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MEETING AGENDA OF THE
PLANNING COMMISSION OF THE TOWN OF FRISCO
FRISCO TOWN HALL
1 MAIN STREET
FRISCO, COLORADO 80443
OCTOBER 16, 2025
5:00 PM

Roll Call:

April Connolly, Candice De, Lina Lesmes, Jessica Forsyth, Andy Stabile, Ira Tane, Kelsey Withrow

Minutes:

Approval of the September 4, 2025, Planning Commission meeting minutes

Public Comments:

Citizens making comments during Public Comments on items not on the agenda shall state their names and addresses for the record, be topicspecific, and limit comments to no longer than three minutes. No Planning Commission action is taken on public comments. The Commission will take all comments under advisement and if a response is appropriate the individual making the comment will receive a formal response from the town at a later date.

Agenda Items:

Agenda Item #1: **Planning File No. MAJ-25-0003**: A final site plan review of the Major Site Plan application for a proposed remodel of a commercial property consisting of one fast food restaurant, located at 960 N. Ten Mile Drive / Lot R1 Block 1 Lakepoint at Frisco Sub Resub L2 Blk1 Amended. Applicant: Robert Palmer, representing McDonald's Real Estate Company

Agenda Item #2: **Planning File No. VAC-25-0001:** A request for the vacation of a portion of a public right-of-way consisting of a 10,500 sq. ft. tract of the South 6th Avenue right-of-way between Blocks 33 and 34, Frisco Town Sub; generally located adjacent to and east of 521 Pitkin Street / Lot 24, Block 34 Frisco Town Sub and adjacent to and west of 601 Pitkin Street / Lot 13, Block 33 Frisco Town Sub. Applicants: Andy Richmond and Lauren Echevarria

Staff and Commissioner Updates:

Adjourn:

RECORD OF PROCEEDINGS

Meeting of the Planning Commission for the Town of Frisco
Town Hall, 1 East Main Street
Thursday, September 4, 2025, at 5:00 P.M.

Call to Order: Lina Lesmes, Chair, opened the meeting at 5:03 p.m.

Roll Call: Present: April Connolly, Lina Lesmes, Jessica Forsyth, Ira Tane, Andy Stabile, Candice De, Kelsey Withrow

Minutes: Approval of the August 7, 2025, Planning Commission meeting minutes.
The minutes were approved unanimously.

Public Comment (non-agenda items): There were no public comments.

Agenda Items:

1. **3-Mile Plan:** A public hearing recommending adoption of the Three Mile Plan of the Town of Frisco pursuant to Colorado Revised Statutes Section 31-12-105(e). Applicant: Town of Frisco. Proposed 2025 3-Mile Plan can be viewed through the Frisco Town website at https://bit.ly/FriscoPlanningProjects, and/or a hard copy is available for viewing at Frisco Town Hall

Katie Kent, Community Development Director presented the staff report dated September 4, 2025. Kent noted that there are no planned annexations to the Town at this time and the Planning Commission has the opportunity to provide comments and/or suggest additional modifications to the draft Three Mile Plan within their packet. Kent requested the Commission approve a motion to recommend approval of the Three Mile Plan to Town Council with recognition that maps and final formatting would be cleaned up prior to official Town Council adoption.

COMMISSIONER QUESTIONS FOR STAFF:

- Commissioners asked if this is the document that would be able to prevent future development of federal lands in the backyard/wilderness areas. Kent explained that a Resolution adopted by Town Council would be needed to protect those areas. However, the Commissioners could add language to the Three Mile Plan to further support the Resolution
- Commissioner asked if there would be any foreseen conflicts with Code if the Backyard area was combined into one area. Kent stated there are no conflicts with Code
- Commissioners asked what staff anticipates future changes will be to this document based off of the newly adopted comprehensive plan. Kent stated that the comprehensive plan would trigger changes within the Town and the Three-mile Plan is related to the properties that are right outside of the Town so the comprehensive plan would not be impacting future versions of the document
- Commissioners asked how often the document needs to be updated. Kent stated legally the document needs to be updated yearly

Public Comment opened at 5:12 p.m.

PUBLIC COMMENTS: There were no public comments
Public comment closed at 5:12 p.m.

COMMISSIONERS DISCUSSION:

- Commissioners unanimously agreed to add verbiage to recognize the importance of protecting federal lands from being developed in the future
- Commissioners requested the Bill's Ranch section be modified to change the Rec path description to pedestrian pathway

MOTION:
With respect to Resolution 2025-03, Commissioner Stabile moved to approve Planning Commission Resolution 2025-03, A Resolution to recommend the Town Council adopt the 2025 Frisco Three Mile Plan.

MOTION SECONDED BY PLANNING COMMISSIONER WITHROW
VOTE: CONNOLLY – YEA, FORSYTH - YEA, WITHROW – YEA, LESMES – YEA, TANE – YEA, DE – YEA, STABILE - YEA
NOES: NONE
MOTION: PASSED

Staff and Commissioner Updates:

- Emma Heth, Planner II, provided an update to the Commissioners on Dark Skies including that it went through a Town Council work session and would be returning to the Commission as a formal Ordinance
- Commissioners expressed concern regarding the deterioration to the Foote's Rest historic structures being exposed to the elements. Kent noted that she was having a meeting with their construction team and would express concerns at that meeting
- Commissioners and Staff discussed the difficulty applicants are having receiving letters from waste hauling companies for dumpster location, sizing, and access. Commissioners noted that a project should not be held up for months if it is only waiting for that letter but recognized that the applicant may have to redesign if it does not meet their requirements when they do receive the letter
- Commissioners asked for information on the Granite Street Complete Streets project. Kent replied that the Town Council would be relooking at their 10-year capital plan at an upcoming meeting and this could affect the timeline and status of the project
- Commissioners asked if the Town is selling the Mary Ruth units. Kent replied that the Town is currently plating the property anticipating selling the Ten Mile units; however, this would be done on a staggered timeline as leases end

Adjournment:
There being no further business, Commissioner Withrow made a motion to adjourn, seconded by Commissioner Forsyth and was unanimous. The meeting adjourned at 5:37 P.M.

Respectfully submitted,
Kimberly Jackson
Community Development Department

Strategic Land Solutions, Inc.
Civil Engineering • Land Planning • Entitlements

Wednesday, March 05, 2025

Attn: Ms. Emma Heth
Town of Frisco Colorado:
Community Development
1 East Main Street
Frisco, CO 80443

RE: 1st Bank/McDonald's Renovation Letter of Introduction (960 N. 10 Mile Drive)

As we discussed in our pre-application meeting, McDonald's plans remodel the existing First Bank building into a McDonald's Restaurant. McDonald's plans to reuse the existing building in its current location, and they plan to reuse most of the building exterior.

As part of the building modifications, McDonald's plans to remove the existing drive-through tellers and canopy and patch the building wall in the teller location with material matching the existing building finishes. McDonald's also plans to modify the south building façade to add three windows to serve the new drive-through lane. The south wall of the building will be modified to better support the drive-through facilities. The existing east and west building elevations will largely remain in their current conditions. The west entrance will be modified to include a vestibule and dual storefront doors. The building interior renovations include removing the teller counters, lobby, offices, and wall safes, leaving the existing restrooms in their current location. McDonald's will then install a new kitchen, dining room, and cashier areas.

As discussed in our pre-application meeting, McDonald's is pursuing a sign code change to allow a second menu board for their dual drive-through layout. Please reference the letter included with this submittal package for the proposed sign code language change.

As part of the site renovation, McDonald's plan to add a grease interceptor upstream of the existing sanitary sewer line, upgrade the existing 1-inch water service to a 1-1/2-inch water service, and to upgrade the electrical service to three phase 1,200-amp service. Communications facilities serving the site will also need to be upgraded to serve McDonald's.

McDonalds plans to raze and rebuild portions of the existing parking lot as shown on the site plan included with this submittal. The new parking lot layout fits within the current pavement footprint, but it is being revised to one-way traffic, which works better with McDonald's site functionality. Areas of the existing curb and gutter along the south side of the site will remain in their current location. The existing sidewalk along the south side of the site will remain, and any broken areas of concrete will be repaired. McDonald's also plans to add a patio seating area between the drive-through and the building to enhance the appearance from Summit Boulevard. The revised landscaping will be designed to work with the existing mature landscaping, and to keep the existing exterior mature trees where possible.

The existing drainage patterns will be kept throughout the site. Furthermore, the existing

2595 Ponderosa Road ● Franktown ● CO ● 80116
Email: rpalmer@strategicls.net
Phone: 720.384.7661
Website: http://www.strategicls.net

Strategic Land Solutions, Inc.
Civil Engineering • Land Planning • Entitlements

imperviousness of the site will not be increased with the McDonald's project. Therefore, the proposed renovations will not adversely affect the existing storm drain facilities serving the site.

As you can see from the information in this letter, and from the attached submittal documents, it is McDonald's intent to use the existing site and building where possible to keep the exiting character of the site. The impacts to the mature landscaping and the existing building architecture will be limited, and additional landscaping and a patio are being added to help offset impacts from the proposed drive-through location.

Please feel free to contact me during your review if you have any questions about what is being proposed.

Sincerely,

STRATEGIC LAND SOLUTIONS, INC.

Robert J. Palmer, PE *(CO, NM, AZ, WY, MT)*
President for SLS, Inc. A Colorado Corporation

Attachments: Conceptual Site Plan, Conceptual Building Footprint, Existing Site Conditions, Conceptual Trash Enclosure Elevations, traffic study.

cc: Mr. Robert Yaguesesky, OVUR via: robert.yagusesky@us.mcd.com

MCDONALD'S RESTAURANT (FIRST BANK REMODEL)

SITE PLAN PLAN FOR TOWN OF FRISCO

THE NORTHWEST ¼ OF SECTION 26, TOWNSHIP 5 SOUTH, RANGE 78 WEST OF THE SIXTH P.M.
TOWN OF FRISCO, COUNTY OF SUMMIT, STATE OF COLORADO

LOCATED AT: 960 NORTH TEN MILE ROAD FRISCO, COLORADO

LEGAL DESCRIPTION

LEGAL DESCRIPTION:

LOT R1, FIRST AMENDED PLAT OF LOTS R1, R2 AND R3, A RESUBDIVISION OF LOT 2, BLOCK 1, LAKEPOINT AT FRISCO, ACCORDING TO THE PLAT RECORDED MAY 26, 1999 UNDER RECEPTION NO. 596666, COUNTY OF SUMMIT, STATE OF COLORADO.

THE FIRST ABOVE LEGAL DESCRIPTION DESCRIBES ALL THAT LAND CONTAINED IN A GENERAL WARRANTY DEED RECORDED ON SEPTEMBER 15, 1998 AT RECEPTION NUMBER 575355 IN SUMMIT COUNTY, COLORADO.

ASSURANCE NOTE: THE ABOVE LEGAL DES CR/ PTION DESCRIBES ALL THAT £AND INSURED IN SCHEDULE A(5) OF TITLE COMMITMENT NUMBER ABD20214589-3 PREPARED BY LAND TITLE GUARANTEE COMPANY AS AGENT FOR OLD REPUBUC NATIONAL TITLE INSURANCE COMPANY WITH A COMMITMENT DATE OF DECEMBER 5, 2024 AT5:00P.M.

BASIS OF BEARINGS

BASIS OF BEARING: BEARINGS ARE BASED ON THE NORTHERLY LINE OF LOT R1, FIRST AMENDED PLAT OF LOTS R1, R2 AND R3, RESUBDIVISION OF LOT 2, BLOCK 1, LAKEPOINT AT FRISCO WITH AN ASSUMED BEARING OF N80°25'02"E MONUMENT BY A #4 REBAR, 0.1' BELOW GRADE FOUND AT THE NORTHEASTERLY CORNER OF SAID LOT R1, WITH ALL BEARINGS CONTAINED HEREIN BEING RELATIVE THERETO.

BENCHMARK

BENCHMARK: NGS BM W449, PID DF5530 - DISK SET INTO A DRILL HOLE IN THE TOP OF THE SOUTH ONE OF THREE CONCRETE FOUNDATIONS FOR THE LARGE 'SHELL' SIGN, IT IS 28.8 M EAST FROM THE EDGE OF OIL FOR DILLON DAM ROAD, 17.7 M NORTH FROM THE NORTHWEST CORNER OF A BUILDING AT 1121 SUMMIT BOULEVARD, 3.2 M NORTH FROM A WITNESS POST, 0.25 M WEST FROM THE WESTERN CORNER OF THE IRON BASE OF THE SOUTHERN SIGN POST AND ABOUT 8 M BELOW INTERSTATE 70.
ELEVATION: 9058.09 FEET (NAVD 1986 DATUM).

FLOOD ZONE

BY GRAPHIC PLOTTING ONLY THE SUBJECT PROPERTY IS SITUATED IN FLOOD ZONE ·X· ACCORDING TO FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY PANEL NO. 08117C0353F WITH AN EFFECTIVE DATE OF NOVEMBER 16, 2018. NO OFFICE CALCULATIONS OR FIELD SURVEYING WAS PERFORMED TO DETERMINE THIS INFORMATION.

OWNER/DEVELOPER
McDONALD'S USA, LLC.
2595 PONDEROSA ROAD
FRANKTOWN, CO 80116
MR. ROBERT YAGUSESKY
206-348-4374

LANDSCAPE ARCHITECT
NATURAL DESIGN SOLUTIONS
ATTN: JASON OLDHAM
JASON@NDSCOLORADO.COM
5539 COLT DRIVE
LONGMONT, CO 80503
303-443-0388

ARCHITECT
ARRIS ARCHITECTURE
285 COMMANDER DR.
ERIE, CO 80516
ATTN: MR. COREY STINAR
970-988-6302

SITE ENGINEER
STRATEGIC LAND SOLUTIONS, INC.
2595 PONDEROSA ROAD
FRANKTOWN, CO 80116
ATTN: ROBERT PALMER, P.E.
(720) 384-7661

LIGHTING
CURRENT LIGHTING
1085 JOHNSON DRIVE
BUFFALO GROVE, IL 60089
SLAPPLICATIONS@
CURRENTLIGHTING.COM

SURVEY
ENGINEERING SERVICE COMPANY
14190 EAST EVANS AVENUE
TOWN OF FRISCO, CO 80014
MR. CHIP BECKSTROM
303-337-1393

REVIEW AGENCY
TOWN OF FRISCO
1 EAST MAIN STREET
FRISCO, CO 80443
ATTN: EMMA HEATH
970-668-4581

REVIEW AGENCY
TOWN OF FRISCO WATER & PUBLIC WORKS
102 SCHOOL HOUSE ROAD
FRISCO, CO 80443
ATTN: CHRIS MCGINNIS
970-668-4579

REVIEW AGENCY
FRISCO SANITATION DISTRICT
111 S. SUMMIT BLVD
FRISCO, CO 80443
ATTN: KATHY MARSHALL
970-668-3723

STATISTICAL DATA BLOCK:

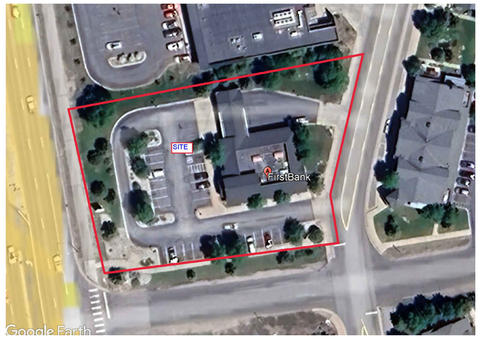
DESCRIPTION	EXISTING	PROPOSED
AREA	48,151 S.F.	48,151 S.F.
ZONING	LAKEPOINT PUD	LAKEPOINT PUD
BUILDING AREA (EXTERIOR)	4,370 S.F.	4,575 S.F.
PAVED AREA	24,056 S.F.	23,636 S.F.
LANDSCAPE AREA	19,725 S.F.	19,940 S.F.
NET ADDITIONAL PERVIOUS AREA	215 S.F. INCREASE	
PARKING	25-SPACES	PROPOSED
DRIVE THRU STACKING	N/A	15 SPACES
SEATS	N/A	57 SEATS
SNOW STORAGE AREA	N/A	6,254 S.F.
SNOW STORAGE PERCENTAGE OF PARKING	N/A	25.9%

BUILDING GFA CALCULATIONS:

SEATING AREA =1,250 S.F.
ALL OTHER AREAS (KITCHEN, STORAGE, FREEZER, COOLER, ETC.) =3,325 S.F.
TOTAL BUILDING AREA =4,575 S.F.



SITE LOCATION MAP



SITE AERIAL MAP

DRAWING LIST

TO-1	TITLE SHEET	09/05/2025
EX-1	EXISTING CONDITIONS PLAN	09/05/2025
DM-1.0	DEMOLITION PLAN	09/05/2025
C-1.1	SITE PLAN	09/05/2025
C-1.2	GRADING PLAN	09/05/2025
C-1.3	UTILITY PLAN	09/05/2025
EC1.0	EROSION CONTROL PLAN-INITIAL	09/05/2025
EC1.1	EROSION CONTROL PLAN-UTILITY/PAVING	09/05/2025
EC1.2	EROSION CONTROL PLAN-FINAL STABILIZATION	09/05/2025
EC2.0	EROSION CONTROL DETAILS	09/05/2025
EC2.1	EROSION CONTROL DETAILS	09/05/2025
EC2.2	EROSION CONTROL DETAILS	09/05/2025
EC2.3	EROSION CONTROL DETAILS	09/05/2025
EC2.4	EROSION CONTROL DETAILS	09/05/2025
L1.0	LANDSCAPE PLAN	09/05/2025
L1.1	LANDSCAPE DETAILS AND NOTES	09/05/2025
LI1.0	LIGHTING PLAN	09/05/2025
LI1.1	LIGHTING DETAILS	09/05/2025
DR-1	EXITING DRAINAGE PLAN	09/05/2025
DR-2	PROPOSED DRAINAGE PLAN	09/05/2025
A1.1	FLOOR PLAN	09/05/2025
A1.3	ROOF PLAN	09/05/2025
A2.0	EXTERIOR ELEVATION	09/05/2025
A2.1	EXTERIOR ELEVATION	09/05/2025
A2.0	EXTERIOR ELEVATION (COLOR)	09/05/2025
A2.1	EXTERIOR ELEVATION (COLOR)	09/05/2025
A2.2	TRASH ENCLOSURE PLAN	09/05/2025
A2.3	TRASH ENCLOSURE ELEVATIONS	09/05/2025
A2.3	TRASH ENCLOSURE ELEVATIONS (COLOR)	09/05/2025
CD.1	SITE DETAILS	09/05/2025
CD.2	SITE DETAILS	09/05/2025

LEGEND

EXISTING LEGEND	PROPOSED LEGEND
SET NAIL & 0.75" BRASS TA STAMPED "*PLS 37601*"	ZONE LOT LINE
FOUND MONUMENT AS NOTED	PROPOSED WATER LINE
SITE BENCHMARK	PROPOSED ELECTRICAL
SANITARY SEWER MANHOLE	PROPOSED TELEPHONE LINE
STORM DRAIN MANHOLE	PROPOSED SANITARY LINE
FIRE HYDRANT	PROPOSED STORM LINE
WATER VALVE	5415.0013 PROPOSED SPOT GRADE
WATER METER	5364 PROPOSED MINOR CONTOURS
ELECTRIC METER	5365 PROPOSED MAJOR CONTOURS
ELECTRIC BOX	PROPOSED INLET
LIGHT POLE	FFE FINISH FLOOR ELEVATION
POWER POLE	FL FLOWLINE
UTILITY PEDESTAL	G GROUND (NON-PAVED AREA)
SIGN	P PAVEMENT
HC HANDICAP RAMP	W SIDEWALK (CONCRETE)
TRAFFIC FLOW DIRECTION	TC TOP OF CURB
SUBJECT PROPERTY BOUNDARY	LIP GUTTER LIP
FENCE	INV. INVERT ELEVATION
SANITARY LINE	BW BOTTOM OF WALL
STORM LINE	TW TOP OF WALL
WATER LINE	BS BOTTOM OF STEPS
ELECTRIC LINE	TS TOP OF STEPS
OHW OVERHEAD WIRES	S= SLOPE
GAS LINE	ME MATCH EXISTING
FO FIBER OPTIC LINE	TS TOP OF STEP
DECIDUOUS TREE 6" OR LARGER	PROPOSED FIRE HYDRANT
CONIFEROUS TREE 6" OR LARGER	PROPOSED TAPPING SLEEVE
TREE GROUP	PROPOSED WATER VALVE
CONCRETE SURFACE	PROPOSED WATER METER
1 B-2 TITLE EXCEPTION NUMBER	PROPOSED CURB STOP
	PROPOSED TAP/CORP STOP
	PROPOSED REDUCER
	PROPOSED ASPHALT PAVEMENT
	PROPOSED CONCRETE PAVEMENT
	PROPOSED LANDSCAPING
	AREA OF DEMOLITION

NOTE: WATER IMPROVEMENTS SHOWN FOR INFORMATION ONLY. ALL WATER IMPROVEMENTS SHALL BE CONSTRUCTED PER THE APPROVED TOWN OF FRISCO WATER PLANS.

ABBREVIATIONS

R.O.W.	RIGHT-OF-WAY
AC	ACRES
SF	SQUARE FEET
C.M.P.	CORRUGATED METAL PIPE
P.V.C.	POLYVINYL CHLORIDE

NO.	DATE	REVISION DESCRIPTION

CIVIL ENGINEERING CONSULTANT:
Strategic Land Solutions, Inc.
Civil Engineering • Land Planning • Entitlements
2595 PONDEROSA ROAD
FRANKTOWN, CO 80116
720.384.7661 Phone
rpalmer@strategicls.net
Robert J. Palmer, PE
President

PREPARED UNDER THE DIRECT SUPERVISION OF:
SEAL: COLORADO REGISTERED ROBERT J. PALMER 36320 PROFESSIONAL ENGINEER
BY Robert J. Palmer, PE
Licensed Professional Engineer (CO PE #36320), AS PRESIDENT FOR STRATEGIC LAND SOLUTIONS, INC.

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF McDONALD'S CORPORATION AND SHALL NOT BE REPRODUCED WITHOUT THEIR WRITTEN PERMISSION.

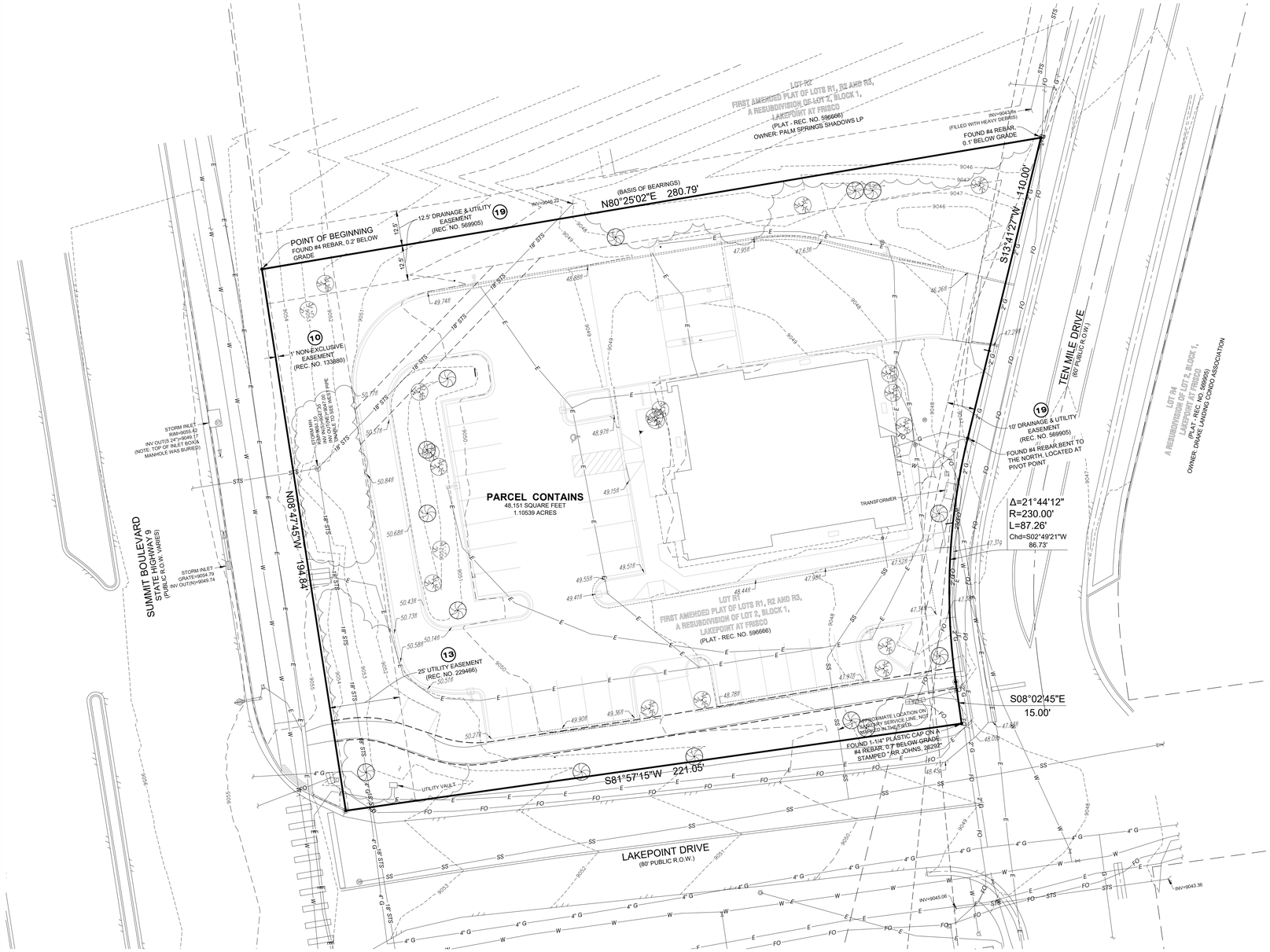
OFFICE: ROCKY MOUNTAIN REGION
ADDRESS:

STREET ADDRESS: 960 N. TEN MILE DRIVE
CITY: FRISCO
STATE: COLORADO
COUNTY: SUMMIT
STATE STORE #: 51062
NATIONAL #: 44322
REGIONAL DWG. NO: -

SCALE: AS NOTED
DATE: 09/05/2025
DESIGNED BY: RJP
DRAWN BY: RJP
CHECKED BY: RJP
McD RE: BAKER
McD P/CM: YAGUSESKY
FILE NAME: CURRENT.DWG
SLS JN: 24-0001-216

DRAWING TITLE: TITLE SHEET

SHEET NO: TO-1



LEGEND

==========	UNLOCATABLE IMPROVEMENTS
——SS——	UNDERGROUND SANITARY SEWER LINE
——STS——	UNDERGROUND STORM SEWER LINE
——W——	UNDERGROUND WATER LINE
●	BOLLARD
CO	CLEANOUT
C	COMMUNICATIONS PEDESTAL
	ELECTRIC METER
	FIRE HYDRANT
	GAS METER
	HOSE BIB (WATER SPIGOT)
	LIGHT POLE (DIRECTIONAL)
SS	MANHOLE (SANITARY)
ST	MANHOLE (STORM)
0	NUMBER OF PARKING STALLS
	SIGN
	STREET LIGHT
	WATER VALVE
✦ 9090.00	SPOT ELEVATION
	DECIDUOUS TREE
	EVERGREEN TREE

BLDGHT	BUILDING HEIGHT (FF - HIGHEST POINT)
FF	FINISHED FLOOR
L/S	LANDSCAPING
R.O.W.	RIGHT-OF-WAY
REC. NO.	RECEPTION NUMBER
◉	SET 5/8"x24" REBAR & 1-1/4" YELLOW PLASTIC CAP STAMPED "ESC LS 38421"
●	FOUND MONUMENT AS DESCRIBED

20 0 20 20

PLAN SCALE: 1" = 20'

Know what's **below.**
Call before you dig.

NO.	DATE	REVISION DESCRIPTION

CIVIL ENGINEERING CONSULTANT:

Strategic Land Solutions, Inc.
Civil Engineering • Land Planning • Entitlements
2595 PONDEROSA ROAD
FRANKTOWN, CO 80116
720.384.7661 Phone
rpalmer@strategicls.net
Robert J. Palmer, PE
President

PREPARED UNDER THE DIRECT SUPERVISION OF:

SEAL: COLORADO REGISTERED ROBERT J. PALMER 36320 PROFESSIONAL ENGINEER

BY Robert J. Palmer, PE
Licensed Professional Engineer (CO PE #36320),
AS PRESIDENT FOR STRATEGIC LAND SOLUTIONS, INC.

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McDonald's

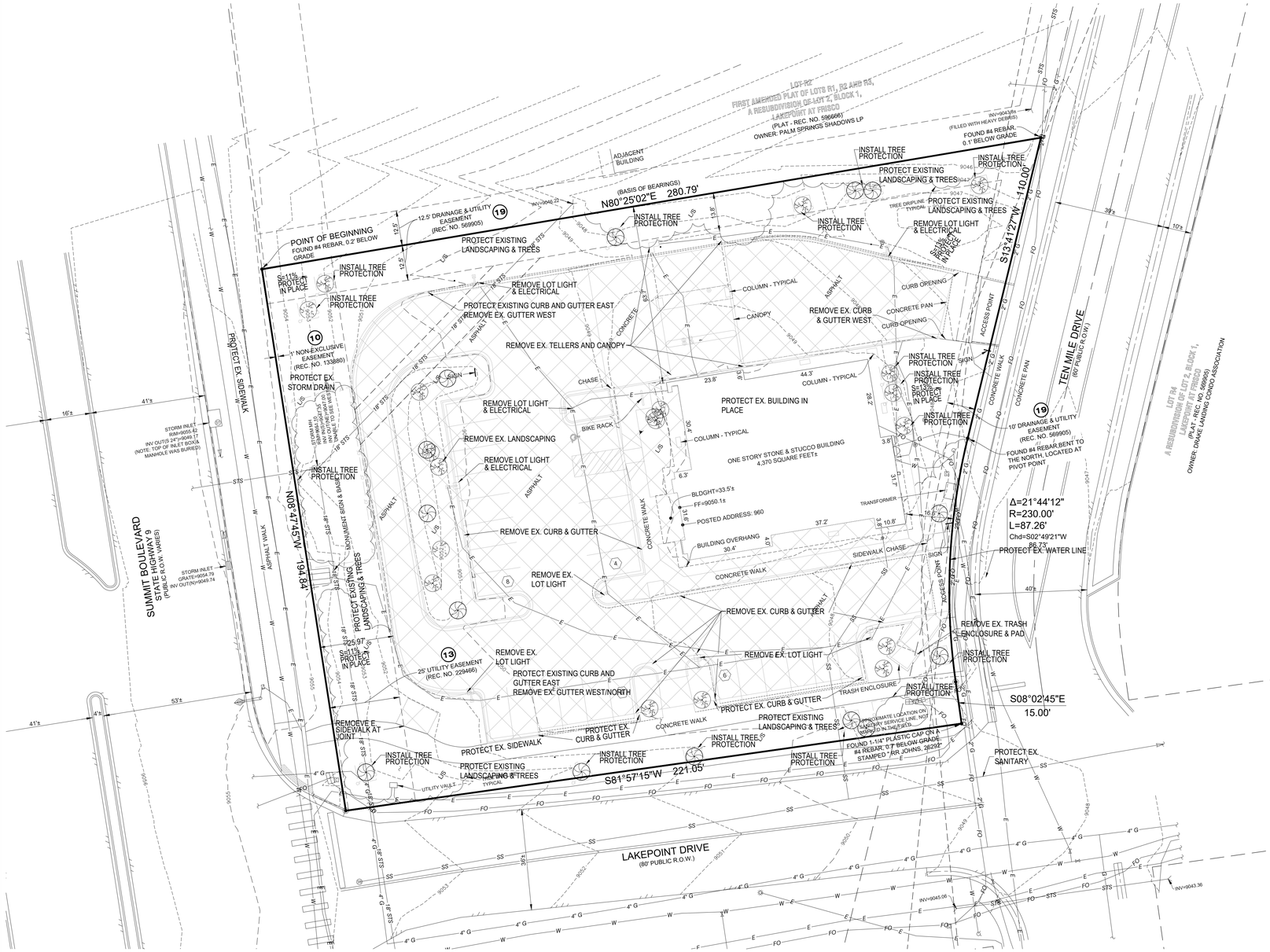
OFFICE: ROCKY MOUNTAIN REGION
ADDRESS:

STREET ADDRESS: 960 N. TEN MILE DRIVE
CITY: FRISCO
STATE: COLORADO
COUNTY: SUMMIT
STATE STORE #: 51062
NATIONAL #: 44322
REGIONAL DWG. NO: -

SCALE:	AS NOTED	McD RE:	BAKER
DATE:	09/05/2025	McD P/CM:	YAGUSESKY
DESIGNED BY:	RJP		
DRAWN BY:	RJP	FILE NAME:	CURRENT.DWG
CHECKED BY:	RJP	SLS JN:	24-0001-216

DRAWING TITLE:
EXISTING CONDITIONS

SHEET NO:
EX-1



LEGEND

==========	UNLOCATABLE IMPROVEMENTS
SS	UNDERGROUND SANITARY SEWER LINE
STS	UNDERGROUND STORM SEWER LINE
W	UNDERGROUND WATER LINE
	BOLLARD
CO	CLEANOUT
C	COMMUNICATIONS PEDESTAL
	ELECTRIC METER
	FIRE HYDRANT
	GAS METER
	HOSE BIB (WATER SPIGOT)
	LIGHT POLE (DIRECTIONAL)
SS	MANHOLE (SANITARY)
ST	MANHOLE (STORM)
0	NUMBER OF PARKING STALLS
	SIGN
	STREET LIGHT
	WATER VALVE
9090.00	SPOT ELEVATION
	DECIDUOUS TREE
	EVERGREEN TREE
BLDGHT	BUILDING HEIGHT (FF - HIGHEST POINT)
FF	FINISHED FLOOR
L/S	LANDSCAPING
R.O.W.	RIGHT-OF-WAY
REC. NO.	RECEPTION NUMBER
	SET 5/8"x24" REBAR & 1-1/4" YELLOW PLASTIC CAP STAMPED "ESC LS 38421"
	FOUND MONUMENT AS DESCRIBED

20 0 20 20

PLAN SCALE: 1" = 20'

Know what's **below.** **Call** before you dig.

NO.	DATE	REVISION DESCRIPTION

CIVIL ENGINEERING CONSULTANT:

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BY Robert J. Palmer, PE
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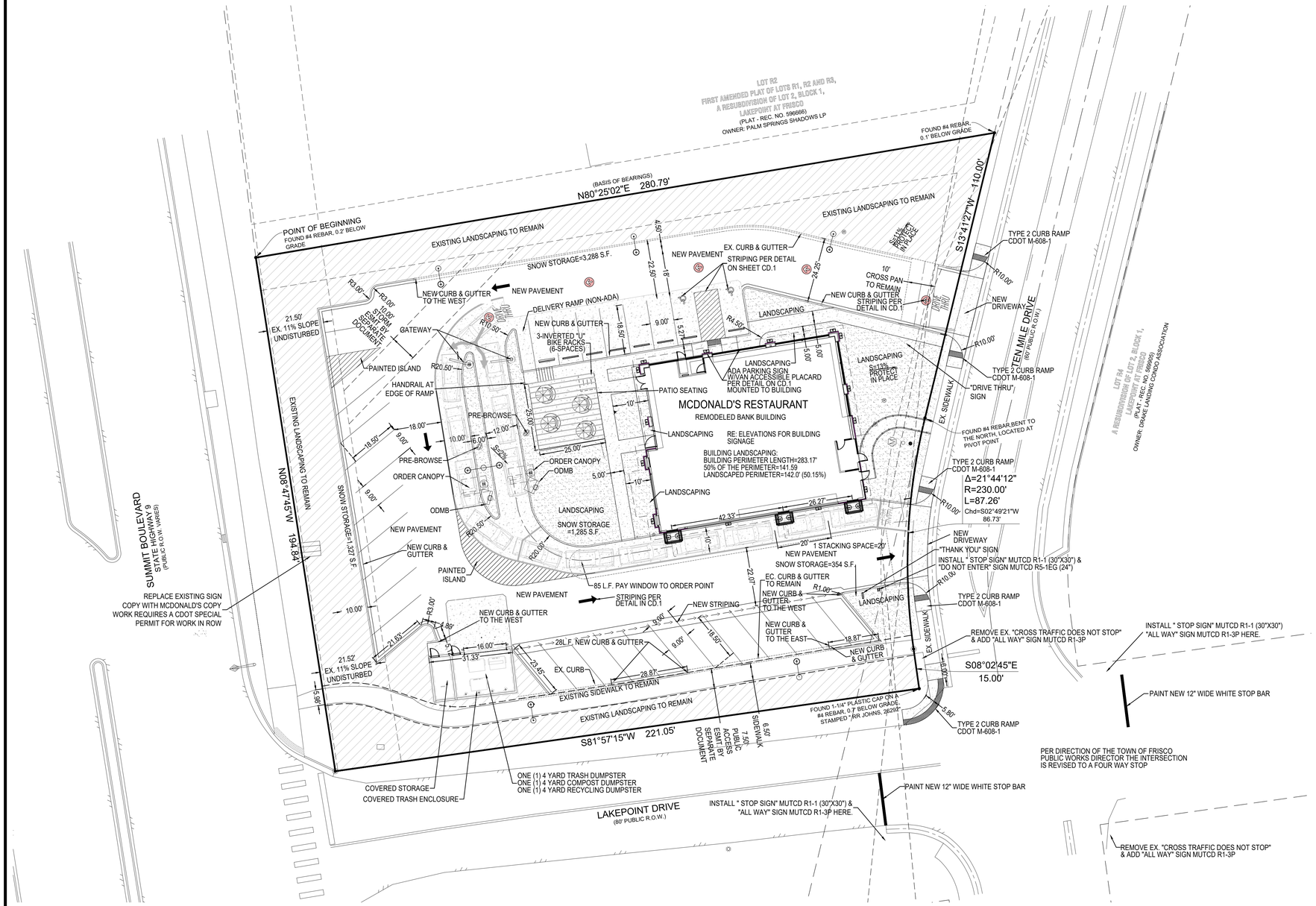
McDonald's
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OFFICE	ROCKY MOUNTAIN REGION
ADDRESS	44322
NATIONAL ID#	51062
STATE STORE ID#	
REGIONAL DWG. NO	-
STREET ADDRESS	960 N. TEN MILE DRIVE
CITY	FRISCO
STATE	COLORADO
COUNTY	SUMMIT

SCALE:	AS NOTED
DATE:	09/05/2025
DESIGNED BY:	RJP
DRAWN BY:	RJP
CHECKED BY:	RJP
McD RE:	BAKER
McD P/CM:	YAGUSESKY
FILE NAME:	CURRENT.DWG
SLS JN:	24-0001-216

DRAWING TITLE:
DEMOLITION PLAN

SHEET NO:
DM1.0



SITE PLAN NOTES

1. ALL DIMENSIONS AND RADII ARE TO THE FACE (FOR 6" REVEAL CURB) OR FLOWLINE (FOR CURB & GUTTER) UNLESS OTHERWISE NOTED.
2. PARKING SPACE STRIPING TO BE WHITE, 4" WIDE, UNLESS OTHERWISE NOTED.
3. LOT LINE AND EXISTING TOPOGRAPHIC INFORMATION TAKEN FROM THE SURVEY PREPARED BY CLC, INC.
4. CONCRETE PAVEMENT, SIDEWALK, CURB & GUTTER TO BE REMOVED (IF APPLICABLE) SHALL BE SAWCUT. CONTRACTOR SHALL REMOVE TO NEXT JOINT IF SAWCUT IS WITHIN 5 FOOT OF A JOINT.
5. THE PARKING AREAS AND ACCESS DRIVES SHALL CONSIST OF A FLEXIBLE COMPOSITE PAVEMENT SECTION OF SIX-INCHES OF ASPHALT OVER FOUR-INCHES OF AGGREGATE BASE COURSE (REFERENCE: SOILS REPORT). AT A MINIMUM, THE PAVEMENT SHALL BE DESIGNED TO SUPPORT THE WEIGHT IMPOSED BY FIRE APPARATUS (40.5 TON, 3 AXLES).
6. THE DRIVE THRU, LOADING AREA, AND TRASH DUMPSTER AREA SHALL CONSIST OF A PORTLAND CEMENT CONCRETE PAVEMENT WITH A MINIMUM THICKNESS OF EIGHT (8) INCHES (UNLESS OTHERWISE NOTED) WITH A 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI, REINFORCED WITH #3 BARS, 16" O.C.B.W. IN CENTER OF SLAB. USE 3½" CHAIRS AT 48" O.C.B.W.
7. ALL ACCESSIBLE RAMPS TO INCLUDE DETECTABLE WARNING PANELS.
8. ALL-CONSTRUCTION WITHIN PUBLIC-RIGHTS-OF-WAY SHALL BE IN ACCORDANCE WITH THE CURRENT TOWN OF FRISCO STANDARD CONSTRUCTION SPECIFICATIONS.
9. ALL ACCESS AND ACCESSIBLE PARKING IS DESIGNED TO MEET ADA ACCESSIBILITY REQUIREMENTS.

SITE PLAN LEGEND (PROPOSED)

- SITE PROPERTY LINE (WITH METES & BOUNDS NOTED)
- ADA ACCESSABLE ROUTE
- ADJACENT PARCEL PROPERTY LINE
- EXISTING CURBLINE
- PROPOSED 6" CURBLINE W/ MONOLITHIC GUTTER RE: DETAIL 2.4 ON SHEET 6
- PROPOSED 6" CURBLINE W/1' CATCH PAN GUTTER, RE: DETAIL 2.4 ON SHEET 6
- 6" TEMPORARY ASPHALT CURB
- PROPOSED 6" CURBLINE W/1' SPILL PAN GUTTER, RE: DETAIL 2.4 ON SHEET 6
- PROPOSED CONCRETE PAVEMENT (WITH THICKNESS NOTED)
- PROPOSED OVERHEAD ROOF/CANOPY LINE
- PROPOSED BUILDING LINE
- CONCRETE SCREEN WALL
- (XX) PARKING SPACES
- INVERTED "U" BICYCLE RACK
- EXISTING LANDSCAPING TO REMAIN

20 0 20 20

PLAN SCALE: 1" = 20'

Know what's **below.** **Call** before you dig.

NO.	DATE	REVISION DESCRIPTION

CIVIL ENGINEERING CONSULTANT:
Strategic Land Solutions, Inc.
Civil Engineering • Land Planning • Entitlements
2595 PONDEROSA ROAD
FRANKTOWN, CO 80116
720.384.7661 Phone
rpalmer@strategicls.net
Robert J. Palmer, PE
President

PREPARED UNDER THE DIRECT SUPERVISION OF:

SEAL: COLORADO REGISTERED ROBERT J. PALMER 36320 PROFESSIONAL ENGINEER

BY Robert J. Palmer, PE
Licensed Professional Engineer (CO PE #36320), AS PRESIDENT FOR STRATEGIC LAND SOLUTIONS, INC.

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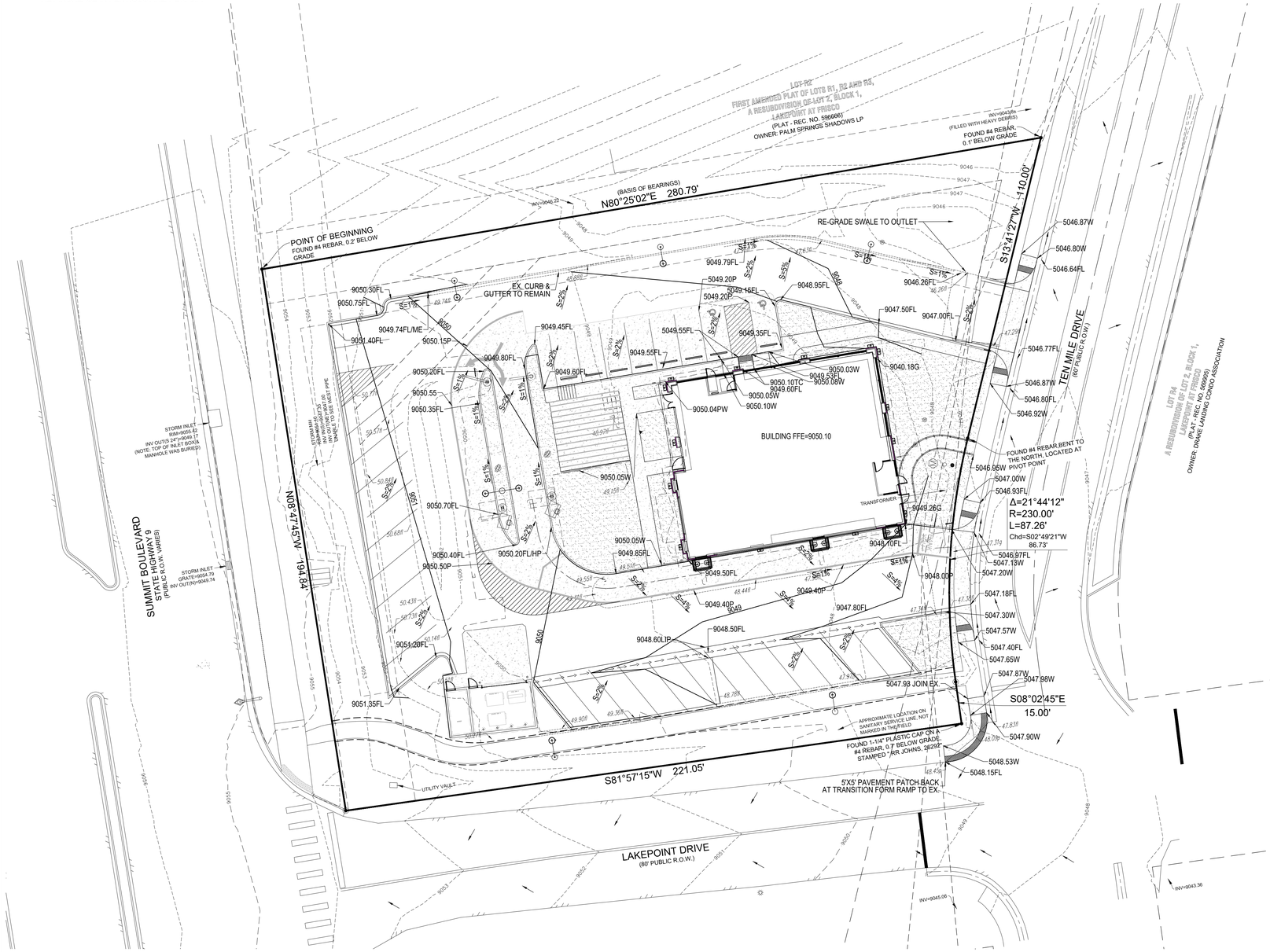
STREET ADDRESS: 960 N. TEN MILE DRIVE	STATE: COLORADO
CITY: FRISCO	COUNTY: SUMMIT
STATE STORE #: 51062	NATIONAL #: 44322
REGIONAL DWG. NO: -	

SCALE: AS NOTED	McD RE: BAKER
DATE: 09/05/2025	McD P/CM: YAGUSESKY
DESIGNED BY: RJP	
DRAWN BY: RJP	FILE NAME: CURRENT.DWG
CHECKED BY: RJP	SLS JN: 24-0001-216

DRAWING TITLE: SITE PLAN

SHEET NO: C1.1

GRADING/PAVING NOTE:
THE EXISTING PARKING LOT WILL BE RE-PAVED MAINTAINING THE CURRENT DRAINAGE BASINS AND DRAINAGE PATTERNS.
THE SITE IMPERVIOUSNESS IS REDUCED WITH THIS PROJECT.
EXISTING PERVIOUS AREA=19,725 S.F.
PROPOSED PERVIOUS AREA=19,940 S.F.
NET INCREASE IN PERVIOUS AREA=215 S.F.



GRADING and DRAINAGE NOTES

1. ALL ONSITE STORM DRAIN AND DETENTION FACILITIES ARE PRIVATE, AND WILL BE MAINTAINED BY THE PROPERTY OWNER.
2. THE PROPOSED DRAINAGE EASEMENT IS BEING DEDICATED FROM THE PROPOSED DRAINAGE FACILITIES TO THE EXISTING PUBLIC ACCESS, UTILITY, AND FIRE LANE EASEMENT AT THE PROPERTY LINE. THE EXISTING PUBLIC ACCESS, UTILITY AND FIRE LAN LEADS TO A PUBLIC RIGHT-OF-WAY. NO ONSITE DRIVE LANES LEAD TO A PUBLIC RIGHT-OF-WAY.
3. REFER TO LAYOUT & CONTROL PLAN FOR DIMENSIONS AND IDENTIFICATION OF PROPOSED IMPROVEMENTS.
4. LOT LINE AND EXISTING TOPOGRAPHIC INFORMATION TAKEN FROM A SURVEY PREPARED BY ENGINEERING SERVICES COMPANY, INC.
5. THE CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR CONTROLLING ALL SILTATION AND EROSION OF THE PROJECT AREA. USE WHATEVER MEANS NECESSARY INCLUDING BUT NOT LIMITED TO STAKED STRAW BALES AND/OR SILT FENCES. CONTROL SHALL COMMENCE WITH GRADING AND BE MAINTAINED THROUGHOUT THE PROJECT UNTIL ACCEPTANCE BY THE OWNER AND/OR THE TOWN OF FRISCO. THE CONTRACTOR'S RESPONSIBILITIES INCLUDE ALL DESIGN AND IMPLEMENTATION AS REQUIRED TO PREVENT EROSION AND THE DEPOSITING OF SILT. THE OWNER AND/OR TOWN OF FRISCO MAY AT THEIR OWN OPTION DIRECT THE CONTRACTOR IN THESE METHODS. ANY DEPOSITING OF SILT OR MUD ON NEW OR EXISTING PAVEMENT, STORM SEWERS OR SWALES SHALL BE REMOVED AFTER EACH RAIN AND AFFECTED AREAS CLEANED TO THE SATISFACTION OF THE OWNER AND/OR THE TOWN OF FRISCO AT THE EXPENSE OF THE CONTRACTOR.
6. ALL CURB AND GUTTER ELEVATIONS ARE FLOWLINE UNLESS NOTED OTHERWISE. ALL CURB AND GUTTER IS CATCH UNLESS NOTED OTHERWISE. FINISHED WALK AND CURB ELEVATIONS SHALL BE 6" ABOVE FINISH PAVEMENT UNLESS NOTED OTHERWISE NOTED. PROPOSED ELEVATIONS ARE SHOWN TO FINISHED PAVEMENT OR GRADE. LANDSCAPE AREAS SHALL BE ROUGH GRADED TO 6" BELOW TOP OF WALKS AND CURBS. FINISH GRADING IS BY THE GENERAL CONTRACTOR.
7. ALL FILL AREAS SHALL BE SCARIFIED EIGHT-INCHES AND RECOMPACTED TO 95% OF STANDARD PROCTOR DENSITY WITH A MOISTURE CONTENT ±2% FROM OPTIMUM, UNLESS OTHERWISE DIRECTED BY THE GEOTECHNCIAL ENGINEER. THE LOOSE THICKNESS OF EACH LAYER OF FILL MATERIAL SHALL NOT EXCEED EIGHT-INCHES. AREAS TO BE PAVED SHALL BE SCARIFIED AND RECOMPACTED TO 95% OF STANDARD PROCTOR DENSITY WITH A MOISTURE CONTENT ±2% FROM OPTIMUM UNLESS DIRECTED OTHERWISE BY THE GEOTECHNICAL ENGINEER. CONTRACTOR SHALL EMPLOY THE ORIGINAL SOILS ENGINEER TO TEST ALL EARTHWORK TO INSURE COMPLIANCE WITH SOILS REPORT.
8. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE TOWN OF FRISCO ENGINEERING DIVISION. THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.
9. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNER / OWNER'S REPRESENTATIVE OF ANY PROBLEM(S) IN CONFORMING TO THE APPROVED PLANS FOR ANY ELEMENT OF THE PROPOSED IMPROVEMENTS PRIOR TO ITS CONSTRUCTION.
10. CURB (ACCESSIBLE ACCESSIBLE) RAMPS ARE TO BE PROVIDED AT INTERSECTIONS AND DRIVE ACCESSES, AS SHOWN.
11. ALL ACCESSIBLE RAMPS AND DETECTABLE WARNINGS SHALL CONFORM TO THE TOWN OF FRISCO STANDARD DETAILS. 5 FOOT BY 5 FOOT LANDINGS WITH A MAXIMUM GRADE OF 2 PERCENT SHALL BE LOCATED AT THE TOP OF ALL ACCESSIBLE RAMPS.
12. ALL CONSTRUCTION WITHIN PUBLIC RIGHTS-OF-WAY SHALL BE IN ACCORDANCE WITH CURRENT TOWN OF FRISCO STANDARD CONSTRUCTION SPECIFICATIONS.

GRADING & DRAINAGE LEGEND

5811	EXISTING CONTOUR (1' INTERVAL)
5810	PROPOSED CONTOUR
25.60FL	PROPOSED SPOT GRADE - FLOW LINE
25.60P	PROPOSED SPOT GRADE - PAVEMENT
25.60TW	PROPOSED SPOT GRADE - TOP OF WALK
25.60G	PROPOSED SPOT GRADE - GROUND
25.60ME	PROPOSED SPOT GRADE - MATCH EXISTING
	6" CURB WITH 1' CATCH GUTTER
	6" CURB WITH 1' SPILL GUTTER
	6" MONOLITHIC CURB WITH 1' SPILL GUTTER
	EXISTING FLOW
ST	EXISTING STORM DRAIN WITH PIPE SIZE & TYPE NOTED
	EXISTING STORM INLET
	EXISTING STORM MANHOLE
ELEC	PROPOSED ELECTRICAL LINE
SAN	PROPOSED STORM DRAIN
SAN	PROPOSED SANITARY SEWER
WAT	WATER LINE
	EXISTING INTERM CONTOUR
	EXISTING INDEX CONTOUR
	PROPOSED INDEX CONTOUR
	PROPOSED INTERIM CONTOUR
	PROPOSED SILT FENCE
	PROPERTY LINE
	100-YEAR FLOOD BOUNDARY

FL	FLOW LINE
GB	GRADE BREAK
HP	HIGH POINT
ME	MATCH EXISTING
P	PAVEMENT
TC	TOP OF CURB
W	SIDEWALK

20 0 20 20
PLAN SCALE: 1" = 20'

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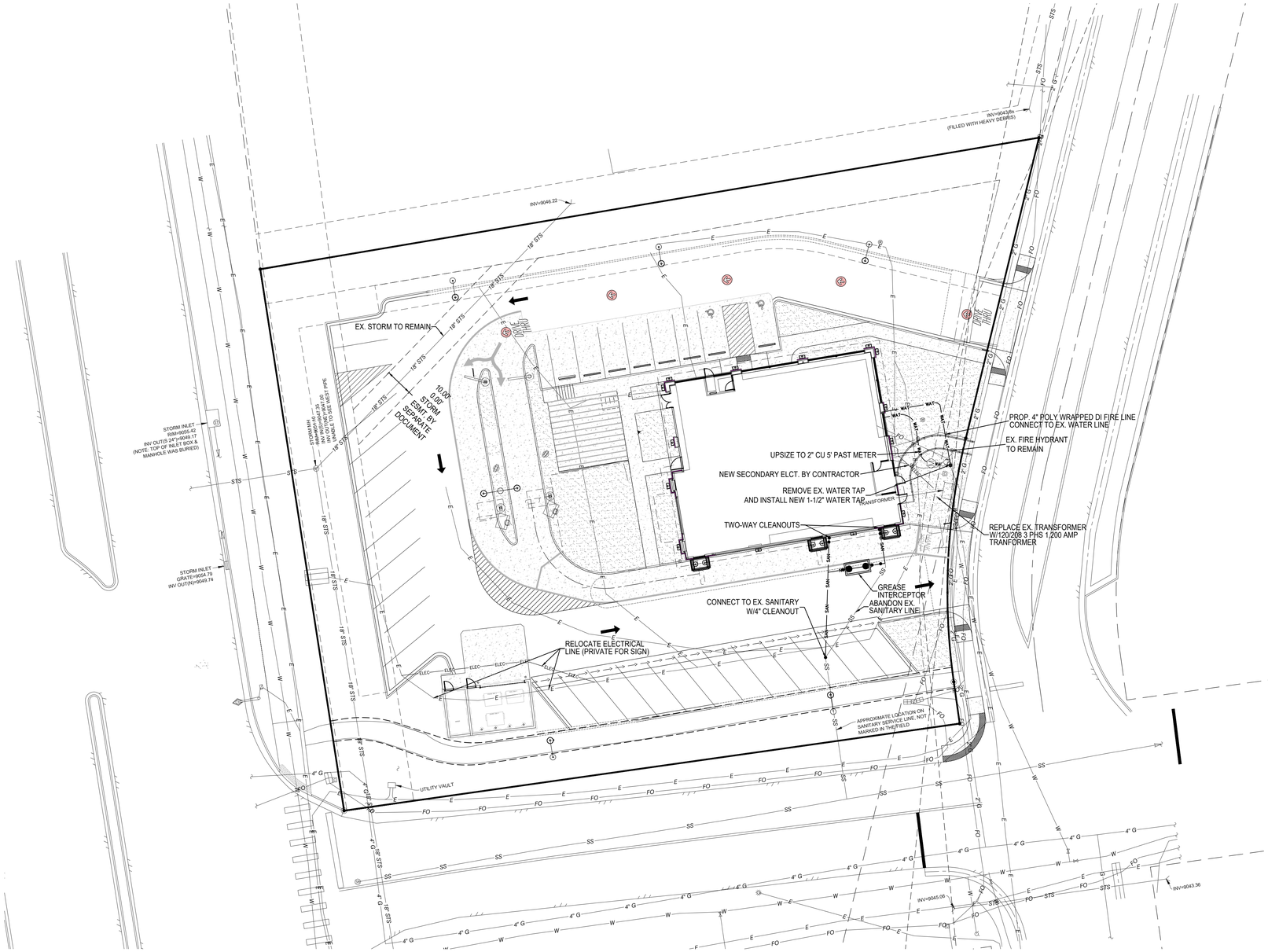
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ADDRESS:

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REGIONAL DWG. NO: -	STATE STORE #: 51062
	NATIONAL #: 44322

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DATE: 09/05/2025	McD P/CM: YAGUSESKY
DESIGNED BY: RJP	
DRAWN BY: RJP	FILE NAME: CURRENT.DWG
CHECKED BY: RJP	SLS JN: 24-0001-216

DRAWING TITLE: GRADING PLAN

SHEET NO: C1.2



20 0 20 20

PLAN SCALE: 1" = 20'

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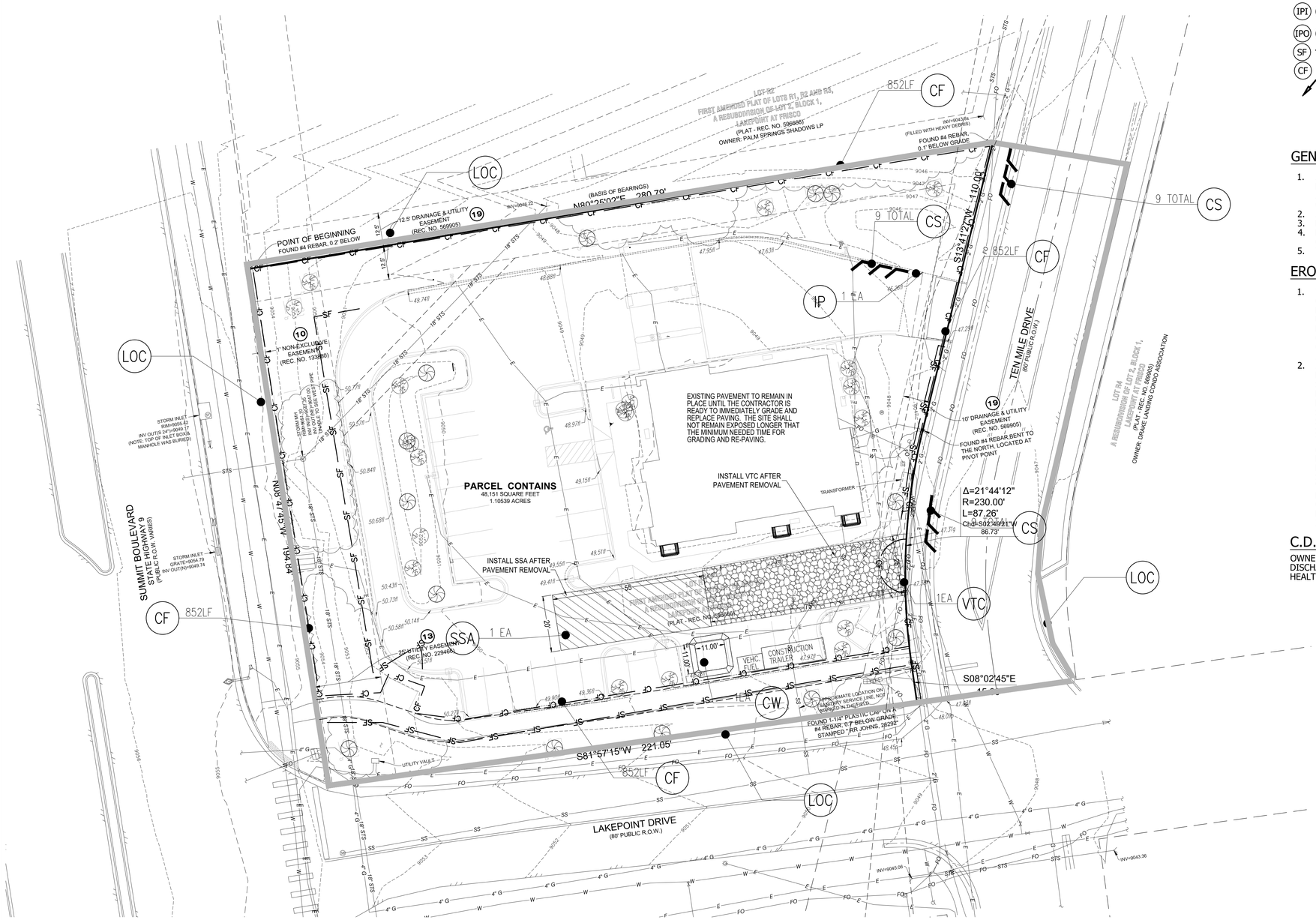
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CHECKED BY: RJP	SLS JN: 24-0001-216

DRAWING TITLE: UTILITY PLAN

SHEET NO: C1.3



SEDIMENT & EROSION CONTROL LEGEND

VTC	VEHICLE TRACKING PAD
IPA	INLET PROTECTION, AREA
IPI	INLET PROTECTION, INTERIM
IPO	INLET PROTECTION, ON-GRADE
SF	SILT FENCE
CF	CONSTRUCTION FENCE
	DIRECTION OF RUNOFF
SSA	STABILIZED STAGING AREA
CW	CONCRETE WASHOUT
CS	CURB SOCK
DD	DIVERSION DITCH
LOC	LIMIT OF CONSTRUCTION
CD	CHECK DAM

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3. POST PAVING WILL REQUIRE BACK OF CURB PROTECTION OR SOD.
4. NO ONSITE STOCKPILE WILL BE UTILIZED, BECAUSE OF THE LIMITED SIZE OF THE SITE.
5. THE TOTAL DISTURBED AREA=0.85 ACRES

EROSION & SEDIMENT CONTROL PLAN NOTE:

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C.D.P.S. NOTE

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20 0 20 20
PLAN SCALE: 1" = 20'

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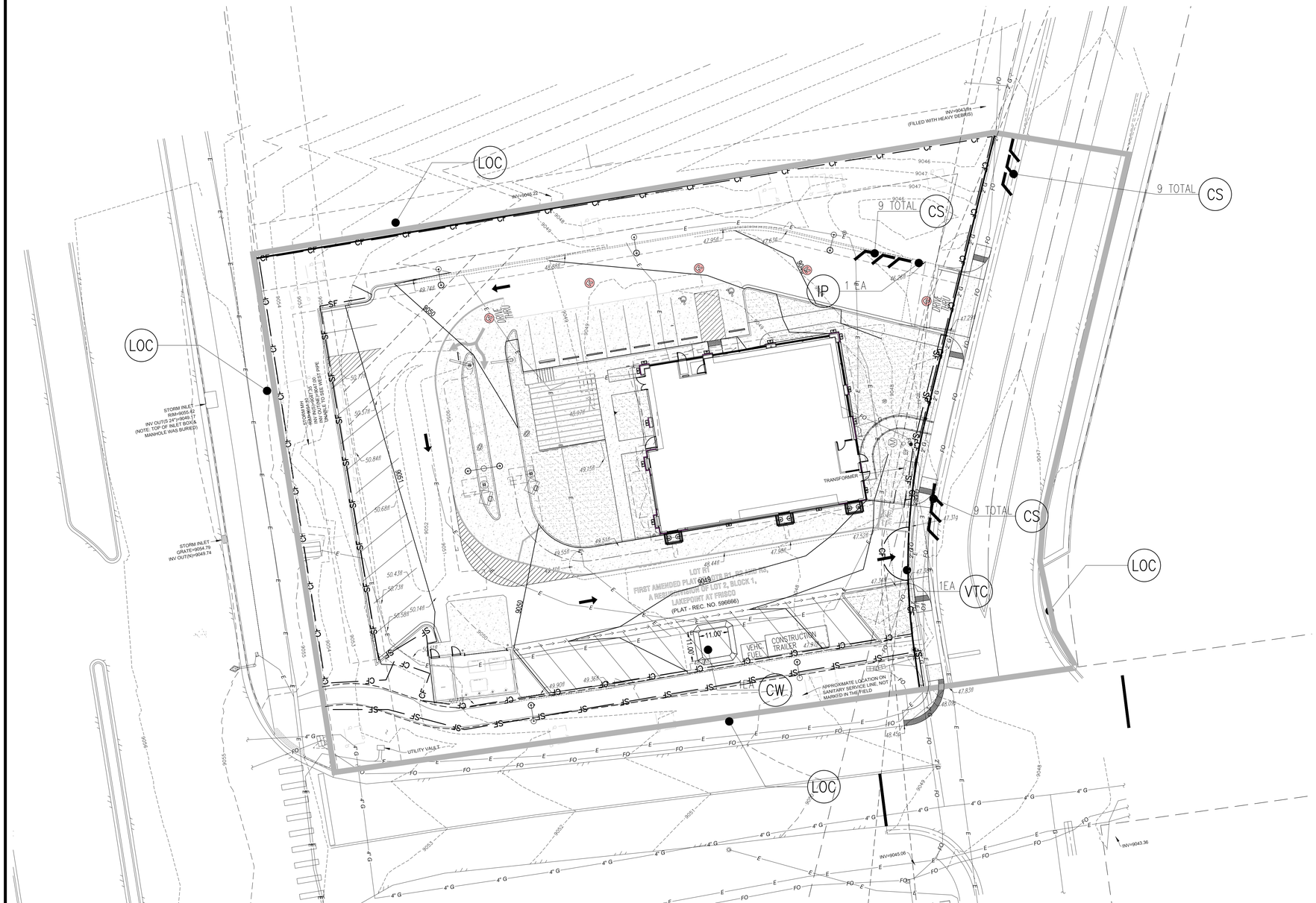
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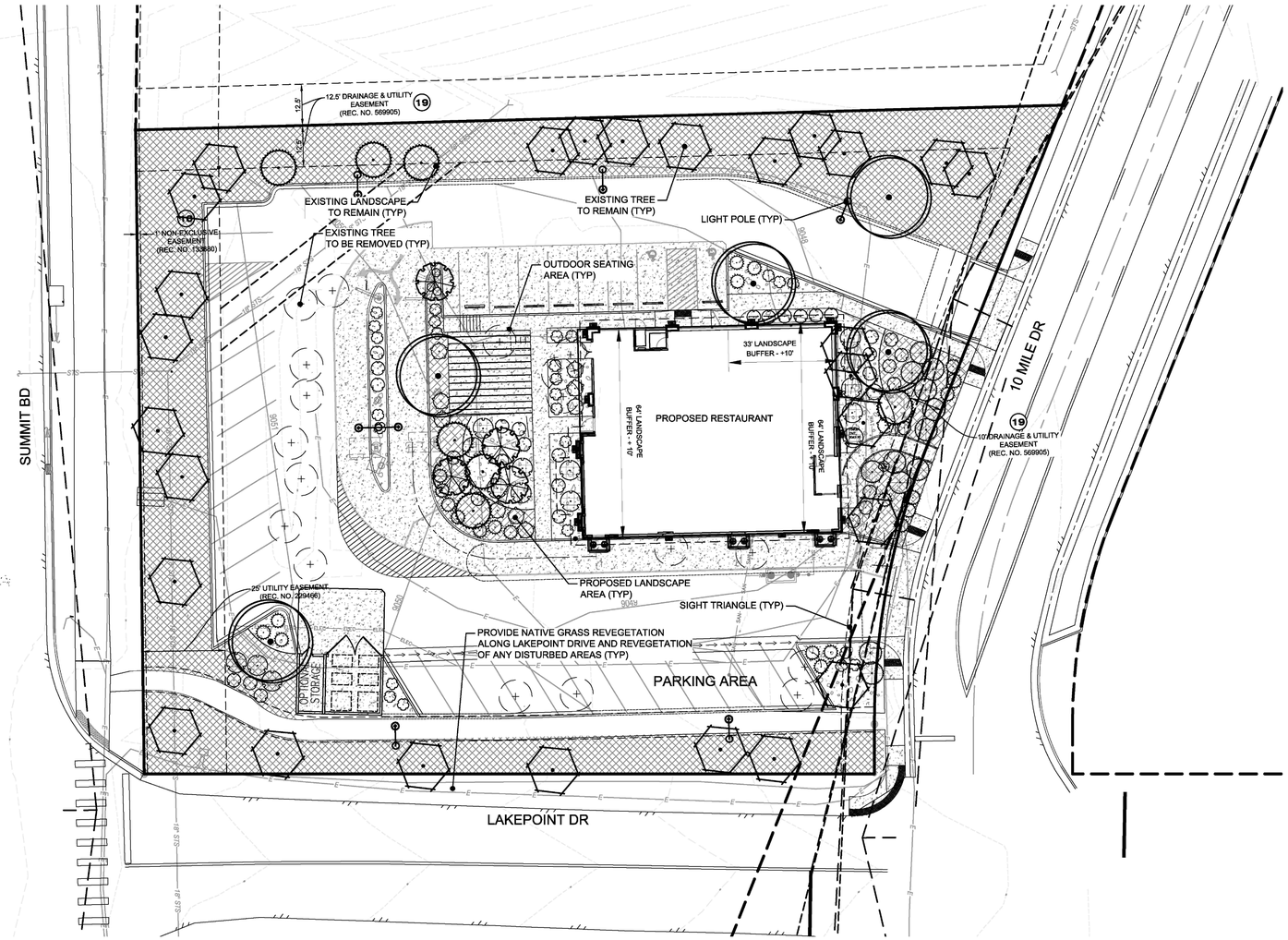
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DESIGNED BY:	RJP
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CHECKED BY:	RJP
McD RE:	BAKER
McD P/CM:	YAGUSESKY
FILE NAME:	CURRENT.DWG
SLS JN:	24-0001-216

DRAWING TITLE: EROSION CONTROL INITIAL

SHEET NO: EC1.0


LOC
LOC
LOC
LOC
9 TOTAL CS
9 TOTAL CS
9 TOTAL CS
1P
1 EA
1EA VTC
CW
SF
SF
SF



SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME
TREES			
	PB	7	PICEA PUNGENS GLAUCA 'HOOPSII' / DWARF BLUE SPRUCE
	PANG	5	POPULUS ANGUSTIFOLIA / NARROWLEAF COTTONWOOD
	PT	4	POPULUS TREMULOIDES / QUAKING ASPEN
	EX-REM	18	REMOVE AS INDICATED / EXISTING TREE TO BE REMOVED
	EX-RET	27	TO REMAIN- PROTECT DURING CONSTRUCTION / EXISTING TREE TO REMAIN
SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME
SHRUBS			
	AMI	11	ARONIA MELANOCARPA `IROQUIS BEAUTY` / DWARF CHOKEBERRY
	CSR	33	CORNUS SERICEA `ARCTIC FIRE / DOGWOOD
	JHH	23	JUNIPERUS HORIZONTALIS 'HUGHES' / CREEPING JUNIPER
	JHBM	12	JUNIPERUS SABINA `BROADMOOR` / BROADMOOR JUNIPER
	MR	3	MAHONIA REPENS / CREEPING MAHONIA
	PFF	25	POTENTILLA FRUTICOSA `ABBOTSWOOD' / POTENTILLA
	RAC	15	RIBES AUREUM / GOLDEN CURRANT
SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME
GROUND COVERS			
	EX-RS	12,653 SF	EX LANDSCAPE - SHRUB BED / TO REMAIN
MULCHES			
	RM	2,837 SF	ROCK MULCH / RIVER ROCK 1"-2"
	WM	1,910 SF	SHREDDED CEDAR MULCH / WOOD MULCH

IRRIGATION NOTES:

IRRIGATION IS TO BE EXTENDED TO NEW PLANTINGS FROM EXISTING SYSTEM, PE SCHEDULE BELOW.

Perennials to receive one of 0.5 GPH emitters
Grasses to receive one of 1.0 GPH emitters
Shrubs to receive two of 1.0 GPH emitters
Trees to receive to receive minimum four of 2.0 GPH emitters

1. All areas disturbed by grading or construction, not being formally landscaped, shall be mulched and revegetated with seeding and/or other plant materials. All seeded areas shall receive seeding mulch (e.g., straw-crimped in place or hydromulch, etc.). In order to promote growth and increase soil contact all rocks larger than three inches in diameter shall be removed, and a minimum of three inches of topsoil shall be installed utilizing existing stockpiled topsoil from the site, when possible. Seeded areas in excess of 3:1 (horizontal:vertical) slope (33 percent) shall receive biodegradable erosion control blankets, to reduce potential for damage from heavy, concentrated storm-water runoff. Seed mixes and other plant material shall be selected from the "Plant Materials List - Frisco Colorado". Alternative plant materials may be considered if it is determined by the Community Development Department or Planning Commission based on competent evidence that the proposed plant material is suitable to the climate and placement on

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3. POST PAVING WILL REQUIRE BACK OF CURB PROTECTION OR SOD.
4. NO ONSITE STOCKPILE WILL BE UTILIZED, BECAUSE OF THE LIMITED SIZE OF THE SITE.
5. THE TOTAL DISTURBED AREA=0.85 ACRES

EROSION & SEDIMENT CONTROL PLAN NOTE:

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20 0 20 20
PLAN SCALE: 1" = 20'

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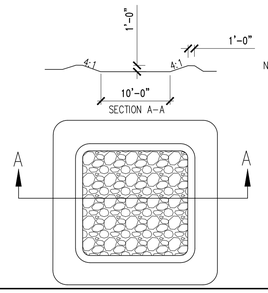
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DRAWING TITLE: EROSION CONTROL FINAL STABILIZATION

SHEET NO: EC1.2



NOTE:
1. BOTTOM OF CONTAINMENT AREA SHALL BE LINED WITH 12" GRAVEL SUFFICIENT TO HOLD THE EQUIPMENT LOADS.
2. IN CASE OF A MAJOR SPILL NOTIFY THE EMERGENCY CONTACT PERSONS LISTED ON THE COVER SHEET OF THESE PLANS.
3. ALL SIDE SLOPES ARE TO BE 4:1 MAX.
4. FUELING VEHICLES CONTAINING 500 GALLONS OR MORE WILL BE REQUIRED TO OBTAIN A SEPARATE PERMIT FROM LONGMONT FIRE DEPARTMENT.

FUEL CONTAINMENT BERM | 1

Wind Erosion/Dust Control (DC) EC-14

Description

Wind erosion and dust control BMPs help to keep soil particles from entering the air as a result of land disturbing construction activities. These BMPs include a variety of practices generally focused on either graded disturbed areas or construction roadways. For graded areas, practices such as seeding and mulching, use of soil binders, site watering, or other practices that provide prompt surface cover should be used. For construction roadways, road watering and stabilized surfaces should be considered.



Photograph DC-1. Water truck used for dust suppression. Photo courtesy of Douglas County.

Appropriate Uses

Dust control measures should be used on any site where dust poses a problem to air quality. Dust control is important to control for the health of construction workers and surrounding waterbodies.

Design and Installation

The following construction BMPs can be used for dust control:

- An irrigation/sprinkler system can be used to wet the top layer of disturbed soil to help keep dry soil particles from becoming airborne.
- Seeding and mulching can be used to stabilize disturbed surfaces and reduce dust emissions.
- Protecting existing vegetation can help to slow wind velocities across the ground surface, thereby limiting the likelihood of soil particles to become airborne.
- Spray-on soil binders form a bond between soil particles keeping them grounded. Chemical treatments may require additional permitting requirements. Potential impacts to surrounding waterways and habitat must be considered prior to use.
- Placing rock on construction roadways and entrances will help keep dust to a minimum across the construction site.
- Wind fences can be installed on site to reduce wind speeds. Install fences perpendicular to the prevailing wind direction for maximum effectiveness.

Wind Erosion Control/ Dust Control	
Functions	
Erosion Control	Yes
Sediment Control	No
Site/Material Management	Moderate

Maintenance and Removal

When using an irrigation/sprinkler control system to aid in dust control, be careful not to overwater. Overwatering will cause construction vehicles to track mud off-site.

WIND AND DUST CONTROL | 2

MM-1 Concrete Washout Area (CWA)

setbacks infeasible or if highly permeable soils exist in the area, then the pit must be installed with an impermeable liner (16 mil minimum thickness) or surface storage alternatives using prefabricated concrete washout devices or a lined aboveground storage area should be used.

Design details with notes are provided in Detail CWA-1 for pits and CWA-2 for aboveground storage areas. Pre-fabricated concrete washout container information can be obtained from vendors.

Maintenance and Removal

A key consideration for concrete washout areas is to ensure that adequate signage is in place identifying the location of the washout area. Part of inspecting and maintaining washout areas is ensuring that adequate signage is provided and in good repair and that the washout area is being used, as opposed to washout in non-designated areas of the site.

Remove concrete waste in the washout area, as needed to maintain BMP function (typically when filled to about two-thirds of its capacity). Collect concrete waste and deliver offsite to a designated disposal location.

Upon termination of use of the washout site, accumulated solid waste, including concrete waste and any contaminated soils, must be removed from the site to prevent on-site disposal of solid waste. If the wash water is allowed to evaporate and the concrete hardens, it may be recycled.



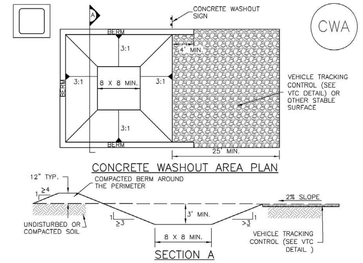
Photograph CWA-2. Prefabricated concrete washout. Photo courtesy of CDOT.



Photograph CWA-3. Earthen concrete washout. Photo courtesy of CDOT.

CONCRETE WASHOUT AREA | 3

Concrete Washout Area (CWA) MM-1



CWA-1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   —CWA INSTALLATION LOCATION.
2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.
3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.
5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.
6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.
7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

CONCRETE WASHOUT AREA | 4

NO.	DATE	REVISION DESCRIPTION

CIVIL ENGINEERING CONSULTANT:
Strategic Land Solutions, Inc.
Civil Engineering • Land Planning • Entitlements
2595 PONDEROSA ROAD
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SEAL: COLORADO REGISTERED ROBERT J. PALMER 36320 PROFESSIONAL ENGINEER
BY Robert J. Palmer, PE
Licensed Professional Engineer (CO PE #36320), AS PRESIDENT FOR STRATEGIC LAND SOLUTIONS, INC.

McDonald's
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OFFICE: ROCKY MOUNTAIN REGION
ADDRESS:

STREET ADDRESS: 960 N. TEN MILE DRIVE
CITY: FRISCO
STATE: COLORADO
COUNTY: SUMMIT
STATE STORE #: 51062
NATIONAL #: 44322
REGIONAL DMC NO: -

SCALE:	AS NOTED
DATE:	09/05/2025
DESIGNED BY:	RJP
DRAWN BY:	RJP
CHECKED BY:	RJP
McD RE:	BAKER
McD P/CM:	YAGUESKY
FILE NAME:	CURRENT.DWG
SLS JN:	24-0001-216

DRAWING TITLE: EROSION CONTROL DETAILS

SHEET NO: EC2.0

MM-1 Concrete Washout Area (CWA)

CWA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE. CONCRETE MATERIALS, ACCUMULATED IN PIT, SHALL BE REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2'.
5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER-TIGHT CONTAINER AND DISPOSED OF PROPERLY.
6. THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.
7. WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM DOUGLAS COUNTY, COLORADO AND THE CITY OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD).

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

CONCRETE WASHOUT AREA | 5

Good Housekeeping Practices (GH) MM-3

Description

Implement construction site good housekeeping practices to prevent pollution associated with solid, liquid and hazardous construction-related materials and wastes. Stormwater Management Plans (SWMPs) should clearly specify BMPs including these good housekeeping practices:

- Provide for waste management.
- Establish proper building material staging areas.
- Designate paint and concrete washout areas.
- Establish proper equipment/vehicle fueling and maintenance practices.
- Control equipment/vehicle washing and allowable non-stormwater discharges.
- Develop a spill prevention and response plan.

Acknowledgement: This Fact Sheet is based directly on EPA guidance provided in *Developing Your Stormwater Pollution Prevent Plan* (EPA 2007).





Photographs GH-1 and GH-2. Proper materials storage and secondary containment for fuel tanks are important good housekeeping practices. Photos courtesy of CDOT and City of Aurora.

Appropriate Uses

Good housekeeping practices are necessary at all construction sites.

Design and Installation

The following principles and actions should be addressed in SWMPs:

- **Provide for Waste Management.** Implement management procedures and practices to prevent or reduce the exposure and transport of pollutants in stormwater from solid, liquid and sanitary wastes that will be generated at the site. Practices such as trash disposal, recycling, proper material handling, and cleanup measures can reduce the potential for stormwater runoff to pick up construction site wastes and discharge them to surface waters. Implement a comprehensive set of waste-management practices for hazardous or toxic materials, such as paints, solvents, petroleum products, pesticides, wood preservatives, acids, roofing tar, and other materials. Practices should include storage, handling, inventory, and cleanup procedures, in case of spills. Specific practices that should be considered include:

Solid or Construction Waste

- Designate trash and bulk waste-collection areas on-site.

Good Housekeeping	
Functions	
Erosion Control	No
Sediment Control	No
Site/Material Management	Yes

GOOD HOUSEKEEPING | 6

MM-3 Good Housekeeping Practices (GH)

- Recycle materials whenever possible (e.g., paper, wood, concrete, oil).
- Segregate and provide proper disposal options for hazardous material wastes.
- Clean up litter and debris from the construction site daily.
- Locate waste-collection areas away from streets, gutters, watercourses, and storm drains. Waste-collection areas (dumpsters, and such) are often best located near construction site entrances to minimize traffic on disturbed soils. Consider secondary containment around waste collection areas to minimize the likelihood of contaminated discharges.
- Empty waste containers before they are full and overflowing.

Sanitary and Septic Waste

- Provide convenient, well-maintained, and properly located toilet facilities on-site.
- Locate toilet facilities away from storm drain inlets and waterways to prevent accidental spills and contamination of stormwater.
- Maintain clean restroom facilities and empty portable toilets regularly.
- Where possible, provide secondary containment pans under portable toilets.
- Provide tie-downs or stake-downs for portable toilets.
- Educate employees, subcontractors, and suppliers on locations of facilities.
- Treat or dispose of sanitary and septic waste in accordance with state or local regulations. Do not discharge or bury wastewater at the construction site.
- Inspect facilities for leaks. If found, repair or replace immediately.
- Special care is necessary during maintenance (pump out) to ensure that waste and/or biocide are not spilled on the ground.

Hazardous Materials and Wastes

- Develop and implement employee and subcontractor education, as needed, on hazardous and toxic waste handling, storage, disposal, and cleanup.
- Designate hazardous waste-collection areas on-site.
- Place all hazardous and toxic material wastes in secondary containment.



Photograph GH-3. Locate portable toilet facilities on level surfaces away from waterways and storm drains. Photo courtesy of WWE.

GOOD HOUSEKEEPING | 7

Good Housekeeping Practices (GH) MM-3

- Hazardous waste containers should be inspected to ensure that all containers are labeled properly and that no leaks are present.

- **Establish Proper Building Material Handling and Staging Areas.** The SWMP should include comprehensive handling and management procedures for building materials, especially those that are hazardous or toxic. Paints, solvents, pesticides, fuels and oils, other hazardous materials or building materials that have the potential to contaminate stormwater should be stored indoors or under cover whenever possible or in areas with secondary containment. Secondary containment measures prevent a spill from spreading across the site and may include dikes, berms, curbing, or other containment methods. Secondary containment techniques should also ensure the protection of groundwater. Designate staging areas for activities such as fueling vehicles, mixing paints, plaster, mortar, and other potential pollutants. Designated staging areas enable easier monitoring of the use of materials and clean up of spills. Training employees and subcontractors is essential to the success of this pollution prevention principle. Consider the following specific materials handling and staging practices:
  - Train employees and subcontractors in proper handling and storage practices.
  - Clearly designate site areas for staging and storage with signs and on construction drawings. Staging areas should be located in areas central to the construction site. Segment the staging area into sub-areas designated for vehicles, equipment, or stockpiles. Construction entrances and exits should be clearly marked so that delivery vehicles enter/exit through stabilized areas with vehicle tracking controls (See Vehicle Tracking Control Fact Sheet).
  - Provide storage in accordance with Spill Protection, Control and Countermeasures (SPCC) requirements and plans and provide cover and impermeable perimeter control, as necessary, for hazardous materials and contaminated soils that must be stored on site.
  - Ensure that storage containers are regularly inspected for leaks, corrosion, support or foundation failure, or other signs of deterioration and tested for soundness.
  - Reuse and recycle construction materials when possible.
- **Designate Concrete Washout Areas.** Concrete contractors should be encouraged to use the washout facilities at their own plants or dispatch facilities when feasible; however, concrete washout commonly occurs on construction sites. If it is necessary to provide for concrete washout areas on-site, designate specific washout areas and design facilities to handle anticipated washout water. Washout areas should also be provided for paint and stucco operations. Because washout areas can be a source of pollutants from leaks or spills, care must be taken with regard to their placement and proper use. See the Concrete Washout Area Fact Sheet for detailed guidance.

  Both self-constructed and prefabricated washout containers can fill up quickly when concrete, paint, and stucco work are occurring on large portions of the site. Be sure to check for evidence that contractors are using the washout areas and not dumping materials onto the ground or into drainage facilities. If the washout areas are not being used regularly, consider posting additional signage, relocating the facilities to more convenient locations, or providing training to workers and contractors.

  When concrete, paint, or stucco is part of the construction process, consider these practices which will help prevent contamination of stormwater. Include the locations of these areas and the maintenance and inspection procedures in the SWMP.

GOOD HOUSEKEEPING | 8

Good Housekeeping Practices (GH) MM-3

- Use high-pressure water spray at vehicle washing facilities without detergents. Water alone can remove most dirt adequately.
- Do not conduct other activities, such as vehicle repairs, in the wash area.
- Include the location of the washing facilities and the inspection and maintenance procedures in the SWMP.

- **Develop a Spill Prevention and Response Plan.** Spill prevention and response procedures must be identified in the SWMP. Representative procedures include identifying ways to reduce the chance of spills, stop the source of spills, contain and clean up spills, dispose of materials contaminated by spills, and train personnel responsible for spill prevention and response. The plan should also specify material handling procedures and storage requirements and ensure that clear and concise spill cleanup procedures are provided and posted for areas in which spills may potentially occur. When developing a spill prevention plan, include the following:
  - Note the locations of chemical storage areas, storm drains, tributary drainage areas, surface waterbodies on or near the site, and measures to stop spills from leaving the site.
  - Provide proper handling and safety procedures for each type of waste. Keep Material Safety Data Sheets (MSDSs) for chemical used on site with the SWMP.
  - Establish an education program for employees and subcontractors on the potential hazards to humans and the environment from spills and leaks.
  - Specify how to notify appropriate authorities, such as police and fire departments, hospitals, or municipal sewage treatment facilities to request assistance. Emergency procedures and contact numbers should be provided in the SWMP and posted at storage locations.
  - Describe the procedures, equipment and materials for immediate cleanup of spills and proper disposal.
  - Identify personnel responsible for implementing the plan in the event of a spill. Update the spill prevention plan and clean up materials as changes occur to the types of chemicals stored and used at the facility.

GOOD HOUSEKEEPING 9

MM-3 Good Housekeeping Practices (GH)

Spill Prevention, Control, and Countermeasure (SPCC) Plan

Construction sites may be subject to 40 CFR Part 112 regulations that require the preparation and implementation of a SPCC Plan to prevent oil spills from aboveground and underground storage tanks. The facility is subject to this rule if it is a non-transportation-related facility that:

- Has a total storage capacity greater than 1,320 gallons or a completely buried storage capacity greater than 42,000 gallons.
- Could reasonably be expected to discharge oil in quantities that may be harmful to navigable waters of the United States and adjoining shorelines.

Furthermore, if the facility is subject to 40 CFR Part 112, the SWMP should reference the SPCC Plan. To find out more about SPCC Plans, see EPA's website on SPPC at www.epa.gov/oilspill/spcc.htm.

Reporting Oil Spills

In the event of an oil spill, contact the National Response Center toll free at 1-800-424- 8802 for assistance, or for more details, visit their website: www.nrc.uscg.mil.

Maintenance and Removal

Effective implementation of good housekeeping practices is dependent on clear designation of personnel responsible for supervising and implementing good housekeeping programs, such as site cleanup and disposal of trash and debris, hazardous material management and disposal, vehicle and equipment maintenance, and other practices. Emergency response "drills" may aid in emergency preparedness.

Checklists may be helpful in good housekeeping efforts.

Staging and storage areas require permanent stabilization when the areas are no longer being used for construction-related activities.

Construction-related materials, debris and waste must be removed from the construction site once construction is complete.

Design Details

See the following Fact Sheets for related Design Details:

MM-1 Concrete Washout Area

MM-2 Stockpile Management

SM-4 Vehicle Tracking Control

Design details are not necessary for other good housekeeping practices; however, be sure to designate where specific practices will occur on the appropriate construction drawings.

GOOD HOUSEKEEPING 10

SC-1 Silt Fence (SF)

Maintenance and Removal

Inspection of silt fence includes observing the material for tears or holes and checking for slumping fence and undercut areas bypassing flows. Repair of silt fence typically involves replacing the damaged section with a new section. Sediment accumulated behind silt fence should be removed, as needed to maintain BMP effectiveness, typically before it reaches a depth of 6 inches.

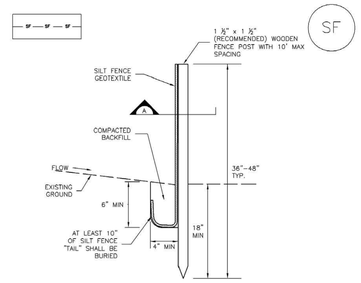
Silt fence may be removed when the upstream area has reached final stabilization.



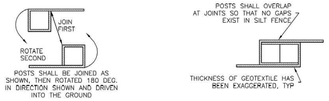
Photograph SF-2. When silt fence is not installed along the contour, a "J-hook" installation may be appropriate to ensure that the BMP does not create concentrated flow parallel to the silt fence. Photo courtesy of Tom Gore.

SILT FENCE 11

Silt Fence (SF) SC-1



SILT FENCE



SECTION A

SF–1. SILT FENCE

SILT FENCE 12

NO.	DATE	REVISION DESCRIPTION

CIVIL ENGINEERING CONSULTANT:

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Civil Engineering • Land Planning • Entitlements
2595 PONDEROSA ROAD
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OFFICE: ROCKY MOUNTAIN REGION
ADDRESS:

STREET ADDRESS: 960 N. TEN MILE DRIVE
CITY: FRISCO
STATE: COLORADO
COUNTY: SUMMIT
STATE STORE #: 51062
NATIONAL #: 44322
REGIONAL DWG. NO: -

SCALE: AS NOTED
DATE: 09/05/2025
DESIGNED BY: RJP
DRAWN BY: RJP
CHECKED BY: RJP
McD RE: BAKER
McD P/CM: YAGUSESKY
FILE NAME: CURRENT.DWG
SLS JN: 24-0001-216

DRAWING TITLE: EROSION CONTROL DETAILS

SHEET NO: EC2.1

SC-1 Silt Fence (SF)

SILT FENCE INSTALLATION NOTES

1. SILT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2–5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR PONDING AND DEPOSITION.

2. A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO ROAD GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED.

3. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.

4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES.

5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE.

6. AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J–HOOK." THE "J–HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' – 20').

7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

SILT FENCE MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6".

5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE.

6. SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER SEDIMENT CONTROL BMP.

7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

SILT FENCE 13

SC-2 Sediment Control Log (SCL)

Although sediment control logs initially allow runoff to flow through the BMP, they can quickly become a barrier and should be installed as if they are impermeable.

Design details and notes for sediment control logs are provided in the following details. Sediment logs must be properly installed per the detail to prevent undercutting, bypassing and displacement. When installed on slopes, sediment control logs should be installed along the contours (i.e., perpendicular to flow).

Improper installation can lead to poor performance. Be sure that sediment control logs are properly trenched (if lighter than 8 lb/foot), anchored and tightly jointed.

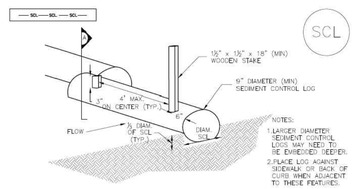
Maintenance and Removal

Be aware that sediment control logs will eventually degrade. Remove accumulated sediment before the depth is one-half the height of the sediment log and repair damage to the sediment log, typically by replacing the damaged section.

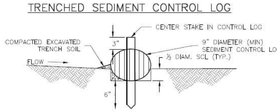
Once the upstream area is stabilized, remove and properly dispose of the logs. Areas disturbed beneath the logs may need to be seeded and mulched. Sediment control logs that are biodegradable may occasionally be left in place (e.g., when logs are used in conjunction with erosion control blankets as permanent slope breaks). However, removal of sediment control logs after final stabilization is typically appropriate when used in perimeter control, inlet protection and check dam applications. Compost from compost sediment control logs may be spread over the area and seeded as long as this does not cover newly established vegetation.

SEDIMENT CONTROL LOG 14

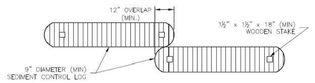
Sediment Control Log (SCL) SC-2



TRENCHED SEDIMENT CONTROL LOG



SECTION A
TRENCHED SEDIMENT CONTROL LOG

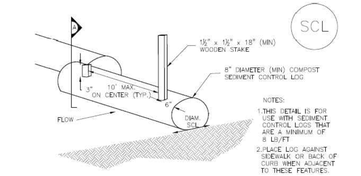


LOG JOINTS

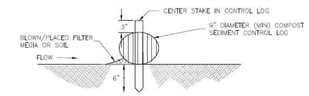
SCL–1. TRENCHED SEDIMENT CONTROL LOG

SEDIMENT CONTROL LOG 15

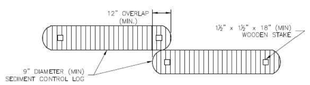
SC-2 Sediment Control Log (SCL)



COMPOST SEDIMENT CONTROL LOG (WEIGHTED)



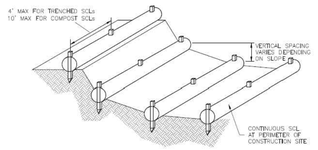
SECTION A
COMPOST SEDIMENT CONTROL LOG



LOG JOINTS

SCL–2. COMPOST SEDIMENT CONTROL LOG (WEIGHTED)

SEDIMENT CONTROL LOG 16



SCL-3. SEDIMENT CONTROL LOGS TO CONTROL SLOPE LENGTH

SEDIMENT CONTROL

17

SEDIMENT CONTROL LOG INSTALLATION NOTES

1. SEE PLAN VIEW FOR LOCATION AND LENGTH OF SEDIMENT CONTROL LOGS.

2. SEDIMENT CONTROL LOGS THAT ACT AS A PERIMETER CONTROL SHALL BE INSTALLED PRIOR TO ANY UPGRADIENT LAND-DISTURBING ACTIVITIES.

3. SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELSIOR OR COCONUT FIBER, AND SHALL BE FREE OF ANY NOXIOUS WEED SEEDS OR DEFECTS INCLUDING RIPS, HOLES AND OBVIOUS WEAR.

4. SEDIMENT CONTROL LOGS MAY BE USED AS SMALL CHECK DAMS IN DITCHES AND SWALES. HOWEVER, THEY SHOULD NOT BE USED IN PERENNIAL STREAMS.

5. IT IS RECOMMENDED THAT SEDIMENT CONTROL LOGS BE TRENCHED INTO THE GROUND TO A DEPTH OF APPROXIMATELY ⅓ OF THE DIAMETER OF THE LOG. IF TRENCHING TO THIS DEPTH IS NOT FEASIBLE AND/OR DESIRABLE (SHORT TERM INSTALLATION WITH DESIRE NOT TO DAMAGE LANDSCAPE) A LESSER TRENCHING DEPTH MAY BE ACCEPTABLE WITH MORE ROBUST STAKING. COMPOST LOGS THAT ARE 8 LB/FT DO NOT NEED TO BE TRENCHED.

6. THE UPHILL SIDE OF THE SEDIMENT CONTROL LOG SHALL BE BACKFILLED WITH SOIL OR FILTER MATERIAL THAT IS FREE OF ROCKS AND DEBRIS. THE SOIL SHALL BE TIGHTLY COMPACTED INTO THE SHAPE OF A RIGHT TRIANGLE USING A SHOVEL OR WEIGHTED LAWN ROLLER OR BLOWN IN PLACE.

7. FOLLOW MANUFACTURERS' GUIDANCE FOR STAKING. IF MANUFACTURERS' INSTRUCTIONS DO NOT SPECIFY SPACING, STAKES SHALL BE PLACED ON 4' CENTERS AND EMBEDDED A MINIMUM OF 6" INTO THE GROUND. 3" OF THE STAKE SHALL PROTRUDE FROM THE TOP OF THE LOG. STAKES THAT ARE BROKEN PRIOR TO INSTALLATION SHALL BE REPLACED. COMPOST LOGS SHOULD BE STAKED 10' ON CENTER.

SEDIMENT CONTROL LOG MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOG SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY ½ OF THE HEIGHT OF THE SEDIMENT CONTROL LOG.

5. SEDIMENT CONTROL LOG SHALL BE REMOVED AT THE END OF CONSTRUCTION. COMPOST FROM COMPOST LOGS MAY BE LEFT IN PLACE AS LONG AS BAGS ARE REMOVED AND THE AREA SEEDED. IF DISTURBED AREAS EXIST AFTER REMOVAL, THEY SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAILS ADAPTED FROM TOWN OF PARKER, COLORADO, JEFFERSON COUNTY, COLORADO, DOUGLAS COUNTY, COLORADO, AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

SEDIMENT CONTROL

18

Description

A rock sock is constructed of gravel that has been wrapped by wire mesh or a geotextile to form an elongated cylindrical filter. Rock socks are typically used either as a perimeter control or as part of inlet protection. When placed at angles in the curb line, rock socks are typically referred to as curb socks. Rock socks are intended to trap sediment from stormwater runoff that flows onto roadways as a result of construction activities.



Photograph RS-1. Rock socks placed at regular intervals in a curb line can help reduce sediment loading to storm sewer inlets. Rock socks can also be used as perimeter controls.

Appropriate Uses

Rock socks can be used at the perimeter of a disturbed area to control localized sediment loading. A benefit of rock socks as opposed to other perimeter controls is that they do not have to be trenched or staked into the ground; therefore, they are often used on roadway construction projects where paved surfaces are present.

Use rock socks in inlet protection applications when the construction of a roadway is substantially complete and the roadway has been directly connected to a receiving storm system.

Design and Installation

When rock socks are used as perimeter controls, the maximum recommended tributary drainage area per 100 lineal feet of rock socks is approximately 0.25 acres with disturbed slope length of up to 150 feet and a tributary slope gradient no steeper than 3:1. A rock sock design detail and notes are provided in Detail RS-1. Also see the Inlet Protection Fact Sheet for design and installation guidance when rock socks are used for inlet protection and in the curb line.

When placed in the gutter adjacent to a curb, rock socks should protrude no more than two feet from the curb in order for traffic to pass safely. If located in a high traffic area, place construction markers to alert drivers and street maintenance workers of their presence.

Maintenance and Removal

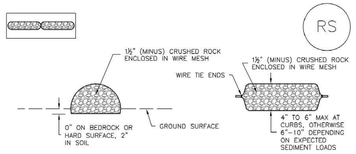
Rock socks are susceptible to displacement and breaking due to vehicle traffic. Inspect rock socks for damage and repair or replace as necessary. Remove sediment by sweeping or vacuuming as needed to maintain the functionality of the BMP, typically when sediment has accumulated behind the rock sock to one-half of the sock's height.

Once upstream stabilization is complete, rock socks and accumulated sediment should be removed and properly disposed.

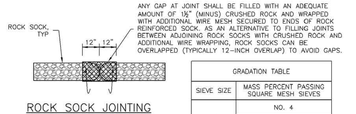
Rock Sock	
Functions	
Erosion Control	No
Sediment Control	Yes
Site/Material Management	No

ROCK SOCK

19



ROCK SOCK SECTION ROCK SOCK PLAN



ROCK SOCK JOINTING

GRADATION TABLE	
SIEVE SIZE	MASS PERCENT PASSING SQUARE MESH SIEVES
	NO. 4
2"	100
1½"	90 - 100
1"	20 - 55
¾"	0 - 15
⅜"	0 - 5
MATCHES SPECIFICATIONS FOR NO. 4 COARSE AGGREGATE FOR CONCRETE PER AASHTO M43. ALL ROCK SHALL BE FRACTURED FACE, ALL SIDES.	

ROCK SOCK INSTALLATION NOTES

1. SEE PLAN VIEW FOR LOCATION(S) OF ROCK SOCKS.

2. CRUSHED ROCK SHALL BE 1½" (MINUS) IN SIZE WITH A FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON THIS SHEET (1½" MINUS).

3. WIRE MESH SHALL BE FABRICATED OF 10 GAGE POULTRY MESH, OR EQUIVALENT, WITH A MAXIMUM OPENING OF ½". RECOMMENDED MINIMUM ROLL WIDTH OF 48"

4. WIRE MESH SHALL BE SECURED USING "HOG RINGS" OR WIRE TIES AT 6" CENTERS ALONG ALL JOINTS AND AT 2' CENTERS ON ENDS OF SOCKS.

5. SOME MUNICIPALITIES MAY ALLOW THE USE OF FILTER FABRIC AS AN ALTERNATIVE TO WIRE MESH FOR THE ROCK ENCLOSURE.

RS-1. ROCK SOCK PERIMETER CONTROL

ROCK SOCK

20

NO.	DATE	REVISION DESCRIPTION

CIVIL ENGINEERING CONSULTANT:
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Civil Engineering • Land Planning • Entitlements
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FRANKTOWN, CO 80116
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Robert J. Palmer, PE
President

PREPARED UNDER THE DIRECT SUPERVISION OF:

SEAL: COLORADO REGISTERED ROBERT J. PALMER 36320 PROFESSIONAL ENGINEER

BY Robert J. Palmer, PE
Licensed Professional Engineer (CO PE #36320), AS PRESIDENT FOR STRATEGIC LAND SOLUTIONS, INC.

McDonald's
THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF McDONALD'S CORPORATION AND SHALL NOT BE REPRODUCED WITHOUT THEIR WRITTEN PERMISSION.

OFFICE: ROCKY MOUNTAIN REGION
ADDRESS:

STREET ADDRESS: 960 N. TEN MILE DRIVE
CITY: FRISCO
STATE: COLORADO
COUNTY: SUMMIT
STATE STORE #: 51062
NATIONAL #: 44322
REGIONAL DWG. NO: -

SCALE: AS NOTED
DATE: 09/05/2025
DESIGNED BY: RJP
DRAWN BY: RJP
CHECKED BY: RJP
McD RE: BAKER
McD P/CM: YAGUSESKY
FILE NAME: CURRENT.DWG
SLS JN: 24-0001-216

DRAWING TITLE: EROSION CONTROL DETAILS

SHEET NO: EC2.2

ROCK SOCK MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SOCKS SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED, OR DAMAGED BEYOND REPAIR.

5. SEDIMENT ACCUMULATED UPSTREAM OF ROCK SOCKS SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY ½ OF THE HEIGHT OF THE ROCK SOCK.

6. ROCK SOCKS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

7. WHEN ROCK SOCKS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

NOTE: THE DETAILS INCLUDED WITH THIS FACT SHEET SHOW COMMONLY USED, CONVENTIONAL METHODS OF ROCK SOCK INSTALLATION IN THE DENVER METROPOLITAN AREA. THERE ARE MANY OTHER SIMILAR PROPRIETARY PRODUCTS ON THE MARKET. UDFCD NEITHER NOORSES NOR DISCOURAGES USE OF PROPRIETARY PROTECTION PRODUCTS; HOWEVER, IN THE EVENT PROPRIETARY METHODS ARE USED, THE APPROPRIATE DETAIL FROM THE MANUFACTURER MUST BE INCLUDED IN THE SWMP AND THE BMP MUST BE INSTALLED AND MAINTAINED AS SHOWN IN THE MANUFACTURER'S DETAILS.

ROCK SOCK

21

IP-3. Rock Sock Inlet Protection for Sump/Area Inlet

IP-4. Silt Fence Inlet Protection for Sump/Area Inlet

IP-5. Over-excavation Inlet Protection

IP-6. Straw Bale Inlet Protection for Sump/Area Inlet

CIP-1. Culvert Inlet Protection

Propriety inlet protection devices should be installed in accordance with manufacturer specifications.

More information is provided below on selecting inlet protection for sump and on-grade locations.

Inlets Located in a Sump

When applying inlet protection in sump conditions, it is important that the inlet continue to function during larger runoff events. For curb inlets, the maximum height of the protective barrier should be lower than the top of the curb opening to allow overflow into the inlet during larger storms without excessive localized flooding. If the inlet protection height is greater than the curb elevation, particularly if the filter becomes clogged with sediment, runoff will not enter the inlet and may bypass it, possibly causing localized flooding, public safety issues, and downstream erosion and damage from bypassed flows.

Area inlets located in a sump setting can be protected through the use of silt fence, concrete block and rock socks (on paved surfaces), sediment control logs/straw wattles embedded in the adjacent soil and stacked around the area inlet (on pervious surfaces), over-excavation around the inlet, and proprietary products providing equivalent functions.

Inlets Located on a Slope

For curb and gutter inlets on paved sloping streets, block and rock sock inlet protection is recommended in conjunction with curb socks in the gutter leading to the inlet. For inlets located along unpaved roads, also see the Check Dam Fact Sheet.

Maintenance and Removal

Inspect inlet protection frequently. Inspection and maintenance guidance includes:

- Inspect for tears that can result in sediment directly entering the inlet, as well as result in the contents of the BMP (e.g., gravel) washing into the inlet.
- Check for improper installation resulting in untreated flows bypassing the BMP and directly entering the inlet or bypassing to an unprotected downstream inlet. For example, silt fence that has not been properly trenched around the inlet can result in flows under the silt fence and directly into the inlet.
- Look for displaced BMPs that are no longer protecting the inlet. Displacement may occur following larger storm events that wash away or reposition the inlet protection. Traffic or equipment may also crush or displace the BMP.
- Monitor sediment accumulation upgradient of the inlet protection.

INLET PROTECTION

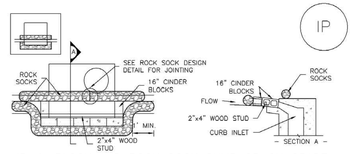
22

- Remove sediment accumulation from the area upstream of the inlet protection, as needed to maintain BMP effectiveness, typically when it reaches no more than half the storage capacity of the inlet protection. For silt fence, remove sediment when it accumulates to a depth of no more than 6 inches. Remove sediment accumulation from the area upstream of the inlet protection as needed to maintain the functionality of the BMP.
- Propriety inlet protection devices should be inspected and maintained in accordance with manufacturer specifications. If proprietary inlet insert devices are used, sediment should be removed in a timely manner to prevent devices from breaking and spilling sediment into the storm drain.

Inlet protection must be removed and properly disposed of when the drainage area for the inlet has reached final stabilization.

INLET PROTECTION

23



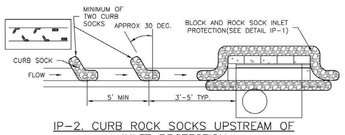
IP-1. BLOCK AND ROCK SOCK SUMP OR ON GRADE INLET PROTECTION

BLOCK AND CURB SOCK INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. CONCRETE "CINDER" BLOCKS SHALL BE LAID ON THEIR SIDES AROUND THE INLET IN A SINGLE ROW, ABUTTING ONE ANOTHER WITH THE OPEN END FACING AWAY FROM THE CURB.

3. GRAVEL BAGS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ABUTTING ONE ANOTHER AND JOINTED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL.



IP-2. CURB ROCK SOCKS UPSTREAM OF INLET PROTECTION

CURB ROCK SOCK INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL INSTALLATION REQUIREMENTS.

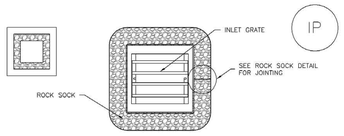
2. PLACEMENT OF THE SOCK SHALL BE APPROXIMATELY 30 DEGREES FROM PERPENDICULAR IN THE OPPOSITE DIRECTION OF FLOW.

3. SOCKS ARE TO BE FLUSH WITH THE CURB AND SPACED A MINIMUM OF 5 FEET APART.

4. AT LEAST TWO CURB SOCKS IN SERIES ARE REQUIRED UPSTREAM OF ON-GRADE INLETS.

INLET PROTECTION

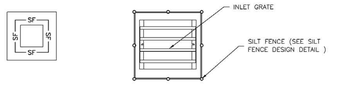
24



IP-3, ROCK SOCK SUMP/AREA INLET PROTECTION

ROCK SOCK SUMP/AREA INLET PROTECTION INSTALLATION NOTES
1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF ROCK SOCKS FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.



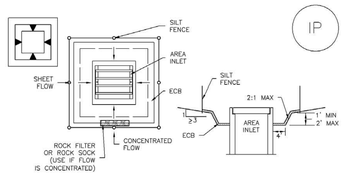
IP-4, SILT FENCE FOR SUMP INLET PROTECTION

SILT FENCE INLET PROTECTION INSTALLATION NOTES
1. SEE SILT FENCE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. POSTS SHALL BE PLACED AT EACH CORNER OF THE INLET AND AROUND THE EDGES AT A MAXIMUM SPACING OF 3 FEET.

3. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF SILT FENCE FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.

INLET PROTECTION 25



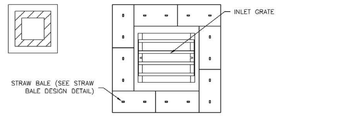
IP-5, OVEREXCAVATION INLET PROTECTION

OVEREXCAVATION INLET PROTECTION INSTALLATION NOTES

1. THIS FORM OF INLET PROTECTION IS PRIMARILY APPLICABLE FOR SITES THAT HAVE NOT YET REACHED FINAL GRADE AND SHOULD BE USED ONLY FOR INLETS WITH A RELATIVELY SMALL CONTRIBUTING DRAINAGE AREA.

2. WHEN USING FOR CONCENTRATED FLOWS, SHAPE BASIN IN 2:1 RATIO WITH LENGTH ORIENTED TOWARDS DIRECTION OF FLOW.

3. SEDIMENT MUST BE PERIODICALLY REMOVED FROM THE OVEREXCAVATED AREA.



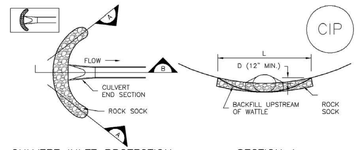
IP-6, STRAW BALE FOR SUMP INLET PROTECTION

STRAW BALE BARRIER INLET PROTECTION INSTALLATION NOTES

1. SEE STRAW BALE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. BALES SHALL BE PLACED IN A SINGLE ROW AROUND THE INLET WITH ENDS OF BALES TIGHTLY ABUTTING ONE ANOTHER.

INLET PROTECTION 26



CULVERT INLET PROTECTION PLAN

SECTION A



SECTION B

CIP-1, CULVERT INLET PROTECTION

CULVERT INLET PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR
–LOCATION OF CULVERT INLET PROTECTION.

2. SEE ROCK SOCK DESIGN DETAIL FOR ROCK GRADATION REQUIREMENTS AND JOINTING DETAIL.

CULVERT INLET PROTECTION MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF THE CULVERT SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS ½ THE HEIGHT OF THE ROCK SOCK.

5. CULVERT INLET PROTECTION SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

(DETAILS ADAPTED FROM AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

INLET PROTECTION 27

GENERAL INLET PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
–LOCATION OF INLET PROTECTION.
–TYPE OF INLET PROTECTION (IP.1, IP.2, IP.3, IP.4, IP.5, IP.6)

2. INLET PROTECTION SHALL BE INSTALLED PROMPTLY AFTER INLET CONSTRUCTION OR PAVING IS COMPLETE (TYPICALLY WITHIN 48 HOURS). IF A RAINFALL/RUNOFF EVENT IS FORECAST, INSTALL INLET PROTECTION PRIOR TO ONSET OF EVENT.

3. MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

INLET PROTECTION MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF INLET PROTECTION SHALL BE REMOVED AS NECESSARY TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN STORAGE VOLUME REACHES 50% OF CAPACITY, A DEPTH OF 6" WHEN SILT FENCE IS USED, OR ¼ OF THE HEIGHT FOR STRAW BALES.

5. INLET PROTECTION IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED, UNLESS THE LOCAL JURISDICTION APPROVES EARLIER REMOVAL OF INLET PROTECTION IN STREETS.

6. WHEN INLET PROTECTION AT AREA INLETS IS REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

NOTE: THE DETAILS INCLUDED WITH THIS FACT SHEET SHOW COMMONLY USED, CONVENTIONAL METHODS OF INLET PROTECTION IN THE DENVER METROPOLITAN AREA. THERE ARE MANY PROPRIETARY INLET PROTECTION METHODS ON THE MARKET. UDFCD NEITHER ENDORSES NOR DISCOURAGES USE OF PROPRIETARY INLET PROTECTION. HOWEVER, IN THE EVENT PROPRIETARY METHODS ARE USED, THE APPROPRIATE DETAIL FROM THE MANUFACTURER MUST BE INCLUDED IN THE SWMP AND THE BMP MUST BE INSTALLED AND MAINTAINED AS SHOWN IN THE MANUFACTURER'S DETAILS.

NOTE: SOME MUNICIPALITIES DISCOURAGE OR PROHIBIT THE USE OF STRAW BALES FOR INLET PROTECTION. CHECK WITH LOCAL JURISDICTION TO DETERMINE IF STRAW BALE INLET PROTECTION IS ACCEPTABLE.

INLET PROTECTION 28

NO.	DATE	REVISION DESCRIPTION

CIVIL ENGINEERING CONSULTANT:
Strategic Land Solutions, Inc.
Civil Engineering • Land Planning • Entitlements
2595 PONDEROSA ROAD
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Robert J. Palmer, PE
President

PREPARED UNDER THE DIRECT SUPERVISION OF:

SEAL: COLORADO REGISTERED ROBERT J. PALMER 36320 PROFESSIONAL ENGINEER

BY Robert J. Palmer, PE
Licensed Professional Engineer (CO PE #36320),
AS PRESIDENT FOR STRATEGIC LAND SOLUTIONS, INC.

McDonald's
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OFFICE ADDRESS: ROCKY MOUNTAIN REGION

STREET ADDRESS: 960 N. TEN MILE DRIVE
CITY: FRISCO
STATE: COLORADO
COUNTY: SUMMIT
STATE STORE #: 51062
NATIONAL #: 44322
REGIONAL DWG. NO: -

SCALE:	AS NOTED	McD RE:	BAKER
DATE:	09/05/2025	McD P/CM:	YAGUSESKY
DESIGNED BY:	RJP		
DRAWN BY:	RJP	FILE NAME:	CURRENT.DWG
CHECKED BY:	RJP	SLS JN:	24-0001-216

DRAWING TITLE: EROSION CONTROL DETAILS

SHEET NO: EC2.3

Construction Fence (CF) SM-3

Description

A construction fence restricts site access to designated entrances and exits, delineates construction site boundaries, and keeps construction out of sensitive areas such as natural areas to be preserved as open space, wetlands and riparian areas.



Photograph CF-1. A construction fence helps delineate areas where existing vegetation is being protected. Photo courtesy of Douglas County.

Appropriate Uses

A construction fence can be used to delineate the site perimeter and locations within the site where access is restricted to protect natural resources such as wetlands, waterbodies, trees, and other natural areas of the site that should not be disturbed.

If natural resource protection is an objective, then the construction fencing should be used in combination with other perimeter control BMPs such as silt fence, sediment control logs or similar measures.

Design and Installation

Construction fencing may be chain link or plastic mesh and should be installed following manufacturer's recommendations. See Detail CF-1 for typical installations.

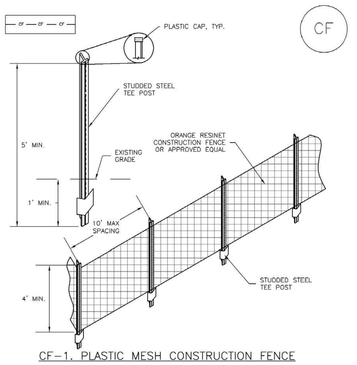
Do not place construction fencing in areas within work limits of machinery.

Maintenance and Removal

- Inspect fences for damage, repair or replace as necessary.
- Fencing should be tight and any areas with stumping or fallen posts should be reinstalled.
- Fencing should be removed once construction is complete.

Construction Fence	
Functions	
Erosion Control	No
Sediment Control	No
Site/Material Management	Yes

CONSTRUCTION FENCE 29



CF-1, PLASTIC MESH CONSTRUCTION FENCE

CONSTRUCTION FENCE INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
–LOCATION OF CONSTRUCTION FENCE.

2. CONSTRUCTION FENCE SHOWN SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

3. CONSTRUCTION FENCE SHALL BE COMPOSED OF ORANGE, CONTRACTOR-GRADE MATERIAL THAT IS AT LEAST 4' HIGH. METAL POSTS SHOULD HAVE A PLASTIC CAP FOR SAFETY.

4. STUDDED STEEL TEE POSTS SHALL BE UTILIZED TO SUPPORT THE CONSTRUCTION FENCE. MAXIMUM SPACING FOR STEEL TEE POSTS SHALL BE 10'.

5. CONSTRUCTION FENCE SHALL BE SECURELY FASTENED TO THE TOP, MIDDLE, AND BOTTOM OF EACH POST.

CONSTRUCTION FENCE 30

Construction Fence (CF) SM-3

CONSTRUCTION FENCE MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. CONSTRUCTION FENCE SHALL BE REPAIRED OR REPLACED WHEN THERE ARE SIGNS OF DAMAGE SUCH AS RIPS OR SAGS. CONSTRUCTION FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

5. WHEN CONSTRUCTION FENCES ARE REMOVED, ALL DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE FENCE SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)

CONSTRUCTION FENCE 31

SM-4 Vehicle Tracking Control (VTC)

VTC-3. Stabilized Construction Entrance/Exit with Wheel Wash. This is an aggregate pad, similar to VTC-1, but includes equipment for tire washing. The wheel wash equipment may be as simple as hand-held power washing equipment to more advance proprietary systems. When a wheel wash is provided, it is important to direct wash water to a sediment trap prior to discharge from the site.

Vehicle tracking controls are sometimes installed in combination with a sediment trap to treat runoff.

Maintenance and Removal

Inspect the area for degradation and replace aggregate or material used for a stabilized entrance/exit as needed. If the area becomes clogged and ponds water, remove and dispose of excess sediment or replace material with a fresh layer of aggregate as necessary.



Photograph VTC-2. A vehicle tracking control pad with wheel wash facility. Photo courtesy of Tom Gore.

With aggregate vehicle tracking controls, ensure rock and debris from this area do not enter the public right-of-way.

Remove sediment that is tracked onto the public right of way daily or more frequently as needed. Excess sediment in the roadway indicates that the stabilized construction entrance needs maintenance.

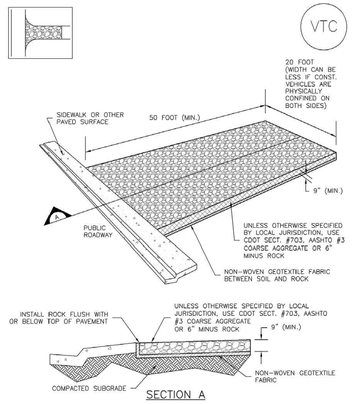
Ensure that drainage ditches at the entrance/exit area remain clear.

A stabilized entrance should be removed only when there is no longer the potential for vehicle tracking to occur. This is typically after the site has been stabilized.

When wheel wash equipment is used, be sure that the wash water is discharged to a sediment trap prior to discharge. Also inspect channels conveying the water from the wash area to the sediment trap and stabilize areas that may be eroding.

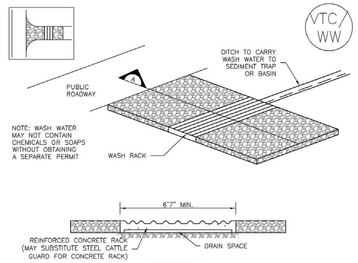
When a construction entrance/exit is removed, excess sediment from the aggregate should be removed and disposed of appropriately. The entrance should be promptly stabilized with a permanent surface following removal, typically by paving.

VEHICLE TRACKING CONTROL 32



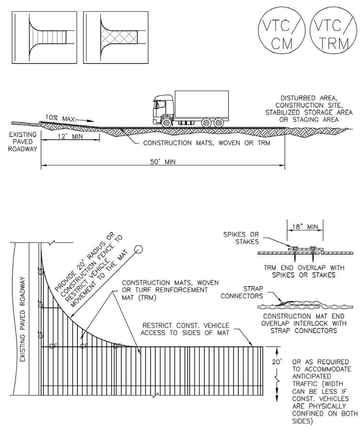
VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

VEHICLE TRACKING CONTROL 33



VTC-2. AGGREGATE VEHICLE TRACKING CONTROL WITH WASH RACK

VEHICLE TRACKING CONTROL 34



VTC-3. VEHICLE TRACKING CONTROL W/ CONSTRUCTION MAT OR TURF REINFORCEMENT MAT (TRM)

VEHICLE TRACKING CONTROL 35

STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   -LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S).
   -TYPE OF CONSTRUCTION ENTRANCE(S)/EXITS(S) (WITH/WITHOUT WHEEL WASH, CONSTRUCTION MAT OR TRM).

2. CONSTRUCTION MAT OR TRM STABILIZED CONSTRUCTION ENTRANCES ARE ONLY TO BE USED ON SHORT DURATION PROJECTS (TYPICALLY RANGING FROM A WEEK TO A MONTH) WHERE THERE WILL BE LIMITED VEHICULAR ACCESS.

3. A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE LOCATED AT ALL ACCESS POINTS WHERE VEHICLES ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT-OF-WAYS.

4. STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

5. A NON-WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STABILIZED CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK.

6. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

STABILIZED CONSTRUCTION ENTRANCE/EXIT MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY TO THE STABILIZED ENTRANCE/EXIT TO MAINTAIN A CONSISTENT DEPTH.

5. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED THROUGHOUT THE DAY AND AT THE END OF THE DAY BY SHOVELING OR SWEEPING. SEDIMENT MAY NOT BE WASHED DOWN STORM SEWER DRAINS.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM CITY OF BROOMFIELD, COLORADO, NOT AVAILABLE IN AUTOCAD)

VEHICLE TRACKING CONTROL 36

Minimizing Long-Term Stabilization Requirements

- Utilize off-site parking and restrict vehicle access to the site.
- Use construction mats in lieu of rock when staging is provided in an area that will not be disturbed otherwise.
- Consider use of a bermed contained area for materials and equipment that do not require a stabilized surface.
- Consider phasing of staging areas to avoid disturbance in an area that will not be otherwise disturbed.

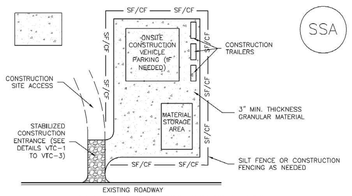
See Detail SSA-1 for a typical stabilized staging area and SSA-2 for a stabilized staging area when materials staging in roadways is required.

Maintenance and Removal

Maintenance of stabilized staging areas includes maintaining a stable surface cover of gravel, repairing perimeter controls, and following good housekeeping practices.

When construction is complete, debris, unused stockpiles and materials should be recycled or properly disposed. In some cases, this will require disposal of contaminated soil from equipment leaks in an appropriate landfill. Staging areas should then be permanently stabilized with vegetation or other surface cover planned for the development.

STABILIZED STAGING AREA 37



SSA-1. STABILIZED STAGING AREA

STABILIZED STAGING AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   -LOCATION OF STAGING AREA(S).
   -CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.

2. STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.

3. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.

4. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.

5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

6. ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.

STABILIZED STAGING AREA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.

STABILIZED STAGING AREA 38

STABILIZED STAGING AREA MAINTENANCE NOTES

5. STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING/LOADING OPERATIONS.

6. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE LOCAL JURISDICTION, USED ON SITE, AND THE AREA COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.

NOTE: MANY MUNICIPALITIES PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STABILIZED STAGING AREAS DUE TO DIFFICULTIES WITH RE-ESTABLISHMENT OF VEGETATION IN AREAS WHERE RECYCLED CONCRETE WAS PLACED.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

STABILIZED STAGING AREA 39

Description

Street sweeping and vacuuming remove sediment that has been tracked onto roadways to reduce sediment transport into storm drain systems or a surface waterway.



Photograph SS 1. A street sweeper removes sediment and potential pollutants along the curb line at a construction site. Photo courtesy of Tom Gore.

Appropriate Uses

Use this practice at construction sites where vehicles may track sediment offsite onto paved roadways.

Design and Installation

Street sweeping or vacuuming should be conducted when there is noticeable sediment accumulation on roadways adjacent to the construction site. Typically, this will be concentrated at the entrance/exit to the construction site. Well-maintained stabilized construction entrances, vehicle tracking controls and tire wash facilities can help reduce the necessary frequency of street sweeping and vacuuming.

On smaller construction sites, street sweeping can be conducted manually using a shovel and broom. Never wash accumulated sediment on roadways into storm drains.

Maintenance and Removal

- Inspect paved roads around the perimeter of the construction site on a daily basis and more frequently, as needed. Remove accumulated sediment, as needed.
- Following street sweeping, check inlet protection that may have been displaced during street sweeping.
- Inspect area to be swept for materials that may be hazardous prior to beginning sweeping operations.

Street Sweeping/ Vacuuming	
Functions	
Erosion Control	No
Sediment Control	Yes
Site/Material Management	Yes

STREET SWEEPING & VACUUMING 40

NO. DATE REVISION DESCRIPTION

CIVIL ENGINEERING CONSULTANT:
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Robert J. Palmer, PE
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PREPARED UNDER THE DIRECT SUPERVISION OF:
SEAL: COLORADO REGISTERED ROBERT J. PALMER 36320 PROFESSIONAL ENGINEER
BY Robert J. Palmer, PE
Licensed Professional Engineer (CO PE #36320), AS PRESIDENT FOR STRATEGIC LAND SOLUTIONS, INC.

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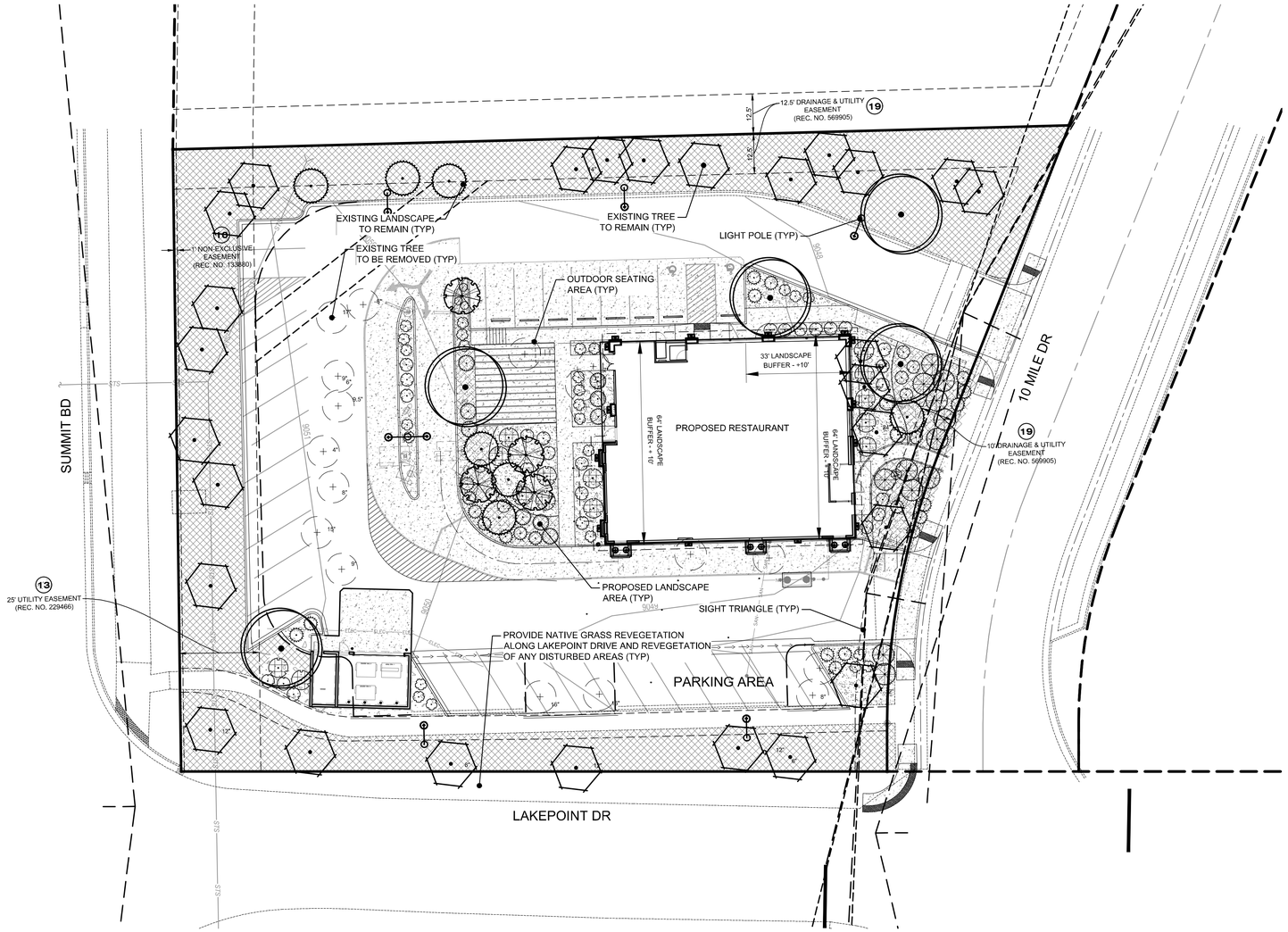
OFFICE ROCKY MOUNTAIN REGION
ADDRESS

STREET ADDRESS: 960 N. TEN MILE DRIVE
CITY: FRISCO
STATE: COLORADO
COUNTY: SUMMIT
STATE STORE #: 51062
NATIONAL #: 44322
REGIONAL DWG. NO: -

SCALE: AS NOTED
DATE: 09/05/2025
DESIGNED BY: RJP
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McD P/CM: YAGUSESKY
FILE NAME: CURRENT.DWG
SLS JN: 24-0001-216

DRAWING TITLE: EROSION CONTROL DETAILS

SHEET NO: EC2.4



LANDSCAPE PLAN

SCALE: 1" = 20'

0 20 40 60

PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	CONT
TREES				
	PB	7	PICEA PUNGENS GLAUCA 'HOOPSII' / DWARF BLUE SPRUCE	50% 6' HEIGHT 25% 8' HEIGHT 25% 10' HEIGHT
	PANG	5	POPULUS ANGUSTIFOLIA / NARROWLEAF COTTONWOOD	50% 3" CALIPER 50% 2" CALIPER
	PT	4	POPULUS TREMULOIDES / QUAKING ASPEN	50% 3" CALIPER 50% 2" CALIPER
	EX-REM	18	REMOVE AS INDICATED / EXISTING TREE TO BE REMOVED	EXISTING
	EX-RET	27	TO REMAIN- PROTECT DURING CONSTRUCTION / EXISTING TREE TO REMAIN	EXISTING

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	SIZE
SHRUBS				
	CSR	33	CORNUS SERICEA `ARCTIC FIRE / DOGWOOD	5 GAL
	JHH	22	JUNIPERUS HORIZONTALIS 'HUGHES' / CREEPING JUNIPER	5 GAL
	JHBM	12	JUNIPERUS SABINA `BROADMOOR` / BROADMOOR JUNIPER	5 GAL
	MR	3	MAHONIA REPENS / CREEPING MAHONIA	5 GAL
	PMN	11	PHYSOCARPUS MONOGYNUS / MOUNTAIN NINEBARK	5 GAL
	PFF	25	POTENTILLA FRUTICOSA `ABBOTSWOOD' / POTENTILLA	5 GAL
	RAC	14	RIBES AUREUM / GOLDEN CURRANT	5 GAL

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	CONT
GROUND COVERS				
	EX-RS	12,679 SF	EX LANDSCAPE - SHRUB BED / TO REMAIN	EXISTING
MULCHES				
	RM	3,013 SF	ROCK MULCH / RIVER ROCK 1"-2"	MULCH
	WM	1,904 SF	SHREDDED CEDAR MULCH / WOOD MULCH	MULCH

IRRIGATION NOTES:

IRRIGATION IS TO BE EXTENDED TO NEW PLANTINGS FROM EXISTING SYSTEM, PER SCHEDULE BELOW.

Perennials to receive one of 0.5 GPH emitters
Grasses to receive one of 1.0 GPH emitters
Shrubs to receive two of 1.0 GPH emitters
Trees to receive to receive minimum four of 2.0 GPH emitters

1. All areas disturbed by grading or construction, not being formally landscaped, shall be mulched and revegetated with seeding and/or other plant materials. All seeded areas shall receive seeding mulch (e.g., straw-crimped in place or hydromulch, etc.). In order to promote growth and increase soil contact all rocks larger than three inches in diameter shall be removed, and a minimum of three inches of topsoil shall be installed utilizing existing stockpiled topsoil from the site, when possible. Seeded areas in excess of 3:1 (horizontal:vertical) slope (33 percent) shall receive biodegradable erosion control blankets, to reduce potential for damage from heavy, concentrated storm-water runoff. Seed mixes and other plant material shall be selected from the "Plant Materials List - Frisco Colorado". Alternative plant materials may be considered if it is determined by the Community Development Department or Planning Commission based on competent evidence that the proposed plant material is suitable to the climate and placement on the site.

CODE REQUIREMENTS

LOT SIZE = 48,151 SF

OVERALL LANDSCAPE: 1 TREE PER 1125 SF LOT AREA + 1 SHRUB PER 17570 SF LOT AREA =
32 TREES / 28 SHRUBS REQUIRED / 32 TREES + 28 SHRUBS PROVIDED*
(16 EXISTING TREES USED TOWARD REQUIREMENTS)

PARKING: 32 PROVIDED SPACES = 20920 SF PAVED AREA =
1256 SF PARKING LANDSCAPE REQUIRED / 1300 SF PROVIDED
1 TREE + 2 SHRUBS PER 150 SF = 8 TREES + 17 SHRUBS REQUIRED / 8 TREES + 17 SHRUBS PROVIDED

LANDSCAPE BUFFERS:
BUILDING FRONTAGE = 64 + 64+ 79 + 79 = 286 LF
PROVIDED BUFFER = 64 + 64 + 33 = 161 (56%)

NATURAL DESIGN SOLUTIONS
Landscape Architecture
Land Planning · Irrigation Design
5539 Colt Drive, Longmont, CO 80503
(303) 443-0388 · neil@ndscolorado.com

NO.	DATE	REVISION DESCRIPTION

CIVIL ENGINEERING CONSULTANT:
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Civil Engineering · Land Planning · Entitlements
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720.384.7661 Phone
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Robert J. Palmer, PE
President

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McDonald's

OFFICE: ROCKY MOUNTAIN REGION
ADDRESS:

STREET ADDRESS: 960 N. TEN MILE DRIVE
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STATE: COLORADO
COUNTY: SUMMIT
STATE STORE #: 51062
NATIONAL #: TBD
REGIONAL DWG. NO: -

SCALE:	AS NOTED	McD RE:	BAKER
DATE:	02/12/25	McD PDM:	YAGUSESKY
DESIGNED BY:	JRO		
DRAWN BY:	JRO	FILE NAME:	CURRENT.DWG
CHECKED BY:	NAM	SLS JN:	24-0001-216

DRAWING TITLE: LANDSCAPE PLAN

SHEET NO: L1.0

GENERAL NOTES

(Note: All references to "Contractor" are specific to "Landscape Contractor" unless notified as "General or other type of Contractor")

1. CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES OF MATERIALS NEEDED TO COMPLETE THIS PLAN IN THE FIELD. NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES BETWEEN THE DRAWINGS AND CONDITIONS IN THE FIELD. SUBSTITUTIONS OF PLANT MATERIAL ARE NOT ALLOWED WITHOUT APPROVAL FROM LANDSCAPE ARCHITECT GIVEN PRIOR TO INSTALLATION. GRAPHIC QTY'S. PREVAIL OVER WRITTEN QTY'S. PRIOR TO COMMENCEMENT OF WORK THE LANDSCAPE CONTRACTOR SHALL CONTACT OWNERS REPRESENTATIVE FOR SPECIFIC INSTRUCTIONS RELEVANT TO THE SEQUENCING AND SCOPE OF WORK.
2. CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL LANDSCAPE SHOWN ON THIS PLAN. ANY DEFICIENCIES OR DEVIATIONS FROM THIS PLAN ARE TO BE APPROVED BY OWNER'S REPRESENTATIVE OR LANDSCAPE ARCHITECT. ANY CHANGES FROM THE APPROVED PLANS MAY REQUIRE APPROVAL FROM THE CITY OR COUNTY PLANNING DEPARTMENTS. LANDSCAPE CONTRACTOR TO PROVIDE ALL LABOR AND MATERIALS NECESSARY TO FURNISH SCOPE OF WORK AS SHOWN PER PLAN.
3. EXISTING TOPSOIL IS TO BE STOCKPILED AND USED TO ESTABLISH FINAL GRADES WITHIN LANDSCAPE AREAS. ALL STOCKPILED SOIL MUST BE CLEAR OF WEEDS, ROCKS AND DEBRIS BEFORE REUSE. ALL BERMED PLANTING BEDS TO BE CREATED WITH IMPORTED TOPSOIL.
4. GENERAL CONTRACTOR TO RE-SPREAD STOCKPILED SOIL AND ESTABLISH ROUGH GRADE CONDITIONS TO THE FOLLOWING SPECIFICATIONS:
   A. 1" BELOW CURB FOR ALL SEEDED AREAS.
   B. 2.5" BELOW CURB FOR ALL SODDED AREAS.
   C. 4" BELOW CURB FOR ALL PLANTING, ROCK AND MULCH BEDS.
5. CONTRACTOR TO TILL PARKING LOT ISLANDS TO A DEPTH OF 30".
6. AMEND ALL PLANTING BEDS WITH CLASS 1 COMPOST. APPLY AT RATE OF 3 CYDS. PER 1000 SQUARE FEET TO ALL PLANTING BEDS AND MANICURED LAWN AREAS, AND 2 CYDS. PER 1000 SQUARE FEET FOR SEEDED AREAS. TILL, MIXING THOROUGHLY, INTO THE UPPER 8" OF SOIL.
7. FINE GRADE TO BE ESTABLISHED BY LANDSCAPE CONTRACTOR. FINE GRADE SHALL BE FREE OF ROCKS AND DEBRIS. FINE GRADE IN SEED AREAS SHALL BE FREE FROM ROCKS AND DEBRIS ½" AND GREATER. FINE GRADE IN SODDED AREAS SHALL BE FREE FROM ROCKS AND DEBRIS ¼"AND GREATER. CONTRACTOR TO REPORT ANY POOR DRAINAGE CONDITIONS PRIOR TO CONSTRUCTION.
8. CONTRACTOR IS TO PROVIDE VERIFICATION THAT ALL SOD AND SEED IS OF THE SPECIES SHOWN ON THIS PLAN. NO SUBSTITUTIONS WILL BE ALLOWED. SOD TO BE LAID WITH TIGHT STAGGERED EDGES AND BE ROLLED AFTER INSTALLATION. SEEDED AREAS CANNOT BE SUBSTITUTED WITH SOD.
9. MULCHS: ALL PLANTING BEDS THAT CALL FOR WOOD MULCH TO RECEIVE 4" ORGANIC SHREDDED BARK MULCH. SHREDDED MULCH IS TO BE OF FIBROUS MATERIAL, NOT CHIPS OR CHUNKS. NO FABRIC IS TO BE PLACED UNDER WOOD/ORGANIC MULCH. ALL MULCHED BEDS ARE TO BE SPRAYED WITH WATER AFTER INSTALLATION TO HELP MULCH TO MAT DOWN.

   ALL AREAS THAT CALL FOR COBBLE/ROCK MULCH TO RECEIVE MIN. 3" DEPTH, UNLESS NOTED OTHERWISE.

   TREES IN COBBLE/ROCK MULCH, SOD AND SEEDED AREAS TO RECEIVE 4' DIAMETER OF WOOD MULCH RING, 3" DEEP. SHRUBS AND GROUNDCOVERS IN COBBLE/ROCK MULCH SOD AND SEEDED AREAS TO RECEIVE A WOOD MULCH RING AT 2X DIAMETER OF ROOT BALL, 3" DEPTH. NO FABRIC UNDERLAYMENT IN WOOD MULCH RINGS.
10. SEED MIX INSTALLATION: CONTRACTOR TO DRILL SEED WITH BRILLION TYPE APPLICATOR AND APPLY 'SOIL GUARD' BONDED FIBER MATRIX (BFM), WHERE INDICATED PER PLAN AND SCHEDULES. APPLY SEED IN TWO DIRECTIONS (PERPENDICULAR OF THE OTHER) ADD SOIL GUARD BFM FOR DRILL SEEDING WHERE NOTED PER PLAN AND ON ALL SLOPES 5:1 TO 3:1, FOR AREAS WITH 3:1 SLOPES OR GREATER CONTRACTOR TO USE SOIL GUARD APPLICATION ONLY (IN LIEU OF HYDROMULCH) CONTRACTOR TO SPOT SEED NON-GERMINATING AREAS (3) MONTHS AFTER INITIAL SEED APPLICATION. CONTRACTOR TO RE-SEED ALL BARE AREAS (6"x6") AND GREATER AFTER (6) MONTHS FROM SEED GERMINATION OR AT THE BEGINNING OF THE FOLLOWING GROWING SEASON. PRIOR TO THE 11-MONTH WARRANTY INSPECTION RE-APPLY SOIL GUARD AND SEED MIX TO ALL BARE AREAS (6"x6" OR GREATER) AND TO ALL BARE AREAS (4"x4" OR GREATER) ON ALL SLOPES 3:1 AND GREATER.
11. REMOVED DEAD TWIGS AND BRANCHES FROM ALL NEW AND EXISTING PLANT MATERIAL IN A MANNER THAT DOES NOT CHANGE THE NATURAL HABIT OF THE PLANT MATERIAL. SCARES OF 1" OR MORE SHALL BE PAINTED WITH ORGANIC TREE PAINT. CENTRAL LEADERS SHALL NOT BE REMOVED AT ANY TIME. NEWLY PLANTED TREES WITHOUT CENTRAL LEADERS WILL BE REJECTED.
12. CONTRACTOR TO APPLY FERTILIZER IN SPRING & LATE SEPTEMBER. WATER THOROUGHLY AFTER APPLICATION OF FERTILIZERS.

    ALL SEEDED AND SODDED AREAS TO HAVE RECOMMEND FERTILIZER APPLICATIONS ADDED ONCE IN MID TO LATE JUNE AND ONCE IN LATE SEPTEMBER. WATER THOROUGHLY AFTER APPLICATION OF FERTILIZERS.
13. ALL PLANT MATERIALS AND UTILITIES ARE SHOWN AT AN APPROXIMATE LOCATIONS. THE CONTRACTOR MAY NEED TO ADJUST LOCATIONS OF PLANT MATERIAL TO ADHERE TO SPECIFIC ON-SITE CONDITIONS AND CODE REQUIREMENTS. ALL TREES AND SHRUBS TO BE PLACES AT 2' MINIMUM BACK OF CURB. CONTRACTOR TO CALL FOR UTILITY LOCATES BEFORE PLANTING (TYP.) 1-800-922-1987, OR CALL 811 BEFORE YOU DIG!
14. STEEL EDGING TO BE USED TO SEPARATE ALL TURF AND/OR SEEDED AREAS FROM PLANTING BEDS. USE PERFORATED EDGING SEGMENTS TO OBTAIN POSITIVE DRAINAGE FOR ALL DRAINAGE SWALES OR AREAS OF STANDING WATER.
15. CONTRACTOR TO PROVIDE COBBLE & UNDERLAYMENT FOR BUILDING DRAINS AND SWALES THROUGH LANDSCAPED AREAS.
16. ALL REQUIRED LANDSCAPING TO BE INSTALLED PRIOR TO ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.
17. ALL NURSERY STOCK TO CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI z60.1) AND THE COLORADO NURSERY ACT.
18. CONTRACTOR IS RESPONSIBLE FOR CONTACTING LANDSCAPE ARCHITECT FOR ALL REQUIRED INSPECTIONS. PROVIDE AT LEAST 48 HOURS NOTICE TO SCHEDULE AN INSPECTION. REQUIRED INSPECTIONS INCLUDE A LANDSCAPE LAYOUT AND PLANT MATERIAL VERIFICATION AND PLACEMENT INSPECTION, IRRIGATION MAIN LINE INSPECTION, LANDSCAPE AND IRRIGATION PUNCH LIST INSPECTION, AND A LANDSCAPE AND IRRIGATION FINAL INSPECTION.
19. CONTRACTOR IS TO PROVIDE A ONE YEAR WARRANTY ON ALL PLANT MATERIAL, TURF, IRRIGATION COMPONENTS, AND WORKMANSHIP. REPLACEMENT PLANT MATERIALS SHALL BE OF THE SAME SPECIES AND SIZE AS THE DECAYED OR DEAD PLANT MATERIAL. WARRANTY IS VOID IF PLANT MATERIAL ARE UNDER OR OVER-WATERED/FERTILIZED, DAMAGED BY VANDALISM OR NEGLECTED BY OWNER AFTER FINAL MAINTENANCE PERIOD AND FINAL ACCEPTANCE IS PROVIDED.

    REMOVE ALL TREE STAKING MATERIALS AT END OF WARRANTY, PRIOR TO FINAL ACCEPTANCE
20. MAINTENANCE: THE OWNER OF THIS PROPERTY AND ANY FUTURE OWNERS SHALL BE RESPONSIBLE FOR THE PROPER LANDSCAPE AND IRRIGATION MAINTENANCE OF THIS SITE AND ANY RIGHT OF WAY AREAS BETWEEN THE CURB AND PROPERTY LINES OF THIS SITE. MAINTENANCE OF THIS SITE INCLUDES, BUT IS NOT LIMITED TO, IRRIGATION INSPECTIONS AND ADJUSTMENTS, IRRIGATION SYSTEM SHUT DOWN AND START UP, IRRIGATION LEAK REPAIR, LANDSCAPE WEEDING, MOWING, SEEDING, FERTILIZATION, WOOD MULCH AND ROCK COVER REPLACEMENT, PRUNING, AND PLANT MATERIAL REPLACEMENT (INCLUDING ANNUAL BEDS). ALL MAINTENANCE SHOULD BE IN ACCORDANCE WITH STANDARDS SPECIFIED WITHIN THE "ALCC SPECIFICATIONS HANDBOOK" REVISED EDITION- 1996. OWNER SHOULD CONTACT LANDSCAPE CONTRACTOR OR LANDSCAPE ARCHITECT REGARDING ANY QUESTIONS RELATING TO THE LANDSCAPE OR IRRIGATION MAINTENANCE OF THIS SITE.

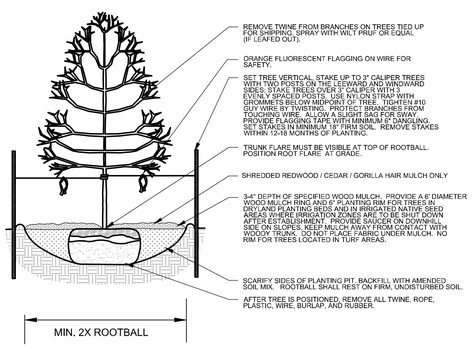
    EXISTING TREES
    EXISTING TREES DESIGNATED ON PLANS AS "TO REMAIN", OR MARKED FOR PROTECTION AND PRESERVATION IN THE FIELD, SHALL NOT BE REMOVED OR DAMAGED.

    NO GRADING TO OCCUR WITHIN THE CRITICAL ROOT ZONE / DRIP LINE OF EXISTING TREES. ALL GRADING AROUND EXISTING TREES TO REMAIN SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT.

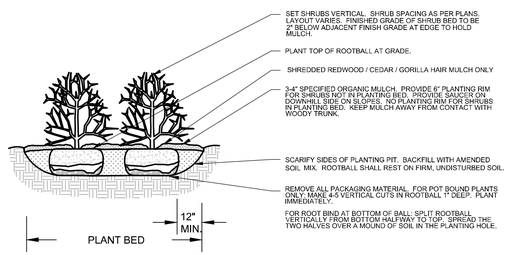
    PRIOR TO CONSTRUCTION, ALL PROTECTED TREES SHALL HAVE ORANGE PROTECTION BARRIER FENCING ERECTED AT A HEIGHT OF 3' OR GREATER. FENCING TO BE SUPPORTED BY STURDY STOCK, CAPABLE OF SUPPORTING FENCING UNTIL ALL CONSTRUCTION OPERATIONS ARE COMPLETED. PLACE NO CLOSER THAN 6' FROM TRUNK, OR ONE HALF (½) OF THE DRIP LINE, WHICHEVER IS GREATER. WITHIN THE PROTECTED ZONE THERE SHALL BE NO MOVEMENT OF EQUIPMENT OR STORAGE OF EQUIPMENT, MATERIALS, WAIST, DEBRIS, OR FILL, UNLESS APPROVED BY THE LANDSCAPE ARCHITECT.

    AVOID CUTTING SURFACE ROOTS WHEREVER POSSIBLE. SIDEWALKS AND PAVING LEVELS SHOULD BE CONTOURED SUFFICIENTLY TO AVOID SUCH. ROOT CUTS FROM EXCAVATION SHOULD BE DONE RAPIDLY, SMOOTHE FLUSH CUTS SHOULD BE MADE. BACKFILL BEFORE ROOTS HAVE A CHANCE TO DRY OUT, AND THOROUGHLY WATER THE TREE IMMEDIATELY.

NOTES:
1. MARK THE NORTH SIDE OF TREE IN THE NURSERY, AND ROTATE TREE TO FACE NORTH AT THE SITE WHENEVER POSSIBLE.
2. AT TIME OF PLANTING, DO NOT REMOVE OR CUT LEADER AND PRUNE ONLY DEAD OR BROKEN BRANCHES, CROSS OVER BRANCHES, AND WEAK OR NARROW CROTCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED. HOWEVER, DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.
3. STRUCTURAL PRUNING SHOULD NOT BEGIN UNTIL AFTER ESTABLISHMENT PERIOD, USUALLY TWO GROWING SEASONS.
4. KEEP PLANTS MOIST AND SHADED UNTIL PLANTING.
5. DO NOT FERTILIZE FOR AT LEAST ONE GROWING SEASON.
6. AMENDED BACKFILL SHALL BE AS STATED ON THIS SHEET.
7. WRAP TRUNK ON EXPOSED SITES AND SPECIES WITH THIN BARK. USE ELECTRICAL OR DUCT TAPE, NOT TWINE.
8. COORDINATE WITH CITY FORESTRY FOR CURRENT INSECT AND DISEASE RECOMMENDATIONS PRIOR TO PLANTING.
9. DEEP WATER ALL PLANTS AT TIME OF PLANTING.

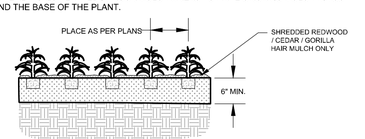


1 L2.0 DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE — SECTION



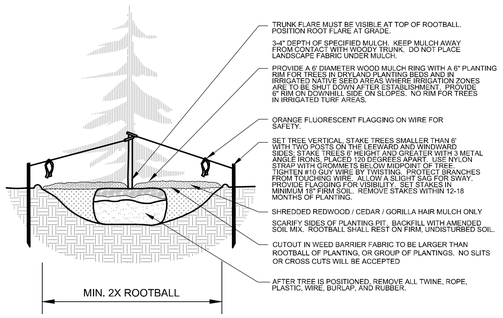
L2.0 SHRUB PLANTING DETAIL
NOT TO SCALE

NOTES:
1. KEEP PLANTS MOIST AND SHADED UNTIL PLANTING.
2. PLANT GROUND COVERS AND PERENNIALS LEVEL AND AT GRADE.
3. PRUNE ALL DEAD OR BROKEN PARTS PRIOR TO PLANTING.
4. AMENDED BACKFILL SHALL BE 1/3 COMPOST (PREFERABLY CLASSIFIED) AND 2/3 NATIVE AND/OR IMPORTED TOPSOIL.
5. ALL PERENNIALS PLANTED IN ROCK MULCH AREAS TO HAVE ORGANIC MULCH RINGS AROUND THE BASE OF THE PLANT.



L2.0 PERENNIAL/GROUNDCOVER PLANTING DETAIL
NOT TO SCALE

NOTES:
1. DO NOT REMOVE OR CUT LEADER.
2. PRUNE ONLY DEAD OR BROKEN BRANCHES IMMEDIATELY PRIOR TO PLANTING.
3. DO NOT REMOVE ANY DOUBLE LEADER, UNLESS OTHERWISE DIRECTED BY OWNERS REPRESENTATIVE.
4. KEEP PLANTS MOIST AND SHADED UNTIL PLANTING.
5. AMENDED BACKFILL SHALL BE AS STATED ON THIS SHEET.
6. MARK THE NORTH SIDE OF TREE IN THE NURSERY, AND ROTATE TREE TO FACE NORTH AT THE SITE WHENEVER POSSIBLE.
7. PINE AND SPRUCE TREES TO BE SPRAYED FOR IPS BARK BEETLE PRIOR TO PLANTING. COORDINATE WITH CITY FORESTRYFOR CURRENT INSECT AND DISEASE RECOMMENDATIONS PRIOR TO PLANTING.
8. ALL TREES TO BE DEEP WATERED AT TIME OF PLANTING.



1 L2.0 EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE — SECTION

EXISTING TREE PROTECTION DIRECTIONS:

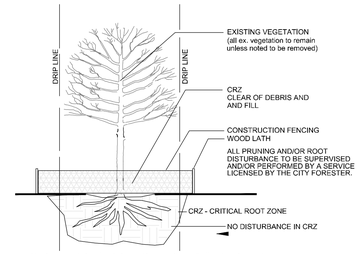
PROTECTIVE FENCING:

FOUR FEET HEIGHT PROTECTIVE FENCING IS TO BE INSTALLED AROUND THE EXISTING TREES TO REMAIN PRIOR TO CONSTRUCTION ON THIS SITE. CONTRACTOR IS TO TAKE PRECAUTIONS TO ENSURE THAT EXISTING ROOTS AND LIMBS ARE NOT DAMAGED DURING EXCAVATION ADJACENT TO TREES. FENCING IS TO BE INSTALLED BELOW THE EDGE OF THE CANOPY OF THE EXISTING TREES TO REMAIN. FENCING IS TO REMAIN IN PLACE FOR THE DURATION OF CONSTRUCTION.

IF ROOT PRUNING IS NECESSARY FOR GRADING, EXCAVATING, OR INSTALLATION OF IRRIGATION SYSTEM, ALL ROOT PRUNING IS TO TAKE PLACE OUTSIDE OF THE PROTECTIVE FENCING AROUND EACH TREE. CONTRACTOR IS TO TRENCH 12" AWAY FROM PROTECTIVE FENCING. ANY ROOTS LARGER THAN 2" ARE TO BE SAW CUT. CONTRACTOR IS TO HAND DIG ANY TRENCHES AND SAW CUT ANY INTERFERING ROOTS INSIDE THE PROTECTIVE FENCE AREAS.

WATERING, MULCHING, AND FERTILIZATION:

PRIOR TO CONSTRUCTION CONTRACTOR IS TO PLACE A 4" DEPTH OF WOOD CHIPS OR MULCH INSIDE THE PROTECTIVE FENCING OF EXISTING TREES TO REMAIN. CONTRACTOR IS TO PROVIDE REGULAR DEEP WATERING TO ALL EXISTING TREES TO REMAIN THROUGHOUT CONSTRUCTION. DURING CONSTRUCTION A SLOW-RELEASE NITROGREN FERTILIZER IS TO BE APPLIED AROUND THE BASE OF EACH TREE AT A RATE OF 2 LBS. PER 1000 S.F. (USE DRIP LINE OF TREE TO CALCULATE SQUARE FOOTAGE).



Use trees spade to relocate trees. Preserve the rootball and existing roots.
Deep water for three months, provide drip irrigation thereafter.

L1.0 EXISTING TREE PROTECTION DETAIL

NOTES:
1. KEEP PLANTS MOIST AND SHADED UNTIL PLANTING.
2. PLANT GROUND COVERS AND PERENNIALS LEVEL AND AT GRADE.
3. PRUNE ALL DEAD OR BROKEN PARTS PRIOR TO PLANTING.
4. AMENDED BACKFILL SHALL BE 1/3 COMPOST (PREFERABLY CLASSIFIED) AND 2/3 NATIVE AND/OR IMPORTED TOPSOIL.
5. ALL PERENNIALS PLANTED IN ROCK MULCH AREAS TO HAVE ORGANIC MULCH RINGS AROUND THE BASE OF THE PLANT.

NDS
NATURAL DESIGN SOLUTIONS
Landscape Architecture
Land Planning · Irrigation Design
5539 Colt Drive, Longmont, CO 80503
(303) 443-0388 · neil@ndscolorado.com

NO.	DATE	REVISION DESCRIPTION

CIVIL ENGINEERING CONSULTANT:

Strategic Land Solutions, Inc.
Civil Engineering · Land Planning · Entitlements
2595 PONDEROSA ROAD
FRANKTOWN, CO 80116
720.384.7661 Phone
rpalmer@strategicls.net
Robert J. Palmer, PE
President

McDonald's®

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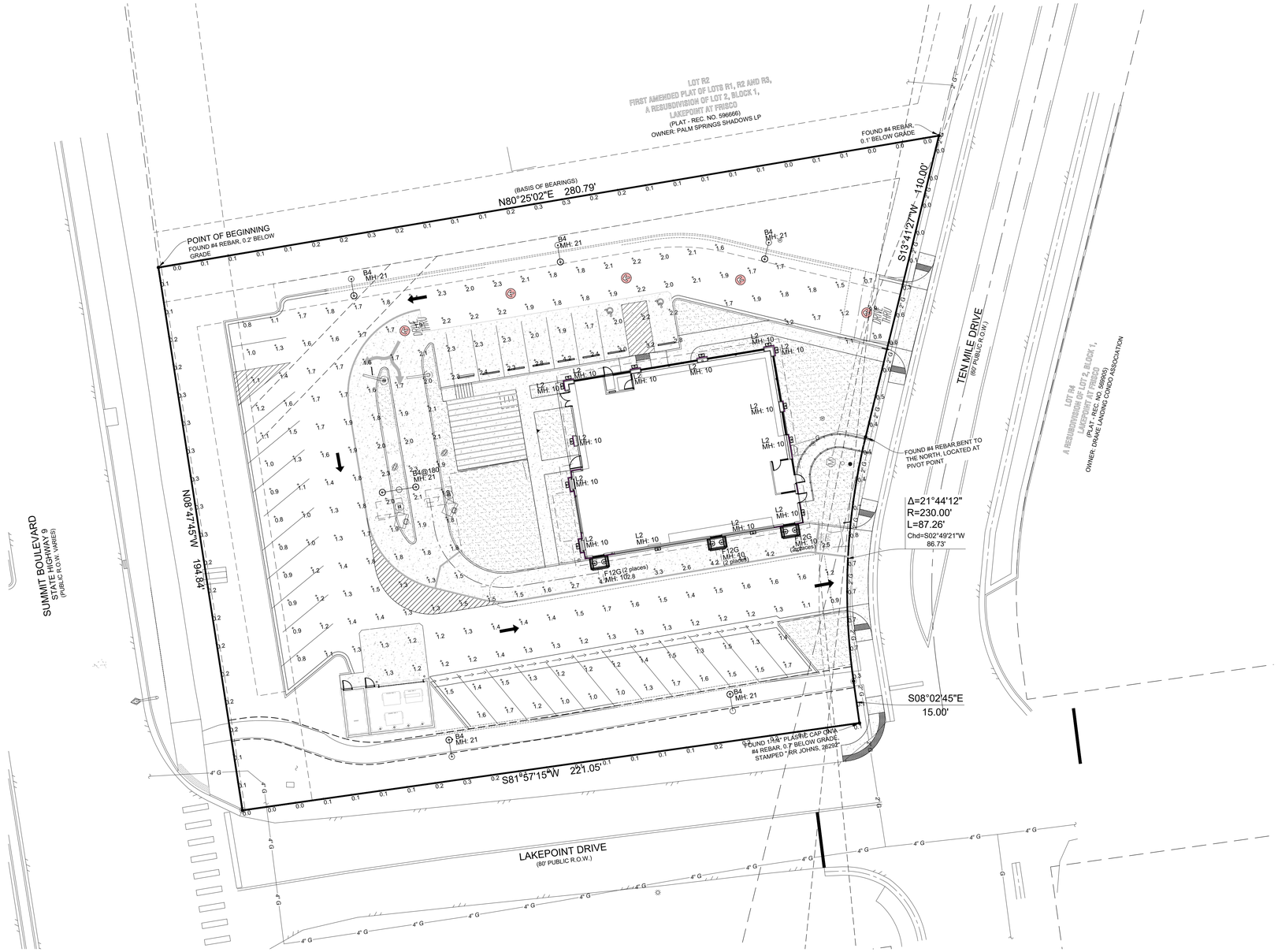
OFFICE: ROCKY MOUNTAIN REGION
ADDRESS:

STREET ADDRESS: 960 N. TEN MILE DRIVE
CITY: FRISCO
STATE: COLORADO
COUNTY: SUMMIT
STATE STORE #: 51062
NATIONAL #: TBD
REGIONAL DWG. NO: -

SCALE: AS NOTED	McD RE: BAKER
DATE: 02/12/25	McD P/CM: YAGUSESKY
DESIGNED BY: JRO	
DRAWN BY: JRO	FILE NAME: CURRENT.DWG
CHECKED BY: NAM	SLS JN: 24-0001-216

DRAWING TITLE:
LANDSCAPE DETAILS & NOTES

SHEET NO:
L2.0



Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
PARKING SURFACE READINGS	Illuminance	Fc	1.71	4.7	0.7	2.44	6.71
PROPERTY LINE READINGS	Illuminance	Fc	0.21	0.8	0.0	N.A.	N.A.

Luminaire Schedule									
Symbol	Qty	Label	Arrangement	LLF	Description	Lum. Watts	EPA	Mtg Height	Pole Type
	5	B4	Single	0.850	UCM2-ANG-36L-615-5K7-4W	71.6	1.43	21	to be determined
	1	B4@180	Back-Back	0.850	UCM2-ANG-36L-615-5K7-4W	71.6	2.86	21	to be determined
	6	F12G	SINGLE	0.850	SL8542-GD-905CCT	12.45	n/a	10	n/a
	14	L2	SINGLE	0.850	RWSC-36L-5K-DO-U-PS	14.4	n/a	10	n/a

Ordinance:
Full Cutoff
30 & 40ft max pole lighting
0.9fc max spill on adjacent property or row
2FC Avg max

20 0 20 20
PLAN SCALE: 1" = 20'

Know what's **below.** **Call** before you dig.

NO.	DATE	REVISION DESCRIPTION

CIVIL ENGINEERING CONSULTANT:
Strategic Land Solutions, Inc.
Civil Engineering • Land Planning • Entitlements
2595 PONDEROSA ROAD
FRANKTOWN, CO 80116
720.384.7661 Phone
rpalmer@strategicls.net
Robert J. Palmer, PE
President

PREPARED UNDER THE DIRECT SUPERVISION OF:
SEAL: COLORADO REGISTERED ROBERT J. PALMER 36320 PROFESSIONAL ENGINEER
BY Robert J. Palmer, PE
Licensed Professional Engineer (CO PE #36320), AS PRESIDENT FOR STRATEGIC LAND SOLUTIONS, INC.

McDonald's

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OFFICE: ROCKY MOUNTAIN REGION
ADDRESS:

STREET ADDRESS: 960 N. TEN MILE DRIVE
CITY: FRISCO
STATE: COLORADO
COUNTY: SUMMIT
STATE STORE #: 51062
NATIONAL #: 44322
REGIONAL DWG. NO: -

SCALE: AS NOTED
DATE: 09/05/2025
DESIGNED BY: RJP
DRAWN BY: RJP
CHECKED BY: RJP
McD RE: BAKER
McD P/CM: YAGUSESKY
FILE NAME: CURRENT.DWG
SLS JN: 24-0001-216

DRAWING TITLE: LIGHTING PLAN

SHEET NO: LI1.0

LIGHTING

DATE: LOCATION:
TYPE: SLED4-HE PROJECT:
CATALOG #:

SLED
HIGH EFFICIENCY LINEAR LED FACADE FIXTURE



FEATURES
- The SLED Linear LED Lighting System offers a discrete and minimalist design to maximize the lighting effect for marketing your building as your brand while keeping energy usage and maintenance to a minimum.
- Thanks to its intuitive "plug and play" mounting design with integral driver system, installation is quick and simple and only requires that power be brought to one fixture in each continuous row.
- The unique fixture design and the long life Mid-Power LED source minimizes maintenance to only an occasional cleaning of outer lens surfaces.
- This successful system is truly a "set it and forget it" solution that is only offered from Security Lighting

SPECIFICATIONS
CONSTRUCTION
- Powder coated mounting brackets that conceal power cables
- Fixture to fixture connections are made external to the fixture

OPTICS
- 5000K color temp standard
- Tamper-proof glass lens
- Down only full cut off

INSTALLATION
- Each order ships with a formed drilling template for accurate and quick installation
- All subsequent fixtures quickly plug together in series
- Fixtures are not opened during the installation process
- Complete instructions for fixture installation posted on web site at www.securitylighting.com

ELECTRICAL
- Fully integrated LED driver for completely self-contained lighting system
- Power feed required only at beginning of each continuous row or stand alone fixture

WARRANTY
- 5 year warranty
- See HLI Standard Warranty for additional information

ORDERING GUIDE
CATALOG #

Example: S-LED-XX-DO-U-XX-XX

S	LED	HE	36	DO	U		
Series	Source	Type	Size	Distribution	Voltage	Finish	Options
S Linear Facade Fixture	LED Mid-Powered	HE High Efficiency	48 4 foot 36 3 foot 24 2 foot	DO Downlight Only (8.5 Watts per foot)	U Universal 120 to 277 VAC	PS Platinum Silver DB Dark Bronze WH White BK Black BZ Bronze RL RAL Color **	3K 3000K color temp* 4K 4000K color temp*

Notes:
1. Must Provide RAL color number and powder coat manufacture name at time of quote request
2. Color pairs chip would need to be provided at time of quote request
3. Must only use factory supplied whip a to maintain water tight integrity and warranty of fixture
4. Made to order 4 to 6 week lead time
5. 5000K color temperature standard Optional 3000K and 4000K color temp, built to order

Accessories (Order Separately)
- 93003538 Hhal - LED Whip Kit (power feed) assembly One required per stand alone fixture or linear run for use with SLED HE *

KEY DATA	
Lumens	834 / 1211
Wattage	30
Efficacy (LPW)	83.6 / 82.9
Reported Life (Hours)	L70 =120,000
Input Current Range (Amps)	.036 - 012

© 2020 Security Lighting. Specifications subject to change without notice. 2120 Golf Road, Suite 460 • Rolling Meadows, IL 60008-4704
Phone 1(800) GO-HUBBELL (1(800) 464-8223) • Fax (847) 776-3842 Website www.securitylighting.com

architectural area lighting

UCM2
ARCHITECTURAL AREA/SITE

DATE: LOCATION:
TYPE: PROJECT:
CATALOG #:

FEATURES
- Reliable, uniform, illumination
- Types 1, 2, 3, 4W, 5Q, and 5W distributions
- 3000K, 4000K, 5000K CCT
- 0-10V dimming ready
- Integral surge protection: 10k in parallel, 20k in series
- Upgrade Kits
- Utilizes Stella Optics for precise distributions, maximum fixture spacing and minimal backlight.

CONTROL TECHNOLOGY
LIGHTGRID

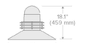
SPECIFICATIONS
CONSTRUCTION
- All housing components die cast aluminum 360 alloy, sealed with continuous silicone rubber gaskets.
- Standard configurations do not require a flat lens, optical lenses are tempered glass
- All internal and external hardware is stainless steel
- Finish: Salt, fog and abrasion resistant, electrostatically applied, thermally cured, triglycidyl isocyanurate (TGIC) polyester powdercoat
- Optical bezel finish matches the luminaire housing

LED/OPTICS
- Optical cartridge system consisting of a die cast heat sink, LED engine, TIR optics, gasket and bezel plate
- Optics are held in place without the use of adhesives
- Molded silicone gasket ensures a weather proof seal around each individual LED
- Features individual LED optical control based on high performance TIR optical designs
- Back light control is available on Standard and Clear Lens options except any Type 5 distribution. Back light control is not available for any distribution using a Diffused Lens

INSTALLATION
- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury

UNIVERSE®





	WEIGHT	EPA
UCM2	20.76 lbs / 11.08 kg	.73 ft²

ELECTRICAL
- Luminaires have integral surge protection, UL recognized and have a surge current rating of 10,000 Amps using the industry standard 8/20mSec wave and surge rating of 3F2J
- Drivers are UL recognized with an inrush current maximum of <20.0 Amps maximum at 230VAC
- 100% flicker free dimming range. Fixture will be wired for low voltage 0-10V dimming control



- Driver and surge suppressor are mounted to a prewired tray with quick disconnects that may be removed from the gear compartment

CONTROLS
- Egress adapter(s) shall slip over a 4"/100mm DIA. pole with the luminaire or arm slipping over the adapter to add a total of 4.5"/114mm to the overall height. Adapter(s) shall be prewired, independently rotatable 359°, and have a cast access cover with an integral lens and lanyard
- Photocell adapter shall include an internal twist-lock receptacle. Photocell by others

CONTROLS, CONTINUED
- Egress adapter shall require an auxiliary 120 volt supply for operation of an integral MR16 lamp in the event of emergency. The lamp may be aimed and locked into position with an adjustment range of 15°-45°. Adapter shall have a socket that accepts miniature bi-pin MR16 lamps up to 50 watts, lamp by others

CERTIFICATIONS
- ETL listed under UL 1598 and CSA C22.2 No. 250.0-08 for wet locations

WARRANTY
- 5 Year Warranty
  Consult Factory
  10 Year Extended Warranty Optional (pt on additional cost)

currentlighting.com/ael
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architectural area lighting

UCM2
ARCHITECTURAL AREA/SITE

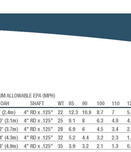
DATE: LOCATION:
TYPE: PROJECT:
CATALOG #:

ORDERING GUIDE
CATALOG #

Example: UCM2-WIND-LUM-BLU-FLR-36L-615-4K7-2-CL-BLS-WRSC-SLAT(S)-URV

UCM2 -		-		-		-		-	
Housing	LED Quantity	Lumen Output		CCT/CRI		Distribution		Optional Lens	
UCM2 Universal Medium 2.0	36L 36 LED	260 2604lm, 32W, 1930–4200 Lumens		AMB* Amber 590nm		1 Type 1		CL Clear Lens	
Optional Element		325 3294lm, 40W, 2200–5300 Lumens		3K7 3000K, 70 CRI		2 Type 2		DL* Diffused Lens	
LUM Universe Medium with Luminous Rings		420 4204lm, 50W, 2800–6700 Lumens		4K7 4000K, 70 CRI		3 Type 3			
SR Universe Medium with Luminous Side Rings		460 4604lm, 55W, 3000–7200 Lumens		5K7 5000K, 70 CRI		4W Type IV Wide		*Diffused lens option only available with 72.6 FSM on a standard option. Contact factory for availability with other distributions	
VSL Universe Medium with Luminous Vertical Slots		615 6154lm, 72W, 3900–9300 Lumens		5QT* 5000K, 90 CRI		5Q* Type V Square			
WND Universe Medium with Optional Luminous Windows		**Equivalent**				5W* Type V Wide			
Optional Internal Lens *		36L-325mA = 32LED-450mA 36L-460mA = 32LED-700mA							
BLU Blue									
RD Red									
GRN Green									
Hood Style									
ANG Angled Hood									
BEL Bell Hood									
FLR Flared Hood									
DEB Deflector Bell Hood									
STR Straight Hood									

Optional Shield	Finish	Optional Controls	Optional Lens Cover	Optional Fuse
HS* House Side Shield	BLS Black Gloss Smooth	WR LIGHTGRID™ connectivity	SLC* Slide Lens Cover	SF Single Fuse (120v, 277v, 347v)
*Black Light Control is only available with T5 TZ, T8 & T4W	BLT Black Matte Textured	WIRSC* LIGHTGRID™ connectivity with Sensor Cover to 8' Mounting Height	*It is CE or shield used to block the light from a luminous element	DF Double Fuse (208V, 240V, 480V)
	DBS Dark Bronze Gloss Smooth			
	DBT Dark Bronze Matte Textured	SCP-8F *		
	GTT Graphite Matte Textured	SCP-20F *		
	LGS Light Grey Gloss Smooth			
	LGT Light Grey Matte Textured			
	PSS Platinum Silver Gloss Smooth			
	VGT Verde Green Matte Textured			
	WHS White Gloss Smooth			
	WHT White Matte Textured			
	Color Option			
	CC* Custom Color			
	CLA* Clear Anodized Finish (Clear protective undercoat for added protection in coastal or other harsh environments)			



* Not available with all options

currentlighting.com/ael
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SECURITY LIGHTING

RWSC
RADIUS LED WALL SCONCE



The RWSC LED radius wall sconce series offers a combination of light distributions that wash the building facade while the radial soft form housing accentuates building architectural design elements in all commercial and residential applications.

The RWSC LED provides excellent illumination with a high efficiency LED light source of 72 or 36 mid power LEDs that deliver up to 2,635 lumens and up to 109 lumens per watt.

The RWSC LED fixture has become a building standard and is stocked as a quick ship item in many colors and distributions.

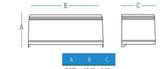
Features
- Durable cast aluminum housing
- Available in various lighting distributions for maximum versatility
- Integrated design eliminates high angle brightness
- Luminaire finished in weatherproof powder-coat paint
- Completely sealed, flat tempered glass lenses, UL listed for use in wet locations
- DLC, Downlight only, full cut-off
- Dark Sky compliant, Downlight only

Operating Temperature
- -30°C to 40°C

Electrical
- Dimming is an option (consult factory)

Mounting
RWSC features Intelligent Mounting Bracket which helps save time and money by allowing only one person to easily install. The small mounting bracket is very user friendly and features an integrated level bubble on the bracket ensuring fixture installation will always be perfect.

Dimensions



Certifications/Listings
cULus Listed, IP65RATED

Ordering Information
Ordering Example: RWSC - XXL - XK - XX - U - XX - XX

RWSC

Series	# of LEDs	CCT	Distribution	Voltage	Finish	Options
RWSC Radius Wall Sconce	36L* 36 Mid-Power LEDs	3K 3000K	DO Down only	U Universal 120/277V	DB Dark Bronze WH White BK Black PS Platinum Silver RL RAL Color* CC Custom Color*	PE Photocontrol
	72L 72 Mid-Power LED's	5K 5000K	UD Up/Down			

* 3L, 5xly available in 3-5 Weeks
* 72, 5xly available in 10 Weeks Max
* One needs lead time required to provide every 5 shown (qty of 5 options follows requiring 10 weeks)
* Must provide RAL color at time of ordering
* Must provide color sample at time of ordering

Quick Ship
- RWSC36L1BKDDBK
- RWSC36L1BKDDWH
- RWSC36L1BKDDDB
- RWSC36L1BKDDPS
- RWSC72L1DUDDWH
- RWSC72L1DUDDBK
- RWSC72L1DUDDDB
- RWSC72L1DUDDPS

Accessories
- L612ST Remote Emergency Inverter (grid mount only)*
- L612SS Remote Emergency Inverter (surface mount only)*

2120 Golf Road, Suite 460, Rolling Meadows, IL 60008
Tel: 800-544-4848 / Website: www.securitylighting.com
WWW.SECURITYLIGHTING.COM
2120 Golf Road, Suite 460 • Rolling Meadows, IL 60008-4704
Phone 1(800) GO-HUBBELL (1(800) 464-8223) • Fax (847) 776-3842
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HUBBELL Lighting

SL-8542-5CCT
6" LED Ultra- Thin Downlight

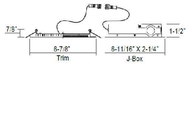
A versatile LED down light solution with edge-lit technology and an off-board driver allow for an ultra slim profile and flexible mounting options. Installation is a snap with the plenum-rated driver box and linkable connector cable – there is no need for a j-box or recessed housing when used for retrofit. The simple spring-loaded retention tabs securely hold each downlight snug to the ceiling.

Technical data:

Construction
- Ultra-thin profile
- Durable aluminum construction
- Frosted acrylic lens diffuses glare and maximizes output

Electrical
- 120V-60Hz, AC
- Dimmable TRIAC or ELV, 10-100%
- 50,000 hour projected life
- 120° Beam Angle
- Nominal 12.5W | 1055 lumens (delivered)
- 90 CRI | 5CCT Selectable: 27K, 3K, 35K, 4K, 5K

Installation
- Spring-loaded retention tabs hold downlight snug to ceiling surface, off-board driver/ junction box, poke-in connectors, and linkable connector cable
- IC Rated for direct contact with batt type fiberglass insulation



IC RATED | WET | ETL Intertek | LIFETIME WARRANTY LED Light Source | LIFETIME WARRANTY Other Components

Ordering Information Ordering Example: **SL8542-WH-905CCT**

SL	8542	-	WH	-	90	5CCT
Family	Series		Finish		CRI	CCT
SL Security Lighting	8542 6" Ultra Thin Downlight		WH White GR Gray BK Matte Black		90 90 CRI	SCCT 2.7K,3K,3.5K,4K,5K

2120 Golf Road, Suite 460, Rolling Meadows, IL 60008
Tel: 800-544-4848 / Website: www.securitylighting.com

Current

ALUMINUM POLES

PS3
3" SQUARE (SQ) POLE

CATALOG NO. MAXIMUM ALLOWABLE EPA (MPH)

BASE	POLE	OAH	SHAFT	WT	85	90	100	110	120	130	140	150
PS3	3SB-12S	8' (2.4m)	3" SQ x .125"	28	10.6	8.4	7.5	6.1	4.9	4.0	3.3	2.7
PS3	3SB-12S	10' (3.1m)	3" SQ x .125"	32	7.3	6.4	3.8	3.8	3.0	2.3	1.8	1.3

NOTE: OVERALL HEIGHT IS MEASURED TO TOP OF POLE.

SPECIFICATIONS
Base shall be cast aluminum #356 alloy, free of any porosity, foreign materials, or cosmetic fillers. Base casting shall be heat treated to a T-6 condition, and of uniform wall thickness, with no warping or mold shifting.

WARNINGS
Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

AAL recommends consulting a local engineer when the pole is to be installed in an area that may be subject to extreme weather and exposure.

Poles installed on structures such as buildings and bridges may be subjected to vibration, oscillations, and other fatigue effects which are not covered by the AAL warranty.

The use of banners or other appendages can severely affect the loading of a pole. No banner or other appendage should be attached to an AAL pole unless approved by AAL.

If the products are to be used on an existing foundation or on other structures, the customer assumes all responsibility for the structural integrity of the existing foundation, anchorage or structures and all the consequences arising therefrom.

CAUTION
Poles should never be erected without the luminaire installed. Warranty is voided if the pole is erected without the luminaire. The warranty is voided if the pole is not grounded under the entire base after installation.

Anchor bolts shall be hot dip galvanized steel. Eight galvanized hex nuts and flat washers, and a bolt circle template shall be provided. Anchor bolt for poles are 3/4" x 24" x 3".

NOTES:
PS3 is used for Parkway Square Accent (Small) Scale - PW5S, and Spectra Small Scale - SPS.

All concrete foundation details are the responsibility of a local structural engineer.

PR4
4" ROUND (RD) POLE

CATALOG NO. MAXIMUM ALLOWABLE EPA (MPH)

BASE	POLE	OAH	SHAFT	WT	85	90	100	110	120	130	140	150
PR4	4RB-12S	8' (2.4m)	4" RD x .125"	22	12.3	10.9	8.7	7	5.7	4.8	4.1	3.6
PR4	4R10-12S	10' (3.1m)	4" RD x .125"	25	9.1	8	6.3	4.9	4.0	3.3	2.8	2.4
PR4	4R12-12S	12' (3.7m)	4" RD x .125"	28	6.9	6	4.5	3.4	2.6	2.1	1.8	1.5
PR4	4R14-12S	14' (4.3m)	4" RD x .125"	32	5.2	4.4	3.2	2.3	1.5	1.2	1	0.8
PR4	4R16-12S	16' (4.9m)	4" RD x .125"	35	3.9	3.2	2.1	1.3	0.8	0.5	0.4	0.2
PR4	4RB-226	8' (2.4m)	4" RD x .226"	32	21.5	19.2	15.5	12.7	10.6	9.0	7.7	6.7
PR4	4R10-226	10' (3.1m)	4" RD x .226"	36	16.5	14.6	11.7	9.4	7.8	6.6	5.6	4.8
PR4	4R12-226	12' (3.7m)	4" RD x .226"	44	13.0	11.4	9	7.2	5.8	4.8	4.1	3.5
PR4	4R14-226	14' (4.3m)	4" RD x .226"	51	10.3	9.1	7	5.4	4.3	3.6	3	2.5
PR4	4R16-226	16' (4.9m)	4" RD x .226"	57	8.3	7.2	5.4	4.1	3.1	2.5	2.1	1.8
PR4	4R18-226	18' (5.5m)	4" RD x .226"	63	6.6	5.6	4.1	2.9	2.1	1.6	1.3	1
PR4	4R20-226	20' (6.2m)	4" RD x .226"	70	5.1	4.3	3.0	1.9	1.2	0.9	0.6	0.4

NOTE: OVERALL HEIGHT IS MEASURED TO TOP OF POLE.

SPECIFICATIONS
Base shall be cast aluminum #356 alloy, free of any porosity, foreign materials, or cosmetic fillers. Base casting shall be heat treated to a T-6 condition, and of uniform wall thickness, with no warping or mold shifting.

WARNINGS
Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

AAL recommends consulting a local engineer when the pole is to be installed in an area that may be subject to extreme weather and exposure.

Poles installed on structures such as buildings and bridges may be subjected to vibration, oscillations, and other fatigue effects which are not covered by the AAL warranty.

The use of banners or other appendages can severely affect the loading of a pole. No banner or other appendage should be attached to an AAL pole unless approved by AAL.

If the products are to be used on an existing foundation or on other structures, the customer assumes all responsibility for the structural integrity of the existing foundation, anchorage or structures and all the consequences arising therefrom.

Anchor bolts shall be hot dip galvanized steel. Eight galvanized hex nuts and flat washers, and a bolt circle template shall be provided. Anchor bolt for poles are 3/4" x 24" x 3".

All concrete foundation details are the responsibility of a local structural engineer.

CONTEMPORARY LUMINAIRE ARM MATRIX

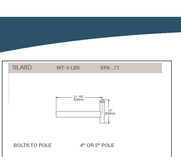


CUBIC INDIRECT™
- RDC
INDIRECT™
- INDA (ILLUSTRATED HEAD)
- INDF (FIXED HEAD)
DIRECTTY™
- DR
FLEX™/MiniFLEX
- FH
- FM
The arms for the Flex are custom designed for the fixture.
LARGENT™
- SLRT

MITRE™
- The arms for the Mitre and Mitre Large are custom designed for the fixture.
PERICLINE
- PER-M (MEDIUM)
- PER-S (SMALL)
SPECTRA™
- SP1 (LARGE)
- SP2 (SMALL)
The arms for the Spectra are custom designed for the fixture.

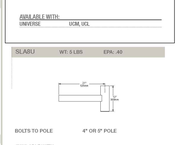
UNIVERSE™
- UCL (LARGE)
- UCM (MEDIUM)
- UCS (SMALL)
The arms for the Universe Small are custom designed for the fixture.
SPHERES
- ALB 18
- ALB 14-ASHS
PARKWAY SQUARE™
- PWM
- PWMI
- PWMS
*Arms for PWSS and PWSM are custom designed

SLARD WT: 5 LBS EPA: .77



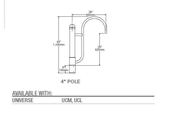
AVAILABLE WITH:
UNIVERSE UCM, UCL

SLABU WT: 5 LBS EPA: .40



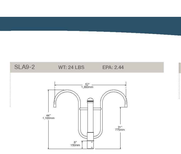
AVAILABLE WITH:
LARGENT SLRT
SPHERES ALB14, ALB18

SLA9 WT: 19 LBS EPA: 1.90



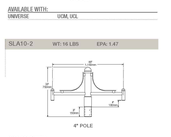
AVAILABLE WITH:
UNIVERSE UCM, UCL

SLAD-2 WT: 24 LBS EPA: 2.44



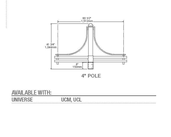
AVAILABLE WITH:
UNIVERSE UCM, UCL

SLA10-2 WT: 16 LBS EPA: 1.47



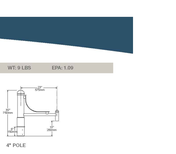
AVAILABLE WITH:
UNIVERSE UCM, UCL

SLA16-2 WT: 28 LBS EPA: 4.56



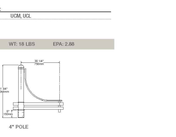
AVAILABLE WITH:
UNIVERSE UCM, UCL

SLA10 WT: 9 LBS EPA: 1.09



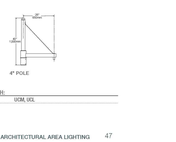
AVAILABLE WITH:
UNIVERSE UCM, UCL

SLA16 WT: 18 LBS EPA: 2.66



AVAILABLE WITH:
UNIVERSE UCM, UCL

SLA17 WT: 19 LBS EPA: 1.90

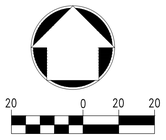


AVAILABLE WITH:
UNIVERSE UCM, UCL

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
PARKING SURFACE READINGS	Illuminance	Fc	1.71	4.7	0.7	2.44	6.71
PROPERTY LINE READINGS	Illuminance	Fc	0.21	0.8	0.0	N.A.	N.A.

Luminaire Schedule								
Symbol	Qty	Label	Arrangement	LLF	Description	Lum. Watts	EPA	Mtg Height	Pole Type
	5	B4	Single	0.850	UCM2-ANG-36L-615-5K7-4W	71.6	1.43	21	to be determined
	1	B4@180	Back-Back	0.850	UCM2-ANG-36L-615-5K7-4W	71.6	2.86	21	to be determined
	6	F12G	SINGLE	0.850	SL8542-GD-905CCT	12.45	n/a	10	n/a
	14	L2	SINGLE	0.850	RWSC-36L-5K-DO-U-PS	14.4	n/a	10	n/a

Ordinance:
Full Cutoff
30 & 40ft max pole lighting
0.9fc max spill on adjacent property or row
2FC Avg max



811
Know what's below.
Call before you dig.

NO.	DATE	REVISION DESCRIPTION

CIVIL ENGINEERING CONSULTANT:

Strategic Land Solutions, Inc.
Civil Engineering • Land Planning • Entitlements
2595 PONDEROSA ROAD
FRANKTOWN, CO 80116
720.384.7661 Phone
rpalmer@strategicls.net
Robert J. Palmer, PE
President

PREPARED UNDER THE DIRECT SUPERVISION OF:
SEAL:
COLORADO REGISTERED ROBERT J. PALMER 36320 PROFESSIONAL ENGINEER
BY Robert J. Palmer, PE
Licensed Professional Engineer (CO PE #36320), AS PRESIDENT FOR STRATEGIC LAND SOLUTIONS, INC.

McDonald's
THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF McDONALD'S CORPORATION AND SHALL NOT BE REPRODUCED WITHOUT THEIR WRITTEN PERMISSION.

OFFICE: ROCKY MOUNTAIN REGION
ADDRESS:

STREET ADDRESS: 960 N. TEN MILE DRIVE
CITY: FRISCO
STATE: COLORADO
COUNTY: SUMMIT
STATE STORE (Up): 51062
NATIONAL (Up): 44322
REGIONAL DWG. NO: -

SCALE: AS NOTED
DATE: 09/05/2025
DESIGNED BY: RJP
DRAWN BY: RJP
CHECKED BY: RJP
McD RE: BAKER
McD P/CM: YAGUSESKY
FILE NAME: CURRENT.DWG
SLS JN: 24-0001-216

DRAWING TITLE: LIGHTING DETAILS

SHEET NO: LI1.1

EXISTING SUMMARY RUNOFF TABLE

DESIGN PT	CONTRIBUTING BASINS / AREA (acres)	5-YEAR RUNOFF (cfs)	100-YEAR PEAK RUNOFF (cfs)
E1	E1/0.467	0.48	1.26
E2	E2/0.485	0.65	1.61
E3	E3C/0.153	0.03	0.15
E4	E1-E3/1.105	0.95	2.53

LEGEND

- TC CALCULATIONS
- BASIN LIMITS
- E1 — DESIGN POINT
- E1 (Ac 0.47, 5YR 0.51, 100YR 0.62) — BASIN DESIGNATION, 5 YR COMPOSITE 'C', 100YR COMPOSITE 'C', BASIN AREA

POINT OF BEGINNING
FOUND #4 REBAR, 0.2' BELOW GRADE

(BASIS OF BEARINGS)
N80°25'02"E 280.79'

FOUND #4 REBAR, 0.1' BELOW GRADE
INV=9043.84 (FILLED WITH HEAVY DEBRIS)

S13°41'27"W 110.00'

FOUND #4 REBAR BENT TO THE NORTH, LOCATED AT PIVOT POINT

Δ=21°44'12"
R=230.00'
L=87.26'
Chd=S02°49'21"W
86.73'

S08°02'45"E
15.00'

S81°57'15"W 221.05'

N08°47'45"W 191.84'

APPROXIMATE LOCATION ON SANITARY SERVICE LINE, NOT LOCATED IN THE FIELD

FOUND 1-1/4" PLASTIC CAP STAMPED "RR JOHNS, 26293" ON #4 REBAR, 0.7' BELOW GRADE

PARCEL CONTAINS
48,151 SQUARE FEET
1.10539 ACRES

LOT R2
FIRST AMENDED PLAT OF LOTS R1, R2 AND R3, A RESUBDIVISION OF LOT 2, BLOCK 1, LAKEPOINT AT FRISCO
(PLAT - REC. NO. 596666)
OWNER: PALM SPRINGS SHADOWS LP

LOT R1
FIRST AMENDED PLAT OF LOTS R1, R2 AND R3, A RESUBDIVISION OF LOT 2, BLOCK 1, LAKEPOINT AT FRISCO
(PLAT - REC. NO. 596666)

LOT R4
A RESUBDIVISION OF LOT 2, BLOCK 1, LAKEPOINT AT FRISCO
(PLAT - REC. NO. 589905)
OWNER: PRAIRIE LANDING CONDO ASSOCIATION

TEN MILE DRIVE
(80' PUBLIC R.O.W.)

LAKEPOINT DRIVE
(80' PUBLIC R.O.W.)

SUMMIT BOULEVARD
STATE HIGHWAY 9
(PUBLIC R.O.W. VARIES)

STORM INLET
RIM=9050.62
INV OUT@ 24"=9049.17
(NOTE: TOP OF INLET BOX/24 MANHOLE WAS BURIED)

STORM MH
RIM=9054.79
INV IN@24"=9049.74
INV OUT@24"=9049.64
UNABLE TO SEE INV PIPE

STORM INLET
GRATE=9054.79
INV OUT(N)=9049.74

UTILITY VAULT

TRANSFORMER

INV=9045.06

INV=9043.36

E1 0.47 | 0.51 | 0.62
E2 0.49 | 0.62 | 0.71
E3 0.15 | 0.11 | 0.27
E4

20 0 20 20
PLAN SCALE: 1" = 20'

Know what's **below.** **Call** before you dig.

NO.	DATE	REVISION DESCRIPTION

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Licensed Professional Engineer (CO PE #36320), AS PRESIDENT FOR STRATEGIC LAND SOLUTIONS, INC.

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McDonald's

OFFICE: ROCKY MOUNTAIN REGION
ADDRESS:

STREET ADDRESS: 960 N. TEN MILE DRIVE
CITY: FRISCO
STATE: COLORADO
COUNTY: SUMMIT
STATE STORE #: 51062
NATIONAL #: 44322
REGIONAL DWG. NO: -

SCALE: AS NOTED
DATE: 09/05/2025
DESIGNED BY: RJP
DRAWN BY: RJP
CHECKED BY: RJP
McD RE: BAKER
McD P/CM: YAGUSESKY
FILE NAME: CURRENT.DWG
SLS JN: 24-0001-216

DRAWING TITLE: EXISTING DRAIANGE

SHEET NO: DR-1

PROPOSED SUMMARY RUNOFF TABLE

DESIGN PT	CONTRIBUTING BASINS / AREA (acres)	5-YEAR RUNOFF (cfs)	100-YEAR PEAK RUNOFF (cfs)
1	A/0.487	0.45	1.24
2	B/0.465	0.61	1.53
3	C/0.153	0.03	0.15
4	A-C/1.105	0.90	2.45

LEGEND

TC CALCULATIONS

BASIN LIMITS

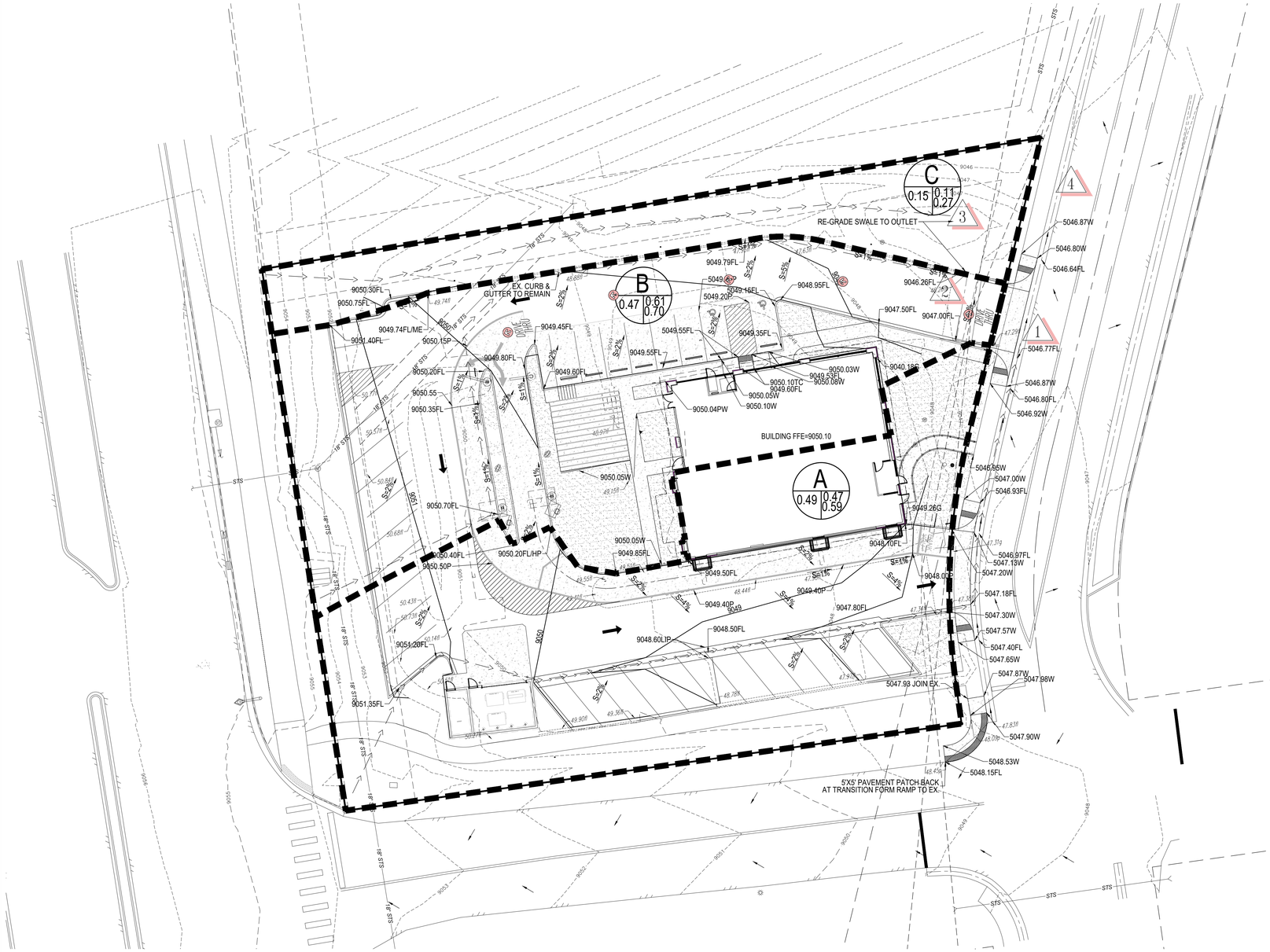
E1 DESIGN POINT

A BASIN DESIGNATION

Ac 5 YR COMPOSITE 'C'

C100 100YR COMPOSITE 'C'

BASIN AREA



20 0 20 20

PLAN SCALE: 1" = 20'

Know what's **below.** **Call** before you dig.

NO.	DATE	REVISION DESCRIPTION

CIVIL ENGINEERING CONSULTANT:

Strategic Land Solutions, Inc.
Civil Engineering • Land Planning • Entitlements
2595 PONDEROSA ROAD
FRANKTOWN, CO 80116
720.384.7661 Phone
rpalmer@strategicls.net
Robert J. Palmer, PE
President

PREPARED UNDER THE DIRECT SUPERVISION OF:

SEAL: COLORADO REGISTERED ROBERT J. PALMER PE 36320 PROFESSIONAL ENGINEER

BY Robert J. Palmer, PE
Licensed Professional Engineer (CO PE #36320), AS PRESIDENT FOR STRATEGIC LAND SOLUTIONS, INC.

McDonald's

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OFFICE: ROCKY MOUNTAIN REGION

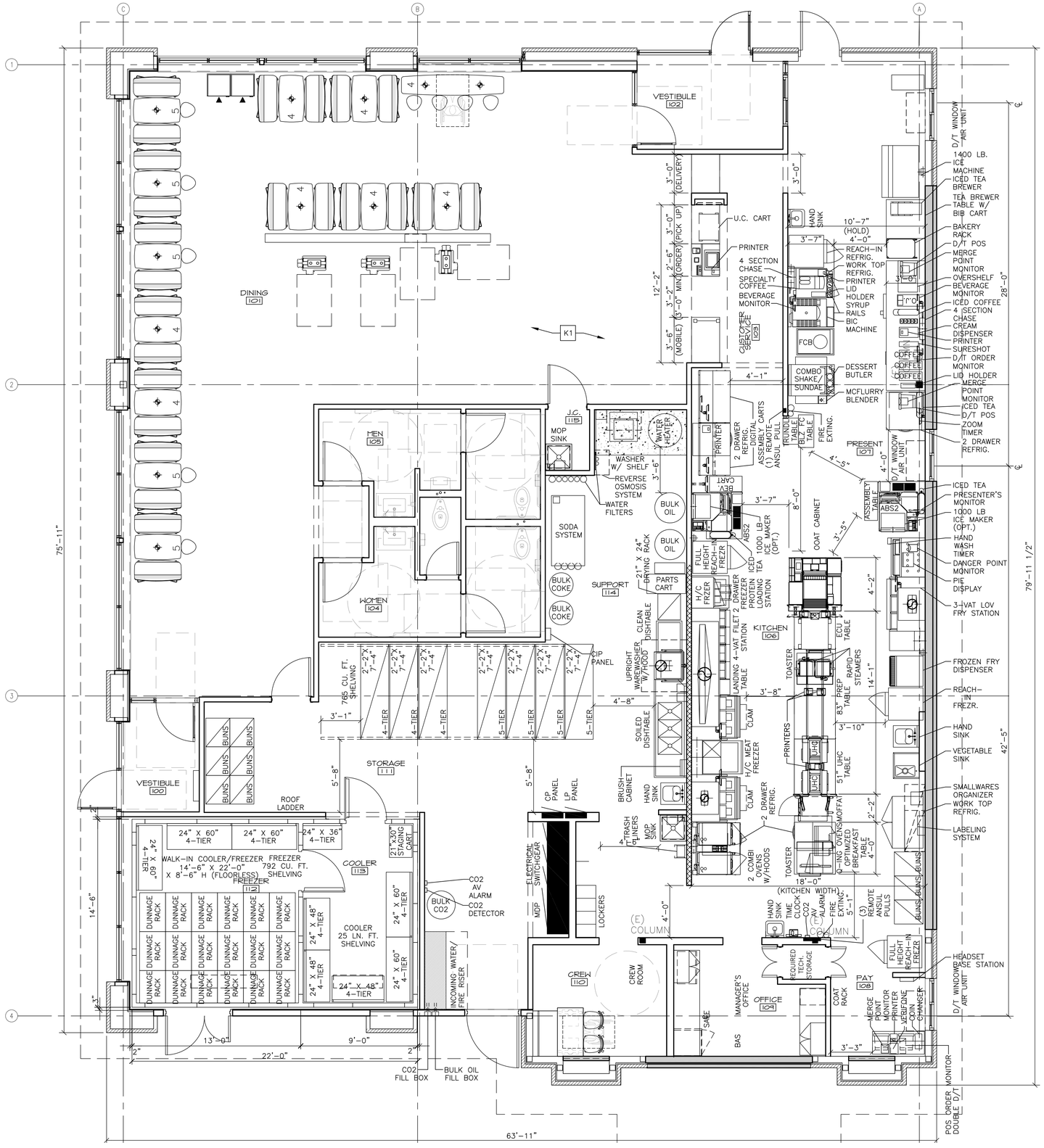
ADDRESS:

STREET ADDRESS: 960 N. TEN MILE DRIVE
CITY: FRISCO
STATE: COLORADO
COUNTY: SUMMIT
STATE STORE #: 51062
NATIONAL #: 44322
REGIONAL DWG. NO: -

SCALE:	AS NOTED
DATE:	09/05/2025
DESIGNED BY:	RJP
DRAWN BY:	RJP
CHECKED BY:	RJP
McD RE:	BAKER
McD P/CM:	YAGUSESKY
FILE NAME:	CURRENT.DWG
SLS JN:	24-0001-216

DRAWING TITLE: PROPOSED DRAINAGE PLAN

SHEET NO: DR-2



1 FLOOR PLAN
SCALE: 1/4" = 1'-0"

NORTH

NO.	DATE	REVISION DESCRIPTION
1	-	-

ARCHITECTURAL CONSULTANT:

ARRIS ARCHITECTURE
Arris Architecture, LLC
285 Commander Drive
Erie, CO 80516
970.988.6302
coreys@arrisinc.net

McDonald's

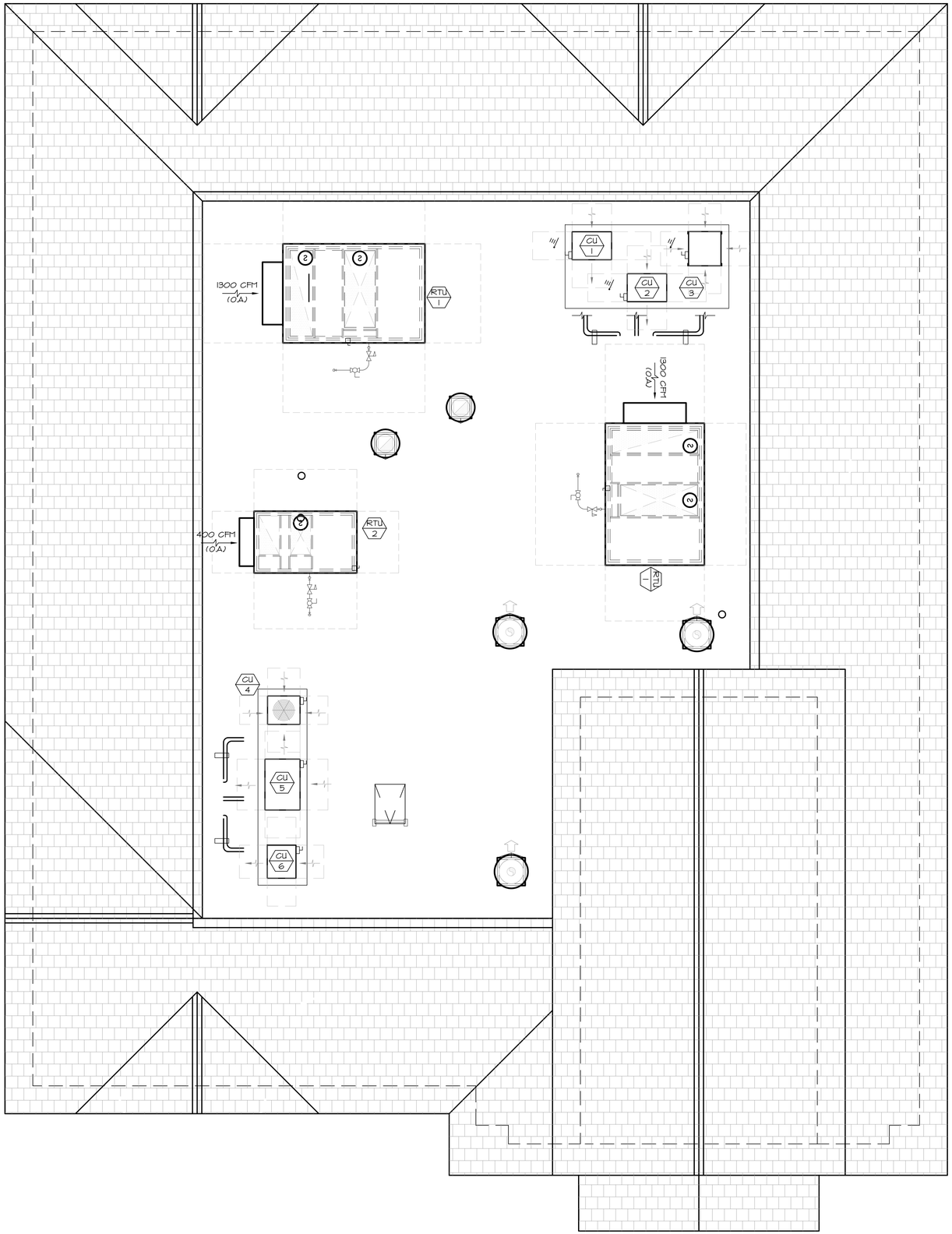
OFFICE: ROCKY MOUNTAIN REGION
ADDRESS:

STREET ADDRESS: 960 N. TEN MILE DRIVE
CITY: FRISCO
STATE: COLORADO
COUNTY: SUMMIT
STATE STORE #: 51062
NATIONAL #: 44322
REGIONAL DIRS. NO:

SCALE: AS NOTED	McD RE: BAKER
DATE: 02/07/2025	McD PJM: YAGUSESKY
DESIGNED BY: CS	
DRAWN BY: CS	FILE NAME:
CHECKED BY: CS	

DRAWING TITLE: FLOOR PLAN

SHEET NO: A1.1



1 ROOF PLAN
SCALE: 1/4" = 1'-0"

NORTH

NO.	DATE	REVISION DESCRIPTION
1	-	-

ARCHITECTURAL CONSULTANT:
ARRIS ARCHITECTURE
Arris Architecture, LLC
285 Commander Drive
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coreys@arrisinc.net

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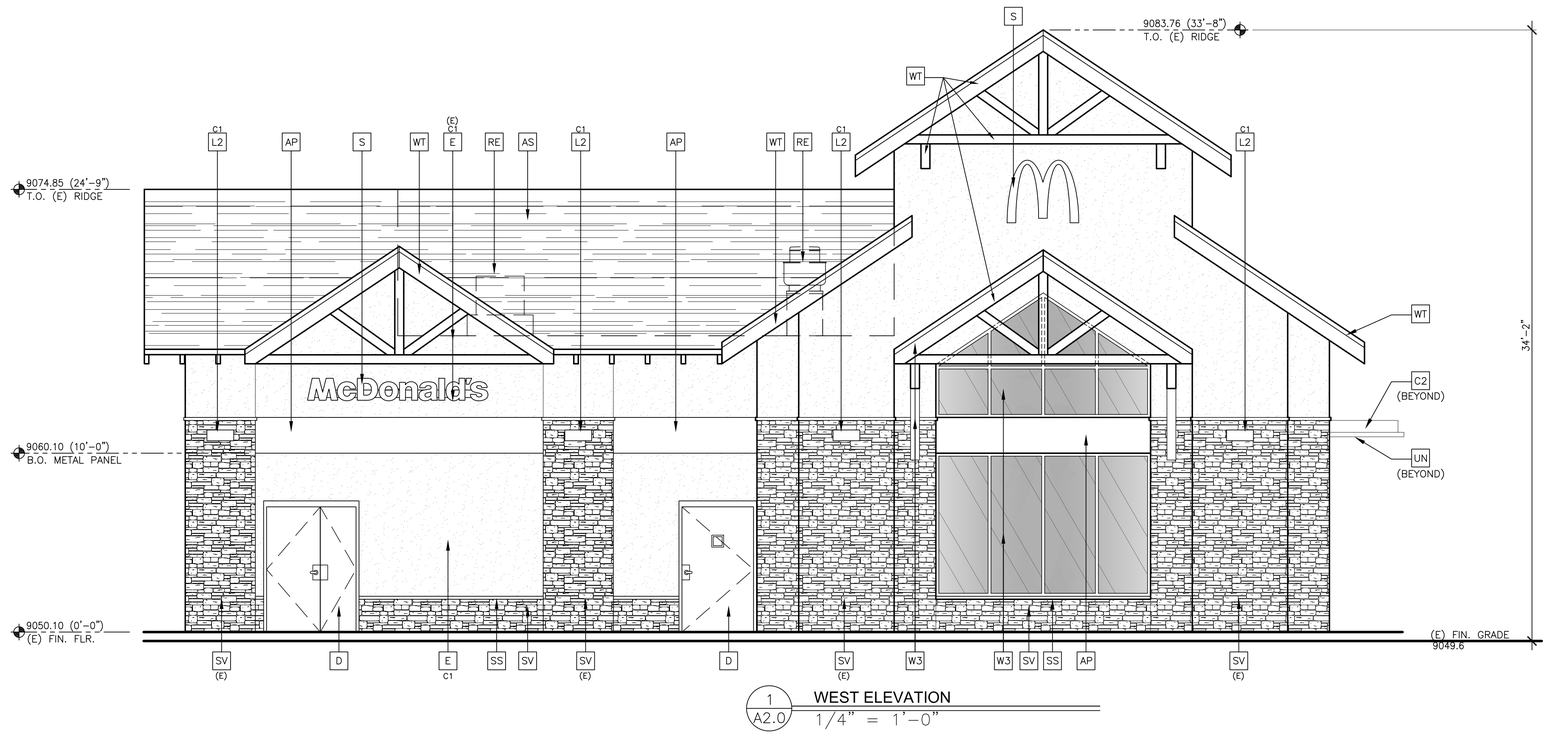
OFFICE ROCKY MOUNTAIN REGION
ADDRESS

STREET ADDRESS: 960 N. TEN MILE DRIVE
CITY: FRISCO
STATE: COLORADO
COUNTY: SUMMIT
STATE STORE #: 51062
NATIONAL #: 44322
REGIONAL ENG. NO:

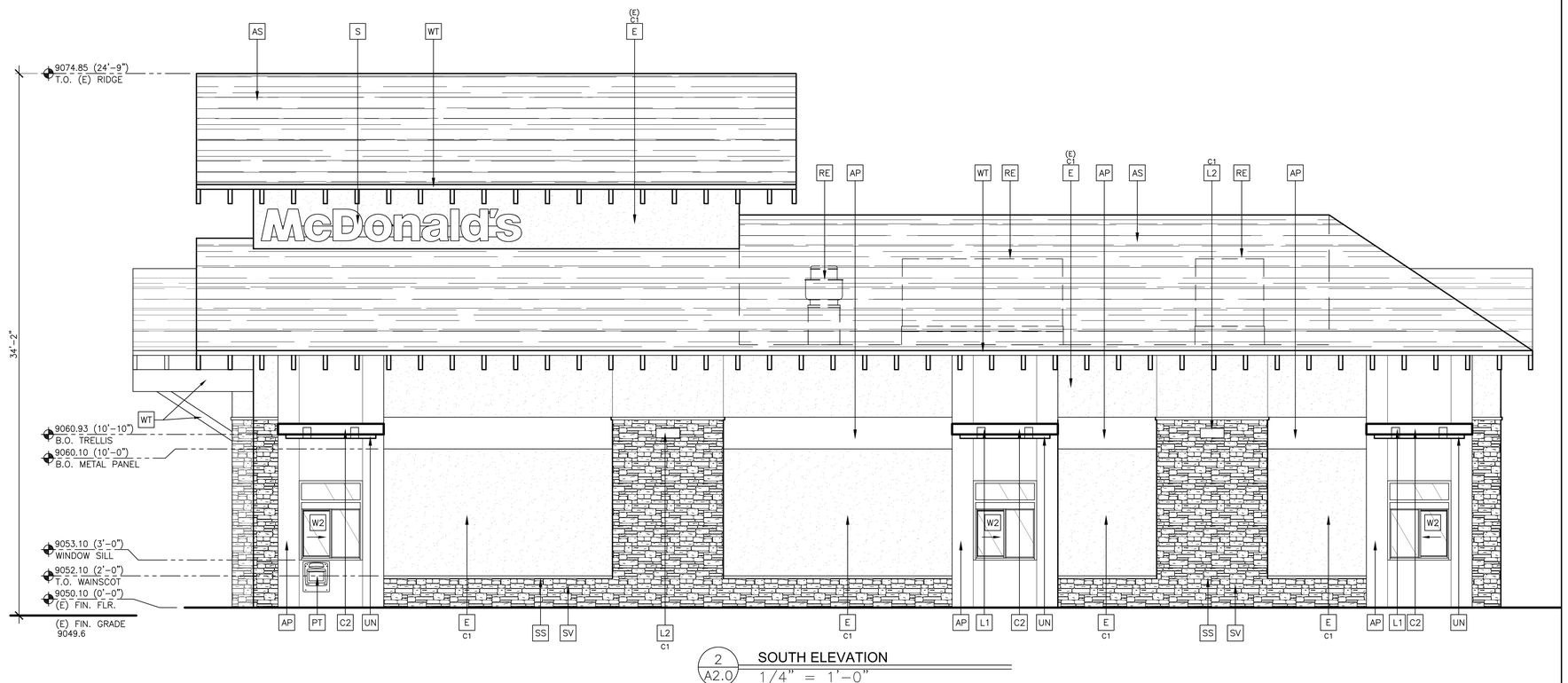
SCALE: AS NOTED	McD RE: BAKER
DATE: 02/07/2025	McD P/CM: YAGUSESKY
DESIGNED BY: CS	
DRAWN BY: CS	FILE NAME:
CHECKED BY: CS	

DRAWING TITLE: ROOF PLAN

SHEET NO: A1.3



1 A2.0 WEST ELEVATION
1/4" = 1'-0"



2 A2.0 SOUTH ELEVATION
1/4" = 1'-0"

KEY NOTES:

- AP — ALPOLIC METAL PANEL (COLOR: RAL 7022)
- AS — EXISTING ASPHALT SHINGLES TO REMAIN
- C2 — ALUMINUM CANOPY SYSTEM
  COLOR: RAL 7022
- D — HOLLOW METAL DOOR
  PAINT: "GAUNTLET GRAY" SW-7017 BY SHERWIN WILLIAMS
- E — EXTERIOR INSULATION FINISH SYSTEM (E.I.F.S.), PAINTED
  - C1 — COLOR:
    C1 = "GAUNTLET GREY" SW7019 BY SHERWIN WILLIAMS
  - (E) — EXISTING EIFS, PAINTED
- DE — DECAL BY GRAPHICS SUPPLIER
  SURFACE APPLIED, FIELD INSTALLED, PRE CUT, PRE SPACED.
  SUPPLIERS:
  VOMELA (865) 330-7337, ann.bowen@vomela.com
  GFX INTERNATIONAL (847) 543-4600, mcdonaldsdecor@gfxi.com
- L1 — RECESSED DOWN LIGHT FIXTURE – SEE ELECTRICAL
  - C1 — COLOR:
    C1= GOLD
- L2 — LIGHT FIXTURE
  - C1 — COLOR:
    C1= COLOR: PLATINUM SILVER
- PT — (RMHC) COIN COLLECTOR
  MODEL: #WPT STD CALL 1-888-743-7435 TO ORDER
- RE — OUTLINE OF ROOF MOUNTED EQUIPMENT
- S — McDONALD'S SIGNAGE BY OTHERS – NOT APPROVED BY THIS SITE PLAN
  APPROVED UNDER SEPARATE PERMIT.
  - C1 — COLOR:
    C1 = WEATHERED ZINC RACEWAY
    C2 = RAL 7022 RACEWAY
- SS — STONE SILL, MATCH EXISTING
  - (E) — EXISTING TO REMAIN
- SV — STONE VENEER: MATCH EXISTING
  - (E) — EXISTING TO REMAIN
- UN — METAL UNDERSCORE
  COLOR: CUSTOM COLOR TO
  MATCH MUNSELL 7.5Y 8/8
  (NOTE: 8/8 DESIGNATES A
  COLOR SATURATION VALUE OF
  8 AND CHROMA OF 8)
- W1 — EXTERIOR WINDOW ASSEMBLY – TEMPERED GLASS
  COLOR: EXTRA DARK BRONZE
- W2 — DRIVE-THRU WINDOW BY READY ACCESS
  MODEL: 600 SERIES, 36" SERVICE HEIGHT WITH TRANSOM, MANUAL OPEN;
  ELECTRONIC RELEASE
  COLOR: DEEP BRONZE
  - XX — SLIDE DIRECTION: RL = RIGHT TO LEFT
    LR = LEFT TO RIGHT
- W3 — EXTERIOR WINDOW ASSEMBLY – TEMPERED SPANDREL GLASS
  SPANDREL GLAZING -#1-0016 CHARCOAL – 6MM PPG
  CLEAR OPACI-COAT-300 (ICD HIGH PERFORMANCE COATINGS)
  OR EQUAL
  FRAME COLOR: DARK BRONZE
- WT — WOOD TRIM:
  PAINT: "IRON ORE" SW 7069 BY SHERWIN WILLIAMS

NO.	DATE	REVISION DESCRIPTION
1	-	-

ARCHITECTURAL CONSULTANT:
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Arris Architecture, LLC
285 Commander Drive
Erie, CO 80516
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McDonald's

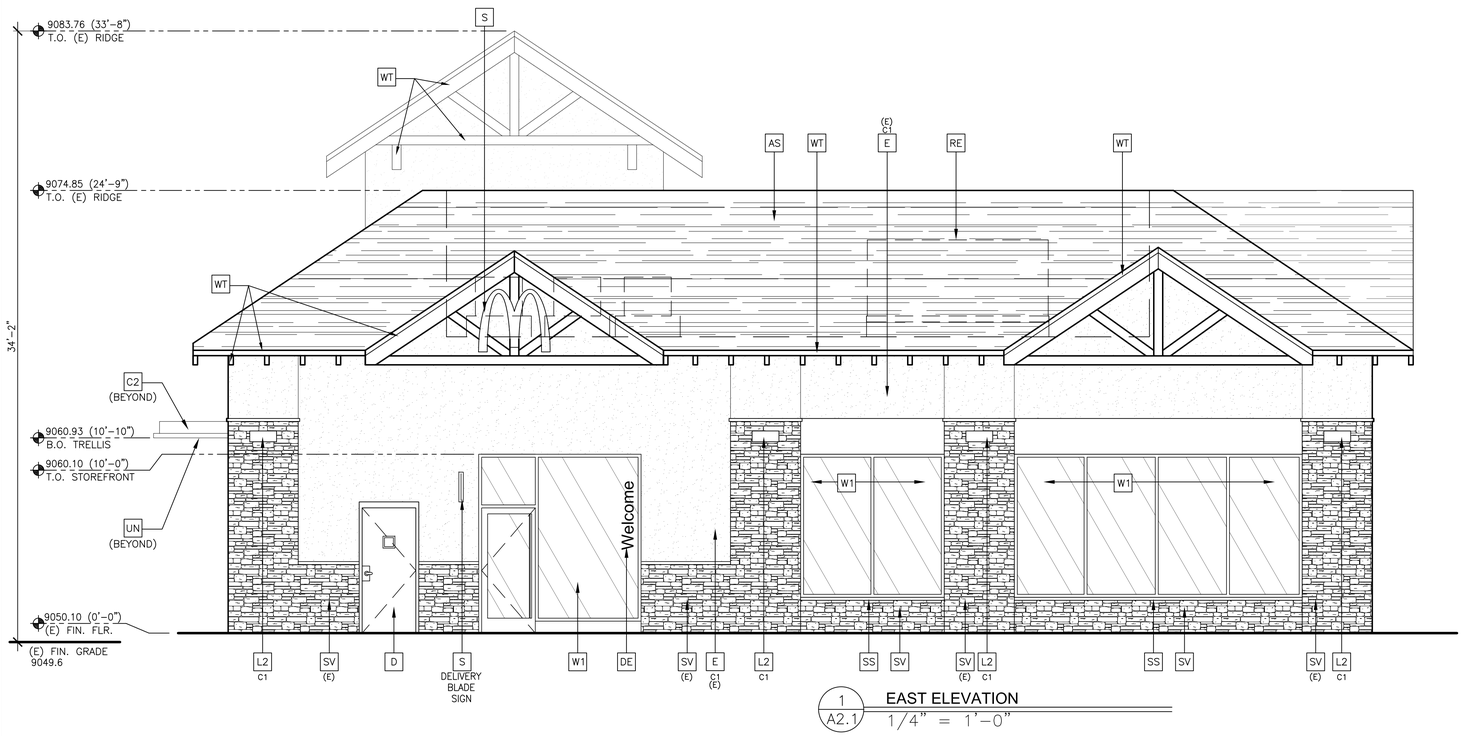
OFFICE: ROCKY MOUNTAIN REGION
ADDRESS:

STREET ADDRESS: 960 N. TEN MILE DRIVE
CITY: FRISCO
STATE: COLORADO
COUNTY: SUMMIT
STATE STORE #: 51062
NATIONAL #: 44322
REGIONAL DIRC. NO:

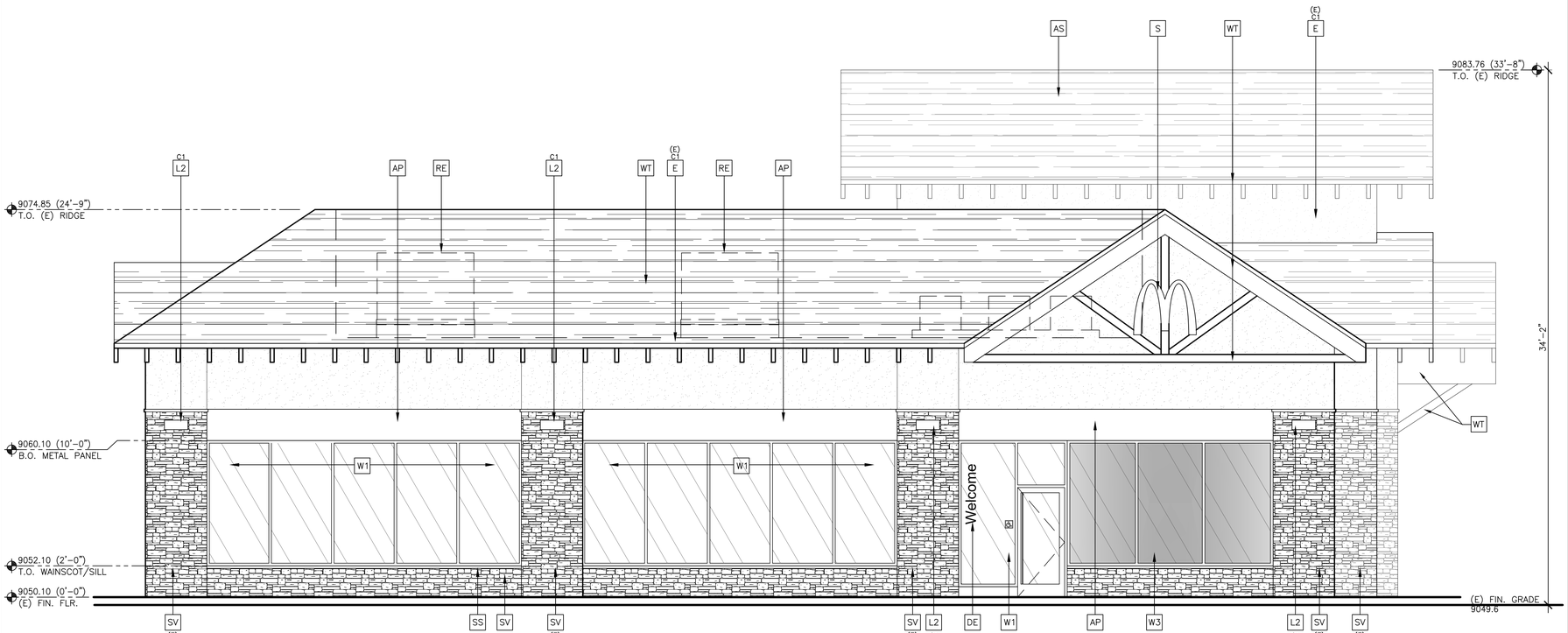
SCALE: AS NOTED	McD RE: BAKER
DATE: 02/07/2025	McD P/CM: YAGUSESKY
DESIGNED BY: CS	
DRAWN BY: CS	FILE NAME:
CHECKED BY: CS	

DRAWING TITLE:
EXTERIOR ELEVATIONS

SHEET NO:
A2.0



1 A2.1 EAST ELEVATION
1/4" = 1'-0"



2 A2.1 NORTH ELEVATION
1/4" = 1'-0"

KEY NOTES:

- AP — ALPOLIC METAL PANEL (COLOR: RAL 7022)
- AS — EXISTING ASPHALT SHINGLES TO REMAIN
- C2 — ALUMINUM CANOPY SYSTEM
  COLOR: RAL 7022
- D — HOLLOW METAL DOOR
  PAINT: "GAUNTLET GRAY" SW-7017 BY SHERWIN WILLIAMS
- E — EXTERIOR INSULATION FINISH SYSTEM (E.I.F.S.), PAINTED
  C1 (E) — COLOR:
  C1 = "GAUNTLET GREY" SW7019 BY SHERWIN WILLIAMS
  EXISTING EIFS, PAINTED
- DE — DECAL BY GRAPHICS SUPPLIER
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- L1 — RECESSED DOWN LIGHT FIXTURE – SEE ELECTRICAL
  C1 — COLOR:
  C1= GOLD
- L2 — LIGHT FIXTURE
  C1 — COLOR:
  C1= COLOR: PLATINUM SILVER
- PT — (RMHC) COIN COLLECTOR
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- RE — OUTLINE OF ROOF MOUNTED EQUIPMENT
- S — McDONALD'S SIGNAGE BY OTHERS – NOT APPROVED BY THIS SITE PLAN
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  (E) — EXISTING TO REMAIN
- SV — STONE VENEER: MATCH EXISTING
  (E) — EXISTING TO REMAIN
- UN — METAL UNDERSCORE
  COLOR: CUSTOM COLOR TO
  MATCH MUNSELL 7.5Y 8/8
  (NOTE: 8/8 DESIGNATES A
  COLOR SATURATION VALUE OF
  8 AND CHROMA OF 8)
- W1 — EXTERIOR WINDOW ASSEMBLY – TEMPERED GLASS
  COLOR: EXTRA DARK BRONZE
- W2 — DRIVE-THRU WINDOW BY READY ACCESS
  XX — MODEL: 600 SERIES, 36" SERVICE HEIGHT WITH TRANSOM, MANUAL OPEN;
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  COLOR: DEEP BRONZE
  SLIDE DIRECTION: RL = RIGHT TO LEFT
  LR = LEFT TO RIGHT

NO.	DATE	REVISION DESCRIPTION
1	-	-

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Arris Architecture, LLC
285 Commander Drive
Erie, CO 80516
970.988.6302
coreys@arrisinc.net

McDonald's

OFFICE ROCKY MOUNTAIN REGION
ADDRESS

STREET ADDRESS: 960 N. TEN MILE DRIVE
CITY: FRISCO
STATE: COLORADO
COUNTY: SUMMIT
STATE STORE #: 51062
NATIONAL #: 44322
REGIONAL DIRC. NO:

SCALE: AS NOTED	McD RE: BAKER
DATE: 02/07/2025	McD P/CM: YAGUSESKY
DESIGNED BY: CS	
DRAWN BY: CS	FILE NAME:
CHECKED BY: CS	

DRAWING TITLE:
EXTERIOR ELEVATIONS

SHEET NO:
A2.1



1 A2.0 **WEST ELEVATION**
1/4" = 1'-0"



2 A2.0 **SOUTH ELEVATION**
1/4" = 1'-0"

MATERIAL LEGEND

- STONE VENEER: MATCH EXISTING
- STUCCO / HOLLOW METAL DOORS: PAINT: "GAUNTLET GRAY" SW-7017 BY SHERWIN WILLIAMS
- WOOD TRIM: PAINT: "IRON ORE" SW 7069 BY SHERWIN WILLIAMS
- GOLD UNDERSCORE COLOR: CUSTOM COLOR TO MATCH MUNSELL 7.5Y 8/8
- EXTERIOR WINDOW ASSEMBLY COLOR: EXTRA DARK BRONZE
- ALPOLIC METAL PANEL / DRIVE THRU CANOPIES: COLOR: RAL 7022
- SPANDREL GLASS: #1-0016 CHARCOAL - 6MM PPG CLEAR OPACI-COAT-300 (ICD HIGH PERFORMANCE COATINGS) OR EQUAL

NO.	DATE	REVISION DESCRIPTION
1	-	-

ARCHITECTURE CONSULTANT:
ARRIS ARCHITECTURE
Arris Architecture, LLC
285 Commander Drive
Erie, CO 80516
970.988.6302
coreys@arrisinc.net

McDonald's
OFFICE: ROCKY MOUNTAIN REGION
ADDRESS:

STREET ADDRESS: 960 N. TEN MILE DRIVE
CITY: FRISCO
STATE: COLORADO
COUNTY: SUMMIT
STATE STORE #: 51062
NATIONAL #: 44322
REGIONAL ENG. NO:

SCALE: AS NOTED	McD RE: BAKER
DATE: 02/07/2025	McD PjtMgr: YAGUSESKY
DESIGNED BY: CS	
DRAWN BY: CS	FILE NAME:
CHECKED BY: CS	

DRAWING TITLE:
EXTERIOR ELEVATIONS

SHEET NO:
A2.0



1 A2.1 EAST ELEVATION
1/4" = 1'-0"



2 A2.1 NORTH ELEVATION
1/4" = 1'-0"

MATERIAL LEGEND

STONE VENEER:
MATCH EXISTING

STUCCO /
HOLLOW METAL DOORS:
PAINT: "GAUNTLET GRAY"
SW-7017 BY SHERWIN WILLIAMS

WOOD TRIM:
PAINT: "IRON ORE" SW 7069 BY SHERWIN WILLIAMS

GOLD UNDERSCORE
COLOR: CUSTOM COLOR TO MATCH MUNSELL 7.5Y 8/8

EXTERIOR WINDOW ASSEMBLY
COLOR: EXTRA DARK BRONZE

HOLLOW METAL DOORS:
PAINT: "GAUNTLET GRAY"
SW-7017 BY SHERWIN WILLIAMS

ALPOLIC METAL PANEL /
DRIVE THRU CANOPIES:
COLOR: RAL 7022

SPANDREL GLASS:
#1-0016 CHARCOAL - 6MM PPG CLEAR OPACI-COAT-300 (ICD HIGH PERFORMANCE COATINGS) OR EQUAL

NO.	DATE	REVISION DESCRIPTION
1	-	-

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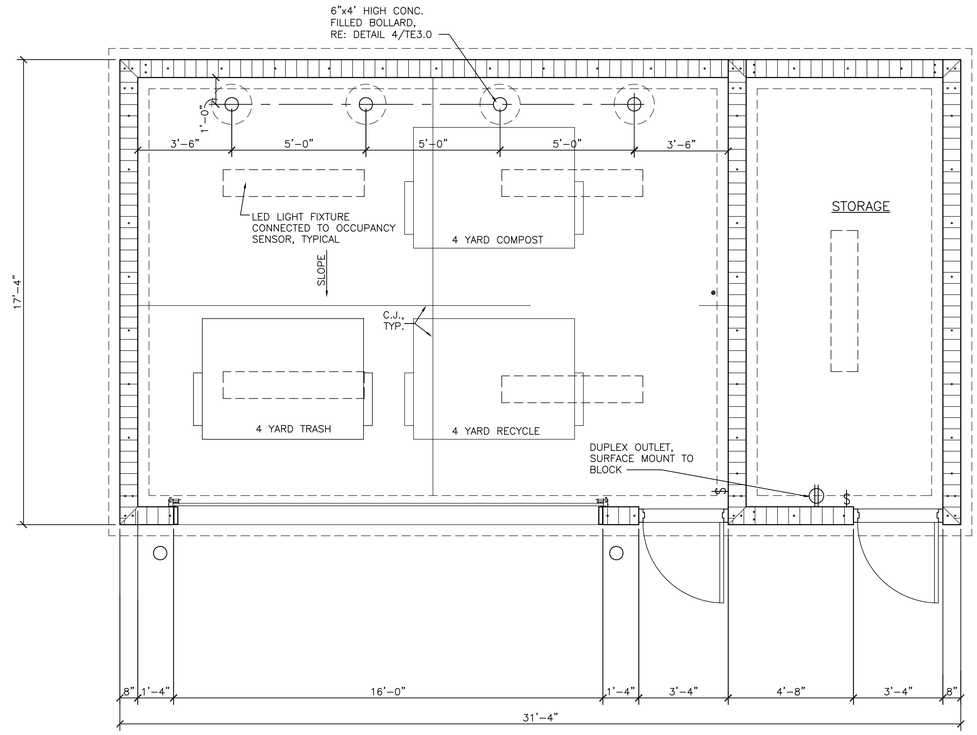
OFFICE: ROCKY MOUNTAIN REGION
ADDRESS:

STREET ADDRESS: 960 N. TEN MILE DRIVE
CITY: FRISCO
STATE: COLORADO
COUNTY: SUMMIT
STORE STONE #: 51062
ARCHIVAL #: 44322
REGIONAL DIR. NO:

SCALE: AS NOTED	McD RE: BAKER
DATE: 02/07/2025	McD PjMgr: YAGUSESKY
DESIGNED BY: CS	
DRAWN BY: CS	FILE NAME:
CHECKED BY: CS	

DRAWING TITLE:
EXTERIOR ELEVATIONS

SHEET NO:
A2.1



1 TRASH ENCLOSURE PLAN

SCALE: 3/8"=1'-0"

NO.	DATE	REVISION DESCRIPTION
1	-	-

ARCHITECTURAL CONSULTANT:

ARRIS ARCHITECTURE

Arris Architecture, LLC
285 Commander Drive
Erie, CO 80516
970.988.6302
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McDonald's

OFFICE: ROCKY MOUNTAIN REGION

ADDRESS:

STREET ADDRESS:	960 N. TEN MILE DRIVE
CITY:	FRISCO
STATE:	COLORADO
COUNTY:	SUMMIT
STATE STORE #:	51062
NATIONAL #:	44322
REGIONAL DWG. NO:	

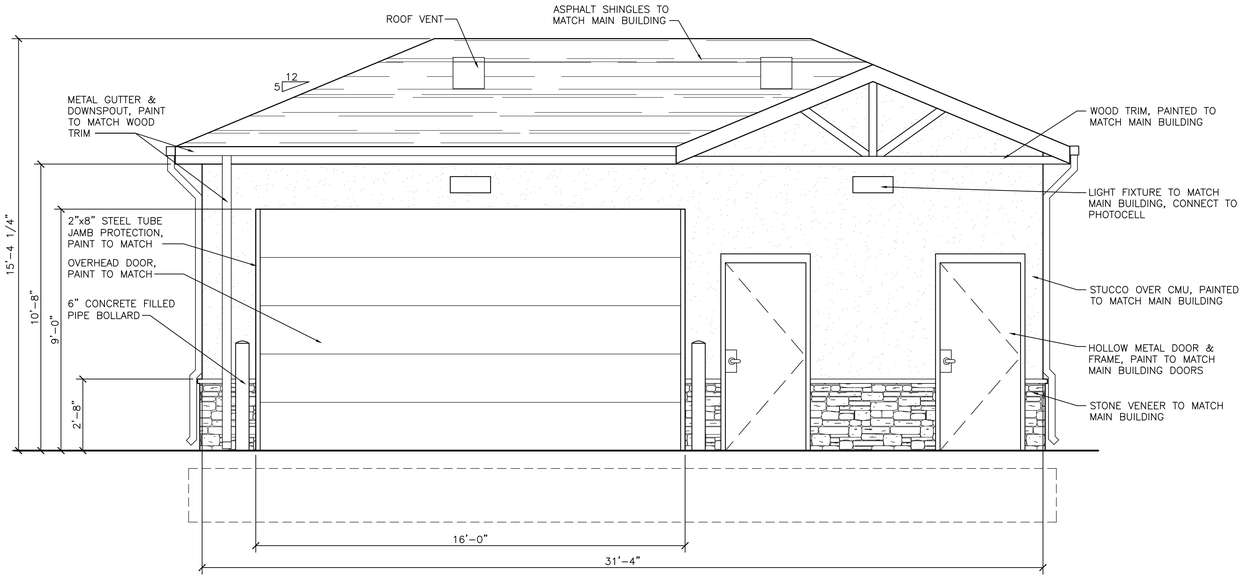
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CHECKED BY: CS	

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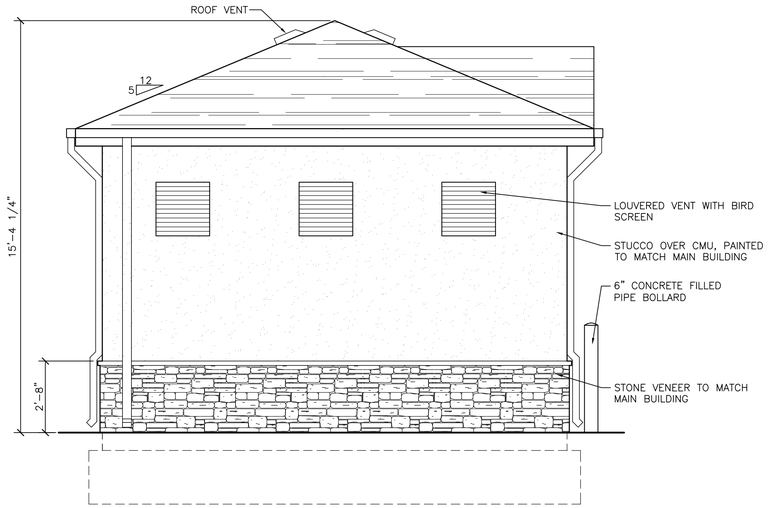
TRASH ENCLOSURE PLAN

SHEET NO:

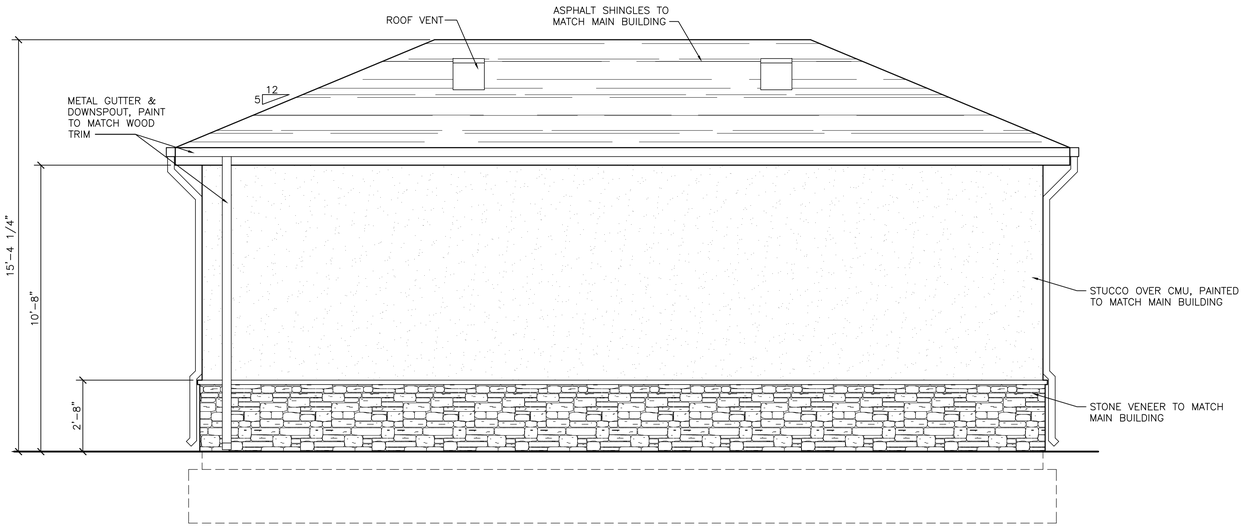
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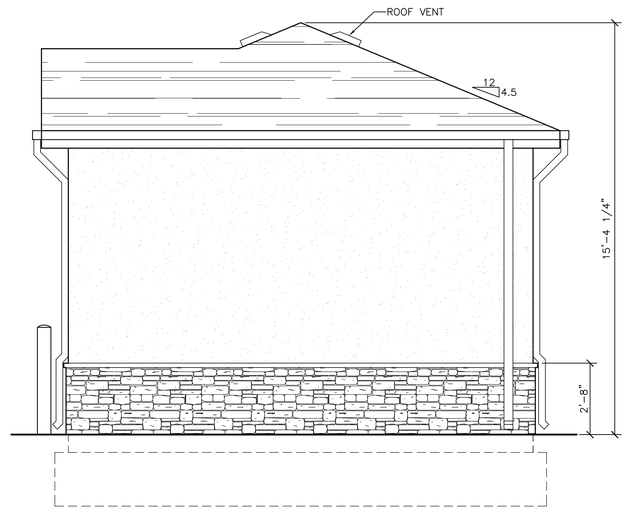
1 TRASH ENCLOSURE ELEVATION
SCALE: 3/8"=1'-0"



2 TRASH ENCLOSURE ELEVATION
SCALE: 3/8"=1'-0"



3 TRASH ENCLOSURE ELEVATION
SCALE: 3/8"=1'-0"



4 TRASH ENCLOSURE ELEVATION
SCALE: 3/8"=1'-0"

NO.	DATE	REVISION DESCRIPTION
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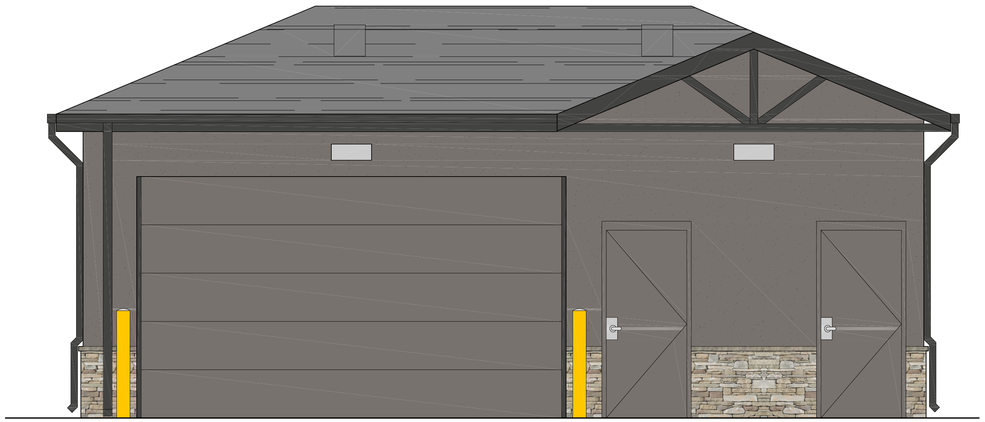
OFFICE: ROCKY MOUNTAIN REGION
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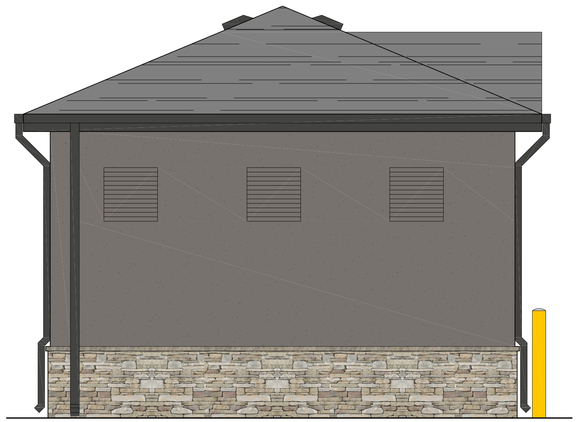
SCALE: AS NOTED	McD RE: BAKER
DATE: 02/07/2025	McD PJCM: YAGUSESKY
DESIGNED BY: CS	
DRAWN BY: CS	FILE NAME:
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DRAWING TITLE:
TRASH ENCLOSURE ELEVATIONS

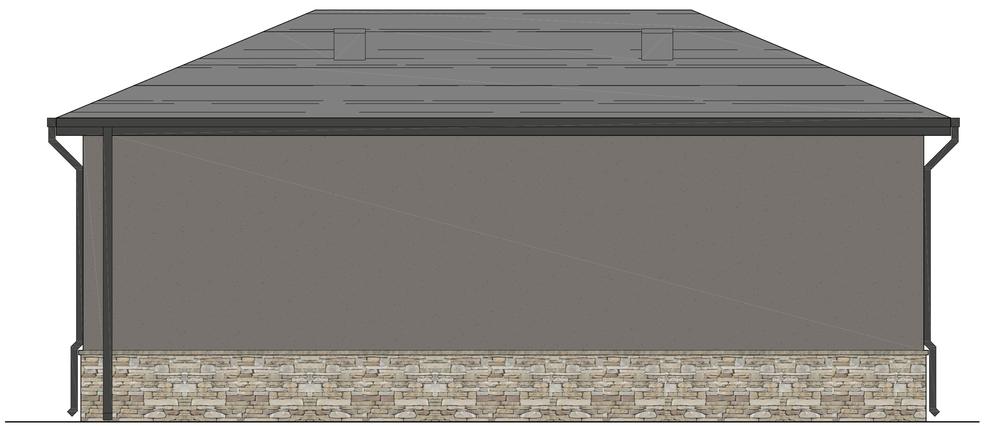
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A2.3



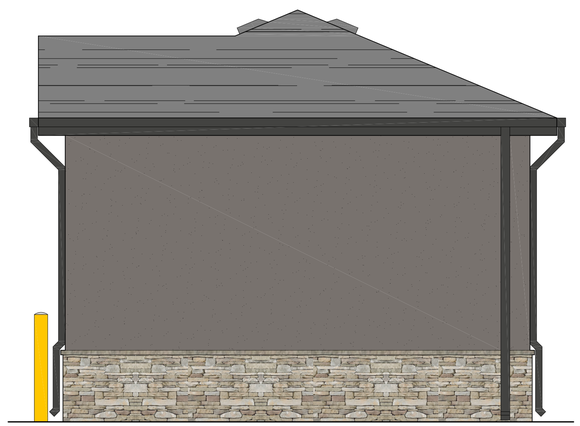
1 TRASH ENCLOSURE ELEVATION
SCALE: 3/8"=1'-0"



2 TRASH ENCLOSURE ELEVATION
SCALE: 3/8"=1'-0"



3 TRASH ENCLOSURE ELEVATION
SCALE: 3/8"=1'-0"



4 TRASH ENCLOSURE ELEVATION
SCALE: 3/8"=1'-0"

MATERIAL LEGEND



STONE VENEER:
MATCH EXISTING



STUCCO /
HOLLOW METAL DOORS:
PAINT: "GAUNTLET GRAY"
SW-7017 BY SHERWIN
WILLIAMS



WOOD TRIM:
PAINT: "IRON ORE" SW
7069 BY SHERWIN
WILLIAMS



HOLLOW METAL DOORS:
PAINT: "GAUNTLET GRAY"
SW-7017 BY SHERWIN
WILLIAMS

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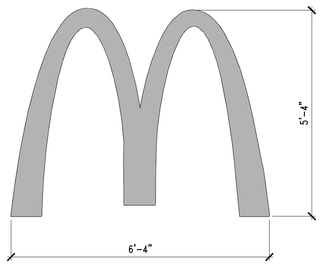
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REGIONAL DWG. NO:

SCALE: AS NOTED	McD RE: BAKER
DATE: 02/07/2025	McD P/CM: YAGUSESKY
DESIGNED BY: CS	
DRAWN BY: CS	FILE NAME:
CHECKED BY: CS	

DRAWING TITLE:
TRASH ENCLOSURE ELEVATIONS

SHEET NO:
A2.3



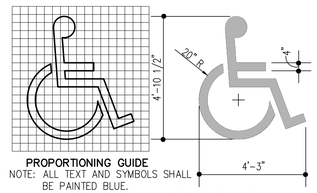
NOTE: THE McDONALD'S ARCH IS PAINTED YELLOW (PMS 123)

PAINTED ARCH | 8



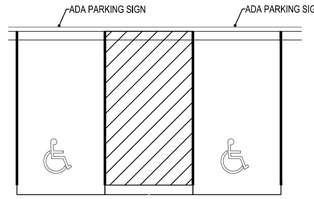
NOTE: ALL TEXT SHALL BE PAINTED YELLOW (PMS 123)

PAINTED 'THANK YOU' | 9



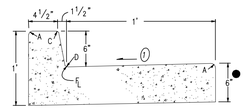
PROPORTIONING GUIDE
NOTE: ALL TEXT AND SYMBOLS SHALL BE PAINTED BLUE.

ACCESSIBLE ACCESSIBLE
PARKING PAVEMENT MARKING

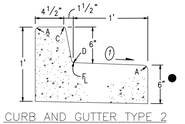


ALL ADA STRIPING SHALL BE 4" WIDE STRIPING PAINTED BLUE

PAINTED ACCESSIBLE PARKING | 10

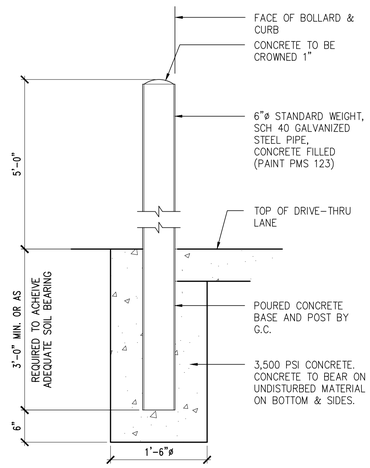


CURB AND GUTTER TYPE 2
(SECTION IIB)
(6" BARRIER – 2' GUTTER)

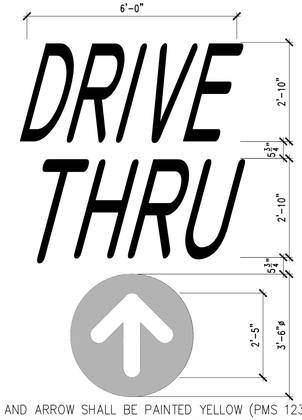


CURB AND GUTTER TYPE 2
(SECTION IB)
(6" BARRIER – 1' GUTTER)

ONSITE CURB & GUTTER | 11

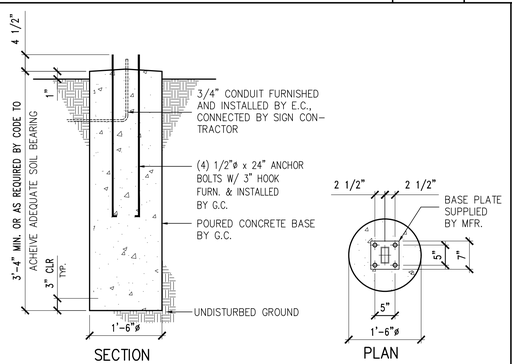


DRIVE THRU BOLLARD FOUNDATION | 12



NOTE: ALL TEXT AND ARROW SHALL BE PAINTED YELLOW (PMS 123)

PAINTED 'DRIVE THRU' WITH ARROW | 13



NOTES:

1. THIS DETAIL TO BE USED WITH SITE SIGNS FROM: TENCON, EVERBRITE, OR YESCO. CONTRACTOR TO COORDINATE DETAILS WITH SIGN COMPANY.
2. THIS FOOTING DETAIL TO BE USED FOR ALL ENTER/EXIT/WELCOME SIGNS AND DRIVE THRU DIRECTIONAL SIGNAGE. COORDINATE WITH THE SITE PLANS AND McDONALD'S PROJECT MANAGER FOR THE EXACT LOCATION, ORIENTATION AND NUMBER OF SIGNS TO BE INSTALLED AT THIS SITE. ALL WORK TO BE COORDINATED WITH OTHER TRADES.

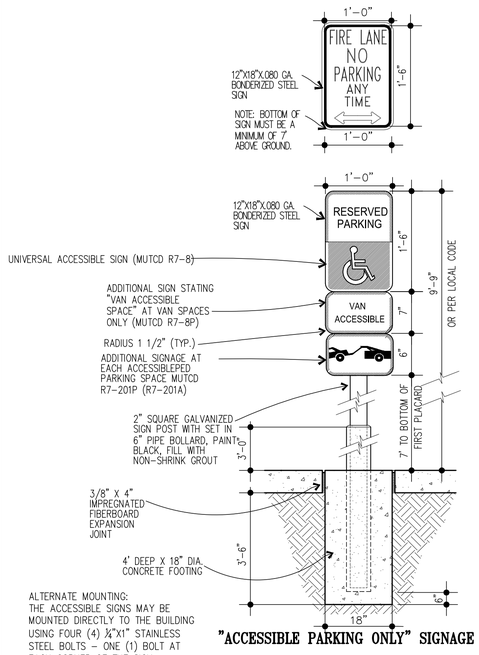
DIRECTIONAL SIGN FOUNDATION | 14

NOT USED | 15

NOTES:

1. IF THE EXISTING EARTH IS NON-VIRGIN FILL MATERIAL OR OTHERWISE UNSUITABLE TO SUPPORT THE BASE AND LIGHT, CONSULT THE McDONALD'S SOILS ENGINEER PRIOR TO PLACING CONCRETE.
2. FOUNDATION DEPTH AS REQUIRED BY CODE OR TO ACHIEVE ADEQUATE SOIL BEARING CAPACITY, (6' DEPTH MINIMUM).
3. IF OPTIONAL TAPERED STEEL BASE IS USED, FILL 2'-0"ø BASE WITH CONCRETE TO FORM TOP 2'-0" PORTION OF LIGHT POLE BASE.

LIGHT POLE BASE | 16



ALTERNATE MOUNTING:
THE ACCESSIBLE SIGNS MAY BE MOUNTED DIRECTLY TO THE BUILDING USING FOUR (4) ¼"X1" STAINLESS STEEL BOLTS – ONE (1) BOLT AT EACH CORNER OF THE SIGN.

"ACCESSIBLE PARKING ONLY" SIGNAGE

ACCESSIBLE PARKING SIGNAGE | 17

NO.	DATE	REVISION DESCRIPTION

CIVIL ENGINEERING CONSULTANT:

Strategic Land Solutions, Inc.
Civil Engineering • Land Planning • Entitlements
2595 PONDEROSA ROAD
FRANKTOWN, CO 80116
720.384.7661 Phone
rpalmer@strategicls.net
Robert J. Palmer, PE
President

PREPARED UNDER THE DIRECT SUPERVISION OF:

SEAL: COLORADO REGISTERED ROBERT J. PALMER 36320 PROFESSIONAL ENGINEER

BY Robert J. Palmer, PE
Licensed Professional Engineer (CO PE #36320), AS PRESIDENT FOR STRATEGIC LAND SOLUTIONS, INC.

McDonald's

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF McDONALD'S CORPORATION AND SHALL NOT BE REPRODUCED WITHOUT THEIR WRITTEN PERMISSION.

OFFICE	ADDRESS
ROCKY MOUNTAIN REGION	

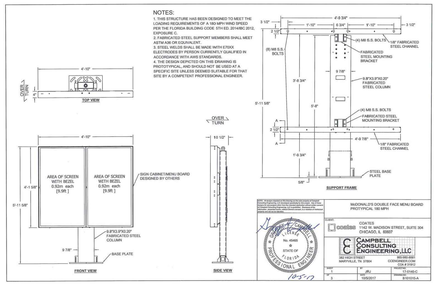
STREET ADDRESS	CITY	STATE	COUNTY	STATE STORE #/#	NATIONAL #/#
960 N. TEN MILE DRIVE	FRISCO	COLORADO	SUMMIT	51062	44322

REGIONAL DWG. NO: -

SCALE:	AS NOTED	McD RE:	BAKER
DATE:	09/05/2025	McD P/CM:	YAGUSESKY
DESIGNED BY:	RJP		
DRAWN BY:	RJP	FILE NAME:	CURRENT.DWG
CHECKED BY:	RJP	SLS JN:	24-0001-216

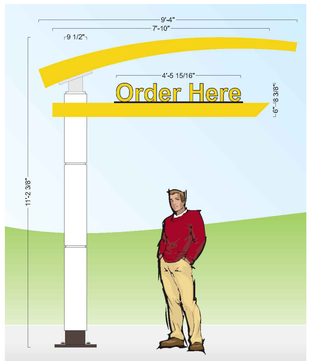
DRAWING TITLE:
CONSTRUCTION DETAILS

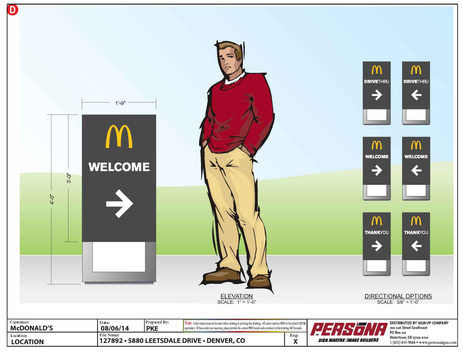
SHEET NO:
CD.1

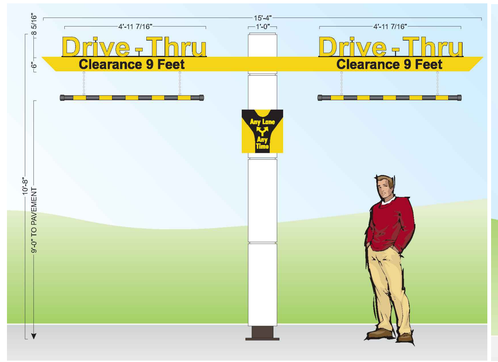


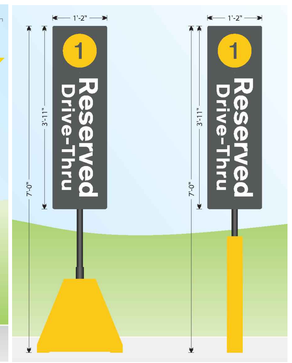
NOTES:

1. SIGNAGE DETAILS SHOWN HEREON ARE FOR INFORMATION ONLY. ACTUAL SIGNAGE WILL BE REVIEWED AND APPROVED UNDER A SEPARATE PERMIT. FINAL SIGNAGE DETAILS WILL REQUIRE ADDITIONAL ITEMS INCLUDING STONE COLUMNS OR WAINSCOT TO MATCH THE BUILDING.
2. NEW MENU AND OPO DETAILS WILL BE ISSUED BY MCDONALD'S PRIOR TO INSTALLATION AT THIS SITE. THE DETAILS WERE NOT AVAILABLE AT TIME OF THESE DRAWINGS.





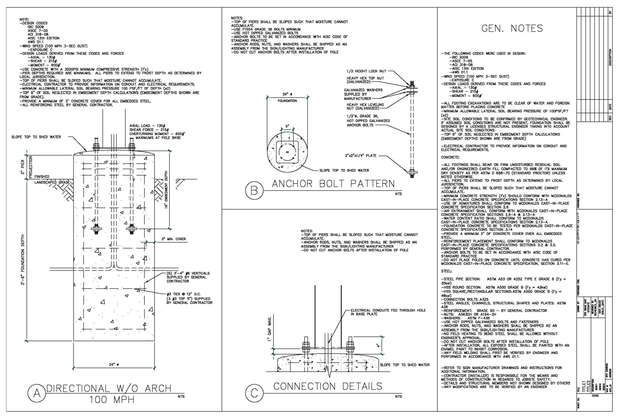


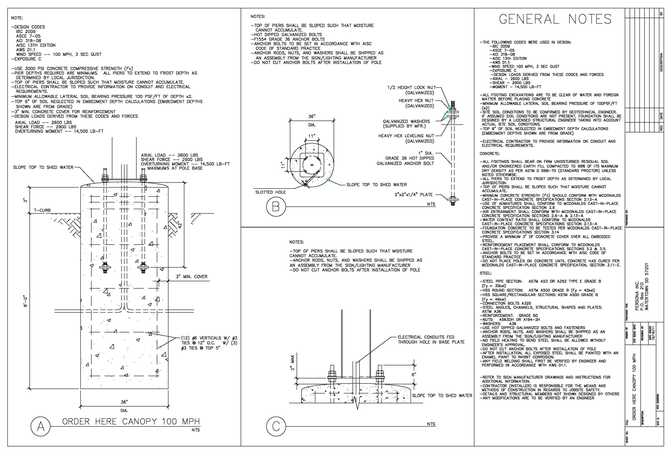


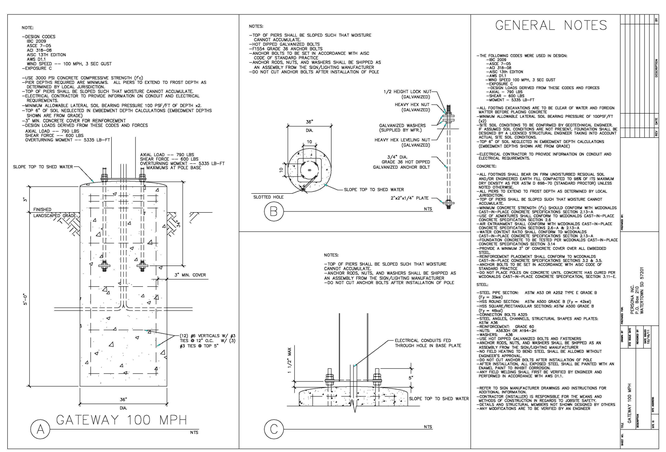


SIGNAGE

18







ODMB/DOUBLE GATEWAY / HEIGHT DETECTOR SIGN BASE DETAILS

19

NO.	DATE	REVISION DESCRIPTION

CIVIL ENGINEERING CONSULTANT:

Strategic Land Solutions, Inc.
Civil Engineering • Land Planning • Entitlements
2595 PONDEROSA ROAD
FRANKTOWN, CO 80116
720.384.7661 Phone
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Robert J. Palmer, PE
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PREPARED UNDER THE DIRECT SUPERVISION OF:

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BY Robert J. Palmer, PE
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AS PRESIDENT FOR STRATEGIC LAND SOLUTIONS, INC.

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OFFICE: ROCKY MOUNTAIN REGION
ADDRESS: 44322
STATE STORE #: 51062
REGIONAL DWG. NO: -

STREET ADDRESS: 960 N. TEN MILE DRIVE
CITY: FRISCO
STATE: COLORADO
COUNTY: SUMMITT

SCALE:	AS NOTED
DATE:	09/05/2025
DESIGNED BY:	RJP
DRAWN BY:	RJP
CHECKED BY:	RJP
McD RE:	BAKER
McD P/CM:	YAGUSESKY
FILE NAME:	CURRENT.DWG
SLS JN:	24-0001-216

DRAWING TITLE:

CONSTRUCTION DETAILS

SHEET NO:

CD.2

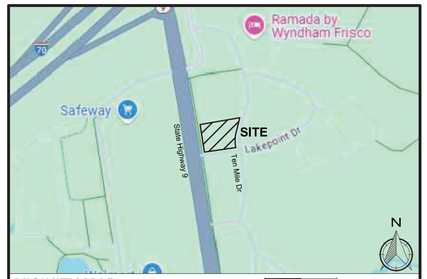
N

0 20 40

Scale: 1" = 20'

LEGEND

E	UNDERGROUND ELECTRICAL LINE		LIGHT POLE (DIRECTIONAL)
FO	UNDERGROUND FIBER-OPTIC LINE		MANHOLE (SANITARY)
G	UNDERGROUND GAS LINE	ST	MANHOLE (STORM)
SS	UNDERGROUND SANITARY SEWER LINE	0	NUMBER OF PARKING STALLS
STS	UNDERGROUND STORM SEWER LINE		SIGN
T	UNDERGROUND TELEPHONE LINE		STREET LIGHT
W	UNDERGROUND WATER LINE		WATER VALVE
	CONTOUR LINE		DECIDUOUS TREE
	EDGE OF ASPHALT PAVEMENT		
	BOLLARD		EVERGREEN TREE
C	CLEANOUT		
	COMMUNICATIONS PEDESTAL	BLDGHT	BUILDING HEIGHT (FF - HIGHEST POINT)
	COMMUNICATIONS VAULT	FF	FINISHED FLOOR
	ELECTRIC BOX	L/S	LANDSCAPING
	ELECTRIC METER	R.O.W.	RIGHT-OF-WAY
E	ELECTRIC PEDESTAL	REC. NO.	RECEPTION NUMBER
	ELECTRIC VAULT		SET 5/8"x24" REBAR & 1-1/4" YELLOW PLASTIC CAP STAMPED "ESC LS 38421"
	FIRE HYDRANT		FOUND MONUMENT AS DESCRIBED
	GAS METER		
	HOSE BIB (WATER SPIGOT)		
	IRRIGATION VALVE		
	LIGHT POLE (AREA)		



VICINITY MAP

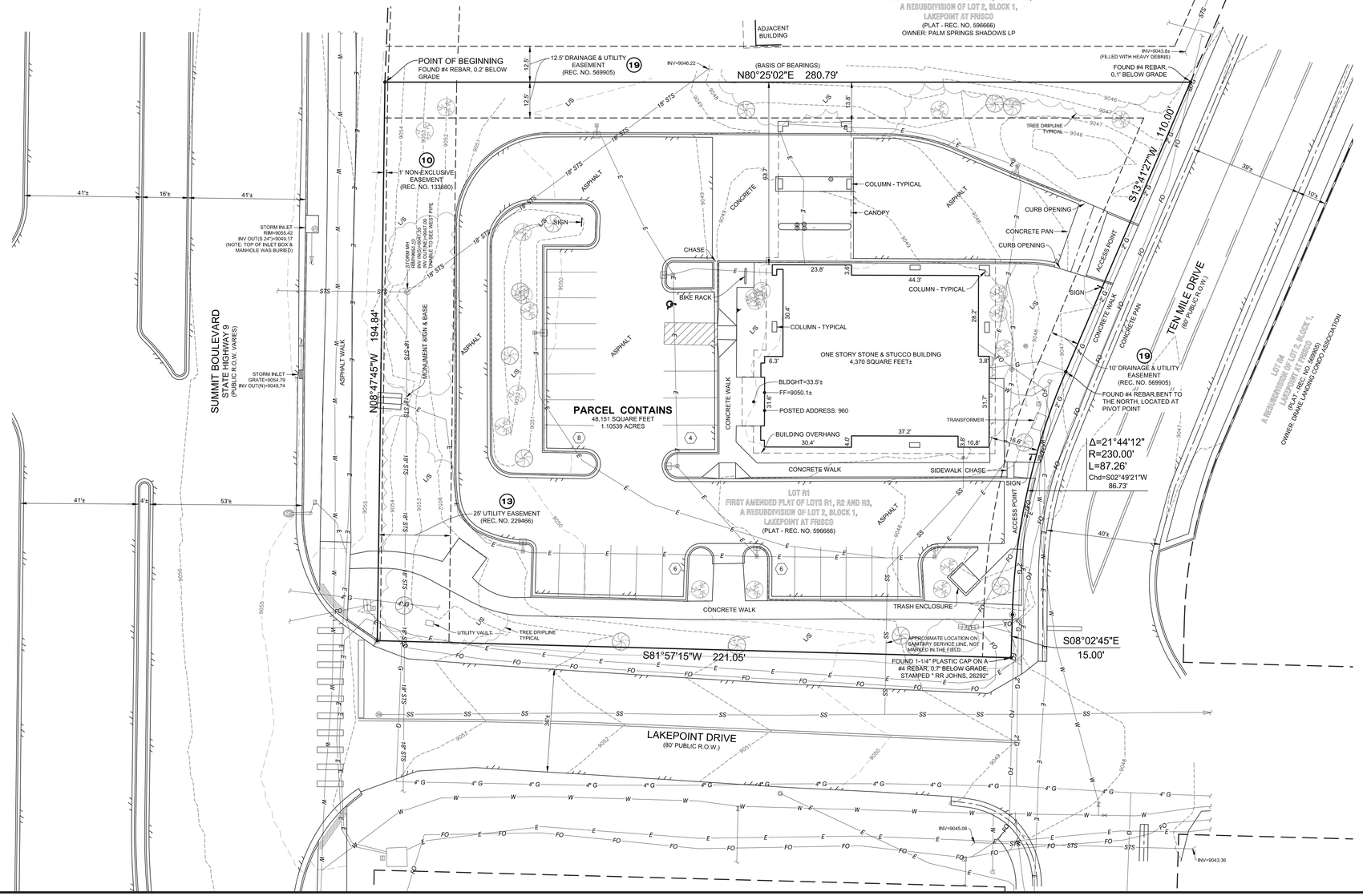
0 500 SCALE: 1" = 500'

ZONING INFORMATION

ZONING CLASSIFICATION	LAKEPOINT PUD
BUILDING SETBACKS	FRONT: 25' EASEMENT REAR: 0' LEFT: 5' SIDEWALK RIGHT: 12.5' EASEMENT
PARKING SETBACKS	FRONT: 25' EASEMENT REAR: 0' LEFT: 5' SIDEWALK RIGHT: 12.5' EASEMENT
PARKING REQUIREMENT	25 MINIMUM STALLS
MAXIMUM BUILDING HEIGHT	35' AVERAGE GRADE AT BUILDING CORNERS.
ZONING INFORMATION PER A MCDONALDS SITE INVESTIGATION REPORT DATED DECEMBER 23, 2024, PROJECT NUMBER 100876.	

GENERAL NOTES:

1. THIS SURVEY WAS BASED ON TITLE COMMITMENT NUMBER ABD20214589-5 PREPARED BY LAND TITLE GUARANTEE COMPANY AS AGENT FOR OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, WITH A COMMITMENT DATE OF DECEMBER 5, 2024 AT 5:00 P.M., AND DOES NOT CONSTITUTE A TITLE SEARCH BY THIS SURVEYOR FOR OTHER EASEMENTS AND/OR EXCEPTIONS OF RECORD.
2. THE USE OF THE WORD "CERTIFY" OR "CERTIFICATION" AS SHOWN AND USED HEREON CONSTITUTES AN EXPRESSION OF PROFESSIONAL OPINION REGARDING THOSE FACTS OF FINDING WHICH ARE THE SUBJECT OF THE CERTIFICATION AND DOES NOT CONSTITUTE A GUARANTY OR WARRANTY, EITHER EXPRESSED OR IMPLIED.
3. THIS SURVEY WAS PREPARED FOR THE EXCLUSIVE USE OF THE ENTITIES NAMED IN THE SURVEYOR'S CERTIFICATION HEREON. SAID CERTIFICATE DOES NOT EXTEND TO ANY UNNAMED PERSON OR ENTITY WITHOUT AN EXPRESS WRITTEN RECERTIFICATION BY THE SURVEYOR OF RECORD NAMING SAID PERSON OR ENTITY.
4. BEARINGS ARE BASED ON THE NORTHERLY LINE OF LOT R1, FIRST AMENDED PLAT OF LOTS R1, R2 AND R3, A RESUBDIVISION OF LOT 2, BLOCK 1, LAKEPOINT AT FRISCO WITH AN ASSUMED BEARING OF N80°25'02"E BOUNDED BY A #4 REBAR, 0.2' BELOW GRADE FOUND AT THE NORTHWESTERLY CORNER OF SAID LOT R1 AND A #4 REBAR, 0.1' BELOW GRADE FOUND AT THE NORTHEASTERLY CORNER OF SAID LOT R1, WITH ALL BEARINGS CONTAINED HEREIN BEING RELATIVE THERETO.
5. THE ADDRESS OF THE SURVEYED PROPERTY IS: 960 NORTH TEN MILE DRIVE AS POSTED ON THE BUILDING.
6. BY GRAPHIC PLOTTING ONLY THE SUBJECT PROPERTY IS SITUATED IN FLOOD ZONE "X" ACCORDING TO FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY PANEL NO. 08117C0353F WITH AN EFFECTIVE DATE OF NOVEMBER 16, 2018. NO OFFICE CALCULATIONS OR FIELD SURVEYING WAS PERFORMED TO DETERMINE THIS INFORMATION.
7. BENCHMARK: NGS BM W449, PID DF5530 - DISK SET INTO A DRILL HOLE IN THE TOP OF THE SOUTH ONE OF THREE CONCRETE FOUNDATIONS FOR THE LARGE "SHELL" SIGN. IT IS 28.8 M EAST FROM THE EDGE OF OIL FOR DILLON DAM ROAD, 17.7 M NORTH FROM THE NORTHWEST CORNER OF A BUILDING AT 1121 SUMMIT BOULEVARD, 3.2 M NORTH FROM A WITNESS POST, 0.25 M WEST FROM THE WESTERN CORNER OF THE IRON BASE OF THE SOUTHERN SIGN POST AND ABOUT 8 M BELOW INTERSTATE 70, ELEVATION: 9058.09 FEET (NAVD 1988 DATUM).
8. THE SUBJECT PROPERTY HAS DIRECT ACCESS TO TEN MILE DRIVE, A PUBLIC RIGHT-OF-WAY.
9. THERE ARE 24 REGULAR PARKING SPACES AND 1 HANDICAP PARKING SPACES ON THE SURVEYED PROPERTY.
10. AT THE TIME OF THE SURVEY THE SUBJECT PROPERTY WAS UNDER 12 INCHES TO 36 INCHES OF SNOW AND WEATHER CONDITIONS LIMITED THE NUMBER OF IMPROVEMENTS SHOWN ON THIS SURVEY. ONLY MAJOR STRUCTURES, LIMITED MINOR STRUCTURES, AND PROPERTY CORNER MONUMENTATION WERE LOCATED DURING THIS SURVEY. UNLOCATABLE IMPROVEMENTS ARE BASED ON AERIAL PHOTOGRAPHY, SEE LEGEND FOR THESE IMPROVEMENTS. DUE TO HEAVY SNOW ON THE GROUND, UNDERGROUND UTILITY MARKINGS WERE NOT PROVIDED. THE UTILITIES SHOWN HEREON ARE BASED ON UTILITY MAPPING AND DESIGN FILES PROVIDED BY THE CLIENT.
11. ALL UNDERGROUND UTILITIES SHOULD BE FIELD VERIFIED PRIOR TO ANY DESIGN AND CONSTRUCTION.
12. BURIED UTILITIES AND PIPELINES SHOWN HEREON ARE PER VISIBLE AND APPARENT SURFACE EVIDENCE, RECORD DRAWINGS OF THE CONSTRUCTION UTILITY LINES AND/OR LOCATION DERIVED FROM THE FIELD SURVEY OF UTILITY MARKINGS PROVIDED BY AN INDEPENDENT UTILITY LOCATING FIRM. NO GUARANTY OR WARRANTY, EITHER EXPRESS OR IMPLIED, IS MADE AS TO THE ACCURACY OR THOROUGHNESS OF SUCH INFORMATION. ENGINEERING SERVICE COMPANY DOES NOT ALLOW FIELD PERSONAL TO ACCESS UTILITY MANHOLES OR ENCLOSED STRUCTURES, THEREFORE SUB-SURFACE PIPE SIZES IF NOTED HEREIN ARE OBSERVED FROM SURFACE LOCATIONS AND/OR TAKEN FROM RECORD DRAWINGS. IF MORE ACCURATE LOCATIONS AND/OR SIZES OF UNDERGROUND UTILITIES OF PIPELINES ARE REQUIRED, THE UTILITY OR PIPELINE LOCATION AND/OR SIZE WILL HAVE TO BE VERIFIED BY FIELD POTHOLING. ENGINEERING SERVICE COMPANY AND THE SURVEYOR OF RECORD SHALL NOT BE HELD LIABLE FOR THE LOCATION OF OR THE FAILURE TO NOTE THE LOCATION OF NON-VISIBLE UNDERGROUND UTILITIES AND PIPELINES.
13. THERE WAS NO VISIBLE EVIDENCE OF CEMETERIES, GRAVESITES OR BURIAL GROUNDS LOCATED ON THE SUBJECT PROPERTY.
14. ALL PARCELS SHOWN HEREON ARE CONTIGUOUS AND CONTAIN NO GORES, GAPS OR OVERLAPS ALONG THEIR COMMON BOUNDARIES.
15. ALL LINEAL DISTANCES ON THIS SURVEY ARE EXPRESSED IN U.S. SURVEY FEET AND DECIMALS THEREOF. A U.S. SURVEY FOOT IS DEFINED AS EXACTLY 1200/3937 METERS.
16. ALL BOUNDARY MEASURED DIMENSIONS SHOWN MATCH THE RECORD DIMENSIONS.
17. NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS WERE OBSERVED AT THE TIME OF SURVEY (TABLE A, ITEM 16).
18. STORM SEWER LINES ARE SHOWN BASED ON FIELD EVIDENCE AND PER THE OFFICIAL AS-BUILT SET OF 1ST BANK, LAKEPOINT AT FRISCO. NO STORM SEWER MAPPING WAS PROVIDED AT THE TIME OF SURVEY.



LEGAL DESCRIPTION:

LOT R1, FIRST AMENDED PLAT OF LOTS R1, R2 AND R3, A RESUBDIVISION OF LOT 2, BLOCK 1, LAKEPOINT AT FRISCO, ACCORDING TO THE PLAT RECORDED MAY 26, 1999 UNDER RECEPTION NO. 596666, COUNTY OF SUMMIT, STATE OF COLORADO.

THE ABOVE LEGAL DESCRIPTION DESCRIBES ALL THAT LAND CONTAINED IN A GENERAL WARRANTY DEED RECORDED ON SEPTEMBER 15, 1998 AT RECEPTION NUMBER 575355 IN SUMMIT COUNTY, COLORADO.

AS SURVEYED LEGAL DESCRIPTION:

LOT R1, FIRST AMENDED PLAT OF LOTS R1, R2 AND R3, A RESUBDIVISION OF LOT 2, BLOCK 1, LAKEPOINT AT FRISCO, ACCORDING TO THE PLAT RECORDED MAY 26, 1999 UNDER RECEPTION NUMBER 596666 IN THE OFFICE OF THE SUMMIT COUNTY CLERK AND RECORDER, SITUATED IN THE NW 1/4 OF SECTION 26, TOWNSHIP 5 SOUTH, RANGE 78 WEST OF THE 6TH PRINCIPAL MERIDIAN, TOWN OF FRISCO, COUNTY OF SUMMIT, STATE OF COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF LOT R1, FIRST AMENDED PLAT OF LOTS R1, R2 AND R3, A RESUBDIVISION OF LOT 2, BLOCK 1, LAKEPOINT AT FRISCO;
THENCE N80°25'02"E ALONG THE NORTH LINE OF SAID LOT R1, A DISTANCE OF 280.79 FEET TO THE NORTHEAST CORNER OF SAID LOT R1;
THENCE ALONG THE EAST LINE OF SAID LOT R1 AND THE WEST RIGHT-OF-WAY (R.O.W.) LINE OF TEN MILE DRIVE THE FOLLOWING THREE (3) COURSES:

1. THENCE S13°41'27"W A DISTANCE OF 110.00 FEET TO A POINT OF CURVE;
2. THENCE ALONG A TANGENT CURVE TO THE LEFT HAVING A CENTRAL ANGLE OF 21°44'12", A RADIUS OF 230.00 FEET, AN ARC LENGTH OF 87.26 FEET, A CHORD BEARING S02°49'21"W WITH A CHORD DISTANCE OF 86.73 FEET;
3. THENCE S08°02'45"E TANGENT TO THE LAST DESCRIBED CURVE, A DISTANCE OF 15.00 FEET TO THE SOUTHEAST CORNER OF SAID LOT R1;

THENCE S81°57'15"W ALONG THE SOUTH LINE OF SAID LOT R1 AND THE NORTH R.O.W. LINE OF LAKEPOINT DRIVE, A DISTANCE OF 221.05 FEET TO THE SOUTHWEST CORNER OF SAID LOT R1;
THENCE N08°47'45"W ALONG THE WEST LINE OF SAID LOT R1 AND THE EAST R.O.W. LINE OF SUMMIT BOULEVARD, A DISTANCE OF 194.84 FEET TO THE **POINT OF BEGINNING**.

PARCEL CONTAINS (48,151 SQUARE FEET) 1.10539 ACRES, MORE OR LESS.

THE ABOVE AS SURVEYED LEGAL DESCRIPTION WAS PROVIDED AT THE CLIENT'S REQUEST.

ASSURANCE NOTE: THE ABOVE LEGAL DESCRIPTION AND AS SURVEYED LEGAL DESCRIPTION DESCRIBES ALL THAT LAND INSURED IN SCHEDULE A(5) OF TITLE COMMITMENT NUMBER ABD20214589-5 PREPARED BY LAND TITLE GUARANTEE COMPANY AS AGENT FOR OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY WITH A COMMITMENT DATE OF DECEMBER 5, 2024 AT 5:00 P.M.

SURVEYOR'S CERTIFICATION:

TO: MCDONALD'S USA, LLC, A DELAWARE LIMITED LIABILITY COMPANY; MCDONALD'S CORPORATION; MCDONALDS REAL ESTATE COMPANY; AND LAND TITLE GUARANTEE COMPANY AS AGENT FOR OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 6(a), 7(a), 7(b.1), 7(c), 8, 9, 11(b), 13, AND 16 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON MAY 6, 2025.,

I FURTHER CERTIFY THAT I, JUSTIN A. CONNER, A LICENSED LAND SURVEYOR IN THE STATE OF COLORADO, CERTIFY FOR AND ON BEHALF OF ENGINEERING SERVICE COMPANY THAT THE SURVEY SHOWN HEREON WAS PERFORMED BY ME OR UNDER MY RESPONSIBLE CHARGE, THAT IT IS BASED UPON MY KNOWLEDGE, INFORMATION AND BELIEF, THAT IT HAS BEEN PREPARED IN ACCORDANCE WITH THE APPLICABLE STANDARDS OF PRACTICE, THAT IT IS NOT A GUARANTY OR WARRANTY, EITHER EXPRESSED OR IMPLIED AND IS, TO THE BEST OF MY KNOWLEDGE, ACCURATE AND COMPLETE.

DATE OF PLAT OR MAP: MAY 27, 2025.

JUSTIN A. CONNER
PROFESSIONAL L.S. NO. 38421
FOR AND ON BEHALF OF
ENGINEERING SERVICE COMPANY
Email: justinc@engineeringservicecо.com

COLORADO LICENSED JUSTIN A. CONNER 38421 PROFESSIONAL LAND SURVEYOR 5/27/2025

NOTICE:

ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT, MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.

ANY PERSON WHO KNOWINGLY REMOVES, ALTERS, OR DEFACES ANY PUBLIC LAND SURVEY MONUMENT, LAND BOUNDARY MONUMENT, OR ACCESSORY COMMITS A CLASS TWO (2) MISDEMEANOR, PURSUANT TO STATE STATUTE 18-4-508 OF THE COLORADO REVISED STATUTES.

NOTES CORRESPONDING TO SCHEDULE B - SECTION 2 OF TITLE COMMITMENT:

ITEMS 1 THROUGH 7 ARE NON-SURVEY RELATED ITEMS.

8 (THIS ITEM WAS INTENTIONALLY DELETED)

9 (THIS ITEM WAS INTENTIONALLY DELETED)

10 TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS OF QUIT CLAIM DEED RECORDED MAY 15, 1973 UNDER RECEPTION NO. 133880.
(APPLIES TO THE SUBJECT PROPERTY, PLOTTABLE ITEMS ARE SHOWN HEREON.)

11 EASEMENTS, CONDITIONS, COVENANTS, RESTRICTIONS, RESERVATIONS AND NOTES ON THE PLAT RECORDED MAY 15, 1973 UNDER RECEPTION NO. 133881.
(AFFECTS THE SUBJECT PROPERTY, HOWEVER CONTAINS NO PLOTTABLE ITEMS.)

12 NOTES, DEDICATIONS AND EASEMENTS SET FORTH ON THE PLAT FOR LAKEPOINT AT FRISCO RECORDED AUGUST 5, 1981 UNDER RECEPTION NO. 226882.
(AFFECTS THE SUBJECT PROPERTY, HOWEVER CONTAINS NO PLOTTABLE ITEMS.)

13 TERMS, CONDITIONS AND PROVISIONS OF PUBLIC SERVICE EASEMENT RECORDED SEPTEMBER 29, 1981 UNDER RECEPTION NO. 229466.
(APPLIES TO THE SUBJECT PROPERTY, PLOTTABLE ITEMS ARE SHOWN HEREON.)

14 ANY TAX, LIEN, FEE, OR ASSESSMENT BY REASON OF INCLUSION OF SUBJECT PROPERTY IN THE FRISCO SANITATION DISTRICT, AS EVIDENCED BY INSTRUMENT RECORDED JULY 02, 1984, UNDER RECEPTION NO. 280101.
(AFFECTS THE SUBJECT PROPERTY, HOWEVER CONTAINS NO PLOTTABLE ITEMS.)

15 (THIS ITEM WAS INTENTIONALLY DELETED)

16 (THIS ITEM WAS INTENTIONALLY DELETED)

17 (THIS ITEM WAS INTENTIONALLY DELETED)

18 (THIS ITEM WAS INTENTIONALLY DELETED)

19 NOTES, DEDICATIONS AND EASEMENTS SET FORTH ON THE PLAT FOR LAKEPOINT AT FRISCO RECORDED JULY 13, 1998 UNDER RECEPTION NO. 569905.
(APPLIES TO THE SUBJECT PROPERTY, PLOTTABLE ITEMS ARE SHOWN HEREON.)

20 (THIS ITEM WAS INTENTIONALLY DELETED)

21 NOTES, DEDICATIONS AND EASEMENTS SET FORTH ON THE PLAT RECORDED MAY 26. 1999 UNDER RECEPTION NO. 596666.
(APPLIES TO THE SUBJECT PROPERTY, PLOTTABLE ITEMS ARE SHOWN HEREON.)

22 EXISTING LEASES AND TENANCIES.
(NOT ADDRESSED.)

23 ALL WATER OR MINERAL RIGHTS, AS EXCLUDED, AND TERMS, CONDITIONS AND PROVISIONS, AS SET FORTH IN SPECIAL WARRANTY DEED FROM FIRSTBANK OF SILVERTHORNE NKA FIRSTBANK OF SUMMIT COUNTY TO MCDONALD'S REAL ESTATE COMPANY, A DELAWARE CORPORATION RECORDED _____ UNDER RECEPTION NO. _____
(NOT ADDRESSED.)

24 TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS AS SET FORTH IN DECLARATION OF RESTRICTIVE USE COVENANT RECORDED _____ UNDER RECEPTION NO. _____.
(NOT ADDRESSED.)

ENGINEERING SERVICE COMPANY
Creative Solutions Since 1994
14190 East Evans Avenue
Aurora, Colorado 80014
engineeringservicecо.com
P 303.337.1393
F 303.337.1481

Revisions:

Description	Date

Prepared For:

McDonald's USA, LLC
4643 South Ulster Street, Suite 1300
Denver, Colorado 80237

ALTA / NSPS LAND TITLE SURVEY

LOT R1, FIRST AMENDED PLAT OF LOTS R1, R2 AND R3, A RESUBDIVISION OF LOT 2, BLOCK 1, LAKEPOINT AT FRISCO
SITUATED IN THE NW 1/4 OF SECTION 26, T.5S., R.78W. OF THE 6TH P.M.
TOWN OF FRISCO, COUNTY OF SUMMIT, STATE OF COLORADO

960 NORTH TEN MILE ROAD

Designed By: JDP	Date: 1/31/2025
Drawn By: JDP	Survey No.: 25-004-S
Checked By: JDP, JAC	Project No.: 337.133
Field Book No.: 981, 982	Scale: 1" = 20'
Sheet No.: 1 OF 1	

File Name: N:\Projects\McDonald's Corporation\2025\Frisco-960 North Ten Mile Dr. #10062\CAD\Survey\960 N Ten Mile Dr Frisco - Survey.dwg | Plot Date: 5/27/2025 | Company: ESC | User: John Perry

From: Corey Stinar
To: Heth, Emma
Subject: RE: McDonalds at 960 N. Ten Mile Drive, Frisco -51062
Date: Tuesday, September 9, 2025 2:14:39 PM
Attachments: image001.png
image004.png
image005.png
image006.png
image007.png
image008.png

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This message came from outside your organization.
Please review the email and report as suspicious if you have any doubts of the integrity of the message.

Report Suspicious

Hi Emma, correct the #1 choice is the Munsell 8/8 color and is what I have on the plans.

Thanks!
Corey

From: Heth, Emma <emmah@townoffrisco.com>
Sent: Tuesday, September 9, 2025 10:10 AM
To: Corey Stinar <coreys@arrisinc.net>
Subject: RE: McDonalds at 960 N. Ten Mile Drive, Frisco -51062

Hi Corey,

Can you confirm that the "#1 choice" sample you sent is the Munsell 8/8 color you send a screenshot of below and that's included on the updated plans? If so, we are good with that color.

Thanks!
Emma

Emma Heth (she/her) | **Planner II | Community Development**
TOWN OF FRISCO
Email: EmmaH@TownofFrisco.com
Office: 970-668-4581

From: Heth, Emma
Sent: Tuesday, August 19, 2025 9:26 AM
To: Corey Stinar <coreys@arrisinc.net>
Subject: RE: McDonalds at 960 N. Ten Mile Drive, Frisco -51062

Sounds good, thanks Corey!

Emma Heth (she/her) | **Planner II | Community Development**
TOWN OF FRISCO
Email: EmmaH@TownofFrisco.com
Office: 970-668-4581

From: Corey Stinar <coreys@arrisinc.net>
Sent: Tuesday, August 19, 2025 6:19 AM
To: Heth, Emma <emmah@townoffrisco.com>
Subject: RE: McDonalds at 960 N. Ten Mile Drive, Frisco -51062

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Good morning Emma, I am going to overnight FedEx some samples of the gold color. I will mark the one that would be our first choice, which in my opinion meets the chroma of 8. I did add the notes we discussed previously to the elevations, but wanted to get you these samples.

I am included the other samples just in case you don't agree with chroma level on our first choice, we will be covered with the other samples.

Thanks!
Corey

From: Heth, Emma <emmah@townoffrisco.com>
Sent: Monday, August 11, 2025 2:29 PM
To: Corey Stinar <coreys@arrisinc.net>

Subject: RE: McDonalds at 960 N. Ten Mile Drive, Frisco -51062

Hi Corey,

That works. You can include this screenshot in the application materials and make it clear that the title means this is a chroma of 8 on the Munsell color chart.

We do require physical samples of materials for the Planning Commission meeting so that they can see what is being proposed. Would you be able to provide a physical sample for Robert to bring to that meeting? It has not been scheduled as we are still waiting on comments from referral agencies.

Thanks,
Emma

Emma Heth (she/her) **| Planner II | Community Development**

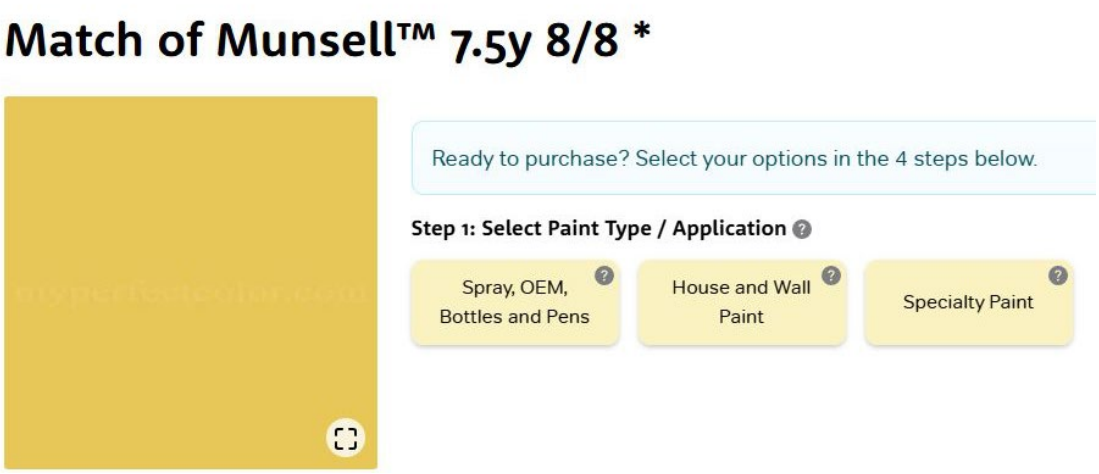
TOWN OF FRISCO

Email: EmmaH@TownofFrisco.com
Office: 970-668-4581

From: Corey Stinar <coreys@arrisinc.net>
Sent: Monday, August 11, 2025 1:53 PM
To: Heth, Emma <emmah@townoffrisco.com>
Subject: RE: McDonalds at 960 N. Ten Mile Drive, Frisco -51062

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Report Suspicious

The original image below is a 10 on chroma. Here is another image that is 8/8 so chroma of 8. I wont have physical sample but we can note that the color to match Munsell 7.5y 8/8



From: Heth, Emma <emmah@townoffrisco.com>
Sent: Monday, August 11, 2025 1:49 PM
To: Corey Stinar <coreys@arrisinc.net>
Subject: RE: McDonalds at 960 N. Ten Mile Drive, Frisco -51062

Hi Corey,

Is that sample an 8 or a 10? Accent colors have a maximum chroma of 8.

Here is the code language for reference:

- *Maximum Color Chroma*. No color may be used as the primary color of the building that exceeds a chroma of four on the Munsell Color chart.
- *Exception for Building Accents*. Colors that exceed a chroma of four, but do not exceed a chroma of eight on the Munsell Color chart may be used only sparingly as accents, such as on trim or railings. Luminescent, fluorescent, or reflective colors shall not be utilized on any exterior portion of the building.

Best,
Emma

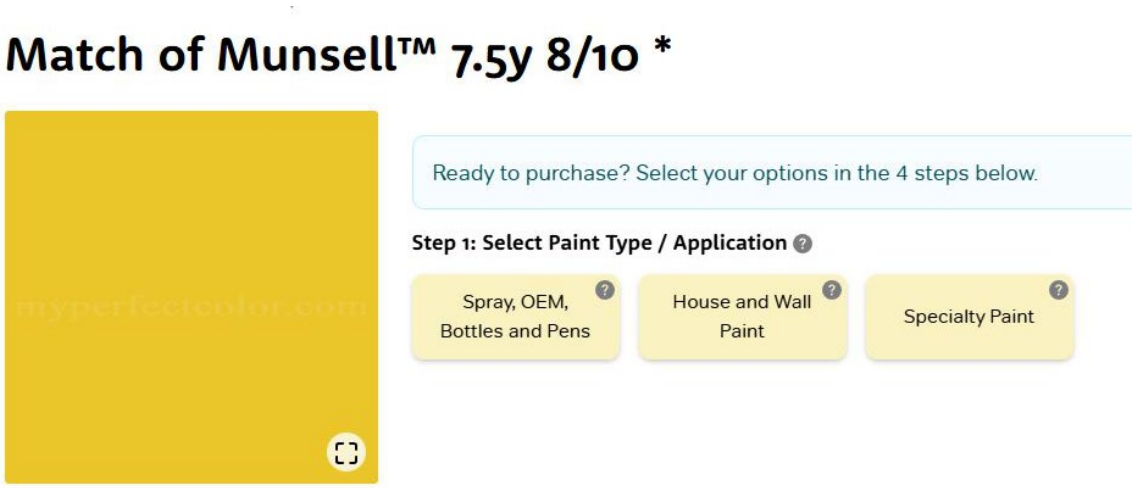
Emma Heth (she/her) **| Planner II | Community Development**

Email: EmmaH@TownofFrisco.com
Office: 970-668-4581

From: Corey Stinar <coreys@arrisinc.net>
Sent: Monday, August 11, 2025 1:24 PM
To: Heth, Emma <emmah@townoffrisco.com>
Subject: RE: McDonalds at 960 N. Ten Mile Drive, Frisco -51062

This Message Is From an External Sender
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Report Suspicious
Please review the email and report as suspicious if you have any doubts of the integrity of the message.

The image below is a Munsell yellow we had to match on another project that mandated colors with Munsell, would this work for the underscore?



From: Corey Stinar
Sent: Monday, August 11, 2025 1:06 PM
To: 'EmmaH@TownofFrisco.com' <EmmaH@TownofFrisco.com>
Subject: FW: McDonalds at 960 N. Ten Mile Drive, Frisco -51062

Hello Emma, what is the max allowed value and Chroma for the yellow?

Thanks!
Corey

From: Robert Palmer <rpalmer@strategicls.net>
Sent: Monday, July 28, 2025 1:08 PM
To: Corey Stinar <coreys@arrisinc.net>
Subject: FW: McDonalds at 960 N. Ten Mile Drive, Frisco -51062

Thanks.

Robert Palmer, P.E.
720-384-7661

From: Heth, Emma <emmah@townoffrisco.com>
Sent: Monday, July 28, 2025 12:31 PM
To: Robert Palmer <rpalmer@strategicls.net>
Subject: RE: McDonalds at 960 N. Ten Mile Drive, Frisco -51062

Hi Robert,

See below for comments from Planning to address. I just sent another reminder message to the other referral agencies, so I will let you know when we hear back. Our Public Works Director/Town Engineer Chris McGinnis left the town last week, so we may have a slight delay on that review. We anticipate having contracted services in place soon.

Attn: McDonald's
960 N. 10 Mile Drive
Frisco, CO 80443
Sept 12,2025

To Whom It May Concern, I have reviewed the site plans for this location and can confirm we will be able to provide waste service and do have the clearce to preform the required services. Please feel free to contact me at 602-980-8808 if you have any further questions.

Estrella Diaz

WM Representative
Signature

9/12/2025

Date

Proposed McDonald's

960 North Ten Mile Dr

Frisco, CO

Traffic Impact Study

Prepared for:

McDonald's Corporation
c/o Strategic Land Solutions, Inc.
Attn: Robert Palmer, PE
2595 Ponderosa Rd
Franktown, CO 80116

(SLS Ref # 24-0001-216)

Prepared by:

Platinum Traffic Engineering

Platinum Traffic Engineering
2876 Amyvale Court
Castle Rock, CO 80109

(PTE Ref # 25001)



09/09/2025

September 9, 2025

Contents

Revision History iv
1 Introduction 1-1
2 Existing and Planned Conditions 2-6
3 Proposed Conditions 3-11
4 Future Conditions 4-15
5 Analysis of Proposed Conditions 5-20
6 Proposed Mitigation Measures 6-29
7 Conclusions & Recommendations 7-30
8 References 8-33
Appendix 35

Appendix

- Trip Generation Re-Evaluation
- Frisco Trails Master Plan
- Traffic Volume Data
- Intersection Analysis Methodology
- Right Turns On Red
- ITE Trip Generation and Trip Assignments
- Pass By Trip Reductions
- Background Traffic Volumes
- Background Roadway Improvements
- Proposed Drive-Through Queue Capacity
- Driveway Spacing
- Driveway Lines of Sight
- CDOT Access Permit (Draft)
- Exit Lane - Alternative Configuration
- Operational Review of Ten Mile Dr & N Ten Mile Dr Intersection
- Traffic Analysis Reports

List of Figures

Figure 1-a: Vicinity Map 1-1
Figure 1-b: Proposed Project Site Plan (September 5, 2025) (No Scale) 1-2
Figure 2-a: 2025 Existing Conditions and LOS 2-8
Figure 2-b: Planned CDOT Project – I-70 Exit 203 Interchange Improvements [6] 2-10
Figure 3-a: Estimated Net New Site-Generated Trip Distribution and Assignment (2026) 3-13
Figure 3-b: Estimated Net New Site-Generated Trip Distribution and Assignment (2046) 3-14
Figure 4-a: Short-Term Background Traffic Conditions (2026) 4-16
Figure 4-b: Long-Term Background Traffic Conditions (2046) 4-17
Figure 4-c: Short-Term Total Traffic Conditions (2026) 4-18
Figure 4-d: Long-Term Total Traffic Conditions (2046) 4-19
Figure 5-a: Background Traffic LOS 5-22
Figure 5-b: Total Traffic LOS 5-22

Appendix

Figure A 1 Trail Master Plan – Frisco Gateway Recommendations [1] 3
Figure A 2 Estimated Traffic Volumes "CDOT Figure 4-1 No-Build Opening Year" [3] 4
Figure A 3 Forecasted 2045 Traffic Volumes "CDOT Figure 5-11 Horizon Year Alternative 1" [3] 4
Figure A 4 Aug 2023 Traffic Volumes CDOT Route 009C, Sta 100513 (Near I-70) [4] 5
Figure A 5 Snapshot of Video used for Westbound RTOR Observations (from SE Corner) 9
Figure A 6 ITE 934 AM Pass-By Rates [5] 11
Figure A 7 ITE 934 PM Pass-By Rates [5] 11
Figure A 8 Annual Traffic Volume Totals 2015-2024 - CDOT Route 009C, Sta 240 (S/O Tiger Rd) [4] . 12
Figure A 9 Proposed 2028 Background Roadway Improvements [3] 14
Figure A 10 Study Location # 1 - Proposed Southbound Left Turn Movement Re-Routing (2028) [3] 15
Figure A 11 Proposed Project Drive-Through Layout 16
Figure A 12 Existing Driveway Spacing 17
Figure A 13 Proposed Sight Triangles 19
Figure A 14 Departure Sight Lines– Motorist's Perspective Looking Left/North 20
Figure A 15 Departure Sight Lines – Motorist's Perspective Looking Right/South to Lake Point Dr ... 20
Figure A 16 Alternate Site Exit Signing and Marking Configuration (Optional) 23
Figure A 17 Estimated 2046 Total Traffic Volumes at 10 Mile Dr & N 10 Mile Dr 24

List of Tables

Table 1-A: Study Locations 1-4
Table 1-B: Study Periods 1-5
Table 2-A: 2025 Existing Intersection Delay and Level of Service (LOS) Summary 2-8
Table 2-B: Existing Storage (Turn Bay) Lengths 2-9
Table 2-C: Existing Queue Lengths and Queue Ratios 2-9
Table 3-A: Trip Generation Summary 3-11
Table 5-A: Future Horizon Years Delay and LOS Summary 5-21
Table 5-B: Estimated Maximum 95th Percentile Queue Lengths and Queue Ratios – 2026 5-23
Table 5-C: Estimated Maximum 95th Percentile Queue Lengths and Queue Ratios – 2046.....5-24
Table 5-D: Fast-Food Restaurant Drive-Through Queue Generation Data 5-25
Table 7-A: Summary of Recommended Improvement Measures.....7-30
Table 7-B: Key Issues Identified by the Agency and Addressed in this TIS 7-31

Appendix

Table A 1 Summary of Frisco Gateway Recommendation (Trail Master Plan – 2023 Update) [1].....2
Table A 2 Aug 2023 Traffic Volumes CDOT Route 009C, Sta100513 (S/O I-70, Frisco) [4].....5
Table A 3 Historic Monthly Traffic Volumes CDOT Route 009C, Sta240 (S/O Tiger Rd), 2006-2024 [4]6
Table A-4: LOS Meaning for Signalized and Unsignalized Intersections [11].....8
Table A 5 Summary of RTOR Observations.....9
Table A 6 Summary of ITE Land Use Descriptions [5].....10
Table A 7 Summary of Primary Site-Generated Trips.....10
Table A 8 Estimated Traffic Volume Seasonal Adjustment Factor (Jan 2024 to Oct 2024)*.....12
Table A-9: Estimated Traffic Volume Growth Factors [4] 13
Table A-10 Trip Generation Summary – Former Drive-Through Bank Use.....21
Table A 11 Project Notes - Vistro Traffic Volume Input 26
Table A 12 Vistro Traffic Volume Input Parameters 27
Table A 13 Vistro Traffic Analysis Reports – Heading #s Numbers by Analysis Scenario.....28

Revision History

Submittal Date	Notes
February 24, 2025	Draft – for Town Review
September 9, 2025	Final – for Submittal to Town

1 Introduction

The purpose of this Traffic Impact Study (TIS) is to satisfy requirements by the Town of Frisco, CO (Agency) to estimate the traffic impacts associated with a proposed development on adjacent roadways and intersections in terms of existing and future traffic conditions both with and without the development. If necessary, mitigations shall also be recommended to mitigate impacts.

1.1 PROPOSED DEVELOPMENT

This section describes the Project. The subject of this TIS is a proposed new McDonald's restaurant that will re-model and occupy an existing building formerly used as a drive-through bank in Frisco, Colorado.

Project Location. The location of the proposed restaurant and drive-through is 960 North Ten Mile Dr in Frisco, CO, as illustrated in ***Figure 1-a***. The location is approximately 0.3 miles from Interstate 70 (I-70).

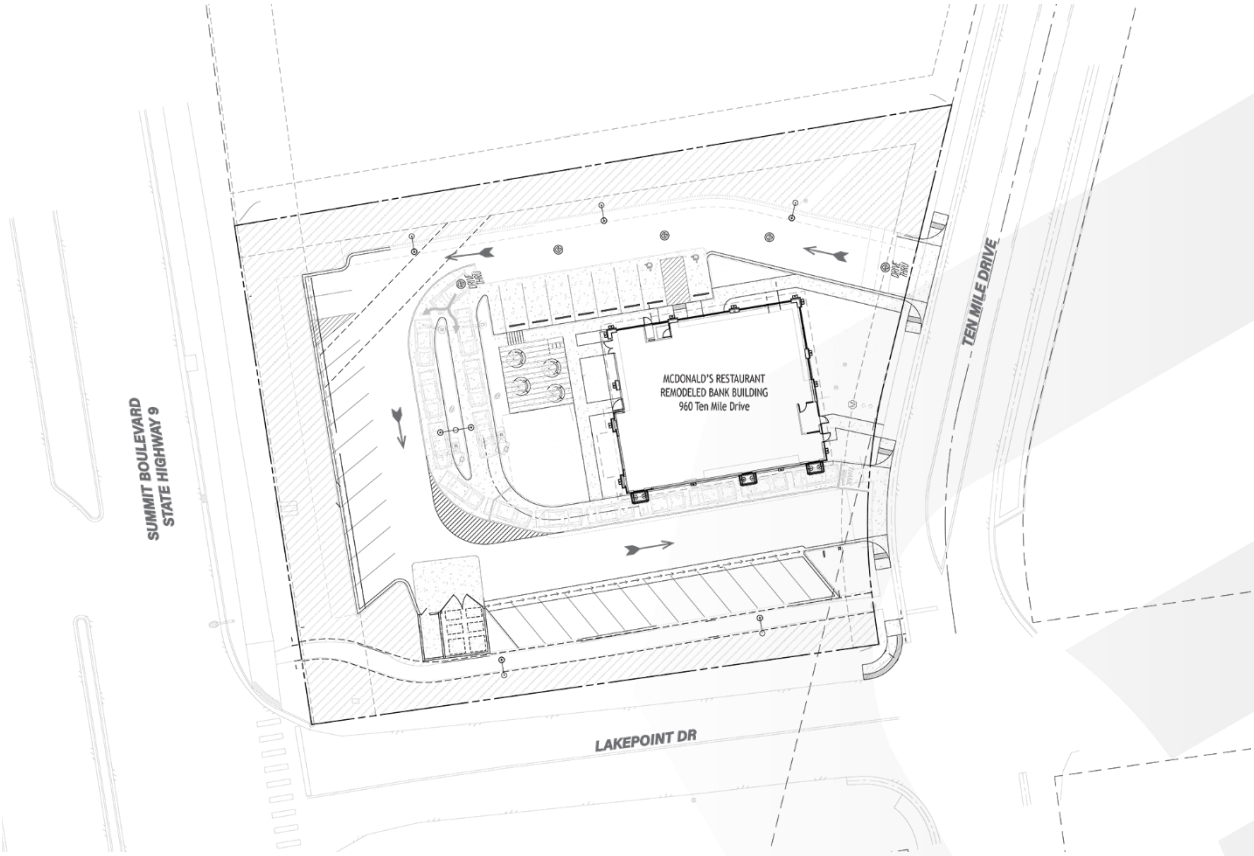
Project Scale. This TIS was prepared using a proposed building area of 4,364 square feet (SF). The final site plan was revised to a total footprint of 4,575 SF to accommodate a standard kitchen layout the existing floor plan could not accommodate. This minor change in gross floor area does not materially affect traffic operations or study conclusions; therefore, the TIS analyses were not updated. See the Appendix for an assessment of this change. The proposed site plan is illustrated in ***Figure 1-b***.

Project Timing. The proposed Project opening year is 2026.

Figure 1-a: Vicinity Map



Figure 1-b: Proposed Project Site Plan (September 5, 2025) (No Scale)



Proposed Parking. The proposed site plan indicates on-site parking will consist of 32 proposed parking spaces, including two accessible parking spaces, as shown in ***Figure 1-b***.

Proposed Vehicular Access. The access to the Project will re-use two existing accesses established by the former drive-through bank. The accesses will be converted to one-way flow in support of the one-way (counter-clockwise) site circulation indicated in ***Figure 1-b***. Both accesses currently exist along the site's North Ten Mile Drive, and are included as Study Locations listed in ***Table 1-A***. Refer to *5 Analysis of Proposed Conditions* for a discussion of the analysis performed for the Project.

Proposed Drive-Through Lanes. As illustrated in the site plan presented in ***Figure 1-b*** above, Project provides a drive-through lane that splits into two lanes when customers place orders. The drive-through is serviced by two pre-sale displays, two order kiosks, and three drive-up windows (a pay window, a present window, and a 3rd window to facilitate efficient operation). Internal channelization of the outside drive-through lane consists of traversable pavement markings to allow drive-through customers to exit the drive-through lanes early (customer opts out of order,

etc.). See *5 Analysis of Proposed Conditions*, for details and analysis regarding the proposed drive-through storage capacity.

Proposed Non-Vehicular Access. The existing sidewalk paths providing non-vehicular access to the Project site from Summit Blvd and Lakepoint Dr will be reused. The site plan limits pedestrian access from adjacent sidewalks to specific locations, focusing pedestrian / vehicle activity at designated areas where the vehicular-pedestrian conflict can be optimized to maximize visibility and attention. A review of the Town's Trail Master Plan reveals recommendations to improve trail connectivity in the Town [1]. Refer to the Appendix for more information about the recommendations in the Trails Master Plan in the vicinity of the Project. Summit Transit also serves the area with bus stops along North Ten Mile Dr within a short walk from the Project site. The proposed site plan also supports bicycle travel through a covered bicycle parking area, which provides a visible location for customers to park their bicycles securely.

1.2 TIS SCOPE

The scope of this TIS was established through a review of the agency's TIS criteria [2] and discussions with the Agency the week of January 24, 2025. In addition to the typical impact analysis performed in a TIS, comments from a January 8, 2025 Agency Development Review Committee meeting (DRC) and follow-up TIS scoping discussions with the Agency identified the following key issues that should be addressed in this TIS. A summary of items that warranted specific discussions is included in *7 Conclusions & Recommendations*.

1. **DRC Comment**: "*Traffic study to determine increase in traffic volume at intersection of Summit Blvd. If it increases by 20%, a CDOT Access permit is required and potential intersection improvements.*" (Refer to the discussion in *5 Analysis of Proposed Conditions*.)
2. **DRC Comment**: "*South driveway does not meet standards for separation from intersection (10 Mile/Lake Point). Increased traffic at this driveway increases the nonconformity. Traffic study to analyze this issue and analyze sight distance, access control, and need for intersection improvements at 10 Mile Drive/Lake Point.*" (Refer to the discussion in *5 Analysis of Proposed Conditions*.)
3. **CDOT Project.** This TIS's Study Locations are impacted by the Colorado Department of Transportation (CDOT) I-70 Exit 203 Interchange Improvement Project (Refer to the discussion in *4 Future Conditions*)

The following items summarize several additional routine scoping items that impact this TIS, including base assumptions for this TIS. These items are incorporated into the TIS without specific discussions provided in response.

- **DRC Comment**: "*Development meets threshold of Section 180-6-12 requiring a traffic study.*"
- **Study Locations.** As discussed with the Agency, several existing signalized and stop-controlled intersections near the site are included for analysis. These locations are summarized in ***Table 1-A*** and are referred to as "Study Locations" throughout this TIS.
- **Study Periods.** The peak periods to be evaluated in this TIS during which traffic volume data was gathered and analysis performed in this TIS (Study Periods) are summarized in ***Table 1-B***.
- **Study Horizons.** In addition to analysis of the existing year, 2025, the following future Horizon Year(s) will be evaluated in this TIS.
  - *Short Term Horizon - 2026.* Based on the estimated opening of the Project, 2026 will represent the Short-Term Horizon Year in this TIS.
  - *Long Term Horizon - 2046.* The year 2046 was selected with the Agency as the Long-Term Horizon Year for evaluating future traffic conditions.
- **Trip Distribution.** The proposed trip distribution used in the TIS was agreed to with the Agency in concept at the time of Scoping. The agreed trip distribution was modified slightly during the preparation of the TIS to account for traffic using Dillon Dam Rd to/from the East to reach the Project site. (Refer to additional discussion in *3 Proposed Conditions*)
- **Target LOS.** The agreed target LOS for this TIS is LOS E. Intersections that experience average delays higher than those associated with LOS E will be considered unacceptable and mitigations should be recommended to improve the LOS.
- **CDOT TIS Outline.** CDOT Region 3 may review the TIS due to the proposed use adjacent to Summit Blvd (State Highway 9), but the TIS need not follow the CDOT TIS Outline format.

Table 1-A: Study Locations

Location	Status	Access Type	Existing Traffic Control
#1 - Summit Blvd (SH 9) & Dillon Dam Rd / Lusher Ct	Existing	Full-Movement	Traffic Signal
#2 - Summit Blvd (SH 9) & Lakepoint Dr	Existing	Right-In / Right-Out	Two-Way STOP Control (2WSC)
#3 - Summit Blvd (SH 9) & Ten Mile Dr (South)	Existing	Full-Movement	Traffic Signal
#4 - Lakepoint Dr & North Ten Mile Dr	Existing	Full-Movement	2WSC
#5 - Dillon Dam Rd & North Ten Mile Dr	Existing	Full-Movement	2WSC (T-Int)

Table 1-B: Study Periods

Study Period	Description	Approx. Times with Peak One-Hour Volume Period	Month / Season
AM	Weekday Morning Peak Period	7:00 AM – 9:00 AM	October
PM	Weekday Afternoon Peak Period	4:00 PM – 6:00 PM	October
Sat	Weekend Peak Period	3:00 PM – 6:00 PM	January

2 Existing and Planned Conditions

This section evaluates the existing conditions and improvements planned in the immediate future that affect traffic in the Project's study area.

2.1 EXISTING CONDITIONS

This section discusses the current traffic conditions in the study area.

Traffic Data. Where available, traffic data from a recent CDOT study, described in this section below, was used for this TIS [3]. The study used 2023 traffic volumes to estimate 2025 volumes. This data was used for the existing conditions analysis for this TIS. Data was available for three of the five Study Locations (*#1 - Summit Blvd (SH 9) & Dillon Dam Rd / Lusher Ct*, *#2 - Summit Blvd (SH 9) & Lakepoint Dr*, and *#3 - Summit Blvd (SH 9) & Ten Mile Dr (South)*), and this TIS collected data for *#4 - Lakepoint Dr & North Ten Mile Dr* The volumes for *#5 - Dillon Dam Rd & North Ten Mile Dr* was calculated in this TIS by balancing volume data. All locations were adjusted to be consistent with appropriate timeframes. A seasonal adjustment factor was applied to the AM and PM traffic volume data collected in January. For more information about the estimation of the seasonal adjustment factor, refer to the Appendix. The existing traffic volumes are illustrated in ***Figure 2-a***. Additional information regarding the existing traffic volume data used in this TIS is included in the Appendix.

Roadway Network. Several roadways are included in the Study Area, Summit Blvd (SH9), Lake Point Dr, Ten Mile Dr, and Dillon Dam Rd. The following summarizes the characteristics of each roadway.

- ***Summit Blvd (SH 9).*** Summit Boulevard is a Major Arterial roadway through Frisco and is also State Highway 9 (SH 9). It provides two through lanes and auxiliary right and left turn lanes along a divided highway with signalized access. The posted speed limit is 35 MPH. CDOT classifies SH 9 as an *NR-B: Non-Rural Arterial* in the Study Area, generally located near Milepost (MP) 97 [4]. State Highway 9 provides a regional connection between Interstate-70 near the Study Area and to areas as far south as Canon City, passing through Breckenridge, over the continental divide at Hoosier Pass, and to Fairplay, where it meets its first regional highway intersection.
- ***Lake Point Dr.*** Lakepoint Dr is a two-lane roadway with no marked turn lanes and functions like a collector roadway adjacent to the site and local street east of the Study Area. Lake Point Dr provides traffic from North Ten Mile Dr and others with direct access to and from NB Summit Blvd (SH 9) through right-turn movements only. Lake Point Dr does not currently have a posted speed limit.

- ***North Ten Mile Dr*** North Ten Mile Dr is a two-lane commercial collector with a two-way left-turn lane (TWLTL) supporting left turns to and from commercial properties to which it provides direct access. North Ten Mile Dr is posted at 20 MPH and its movements approaching Lake Point Dr are STOP-controlled.
- ***Ten Mile Dr (South).*** Ten Mile Dr, similar to North Ten Mile Dr is a commercial collector providing direct access to commercial properties. Ten Mile Dr meets Summit Blvd (SH 9) at a signalized intersection, opposite a signalized driveway to commercial big-box and other strip commercial properties.
- ***Dillon Dam Rd.*** Dillon Dam Rd is a two-lane roadway that functions as a collector, providing a key alternative to I-70 between Frisco and the Town of Dillon and other residential communities and key recreational areas along Dillon Reservoir. The speed limit along Dillon Dam Road approaching Summit Blvd (SH 9) is posted at 30 MPH, but it is not posted in the opposite direction. Dillon Dam Rd and Lusher Court align at their signalized intersection with Summit Blvd (SH 9) as the first intersection south of the I-70 ramp terminals located immediately to the north.
- ***Lusher Ct.*** Lusher Ct is a two-lane roadway, posted at 20 MPH, that currently serves as a commercial collector west of Summit Blvd (SH 9). It provides links to many commercial areas. Dillon Dam Rd and Lusher Court align at their signalized intersection with Summit Blvd (SH 9).

The roadway network within the immediate study area is illustrated in ***Figure 2-a***.

Nearby Land Use. The Project is situated along an area of mixed commercial sites. The current site currently houses a vacant building where a former drive-through bank once operated. Adjacent to the north are various retail including grocery and a coffee shop. Across North Ten Mile Dr to the east are professional buildings with off-street parking. Behind the commercial uses along Summit Blvd to the east are residential condominium communities. Recreational opportunities exist all around Project area, with trail heads.

Existing Level of Service. The Levels of Service (LOS) estimated by the operational analysis of existing conditions are summarized in ***Table 2-A*** and ***Figure 2-a***. For a description of non-default values used in the *PTV Vistro* model for this project, refer to the Appendix.

Figure 2-a: 2025 Existing Conditions and LOS

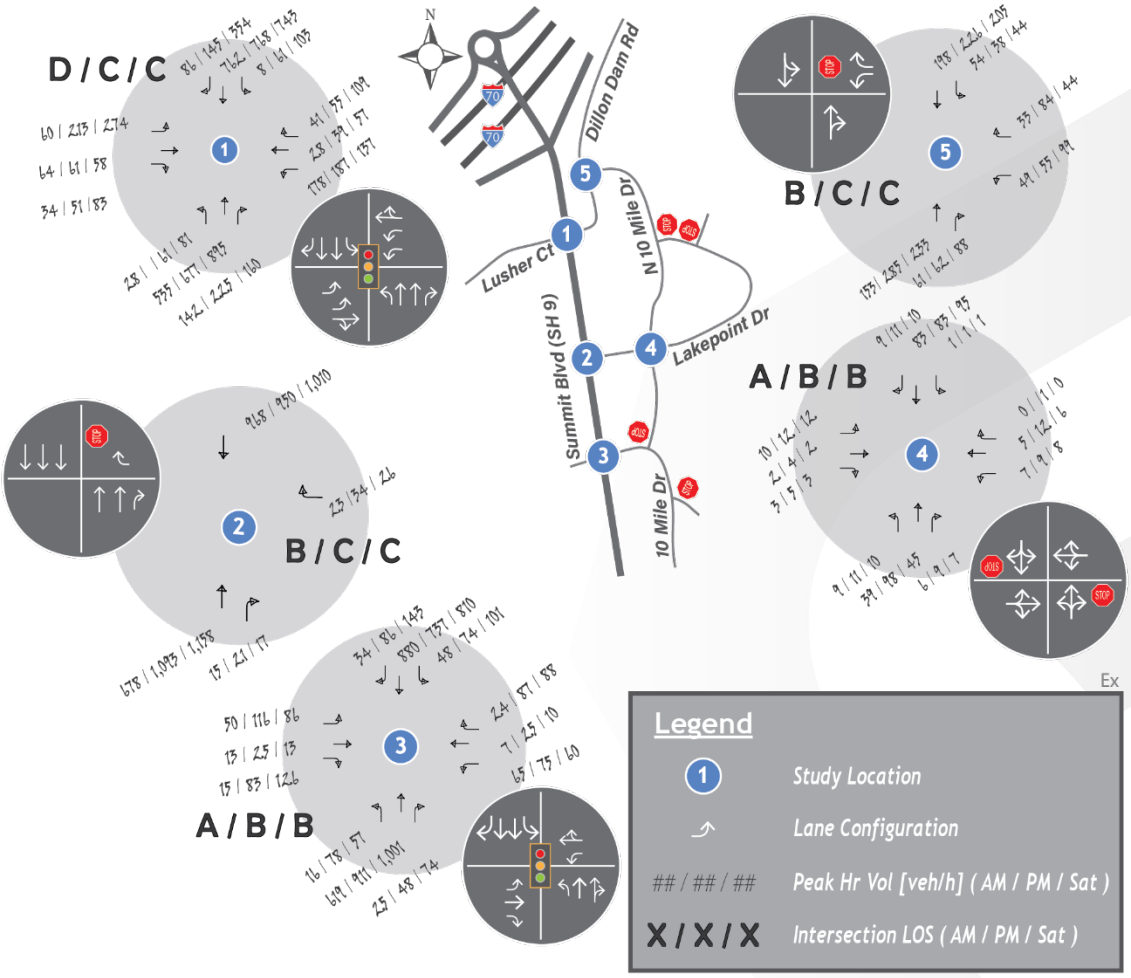


Table 2-A: 2025 Existing Intersection Delay and Level of Service (LOS) Summary

Study Location	AM	PM	SAT
1 - Summit Blvd (SH-9) & Dillon Dam Rd / Lusher Ct	45.89 D	25.78 C	26.28 C
2 - Summit Blvd (SH-9) & Lakepoint Dr	0.16 B	0.23 C	0.18 C
3 - Summit Blvd (SH-9) & Ten Mile Dr	9.22 A	13.22 B	13.35 B
4 - Lakepoint Dr & North Ten Mile Dr	8.76 A	8.80 B	9.05 B
5 - Dillon Dam Rd & North Ten Mile Dr	2.61 B	3.03 C	3.61 C

Note: Numeric values represent average delay in seconds/vehicle. Two-way stop control locations report the worst movement's delay.

Results of traffic operations analyses are reported in terms of Levels of Service (LOS). Please refer to the Appendix for information about the standard methodology used to analyze the intersections.

Existing Queues. Existing storage lengths for vehicular turn bays are summarized in ***Table 2-B***. Estimated 95th Percentile queues and queue ratios estimated in the existing conditions are summarized in ***Table 2-C***. For more description of these metrics, refer to *5 Analysis of Proposed Conditions*.

Table 2-B: Existing Storage (Turn Bay) Lengths

Location	Movement	Storage [feet]
1 - Summit Blvd (SH-9) & Dillon Dam Rd / Lusher Ct	NBL	165
	NBR*	160
	SBL	180
	SBR*	325
	EBL	175
	EBR	175
	WBL	240
2 - Summit Blvd (SH-9) & Lakepoint Dr	NBR	235
3 - Summit Blvd (SH-9) & 10 Mile Dr	NBL	145
	SBR	500
	SBL	300
	EBL*	160
	EBR*	160
	WBL*	240
	WBR*	240
4 - Lakepoint Dr & North Ten Mile Dr	NB*	205
	SB*	35
5 - Dillon Dam Rd & North Ten Mile Dr	WBL*	150
	WBR	100

Note: *Storage lane extends to the upstream intersection, so its reported length represents the distance to the first driveway or intersection.

Queue ratios (QR) are a calculated metric presented as a quick means to assess the portion of turn bay storage capacity used by the 95th percentile queue lengths, expressed as a percentage.

Table 2-C: Existing Queue Lengths and Queue Ratios

Location	Control	Lane Group or Movement	AM	PM	SAT
1 - Summit Blvd (SH-9) & Dillon Dam Rd / Lusher Ct (Signalized)	**Signalized**	NBL	*< 1 veh*	30 (18%)	**42 (25%)**
		NBR	72 (45%)	**142 (89%)**	99 (62%)
		SBL	39 (22%)	54 (30%)	**56 (31%)**
		SBR	196 (60%)	233 (72%)	**240 (74%)**
		WBL	138 (58%)	**144 (60%)**	106 (44%)
		EBL	**410 (234%)**	208 (119%)	210 (120%)
2 - Summit Blvd (SH-9) & Lakepoint Dr (2WSC)	**2WSC**	WBR	*< 1 veh*	*< 1 veh*	*< 1 veh*
3 - Summit Blvd (SH-9) & Ten Mile Dr (Signalized)	**Signalized**	NBL	*< 1 veh*	**33 (23%)**	*< 1 veh*
		SBL	*< 1 veh*	**59 (20%)**	30 (10%)
		SBR	*< 1 veh*	**113 (21%)**	56 (10%)
		WBL	**91 (38%)**	80 (33%)	82 (34%)
		EBL	75 (47%)	**174 (109%)**	130 (81%)
4 - Lakepoint Dr & North Ten Mile Dr (2WSC)	**2WSC**	NB	*< 1 veh*	*< 1 veh*	*< 1 veh*
		SB	*< 1 veh*	*< 1 veh*	*< 1 veh*
		EBL	*< 1 veh*	*< 1 veh*	*< 1 veh*
		WBL	*< 1 veh*	*< 1 veh*	*< 1 veh*
5 - Dillon Dam Rd & North Ten Mile Dr (2WSC)	**2WSC**	SBL	*< 1 veh*	*< 1 veh*	*< 1 veh*
		WBL	*< 1 veh*	29 (29%)	**34 (34%)**
		WBR	*< 1 veh*	29 (29%)	**34 (34%)**

Notes:

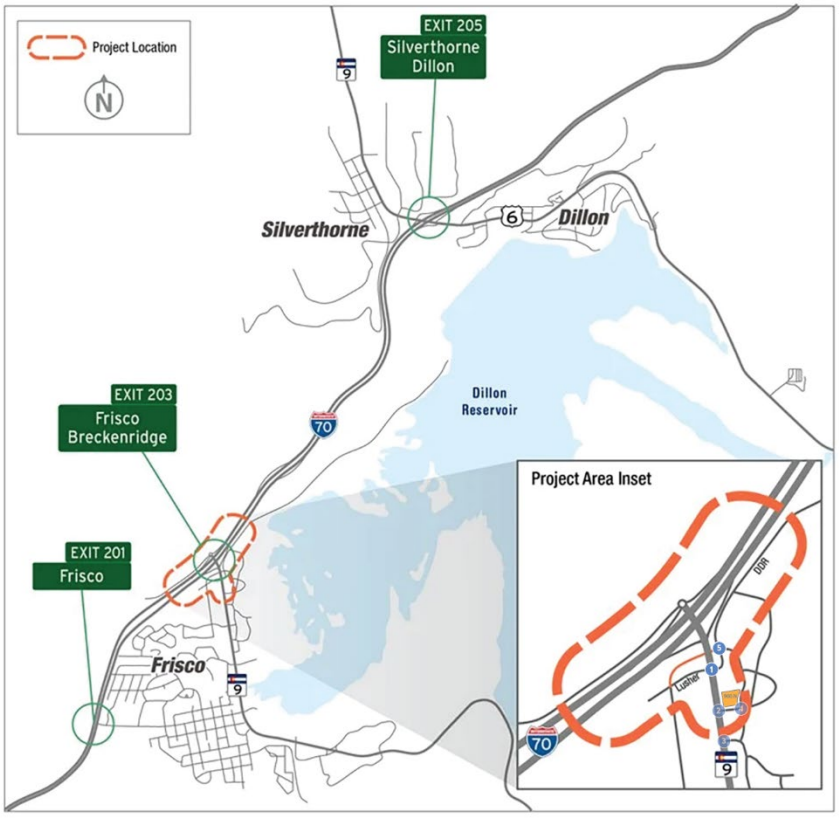
- XXX (YY%) = 95th Percentile Queue [ft/ln] (Queue Ratio)
- Bold indicates Maximum Queue for the Study Periods

2.2 PLANNED CONDITIONS

This section describes background roadway improvements that are planned in the Study Area.

I-70 Exit 203 Interchange Improvements. CDOT will improve two of the Study Locations by 2028 as part of the *I-70 Exit 203 Interchange Improvements* project (the *"CDOT Interchange Project"*). The key functional changes at the two affected Study Locations are summarized below. Refer to the Appendix for more information about the schedule and a graphical representation of the proposed improvements. ***Figure 2-b*** offers an overview of the CDOT Interchange Project location.

Figure 2-b: Planned CDOT Project – I-70 Exit 203 Interchange Improvements [6]



- Construct a new frontage road, which connects Lusher Ct and Dillon Dam Road via an underpass of Summit Blvd (SH 9), shown in ***Figure 2-b***.
- Construct a roundabout where the proposed frontage road meets Dillon Dam Rd at *#5 - Dillon Dam Rd & North Ten Mile Dr*
- Re-configure *#1 - Summit Blvd (SH 9) & Dillon Dam Rd / Lusher Ct* to remove all turn movements that conflict with Summit Blvd (except westbound right turns).
- Re-direct all affected movements to the Frontage Road.
- Channelize right turns movements to/from Lusher Ct and Dillon Dam Rd. Westbound rights from Dillon Dam Rd to Northbound Summit Blvd (SH 9) will use two lanes, and be signalized.

Upon completion of the CDOT Interchange Project in 2028, the intersection of #1 - Summit Blvd (SH 9) & Dillon Dam Rd / Lusher Ct- all intersection conflicts will have been removed except between northbound through and westbound right turn movements. These two turn movements alone will be signalized. All other movements will flow freely.

3 Proposed Conditions

This section discusses the vehicular trips that will travel to/from the Project after opening (Project trips) and estimates specifically where each trip will pass through the Study Locations using Trip Distribution and Trip Assignment processes.

3.1 SITE TRIP GENERATION

This section documents the estimated Project Trips based on the trip generation analysis performed for the Project. The analysis is based on rates available from the Institute of Transportation Engineer's (ITE) Trip Generation Manual (11th edition) [5] (TGM).

Total Project Trips. The total project trips are based on the land uses applied to this project. The Appendix contains descriptions of the land use description from the TGM.

Internal Trip Capture. This Project did not apply internal trip capture reductions.

Pass-By Trip Reductions. Pass-by trip reductions have been applied for the Project due to the draw the Project's drive-through restaurant has on traffic already on the roadway network. The pass-by rates applied are based on data provided in the TGM and are presented in the Appendix. ***Table 3-A*** summarizes the results of the trip generation analysis and the net new Project trips analyzed in this TIS.

Table 3-A: Trip Generation Summary

		AM Trips [veh/h]				PM Trips [veh/h]				Sat Trips [veh/h]			
ITE Code	Qty	Rate	In	Out	Total	Rate	In	Out	Total	Rate	In	Out	Total
934 [1]	4.364[2]	44.61	99	96	195	33.03	75	69	144	55.25	123	118	241
Pass-By Rate [2]			49	48	97		41	37	79		61	59	120
Net New Trips			50	48	98		34	32	65		62	59	121

Notes:

1. ITE Code *934: Fast-Food Restaurant with Drive-Through Window*
   - Independent Variable: 1000 Sq. Ft. GFA
   - AM: 51% In, 49% Out
   - PM: 52% In, 48% Out
   - Sat: 51% In, 49% Out
   - Total Weekday Trips: 2,040 (@ 467.48 trips per 1000 Sq. Ft. GFA)
2. 50% Pass By rate applied. Refer to the discussion above and the data presented in ***Figure A 6*** , in the Appendix.
3. Analysis performed at the original planned GFA of 4,364 SF. In development, the GFA was increased to 4,575 SF and is determined to not significantly impact analysis. In agreement with the Agency, analysis of this increase is included in the Appendix for reference.

3.2 TRIP DISTRIBUTION

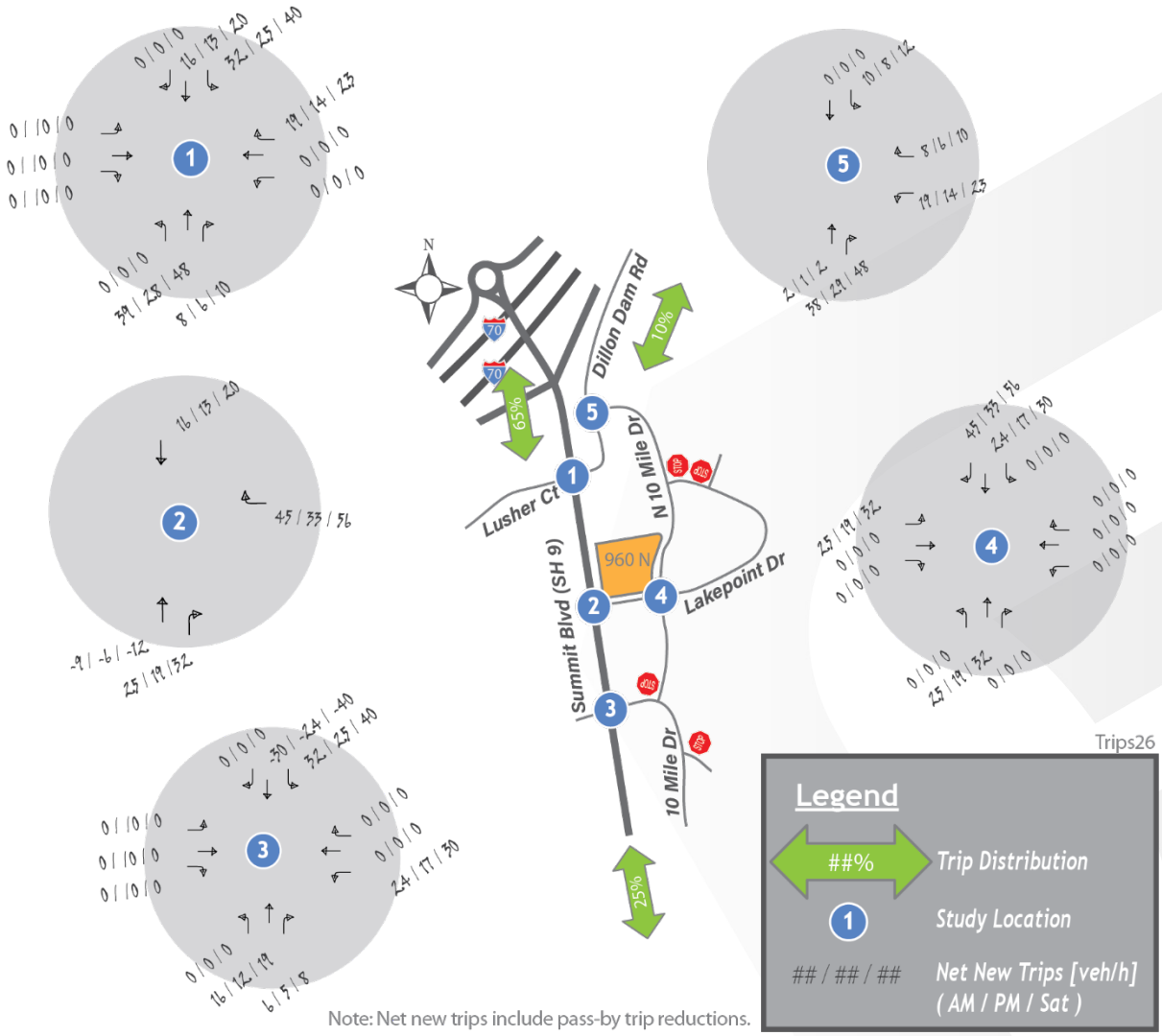
The proposed distribution of site-generated trips to and from the site was estimated based on the heavy draw the Project is expected to have on interstate travelers.

As discussed in *1 Introduction*, the Trip Distribution percentages for this TIS were agreed upon during the scoping process. The Trip Distribution included 70% to and from I-70 and 30% to and from the south of the Project site along Summit Blvd (SH 9). A minor adjustment to the agreed trip distribution was incorporated into this analysis since then, specifically redistributing 10% of Project trips to/from the east of the Project along Dillon Dam Rd due to the regional importance of this non-interstate alternative route between the towns of Frisco and Dillon. The 10% difference was balanced by evenly reducing the originally agreed trip distributions. The trip distribution used for this TIS is illustrated in ***Figure 3-a*** and ***Figure 3-b***.

3.3 SITE-GENERATED TRIPS

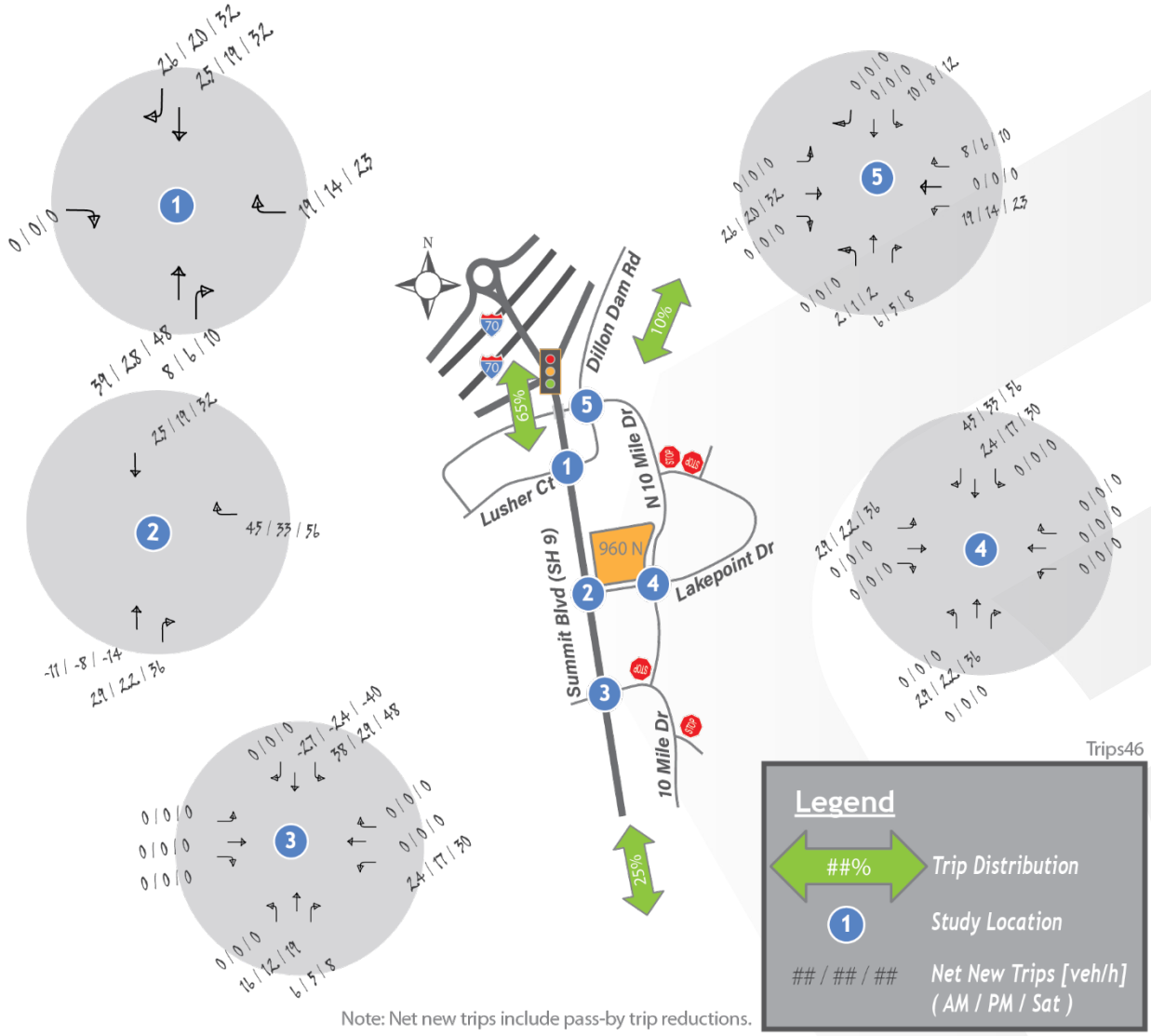
The trips generated by the Project, shown by turn movement at each Study Location in the years 2026 and 2046, are illustrated in ***Figure 3-a*** and ***Figure 3-b*** in accordance with the Trip Distribution. The Trip Assignments in each figure are slightly different due to the re-routing of traffic that the CDOT Interchange Project scheduled to be completed in 2028 will require. The figures display the net new site trips, after accounting for reductions due to Pass-By trips described above. The Appendix also presents a tabular summary of the Primary Project trips. Pass by reductions were only applied to turn movements toward the Project from Summit Blvd (SH 9).

Figure 3-a: Estimated Net New Site-Generated Trip Distribution and Assignment (2026)



Note: Net new trips include pass-by trip reductions.

Figure 3-b: Estimated Net New Site-Generated Trip Distribution and Assignment (2046)



Note: Net new trips include pass-by trip reductions.

4 Future Conditions

The following sections describe traffic conditions expected to be present in future Background Traffic and Total Traffic conditions.

4.1 BACKGROUND TRAFFIC CONDITIONS

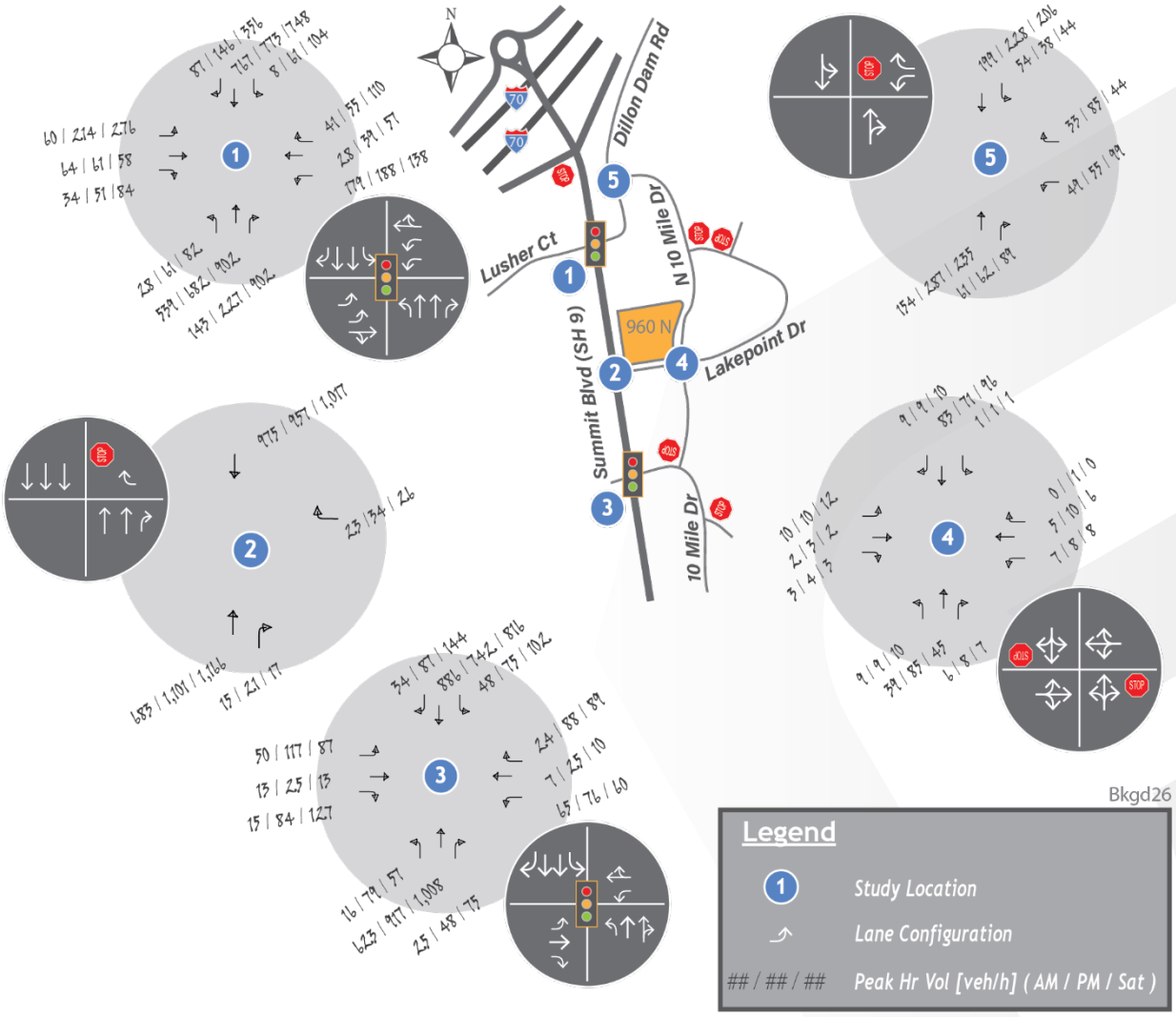
This section addresses the development of estimated Background Traffic volumes, referring to the traffic volumes that would be present without the Project (Project's no-build scenario). Background Traffic conditions, including traffic volumes and intersection lane configurations expected in the Short-Term and Long-Term horizon years are shown in ***Figure 4-a*** and ***Figure 4-b***.

Short-Term Background Conditions – Roadway Network. The CDOT Interchange Project (described in *2 Existing and Planned Conditions)* will begin construction in the same year as the Project's opening year and Short-Term Study Horizon. The final improvements are not expected to be completed until 2028, so the Short-Term Background conditions analyzed in this TIS account for the CDOT Interchange No Build Scenario for this treason. Further, this TIS analysis does not account for temporary work zone traffic control that will be necessary to maintain traffic flow. The CDOT project aims to improve traffic operations, so the analysis of the existing conditions analysis will present a more conservative Short-Term Background conditions analysis. The intersection lane configuration in the future roadway network expected in the Short-Term Background conditions is shown in ***Figure 4-a***.

Short-Term Background Conditions – Estimated Traffic Volumes. The CDOT Study completed in November 2023 presents estimated 2025 traffic volume data for three Study Locations, *#1 - Summit Blvd (SH 9) & Dillon Dam Rd / Lusher Ct*, *#3 - Summit Blvd (SH 9) & Ten Mile Dr (South)*, and *#5 - Dillon Dam Rd & North Ten Mile Dr* The project are expected to be completed in 2028 [6]. The 2024 traffic volumes from the CDOT Study used as base inputs at the relevant Study Locations and adjusted by growth factors to reach the Study Horizon, 2026. For more information on the estimation of growth factors, refer to the Appendix. The estimated Short-Term Background Traffic volumes are shown in ***Figure 4-b***.

Long-Term Background Conditions – Roadway Network. As described in *2 Existing and Planned Conditions*, major improvements to #1 - Summit Blvd (SH 9) & Dillon Dam Rd / Lusher Ct and *#5 - Dillon Dam Rd & North Ten Mile Dr* are planned in the CDOT Interchange Project. No other known background roadway improvements are expected in the Study Area, so the 2046 background conditions reflect those improvements. The specific intersection lane configuration in the roadway network expected in the Long-Term horizon years is shown in ***Figure 4-b***. Additional information about the background roadway improvements is available in the Appendix.

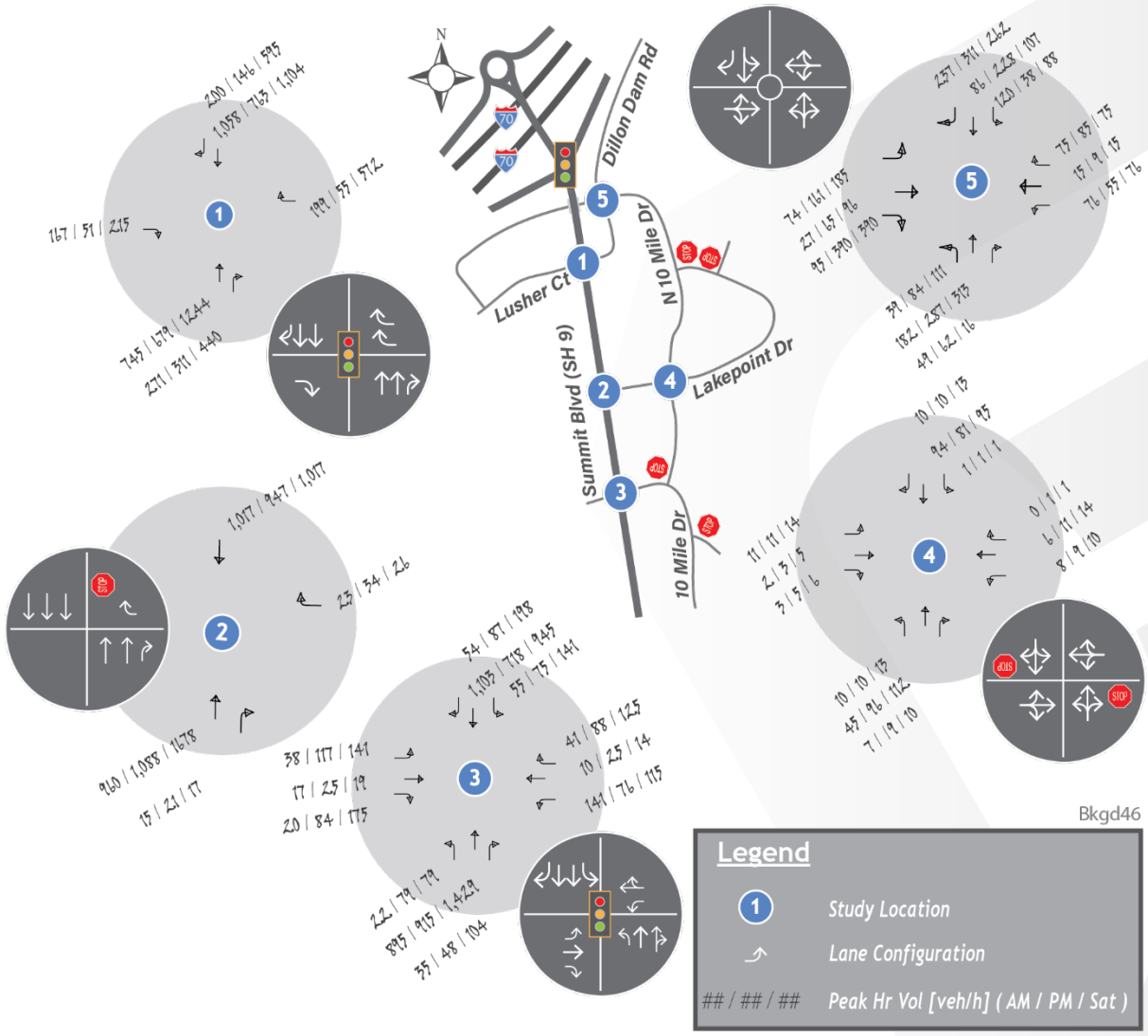
Figure 4-a: Short-Term Background Traffic Conditions (2026)



Based on the proposed enhancements at *#1 - Summit Blvd (SH 9) & Dillon Dam Rd / Lusher Ct*, a basic optimization of traffic signal timing yield similar conclusions to those of the CDOT study. Specifically, this TIS found that the reduced conflicts and overall simplicity allows the shortening of the cycle length resulting in reduced delays at *#1 - Summit Blvd (SH 9) & Dillon Dam Rd / Lusher Ct*. While not included as Study Locations, it was also noted that a shorter cycle length is compatible with new traffic signals proposed at the I-70 ramp terminals. Ultimately, the Long-Term analysis employs cycle lengths of 45 seconds at *#1 - Summit Blvd (SH 9) & Dillon Dam Rd / Lusher Ct* and 90 seconds at *#3 - Summit Blvd (SH 9) & Ten Mile Dr (South)*, which reduces delays at that intersection as well without fully compromising coordination reliability due to pedestrian crossing times. A more thorough optimization of traffic signal timings based on actual conditions will be necessary upon

completion of construction, but analysis indicates that significant improvements to the corridor are possible at *#3 - Summit Blvd (SH 9) & Ten Mile Dr (South)* through signal timing adjustments due to the significant investment in capacity improvements elsewhere.

Figure 4-b: Long-Term Background Traffic Conditions (2046)



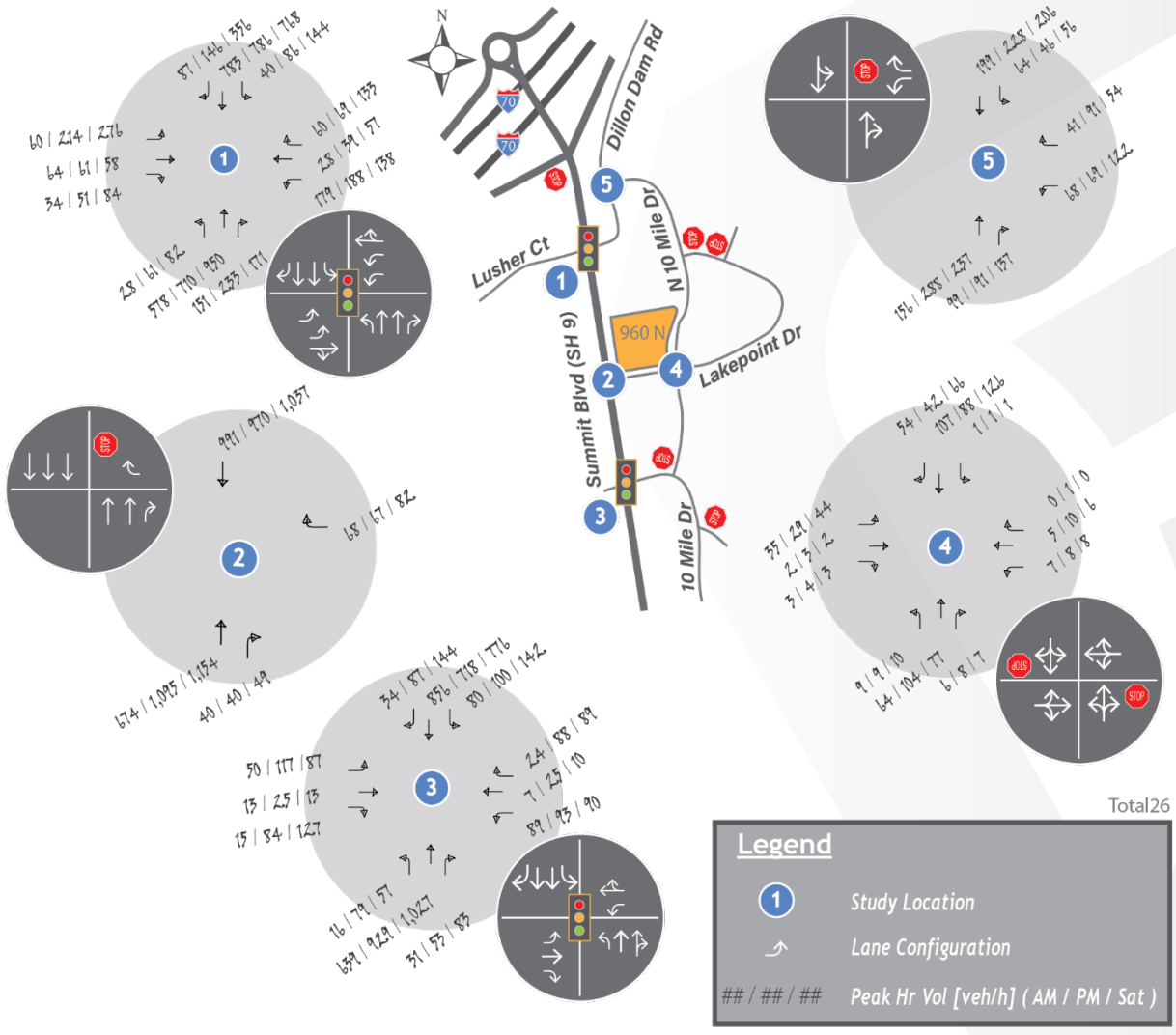
Long-Term Background Conditions – Estimated Traffic Volumes. The study performed by CDOT in November 2023 presents forecasted 2045 traffic volume data for three Study Locations, *#1 - Summit Blvd (SH 9) & Dillon Dam Rd / Lusher Ct*, *#3 - Summit Blvd (SH 9) & Ten Mile Dr (South)*, and *#5 - Dillon Dam Rd & North Ten Mile Dr* The 2045 traffic volumes from the CDOT Study were used as base volume inputs at the relevant Study Locations and adjusted by growth factors to reach

the Study Horizon, 2046. For more information on the estimation of growth factors, refer to the Appendix. The estimated Long-Term Background Traffic volumes are shown in ***Figure 4-b*** above.

4.2 TOTAL TRAFFIC CONDITIONS

This section describes the Total Traffic conditions, representing the traffic volume in a scenario where the Project is built.

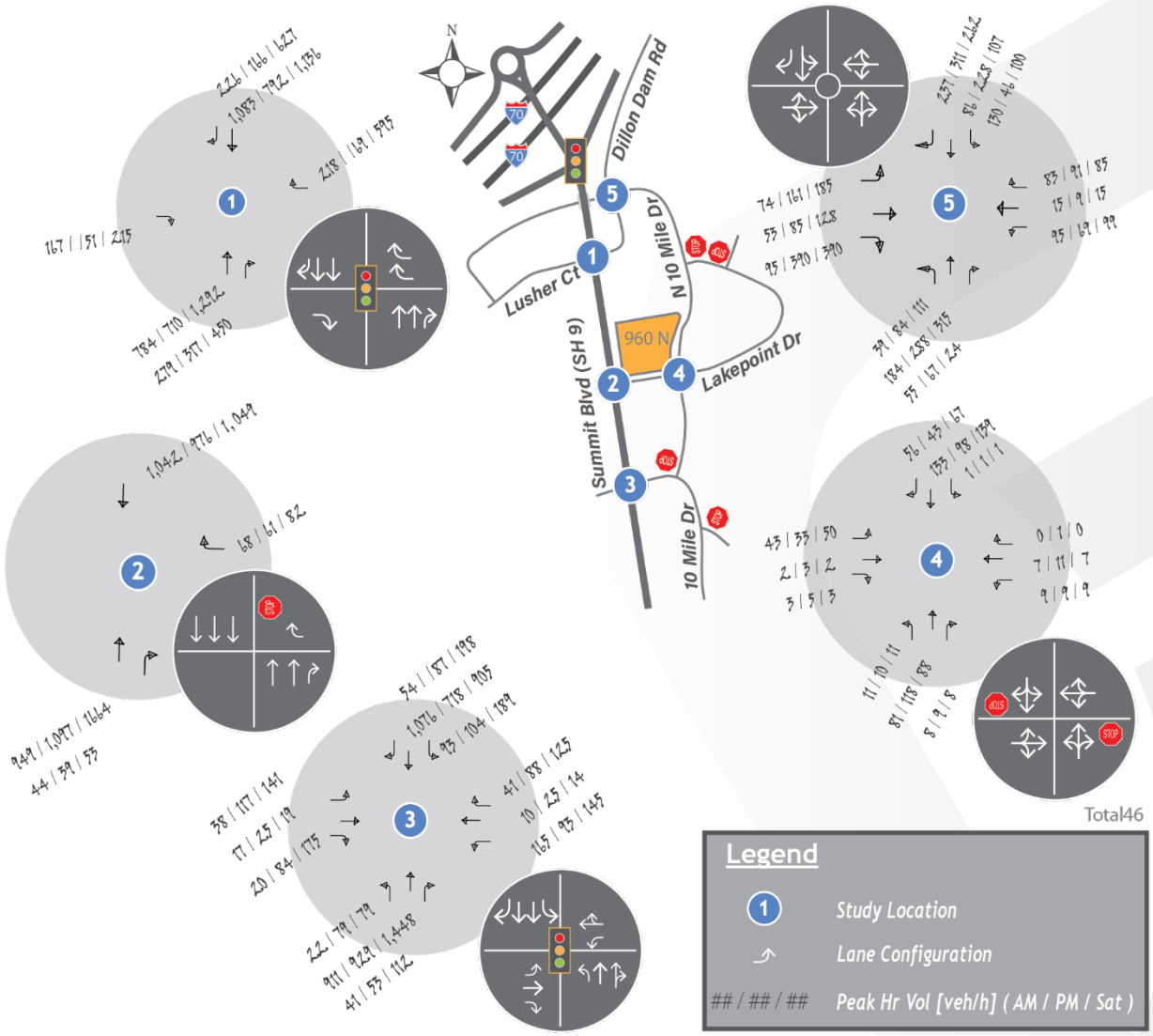
Figure 4-c: Short-Term Total Traffic Conditions (2026)



Total Traffic Volumes. To enable the analysis of the impacts of the site-generated traffic in each of the horizon study periods, the site-generated traffic volumes developed in *3 Proposed Conditions* are added to the respective peak periods in both the Short-Term and Long-Term Background Traffic volume scenarios above. Doing so at a granular turn-movement level creates the Total Traffic

volume data used in each horizon year. The Short-Term Total Traffic volumes are illustrated in ***Figure 4-c*** above and the Long-Term Total Traffic volumes are illustrated in ***Figure 4-d*** below.

Figure 4-d: Long-Term Total Traffic Conditions (2046)



5 Analysis of Proposed Conditions

This section reports on the evaluation of the Study Locations' performance with respect to various measures. Each analysis considers measures of effectiveness (MoE) including level of service and queueing analysis.

5.1 LEVEL OF SERVICE (LOS)

The roadway network and operational characteristics were modeled using *PTV Vistro 2025* (PTV Vistro) software using the *Highway Capacity Manual 7th Edition* (HCM) methodology.

The intersection and movement delays and LOS are summarized in ***Table 5-A*** and ***Figure 5-a***. Roundabout analysis produces levels of service by approach lane, which is reported for *#5 - Dillon Dam Rd & North Ten Mile Dr* in 2046.

Overview of Results. The operations analysis found that operations at all Study Locations operate at acceptable average levels of service, but individual movements at two Study Locations fall below acceptable levels of delay in 2026 Background Traffic conditions. However, Background Traffic conditions in 2046 Background Traffic, 20 years later, operate with less delay than in 2026. The introduction of Project trips adds delay to all movements where Project trips pass through, but all intersections and movements operate at acceptable LOS.

The analysis of Background Traffic conditions in the Short-Term and Long-Term Horizon Years revealed the intersections of *#1 - Summit Blvd (SH 9) & Dillon Dam Rd / Lusher Ct* and *#3 - Summit Blvd (SH 9) & Ten Mile Dr (South)* operate at acceptable average levels of service, but several minor approach movements experience higher and even unacceptable levels of service in 2026 that are later resolved in 2046. Other study locations during other study periods show that each operates at an acceptable level of service during the horizon years. The 2026 Background Traffic Conditions do not account for capacity reductions caused by work zone activity and traffic control expected during the construction seasons between 2026 and 2028.

Table 5-A: Future Horizon Years Delay and LOS Summary

Study Location	2026						2046					
	BACKGROUND			TOTAL			BACKGROUND			TOTAL		
	AM	PM	SAT	AM	PM	SAT	AM	PM	SAT	AM	PM	SAT
1 - Summit Blvd (SH-9) & Dillon Dam Rd / Lusher Ct	45.89 D	25.79 C	26.30 C	45.35 D	26.23 C	27.20 C	4.65 A	4.65 A	4.65 A	4.96 A	4.89 A	5.05 A
2 - Summit Blvd (SH-9) & Lakepoint Dr	0.16 B	0.25 C	0.18 C	0.49 B	0.51 C	0.63 C	0.16 B	0.25 C	0.21 C	0.49 C	0.46 C	0.82 D
3 - Summit Blvd (SH-9) & Ten Mile Dr	9.22 A	14.87 B	13.46 B	10.84 B	15.17 B	14.01 B	9.04 A	14.12 B	*16.03 B*	10.79 B	14.88 B	*17.26 B*
4 - Lakepoint Dr & North Ten Mile Dr	8.94 A	8.87 B	9.06 B	9.58 B	9.39 B	9.95 B	8.87 A	9.01 B	9.16 B	10.01 B	9.60 B	10.22 B
5 - Dillon Dam Rd & North Ten Mile Dr	2.60 B	3.04 C	3.63 C	3.17 B	3.56 C	4.60 C	A	A	B	A	A	B

Study Location	Mvmt	2026						2046					
		BACKGROUND			TOTAL			BACKGROUND			TOTAL		
		AM	PM	SAT	AM	PM	SAT	AM	PM	SAT	AM	PM	SAT
1 - Summit Blvd (SH-9) & Dillon Dam Rd / Lusher Ct	NBL	6.46 A	9.63 A	10.41 B	7.10 A	10.31 B	11.68 B	-	-	-	-	-	-
	NBT	13.52 B	17.53 B	18.17 B	14.75 B	18.70 B	20.13 C	3.96 A	3.96 A	3.96 A	4.19 A	4.13 A	4.28 A
	NBR	10.41 B	14.55 B	14.19 B	11.18 B	15.34 B	15.37 B	-	-	-	-	-	-
	SBL	7.94 A	11.97 B	12.12 B	10.01 B	12.93 B	15.70 B	-	-	-	-	-	-
	SBT	11.29 B	15.87 B	16.69 B	12.21 B	16.78 B	18.22 B	-	-	-	-	-	-
	SBR	11.64 B	16.32 B	17.17 B	12.38 B	17.05 B	18.38 B	-	-	-	-	-	-
	EBL	299.1 F	57.49 E	58.59 E	299.1 F	57.66 E	58.59 E	-	-	-	-	-	-
	EBT	57.98 E	49.18 D	47.87 D	54.79 D	48.38 D	45.97 D	-	-	-	-	-	-
	EBR	57.98 E	49.18 D	47.87 D	54.79 D	48.38 D	45.97 D	-	-	-	-	-	-
	WBL	59.55 E	59.10 E	59.14 E	59.55 E	57.58 E	58.61 E	-	-	-	-	-	-
	WBT	62.70 E	62.82 E	62.22 E	61.75 E	61.40 E	60.44 E	-	-	-	-	-	-
	WBR	-	-	-	-	-	-	21.03 C	21.03 C	21.03 C	21.16 C	21.12 C	21.06 C
2 - Summit Blvd (SH-9) & Lakepoint Dr	WBR	12.06 B	15.45 C	15.78 C	12.75 B	16.59 C	17.99 C	13.94 B	15.33 C	22.19 C	15.07 C	16.35 C	28.57 D
3 - Summit Blvd (SH-9) & Ten Mile Dr	NBL	2.49 A	5.28 A	4.45 A	3.04 A	5.28 A	4.45 A	2.55 A	5.23 A	6.70 A	3.30 A	5.25 A	6.72 A
	NBT	6.52 A	11.62 B	10.81 B	8.33 A	11.89 B	11.10 B	7.43 A	12.76 B	15.60 B	9.78 A	13.90 B	17.34 B
	NBR	6.54 A	11.64 B	10.84 B	8.35 A	11.91 B	11.13 B	7.44 A	12.79 B	15.63 B	9.81 A	13.94 B	17.40 B
	SBU	2.95 A	6.91 A	6.25 A	4.26 A	7.66 A	7.49 A	3.09 A	6.65 A	10.52 B	4.92 A	7.50 A	12.63 B
	SBL	2.95 A	6.91 A	6.25 A	4.26 A	7.66 A	7.49 A	3.09 A	6.65 A	*10.52 B*	4.92 A	7.50 A	*12.63 B*
	SBT	5.50 A	9.59 A	8.76 A	6.64 A	9.59 A	8.76 A	6.12 A	10.20 B	12.01 B	7.43 A	10.64 B	12.85 B
	SBR	3.97 A	7.34 A	7.07 A	4.82 A	7.34 A	7.07 A	4.49 A	7.75 A	10.16 B	5.46 A	8.08 A	10.85 B
	EBL	58.19 E	55.27 E	57.26 E	54.98 D	55.27 E	57.26 E	44.67 D	41.13 D	39.97 D	40.93 D	41.31 D	40.42 D
	EBT	51.83 D	43.10 D	44.21 D	48.79 D	43.10 D	44.21 D	39.02 D	31.67 C	28.98 C	36.08 D	30.87 C	27.79 C
	WBL	58.24 E	46.90 D	49.22 D	57.17 E	47.80 D	51.03 D	45.07 D	35.05 D	31.36 C	42.54 D	35.74 D	32.47 C
	WBT	52.49 D	45.11 D	46.89 D	49.25 D	45.11 D	46.89 D	40.33 D	33.2 C	31.33 C	36.88 D	32.33 C	29.97 C
4 - Lakepoint Dr & North Ten Mile Dr	NBL	9.96 A	10.26 B	10.25 B	11.56 B	11.49 B	12.54	9.90 A	10.54 B	11.07 B	12.60	11.97	13.19
	NBT	9.63 A	10.03 B	9.75 A	10.30 B	10.62 B	10.69 B	9.60 A	10.18 B	10.49 B	10.75 B	10.91 B	10.99 B
	NBR	8.65 A	9.00 A	8.72 A	8.94 A	9.29 A	9.15 A	8.64 A	9.11 A	9.35 A	9.21 A	9.49 A	9.34 A
	SBL	9.76 A	10.23 B	10.00 B	11.03 B	11.26 B	11.81 B	9.71 A	10.50 B	11.00 B	11.91 B	11.72 B	12.37 B
	SBT	9.88 A	9.88 A	10.05 B	10.81 B	10.55 B	11.36 B	9.84 A	10.00 B	10.25 B	11.40 B	10.77 B	11.72 B
	SBR	8.91 A	8.86 A	9.03 A	9.45 A	9.23 A	9.83 A	8.89 A	8.96 A	9.12 A	9.86 A	9.37 A	10.07 B
	EBL	7.24 A	7.26 A	7.25 A	7.28 A	7.29 A	7.30 A	7.24 A	7.26 A	7.27 A	7.30 A	7.29 A	7.31 A
	WBL	7.24 A	7.24 A	7.24 A	7.24 A	7.24 A	7.24 A	7.24 A	7.24 A	7.25 A	7.24 A	7.24 A	7.24 A
5 - Dillon Dam Rd & North Ten Mile Dr	NB	-	-	-	-	-	-	A	A	B	A	A	B
	SB1	-	-	-	-	-	-	A	A	A	A	A	A
	SB2	-	-	-	-	-	-	A	A	A	A	A	A
	SBL	7.77 A	8.10 A	8.04 A	7.88 A	8.20 A	8.20 A	-	-	-	-	-	-
	EB	-	-	-	-	-	-	A	B	B	A	C	C
	WB	-	-	-	-	-	-	A	A	A	A	A	A
	WBL	13.59 B	16.53 C	16.75 C	14.93 B	18.14 C	19.85 C	-	-	-	-	-	-
	WBR	10.39 B	12.74 B	13.25 B	11.30 B	13.93 B	15.74 C	-	-	-	-	-	-

Note: Numeric values represent average delay in seconds/vehicle.

Figure 5-a: Background Traffic LOS

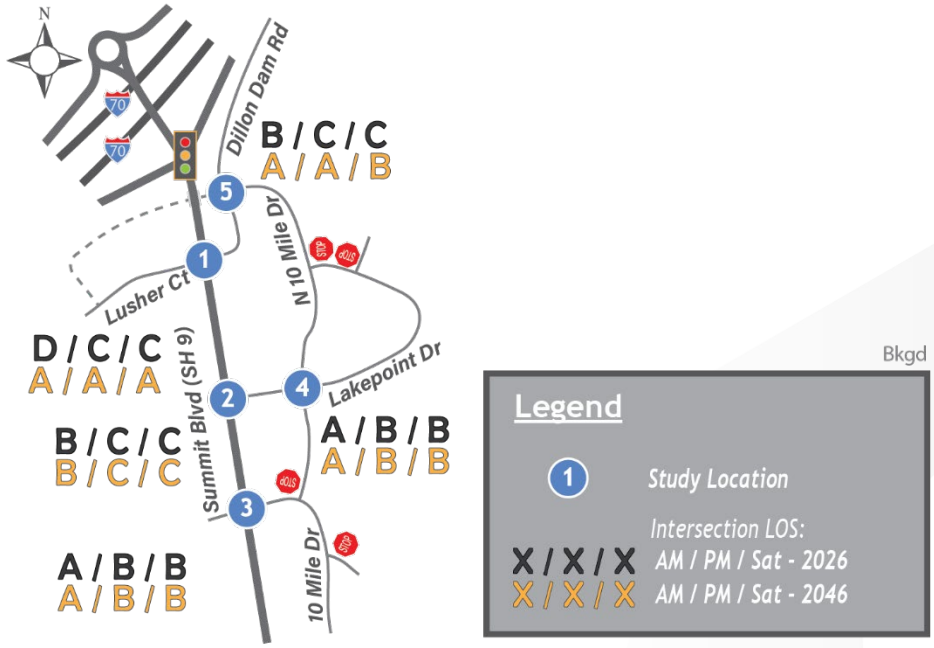
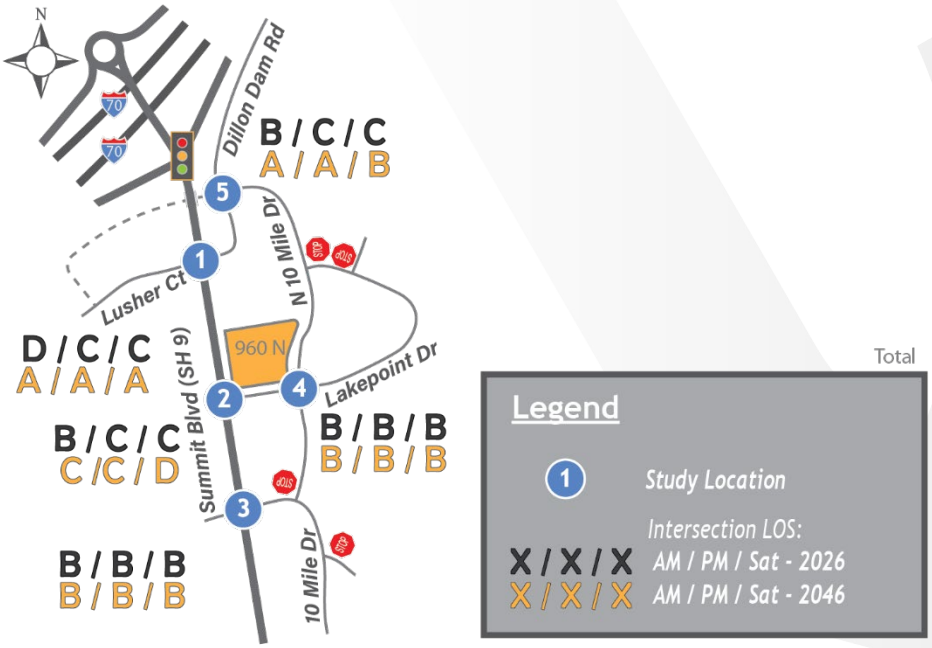


Figure 5-b: Total Traffic LOS



5.2 QUEUING ANALYSIS – ROADWAYS

This section summarizes the queue analysis at the Study Locations in the Short Term and Long Term horizon years. Queue analysis was performed using *HCM* methodology within PTV Vistro. ***Table 5-B*** summarizes the queue lengths for the Study Periods. This TIS presents a separately calculated metric known as the Queue Ratio (QR). The QR represents the portion of the storage capacity used by the queue, expressed as a percentage. (Storage lengths are available in ***Table 2-B*** above.)

Table 5-B: Estimated Maximum 95th Percentile Queue Lengths and Queue Ratios – 2026

		BACKGROUND			TOTAL		
		AM	PM	SAT	AM	PM	SAT
1 - Summit Blvd (SH-9) & Dillon Dam Rd / Lusher Ct (Signalized)	NBL	*< 1 veh*	30 (18%)	**42 (25%)**	*< 1 veh*	31 (19%)	**45 (27%)**
	NBR	72 (45%)	**144 (90%)**	100 (63%)	80 (50%)	**153 (96%)**	111 (69%)
	SBL	39 (22%)	54 (30%)	**56 (31%)**	58 (32%)	66 (37%)	**86 (48%)**
	SBR	196 (60%)	233 (72%)	**240 (74%)**	203 (62%)	239 (74%)	**248 (76%)**
	WBL	139 (58%)	**145 (60%)**	106 (44%)	139 (58%)	**143 (60%)**	106 (44%)
	EBL	**410 (234%)**	208 (119%)	210 (120%)	**410 (234%)**	208 (119%)	210 (120%)
2 - Summit Blvd (SH-9) & Lakepoint Dr (2WSC)	WBR	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*
3 - Summit Blvd (SH-9) & Ten Mile Dr (Signalized)	NBL	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*
	SBL	*< 1 veh*	24 (8%)	**31 (10%)**	*< 1 veh*	33 (11%)	**45 (15%)**
	SBR	*< 1 veh*	35 (6%)	**57 (11%)**	*< 1 veh*	35 (6%)	**57 (11%)**
	WBL	**91 (38%)**	80 (33%)	82 (34%)	126 (53%)	105 (44%)	**128 (53%)**
	EBL	75 (47%)	**175 (109%)**	133 (83%)	73 (46%)	**175 (109%)**	133 (83%)
4 - Lakepoint Dr & North Ten Mile Dr (2WSC)	NBL	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*
	SBL	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*	**25 (25%)**
	EBL	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*
	WBL	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*
5 - Dillon Dam Rd & North Ten Mile Dr (2WSC)	SBL	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*
	WBL	*< 1 veh*	29 (29%)	**34 (34%)**	21 (21%)	38 (38%)	**52 (52%)**
	WBR	*< 1 veh*	29 (29%)	**34 (34%)**	21 (21%)	38 (38%)	**52 (52%)**

Notes:

- XXX (YY%) = 95th Percentile Queue [ft/ln] (Queue Ratio)
- Bold indicates Maximum Queue for the Study Periods

Table 5-C: Estimated Maximum 95th Percentile Queue Lengths and Queue Ratios – 2046

		BACKGROUND			TOTAL		
		AM	PM	SAT	AM	PM	SAT
1 - Summit Blvd (SH-9) & Dillon Dam Rd / Lusher Ct (Signalized: WBR x NBT)	WBR	24 (10%)	24 (10%)	24 (10%)	28 (12%)	28 (12%)	29 (12%)
2 - Summit Blvd (SH-9) & Lakepoint Dr (2WSC)	WBR	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*	**41 (41%)**
3 - Summit Blvd (SH-9) & Ten Mile Dr (Signalized)	NBL	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*	**18 (12%)**
	SBL	*< 1 veh*	*< 1 veh*	**46 (15%)**	*< 1 veh*	29 (10%)	**71 (24%)**
	SBR	*< 1 veh*	30 (6%)	**82 (15%)**	*< 1 veh*	31 (6%)	**86 (16%)**
	WBL	**68 (28%)**	58 (24%)	54 (23%)	**91 (38%)**	76 (32%)	84 (35%)
	EBL	42 (26%)	126 (79%)	**151 (94%)**	40 (25%)	127 (79%)	**152 (95%)**
4 - Lakepoint Dr & North Ten Mile Dr (2WSC)	NB	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*
	SB	*< 1 veh*	*< 1 veh*	*< 1 veh*	25 (61%)	*< 1 veh*	**29 (71%)**
	EBL	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*
	WBL	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*	*< 1 veh*
5 - Dillon Dam Rd & North Ten Mile Dr (Roundabout)	NB	28	60	**75**	31	65	**86**
	SB1	*< 1 veh*	**25**	*< 1 veh*	*< 1 veh*	**27**	20
	SB2	*< 1 veh*	**26**	22	*< 1 veh*	26	22
	EB	*< 1 veh*	127	**137**	23	146	**171**
	WB	*< 1 veh*	20	**26**	21	24	**33**

Note:

- XXX (YY%) = Maximum 95th Percentile Queue [ft/ln] (Queue Ratio)
- QR is not reported at proposed roundabout. Storage length is unknown.

5.3 QUEUEING CAPACITY – PROJECT DRIVE-THROUGH

The Project proposes to offer drive-through service. The Town requires a fast-food restaurant to accommodate 5.0 queued vehicles for every service window available [2]. Based on this requirement and the three proposed service windows described in *1 Introduction*, the site must accommodate a minimum of 15 vehicles (or a minimum of 300 feet of total storage, at 20 feet per vehicle).

The Project proposes an on-site queue storage capacity that accommodates at least 20 queued vehicles, as follows. Refer also to the Project site plan excerpt in ***Figure 1-b*** above and the Appendix.

1. 250 feet (total length of 2 lanes) from the edge of accessible parking to the merge point
2. 85 feet from the merge point to the payment window
3. 65 feet from the payment window to the 3rd window

400 feet total storage capacity, or 20 vehicles

Based on lessons learned at its restaurants across the United States, McDonald's maintains its drive-through queues at its new restaurants by designing its sites and kitchens to optimize operations. Site selection process screens out sites that do not conform to their design criteria. Specifically, sites' drive-through lanes must provide a minimum of 60 feet of vehicle storage between the drive-through order position and the first window. The Project's site design exceeds its own minimum requirement by providing almost 50% more distance in this key dimension, providing approximately 85 feet. Based on these conditions, the Project expects drive-through queues to be well-managed. As discussed below, ample storage is provided during busy scenarios.

Additionally, two independent studies of drive-through queue lengths, including one conducted in 2012 [7] and an updated report in 2019 [8], monitored and identified key measures about fast food drive-through restaurant queue behaviors. The findings of each study are summarized in ***Table 5-D***. The report from the 2012 study specifically stated that McDonald's restaurants were included in its sample, but the 2019 findings did not name specific restaurants included in its sample.

Table 5-D: Fast-Food Restaurant Drive-Through Queue Generation Data

Measure	2012 Study [3]	2019 Study [4]
Number of Data Points	14	6
Average Maximum Queue (Vehicles)	8.50	8.00
Standard Deviation (Vehicles)	2.68	3.41
Coefficient of Variation	32%	43%
Range (Vehicles)	5 to 13	5 to 14
85th Percentile Queue Length (Vehicles)	12.00	13.80
33rd Percentile Queue Length (Vehicles)	7.90	6.00
85th Percentile Queue Length (Feet)	240	260

The Project's proposed drive-through provides queue storage of 400 feet or 20 vehicles, which is longer than the 85th percentile queues from either study (12.00 and 13.80 vehicles), exceeds the highest maximum queue length (13 and 14 vehicles) observed in either study, and even exceeds the Agency's requirement to support 15 queued vehicles.

Based on the information presented in this section, and in the absence of extraordinary conditions, queues from the Project's drive-through operations are expected to be contained on site, and are not expected to spill back onto N Ten Mile Dr.

5.4 DRIVEWAY SPACING

The DRC comments received in January 2025 indicated that the spacing of the existing Project driveway does not meet the Agency's standards:

> *South driveway does not meet standards for separation from intersection (10 Mile/Lake Point).*

Topographic and right-of-way (ROW) survey received after the DRC meeting indicates the existing intersection in fact does meet the Agency's minimum driveway spacing and intersection spacing standards. The Project site plan in ***Figure 1-b*** above incorporates the survey and indicates that the driveway's nearest edge is 41 feet from the ROW for Lake Point Dr, in compliance with the current standards [9]. Refer to the Appendix for more information about the spacing of the existing driveways from the nearby intersections and between each driveway.

5.5 DRIVEWAY SIGHT DISTANCE

Intersection sight distance applies to motorists departing the Project site, to enter the stream of major street traffic along North Ten Mile Dr In the case of this Project, the subject location is the southern one-way outbound driveway located near Lake Point Dr. Preliminary departure sight triangle from the existing driveway is included in the Appendix and they are free of permanent obstructions. The sight lines should be drawn more precisely in the construction drawings to avoid proposed obstructions being overlooked. For more information about the lines of sight, please refer to the Appendix.

5.6 TRAFFIC CONTROL

The on-site vehicle circulation will consist of one-way circulation in a counter-clockwise direction around the Project building. Traffic exiting the site onto North Ten Mile Dr should approach STOP controls. One way signage should be clearly posted visible along North Ten Mile Dr so the entry and exits are clear to approaching motorists. The two-way STOP controls do not experience significant delays with or without the Project trips at any of the locations, except for eastbound movements at both signalized Study Locations, *#1 - Summit Blvd (SH 9) & Dillon Dam Rd / Lusher Ct* and *#2 - Summit Blvd (SH 9) & Lakepoint Dr*.

5.7 PARKING CAPACITY

The Project's parking lot layout and pedestrian flow design provide adequate circulation without unnecessary or unreasonable conflict points between vehicles and pedestrians, bicyclists, and other road users.

5.8 CDOT ACCESS PERMIT CONSIDERATIONS

The Project located at 960 North Ten Mile Dr introduces 1,602 (365%) more weekday trips compared to the previous use as a drive-in bank. Refer to ***Table 3-A*** above and ***Table A-10*** in the Appendix, 2,040 veh/day (Project) and 438 veh/day (Bank).

A proposed access permit approved by CDOT Region 3 will be required because the proposed change in use results in a more than 20% increase in daily trips. Refer to the Appendix regarding the estimated trip generation and a draft access permit application as well as current daily traffic volumes along Summit Blvd (SH 9) in the Study Area.

The Agency clarified during its review of this TIS that the Project will act as the permit Applicant and submit the application to CDOT on behalf of the Permittee, the Town of Frisco. The Town requires the application prior to issuance of building permits for the Project.

5.9 OTHER CONSIDERATIONS – AGENCY REVIEW

The Agency reviewed a draft of the TIS and requested that it include several other considerations, discussed in this section.

Exit Configuration. The Agency requested a review of the site access exit configuration due to its width. The site plan's proposed exit configuration, shown in ***Figure 1-b***, is optimizes traffic flow and safety while reusing the existing building layout. Having three service windows, especially the third window used as needed to fulfill quick orders, helps reduce drive-through congestion during the restaurant's busy periods. Since most customers use the drive-through, conflicts between drive-through and circulating vehicles at the exit are infrequent. Should operational issues arise, an alternative exit configuration is presented in the Appendix for further consideration.

Ten Mile Dr & N Ten Mile Dr. The Study Locations in this TIS do not include the nearby stop-controlled intersection of N Ten Mile Dr & Ten Mile Dr, but the location is within the limits of the figures in this TIS. The Study Locations were initially agreed with the Agency (refer to scoping discussions in *1 Introduction*). However, following their review of a draft version of this TIS, the Agency requested a high-level investigation of the intersection operations to estimate whether the impacts of site trips being distributed through this intersection will be significant.

To conduct this investigation, the intersection was assessed using Sat Total Traffic volumes estimated for the year 2046. The intersection hourly traffic volumes used for the investigation were estimated using the future Background traffic volumes and estimated new Project-related trips at *#3 - Summit Blvd (SH 9) & Ten Mile Dr (South)* and *#4 - Lakepoint Dr & North Ten Mile Dr*. Operational analysis of this intersection revealed it is expected to operate with acceptable delays in these conditions. This analysis is expanded on in the Appendix for reference.

STOP-Sign Configuration. The Town of Frisco has tentatively decided to recommend creating an all-way STOP condition at the intersection of *#4 - Lakepoint Dr & North Ten Mile Dr* for reasons unrelated to the Project. This new right-of-way configuration will decrease delays experienced by motorists approaching the intersection along N Ten Mile Dr (northbound and southbound approaches in this TIS) and will introduce delays for east and westbound traffic along Lakepoint Dr. The analysis of *#4 - Lakepoint Dr & North Ten Mile Dr* performed in this TIS remains valid, because it considers a more conservative condition at the location and traffic volumes are light.

6 Proposed Mitigation Measures

This section describes the various mitigation measures recommended to maintain acceptable operations during the Background and Total Traffic conditions in future horizon years.

6.1 ROADWAY MODIFICATIONS

Due to the acceptable operations presented in *5 Analysis of Proposed Conditions*, no additional roadway modifications are recommended for the Project for two reasons:

- Background roadway improvements will be under construction as the Project is also under construction. The Project will be open before the background improvements are complete.
- The results of analysis of the Long Term Horizon Year indicates the Background conditions that include the proposed CDOT improvements provide sufficient capacity to address unacceptable operations in the future. As such, it is reasonable to assert that operations will also be acceptable between their completion in 2028 and 2046.

6.2 MITIGATED LEVELS OF SERVICE

This section would typically summarize the LOS estimated after incorporating recommended mitigation measures. In the case for this Project, no *new* mitigations are recommended, for the reasons previously stated, in either the Background or Total Traffic conditions in either the Short-Term or Long-Term Study Horizons. As such, no re-evaluation of the operations analysis was necessary or performed.

6.3 STORAGE (TURN BAY) LENGTHS

This section would typically discuss the updated queue analysis based on the recommended mitigation measures and respect to available storage capacity and reports issues. In the case for this Project, no *new* mitigations are recommended, for the reasons previously stated, in either the Background or Total Traffic conditions in either the Short-Term or Long-Term Study Horizons. As such, no re-evaluation of the queue analysis was necessary or performed

7 Conclusions & Recommendations

This section summarizes the findings and recommendations of this Traffic Impact Study (TIS).

7.1 RECOMMENDED IMPROVEMENTS

Background Improvements. The improvements summarized in *2 Existing and Planned Conditions* and referred to as the CDOT Interchange Project are supported by the analysis in this TIS as an effective mitigation to unacceptable operations identified in the 2026 Background Traffic conditions.

7.2 PROPOSED SITE IMPROVEMENTS

The Project-related improvements summarized in ***Table 7-A*** are recommended prior to its opening.

Table 7-A: Summary of Recommended Improvement Measures

ID	Location	Improvement Name	Recommended Timeframe
A	Project Driveway (Entrance)	Re-Configure Full Movement Entrance	Prior to opening
B	Project Driveway (Exit)	Re-Configure Full Movement Exit	Prior to opening
C	Project Driveway (Exit)	Sight Triangles	Prior to opening

A. **Re-Configure Full-Movement Entrance.** Reconfigure the existing northern access of 960 North Ten Mile Drive to an entrance-only supporting the proposed one-way Project site circulation. Install one-way signage per Manual on Uniform Traffic Control Devices [10] standards.

B. **Re-Configure Full Movement Exit.** Reconfigure the existing southern access of 960 North Ten Mile Drive to a full-movement exit-only supporting the proposed one-way Project site circulation. Install STOP control for traffic exiting the site and one-way signage per Manual on Uniform Traffic Control Devices [10] standards.

C. **Sight Triangles.** Update construction documents to include sight triangles at the southern access (exit) and (utilities, signage, etc.) for the southern access. The Project shall follow the AGENCY's requirements to minimize new obstructions in driveway sight triangles.

7.3 SUMMARY

This Traffic Impact Study (TIS) was prepared to identify and address impacts to intersection operations in the roadway network due to the proposed McDonald's restaurant and drive-through in a remodeled vacant drive-through bank building at 960 North Ten Mile Dr in Frisco, CO (Project). The Project proposes a 4,575 square-foot restaurant and drive-through with vehicular access along North Ten Mile Rd at two existing driveways. The proposed site will use one-way internal circulation due to the re-use of the existing building and other site conditions. (Refer to *1 Introduction* starting on Page 1-1 for more information.)

The scope of this TIS was discussed with the Agency in advance. Several key issues were raised at TIS scoping, as indicated in ***Table 7-B***. The TIS scope otherwise includes the following base assumptions:

- Five (5) Study Locations
- Three (3) Peak Periods
- Existing Conditions Analysis (2025)
- Two (2) Future Horizons: Short Term (2026), and Long-Term (2046)
- Two Traffic Volume scenarios: Background (Project *no-build*) and Total Traffic (Project *build*)

Refer to *1 Introduction* starting on Page 1-1 for more information.

Table 7-B: Key Issues Identified by the Agency and Addressed in this TIS

Item	Description	Summary of Response	TIS Section with Additional Discussion
Pre-App Comment: CDOT Access	Traffic study to determine increase in traffic volume at intersection of Summit Blvd. If it increases by 20%, a CDOT Access permit is required and potential intersection improvements	Access Permit is Required. No Access Improvements Recommended.	*5 Analysis of Proposed Conditions*
Pre-App Comment: Existing Driveway	South driveway does not meet standards for separation from intersection (10 Mile/Lake Point). Increased traffic at this driveway increases the nonconformity. Traffic study to analyze this issue and analyze sight distance, access control, and need for intersection improvements at 10 Mile Dr/Lake Point.	Survey indicates the existing driveway location is in conformance with Agency standard minimum spacing. Sight distance evaluation included.	*5 Analysis of Proposed Conditions*

This TIS estimated a total of 2,040 new daily trips will travel to and from the Project (not including 438 daily trips no longer generated by the prior use as a drive-through bank), based on data available in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition) [5]. These *"Project trips"* were combined with estimated Background Traffic volumes to develop traffic volume scenarios referred to as Total Traffic volumes. Traffic volumes estimated in both Short-Term and Long-Term Horizon Year scenarios were used to analyze the operational performance of the Study Locations in each future year. (Refer to *3 Proposed Conditions* starting on Page 3-11 and *4 Future Conditions* starting on Page 4-15 for more information.)

Background traffic volume scenarios for this TIS rely heavily on traffic volume forecasts developed by others in a 2023 transportation improvement study performed for CDOT Region 3 [3]. The design of the CDOT Interchange Project is being designed, as of February 2025, and will result in modifications to the roadway network near the I-70 Exit 203 interchange in Frisco, the *"CDOT Interchange Project,"* by approximately 2028. (Refer to *4 Future Conditions* starting on Page 4-15 for more information.)

The schedule for the construction of the CDOT Interchange Project improvements overlaps with the opening year of the Project addressed in this TIS and affects two of its Study Locations, *#1 - Summit Blvd (SH 9) & Dillon Dam Rd / Lusher Ct* and *#5 - Dillon Dam Rd & North Ten Mile Dr* The CDOT Interchange Project brings several planned changes to the background roadway network that were considered when evaluating the performance of the Study Locations in this TIS. In fact, the major changes provide adequate relief to the Study locations such that no additional mitigations are needed to address operational issues. (Refer to *4 Future Conditions* starting on Page 4-15.)

As a result of the analysis in this TIS, standard design practices, and as summarized in this section above, several baseline improvements are recommended for the proposed Project accesses, which are the responsibility of the Project. These include re-configuring the two existing accesses to accept the one-way circulation and incorporating sight triangles into the construction documents. (Refer to *5 Analysis of Proposed Conditions* starting on Page 5-20 and *6 Proposed Mitigation Measures* starting on Page 6-29 for more information.)

In summary, assuming the implementation of the recommended background improvements known as the CDOT Interchange Improvements and described in this TIS, the Study Locations are expected to operate at adequate levels of service in the future. No further mitigations are necessary to address unacceptable operations in the Background or Total Traffic conditions in the Short-Term or Long-Term Horizon Years (2026 and 2046). Furthermore, in the absence of extraordinary conditions, queues from the Project's drive-through operations are expected to be fully contained on site, and are not expected to spill back onto N Ten Mile Dr.

8 References

[1] Town of Frisco, "Trails Master Plan," 2017 (updated 2023). [Online]. Available: https://www.friscogov.com/departments/recreation-and-culture/trails/. [Accessed Feb 2025].

[2] C. Town of Frisco, "Code of Ordinances - Town of Frisco, Colorado," Jan 2025. [Online]. Available: https://library.municode.com/co/frisco/codes/code_of_ordinances?nodeId=CH180UNDECO_ARTVIDEST_S180-6.12TRST.

[3] A. S. L. (. f. C. R. 3), "I-70 Exit 203 and EB Auxiliary Lane Design, Alternatives Traffic Analysis Technical Report," 2023.

[4] Colorado Department of Transportation, "Online Transportation Information System (OTIS)," [Online]. Available: https://dtdapps.coloradodot.info/otis/TrafficData. [Accessed Jan 2025].

[5] Institute of Transportation Engineers (ITE), "ITE Trip Generation Manual, 11th Edition," Transoft Solutions, Inc., 2021. [Online]. Available: https://itetripgen.org/.

[6] Colorado Department of Transportation, "I-70 Exit 203 Interchange in Frisco - Design Phase," [Online]. Available: https://www.codot.gov/projects/i70-exit203-interchange-frisco. [Accessed 28 January 2025].

[7] M. M. L. d. L. a. N. H. M. Spack, Drive-Through Queue Generation, 2012.

[8] S. Solutions, Drive-Thru Queue Generation, 2019.

[9] Town of Frisco, "Minimum Street Design and Access Criteria," 12 March 2019. [Online]. Available: https://www.friscogov.com/wp-content/uploads/2024/03/155-1.-Street-Design-and-Access-2019.pdf. [Accessed Jan 2025].

[10] Federal Highway Administration (FHWA), "Manual on Uniform Traffic Control Devices, 11th Edition," Dec 2023. [Online]. Available: https://mutcd.fhwa.dot.gov/kno_11th_Edition.htm. [Accessed Nov 2024].

[11] National Academies of Sciences, Engineering, and Medicine, "Highway Capacity Manual 7th Edition: A Guide for Multimodal Mobility Analysis," The National Academies Press, 2022. [Online]. Available: https://doi.org/10.17226/26432.

[12] American Association of State Highway Transportation Officials (AASHTO), A Policy on Geometric Design of Highways and Streets, 2011 6th edition.

[13] Fox Tuttle Transportation Group, LLC, "Lake Hill Development TIA," Fox Tuttle Transportation Group, LLC (#22010), Sep 26, 2022.

Appendix

TRIP GENERATION RE-EVALUATION

As described in *1 Introduction* and *3 Proposed Conditions*, the proposed restaurant's square footage has increased by 5% beyond what the TIS analysis evaluated. This Appendix describes the impact of that change on the analyses and findings of this TIS.

The trip generation rates used are based on average (linear) rates, so the number of new trips is expected to also increase by 5%. With this increase, there are approximately 102 additional trips on a typical weekday[1]. During peak hours, this results in approximately 13 extra Project trips during the Sat Study Period[2]. When looking at the individual 2046 turn movements in ***Figure 3-b***, the increased gross floor area increases the assigned trips by up to three extra trips per hour[3]. At that movement, three hourly trips are equivalent to a single extra Project trip every 20 minutes.

Given the minimal changes in project trips, along with delays that represent LOS B, it is evident that re-evaluating all analyses in this TIS would not alter the findings in a meaningful way. As such, the author of this TIS and the Agency agree that the TIS need not be updated to reflect the minor increase in proposed area. In summary, the specific analysis of this TIS reflects the 4,375 square foot gross floor area of the existing building, and the findings apply to the proposed Project, which includes a 4,575 square foot restaurant and drive-through.

[1] The notes in ***Table 3-A*** indicate a total of 2,040 project trips per weekday. At 5%, the extra daily trips for the updated restaurant area are approximately 102 trips per day.
[2] Data from ***Table 3-A*** indicate a total of 241 project trips per Sat Peak Period. At 5%, the extra hourly trips for the updated restaurant area are approximately 13 trips per hour.
[3] The most hourly Project trips assigned to a single movement in 2046 based on ***Figure 3-b*** is 48 trips per hour, at the southbound left turn at *#3 - Summit Blvd (SH-9) & Ten Mile*. Three trips per hour are based on 5% of 48 hourly trips.

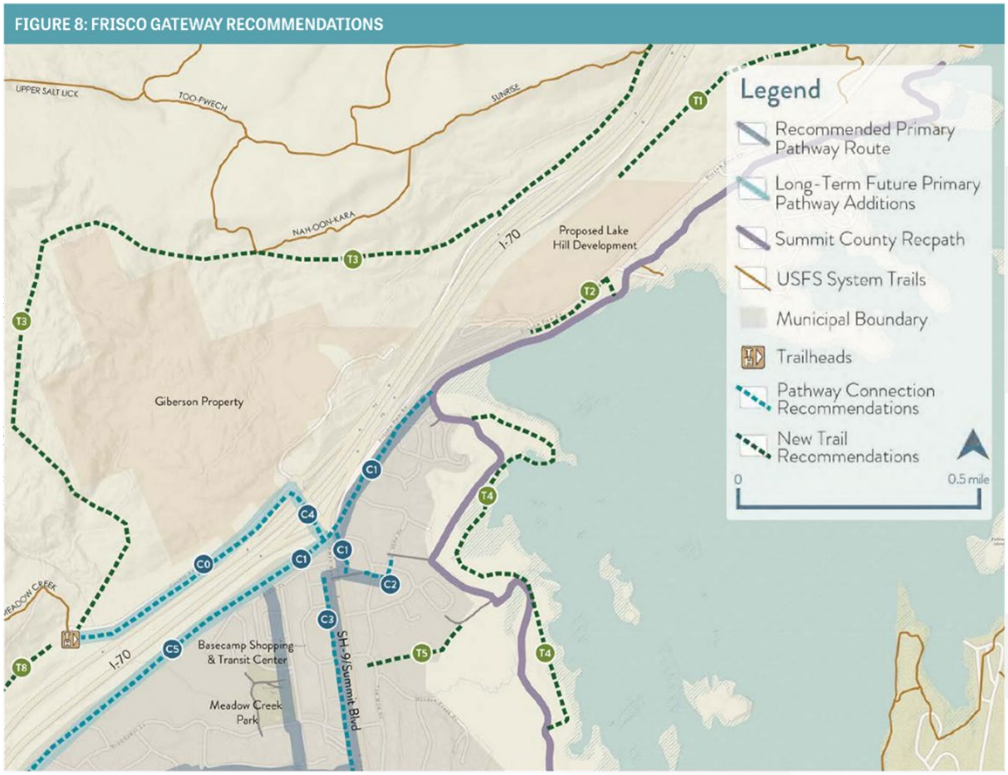
FRISCO TRAILS MASTER PLAN

The 2023 update to the Town of Frisco's Trails Master Plan [1] provides specific enhancement recommendations near the Project site, but none of the recommendations affect the Project site. The Frisco Gateway Recommendations near the Project are summarized in ***Table A 1*** and copy of the figure from the plan, indicating the location of projects, is provided in ***Figure A 1***.

Table A 1 Summary of Frisco Gateway Recommendation (Trail Master Plan – 2023 Update) [1]

Frisco Gateway Recommendation Name (Refer to Locations in Figure A 1)	Description
New Trails (T5)	*Formalize the soft surface pedestrian footpath from Willow Preserve Overlook (and Trailhead Parking) to the County Recpath system. Portions of this area are classified as "shrub scrub" wetland; further investigation of impact should be pursued.*
Frisco Pathway Connection (C1)	*Work with CDOT to establish designated bicycle and pedestrian infrastructure to improve the connection between the Frisco Transit Center & Basecamp commercial complex to the residential areas and County Recpath system across SH-9 and via Dillon Dam Road. CDOT's latest design concepts for this intersection are illustrated in Figure 9.*
Frisco Pathway Connection (C2)	*Establish designated bicycle and pedestrian infrastructure connecting the off-street paved path at North Ten Mile Road to the County Recpath system via Lakepoint Drive to 9000 Divide.*
Frisco Pathway Connection (C3)	*Work with CDOT to establish a continuous, year-round, multi-use paved pathway on the west side of SH-9 from Lusher Court to County Rd 1040.*

Figure A 1 Trail Master Plan – Frisco Gateway Recommendations [1]



TRAFFIC VOLUME DATA

Turning Movement Count Data. As discussed in *2 Existing and Planned Conditions* turning movement count data was collected at *#4 - Lakepoint Dr & North Ten Mile Dr* on Thursday, January 30, 2025 and Saturday, February 1, 2025. Those reports are attached in the following pages.

The remaining data was gathered from a recent CDOT Traffic Study. ***Figure A 2*** and ***Figure A 3*** illustrate the original traffic volume data adjusted for use in this TIS.

Figure A 2 Estimated Traffic Volumes "CDOT Figure 4-1 No-Build Opening Year" [3]

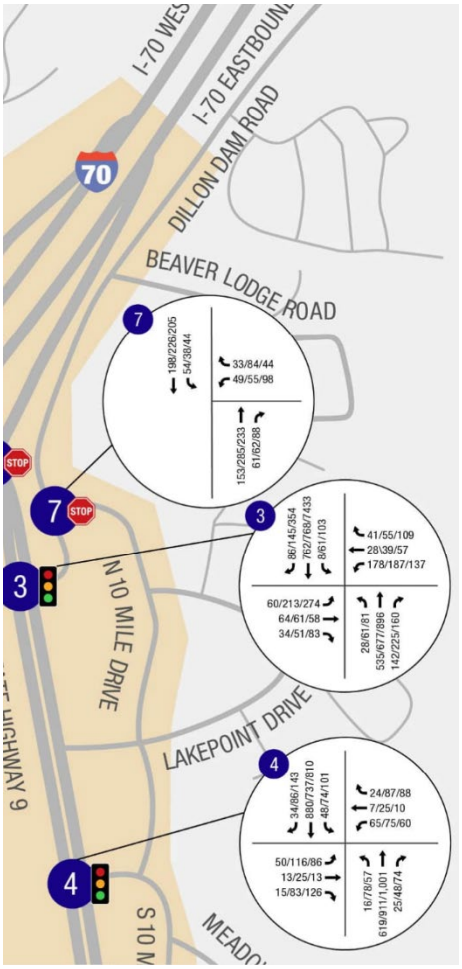
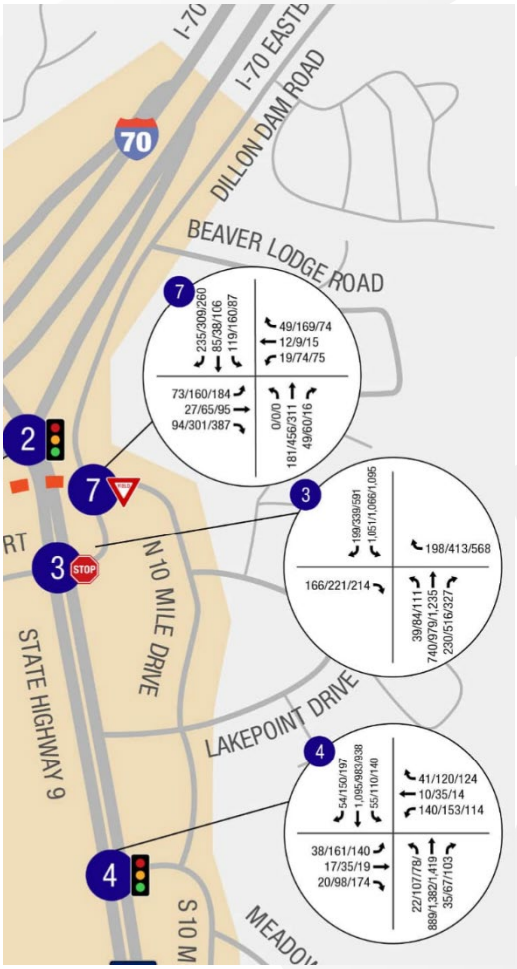


Figure A 3 Forecasted 2045 Traffic Volumes "CDOT Figure 5-11 Horizon Year Alternative 1" [3]

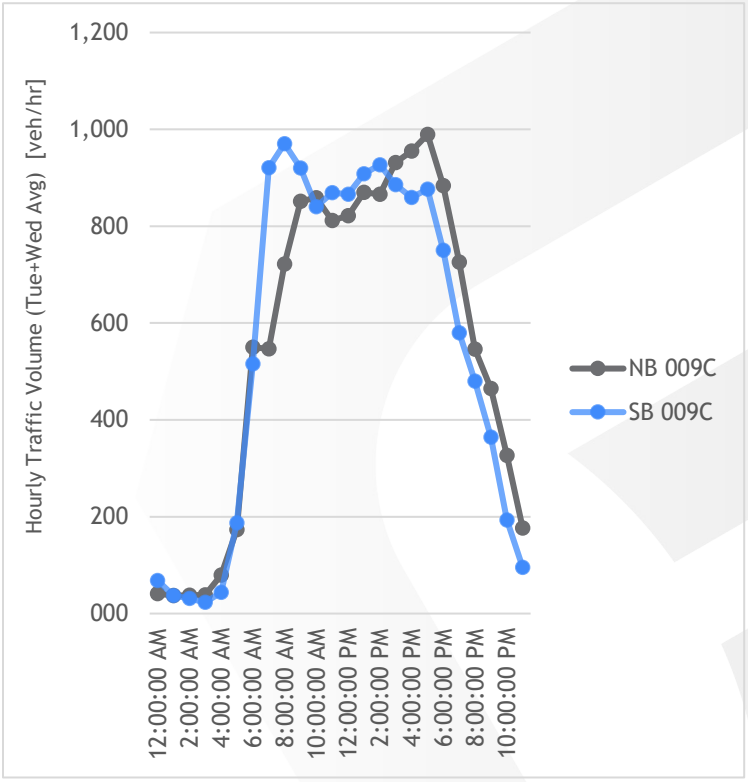


Bi-Directional Volume Data. ***Table A 2*** and ***Figure A 4*** summarize the average hourly volumes from 48 hours of directional traffic volume data collected by CDOT along Summit Blvd August 23-24, 2023.

Table A 2 Aug 2023 Traffic Volumes CDOT Route 009C, Sta100513 (S/O I-70, Frisco) [4]

	NB	SB
12:00:00 AM	41	68
1:00:00 AM	37	37
2:00:00 AM	38	32
3:00:00 AM	39	23
4:00:00 AM	80	44
5:00:00 AM	174	187
6:00:00 AM	550	516
7:00:00 AM	547	921
8:00:00 AM	722	971
9:00:00 AM	852	921
10:00:00 AM	859	841
11:00:00 AM	812	870
12:00:00 PM	822	866
1:00:00 PM	870	908
2:00:00 PM	866	927
3:00:00 PM	932	886
4:00:00 PM	955	860
5:00:00 PM	990	877
6:00:00 PM	884	750
7:00:00 PM	726	580
8:00:00 PM	546	480
9:00:00 PM	465	365
10:00:00 PM	327	193
11:00:00 PM	177	96
Grand Total	**13,306**	**13,213**
		26,519

Figure A 4 Aug 2023 Traffic Volumes CDOT Route 009C, Sta 100513 (Near I-70) [4]



The closest CDOT Automatic Traffic Recording (ATR) station along SH 9 is located along SH 9 several miles south of the Project. The CDOT ATR collects traffic volume data continuously and CDOT publishes average daily traffic volumes by month over many years, as summarized in ***Table A 3***.

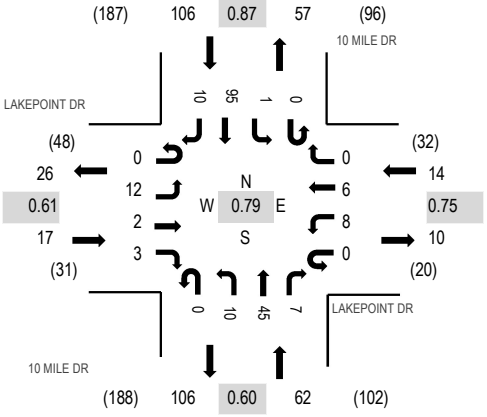
Table A 3 Historic Monthly Traffic Volumes
CDOT Route 009C, Sta240 (S/O Tiger Rd), 2006-2024 [4]

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2006		20,998	21,722	16,262	14,383	18,215	21,499	19,876	17,816	14,343	16,474	17,318
2007	17,702	17,620	18,759	14,050	12,673				18,771	16,492	17,633	19,734
2008	20,905	20,794	21,778	16,242	14,218	17,918	21,285	20,247	18,055	15,894	15,800	19,566
2009	21,034	20,678	20,526	15,689	13,641	17,657	21,077	19,819	17,562	14,586	15,975	19,679
2010	21,080	20,612	21,125	15,130	13,030	17,052	21,181	19,662	18,019	14,514	15,010	19,458
2011	19,904	19,013	19,970	14,963	12,362	17,049	20,609	20,745	18,187	15,322	15,089	20,645
2012	21,020	20,867	21,856	14,988	13,970	18,252	21,689	21,020	18,465	15,317	14,911	16,463
2013	19,202	21,802	21,597	15,304	14,226	18,639	23,409	22,113	18,964	16,174	17,346	20,515
2014	22,074	21,741	22,695	17,203								21,545
2015	22,254	24,105	22,746	16,768	14,626	19,975	24,189	22,612	20,612	17,216	16,072	18,628
2016	20,067	20,166	19,771	15,583	15,315	20,234	24,369	22,538	21,058	17,606	17,498	20,596
2017	22,314	22,238	22,640	16,863	15,739	20,133	23,872	22,365	20,694	17,736	17,914	22,213
2018	24,454	23,112	23,746	17,638	16,681	21,491	25,586	23,805	21,848	17,993	19,613	24,572
2019	26,864	25,558	25,043	19,475	17,420	19,707	22,715	25,287	23,769	18,932	19,522	23,106
2020	26,091	24,334	16,206	8,459	12,873	20,096	25,398	24,184	23,870	21,272	18,851	22,557
2021	23,613	23,681	24,455	19,981	18,729	23,885	26,569	24,052	22,303	19,357	19,779	23,740
2022	25,343	26,314	25,528	19,385	17,755	22,419	25,576	25,157	23,340	20,126	19,542	23,392
2023	25,561	26,129	25,423	20,266	17,932	22,107	26,085	24,365	23,106	19,796	18,253	23,473
2024	24,223	24,914	25,075	19,321	17,805	23,097	26,984	25,061	23,741	20,929	19,491	26,127

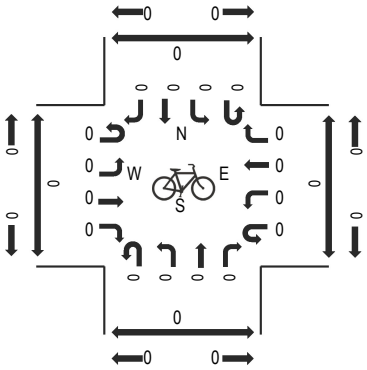
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 10 MILE DR & LAKEPOINT DR AM
Date: Thursday, January 30, 2025
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

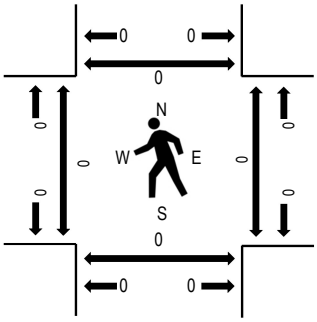
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

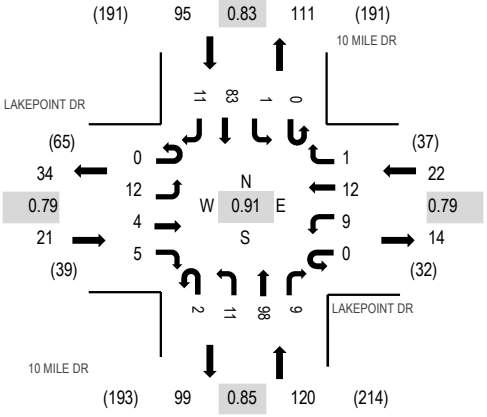
Traffic Counts - Motorized Vehicles

Interval Start Time	LAKEPOINT DR Eastbound				LAKEPOINT DR Westbound				10 MILE DR Northbound				10 MILE DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	2	0	0	0	1	0	1	0	0	5	0	0	1	8	1	19	161	0	1	0	0
7:15 AM	0	1	2	0	0	5	1	0	0	0	6	3	0	0	16	2	36	181	0	0	0	0
7:30 AM	0	2	1	1	0	2	2	2	1	2	6	2	0	0	20	2	43	190	0	1	0	0
7:45 AM	0	4	1	0	0	2	1	0	0	3	20	3	0	1	26	2	63	199	0	0	0	0
8:00 AM	0	2	0	0	0	1	2	0	0	3	7	0	0	0	22	2	39	191	0	0	0	0
8:15 AM	0	3	0	0	0	2	1	0	0	2	4	2	0	0	29	2	45		0	0	0	0
8:30 AM	0	3	1	3	0	3	2	0	0	2	14	2	0	0	18	4	52		0	0	0	0
8:45 AM	0	3	0	2	0	2	2	0	0	3	11	1	0	0	24	7	55		0	1	0	0
Count Total	0	20	5	6	0	18	11	3	1	15	73	13	0	2	163	22	352		0	3	0	0
Peak Hour	0	12	2	3	0	8	6	0	0	10	45	7	0	1	95	10	199		0	0	0	0

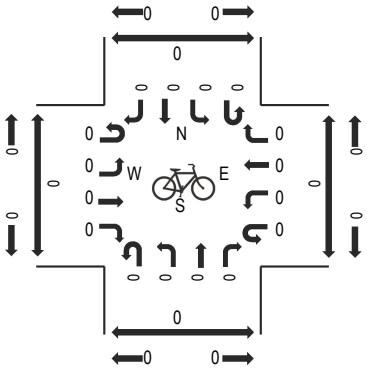
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 10 MILE DR & LAKEPOINT DR PM
Date: Thursday, January 30, 2025
Peak Hour: 04:45 PM - 05:45 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

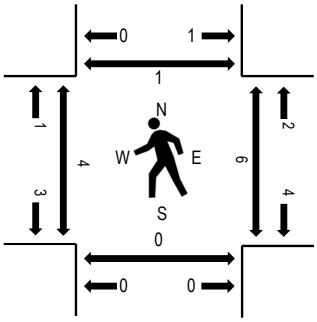
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

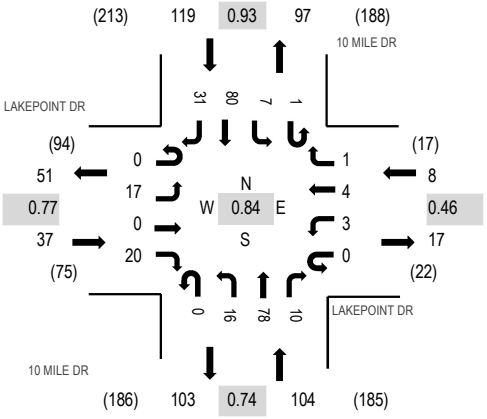
Traffic Counts - Motorized Vehicles

Interval Start Time	LAKEPOINT DR Eastbound				LAKEPOINT DR Westbound				10 MILE DR Northbound				10 MILE DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	1	1	0	0	2	1	1	0	4	23	4	0	1	25	5	68	246	0	0	0	0
4:15 PM	0	5	1	3	0	1	3	0	0	1	15	5	0	0	21	2	57	249	0	10	3	1
4:30 PM	0	0	0	2	0	2	0	0	0	4	19	3	0	0	19	6	55	255	4	1	0	0
4:45 PM	0	2	1	1	0	1	4	0	0	3	27	3	0	0	20	4	66	258	1	1	0	0
5:00 PM	0	2	1	2	0	3	3	1	2	6	28	0	0	1	19	3	71	235	0	1	0	0
5:15 PM	0	4	1	2	0	3	2	0	0	2	23	2	0	0	21	3	63		3	3	0	1
5:30 PM	0	4	1	0	0	2	3	0	0	0	20	4	0	0	23	1	58		0	1	0	0
5:45 PM	0	2	1	2	0	3	2	0	0	1	14	1	0	1	14	2	43		0	1	0	0
Count Total	0	20	7	12	0	17	18	2	2	21	169	22	0	3	162	26	481		8	18	3	2
Peak Hour	0	12	4	5	0	9	12	1	2	11	98	9	0	1	83	11	258		4	6	0	1

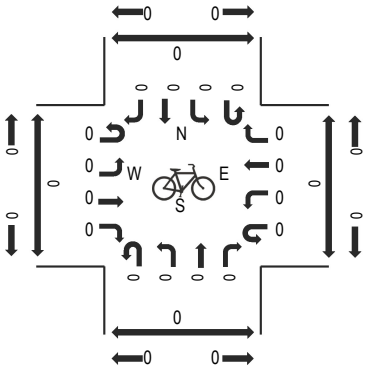
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 10 MILE DR & LAKEPOINT DR PM — Sat Peak
Date: Saturday, February 1, 2025
Peak Hour: 03:30 PM - 04:30 PM
Peak 15-Minutes: 04:15 PM - 04:30 PM

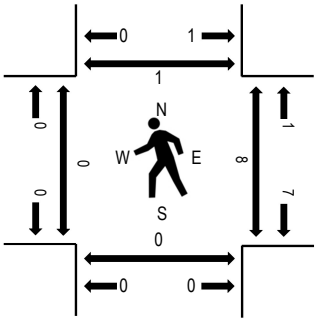
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	LAKEPOINT DR Eastbound				LAKEPOINT DR Westbound				10 MILE DR Northbound				10 MILE DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
3:00 PM	0	4	0	3	0	2	1	0	0	2	20	0	0	0	14	8	54	230	0	1	1	0
3:15 PM	0	10	0	3	0	0	0	0	1	1	10	0	0	0	16	8	49	237	0	1	0	0
3:30 PM	0	5	0	3	0	1	1	0	0	3	16	3	0	0	21	11	64	268	0	2	0	0
3:45 PM	0	8	0	4	0	0	1	0	0	5	16	1	0	2	15	11	63	262	0	0	0	0
4:00 PM	0	3	0	4	0	0	2	1	0	4	19	1	1	1	19	6	61	260	0	5	0	1
4:15 PM	0	1	0	9	0	2	0	0	0	4	27	5	0	4	25	3	80		0	1	0	0
4:30 PM	0	4	0	4	0	0	0	0	0	4	19	1	0	0	23	3	58		0	0	0	1
4:45 PM	0	7	2	1	0	4	2	0	0	5	17	1	0	1	12	9	61		0	0	0	0
Count Total	0	42	2	31	0	9	7	1	1	28	144	12	1	8	145	59	490		0	10	1	2
Peak Hour	0	17	0	20	0	3	4	1	0	16	78	10	1	7	80	31	268		0	8	0	1

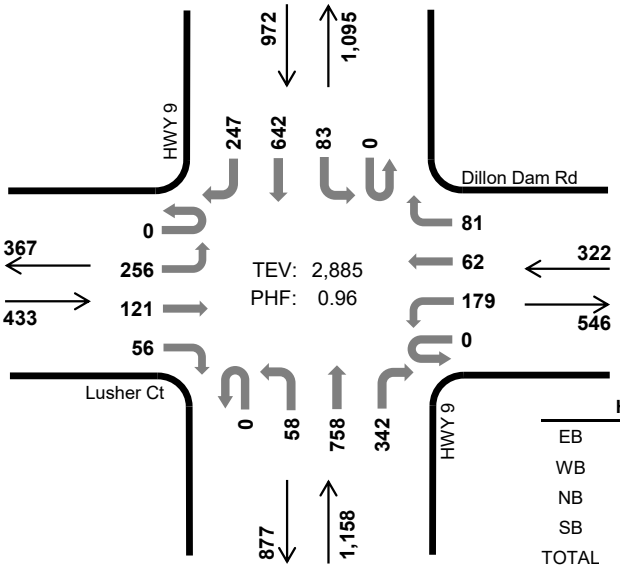
HWY 9
Lusher Ct

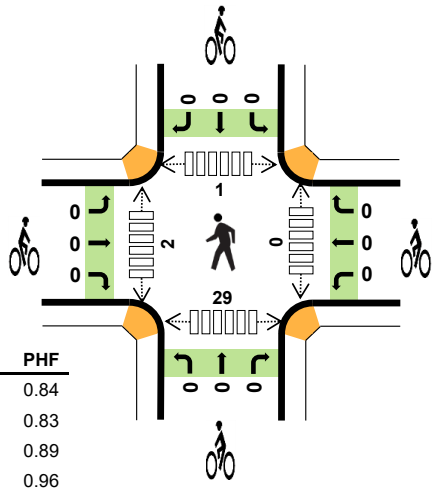
PM Tue, July 2022

Date: 07/12/2022

Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM

Peak Hour





	HV %:	PHF
EB	3.5%	0.84
WB	2.2%	0.83
NB	3.1%	0.89
SB	3.7%	0.96
TOTAL	3.3%	0.96

Two-Hour Count Summaries

Interval Start	Lusher Ct Eastbound				Dillon Dam Rd Westbound				HWY 9 Northbound				HWY 9 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	70	23	15	0	48	14	19	0	21	167	76	0	30	138	58	679	0
4:15 PM	0	45	18	19	0	53	16	18	1	20	176	83	0	18	134	61	662	0
4:30 PM	**0**	**76**	**38**	**15**	**0**	**33**	**17**	**17**	**0**	**14**	**169**	**83**	**0**	**19**	**150**	**77**	**708**	0
4:45 PM	**0**	**56**	**22**	**17**	**0**	**43**	**15**	**14**	**0**	**14**	**187**	**88**	**0**	**18**	**153**	**66**	**693**	2,742
5:00 PM	**0**	**73**	**31**	**16**	**0**	**42**	**16**	**28**	**0**	**16**	**181**	**80**	**0**	**22**	**180**	**51**	**736**	2,799
5:15 PM	**0**	**51**	**30**	**8**	**0**	**61**	**14**	**22**	**0**	**14**	**221**	**91**	**0**	**24**	**159**	**53**	**748**	**2,885**
5:30 PM	0	72	23	13	0	50	17	14	0	17	187	76	0	16	127	44	656	2,833
5:45 PM	0	76	23	10	0	46	15	10	1	14	159	82	0	24	131	40	631	2,771
Count Total	0	519	208	113	0	376	124	142	2	130	1,447	659	0	171	1,172	450	5,513	0
Peak Hour All	**0**	**256**	**121**	**56**	**0**	**179**	**62**	**81**	**0**	**58**	**758**	**342**	**0**	**83**	**642**	**247**	**2,885**	**0**
Peak Hour HV	**0**	**12**	**2**	**1**	**0**	**0**	**1**	**6**	**0**	**0**	**31**	**5**	**0**	**2**	**26**	**8**	**94**	**0**
Peak Hour HV%	**-**	**5%**	**2%**	**2%**	**-**	**0%**	**2%**	**7%**	**-**	**0%**	**4%**	**1%**	**-**	**2%**	**4%**	**3%**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	8	1	11	6	*26*	0	0	0	0	*0*	0	0	0	4	*4*
4:15 PM	3	2	9	10	*24*	0	0	0	0	*0*	0	0	0	7	*7*
4:30 PM	**8**	**2**	**14**	**13**	***37***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**8**	*8*
4:45 PM	**1**	**0**	**5**	**9**	***15***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**8**	*8*
5:00 PM	**4**	**2**	**8**	**7**	***21***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**0**	**3**	*5*
5:15 PM	**2**	**3**	**9**	**7**	***21***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**10**	***11***
5:30 PM	3	0	10	3	*16*	0	0	0	0	*0*	0	0	0	7	*7*
5:45 PM	3	0	8	4	*15*	0	1	0	0	*1*	0	0	0	1	*1*
Count Total	32	10	74	59	*175*	0	1	0	0	*1*	0	2	1	48	*51*
Peak Hour	**15**	**7**	**36**	**36**	***94***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**1**	**29**	***32***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Lusher Ct				Dillon Dam Rd				HWY 9				HWY 9				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	5	0	3	0	0	0	1	0	1	10	0	0	2	3	1	26	0
4:15 PM	0	2	0	1	0	0	1	1	0	1	8	0	0	2	6	2	24	0
4:30 PM	**0**	**6**	**2**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**11**	**3**	**0**	**0**	**10**	**3**	**37**	0
4:45 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**1**	**0**	**0**	**8**	**1**	**15**	102
5:00 PM	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**7**	**1**	**0**	**0**	**4**	**3**	**21**	97
5:15 PM	**0**	**1**	**0**	**1**	**0**	**0**	**1**	**2**	**0**	**0**	**9**	**0**	**0**	**2**	**4**	**1**	**21**	**94**
5:30 PM	0	1	2	0	0	0	0	0	0	1	9	0	0	0	2	1	16	73
5:45 PM	0	3	0	0	0	0	0	0	0	1	7	0	0	0	4	0	15	73
Count Total	0	23	4	5	0	0	2	8	0	4	65	5	0	6	41	12	175	0
Peak Hour	**0**	**12**	**2**	**1**	**0**	**0**	**1**	**6**	**0**	**0**	**31**	**5**	**0**	**2**	**26**	**8**	**94**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Lusher Ct			Dillon Dam Rd			HWY 9			HWY 9			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	1
Count Total	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

INTERSECTION ANALYSIS METHODOLOGY

The performance of the roadway network depends most of all on the performance at intersections, due to the exchange of right-of-way assignment that must take place to provide access where conflicting streams of traffic must cross paths. The Study Locations represent the key intersections near the Project that are analyzed in this study. The Agency, like most local agencies nearby and nationally, requires the use of the latest edition of the *Highway Capacity Manual 7th Edition* (*HCM*) to estimate the performance of intersections within its jurisdiction.

The intersection levels of service (LOS) reported in this TIS are based on an analysis of the existing roadway features and typical one-hour traffic volumes. Peak periods are typically identified using available traffic data, engineering judgment, or a combination of both, as described more specifically in the body of the TIS.

Intersection operations were analyzed with PTV Vistro 2025 (sp 0-2) software (PTV Vistro) using the methodologies outlined in the HCM. PTV Vistro estimates delays and reports the delays and LOS. Detailed analysis reports are included in this, Appendix and results are also summarized in figures and tables throughout this TIS.

The LOS provides an overview of how well an intersection is expected to operate. The Agency has a design objective of LOS E or better for intersection operations, per its Traffic Impact Study Criteria. The criteria for the HCM LOS designations are provided in the Table below. LOS are presented as letter grades, similar to an academic summarization of a student's performance.

Table A-4: LOS Meaning for Signalized and Unsignalized Intersections [11]

LOS	Control Delay (sec/veh)		Description
	Signalized Intersections	Unsignalized Intersections	
A	≤10	≤10	Operations with very low delay and most vehicles do not stop.
B	>10 and ≤20	>10 and ≤15	Operations with good progression but with some restricted movements.
C	>20 and ≤35	>15 and ≤25	Operations where a significant number of vehicles are stopping with some backup and light congestion.
D	>35 and ≤55	>25 and ≤35	Operations where congestion is noticeable, longer delays occur, and many vehicles stop. The proportion of vehicles not stopping declines.
E	>55 and ≤80	>35 and ≤50	Operations where there is significant delay, extensive queuing, and poor progression.
F	>80	>50	Operations that are unacceptable to most drivers, when the arrival rates exceed the capacity of the intersection.

RIGHT TURNS ON RED

As discussed in *1.22 Existing and Planned Conditions*, RTOR volume reductions were applied at *#3 - Summit Blvd (SH 9) & Ten Mile Dr (South)*. Observations of video recordings taken the week of Feb 1, 2025, at the intersection of *#3 - Summit Blvd (SH 9) & Ten Mile Dr (South)* informed the application of the right-turn-on-red (RTOR) reductions to traffic volumes used in the Traffic Analysis Reports. Refer to ***Figure A 5*** for an example image from the video used. ***Table A 5*** catalogs the observations and calculated % RTOR using video imagery. The use of these and other traffic volume reductions described in the HCS is also identified in ***Table A 11***.

Video recordings taken at the intersection of *#1 - Summit Blvd (SH 9) & Dillon Dam Rd / Lusher Ct* did not permit effective estimation of the proportion of westbound RTOR; however, infrequent opportunities for RTOR were noticed during field observations made on Sat Feb 1, 2025. This was due primarily to the westbound through volume and the shared westbound through/right lane.

Table A 5 Summary of RTOR Observations

Date of Observation	Start Time	End Time	Intersection ID	Intersection Name	Approach Direction	Observed # Right-Turn Vehs (Green/Yellow)	# Observed Right-Turn Vehs (Red, aka RTOR)	Observation Duration (H:M:S)	*% RTOR*
2025-01-30 Thu	7:00 AM	7:15 AM	3	SH9 @ 10 Mile	WB	2	5	0:15:00	*71%*
2025-01-30 Thu	4:00 PM	4:15 PM	3	SH9 @ 10 Mile	WB	15	13	0:15:00	*46%*
2025-02-01 Sat	3:00 PM	3:15 PM	3	SH9 @ 10 Mile	WB	14	6	0:15:00	*30%*
Total								0:45:00	

Figure A 5 Snapshot of Video used for Westbound RTOR Observations (from SE Corner)



ITE TRIP GENERATION AND TRIP ASSIGNMENTS

Table A 6 summarizes the ITE Land Use description discussed in *3 Proposed Conditions*.

Table A 6 Summary of ITE Land Use Descriptions [5]

ITE Code	ITE Land Use Name	ITE Land Use Description
934	Fast-Food Restaurant with Drive-Through Window	This land use includes any fast-food restaurant with a drive-through window. This type of restaurant is characterized by a large drive-through and large carry-out clientele, long hours of service (some are open for breakfast, all are open for lunch and dinner, some are open late at night or 24 hours a day) and high turnover rates for eat-in customers. The restaurant does not provide table service. A patron generally orders from a menu board and pays before receiving the meal. A typical duration of stay for an eat-in patron is less than 30 minutes.

Table A 7 provides a tabular version of the Project's trip assignments. The table differs from the one illustrated in ***Figure 3-a*** and ***Figure 3-b*** above because Pass-By trips are not addressed in ***Table A 7***.

Table A 7 Summary of Primary Site-Generated Trips

		2026 TOTAL			2046 TOTAL		
Study Location	Movement	AM	PM	SAT	AM	PM	SAT
1 - Summit Blvd (SH-9) & Dillon Dam Rd / Lusher Ct	NBT	43	31	53	43	31	53
	NBR	8	6	10	8	6	10
	SBL	32	25	40			
	SBT	32	25	40	38	29	48
	SBR				26	20	32
2 - Summit Blvd (SH-9) & Lakepoint Dr	NBT	6	5	8	6	5	8
	NBR	25	19	32	29	22	36
	SBT	32	25	40	38	29	48
	WBR	45	33	56	45	33	56
3 - Summit Blvd (SH-9) & Ten Mile Dr	NBT	19	14	23	19	14	23
	NBR	6	5	8	6	5	8
	SBU	13	10	16	16	12	20
	SBL	19	15	24	22	17	28
	WBL	24	17	30	24	17	30
4 - Lakepoint Dr & North Ten Mile Dr	NBT	25	19	32	29	22	36
	SBT	24	17	30	24	17	30
	SBR	45	33	56	45	33	56
	EBL	25	19	32	29	22	36
5 - Dillon Dam Rd & North Ten Mile Dr	NBT	2	1	2	2	1	2
	NBR	38	29	48	6	5	8
	SBL	10	8	12	10	8	12
	EBT				26	20	32
	WBL	19	14	23	19	14	23
	WBR*	8	6	10			

PASS BY TRIP REDUCTIONS

Figure A 6 and ***Figure A 7*** show the available ITE pass-by trip reduction rates for Land Use Code 934 (Fast-Food Restaurant with Drive-Through Window) [5]. The 50% pass-by rate used in this TIS was based on the lesser of the Average Pass-By Rates available in the figures below.

Figure A 6 ITE 934 AM Pass-By Rates [5]

Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual*, 11th Edition

Land Use Code	934
Land Use	Fast-Food Restaurant with Drive-Through Window
Setting	General Urban/Suburban
Time Period	Weekday AM Peak Period
# Data Sites	5
Average Pass-By Rate	50%

Pass-By Characteristics for Individual Sites

GFA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips			Adj Street Peak Hour	Source
					Primary (%)	Diverted (%)	Total (%)		
1.4	Kentucky	1993	—	62	22	16	38	1407	2
3	Kentucky	1993	—	43	14	43	57	2903	2
3.3	--	1996	—	68	—	—	32	—	21
3.6	Kentucky	1993	—	32	47	21	68	437	2
4.2	Indiana	1993	—	46	23	31	54	1049	2

Figure A 7 ITE 934 PM Pass-By Rates [5]

Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual*, 11th Edition

Land Use Code	934
Land Use	Fast-Food Restaurant with Drive-Through Window
Setting	General Urban/Suburban
Time Period	Weekday PM Peak Period
# Data Sites	11
Average Pass-By Rate	55%

Pass-By Characteristics for Individual Sites

GFA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips			Adj Street Peak Hour	Source
					Primary (%)	Diverted (%)	Total (%)		
1.3	Kentucky	1993	—	68	22	10	32	2055	2
1.9	Kentucky	1993	33	67	24	9	33	2447	2
2.8	Florida	1995	47	66	—	—	34	—	30
2.9	Florida	1996	271	41	41	18	59	—	30
3	Kentucky	1993	—	31	31	38	69	4250	2
3.1	Florida	1995	28	71	—	—	29	—	30
3.1	Florida	1996	29	38	—	—	62	—	30
3.2	Florida	1996	202	40	39	21	60	—	30
3.3	—	1996	—	62	—	—	38	—	21
4.2	Indiana	1993	—	56	25	19	44	1632	2
4.3	Florida	1994	304	62	—	—	38	—	30

BACKGROUND TRAFFIC VOLUMES

This Appendix section describes the details behind the adjustment factors used to normalize traffic volumes in each horizon year, based on the base data available. Existing Conditions data, as discussed in *2 Existing and Planned Conditions*.

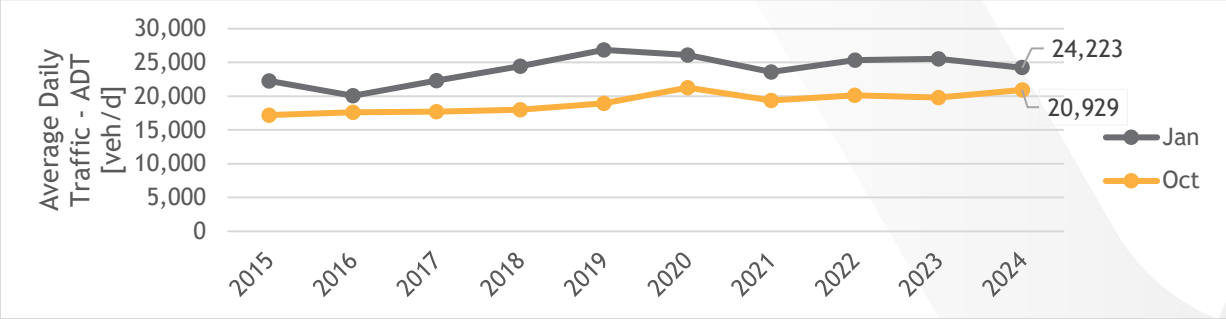
Seasonal Adjustments. As described in *2 Existing and Planned Conditions* seasonal adjustment factors were applied to AM & PM data collected for this TIS in January 2025. The majority of TMC data used for the AM and PM study periods used in this TIS was collected by others in October [3]. The seasonal adjustment factors used in this TIS address differences in travel patterns across different months/seasons of the year and align the new TMC data with the October data used in the CDOT study. The estimation of the seasonal adjustment factor is summarized in ***Table A 8***, which takes data from ***Table A 3*** above and ***Figure A 8***.

Table A 8 Estimated Traffic Volume Seasonal Adjustment Factor (Jan 2024 to Oct 2024)*

Location	Season 1: Jan 2024 [veh/day]	Season 2: Oct 2024 [veh/day]	Seasonal Adjustment Factor (Season 1 to Season 2)
CDOT Route 009C, Station 240 (on SH 9 S/O Tiger Rd, Breckenridge)	24,223*	20,929*	**0.86**

*Note: Refer to traffic volumes in ***Table A 3***.

Figure A 8 Annual Traffic Volume Totals 2015-2024 - CDOT Route 009C, Sta 240 (S/O Tiger Rd) [4]



Note: Refer to source data in ***Table A 3***.

Short-Term Future Growth Factors. The future traffic volumes for *#4 - Lakepoint Dr & North Ten Mile Dr* were not available, so the TMC data collected for this TIS between January 30 and February 1, 2025 was factored to estimate future conditions using a growth factor. The factor was estimated using future traffic projections for Summit Blvd (Hwy 009C) published online by CDOT [4] were used as a growth factor between 2025 and 2026. (The seasonal factor described above was also applied to AM and PM TMC when estimating 2046 traffic at *#4 - Lakepoint Dr & North Ten Mile Dr*).

Long-Term Future Growth Factors. Forecasted traffic volumes for *#4 - Lakepoint Dr & North Ten Mile Dr* were not available in the CODT study, so the TMC data collected for this TIS on January 30 and February 1, 2025, was factored to estimate future conditions using a growth factor.

The 2025 volumes at *#4 - Lakepoint Dr & North Ten Mile Dr* were increased uniformly by approximately 15% to estimate 2046 background traffic volumes. The growth factor applied to traffic volumes at *#4 - Lakepoint Dr & North Ten Mile Dr* was estimated using future traffic projections for Summit Blvd (Hwy 009C) published online by CDOT [4]. These volumes were assumed to be consistent with growth patterns in the adjacent area, which is already mature and is likely to experience relatively low sustained growth over the long-term. The calculated annual average growth rate based on the 2023 and forecasted 2046 Summit Blvd traffic volume data was 0.651% per year. This growth rate was used to calculate a growth factor for each location between 2025 and 2046. (The seasonal factor described above was also applied to AM and PM TMC when estimating 2046 traffic at *#4 - Lakepoint Dr & North Ten Mile Dr*).

Table A-9: Estimated Traffic Volume Growth Factors [4]

Year 1	Year 2	Growth Factor (Year 1 to Tear 2)
2025	2026	1.007
2045	2046	1.007
2025	2046	1.146

An Average Annual Growth Rate is used to estimate compound growth in traffic over any timespan.
A Growth Factor is used to adjust a traffic volume between two specific years.
A Seasonal Adjustment Factor is used to adjust a traffic volume between two different specific months of a year.

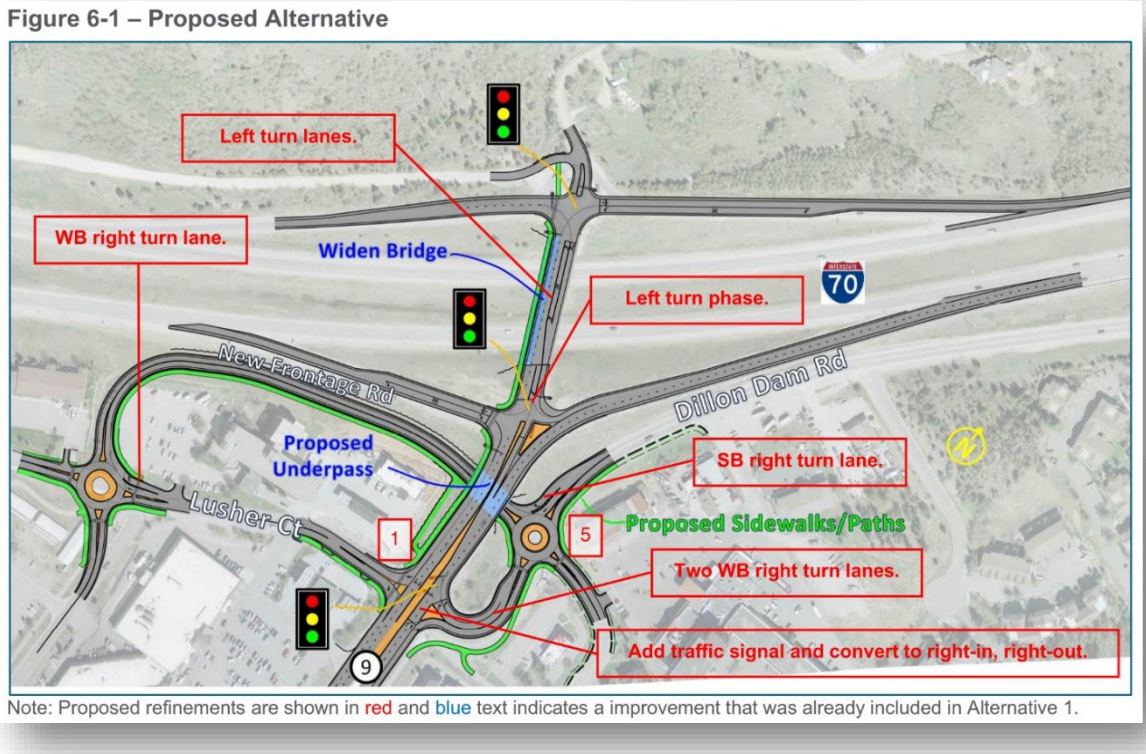
BACKGROUND ROADWAY IMPROVEMENTS (CDOT)

As discussed in *2 Existing and Planned Conditions*, CDOT Region 3 has scheduled construction of improvements illustrated in ***Figure A 9***, beginning in 2026, with completion expected in 2028. The project, referred to in this TIS as the *CDOT Interchange Project*, affects two Study Locations, *#1 - Summit Blvd (SH 9) & Dillon Dam Rd / Lusher Ct* and *#5 - Dillon Dam Rd & North Ten Mile Dr* after the Short-Term Study Horizon but before the Long-Term Study Horizon. A project website offers the following additional insights about the current project schedule:

> *Construction [of the CDOT Interchange Improvements] will begin the spring of 2026 and is anticipated to continue through the fall of 2028 with a winter shutdown between November and March in 2026 and 2027* [6].

This TIS assumes that the proposed configuration in ***Figure A 9*** was accepted as the final alternative and will be designed and constructed as shown. The design of construction documents for the CDOT Interchange Improvement was in progress and copies of the progress plans were requested, but not received before this TIS was prepared.

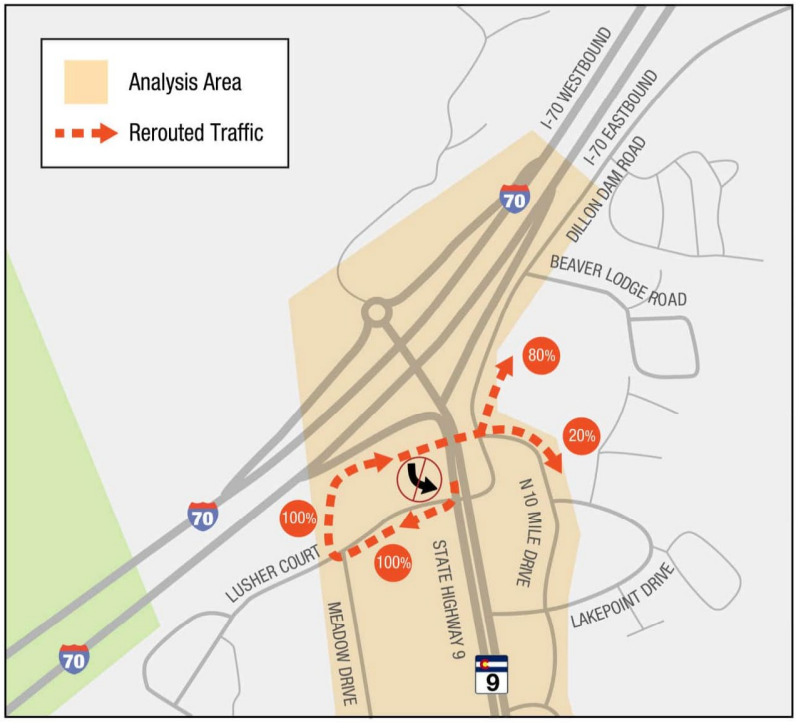
Figure A 9 Proposed 2028 Background Roadway Improvements [3]



Certain turning movements to the Project site through the intersection of *#1 - Summit Blvd (SH 9) & Dillon Dam Rd / Lusher Ct* will require taking a new route due to background improvements proposed by the CDOT Interchange Project. The necessary re-routing is shown in ***Figure A 10***. Assignments of site-generated trips in the 2046 Horizon Year presented in *3 Proposed Conditions* reflect the new route. The routes for other inbound and outbound Project trips traveling through *#1 - Summit Blvd (SH 9) & Dillon Dam Rd / Lusher Ct* will remain the same.

Figure A 10 Study Location # 1 - Proposed Southbound Left Turn Movement Re-Routing (2028) [3]

Figure 5-4 – SB Left Turns at Dillon Dam Road Rerouting



SB left turns at the DDR.

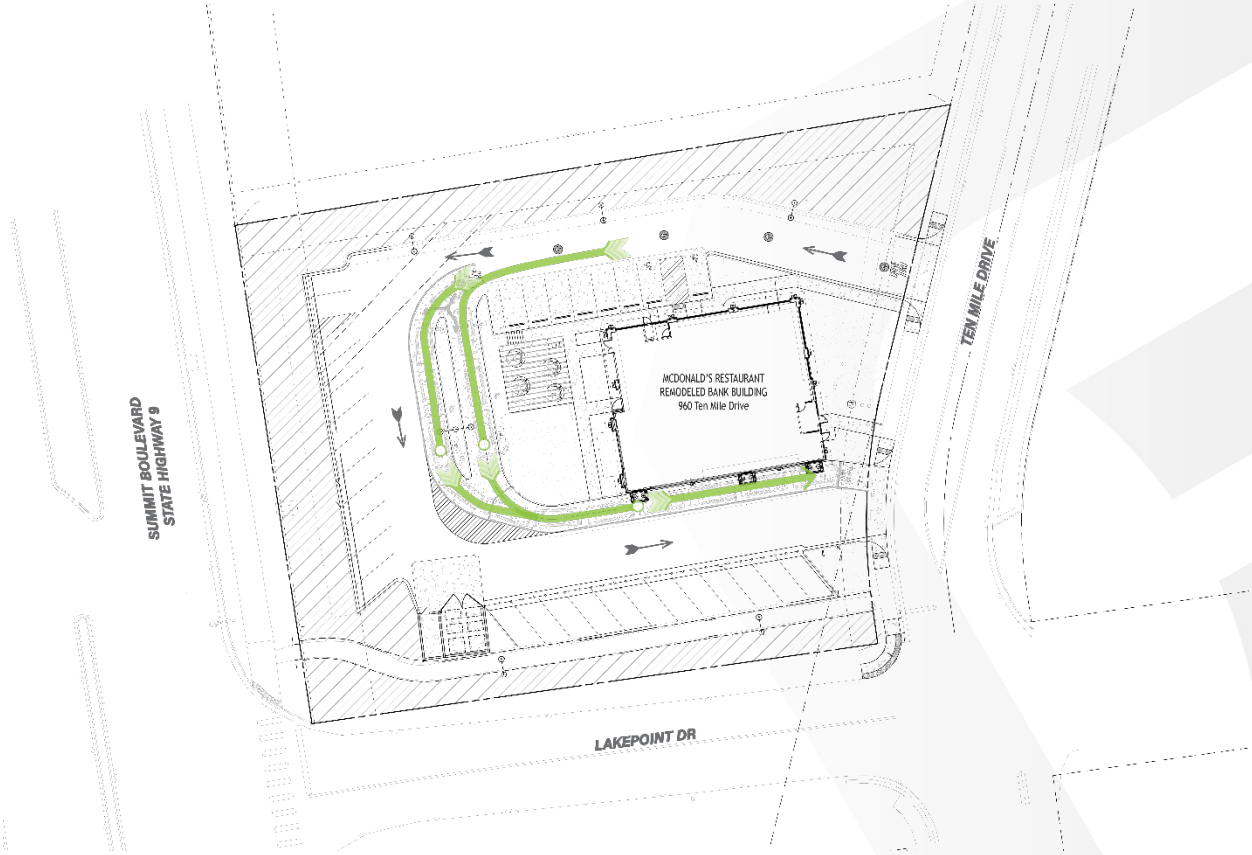
The rerouting assumptions for this movement are shown in Figure 5-4. All SB left turns are assumed to make a right turn at Lusher Court, a right turn onto the Frontage Road using the roundabout at the Meadow Drive/Lusher Court intersection, 80 percent of drivers would turn right onto DDR at the new roundabout intersection, and the remaining 20 percent of drivers would continue through the roundabout onto N. 10 Mile Road.

These rerouting assumptions apply to both design alternatives.

PROPOSED DRIVE-THROUGH QUEUE CAPACITY

As introduced in *1 Introduction* and discussed in *5 Analysis of Proposed Conditions*, the proposed drive-through provides sufficient storage to address the Agency requirements and expected demand. ***Figure A 11*** illustrates the queue storage areas referenced in *5 Analysis of Proposed Conditions*.

Figure A 11 Proposed Project Drive-Through Layout



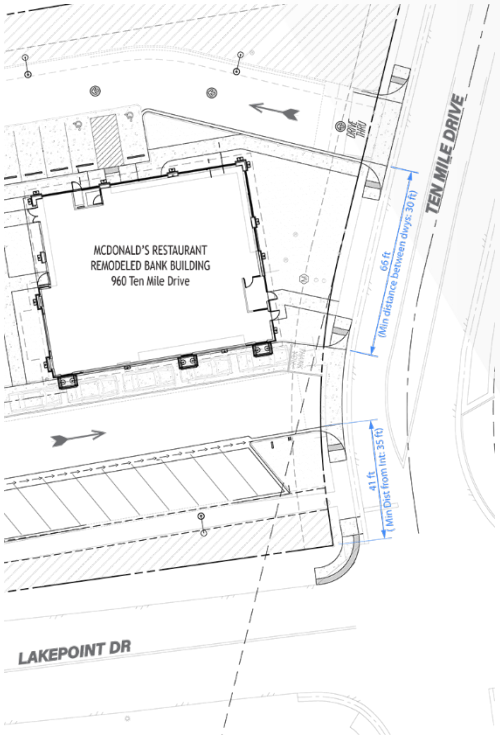
DRIVEWAY SPACING

As first noted in *1 Introduction* and discussed in *5 Analysis of Proposed Conditions*, the existing driveway spacing was an area of focus for this TIS. Below are two relevant excerpts from section IV.D of the Agency's *Minimum Street Design and Access Criteria* March 12, 2019 [9]. Additionally, ***Figure A 12*** illustrates the distance from the existing southern Project driveway to the ROW of Lake Point Dr and to the northern Project driveway. The northern driveway does not support exiting vehicles, so departure sight triangles are not relevant and were not illustrated.

Proximity to Intersection – Driveways accessing Town ROW near an intersection of a Major Arterial (Summit Blvd.) shall be a minimum of fifty (50) feet and for all other street classifications shall be a minimum of thirty-five (35) feet from the intersecting street ROW as measured from the nearest edge of the driveway. When this spacing cannot be achieved (for example, due to topography or lot size) effort shall be made to place the entrance as far from the intersecting ROW as possible.

Driveway Spacing – No two driveways connecting to a public or private street, alley or highway shall be within thirty (30) feet of one another measured from edge of driveway to edge of driveway within the Town ROW or private street ROW. When this spacing cannot be achieved (for example, due to topography or lot size) effort shall be made to place the driveways as far apart as possible and must be approved by the Public Works Director in accordance with Section VI, Waivers to These Criteria.

Figure A 12 Existing Driveway Spacing



DRIVEWAY LINES OF SIGHT

As first noted in *1 Introduction* and discussed in *5 Analysis of Proposed Conditions*, the sight lines were reviewed in this TIS. Project's proposed one-way site circulation reduces the number of movements and conflicts at the property's two accesses. For STOP-controlled approaches, AASHTO intersection sight distance Case B applies [12]. It should be noted that the calculated minimum lines of sight needed for each maneuver are greatly exaggerated for this situation due to the variable speeds of major street traffic caused by the nearby STOP controls at the intersection of Lake Point Dr (southbound motorists decelerating to a stop condition and northbound motorists accelerating from a stop). Nonetheless, the full sight triangles were constructed based on a passenger car and 30 MPH design speed along southbound North Ten Mile Dr on grades less than 3.0%. The triangles are illustrated on the Project site plan in ***Figure A 13***. A sight distance of 290 feet was used in each case, based on Case B2 (the more conservative approach). Each sight triangle includes two overlapping sight triangles that show setbacks at approximately 10 and 15 feet behind the traveled way.

The existing line of sight appears to exceed the minimum sight distance based on field observations. While the line of sight was not measured directly in the field, a video recording was taken from a motorist's perspective, waiting at a typical location in a typical sedan, and watching for an opportunity to turn left. Review of the video indicates more than nine (9) seconds of time since the oncoming southbound vehicle first appears until the vehicle crosses the path of the waiting motorist. This time is referred to as an observed gap, and typically, 6.5 seconds of observed gap time is typically the minimum acceptable observed gap for a motorist to make a decision to turn.

Additionally, ***Figure A 14*** and ***Figure A 15*** present images captured during field observations on Saturday, February 1, 2025 before 5:00 PM. The images show the sight lines from a motorist's perspective.

Figure A 13 Proposed Sight Triangles

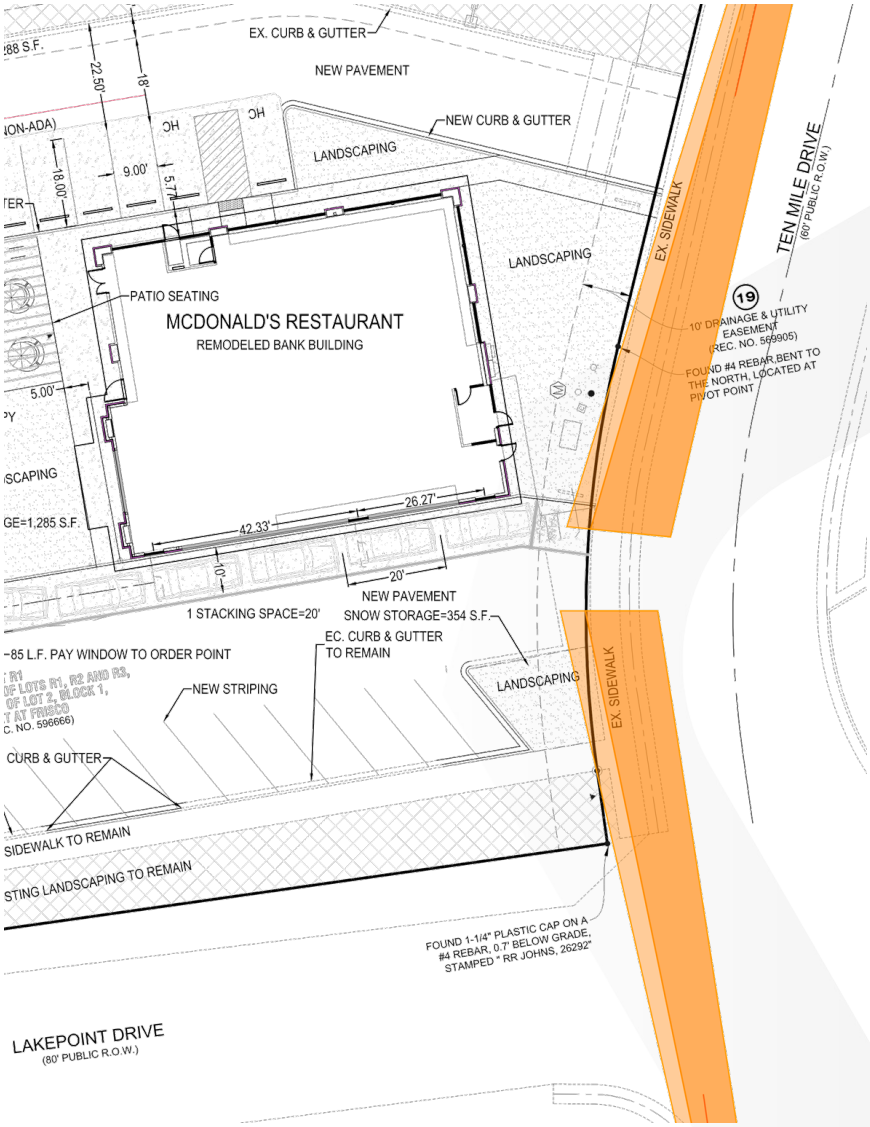


Figure A 14 Departure Sight Lines– Motorist's Perspective Looking Left/North



Figure A 15 Departure Sight Lines – Motorist's Perspective Looking Right/South to Lake Point Dr



CDOT ACCESS PERMIT (DRAFT)

As first noted in *1 Introduction* and discussed in *5 Analysis of Proposed Conditions*, the Project is adjacent to a state highway and requires a state highway access permit.

The following pages include a **draft** CDOT access permit for the Project. The trip generation estimates included in the access permit are conservatively higher due to the following:

1. ITE Trip Generation Web App output limitation (permit attachment), and
2. To provide a conservative trip estimate

Refer to ***Table 3-A*** above for more precise estimates used in this TIS and ***Table A-10*** for a more precise estimate of the trips generated by the former bank.

The attached DRAFT CDOT Access Permit application has
*⚠ **Not Been Submitted** to any agency by the TIS author, ⚠*
as of the date of this TIS Revision.

Table A-10 Trip Generation Summary – Former Drive-Through Bank Use.

ITE Code	Qty	Period	Rate	In [veh/h]	Out [veh/h]	Total [veh/h]
912 [1]	4.364 KSF [2]	AM Trips [veh/h]	9.95	25	18	**43**
		PM Trips [veh/h]	21.01	46	46	**92**
		Sat Trips [veh/h]	26.35	59	56	**115**
		Daily [veh/d]	100.35			**438**

Notes:

1. ITE Code 912: Drive-In Bank
   - AM (Oct): 58% In, 42% Out
   - PM (Oct): 50% In, 50% Out
   - Sat (Jan): 51% In, 49% Out
2. KSF = 1,000 Sq. Ft. GFA

COLORADO DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ACCESS PERMIT APPLICATION

Issuing authority application acceptance date:

Instructions:
- Contact the Colorado Department of Transportation (CDOT) or your local government to determine your issuing authority.
- Contact the issuing authority to determine what plans and other documents are required to be submitted with your application.
- Complete this form (some questions may not apply to you) and attach all necessary documents and Submit it to the issuing authority.
- Submit an application for each access affected.
- If you have any questions, contact the issuing authority.
- For additional information, see CDOT's Access Management website at http://www.codot.gov/business/permits/accesspermits.

Please print or type

**Indicates required field*

1) Property Owner (Permittee)*		2) Applicant or Agent for Permittee (if different from property owner)	
Town of Frisco		McDonald's Corporation c/o Robert Palmer	
Street Address*		Mailing Address	
Frisco Town Hall, 1 Main Street		2595 Ponderosa Rd	
City, State & Zip*	Phone #	City, State & Zip	Phone #
Frisco, CO 80443	(970) 668-5276	Franktown, CO 80116	(720) 384-7661
E-mail Address*		E-mail Address (if available)	
		rpalmer@strategicls.net	

3) Address of property to be served by permit*
960 N 10 Mile Dr, Frisco, CO 80443

4) Legal description of property: (If within jurisdictional limits of Municipality, City and/or County, which one?

county	subdivision	block	lot	section	township	range
Summit	Lakepoint	1	2			

5) What State Highway are you requesting access from?*
009C

6) What side of the highway?*
☐ N ☐ S ☒ E ☐ W

7) How many feet is the proposed access from the nearest milepost (or cross street if mile post unknown)?*
475 feet (☒ N ☐ S ☐ E ☐ W) from: 10 Mile Road (Milepost 96-97)

8) What is the approximate date you intend to begin construction?
01/01/2026

9) Check here if you are requesting a:*
☐ New Access ☐ Temporary Access (duration anticipated: _____) ☐ Improvement to Existing Access
☒ Change in Access Use ☐ Removal of Access ☐ Relocation of an Existing Access (provide detail)

10) Provide existing property use
Vacant (former Bank with Drive Thru)

11) Do you have knowledge of any State Highway access permits serving this property, or adjacent properties in which you have a property interest?*
☒ No ☐ Yes, if yes – what are the permit number(s) and provide copies: and/or, permit date:

12) Does the property owner own or have any interests in any adjacent property?*
☒ No ☐ Yes, if yes – please describe:

13) Are there other existing or dedicated public streets, roads, highways or access easements bordering or within the property?*
☐ No ☒ Yes, if yes – list them on your plans and indicate the proposed and existing access points.

14) If you are requesting agriculture field access – how many acres will the access serve?
n/a

15) If you are requesting commercial or industrial access, please indicate the types and number of businesses and provide the floor area square footage of each.

Business/Land Use	Square Footage	Business/Land Use	Square Footage
Fast Food Restaurant (with Drive Thru)	4800		

16) If you are requesting residential development access, what is the type (single family, apartment, townhouse) and number of units?

Type	Number of Units	Type	Number of Units
n/a	n/a		

17) Provide the following vehicle count estimates for vehicles that will use the access. Leaving the property then returning is two counts.*

Indicate if your counts are	# of passenger cars and light trucks at peak hour volumes	# of multi-unit trucks at peak hour volumes
☐ peak hour volumes or ☒ average daily volumes.	2,244	0
# of single unit vehicles in excess of 30 ft.	**# of farm vehicles (field equipment)**	**Total count of all vehicles**
9	0	2253

18) Check with the issuing authority to determine which of the following documents are required to complete the review of your application.

a) Property map indicating other access, bordering roads and streets.
b) Highway and driveway plan profile.
c) Drainage plan showing impact to the highway right-of-way.
d) Map and letters detailing utility locations before and after development in and along the right-of-way.
e) Subdivision, zoning, or development plan.
f) Proposed access design.
g) Parcel and ownership maps including easements.
h) Traffic studies.
i) Proof of ownership.

1- It is the applicant's responsibility to contact appropriate agencies and obtain all environmental clearances that apply to their activities. Such clearances may include Corps of Engineers 404 Permits or Colorado Discharge Permit System permits, or ecological, archeological, historical or cultural resource clearances. The COOT Environmental Clearances Information Summary presents contact information for agencies administering certain clearances, information about prohibited discharges, and may be obtained from Regional COOT Utility/Special Use Permit offices or accessed via the COOT Planning/Construction-Environmental-Guidance webpage: https://www.codot.gov/programs/environmental/resources/guidance-standards/environmental-clearances-info-summary-august-2017/view.

2- All workers within within the State Highway right of way shall comply with their employer's safety and health policies/ procedures, and all applicable U.S. Occupational Safety and Health Administration (OSHA) regulations -including, but not limited to the applicable sections of 29 CFR Part 1910 -Occupational Safety and Health Standards and 29 CFR Part 1926

- Safety and Health Regulations for Construction.

Personal protective equipment (e.g. head protection, footwear, high visibility apparel, safety glasses, hearing protection, respirators, gloves, etc.) shall be worn as appropriate for the work being performed, and as specified in regulation. At a minimum, all workers in the State Highway right of way, except when in their vehicles, shall wear the following personal protective equipment: High visibility apparel as specified in the Traffic Control provisions of the documentation accompanying the Notice to Proceed related to this permit (at a minimum, ANSI/ISEA 107-1999, class 2); head protection that complies with the ANSI 289.1-1997 standard; and at all construction sites or whenever there is danger of injury to feet, workers shall comply with OSHA's PPE requirements for foot protection per 29 CFR 1910.136, 1926.95, and 1926.96. If required, such footwear shall meet the requirements of ANSI 241-1999.

Where any of the above-referenced ANSI standards have been revised, the most recent version of the standard shall apply.

3- The Permittee is responsible for complying with the Revised Guidelines that have been adopted by the Access Board under the American Disabilities Act (ADA). These guidelines define traversable slope requirements and prescribe the use of a defined pattern of truncated domes as detectable warnings at street crossings. The new Standards Plans and can be found on the Design and Construction Project Support web page at: https://www.codot.gov/business/civilrights/ada/resources-engineers.

If an access permit is issued to you, it will state the terms and conditions for its use. Any changes in the use of the permitted access not consistent with the terms and conditions listed on the permit may be considered a violation of the permit.

The applicant declares under penalty of perjury in the second degree, and any other applicable state or federal laws, that all information provided on this form and submitted attachments are to the best of their knowledge true and complete.

I understand receipt of an access permit does not constitute permission to start access construction work.

Applicant or Agent for Permittee Signature	Print Name	Date

If the applicant is not the owner of the property, we require this application also to be signed by the property owner or their legally authorized representative (or other acceptable written evidence). This signature shall constitute agreement with this application by all owners-of-interest unless stated in writing. If a permit is issued, the property owner, in most cases, will be listed as the permittee.

Property Owner Signature	Print Name	Date

INSTRUCTIONS FOR COMPLETING APPLICATION FOR ACCESS PERMIT
(CDOT FORM NO. 137)
December 2018

To construct, relocate, close, or modify access(es) to a State Highway or when there are changes in use of such access point(s), an application for access permit must be submitted to the Colorado Department of Transportation (CDOT) or the local jurisdiction serving as the issuing authority for State Highway Access Permits. Contact the CDOT Regional Access Unit in which the subject property is located to determine where the application must be submitted. The following link will help you determine which CDOT Region office to contact:

https://www.codot.gov/business/permits/accesspermits/regional-offices.html

All applications are processed and access permits are issued in accordance to the requirements and procedures found in the most current version of the State Highway Access Code (Access Code). Code and the application form are also available from CDOT's web site at:

https://www.codot.gov/business/permits/accesspermits

Please complete all information requested accurately. Access permits granted based on applications found to contain false information may be revoked. An incomplete application will not be accepted. If additional information, plans and documents are required, attach them to the application. Keep a copy of your submittal for your records. Please note that only the original signed copy of the application will be accepted. Do not send or enclose any permit fee at this time. A permit fee will be collected if an access permit is issued. The following is a brief description of the information to be provided on each enumerated space on the application form (CDOT Form 137, 2010).

1. Property Owner (Permittee): Please provide the full name, mailing address and telephone number and the E-mail address (if available) of the legal property owner (owner of the surface rights). Please provide a telephone number where the Permittee can be reached during business hours (8:00 a.m. to 5:00 p.m.). Having a contract on the property is not a sufficient legal right to that property for purposes of this application. If the access is to be on or across an access easement, then a copy of the easement MUST accompany this application. If federal land is involved, provide the name of the relevant federal agency AND attach copy of federal authorization for property use.

2. Agent for permittee: If the applicant (person completing this application) is different than the property owner (Permittee), provide entity name (if applicable), the full name of the person serving as the Agent, mailing address, telephone number, and the E-mail address (if available). Please provide a telephone number where the Agent can be reached during business hours (8:00 a.m. to 5:00 p.m.). Joint applications such as owner/lessee may be submitted. Corporations must be licensed to do business in Colorado: All corporations serving as, or providing, an Agent as the applicant must be licensed to do business in Colorado.

3. Address of Property to be Served: Provide if property to be served has an official street address. If the access is a public road, note the name (or future name) of the road.

4. Legal Description of Property: Fill in this item to the extent it applies. This information is available at your local County Courthouse, or on your ownership deed(s). A copy of the deed may be required as part of this application in some situations. To determine applicability, check with the CDOT's Regional Access Manager or issuing authority staff.

5. State Highway: Provide the State Highway number from which the access is requested.

6. Highway Side: Mark the appropriate box to indicate what side of the highway the requested access is located.

7. Access Mile Point: Without complete information, we may not be able to locate the proposed access. To obtain the distance in feet, drive the length between the mile point and the proposed access, rounding the distance on the odometer to the nearest tenth of a mile; multiply the distance by 5,280 feet to obtain the number of feet from the mile point. Then enter the direction (i.e. north, south, east, west) from the mile point to the proposed access. Finally, enter the mile point number. It is helpful in rural or undeveloped areas if some flagging is tied to the right-of-way fence at the desired location of the access. If the mile post is unknown, note the distance in feet (using the same procedures noted above) from that cross street or road closest to the proposed access.

8. Access Construction Date: Fill in the date on which construction of the access is planned to begin.

9. Access Request: Mark items that apply. More than one item may be checked.

10. Existing property use: Describe how the property is currently being used. For example, common uses are Single Family Residential, Commercial or Agricultural.

11. Existing Access: Does the property have ***any other legal alternatives to reach a public road*** other than the access requested in this application? Note the access permit number(s) for any existing state highway access point(s) along with their issue date(s). If there are no existing access point(s), mark the "no" box.

12. Adjacent Property: Please mark the appropriate box. If the "yes" box is marked, provide a brief description of the property (location of the property in relation to the property for which this access application is being made).

13. Abutting Streets: If there are any other existing or proposed public roads or easements abutting the property, they should be shown on a map or plan attached to this application.

14. Agricultural Acres: Provide number of acres **to be served.**

15. Access Use: List the land uses and square footage of the site as it will be when it is fully developed. The planned land uses as they will be when the site is fully developed are used to project the amount of traffic that the site will generate, peak hour traffic levels and the type of vehicles that can be expected as a result of the planned land uses. There may be exceptional circumstances that would allow phased installation of access requirements. This is at the discretion of the CDOT Regional Access Unit or issuing authority staff.

16. Estimated Traffic Count: Provide a reasonable estimate of the traffic volume expected to use the access. Note the type of vehicles that will use the access along with the volume (number of vehicles in and out at either the peak hour or average daily rates) for each type of vehicle. A vehicle leaving the property and then returning counts as two trips. If 40 customers are expected to visit the business daily, there would be 80 trips in addition to the trips made by all employees and other visitors (such as delivery and trash removal vehicles). If the PDF on-line version of this application is being used, the fields for each type of vehicle will automatically be added together to populate the last field on the page.

17. Documents and Plans: The CDOT Regional Access Manager or issuing authority staff will determine which of these items must be provided to make the application complete. Incomplete applications will not be accepted. If an incomplete application is received via U.S. mail or through means other than in the hand of the Access Manager or issuing authority staff, it will not be processed. ***It is the responsibility of the applicant to verify with the CDOT Regional Access Manager or issuing authority staff whether the application is complete at the time of submission.***

Signature: Generally, if the applicant is not the property owner, then the property owner or a legally authorized representative must sign the application. With narrow exceptions, proof of the property owner's consent is required to be submitted with the application (proof may be a power of attorney or a similar consent instrument). The CDOT Regional Access Manager or issuing authority staff will determine if the exception provided in the Access Code (2.3 (3) (b)) is applicable.

If CDOT is the issuing authority for this application, direct your questions to the CDOT Regional Access Manager or the issuing authority staff serving the subject property.

https://www.codot.gov/business/permits/accesspermits/regional-offices.html

If the application is accepted, it will be reviewed by the CDOT Regional Access Manager or the issuing authority staff. If an Access Permit is issued, be sure to read all of the attached Terms and Conditions before signing and returning the Access Permit. The Terms and Conditions may require that additional information be provided prior to issuance of the Notice to Proceed.

The CDOT Regional Access Manager (or issuing authority staff) MUST be contacted prior to commencing work on any Access Permit project. ***A Notice to Proceed that authorizes the Permittee to begin access related construction MUST be issued prior to working on the access in the State Highway right-of-way.*** The Notice to Proceed may also have Terms and Conditions that must be fulfilled before work may begin on the permitted access.

Fast-Food Restaurant with Drive-Through Window
(934)

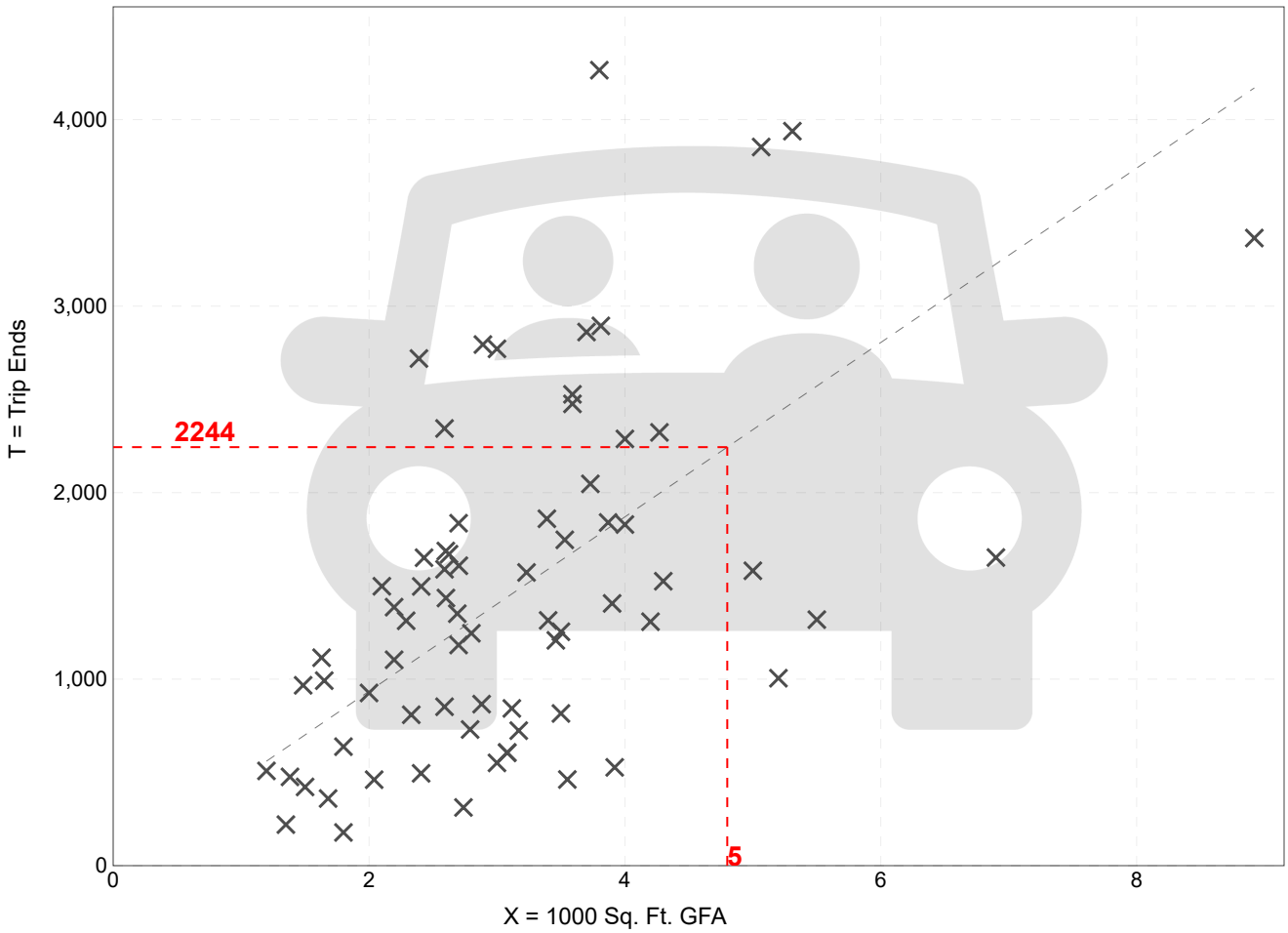
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 71
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
467.48	98.89 - 1137.66	238.62

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= **

Fast-Food Restaurant with Drive-Through Window
(934)

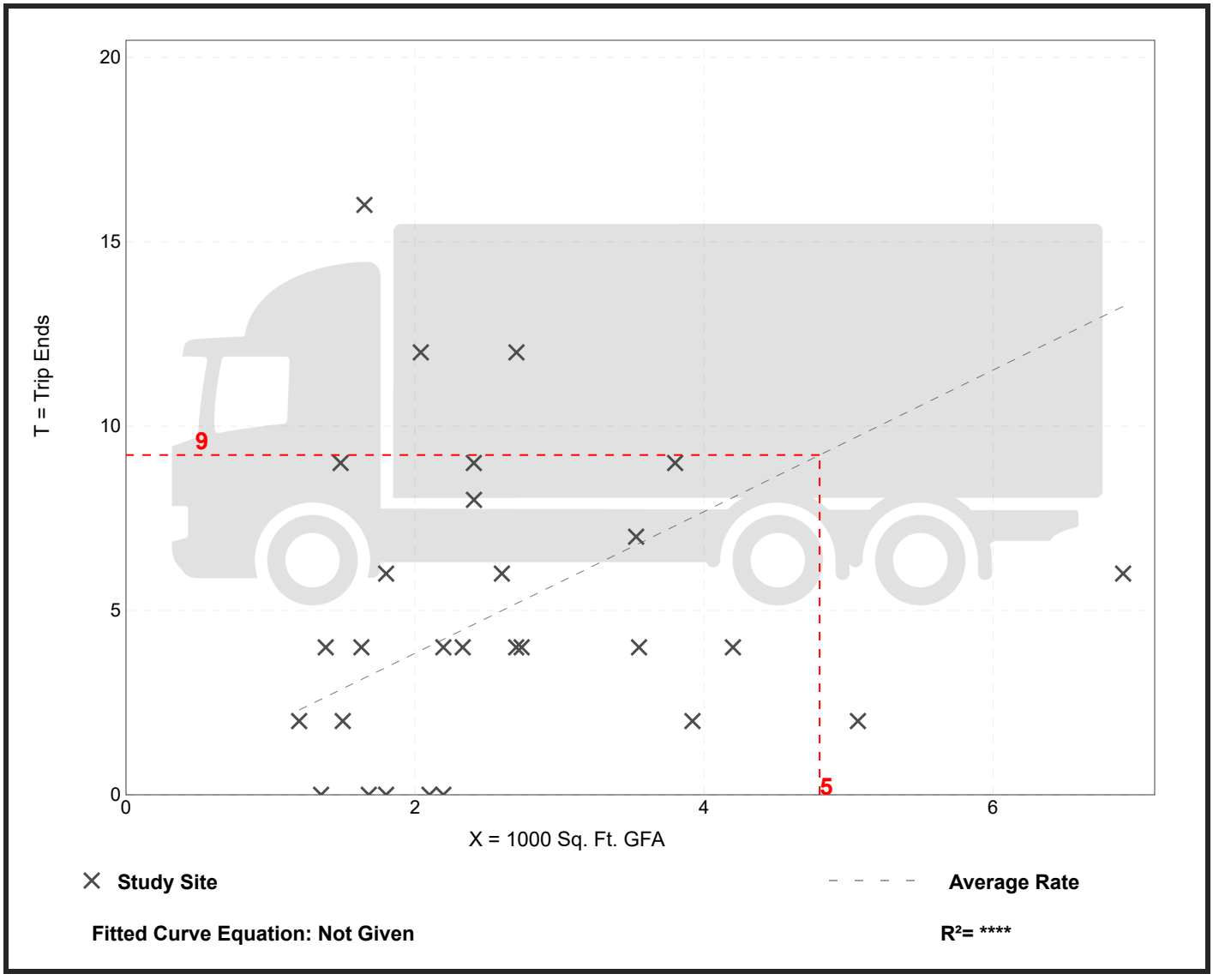
Truck Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 28
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 50% entering, 50% exiting

Truck Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.92	0.00 - 9.70	1.93

Data Plot and Equation



Trip Gen Manual, 11th Edition • Institute of Transportation Engineers

Drive-in Bank
(912)

FORMER USE:
960 NORTH TEN MILE RD,
FRISCO, CO

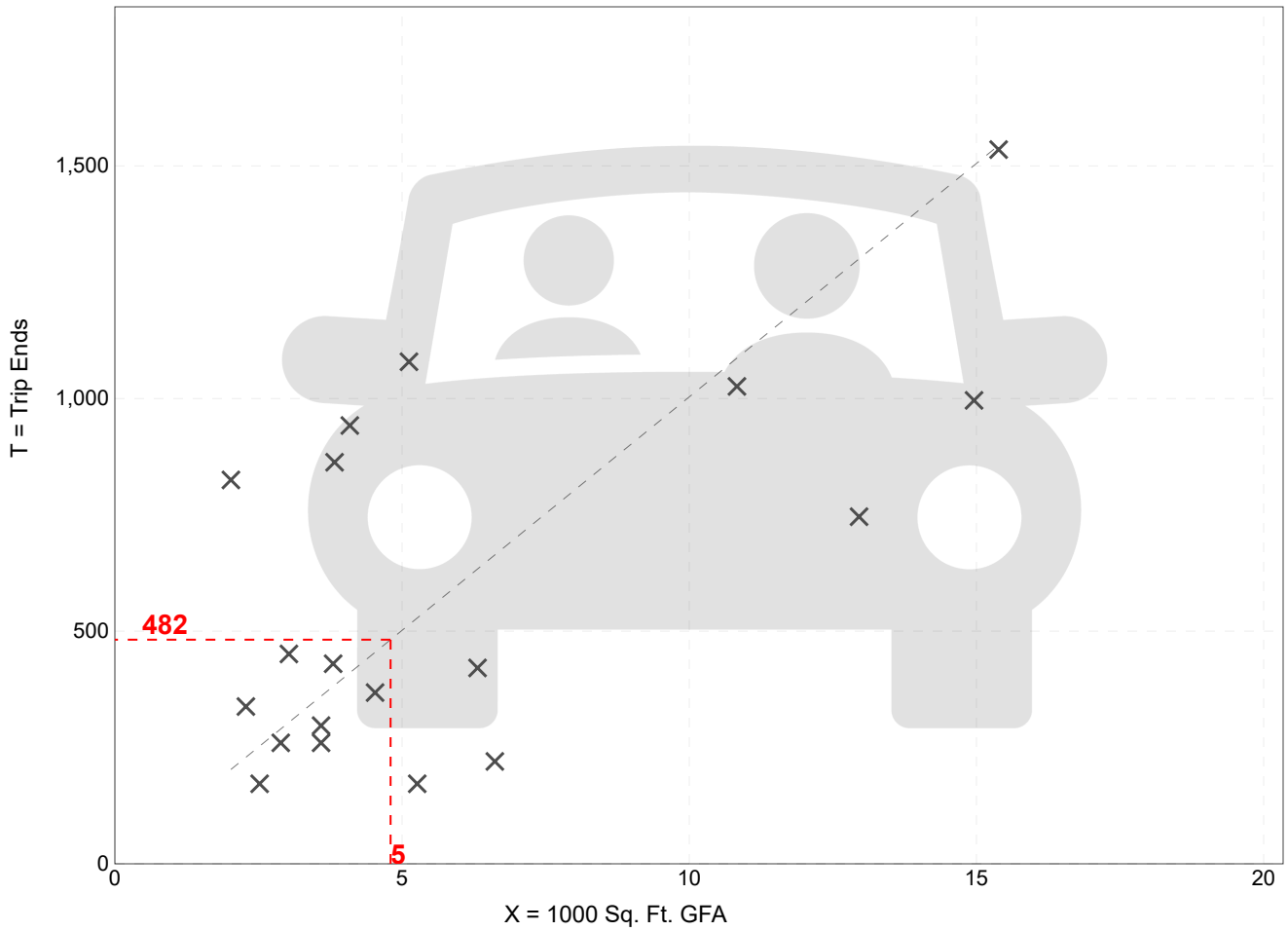
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 19
Avg. 1000 Sq. Ft. GFA: 6
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
100.35	32.67 - 408.42	68.62

Data Plot and Equation



Fitted Curve Equation: Not Given

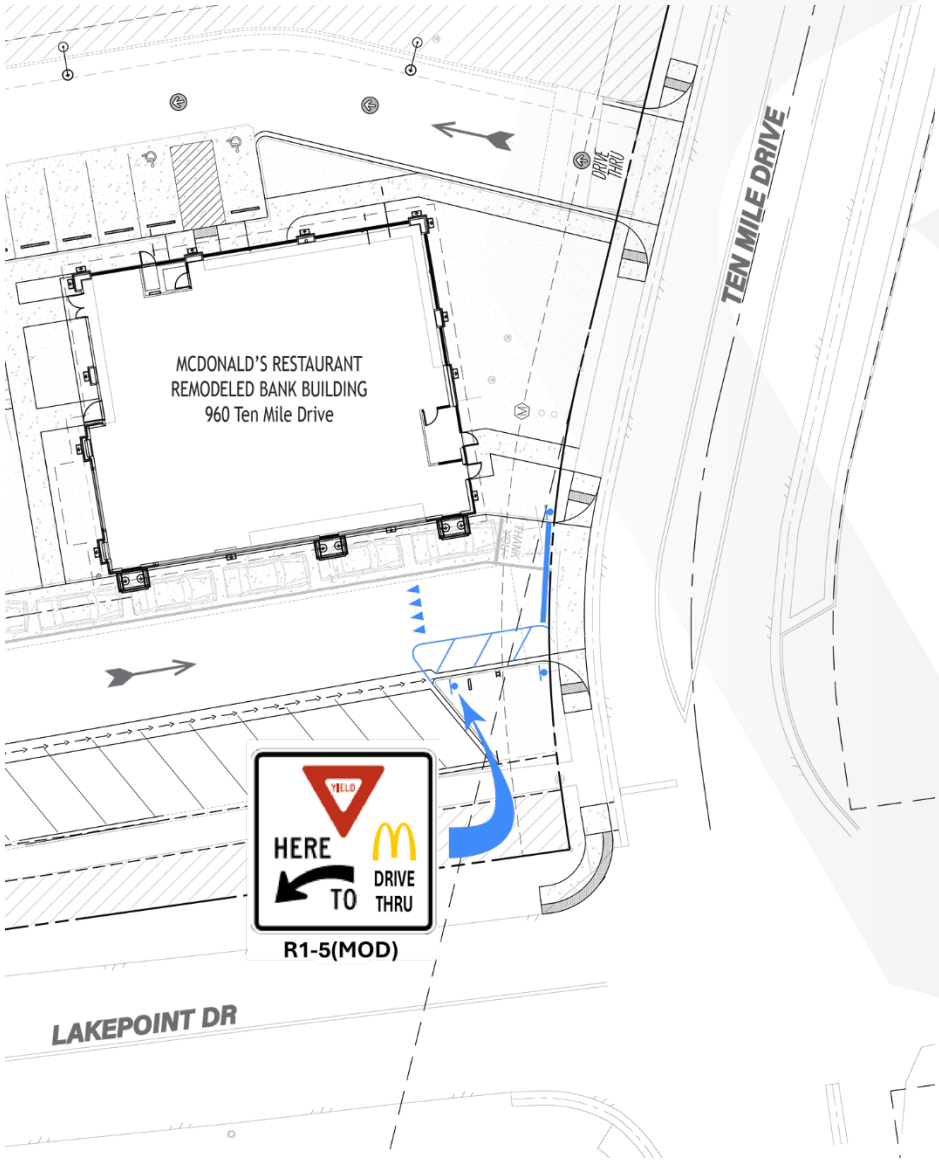
R^2= **

EXIT LANE - ALTERNATIVE CONFIGURATION

If the operations at the Project's exit, outlined in *5 Analysis of Proposed Conditions*, require attention, or if the Project chooses to implement this from the outset, an alternative sign and marking layout is shown in ***Figure A 16***.

This alternate layout directs exiting traffic (other than drive-through vehicles) into a single lane and introduces a YIELD condition using a modified MUTCD-compliant sign that identifies right-of-way. This configuration is designed to minimize effects on drive-through operations while supporting safe and efficient traffic flow for customers navigating the exit.

Figure A 16 Alternate Site Exit Signing and Marking Configuration (Optional)



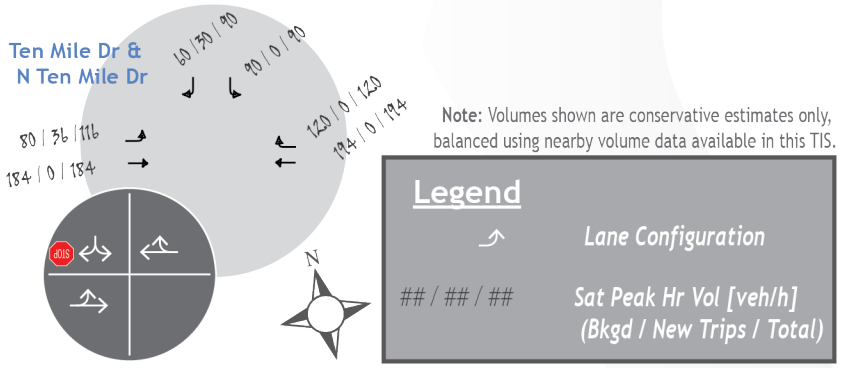
OPERATIONAL REVIEW OF TEN MILE DR & N TEN MILE DR INTERSECTION

As described in *5 Analysis of Proposed Conditions*, a supplemental review was conducted for the T-intersection of Ten Mile Dr & N Ten Mile Dr, which is not a Study Location. This review was prompted by the expected distribution of new Project-generated trips through the intersection.

Operations were assessed using Synchro 12 and the HCM 7th Edition methodology for the 2046 Total traffic volume scenario, representing an expected worst-case condition. Traffic volumes were estimated based on adjacent study intersections and adjusted to reflect site access.

The intersection is expected to operate with acceptable delays, and site trips—based on the assumed distribution—are not expected to materially impact operations. Supporting estimated volume data and lane configuration is included in ***Figure A 17*** and operational analysis is included below. Operational analysis was performed for this intersection using Cubic Transportation Systems Synchro (version 12.2 build 5, revision 31).

Figure A 17 Estimated 2046 Total Traffic Volumes at 10 Mile Dr & N 10 Mile Dr



TRAFFIC ANALYSIS REPORTS

PTV Vistro model analysis reports are collated for each of the evaluated scenarios.

Table A 11 indicates which volume adjustments were applied in this TIS in one or more scenarios. For more specifics, please refer to the Traffic Analysis Reports.

Table A 11 Project Notes - Vistro Traffic Volume Input

Vistro Volume Param	Project Input Notes	#1 - Summit Blvd (SH 9) & Dillon Dam Rd / Lusher Ct	#2 - Summit Blvd (SH 9) & Lakepoint Dr	#3 - Summit Blvd (SH 9) & Ten Mile Dr (South)	#4 - Lakepoint Dr & North Ten Mile Dr	#5 - Dillon Dam Rd & North Ten Mile Dr
Base Volume Input	*Used for available TMC data.*	•	•	•	•	•
Base Volume Adj factor	*Used as a seasonal factor at Study Location 4 in AM & PM Study Periods.*				•	
Heavy Vehicles %	*2022 PM HV% available from other TIS TMC data at #1 - Summit Blvd (SH 9) & Dillon Dam Rd / Lusher Ct and #3 - Summit Blvd (SH 9) & Ten Mile Dr (South) [13]*. HV%= 2.0% used elsewhere.*	•		•		
Growth Factor	*Used to factor available volume data to study years.*	•	•	•	•	•
In-Process Volume	*Not used.*					
Diverted Trips	*Not used.*					
Pass-by Trips	*Used to apply pass-by trips as noted in the body of the report.*	•	•	•		
Existing Site Adj Volume	*Not used.*					
Other Volume	*Used to re-distribute background volumes due to Future Background Conditions.*					•
Right-Turn on Red Volume	*Used % RTOR method, at #1 - Summit Blvd (SH 9) & Dillon Dam Rd / Lusher Ct and #3 - Summit Blvd (SH 9) & Ten Mile Dr (South), based on observations of existing behavior at #3 - Summit Blvd (SH 9) & Ten Mile Dr (South).*	•		•		
Peak Hour Factor	*Data not available, so defaults used (0.92).*	•	•	•	•	•
Other Adj Factor	*Used to reduce analysis volumes at channelized right-turn movements with an add lane (as per HCM).*	• (2046)		•		

* **Note:** CDOT OTIS website was out of service when SH-9 (Hwy 009C) HV% was needed for this TIS.

Table A 12 provides definitions of the user input as well as calculated fields found in the Vistro Traffic Analysis Reports.

Table A 12 Vistro Traffic Volume Input Parameters

Vistro Volume Param	Description (Vistro User Manual)	Unit	Default Value	User-Input or Calc Only?
Base Volume Input	Summary of Base Volume Input, description below.	veh/h	0	User (PTE)
Base Volume Adj factor	User definable adjustment factor to apply if desired to base volume input. An example application would be a seasonal adjustment factor. Default = 1.0000. Range = 0 - 99.9000	-	1.00	User (PTE)
Final Base Volume	Base volume representing the base condition. *= Base Volume Input * Base Volume Adjustment Factor*	veh/h	-	Calc
Heavy Vehicles %	Percent of heavy vehicles for each turn movement. Default = 2. Range = 0 – 100	%	2.00	User (PTE)
Growth Rate	Growth rate to be applied as multiplicative factor to adjust volume to future year analysis. Default = 1.000	-	1.00	User (PTE)
In-Process Volume	User definable volume input typically used to account for trips already approved by a nearby development that is not yet in place.	veh/h	0	User (PTE)
Future Background Volume	Future volumes before any trips are added for the new development. *= Final Base Volume * Growth Rate + In-Process Volume*	veh/h	-	Calc
Site-Generated Trips	Trips calculated from the new development(s) based on the trip generation, distribution, and assignment paths. Making changes to any component of the trip generation process will result in a change to this value.	veh/h	-	Calc
Diverted Trips	Trips attracted from the traffic on roadways within the vicinity of the development site but require a diversion from that roadway to another roadway to gain access to the site. Diverted trips add traffic to the roadways adjacent to a site. Value may be negative or positive.	veh/h	0	User (PTE)
Pass-by Trips	Trips made as intermediate stops to the development on the way from an origin to a primary trip destination. This field is used in tandem with the Trip Generation for a zone. Primary trips (non-pass-by) can be generated and assigned to the study network, while pass-by adjustments at project driveways can be entered in these fields. Value may be negative or positive.	veh/h	0	User (PTE)
Existing Site Adj Volume	User defined volume adjustment to account for trips either added or removed due to changes in the land use to accommodate the new development. For example, an existing apartment complex is removed to allow construction of a new retail shop. In this case, trips from the apartment complex have been accounted for in the base volume and now need to be removed. This parameter may be positive or negative.	veh/h	0	User (PTE)
Net New Trips	Total new trips added to the system after accounting for all adjustments. *= Site Generated + Diverted + Pass-by + Existing Site Adjustment Volume*	veh/h	-	Calc
Other Volume	User definable volume not accounted for by other volume parameters	veh/h	0.00	User (PTE)
Future Total Volume	Total future volume after all site generated trips and volume adjustments have been made. *= Future Background Volume + Net New Trips + other volume*	veh/h	-	Calc
Right-Turn on Red Volume	Volume adjustment to account for vehicles per hour that turn right on a red signal. Value is positive. If the Right Turn on Red Method is set to Absolute, a right-turn on red volume value can be entered. If the Right Turn on Red Method is set to Percentage, a right-turn on red percentage value can entered. This value will calculate right turn on red volume based on a percentage of the movement's Future Total Volume. Global Settings or Multi Change can be used to set a default Right Turn on Red Percentage.	veh/h or %	0.00	User (PTE)
Total Hourly Volume	Total hourly future volume after accounting for right-turn on red.	veh/h	-	Calc
Peak Hour Factor	PHF based on the Highway Capacity Manual used to adjust the hourly volume to reflect the 15-minute peak flow rate. Default = 1.0000. Range = 0.25 – 1.0000	-	0.92	User (PTE)
Other Adj Factor	User-defined adjustment factor to account for factors not accounted for by any other parameter. Default = 1.0000. Range = *0.0* – 99.9000	-	1.00	User (PTE)
Total 15-Minute Volume	Estimated total vehicles during the highest 15-minute period of the peak hour. *= (Total Hourly Volume * 0.25 / PHF) * Other Adjustment Factor*	veh	-	Calc
Total Analysis Volume	Calculated total analysis volume, including all volume adjustments and factors defined. *= Total 15-Minute Volume * 4*	veh/h	-	Calc

Table A 13 provides headings of the following PTV Vistro reports which can be helpful while navigating the Traffic Analysis Reports.

Table A 13 Vistro Traffic Analysis Reports – Heading #s Numbers by Analysis Scenario

Scenario	2025	2026	2046
Existing			
AM	1		
PM	4		
Sat	7		
Background			
AM		10	2
PM		11	5
Sat		12	8
Total Traffic			
AM		13	3
PM		14	6
Sat		15	9

Intersection Level Of Service Report

Intersection 1: Summit Blvd (SH-9) & Dillon Dam Rd / Lusher Ct

Control Type:	Signalized	Delay (sec / veh):	45.9
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.476

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	2	0	0
Entry Pocket Length [ft]	165.00	100.00	100.00	180.00	100.00	100.00	175.00	100.00	175.00	240.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			20.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Base Volume Input [veh/h]	28	896	142	103	743	354	274	64	34	178	28	109
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	1.00	2.00	4.00	3.00	5.00	2.00	2.00	0.00	2.00	7.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0070	1.0000	1.0070	1.0070	1.0070	1.0070	1.0000	1.0000	1.0000	1.0000	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	14	0	0	36	0	0	3	0	0	11
Total Hourly Volume [veh/h]	28	902	128	104	748	320	276	64	31	178	28	99
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	245	35	28	203	87	75	17	8	48	8	27
Total Analysis Volume [veh/h]	30	980	139	113	813	348	300	70	34	193	30	108
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	91.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Flashing Yellow Arrow	No			No								
Signal Group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Maximum Green [s]	7	19	0	7	19	0	8	16	0	7	15	0
Amber [s]	3.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	12.0	53.0	0.0	12.0	53.0	0.0	12.0	40.0	0.0	15.0	43.0	0.0
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	5	0	7	5	0	7	5	0	7	5	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	Yes		No	Yes		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C
C, Calculated Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	4.00	0.00	4.00	4.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	84.9	73.0	73.0	84.9	75.4	75.4	7.0	10.6	8.5	12.1
g / C, Green / Cycle	0.71	0.61	0.61	0.71	0.63	0.63	0.06	0.09	0.07	0.10
(v / s)_i Volume / Saturation Flow Rate	0.05	0.28	0.09	0.17	0.23	0.22	0.09	0.06	0.05	0.08
s, saturation flow rate [veh/h]	607	3503	1602	652	3503	1577	3375	1768	3514	1643
c, Capacity [veh/h]	460	2130	974	469	2200	990	197	157	250	167
d1, Uniform Delay [s]	6.19	12.80	10.09	7.52	10.81	10.66	56.50	52.94	54.76	52.86
k, delay calibration	0.50	0.50	0.50	0.17	0.50	0.50	0.13	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.27	0.72	0.31	0.42	0.48	0.98	242.59	4.73	4.99	9.84
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.07	0.46	0.14	0.24	0.37	0.35	1.52	0.66	0.77	0.83
d, Delay for Lane Group [s/veh]	6.46	13.52	10.40	7.94	11.29	11.64	299.09	57.67	59.75	62.70
Lane Group LOS	A	B	B	A	B	B	F	E	E	E
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.24	6.97	1.60	0.86	5.05	4.41	9.66	3.30	3.06	4.57
50th-Percentile Queue Length [ft/ln]	5.94	174.35	39.90	21.43	126.35	110.26	241.53	82.38	76.58	114.24
95th-Percentile Queue Length [veh/ln]	0.43	11.31	2.87	1.54	8.74	7.85	16.42	5.93	5.51	8.08
95th-Percentile Queue Length [ft/ln]	10.70	282.63	71.82	38.58	218.52	196.36	410.43	148.29	137.84	201.89

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	6.46	13.52	10.40	7.94	11.29	11.64	299.09	57.67	57.67	59.75	62.70	62.70
Movement LOS	A	B	B	A	B	B	F	E	E	E	E	E
d_A, Approach Delay [s/veh]	12.96			11.09			236.94			60.98		
Approach LOS	B			B			F			E		
d_I, Intersection Delay [s/veh]	45.89											
Intersection LOS	D											
Intersection V/C	0.476											

Emissions

Vehicle Miles Traveled [mph]	3.46	113.03	16.03	9.83	70.71	30.27	37.14	12.88	15.09	10.79
Stops [stops/h]	7.13	418.44	47.88	25.72	303.24	132.31	579.66	98.86	183.79	137.09
Fuel consumption [US gal/h]	0.22	10.15	1.27	0.75	6.84	2.97	21.52	2.10	3.73	2.77
CO [g/h]	15.73	709.56	88.45	52.47	478.41	207.81	1504.07	146.84	260.71	193.73
NOx [g/h]	3.06	138.05	17.21	10.21	93.08	40.43	292.64	28.57	50.73	37.69
VOC [g/h]	3.64	164.45	20.50	12.16	110.88	48.16	348.58	34.03	60.42	44.90

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	783	783	583	633
d_b, Bicycle Delay [s]	22.20	22.20	30.10	28.02
l_b,int, Bicycle LOS Score for Intersection	2.519	2.640	2.231	2.124
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Summit Blvd (SH-9) & Lakepoint Dr

Control Type:	Two-way stop	Delay (sec / veh):	12.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.047

Intersection Setup

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Base Volume Input [veh/h]	678	15	0	968	0	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	678	15	0	968	0	23
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	184	4	0	263	0	6
Total Analysis Volume [veh/h]	737	16	0	1052	0	25
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.01	0.00	0.05
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	12.03
Movement LOS	A	A		A		B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.15
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	3.66
d_A, Approach Delay [s/veh]	0.00		0.00		12.03	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.16					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 3: Summit Blvd (SH-9) & 10 Mile Dr

Control Type:	Signalized	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.375

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	145.00	100.00	100.00	300.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00				35.00			35.00		
Grade [%]	0.00			0.00				0.00			0.00		
Curb Present	No			No				No			No		
Crosswalk	No			No				No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Base Volume Input [veh/h]	57	1001	74	0	48	810	34	50	13	126	60	7	24
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	2.00	0.00	2.00	4.00	3.00	5.00	2.00	2.00	2.00	4.00	3.00
Proportion of CAVs [%]	0.00												
Growth Factor	1.0070	1.0070	1.0070	1.000	1.000	1.007	1.000	1.0000	1.0000	1.0070	1.0070	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	8	0	0	0	3	0	0	13	0	0	11
Total Hourly Volume [veh/h]	57	1008	67	0	48	816	31	50	13	114	60	7	13
Peak Hour Factor	0.9200	0.9200	0.9200	0.920	0.920	0.920	0.920	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	274	18	0	13	222	8	14	4	0	16	2	4
Total Analysis Volume [veh/h]	62	1096	73	0	52	887	34	54	14	0	65	8	14
Presence of On-Street Parking	No		No	No			No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0				0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0				0			0		
v_co, Outbound Pedestrian Volume crossing	0			0				0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0			0		
Bicycle Volume [bicycles/h]	0			0				0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	10.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	Permi	ProtP	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Flashing Yellow Arrow	No			No	No			No			No		
Signal Group	5	2	0	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups													
Maximum Green [s]	7	63	0	0	7	63	0	0	15	0	0	15	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Walk [s]	0.0	5.0	0.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	12.0	90.0	0.0	0.0	12.0	90.0	0.0	0.0	18.0	0.0	0.0	18.0	0.0
Lead / Lag	Lead	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	5	0	0	7	5	0	0	5	0	0	5	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No			No	No			No			No	
Maximum Recall	No	Yes			No	Yes			No			No	
Pedestrian Recall	No	No			No	No			No			No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	R	L	C
C, Calculated Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	0.00	3.00	3.00	0.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	100.8	90.0	90.0	100.8	89.6	89.6	9.2	9.2	9.2	9.2	9.2
g / C, Green / Cycle	0.84	0.75	0.75	0.84	0.75	0.75	0.08	0.08	0.08	0.08	0.08
(v / s)_i Volume / Saturation Flow Rate	0.09	0.32	0.32	0.09	0.25	0.02	0.04	0.01	0.00	0.05	0.01
s, saturation flow rate [veh/h]	725	1840	1800	594	3503	1577	1356	1870	1589	1399	1654
c, Capacity [veh/h]	641	1379	1349	527	2617	1178	131	143	122	141	127
d1, Uniform Delay [s]	2.19	5.54	5.54	2.71	5.15	3.93	56.12	51.54	0.00	55.88	51.84
k, delay calibration	0.50	0.50	0.50	0.32	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.30	0.97	1.00	0.24	0.35	0.05	2.07	0.29	0.00	2.36	0.64
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.10	0.43	0.43	0.10	0.34	0.03	0.41	0.10	0.00	0.46	0.17
d, Delay for Lane Group [s/veh]	2.49	6.51	6.54	2.95	5.50	3.97	58.19	51.83	0.00	58.24	52.49
Lane Group LOS	A	A	A	A	A	A	E	D	A	E	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.20	4.93	4.84	0.16	3.29	0.20	1.68	0.40	0.00	2.02	0.64
50th-Percentile Queue Length [ft/ln]	4.93	123.14	120.94	3.88	82.34	5.00	41.90	10.04	0.00	50.51	15.98
95th-Percentile Queue Length [veh/ln]	0.35	8.57	8.44	0.28	5.93	0.36	3.02	0.72	0.00	3.64	1.15
95th-Percentile Queue Length [ft/ln]	8.87	214.14	211.12	6.98	148.21	9.00	75.42	18.08	0.00	90.92	28.77

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	2.49	6.52	6.54	2.95	2.95	5.50	3.97	58.19	51.83	0.00	58.24	52.49	52.49
Movement LOS	A	A	A	A	A	A	A	E	D	A	E	D	D
d_A, Approach Delay [s/veh]	6.32			5.31				56.88			56.79		
Approach LOS	A			A				E			E		
d_I, Intersection Delay [s/veh]	9.22												
Intersection LOS	A												
Intersection V/C	0.375												

Emissions

Vehicle Miles Traveled [mph]	9.50	90.47	88.64	4.68	79.82	3.06	2.12	0.55	0.00	2.94	0.99
Stops [stops/h]	5.91	147.77	145.13	4.65	197.61	6.00	50.28	12.05	0.00	60.61	19.18
Fuel consumption [US gal/h]	0.44	5.34	5.24	0.24	5.52	0.19	1.10	0.26	0.00	1.34	0.42
CO [g/h]	30.61	373.42	366.27	17.09	385.92	13.23	76.77	18.12	0.00	93.54	29.15
NOx [g/h]	5.96	72.65	71.26	3.33	75.09	2.57	14.94	3.53	0.00	18.20	5.67
VOC [g/h]	7.09	86.54	84.89	3.96	89.44	3.07	17.79	4.20	0.00	21.68	6.76

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1417	1417	217	217
d_b, Bicycle Delay [s]	5.10	5.10	47.70	47.70
l_b,int, Bicycle LOS Score for Intersection	2.582	2.322	1.693	1.721
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Lakepoint Dr & North Ten Mile Dr

Control Type:	Two-way stop	Delay (sec / veh):	9.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.093

Intersection Setup

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Base Volume Input [veh/h]	10	45	7	1	95	10	12	2	3	8	6	0
Base Volume Adjustment Factor	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	39	6	1	83	9	10	2	3	7	5	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600
Total 15-Minute Volume [veh/h]	2	9	1	0	19	2	2	0	1	2	1	0
Total Analysis Volume [veh/h]	8	36	6	1	78	8	9	2	3	7	5	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.04	0.01	0.00	0.09	0.01	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.72	9.53	8.59	9.56	9.75	8.81	7.24	0.00	0.00	7.24	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.18	0.18	0.18	0.34	0.34	0.34	0.02	0.02	0.02	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	4.62	4.62	4.62	8.42	8.42	8.42	0.42	0.42	0.42	0.29	0.29	0.29
d_A, Approach Delay [s/veh]	9.45			9.66			4.65			4.22		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	8.76											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 5: Dillon Dam Rd & N Ten Mile Dr

Control Type:	Two-way stop	Delay (sec / veh):	13.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.110

Intersection Setup

Name	Dillon Dam Rd		Dillon Dam Rd		North Ten Mile Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Dillon Dam Rd		Dillon Dam Rd		North Ten Mile Dr	
Base Volume Input [veh/h]	153	61	54	198	49	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	153	61	54	198	49	33
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	17	15	54	13	9
Total Analysis Volume [veh/h]	166	66	59	215	53	36
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.04	0.00	0.11	0.04
d_M, Delay for Movement [s/veh]	0.00	0.00	7.76	0.00	13.57	10.38
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.10	0.10	0.54	0.54
95th-Percentile Queue Length [ft/ln]	0.00	0.00	2.54	2.54	13.39	13.39
d_A, Approach Delay [s/veh]	0.00		1.67		12.28	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	2.61					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 56: Summit Blvd (SH-9) & I-70 EB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)								
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)								
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	9.02	8.32	0.00	9.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS		A	A		A		A	A	A			
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.67			9.02			0.00			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	4.42											
Intersection LOS												

Intersection Level Of Service Report

Intersection 1: Summit Blvd (SH-9) & Dillon Dam Rd / Lusher Ct

Control Type:	Signalized	Delay (sec / veh):	25.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.486

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	2	0	0
Entry Pocket Length [ft]	165.00	100.00	100.00	180.00	100.00	100.00	175.00	100.00	175.00	240.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			20.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Base Volume Input [veh/h]	61	896	225	103	743	354	274	61	51	187	39	109
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	1.00	2.00	4.00	3.00	5.00	2.00	2.00	0.00	2.00	7.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0070	1.0000	1.0070	1.0070	1.0070	1.0070	1.0000	1.0000	1.0000	1.0000	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	23	0	0	36	0	0	5	0	0	11
Total Hourly Volume [veh/h]	61	902	202	104	748	320	276	61	46	187	39	99
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	245	55	28	203	87	75	17	13	51	11	27
Total Analysis Volume [veh/h]	66	980	220	113	813	348	300	66	50	203	42	108
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	91.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Flashing Yellow Arrow	No			No								
Signal Group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Maximum Green [s]	7	19	0	7	19	0	8	16	0	7	15	0
Amber [s]	3.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	12.0	64.0	0.0	12.0	64.0	0.0	21.0	27.0	0.0	17.0	23.0	0.0
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	5	0	7	5	0	7	5	0	7	5	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	Yes		No	Yes		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C
C, Calculated Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	4.00	0.00	4.00	4.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	78.4	66.5	66.5	78.4	67.1	67.1	12.8	16.6	9.0	12.8
g / C, Green / Cycle	0.65	0.55	0.55	0.65	0.56	0.56	0.11	0.14	0.07	0.11
(v / s)_i Volume / Saturation Flow Rate	0.10	0.28	0.14	0.18	0.23	0.22	0.09	0.07	0.06	0.09
s, saturation flow rate [veh/h]	647	3503	1602	631	3503	1577	3375	1738	3514	1659
c, Capacity [veh/h]	443	1940	887	417	1957	881	361	241	264	178
d1, Uniform Delay [s]	8.92	16.59	13.85	10.36	15.21	14.99	52.52	47.67	54.46	52.57
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.71	0.94	0.67	1.60	0.65	1.33	4.97	1.48	4.65	10.25
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.15	0.51	0.25	0.27	0.42	0.40	0.83	0.48	0.77	0.84
d, Delay for Lane Group [s/veh]	9.63	17.53	14.52	11.96	15.87	16.32	57.49	49.14	59.11	62.82
Lane Group LOS	A	B	B	B	B	B	E	D	E	E
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.67	8.24	3.16	1.20	6.30	5.49	4.75	3.37	3.21	4.98
50th-Percentile Queue Length [ft/ln]	16.66	206.01	78.96	30.12	157.56	137.31	118.78	84.15	80.15	124.45
95th-Percentile Queue Length [veh/ln]	1.20	12.95	5.68	2.17	10.42	9.34	8.33	6.06	5.77	8.64
95th-Percentile Queue Length [ft/ln]	29.98	323.71	142.12	54.21	260.49	233.40	208.14	151.47	144.28	215.92

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	9.63	17.53	14.52	11.96	15.87	16.32	57.49	49.14	49.14	59.11	62.82	62.82
Movement LOS	A	B	B	B	B	B	E	D	D	E	E	E
d_A, Approach Delay [s/veh]	16.60			15.64			55.16			60.68		
Approach LOS	B			B			E			E		
d_I, Intersection Delay [s/veh]	25.78											
Intersection LOS	C											
Intersection V/C	0.486											

Emissions

Vehicle Miles Traveled [mph]	7.61	113.03	25.37	9.83	70.71	30.27	37.14	14.36	15.87	11.72
Stops [stops/h]	19.99	494.43	94.75	36.14	378.15	164.77	285.06	100.98	192.37	149.34
Fuel consumption [US gal/h]	0.57	11.52	2.33	0.92	8.16	3.55	6.05	2.12	3.89	3.02
CO [g/h]	39.83	805.46	162.84	64.41	570.69	248.06	422.79	148.13	272.11	210.92
NOx [g/h]	7.75	156.71	31.68	12.53	111.04	48.26	82.26	28.82	52.94	41.04
VOC [g/h]	9.23	186.67	37.74	14.93	132.26	57.49	97.99	34.33	63.06	48.88

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	967	967	367	300
d_b, Bicycle Delay [s]	16.02	16.02	40.02	43.35
l_b,int, Bicycle LOS Score for Intersection	2.623	2.640	2.254	2.160
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Summit Blvd (SH-9) & Lakepoint Dr

Control Type:	Two-way stop	Delay (sec / veh):	15.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.088

Intersection Setup

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Base Volume Input [veh/h]	1093	21	0	950	0	34
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1093	21	0	950	0	34
Peak Hour Factor	0.9200	1.0000	1.0000	0.9200	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	297	5	0	258	0	9
Total Analysis Volume [veh/h]	1188	21	0	1033	0	34
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.01	0.00	0.09
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	15.17
Movement LOS	A	A		A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.29
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	7.16
d_A, Approach Delay [s/veh]	0.00		0.00		15.17	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.23					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 3: Summit Blvd (SH-9) & 10 Mile Dr

Control Type:	Signalized	Delay (sec / veh):	13.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.419

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Shopping Ctr			Ten Mile Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	155.00	100.00	100.00	300.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Shopping Ctr			Ten Mile Dr		
Base Volume Input [veh/h]	57	1001	74	74	810	86	116	25	126	60	25	87
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	2.00	2.00	4.00	3.00	5.00	2.00	2.00	2.00	4.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0070	1.0070	1.0070	1.0000	1.0070	1.0000	1.0000	1.0000	1.0070	1.0070	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	8	0	0	9	0	0	13	0	0	39
Total Hourly Volume [veh/h]	57	1008	67	74	816	77	116	25	114	60	25	48
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	274	18	20	222	21	32	7	0	16	7	13
Total Analysis Volume [veh/h]	62	1096	73	80	887	84	126	27	0	65	27	52
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	10.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Flashing Yellow Arrow	No			No			No			No		
Signal Group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Maximum Green [s]	7	63	0	7	63	0	0	15	0	0	15	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Walk [s]	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	12.0	78.0	0.0	12.0	78.0	0.0	0.0	30.0	0.0	0.0	30.0	0.0
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	5	0	7	5	0	0	5	0	0	5	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		Yes			Yes			No			No	
Pedestrian Recall		No			No			No			No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	L	C	R	L	C
C, Calculated Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	84.2	84.2	84.2	84.2	84.2	20.8	20.8	20.8	20.8	20.8
g / C, Green / Cycle	0.70	0.70	0.70	0.70	0.70	0.17	0.17	0.17	0.17	0.17
(v / s)_i Volume / Saturation Flow Rate	0.10	0.32	0.32	0.17	0.18	0.10	0.01	0.00	0.05	0.05
s, saturation flow rate [veh/h]	636	1840	1800	480	5012	1288	1870	1589	1383	1648
c, Capacity [veh/h]	457	1292	1264	323	3520	204	322	274	255	284
d1, Uniform Delay [s]	9.42	7.83	7.83	14.75	6.46	52.49	41.70	0.00	46.43	43.16
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.62	1.17	1.20	1.83	0.17	3.04	0.11	0.00	0.52	0.53
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.14	0.46	0.46	0.25	0.25	0.62	0.08	0.00	0.25	0.28
d, Delay for Lane Group [s/veh]	10.03	8.99	9.03	16.58	6.63	55.53	41.81	0.00	46.94	43.69
Lane Group LOS	B	A	A	B	A	E	D	A	D	D
Critical Lane Group	No	No	Yes	No	No	Yes	No	No	No	No
50th-Percentile Queue Length [veh/ln]	0.73	6.36	6.24	1.32	2.51	3.87	0.68	0.00	1.78	2.07
50th-Percentile Queue Length [ft/ln]	18.19	158.91	156.04	32.88	62.73	96.76	16.99	0.00	44.39	51.77
95th-Percentile Queue Length [veh/ln]	1.31	10.49	10.34	2.37	4.52	6.97	1.22	0.00	3.20	3.73
95th-Percentile Queue Length [ft/ln]	32.75	262.28	258.47	59.19	112.92	174.17	30.59	0.00	79.90	93.18

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	10.03	9.01	9.03	16.58	6.63	0.00	55.53	41.81	0.00	46.94	43.69	43.69
Movement LOS	B	A	A	B	A		E	D	A	D	D	D
d_A, Approach Delay [s/veh]	9.06			7.45			53.11			45.16		
Approach LOS	A			A			D			D		
d_I, Intersection Delay [s/veh]	13.22											
Intersection LOS	B											
Intersection V/C	0.419											

Emissions

Vehicle Miles Traveled [mph]	9.50	90.47	88.64	7.20	79.82	4.95	1.06	0.00	2.94	3.57
Stops [stops/h]	21.83	190.70	187.24	39.46	225.83	116.11	20.39	0.00	53.26	62.12
Fuel consumption [US gal/h]	0.65	5.96	5.85	0.84	5.94	2.49	0.42	0.00	1.13	1.31
CO [g/h]	45.64	416.85	408.90	58.79	415.05	173.73	29.60	0.00	79.23	91.26
NOx [g/h]	8.88	81.10	79.56	11.44	80.75	33.80	5.76	0.00	15.42	17.76
VOC [g/h]	10.58	96.61	94.77	13.62	96.19	40.26	6.86	0.00	18.36	21.15

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1217	1217	417	417
d_b, Bicycle Delay [s]	9.20	9.20	37.60	37.60
l_b,int, Bicycle LOS Score for Intersection	2.582	2.091	1.834	1.862
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Lakepoint Dr & North Ten Mile Dr

Control Type:	Two-way stop	Delay (sec / veh):	10.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.013

Intersection Setup

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Base Volume Input [veh/h]	11	98	9	1	83	11	12	4	5	9	12	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	98	9	1	83	11	12	4	5	9	12	1
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600
Total 15-Minute Volume [veh/h]	3	23	2	0	19	3	3	1	1	2	3	0
Total Analysis Volume [veh/h]	10	92	8	1	78	10	11	4	5	8	11	1
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.11	0.01	0.00	0.09	0.01	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.26	10.02	9.00	10.23	9.88	8.87	7.26	0.00	0.00	7.24	0.00	0.00
Movement LOS	B	B	A	B	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.45	0.45	0.45	0.35	0.35	0.35	0.02	0.02	0.02	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	11.33	11.33	11.33	8.81	8.81	8.81	0.51	0.51	0.51	0.34	0.34	0.34
d_A, Approach Delay [s/veh]	9.97			9.77			3.99			2.90		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	8.80											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 5: Dillon Dam Rd & N Ten Mile Dr

Control Type:	Two-way stop	Delay (sec / veh):	16.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.148

Intersection Setup

Name	Dillon Dam Rd		Dillon Dam Rd		North Ten Mile Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Dillon Dam Rd		Dillon Dam Rd		North Ten Mile Dr	
Base Volume Input [veh/h]	285	62	38	226	55	84
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	285	62	38	226	55	84
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	77	17	10	61	15	23
Total Analysis Volume [veh/h]	310	67	41	246	60	91
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.03	0.00	0.15	0.13
d_M, Delay for Movement [s/veh]	0.00	0.00	8.09	0.00	16.44	12.69
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.07	0.07	1.13	1.13
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.75	1.75	28.30	28.30
d_A, Approach Delay [s/veh]	0.00		1.16		14.18	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	3.03					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 56: Summit Blvd (SH-9) & I-70 EB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)								
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)								
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	9.02	8.32	0.00	9.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS		A	A		A		A	A	A			
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.67			9.02			0.00			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	4.42											
Intersection LOS												

Intersection Level Of Service Report

Intersection 1: Summit Blvd (SH-9) & Dillon Dam Rd / Lusher Ct

Control Type:	Signalized	Delay (sec / veh):	26.3
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.497

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	2	0	0
Entry Pocket Length [ft]	165.00	100.00	100.00	180.00	100.00	100.00	175.00	100.00	175.00	240.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			20.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Base Volume Input [veh/h]	81	896	160	103	743	354	274	58	83	137	57	109
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	1.00	2.00	4.00	3.00	5.00	2.00	2.00	0.00	2.00	7.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0070	1.0000	1.0070	1.0070	1.0070	1.0070	1.0000	1.0000	1.0000	1.0000	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	16	0	0	36	0	0	8	0	0	11
Total Hourly Volume [veh/h]	81	902	144	104	748	320	276	58	75	137	57	99
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	245	39	28	203	87	75	16	20	37	15	27
Total Analysis Volume [veh/h]	88	980	157	113	813	348	300	63	82	149	62	108
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	91.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Flashing Yellow Arrow	No			No								
Signal Group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Maximum Green [s]	7	19	0	7	19	0	8	16	0	7	15	0
Amber [s]	3.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	12.0	63.0	0.0	12.0	63.0	0.0	18.0	17.0	0.0	28.0	27.0	0.0
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	5	0	7	5	0	7	5	0	7	5	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	Yes		No	Yes		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C
C, Calculated Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	4.00	0.00	4.00	4.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	77.3	65.5	65.5	77.3	65.7	65.7	12.5	19.3	7.3	14.1
g / C, Green / Cycle	0.64	0.55	0.55	0.64	0.55	0.55	0.10	0.16	0.06	0.12
(v / s)_i Volume / Saturation Flow Rate	0.13	0.28	0.10	0.17	0.23	0.22	0.09	0.09	0.04	0.10
s, saturation flow rate [veh/h]	656	3503	1602	658	3503	1577	3375	1700	3514	1681
c, Capacity [veh/h]	444	1912	874	425	1918	863	353	274	215	198
d1, Uniform Delay [s]	9.39	17.19	13.73	10.60	16.00	15.76	52.81	46.18	55.21	51.95
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.00	0.99	0.45	1.52	0.69	1.40	5.78	1.59	3.94	10.27
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.20	0.51	0.18	0.27	0.42	0.40	0.85	0.53	0.69	0.86
d, Delay for Lane Group [s/veh]	10.39	18.17	14.18	12.12	16.69	17.17	58.59	47.77	59.15	62.22
Lane Group LOS	B	B	B	B	B	B	E	D	E	E
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.93	8.44	2.20	1.23	6.52	5.68	4.80	4.17	2.35	5.62
50th-Percentile Queue Length [ft/ln]	23.28	211.08	55.06	30.86	162.96	142.01	119.93	104.18	58.66	140.61
95th-Percentile Queue Length [veh/ln]	1.68	13.21	3.96	2.22	10.71	9.59	8.39	7.50	4.22	9.51
95th-Percentile Queue Length [ft/ln]	41.91	330.21	99.11	55.54	267.64	239.72	209.73	187.52	105.59	237.85

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	10.39	18.17	14.18	12.12	16.69	17.17	58.59	47.77	47.77	59.15	62.22	62.22
Movement LOS	B	B	B	B	B	B	E	D	D	E	E	E
d_A, Approach Delay [s/veh]	17.10			16.41			55.06			60.79		
Approach LOS	B			B			E			E		
d_I, Intersection Delay [s/veh]	26.28											
Intersection LOS	C											
Intersection V/C	0.497											

Emissions

Vehicle Miles Traveled [mph]	10.15	113.03	18.11	9.83	70.71	30.27	37.14	17.95	11.65	13.29
Stops [stops/h]	27.94	506.59	66.07	37.03	391.11	170.41	287.82	125.02	140.79	168.73
Fuel consumption [US gal/h]	0.78	11.74	1.64	0.93	8.40	3.65	6.12	2.61	2.86	3.40
CO [g/h]	54.74	820.81	114.64	65.13	586.99	255.20	427.97	182.11	199.72	237.45
NOx [g/h]	10.65	159.70	22.30	12.67	114.21	49.65	83.27	35.43	38.86	46.20
VOC [g/h]	12.69	190.23	26.57	15.10	136.04	59.15	99.19	42.21	46.29	55.03

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	950	950	200	367
d_b, Bicycle Delay [s]	16.54	16.54	48.60	40.02
l_b,int, Bicycle LOS Score for Intersection	2.583	2.640	2.307	2.104
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Summit Blvd (SH-9) & Lakepoint Dr

Control Type:	Two-way stop	Delay (sec / veh):	15.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.077

Intersection Setup

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Base Volume Input [veh/h]	1158	17	0	1010	0	26
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1158	17	0	1010	0	26
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	315	5	0	274	0	7
Total Analysis Volume [veh/h]	1259	18	0	1098	0	28
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.01	0.00	0.08
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	15.71
Movement LOS	A	A		A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.25
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	6.21
d_A, Approach Delay [s/veh]	0.00		0.00		15.71	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.18					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 3: Summit Blvd (SH-9) & 10 Mile Dr

Control Type:	Signalized	Delay (sec / veh):	13.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.413

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	145.00	100.00	100.00	300.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00				35.00			35.00		
Grade [%]	0.00			0.00				0.00			0.00		
Curb Present	No			No				No			No		
Crosswalk	No			No				No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Base Volume Input [veh/h]	57	1001	74	0	101	810	143	86	13	126	60	10	88
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	2.00	0.00	2.00	4.00	3.00	5.00	2.00	2.00	2.00	4.00	3.00
Proportion of CAVs [%]	0.00												
Growth Factor	1.0070	1.0070	1.0070	1.000	1.000	1.007	1.000	1.0000	1.0000	1.0070	1.0070	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	8	0	0	0	14	0	0	13	0	0	26
Total Hourly Volume [veh/h]	57	1008	67	0	101	816	129	86	13	114	60	10	62
Peak Hour Factor	0.9200	0.9200	0.9200	0.920	0.920	0.920	0.920	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	274	18	0	27	222	35	23	4	0	16	3	17
Total Analysis Volume [veh/h]	62	1096	73	0	110	887	140	93	14	0	65	11	67
Presence of On-Street Parking	No		No	No			No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0				0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0				0			0		
v_co, Outbound Pedestrian Volume crossing	0			0				0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0			0		
Bicycle Volume [bicycles/h]	0			0				0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	10.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	Permi	ProtP	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Flashing Yellow Arrow	No			No	No			No			No		
Signal Group	5	2	0	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups													
Maximum Green [s]	7	63	0	0	7	63	0	0	15	0	0	15	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Walk [s]	0.0	5.0	0.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	12.0	85.0	0.0	0.0	12.0	85.0	0.0	0.0	23.0	0.0	0.0	23.0	0.0
Lead / Lag	Lead	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	5	0	0	7	5	0	0	5	0	0	5	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No			No	No			No			No	
Maximum Recall	No	Yes			No	Yes			No			No	
Pedestrian Recall	No	No			No	No			No			No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	R	L	C
C, Calculated Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	0.00	3.00	3.00	0.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	92.7	80.8	80.8	92.7	81.5	81.5	17.3	17.3	17.3	17.3	17.3
g / C, Green / Cycle	0.77	0.67	0.67	0.77	0.68	0.68	0.14	0.14	0.14	0.14	0.14
(v / s)_i Volume / Saturation Flow Rate	0.09	0.32	0.32	0.18	0.25	0.09	0.07	0.01	0.00	0.05	0.05
s, saturation flow rate [veh/h]	681	1840	1800	618	3503	1577	1289	1870	1589	1399	1598
c, Capacity [veh/h]	557	1241	1214	494	2383	1073	166	269	228	228	230
d1, Uniform Delay [s]	3.98	9.37	9.37	5.11	8.22	6.73	54.47	44.33	0.00	48.76	46.25
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.40	1.31	1.34	1.04	0.45	0.25	2.94	0.08	0.00	0.68	0.87
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.11	0.48	0.48	0.22	0.37	0.13	0.56	0.05	0.00	0.29	0.34
d, Delay for Lane Group [s/veh]	4.39	10.67	10.71	6.15	8.66	6.98	57.41	44.41	0.00	49.44	47.12
Lane Group LOS	A	B	B	A	A	A	E	D	A	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No
50th-Percentile Queue Length [veh/ln]	0.35	7.21	7.07	0.67	4.65	1.24	2.89	0.36	0.00	1.83	2.14
50th-Percentile Queue Length [ft/ln]	8.76	180.14	176.87	16.71	116.13	30.96	72.19	9.11	0.00	45.74	53.47
95th-Percentile Queue Length [veh/ln]	0.63	11.61	11.44	1.20	8.18	2.23	5.20	0.66	0.00	3.29	3.85
95th-Percentile Queue Length [ft/ln]	15.77	290.20	285.92	30.08	204.49	55.73	129.94	16.39	0.00	82.33	96.25

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	4.39	10.69	10.71	6.15	6.15	8.66	6.98	57.41	44.41	0.00	49.44	47.12	47.12
Movement LOS	A	B	B	A	A	A	A	E	D	A	D	D	D
d_A, Approach Delay [s/veh]	10.38			8.21				55.71			48.18		
Approach LOS	B			A				E			D		
d_I, Intersection Delay [s/veh]	13.35												
Intersection LOS	B												
Intersection V/C	0.413												

Emissions

Vehicle Miles Traveled [mph]	9.50	90.47	88.64	9.90	79.82	12.60	3.65	0.55	0.00	2.94	3.53
Stops [stops/h]	10.51	216.17	212.24	20.05	278.70	37.15	86.62	10.93	0.00	54.88	64.16
Fuel consumption [US gal/h]	0.50	6.36	6.24	0.67	6.70	0.96	1.88	0.23	0.00	1.18	1.36
CO [g/h]	34.71	444.36	435.92	46.54	468.48	67.01	131.20	16.05	0.00	82.39	95.40
NOx [g/h]	6.75	86.46	84.81	9.05	91.15	13.04	25.53	3.12	0.00	16.03	18.56
VOC [g/h]	8.04	102.99	101.03	10.79	108.57	15.53	30.41	3.72	0.00	19.09	22.11

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1333	1333	300	300
d_b, Bicycle Delay [s]	6.67	6.67	43.35	43.35
l_b,int, Bicycle LOS Score for Intersection	2.582	2.418	1.758	1.838
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Lakepoint Dr & North Ten Mile Dr

Control Type:	Two-way stop	Delay (sec / veh):	10.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.015

Intersection Setup

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Base Volume Input [veh/h]	10	45	7	1	95	10	12	2	3	8	6	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	45	7	1	95	10	12	2	3	8	6	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	12	2	0	26	3	3	1	1	2	2	0
Total Analysis Volume [veh/h]	11	49	8	1	103	11	13	2	3	9	7	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.06	0.01	0.00	0.13	0.01	0.01	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	10.24	9.75	8.72	9.99	10.04	9.02	7.25	0.00	0.00	7.24	0.00	0.00
Movement LOS	B	A	A	A	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.27	0.27	0.27	0.47	0.47	0.47	0.02	0.02	0.02	0.02	0.02	0.02
95th-Percentile Queue Length [ft/ln]	6.65	6.65	6.65	11.79	11.79	11.79	0.61	0.61	0.61	0.38	0.38	0.38
d_A, Approach Delay [s/veh]	9.70			9.95			5.24			4.07		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	9.05											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 5: Dillon Dam Rd & N Ten Mile Dr

Control Type:	Two-way stop	Delay (sec / veh):	16.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.248

Intersection Setup

Name	Dillon Dam Rd		Dillon Dam Rd		North Ten Mile Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Dillon Dam Rd		Dillon Dam Rd		North Ten Mile Dr	
Base Volume Input [veh/h]	233	88	44	205	98	44
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	233	88	44	205	98	44
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	63	24	12	56	27	12
Total Analysis Volume [veh/h]	253	96	48	223	107	48
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.04	0.00	0.25	0.06
d_M, Delay for Movement [s/veh]	0.00	0.00	8.03	0.00	16.63	13.16
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.08	0.08	1.33	1.33
95th-Percentile Queue Length [ft/ln]	0.00	0.00	2.05	2.05	33.16	33.16
d_A, Approach Delay [s/veh]	0.00		1.42		15.55	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	3.61					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 56: Summit Blvd (SH-9) & I-70 EB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)								
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)								
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	9.02	8.32	0.00	9.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS		A	A		A		A	A	A			
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.67			9.02			0.00			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	4.42											
Intersection LOS												

Intersection Level Of Service Report

Intersection 1: Summit Blvd (SH-9) & Dillon Dam Rd / Lusher Ct

Control Type:	Signalized	Delay (sec / veh):	45.9
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.476

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	2	0	0
Entry Pocket Length [ft]	165.00	100.00	100.00	180.00	100.00	100.00	175.00	100.00	175.00	240.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			20.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Base Volume Input [veh/h]	28	896	142	103	743	354	274	64	34	178	28	109
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	1.00	2.00	4.00	3.00	5.00	2.00	2.00	0.00	2.00	7.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	14	0	0	36	0	0	3	0	0	11
Total Hourly Volume [veh/h]	28	902	129	104	748	320	276	64	31	179	28	99
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	245	35	28	203	87	75	17	8	49	8	27
Total Analysis Volume [veh/h]	30	980	140	113	813	348	300	70	34	195	30	108
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	91.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Flashing Yellow Arrow	No			No								
Signal Group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Maximum Green [s]	7	19	0	7	19	0	8	16	0	7	15	0
Amber [s]	3.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	12.0	53.0	0.0	12.0	53.0	0.0	12.0	39.0	0.0	16.0	43.0	0.0
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	5	0	7	5	0	7	5	0	7	5	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	Yes		No	Yes		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C
C, Calculated Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	4.00	0.00	4.00	4.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	84.9	73.0	73.0	84.9	75.4	75.4	7.0	10.5	8.7	12.1
g / C, Green / Cycle	0.71	0.61	0.61	0.71	0.63	0.63	0.06	0.09	0.07	0.10
(v / s)_i Volume / Saturation Flow Rate	0.05	0.28	0.09	0.17	0.23	0.22	0.09	0.06	0.06	0.08
s, saturation flow rate [veh/h]	607	3503	1602	651	3503	1577	3375	1768	3514	1643
c, Capacity [veh/h]	460	2130	974	469	2200	990	197	155	254	167
d1, Uniform Delay [s]	6.19	12.80	10.10	7.52	10.81	10.66	56.50	53.05	54.68	52.86
k, delay calibration	0.50	0.50	0.50	0.17	0.50	0.50	0.13	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.27	0.72	0.31	0.42	0.48	0.98	242.59	4.93	4.86	9.84
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.07	0.46	0.14	0.24	0.37	0.35	1.52	0.67	0.77	0.83
d, Delay for Lane Group [s/veh]	6.46	13.52	10.41	7.94	11.29	11.64	299.09	57.98	59.55	62.70
Lane Group LOS	A	B	B	A	B	B	F	E	E	E
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.24	6.97	1.61	0.86	5.05	4.41	9.66	3.31	3.09	4.57
50th-Percentile Queue Length [ft/ln]	5.94	174.35	40.21	21.44	126.35	110.26	241.53	82.63	77.24	114.24
95th-Percentile Queue Length [veh/ln]	0.43	11.31	2.90	1.54	8.74	7.85	16.42	5.95	5.56	8.08
95th-Percentile Queue Length [ft/ln]	10.70	282.63	72.38	38.59	218.52	196.36	410.43	148.73	139.04	201.89

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	6.46	13.52	10.41	7.94	11.29	11.64	299.09	57.98	57.98	59.55	62.70	62.70
Movement LOS	A	B	B	A	B	B	F	E	E	E	E	E
d_A, Approach Delay [s/veh]	12.95			11.09			237.02			60.85		
Approach LOS	B			B			F			E		
d_I, Intersection Delay [s/veh]	45.89											
Intersection LOS	D											
Intersection V/C	0.476											

Emissions

Vehicle Miles Traveled [mph]	3.46	113.03	16.15	9.83	70.71	30.27	37.14	12.88	15.24	10.79
Stops [stops/h]	7.13	418.44	48.26	25.72	303.24	132.31	579.66	99.15	185.38	137.09
Fuel consumption [US gal/h]	0.22	10.15	1.28	0.75	6.84	2.97	21.52	2.11	3.76	2.77
CO [g/h]	15.73	709.56	89.12	52.47	478.41	207.81	1504.07	147.34	262.77	193.73
NOx [g/h]	3.06	138.05	17.34	10.21	93.08	40.43	292.64	28.67	51.13	37.69
VOC [g/h]	3.64	164.45	20.66	12.16	110.88	48.16	348.58	34.15	60.90	44.90

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	783	783	567	633
d_b, Bicycle Delay [s]	22.20	22.20	30.82	28.02
l_b,int, Bicycle LOS Score for Intersection	2.520	2.640	2.231	2.127
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Summit Blvd (SH-9) & Lakepoint Dr

Control Type:	Two-way stop	Delay (sec / veh):	12.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.047

Intersection Setup

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Base Volume Input [veh/h]	678	15	0	968	0	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0070	1.0070	1.0000	1.0070	1.0000	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	683	15	0	975	0	23
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	186	4	0	265	0	6
Total Analysis Volume [veh/h]	742	16	0	1060	0	25
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.01	0.00	0.05
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	12.06
Movement LOS	A	A		A		B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.15
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	3.67
d_A, Approach Delay [s/veh]	0.00		0.00		12.06	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.16					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 3: Summit Blvd (SH-9) & 10 Mile Dr

Control Type:	Signalized	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.375

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	145.00	100.00	100.00	300.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00				35.00			35.00		
Grade [%]	0.00			0.00				0.00			0.00		
Curb Present	No			No				No			No		
Crosswalk	No			No				No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Base Volume Input [veh/h]	57	1001	74	0	48	810	34	50	13	126	60	7	24
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	2.00	0.00	2.00	4.00	3.00	5.00	2.00	2.00	2.00	4.00	3.00
Proportion of CAVs [%]	0.00												
Growth Factor	1.0070	1.0070	1.0070	1.007	1.007	1.007	1.007	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	8	0	0	0	3	0	0	13	0	0	11
Total Hourly Volume [veh/h]	57	1008	67	0	48	816	31	50	13	114	60	7	13
Peak Hour Factor	0.9200	0.9200	0.9200	0.920	0.920	0.920	0.920	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	274	18	0	13	222	8	14	4	0	16	2	4
Total Analysis Volume [veh/h]	62	1096	73	0	52	887	34	54	14	0	65	8	14
Presence of On-Street Parking	No		No	No			No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0				0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0				0			0		
v_co, Outbound Pedestrian Volume crossing	0			0				0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0			0		
Bicycle Volume [bicycles/h]	0			0				0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	10.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	Permi	ProtP	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Flashing Yellow Arrow	No			No	No			No			No		
Signal Group	5	2	0	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups													
Maximum Green [s]	7	63	0	0	7	63	0	0	15	0	0	15	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Walk [s]	0.0	5.0	0.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	12.0	90.0	0.0	0.0	12.0	90.0	0.0	0.0	18.0	0.0	0.0	18.0	0.0
Lead / Lag	Lead	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	5	0	0	7	5	0	0	5	0	0	5	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No			No	No			No			No	
Maximum Recall	No	Yes			No	Yes			No			No	
Pedestrian Recall	No	No			No	No			No			No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	R	L	C
C, Calculated Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	0.00	3.00	3.00	0.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	100.8	90.0	90.0	100.8	89.6	89.6	9.2	9.2	9.2	9.2	9.2
g / C, Green / Cycle	0.84	0.75	0.75	0.84	0.75	0.75	0.08	0.08	0.08	0.08	0.08
(v / s)_i Volume / Saturation Flow Rate	0.09	0.32	0.32	0.09	0.25	0.02	0.04	0.01	0.00	0.05	0.01
s, saturation flow rate [veh/h]	725	1840	1800	594	3503	1577	1356	1870	1589	1399	1654
c, Capacity [veh/h]	641	1379	1349	527	2617	1178	131	143	122	141	127
d1, Uniform Delay [s]	2.19	5.54	5.54	2.71	5.15	3.93	56.12	51.54	0.00	55.88	51.84
k, delay calibration	0.50	0.50	0.50	0.32	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.30	0.97	1.00	0.24	0.35	0.05	2.07	0.29	0.00	2.36	0.64
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.10	0.43	0.43	0.10	0.34	0.03	0.41	0.10	0.00	0.46	0.17
d, Delay for Lane Group [s/veh]	2.49	6.51	6.54	2.95	5.50	3.97	58.19	51.83	0.00	58.24	52.49
Lane Group LOS	A	A	A	A	A	A	E	D	A	E	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.20	4.93	4.84	0.16	3.29	0.20	1.68	0.40	0.00	2.02	0.64
50th-Percentile Queue Length [ft/ln]	4.93	123.14	120.94	3.88	82.34	5.00	41.90	10.04	0.00	50.51	15.98
95th-Percentile Queue Length [veh/ln]	0.35	8.57	8.44	0.28	5.93	0.36	3.02	0.72	0.00	3.64	1.15
95th-Percentile Queue Length [ft/ln]	8.87	214.14	211.12	6.98	148.21	9.00	75.42	18.08	0.00	90.92	28.77

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	2.49	6.52	6.54	2.95	2.95	5.50	3.97	58.19	51.83	0.00	58.24	52.49	52.49
Movement LOS	A	A	A	A	A	A	A	E	D	A	E	D	D
d_A, Approach Delay [s/veh]	6.32			5.31				56.88			56.79		
Approach LOS	A			A				E			E		
d_I, Intersection Delay [s/veh]	9.22												
Intersection LOS	A												
Intersection V/C	0.375												

Emissions

Vehicle Miles Traveled [mph]	9.50	90.47	88.64	4.68	79.82	3.06	2.12	0.55	0.00	2.94	0.99
Stops [stops/h]	5.91	147.77	145.13	4.65	197.61	6.00	50.28	12.05	0.00	60.61	19.18
Fuel consumption [US gal/h]	0.44	5.34	5.24	0.24	5.52	0.19	1.10	0.26	0.00	1.34	0.42
CO [g/h]	30.61	373.42	366.27	17.09	385.92	13.23	76.77	18.12	0.00	93.54	29.15
NOx [g/h]	5.96	72.65	71.26	3.33	75.09	2.57	14.94	3.53	0.00	18.20	5.67
VOC [g/h]	7.09	86.54	84.89	3.96	89.44	3.07	17.79	4.20	0.00	21.68	6.76

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1417	1417	217	217
d_b, Bicycle Delay [s]	5.10	5.10	47.70	47.70
l_b,int, Bicycle LOS Score for Intersection	2.582	2.322	1.693	1.721
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Lakepoint Dr & North Ten Mile Dr

Control Type:	Two-way stop	Delay (sec / veh):	10.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.013

Intersection Setup

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Base Volume Input [veh/h]	10	45	7	1	95	10	12	2	3	8	6	0
Base Volume Adjustment Factor	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	39	6	1	83	9	10	2	3	7	5	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	11	2	0	23	2	3	1	1	2	1	0
Total Analysis Volume [veh/h]	10	42	7	1	90	10	11	2	3	8	5	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.05	0.01	0.00	0.11	0.01	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.96	9.63	8.65	9.76	9.88	8.91	7.24	0.00	0.00	7.24	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.22	0.22	0.22	0.40	0.40	0.40	0.02	0.02	0.02	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	5.60	5.60	5.60	10.03	10.03	10.03	0.52	0.52	0.52	0.33	0.33	0.33
d_A, Approach Delay [s/veh]	9.57			9.79			4.98			4.45		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	8.94											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 5: Dillon Dam Rd & N Ten Mile Dr

Control Type:	Two-way stop	Delay (sec / veh):	13.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.110

Intersection Setup

Name	Dillon Dam Rd		Dillon Dam Rd		North Ten Mile Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Dillon Dam Rd		Dillon Dam Rd		North Ten Mile Dr	
Base Volume Input [veh/h]	153	61	54	198	49	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	154	61	54	199	49	33
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	17	15	54	13	9
Total Analysis Volume [veh/h]	167	66	59	216	53	36
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.04	0.00	0.11	0.04
d_M, Delay for Movement [s/veh]	0.00	0.00	7.77	0.00	13.59	10.39
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.10	0.10	0.54	0.54
95th-Percentile Queue Length [ft/ln]	0.00	0.00	2.54	2.54	13.42	13.42
d_A, Approach Delay [s/veh]	0.00		1.67		12.30	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	2.60					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 56: Summit Blvd (SH-9) & I-70 EB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)								
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)								
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	9.02	8.32	0.00	9.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS		A	A		A		A	A	A			
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.67			9.02			0.00			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	4.42											
Intersection LOS												

Intersection Level Of Service Report

Intersection 1: Summit Blvd (SH-9) & Dillon Dam Rd / Lusher Ct

Control Type:	Signalized	Delay (sec / veh):	25.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.486

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	2	0	0
Entry Pocket Length [ft]	165.00	100.00	100.00	180.00	100.00	100.00	175.00	100.00	175.00	240.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			20.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Base Volume Input [veh/h]	61	896	225	103	743	354	274	61	51	187	39	109
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	1.00	2.00	4.00	3.00	5.00	2.00	2.00	0.00	2.00	7.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	23	0	0	36	0	0	5	0	0	11
Total Hourly Volume [veh/h]	61	902	204	104	748	320	276	61	46	188	39	99
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	245	55	28	203	87	75	17	13	51	11	27
Total Analysis Volume [veh/h]	66	980	222	113	813	348	300	66	50	204	42	108
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	91.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Flashing Yellow Arrow	No			No								
Signal Group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Maximum Green [s]	7	19	0	7	19	0	8	16	0	7	15	0
Amber [s]	3.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	12.0	64.0	0.0	12.0	64.0	0.0	21.0	27.0	0.0	17.0	23.0	0.0
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	5	0	7	5	0	7	5	0	7	5	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	Yes		No	Yes		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C
C, Calculated Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	4.00	0.00	4.00	4.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	78.4	66.5	66.5	78.4	67.1	67.1	12.8	16.6	9.0	12.8
g / C, Green / Cycle	0.65	0.55	0.55	0.65	0.56	0.56	0.11	0.14	0.08	0.11
(v / s)_i Volume / Saturation Flow Rate	0.10	0.28	0.14	0.18	0.23	0.22	0.09	0.07	0.06	0.09
s, saturation flow rate [veh/h]	647	3503	1602	631	3503	1577	3375	1738	3514	1659
c, Capacity [veh/h]	443	1940	887	416	1957	881	361	241	265	178
d1, Uniform Delay [s]	8.92	16.59	13.87	10.36	15.21	14.99	52.52	47.70	54.44	52.57
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.71	0.94	0.68	1.60	0.65	1.33	4.97	1.49	4.66	10.25
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.15	0.51	0.25	0.27	0.42	0.40	0.83	0.48	0.77	0.84
d, Delay for Lane Group [s/veh]	9.63	17.53	14.55	11.97	15.87	16.32	57.49	49.18	59.10	62.82
Lane Group LOS	A	B	B	B	B	B	E	D	E	E
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.67	8.24	3.19	1.20	6.30	5.49	4.75	3.37	3.22	4.98
50th-Percentile Queue Length [ft/ln]	16.66	206.01	79.80	30.12	157.56	137.31	118.78	84.19	80.55	124.45
95th-Percentile Queue Length [veh/ln]	1.20	12.95	5.75	2.17	10.42	9.34	8.33	6.06	5.80	8.64
95th-Percentile Queue Length [ft/ln]	29.98	323.71	143.63	54.22	260.49	233.40	208.14	151.54	144.99	215.92

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	9.63	17.53	14.55	11.97	15.87	16.32	57.49	49.18	49.18	59.10	62.82	62.82
Movement LOS	A	B	B	B	B	B	E	D	D	E	E	E
d_A, Approach Delay [s/veh]	16.60			15.64			55.17			60.68		
Approach LOS	B			B			E			E		
d_I, Intersection Delay [s/veh]	25.79											
Intersection LOS	C											
Intersection V/C	0.486											

Emissions

Vehicle Miles Traveled [mph]	7.61	113.03	25.60	9.83	70.71	30.27	37.14	14.36	15.95	11.72
Stops [stops/h]	19.99	494.43	95.76	36.15	378.15	164.77	285.06	101.03	193.32	149.34
Fuel consumption [US gal/h]	0.57	11.52	2.35	0.92	8.16	3.55	6.05	2.12	3.91	3.02
CO [g/h]	39.83	805.46	164.49	64.42	570.69	248.06	422.79	148.20	273.43	210.92
NOx [g/h]	7.75	156.71	32.00	12.53	111.04	48.26	82.26	28.83	53.20	41.04
VOC [g/h]	9.23	186.67	38.12	14.93	132.26	57.49	97.99	34.35	63.37	48.88

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	967	967	367	300
d_b, Bicycle Delay [s]	16.02	16.02	40.02	43.35
l_b,int, Bicycle LOS Score for Intersection	2.625	2.640	2.254	2.162
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Summit Blvd (SH-9) & Lakepoint Dr

Control Type:	Two-way stop	Delay (sec / veh):	15.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.097

Intersection Setup

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Base Volume Input [veh/h]	1093	21	0	950	0	34
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0070	1.0070	1.0000	1.0070	1.0000	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1101	21	0	957	0	34
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	299	6	0	260	0	9
Total Analysis Volume [veh/h]	1197	23	0	1040	0	37
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.01	0.00	0.10
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	15.45
Movement LOS	A	A		A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.32
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	8.00
d_A, Approach Delay [s/veh]	0.00		0.00		15.45	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.25					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 3: Summit Blvd (SH-9) & 10 Mile Dr

Control Type:	Signalized	Delay (sec / veh):	14.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.435

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	145.00	100.00	100.00	300.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00				35.00			35.00		
Grade [%]	0.00			0.00				0.00			0.00		
Curb Present	No			No				No			No		
Crosswalk	No			No				No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Base Volume Input [veh/h]	57	1001	74	0	74	810	86	116	25	126	60	25	87
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	2.00	0.00	2.00	4.00	3.00	5.00	2.00	2.00	2.00	4.00	3.00
Proportion of CAVs [%]	0.00												
Growth Factor	1.0070	1.0070	1.0070	1.007	1.007	1.007	1.007	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	8	0	0	0	9	0	0	13	0	0	40
Total Hourly Volume [veh/h]	57	1008	67	0	75	816	78	117	25	114	60	25	48
Peak Hour Factor	0.9200	0.9200	0.9200	0.920	0.920	0.920	0.920	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	274	18	0	20	222	21	32	7	0	16	7	13
Total Analysis Volume [veh/h]	62	1096	73	0	82	887	85	127	27	0	65	27	52
Presence of On-Street Parking	No		No	No			No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0				0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0				0			0		
v_co, Outbound Pedestrian Volume crossing	0			0				0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0			0		
Bicycle Volume [bicycles/h]	0			0				0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	10.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	Permi	ProtP	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Flashing Yellow Arrow	No			No	No			No			No		
Signal Group	5	2	0	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups													
Maximum Green [s]	7	63	0	0	7	63	0	0	15	0	0	15	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Walk [s]	0.0	5.0	0.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	12.0	78.0	0.0	0.0	12.0	78.0	0.0	0.0	30.0	0.0	0.0	30.0	0.0
Lead / Lag	Lead	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	5	0	0	7	5	0	0	5	0	0	5	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No			No	No			No			No	
Maximum Recall	No	Yes			No	Yes			No			No	
Pedestrian Recall	No	No			No	No			No			No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	R	L	C
C, Calculated Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	0.00	3.00	3.00	0.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	90.8	79.2	79.2	90.8	79.6	79.6	19.2	19.2	19.2	19.2	19.2
g / C, Green / Cycle	0.76	0.66	0.66	0.76	0.66	0.66	0.16	0.16	0.16	0.16	0.16
(v / s)_i Volume / Saturation Flow Rate	0.09	0.32	0.32	0.13	0.25	0.05	0.10	0.01	0.00	0.05	0.05
s, saturation flow rate [veh/h]	712	1840	1800	618	3503	1577	1288	1870	1589	1383	1648
c, Capacity [veh/h]	550	1215	1188	470	2324	1046	206	299	254	256	263
d1, Uniform Delay [s]	4.87	10.21	10.21	6.11	9.11	7.19	52.30	42.97	0.00	46.38	44.48
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.41	1.39	1.43	0.81	0.48	0.15	2.97	0.13	0.00	0.52	0.63
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.11	0.49	0.49	0.17	0.38	0.08	0.62	0.09	0.00	0.25	0.30
d, Delay for Lane Group [s/veh]	5.28	11.60	11.64	6.91	9.59	7.34	55.27	43.10	0.00	46.90	45.11
Lane Group LOS	A	B	B	A	A	A	E	D	A	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No
50th-Percentile Queue Length [veh/ln]	0.38	7.62	7.48	0.54	4.97	0.77	3.89	0.69	0.00	1.78	2.11
50th-Percentile Queue Length [ft/ln]	9.61	190.39	186.93	13.39	124.18	19.31	97.35	17.31	0.00	44.38	52.78
95th-Percentile Queue Length [veh/ln]	0.69	12.14	11.96	0.96	8.62	1.39	7.01	1.25	0.00	3.20	3.80
95th-Percentile Queue Length [ft/ln]	17.31	303.53	299.04	24.10	215.56	34.76	175.23	31.16	0.00	79.89	95.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	5.28	11.62	11.64	6.91	6.91	9.59	7.34	55.27	43.10	0.00	46.90	45.11	45.11
Movement LOS	A	B	B	A	A	A	A	E	D	A	D	D	D
d_A, Approach Delay [s/veh]	11.30			9.20				53.14			45.92		
Approach LOS	B			A				D			D		
d_I, Intersection Delay [s/veh]	14.87												
Intersection LOS	B												
Intersection V/C	0.435												

Emissions

Vehicle Miles Traveled [mph]	9.50	90.47	88.64	7.38	79.82	7.65	4.99	1.06	0.00	2.94	3.57
Stops [stops/h]	11.54	228.47	224.31	16.06	298.04	23.17	116.82	20.78	0.00	53.26	63.34
Fuel consumption [US gal/h]	0.52	6.56	6.44	0.52	7.01	0.59	2.50	0.43	0.00	1.13	1.34
CO [g/h]	36.03	458.59	449.89	36.17	490.30	41.44	174.54	30.30	0.00	79.18	93.50
NOx [g/h]	7.01	89.22	87.53	7.04	95.39	8.06	33.96	5.89	0.00	15.41	18.19
VOC [g/h]	8.35	106.28	104.27	8.38	113.63	9.60	40.45	7.02	0.00	18.35	21.67

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1217	1217	417	417
d_b, Bicycle Delay [s]	9.20	9.20	37.60	37.60
l_b,int, Bicycle LOS Score for Intersection	2.582	2.369	1.835	1.863
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Lakepoint Dr & North Ten Mile Dr

Control Type:	Two-way stop	Delay (sec / veh):	10.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.013

Intersection Setup

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Base Volume Input [veh/h]	11	98	9	1	83	11	12	4	5	9	12	1
Base Volume Adjustment Factor	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	85	8	1	71	9	10	3	4	8	10	1
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	23	2	0	19	2	3	1	1	2	3	0
Total Analysis Volume [veh/h]	10	92	9	1	77	10	11	3	4	9	11	1
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.11	0.01	0.00	0.09	0.01	0.01	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	10.26	10.03	9.00	10.23	9.88	8.86	7.26	0.00	0.00	7.24	0.00	0.00
Movement LOS	B	B	A	B	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.46	0.46	0.46	0.35	0.35	0.35	0.02	0.02	0.02	0.02	0.02	0.02
95th-Percentile Queue Length [ft/ln]	11.43	11.43	11.43	8.70	8.70	8.70	0.51	0.51	0.51	0.38	0.38	0.38
d_A, Approach Delay [s/veh]	9.97			9.76			4.43			3.10		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	8.87											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 5: Dillon Dam Rd & N Ten Mile Dr

Control Type:	Two-way stop	Delay (sec / veh):	16.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.149

Intersection Setup

Name	Dillon Dam Rd		Dillon Dam Rd		North Ten Mile Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Dillon Dam Rd		Dillon Dam Rd		North Ten Mile Dr	
Base Volume Input [veh/h]	285	62	38	226	55	84
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	287	62	38	228	55	85
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	78	17	10	62	15	23
Total Analysis Volume [veh/h]	312	67	41	248	60	92
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.03	0.00	0.15	0.13
d_M, Delay for Movement [s/veh]	0.00	0.00	8.10	0.00	16.53	12.74
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.07	0.07	1.15	1.15
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.75	1.75	28.65	28.65
d_A, Approach Delay [s/veh]	0.00		1.15		14.24	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	3.04					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 56: Summit Blvd (SH-9) & I-70 EB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)								
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)								
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	9.02	8.32	0.00	9.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS		A	A		A		A	A	A			
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.67			9.02			0.00			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	4.42											
Intersection LOS												

Intersection Level Of Service Report

Intersection 1: Summit Blvd (SH-9) & Dillon Dam Rd / Lusher Ct

Control Type:	Signalized	Delay (sec / veh):	26.3
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.497

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	2	0	0
Entry Pocket Length [ft]	165.00	100.00	100.00	180.00	100.00	100.00	175.00	100.00	175.00	240.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			20.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Base Volume Input [veh/h]	81	896	160	103	743	354	274	58	83	137	57	109
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	1.00	2.00	4.00	3.00	5.00	2.00	2.00	0.00	2.00	7.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	16	0	0	36	0	0	8	0	0	11
Total Hourly Volume [veh/h]	82	902	145	104	748	320	276	58	76	138	57	99
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	245	39	28	203	87	75	16	21	38	15	27
Total Analysis Volume [veh/h]	89	980	158	113	813	348	300	63	83	150	62	108
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	91.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Flashing Yellow Arrow	No			No								
Signal Group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Maximum Green [s]	7	19	0	7	19	0	8	16	0	7	15	0
Amber [s]	3.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	12.0	63.0	0.0	12.0	63.0	0.0	18.0	17.0	0.0	28.0	27.0	0.0
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	5	0	7	5	0	7	5	0	7	5	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	Yes		No	Yes		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C
C, Calculated Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	4.00	0.00	4.00	4.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	77.3	65.5	65.5	77.3	65.7	65.7	12.5	19.3	7.3	14.1
g / C, Green / Cycle	0.64	0.55	0.55	0.64	0.55	0.55	0.10	0.16	0.06	0.12
(v / s)_i Volume / Saturation Flow Rate	0.14	0.28	0.10	0.17	0.23	0.22	0.09	0.09	0.04	0.10
s, saturation flow rate [veh/h]	656	3503	1602	658	3503	1577	3375	1699	3514	1681
c, Capacity [veh/h]	444	1912	874	425	1918	863	353	273	216	198
d1, Uniform Delay [s]	9.40	17.19	13.73	10.60	16.01	15.77	52.81	46.24	55.19	51.95
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.01	0.99	0.45	1.53	0.69	1.40	5.78	1.62	3.94	10.27
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.20	0.51	0.18	0.27	0.42	0.40	0.85	0.53	0.69	0.86
d, Delay for Lane Group [s/veh]	10.41	18.17	14.19	12.12	16.69	17.17	58.59	47.87	59.14	62.22
Lane Group LOS	B	B	B	B	B	B	E	D	E	E
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.94	8.44	2.22	1.23	6.52	5.68	4.80	4.20	2.36	5.62
50th-Percentile Queue Length [ft/ln]	23.57	211.08	55.45	30.86	163.01	142.05	119.93	105.05	59.05	140.61
95th-Percentile Queue Length [veh/ln]	1.70	13.21	3.99	2.22	10.71	9.59	8.39	7.56	4.25	9.51
95th-Percentile Queue Length [ft/ln]	42.42	330.21	99.82	55.55	267.70	239.78	209.73	189.09	106.29	237.85

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	10.41	18.17	14.19	12.12	16.69	17.17	58.59	47.87	47.87	59.14	62.22	62.22
Movement LOS	B	B	B	B	B	B	E	D	D	E	E	E
d_A, Approach Delay [s/veh]	17.10			16.42			55.08			60.77		
Approach LOS	B			B			E			E		
d_I, Intersection Delay [s/veh]	26.30											
Intersection LOS	C											
Intersection V/C	0.497											

Emissions

Vehicle Miles Traveled [mph]	10.26	113.03	18.22	9.83	70.71	30.27	37.14	18.08	11.72	13.29
Stops [stops/h]	28.28	506.59	66.54	37.03	391.22	170.46	287.82	126.06	141.72	168.73
Fuel consumption [US gal/h]	0.79	11.74	1.65	0.93	8.40	3.65	6.12	2.63	2.88	3.40
CO [g/h]	55.40	820.81	115.42	65.14	587.13	255.27	427.97	183.60	201.02	237.45
NOx [g/h]	10.78	159.70	22.46	12.67	114.23	49.67	83.27	35.72	39.11	46.20
VOC [g/h]	12.84	190.23	26.75	15.10	136.07	59.16	99.19	42.55	46.59	55.03

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	950	950	200	367
d_b, Bicycle Delay [s]	16.54	16.54	48.60	40.02
l_b,int, Bicycle LOS Score for Intersection	2.585	2.640	2.309	2.106
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Summit Blvd (SH-9) & Lakepoint Dr

Control Type:	Two-way stop	Delay (sec / veh):	15.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.077

Intersection Setup

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Base Volume Input [veh/h]	1158	17	0	1010	0	26
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0070	1.0070	1.0000	1.0070	1.0000	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1166	17	0	1017	0	26
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	317	5	0	276	0	7
Total Analysis Volume [veh/h]	1267	18	0	1105	0	28
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.01	0.00	0.08
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	15.78
Movement LOS	A	A		A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.25
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	6.25
d_A, Approach Delay [s/veh]	0.00		0.00		15.78	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.18					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 3: Summit Blvd (SH-9) & 10 Mile Dr

Control Type:	Signalized	Delay (sec / veh):	13.5
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.415

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	145.00	100.00	100.00	300.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00				35.00			35.00		
Grade [%]	0.00			0.00				0.00			0.00		
Curb Present	No			No				No			No		
Crosswalk	No			No				No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Base Volume Input [veh/h]	57	1001	74	0	101	810	143	86	13	126	60	10	88
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	2.00	0.00	2.00	4.00	3.00	5.00	2.00	2.00	2.00	4.00	3.00
Proportion of CAVs [%]	0.00												
Growth Factor	1.0070	1.0070	1.0070	1.007	1.007	1.007	1.007	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	8	0	0	0	14	0	0	13	0	0	27
Total Hourly Volume [veh/h]	57	1008	67	0	102	816	130	87	13	114	60	10	62
Peak Hour Factor	0.9200	0.9200	0.9200	0.920	0.920	0.920	0.920	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	274	18	0	28	222	35	24	4	0	16	3	17
Total Analysis Volume [veh/h]	62	1096	73	0	111	887	141	95	14	0	65	11	67
Presence of On-Street Parking	No		No	No			No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0				0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0				0			0		
v_co, Outbound Pedestrian Volume crossing	0			0				0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0			0		
Bicycle Volume [bicycles/h]	0			0				0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	10.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	Permi	ProtP	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Flashing Yellow Arrow	No			No	No			No			No		
Signal Group	5	2	0	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups													
Maximum Green [s]	7	63	0	0	7	63	0	0	15	0	0	15	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Walk [s]	0.0	5.0	0.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	12.0	85.0	0.0	0.0	12.0	85.0	0.0	0.0	23.0	0.0	0.0	23.0	0.0
Lead / Lag	Lead	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	5	0	0	7	5	0	0	5	0	0	5	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No			No	No			No			No	
Maximum Recall	No	Yes			No	Yes			No			No	
Pedestrian Recall	No	No			No	No			No			No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	R	L	C
C, Calculated Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	0.00	3.00	3.00	0.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	92.5	80.6	80.6	92.5	81.3	81.3	17.5	17.5	17.5	17.5	17.5
g / C, Green / Cycle	0.77	0.67	0.67	0.77	0.68	0.68	0.15	0.15	0.15	0.15	0.15
(v / s)_i Volume / Saturation Flow Rate	0.09	0.32	0.32	0.18	0.25	0.09	0.07	0.01	0.00	0.05	0.05
s, saturation flow rate [veh/h]	681	1840	1800	618	3503	1577	1289	1870	1589	1399	1598
c, Capacity [veh/h]	555	1237	1210	493	2377	1070	169	272	231	230	233
d1, Uniform Delay [s]	4.04	9.47	9.48	5.19	8.31	6.82	54.33	44.13	0.00	48.55	46.05
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.41	1.32	1.35	1.06	0.45	0.26	2.94	0.08	0.00	0.66	0.84
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.11	0.48	0.48	0.23	0.37	0.13	0.56	0.05	0.00	0.28	0.34
d, Delay for Lane Group [s/veh]	4.45	10.80	10.84	6.25	8.76	7.07	57.26	44.21	0.00	49.22	46.89
Lane Group LOS	A	B	B	A	A	A	E	D	A	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No
50th-Percentile Queue Length [veh/ln]	0.35	7.26	7.13	0.68	4.68	1.26	2.95	0.36	0.00	1.82	2.13
50th-Percentile Queue Length [ft/ln]	8.86	181.50	178.20	17.06	117.00	31.44	73.68	9.09	0.00	45.62	53.32
95th-Percentile Queue Length [veh/ln]	0.64	11.68	11.51	1.23	8.23	2.26	5.30	0.65	0.00	3.28	3.84
95th-Percentile Queue Length [ft/ln]	15.95	291.97	287.66	30.72	205.70	56.59	132.62	16.35	0.00	82.12	95.98

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	4.45	10.81	10.84	6.25	6.25	8.76	7.07	57.26	44.21	0.00	49.22	46.89	46.89
Movement LOS	A	B	B	A	A	A	A	E	D	A	D	D	D
d_A, Approach Delay [s/veh]	10.49			8.31				55.59			47.95		
Approach LOS	B			A				E			D		
d_I, Intersection Delay [s/veh]	13.46												
Intersection LOS	B												
Intersection V/C	0.415												

Emissions

Vehicle Miles Traveled [mph]	9.50	90.47	88.64	9.99	79.82	12.69	3.73	0.55	0.00	2.94	3.53
Stops [stops/h]	10.63	217.80	213.84	20.48	280.81	37.72	88.41	10.90	0.00	54.74	63.99
Fuel consumption [US gal/h]	0.50	6.38	6.26	0.68	6.74	0.97	1.91	0.23	0.00	1.17	1.36
CO [g/h]	34.83	446.23	437.75	47.24	470.83	67.82	133.79	16.00	0.00	82.11	95.06
NOx [g/h]	6.78	86.82	85.17	9.19	91.61	13.20	26.03	3.11	0.00	15.98	18.49
VOC [g/h]	8.07	103.42	101.45	10.95	109.12	15.72	31.01	3.71	0.00	19.03	22.03

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1333	1333	300	300
d_b, Bicycle Delay [s]	6.67	6.67	43.35	43.35
l_b,int, Bicycle LOS Score for Intersection	2.582	2.419	1.761	1.840
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Lakepoint Dr & North Ten Mile Dr

Control Type:	Two-way stop	Delay (sec / veh):	10.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.015

Intersection Setup

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Base Volume Input [veh/h]	10	45	7	1	95	10	12	2	3	8	6	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	45	7	1	96	10	12	2	3	8	6	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	12	2	0	26	3	3	1	1	2	2	0
Total Analysis Volume [veh/h]	11	49	8	1	104	11	13	2	3	9	7	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.06	0.01	0.00	0.13	0.01	0.01	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	10.25	9.75	8.72	10.00	10.05	9.03	7.25	0.00	0.00	7.24	0.00	0.00
Movement LOS	B	A	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.27	0.27	0.27	0.48	0.48	0.48	0.02	0.02	0.02	0.02	0.02	0.02
95th-Percentile Queue Length [ft/ln]	6.65	6.65	6.65	11.91	11.91	11.91	0.61	0.61	0.61	0.38	0.38	0.38
d_A, Approach Delay [s/veh]	9.71			9.95			5.24			4.07		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	9.06											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 5: Dillon Dam Rd & N Ten Mile Dr

Control Type:	Two-way stop	Delay (sec / veh):	16.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.252

Intersection Setup

Name	Dillon Dam Rd		Dillon Dam Rd		North Ten Mile Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Dillon Dam Rd		Dillon Dam Rd		North Ten Mile Dr	
Base Volume Input [veh/h]	233	88	44	205	98	44
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	235	89	44	206	99	44
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	64	24	12	56	27	12
Total Analysis Volume [veh/h]	255	97	48	224	108	48
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.04	0.00	0.25	0.07
d_M, Delay for Movement [s/veh]	0.00	0.00	8.04	0.00	16.75	13.25
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.08	0.08	1.35	1.35
95th-Percentile Queue Length [ft/ln]	0.00	0.00	2.05	2.05	33.71	33.71
d_A, Approach Delay [s/veh]	0.00		1.42		15.67	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	3.63					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 56: Summit Blvd (SH-9) & I-70 EB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)								
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)								
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	9.02	8.32	0.00	9.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS		A	A		A		A	A	A			
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.67			9.02			0.00			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	4.42											
Intersection LOS												

Intersection Level Of Service Report

Intersection 1: Summit Blvd (SH-9) & Dillon Dam Rd / Lusher Ct

Control Type:	Signalized	Delay (sec / veh):	45.3
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.510

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	2	0	0
Entry Pocket Length [ft]	165.00	100.00	100.00	180.00	100.00	100.00	175.00	100.00	175.00	240.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			20.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Base Volume Input [veh/h]	28	896	142	103	743	354	274	64	34	178	28	109
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	1.00	2.00	4.00	3.00	5.00	2.00	2.00	0.00	2.00	7.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	43	8	32	32	0	0	0	0	0	0	19
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	15	0	0	36	0	0	3	0	0	13
Total Hourly Volume [veh/h]	28	945	136	136	780	320	276	64	31	179	28	116
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	257	37	37	212	87	75	17	8	49	8	32
Total Analysis Volume [veh/h]	30	1027	148	148	848	348	300	70	34	195	30	126
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	91.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Flashing Yellow Arrow	No			No								
Signal Group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Maximum Green [s]	7	19	0	7	19	0	8	16	0	7	15	0
Amber [s]	3.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	12.0	49.0	0.0	12.0	49.0	0.0	12.0	43.0	0.0	16.0	47.0	0.0
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	5	0	7	5	0	7	5	0	7	5	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	Yes		No	Yes		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C
C, Calculated Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	4.00	0.00	4.00	4.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	83.4	71.5	71.5	83.4	74.0	74.0	7.0	11.9	8.7	13.6
g / C, Green / Cycle	0.70	0.60	0.60	0.70	0.62	0.62	0.06	0.10	0.07	0.11
(v / s)_i Volume / Saturation Flow Rate	0.05	0.29	0.09	0.23	0.24	0.22	0.09	0.06	0.06	0.10
s, saturation flow rate [veh/h]	595	3503	1602	633	3503	1577	3375	1768	3514	1637
c, Capacity [veh/h]	440	2085	954	445	2158	971	197	176	254	186
d1, Uniform Delay [s]	6.80	13.91	10.83	8.84	11.67	11.35	56.50	51.67	54.68	52.11
k, delay calibration	0.50	0.50	0.50	0.29	0.50	0.50	0.13	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.30	0.83	0.35	1.17	0.54	1.03	242.59	3.12	4.86	9.64
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.07	0.49	0.16	0.33	0.39	0.36	1.52	0.59	0.77	0.84
d, Delay for Lane Group [s/veh]	7.10	14.75	11.18	10.01	12.21	12.38	299.09	54.79	59.55	61.75
Lane Group LOS	A	B	B	B	B	B	F	D	E	E
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.25	7.77	1.78	1.28	5.57	4.60	9.66	3.20	3.09	5.14
50th-Percentile Queue Length [ft/ln]	6.29	194.34	44.56	32.06	139.26	114.90	241.53	80.04	77.24	128.43
95th-Percentile Queue Length [veh/ln]	0.45	12.35	3.21	2.31	9.44	8.11	16.42	5.76	5.56	8.85
95th-Percentile Queue Length [ft/ln]	11.32	308.65	80.20	57.71	236.03	202.79	410.43	144.07	139.04	221.36

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	7.10	14.75	11.18	10.01	12.21	12.38	299.09	54.79	54.79	59.55	61.75	61.75
Movement LOS	A	B	B	B	B	B	F	D	D	E	E	E
d_A, Approach Delay [s/veh]	14.12			12.01			236.20			60.53		
Approach LOS	B			B			F			E		
d_I, Intersection Delay [s/veh]	45.35											
Intersection LOS	D											
Intersection V/C	0.510											

Emissions

Vehicle Miles Traveled [mph]	3.46	118.45	17.07	12.87	73.76	30.27	37.14	12.88	15.24	12.19
Stops [stops/h]	7.55	466.40	53.47	38.47	334.22	137.88	579.66	96.05	185.38	154.11
Fuel consumption [US gal/h]	0.23	11.10	1.39	1.08	7.43	3.07	21.52	2.03	3.76	3.10
CO [g/h]	16.22	776.20	97.13	75.59	519.48	214.42	1504.07	142.10	262.77	216.67
NOx [g/h]	3.16	151.02	18.90	14.71	101.07	41.72	292.64	27.65	51.13	42.16
VOC [g/h]	3.76	179.89	22.51	17.52	120.39	49.69	348.58	32.93	60.90	50.21

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	717	717	633	700
d_b, Bicycle Delay [s]	24.70	24.70	28.02	25.35
l_b,int, Bicycle LOS Score for Intersection	2.566	2.698	2.231	2.160
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Summit Blvd (SH-9) & Lakepoint Dr

Control Type:	Two-way stop	Delay (sec / veh):	12.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.137

Intersection Setup

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Base Volume Input [veh/h]	678	15	0	968	0	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0070	1.0070	1.0000	1.0070	1.0000	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	25	0	32	0	45
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	-15	0	0	-16	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	674	40	0	991	0	68
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	183	11	0	269	0	18
Total Analysis Volume [veh/h]	733	43	0	1077	0	74
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.01	0.00	0.14
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	12.75
Movement LOS	A	A		A		B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.47
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	11.85
d_A, Approach Delay [s/veh]	0.00		0.00		12.75	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.49					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 3: Summit Blvd (SH-9) & 10 Mile Dr

Control Type:	Signalized	Delay (sec / veh):	10.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.407

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	145.00	100.00	100.00	300.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00				35.00			35.00		
Grade [%]	0.00			0.00				0.00			0.00		
Curb Present	No			No				No			No		
Crosswalk	No			No				No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Base Volume Input [veh/h]	57	1001	74	0	48	810	34	50	13	126	60	7	24
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	2.00	0.00	2.00	4.00	3.00	5.00	2.00	2.00	2.00	4.00	3.00
Proportion of CAVs [%]	0.00												
Growth Factor	1.0070	1.0070	1.0070	1.007	1.007	1.007	1.007	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	19	6	13	19	0	0	0	0	0	24	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	8	0	0	0	3	0	0	13	0	0	11
Total Hourly Volume [veh/h]	57	1027	73	13	67	816	31	50	13	114	84	7	13
Peak Hour Factor	0.9200	0.9200	0.9200	0.920	0.920	0.920	0.920	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	279	20	4	18	222	8	14	4	0	23	2	4
Total Analysis Volume [veh/h]	62	1116	79	14	73	887	34	54	14	0	91	8	14
Presence of On-Street Parking	No		No	No			No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0				0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0				0			0		
v_co, Outbound Pedestrian Volume crossing	0			0				0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0			0		
Bicycle Volume [bicycles/h]	0			0				0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	10.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	Permi	ProtP	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Flashing Yellow Arrow	No			No	No			No			No		
Signal Group	5	2	0	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups													
Maximum Green [s]	7	63	0	0	7	63	0	0	15	0	0	15	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Walk [s]	0.0	5.0	0.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	12.0	85.0	0.0	0.0	12.0	85.0	0.0	0.0	23.0	0.0	0.0	23.0	0.0
Lead / Lag	Lead	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	5	0	0	7	5	0	0	5	0	0	5	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No			No	No			No			No	
Maximum Recall	No	Yes			No	Yes			No			No	
Pedestrian Recall	No	No			No	No			No			No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	R	L	C
C, Calculated Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	0.00	3.00	3.00	0.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	97.6	86.0	86.0	97.6	86.5	86.5	12.4	12.4	12.4	12.4	12.4
g / C, Green / Cycle	0.81	0.72	0.72	0.81	0.72	0.72	0.10	0.10	0.10	0.10	0.10
(v / s)_i Volume / Saturation Flow Rate	0.09	0.33	0.33	0.15	0.25	0.02	0.04	0.01	0.00	0.07	0.01
s, saturation flow rate [veh/h]	728	1840	1798	599	3503	1577	1356	1870	1589	1399	1654
c, Capacity [veh/h]	625	1319	1288	513	2526	1137	159	193	164	169	171
d1, Uniform Delay [s]	2.73	7.17	7.17	3.55	6.26	4.78	53.72	48.63	0.00	54.54	48.92
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.32	1.15	1.18	0.71	0.39	0.05	1.26	0.16	0.00	2.64	0.34
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.10	0.46	0.46	0.17	0.35	0.03	0.34	0.07	0.00	0.54	0.13
d, Delay for Lane Group [s/veh]	3.04	8.31	8.35	4.26	6.64	4.82	54.98	48.79	0.00	57.17	49.25
Lane Group LOS	A	A	A	A	A	A	D	D	A	E	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.26	6.12	6.01	0.39	3.82	0.23	1.62	0.39	0.00	2.81	0.61
50th-Percentile Queue Length [ft/ln]	6.38	153.11	150.27	9.68	95.52	5.78	40.45	9.65	0.00	70.26	15.32
95th-Percentile Queue Length [veh/ln]	0.46	10.18	10.03	0.70	6.88	0.42	2.91	0.69	0.00	5.06	1.10
95th-Percentile Queue Length [ft/ln]	11.48	254.57	250.79	17.42	171.94	10.40	72.81	17.37	0.00	126.48	27.58

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	3.04	8.33	8.35	4.26	4.26	6.64	4.82	54.98	48.79	0.00	57.17	49.25	49.25
Movement LOS	A	A	A	A	A	A	A	D	D	A	E	D	D
d_A, Approach Delay [s/veh]	8.07			6.38				53.71			55.63		
Approach LOS	A			A				D			E		
d_I, Intersection Delay [s/veh]	10.84												
Intersection LOS	B												
Intersection V/C	0.407												

Emissions

Vehicle Miles Traveled [mph]	9.50	92.52	90.57	7.83	79.82	3.06	2.12	0.55	0.00	4.11	0.99
Stops [stops/h]	7.66	183.73	180.32	11.61	229.26	6.93	48.54	11.58	0.00	84.32	18.39
Fuel consumption [US gal/h]	0.46	5.93	5.81	0.46	5.97	0.20	1.05	0.25	0.00	1.85	0.40
CO [g/h]	32.02	414.52	406.33	32.24	417.00	14.13	73.39	17.27	0.00	129.28	27.73
NOx [g/h]	6.23	80.65	79.06	6.27	81.13	2.75	14.28	3.36	0.00	25.15	5.39
VOC [g/h]	7.42	96.07	94.17	7.47	96.64	3.27	17.01	4.00	0.00	29.96	6.43

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1333	1333	300	300
d_b, Bicycle Delay [s]	6.67	6.67	43.35	43.35
l_b,int, Bicycle LOS Score for Intersection	2.603	2.333	1.693	1.764
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Lakepoint Dr & North Ten Mile Dr

Control Type:	Two-way stop	Delay (sec / veh):	11.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.017

Intersection Setup

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Base Volume Input [veh/h]	10	45	7	1	95	10	12	2	3	8	6	0
Base Volume Adjustment Factor	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	25	0	0	24	45	25	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	64	6	1	107	54	35	2	3	7	5	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	17	2	0	29	15	10	1	1	2	1	0
Total Analysis Volume [veh/h]	10	70	7	1	116	59	38	2	3	8	5	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.09	0.01	0.00	0.15	0.05	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.56	10.30	8.94	11.03	10.81	9.45	7.28	0.00	0.00	7.24	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.39	0.39	0.39	0.78	0.78	0.78	0.07	0.07	0.07	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	9.63	9.63	9.63	19.47	19.47	19.47	1.82	1.82	1.82	0.33	0.33	0.33
d_A, Approach Delay [s/veh]	10.34			10.36			6.43			4.45		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	9.58											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 5: Dillon Dam Rd & N Ten Mile Dr

Control Type:	Two-way stop	Delay (sec / veh):	14.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.166

Intersection Setup

Name	Dillon Dam Rd		Dillon Dam Rd		North Ten Mile Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Dillon Dam Rd		Dillon Dam Rd		North Ten Mile Dr	
Base Volume Input [veh/h]	153	61	54	198	49	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	38	10	0	19	8
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	156	99	64	199	68	41
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	27	17	54	18	11
Total Analysis Volume [veh/h]	170	108	70	216	74	45
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.05	0.00	0.17	0.06
d_M, Delay for Movement [s/veh]	0.00	0.00	7.88	0.00	14.93	11.30
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.12	0.12	0.84	0.84
95th-Percentile Queue Length [ft/ln]	0.00	0.00	3.03	3.03	20.91	20.91
d_A, Approach Delay [s/veh]	0.00		1.93		13.56	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	3.17					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 56: Summit Blvd (SH-9) & I-70 EB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	9.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.078

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)								
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)								
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	62	0	0	64	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	62	0	0	64	0	0	0	0	0	0	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	17	0	0	17	0	0	0	0	0	0	0
Total Analysis Volume [veh/h]	0	67	0	0	70	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.07	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	9.34	8.32	0.00	9.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS		A	A		A		A	A	A			
95th-Percentile Queue Length [veh/ln]	0.00	0.24	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	6.05	0.00	0.00	6.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.34			9.36			0.00			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	9.35											
Intersection LOS	A											

Intersection Level Of Service Report

Intersection 1: Summit Blvd (SH-9) & Dillon Dam Rd / Lusher Ct

Control Type:	Signalized	Delay (sec / veh):	26.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.512

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	2	0	0
Entry Pocket Length [ft]	165.00	100.00	100.00	180.00	100.00	100.00	175.00	100.00	175.00	240.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			20.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Base Volume Input [veh/h]	61	896	225	103	743	354	274	61	51	187	39	109
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	1.00	2.00	4.00	3.00	5.00	2.00	2.00	0.00	2.00	7.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	31	6	25	25	0	0	0	0	0	0	14
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	23	0	0	36	0	0	5	0	0	12
Total Hourly Volume [veh/h]	61	933	210	129	773	320	276	61	46	188	39	112
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	254	57	35	210	87	75	17	13	51	11	30
Total Analysis Volume [veh/h]	66	1014	228	140	840	348	300	66	50	204	42	122
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	91.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Flashing Yellow Arrow	No			No								
Signal Group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Maximum Green [s]	7	19	0	7	19	0	8	16	0	7	15	0
Amber [s]	3.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	12.0	42.0	0.0	12.0	42.0	0.0	21.0	17.0	0.0	49.0	45.0	0.0
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	5	0	7	5	0	7	5	0	7	5	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	Yes		No	Yes		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C
C, Calculated Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	4.00	0.00	4.00	4.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	77.2	65.2	65.2	77.2	65.9	65.9	12.8	17.4	9.5	14.1
g / C, Green / Cycle	0.64	0.54	0.54	0.64	0.55	0.55	0.11	0.14	0.08	0.12
(v / s)_i Volume / Saturation Flow Rate	0.10	0.29	0.14	0.23	0.24	0.22	0.09	0.07	0.06	0.10
s, saturation flow rate [veh/h]	638	3503	1602	620	3503	1577	3375	1738	3514	1653
c, Capacity [veh/h]	428	1903	870	400	1923	866	360	251	280	194
d1, Uniform Delay [s]	9.55	17.63	14.60	11.67	16.05	15.66	52.57	47.06	53.96	51.87
k, delay calibration	0.50	0.50	0.50	0.26	0.50	0.50	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.77	1.07	0.73	1.26	0.72	1.39	5.09	1.32	3.63	9.53
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.15	0.53	0.26	0.35	0.44	0.40	0.83	0.46	0.73	0.84
d, Delay for Lane Group [s/veh]	10.31	18.70	15.34	12.93	16.78	17.05	57.66	48.38	57.58	61.40
Lane Group LOS	B	B	B	B	B	B	E	D	E	E
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.69	8.92	3.39	1.48	6.77	5.65	4.76	3.33	3.18	5.39
50th-Percentile Queue Length [ft/ln]	17.32	222.99	84.86	36.88	169.28	141.29	118.93	83.34	79.45	134.72
95th-Percentile Queue Length [veh/ln]	1.25	13.82	6.11	2.66	11.04	9.55	8.33	6.00	5.72	9.20
95th-Percentile Queue Length [ft/ln]	31.18	345.44	152.75	66.39	275.97	238.75	208.36	150.00	143.01	229.89

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	10.31	18.70	15.34	12.93	16.78	17.05	57.66	48.38	48.38	57.58	61.40	61.40
Movement LOS	B	B	B	B	B	B	E	D	D	E	E	E
d_A, Approach Delay [s/veh]	17.69			16.44			55.07			59.29		
Approach LOS	B			B			E			E		
d_I, Intersection Delay [s/veh]	26.23											
Intersection LOS	C											
Intersection V/C	0.512											

Emissions

Vehicle Miles Traveled [mph]	7.61	116.95	26.30	12.18	73.06	30.27	37.14	14.36	15.95	12.82
Stops [stops/h]	20.79	535.18	101.83	44.26	406.28	169.54	285.43	100.00	190.68	161.66
Fuel consumption [US gal/h]	0.59	12.34	2.48	1.17	8.71	3.64	6.06	2.10	3.84	3.25
CO [g/h]	40.89	862.68	173.34	81.45	608.72	254.19	423.58	146.70	268.33	226.87
NOx [g/h]	7.96	167.85	33.72	15.85	118.44	49.46	82.41	28.54	52.21	44.14
VOC [g/h]	9.48	199.93	40.17	18.88	141.08	58.91	98.17	34.00	62.19	52.58

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	600	600	200	667
d_b, Bicycle Delay [s]	29.40	29.40	48.60	26.67
l_b,int, Bicycle LOS Score for Intersection	2.658	2.685	2.254	2.187
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Summit Blvd (SH-9) & Lakepoint Dr

Control Type:	Two-way stop	Delay (sec / veh):	16.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.190

Intersection Setup

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Base Volume Input [veh/h]	1093	21	0	950	0	34
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0070	1.0070	1.0000	1.0070	1.0000	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	19	0	25	0	33
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	-11	0	0	-12	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1095	40	0	970	0	67
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	298	11	0	264	0	18
Total Analysis Volume [veh/h]	1190	43	0	1054	0	73
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.01	0.00	0.19
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	16.59
Movement LOS	A	A		A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.69
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	17.33
d_A, Approach Delay [s/veh]	0.00		0.00		16.59	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.51					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 3: Summit Blvd (SH-9) & 10 Mile Dr

Control Type:	Signalized	Delay (sec / veh):	15.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.446

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	145.00	100.00	100.00	300.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00				35.00			35.00		
Grade [%]	0.00			0.00				0.00			0.00		
Curb Present	No			No				No			No		
Crosswalk	No			No				No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Base Volume Input [veh/h]	57	1001	74	0	74	810	86	116	25	126	60	25	87
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	2.00	0.00	2.00	4.00	3.00	5.00	2.00	2.00	2.00	4.00	3.00
Proportion of CAVs [%]	0.00												
Growth Factor	1.0070	1.0070	1.0070	1.007	1.007	1.007	1.007	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	14	5	10	15	0	0	0	0	0	17	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	8	0	0	0	9	0	0	13	0	0	40
Total Hourly Volume [veh/h]	57	1022	72	10	90	816	78	117	25	114	77	25	48
Peak Hour Factor	0.9200	0.9200	0.9200	0.920	0.920	0.920	0.920	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	278	20	3	24	222	21	32	7	0	21	7	13
Total Analysis Volume [veh/h]	62	1111	78	11	98	887	85	127	27	0	84	27	52
Presence of On-Street Parking	No		No	No			No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0				0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0				0			0		
v_co, Outbound Pedestrian Volume crossing	0			0				0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0			0		
Bicycle Volume [bicycles/h]	0			0				0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	10.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	Permi	ProtP	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Flashing Yellow Arrow	No			No	No			No			No		
Signal Group	5	2	0	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups													
Maximum Green [s]	7	63	0	0	7	63	0	0	15	0	0	15	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Walk [s]	0.0	5.0	0.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	12.0	78.0	0.0	0.0	12.0	78.0	0.0	0.0	30.0	0.0	0.0	30.0	0.0
Lead / Lag	Lead	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	5	0	0	7	5	0	0	5	0	0	5	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No			No	No			No			No	
Maximum Recall	No	Yes			No	Yes			No			No	
Pedestrian Recall	No	No			No	No			No			No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	R	L	C
C, Calculated Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	0.00	3.00	3.00	0.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	90.8	79.0	79.0	90.8	79.6	79.6	19.2	19.2	19.2	19.2	19.2
g / C, Green / Cycle	0.76	0.66	0.66	0.76	0.66	0.66	0.16	0.16	0.16	0.16	0.16
(v / s)_i Volume / Saturation Flow Rate	0.09	0.33	0.33	0.18	0.25	0.05	0.10	0.01	0.00	0.06	0.05
s, saturation flow rate [veh/h]	712	1840	1798	614	3503	1577	1288	1870	1589	1383	1648
c, Capacity [veh/h]	550	1211	1183	467	2324	1046	206	299	254	256	263
d1, Uniform Delay [s]	4.87	10.41	10.42	6.48	9.11	7.19	52.30	42.97	0.00	47.06	44.48
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.41	1.45	1.49	1.17	0.48	0.15	2.97	0.13	0.00	0.74	0.63
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.11	0.50	0.50	0.23	0.38	0.08	0.62	0.09	0.00	0.33	0.30
d, Delay for Lane Group [s/veh]	5.28	11.86	11.91	7.66	9.59	7.34	55.27	43.10	0.00	47.80	45.11
Lane Group LOS	A	B	B	A	A	A	E	D	A	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No
50th-Percentile Queue Length [veh/ln]	0.38	7.88	7.74	0.73	4.97	0.77	3.89	0.69	0.00	2.33	2.11
50th-Percentile Queue Length [ft/ln]	9.61	197.07	193.39	18.32	124.18	19.31	97.35	17.31	0.00	58.31	52.78
95th-Percentile Queue Length [veh/ln]	0.69	12.49	12.30	1.32	8.62	1.39	7.01	1.25	0.00	4.20	3.80
95th-Percentile Queue Length [ft/ln]	17.31	312.19	307.43	32.97	215.56	34.76	175.23	31.16	0.00	104.96	95.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	5.28	11.89	11.91	7.66	7.66	9.59	7.34	55.27	43.10	0.00	47.80	45.11	45.11
Movement LOS	A	B	B	A	A	A	A	E	D	A	D	D	D
d_A, Approach Delay [s/veh]	11.56			9.21				53.14			46.50		
Approach LOS	B			A				D			D		
d_I, Intersection Delay [s/veh]	15.17												
Intersection LOS	B												
Intersection V/C	0.446												

Emissions

Vehicle Miles Traveled [mph]	9.50	92.06	90.12	9.81	79.82	7.65	4.99	1.06	0.00	3.80	3.57
Stops [stops/h]	11.54	236.49	232.07	21.98	298.04	23.17	116.82	20.78	0.00	69.97	63.34
Fuel consumption [US gal/h]	0.52	6.74	6.61	0.71	7.01	0.59	2.50	0.43	0.00	1.49	1.34
CO [g/h]	36.03	470.99	461.79	49.56	490.30	41.44	174.54	30.30	0.00	104.01	93.50
NOx [g/h]	7.01	91.64	89.85	9.64	95.39	8.06	33.96	5.89	0.00	20.24	18.19
VOC [g/h]	8.35	109.16	107.02	11.49	113.63	9.60	40.45	7.02	0.00	24.10	21.67

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1217	1217	417	417
d_b, Bicycle Delay [s]	9.20	9.20	37.60	37.60
l_b,int, Bicycle LOS Score for Intersection	2.598	2.378	1.835	1.895
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Lakepoint Dr & North Ten Mile Dr

Control Type:	Two-way stop	Delay (sec / veh):	11.5
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.015

Intersection Setup

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Base Volume Input [veh/h]	11	98	9	1	83	11	12	4	5	9	12	1
Base Volume Adjustment Factor	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	19	0	0	17	33	19	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	104	8	1	88	42	29	3	4	8	10	1
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	28	2	0	24	11	8	1	1	2	3	0
Total Analysis Volume [veh/h]	10	113	9	1	96	46	32	3	4	9	11	1
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.15	0.01	0.00	0.12	0.04	0.02	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	11.49	10.62	9.29	11.26	10.55	9.23	7.29	0.00	0.00	7.24	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.61	0.61	0.61	0.61	0.61	0.61	0.06	0.06	0.06	0.02	0.02	0.02
95th-Percentile Queue Length [ft/ln]	15.28	15.28	15.28	15.18	15.18	15.18	1.52	1.52	1.52	0.38	0.38	0.38
d_A, Approach Delay [s/veh]	10.60			10.13			5.98			3.10		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	9.39											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 5: Dillon Dam Rd & N Ten Mile Dr

Control Type:	Two-way stop	Delay (sec / veh):	18.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.198

Intersection Setup

Name	Dillon Dam Rd		Dillon Dam Rd		North Ten Mile Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Dillon Dam Rd		Dillon Dam Rd		North Ten Mile Dr	
Base Volume Input [veh/h]	285	62	38	226	55	84
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	29	8	0	14	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	288	91	46	228	69	91
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	78	25	13	62	19	25
Total Analysis Volume [veh/h]	313	99	50	248	75	99
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.04	0.00	0.20	0.15
d_M, Delay for Movement [s/veh]	0.00	0.00	8.20	0.00	18.14	13.93
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.09	0.09	1.51	1.51
95th-Percentile Queue Length [ft/ln]	0.00	0.00	2.14	2.14	37.74	37.74
d_A, Approach Delay [s/veh]	0.00		1.38		15.74	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	3.56					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 56: Summit Blvd (SH-9) & I-70 EB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	9.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.059

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)								
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)								
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	45	0	0	49	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	45	0	0	49	0	0	0	0	0	0	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	12	0	0	13	0	0	0	0	0	0	0
Total Analysis Volume [veh/h]	0	49	0	0	53	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.05	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	9.25	8.32	0.00	9.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS		A	A		A		A	A	A			
95th-Percentile Queue Length [veh/ln]	0.00	0.17	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	4.33	0.00	0.00	4.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.25			9.27			0.00			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	9.26											
Intersection LOS	A											

Intersection Level Of Service Report

Intersection 1: Summit Blvd (SH-9) & Dillon Dam Rd / Lusher Ct

Control Type:	Signalized	Delay (sec / veh):	27.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.540

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	2	0	0
Entry Pocket Length [ft]	165.00	100.00	100.00	180.00	100.00	100.00	175.00	100.00	175.00	240.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			20.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Base Volume Input [veh/h]	81	896	160	103	743	354	274	58	83	137	57	109
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	1.00	2.00	4.00	3.00	5.00	2.00	2.00	0.00	2.00	7.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	53	10	40	40	0	0	0	0	0	0	23
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	17	0	0	36	0	0	8	0	0	13
Total Hourly Volume [veh/h]	82	955	154	144	788	320	276	58	76	138	57	120
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	260	42	39	214	87	75	16	21	38	15	33
Total Analysis Volume [veh/h]	89	1038	167	157	857	348	300	63	83	150	62	130
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	91.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Flashing Yellow Arrow	No			No								
Signal Group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Maximum Green [s]	7	19	0	7	19	0	8	16	0	7	15	0
Amber [s]	3.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	12.0	49.0	0.0	12.0	49.0	0.0	18.0	15.0	0.0	44.0	41.0	0.0
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	5	0	7	5	0	7	5	0	7	5	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	Yes		No	Yes		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C
C, Calculated Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	4.00	0.00	4.00	4.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	75.5	63.5	63.5	75.5	63.9	63.9	12.5	21.0	7.5	16.0
g / C, Green / Cycle	0.63	0.53	0.53	0.63	0.53	0.53	0.10	0.18	0.06	0.13
(v / s)_i Volume / Saturation Flow Rate	0.14	0.30	0.10	0.25	0.24	0.22	0.09	0.09	0.04	0.11
s, saturation flow rate [veh/h]	642	3503	1602	638	3503	1577	3375	1699	3514	1670
c, Capacity [veh/h]	420	1854	848	396	1863	839	353	297	222	223
d1, Uniform Delay [s]	10.53	18.90	14.85	12.87	17.40	16.87	52.81	44.71	55.02	50.93
k, delay calibration	0.50	0.50	0.50	0.48	0.50	0.50	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.15	1.23	0.52	2.83	0.82	1.51	5.78	1.26	3.59	9.51
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.21	0.56	0.20	0.40	0.46	0.41	0.85	0.49	0.68	0.86
d, Delay for Lane Group [s/veh]	11.68	20.13	15.37	15.70	18.22	18.38	58.59	45.97	58.61	60.44
Lane Group LOS	B	C	B	B	B	B	E	D	E	E
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.00	9.59	2.47	1.90	7.29	5.93	4.80	4.11	2.35	6.28
50th-Percentile Queue Length [ft/ln]	24.99	239.71	61.66	47.59	182.32	148.16	119.93	102.67	58.78	157.03
95th-Percentile Queue Length [veh/ln]	1.80	14.67	4.44	3.43	11.72	9.92	8.39	7.39	4.23	10.39
95th-Percentile Queue Length [ft/ln]	44.99	366.67	110.98	85.65	293.04	247.98	209.73	184.80	105.80	259.79

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	11.68	20.13	15.37	15.70	18.22	18.38	58.59	45.97	45.97	58.61	60.44	60.44
Movement LOS	B	C	B	B	B	B	E	D	D	E	E	E
d_A, Approach Delay [s/veh]	18.93			17.97			54.46			59.64		
Approach LOS	B			B			D			E		
d_I, Intersection Delay [s/veh]	27.20											
Intersection LOS	C											
Intersection V/C	0.540											

Emissions

Vehicle Miles Traveled [mph]	10.26	119.72	19.26	13.66	74.54	30.27	37.14	18.08	11.72	15.01
Stops [stops/h]	29.99	575.31	73.99	57.10	437.57	177.80	287.82	123.20	141.07	188.44
Fuel consumption [US gal/h]	0.83	13.14	1.81	1.45	9.31	3.79	6.12	2.56	2.86	3.76
CO [g/h]	57.90	918.59	126.72	101.47	650.78	265.11	427.97	179.18	199.72	262.76
NOx [g/h]	11.26	178.72	24.65	19.74	126.62	51.58	83.27	34.86	38.86	51.12
VOC [g/h]	13.42	212.89	29.37	23.52	150.82	61.44	99.19	41.53	46.29	60.90

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	717	717	167	600
d_b, Bicycle Delay [s]	24.70	24.70	50.42	29.40
l_b,int, Bicycle LOS Score for Intersection	2.641	2.713	2.309	2.145
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Summit Blvd (SH-9) & Lakepoint Dr

Control Type:	Two-way stop	Delay (sec / veh):	18.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.244

Intersection Setup

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Base Volume Input [veh/h]	1158	17	0	1010	0	26
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0070	1.0070	1.0000	1.0070	1.0000	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	8	32	0	40	0	56
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	-20	0	0	-20	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1154	49	0	1037	0	82
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	314	13	0	282	0	22
Total Analysis Volume [veh/h]	1254	53	0	1127	0	89
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.01	0.00	0.24
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	17.99
Movement LOS	A	A		A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.94
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	23.51
d_A, Approach Delay [s/veh]	0.00		0.00		17.99	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.63					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 3: Summit Blvd (SH-9) & 10 Mile Dr

Control Type:	Signalized	Delay (sec / veh):	14.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.432

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	145.00	100.00	100.00	300.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00				35.00			35.00		
Grade [%]	0.00			0.00				0.00			0.00		
Curb Present	No			No				No			No		
Crosswalk	No			No				No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Base Volume Input [veh/h]	57	1001	74	0	101	810	143	86	13	126	60	10	88
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	2.00	0.00	2.00	4.00	3.00	5.00	2.00	2.00	2.00	4.00	3.00
Proportion of CAVs [%]	0.00												
Growth Factor	1.0070	1.0070	1.0070	1.007	1.007	1.007	1.007	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	23	8	16	24	0	0	0	0	0	30	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	8	0	0	0	14	0	0	13	0	0	27
Total Hourly Volume [veh/h]	57	1031	75	16	126	816	130	87	13	114	90	10	62
Peak Hour Factor	0.9200	0.9200	0.9200	0.920	0.920	0.920	0.920	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	280	20	4	34	222	35	24	4	0	24	3	17
Total Analysis Volume [veh/h]	62	1121	82	17	137	887	141	95	14	0	98	11	67
Presence of On-Street Parking	No		No	No			No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0				0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0				0			0		
v_co, Outbound Pedestrian Volume crossing	0			0				0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0			0		
Bicycle Volume [bicycles/h]	0			0				0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	10.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	Permi	ProtP	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Flashing Yellow Arrow	No			No	No			No			No		
Signal Group	5	2	0	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups													
Maximum Green [s]	7	63	0	0	7	63	0	0	15	0	0	15	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Walk [s]	0.0	5.0	0.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	0.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	12.0	85.0	0.0	0.0	12.0	85.0	0.0	0.0	23.0	0.0	0.0	23.0	0.0
Lead / Lag	Lead	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	5	0	0	7	5	0	0	5	0	0	5	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No			No	No			No			No	
Maximum Recall	No	Yes			No	Yes			No			No	
Pedestrian Recall	No	No			No	No			No			No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	R	L	C
C, Calculated Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	0.00	3.00	3.00	0.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	92.5	80.5	80.5	92.5	81.3	81.3	17.5	17.5	17.5	17.5	17.5
g / C, Green / Cycle	0.77	0.67	0.67	0.77	0.68	0.68	0.15	0.15	0.15	0.15	0.15
(v / s)_i Volume / Saturation Flow Rate	0.09	0.33	0.33	0.25	0.25	0.09	0.07	0.01	0.00	0.07	0.05
s, saturation flow rate [veh/h]	681	1840	1796	607	3503	1577	1289	1870	1589	1399	1598
c, Capacity [veh/h]	555	1235	1206	483	2377	1070	169	272	231	230	233
d1, Uniform Delay [s]	4.04	9.67	9.68	5.76	8.31	6.82	54.33	44.13	0.00	49.78	46.05
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.41	1.40	1.44	1.73	0.45	0.26	2.94	0.08	0.00	1.25	0.84
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.11	0.49	0.49	0.32	0.37	0.13	0.56	0.05	0.00	0.43	0.34
d, Delay for Lane Group [s/veh]	4.45	11.08	11.13	7.49	8.76	7.07	57.26	44.21	0.00	51.03	46.89
Lane Group LOS	A	B	B	A	A	A	E	D	A	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No
50th-Percentile Queue Length [veh/ln]	0.35	7.62	7.48	1.00	4.68	1.26	2.95	0.36	0.00	2.84	2.13
50th-Percentile Queue Length [ft/ln]	8.86	190.59	186.96	24.95	117.00	31.44	73.68	9.09	0.00	70.88	53.32
95th-Percentile Queue Length [veh/ln]	0.64	12.15	11.96	1.80	8.23	2.26	5.30	0.65	0.00	5.10	3.84
95th-Percentile Queue Length [ft/ln]	15.95	303.80	299.08	44.91	205.70	56.59	132.62	16.35	0.00	127.58	95.98

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	4.45	11.10	11.13	7.49	7.49	8.76	7.07	57.26	44.21	0.00	51.03	46.89	46.89
Movement LOS	A	B	B	A	A	A	A	E	D	A	D	D	D
d_A, Approach Delay [s/veh]	10.78			8.39				55.59			49.20		
Approach LOS	B			A				E			D		
d_I, Intersection Delay [s/veh]	14.01												
Intersection LOS	B												
Intersection V/C	0.432												

Emissions

Vehicle Miles Traveled [mph]	9.50	93.17	91.15	13.86	79.82	12.69	3.73	0.55	0.00	4.43	3.53
Stops [stops/h]	10.63	228.71	224.35	29.94	280.81	37.72	88.41	10.90	0.00	85.05	63.99
Fuel consumption [US gal/h]	0.50	6.64	6.51	0.99	6.74	0.97	1.91	0.23	0.00	1.83	1.36
CO [g/h]	34.83	464.29	454.98	69.07	470.83	67.82	133.79	16.00	0.00	127.65	95.06
NOx [g/h]	6.78	90.33	88.52	13.44	91.61	13.20	26.03	3.11	0.00	24.84	18.49
VOC [g/h]	8.07	107.60	105.45	16.01	109.12	15.72	31.01	3.71	0.00	29.58	22.03

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1333	1333	300	300
d_b, Bicycle Delay [s]	6.67	6.67	43.35	43.35
l_b,int, Bicycle LOS Score for Intersection	2.610	2.433	1.761	1.895
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Lakepoint Dr & North Ten Mile Dr

Control Type:	Two-way stop	Delay (sec / veh):	12.5
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.021

Intersection Setup

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Base Volume Input [veh/h]	10	45	7	1	95	10	12	2	3	8	6	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	32	0	0	30	56	32	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	77	7	1	126	66	44	2	3	8	6	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	21	2	0	34	18	12	1	1	2	2	0
Total Analysis Volume [veh/h]	11	84	8	1	137	72	48	2	3	9	7	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.11	0.01	0.00	0.19	0.07	0.03	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	12.54	10.69	9.15	11.81	11.36	9.83	7.30	0.00	0.00	7.24	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.49	0.49	0.49	1.01	1.01	1.01	0.09	0.09	0.09	0.02	0.02	0.02
95th-Percentile Queue Length [ft/ln]	12.30	12.30	12.30	25.23	25.23	25.23	2.31	2.31	2.31	0.38	0.38	0.38
d_A, Approach Delay [s/veh]	10.76			10.84			6.61			4.07		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	9.95											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 5: Dillon Dam Rd & N Ten Mile Dr

Control Type:	Two-way stop	Delay (sec / veh):	19.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.339

Intersection Setup

Name	Dillon Dam Rd		Dillon Dam Rd		North Ten Mile Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Dillon Dam Rd		Dillon Dam Rd		North Ten Mile Dr	
Base Volume Input [veh/h]	233	88	44	205	98	44
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	48	12	0	23	10
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	237	137	56	206	122	54
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	64	37	15	56	33	15
Total Analysis Volume [veh/h]	258	149	61	224	133	59
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.05	0.00	0.34	0.08
d_M, Delay for Movement [s/veh]	0.00	0.00	8.20	0.00	19.85	15.74
Movement LOS	A	A	A	A	C	C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.11	0.11	2.06	2.06
95th-Percentile Queue Length [ft/ln]	0.00	0.00	2.63	2.63	51.59	51.59
d_A, Approach Delay [s/veh]	0.00		1.75		18.58	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	4.60					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 56: Summit Blvd (SH-9) & I-70 EB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	9.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.097

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)								
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)								
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	76	0	0	80	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	76	0	0	80	0	0	0	0	0	0	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	21	0	0	22	0	0	0	0	0	0	0
Total Analysis Volume [veh/h]	0	83	0	0	87	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.09	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	9.43	8.32	0.00	9.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS		A	A		A		A	A	A			
95th-Percentile Queue Length [veh/ln]	0.00	0.31	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	7.63	0.00	0.00	8.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.43			9.45			0.00			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	9.44											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 1: Summit Blvd (SH-9) & Dillon Dam Rd / Lusher Ct

Control Type:	Signalized	Delay (sec / veh):	4.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.320

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	180.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			20.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Base Volume Input [veh/h]	0	896	230	103	743	354	274	0	166	0	0	109
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	1.00	2.00	4.00	3.00	5.00	2.00	2.00	0.00	2.00	7.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	39	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	27	0	0	36	0	0	17	0	0	11
Total Hourly Volume [veh/h]	0	902	244	104	748	320	276	0	150	0	0	99
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	245	0	28	203	87	75	0	0	0	0	27
Total Analysis Volume [veh/h]	0	980	0	113	813	348	300	0	0	0	0	108
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	45
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	91.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Flashing Yellow Arrow												
Signal Group	0	2	0	1	6	0	7	4	6	0	8	4
Auxiliary Signal Groups												
Maximum Green [s]	0	19	0	7	19	0	8	16	19	0	15	16
Amber [s]	0.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	4.0	0.0	3.0	3.0
All red [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0
Walk [s]	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	5.0	0.0	5.0	5.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	10.0	0.0	10.0	10.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No			No
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	0.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	4.0	0.0	3.0	3.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	0.0	35.0	0.0	50.0	35.0	0.0	50.0	10.0	35.0	0.0	50.0	10.0
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	7	5	0	7	5	5	0	5	5
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	0.0	3.0	3.0
Minimum Recall		No			No				No			No
Maximum Recall		Yes			Yes				Yes			No
Pedestrian Recall		No			No				No			No

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	R	R	R
C, Calculated Cycle Length [s]	45	45	45	45	45	45
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.00	4.00	4.00	4.00	4.00	3.00
g_i, Effective Green Time [s]	30.2	30.2	30.2	30.2	30.2	3.8
g / C, Green / Cycle	0.67	0.67	0.67	0.67	0.67	0.08
(v / s)_i Volume / Saturation Flow Rate	0.28	0.00	0.23	0.22	0.00	0.04
s, saturation flow rate [veh/h]	3503	1602	3503	1577	1589	2700
c, Capacity [veh/h]	2346	1073	2346	1056	1064	232
d1, Uniform Delay [s]	3.41	0.00	3.20	3.15	0.00	19.58
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.55	0.00	0.41	0.84	0.00	1.45
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.42	0.00	0.35	0.33	0.00	0.47
d, Delay for Lane Group [s/veh]	3.96	0.00	3.60	3.99	0.00	21.03
Lane Group LOS	A	A	A	A	A	C
Critical Lane Group	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.86	0.00	0.66	0.69	0.00	0.54
50th-Percentile Queue Length [ft/ln]	21.42	0.00	16.49	17.25	0.00	13.53
95th-Percentile Queue Length [veh/ln]	1.54	0.00	1.19	1.24	0.00	0.97
95th-Percentile Queue Length [ft/ln]	38.55	0.00	29.69	31.05	0.00	24.36

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	3.96	0.00	0.00	3.60	3.99	0.00	0.00	0.00	0.00	0.00	21.03
Movement LOS		A	A		A	A			A			C
d_A, Approach Delay [s/veh]	3.96			3.72			0.00			21.03		
Approach LOS	A			A			A			C		
d_I, Intersection Delay [s/veh]	4.65											
Intersection LOS	A											
Intersection V/C	0.320											

Emissions

Vehicle Miles Traveled [mph]	113.03	0.00	70.71	30.27	0.00	8.44
Stops [stops/h]	137.07	0.00	105.55	55.20	0.00	86.60
Fuel consumption [US gal/h]	6.13	0.00	4.09	1.85	0.00	1.17
CO [g/h]	428.39	0.00	285.57	129.40	0.00	82.07
NOx [g/h]	83.35	0.00	55.56	25.18	0.00	15.97
VOC [g/h]	99.28	0.00	66.18	29.99	0.00	19.02

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1289	1289	1289	222
d_b, Bicycle Delay [s]	2.84	2.84	2.84	17.78
l_b,int, Bicycle LOS Score for Intersection	2.390	2.547	1.560	1.560
Bicycle LOS	B	B	A	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Summit Blvd (SH-9) & Lakepoint Dr

Control Type:	Two-way stop	Delay (sec / veh):	13.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.058

Intersection Setup

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Base Volume Input [veh/h]	953	15	0	1010	0	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0070	1.0070	1.0000	1.0070	1.0000	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	960	15	0	1017	0	23
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	261	4	0	276	0	6
Total Analysis Volume [veh/h]	1043	16	0	1105	0	25
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.01	0.00	0.06
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	13.94
Movement LOS	A	A		A		B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.19
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	4.64
d_A, Approach Delay [s/veh]	0.00		0.00		13.94	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.16					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 3: Summit Blvd (SH-9) & 10 Mile Dr

Control Type:	Signalized	Delay (sec / veh):	9.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.378

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	145.00	100.00	100.00	300.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00				35.00			35.00		
Grade [%]	0.00			0.00				0.00			0.00		
Curb Present	No			No				No			No		
Crosswalk	No			No				No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Base Volume Input [veh/h]	57	1001	74	0	55	810	54	38	17	126	60	10	41
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	2.00	0.00	2.00	4.00	3.00	5.00	2.00	2.00	2.00	4.00	3.00
Proportion of CAVs [%]	0.00												
Growth Factor	1.0070	1.0070	1.0070	1.007	1.007	1.007	1.007	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	8	0	0	0	5	0	0	13	0	0	18
Total Hourly Volume [veh/h]	57	1008	67	0	55	816	49	38	17	114	60	10	23
Peak Hour Factor	0.9200	0.9200	0.9200	0.920	0.920	0.920	0.920	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	274	18	0	15	222	13	10	5	0	16	3	6
Total Analysis Volume [veh/h]	62	1096	73	0	60	887	53	41	18	0	65	11	25
Presence of On-Street Parking	No		No	No			No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0				0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0				0			0		
v_co, Outbound Pedestrian Volume crossing	0			0				0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0			0		
Bicycle Volume [bicycles/h]	0			0				0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	10.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	Permi	ProtP	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Flashing Yellow Arrow	No			No	No			No			No		
Signal Group	5	2	0	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups													
Maximum Green [s]	7	63	0	0	7	63	0	0	15	0	0	15	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Walk [s]	0.0	5.0	0.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	0.0	10.0	0.0	0.0	25.0	0.0	0.0	25.0	0.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	13.0	66.0	0.0	0.0	12.0	65.0	0.0	0.0	12.0	0.0	0.0	12.0	0.0
Lead / Lag	Lead	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	5	0	0	7	5	0	0	5	0	0	5	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No			No	No			No			No	
Maximum Recall	No	Yes			No	Yes			No			No	
Pedestrian Recall	No	No			No	No			No			No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	R	L	C
C, Calculated Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	0.00	3.00	3.00	0.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	73.0	62.5	62.5	73.0	62.4	62.4	7.0	7.0	7.0	7.0	7.0
g / C, Green / Cycle	0.81	0.69	0.69	0.81	0.69	0.69	0.08	0.08	0.08	0.08	0.08
(v / s)_i Volume / Saturation Flow Rate	0.08	0.32	0.32	0.09	0.25	0.03	0.03	0.01	0.00	0.05	0.02
s, saturation flow rate [veh/h]	749	1840	1800	632	3503	1577	1339	1870	1589	1394	1639
c, Capacity [veh/h]	661	1277	1249	561	2426	1092	127	145	124	145	127
d1, Uniform Delay [s]	2.27	6.20	6.21	2.80	5.70	4.40	43.22	38.64	0.00	42.90	39.13
k, delay calibration	0.50	0.50	0.50	0.39	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.28	1.21	1.24	0.30	0.43	0.08	1.45	0.38	0.00	2.16	1.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.09	0.46	0.46	0.11	0.37	0.05	0.32	0.12	0.00	0.45	0.28
d, Delay for Lane Group [s/veh]	2.55	7.41	7.44	3.09	6.12	4.49	44.67	39.02	0.00	45.07	40.33
Lane Group LOS	A	A	A	A	A	A	D	D	A	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.16	4.36	4.29	0.15	2.85	0.28	0.94	0.38	0.00	1.50	0.78
50th-Percentile Queue Length [ft/ln]	3.88	109.06	107.16	3.66	71.20	6.88	23.50	9.44	0.00	37.50	19.41
95th-Percentile Queue Length [veh/ln]	0.28	7.79	7.68	0.26	5.13	0.50	1.69	0.68	0.00	2.70	1.40
95th-Percentile Queue Length [ft/ln]	6.98	194.69	192.04	6.58	128.16	12.39	42.30	17.00	0.00	67.50	34.94

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	2.55	7.43	7.44	3.09	3.09	6.12	4.49	44.67	39.02	0.00	45.07	40.33	40.33
Movement LOS	A	A	A	A	A	A	A	D	D	A	D	D	D
d_A, Approach Delay [s/veh]	7.18			5.85				42.95			43.38		
Approach LOS	A			A				D			D		
d_I, Intersection Delay [s/veh]	9.04												
Intersection LOS	A												
Intersection V/C	0.378												

Emissions

Vehicle Miles Traveled [mph]	9.50	90.47	88.64	5.40	79.82	4.77	1.61	0.71	0.00	2.94	1.63
Stops [stops/h]	6.21	174.49	171.45	5.85	227.85	11.01	37.60	15.11	0.00	60.00	31.06
Fuel consumption [US gal/h]	0.44	5.65	5.54	0.29	5.86	0.31	0.72	0.28	0.00	1.16	0.59
CO [g/h]	30.82	395.03	387.56	20.10	409.70	21.88	50.11	19.82	0.00	81.04	41.31
NOx [g/h]	6.00	76.86	75.41	3.91	79.71	4.26	9.75	3.86	0.00	15.77	8.04
VOC [g/h]	7.14	91.55	89.82	4.66	94.95	5.07	11.61	4.59	0.00	18.78	9.57

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1356	1333	156	156
d_b, Bicycle Delay [s]	4.67	5.00	38.27	38.27
l_b,int, Bicycle LOS Score for Intersection	2.582	2.339	1.678	1.756
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Lakepoint Dr & North Ten Mile Dr

Control Type:	Two-way stop	Delay (sec / veh):	9.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.011

Intersection Setup

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Base Volume Input [veh/h]	10	45	7	1	95	10	12	2	3	8	6	0
Base Volume Adjustment Factor	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	45	7	1	94	10	11	2	3	8	6	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600
Total 15-Minute Volume [veh/h]	2	11	2	0	22	2	3	0	1	2	1	0
Total Analysis Volume [veh/h]	9	42	7	1	88	9	10	2	3	7	6	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.05	0.01	0.00	0.11	0.01	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.90	9.60	8.64	9.71	9.84	8.89	7.24	0.00	0.00	7.24	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.22	0.22	0.22	0.39	0.39	0.39	0.02	0.02	0.02	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	5.46	5.46	5.46	9.66	9.66	9.66	0.47	0.47	0.47	0.29	0.29	0.29
d_A, Approach Delay [s/veh]	9.53			9.75			4.83			3.90		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	8.87											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 5: Dillon Dam Rd & N Ten Mile Dr

Control Type:	Roundabout	Delay (sec / veh):	5.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	Dillon Dam Rd			Dillon Dam Rd			Ne-70			North Ten Mile Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Dillon Dam Rd			Dillon Dam Rd			Ne-70			North Ten Mile Dr		
Base Volume Input [veh/h]	0	181	49	119	85	235	73	27	94	75	15	74
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	39	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	39	182	49	120	86	237	74	27	95	76	15	75
Peak Hour Factor	1.0000	0.9200	0.9200	0.9200	0.9200	1.0000	1.0000	1.0000	1.0000	0.9200	1.0000	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	49	13	33	23	59	19	7	24	21	4	20
Total Analysis Volume [veh/h]	39	198	53	130	93	237	74	27	95	83	15	82
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	236			140			312			317		
Exiting Flow Rate [veh/h]	276			361			55			214		
Demand Flow Rate [veh/h]	39	182	49	120	86	237	74	27	95	76	15	75
Adjusted Demand Flow Rate [veh/h]	39	198	53	130	93	237	74	27	95	83	15	82

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	0.98	0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]	296	228	0	200	184
Capacity of Entry and Bypass Lanes [veh/h]	1086	1197	1305	1004	999
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1064	1174	1280	985	979
X, volume / capacity	0.27	0.19	0.19	0.20	0.18

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A	A
95th-Percentile Queue Length [veh]	1.11	0.70	0.68	0.74	0.67
95th-Percentile Queue Length [ft]	27.78	17.50	16.97	18.51	16.78
Approach Delay [s/veh]	6.01	4.55		5.56	5.42
Approach LOS	A	A		A	A
Intersection Delay [s/veh]	5.24				
Intersection LOS	A				

Intersection Level Of Service Report
Intersection 1: Summit Blvd (SH-9) & Dillon Dam Rd / Lusher Ct

Control Type:	Signalized	Delay (sec / veh):	4.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.320

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	180.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			20.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Base Volume Input [veh/h]	0	896	225	103	743	354	274	0	51	0	0	109
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	1.00	2.00	4.00	3.00	5.00	2.00	2.00	0.00	2.00	7.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	84	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	31	0	0	36	0	0	5	0	0	11
Total Hourly Volume [veh/h]	0	902	280	104	748	320	276	0	46	0	0	99
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	245	0	28	203	87	75	0	0	0	0	27
Total Analysis Volume [veh/h]	0	980	0	113	813	348	300	0	0	0	0	108
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	45
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	91.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Flashing Yellow Arrow												
Signal Group	0	2	0	1	6	0	7	4	6	0	8	4
Auxiliary Signal Groups												
Maximum Green [s]	0	19	0	7	19	0	8	16	19	0	15	16
Amber [s]	0.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	4.0	0.0	3.0	3.0
All red [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0
Walk [s]	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	5.0	0.0	5.0	5.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	10.0	0.0	10.0	10.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No			No
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	0.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	4.0	0.0	3.0	3.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	0.0	35.0	0.0	50.0	35.0	0.0	50.0	10.0	35.0	0.0	50.0	10.0
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	7	5	0	7	5	5	0	5	5
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	0.0	3.0	3.0
Minimum Recall		No			No				No			No
Maximum Recall		Yes			Yes				Yes			No
Pedestrian Recall		No			No				No			No

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	R	R	R
C, Calculated Cycle Length [s]	45	45	45	45	45	45
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.00	4.00	4.00	4.00	4.00	3.00
g_i, Effective Green Time [s]	30.2	30.2	30.2	30.2	30.2	3.8
g / C, Green / Cycle	0.67	0.67	0.67	0.67	0.67	0.08
(v / s)_i Volume / Saturation Flow Rate	0.28	0.00	0.23	0.22	0.00	0.04
s, saturation flow rate [veh/h]	3503	1602	3503	1577	1589	2700
c, Capacity [veh/h]	2346	1073	2346	1056	1064	232
d1, Uniform Delay [s]	3.41	0.00	3.20	3.15	0.00	19.58
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.55	0.00	0.41	0.84	0.00	1.45
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.42	0.00	0.35	0.33	0.00	0.47
d, Delay for Lane Group [s/veh]	3.96	0.00	3.60	3.99	0.00	21.03
Lane Group LOS	A	A	A	A	A	C
Critical Lane Group	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.86	0.00	0.66	0.69	0.00	0.54
50th-Percentile Queue Length [ft/ln]	21.42	0.00	16.49	17.25	0.00	13.53
95th-Percentile Queue Length [veh/ln]	1.54	0.00	1.19	1.24	0.00	0.97
95th-Percentile Queue Length [ft/ln]	38.55	0.00	29.69	31.05	0.00	24.36

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	3.96	0.00	0.00	3.60	3.99	0.00	0.00	0.00	0.00	0.00	21.03
Movement LOS		A	A		A	A			A			C
d_A, Approach Delay [s/veh]	3.96			3.72			0.00			21.03		
Approach LOS	A			A			A			C		
d_I, Intersection Delay [s/veh]	4.65											
Intersection LOS	A											
Intersection V/C	0.320											

Emissions

Vehicle Miles Traveled [mph]	113.03	0.00	70.71	30.27	0.00	8.44
Stops [stops/h]	137.07	0.00	105.55	55.20	0.00	86.60
Fuel consumption [US gal/h]	6.13	0.00	4.09	1.85	0.00	1.17
CO [g/h]	428.39	0.00	285.57	129.40	0.00	82.07
NOx [g/h]	83.35	0.00	55.56	25.18	0.00	15.97
VOC [g/h]	99.28	0.00	66.18	29.99	0.00	19.02

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1289	1289	1289	222
d_b, Bicycle Delay [s]	2.84	2.84	2.84	17.78
l_b,int, Bicycle LOS Score for Intersection	2.394	2.547	1.560	1.560
Bicycle LOS	B	B	A	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Summit Blvd (SH-9) & Lakepoint Dr

Control Type:	Two-way stop	Delay (sec / veh):	15.3
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.096

Intersection Setup

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Base Volume Input [veh/h]	1093	21	0	950	0	34
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0070	1.0070	1.0000	1.0070	1.0000	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	-13	0	0	-10	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1088	21	0	947	0	34
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	296	6	0	257	0	9
Total Analysis Volume [veh/h]	1183	23	0	1029	0	37
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.01	0.00	0.10
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	15.33
Movement LOS	A	A		A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.32
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	7.91
d_A, Approach Delay [s/veh]	0.00		0.00		15.33	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.25					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 3: Summit Blvd (SH-9) & 10 Mile Dr

Control Type:	Signalized	Delay (sec / veh):	14.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.438

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	145.00	100.00	100.00	300.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00				35.00			35.00		
Grade [%]	0.00			0.00				0.00			0.00		
Curb Present	No			No				No			No		
Crosswalk	No			No				No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Base Volume Input [veh/h]	57	1001	74	0	74	810	86	116	25	126	60	25	87
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	2.00	0.00	2.00	4.00	3.00	5.00	2.00	2.00	2.00	4.00	3.00
Proportion of CAVs [%]	0.00												
Growth Factor	1.0070	1.0070	1.0070	1.007	1.007	1.007	1.007	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	8	0	0	0	9	0	0	13	0	0	40
Total Hourly Volume [veh/h]	57	1008	67	0	75	816	78	117	25	114	60	25	48
Peak Hour Factor	0.9200	0.9200	0.9200	0.920	0.920	0.920	0.920	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	274	18	0	20	222	21	32	7	0	16	7	13
Total Analysis Volume [veh/h]	62	1096	73	0	82	887	85	127	27	0	65	27	52
Presence of On-Street Parking	No		No	No			No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0				0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0				0			0		
v_co, Outbound Pedestrian Volume crossing	0			0				0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0			0		
Bicycle Volume [bicycles/h]	0			0				0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	10.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	Permi	ProtP	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Flashing Yellow Arrow	No			No	No			No			No		
Signal Group	5	2	0	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups													
Maximum Green [s]	7	63	0	0	7	63	0	0	15	0	0	15	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Walk [s]	0.0	5.0	0.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	0.0	10.0	0.0	0.0	25.0	0.0	0.0	25.0	0.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	12.0	54.0	0.0	0.0	12.0	54.0	0.0	0.0	24.0	0.0	0.0	24.0	0.0
Lead / Lag	Lead	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	5	0	0	7	5	0	0	5	0	0	5	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No			No	No			No			No	
Maximum Recall	No	Yes			No	Yes			No			No	
Pedestrian Recall	No	No			No	No			No			No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	R	L	C
C, Calculated Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	0.00	3.00	3.00	0.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	64.8	53.6	53.6	64.8	54.2	54.2	15.2	15.2	15.2	15.2	15.2
g / C, Green / Cycle	0.72	0.60	0.60	0.72	0.60	0.60	0.17	0.17	0.17	0.17	0.17
(v / s)_i Volume / Saturation Flow Rate	0.08	0.32	0.32	0.12	0.25	0.05	0.10	0.01	0.00	0.05	0.05
s, saturation flow rate [veh/h]	752	1840	1800	665	3503	1577	1288	1870	1589	1383	1648
c, Capacity [veh/h]	571	1096	1072	497	2107	948	229	315	268	279	278
d1, Uniform Delay [s]	4.85	10.83	10.84	6.12	9.58	7.56	39.04	31.56	0.00	34.63	32.67
k, delay calibration	0.50	0.50	0.50	0.37	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.38	1.90	1.95	0.53	0.62	0.19	2.09	0.12	0.00	0.42	0.55
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.11	0.54	0.54	0.17	0.42	0.09	0.55	0.09	0.00	0.23	0.28
d, Delay for Lane Group [s/veh]	5.23	12.73	12.79	6.65	10.20	7.75	41.13	31.67	0.00	35.05	33.22
Lane Group LOS	A	B	B	A	B	A	D	C	A	D	C
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No
50th-Percentile Queue Length [veh/ln]	0.31	6.66	6.54	0.41	4.24	0.66	2.81	0.49	0.00	1.28	1.51
50th-Percentile Queue Length [ft/ln]	7.77	166.45	163.52	10.18	106.07	16.59	70.21	12.35	0.00	32.01	37.71
95th-Percentile Queue Length [veh/ln]	0.56	10.89	10.73	0.73	7.62	1.19	5.05	0.89	0.00	2.30	2.72
95th-Percentile Queue Length [ft/ln]	13.99	272.24	268.37	18.33	190.52	29.86	126.37	22.23	0.00	57.61	67.88

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	5.23	12.76	12.79	6.65	6.65	10.20	7.75	41.13	31.67	0.00	35.05	33.22	33.22
Movement LOS	A	B	B	A	A	B	A	D	C	A	D	C	C
d_A, Approach Delay [s/veh]	12.38			9.72				39.47			34.05		
Approach LOS	B			A				D			C		
d_I, Intersection Delay [s/veh]	14.12												
Intersection LOS	B												
Intersection V/C	0.438												

Emissions

Vehicle Miles Traveled [mph]	9.50	90.47	88.64	7.38	79.82	7.65	4.99	1.06	0.00	2.94	3.57
Stops [stops/h]	12.43	266.32	261.63	16.30	339.42	26.55	112.33	19.76	0.00	51.21	60.34
Fuel consumption [US gal/h]	0.52	6.98	6.85	0.51	7.44	0.63	2.10	0.36	0.00	0.96	1.12
CO [g/h]	36.46	488.02	478.96	35.98	519.75	43.70	146.64	25.38	0.00	67.16	78.57
NOx [g/h]	7.09	94.95	93.19	7.00	101.12	8.50	28.53	4.94	0.00	13.07	15.29
VOC [g/h]	8.45	113.10	111.00	8.34	120.46	10.13	33.98	5.88	0.00	15.56	18.21

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1089	1089	422	422
d_b, Bicycle Delay [s]	9.34	9.34	28.01	28.01
l_b,int, Bicycle LOS Score for Intersection	2.582	2.369	1.835	1.863
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Lakepoint Dr & North Ten Mile Dr

Control Type:	Two-way stop	Delay (sec / veh):	10.5
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.015

Intersection Setup

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Base Volume Input [veh/h]	11	98	9	1	83	11	12	4	5	9	12	1
Base Volume Adjustment Factor	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	96	9	1	81	10	11	3	5	9	11	1
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	26	2	0	22	3	3	1	1	2	3	0
Total Analysis Volume [veh/h]	11	104	10	1	88	11	12	3	5	10	12	1
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.13	0.01	0.00	0.11	0.01	0.01	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	10.54	10.18	9.11	10.50	10.00	8.96	7.26	0.00	0.00	7.24	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.53	0.53	0.53	0.41	0.41	0.41	0.02	0.02	0.02	0.02	0.02	0.02
95th-Percentile Queue Length [ft/ln]	13.27	13.27	13.27	10.15	10.15	10.15	0.57	0.57	0.57	0.43	0.43	0.43
d_A, Approach Delay [s/veh]	10.13			9.89			4.36			3.15		
Approach LOS	B			A			A			A		
d_I, Intersection Delay [s/veh]	9.01											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 5: Dillon Dam Rd & N Ten Mile Dr

Control Type:	Roundabout	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	Dillon Dam Rd			Dillon Dam Rd			Ne-70			North Ten Mile Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Dillon Dam Rd			Dillon Dam Rd			Ne-70			North Ten Mile Dr		
Base Volume Input [veh/h]	0	285	62	38	226	309	160	65	387	55	9	84
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	84	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	84	287	62	38	228	311	161	65	390	55	9	85
Peak Hour Factor	1.0000	0.9200	0.9200	0.9200	0.9200	1.0000	1.0000	1.0000	1.0000	0.9200	1.0000	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	21	78	17	10	62	78	40	16	98	15	2	23
Total Analysis Volume [veh/h]	84	312	67	41	248	311	161	65	390	60	9	92
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	272			156			356			568		
Exiting Flow Rate [veh/h]	712			576			95			176		
Demand Flow Rate [veh/h]	84	287	62	38	228	311	161	65	390	55	9	85
Adjusted Demand Flow Rate [veh/h]	84	312	67	41	248	311	161	65	390	60	9	92

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	0.98	0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]	473	295	0	629	165
Capacity of Entry and Bypass Lanes [veh/h]	1046	1177	1253	960	774
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1025	1154	1229	941	758
X, volume / capacity	0.45	0.25	0.25	0.65	0.21

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	B	A
95th-Percentile Queue Length [veh]	2.39	0.99	1.01	5.06	0.80
95th-Percentile Queue Length [ft]	59.78	24.83	25.21	126.42	20.02
Approach Delay [s/veh]	8.63	5.30		14.04	7.09
Approach LOS	A	A		B	A
Intersection Delay [s/veh]	9.22				
Intersection LOS	A				

Intersection Level Of Service Report

Intersection 1: Summit Blvd (SH-9) & Dillon Dam Rd / Lusher Ct

Control Type:	Signalized	Delay (sec / veh):	4.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.320

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	180.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			20.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Base Volume Input [veh/h]	0	896	327	103	743	354	274	0	214	0	0	109
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	1.00	2.00	4.00	3.00	5.00	2.00	2.00	0.00	2.00	7.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	111	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	44	0	0	36	0	0	22	0	0	11
Total Hourly Volume [veh/h]	0	902	396	104	748	320	276	0	193	0	0	99
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	245	0	28	203	87	75	0	0	0	0	27
Total Analysis Volume [veh/h]	0	980	0	113	813	348	300	0	0	0	0	108
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	45
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	91.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Flashing Yellow Arrow												
Signal Group	0	2	0	1	6	0	7	4	6	0	8	4
Auxiliary Signal Groups												
Maximum Green [s]	0	19	0	7	19	0	8	16	19	0	15	16
Amber [s]	0.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	4.0	0.0	3.0	3.0
All red [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0
Walk [s]	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	5.0	0.0	5.0	5.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	10.0	0.0	10.0	10.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No			No
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	0.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	4.0	0.0	3.0	3.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	0.0	35.0	0.0	50.0	35.0	0.0	50.0	10.0	35.0	0.0	50.0	10.0
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	7	5	0	7	5	5	0	5	5
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	0.0	3.0	3.0
Minimum Recall		No			No				No			No
Maximum Recall		Yes			Yes				Yes			No
Pedestrian Recall		No			No				No			No

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	R	R	R
C, Calculated Cycle Length [s]	45	45	45	45	45	45
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.00	4.00	4.00	4.00	4.00	3.00
g_i, Effective Green Time [s]	30.2	30.2	30.2	30.2	30.2	3.8
g / C, Green / Cycle	0.67	0.67	0.67	0.67	0.67	0.08
(v / s)_i Volume / Saturation Flow Rate	0.28	0.00	0.23	0.22	0.00	0.04
s, saturation flow rate [veh/h]	3503	1602	3503	1577	1589	2700
c, Capacity [veh/h]	2346	1073	2346	1056	1064	232
d1, Uniform Delay [s]	3.41	0.00	3.20	3.15	0.00	19.58
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.55	0.00	0.41	0.84	0.00	1.45
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.42	0.00	0.35	0.33	0.00	0.47
d, Delay for Lane Group [s/veh]	3.96	0.00	3.60	3.99	0.00	21.03
Lane Group LOS	A	A	A	A	A	C
Critical Lane Group	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.86	0.00	0.66	0.69	0.00	0.54
50th-Percentile Queue Length [ft/ln]	21.42	0.00	16.49	17.25	0.00	13.53
95th-Percentile Queue Length [veh/ln]	1.54	0.00	1.19	1.24	0.00	0.97
95th-Percentile Queue Length [ft/ln]	38.55	0.00	29.69	31.05	0.00	24.36

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	3.96	0.00	0.00	3.60	3.99	0.00	0.00	0.00	0.00	0.00	21.03
Movement LOS		A	A		A	A			A			C
d_A, Approach Delay [s/veh]	3.96			3.72			0.00			21.03		
Approach LOS	A			A			A			C		
d_I, Intersection Delay [s/veh]	4.65											
Intersection LOS	A											
Intersection V/C	0.320											

Emissions

Vehicle Miles Traveled [mph]	113.03	0.00	70.71	30.27	0.00	8.44
Stops [stops/h]	137.07	0.00	105.55	55.20	0.00	86.60
Fuel consumption [US gal/h]	6.13	0.00	4.09	1.85	0.00	1.17
CO [g/h]	428.39	0.00	285.57	129.40	0.00	82.07
NOx [g/h]	83.35	0.00	55.56	25.18	0.00	15.97
VOC [g/h]	99.28	0.00	66.18	29.99	0.00	19.02

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1289	1289	1289	222
d_b, Bicycle Delay [s]	2.84	2.84	2.84	17.78
l_b,int, Bicycle LOS Score for Intersection	2.404	2.547	1.560	1.560
Bicycle LOS	B	B	A	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Summit Blvd (SH-9) & Lakepoint Dr

Control Type:	Two-way stop	Delay (sec / veh):	22.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.118

Intersection Setup

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Base Volume Input [veh/h]	1666	17	0	1010	0	26
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0070	1.0070	1.0000	1.0070	1.0000	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1678	17	0	1017	0	26
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	456	5	0	276	0	7
Total Analysis Volume [veh/h]	1824	18	0	1105	0	28
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.01	0.00	0.12
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	22.19
Movement LOS	A	A		A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.40
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	9.88
d_A, Approach Delay [s/veh]	0.00		0.00		22.19	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.21					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 3: Summit Blvd (SH-9) & 10 Mile Dr

Control Type:	Signalized	Delay (sec / veh):	16.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.480

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	145.00	100.00	100.00	300.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00				35.00			35.00		
Grade [%]	0.00			0.00				0.00			0.00		
Curb Present	No			No				No			No		
Crosswalk	No			No				No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Base Volume Input [veh/h]	57	1001	74	0	140	810	197	140	19	126	60	14	124
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	2.00	0.00	2.00	4.00	3.00	5.00	2.00	2.00	2.00	4.00	3.00
Proportion of CAVs [%]	0.00												
Growth Factor	1.0070	1.0070	1.0070	1.007	1.007	1.007	1.007	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	8	0	0	0	20	0	0	13	0	0	38
Total Hourly Volume [veh/h]	57	1008	67	0	141	816	178	141	19	114	60	14	87
Peak Hour Factor	0.9200	0.9200	0.9200	0.920	0.920	0.920	0.920	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	274	18	0	38	222	48	38	5	0	16	4	24
Total Analysis Volume [veh/h]	62	1096	73	0	153	887	193	153	21	0	65	15	95
Presence of On-Street Parking	No		No	No			No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0				0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0				0			0		
v_co, Outbound Pedestrian Volume crossing	0			0				0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0			0		
Bicycle Volume [bicycles/h]	0			0				0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	10.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	Permi	ProtP	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Flashing Yellow Arrow	No			No	No			No			No		
Signal Group	5	2	0	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups													
Maximum Green [s]	7	63	0	0	7	63	0	0	15	0	0	15	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Walk [s]	0.0	5.0	0.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	0.0	10.0	0.0	0.0	25.0	0.0	0.0	25.0	0.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	12.0	48.0	0.0	0.0	12.0	48.0	0.0	0.0	30.0	0.0	0.0	30.0	0.0
Lead / Lag	Lead	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	5	0	0	7	5	0	0	5	0	0	5	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No			No	No			No			No	
Maximum Recall	No	Yes			No	Yes			No			No	
Pedestrian Recall	No	No			No	No			No			No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	R	L	C
C, Calculated Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	0.00	3.00	3.00	0.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	61.8	49.9	49.9	61.8	51.1	51.1	18.2	18.2	18.2	18.2	18.2
g / C, Green / Cycle	0.69	0.55	0.55	0.69	0.57	0.57	0.20	0.20	0.20	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.09	0.32	0.32	0.22	0.25	0.12	0.12	0.01	0.00	0.05	0.07
s, saturation flow rate [veh/h]	711	1840	1800	688	3503	1577	1252	1870	1589	1391	1597
c, Capacity [veh/h]	513	1020	998	475	1987	894	257	379	322	342	324
d1, Uniform Delay [s]	6.22	13.17	13.18	8.73	11.29	9.60	37.78	28.92	0.00	31.09	30.72
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.48	2.40	2.46	1.79	0.73	0.55	2.19	0.06	0.00	0.27	0.62
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.12	0.58	0.58	0.32	0.45	0.22	0.59	0.06	0.00	0.19	0.34
d, Delay for Lane Group [s/veh]	6.70	15.56	15.63	10.52	12.01	10.16	39.97	28.98	0.00	31.36	31.33
Lane Group LOS	A	B	B	B	B	B	D	C	A	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No
50th-Percentile Queue Length [veh/ln]	0.37	7.66	7.53	1.03	4.76	1.83	3.36	0.36	0.00	1.20	2.04
50th-Percentile Queue Length [ft/ln]	9.32	191.53	188.17	25.72	119.08	45.67	83.88	9.09	0.00	29.92	51.07
95th-Percentile Queue Length [veh/ln]	0.67	12.20	12.03	1.85	8.34	3.29	6.04	0.65	0.00	2.15	3.68
95th-Percentile Queue Length [ft/ln]	16.77	305.02	300.66	46.29	208.57	82.21	150.98	16.36	0.00	53.85	91.92

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	6.70	15.60	15.63	10.52	10.52	12.01	10.16	39.97	28.98	0.00	31.36	31.33	31.33
Movement LOS	A	B	B	B	B	B	B	D	C	A	C	C	C
d_A, Approach Delay [s/veh]	15.15			11.54				38.64			31.34		
Approach LOS	B			B				D			C		
d_I, Intersection Delay [s/veh]	16.03												
Intersection LOS	B												
Intersection V/C	0.480												

Emissions

Vehicle Miles Traveled [mph]	9.50	90.47	88.64	13.77	79.82	17.37	6.01	0.82	0.00	2.94	4.97
Stops [stops/h]	14.91	306.45	301.07	41.15	381.07	73.08	134.20	14.54	0.00	47.87	81.70
Fuel consumption [US gal/h]	0.56	7.62	7.48	1.16	8.08	1.61	2.48	0.26	0.00	0.89	1.51
CO [g/h]	39.06	532.89	523.11	81.21	564.59	112.58	173.54	18.50	0.00	61.98	105.23
NOx [g/h]	7.60	103.68	101.78	15.80	109.85	21.90	33.76	3.60	0.00	12.06	20.47
VOC [g/h]	9.05	123.50	121.23	18.82	130.85	26.09	40.22	4.29	0.00	14.37	24.39

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	956	956	556	556
d_b, Bicycle Delay [s]	12.27	12.27	23.47	23.47
l_b,int, Bicycle LOS Score for Intersection	2.582	2.467	1.868	1.911
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Lakepoint Dr & North Ten Mile Dr

Control Type:	Two-way stop	Delay (sec / veh):	11.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.020

Intersection Setup

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Base Volume Input [veh/h]	11	98	9	1	83	11	12	4	5	9	12	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	112	10	1	95	13	14	5	6	10	14	1
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	30	3	0	26	4	4	1	2	3	4	0
Total Analysis Volume [veh/h]	14	122	11	1	103	14	15	5	7	11	15	1
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.15	0.01	0.00	0.13	0.01	0.01	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	11.07	10.49	9.35	11.00	10.25	9.12	7.27	0.00	0.00	7.25	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.66	0.66	0.66	0.50	0.50	0.50	0.03	0.03	0.03	0.02	0.02	0.02
95th-Percentile Queue Length [ft/ln]	16.60	16.60	16.60	12.52	12.52	12.52	0.70	0.70	0.70	0.47	0.47	0.47
d_A, Approach Delay [s/veh]	10.46			10.12			4.04			2.95		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	9.16											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 5: Dillon Dam Rd & N Ten Mile Dr

Control Type:	Roundabout	Delay (sec / veh):	10.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes		

Intersection Setup

Name	Dillon Dam Rd			Dillon Dam Rd			Ne-70			North Ten Mile Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Dillon Dam Rd			Dillon Dam Rd			Ne-70			North Ten Mile Dr		
Base Volume Input [veh/h]	0	311	16	87	106	260	184	95	387	75	15	74
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	111	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	111	313	16	88	107	262	185	96	390	76	15	75
Peak Hour Factor	1.0000	0.9200	0.9200	0.9200	0.9200	1.0000	1.0000	1.0000	1.0000	0.9200	1.0000	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	28	85	4	24	29	66	46	24	98	21	4	20
Total Analysis Volume [veh/h]	111	340	17	96	116	262	185	96	390	83	15	82
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	385			213			301			649		
Exiting Flow Rate [veh/h]	601			619			129			213		
Demand Flow Rate [veh/h]	111	313	16	88	107	262	185	96	390	76	15	75
Adjusted Demand Flow Rate [veh/h]	111	340	17	96	116	262	185	96	390	83	15	82

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	0.98	0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]	478	217	0	685	184
Capacity of Entry and Bypass Lanes [veh/h]	933	1111	1211	1016	713
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	914	1089	1187	996	699
X, volume / capacity	0.51	0.19	0.22	0.67	0.26

Movement, Approach, & Intersection Results

Lane LOS	B	A	A	B	A
95th-Percentile Queue Length [veh]	2.99	0.72	0.84	5.47	1.03
95th-Percentile Queue Length [ft]	74.70	18.02	21.10	136.71	25.65
Approach Delay [s/veh]	10.56	5.03		14.12	8.23
Approach LOS	B	A		B	A
Intersection Delay [s/veh]	10.20				
Intersection LOS	B				

Intersection Level Of Service Report
Intersection 1: Summit Blvd (SH-9) & Dillon Dam Rd / Lusher Ct

Control Type:	Signalized	Delay (sec / veh):	5.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.340

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	180.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			20.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Base Volume Input [veh/h]	0	896	230	103	743	354	274	0	166	0	0	109
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	1.00	2.00	4.00	3.00	5.00	2.00	2.00	0.00	2.00	7.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	43	8	0	38	26	0	0	0	0	0	19
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	39	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	28	0	0	38	0	0	17	0	0	13
Total Hourly Volume [veh/h]	0	945	251	104	786	344	276	0	150	0	0	116
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	257	0	28	214	93	75	0	0	0	0	32
Total Analysis Volume [veh/h]	0	1027	0	113	854	374	300	0	0	0	0	126
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	45
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	91.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Flashing Yellow Arrow												
Signal Group	0	2	0	1	6	0	7	4	6	0	8	4
Auxiliary Signal Groups												
Maximum Green [s]	0	19	0	7	19	0	8	16	19	0	15	16
Amber [s]	0.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	4.0	0.0	3.0	3.0
All red [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0
Walk [s]	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	5.0	0.0	5.0	5.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	10.0	0.0	10.0	10.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No			No
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	0.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	4.0	0.0	3.0	3.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	0.0	35.0	0.0	50.0	35.0	0.0	50.0	10.0	35.0	0.0	50.0	10.0
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	7	5	0	7	5	5	0	5	5
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	0.0	3.0	3.0
Minimum Recall		No			No				No			No
Maximum Recall		Yes			Yes				Yes			No
Pedestrian Recall		No			No				No			No

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	R	R	R
C, Calculated Cycle Length [s]	45	45	45	45	45	45
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.00	4.00	4.00	4.00	4.00	3.00
g_i, Effective Green Time [s]	30.0	30.0	30.0	30.0	30.0	4.0
g / C, Green / Cycle	0.67	0.67	0.67	0.67	0.67	0.09
(v / s)_i Volume / Saturation Flow Rate	0.29	0.00	0.24	0.24	0.00	0.05
s, saturation flow rate [veh/h]	3503	1602	3503	1577	1589	2700
c, Capacity [veh/h]	2328	1065	2328	1048	1056	246
d1, Uniform Delay [s]	3.58	0.00	3.35	3.32	0.00	19.50
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.61	0.00	0.45	0.95	0.00	1.65
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.44	0.00	0.37	0.36	0.00	0.51
d, Delay for Lane Group [s/veh]	4.19	0.00	3.79	4.27	0.00	21.16
Lane Group LOS	A	A	A	A	A	C
Critical Lane Group	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.97	0.00	0.75	0.80	0.00	0.63
50th-Percentile Queue Length [ft/ln]	24.25	0.00	18.64	19.96	0.00	15.82
95th-Percentile Queue Length [veh/ln]	1.75	0.00	1.34	1.44	0.00	1.14
95th-Percentile Queue Length [ft/ln]	43.65	0.00	33.55	35.93	0.00	28.48

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	4.19	0.00	0.00	3.79	4.27	0.00	0.00	0.00	0.00	0.00	21.16
Movement LOS		A	A		A	A			A			C
d_A, Approach Delay [s/veh]	4.19			3.94			0.00			21.16		
Approach LOS	A			A			A			C		
d_I, Intersection Delay [s/veh]	4.96											
Intersection LOS	A											
Intersection V/C	0.340											

Emissions

Vehicle Miles Traveled [mph]	118.45	0.00	74.28	32.53	0.00	9.85
Stops [stops/h]	155.19	0.00	119.28	63.87	0.00	101.25
Fuel consumption [US gal/h]	6.56	0.00	4.39	2.05	0.00	1.37
CO [g/h]	458.39	0.00	306.71	142.96	0.00	96.03
NOx [g/h]	89.19	0.00	59.67	27.81	0.00	18.68
VOC [g/h]	106.24	0.00	71.08	33.13	0.00	22.26

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1289	1289	1289	222
d_b, Bicycle Delay [s]	2.84	2.84	2.84	17.78
l_b,int, Bicycle LOS Score for Intersection	2.430	2.604	1.560	1.560
Bicycle LOS	B	B	A	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Summit Blvd (SH-9) & Lakepoint Dr

Control Type:	Two-way stop	Delay (sec / veh):	15.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.172

Intersection Setup

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Base Volume Input [veh/h]	953	15	0	1010	0	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0070	1.0070	1.0000	1.0070	1.0000	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	29	0	38	0	45
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	-17	0	0	-13	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	949	44	0	1042	0	68
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	258	12	0	283	0	18
Total Analysis Volume [veh/h]	1032	48	0	1133	0	74
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.01	0.00	0.17
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	15.07
Movement LOS	A	A		A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.61
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	15.32
d_A, Approach Delay [s/veh]	0.00		0.00		15.07	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.49					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 3: Summit Blvd (SH-9) & 10 Mile Dr

Control Type:	Signalized	Delay (sec / veh):	10.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.413

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	145.00	100.00	100.00	300.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00				35.00			35.00		
Grade [%]	0.00			0.00				0.00			0.00		
Curb Present	No			No				No			No		
Crosswalk	No			No				No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Base Volume Input [veh/h]	57	1001	74	0	55	810	54	38	17	126	60	10	41
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	2.00	0.00	2.00	4.00	3.00	5.00	2.00	2.00	2.00	4.00	3.00
Proportion of CAVs [%]	0.00												
Growth Factor	1.0070	1.0070	1.0070	1.007	1.007	1.007	1.007	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	19	6	16	22	0	0	0	0	0	24	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	8	0	0	0	5	0	0	13	0	0	18
Total Hourly Volume [veh/h]	57	1027	73	16	77	816	49	38	17	114	84	10	23
Peak Hour Factor	0.9200	0.9200	0.9200	0.920	0.920	0.920	0.920	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	279	20	4	21	222	13	10	5	0	23	3	6
Total Analysis Volume [veh/h]	62	1116	79	17	84	887	53	41	18	0	91	11	25
Presence of On-Street Parking	No		No	No			No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0				0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0				0			0		
v_co, Outbound Pedestrian Volume crossing	0			0				0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0			0		
Bicycle Volume [bicycles/h]	0			0				0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	10.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	Permi	ProtP	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Flashing Yellow Arrow	No			No	No			No			No		
Signal Group	5	2	0	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups													
Maximum Green [s]	7	63	0	0	7	63	0	0	15	0	0	15	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Walk [s]	0.0	5.0	0.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	0.0	10.0	0.0	0.0	25.0	0.0	0.0	25.0	0.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	12.0	60.0	0.0	0.0	15.0	63.0	0.0	0.0	15.0	0.0	0.0	15.0	0.0
Lead / Lag	Lead	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	5	0	0	7	5	0	0	5	0	0	5	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No			No	No			No			No	
Maximum Recall	No	Yes			No	Yes			No			No	
Pedestrian Recall	No	No			No	No			No			No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	R	L	C
C, Calculated Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	0.00	3.00	3.00	0.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	70.0	58.5	58.5	70.0	59.5	59.5	10.0	10.0	10.0	10.0	10.0
g / C, Green / Cycle	0.78	0.65	0.65	0.78	0.66	0.66	0.11	0.11	0.11	0.11	0.11
(v / s)_i Volume / Saturation Flow Rate	0.08	0.33	0.33	0.16	0.25	0.03	0.03	0.01	0.00	0.07	0.02
s, saturation flow rate [veh/h]	753	1840	1798	649	3503	1577	1339	1870	1589	1394	1639
c, Capacity [veh/h]	635	1195	1167	541	2314	1041	172	208	177	192	182
d1, Uniform Delay [s]	2.99	8.23	8.24	4.16	6.95	5.37	40.23	35.90	0.00	40.73	36.35
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.31	1.53	1.57	0.76	0.48	0.09	0.70	0.18	0.00	1.81	0.53
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.10	0.51	0.51	0.19	0.38	0.05	0.24	0.09	0.00	0.47	0.20
d, Delay for Lane Group [s/veh]	3.30	9.76	9.81	4.92	7.43	5.46	40.93	36.08	0.00	42.54	36.88
Lane Group LOS	A	A	A	A	A	A	D	D	A	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.21	5.58	5.47	0.38	3.35	0.32	0.89	0.36	0.00	2.03	0.73
50th-Percentile Queue Length [ft/ln]	5.28	139.38	136.87	9.41	83.63	8.04	22.16	8.94	0.00	50.81	18.25
95th-Percentile Queue Length [veh/ln]	0.38	9.45	9.31	0.68	6.02	0.58	1.60	0.64	0.00	3.66	1.31
95th-Percentile Queue Length [ft/ln]	9.50	236.19	232.81	16.93	150.54	14.46	39.89	16.09	0.00	91.46	32.85

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	3.30	9.78	9.81	4.92	4.92	7.43	5.46	40.93	36.08	0.00	42.54	36.88	36.88
Movement LOS	A	A	A	A	A	A	A	D	D	A	D	D	D
d_A, Approach Delay [s/veh]	9.47			7.09				39.45			40.93		
Approach LOS	A			A				D			D		
d_I, Intersection Delay [s/veh]	10.79												
Intersection LOS	B												
Intersection V/C	0.413												

Emissions

Vehicle Miles Traveled [mph]	9.50	92.52	90.57	9.09	79.82	4.77	1.61	0.71	0.00	4.11	1.63
Stops [stops/h]	8.44	223.01	219.00	15.05	267.63	12.86	35.46	14.30	0.00	81.29	29.20
Fuel consumption [US gal/h]	0.47	6.40	6.28	0.56	6.40	0.34	0.67	0.27	0.00	1.56	0.55
CO [g/h]	32.65	447.61	438.94	39.20	447.12	23.58	46.80	18.64	0.00	108.76	38.57
NOx [g/h]	6.35	87.09	85.40	7.63	86.99	4.59	9.11	3.63	0.00	21.16	7.50
VOC [g/h]	7.57	103.74	101.73	9.09	103.62	5.47	10.85	4.32	0.00	25.21	8.94

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1222	1289	222	222
d_b, Bicycle Delay [s]	6.81	5.69	35.56	35.56
l_b,int, Bicycle LOS Score for Intersection	2.603	2.353	1.678	1.799
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Lakepoint Dr & North Ten Mile Dr

Control Type:	Two-way stop	Delay (sec / veh):	12.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.022

Intersection Setup

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Base Volume Input [veh/h]	10	45	7	1	95	10	12	2	3	8	6	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	29	0	0	24	45	29	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	81	8	1	133	56	43	2	3	9	7	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	22	2	0	36	15	12	1	1	2	2	0
Total Analysis Volume [veh/h]	12	88	9	1	145	61	47	2	3	10	8	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.12	0.01	0.00	0.20	0.06	0.03	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	12.60	10.75	9.21	11.91	11.40	9.86	7.30	0.00	0.00	7.24	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.53	0.53	0.53	1.01	1.01	1.01	0.09	0.09	0.09	0.02	0.02	0.02
95th-Percentile Queue Length [ft/ln]	13.15	13.15	13.15	25.35	25.35	25.35	2.26	2.26	2.26	0.42	0.42	0.42
d_A, Approach Delay [s/veh]	10.83			10.95			6.60			4.02		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	10.01											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 5: Dillon Dam Rd & N Ten Mile Dr

Control Type:	Roundabout	Delay (sec / veh):	5.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	Dillon Dam Rd			Dillon Dam Rd			Ne-70			North Ten Mile Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Dillon Dam Rd			Dillon Dam Rd			Ne-70			North Ten Mile Dr		
Base Volume Input [veh/h]	0	181	49	119	85	235	73	27	94	75	15	74
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	6	10	0	0	0	26	0	19	0	8
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	39	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	39	184	55	130	86	237	74	53	95	95	15	83
Peak Hour Factor	1.0000	0.9200	0.9200	0.9200	0.9200	1.0000	1.0000	1.0000	1.0000	0.9200	1.0000	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	50	15	35	23	59	19	13	24	26	4	23
Total Analysis Volume [veh/h]	39	200	60	141	93	237	74	53	95	103	15	90
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	273			160			344			319		
Exiting Flow Rate [veh/h]	297			371			55			259		
Demand Flow Rate [veh/h]	39	184	55	130	86	237	74	53	95	95	15	83
Adjusted Demand Flow Rate [veh/h]	39	200	60	141	93	237	74	53	95	103	15	90

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	0.98	0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]	305	239	0	227	213
Capacity of Entry and Bypass Lanes [veh/h]	1045	1173	1305	972	997
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1024	1150	1280	953	977
X, volume / capacity	0.29	0.20	0.19	0.23	0.21

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A	A
95th-Percentile Queue Length [veh]	1.22	0.76	0.68	0.90	0.80
95th-Percentile Queue Length [ft]	30.53	19.05	16.97	22.56	20.12
Approach Delay [s/veh]	6.42	4.66		6.09	5.74
Approach LOS	A	A		A	A
Intersection Delay [s/veh]	5.55				
Intersection LOS	A				

Intersection Level Of Service Report
Intersection 1: Summit Blvd (SH-9) & Dillon Dam Rd / Lusher Ct

Control Type:	Signalized	Delay (sec / veh):	4.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.335

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	180.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			20.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Base Volume Input [veh/h]	0	896	225	103	743	354	274	0	51	0	0	109
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	1.00	2.00	4.00	3.00	5.00	2.00	2.00	0.00	2.00	7.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	31	6	0	29	20	0	0	0	0	0	14
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	84	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	32	0	0	38	0	0	5	0	0	12
Total Hourly Volume [veh/h]	0	933	285	104	777	338	276	0	46	0	0	112
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	254	0	28	211	92	75	0	0	0	0	30
Total Analysis Volume [veh/h]	0	1014	0	113	845	367	300	0	0	0	0	122
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	45
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	91.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Flashing Yellow Arrow												
Signal Group	0	2	0	1	6	0	7	4	6	0	8	4
Auxiliary Signal Groups												
Maximum Green [s]	0	19	0	7	19	0	8	16	19	0	15	16
Amber [s]	0.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	4.0	0.0	3.0	3.0
All red [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0
Walk [s]	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	5.0	0.0	5.0	5.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	10.0	0.0	10.0	10.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No			No
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	0.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	4.0	0.0	3.0	3.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	0.0	35.0	0.0	50.0	35.0	0.0	50.0	10.0	35.0	0.0	50.0	10.0
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	7	5	0	7	5	5	0	5	5
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	0.0	3.0	3.0
Minimum Recall		No			No				No			No
Maximum Recall		Yes			Yes				Yes			No
Pedestrian Recall		No			No				No			No

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	R	R	R
C, Calculated Cycle Length [s]	45	45	45	45	45	45
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.00	4.00	4.00	4.00	4.00	3.00
g_i, Effective Green Time [s]	30.0	30.0	30.0	30.0	30.0	4.0
g / C, Green / Cycle	0.67	0.67	0.67	0.67	0.67	0.09
(v / s)_i Volume / Saturation Flow Rate	0.29	0.00	0.24	0.23	0.00	0.05
s, saturation flow rate [veh/h]	3503	1602	3503	1577	1589	2700
c, Capacity [veh/h]	2332	1066	2332	1049	1058	243
d1, Uniform Delay [s]	3.54	0.00	3.32	3.28	0.00	19.52
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.59	0.00	0.44	0.92	0.00	1.60
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.43	0.00	0.36	0.35	0.00	0.50
d, Delay for Lane Group [s/veh]	4.13	0.00	3.75	4.20	0.00	21.12
Lane Group LOS	A	A	A	A	A	C
Critical Lane Group	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.94	0.00	0.73	0.77	0.00	0.61
50th-Percentile Queue Length [ft/ln]	23.53	0.00	18.17	19.26	0.00	15.31
95th-Percentile Queue Length [veh/ln]	1.69	0.00	1.31	1.39	0.00	1.10
95th-Percentile Queue Length [ft/ln]	42.36	0.00	32.70	34.67	0.00	27.55

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	4.13	0.00	0.00	3.75	4.20	0.00	0.00	0.00	0.00	0.00	21.12
Movement LOS		A	A		A	A			A			C
d_A, Approach Delay [s/veh]	4.13			3.89			0.00			21.12		
Approach LOS	A			A			A			C		
d_I, Intersection Delay [s/veh]	4.89											
Intersection LOS	A											
Intersection V/C	0.335											

Emissions

Vehicle Miles Traveled [mph]	116.95	0.00	73.49	31.92	0.00	9.54
Stops [stops/h]	150.62	0.00	116.27	61.64	0.00	97.96
Fuel consumption [US gal/h]	6.44	0.00	4.32	1.99	0.00	1.33
CO [g/h]	450.40	0.00	302.07	139.37	0.00	92.90
NOx [g/h]	87.63	0.00	58.77	27.12	0.00	18.07
VOC [g/h]	104.38	0.00	70.01	32.30	0.00	21.53

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1289	1289	1289	222
d_b, Bicycle Delay [s]	2.84	2.84	2.84	17.78
l_b,int, Bicycle LOS Score for Intersection	2.423	2.591	1.560	1.560
Bicycle LOS	B	B	A	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Summit Blvd (SH-9) & Lakepoint Dr

Control Type:	Two-way stop	Delay (sec / veh):	16.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.172

Intersection Setup

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Base Volume Input [veh/h]	1097	17	0	950	0	28
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0070	1.0070	1.0000	1.0070	1.0000	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	22	0	29	0	33
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	-13	0	0	-10	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1097	39	0	976	0	61
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	298	11	0	265	0	17
Total Analysis Volume [veh/h]	1192	42	0	1061	0	66
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.01	0.00	0.17
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	16.35
Movement LOS	A	A		A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.62
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	15.39
d_A, Approach Delay [s/veh]	0.00		0.00		16.35	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.46					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 3: Summit Blvd (SH-9) & 10 Mile Dr

Control Type:	Signalized	Delay (sec / veh):	14.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.451

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	145.00	100.00	100.00	300.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00				35.00			35.00		
Grade [%]	0.00			0.00				0.00			0.00		
Curb Present	No			No				No			No		
Crosswalk	No			No				No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Base Volume Input [veh/h]	57	1001	74	0	74	810	86	116	25	126	60	25	87
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	2.00	0.00	2.00	4.00	3.00	5.00	2.00	2.00	2.00	4.00	3.00
Proportion of CAVs [%]	0.00												
Growth Factor	1.0070	1.0070	1.0070	1.007	1.007	1.007	1.007	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	14	5	12	17	0	0	0	0	0	17	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	8	0	0	0	9	0	0	13	0	0	40
Total Hourly Volume [veh/h]	57	1022	72	12	92	816	78	117	25	114	77	25	48
Peak Hour Factor	0.9200	0.9200	0.9200	0.920	0.920	0.920	0.920	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	278	20	3	25	222	21	32	7	0	21	7	13
Total Analysis Volume [veh/h]	62	1111	78	13	100	887	85	127	27	0	84	27	52
Presence of On-Street Parking	No		No	No			No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0				0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0				0			0		
v_co, Outbound Pedestrian Volume crossing	0			0				0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0			0		
Bicycle Volume [bicycles/h]	0			0				0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	10.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	Permi	ProtP	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Flashing Yellow Arrow	No			No	No			No			No		
Signal Group	5	2	0	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups													
Maximum Green [s]	7	63	0	0	7	63	0	0	15	0	0	15	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Walk [s]	0.0	5.0	0.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	0.0	10.0	0.0	0.0	25.0	0.0	0.0	25.0	0.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	12.0	56.0	0.0	0.0	12.0	56.0	0.0	0.0	22.0	0.0	0.0	22.0	0.0
Lead / Lag	Lead	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	5	0	0	7	5	0	0	5	0	0	5	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No			No	No			No			No	
Maximum Recall	No	Yes			No	Yes			No			No	
Pedestrian Recall	No	No			No	No			No			No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	R	L	C
C, Calculated Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	0.00	3.00	3.00	0.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	63.8	52.2	52.2	63.8	53.3	53.3	16.2	16.2	16.2	16.2	16.2
g / C, Green / Cycle	0.71	0.58	0.58	0.71	0.59	0.59	0.18	0.18	0.18	0.18	0.18
(v / s)_i Volume / Saturation Flow Rate	0.08	0.33	0.33	0.17	0.25	0.05	0.10	0.01	0.00	0.06	0.05
s, saturation flow rate [veh/h]	751	1840	1798	669	3503	1577	1288	1870	1589	1383	1648
c, Capacity [veh/h]	573	1069	1045	499	2077	935	227	335	285	279	295
d1, Uniform Delay [s]	4.87	11.73	11.74	6.45	9.99	7.89	39.16	30.76	0.00	35.14	31.85
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.38	2.14	2.20	1.05	0.64	0.19	2.15	0.10	0.00	0.60	0.48
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.11	0.56	0.56	0.23	0.43	0.09	0.56	0.08	0.00	0.30	0.27
d, Delay for Lane Group [s/veh]	5.25	13.87	13.94	7.50	10.64	8.08	41.31	30.87	0.00	35.74	32.33
Lane Group LOS	A	B	B	A	B	A	D	C	A	D	C
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No
50th-Percentile Queue Length [veh/ln]	0.33	7.22	7.09	0.65	4.39	0.69	2.82	0.49	0.00	1.68	1.48
50th-Percentile Queue Length [ft/ln]	8.19	180.43	177.18	16.19	109.79	17.16	70.38	12.15	0.00	42.05	37.07
95th-Percentile Queue Length [veh/ln]	0.59	11.62	11.45	1.17	7.83	1.24	5.07	0.87	0.00	3.03	2.67
95th-Percentile Queue Length [ft/ln]	14.75	290.58	286.33	29.14	195.72	30.88	126.68	21.87	0.00	75.68	66.73

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	5.25	13.90	13.94	7.50	7.50	10.64	8.08	41.31	30.87	0.00	35.74	32.33	32.33
Movement LOS	A	B	B	A	A	B	A	D	C	A	D	C	C
d_A, Approach Delay [s/veh]	13.48			10.11				39.48			34.09		
Approach LOS	B			B				D			C		
d_I, Intersection Delay [s/veh]	14.88												
Intersection LOS	B												
Intersection V/C	0.451												

Emissions

Vehicle Miles Traveled [mph]	9.50	92.06	90.12	10.17	79.82	7.65	4.99	1.06	0.00	3.80	3.57
Stops [stops/h]	13.11	288.69	283.49	25.91	351.34	27.45	112.60	19.44	0.00	67.27	59.32
Fuel consumption [US gal/h]	0.53	7.38	7.24	0.75	7.60	0.64	2.10	0.36	0.00	1.26	1.10
CO [g/h]	36.83	515.59	505.78	52.76	531.59	44.58	147.11	24.90	0.00	88.19	77.02
NOx [g/h]	7.17	100.32	98.41	10.27	103.43	8.67	28.62	4.84	0.00	17.16	14.99
VOC [g/h]	8.54	119.49	117.22	12.23	123.20	10.33	34.09	5.77	0.00	20.44	17.85

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1133	1133	378	378
d_b, Bicycle Delay [s]	8.45	8.45	29.61	29.61
l_b,int, Bicycle LOS Score for Intersection	2.598	2.380	1.835	1.895
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Lakepoint Dr & North Ten Mile Dr

Control Type:	Two-way stop	Delay (sec / veh):	12.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.018

Intersection Setup

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Base Volume Input [veh/h]	11	98	9	1	83	11	12	4	5	9	12	1
Base Volume Adjustment Factor	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	22	0	0	17	33	22	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	118	9	1	98	43	33	3	5	9	11	1
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	32	2	0	27	12	9	1	1	2	3	0
Total Analysis Volume [veh/h]	11	128	10	1	107	47	36	3	5	10	12	1
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.17	0.01	0.00	0.14	0.04	0.02	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	11.97	10.91	9.49	11.72	10.77	9.37	7.29	0.00	0.00	7.24	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.72	0.72	0.72	0.69	0.69	0.69	0.07	0.07	0.07	0.02	0.02	0.02
95th-Percentile Queue Length [ft/ln]	18.12	18.12	18.12	17.14	17.14	17.14	1.73	1.73	1.73	0.43	0.43	0.43
d_A, Approach Delay [s/veh]	10.89			10.35			5.97			3.15		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	9.60											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 5: Dillon Dam Rd & N Ten Mile Dr

Control Type:	Roundabout	Delay (sec / veh):	10.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	Dillon Dam Rd			Dillon Dam Rd			Ne-70			North Ten Mile Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Dillon Dam Rd			Dillon Dam Rd			Ne-70			North Ten Mile Dr		
Base Volume Input [veh/h]	0	285	62	38	226	309	160	65	387	55	9	84
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	5	8	0	0	0	20	0	14	0	6
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	84	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	84	288	67	46	228	311	161	85	390	69	9	91
Peak Hour Factor	1.0000	0.9200	0.9200	0.9200	0.9200	1.0000	1.0000	1.0000	1.0000	0.9200	1.0000	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	21	78	18	13	62	78	40	21	98	19	2	25
Total Analysis Volume [veh/h]	84	313	73	50	248	311	161	85	390	75	9	99
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	302			171			380			569		
Exiting Flow Rate [veh/h]	727			584			95			212		
Demand Flow Rate [veh/h]	84	288	67	46	228	311	161	85	390	69	9	91
Adjusted Demand Flow Rate [veh/h]	84	313	73	50	248	311	161	85	390	75	9	99

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	0.98	0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]	480	304	0	649	187
Capacity of Entry and Bypass Lanes [veh/h]	1015	1159	1253	937	773
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	995	1136	1229	918	758
X, volume / capacity	0.47	0.26	0.25	0.69	0.24

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	C	A
95th-Percentile Queue Length [veh]	2.59	1.06	1.01	5.81	0.94
95th-Percentile Queue Length [ft]	64.67	26.41	25.21	145.30	23.60
Approach Delay [s/veh]	9.19	5.39		15.74	7.47
Approach LOS	A	A		C	A
Intersection Delay [s/veh]	10.00				
Intersection LOS	A				

Intersection Level Of Service Report

Intersection 1: Summit Blvd (SH-9) & Dillon Dam Rd / Lusher Ct

Control Type:	Signalized	Delay (sec / veh):	5.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.344

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	180.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			20.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)			Lusher Ct			Dillon Dam Rd		
Base Volume Input [veh/h]	0	896	327	103	743	354	274	0	214	0	0	109
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	1.00	2.00	4.00	3.00	5.00	2.00	2.00	0.00	2.00	7.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	53	10	0	48	32	0	0	0	0	0	23
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	111	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	45	0	0	39	0	0	22	0	0	13
Total Hourly Volume [veh/h]	0	955	405	104	796	349	276	0	193	0	0	120
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	260	0	28	216	95	75	0	0	0	0	33
Total Analysis Volume [veh/h]	0	1038	0	113	865	379	300	0	0	0	0	130
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	45
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	91.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Flashing Yellow Arrow												
Signal Group	0	2	0	1	6	0	7	4	6	0	8	4
Auxiliary Signal Groups												
Maximum Green [s]	0	19	0	7	19	0	8	16	19	0	15	16
Amber [s]	0.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	4.0	0.0	3.0	3.0
All red [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0
Walk [s]	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	5.0	0.0	5.0	5.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	10.0	0.0	0.0	10.0	10.0	0.0	10.0	10.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No			No
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	0.0	4.0	0.0	3.0	4.0	0.0	3.0	3.0	4.0	0.0	3.0	3.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	0.0	33.0	0.0	50.0	33.0	0.0	50.0	12.0	33.0	0.0	50.0	12.0
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	7	5	0	7	5	5	0	5	5
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	0.0	3.0	3.0
Minimum Recall		No			No				No			No
Maximum Recall		Yes			Yes				Yes			No
Pedestrian Recall		No			No				No			No

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	R	R	R
C, Calculated Cycle Length [s]	45	45	45	45	45	45
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.00	4.00	4.00	4.00	4.00	3.00
g_i, Effective Green Time [s]	29.9	29.9	29.9	29.9	29.9	4.1
g / C, Green / Cycle	0.66	0.66	0.66	0.66	0.66	0.09
(v / s)_i Volume / Saturation Flow Rate	0.30	0.00	0.25	0.24	0.00	0.05
s, saturation flow rate [veh/h]	3503	1602	3503	1577	1589	2700
c, Capacity [veh/h]	2320	1061	2320	1044	1053	252
d1, Uniform Delay [s]	3.65	0.00	3.41	3.38	0.00	19.43
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.63	0.00	0.46	0.98	0.00	1.63
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.45	0.00	0.37	0.36	0.00	0.52
d, Delay for Lane Group [s/veh]	4.28	0.00	3.87	4.36	0.00	21.06
Lane Group LOS	A	A	A	A	A	C
Critical Lane Group	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.00	0.00	0.77	0.83	0.00	0.65
50th-Percentile Queue Length [ft/ln]	25.07	0.00	19.30	20.65	0.00	16.28
95th-Percentile Queue Length [veh/ln]	1.81	0.00	1.39	1.49	0.00	1.17
95th-Percentile Queue Length [ft/ln]	45.13	0.00	34.75	37.16	0.00	29.30

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	4.28	0.00	0.00	3.87	4.36	0.00	0.00	0.00	0.00	0.00	21.06
Movement LOS		A	A		A	A			A			C
d_A, Approach Delay [s/veh]	4.28			4.02			0.00			21.06		
Approach LOS	A			A			A			C		
d_I, Intersection Delay [s/veh]	5.05											
Intersection LOS	A											
Intersection V/C	0.344											

Emissions

Vehicle Miles Traveled [mph]	119.72	0.00	75.23	32.96	0.00	10.16
Stops [stops/h]	160.48	0.00	123.55	66.07	0.00	104.19
Fuel consumption [US gal/h]	6.67	0.00	4.48	2.09	0.00	1.41
CO [g/h]	466.47	0.00	313.03	146.07	0.00	98.82
NOx [g/h]	90.76	0.00	60.90	28.42	0.00	19.23
VOC [g/h]	108.11	0.00	72.55	33.85	0.00	22.90

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1200	1200	1200	311
d_b, Bicycle Delay [s]	3.60	3.60	3.60	16.04
l_b,int, Bicycle LOS Score for Intersection	2.453	2.618	1.560	1.560
Bicycle LOS	B	B	A	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Summit Blvd (SH-9) & Lakepoint Dr

Control Type:	Two-way stop	Delay (sec / veh):	28.6
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.371

Intersection Setup

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Summit Blvd (SH-9)		Summit Blvd (SH-9)		Lakepoint Dr	
Base Volume Input [veh/h]	1666	17	0	1010	0	26
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0070	1.0070	1.0000	1.0070	1.0000	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	8	36	0	48	0	56
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	-22	0	0	-16	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1664	53	0	1049	0	82
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	452	14	0	285	0	22
Total Analysis Volume [veh/h]	1809	58	0	1140	0	89
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.01	0.00	0.37
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	28.57
Movement LOS	A	A		A		D
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	1.63
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	40.67
d_A, Approach Delay [s/veh]	0.00		0.00		28.57	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	0.82					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 3: Summit Blvd (SH-9) & 10 Mile Dr

Control Type:	Signalized	Delay (sec / veh):	17.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.504

Intersection Setup

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	145.00	100.00	100.00	300.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00				35.00			35.00		
Grade [%]	0.00			0.00				0.00			0.00		
Curb Present	No			No				No			No		
Crosswalk	No			No				No			No		

Volumes

Name	Summit Blvd (SH-9)			Summit Blvd (SH-9)				Shopping Ctr			Ten Mile Dr		
Base Volume Input [veh/h]	57	1001	74	0	140	810	197	140	19	126	60	14	124
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	2.00	0.00	2.00	4.00	3.00	5.00	2.00	2.00	2.00	4.00	3.00
Proportion of CAVs [%]	0.00												
Growth Factor	1.0070	1.0070	1.0070	1.007	1.007	1.007	1.007	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	23	8	20	28	0	0	0	0	0	30	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	8	0	0	0	20	0	0	13	0	0	38
Total Hourly Volume [veh/h]	57	1031	75	20	169	816	178	141	19	114	90	14	87
Peak Hour Factor	0.9200	0.9200	0.9200	0.920	0.920	0.920	0.920	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	280	20	5	46	222	48	38	5	0	24	4	24
Total Analysis Volume [veh/h]	62	1121	82	22	184	887	193	153	21	0	98	15	95
Presence of On-Street Parking	No		No	No			No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0				0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0				0			0		
v_co, Outbound Pedestrian Volume crossing	0			0				0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0			0		
Bicycle Volume [bicycles/h]	0			0				0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	10.0
Offset Reference	Beginning of First Yellow
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	Permi	ProtP	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Flashing Yellow Arrow	No			No	No			No			No		
Signal Group	5	2	0	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups													
Maximum Green [s]	7	63	0	0	7	63	0	0	15	0	0	15	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Walk [s]	0.0	5.0	0.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0
Pedestrian Clearance [s]	0.0	10.0	0.0	0.0	0.0	10.0	0.0	0.0	25.0	0.0	0.0	25.0	0.0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	12.0	53.0	0.0	0.0	12.0	53.0	0.0	0.0	25.0	0.0	0.0	25.0	0.0
Lead / Lag	Lead	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	5	0	0	7	5	0	0	5	0	0	5	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No			No	No			No			No	
Maximum Recall	No	Yes			No	Yes			No			No	
Pedestrian Recall	No	No			No	No			No			No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	R	L	C
C, Calculated Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	0.00	3.00	3.00	0.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	60.2	48.2	48.2	60.2	49.7	49.7	19.8	19.8	19.8	19.8	19.8
g / C, Green / Cycle	0.67	0.54	0.54	0.67	0.55	0.55	0.22	0.22	0.22	0.22	0.22
(v / s)_i Volume / Saturation Flow Rate	0.09	0.33	0.33	0.30	0.25	0.12	0.12	0.01	0.00	0.07	0.07
s, saturation flow rate [veh/h]	712	1840	1796	683	3503	1577	1252	1870	1589	1391	1597
c, Capacity [veh/h]	517	988	964	472	1936	871	253	410	348	340	350
d1, Uniform Delay [s]	6.24	14.42	14.44	9.70	12.06	10.27	38.09	27.74	0.00	32.01	29.46
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.47	2.87	2.96	2.92	0.78	0.59	2.33	0.05	0.00	0.46	0.51
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.12	0.62	0.62	0.44	0.46	0.22	0.61	0.05	0.00	0.29	0.31
d, Delay for Lane Group [s/veh]	6.72	17.30	17.40	12.63	12.85	10.85	40.42	27.79	0.00	32.47	29.97
Lane Group LOS	A	B	B	B	B	B	D	C	A	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No
50th-Percentile Queue Length [veh/ln]	0.40	8.50	8.34	1.59	5.01	1.92	3.37	0.35	0.00	1.86	1.99
50th-Percentile Queue Length [ft/ln]	9.99	212.42	208.55	39.65	125.37	48.03	84.37	8.85	0.00	46.43	49.65
95th-Percentile Queue Length [veh/ln]	0.72	13.28	13.08	2.86	8.69	3.46	6.07	0.64	0.00	3.34	3.57
95th-Percentile Queue Length [ft/ln]	17.99	331.93	326.96	71.38	217.18	86.45	151.86	15.93	0.00	83.57	89.36

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	6.72	17.34	17.40	12.63	12.63	12.85	10.85	40.42	27.79	0.00	32.47	29.97	29.97
Movement LOS	A	B	B	B	B	B	B	D	C	A	C	C	C
d_A, Approach Delay [s/veh]	16.83			12.51				38.90			31.15		
Approach LOS	B			B				D			C		
d_I, Intersection Delay [s/veh]	17.26												
Intersection LOS	B												
Intersection V/C	0.504												

Emissions

Vehicle Miles Traveled [mph]	9.50	93.17	91.15	18.54	79.82	17.37	6.01	0.82	0.00	4.43	4.97
Stops [stops/h]	15.99	339.87	333.68	63.45	401.17	76.84	134.99	14.16	0.00	74.28	79.43
Fuel consumption [US gal/h]	0.57	8.25	8.09	1.71	8.38	1.67	2.50	0.26	0.00	1.38	1.46
CO [g/h]	39.64	576.53	565.50	119.74	585.67	116.47	174.94	17.94	0.00	96.11	101.90
NOx [g/h]	7.71	112.17	110.03	23.30	113.95	22.66	34.04	3.49	0.00	18.70	19.83
VOC [g/h]	9.19	133.62	131.06	27.75	135.73	26.99	40.54	4.16	0.00	22.28	23.62

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1067	1067	444	444
d_b, Bicycle Delay [s]	9.80	9.80	27.22	27.22
l_b,int, Bicycle LOS Score for Intersection	2.610	2.485	1.868	1.966
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Lakepoint Dr & North Ten Mile Dr

Control Type:	Two-way stop	Delay (sec / veh):	13.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.024

Intersection Setup

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	North Ten Mile Dr			North Ten Mile Dr			Lakepoint Dr			Lakepoint Dr		
Base Volume Input [veh/h]	10	45	7	1	95	10	12	2	3	8	6	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460	1.1460
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	36	0	0	30	56	36	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	88	8	1	139	67	50	2	3	9	7	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	24	2	0	38	18	14	1	1	2	2	0
Total Analysis Volume [veh/h]	12	96	9	1	151	73	54	2	3	10	8	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.13	0.01	0.00	0.21	0.07	0.03	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	13.19	10.99	9.34	12.37	11.72	10.07	7.31	0.00	0.00	7.24	0.00	0.00
Movement LOS	B	B	A	B	B	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.59	0.59	0.59	1.14	1.14	1.14	0.10	0.10	0.10	0.02	0.02	0.02
95th-Percentile Queue Length [ft/ln]	14.74	14.74	14.74	28.59	28.59	28.59	2.61	2.61	2.61	0.42	0.42	0.42
d_A, Approach Delay [s/veh]	11.09			11.19			6.69			4.02		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	10.22											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 5: Dillon Dam Rd & N Ten Mile Dr

Control Type:	Roundabout	Delay (sec / veh):	11.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes		

Intersection Setup

Name	Dillon Dam Rd			Dillon Dam Rd			Ne-70			North Ten Mile Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Dillon Dam Rd			Dillon Dam Rd			Ne-70			North Ten Mile Dr		
Base Volume Input [veh/h]	0	311	16	87	106	260	184	95	387	75	15	74
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070	1.0070
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	8	12	0	0	0	32	0	23	0	10
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	111	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	111	315	24	100	107	262	185	128	390	99	15	85
Peak Hour Factor	1.0000	0.9200	0.9200	0.9200	0.9200	1.0000	1.0000	1.0000	1.0000	0.9200	1.0000	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	28	86	7	27	29	66	46	32	98	27	4	23
Total Analysis Volume [veh/h]	111	342	26	109	116	262	185	128	390	108	15	92
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	430			239			340			651		
Exiting Flow Rate [veh/h]	626			631			129			268		
Demand Flow Rate [veh/h]	111	315	24	100	107	262	185	128	390	99	15	85
Adjusted Demand Flow Rate [veh/h]	111	342	26	109	116	262	185	128	390	108	15	92

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	0.98	0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]	489	230	0	718	220
Capacity of Entry and Bypass Lanes [veh/h]	890	1082	1211	976	711
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	873	1061	1187	957	697
X, volume / capacity	0.55	0.21	0.22	0.73	0.31

Movement, Approach, & Intersection Results

Lane LOS	B	A	A	C	A
95th-Percentile Queue Length [veh]	3.42	0.80	0.84	6.84	1.31
95th-Percentile Queue Length [ft]	85.43	20.04	21.10	170.92	32.77
Approach Delay [s/veh]	11.78	5.17		17.08	9.00
Approach LOS	B	A		C	A
Intersection Delay [s/veh]	11.73				
Intersection LOS	B				



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www.PlatinumTrafficEngineering.com
303.210.9984

MCDONALDS RESTAURANT

960 N. Ten Mile Drive
Frisco, Colorado

FINAL DRAINAGE REPORT

Strategic Land Solutions, Inc. JN: 21-0001-211
Report Date/History: May 30, 2025
Revised: September 05, 2025

Prepared for:

MCDONALD'S RESTAURANT

960 N. TEN MILE DRIVE
Frisco, Colorado
STORE ID # 51062
ATTN: Mr. Robert Yagusesky – Area Construction Manager
Email: robert.yagusesky@us.mcd.com

Prepared by:

Strategic Land Solutions, Inc.
Civil Engineering • Land Planning • Entitlements

Robert J. Palmer, P.E., as President
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TABLE OF CONTENTS

TABLE OF CONTENTS i

ENGINEER'S AND DEVELOPER'S CERTIFICATIONS ii

1. GENERAL LOCATION AND DESCRIPTION 1
- **1.1. LOCATION** 1
- **1.2. DESCRIPTION OF PROPERTY** 1

2. DRAINAGE BASINS AND SUB-BASINS 1
- **2.1. MAJOR BASIN DESCRIPTION** 1
- **2.2. SUB-BASIN DESCRIPTION** 2

3. DRAINAGE DESIGN CRITERIA 2
- **3.1. REGULATIONS** 2
- **3.2. DEVELOPMENT RESTRAINTS** 2
- **3.3. HYDROLOGICAL CRITERIA** 3
- **3.4. HYDRAULIC CRITERIA** 3
- **3.5. WATER QUALITY REQUIREMENTS** 3
- **3.6. WAIVERS FROM CRITERIA** 3

4. DRAINAGE FACILITY DESIGN 3
- **4.1. GENERAL CONCEPT** 3
- **4.2. SPECIFIC DETAILS** 3

5. CONCLUSIONS 4
- **5.1. COMPLIANCE WITH STANDARDS** 4
- **5.2. DESIGN** 4

6. REFERENCES 5

LIST OF FIGURES

Figure 1 - SITE LOCATION MAP 1
Figure 2 - SITE LOCATION ENLARGEMENT 1

APPENDICES

APPENDIX A: HYDROLOGIC COMPUTATIONS
APPENDIX B: MAP POCKET

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ENGINEER'S CERTIFICATION

This **STORMWATER MANAGEMENT REPORT** was prepared by me or under my direct supervision in accordance with the provisions of the Town of Frisco, Storm Drainage Design and Technical Stormwater requirements for the owners thereof. It is understood that the Town of Frisco does not and will not assume liability for the drainage facilities designed by others.

SIGNATURE: _____

Robert J. Palmer, PE
CO PE #36320

COLORADO REGISTERED ROBERT J. PALMER 36320 PROFESSIONAL ENGINEER
05/30/2025

DEVELOPER'S CERTIFICATION

MCDONALD'S CORPORATION (hereinafter **DEVELOPER**) hereby certifies that the drainage facilities for the project detailed within this Report will be constructed according to the design presented. It is understood that the Town of Frisco does not and will not assume liability for the drainage facilities designed and/or certified by my engineer and that the Town of Frisco reviews drainage plans pursuant to Colorado Revised Statutes, Title 24, Article 28; but cannot, on behalf of **DEVELOPER**, guarantee that final drainage design review will absolve **DEVELOPER** and/or their successor and/or assigns of future liability for improper design.

SIGNATURE: _____

_____
Printed Name –

_____
Title –

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1. GENERAL LOCATION AND DESCRIPTION

1.1. LOCATION

The planned **McDonald's Restaurant** will consist of the building remodel and site revisions of the First Bank site located at 960 N. Ten Mile Drive, within the northwest ¼ of Section 26, Township 5 South, Range 78 West of the 6th Principal Meridian, Town of Frisco, Summit County, State of Colorado.

The site is bounded on the west by Summit Boulevard, on the north by existing commercial/retail, on the east by N. Ten Mile Drive, and on the south by Lakepoint Drive.



Figure 1 - SITE LOCATION MAP

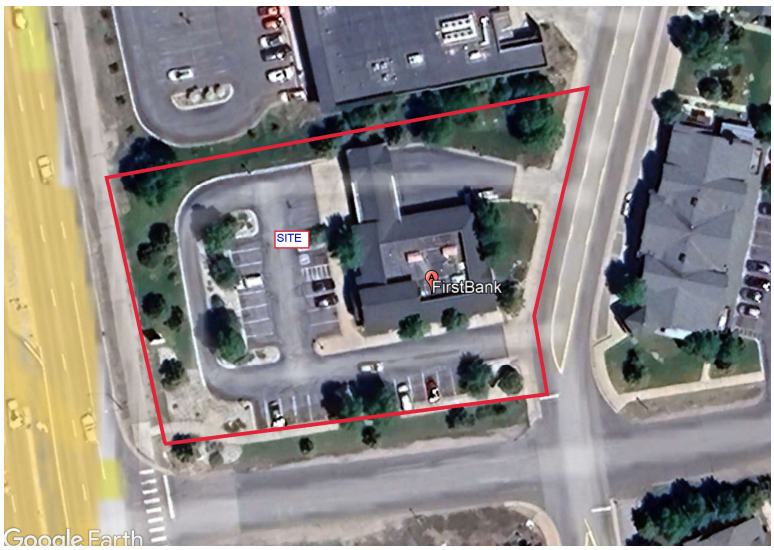


Figure 2 - SITE LOCATION ENLARGEMENT

1.2. DESCRIPTION OF PROPERTY

The site currently encompasses approximately 1.05-acres and includes a bank building, surface parking, landscaping, and utilities.

The proposed redevelopment of this property includes remodeling the bank building to operate as a McDonald's restaurant, removal of the remote tellers, the addition of double drive thru, some new landscaping, and repaving of the site. Site landscaping will be increased with this project.

2. DRAINAGE BASINS AND SUB-BASINS

2.1. MAJOR BASIN DESCRIPTION

The site lies within the Dillon Reservoir Drainage Basin. Runoff from the site sheet flows to the adjacent streets, where it is conveyed north in the N. Ten Mile Drive gutter to an underground storm drain. The runoff is captured in the public underground storm drain, where it is conveyed through stormwater treatment and to Dillon Reservoir.

There are no adjacent irrigation facilities tributary to this site.

The project is located within Flood Zone X, as shown on the National Flood Insurance Program's Flood Insurance map community panel 08117C0353F with an effective date of November 16, 2018, Summit County.

According to the Natural Resources Conservation Service (NRCS) web site, the onsite soil consists of Histic Cryaquolls, which has a hydraulic rating of A/ D.

As shown in the geotechnical report (see Appendix F), no ground water was encountered in any borings, which ranged in depth from 6.5-feet to 26.5-feet. Therefore, no dewatering is expected with this project.

2.2. SUB-BASIN DESCRIPTION

Under proposed conditions, the site is roughly divided into three (3) existing and proposed drainage sub-basins. The proposed basins match closely to the existing basins.

The following is a description of the three existing E1, E2, E3, and three proposed sub-basins A, B, and C.

Basin E1 contains approximately 0.48 acre, and is comprised of a portion of the building rooftop, landscaping, parking, and drive aisles along the south and east portion of the site. Runoff from this basin sheet flows to the adjacent pavement, where it drains to the gutter in N. Ten Mile Drive at design point E1. The runoff is then conveyed North in N. Ten Mile Drive to a public inlet.

Basin E2 contains approximately 0.47 acre, and is comprised of a portion of the building rooftop, landscaping, parking, and drive aisles along the west portion of the site. Runoff from this basin sheet flows to the adjacent pavement, where it drains to the onsite gutter. The runoff is then conveyed to the drainage swale along the north portion of the site at Design Point E2. The runoff is then conveyed North in N. Ten Mile Drive in a public storm pipe.

Basin E3 contains approximately 0.15 acre and is comprised of drainage swale along the north side of the site. Runoff from this area combines with runoff from basin E3 and the storm pipe into the swale at Design Point E3. The runoff is then conveyed North in N. Ten Mile Drive in a public storm pipe.

Basin A contains approximately 0.50 acre, and is comprised of a portion of the building rooftop, landscaping, parking, and drive aisles along the south and east portion of the site. Runoff from this basin sheet flows to the adjacent pavement, where it drains to the gutter in N. Ten Mile Drive at design point 1. The runoff is then conveyed North in N. Ten Mile Drive to a public inlet.

Basin B contains approximately 0.46 acre, and is comprised of a portion of the building rooftop, landscaping, parking, and drive aisles along the west portion of the site. Runoff from this basin sheet flows to the adjacent pavement, where it drains to the onsite gutter. The runoff is then conveyed to the drainage swale along the north portion of the site at Design Point 2. The runoff is then conveyed North in N. Ten Mile Drive in a public storm pipe.

Basin C contains approximately 0.15 acre and is comprised of drainage swale along the north side of the site. Runoff from this area combines with runoff from basin E3 and the storm pipe into the swale at Design Point 3. The runoff is then conveyed North in N. Ten Mile Drive in a public storm pipe.

DRAINAGE DESIGN CRITERIA

2.3. REGULATIONS

This drainage report was prepared in compliance with the following criteria:

- Town of Frisco, *Storm Drainage Design and Technical Criteria*
- Mile High Flood District (MHFD) *Urban Storm Drainage Criteria Manual*

During construction, disturbed areas will be stabilized for erosion and sediment control in accordance with Town of Frisco and MHFD *Criteria*. The methods used to control erosion and sediment during construction of this project will comply with the non-structural and structural Best Management Practices (BMPs) described within the Town of Frisco and MHFD manuals. A separate Erosion Control Report will be submitted to Town of Frisco for approval.

No deviation from the Town of Frisco *Criteria* is being.

2.4. DEVELOPMENT RESTRAINTS

The proposed development is a remodel of the existing site, and the site is located at the corner of two streets. Therefore, the proposed drainage basins are almost identical to the existing drainage basins. The proposed development will increase the amount of pervious (landscaping) area by a small amount. All proposed drainage basins show a minor reduction in runoff intensity and volume compared to the existing drainage basins.

2.5. HYDROLOGIC CRITERIA

Runoff was calculated per the Town of Frisco *Criteria*. Rainfall intensity was taken from NOAA Atlas 14 runoff data, and runoff coefficients were taken from MHFD Table RO-3 utilizing soil type "A". The rational method was used to calculate runoff from the proposed development. The following formula was used to determine the runoff values:

Q=CIA
Where Q = Storm runoff, cubic feet per second (CFS)
C = Runoff coefficient
I = Storm intensity, inches per hour
A = Drainage area, acres

2.6. HYDRAULIC CRITERIA

The are no pipe hydraulics associated with this report.

2.7. WATER QUALITY REQUIREMENTS

Stormwater quality for the project will be provided by passing site runoff over landscaping where possible. There are no formal existing water quality facilities serving the existing site, and this a remodel of the existing site with an increase in pervious area. Therefore, the addition of formal water quality treatment is not required.

2.8. WAIVERS FROM CRITERIA

No deviation from the Town of Frisco *Criteria* or MHFD *Criteria* is being requested.

3. DRAINAGE FACILITY DESIGN

3.1. GENERAL CONCEPT

Runoff from the building will be captured by roof drains and conveyed across the landscape in front of the building to N. Ten Mile Drive. The runoff is then conveyed north to a public strom drain inlet. Runoff from the north portion of the lot is conveyed to the landscaped area at the northeast corner of the site, where it is captured in the public underground storm drain. Runoff form the south portion of the site is conveyed to N. Ten Mile Drive, where it is conveyed north to a public storm drain inlet.

3.2. SPECIFIC DETAILS

Runoff from the site sheet flows to gutters, where it is captured by inlets, and conveyed to the public storm drain system in N. Ten Mile Drive. The remodeled site is designed to mimic the existing grading and drainage patterns through the site. The proposed site contains a small increase in pervious area, and it provides a small decrease or no change in stormwater runoff intensity and volume compared to the existing site.

SITE STATISTICS:

DESCRIPTION	EXISTING	PROVIDED
Area	1.105 Acres	1.105 Acres
Percent Imperviouness	64.66%	61.95%
5-year Runoff Coefficient	0.49	0.47
100-year Runoff Coefficient	0.61	0.59
5-year South Basin Runoff (Basins E1 & A)	0.49 CFS	0.49 CFS
5-year Middle Basin Runoff (Basins E2 & B)	0.62 CFS	0.62 CFS
5-year South Basin Runoff (Basins E3 & C)	0.03 CFS	0.03 CFS
5-year Total Site Runoff	**0.94 CFS**	**0.94 CFS**
25-year South Bsn. Runoff (Basins E1 & A)	0.84 CFS	0.85 CFS
25-year South Bsn. Runoff (Basins E2 & B)	1.03 CFS	1.02 CFS
25-year South Bsn. Runoff (Basins E3 & C)	0.06 CFS	0.06 CFS
25-year Total Site Runoff	**1.60 CFS**	**1.60 CFS**
100-year South Bsn. Runoff (Basins E1 & A)	1.30 CFS	1.33
100-year South Bsn. Runoff (Basins E2 & B)	1.54 CFS	1.53
100-year South Bsn. Runoff (Basins E3 & C)	0.15 CFS	0.14
100-year Total Site Runoff	**2.52 CFS**	**2.52 CFS**

3.3. OPERATION AND MAINTENANCE PLAN

The proposed storm drain system will be inspected weekly to ensure no trash is accumulating in the system, and to ensure the system is operating correctly. The system will be maintenance yearly to remove any sedimentation form landscape areas and gutters.

All maintenance is the responsibility of the property owner. The Town of Frisco is not responsible for maintenance of private onsite facilities. See section 4.2 of this report for maintenance specifications.

4. CONCLUSIONS

4.1. COMPLIANCE WITH STANDARDS

This stormwater Management Report was prepared in compliance with the Town of Frisco *Storm Drainage Design and Technical Criteria* and the MHFD *Urban Storm Drainage Criteria Manual*. No variances will be requested. The proposed total site runoff for the 5-year storm, 25-year storm, and 100-year storm are identical to the existing site.

4.2. MAINTENANCE

All proposed drainage facilities proposed with this project are private and will be maintained by the property owner. All periodic maintenance will be performed per Mile Hi Flood District Urban Storm Drainage Criteria Manual Volume 3, Chapter 6, Section 7.0.

4.3. DESIGN

This project meets the requirements shown in the Town of Frisco *Storm Drainage Design and Technical Criteria* and the MHFD *Urban Storm Drainage Criteria Manual, and it includes a decrease in runoff intensity and volume. Furthermore, as discussed in section 2.1 of this report, groundwater is not expected to affect this project.* As such, this project should not have a negative impact on the surrounding developments and existing drainage facilities.

5. REFERENCES

1. Town of Frisco, Minimum Street Design and Access Criteria, February 12, 2019.

2. Flood Insurance Rate Map – Town of Frisco, Colorado, Community Panel Number 0800460181G, Effective date of November 16, 2018.

3. Geotechnical Exploration Report McDonalds-Frisco, CO 960 N. 10 Mile Rd. Frisco CO, 80443 – UES, January 21, 2025.

4. Mile High Flood District Criteria Manual (Volumes 1, 2, and 3); Mile High Flood District, 2021 (latest revision).

APPENDIX

A HYDROLOGIC COMPUTATIONS

Appendix A – HYDROLOGIC COMPUTATIONS

960 N. TEN MILE DRIVE FRISCO, CO - Existing Drainage Calculations

LAND USAGE FOR EACH SUB-BASIN

LAND USAGE	PERCENT IMPERVIOUS (%)	5-YR RUNOFF COEFF. C_5	100-YR RUNOFF COEFF. C_{100}	AREA						SUM OF AREA (ACRE)
				E1	E2	E3				
LANDSCAPE (clay)	20	0.11	0.26	0.184	0.116	0.153				0.453
ROOF	95	0.81	0.84	0.054	0.046					0.100
DRIVES AND WALKS (IMPERVIOUS)	95	0.81	0.84	0.244	0.308					0.552
Total				0.482	0.470	0.153	0.000	0.000	0.000	1.105

COMPOSITE % IMPERVIOUSNESS AND RUNOFF COEFFICIENTS

SUB-BASIN	EFFECTIVE % IMPERVIOUS				AREA acres
E1	66.37				0.482
E2	76.49				0.470
E3	20.00				0.153
Total Existing Site	64.25				1.105

960 N. TEN MILE DRIVE FRISCO, CO - ProposedDrainage Calculations

LAND USAGE FOR EACH SUB-BASIN

LAND USAGE	PERCENT IMPERVIOUS (%)	5-YR RUNOFF COEFF. C_5	100-YR RUNOFF COEFF. C_{100}	AREA						SUM OF AREA (ACRE)
				A	B	C				
LANDSCAPE (clay)	20	0.11	0.26	0.204	0.108	0.146				0.458
ROOF	95	0.81	0.84	0.054	0.051					0.105
DRIVES AND WALKS (IMPERVIOUS)	95	0.81	0.84	0.243	0.299					0.542
Total				0.501	0.458	0.146	0.000	0.000	0.000	1.105

COMPOSITE % IMPERVIOUSNESS AND RUNOFF COEFFICIENTS

SUB-BASIN	EFFECTIVE % IMPERVIOUS				AREA acres
A	64.46				0.501
B	77.31				0.458
C	20.00				0.146
Total Proposed Site	63.91				1.105

Calculation of Peak Runoff using Rational Method

Designer: Robert Palmer
Company: Strategic Land Solutions
Date: 9/10/2025
Project: 960 N. TEM MILE, FRISCO, CO - MCDONA
Location: 2930 S. PANCRATIA STREET DENVER, C

Version 2.00 released May 2017

Cells of this color are for required user-input
Cells of this color are for optional override values
Cells of this color are for calculated results based on overrides

$$t_i = \frac{0.395(1.1 - C_5)\sqrt{L_i}}{S_i^{0.33}}$$

$$t_t = \frac{L_t}{60K\sqrt{S_t}} = \frac{L_t}{60V_t}$$

$$\text{Computed } t_c = t_i + t_t$$

$$\text{Regional } t_c = (26 - 17i) + \frac{L_t}{60(14i + 9)\sqrt{S_t}}$$

$t_{minimum}$= 5 (urban)
$t_{minimum}$= 10 (non-urban)

$$\text{Selected } t_c = \max\{t_{minimum}, \min(\text{Computed } t_c, \text{Regional } t_c)\}$$

Select UDFCD location for NOAA Atlas 14 Rainfall Depths from the pulldown list OR enter your own depths obtained from the NOAA website (click this link)

	2-yr	5-yr	10-yr	25-yr	50-yr	100-yr	500-yr
1-hour rainfall depth, P1 (in) =	0.50	0.64	0.78	1.00	1.18	1.38	1.91
	a	b	c				
Rainfall Intensity Equation Coefficients =	28.50	10.00	0.786				

$$I(in/hr) = \frac{a * P_1}{(b + t_c)^c}$$

$$Q(cfs) = CIA$$

Subcatchment Name	Area (ac)	NRCS Hydrologic Soil Group	Percent Imperviousness	Runoff Coefficient, C							Overland (Initial) Flow Time					Channelized (Travel) Flow Time							Time of Concentration			Rainfall Intensity, I (in/hr)							Peak Flow, Q (cfs)						
				2-yr	5-yr	10-yr	25-yr	50-yr	100-yr	500-yr	Overland Flow Length L_i (ft)	U/S Elevation (ft) (Optional)	D/S Elevation (ft) (Optional)	Overland Flow Slope S_i (ft/ft)	Overland Flow Time t_i (min)	Channelized Flow Length L_t (ft)	U/S Elevation (ft) (Optional)	D/S Elevation (ft) (Optional)	Channelized Flow Slope S_t (ft/ft)	NRCS Conveyance Factor K	Channelized Flow Velocity V_t (ft/sec)	Channelized Flow Time t_t (min)	Computed t_c (min)	Regional t_c (min)	Selected t_c (min)	2-yr	5-yr	10-yr	25-yr	50-yr	100-yr	500-yr	2-yr	5-yr	10-yr	25-yr	50-yr	100-yr	500-yr
E1	0.48	A	66.4	0.49	0.51	0.53	0.56	0.59	0.63	0.68	66.00			0.053	4.99	216.00			0.012	20	2.14	1.68	6.67	16.55	6.67	1.55	2.01	2.44	3.11	3.68	4.31	5.96	0.37	0.49	0.62	0.84	1.05	1.30	1.96
E2	0.47	A	76.5	0.59	0.61	0.63	0.65	0.68	0.71	0.75	37.00			0.108	2.45	297.00			0.008	20	1.83	2.70	5.15	15.74	5.15	1.67	2.16	2.63	3.35	3.97	4.65	6.43	0.46	0.62	0.78	1.03	1.27	1.54	2.26
E3	0.15	A	20.0	0.10	0.11	0.12	0.14	0.20	0.27	0.38	38.35			0.104	5.11	207.65			0.027	15	2.44	1.42	6.53	24.40	10.00	1.34	1.74	2.12	2.69	3.19	3.73	5.17	0.02	0.03	0.04	0.06	0.10	0.15	0.30
E-TOTAL	1.11	A	64.3	0.47	0.49	0.51	0.54	0.57	0.61	0.67	72.50			0.053	5.41	381.00			0.008	15	1.37	4.62	10.03	18.93	10.03	1.34	1.74	2.11	2.69	3.19	3.73	5.16	0.70	0.94	1.18	1.60	2.02	2.52	3.81
A	0.50	A	64.5	0.47	0.49	0.51	0.54	0.58	0.61	0.67	64.00			0.051	5.13	236.40			0.021	20	2.89	1.36	6.50	16.55	6.50	1.56	2.02	2.46	3.14	3.71	4.34	6.01	0.37	0.49	0.63	0.85	1.07	1.33	2.01
B	0.46	A	77.3	0.60	0.62	0.64	0.66	0.69	0.71	0.75	28.00			0.099	2.15	290.90			0.010	20	2.00	2.42	4.58	15.30	5.00	1.68	2.18	2.65	3.38	4.00	4.68	6.48	0.46	0.62	0.77	1.02	1.26	1.53	2.23
C	0.15	A	20.0	0.10	0.11	0.12	0.14	0.20	0.27	0.38	38.35			0.104	5.11	207.65			0.027	15	2.46	1.40	6.51	24.38	10.00	1.34	1.74	2.12	2.69	3.19	3.73	5.17	0.02	0.03	0.04	0.06	0.09	0.14	0.29
P-TOTAL	1.11	A	63.9	0.47	0.49	0.50	0.53	0.57	0.61	0.67	64.00			0.051	5.18	375.00			0.008	15	1.34	4.66	9.84	19.03	9.84	1.35	1.75	2.13	2.71	3.21	3.76	5.20	0.70	0.94	1.18	1.60	2.03	2.52	3.83

TABLE 6-3. RECOMMENDED IMPERVIOUSNESS BY SURFACE TYPES

SURFACE TYPES		IMPERVIOUSNESS
Roadways and Paved Streets		95%
Concrete Driveways and Walks		95%
Roofs		95%
Gravel	No Traffic (Pedestrian Use)	40%
	Low-traffic Areas (Maintenance Paths and Substations)	60%
	High-traffic Areas (Roadways and Parking)	80%
Disturbed Soil (Including Lawns, Managed/Active Turf, Landscaped Areas with Water-Wise Vegetation, and Uncompacted Gravel/Mulch Planting Beds)		20%
Undisturbed or Decompacted Soil (Native Grasses and Open Space Areas)		5%
Artificial Turfs[1]	Landscape Applications (without Subgrade Drainage Layer)	25% – 45%
	Sport Fields (with Underdrain Pipe System)	60% – 80%
Water Surfaces (Lakes/Reservoirs/Irrigation Ponds)		100%
Solar Fields[2]	Grass Cover (Varies with Panel Orientation Relative to Ground Contours)	10% – 45%
	Gravel Cover (Varies with Panel Orientation Relative to Ground Contours)	50% – 75%
Historic Flow Analysis, Greenbelts, Agricultural		5%
Newly Graded Areas		65%
Stormwater Control Measures[3]	Retention Ponds & Constructed Wetland Ponds	100%
	Rooftop Systems – Blue Roofs	95%
	Rooftop Systems – Green Roofs (extensive)	65%
	Rooftop Systems – Green Roofs (intensive)	50%
	Permeable Pavement – CGP/PGP/RGP	55%
	Permeable Pavement – PICP	45%
	Extended Detention Basins	25%
	Receiving Pervious Areas (incl. Grass Buffers & Grass Swales)	20%
	Bioretention & Sand Filters	10%

[1] Consult with the manufacturer to get a recommended value.

[2] Assumes 1:1 ratio of panels to aisles. See MHFD's technical memorandum regarding *Determination of Solar Panel Field Runoff Coefficients and Imperviousness Values* for additional information on procedures for determining percent imperviousness based on panel width, panel spacing, and panel orientation relative to ground contours and how to reflect other impervious areas such as roads and pads that may be part of a solar field and layouts with wider inter-panel spacing.

[3] See MHFD's technical memorandum regarding *Evaluation of Percent Imperviousness for Stormwater Control Measures* for background information.

Where:

I = Weighted imperviousness of catchment **expressed as a decimal**

C_A = Runoff coefficient for NRCS HSG A soils

C_B = Runoff coefficient for NRCS HSG B soils

$C_{C/D}$ = Runoff coefficient for NRCS HSG C and D soils

The values for various catchment imperviousness and storm return periods are tabulated in Tables 6-6 through 6-8 and presented graphically in Figures 6-1 through 6-3. These coefficients were developed for the Denver region to work in conjunction with the t_c criteria in Section 4.4. Use of these coefficients and this procedure outside of the semi-arid climate found in the Denver region may not be valid. The MHFD-Rational Excel workbook performs calculations to determine the runoff coefficient based on the HSG, the design storm return period, and imperviousness and is available at www.mhfd.org.

See Examples 13.1 and 13.2 for application of the Rational Method.

TABLE 6-6. RUNOFF COEFFICIENTS, *C*, NRCS HSG A

TOTAL OR EFFECTIVE % IMPERVIOUS	NRCS HSG A						
	WQE & 2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	500-Year
2%	0.01	0.01	0.01	0.01	0.04	0.13	0.27
5%	0.02	0.02	0.02	0.03	0.07	0.15	0.29
10%	0.04	0.05	0.05	0.07	0.11	0.19	0.32
15%	0.07	0.08	0.08	0.10	0.15	0.23	0.35
20%	0.10	0.11	0.12	0.14	0.20	0.26	0.38
25%	0.14	0.15	0.16	0.19	0.24	0.30	0.42
30%	0.18	0.19	0.20	0.23	0.28	0.34	0.45
35%	0.21	0.23	0.24	0.27	0.32	0.38	0.48
40%	0.25	0.27	0.28	0.32	0.37	0.42	0.51
45%	0.30	0.31	0.33	0.36	0.41	0.46	0.54
50%	0.34	0.36	0.37	0.41	0.45	0.50	0.58
55%	0.39	0.40	0.42	0.45	0.49	0.53	0.61
60%	0.43	0.45	0.47	0.50	0.54	0.57	0.64
65%	0.48	0.50	0.51	0.54	0.58	0.61	0.67
70%	0.53	0.55	0.56	0.59	0.62	0.65	0.71
75%	0.58	0.60	0.61	0.64	0.67	0.69	0.74
80%	0.63	0.65	0.66	0.69	0.71	0.73	0.77
85%	0.68	0.70	0.71	0.74	0.75	0.76	0.80
90%	0.73	0.75	0.77	0.79	0.79	0.80	0.83
95%	0.79	0.81	0.82	0.83	0.84	0.84	0.87
100%	0.84	0.86	0.87	0.88	0.88	0.88	0.90

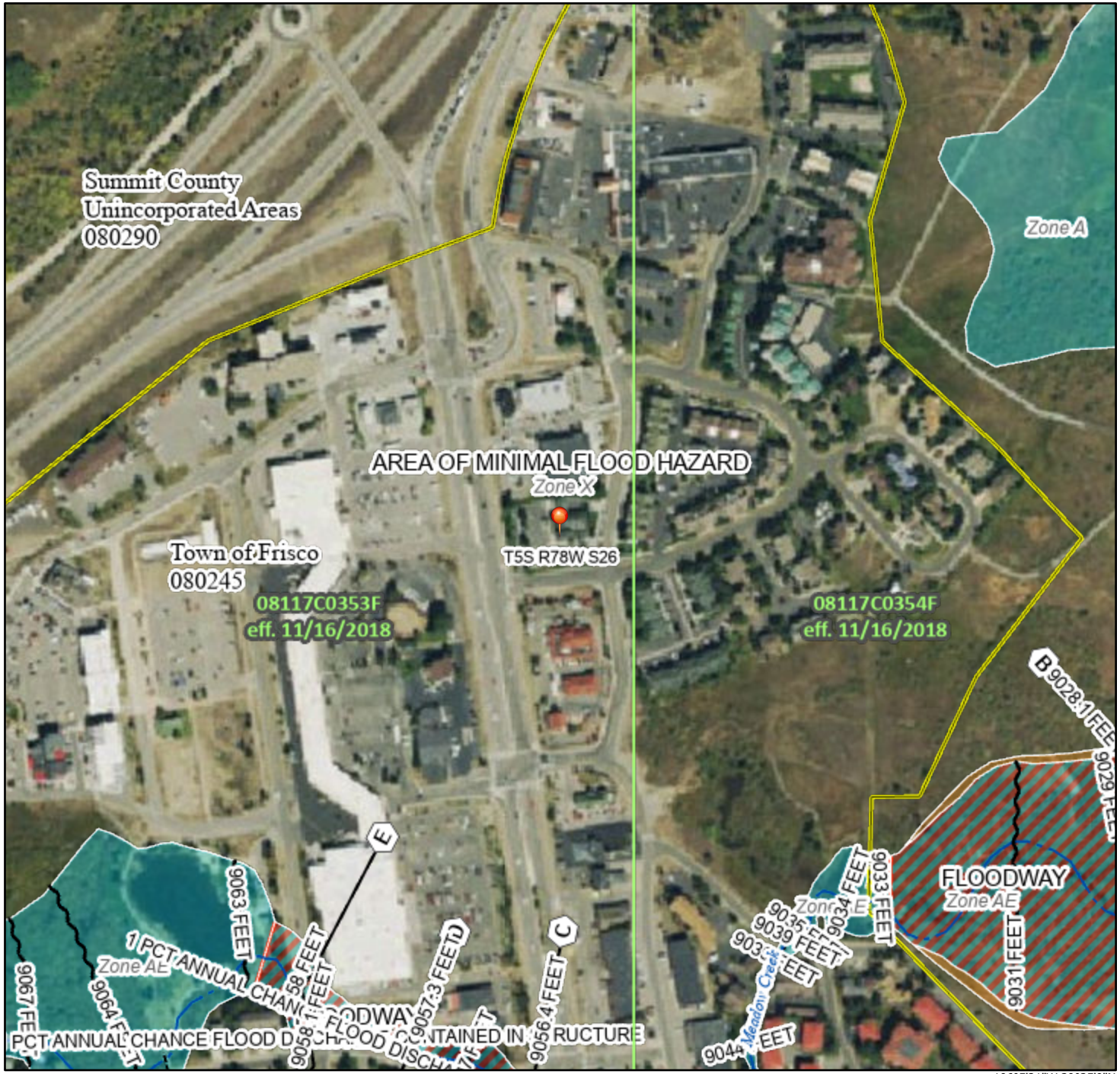
B. MAP POCKED

Appendix B – MAP POCKET

National Flood Hazard Layer FIRMette

FEMA

106°5'59"W 39°35'37"N



106°5'21"W 39°35'9"N

Feet

0 250 500 1,000 1,500 2,000

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/29/2025 at 10:36 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.


106° 5' 43" W
106° 5' 37" W
39° 35' 24" N
39° 35' 21" N
405950
405960
405970
405980
405990
406000
406010
406020
406030
406040
406050
406060
406070
406080
4382840
4382830
4382820
4382810
4382800
4382790
4382780
4382770
4382760
4382750
6
10
N Ten Mile Dr
Connecting
Soil Map may not be valid at this scale.
Map Scale: 1:639 if printed on A landscape (11" x 8.5") sheet.
N
Meters
0 5 10 20 30
Feet
0 30 60 120 180
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Summit County Area, Colorado
Survey Area Data: Version 16, Aug 29, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 5, 2021—Sep 7, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
10	Histic Cryaquolls, nearly level	A/D	1.2	100.0%
Totals for Area of Interest			**1.2**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

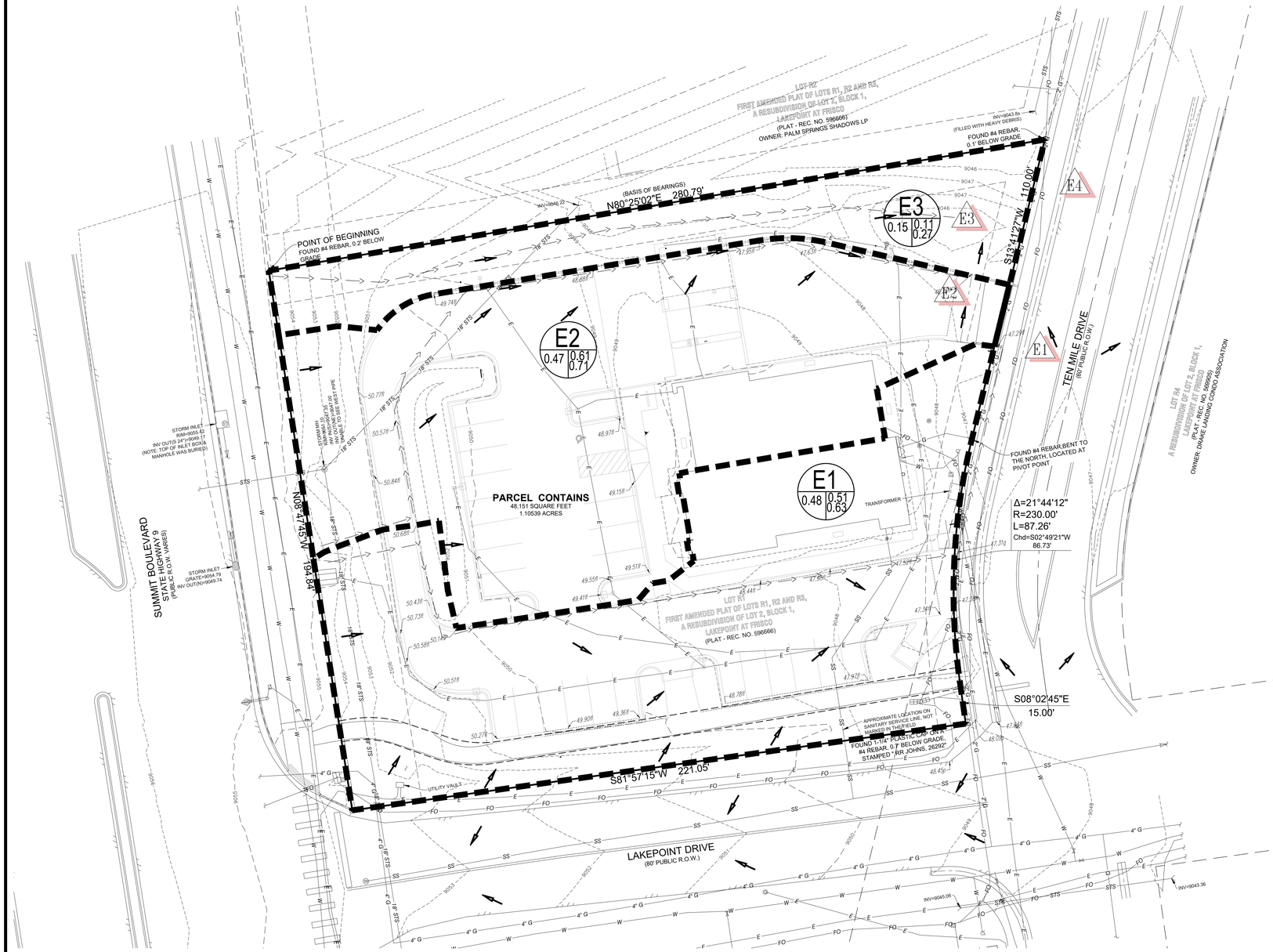
Component Percent Cutoff: None Specified

EXISTING SUMMARY RUNOFF TABLE

DESIGN PT	CONTRIBUTING BASINS / AREA (acres)	5-YEAR RUNOFF (cfs)	25-YEAR RUNOFF (cfs)	100-YEAR PEAK RUNOFF (cfs)
E1	E1/0.467	0.49	0.84	1.30
E2	E2/0.485	0.62	1.03	1.54
E3	E3C/0.153	0.03	0.06	0.15
E4	E1-E3/1.105	0.94	1.60	2.52

LEGEND

TC CALCULATIONS
BASIN LIMITS
FLOW DIRECTION
DESIGN POINT
BASIN DESIGNATION
5 YR COMPOSITE 'C'
100YR COMPOSITE 'C'
BASIN AREA



20 0 20 20
PLAN SCALE: 1" = 20'

Know what's **below.** **Call** before you dig.

NO.	DATE	REVISION DESCRIPTION

CIVIL ENGINEERING CONSULTANT:

Strategic Land Solutions, Inc.
Civil Engineering • Land Planning • Entitlements
2595 PONDEROSA ROAD
FRANKTOWN, CO 80116
720.384.7661 Phone
rpalmer@strategicls.net
Robert J. Palmer, PE
President

PREPARED UNDER THE DIRECT SUPERVISION OF:

SEAL: COLORADO REGISTERED ROBERT J. PALMER 36320 PROFESSIONAL ENGINEER

BY Robert J. Palmer, PE
Licensed Professional Engineer (CO PE #36320), AS PRESIDENT FOR STRATEGIC LAND SOLUTIONS, INC.

McDonald's

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF McDONALD'S CORPORATION AND SHALL NOT BE REPRODUCED WITHOUT THEIR WRITTEN PERMISSION.

OFFICE: ROCKY MOUNTAIN REGION
ADDRESS:

STREET ADDRESS: 960 N. TEN MILE DRIVE
CITY: FRISCO
STATE: COLORADO
COUNTY: SUMMIT
STATE STORE #: 51062
NATIONAL #: 44322
REGIONAL DWG. NO: -

SCALE:	AS NOTED	McD RE:	BAKER
DATE:	09/05/2025	McD P/CM:	YAGUSESKY
DESIGNED BY:	RJP		
DRAWN BY:	RJP	FILE NAME:	CURRENT.DWG
CHECKED BY:	RJP	SLS JN:	24-0001-216

DRAWING TITLE: EXISTING DRAINAGE

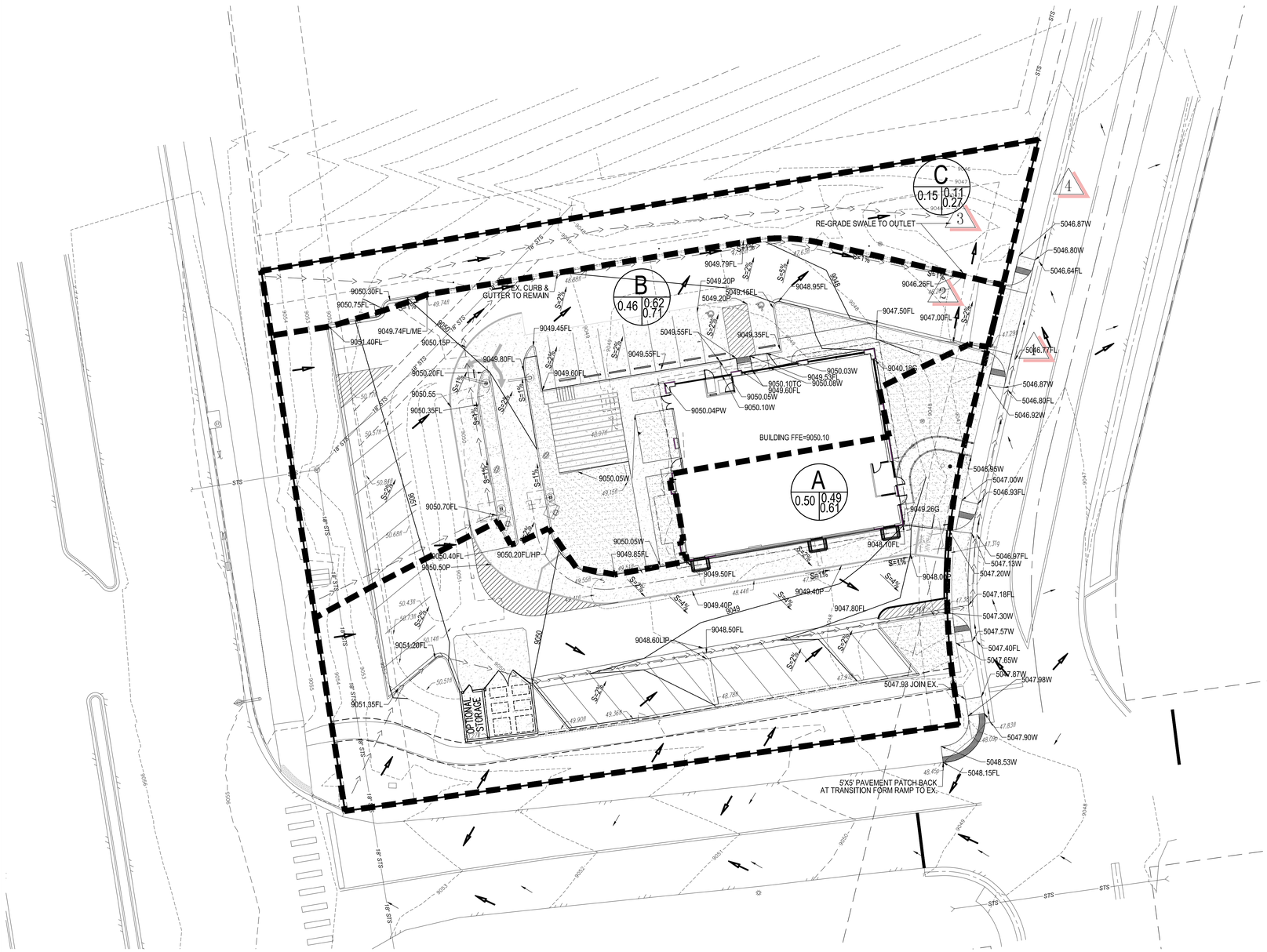
SHEET NO: DR-1

PROPOSED SUMMARY RUNOFF TABLE

DESIGN PT	CONTRIBUTING BASINS / AREA (acres)	5-YEAR RUNOFF (cfs)	25-YEAR RUNOFF (cfs)	100-YEAR PEAK RUNOFF (cfs)
1	A/0.487	0.50	0.85	1.33
2	B/0.465	0.62	1.02	1.53
3	C/0.153	0.02	0.06	0.14
4	A-C/1.105	0.94	1.60	2.52

LEGEND

- TC CALCULATIONS
- BASIN LIMITS
- E1 — DESIGN POINT
- A — BASIN DESIGNATION
- Ac — BASIN AREA
- 5 YR COMPOSITE 'C'
- 100YR COMPOSITE 'C'



20 0 20 20

PLAN SCALE: 1" = 20'

Know what's **below.** **Call** before you dig.

NO.	DATE	REVISION DESCRIPTION

CIVIL ENGINEERING CONSULTANT:

Strategic Land Solutions, Inc.
Civil Engineering • Land Planning • Entitlements
2595 PONDEROSA ROAD
FRANKTOWN, CO 80116
720.384.7661 Phone
rpalmer@strategicls.net
Robert J. Palmer, PE
President

PREPARED UNDER THE DIRECT SUPERVISION OF:

SEAL: COLORADO REGISTERED ROBERT J. PALMER PE 36320 PROFESSIONAL ENGINEER

BY Robert J. Palmer, PE
Licensed Professional Engineer (CO PE #36320), AS PRESIDENT FOR STRATEGIC LAND SOLUTIONS, INC.

McDonald's

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OFFICE: ROCKY MOUNTAIN REGION
ADDRESS:

STREET ADDRESS: 960 N. TEN MILE DRIVE
CITY: FRISCO
STATE: COLORADO
COUNTY: SUMMIT
STATE STORE #: 51062
NATIONAL #: 44322
REGIONAL DWG. NO: -

SCALE:	AS NOTED	McD RE:	BAKER
DATE:	09/05/2025	McD PJCM:	YAGUSESKY
DESIGNED BY:	RJP		
DRAWN BY:	RJP	FILE NAME:	CURRENT.DWG
CHECKED BY:	RJP	SLS JN:	24-0001-216

DRAWING TITLE:
PROPOSED DRAINAGE PLAN

SHEET NO:
DR-2

Building a Better World for All of Us®

MEMORANDUM

TO: Katie Kent, Community Development Director; Emma Heth, Planner II

FROM: Chris McGinnis, PE

DATE: September 22, 2025

RE: 960 N Ten Mile Drive (McDonald's) Engineering Review

The 1st submittal for 960 N Ten Mile Drive (McDonalds) was reviewed for general conformance with Town Code, standards, and general engineering principals on 8/28/25 and plan comments and a memo were sent to the applicant. Comments were addressed and updated submittals dated 9/05/25 were uploaded to CommunityCore on 9/11/25. The revised submittals were reviewed and updated comments are included below.

We have reviewed the submittals and approved for Major Site Plan. The comments below shall be addressed prior to building permit issuance.

Engineering review comments for 2nd submittal of a renovation of 960 N Ten Mile Drive to remodel existing building to a McDonald's:

1. The revised TIS added signage and striping recommendations for the double driveway/drive-through exit, if issues were noted after completion. Since the Town would have difficulty requiring changes after project completion, recommendations should be incorporated into the plan set.
2. A draft CDOT access permit was submitted. On review of the permit, it was written to describe the McDonald's driveway access. However, the permit application is for the intersection of SH 9 and Lakepoint Drive due to the greater than 20% increase at this access. Therefore, the permit application needs to be updated on several of the lines to describe the location and traffic volumes at the Lakepoint/SH 9 intersection and not the driveway intersection.
3. The revised plans show sight distance triangles. One proposed tree is in conflict with the sight distance and landscaping will need to be revised to avoid conflicts with the sight line.
4. Proposed easements are shown for the existing sidewalk and storm sewer line. The proposed 7.5' pedestrian easement shall be increased to 10' to accommodate maintenance and snow storage. Easements shall be sent to Town for review and recorded prior to building permits.
5. During building permit submittals, we will review for all previous comments sent on 8/28/25, as well as new comments due to any changes or new information which is presented.

Review and approval of these plans does not imply responsibility of the reviewing entity for the accuracy, completeness, or correctness of the design, nor does it relieve the design professional of responsibility of the plans.

The Town reserves the right to add or modify comments based on new or revised information provided by the Applicant(s).

Chris McGinnis, PE
SEH, Inc.

From: Christopher McGinnis
To: Heth, Emma
Subject: Re: Frisco McDonald"s
Date: Friday, October 3, 2025 7:48:23 AM
Attachments: image001.png
image002.png

This Message Is From an External Sender
This message came from outside your organization.
Please review the email and report as suspicious if you have any doubts of the integrity of the message.

Report Suspicious

Hi Emma,

The ROW improvements can be tied to the building permit so we wouldn't need a separate agreement unless they try to CO before they are complete. I don't think I've discussed this project with Josh yet, but I can coordinate with him.

Thanks,

Chris McGinnis, PE (CO)
Sr. Engineer & Client Manager
Short Elliott Hendrickson Inc. (SEH®)
970.216.9659 mobile | 720.540.6800 main

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From: Heth, Emma <emmah@townoffrisco.com>
Sent: Thursday, October 2, 2025 4:31 PM
To: Christopher McGinnis <cmcginnis@sehinc.com>
Subject: RE: Frisco McDonald's

Sounds good, thank you Chris! Just a couple of other questions for the improvements in the ROW:

- Do you need any agreement or anything for those? Or do you just hold up your final inspection until the sidewalk and intersection improvements are finished?
- Should I let Josh know about the improvements in the ROW or do you coordinate with him on those?

Thanks!
Emma

Emma Heth (she/her) **| Planner II | Community Development**
TOWN OF FRISCO
COLORADO

Email: EmmaH@TownofFrisco.com
Office: 970-668-4581

From: Christopher McGinnis <cmcginnis@sehinc.com>
Sent: Thursday, October 2, 2025 10:46 AM
To: Heth, Emma <emmah@townoffrisco.com>
Subject: Re: Frisco McDonald's

This Message Is From an External Sender
This message came from outside your organization.
Please review the email and report as suspicious if you have any doubts of the integrity of the message.

Report Suspicious

Hi Emma,

See my comments below.

Thanks,

Chris McGinnis, PE (CO)
Sr. Engineer & Client Manager
Short Elliott Hendrickson Inc. (SEH®)
970.216.9659 mobile | 720.540.6800 main

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From: Heth, Emma <emmah@townoffrisco.com>
Sent: Wednesday, October 1, 2025 4:34 PM
To: Christopher McGinnis <cmcginnis@sehinc.com>
Subject: RE: Frisco McDonald's

Hi Chris,

I'm working on the staff report for McDonald's. Would you be able to confirm a few things about the engineering review so I can be sure I'm getting it right in the report?

- Do we still need an easement for the storm sewer going across the parking lot? I saw that in your 1st submittal comments and wasn't sure how it got addressed.
  An easement is needed - it is now shown on the plans but still needs to be dedicated and recorded. I am okay with conditioning the easement recording prior to building permit issuance.
- For the improvements to sidewalks, curbs, and the 4-way stop, is the applicant

proposing to construct the improvements, with maintenance after that provided by the Town?

Correct, the applicant would construct and Town would maintain.

- Was the 4-way stop at Lakepoint/Ten Mile a recommendation from you/PW knowledge of the town's needs, the traffic study, or another engineering standard?
  I think the recommendation was a combination of public comment and the applicant's engineer's recommendations. There is not a code or engineering standard requiring a four way stop and the intersection is functioning adequately. The argument that I see with changing to the four way stop is that 10 Mile Drive is the major road and not Lakepoint, but the stop control is on 10 Mile Drive, which can result in vehicles incorrectly thinking they have the right of way. A four-way stop can be beneficial for this, but is not required, so the Town could remove the stop signs in the future if they do not observe improvements from this change.

And, are you able to attend the Planning Commission for this project on October 16? I think joining online would be fine, but it would be good to have you there to speak to the traffic pieces especially.

Thanks,
Emma

Emma Heth (she/her) | **Planner II** | **Community Development**

Email: EmmaH@TownofFrisco.com
Office: 970-668-4581

From: Heth, Emma
Sent: Monday, September 22, 2025 1:59 PM
To: 'Christopher McGinnis' <cmcginnis@sehinc.com>
Subject: RE: Frisco McDonald's

That's great, thank you Chris! I see your memo and comments about the CDOT access permit.

Thanks,
Emma

Emma Heth (she/her) | **Planner II** | **Community Development**

Email: EmmaH@TownofFrisco.com
Office: 970-668-4581

From: Christopher McGinnis <cmcginnis@sehinc.com>
Sent: Monday, September 22, 2025 12:17 PM
To: Heth, Emma <emmah@townoffrisco.com>
Subject: Re: Frisco McDonald's

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Also, I added a comment in my memo, but the access permit does require a few modifications prior to being submitted to CDOT.

Thanks,

Chris McGinnis, PE (CO)
Sr. Engineer & Client Manager
Short Elliott Hendrickson Inc. (SEH®)
970.216.9659 mobile | 720.540.6800 main

Building a Better World for All of Us®
100% Employee Owned

From: Christopher McGinnis <cmcginnis@sehinc.com>
Sent: Monday, September 22, 2025 12:15 PM
To: Heth, Emma <emmah@townoffrisco.com>
Subject: Re: Frisco McDonald's

I just signed off and uploaded a memo. Let me know if you need anything else from me.

Thanks,

Chris McGinnis, PE (CO)
Sr. Engineer & Client Manager
Short Elliott Hendrickson Inc. (SEH®)
970.216.9659 mobile | 720.540.6800 main

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From: Heth, Emma <emmah@townoffrisco.com>
Sent: Monday, September 22, 2025 9:29 AM
To: Christopher McGinnis <cmcginnis@sehinc.com>
Subject: RE: Frisco McDonald's

Sounds good, thanks Chris! Yes, I was able to get Ryan's comments and sign-off, so we are good there.
Thanks!
Emma

1st Submittal Review

Thanks,

Chris McGinnis, PE (CO)

Sr. Engineer & Client Manager

Short Elliott Hendrickson Inc. (SEH®)

970.216.9659 mobile | 720.540.6800 main

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From: Christopher McGinnis <cmcginnis@sehinc.com>
Sent: Wednesday, August 27, 2025 9:46 AM
To: Heth, Emma <emmah@townoffrisco.com>
Cc: Kent, Katie <katiek@townoffrisco.com>
Subject: Re: McDonald's Review - 960 N Ten Mile Dr.

Hi Emma,

Regarding the access permit, I would recommend requiring McDonald's to use a professional engineer (most likely to be their traffic engineer) to apply for the access permit on behalf of the Town. The only counterargument to that is that you are allowing a developer to represent the Town's interests, but this is the common approach I have seen as it takes the workload off the Town and then by requiring them to use a PE, along with reviews by us, helps protect the Town's interest. I would recommend requiring the access permit prior to issuance of a building permit. In theory, CDOT can either deny an access permit and shut down a development, or require significant intersection improvements of the developer. I wouldn't expect either from this, but for that reason, I have required access permits to be obtained prior to building permit issuance and beginning any work.

The Community Core login can be my email and then I can share it internally.

Thanks,

Chris McGinnis, PE (CO)

Sr. Engineer & Client Manager

Short Elliott Hendrickson Inc. (SEH®)

970.216.9659 mobile | 720.540.6800 main

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From: McGinnis, Chris
To: Heth, Emma
Cc: Kent, Katie
Subject: RE: Planning items
Date: Thursday, June 5, 2025 6:53:23 PM
Attachments: image003.png
image004.png
image005.png

I just looked more into this. For some reason, part of the traffic study mentions August and then another mentions October – I checked the data and it was collected in October. However, the methodology this study used of analyzing January (peak time) and October (non-peak time) is the correct method and is more likely to cause a development to be required to complete mitigation improvements. The reason is that traffic mitigation is not required by the LOS, but instead the **drop** in LOS. For example, if an adjacent road is already at a LOS F at peak time, the development is not required to mitigate per our code because the LOS is already failing. However, during a non-peak time, the LOS may be a LOS C and the development causes it to drop to a LOS D, which would necessitate mitigation. So analyzing a peak time and non-peak time gives a better analysis of multiple conditions and makes it more likely that a developer will need to mitigate. Overall, I will review this traffic study more closely and analyze details such as the stop sign configuration, but I believe the traffic study period is acceptable.

Thanks,

Chris McGinnis, PE | Public Works Director/Town Engineer

Mailing PO Box 4100, Frisco, CO 80443
Physical 102 School Road, Frisco, CO 80443
Email Chrism@TownofFrisco.com
Office 970-668-4579
Cell 970-216-9659
FriscoGov.com
TownofFrisco.com

From: Heth, Emma <emmah@townoffrisco.com>
Sent: Tuesday, May 27, 2025 9:39 AM
To: McGinnis, Chris <ChrisM@townoffrisco.com>
Cc: Kent, Katie <katiek@townoffrisco.com>
Subject: RE: Planning items

Hi Chris,

That is great, thank you!! I saw your comments for 20 E Main and the grading permit, thank you

From: Killian - CDOT, Brian
To: Heth, Emma
Cc: Kandis Aggen - CDOT; Karthik Vishwamitra - CDOT
Subject: Re: FOR REVIEW: McDonald"s at 960 N Ten Mile Dr MAJ-25-0003
Date: Thursday, July 24, 2025 1:59:03 PM
Attachments: image001.png

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Emma,

It looks like this development would increase traffic by nearly 100% (nearly doubling existing traffic) at the Lakepoint Dr intersection, so that will require a CDOT access permit. Neither of the signalized intersections (Dillon Dam Rd and Ten Mile Dr) are affected more than 20%, so no permits will be required there.

As for who the permittee will be, the developer or the Town can be the permittee. Since it's a Town street, the Town can be the permittee. Or, if the Town wants to delegate permitting authority to Mcdonalds, via a delegation letter, the developer can be the permittee.

Please let me know if you have any questions.

Thanks,

Brian Killian
Region 3 Access Program Manager
Traffic & Safety

P 970-683-6284 | C 970-210-1101 | F 970-683-6290
222 S. 6th St, Room 100 Grand Junction, CO 81501
brian.killian@state.co.us | www.codot.gov | www.cotrip.org

On Tue, Jul 22, 2025 at 11:20 AM Heth, Emma <emmah@townoffrisco.com> wrote:

> Hi Brian,
>
> Thanks for your quick response! This is the first time I've worked on a project that might require a CDOT access permit so I just have a couple of clarifying questions. The Town is also working on

SUMMIT FIRE & EMS

PO Box 4910
Frisco, CO 80443
(970) 262-5100
www.summitfire.org

Tuesday, August 12, 2025

RE: Major Site Plan # MAJ-25-0003 McDonalds

To

Thank you for the opportunity to review the site plan for McDonald's in Frisco. This review was conducted using the 2018 International Fire Code and policies and amendments of Summit Fire and EMS. Summit Fire has the following comments:

Hydrant access is acceptable.

Landscaping will need to meet requirements of State adopted WUI code. See AHJ for further details

If not already provided for, the structure will need sprinklers, alarms, kitchen hoods, mitigation, and other permits pending final review.

No additional comments

IF there are any questions, please let me know

Regards,

Scott Benson MS IAAI-CFI CFO
Fire Marshal Division Chief of Community Risk
Summit Fire and EMS
sbenson@summitfire.org
(970)262-5100 Ext. 523

From: Thompson, Ryan
To: Heth, Emma
Subject: 960 N. Ten Mile Drive
Date: Wednesday, September 17, 2025 5:41:15 PM
Attachments: image001.png

Emma,

Based on the seating chart that you have relayed to me, the 57-seat arrangement, the current 3.81 EQR (Tap Fee) attached to the property is sufficient to cover the required amount of 2.65 based on the following calculation;

- Current EQR count is 3.81
- Restaurant tap fee schedule: Restaurants, bars and lounges:
  a) Business with a seating capacity of fewer than twenty-five (25): one and twenty-five hundredths (1.25).
  b) Second twenty-five (25) seating capacity, or part thereof: eight tenths (0.8).
  c) Each additional twenty-five (25) seating capacity, or part thereof: six- tenths (0.6)

Water service line modification

- The proposed upsizing of the water service connection needs to happen at the water main and the existing water service line does need to be properly abandoned at the water main.
- If the building is to be sprinkled, then a hydraulic analysis needs to determine the proper-sized water service line
- The current water meter in place is a 1-inch water meter. If the domestic plumbing is determined to be upsized to accommodate water demand, the meter size needs to match the pipe diameter.

Ryan Thompson | Water Superintendent | Frisco Public Works

TOWN OF FRISCO
COLORADO

Mailing: PO Box 4100 Frisco, CO 80443
Physical: 0102 School Rd Frisco, CO 80443
Office: 970-668-9156
Mobile: 970-418-5544
RyanT@TownofFrisco.com
FriscoWater.com
TownofFrisco.com

From: Chandler Morehardt
To: Heth, Emma
Subject: Re: FOR REVIEW: McDonald"s at 960 N Ten Mile Dr MAJ-25-0003
Date: Tuesday, July 8, 2025 2:42:34 PM
Attachments: image001.png
Outlook-newlogo.png

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Hey Emma, no concerns from a GIS perspective. Since the same building will be used, the same physical address can continue to be used (960 N Ten Mile DR).

Chandler Morehardt
Information Systems Dept.
Summit County Government
GIS Analyst
chandler.morehardt@summitcountyco.gov
970.668.4219
0037 Peak One Drive
PO Box 5660
Frisco, CO 80443

SUMMIT COUNTY
COLORADO

From: Heth, Emma <emmah@townoffrisco.com>
Sent: Monday, July 7, 2025 4:24 PM
To: Amy Lagace <amy.lagace@xcelenergy.com>; Peter Kunz-DRC <Peter.H.Kunz@xcelenergy.com>; Suzanne Kenney <Suzanne.Kenney@summitcountyco.gov>; Sally Bickel <Sally.Bickel@summitcountyco.gov>; Chandler Morehardt <Chandler.Morehardt@summitcountyco.gov>; Scott Benson <sbenson@summitfire.org>; Matt Smith <msmith.fsd@gmail.com>; McGinnis, Chris <ChrisM@townoffrisco.com>; Thompson, Ryan <RyanT@townoffrisco.com>; John Schumacher <john@cbcscode.com>; Dan Hendershott <Dan.Hendershott@summitcountyco.gov>; Killian - CDOT, Brian <brian.killian@state.co.us>; Kandis Aggen - CDOT <kandis.aggen@state.co.us>
Subject: FOR REVIEW: McDonald's at 960 N Ten Mile Dr MAJ-25-0003

Caution: This is an external email and may be malicious. Please take care when clicking links or opening attachments.

Hello all,

Frisco Planning received the final submittal for the Major Site Plan for a proposed McDonald's, remodeling the existing First Bank building at 960 N. Ten Mile Dr. The plans are available under the Planning Projects Under Review page on our website, or on CommunityCore. If you are assigned a CommunityCore review, please review by **Monday, July 21** (file # MAJ-25-0003).

Let me know if you have any questions or concerns.

Thanks!
Emma

Emma Heth (she/her) **| Planner II | Community Development**

Mailing: PO Box 4100, Frisco, CO 80443
Physical: 1 Main Street, Frisco, CO 80443
Email: EmmaH@TownofFrisco.com
Office: 970-668-4581
FriscoGov.com
TownofFrisco.com

From: wc b
To: Heth, Emma
Cc: Kevin Lovett; Tim Colton
Subject: Proposed Fast Food Restaurant
Date: Monday, June 9, 2025 11:13:12 AM

You don't often get email from willwestern@msn.com. Learn why this is important

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I attended the virtual Planning meeting in April regarding the proposed Mc Donald's restaurant on Summit Blvd. While agreeing with the attitudes of the other Drake Landing owners (who also attended the meeting) I have since reviewed some of the links provided by my HOA and have some issues directly under the purview of the Planning Commission, should consider:

1. Confused as to how the Exit 203 re-construction will mitigate any of the traffic concerns. The CDOT plans do not include any new left turn access off of south bound Summit Blvd, either directly into the proposed parking lot of the restaurant or onto Lake Point. Therefore, any new and additional traffic will still have to access the facility via Ten Mile Dr. either from the south (light at Wendy's) or the north at KFC.
2. Has the proponent agreed to a new traffic flow review that more accurately reflects the potential impact during more correlated time frames (perhaps the summer season during July or August) and the winter season in late December. The proponent's current analysis was an embarrassment to some of the home owners who maintain a more accurate assessment of traffic, living in the county year around. It can only be surmised that they knew the results would not be representative of likely outcomes going into their analysis.
3. On the traffic flow issues- an organization that is going to be enduring this type of investment cost, has to of performed its own traffic (both auto and pedestrian) expectations in order to evaluate a return on the investment. Have they shared those expectations with the Planning committee. With that information. the Committee would then model a traffic analysis (post construction) based upon the volume expectations of the proponent's facility.
4. Has the Committee contacted the Summit Stage for their input on what effect the proposed restaurant and traffic (both pedestrian and vehicle) increase would have on their scheduling and service.
5. The Committee should require the proponent to provide additional traffic crosswalks and associated painting at both Lake Point and Ten Mile crossings.
6. Understanding that the County wants the additional tax revenues associated with the

proponent's business-- has the County looked into other potential restaurants (higher average dollar per customer). Many of these outlets (sit down/takeout) can also use the existing commercial allowances but may not place the strain on the neighborhood the associated issues brought up in this note and at the meeting in April.

Thank you reviewing and addressing these questions.
Willis Bennett
Unit D4 Drake Landing

From: Michael Bernstein
To: Heth, Emma
Cc: tim@coltoncustom.com
Subject: Feedback on Proposed McDonald"s
Date: Monday, May 5, 2025 11:44:49 AM

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Hello Emma,

I hope this message finds you doing well. I wanted to pass this feedback to you and hope that you can forward to the rest of the Planning Commission. I'm also copying our HOA President Tim Colton.

Thank you for all you do, Mike

To the Frisco Planning Commission:

I understand that drive-in restaurants are a permitted use under Lakepoint PUD 3. However, I'm writing to formally express two key objections to the proposed McDonald's development at this site: **(1) the proposed access configuration and (2) the request to allow multiple menu boards.**

---

1. Access and Nuisance Impact

While the site was previously occupied by a bank—an establishment operating under normal business hours—the nature of a McDonald's drive-thru, particularly one with the discretion to operate 24 hours, presents a very different and more disruptive use of the property.

The current access design, a one-way counterclockwise route, would direct drive-thru traffic and vehicle headlights directly at the Drake Landing condominiums and small businesses on Ten Mile Drive. I personally visited the site at night and observed just how intrusive the light pollution will be. A 24-hour operation or any business with high traffic operating outside of business hours will exacerbate this, subjecting residents and small business owners to constant disturbance throughout the night.

It's worth noting that other fast-food establishments in Frisco—Taco Bell, Starbucks, and KFC—do not direct vehicle traffic toward residential buildings in this manner. The proposed McDonald's layout breaks this precedent and poses a clear nuisance.

Moreover, the traffic study presented by McDonald’s projected a 365% increase in traffic volume, based on data collected under conditions that may have downplayed the true impact. This should raise red flags. Directing that level of traffic, with headlights shining into people’s homes, effectively makes those homes uninhabitable at night.

Given this, I urge the Commission to require McDonald’s to revise the site plan and submit an alternative access design that minimizes the nuisance to the neighborhood.

---

2. Menu Boards and Code Exemptions

Current code permits one menu board per site. I see no valid reason why the Commission should consider granting an exemption to allow multiple menu boards—particularly not for the benefit of a Fortune 500 company seeking to optimize ROI at the direct expense of Frisco’s residents.

The Planning Commission has made it clear that the McDonald’s proposal falls within their right of use. However, that right should not be extended through preferential exemptions. Residents of Drake Landing and the broader Frisco community have a reasonable expectation that the Town will enforce its code—not amend it to suit corporate interests.

If the Commission is willing to consider amendments to benefit McDonald’s, it should also be willing to consider amendments that benefit residents, such as limiting the number of drive-thru restaurants within a one-mile radius. It would be inconsistent—and, frankly, inequitable—to alter zoning code in a way that only favors powerful companies while ignoring residents' concerns.

A Matter of Precedent and Principle

I’m reminded of the Commission’s bold and decisive action in placing a cap on short-term rentals in Frisco. Prior to that policy, homeowners had full right of use, yet that right was curtailed in the interest of protecting the town’s character and livability. Some residents felt that their property rights were limited—but the Town acted because it was the right thing to do.

I ask the Commission to apply the same principled judgment in this case. If we can restrict residents use of their private property for the greater good, we should certainly be able to place reasonable restrictions on a multinational corporation—especially when its proposed use threatens one of our neighborhoods.

We should not treat a Fortune 500 company better than we treat our own residents. I respectfully urge the Commission to:

- Require a reconfiguration of the proposed drive-thru access,

- Deny any request for code amendments that expand menu board allowances,
- And consider zoning limitations that prevent further overconcentration of drive-thru establishments near residential areas.

Thank you for your time, service, and consideration of this important issue.

Sincerely,

Michael Bernstein
Drake Landing A4

From: Todd
To: Heth, Emma
Subject: Re: Opposed to the McDonalds
Date: Friday, May 9, 2025 8:56:36 AM

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Thank you for the info!

Will the traffic study be redone?

Aas part of the final Master Plan review, an updated traffic study will need to be done. We raised several concerns about the initial traffic study. For example, the study used mid-week and Saturday evening traffic counts during October 2024 and late January 2025. As we all know, October is during “shoulder season” so the traffic volumes are not representative. The CDOT traffic data in the initial traffic study shows that some of the highest traffic volumes are during the summer and mid-winter periods. We also pointed out that Sunday and holiday weekends are a serious concern.

These streets were NOT designed for such a high traffic fast food location like this. The realignment (if it ever happens on I70 and Highway 9) will not fix problems on Ten mile drive, where there already are problems due the starbucks and natural grocers, MUCH higher traffic than that study predicted. I was at the city council meeting and NOBODY listened or cared about the residents.

What needs to be done to ensure a proper and correct traffic study is done?

I really hope you are focusing on the citizens of Frisco FIRST vs some slick corporate guy with the backing of McDonalds who are experts ad pushing their will.

This location will not benefit the citizens of Frisco and directly impact hundreds of people that live close by.

Thanks
Todd

> On May 9, 2025, at 8:50 AM, Heth, Emma <emmah@townoffrisco.com> wrote:
>
> Hello Todd,
> The next step for this project will be for the applicant to submit a full Major Site Plan application. Once Planning receives that application, the applicant will work with Community Development, Public Works, and other referral agencies to get the application to a point where it meets Town Code and Town requirements. This is when they will work with our Town

Engineer on any traffic concerns.
> Once the project has received sign-offs from all agencies, it will go back to Planning Commission for a final public hearing. At this point, the Planning Commission can take a vote on the project. There will be public noticing for that meeting in the same fashion as there was for the last one – all property owners within 300 feet of the property will receive a postcard, and posters will be posted on the property.
> There is not a clear timeline for this as it depends on when the applicant submits the application and how long it takes to work out any concerns with the referral agencies. However, you can keep an eye out for that public noticing to let you know when the updated plans are posted on our website and there will be another public hearing.
> Let me know if you have further questions.
> Best,
> Emma
> Emma Heth (she/her) | Planner II | Community Development<image001.png>Email: EmmaH@TownofFrisco.com
> Office: 970-668-4581
> From: Todd <tkcmkerch@gmail.com>
> Sent: Wednesday, May 7, 2025 6:51 AM
> To: Heth, Emma <emmah@townoffrisco.com>
> Subject: Re: Opposed to the McDonalds
> You don't often get email from tkcmkerch@gmail.com. Learn why this is important
> Hi Emma, What are the next steps for this project, approvals, etc? What are the timeframes? Thanks Todd On Apr 17, 2025, at 8:20 PM, Heth, Emma <emmah@townoffrisco.com> wrote: Hello Todd, Thank you for sharing your comments with us, and
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> ZjQcmQRYFpfptBannerEnd
> Hi Emma, What are the next steps for this project, approvals, etc?
> What are the timeframes?
> Thanks
> Todd
>
>
> On Apr 17, 2025, at 8:20 PM, Heth, Emma <emmah@townoffrisco.com> wrote:
> Hello Todd,
> Thank you for sharing your comments with us, and apologies that I did not see them until after the meeting. I will pass your comments along to the Planning Commission and the applicant for consideration.
> Best,
> Emma
> Emma Heth (she/her) | Planner II | Community Development
> <image001.png>
> Email: EmmaH@TownofFrisco.com
> Office: 970-668-4581
> From: Todd <tkcmkerch@gmail.com>

> Sent: Thursday, April 17, 2025 3:58 PM
> To: Heth, Emma <emmah@townoffrisco.com>
> Subject: Opposed to the McDonalds
> Importance: High
> You don't often get email from tkcmkerch@gmail.com. Learn why this is important
> Emma, I understand you are on the city council or can get our comments to the city council meeting. I am going to attempt to make the meeting tonight, but I not be able to make it, the notice was short. I live at 965 N 10 Mile Ave in Drake Landing,
> ZjQcmQRYFpfptBannerStart
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> Emma, I understand you are on the city council or can get our comments to the city council meeting. I am going to attempt to make the meeting tonight, but I not be able to make it, the notice was short.
> I live at 965 N 10 Mile Ave in Drake Landing, just steps from the proposed McDonald's at 960 N Drive. I have owned my property for over 13 years and currently work at Breckenridge Ski resort on the mountain as an employee. When I bought my property I could see Buffalo Mountain, now 90% is blocked by the huge Natural Grocers building that this council approved in the lot that was the "Christmas Tree lot"!
> I'm here, alongside my neighbors, to urge you to deny this proposal. We've seen what happens when developments are approved without fully considering the community's voice, and we fear this McDonald's will bring irreversible harm to our neighborhood.
> Please hear us out and put Frisco's residents first.
> Past Promises, Broken Trust
> Let me take you back to the Natural Grocers and Starbucks approvals. I don't know if any of you were on the council then, but I was there, pleading alongside others. We warned about noise and traffic, but it felt like no one truly listened. The council approved it that night, assuring us the impacts would be minimal with all sorts of what turned out to be incorrect facts. What happened? It's been worse than anyone predicted.
> Natural Grocers' loading dock is a nightmare. Trucks roll in at all hours, beeping as they back up, some idling right in front of our homes, waiting for other trucks. The noise disrupts our sleep and peace. Traffic? It's far beyond what was promised. That experience taught us that assurances don't always hold up, and we're still living with the consequences.
> Then there's the A&W, replaced by a pot shop. That change brought a surge in traffic and new problems to our doorstep. Just last week, I found two homeless people sleeping on the Lake Dillon path—they're there almost every day, even in winter. I've seen someone rummaging through our locked trash dumpster and motorhomes camping in our parking lot, next to our homes. These aren't isolated incidents; they're our new reality. A McDonald's will only amplify these issues, and we can't afford to repeat past mistakes.
> Why a McDonald's Here Is Wrong
> Let's talk specifics about why this McDonald's at 960 N Drive is a bad fit, especially when we already have a Wendy's and KFC nearby.
> Traffic Overload
> McDonald's typically operates from 6:00 AM to midnight, with many locations running 24

hours [Source: McDonald's Corporation Website, https://urldefense.com/v3/__https://corporate.mcdonalds.com/corpmcd/our-stories/article/ourfood.breakfast.html__;!!Darphol7AI4AHw!q6iA3m89mWIA7fdx61ORb36rpw8yKBrSCh3PM5u8vlW6tAamQL3il8GW4CWX8adXiPAlDQj8oOxCR1Yflu7t$]. A 2019 study by the Institute of Transportation Engineers found that a McDonald's with a drive-thru generates an average of 1,500 vehicle trips per day in suburban areas, compared to 1,200 for Wendy's and 1,000 for KFC [Source: ITE Trip Generation Manual, 10th Edition, https://urldefense.com/v3/__https://www.ite.org/technical-resources/topics/trip-generation/__;!!Darphol7AI4AHw!q6iA3m89mWIA7fdx61ORb36rpw8yKBrSCh3PM5u8vlW6tAamQL3il8GW4CWX8adXiPAlDQj8oOxCR5LpCqOv$]. That's hundreds of extra cars flooding 10 Mile Ave, which is already strained. McDonald's also draws a broader customer base due to its global brand, driving more traffic than its competitors.

> Our street wasn't built for this. There's no traffic light at Lakepoint Drive and Highway 9, so northbound drivers can access the site, but southbound drivers will have to loop through Dillon Dam Road or Lakeview by Taco Bell. This will clog our neighborhood streets, creating bottlenecks and safety risks. We've seen how traffic projections underestimate reality—just look at Natural Grocers. With Wendy's and KFC already here, adding McDonald's will push our roads past their limit.

> The Smell

> Have you ever stood near a McDonald's? The odor of fryers and grease lingers. A 2017 study in the Journal of Environmental Health noted that fast-food restaurants, including McDonald's, produce volatile organic compounds and particulate matter from cooking, contributing to noticeable odors. [Source: Journal of Environmental Health, Vol. 80, No. 3, https://urldefense.com/v3/__https://www.neha.org/publications/journal-environmental-health__;!!Darphol7AI4AHw!q6iA3m89mWIA7fdx61ORb36rpw8yKBrSCh3PM5u8vlW6tAamQL3il8GW4CWX8adXiPAlDQj8oOxCR4KKsrYJ$]. McDonald's high-volume fryers and grills operate at a larger scale than Wendy's or KFC, amplifying emissions—its menu relies heavily on fried items, with 30% of sales from fries alone compared to 20% for KFC [Source: QSR Magazine, 2022, https://urldefense.com/v3/__https://www.qsrmagazine.com/reports/drive-thru-performance-study-2022__;!!Darphol7AI4AHw!q6iA3m89mWIA7fdx61ORb36rpw8yKBrSCh3PM5u8vlW6tAamQL3il8GW4CWX8adXiPAlDQj8oOxCR_2WfOnw$]. Here, the wind often blows from Copper Mountain toward Drake Landing, carrying that smell right to our homes. Imagine opening your window to that every day. Would you want to live with it? We don't.

> Rising Crime

> Fast-food restaurants, especially those open late, can attract crime, but McDonald's scale makes it worse. A 2021 analysis by the Urban Institute found that areas within a quarter-mile of 24-hour fast-food restaurants saw a 12% increase in property crimes like vandalism and theft compared to similar areas without them [Source: Urban Institute, "Crime and Fast Food," 2021, https://urldefense.com/v3/__https://www.urban.org/research/publication/crime-and-fast-food__;!!Darphol7AI4AHw!q6iA3m89mWIA7fdx61ORb36rpw8yKBrSCh3PM5u8vlW6tAamQL3il8GW4CWX8adXiPAlDQj8oOxCR33hSwHh$]. McDonald's, with its extended hours and high foot traffic (serving 26 million U.S. customers daily versus 10 million for Wendy's), becomes a magnet for loitering and petty crime [Source: Statista, 2023, https://urldefense.com/v3/__https://www.statista.com/statistics/1231356/mcdonalds-customer-traffic-united-states/__;!!Darphol7AI4AHw!q6iA3m89mWIA7fdx61ORb36rpw8yKBrSCh3PM5u8vlW6tA

amQL3il8GW4CWX8adXiPAlDQj8oOxCR1g1O0kf$]. The pot shop already brought trespassing to our doorstep. A McDonald's risks drawing even more strangers lingering in our neighborhood, and we're already stretched thin.
> Property Values at Risk
> The traffic by the Natural grocers and Starbucks that this council already approved has already hurt our property values due to the traffic on 10 mile ave.
> This McDonald's threatens our home values and quality of life even more. A 2018 study by the National Association of Realtors found that homes within 1,000 feet of fast-food restaurants sold for 8-15% less than comparable homes farther away, citing noise, traffic, and odor as key factors [Source: NAR, "Impact of Commercial Development on Residential Values," 2018, https://urldefense.com/v3/__https://www.nar.realtor/research-and-statistics/research-reports__;!!Darphol7AI4AHw!q6iA3m89mWIA7fdx61ORb36rpw8yKBrSCh3PM5u8vlW6tAamQL3il8GW4CWX8adXiPAlDQj8oOxCR670jShP$]. McDonald's, as the largest fast-food chain with a denser customer draw (70% of locations have drive-thrus versus 50% for KFC), has a bigger impact than smaller chains [Source: McDonald's SEC Filings, 2022, https://urldefense.com/v3/__https://www.sec.gov/Archives/edgar/data/63908/000006390823000016/mcd-20221231.htm__;!!Darphol7AI4AHw!q6iA3m89mWIA7fdx61ORb36rpw8yKBrSCh3PM5u8vlW6tAamQL3il8GW4CWX8adXiPAlDQj8oOxCR297i96Z$]. Drake Landing, Lakeview, and nearby residents could see hundreds of thousands wiped off our property values if you approve this project.
> Who will compensate us for that loss? The McDonald's franchisee? The city? We shouldn't have to pay the price for a business's gain.
> Better Alternatives Exist
> This McDonald's doesn't have to be at 960 N Drive. There are smarter options that avoid harming residents:
>
> • Deny this permit and building
>
> • Safeway or Walmart Parking Lots: Roughly 60% of McDonald's locations in the U.S. are built in shopping centers or shared lots, leveraging existing infrastructure [Source: McDonald's SEC Filings, 2022, https://urldefense.com/v3/__https://www.sec.gov/Archives/edgar/data/63908/000006390823000016/mcd-20221231.htm__;!!Darphol7AI4AHw!q6iA3m89mWIA7fdx61ORb36rpw8yKBrSCh3PM5u8vlW6tAamQL3il8GW4CWX8adXiPAlDQj8oOxCR297i96Z$]. Walmart's lot already hosts 20-40 campers and has room to spare. Safeway's lot, right off Highway 9, has space and established traffic lights. These sites are designed for high traffic and won't disrupt residential areas.
>
> • Land Near Summit Inn: There's a parcel for sale next to Summit Inn, visible from Highway 9. It's a blank slate—no need to demolish anything—and the roads there can handle the load. Why cram a McDonald's into our neighborhood when this option exists?
> Listen to Us, Act for Us
> Council, you have the power to prevent this. We're not anti-business; we're pro-community. The Natural Grocers approval ignored our warnings, and we're still paying for it. The pot shop showed how one change can ripple through a neighborhood. A McDonald's at

960 N Drive will bring worse traffic, stronger odors, more crime, and lower home values than the Wendy's, KFC and Natural Grocers we already have—hurting not just Drake Landing but everyone that lives or owns a property nearby.
> Deny this application at his location or choose alternatives that work for all of us. Protect our homes, our peace, and our town's charm.
> Deny this proposal and show Frisco that you hear us and care for the community first. Thank you.
> Please see the attached summary document:

Attachment D – Lakepoint at Frisco PUD

PRELIMINARY DEVELOPMENT PLAN

FOR

LAKEPOINT AT FRISCO

This written statement (this "Statement") together with the site plan (the "Site Plan"), which is dated February 26, 1981, revised March 31, 1981, and April 21, 1981, prepared by THK Associates, Inc., and hereby incorporated herein by reference, constitute the preliminary development plan (the "Preliminary Plan") for the planned unit development of a subdivision to be platted under the name of Lakepoint At Frisco (the "Planned Unit"), pursuant to the Code of the Town of Frisco (the "Code"), as adopted August 5, 1980, by Ordinance No. 80-20 and as subsequently amended.

1. OWNERSHIP AND LEGAL DESCRIPTION:

1.01 All of the land included in the Planned Unit is owned by Frisco-Lakepoint Co. (the "Owner"), a Colorado limited partnership.

1.02 The land included in the Planned Unit is legally described as is set forth in attached Exhibit A, which is hereby incorporated herein by reference.

2. REZONING AND SUBDIVISION PROCEEDINGS:

2.01 Pursuant to the Code, the Owner has commenced proceedings to change the current zone district boundaries of the Planned Unit so that the Planned Unit is rezoned to a Planned Unit Development District ("P.U.D.") as is defined in Article XII, Chapter 180, of the Code.

2.02 In conjunction with the proceedings referred to in paragraph 2.01 herein, the Owner has submitted the Site Plan as a sketch plan and other information, in accordance with Chapter 157 of the Code, which details a proposed resubdivision of the Planned Unit, including the vacation of existing, and the dedication of new, rights of way and easements for streets, drainage, and utilities.

3. FINAL PLAT:

3.01 The plat (the "Final Plat") of the Planned Unit which subdivides the Planned Unit in conformance with the Site Plan and which is dated _____, 1981, prepared by Backlund Land Surveys, and hereby incorporated herein by reference shall be the final plat of the Planned Unit, as described in Chapter 157 of the Code.

3.02 Previously, the Town of Frisco (the "Town"), the County of Summit, Colorado, and other governmental authorities have received benefits from the previous owners of the Planned Unit at the time of subdivision and annexation proceedings affecting land owned by such owners.

3.03 By the Planning and Zoning Commission of the Town of Frisco (the "Commission") and the Board of Trustees of the Town of Frisco (the "Board") approving this Statement, they acknowledge that reservations of sites for schools or other public uses are not required within the Planned Unit or by the Owner, that ten percent (10%) of the Planned Unit or other area is not required to be dedicated for public purposes by the Owner, and that a contribution, payment, or other remuneration is not required to be made by the Owner in lieu of such reservations and dedications. Provided, however, if such reservations and dedications or similar reservations and dedications are required by law or the Code, by the Commission and the Board approving this Statement and pursuant to Section 157-19 of the Code, the Commission and the Board authorize a variance from the provisions of Chapter 157 of the Code and such law insofar as any such reservation or dedication are required.

4. OBJECTIVE AND STATED INTENTIONS:

4.01 It is the intent of the Town to cause the development of the land included in the Planned Unit in the manner set forth in the Preliminary Plan.

4.02 With the unique location of the Planned Unit and the view corridors that exist thereon in mind, the Town, in conjunction with the Owner, has developed the Preliminary Plan to achieve the objectives hereinafter set forth. Such objectives are intended as guidelines for the future development of the Planned Unit and are intended to provide that such development is in harmony overall with the concepts in the Preliminary Plan and is in harmony with each portion constituting a part thereof. Such objectives are as follows:

(a) Throughout the Planned Unit, reasonable consideration shall be given to the placement and design of buildings to ensure that view corridors of the Continental Divide are maintained throughout the Planned Unit. To this end, special consideration has been given to the limitation and allocation of structure heights and densities throughout the Planned Unit.

(b) Stages 4, 5, 6, 7, and 8 (hereinafter defined) of the Planned Unit have minimum open space requirements which must be met as a prerequisite for site plan approval. These open space areas shall be designed to enhance the overall development of the Stage (hereinafter defined) as well as the Planned Unit. In no instance, shall such minimum open space areas be used for parking or lie within a building's footprint, including that created by any kind of an overhang. Additionally, such minimum open space cannot utilize areas which are designated as wetlands or waterways and shall not contain active recreational facilities.

(c) Due to the location of the Planned Unit adjacent to the Dillon Reservoir and in close proximity to major retail areas in the Town, the provision for bike paths and pedestrian easements throughout the Planned Unit is important. Therefore, the Town, through the site plan review process, may require the owner of any, other than Stage 1 (hereinafter defined), to provide bike paths and pedestrian access easements in reasonable quantities and locations to achieve this objective and integrate with the overall master plan for bike paths and pedestrian easements as set forth in the "Parks and Recreation Plan for the Town of Frisco". Such bike paths shall be in conformance with the standards for bike paths adopted by the Town.

(d) The owner of each Stage (hereinafter defined), other than Stage 1 (hereinafter defined), shall submit a landscape plan before final site plan approval is given by the Town. Landscaping should blend in with the architecture of the improvements to minimize visual impact. Landscaping to minimize the view of autos and pavement from surrounding properties will be reasonably required. All such landscaping plans shall reflect landscaping which will be reasonably substantial enough to achieve these objectives.

(e) Architectural products in the Planned Unit will be designed so as to blend with the existing environs and the surrounding land uses and to reflect the character of the mountain environment. The materials, textures, and colors of such products shall reflect earthen tones or blends thereof.

4.03 It is the intent, but not the obligation, of the Town to allow the Owner the maximum utilization of each Stage (hereinafter defined) for the construction of buildings thereon within the parameters set forth in paragraphs nine herein, provided that such buildings and the balance of the development of the Stage (hereinafter defined) are of a sufficiently high quality of design and construction to compensate for such utilization.

5. DEVELOPMENT SCHEDULE:

5.01 The Planned Unit is comprised of nine (9) different stages (singularly, a "Stage" and in combinations of two or more, the "Stages"). Each Stage is a separate geographic area on the Site Plan and can be described as follows:

Stage Number	Geographic Area Description
Stage 1	All streets shown on the Site Plan
Stage 2	Lot 1, Block 1
Stage 3	Lot 2, Block 1
Stage 4	Lot 1, Block 2
Stage 5	Lot 1, Block 3
Stage 6	Lot 2, Block 3
Stage 7	Lot 3, Block 3
Stage 8	Lot 4, Block 3

→ Stage 9 Lot 1, Block 4

5.02 Subject to paragraph 5.03 herein, as is determined by the Owner, each Stage may be developed alone or in combination with one or more other Stages and each Stage may be developed in any order without the commencement, completion, or occupancy of the development of one or more of the Stages being a prerequisite for the commencement, completion, or occupancy of the development of one or more of the other Stages.

5.03 Within eighteen (18) months following the recording of the Final Plat in the office of the Clerk and Recorder of Summit County, Colorado, or sooner at the discretion of the Owner, the Owner shall commence the construction of Stage 1, in accordance with the written agreement (the "Infrastructure Agreement") dated July 21, 1981, between the Town and the Owner pertaining to the proposed infrastructure for the Planned Unit. Prior to such commence of the construction of Stage 1, the Owner shall not commence the construction of any Stage other than Stage 1. The Infrastructure Agreement is hereby incorporated herein by reference.

5.04 Completion of the construction of the last Stage to be completed can be expected to be on June 1, 1991, approximately.

5.05 Except with respect to Stage 1, the final development plans for the Stage may be submitted to the Commission by the Owner in any sequence determined by the Owner and at regular or irregular intervals determined by the Owner.

6. STAGE 1 FINAL PLAN: This Statement together with the Site Plan shall constitute the final development plan with respect to Stage 1 (the "Stage 1 Final Plan").

7. STAGES 2-9 FINAL PLANS:

7.01 Prior to commencing any construction on any Stage, other than Stage 1, the Owner shall have (a) submitted to the Commission a final development plan for such Stage, (b) received the approval of such final development plan by the Commission, and (c) received the approval of such final development plan by the Board, all in accordance with the Code. Along with, or as part of, such a final development plan, the Owner shall submit to the Commission a site plan, a landscape plan, a utility plan, floor plans, architectural elevations, and such other materials as may reasonably be requested by the Commission.

7.02 There are no time constraints within which a final development plan must be filed with the Commission for any of the Stages 2 through 9. The final development plans for Stages 2 through 9 may be filed at any time and in any sequence without the filing of any such final development plan being a condition of, or prerequisite for, the filing of other such final development plan.

7.03 Unless the Owner requests that the final development plan for any Stage deviate from any provision of the Preliminary Plan and unless the Commission approves such deviation, the provisions of the Preliminary Plan shall be followed in the final development plan for each Stage.

7.04 The subdivision of a lot depicted on the Final Plat shall not create any additional Stages and all of the limitations and allowances provided for in the Preliminary Plan shall be applicable to such lot when taken as a whole without change as a result of such subdivision. Provided, however, at the request of the Owner and upon the approval of the Commission and the Board, a lot depicted on the Final Plat which is subdivided into two or more lots may be deemed to have created additional Stages under the Preliminary Plan, as and to the extent and subject to the limitations and allowances as are then approved by the Commission and the Board.

7.05 Neither this Statement nor any of the documents heretofore filed with the Commission when taken separately or together in any combination shall constitute the final development plan for any of the Stages 2 through 9.

8. EASEMENTS, DEDICATIONS, RESTRICTIVE COVENANTS, AND PROPERTY OWNER AGREEMENTS:

8.01 The Planned Unit may be presently subject to various building setbacks and easements for the installation and maintenance of public utilities dedicated on the plat of Discovery 9000, as recorded in the office of the Clerk and Recorder of Summit County, Colorado. Except with respect to that portion of such easements presently occupied by operating utility lines, the said easements and building setbacks are not required by the current use of the Planned Unit or any adjacent real property and may be inappropriate and detrimental to the development of the Planned Unit in accordance with the Preliminary Plan.

8.02 The Planned Unit may be subject to various streets, alleys, and roads and other public areas dedicated on the said plat of Discovery 9000. All such streets, alleys, and roads and other public areas are not required by the current Planned Unit, are adequately replaced by the streets to be dedicated by the Final Plat as described therein and shown on the Sketch Plan, and may be inappropriate and detrimental to the development of the Planned Unit in accordance with the Preliminary Plan.

8.03 The Owner may obtain the abolishion of said setbacks, easements (except with respect to the portions thereof presently occupied by operating utility lines), and dedicated streets, alleys, and roads and other public areas referred to in paragraphs 7.01 and 7.02 herein and any other easements affecting the Planned Unit which are not occupied by operating utility lines; and, the Town shall aid the Owner in doing so in any reasonable manner requested by the Owner, including, but not by way of limitation, conveying to the Owner any right, title, and interest which the Town may have therein.

8.04 The approval of this Statement by the Commission and the Board, shall constitute the approval by the Commission and the Board of the dedication of the streets made by the Owner on the Final Plat and the Town shall accept the same in accordance with the Infrastructure Agreement.

8.05 Except for the dedication of the streets made by the Owner on the Final Plat, the Owner is not requird to dedicate any streets or other areas for public use, to grant any easements, or to burden all or any part of the Planned Unit with restrictive covenants, property owner agreements, or other matters. All such dedications, grants, and burdenings shall be at the discretion of the Owner, except that the dedication of additional streets and the granting of utility easements shall be incorporated into the site plan review process of the Town.

8.06 Notwithstanding paragraph 7.05 herein, (a) as part of the final development plan for Stage 6, the Owner shall provide at least two open space corridors and accesses to Lake Dillon from the streets depicted on the Final Plat; provided, the Owner may limit the use thereof to pedestrians and (b) as part of the final development plans for Stages 2 through 9, the Owner shall provide for the preservation of open space corridors, pedestrian easements, and bike paths in accordance with the objectives of the Planned Unit and by means which are reasonably satisfactory to the Commission.

9. USES AND DEVELOPMENT CRITERIA:

9.01 Without further approval of the Commission or the Board, the following described uses shall be permitted on the Stage indicated, viz:

(a) Stage 1, Streets, sidewalks, and utilities.

(b) Stage 2 (Lot 1, Block 1). All retail, commercial, business, and accommodation (ie. hotel, motel, and boarding and rooming house) uses including, but not by way of limitation, the following: Stations dispensing petroleum products, automobile wash and polishing services (provided that the work area therefor is architecturally enclosed), convenience food outlets, barber shops, beauty shops, banks, savings and loan associations, real estate offices, investment offices, restaurants and/or lounges, general offices, professional offices, and stores for retail trade (provided that the gross floor area per establishment does not exceed 2,000 square feet).

(c) Stage 3 (Lot 2, Block 1). All retail, commercial, business, and accommodation (ie. hotel, motel, and boarding and rooming house) uses including, but not by way of limitation, the following: Automobile accessory parts sales, child day-care center, laundromat, transportation centers and terminals for commercial cars and buses and sales of tickets and other associated items, liquor stores, drug stores, department stores, antique clothing stores, hardware stores, sporting goods stores, camera stores, general offices, professional offices, banks, savings and loan associations, indoor entertainment facilities, recreation centers, commercial recreation centers, apparel shops, shoe stores, stores for retail trade, restaurants, bars, lounges, drive-in restaurants,

civic organizations, youth organizations, social organizations, and fraternal organizations.

(d) Stage 4 (Lot 1, Block 2). Residential.

(e) Stage 5 (Lot 1, Block 3). Residential.

(f) Stage 6 (Lot 2, Block 3). Residential.

(g) Stage 7 (Lot 3, Block 3). Residential.

(h) Stage 8 (Lot 4, Block 3). Residential.

(i) Stage 9 (Lot 1, Block 4). All retail, commercial, business, and accommodation (ie. hotel, motel, and boarding and rooming house) uses including, but not by way of limitation, the following: Restaurants and/or lounges, convenience food outlets, barber shops, beauty shops, banks, savings and loan associations, insurance offices, real estate offices, investment offices, lodges, motels, hotels, stores for retail trade, automobile accessory parts sales, liquor stores, general offices, professional offices, and appliance stores.

9.02 Notwithstanding anything to the contrary herein, the followng uses shall not be permitted uses on Stage 2, Stage 3, and Stage 9: Outside storage and automobile repairs.

9.03 With respect to Stage 2, Stage 3, and Stage 9 the following development criteria shall apply, viz:

(a) The maximum building coverage of each Stage is forty percent (40%).

(b) The maximum gross floor area of any building in Stage 2 is eight thousand (8,000) square feet, in Stage 3 is one hundred twenty-five thousand (125,000) square feet, and in Stage 9 is twenty thousand (20,000) square feet.

(c) There are no setback requirements for the Stages.

(d) The minimum open space for each Stage is twenty percent (20%).

(e) The maximum number of stories of any structure in the Stages is two (2).

(f) The maximum height of any structure in the Stages is thirty-five (35) feet.

(g) Upon the application of the Owner, the Commission and the Board shall consider, but shall be under no obligation to approve, an increase in the height of any structure above thirty-five (35) feet and an

increase in the number of stories of any structure above two (2) based upon the merits of the uses, site plan, and architectural compatibility of the specific proposal.

9.04 With respect to Stage 4 and Stage 5, the following development criteria shall apply, viz:

(a) The maximum number of dwelling units that can be constructed on Stage 4 is thirty-six (36) and on Stage 5 is sixty-six (66).

(b) The maximum building coverage of each Stage is twenty-three percent (23%).

(c) The maximum height of any structure in the Stages is eighty (80) feet.

(d) The minimum number of parking spaces required for each dwelling unit on the Stages is two (2).

(e) The minimum open space of each Stage is twenty-six percent (26%).

9.05 With respect to Stage 7 and Stage 8, the following development criteria shall apply, viz:

(a) The maximum number of dwelling units that can be constructed on Stage 7 is forty-eight (48) and on Stage 8 is forty-eight (48).

(b) The maximum building coverage of each Stage is twenty-seven percent (27%).

(c) The maximum height of any structure in the Stages is forty (40) feet.

(d) The maximum number of parking spaces required for each dwelling unit on each Stage is two (2).

(e) The minimum open space of each Stage is twenty-two percent (22%).

9.06 With respect to Stage 6, the following development criteria shall apply, viz:

(a) The maximum number of dwelling units that can be constructed on Stage 6 is one hundred ten (110).

(b) The maximum building coverage of Stage 6 is twenty-five percent (25%).

(c) The maximum number of stories of any structure in Stage 6 is two (2).

(d) The maximum height of any structure in Stage 6 is thirty-five (35) feet.

(e) The minimum number of parking spaces required for each dwelling unit on Stage 6 is two (2).

(f) The minimum open space of Stage 6. is thirty percent (30%), provided that any portion of Stage 6 which remains designated as "wetlands" after the Owner's full prosecution of its application for a "404 permit" shall be exeluded from the area of Stage 6 before computing the said minimum open space.

9.07 With respect to Stage 4, Stage 5, Stage 6, Stage 7, and Stage 8, the following additional development criteria shall apply:

(a) There shall be a twenty-five (25) foot setback from the front lot line and a fifteen (15) foot setback from the rear lot line and each side lot line of each Stage, within which no buildings shall be constructed.

(b) There shall be a minimum separation between each building within a Stage of fifteen feet (15).

9.08 The snow removal methods and techniques for Stage 1 shall be as determined by the Town and for the other Stages shall be as is determined during the site plan review progress of the Town with respect to each such Stage.

10. GENERAL:

10.01 This Statement supersedes the verbage on the Site Plan to its exclusion and shall be controlling under all circumstances.

10.02 This Statement hereby incorporates herein by reference all information and documents previously supplied the Commission by the Owner to the extent that the same are necessary to supplement this Statement and make it, together with the Site Plan, a preliminary development plan within the meaning of Chapter 180 of the Code. To the extent that such information and documents are insufficient for such purpose, by the Commission and the Board approving this Statement, the Commission and the Board waive, and grant a variance with respect to, the providing of such information and documents.

10.03 Unless specifically reserved or restricted in the instrument of conveyance, the conveyance of all, or any part of the Planned Unit, or any interest therein, by the Owner, or its successors or assigns, shall confer upon the grantee of such conveyance, to the exclusion of the Owner, the rights of the Owner and the duties of the Owner under the Preliminary Plan with respect to that being so conveyed. Provided, in no event shall any reservation

or restriction contained in any such instrument in any way alter the provisions of the Preliminary Plan.

This Statement is hereby approved and agreed to on July 21, 1981.

FRISCO-LAKEPOINT CO.,
a Colorado limited partnership

By: _____
Charles C. Murphy, the managing partner and a general partner

And, By: CANYON PROPERTIES DEVELOPMENT COMPANY, a Colorado general partnership, a general partner

By: _____
L. J. Lewis, a general partner

RECOMMENDED FOR APPROVAL July 21, 1981

PLANNING AND ZONING COMMISSION,
TOWN OF FRISCO, COLORADO

By: _____

Title: CHAIRMAN

APPROVED July 21, 1981

BOARD OF TRUSTEES,
TOWN OF FRISCO, COLORADO

By: Doug Jones

Title: Mayor, Town of Frisco

Attest: _____
Deputy Town Clerk

AMENDMENT TO THE PRELIMINARY DEVELOPMENT PLAN FOR LAKEPOINT AT FRISCO

This Amendment to the Preliminary Development Plan is dated 4/17/97, and entered into by Frisco-Lakepoint Co., as Colorado limited partnership ("Owner") and the Town of Frisco ("Frisco"), a Colorado home rule municipality.

WHEREAS, the Preliminary Plan for Lakepoint at Frisco was entered into on July 21, 1981 (the "Agreement"); and

WHEREAS, the Agreement recognized 9 separate "stages" all within the Lakepoint Planned Unit Development; and

WHEREAS, Owner is the owner of land described in the Agreement as Lot 1, Block 2, also referred to therein and herein as Stage 4; and

WHEREAS, Owner and Frisco desire to amend the Agreement with respect to the Stage 4 provisions only by changing the permitted uses, maximum number of units, maximum height, minimum required parking spaces and minimum open space area, all amendments conditioned upon commencement of construction of a motel on Stage 4 within 3 years and completion of said motel within 4 years from the Notice of Decision dated March 4, 1997; and provided that said motel is constructed in accordance with the Frisco Town Council's approved final development plan for a 51 room motel, which approval was noticed in the Notice of Decision dated March 4, 1997 (the "Notice of Decision"); and

NOW THEREFORE, for good and valuable consideration the receipt of which is hereby acknowledged the parties agree as follows:

1. LEGAL AND OWNERSHIP DESCRIPTION:

1.01 This amendment pertains only to and is legally described as Lot 1, Block 2, Lakepoint at Frisco, Town of Frisco, Colorado, and is also referred to as "Stage 4" in the "Preliminary Development Plan for Lakepoint at Frisco".

1.02 Lot 1, Block 2, Lakepoint at Frisco, is owned by Frisco-Lakepoint Co., a Colorado Limited Partnership.

2. USE AND DEVELOPMENT CRITERIA:

2.01 Paragraph 9.01(d) of the Agreement is hereby amended to eliminate residential uses and replace the same with commercial uses and shall read as follows:

(d) Stage 4 (Lot 1, Block 2). Commercial, specifically all commercial uses permitted in Stage 2 except that stations dispensing petroleum products, convenience food outlets and automobile wash and polishing services shall not be permitted.

2.02 Paragraph 9.04(a) of the Agreement is hereby amended to read as follows:

(a) The maximum number of motel units that can be constructed on Stage 4 is fifty-one (51) and the maximum number of dwelling units that can be constructed on Stage 5 is sixty-six (66).

2.03 Paragraph 9.04(c) of the Agreement is hereby amended to read as follows:

(c) The maximum height of any structure constructed on Stage 4 is forty-five (45) feet and the maximum height of any structure on Stage 5 is eighty (80) feet.

2.04 Paragraph 9.04(d) of the Agreement is hereby amended to read as follows:

(d) The minimum number of parking spaces for a motel on Stage 4 shall be

one (1) for each bedroom, one (1) per every 2,500 square feet of GFA to provide for non-resident employees and two (2) per each owner/employee resident units; the minimum number of parking spaces required for each dwelling unit constructed on Stage 5 is two (2).

2.05 Paragraph 9.04(e) of the Agreement is hereby amended to read as follows:

(e) The minimum open space for Stage 4 is thirty-three percent (33%), which excludes and must be provided in addition to the bike path; the minimum open space for Stage 5 is twenty-six percent (26%).

3. EFFECTIVE PERIOD

This Amendment shall be void and without effect if the approved motel as contemplated by the Notice of Decision is not completed by March 4, 2001.

4. MISCELLANEOUS

4.1 This Amendment shall enure to the benefit of and be binding upon the successors and assigns of the parties.

4.2 This Amendment, along with the Preliminary Development Plan for Lakepoint at Frisco shall be recorded with the County Clerk and Recorder for the County of Summit.

IN WITNESS WHEREOF, the undersigned have executed this Amendment and approve and accept the terms and conditions hereof.

Town of Frisco

Tex Etie, Mayor Date

ATTEST:

Vivian Louvet, Town Clerk Date

Debra Helton, Deputy Town Clerk

Frisco-Lakepoint Co., a Colorado limited partnership

Armin Heinrichs, Managing Partner 4-18-97

Armin Heinrichs, Managing Partner Date

by Mark Richmond attorney-in-fact

4-17-97

STATE OF COLORADO)
)SS.
COUNTY OF Summit)

The foregoing instrument was acknowledged before me this 17th day of April 1997, by Tex Etie as Mayor of the Town of Frisco, Colorado.

Witness my hand and official seal.
My commission expires: 1/17/2000.

Notary Public

Box 130 Dillon, CO
Address

NOTARY PUBLIC
LENORE D. SCOTT
STATE OF COLORADO

STATE OF COLORADO)
)SS.
COUNTY OF Summit)

The foregoing instrument was acknowledged before me this 18th day of April, 1997, by Mark Richmond as attorney-in-fact for Armin Heinrichs as Managing Partner of Frisco-Lakepoint Co., a Colorado limited partnership.

Witness my hand and official seal.
My commission expires: 2-18-98.

LYNN M. RYS
STATE OF COLORADO

Notary Public

620 Main St. Frisco
Address

amend1-9

LAKEPOINT AT FRISCO

CURVE DATA			
CURVE NO.	DELTA	RADIUS	ARC LENGTH
1	16°13'41"	163.63'	46.35'
2	143°00'00"	169.72'	423.59'
3	09°45'00"	246.53'	41.95'
* 4	54°23'20"	70.00'	66.45'
5	09°17'21"	207.74'	33.68'
6	65°00'00"	85.00'	96.43'
* 7	54°22'58"	50.00'	47.46'
8	17°11'19"	500.00'	150.00'
9	12°24'43"	500.00'	108.31'
10	05°21'14"	1913.68'	178.82'

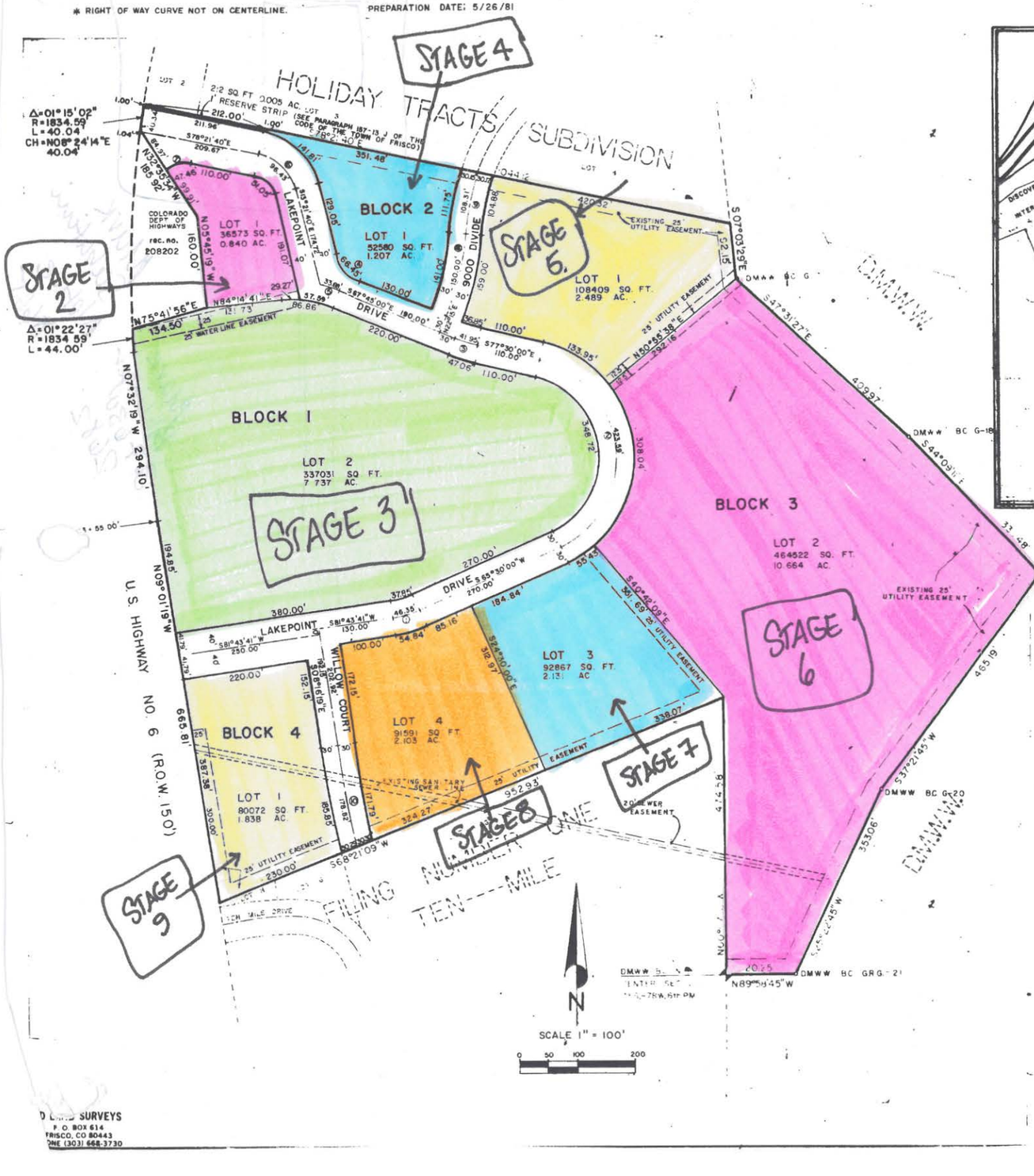
* RIGHT OF WAY CURVE NOT ON CENTERLINE.

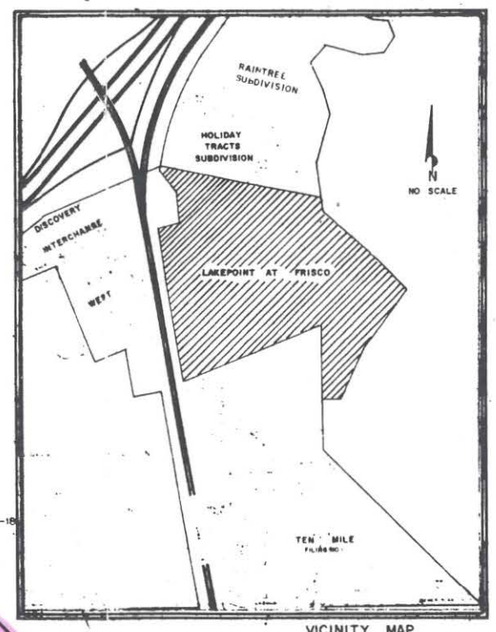
BEARING BASE REFERENCED TO D.M.W.W. BOUNDARY SURVEY OF LAKE DILLON.

ALL MONUMENTS LOCATED AS PER CRS(1973) 38-51-101

THE TOTAL PROPERTY SUBJECT TO THIS PLAT IS SUBJECT TO PLANNED UNIT DEVELOPMENT IN ACCORDANCE WITH ARTICLE XII, CHAPTER 180 OF THE CODE OF THE TOWN OF FRISCO, SUMMIT COUNTY, COLORADO, AS AMENDED.

PREPARATION DATE: 5/26/81





VICINITY MAP

SURVEYOR'S CERTIFICATE

I, RICHARD A. BACKLUND BEING A REGISTERED LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THIS PLAT WAS PREPARED BY ME AND UNDER MY DIRECT RESPONSIBILITY, SUPERVISION, AND CHECKING FROM A SURVEY MADE BY ME AND UNDER MY DIRECT RESPONSIBILITY, SUPERVISION, AND CHECKING AND THAT BOTH THIS PLAT AND THE SURVEY ARE TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE.

DATED THIS 28TH DAY OF JULY, 1981.

RICHARD A. BACKLUND
COLORADO L.S. NO. 10647

PLANNING COMMISSION APPROVAL

THE PLANNING AND ZONING COMMISSION OF THE TOWN OF FRISCO, COLORADO, HEREBY APPROVES THIS PLAT AND RECOMMENDS THIS PLAT FOR APPROVAL BY THE BOARD OF TRUSTEES OF THE TOWN OF FRISCO, COLORADO.

DATED THIS 29TH DAY OF JULY, 1981.

BY:

TITLE: CHAIRMAN OF PLANNING AND ZONING COMMISION, TOWN OF FRISCO

TOWN BOARD APPROVAL

THE BOARD OF TRUSTEES OF THE TOWN OF FRISCO, COLORADO, HEREBY APPROVES THIS PLAT.

DATED THIS 29th DAY OF July, 1981.

BY: Corey Jones

TITLE: Mayor Pro Tem of Frisco

ATTEST: Lo Deiss
Deputy TOWN CLERK

RECORDER'S ACCEPTANCE

THIS PLAT HAS BEEN ACCEPTED FOR FILING IN THE OFFICE OF THE RECORDER OF SUMMIT COUNTY, COLORADO ON THIS 5th DAY OF August, 1981, AT 2:11 P.M., AND IS DULY FILED UNDER RECEPTION NO. 226882.

BY: Sylvia H Ward

TITLE: Joanne R. Peterson, Deputy

OWNER'S CERTIFICATE

KNOW ALL MEN BY THESE PRESENTS: THAT, FRISCO-LAKEPOINT CO., A COLORADO LIMITED PARTNERSHIP, BEING THE OWNER OF A TRACT OF LAND BEING A PORTION OF THE NORTH ONE-HALF OF SECTION 26, TOWNSHIP 5 SOUTH, RANGE 78 WEST OF THE SIXTH PRINCIPAL MERIDIAN, TOWN OF FRISCO, SUMMIT COUNTY, COLORADO AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE CENTER ONE-QUARTER CORNER OF SAID SECTION 26, A DENVER MUNICIPAL WATER WORKS BRASS CAP NUMBER N-1, THENCE WESTERLY ALONG THE LINES CONTIGUOUS WITH TEN-MILE FILING NUMBER ONE, A SUBDIVISION AS FILED FOR RECORD IN THE OFFICE OF THE SUMMIT COUNTY CLERK AND RECORDER, FOR THE FOLLOWING TWO COURSES:

1) N 00°07'10" W A DISTANCE OF 474.58 FEET;
2) S 68°21'09" W A DISTANCE OF 952.93 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF U.S. HIGHWAY 6;

THENCE NORTHERLY ALONG SAID EASTERLY RIGHT-OF-WAY LINE FOR THE FOLLOWING THREE COURSES:

1) N 09°01'19" W A DISTANCE OF 665.81 FEET;
2) N 07°32'19" W A DISTANCE OF 294.10 FEET;
3) 44.00 FEET ALONG THE ARC OF A CURVE TO THE RIGHT, HAVING A CENTRAL ANGLE OF 01 22'27" AND A RADIUS OF 1834.59 FEET TO THE SOUTHWEST CORNER OF A TRACT OF LAND FILED UNDER RECEPTION NO. 208202 IN SAID OFFICE OF THE SUMMIT COUNTY CLERK AND RECORDER;

THENCE NORTHERLY ALONG THE BOUNDARY OF SAID TRACT OF LAND FOR THE FOLLOWING THREE COURSES:

1) N 75°41'56" E A DISTANCE OF 134.50 FEET;
2) N 05 45'19" W A DISTANCE OF 160.00 FEET;
3) N 32 35'34" W A DISTANCE OF 185.92 FEET TO A POINT ON SAID EASTERLY RIGHT-OF-WAY LINE OF U.S. HIGHWAY 6;

THENCE 40.04 FEET ALONG THE ARC OF A CURVE TO THE RIGHT, HAVING A CENTRAL ANGLE OF 01 15'02" AND A RADIUS OF 1834.59 FEET TO A POINT BEING THE SOUTHWEST CORNER OF HOLIDAY TRACTS SUBDIVISION, A SUBDIVISION AS FILED FOR RECORD IN SAID OFFICE OF THE SUMMIT COUNTY CLERK AND RECORDER; THENCE S 78°21'40" E A DISTANCE OF 1044.12 FEET ALONG THE SOUTHERLY LINE OF SAID HOLIDAY TRACTS SUBDIVISION TO A POINT ON THE WESTERLY BOUNDARY LINE OF THE DENVER MUNICIPAL WATER WORKS PROPERTY SURROUNDING LAKE DILLON; THENCE ALONG SAID WESTERLY BOUNDARY LINE FOR THE FOLLOWING SIX COURSES:

1) S 07°03'29" E A DISTANCE OF 92.15 FEET;
2) S 47°31'27" E A DISTANCE OF 409.97 FEET;
3) S 44°09'11" E A DISTANCE OF 330.48 FEET;
4) S 37°21'45" W A DISTANCE OF 465.19 FEET;
5) S 25°22'45" W A DISTANCE OF 353.06 FEET;
6) N 89°58'45" W A DISTANCE OF 120.25 FEET TO THE POINT OF BEGINNING,

CONTAINING 22.907 ACRES, MORE OR LESS;

HEREBY LAYS OUT, PLATS, AND SUBDIVIDES THE SAME, AS SHOWN ON THIS PLAT, UNDER THE NAME AND STYLE OF "LAKEPOINT AT FRISCO" AND HEREBY DEDICATES TO THE PERPETUAL USE OF THE TOWN OF FRISCO, COLORADO, THE STREETS AND UTILITY EASEMENTS AS SHOWN ON THIS PLAT.

DATED THIS 31ST DAY OF July, 1981.

FRISCO-LAKEPOINT CO.,
A COLORADO LIMITED PARTNERSHIP

BY: Charles C. Murphy
CHARLES C. MURPHY, THE MANAGING PARTNER AND GENERAL PARTNER

AND BY: CANYON PROPERTIES DEVELOPMENT COMPANY, A COLORADO GENERAL PARTNERSHIP, A GENERAL PARTNER

BY: L.J. Lewis, A GENERAL PARTNER

ACKNOWLEDGEMENT

STATE OF COLORADO)
) ss.
COUNTY OF SUMMIT)

THE FOREGOING WAS ACKNOWLEDGED BEFORE ME THIS 31ST DAY OF July, 19 BY L.J. LEWIS, AS GENERAL PARTNER OF CANYON PROPERTIES DEVELOPMENT COMPANY, A COLOR GENERAL PARTNERSHIP, AS GENERAL PARTNER, AND BY CHARLES C. MURPHY, AS THE MANAGING PARTNER AND GENERAL PARTNER OF FRISCO-LAKEPOINT CO., A COLORADO LIMITED PARTNERSHIP

WITNESS MY HAND AND OFFICIAL SEAL.

MY COMMISSION EXPIRES: April 17, 1983

NOTARY PUBLIC

MORTGAGEE'S CERTIFICATE

KNOW ALL MEN BY THESE PRESENTS: THAT, MICHAEL OPPENHOFF, BEING THE HOLDER OF THE INDEBTEDNESS SECURED BY, AND THE NAMED BENEFICIARY OF, A FIRST DEED OF TRUST RECORD AT RECEPTION NUMBER 218211 OF THE RECORDS OF THE CLERK AND RECORDER OF SUMMIT COUNTY COLORADO, HEREBY SUBORDINATES THE SAID DEED OF TRUST TO THIS PLAT AND JOINS THE DEDICATION TO THE PERPETUAL USE OF THE TOWN OF FRISCO, COLORADO, OF THE STREETS AS SHOWN ON THIS PLAT.

DATED THIS 31 DAY OF July, 1981.

BY: Michael Oppenhoff
BY: Frederick O. Jolley
FREDERICK O. JOLLEY, ATTORNEY-IN-FACT

ACKNOWLEDGEMENT

STATE OF COLORADO)
) ss.
COUNTY OF SUMMIT)

THE FOREGOING WAS ACKNOWLEDGED BEFORE ME THIS 31 DAY OF July 1981, BY FREDERICK O. JOLLEY, AS THE ATTORNEY-IN-FACT FOR MICHAEL

WITNESS MY HAND AND OFFICIAL SEAL

TITLE: NOTARY

MY COMMISSION EXPIRES: 4-18-82

TITLE COMPANY CERTIFICATE

LAND TITLE GUARANTEE COMPANY HEREBY CERTIFIES THAT IT HAS EXAMINED THE TITLE TO ALL LANDS SHOWN HEREON AND TITLE TO SUCH LANDS IS IN FRISCO-LAKEPOINT CO., A COLORADO LIMITED PARTNERSHIP, FREE AND CLEAR OF ALL LIENS, AND ENCUMBRANCES, EXCEPT A FIRST DEED OF TRUST RECORDED AT RECEPTION NUMBER 218211 OF THE RECORDS OF THE CLERK AND RECORDER OF SUMMIT COUNTY, COLORADO, FOR THE USE OF MICHAEL OPPENHOFF.

DATED THIS 31 DAY OF July, 1981.

LAND TITLE GUARANTEE COMPANY

BY:

TITLE:

SURVEYS
P. O. BOX 614
FRISCO, CO 80443
PHONE (303) 668-3730

From: Ryan Dulaney
To: Heth, Emma
Subject: McDonald's in Frisco
Date: Thursday, October 16, 2025 1:31:48 PM

You don't often get email from ryan.dulaney19@gmail.com. Learn why this is important

This Message Is From an Untrusted Sender
You have not previously corresponded with this sender.
Please review the email and report as suspicious if you have any doubts of the integrity of the message.

Report Suspicious

Hello -

My name is Ryan Dulaney and I own 700 Lakepoint Dr A9 in Frisco.

I am writing to express my concern about allowing a McDonalds to be opened. My main concerns are about the increased traffic on 10 Mile Dr and Lakepoint Drive intersection as well as impacting the local business economy.

McDonald's shared that they expect a 280% increase in traffic. Because there is no turn to get into the business from Hwy 9, this will drive even more traffic into the already dangerous intersection at 10 Mile and Lakepoint.

I'd love to keep Frisco local business and restaurants busy too. Adding another fast food place seems to diminish the charm and mountain feel of the town and of the area.

I strongly urge you and the council to vote no on allowing a Mc Donald's in frisco.

Please let me know if you have any questions.

Thank you.

Ryan Dulaney

PLANNING COMMISSION
STAFF REPORT

October 16, 2025

AGENDA ITEM:	Planning File No. MAJ-25-0003: A final review of a remodel to a commercial property consisting of a fast food restaurant located at 960 N. Ten Mile Drive.
LOCATION:	960 N. Ten Mile Drive / Lot R1 Block 1 Lakepoint at Frisco Sub Resub L2 Blk1 Amended
ZONING:	Planned Unit Development (PUD) – Lakepoint PUD
APPLICANT:	Robert Palmer representing McDonald's Real Estate Company
OWNER:	McDonald's Real Estate Company McDonald's Corporation Tax Dept 027 110 N. Carpenter St Chicago, IL 60607
TOWN STAFF:	Emma Heth, Planner II

PROJECT DESCRIPTION

The applicant, Robert Palmer, representing McDonald's Real Estate Company proposes a remodel to an existing commercial property located at 960 N. Ten Mile Drive. The proposal includes a fast food drive-in restaurant and changes to the site layout.

BACKGROUND

The property is located in the Lakepoint at Frisco Planned Unit Development (PUD). The properties to the north, east, and south are also in the PUD. The properties to the west, across Summit Boulevard, are in the Commercial Oriented Zone District. The Lakepoint at Frisco PUD, initially approved in 1981, encompasses a large geographic area located between North Summit Boulevard/Highway 9 and the Lake Dillon Reservoir. This PUD includes multiple commercial projects adjacent to the highway, a mixed-use project (Drake Landing), and a variety of multi-family residential projects located closer to the lake. This PUD is divided into "stages." The permitted uses and development standards for each stage are regulated by the Lakepoint at Frisco PUD Preliminary Development Plan. The property is located in Stage 3 of the PUD, where

the permitted uses include “drive-in restaurants.” The current site conditions include one commercial building previously used as a bank.



Figure 1: Vicinity Map



Figure 2: Lakepoint at Frisco PUD

On April 17, 2025, the Planning Commission reviewed the sketch plan for this project. During the sketch plan review, public comments noted concerns around traffic on N. Ten Mile Dr and at the intersection with Lakepoint Dr, odors, pedestrian safety, and opposition to the type of business. At that meeting, general discussion provided by the Commission included:

- Commissioners noted that they heard and understood public comments and recognized that there were only certain items that are in their purview
- Commissioners stated they expected an in-depth review of the traffic study at final site plan review and that the traffic study needs to reflect the business at the highest use along with extending the corridor to be analyzed
- Commissioners requested that a third-party reviewer also be consulted for the traffic study
- Commissioners noted that four-way stop needs to be a priority for the Town at the Lakepoint Dr/N. Ten Mile Dr intersection
- Commissioners encouraged the applicant to be a good neighbor
- Commissioners requested additional landscaping to screen headlights

- Commissioners requested that the applicant consider not having a 24-hour drive through
- Commissioners noted that the applicants' offer to improve striping and signage should be in writing with the final Site Plan application

MAJOR SITE PLAN REVIEW

A Major Site Plan application requires the Planning Commission to review, discuss, and make a final decision on the application. The proposal is reviewed in detail to ensure conformance with the Frisco Community Plan and compliance with the Frisco Unified Development Code (UDC). The Planning Commission shall review the Major Site Plan application and approve, approve with conditions, or deny the Major Site Plan in accordance with Section 180-2.3.7 and the approval criteria in Subsection 180-2.5.2.E.

ANALYSIS – FRISCO COMMUNITY PLAN

The following elements of the 2019 Frisco Community Plan are applicable to review the proposed development:

Vision and Guiding Principles (excerpts)
The vision and guiding principles are a statement of community values. Together, they reflect characteristics that residents value about Frisco today, and the kind of community that residents would like to see Frisco become as it continues to grow and evolve over time. The vision and guiding principles serve as an organizing framework for subsequent chapters and policy guidance in the Community Plan, as well as for the Town Council's Strategic Plan.

Guiding Principle 1: Inclusive Community

Frisco cares about our neighbors, visitors, and the whole of our community. We are an inclusive community that welcomes people of all backgrounds and income levels. We support a balance of housing options to create opportunities for a diverse population to reside here. Our history is integral to our identity and it is also a guiding principle for our future. As the Town grows and changes, we need to be rooted in the values of our past. The Ten Mile Range mountain backdrop, historic structures, vibrant neighborhoods, and a lively Main Street characterize Frisco along with the friendly people and welcoming vibe. As Frisco grows, this character and identity should be preserved and enhanced throughout Town.

1.2: Improve the aesthetic appeal and functionality of the Summit Boulevard Corridor and the Exit 203 Gateway

- *1.2A Support public improvements and gateway redevelopment that is aesthetically appealing, inviting to visitors, and reflects a cohesive community image of Frisco. See page 64 for design concepts and Area Specific Policies/Design Principles to enhance the West Main Gateway.*
- ***1.2B Encourage infill and redevelopment along Summit Boulevard that improves the aesthetic appeal and supports an economically thriving corridor.** See page 67 for additional discussion of opportunities along Summit Boulevard.*
- *1.2C Support the integration of workforce housing as part of future redevelopment efforts along Summit Boulevard through the potential intensification of land uses throughout the Summit Boulevard corridor and the greater Mixed Use Gateway District.*

Guiding Principle 2: Thriving Economy

The Frisco economy is built upon a unique balance of tourism and its role as a commercial-service hub for the region. Tourism, driven by recreational opportunities, and the small, mountain town appeal of Main Street, creates jobs and revenue. Locals and visitors utilize the large retailers, grocery stores, and services located along Summit Boulevard, and support the small businesses on Main Street. While the Frisco economy has seen steady growth in the past decade, diversification of the economy is important. More year-round opportunities will provide stability through the seasons and economic downturns. The Town should focus on small, incremental changes that preserve the town character and a healthy small business community that attracts residents and visitors.

2.1: Maintain a diverse and strong economy

- ***2.1A Continue to attract and retain businesses that support and enhance Frisco's tourism revenues, while also seeking to build upon entrepreneurship and new or emerging niches.***
- *2.1B Provide opportunities for a balanced mix of housing and services to support local businesses, employees, residents and visitors.*
- ***2.1C As development and infill occurs, ensure that the Town's overall mix of land uses remains aligned with community goals.***
- *2.1D Participate in regional and state economic development efforts that support a diverse economy.*
- *2.1E Support the creation of home-based businesses and remote workers.*

2.2: Strengthen Frisco's role as the year-round-local commercial and service hub for the region

- ***2.2A Support the retention and expansion of regionally-serving commercial and service uses.***
- *2.2B Protect the Light Industrial zone district from dilution and intrusion by other uses.*
- ***2.2C Encourage continued reinvestment in existing commercial centers.*** *Refer to page 67 for additional discussion of opportunities along Summit Boulevard.*

The property is located along the Summit Boulevard commercial corridor, about a half mile from the I-70 Exit 203. The adjacent properties to the north and south are zoned Lakepoint PUD and consist of commercial uses, including a fast food restaurant and a grocery store. The property to the east is zoned Lakepoint PUD and consists of a mixed-use development (Drake Landing). The properties to the west, across Summit Boulevard, are all commercial uses.

The application as proposed complements adjacent properties with an appropriate use in the Summit Boulevard commercial corridor, while reusing the existing structure. The proposed change in use supports Frisco's role as a commercial hub for the region and will enhance tourism revenues from visitors passing through Frisco and the I-70 corridor as supported by Policies 1.2B, 2.1A, 2.1C, 2.2A, and 2.2C.

The application, as proposed, is permitted in the PUD and generally complies with the principles, goals, and policies of the Frisco Community Plan.

ANALYSIS – LAKEPOINT AT FRISCO PLANNED UNIT DEVELOPMENT

The PUD specifies certain requirements as outlined below. If the PUD does not address specific requirements found in the Town Code, the Town will defer to the Town Code for regulations concerning that requirement. The requirements of the PUD are applicable to the review of the proposed commercial project as follows:

Maximum Building Coverage: The maximum allowed building coverage is 40%. Building coverage includes roof overhangs. The application proposes 5,609 sq ft, or 11.6% building coverage. The application meets this requirement.

Maximum Gross Floor Area: The maximum gross floor area allowed of any building is 125,000 square feet. The application proposes 4,575 sq ft of gross floor area, meeting the requirement.

Setbacks: The PUD states that there are no setback requirements for developments in Stage 3 of the PUD.

Minimum Open Space: The PUD requires a minimum of 20% of the property to be dedicated open space. Per the PUD:

> *In no instance shall such minimum open space areas be used for parking or lie within a building's footprint, including that created by any kind of an overhang. Additionally, such minimum open space cannot utilize areas which are designated as wetlands or waterways and shall not contain active recreational facilities.*

The application proposes 19,940 sq ft, or 41.4%, of open space on the property. The application meets this requirement.

Maximum Stories: The maximum number of stories allowed in the PUD is two (2). The application proposes utilizing the existing one-story building with a second-story architectural feature that does not include usable space. The application meets this requirement.

Maximum Building Height: The maximum height of any structure allowed in the PUD is 35 feet. Plans submitted show the existing structure at 34.16 feet from finished grade to the existing building height. No changes are proposed to the existing building height.

Bike Paths and Pedestrian Easements: Per the PUD, *"The provision for bike paths and pedestrian easements throughout the Planned Unit is important. Therefore, the Town, through the site plan review process, may require the owner of any, other than Stage 1 (hereinafter defined), to provide bike paths and pedestrian access easements in reasonable quantities and locations to achieve this objective and integrate with the overall master plan for bike paths and pedestrian easements as set forth in the "Parks and Recreation Plan for the Town of Frisco."*

Existing sidewalks are located to the east, west, and south of the property. The Town Engineer/Public Works review stated that a 10' pedestrian easement for the sidewalk on the south side of the property shall be recorded prior to issuance of a building permit. This is included as a condition of approval that all comments from the Town Engineer be satisfied.

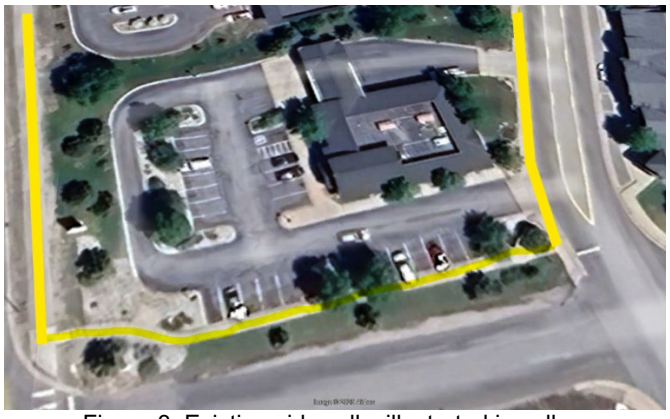


Figure 3: Existing sidewalks illustrated in yellow

Permitted and Conditional Uses: The PUD permits *"all retail, commercial, business, and accommodation uses including...drive-in restaurants*" in Stage 3 of the PUD. The application meets this standard.

ANALYSIS - DEVELOPMENT STANDARDS [180-6]

Development On Steep Slopes (§180-6.5.1): Per the Code, any portion of a site with a slope of 15% or greater for a distance of 25 contiguous feet shall qualify as a steep slope. These slopes are subject to limits on net site disturbance of the sloped area. The property does not contain steep slopes of at least 15% grade for 25 contiguous feet. The application meets this standard.

Drainage Plan (§180-6.6): The contracted Town Engineer reviewed the drainage plan submittal and provided comments to the applicant. All comments have been addressed and the plans are in conformance with Town standards. As noted on the plans, a storm sewer easement will need to be recorded prior to building permit issuance. The application meets this standard.

Vehicular Access Requirements (§180-6.11)**:** All vehicle access shall comply with the standards outlined in Chapter 155, Minimum Street Design and Access Criteria. Commercial driveways accessing the right-of-way shall be at least 12 feet wide for a one-way access. Where development abuts a Town road, the Frisco Public Works Director must approve the location and design of access points to the road.

The applicant proposes one-way counterclockwise traffic circulation through the site, with the north driveway serving as the entrance and the south driveway serving as the exit. The contracted Town Engineer reviewed the proposed vehicle access and provided comments. The submittals were found to be in general conformance with Town standards, but the applicant will be required to address all outstanding comments prior to issuance of a building permit.

Non-vehicular Access Requirements (§180-6.11.2): All site plans shall provide for and show non-vehicular access in accordance with the standards set forth in the Frisco Trails Master Plan and Chapter 155, Minimum Street Design and Access Criteria. All non-residential developments shall provide safe and convenient non-vehicular access to a public street or road year-round and integrate pedestrian and bike paths with similar existing and planned facilities on adjacent properties. Developments shall install paved, year-round access from and through the development to adjacent public sidewalks, bicycle and pedestrian facilities, or right of way both existing and proposed.

The 2023 Frisco Trails and Pathways Master Plan does not show any new connections adjacent to the property that need to be considered in this review. The application proposes two pedestrian connections from the building to the existing sidewalk on N. Ten Mile Drive. The application meets this standard.



Figure 4: Frisco Trails and Pathways Master Plan

The plans also indicate upgrades to the sidewalk and curbs along N. Ten Mile Drive to meet ADA requirements. These improvements were recommended by the contracted Town Engineer. The improvements are to be made by the property owner and maintained by the Town.

The existing sidewalk connection between N. Ten Mile Drive and Summit Boulevard, parallel to Lakepoint Drive, is currently on the subject property with no easement for the Town. As stated previously in this staff report, a 10' easement shall be granted to the Town for this sidewalk prior to building permit issuance.

Traffic Study (§180-6.12)**:** Frisco Town Code requires that a traffic study, prepared by a professional engineer licensed in the State of Colorado, be submitted for this application. At sketch plan review, Planning Commission requested that the traffic study be given an in-depth review given the extensive public comment around potential traffic impacts. Commissioners also requested that the Town consider a four-way stop at the intersection of Lakepoint Dr and Ten Mile Dr, and incorporate the applicant's offer to upgrade striping and signage at the intersection.

A traffic impact study was submitted with this application and reviewed by the contracted Town Engineer. In initial comments, the Town Engineer noted that the data, methodology, and analysis met Town standards, but requested additional analysis of the drive-through queue, the Ten Mile Dr/Ten Mile Dr intersection south of the proposed development, and the driveway exit. The applicant provided an updated traffic study, which was reviewed and approved by the Town Engineer.

The traffic study analyzes the impacts of the traffic increase from redevelopment and concludes that the increased traffic caused by this development does not cause any adjacent roadways to fall to a failing level of service (LOS) and therefore no mitigation is required. The study notes that several adjacent intersections will be at a failing level of service in future years, but not due to the proposed development. However, the intersection at Lakepoint Dr. and N. Ten Mile Dr. will be updated to a four-way stop. This decision was made following public input, at the applicant's recommendation, and with Town approval, but not as an outcome of the traffic study. Upgrades for the four-way stop will be constructed by the applicant and maintained by the Town.

The traffic study recommended signage and striping improvements at the driveway exit, which shall be incorporated into the plans at building permit submittal per the contracted Town Engineer's comments. A CDOT access permit will also need to be approved by the Town and CDOT prior to building permit issuance. Staff recommends the CDOT access permit approval as a condition of approval.

On-Premise Parking Requirements (§180-6.13.3.)**:** The following is a preliminary parking analysis:

Use Type	Parking Standard	Applicable Criteria	Required Spaces	Provided Spaces
Fast food restaurant	1 per 150 sq ft of GFA (non-seating area)	3,325 sq ft	22	
	1 per 250 sq ft of GFA (seating area)	1,250 sq ft	5	
Total parking spaces required			**27**	**32**
Fast food restaurant	5 stacking spaces per drive-up window	2 drive-up windows	10	
Total stacking spaces required			**10**	**15**

The application proposes 32 parking spaces in the parking lot, including two accessible parking spaces, and 15 stacking spaces for the drive-up windows. The application meets this standard.

Parking Standards and Criteria (§180-6.13.6.): The application materials comply with all parking design standards, including parking space dimensions and drive aisles. The Town Engineer reviewed the parking layout for drainage, access, and design as outlined in the UDC and Chapter 155, Minimum Street Design and Access Criteria, and the applicant has addressed all comments. The application meets this standard.

Accessible Parking (§180-6.13.3.H): All commercial projects must provide accessible parking, including one space designated for accessible vans. The proposed project requires 2 accessible parking spaces, one of which must be van accessible. The application shows 2 accessible parking spaces provided, both of which meet the requirements for being van accessible. The application meets this requirement.

Bicycle Parking (§180-6.13.4)**:** All nonresidential developments must provide bicycle parking facilities, in the amount of not less than 20 percent of the total required parking spaces. 5 bicycle parking stalls are required for this project. The application materials show 6 bicycle parking spaces provided. The application meets this standard.

On-Premises Loading Requirements (§180-6.13.8.): On premises loading areas are not required for commercial uses with 0-12,000 sq ft of GFA. An on-premises loading area is not required for this application. Whereas not required, Staff asked the applicant to address how deliveries would not create a traffic problem. The applicant has stated that the deliveries occur during the off hours so that the truck can offload in parking spaces then circulate and leave and therefore not restrict traffic movement.

Outdoor Lighting (§180-6.16): Outdoor lighting installed for new structures shall be full cut-off fixtures and be positioned so that there is no direct light emission onto adjacent properties. The average illumination on the surface of a parking lot cannot exceed 2.0 footcandles (fc), and the maximum spillage onto adjacent properties and rights-of-way is 0.9 footcandles. A lighting plan was submitted with the application materials for review.

The application materials show full cut-off parking lot fixtures, recessed canopy fixtures, and wall-mounted fixtures. The submitted lighting plan shows the average parking surface illumination as 1.71 fc and the maximum illumination at the property line as 0.8 fc. Parking lot fixtures are designed to be compatible with the site. The application meets this standard.

Landscaping and Revegetation (§180-6.14)**:** The application is subject to the landscaping requirements for a commercial large project development. In commercial large projects, for every 1,500 square feet of project lot area or fraction thereof, a minimum of one (1) tree must be planted on the site, and one (1) shrub shall be required for every 2,500 square feet of lot area. With a lot size of 48,151 square feet, 32 trees and 19 shrubs are required.

Existing trees may be substituted for up to 50% of the required tree landscaping, or 16 trees. Additional landscape screening may be required when it is determined by Planning Commission to be in the best interest of the affected properties. To be "deemed in the best interest of the affected properties," it must be determined that:

1. The proposed development will have a substantial adverse impact on an adjacent property; and
2. The substantial adverse impact is due to an impact of the proposed development that is unique and peculiar to the proposed development and not of the type normally associated with the type of development proposed.

At sketch plan review, the Planning Commission requested additional landscaping to screen headlights.

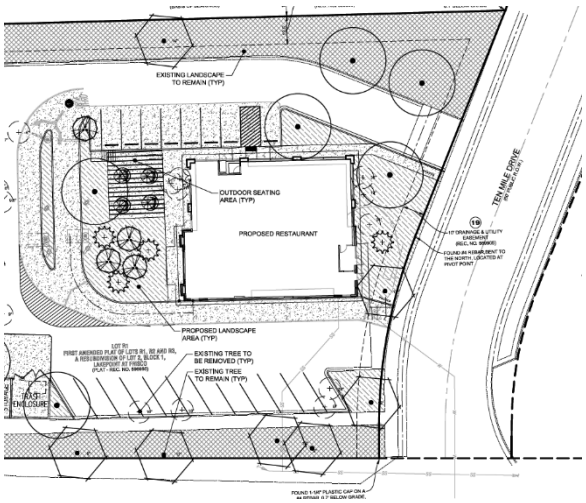


Figure 5: Proposed landscaping, sketch plan

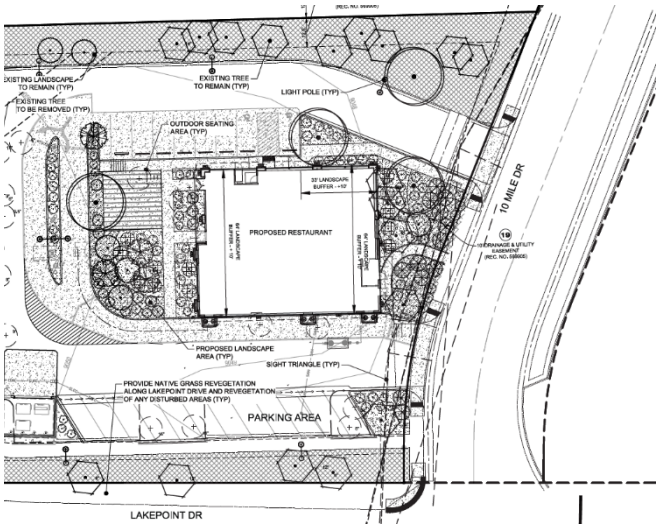


Figure 6: Proposed landscaping, final site plan review

The application shows 27 existing trees to be preserved and 16 new trees to be planted, including 7 blue spruce, 5 narrowleaf cottonwood, and 4 aspen. The application lists 120 shrubs to be provided. Two trees and numerous shrubs are shown near the driveway exit, with additional shrubs and trees located between the building and N. Ten Mile Dr. The application meets the landscaping requirements. Staff notes that in order to meet sight triangles for vehicle safety, landscaping should not be required too close to the driveway access. If Planning Commission finds that the proposed landscaping meets their request for additional landscaping to screen the development from the road and the mixed-use development across N. Ten Mile Dr, the application meets this standard.

Additional landscaping requirements are outlined in the Nonresidential Development Standards, which are discussed later in the staff report.

Parking Area Landscaping (§180-6.14.3.F.)**:** Any parking lot providing 20 or more parking spaces must provide a landscaping area equal to at least 6% of the total paved area. At least 50% of the required parking lot landscaping area must be internal to the parking area. The remainder must be within 10 feet of the perimeter of the paved area. This area must include 1 tree and 2 shrubs per 150 square feet of required area, or fraction thereof. Parking lot islands must be at least 8 feet in width and length and contain at least 1 tree. With a paved area of 20,920 sf, 1,255 sf of parking lot landscaping is required, with 628 sf of that area being internal to the parking area. Within this area, 8 trees and 16 shrubs are required.

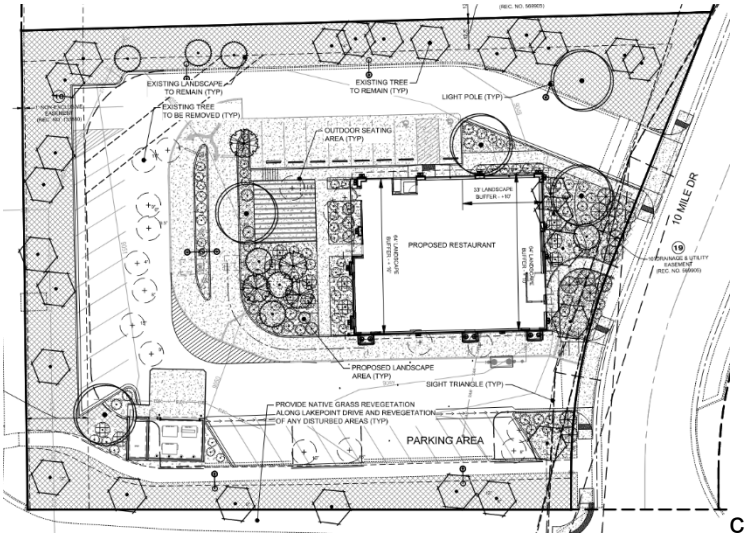


Figure 7: Proposed Landscaping

The application shows 1,255 sf of landscaping within 10 feet of the parking area, including the 8 required trees and 16 shrubs. The application meets this requirement.

Snow Storage and Snow Shedding (§180-6.15.): Snow storage is required on-premises in the amount of 25% of the paved surface area. Snow storage must be located lengthwise adjacent to the applicable paved area. For 23,636 sf of total paved area, the project is required to provide 5,909 sf of snow storage. The application materials show 6,254 sf of snow storage provided. All snow storage areas are at least 10 feet wide. The application meets this requirement.

Refuse Management (§180-6.17): All commercial, mixed-use, and multi-family residential development projects containing five or more units shall utilize a trash enclosure to collect and store refuse, recycling, grease traps, and compost collection. Equal space for refuse, recycling, and compost collection must be provided. Enclosures shall be wildlife-proof, four-sided structures with opaque materials to a height of 6 feet, a roof, and separate pedestrian access.

The application materials show a refuse enclosure with stucco, stone veneer, wood trim, and asphalt shingles to match the primary structure. The structure is accessed either through a pedestrian door or garage door for collection. The structure has sufficient space for recycling, trash, and compost. A letter of approval from a waste collection provider was provided. The application meets this standard.

Signs (§180-6.19)**:** Signage is not reviewed as part of the Major Site Plan application. A separate sign permit will be required to review any proposed signage shown in the application materials.

Nonresidential Development Standards (§180-6.21)**:** The purpose of the nonresidential development standards is to promote high-quality site and building design in Frisco; to establish minimum standards related to the scale, mass, architecture, materials, and overall design character of development; and to protect and enhance existing neighborhood character.

A. Compatibility with Neighborhood Character (§180-6.21.3.A): Compatibility shall be achieved through proper consideration of scale, design, proportions, site planning, landscaping, materials and colors, and compliance with the standards in this section.

The applicant proposes to reuse most of the existing building exterior with minor renovations. Proposed finishes will match existing. New elements include gray and bronze trim, with gold accents on the drive-through canopies.

B. Façade Standards (§180-6.21.3. B): All building elevations shall employ varied articulation of wall surfaces, including deep eaves or overhangs, patios, architectural features that add variety to the wall plane, changes in material, variations in window sizes, and/or prominent building entrance features. Building walls and corresponding eaves shall not exceed 27 feet in the same geometric plane.

The application utilizes an existing building, modifying the exterior for a new use. The application materials show that the project will retain most of the building articulation and architectural elements on all facades of the building. The walls on all facades will be bumped out; the existing stone columns will be incorporated into the walls, still providing articulation. Articulation appears to decrease slightly on the south side of the building to better accommodate the drive-through, but new elements are also incorporated for the drive-through windows. All facades of the building meet the standards for building elements. No changes are proposed to the roof lines.





Figure 8: Existing and proposed south facades

D. Roof Standards (§180-6.21.3.D): The intent of the roof standards is to ensure that roof elements are compatible with or complementary to existing historic or contributing buildings in the area and to encourage visibly pitched roofs or roof elements. No changes are proposed to the roof pitch, design, or materials. At sketch plan review, Planning Commissioners asked about screening of rooftop mechanical equipment. Rooftop mechanical equipment is shown screened within the existing roof lines.

E. Building Material Standards (§180-6.21.3.E): Building materials must be predominantly natural. Stucco, metal, and concrete block are allowed as an accent material or in combination with other materials. Aluminum siding that does not imitate natural materials is prohibited.

The existing stone veneer and stucco will remain as the primary materials. The application materials show added metal doors, aluminum accent panels, and aluminum canopies over the

drive-through windows. At sketch plan review, Planning Commission did not express any concerns around proposed building materials. The application meets this standard.

F. Building Colors (§180-6.21.3.F): Primary building colors may not exceed a chroma of 4 on the Munsell Color Chart, and accent colors may not exceed a chroma of 8. The proposed "gold underscore" on the drive-through canopy is a chroma of 8, meeting this standard. Staff has verified the chroma of the physical samples provided.

G. Design Variety (§180-6.21.3.G): Building designs that duplicate, or are substantially similar to nearby structures are not allowed. This is an existing building and does not appear to be substantially similar to other structures within a 300 foot radius.

I. Parking and Loading (§180-6.21.3.I): No more than 60% of required parking spaces may be located in front of a building along the principal street façade. With 27 required parking spaces, no more than 16 may be located along the principal street. The application shows no more than 12 parking spaces along any street façade, meeting the requirement.

Parking lots abutting a property line shall incorporate a minimum 10-foot wide landscaped buffer between the property line and the paved surface of the parking lot. The buffer shall contain twice the number of trees required by the landscaping section. The application materials show a >20ft landscaping buffer from the west property line containing 6 trees, and a landscaping buffer from the south property line that appears to be ~11ft (not including the sidewalk) and contains 5 trees. The application meets this standard.

Parking lots or paving abutting a building shall provide a landscaped area of 5-10 feet in width, with half of the area being 10 feet in width and the area running along 50% of the building. If less than 50% of the required parking spaces are in the front of the building, the landscape buffer may be reduced to 35% of the length of the building, with Planning Commission approval. The project qualifies for the reduction to 35%.

The application materials currently show 222 linear feet of the building abutting paving. Of those 222 feet, approximately 83 feet incorporate a landscape buffer between the paving and the building. All provided buffers are between 5-10 feet. At the time of sketch plan, the Planning Commission did not comment on landscape buffers. If Planning Commission approves the reduction of landscape buffers to 35%, the application meets this requirement.

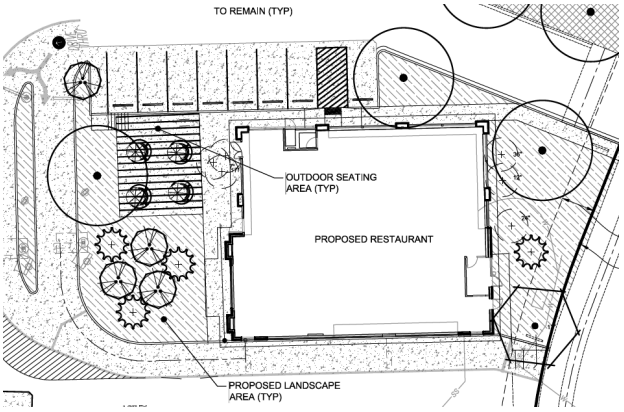


Figure 9: Landscaping proposed at sketch plan

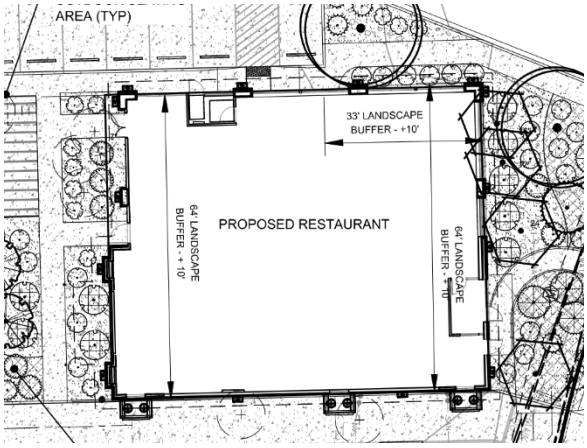


Figure 10: Final proposed landscaping buffers

Trash areas must be screened from all public rights-of-way and parking areas. The application materials show 1 new tree and 10 shrubs to be planted around the new enclosure to screen it from the parking area. Given that the applicant is utilizing an existing building and site, the application meets this standard.

J. Amenities (§180-6.21.3.J): Bicycle parking spaces shall be provided in an amount equal to at least twenty percent (20%) of the required vehicular parking spaces for the development. 5 bicycle parking stalls are required for this project. The application materials show 6 bicycle parking spaces provided. The application meets this standard.

No community spaces are required for commercial development with less than 10,000 square feet of gross floor area. The proposed project has 4,575 square feet of gross floor area. No community spaces are required.

Bulk Standards (§180-6.23): Table 6-K of the Code outlines bulk plane requirements for Summit Boulevard. The applicant proposes utilizing an existing building with no changes within the bulk plane. The application meets this requirement.

PUBLIC COMMENT

As of October 10, 2025, the Community Development Department had received three formal public comments concerning this project, submitted after the sketch plan review. These comments do not necessarily address the final plans currently under review. The comments are included as Attachment C.

STAFF RECOMMENDATIONS

Recommended Findings

The Community Development Department recommends the following findings pertaining to the Major Site Plan application for the proposed remodel to an existing commercial property located at 960 N. Ten Mile Drive / Lot R1 Block 1 Lakepoint at Frisco Sub Resub L2 Blk1 Amended.

Based upon the review of the staff report dated October 16, 2025, and the evidence and testimony presented, the Planning Commission finds:

1. *The proposed major site plan application is in general conformance with the principles and policies of the Frisco Community Plan. Commercial redevelopment of this lot is supported by the Frisco Community Plan Guiding Principles of Inclusive Community and Thriving Economy. The proposed development reuses an existing building design for a new use in the Summit Boulevard commercial corridor. The proposed redevelopment supports Frisco's role as a commercial hub for the region and will enhance tourism revenues from visitors passing through Frisco and the I-70 corridor.*

2. *The proposed major site plan application is in general conformance with the Lakepoint at Frisco PUD Preliminary Development Plan, including: building coverage, building height, permitted uses, open space, and gross floor area. All applicable requirements have been met by the submittal and the recommended conditions of approval.*

3. *The proposed major site plan application is in general conformance with the Town of Frisco Unified Development Code, specifically Section 180-6, Development Standards since all the applicable requirements have been met by the submittal and the recommended conditions of approval, including: grading plan, drainage plan, snow storage and snow shedding, vehicular access, non-vehicular access, and refuse management.*

4. *The proposed major site plan application is in general conformance with the Town of Frisco Unified Development Code, specifically Section 180-6.14 Landscaping since all the applicable requirements have been met by the submittal and the recommended condition of approval; including: required vegetation, screening, water conservation, irrigation system, and parking area landscaping. The Planning Commission finds that the proposed landscaping buffer is approved with materials showing compliance with 35% of the length of the building.*

5. *The proposed major site plan application is in general conformance with the Town of Frisco Unified Development Code, specifically 180-6.16 Outdoor Lighting since all the applicable requirements have been met by the submittal; including: exterior light fixtures, light emissions, and design.*

6. *The proposed major site plan application is in general conformance with the Town of Frisco Unified Development Code, specifically Section 180-6.21, Nonresidential Development Standards, since all of the applicable requirements have been met by the submittal and the recommended conditions of approval, including: that the development is designed in a manner compatible with the neighborhood; the development includes required building elements and the other recommendations and standards including colors and materials of the Nonresidential Design Standards are in compliance.*

Recommended Action

Based upon the findings above, the Community Development Department recommends APPROVAL of the Major Site Plan application for the proposed remodel to an existing commercial property located at 960 N. Ten Mile Drive / Lot R1 Block 1 Lakepoint at Frisco Sub Resub L2 Blk1 Amended, subject to the following conditions:

Conditions:

1. *Prior to the issuance of a building permit, the applicant shall satisfy all requirements of the contracted Town Engineer outlined in the comments dated September 22, 2025.*
2. *Prior to the issuance of a building permit, a CDOT access permit shall be submitted and approved by CDOT.*
3. *Prior to the issuance of a building permit, the applicant shall satisfy all requirements of Summit Fire & EMS outlined in the comments dated August 12, 2025.*
4. *Prior to the issuance of a building permit, the applicant shall satisfy the requirements of Xcel Energy.*

5. *Prior to the issuance of a building permit, the applicant shall satisfy the requirements of the Frisco Water Division as outlined in the comments dated September 17, 2025.*

Recommended Motion

Should the Planning Commission choose to approve this Major Site Plan application, the Community Development Department recommends the following motion:

> ***With respect to File No. MAJ-25-0003, I move that the recommended findings set forth in the October 16, 2025 staff report be made and that the recommended conditions set forth therein be taken and that the Planning Commission hereby APPROVES the request for the Major Site Plan application for the proposed remodel to an existing commercial property located at 960 N. Ten Mile Drive / Lot R1 Block 1 Lakepoint at Frisco Sub Resub L2 Blk1 Amended.***

ATTACHMENTS

Attachments:

Attachment A – Application Materials MAJ-25-0003
Attachment B – Referral Comments
Attachment C – Public Comments
Attachment D – Lakepoint at Frisco PUD

cc: Robert Palmer, Strategic Land Solutions, Inc.

Attachment A:
Application Materials

620 Main St., P.O. Box 280
Frisco, Colorado 80443-0280
Office: (970) 668-0176
FAX: (970) 668-3757
E-MAIL: andyr@richmondsummitlaw.com
www.richmondsummitlaw.com

RICHMOND SUMMIT LAW, LLC

Attorneys at Law

Serving Summit County since 1979

Mark Richmond
Andy R. Richmond

May 1, 2023

Susan Lee
Community Development Department
Frisco Town Hall * 1 Main Street
PO Box 4100
Frisco, CO 80443

Richmond-Lindrose Vacation Application for 6th Ave. Roadway
Reasons for the Requested Vacation

My name is Andy Richmond and I was born and raised in Frisco. I purchased a home at 521 Pitkin St. almost two years ago. I have long been aware of the Town's pressing need for local's housing and, having personally seen Frisco grow and change over the past 30 years I want to be part of the solution. I have followed Council's recent working groups and discussions regarding the local housing issue. I know that Council is seeking as many solutions as it can to the local housing shortage. And I believe we have a proposal that will add a different, creative way to further address Frisco's need for local's housing.

The first step in our proposal is to request that the Town vacate the 6th Ave. right-of-way between our home at 521 Pitkin, and the Lindrose's home at 601 Pitkin. We understand that vacation of public right-of-way requires a show of "overriding public interest." Our proposal offers this public interest.

In exchange for the Town's vacation, my wife and I will encumber our current home at 521 Pitkin with a local's housing covenant. Additionally, we are proposing a subdivision of our lot so as to sell the back half, that home would also be subject to a local's housing covenant. In the vacated right-of-way, we would build a third home, also subject to a local's housing covenant. And finally, our neighbors and co-applicants the Lindroses, would, on longer time frame, contribute one more local unit to the proposed area. That is the potential for four local houses from one vacated right-of-way.

All four potential local units would contain the same restriction, contained in the Planned Unit Development ("PUD") application, which is proceeding in concert with this requested vacation. That restriction, in summary, is that these local units are only available to individuals who:

- Are registered voters in Frisco, Colorado;
- Work 30 hours/week at a business who holds a business license or pay taxes in Summit County and the income from that job comprises at least 75% of their total income, or a retired person who met these same requirements for 5 consecutive years prior to retirement; an

- Uses these units as their principal place of residence, as determined by Colorado law.

To clarify, my wife and I would immediately encumber our current home, our new back lot, and the parcel we gain from vacation with a local's housing covenant. The Lindroses would sign on to an agreement that as soon as they, or their successors in interest, built a garage or added on to their home in any way, they would be required to either add a mother-in-law apartment to the garage or build an additional local's home on their portion of the vacated parcel. You can see on the attached survey from Ten Mile Engineering that the 521 Pitkin side of the right-of-way would gain slightly more land than the 601 Pitkin side. This is because the 521 side will be providing three of the four local's units, and thus much of the public benefit.

We would be able to fit this number of houses on this property by subjecting the current Richmond house, as well as the two to be built immediately, the PUD mentioned above. The PUD is based on the Code's Cabin Housing designation with some changes that reflect an incentive for local's housing. The PUD forces two of those houses be no larger than 1250 sq. ft. with the third house being no larger than 1500sq. ft. This would have the added bonus of maintaining the small cabin character of the neighborhood. The Ten Mile Engineering site plan attached with this application illustrates how the cabin houses would fit in this area.

The covenant we propose would not have the AMI or resale caps that some of the current local housing projects in the Town do. As a recent home buyer, and judging from some of Council's recent discussions, AMI and resale caps can create some issues for buyers. That is not to say that they do not have a place, but rather that the Town should have several options in its local housing arsenal. AMI caps create a situation where some buyers are left behind because they make too much to qualify for an AMI cap but don't make enough for a free market home. Resale caps can provoke dissatisfaction because they essentially disallow locals from participating in the real estate market while second homeowners strike it rich when home values in town rise. Our local housing covenant would instead regulate the local requirement with a strict covenant limiting ownership of these homes to locals who work in Summit County, with a preference to locals who work in Frisco specifically. Additionally, there would be a covenant requiring that these homes be the primary residence of each owner. That ensures there is no real estate speculation or investment purchases in our development, each owner has to want to live there. Thus, we would regulate price with a combination of the local's covenant and the small size of the homes. Essentially, the fact that you must sell to a local, it must be that local's primary residence, and the house cannot be more than 1000 sq. ft. will not allow the prices on these homes to become prohibitive.

By signing on to these local covenants, we are giving up significant value. We have seen what homes in this neighborhood go for on the free market. However, we have also seen that once homes in our neighborhood are sold, they often become second homes are short-term rentals, thus deteriorating the quality and character of the neighborhood. We are willing to forego the big returns of the free market to ensure that we live in a local neighborhood with people who value the area enough to make it their primary residence.

The main point of our proposal is that the Town can ensure four permanent, primary residence, local units from one right-of-way, rather than risk yet another lot turning into a second

home that no local can ever afford thus taking it off the local's market forever. Considering the local's housing shortage in Frisco, this is the definition of "overriding public interest." Our proposal would provide a blueprint for future vacations and would give the Town tremendous leverage because it could forever tell future applicants "The 6th Ave. vacation gave us four local homes, that is the standard."

Thank you for your consideration.

Andy Richmond

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Office: (970) 668-0176
FAX: (970) 668-3757
E-MAIL: andyr@richmondsummitlaw.com
www.richmondsummitlaw.com

RICHMOND SUMMIT LAW, LLC

Attorneys at Law

Serving Summit County since 1979

Mark Richmond
Andy R. Richmond

Mary Winston,
Legal Assistant

May 7, 2021

Community Development Department
Frisco Town Hall * 1 Main Street
PO Box 4100 * Frisco, CO 80443

Richmond-Lindrose Vacation Application for 6th Ave. Roadway
Names and Addresses of Record Owners of Adjacent Property

The names and addresses of all record owners of property adjacent to the roadway proposed to be vacated are:

Andy Richmond and Lauren Echevarria
P.O. Box 92
Frisco, Colorado 80443
Owners of Lots 23, 24, Block 34 FRISCO TOWN SUB commonly known as 521 Pitkin Street, Frisco, Colorado 80443

Albert and Marta Lindrose
1225 Gapter Rd
Boulder, CO 80303
Owners of Lots 13, 14, and part of Lot 15, Block 33 FRISCO TOWN SUB commonly known as 601 Pitkin Street, Frisco, Colorado 80443

All record owners are participating applicants to this application.

620 Main St., P.O. Box 280
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Mark Richmond
Andy R. Richmond

Mary Winston,
Legal Assistant

May 7, 2021

Community Development Department
Frisco Town Hall * 1 Main Street
PO Box 4100 * Frisco, CO 80443

Richmond-Lindrose Vacation Application for 6th Ave. Roadway
Certification of Statements

As primary applicant, I, Andy Richmond, certify that the following statements are true:

1. That no land adjoining any roadway to be vacated is left without an established public road connecting said land with another established public road.

2. That the roadway or easement to be vacated is no longer necessary for present or prospective public use or convenience.

Andy Richmond



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*CO, NC, & TN
**CO, KS, MO, & US Tax Court

Mac Buehler,
Legal Assistant

Town of Frisco
Planning Division
1 East Main Street
Frisco, CO 80443

Owner Consent re REZ-24-0001

I, Marta Lindrose, am a trustee of the Lindrose Living Trust, which owns the real property located at 601 Pitkin Street, Frisco, Colorado (the "Property"). I am aware that our neighbors, Andy and Lauren Richmond have applied to the Town of Frisco ("Town") to:

- Have the 6th Ave. Right-of-Way vacated;
- To have part of the vacated 6th Ave. Right-of-Way added to our Property; and
- To rezone the Richmond Property, the vacated 6th Ave. Right-of-Way and our Property as a Planned Unit Development.

On behalf of the Lindrose Living Trust I consent to the applications, designated REZ-24-0001 and VAC-21-0001 by the Town, and any future applications related to these projects, by the Richmonds.

Marta Lindrose as Trustee of the Lindrose Living Trust — Date 7/9/24

A PRELIMINARY PLAN EXHIBIT

LOTS 23 AND 24, BLOCK 34 & LOTS 13, 14 & PT. OF 15, BLOCK 33 AMENDED FRISCO TOWNSITE

TOWN OF FRISCO, SUMMIT COUNTY, COLORADO

PITKIN STREET
(80' R-O-W)

BLOCK 34

N11°07'00"W 140.00'

LCE CABIN 1

1 STORY WOOD FRAME HOUSE
cabin 1
963 sq.ft.
0.02 acres

432 sq.ft.

PROPOSED LOT 1
3,500 sq.ft.
0.08 acres

2 GARAGE SPACES

PROPOSED LOT 2
3,500 sq.ft.
0.08 acres

1 GARAGE SPACE

LCE CABIN 2

CABIN 2
1,000 sq.ft.
0.02 acres

30% SLOPE +

15% SLOPE +

WOOD RETAINING WALL

PARKING AREA

GRAVEL DRIVEWAY

ALLEY
(40' R-O-W)
(NOT CONSTRUCTED)

PHONE

PHONE TV ELEC.

LOTS 1-4
BLOCK 34

GRAVEL PARKING AREA

DECK

PAVING

S78°53'00"W

driveway per plan

PROPOSED LOT 3
6,300 sq.ft.
0.14 acres

LCE CABIN 3

15% SLOPE TOTAL
4,952 sq.ft.
0.11 acres
"45% OF 15% GRADE TO BE DISTURBED"

30% SLOPE TOTAL
957sq.ft.
0.02 acres
"25% OF 30% GRADE TO BE DISTURBED"

SPACES

2 GARAGE

CABIN 3
1,000 sq.ft.
0.02 acres

LCE CABIN 3

6th AVENUE
(75' R-O-W)
(NOT CONSTRUCTED)

6th AVENUE
(75' R-O-W)
DIRT ROAD

GRAVEL DRIVEWAY

PROPOSED LOT 4
11,500 sq.ft.
0.26 acres

LOTS 13-14 AND A PORTION OF LOT 15, BLOCK 33 + 30' ROW
ACCORDING TO THE DEED AT REC. NO. 991121
ADDRESS: 601
PITKIN STREET

ALLEY
(40' R-O-W)
(NOT CONSTRUCTED)

FRISCO STREET HOMESITES
BLOCK 33

LOTS 15-17
BLOCK 33

N11°07'00"W 65.00'
S78°53'00"W 4.00'
N11°07'00"W 75.00'

North

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

Drawn JJK	Dwg 20086_4 LOTS	Project 20086
Checked JJK	Date 10/14/2024	Sheet 1 of 1

R-A-N-G-E W-E-S-T INC.
ENGINEERS & SURVEYORS
P.O. Box 589
Silverthorne, CO 80498 970-468-6281

NOTE: ACCORDING TO COLORADO LAW, YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.

A TOPOGRAPHIC MAP & UTILITY LOCATION MAP OF
LOTS 23, 24 & 6TH AVE., BLOCK 34
AMENDED FRISCO TOWNSITE
TOWN OF FRISCO, SUMMIT COUNTY, COLORADO

North

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

DATE OF UTILITY LOCATES: 10/13/2022
CONTOUR INTERVAL=2 FEET

LEGEND

- SET REBAR & YELLOW PLASTIC CAP (PLS 26292)
- FOUND REBAR & YELLOW PLASTIC CAP (PLS 4974)
- FOUND REBAR & PURPLE PLASTIC CAP (PLS ????)
- FIRE HYDRANT
- FENCE
- PINE TREE WITH TRUNK DIAMETER
- SPRUCE TREE WITH TRUNK DIAMETER
- WATER LINE
- GAS LINE
- SANITARY SEWER LINE
- UNDER GROUND ELECTRIC LINE
- UNDER GROUND TV LINE
- UNDER GROUND PHONE LINE

BLOCK 34

LOT 22

LOT 21

ADJACENT HOUSE

9096.73

SHED ROOF DRIVEWAY PASSTHROUGH

BASIS OF BEARINGS
N11°07'00"W

ELEV.=9060.38

N11°07'00"W 140.00'

LOTS 23 & 24
7,000 SQ FT
0.161 AC
ADDRESS: 421
PITKIN STREET

LOT 23
LOT 24

1 STORY
WOOD FRAME
HOUSE
949 SQUARE FEET

CHIMNEY

PLANTER

FFE 9062.75

BSMT 9057.08

ROOF (TO BE REMOVED)

DECK

PAVERS

EAVE 9070.56

30% SLOPE +

15% SLOPE +

SHED

PARKING AREA

THE COUNTESS ROOM

GRAVEL DRIVEWAY

PROPOSED CABIN ZONING SETBACK

50.00'

S78°53'00"W

N78°53'00"E

28.06

10.0'

5.0'

8.5'

3.0'

20.0'

20.2'

9.9'

9.2'

5.8'

28.1'

15.4'

14.5'

12.3'

9.1'

ELEV.=9058.13

S11°07'00"E 140.00'

PITKIN STREET
(80' R-O-W)

9057.86

9057.12

9056.94

GRAVEL PARKING AREA

SEWER MANHOLE
RIM ELEV.
=9057.32

ALLEY
(40' R-O-W)
(NOT CONSTRUCTED)

LOTS 1-4

PHONE

TV

ELEC

10'

6th AVENUE
(75' R-O-W)
(NOT CONSTRUCTED)

75.00'

VICTORIA SEAL

ROYAL FLEAK

ROYAL CLIFF

VIEWS

SUNWATCH PAD

SMALL PINE TREE

GRAVEL DRIVEWAY

ADJACENT HOUSE

9060 9062 9064 9066 9068 9070 9072 9074 9076 9078 9080 9082

NOTE: ACCORDING TO COLORADO LAW, YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.

COLORADO REGISTERED
ROBERT R. JENKS
26292
PROFESSIONAL LAND SURVEYOR

Drawn JJK/ESH	Dwg 22086TP	Project 22086
Checked RRJ	Date 10/19/2022	Sheet 1 of 1

R-A-N-G-E W-E-S-T INC.
ENGINEERS & SURVEYORS
P.O. Box 589
Silverthorne, CO 80498 970-468-6281

Attachment B:
Proposed draft PUD

For reference as public benefit but not to be reviewed at this time

For reference - not to be reviewed at this time

Snowfell Cabins
Planned Unit Development Agreement

This Planned Unit Development Agreement ("Agreement") is made between Andrew Richmond and Lauren Echevarria a/k/a Lauren Richmond ("Richmond"), the Lindrose Living Trust dated April 18, 2012 ("Lindrose") (Richmond and Lindrose are collectively referred to as "Owners") and the Town of Frisco ("Town"). The effective date of this Agreement shall be the date it is fully executed by Owners and Town.

Recitals

A. Richmond owns the real property described as Lots 23 and 24 Block 34, Town of Frisco, Summit County, Colorado ("Richmond Property").

B. Lindrose owns the real property described as Lots 13, 14, and part of 15, Block 33, Town of Frisco, Summit County, Colorado ("Lindrose Property").

C. The Town has agreed to vacate the 6th Avenue Right-of-Way between Pitkin Street and the alley to the north to the Owners according to Resolution _____. All real property described in Recitals A, B, and C is collectively referred to as the "Property" unless distinguished as Richmond or Lindrose Property.

D. The Owners and Town agree to subdivide the Property pursuant to Frisco Town Code ("Code") section 180-2.6.3 for minor subdivisions.

E. The Owners and Town agree to create a planned unit development ("PUD") for the Property pursuant to section 180-2.4.2 of the Code.

F. The objective of the Owners and Town in this Agreement is to create a development that preserves the local character of the Town of Frisco while creating local housing and preserving the views and natural vegetation of the area.

WHEREFORE, the Owners and Town agree:

1. Overlay Zone. The PUD created by this Agreement is an overlay zoning district. Where this Agreement does not address a specific development standard or requirement of the Code, the provisions of the Code shall apply. Where the Agreement addresses a specific development standard or requirement, the provisions of this Agreement shall supersede such specific provisions of the Code.

2. Lot Size. The Property shall be subdivided into four (4) lots known as the Snowfell Cabins Planned Unit Development. The lots are specifically described on the Snowfell Cabins PUD Map, attached to this Agreement as Exhibit A. The lots shall be the following sizes:

Lot 1 is 3,500 square feet.

Lot 2 is 3,500 square feet.
Lot 3 is 8,120 square feet.
Lot 4 is 11,518 square feet

Lot 4 may subdivide its Primary Resident unit from the main residence on the Lindrose Property as described in paragraph 4 of this Agreement. In that instance, the newly created lot with the Primary Resident unit may have a size ranging from 1,000 square feet to 5,000 square feet, and Lot 4 may have a lot size ranging from 6,518 square feet to 10,518 square feet.

3. Density. The maximum density for Lots 1, 2 and 3 shall be one (1) single family residential unit per Lot, and Lot 3 may also construct one (1) Accessory Dwelling Unit. The Accessory Dwelling Unit may be in a detached building, attached to the principal dwelling unit, or a garage. Habitation of all Accessory Dwelling Units described in this Agreement shall be subject to the restrictions of paragraph 17 of this Agreement only, no other restrictions to habitation of the Accessory Dwelling Units shall apply.

4. Primary Resident Unit on Lindrose Property. As part of the consideration for the vacation of the 6th Avenue right-of-way, Lindrose, or its successor, will construct a local unit for a Primary Resident, subject to the same restrictions as Paragraph 17 of this Agreement. Construction of this additional unit for a Primary Resident must be begin within three (3) years of either of the following acts: i) any alteration of the existing residence or new construction requiring a building permit; or ii) any transfer of the Lindrose Property. Lindrose, or its successor, will be considered to have begun construction on the additional unit by submitting plans to the Town's planning department which are reasonably calculated to meet the requirements of the Code and this Agreement. The Primary Resident unit on the Lindrose Property may be a single family or duplex dwelling unit, or an Accessory Dwelling Unit. The Primary Resident unit on the Lindrose Property may be no larger than 1,250 square feet in gross floor area, including all levels, but excluding basements and attached garages. The Primary Resident unit on the Lindrose Property may be subdivided as a separate lot or developed as an Accessory Dwelling Unit. At the option of the owner of the Lindrose Property at the time of construction of the Primary Resident Unit, the Lindrose Property Primary Resident unit or all of the Lindrose Property may be made subject to this Agreement.

5. Design. Residences are encouraged to appear as a small cabin that is reflective of Frisco's historic architecture in terms of its small scale, pitched roof, has the appearance of natural siding, and miner's-cabin influenced past. Residences are also encouraged to incorporate sustainable building techniques including, but not limited to LEED certification, net-zero building, and solar panels.

6. Open Space and Lot Coverage. Each Lot shall contain a minimum of 600 square feet of open space. This open space requirement is the only lot coverage restriction on the Property. Driveways twelve (12) feet or less in width shall count as open space for the purpose of this requirement.

a. Disturbed Areas on Steep Slopes. On slopes from 15 percent to 30 percent, net site disturbance shall not exceed 60 percent of the total area within this

range of slopes. On slopes greater than 30 percent, net site disturbance shall not exceed 25 percent of the total area over this range of slope. The surveys required by § 180-6.5(C)(2)(c) of the Code are not required for the Property.

7. Setbacks. The setbacks shall be as follows:

Minimum Front Yard Setback: 8 feet
Minimum Side Yard Setback: 5 feet
Minimum Rear Yard Setback: 5 feet
Minimum Distance Between Structures: 5 feet

8. Building Sizes. The residences on Lots 1 and 2 may be no larger than 1,250 square feet in gross floor area, including all levels, but excluding basements and attached garages. The residence on Lot 3 may be no larger than 1,500 square feet in gross floor area, including all levels, but excluding basements and attached garages.

9. Building Heights. The maximum building height for the Snowfell Cabins Planned Unit Development shall be 30 feet. In those instances where a structure has a 8/12 roof pitch or greater, then the maximum building height limit may be up to 32 feet. When measuring the height of a building built on a slope, the building base shall be measured from highest ground elevation on which the building sits. Building height shall be measured from the ground floor and not from any walkout basement that meets the requirements of a basement in paragraph 10 of this Agreement.

10. Basements and Crawlspaces. Basements or other similar below-grade living areas are permitted in the Snowfell Cabins Planned Unit Development. A basement shall not exceed the gross floor area of the ground floor of the unit and shall be located primarily below the grade of the property so as not to be visible when viewed from the ground level. No more than 30 percent of the wall area of the basement may be above the finished grade and visible. A basement, regardless of its configuration or intended use, shall provide an egress window meeting the requirements of Chapter 65, Town of Frisco Building Construction and Housing Standards. Crawlspaces located below grade are permitted in the Snowfell Cabins Planned Unit Development, but shall not exceed the gross floor area of the ground floor for the unit. Crawlspaces shall not be habitable living space as defined by Chapter 65, Town of Frisco Building Construction and Housing Standards. A crawlspace area may be used for storage, mechanical equipment, or other similar uses that do not involve habitation.

11. Covered Porches and First Floor Heights. Covered porches may be built on each residence in the Snowfell Cabins Planned Unit Development. Covered porches are excluded from the gross floor area and lot coverage restrictions. Porches shall be designed to be in scale with overall development. First floor ceiling heights are not otherwise limited.

12. Parking. On-site parking areas shall be provided in the amount of one parking space per bedroom, with a maximum of two parking spaces required per residence.

13. Garages. Each Lot may have either an attached or detached garage. The maximum size of a garage shall not exceed 550 square feet. Lots may also share a common garage. The maximum size of a common garage shall not exceed 850 square feet. If a common garage is constructed it need not meet setback requirements to other buildings within the Snowfell Cabins Planned Unit Development though it must still meet setback requirements to real property not subject to this Agreement.

14. Storage Sheds. Storage sheds are permitted so as long as the storage shed does not exceed 50 square feet of floor area. The floor area for an attached storage shed is exempt from the floor area calculation for residences, but a shed is subject setback requirements.

15. Certified Solid-Fuel-Burning Devices. A residence may contain a Certified Solid-Fuel-Burning Device as long as the device meets the emission standards set forth in Section VI of Regulation No. 4 of Volume 1 of the Colorado Air Quality Control Commission.

16. Covenants. Additional covenants and restrictions on the Property will be contained the Declaration for Snowfell Cabins Planned Unit Development ("Declaration"). That Declaration shall incorporate this Agreement by reference. In the event of a conflict between the terms of this Agreement and the Declaration, this Agreement shall prevail.

17. Local Restriction. The Primary Resident unit on the Lindrose Property and Lots 1, 2, and 3 in the Snowfell Cabins Planned Unit Development must be owned by Primary Residents only. For the purposes of this Agreement, a "Primary Resident" means:

- a person and their spouse and dependents who works an average of 30 hours or more per week at a business in Summit County, Colorado that holds a valid and current business license, or is otherwise generally recognized as a legitimate business, and earns at least 75% of their income from such business; or is a person who is retired, was 60 years of age or older at the time of retirement; for the 5 years immediately prior to retirement worked an average of 30 hours or more per week at a business in Summit County, Colorado that held a valid and current business license, or is otherwise generally recognized as a legitimate business, and earned at least 75% of their income from such business; and
- whose Principal Place of Residence is a residence on the Property in the Snowfell Cabins Planned Unit Development and is a registered voter in the Frisco, Colorado. "Principal Place of Residence*"* means the home or place in which one's habitation is fixed and to which one has a present intention of returning after a departure or absence therefrom. To determine a person's Principal Place of Residence, the criteria set forth in C.R.S. § 31-10-201(3) shall apply.

The term "business" means an enterprise or organization providing goods and/or services, whether or not for profit, and shall include, but not be limited to, educational, governmental, and other similar institutions.

A Lot may be leased, for a term of not less than nine (9) months, to a party who qualifies as a Primary Resident.

All owners or renters of a Lot qualify as a Primary Resident as long as they are a spouse, partner, child, or parent of Primary Resident who meets all qualifications of this Paragraph 17.

18. Development. All houses developed on the Property will be reviewed as a Minor Site Plan Project as defined by the Code.

19. Modification. No substantial modification, removal, or release of the provisions of this Agreement shall be permitted except upon approval by all Parties to this Agreement.

20. Enforcement. The provisions of this Agreement are made for the benefit of the residents, occupants, and owners of Snowfell Cabins Planned Unit Development as well as the Town. This Agreement shall run with the land and is enforceable in law or in equity by the residents, occupants, and owners of Snowfell Cabins Planned Unit Development as well as the Town.

OWNERS

_____
Andrew Richmond Date

_____
Lauren Echevarria Date

_____
Marta Lindrose as Trustee Date
For the Lindrose Living Trust dated April 18, 2012

TOWN OF FRISCO

_____
By:_____ Date
Title:_____

For reference - not to be reviewed at this time

Snowfell Cabins
Planned Unit Development Agreement

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- a person and their spouse and dependents who works an average of 30 hours or more per week at a business in Summit County, Colorado that holds a valid and current business license, or is otherwise generally recognized as a legitimate business, and earns at least 75% of their income from such business; or is a person who is retired, was 60 years of age or older at the time of retirement; for the 5 years immediately prior to retirement worked an average of 30 hours or more per week at a business in Summit County, Colorado that held a valid and current business license, or is otherwise generally recognized as a legitimate business, and earned at least 75% of their income from such business; and
- whose Principal Place of Residence is a residence on the Property in the Snowfell Cabins Planned Unit Development and is a registered voter in the Frisco, Colorado. "Principal Place of Residence" means the home or place in which one's habitation is fixed and to which one has a present intention of returning after a departure or absence therefrom. To determine a person's Principal Place of Residence, the criteria set forth in C.R.S. § 31-10-201(3) shall apply.

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OWNERS

_____
Andrew Richmond Date

_____
Lauren Echevarria Date

_____
Marta Lindrose as Trustee Date
For the Lindrose Living Trust dated April 18, 2012

TOWN OF FRISCO

_____
By:_____ Date
Title:_____

Footnotes:
*--- **(1)** ---*
***Editor's note—** Ord. No. 98-01, adopted February 17, 1998, repealed and reenacted Ch. 142. Former Ch. 142 pertained to the same subject matter, and derived from Ord. No. 89-29, adopted November 7, 1989.*
***Cross reference—** Streets, Ch. 155.*

§ 142-1. - Declaration of policy.

The Town Council hereby finds and declares that the general policy of the town is to prohibit the vacation or divesting of any right, title or interest of the town in and to any land, including any roadway or easement. Any application for vacation pursuant to this chapter may be granted only in cases where the Town Council, in the exercise of its sole and exclusive discretion, first finds an overriding public interest favors the vacation.

(Ord. No. 98-01, 2-17-98)

§ 142-2. - Definitions.

As used in this Chapter 142, unless the context otherwise requires:

A. Access easement includes any platted or designated public improvement dedicated to the town for the purposes of vehicular or pedestrian access or travel, whether or not it has been used as such.
B. Easement includes any platted or designated public easement dedicated to the town, whether or not it has been used as such.
C. Roadway includes any platted or designated public street, alley, lane, parkway, avenue, road or other public way, whether or not it has been used as such.
D. Vacation means the extinguishment by ordinance of all right, title or interest of the town in and to any roadway or easement.

§ 142-3. - Vacation by ordinance.

A. All right, title or interest of the town in and to any roadway or easement, shall be divested only upon adoption by the Town Council of an ordinance vacating such property or portion thereof located within the corporate limits of the town. If a roadway constitutes a boundary line of the town, it may be vacated only by a joint action of the Board of County Commissioners of the County and the Town Council.

B.

Any ordinance effecting a vacation under this article shall contain the following findings, if applicable:

1. That no land adjoining any roadway to be vacated is left without an established public road connecting said land with another established public road.
2. That the roadway or easement to be vacated is no longer necessary for present or prospective public use or convenience.

(Ord. No. 98-01, 2-17-98)

§ 142-4. - Vacation procedures.

The following procedures shall be adhered to by person(s) requesting the vacation of any roadway or easement:

A. Attendance at a pre-application conference held in the manner described in section 180-2.3.1 of the Town of Frisco Unified Development Code.

B. Submission to the Town Manager of a written application that includes the following information:

1. Name, address and telephone number of the applicant(s). An application submitted by multiple applicants shall designate one person from among them to serve as the primary applicant.
2. Accurate legal description of the roadway or easement to be vacated.
3. A map showing the roadway or easement to be vacated and abutting properties. The Town Manager or his/her designee may, in the exercise of his/her sole and exclusive discretion, require the applicant to furnish a survey of the roadway or easement to be vacated.
4. Names and addresses of all record owners of property adjacent to that portion of the roadway or easement to be vacated. If possible, all such record owners should sign the application for vacation.
5. Reasons for the requested vacation.
6. Certification by the applicant(s) that the statements referred to in subsection 142-3(B)(1) above are true.
7. Signature of the applicant(s).

C. Review of the proposal by the town staff and preparation of a staff report, and in the case of the proposed vacation of an easement, other than an access easement, preparation of a proposed vacation ordinance.

D. Vacations of roadways and access easements must be referred to the planning commission for a public hearing and recommendation to the town council. The Director of the Community Development Department or his/her designee may refer the vacation of an easement, other

than an access easement, to the Planning Commission for a public hearing and recommendation to the Town Council, if he/she determines that such a referral would assist the Town Council in determining whether or not to grant the vacation request.

E. After a public hearing, the Planning Commission may either continue the matter for further information and study for not more than 30 days or forward its recommendation to approve, disapprove or conditionally approve the application to the town council and the applicant(s). Any application forwarded to the Town Council will be in the form of an ordinance.

F. The Town Council will consider the proposed vacation ordinance and render its decision either to adopt or deny the ordinance on first reading in accordance with the requirements of the Charter with respect to the adoption of ordinances. Prior to adoption of the vacation ordinance on first reading, the Town Council shall find that an overriding public interest favors the vacation.

(Ord. No. 98-01, 2-17-98; Ord. No. 18-04, 6-12-18)

§ 142-5. - Public notice.

Public notice will be given at least once prior to final adoption of the vacation ordinance by publication, posting and mailing in the manner provided for in 180-2.3.5 of the Town of Frisco Unified Development Code.

(Ord. No. 98-01, 2-17-98; Ord. No. 18-04, 6-12-18)

§ 142-6. - Valuation of vacated property.

Prior to the submission of a request for vacation to the planning commission or town council for consideration, the Town Manager or his/her designee will cause an appraisal to be made at the expense of the applicant(s), unless the Town Manager or Town Council waives such appraisal. An appraisal is not required for the vacation of an easement, other than an access easement, unless specially requested by the Town Manager or Town Council. The appraisal will include the following information:

A. Valuation of the property being vacated;

B. Valuation of any property that may be benefitted by the vacation, valued prior to vacation;

C. Valuation of any property that may be benefitted by the vacation, valued after vacation; and

D. Any other determinations requested by the town council.

(Ord. No. 98-01, 2-17-98; Ord. No. 21-08, 7-13-21)

§ 142-7. - Payment of costs.

The applicant or primary applicant is responsible for the payment of any costs associated with the vacation including, without limitation, payment for administrative services performed by the community development department, appraisals, surveys, recording fees, documentary fees, legal services rendered to the town in connection with the application, and other customary costs in the following manner:

A. A development review account shall be established at the time the vacation application is submitted to the town manager. Such development review account will be managed pursuant to subsection 180-2.3.2.D of the Town of Frisco Unified Development Code.

B. If the town incurs costs beyond the amount deposited in the vacation review account and the applicant or primary applicant does not pay those costs within 30 days after written notice from the town, the town shall be entitled to certification of the assessment for sale or a lien for those costs on the property owned by each applicant, which lien may be perfected and foreclosed in the manner provided in C.R.S. § 38-22-101 et seq., as amended.

(Ord. No. 98-01, 2-17-98; Ord. No. 18-04, 6-12-18)

§ 142-8. - Vacation of portion of request.

The town shall have the right, in its sole and exclusive discretion, to vacate only a portion of the total area requested for vacation.

(Ord. No. 98-01, 2-17-98)

§ 142-9. - Reservation of rights-of-way or easements.

The town may reserve any right-of-way or easement for the continued use of existing or future sewer, gas, water or similar pipelines and appurtenances, for overland drainage, drainage facilities or canals and appurtenances, and for electric, cable television, telephone and similar lines and appurtenances, or any other public purpose. Notwithstanding the foregoing, the town is presumed to have reserved in any property vacated under this chapter all necessary, useful or common easements related to underground utilities or services.

(Ord. No. 98-01, 2-17-98)

§ 142-10. - Conditions on vacation.

The Planning Commission may recommend, and the Town Council in the ordinance effecting a vacation may impose, reasonable conditions on said vacation, to preserve and promote the public health, safety and welfare of the inhabitants of the town and the public generally. Such reasonable conditions may include the payment of money to the town as consideration for a vacation, when the vesting of title upon vacation may

confer a benefit upon the new owner of the vacated roadway or easement, where the town has purchased or may purchase a roadway or easement to replace that being vacated, to avoid a windfall to the new owner, or for any other reason deemed by the town council to be in the public interest.

(Ord. No. 98-01, 2-17-98)

§ 142-11. - Recordation of vacation.

In the event of a vacation in accordance with this article, the documents vacating such property or interest in property, including, but not necessarily limited to, any resolution, ordinance, deed, conveyance document, plat or survey, shall be recorded in the office of the Clerk and Recorder of the county in which such property is located.

(Ord. No. 98-01, 2-17-98)

§ 142-12. - Preservation of access.

No roadway or part thereof shall be vacated so as to leave any land adjoining said roadway without an established public road connecting said land with another established public road.

§ 142-13. - Vesting of title and zoning upon vacation.

Any ordinance effecting a vacation under this article shall state to whom title to the vacated land shall vest upon vacation. Except as otherwise provided in the ordinance effecting a vacation, title to the lands included within a roadway or so much thereof as may be vacated shall vest in accordance with the provisions of C.R.S. § 43-2-302 or its successor statute. Whenever any roadway shall be vacated, such roadway or portion thereof shall automatically be classified in the same zoning district as the property to which it attaches without further action on the part of the town.

(Ord. No. 98-01, 2-17-98; Ord. No. 18-04, 6-12-18; Ord. No. 21-08, 7-13-21)

§ 142-14. - Adjacent platted lands.

Where title to any vacated property vests with the owner of adjacent platted land, said owner shall, within 90 days of the adoption of the ordinance effecting such vacation, take all necessary steps to include said vacated property within the plat of the adjacent land.

(Ord. No. 98-01, 2-17-98)

REAL ESTATE APPRAISAL REPORT
OF



6th Avenue Right of Way

LOCATED
6th Avenue ROW and
521 and 601 Pitkin Street
Frisco, CO 80443

FOR
William Gibson
Town of Frisco
PO Box 4100
Frisco, CO, 80443

BY
Fred M. Ebert, SRA
Certified General Appraiser #CG1314171

File Number 21B9-093

EBERT APPRAISAL SERVICE, INC
Mountain Real Estate Appraisers and Consultants

Fred M. Ebert, SRA, CG1314171
Robert H. Ebert, CR1322010

October 7, 2021

William Gibson
Town of Frisco
PO Box 4100
Frisco, CO, 80443

RE: 6th Avenue Right of Way
Frisco, CO 80443

Dear Mr. Gibson:

As requested, I have inspected the subject property, I have researched market data and completed a Valuation Analysis of the above-described property. The conclusion of this study is presented to you in the attached report. This narrative report is considered a real estate appraisal. The Intended Users are William Gibson and the Town of Frisco as well as the owners of the adjacent properties to the Right of Way. The Intended Use is to estimate the market value of the Town owned lot for potential purchase or transfer of this section of land.

The valuation estimate is for the market value of the fee simple estate of the subject property. The analysis is subject to the extraordinary assumptions, limiting conditions and certifications as set out in the full narrative report which is attached. This appraisal is written to the standards of USPAP, The Appraisal Standards Board, and the standards of FIRREA.

The conclusions presented herein are strictly dependent on the attached narrative report and also the specific and limiting conditions of this appraisal. The narrative report will lead a reader through the appraisal process and provides the documentation, support and reasoning in arriving at the estimated value. Thus, reading of the report in its entirety is required to fully understand the value estimate.

After completing the detailed study and thorough analysis of the subject, it is my opinion that the market value of the subject properties “as is” and “as subdivided and encumbered” as of September 9, 2021 with an estimated market time of less than 6 months on average is:

VALUE CONCLUSIONS						
"AS IS" VALUES				"AS PROPOSED" VALUES		
				Property	Site Sizes SF	Value
6th Ave. Right of Way		$ 158,000		West Right of Way Lot	7,000	$ 210,000
521 Pitkin Street		$ 1,050,000		East Right of Way Lot	3,500	$ 175,000
601 Pitkin Street		$ 1,125,000		Rear 521 Lot	3,500	$ 210,000
				521 Pitkin with house	3,500	$ 507,000
				601 Pitkin with house	7,300	$ 1,125,000

EXTRAORDINARY ASSUMPTIONS AND HYPOTHETICAL CONDITIONS:

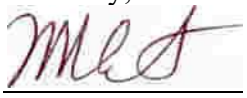
1. *This site is a vacated street Right of Way and is being valued under the **hypothetical condition** that it will be approved to house one or two residential structures upon sale, placed on a permanent foundation, with no more than 1000 SF of floor area. This house is to be deed restricted for full time occupancy by an owner who is an employee working within Summit County, and the site will not be allowed further expansion of living area and other site improvements and structures may be limited to preserve the site as much as possible. This restriction usually also allows occupancy by a retiree over 60 years of age, as owner or tenant. There may be other exceptions or conditions placed by the town, which are assumed to not adversely affect value.*

2. *The Town of Frisco "Cabin" zoning allows up to 50% of the houses in a development to have up to 1200 square feet of living area. Therefore, 2 of the sites are estimated to be improved with 1200 square foot houses. Houses are also allowed basements, which in this market can create additional living area. This report values the sites with the extraordinary assumption that basements cannot be used for additional bedrooms, units or have plumbing or finishes that accommodate additional occupants, and that the basements are an option that do not contribute to value for this valuation purpose.*

3. *This appraisal was performed following public awareness that COVID-19 was affecting residents in the United States. At the time of the appraisal, COVID-19 protocol was beginning to experience easing of restrictions and although there have been widespread health and economic impacts, this is subsiding and mask mandates are easing as well as the restrictions on retail, hospitality and restaurants, although the recent resurgence due to the Delta Variance is continuing mask mandaates and concerns about gathering. The effects of COVID-19 on the real estate market in the area of the subject property have been measurable based on reliable data. The period since the lock down that occurred from March to May of 2020 has seen unprecedented activity in mountain real estate and other businesses with resort areas offering alternatives to the urban areas and remote working offering alternatives to the office environment that has been the historical model for work. The internet and advent of the remote worker has opened up these areas in the resort and more rural areas in character as good alternatives, stimulating a storng home sales market with rising prices and land values. The analyses and value opinion in this appraisal are based on the data available to the appraiser at the time of the assignment and apply only as of the effective date indicated. No analyses or opinions contained in this appraisal should be construed as predictions of future market conditions or value. 2020 proved to show the highest dollar volume in sales in the area, including Summit, Eagle, Grand and surrounding counties in Colorado.*

If I can be of any further assistance to you in this matter, please do not hesitate to call.

Sincerely,



Fred M. Ebert, SRA, Colorado Certified General Appraiser #CG1314171

Table of Contents

EXECUTIVE SUMMARY OF IMPORTANT FACTS AND CONCLUSIONS 2

CERTIFICATION 4

ASSUMPTIONS AND LIMITING CONDITIONS 5

APPRAISER'S COMPETENCY 7

IDENTIFICATION OF ASSIGNMENT 10

IDENTIFICATION OF SUBJECT PROPERTY 10
HISTORY OF THE SUBJECT PROPERTY, CURRENT CONTRACTS OR AGREEMENTS 10
PURPOSE AND INTENDED USE OF APPRAISAL REPORT 10
SCOPE OF APPRAISAL REPORT 10
EFFECTIVE DATE OF APPRAISAL 11
EFFECTIVE DATE OF REPORT 11
DEFINITIONS 11

MARKET AREA AND NEIGHBORHOOD DATA 15

DESCRIPTION OF REGIONAL SETTING, SUMMIT COUNTY DATA 15
REGIONAL ANALYSIS – SUMMIT COUNTY 16
REAL ESTATE AND DEVELOPMENT 19
RETAIL SALES 30
NEIGHBORHOOD DATA – FRISCO 32

SUBJECT DATA 36

SITE DATA, TOPOGRAPHY & SURROUNDING LAND USES 36
EASEMENTS OR ENCROACHMENTS 36
TAXES 36
ZONING 36
DEED RESTRICTIONS 36
HAZARDOUS CONDITIONS 36
FUNCTIONAL ADEQUACY OF THE SITE 36
FLOOD PLAIN 37
SURVEY MAP SHOWING THE ROW 38
TOPOGRAPHIC MAP AND SLOPE ANALYSIS 39
SUBJECT DESCRIPTION 40
DENSITY PENDING APPROVAL 40
SITE PHOTOS 40

HIGHEST AND BEST USE ANALYSIS 44

VALUATION OF MOST PROBABLE USE 46

LAND VALUE 46
RESIDENTIAL ZONED LAND 63
FINAL RECONCILIATION 75

ADDENDUM 78

PROPOSED DEVELOPMENT LETTER 78

EXECUTIVE SUMMARY OF IMPORTANT FACTS AND CONCLUSIONS

Appraisal	
Purpose of Report	To provide an opinion of the market value of the 6th Avenue ROW and adjacent properties "as is" and "as subdivided"
Owner/s	Town of Frisco
Client	William Gibson, Town of Frisco
Intended Users	William Gibson, Town of Frisco
Intended Use	To estimate the market value of the Town owned lot for aid in negotiations for the potential purchase of the site.
Effective Date of Appraisal	September 9, 2021
Effective Date of Report	October 7, 2021
Property Interest	Market Value of the Fee Simple Estate as an abandoned ROW (before) and as a building site for a small, restricted house (After)
Appraiser	Fred M. Ebert, SRA
Site	
Property Location	*Part of* 6th Avenue ROW, and Adjacent properties Frisco, CO 80443
Land Area	10,500 sf (0.241 Ac approx.)
Zoning	Not Zoned, Surrounding land in Low Density Residential
Flood Status	Panel# 08117C0353F eff 11/16/2018 Zone X
Market and Financial Information	
Most Probable Purchaser	**As Vacant:** Public use or adjacent property owner for greenbelt **As Improved:** N/A
Highest and Best Use	Open Space, greenbelt, or a single home site if approved
Estimated Marketing Time: Marketing time for the property for the value estimate herein is on average estimated to be 1-6 months.	
Valuation Analysis	
For the valuation of a vacant site, the market approach to value (direct sales comparison approach) is most appropriate.	

Conclusions of Value Study:

After completing the detailed study and thorough analysis of the subject, it is my opinion that the market value of the subject property, as of September 9, 2021, with an estimated market time of less than 6 months on average is:

VALUE CONCLUSIONS						
"AS IS" VALUES				"AS PROPOSED" VALUES		
				Property	Site Sizes SF	Value
6th Ave. Right of Way		$ 158,000		West Right of Way Lot	7,000	$ 210,000
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EXTRAORDINARY ASSUMPTIONS AND HYPOTHETICAL CONDITIONS:

1) *This site is a vacated street Right of Way and is being valued under the **hypothetical condition** that it will be approved to house a residential structure upon sale, placed on a permanent foundation, with no more than 1000 SF of floor area. This house is to be deed restricted for full time occupancy by an owner who is an employee working within Summit County, and the site will not be allowed further expansion of living area and other site improvements and structures may be limited to preserve the site as much as possible. This restriction usually also allows occupancy by a retiree over 60 years of age, as owner or tenant. There may be other exceptions or conditions placed by the town, which are assumed to not adversely affect value.*

2) *The Town of Frisco "Cabin" zoning allows up to 50% of the houses in a development to have up to 1200 square feet of living area. Therefore, 2 of the sites are estimated to be improved with 1200 square foot houses. Houses are also allowed basements, which in this market can create additional living area. This report values the sites with the **extraordinary assumption** that basements cannot be used for additional bedrooms, units or have plumbing or finishes that accommodate additional occupants, and that the basements are an option that do not contribute to value for this valuation purpose.*

3) *This appraisal was performed following public awareness that COVID-19 was affecting residents in the United States. At the time of the appraisal, COVID-19 protocol was beginning to experience easing of restrictions and although there have been widespread health and economic impacts, this is subsiding and mask mandates are easing as well as the restrictions on retail, hospitality and restaurants, although the recent resurgence due to the Delta Variance is continuing mask mandaates and concerns about gathering. The effects of COVID-19 on the real estate market in the area of the subject property have been measurable based on reliable data. The period since the lock down that occurred from March to May of 2020 has seen unprecedented activity in mountain real estate and other businesses with resort areas offering alternatives to the urban areas and remote working offering alternatives to the office environment that has been the historical model for work. The internet and advent of the remote worker has opened up these areas in the resort and more rural areas in character as good alternatives, stimulating a storng home sales market with rising prices and land values. The analyses and value opinion in this appraisal are based on the data available to the appraiser at the time of the assignment and apply only as of the effective date indicated. No analyses or opinions contained in this appraisal should be construed as predictions of future market conditions or value. 2020 proved to show the highest dollar volume in sales in the area, including Summit, Eagle, Grand and surrounding counties in Colorado.*

CERTIFICATION

The Appraiser certifies that, to the best of his knowledge and belief...

- *The statements of fact contained in this report are true and correct.*

- *The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions.*

- *I have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved.*

- *I have performed no services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding the acceptance of this assignment.*

- *I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.*

- *My engagement in this assignment was not contingent upon developing or reporting predetermined results.*

- *My compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.*

- *My analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Uniform Standards of Professional Appraisal Practice.*

- *I have made a personal inspection of the property that is the subject of this report.*

- *No one provided significant real property appraisal assistance to the person signing this certification.*

- *The reported analysis, opinions and conclusions were developed, and this report has been prepared, in conformity with the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute.*

- *The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.*

- *As of the date of this report, I have completed the continuing education program for Designated Members of the Appraisal Institute.*



Fred M. Ebert, SRA
Colorado Certified General Appraiser #CG1314171

ASSUMPTIONS AND LIMITING CONDITIONS

This appraisal is subject to the following assumptions and limiting conditions.

1. Title to the property is assumed to be good and marketable and the legal description correct.

2. No responsibility for legal matters is assumed. All existing liens, mortgages or other encumbrances have been disregarded and the property is appraised as though free and clear, under responsible management and competent marketing unless otherwise stated.

3. All sketches in this report are intended to be visual aids and should not be construed as surveys or engineering reports.

4. The information in this report has been obtained from reliable sources. The appraiser cannot, however, guarantee or be responsible for the accuracy of information furnished by others.

5. The comparable sales data relied upon in this appraisal are believed to be from reliable sources; however, it was not possible to rely on information furnished by others. Therefore, the value conclusions are subject to the correctness and verification of said data.

6. This opinion of value applies to land and improvements only. The value of trade fixtures, furnishings and other equipment has not been included with the value of the real estate.

7. Subsurface rights (minerals, oil, etc.) were not considered in making this appraisal.

8. The appraiser is not required to give testimony or attendance in court by reason of this appraisal, unless prior agreements have been made in writing.

9. The distribution of the total valuation in this report between land and improvements applies only to the existing utilization. The separate valuations for land and building must not be used in conjunction with any other appraisal and are invalid if so used.

10. The land, and particularly the soil, of the area under analysis appears firm and solid. Subsidence in the area is unknown or uncommon, but the appraiser does not warrant against this condition or occurrence.

11. The appraiser very carefully inspected the building (if as yet constructed) involved in this appraisal report and damage, if any, by termites, dry rot, or other infestations was reported as a matter of information and no guarantee of the amount or degree of damage, if any, is

implied.

12. The appraiser has inspected, as far as possible, by observation, the land and the improvements thereon. However, it was not possible to personally observe conditions beneath the soil or hidden structural components within the improvements. Therefore, no representation is made herein as to these matters and unless specifically considered in the report. The value estimate is subject to any such conditions that could cause a loss in value. Condition of heating, cooling, ventilation, electrical and plumbing equipment is considered to be commensurate with the condition of the balance of the improvements unless otherwise stated.

13. Possession of this report or a copy thereof does not imply the right of publications or use for any purpose by any other than the addressee, without the written consent of the appraiser.

14. Disclosure of the contents of this appraisal report is governed by the By-Laws and Regulations of the Appraisal Institute.

15. Neither all nor any part of the contents of this report, especially any conclusions as to value, the identity of the appraiser or the firm with which he is connected, or any reference to the Appraisal Institute or the SRA designation shall be disseminated to the public through advertising media, public relations media, news media, sales media or any other public means of communication without the prior written consent and approval of the undersigned.

16. Unless otherwise stated in this report, the existence of hazardous material, which may or may not be present on the property, was not observed by the appraiser. The appraiser has no knowledge of the existence of such materials on or in the property. The appraiser, however, is not qualified to detect such substances. The presence of substances such as asbestos, urea-formaldehyde foam insulation or other potentially hazardous materials may affect the value of the property. The value estimate is predicated on the assumption that there is not such material on or in the property, which would cause a loss in value. No responsibility is assumed for any such conditions, or for any expertise or engineering knowledge required to discover them. The client is urged to retain an expert in this field, if desired.

17. The reader should note that the owner may be subject to additional financial expenditures in accordance with the Americans with Disabilities Act (ADA), a federal law codified at 42 USC Section 12101 et seq. Among other requirements of the ADA that could apply to this property, Title III of the ADA requires owners and tenants of "public accommodations" to remove barriers to access by disabled persons and provide auxiliary aids and services for hearing, vision or speech impaired persons by January 26, 1992. The regulations under Title III of the ADA are codified at 28 CFR part 36. The reader should not that the appraiser is not a qualified expert as to the subject's compliance or noncompliance under the ADA. In recognition of this law's recent enactment, some of the requirements may be subject to interpretation. The client is strongly urged to retain the services of qualified independent expert/advisor concerning the interpretation and application of the ADA and to determine

the subject' compliance. The value reported herein is subject to revision should it be later determined that additional expenditures are required.

18. The contents of the appraisal are for limited private use only. If, by virtue of this report, it becomes necessary to testify in court in support of the value estimate, an additional fee will be charged. If this report becomes the property of any other party, other than the addressee or the person who has paid the fee connected herewith, permission must be obtained from the original addressee for reproduction or additional copies, and additional fees will be charged for any further consultation, reappraisal, or review of the property.

19. Retail or residential Market does not decline from current levels of activity.

APPRAISER'S COMPETENCY

I have been appraising in this market for 43 years and have appraised numerous properties similar to this development.

Qualifications for

Fred M. Ebert, SRA - Colorado Certified General Appraiser

EDUCATION

Licensing: State of Colorado - Certified General Licensed Appraiser #CG1314171, Expires 12/31/2021

Formal: University of Illinois - B.A. in Finance March 1977

Memberships: Residential Member of The Appraisal Institute; The appraiser is current on all educational requirements for the SRA Designation with the Appraisal Institute.

Professional:

March 31, 2017	Appraisal Institute, Review Theory, General
March 1, 2017	Appraisal Institute, Business Practices and Ethics
March 2, 2017	Appraisal Institute, National 7 Hour USPAP
April, 2015	Appraisal Institute, National 7-Hour USPAP
January, 2014	Appraisal Institute, General Market Analysis and H&B Use
April, 2013	Appraisal Institute, General Report Writing and Case Study
February, 2013	Appraisal Institute, Business Practices and Ethics
June, 2011	Appraisal Institute, Market Analysis/Highest and Best Use
April, 2011	Appraisal Institute, USPAP Update
March, 2011	Appraisal Institute, 15 Hour USPAP
February, 2011	Appraisal Institute, Cost Approach and Land Value

March, 2010	Appraisal Institute, Business Practices and Ethics
July, 2009	Appraisal Institute, Appraisal Curriculum Overview
July, 2009	Appraisal Institute, Appraising Distressed Commercial RE
May, 2009	Appraisal Institute, 7 Hour USPAP Update
January, 2008	Appraisal Institute, 7 Hour USPAP Update
July, 2006	Appraisal Institute, Course 510 Advanced Income Capitalization
July, 2006	Appraisal Institute, HP 12-C Financial Calculator
April, 2006	Appraisal Institute, Course 420 Business Ethics
June, 1999	General Applications, Course 320
January, 1998	Appraisal Institute -Standards of Prof. Practice Part C
December, 1993	Appraisal Institute - II530 Adv. Sales Comparison & Cost Approaches
November, 1992	Appraisal Institute - Appraising with the Residential Reviewer in Mind
November, 1991	Appraisal Institute - Standards Professional Practice, Part B
April, 1991	Applied Income Property Valuation - 202
February, 1990	SRA Designation from the Society of Real Estate Appraisers
December, 1987	SREA/Professional Practice
October, 1987	FNMA Guidelines to URAR
March, 1987	R41-C and The Appraiser URAR Seminar
December, 1983	Demonstration Narrative Report
June, 1977	Income Property Appraising (201)
February, 1977	Residential Appraising (101)
February, 1977	Income Property Valuation (102)

CONFERENCES/SEMINARS/CLINICS
APPRAISAL INSTITUTE OR PRECEDING ORGANIZATION:

2008-present	**I regularly attend seminars and conferences on a wide variety of topic related to appraisal and the industry. There are too many to list individually here.**
June, 2008	Vineyard Appraising, Napa, CA
April, 2008	Conservation Easements, Overview
January, 2005	Economic Update, Denver and Colorado
September, 2004	Design in a Down Market, Land Uses, Resort Development and Transportation
January, 2004	Economic Update, Colorado Apartment Market
September, 2003	Affordable Housing, Restaurants, Redevelopment
September, 2002	Hotel Restoration, Water Rights, Transportation
September, 2001	Mountain Resort Properties, Costs, Transportation
November, 2000	Serving the Client, FNMA and Banking
January, 1999	Economic Forecasting
Instructor:	
April, 1993	How to Measure Difficult Properties - Appraisal Institute
January, 1986	Colorado Mountain College - Appraisal for Brokers

EMPLOYMENT HISTORY

1977, to Present Real Estate Appraiser/Ebert Appraisal Service

SAMPLE LIST OF CLIENTS

BANK OF AMERCIA
U.S. BANK
BANK OF THE WEST
ALPINE BANK, COLORADO
MILLENNIUM BANK, COLORADO
GREAT OUTDOORS (GOCO) COLORADO
TOWN OF FRISCO, CO
TOWN OF SILVERTHORNE, CO
TOWN OF DILLON, CO
UPPER BLUE SANITATION DISTRICT
EAGLE RIVER WATER AND SANITATION DISTRICT
BANK OF COLORADO
HIGH COUNTRY BANK

REFERENCES:

Scott Erchul, High Country Bank scott.erchul@highcountrybank.com (719) 395-1004
Larry Reavis, Alpine Bank, larryreavis@alpinebank.com (970) 513-5901
Deane Davenport, Bank of the West, deane.davenport@bankofthewest.com (303) 202-5750
Dan Burroughs, Town of Dillon, Dburroughs@townofdillon.com (970) 262-3405


Colorado Department of Regulatory Agencies
Division of Real Estate
COPY
Fred Marcus Ebert
Certified General Appraiser
COPY
CG1314171
License Number
01/06/2020
Issue Date
Active
License Status
12/31/2021
Expiration
Verify this license at http://dora.colorado.gov/dre
Marcia Waters
Director: Marcia Waters
Licensee Signature

IDENTIFICATION OF ASSIGNMENT

IDENTIFICATION OF SUBJECT PROPERTY

Street Address: *Part of* 6th Avenue ROW, and Adjacent properties
Frisco, CO 80443

Parcel Size: 75 x 140 = 10,500 sf (0.241 Ac approx.)

Two other properties involved in the subdivision include 521 Pitkin Street and 601 Pitkin Street. The land and house sizes before and after the subdivision will be addressed individually in this report.

HISTORY OF THE SUBJECT PROPERTY, CURRENT CONTRACTS OR AGREEMENTS

The current owner of the subject is the Town of Frisco. Adjacent property owners Richmond and Lindrose (+partners) have submitted a request to the Town of Frisco to develop a four-unit subdivision that will include the Right of Way land. The plan is to use the front part of 2/3 of the ROW for access, the rear to the west for a house of limited size and subdivide the lot to the west for two distinct houses of limited size (one existing). Eventually, a fourth house or unit of limited size will be added to the property to the east, which will also receive the east 1/3 of the ROW. This analysis is based on allowing a 1,000-1,200 SF cabin (house) on these properties at the largest. For this privilege, the owners will deed restrict the four units for ownership by a local resident who works in the County at least 30 hours per week.

PURPOSE AND INTENDED USE OF APPRAISAL REPORT

I was contacted by William Gibson, Town of Frisco, who asked me to give my opinion of the *market value* of the property as of the effective date of this appraisal for potential purchase from the Town of Frisco. There are various valuations needed to accomplish this, as listed below.

This appraisal is written solely for our client and the Town of Frisco for their purpose. Other users may find the conclusions of this report misleading. The appraisal is compiled according to the scope of work agreed upon by the client in an appraisal report.

SCOPE OF APPRAISAL REPORT

The scope of this appraisal assignment is to provide the client with an estimate of the cash equivalent "Market Value" for the “Fee Simple Interest” in the subject properties and proposed properties. The appraisal is as of the effective date considering any encumbrances or existing leases, in a narrative report format. This appraisal utilizes the market and cost approaches to value, with some support from the income approach in discussion format. The procedures and methodologies employed in this approach are outlined before the valuation section.

Since it is a public involved purchase, I have provided a value of the property “as is” and “as zoned for residential use”. In addition, I am addressing the value of the adjacent properties “As is” and “As Subdivided” and restricted.

Below is a summary description of the extent of the appraisers' involvement in the collection, confirmation, and reporting of data as incorporated herein.

Within the limitations of the appraisal process and based on the imperfect data gathered from various Primary and Secondary sources the appraiser has attempted to provide a reasonable estimate of the "Market Value" for the subject property, supported by a full narrative report detailing the analyses. The Summit MLS, regional listing services, public records and local property owners and managers were searched or interviewed for comparable sales, rentals and other data. Appraisal files were searched for additional sales, lease and capitalization rate information. Whenever possible, data was confirmed with market participants, and double checked with public records.

This report will delve into the residential market in Frisco to derive values for sites of various sizes using recent sales, contracted properties and listed properties to attempt to bracket values for land and houses. This will also include accounting for the older houses on the adjacent sites around the Right of Way and address the changes in value as a result of the subdivision and restrictions that are proposed.

The purpose is to estimate a market value to aid in negotiations between the Town of Frisco and the owners of the adjacent land, who wish to create a subdivision with deed restricted houses.

EFFECTIVE DATE OF APPRAISAL

The valuation date is the last date of inspection, September 9, 2021. It should be noted that real estate values are influenced by a large number of external factors, which can change rapidly. Therefore, the value estimate is considered reliable only as of the date of this appraisal and cannot be guaranteed as a fact that will actually be realized.

EFFECTIVE DATE OF REPORT

This is the date of transmission to our client, October 7, 2021.

DEFINITIONS

For purposes of this report, the following terms are used and these specific definitions apply to these terms. Following the definitions is a brief explanation of how these definitions are used:

Fee Simple Estate[1].

Absolute ownership unencumbered by any other interest or estate; subject only to the limitation imposed by the government powers of taxation, eminent domain, police power, and escheat.

[1] The Appraisal of Real Estate, Twelfth Edition, The Appraisal Institute.

Market Value[2]

Market value is defined as the most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently, knowledgeably and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

a. buyer and seller are typically motivated;
b. both parties are well informed or well advised, and each acting in what he considers his own best interest;
c. a reasonable time is allowed for exposure in the open market;
d. payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable there to; and
e. the price represents the normal consideration for the property sold, unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

Most probable Market Value is the final conclusion of this report.

Marketing Time[3]

The time it takes an interest in real property to sell on the market sub-sequent to the date of an appraisal.

Reasonable marketing time is an estimate of the amount of time it might take to sell an interest in real property at its estimated market value during the period immediately after the effective date of the appraisal; the anticipated time required to expose the property to a pool of prospective purchasers and to allow appropriate time for negotiation, the exercise of due diligence, and the consummation of a sale at a price supportable by concurrent market conditions. Marketing time differs from exposure time, which is always presumed to precede the effective date of the appraisal.

(Advisory Opinion 7 of the Appraisal Standards Board of The Appraisal Foundation and Statement on Appraisal Standards No. 6, "Reasonable Exposure Time in Real Property and Personal Property Market Value Opinions" address the determination of reasonable exposure and marketing time.) See also exposure time.

Exposure Time[4]

The time a property remains on the market.

The estimated length of time the property interest being appraised would have been offered on the market prior to the hypothetical consummation of a sale at market value on the effective date of the

[2] RTC Uniform Appraisal Instructions and 12 CFR, Part 1608.
[3] The Appraisal of Real Estate, Twelfth Edition, The Appraisal Institute.
[4] The Appraisal of Real Estate, Twelfth Edition, The Appraisal Institute.

appraisal; a retrospective estimate based on an analysis of past events assuming a competitive and open market. Exposure time is always presumed to occur prior to the effective date of the appraisal. The overall concept of reasonable exposure encompasses not only adequate, sufficient and reasonable time but also adequate, sufficient and reasonable effort. Exposure time is different for various types of real estate and value ranges and under various market conditions.

(Appraisal Standards Board of The Appraisal Foundation, Statement on Appraisal Standards No. 6, "Reasonable Exposure Time in Real Property and Personal Property Market Value Opinions")

Market value estimates imply that an adequate marketing effort and reasonable time for exposure occurred prior to the effective date of the appraisal. In the case of disposition value, the time frame allowed for marketing the property rights is somewhat limited, but the marketing effort is orderly and adequate. With liquidation value, the time frame for marketing the property rights is so severely limited that an adequate marketing program cannot be implemented. (The Report of the Appraisal Institute Special Task Force on Value Definitions qualifies exposure time in terms of the three above-mentioned values.)

Extraordinary Assumption

An assumption, directly related to a specific assignment, which, if found to be false, could alter the appraiser's opinions or conclusions. Extraordinary assumptions presume as fact otherwise uncertain information about physical, legal, or economic characteristics of the subject property; or about conditions external to the property such as market conditions or trends; or about the integrity of data used in an analysis. An extraordinary assumption may be used in an assignment only if:

- *It is required to properly develop credible opinions and conclusions;*
- *The appraiser has a reasonable basis for the extraordinary assumption;*
- *Use of the extraordinary assumption results in a credible analysis; and*
- *The appraiser complies with the disclosure requirements set forth in USPAP for extraordinary assumptions. (USPAP 2002 ed.)*

Hypothetical Condition

That which is contrary to what exists but is supposed for the purpose of analysis. Hypothetical conditions assume conditions contrary to known facts about physical, legal, or economic characteristics of the subject property; or about conditions external to the property, such as market conditions or trends; or about the integrity of data used in an analysis. A hypothetical condition may be used in an assignment only if:

- *Use of the hypothetical condition is clearly required for legal purposes, for purposes of reasonable analysis, or for purposes of comparison;*
- *Use of the hypothetical condition results in a credible analysis; and*

The appraiser complies with the disclosure requirements set forth in USPAP for hypothetical conditions. (USPAP 2002 ed.)

Marketing and Exposure Time

The comparable properties were generally sold with the buyer seeking out the owner and negotiating purchase without listing the property.

Land Sales Listing Times:

Comparable #1	Not Listed
Comparable #2	Not Listed
Comparable #3	1 Day
Comparable #4	0 Day
Comparable #5	Not Listed

None of the sales in this report were exposed to the market more than 30 days to contract. Some listings are priced high for the market and may have extended this time period, but not by much.

All of the configurations in this report are experiencing heavy demand and would be exposed to the market for less than 30 days before getting offers at or near the appraised value, perhaps even higher.

As open space, outdoor parking or for access, this parcel is appraised to sell within a 6-12 month marketing period.

Appraisal Process

The appraisal process consists of three major analysis steps.

First, a Highest and Best Use/Marketability Analysis is made of the subject. This consists of analysis of physical, legal, locational, and effective market demand, which impinge on the possible uses and performance of the subject property.

Note: In studies such as this, the objective is to establish rational premise of value, not necessarily to make a conclusion of fact. See Limiting Conditions for additional definitions of study scope.

The second step is the specific valuation of the highest and best use as determined in Step #1. This analysis employs as many separate techniques as are appropriate. Valuation analysis is typically made in the following categories:

COST APPROACH - An estimate of the present replacement cost of the improvements, less accrued depreciation, plus the land value.

INCOME APPROACH - Capitalization of the net income that the property is capable of producing.

SALES COMPARISON APPROACH (Market Approach) - Comparison with similar properties that have sold in the market.

The final step is a reconciliation of all the preceding analysis into a final estimate of value. In the case of the subject, only the direct sales comparison approach is applicable.

Valuation Analysis

The valuation study includes above average detail as prescribed by standards of professional practice of the Appraisal Institute and general practice. This part of the study includes specific sales documentation and comparison analysis.

Overall Study

In my opinion, this study meets more than the minimum standards of the Appraisal Institute and conforms to the guidelines of The Uniform Standards of Professional Appraisal Practice (USPAP).

MARKET AREA AND NEIGHBORHOOD DATA

DESCRIPTION OF AREA SETTING - INTRODUCTION

As utilized in this appraisal, the subject's area or neighborhood is defined as follows:

> *"A grouping of complementary land uses consisting of individuals, buildings or businesses within, or as part of, a larger community. These groupings may be devoted to residential use, trade or service activities, industrial activities, recreational activities, or cultural and civic activities."*

A neighborhood can be a section of a community or an entire community. It is a more or less unified area with definite boundaries which exhibit a fairly high degree of similar uses, tenancy and certain other characteristics. In essence, it is a group of complementary land uses that exhibit a greater degree of commonality than the larger area.

The value of a property is not found exclusively in its physical attributes. Economic, political, sociological and environmental forces found in the area interact to influence real estate values. In order to determine the degree of influence extended by these forces on a property, there past, present and probable future trends must be studied in depth. A detailed analysis of the subject area is described below.

DESCRIPTION OF REGIONAL SETTING, SUMMIT COUNTY DATA

The subject is located in Frisco, Colorado which is centrally located in southern Summit County. This section summarizes population, employment and other economic trends and projections for the area surrounding the subject. In our analysis of the area, we have found that much of the activities of the area are directed towards all of Summit County; therefore, we are of the opinion that statistics for the county accurately reflect the market area that includes the subject property. In addition to our discussion regarding the County as a whole, we will include a brief overview of

the Town of Frisco.

REGIONAL ANALYSIS – SUMMIT COUNTY

Summit County is well located approximately one hour west of the Denver Metro Area along the Interstate 70 (I-70) corridor. It is the home to four world-class ski resort areas, including Arapahoe Basin, Breckenridge, Copper Mountain and Keystone. Consequently, much of the local economy is centered on the tourist industry. The local towns of Frisco, Dillon, Silverthorne and Breckenridge plus ski resort areas of Keystone and Copper Mountain offer a variety of activities and services. A major focus of the area is recreational activities. Winter activities include downhill and cross country skiing, snowboarding, ice-skating, snowshoeing, snowmobiling, dog sledding and sleigh rides. Summer activities are growing in popularity, however do not yet generate the amount of traffic that the ski areas do. These summer activities include biking, boating on Lake Dillon reservoir, fishing, hiking, and golfing on one of five area courses.

Because of the proximity to Denver, the economy of Summit County is closely tied to that of Denver.

POPULATION

Colorado.gov estimates the population for Summit County and the towns within the county as follows:

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Colorado	**5,050,332**	**5,123,692**	**5,195,943**	**5,272,942**	**5,352,866**	**5,454,707**	**5,542,951**	**5,616,567**	**5,694,311**
Summit County	**28,073**	**28,043**	**28,302**	**28,734**	**29,331**	**30,124**	**30,682**	**30,979**	**30,974**
Blue River	853	853	864	874	884	905	924	932	926
Breckenridge	4,552	4,549	4,604	4,678	4,756	4,893	4,968	4,972	4,989
Dillon	906	904	910	922	933	956	971	975	968
Frisco	2,694	2,712	2,755	2,824	2,901	3,015	3,109	3,168	3,194
Montezuma	65	65	65	66	66	68	69	69	67
Silverthorne	3,904	3,913	3,956	4,038	4,263	4,399	4,554	4,703	4,789
Unincorp. Area	15,099	15,047	15,148	15,332	15,528	15,888	16,087	16,160	16,041

https://demography.dola.colorado.gov/population/data/muni-pop-housing/

Because much of Summit County is undevelopable National Forest land, it is generally rural in nature. Additionally, the population figures swell during high tourist seasons, with a much smaller "local" or year-round population. The population is spread throughout the county, with the largest population living in unincorporated areas.

EMPLOYMENT

The unemployment rates for the area are as follows:

UNEMPLOYMENT IN MOUNTAIN COUNTIES									
	Dec-19	Mar-20	May-20	Jun-20	Aug-20	Sep-20	Dec-20	Mar-21	Jun-21
COLORADO	2.40%	4.80%	10.00%	10.70%	6.60%	6.20%	8.20%	6.50%	6.30%
US*	3.50%	4.40%	13.00%	11.10%	8.40%	7.90%	6.70%	6.00%	5.90%
Chaffee	2.10%	4.40%	10.10%	9.10%	4.90%	5.10%	6.90%	5.50%	4.60%
Clear Creek	2.00%	4.30%	13.50%	12.90%	7.60%	6.80%	9.60%	6.40%	6.40%
Eagle	1.80%	3.40%	17.70%	15.70%	7.80%	7.00%	7.40%	5.10%	6.20%
Grand	1.80%	3.70%	16.00%	13.20%	6.50%	6.10%	7.70%	5.30%	5.70%
Lake	1.60%	3.30%	15.00%	13.80%	6.60%	6.20%	7.20%	5.40%	5.90%
Park	2.20%	4.10%	8.20%	8.60%	4.90%	4.60%	5.70%	5.00%	4.90%
Routt	1.70%	3.60%	14.40%	13.10%	6.50%	5.90%	7.70%	4.80%	5.60%
Summit	**1.40%**	**2.70%**	**19.40%**	**16.60%**	**8.10%**	**8.10%**	**7.80%**	**4.40%**	**6.20%**
Garfield	2.50%	5.40%	10.00%	9.70%	5.70%	5.40%	7.10%	6.00%	5.60%

Source: https://www.colmigateway.com/vosnet/lmi/default.aspx?pu=1&plang=E
*Seasonally not adjusted | *Seasonally adjusted*

The Colorado Department of Labor and Unemployment shows a total labor force in Summit County of 17,675 as of April 2021. This labor pool shrinks in the "shoulder seasons" of late spring and fall, and summer is also lower than winter due to the many seasonal employees that are hired during this peak time. Any surge in the unemployment rate in the county is typically attributable to the cyclical employment of a resort area. Unemployment is typically lower in Summit County than in the State of Colorado.

Tourism is the top economic driver in Summit County. Consequently, employment in the lodging and food service industry represents over 30 percent of the workforce. Retail trade accounts for an additional six percent of the workforce. Silverthorne has developed as a primary retail location, with over 70 factory outlet stores. Most of the "chain" and "big-box" retail stores are located in the Silverthorne/Dillon area along the Highway 6 corridor. The most notable exception is the Wal-Mart located in Frisco along the Highway 9 corridor and just off Interstate Highway 70. The Breckenridge and Frisco historic downtown Main Street areas are both good locations for retail stores, but cater to the pedestrian tourist shopper rather than the regional shopper.

The table below shows the preliminary distribution of industries in Summit County for the 4th quarter of 2020.

Rank	Industry	Establishments	Employment
1	Accommodation and Food Services	263	5,853
2	Retail Trade	288	2,843
3	Arts, Entertainment, and Recreation	58	1,612
4	Public Administration	24	1,470
5	Construction	356	1,465
6	Health Care and Social Assistance	113	1,258
7	Real Estate and Rental and Leasing	354	1,191
8	Administrative and Waste Services	159	1,019

9	Educational Services	29	784
10	Professional and Technical Services	355	752

The table below shows the preliminary estimated average wage in Summit County and Colorado for the year 2020.

Area	Ave Employment	Ave Hourly Wage*	Ave Weekly Wage	Ave Annual Wage*
Colorado	2,603,622	$32.03	$1,281.22	$66,623.25
Summit County	19,504	$22.80	$911.92	$47,420.04

RESIDENTIAL RENTS

Fair Market Rents are reported by the US Department of Housing and Urban Development (HUD) for Summit and the surrounding counties for 2021 as follows:

2021 Fair Market Rents					
County	**0 BR**	**1 BR**	**2 BR**	**3 BR**	**4 BR**
Summit	**1,200**	**1,321**	**1,607**	**2,178**	**2,530**
Eagle	1,132	1,331	1,715	2,139	2,326
Routt	1,052	1,059	1,395	1,796	2,415
Clear Creek	1,179	1,304	1,605	2,186	2,486
Grand	755	874	1,144	1,484	1,981
Chaffee	601	799	911	1,167	1,434
Park	1,179	1,304	1,605	2,186	2,486
Garfield	947	953	1,212	1,636	2,098

Actual market rents will vary by property. These conclusions by HUD indicate 1% to 20+% increases from 2019 for the mountain counties and a 1% to 15% increase for all counties considered in the Denver MSA. The Denver MSA includes the mountain counties of Clear Creek and Park. The eastern parts of these counties are mostly bedroom communities for the Denver MSA, but the western sides of these counties spread to the mountain regions and are more of an influence to the resort communities around Grand and Summit counties than the Front Range communities around Denver. From the HUD website, Fair Market Rent (FMR) is determined as follows:

"FMRs are gross rent estimates. They include the shelter rent plus the cost of all tenant-paid utilities, except telephones, cable or satellite television service, and internet service. The level at which FMRs are set is expressed as a percentile point within the rent distribution of standard-quality rental housing units. The current definition used is the 40th percentile rent, the dollar amount below which 40 percent of the standard-quality rental housing units are rented. The 40th percentile rent is drawn from the distribution of rents of all units occupied by recent movers (renter households who moved to their present residence within the past 15 months). HUD is required to ensure that FMRs exclude non-market rental housing in their computation. Therefore, HUD excludes all units falling below a specified rent level determined from public housing rents in

HUD's program databases as likely to be either assisted housing or otherwise at a below-market rent, and units less than two years old."

Area Median Income continues to improve in the County, as reported by the Summit County Housing Authority.

SCHA

2021 SUMMIT COUNTY AREA MEDIAN INCOME (AMI)

Figures in RED are directly from HUD 4/1/2021; other numbers have been extrapolated

AMIs

Household size	HUD EXTREMELY LOW INCOME	50%	60%	HUD LOW INCOME	TRUE 80%	85%	90%	95%	100%	105%	110%	115%	120%	125%	130%	140%	160%
1 person	*$20,200*	*$33,650*	$40,380	*$53,850*	$53,840	$57,205	$60,570	$63,935	$67,300	$70,665	$74,030	$77,395	$80,760	$84,125	$87,490	$94,220	$107,680
1.5 person	$21,650	$36,050	$43,260	$57,700	$57,680	$61,285	$64,890	$68,495	$72,100	$75,705	$79,310	$82,915	$86,520	$90,125	$93,730	$100,940	$115,360
2 person	*$23,100*	*$38,450*	$46,140	*$61,550*	$61,520	$65,365	$69,210	$73,055	$76,900	$80,745	$84,590	$88,435	$92,280	$96,125	$99,970	$107,660	$123,040
3 person	*$26,000*	*$43,250*	$51,900	*$69,250*	$69,200	$73,525	$77,850	$82,175	$86,500	$90,825	$95,150	$99,475	$103,800	$108,125	$112,450	$121,100	$138,400
4 person	*$28,850*	*$48,050*	$57,660	*$76,900*	$76,880	$81,685	$86,490	$91,295	*$96,100*	$100,905	$105,710	$110,515	$115,320	$120,125	$124,930	$134,540	$153,760
4.5 person	$30,025	$49,975	$59,970	$80,000	$79,960	$84,958	$89,955	$94,953	$99,950	$104,948	$109,945	$114,943	$119,940	$124,938	$129,935	$139,930	$159,920
5 person	*$31,200*	*$51,900*	$62,280	*$83,100*	$83,040	$88,230	$93,420	$98,610	$103,800	$108,990	$114,180	$119,370	$124,560	$129,750	$134,940	$145,320	$166,080
6 person	*$35,580*	*$55,750*	$66,900	*$89,250*	$89,200	$94,775	$100,350	$105,925	$111,500	$117,075	$122,650	$128,225	$133,800	$139,375	$144,950	$156,100	$178,400
7 person	*$40,120*	*$59,600*	$71,520	*$95,400*	$95,360	$101,320	$107,280	$113,240	$119,200	$125,160	$131,120	$137,080	$143,040	$149,000	$154,960	$166,880	$190,720
8 person	*$44,660*	*$63,450*	$76,140	*$101,550*	$101,520	$107,865	$114,210	$120,555	$126,900	$133,245	$139,590	$145,935	$152,280	$158,625	$164,970	$177,660	$203,040

REAL ESTATE AND DEVELOPMENT

Scarcity

The Summit County Planning Department estimates a total of 28,718 housing units exist in Summit County as of January 1, 2010. This figure is from a build-out study that estimates the "realistic build out" for all residential units in Summit County at 76% currently.

Because of limited land for future expansion, a strong redevelopment and renovation market was seen during the real estate boom from 2002 to 2006, especially in the Frisco area. Several mixed-use projects were completed, generally proximate to Frisco's Main Street, that include first floor commercial or retail use with residential units built above. Numerous older single family homes and townhomes have undergone renovation within the past years as well, with several existing homes purchased for "scrape off" redevelopment as "trophy" second homes. This redevelopment (and new development) has slowed in the past six quarters, shown in greater detail in the following section.

Environmental issues that may affect future development in Summit County include high traffic congestion along the I-70 corridor, especially during peak summer and winter seasons. Water issues also face much of the more rural areas of Colorado, as especially the Denver Water Board attempts to provide a sustainable supply to the rapidly growing metro area. Effects on tourism were especially felt during recent drought years, when wild fires deterred summer travel and Denver's use of water from Dillon Reservoir curtailed some summer activities.

Deed Restricted Housing

Affordable housing for local workers is perhaps the biggest concern for county and city governments as well as local employers and residents alike. This economy has been operating under a critical shortage of housing that is causing problems keeping workers in place and inhibiting the expansion and creation of businesses throughout the mountain resort communities. A recent study by two consultants, Wendy Sullivan of WSW Consulting, and Melanie Rees, of Rees Consulting, concluded that the Summit County market needed 659 units to "catch up" with demand, and another 1025 units to "keep up" with demand through 2020.

Many projects have been developed over the past decade and longer, but there are now a critical volume of units planned in projects hosted by a variety of public and private entities that may go a long way toward stabilizing demand. If successful, these projects could come close to meeting the demand and needs. Developments planned and underway total over 1600 units, but some could be a few years before starting, and others will take a few years to build out. Most will include a mix of rental and for-sale units.

Besides the current and anticipated demand from existing forces, the economy in general suffers when companies leave the mountains or cannot set up shop here because employees and owners cannot afford or find housing. A glaring example is Vail Associates moving their corporate headquarters, management, bookings and property operations to a Denver suburb from Avon, in the center of the The Vail Valley. Several other companies have followed suite. Studies cited by these most recent reports are dated, with data from 2012. Since then, the housing market has recovered with a limited number of new units built, causing prices and rents of housing to skyrocket. The shortage has been further exacerbated by on-line home and unit rental sites, and advances in software and management practices that make it easier and more profitable for owners to rent their units by themselves short term, or through internet based management. This alone has removed hundreds of units from the long-term rental market, and maybe more.

When considering the above trends, the housing needs are likely much greater than these studies indicate. Following are projects proposed and under way in Summit County.

Project	Town	#unit	Type	Ownersl	Status	remaks
Huron Landing	Breckenridge	26	2-BR, rental	rental	expected to be completed by summe	JV Breckenridge & Summit
West Hills	Keystone	66	2-3 BR Duplex	own	25/66 phase 1 under construction	first phase next phases: followed by several buildings of apartments for rent and some smaller units for sale.
Smith Ranch (formerly Silver Mountain)	Silverthorne	206		own, rental	future project	high infrastructure costs and funding uncertainties stalled the development. With reauthorization of 5A, the Town is reconsidering Smith Ranch.
Lake Hill	Frisco	436	single family detached, duplexes, townhouses, and large multifamily buildings, rental & own	own, rental	planning phase	for next 10 yrs; w/ some real challenges getting utilities to this site
Wellington Lincoln Park	Breckenridge	65	2,3,4 BR		under construction w/ 7 out of 65 completed in 2016	Another phase of the Wellington neighborhood development
Block 11	Breckenridge	250			future project	in Runway Sub
Denison Placer 2	Breckenridge	30	10 1-BR; 20 studios, rental	rental	Under/Pending Construction	20 units are reserved for students at CMC and 10 units are restricted to Town of Breckenridge
Denison Placer 1 (BLUE 52)	Breckenridge	70	18 apartments (Blue 52) 52 1-3 BR townhomes	own, rental	Construction is scheduled to start in spring 2017	first phase - 17 townhomes
Snake River Basin	Keystone	196	120 year-round rentals made up of one- and two-bedroom apartments, 36 three-bedroom, four-occupant seasonal units and 40 low-income, mostly one-bedroom rentals.	rental	planning phase	The adjacent land is also the site of the recently approved Village at Wintergreen workforce complex on which Vail is working with development partner Gorman & Company. The county board gave the thumbs up to that 196-unit Snake River Basin project on May 22.
Mary Ruth Place Project	Frisco	8	1 studio 5 1-bedroom units 2 2-bedroom units		Construction is projected to begin in summer 2017	
Basecamp Project	Frisco	24	rental	rental	Construction timeline is targeted for 2017	to be located on upper floors of Basecamp Development
Wendy's/Exxon Project	Frisco	4			planning phase	above gas station for employees
Boatyard Expansion Project	Frisco	5	rental	rental	construction completion is projected for late summer 2017.	
Copper Point Townhomes	Copper Mount	15	single family attached units with 3 Duplex and 3 Triplex buildings.Sale	own	first units are projected to be complete November, 2016 with the entire project completed by June 2017.	
Mc Cain	Breckenridge	100			future project	
Stan Miller Annexation	Breckenridge	105		own (65) rental (40)	future project	
Berlin Placer	Breckenridge	36	employee units	own	under review	
PUD in Dillon	Dillon	3		rental	planning phase	Three (3) affordable rentals are proposed as part of a 65-unit condominium PUD.
County owned land	Keystone	25		own	planning phase	The County is looking to partner with a private builder
Total		1670				

COMMERCIAL REAL ESTATE ACTIVITY

Recently, some of the remaining development land for commercial use has been built out in Frisco, with a retail center anchored by a Whole Foods Market and in Silverthorne, with a Lowes and Murdoch's Home and Ranch Supply. A proposed Home Depot that was cancelled.

Dillon and Silverthorne have attracted other nationally recognized retailers to the area including Walgreens, Qdoba, Chipolte, Noodles and Company, as well as others. There is currently a parcel of commercial development land available to the market in the same regional retail center as City Market and Walgreens. This activity shows the long term bullish attitude of these retailers for Summit County.

During 2009, commercial property sales slowed to almost a halt. As of year-end 2009, there were only six commercial property transactions that occurred on the Summit County MLS, and at least three that occurred off the MLS. All were moderately-sized properties purchased for owner-use. Only one of the transactions was for retail use, and was sold immediately after a bank foreclosure. In 2010, commercial activity picked up a bit. As of year-end 2010, there were 15 commercial property transactions that occurred on the Summit County MLS - 13 of the sales were commercial or industrial condominiums.

Commercial inventory as of October 2021 is stable, but few properties are being offered for sale. There are currently 9 properties offered in Summit County at $19,584,000 in asking price volume. There are currently 3 pending listings offered with over $4,856,000 in asking price volume. There are currently 4 properties offered in Frisco.

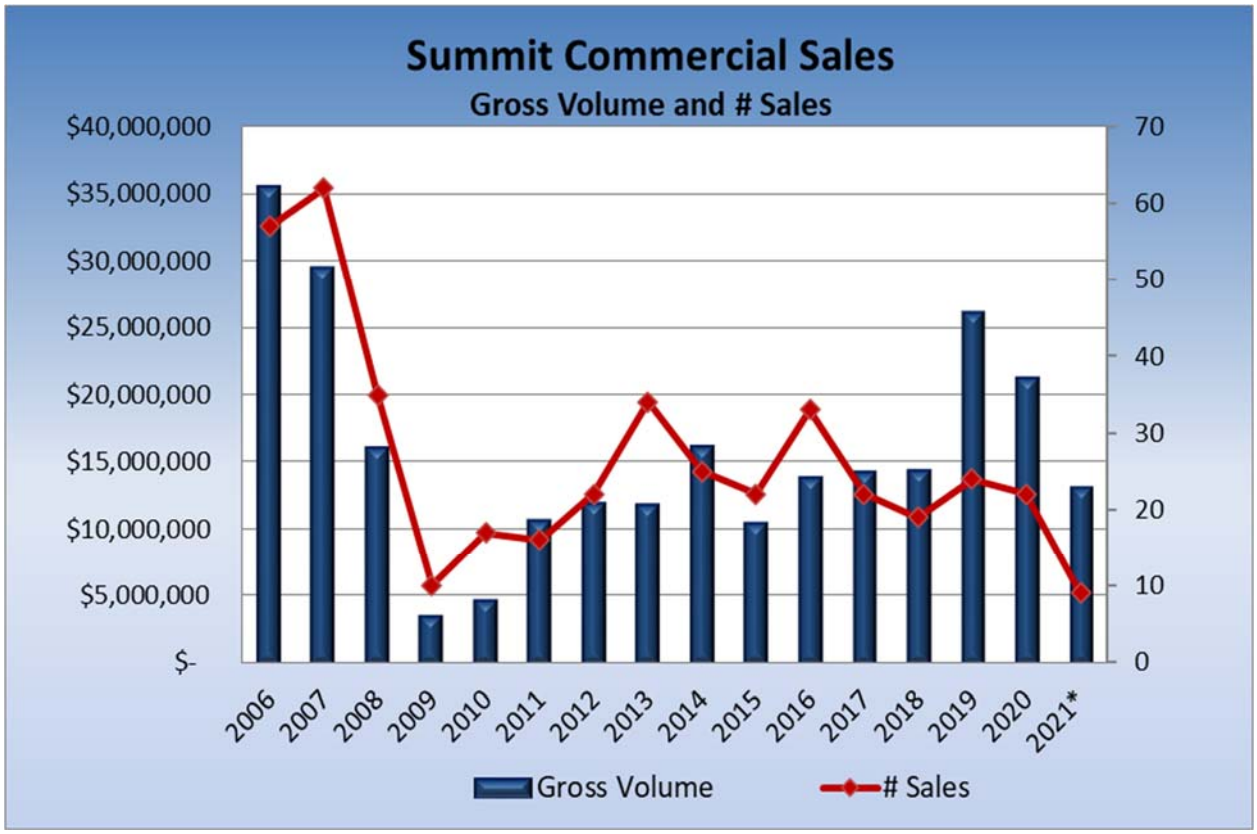
The table and graph show the trend of commercial property transactions that have been marketed on the Summit County MLS. This data was filtered to omit businesses and lease listings/transactions that did not include real estate. This data does not include private party transactions or transactions that were marketed through other means such as LoopNet.

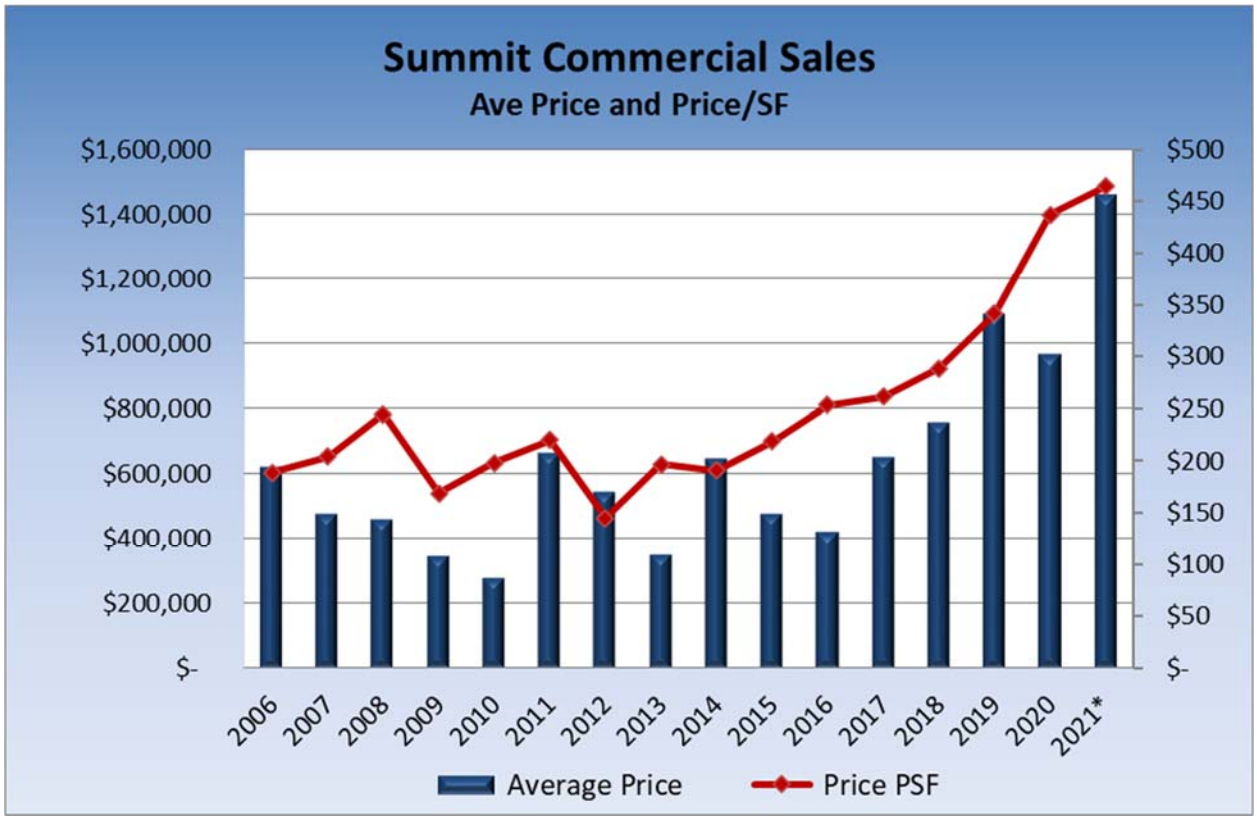
As is typical for a resort community, two of every three homes in Summit County is a second home, with a majority of Summit County second homeowners having permanent homes along the Front Range (Denver metropolitan area).

SUMMIT COUNTY COMMERCIAL SALES - MLS DATA

Year	# Sales	Average Price	Gross Volume	Price PSF	Ratio	Ave. DOM
2006	57	$ 621,772	$ 35,441,004	$ 189	91%	313
2007	62	$ 474,994	$ 29,449,628	$ 204	93%	302
2008	35	$ 459,811	$ 16,093,385	$ 245	95%	172
2009	10	$ 344,581	$ 3,445,810	$ 169	92%	153
2010	17	$ 274,338	$ 4,663,746	$ 198	81%	361
2011	16	$ 665,003	$ 10,640,048	$ 220	85%	447
2012	22	$ 544,218	$ 11,972,796	$ 145	83%	447
2013	34	$ 348,829	$ 11,860,186	$ 197	88%	602
2014	25	$ 647,874	$ 16,196,850	$ 191	88%	303
2015	22	$ 476,463	$ 10,482,186	$ 219	82%	487
2016	33	$ 419,213	$ 13,834,029	$ 253	93%	290
2017	22	$ 649,723	$ 14,293,906	$ 261	94%	247
2018	19	$ 754,500	$ 14,335,500	$ 288	93%	95
2019	24	$ 1,088,167	$ 26,116,008	$ 341	93%	87
2020	22	$ 964,744	$ 21,224,368	$ 437	94%	82
2021	9	$ 1,457,500	$ 13,117,500	$ 465	94%	95

YTD 08/23/2021



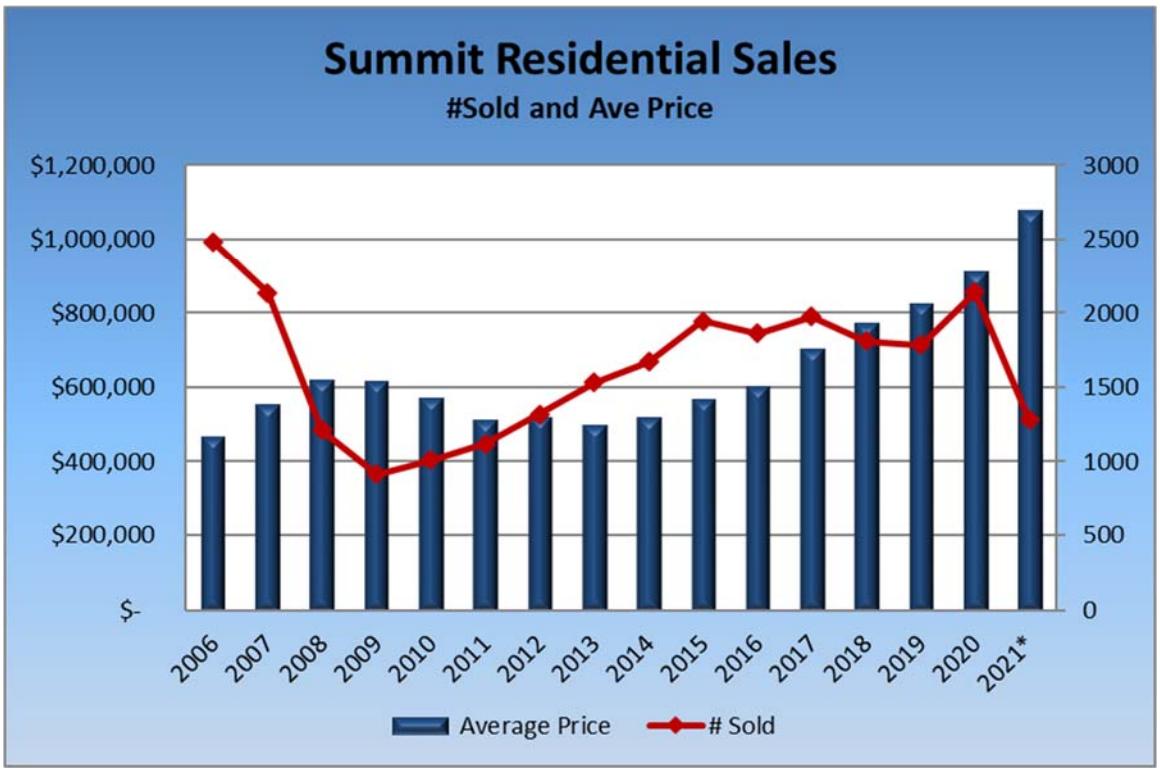

Summit Commercial Sales
Ave Price and Price/SF
$1,600,000
$1,400,000
$1,200,000
$1,000,000
$800,000
$600,000
$400,000
$200,000
$-
$500
$450
$400
$350
$300
$250
$200
$150
$100
$50
$-
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
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2019
2020
2021*
Average Price
Price PSF

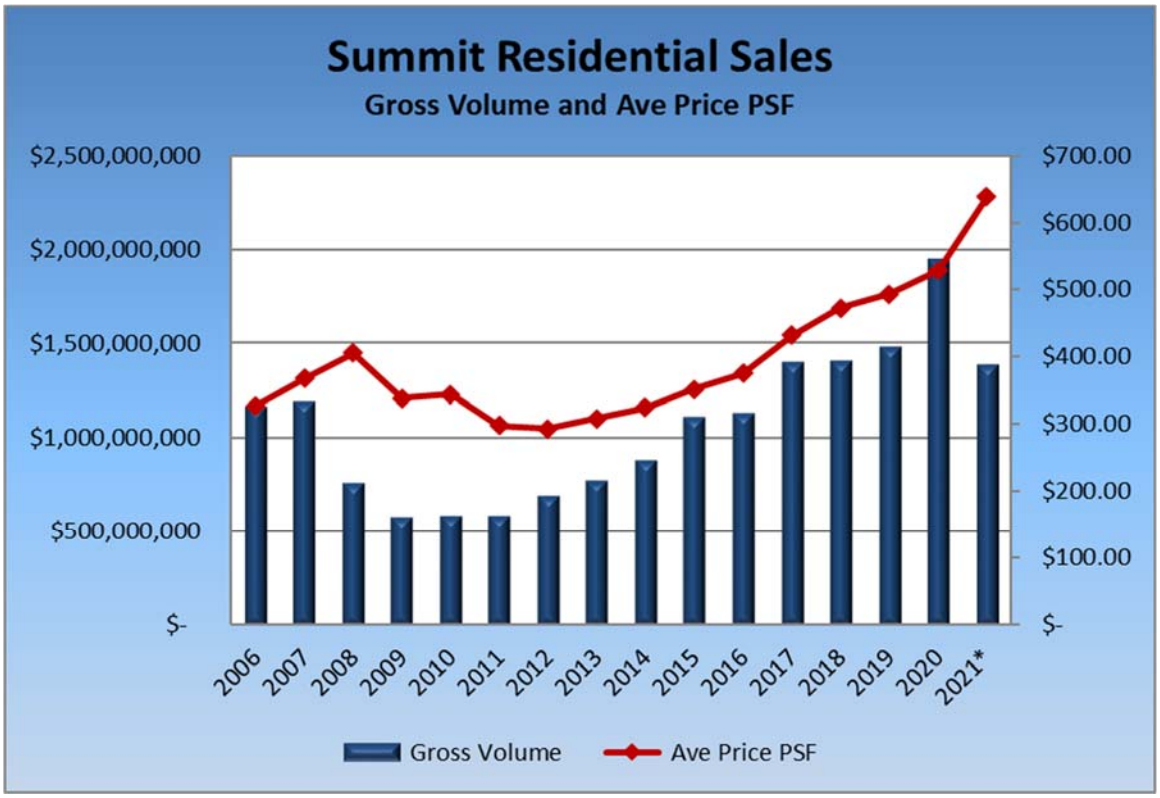
RESIDENTIAL SALES

The following figures show activity on the Summit County MLS system for all residential unit types from 2006 through YTD August 23, 2021.

AREA	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021*	Description
Breck	939	792	481	362	405	491	543	638	644	733	677	736	703	623	778	450	# of sales
	$569,084,706	$559,934,496	$397,256,457	$295,040,860	$300,288,465	$307,562,400	$347,310,945	$389,264,854	$444,992,408	$541,276,520	$540,858,008	$680,173,664	$669,187,809	$710,017,525	$923,209,810	$654,514,650	Total Volume
	$606,054	$706,988	$825,897	$815,030	$741,453	$626,400	$639,615	$610,133	$690,982	$738,440	$798,904	$924,149	$951,903	$1,139,675	$1,186,645	$1,454,477	Avg Price/Unit
	23%	17%	17%	-1%	-9%	-16%	2%	-5%	13%	7%	8%	16%	3%	20%	4%	23%	% Chg
Frisco	206	220	109	98	117	137	159	161	181	223	191	163	163	170	207	112	# of sales
	$ 108,542,430	$ 122,826,000	$ 56,600,757	$ 48,521,858	$ 56,718,090	$ 63,811,449	$ 70,723,518	$ 76,097,294	$ 87,022,809	$ 128,164,567	$ 115,058,973	$ 106,816,997	$ 127,483,115	$ 122,823,640	$ 172,088,001	$ 115,631,152	Total Volume
	$526,905	$558,300	$519,273	$495,121	$484,770	$465,777	$444,802	$472,654	$480,789	$574,729	$602,403	$655,319	$782,105	$722,492	$831,343	$1,032,421	Avg Price/Unit
	27%	6%	-7%	-5%	-2%	-4%	-5%	6%	2%	20%	5%	9%	19%	-8%	15%	24%	% Chg
Dillon	294	307	147	97	106	128	154	169	187	209	212	203	173	221	210	136	# of sales
	$ 91,481,040	$ 110,450,925	$ 54,590,802	$ 33,565,492	$ 38,600,960	$ 42,129,536	$ 54,399,422	$ 60,106,202	$ 66,925,804	$ 81,237,673	$ 81,091,484	$ 86,431,107	$ 96,021,228	$ 122,756,881	$ 126,084,840	$ 107,381,656	Total Volume
	$ 311,160	$ 359,775	$ 371,366	$ 346,036	$ 364,160	$ 329,137	$ 353,243	$ 355,658	$ 357,892	$ 388,697	$ 382,507	$ 425,769	$ 555,036	$ 555,461	$ 600,404	$ 789,571	Avg Price/Unit
	5%	16%	3%	-7%	5%	-10%	7%	1%	1%	9%	-2%	11%	30%	0%	8%	32%	% Chg
Silverthorne	415	359	242	182	192	195	225	293	329	372	394	425	351	433	529	306	# of sales
	$ 161,249,080	$ 174,696,939	$ 128,230,718	$ 96,085,808	$ 94,440,000	$ 82,586,010	$ 107,664,300	$ 128,862,865	$ 149,799,951	$ 178,040,688	$ 209,855,826	$ 266,499,225	$ 237,032,055	$ 294,355,998	$ 419,270,588	$ 283,028,580	Total Volume
	$388,552	$486,621	$529,879	$527,944	$491,875	$423,518	$478,508	$439,805	$455,319	$478,604	$532,629	$627,057	$ 675,305	$ 679,806	$ 792,572	$ 924,930	Avg Price/Unit
	20%	25%	9%	0%	-7%	-14%	13%	-8%	4%	5%	11%	18%	8%	1%	17%	17%	% Chg
Copper	159	115	51	40	33	31	42	54	73	98	95	109	91	61	111	70	# of sales
	$ 57,716,845	$ 47,985,179	$ 23,075,919	$ 20,344,000	$ 18,523,791	$ 17,000,245	$ 15,334,368	$ 21,992,094	$ 28,446,567	$ 34,820,282	$ 36,263,305	$ 54,088,961	$ 53,159,379	$ 40,578,481	$ 81,513,516	$ 56,539,140	Total Volume
	$ 362,999	$ 417,262	$ 452,469	$ 508,600	$ 561,327	$ 548,395	$ 365,104	$ 407,261	$ 389,679	$ 355,309	$ 381,719	$ 496,229	$ 584,169	$ 665,221	$ 734,356	$ 807,702	Avg Price/Unit
	22%	15%	8%	12%	10%	-2%	-33%	12%	-4%	-9%	7%	30%	18%	14%	10%	10%	% Chg
Keystone	469	349	178	137	154	136	196	218	267	305	292	339	328	274	304	204	# of sales
	$ 165,913,364	$ 170,236,516	$ 84,689,018	$ 68,583,570	$ 63,069,006	$ 58,324,120	$ 86,760,772	$ 85,497,856	$ 94,016,841	$ 132,554,525	$ 133,343,260	$ 191,245,494	$ 210,052,184	$ 177,779,146	$ 220,094,784	$ 156,397,416	Total Volume
	$ 353,760	$ 482,128	$ 475,781	$ 500,610	$ 409,539	$ 429,295	$ 442,657	$ 392,192	$ 352,123	$ 434,605	$ 456,655	$ 564,146	$ 640,403	$ 648,829	$ 723,996	$ 766,654	Avg Price/Unit
	1%	36%	-1%	5%	-18%	5%	3%	-11%	-10%	23%	5%	24%	14%	1%	12%	6%	% Chg
Total	2,482	2,142	1,208	916	1,007	1,118	1,319	1,533	1,681	1,940	1,861	1,975	1,809	1,782	2,139	1,278	# of sales
Total	$ 1,153,987,465	$ 1,186,130,055	$ 744,443,671	$ 562,141,588	$ 571,640,312	$ 572,992,124	$ 682,193,325	$ 761,821,165	$ 871,204,380	$ 1,096,094,255	$ 1,116,470,856	$ 1,385,255,448	$ 1,392,935,770	$ 1,468,311,671	$ 1,942,261,539	$ 1,373,492,594	Total Volume
Total	$ 464,943	$ 553,749	$ 616,261	$ 613,692	$ 567,667	$ 508,874	$ 517,205	$ 496,948	$ 518,266	$ 564,997	$ 599,931	$ 701,395	$ 770,003	$ 823,968	$ 908,023	$ 1,074,720	Avg Price/Unit
	17%	19%	11%	0%	-7%	-10%	2%	-4%	4%	9%	6%	17%	10%	7%	10%	18%	% Chg
Sales Data from Summit County YTD 08/23/2021																	

Graphically, the following charts show trends in number of sales and average prices per unit, based on the data in the above spreadsheet:





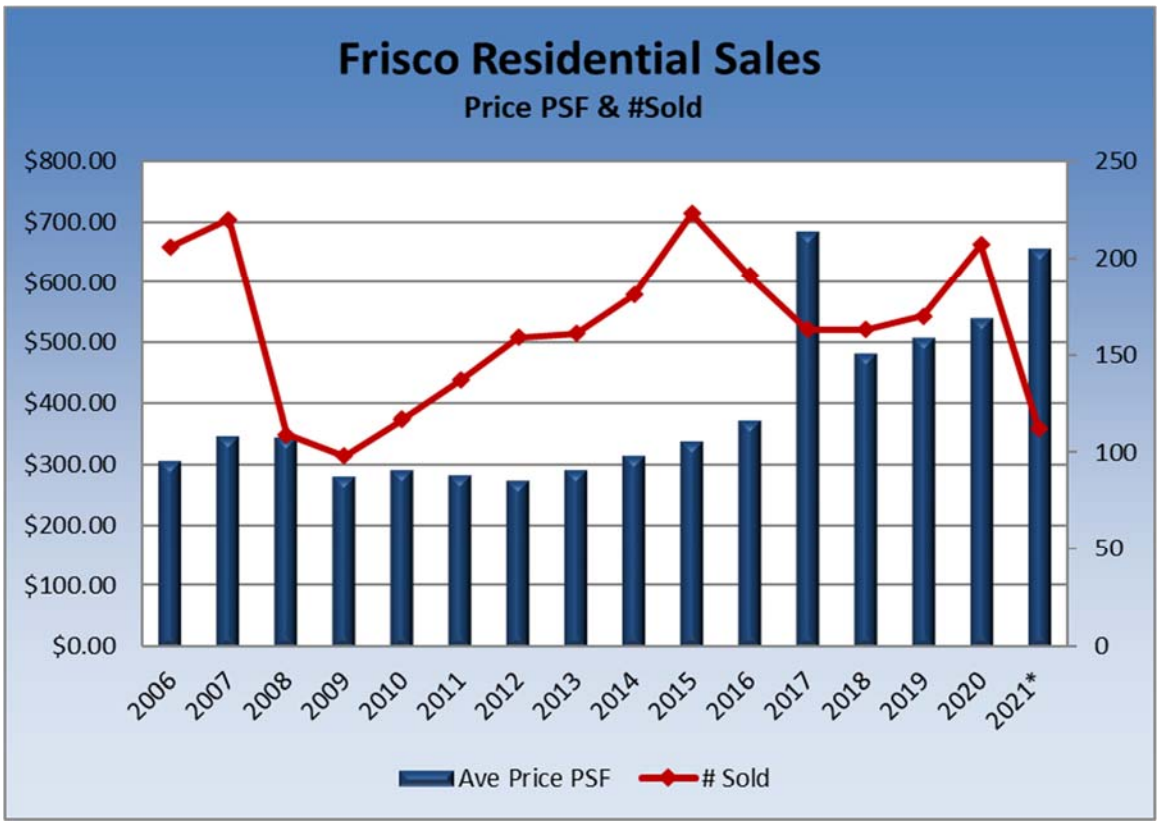
FRISCO SALES

Graphically, the following charts show trends in gross sales and average price, and number of sales and average price per SF, based on the data in the above spreadsheet.

FRISCO RESIDENTIAL SALES							
Year	# Sold	Average Price	Gross Volume	% Change	Ave Price PSF	Sales Ratio	DOM
2006	206	$526,905	$108,542,430	16.07%	$305.98	97.66%	66
2007	220	$558,300	$122,826,000	13.16%	$347.42	98.34%	78
2008	109	$519,273	$56,600,757	-53.92%	$343.66	96.52%	86
2009	98	$495,121	$48,521,858	-14.27%	$279.57	94.52%	193
2010	117	$484,770	$56,718,090	16.89%	$290.28	93.95%	175
2011	137	$465,777	$63,811,449	12.51%	$282.46	94.64%	147
2012	159	$444,802	$70,723,518	10.83%	$273.22	95.82%	142
2013	161	$472,654	$76,097,294	7.60%	$290.69	96.74%	116
2014	181	$480,789	$87,022,809	14.36%	$315.06	97.39%	89
2015	223	$574,729	$128,164,567	47.28%	$338.67	97.58%	81
2016	191	$602,403	$115,058,973	-10.23%	$372.31	98.08%	47
2017	163	$655,319	$106,816,997	-7.16%	$682.62	97.57%	41
2018	163	$780,006	$127,140,978	19.03%	$480.31	98.09%	37
2019	170	$722,492	$122,823,640	-3.40%	$506.36	98.44%	39
2020	207	$831,343	$172,088,001	40.11%	$538.24	98.44%	37
2021*	112	$1,032,421	$115,631,152	-32.81%	$653.96	101.44%	9

*YTD 08/23/2021**





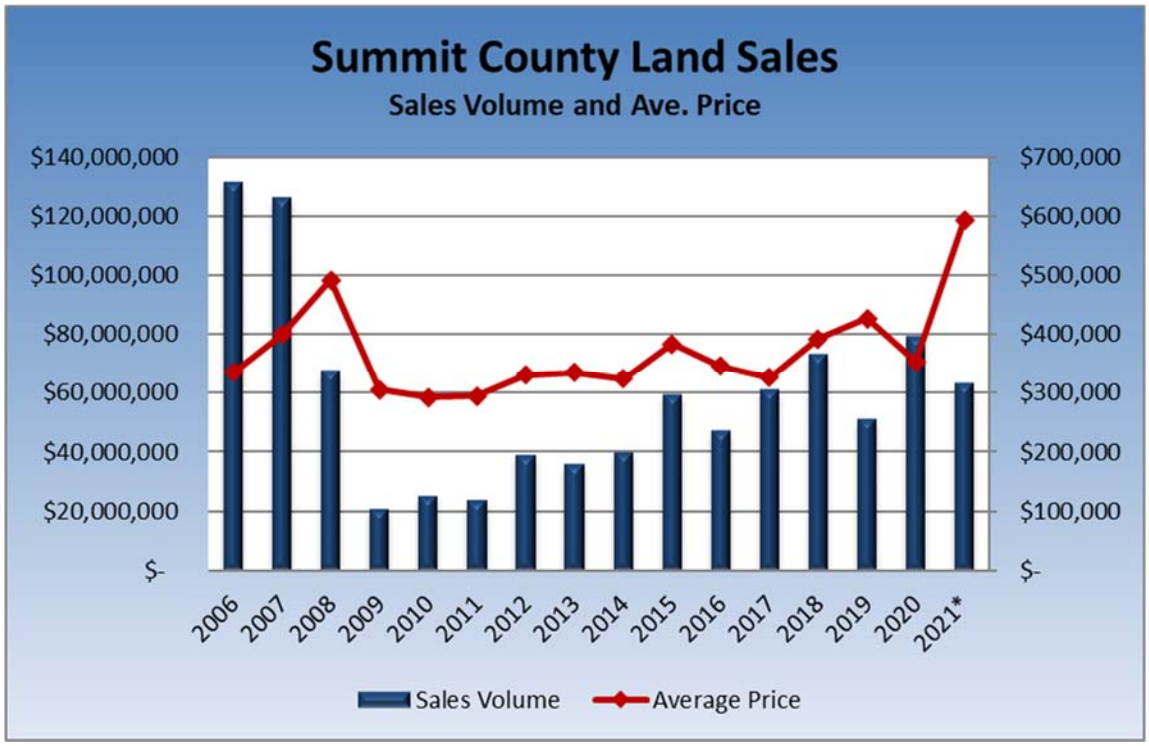
The information represented in the graphs and table above are taken from the Summit County MLS. Number of transactions and annual dollar volume of transactions shows a clear decline in 2008 and 2009. The data from 2010-2011 shows stabilization with recovery steadily since that period. The data shows a drop in volume in 2016-2017, recovery in 2018, a drop again in 2019 due to a lack of inventory and recovery in 2020.

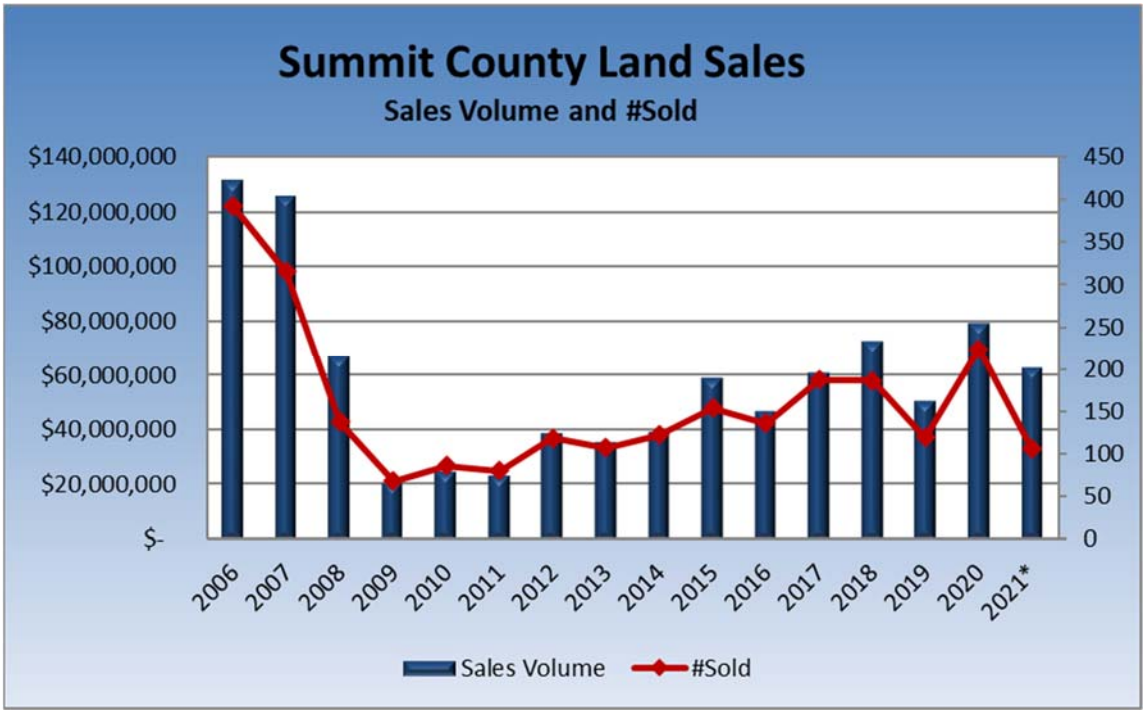
LAND SALES

The market for residential lots has shown a dramatic decline in sales price per lot until 2017 and a drop in the number of annual transactions and volume in Summit County in 2019. The following statistics are from the MLS for Summit County:

SUMMIT COUNTY LAND SALES - MLS DATA					
Year	#Sold	Average Price	Sales Volume	Sale/List Ratio	Avg DOM
2006	392	$ 335,090	$ 131,355,280	94.61%	254
2007	315	$ 399,548	$ 125,857,620	95.82%	168
2008	137	$ 491,834	$ 67,381,258	92.80%	152
2009	68	$ 305,285	$ 20,759,380	86.58%	254
2010	86	$ 292,338	$ 25,141,068	86.50%	261
2011	80	$ 294,486	$ 23,558,880	86.81%	273
2012	118	$ 330,443	$ 38,992,274	87.80%	359
2013	107	$ 335,077	$ 35,853,239	89.66%	414
2014	122	$ 324,202	$ 39,552,644	88.88%	443
2015	154	$ 383,585	$ 59,072,090	90.86%	329
2016	136	$ 345,909	$ 47,043,624	92.23%	337
2017	187	$ 325,607	$ 60,888,509	92.79%	273
2018	186	$ 392,223	$ 72,953,478	105.11%	256
2019	119	$ 427,247	$ 50,842,393	93.92%	233
2020	224	$ 353,667	$ 79,221,408	93.43%	209
2021*	106	$ 593,982	$ 62,962,092	97.79%	136

**YTD 08/23/2021*

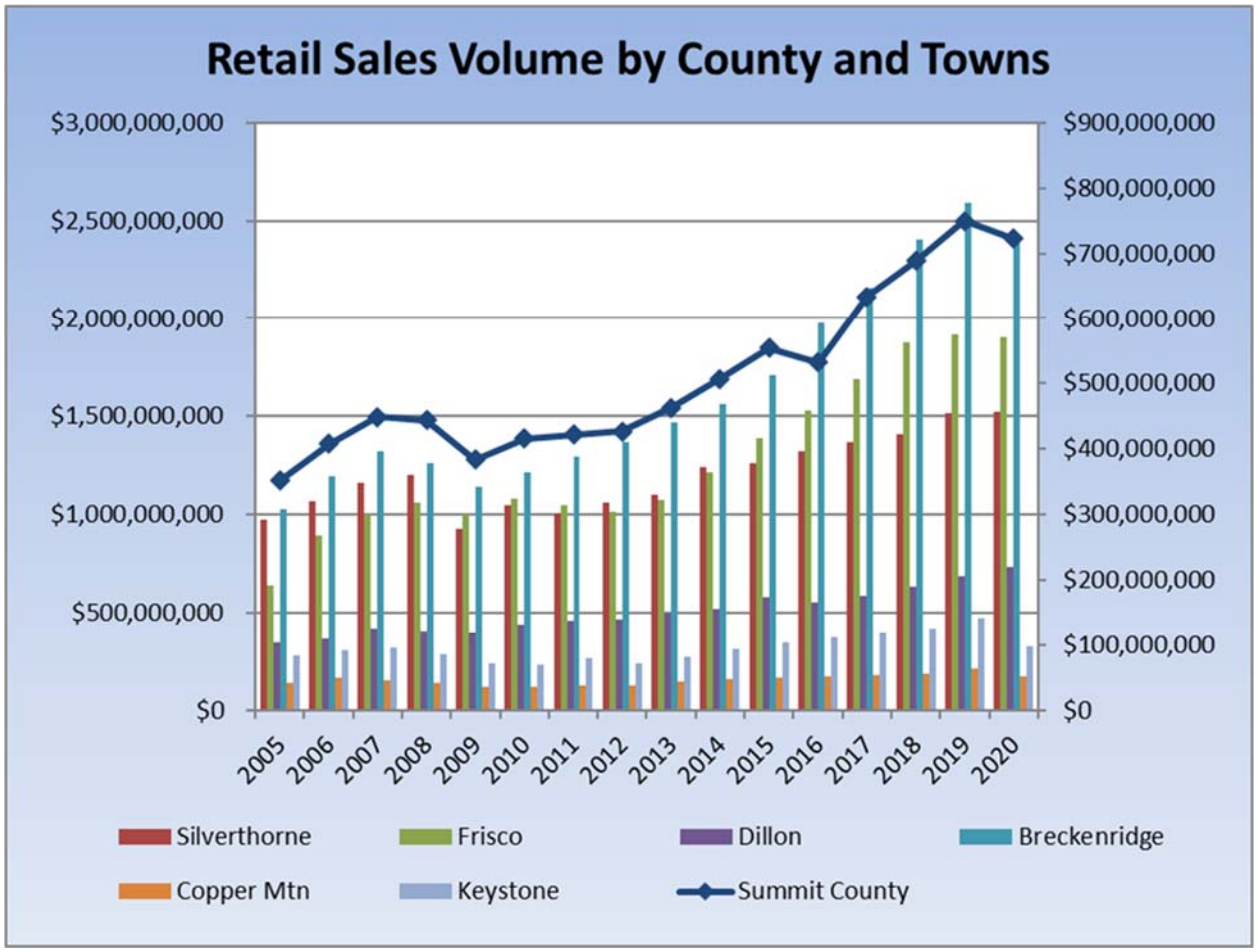




From 2009 through 2011, land sales dollar volume leveled-off at the bottom of the market, at a rate about one-fifth that of the prior years. Recovery has been limited due to a lack of inventory of land around the county. Prices have been more stable than volume levels, but recently have spiked with a limited inventory. The current strong market is maintaining in spite of rising interest rates and some evidence of national slowdown. The market is being monitored for effects of these events.

RETAIL SALES

Retail sales in the Summit County area overall have been steady in the past years, with some slight fluctuations. Silverthorne had seen an increase in the past few years with the opening of a new Target retail store. The following chart shows retail sales in each town/city/community in Summit County. The table shows detail of the subject's market area.


Retail Sales Volume by County and Towns
$3,000,000,000
$2,500,000,000
$2,000,000,000
$1,500,000,000
$1,000,000,000
$500,000,000
$0
$900,000,000
$800,000,000
$700,000,000
$600,000,000
$500,000,000
$400,000,000
$300,000,000
$200,000,000
$100,000,000
$0
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
Silverthorne
Frisco
Dillon
Breckenridge
Copper Mtn
Keystone
Summit County

Retail Sales Statistics Summit County		
Year	Volume	% change
2005	$1,171,526,537	
2006	$1,359,694,249	16.06%
2007	$1,496,632,538	10.07%
2008	$1,480,836,550	-1.06%
2009	$1,280,571,598	-13.52%
2010	$1,385,144,630	8.17%
2011	$1,407,965,253	1.65%
2012	$1,423,615,672	1.11%
2013	$1,544,892,960	8.52%
2014	$1,691,461,469	9.49%
2015	$1,846,077,634	9.14%
2016	$1,773,583,000	-3.93%
2017	$2,112,916,000	19.13%
2018	$2,296,461,000	8.69%
2019	$2,498,293,000	8.79%
2020	$2,408,763,000	-3.58%

Retail Sales Statistics- Frisco		
Year	Volume	% Change
2005	$192,685,593	
2006	$268,031,398	39.10%
2007	$299,334,073	11.68%
2008	$317,338,967	6.01%
2009	$300,697,978	-5.24%
2010	$323,411,096	7.55%
2011	$313,520,264	-3.06%
2012	$305,014,157	-2.71%
2013	$322,571,885	5.76%
2014	$364,685,313	13.06%
2015	$416,962,454	14.33%
2016	$458,575,000	9.98%
2017	$506,796,000	10.52%
2018	$562,394,000	10.97%
2019	$574,534,000	2.16%
2020	$571,361,000	-0.55%

NEIGHBORHOOD DATA – FRISCO

The first residents of the Frisco area were the Ute Indians, followed by "mountain men" in the early 1800's. Beaver pelts were in demand and easy to find in the nearby high mountain lakes. A mining boom, lasting from the 1870's to the early 1900's caused rapid development in the area, with two railroads, hotels, businesses and saloons. The population declined for many years, as the mining industry declined, the depression hit, and other Summit County areas developed proximate to resorts. During the late 1990's, Frisco once again hit an economic boom, with the rapid influx of second homeowners.

According to the Colorado State Demography Office, the 2009 population estimate for Frisco was 3,005 full-time residents. According to the Town of Frisco, the current population is 2,697 year round residents and 4,209 second homeowners; combined approximately 6,906 people including second homeowners. The average age of a Frisco resident is 33.4 years.

Located between two interstate exits, Frisco enjoys a strategic location within Summit County. Located proximate to Copper Mountain ski area, Frisco businesses are frequently visited by Copper Mountain guests. Proximity to other major ski areas is also an appealing factor to Frisco: Keystone, Breckenridge, Arapahoe Basin, Loveland, Vail and Beaver Creek are all within 40 minutes; Keystone and Breckenridge are within 15 minutes. Highway 9 provides direct access through Frisco to the Breckenridge resort area. Frisco enjoys the revenue generated by I-70 and Highway 9 traffic.

Frisco offers its own recreation activities, located along the shores of the Lake Dillon Reservoir,

encircled by the National Forest. The Town of Frisco has developed the Frisco Bay Marina to allow easier access to the reservoir. The Peninsula site offers a variety of summer and winter activities, including an extensive bike trail network, cross country ski and snowshoe trails, disk golf course and skate park. The elevation of Frisco is 9,100 feet, with an average annual snowfall of 112 inches.

A revitalized Main Street has helped the Frisco economy to grow, although slowly, through the recent recession. Several commercial sites along Main Street have been developed over the past few years. Development has generally included first floor retail or commercial development, with residential units on upper floors. Reportedly, only 47 acres, or four percent, of the total land area remains available for development within the Town of Frisco, mostly owned by the Town of Frisco.

A hospital and medical office building (also Frisco's largest development) were completed in December 2005. They are located in the Summit County Commons area that also hosts the library, senior center, State Patrol headquarters, Summit County Animal Shelter, and other government offices. Approximately 14,000 patients were treated annually in the older hospital along Highway 9, also in Frisco, and this number has increased almost two-fold.

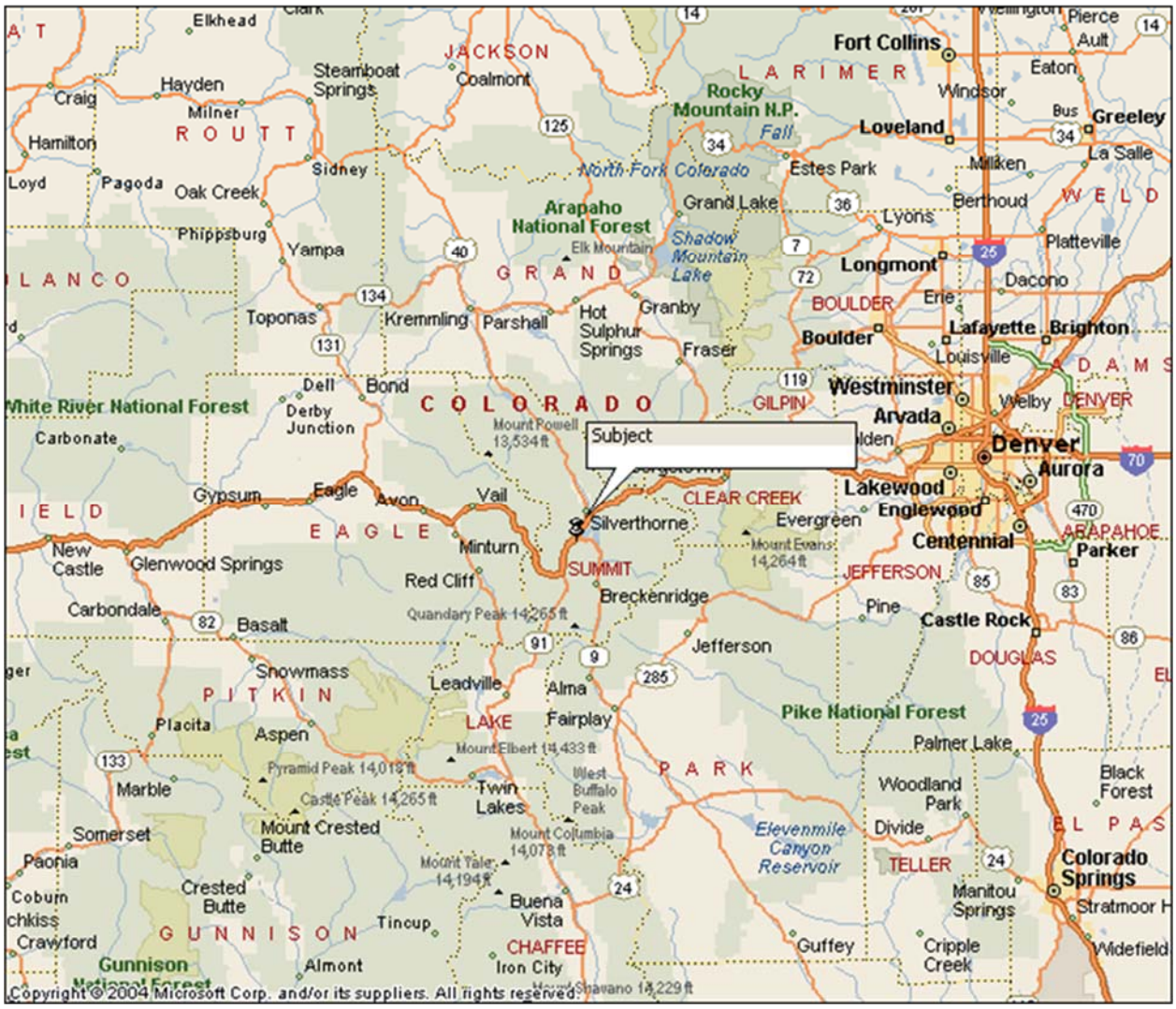
Frisco has developed the Town owned "Peak 1" parcel with cluster homes offering affordable housing. This is a parcel in the southwest portion of town that abuts National Forest land. This action is the Town's attempt to meet the demand for affordable housing in this market and these units were sold to local families at favorable prices under deed restrictions.

Residential volume took a major hit in 2008, dropping by more than half. Since then, the market has recovered with very high demand for residential units and now commercial properties are also enjoying strong demand.

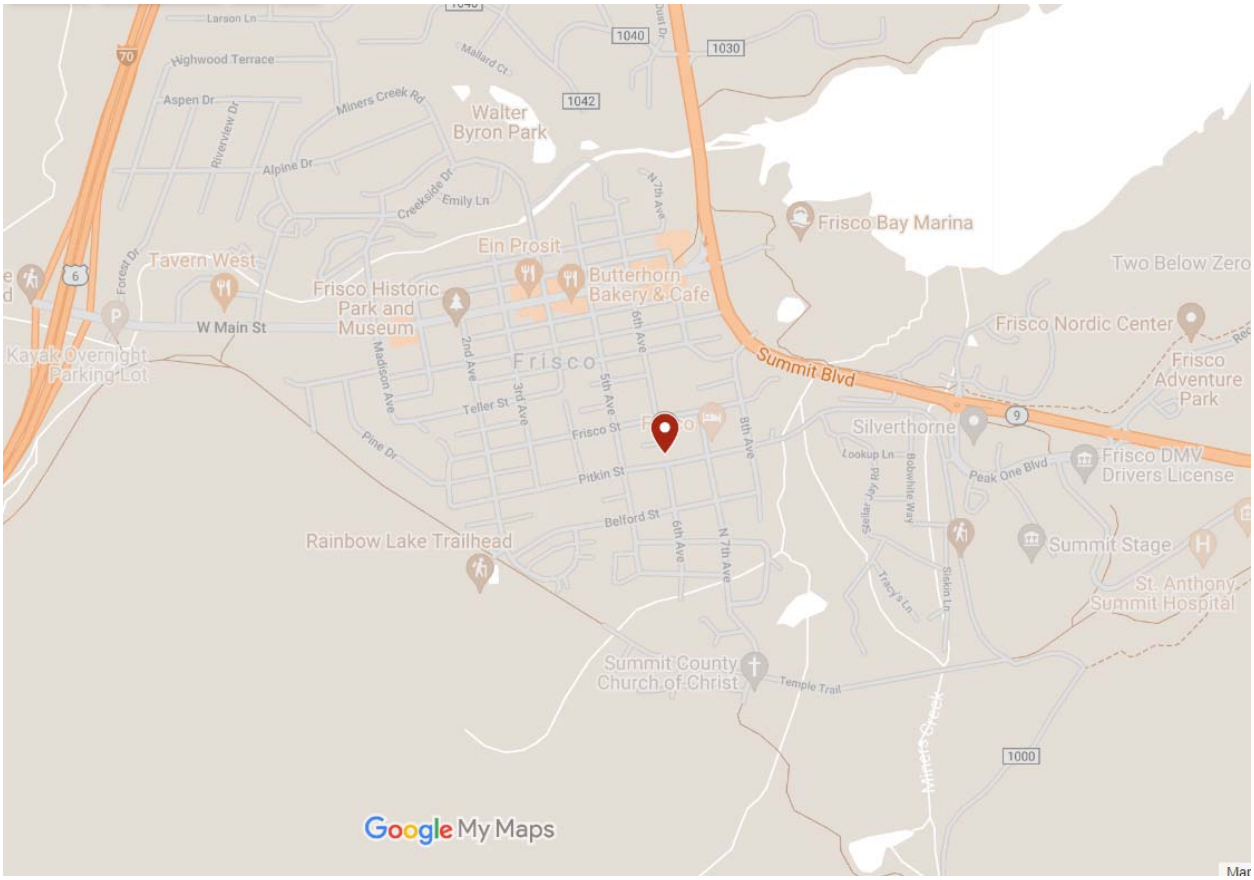
Overall, Frisco is proving itself to be one of the most stable markets in Summit County. Centrally located within the County, with easy interstate access, Frisco has become a popular location for new residents to the County. The short-term forecast is expected to continue growth with the few remaining parcels expected to build out quickly.

Reference is made to the following Neighborhood and Plat maps for a delineation of the subject neighborhood boundaries relative to the location of the subject.

REGIONAL MAP



NEIGHBORHOOD MAP



SUBJECT DATA

SITE DATA, TOPOGRAPHY & SURROUNDING LAND USES

This ROW is 10,500 sf (0.241 Ac approx.), rectangular in shape. This land is 75 feet wide and extends up a hillside in a north-south direction up from Pitkin to the alley.

No soil testing documents have been provided to us for this report and we are not qualified to judge soil quality. The soil is assumed to be in good condition and appropriate for the existing improvements.

EASEMENTS OR ENCROACHMENTS

No apparent adverse easements or encroachments were noted at the time of inspection. Typical utility easements exist along the property lines, with some setback from each boundary. Sewer and water are in Pitkin Street or nearby.

There are no known encroachments. The subject has an access easement.

TAXES

N/A. County owned.

ZONING

The site is currently not zoned but is in a Residential Low Density RL district.

DEED RESTRICTIONS

There are no specific deed restrictions known on this property. The Right of Way has no history of being a separate property from the road. This report will consider the new subdivision will have deed restrictions for the housing.

HAZARDOUS CONDITIONS

In estimating market value, the appraiser is essentially acting as a well-informed buyer or seller, NOT as an expert trained to determine specialized property conditions such as problems with foundation, subsoil, equipment or the existence of environmental hazards or implications of such value-influencing factors on market value.

Based on a visual and physical inspection of the subject, it appears that there are no potential hazards existing on the subject property.

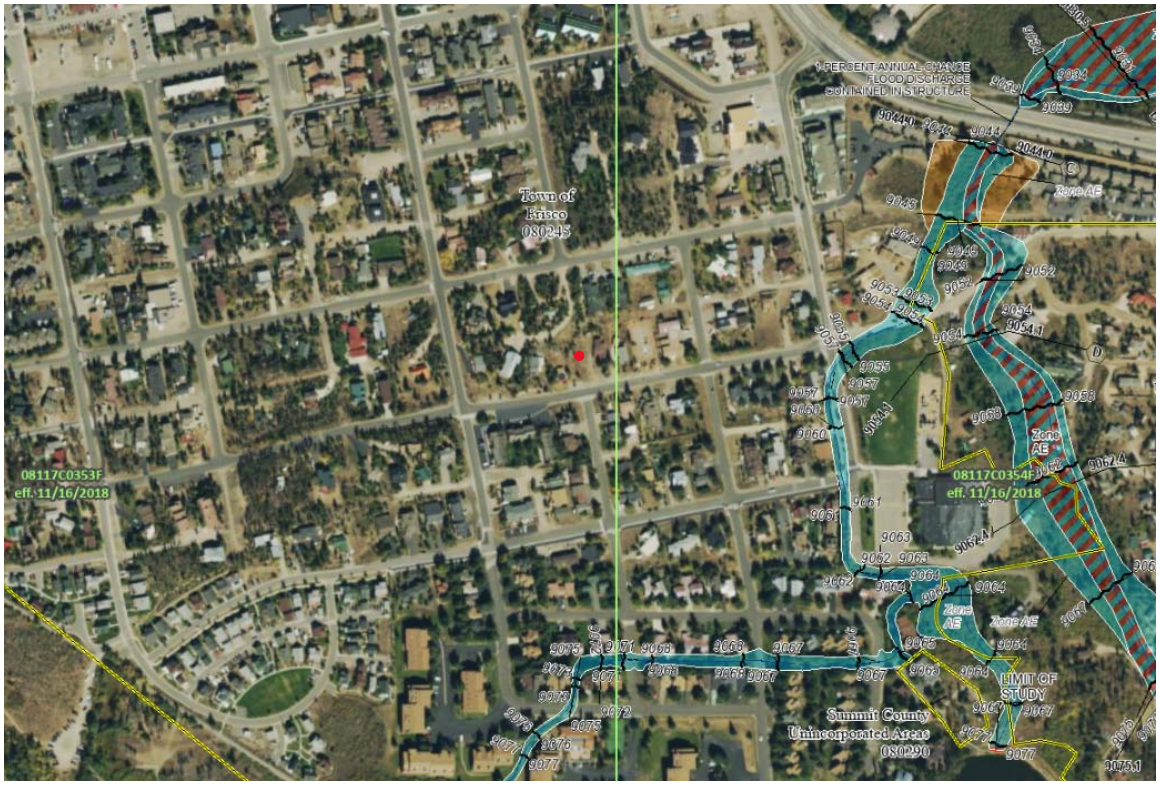
FUNCTIONAL ADEQUACY OF THE SITE

All sites that are gradually sloping up from Pitkin Street, with the sites getting more steep at the

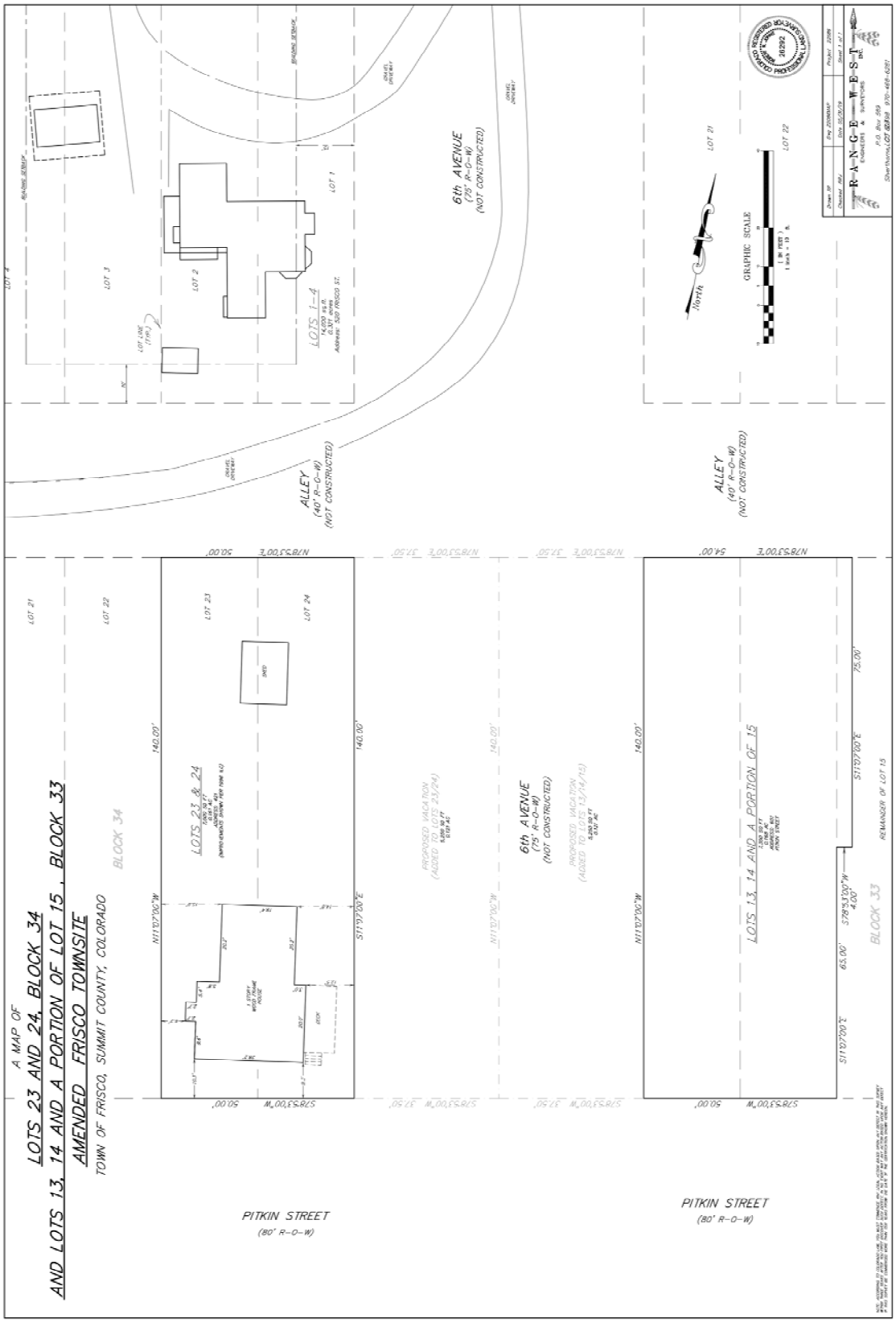
north end where they meet the alley. I have not seen any issues with drainage, soil problems or other negative influences in my brief inspection.

FLOOD PLAIN

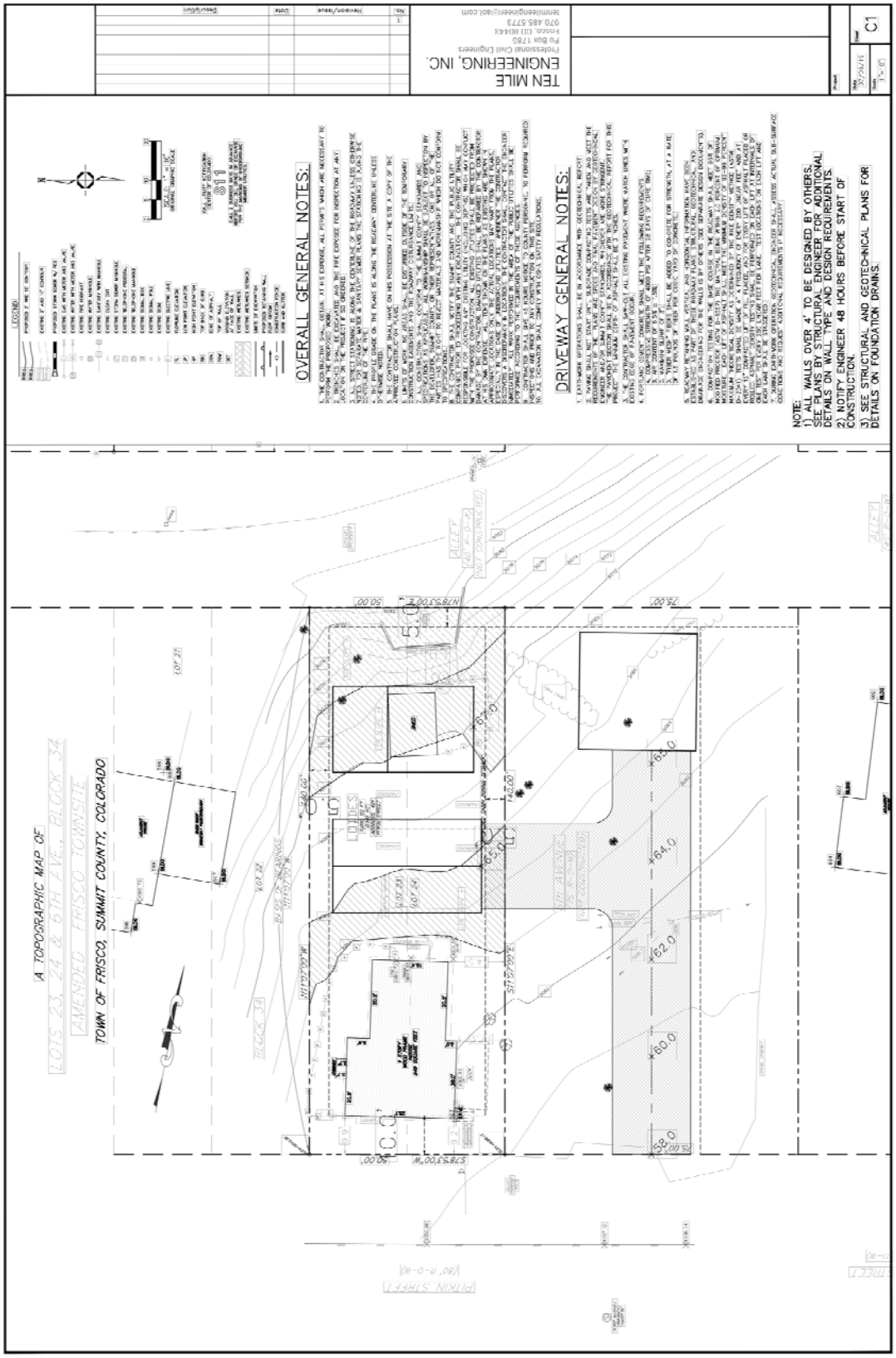
According to FEMA Community Panel Number Panel# 08117C0353F eff 11/16/2018, the site appears to be in a Zone X flood hazard area, which is described as an Area of Minimal Flood Hazard.



SURVEY MAP SHOWING THE ROW



TOPOGRAPHIC MAP AND SLOPE ANALYSIS



SUBJECT DESCRIPTION

This property is located in the downtown area extending up a hillside from Pitkin Street to an unused alley 140 feet. Without a topographical map, I cannot say the slope attains 30% anywhere on site, but it does not appear to, making it fully developable without physical restrictions. Some building sites have been developed with homes around this alley, but there has been no historic use of the land for access or any type of improvements in recent history. The site is partly wooded with Lodgepole Pines and any type of improvement would likely require site excavation planned for access and foundation placement. Surrounding roads and alleys are paved and maintained by the Town of Frisco.

DENSITY PENDING APPROVAL

This report assumes that no density or private improvement or substantial use are allowed but under the new subdivision houses would be approved under the Town's Cabin zoning category.

SITE PHOTOS



6th St. ROW facing north



6th St. ROW facing south



Rear 521 with part alley shed



Rear 601 Pitkin with shed facing south



521 Pitkin Front



601 Pitkin Front

HIGHEST AND BEST USE ANALYSIS

Highest and Best Use is defined as:

> *"The reasonable and probable use that supports the highest present value, as defined, as of the date of the appraisal."*

Alternatively, highest and best use is:

> *"The reasonably probable and legal use of vacant land or improved property, which is physically possible, appropriately supported, financially feasible, and that results in the highest value."*[5]

This definition applies specifically to the highest and best use of land or sites as though vacant. When a site contains improvements, the highest and best use may be determined to be different from the existing use. The existing use will continue unless and until land value in its highest and best use exceeds the sum of the value of the entire property in its existing use and the cost to remove the improvements.

Implied in this definition is that the determination of the highest and best use takes into account the contribution of a specific use to the community and community development goals, as well as the benefits of that use to individual property owners. An additional implication is that the determination of highest and best use results from the appraiser's judgment and analytical skill - that is, that the use determined from analysis represents an opinion, not a fact to be found. In appraisal practice, the concept of highest and best use represents the premise upon which value is based.

The procedure used to estimate the highest and best use of a property as vacant and as improved is to test separately these two situations on the basis of the categories discussed in the definition. In this appraisal, the client will need multiple valuations based on subdivision and reconfigurations of these parcels.

Physically Possible

The sites are all rectangular in shape, gradually sloped, steeper near the top (north end) extending up more gradual from the street (south end). Building sites created will be near the upper portion of the site, and will likely utilize a basement foundation or retaining foundation to the north side. The street Right of Way is 75 feet wide and 140 feet deep. Each of the existing sites, including the ROW and the proposed sites should adequately support a foundation and access as planned for a single family home. Each of the sites might also physically support other uses including residential high to low density, commercial, light industrial, public uses such as parks and recreation and other potential uses.

Surrounding Uses

This is a residential neighborhood with commercial uses including retail, restaurant, office, business

[5] The Appraisal of Real Estate, Twelfth Edition, The Appraisal Institute.

services and other uses along Main Street and Highway 9, and in the first block between Granite and Main Street. To the south, east and west are residential single family, duplex and some condominium projects. To the east is Highway 9, with the local sewer treatment plant across the highway, and beyond that is the Frisco Bay Marina, with some residential uses along the shore

Legal Uses

This is a Right of Way for a street in downtown Frisco, so has no legal use other than as a street for access to surrounding properties.

The surrounding sites are zoned by the Town of Frisco RL, for residential low density. The zoning allows some flexibility in unit sizes and configurations and up to 8 units per acre. Each of the existing sites and proposed sites will support 1 single family residence under this zoning. A newer designation that is proposed here is the Cabin Zoning, which allows the use of smaller sites for smaller houses intended to be built or moved to a site so that it can be occupied by local residents at more affordable cost. This restricts houses to 1,000-1,200 square feet, but may allow a basement with certain restrictions.

The owner submitting for this subdivision is proposing creating more affordable housing with a deed restriction as described in this report.

Reasonably Probable Uses

This setting is in a residential neighborhood with varying densities around the property. It is mostly built out with single family homes that are older but sites are being re-developed with some small multi-family projects along with single family homes depending on zoning. New homes tend to be high quality and larger to utilize as much of the site as they can to justify the high cost of land. Any configuration allowing the construction of new homes that maximize the size and value of the sites are the most probable use.

Highest and Best Use as Vacant and as Improved

As of September 9, 2021, the highest and best use is to improve these sites with new houses of higher quality that create the most value for the size of the site.

The proposed subdivision is specifically to allow for affordable housing and the petitioners will forgo the highest and best use of their property to achieve this.

VALUATION OF MOST PROBABLE USE

INTRODUCTION

This section is the detailed valuation analysis based on the preliminary conclusions of the previous highest and best use section. The valuation of any parcel of real estate is derived principally through three basic approaches to value: The Cost Approach, the Sales Comparison (Market) Approach, and the Income Approach.

The appraisal process is a four-step process. Section one identified the appraisal assignment and specified the appraisal objectives. Section two was the subject description. Section three was the highest and best use and marketability analysis of the property. This section is the detailed valuation analysis based on the preliminary conclusions of the previous highest and best use section. The last part of this section will be a reconciliation of all facts analyzed and conclusions drawn, blending all analyses into a final conclusion of value.

The objective of the valuation section is to provide well-supported analysis of the subject specific real estate economic characteristics. Typically, the appraiser studies the property from each of the traditional viewpoints or approaches to value analysis - cost, income, and sales comparison. The three approaches are interrelated and utilized to provide an analytical process to form a check and balance for a comparison in the final conclusions of value.

Buyers and sellers of real estate commonly think of value in these three ways:

1. *The current cost of replacing a property less depreciation from all sources - that is, deterioration and functional and economic obsolescence.*

2. *The value indicated by recent sales of comparable properties in the market and other market factors such as listing and offer activities.*

3. *The value that the property's net earning power will support, based on capitalization of net income.*

In some assignments all three approaches to value are employed. In the subject case, only the direct sales comparison approach is valid, since there are no improvements for which to estimate cost, and any substantial income generated from the land would be highly seasonal and depend on a separate business operation.

LAND VALUE

I have used the sales comparison approach to develop an opinion of the land value. I have included only those sites that have recently sold or that I believe are most comparable to the subject for size, location and functional use. A search was made of the market for vacant land sales. Research included contact with real estate brokers, other appraisers, developers and users in the area along with a search of data for land sales with similar potential and access. I also relied on data from the Summit County Assessor's records and the Multiple Listing Service (MLS). For this purpose, I

have also studied open space acquisitions by the County and Towns in Summit County, and I have spoken with Towns and metropolitan districts, including sewer and water providers to attempt to find sales of properties that would not allow, or restrict development by private parties.

The following summarizes the most recent land sales found in my research. All the sales were analyzed for value indicators, but only the most comparable were subjected to a detailed primary analysis. The following grid describes the best land comparable sales that I have found.

SALES COMPARABLE #1
22290 Hwy 6
Keystone, CO 80435

Verify:	Deed, Kevin Hopkins, Vail Resorts Development Company
Legal Description:	Willows Pumphouse, Tract 1
Location:	About 7.5 mi northeast
Zoning:	Keystone Resort PUD
Permitted Uses:	PUD
Lot:	
Area:	0.2062 Acres (approx. 8,982 SF) ***2021 size per assessor***
Shape:	Irregular
Developable Area:	N/A
Topography:	Gentle slope
Utilities:	All utilities in place
Schedule #:	4200718 (2019)/ 6518500 (2021)
Sales Price:	$105,000
Date of Sale:	03/05/2019
Price PSF:	$10.48/$13.41 adjusted
Price per SF Dev Area:	N/A
Price Per Unit:	N/A
Reception#:	1192719
Grantor:	Vail Summit Resorts Inc
Grantee:	Snake River Water and Sewer District
Description:	Not a developable lot
Days on Market:	Not listed
Taxes:	$72 for 2019/ $0 for 2020
Terms of Sale:	Cash, Conventional
Conditions of Sale:	None
Previous Sale:	None on record

Comment: This is a small parcel of land in the middle of Keystone Village just off the center pond and across the access road to surrounding condominium projects. This site was purchased by the local water authority and is a pump station site. The grantor's representative has described this parcel as a service parcel for utilities that is not allowed any private density for development or sale.



Parcel From Road Facing North



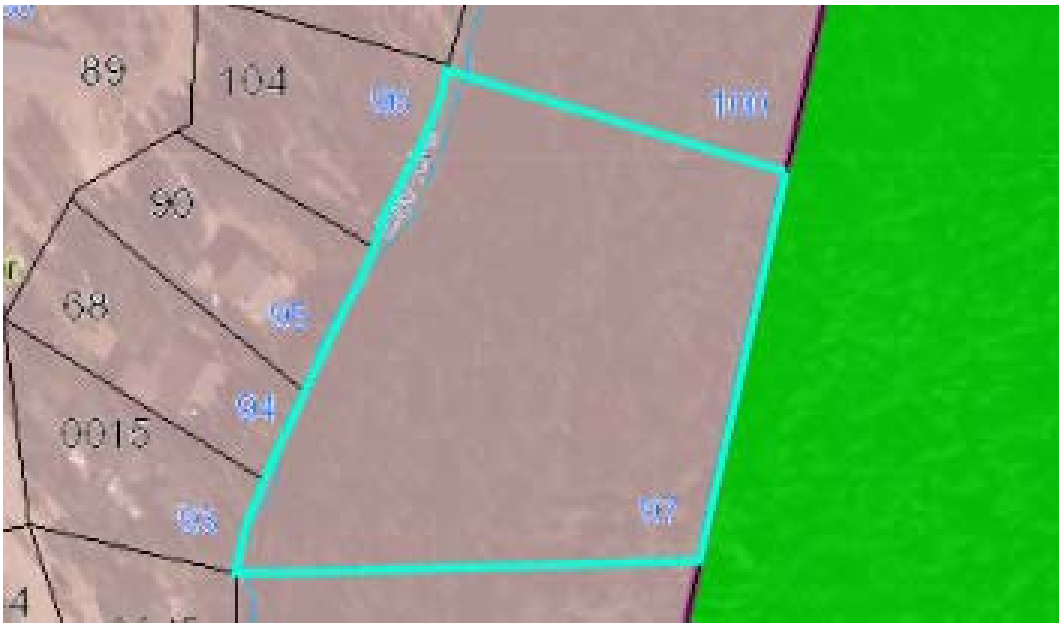
Plat

SALES COMPARABLE #2

Sherwood Lane
Blue River, CO 80424

Verify:	Summit County Open Space, (970) 668-4067
Address/Telephone:	
Legal Description:	Sherwood Forest Sub, Lot 97
Proximity:	About 15 mi south of subject
Zoning:	Blue River Developed Neighborhoods
Permitted Uses:	Residential
Lot:	
Area:	2.18 Ac (approx. 94,961 SF)
Shape:	Irregular
Developable Area:	5,000 SF
Topography:	Very Steep
Utilities:	None
Schedule #:	100480
Sales Price:	$80,000
Date of Sale:	12/30/2019
Price PSF:	$0.84/$1.01 adjusted
Price per SF Dev Area:	$16/$19.20 adjusted
Price per Unit:	$80,000/$96,000 adjusted
Reception#:	1217337
Grantor:	Theobald Limited Partnership LLLP
Grantee:	Summit City Board of Commissioners, Town of Breckenridge
Description:	County Land
Days on Market:	Not listed
Taxes:	N/A (owned by the County)
Terms of Sale:	Conventional
Conditions of Sale:	None
Previous Sale:	06/01/1985 for $11,000

Comments: This site is larger, steep and has no access, so although titled as fee simple, and potentially developable with proper access secured, the terrain renders it impractical at this time and in the setting to develop. It is similar to an open space parcel effectively.


89
104
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0015
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Plat


Lot 97 Sherwood Forest
Write a description for your map.
Legend
Sherwood Ln
Sherwood Ln
Blue River
Sherwood Ln
Stadlitt Ln
Blue River
Google Earth
300 ft
N

SALES COMPARABLE #3

319 4th Ave Alley
Frisco, CO 80443

Verify:	Deborah H. Shoop/ Listing Agent/ (970) 393-0321 Rori Miller/ Selling Agent/ (970) 389-2666
Legal Description:	Frisco Town Sub, Lot 23r Block D, Resub of Lots 23 & 24
Proximity:	approx. 0.5 mi northwest of subject
Zoning:	RH - Residential High Density
Permitted Uses:	High density residential development
Lot:	
Area:	0.1148 Ac (approx. 5,001 SF)
Shape:	Irregular
Developable Area:	2,000 SF
Topography:	Gentle
Utilities:	All available,
Schedule #:	1101947 (2020) / 6519130 (2021)
Sales Price:	$169,500
Date of Sale:	03/19/2020
Price PSF:	$33.89/$39.66 adjusted
Price per SF Dev Area:	$84.75/$99.16 adjusted
Price per Unit:	$169,500 / $198,315 adjusted
Reception#:	Not available
Grantor:	N/A
Grantee:	Miller, Jacob & Rori
Description:	Residential Vacant Land
Days on Market:	1
Taxes:	$2,649 for 2020
Terms of Sale:	Conventional
Conditions of Sale:	None
Previous Sale:	None recorded

Comments: This is a small tract of land that is in a high-density zoned district but was thought to be undevelopable due to setback requirements and wetland issues. The owner took the property through the planning process and fought for a variance for two years to receive approval for a house that will have limited site impact.



Picture taken 9/2021, Fred M Ebert, SRA



Plat

SALES COMPARABLE #4

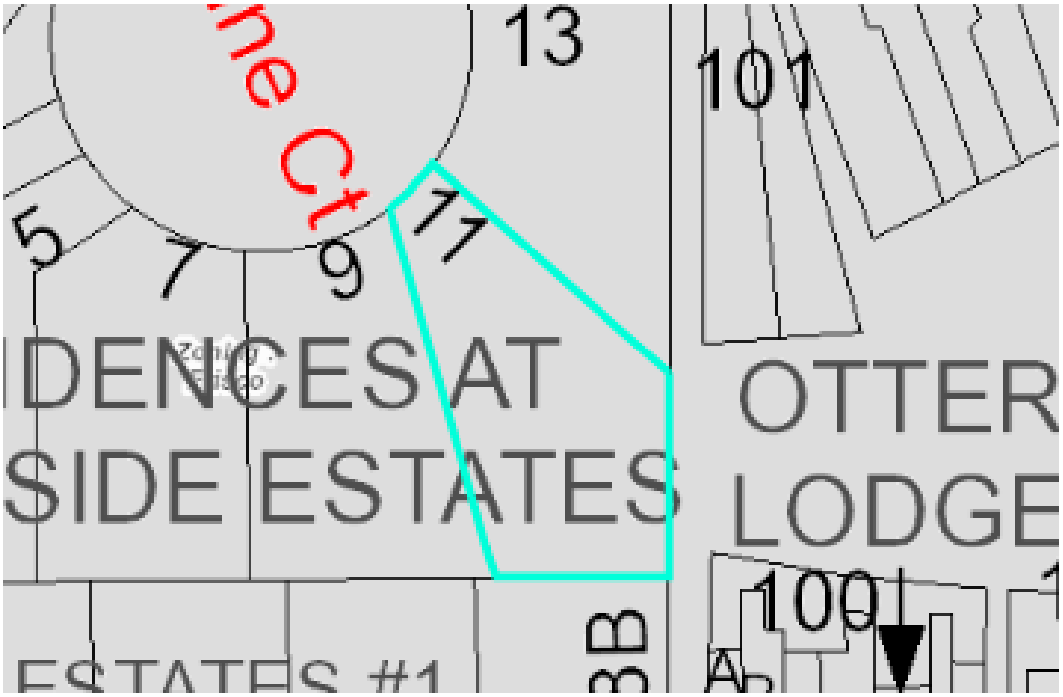
11 Alpine Ct
Frisco, CO 80443

Verify:	Eddie Bowers, Listing Agent, (970) 389-3755 Madeline Mishkind, Selling Agent, (970) 988-2216
Legal Description:	Residences at Creekside Estates, Lot 13
Proximity:	approx. 0.9 mi northwest of subject
Zoning:	RH - Residential High Density/ PUD Residence at Creekside Estates
Permitted Uses:	High density residential development
Lot:	
Area:	0.23 Ac (approx. 10,019 SF)
Shape:	Irregular
Developable Area:	3,500
Topography:	Level
Utilities:	All available
Schedule #:	1102550
Sales Price:	$485,000
Date of Sale:	6/14/2021
Price PSF:	$48.41/$49.87 adjusted
Price per SF Dev Area:	$138.57/$142.73 adjusted
Price per Unit:	$485,000/$499,550 adjusted
Reception#:	1261928
Grantor:	Daniel L. McCrerey
Grantee:	Glen Schlechter Summit LLC
Description:	Residential Vacant Land
Days on Market:	0
Taxes:	$5,243 for 2020
Terms of Sale:	Cash
Conditions of Sale:	None
Previous Sale:	None recorded

Comments: This is a Frisco building site in a single family neighborhood with similar site size, but no restrictions on development other than having a very narrow entry and irregular triangular shape.



Picture taken 9/2021, Fred M Ebert, SRA



Plat

SALES COMPARABLE #5

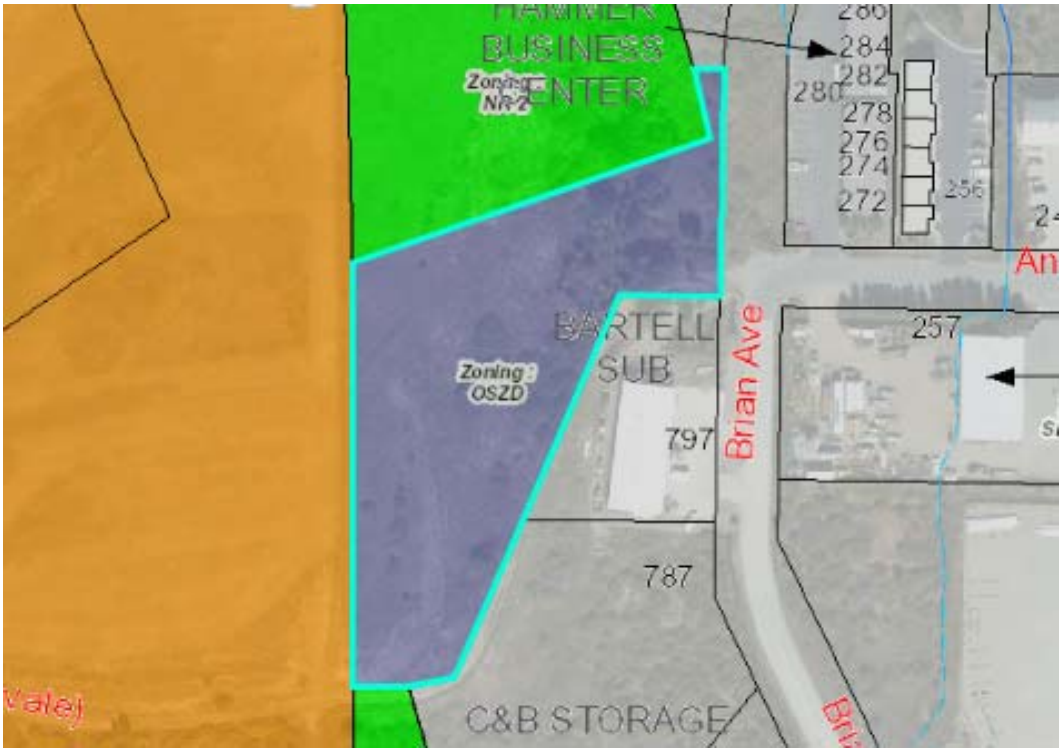
Brian Ave
Silverthorne, CO 80498

Verify:	Summit County Open Space, (970) 668-4067
Address/Telephone:	
Legal Description:	TR 5-78 Sec 12 Qtr 2 Acres 2.4610 Aka Tract In Sec 1 And Sec 12-5-78
Proximity:	Approx. 4.5 mi north of subject
Zoning:	OSZD – Open Space Zoning District
Permitted Uses:	Intent is to protect and preserve lands in a predominantly undeveloped state
Lot:	
Area:	2.461 Ac (approx. 107,201 SF)
Shape:	Irregular
Developable Area:	N/A
Topography:	Steep
Utilities:	All available
Schedule #:	1301093
Sales Price:	$80,400
Date of Sale:	07/22/2016
Price PSF:	$0.75
Price per SF Dev Area:	N/A
Price per Unit:	N/A
Reception#:	1116483
Grantor:	David P. Spencer
Grantee:	Summit City Board of Commissioners
Description:	Development lot
Days on Market:	Not listed
Taxes:	N/A (owned by the County)
Terms of Sale:	Conventional
Conditions of Sale:	None
Previous Sale:	09/6/2002 for $110,000

Comments: This is a parcel of land in Silverthorne that is just out of the downtown area and town limits**.** It was a sale and partial donation by the owner, who could not use it due to the extensive wetlands and steep terrain.



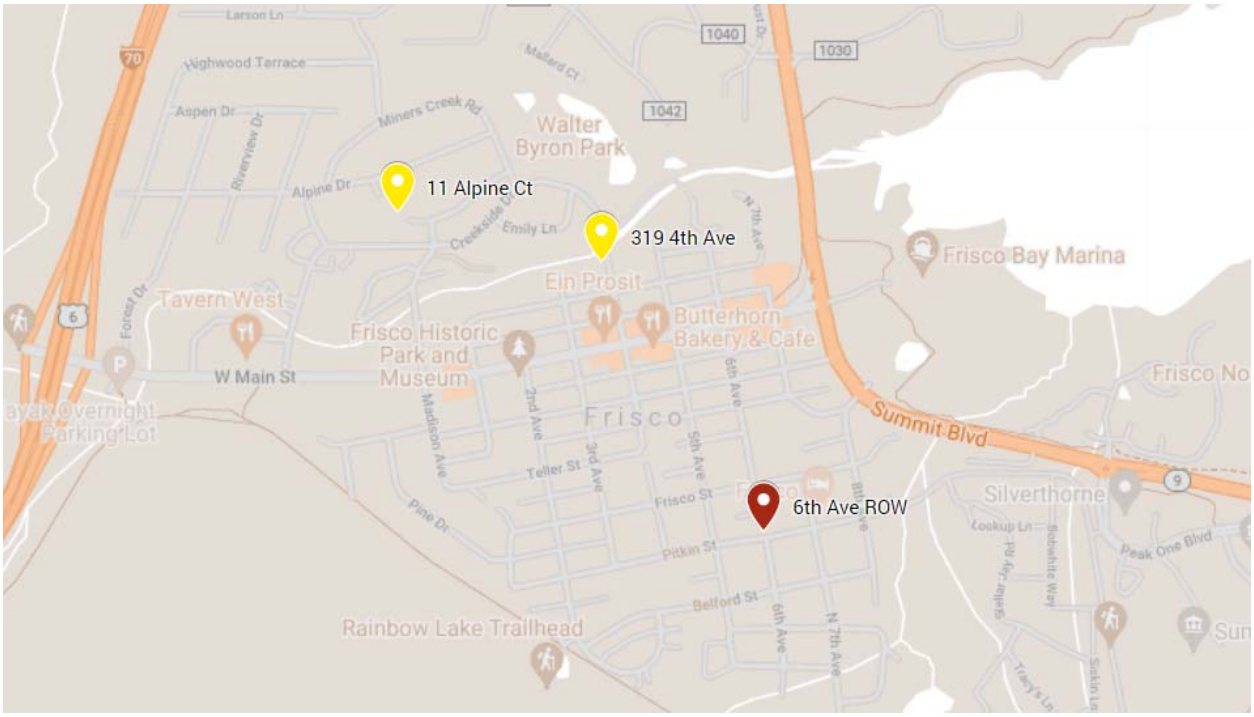
Front view



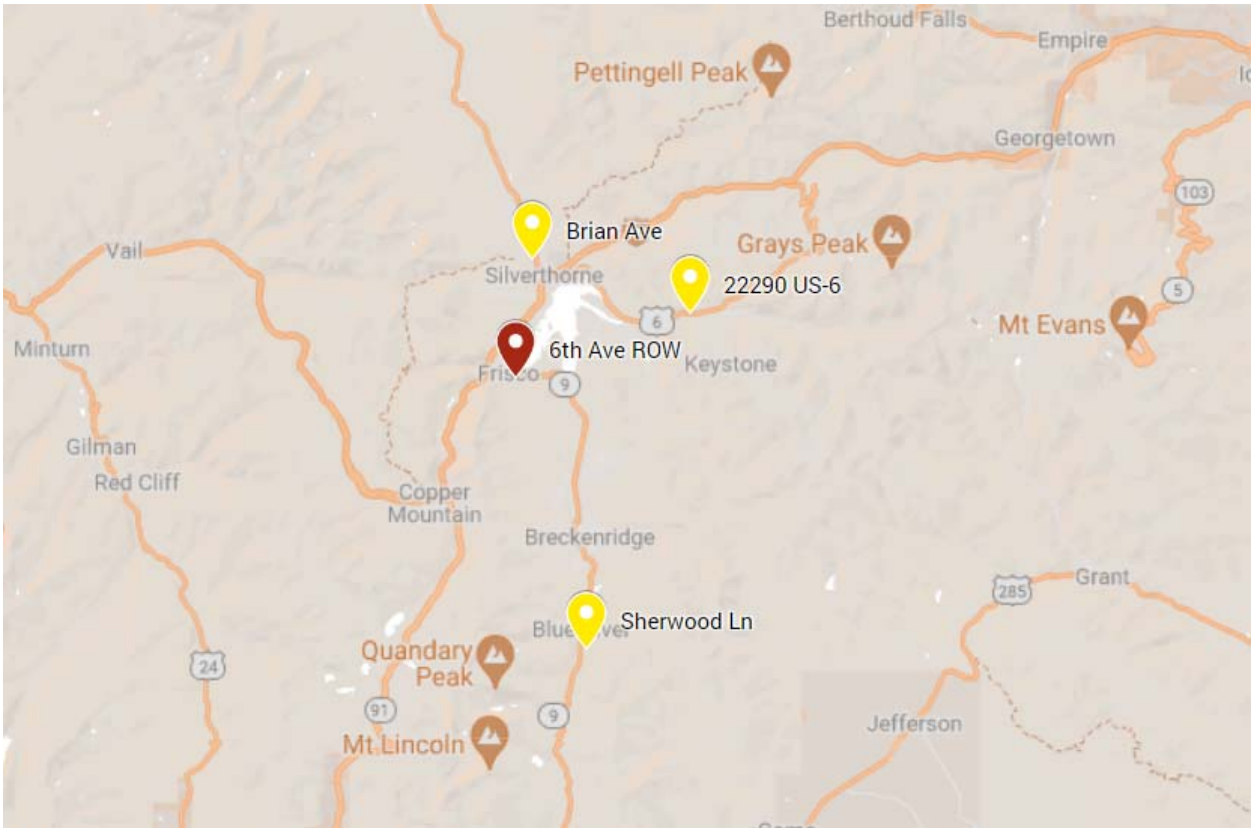
Plat

PROPERTY	SUBJECT	COMPARABLE #1	COMPARABLE #2	COMPARABLE #3	COMPARABLE #4	COMPARABLE #5
ADDRESS	6th Avenue & Pitkin	22290 Hwy 6	Sherwood Lane	319 4th Ave. Alley	11 Alpine Court	Brian Avenue Parcel
Legal Description	6th Ave. ROW Cont. approx. 10,500 SF	Pt of Tract A, Keystone Village Sub #2	Lot 97 Sherwood Forest Subdivision	Lot 23R, Blk D, Resub L 23 & 24 Town of Frisco	Lot 13 Residences at Creekside	Pcl in Qtr 2 5-12-78
TOWN	Frisco	Keystone	Blue River	Frisco	Frisco	Silverthorne
PRICE		$ 105,000	$ 80,000	$ 169,500	$ 485,000	$ 80,400
DATE OF SALE/TIME		3/5/19	12/312/19	3/19/20	6/14/21	7/22/16
	Older, sales 1% Ave. Mo.	28%	20%	17%	3%	70%
CONDITIONS OF SALE	Cash or equal	Cash, conv .	Conv.	Conv.	Cash	Conv.
		0%	0%	0%	0%	0%
TOTAL CONDITIONS ADJ.		28%	20%	17%	3%	70%
ADJUSTED SALE PRICE	N/A	$ 134,400	$ 96,000	$ 198,315	$ 499,550	$ 136,680
PRICE PER ADJ UNIT		N/A	$ 96,000	$ 198,315	$ 499,550	Not assigned
PRICE PER SF DEV. AREA		N/A	$ 19.20	$ 99.16	$ 142.73	$ -
PRICE PER SF LAND		$ 14.96	$ 1.01	$ 39.66	$ 49.87	$ 1.27
ACTUAL # OF UNITS	-	N/A	1	1	1.00	Commercial
Adjustment						
LAND SIZE	10,500	8,982	94,961	5,001	10,018	107,201
Adjustment						
EST DEV. AREA SF	None	N/A	5,000	2,000	3,500	None
Adjustment			*Potential subject to access*		*EST*	
LOCATION/SETTING	Downtown Frisco	Keystone, Near ski, Village	Blue River front, ltd access, steep	Downtown Central Core, on Creek	Downtown residential	Off Brian Avenue
Adjustment						
SITE/VIEW/ EXISTING IMPROVEMENTS	Mountains, residential	Mountains, residential	Mountain, residential	Mountains, residential	Mountains, residential	Mountain views
Adjustment						
ACCESS/UTILITIES	Good access, electric, other utilities off site nearby	Good access, utilities nearby	Some utilities, needs to cross river	Good Access, full utilities avilable to site	Good Access, full utilities avilable to site	Utilties nearby
Adjustment						
ZONING/USE	This is a right of way, with no allowed density Town Distric is Low Density	Not a developable lot	Single family residential	Residential High Density	PUD Residential Single Family	Wetland, county
Adjustment						
NET ADJUSTMENT		0%	0%	0%	0%	0%
RAW PRICE PSF LAND	$ 15.00	$ 14.96	$ 1.01	$ 39.66	$ 49.87	$ 1.27
IND. VALUE BY SF LAND	**$ 157,500**	$ 157,114	$ 10,615	$ 416,378	$ 523,585	$ 13,387

LOCATION MAP OF COMPARABLE SALES



Local Sales



Regional Sales

RECONCILIATION OF OPEN SPACE SITES

I have listed sales of land with no density or development rights and some with potential for development. There were no small sites near the subject size range with no development rights sold recently, but some former sales are used and adjusted to current market, and some larger sites are considered on a limited basis. Following is a description of each of the sales.

Comparable Sale #1 is a site in the Keystone Resort that is surrounded by high density residential and commercial uses but is not allowed private development. It is a smaller site for this area, and has housed a pump house to serve the surrounding village. At about 10,019 SF, it is large enough for a home, or small development, but under the approved PUD, it is a service site for the water district, and will remain so. Although it cannot be developed privately, it was purchased for the water district at this location.

Comparable Sale #2 is a single family building site that was purchased for open space. It is larger and steep and along the Blue River near its source, but did not have access from an existing road and would have required a bridge if it did have an easement.

Comparable Sale #3 is a parcel of land that is zoned high density residential but was located in wetland area between Ten Mile Creek and an alleyway in downtown Frisco. Although zoned for residential, it was deemed unbuildable until the purchaser received approval from the Army Corp of Engineers and filed a plan that took 2 years of planning and negotiations with the Town of Frisco to get approved for a single-family home. This involved variances for setbacks, and the final plan included a rather narrow, tall house with about 2,000 SF of living area.

Comparable Sale #4 is single-family building site a few blocks northeast of the subject. This site has no restrictions other than a pie-shaped access from a cul-de-sac that may limit the house size and development. It is similar in size to the subject and would be a similar development site, except the subject has steep terrain and will require substantial excavation and likely a retaining wall if it were to be approved for a more typical sized house for the area, rather than the small cabin proposed.

Comparable Sale #5 is a vacant parcel adjacent to the western border of the Town of Silverthorne off of a side street. This is surrounded by town land on the north, south and east. It is wetlands with limited possibility of development or supporting any structures. It is mostly level at the lower end, but extends up a steep hillside around another property in an area known for unstable soils. This was purchased by the county for open space from a private party. The sale involved a partial donation, so I am using the agreed up on value for the price.

The subject is not developable without a variance as it is a street right of way. The Town has shown some precedence in allowing these ROW parcels to be used, however, but usually with some trade-off that offers benefit to the town, such as to straighten a roadway by trading land or for a use that is considered a benefit to the community. The value is estimated using indicated prices on a per square foot basis, with properties that are otherwise deemed unusable or compromised in some way, and their application as value indicators is reflected in the weight assigned each in the following chart. Those that were zoned for residential, but restricted in some way are weighted

the least. The various sizes are also considered in the weighting, as the larger parcels tend to sell for the lowest price on a square foot basis. Those that were used for public or open space are weighted the heaviest.

WEIGHTED AVERAGE RECONCILIATION				
Sale	Location	Adj. Value PSF	Weight	Factor
	Subject			
1	Keystone	$ 14.96	20%	$ 2.99
2	Sherwood	$ 1.01	15%	$ 0.15
3	Frisco Alley	$ 39.66	15%	$ 5.95
4	Alpine Court	$ 49.87	10%	$ 4.99
5	Brian Ave.	$ 1.27	40%	$ 0.51
			100%	
	Average	$ 21.35	Weighted	**$ 14.59**

In downtown Frisco development land has sold for over $200 per square foot as this market experiences unprecedented demand. As a town street right of way that exists due to steep terrain and a tall hill in the middle of the downtown area, the subject is deemed undevelopable, only partly due to terrain, but mostly due to it not included as a zoned parcel. Any grade exceeding 30% in the downtown area cannot be built upon, but parts of this site are less than 30%.

Due to the high cost of land in this area, sites that back to open space or undeveloped areas are more appealing, and if this site were offered to the adjacent properties to expand their homesites, even if not developable, it would be appealing as a private buffer or land that might allow parking, storage or non-permanent improvements.

I have considered the rise in land values in this market over the past 2+ years, which has been substantial. Looking at the chart for land sales in the neighborhood analysis, increases are inconsistent, showing a larger increase from 2019 than 2018, so I have used 2018 as an average.

This site is compromised in its zoning/use and its terrain, but as open space it should be equally appealing with lesser sloped parcels. Sales #1, #2 and #5, which are relied upon most heavily, all have steep areas.

Based on the above analysis, and bracketing of the uses, I am estimating the market value of the parcel at $14.59 psf rounded to $15.00 x 10,500 = $157,500.

CONCLUSION OF VALUE 'as is"

$158,000

"AS IS" VALUE: 521 PITKIN AND 601 PITKIN

This property consists of a 7,000 SF lot in the original Frisco Townsite with an older cabin that has what the owner describes a 1.5 bedrooms and a bath, with about 949 SF of living area. 601 Pitkin is very similar, although about 50% larger. It too is an older house built more as a cabin and maintained over the past 70 years.

Two recently built duplex units a half block to the east have demonstrated a buildout for a site of this size in this zoning district of as much as 3,800 SF or about 60% of site area. Other recently built homes support living area at 50-60% in this district. I have brought sales in from the higher density residential district to the north. Closer to and along Main Street, site development has achieved density of 75-90% of site area. Different projects have been approved over the years at varying densities, so these ratios are rather inconsistent because Frisco does not approve by density per se, but by number of units, so the larger units can be built on a site with more parking or better access and still meet minimum unit, setback, height and coverage requirements. I am using an estimated living area build-out based on what I have found to be typical and most likely to be approved on a given site, where there are no recent approved projects in place.

House Value VS Land Value:

I have used sales of older, smaller houses that are likely to be removed for re-development in some cases. I have avoided newer houses and those extensively updated and upgraded, as these are not comparable to the subject, and would most likely be retained on site. I expect the subject will be sold as a house, but eventually expanded and remodeled, or more likely removed to build a new house that better utilizes the available area on site to maximize the size and function, at least approaching the range of 50% living area to site area.

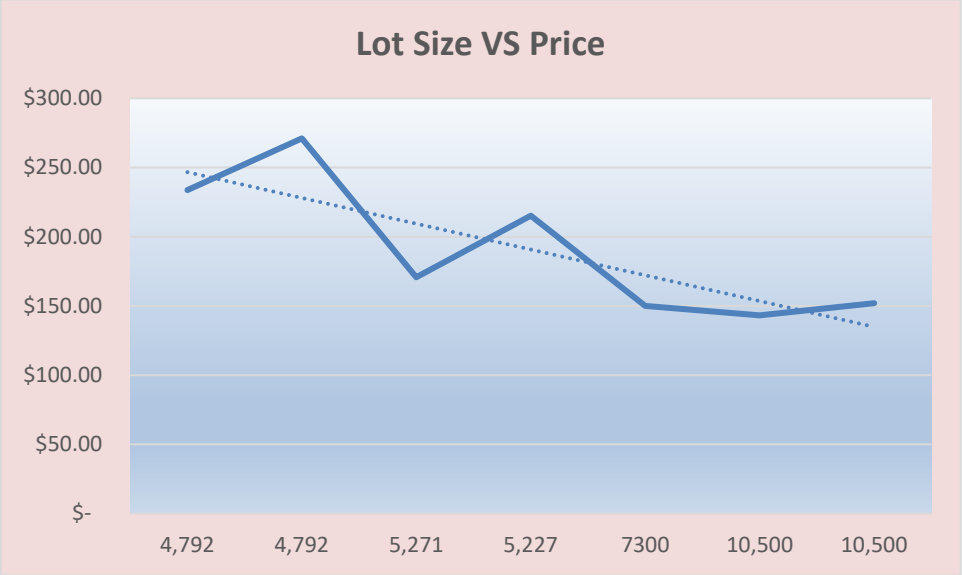
Following are sales that bracket the subject house and lot size, as well as addressing different zoning.

"As Is " Value 521 Pitkin Street

Address	Date of Sale	Size	Condition	Land Size	Price	Price PSF Imp	Includes House Price PSF Land	Site Cover	Type	Other	IND. VALUE
533 Bills Ranch Road	4/2/21	1838	Average+	4,792	$ 1,120,000	$ 609.36	$ 233.72	38%	Cluster		
872 S. 7th Avenue	9/28/21	1680	Average+	4,792	$ 1,299,000	$ 773.21	$ 271.08	35%	Cluster		
37 Hawn Drive	5/4/21	1341	Fair-Ave	5,271	$ 900,000	$ 671.14	$ 170.75	25%	Duplex		
762 Pitkin Street	8/30/21	1632	Average+	5,227	$ 1,125,000	$ 689.34	$ 215.23	31%	Duplex		
521 Pitkin		**949**	**Average**	**7000**		**$ 1,100.00**	**$ 150.00**	**14%**	**Ind. Value**	**$ 1,043,900**	**$ 1,050,000**
406 S. 8th Avenue	LISTING	1044	Fair	10,500	$ 1,500,000	$ 1,436.78	$ 142.86	10%	Single Fam	Tear down	
307 S. Fifth Street	7/30/21	967	Fair	10,500	$ 1,995,000	$ 2,063.08	$ 190.00	9%	Hi Density		
313 Galena	PENDING	1412	Fair	14,000	$ 2,400,000	$ 1,699.72	$ 171.43	10%	Hi Density	Tear down	
				Final	**$ 1,050,000**						

"As Is " Value 601 Pitkin Street											
Address	Date of Sale	Size	Condition	Land Size	Price	Price PSF Imp	Includes House Price PSF Land	Site Cover	Type	Other	IND. VALUE
533 Bills Ranch Road	4/2/21	1838	Average+	4,792	$ 1,120,000	$ 609.36	$ 233.72	38%	Cluster		
872 S. 7th Avenue	9/28/21	1680	Average+	4,792	$ 1,299,000	$ 773.21	$ 271.08	35%	Cluster		
37 Hawn Drive	5/4/21	1341	Fair-Ave	5,271	$ 900,000	$ 671.14	$ 170.75	25%	Duplex		
762 Pitkin Street	8/30/21	1632	Average+	5,227	$ 1,125,000	$ 689.34	$ 215.23	31%	Duplex		
601 Pitkin		**1441**	**Average**	**7300**		**$ 760.00**	**$ 155.00**	**20%**	**Ind. Value**	**$ 1,095,160**	**$ 1,131,500**
406 S. 8th Avenue	LISTING	1044	Fair	10,500	$ 1,500,000	$ 1,436.78	$ 142.86	10%	LISTING	Tear down	
307 S. Fifth Street	7/30/21	967	Fair	10,500	$ 1,995,000	$ 2,063.08	$ 190.00	9%	Hi Density	Tear down	
313 Galena	PENDING	1412	Fair	14,000	$ 2,400,000	$ 1,699.72	$ 171.43	10%	Hi Density	Tear down	
				Final	**$ 1,125,000**						

The land value is predominant in both of these properties. Although the sales are not consistent, they plot out a trend and range in the market that is demonstrated by the following chart, which utilizes the property at 601 Pitkin Street in relation to the above listed properties that have sold or are listed or contracted in the market.



As test of reasonableness, I have taken the older houses from each of these properties and somewhat arbitrarily assigned an improvement value, which reflects the depreciated value of the houses, including utility hook-ups, out-buildings and site improvements, at a cost value of $200 psf. I have then removed this value from each of the properties to arrive at a raw land value. The variances between the sales are averaged for each lot size range, reducing the comparable sales to three value ranges reflecting the smallest, middle size and largest lots. The indicated values for the small sites were about $179 psf, with the largest at just under $150 psf at $148.60. This demonstration supports a lot value bracketed for the subject sites at about $120 to $157 psf, with a predominant indication of about $150, with or without the houses, although there is evidence that the houses contribute as they get larger and more functional**. I am concluding a value for 521 Pitkin at $150 psf and 601 at $155 psf of land area.**

Remove House at $200 psf				
Land Size		Adj. Price	PSF Land	
4,792		$ 752,400	$ 157.01	
4,792		$ 963,000	$ 200.96	$ 178.99
5,271		$ 631,800	$ 119.86	
5,227		$ 798,600	$ 152.78	$ 136.32
7300			$ 150.00	
10,500		$ 1,291,000	$ 122.95	
10,500		$ 1,801,600	$ 171.58	$ 148.60
14,000		$ 2,117,600	$ 151.26	

"AS IS" PROPERTY VALUES

521 PITKIN	**$1,050,000**
601 PITKIN	**$1,125,000**

RESIDENTIAL ZONED LAND

The valuation of the ROW parcel, as well as the new lots subdivided from the ROW and adjacent properties as residential building sites for the purpose of this report are subject to the following conditions:

1) There is assumed to be no areas of these sites that exceed 30% slope, a this would restrict building placements.
2) The building site will accommodate a historic cabin or houses that are a maximum of 1,000 SF in size. 601 itself will not be restricted to this size or occupancy, but the potential development of a fourth cabin or unit on site will be restricted for local housing and size.
3) The property is to be deed restricted to occupancy by a local resident who works in the county or Town of Frisco a minimum of 30 hours per week.

Following are sites for single family and multi-family development that have sold in this market recently.

DEVELOPMENT SITE COMPARABLE #1
307 5th Ave, Frisco, CO 80443



Picture taken 8/2021, Fred M Ebert, SRA

Verify:	Laurie Huggins, Listing Agent, (970) 389-400
	Ronda L. Campbell, Selling Agent and owner representative, (970) 389-3437
Legal:	Frisco Town Sub, Lot 1,2,3, Block 26
Grantor:	Francis and Betty Anne Casapullo
Grantee:	Harris Properties LLC
Reception:	1266449

DEVELOPMENT SITE COMPARABLE #2
212 S 6th Ave, Frisco, CO 80443



Picture taken 8/2021, Fred M Ebert, SRA

Verify:	Lawrence Feldman
Legal:	Cabin Preserve Sub, Lot 1
Grantor:	Chris Eby
Grantee:	Feldman, Kyle Robin & Lawrence
Reception:	1219302/1219304

DEVELOPMENT SITE COMPARABLE #3
214 E Main St, Frisco, CO 80443



Picture taken 8/2021, Fred M Ebert, SRA

Verify:	Stewart Voutour, Listing Agent, (970) 409-7938
	Seller: Richard Boylan
Legal:	Frisco Town Sub, Lot 4,5,6, Block 8
Grantor:	Richard Boylan
Grantee:	Titus, Bradley A & Stacy D
Reception:	1261143

DEVELOPMENT SITE COMPARABLE #4
212 Galena St, Frisco, CO 80443



Picture taken 8/2021, Fred M Ebert, SRA

Verify:	Anne Marie Ohly, Listing Agent, (970) 485-0183
	Ronda L. Campbell, Selling Agent, Owner Representative (970) 389-3437
Legal:	Frisco Town Sub, Lot 17,18,19, Block 7
Grantor:	Peterson Investments-Frisco II LLC
Grantee:	MACATR LLC
Reception:	1236649

DEVELOPMENT SITE COMPARABLE #5
319 4th Ave Aly, Frisco, CO 80443



Picture taken 9/2021, Fred M Ebert, SRA

Verify:	Deborah H. Shoop/ Listing Agent/ (970) 393-0321
	Rori Miller/ Owner/Purchaser (970) 389-2666
Legal:	Frisco Town Sub, Lot 23R, Block D, Resub of Lots 23 & 24
Grantor:	Not found
Grantee:	Miller, Jacob & Rori
Reception:	Not found

DEVELOPMENT SITE COMPARABLE #6
103 Rose Crown Cir, Frisco, CO 80443



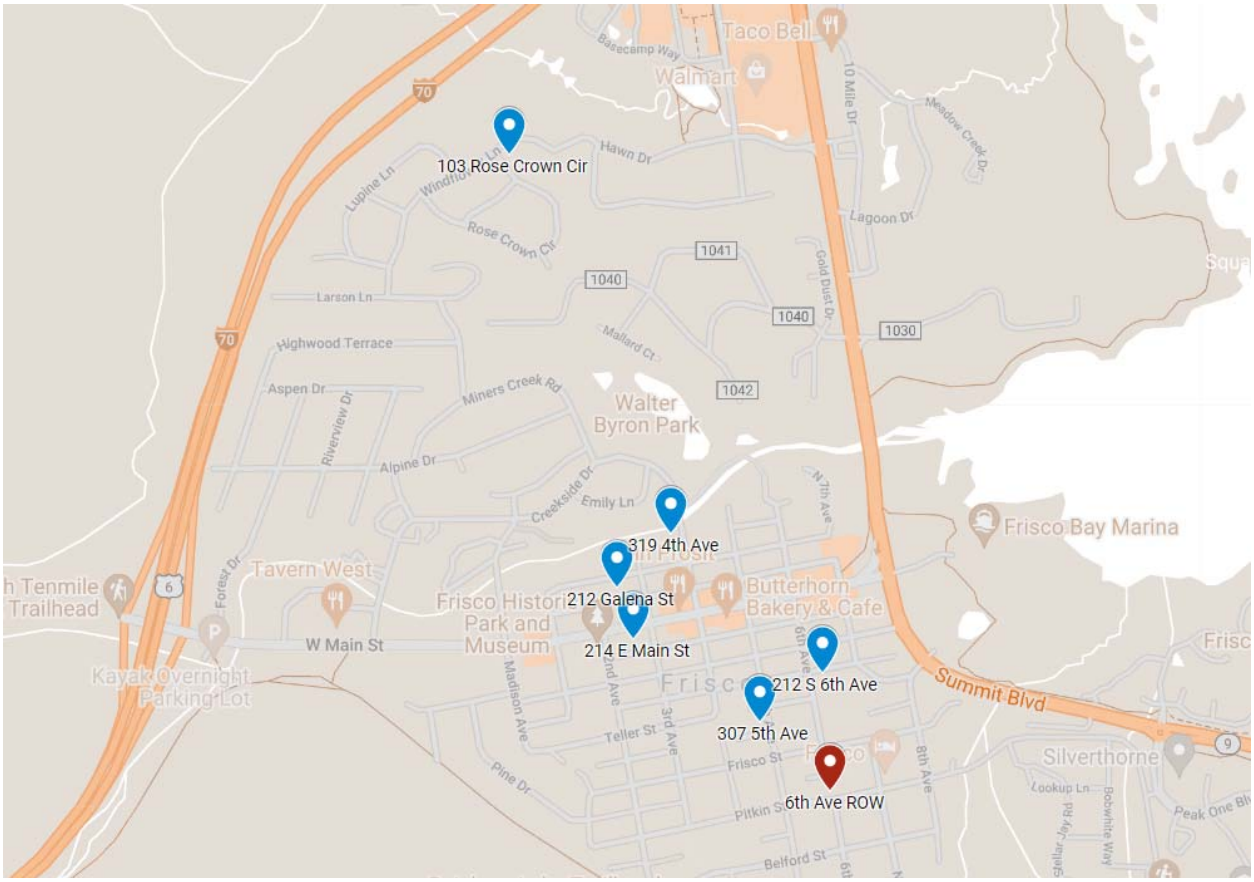
Picture taken 9/2021, Fred M Ebert, SRA

Verify:	Matthew Dayton, Listing Agent, Seller rep. for Dennis Teachey (970) 485-1167 Wendy Tancheff, Selling Agent, (970) 389-3019
Legal:	Reserve at Frisco, Lot 1, Block 4, Filing 2, Phase 1
Grantor:	Teachy and Donnelly
Grantee:	103 Rose Crown LLC
Reception:	1243741

PROPERTY	SUBJECT	COMPARABLE #1	COMPARABLE #2	COMPARABLE #3	COMPARABLE #4	COMPARABLE #4	COMPARABLE #4
ADDRESS	6th Avenue ROW	307 S. 5th Street	212 S. 6th Street	214 E. Main Street	212 Galena Street	319 4th Ave. Alley	103 Rose Crown
Legal Description		Lots 1, 2, 3 Block 26 Town of Frisco	Lot 1 and Future Dev. Cabin Preserve	Lots 4, 5,6 Block 8 Town of Frisco	Lots 17, 18, 19 Block 7 Town of Frisco	Lot 23R, Blk D, Resub L 23 & 24 Town of Frisco	Lot 1, Block 4 Reserve at Frisco
TOWN	Frisco	Frisco	Frisco	Frisco	Frisco	Frisco	Frisco
PRICE		$ 1,995,000	$ 2,100,000	$ 2,300,000	$ 1,100,000	$ 169,500	$ 410,000
DATE OF SALE/TIME	8/18/21	7/30/21	1/21/20	6/1/21	9/25/20	3/19/20	11/30/20
	Dev. Sales 1.5%	0%	30%	3%	15%	24%	14%
CONDITIONS OF SALE	Cash or equal	Cash	Conv.	Conv.	Conv.	Conv.	Conv.
		0%	0%	0%	0%	0%	0%
TOTAL CONDITIONS ADJ.		0%	30%	3%	15%	24%	14%
ADJUSTED SALE PRICE	N/A	$ 1,995,000	$ 2,730,000	$ 2,369,000	$ 1,265,000	$ 210,180	$ 467,400
PRICE PER ADJ UNIT		$ 498,750	$ 341,250	$ 394,833	$ 316,250	$ 210,180	$ 467,400
PRICE PER SF DEV. AREA		$ 226.70	$ 169.30	$ 225.62	$ 158.13	$ 105.09	$ 151.46
PRICE PER SF LAND		$ 190.00	$ 126.98	$ 225.62	$ 120.48	$ 42.03	$ 41.43
ACTUAL # OF UNITS	1.0	4.00	8	6	4	1	1
Adjustment			*Effective*	*Eff with Commercial*	*(Net of restricted)*		*SF Zoning*
LAND SIZE	3,500	10,500	21,500	10,500	10,500	5,001	11,282
Adjustment	*Approx*						
EST DEV. AREA SF	1,000	8,800	16,125	10,500	8,000	2,000	3,086
Adjustment			*Est*	*Est*			
LOCATION/SETTING	Downtown core 3 Blks off Main Street	Downtown core 2 Blk off Main Street	Downtown 2 Blk off Main Street	Central Core downtown Main	Downtown core 2 Blk off Main Street	Downtown Central Core, on Creek	North Frisco resdential single family
Adjustment							
SITE/VIEW/ EXISTING IMPROVEMENTS	Mountains, residential	643433	Mountains, residential	Removal of old apartments	Mountains, residential	Mountains, residential	Mountains, residential
Adjustment							
ACCESS/UTILITIES	Good Access, full utilities avilable to site	Good Access, full utilities avilable to site	Good Access, full utilities avilable to site	All utilities to site or in road	Good Access, full utilities avilable to site	Good Access, full utilities avilable to site	Good Access, full utilities avilable to site
Adjustment							
ZONING/USE	Residential Low Density	Residential High Density	Centrral Core	Central Core	Residential High Density	Residential High Density	Single Family
Adjustment							
NET ADJUSTMENT		0%	0%	0%	0%	0%	0%
ADJ. $$ PSF LAND	$ 65.00	$ 190.00	$ 126.98	$ 225.62	$ 120.48	$ 42.03	$ 41.43
IND. VALUE BY SF LAND	$ 227,500	$ 665,000	$ 444,419	$ 789,667	$ 421,667	$ 147,097	$ 145,001
ADJ. $$ PSF DEV AREA	$ 225.00	$ 226.70	$ 169.30	$ 225.62	$ 158.13	$ 105.09	$ 151.46
IND. VALUE BY DEV SF	$ 225,000	$ 226,705	$ 169,302	$ 225,619	$ 158,125	$ 105,090	$ 151,458
VALUE CONCLUSIONS	**$ 225,000**						
	Deed Restrict -22%						
CONCLUSION	**$ 175,500**	**ROUNDED**	**$ 175,000**				

1200 SF House Allowed	SUBJECT	COMPARABLE #1	COMPARABLE #2	COMPARABLE #3	COMPARABLE #4	COMPARABLE #4	COMPARABLE #4
ADDRESS	6th Avenue ROW	307 S. 5th Street	212 S. 6th Street	214 E. Main Street	212 Galena Street	319 4th Ave. Alley	103 Rose Crown
Legal Description		Lots 1, 2, 3 Block 26 Town of Frisco	Lot 1 and Future Dev. Cabin Preserve	Lots 4, 5,6 Block 8 Town of Frisco	Lots 17, 18, 19 Block 7 Town of Frisco	Lot 23R, Blk D, Resub L 23 & 24 Town of Frisco	Lot 1, Block 4 Reserve at Frisco
TOWN	Frisco	Frisco	Frisco	Frisco	Frisco	Frisco	Frisco
PRICE		$ 1,995,000	$ 2,100,000	$ 2,300,000	$ 1,100,000	$ 169,500	$ 410,000
DATE OF SALE/TIME	18/08/2021	30/07/2021	21/01/2020	01/06/2021	25/09/2020	19/03/2020	30/11/2020
	Dev. Sales 1.5%	0%	30%	3%	15%	24%	14%
CONDITIONS OF SALE	Cash or equal	Cash	Conv.	Conv.	Conv.	Conv.	Conv.
		0%	0%	0%	0%	0%	0%
TOTAL CONDITIONS ADJ.		0%	30%	3%	15%	24%	14%
ADJUSTED SALE PRICE	N/A	$ 1,995,000	$ 2,730,000	$ 2,369,000	$ 1,265,000	$ 210,180	$ 467,400
PRICE PER ADJ UNIT		$ 498,750	$ 341,250	$ 394,833	$ 316,250	$ 210,180	$ 467,400
PRICE PER SF DEV. AREA		$ 226.70	$ 169.30	$ 225.62	$ 158.13	$ 105.09	$ 151.46
PRICE PER SF LAND		$ 190.00	$ 126.98	$ 225.62	$ 120.48	$ 42.03	$ 41.43
ACTUAL # OF UNITS	1.0	4.00	8	6	4	1	1
Adjustment			*Effective*	*Eff with Commercial*	*(Net of restricted)*		*SF Zoning*
LAND SIZE	3,500	10,500	21,500	10,500	10,500	5,001	11,282
Adjustment	*Approx*						
EST DEV. AREA SF	1,200	8,800	16,125	10,500	8,000	2,000	3,086
Adjustment			*Est*	*Est*			
LOCATION/SETTING	Downtown core 3 Blks off Main Street	Downtown core 2 Blk off Main Street	Downtown 2 Blk off Main Street	Central Core downtown Main	Downtown core 2 Blk off Main Street	Downtown Central Core, on Creek	North Frisco resdential single family
Adjustment							
SITE/VIEW/ EXISTING IMPROVEMENTS	Mountains, residential	643433	Mountains, residential	Removal of old apartments	Mountains, residential	Mountains, residential	Mountains, residential
Adjustment							
ACCESS/UTILITIES	Good Access, full utilities avilable to site	Good Access, full utilities avilable to site	Good Access, full utilities avilable to site	All utilities to site or in road	Good Access, full utilities avilable to site	Good Access, full utilities avilable to site	Good Access, full utilities avilable to site
Adjustment							
ZONING/USE	Residential Low Density	Residential High Density	Centrral Core	Central Core	Residential High Density	Residential High Density	Single Family
Adjustment							
NET ADJUSTMENT		0%	0%	0%	0%	0%	0%
ADJ. $$ PSF LAND	$ 77.00	$ 190.00	$ 126.98	$ 225.62	$ 120.48	$ 42.03	$ 41.43
IND. VALUE BY SF LAND	$ 269,500	$ 665,000	$ 444,419	$ 789,667	$ 421,667	$ 147,097	$ 145,001
ADJ. $$ PSF DEV AREA	$ 225.00	$ 226.70	$ 169.30	$ 225.62	$ 158.13	$ 105.09	$ 151.46
IND. VALUE BY DEV SF	$ 270,000	$ 272,045	$ 203,163	$ 270,743	$ 189,750	$ 126,108	$ 181,750
VALUE CONCLUSIONS	**$ 270,000**						
	Deed Restrict -22%						
CONCLUSION	**$ 210,600**	**ROUNDED**	**$ 210,000**				

LOCATION MAP OF COMPARABLE SALES – DEVELOPMENT SITE



DISCUSSION OF SALES

The above properties are all sales in the downtown Frisco area. Some are in the higher density area, and so command the highest price per square foot, and overall. The subject will be lower average density, with site density limited to about 29% of land area actually or effectively.

DEED RESTRICTION

This property will be subject to a deed restriction that will limit its use and remove it from the lucrative second home market. I have completed a study of small units similar in size to the subject cabin in a condominium project in Frisco. Following is a summary of findings.

BASE CAMP CONDOS-Deed Restriction Study						
Date Sold	**Unit**	**Price**	**Size**	**Price PSF**	**Deed Restricted**	**Garage**
10/30/20	201	$ 407,000	559	$ 728.09	No	None
11/4/20	219	$ 365,000	653	$ 558.96	Yes	None
4/30/21	209	$ 441,500	569	$ 775.92	Yes	Yes
6/17/21	216	$ 372,000	570	$ 652.63	Yes	None
8/23/21	206	$ 409,000	654	$ 625.38	Yes	None

The above chart shows 5 sales from Base Camp Condominiums in Frisco. These sales offer an opportunity to derive some adjustments from the market because these are all in the same project, are basically the same unit model, and the project offers market and deed restricted units.

This project is on a land lease, but this should not have an influence on the study for this particular purpose since all units are subject to the same interest.

Date of Sale

Since these sales were all in a rising market, prices must be adjusted or considered over time, even with the period stretching only 8 months.

The two with the longest time gap over time are 219 and 216, which shows a price per square foot variance of $652.63/$558.96 = 1.167, indicating about an 18% increase over about 5 months. However, some consideration should be made for 219 being about 15% larger, which tends to drive down price per square foot slightly.

With 206 selling for full price, and being identical to 219, the indicated time adjustment is $409,000/$365,000 = 1.12, or 12%. With the closing at the end of August, that is over a 10 month period, indicating a rise of 1.2% per month. Since this is closer to the subject in size, I am estimating the increase to be 1.2% per month.

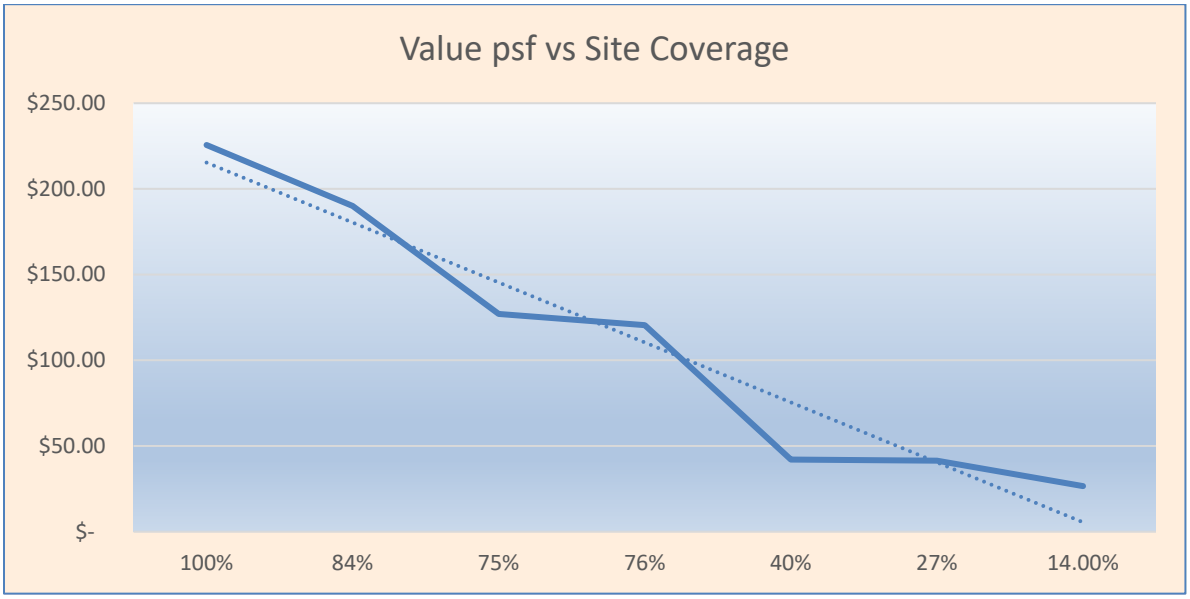
This is limited, due to the small size of these units and the appeal of that much extra space. Therefore, I am estimating time of sale to be adjusted during this time at about 1.2% per month. This remains an exceptional market.

Deed Restriction

The deed restriction on these units involves only full-time occupancy, so in this market it is considered a "limited" restriction since there is no restriction on value growth, income qualifications or other factors. It should be noted that the restriction from renting or using these units on a part time basis as a second home is a major impediment in this market.

Adjusting Unit 201 at 1.2% per month, to Unit 216, 8 months later, would indicate a price per square foot of $728 x 1.096 = $798 psf. This would indicate a difference of $798/652.63 = 1.22, or **22% for the deed restriction.**

The value of the subject sites is a function of density, if used for residential development. The price per square foot of land correlates strongly with amount of density allowed on site, as demonstrated in the following chart.



With the limited density on the subject property, the land value per square foot as a development parcel is limited to a fraction of the value of land with higher density. Although Frisco limits density by unit and site coverage, it does not directly consider unit sizes, except in the Cabin zoning, but rather what can be placed on the site given height, setback, zoning district and terrain considerations. This size site in the high-density district could easily qualify for density at 10-15 times the size of the subject cabin. The concluded value is therefore a function of the size of the potential improvement's living area, at 1000 SF.

The proposed site on the 6th Avenue Right of Way will be larger, at 50 x 140, or 7,000 SF, but half of the site is restricted with an access easement for the two sites next door, combined with its own access drive, so the property effectively useable for the house and living areas is about the same as next door, at 3500 SF. Therefore, both vacant sites are estimated at the same value.

After concluding an unrestricted value for the 1000 SF, the deed restriction needs to be considered. Deducting another 22% for this arrives at a value of about $175,000. Taking the units at 1200 SF with the restriction deducted results in values for the sites of about $210,000.

VALUE OF 521 PITKIN AFTER SUBDIVIDING

Once again, I am applying the house sales without restriction, but with various house and land sizes in an attempt to bracket the subject value. The smaller site and house indicate a value per square foot for both near the higher end of the range, but most similar to the duplex units, which like the subject, are restricted in size and potential by being attached. The following chart reveals the range and conclusion of value as a result.

"As Subdivided " Value 521 Pitkin Street											
Address	Date of Sale	Size	Condition	Land Size	Price	Price PSF Imp	Includes House Price PSF Land	Site Cover	Type	Other	IND. VALUE
601 Pitkin		**949**	**Average**	**3500**		**$ 680.00**	**$ 190.00**	**27%**	**Ind. Value**	**$ 645,320**	**$ 665,000**
533 Bills Ranch Road	4/2/21	1838	Average+	4,792	$ 1,120,000	$ 609.36	$ 233.72	38%	Cluster		
872 S. 7th Avenue	9/28/21	1680	Average+	4,792	$ 1,299,000	$ 773.21	$ 271.08	35%	Cluster		
37 Hawn Drive	5/4/21	1341	Fair-Ave	5,271	$ 900,000	$ 671.14	$ 170.75	25%	Duplex		
762 Pitkin Street	8/30/21	1632	Average+	5,227	$ 1,125,000	$ 689.34	$ 215.23	31%	Duplex		
406 S. 8th Avenue	LISTING	1044	Fair	10,500	$ 1,500,000	$ 1,436.78	$ 142.86	10%	LISTING	Tear down	
307 S. Fifth Street	7/30/21	967	Fair	10,500	$ 1,995,000	$ 2,063.08	$ 190.00	9%	Hi Density	Tear down	
313 Galena	PENDING	1412	Fair	14,000	$ 2,400,000	$ 1,699.72	$ 171.43	10%	Hi Density	Tear down	
				Value	**$ 650,000**	-22%	$ (143,000.00)	$ 507,000		SAY	**$507,000**

FINAL RECONCILIATION

The final values "as is" and "as approved for development" show a limited premium for the development rights. This is due to the appeal in the market of open land even if it cannot be developed, since lots around it are relatively small and these open spaces are considered valuable for separation of houses for privacy and greenbelt areas.

When considering the typical buildout of vacant or redeveloped sites in the downtown area, the proposed development is lower density than is typical, and with the Cabin zoning, all units are well below the maximum building height. Therefore, the proposed use should appeal to the surrounding property owners and should not detract from any values in the area.

The house at 601 Pitkin may have the opportunity to add a garage with a restricted unit for sale under the cabin zoning with up to 1000 square feet. However, this site is most valuable as used for a redevelopment to maximize the size of a new house built to modern standards and function. As such, the addition of the adjacent 3500 SF lot with the requirement to add a unit is the same as taking the 3500 SF lot and adding a 1000 SF house to be sold as a restricted residence. The result is that the restriction can be separated from the existing property at 601 Pitkin, essentially not changing its existing value, provided the smaller house can be built on the narrow lot functionally, likely with a re-subdivision of the two sites to better accommodate this.

Frisco is experiencing a buying frenzy this year that has driven up the price of housing to unprecedented levels, and this is reflected in land values based on the size of house that can fit on any given lot. Many older and historic houses are being moved or demolished to make way for new, larger homes. This is the basis for the values of the building sites in this report.

Subject to the contingent and limiting conditions and extraordinary assumptions listed in this report, my conclusion of the values of these properties as of September 9, 2021 is:

VALUE CONCLUSIONS						
"AS IS" VALUES			"AS PROPOSED" VALUES			
			Property	Site Sizes SF		Value
6th Ave. Right of Way		$ 158,000	West Right of Way Lot	7,000	$	210,000
521 Pitkin Street		$ 1,050,000	East Right of Way Lot	3,500	$	175,000
601 Pitkin Street		$ 1,125,000	Rear 521 Lot	3,500	$	210,000
			521 Pitkin with house	3,500	$	507,000
			601 Pitkin with house	7,300	$	1,125,000

EXTRAORDINARY ASSUMPTIONS AND HYPOTHETICAL CONDITIONS:

1) *This site is a vacated street Right of Way and is being valued under the **hypothetical condition** that it will be approved to house a residential structure upon sale, placed on a permanent foundation, with no more than 1000 SF of floor area. This house is to be deed restricted for full time occupancy by an owner who is an employee working within Summit County, and the site will not be allowed further expansion of living area and other site improvements and structures may be limited to preserve the site as much as possible. This restriction usually also allows occupancy by a retiree over 60 years of age, as owner or tenant. There may be other exceptions or conditions placed by the town, which are assumed to not adversely affect value.*

2) *The Town of Frisco "Cabin" zoning allows up to 50% of the houses in a development to have up to 1200 square feet of living area. Therefore, 2 of the sites are estimated to be improved with 1200 square foot houses. Houses are also allowed basements, which in this market can create additional living area. This report values the sites with the **extraordinary assumption** that basements cannot be used for additional bedrooms, units or have plumbing or finishes that accommodate additional occupants, and that the basements are an option that do not contribute to value for this valuation purpose.*

3) *This appraisal was performed following public awareness that COVID-19 was affecting residents in the United States. At the time of the appraisal, COVID-19 protocol was beginning to experience easing of restrictions and although there have been widespread health and economic impacts, this is subsiding and mask mandates are easing as well as the restrictions on retail, hospitality and restaurants, although the recent resurgence due to the Delta Variance is continuing mask mandaates and concerns about gathering. The effects of COVID-19 on the real estate market in the area of the subject property have been measurable based on reliable data. The period since the lock down that occurred from March to May of 2020 has seen unprecedented activity in mountain real estate and other businesses with resort areas offering alternatives to the urban areas and remote working offering alternatives to the office environment that has been the historical model for work. The internet and advent of the remote worker has opened up these areas in the resort and more rural areas in character as good alternatives, stimulating a storng home sales market with rising prices and land values. The analyses and value opinion in this appraisal are*

based on the data available to the appraiser at the time of the assignment and apply only as of the effective date indicated. No analyses or opinions contained in this appraisal should be construed as predictions of future market conditions or value. 2020 proved to show the highest dollar volume in sales in the area, including Summit, Eagle, Grand and surrounding counties in Colorado.

ADDENDUM

PROPOSED DEVELOPMENT LETTER



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Serving Summit County since 1979

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Andy R. Richmond

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Legal Assistant

May 7, 2021

Don Reimer
Community Development Department
Frisco Town Hall * 1 Main Street
PO Box 4100
Frisco, CO 80443

Richmond-Lindrose Vacation Application for 6th Ave. Roadway
Reasons for the Requested Vacation

My name is Andy Richmond and I was born and raised in Frisco. I purchased a home at 521 Pitkin St. almost two years ago. I have long been aware of the Town's pressing need for local's housing and, having personally seen Frisco grow and change over the past 30 years I want to be part of the solution. I have followed Council's recent working groups and discussions regarding the local housing issue. I know that Council is seeking as many solutions as it can to the local housing shortage. And I believe we have a proposal that will add a different, creative way to further address Frisco's need for local's housing.

The first step in our proposal is to request that the Town vacate the 6th Ave. right-of-way between our home at 521 Pitkin, and the Lindrose's home at 601 Pitkin. We understand that vacation of public right-of-way requires a show of "overriding public interest." Our proposal offers this public interest.

In exchange for the Town's vacation, my wife and I will encumber our current home at 521 Pitkin with a local's housing covenant. Additionally, we are proposing a subdivision of our lot so as to sell the back half, that home would also be subject to a local's housing covenant. In the vacated right-of-way, we would build a third home, also subject to a local's housing covenant. And finally, our neighbors and co-applicants the Lindroses, would, on longer time frame, contribute one more local unit to the proposed area. That is the potential for four local houses from one vacated right-of-way.

To clarify, my wife and I would immediately encumber our current home, our new back lot, and the parcel we gain from vacation with a local's housing covenant. The Lindroses would sign on to an agreement that as soon as they, or their successors in interest, built a garage or added on to their home in any way, they would be required to either add a mother-in-law apartment to the garage or build an additional local's home on their portion of the vacated parcel. You can see on the attached survey from Ten Mile Engineering that the 521 Pitkin side of the right-of-way would gain slightly more land than the 601 Pitkin side. This is because the 521 side will be providing three of the four local's units, and thus much of the public benefit.

We would be able to fit this number of houses on this property by applying a Cabin Housing use to the current Richmond house, as well as the two to be built immediately. This forces those houses to average no more than 1000 sq. ft. This would have the added bonus of maintaining the small cabin character of the neighborhood. The Ten Mile Engineering site plan attached with this application illustrates how the cabin houses would fit in this area.

The covenant we propose would not have the AMI or resale caps that some of the current local housing projects in the Town do. As a recent home buyer, and judging from some of Council's recent discussions, AMI and resale caps can create some issues for buyers. That is not to say that they do not have a place, but rather that the Town should have several options in its local housing arsenal. AMI caps create a situation where some buyers are left behind because they make too much to qualify for an AMI cap but don't make enough for a free market home. Resale caps can provoke dissatisfaction because they essentially disallow locals from participating in the real estate market while second home owners strike it rich when home values in town rise. Our local housing covenant would instead regulate the local requirement with a strict covenant limiting ownership of these homes to locals who work in Summit County, with a preference to locals who work in Frisco specifically. Additionally, there would be a covenant requiring that these homes be the primary residence of each owner. That ensures there is no real estate speculation or investment purchases in our development, each owner has to want to live there. Thus we would regulate price with a combination of the local's covenant and the small size of the homes. Essentially, the fact that you must sell to a local, it must be that local's primary residence, and the house cannot be more than 1000 sq. ft. will not allow the prices on these homes to become prohibitive.

By signing on to these local covenants, we are giving up significant value. We have seen what homes in this neighborhood go for on the free market. However, we have also seen that once homes in our neighborhood are sold, they often become second homes are short-term rentals, thus deteriorating the quality and character of the neighborhood. We are willing to forego the big returns of the free market to ensure that we live in a local neighborhood with people who value the area enough to make it their primary residence.

The main point of our proposal is that the Town can ensure four permanent, primary residence, local units from one right-of-way, rather than risk yet another lot turning into a second home that no local can ever afford thus taking it off the local's market forever. Considering the local's housing shortage in Frisco, this is the definition of "overriding public interest." Our proposal would provide a blueprint for future vacations and would give the Town tremendous leverage because it could forever tell future applicants "The 6th Ave. vacation gave us four local homes, that is the standard."

Thank you for your consideration.

Andy Richmond

From: Gorham, James
To: Heth, Emma
Cc: Kent, Katie
Subject: RE: For Review: ROW Vacation at 521 Pitkin St
Date: Thursday, October 9, 2025 2:55:15 PM
Attachments: image002.png
image007.png

Hi Emma – See below your answers. Something to also consider is utilizing pages A-4 & A-5 regarding ownership need.

Thanks!

James Gorham | Economic Development Manager

Mailing: PO Box 4100, Frisco, CO 80443
Physical: 1 Main Street, Frisco, CO 80443
Email jamesg@townoffrisco.com
Office 970-668-4570
FriscoGov.com
TownofFrisco.com

From: Heth, Emma <emmah@townoffrisco.com>
Sent: Thursday, October 9, 2025 12:54 PM
To: Gorham, James <jamesg@townoffrisco.com>
Cc: Kent, Katie <katiek@townoffrisco.com>
Subject: RE: For Review: ROW Vacation at 521 Pitkin St

Thank you!!

A couple of other questions came up as I'm analyzing the project.

- Did the housing plan identify what AMIs are typically served by units with live-work restrictions? Or is that too hard to pin down because it depends on the house size/type?
  No. The plan doesn't interpret live/work like we do with a covenant restriction. It views it from an affordable/workforce vs market rate standpoint.
- Did the housing plan identify a need for live-work deed-restricted housing? I see the needs broken out by AMI levels that indicates the Town should focus on 150% AMI and less, but not sure where this development would fit into that.
  No. Pretty much the same explanation as above. The housing plan does not evaluate live/work but rather AMI levels. This development could be viewed as workforce housing based on the covenant and not "affordable" depending on if the sale price is

above 150% AMI.

- Is there a place in the housing plan where it talks about providing higher-income units for the sake of opening up affordable units to new buyers? I see it implied a bit but wondering if there is a section explicitly about this.
  No, as you stated there is wording that implies it, but nothing that states a “move-up” action item. It’s kind of discussed in the rental section, but not homeownership.

No worries if you can’t get to this today, I know it’s last minute!

Emma Heth (she/her) **| Planner II | Community Development**

TOWN OF FRISCO
COLORADO

Email: EmmaH@TownofFrisco.com
Office: 970-668-4581

From: Gorham, James <jamesg@townoffrisco.com>
Sent: Wednesday, October 8, 2025 5:30 PM
To: Heth, Emma <emmah@townoffrisco.com>
Cc: Kent, Katie <katiek@townoffrisco.com>
Subject: RE: For Review: ROW Vacation at 521 Pitkin St

Thanks for the answers, Emma. For referencing the Housing Plan, I recommend using 5.1.D Neighborhood Densification from the Action Plan. This item specifically talks about utilizing unused public land/undeveloped right of way for housing.

If you need anything else let me know!

James Gorham | Economic Development Manager

TOWN OF FRISCO

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Physical: 1 Main Street, Frisco, CO 80443
Email jamesg@townoffrisco.com
Office 970-668-4570
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From: Heth, Emma <emmah@townoffrisco.com>
Sent: Wednesday, October 8, 2025 4:31 PM
To: Gorham, James <jamesg@townoffrisco.com>

Cc: Kent, Katie <katiek@townoffrisco.com>
Subject: RE: For Review: ROW Vacation at 521 Pitkin St

Hi James!

Thank you for sharing this. A couple of responses to your questions are below, and Katie feel free to weigh in if I'm missing anything!

One other question for you – is there a specific section of the housing plan that I should quote or use for this?

I think your email is ok for me to just include in the packet, no memo needed unless you want to.

Thanks!
Emma

Emma Heth (she/her) **| Planner II | Community Development**

Email: EmmaH@TownofFrisco.com
Office: 970-668-4581

From: Gorham, James <jamesg@townoffrisco.com>
Sent: Tuesday, October 7, 2025 3:43 PM
To: Heth, Emma <emmah@townoffrisco.com>
Cc: Kent, Katie <katiek@townoffrisco.com>
Subject: RE: For Review: ROW Vacation at 521 Pitkin St

Hi Emma!

Some initial thoughts:

- What is the timeframe for the new cabins on Richmond's lot to be constructed after approval? We need some type of claw back if they fail to produce.

  The plan that Thad suggested when it was under review previously was that the Town would require a development agreement to outline the timing for the new cabins and the specifics of the housing covenants. The vacation ordinance would only be recorded once the conditions of the development agreement were met. The applicant has not outlined or proposed a specific timeline.

- The Lindrose property is under a living trust. Any idea how old the trustee is? Due to the two conditions mentioned in the PUD, it may be some time before a unit is built.

  I believe the trustee is older, but you are correct that the timeline for the 4th unit

that would be constructed by the owners of 601 Pitkin is less clear. This was something the Planning Commission and Council were concerned about last time around too. The 4th unit would not be built until the owners added onto their home in some way.

- Under the PUDs Density description, is states an ADU can be a garage. Do we want to revise that to state above a garage? Yes, I think we would want that to be more clear when we got to reviewing the rezoning in detail, thanks for catching!
- Section 4 states that, "The Primary Resident unit on the Lindrose Property may be a single family or duplex swelling unit, or an Accessory Dwelling Unit." Would we want an ADU to be the primary? That's a good question, I think the Planning Commission/Council can discuss whether it would be enough for the 4th workforce unit to be an ADU rather than its own cabin.
- Section 17 gives a definition of "Primary Resident" and states that they must be a "registered voter in the Frisco, Colorado." "To determine a person's Principal Place of Residence, the criteria set forth in C.R.S. 31-10-201(3) shall apply."
    - I'm unsure if we can require a resident who qualifies under the 30+ hours a week in Summit County section, to *also* be required to be a registered voter… The statute referenced gives judges rules regarding if someone is authorized to vote in a certain jurisdiction. The covenant that would be placed on the property would most likely differ from those criteria, as the Town's HH Live/work covenant does in *7.1 Occupancy*.
    - That's a good question, I know last time Council said they would want the applicant to use the town's standard live-work covenant, not create their own. It sounds like the applicant pulled these qualifications from a Vail housing program. We would also have Thad look at this more in detail after Planning commission review.

I'm good with the total # of units being produced. I wish that the AMI was capped at 150%, but I can live with live/work. Would also like a lottery utilized to sell the units.

Let me know if you want something more formal, like a memo to you regarding this.

Thanks,

James Gorham | Economic Development Manager

Mailing: PO Box 4100, Frisco, CO 80443
Physical: 1 Main Street, Frisco, CO 80443
Email jamesg@townoffrisco.com
Office 970-668-4570
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From: Heth, Emma <emmah@townoffrisco.com>
Sent: Tuesday, October 7, 2025 2:12 PM
To: Gorham, James <jamesg@townoffrisco.com>
Cc: Kent, Katie <katiek@townoffrisco.com>
Subject: For Review: ROW Vacation at 521 Pitkin St

Hi James,

Planning has an application in to vacate a portion of the South 6th Ave ROW, between 521 Pitkin St and 601 Pitkin St. The applicant (Andy Richmond), who lives at 521 Pitkin St, is proposing that the Town vacate this portion of the ROW in exchange for them providing 4 housing units with a live-work housing covenant. His application materials show criteria for a custom covenant, similar to our live-work covenant. I'm sending this to you to see if you have comments you'd like to share from a housing perspective. I've also created a sign-off step in our CommunityCore workflow that I will sign off on once I get your thoughts.

You might remember this from when it went to Council in November last year. At the time, Council said they wanted him to provide one additional unit with an AMI restriction, which the applicant didn't want to do. Now that there has been some turnover on Council, he is coming back with the same proposal to see if he can get more support.

We are taking this to Planning Commission next week (on 10/16) for them to make a recommendation to Council. If you are able to provide comments by then, that would be great, but if not we will just make sure we have your input before going to Town Council. I will be adding some comments to the staff report based on how this fits into the Housing Strategic Plan as well.

Here is the location:



Let me know if you have any questions about this or if I can provide any other information for you.

Thanks!
Emma

Emma Heth (she/her) **| Planner II | Community Development**

TOWN OF FRISCO
COLORADO

Mailing: PO Box 4100, Frisco, CO 80443
Physical: 1 Main Street, Frisco, CO 80443
Email: EmmaH@TownofFrisco.com
Office: 970-668-4581
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TownofFrisco.com

From: Christopher McGinnis
To: Heth, Emma; Southworth, Josh
Cc: Kent, Katie
Subject: Re: For Review: ROW Vacation at 521 Pitkin St
Date: Wednesday, October 8, 2025 2:48:55 PM
Attachments: image002.png

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Hi Emma,

I was speaking to Josh about this today and I will upload formal comments to CommunityCore but wanted to respond to item 2. It is easy to state that the ROW is not necessary for present use, but more difficult to state that there is not a prospective use. I had sent previous comments that we wanted an easement to be granted for utilities and access if needed in the future. I think that if we condition an easement requirement, we could state that the easement would satisfy any prospective uses (trail or water line). The easement would not be sufficient for a roadway, but we could clarify that the existing grades would not allow for a roadway per Town standards and would not be a reasonable prospective use.

Thanks,

Chris McGinnis, PE (CO)
Sr. Engineer & Client Manager
Short Elliott Hendrickson Inc. (SEH®)
970.216.9659 mobile | 720.540.6800 main

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100% Employee Owned

From: Heth, Emma <emmah@townoffrisco.com>
Sent: Tuesday, October 7, 2025 2:14 PM
To: Christopher McGinnis <cmcginnis@sehinc.com>; Southworth, Josh <joshs@townoffrisco.com>
Cc: Kent, Katie <katiek@townoffrisco.com>
Subject: RE: For Review: ROW Vacation at 521 Pitkin St

Hi both – Sorry for the double email, but I forgot to include one specific finding for you to comment on.

In Section 142 of Town Code that concerns vacation of property, it states that any vacation has to contain the following findings:
1. That no land adjoining any roadway to be vacated is left without an established public road connecting said land with another established public road.
2. That the roadway or easement to be vacated is no longer necessary for present or prospective

public use or convenience.

Would you be able to comment specifically on #2?

Thanks!
Emma

Emma Heth (she/her) **| Planner II | Community Development**

Email: EmmaH@TownofFrisco.com
Office: 970-668-4581

From: Heth, Emma
Sent: Tuesday, October 7, 2025 2:04 PM
To: Chris Mcginnis <cmcginnis@sehinc.com>; Southworth, Josh <joshs@townoffrisco.com>
Cc: Kent, Katie <katiek@townoffrisco.com>
Subject: For Review: ROW Vacation at 521 Pitkin St

Hi Chris and Josh,

Planning has an application in to vacate a portion of the South 6th Ave ROW, between 521 Pitkin St and 601 Pitkin St (application # VAC-25-0001 in CommunityCore). The applicant, who lives at 521 Pitkin St, is proposing that the Town vacate this portion of the ROW in exchange for them providing 4 housing units with a live-work housing covenant/deed restriction.

This application was originally submitted in 2022 and was reviewed by Public Works and Engineering at that time, but I wanted to share their materials with you and get your comments and approval since it has been awhile and we have new staff. We are taking this to Planning Commission next week (on 10/16) for them to make a recommendation to Council. If you are able to provide comments by then, that would be great, but if not we will just make sure we have your approval before going to Town Council. I added sign-offs for both of you in CommunityCore, so you can sign off there if you are ok with it.

Here is the location:



The staff report from 2023 when this went to Planning Commission notes that no roads have been constructed and no public utilities have been installed in the area in question.

Let me know if you have any questions about this or if I can provide any other information for you.

Thanks!
Emma

Emma Heth (she/her) **| Planner II | Community Development**

TOWN OF FRISCO
COLORADO

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DATE	USER	STATUS	NOTES
10/07/2025	Joshua Southworth	Approved	Public Works has no issue with the vacation of the ROW as it is not used at t his time. We would not accept any additional maintenance even if built to To wn standards.

From:	Tom Metzger
To:	Heth, Emma
Cc:	Tom Metzger; terrykolehall@me.com
Subject:	Planning File No. VAC-25-0001
Date:	Saturday, October 4, 2025 7:51:27 PM
Attachments:	Town of Frisco ROW Vacation Petition.pdf

You don't often get email from tmetzger@bsegllc.com. Learn why this is important

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You have not previously corresponded with this sender.
Please review the email and report as suspicious if you have any doubts of the integrity of the message.

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Dear Emma,

We submitted a General Objection to this petition back on May 15, 2023 (see attached), when it first came up. We like to re-submit that section of the attached, and in addition we'd like to add the following.

Potential Unintended Consequences & Considerations.

a. Existing building height restrictions and space between dwellings may be negated or unfairly leveraged (against offset homeowners), should the TOF ROW being vacated, lie topographically high and/or narrow to the surrounding private lots.
b. There should be a mechanism whereby, a dwelling built upon a vacated ROW, should not allow the overall height to by higher than the offset roof height of topographically lower offsetting dwellings and/or legally allowable future dwellings, regardless of floor level reductions for the ROW dwelling.
c. There could be an instance where a new ROW home blocks the neighbors view (nearby) in what was a reason that homeowner purchased that home/lot in the 1st place. Presuming that future development in public ROW's could not occur, a motivating factor in their lot choice.
d. Should an offset homeowner(s), object to the building/development plan (based on issues such as above), they should have some recourse in the final "agreed upon" plan as a consolation for the potential loss of aesthetics, view, green space, and neighborhood/public corridors.

Please confirm receipt of these comments and the attached and forward to the Planning Commissioner in advance of this Oct 16 public hearing.

Respectfully submitted,
Thomas Metzger and Theresa Hall
500 Frisco Street
Frisco, CO 80443

Cell 303-941-2438

Tom Metzger

From: Lee, Susan <SusanL@townoffrisco.com>
Sent: Tuesday, May 23, 2023 3:45 PM
To: Tom Metzger; Mattka, Cheryl
Cc: terrykolehall@me.com
Subject: RE: Planning Commission Public Hearing 5/18/23 RE: Planning File No. VAC-21--0001 OBJECTION

Follow Up Flag: Follow up
Flag Status: Flagged

Tom –

We haven't produced minutes from last week's meeting but can forward to you when they're ready. The outcome was that Planning Commission is in favor of the vacation in exchange for up to four work force housing units and that one of the units should be deed restricted to a person earning 160% AMI. Planning Commission also recommended that the Town and developer enter into a development agreement that specifys when and how the units will be completed. Planning Commission's recommendation goes to Town Council for consideration. It will likely be on the June 27th Town Council work session agenda.

Susan

From: Tom Metzger <tmetzger@bsegllc.com>
Sent: Monday, May 22, 2023 9:54 PM
To: Lee, Susan <SusanL@townoffrisco.com>; Mattka, Cheryl <CherylM@townoffrisco.com>
Cc: terrykolehall@me.com
Subject: RE: Planning Commission Public Hearing 5/18/23 RE: Planning File No. VAC-21--0001 OBJECTION

Hi Susan or Cheryl,

I listened to the You Tube broadcast of the mtg, but it's very hard to hear and understand all that's said or decided. Is there a summary of how the VAC application was left that evening.

Regards,
Tom Metzger

From: Tom Metzger
Sent: Monday, May 15, 2023 3:48 PM
To: Lee, Susan <SusanL@townoffrisco.com>; Mattka, Cheryl <CherylM@townoffrisco.com>
Cc: terrykolehall@me.com
Subject: RE: Planning Commission Public Hearing 5/18/23 RE: Planning File No. VAC-21--0001 OBJECTION

Great, thank you so much!

From: Lee, Susan <SusanL@townoffrisco.com>
Sent: Monday, May 15, 2023 3:17 PM
To: Tom Metzger <tmetzger@bsegllc.com>; Mattka, Cheryl <CherylM@townoffrisco.com>

Cc: terrykolehall@me.com
Subject: RE: Planning Commission Public Hearing 5/18/23 RE: Planning File No. VAC-21--0001 OBJECTION

Hi Tom – Just writing to let you know your public comment has been received and will be forwarded to Planning Commissioner's in advance of this Thursday's public hearing.

Susan Lee | Planning Manager/Principal Planner | Community Development

Mailing PO Box 4100, Frisco, CO 80443
Physical 1 Main Street, Frisco, CO 80443
Email SusanL@TownofFrisco.com
Office 970-668-2566
FriscoGov.com
TownofFrisco.com

From: Tom Metzger <tmetzger@bsegllc.com>
Sent: Monday, May 15, 2023 10:52 AM
To: Lee, Susan <SusanL@townoffrisco.com>; Mattka, Cheryl <CherylM@townoffrisco.com>
Cc: terrykolehall@me.com; Tom Metzger <tmetzger@bsegllc.com>
Subject: Planning Commission Public Hearing 5/18/23 RE: Planning File No. VAC-21--0001 OBJECTION

Susan Lee
Community Development Department
Town of Frisco,
PO Box 4100
Frisco, CO 80443

RE: Planning File No. VAC-21-0001

Dear Susan,

My wife Terry Hall and I are full time residents living at 500 Frisco Street in Block 34, FRISCO TOWN SUB, RL (same as Applicants).

Opening Statement:

1. We recognize and sympathize with the Town's efforts to find "reasonable" solutions to local "affordable" housing.
2. We have no objection to the applicants' desires to upgrade, enlarge or replace their living space on their existing lot or to find an alternate location to facilitate same.

General Objection to Vacation of TOF Public Property for the Following Reasons

1. Loss of neighborhood/public uses, such as,
   a) Pedestrian footpath.
   b) Pet exercise avenues.
   c) Wildlife corridor.
   d) Greenbelt space between properties.
2. Unexpected Development/Consequences by Developers and/or Home-Owners/Home-Buyers.
   a) Potential increased density to existing DU allotments.
   b) Investment by a homeowner/buyer to reside, build or buy based on current surrounding density/setbacks, aesthetics and green space can be changed/minimized unexpectantly in the future.

c) Potential leverage (financial and/or lot size) granted to offsetting lot site owners adjacent to undeveloped TOF Public Property not afforded to others (not offsetting such ROWs).
d) Potential diminution of property value to existing nearby lot owners.

3. Other Considerations:
   a) Loss of future infrastructure options by TOF.
   b) Loss of existing or future vegetation/forestation sites.
   c) Free and/or below current market value given or received by TOF.
   d) **Specific:**
      i) Does not provide deed restricted workforce housing units or require an AMI cap. The potential for such restrictions/requirements to limit buyer audience and/or investment returns should not play a role.
      ii) If such Vacation has not been granted by TOF before, concerned this could be precedent setting (for the issues outlined above).

Respectfully submitted,
Tom Metzger and Terry hall
500 Frisco Street
Frisco, CO 80443

PLANNING COMMISSION
STAFF REPORT

May 18, 2023

AGENDA ITEM: Planning File No: VAC-21-0001: A request for the vacation of a portion of a public right-of-way consisting of a 10,500 sq. ft. (0.24 acres) tract of the South 6th Avenue right-of-way within Blocks 33 & 34, Frisco Townsite

LOCATION: Generally located north of Pitkin Street, south of Pitkin Street Alley, adjacent to and east of 521 Pitkin Street / Lots 23-24, Block 34, Frisco Townsite and adjacent to and west of 601 Pitkin Street / Lots 13-14, Pt 15, Block 33, Frisco Townsite

APPLICANT: Andy Richmond and Lauren Echevarria
PO Box 92
Frisco, CO 80443

Albert and Marta Lindrose
1225 Gapter Road
Boulder, CO 80303

NOTICING: Mailed to adjacent property owners – May 4, 2023
Posted at site – May 4, 2023

TOWN STAFF: Susan Lee, Planning Manager
susanl@townoffrisco.com, 970-668-2566

PROJECT DESCRIPTION

The Applicants, Andy Richmond and Lauren Echevarria are the owners of the property located at 521 Pitkin Street and Albert and Marta Lindrose are the owners of the property located at 601 Pitkin Street. The Applicants are requesting that the Town of Frisco vacate a portion of a public right-of-way consisting of a 10,500 sq. ft. (0.24 acres) tract of the South 6th Avenue right-of-way. The property is generally located north of Pitkin Street, south of Pitkin Street Alley, adjacent to and east of 521 Pitkin Street / Lots 23-24, Block 34, Frisco Townsite and adjacent to and west of 601 Pitkin Street / Lots 13-14, Pt 15, Block 33, Frisco Townsite

If the Town of Frisco chooses to vacate this portion of street right-of-way, the applicant is proposing that ownership will be split between the properties located at 521 Pitkin Street and 601 Pitkin Street, with 7,000 sq. ft. being added to 521 Pitkin and 3,500 sq. ft. being added to 601 Pitkin as shown on the submitted site plan.

If the Town of Frisco chooses to vacate the subject street right-of-way, the applicants who own 521 Pitkin Street are proposing to encumber their current home at 521 Pitkin with a "local's housing covenant". Additionally, they are proposing a subdivision of their lot so as to sell the back half of the existing property and restrict the newly created vacant lot to having a "local's housing covenant".

The applicants who own 601 Pitkin Street would, in an undetermined timeframe, contribute one more local unit to the proposed area. This timeline would be dependent on when they, or their successors in interest, build a garage or an addition to the existing structure. At that time, they would build a mother-in-law apartment to the garage or build an additional local's home within the 3,500 sq. ft. of South 6th Avenue vacated to them.

The owners of 521 Pitkin Street have submitted an application for a Planned Unit Development over the existing property and the portion of right-of-way property they wish to acquire. The PUD process is regulated by Frisco Town Code, Section 180-4.3. The PUD is not being evaluated at this time.

If the Town of Frisco chooses to vacate the right-of-way, approval may be granted contingent upon a development agreement outlining the conditions that must be met in order for the Town to vacate the right-of-way and transfer ownership to the applicant. The development agreement should outline the exact nature of the proposed deed restrictions, performance measures such as timing of completion, and recording of restrictions. The vacation request and development agreement could not assume quasi-judicial approvals by Planning Commission and Council on either the PUD or development application.

The applicants have stated that the covenants would not have a specific area median income (AMI) cap but would require the ownership of the home to be by a person(s) that work within Summit County with a preference to locals who work in Frisco specifically. Additionally, there would be a covenant restriction requiring the homes to be the primary residence of each owner.

The subject parcel, and adjacent properties, are zoned Residential Low Density (RL) District with an allowed density of eight (8) units per developable acre. When the right-of-way is combined with the adjacent parcels, the allowed density for each parcel will increase. 521 Pitkin would increase from 1 to 3 units, due to rounding, and 601 Pitkin would increase from 1 to 2 dwelling units.

Property Address	Existing Lot Size	Existing Density Permitted	Proposed Lot Size	Density with Proposed Vacation
521 Pitkin Street	7,000 sq. ft.	1	14,000 sq. ft.	3
601 Pitkin Street	7,300 sq. ft.	1	3,500 sq. ft.	2

Staff has analyzed the feasibility of converting this portion of the South 6th Avenue right-of-way into a lot for development of workforce housing. If converted into a lot for residential development, the subject parcel would need to be zoned and would be assigned to the Residential Low Density (RL) District the same as the neighboring lots. The allowed density on the 10,500 sq. ft. right-of-way parcel would be 2 dwelling units.

Requests of this nature are regulated by Chapter 142, Vacation of Property, Code of the Town of Frisco. Pursuant to this chapter, requests for the vacation of a public right-of-way require Planning

Commission review and a recommendation to the Town Council. The Town Council then reviews and takes final action on such a vacation request by ordinance.

If the Town of Frisco chooses to vacate this portion of right-of-way, the applicants will be required to submit a plat application to combine the ROW vacation with their existing lots.

No roads have been constructed and no public utilities have been installed in the South 6th Avenue right-of-way in the area requested to be vacated. Below is a vicinity map of the subject property.



Vicinity Map

REQUIRED ACTION

Planning Commission:	Recommendation of approval, denial, or approval with conditions to the Town Council for the proposed vacation.
Town Council:	Approval, denial, or approval with conditions of the proposed vacation by ordinance.

ANALYSIS – FRISCO COMMUNITY PLAN

The following elements of the Frisco Community Plan are applicable to the review of the proposed development:

Vision and Guiding Principles (excerpts)

The vision and guiding principles are a statement of community values. Together, they reflect characteristics that residents value about Frisco today, and the kind of community that residents would like to see Frisco become as it continues to grow and evolve over time. The vision and guiding principles serve as an organizing framework for subsequent chapters and policy guidance in the Community Plan, as well as for the Town Council's Strategic Plan.

Guiding Principle 1: Inclusive Community

Frisco cares about our neighbors, visitors, and the whole of our community. We are an inclusive community that welcomes people of all backgrounds and income levels. We support a balance of housing options to create opportunities for a diverse population to reside here. Our history is integral to our identity and it is also a guiding principle for our future. As the Town grows and changes, we need to be rooted in the values of our past. The Ten Mile Range mountain backdrop, historic structures, vibrant neighborhoods, and a lively Main Street characterize Frisco along with the friendly people and welcoming vibe. As Frisco grows, this character and identity should be preserved and enhanced throughout Town.

1.1: Protect the character and livability of Frisco's residential neighborhoods

- ***1.1A Ensure new housing complements adjacent properties and neighborhoods through appropriate mass, scale, and design. See page 68 for Area Specific Policies/Design Principles to help encourage compatible neighborhood development.***
- *1.1B Invest in targeted improvements (e.g., trail connections, bike paths, sidewalks, and drainage improvements) that enhance the safety and quality of life of residents.*
- ***1.1C Strive to create an appropriate balance of full-time residents, second homes, and short-term rentals to maintain a diverse and vibrant community.***

1.5: Promote a balanced community through support for diverse and equitable housing options

- ***1.5A Develop a diverse portfolio of workforce housing programs to support a broad range of housing needs—type of unit, rental vs. ownership, and price points—at the community and neighborhood level.***
- ***1.5B Stimulate the creation of workforce housing through town policies, incentives, and regulatory procedures.***
- ***1.5C Collaborate with community partners and the private sector to expand the reach of Frisco's workforce housing efforts.***

Guiding Principle 2: Thriving Economy

The Frisco economy is built upon a unique balance of tourism and its role as a commercial-service hub for the region. Tourism, driven by recreational opportunities, and the small, mountain town appeal of Main Street, creates jobs and revenue. Locals and visitors utilize the large retailers, grocery stores, and services located along Summit Boulevard, and support the small businesses on Main Street. While the Frisco economy has seen steady growth in the past decade, diversification of the economy is important. More year-round opportunities will provide stability through the seasons and economic downturns. The Town should focus on small, incremental changes that preserve the town character and a healthy small business community that attracts residents and visitors.

2.1: Maintain a diverse and strong economy

- *2.1A Continue to attract and retain businesses that support and enhance Frisco's tourism revenues, while also seeking to build upon entrepreneurship and new or emerging niches.*
- ***2.1B Provide opportunities for a balanced mix of housing and services to support local businesses, employees, residents and visitors.***
- ***2.1C As development and infill occurs, ensure that the Town's overall mix of land uses remains aligned with community goals.***
- *2.1D Participate in regional and state economic development efforts that support a diverse economy.*
- *2.1E Support the creation of home-based businesses and remote workers.*

The subject parcel is generally located north of Pitkin Street, south of Pitkin Street Alley, adjacent to and east of 521 Pitkin Street / Lots 23-24, Block 34, Frisco Townsite and adjacent to and west of 601 Pitkin Street / Lots 13-14, Pt 15, Block 33, Frisco Townsite. There is an existing mixture of residential building types, building designs, and dwelling unit densities in this neighborhood, generally consisting of one and two unit dwellings. The proposed right-of-way vacation application encourages infill and redevelopment on a parcel that is currently vacant.

This application facilitates the applicant's proposed construction of residential units under 1,500 sq. ft. that would add variety to the sizes and types of homes in this residential neighborhood. The addition of the proposed covenant restrictions aid in the creation of workforce housing and responds to a need that has been defined within the community.

The application appears to be in conformance with the purpose and recommendations of the Frisco Community Plan.

The proposed vacation of the undeveloped South 6th Avenue right-of-way in exchange for up to four (4) workforce housing units appears to be in conformance with the purpose and recommendations of the Frisco Community Plan.

ANALYSIS - CHAPTER 142, VACATION OF PROPERTY

Declaration of Policy: Pursuant to §142-1 of the Frisco Town Code, *the Town Council hereby finds and declares that the general policy of the Town is to* ***prohibit the vacation*** *or divesting of any right, title or interest of the Town in and to any land, including any roadway or easement. Any application for vacation pursuant to this chapter may be granted only in cases where the Town Council, in the exercise of its sole and exclusive discretion, first finds* ***an overriding public interest favors the vacation****.*

The general policy of the Town of Frisco is to not allow for the vacation or divesting of any right, title or interest of the Town in and to any land including any roadway unless there is a clear overriding public interest. As stewards of public property, the Town has taken a conservative interpretation of "an overriding public interest" and should continue to be conservative in their vacation of public right-of-ways including the subject property.

There is a demonstrated need for additional workforce housing in Frisco at multiple price points. The *2019 Summit County Housing Needs Update* was commissioned to assess the workforce housing needs within the county. This analysis was further refined to evaluate the county on a geographic basis based on the various drainage basins. The Town of Frisco is located in the Ten Mile drainage basin. The assessment analyzed and quantified the workforce housing needs by

AMI level in each basin. The following table is an excerpt from the *2019 Summit County Housing Needs Update:*

Net Inventory Gaps by Basin by Tenure by AMI

	2018					2023				
	Lower Blue	Snake River	Upper Blue	Ten Mile	Summit County	Lower Blue	Snake River	Upper Blue	Ten Mile	Summit County
Net Owner Gaps										
Less than 30% AMI	-91	-69	-74	-94	-329	-106	-74	-84	-99	-362
31% to 60% AMI	-198	-311	-462	-349	-1,321	-277	-336	-524	-361	-1,498
61% to 80% AMI	-13	11	-249	-240	-491	-86	19	-289	-248	-604
81% to 100% AMI	-21	27	-64	-133	-191	-31	37	-60	-136	-190
101% to 120% AMI	17	51	23	-54	37	64	75	15	-53	102
Greater than 120% AMI	247	221	118	278	865	31	281	100	329	741
Subtotal	**-59**	**-70**	**-710**	**-592**	**-1,431**	**-405**	**2**	**-841**	**-568**	**-1,812**
Net Renter Gaps										
Less than 30% AMI	-60	-42	-66	-41	-210	-68	-61	-74	-43	-246
31% to 60% AMI	-131	-28	-104	-143	-405	-153	-84	-97	-148	-482
61% to 80% AMI	17	-1	-74	-87	-145	-3	-46	-139	-69	-256
81% to 100% AMI	144	210	47	42	442	108	150	-40	49	267
101% to 120% AMI	158	85	62	64	370	125	27	-21	73	204
Greater than 120% AMI	134	131	238	143	647	98	35	41	164	339
Subtotal	**262**	**355**	**103**	**-21**	**699**	**108**	**21**	**-330**	**27**	**-175**
Net All Household										
Less than 30% AMI	-151	-112	-141	-135	-539	-174	-135	-158	-142	-608
31% to 60% AMI	-330	-339	-566	-492	-1,726	-430	-421	-621	-509	-1,981
61% to 80% AMI	4	10	-324	-327	-636	-89	-27	-427	-317	-860
81% to 100% AMI	123	237	-17	-92	251	77	187	-100	-87	77
101% to 120% AMI	175	137	84	11	407	189	102	-6	20	306
Greater than 120% AMI	382	352	356	422	1,512	129	316	141	493	1,079
Total	**204**	**285**	**-607**	**-613**	**-731**	**-297**	**24**	**-1,171**	**-542**	**-1,987**

Source: Economic & Planning Systems

As previously stated, this vacation request presents the Town of Frisco with a request that would provide up to four (4) workforce housing units in exchange for the 10,500 sq. ft. parcel of South 6th Avenue right-of-way. No AMI cap is being proposed for the deed restrictions. The units would therefore likely fall into the "Greater than 160% AMI category above.

This vacation request creates additional development opportunities and financial value for the Applicants. It is ultimately the responsibility of the Town Council to ensure that the terms and conditions (including covenant limitations) set forth in a development agreement, or other such an arrangement, will also return an appropriate level of value and benefit back to the community.

Vacation by Ordinance: Pursuant to §142-3 of the Frisco Town Code, *All right, title or interest of the town in and to any roadway or easement, shall be divested only upon adoption by the town council of an ordinance vacating such property or portion thereof located within the corporate limits of the town. If a roadway constitutes a boundary line of the town, it may be vacated only by a joint action of the board of county commissioners of the county and the town council. Any ordinance affecting a vacation is required to contain the following findings, if applicable:*

- *That no land adjoining any roadway to be vacated is left without an established public road connecting said land with another established public road.*

- *That the roadway or easement to be vacated is no longer necessary for present or prospective public use or convenience.*

If the subject portion of the South 2nd Avenue right-of-way is vacated, all properties in the area will continue to have a public road connecting to their properties. No land located adjacent to the proposed right-of-way vacation will be left without an established public road. The application meets this standard.

This right-of-way tract is located between 521 Pitkin Street and 601 Pitkin Street. There is no street physically constructed in this right-of-way, nor does the Town of Frisco have any plans to construct a future road in this location. The Town of Frisco Public Works Department was asked to comment on the proposed vacation from a street maintenance perspective and stated that they had no concerns with the proposal. Additionally, there are no existing public utilities located in this portion of street right-of-way and there are no future utilities planned for this area. The vacation of this portion of the South 6th Avenue right-of-way will have no negative impact on Emergency Services access to the neighborhood. The subject portion of street right-of-way is not necessary for any current or prospective public use or convenience. The application meets this standard.

Vacation Procedures: Pursuant to §142-4 of the Frisco Town Code, the following procedures shall be adhered to by person(s) requesting the vacation of any roadway or easement:

A. *Attendance at a pre-application conference held in the manner described in section 180-19 (C)(5)(a) of the Town of Frisco Zoning Ordinance.*

   The Applicants have had multiple pre-application meetings with the Planning Division of the Community Development Department and have also discussed the proposed vacation with the various referral agencies at a Development Review Committee (DRC) meeting.

B. *Submission to the town manager of a written application that includes the required information.*

   The formal written application has been submitted. The application meets this standard.

C. *Review of the proposal by the town staff and preparation of a staff report, and in the case of the proposed vacation of an easement, other than an access easement, preparation of a proposed vacation ordinance.*

   Community Development, Public Works, Town Engineer, Frisco Sanitation, Summit Fire, and Summit County Road & Bridge have reviewed this vacation application. The Planning Division has prepared the staff report and the associated ordinance will be prepared by the Town Attorney. The application meets this standard.

D. *Vacations of roadways and access easements must be referred to the planning commission for a public hearing and recommendation to the town council. The director of the community development department or his/her designee may refer the vacation of an easement, other than an access easement, to the planning commission for a public hearing and recommendation to the town council, if he/she determines that such*

a referral would assist the town council in determining whether or not to grant the vacation request.

The application request to vacate a portion of South 6th Avenue right-of-way has been referred to the Planning Commission for a public hearing and recommendation to the Town Council. The application meets this standard.

E. *After a public hearing, the planning commission may either continue the matter for further information and study for not more than thirty (30) days or forward its recommendation to approve, disapprove or conditionally approve the application to the town council and the applicant(s). Any application forwarded to the town council will be in the form of an ordinance.*

The application will be heard by the Planning Commission at its May 18, 2023 public hearing. The application meets this standard.

F. *The town council will consider the proposed vacation ordinance and render its decision either to adopt or deny the ordinance on first reading in accordance with the requirements of the Charter with respect to the adoption of ordinances. Prior to adoption of the vacation ordinance on first reading, the town council shall find that an overriding public interest favors the vacation.*

The first reading of an ordinance vacating the subject portion of the South 6th Avenue right-of-way will be scheduled for review by the Town Council after a public hearing and recommendation have been completed by the Planning Commission.

Public Notice: Pursuant to §142-5 of the Frisco Town Code, *public notice will be given at least once prior to final adoption of the vacation ordinance in the manner provided for in subsection (1) through (3) of Section §180-46E of the Town of Frisco Zoning Ordinance*.

Public noticing was provided for the Planning Commission's May 18, 2023, meeting in accordance with the requirements of the Town Code. Public notice of the Town Council's review of an ordinance will be provided once the public hearing dates have been determined. The application meets this standard.

Valuation of Vacated Property: Pursuant to §142-6 of the Frisco Town Code, *if the town council adopts on first reading a vacation ordinance vacating a roadway or access easement, the town manager or his/her designee will cause an appraisal to be made at the expense of the applicant(s), unless the town manager or town council waives such appraisal*. *The appraisal will include the following information:*

A. *Valuation of the property being vacated;*
B. *Valuation of any property that may be benefitted by the vacation, valued prior to vacation;*
C. *Valuation of any property that may be benefitted by the vacation, valued after vacation; and*
D. *Any other determinations requested by the town council.*

Should the Town Council choose to adopt on first reading the vacation ordinance, Town Staff will cause an appraisal to be made at the expense of the applicants. The appraisal shall be performed meeting criteria as outlined in §142-6.

An appraisal of the property submitted on October 7, 2021 estimated the 10,500 sq. ft. right-of-way's "as-is" value at $158,000. The "as-proposed" value of the portion of the right-of-way proposed for dedication to 521 Pitkin is estimated at $210,000; and the portion of the right-of-way proposed for dedication to 601 Pitkin is $175,000.

VALUE CONCLUSIONS					
"AS IS" VALUES			"AS PROPOSED" VALUES		
			Property	Site Sizes SF	Value
6th Ave. Right of Way		$ 158,000	West Right of Way Lot	7,000	$ 210,000
521 Pitkin Street		$ 1,050,000	East Right of Way Lot	3,500	$ 175,000
601 Pitkin Street		$ 1,125,000	Rear 521 Lot	3,500	$ 210,000
			521 Pitkin with house	3,500	$ 507,000
			601 Pitkin with house	7,300	$ 1,125,000

Payment of Costs: Pursuant to §142-7 of the Frisco Town Code, *The applicant or primary applicant is responsible for the payment of any costs associated with the vacation including, without limitation, payment for administrative services performed by the community development department, appraisals, surveys, recording fees, documentary fees, legal services rendered to the town in connection with the application, and other customary costs in the following manner:*

> *A. A development review account shall be established at the time the vacation application is submitted to the town manager. Such development review account will be managed pursuant to section 180-31(D), excluding subsection 180-31(D) (4) (c).*
>
> *B. If the town incurs costs beyond the amount deposited in the vacation review account and the applicant or primary applicant does not pay those costs within thirty (30) days after written notice from the town, the town shall be entitled to certification of the assessment for sale or a lien for those costs on the property owned by each applicant, which lien may be perfected and foreclosed in the manner provided in C.R.S. §§ 38-22-101 et seq., as amended.*

The Applicants have been notified of their responsibility for payment. A $1,500 Development Review Account (DRA) was established with submittal of the application.

Vacation of Portion of Request: Pursuant to §142-8 of the Frisco Town Code, *the town shall have the right, in its sole and exclusive discretion, to vacate only a portion of the total area requested for vacation.*

The Applicants are requesting a vacation of the entirety of the subject portion of the South 6th Avenue right-of-way. If the Town of Frisco chooses to vacate the subject street right-of-way, it may do so in whole or in part at its discretion.

Reservation of Rights-of-Way or Easements: Pursuant to §142-9 of the Frisco Town Code, t*he town may reserve any right-of-way or easement for the continued use of existing or future sewer, gas, water or similar pipelines and appurtenances, for overland drainage, drainage facilities or canals and appurtenances, and for electric, cable television, telephone and similar lines and appurtenances, or any other public purpose. Notwithstanding the foregoing, the town is presumed to have reserved in any property vacated under this chapter all necessary, useful or common easements related to underground utilities or services*.

There are no existing or future roads, public parking spaces, street snow storage, utilities, drainage features, or other infrastructure being displaced or negatively impacted by this vacation request. If the Town of Frisco chooses to vacate the subject street right-of-way, it may do so in whole or in part at its discretion.

Conditions on Vacation: §142-10 states *the planning commission may recommend, and the town council in the ordinance effecting a vacation may impose, reasonable conditions on said vacation, to preserve and promote the public health, safety and welfare of the inhabitants of the town and the public generally. Such reasonable conditions may include the payment of money to the town as consideration for a vacation, when the vesting of title upon vacation may confer a benefit upon the new owner of the vacated roadway or easement, where the town has purchased or may purchase a roadway or easement to replace that being vacated, to avoid a windfall to the new owner, or for any other reason deemed by the town council to be in the public interest.*

In exchange for the Town's vacation of the subject portion of the South 6th Avenue right-of-way, the Applicants are proposing to construct up to three workforce units, along with encumbering the existing structure at 521 Pitkin Street with a workforce covenant.

Staff finds that the creation of workforce housing units is in the public interest. However, Staff has concerns as to whether or not the proposed deed restriction with no AMI cap meets the current goals for workforce housing, and whether or not this is equivalent to the development opportunities conveyed to the Applicant.

It is ultimately the responsibility of the Town Council to determine if proposed new deed restricted units and the associated terms and conditions (including terms within the covenant) set forth in such an arrangement return an appropriate level of value and benefit back to the community.

If Planning Commission finds that there is an overriding public interest associated with vacating the right-of-way in exchange for the creation of four deed restricted, work force housing units, staff recommends that a condition be placed upon the recommendation of Town Council approval that requires the creation of a development agreement with the Town that defines the proposed deed restrictions, performance measures such as timing of completion, and recording of restrictions. The vacation request and development agreement shall not assume quasi-judicial approvals by Planning Commission or Council.

Recordation of Vacation: Pursuant to §142-11 of the Frisco Town Code, *in the event of a vacation in accordance with this article, the documents vacating such property or interest in property, including but not necessarily limited to any resolution, ordinance, deed, conveyance document, plat or survey, shall be recorded in the office of the clerk and recorder of the county in which such property is located.*

All relevant documents pursuant to the vacation of the 0.24 acre tract of land will be recorded in the office of the Summit County Clerk and Recorder.

Preservation of Access: Pursuant to §142-12 of the Frisco Town Code, *no roadway or part thereof shall be vacated so as to leave any land adjoining said land with another established public road.*

No land adjoining the proposed right-of-way vacation will be left without an established public road.

Vesting of Title Upon Vacation: Pursuant to §142-13 of the Frisco Town Code, *any ordinance effecting a vacation under this article shall state to whom title to the vacated land shall vest upon vacation. Title to the lands included within a roadway or so much thereof as may be vacated shall vest in accordance with the provisions of C.R.S. § 43-2-302 or its successor statute.*

The ordinance in connection to the vacation shall state that title to the vacated land shall be vested to the Applicants, Andy Richmond and Lauren Echevarria, the owners of the property located at 521 Pitkin Street and Albert and Marta Lindrose, the owners of the property located at 601 Pitkin Street.

Adjacent Platted Lands: Pursuant to §142-14 of the Frisco Town Code, w*here title to any vacated property vests with the owner of adjacent platted land, said owner shall, within 90 days of the adoption of the ordinance effecting such vacation, take all necessary steps to include said vacated property within the plat of the adjacent land.*

If the Planning Commission chooses to recommend approval, Staff recommends a condition of approval stating that the Applicants shall take all necessary steps to include said vacated property within the plat of their adjacent properties located at 521 Pitkin Street / Lots 23-24, Block 34, Frisco Townsite and 601 Pitkin Street / Lots 13-14, Pt 15, Block 33, Frisco Townsite within ninety (90) days of the adoption of the ordinance effecting vacation of the 0.24 acre right-of-way.

ANALYSIS – AGENCY REVIEWS

Town of Frisco Public Works Department & Water Department

No concerns.

Jeff Goble, Public Works Director

Frisco Sanitation District

No comments at this time.

Matt Smith, Manager

LAKE DILLON FIRE DISTRICT

No comments at this time.

Steven Skulski. Assistant Chief/Fire Marshal, Lake Dillon Fire District

Xcel Energy

No comments/issues.

Amy Lagace, Designer, Mountain Division

Summit County Road & Bridge

No concerns from Road & Bridge or Engineering.

Robert Jacobs, County Engineer/Road & Bridge Director

PUBLIC COMMENT

The Community Development Department has not received any written public comments as of May 12, 2023 concerning this current application.

STAFF RECOMMENDATIONS

Based on the property valuations and the Town's workforce housing needs, the Community Development Department supports a vacation of the subject portion of street right-of-way in exchange for the creation of up to four workforce housing units. However, staff is recommending that the approval be conditioned on the execution of a development agreement between the Town and the applicant that defines the proposed deed restrictions, performance measures such as timing of completion, and recording of restrictions. The vacation request and development agreement shall not assume quasi-judicial approvals by Planning Commission or Council.

Whether or not this vacation and the terms of this request constitute an overriding public interest will ultimately be a decision for the Town Council.

Recommended Findings, Action, and Motion for Approval

If the Planning Commission chooses to forward a recommendation of approval, the Community Development Department recommends the following findings pertaining to the proposed vacation request:

Based upon the review of the Staff Report dated May 18, 2023 and the evidence and testimony presented, the Planning Commission finds:

1. *That the proposed vacation is in general conformance with the purpose and intent of the Frisco Community Plan, since it furthers several quality of life statements and criteria outlined in the plan and furthers the Town's efforts to address workforce housing demands.*

2. *Pursuant to §142-1 of the Frisco Town Code, it is found that there is an overriding public interest favoring the vacation because the proposed vacation provides a unique opportunity that results in the construction of up to three deed restricted workforce housing units, along with encumbering the existing structure at 521 Pitkin Street with a workforce covenant. Also, the terms and conditions of the proposed deed restriction provide a value to the community that is commensurate with or exceeds the value of the vacated property.*

3. *Pursuant to §142-3 of the Frisco Town Code, no land adjoining the roadway to be vacated is left without an established public road connecting said land with another established public road because the adjoining 421 Juniper Street will retain access to Juniper Drive, Pitkin Street, and Pine Drive.*

4. *Pursuant to §142-3 of the Frisco Town Code, the roadway to be vacated is no longer necessary for present or prospective public use or convenience because this portion*

of the South 6th Avenue right-of-way has not been improved, used, or planned to be used for roads, public parking spaces, street snow storage, utilities, drainage features, or other infrastructure or uses.

5. *Pursuant to §142-13 of the Frisco Town Code, title to the lands vacated shall vest in accordance with the provisions of C.R.S. § 43-2-302 to the Applicants.*

Recommended Action:

The Community Development Department recommends the Planning Commission forwards a **RECOMMENDATION OF APPROVAL** to the Town Council for the vacation of a 10,500 sq. ft. (0.24 acres) tract of the South 6th Avenue Right-of-Way within Blocks 33 & 34 Frisco Townsite; generally located north of Pitkin Street, south of Pitkin Street Alley, adjacent to and east of 521 Pitkin Street / Lots 23-24, Block 34, Frisco Townsite and adjacent to and west of 601 Pitkin Street / Lots 13-14, Pt 15, Block 33, Frisco Townsite, subject to the following conditions:

1. *The Applicant(s) shall enter into a development agreement with the Town of Frisco that outlines the requirements for construction completion and residential housing restrictive covenants, including the terms and conditions for occupancy and ownership of the units as determined by the Town of Frisco, and have obtained all necessary development approvals and permits.*

2. *That the vacation ordinance shall not cause the South 6th Avenue right-of-way to be vacated until the ordinance is filed by the Town Clerk for recording in the Office of the Summit County Clerk and Recorder. The Town Clerk shall not file the ordinance for recording in said office until the conditions of the development agreement above have been satisfied.*

Recommended Motion:

Should the Planning Commission choose to recommend approval of this vacation request, Staff recommends the following motion and conditions:

With respect to File No. VAC-21-0001, I move that the recommended findings be made and that the recommended conditions set forth therein be taken and that the Planning Commission hereby forwards a RECOMMENDATION OF APPROVAL to the Town Council for the vacation of a 10,500 sq.ft. (0.24 acres) tract of the South 6th Avenue Right-of-Way within Blocks 33 & 34, Frisco Townsite; generally located north of Pitkin Street, south of Pitkin Street Alley, adjacent to and east of 521 Pitkin Street / Lots 23-24, Block 34, Frisco Townsite and adjacent to and west of 601 Pitkin Street / Lots 13-14, Pt 15, Block 33, Frisco Townsite.

Alternative Findings, Action, and Motion for Denial

If the Planning Commission chooses to forward a recommendation of denial, the Community Development Department recommends the following findings pertaining to the proposed vacation request:

Based upon the review of the Staff Report dated May 18, 2023 and the evidence and testimony presented, the Planning Commission finds:

1. *Pursuant to §142-1 of the Frisco Town Code, it is found that there is not an overriding public interest favoring the vacation because the proposed vacation does not provide an adequate mechanism for creating deed restricted workforce housing units. The terms and conditions of the proposed deed restriction do not provide a value to the community that is commensurate with the value of the vacated property.*

Recommended Action:

The Community Development Department recommends the Planning Commission forward a **RECOMMENDATION OF DENIAL** to the Town Council for the vacation of a 10,500 sq. ft. (0.24 acres) tract of the South 6th Avenue Right-of-Way within Blocks 33 & 34 Frisco Townsite; generally located north of Pitkin Street, south of Pitkin Street Alley, adjacent to and east of 521 Pitkin Street / Lots 23-24, Block 34, Frisco Townsite and adjacent to and west of 601 Pitkin Street / Lots 13-14, Pt 15, Block 33, Frisco Townsite, based on the above finding.

Recommended Motion:

Should the Planning Commission choose to recommend denial of this vacation request, Staff recommends the following motion and conditions:

With respect to File No. VAC-21-0001, I move that the recommended findings be made and that the Planning Commission hereby forwards a RECOMMENDATION OF DENIAL to the Town Council for the vacation of a 10,500 sq.ft. (0.24 acres) tract of the South 6th Avenue Right-of-Way within Blocks 33 & 34, Frisco Townsite; generally located north of Pitkin Street, south of Pitkin Street Alley, adjacent to and east of 521 Pitkin Street / Lots 23-24, Block 34, Frisco Townsite and adjacent to and west of 601 Pitkin Street / Lots 13-14, Pt 15, Block 33, Frisco Townsite.

ATTACHMENTS

Attachments:

Attachment 1 - Application Materials
Attachment 2 - Town Code, Chapter 142, Vacation of Property

cc: Andy Richmond and Lauren Echevarria
Albert and Maria Lindrose

RECORD OF PROCEEDINGS

Meeting of the Planning Commission for the Town of Frisco
Town Hall, 1 East Main Street
Thursday, May 18, 2023 at 5:00 P.M.

Call to Order: Lina Lesmes, Vice Chair, opened the meeting.

Roll Call: Present: Lina Lesmes, Andy Stabile, Ira Tane, Jessica Forsyth
Via Zoom: Kelsey Withrow
Absent: Patrick Gleason

Minutes: Approval of the May 4, 2023 Planning Commission meeting minutes (passed unanimously

Public Comment (non-agenda items): There were no public comments.

Co-Chair Lesmes opened the meeting and briefly stated that if anyone present is here to speak on Agenda Item #3, it will be tabled to the June 1, 2023 meeting.

1. **Planning File No. VAC-21-0001:** A public hearing of a request for the vacation of a portion of a public right-of-way consisting of 1,260 sq. ft. of the South 6th Avenue right-of-way within Block 34, FRISCO TOWN SUB; generally located adjacent to and east of 521 Pitkin Street / Lot 24, Block 34 Frisco Town Sub. Applicants: Andy Richmond and Lauren Echevarria

Susan Lee, explained the project as outlined in the staff report. The project before us this evening is the South 6th Street right-of-way vacation. The Applicants, Andy Richmond and Lauren Echevarria are the owners of the property located at 521 Pitkin Street and they will also be representing Albert and Marta Lindrose, the owners of the property located at 601 Pitkin Street. The Applicants are requesting that the Town of Frisco vacate a portion of a public right-of-way consisting of a 10,500 sq. ft. (0.24 acres) tract of the South 6th Avenue right-of-way.

Chapter 142 of the Frisco Town Code outlines the Town's Policy on property vacations. The Town Council must find that an overriding public interest favors the vacation. The Planning Commission's role in this process is to review the application in accordance with Chapter 180 and make a recommendation to the Town Council.

If the Town of Frisco chooses to vacate this portion of street right-of-way, the applicant is proposing that ownership will be split between the properties located at 521 Pitkin Street and 601 Pitkin Street, with 7,500 sq. ft. being added to 521 Pitkin and 3,000 sq. ft. being added to 601 Pitkin as shown on the submitted site plan. Based on the property valuations and the Town's workforce housing needs, the Community Development Department supports a vacation of the subject portion of street right-of-way in

exchange for the creation of up to four deed restricted dwelling units. However, staff is recommending that the approval be conditioned on the execution of a development agreement between the Town and the applicant that defines the proposed deed restrictions, performance measures, such as timing of completion, and recording of restrictions. The vacation request and development agreement shall not assume quasi-judicial approvals by Planning Commission or Council. Whether or not this vacation and the terms of this request constitute an overriding public interest will ultimately be a decision for the Town Council. For additional information please refer to the May 18, 2023 staff report packet.

Staff is recommending the Planning Commission forward a RECOMMENDATION OF APPROVAL to the Town Council for the vacation of a 10,500 sq. ft. (0.24 acres) tract of the South 6th Avenue right-of-way within Blocks 33 & 34 Frisco Townsite; generally located north of Pitkin Street, south of Pitkin Street Alley, adjacent to and east of 521 Pitkin Street / Lots 23-24, Block 34, Frisco Townsite and adjacent to and west of 601 Pitkin Street / Lots 13-14, Pt 15, Block 33, Frisco Townsite, subject to the following conditions:

1. The Applicant(s) shall enter into a development agreement with the Town of Frisco that outlines the requirements for construction completion and residential housing restrictive covenants, including the terms and conditions for occupancy and ownership of the units as determined by the Town of Frisco, and have obtained all necessary development approvals and permits.

2. That the vacation ordinance shall not cause the South 6th Avenue right-of-way to be vacated until the ordinance is filed by the Town Clerk for recording in the Office of the Summit County Clerk and Recorder. The Town Clerk shall not file the ordinance for recording in said office until the conditions of the development agreement above have been satisfied.

COMMISSION QUESTIONS FOR STAFF INCLUDED:

- Commissioners asked if this Development Agreement is yet to be determined and if it is possible for any monetary compensation to the Town. Ms. Lee responded that the Commission could ask the applicant if they would consider that, but at this time they are not proposing to financially compensate the Town for the vacation. The only thing they are offering is the creation of up to four deed restricted units.
- Commissioners asked to be clear if the Planning Commission is the recommending body on this, but the Town Council is the final body on the vacation. Staff responded that is correct.
- Commissioners asked if we knew who would be developing those units, they are saying that if the lot size is now enlarged any additional dwelling unit that is constructed as well as the current unit would be restricted with a deed restriction yet to be determined. Staff replied, correct.
- Commissioners asked why it would need to be rezoned, does the underlying zoning not allow that density they are proposing. Ms. Lee responded that the underlying zoning would not allow the smaller lot sizes and the existing cabin is in the setback, so it is an existing non-conforming structure. The PUD could mitigate that issue as well.
- Commissions questioned if there is not a traditional Zone District that they could be zoned into and then a variance granted. Staff replied yes there are other ways to do it so we are trying to separate how it is done with whether, ideologically you agree that it is meeting Community Plan guidelines and it is meeting this overriding public interest, then we can shift into the mode of meshing out how they will develop the units in compliance with Town Code.
- Commissioners asked if Town has concern about the deed restrictions. Ms. Lee responded that it is best to stick with the deed restrictions we have.

- Commissioners asked how many units are being proposed after everything is built out and are they all deed restricted or is there also a market rate unit. Staff responded that today, two dwelling units exist, 521 Pitkin has a small cabin, and 601 Pitkin has a single-family residence. The applicant is proposing to deed restrict the cabin at 521 Pitkin, subdivide a lot at the rear portion of 521, convey that lot with a deed restriction or an affordable housing workforce unit, build another unit in Mr. Richmond's portion of the right-of-way, that would be deed restricted. Then there is some gray area for the owner of 601 Pitkin, because there is no specification for what kind of unit or when it will be built. So a unit is proposed but we do not know if it is an accessory dwelling unit or if it is a separate structure – that was not as well defined in the application..
- Commissioners asked if there are two market rate units. Staff responded that the new one would be deed restricted but the existing 601 residence would stay market rate.
- Commissioners questioned if subdivided they would be selling but with a deed restriction, they are proposing we vacate right-of-way, convey them land at no cost for *maybe* four units. Staff responded that this is why we have inserted the idea of the development agreement so that we have assurances that those units will be constructed.
- Commissioners asked if we could provide input or recommendation to Council to do additional restrictions related to the deed restriction. Staff responded that you could add that as a condition.
- Commissioners asked if the Town thought of developing the space ourselves and rezoning it to a PUD and building deed restricted units on the land. Staff responded that we could develop it ourselves and we have spoken with the Town attorney about that, and it is an option, but we have not taken any action on that to date.
- Commissioners asked if the Town were developing this space and put in housing what deed restrictions do you think we would put on it. Staff responded if the Town were developing it ourselves, likely we would choose an AMI deed restriction.

Applicant Andy Richmond introduced himself as being part of the application team along with his wife, Lauren Richmond Echevarria. Mr. Richmond provided the Planning Commission with a quick summary of the project, addressing the question of was there another way to do this, was there a code overlay. The applicant suggested several proposals that were discussed, including Cabin Housing with incentives for locals only. This project is a project for local development. This is definitely four local units with the way the PUD is drafted. Mr. Richmond continued to discuss the deed restriction requirements, noting that the language was taken from the "Vail Indeed Program" and made stricter. There are different types of deeds and Frisco needs all the tools it can get in this local housing. We are starting to see that there is a massive gap between the AMI homes and the market rate homes resulting in difficulties selling the home and moving up to a market rate house. This is another tool in Frisco's toolbox. We are getting a little above the AMI cap, but we are well below the market rate cap, which gives us that nice middle ground. We named it the Locals Housing Restrictions because it is for the locals.

We are proposing that we do not compensate the Town. With the Town's declaration of a local housing emergency, providing four local units on a lot that could just turn into another second home is an overriding public interest. The as is value of this right-of-way is $158,000. If you break that out into the four local units that will be provided and compare that against other projects, you will see it compares favorably to Frisco's bottom line.

Mr. Richmond noted that what is being proposed is that we would develop the house in the middle of the newly vacated right-of-way. We are talking with Jessica Johns Ketteritz and her husband, owners of Range West, to build the back home. Whatever locals buy our home, they can keep it as it is or develop it according to the PUD as they see fit. Cabin housing zoning envisions this as basically small houses in keeping with the south side of Frisco's character. These are small houses designed to reflect the old miner's cabin aesthetic.
If we talk about 601 and 521, these are currently two market rate houses. Under this proposal this would result in four locals' houses and 601 would remain market rate. Two market rates into four locals and one market rate. The property at 601 is not changing, it will remain market rate and is owned by Al and Marta Lindrose. When the Lindroses build the garage or transfer the property that is when the mother-in-law apartment or additional unit gets built.

Mr. Richmond spoke to additional conditions on the deed. Vail has shown that this is a viable and profitable way for towns to get locals into houses and provide a range of options. A condition of AMIs would be difficult for us to live with. If this project works, this has the potential to set great precedence for the Town.

COMMISSION QUESTIONS FOR APPLICANTS:

- Commissioners asked if the PUD speaks to the size of the house to be renovated or the one being constructed. Mr. Richmond responded that there is only one existing house that could possibly be renovated, and they would have to be under the PUD and the PUD makes no allowances for expansion later on.
- Commissioners asked if there is a minimum home size. The applicant responded, no. In keeping with the cabin housing overlay there are provisions in it about maintaining the historic cabin characteristics.
- Commissioners asked if 521 can stay or go. Mr. Richmond said that he and his wife would sell that unit and would start construction on a new house in the right-of-way. Johnny and Jesse Ketteritz would develop at the back of the lot at 521 Pitkin. Whoever buys our current house at 521 Pitkin would have the option of either staying in it or developing it as they see fit. If someone wants to buy a lot and leave it vacant that is up to them, but the vacant land tax is enough of a deterrent that people will be building.
- Commissioners questioned if the applicant is guaranteeing housing or just the right for someone to construct housing. The applicant responded that he is guaranteeing that he and his wife will be building on the vacated lot if the project goes through.
- Commissioners asked where the Frisco registered voter thing comes in. The applicant responded that it is easier to check someone's registration, but it gives preference to Frisco first, then moves throughout the County.
- Commissioners recapped – no minimum sizes, lives in Frisco, no AMI cap. The Town would be giving you land, not develop housing but to subdivide and still no AMI caps. Mr. Richmond stated that he is volunteering to do this on his own property. If the Town believes local housing is an emergency, then that should be what the overriding consideration is.

Mr. Richmond stated that the Town attorney's interpretation of state law is incorrect. The town cannot develop this property for their own means, without going to the Supreme Court. The Town must offer it to adjacent landowners first.

- Commissioners asked if there would be a short-term rental allowed. Applicant responded, absolutely not, it is written in the PUD. The property must be the owner's primary residence.

- Commissioners asked why split the right-of-way with a neighbor. The applicant responded that under Colorado law, any vacation of the right-of-way must go to the adjacent landowners, that means both.
- Commissioners asked if the vacation gets approved and houses are built and occupied, what if one owner is rich and wants to rent. Mr. Richmond replied that under the PUD all four owners sign on the PUD, including the Town and each has the right to enforce under the PUD.

Public Comments:

- Chad Robinson 512 S 6th Avenue, Frisco – I would like to support the project. I think it is a really good use of a steep lot. I like the idea that it is restricted to locals only, non-AMI capped. Specifically, because it provides that next step for those moving up the housing ladder. It is a steppingstone in that chain.
- Dan McCrerey, 375 Belford Street, Frisco – I have been involved in the construction of deed restricted housing for the last twenty-five years. I built Peak One and other neighborhoods. I would like to see this non-AMI be given some serious consideration because what happens is when a person makes over the AMIs and they have no place to go, it is missing the middle class. The Richmond's creative approach to this deserves a yes vote to send it up to the Town Council and let them work out the specifics on the deed restrictions and on the PUD agreement. I am 100% in support of what I see tonight.
- Doug Bair – 1111 Rainbow Drive, Silverthorne – I believe this is essential to keep our community thriving. If not for this type of project, it would not be possible in today's economy and in the recreation environment.
- Mark Richmond – 400 Pitkin Street, Frisco – I am totally in support of this project. We have seen the south side change so much; investors buy every property for sale. We need other tools other than AMI. Locals belong in town. It would help if the Town worked with private investors. If vacated, the property should go to the adjacent landowners. Close the gap between Housing Helps and the market value. The property must be sold to someone else that is a resident and is locally employed. Will be restricted always. I would love to see you support this.
- Mark Sabatini, 312D Creekside, Frisco – It is difficult to out clever common sense. The right-of-way has limited real value. Better community to address the challenge we face and that is live here, work here, be here. I strongly suggest we take this as a community. We are doing more than talking about the problem.
- Jessica Ketteritz, 601 Pitkin Street, Frisco – My husband and I will be working to purchase one of the lots. There is a missing gap between the AMI and market rate. A lot of people in our age bracket do not qualify for deed restricted housing. There is a need for this housing development, and I hope that the Town sees this as a way forward and a model for the rest of the unused right-of-ways in the Town.

COMMISSION DISCUSSIONS:

- Commissioners noted that the project is an interesting concept; however, not convinced. For example, the size of the house is limited. Even at that limitation, the value in Frisco could still be substantial.
- Commissioners commented that it is a very creative idea, and the applicant has come up with an interesting solution. There is absolutely a place in Frisco for housing above current AMI. Commissioners asked staff what the current AMI cap is for Frisco. Ms. Lee responded that on the last vacation we had a deed restriction of 160% AMI. Commissioner commented not a fan of Vail Indeed because prices go so high, there is abuse. Commissioners do not have a problem increasing the density of a lot you own. But to go completely no AMI cap causes pause, maybe compromise and one unit is deeded to the Town of Frisco, or one unit has a max of 160% AMI. Commissioners feel more can be negotiated.

- Commissioners appreciate the ingenuity. Looking at the property, what else could be at this location, never a road, no parking, no bike path. We want locals housing. If the town is going to find value in that lot that is where you will find it. Our code says as stewards of public property the Town has taken a conservative interpretation of overriding public interest and should continue to be conservative in their vacation of public right-of-ways including the subject property. Looking at "a conservative interpretation of an overriding public interest", we may not have gotten there yet. More comments followed on what might be considered "overriding".
- Commissioners noted that the previous vacation included a deed restriction and the purchase at fair market value.
- Commissioners commented that it is nice to have long time locals giving opportunity to locals.
- Commissioners noted they do not want to lose open space; however, this is maybe not the appropriate space for open space.
- Commissioners want more security that these units are going to be built in a timely manner and there will be four or more. Too much of an uncertain question mark, "up to four units".
- Commissioners noted that the Commission just did a lot of code incentives, but these are not applied here.
- Commissioners commented that if in the past the Town was reimbursed for the cost of the land and used 160% AMI, that is a likeable concept. Further, the Town is not getting enough in the deal, and we are not doing what we have done in the past.

The Commissioners discussed with staff possible action by the Commission. Ms. Lee noted that the idea behind conditional approval is to pass it on to Council to work through and give recommendations.

- Commissioners questioned why the PUD was not presented with this application. Staff responded that the PUD is a separate development application. They would need ownership permission to process an application on property they do not own, so they need some guarantee from the Town. The rezoning is a longer process so before they embark on that longer more expensive process, they need some reasonable assurances that at least the Town is going to entertain the idea of vacating the property.
- Commissioners asked if, once built, the development agreement would go away, and we would solely be relying on the PUD. Ms. Lee responded that would be up to the development agreement to determine and then also we cannot guarantee that they will get approval from the Planning Commission on their PUD or on any development application. Ms. Lee walked the Commission through the proper steps of review.
- Commissioners noted there would be a deed restriction that also governs the property. Ms. Lee responded yes, that is why Housing Helps takes some of the guesswork out of the questions that you are asking about how we will enforce these things, etc.
- Commissioners asked if, with an ADU, it can be separately deeded and sold. Ms. Lee replied that with an ADU if you have the allowed density on your property to subdivide and to create a condo plat for example, you could sell the ADU as a condo, but if you do not have the allowed density on your property, you must deed restrict that accessory dwelling unit to 100% AMI and it cannot be sold separately from the main property . Further, Ms. Lee responded that in the RL zone district, your density is based on your lot size. The existing 601 Pitkin property only has one unit of density, they could build an ADU but they could not sell it separately and it would have to be deed restricted at 100% AMI.
- Commissioners asked if there were bonus units of density in that zone. Staff responded that the code revision did not include the RL zone district.

- Commissioners commented that the details really matter. In general concept we would like to move forward but are not comfortable with recommending approval without more details.
- Commissioners agreed this is a great project if the details could be worked out and with more assurance that the fourth unit is going to get built and if the Town were to get more in return.
- Commissioners agreed that there is not enough to the proposal to respond to and maybe it should be tabled for more information. Commissioners asked the applicant for their response.

Mr. Richmond commented that this is not a one-way street and that the proposal made is the maximum of what they want to do. You ask if the Town is getting enough. This is Town getting more? Planning's purpose is to find ways to make this work, not find ways to not make it work. If this does not go through, we will build our driveway and then there is one local house, not restricted on anything instead of four. This was started in 2020, everything more is in the PUD. We believe the details are there. We understand the concerns. Frisco needs to take a leap of faith. We would prefer to move this along quicker than not.

- Commissioners would like to come to a resolution tonight maybe the applicant could create an ADU.
- Commissioners agree that this is the Town Council's job to make these agreements and they are creative.
- Commissioners were more concerned with the possibility of the property being bought and then not developed.
- Commissioners noted that even if we allowed an ADU at 100% AMI, there is no guarantee that the ADU would be built.
- Commissioners have expressed they want to make this work but were surprised by the applicant's resistance to a reasonable request.

Commissioners discussed possible conditions – deed restrictions, ADUs, the fourth unit being built, possible AMI caps – for a recommendation to the Town Council.

MOTION:

WITH RESPECT TO FILE NO. VAC-21-0001, COMMISSIONER TANE MOVED THAT THE PLANNING COMMISSION FORWARDS A RECOMMENDATION OF APPROVAL TO THE TOWN COUNCIL FOR THE VACATION OF A 10,500 SQ. FT. (0.24 ACRES) TRACT OF THE SOUTH 6TH AVENUE RIGHT-OF-WAY WITHIN BLOCKS 33 & 34 FRISCO TOWNSITE; GENERALLY LOCATED NORTH OF PITKIN STREET, SOUTH OF PITKIN STREET ALLEY, ADJACENT TO AND EAST OF 521 PITKIN STREET / LOTS 23-24, BLOCK 34, FRISCO TOWNSITE AND ADJACENT TO AND WEST OF 601 PITKIN STREET / LOTS 13-14, PT 15, BLOCK 33, FRISCO TOWNSITE, SUBJECT TO THE FOLLOWING CONDITIONS:

1. **THE APPLICANT(S) SHALL ENTER INTO A DEVELOPMENT AGREEMENT WITH THE TOWN OF FRISCO THAT OUTLINES THE REQUIREMENTS FOR GUARANTEEING CONSTRUCTION COMPLETION OF ALL FOUR DEED RESTRICTED WORKFORCE HOUSING UNITS AND THE RESIDENTIAL HOUSING RESTRICTIVE COVENANTS, INCLUDING THE TERMS AND CONDITIONS FOR OCCUPANCY AND OWNERSHIP OF THE UNITS AS DETERMINED BY THE TOWN OF FRISCO, INCLUDING THAT A PORTION OF THE UNITS CONTAIN A DEED RESTRICTION THAT CAPS THE SALE PRICE AT 160% AMI, AND THAT THE APPLICANTS HAVE OBTAINED ALL NECESSARY DEVELOPMENT APPROVALS AND PERMITS.**

2. **THAT THE VACATION ORDINANCE SHALL NOT CAUSE THE SOUTH 6TH AVENUE RIGHT-OF-WAY TO BE VACATED UNTIL THE ORDINANCE IS FILED BY THE TOWN CLERK FOR RECORDING IN THE**

OFFICE OF THE SUMMIT COUNTY CLERK AND RECORDER. THE TOWN CLERK SHALL NOT FILE THE ORDINANCE FOR RECORDING IN SAID OFFICE UNTIL THE CONDITIONS OF THE DEVELOPMENT AGREEMENT ABOVE HAVE BEEN SATISFIED.

MOTION SECONDED BY PLANNING COMMISSION MEMBER STABILE.

VOTE:

YEAS: LESMES – YEA, STABILE – YEA, TANE – YEA, FORSYTH – YEA, WITHROW – YEA
NOES: NONE

MOTION: PASSED

Commissioner Lesmes called for a five-minute break before continuing to the next agenda item.

2. **Planning File No. CU-23-0001**: A Conditional Use application to allow Unsheltered in Summit use of the 602 Galena Street parking lot as a designated, secure location for members of the local workforce to sleep in their vehicles for the summer of 2023, 602 Galena ST, Lot 13,14,15,16,17,18,19,20,21 Block 3 Frisco Town Sub. Applicant: Diane Luellen, Unsheltered in Summit representing the Safe Parking Program

Emily Weber, Planner II, began by stating that the applicant, Unsheltered in Summit, is requesting a conditional use permit to allow the Summit Safe Parking Program (SSPP) to utilize a portion of the parking lot at 602 Galena Street as a Transitional Shelter Facility, which includes the overnight parking, from the end of May 2023 to October 2023. The proposal includes occupying eight parking spaces within the parking lot at 602 Galena Street that would allow overnight parking for members of the SSPP to sleep in their vehicles. The program also provides sanitation (port-a-lets) and trash collection for its members. Parking for members would be allowed between 6:00pm and 8:00am, seven days a week. Ms. Weber continued with background information included in the March 18, 2023 staff report, calling attention to an updated rendering from the property occupant, Colorado Department of Labor (CDLE), showing the locations on site where they would approve the eight parking locations. This rendering was not originally in the March 18, 2023 staff report.

Ms. Weber continued with staff's analysis of the conditional use and noted that staff recommends APPROVAL of the conditional use application to allow the Summit Safe Parking Program to utilize a portion of the parking lot at 602 Galena Street as a Transitional Shelter Facility, which includes the overnight parking, from end of May 19, 2023, to October 31, 2023.

COMMISSION QUESTIONS FOR STAFF INCLUDED:

- Commissioners asked where the trash and port-a-let will be located. Ms. Weber replied that these items would be located next to the parking spaces.
- Commissioners asked about security to which staff responded that the applicant could address.
- Commissioners noted that when previously discussed, this was not meeting the needs with only eight parking spaces and why not look at another location that accommodates more, for example the PRA. Ms. Weber replied that that is not the request that I have in front of me. Part of it is limited to the eight parking spaces because that is what CDLE is allowing on site. The applicant may have other sites in mind, and they may be working on other potential sites, but I do not know that.

- Commissioners asked if staff received any neighbors' complaints from the last conditional use that was granted. Staff responded that the previous conditional use was a pretty successful program, and the applicant can speak on any specifics.
- Commissioners asked why the parking spaces changed. Ms. Weber responded that they changed to provide more screening and privacy and that those spaces were provided by CDLE.
- Commissioners noted that there are already people living in their cars at this location. Ms. Weber responded that those currently parked there are not legal or approved and intended to be mitigated.
- Commissioners asked staff, when these spaces do become occupied, what will happen to those currently living in their cars. Staff responded they will be ticketed and towed as they are not in conjunction with this program. This is not something the applicant will deal with; it is up to the Police Department to handle.

Applicant Diane Luellen and Doug Bair who are part of the Unsheltered in Summit team took the podium to respond to the Commission's questions. Ms. Luellen spoke to how successful the program has been at the marina and quoted a Town council member to say, "we haven't heard a word and that must mean nothing has happened that was a bad thing", further commenting that the program has been enormously successful. Ms. Luellen commented that their members have really enjoyed being at the marina, with comments from participants that it is so comforting to know where you were going to sleep every night, to be there and know that you did not have to look for that knock on the window or drive around in the evening looking for a place to park. Mr. Bair stated that he handles 90% of the intakes and those are the comments he receives from almost every applicant, then and later after they have had the experience there.

Regarding the trash and port-a-potties, Ms. Luellen stated that there are always kinks to work out. The management team and "host" take care of these issues. The host gets to park free and at the marina location, Paul who is a musician, functioned as the host. Mr. Bair noted that he and Paul worked closely to address issues that arose. Mr. Bair stated that the host gets to know the participants. Also Mr. Bair stated that in the marina lot, some members were allowed to stay past 8am. At this point we do not have a place for anyone to sleep in. If anything can be done it would be appreciated.

COMMISSION QUESTIONS FOR APPLICANTS:

- Commissioners noted that there were twenty-five spots at the marina which was their sole spot. Mr. Bair responded that during the time at the marina there were also eight spots in the Frisco Library parking lot. Commissioners questioned if there are any other opportunities. Mr. Bear responded that we would have the spots at the Galena property and will still have the eight spots at the library parking lot and were told recently that that can be a permanent situation for us, and twelve spots at the Justice Center. There was a brief discussion regarding the size limitations.
- Commissioners noted that this location differs from the past locations because it is on the fringe of residential property. Commissioners asked if anything will be different in your operation because it is on the fringe of residential property. Mr. Bair questioned in what sense. Commissioners responded, for example, with security noting unauthorized vehicles parking there and any misdeeds could taint the image of the program. Mr. Bair stated that he has spoken with Maggie at Workforce, and they will talk to those unauthorized vehicles and ask them to join the program or move on. One vehicle will be towed.
- Commissioners asked what the program fees are. Mr. Bair responded that the participant fee is $45 per month and those fees go to running the program. None of the staff is paid.

- Commissioners asked if the applicant has looked at the PRA. The applicant responded that that is one of the first properties we looked at and were told that all the spots were being used. Also, we considered the medical office building but that did not work out either, understanding was that the medical office building needs to be reserved in case of any all-County emergency. There is also a gravel parking lot across Highway 9 from the medical office building – there are wedding receptions at that location. Frisco Council came up with the marina and the Galena property and we are appreciative of that. The applicant also addressed the question on security, noting that we work closely with Chief Wickman and provide the Police Department and Sheriff's Department with a list of members and license plates. When an officer does a drive-by, they will know which are legal (windshield permits are provided for front and back of vehicles) and which are not, if parked elsewhere without windshield permit, they will know.
- Commissioners asked who the people in the program are. The applicant responded they are ski instructors, restaurant workers, teachers, nurses, an employee of a sled dog business, golf course greens keepers, about 20% of the participants fall into the category of van life as their intended lifestyle. Most are wanting to save up and move up. When we perform our intake, we ask for a plan. You must have a plan to advance yourself.
- Commissioners asked about Paul, the host who managed the marina site. Noting that that position sounds like an important role and asked if the applicant has trouble filling that role. The applicant responded that he is one of the first people in that role. The management team (Doug) is a fallback for the role.
- Commissioners asked if the program is unable to absorb those people currently living on the lot, into the eight spots, will you share the porta-potty. The applicant responded that there is one spot available at the Galena lot and two spots available at the library, and if needed, as we have in the Justice Center lot, put locks on the doors. We will monitor Galena and if need be, will lock up and give members the combinations.
- Commissioners asked if you have had to kick someone out of the program. The applicant responded only once and it was for emotional issues.
- Commissioners asked who set the hours of 6pm to 8am. The applicant responded that the Colorado Workforce Center established the hours. For sleeping purposes, we asked for two additional hours and were told no.

Public Comments:

- Demetri Molochev, Property Manager for 520-540 Galena – I was interested in coming here and hearing about the program and so far, I believe the folks have everything under control.
- Joan Scott, 601 Galena – We have a large parking lot and a large dumpster, we do have a concern that people parking and staying over here could spill over into our large parking lot. We have already experienced this.

Commissioner Lesmes commented that if anyone has problems, they can contact the Frisco Police Department.

Mr. Bair responded that we have not had anyone do that from our program. We are willing to be a contact for you or your association if someone stays in your lot. Ms. Weber asked for Ms. Scott to contact her at EmilyW@townoffrisco.com and she will pass the concern on to Mr. Bair.

COMMISSION DISCUSSIONS:

- Commissioners thanked the applicant for doing a great job and noted that Unsheltered in Summit cannot control those who do not belong to their program.
- Commissioners expressed appreciation for such a critical resource and further commented that when frequently walking by the program's marina location, it was always clean, and people take this privilege seriously and do not want to lose the opportunity. Further, noted we wish the program could get more spots and longer sleeping hours.
- Commissioners noted that initially they were doubtful, but it has really turned out to be very positive.

MOTION:

WITH RESPECT TO FILE NO. CU-23-0001, COMMISSIONER FORSYTH MOVED THAT THE RECOMMENDED FINDINGS SET FORTH IN THE MAY 18, 2023, STAFF REPORT BE MADE AND THAT THE PLANNING COMMISSION HEREBY APPROVES THE REQUEST FOR A CONDITIONAL USE FOR THIS APPLICATION SUBJECT TO THE FINDINGS AND CONDITIONS CONTACNED IN THE STAFF REPORT.

MOTION SECONDED BY PLANNING COMMISSION MEMBER STABILE.

VOTE:

YEAS: LESMES – YEA, STABILE – YEA, TANE – YEA, FORSYTH – YEA, WITHROW – YEA
NOES: NONE

MOTION: PASSED

3. **MAJ-23-0001**: A sketch plan review of the Major Site Plan application for a new mixed-use/affordable housing development, **CU-23-0002** a Conditional Use application to allow ground floor residential in the Mixed-Use Zone District, and **CU-23-0003** a Conditional Use application to allow for less than 20% mix of uses in the Mixed-Use Zone District; located at 101 W Main Street / Lot B-1 West Frisco 70 Sub # 2. Applicant: Andy Stabile, Allen-Guerra Architecture

Commissioner Stabile recused himself from this item noting that since there will not be any discussions, he will stay in the room but will abstain from any votes that might happen.

Ms. Lee noted that the item is being tabled due to a noticing error.

MOTION:

COMMISSIONER FORSYTH MOVED THAT THE PLANNING COMMISSION TABLE THE ABOVE AGENDA ITEM TO JUNE 1, 2023, THE MOTION WAS SECONDED BY COMMISSIONER WITHROW, AND PASSED BY A UNANIMOUS VOTE.

Staff updates:

- In the Town's RL-Zone district, particularly in the Pitkin and S 6th Avenue area, there are older cabins that were built in the setbacks and people have been asking about improving their roofs. As for the way our code is written, a variance is required if you are going to increase the non-conformity of the structure. It goes against some of our guiding principles and goals in the Community Plan. This is being mentioned tonight to determine whether you feel a code revision would be in order to try to allow

some of those existing cabins to remain as they are but have improved roofs so that they can be modernized so they are habitable. Commissioners asked if they wanted to rebuild the roof or replace the roof. Ms. Lee responded that a lot of these cabins were built with very old flat roofs, and they want to go up higher, so it is going to increase the cubic footage that is in the setback. Commissioners responded if fixing the roof, please go ahead and do that. If changing the pitch, dormer, loft, that is a variance. Commissioners noted that the variance should be attainable. Staff suggested that the fees be re-visited as currently a variance fee is $1000. Commissioners would like to look at the whole variance process.

- Katie Kent has been selected as the new Community Development Director.

Ms. Lee announced that she has resigned, and her last day will be June 1, 2023.

Commissioners expressed their appreciation to Ms. Lee for filling in, in the interim.

Adjournment:

There being no further business, Commissioner Stabile made a motion to adjourn, seconded by Commissioner Tane and was unanimous. The meeting was adjourned at 7:25 p.m.

Respectfully submitted,

Cheryl Mattka
Community Development Department

Program

1.1.D

Conversation of Public Lands

Priority Secondary

This program is essential for expanding housing opportunities using public assets, but it depends on the foundational initiatives like Land Banking and Housing Sites Inventory.



Goal 1

Provide Diverse and Equitable Housing

Strategy 1.1

Supply Sufficient Land

Estimated Cost	Staff time for land assessment, outreach, coordination with public agencies, incentives, RFP preparation	**Responsible Agency**	Community Development; Summit Combined Housing Authority	**Target Population**	Low- to moderate-income households, essential workers, affordable housing developers
Timeline	Annually review publicly-owned lands and update the inventory; take follow-up actions on specific sites as appropriate opportunities arise; implement additional actions by 2028 if necessary	**Outcome**	Identification and conversion of underutilized public lands into viable housing development sites; Increased availability of land for affordable housing; Enhanced collaboration between public agencies and developers	**Funding Source**	Proposition 123 Affordable Housing Financing Fund; Grant Funding; Community Development Block Grants (CDBG); Local Planning Capacity Grant Program; General Fund/Staff Time

Quantified Objective

Maintain a sites inventory to accommodate the catch up need of 193 units by 2029 and keep up need of 186 units by 2034 (includes surplus)

Implementation

1. Review Inventory
2. Outreach to Developers
3. Apply Affordable Housing Overlay
4. Issue RFPs
5. Incentivize Development
6. Monitor and Adjust

Description

In collaboration with other public agencies, undertake a review of publicly- and institutionally-owned lands to consider their viability for housing, and pursue follow-up actions such as adding appropriate sites to the Housing Sites Inventory or prioritizing sites for the Land Banking Program. Also collaborate with SCHA to identify potential regional applications. As part of this effort, the following actions could be taken:

- Application of the Affordable Housing Overlay District to such lands
- Outreach to affordable housing developers about financial assistance and other incentives
- Issue Requests for Proposals on such lands found viable and ready for housing development
- Provide additional incentives to facilitate development on such lands (e.g., streamlining for final entitlements, priority in building permit queue)
- By 2028, if development of such lands does not progress as anticipated, additional actions to facilitate housing development and maintain adequate sites should be taken

Program

5.1.D

Neighborhood Densification

Priority Secondary

This program is essential for increasing housing supply and diversity within existing neighborhoods. By focusing on modifying density requirements and utilizing public lands for densification, the town can promote efficient use of available resources and infrastructure. This initiative will build on foundational strategies, such as the Affordable Housing Overlay, to ensure its approach is well-supported and strategically aligned with broader goals to create more inclusive and diverse housing options in established neighborhoods.



Goal 5
Maintain Community While Supporting Regional Needs

Strategy 5.1
Facilitate Infill Housing

Estimated Cost	Costs include administrative expenses, outreach efforts, and potential costs for infrastructure adjustments	**Responsible Agency**	Community Development; Public Works; Local Planning Authorities	**Target Population**	Property owners, developers, local residents, and those in need of affordable and diverse housing options
Timeline	Implement by 2028; Begin projects by 2029	**Outcome**	Increased housing density in existing neighborhoods; More efficient use of public lands and infrastructure; Enhanced availability of diverse housing types for residents	**Funding Source**	General Fund/Staff Time; Partnership Contributions; Grant Funding

Quantified Objective

Convert at least 10 single-family homes to multi-unit housing types and increase overall neighborhood density by 15% in targeted areas

Description

Support the densification of existing neighorboods through the creative use of public lands and the conversion of existing single-family dwelling units to duplex, triplex, and quadplex housing types (including provisions to incentivize or require mixed-income housing). Modify maximum density requirements to allow for conversions in appropriate areas, including through the use of the Affordable Housing Overlay, and increase flexibility in development and building standards for the reuse of existing structures for housing to the extent possible under health and safety codes. In areas of desired densification where there is unused public land, such as undeveloped alley rights-of-way, provide a streamlined process to utilize it in ways that support densification, such as through parking requirement adjustments.

Implementation

1. Modify Density Requirements
2. Identify and Utilize Public Lands
3. Support Conversion of Existing Structures
4. Outreach and Education to Property Owners

From: Dean Myerson
To: Heth, Emma
Subject: Planning File No. VAC-25-0001
Date: Saturday, October 11, 2025 11:03:35 PM

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Please review the email and report as suspicious if you have any doubts of the integrity of the message.

Report Suspicious

Emma,
I own the property at 503-B So. 6th Ave Frisco, CO 80443, across the street from the proposed ROW Vacation (Planning File No. VAC-25-0001) and PUD. I have read the planning documents and staff/commission/council comments and am in support of the applicants desire to create additional workforce housing through the Town's approval of the ROW vacation.

The applicant's offer to restrict their own market rate home with a local workforce buyer deed restriction seems more than equitable in consideration for approving the ROW vacation and allowing the development of additional workforce housing units. Layering an additional AMI restriction seems like an excessive burden since the properties will already be restricted to Buyers who work in the area, especially considering the Applicant would be permanently giving up value in their own home via the same deed restriction.

If the applicant does not agree to an additional AMI restriction and the project does not move forward, the Town will lose the opportunity to have four additional permanent workforce housing units created.

While AMI restrictions are one tool to create workforce housing, it does not mean all workforce housing must require AMI restrictions to be useful in mitigating the local housing problem. Ultimately, it is better to have a whole "basket" of housing options for locals to choose from, especially when the alternative will be a lost opportunity.

Please take advantage of this long-time resident's willingness to be creative and spend enormous amounts of time to help solve the housing problem… overreaching with excessive requirements could ultimately do more harm than good.

Regards,
Dean Myerson
503-B So. 6th Ave
Frisco, CO 80443

From: Jenise Packer
To: Heth, Emma
Subject: Objection
Date: Monday, October 13, 2025 3:24:04 PM

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This message came from outside your organization.
Please review the email and report as suspicious if you have any doubts of the integrity of the message.

Report Suspicious

Hi Emma,

I am writing to object strongly to the proposed vacation of the 6th Avenue right-of-way between 521 and 601 Pitkin Street. We do not believe this project meets the threshold of *overriding public interest* required for the Town to vacate public property for the reasons outlined below. My concern is that I truly don't understand the benefit the town would receive. The land the alley currently occupies could be built on for affordable housing and yet has never been developed. The land as is could easily have two homes on it without any disturbance to the current neighbors so I don't see the point of anyone else being involved. I don't think private citizens should be involved in the development of affordable housing. We also need to really look at what affordable housing means to this community. It can't just mean affordable to the first person to own the home, it needs to remain affordable for future homeowners and I don't believe this meets that criteria.

---

1. Sets a dangerous precedent for the Town of Frisco.
This proposal would establish an alarming precedent allowing private parties to acquire and develop Town-owned land for their own benefit. Frisco holds numerous small parcels, alleyways, and rights-of-way throughout town that provide green buffers, visual openness, and the "small mountain town" charm our community values. If this vacation is approved, other property owners or developers will likely pursue similar requests—eroding these natural breaks, increasing density, and permanently changing the fabric of Frisco's neighborhoods.

---

2. The land is a valuable public asset being undervalued.
Recent comparable sales, including 706 Frisco Street (approximately $1.3 million), demonstrate that this right-of-way land is far more valuable than the 2021 appraisal of $158,000 suggests. That appraisal is significantly outdated given Frisco's rapid appreciation in property values. The Town would effectively be giving away a seven-figure asset for a fraction of its worth.

If the Town believes this land is suitable for development, it should **open the opportunity to public bid or proposal**—allowing the community, other local residents, or qualified developers to participate transparently and ensure fair market value is received. Anything less risks undermining public trust and responsible stewardship of Town property.

For the record, we would personally be willing to purchase the parcel for $158,001 to demonstrate that this land is being grossly undervalued.

---

3. The proposal provides disproportionate private benefit with little public return.
This vacation would convey substantial financial and development benefit to the applicants,

Andy Richmond and Lauren Echevarria, while providing the town little measurable benefit. The applicants would see a significant increase in the size, utility, and market value of their properties—potentially millions of dollars—while the Town relinquishes ownership of a public asset and receives only vague assurances of "locals' housing" that are unenforceable over time.

---

4. The "locals' housing" component does not achieve true affordability.
The applicants specifically note that their proposed housing covenants would exclude AMI (Area Median Income) and resale restrictions. Most that struggle with affording housing in the town are those with AMI of 150% or below. Without income-based or resale caps, these proposed units could still sell at or near market rates, simply limited to "primary residents" who may already be high-income earners or remote professionals.

In other words, this plan does not help the workers who make up Frisco's true local workforce —those in service, retail, education, and public safety positions who cannot compete in today's housing market. AMI-based restrictions exist precisely to enable these residents to buy homes. Without them, there is no affordability, and the Town gains no meaningful workforce housing.

---

5. The proposed building sizes and density contradict the "small cabin" description.
Although the applicant characterizes the project as "small cabins," the draft PUD allows for buildings up to **3,550 square feet** and up to **32 feet in height** (approximately three stories)

The smaller setbacks—just five feet from property lines—would intensify the sense of crowding, reduce privacy for adjacent homeowners, and diminish the open, natural views that define this area.

---

6. Questionable delivery of the promised housing units.
There is no indication that Andy Richmond and Lauren Echevarria have any prior experience in property development or project management. This raises serious questions about the feasibility of the proposed build-out. What assurances does the Town have that the project will be completed on time—or at all? What is the expected timeframe for development? And if the applicants fail to deliver as promised, what recourse will the Town have after the right-of-way has already been vacated and ownership transferred?

Without clear performance benchmarks, bonding, or enforcement provisions, the Town would be taking on significant risk—essentially giving away public land based on uncertain promises of future housing that may never materialize.

Even under the applicant's plan, the Town may only see three new "local" units. The fourth—proposed for the Lindrose property may never be built, as the successor of that property could contest complying. This loophole means the Town could permanently lose the right-of-way yet only receive partial fulfillment of the proposed housing benefits. Meanwhile, the Lindrose property would gain significant market value (potentially $500,000 or more) from the land vacation alone.

Considering the above points, this proposal serves primarily private interests, not the public good. It establishes a dangerous precedent, reduces public land holdings, weakens community character, increases density and building scale, and provides no assured affordable housing or equitable return to the Town. By every reasonable measure, the proposal fails to meet the

“overriding public interest” standard required for a right-of-way vacation.

Thank you for your consideration and for your continued efforts to preserve the integrity, openness, and small-town feel that make Frisco such a special place to live.

Sincerely,

Jenise Pencek

500 Pitkin Street

Frisco, CO 80443

From: Derrick Packer
To: Heth, Emma
Subject: Objection - vacation of the 6th Avenue right-of-way between 521 and 601 Pitkin Street
Date: Monday, October 13, 2025 2:20:49 PM
Attachments: image001.png

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Report Suspicious

Hi Emma,

I hope you are doing well. I am writing because I am also a very concerned resident, and I want to add my name to the letter below. I know many people who have and still do struggle with our housing affordability crisis, including my family (we live in the Pitkin Townhomes across the street from the proposed project). I have discussed this proposal with friends and colleagues recently and it's been met with 100% negative feedback. No one thinks it's a good idea and no one believes this type of project, with no AMI or Resale Cap has any place in the affordable housing program. If you cannot ensure affordability into the future, then there is no reason at all to entertain a proposal like this. These homes will have resale values exceeding $2 million dollars, which goes without saying - the definition of unaffordability.

Thank you for taking the time to address our concerns.

We are writing as concerned Frisco residents and nearby property owners to strongly object to the proposed vacation of the 6th Avenue right-of-way between 521 and 601 Pitkin Street. We do not believe this project meets the threshold of *overriding public interest* required for the Town to vacate public property for the reasons outlined below.

---

1. Sets a dangerous precedent for the Town of Frisco.
This proposal would establish an alarming precedent allowing private parties to acquire and develop Town-owned land for their own benefit. Frisco holds numerous small parcels, alleyways, and rights-of-way throughout town that provide green buffers, visual openness, and the "small mountain town" charm our community values. If this vacation is approved, other property owners or developers will likely pursue similar requests—eroding these natural breaks, increasing density, and permanently changing the fabric of Frisco's neighborhoods.

---

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fraction of its worth.

If the Town believes this land is suitable for development, it should **open the opportunity to public bid or proposal**—allowing the community, other local residents, or qualified developers to participate transparently and ensure fair market value is received. Anything less risks undermining public trust and responsible stewardship of Town property.

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---

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This vacation would convey substantial financial and development benefit to the applicants, Andy Richmond and Lauren Echevarria, while providing the town little measurable benefit. The applicants would see a significant increase in the size, utility, and market value of their properties—potentially millions of dollars—while the Town relinquishes ownership of a public asset and receives only vague assurances of "locals' housing" that are unenforceable over time.

---

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In other words, this plan does not help the workers who make up Frisco's true local workforce —those in service, retail, education, and public safety positions who cannot compete in today's housing market. AMI-based restrictions exist precisely to enable these residents to buy homes. Without them, there is no affordability, and the Town gains no meaningful workforce housing.

---

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Although the applicant characterizes the project as "small cabins," the draft PUD allows for buildings up to **3,550 square feet** and up to **32 feet in height** (approximately three stories)

The smaller setbacks—just five feet from property lines—would intensify the sense of crowding, reduce privacy for adjacent homeowners, and diminish the open, natural views that define this area.

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There is no indication that Andy Richmond and Lauren Echevarria have any prior experience in property development or project management. This raises serious questions about the feasibility of the proposed build-out. What assurances does the Town have that the project will be completed on time—or at all? What is the expected timeframe for development? And if the applicants fail to deliver as promised, what recourse will the Town have after the right-of-way has already been vacated and ownership transferred?

Without clear performance benchmarks, bonding, or enforcement provisions, the Town would be taking on significant risk—essentially giving away public land based on uncertain promises of future housing that may never materialize.

Even under the applicant's plan, the Town may only see three new "local" units. The fourth—proposed for the Lindrose property may never be built, as the successor of that property could contest complying. This loophole means the Town could permanently lose the right-of-way yet only receive partial fulfillment of the proposed housing benefits. Meanwhile, the Lindrose property would gain significant market value (potentially $500,000 or more) from the land vacation alone.

Considering the above points, this proposal serves primarily private interests, not the public good. It establishes a dangerous precedent, reduces public land holdings, weakens community character, increases density and building scale, and provides no assured affordable housing or equitable return to the Town. By every reasonable measure, the proposal fails to meet the "overriding public interest" standard required for a right-of-way vacation.

Thank you for your consideration and for your continued efforts to preserve the integrity, openness, and small-town feel that make Frisco such a special place to live.

Sincerely,

Derrick Packer
Principal | IBD Design Studio
970 453 9020 o | 267 639 8283 c | Derrick@ibddesignstudio.com

PO Box 3610 | 306 ½ South Ridge Street
Breckenridge, Colorado 80424
ibddesignstudio.com

IBD DESIGN STUDIO

Jill and Kevin Windrum, Kathryn Brown and Diane DeSilva
Owners of 600A, 600B and 604A Frisco St.
Frisco, CO 80443

Date: October 14, 2025

Frisco Planning Commission
Town of Frisco
1 Main Street
P.O. Box 4100
Frisco, CO 80443

Re: Opposition to the request for vacation of a public right-of-way (Planning File No. VAC-25-0001)

Dear Members of the Planning Commission,

We own the properties of 600A, 600B and 604A Frisco St, behind the 6th Avenue right-of-way, and two of us are primary residents. Unfortunately, we do not recall receiving the notice of the Richmond-Lindrose Vacation Application for the 6th Avenue right-of-way (ROW) and planned development in 2023, and would have opposed it then as we do now.

We strongly oppose the project, as we do not believe the threshold for overriding public interest has been met. While we understand and support the Town's goals of providing local housing, we do not believe this particular proposal meets those objectives, and should not come at the cost of public interest.

The proposal provides significant value to the applicants with little public benefit.
Has anyone stopped to ask what the Applicants stand to gain from this? The Applicants would see a significant increase in the size, utility, and market value of their properties—most likely millions of dollars—while the Town relinquishes ownership of a public asset, for the promise of maybe three locals housing units over an undetermined time frame.

The application and the Planned Unit Development Agreement (PUD) raise questions about the intent of the Applicants and whether this development is in the best interest of the community:

- The Applicants claim they would be giving up significant value by signing onto local covenants – simply limiting to 'primary residents' who may already be high-income earners, remote workers or wealthy retirees do not have a noticeable impact on market value. As such, the Applicants could sell these units for millions of dollars apiece based on going market rates. To truly have an impact on local housing needs (provide housing to those that can't afford market rates), there should be area median income (AMI) caps and resale restrictions in place. Otherwise, the Town would be providing a mechanism for the Applicants to gain substantial wealth with little to no public benefit.
- The Applicants claim that the locals covenant ensures no real estate speculation or investment purchases, but the PUD allows for rentals of *at least* nine months, which

encourages investment properties. The rentals should be limited to a maximum of 12 months over the duration of ownership to ensure that these properties do not become investment properties.

- The Applicants claim these would be small cabins (1250 to 1500 sq feet); however, the PUD indicates the units can be 30-32 feet tall, with basements equal to the size of the ground floor (i.e., a total home size of 2500 to 3000 sq feet), plus a garage of 550 sq feet and a covered porch. Home sizes this large clearly do not qualify as small cabins, and are not in the best interest of the community.
- The PUD would allow for six structures with significantly reduced setbacks (less than half of what the town building code requires), and open space of only 5% to 17% of each lot. This would significantly increase the building density and significantly reduce open green space, and permanently alter the quality and character of the neighborhood to the detriment of the community.
- The proposed development would provide two additional units to "locals" in the near term (although development timelines are not specified). The third unit on the Lindrose property is on a questionable timeframe of at least several years out into the future, and therefore no near-term benefit. With only two additional guaranteed units, a vacation of land for no consideration does not appear to be in the best interest of the community, nor does it effectively address the housing needs in the Town's Strategic Housing Plan.

Negative impact to neighbors.
The open right-of-way currently serves as a vital buffer and contributes to the visual and environmental quality of the neighborhood. In fact, one of the reasons we bought our properties was due to the green space behind our houses that we were under the impression would not be built upon. The proposed development would significantly alter that balance and diminish the small-town character that we residents value. In addition, it would impact wildlife, which frequently habitat the ROW and surrounding area.

The smaller setbacks from property lines means that the buildings on lots one through four of the proposed development would encroach on our properties, reduce privacy, and increase noise. The height of the proposed development would obstruct our mountain views and transform backyard vistas into what feels more like a metropolitan streetscape. For these reasons, we believe the Richmond-Lindrose Proposal would significantly diminish our property values and the overall quality of life that defines our neighborhood.

Frisco is already losing its small town charm with each development that goes in – single family homes are going by the way side, and replaced with multiple dwellings, often three or more stories tall, one on top of the other. Vacating this Town-owned property for development would set an unfortunate precedent for converting community green space into higher-density private lots, further deteriorating the quality and character of Frisco.

The land is highly valuable and should not be given away.
The appraisal referenced in the meeting materials is outdated (2021), misleading and does not reflect the true value of the land. The appraisal includes land values in Keystone and Blue River as comparables, and as the Planning Commission knows, these locations have nowhere near the value of Frisco property. The ROW could easily be developed, and has value to others beyond

adjacent neighbors. 706 Frisco Street was sold in 2023 for $1.25 million, and property values have continued to appreciate since then. The cabin on 706 Frisco St, was scrapped after purchase (and replaced with two single family homes), which indicates the 2023 sale price represents the value of the land. The ROW is in the same neighborhood and is a similar size to 706 Frisco St., indicating the ROW is likely worth $1.3M. The Town would effectively be giving away a seven-figure asset for no consideration.

Respectfully request denying the Richmond-Lindrose Application.
Considering the above points, this proposal serves primarily private interests, not the public good. It establishes a troubling precedent, and provides no assured affordable housing or equitable return to the Town. For these reasons, we strongly recommend the Planning Commission deny the Richmond-Lindrose Application.

Should the Planning Commission consider approving the Richmond-Lindrose Application, we respectfully request the following additional conditions to protect public interest:

1) **Fair Market Value Compensation** – Require a fair and independent 2025 appraisal to establish current fair market value, and require the applicants to compensate the Town for the ROW and avoid a private windfall;
2) **Deed Restrictions for Affordability** – Impose enforceable deed restrictions on all lots to ensure affordability now and into the future (AMI and resale caps);
3) **Mitigation of Impacts** – mandate design modifications to reduce density, structure height, and environmental and visual impacts to surrounding homes, and allow surrounding homeowners to object to the final agreed upon plan, to reduce impact of loss of view, green space, privacy, etc.
4) **Performance Enforcement** – require firm construction timelines and clawback provisions so the ROW reverts to the Town if all required units are not completed within the specified time period.

Thank you for your consideration and for your efforts to preserve the small-town feel that make Frisco a special place to live.

Sincerely,

/s/ **Jill Windrum**
/s/ **Kevin Windrum**
600B Frisco St.

/s/ **Kathryn Brown**
600A Frisco St.

/s/ **Diane DeSilva**
604A Frisco St.

Shana Solomon and Gene Bernard
Owners
604B Frisco St.
Frisco, CO 80443

Date: October 13, 2025

Via Email

Frisco Planning Commission
Town of Frisco
1 Main Street
P.O. Box 4100
Frisco, CO 80443

Re: Planning File No. VAC-25-0001; Opposition to the Richmond/Echevarria-Lindrose Vacation Application and Related PUD (the "Application")

Dear Members of the Planning Commission:

We respectfully submit this letter in strong opposition to the Richmond-Lindrose Vacation Application for the 6th Avenue right-of-way and the related Planned Unit Development (the "Application"). Neither we nor our fellow duplex owners at 604A or 600A and B Frisco Street received notice of this proposal in 2023. Had we been notified earlier, we would have expressed our opposition then, as we do now.

We have owned our duplex at 604B Frisco St. since 2009 and agree that creative solutions are needed to address affordability in Frisco, which is an important goal. But the proposed vacation Application is *not* the right solution. If the Application is allowed without requiring payment to the Town of the actual fair market value for the new lots being created and developed *and* without any affordability requirement on their sale, it would set a terrible precedent.

The Application Fails to Serve an Overriding Public Interest

The vacation Application provides minimal public benefit while conferring significant private gain on the Applicants. The Application does not meaningfully advance the Town's affordable- or workforce-housing objectives. The so-called "locals housing covenant" lacks affordability requirements and AMI-based resale restrictions, rendering it ineffective in addressing the housing needs identified in the Town's Strategic Housing Plan, which prioritizes ownership units at or below 150% AMI.

The 2021 appraisal commissioned by the Town pegged the "as-is" value of the 10,500 sq ft of public right-of-way at just $158,000—an outdated and flawed valuation that notably excluded any value of finished basement space and preceded the substantial escalation in Frisco property values since 2021. Even Staff acknowledged that this low figure confers a considerable private windfall to Applicants. By contrast, a comparable lot at 706 Frisco Street, sold in 2023 for $1.25M, demonstrate

a fair-market value exceeding $1M, particularly when considering the value of the three new lots that will be created by the subdivisions. Proceeding without an updated valuation for such lots or fair compensation would contravene Frisco Town Code §142-10, which authorizes payment to the Town to avoid such private windfalls. Back in 2023, even the Commissioners noted that in the past the Town was reimbursed for the value of vacated land and used a 160% AMI cap on resale values. Why should this Application not adhere to the same requirements?

Under §142-1 of the Code, the Town's policy is to prohibit right-of-way vacations unless a clear "overriding public interest" favors them. As the Planning Commission itself noted in 2023, the Town must take a conservative interpretation of that standard. Here, the absence of any fair-market payment, enforceable affordability requirements, or clear public return demonstrates that no such overriding public interest exists.

The Proposed PUD Reveals Troubling Development Intent

Although the proposed PUD is not yet under formal review, its provisions demonstrate the Applicants' intentions, the lack of meaningful public benefit, and reinforce why the vacation Application should be denied:

- *Uncertain and Delayed Public Benefit*: Only one of four proposed "locals" units would be restricted immediately; the others depend on uncertain, future construction. Town Housing staff questioned the absence of "claw-back" provisions and the lack of guaranteed timelines for completion—especially given that one lot is held in a living trust and may never be developed by either the Lindroses or any successor.
- *Scale and Character:* Homes up to 2,500–3,000 sq ft (including the basement), with rooftop decks, large garages, and **30–32 ft** heights (all allowed in the PUD), are wholly inconsistent with "cabin" zoning and may block neighboring home owners' mountain views.
- Affordability: The "locals-only" covenant merely limits ownership to residents with local ties, regardless of income. The new homes could reasonably be offered for sale at $2.5M–$3M – a significant profit for the Applicants and little real benefit to the Town.
- *Density and Setbacks:* Allowing up to six structures with reduced 5–8 ft setbacks would produce density far beyond current zoning and erode neighborhood character.
- *Investment Use*: The restrictive covenant language permits rentals of nine months or longer, which encourages speculative investment rather than permanent residency.

Requested Action

We urge the Planning Commission to recommend the DENIAL of the Application. Should the Commission nonetheless recommend approval to the Town Council, we respectfully request the following reasonable conditions to such approval in accordance with §142-10, all to protect the public interest:

1. *Updated Appraisal & Fair-Market Compensation* — Require an independent 2025 appraisal, in accordance with Code §142-6, to establish the *current* fair-market value of both the vacated property and the value of the three new lots once subdivided and require *full and fair compensation* to the Town for the value of such lots, consistent with Code §142-10 to avoid a private windfall;

2. *Deed Restrictions for Affordability* — require more typical, enforceable deed restrictions on all four lots to ensure lasting affordability (e.g., resale caps tied to no more than 160% AMI);

3. *Performance Enforcement* — Require firm construction timelines and "claw-back" provisions so the right-of-way reverts to the Town if all required units are not completed within the specified period; and

4. *Mitigation of Impacts* — Mandate design modifications to the PUD to reduce density, structure height, and environmental and visual impacts on surrounding homes.

Conclusion

Recommending the approval of the Application as proposed would contradict the Town's own code, policy, and precedent. Previous right-of-way vacations required both fair-market compensation and AMI-based affordability caps. This Application offers neither, provides no enforceable timeline for delivery of public benefit, and fails to meet the "overriding public interest" standard mandated by Frisco Code §142-1. We respectfully urge the Planning Commission to recommend that the Town DENY the Application or at the very least require additional conditions for its approval in order to protect the public interest.

Thank you for your attention and consideration.

Respectfully submitted,

Shana Solomon

Shana Solomon

From: Megan Mulqueen
To: Heth, Emma
Subject: Planning file number VAC – 25–001
Date: Thursday, October 16, 2025 9:07:33 AM

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Community development department:

I am a full-time resident at 306 South 5th Ave in Frisco. I've lived here my whole adult life and I've seen a lot of changes. I am aware of the housing issues and over the past 25 years, I have seen a lot of good work done by our community to bring more people to live here. Kudos to Frisco taxpayers!

I don't think that we as a town and as taxpayers should be giving town owned land to developers. This land belongs to all of us. If anything, it should be a Park. It's a beautiful piece of property and we don't have enough open space. Open space is good.

Thank you so much for allowing us all to help guide the future of our town.

Sincerely, Megan Mulqueen

From: Derrick Packer
To: Heth, Emma
Subject: RE: Objection - vacation of the 6th Avenue right-of-way between 521 and 601 Pitkin Street
Date: Thursday, October 16, 2025 12:51:51 PM
Attachments: image001.png
Peak One Neighborhood Case Study.pdf

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Report Suspicious

Hi Emma,

I am attaching a case study of the Peak One Neighborhood here in Frisco. Peak One has homes very similar to what the applicant is proposing. The homes with market rate resale value, sell at market rate values regardless of their 30-hr. work requirement. The capped units have remained affordable. As concerned residents, we are tired of seeing our Affordable Housing Program targeted for personal gain. We need to have common sense AMI and resale caps to ensure affordability. Giving up a town and public asset for an uncapped development with few guidelines is not in the public interest.

Thanks again for your attention to our concerns. If you could forward these comments to the planning board in advance of tonight's meeting, it would be much appreciated.

Case Study Summary: Peak One Neighborhood Subdivision (2013–2015)
Overview:
Peak One Neighborhood was developed in the mid-2010s as an affordable housing community, with homes average prices between **$400,000–$500,000**—accessible to local residents at the time. A key affordability condition required **buyers to work at least 30 hours per week locally**, reinforcing the intent to serve the local workforce.
Problem:
Despite the local employment requirement, the development lacked **permanent affordability mechanisms**—such as resale caps or deed restrictions tied to income levels. Over time, this allowed market forces to drive up home values well beyond what local workers could afford.
Key Outcome – Affordability Lost:
By the mid-2020s, homes were reselling for **$1.37M–$1.65M**, a **2.25x to 3x increase** from their original price.
The **30-hour local work requirement** remained in place, but it **did not deter significant appreciation** or preserve affordability. Home prices far outpaced local wage growth, making these units **inaccessible to the very workforce they were built to support**.
Implications for Future Development:

Intent is not enough — Even with local work requirements, affordability erodes without structural safeguards.

- **Employment-based eligibility alone does not ensure long-term affordability.**
- **Sustainable affordability requires mechanisms** such as:
  - Resale price caps
  - Deed restrictions tied to **Area Median Income (AMI)** and local wage levels
- **Future planning must build in protections** that keep homes permanently affordable to workers earning typical local wages.

Lesson:

Without enforceable, long-term affordability protections, even well-intentioned policies like local work requirements **cannot stop affordable homes from becoming luxury assets over time**.

Sincerely,

Derrick Packer
Principal | IBD Design Studio
970 453 9020 o | 267 639 8283 c | Derrick@ibddesignstudio.com

PO Box 3610 | 306 ½ South Ridge Street
Breckenridge, Colorado 80424
ibddesignstudio.com

IBD DESIGN STUDIO

3x sale 2024 - Uncapped

Schedule # 6515650

Property Desc:	LOT 8 BLOCK 3 PEAK ONE NEIGHBORHOOD # 4
Phys. Address:	245 BELFORD ST

Ownership	
Primary:	CARLSON, KATIE
Secondary:	CARLSON, GREGORY

Mailing Address	
C/O	
Addr:	PO BOX 1330
CSZ	FRISCO CO 804431330

	Subdiv	Filing	Phase	Block	Lot
SubCode	2265	4	0	3	8

PPI:	2097-3530-68-031		
Econ:	2	Frisco	
Nhood:	23000	Frsco Area	
TaxArea:	11	2025 Tship:	5
AssdVal:	116688	Est. Tax/Tax Rate: 52.521	Range: 78

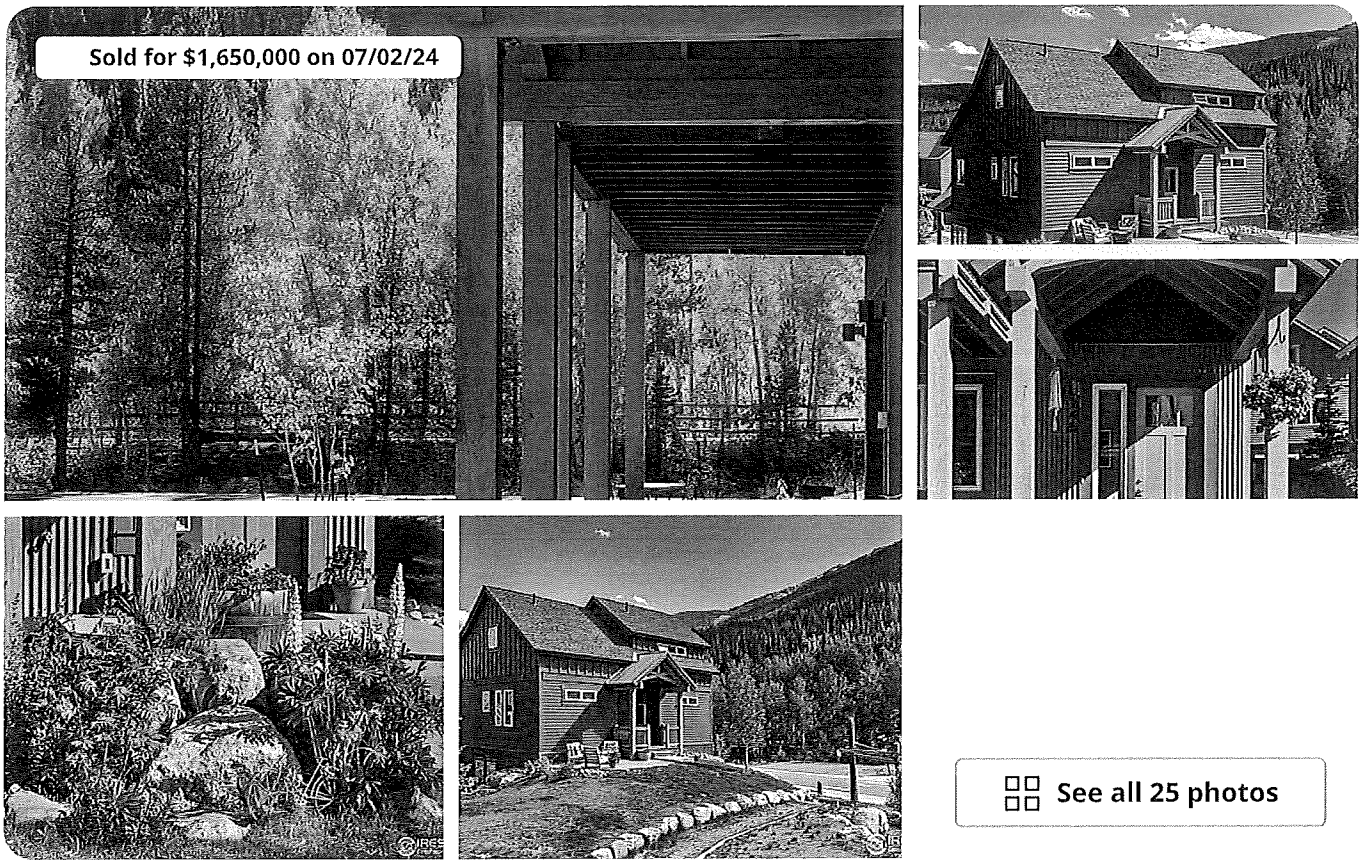
Reception	Sale Date	Document Type	Sale Price
1333113	6/26/2024	HRC	0
1333111	6/26/2024	WD	$1,650,000
1234115	8/31/2020	WD	$1,025,535
1045978	12/18/2013	HRC	0
1045084	12/17/2013	WD	$549,900
1032489	7/9/2013	HRC	0
1032486	7/9/2013	QCD	0
1026724	5/21/2013	PLT	0

2025 Actual Value		
1117	EMPLOYEE SFR LAND	$517,100
1217	EMPLOYEE SFR STRUCTURE	$1,349,900
	Total Value:	$1,867,000

2024 Actual Value		
1117	EMPLOYEE SFR LAND	$430,100
1217	EMPLOYEE SFR STRUCTURE	$1,053,200
	Total Value:	$1,483,300

Improvement Info:		First:	1163	FinHalf:	0	Beds:	4	Units:	1	Impstyle:	Two Story	Grade:	Average
Imp#	1	Second:	490	FinBsmt:	660	Baths:	4.00	Gar Sqft:	503	Bsmt:	Walkout	Cond:	Average
YearBlt::	2013	Third:	0	SFLA:	2313	Rooms:	7	Cars:	2	Garage:	Basement	Xwall:	FiberCment
AdjYr:	2013	Addn:	0	UnBsmt:	0	Lofts:	0	Heat:	Hot Water				

Acres:	0.0927	Access:	Pub Paved	Topography:	Level	View:	Typical	Tree Cover:	None
Hydrology:	None	Sewer:	Public Swr	Water:	Public Wtr	Utilites:	Elec & Gas	Misc:	NONE



$1,650,000

245 Belford St, Dillon, CO 80443

4 beds **4** baths **2,345** sqft

Est. refi payment: $9,275/mo **Refinance your loan**

SingleFamily

Built in 2013

4,356 Square Feet Lot

$1,658,100 Zestimate®

$704/sqft

$5,638 Estimated rent

Home value

Zestimate®

$1,658,100

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What's special

A beautiful, rare find in Frisco. A custom, Energy Star rated 4 BR, plus office/flex space, SW facing corner lot w/incredible views of Peak1, Mt Royal. Across from Forest Service land & blocks to Frisco's Main St, schools, rec path & trails. Over $200k in designer upgrades - open floorplan/large windows,3rd floor master suite w/large WIC/bath & private deck,plus gas fireplace,hrd firs,cherry cabinets,SS apps,granite,flagstone patio,gardens,decks.Work from home/or in SC for 30 hr work requirement. Escape the city, and relocate to the mountains. Giant outdoor playground in back yard.

Hide

Facts & features

Interior

Bedrooms & bathrooms

- Bedrooms: 4

Capped - resale 2024

Schedule # 6515649

Property Desc:	LOT 7 BLOCK 3 PEAK ONE NEIGHBORHOOD # 4
Phys. Address:	249 BELFORD ST

Ownership

Primary:	WARNING, MARLI
Secondary:	EBERLE, JASON

Mailing Address

C/O	
Addr:	PO BOX 471
CSZ	FRISCO CO 804430471

	Subdiv	Filing	Phase	Block	Lot
SubCode	2265	4	0	3	7

PPI:	2097-3530-68-030				
Econ:	2	Frisco			
Nhood:	23000	Frsco Area			
TaxArea:	11		2025	Tship:	5
AssdVal:	35981	Est. Tax/Tax Rate:	52.521	Range:	78

Reception	Sale Date	Document Type	Sale Price
1339409	10/11/2024	HRC	0
1339407	10/3/2024	WD	$575,741
1339406	9/26/2024	STM	0
1339405	10/11/2024	CQC	0
1335808	5/20/2024	HRC	0
1335807	5/2/2024	AGM	0
1320052	11/1/2023	QCD	0
1070590	11/10/2014	HRC	0
1070588	11/4/2014	WD	$415,900
1064959	9/18/2014	COR	0
1056668	5/7/2014	HRC	0
1056665	5/7/2014	QCD	0
1026724	5/21/2013	PLT	0

2025 Actual Value

1185	SFR EMPLOYEE CAP LAND	$143,925
1285	SFR EMPLOYEE CAP IMP	$431,775
	Total Value:	$575,700

2024 Actual Value

1185	SFR EMPLOYEE CAP LAND	$119,900
1285	SFR EMPLOYEE CAP IMP	$359,600
	Total Value:	$479,500

Improvement Info:		First:	994	FinHalf:	0	Beds:	3	Units:	1	Impstyle:	One Story	Grade:	Average
Imp#	1	Second:	0	FinBsmt:	520	Baths:	2.00	Gar Sqft:	439	Bsmt:	Walkout	Cond:	Average
YearBlt::	2013	Third:	0	SFLA:	1514	Rooms:	5	Cars:	2	Garage:	Basement	Xwall:	FiberCment
AdjYr:	2013	Addn:	0	UnBsmt:	35	Lofts:	0	Heat:	Hot Water				

Acres:	0.0705	Access:	Pub Paved	Topography:	Sloping	View:	Typical	Tree Cover:	Minimal
Hydrology:	None	Sewer:	Public Swr	Water:	Public Wtr	Utilites:	Elec & Gas	Misc:	NONE

Uncapped - No Sale yet

Schedule # 6515648

Property Desc:	LOT 6 BLOCK 3 PEAK ONE NEIGHBORHOOD # 4
Phys Address:	253 BELFORD ST

Ownership	
Primary:	TON, LISA
Secondary:	

Mailing Address	
C/O	
Addr:	PO BOX 652
CSZ	FRISCO CO 804430652

	Subdiv	Filing	Phase	Block	Lot
SubCode	2265	4	0	3	6

PPI:	2097-3530-68-029				
Econ:	2	Frisco			
Nhood:	23000	Frsco Area			
TaxArea:	11		2025	Tship:	5
AssdVal:	101088	Est. Tax/Tax Rate:	52.521	Range:	78

Reception	Sale Date	Document Type	Sale Price
1073101	12/18/2014	HRC	0
1073099	12/18/2014	WD	$565,880
1056791	5/7/2014	HRC	0
1056788	5/7/2014	QCD	0
1026724	5/21/2013	PLT	0

2025 Actual Value		
1117	EMPLOYEE SFR LAND	$476,100
1217	EMPLOYEE SFR STRUCTURE	$1,141,300
	Total Value:	$1,617,400

2024 Actual Value		
1117	EMPLOYEE SFR LAND	$401,500
1217	EMPLOYEE SFR STRUCTURE	$893,500
	Total Value:	$1,295,000

Improvement Info:		First:	1097	FinHalf:	0	Beds:	3	Units:	1	Impstyle:	One Story	Grade:	Average
Imp#	1	Second:	0	FinBsmt:	611	Baths:	3.00	Gar Sqft:	486	Bsmt:	Walkout	Cond:	Average
YearBlt::	2014	Third:	0	SFLA:	1708	Rooms:	6	Cars:	2	Garage:	Basement	Xwall:	FiberCment
AdjYr:	2014	Addn:	0	UnBsmt:	0	Lofts:	0	Heat:	Hot Water				

Acres:	0.0786	Access:	Pub Paved	Topography:	Sloping	View:	Typical	Tree Cover:	Minimal
Hydrology:	None	Sewer:	Public Swr	Water:	Public Wtr	Utilites:	Elec & Gas	Misc:	NONE

Capped

Schedule # 6515647

Property Desc:	LOT 5 BLOCK 3 PEAK ONE NEIGHBORHOOD # 4
Phys. Address:	257 BELFORD ST

Ownership

Primary:	LINDSEY, ALISON M
Secondary:	LINDSEY, DARIC A

Mailing Address

C/O	
Addr:	PO BOX 4416
CSZ	FRISCO CO 804434416

	Subdiv	Filing	Phase	Block	Lot
SubCode	2265	4	0	3	5

PPI:	2097-3530-68-028				
Econ:	2	Frisco			
Nhood:	23000	Frsco Area			
TaxArea:	11		2025	Tship:	5
AssdVal:	32944	Est. Tax/Tax Rate:	52.521	Range:	78

Reception	Sale Date	Document Type	Sale Price
1086595	7/1/2015	HRC	0
1086593	7/1/2015	WD	$415,900
1044565	12/10/2013	COV	0
1044562	12/10/2013	QCD	0
1026724	5/21/2013	PLT	0

2025 Actual Value

1185	SFR EMPLOYEE CAP LAND	$131,775
1285	SFR EMPLOYEE CAP IMP	$395,325
	Total Value:	$527,100

2024 Actual Value

1185	SFR EMPLOYEE CAP LAND	$125,600
1285	SFR EMPLOYEE CAP IMP	$376,500
	Total Value:	$502,100

Improvement Info:		First:	994	FinHalf:	0	Beds:	3	Units:	1	Impstyle:	One Story	Grade:	Average
Imp#	1	Second:	0	FinBsmt:	520	Baths:	2.00	Gar Sqft:	439	Bsmt:	Walkout	Cond:	Average
YearBlt::	2013	Third:	0	SFLA:	1514	Rooms:	5	Cars:	2	Garage:	Basement	Xwall:	FiberCment
AdjYr:	2013	Addn:	0	UnBsmt:	35	Lofts:	0	Heat:	Hot Water				

Acres:	0.0693	Access:	Pub Paved	Topography:	Sloping	View:	Typical	Tree Cover:	Minimal
Hydrology:	None	Sewer:	Public Swr	Water:	Public Wtr	Utilites:	Elec & Gas	Misc:	ADJ OPENSP

Uncapped - No recent sale yet

Schedule # 6515646

Property Desc:	LOT 4 BLOCK 3 PEAK ONE NEIGHBORHOOD # 4
Phys. Address:	261 BELFORD ST

Ownership

Primary:	HIRSH, THAYER
Secondary:	HIRSH, HOLEN

Mailing Address

C/O	
Addr:	PO BOX 704
CSZ	FRISCO CO 804430704

	Subdiv	Filing	Phase	Block	Lot
SubCode	2265	4	0	3	4

PPI:	2097-3530-68-027				
Econ:	2	Frisco			
Nhood:	23000	Frsco Area			
TaxArea:	11		2025	Tship:	5
AssdVal:	83006	Est. Tax/Tax Rate:	52.521	Range:	78

Reception	Sale Date	Document Type	Sale Price
1230904	7/17/2020	WD	$805,000
1230903	7/17/2020	HRC	0
1208665	9/20/2019	HRC	0
1208663	9/18/2019	WD	$765,000
1055842	5/20/2014	QCD	0
1055388	5/20/2014	WD	$540,026
1047930	1/17/2014	HRC	0
1047927	1/17/2014	QCD	0
1026724	5/21/2013	PLT	0

2025 Actual Value

1117	EMPLOYEE SFR LAND	$389,400
1217	EMPLOYEE SFR STRUCTURE	$938,700
	Total Value:	$1,328,100

2024 Actual Value

1117	EMPLOYEE SFR LAND	$415,100
1217	EMPLOYEE SFR STRUCTURE	$882,300
	Total Value:	$1,297,400

Improvement Info:		First:	1105	FinHalf:	0	Beds:	3	Units:	1	Impstyle:	One Story	Grade:	Average
Imp#	1	Second:	0	FinBsmt:	642	Baths:	2.00	Gar Sqft:	463	Bsmt:	Walkout	Cond:	Average
YearBlt::	2013	Third:	0	SFLA:	1747	Rooms:	5	Cars:	2	Garage:	Basement	Xwall:	FiberCment
AdjYr:	2013	Addn:	0	UnBsmt:	0	Lofts:	0	Heat:	Hot Water				

Acres:	0.0784	Access:	Pub Paved	Topography:	Sloping	View:	Typical	Tree Cover:	None
Hydrology:	None	Sewer:	Public Swr	Water:	Public Wtr	Utilites:	Elec & Gas	Misc:	NONE

Capped

Schedule # 6515645

Property Desc:	LOT 3 BLOCK 3 PEAK ONE NEIGHBORHOOD # 4
Phys Address:	265 BELFORD ST

Ownership

Primary:	Data Not Available,
Secondary:	

Mailing Address

C/O	Data Not Available
Addr:	Data Not Available
CSZ	Data Not Available

	Subdiv	Filing	Phase	Block	Lot
SubCode	2265	4	0	3	3

PPI:	2097-3530-68-026				
Econ:	2	Frisco			
Nhood:	23000	Frsco Area			
TaxArea:	11		2025	Tship:	5
AssdVal:	34419	Est. Tax/Tax Rate:	52.521	Range:	78

Reception	Sale Date	Document Type	Sale Price
1255807	4/9/2021	QCD	0
1129599	12/9/2016	HRC	0
1129597	12/9/2016	WD	$449,587
1056579	6/5/2014	HRC	0
1056577	5/7/2014	WD	$420,175
1054286	5/5/2014	COR	0
1048523	2/5/2014	HRC	0
1048520	2/2/2014	QCD	0
1026724	5/21/2013	PLT	0

2025 Actual Value

1185	SFR EMPLOYEE CAP LAND	$137,675
1285	SFR EMPLOYEE CAP IMP	$413,025
	Total Value:	$550,700

2024 Actual Value

1185	SFR EMPLOYEE CAP LAND	$131,000
1285	SFR EMPLOYEE CAP IMP	$392,700
	Total Value:	$523,700

Improvement Info:		First:	994	FinHalf:	0	Beds:	3	Units:	1	Impstyle:	One Story	Grade:	Average
Imp#	1	Second:	0	FinBsmt:	520	Baths:	2.00	Gar Sqft:	439	Bsmt:	Walkout	Cond:	Average
YearBlt::	2013	Third:	0	SFLA:	1514	Rooms:	5	Cars:	2	Garage:	Basement	Xwall:	FiberCment
AdjYr:	2013	Addn:	0	UnBsmt:	35	Lofts:	0	Heat:	Hot Water				

Acres:	0.0695	Access:	Pub Paved	Topography:	Sloping	View:	Typical	Tree Cover:	Minimal
Hydrology:	None	Sewer:	Public Swr	Water:	Public Wtr	Utilites:	Elec & Gas	Misc:	ADJ OPENSP

No Cap - No sale yet

Schedule # 6515063

Property Desc:	LOT 2 BLOCK 3 PEAK ONE NEIGHBORHOOD # 2
Phys. Address:	269 BELFORD ST

Ownership

Primary:	CAPERTON, CHRISTINE BLASKI
Secondary:	

Mailing Address

C/O	
Addr:	PO BOX 2082
CSZ	FRISCO CO 804432082

Subdiv	Filing	Phase	Block	Lot
SubCode: 2265	2	0	3	2

PPI:	2097-3530-69-002			
Econ:	2	Frisco		
Nhood:	23000	Frsco Area		
TaxArea:	11	2025	Tship:	5
AssdVal:	90450	Est. Tax/Tax Rate:	52.521	Range: 78

Reception	Sale Date	Document Type	Sale Price
1303515	12/23/2022	QCD	0
1132051	12/29/2016	QCD	0
1066562	9/29/2014	HRC	0
1066560	9/29/2014	WD	$555,100
1056672	5/7/2014	HRC	0
1056669	5/7/2014	QCD	0
997856	7/12/2012	EAS	0
978880	11/4/2011	PLT	0

2025 Actual Value		
1117	EMPLOYEE SFR LAND	$416,600
1217	EMPLOYEE SFR STRUCTURE	$1,030,600
	Total Value:	$1,447,200

2024 Actual Value		
1117	EMPLOYEE SFR LAND	$420,400
1217	EMPLOYEE SFR STRUCTURE	$893,600
	Total Value:	$1,314,000

Improvement Info:		First:	1137	FinHalf:	0	Beds:	3	Units:	1	Impstyle:	One Story	Grade:	Average
Imp#	1	Second:	0	FinBsmt:	638	Baths:	3.00	Gar Sqft:	499	Bsmt:	Walkout	Cond:	Average
YearBlt::	2014	Third:	0	SFLA:	1775	Rooms:	6	Cars:	2	Garage:	Basement	Xwall:	FiberCment
AdjYr:	2014	Addn:	0	UnBsmt:	0	Lofts:	0	Heat:	Hot Water				

Acres:	0.0775	Access:	Pub Paved	Topography:	Sloping	View:	Typical	Tree Cover:	Minimal
Hydrology:	None	Sewer:	Public Swr	Water:	Public Wtr	Utilites:	Elec & Gas	Misc:	NONE

No Cap - No sale yet

Schedule # 6515062

Property Desc:	LOT 1 BLOCK 3 PEAK ONE NEIGHBORHOOD # 2
Phys. Address:	273 BELFORD ST

Ownership

Primary:	PROVORSE, KASEY C
Secondary:	PROVORSE, BRADD J

Mailing Address

C/O	
Addr:	PO BOX 1108
CSZ	FRISCO CO 804431108

	Subdiv	Filing	Phase	Block	Lot
SubCode	2265	2	0	3	1

PPI:	2097-3530-69-001				
Econ:	2	Frisco			
Nhood:	23000	Frsco Area			
TaxArea:	11		2025	Tship:	5
AssdVal:	92175	Est. Tax/Tax Rate:	52.521	Range:	78

Reception	Sale Date	Document Type	Sale Price
1073398	12/30/2014	QCD	0
1016759	1/25/2013	HRC	0
1016757	1/23/2013	WD	$549,900
1005756	9/25/2012	COV	0
1005753	9/25/2012	QCD	0
978880	11/4/2011	PLT	0

2025 Actual Value

1117	EMPLOYEE SFR LAND	$423,000
1217	EMPLOYEE SFR STRUCTURE	$1,051,800
	Total Value:	$1,474,800

2024 Actual Value

1117	EMPLOYEE SFR LAND	$419,500
1217	EMPLOYEE SFR STRUCTURE	$920,000
	Total Value:	$1,339,500

Improvement Info:		First:	1163	FinHalf:	0	Beds:	4	Units:	1	Impstyle:	One Story	Grade:	Average
Imp#	1	Second:	0	FinBsmt:	660	Baths:	3.00	Gar Sqft:	503	Bsmt:	Walkout	Cond:	Average
YearBlt::	2012	Third:	0	SFLA:	1823	Rooms:	6	Cars:	2	Garage:	Attached	Xwall:	FiberCment
AdjYr:	2012	Addn:	0	UnBsmt:	0	Lofts:	0	Heat:	Hot Water				

Acres:	0.0797	Access:	Pub Paved	Topography:	Sloping	View:	Typical	Tree Cover:	Minimal
Hydrology:	None	Sewer:	Public Swr	Water:	Public Wtr	Utilites:	Elec & Gas	Misc:	NONE

No Cap- No sale yet

Schedule # 6516205

Property Desc:	LOT 9 BLOCK 3 PEAK ONE NEIGHBORHOOD # 5
Phys Address:	532 S 2ND AVE

Ownership

Primary:	BROECKER, GRETCHEN
Secondary:	BROECKER, ERIC

Mailing Address

C/O	
Addr:	PO BOX 5593
CSZ	FRISCO CO 804435593

Subdiv	Filing	Phase	Block	Lot
SubCode: 2265	5	0	3	9

PPI:	2097-3530-68-061			
Econ:	2	Frisco		
Nhood:	23000	Frsco Area		
TaxArea:	11		2025 Tship:	5
AssdVal:	99800	Est. Tax/Tax Rate:	52.521	Range: 78

Reception	Sale Date	Document Type	Sale Price
1085415	6/17/2015	HRC	0
1085413	6/17/2015	WD	$701,541
1072703	12/2/2014	HRC	0
1072700	12/2/2014	QCD	0
1064929	9/18/2014	PLT	0

2025 Actual Value

1117	EMPLOYEE SFR LAND	$422,100
1217	EMPLOYEE SFR STRUCTURE	$1,174,700
	Total Value:	$1,596,800

2024 Actual Value

1117	EMPLOYEE SFR LAND	$435,400
1217	EMPLOYEE SFR STRUCTURE	$1,066,300
	Total Value:	$1,501,700

Improvement Info:		First:	1183	FinHalf:	0	Beds:	4	Units:	1	Impstyle:	Two Story	Grade:	Average
Imp#	1	Second:	552	FinBsmt:	636	Baths:	4.00	Gar Sqft:	547	Bsmt:	Walkout	Cond:	Average
YearBlt::	2014	Third:	0	SFLA:	2371	Rooms:	7	Cars:	2	Garage:	Basement	Xwall:	FiberCment
AdjYr:	2014	Addn:	0	UnBsmt:	0	Lofts:	0	Heat:	Hot Water				

Acres:	0.0866	Access:	Pub Paved	Topography:	Sloping	View:	Typical	Tree Cover:	None
Hydrology:	None	Sewer:	Public Swr	Water:	Public Wtr	Utilites:	Elec & Gas	Misc:	NONE

Uncapped - 2.24x sale 2025

Schedule # 6516206

Property Desc:	LOT 10 BLOCK 3 PEAK ONE NEIGHBORHOOD # 5
Phys. Address:	528 S 2ND AVE

Ownership

Primary:	DORR, JONATHAN
Secondary:	DORR, JILLIAN

Mailing Address

C/O	
Addr:	PO BOX 5522
CSZ	FRISCO CO 804435522

	Subdiv	Filing	Phase	Block	Lot
SubCode	2265	5	0	3	10

PPI:	2097-3530-68-062				
Econ:	2	Frisco			
Nhood:	23000	Frsco Area			
TaxArea:	11		2025	Tship:	5
AssdVal:	100756	Est. Tax/Tax Rate:	52.521	Range:	78

Reception	Sale Date	Document Type	Sale Price
1354155	6/20/2025	HRC	0
1354121	6/9/2025	WD	$1,370,000
1354120	5/19/2025	SA	0
1351657	11/14/2025	DC	0
1297776	9/23/2022	HRC	0
1297774	9/23/2022	QCD	0
1297773	9/23/2022	WD	$1,100,000
1083499	5/21/2015	HRC	0
1083497	5/29/2015	WD	$609,579
1074836	1/13/2015	HRC	0
1074833	1/13/2015	QCD	0
1064929	9/18/2014	PLT	0

2025 Actual Value

1117	EMPLOYEE SFR LAND	$463,200
1217	EMPLOYEE SFR STRUCTURE	$1,148,900
	Total Value:	$1,612,100

2024 Actual Value

1117	EMPLOYEE SFR LAND	$413,300
1217	EMPLOYEE SFR STRUCTURE	$878,500
	Total Value:	$1,291,800

Improvement Info:		First:	1098	FinHalf:	0	Beds:	3	Units:	1	Impstyle:	One Story	Grade:	Average
Imp#	1	Second:	0	FinBsmt:	609	Baths:	3.00	Gar Sqft:	489	Bsmt:	Walkout	Cond:	Average
YearBlt::	2014	Third:	0	SFLA:	1707	Rooms:	6	Cars:	2	Garage:	Basement	Xwall:	FiberCment
AdjYr:	2014	Addn:	0	UnBsmt:	0	Lofts:	0	Heat:	Hot Water				

Acres:	0.0744	Access:	Pub Paved	Topography:	Sloping	View:	Typical	Tree Cover:	Minimal
Hydrology:	None	Sewer:	Public Swr	Water:	Public Wtr	Utilites:	Elec & Gas	Misc:	NONE

Capped

Schedule # 6516188

Property Desc:	LOT 11 BLOCK 3 PEAK ONE NEIGHBORHOOD # 5
Phys. Address:	524 S 2ND AVE

Ownership

Primary:	BRUNS, TIMOTHY W
Secondary:	

Mailing Address

C/O	
Addr:	PO BOX 1741
CSZ	FRISCO CO 804431741

	Subdiv	Filing	Phase	Block	Lot
SubCode	2265	5	0	3	11

PPI:	2097-3530-68-044				
Econ:	2	Frisco			
Nhood:	23000	Frsco Area			
TaxArea:	11		2025	Tship:	5
AssdVal:	33206	Est. Tax/Tax Rate:	52.521	Range:	78

Reception	Sale Date	Document Type	Sale Price
1079261	3/19/2015	HRC	0
1079259	3/19/2015	WD	$415,900
1072707	12/2/2014	HRC	0
1072704	12/2/2014	QCD	0
1064929	9/18/2014	PLT	0

2025 Actual Value

1185	SFR EMPLOYEE CAP LAND	$132,825
1285	SFR EMPLOYEE CAP IMP	$398,475
	Total Value:	$531,300

2024 Actual Value

1185	SFR EMPLOYEE CAP LAND	$125,700
1285	SFR EMPLOYEE CAP IMP	$376,900
	Total Value:	$502,600

Improvement Info:		First:	994	FinHalf:	0	Beds:	3	Units:	1	Impstyle:	One Story	Grade:	Average
Imp#	1	Second:	0	FinBsmt:	514	Baths:	2.00	Gar Sqft:	439	Bsmt:	Walkout	Cond:	Average
YearBlt::	2014	Third:	0	SFLA:	1508	Rooms:	5	Cars:	2	Garage:	Basement	Xwall:	FiberCment
AdjYr:	2014	Addn:	0	UnBsmt:	41	Lofts:	0	Heat:	Hot Water				

Acres:	0.0794	Access:	Pub Paved	Topography:	Sloping	View:	Typical	Tree Cover:	Minimal
Hydrology:	None	Sewer:	Public Swr	Water:	Public Wtr	Utilites:	Elec & Gas	Misc:	ADJ OPENSP

Capped

Schedule # 6516202

Property Desc:	LOT 1 BLOCK 4 PEAK ONE NEIGHBORHOOD # 5
Phys. Address:	537 S 2ND AVE

Ownership

Primary:	BLANCO, KARYN D
Secondary:	

Mailing Address

C/O	
Addr:	PO BOX 4324
CSZ	FRISCO CO 804434324

	Subdiv	Filing	Phase	Block	Lot
SubCode	2265	5	0	4	1

PPI:	2097-3530-68-058				
Econ:	2	Frisco			
Nhood:	23000	Frsco Area			
TaxArea:	11		2025	Tship:	5
AssdVal:	26869	Est. Tax/Tax Rate:	52.521	Range:	78

Reception	Sale Date	Document Type	Sale Price
1227170	6/1/2020	QCD	0
1090387	8/20/2015	HRC	0
1090385	8/20/2015	WD	$339,900
1081117	4/7/2015	HRC	0
1081114	4/7/2015	QCD	0
1064929	9/18/2014	PLT	0

2025 Actual Value

1185	SFR EMPLOYEE CAP LAND	$107,475
1285	SFR EMPLOYEE CAP IMP	$322,425
	Total Value:	$429,900

2024 Actual Value

1185	SFR EMPLOYEE CAP LAND	$102,400
1285	SFR EMPLOYEE CAP IMP	$307,100
	Total Value:	$409,500

Improvement Info:		First:	830	FinHalf:	0	Beds:	3	Units:	1	Impstyle:	Two Story	Grade:	Average
Imp#	1	Second:	510	FinBsmt:	0	Baths:	2.00	Gar Sqft:	0	Bsmt:	NONE	Cond:	Average
YearBlt::	2015	Third:	0	SFLA:	1340	Rooms:	5	Cars:	0	Garage:	None	Xwall:	WoodSiding
AdjYr:	2015	Addn:	0	UnBsmt:	0	Lofts:	0	Heat:	Hot Water				

Acres:	0.1186	Access:	Pub Paved	Topography:	Gentle	View:	Typical	Tree Cover:	Minimal
Hydrology:	None	Sewer:	Public Swr	Water:	Public Wtr	Utilites:	Elec & Gas	Misc:	NONE

Capped - resale 2022

Schedule # 6516208

Property Desc:	LOT 3 BLOCK 4 PEAK ONE NEIGHBORHOOD # 5
Phys. Address:	529 S 2ND AVE

Ownership

Primary:	VELLONE, DOMINIC P
Secondary:	VELLONE, JENNIFER R

Mailing Address

C/O	
Addr:	PO BOX 561
CSZ	FRISCO CO 804430561

	Subdiv	Filing	Phase	Block	Lot
SubCode	2265	5	0	4	3

PPI:	2097-3530-68-064				
Econ:	2	Frisco			
Nhood:	23000	Frsco Area			
TaxArea:	11		2025	Tship:	5
AssdVal:	37456	Est. Tax/Tax Rate:	52.521	Range:	78

Reception	Sale Date	Document Type	Sale Price
1300164	10/25/2022	HRC	0
1300162	10/24/2022	WD	$570,826
1294592	8/4/2022	HRC	0
1294591	8/4/2022	AGM	0
1087757	7/23/2015	HRC	0
1087755	7/23/2015	WD	$446,900
1081121	4/7/2015	HRC	0
1081118	4/7/2015	QCD	0
1064929	9/18/2014	PLT	0

2025 Actual Value		
1185	SFR EMPLOYEE CAP LAND	$149,825
1285	SFR EMPLOYEE CAP IMP	$449,475
	Total Value:	$599,300

2024 Actual Value		
1185	SFR EMPLOYEE CAP LAND	$134,900
1285	SFR EMPLOYEE CAP IMP	$404,700
	Total Value:	$539,600

Improvement Info:		First:	728	FinHalf:	0	Beds:	3	Units:	1	Impstyle:	Two Story	Grade:	Average
Imp#	1	Second:	788	FinBsmt:	0	Baths:	3.00	Gar Sqft:	484	Bsmt:	NONE	Cond:	Average
YearBlt::	2015	Third:	0	SFLA:	1516	Rooms:	5	Cars:	2	Garage:	Detached	Xwall:	WoodSiding
AdjYr:	2015	Addn:	0	UnBsmt:	0	Lofts:	0	Heat:	Hot Water				

Acres:	0.0695	Access:	Pub Paved	Topography:	Gentle	View:	Typical	Tree Cover:	Minimal
Hydrology:	None	Sewer:	Public Swr	Water:	Public Wtr	Utilites:	Elec & Gas	Misc:	NONE

PLANNING COMMISSION
STAFF REPORT

October 16, 2025

AGENDA ITEM: Planning File No. VAC-25-0001: A request for the vacation of a portion of a public right-of-way consisting of a 10,500 sq. ft. (0.24 acres) tract of the South 6th Avenue right-of-way between Blocks 33 & 34, Frisco Townsite

LOCATION: Generally located north of Pitkin Street, south of Pitkin Street Alley, adjacent to and east of 521 Pitkin Street / Lots 23-24, Block 34, Frisco Townsite and adjacent to and west of 601 Pitkin Street / Lots 13-14, Pt 15, Block 33, Frisco Townsite

APPLICANT: Andy Richmond and Lauren Echevarria
PO Box 1914
Frisco, CO 80443

Marta Lindrose
Lindrose Living Trust
1225 Gapter Road
Boulder, CO 80303

TOWN STAFF: Emma Heth, Planner II

PROJECT DESCRIPTION

The applicants, Andy Richmond and Lauren Echevarria, are the owners of the property located at 521 Pitkin Street, and Marta Lindrose is the owner of the property located at 601 Pitkin Street. The applicants are requesting that the Town of Frisco vacate a portion of a public right-of-way consisting of a 10,500 sq. ft. (0.24 acres) tract of the South 6th Avenue right-of-way. The property is generally located north of Pitkin Street, south of Pitkin Street Alley, adjacent to and east of 521 Pitkin Street / Lots 23-24, Block 34, Frisco Townsite and adjacent to and west of 601 Pitkin Street / Lots 13-14, Pt 15, Block 33, Frisco Townsite

If the Town of Frisco chooses to vacate this portion of street right-of-way, the applicant is proposing that ownership will be split between the properties located at 521 Pitkin Street and 601 Pitkin Street, with 6,300 sq. ft. being added to 521 Pitkin and 4,200 sq. ft. being added to 601 Pitkin as shown on the submitted site plan.

SQUARE FOOTAGE OF EXISTING LOTS WITH PROPOSED ROW		
Address	521 Pitkin Street	601 Pitkin Street
Owner	Andy Richmond and Lauren Echevarria	Lindrose Living Trust
Existing Lot Size	7,000 sq. ft.	7,300 sq. ft.
Proposed ROW distribution	6,300 sq. ft.	4,200 sq. ft.
Proposed Lot Size	13,300 sq. ft.	11,500 sq. ft.

If the Town of Frisco chooses to vacate the subject street right-of-way, the applicants who own 521 Pitkin Street are proposing to encumber their current home at 521 Pitkin with a custom live-work housing covenant (proposed Lot 1). Additionally, they are proposing a subdivision of their lot into townhomes with Limited Common Element areas for each, including the back half of the existing property (proposed Lot 2) and their portion of the vacated right-of-way (proposed Lot 3). Lots 1-3 would be immediately restricted with a "local's housing covenant."

The applicants who own 601 Pitkin Street would, in an undetermined timeframe, contribute one more local unit to the proposed area. This unit would be subject to the same live-work housing covenant as the proposed Lots 1-3. This timeline would be dependent on when they, or their successors in interest, build a garage or "added on to their home in any way." At that time, they would build either an accessory dwelling unit on the garage or an additional local's home within the 4,200 sq. ft. of South 6th Avenue vacated to them.

PROPOSED LOT SIZE AND USES				
	Lot 1	Lot 2	Lot 3	Lot 4
Owner	Andy Richmond and Lauren Echevarria	Andy Richmond and Lauren Echevarria	Andy Richmond and Lauren Echevarria	Lindrose Living Trust
Lot Size	3,500 sq. ft.	3,500 sq. ft.	6,300 sq. ft.	11,500 sq. ft.
Existing Use	SFR	Accessory structure to Lot 1 SFR	Portion of ROW	SFR plus portion of ROW
Proposed Use	Live/Work SFR	Live/Work SFR	Live/Work SFR and option for one ADU	Existing SFR plus future live/work unit with option for subdivision

The applicants have stated that the covenants would not have a specific area median income (AMI) cap but would require the ownership of the home to be by a person(s) that works at a business in Summit County an average of 30 hours or more per week; or is a person who is retired and worked an average of 30 hours or more a week for a business in Summit County and a minimum of five years immediately prior to retirement. The applicant has stated that there would be a preference to locals who work in Frisco specifically, although it is not clear how that would be implemented. Additionally, there would be a covenant restriction requiring the homes to be the primary residence of each owner. At a work session in 2024, Town Council recommended that the applicant use the Town's standard live-work housing covenant, without special language changes to the existing language already used in the Town.

At this time, Planning Commission is considering a recommendation for whether the proposed plan would provide an overriding public benefit and meets the Frisco Comprehensive Plan. Specific considerations around the site will be considered with later planning applications.

No roads have been constructed and no public utilities have been installed in the South 6th Avenue right-of-way in the area requested to be vacated. Below is a vicinity map of the subject property.



Vicinity Map


View of parcel, facing north

The owners of 521 Pitkin Street have submitted an application for a Planned Unit Development over the existing properties and the portion of right-of-way property they wish to acquire. The PUD process is regulated by Frisco Town Code, Section 180-4.3. The PUD is not being evaluated at

this time but has been submitted so the Town can evaluate the proposed public benefit associated with the ROW vacation.

This vacation request presents the Town of Frisco with a unique opportunity for a public/private partnership-type opportunity where the Town could facilitate the construction of new live-work deed-restricted standalone townhome units that help address the community's housing needs. This vacation request also creates additional development opportunities and financial value for the applicants.

Staff finds that the creation of live-work, deed-restricted standalone townhomes is in the public interest. Staff requests the Planning Commission, after reviewing the staff report including references to the Comprehensive Plan and Strategic Housing Plan, provide feedback to Town Council as to whether or not the proposed deed restriction with no AMI cap meets the current goals for workforce housing. When the applicant presented in May 2023, Planning Commission included a condition that a portion of the units should contain a deed restriction that caps the sale price at 160% AMI. It will ultimately be the responsibility of the Town Council to ensure that the terms and conditions set forth in such an arrangement would also return an appropriate level of value and benefit back to the community.

BACKGROUND

The Planning Commission has reviewed this request previously, on May 18, 2023. Following Planning Commission's recommendation in 2023, the request did not receive full support from Town Council at work sessions and an executive session. The applicant is requesting to return to Council with their request. Staff is requesting an updated recommendation from Planning Commission due to the elapsed time and need for review with the 2025 Comprehensive Plan and 2024 Strategic Housing Plan. After receiving a recommendation by the Planning Commission, the application will move forward to a first reading of an ordinance with Town Council so that the applicants can have a formal decision on the application and not just a work session discussion.

In May 2023, Planning Commission forwarded a recommendation of approval with conditions to Town Council, with the following conditions:

1. The applicant(s) shall enter into a development agreement with the Town of Frisco that outlines the requirements for guaranteeing construction completion of all four deed restricted workforce housing units and the residential housing restrictive covenants, including the terms and conditions for occupancy and ownership of the units as determined by the Town of Frisco, including that a portion of the units contain a deed restriction that caps the sale price at 160% AMI, and that the applicants have obtained all necessary development approvals and permits.

2. That the vacation ordinance shall not cause the South 6th Avenue right-of-way to be vacated until the ordinance is filed by the Town Clerk for recording in the Office of the Summit County Clerk and Recorder. The Town Clerk shall not file the ordinance for recording in said office until the conditions of the development agreement above have been satisfied.

The following is an excerpt from the May 18, 2023 meeting minutes, which are included in full as an attachment to this staff report:

COMMISSION DISCUSSIONS:

- *Commissioners noted that the project is an interesting concept; however, not convinced. For example, the size of the house is limited. Even at that limitation, the value in Frisco could still be substantial.*
- *Commissioners commented that it is a very creative idea, and the applicant has come up with an interesting solution. There is absolutely a place in Frisco for housing above current AMI. Commissioners asked staff what the current AMI cap is for Frisco. Ms. Lee responded that on the last vacation we had a deed restriction of 160% AMI. Commissioner commented not a fan of Vail Indeed because prices go so high, there is abuse. Commissioners do not have a problem increasing the density of a lot you own. But to go completely no AMI cap causes pause, maybe compromise and one unit is deeded to the Town of Frisco, or one unit has a max of 160% AMI. Commissioners feel more can be negotiated.*
- *Commissioners appreciate the ingenuity. Looking at the property, what else could be at this location, never a road, no parking, no bike path. We want locals housing. If the town is going to find value in that lot that is where you will find it. Our code says as stewards of public property the Town has taken a conservative interpretation of overriding public interest and should continue to be conservative in their vacation of public right-of-ways including the subject property. Looking at "a conservative interpretation of an overriding public interest", we may not have gotten there yet. More comments followed on what might be considered "overriding".*
- *Commissioners noted that the previous vacation included a deed restriction and the purchase at fair market value.*
- *Commissioners commented that it is nice to have long time locals giving opportunity to locals.*
- *Commissioners noted they do not want to lose open space; however, this is maybe not the appropriate space for open space.*
- *Commissioners want more security that these units are going to be built in a timely manner and there will be four or more. Too much of an uncertain question mark, "up to four units".*
- *Commissioners noted that the Commission just did a lot of code incentives, but these are not applied here.*
- *Commissioners commented that if in the past the Town was reimbursed for the cost of the land and used 160% AMI, that is a likeable concept. Further, the Town is not getting enough in the deal, and we are not doing what we have done in the past.*
- *Commissioners commented that the details really matter. In general concept we would like to move forward but are not comfortable with recommending approval without more details.*
- *Commissioners agreed this is a great project if the details could be worked out and with more assurance that the fourth unit is going to get built and if the Town were to get more in return.*
- *Commissioners agreed that there is not enough to the proposal to respond to and maybe it should be tabled for more information. Commissioners asked the applicant for their response.*

  Mr. Richmond commented that this is not a one-way street and that the proposal made is the maximum of what they want to do. You ask if the Town is getting enough. This is Town getting more? Planning's purpose is to find ways to make this work, not find ways to not make it work. If this does not go through, we will build our driveway and then there is one local house, not restricted on anything instead of four. This was started in 2020, everything more is in the PUD. We believe the details are there. We understand the concerns. Frisco needs to take a leap of faith. We would prefer to move this along quicker than not.

- *Commissioners would like to come to a resolution tonight maybe the applicant could create an ADU.*

- *Commissioners agree that this is the Town Council's job to make these agreements and they are creative.*
- *Commissioners were more concerned with the possibility of the property being bought and then not developed.*
- *Commissioners noted that even if we allowed an ADU at 100% AMI, there is no guarantee that the ADU would be built.*
- *Commissioners have expressed they want to make this work but were surprised by the applicant's resistance to a reasonable request.*

Following Planning Commission's May 2023 recommendation, Town Council discussed the application at work sessions on June 27, 2023 and October 22, 2024. Following the work sessions, this property was discussed during an executive session on November 12, 2024, to discuss the potential terms and conditions relating to the transfer of the property. Following these discussions, Town Council concluded that they wanted to see the applicant:

- Utilize the standard live-work housing covenant, without special language changes to the existing language already used in the Town
- In addition to the units proposed, the Council wanted to see another unit that would be income capped with the standard Town housing covenant.
- Council recommended separate ordinances for the owners of 521 Pitkin St and 601 Pitkin St, so that each would receive their portion of the vacated right-of-way when they completed their conditions.

Following the feedback from Council in November 2024, the applicant decided to not move forward with an ordinance at that time.

A real estate appraisal report was completed in October 2021. At the October 22, 2024 work session, Town Council stated that they did not see a need for an updated appraisal. The appraisal shows a land value of $158,000. At the October 2024 work session, Council indicated that the low land value was because state law dictates that the right-of-way would have to be offered to adjacent property owners. Staff will ask Council if they would like an updated appraisal performed.

PROPERTY VACATION REVIEW

Requests of this nature are regulated by Chapter 142, Vacation of Property, Code of the Town of Frisco. Pursuant to this chapter, requests for the vacation of a public right-of-way require Planning Commission review and a recommendation to the Town Council. A vacation may only be granted in cases where the Town Council first finds that an overriding public interest favors the vacation.

The Planning Commission may recommend reasonable conditions on the vacation, to preserve and promote the public health, safety and welfare of the inhabitants of the town and the public generally. The conditions may include the payment of money to the town as consideration for a vacation, when the vesting of title upon vacation may confer a benefit upon the new owner of the vacated roadway or easement, where the town has purchased or may purchase a roadway or easement to replace that being vacated, to avoid a windfall to the new owner, or for any other reason deemed by the Town Council to be in the public interest.

The Town Council then reviews and takes final action on such a vacation request by ordinance. In order to approve the application for vacation, Town Council must find an "overriding public interest" favoring the vacation.

If the Town of Frisco chooses to vacate the right-of-way, approval may be granted contingent upon conditions written in the ordinance and/or a development agreement that must be met in order for the Town to vacate the right-of-way and transfer ownership to the applicant. The development agreement and/or ordinance should outline the exact nature of the proposed housing covenant(s), performance measures such as timing of completion, and recording of covenants. The vacation request and development agreement could not assume quasi-judicial approvals by Planning Commission and Council on either the PUD or development application.

If the Town of Frisco chooses to vacate this portion of right-of-way, the applicants will be required to submit a plat application to combine the ROW vacation with their existing lots. The plat and vacation ordinance could be recorded in accordance with the conditions of a development agreement, if that is what Town Council requires.

REQUIRED ACTION

Planning Commission:	Recommendation of approval, denial, or approval with conditions to the Town Council for the proposed vacation.
Town Council:	Approval, denial, or approval with conditions of the proposed vacation by ordinance.

ANALYSIS – FRISCO COMPREHENSIVE PLAN

The following elements of the Frisco Comprehensive Plan are applicable to the review of the application. The Housing Affordability strategies are taken directly from the Strategic Housing Plan, which is discussed in more detail later in this staff report.

Goals and Strategies (excerpts)

Planning for the Town of Frisco's future must provide direction to utilize and implement the values and Guiding Principles established in the Comprehensive Plan process. Strategies guide decision-making on land use policy, zoning, infrastructure investment, and development standards.

HOUSING AFFORDABILITY (H)
Goal H.1*: Provide diverse and equitable housing through a full spectrum of housing that is abundant, adaptable, and equitably distributed.*

1. ***Supply sufficient land.*** *Provide a sufficient supply of land to accommodate current and projected housing needs with an equitable distribution of various housing types.*

3. ***Support long-term affordability.*** *Support the long-term affordability and availability of housing provided through density bonuses and other incentive programs to support diverse housing options. Integrate the affordable housing overlay language for Summit Boulevard and Gateway. To further support affordable housing development, consider implementing a Community Land Trust (See Strategic Housing Plan).*

Goal H.2*: Balance sustainable economic growth with the housing needs of the local workforce and protect community members from displacement.*

1. ***Balance growth and housing.*** *Recognizing the impact on housing demand imposed by new development, prioritize balancing community growth with the housing needs of workers and their families.*

Goal H.5*: Collaborate with partner agencies to maintain Frisco as a welcoming Summit County "neighborhood" while addressing regional housing needs.*

1. ***Facilitate infill housing.*** *Facilitate infill housing development in older neighborhoods, along commercial corridors, and near employment centers that helps revitalize these areas and increases housing availability and variety.*

2. ***Engage residents and developers in solutions.*** *Collaborate with partner agencies to engage and inform community members and developers on housing needs, challenges, resources, and development procedures to more effectively and inclusively integrate new housing into the existing community fabric.*

3. ***Collaborate and advocate for housing.*** *Collaborate with and support partner agencies in identifying, advocating for, and implementing housing solutions locally, regionally, and statewide.*

The subject parcel is generally located north of Pitkin Street, south of Pitkin Street Alley, adjacent to and east of 521 Pitkin Street and adjacent to and west of 601 Pitkin Street. There is an existing mixture of residential building types, building designs, and dwelling unit densities in this neighborhood, generally consisting of one and two unit dwellings. The proposed right-of-way vacation application encourages infill and development on a parcel that is currently vacant.

This application facilitates the applicant's proposed construction of residential units under 1,500 sq. ft. that would add variety to the sizes and types of homes in this residential neighborhood. The addition of the proposed covenant restrictions aid in the creation of workforce housing and responds to a need that has been defined within the community. See the next section of this staff report for more information on the defined needs.

The application supports the strategies in the Frisco Comprehensive Plan by supplying additional land to address the community's housing needs; facilitating infill housing on a vacant parcel in an older neighborhood; forming a unique collaboration for housing development; and integrating new housing into the existing community fabric.

The proposed vacation of the undeveloped South 6th Avenue right-of-way in exchange for up to four (4) workforce housing units appears to be in conformance with the purpose and recommendations of the Frisco Comprehensive Plan.

ANALYSIS – STRATEGIC HOUSING PLAN

The following programs in the Frisco Strategic Housing Plan are applicable to the review of the application:

Program 5.1.D. Neighborhood Densification.

- *This program is essential for increasing housing supply and diversity within existing neighborhoods. By focusing on modifying density requirements and utilizing public lands for densification, the town can promote efficient use of available resources and infrastructure. This initiative will build on foundational strategies, such as the Affordable Housing Overlay, to ensure its approach is well-supported and strategically aligned with broader goals to create more inclusive and diverse housing options in established neighborhoods.*

- *Description: Support the densification of existing neighborhoods through the creative use of public lands and the conversion of existing single-family dwelling units to duplex, triplex, and quadplex housing types (including provisions to incentivize or require mixed-income housing). Modify maximum density requirements to allow for conversions in appropriate areas, including through the use of the Affordable Housing Overlay, and increase flexibility in development and building standards for the reuse of existing structures for housing to the extent possible under health and safety codes. In areas of desired densification where there is unused public land, such as undeveloped alley rights-of-way, provide a streamlined process to utilize it in ways that support densification, such as through parking requirement adjustments.*

The Strategic Housing Plan supports the conversion of underutilized public lands for development of affordable housing and appropriate densification of existing neighborhoods. These strategies support diversifying the housing types available in existing neighborhoods. Providing land at a reduced cost is also one of the methods identified in the Strategic Housing Plan for how the Town can support public-private partnerships.

The Strategic Housing Plan shows support specifically for conversion of public lands for the purpose of providing “affordable” housing. The plan identifies the greatest need for ownership units at and below 150% AMI. However, construction of live-work units could support the turnover of lower-AMI workforce housing to new buyers. The chart below outlines the homeownership need identified across AMI levels. The plan does not specifically address the need for units with a live-work covenant.

TOTAL OWNERSHIP NEED

AMI	Max Household Income (2.5-Person HH)	Frisco Units Needed	Pipeline	Balance	Development Gap
Owner Units					
60% or less	$62,160	34	0	34	34
60.1-80%	$82,880	31	0	31	31
80.1-100%	$103,600	24	0	24	24
100.1-120%	$124,320	42	12	30	31
120.1-150%	$155,400	31	0	31	31
150.1-200%	$207,200	29	68	-39	0
200.1-300%	$310,800	24	12	12	12
Over 300%	>$310,800	64	31	33	33
Total Ownership Need		**279**	**123**	**156**	**196**
Ownership Gap (Below Market Units)		**162**	**12**	**151**	**151**

Housing ownership needs identified in the Strategic Housing Plan

The proposed vacation of the undeveloped South 6th Avenue right-of-way in exchange for up to four (4) workforce housing units appears to be supported by the recommended programs outlined in the Strategic Housing Plan.

ANALYSIS - CHAPTER 142, VACATION OF PROPERTY

Declaration of Policy (§142-1)**:** Pursuant to §142-1 of the Frisco Town Code, *the Town Council hereby finds and declares that the general policy of the Town is to* ***prohibit the vacation*** *or divesting of any right, title or interest of the Town in and to any land, including any roadway or easement. Any application for vacation pursuant to this chapter may be granted only in cases where the Town Council, in the exercise of its sole and exclusive discretion, first finds* ***an overriding public interest favors the vacation****.*

The general policy of the Town of Frisco is to not allow for the vacation or divesting of any right, title or interest of the Town in and to any land including any roadway unless there is a clear overriding public interest. As stewards of public property, the Town has taken a conservative interpretation of "an overriding public interest" and should continue to be conservative in their vacation of public right-of-ways including the subject property.

There is a demonstrated need for additional workforce housing in Frisco at multiple price points. As previously stated, this vacation request presents the Town of Frisco with a request that would provide up to four (4) workforce housing units in exchange for the 10,500 sq. ft. parcel of South 6th Avenue right-of-way. These units are proposed to be restricted to a person(s) that work at a business in Summit County an average of 30 hours or more per week; or is a person who is retired and worked an average of 30 hours or more a week for a business in Summit County and a minimum of five years immediately prior to retirement. No AMI cap is being proposed for the deed restrictions. The units would therefore likely fall into the higher AMI categories, though it is not clear what AMI range the sale prices would be.

This vacation request creates additional development opportunities and financial value for the applicants, while providing 4 workforce housing units. One existing unit would immediately have a restriction recorded on it and the other three are on an undetermined timeline. It is ultimately the responsibility of the Town Council to ensure that the terms and conditions (including covenant limitations) set forth in a development agreement, or other such an arrangement, will also return an appropriate level of value and benefit back to the community. Planning Commission should comment on whether they find that the applicant is providing an overriding public interest.

Vacation by Ordinance (§142-3)**:** Pursuant to §142-3 of the Frisco Town Code, *All right, title or interest of the town in and to any roadway or easement, shall be divested only upon adoption by the Town Council of an ordinance vacating such property or portion thereof located within the corporate limits of the town. If a roadway constitutes a boundary line of the town, it may be vacated only by a joint action of the Board of County Commissioners of the County and the Town Council. Any ordinance affecting a vacation is required to contain the following findings, if applicable:*

1. *That no land adjoining any roadway to be vacated is left without an established public road connecting said land with another established public road.*

2. *That the roadway or easement to be vacated is no longer necessary for present or prospective public use or convenience.*

If the subject portion of the South 6th Avenue right-of-way is vacated, all properties in the area will continue to have a public road connecting to their properties. No land located adjacent to the proposed right-of-way vacation will be left without an established public road. The application meets standard #1 above.

There is no street constructed in this right-of-way tract, nor does the Town of Frisco have any plans to construct a future road in this location. The Town of Frisco Public Works Department stated that they had no concerns with the proposal, although they recommend requiring an easement be granted for utilities and access. The easement would satisfy any prospective public uses for a trail or water line. The easement would not be sufficient for a roadway, but the existing grades would not allow for a roadway per Town standards and would not be a reasonable prospective use. Staff recommends an access and utility easement as a condition of approval.

Vacation Procedures (§142-4): The following procedures shall be adhered to by person(s) requesting the vacation of any roadway or easement:

A. *Attendance at a pre-application conference held in the manner described in section 180-19 (C)(5)(a) of the Town of Frisco Zoning Ordinance.*

   The applicants have had multiple pre-application meetings with the Planning Division, have discussed the proposed vacation with the various referral agencies at a Development Review Committee (DRC) meeting, and presented to both Planning Commission and Town Council.

B. *Submission to the Town Manager of a written application that includes the required information.*

   The formal written application has been submitted. The application meets this standard.

C. *Review of the proposal by the town staff and preparation of a staff report, and in the case of the proposed vacation of an easement, other than an access easement, preparation of a proposed vacation ordinance.*

   Community Development, Public Works, Town Engineer, and Housing staff have reviewed this vacation application. The Planning Division has prepared the staff report and the associated ordinance will be prepared by the Town Attorney. The application meets this standard.

D. *Vacations of roadways and access easements must be referred to the planning commission for a public hearing and recommendation to the town council. The Director of the Community Development Department or his/her designee may refer the vacation of an easement, other than an access easement, to the Planning Commission for a public hearing and recommendation to the Town Council, if he/she determines that such a referral would assist the Town Council in determining whether or not to grant the vacation request.*

   The application request to vacate a portion of South 6th Avenue right-of-way has been referred to the Planning Commission for a public hearing and recommendation to the Town Council. The application meets this standard.

E. After a public hearing, the Planning Commission may either continue the matter for further information and study for not more than thirty (30) days or forward its recommendation to approve, disapprove or conditionally approve the application to the town council and the applicant(s). Any application forwarded to the Town Council will be in the form of an ordinance.

The application will be heard by the Planning Commission at its October 16, 2025 public hearing. The application meets this standard.

F. The Town Council will consider the proposed vacation ordinance and render its decision either to adopt or deny the ordinance on first reading in accordance with the requirements of the Charter with respect to the adoption of ordinances. Prior to adoption of the vacation ordinance on first reading, the Town Council shall find that an overriding public interest favors the vacation.

The first reading of an ordinance vacating the subject portion of the South 6th Avenue right-of-way will be scheduled for review by the Town Council after a public hearing and recommendation have been completed by the Planning Commission.

Public Notice (§142-5): Pursuant to §142-5 of the Frisco Town Code, *public notice will be given at least once prior to final adoption of the vacation ordinance in the manner provided for in subsection (1) through (3) of Section §180-46E of the Town of Frisco Zoning Ordinance*.

Public noticing was provided for the Planning Commission's October 16, 2025, meeting in accordance with the requirements of the Town Code. Public notice of the Town Council's review of an ordinance will be provided once the public hearing dates have been determined. The application meets this standard.

Valuation of Vacated Property (§142-6): Pursuant to §142-6 of the Frisco Town Code, *Prior to the submission of a request for vacation to the planning commission or town council for consideration, the Town Manager or his/her designee will cause an appraisal to be made at the expense of the applicant(s), unless the Town Manager or Town Council waives such appraisal. An appraisal is not required for the vacation of an easement, other than an access easement, unless specially requested by the Town Manager or Town Council. The appraisal will include the following information:*
A. Valuation of the property being vacated;
B. Valuation of any property that may be benefitted by the vacation, valued prior to vacation;
C. Valuation of any property that may be benefitted by the vacation, valued after vacation; and
D. Any other determinations requested by the town council.

An appraisal of the property submitted on October 7, 2021 estimated the 10,500 sq. ft. right-of-way's "as-is" value at $158,000.

VALUE CONCLUSIONS						
"AS IS" VALUES				"AS PROPOSED" VALUES		
				Property	Site Sizes SF	Value
6th Ave. Right of Way		$ 158,000		West Right of Way Lot	7,000	$ 210,000
521 Pitkin Street		$ 1,050,000		East Right of Way Lot	3,500	$ 175,000
601 Pitkin Street		$ 1,125,000		Rear 521 Lot	3,500	$ 210,000
				521 Pitkin with house	3,500	$ 507,000
				601 Pitkin with house	7,300	$ 1,125,000

At their work session regarding this application in October 2024, Town Council indicated that they did not need an updated appraisal. Should the Town Council request an updated appraisal, Town Staff will cause an appraisal to be made at the expense of the applicants. The appraisal shall be performed meeting criteria as outlined in §142-6.

Payment of Costs (§142-7): Pursuant to §142-7 of the Frisco Town Code, *The applicant or primary applicant is responsible for the payment of any costs associated with the vacation including, without limitation, payment for administrative services performed by the community development department, appraisals, surveys, recording fees, documentary fees, legal services rendered to the town in connection with the application, and other customary costs in the following manner:*

> *A. A development review account shall be established at the time the vacation application is submitted to the town manager. Such development review account will be managed pursuant to section 180-31(D), excluding subsection 180-31(D) (4) (c).*
>
> *B. If the town incurs costs beyond the amount deposited in the vacation review account and the applicant or primary applicant does not pay those costs within thirty (30) days after written notice from the town, the town shall be entitled to certification of the assessment for sale or a lien for those costs on the property owned by each applicant, which lien may be perfected and foreclosed in the manner provided in C.R.S. §§ 38-22-101 et seq., as amended.*

The applicants have been notified of their responsibility for payment. A $1,500 Development Review Account (DRA) was established with submittal of the application.

Vacation of Portion of Request (§142-8): Pursuant to §142-8 of the Frisco Town Code, *the town shall have the right, in its sole and exclusive discretion, to vacate only a portion of the total area requested for vacation.*

The applicants are requesting a vacation of the entirety of the subject portion of the South 6th Avenue right-of-way. If the Town of Frisco chooses to vacate the subject street right-of-way, it may do so in whole or in part at its discretion.

Reservation of Rights-of-Way or Easements (§142-9): *The town may reserve any right-of-way or easement for the continued use of existing or future sewer, gas, water or similar pipelines and appurtenances, for overland drainage, drainage facilities or canals and appurtenances, and for electric, cable television, telephone and similar lines and appurtenances, or any other public purpose. Notwithstanding the foregoing, the town is presumed to have reserved in any property*

vacated under this chapter all necessary, useful or common easements related to underground utilities or services.

There are no existing or future roads, public parking spaces, street snow storage, or drainage features being displaced or negatively impacted by this vacation request. As discussed earlier in this staff report, Staff recommends a condition that an access and utility easement be granted for prospective future utilities or trails.

Conditions on Vacation (§142-10): *The Planning Commission may recommend, and the Town Council in the ordinance effecting a vacation may impose, reasonable conditions on said vacation, to preserve and promote the public health, safety and welfare of the inhabitants of the town and the public generally. Such reasonable conditions may include the payment of money to the town as consideration for a vacation, when the vesting of title upon vacation may confer a benefit upon the new owner of the vacated roadway or easement, where the town has purchased or may purchase a roadway or easement to replace that being vacated, to avoid a windfall to the new owner, or for any other reason deemed by the town council to be in the public interest.*

In exchange for the Town's vacation of the subject portion of the South 6th Avenue right-of-way, the applicants are proposing to construct up to three live-work housing units, along with encumbering the existing structure at 521 Pitkin Street with a live-work covenant.

Staff finds that the creation of workforce housing units is in the public interest. However, Staff requests the Planning Commission, after reviewing the staff report including references to the Comprehensive Plan and Strategic Housing Plan, provide feedback to Town Council as to whether or not the proposed deed restriction with no AMI cap meets the current goals for workforce housing. When the applicant presented in May 2023, Planning Commission included a condition that a portion of the units should contain a deed restriction that caps the sale price at 160% AMI.

It is ultimately the responsibility of the Town Council to determine if proposed new deed restricted units and the associated terms and conditions (including terms within the covenant) set forth in such an arrangement return an appropriate level of value and benefit back to the community.

If Planning Commission finds that there is an overriding public interest associated with vacating the right-of-way in exchange for the creation of four deed-restricted workforce housing units, Staff recommends that a condition be placed upon the recommendation of Town Council approval that requires the Town define the proposed housing restrictive covenants, performance measures such as timing of completion, and recording of restrictions in a development agreement and/or ordinance. The vacation request shall not assume quasi-judicial approvals by Planning Commission or Council.

Recordation of Vacation (§142-11): *In the event of a vacation in accordance with this article, the documents vacating such property or interest in property, including but not necessarily limited to any resolution, ordinance, deed, conveyance document, plat or survey, shall be recorded in the office of the Clerk and Recorder of the county in which such property is located.*

All relevant documents pursuant to the vacation of the tract of land will be recorded in the office of the Summit County Clerk and Recorder in accordance with the conditions of the ordinance and any associated documents, as applicable.

Preservation of Access (§142-12): *No roadway or part thereof shall be vacated so as to leave any land adjoining said land with another established public road.*

No land adjoining the proposed right-of-way vacation will be left without an established public road.

Vesting of Title Upon Vacation (§142-13): *Any ordinance effecting a vacation under this article shall state to whom title to the vacated land shall vest upon vacation. Except as otherwise provided in the ordinance effecting a vacation, title to the lands included within a roadway or so much thereof as may be vacated shall vest in accordance with the provisions of C.R.S. § 43-2-302 or its successor statute. Whenever any roadway shall be vacated, such roadway or portion thereof shall automatically be classified in the same zoning district as the property to which it attaches without further action on the part of the town.*

The ordinance in connection to the vacation shall state that title to the vacated land shall be vested to the applicants, Andy Richmond and Lauren Echevarria, the owners of the property located at 521 Pitkin Street and Marta Lindrose, the owner of the property located at 601 Pitkin Street. The properties to which this tract would be attached are zoned Residential Low Density (RL), so the vacated portions of right-of-way would also be initially zoned RL, unless and until a rezoning to PUD was approved as an overlying zone district for the property.

Adjacent Platted Lands (§142-14): *Where title to any vacated property vests with the owner of adjacent platted land, said owner shall, within 90 days of the adoption of the ordinance effecting such vacation, take all necessary steps to include said vacated property within the plat of the adjacent land.*

If the Town Council adopts an ordinance, the applicant will be required to follow requirements as outlined in Town Code §142-14.

ANALYSIS – AGENCY REVIEWS

Town of Frisco Public Works Department and Contracted Town Engineer

It is easy to state that the ROW is not necessary for present use, but more difficult to state that there is not a prospective use. I had sent previous comments that we wanted an easement to be granted for utilities and access if needed in the future. I think that if we condition an easement requirement, we could state that the easement would satisfy any prospective uses (trail or water line). The easement would not be sufficient for a roadway, but we could clarify that the existing grades would not allow for a roadway per Town standards and would not be a reasonable prospective use.

Chris McGinnis, PE, Town Engineer (contracted)

Public Works has no issue with the vacation of the ROW as it is not used at this time. We would not accept any additional maintenance even if built to Town standards.

Josh Southworth, Public Works Director

Town of Frisco Housing

- *What is the timeframe for the new cabins on Richmond's lot to be constructed after approval? We need some type of claw back if they fail to produce.*
- *The Lindrose property is under a living trust. Any idea how old the trustee is? Due to the two conditions mentioned in the PUD, it may be some time before a unit is built.*
- *Under the PUDs Density description, is states an ADU can be a garage. Do we want to revise that to state above a garage?*
- *Section 4 states that, "The Primary Resident unit on the Lindrose Property may be a single family or duplex swelling unit, or an Accessory Dwelling Unit." Would we want an ADU to be the primary?*
- *Section 17 gives a definition of "Primary Resident" and states that they must be a "registered voter in the Frisco, Colorado." "To determine a person's Principal Place of Residence, the criteria set forth in C.R.S. 31-10-201(3) shall apply."*
    - *I'm unsure if we can require a resident who qualifies under the 30+ hours a week in Summit County section, to also be required to be a registered voter… The statute referenced gives judges rules regarding if someone is authorized to vote in a certain jurisdiction. The covenant that would be placed on the property would most likely differ from those criteria, as the Town's HH Live/work covenant does in 7.1 Occupancy.*

I'm good with the total # of units being produced. I wish that the AMI was capped at 150%, but I can live with live/work. Would also like a lottery utilized to sell the units.

The housing plan doesn't interpret live/work like we do with a covenant restriction. It views it from an affordable/workforce vs market rate standpoint. This development could be viewed as workforce housing based on the covenant and not "affordable" depending on if the sale price is above 150% AMI. {In the plan there is} nothing that states a "move-up" action item {to specifically encourage housing for upward mobility}. It's kind of discussed in the rental section, but not homeownership.

James Gorham, Economic Development Manager

PUBLIC COMMENT

As of October 9, 2025, the Community Development Department had received one formal public comment concerning this application. The comment is included as Attachment F.

STAFF RECOMMENDATIONS

Based on the property valuations and the Town's workforce housing needs, the Community Development Department supports a vacation of the subject portion of street right-of-way in exchange for the creation of up to four workforce housing units. However, Staff recommends that the approval include conditions outlined in a development agreement and/or ordinance that define the proposed housing restrictive covenants, performance measures such as timing of completion, and recording of restrictions. The vacation request and any associated documents shall not assume quasi-judicial approvals by Planning Commission or Council.

Whether or not this vacation and the terms of this request constitute an overriding public interest will ultimately be a decision for the Town Council.

Recommended Findings, Action, and Motion for Approval

If the Planning Commission chooses to forward a recommendation of approval, the Community Development Department recommends the following findings pertaining to the proposed vacation request:

Based upon the review of the staff report dated October 16, 2025 and the evidence and testimony presented, the Planning Commission finds:

1. *That the proposed vacation is in general conformance with the purpose and intent of the Frisco Comprehensive Plan, since it furthers several goals and strategies outlined in the plan and furthers the Town's efforts to address workforce housing demands specifically by supplying additional land to address the community's housing needs; facilitating infill housing on a vacant parcel in an older neighborhood; forming a unique collaboration for housing development; and integrating new housing into the existing community fabric.*

2. *That pursuant to §142-1 of the Frisco Town Code, there is an overriding public interest favoring the vacation because the proposed vacation provides a unique opportunity that results in the construction of up to three deed restricted workforce housing units, along with encumbering the existing structure at 521 Pitkin Street with a workforce covenant. Also, the terms and conditions of a live-work housing restrictive covenant provide a value to the community that is commensurate with or exceeds the value of the vacated property.*

3. *That pursuant to §142-3 of the Frisco Town Code, no land adjoining the roadway to be vacated is left without an established public road connecting said land with another established public road.*

4. *That pursuant to §142-3 of the Frisco Town Code, the roadway to be vacated is no longer necessary for present public use or convenience, or prospective public use as a roadway, because this portion of the South 6th Avenue right-of-way has not been improved, used, or planned to be used for roads, public parking spaces, street snow storage, drainage features, or other infrastructure or uses.*

5. *That pursuant to §142-13 of the Frisco Town Code, title to the lands vacated shall vest in accordance with the provisions of the ordinance effecting a vacation to the applicants.*

Recommended Action:

The Community Development Department recommends the Planning Commission forward a **RECOMMENDATION OF APPROVAL** to the Town Council for the vacation of a 10,500 sq. ft. (0.24 acres) tract of the South 6th Avenue Right-of-Way between Blocks 33 & 34 Frisco Townsite; generally located north of Pitkin Street, south of Pitkin Street Alley, adjacent to and east of 521 Pitkin Street / Lots 23-24, Block 34, Frisco Townsite and adjacent to and west of 601 Pitkin Street / Lots 13-14, Pt 15, Block 33, Frisco Townsite, subject to the following conditions:

1. *The ordinance and/or development agreement shall include conditions outlining the requirements for guaranteeing construction completion of all four units and residential housing restrictive covenants, including the terms and conditions for occupancy and*

ownership of the units as determined by the Town of Frisco, and that the applicants have obtained all necessary development approvals and permits.

2. *The vacation ordinance shall not cause the South 6th Avenue right-of-way to be vacated until the ordinance is filed by the Town Clerk for recording in the Office of the Summit County Clerk and Recorder. The Town Clerk shall not file the ordinance for recording in said office until the conditions of the ordinance and/or development agreement have been satisfied.*

3. *The applicants shall provide an access and utility easement, sufficient to accommodate prospective future public uses for utilities or trails, but not for a roadway.*

Recommended Motion:

Should the Planning Commission choose to recommend approval of this vacation request, Staff recommends the following motion:

With respect to File No. VAC-25-0001, I move that the recommended findings set forth in the October 16, 2025 staff report be made and that the recommended conditions set forth therein be taken and that the Planning Commission hereby forwards a RECOMMENDATION OF APPROVAL to the Town Council for the vacation of a 10,500 sq.ft. (0.24 acres) tract of the South 6th Avenue Right-of-Way between Blocks 33 & 34, Frisco Townsite; generally located north of Pitkin Street, south of Pitkin Street Alley, adjacent to and east of 521 Pitkin Street / Lots 23-24, Block 34, Frisco Townsite and adjacent to and west of 601 Pitkin Street / Lots 13-14, Pt 15, Block 33, Frisco Townsite.

ATTACHMENTS

Attachments:

Attachment A – Application Materials
Attachment B – Draft PUD, for reference
Attachment C – Town Code, Chapter 142, Vacation of Property
Attachment D – 2021 Real Estate Appraisal Report
Attachment E – Referral Comments
Attachment F – Public Comment
Attachment G – Minutes from the May 18, 2023 Planning Commission Meeting
Attachment H – Relevant 2024 Strategic Housing Plan Programs

cc: Andy Richmond and Lauren Echevarria
Marta Lindrose