PLANNING & DEVELOPMENT DEPARTMENT
STAFF REPORT
SEPTEMBER 13, 2022

Application #:	**2022-22**
Project Name:	**Copper Creek West**
Application:	Preliminary Plan
Representative:	Kaart Planning
Location:	954 19 Road
Zone:	Community Residential (CR)
Request:	This is a request for approval of a Preliminary Plan application for a 138-lot residential subdivision over approximately 25.95 acres in the Community Residential (CR) zone for an overall density of 5.31 dwelling units per acre. The subdivision is proposed to be completed over 4 filings.

PROJECT DESCRIPTION:

This is a request for approval of a Preliminary Plan application for a 138-lot residential subdivision over approximately 25.95 acres in the Community Residential (CR) zone for an overall density of 5.31 dwelling units per acre. The subdivision is proposed to be completed over 4 filings. This property was annexed and zoned in 2021.

The proposed subdivision is requesting approval of density bonuses. The purpose of density bonuses is to help implement portions of the Fruita Comprehensive Plan (Master Plan) by providing for residential density bonuses in designated zones tied to the provision of community benefits. Additionally, density bonuses provide opportunities for development incentives in response to applicants providing community benefits and encouraging applicants to deliver amenities without incurring unreasonable economic costs or driving up housing or consumer costs.

This particular request for density bonuses is to allow for a decrease in lot size in the Community Residential (CR) zone from a minimum of 7,000 square feet to a minimum of 3,500 square feet. The CR zone allows for residential densities of up to 6 dwelling units per acre with the allowance for up to 8 dwelling units per acre upon approval of density bonuses. The Land Use Code requires density bonuses to be approved by the City Council in which they would consider whether or not the application meets the intents and purposes of the density bonus section of the Code (17.09.040). The elements required to be included for consideration of approval of density bonuses include 20% Open Space, Bike and Trail Connections, Alley/Shared drive access,

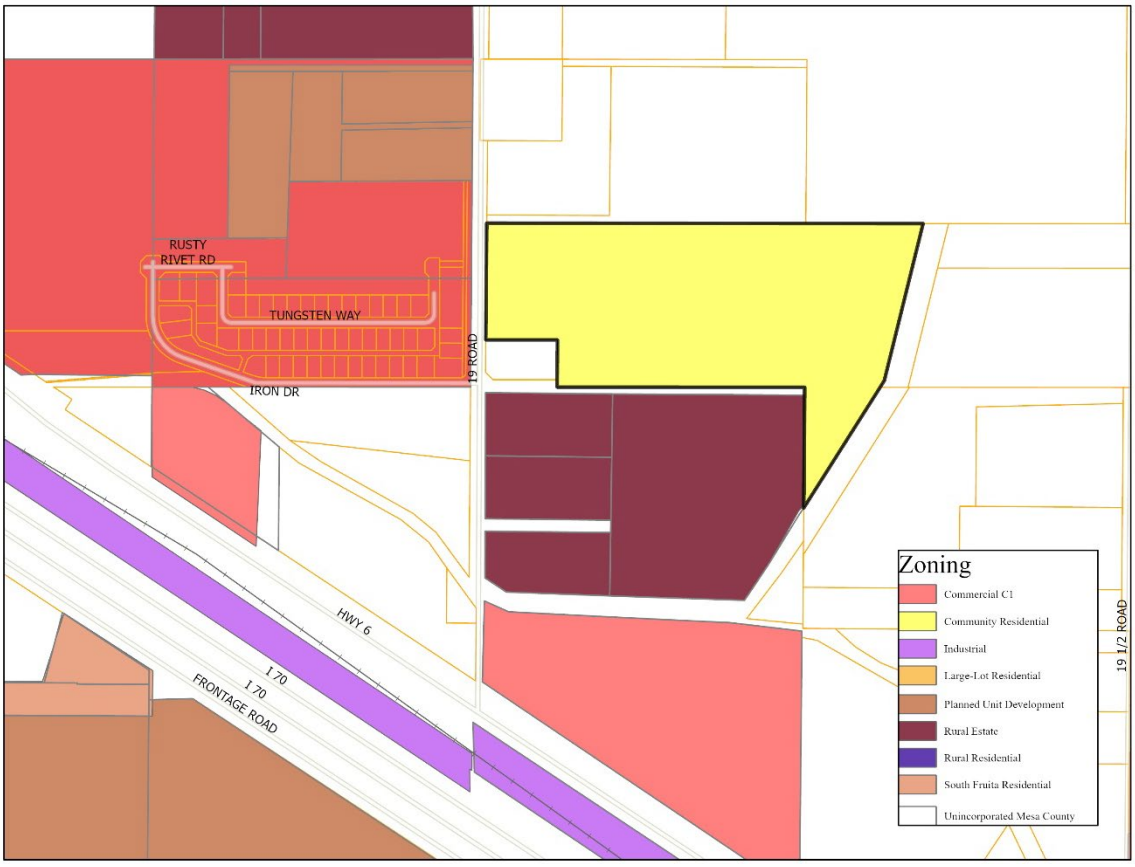
and/or a Mix of Housing. The request for density bonuses does not always translate to more density, as with this subdivision, the request for density bonuses is to decrease the minimum lot sizes. The application is proposing Bike and Trail Connections and the Mix of Housing Types within the density bonus request. More detail is included within this Staff Report.

This subdivision is proposing primary access on the east side of 19 Road in alignment with Iron Drive to the west with an additional street stub to the north in Filing/Phase 3. Off-site roadway improvements along the 19 Road corridor are also being proposed with this application.
The interior roads within the subdivision are proposed to be constructed at 31.5' of total right-of-way with sidewalk on one side. The subdivision also proposes several 20' alley rights-of-ways along with numerous parking pods. Additionally, the subdivision is proposing a total of 20.9% or approximately 5 acres of usable open space.

SURROUNDING LAND USES AND ZONING:

Surrounding land uses are primarily single family detached residential with some small-scale farming scattered nearby. The Iron Wheel Subdivision is located to the west. This is typical of subdivisions built at the city's edge.

ZONING MAP



2022 AERIAL PHOTO

REVIEW OF APPLICABLE LAND USE CODE REQUIREMENTS:

PRELIMINARY PLAN (MAJOR SUBDIVISION)

Section 17.21.040 (A) states, Major Subdivisions are reviewed based on the following criteria:

1. Conformance to the City of Fruita's Master Plan, Land Use Code, Design Criteria and Construction Specifications Manual and other city policies and regulations;

Conformance to the City of Fruita's Master Plan (Comprehensive Plan):

Influenced by the community values expressed on page 2 of the Comprehensive Plan, the Plan Vision states, *"The City of Fruita values quality of place. It's an inclusive city, with a small-town feel and vibrant downtown, surrounded by public lands. People love to live, work, and play in*

Fruita because the City facilitates community, safe neighborhoods, family-friendly events, and walking and biking. The City governs in a way that's responsive to its citizens and prioritizes high-impact services and projects. Fruita fosters a fun and funky ambiance around the arts, agriculture, and recreation."

Community Values were built into the plan and some to keep in mind for residential development applications include the following:

- *Fruita is a place where you run into neighbors, friends, and acquaintances at local stores and restaurants, parks, and the community center. (Community Values, Page 2, Comprehensive Plan)*
- *Fruita is a community where people are invested and constantly work to make the community better. (Community Values, Page 2, Comprehensive Plan)*
- *Fruita is committed to a land use pattern and supporting policies that promote access to housing across the income spectrum of its residents. (Community Values, Page 2, Comprehensive Plan)*

Community Snapshot – *The Comprehensive Plan must suit the needs of the current Fruita community and remain relevant as the city changes and grows in the future. Thus, a thorough analysis of city and regional demographic and economic trends was conducted for this plan. This data-driven approach has informed many elements of this plan, from the future land use goals to economic development strategies and education policies.* (Community Snapshot, Page 10, Comprehensive Plan).

The Community Snapshot also identified the growing need for affordable housing units within Fruita. Fruita has some of the highest home prices in Mesa County and home prices are appreciating rapidly. This portion states, "*The average 2018 resale home price in Fruita was $271,684. The quality of life in Fruita, including its schools and small-town feel, are the major factors driving home prices. Home prices are also appreciating throughout Mesa County and the Rocky Mountain region due to other macroeconomic factors such as labor and material costs and an overall shortage of housing.*" Community Snapshot, Page 11, Comprehensive Plan).

Furthermore, the plan goes on to state, "*Regardless of price, the dominant housing product in Fruita is single-family homes, which comprise 97% of new construction from 2010 through 2018. Of the 557 total new homes permitted during this time period, 538 (97%) were for single-family detached homes. Building exclusively single-family homes means limited diversity of housing types and often, few housing options at lower price points*." (Community Snapshot, Page 12, Comprehensive Plan).

The Community Snapshot section with the Comprehensive Plan also identified affordability as a growing concern within Fruita. "*Affordability issues are greatest among renters in Fruita, with about half of all renters paying more than 30% of their income towards housing costs. This is defined as being cost burdened, wherein a household is paying too much towards housing. The rental supply in Fruita is extremely limited with essentially zero vacancy, allowing landlords to charge higher rents. The percentage of renters in Fruita has increased, even though most housing being built is in the form of single-family homes. Some people may be renting single-*

family homes by choice; for others it may be the only option and they would prefer a lower cost option such as an apartment or duplex. Housing affordability issues affect the ability of local businesses to attract and retain employees. This is a threat to economic sustainability if left unchecked." (Community Snapshot, Page 12, Comprehensive Plan).

The findings from the Community Snapshot point to key areas for the City to address through the Comprehensive Plan. The Plan seeks to address managing growth at the edges and encouraging development within the city, supporting affordable housing to retain the local workforce. The Community Snapshot also identified the growing need for affordable housing units within Fruita as well as creating opportunities for housing diversity. Supporting evidence included in the Comprehensive Plan states, "*Regardless of price, the dominant housing product in Fruita is single-family homes, which comprise 97% of new construction from 2010 through 2018. Of the 557 total new homes permitted during this time period, 538 (97%) were for single-family detached homes. Building exclusively single-family homes means limited diversity of housing types and often, few housing options at lower price points."* (Community Snapshot, Page 12, Comprehensive Plan).

The Comprehensive Plan also states that, "*the lot size requirements for various types of development make it hard to build housing types other than single-family homes unless it is on a very large lot. This plan encourages a diversity of housing options. Changes to the Land Use Code to allow different housing types on various lot sizes will help remedy this issue.*" (Chapter 3 Land Use and Growth, Page 24, Comprehensive Plan).

The City of Fruita's Master Plan, Fruita In Motion: Plan Like a Local, encourages Efficient Development as one of its Plan Themes. The Plan Themes section is found in in Chapter 1 (page 5) of the plan and states that, "*The City of Fruita encourages infill over sprawl and development within the existing city limits and Urban Growth Boundary (UGB). Efficient development reduces the demand for infrastructure and city services, supports community connectivity, and encourages a thriving downtown core*." This subdivision is within the UGB and will meet the intents of creating a definitive city edge. An urban-rural edge defines Fruita as a freestanding community separate from Grand Junction. Undeveloped parcels within the edge are encouraged to develop at higher densities than beyond the edge where rural densities are desired.

Connectivity is another Plan Theme within Fruita's Master Plan. This Plan Theme reads, "*It is easy for vehicles, cyclists, and pedestrians to get around Fruita and to visit local destinations. The City of Fruita offers safe, intuitive, and well connected on- and off-street trail networks for pedestrians and cyclists.*" Overall, the proposed subdivision meets the intents and purposes of the Connectivity Plan Theme which is ultimately meant to create an overall development pattern that is positive for vehicular and pedestrian movement.

Conformance to Land Use Code, Design Criteria and Construction Specifications Manual and other city policies and regulations:

The property is zoned Community Residential (CR). The purpose of the CR zone is to allow moderate density with a mix of housing types. The CR zone has a minimum lot size of 7,000

square feet for subdivisions with up to 6 dwelling units per acre and as explained before, density bonuses may be requested to reduce the minimum lot sizes to 3,500 square feet and/or increase the allowable density. This subdivision is proposing density bonuses to decrease the minimum lot sizes by proposing a 20% Open Space, Bike and Trail Connections, and a mix of housing types. It should be noted that this application for density bonuses is not meant to increase the already proposed density of 5.3 dwelling units/acre (138 dwelling units/25.95 acres). Supporting the density bonus request would allow the lot sizes to be a minimum of 3,500 square feet instead of 7,000 square feet.

Density Bonuses:

20% Open Space – This application is proposing a total of 20.9% usable open space within the development. Section 17.09.050 (D)(1) states, *"A minimum of twenty (20) percent of the project designated as parks, trails, open space or common area. The open space or common area must be easily accessible to a minimum of fifty (50) percent of the lots, by being located within a ¼ mile walking shed, and providing a safe sidewalk or trail connection to the space. A conservation easement, or other form acceptable to the City Attorney, shall be required with the first phase or first filling of the subdivision to ensure the space is permanently designated as an open area."* The location of the proposed open space does appear to be functional and accessible to all proposed lots located within the ¼ mile walking shed. The applicant has also removed any "left over" strips of open space from their open space calculation.

Based on the proposed application, Staff is supportive of the density bonus request with regards to the proposed 20% Open Space as expressed in Section 17.09.050 (D)(1).

Bike and Trail Connections – This application is proposing over 1,200 linear feet of internal trails within the subdivision. The internal trail network is included within all the open space areas along with the construction of a primary trail along the Adobe Creek Wash. The trail along the wash is identified in the Parks, Health, Recreation, Open Space, and Trails Master Plan (PHROST). This primary trail is proposed to be constructed in the last Phase/Filing of the subdivision. Section 17.09.050 (D)(2) states, "*The project includes an internal trail network, a continuation of an existing trail network, or the continuation of a bike lane system internal to the project and along adjoining rights-of-way. The bike and trail amenities must be at least 500 feet of linear length to qualify for this bonus. On-site trails and/or sidewalks shall be extended to existing off-site trails, sidewalks or parks if the extension is less than two hundred (200) feet in length. An easement, or other form acceptable to the City Attorney, shall be required with the first phase or first filling of the subdivision to ensure the space is permanently designated as a trail."*

Based on the proposed application, Staff is supportive of the density bonus request with regards to the proposed Bike and Trail Connections as expressed in Section 17.09.050 (D)(2).

Mix of Housing Types- This application is proposing a total of 138 dwelling units, 49 of which will be attached and 89 of which will be detached. Overall, the attached dwelling units account

for 35% of the dwelling units. Section 17.09.050 (D)(4) states, "*A mix of housing types are proposed with a minimum of twenty (20%) percent of the dwelling units being single- family attached, duplexes and/or multi- family units. The unit types shall be dispersed within the development, and a site plan shall be recorded to ensure that the final buildout reflects representations in the density bonus review."* It does appear that the application is proposing a balanced mix of housing types within this subdivision. The majority of the mix of housing types are proposed with Filing 4 on the eastern portion of the development. The attached dwelling units proposed meet the condominium definition of the Land Use Code, which has been used in past subdivisions with the most recent being Village at Country Creek. The Land Use Code states a condominium as "*a common interest community in which portions of the real estate are designated for separate ownership and the remainder of which is designated for common ownership solely by the owners of the separate portions. A common interest community is not a condominium unless the undivided interests in the common elements are vested in the unit owners."* Developing these as condominiums allows the attached dwelling units to be sold separately with shared common area.

Based on the proposed application, Staff is supportive of the density bonus request with regards to the proposed mix of housing types as expressed in Section 17.09.050 (D)(4).

With some changes, the proposed development can be in conformance with the city's Master Plan, Land Use Code, and all other city policies and regulations based on the more technical responses as expressed in the Consolidated Review Comments included with the Staff Report.

Review comments from the City Engineer, Planning & Development Department, Ute Water, Grand Valley Power (GVP), Grand Valley Drainage District (GVDD), Lower Valley Fire District (LVFD) and others address technical issues within the development and are attached with this Staff Report. If these issues are adequately resolved with the Final Plat application, then this criterion can be met.

2. Compatibility with the area around the subject property in accordance with Section 17.05.080 (C);

The City seeks to provide a fair and consistent manner in which to consider compatibility within the overall context of the Fruita Comprehensive Plan, existing adjacent land uses, applicable zoning district requirements, and other city codes and regulations. Section 17.05.080 (C) of the Code states that for all land uses, "compatibility" is provided when a proposed land use can coexist with other existing uses in the vicinity without one use having a disproportionate or severe impact on the other use(s). The city decision-making body may consider other uses existing and approved and may consider all potential impacts relative to what customarily occurs in the applicable zone and those which are foreseeable, given the range of land uses allowed in the zone.

The primary uses surrounding the subject property consist of single-family detached, a church, the Iron Wheel subdivision to the west, and small-scale farming/ranching operations nearby. The supported future land uses surrounding the subject property are residential (attached and/or detached dwelling units). The subject property is located about 1,400 feet from the Highway 6 &

50 corridor which supports a number of different commercial types of uses in the city's C-1 zone district.

Based on the current land uses surrounding the subject property and the future land uses as expressed in the Master Plan, this criterion has been met.

3. Adequate provision of all required services and facilities (roads, bicycle and pedestrian facilities, parks, police protection, fire protection, domestic water, wastewater services, irrigation water, storm drainage facilities, etc.);

It appears that most required services and facilities are available to the subject property and the proposed subdivision. The sanitary sewer will be coming from 19 Road along with the water services. The sanitary sewer line was recently constructed as part of a major trunk line extension along Highway 6 & 50, the construction of this trunk line was then extended to 19 Road with Filing 1 of the Iron Wheel Subdivision. As part of recouping the costs for this extension, the City Council adopted Resolution 2019-44 which requires all dwelling units tapping into this line to pay a recapture fee of $2,000 per dwelling unit back to the City of Fruita at the time of tap or planning clearance issuance for a building permit ($2,000 * 138 dwelling units = $276,000).

Based on the submittal, the subdivision has 46 irrigation water shares. The Land Use Code only requires 1 – 1.5 shares per irrigated acre. With that said, there is adequate irrigation water shares for this project.

The application is also requesting modified road sections internal to the subdivision. Section 17.41.010 (C) of the Land Use Code states, *"Alternate street sections for minor collector and local streets internal to a subdivision will be considered but should meet the minimum lane widths identified in the City of Fruita Design Criteria and Construction Specifications Manual."* The standard residential section is 44' of right-of-way with curb, gutter, and sidewalk on both sides of the street and 28' of asphalt. The proposed residential section for this development is 31.5' of right-of-way with curb, gutter and sidewalk on one side with 22' of asphalt.

More technical details pertaining to the roads, drainage facilities, domestic water systems are contained in the review comments. All review agencies have had an opportunity to comment on this application and continued coordination will take place as the application continues to move forward.

The applicant and Staff have worked through one round of review comments. The responses to comments are included with the Staff Report materials. As the application moves along, the applicant and Staff, along with outside review agencies, will continue to work together. If all review comments and issues identified in this Staff Report are adequately resolved with the Final Plat application, this criterion can be met.

4. Preservation of natural features and adequate environmental protection; and

The Adobe Creek Wash on the eastern portion of the development should be preserved as much as possible.

Any stormwater management issues must be addressed and sedimentation, weed, and dust controls will be required as part of the construction process.

This criterion can be met.

5. Ability to resolve all comments and recommendations from reviewers without a significant redesign of the proposed development.

Although some redesign will be necessary in order to meet the minimum requirements of the Land Use Code and other city regulations, it does not appear that resolving concerns necessarily leads to a significant redesign of the development that would require another Preliminary Plan review.

As mentioned before, review comments from the City Engineer, Planning & Development Department, Ute Water, Grand Valley Power (GVP), Grand Valley Drainage District (GVDD), Lower Valley Fire District (LVFD) and others address technical issues within the development and are attached with this Staff Report. If these issues are adequately resolved with the Final Plat application, then this criterion can be met.

Based on this information, the approval criteria that must be considered for Preliminary Plan applications either have been met or can be met if all review comments and issues identified in this Staff Report are adequately resolved with the Final Plat application.

LEGAL NOTICE:

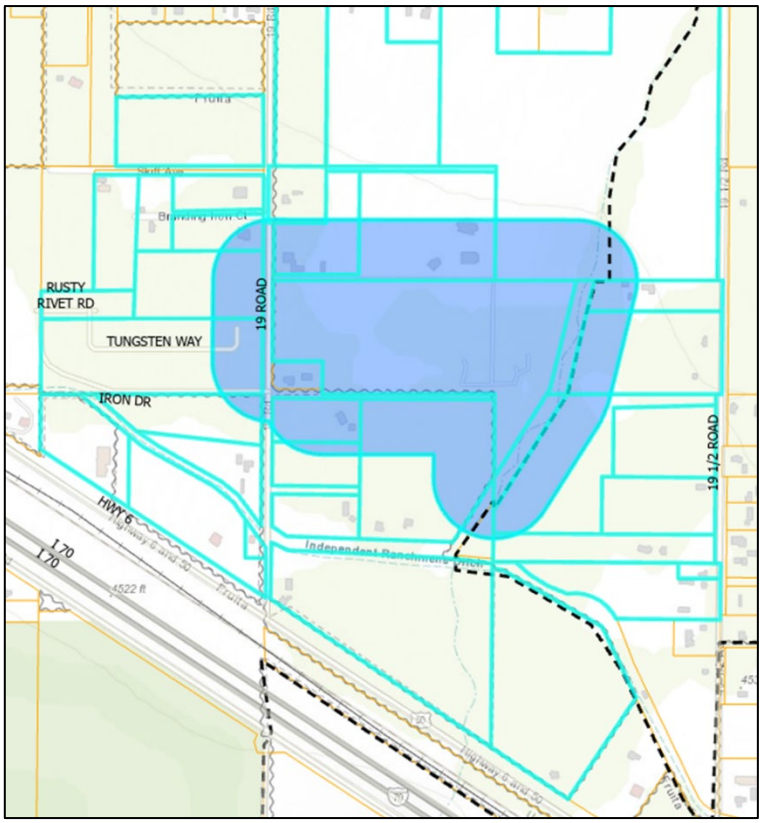
Legal Notice (minimum of 15 days prior to Planning Commission)	
August 22, 2022 (22 days prior)	Post Cards [17.07.040 (E)(1)(d)]
August 22, 2022 (22 days prior)	Sign Posting [17.07.040 (E)(1)(c)]
August 24, 2022 (20 days prior)	Legal Ad [17.07.040 (E)(1)(a)]

NOTICE OF PUBLIC HEARING

The Fruita Planning Commission will hold a public hearing **Tuesday, September 13, 2022** at **6:00 p.m**. This meeting may be held in person subject to public health orders or by City Council direction. Details on how to access this meeting will be found at www.fruita.org. If the meeting is held in person, the virtual link will remain open for public participation. The following item will be presented at the public hearings. The Planning Commission will formulate a Recommendation, which will be forwarded to the Fruita City Council. If the item listed below is acted on by the Planning Commission, the Fruita City Council will hold a public hearing on this same item on **Tuesday, October 18, 2022 at 7:00 p.m.** Please check www.fruita.org for more details. If you have an interest on the item please call 858-0786 or come to the Planning & Development Department office located at 325 E. Aspen Avenue to review the information in the file. Your appearance at both hearings is encouraged to ensure your concerns are accurately represented or you can write a letter outlining your concerns and submit it to the Planning & Development Department.

Application #:	2022-22
Project Name:	Copper Creek West
Application:	Preliminary Plan
Representative:	Kaart Planning
Location:	954 19 Road
Description:	This is a request for approval of a Preliminary Plan of a 138-lot subdivision on approximately 25.95 acres in a Community Residential (CR) zone.

Physically disadvantaged persons who wish to obtain information or need assistance in attending the Public Hearing, may call (970) 858-0786, the hearing impaired may call Relay Colorado at 1-800-659-2656, or visit our website: www.fruita.org



REVIEW COMMENTS:

All review comments received are included with this Staff Report. All review comments must be adequately resolved with the Final Plat application.

PUBLIC COMMENTS:

No written public comments have been received by Staff at this time.

It should be noted that the Land Use Code requires a neighborhood meeting to be held by the applicant in accordance with Section 17.07.040 (D). The city received the neighborhood meeting invitation from the applicant which invited the neighboring property owners to a virtual meeting on February 1, 2022 at 5:30pm.

STAFF RECOMMENDATION:

Staff recommends approval of application 2022-22, Copper Creek West Preliminary Plan, with the condition that all review comments and all issues identified in the Staff Report are adequately resolved with the Final Plat application.

PLANNING COMMISSION SUGGESTED MOTION:

Mr. Chair, I move we (**approve**/deny) application 2022-22, the Copper Creek West Preliminary Plan to the City Council with the condition that all review comments and all issues identified in the Staff Report be adequately resolved with the Final Plat application.

FRUITA PLANNING COMMISSION: SEPTEMBER 13, 2022
FRUITA CITY COUNCIL: OCTOBER 18 2022

FRUITA COLORADO

Planning & Development Department
RESPONSE TO Review Comments – Round 1
06/17/2022
Response Date 8-19-2022

Application Type: Preliminary Plan
Application Name: Copper Creek West
Application Number: 2022-22
Location: 954 19 Road (Parcel #2697-222-00-102)

- Pre-Application Date: January 4, 2022
- Application sent out for review: May 6, 2022 – comments due back May 27, 2022 (rd. 1)
- Planning Commission: TBD upon adequate resolution of review comments
- City Council: TBD upon adequate resolution of review comments

Description:

This is a request for approval of a Preliminary Plan application for a 138-lot residential subdivision over approximately 25.97 acres in the Community Residential (CR) zone for an overall density of 5.31 dwelling units per acre. The subdivision is proposed to be completed over 4 filings.

General:

1. The project narrative indicates 138 dwelling units at complete build out, however, the statement of 8 dwelling units per acre would equal 207 dwelling units through density bonus. Please confirm that 138 units is the plan. There was a miscalculation; this project now has a total of 139 units. 139 units/25.95 acres = 5.3 unit/acre. The additional (3) density bonuses increase the density to 8.3 (5.3+3) which allows us to drop the minimum lot size to 3,500 SF.
2. Most of the lots in Filing 4 don't look like they meet the minimum lot size requirements at 3,500 square feet. It appears that the intention may be to follow the definitions below to accomplish the unit sizes for the lots on the most eastern portion. The lots in Filing 4 will be Condominium Units.
    a. CONDOMINIUM. A common interest community in which portions of the real estate are designated for separate ownership and the remainder of which is designated for common ownership solely by the owners of the separate portions. A common interest community is not a condominium unless the undivided interests in the common elements are vested in the unit owners.
    b. CONDOMINIUM UNIT. A unit in a condominium consisting of any enclosed room(s) occupying all or part of a floor(s) in a building of one or more floors used for residential, professional, commercial, or industrial purposes together with the interest in the common elements appurtenant to that unit.

3. Density Bonuses:
    a. The Land Use Code requires that a conservation easement, or other form acceptable to the City Attorney, shall be required with the first phase or first filing of the subdivision to ensure the open space is permanently designated as an open area.
    b. The Open Space calculation appears to include the stormwater detention areas, please indicate that the grades of these areas do not exceed 15%. Some sides of the detention areas exceed 15%, but all detention areas provide at least one side if not more of grades that are less than 15% for access.
    c. Mix of Housing types
        i. The project narrative highlights 64% are single-family and 36% are multifamily.
        ii. Please show the intent of the mix of housing types on the overall site plan. This will allow staff to adequately review which parcels are to be multifamily. This will also be needed to ensure planning clearances for building permits are issued accurately. Lots 1-90 are single-family and Lots 91-139 are multi-family (everything east of 19 ¼ Road).
    d. The density bonus request will allow the development to have lot sizes reduced to a minimum of 3,500 square feet. Understood.

4. Parks, Open Space and Trails Impact Fee Credits:
    a. The Adobe Creek Trail is proposed to be constructed in phase 3 and 4 of the subdivision. Typically impact fee credits are provided once the construction of said improvements are completed. The trail may be constructed in Phase 1 or impact fee credits can be applied once the trail is constructed in Phases 3 and 4.
        i. Section 17.43.030 (B) states, "*Construction of the public trail(s) may be required and the cost of trail construction of a primary trail or an off-site trail is eligible for credits against the public parks, open space, and trails impact fee/dedication.*"

The Developer would rather the credits be applied once the trail is constructed in Phase 3 and Phase 4.

    b. Impact fee credits for landscaping along 19 Road does apply and is in accordance with Section 17.43.030 (A)(13). Section copied below for reference.
        i. "Notwithstanding the preceding criteria, a five-foot wide landscaped outlot abutting and parallel to public right-of-way for collector and arterial roads will be eligible for credit against the otherwise required parks, open space and trails impact fee/dedication. Both the land area and the improvement to the land are eligible for credit. The minimum required width is five feet and the minimum required landscaping must consist of one large tree for every forty linear feet along the public right-of-way and appropriate groundcover and irrigation. This outlot must be owned and

maintained by a Homeowners Association and contain a public access easement in order to receive credit." Understood.

ii. In order to determine the amount to credit this impact fee, please provide a cost estimate of the landscaping improvements for this area along 19 Road. This should be in the form of an Exhibit provided by Staff. A cost estimate has been provided for the landscaping improvements along 19 road. See section (E2) of Exhibit B.

iii. Impact Fee Credits are typically shared proportionately for each lot in the subdivision. Understood

5. Section 17.43.030 (D) states that there shall be a 100-foot buffer on both sides of the wash, or creek, as measured from the centerline of the wash or 100 feet from the edge of the wetland area. This is to ensure that the proposed development does not degrade the existing habitat or interfere with other uses. This 100-foot buffer is the minimum.
    a. Please confirm that this has been met. This has been met. Will label. See Landscape Plan.
6. Please verify that the internal trails within the development are at least 8 feet paved with 3-foot clearance on each side. See Section 17.43.030 (B)(8). The internal sidewalks are not public trails. The sidewalks will remain 5'. Adobe Creek Trail is going to be public and is 10'.

7. Residential Design Standards – Section 17.13.070
    a. The intent and purposes of the residential design standards is to support the development of new compact, walkable neighborhoods with a variety of housing.
    b. Section 17.13.070 (A) Site Design.
        i. It appears that the site circulation and street design standard of this section have been met. Understood.
            1. The street and alley configurations are designed to minimize cut-through traffic on local residential streets.
            2. Pedestrian access ways and trails appear to be provided well above the minimum requirements. The site design appears to utilize pedestrian trails internal to the subdivision in place of the typical curb, gutter, sidewalk design on local streets.
            3. Street and pedestrian orientation is focused on alignment with open space for views and access.
            4. Block lengths do appear to have been met with this proposed subdivision plan. Where street connections aren't made, a pedestrian trail/access way is provided.
                a. A future trail connection should be provided somewhere on between lots 21 and 32 on the north side to allow for future out-of-direction pedestrian travel in this area when the property to the north develops.

i. Lots 22, 24, 25, 27, 29, 30 are larger. Lots 24 and 30 could be good since they will already have pedestrian ramps on the south side. A trail connection has been added between lots 25 and 26.

5. The dwelling units with access from the alleys appear to be used in accordance with Section 17.13.070 (A)(2) which states, *"alleys can provide effective land use and density transitions in the middle of a block instead of along street frontages, where it is more desirable to have similar building types face one another."* Understood.
6. It appears that the provisions of Section 17.13.070 (A)(2) have been met with the intent to reduce traffic conflicts and aesthetic problems associated with frequent garage openings and driveway approaches abutting neighborhood streets.
    a. This is accomplished with the design of alleys and additional off-street parking locations (48 proposed spaces) throughout the subdivision. Understood.
7. Although Section 17.13.070 (A)(4) doesn't necessarily call out the Adobe Creek Wash, it should be observed as a unique natural feature. Will revise Narrative under "Natural Areas."
    a. The subdivision does appear to have been designed to respond to topographic and natural resource values. The application should justify the buffering criteria in Section 17.43.030 (D) as stated above. Will update the General Project Report to justify the buffering criteria.

8. Transportation System Planning and Development – Section 17.41
    a. The application proposes 1 primary access point for the first 2 Phases. These phases amount to a total of 67 lots. Based on the project narrative, Staff is assuming that the 67 lots will equal 67 dwelling units. Correct.
        i. The intention of providing additional access points (above 25 dwelling units) is to have interconnected neighborhoods to prevent pedestrian and vehicular traffic from using higher classified roadways.
            1. The subdivision does appear to meet the intent of connectivity once all Filings are completed.Understood.
            2. A permanent emergency access appears to be warranted with Phase 1. This could be accomplished on the trail located on Tract B in Phase 1 connecting to 19 Road. An emergency access has been provided on the trail located in Tract B. .
    b. Section 17.41.010 (C) states, "*Alternate street sections for minor collector and local streets internal to a subdivision will be considered but should meet the minimum lane widths identified in the City of Fruita Design Criteria and Construction Specifications Manual."*

i. The street sections proposed internal to the subdivision are 31.5' ROW, 22' asphalt, 6.5' curb gutter and sidewalk on one side.
    1. The minimum lane width for this street section is 28' asphalt. We are proposing an alternate street section. The design team sat down with staff and initially supported this idea, but mentioned we have to go in front of council to get the official approval.

9. CCR's
    a. Page 6 Section 3.5 Height Restrictions. The maximum height restriction is 35' and is measured from finished grade. Will revise.
    b. Page 12 Section 4.25 (a-d) is confusion and I'm not sure apply to this subdivision. Correct, this does not apply to this subdivision. Will revise.
    c. For clarity, please change references of Fruita's Development Code, or the like, to Fruita Land Use Code. Will revise.
    d. What is the plan for the HOA's maintenance of Irrigation Water and delivery system? HOA will maintain the irrigation water and delivery system.
        i. This is typically addressed in CCR's.Will revise.
    e. The HOA will be required to own and maintain the open space areas and these need to be dedicated to the HOA by separate instrument and documented and referenced on the Plat at the applicable Phases. Will revise.
    Revising the CC&Rs are in progress. The developer will provide a new copy to the City of Fruita before approval.

10. Who is going to maintain the off-street parking spaces? There are 48 spaces total proposed with a total of 10 separate areas. HOA will maintain.
    a. The city would prefer the HOA to own and maintain these as part of the open space Tracts. HOA will maintain.
11. For reference, the Land Use Code requires 3 off-street parking spaces per dwelling unit.
12. Please provide a water shares document and a headgate report. The headgate report must identify the appropriate shares allocated to the subject property. This will ensure that the shares are deliverable to the property. A water share invoice was provided with this submittal. Do we need to provide something else?

**Responses to comments must be shown with redlines all call outs. This will help Staff evaluate how the review comments have been addressed.

CITY OF FRUITA
CITY ENGINEER & PUBLIC WORKS REVIEW SHEET

PROJECT: Copper Creek West Preliminary Plan

Petitioner: North 25 LLC (Silas Coleman)
Kaart Planning (Ted Ciavonne)
Rolland Consulting Engineers (Eric Slivon)

Reviewer: Sam Atkins

Date: June 21, 2022
Response Date: 8-19-2022

REVIEW TYPE: (Check One)

___ Minor Subdivision
___ Lot Line Adjustment
___Site Design Review
____ Other:

_X_ Major Subdivision
___ Final Plat
____ Conditional Use Permit

REVIEW COMMENTS

1. There will need to be additional access. 138 units coming off one location does not meet the city's current code. I would think an emergency access to 19 Road would work. A Temporary Emergency access easement has been added to the Lot on the north side of the detention basin. The concrete sidewalk across the north side of the detention basin has been increased to 8' wide and 12 feet of Gravel drive added on the north side, partly into the emergency access easement.
2. The street sections proposed do not meet the city standards. The minimum standard is a 28-ft wide asphalt section with mountable curb gutter and sidewalk. We are proposing an alternate street section for the internal loop road that will have 22' asphalt and no parking on one side. 39 off-street parking spaces are also being provided. This alternate street section has been approved by the City of Grand Junction in the past and has proved it works.
3. The ¼ mile spacing road network is proposed for either major or minor collectors. The 19 ¼ road section should be a minor collector, which has a pavement section of 44-ft of asphalt and 7-ft curb gutter and sidewalk on each side with 60-ft of right of way. The street width and ROW width have been increased as requested.
4. Pavement sections do not match the section as proposed by Geotech report. Pavement sections have been updated. We are getting an update from Huddleston-Berry to see if the internal loop road can go down to 3" asphalt.
5. There is no section for the collector roads. The section proposed is just for local streets. We are getting an update from Huddleston-Berry and will verify the section for Collector Roads.
6. If there are any open ditches for irrigation, they will be required to be piped. The Tailwater/ Stormwater ditch along 19 Road will be piped. The location will be 34' from the section line or in the middle of the future landscape street between the curb and gutter and the detached walk of the future section. The plans show a manhole at the north end, north of 952 19 Road and in I ½ Road. The portion across 952 19 road will have to be piped with future road improvement and ROW acquisition.
7.

CITY OF FRUITA
CITY ENGINEER & PUBLIC WORKS REVIEW SHEET

8. Drainage from east half of 19 Road will need to be accommodated and not just passed through a culvert to a downstream condition. Drainage will be directed to the new 18 Pipe. The subdivision detention basin is very shallow and has no additional capacity to detain off-site flows.
9. Minimum pipe size in SWMM is 18-inch. All pipes in the ROW will be 18" minimum. Some private back yard drains may still be smaller.
10. Provide 10-ft of additional asphalt on East side of 19 Road. We request that the widening happen with the future 19 Road improvement project and not with this project.
11. Is there a reason why you are not matching crowns with the connections to the sewer line in 19 Road? No, Sewer grades have been raised to match crowns.
12. Iron Wheel Filing 1 was required to provide 25-ft of asphalt width knowing it would be the entrance to the subdivision. This project should do the same. Plans changed to provide 25' asphalt.
13. I ½ Road gutter slope does not meet the minimum grade per city standards. Grades changed to provide a minimum of 0.5%

Response to 2022-22 Copper Creek West Preliminary Plan Consolidated Review Comments

Grand Valley Drainage District

GVDD Has reviewed the preliminary plan documents. There are no District facilities on the project site, however, the historic drainage along 19 Rd outfalls into the District's Bartyzel Drain north of the Ranchman's. The District has determined that this drain does not have capacity for MS4 water.

Grand Valley Power

Thanks for the opportunity to review this project. GVP
Comments
1. The project is in the Grand Valley Power (GVP) service area.
2. This review does not start the design process with GVP. Please make an application for service by calling 242-0040 to start the design process, a cost estimate will be prepared. An engineering deposit may be required. Application started.
3. Three-phase power is available for this project, along 19 Road. Understood.
4. Need GVP electric layout on FINAL Utility Composite Plan. Showing the locations of streetlights, transformers, junction boxes, road crossings (number of conduits, type, size, depth & length), and any other needed equipment. Understood.
5. For new projects, some electrical equipment (transformers, metering, etc.) may have an ordering lead-time exceeding twelve months. Please plan accordingly. Understood.
6. Need 14' Multi-Purpose Easement along all Roads and streets. Understood.
7. No trees to be planted over the utility portion of Multi-Purpose Easement. Understood.
8. Any Utility / Multi-Purpose Easement that is also used for landscaping will need to have underground power lines buried in a duct system. Understood.
9. Irrigation and drainage lines should not be in the utility portion of the Multi-Purpose Easement. Fruita Engineering department is ok with the irrigation line in the very front of the 14' MPE, where water meters and hydrants would normally go. The east side of 19 ¼ Road does not have water meters or fire hydrants..)
10. Any relocation of existing overhead power lines, poles, guy/anchors, underground lines, transformers, or any other Grand Valley Power equipment is at the developer's expense.

All other comments either have been addressed or will address in Final Design.

Lower Valley Fire District

Review comments: 2022-22 Copper Creek West Preliminary Review

1. Fire hydrants are required at every street and alley intersection. All dwellings shall be within 250 feet of a fire hydrant. Ref: Appendix C as amended Sections 103.4 and 103.5 of the 2018 IFC. Coordinate the locations with Ute Water and LVFD.Understood.
2. Required fire flow is 1,000 GPM at 20 PSI residual for dwellings under 3600 SF and 1,500 GPM for dwellings over 3600 SF. Required fire flow may be reduced to less than 1,000 GPM by installing fire sprinkler systems in dwellings. Provide hydraulic calculations by a Colorado Professional Engineer that minimum required fire flows are available at the most remote fire hydrant. Understood.

3. Access Roads: More than 30 residences requires a second street access for use by the public and emergency services. Access to be roughly one half the length of the property or filing. The exception to this requirement is if all residences are protected by residential sprinkler systems. Ref: Appendix D Section D107 and Section 503.1.2 of the 2018 IFC. Provided a second access. Fruita Engineering Department is ok with the second access being only for emergency.
4. Alley and street ROWS shall be a minimum of 26 feet in width Ref: Appendix D 103.1 and 105.2
   The development is proposing an Alternate Street Section that will go in front of council for approval.
   According to Chapter 4 (c)(5) of the City of Fruita Design Criteria and Construction Specifications Manual - Alleys can have a right-of-way width of 20'

Mesa County Stormwater

Site is within the Stormwater Urbanized Area and is larger than 1 acre, this project will require a Mesa County Construction Stormwater Permit which can be applied for at https://h9.maintstar.co/MesaCountyportal/#/
When applying for the Stormwater permit, please provide a copy of the Construction Stormwater Management Plan (CSWMP), including site maps, and your COR400000 State discharge permit. All Mesa County permit fees must be paid before we can review your CSWMP.
This project is considered new development and will require a Post-Construction Operation and Maintenance Agreement for the permanent water quality feature in Tract A (detention pond). The O&M Agreement must be signed and notarized. This form can be found at the link provided below.
This will be taken care of in Final Design for Filing 1
https://stormwater.mesacounty.us/globalassets/stormwater/forms/documents/post- construction-om-agreementform.pdf

Mesa County Building Department

MCBD has no objections

Provide the soil report, Approved drainage plan and TOF tabulation sheet, Recorded plat & site plan to our office.

This will be taken care of in Final Design for Filing 1

Ute Water

Copper Creek West

- Contract Water Line assessments are due for the water line in the J Rd. alignment. Assessments must be paid prior to wet tap or tap sales for this development. Understood.
- Show dry utilities for further review. Revised.
- Show line terminus in I ½ per Ute standard. Revised.
- Show bends per Ute standard. Revised.
- Where needed add filing valves. Revised.
- Move FH near lot 74 to be near lot 73. Revised.
- Move water service for lot49 to Welcome Rd. Revised.

- Add a valve in Korima east of Welcome intersection. Revised.
- Show blowoffs at filing terminus. Revised.
- Move FH from tract G to tract H. Revised.

FRUITA
COLORADO

LAND DEVELOPMENT APPLICATION

Project Name: Copper Creek West
Project Location: 994 19 Road Fruita, Co 81521
Current Zoning District: ~~CR~~ CR Requested Zone: ~~CR~~ CR
Tax Parcel Number(s): 2697-222-00-102 Number of Acres: 25.9 acres
Project Type: Single family detached Subdivision (Preliminary Plan)

Property Owner: North 25 LLC
Property Owner: —
Address: PO Box 1473
City/State/Zip: G.J. Co 81502
Phone: 970 433-0773 Fax: —
E-mail: silascolman@gmail.com

Developer: Silas Colman
Contact: Silas Colman
Address: PO Box 1473
City/State/Zip: G.J. Co 81502
Phone: 970 433-0773 Fax: —
E-mail: silascolman@gmail.com

Please designate a representative as the coordinator for this application. The representative should attend all conferences/hearings, will receive all correspondence, and communicate all information to the property owners.

Owner Rep: Kaart. Planning
Contact: Ted Ciavonne
Address: 734 Main Street
City/State/Zip: G.J. Co 81501
Phone: 970 241-0745 Fax: —
E-mail: ted.ciavonne@kaart.com

Engineer: Rolland Consulting Engineers
Contact: Eric Slivon
Address: 405 Ridges Blvd
City/State/Zip: G.J. Co 81507
Phone: 970 243-8300 Fax: —
E-mail: eric@rcegj.com

This Notarized application authorizes the owner's representative, if designated, to act on behalf of the property owners regarding this application.

The above information is correct and accurate to the best of my knowledge.

Name of Legal Owner	Signature	Date
North 25, LLC		4/19/22
Name of Legal Owner	Signature	Date
Name of Legal Owner	Signature	Date

STATE OF COLORADO)
) ss.
COUNTY OF MESA)

SUNNI B GAGLER
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 19984030898
MY COMMISSION EXPIRES JANUARY 12, 2023

The foregoing instrument was acknowledged before me this 19th day of April, 2022

My Commission expires: 01-12-2023 Notary Public Sunni B Gagler

Copper Creek West
954 19 Road Fruita, CO
April 29, 2022 Revised 8-19-2022
Project Narrative for Preliminary Plan

General Description

The property, currently zoned Community Residential (CR), is located at 954 19 Road in Fruita, Colorado. The parcel dimensions are approximately 660 feet wide by 1,710 feet long (25.95 acres). Copper Creek West is proposing a mix of single family - detached and multi-family attached residential community lots. There will be 90 single-family detached lots and 49 multi-family detached lots for a total of 139 lots. The density equals 5.3 units/acre. This development will be asking for density bonuses for added density (explained below under Density Bonus).

Neighborhood Meeting

A Neighborhood Meeting was held on February 1, 2022 virtually via Zoom and 6 neighbors attended. Notes are attached to this submittal package.

Project Compliance

- Adopted Plans and Policies

  This development complies with The Future Land Use Map that designates this area as R 4-9.

  This development complies with the Fruita Land Use Code that designates this area under the CR zone (6 units per acre or 8 units per acre thru Density Bonus).

  The density of this project is 5.3 units per acre, but through the Density Bonus, this project will be 8 units/acre.

  Land Use in Surrounding Area

  The surrounding land uses in the vicinity of the subject property consist of single family residences on ag land. Properties to the north are in the county zoned URR & AFT. Adobe Creek runs along the east boundary. Properties to the south are zoned Rural Estate. 19 Road runs along the west property line, but across the street is a single-family subdivision currently under construction (zoned Community Mixes Use).

- Site Access and Traffic Patterns

  Vehicular access to this site is from the future I ½ Road on the south property line. I ½ Road will be improved as a 52' road section stubbing on the east

property line. The internal road system will be a 31.5' right-of-way with a sidewalk on one side. There will also be a north/south 44' right-of-way stubbing at both the north and south property lines. Per the attached Traffic Study, the subdivision is expected to generate a total of 1,250 trips over the course of an average weekday. The Traffic Study states that the two site accesses proposed at project buildout are anticipated to operate at acceptable Levels of Service through Year 2045 total traffic conditions. See the attached Traffic Study for a more detailed analysis.

- Availability of Utilities
  Ute Water has a main line in 19 Road.
  Sewer is provided by the City of Fruita within Iron Drive and 19 Road.
  Xcel Energy will provide gas and electricity. There is an overhead power line located along the west side of 19 Road.

- Special or Unusual Demands on Utilities (high water usage, grease, sedimentation, pre-treatment needs, etc.)
  This project will have expected, but not unusual demand on utilities.

- Effects on Public Facilities and Services (police, fire, sanitation, roads, parks, schools, irrigation, etc.)
  This project will have expected, but not unusual effects on public utilities.

- Site Soils and Geology
  The US Department of Agriculture, Natural Resources Conservation Service, has identified multiple soil classifications within the site - massadona silty clay loam, fruitland sandy clay loam, sagrlite loam, and turley clay loam. It can be anticipated that shallow groundwater and associated moisture sensitive soil conditions could likely impact foundation, utility, and pavement construction that may require special attention by qualified geotechnical experts.

- Natural Areas
  A portion of Adobe Creek runs along the east side of this property. A 100' buffer from the centerline of the wash to the edge of this development is required and provided.

Project Phasing

This project will be built in four phases, going from west to east. A Phasing Plan is attached to this submittal package.

Recapture

A recapture is not requested at this time.

Density Bonus

This project is requesting (3) density bonuses.

(1) 20% Open Space - This development has a total of 26.1% of landscape tracts (Tracts A-K). After removing the narrow strips, this development has a total of 20.9% usable open space.

1. All of the open space is easily accessible to the entire community.

a. The open space/common areas of this development will be a functional part of the design and not "left over" land. The cottage units and the multi-family units will front on open space. There are pedestrian walks throughout connecting all of the open space areas. The pedestrian walks will also connect to Adobe Creek Trail once it is constructed. All open space will be landscaped and maintained by the HOA.

b. The narrow strips are not counted in the 20.9%.

c. The open spaces include stormwater detention areas, open space in the middle of the cottage units (also used for stormwater), open space surrounding the irrigation pond and the natural area with bike trail along adobe creek.

d. The open spaces are visible from the street and will be easily accessible to all units by sidewalk.

e. There will be small shade shelters placed in the larger open spaces in between the cottage units. A larger clubhouse/barn type building that has yet to be designed will be placed near the irrigation pond.

f. There are no existing developments adjacent to this property other than Iron Wheel across 19 Road. This development will provide two sidewalks to 19 Road to allow connectivity.

(2) Bike and Trail Connections -

This project includes an internal network of pedestrian sidewalks along the street as well as internally, throughout the open space. There will be two sidewalk accesses to 19 Road. A 10' trail will be built along Adobe Creek (Adobe Creek Trail) and will be 1,200 feet long.

(4) Mix of Housing Types - This development will have a mix of single-family detached, as well as multi-family attached. The percentage of this mix will be 64% single-family and 36% multi-family. Within the single-family residential type, there will be two different housing types: (1) Cottage style home: smaller lot, alley loaded, fronting on open space and (2) standard single family home: larger lot, faces street, but will have views of the open space. The multi-family units will be a mix of one story and two story units as well as alley vs street loaded.

Credits Against Impact Fees

The City of Fruita has offered the following credits against Impact Fees:

-Adobe Creek Trail: The cost of building the 10' concrete Adobe Creek Trail within this property can go towards Impact Fees.

-Frontage Landscape along 19 Road: The cost of landscape within the 14' tract along 19 Road can go towards Impact Fees.

Sketch Plan

A Sketch Plan was not submitted for this proposed development.

MCSM 563-2
NORTH 1/16 CORNER
SECTION 22
T.1N., R.2W. U.M.
SECTION 22

968 19 ROAD
STILLWATER COWBOY CHURCH

S 89°50'06" E 1290.80' NORTH LINE S1/2 SW1/4 NW1/4 SECTION 22

ASPHALT DRIVEWAY

MBX

WIRE FENCE

BASIS OF BEARINGS
N 00°34'09" E 1319.99'

19 ROAD

30.00' RIGHT-OF-WAY REC. NO. 2364298

N 00°34'09" E 469.97'

20' R.O.W. DEDICATION

WEST LINE SECTION 22

50' R.O.W.

LOT 19 7813 S.F.
LOT 20 6719 S.F.
LOT 21 6459 S.F.
LOT 22 4535 S.F.
LOT 23 4534 S.F.
LOT 24 6546 S.F.
LOT 25 4503 S.F.
TRACT C 760 S.F.
LOT 26 6516 S.F.
LOT 27 6142 S.F.
LOT 28 5968 S.F.
LOT 62 6006 S.F.
LOT 63 6185 S.F.
LOT 64 6366 S.F.
LOT 65 6515 S.F.
LOT 66 4550 S.F.
LOT 67 6531 S.F.

10' DRAINAGE EASEMENT
14' MULTI-PURPOSE EASEMENT

PHASE 1
PHASE 2
PHASE 3

6.5 FT. DW CURB, GUTTER AND WALK
22' ASPHALT
31.5' R.O.W.
2 FT. VERT. CURB AND GUTTER

KORIMA LOOP ROAD

CONCRETE PARKING

LOT 18 6379 S.F.
LOT 17 4789 S.F.
LOT 16 4804 S.F.
LOT 15 6504 S.F.
9' TEMPORARY EMERGENCY ACCESS EASEMENT
12 FT. GRAVEL

KORIMA LOOP
6.5 FT. DW CURB, GUTTER AND WALK
2 FT. VERT. CURB AND GUTTER
31.5' R.O.W.

5 FT. SIDEWALK

LOT 29 4200 S.F.
LOT 30 4200 S.F.
LOT 31 4200 S.F.
LOT 32 4200 S.F.
LOT 33 4200 S.F.
LOT 34 4200 S.F.
LOT 35 4200 S.F.
LOT 36 4200 S.F.

ALLEY R.O.W.
20' CONCRETE ALLEY
20' R.O.W.

TRACT D 8220 S.F.

2 FT. CONC. DRAIN PAN

TRACT E 44016 S.F.

LOT 37 4200 S.F.
LOT 38 4200 S.F.
LOT 39 4200 S.F.
LOT 40 4200 S.F.
LOT 52 4200 S.F.
LOT 51 4200 S.F.
LOT 50 4200 S.F.
LOT 49 4200 S.F.

TRACT F 44286 S.F.

SHELTER

LOT 53 4200 S.F.
LOT 54 4200 S.F.
LOT 55 4200 S.F.
LOT 56 4200 S.F.

PHASE 2
PHASE 1

8 FT. SIDEWALK

20' UTILITY EASEMENT

14' MULTI-PURPOSE EASEMENT REC. NO. 2364297

TRACT B 19876 S.F.
DETENTION

LOT 14 6947 S.F.
LOT 13 4793 S.F.
LOT 12 4864 S.F.
LOT 11 4864 S.F.
LOT 10 8329 S.F.

LOT 41 4200 S.F.
LOT 42 4200 S.F.
LOT 43 4200 S.F.
LOT 44 4200 S.F.
LOT 48 4200 S.F.
LOT 47 4200 S.F.
LOT 46 4200 S.F.
LOT 45 4200 S.F.

DETENTION

LOT 57 4200 S.F.
LOT 58 4200 S.F.
LOT 59 4200 S.F.
LOT 60 4200 S.F.

CONCRETE PARKING

ENTRY

2" ALLOY CAP
0.1' BELOW GROUND

CONC. DITCH

N 89°51'32" W 290.01'

952 19 ROAD
MELISSA KELLEY
PAWEL SZAFRUGA

GRAVEL DRIVEWAY

LOT 9 6459 S.F.
10' DRAINAGE EASEMENT

TRACT A 7324 S.F.
DETENTION

LOT 8 7473 S.F.
LOT 7 6770 S.F.
LOT 6 4725 S.F.
LOT 5 4725 S.F.
LOT 4 6825 S.F.
LOT 3 6825 S.F.
LOT 2 5972 S.F.
LOT 1 5972 S.F.
LOT 61 6825 S.F.
LOT 82 6825 S.F.

14' MULTI-PURPOSE EASEMENT

N 00°34'09" E 190.01'

GATE

N 89°51'32" W 260.01'

6' WOOD FENCE

DWY

30.00' RIGHT-OF-WAY REC. NO. 2364298

GRAVEL DRIVEWAY

22' ASPHALT
31.5' R.O.W.
6.5 FT. DW CURB, GUTTER AND WALK

2 FT. VERT. CURB AND GUTTER

KORIMA LOOP ROAD

WELCOME ROAD

6.5 FT. DW CURB, GUTTER AND WALK
14' R.O.W.
28' ASPHALT

7 FT. VERT. CURB, GUTTER AND WALK
60' R.O.W.
25' ASPHALT
2 FT. GRAVEL SHOULDER

I 1/2 ROAD
I 1/2 ROAD RIGHT-OF-WAY PLAT BOOK 13 PAGE 352
30' R.O.W.

N 89°51'32" W 1001.66'

SOUTH LINE SW1/4 NW1/4 SECTION 22

GRAVEL DRIVEWAY

WIRE FENCE

2" ALLOY CAP
FLUSH WITH GROUND

GATE

VOLLEYBALL NET POLE

MCSM 562-3
WEST 1/4 CORNER
SECTION 22
T.1N., R.2W. U.M.

948 19 ROAD
MARTIN A FABER
DENISE A FABER

938 19 ROAD
KEITH F HARMON
MARLYS R HARMON

0' 40' 80' 120'
SCALE : 1"=40'

LEGEND

	MESA COUNTY SURVEY MARKER
MCLCS	MESA COUNTY LOCAL COORDINATE SYSTEM
MCSM	MESA COUNTY SURVEY MARKER
NAVD-88	NORTH AMERICA VERTICAL DATUM 1988
ROW	RIGHT-OF-WAY
DW	EXISTING DRIVEWAY
	EXISTING WIRE FENCE LINE
	EXISTING EDGE OF PAVEMENT
	PHASE BOUNDARY (SUBJECT TO CHANGE)

AREA SUMMARY

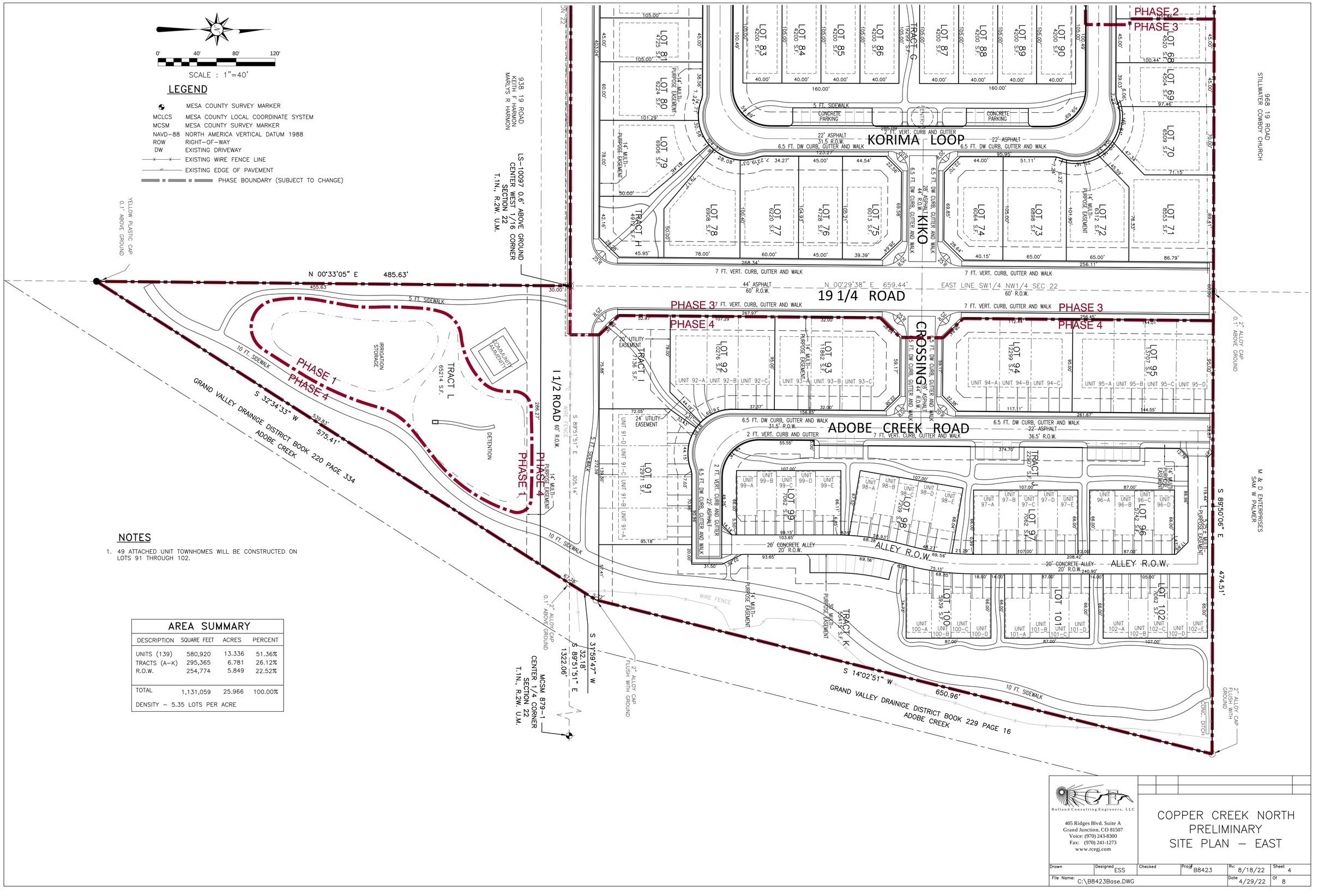
DESCRIPTION	SQUARE FEET	ACRES	PERCENT
UNITS (139)	580,920	13.336	51.36%
TRACTS (A-K)	295,365	6.781	26.12%
R.O.W.	254,774	5.849	22.52%
TOTAL	1,131,059	25.966	100.00%

DENSITY - 5.35 LOTS PER ACRE

Rolland Consulting Engineers, LLC
405 Ridges Blvd. Suite A
Grand Junction, CO 81507
Voice: (970) 243-8300
Fax: (970) 241-1273
www.rcegj.com

COPPER CREEK WEST
PRELIMINARY
SITE PLAN - WEST

Drawn	Designed	Checked	Proj#	Rv:	Sheet
	ESS		B8423	8/18/22	3
File Name: C:\B8423Base.DWG				Date 4/29/22	Of 8



NOTES

1. 49 ATTACHED UNIT TOWNHOMES WILL BE CONSTRUCTED ON LOTS 91 THROUGH 102.

AREA SUMMARY

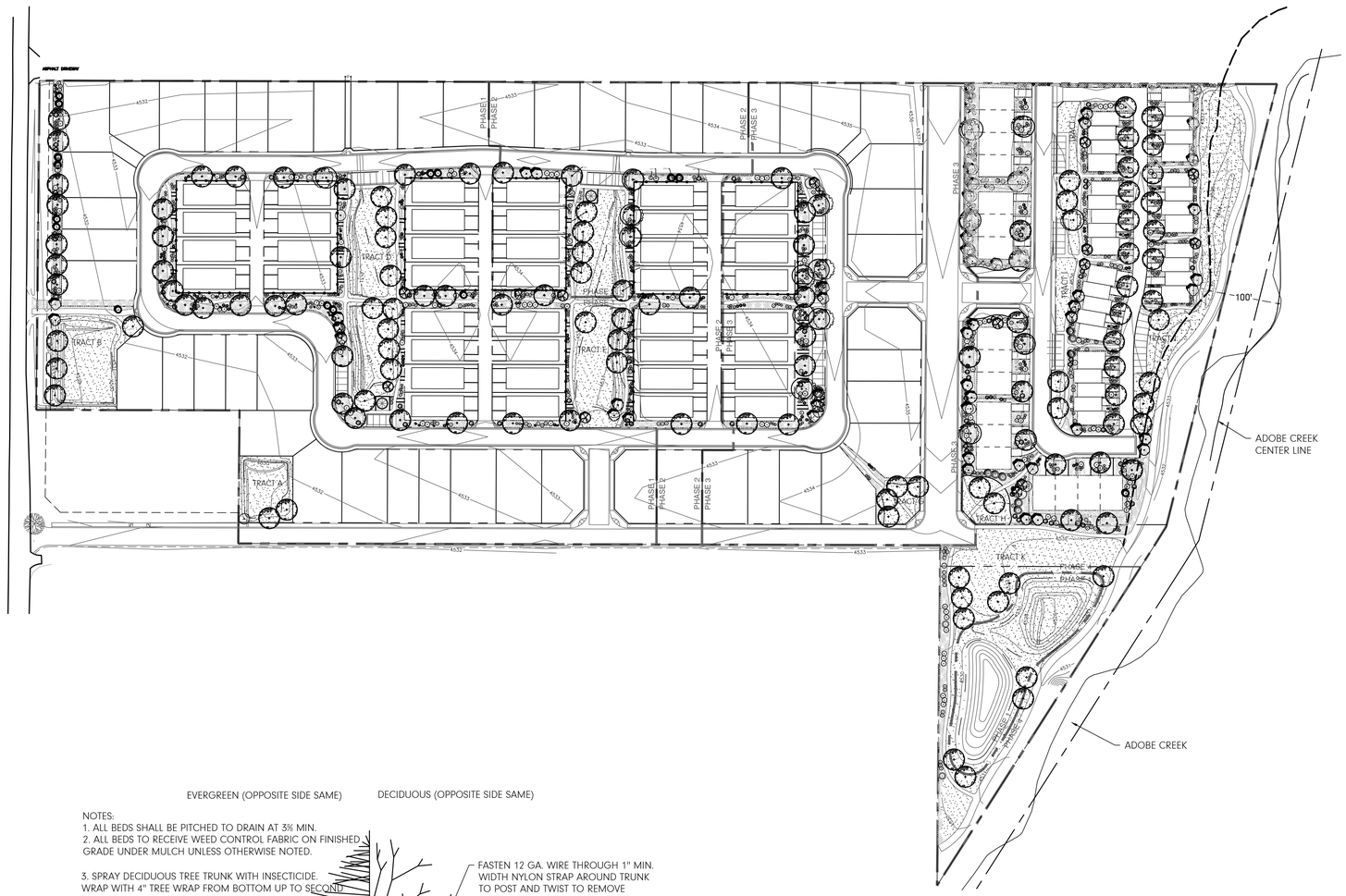
DESCRIPTION	SQUARE FEET	ACRES	PERCENT
UNITS (139)	580,920	13.336	51.36%
TRACTS (A–K)	295,365	6.781	26.12%
R.O.W.	254,774	5.849	22.52%
TOTAL	1,131,059	25.966	100.00%

DENSITY – 5.35 LOTS PER ACRE

Rolland Consulting Engineers, LLC
405 Ridges Blvd. Suite A
Grand Junction, CO 81507
Voice: (970) 243-8300
Fax: (970) 241-1273
www.rcegj.com

COPPER CREEK NORTH
PRELIMINARY
SITE PLAN – EAST

Drawn	Designed	Checked	Proj#	Rv:	Sheet
	ESS		B8423	8/18/22	4
File Name: C:\B8423Base.DWG			Date 4/29/22		Of 8



LANDSCAPE LEGEND

- SHRUB BED WITH GRANITE MULCH
- TURFGRASS
- PHASE LINE
- DECIDUOUS SHADE TREE
- DECIDUOUS ORNAMENTAL TREE
- EVERGREEN TREE
- SHRUB, ORNAMENTAL GRASS AND PERENNIAL PLANTINGS

PLANTING NOTES

1. CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
2. ALL LANDSCAPING AND IRRIGATION TO CONFORM TO CURRENT CITY OR COUNTY CODE.
3. EQUAL PART MIXTURE OF ROUND-UP AND 2-4-D DILUTED AS PER MANUFACTURER'S RECOMMENDATIONS SHALL BE APPLIED TO ALL ACTIVELY GROWING WEEDS TWO WEEKS PRIOR TO ANY OPERATIONS.
4. ALL SHRUB BEDS AND LAWN AREAS TO RECEIVE SOIL AMENDMENT. SHRUB BEDS TO RECEIVE WEED FABRIC AND 3 INCH DEPTH OF MULCH.
5. AREAS TO BE PLANTED (AS PER DRAWINGS) TO RECEIVE SOIL AMENDMENT. REMOVE UNSATISFACTORY MATERIAL (INCLUDING ROAD BASE, ASPHALT, CONCRETE AND TRASH) AND REMOVE FROM SITE. ALL LANDSCAPE AREAS TO RECEIVE 6 YDS/1000 S.F. SOIL AMENDMENT. SCARIFY ALL AREAS TO RECEIVE SOIL AMENDMENT TO A DEPTH OF 6".
6. SOIL AMENDMENT IS TO CONSIST OF 50% GROUND WELL-AGED MANURE, 50% FINELY GROUND AND AGED WOOD CHIPS. AMENDMENT IS TO BE INCORPORATED WITH FERTILIZER BY TILLING AT THE RATE OF 6 CUBIC YARDS/1000 SF INTO ALL LAWN AND SHRUB AREAS.
7. SOIL IS TO BE COMPACTED TO 85% MODIFIED PROCTOR (WHEEL ROLL) TO MINIMIZE SETTLING. BEDS ARE TO BE FILLED TO A DEPTH OF 6" ABOVE ADJACENT EDGE OF CURB, SHAPED TO FORM MOUNDED PLANTING AREA. SHRUB BED TO BE FINISHED WITH A 4:1 SLOPE FROM 2" BELOW ADJACENT CONCRETE TO FINISH GRADE. SHRUB BEDS ADJACENT TO BUILDINGS ARE TO DRAIN AWAY FROM BUILDING.
8. WEED FABRIC IS TO BE 3.5 OZ. SPINBOND, PERMEABLE MATERIAL BY LANDMASTER, OR EQUAL. WEED FABRIC IS TO OVERLAP 6 INCHES AT SEAMS WITH NO GAPS AT EDGES. FABRIC IS TO BE PINNED IN PLACE WITH SOD STAPLE 5' ON CENTER AND IN ALL CORNERS.
9. SHRUBS AND TREES ARE TO SPACED AS SCALED FROM THE PLANTING PLAN.
10. MULCH FOR SHRUB BEDS SHALL BE 3/4" TAN GRANITE. MULCH SHALL BE FREE OF TRASH, STICKS, ROOTS OR OTHER DEBRIS.
11. DI-AMMONIUM PHOSPHATE (18-46-0) SHALL BE SUPPLIED IN QUANTITY NECESSARY TO APPLY 1 LB/1000 SF TO ALL LAWN SEED AREAS.
12. LAWN AREAS ARE TO BE HYDROSEEDED WITH SPECIES AND RATES SHOWN ON THIS SHEET AND HYDROMULCHED WITH DYE TO ALLOW INSPECTION FOR COVERAGE. CONTRACTOR IS RESPONSIBLE FOR CLEANING ANY NON-LAWN SURFACES.
13. CONTRACTOR IS TO GUARANTEE ALL PLANT MATERIALS FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE OF WORK. CONTRACTOR IS TO MAINTAIN LAWN AREAS AFTER EACH AREA IS SEEDED AND CONTINUE FOR 30 DAYS OR UNTIL FINAL ACCEPTANCE, WHICHEVER IS LONGER.

NOTE:

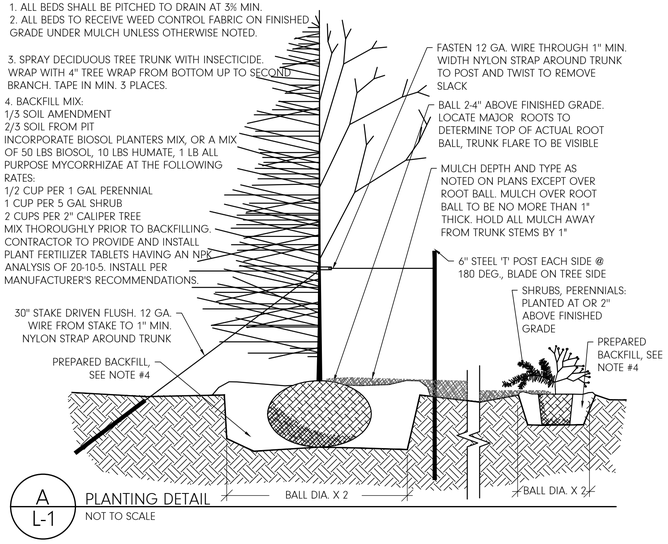
STATE LAW REQUIRES THESE PLANS TO BE PREPARED AND STAMPED BY A LICENSED LANDSCAPE ARCHITECT. SUBSEQUENTLY, ANY CHANGES OR MODIFICATIONS TO THESE PLANS, INCLUDING BUT NOT LIMITED TO LANDSCAPE MATERIAL SUBSTITUTIONS AND/OR RELOCATIONS, MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. FAILURE TO DO SO IS CONSIDERED A CRIMINAL OFFENSE PER CRS 12-45.

EVERGREEN (OPPOSITE SIDE SAME) DECIDUOUS (OPPOSITE SIDE SAME)

NOTES:
1. ALL BEDS SHALL BE PITCHED TO DRAIN AT 3% MIN.
2. ALL BEDS TO RECEIVE WEED CONTROL FABRIC ON FINISHED GRADE UNDER MULCH UNLESS OTHERWISE NOTED.

3. SPRAY DECIDUOUS TREE TRUNK WITH INSECTICIDE. WRAP WITH 4" TREE WRAP FROM BOTTOM UP TO SECOND BRANCH. TAPE IN MIN. 3 PLACES.

4. BACKFILL MIX:
1/3 SOIL AMENDMENT
2/3 SOIL FROM PIT
INCORPORATE BIOSOL PLANTERS MIX, OR A MIX OF 50 LBS BIOSOL, 10 LBS HUMATE, 1 LB ALL PURPOSE MYCORRHIZAE AT THE FOLLOWING RATES:
1/2 CUP PER 1 GAL PERENNIAL
1 CUP PER 5 GAL SHRUB
2 CUPS PER 2" CALIPER TREE
MIX THOROUGHLY PRIOR TO BACKFILLING. CONTRACTOR TO PROVIDE AND INSTALL PLANT FERTILIZER TABLETS HAVING AN NPK ANALYSIS OF 20-10-5. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.



A / L-1 PLANTING DETAIL
NOT TO SCALE

ACCEPTANCE BLOCK

THE CITY OF FRUITA REVIEW CONSTITUTES GENERAL COMPLIANCE WITH THE CITY'S DEVELOPMENT STANDARDS, SUBJECT TO THESE PLANS BEING SEALED, SIGNED, AND DATED BY THE PROFESSIONAL OF RECORD. REVIEW BY THE CITY DOES NOT CONSTITUTE APPROVAL OF THE PLAN DESIGN. THE CITY NEITHER ACCEPTS NOR ASSUMES ANY LIABILITY FOR ERRORS OR OMISSIONS. ERRORS IN THE DESIGN OR CALCULATIONS REMAIN THE RESPONSIBILITY OF THE PROFESSIONAL OF RECORD.

CONSTRUCTION MUST COMMENCE WITHIN ONE YEAR FROM THE DATE OF PLAN SIGNATURE.

CITY PLANNER _____ Date _____

Kaart PLANNING
LAND PLANNING AND LANDSCAPE ARCHITECTURE

734 Main Street
Grand Junction, CO 81501
970-241-0745 (P)
kaart.com

COPPER CREEK WEST
FRUITA, COLORADO

SUBMITTAL TYPE
PH 1 Final Landscape Plan
Overall Preliminary Landscape

DRAWN BY
MH

CHECKED
MR

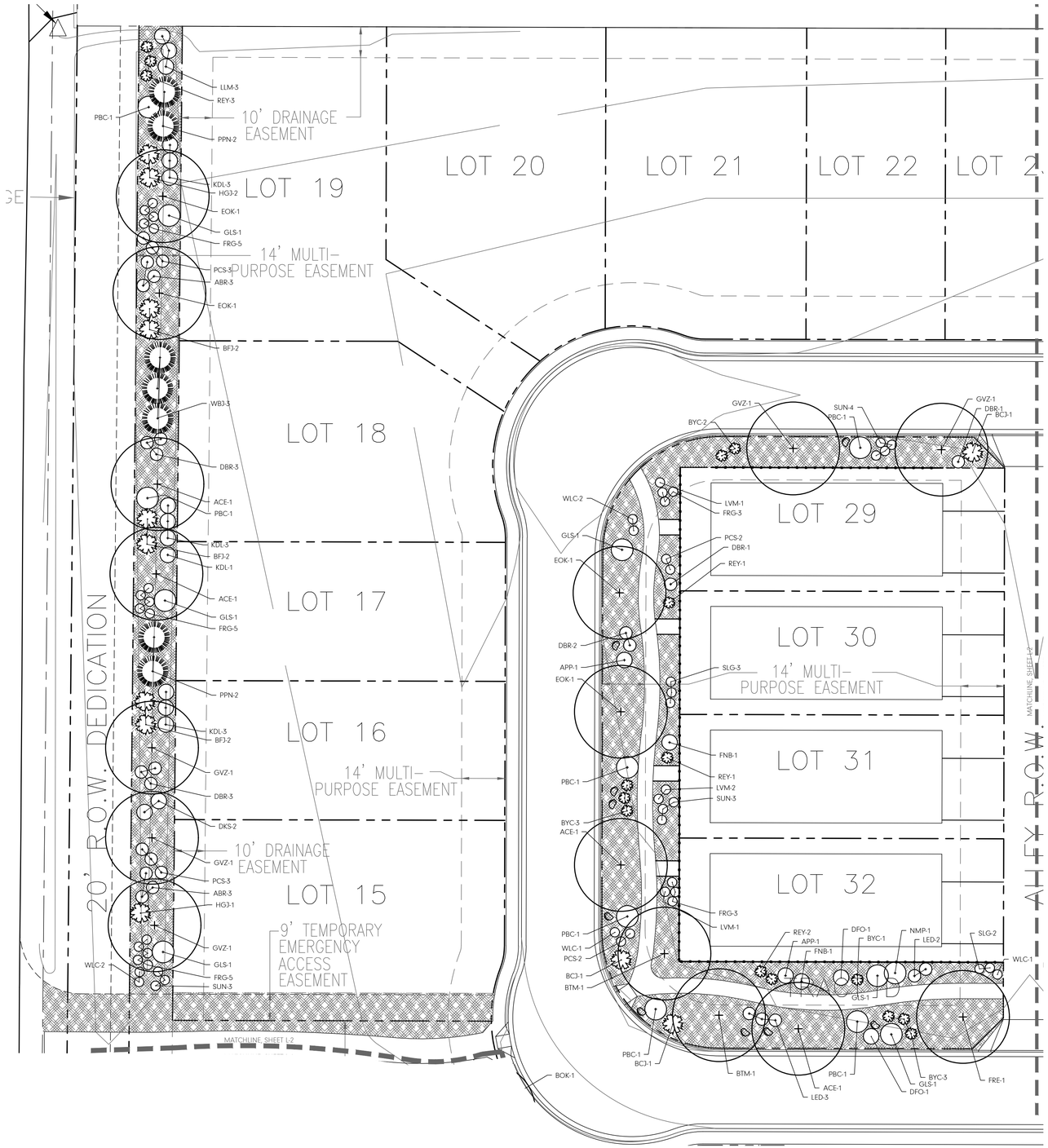
JOB NUMBER
1810

DATE
2022 04 20

REVISIONS
8-19-2022 Respones to Rnd 1 Comments

0 100 200

L-1



LANDSCAPE LEGEND

SHADE TREE

ORNAMENTAL TREE

EVERGREEN TREE

EXISTING TREE

DECIDUOUS SHRUBS

EVERGREEN SHRUBS

PERENNIALS

SHRUB BED WITH CONCRETE EDGER

TURF WITH CONCRETE EDGER

NATIVE SEED WITH CONCRETE EDGER

BOULDERS

PLANTING NOTES

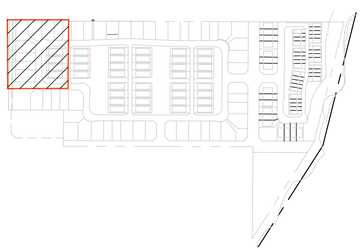
1. CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
2. ALL LANDSCAPING AND IRRIGATION TO CONFORM TO CURRENT CITY OR COUNTY CODE.
3. EQUAL PART MIXTURE OF ROUND-UP AND 2-4-D DILUTED AS PER MANUFACTURER'S RECOMMENDATIONS SHALL BE APPLIED TO ALL ACTIVELY GROWING WEEDS TWO WEEKS PRIOR TO ANY OPERATIONS.
4. ALL SHRUB BEDS AND LAWN AREAS TO RECEIVE SOIL AMENDMENT. SHRUB BEDS TO RECEIVE WEED FABRIC AND 3 INCH DEPTH OF MULCH.
5. AREAS TO BE PLANTED (AS PER DRAWINGS) TO RECEIVE SOIL AMENDMENT. REMOVE UNSATISFACTORY MATERIAL (INCLUDING ROAD BASE, ASPHALT, CONCRETE AND TRASH) AND REMOVE FROM SITE. ALL LANDSCAPE AREAS TO RECEIVE 6 YDS/1000 S.F. SOIL AMENDMENT. SCARIFY ALL AREAS TO RECEIVE SOIL AMENDMENT TO A DEPTH OF 6".
6. SOIL AMENDMENT IS TO CONSIST OF 50% GROUND WELL-AGED MANURE, 50% FINELY GROUND AND AGED WOOD CHIPS. AMENDMENT IS TO BE INCORPORATED WITH FERTILIZER BY TILLING AT THE RATE OF 6 CUBIC YARDS/1000 SF INTO ALL LAWN AND SHRUB AREAS.
7. SOIL IS TO BE COMPACTED TO 85% MODIFIED PROCTOR (WHEEL ROLL) TO MINIMIZE SETTLING. BEDS ARE TO BE FILLED TO A DEPTH OF 6" ABOVE ADJACENT EDGE OF CURB, SHAPED TO FORM MOUNDED PLANTING AREA. SHRUB BED TO BE FINISHED WITH A 4:1 SLOPE FROM 2" BELOW ADJACENT CONCRETE TO FINISH GRADE. SHRUB BEDS ADJACENT TO BUILDINGS ARE TO DRAIN AWAY FROM BUILDING.
8. WEED FABRIC IS TO BE 3.5 OZ. SPINBOND, PERMEABLE MATERIAL BY LANDMASTER, OR EQUAL. WEED FABRIC IS TO OVERLAP 6 INCHES AT SEAMS WITH NO GAPS AT EDGES. FABRIC IS TO BE PINNED IN PLACE WITH SOD STAPLE 5' ON CENTER AND IN ALL CORNERS.
9. SHRUBS AND TREES ARE TO SPACED AS SCALED FROM THE PLANTING PLAN.
10. MULCH FOR SHRUB BEDS SHALL BE 3/4" TAN GRANITE. MULCH SHALL BE FREE OF TRASH, STICKS, ROOTS OR OTHER DEBRIS.
11. DI-AMMONIUM PHOSPHATE (18-46-0) SHALL BE SUPPLIED IN QUANTITY NECESSARY TO APPLY 1 LB/1000 SF TO ALL LAWN SEED AREAS.
12. LAWN AREAS ARE TO BE HYDROSEEDED WITH SPECIES AND RATES SHOWN ON THIS SHEET AND HYDROMULCHED WITH DYE TO ALLOW INSPECTION FOR COVERAGE. CONTRACTOR IS RESPONSIBLE FOR CLEANING ANY NON-LAWN SURFACES.
13. CONTRACTOR IS TO GUARANTEE ALL PLANT MATERIALS FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE OF WORK. CONTRACTOR IS TO MAINTAIN LAWN AREAS AFTER EACH AREA IS SEEDED AND CONTINUE FOR 30 DAYS OR UNTIL FINAL ACCEPTANCE, WHICHEVER IS LONGER.

PHASE 1 PLANT LIST

Qty	Key	Common Name	Scientific Name	Size	Mature Height
Deciduous Trees					
7	ACE	Accolade Elm	Ulmus morton	2"	50-60'
4	BOK	Burr Oak	Quercus macrocarpa	2"	50-60'
4	BTM	Big Tooth(Wasatch) Maple	Acer grandidentatum	2"	23-37'
6	EOK	English Oak	Quercus robur	2"	40-60'
10	FRE	Frontier Elm	Ulmus x Frontier	2"	25-35'
8	GVZ	Green Vase Zelkova	Zelkova serrata 'Green Vase'	2"	40-60'
5	HBY	Hackberry	Celtis occidentalis	2"	35-60'
1	JTL	Japanese Tree Lilac	Syringa reticulata 'Ivory Silk'	1-1/2"	15-18'
1	KCT	Kentucky Coffeetree	Gymnocladus dioicus	2"	55-65'
5	RRC	Royal Raindrops Crabapple	Malus 'JFS-KW5'	1-1/2"	17-22'
8	SBE	Sensation Box Elder	Acer negundo 'Sensation'	2"	25-40'
2	SKH	Skyline Honeylocust	Gleditsia triacanthos var. inermis 'Skyline'	2"	40-50'
5	SSC	Spring Snow Crabapple	Malus 'Spring Snow'	1-1/2"	15-20'
2	WKH	Winter King Hawthorn	Crataegus viridis 'Winter King'	1-1/2"	15-20'
Evergreen Trees					
8	PPN	Pinon Pine	Pinus cembroides edulis	6'	10-15'
5	WBJ	Wichita Juniper	Juniperus sabina "Wichita"	6'	10-15'
Deciduous Shrubs					
9	ABR	Appleblossom Carpet Rose	Rosa x Flower Carpet 'Noamel'	5 gal	1-2'
8	APP	Apache Plume	Fallugia paradoxa	5 gal	3-6'
18	DBR	Dwarf Blue Rabbit Brush	Chrysothamnus nauseosus	5 gal	2-5'
8	DKS	Dark Knight Blue Mist Spiraea	Caryopteris incana "Dark Knight"	5 gal	3-5'
7	FNB	Fern Bush	Chamaebatiaria millefolium	5 gal	4-7'
18	GLS	Gro-low Sumac	Rhus aromatica 'Gro-Low'	5 gal	1.5-2.5'
11	KDL	Korean Dwarf Lilac	Syringa meyeri 'Pablin'	5 gal	3-4'
20	LED	Leadplant	Amorpha canescens	5 gal	2-3'
9	LLM	Littleleaf Mockorange	Philadelphus Microphyllus	5 gal	4-5'
7	NMP	New Mexico Privet	Foresteria neo-mexicana	5 gal	5-7'
17	PBC	Pawnee Buttes Sand Cherry	Prunus besseyi 'Pawnee Buttes'	5 gal	1-2'
Evergreen Shrubs					
8	BCJ	Blue Chip Juniper	Juniperus horizontalis 'Blue Chip'	5 gal	.5-1'
10	BFJ	Buffalo Juniper	Juniperus sabina 'Buffalo'	5 gal	1-2'
22	BYC	Banana Yucca	Yucca baccata	5 gal	2-4'
9	HGJ	Hughes Juniper	Juniperus horizontalis 'Hughes'	5 gal	.5-1'
17	REY	Red Yucca	Hesperaloe parviflora	5 gal	2-4'
Perennials/Ground Covers					
5	DFO	Desert 4 O'Clock	Mirabilis multiflora	1 gal	1-2.5'
17	LVM	Munstead Lavender	Lavendula 'Munstead'	1 gal	1-2.5'
14	PCS	Powis Castle Sage	Artemisia 'Powis Castle'	5 gal	2-2.5'
16	SUN	Sunset Hyssop	Agastache rupestris	1 gal	1.5-3'
16	WLC	Walker's Low Catmint	Nepeta x Walker's Low	1 gal	1-2'
Ornamental Grasses					
17	CSG	Cheyenne Sky Prairie Switch Grass	Panicum virgatum 'Cheyenne Sky'	1 gal	2-3'
11	DFG	Dwarf Fountain Grass	Pennisetum alopecuroides 'Hameln'	1 gal	1.5-3'
43	FRG	Feather Reed Grass	Calamagrostis x acutiflora 'Karl Foerster'	1 gal	2-4'
17	SLG	Sand Love Grass	Eragrostis trichodes	1 gal	2-4'

NOTES:
1. PLANT GROWTH CHARACTERISTICS VARY DUE TO ENVIRONMENTAL CONDITIONS, THEREFORE A RANGE OF AVERAGE MATURE HEIGHTS ARE INDICATED.
2. QUANTITIES ARE INCLUSIVE OF ALL PHASE 1 LANDSCAPE SHEETS. (L-2 TO L-4)

KEY MAP
NOT TO SCALE



ACCEPTANCE BLOCK

THE CITY OF FRUITA REVIEW CONSTITUTES GENERAL COMPLIANCE WITH THE CITY'S DEVELOPMENT STANDARDS, SUBJECT TO THESE PLANS BEING SEALED, SIGNED, AND DATED BY THE PROFESSIONAL OF RECORD. REVIEW BY THE CITY DOES NOT CONSTITUTE APPROVAL OF THE PLAN DESIGN. THE CITY NEITHER ACCEPTS NOR ASSUMES ANY LIABILITY FOR ERRORS OR OMISSIONS. ERRORS IN THE DESIGN OR CALCULATIONS REMAIN THE RESPONSIBILITY OF THE PROFESSIONAL OF RECORD.

CONSTRUCTION MUST COMMENCE WITHIN ONE YEAR FROM THE DATE OF PLAN SIGNATURE.

CITY PLANNER _____ Date _____

Kaart
PLANNING
LAND PLANNING AND
LANDSCAPE ARCHITECTURE

734 Main Street
Grand Junction, CO 81501
970-241-0745 (P)
kaart.com

COPPER CREEK WEST
FRUITA, COLORADO

SUBMITTAL TYPE
PH 1 Final Landscape Plan
Overall Preliminary Landscape

DRAWN BY
MH

CHECKED
MR

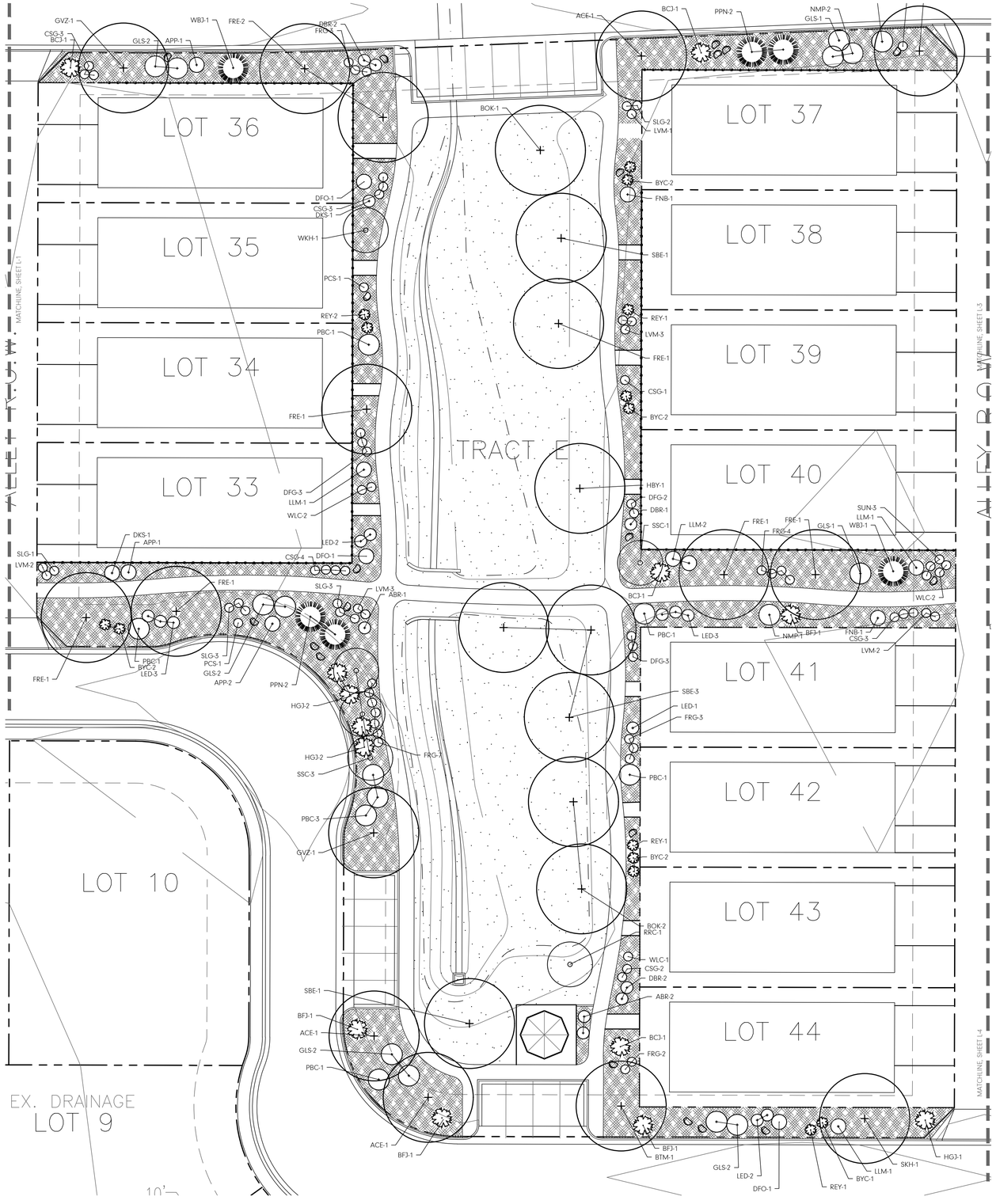
JOB NUMBER
1810

DATE
2022 04 20

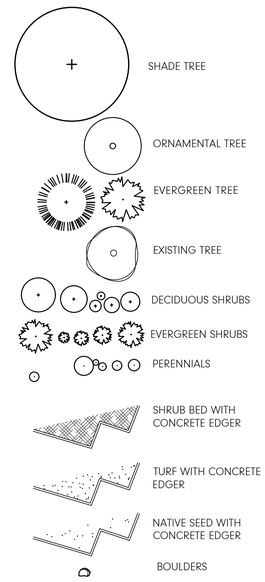
REVISIONS
8-19-2022 Respones to Rnd 1 Comments

0 20 40

L-2



LANDSCAPE LEGEND



LAWN SEED MIX

COMMON NAME	SCIENTIFIC NAME	PLS/ ACRE	% OF MIX BY QTY
KENTUCKY BLUERGRASS "REVEILLE"	POA PRATANSE 'Reveille'	16 LBS	80%
PERENNIAL RYE "PINNACLE"	LOLIUM PERENNE "Pinnacle"	4 LBS	20%

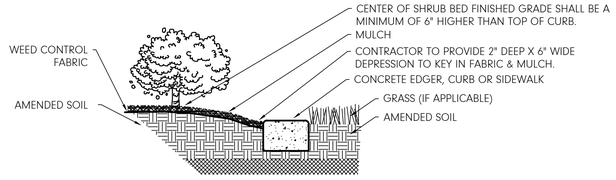
PHASE 1 PLANT LIST, NO QUANTITIES

Key	Common Name	Scientific Name	Size	Mature Height
Deciduous Trees				
ACE	Accolade Elm	Ulmus morton	2"	50-60'
BOK	Burr Oak	Quercus macrocarpa	2"	50-60'
BTM	Big Tooth(Wasatch) Maple	Acer grandidentatum	2"	25-37'
EOK	English Oak	Quercus robur	2"	40-60'
FRE	Frontier Elm	Ulmus x Frontier	2"	25-35'
GVZ	Green Vase Zelkova	Zelkova serrata 'Green Vase'	2"	40-60'
HBY	Hackberry	Celtis occidentalis	2"	35-60'
JTL	Japanese Tree Lilac	Syringa reticulata 'Ivory Silk'	1-1/2"	15-18'
KCT	Kentucky Coffeetree	Gymnocladus dioicus	2"	55-65'
RRC	Royal Raindrops Crabapple	Malus 'JFS-KW5'	1-1/2"	17-22'
SBE	Sensation Box Elder	Acer negundo 'Sensation'	2"	25-40'
SKH	Skyline Honeylocust	Gleditsia triacanthos var. inermis 'Skyline'	2"	40-50'
SSC	Spring Snow Crabapple	Malus 'Spring Snow'	1-1/2"	15-20'
WKH	Winter King Hawthorn	Crataegus viridis 'Winter King'	1-1/2"	15-20'
Evergreen Trees				
PPN	Pinon Pine	Pinus cembroides edulis	6'	10-15'
WHJ	Wichita Juniper	Juniperus sabina "Wichita"	6'	10-15'
Deciduous Shrubs				
ABR	Appleblossom Carpet Rose	Rosa x Flower Carpet 'Noamei'	5 gal	1-2'
APP	Apache Plume	Fallugia paradoxa	5 gal	3-6'
DBR	Dwarf Blue Rabbit Brush	Chrysothamnus nauseosus	5 gal	2-5'
DKS	Dark Knight Blue Mist Spiraea	Caryopteris incana "Dark Knight"	5 gal	3-5'
FNB	Fern Bush	Chamaebatiaria millefolium	5 gal	4-7'
GLS	Gro-low Sumac	Rhus aromatica 'Gro-Low'	5 gal	1.5-2.5'
KDL	Korean Dwarf Lilac	Syringa meyeri 'Palbin'	5 gal	3-4'
LED	Leadplant	Amorpha canescens	5 gal	2-3'
LLM	Littleleaf Mockorange	Philadelphus Microphyllus	5 gal	4-5'
NMP	New Mexico Privet	Foresteria neo-mexicana	5 gal	5-7'
PBC	Pawnee Buttes Sand Cherry	Prunus besseyi 'Pawnee Buttes'	5 gal	1-2'
Evergreen Shrubs				
BCJ	Blue Chip Juniper	Juniperus horizontalis 'Blue Chip'	5 gal	5-1'
BFJ	Buffalo Juniper	Juniperus sabina 'Buffalo'	5 gal	1-2'
BYC	Banana Yucca	Yucca baccata	5 gal	2-4'
HGJ	Hughes Juniper	Juniperus horizontalis 'Hughes'	5 gal	5-1'
REY	Red Yucca	Hesperaloe parviflora	5 gal	2-4'
Perennials/Ground Covers				
DFO	Desert 4 O'Clock	Mirabilis multiflora	1 gal	1-2.5'
LVM	Munstead Lavender	Lavendula 'Munstead'	1 gal	1-2.5'
PCS	Powis Castle Sage	Artemisia 'Powis Castle'	1 gal	2-2.5'
SUN	Sunset Hyssop	Agastache rupestris	1 gal	1.5-3'
WLC	Walker's Low Catmint	Nepeta x Walker's Low	1 gal	1-2'
Ornamental Grasses				
CSG	Cheyenne Sky Prairie Switch Grass	Panicum virgatum 'Cheyenne Sky'	1 gal	2-3'
DFG	Dwarf Fountain Grass	Pennisetum alopecuroides 'Hameln'	1 gal	1.5-3'
FRG	Feather Reed Grass	Calamagrostis x acutiflora 'Karl Foerster'	1 gal	2-4'
SLG	Sand Love Grass	Eragrostis trichodes	1 gal	2-4'

NOTES:
1. PLANT GROWTH CHARACTERISTICS VARY DUE TO ENVIRONMENTAL CONDITIONS, THEREFORE A RANGE OF AVERAGE MATURE HEIGHTS ARE INDICATED.
2. SEE SHEET L-2 FOR PLANT QUANTITIES

A / L3 SHRUB BED DETAIL

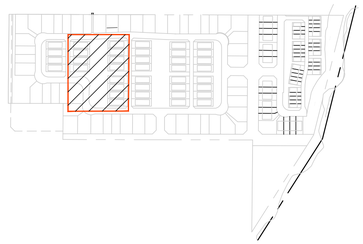
NOT TO SCALE



NOTES: EDGER OCCURS WHERE INDICATED ON PLAN. ALL CURVES TO BE SMOOTH IN TRANSITION, ALL CORNERS TO BE SQUARE. TOP OF EDGER TO BE SAME AS ADJACENT FINISHED GRADE.

KEY MAP

NOT TO SCALE



ACCEPTANCE BLOCK

THE CITY OF FRUITA REVIEW CONSTITUTES GENERAL COMPLIANCE WITH THE CITY'S DEVELOPMENT STANDARDS, SUBJECT TO THESE PLANS BEING SEALED, SIGNED, AND DATED BY THE PROFESSIONAL OF RECORD. REVIEW BY THE CITY DOES NOT CONSTITUTE APPROVAL OF THE PLAN DESIGN. THE CITY NEITHER ACCEPTS NOR ASSUMES ANY LIABILITY FOR ERRORS OR OMISSIONS. ERRORS IN THE DESIGN OR CALCULATIONS REMAIN THE RESPONSIBILITY OF THE PROFESSIONAL OF RECORD.

CONSTRUCTION MUST COMMENCE WITHIN ONE YEAR FROM THE DATE OF PLAN SIGNATURE.

CITY PLANNER _____ Date _____

Kaart PLANNING
LAND PLANNING AND LANDSCAPE ARCHITECTURE

734 Main Street
Grand Junction, CO 81501
970-241-0745 (P)
kaart.com

COPPER CREEK WEST
FRUITA, COLORADO

SUBMITTAL TYPE
PH 1 Final Landscape Plan
Overall Preliminary Landscape

DRAWN BY
MH

CHECKED
MR

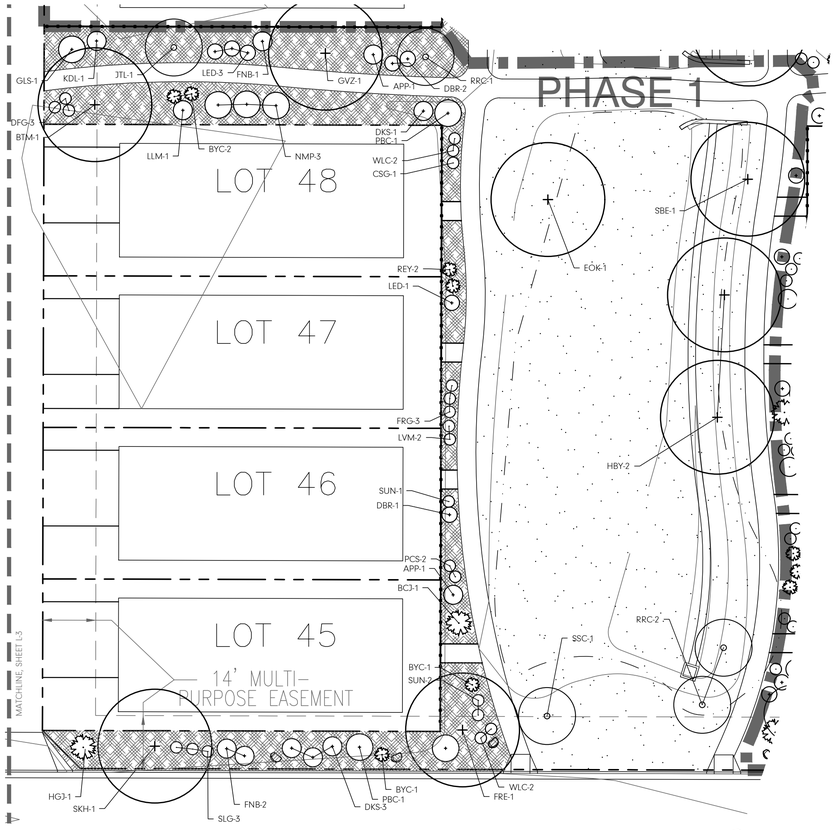
JOB NUMBER
1810

DATE
2022 04 20

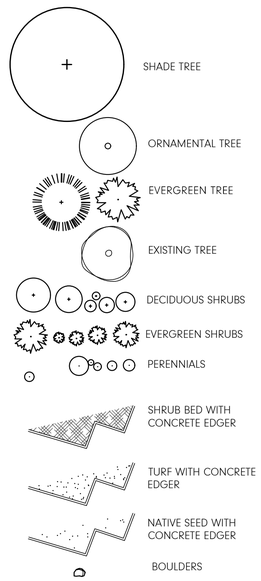
REVISIONS
8-19-2022 Respones to Rnd 1 Comments

0 20 40

L-3



LANDSCAPE LEGEND



LAWN SEED MIX

COMMON NAME	SCIENTIFIC NAME	PLS/ ACRE	% OF MIX BY QTY
KENTUCKY BLUERGRASS "REVEILLE"	POA PRATANSE 'Reveille'	16 LBS	80%
PERENNIAL RYE "PINNACLE"	LOLIUM PERENNE "Pinnacle"	4 LBS	20%

PLANTING NOTES

1. CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
2. ALL LANDSCAPING AND IRRIGATION TO CONFORM TO CURRENT CITY OR COUNTY CODE.
3. EQUAL PART MIXTURE OF ROUND-UP AND 2-4-D DILUTED AS PER MANUFACTURER'S RECOMMENDATIONS SHALL BE APPLIED TO ALL ACTIVELY GROWING WEEDS TWO WEEKS PRIOR TO ANY OPERATIONS.
4. ALL SHRUB BEDS AND LAWN AREAS TO RECEIVE SOIL AMENDMENT. SHRUB BEDS TO RECEIVE WEED FABRIC AND 3 INCH DEPTH OF MULCH.
5. AREAS TO BE PLANTED (AS PER DRAWINGS) TO RECEIVE SOIL AMENDMENT. REMOVE UNSATISFACTORY MATERIAL (INCLUDING ROAD BASE, ASPHALT, CONCRETE AND TRASH) AND REMOVE FROM SITE. ALL LANDSCAPE AREAS TO RECEIVE 6 YDS/1000 S.F. SOIL AMENDMENT. SCARIFY ALL AREAS TO RECEIVE SOIL AMENDMENT TO A DEPTH OF 6".
6. SOIL AMENDMENT IS TO CONSIST OF 50% GROUND WELL-AGED MANURE, 50% FINELY GROUND AND AGED WOOD CHIPS. AMENDMENT IS TO BE INCORPORATED WITH FERTILIZER BY TILLING AT THE RATE OF 6 CUBIC YARDS/1000 SF INTO ALL LAWN AND SHRUB AREAS.
7. SOIL IS TO BE COMPACTED TO 85% MODIFIED PROCTOR (WHEEL ROLL) TO MINIMIZE SETTLING. BEDS ARE TO BE FILLED TO A DEPTH OF 6" ABOVE ADJACENT EDGE OF CURB, SHAPED TO FORM MOUNDED PLANTING AREA. SHRUB BED TO BE FINISHED WITH A 4:1 SLOPE FROM 2" BELOW ADJACENT CONCRETE TO FINISH GRADE. SHRUB BEDS ADJACENT TO BUILDINGS ARE TO DRAIN AWAY FROM BUILDING.
8. WEED FABRIC IS TO BE 3.5 OZ. SPINBOND, PERMEABLE MATERIAL BY LANDMASTER, OR EQUAL. WEED FABRIC IS TO OVERLAP 6 INCHES AT SEAMS WITH NO GAPS AT EDGES. FABRIC IS TO BE PINNED IN PLACE WITH SOD STAPLE 5' ON CENTER AND IN ALL CORNERS.
9. SHRUBS AND TREES ARE TO SPACED AS SCALED FROM THE PLANTING PLAN.
10. MULCH FOR SHRUB BEDS SHALL BE 3/4" TAN GRANITE. MULCH SHALL BE FREE OF TRASH, STICKS, ROOTS OR OTHER DEBRIS.
11. DI-AMMONIUM PHOSPHATE (18-46-0) SHALL BE SUPPLIED IN QUANTITY NECESSARY TO APPLY 1 LB/1000 SF TO ALL LAWN SEED AREAS.
12. LAWN AREAS ARE TO BE HYDROSEEDED WITH SPECIES AND RATES SHOWN ON THIS SHEET AND HYDROMULCHED WITH DYE TO ALLOW INSPECTION FOR COVERAGE. CONTRACTOR IS RESPONSIBLE FOR CLEANING ANY NON-LAWN SURFACES.
13. CONTRACTOR IS TO GUARANTEE ALL PLANT MATERIALS FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE OF WORK. CONTRACTOR IS TO MAINTAIN LAWN AREAS AFTER EACH AREA IS SEEDED AND CONTINUE FOR 30 DAYS OR UNTIL FINAL ACCEPTANCE, WHICHEVER IS LONGER.

NOTE:

STATE LAW REQUIRES THESE PLANS TO BE PREPARED AND STAMPED BY A LICENSED LANDSCAPE ARCHITECT. SUBSEQUENTLY, ANY CHANGES OR MODIFICATIONS TO THESE PLANS, INCLUDING BUT NOT LIMITED TO LANDSCAPE MATERIAL SUBSTITUTIONS AND/OR RELOCATIONS, MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. FAILURE TO DO SO IS CONSIDERED A CRIMINAL OFFENSE PER CRS 12-45.

PHASE 1 PLANT LIST, NO QUANTITIES

Key	Common Name	Scientific Name	Size	Mature Height
Deciduous Trees				
ACE	Accolade Elm	Ulmus morton	2"	50-60'
BOK	Burr Oak	Quercus macrocarpa	2"	50-60'
BTM	Big Tooth(Wasatch) Maple	Acer grandidentatum	2"	23-37'
EOK	English Oak	Quercus robur	2"	40-60'
FRE	Frontier Elm	Ulmus x Frontier	2"	25-35'
GVZ	Green Vase Zelkova	Zelkova serrata 'Green Vase'	2"	40-60'
HBY	Hackberry	Celtis occidentalis	2"	35-60'
JTL	Japanese Tree Lilac	Syringa reticulata 'Ivory Silk'	1-1/2"	15-18'
KCT	Kentucky Coffeetree	Gymnocladus dioicus	2"	55-65'
RRC	Royal Raindrops Crabapple	Malus 'JFS-KW5'	1-1/2"	17-22'
SBE	Sensation Box Elder	Acer negundo 'Sensation'	2"	25-40'
SKH	Skyline Honeylocust	Gleditsia triacanthos var. inermis 'Skyline'	2"	40-50'
SSC	Spring Snow Crabapple	Malus 'Spring Snow'	1-1/2"	15-20'
WKH	Winter King Hawthorn	Crataegus viridis 'Winter King'	1-1/2"	15-20'
Evergreen Trees				
PPN	Pinon Pine	Pinus cembroides edulis	6'	10-15'
WHJ	Wichita Juniper	Juniperus sabina "Wichita"	6'	10-15'
Deciduous Shrubs				
ABR	Appleblossom Carpet Rose	Rosa x Flower Carpet 'Noamel'	5 gal	1-2'
APP	Apache Plume	Fallugia paradoxa	5 gal	3-6'
DBR	Dwarf Blue Rabbit Brush	Chrysothamnus nauseosus	5 gal	2-5'
DKS	Dark Knight Blue Mist Spiraea	Caryopteris incana "Dark Knight"	5 gal	3-5'
FNB	Fern Bush	Chamaebatiaria millefolium	5 gal	4-7'
GLS	Gro-low Sumac	Rhus aromatica 'Gro-Low'	5 gal	1.5-2.5'
KDL	Korean Dwarf Lilac	Syringa meyeri 'Palibin'	5 gal	3-4'
LED	Leadplant	Amorpha canescens	5 gal	2-3'
LLM	Littleleaf Mockorange	Philadelphus Microphyllus	5 gal	4-5'
NMP	New Mexico Privet	Foresteria neo-mexicana	5 gal	5-7'
PBC	Pawnee Buttes Sand Cherry	Prunus besseyi 'Pawnee Buttes'	5 gal	1-2'
Evergreen Shrubs				
BCJ	Blue Chip Juniper	Juniperus horizontalis 'Blue Chip'	5 gal	.5-1'
BFJ	Buffalo Juniper	Juniperus sabina 'Buffalo'	5 gal	1-2'
BYC	Banana Yucca	Yucca baccata	5 gal	2-4'
HGJ	Hughes Juniper	Juniperus horizontalis 'Hughes'	5 gal	.5-1'
REY	Red Yucca	Hesperaloe parviflora	5 gal	2-4'
Perennials/Ground Covers				
DFO	Desert 4 O'Clock	Mirabilis multiflora	1 gal	1-2.5'
LVM	Munstead Lavender	Lavendula 'Munstead'	1 gal	1-2.5'
PCS	Powis Castle Sage	Artemisia 'Powis Castle'	1 gal	2-2.5'
SUN	Sunset Hyssop	Agastache rupestris	1 gal	1.5-3'
WLC	Walker's Low Catmint	Nepeta x Walker's Low	1 gal	1-2'
Ornamental Grasses				
CSG	Cheyenne Sky Prairie Switch Grass	Panicum virgatum 'Cheyenne Sky'	1 gal	2-3'
DFG	Dwarf Fountain Grass	Pennisetum alopecuroides 'Hameln'	1 gal	1.5-3'
FRG	Feather Reed Grass	Calamagrostis x acutiflora 'Karl Foerster'	1 gal	2-4'
SLG	Sand Love Grass	Eragrostis trichodes	1 gal	2-4'

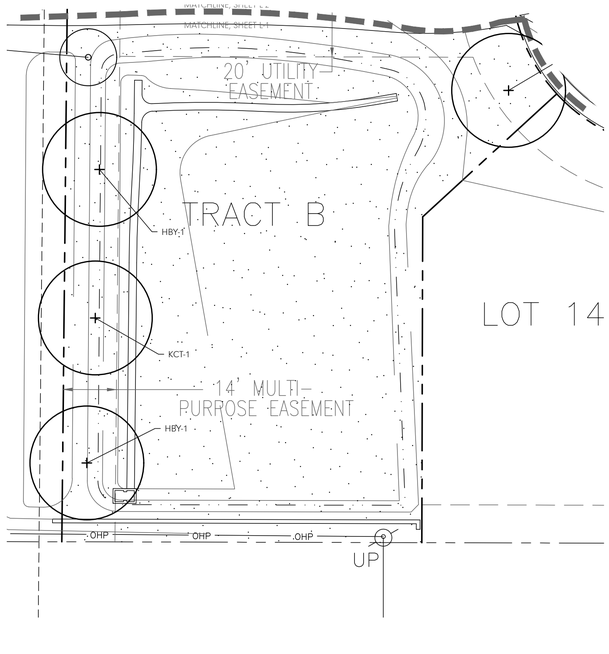
NOTES:
1. PLANT GROWTH CHARACTERISTICS VARY DUE TO ENVIRONMENTAL CONDITIONS, THEREFORE A RANGE OF AVERAGE MATURE HEIGHTS ARE INDICATED.
2. SEE SHEET L-2 FOR PLANT QUANTITIES

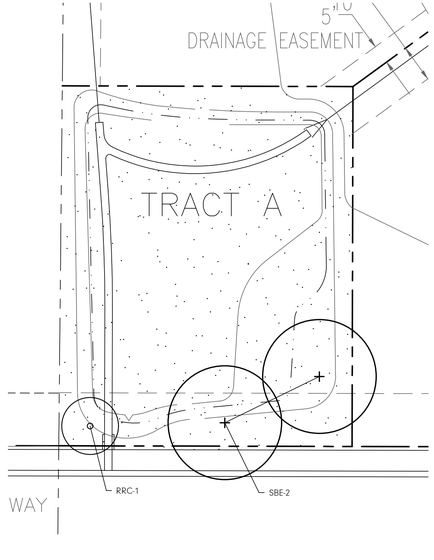
ACCEPTANCE BLOCK

THE CITY OF FRUITA REVIEW CONSTITUTES GENERAL COMPLIANCE WITH THE CITY'S DEVELOPMENT STANDARDS, SUBJECT TO THESE PLANS BEING SEALED, SIGNED, AND DATED BY THE PROFESSIONAL OF RECORD. REVIEW BY THE CITY DOES NOT CONSTITUTE APPROVAL OF THE PLAN DESIGN. THE CITY NEITHER ACCEPTS NOR ASSUMES ANY LIABILITY FOR ERRORS OR OMISSIONS. ERRORS IN THE DESIGN OR CALCULATIONS REMAIN THE RESPONSIBILITY OF THE PROFESSIONAL OF RECORD.

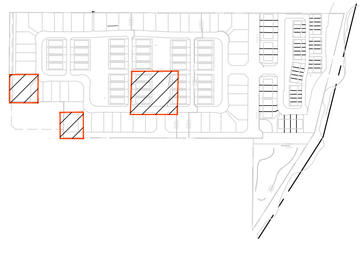
CONSTRUCTION MUST COMMENCE WITHIN ONE YEAR FROM THE DATE OF PLAN SIGNATURE.

CITY PLANNER _____ Date _____





KEY MAP
NOT TO SCALE



Kaart
PLANNING
LAND PLANNING AND
LANDSCAPE ARCHITECTURE

734 Main Street
Grand Junction, CO 81501
970-241-0745 (P)
kaart.com

COPPER CREEK WEST
FRUITA, COLORADO

SUBMITTAL TYPE
PH 1 Final Landscape Plan
Overall Preliminary Landscape

DRAWN BY
MH

CHECKED
MR

JOB NUMBER
1810

DATE
2022 04 20

REVISIONS
8-19-2022 Respones to Rnd 1 Comments

0 20 40

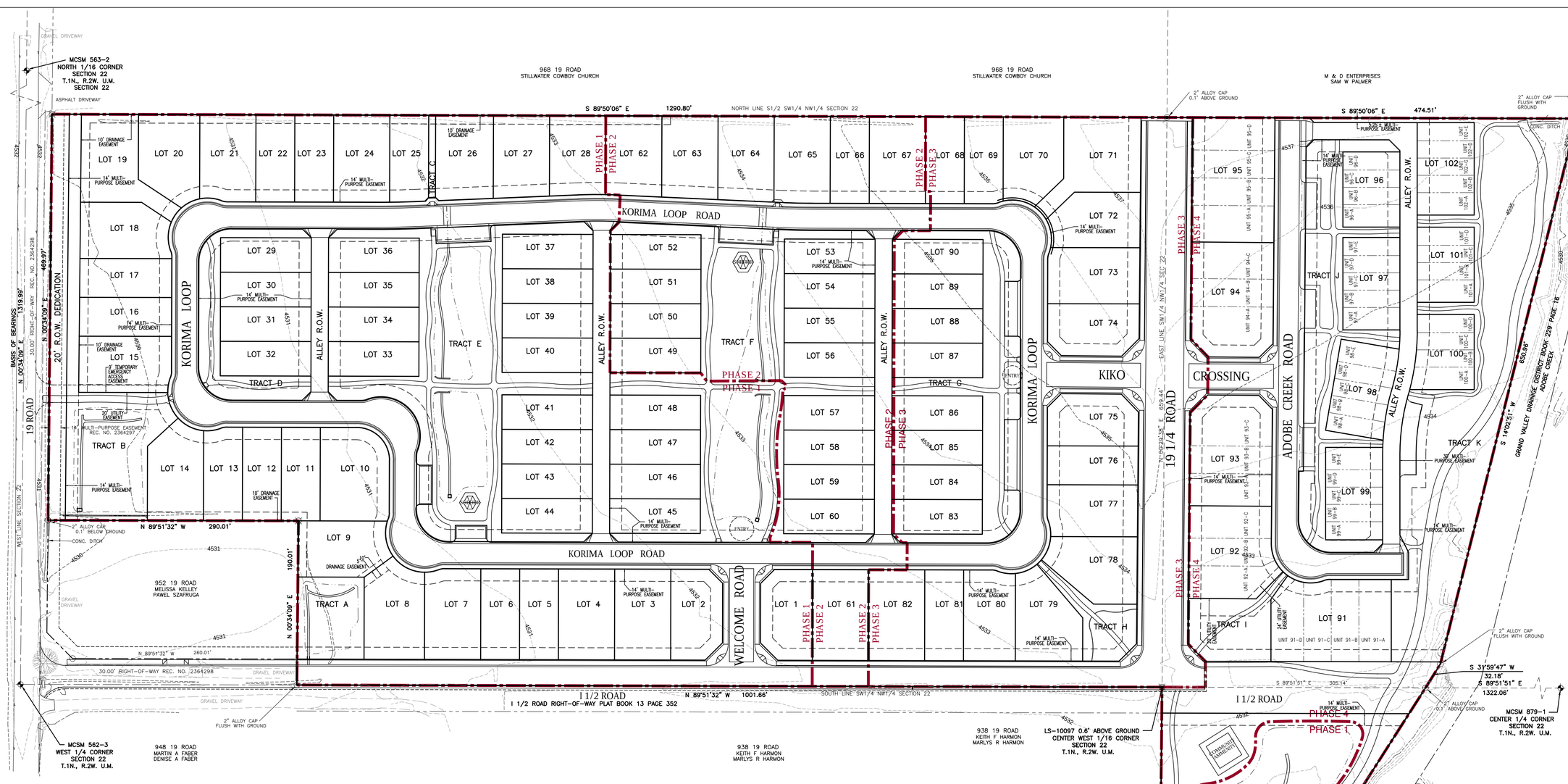
L-4

COPPER CREEK WEST

Fruita, Colorado

0 60 120

Kaart PLANNING & LANDSCAPE ARCHITECTURE

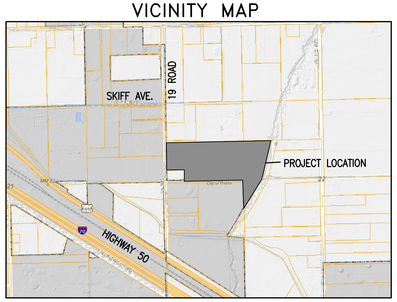


SHEET INDEX

FILING SUMMARY TABLE

	RESIDENTIAL UNITS	AREA (AC.)	DENSITY (UNITS/AC.)	PHASE % OF TOTAL UNITS
FILING 1	48	10.32	4.65	34.5%
FILING 2	19	3.26	5.83	13.7%
FILING 3	23	5.21	4.41	16.5%
FILING 4	49	7.18	6.82	35.3%
TOTAL	139	25.97	5.35	100.0%

VICINITY MAP



NOTES

1. THE PROJECT WILL PLATTED IN FILINGS AND CONSTRUCTED IN PHASES.
2. THE NUMBER AND CONFIGURATION OF FUTURE FILINGS/PHASES IS SUBJECT TO CHANGE.

Rolland Consulting Engineers, LLC
405 Ridges Blvd. Suite A
Grand Junction, CO 81507
Voice: (970) 243-8300
Fax: (970) 241-1273
www.rcegj.com

COPPER CREEK WEST

PHASING PLAN

Drawn	Designed	Checked	Proj#	Rv:	Sheet
	ESS		B8423	8/18/22	1
File Name: C:\B8423Base.DWG				Date 4/29/22	Of 8

Transportation Impact Study
For
Copper Creek Subdivision
I ½ Road & 19 Road
Fruita, CO

April 13, 2022

PREPARED FOR:
Copper Creek Builders
2467 D Flattop Lane
Grand Junction, CO 81505
Contact: Silas Colman

PREPARED BY:
McDowell Engineering, LLC
PO Box 4259
Eagle, CO 81631
970.623.078
Contact: Kari J. McDowell Schroeder, PE, PTOE
Project Number: M1560

Statement of Engineering Qualifications

Kari J. McDowell Schroeder, PE, PTOE is a Transportation and Traffic Engineer for McDowell Engineering, LLC. Ms. McDowell Schroeder has over twenty-five years of extensive traffic and transportation engineering experience. She has completed numerous transportation studies and roadway design projects throughout the State of Colorado. Ms. McDowell Schroeder is a licensed Professional Engineer in the State of Colorado and has her certification as a Professional Traffic Operations Engineer from the Institute of Transportation Engineers.

Traffic Impact Study for Copper Creek Subdivision

Table of Contents

Figures and Tables

1.0 Project Description

McDowell Engineering has prepared this Transportation Impact Study (TIS) for the Copper Creek Residential Development in Fruita, CO in Mesa County. The purpose of this TIS is to forecast and analyze the impacts of the additional traffic volumes associated with the addition of the proposed development on the surrounding roadway network.

The development is located approximately 1,600 feet north of the US 6/50 & 19 Rd intersection on the east side of 19 Road. The lot is currently vacant with only a residential home in the lower southwest corner of the lot. The project is proposing developing single-family homes of different sizes within a 25.95-acre lot. This includes 40 cottage lots, (18) 35' x 60' homes, 33 regular lots, single story 3 and 4 plexes, and alley town homes for a total of 138 lots.

The location of proposed development is shown in the vicinity map in **Figure 1**.

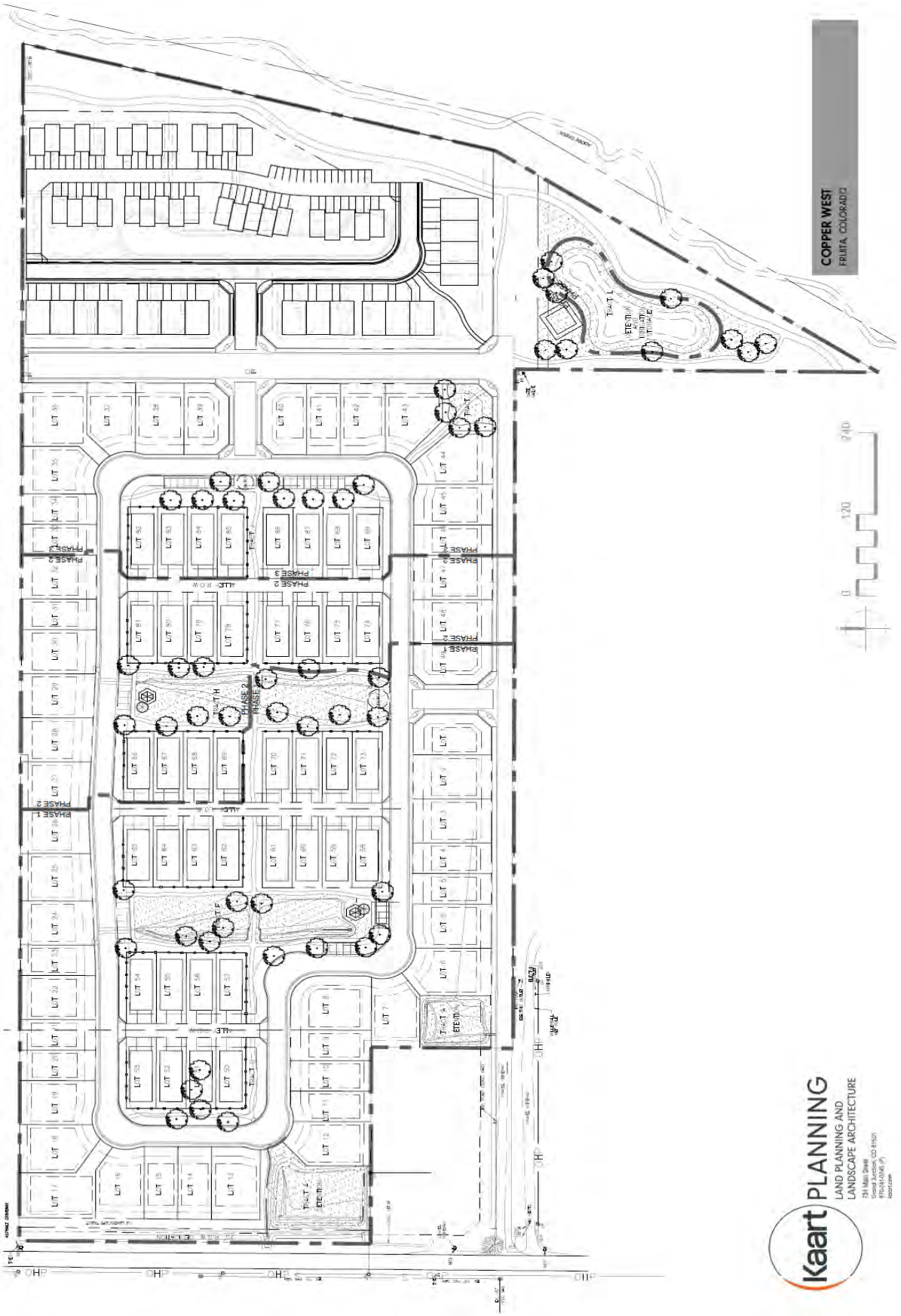
Figure 1: Vicinity Map

An area map showing the project site in relation to the surrounding road network and towns is show in area map in **Figure 2**.

Figure 2: Area Map

The project is proposing two accesses located on the south side of the lot. The two accesses will be paved and have direct connectivity to I ½ Road. The internal traffic is two-way. The project is also proposing two futures access, one on the northeast side of the lot and the other on the southeast side. The proposed site plan with the proposed accesses is shown in **Figure 3**.

Figure 3: Site Plan



1.1 Project Phasing

The Copper Creek Subdivision is proposed to be constructed in two to three phases. However, this study analyzes a buildout condition of the subdivision with estimated completion in Year 2023. Analysis has been performed for both short-term buildout Year 2023 conditions as well as the long-range planning Year 2045.

1.2 Project Access Locations

The Copper Creek Subdivision project site will have two accesses with direct connectivity to I ½ Rd. Refer to the site plan in **Figure 3**.

1. I ½ Road & East Site Access
2. I ½ Road & West Site Access
3. Northeast Site Access (future access)
4. Southeast Site Access (future access)

Per Section 4.2(F) and 4.2(G) of the *Fruita Design Criteria and Construction Specifications Manual*[1], the access spacing requirements are based upon the roadway classification. There is a single site access proposed onto 19 Road, per Section 4.2(F). I ½ Rd has two proposed access that exceed 300' spacing per Section 4.2(G).

1.3 Intersection Analysis Locations

In addition to site accesses, this report also studies five additional off-site intersections:

1. S Pine Street & J Road (Wildcat Avenue)
2. J Road & 19 Road
3. Highway 6/50 & S Pine Street
4. 19 Rd and I ½ Rd
5. Highway 6/50 & 19 Road

[1] Fruita Design Criteria and Construction Specifications Manual. City of Fruita, 2009.

2.0 Existing Conditions

2.1 Description of Existing Transportation System

19 Road: 19 Road is a two-lane, north-south roadway connecting Highway 6/50 to O Road and forms the western boundary of the site. 19 Road has been classified as an "Enhanced Travel Corridor" by the *Fruita Area Street Classifications and Traffic Control Plan*[2]. The posted speed limit of 19 Road within the vicinity of the project is 45 mph.

US 6/50: US 6/50 is a two-lane, generally east-west US Highway connecting Fruita with Grand Junction. The intersection of US 6/50 is a signalized intersection with 19 Road. US 6/50 is classified by CDOT as Access Category R-A, Regional Highway with a posted speed limit of 55 mph within the vicinity of the project.

J Road: J Road is a two-lane, east-west roadway connecting South Pine Street to 24 Road. J Road has been classified as a Major Collector by the *Fruita Area Street Classifications and Traffic Control Plan*. The posted speed limit of J Road within the vicinity of the project is 35 mph.

S Pine Street: S Pine Street is a two-lane north-south roadway connecting Highway 6/50 to L ½ Road. S Pine Street is classified as a Major Collector by the *Fruita Area Street Classifications and Traffic Control Plan*. The posted speed limit of S Pine Street south of J.2 Road is 35 mph.

Pedestrian and Bicycle Facilities: J Road is a marked bicycle route near the intersection with 19 Road. However, there are no pedestrian facilities within the vicinity of the proposed development. The marked bicycle route begins west of Fremont Street and disperses through the surrounding roads. City of Fruita's *2008 Community Plan*[3] states that the City would like to establish more pedestrian and bicycle connectivity throughout this area of the city.

2.2 Existing Traffic Data

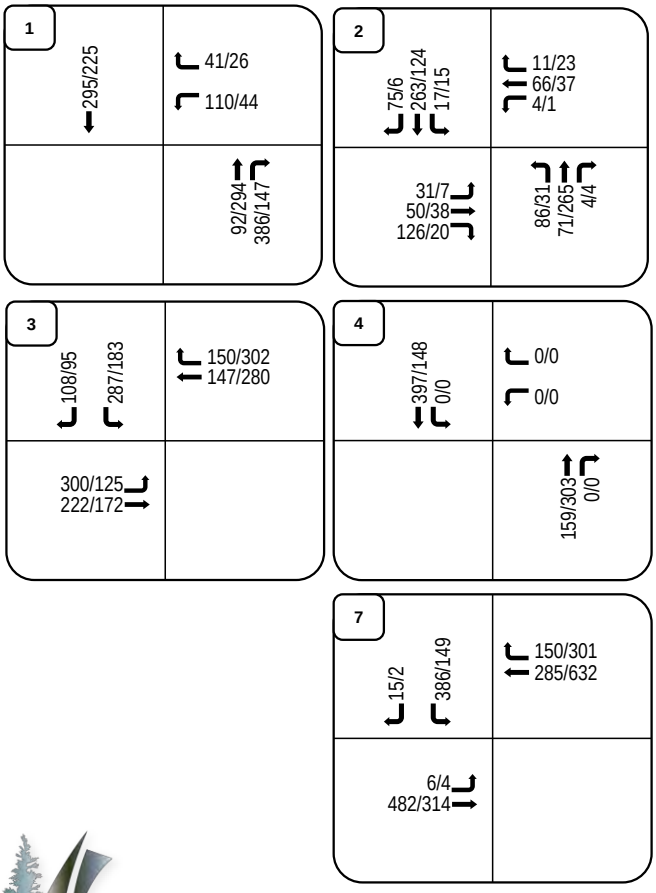
Current Year 2022 traffic data was collected at several intersections within the vicinity of the site. Peak hour turning movement counts were taken on Tuesday, March 15, 2022, from 7:00-9:00 am and 4:00-6:00 pm. Counts were taken at these intersections:

1. S Pine Street & J Road
2. J Road & 19 Road
3. Highway 6/50 & S Pine Street
4. Highway 6/50 & 19 Road

Current Year 2022 traffic data can be found in **Figure 4**. Data collected can be seen in the **Appendix**.

[2] Fruita Area Street Classifications and Traffic Control Plan. City of Fruita, 2012.
[3] Community Plan, City of Fruita, 2008.

Figure 4: Year 2022 Existing Traffic



LEGEND:
Directional Distribution = Inbound% (Outbound %)
AM/PM Volumes = XX/XX VPH (in PCEs)
Turning Movements

McDOWELL ENGINEERING, LLC
TRANSPORTATION ENGINEERING CONSULTANTS

Project Number M1560
Prepared By EP

3.0 Future Traffic Projections

3.1 Existing & Committed Capital Improvement Projects

The *Draft City of Fruita Capital Improvement Projects*[4] map does not show any proposed near-term infrastructure improvements within the vicinity of this proposed development. Per conversations with the city Engineer, no capital improvements are anticipated within the vicinity of the project.

Auxiliary turn lane requirements are detailed in **Table 3**. It was assumed that any turn lane requirements to accommodate background traffic volumes will be constructed by Year 2045.

3.2 Planned or Existing Land Development Projects

The Iron Wheel Subdivision is a residential development that will be built directly across the Copper Creek development on the west side of 19 Road. This development is a 57.7-acre property consisting of 233 single-family and 32 multi-family dwelling units. The Iron Wheel Subdivision has not yet been built out at the time of this TIS, however, construction has begun.

Due to the proximity between the Iron Wheel Subdivision and Copper Creek Subdivision development, the traffic generated by the Iron Wheel Subdivision will be added to the Background Traffic from the Copper Creek Subdivision. This ensures that the impacts on the surrounding roadway network from the additional traffic volumes associated with the addition of the Iron Wheel Subdivision are considered. See **Figure APP-1** in the **Appendix**.

3.3 Background Traffic Growth

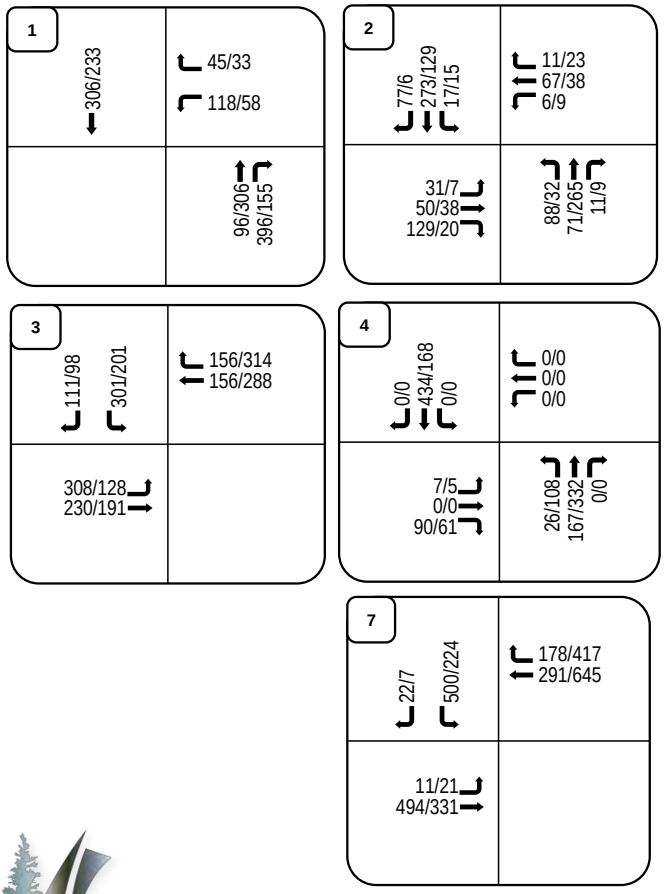
The 2010 Base Year and 2040 Planning traffic models were obtained from Mesa County Regional Transportation Planning Office staff. This data was used to determine the traffic growth rates on 19 Road and J Road. A portion of the site-generated traffic was subtracted from the RTPO's Year 2040 model, as to not double-count the forecasted growth. The resulting growth rates on 19 Road are 3.70% north of J Road and 4.05% south of J Road. The anticipated growth rates on J Road are 0.31% west of 19 Road and 1.53% east of 19 Road.

CDOT's Online Transportation Information System[5] data was used to forecast traffic on Highway 6/50. The 20-year factor of 1.28 equates to an annual growth rate of 1.24%.

Projected Year 2023 and 2045 background traffic can be seen in **Figure 5 and 6**.

[4] Capital Improvement Projects, City of Fruita, 2022. https://www.fruita.org/projects.
[5] Online Transportation Information System, Colorado Department of Transportation, 2022. https://dtdapps.coloradodot.info/otis

Figure 5: Year 2023 Background Traffic

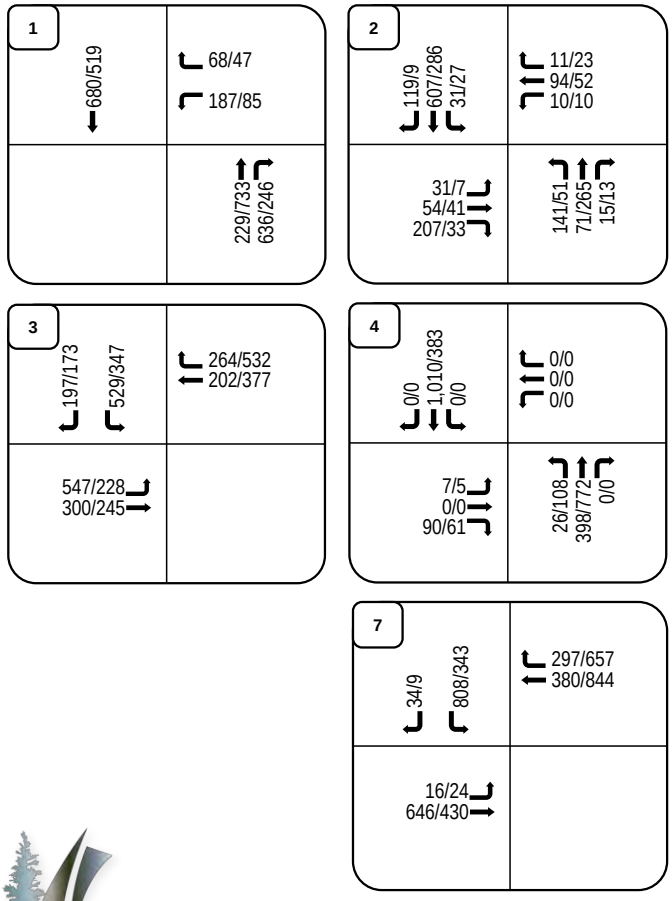


LEGEND:
Directional Distribution = Inbound% (Outbound %)
AM/PM Volumes = XX/XX VPH (in PCEs)
Turning Movements

McDOWELL ENGINEERING, LLC
TRANSPORTATION ENGINEERING CONSULTANTS

Project Number M1560
Prepared By EP

Figure 6: Year 2045 Background Traffic



LEGEND:
Directional Distribution = Inbound% (Outbound %)
AM/PM Volumes = XX/XX VPH (in PCEs)
Turning Movements

McDOWELL ENGINEERING, LLC
TRANSPORTATION ENGINEERING CONSULTANTS

Project Number M1560
Prepared By EP

3.4 Background Traffic Level of Service

Using *Highway Capacity Manual 6th Edition 2016*[6] *(HCM)* methodology, Synchro Version 10 software was used to determine the delay and Level of Service (LOS.) *HCM* LOS is defined by the following criteria:

Table 1: Year HCM Level of Service Criteria

LOS	Expected Delay to Minor Street Traffic	Average Signal Delay (Seconds/Vehicle)	Average Stop-Controlled Delay (Seconds/Vehicle)
A	Little or no delay.	0-10	0-10
B	Short traffic delays.	>10-20	>10-15
C	Average traffic delays.	>20-35	>15-25
D	Long traffic delays.	>35-55	>25-35
E	Very long traffic delays.	>55-80	>35-50
F	When volume exceeds the capacity of the lane extreme delays will be encountered with queuing that may cause severe congestion affecting other traffic movements in the intersection. This condition usually warrants improving the intersection.	>80	>50

The following **Table 2** shows the resulting LOS as determined by *HCM* analysis:

[6] Highway Capacity Manual, 6th Edition. Transportation Research Board, 2016.

Table 2: Background Traffic Level of Service

#	Int.	Traffic Control	Approach or Control Delay	Approach	Year 2023 Level of Service (Delay in Seconds)		Year 2045 Level of Service (Delay in Seconds)	
					AM	PM	AM	PM
1	S Pine Rd & J Rd	WB Stop	A	WB	B (15.0)	B (13.5)	F (139.8)	F (55.3)
			A	NB	A (0.0)	A (0.0)	A (0.0)	A (0.0)
			A	SB	A (0.0)	A (0.0)	A (0.0)	A (0.0)
2	J Rd & 19 Rd	All Way Stop	A	EB	B (11.0)	A (8.6)	C (19.0)	A (9.6)
			A	WB	A (9.9)	A (8.6)	B (14.1)	A (9.8)
			A	NB	B (10.7)	B (10.7)	B (13.7)	B (12.2)
			A	SB	B (14.1)	A (9.0)	F (204.2)	B (12.9)
3	US6/50 & S Pine Rd	Signal	C	EBL	A (6.0)	A (4.2)	C (17.4)	A (6.0)
			A	EBT	A (4.5)	A (4.4)	A (4.9)	A (4.6)
			A	WBT	B (10.2)	B (11.1)	B (10.7)	B (13.2)
			C	WBR	A (2.5)	A (2.5)	A (2.5)	A (3.3)
			C	SBL	F (224.4)	F (72.6)	F (678.0)	F (312.7)
			C	SBR	A (9.6)	A (9.7)	A (9.9)	A (9.8)
4	19 Rd & I 1/2 Rd	EB/WB Stop	A	EB	B (12.6)	B (10.1)	D (28.9)	B (13.9)
			A	WB	A (0.0)	A (0.0)	A (0.0)	A (0.0)
			A	NB	A (1.1)	A (1.9)	A (0.7)	A (1.0)
			A	SB	A (0.0)	A (0.0)	A (0.0)	A (0.0)
7	US 6/50 & 19 Rd	Signal	C	EBL	B (11.2)	A (7.6)	A (8.8)	A (7.0)
			A	EBT	C (22.8)	A (8.7)	C (19.5)	A (8.2)
			A	WBT	C (20.3)	C (20.0)	C (18.8)	C (24.9)
			C	WBR	A (3.4)	A (2.9)	A (3.1)	A (3.3)
			C	SBL	E (35.6)	E (44.1)	E (40.7)	E (39.4)
			C	SBR	C (17.9)	C (20.7)	A (9.2)	C (15.8)

As can be seen in **Table 2**, none of the intersections are anticipated to operate at acceptable overall intersection Levels of Service through the long-term planning horizon Year 2045.

S Pine Road & J Road (Wildcat Avenue): This intersection is anticipated to operate at an acceptable LOS B or better through Year 2045 background traffic conditions on the north and south legs. The East Leg is expected to perform at a LOS F during Year 2045 background traffic conditions. This is due to Fruita and Mesa County's anticipated growth on S Pine Road. The westbound left movement will have few gaps to make the movement across the northbound traffic, resulting in an increased delay by Year 2045.

This may also be exacerbated by southbound left queues discussed below in the US6/50 & S Pine Road intersection.

J Road & 19 Road: The intersection is anticipated to operate at an acceptable LOS C or better through Year 2045 background traffic conditions on the west, east, and south legs. The north leg is expected to perform at a LOS F during Year 2045 background traffic conditions.

US 6/50 & S Pine Road: This intersection is anticipated to operate at an acceptable LOS C or better through Year 2045 background traffic conditions on the east and west legs. The north leg is expected to perform at a LOS F during Year 2023 and 2045 background traffic conditions. This is due to Fruita and Mesa County's anticipated growth on S Pine Rd. The current signal timing does not allow for all the southbound traffic to leave in one cycle, forcing some vehicles in the queue to wait multiple cycles.

19 Road & I ½ Rd: This intersection is anticipated to operate at an acceptable LOS A Year 2045 background traffic conditions on the east, south, and north legs. The west leg is expected to perform at LOS D during Year 2045 background traffic conditions due to the expected growth on 19 Road. With the higher northbound and southbound traffic volumes, the eastbound traffic will not have sufficient gaps to make the movement across the northbound and southbound traffic.

US 6/50 & 19 Rd: This intersection is anticipated to operate at an acceptable LOS C or better through Year 2045 background traffic conditions on the east and west legs. The north leg is expected to perform at a LOS E during Year 2023 and 2045 background traffic conditions. This is due to Fruita and Mesa Count's anticipated growth on 19 Rd. The current signal timing does not allow for all the southbound traffic to leave in one cycle, forcing some vehicles in the queue to wait multiple cycles.

4.0 Project Traffic

4.1 Trip Generation

Copper Creek Subdivision is proposed to be a residential community, with 138 single-family detached dwelling units. This falls under two land use codes as per the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*[7], #210 Single-Family Detached Housing and #220 Multifamily Housing (Low Rise).

As per ITE's *Trip Generation Handbook*[8] methodology, the trip generation regression equations for each of the residential land use codes were utilized as part of this analysis.

A 5% multimodal trip reduction was used when calculating the total number of vehicular trips. This reduction was used to accommodate the projected multimodal trips to the nearby schools and businesses.

The subdivision is expected to generate a total of 1250 trips over the course of an average weekday This includes 28 inbound and 83 outbound trips during the morning peak hour. The evening peak hour is expected to generate 91 inbound trips and 53 outbound trips.

Refer to **Table 3** for trip generation calculations and further breakdown of these trips.

Table 3: Trip Generation Table

			ITE Trip Generation Equation[3]			Average Weekday	Morning Peak Hour				Evening Peak Hour			
							Inbound		Outbound		Inbound		Outbound	
ITE Code	Units [2]	Eq. Coef	Avg. Weekday	AM Peak Hour	PM Peak Hour	Trips (VPD)	% Trips	Trips	% Trips	Trips	% Trips	Trips	% Trips	Trips
Brown Ranch Residential														
Proposed Land Use														
#210 Single-Family Detactched	89 DU	Type a= b=	B 0.92 2.68	A 0.71 7.23	B 0.93 0.36	906	26%	18	74%	52	64%	60	36%	34
#220 Multifamily Housing (Low Rise)	49 DU	Type a= b=	A 6.41 75.31	A 0.35 28.13	A 0.42 34.78	389	24%	11	76%	34	62%	34	38%	21
Multi-Modal Reduction	*-5%*					*-45*		*-1*		*-3*		*-3*		*-2*
Proposed Land Use Trips						**1,250**		**28**		**83**		**91**		**53**

Notes:

[1] Values obtained from *Trip Generation, 10th Edition,* Institute of Transportation Engineers, 2017.

[2] DU = Dwelling Units, kSF = 1,000 Square Feet

[3] Fitted curve equations from ITE Land Uses - Equation Type A is T = a * X + b, Equation Type B is Ln(T) = a * Ln(X) + b, Rate is T = a * X

[7] Trip Generation Handbook, An ITE Recommended Practice. Institute of Transportation Engineers, 2001.

[8] Trip Generation Manual, 11th Edition. Institute of Transportation Engineers, 2021.

4.2 Trip Distribution

The distribution of project-generated vehicular traffic on adjacent roadways is influenced by several factors including the following:

- The location of the site relative to other commercial and healthcare facilities and the roadway network.
- The configuration of the existing and proposed adjacent roadway network
- Relative location of neighboring population centers

Directional Distribution: Fruita has a large residential population base with many people traveling to Grand Junction for employment. Therefore, it was assumed that 50% of Copper Creek residents traveled to Grand Junction for work. Refer to **Figure 7** for directional distribution breakdown.

4.3 Trip Assignment

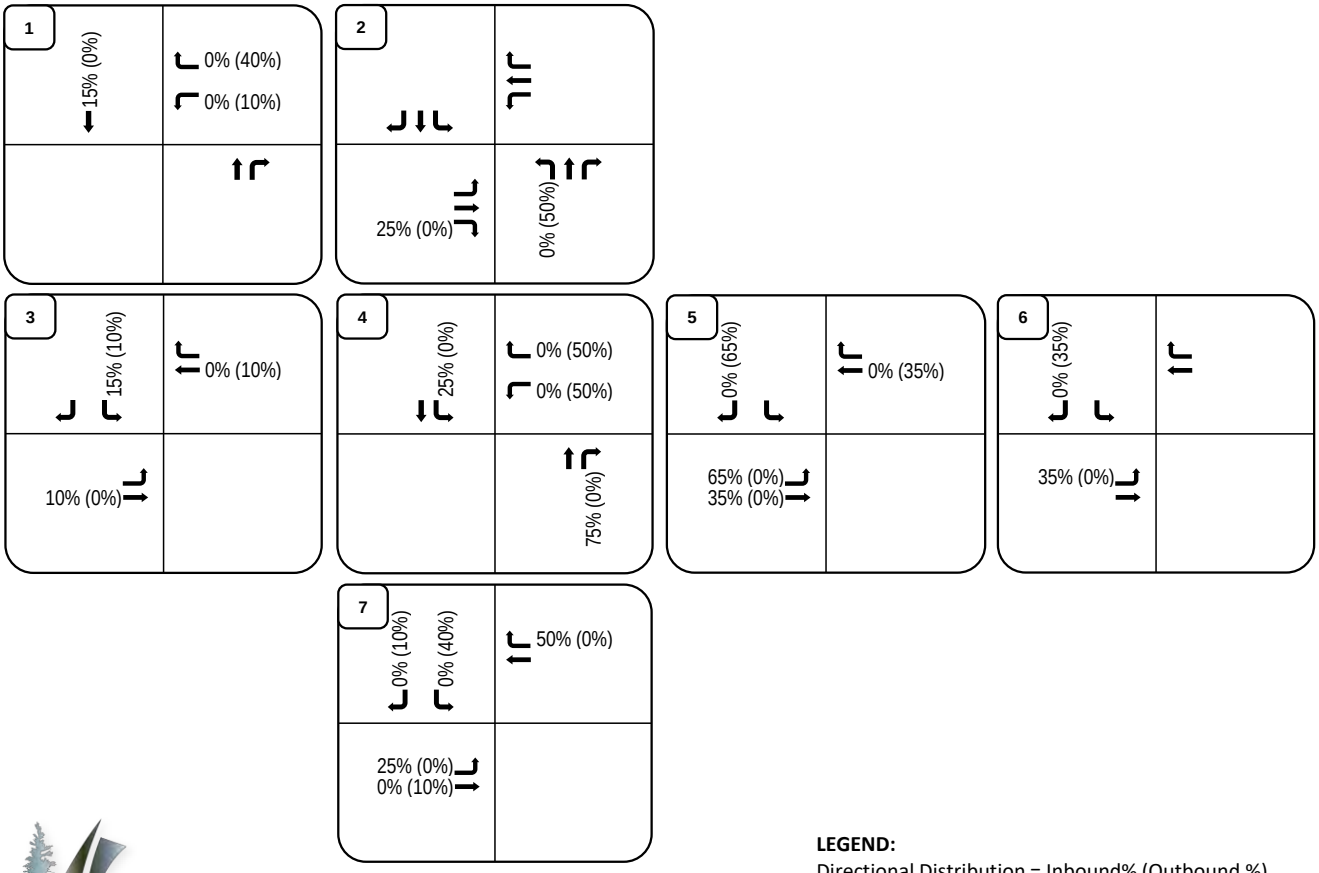
When the trip generation expected for this site is applied to the estimated trip distribution, the result is the anticipated assignment of trips on the roadway system. **Figure 8** depicts the new vehicle trips that are anticipated from the Copper Creek project.

4.4 Total Traffic

The total traffic anticipated at each intersection is the sum of background traffic with the site-generated traffic.

For Year 2023, the background traffic **(Figure 5)** added to the site-generated traffic **(Figure 8)** plus the site generated traffic from the Iron Wheel Subdivision (**Figure APP-1**) yields the total Year 2023 traffic in **Figure 9**. For Year 2045, the background traffic **(Figure 6)** added to the site-generated traffic **(Figure 8)** plus the site generated traffic from the Iron Wheel Subdivision (**Figure APP-1**) yields the total Year 2045 traffic in **Figure 10**.

Figure 7: Project Generated Traffic Distribution

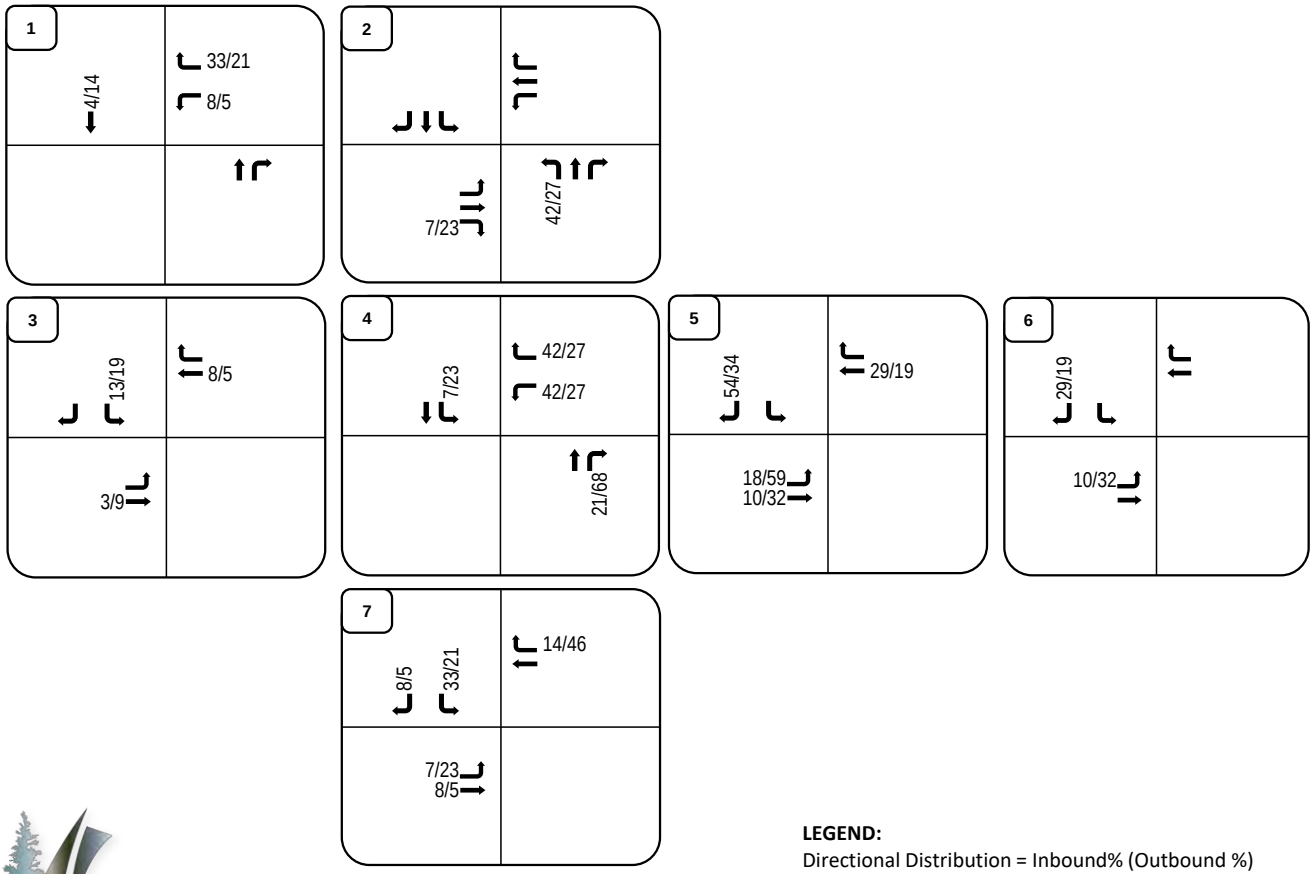


LEGEND:
Directional Distribution = Inbound% (Outbound %)
AM/PM Volumes = XX/XX VPH (in PCEs)
Turning Movements

McDOWELL ENGINEERING, LLC
TRANSPORTATION ENGINEERING CONSULTANTS

Project Number M1560
Prepared By EP

Figure 8: Project Generated Traffic Assignment

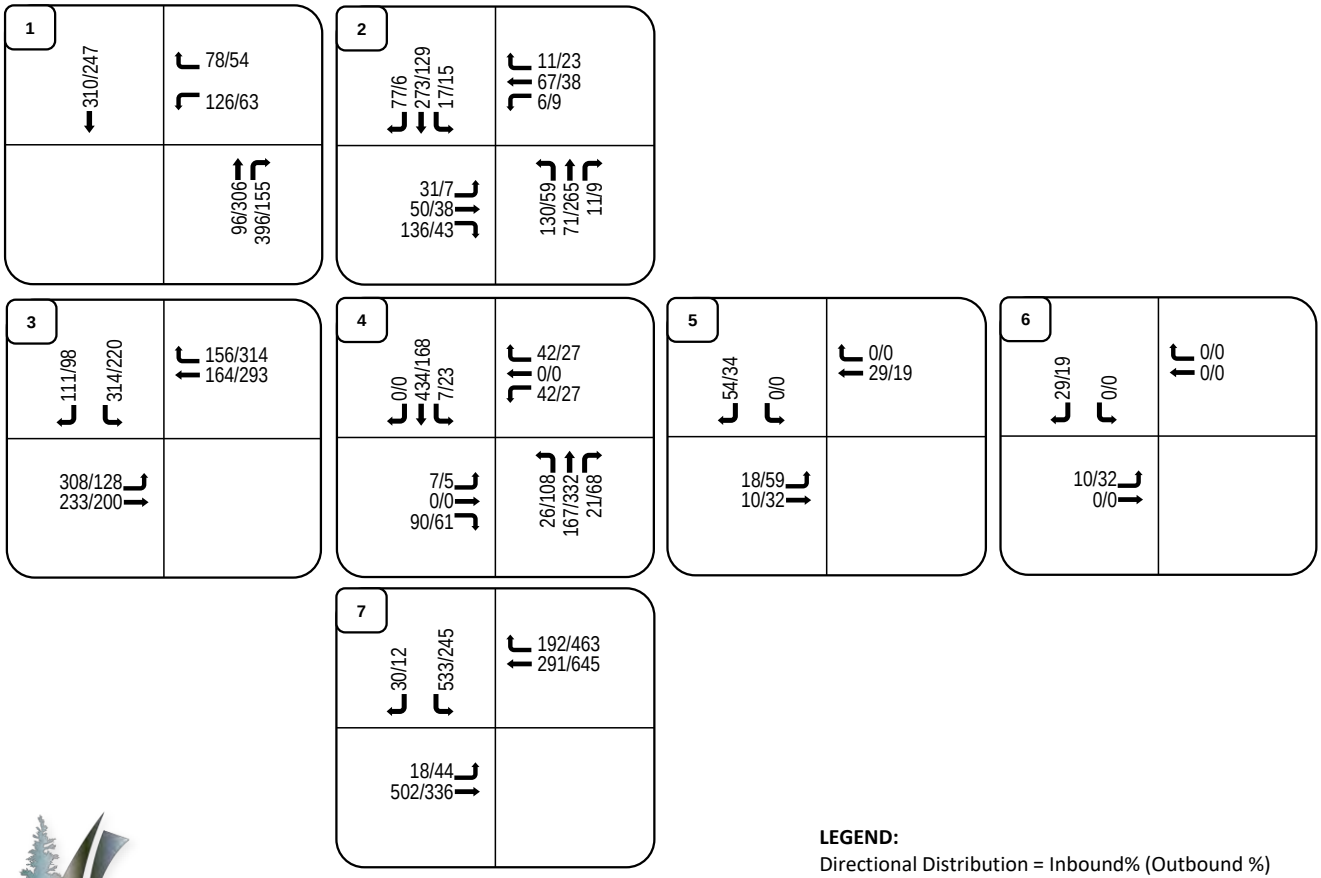


LEGEND:
Directional Distribution = Inbound% (Outbound %)
AM/PM Volumes = XX/XX VPH (in PCEs)
Turning Movements

McDOWELL ENGINEERING, LLC
TRANSPORTATION ENGINEERING CONSULTANTS

Project Number M1560
Prepared By EP

Figure 9: Year 2023 Total Traffic

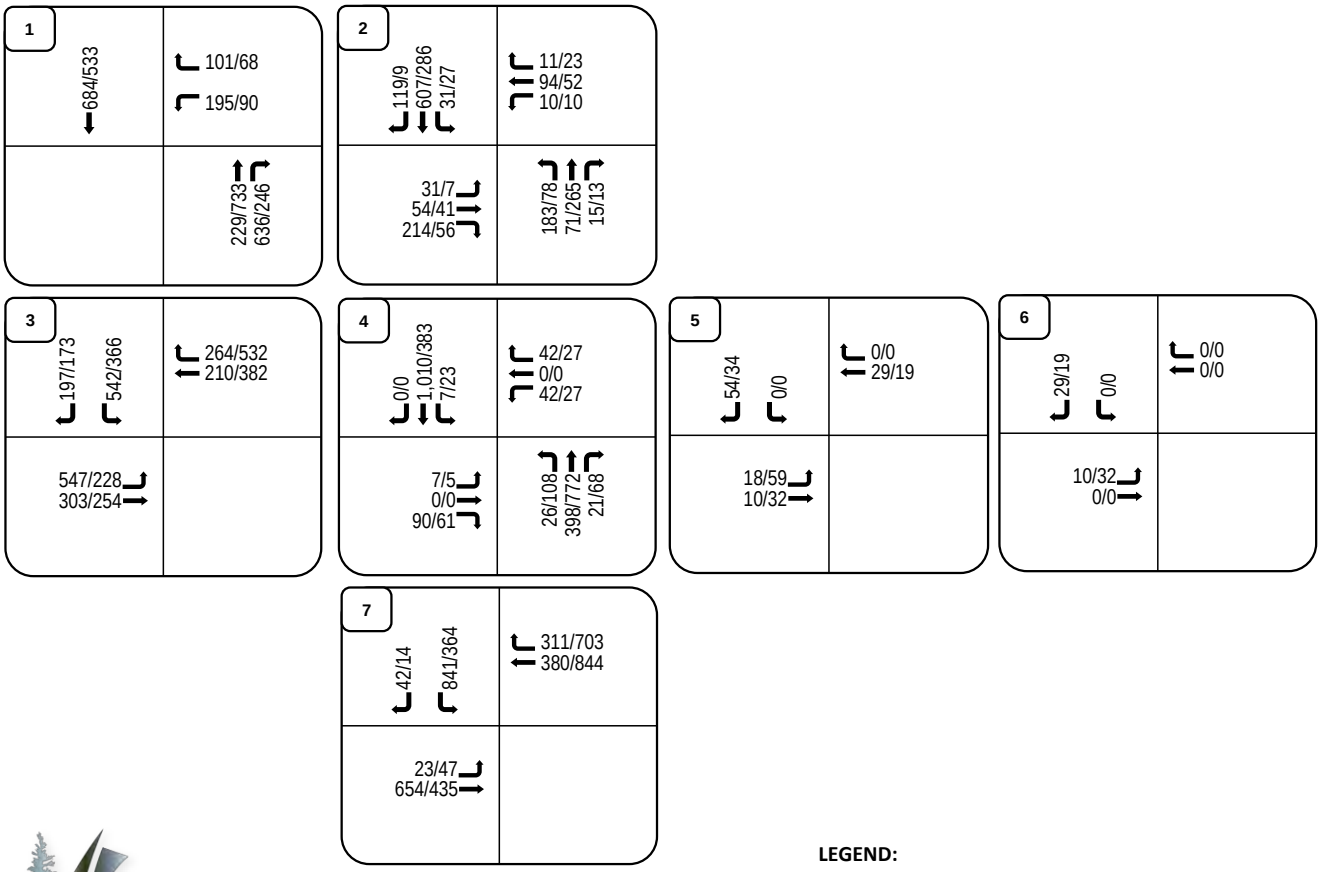


LEGEND:
Directional Distribution = Inbound% (Outbound %)
AM/PM Volumes = XX/XX VPH (in PCEs)
Turning Movements

McDOWELL ENGINEERING, LLC
TRANSPORTATION ENGINEERING CONSULTANTS

Project Number M1560
Prepared By EP

Figure 10: Year 2045 Total Traffic



LEGEND:
Directional Distribution = Inbound% (Outbound %)
AM/PM Volumes = XX/XX VPH (in PCEs)
Turning Movements

McDOWELL ENGINEERING, LLC
TRANSPORTATION ENGINEERING CONSULTANTS

Project Number M1560
Prepared By EP

5.0 Transportation Impact Analysis

5.1 Site Design, Traffic Circulation, and Queue Evaluation

Based upon review of the Copper Creek Subdivision's latest site plan, it is anticipated to have adequate internal street connectivity to accommodate the site traffic.

All site design shall conform to *City of Fruita Design Criteria and Construction Specifications Manual*[9], *Mesa County Standard Specifications for Road and Bridge Construction*[10] and the *Manual on Uniform Traffic Control Devices*[11].

5.2 Multimodal Improvements

The Copper Creek Subdivision shall construct sidewalk facilities adjacent to all constructed streets. Connectivity shall be incorporated to adjacent undeveloped properties. The current site plan (**Figure 3**) shows the sidewalks that are proposed to be constructed adjacent to all of the roads. Additionally, a central green space has trails that offer good pedestrian and bicycle circulation throughout the subdivision.

5.3 Internal Traffic Calming

The internal intersections are not anticipated to meet the MUTCD's minimum traffic volumes for installing all-way stop signs.

Per Section 4.2(B)(3) of the *Fruita Design Criteria and Construction Specifications Manual*, "Residential streets should be designed to discourage fast movement of vehicular traffic (more than 25 m.p.h.) and incorporate traffic calming measures where appropriate." Appropriate traffic calming methods may be incorporated into the internal roadway design:

- Internal roundabout installation at key intersections
- Curb extensions at intersections
- Raised medians at intersections
- Midblock and/or raised pedestrian crossings

5.4 Auxiliary Turn Lanes

The need for both auxiliary turn lanes was assessed per *Mesa County Design Standards*[12] and *State of Colorado State Highway Access Code*[13] *(Access code)* standards. Refer to **Table 4** below for the auxiliary turn lane recommendations and details.

[9] Fruita Design Criteria and Construction Specifications Manual. City of Fruita, 2009.
[10] Mesa County Standard Specifications for Road and Bridge Construction. Mesa County, 1995.
[11] Manual on Traffic Control Devices. Federal Highway Administration, 2009.
[12] Mesa County Design Standards, 2020.
[13] State of Colorado State Highway Access Code, 2002.

Table 4 - Auxiliary Turn Lane Requirements [1]

#	Int.	Mvmt	Accel or Decel	Posted Speed Limit (MPH)	Road Classification	*Mesa/ SHAC* Trigger Volume (VPH)	Year 2022 Existing		Year 2023 BG		Year 2045 BG		Year 2023 Total		Year 2045 Total		Existing Turn Lane	*Mesa County / Access Code* Required Turn Lane	Trigger Year & Condition
							AM	PM	AM	PM	AM	PM	AM	PM	AM	PM			
1	S Pine Road & J Road (Wildcat B	WBL	Dec	35	Mesa	> 20	110	44	118	58	187	85	126	63	195	90	225' Storage + 200' Taper	120' Taper + 275' Decel + 195' Storage	Year 2022 Existing. Currently Restricted by back-to-back with high school access.
		WBL	Acc	35	Mesa	> 20	110	44	118	58	187	85	126	63	195	90	225' Storage + 200' Taper	120' Taper + 280' Decel + 195' Storage	Year 2022 Existing.
		WBR	Dec	35	Mesa	> 40	41	26	45	33	68	47	78	54	101	68	225' Storage	120' Taper + 275' Decel + 105' Storage	Year 2022 Existing
		NBR	Dec	35	Mesa	> 20	386	147	396	155	636	246	396	155	636	246	None	120' Taper + 275' Decel + 640' Storage	Year 2022 Existing
2	J Rd & 19 Rd	EBL	Dec	35	Mesa	> 20	31	7	31	7	31	7	31	7	31	7	None	120' Taper + 275' Dec + 45' Storage	Year 2022 Existing
		EBR	Dec	35	Mesa	> 40	126	20	129	20	207	33	136	43	214	56	None	120' Taper + 275' Dec + 215' Storage	Year 2022 Existing
		WBL	Dec	35	Mesa	Does Not Warrant	4	1	6	9	10	10	6	9	10	10	None		Does not meet minimum DHV of Road
		WBR	Dec	35	Mesa	Does Not Warrant	11	23	11	23	11	23	11	23	11	23	None		Does not meet minimum DHV of Road
		NBL	Dec	45	Mesa	> 15	86	31	88	32	141	51	130	59	183	78	None	135' Taper (@10' lanes) + 425' Dec + 185' Storage	Year 2022 Existing
		NBR	Dec	45	Mesa	> 20	4	4	11	9	15	13	11	9	15	13	None		Does not meet minimum DHV of Road
		SBL	Dec	45	Mesa	> 15	17	15	17	15	31	27	17	15	31	27	None	135' Taper (@10' lanes) + 425' Dec + 45' Storage	Year 2022 Existing
		SBR	Dec	45	Mesa	> 20	75	6	77	6	119	9	77	6	119	9	None	135' Taper (@10' lanes) + 425' Decel + 120' Storage	Year 2022 Existing
3	US 6/50 & S Pine Road	EBL	Dec	45	NR-B	> 10	300	125	308	128	547	228	308	128	547	228	390' Storage + 145' Taper	435' (includes 13.5:1 taper)	Existing is adequate
		WBR	Dec	45	R-A	> 25	150	302	156	314	264	532	156	314	264	532	180' Storage (Combined Accel/Decel Lane)	435' (includes 13.5:1 taper)	2045 Total traffic 95th queue is 46', which is less than the existing 180' storage. Therefore existing is adequate.
		SBL	Dec	35	Mesa	> 15	287	183	301	201	529	347	314	220	542	366	375'	120' Taper + 275' Decel + 545' storage	Year 2022 Existing
		SBR	Dec	35	Mesa	> 20	108	95	111	98	197	173	111	98	197	173	240' Existing SB Lane	120' taper + 275' Decel + 200' Storage	Year 2022 Existing
		SBR	Acc	45	NR-B	Safety & Operations	108	95	111	98	197	173	111	98	197	173	335'+225' Taper		Existing is adequate
4	19 Rd & I 1/2 Rd	EBL	Acc	45	Mesa	> 15	0	0	7	5	7	5	7	5	7	5	None		
		EBR	Acc	45	Mesa	> 20	0	0	90	61	90	61	90	61	90	61	None	560' Accel Length + 135' Taper	Year 2023 BG (Iron Wheel Subdivision)
		WBL	Acc	45	Mesa / NR-B [2]	> 50	0	0	0	0	0	0	42	27	42	27	None		Note: State Highway Access Code was used for turn lane trigger volume
		WBR	Acc	45	Mesa / NR-B [2]	> 50	0	0	0	0	0	0	42	27	42	27	None		Note: State Highway Access Code was used for turn lane trigger volume
		NBL	Dec	45	Mesa	> 15	0	0	26	108	26	108	26	108	26	108	None	135' Taper + 425 Decel + 110' Storage	Year 2023 BG (Iron Wheel Subdivision)
		NBR	Dec	45	Mesa	> 20	0	0	0	0	0	0	21	68	21	68	None	135' Taper + 425' Decel + 70' Storage	Year 2023 Total (Copper Creek Subdivision)
		SBL	Dec	45	Mesa	> 15	0	0	0	0	0	0	7	23	7	23	None	135' Taper + 425' Decel + 30' Storage	Year 2023 Total (Copper Creek Subdivision)
		SBR	Dec	45	Mesa	> 20	0	0	0	0	0	0	0	0	0	0	None		

#	Int.	Mvmt	Accel or Decel	Posted Speed Limit (MPH)	Road Classification	*Mesa/ SHAC* Trigger Volume (VPH)	Year 2022 Existing		Year 2023 BG		Year 2045 BG		Year 2023 Total		Year 2045 Total		Existing Turn Lane	*Mesa County / Access Code* Required Turn Lane	Trigger Year & Condition
							AM	PM	AM	PM	AM	PM	AM	PM	AM	PM			
5	I 1/2 Rd & West Site Access	EBL	Dec	45	Mesa	NA	0	0	0	0	0	0	18	59	18	59	None		Does not meet minimum DHV of Road
		EBR					0	0	0	0	0	0	0	0	0	0			
		WBL					0	0	0	0	0	0	0	0	0	0			
		WBR	Dec	20	Mesa	NA	0	0	0	0	0	0	0	0	0	0	None		Does not meet minimum DHV of Road
		NBL					0	0	0	0	0	0	0	0	0	0			
		NBR					0	0	0	0	0	0	0	0	0	0			
		SBL	Dec	20	Mesa	NA	0	0	0	0	0	0	0	0	0	0	None		Does not meet minimum DHV of Road
		SBR	Dec	20	Mesa	NA	0	0	0	0	0	0	54	34	54	34	None		Does not meet minimum DHV of Road
6	I 1/2 Rd & East Site Access	EBL	Dec	20	Mesa	Na	0	0	0	0	0	0	10	32	10	32	None		Does not meet minimum DHV of Road
		WBR	Dec	20	Mesa	NA	0	0	0	0	0	0	0	0	0	0	None		Does not meet minimum DHV of Road
		SBL	Dec	20	Mesa	NA	0	0	0	0	0	0	0	0	0	0	None		Does not meet minimum DHV of Road
		SBR	Dec	20	Mesa	NA	0	0	0	0	0	0	29	19	29	19	None		Does not meet minimum DHV of Road
7	US6/50 & 19 Rd	EBL	Dec	55	R-A	> 10	6	4	11	21	16	24	18	44	23	47	330' Storage + 265' Taper	600' (includes 13.5:1 taper) + 50' Storage	Year 2023 BG
		WBR	Dec	55	R-A	> 25	150	301	178	417	297	657	192	463	311	703	480' Storage + 390 ' Taper	600' (includes 13.5:1 taper)	Year 2022 Exsiting. Existing Infrastructure is adequate.
		SBL	Dec	45	Mesa	> 20	386	149	500	224	808	343	533	245	841	364	None	135' Taper + 425' Decel + 425' Storage (dual lefts)	Year 2022 Existing. Construct dual left turns.
		SBL	Acc	55	R-A	Safety & Operations	386	149	500	224	808	343	533	245	841	364	180' Accel Length + 550' Taper	960' Accel Length (includes 18.5:1 taper)	Acceleration lane is not required with the existing signal.
		SBR	Dec	45	Mesa	> 20	15	2	22	7	34	9	30	12	42	14	None	135' Taper + 425' Decel + 50' Storage	Year 2023 BG
		SBR	Acc	55	R-A	> 50	15	2	22	7	34	9	30	12	42	14	330' Accel Length + 430' Taper	960' Accel Length (includes 18.5:1 taper)	Forecasted traffic volume does not require the acceleration lane.

[1] Based upon *State Highway Access Code* requirements for an R-A roadway with posted speed of 45mph.

[2] Turn Lane based upon State Highway Access Code requirements for an NR-B roadway with posted speed of 45mph.

Triggered by State Highway Access Code Volumes or Mesa County Design Standards Volumes

S Pine Road & J Road (Wildcat Avenue): Westbound left deceleration and acceleration lanes are required by Year 2022 existing traffic conditions. The westbound left deceleration lane is currently restricted back-to-back by high school access. The Year 2045 total queue is 300', which is greater than the existing storage. Westbound right and northbound right deceleration lanes are required by current Year 2022 existing traffic conditions. These turn lanes will be required with or without site traffic. The requirements for each turn lane at this intersection can be seen in **Table 4**.

J Road & 19 Rd: Eastbound left and right, northbound left, southbound left and right are all required with Year 2022 existing traffic conditions. These turn lanes will be required with or without site traffic. The requirements for each turn lane at this intersection can be seen in **Table 4**.

US 6/50 & S Pine Road: Eastbound left, westbound right, southbound left and right deceleration lanes are required by Year 2022 existing traffic conditions. The existing eastbound left turn lane is adequate. Year 2045 total traffic 95th queue is 46' for the westbound right deceleration movement. This queue is less than the existing 180' storage. Therefore, the existing turn lane is adequate. These turn lanes will be required with or without site traffic. The requirements for each turn lane at this intersection can be seen in **Table 4**.

19 Road & I ½ Road: Eastbound right acceleration lane and northbound left deceleration lane are required by Year 2023 background traffic conditions. These two turn lanes were identified in the previous *2018 Iron Wheel Subdivision TIS*[14] study. The requirements for these turn lanes can be seen in **Table 4**.

Northbound right and southbound left deceleration lanes are required by Year 2023 total traffic conditions. These deceleration lanes are triggered by the Copper Creek Subdivision development. The requirements for these turn lanes can be seen in **Table 4.**

I ½ Road & West Site Access: There are no turn lanes triggered by current and expected future traffic conditions at this intersection. The traffic volumes are too low to meet the minimum design hourly volume (DHV) of the road.

I ½ Road & East Site Access: There are no turn lanes triggered by current and expected future traffic conditions at this intersection. The traffic volumes are too low to meet the minimum DHV of the road.

US 6/50 & 19 Road: Eastbound left and southbound right deceleration lanes are required by Year 2023 background traffic conditions. Dual southbound left deceleration lanes are required by Year 2022 existing traffic conditions. These dual left deceleration lanes were identified in the previous *Iron Wheel Subdivision TIS Study*. A westbound right deceleration lane is required by Year 2022 existing traffic

[14] Iron Wheel Subdivision Transportation Impact Study. McDowell Engineering, 2018.

conditions. However, the existing westbound deceleration lane is adequate. The turn lane requirements for this intersection can be seen in **Table 4**.

5.5 Total Traffic Levels of Service

An *HCM* 2010 analysis under total traffic conditions was performed for the proposed site access under both short-term Year 2023 and long-term Year 2045 traffic conditions. The results can be seen in **Table 5**.

Table 5: Total Traffic Level of Service

#	Int.	Traffic Control	Approach or Control Delay	Approach	Year 2023 Level of Service (Delay in Seconds)		Year 2045 Level of Service (Delay in Seconds)	
					AM	PM	AM	PM
1	S Pine Rd & J Rd	WB Stop	A	WB	B (14.7)	B (13.5)	F (141.3)	F (56.4)
			A	NB	A (0.0)	A (0.0)	A (0.0)	A (0.0)
			A	SB	A (0.0)	A (0.0)	A (0.0)	A (0.0)
2	J Rd & 19 Rd	All Way Stop	A	EB	B (11.5)	A (8.8)	C (20.4)	A (10.0)
			A	WB	B (10.1)	A (8.8)	B (14.6)	A (10.0)
			A	NB	B (11.7)	B (11.5)	C (15.4)	B (12.3)
			A	SB	B (14.7)	A (9.2)	F (219.1)	B (13.4)
3	US6/50 & S Pine Rd	Signal	C	EBL	A (6.0)	A (4.2)	C (17.9)	A (6.0)
			A	EBT	A (4.6)	A (4.4)	A (4.9)	A (4.7)
			A	WBT	B (10.2)	B (11.1)	B (10.8)	B (13.3)
			C	WBR	A (2.5)	A (2.5)	A (2.5)	A (3.3)
			C	SBL	F (248.7)	F (93.6)	F (704.2)	F (350.6)
			C	SBR	A (9.6)	A (9.7)	A (9.9)	A (9.8)
4	19 Rd & I 1/2 Rd	EB/WB Stop	A	EB	B (12.7)	B (10.3)	D (29.6)	B (15.0)
			A	WB	C (17.2)	C (18.3)	F (202.8)	F (68.1)
			A	NB	A (1.0)	A (1.7)	A (0.6)	A (1.0)
			A	SB	A (0.1)	A (1.0)	A (0.1)	A (0.6)
5	I 1/2 Rd & West Site Access	SB Stop	A	EB	A (4.70)	A (4.80)	A (4.70)	A (4.80)
			A	WB	A (0.00)	A (0.00)	A (0.00)	A (0.00)
			A	SB	A (8.70)	A (8.50)	A (8.70)	A (8.50)
6	I 1/2 Rd & East Site Access	SB Stop	A	EB	A (7.2)	A (7.3)	A (7.2)	A (7.3)
			A	WB	A (0.0)	A (0.0)	A (0.0)	A (0.0)
			A	SB	A (8.4)	A (8.4)	A (8.4)	A (8.4)
7	US 6/50 & 19 Rd	Signal	C	EBL	B (10.8)	A (8.4)	A (9.2)	A (9.0)
			A	EBT	C (21.9)	A (9.1)	C (21.4)	A (8.6)
			A	WBT	C (22.0)	C (24.2)	C (19.9)	D (31.7)
			C	WBR	A (3.7)	A (3.2)	A (3.2)	A (3.8)
			C	SBL	E (42.4)	E (45.0)	E (38.9)	E (39.2)
			C	SBR	C (19.1)	C (21.2)	C (20.8)	C (20.8)

As can be seen in **Table 5**, two of the intersections (Intersections #5 and #6) are anticipated to operate at acceptable overall intersection Levels of Service through the long-term planning horizon Year 2045. The other five intersections with unacceptable Levels of Service are anticipated to have excessive delay under background traffic conditions as well.

S Pine Road & J Road (Wildcat Avenue): This intersection is anticipated to operate at an acceptable LOS B or better through Year 2045 total traffic conditions on the north and south legs. The east leg is expected to operate at a LOS F during Year 2045 total traffic conditions. This is due to Fruita and Mesa County's anticipated growth on S Pine Road. The westbound left movement will have few gaps to make the movement across the northbound traffic, resulting in an increase delay. This may also be exacerbated by southbound left queues discussed below in the US6/50 & S Pine Road intersection.

J Road & 19 Road: This intersection is anticipated to operate at an acceptable LOS C or better through Year 2045 total traffic conditions on the east, west, and south legs. The north leg is expected to operate at a LOS F during Year 2045 total traffic conditions.

US 6/50 & S Pine Road: This intersection is anticipated to operate at an acceptable LOS C or better through Year 2045 total traffic conditions on the east and west legs. The north leg is anticipated to operate at a LOS F during year 2023 and 2045 total traffic conditions. This is due to Fruita and Mesa County's anticipated growth on S Pine Road. The current signal timing does not allow for all the southbound traffic to leave in one cycle, forcing some vehicles in the queue to wait multiple cycles.

19 Road & I ½ Road: This intersection is anticipated to operate at an acceptable LOS A through Year 2045 total traffic conditions on the north and south legs. The west leg is anticipated to operate at a LOS D during Year 2045 total traffic conditions. The east leg is anticipated to operate at a LOS F during Year 2045 total traffic conditions. The east and west leg are anticipated to operate at low LOS due to the expected growth on 19 Road. With the higher northbound and southbound traffic volumes, the eastbound traffic will not have sufficient gaps to make the movement across the northbound and southbound traffic.

Roundabout Alternative: As an alternative, the City of Fruita could consider the construction of a roundabout at the intersection. The roundabout would not require the construction of turn lanes but would require a larger footprint at the intersection. A single lane roundabout would be adequate.

In the previous *2008 Iron Wheel Subdivision TIS study*, a roundabout at the same intersection was recommended as an alternative to building turn lanes. The cost of building a single lane roundabout at this intersection could be shared between both parties.

I ½ Road & West Site Access: The intersection is anticipated to operate at an acceptable LOS A through Year 2045 total traffic conditions.

I ½ Road & East Site Access: The intersection is anticipated to operate at an acceptable LOS A through Year 2045 total traffic conditions.

US 6/50 & 19 Road: The intersection is anticipated to operate at an acceptable LOS C or better through year 2045 total traffic conditions on the west leg. The east leg is anticipated to perform at a LOS D during Year 2045 total traffic conditions. The north leg is anticipated to perform at a LOS E during Year 2023 and 2045 total traffic conditions. This is due to Fruita and Mesa County's anticipated growth on S Pine Road. The current signal timing does not allow for all the southbound traffic to leave in one cycle.

5.6 Site Access Entering Sight Distance

Per Figure 4.7 of the *City of Fruita Design Criteria and Construction Specifications Manual (Specs)*, 500 feet of entering sight distance is required in both directions of 19 Road for the posted speed limit of 45 mph. 19 Road is generally level in the vicinity of the proposed site access and appears to have more than 1,000 feet of entering sight distance in each direction.

5.7 State Highway Access Permit

A new State Highway Access Permit will be required for the intersection of 19 Road and Highway 6 & 50. A State Highway Access Permit was submitted with the *Iron Wheel Subdivision*. The previous permit volume was 1,027 vph. The new permit volume is 1,217 vph.

6.0 Recommendations and Conclusions

The Copper Creek Subdivision is a residential development with approximately 138 single-family and multifamily homes. The project is anticipated to be constructed in two or three phases. This study analyzes a buildout condition of the subdivision with estimated completion in Year 2023. The project site is located approximately 1,600 feet north of the intersection of US 6 and 19 Road on the east side of 19 Road.

Trip Generation: The subdivision is expected to generate a total of 1,250 trips over the course of an average weekday This includes 28 inbound and 83 outbound trips during the morning peak hour. The evening peak hour is expected to generate 91 inbound trips and 53 outbound trips.

Site Accesses: The Copper Creek Subdivision will have two site accesses at project buildout and two more in the future. Refer to **Figure 3** for the site plan showing the site accesses. The two site accesses proposed at project buildout are anticipated to operate at acceptable Levels of Service through Year 2045 total traffic conditions. The proposed access spacing will comply with the City of Fruita requirements. All accesses will be constructed per the *Fruita Design Criteria and Construction Specifications Manual*.

1. I ½ Road & East Site Access: This intersection is expected to perform at LOS A on all legs through Year 2045 total traffic conditions.
2. I ½ Road & West Site Access: This intersection is expected to perform at LOS A on all legs through Year 2045 total traffic conditions.
3. Northeast Site Access (future access)
4. Southeast Site Access (future access)

Intersection Analysis: In addition to the proposed site accesses, this report also studies five additional off-site intersections.

1. S Pine Street & J Road (Wildcat Avenue): The east leg is expected to perform at a LOS F during Year 2045 background traffic conditions due to Fruita and Mesa County's anticipated growth on S Pine Road. The other legs are expected to perform at LOS A through Year 2045 total traffic conditions.

2. J Road & 19 Road: The north leg is expected to operate at a LOS F during Year 2045 background traffic conditions. The other legs are expected to perform at LOS C or better through Year 2045 total traffic conditions.

3. Highway 6/50 & S Pine Street: The north leg is expected to perform at a LOS F during Year 2023 background traffic conditions. The other legs are expected to perform at LOS C or better through Year 2045 total traffic conditions.

4. 19 Road and I ½ Road: The west leg is anticipated to perform at LOS D during Year 2045 background traffic conditions. The east leg is anticipated to perform

at LOS F during Year 2045 total traffic conditions. The north and south legs are expected to perform at LOS A through Year 2045 total traffic conditions.

Roundabout Alternative: As an alternative, the City of Fruita could consider the construction of a roundabout at the intersection. The roundabout would not require the construction of turn lanes, but instead a larger footprint at the intersection. A single-lane roundabout would be adequate.

5. Highway 6/50 & 19 Road: The north leg is expected to perform at LOS E during Year 2023 background traffic conditions. The east leg is expected to perform at LOS D during Year 2045 total traffic conditions. The south and west legs are expected to perform at LOS C or better through Year 2045 total traffic conditions.

Internal Site Circulation: The site has several long, straight internal roadways. The internal intersections are not anticipated to meet the MUTCD's minimum traffic volumes for installing all-way stop signs. Other, more appropriate, traffic calming methods may be incorporated into the internal roadway design:

- Internal roundabout installation at key intersections
- Curb extensions at intersections
- Raised medians at intersections
- Midblock and/or raised pedestrian crossings

Multimodal Improvements: The Copper Creek Subdivision shall construct sidewalk facilities adjacent to all constructed streets. Additionally, a central green space has trails that offer good pedestrian and bicycle circulation throughout the subdivision.

Auxiliary Turn Lanes: Auxiliary turn lane requirements are detailed in **Table 4**.

S Pine Road & J Road (Wildcat Avenue): Westbound left deceleration and acceleration lanes are required by Year 2022 existing traffic conditions. Westbound right and northbound right deceleration lanes are required as well by Year 2022 existing traffic conditions. This condition will occur with or without site traffic.

J Road & 19 Road: Eastbound right, eastbound left, northbound left, southbound left, and southbound right deceleration lanes are required by Year 2022 existing traffic conditions.

US 6/50 & S Pine Road: Eastbound left, westbound right, southbound left, and southbound right deceleration lanes are required by Year 2022 existing traffic conditions.

19 Road & I ½ Road: Eastbound right acceleration and northbound deceleration turn lanes are required by Year 2023 background traffic conditions. These two turn lanes were identified in the previous *2018 Iron Wheel Subdivision TIS* study.

Northbound right and southbound left deceleration lanes are required by Year 2023 total traffic conditions. These turn lanes are triggered by the Copper Creek Subdivision development

I ½ Road & West Site Access: There are no turn lanes triggered by current and expected future traffic conditions at this intersection. The traffic volumes are too low to meet the minimum DHV of the road.

I ½ Road & East Site Access: There are no turn lanes triggered by current and expected future traffic conditions at this intersection. The traffic volumes are too low to meet the minimum DHV of the road.

US 6/50 & 19 Road: Eastbound left and southbound right deceleration lanes are required by Year 2023 background traffic conditions. Westbound right and southbound left deceleration lanes are required Year 2022 existing traffic conditions. Dual southbound left deceleration lanes are required by Year 2022 existing traffic conditions. These dual left deceleration lanes were identified in the previous *Iron Wheel Subdivision TIS Study*.

State Highway Access Permit: A new State Highway Access Permit will be required for the intersection of 19 Road and Highway 6 & 50. A State Highway Access Permit was submitted with the *Iron Wheel Subdivision*. The previous permit volume was 1,027 vph. The new permit volume is 1,217 vph.

In summary, the proposed Iron Wheel Subdivision is anticipated to be fully served by the surrounding transportation infrastructure, with the above recommended infrastructure improvements.

7.0 Appendix

Reference Documents

1. *Fruita Design Criteria and Construction Specifications Manual. City of Fruita, 2009.*
2. *Fruita Area Street Classifications and Traffic Control Plan. City of Fruita, 2012.*
3. *Community Plan, City of Fruita, 2008.*
4. *Capital Improvement Projects. City of Fruita, 2022. https://www.fruita.org/projects.*
5. *Online Transportation Information System, Colorado Department of Transportation, 2022. https://dtdapps.coloradodot.info/otis.*
6. *Highway Capacity Manual, 6th Edition. Transportation Research Board, 2016.*
7. *Trip Generation Handbook, An ITE Recommended Practice. Institute of Transportation Engineers, 2001.*
8. *Trip Generation Manual, 11th Edition of Transportation Engineers, 2021.*
9. *Fruita Design Criteria and Construction Specifications Manual. City of Fruita, 2009.*
10. *Mesa County Standards Specifications for Road and Bridge Construction. Mesa County, 1995.*
11. *Manual on Traffic Control Devices. Federal Highway Administration, 2009.*
12. *Mesa County Design Standards, 2020.*
13. *State of Colorado State Highway Access Code, 2002.*
14. *Iron Wheel Subdivision Transportation Impact Study, McDowell Engineering, 2018.*

Included Documents

1. Traffic Impact Study Scoping Form
2. CDOT OTIS Data
3. Traffic Counts
4. Figure APP-1 Background Traffic Adjust for Iron Wheel Subdivision
5. Traffic Signal Timing Data
6. Synchro Reports

Gmail **Kari McDowell Schroeder <kari@mcdowelleng.com>**

Proposed TIS Scoping - Fruita Copper Creek Residential

1 message

Kari McDowell Schroeder <kari@mcdowelleng.com> Thu, Mar 17, 2022 at 10:02 AM
To: "Killian - CDOT, Brian" <brian.killian@state.co.us>, satkins@fruita.org
Cc: Karthik Vishwamitra - CDOT <karthik.vishwamitra@state.co.us>, Mark Bunnell - CDOT <mark.bunnell@state.co.us>, Edgar Palacios <edgar@mcdowelleng.com>

Brian and Sam,

Attached is our proposed TIS scoping form for the Copper Creek Residential project in Fruita. Please review and let us know if you have any additions or revisions.

Thank you,

Kari

Kari J. McDowell Schroeder, PE, PTOE

Transportation / Traffic Engineer

McDOWELL ENGINEERING LLC
TRANSPORTATION ENGINEERING CONSULTANTS

Eagle ● Broomfield ● Grand Junction

970.623.0788 ● 303.949.4748 ● 303.845.9541 fax

kari@mcdowelleng.com

www.mcdowelleng.com

2022-03-17 CDOT Scoping Form - Fruita Copper Creek Residential.pdf
1279K

COLORADO
Department of Transportation
Region 3

Transportation Impact Study Methodology Form

Prior to starting a traffic impact study, a Methodology Form must be submitted for review and signed by the Region 3 Access Engineer. It shall be included as part of the study.

CONTACT INFORMATION	
Consultant:	Name: McDowell Engineering
	Telephone: (970)623-0788
	Email: kari@mcdowelleng.com
Developer/Owner Name:	Silas Colman

PROJECT INFORMATION	
Project Name	Fruita Copper Creek
Project Location	954 19 Road, Parcel #2697-222-00-102, Fruita, CO
Project Description *(Attached proposed site plan)*	Proposed 103 single family residential dwelling units southwest of Skiff Ave & 19 Rd in Fruita,CO. Site is 25.95 acres.
State Highway	Hwy 6 & 50 (006 A)
County	Mesa County
Mile Post	22.45
Posted Speed Limit	55 mph

TIS ASSUMPTIONS			
Study Years	Current Year: 2022	Buildout Year: 2023	Long Term Year: 2045
Traffic Assessment Level *(Provide justification)*	level 3 - Traffic Impact Study		
Study Intersections	1. S Pine Road & J Road	6. East Site Access	
	2. 19 Road & J Road	7. US 6/50 & 19 Road	
	3. US 6/50 & S Pine Road	8.	
	4. 19 Road & Site Access	9.	
	5. West Site Access	10.	
Future Growth Rate	■ OTIS 1.24%	☐ Regional TDM	■ Other See Notes on pg. 2
Seasonal Adjustment Factor	N/A		

COLORADO
Department of Transportation
Region 3

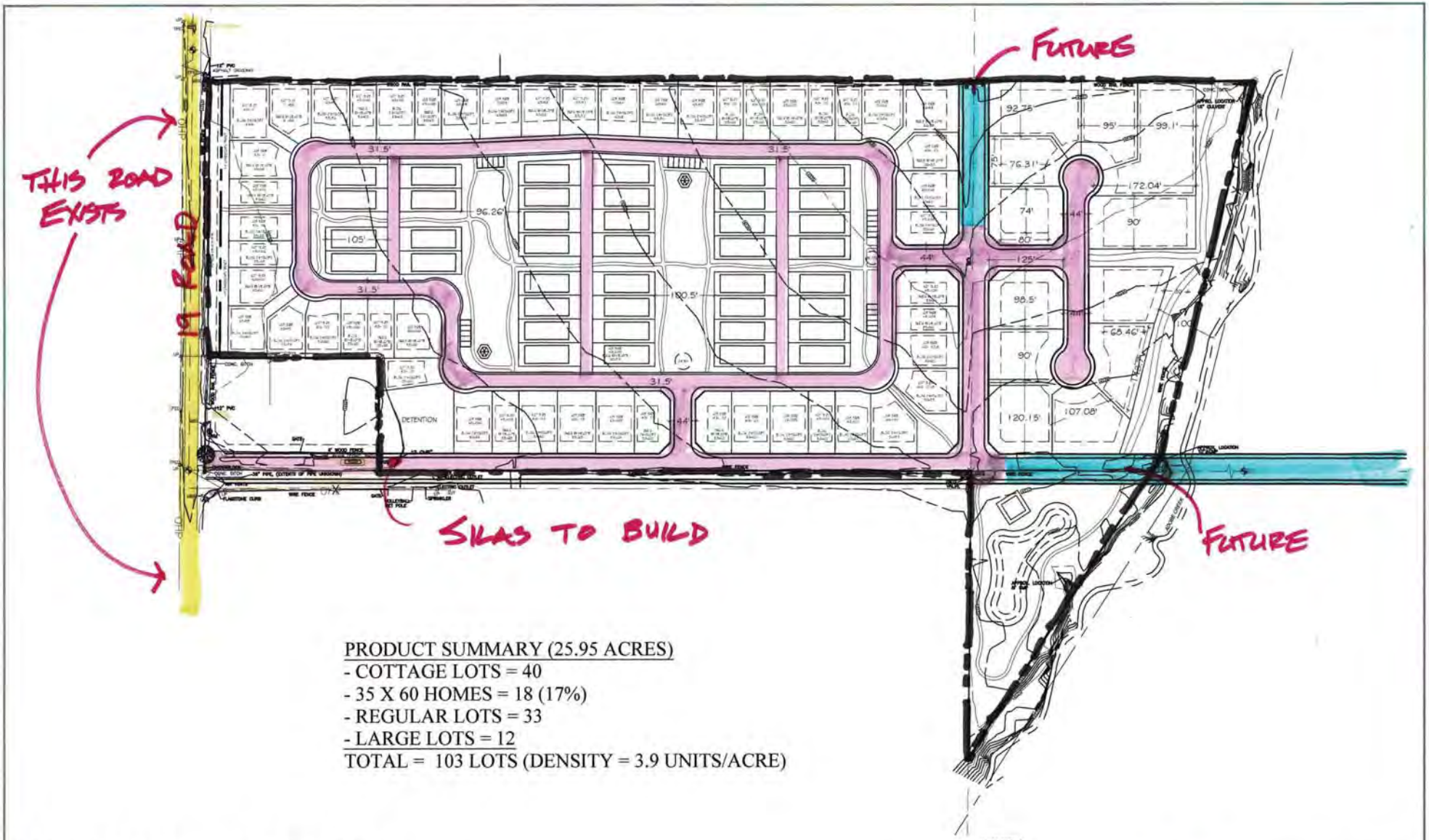
ASSUMPTIONS CONTINUED					
Project Trip Distribution *(State assumptions and attach sketch that shows individual movements.)*	Assumed that 50% of the project generated traffic traveled east towards Grand Junction for work and 50% traveled west towards for work and school. See attached figures for further distribution breakdowns.				
Trip Reduction Percentage	Internal Capture:	NA	Pass By:	NA	
	Multi-Modal:	5%	Other:	NA	
Study Time Periods *(Check all that apply)*	■ AM (7-9)	■ PM (4-6)	■ Weekday		
	☐ SAT (Midday)	☐ Other			
Existing and Proposed ITE Trip Generation Land Use	Existing: Vacant. Proposed: Land code #210 Single-Family Detached for 103 dwelling units.				
Analysis Methods *(Check all that apply)*	■ Synchro or ☐ HCS *(isolated intersections only)*	☐ SimTraffic or ☐ Other *(closely spaced intersections or when known/expected queuing issue)*			
	☐ Signal Warrants	■ Pedestrian/Transit/Bicycle			
	■ Safety/Sight Distance	■ Queuing and Storage			
	☐ Other				
Notes and Other Assumptions	Based on Mesa County Regional Transportation Planning the growth rate was 3.70% North of J Road, 4.05% South of J road, 0.31% West of 19 Road, and 1.53% East of 19 Road.				
Crash Data	CDOT will perform a crash data analysis for the highway in the vicinity of the proposed access and provide to the consultant. As a part of the study consultant shall recommend mitigation measures for any identified safety issues.				
Simulation Input Files	Consultant to provide computer files used for analysis with a signed and sealed copy of the study.				

CDOT INTERNAL USE ONLY	
Review Comments ☐ Revise and Resubmit	
Engineer Signature/Date	☐ Approved

City of Grand Junction

Printed: 2/14/2022
1 inch equals 1,000 feet
Scale: 1:12,000

City of Grand Junction COLORADO
GEOGRAPHIC INFORMATION SYSTEM



PRODUCT SUMMARY (25.95 ACRES)
- COTTAGE LOTS = 40
- 35 X 60 HOMES = 18 (17%)
- REGULAR LOTS = 33
- LARGE LOTS = 12

TOTAL = 103 LOTS (DENSITY = 3.9 UNITS/ACRE)

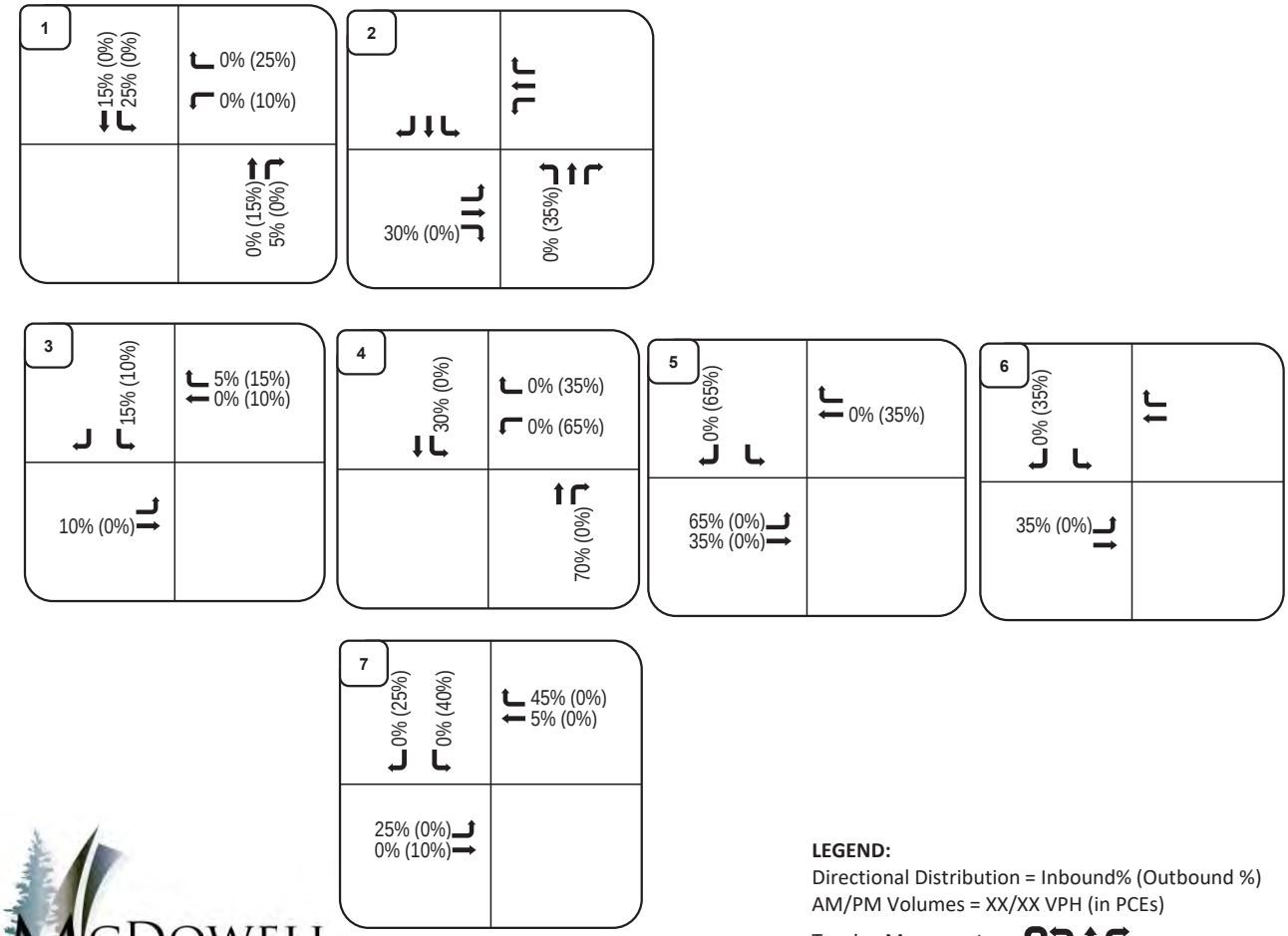
FRUITA COPPER CREEK
PREFERRED PLAN & Concept 1 East Side

1"=150'

NORTH

KAART PLANNING
LAND PLANNING AND
LANDSCAPE ARCHITECTURE
734 MAIN STREET GRAND JUNCTION, CO 81501
970-241-0745 (P)

Figure 6: Year Project Generated Traffic Distribution Traffic

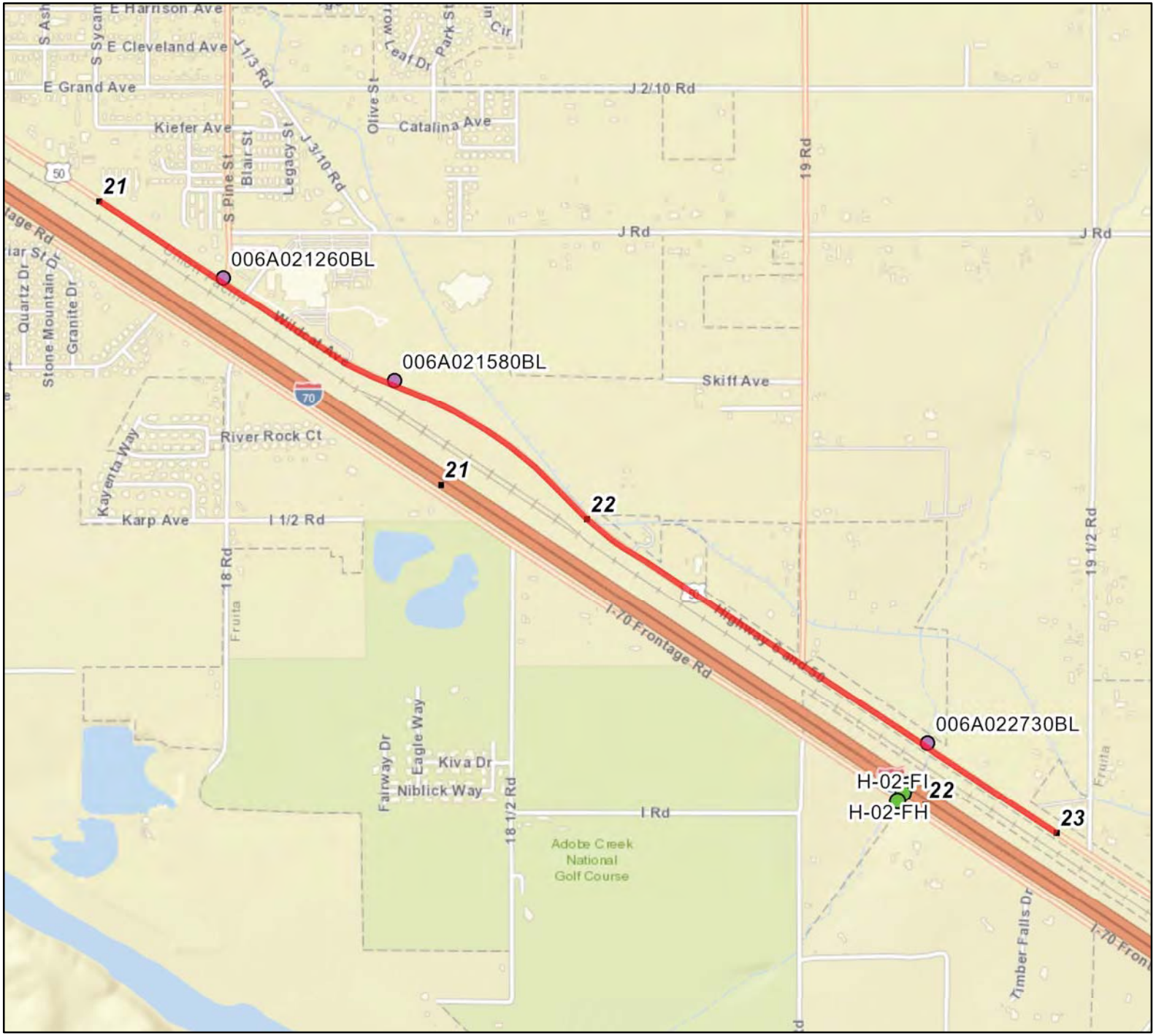


LEGEND:
Directional Distribution = Inbound% (Outbound %)
AM/PM Volumes = XX/XX VPH (in PCEs)
Turning Movements

McDOWELL ENGINEERING, LLC
TRANSPORTATION ENGINEERING CONSULTANTS

Project Number M1560
Prepared By EP

Route 006A From 21 to 23



Legend

- Route
- Milepoint

Structures

- Major Structure
- Minor Structure

Created:

Date: 3/10/2022

Time: 9:40:39 AM

0 0.1 0.2 0.3 0.4

Miles

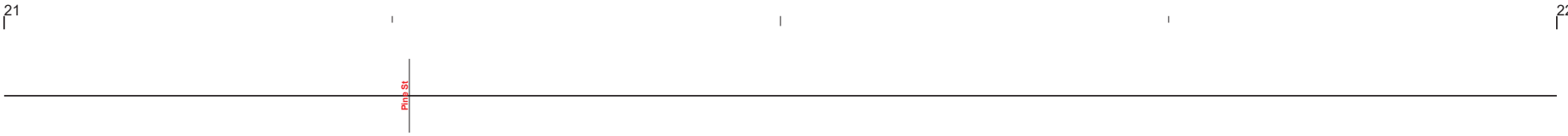
N

W E

S

CDOT

Route 006A
From 21 To 22



Ramps
Overpass
Underpass
Structures

CLASSIFICATION

Access Control	NR-B: Non-Rural Arterial	R-A: Regional Highway
Functional Class	3 Principal Arterial - Other	
Highway Designation	U.S.	
NHS Designation	1 Mainline NHS	

JURISDICTION

Commission District	7
FIPS City	28745 Fruita
FIPS County	077 Mesa Co
Region	3
TPR	5 Grand Valley

SAFETY

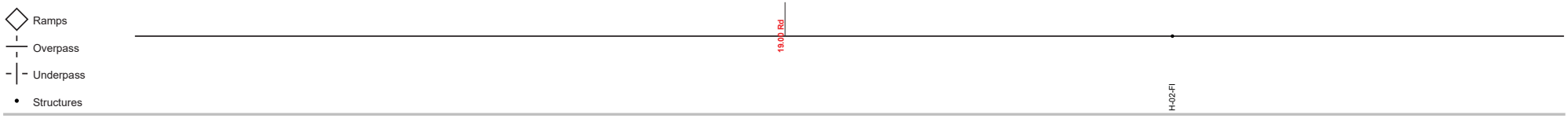
Primary Speed Limit	45	55
Secondary Speed Limit	45	55
Truck Restriction	0 No Truck Restrictions	

TRAFFIC

AADT	7400	8100
DHV	10.5	11.0
Off Peak Truck Percentage	5.60	5.10
Peak Truck Percentage	0.30	0.40
Route Capacity	2100	2400
V/C Ratio	0.38	0.48
V/C Ratio 20	0.49	0.59
VMT	6726	9849
Year 20 Factor	1.30	1.24

It may appear that information is missing from the straight line diagram. If so, reduce the number of miles/page and re-submit the request.

Route 006A
From 22 To 23



CLASSIFICATION

Access Control	R-A: Regional Highway	
Functional Class	3 Principal Arterial - Other	
Highway Designation	U.S.	
NHS Designation	1 Mainline NHS	

JURISDICTION

Commission District	7	
FIPS City	28745 Fruita	
FIPS County	077 Mesa Co	
Region	3	
TPR	5 Grand Valley	

SAFETY

Primary Speed Limit	55	
Secondary Speed Limit	55	
Truck Restriction	0 No Truck Restrictions	

TRAFFIC

AADT	8100	11000
DHV	11.0	
Off Peak Truck Percentage	5.10	6.10
Peak Truck Percentage	0.40	0.28
Route Capacity	2400	2550
V/C Ratio	0.48	0.64
V/C Ratio 20	0.59	0.81
VMT	9849	13145
Year 20 Factor	1.24	1.28

It may appear that information is missing from the straight line diagram. If so, reduce the number of miles/page and re-submit the request.

Gmail

Greg Schroeder <greg@mcdowelleng.com>

Fwd: Proposed TIS Scoping - Fruita Copper Creek Residential

4 messages

Kari McDowell Schroeder <kari@mcdowelleng.com> Thu, Mar 24, 2022 at 8:08 AM
To: Edgar Palacios <edgar@mcdowelleng.com>, Greg Schroeder <greg@mcdowelleng.com>

Sent from my iPhone

Begin forwarded message:

From: "Killian - CDOT, Brian" <brian.killian@state.co.us>
Date: March 24, 2022 at 7:54:19 AM MDT
To: Kari McDowell Schroeder <kari@mcdowelleng.com>
Cc: Sam Atkins <satkins@fruita.org>, Karthik Vishwamitra - CDOT <karthik.vishwamitra@state.co.us>, Mark Bunnell - CDOT <mark.bunnell@state.co.us>, Edgar Palacios <edgar@mcdowelleng.com>, Kandis Aggen - CDOT <kandis.aggen@state.co.us>
Subject: Re: Proposed TIS Scoping - Fruita Copper Creek Residential

Kari,

CDOT reviewed the methodology and have the following comment:

- Please provide justification for or revise the traffic distribution. It doesn't seem likely that traffic to and from the east on US 6 would choose Pine St/18 Rd (Intersection 3) over 19 Rd (Intersection 7).

Please update and resubmit.

Please let me know if you have any questions.

Thanks,

Brian Killian
Region 3 Access Program Manager
Traffic & Safety

COLORADO
Department of Transportation

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 Thu, Mar 17, 2022 at 3:28 PM Kari McDowell Schroeder <kari@mcdowelleng.com> wrote:

> All,

I updated the form to include the Iron Wheel Subdivision traffic in background projections. Please use this version.

Thanks,

Kari

From: Kari McDowell Schroeder kari@mcdowelleng.com
Sent: Thursday, March 17, 2022 10:03 AM
To: 'Killian - CDOT, Brian' brian.killian@state.co.us; satkins@fruita.org
Cc: 'Karthik Vishwamitra - CDOT' karthik.vishwamitra@state.co.us; Mark Bunnell - CDOT mark.bunnell@state.co.us; Edgar Palacios edgar@mcdowelleng.com
Subject: Proposed TIS Scoping - Fruita Copper Creek Residential

Brian and Sam,

Attached is our proposed TIS scoping form for the Copper Creek Residential project in Fruita. Please review and let us know if you have any additions or revisions.

Thank you,

Kari

Kari J. McDowell Schroeder, PE, PTOE

Transportation / Traffic Engineer

McDOWELL ENGINEERING LLC
TRANSPORTATION ENGINEERING CONSULTANTS

Eagle ● Broomfield ● Grand Junction

970.623.0788 ● 303.949.4748 ● 303.845.9541 fax

kari@mcdowelleng.com

www.mcdowelleng.com

Kari McDowell Schroeder <kari@mcdowelleng.com> Thu, Mar 24, 2022 at 8:30 AM
To: "Killian - CDOT, Brian" <brian.killian@state.co.us>
Cc: Sam Atkins <satkins@fruita.org>, Karthik Vishwamitra - CDOT <karthik.vishwamitra@state.co.us>, Mark Bunnell - CDOT <mark.bunnell@state.co.us>, Edgar Palacios <edgar@mcdowelleng.com>, Kandis Aggen - CDOT <kandis.aggen@state.co.us>, Greg Schroeder <greg@mcdowelleng.com>

Thanks, Brian. We will make that change to the distribution assumptions.

For background off site improvements, we were thinking:

1. Short term background - Iron Wheel's turn lanes on 19 Road would be constructed
2. Long term background - 19 Road & US 6/50 and 19 Road & J Road improvements recommended in the Iron Wheel TIS would be done.

Are these good assumptions?

Kari

On Thu, Mar 24, 2022 at 7:54 AM Killian - CDOT, Brian <brian.killian@state.co.us> wrote:

> Kari,
>
> CDOT reviewed the methodology and have the following comment:
>
> - Please provide justification for or revise the traffic distribution. It doesn't seem likely that traffic to and from the east on US 6 would choose Pine St/18 Rd (Intersection 3) over 19 Rd (Intersection 7).
>
> Please update and resubmit.
>
> Please let me know if you have any questions.
>
> Thanks,
>
> Brian Killian
> Region 3 Access Program Manager
> Traffic & Safety
>
> COLORADO
> Department of Transportation
>
> 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 Thu, Mar 17, 2022 at 3:28 PM Kari McDowell Schroeder <kari@mcdowelleng.com> wrote:
>
> > All,
> >
> > I updated the form to include the Iron Wheel Subdivision traffic in background projections. Please use this version.
> >
> > Thanks,
> >
> > Kari

From: Kari McDowell Schroeder kari@mcdowelleng.com
Sent: Thursday, March 17, 2022 10:03 AM
To: 'Killian - CDOT, Brian' brian.killian@state.co.us; satkins@fruita.org
Cc: 'Karthik Vishwamitra - CDOT' karthik.vishwamitra@state.co.us; Mark Bunnell - CDOT mark.bunnell@state.co.us; Edgar Palacios edgar@mcdowelleng.com
Subject: Proposed TIS Scoping - Fruita Copper Creek Residential

Brian and Sam,

Attached is our proposed TIS scoping form for the Copper Creek Residential project in Fruita. Please review and let us know if you have any additions or revisions.

Thank you,

Kari

Kari J. McDowell Schroeder, PE, PTOE

Transportation / Traffic Engineer

McDOWELL ENGINEERING LLC
TRANSPORTATION ENGINEERING CONSULTANTS

Eagle ● Broomfield ● Grand Junction

970.623.0788 ● 303.949.4748 ● 303.845.9541 fax

kari@mcdowelleng.com

www.mcdowelleng.com

Killian - CDOT, Brian <brian.killian@state.co.us> Fri, Apr 1, 2022 at 11:17 AM
To: Kari McDowell Schroeder <kari@mcdowelleng.com>
Cc: Sam Atkins <satkins@fruita.org>, Karthik Vishwamitra - CDOT <karthik.vishwamitra@state.co.us>, Mark Bunnell - CDOT <mark.bunnell@state.co.us>, Edgar Palacios <edgar@mcdowelleng.com>, Kandis Aggen - CDOT <kandis.aggen@state.co.us>, Greg Schroeder <greg@mcdowelleng.com>

Kari,

I have a question about Iron Wheel vs Copper Creek. Are they the same development? Your email title states Copper Creek as does the methodology, but you reference Iron Wheel in your email. Please advise.

Thanks,

Brian Killian
Region 3 Access Program Manager
Traffic & Safety

COLORADO
Department of Transportation

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 Thu, Mar 24, 2022 at 8:30 AM Kari McDowell Schroeder <kari@mcdowelleng.com> wrote:

> Thanks, Brian. We will make that change to the distribution assumptions.
>
> For background off site improvements, we were thinking:
>
> 1. Short term background - Iron Wheel's turn lanes on 19 Road would be constructed
> 2. Long term background - 19 Road & US 6/50 and 19 Road & J Road improvements recommended in the Iron Wheel TIS would be done.
>
> Are these good assumptions?
>
> Kari
>
> On Thu, Mar 24, 2022 at 7:54 AM Killian - CDOT, Brian <brian.killian@state.co.us> wrote:
>
> > Kari,
> >
> > CDOT reviewed the methodology and have the following comment:
> >
> > - Please provide justification for or revise the traffic distribution. It doesn't seem likely that traffic to and from the east on US 6 would choose Pine St/18 Rd (Intersection 3) over 19 Rd (Intersection 7).
> >
> > Please update and resubmit.
> >
> > Please let me know if you have any questions.
> >
> > Thanks,
> >
> > Brian Killian
> > Region 3 Access Program Manager
> > Traffic & Safety
> >
> > COLORADO
> > Department of Transportation
> >
> > 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 Thu, Mar 17, 2022 at 3:28 PM Kari McDowell Schroeder <kari@mcdowelleng.com> wrote:

> All,
>
> I updated the form to include the Iron Wheel Subdivision traffic in background projections. Please use this version.
>
> Thanks,
>
> Kari
>
> ---
>
> **From:** Kari McDowell Schroeder kari@mcdowelleng.com
> **Sent:** Thursday, March 17, 2022 10:03 AM
> **To:** 'Killian - CDOT, Brian' brian.killian@state.co.us; satkins@fruita.org
> **Cc:** 'Karthik Vishwamitra - CDOT' karthik.vishwamitra@state.co.us; Mark Bunnell - CDOT mark.bunnell@state.co.us; Edgar Palacios edgar@mcdowelleng.com
> **Subject:** Proposed TIS Scoping - Fruita Copper Creek Residential
>
> Brian and Sam,
>
> Attached is our proposed TIS scoping form for the Copper Creek Residential project in Fruita. Please review and let us know if you have any additions or revisions.
>
> Thank you,
>
> Kari

Kari J. McDowell Schroeder, PE, PTOE

Transportation / Traffic Engineer

McDOWELL ENGINEERING LLC
TRANSPORTATION ENGINEERING CONSULTANTS

Eagle ● Broomfield ● Grand Junction

970.623.0788 ● 303.949.4748 ● 303.845.9541 fax

kari@mcdowelleng.com

www.mcdowelleng.com

Kari McDowell Schroeder <kari@mcdowelleng.com> Fri, Apr 1, 2022 at 11:26 AM
To: "Killian - CDOT, Brian" <brian.killian@state.co.us>
Cc: Sam Atkins <satkins@fruita.org>, Karthik Vishwamitra - CDOT <karthik.vishwamitra@state.co.us>, Mark Bunnell - CDOT <mark.bunnell@state.co.us>, Edgar Palacios <edgar@mcdowelleng.com>, Kandis Aggen - CDOT <kandis.aggen@state.co.us>, Greg Schroeder <greg@mcdowelleng.com>

Brian,

Iron Wheel is the development across the street that is currently under construction. We are including this other development's traffic volumes in our background analysis.

Kari

From: Killian - CDOT, Brian <brian.killian@state.co.us>
Sent: Friday, April 1, 2022 11:17 AM
To: Kari McDowell Schroeder <kari@mcdowelleng.com>
Cc: Sam Atkins <satkins@fruita.org>; Karthik Vishwamitra - CDOT <karthik.vishwamitra@state.co.us>; Mark Bunnell - CDOT <mark.bunnell@state.co.us>; Edgar Palacios <edgar@mcdowelleng.com>; Kandis Aggen - CDOT <kandis.aggen@state.co.us>; Greg Schroeder <greg@mcdowelleng.com>
Subject: Re: Proposed TIS Scoping - Fruita Copper Creek Residential

Kari,

I have a question about Iron Wheel vs Copper Creek. Are they the same development? Your email title states Copper Creek as does the methodology, but you reference Iron Wheel in your email. Please advise.

Thanks,

Brian Killian
Region 3 Access Program Manager
Traffic & Safety

COLORADO
Department of Transportation

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 Thu, Mar 24, 2022 at 8:30 AM Kari McDowell Schroeder <kari@mcdowelleng.com> wrote:

> Thanks, Brian. We will make that change to the distribution assumptions.
>
> For background off site improvements, we were thinking:
>
> 1. Short term background - Iron Wheel's turn lanes on 19 Road would be constructed
> 2. Long term background - 19 Road & US 6/50 and 19 Road & J Road improvements recommended in the Iron Wheel TIS would be done.
>
> Are these good assumptions?
>
> Kari
>
> On Thu, Mar 24, 2022 at 7:54 AM Killian - CDOT, Brian <brian.killian@state.co.us> wrote:
>
> > Kari,
> >
> > CDOT reviewed the methodology and have the following comment:
> >
> > - Please provide justification for or revise the traffic distribution. It doesn't seem likely that traffic to and from the east on US 6 would choose Pine St/18 Rd (Intersection 3) over 19 Rd (Intersection 7).
> >
> > Please update and resubmit.
> >
> > Please let me know if you have any questions.
> >
> > Thanks,
> >
> > Brian Killian
> > Region 3 Access Program Manager
> > Traffic & Safety
> >
> > COLORADO
> > Department of Transportation
> >
> > 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 Thu, Mar 17, 2022 at 3:28 PM Kari McDowell Schroeder <kari@mcdowelleng.com> wrote:

> All,
>
> I updated the form to include the Iron Wheel Subdivision traffic in background projections. Please use this version.
>
> Thanks,
>
> Kari
>
> ---
>
> **From:** Kari McDowell Schroeder kari@mcdowelleng.com
> **Sent:** Thursday, March 17, 2022 10:03 AM
> **To:** 'Killian - CDOT, Brian' brian.killian@state.co.us; satkins@fruita.org
> **Cc:** 'Karthik Vishwamitra - CDOT' karthik.vishwamitra@state.co.us; Mark Bunnell - CDOT mark.bunnell@state.co.us; Edgar Palacios edgar@mcdowelleng.com
> **Subject:** Proposed TIS Scoping - Fruita Copper Creek Residential
>
> Brian and Sam,
>
> Attached is our proposed TIS scoping form for the Copper Creek Residential project in Fruita. Please review and let us know if you have any additions or revisions.
>
> Thank you,
>
> Kari

Kari J. McDowell Schroeder, PE, PTOE

Transportation / Traffic Engineer

McDOWELL ENGINEERING LLC
TRANSPORTATION ENGINEERING CONSULTANTS

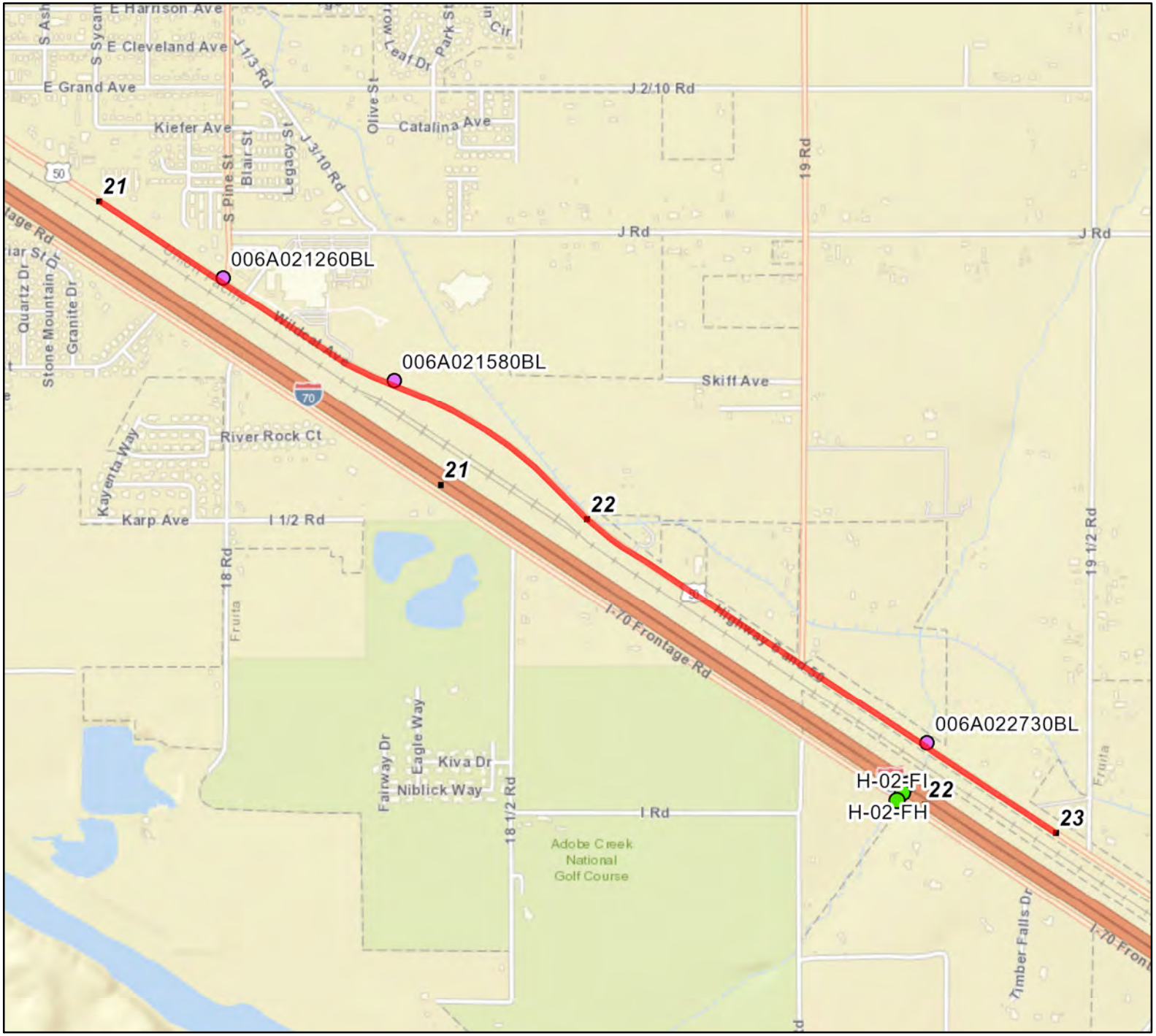
Eagle ● Broomfield ● Grand Junction

970.623.0788 ● 303.949.4748 ● 303.845.9541 fax

kari@mcdowelleng.com

www.mcdowelleng.com

Route 006A From 21 to 23



Legend

- Route
- Milepoint

Structures

- Major Structure
- Minor Structure

Created:

Date: 3/10/2022

Time: 9:40:39 AM

0 0.1 0.2 0.3 0.4

Miles

N W E S

The information contained in this map is based on the most currently available data and has been checked for accuracy. CDOT does not guarantee the accuracy of any information presented, is not liable in any respect for any errors or omissions, and is not responsible for determining "fitness for use".

Route 006A
From 21 To 22

Ramps
Overpass
Underpass
Structures

CLASSIFICATION

Access Control	NR-B: Non-Rural Arterial	R-A: Regional Highway
Functional Class	3 Principal Arterial - Other	
Highway Designation	U.S.	
NHS Designation	1 Mainline NHS	

JURISDICTION

Commission District	7
FIPS City	28745 Fruita
FIPS County	077 Mesa Co
Region	3
TPR	5 Grand Valley

SAFETY

Primary Speed Limit	45	55
Secondary Speed Limit	45	55
Truck Restriction	0 No Truck Restrictions	

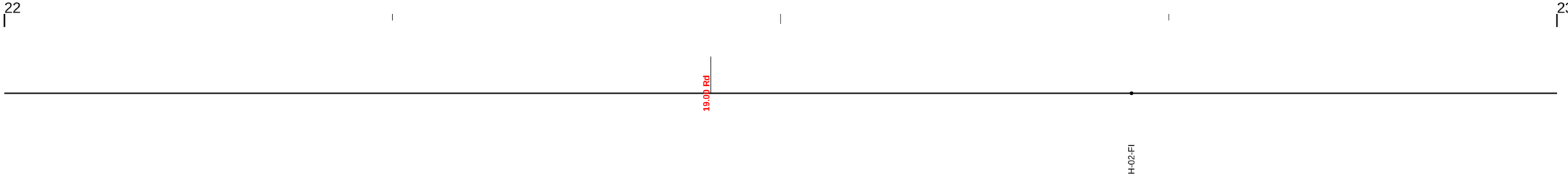
TRAFFIC

AADT	7400	8100
DHV	10.5	11.0
Off Peak Truck Percentage	5.60	5.10
Peak Truck Percentage	0.30	0.40
Route Capacity	2100	2400
V/C Ratio	0.38	0.48
V/C Ratio 20	0.49	0.59
VMT	6726	9849
Year 20 Factor	1.30	1.24

It may appear that information is missing from the straight line diagram. If so, reduce the number of miles/page and re-submit the request.

Route 006A
From 22 To 23

Ramps
Overpass
Underpass
Structures



CLASSIFICATION

Access Control	R-A: Regional Highway
Functional Class	3 Principal Arterial - Other
Highway Designation	U.S.
NHS Designation	1 Mainline NHS

JURISDICTION

Commission District	7
FIPS City	28745 Fruita
FIPS County	077 Mesa Co
Region	3
TPR	5 Grand Valley

SAFETY

Primary Speed Limit	55
Secondary Speed Limit	55
Truck Restriction	0 No Truck Restrictions

TRAFFIC

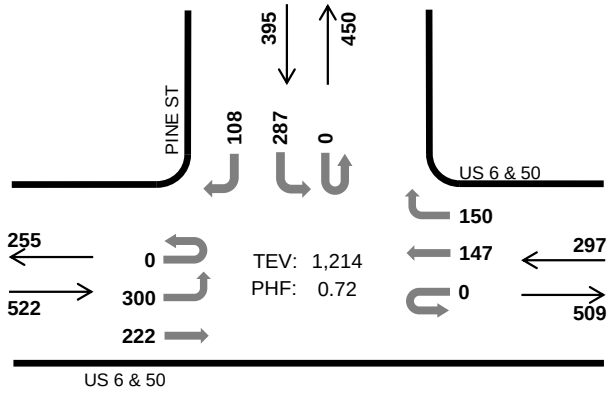
AADT	8100	11000
DHV	11.0	
Off Peak Truck Percentage	5.10	6.10
Peak Truck Percentage	0.40	0.28
Route Capacity	2400	2550
V/C Ratio	0.48	0.64
V/C Ratio 20	0.59	0.81
VMT	9849	13145
Year 20 Factor	1.24	1.28

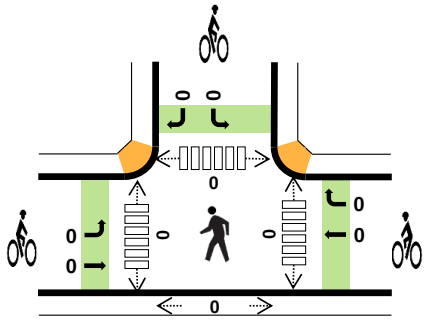
It may appear that information is missing from the straight line diagram. If so, reduce the number of miles/page and re-submit the request.

PINE ST
US 6 & 50

Date: 03/15/2022
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM

Peak Hour





	HV %:	PHF
EB	4.2%	0.70
WB	12.5%	0.68
NB	-	-
SB	1.3%	0.80
TOTAL	5.3%	0.72

Two-Hour Count Summaries

Interval Start		US 6 & 50 Eastbound				US 6 & 50 Westbound				n/a Northbound				PINE ST Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	20	30	0	0	0	15	15	0	0	0	0	0	69	0	9	158	0
7:15 AM		**0**	**31**	**44**	**0**	**0**	**0**	**34**	**14**	**0**	**0**	**0**	**0**	**0**	**71**	**0**	**13**	**207**	0
7:30 AM		**0**	**101**	**77**	**0**	**0**	**0**	**41**	**49**	**0**	**0**	**0**	**0**	**0**	**81**	**0**	**17**	**366**	0
7:45 AM		**0**	**130**	**56**	**0**	**0**	**0**	**44**	**65**	**0**	**0**	**0**	**0**	**0**	**72**	**0**	**52**	**419**	1,150
8:00 AM		**0**	**38**	**45**	**0**	**0**	**0**	**28**	**22**	**0**	**0**	**0**	**0**	**0**	**63**	**0**	**26**	**222**	**1,214**
8:15 AM		0	22	37	0	0	0	39	19	0	0	0	0	0	44	0	21	182	1,189
8:30 AM		0	47	58	0	0	0	35	29	0	0	0	0	0	53	0	16	238	1,061
8:45 AM		0	29	36	0	0	0	39	24	0	0	0	0	0	58	0	27	213	855
Count Total		0	418	383	0	0	0	275	237	0	0	0	0	0	511	0	181	2,005	0
Peak Hour	**All**	**0**	**300**	**222**	**0**	**0**	**0**	**147**	**150**	**0**	**0**	**0**	**0**	**0**	**287**	**0**	**108**	**1,214**	**0**
	HV	**0**	**2**	**20**	**0**	**0**	**0**	**32**	**5**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**1**	**64**	**0**
	HV%	**-**	**1%**	**9%**	**-**	**-**	**-**	**22%**	**3%**	**-**	**-**	**-**	**-**	**-**	**1%**	**-**	**1%**	**5%**	**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
7:00 AM	1	6	0	1	*8*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	**6**	**12**	**0**	**2**	***20***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:30 AM	**10**	**15**	**0**	**2**	***27***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**4**	**8**	**0**	**0**	***12***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**2**	**2**	**0**	**1**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:15 AM	3	5	0	1	*9*	0	0	0	0	*0*	0	0	1	0	*1*
8:30 AM	0	3	0	3	*6*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	6	6	0	0	*12*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	32	57	0	10	*99*	0	0	0	0	*0*	0	0	1	0	*1*
Peak Hr	**22**	**37**	**0**	**5**	***64***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	US 6 & 50 Eastbound				US 6 & 50 Westbound				n/a Northbound				PINE ST Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	1	0	0	0	4	2	0	0	0	0	0	1	0	0	8	0
7:15 AM	**0**	**1**	**5**	**0**	**0**	**0**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**20**	0
7:30 AM	**0**	**0**	**10**	**0**	**0**	**0**	**13**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**27**	0
7:45 AM	**0**	**0**	**4**	**0**	**0**	**0**	**6**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	67
8:00 AM	**0**	**1**	**1**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**64**
8:15 AM	0	0	3	0	0	0	4	1	0	0	0	0	0	1	0	0	9	53
8:30 AM	0	0	0	0	0	0	2	1	0	0	0	0	0	1	0	2	6	32
8:45 AM	0	1	5	0	0	0	5	1	0	0	0	0	0	0	0	0	12	32
Count Total	0	3	29	0	0	0	47	10	0	0	0	0	0	7	0	3	99	0
Peak Hour	**0**	**2**	**20**	**0**	**0**	**0**	**32**	**5**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**1**	**64**	**0**

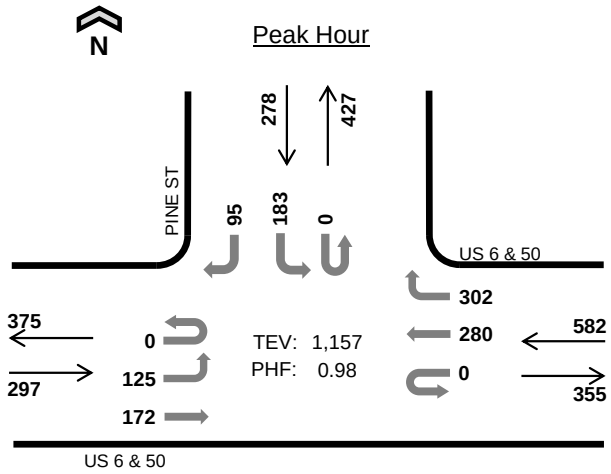
Two-Hour Count Summaries - Bikes

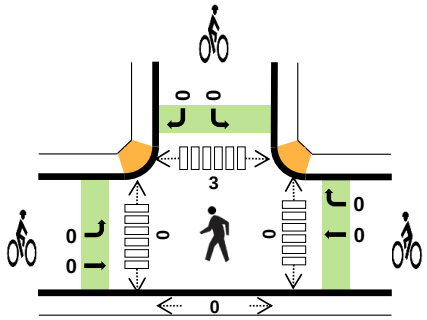
Interval Start	US 6 & 50 Eastbound			US 6 & 50 Westbound			n/a Northbound			PINE ST Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	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.

PINE ST
US 6 & 50

Date: 03/15/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM





	HV %:	PHF
EB	4.0%	0.91
WB	4.0%	0.97
NB	-	-
SB	4.0%	0.90
TOTAL	4.0%	0.98

Two-Hour Count Summaries

Interval Start		US 6 & 50 Eastbound				US 6 & 50 Westbound				n/a Northbound				PINE ST 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**	**32**	**45**	**0**	**0**	**0**	**54**	**86**	**0**	**0**	**0**	**0**	**0**	**43**	**0**	**21**	**281**	0
4:15 PM		**0**	**29**	**36**	**0**	**0**	**0**	**80**	**70**	**0**	**0**	**0**	**0**	**0**	**46**	**0**	**27**	**288**	0
4:30 PM		**0**	**26**	**47**	**0**	**0**	**0**	**69**	**77**	**0**	**0**	**0**	**0**	**0**	**56**	**0**	**21**	**296**	0
4:45 PM		**0**	**38**	**44**	**0**	**0**	**0**	**77**	**69**	**0**	**0**	**0**	**0**	**0**	**38**	**0**	**26**	**292**	**1,157**
5:00 PM		0	16	56	0	0	0	74	64	0	0	0	0	0	31	0	17	258	1,134
5:15 PM		0	20	32	0	0	0	78	76	0	0	0	0	0	30	0	26	262	1,108
5:30 PM		0	31	26	0	0	0	80	84	0	0	0	0	0	47	0	19	287	1,099
5:45 PM		0	15	30	0	0	0	79	65	0	0	0	0	0	25	0	33	247	1,054
Count Total		0	207	316	0	0	0	591	591	0	0	0	0	0	316	0	190	2,211	0
Peak Hour	**All**	**0**	**125**	**172**	**0**	**0**	**0**	**280**	**302**	**0**	**0**	**0**	**0**	**0**	**183**	**0**	**95**	**1,157**	**0**
	HV	**0**	**2**	**10**	**0**	**0**	**0**	**14**	**9**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**3**	**46**	**0**
	HV%	**-**	**2%**	**6%**	**-**	**-**	**-**	**5%**	**3%**	**-**	**-**	**-**	**-**	**-**	**4%**	**-**	**3%**	**4%**	**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	**0**	**5**	**0**	**3**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:15 PM	**2**	**10**	**0**	**2**	***14***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**0**	*2*
4:30 PM	**4**	**5**	**0**	**4**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**6**	**3**	**0**	**2**	***11***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	***1***
5:00 PM	4	3	0	2	*9*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	0	7	0	2	*9*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	1	2	0	0	*3*	0	0	0	0	*0*	0	0	1	0	*1*
5:45 PM	0	5	0	2	*7*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	17	40	0	17	*74*	0	0	0	0	*0*	0	0	4	0	*4*
Peak Hr	**12**	**23**	**0**	**11**	***46***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**3**	**0**	***3***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	US 6 & 50 Eastbound				US 6 & 50 Westbound				n/a Northbound				PINE ST 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**	**0**	**0**	**0**	**0**	**0**	**2**	**3**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**8**	0
4:15 PM	**0**	**1**	**1**	**0**	**0**	**0**	**7**	**3**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**14**	0
4:30 PM	**0**	**0**	**4**	**0**	**0**	**0**	**3**	**2**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**13**	0
4:45 PM	**0**	**1**	**5**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**11**	**46**
5:00 PM	0	0	4	0	0	0	2	1	0	0	0	0	0	2	0	0	9	47
5:15 PM	0	0	0	0	0	0	5	2	0	0	0	0	0	2	0	0	9	42
5:30 PM	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3	32
5:45 PM	0	0	0	0	0	0	4	1	0	0	0	0	0	2	0	0	7	28
Count Total	0	2	15	0	0	0	27	13	0	0	0	0	0	14	0	3	74	0
Peak Hour	**0**	**2**	**10**	**0**	**0**	**0**	**14**	**9**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**3**	**46**	**0**

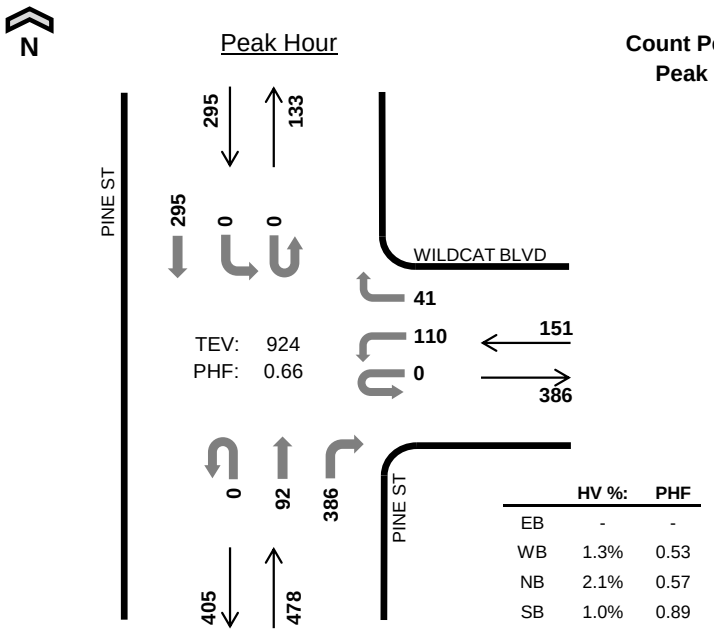
Two-Hour Count Summaries - Bikes

Interval Start	US 6 & 50 Eastbound			US 6 & 50 Westbound			n/a Northbound			PINE ST Southbound			15-min Total	Rolling One Hour
	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	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

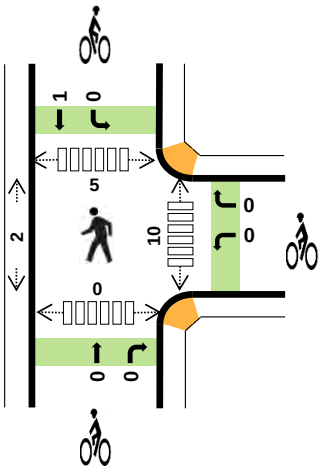
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

PINE ST
WILDCAT BLVD

Date: 03/15/2022
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM



	HV %:	PHF
EB	-	-
WB	1.3%	0.53
NB	2.1%	0.57
SB	1.0%	0.89
TOTAL	1.6%	0.66



Two-Hour Count Summaries

Interval Start	N/A Eastbound				WILDCAT BLVD Westbound				PINE ST Northbound				PINE ST Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	2	0	1	0	0	21	18	0	0	73	0	115	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**6**	**0**	**0**	**14**	**36**	**0**	**0**	**77**	**0**	**139**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**27**	**0**	**8**	**0**	**0**	**24**	**131**	**0**	**0**	**83**	**0**	**273**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**51**	**0**	**20**	**0**	**0**	**37**	**171**	**0**	**0**	**73**	**0**	**352**	879
8:00 AM	**0**	**0**	**0**	**0**	**0**	**26**	**0**	**7**	**0**	**0**	**17**	**48**	**0**	**0**	**62**	**0**	**160**	**924**
8:15 AM	0	0	0	0	0	9	0	4	0	0	26	19	0	0	52	0	110	895
8:30 AM	0	0	0	0	0	7	0	5	0	0	29	48	0	0	62	0	151	773
8:45 AM	0	0	0	0	0	17	0	6	0	0	27	31	0	0	66	0	147	568
Count Total	0	0	0	0	0	145	0	57	0	0	195	502	0	0	548	0	1,447	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**110**	**0**	**41**	**0**	**0**	**92**	**386**	**0**	**0**	**295**	**0**	**924**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**7**	**3**	**0**	**0**	**3**	**0**	**15**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**1%**	**-**	**2%**	**-**	**-**	**8%**	**1%**	**-**	**-**	**1%**	**-**	**2%**	**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
7:00 AM	0	1	2	0	*3*	0	0	0	0	*0*	1	0	0	0	*1*
7:15 AM	**0**	**0**	**2**	**2**	***4***	**0**	**0**	**0**	**0**	***0***	**5**	**1**	**3**	**0**	*9*
7:30 AM	**0**	**1**	**2**	**1**	***4***	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**1**	**0**	*3*
7:45 AM	**0**	**1**	**4**	**0**	***5***	**0**	**0**	**0**	**1**	***1***	**4**	**0**	**1**	**0**	*5*
8:00 AM	**0**	**0**	**2**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:15 AM	0	0	1	1	*2*	0	0	0	0	*0*	1	0	1	0	*2*
8:30 AM	0	0	0	2	*2*	0	0	0	0	*0*	2	0	1	0	*3*
8:45 AM	0	0	3	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	3	16	6	*25*	0	0	0	1	*1*	14	2	7	0	*23*
Peak Hr	**0**	**2**	**10**	**3**	***15***	**0**	**0**	**0**	**1**	***1***	**10**	**2**	**5**	**0**	***17***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	N/A				WILDCAT BLVD				PINE ST				PINE ST				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		
7:00 AM	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	3	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**2**	**0**	**4**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**1**	**0**	**4**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**5**	16
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**15**
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	13
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	11
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	3	9
Count Total	0	0	0	0	0	2	0	1	0	0	11	5	0	0	6	0	25	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**7**	**3**	**0**	**0**	**3**	**0**	**15**	**0**

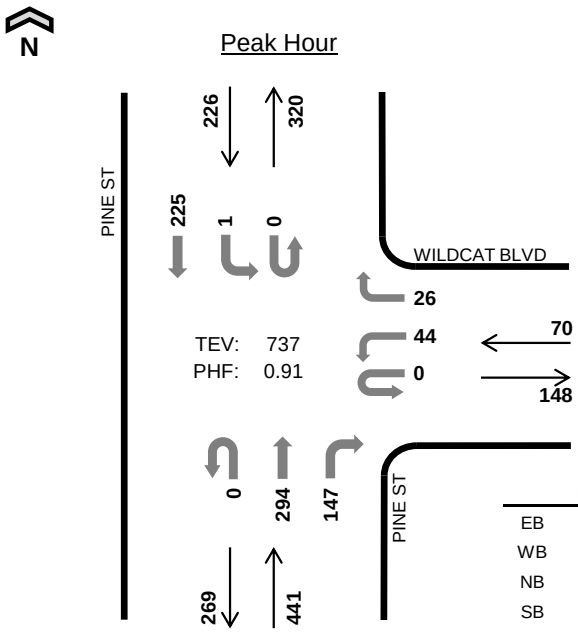
Two-Hour Count Summaries - Bikes

Interval Start	N/A			WILDCAT BLVD			PINE ST			PINE ST			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	1	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**

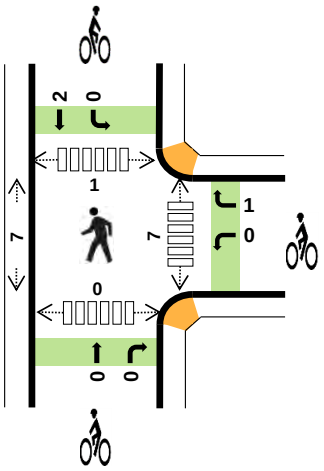
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

PINE ST
WILDCAT BLVD

Date: 03/15/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM



	HV %:	PHF
EB	-	-
WB	0.0%	0.76
NB	1.8%	0.93
SB	2.7%	0.86
TOTAL	1.9%	0.91



Two-Hour Count Summaries

Interval Start	N/A Eastbound				WILDCAT BLVD Westbound				PINE ST Northbound				PINE ST 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**	**0**	**0**	**0**	**0**	**11**	**0**	**4**	**0**	**0**	**65**	**54**	**0**	**0**	**49**	**0**	**183**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**12**	**0**	**6**	**0**	**0**	**66**	**37**	**0**	**1**	**58**	**0**	**180**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**13**	**0**	**10**	**0**	**0**	**82**	**32**	**0**	**0**	**66**	**0**	**203**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**6**	**0**	**0**	**81**	**24**	**0**	**0**	**52**	**0**	**171**	**737**
5:00 PM	0	0	0	0	0	6	0	2	0	0	77	7	0	0	44	0	136	690
5:15 PM	0	0	0	0	0	11	0	14	0	0	84	21	0	0	42	0	172	682
5:30 PM	0	0	0	0	0	17	0	8	0	0	118	17	0	0	55	0	215	694
5:45 PM	0	0	0	0	0	17	0	10	0	0	81	15	0	0	55	0	178	701
Count Total	0	0	0	0	0	95	0	60	0	0	654	207	0	1	421	0	1,438	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**44**	**0**	**26**	**0**	**0**	**294**	**147**	**0**	**1**	**225**	**0**	**737**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**2**	**0**	**0**	**6**	**0**	**14**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**-**	**-**	**2%**	**1%**	**-**	**0%**	**3%**	**-**	**2%**	**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	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
4:15 PM	**0**	**0**	**3**	**2**	***5***	**0**	**0**	**0**	**0**	***0***	**4**	**2**	**0**	**0**	*6*
4:30 PM	**0**	**0**	**3**	**2**	***5***	**0**	**0**	**0**	**1**	***1***	**0**	**3**	**0**	**0**	*3*
4:45 PM	**0**	**0**	**1**	**1**	***2***	**0**	**1**	**0**	**1**	***2***	**2**	**2**	**1**	**0**	***5***
5:00 PM	0	0	1	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	0	0	0	2	*2*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	0	0	*1*
5:45 PM	0	0	0	2	*2*	0	0	0	0	*0*	1	0	2	0	*3*
Count Total	0	0	9	11	*20*	0	1	0	2	*3*	8	8	3	0	*19*
Peak Hr	**0**	**0**	**8**	**6**	***14***	**0**	**1**	**0**	**2**	***3***	**7**	**7**	**1**	**0**	***15***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	N/A				WILDCAT BLVD				PINE ST				PINE ST				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**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**2**	**0**	**5**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**2**	**0**	**5**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**2**	**14**
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	14
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	11
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	6
Count Total	0	0	0	0	0	0	0	0	0	0	7	2	0	0	11	0	20	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**2**	**0**	**0**	**6**	**0**	**14**	**0**

Two-Hour Count Summaries - Bikes

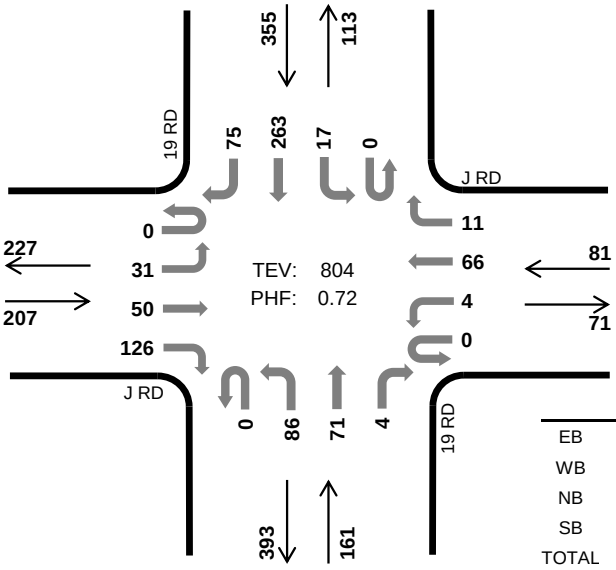
Interval Start	N/A			WILDCAT BLVD			PINE ST			PINE ST			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**3**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	1	0	0	0	0	2	0	3	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**0**	**3**	**0**

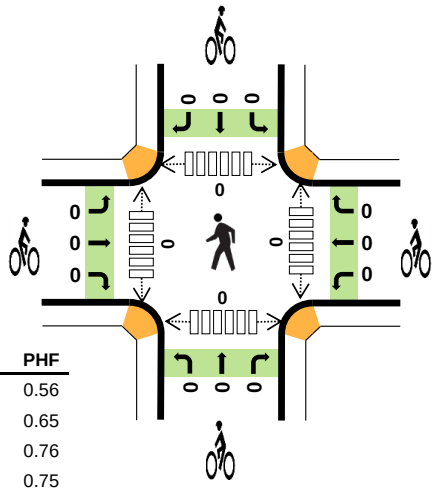
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

19 RD
J RD

Peak Hour

Date: 03/15/2022
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM





	HV %:	PHF
EB	6.3%	0.56
WB	2.5%	0.65
NB	4.3%	0.76
SB	0.0%	0.75
TOTAL	2.7%	0.72

Two-Hour Count Summaries

Interval Start		J RD Eastbound				J RD Westbound				19 RD Northbound				19 RD Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	4	6	0	0	6	0	0	3	9	0	0	2	62	0	92	0
7:15 AM		**0**	**0**	**5**	**13**	**0**	**3**	**8**	**2**	**0**	**14**	**17**	**0**	**0**	**3**	**68**	**5**	**138**	0
7:30 AM		**0**	**5**	**16**	**40**	**0**	**1**	**23**	**4**	**0**	**35**	**15**	**0**	**0**	**4**	**81**	**34**	**258**	0
7:45 AM		**0**	**21**	**19**	**53**	**0**	**0**	**28**	**3**	**0**	**29**	**23**	**1**	**0**	**7**	**67**	**30**	**281**	769
8:00 AM		**0**	**5**	**10**	**20**	**0**	**0**	**7**	**2**	**0**	**8**	**16**	**3**	**0**	**3**	**47**	**6**	**127**	**804**
8:15 AM		0	1	3	6	0	1	4	3	0	7	16	1	0	4	37	3	86	752
8:30 AM		0	2	2	2	0	0	10	6	0	13	19	0	0	1	53	0	108	602
8:45 AM		0	2	5	7	0	1	6	7	0	3	17	2	0	8	41	2	101	422
Count Total		0	36	64	147	0	6	92	27	0	112	132	7	0	32	456	80	1,191	0
Peak Hour	**All**	**0**	**31**	**50**	**126**	**0**	**4**	**66**	**11**	**0**	**86**	**71**	**4**	**0**	**17**	**263**	**75**	**804**	**0**
	HV	**0**	**1**	**4**	**8**	**0**	**0**	**2**	**0**	**0**	**4**	**2**	**1**	**0**	**0**	**0**	**0**	**22**	**0**
	HV%	**-**	**3%**	**8%**	**6%**	**-**	**0%**	**3%**	**0%**	**-**	**5%**	**3%**	**25%**	**-**	**0%**	**0%**	**0%**	**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
7:00 AM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	**1**	**1**	**1**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:30 AM	**8**	**0**	**1**	**0**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**2**	**0**	**2**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**2**	**1**	**3**	**0**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:15 AM	1	1	2	1	*5*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	1	0	1	2	*4*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	2	2	1	2	*7*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	17	5	11	6	*39*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**13**	**2**	**7**	**0**	***22***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	J RD Eastbound				J RD Westbound				19 RD Northbound				19 RD Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
7:15 AM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	0
7:30 AM	**0**	**0**	**2**	**6**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	0
7:45 AM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	17
8:00 AM	**0**	**1**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**6**	**22**
8:15 AM	0	0	0	1	0	0	0	1	0	1	1	0	0	0	0	1	5	24
8:30 AM	0	0	0	1	0	0	0	0	0	1	0	0	0	0	2	0	4	19
8:45 AM	0	0	2	0	0	0	2	0	0	1	0	0	0	0	2	0	7	22
Count Total	0	1	6	10	0	0	4	1	0	7	3	1	0	0	5	1	39	0
Peak Hour	**0**	**1**	**4**	**8**	**0**	**0**	**2**	**0**	**0**	**4**	**2**	**1**	**0**	**0**	**0**	**0**	**22**	**0**

Two-Hour Count Summaries - Bikes

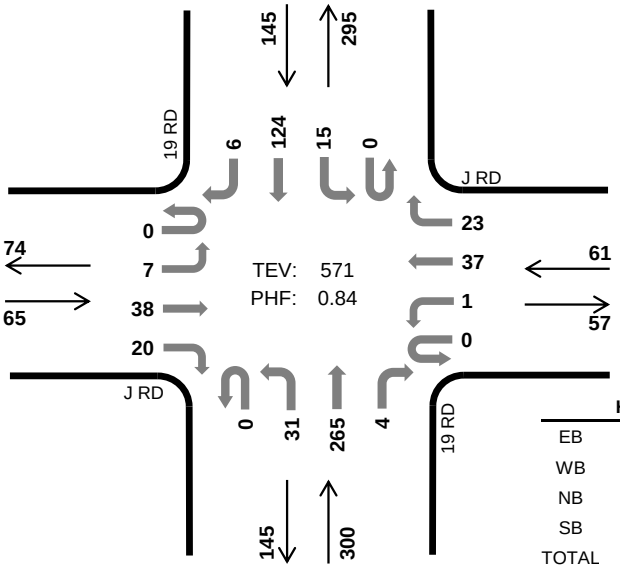
Interval Start	J RD Eastbound			J RD Westbound			19 RD Northbound			19 RD Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

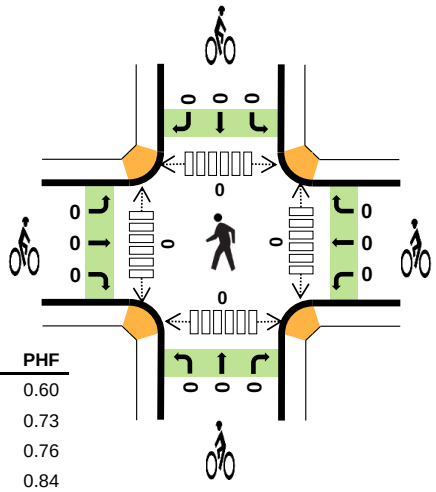
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

19 RD
J RD

Peak Hour

Date: 03/15/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM





	HV %:	PHF
EB	3.1%	0.60
WB	0.0%	0.73
NB	1.7%	0.76
SB	1.4%	0.84
TOTAL	1.6%	0.84

Two-Hour Count Summaries

Interval Start		J RD Eastbound				J RD Westbound				19 RD Northbound				19 RD 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	4	8	3	0	0	5	1	0	11	51	0	0	14	36	2	135	0
4:15 PM		0	1	1	7	0	0	14	3	0	12	51	0	0	6	33	2	130	0
4:30 PM		0	0	5	4	0	0	4	3	0	8	47	1	0	3	39	1	115	0
4:45 PM		**0**	**0**	**9**	**7**	**0**	**0**	**8**	**6**	**0**	**5**	**47**	**1**	**0**	**5**	**29**	**2**	**119**	499
5:00 PM		**0**	**0**	**6**	**4**	**0**	**0**	**8**	**5**	**0**	**9**	**56**	**2**	**0**	**5**	**36**	**2**	**133**	497
5:15 PM		**0**	**3**	**18**	**6**	**0**	**0**	**9**	**4**	**0**	**8**	**90**	**1**	**0**	**4**	**27**	**0**	**170**	537
5:30 PM		**0**	**4**	**5**	**3**	**0**	**1**	**12**	**8**	**0**	**9**	**72**	**0**	**0**	**1**	**32**	**2**	**149**	**571**
5:45 PM		0	1	2	8	0	0	7	3	0	8	58	0	0	2	20	0	109	561
Count Total		0	13	54	42	0	1	67	33	0	70	472	5	0	40	252	11	1,060	0
Peak Hour	**All**	**0**	**7**	**38**	**20**	**0**	**1**	**37**	**23**	**0**	**31**	**265**	**4**	**0**	**15**	**124**	**6**	**571**	**0**
	HV	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**1**	**0**	**0**	**2**	**0**	**9**	**0**
	HV%	**-**	**14%**	**3%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**2%**	**25%**	**-**	**0%**	**2%**	**0%**	**2%**	**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	1	1	1	3	*6*	1	0	0	0	*1*	0	0	0	0	*0*
4:15 PM	0	0	0	1	*1*	0	1	0	0	*1*	0	0	0	0	*0*
4:30 PM	0	0	0	2	*2*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	**1**	**0**	**2**	**1**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**0**	**0**	**2**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**1**	**0**	**1**	**1**	***3***	**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**	***0***
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	3	1	6	8	*18*	1	1	0	0	*2*	0	0	0	0	*0*
Peak Hour	**2**	**0**	**5**	**2**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	J RD Eastbound				J RD Westbound				19 RD Northbound				19 RD 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	0	0	1	0	0	1	0	0	0	1	0	0	2	1	0	6	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0
4:45 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**1**	**0**	**4**	13
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	9
5:15 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**3**	11
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Count Total	0	1	1	1	0	0	1	0	0	0	5	1	0	2	6	0	18	0
Peak Hour	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**1**	**0**	**0**	**2**	**0**	**9**	**0**

Two-Hour Count Summaries - Bikes

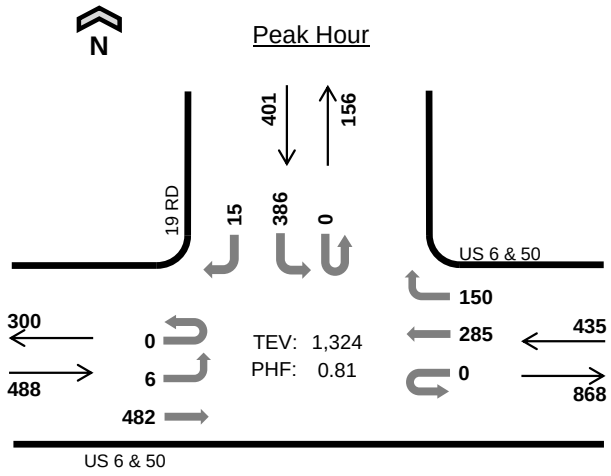
Interval Start	J RD Eastbound			J RD Westbound			19 RD Northbound			19 RD Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
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	0	0	0	0	0	0	0	0	0	0
Count Total	0	1	0	0	1	0	0	0	0	0	0	0	2	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

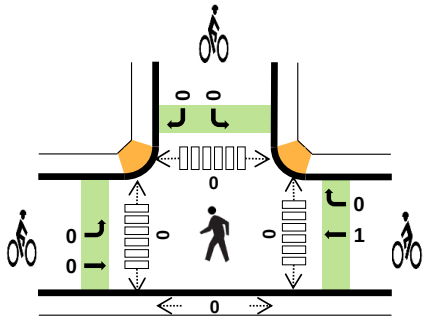
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

19 RD
US 6 & 50

Date: 03/15/2022
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM

Peak Hour





	HV %:	PHF
EB	3.7%	0.88
WB	6.4%	0.75
NB	-	-
SB	2.2%	0.78
TOTAL	4.2%	0.81

Two-Hour Count Summaries

Interval Start		US 6 & 50 Eastbound				US 6 & 50 Westbound				n/a Northbound				19 RD Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	1	89	0	0	0	34	13	0	0	0	0	0	62	0	2	201	0
7:15 AM		**0**	**0**	**117**	**0**	**0**	**0**	**54**	**27**	**0**	**0**	**0**	**0**	**0**	**87**	**0**	**3**	**288**	0
7:30 AM		**0**	**0**	**127**	**0**	**0**	**0**	**86**	**58**	**0**	**0**	**0**	**0**	**0**	**112**	**0**	**4**	**387**	0
7:45 AM		**0**	**4**	**134**	**0**	**0**	**0**	**101**	**44**	**0**	**0**	**0**	**0**	**0**	**121**	**0**	**7**	**411**	1,287
8:00 AM		**0**	**2**	**104**	**0**	**0**	**0**	**44**	**21**	**0**	**0**	**0**	**0**	**0**	**66**	**0**	**1**	**238**	**1,324**
8:15 AM		0	0	83	0	0	0	73	26	0	0	0	0	0	49	0	0	231	1,267
8:30 AM		0	1	101	0	0	0	66	34	0	0	0	0	0	53	0	1	256	1,136
8:45 AM		0	0	101	0	0	0	75	18	0	0	0	0	0	56	0	0	250	975
Count Total		0	8	856	0	0	0	533	241	0	0	0	0	0	606	0	18	2,262	0
Peak Hour	**All**	**0**	**6**	**482**	**0**	**0**	**0**	**285**	**150**	**0**	**0**	**0**	**0**	**0**	**386**	**0**	**15**	**1,324**	**0**
	HV	**0**	**0**	**18**	**0**	**0**	**0**	**20**	**8**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**5**	**55**	**0**
	HV%	**-**	**0%**	**4%**	**-**	**-**	**-**	**7%**	**5%**	**-**	**-**	**-**	**-**	**-**	**1%**	**-**	**33%**	**4%**	**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
7:00 AM	4	7	0	2	*13*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	**3**	**11**	**0**	**0**	***14***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
7:30 AM	**3**	**5**	**0**	**6**	***14***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**9**	**6**	**0**	**2**	***17***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**3**	**6**	**0**	**1**	***10***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:15 AM	3	9	0	1	*13*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	1	4	0	3	*8*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	5	8	0	2	*15*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	31	56	0	17	*104*	0	1	0	0	*1*	0	0	0	0	*0*
Peak Hr	**18**	**28**	**0**	**9**	***55***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	US 6 & 50 Eastbound				US 6 & 50 Westbound				n/a Northbound				19 RD Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	4	0	0	0	6	1	0	0	0	0	0	1	0	1	13	0
7:15 AM	**0**	**0**	**3**	**0**	**0**	**0**	**10**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	0
7:30 AM	**0**	**0**	**3**	**0**	**0**	**0**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**4**	**14**	0
7:45 AM	**0**	**0**	**9**	**0**	**0**	**0**	**4**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**17**	58
8:00 AM	**0**	**0**	**3**	**0**	**0**	**0**	**2**	**4**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**10**	**55**
8:15 AM	0	0	3	0	0	0	6	3	0	0	0	0	0	1	0	0	13	54
8:30 AM	0	0	1	0	0	0	3	1	0	0	0	0	0	3	0	0	8	48
8:45 AM	0	0	5	0	0	0	7	1	0	0	0	0	0	2	0	0	15	46
Count Total	0	0	31	0	0	0	42	14	0	0	0	0	0	11	0	6	104	0
Peak Hour	**0**	**0**	**18**	**0**	**0**	**0**	**20**	**8**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**5**	**55**	**0**

Two-Hour Count Summaries - Bikes

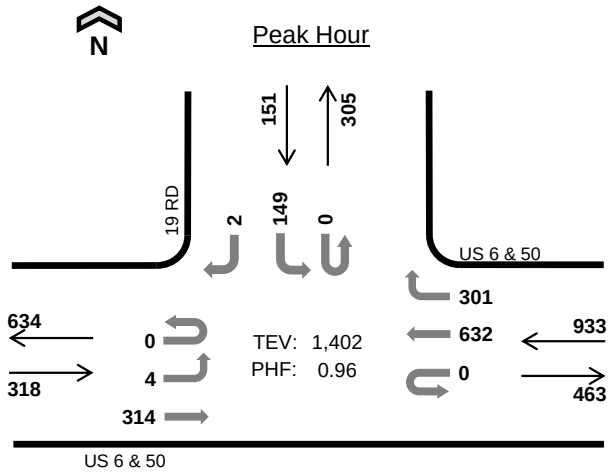
Interval Start	US 6 & 50 Eastbound			US 6 & 50 Westbound			n/a Northbound			19 RD Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

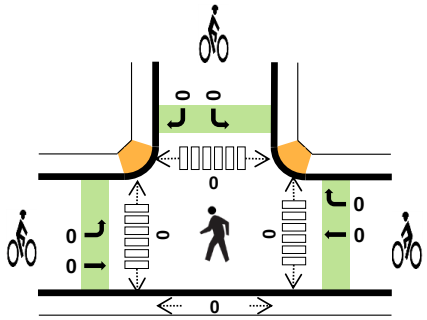
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

19 RD
US 6 & 50

Date: 03/15/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

Peak Hour





	HV %:	PHF
EB	5.7%	0.85
WB	0.8%	0.89
NB	-	-
SB	2.0%	0.88
TOTAL	2.0%	0.96

Two-Hour Count Summaries

Interval Start		US 6 & 50 Eastbound				US 6 & 50 Westbound				n/a Northbound				19 RD 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	0	84	0	0	0	165	68	0	0	0	0	0	33	0	3	353	0
4:15 PM		0	1	84	0	0	0	169	59	0	0	0	0	0	45	0	2	360	0
4:30 PM		0	1	96	0	0	0	142	59	0	0	0	0	0	43	0	1	342	0
4:45 PM		**0**	**0**	**85**	**0**	**0**	**0**	**144**	**56**	**0**	**0**	**0**	**0**	**0**	**36**	**0**	**1**	**322**	1,377
5:00 PM		**0**	**3**	**91**	**0**	**0**	**0**	**156**	**62**	**0**	**0**	**0**	**0**	**0**	**43**	**0**	**0**	**355**	1,379
5:15 PM		**0**	**1**	**72**	**0**	**0**	**0**	**162**	**101**	**0**	**0**	**0**	**0**	**0**	**29**	**0**	**0**	**365**	1,384
5:30 PM		**0**	**0**	**66**	**0**	**0**	**0**	**170**	**82**	**0**	**0**	**0**	**0**	**0**	**41**	**0**	**1**	**360**	**1,402**
5:45 PM		0	2	58	0	0	0	148	64	0	0	0	0	0	30	0	2	304	1,384
Count Total		0	8	636	0	0	0	1,256	551	0	0	0	0	0	300	0	10	2,761	0
Peak Hour	**All**	**0**	**4**	**314**	**0**	**0**	**0**	**632**	**301**	**0**	**0**	**0**	**0**	**0**	**149**	**0**	**2**	**1,402**	**0**
	HV	**0**	**1**	**17**	**0**	**0**	**0**	**5**	**2**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**28**	**0**
	HV%	**-**	**25%**	**5%**	**-**	**-**	**-**	**1%**	**1%**	**-**	**-**	**-**	**-**	**-**	**2%**	**-**	**0%**	**2%**	**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	3	6	0	1	*10*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	6	5	0	2	*13*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	9	5	0	1	*15*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	**7**	**0**	**0**	**1**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**5**	**3**	**0**	**1**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**5**	**3**	**0**	**1**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:30 PM	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:45 PM	3	0	0	1	*4*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	39	23	0	8	*70*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hr	**18**	**7**	**0**	**3**	***28***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

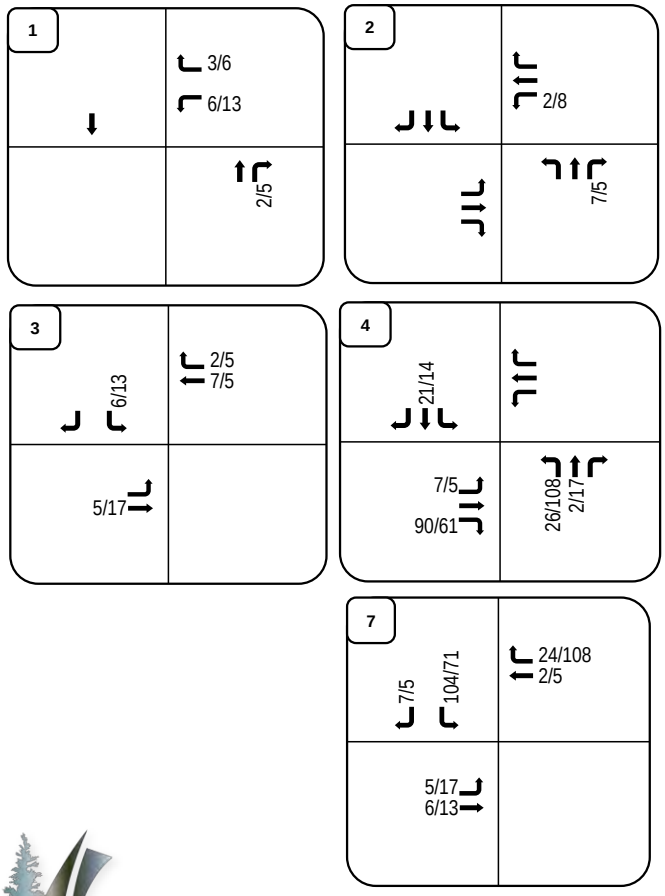
Interval Start	US 6 & 50 Eastbound				US 6 & 50 Westbound				n/a Northbound				19 RD Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	3	0	0	0	5	1	0	0	0	0	0	0	0	1	10	0
4:15 PM	0	0	6	0	0	0	5	0	0	0	0	0	0	2	0	0	13	0
4:30 PM	0	0	9	0	0	0	3	2	0	0	0	0	0	1	0	0	15	0
4:45 PM	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**8**	46
5:00 PM	**0**	**1**	**4**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**9**	45
5:15 PM	**0**	**0**	**5**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**9**	41
5:30 PM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**28**
5:45 PM	0	1	2	0	0	0	0	0	0	0	0	0	0	1	0	0	4	24
Count Total	0	2	37	0	0	0	18	5	0	0	0	0	0	7	0	1	70	0
Peak Hour	**0**	**1**	**17**	**0**	**0**	**0**	**5**	**2**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**28**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	US 6 & 50 Eastbound			US 6 & 50 Westbound			n/a Northbound			19 RD Southbound			15-min Total	Rolling One Hour
	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	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	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.

Figure APP-1: Year 2023 Background Adjust Traffic (Iron Wheel Subdivision)



LEGEND:
Directional Distribution = Inbound% (Outbound %)
AM/PM Volumes = XX/XX VPH (in PCEs)
Turning Movements

McDOWELL ENGINEERING, LLC
TRANSPORTATION ENGINEERING CONSULTANTS

Project Number M1560
Prepared By EP

CDOT

MaxTime Timing Shee

006A021.26-Pine20190415

Administration

Cross Black_White.jpg

Unit Information

Controller ID	10
Main St.	SH 6A
Side St.	18 Rd (Pine)

Adapter	IP Address	Subnet Mask	Default Gateway	ARP	DHCP
1				Disable	
2				Disable	

Serial Ports:

Port	Description	Function	Address	Baud	Bits	Stop	Parity	Flow	CTS	RTS
1	Port 2/C21S	None	1	9600	8	1	None	None	0	0
2	Aux_P3/C22S	None	1	9600	8	1	None	None	0	0
3	SDLC Port 1	None	1	9600	8	1	None	None	0	0
4	Com A/C50S	None	1	9600	8	1	None	None	0	0
5	FIO	None	1	9600	8	1	None	None	0	0
6	DISPLAY/C60M	None	1	9600	8	1	None	None	0	0
7	SP7	None	1	9600	8	1	None	None	0	0
8	SP8/Com B	None	1	9600	8	1	None	None	0	0

Unit Parameters

Startup Flash	0	Auto Ped Clr	Enable	Red Revert	6.0	Backup Time	600	Ext Mode	
All Red Exit	6	Grn Flash Freq.	60	Yel Flash Freq.	60	MCE Enable	Enable	Free Seq.	1
MCE Seq.	1	Start Yellow	0.0	Start Red	0.0	Start Clear Hold	6		

Phase Parameters

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
Walk Time	0	0	0	0	0	7	0	0	0	0	0	0	0	0						
Clear Time	0	0	0	0	0	15	0	0	0	0	0	0	0	0						
Don't Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Min Green	0	20	0	8	6	20	0	0	0	0	1	1	1	1						
Min Green 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Passage	0.0	3.0	0.0	3.5	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
Max-1	0	38	0	22	14	38	0	0	0	0	0	0	0	0						
Max-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Max-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Yel Change	3.0	5.0	3.0	4.0	4.0	5.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0						
Red Clear	1.0	1.5	1.0	2.0	1.5	1.5	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0						
Add Red Clear	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Red Revert	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	0.0						
Added Initial	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	0.0						
Max Initial	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	0.0						
Time B4 Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Cars B4 Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Time To Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Reduce By	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	0.0						
Min Gap	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	0.0						
Dyn Max Limit	0	0	0	40	25	0	0	0	0	0	0	0	0	0						
Dyn Max Step	0.0	0.0	0.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
Advance Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Delay Ped	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Alt Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Alt Ped Clr																				
Pre Green	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	0.0						
Pre Clearance	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	0.0						

Phase Options

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
Enable		X		X	X	X														
Auto Flash Ent.		X				X														
Auto Flash Exit																				

		X				X													
Non Actuated I																			
Non Actuated II																			
Non Lock Mem	X	X	X	X	X	X	X	X											
Min Veh Recall		X				X													
Max Veh Recall																			
Ped Recall																			
Soft Veh Recall																			
Dual Entry																			
Sim Gap Dis																			
Guaranteed Pass																			
Act Rest Walk																			
Cond Service																			
Add Initial																			

Additional Phase Options

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
Ped Clr During Yel																				
Ped Clr During Red																				
Cond Reservice																				
Yel Min Override																				
No Startup Call																				
Adv. Warn Flasher																				
No Ped Str Up Call																				
Ped Clr OVTG																				
Flash Exit Call																				
Flash Exit Ped Call																				
MinGreen2																				
MaxGreen2																				
MaxGreen3																				
Ped2																				
Ped Clear Pre Clear																				
Ped NA+ Mode																				
Red Rest																				
Serve Evy Oth Even																				
Serve Evy Oth Odd																				

Phase Configuration

Ph.	Startup	Ring	Concurrent	No Served Phases	Startup Min	Description
1	Phase Not On	0			0	WBLT
2	Green No Walk	1	5,6		0	EBTL
3	Phase Not On	0			0	NBLT
4	Phase Not On	1			0	SBTL
5	Phase Not On	2	2		0	EBL
6	Green No Walk	2	2		0	WBT
7	Phase Not On	0			0	SBLT
8	Phase Not On	0			0	NBT
9	None	0			0	
10	None	0			0	
11	None	0			0	
12	None	0			0	
13	None	0			0	
14	None	0			0	

Sequence Configuration

Sequence 1

Ring	Phases
1	2,a,4,b
2	5,6,a,b
3	
4	
5	

Sequence 2

Ring	Phases
1	2,1,a,3,4,b
2	5,6,a,7,8,b
3	
4	
5	

Sequence 3

Ring	Phases
1	1,2,a,4,3,b
2	5,6,a,7,8,b
3	
4	
5	

Sequence 4

Ring	Phases
1	2,1,a,4,3,b
2	5,6,a,7,8,b
3	
4	
5	

6		6		6		6	
7		7		7		7	
8		8		8		8	
9		9		9		9	
10		10		10		10	
11		11		11		11	
12		12		12		12	
13		13		13		13	
14		14		14		14	

Vehicle Detection Parameters

Det.	Call Phs	Call Ovl	Additional Call Phase	Switch Phase	Delay	Extend	Queue Limit	No Activity	Max Presence	Erratic Counts	Failed Time	Description
1	1	0		0	0.0	0.0	0	0	0	0	0	
2	2	0		0	0.0	0.0	0	0	0	0	0	
3	2	0		0	0.0	0.0	0	0	0	0	0	
4	2	0		0	0.0	0.0	0	0	0	0	0	
5	2	0		0	0.0	0.0	0	0	0	0	0	
6	2	0		0	0.0	0.0	0	0	0	0	0	
7	3	0		0	0.0	0.0	0	0	0	0	0	
8	4	0		0	5.0	0.0	0	0	0	0	0	
9	4	0		0	5.0	0.0	0	0	0	0	0	
10	4	0		0	0.0	0.0	0	0	0	0	0	
11	4	0		0	0.0	0.0	0	0	0	0	0	
12	4	0		0	0.0	0.0	0	0	0	0	0	
13	1	0		0	0.0	0.0	0	0	0	0	0	
14	3	0		0	0.0	0.0	0	0	0	0	0	
15	5	0		2	4.0	0.0	0	0	0	0	0	
16	6	0		0	0.0	0.0	0	0	0	0	0	
17	6	0		0	0.0	0.0	0	0	0	0	0	
18	6	0		0	0.0	0.0	0	0	0	0	0	
19	6	0		0	0.0	0.0	0	0	0	0	0	
20	6	0		0	0.0	0.0	0	0	0	0	0	
21	7	0		0	0.0	0.0	0	0	0	0	0	
22	8	0		0	0.0	0.0	0	0	0	0	0	
23	8	0		0	0.0	0.0	0	0	0	0	0	
24	8	0		0	0.0	0.0	0	0	0	0	0	
25	8	0		0	0.0	0.0	0	0	0	0	0	
26	8	0		0	0.0	0.0	0	0	0	0	0	
27	5	0		0	0.0	0.0	0	0	0	0	0	
28	7	0		0	0.0	0.0	0	0	0	0	0	

Vehicle Detection Options

Detector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Volume Detector																				
Occupancy																				
Yellow Lock Call																				
Red Lock call																				
Passage																				
Queue																				
Call																				
Terminate																				

Detector	21	22	23	24	25	26	27	28												
Volume Detector																				
Occupancy																				
Yellow Lock Call																				
Red Lock call																				
Passage																				
Queue																				
Call																				
Terminate																				

Pedestrian Detectors

Det	Call Phase	Call Ovlp	No Act	Max Presence	Erratic Count
1	0	0	0	0	0
2	2	0	0	0	0
3	0	0	0	0	0
4	4	0	0	0	0
5	0	0	0	0	0
6	6	0	0	0	0
7	0	0	0	0	0
8	8	0	0	0	0
9	0	0	0	0	0
10	0	0	0	0	0

Overlaps

OLP	Type	Included Phases	Modifier Phases	Trail GRN	Trail YEL	Trail RED	Walk 1	Ped Clr 1	Walk 2	Ped Clr 2	Delay	Flash	Descriptions
1	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
2	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
3	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
4	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
5	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
6	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
7	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
8	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
9	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
10	Off			0	0.0	0.0	0	0	0	0	0.0	Off	

Coordination Parameters

Operational Mode	Correction Mode	Maximum Mode	Force Mode
Automatic	Add Only	Per Pattern	Per Pattern

Patterns

Patt.	Cycle	Offset 1	Offset 2	Offset 2	Split	Sequence	Ref. Color	Max Mode	Phs Pln	Det Pln	Ped Pln
1	0	0	0	0	0	0	Yel	Inh	1	1	1
2	0	0	0	0	0	0	Yel	Inh	1	1	1
3	0	0	0	0	0	0	Yel	Inh	1	1	1
4	0	0	0	0	0	0	Yel	Inh	1	1	1
5	0	0	0	0	0	0	Yel	Inh	1	1	1
6	0	0	0	0	0	0	Yel	Inh	1	1	1
7	0	0	0	0	0	0	Yel	Inh	1	1	1
8	0	0	0	0	0	0	Yel	Inh	1	1	1
9	0	0	0	0	0	0	Yel	Inh	1	1	1
10	0	0	0	0	0	0	Yel	Inh	1	1	1
11	0	0	0	0	0	0	Yel	Inh	1	1	1
12	0	0	0	0	0	0	Yel	Inh	1	1	1
13	0	0	0	0	0	0	Yel	Inh	1	1	1
14	0	0	0	0	0	0	Yel	Inh	1	1	1
15	0	0	0	0	0	0	Yel	Inh	1	1	1
16	0	0	0	0	0	0	Yel	Inh	1	1	1
17	0	0	0	0	0	0	Yel	Inh	1	1	1
18	0	0	0	0	0	0	Yel	Inh	1	1	1
19	0	0	0	0	0	0	Yel	Inh	1	1	1
20	0	0	0	0	20	1	Yel	Max1	1	1	1

Split Parameters

Split 1 PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None

Split 2 PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None

8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None

8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None

Split 3		Coord	Ref	
PH.	Time	PH	PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None

Split 4		Coord	Ref	
PH.	Time	PH	PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None

Split 5		Coord	Ref	
PH.	Time	PH	PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None

Split 6		Coord	Ref	
PH.	Time	PH	PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None

Ring	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Offset																

Day Plan 1

Month of Year						Days of Week							Days of Month														
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 2

Month of Year						Days of Week							Days of Month														
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 3

Month of Year						Days of Week							Days of Month														
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	

Day Plan 4

Month of Year						Days of Week							Days of Month														
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	

Day Plan 1

Event	Hour	Min.	Act
1	0	0	20
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 2

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 3

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 4

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Actions

		Aux.			Special Functions						
Act	Pattern	1	2	3	1	2	3	4	5	6	7	8
1	Pattern 1											
2	Pattern 2											
3	Pattern 3											
4	Pattern 4											
5	Pattern 5											
6	Pattern 6											
7	Pattern 7											
8	Pattern 8											
9	Pattern 9											
10	Pattern 10											

Actions

		Aux.			Special Functions							
Act	Pattern	1	2	3	1	2	3	4	5	6	7	8
11	Pattern 11											
12	Pattern 12											
13	Pattern 13											
14	Pattern 14											
15	Pattern 15											
16	Pattern 16											
17	Pattern 17											
18	Pattern 18											
19	Pattern 19											
20	Pattern 20											

Preemption Parameters

Preempt	1	2	3	4	5	6	7	8
Link	0	0	0	0	0	0	0	0
Delay	0	0	0	0	0	0	0	0
Min Duration	0	0	0	0	0	0	0	0
Min Green	0	0	0	0	0	0	0	0
Min Walk	0	0	0	0	0	0	0	0
Ent. Ped Clear	255	255	255	255	255	255	255	255
Track Green	0	0	0	0	0	0	0	0
Dwell Green	0	0	0	0	0	0	0	0
Max Presence	0	0	0	0	0	0	0	0
Enter Yellow	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Ent. Red Clear	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5

Preemption Parameters

Preempt	1	2	3	4	5	6	7	8
Track Yellow	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Track Red Clear	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Exit Red	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Exit Ped Clear	255	255	255	255	255	255	255	255
Exit Yellow	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Exit Red	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5

Preempt	1	2	3	4	5	6	7	8
Non Lock Mem								
Not Overide Flash								
NotOverideNextPre								
Flash Dwell								

Preemption Configuration

Preempt	1	2	3	4	5	6	7	8
Track phase								
Dwell Phase								
Dwell Ped								
Exit Phase								
Track Overlap								
Dwell overlap								
Cycling phase								
Cycling Ped								
Cycling Overlap								

IO Modules

IO Mod	TYPE

Channel Configuration

Chan	Ctrl Type	Source

Chan	Ctrl Type	Source

1	Caltrans 332	1	None	1	11	None	3
2	None	2	Phs Veh	2	12	None	4
3	None	3	None	3	13	None	2
4	None	4	Phs Veh	4	14	None	4
5	None	5	Phs Veh	5	15	Phs Ped	6
6	None	6	Phs Veh	6	16	None	8
7	None	7	None	7	17	None	5
8	None	8	None	8	18	None	6
9	None	9	None	1	19	None	0
10	None	10	None	2	20	None	0

Channel Options

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
Flash Yellow		X				X										
Flash Red	X		X	X	X		X	X								
Alt Flash		X				X										

Startup Clearance Hold Type 1=off, 2=On, 3=Flash and 4= Alt Flash

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
Red																
Yellow																
Green																

Phase Intervals

Interval	Description	Red	Yel	Grn	Type
1	notActive	On	Off	Off	Red
2	dltGrn	On	Off	Off	Red
3	PreGrn	Off	Off	On	Green
4	minGrn	Off	Off	On	Green
5	grnExt	Off	Off	On	Green
6	grnDwell	Off	Off	On	Green
7	preClear	Off	Off	On	Green
8	yelChange	Off	On	Off	Yellow
9	redClear	On	Off	Off	Red
10	redDwell	On	Off	Off	Red
11	Barrier	On	Off	Off	Red

Pedestrian Intervals

Interval	Description	DWK	CLR	Wlk	Type
1	notActive	On	Off	Off	Dont Walk
2	dltPed	On	Off	Off	Dont Walk
3	walk	Off	Off	On	Walk
4	walkDwell	Off	Off	On	Walk
5	flashDtWlk	Flash	Off	Off	Ped Clear
6	dWalk	On	Off	Off	Dont Walk
7					
8					

Countdown Display

Display	Addr	Phase	Time
1			
2			
3			
4			
5			
6			
7			
8			

Display	Addr	Phase	Time
9			
10			
11			
12			
13			
14			
15			
16			

Manual Control Phase Groups

Grp 1		Grp 2		Grp 3		Grp 4		Grp 5		Grp 6		Grp 7		Grp 8	
Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph
1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
3	0	3	0	3	0	3	0	3	0	3	0	3	0	3	0
4	0	4	0	4	0	4	0	4	0	4	0	4	0	4	0
5	0	5	0	5	0	5	0	5	0	5	0	5	0	5	0
6	0	6	0	6	0	6	0	6	0	6	0	6	0	6	0
7	0	7	0	7	0	7	0	7	0	7	0	7	0	7	0
8	0	8	0	8	0	8	0	8	0	8	0	8	0	8	0
9	0	9	0	9	0	9	0	9	0	9	0	9	0	9	0
10	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0
11	0	11	0	11	0	11	0	11	0	11	0	11	0	11	0
12	0	12	0	12	0	12	0	12	0	12	0	12	0	12	0

13	0	13	0	13	0	13	0	13	0	13	0	13	0	13	0
14	0	14	0	14	0	14	0	14	0	14	0	14	0	14	0
15	0	15	0	15	0	15	0	15	0	15	0	15	0	15	0
16	0	16	0	16	0	16	0	16	0	16	0	16	0	16	0

Prioritor Settings

Prioritor	Priority Ph	Output Dly
1		0
2		0
3		0
4		0
5		0
6		0
7		0
8		0

Enabled	Lock Out Time
No	0

Loopback Functions

Func	Result Function Type	Index	Source Function Type	Index
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				

Func	Result Function Type	Index	Source Function Type	Index
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

Section Configuration

Section	Control	Poll	Req #	Fail Time	Algorithm Period	Description
1	None	60	1	300	240	
2	None	60	1	300	240	
3	None	60	1	300	240	
4	None	60	1	300	240	
5	None	60	1	300	240	
6	None	60	1	300	240	
7	None	60	1	300	240	
8	None	60	1	300	240	
9	None	60	1	300	240	
10	None	60	1	300	240	
11	None	60	1	300	240	
12	None	60	1	300	240	
13	None	60	1	300	240	
14	None	60	1	300	240	
15	None	60	1	300	240	
16	None	60	1	300	240	

User Program Info

Pgrm	Description
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

CDOT

MaxTime Timing Shee

006A_022.46@19_Rd

Administration

Cross Black_White.jpg

Unit Information

Controller ID	11
Main St.	SH 6A
Side St.	19 Rd

Adapter	IP Address	Subnet Mask	Default Gateway	ARP	DHCP
1				Disable	
2				Disable	

Serial Ports:

Port	Description	Function	Address	Baud	Bits	Stop	Parity	Flow	CTS	RTS
1	Port 2/C21S	None	1	9600	8	1	None	None	0	0
2	Aux_P3/C22S	None	1	9600	8	1	None	None	0	0
3	SDLC Port 1	None	1	9600	8	1	None	None	0	0
4	Com A/C50S	None	1	9600	8	1	None	None	0	0
5	FIO	None	1	9600	8	1	None	None	0	0
6	DISPLAY/C60M	None	1	9600	8	1	None	None	0	0
7	SP7	None	1	9600	8	1	None	None	0	0
8	SP8/Com B	None	1	9600	8	1	None	None	0	0

Unit Parameters

Startup Flash	0	Auto Ped Clr	Enable	Red Revert	6.0	Backup Time	600	Ext Mode	
All Red Exit	6	Grn Flash Freq.	60	Yel Flash Freq.	60	MCE Enable	Enable	Free Seq.	1
MCE Seq.	1	Start Yellow	0.0	Start Red	0.0	Start Clear Hold	6		

Phase Parameters

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
Walk Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Clear Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Don't Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Min Green	0	15	0	5	5	15	0	0	0	0	1	1	1	1						
Min Green 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Passage	0.0	7.0	0.0	3.5	3.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
Max-1	0	60	0	30	16	44	0	0	0	0	0	0	0	0						
Max-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Max-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Yel Change	3.0	5.5	3.0	5.0	5.0	5.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0						
Red Clear	1.0	2.0	1.0	2.0	2.5	2.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0						
Add Red Clear	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Red Revert	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	0.0						
Added Initial	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	0.0						
Max Initial	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	0.0						
Time B4 Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Cars B4 Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Time To Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Reduce By	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	0.0						
Min Gap	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	0.0						
Dyn Max Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Dyn Max Step	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	0.0						
Advance Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Delay Ped	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Alt Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Alt Ped Clr																				
Pre Green	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	0.0						
Pre Clearance	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	0.0						

Phase Options

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
Enable		X		X	X	X														
Auto Flash Ent.		X				X														
Auto Flash Exit																				

		X				X														
Non Actuated I																				
Non Actuated II																				
Non Lock Mem	X	X	X	X	X	X	X	X												
Min Veh Recall		X				X														
Max Veh Recall																				
Ped Recall																				
Soft Veh Recall																				
Dual Entry																				
Sim Gap Dis																				
Guaranteed Pass																				
Act Rest Walk																				
Cond Service																				
Add Initial																				

Additional Phase Options

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
Ped Clr During Yel																				
Ped Clr During Red																				
Cond Reservice																				
Yel Min Override																				
No Startup Call																				
Adv. Warn Flasher																				
No Ped Str Up Call																				
Ped Clr OVTG																				
Flash Exit Call																				
Flash Exit Ped Call																				
MinGreen2																				
MaxGreen2																				
MaxGreen3																				
Ped2																				
Ped Clear Pre Clear																				
Ped NA+ Mode																				
Red Rest																				
Serve Evy Oth Even																				
Serve Evy Oth Odd																				

Phase Configuration

Ph.	Startup	Ring	Concurrent	No Served Phases	Startup Min	Description
1	Phase Not On	0			0	WBLT
2	Green No Walk	1	5,6		0	EBT
3	Phase Not On	0			0	NBLT
4	Phase Not On	1			0	SBT
5	Phase Not On	2	2		0	EBLT
6	Green No Walk	2	2		0	WBT
7	Phase Not On	0			0	SBLT
8	Phase Not On	0			0	NBT
9	None	0			0	
10	None	0			0	
11	None	0			0	
12	None	0			0	
13	None	0			0	
14	None	0			0	

Sequence Configuration

Sequence 1

Ring	Phases
1	2,a,4,b
2	5,6,a,b
3	
4	
5	

Sequence 2

Ring	Phases
1	2,1,a,3,4,b
2	5,6,a,7,8,b
3	
4	
5	

Sequence 3

Ring	Phases
1	1,2,a,4,3,b
2	5,6,a,7,8,b
3	
4	
5	

Sequence 4

Ring	Phases
1	2,1,a,4,3,b
2	5,6,a,7,8,b
3	
4	
5	

6		6		6		6	
7		7		7		7	
8		8		8		8	
9		9		9		9	
10		10		10		10	
11		11		11		11	
12		12		12		12	
13		13		13		13	
14		14		14		14	

Vehicle Detection Parameters

Det.	Call Phs	Call Ovl	Additional Call Phase	Switch Phase	Delay	Extend	Queue Limit	No Activity	Max Presence	Erratic Counts	Failed Time	Description
1	1	0		0	0.0	0.0	0	0	0	0	0	
2	2	0		0	0.0	0.0	0	0	0	0	0	
3	2	0		0	0.0	0.0	0	0	0	0	0	
4	2	0		0	0.0	0.0	0	0	0	0	0	
5	2	0		0	0.0	0.0	0	0	0	0	0	
6	2	0		0	0.0	0.0	0	0	0	0	0	
7	3	0		0	0.0	0.0	0	0	0	0	0	
8	4	0		0	5.0	0.0	0	0	0	0	0	
9	4	0		0	5.0	0.0	0	0	0	0	0	
10	4	0		0	0.0	0.0	0	0	0	0	0	
11	4	0		0	0.0	0.0	0	0	0	0	0	
12	4	0		0	0.0	0.0	0	0	0	0	0	
13	1	0		0	0.0	0.0	0	0	0	0	0	
14	3	0		0	0.0	0.0	0	0	0	0	0	
15	5	0		0	4.0	0.0	0	0	0	0	0	
16	6	0		0	0.0	0.0	0	0	0	0	0	
17	6	0		0	0.0	0.0	0	0	0	0	0	
18	6	0		0	0.0	0.0	0	0	0	0	0	
19	6	0		0	0.0	0.0	0	0	0	0	0	
20	6	0		0	0.0	0.0	0	0	0	0	0	
21	7	0		0	0.0	0.0	0	0	0	0	0	
22	8	0		0	0.0	0.0	0	0	0	0	0	
23	8	0		0	0.0	0.0	0	0	0	0	0	
24	8	0		0	0.0	0.0	0	0	0	0	0	
25	8	0		0	0.0	0.0	0	0	0	0	0	
26	8	0		0	0.0	0.0	0	0	0	0	0	
27	5	0		0	0.0	0.0	0	0	0	0	0	
28	7	0		0	0.0	0.0	0	0	0	0	0	

Vehicle Detection Options

Detector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Volume Detector																				
Occupancy																				
Yellow Lock Call																				
Red Lock call																				
Passage																				
Queue																				
Call																				
Terminate																				

Detector	21	22	23	24	25	26	27	28												
Volume Detector																				
Occupancy																				
Yellow Lock Call																				
Red Lock call																				
Passage																				
Queue																				
Call																				
Terminate																				

Pedestrian Detectors

Det	Call Phase	Call Ovlp	No Act	Max Presence	Erratic Count
1	0	0	0	0	0
2	2	0	0	0	0
3	0	0	0	0	0
4	4	0	0	0	0
5	0	0	0	0	0
6	6	0	0	0	0
7	0	0	0	0	0
8	8	0	0	0	0
9	0	0	0	0	0
10	0	0	0	0	0

Overlaps

OLP	Type	Included Phases	Modifier Phases	Trail GRN	Trail YEL	Trail RED	Walk 1	Ped Clr 1	Walk 2	Ped Clr 2	Delay	Flash	Descriptions
1	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
2	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
3	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
4	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
5	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
6	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
7	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
8	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
9	Off			0	0.0	0.0	0	0	0	0	0.0	Off	
10	Off			0	0.0	0.0	0	0	0	0	0.0	Off	

Coordination Parameters

Operational Mode	Correction Mode	Maximum Mode	Force Mode
Automatic	Shortway (Auto)	Per Pattern	Per Pattern

Patterns

Patt.	Cycle	Offset 1	Offset 2	Offset 2	Split	Sequence	Ref. Color	Max Mode	Phs Pln	Det Pln	Ped Pln
1	0	0	0	0	0	0	Yel	Inh	1	1	1
2	0	0	0	0	0	0	Yel	Inh	1	1	1
3	0	0	0	0	0	0	Yel	Inh	1	1	1
4	0	0	0	0	0	0	Yel	Inh	1	1	1
5	0	0	0	0	0	0	Yel	Inh	1	1	1
6	0	0	0	0	0	0	Yel	Inh	1	1	1
7	0	0	0	0	0	0	Yel	Inh	1	1	1
8	0	0	0	0	0	0	Yel	Inh	1	1	1
9	0	0	0	0	0	0	Yel	Inh	1	1	1
10	0	0	0	0	0	0	Yel	Inh	1	1	1
11	0	0	0	0	0	0	Yel	Inh	1	1	1
12	0	0	0	0	0	0	Yel	Inh	1	1	1
13	0	0	0	0	0	0	Yel	Inh	1	1	1
14	0	0	0	0	0	0	Yel	Inh	1	1	1
15	0	0	0	0	0	0	Yel	Inh	1	1	1
16	0	0	0	0	0	0	Yel	Inh	1	1	1
17	0	0	0	0	0	0	Yel	Inh	1	1	1
18	0	0	0	0	0	0	Yel	Inh	1	1	1
19	0	0	0	0	0	0	Yel	Inh	1	1	1
20	0	0	0	0	20	1	Yel	Max1	1	1	1

Split Parameters

Split 1 PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None

Split 2 PH.	Time	Coord PH	Ref PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None

8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None

8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None

Split 3		Coord	Ref	
PH.	Time	PH	PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None

Split 4		Coord	Ref	
PH.	Time	PH	PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None

Split 5		Coord	Ref	
PH.	Time	PH	PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None

Split 6		Coord	Ref	
PH.	Time	PH	PH	Mode
1	0			None
2	0			None
3	0			None
4	0			None
5	0			None
6	0			None
7	0			None
8	0			None
9	0			None
10	0			None
11	0			None
12	0			None
13	0			None
14	0			None

Ring	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Offset																

Day Plan 1

Month of Year						Days of Week							Days of Month														
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 2

Month of Year						Days of Week							Days of Month														
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 3

Month of Year						Days of Week							Days of Month														
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	

X	X	X	X	X	X

X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Day Plan 4

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 1

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 2

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 3

Event	Hour	Min.	Act
1	0	0	20
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 4

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Actions

Act	Pattern	Aux. 1	Aux. 2	Aux. 3	Special Functions 1	2	3	4	5	6	7	8
1	Pattern 1											
2	Pattern 2											
3	Pattern 3											
4	Pattern 4											
5	Pattern 5											
6	Pattern 6											
7	Pattern 7											
8	Pattern 8											
9	Pattern 9											
10	Pattern 10											

Actions

Act	Pattern	Aux. 1	Aux. 2	Aux. 3	Special Functions 1	2	3	4	5	6	7	8
11	Pattern 11											
12	Pattern 12											
13	Pattern 13											
14	Pattern 14											
15	Pattern 15											
16	Pattern 16											
17	Pattern 17											
18	Pattern 18											
19	Pattern 19											
20	Pattern 20											

Preemption Parameters

Preempt	1	2	3	4	5	6	7	8
Link	0	0	0	0	0	0	0	0
Delay	0	0	0	0	0	0	0	0
Min Duration	0	0	0	0	0	0	0	0
Min Green	0	0	0	0	0	0	0	0
Min Walk	0	0	0	0	0	0	0	0
Ent. Ped Clear	255	255	255	255	255	255	255	255
Track Green	0	0	0	0	0	0	0	0
Dwell Green	0	0	0	0	0	0	0	0
Max Presence	0	0	0	0	0	0	0	0
Enter Yellow	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Ent. Red Clear	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5

Preemption Parameters

Preempt	1	2	3	4	5	6	7	8
Track Yellow	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Track Red Clear	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Exit Red	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Exit Ped Clear	255	255	255	255	255	255	255	255
Exit Yellow	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Exit Red	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5

Preempt	1	2	3	4	5	6	7	8
Non Lock Mem								
Not Overide Flash								
NotOverideNextPre								
Flash Dwell								

Preemption Configuration

Preempt	1	2	3	4	5	6	7	8
Track phase								
Dwell Phase								
Dwell Ped								
Exit Phase								
Track Overlap								
Dwell overlap								
Cycling phase								
Cycling Ped								
Cycling Overlap								

IO Modules

IO Mod	TYPE

Channel Configuration

Chan	Ctrl Type	Source

Chan	Ctrl Type	Source

1	Caltrans 332	1	None	1	11	None	3
2	None	2	Phs Veh	2	12	None	4
3	None	3	None	3	13	None	2
4	None	4	Phs Veh	4	14	None	4
5	None	5	Phs Veh	5	15	None	6
6	None	6	Phs Veh	6	16	None	8
7	None	7	None	7	17	None	5
8	None	8	None	8	18	None	6
9	None	9	None	1	19	None	0
10	None	10	None	2	20	None	0

Channel Options

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
Flash Yellow		X				X										
Flash Red	X		X	X	X											
Alt Flash		X				X										

Startup Clearance Hold Type 1=off, 2=On, 3=Flash and 4= Alt Flash

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
Red																
Yellow																
Green																

Phase Intervals

Interval	Description	Red	Yel	Grn	Type
1	notActive	On	Off	Off	Red
2	dltGrn	On	Off	Off	Red
3	PreGrn	Off	Off	On	Green
4	minGrn	Off	Off	On	Green
5	grnExt	Off	Off	On	Green
6	grnDwell	Off	Off	On	Green
7	preClear	Off	Off	On	Green
8	yelChange	Off	On	Off	Yellow
9	redClear	On	Off	Off	Red
10	redDwell	On	Off	Off	Red
11	Barrier	On	Off	Off	Red

Pedestrian Intervals

Interval	Description	DWK	CLR	Wlk	Type
1	notActive	On	Off	Off	Dont Walk
2	dltPed	On	Off	Off	Dont Walk
3	walk	Off	Off	On	Walk
4	walkDwell	Off	Off	On	Walk
5	flashDtWlk	Flash	Off	Off	Ped Clear
6	dWalk	On	Off	Off	Dont Walk
7					
8					

Countdown Display

Display	Addr	Phase	Time	Display	Addr	Phase	Time								
1				9											
2				10											
3				11											
4				12											
5				13											
6				14											
7				15											
8				16											

Manual Control Phase Groups

Grp 1		Grp 2		Grp 3		Grp 4		Grp 5		Grp 6		Grp 7		Grp 8	
Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph
1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
3	0	3	0	3	0	3	0	3	0	3	0	3	0	3	0
4	0	4	0	4	0	4	0	4	0	4	0	4	0	4	0
5	0	5	0	5	0	5	0	5	0	5	0	5	0	5	0
6	0	6	0	6	0	6	0	6	0	6	0	6	0	6	0
7	0	7	0	7	0	7	0	7	0	7	0	7	0	7	0
8	0	8	0	8	0	8	0	8	0	8	0	8	0	8	0
9	0	9	0	9	0	9	0	9	0	9	0	9	0	9	0
10	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0
11	0	11	0	11	0	11	0	11	0	11	0	11	0	11	0
12	0	12	0	12	0	12	0	12	0	12	0	12	0	12	0

13	0	13	0	13	0	13	0	13	0	13	0	13	0	13	0
14	0	14	0	14	0	14	0	14	0	14	0	14	0	14	0
15	0	15	0	15	0	15	0	15	0	15	0	15	0	15	0
16	0	16	0	16	0	16	0	16	0	16	0	16	0	16	0

Prioritor Settings

Prioritor	Priority Ph	Output Dly
1		0
2		0
3		0
4		0
5		0
6		0
7		0
8		0

Enabled	Lock Out Time
No	0

Loopback Functions

Func	Result Function Type	Index	Source Function Type	Index
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				

Func	Result Function Type	Index	Source Function Type	Index
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

Section Configuration

Section	Control	Poll	Req #	Fail Time	Algorithm Period	Description
1	None	60	1	300	240	
2	None	60	1	300	240	
3	None	60	1	300	240	
4	None	60	1	300	240	
5	None	60	1	300	240	
6	None	60	1	300	240	
7	None	60	1	300	240	
8	None	60	1	300	240	
9	None	60	1	300	240	
10	None	60	1	300	240	
11	None	60	1	300	240	
12	None	60	1	300	240	
13	None	60	1	300	240	
14	None	60	1	300	240	
15	None	60	1	300	240	
16	None	60	1	300	240	

User Program Info

Pgrm	Description
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	118	45	96	396	0	306
Future Vol, veh/h	118	45	96	396	0	306
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	220	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	128	49	104	430	0	333

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	652	319	0	0	-	-
Stage 1	319	-	-	-	-	-
Stage 2	333	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	-	-
Pot Cap-1 Maneuver	433	722	-	-	0	-
Stage 1	737	-	-	-	0	-
Stage 2	726	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	433	722	-	-	-	-
Mov Cap-2 Maneuver	433	-	-	-	-	-
Stage 1	737	-	-	-	-	-
Stage 2	726	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBT
Capacity (veh/h)	-	-	433	722	-
HCM Lane V/C Ratio	-	-	0.296	0.068	-
HCM Control Delay (s)	-	-	16.8	10.3	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	1.2	0.2	-

Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	58	33	306	155	0	233
Future Vol, veh/h	58	33	306	155	0	233
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	220	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	63	36	333	168	0	253

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	670	417	0	0	-	-
Stage 1	417	-	-	-	-	-
Stage 2	253	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	-	-
Pot Cap-1 Maneuver	422	636	-	-	0	-
Stage 1	665	-	-	-	0	-
Stage 2	789	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	422	636	-	-	-	-
Mov Cap-2 Maneuver	422	-	-	-	-	-
Stage 1	665	-	-	-	-	-
Stage 2	789	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBT
Capacity (veh/h)	-	-	422	636	-
HCM Lane V/C Ratio	-	-	0.149	0.056	-
HCM Control Delay (s)	-	-	15	11	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	0.5	0.2	-

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	118	45	96	396	0	306
Future Vol, veh/h	118	45	96	396	0	306
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	220	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	128	49	104	430	0	333

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	652	319	0	0	-	-
Stage 1	319	-	-	-	-	-
Stage 2	333	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	-	-
Pot Cap-1 Maneuver	433	722	-	-	0	-
Stage 1	737	-	-	-	0	-
Stage 2	726	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	433	722	-	-	-	-
Mov Cap-2 Maneuver	433	-	-	-	-	-
Stage 1	737	-	-	-	-	-
Stage 2	726	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBT
Capacity (veh/h)	-	-	433	722	-
HCM Lane V/C Ratio	-	-	0.296	0.068	-
HCM Control Delay (s)	-	-	16.8	10.3	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	1.2	0.2	-

Intersection	
Int Delay, s/veh	4.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	85	47	733	246	0	519
Future Vol, veh/h	85	47	733	246	0	519
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	220	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	92	51	797	267	0	564

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1495	931	0	0	-	-
Stage 1	931	-	-	-	-	-
Stage 2	564	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	-	-
Pot Cap-1 Maneuver	135	324	-	-	0	-
Stage 1	384	-	-	-	0	-
Stage 2	569	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	135	324	-	-	-	-
Mov Cap-2 Maneuver	135	-	-	-	-	-
Stage 1	384	-	-	-	-	-
Stage 2	569	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	55.3	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBT
Capacity (veh/h)	-	-	135	324	-
HCM Lane V/C Ratio	-	-	0.684	0.158	-
HCM Control Delay (s)	-	-	75.8	18.2	-
HCM Lane LOS	-	-	F	C	-
HCM 95th %tile Q(veh)	-	-	3.8	0.6	-

Intersection	
Int Delay, s/veh	3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	126	78	96	396	0	310
Future Vol, veh/h	126	78	96	396	0	310
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	220	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	137	85	104	430	0	337

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	656	319	0	0	-	-
Stage 1	319	-	-	-	-	-
Stage 2	337	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	-	-
Pot Cap-1 Maneuver	430	722	-	-	0	-
Stage 1	737	-	-	-	0	-
Stage 2	723	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	430	722	-	-	-	-
Mov Cap-2 Maneuver	430	-	-	-	-	-
Stage 1	737	-	-	-	-	-
Stage 2	723	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.7	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBT
Capacity (veh/h)	-	-	430	722	-
HCM Lane V/C Ratio	-	-	0.319	0.117	-
HCM Control Delay (s)	-	-	17.2	10.6	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	1.4	0.4	-

Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	63	54	306	155	0	247
Future Vol, veh/h	63	54	306	155	0	247
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	220	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	68	59	333	168	0	268

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	685	417	0	0	-	-
Stage 1	417	-	-	-	-	-
Stage 2	268	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	-	-
Pot Cap-1 Maneuver	414	636	-	-	0	-
Stage 1	665	-	-	-	0	-
Stage 2	777	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	414	636	-	-	-	-
Mov Cap-2 Maneuver	414	-	-	-	-	-
Stage 1	665	-	-	-	-	-
Stage 2	777	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBT
Capacity (veh/h)	-	-	414	636	-
HCM Lane V/C Ratio	-	-	0.165	0.092	-
HCM Control Delay (s)	-	-	15.4	11.2	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	0.6	0.3	-

Intersection	
Int Delay, s/veh	22.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	195	101	229	636	0	684
Future Vol, veh/h	195	101	229	636	0	684
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	220	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	212	110	249	691	0	743

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1338	595	0	0	-	-
Stage 1	595	-	-	-	-	-
Stage 2	743	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	-	-
Pot Cap-1 Maneuver	~ 169	504	-	-	0	-
Stage 1	551	-	-	-	0	-
Stage 2	470	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 169	504	-	-	-	-
Mov Cap-2 Maneuver	~ 169	-	-	-	-	-
Stage 1	551	-	-	-	-	-
Stage 2	470	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	141.3	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBT
Capacity (veh/h)	-	-	169	504	-
HCM Lane V/C Ratio	-	-	1.254	0.218	-
HCM Control Delay (s)	-	-	207.2	14.1	-
HCM Lane LOS	-	-	F	B	-
HCM 95th %tile Q(veh)	-	-	12	0.8	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	5.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	90	68	733	246	0	533
Future Vol, veh/h	90	68	733	246	0	533
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	220	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	98	74	797	267	0	579

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1510	931	0	0	-	-
Stage 1	931	-	-	-	-	-
Stage 2	579	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	-	-
Pot Cap-1 Maneuver	133	324	-	-	0	-
Stage 1	384	-	-	-	0	-
Stage 2	560	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	133	324	-	-	-	-
Mov Cap-2 Maneuver	133	-	-	-	-	-
Stage 1	384	-	-	-	-	-
Stage 2	560	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	56.4	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBT
Capacity (veh/h)	-	-	133	324	-
HCM Lane V/C Ratio	-	-	0.736	0.228	-
HCM Control Delay (s)	-	-	84.4	19.4	-
HCM Lane LOS	-	-	F	C	-
HCM 95th %tile Q(veh)	-	-	4.2	0.9	-

Intersection	
Intersection Delay, s/veh	12.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	50	129	6	67	11	88	71	11	17	273	77
Future Vol, veh/h	31	50	129	6	67	11	88	71	11	17	273	77
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	34	54	140	7	73	12	96	77	12	18	297	84
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11	9.9	10.7	14.1
HCM LOS	B	A	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	52%	15%	7%	5%
Vol Thru, %	42%	24%	80%	74%
Vol Right, %	6%	61%	13%	21%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	170	210	84	367
LT Vol	88	31	6	17
Through Vol	71	50	67	273
RT Vol	11	129	11	77
Lane Flow Rate	185	228	91	399
Geometry Grp	1	1	1	1
Degree of Util (X)	0.281	0.334	0.147	0.554
Departure Headway (Hd)	5.473	5.275	5.798	5
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	656	680	617	722
Service Time	3.513	3.317	3.848	3.031
HCM Lane V/C Ratio	0.282	0.335	0.147	0.553
HCM Control Delay	10.7	11	9.9	14.1
HCM Lane LOS	B	B	A	B
HCM 95th-tile Q	1.1	1.5	0.5	3.4

Intersection	
Intersection Delay, s/veh	9.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	38	20	9	38	23	32	265	9	15	129	6
Future Vol, veh/h	7	38	20	9	38	23	32	265	9	15	129	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	41	22	10	41	25	35	288	10	16	140	7
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.6	8.6	10.7	9
HCM LOS	A	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	10%	11%	13%	10%
Vol Thru, %	87%	58%	54%	86%
Vol Right, %	3%	31%	33%	4%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	306	65	70	150
LT Vol	32	7	9	15
Through Vol	265	38	38	129
RT Vol	9	20	23	6
Lane Flow Rate	333	71	76	163
Geometry Grp	1	1	1	1
Degree of Util (X)	0.415	0.098	0.105	0.211
Departure Headway (Hd)	4.491	5.006	4.989	4.667
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	802	712	715	768
Service Time	2.525	3.061	3.044	2.707
HCM Lane V/C Ratio	0.415	0.1	0.106	0.212
HCM Control Delay	10.7	8.6	8.6	9
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	2.1	0.3	0.4	0.8

Intersection	
Intersection Delay, s/veh	12.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	50	129	6	67	11	88	71	11	17	273	77
Future Vol, veh/h	31	50	129	6	67	11	88	71	11	17	273	77
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	34	54	140	7	73	12	96	77	12	18	297	84
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	11.2	10	10.1	15.7
HCM LOS	B	A	B	C

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	15%	7%	100%	0%
Vol Thru, %	0%	87%	24%	80%	0%	78%
Vol Right, %	0%	13%	61%	13%	0%	22%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	88	82	210	84	17	350
LT Vol	88	0	31	6	17	0
Through Vol	0	71	50	67	0	273
RT Vol	0	11	129	11	0	77
Lane Flow Rate	96	89	228	91	18	380
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.173	0.146	0.34	0.15	0.032	0.588
Departure Headway (Hd)	6.493	5.89	5.36	5.899	6.227	5.565
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	552	608	669	606	575	647
Service Time	4.236	3.633	3.406	3.953	3.962	3.3
HCM Lane V/C Ratio	0.174	0.146	0.341	0.15	0.031	0.587
HCM Control Delay	10.6	9.6	11.2	10	9.2	16
HCM Lane LOS	B	A	B	A	A	C
HCM 95th-tile Q	0.6	0.5	1.5	0.5	0.1	3.8

Intersection	
Intersection Delay, s/veh	12
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	41	33	10	52	23	51	265	13	27	286	9
Future Vol, veh/h	7	41	33	10	52	23	51	265	13	27	286	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	45	36	11	57	25	55	288	14	29	311	10
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	9.6	9.8	12.2	12.9
HCM LOS	A	A	B	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	9%	12%	100%	0%
Vol Thru, %	0%	95%	51%	61%	0%	97%
Vol Right, %	0%	5%	41%	27%	0%	3%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	51	278	81	85	27	295
LT Vol	51	0	7	10	27	0
Through Vol	0	265	41	52	0	286
RT Vol	0	13	33	23	0	9
Lane Flow Rate	55	302	88	92	29	321
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.092	0.458	0.139	0.148	0.049	0.488
Departure Headway (Hd)	5.99	5.452	5.687	5.763	6.003	5.476
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	601	665	630	622	599	661
Service Time	3.699	3.16	3.725	3.801	3.712	3.185
HCM Lane V/C Ratio	0.092	0.454	0.14	0.148	0.048	0.486
HCM Control Delay	9.3	12.7	9.6	9.8	9	13.3
HCM Lane LOS	A	B	A	A	A	B
HCM 95th-tile Q	0.3	2.4	0.5	0.5	0.2	2.7

Intersection	
Intersection Delay, s/veh	12.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	50	136	6	67	11	130	71	11	17	273	77
Future Vol, veh/h	31	50	136	6	67	11	130	71	11	17	273	77
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	34	54	148	7	73	12	141	77	12	18	297	84
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11.5	10.1	11.7	14.7
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	61%	14%	7%	5%
Vol Thru, %	33%	23%	80%	74%
Vol Right, %	5%	63%	13%	21%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	212	217	84	367
LT Vol	130	31	6	17
Through Vol	71	50	67	273
RT Vol	11	136	11	77
Lane Flow Rate	230	236	91	399
Geometry Grp	1	1	1	1
Degree of Util (X)	0.356	0.355	0.152	0.568
Departure Headway (Hd)	5.563	5.418	5.985	5.125
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	645	663	596	702
Service Time	3.612	3.47	4.048	3.166
HCM Lane V/C Ratio	0.357	0.356	0.153	0.568
HCM Control Delay	11.7	11.5	10.1	14.7
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	1.6	1.6	0.5	3.6

Intersection	
Intersection Delay, s/veh	10.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	38	43	9	38	23	59	265	9	15	129	6
Future Vol, veh/h	7	38	43	9	38	23	59	265	9	15	129	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	41	47	10	41	25	64	288	10	16	140	7
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.8	8.8	11.5	9.2
HCM LOS	A	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	18%	8%	13%	10%
Vol Thru, %	80%	43%	54%	86%
Vol Right, %	3%	49%	33%	4%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	333	88	70	150
LT Vol	59	7	9	15
Through Vol	265	38	38	129
RT Vol	9	43	23	6
Lane Flow Rate	362	96	76	163
Geometry Grp	1	1	1	1
Degree of Util (X)	0.46	0.132	0.108	0.216
Departure Headway (Hd)	4.575	4.976	5.11	4.773
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	785	715	696	748
Service Time	2.62	3.042	3.179	2.828
HCM Lane V/C Ratio	0.461	0.134	0.109	0.218
HCM Control Delay	11.5	8.8	8.8	9.2
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	2.4	0.5	0.4	0.8

Intersection	
Intersection Delay, s/veh	123.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	54	214	10	94	11	183	71	15	31	607	119
Future Vol, veh/h	31	54	214	10	94	11	183	71	15	31	607	119
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	34	59	233	11	102	12	199	77	16	34	660	129
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	20.4	14.6	15.4	219.1
HCM LOS	C	B	C	F

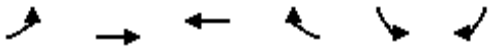
Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	10%	9%	100%	0%
Vol Thru, %	0%	83%	18%	82%	0%	84%
Vol Right, %	0%	17%	72%	10%	0%	16%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	183	86	299	115	31	726
LT Vol	183	0	31	10	31	0
Through Vol	0	71	54	94	0	607
RT Vol	0	15	214	11	0	119
Lane Flow Rate	199	93	325	125	34	789
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.422	0.182	0.587	0.26	0.067	1.442
Departure Headway (Hd)	8.354	7.709	7.397	8.573	7.209	6.58
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	434	468	491	421	495	552
Service Time	6.054	5.409	5.397	6.573	4.985	4.355
HCM Lane V/C Ratio	0.459	0.199	0.662	0.297	0.069	1.429
HCM Control Delay	17	12.1	20.4	14.6	10.5	228
HCM Lane LOS	C	B	C	B	B	F
HCM 95th-tile Q	2.1	0.7	3.7	1	0.2	37.7

Intersection	
Intersection Delay, s/veh	12.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	41	56	10	52	23	78	265	13	27	286	9
Future Vol, veh/h	7	41	56	10	52	23	78	265	13	27	286	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	45	61	11	57	25	85	288	14	29	311	10
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	10	10	12.3	13.4
HCM LOS	A	A	B	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	7%	12%	100%	0%
Vol Thru, %	0%	95%	39%	61%	0%	97%
Vol Right, %	0%	5%	54%	27%	0%	3%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	78	278	104	85	27	295
LT Vol	78	0	7	10	27	0
Through Vol	0	265	41	52	0	286
RT Vol	0	13	56	23	0	9
Lane Flow Rate	85	302	113	92	29	321
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.143	0.465	0.178	0.151	0.05	0.499
Departure Headway (Hd)	6.078	5.54	5.682	5.897	6.128	5.601
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	591	653	631	607	585	645
Service Time	3.804	3.265	3.724	3.94	3.854	3.327
HCM Lane V/C Ratio	0.144	0.462	0.179	0.152	0.05	0.498
HCM Control Delay	9.8	13	10	10	9.2	13.8
HCM Lane LOS	A	B	A	A	A	B
HCM 95th-tile Q	0.5	2.5	0.6	0.5	0.2	2.8



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	308	230	156	156	301	111
Future Volume (vph)	308	230	156	156	301	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	390			180	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	145				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.543				0.950	
Satd. Flow (perm)	1011	1863	1863	1583	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				170		121
Link Speed (mph)		45	45		35	
Link Distance (ft)		583	2421		489	
Travel Time (s)		8.8	36.7		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	335	250	170	170	327	121
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	1.0	13.5	28.0	28.0	2.0	2.0
Minimum Split (s)	6.5	20.0	34.5	34.5	8.0	8.0
Total Split (s)	11.5	46.0	34.5	34.5	14.0	14.0
Total Split (%)	19.2%	76.7%	57.5%	57.5%	23.3%	23.3%
Yellow Time (s)	4.0	5.0	5.0	5.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5	1.5	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	6.5	6.5	6.5	6.0	6.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Min	C-Min	C-Min	None	None
Act Effct Green (s)	40.5	39.5	28.0	28.0	8.0	8.0
Actuated g/C Ratio	0.68	0.66	0.47	0.47	0.13	0.13
v/c Ratio	0.44	0.20	0.20	0.21	1.39	0.38
Control Delay	6.0	4.5	10.2	2.5	224.4	9.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.0	4.5	10.2	2.5	224.4	9.6
LOS	A	A	B	A	F	A
Approach Delay		5.4	6.4		166.4	
Approach LOS		A	A		F	
Queue Length 50th (ft)	39	29	34	0	~163	0
Queue Length 95th (ft)	68	52	65	26	#298	39
Internal Link Dist (ft)		503	2341		409	

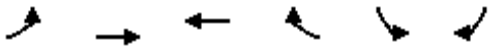
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Bay Length (ft)	390			180		
Base Capacity (vph)	758	1226	869	829	236	315
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.20	0.20	0.21	1.39	0.38

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.39			
Intersection Signal Delay: 58.2		Intersection LOS: E	
Intersection Capacity Utilization 72.1%		ICU Level of Service C	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: US 6/50 & S Pine St

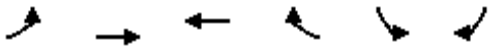


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	128	191	288	314	201	98
Future Volume (vph)	128	191	288	314	201	98
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	390			180	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	145				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.480				0.950	
Satd. Flow (perm)	894	1863	1863	1583	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				341		107
Link Speed (mph)		45	45		35	
Link Distance (ft)		583	2421		489	
Travel Time (s)		8.8	36.7		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	139	208	313	341	218	107
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	1.0	13.5	28.0	28.0	2.0	2.0
Minimum Split (s)	6.5	20.0	34.5	34.5	8.0	8.0
Total Split (s)	11.5	46.0	34.5	34.5	14.0	14.0
Total Split (%)	19.2%	76.7%	57.5%	57.5%	23.3%	23.3%
Yellow Time (s)	4.0	5.0	5.0	5.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5	1.5	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	6.5	6.5	6.5	6.0	6.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Min	C-Min	C-Min	None	None
Act Effct Green (s)	40.5	39.5	30.3	30.3	8.0	8.0
Actuated g/C Ratio	0.68	0.66	0.50	0.50	0.13	0.13
v/c Ratio	0.20	0.17	0.33	0.35	0.92	0.35
Control Delay	4.2	4.4	11.1	2.5	72.6	9.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.2	4.4	11.1	2.5	72.6	9.7
LOS	A	A	B	A	E	A
Approach Delay		4.3	6.6		51.9	
Approach LOS		A	A		D	
Queue Length 50th (ft)	14	24	68	0	80	0
Queue Length 95th (ft)	29	44	118	36	#192	37
Internal Link Dist (ft)		503	2341		409	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Bay Length (ft)	390			180		
Base Capacity (vph)	691	1226	940	968	236	303
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.17	0.33	0.35	0.92	0.35

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 17.1		Intersection LOS: B	
Intersection Capacity Utilization 56.6%		ICU Level of Service B	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: US 6/50 & S Pine St



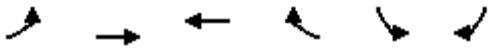
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	308	230	156	156	301	111
Future Volume (vph)	308	230	156	156	301	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	390			180	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	145				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.543				0.950	
Satd. Flow (perm)	1011	1863	1863	1583	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				170		121
Link Speed (mph)		45	45		35	
Link Distance (ft)		583	2421		489	
Travel Time (s)		8.8	36.7		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	335	250	170	170	327	121
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	1.0	13.5	28.0	28.0	2.0	2.0
Minimum Split (s)	6.5	20.0	34.5	34.5	8.0	8.0
Total Split (s)	11.5	46.0	34.5	34.5	14.0	14.0
Total Split (%)	19.2%	76.7%	57.5%	57.5%	23.3%	23.3%
Yellow Time (s)	4.0	5.0	5.0	5.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5	1.5	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	6.5	6.5	6.5	6.0	6.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Min	C-Min	C-Min	None	None
Act Effct Green (s)	40.5	39.5	28.0	28.0	8.0	8.0
Actuated g/C Ratio	0.68	0.66	0.47	0.47	0.13	0.13
v/c Ratio	0.44	0.20	0.20	0.21	1.39	0.38
Control Delay	6.0	4.5	10.2	2.5	224.4	9.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.0	4.5	10.2	2.5	224.4	9.6
LOS	A	A	B	A	F	A
Approach Delay		5.4	6.4		166.4	
Approach LOS		A	A		F	
Queue Length 50th (ft)	39	29	34	0	~163	0
Queue Length 95th (ft)	68	52	65	26	#298	39
Internal Link Dist (ft)		503	2341		409	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Bay Length (ft)	390			180		
Base Capacity (vph)	758	1226	869	829	236	315
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.20	0.20	0.21	1.39	0.38

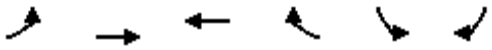
Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.39			
Intersection Signal Delay: 58.2		Intersection LOS: E	
Intersection Capacity Utilization 72.1%		ICU Level of Service C	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: US 6/50 & S Pine St



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	228	245	377	532	347	173
Future Volume (vph)	228	245	377	532	347	173
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	390			180	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	145				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.390				0.950	
Satd. Flow (perm)	726	1863	1863	1583	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				578		188
Link Speed (mph)		45	45		35	
Link Distance (ft)		583	2421		489	
Travel Time (s)		8.8	36.7		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	248	266	410	578	377	188
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	1.0	13.5	28.0	28.0	2.0	2.0
Minimum Split (s)	6.5	20.0	34.5	34.5	8.0	8.0
Total Split (s)	11.5	46.0	34.5	34.5	14.0	14.0
Total Split (%)	19.2%	76.7%	57.5%	57.5%	23.3%	23.3%
Yellow Time (s)	4.0	5.0	5.0	5.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5	1.5	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	6.5	6.5	6.5	6.0	6.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Min	C-Min	C-Min	None	None
Act Effct Green (s)	40.5	39.5	28.0	28.0	8.0	8.0
Actuated g/C Ratio	0.68	0.66	0.47	0.47	0.13	0.13
v/c Ratio	0.42	0.22	0.47	0.55	1.60	0.50
Control Delay	6.0	4.6	13.2	3.3	312.7	9.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.0	4.6	13.2	3.3	312.7	9.8
LOS	A	A	B	A	F	A
Approach Delay		5.3	7.4		211.9	
Approach LOS		A	A		F	
Queue Length 50th (ft)	27	31	95	0	~202	0
Queue Length 95th (ft)	49	56	161	46	#346	49
Internal Link Dist (ft)		503	2341		409	

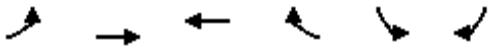


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Bay Length (ft)	390			180		
Base Capacity (vph)	594	1226	869	1047	236	374
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.22	0.47	0.55	1.60	0.50

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.60			
Intersection Signal Delay: 62.8		Intersection LOS: E	
Intersection Capacity Utilization 70.2%		ICU Level of Service C	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: US 6/50 & S Pine St



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	308	233	164	156	314	111
Future Volume (vph)	308	233	164	156	314	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	390			180	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	145				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.539				0.950	
Satd. Flow (perm)	1004	1863	1863	1583	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				170		121
Link Speed (mph)		45	45		35	
Link Distance (ft)		583	2421		489	
Travel Time (s)		8.8	36.7		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	335	253	178	170	341	121
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	1.0	13.5	28.0	28.0	2.0	2.0
Minimum Split (s)	6.5	20.0	34.5	34.5	8.0	8.0
Total Split (s)	11.5	46.0	34.5	34.5	14.0	14.0
Total Split (%)	19.2%	76.7%	57.5%	57.5%	23.3%	23.3%
Yellow Time (s)	4.0	5.0	5.0	5.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5	1.5	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	6.5	6.5	6.5	6.0	6.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Min	C-Min	C-Min	None	None
Act Effct Green (s)	40.5	39.5	28.0	28.0	8.0	8.0
Actuated g/C Ratio	0.68	0.66	0.47	0.47	0.13	0.13
v/c Ratio	0.44	0.21	0.20	0.21	1.44	0.38
Control Delay	6.0	4.6	10.2	2.5	248.7	9.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.0	4.6	10.2	2.5	248.7	9.6
LOS	A	A	B	A	F	A
Approach Delay		5.4	6.5		186.1	
Approach LOS		A	A		F	
Queue Length 50th (ft)	39	30	36	0	~174	0
Queue Length 95th (ft)	68	53	68	26	#311	39
Internal Link Dist (ft)		503	2341		409	

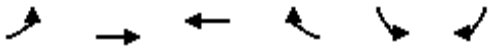
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Bay Length (ft)	390			180		
Base Capacity (vph)	754	1226	869	829	236	315
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.21	0.20	0.21	1.44	0.38

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.44			
Intersection Signal Delay: 65.4		Intersection LOS: E	
Intersection Capacity Utilization 72.8%		ICU Level of Service C	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: US 6/50 & S Pine St



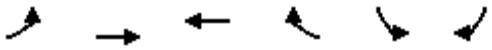
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	128	200	293	314	220	98
Future Volume (vph)	128	200	293	314	220	98
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	390			180	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	145				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.476				0.950	
Satd. Flow (perm)	887	1863	1863	1583	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				341		107
Link Speed (mph)		45	45		35	
Link Distance (ft)		583	2421		489	
Travel Time (s)		8.8	36.7		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	139	217	318	341	239	107
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	1.0	13.5	28.0	28.0	2.0	2.0
Minimum Split (s)	6.5	20.0	34.5	34.5	8.0	8.0
Total Split (s)	11.5	46.0	34.5	34.5	14.0	14.0
Total Split (%)	19.2%	76.7%	57.5%	57.5%	23.3%	23.3%
Yellow Time (s)	4.0	5.0	5.0	5.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5	1.5	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	6.5	6.5	6.5	6.0	6.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Min	C-Min	C-Min	None	None
Act Effct Green (s)	40.5	39.5	30.3	30.3	8.0	8.0
Actuated g/C Ratio	0.68	0.66	0.50	0.50	0.13	0.13
v/c Ratio	0.20	0.18	0.34	0.35	1.01	0.35
Control Delay	4.2	4.4	11.1	2.5	93.6	9.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.2	4.4	11.1	2.5	93.6	9.7
LOS	A	A	B	A	F	A
Approach Delay		4.3	6.7		67.7	
Approach LOS		A	A		E	
Queue Length 50th (ft)	14	25	69	0	~90	0
Queue Length 95th (ft)	29	46	121	36	#213	37
Internal Link Dist (ft)		503	2341		409	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Bay Length (ft)	390			180		
Base Capacity (vph)	687	1226	940	968	236	303
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.18	0.34	0.35	1.01	0.35

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.01			
Intersection Signal Delay: 21.6		Intersection LOS: C	
Intersection Capacity Utilization 57.6%		ICU Level of Service B	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: US 6/50 & S Pine St



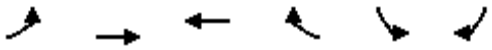
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	547	303	210	264	542	197
Future Volume (vph)	547	303	210	264	542	197
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	390			180	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	145				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.515				0.950	
Satd. Flow (perm)	959	1863	1863	1583	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				287		214
Link Speed (mph)		45	45		35	
Link Distance (ft)		583	2421		489	
Travel Time (s)		8.8	36.7		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	595	329	228	287	589	214
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	1.0	13.5	28.0	28.0	2.0	2.0
Minimum Split (s)	6.5	20.0	34.5	34.5	8.0	8.0
Total Split (s)	11.5	46.0	34.5	34.5	14.0	14.0
Total Split (%)	19.2%	76.7%	57.5%	57.5%	23.3%	23.3%
Yellow Time (s)	4.0	5.0	5.0	5.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5	1.5	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	6.5	6.5	6.5	6.0	6.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Min	C-Min	C-Min	None	None
Act Effct Green (s)	40.5	39.5	28.0	28.0	8.0	8.0
Actuated g/C Ratio	0.68	0.66	0.47	0.47	0.13	0.13
v/c Ratio	0.82	0.27	0.26	0.32	2.50	0.54
Control Delay	17.9	4.9	10.8	2.5	704.2	9.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.9	4.9	10.8	2.5	704.2	9.9
LOS	B	A	B	A	F	A
Approach Delay		13.3	6.2		519.2	
Approach LOS		B	A		F	
Queue Length 50th (ft)	84	40	47	0	~367	0
Queue Length 95th (ft)	#189	70	86	34	#537	51
Internal Link Dist (ft)		503	2341		409	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Bay Length (ft)	390			180		
Base Capacity (vph)	728	1226	869	891	236	396
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.82	0.27	0.26	0.32	2.50	0.54

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 2.50			
Intersection Signal Delay: 192.8		Intersection LOS: F	
Intersection Capacity Utilization 98.7%		ICU Level of Service F	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: US 6/50 & S Pine St



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	228	254	382	532	366	173
Future Volume (vph)	228	254	382	532	366	173
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	390			180	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	145				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.386				0.950	
Satd. Flow (perm)	719	1863	1863	1583	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				578		188
Link Speed (mph)		45	45		35	
Link Distance (ft)		583	2421		489	
Travel Time (s)		8.8	36.7		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	248	276	415	578	398	188
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	1.0	13.5	28.0	28.0	2.0	2.0
Minimum Split (s)	6.5	20.0	34.5	34.5	8.0	8.0
Total Split (s)	11.5	46.0	34.5	34.5	14.0	14.0
Total Split (%)	19.2%	76.7%	57.5%	57.5%	23.3%	23.3%
Yellow Time (s)	4.0	5.0	5.0	5.0	4.0	4.0
All-Red Time (s)	1.5	1.5	1.5	1.5	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	6.5	6.5	6.5	6.0	6.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Min	C-Min	C-Min	None	None
Act Effct Green (s)	40.5	39.5	28.0	28.0	8.0	8.0
Actuated g/C Ratio	0.68	0.66	0.47	0.47	0.13	0.13
v/c Ratio	0.42	0.23	0.48	0.55	1.69	0.50
Control Delay	6.0	4.7	13.3	3.3	350.6	9.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.0	4.7	13.3	3.3	350.6	9.8
LOS	A	A	B	A	F	A
Approach Delay		5.3	7.5		241.2	
Approach LOS		A	A		F	
Queue Length 50th (ft)	27	33	96	0	~218	0
Queue Length 95th (ft)	49	58	163	46	#365	49
Internal Link Dist (ft)		503	2341		409	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Bay Length (ft)	390			180		
Base Capacity (vph)	590	1226	869	1047	236	374
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.23	0.48	0.55	1.69	0.50

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.69			
Intersection Signal Delay: 72.1		Intersection LOS: E	
Intersection Capacity Utilization 71.2%		ICU Level of Service C	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: US 6/50 & S Pine St

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	0	90	0	0	0	26	167	0	0	434	0
Future Vol, veh/h	7	0	90	0	0	0	26	167	0	0	434	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	535	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	0	98	0	0	0	28	182	0	0	472	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	710	710	472	759	710	182	472	0	0	182	0	0
Stage 1	472	472	-	238	238	-	-	-	-	-	-	-
Stage 2	238	238	-	521	472	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	348	359	592	323	359	861	1090	-	-	1393	-	-
Stage 1	573	559	-	765	708	-	-	-	-	-	-	-
Stage 2	765	708	-	539	559	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	341	350	592	264	350	861	1090	-	-	1393	-	-
Mov Cap-2 Maneuver	341	350	-	264	350	-	-	-	-	-	-	-
Stage 1	558	559	-	745	690	-	-	-	-	-	-	-
Stage 2	745	690	-	450	559	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.6	0	1.1	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1090	-	-	341	592	-	1393	-	-
HCM Lane V/C Ratio	0.026	-	-	0.022	0.165	-	-	-	-
HCM Control Delay (s)	8.4	-	-	15.8	12.3	0	0	-	-
HCM Lane LOS	A	-	-	C	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.6	-	0	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	61	0	0	0	108	332	0	0	168	0
Future Vol, veh/h	5	0	61	0	0	0	108	332	0	0	168	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	535	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	0	66	0	0	0	117	361	0	0	183	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	778	778	183	811	778	361	183	0	0	361	0	0
Stage 1	183	183	-	595	595	-	-	-	-	-	-	-
Stage 2	595	595	-	216	183	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	314	328	859	298	328	684	1392	-	-	1198	-	-
Stage 1	819	748	-	491	492	-	-	-	-	-	-	-
Stage 2	491	492	-	786	748	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	294	300	859	257	300	684	1392	-	-	1198	-	-
Mov Cap-2 Maneuver	294	300	-	257	300	-	-	-	-	-	-	-
Stage 1	750	748	-	450	451	-	-	-	-	-	-	-
Stage 2	450	451	-	725	748	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.1	0	1.9	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1392	-	-	294	859	-	1198	-	-
HCM Lane V/C Ratio	0.084	-	-	0.018	0.077	-	-	-	-
HCM Control Delay (s)	7.8	-	-	17.5	9.5	0	0	-	-
HCM Lane LOS	A	-	-	C	A	A	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.1	0.2	-	0	-	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	0	90	0	0	0	26	167	0	0	434	0
Future Vol, veh/h	7	0	90	0	0	0	26	167	0	0	434	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	535	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	0	98	0	0	0	28	182	0	0	472	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	710	710	472	759	710	182	472	0	0	182	0	0
Stage 1	472	472	-	238	238	-	-	-	-	-	-	-
Stage 2	238	238	-	521	472	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	348	359	592	323	359	861	1090	-	-	1393	-	-
Stage 1	573	559	-	765	708	-	-	-	-	-	-	-
Stage 2	765	708	-	539	559	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	341	350	592	264	350	861	1090	-	-	1393	-	-
Mov Cap-2 Maneuver	341	350	-	264	350	-	-	-	-	-	-	-
Stage 1	558	559	-	745	690	-	-	-	-	-	-	-
Stage 2	745	690	-	450	559	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.6	0	1.1	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1090	-	-	341	592	-	1393	-	-
HCM Lane V/C Ratio	0.026	-	-	0.022	0.165	-	-	-	-
HCM Control Delay (s)	8.4	-	-	15.8	12.3	0	0	-	-
HCM Lane LOS	A	-	-	C	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.6	-	0	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	61	0	0	0	108	772	0	0	383	0
Future Vol, veh/h	5	0	61	0	0	0	108	772	0	0	383	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	535	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	0	66	0	0	0	117	839	0	0	416	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1489	1489	416	1522	1489	839	416	0	0	839	0	0
Stage 1	416	416	-	1073	1073	-	-	-	-	-	-	-
Stage 2	1073	1073	-	449	416	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	102	124	637	97	124	366	1143	-	-	796	-	-
Stage 1	614	592	-	267	297	-	-	-	-	-	-	-
Stage 2	267	297	-	589	592	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	94	111	637	80	111	366	1143	-	-	796	-	-
Mov Cap-2 Maneuver	94	111	-	80	111	-	-	-	-	-	-	-
Stage 1	551	592	-	240	267	-	-	-	-	-	-	-
Stage 2	240	267	-	528	592	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.9	0	1	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1143	-	-	94	637	-	796	-	-
HCM Lane V/C Ratio	0.103	-	-	0.058	0.104	-	-	-	-
HCM Control Delay (s)	8.5	-	-	45.6	11.3	0	0	-	-
HCM Lane LOS	A	-	-	E	B	A	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.2	0.3	-	0	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	0	90	42	0	42	26	167	21	7	434	0
Future Vol, veh/h	7	0	90	42	0	42	26	167	21	7	434	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	535	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	0	98	46	0	46	28	182	23	8	472	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	761	749	472	787	738	194	472	0	0	205	0	0
Stage 1	488	488	-	250	250	-	-	-	-	-	-	-
Stage 2	273	261	-	537	488	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	322	341	592	309	346	847	1090	-	-	1366	-	-
Stage 1	561	550	-	754	700	-	-	-	-	-	-	-
Stage 2	733	692	-	528	550	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	297	329	592	251	334	847	1090	-	-	1366	-	-
Mov Cap-2 Maneuver	297	329	-	251	334	-	-	-	-	-	-	-
Stage 1	546	546	-	734	682	-	-	-	-	-	-	-
Stage 2	676	674	-	437	546	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.7	17.2	1	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1090	-	-	297	592	387	1366	-	-
HCM Lane V/C Ratio	0.026	-	-	0.026	0.165	0.236	0.006	-	-
HCM Control Delay (s)	8.4	-	-	17.4	12.3	17.2	7.7	0	-
HCM Lane LOS	A	-	-	C	B	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.6	0.9	0	-	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	61	27	0	27	108	332	68	23	168	0
Future Vol, veh/h	5	0	61	27	0	27	108	332	68	23	168	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	535	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	0	66	29	0	29	117	361	74	25	183	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	880	902	183	898	865	398	183	0	0	435	0	0
Stage 1	233	233	-	632	632	-	-	-	-	-	-	-
Stage 2	647	669	-	266	233	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	268	277	859	260	292	652	1392	-	-	1125	-	-
Stage 1	770	712	-	468	474	-	-	-	-	-	-	-
Stage 2	460	456	-	739	712	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	235	247	859	220	261	652	1392	-	-	1125	-	-
Mov Cap-2 Maneuver	235	247	-	220	261	-	-	-	-	-	-	-
Stage 1	705	694	-	429	434	-	-	-	-	-	-	-
Stage 2	402	418	-	665	694	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.3	18.3	1.7	1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1392	-	-	235	859	329	1125	-	-
HCM Lane V/C Ratio	0.084	-	-	0.023	0.077	0.178	0.022	-	-
HCM Control Delay (s)	7.8	-	-	20.7	9.5	18.3	8.3	0	-
HCM Lane LOS	A	-	-	C	A	C	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0.1	0.2	0.6	0.1	-	-

Intersection	
Int Delay, s/veh	12.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	0	90	42	0	42	26	398	21	7	1010	0
Future Vol, veh/h	7	0	90	42	0	42	26	398	21	7	1010	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	535	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	0	98	46	0	46	28	433	23	8	1098	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1638	1626	1098	1664	1615	445	1098	0	0	456	0	0
Stage 1	1114	1114	-	501	501	-	-	-	-	-	-	-
Stage 2	524	512	-	1163	1114	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	80	102	259	77	104	613	636	-	-	1105	-	-
Stage 1	253	284	-	552	543	-	-	-	-	-	-	-
Stage 2	537	536	-	237	284	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	71	96	259	46	98	613	636	-	-	1105	-	-
Mov Cap-2 Maneuver	71	96	-	46	98	-	-	-	-	-	-	-
Stage 1	242	279	-	528	519	-	-	-	-	-	-	-
Stage 2	475	512	-	145	279	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	29.6	202.8	0.6	0.1
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	636	-	-	71	259	86	1105	-	-
HCM Lane V/C Ratio	0.044	-	-	0.107	0.378	1.062	0.007	-	-
HCM Control Delay (s)	10.9	-	-	61.7	27.1	202.8	8.3	0	-
HCM Lane LOS	B	-	-	F	D	F	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	1.7	6.2	0	-	-

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	61	27	0	27	108	772	68	23	383	0
Future Vol, veh/h	5	0	61	27	0	27	108	772	68	23	383	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	535	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	0	66	29	0	29	117	839	74	25	416	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1591	1613	416	1609	1576	876	416	0	0	913	0	0
Stage 1	466	466	-	1110	1110	-	-	-	-	-	-	-
Stage 2	1125	1147	-	499	466	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	87	104	637	84	110	348	1143	-	-	746	-	-
Stage 1	577	562	-	254	285	-	-	-	-	-	-	-
Stage 2	249	274	-	554	562	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	71	89	637	67	94	348	1143	-	-	746	-	-
Mov Cap-2 Maneuver	71	89	-	67	94	-	-	-	-	-	-	-
Stage 1	518	537	-	228	256	-	-	-	-	-	-	-
Stage 2	205	246	-	474	537	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15	68.1	1	0.6
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1143	-	-	71	637	112	746	-	-
HCM Lane V/C Ratio	0.103	-	-	0.077	0.104	0.524	0.034	-	-
HCM Control Delay (s)	8.5	-	-	59.9	11.3	68.1	10	0	-
HCM Lane LOS	A	-	-	F	B	F	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0.2	0.3	2.4	0.1	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	1	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1622	-	-	-	1022	1084
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1622	-	-	-	1022	1084
Mov Cap-2 Maneuver	-	-	-	-	1022	-
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1622	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	1	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1622	-	-	-	1022	1084
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1622	-	-	-	1022	1084
Mov Cap-2 Maneuver	-	-	-	-	1022	-
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1622	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	1	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1622	-	-	-	1022	1084
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1622	-	-	-	1022	1084
Mov Cap-2 Maneuver	-	-	-	-	1022	-
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1622	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	1	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1622	-	-	-	1022	1084
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1622	-	-	-	1022	1084
Mov Cap-2 Maneuver	-	-	-	-	1022	-
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1622	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	10	29	0	0	54
Future Vol, veh/h	18	10	29	0	0	54
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	11	32	0	0	59

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	32	0	-	0	83	32
Stage 1	-	-	-	-	32	-
Stage 2	-	-	-	-	51	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1580	-	-	-	919	1042
Stage 1	-	-	-	-	991	-
Stage 2	-	-	-	-	971	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1580	-	-	-	907	1042
Mov Cap-2 Maneuver	-	-	-	-	907	-
Stage 1	-	-	-	-	978	-
Stage 2	-	-	-	-	971	-

Approach	EB	WB	SB
HCM Control Delay, s	4.7	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1580	-	-	-	1042
HCM Lane V/C Ratio	0.012	-	-	-	0.056
HCM Control Delay (s)	7.3	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	59	32	19	0	0	34
Future Vol, veh/h	59	32	19	0	0	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	64	35	21	0	0	37

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	21	0	-	0	184	21
Stage 1	-	-	-	-	21	-
Stage 2	-	-	-	-	163	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1595	-	-	-	805	1056
Stage 1	-	-	-	-	1002	-
Stage 2	-	-	-	-	866	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1595	-	-	-	772	1056
Mov Cap-2 Maneuver	-	-	-	-	772	-
Stage 1	-	-	-	-	961	-
Stage 2	-	-	-	-	866	-

Approach	EB	WB	SB
HCM Control Delay, s	4.8	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1595	-	-	-	1056
HCM Lane V/C Ratio	0.04	-	-	-	0.035
HCM Control Delay (s)	7.4	0	-	-	8.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	10	29	0	0	54
Future Vol, veh/h	18	10	29	0	0	54
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	11	32	0	0	59

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	32	0	-	0	83	32
Stage 1	-	-	-	-	32	-
Stage 2	-	-	-	-	51	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1580	-	-	-	919	1042
Stage 1	-	-	-	-	991	-
Stage 2	-	-	-	-	971	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1580	-	-	-	907	1042
Mov Cap-2 Maneuver	-	-	-	-	907	-
Stage 1	-	-	-	-	978	-
Stage 2	-	-	-	-	971	-

Approach	EB	WB	SB
HCM Control Delay, s	4.7	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1580	-	-	-	1042
HCM Lane V/C Ratio	0.012	-	-	-	0.056
HCM Control Delay (s)	7.3	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	59	32	19	0	0	34
Future Vol, veh/h	59	32	19	0	0	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	64	35	21	0	0	37

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	21	0	-	0	184	21
Stage 1	-	-	-	-	21	-
Stage 2	-	-	-	-	163	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1595	-	-	-	805	1056
Stage 1	-	-	-	-	1002	-
Stage 2	-	-	-	-	866	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1595	-	-	-	772	1056
Mov Cap-2 Maneuver	-	-	-	-	772	-
Stage 1	-	-	-	-	961	-
Stage 2	-	-	-	-	866	-

Approach	EB	WB	SB
HCM Control Delay, s	4.8	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1595	-	-	-	1056
HCM Lane V/C Ratio	0.04	-	-	-	0.035
HCM Control Delay (s)	7.4	0	-	-	8.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	1	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1622	-	-	-	1022	1084
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1622	-	-	-	1022	1084
Mov Cap-2 Maneuver	-	-	-	-	1022	-
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1622	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	1	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1622	-	-	-	1022	1084
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1622	-	-	-	1022	1084
Mov Cap-2 Maneuver	-	-	-	-	1022	-
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1622	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	1	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1622	-	-	-	1022	1084
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1622	-	-	-	1022	1084
Mov Cap-2 Maneuver	-	-	-	-	1022	-
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1622	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	1	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1622	-	-	-	1022	1084
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1622	-	-	-	1022	1084
Mov Cap-2 Maneuver	-	-	-	-	1022	-
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1622	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	0	0	0	0	29
Future Vol, veh/h	10	0	0	0	0	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	0	0	0	0	32

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	23	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	22	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1622	-	-	-	993	1084
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	1001	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1622	-	-	-	986	1084
Mov Cap-2 Maneuver	-	-	-	-	986	-
Stage 1	-	-	-	-	1015	-
Stage 2	-	-	-	-	1001	-

Approach	EB	WB	SB
HCM Control Delay, s	7.2	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1622	-	-	-	1084
HCM Lane V/C Ratio	0.007	-	-	-	0.029
HCM Control Delay (s)	7.2	0	-	-	8.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	32	0	0	0	0	19
Future Vol, veh/h	32	0	0	0	0	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	0	0	0	0	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	71	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	70	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1622	-	-	-	933	1084
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	953	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1622	-	-	-	912	1084
Mov Cap-2 Maneuver	-	-	-	-	912	-
Stage 1	-	-	-	-	1000	-
Stage 2	-	-	-	-	953	-

Approach	EB	WB	SB
HCM Control Delay, s	7.3	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1622	-	-	-	1084
HCM Lane V/C Ratio	0.021	-	-	-	0.019
HCM Control Delay (s)	7.3	0	-	-	8.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	0	0	0	0	29
Future Vol, veh/h	10	0	0	0	0	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	0	0	0	0	32

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	23	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	22	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1622	-	-	-	993	1084
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	1001	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1622	-	-	-	986	1084
Mov Cap-2 Maneuver	-	-	-	-	986	-
Stage 1	-	-	-	-	1015	-
Stage 2	-	-	-	-	1001	-

Approach	EB	WB	SB
HCM Control Delay, s	7.2	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1622	-	-	-	1084
HCM Lane V/C Ratio	0.007	-	-	-	0.029
HCM Control Delay (s)	7.2	0	-	-	8.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

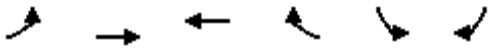
Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	32	0	0	0	0	19
Future Vol, veh/h	32	0	0	0	0	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	0	0	0	0	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	71	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	70	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1622	-	-	-	933	1084
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	953	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1622	-	-	-	912	1084
Mov Cap-2 Maneuver	-	-	-	-	912	-
Stage 1	-	-	-	-	1000	-
Stage 2	-	-	-	-	953	-

Approach	EB	WB	SB
HCM Control Delay, s	7.3	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1622	-	-	-	1084
HCM Lane V/C Ratio	0.021	-	-	-	0.019
HCM Control Delay (s)	7.3	0	-	-	8.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

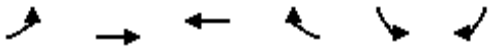


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	11	494	291	178	500	22
Future Volume (vph)	11	494	291	178	500	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	330			480	0	25
Storage Lanes	1			1	1	1
Taper Length (ft)	265				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.384				0.950	
Satd. Flow (perm)	715	1863	1863	1583	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				193		5
Link Speed (mph)		55	55		45	
Link Distance (ft)		860	716		629	
Travel Time (s)		10.7	8.9		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	12	537	316	193	543	24
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	15.0	15.0	15.0	5.0	5.0
Minimum Split (s)	12.5	23.5	23.5	23.5	23.0	23.0
Total Split (s)	16.0	60.0	44.0	44.0	30.0	30.0
Total Split (%)	17.8%	66.7%	48.9%	48.9%	33.3%	33.3%
Yellow Time (s)	5.0	5.5	5.5	5.5	5.0	5.0
All-Red Time (s)	2.5	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	7.5	7.5	7.0	7.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Min	C-Min	C-Min	None	None
Act Effct Green (s)	39.9	39.9	37.2	37.2	35.6	35.6
Actuated g/C Ratio	0.44	0.44	0.41	0.41	0.40	0.40
v/c Ratio	0.03	0.65	0.41	0.25	0.78	0.04
Control Delay	11.2	22.8	20.3	3.4	35.6	17.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.2	22.8	20.3	3.4	35.6	17.9
LOS	B	C	C	A	D	B
Approach Delay		22.6	13.9		34.9	
Approach LOS		C	B		C	
Queue Length 50th (ft)	4	235	118	0	260	6
Queue Length 95th (ft)	10	260	196	39	#552	27
Internal Link Dist (ft)		780	636		549	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Bay Length (ft)	330			480		25
Base Capacity (vph)	416	1086	789	781	699	628
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.49	0.40	0.25	0.78	0.04

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 24.1		Intersection LOS: C	
Intersection Capacity Utilization 65.8%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 7: US 6/50 /US 6 & 50 & 19 Rd

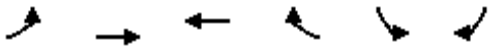


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	21	331	645	417	224	7
Future Volume (vph)	21	331	645	417	224	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	330			480	0	25
Storage Lanes	1			1	1	1
Taper Length (ft)	265				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.204				0.950	
Satd. Flow (perm)	380	1863	1863	1583	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				453		4
Link Speed (mph)		55	55		45	
Link Distance (ft)		860	716		629	
Travel Time (s)		10.7	8.9		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	23	360	701	453	243	8
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	15.0	15.0	15.0	5.0	5.0
Minimum Split (s)	12.5	23.5	23.5	23.5	23.0	23.0
Total Split (s)	16.0	60.0	44.0	44.0	30.0	30.0
Total Split (%)	17.8%	66.7%	48.9%	48.9%	33.3%	33.3%
Yellow Time (s)	5.0	5.5	5.5	5.5	5.0	5.0
All-Red Time (s)	2.5	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	7.5	7.5	7.0	7.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Min	C-Min	C-Min	None	None
Act Effct Green (s)	57.8	57.8	52.2	52.2	17.7	17.7
Actuated g/C Ratio	0.64	0.64	0.58	0.58	0.20	0.20
v/c Ratio	0.07	0.30	0.65	0.41	0.70	0.03
Control Delay	7.6	8.7	20.0	2.9	44.1	20.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.6	8.7	20.0	2.9	44.1	20.7
LOS	A	A	C	A	D	C
Approach Delay		8.6	13.3		43.3	
Approach LOS		A	B		D	
Queue Length 50th (ft)	4	82	207	0	129	2
Queue Length 95th (ft)	15	150	#577	54	195	13
Internal Link Dist (ft)		780	636		549	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Bay Length (ft)	330			480		25
Base Capacity (vph)	375	1196	1080	1108	452	407
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.30	0.65	0.41	0.54	0.02

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 16.5		Intersection LOS: B	
Intersection Capacity Utilization 58.4%		ICU Level of Service B	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 7: US 6/50 /US 6 & 50 & 19 Rd

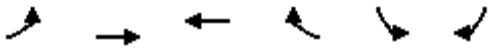


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	11	494	291	178	500	22
Future Volume (vph)	11	494	291	178	500	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	483			480	840	0
Storage Lanes	1			1	2	1
Taper Length (ft)	162				135	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	3433	1583
Flt Permitted	0.472				0.950	
Satd. Flow (perm)	879	1863	1863	1583	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				193		24
Link Speed (mph)		55	55		45	
Link Distance (ft)		860	716		1297	
Travel Time (s)		10.7	8.9		19.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	12	537	316	193	543	24
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	15.0	15.0	15.0	5.0	5.0
Minimum Split (s)	12.5	23.5	23.5	23.5	23.0	23.0
Total Split (s)	16.0	60.0	44.0	44.0	30.0	30.0
Total Split (%)	17.8%	66.7%	48.9%	48.9%	33.3%	33.3%
Yellow Time (s)	5.0	5.5	5.5	5.5	5.0	5.0
All-Red Time (s)	2.5	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	7.5	7.5	7.0	7.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Min	C-Min	C-Min	None	None
Act Effct Green (s)	55.5	55.5	52.7	52.7	20.0	20.0
Actuated g/C Ratio	0.62	0.62	0.59	0.59	0.22	0.22
v/c Ratio	0.02	0.47	0.29	0.19	0.71	0.06
Control Delay	8.2	11.7	12.3	2.8	37.5	10.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.2	11.7	12.3	2.8	37.5	10.5
LOS	A	B	B	A	D	B
Approach Delay		11.6	8.7		36.4	
Approach LOS		B	A		D	
Queue Length 50th (ft)	2	148	75	0	148	0
Queue Length 95th (ft)	10	260	196	39	188	19
Internal Link Dist (ft)		780	636		1217	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Bay Length (ft)	483			480	840	
Base Capacity (vph)	626	1157	1091	1007	891	429
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.46	0.29	0.19	0.61	0.06

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 19.3		Intersection LOS: B	
Intersection Capacity Utilization 52.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: US 6/50 /US 6 & 50 & 19 Rd

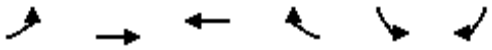


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	24	430	844	657	343	9
Future Volume (vph)	24	430	844	657	343	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	483			480	840	0
Storage Lanes	1			1	2	1
Taper Length (ft)	162				135	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	3433	1583
Flt Permitted	0.090				0.950	
Satd. Flow (perm)	168	1863	1863	1583	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				714		10
Link Speed (mph)		55	55		45	
Link Distance (ft)		860	716		1297	
Travel Time (s)		10.7	8.9		19.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	26	467	917	714	373	10
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	15.0	15.0	15.0	5.0	5.0
Minimum Split (s)	12.5	23.5	23.5	23.5	23.0	23.0
Total Split (s)	16.0	60.0	44.0	44.0	30.0	30.0
Total Split (%)	17.8%	66.7%	48.9%	48.9%	33.3%	33.3%
Yellow Time (s)	5.0	5.5	5.5	5.5	5.0	5.0
All-Red Time (s)	2.5	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	7.5	7.5	7.0	7.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Min	C-Min	C-Min	None	None
Act Effct Green (s)	60.1	60.1	54.5	54.5	15.4	15.4
Actuated g/C Ratio	0.67	0.67	0.61	0.61	0.17	0.17
v/c Ratio	0.12	0.38	0.81	0.58	0.63	0.04
Control Delay	7.0	8.2	24.9	3.3	39.4	15.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.0	8.2	24.9	3.3	39.4	15.8
LOS	A	A	C	A	D	B
Approach Delay		8.1	15.5		38.8	
Approach LOS		A	B		D	
Queue Length 50th (ft)	4	104	302	0	102	0
Queue Length 95th (ft)	14	182	#808	59	140	13
Internal Link Dist (ft)		780	636		1217	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Bay Length (ft)	483			480	840	
Base Capacity (vph)	263	1243	1127	1239	877	411
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.38	0.81	0.58	0.43	0.02

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 17.6		Intersection LOS: B	
Intersection Capacity Utilization 66.3%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 7: US 6/50 /US 6 & 50 & 19 Rd

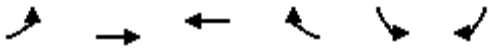


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	18	502	291	192	533	30
Future Volume (vph)	18	502	291	192	533	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	330			480	0	25
Storage Lanes	1			1	1	1
Taper Length (ft)	265				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.382				0.950	
Satd. Flow (perm)	712	1863	1863	1583	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				209		6
Link Speed (mph)		55	55		45	
Link Distance (ft)		860	716		629	
Travel Time (s)		10.7	8.9		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	20	546	316	209	579	33
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	15.0	15.0	15.0	5.0	5.0
Minimum Split (s)	12.5	23.5	23.5	23.5	23.0	23.0
Total Split (s)	16.0	60.0	44.0	44.0	30.0	30.0
Total Split (%)	17.8%	66.7%	48.9%	48.9%	33.3%	33.3%
Yellow Time (s)	5.0	5.5	5.5	5.5	5.0	5.0
All-Red Time (s)	2.5	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	7.5	7.5	7.0	7.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Min	C-Min	C-Min	None	None
Act Effct Green (s)	41.0	41.0	35.4	35.4	34.5	34.5
Actuated g/C Ratio	0.46	0.46	0.39	0.39	0.38	0.38
v/c Ratio	0.05	0.64	0.43	0.28	0.85	0.05
Control Delay	10.8	21.9	22.0	3.7	42.4	19.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.8	21.9	22.0	3.7	42.4	19.1
LOS	B	C	C	A	D	B
Approach Delay		21.5	14.7		41.2	
Approach LOS		C	B		D	
Queue Length 50th (ft)	6	240	118	0	285	9
Queue Length 95th (ft)	14	260	193	40	#610	34
Internal Link Dist (ft)		780	636		549	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Bay Length (ft)	330			480		25
Base Capacity (vph)	423	1086	770	777	679	611
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.50	0.41	0.27	0.85	0.05

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 26.5		Intersection LOS: C	
Intersection Capacity Utilization 68.0%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 7: US 6/50 /US 6 & 50 & 19 Rd

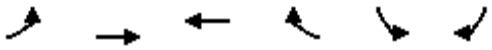


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	44	336	645	463	245	12
Future Volume (vph)	44	336	645	463	245	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	330			480	0	25
Storage Lanes	1			1	1	1
Taper Length (ft)	265				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.182				0.950	
Satd. Flow (perm)	339	1863	1863	1583	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				503		5
Link Speed (mph)		55	55		45	
Link Distance (ft)		860	716		629	
Travel Time (s)		10.7	8.9		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	48	365	701	503	266	13
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	15.0	15.0	15.0	5.0	5.0
Minimum Split (s)	12.5	23.5	23.5	23.5	23.0	23.0
Total Split (s)	16.0	60.0	44.0	44.0	30.0	30.0
Total Split (%)	17.8%	66.7%	48.9%	48.9%	33.3%	33.3%
Yellow Time (s)	5.0	5.5	5.5	5.5	5.0	5.0
All-Red Time (s)	2.5	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	7.5	7.5	7.0	7.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Min	C-Min	C-Min	None	None
Act Effct Green (s)	56.9	56.9	48.2	48.2	18.6	18.6
Actuated g/C Ratio	0.63	0.63	0.54	0.54	0.21	0.21
v/c Ratio	0.15	0.31	0.70	0.47	0.73	0.04
Control Delay	8.4	9.1	24.2	3.2	45.0	21.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.4	9.1	24.2	3.2	45.0	21.2
LOS	A	A	C	A	D	C
Approach Delay		9.0	15.4		43.9	
Approach LOS		A	B		D	
Queue Length 50th (ft)	9	87	324	0	141	4
Queue Length 95th (ft)	25	153	#589	57	213	18
Internal Link Dist (ft)		780	636		549	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Bay Length (ft)	330			480		25
Base Capacity (vph)	349	1178	997	1081	452	408
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.31	0.70	0.47	0.59	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 18.2		Intersection LOS: B	
Intersection Capacity Utilization 62.2%		ICU Level of Service B	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 7: US 6/50 /US 6 & 50 & 19 Rd

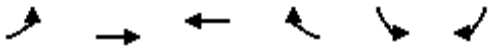


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	23	654	380	311	841	42
Future Volume (vph)	23	654	380	311	841	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	483			480	0	25
Storage Lanes	1			1	2	1
Taper Length (ft)	162				135	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	3433	1583
Flt Permitted	0.333				0.950	
Satd. Flow (perm)	620	1863	1863	1583	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				338		10
Link Speed (mph)		55	55		45	
Link Distance (ft)		860	716		1297	
Travel Time (s)		10.7	8.9		19.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	25	711	413	338	914	46
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	15.0	15.0	15.0	5.0	5.0
Minimum Split (s)	12.5	23.5	23.5	23.5	23.0	23.0
Total Split (s)	16.0	60.0	44.0	44.0	30.0	30.0
Total Split (%)	17.8%	66.7%	48.9%	48.9%	33.3%	33.3%
Yellow Time (s)	5.0	5.5	5.5	5.5	5.0	5.0
All-Red Time (s)	2.5	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	7.5	7.5	7.0	7.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Min	C-Min	C-Min	None	None
Act Effct Green (s)	46.9	46.9	41.2	41.2	28.6	28.6
Actuated g/C Ratio	0.52	0.52	0.46	0.46	0.32	0.32
v/c Ratio	0.06	0.73	0.48	0.37	0.84	0.09
Control Delay	9.2	21.4	19.9	3.2	38.9	20.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.2	21.4	19.9	3.2	38.9	20.8
LOS	A	C	B	A	D	C
Approach Delay		21.0	12.4		38.0	
Approach LOS		C	B		D	
Queue Length 50th (ft)	7	312	144	0	238	14
Queue Length 95th (ft)	16	373	257	48	#411	43
Internal Link Dist (ft)		780	636		1217	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Bay Length (ft)	483			480		25
Base Capacity (vph)	431	1086	853	908	1091	509
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.65	0.48	0.37	0.84	0.09

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 25.0		Intersection LOS: C	
Intersection Capacity Utilization 70.5%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 7: US 6/50 /US 6 & 50 & 19 Rd



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	47	435	844	703	364	14
Future Volume (vph)	47	435	844	703	364	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	483			480	0	25
Storage Lanes	1			1	2	1
Taper Length (ft)	162				135	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	3433	1583
Flt Permitted	0.072				0.950	
Satd. Flow (perm)	134	1863	1863	1583	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				764		8
Link Speed (mph)		55	55		45	
Link Distance (ft)		860	716		1297	
Travel Time (s)		10.7	8.9		19.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	51	473	917	764	396	15
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	15.0	15.0	15.0	5.0	5.0
Minimum Split (s)	12.5	23.5	23.5	23.5	23.0	23.0
Total Split (s)	16.0	60.0	44.0	44.0	30.0	30.0
Total Split (%)	17.8%	66.7%	48.9%	48.9%	33.3%	33.3%
Yellow Time (s)	5.0	5.5	5.5	5.5	5.0	5.0
All-Red Time (s)	2.5	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	7.5	7.5	7.0	7.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Min	C-Min	C-Min	None	None
Act Effct Green (s)	59.5	59.5	50.8	50.8	16.0	16.0
Actuated g/C Ratio	0.66	0.66	0.56	0.56	0.18	0.18
v/c Ratio	0.25	0.38	0.87	0.62	0.65	0.05
Control Delay	9.0	8.6	31.7	3.8	39.2	20.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.0	8.6	31.7	3.8	39.2	20.8
LOS	A	A	C	A	D	C
Approach Delay		8.6	19.0		38.5	
Approach LOS		A	B		D	
Queue Length 50th (ft)	9	109	484	0	108	3
Queue Length 95th (ft)	24	189	#828	63	147	19
Internal Link Dist (ft)		780	636		1217	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Bay Length (ft)	483			480		25
Base Capacity (vph)	242	1230	1050	1225	877	410
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.38	0.87	0.62	0.45	0.04

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 20.0		Intersection LOS: C	
Intersection Capacity Utilization 66.9%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 7: US 6/50 /US 6 & 50 & 19 Rd

Grand Valley Irrigation Company
688 26 Road
Grand Junction, CO 81506 Phone (970) 242-2762

FIRST CLASS MAIL
U.S. POSTAGE
PAID
GRAND JUNCTION, CO
PERMIT NO. 16

Notice of Assessment
BILLING

Owner of record
North 25, LLC

954 19 Rd

Account No. 52414
A Stock.. $293.61
B Stock.. $14.04

Records show you own 46 A/B stock

Assessment Due... $925.41
Interest Charge.... $0.00
Previous Balance..... $0.00

TOTAL DUE..... $925.41

Billing Date
01/13/22

Date Due
04/01/22

Assessment must be paid whether water is used or not.

Account No.
52414

Mail to:

North 25, LLC
PO Box 1473
Gr Jct CO 81502-1473

Please enter your headgate orders on back of stub.
Enclose stub with payment.

Copper Creek West
Irrigation Narrative
Apr 29, 2022

The Palmer farm located east of 19 Road at 954 19 Road Fruita, future site Fruita Copper Creek, is at present being served by Grand Valley Irrigation Company. The current agricultural use is being delivered irrigation water using the Palmer Lateral. The Palmer Lateral is piped from a diversion 650' north of the property and delivered to this site as well as the Woolery property to the south.

The proposed irrigation system for this 26 acre site will be a pressurized, pumped system with a ¼ acre pond for storage. The irrigation source will be controlled using a valve to regulate the flow into the pond to minimize waste. The rate of flow into the pond can also be controlled at this valve. This will cause the source pipe to remain full to the greatest extent possible.

The proposed pump will draw irrigation water from the pond and deliver it to the landscape areas within the project. The pressurized irrigation system controller will be able to access weather information to regulate the amount of water applied to the landscape areas. This system can also be enabled to detect problems within the system and shut the system down to minimize waste and damage if a broken irrigation line or damaged head is detected.

Craig Roberts, PLA

COPPER CREEK WEST
NEIGHBORHOOD MEETING NOTES
February 1, 2022 @ 5:30pm

A Neighborhood Meeting was held on February 1st, 2022 regarding a proposed Preliminary Subdivision at 954 19 Road, Fruita, CO. This meeting was held virtually via Zoom. A recording of the meeting can be provided if requested.

In Attendance:

Representatives: Ted Ciavonne & Mallory Reams (Kaart Planning)
Land Owner: Silas Colman (North 25 LLC)
Neighbors:

- Martin & Denise Faber 948 19 Road
- Marlys Harman 938 19 Road
- Stephanie LaCount 938 19 Road
- Keith Harman 938 19 Road
- Gary

29 notices were sent out. 6 neighbors attended this meeting and the following were their comments/concerns:

Martin Faber is concerned about the density, especially because of the Iron Wheel Subdivision going in. He is also concerned with I Road and its ability to handle this much traffic/volume.

- *We explained we have to do a traffic study as part of this submittal and Iron Wheel Subdivision and the new traffic volume will be counted. As far as the density, this area is in the Comp Plan to be developed and we are on the low end (4) of what's allowed (4-8). We told them to take a look at Copper Creek North in Grand Junction as an example of what this subdivision looks like.*

Stephanie is concerned about the placement of the new road (I ½) Road. Will it take away the neighboring land and the existing fence lines? Will the road take over Faber's driveway?

- *We explained the road that is shown in the graphic is what ultimately will be built, but this is for graphical purposes. Initially it will probably be a half road improvement. Either way, the road will be surveyed and will not take away land. The future road will be located within the dedicated right-of-way.*

- *The road most likely will take over Faber's driveway, but it is already located in the dedicated right-of-way. We will take a look at it to make sure we make the situation better, not worse.*

Marlys Harman asked about the water shares. She has concerns about the new road running North/South as it will be built over the existing irrigation line. Marlys is the tail end water user and wants to make sure there will be enough water after this subdivision goes in.

- *We thanked her for her information as that is always helpful to know about the amount of water shares and its users. We explained the underground water line will probably be replaced. We intend to keep everybody whole and not use any more water than the existing agriculture field is using now. We plan to put in an irrigation pond that will pump water back to the subdivision, allowing the irrigation water to keep flowing downstream to the tail users.*

Martin Faber asked if we knew there was an underground pipe under the future I ½ Road we were proposing?

- *We were not initially aware, but this area has been surveyed and the engineering will soon begin on this project. We will make sure the engineer is aware of this line.*

Stephanie had concerns about the proposed trail along Adobe Creek on the east side. She asked how we plan to keep people off the neighboring properties as this trail dead ends?

- *We explained this is just visual for right now. A pedestrian trail along Adobe Creek is part of City of Fruita's future plan, but realistically the trail may not get built, only part of it for now, but easements will be put in place.*

Denis Faber asked about the timeline of the project?

- *Submit this Preliminary Application in 6-8 weeks*
- *Then it will go through the hearing process*
- *Plan to have the first final phase under construction by late summer/fall of 2022*

Denis Faber also asked what is the time frame of the traffic study? When do they come out and do they study? She requests that the study not be done during Spring Break if possible. She wants it to be done when traffic volumes are high (school in session).

- *We explained it will be within these next 6-8 weeks and we will try to avoid the study being during Spring Break.*

Everyone is still concerned about accessing 19 Road when both subdivisions are complete.

- *We hope the traffic study will give us some insight into what this will do and how to help the situation.*

The neighbors are asking for good communication from us and keep them informed of what's going on. They had a bad experience with the developers and contractors of Iron Wheel Subdivision.

Martin Faber wanted to let us know that there is a big giant fire suppression tank at the corner of 19 Road and I ½ Road. It is empty, but still there.

- *Noted. It will most likely be removed.*

Stephanie explained that right now the neighbors have to clean out the headgate daily, sometimes hourly to keep the water flowing. She is not ok with having to do all of the for this new subdivision just to make sure she has water.

- *We explained we will hopefully make the situation on our property better, not worse. Not much we can do north of us, but maybe we can come up with something that is less manual labor. As far as the water, we intend to not use any more water than the ag field is currently using.*

Stephanie asked about sewer lines?

- *We explained the engineering is just getting started, but we do know it will most likely go through I ½ Road. We will make sure to locate the existing water line and stay within the required distance away.*

Meeting adjourned at around 6:20pm