TIMBERLINE

May 26, 2025

Project Narrative for Proposed Site Plan, Lot E, River Pines PUD Subdivision; and Related Conditional Use Permit Review to Convert the Project to 100% Residential

I. Overview

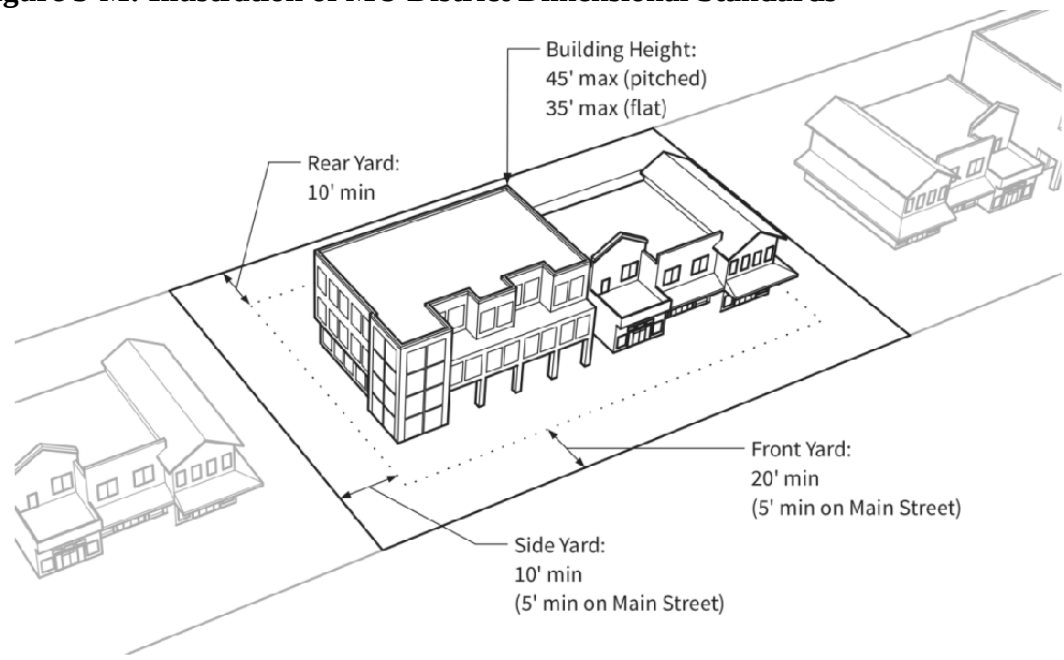
This firm represents Blue River Real Estate, owners of Lot E, River Pines PUD Subdivision ("Property"), located between 7th Street and Summit Boulevard, just north of Galena Ave. This property remains subject to the River Pines PUD zoning designation ("RPPUD"). That PUD designation expressly attributes the development standards of the MU zoning district via Town Code §180-3.12, directly towards all development and use of the Property. Per the MU District, the property is envisioned for a blend of commercial and residential zoning, with a baseline of no less that 20% of either type of use incorporated into the project. The Property is 1.96 acres in size yet contains a significant area of wetlands and accordant wetlands setback. These restraints lead to an overall developable area of 1.3335 acres, which, per the standards of the code, lead to a maximum density allotment for the Property of 19 market rate units.

A. Mixed Use Zoning Nature of the Property

My client has made extensive efforts to meticulously plan out the development of this property, having moved through multiple iterations of sketch plans with the Town staff and the Planning. Commission before reaching this site plan proposal. Each iteration was a good faith attempt to improve and fine tune the development proposal. Throughout this process, we have tried to address the concerns expressed by staff and the public, particularly the adjacent properties, and mitigate any expressed impacts or concerns where possible. Invariably, we cannot resolve all such impacts or concerns, but we feel the proposal has significantly improved through the course of this project to address and resolve the issues confronted, and thereby significantly improve the character and quality of this site plan.

The PUD, and the underlying MU zoning standards articulated therein, intrinsically direct development of this site to a larger budling with considerable height. The MU zoning district provisions in the Code in fact even illustrate exactly how such a development per MU standards would look. In the MU section of the Code, figure 3-M is presented as an illustration of the dimensional standards per the MU District, as follows:

Figure 3-M: Illustration of MU District Dimensional Standards



In light of these factors, the much more dense and impactful development anticipated for properties with this zoning designation is very hard to orient away from. The property has been reflective of a more intensive mixed-use nature for decades, and the sale and marketing of the subject property was naturally reflective of the MU zoning on the property, and the density tied to such zoning. This is no different than any other MU parcel in the Town. For every property, the zoning and related density for that property reflect not just the development vision, but also the investment backed expectations of any buyers for the parcel. In other words, higher intensity MU development on this property is not mere speculation – it is a reflection of what has been formally intended and envisioned on this parcel for decades.

Similar to any MU property within the Town, the Code calls for a baseline of 20% commercial on this property. However, the Code also quite presciently anticipates the conversion of such commercial to residential where more appropriate, and such a conversion is expressly contemplated within the Code MU provisions. In such circumstances, the Town directs a proposal to the conditional use permit process ("CUP") to determine the propriety of the conversion – namely discern what the best fit is for the particular proposal.

As noted for this property, due to present market demands, the character of this area of the Town, and the pattern of commercial development orienting towards other regions in the Town of Frisco, we do not believe it is the best use of the property -- nor the most astute development approach from a policy perspective -- to include commercial development to this area. As reflected by the PUD itself, the area has progressed into a more residentially oriented neighborhood within the Town.

B. CUP Conversion of Commercial Percentage of Project to Residential

It also is an area that reflects transitions from lower to higher density, and from single family to muti-family in nature. We play a role in that transition and believe we have been able to manifest that transition with a blend of duplex and single-family units in the development as proposed. We want to emphasize that essentially all the issues that have been expressed as the overarching general concerns regarding any development of this Property – such density, traffic, parking, building size, access, lighting, bulk and mass – are all of greater concern should the property be developed to include commercial. Thus, the *very proposal* of converting this property to 100% residential takes an emphatic first step at eliminating impacts and enhancing compatibility to the surrounding neighborhood and development.

In light of these dynamics, converting the 20% commercial envisioned under the MU district is rather logically typically done within the auspice of the type of massive building even the Code envisions here. One need look no further than the directly adjacent Marina Park Development literally across the street from this Property, or the Galena Condominiums Local Housing project that the Town is now developing, to understand how the dynamics of MU zoning and development constraints in this area naturally lead to a need to maximize density and thus build larger multi family structures as the necessary model. Once we move to a different type of development pattern for the property, there are other development concessions that will be significantly impacted. These concessions include utilization of allotted density, ability to include affordable housing units or open space areas within the project, and other such considerations.

C. Progression of Prior Sketch Plan Improvements

The challenge in altering the mixture of uses on the property in an effort to supplant the allotted commercial area with residential development lies in the requirement for a conditional use permit to secure such a change, per Code §180-5-2-13. In light of the mandated CUP, and the CUP standards, we have progressed from 18 units to a condominium building, which contained 18 market units and 2 affordable units to the last sketch plan, which is now reflected in this site plan proposal, with a reduction in density and a change if unit types to propose 11 single family and duplex type units. Accordingly, the prior sketch plan reviews for the Property were very focused on the issue of the compatibility of the proposal with the surrounding vicinity – a fundamental element of any CUP review.

We have heard and greatly appreciate the valuable guidance offered from the planning commission, the public and staff during these past sketch plan efforts. Essentially every Planning Commission member made it clear that they agreed that as a generic concept, a conversion of the MU mix on this property to 100% residential made sense and would be supported. The concern was obviously much more closely tied to the nature of that residential development, and how it would blend into the vicinity. In response, we have now, several times, gone back to the drawing board trying to focus on the areas of consensus and common perspective on this project.

For any developer the biggest impact of such a transition away from a more massive building is obviously density; this is particularly so in Summit County, where density has actually become a form of currency for pricing of properties, TDRs, etc. Based upon that premise, my client has

opted to stomach the pain of losing very valuable density for a site that was planned and priced in reflection of 18 units and alter the development profile of this property. Thus, we are now presenting an application for site plan and CUP review for a new and improved site plan for the Property.

The property allows for a maximum density of 19 units. Our revised proposal includes 11 residential units, comprising a blend of different unit types oriented away from typical MU style condominium development, as follows:

- 2 single-family homes
- 3 duplexes
- 1 triplex

With the exception of three duplex type units, all residences will feature four-car garages. Homes with four-car garages will range between four and six bedrooms, each with four to six bathrooms. The duplex unit with a two-car garage will have an exterior parking spot and as such, will be a three bedroom unit with four bathrooms. The two duplex units with three-car garages will include three bedrooms and three and four bathrooms.

Finally, we emphasize that this is an application for a site plan – and thus the focus is to reflect the proper development and design standards per the Code in the overall planning for the site. As reflected in the Code, any CUP request related to a commercial density conversion should be processed concurrently with such a site plan, per Code §180-2.5.1.C. Accordingly, this narrative also addresses the CUP aspect of this proposal – with a keen focus on the notion of compatibility with the surrounding area. The standards for such a CUP approval are obviously distinct from the more generic site plan standards, and warrant significant discussion, and we have structured this narrative and this application in that light.

II. Discussion

This new proposal, which again has shaved off 8 units of density – a 42% reduction in units -- reflects a significant adjustment in an effort to blend in with the surrounding vicinity in a more complementary fashion. Accordingly, we have now introduced a development which is more single family and duplex oriented, in contemplation of the single family and duplex development to the west of the Property, also within the RPPUD.

We also have significantly limited the multifamily component here – further breaking up the originally planned townhome units into a duplex and a triplex. And in shaping this site plan in this manner, we remain consistent with the key intent and purpose of the PUD, which was to transition from single family development towards a more mixed-use character as we progress in a west to east fashion towards Summit Boulevard. This transition obviously also reflects the equally adjacent development directly south of the property, Marina Park, which presents far more dense and intensive development as a MU parcel with a high level of multifamily units.

A. Updates on Recent Additional Enhancements to the Proposal

Most of the above adjustments were made prior to the April sketch plan review before the Planning Commission. During that review, the Planning Commission offered feedback that while we had progressed in the right direction to meet the goal of compatibility with the

neighborhood, they desired to see some further steps. We will not reiterate all the conversations at that review – instead we will try to outline the addental steps we have now taken in reflection of the valuable feedback we received.

We have made the following changes to the plans since the Sketch Review hearing on April 17, 2025:

- **Lower bedroom count:**
- We removed a bedroom from the largest unit, Unit 108; that is now a 6-bedroom unit.

- **Additional guest parking:**
- We added 3 additional guest parking spots on the south side of the property where there is a pre-existing driveway and parking area. This parking area was originally used by the dinner theatre and has been in place at least since the 70s. This area was going to be slated for wetlands restoration. However, there is actually very little quality or benefit in such restoration at this juncture, particularly in light of the fact that the original wetlands were man made and not of high quality. Instead, we have now enhanced extra parking, well beyond the required number of spaces, in an effort to ameliorate what was a chief concern expressed for the project. Such additional parking also helps to alleviate concerns over the tightness of the site plan, in terms of snow removal, circulation, etc.
- We are now providing 6 guest parking spots. The code only requires 3 guest parking spots for 11 units. As such, we have 3 additional guest parking spots beyond the Code mandates threshold. This additional parking area effort has been supported by Chris McGinnis of the Frisco Public Works Department.

- **Shading concerns for property to the north:**
- We have lowered the roof heights of the duplex and triplex on the north side of the building area in order to achieve a roof height of approximately 40 feet in light of the concerns for our neighbors to the north.
- That building was already designed to transition away from the property line; thus, the higher reaches of the home are further back from that adjacent lot line and naturally pose less impact in terms of views and shading.
- As it presently stands, the development is now set back 13 feet from that adjacent north property line. It then scales back significantly leaving the highest points even further set back from the property line with the third level set back approximately 20 feet from the property line and the fourth level set back approximately 30 feet from the property line. The subject home is set back 4 feet from that property line at its closest point and 20 feet from the property line at its furthest point, with the deck set back 21 feet to 26 feet from the property line.
- Some Planning Commissioner comments during the Sketch Review reflected developing a better understanding of how the duplex and triplex on the north side of the property could impact the neighbor to the north. In that regard, we had discussion over producing a shading study for this area. While taking the initial steps to conduct this study we noticed that this neighboring northern property has no windows facing south. That logistic naturally abates many issues related to shading and view impacts tied to the adjacent property line between this home and our project.
- In addition, there is currently a large grouping of mature 40’ to 50’ Aspen trees on the applicant’s property that, particularly in the summer months, create a significant level of shading upon the home to the north. The removal of some these trees during construction

will actually increase the amount of sun hitting the southern exterior of this home, especially when there is full leaf growth on the trees.

- The home to the north does have a deck to the northeast. However, we also observed that this deck is already being significantly shaded by a large cropping of trees located on that property – trees which will not be affected by this development.
- We will be presenting pictures taken on April 23, 2025, which demonstrate the existing tree cover and the southern façade of that home. With full leaf growth the property to the north will be even more shaded during the spring, summer, and fall months.
- We are also proposing to build a new fence on the adjacent property line with this property, to the maximum height allowed by the Town, to help with mitigation of impacts to that property from this development, and to enhance privacy for the owners of the property.

- **Short-Term Rental Regulations**

The Planning Commission offered strong insight as to a minimum night rental limitation for all short-term rentals as a means of abating STR impacts. We have taken that guidance and now can reflect that residents at The Glade who choose to apply for and obtain a short-term rental license from the Town of Frisco will be required to adhere to a minimum rental period of four (4) nights. This limitation will be explicitly stated in the HOA's governing documents to ensure compliance with Town objectives related to neighborhood stability and short-term rental management. We will also, as noted, also have a significant level of other STR restraints, such as parking, vehicles, responsibility for guests, incident management, and other such measures that constrain the more concerning potential impacts of STRs. We are proposing staff confirmation of such language in the HOA documents as a condition of approval for this site plan.

- **Drive Aisle Access and Parking Restrictions**
    - We received feedback from Summit Fire & EMS requesting that the drive-aisle be a designated fire lane with appropriate signage. As such, parking within the drive aisle will not be allowed. Each unit includes sufficient garage parking to support this restriction, and the policy will be enforced by the HOA.

- **Pedestrian Infrastructure Improvements**
    - We will construct a continuous walkway along the full length of the property frontage on 7th Avenue and will be extended southward – even beyond our property limits -- to connect with the adjacent bike path, if such extension is allowed by the Town. The goal is for the walkway to meet all Town design standards in order to be maintained in accordance with Town requirements to qualify for municipal snow plowing services. If the Town does not desire to maintain this walkway we will address such maintenance in our HOA documents.

- **Traffic Control and Visibility Enhancements**
    - A stop sign will be installed at both driveway exits to ensure all vehicles come to a full stop before entering 7th Avenue, enhancing traffic safety. Subject to approval by the Public Works Department, a traffic mirror will be installed near the bike path signage to improve visibility for pedestrians, cyclists and drivers.

- **Snow Management and Vehicle Coordination**
    - The HOA governing documents will include mandatory snow removal requirements, including proactive clearing and removal of snow storage areas as they near capacity. During snow events, visitors will be required to temporarily relocate vehicles to allow full access for snow plowing. This requirement will be reflected in HOA documents. This measure aligns with common snow management practices throughout Summit County. We note that whole perhaps not perfect, this helps assuage the concerns that nearly every parking area has to deal with in the county during winter (namely, cars parking in the snow removal, storage and maintenance areas).

- **Deck Placement and Snow Storage Impact**
    - Nearly all the decks proposed are oriented away from drive aisles and will not interfere with snow storage zones. For those located near vehicular paths, snow storage calculations have been revised to accommodate any potential impact, ensuring compliance with applicable standards.

- **Heated driveway elements.**
    - We are also proposing to provide ground heating apparatus for the homes in the apron area just in front of such homes. This will significantly improve the snow removal and storage portfolio for the development and ensure a viable system during the challenging winter months.

B. Compliance with Site Plan Criteria

Within this narrative we will try to address the multiple layers of Code and master plan considerations which are germane to this sketch plan review. Due to the commercial density adjustment here, and the CUP implications it carries, this endeavor may be a bit more complex, yet we will try to bifurcate the more technical aspects of the site plan standards from the more esoteric and aesthetic aspects of the CUP review.

1. Site Plan Compliance Standards

Naturally, this proposal implicates a major site plan review process, per Code §180-2.5.1.D. The application addresses all the necessary elements for SITE plan review, including studies required such as traffic studies, and in fact the application exceeds that level of detail. In reflection of the standards set forth in Code §180-2.5.2.D.3.a.1, which applies to both sketch plan and site plan reviews, we have provided this narrative to address code compliance and master plan conformance concerns. Our attached site plan provides all the requisite details called out for in the Code, including the following:

- Site plan showing the location of the building(s) and other improvements;
- Existing and proposed utility lines;
- Existing and proposed topography at two-foot intervals, including 50 feet beyond the property boundary, existing easements, lot dimensions, lot size in square feet/acreage;
- Existing site characteristics map;

- Parking space location and counts and traffic circulation design, with driveway locations, points of access from right-of-way, preliminary grades, bike and pedestrian improvements;
- Proposed landscaping, post-development grades, snow storage, preliminary stormwater plan showing approach to stormwater handling;
- Scaled drawings of all building locations and schematic elevations; and

As reflected in Code §180-2.5.2.A, the site plan review and approval process are intended to ensure compliance with the development and design standards of the Uniform Development Code. In regard to many elements of this site plan, the plan essentially speaks for itself, and we simply defer to the site plan to address these concerns. However, as a general overview, the following elements are outlined:

- Lower-Level Garages/Floodplain Concerns

Due to the property's location within a FEMA-designated floodplain, the lower level of each residence will be designated for non-livable spaces, such as garages and mechanical rooms.

- Internal Access

A single driveway will provide access to all the units, each of which contains oversized car tandem space garages with additional storage. This internal access is nearly 30 feet wide and thus well above the required width for such internal drives per both the Code and the International Fire Code. The front of this drive, before it reaches the homes, will also afford access to the main three exterior guest parking spaces. The other 3 guest parking spaces will be accessed by an adjacent drive on the southern portion of the Property.

- <u>Exterior Materials:</u>

The design will incorporate a mix of wood in varying sizes and finishes, along with metal and stone siding to create a dynamic yet cohesive aesthetic. We are of course open to further direction or suggestion as to this element of the plan, but the project does already meet Code standards for such aesthetic concerns.

- <u>Landscape Features:</u>

The site is uniquely situated around a pond and extensive wetlands. As part of this development, the existing structure will be removed, and its deck and southern parking area—currently within the wetlands setback—will be restored to their natural state.

Additionally, the existing pedestrian means around the wetlands will be refurbished. No wetlands will be disturbed as a result of this project. Crucially, *<u>no wetlands setbacks will be disturbed</u>* due to this project either.

We will have an aggressive plan to plant and maintain new landscaping when needed and keep the number of trees and shrubs well above the Code minimums. We will also endeavor to maximize the preservation of trees around the north property line and the west property line where viable to help abate visual impacts and soften the visual feel of the development from adjacent areas.

Finally, we also have to emphasize the critical importance of our maintaining the wetlands area in a natural and unimpeded state on the south of the property. We understand that the Code

mandates such wetland avoidance already; yet when gauging the overall aesthetic feel of the project and its landscaping and open space feel for the area, this strict preservation aspect of the development has to be considered in terms of the overall feel of the project.

- Exterior Lighting:

All exterior lighting will comply with Dark Sky regulations to minimize light pollution and preserve the natural environment. We will further ensure via our HOA documents that all exterior lighting be downcast in nature and mandate that no lighting be directed onto neighboring properties.

- Building Bulk and Mass:

A bulk plane variance of 322.90 cubic feet is being requested, which falls below the 350 cubic feet bulk plane encroachment allowance. The development is now split up many different structures, functionally in a more duplex oriented nature. This effort will ensure that any concerns over mass of the development have been dramatically assuaged from any past proposal on this area. Moreover, the bulk and mass as proposed now blend in very complementary fashion to the developments in the vicinity. The mass of the building is well broken up as noted above. However, we have also worked to break up the plane and bulk on this proposal. We have employed deck and patio extensions, varied rooflines, staggered planes, and step backs from setback lines in order to enhance and accentuate the aesthetic design of the proposal. The results of these efforts effectively exceed the Code standards for bulk and mass and afford a highly aesthetic design for our proposal, despite its nature as an MU zoned development.

- Budling Height

The proposed structures remain below the maximum allowable roof height of 45 feet.
The sloped roofs exceed the minimum 2/12 pitch requirement. The 45-foot height adheres to the roof standards for buildings of such height per the Code.

- Setbacks/Yards/Common Area

All setback standards of the Code for the MU Zone District, as set forth in §180- 3.12, at table 3-M. One key element of this development is the fact that though there are a variety of building types here, the project will be developed without any interior lot lines or subdivision. Instead, the development and property interests created will be effectuated via a Townhome Plat. The definition of a Townhome, per Code §180-9.3, is as follows:

> *Townhome.* An individually owned residential unit that has an undivided interest in common with other unit owners in the common elements of a project including land and infrastructure. Townhouse ownership includes the structure, from foundation to roof in an unbroken vertical plane, and the land on which the foundation of the Townhouse is constructed.

Each unit proposed herein, though subject to different design models, falls within the scope of this definition. The broad scope of the definition of multifamily development, which also allows for detached units, also comports to the focus of this development plan:

> *Multifamily or Multi-Unit Residential Project.* Development of three or more ***attached or detached*** dwelling units, for which development approval is sought under a single or phased development application.

The areas outside of the footprints of each structure shall be common open space subject to owners' association control. All common area maintenance, including snow plowing, storage and removal, will be handled by said association. All landscaping will be a common element and remain subject to association management. The focus on common areas and collective management here pragmatically allows for a close connection and uniform maintenance and upkeep standards for all units, despite the variation in unit types.

- **Residential development standards**

This project also conforms to all the specific residential development standards identified in Code §180-6.22. These include the following:

- Despite the single family homes, no duplicate building designs are present for each such home.(§A.3)
- The duplex meets the duplex design standards and is designed to present the feel of a singular home, employing a functional party wall while avoiding mirror image units. (§A.4).
- The garage doors are all oriented away from the public street and towards the interior of the property. The garages are partially sublevel and thus do not dominate the landscape of the property. (§F).

For further details, please refer to the attached drawings and supporting documents included in our submission package. In summary, this site plan reflects a development that satisfies all the design standards set forth in the Code. Of course, we are eager to get valuable feedback from the Planning Commission in this regard and will continue to fine tune the design of the project leading up to final site plan approval to ensure that the development is of the highest quality design, aesthetics and planning.

2. Zoning Standards per the RPPUD

Before we delve into design considerations, or overall CUP discussion, we want to emphasize that even the crucial second criterion for CUP approval – the standard that the Planning Commission focused on -- expressly calls for a close consideration of the compatibility with any applicable PUD, in this case, obviously, the RPPUD. This is a critical aspect of this analysis -- because it is that PUD that first and foremost lays out the negotiated, articulated vision for the immediate area, including this Property. It follows that ***the PUD plays a large role in defining what compatibility with the mix of development in the area actually is*** – simply due to the fact that the PUD articulated that vision and codified it prior to any development.

A PUD Agreement is essentially the reflection of the parties' intent in a negotiated zoning process. As such it presents the reflective vision of both the Town and the original developer during that process. That vision of the neighborhood lucidly speaks to the compatibility of different uses, structures and aspects of that neighborhood. Indeed, that is what a PUD is adopted to achieve. For the RPPUD, that vision was set forth quite plainly, particularly in the Recitals of that accord.

First, the PUD intentionally allowed for the creation of residential lots that were considerably **smaller** than the Town minimum size for such lots:

> The residential lots … will range in size from 5,144 to 8,753 square feet which is somewhat smaller than the Town' s normal requirement of a 10,500 square foot minimum for single family residences. *PUD Recital B*.

The rationale here was to allow for some transition from the normal sized residential lots west of the PUD area transitioning towards the remaining M-U area of the PUD (this Property, Lot E) and Summit Boulevard. Recital C noted this consideration, as follows:

> Benefits to the Town, in furtherance of the Master Plan, are: a portion of M -U land that may be in conflict with adjacent developed residential property will be placed in permanent use for low density residential purposes; instead of the potential for up to 77 dwelling units that might have been allowed the density will be reduced so that only 34 single family. *PUD Recital C*.

Finally, in terms of the remaining Lot E, it was intentionally left not only subject exclusively to the MU zone standards, but it was also expressly excluded from any design standards or other covenants plainly called for in the rest of the PUD area, as reflected in Paragraph 9 therein:

> Outlot E shall be controlled only by relevant portions of the M -U zoning code and not the Covenants or the Design Review Committee.
>
> a. Architectural Character. All buildings shall be single family residences with up to two stories and, if desired, a garden level. House plans will include a minimum of 3 different styles with varying elevations. *PUD Pgh. 9.*

The contrast between the vision of these two areas of the PUD was quite apparent on the face of the PUD itself. In other words, Outlot E was **never** intended to be identical or consistent with the nature of the development in other parts of the PUD … namely the single-family aspect of that neighborhood, which was all subject to design standards and covenants which *expressly exclude Lot E*. Thus, the question of such compatibility must, as the CUP criterion emphasizes, contemplate the vision for such compatibility set forth in the PUD itself, in terms of type of structure, design standards and all other such considerations.

Finally, the fact that the Code criteria for *PUD approval* also specifically addresses such **compatibility** standards itself – in the same manner as the CUP criteria -- underscores the prominence of the PUD vision in already addressing this CUP standard of compatibility. Per Code §180-2.4.2.D, the following are all criteria for approval of a PUD:

3. That the application achieves a compatibility of land uses with neighboring land uses;
4. That the modifications to the underlying zoning district by the project are in the best interests of the Town, and neighborhood in which the development is planned; and
7. That more than one housing type, or housing price, or housing form of ownership (i.e. for sale and rental) to satisfy the needs of more than one segment of the community be provided (when residential uses are proposed).

All 3 of these criteria for any PUD approval speak to exactly what the vision of the Pines PUD was, and why that vision has determined that a use outside of single family development on Lot E was always deemed to be **compatible** with the rest of the PUD and the general vicinity. And that PUD determination continues to carry great weight when determining compatibility per the CUP review, specifically when pondering the proper type and nature of development on Lot E.

The RPPUD envisioned that a massive MU type development (again see Figure 3-M) was compatible with the rest of the PUD. The RPPUD envisioned that the blend of types of residences was in the best interests of the neighborhood and the Town. Finally, the RPPUD envisioned a variety of housing types, not merely single-family homes throughout.

This is not to suggest that any type of residential development on Lot E is appropriate, particularly when considering a 100% residential proposal. However, this is to say that the nature of the development across the street (i.e. single family), and the design of that development, are expressly not intended to be highly limiting factors in terms of how Lot E will be developed.

C. Conditional Use Permit Implications and Considerations

As discussed above, this site plan, proposing to remove the 20% commercial threshold, also entails a concurrent CUP review, as mandated per Code §180-2.5.1.B.2:

> *An application for conditional use approval is required and shall be submitted at the same time as the site plan review, if one is necessary.*

It follows that this narrative must also delve into the compliance with the criteria for CUP approval set forth in Code §180-2.5.1. Fortunately, a robust discussion on the merits of this project as related to the CUP has been conducted throughout the quite extensive sketch planning phase of this project, but both staff, the applicant and the Planning commission. Accordingly, much of this CUP aspect of the proposal has already been extensively contemplated, and the chief criteria of concern has already been addressed – specifically the proper level of compatibility of this project to the surrounding area. Accordingly, we will focus on that criterion herein. We will also offer a more cursory discussion of the other CUP standards here, though staff and the Planning Commission have already expressed their overarching comfort with the compliance with such other standards.

1. Overarching purpose of CUP review and meaning of conditional uses

As an initial concern, we do want to reiterate our concerns with what the proper scope and nature of this CUP review entails. We fully acknowledge that per Code §180-5.2.13 "developments with a lesser mixture of residential or nonresidential uses, including single use developments, are a conditional use." Nevertheless, within this context, the following overarching purpose for that CUP review remains:

> *Purpose.* Conditional uses are land uses that, because of their unique character, size, operating characteristics, and potential impacts, must undergo special review with the potential for conditional approval in order to be undertaken in a particular zoning district. The conditional use process allows for the integration of certain land uses within the Town based on appropriate conditions imposed by the Planning Commission. Review is based primarily on compatibility of the use with its proposed location and with surrounding land uses and by reviewing the impacts a conditional use may have. Conditions are intended to minimize or ameliorate any negative circumstances that might arise by the use. Code §180-2.5.1.A

Within this context, it is crucial to ask what the conditional use is that we are dealing with. Per that vein, a conditional use is defined in Code §180-9.3 as follows:

A use which, because of its character, size and potential impacts, may or may not be appropriate in a particular zoning district and which may be undertaken, if at all, only in accordance with the provisions of Section 180-2.5 of this Chapter.

In the present manner, the fundamental question that permeates into the discussion of all the individual criteria for a CUP is what the use is we are contemplating. That conditional use is expressly tied, per the Code, to the removal of the baseline minimum 20% commercial density. Within that context, the fact remains that ***but for removing the commercial element*** to this project, a typical MU development, reflective of the Code's own illustration of the same at Figure 3-M, is absolutely allowed via site plan, without a CUP or any other similar discretionary review. There are two separate yet related essential elements at play here: first, the ***type*** of development, namely residential versus commercial. Second is the ***nature*** of that residential development, namely single family versus multi family or a mixture of units. In this light, the CUP is really a question as to type of use, not nature of use. The nature of such use (types of units) must still be primarily controlled by zoning. These overarching factors should at a minimum inform and affect the discussion we have on the CUP criterion for approval.

2. CUP Criteria for Approval

The Approval Criteria of the Town of Frisco Unified Development Code ("Code") for Conditional Uses is set forth at Section of 180-2.5.1.D. In response to the listed Approval Criteria set forth in the Code, we have described in general terms how the proposed residential development meets each of the required items as follows:

1. ***The conditional use is consistent with the purpose and intent of the zone district in which it is proposed to be located, furthers the applicable goals of the Frisco Community Plan, and is a desirable use that will contribute to the general welfare of the community;***

At this juncture, the remainder of the RPPUD has been developed as residential. Moreover, all areas surrounding Lot E and this entire PUD is also residential. In the interim, other areas have become more focused commercial cores, such as the gateway Whole Foods area. Consider the following factors:

a. 200 N 7th Ave is located in the River Pines PUD, which was zoned all residential, with the exception of 4.5 acres which was zoned as multi-use.

b. Outlot E as per the PUD originally included 200 N 7th Ave as well as a parcel across the street (now defined as 201 N 7th Ave (Lot E-1-A) and 203 N 7th Ave (Lot E-1-B).

c. Both 201 N 7th Ave (Lot E-1-A) and 203 N 7th Ave (Lot E-1-B) were given conditional use to build all residential. As such, based on my understanding of the River Pines PUD there are currently no commercial units/properties.

d. As such, to meet the current zoning of the River Pines PUD, we propose a conditional use to develop a residential only at 200 N 7th Ave.

In light of these considerations, as the Planning Commission has previously acknowledged, Lot E, in this area, is best suited for 100% residential development.

2. ***The conditional use is compatible with the mix of development in the immediate vicinity of the parcel in terms of density, height, bulk, architecture, landscaping, and open space, as well as with any applicable adopted regulatory master plan or PUD (See, Section 1a–d, above); and***

This criterion was the subject of the greatest discussion at prior sketch plan reviews on the previous sketch plan for the Property. It is also the most nuanced criterion in terms of the aesthetic and esoteric standards reflected therein. Accordingly, we will try to focus chiefly on this criterion in this narrative, in an effort to secure optimal Planning Commission feedback.

a. Implications of the RPPUD to this standard

As discussed in considerable detail above, the RPPUD is in fact an expressly reflection of the fundamental issue of compatibility with the surrounding area. The fact that criterion 2 expressly references PUD compatibility here speaks volumes to the proper analysis of this CUP standard. We can not analyze such compatibility without doing so via the lens of this PUD that controls this entire neighborhood. Plainly, the RPPUD *never* intended the density, height, bulk, architecture, or landscaping on Lot E to *in any way* match the remainder of the PUD area. To the contrary, as highlighted above, the RPPUD approval was expressly premised on the auspice that the different nature of development on Lot E versus the remainder of the PUD was in fact compatible and appropriate.

One further crucial point here. Compatible does not and should not mean identical or consistent. It is a question of how a development blends and complements other developments in the area, not how it is the same in design or nature of structure (i.e. single family).

b. Proper scope of the term Immediate Vicinity

The other consideration at plate here is the question of what properly constitutes the immediate vicinity of Lot E. In that regard, certainly the single-family homes and two duplexes across the street are highly relevant. However, there is no viable rationale to exclude Marine Park from that question of the immediate vicinity. There is simply no basis to suggest that one property is in the vicinity yet another the same distance from the property lines is not. That very intensive multifamily development is directly across the street from the Property. **Both** projects are across the street and immediately adjacent to this Property. Thus, both projects speak to overall compatibility per any CUP consideration.

What we have proposed now, in response to concerns over the more intensive prior proposal, is a mix oof single family and multi family type residences. This results in a reduction of 8 potential units of density but presents a far superior and much more compatible project. The single family and duplex units are certainly not designed in the same manner as the adjacent subdivision. Again, per the PUD, they were never intended to be. However, it is more reflective of the nature of that neighborhood than the prior proposal. In turn, the limited townhome structure is not designed in the same manner as Marina Park – it is far less intense in terms of size scale, density and intensity than Marina Park. But it includes some townhome style units as we transition north along Summit Boulevard, which is also highly appropriate.

This development will serve the function that was always envisioned for this Property, per the RPPUD, as well as the MU zone district, and the Community Plan. The property serves as a

residential transition away from the single-family homes as we head east. It also serves as a low intensity multi-family transition away from the intensive marina park development as we head north. This transition from both immediately adjacent neighborhoods fits a crucial cog in the vacant space between these neighborhoods. Again, this is what the PUD expressly intended. As discussed below, this is what the community plan envisions in this area in terms of infill. We have proposed a project that is certainly not identical, but is complementary, to the surrounding areas.

3. ***The conditional use is consistent and compatible with the character of the immediate vicinity of the parcel proposed for development and surrounding land uses and enhances the mixture of complimentary uses and activities in the immediate vicinity of the parcel proposed for development.***

This is indeed a complementary development. Again, just as the PUD directs, this criterion of approval educates the proper scope of the term "*compatibility*" as related to criterion 2 as well. The bottom line is that "the mixture of complimentary uses and activities in the immediate vicinity" is tied to not only the type of development but the nature of that development. Blending single family and multi-family type homes into one development is roundly within the scope of what this third CUP standard calls for. Consider the following:

- In terms of use, commercial is not complementary in this area anymore. The River Pines PUD is currently designated as entirely residential. All other properties within the River Pines PUD that were zoned for mixed use have already been granted conditional use approvals to be fully residential, including 201 N 7th Ave (Lot E-1-A) and 203 N 7th Ave (Lot E-1-B).

- The proposed residential development at 200 N 7th Ave aligns with all River Pines PUD requirements, but presents much less density, height, bulk, and other such characteristics than the PUD otherwise allows. It has been ratcheted down to blend in and prove more complementary to the single-family neighborhood.

- There is a key pedestrian travel corridor through this property, and a very significant swath of protected wetlands and related setbacks to the same. The areas within the wetlands section of the property that were long ago disturbed will be rehabilitated. The pedestrian means around this area will be restored as well.

- Key visual corridors will be preserved to a great degree. The density is significantly reduced and the one large budling broken up into multiple structures. The wetlands area provides an ongoing visual corridor and pedestrian corridor.

- In response to public comments provided at the prior hearing, we are now proposing two key elements to help assuage the concerns over the street which have long preceded this proposal. First, we will establish, a pedestrian pathway along 7th Street in front of Lot E where none now exists. We will also provide street attractively designed lights along this corridor to help with visibility. Neither of these measures are requirements for site plan or a CUP, nor are they based on concerns caused by our project. Nonetheless, they help foster this compatibility and the blend of this project with the surrounding vicinity, and we are happy to take these steps as part of the overall proposal.

4. **The location, size, design and operating characteristics of the proposed conditional use minimizes adverse effects, including visual impacts, impacts on pedestrian and vehicular circulation, parking, refuse and recycling services/area, service delivery, noise, vibrations and odor on surrounding properties.**

This fourth criterion again is closely tied to what the baseline for CUP consideration is. Here, we are proposing to remove no less than 20% of the property being commercial in nature. We are also reducing units of density by 42%. That change will have a highly positive effect on traffic and pedestrian concerns, as will the pathway and street lights proposed. Removing commercial uses also removes related intensive service and delivery traffic impacts, noise, light impacts and the like.

Ultimately, it is because we are moving to 100% residential that we are viably exploring anything but a large, massive singular mixed-use building – a building more in line with the type reflected in Figure 3-M of the Code. That transition to 100% residential thereby eliminates many of these adverse effects to a great degree. We are also reducing density, which also greatly eliminates such adverse effects. Finally, consider these additional factors:

- The proposed residential development at 200 N 7th Ave complies with all bulk plane requirements. Additionally, a traffic study has been performed that assesses and confirms that 7th Ave and nearby intersections can adequately support the proposed residential development.

- The proposed residential development will maintain a similar frontage along 7th Ave as the existing structure. A designated trash area near 7th Ave will provide convenient access to garbage dumpsters and recycling bins for efficient collection by a waste removal service.

5. ***There are adequate public facilities and services to serve the conditional use including but not limited to roads, potable water, sewer, solid waste, parks, police, fire protection, emergency medical services, hospital and medical services, drainage systems and schools.***

This standard for CUP review is readily met. The following considerations apply to this criterion:

a. *We have confirmed with the Sanitation Department that the existing pump station on Summit Boulevard has the capacity to support the proposed residential development.*

b. *We have also confirmed with the Water District that the current water lines on 7th Ave are sufficient to accommodate the proposed residential development.*

c. *While the property is zoned for 23 units based on its acreage (1.96 acres), considerations for onsite wetlands and density regulations under the UDC limit development to 19 units. The proposed residential development consists of 11 units, which is 8 units below the maximum allowable density,* ***a 42% reduction****.*

d. *Given the change in the type of development being proposed, we have reached out to Scott Benson of Summit Fire and EMS to better understand what fire protection*

requirements will be needed. All Summit Fire recommendations will be implemented.

e. *A local civil engineer has been engaged to ensure proper drainage. Additionally, a large, paved area on the south side of the property will be removed to improve permeability and restore the area to a more natural state. This proposal already far exceeds the standards for pervious open space in this area.*

In summary, we believe that this proposal roundly satisfies the standards for CUP approval. Of course, as we have tried to emphasize, maintaining the proper context of this CUP review is absolutely paramount. Development on this Property will logically never mirror development on the single-family parcel. It is not supposed to, and it was never envisioned that way. The RPPUD underscores this fact quite dramatically. In that light, the fundamental question for CUP review pertains to the nature of exactly what the conditional use proposed is, which is subject to review. In this case, it is fundamentally a question of removing a 20% commercial baseline. The standards of the PUD and underlying MU zoning must remain a major aspect of this analysis.

That removal of a commercial component eliminates the need for one massive building, typical of MU zoning as Figure 3-M of the Code illustrates. It eliminates a significant amount of traffic, noise, lighting and visual impacts. It affords the ability to preserve open areas and enhance and illuminate pedestrian walkways. This is the core question for CUP review, and this proposal readily fosters all such goals and benefits.

One final note … again, compatible does not mean consistent, let alone identical. These are all different terms with different implications. The term compatible should contemplate how developments blend and complement each other. That is the only logical standard. Pert such a standard, the goal here should be effective transition and complementary style development. If we were to insist that compatibility with the vicinity meant identical type development, we could argue that we are required to build a replica of Marina Park, directly across the street from this property and just as close as most of the single family homes within the RPPUD. Clearly that makes little sense, but it also makes little sense to suggest this Property should be primarily subject to any single-family home design standards that the RPPUD zoning expressly excludes it from.

D. Master Plan Conformity

We also want to briefly highlight the manner in which this project conforms to the Town Community Plan. First, the Plan designated this area as Local Mixed Use. That designation carries the following vision:

Primary Uses:

- A mix of small retailers, restaurants, offices, and other neighborhood services.

Secondary Uses:

- Multi-unit dwellings, townhomes and duplexes, civic and institutional uses, parks and other outdoor gathering spaces.

Key Characteristics:

- Integrates a broad mix of uses and serves as a transition between the Greater Downtown district and surrounding residential neighborhoods.
- Promotes a more human-scale development and pedestrian-friendly environment that encourages pedestrian and bicycle circulation. Plan p. 62.

As the Planning Commission has already expressly acknowledged commercial simply does not fit in this neighborhood under present circumstances. In such a scenario, we logically fall back to the envisioned secondary uses. That vision is for multifamily use and neighborhoods that serve as a transition. As noted, this is exactly what we are proposing.

Moreover, that community plan also flatly contemplates, and in many ways encourages, infill development. The plan states the following:

> **Infill and Redevelopment in Established Neighborhoods**
> Current zoning in many of Frisco's older neighborhoods allows for development at densities higher than what exists today. This means, for example, a property owner could tear down an existing home and build two or more new units in its place. While densities vary by location, the graphics below illustrate how these changes might affect existing neighborhoods (using the RL and RH zoning districts as examples). Plan p. 68.

In recognition of such infill concerns, the Plan suggested the following Design Principals:

- Mix of housing types. Where supported by Future Land Use Categories and underlying zoning, ***no one housing type should dominate the block***. *Redevelopment of larger sites should include at least two housing types and a mix of unit sizes***.**
- Building bulk/mass/height. Blocky and blank multi-story building forms devoid of articulation or architectural features should be avoided, especially along adjacent property lines.
- Transitions. Where infill or redevelopment is of a different scale or height than surrounding buildings, transitions should be provided to limit impacts on adjacent properties. Transition techniques may include: stepping down building heights and massing along shared property lines to match the height of adjacent buildings; increasing side yard setbacks to incorporate a landscape buffer; providing variation in the side building wall or roof form; using dormers and sloping roofs to accommodate upper stories; and/or orienting windows, porches, balconies, and other outdoor living spaces away from shared property lines; among others.

In light of the foregoing Plan direction, we have significantly reduced the size, scale and density of the proposal on the Property. We have a mix of three different housing types proposed, and separate footprints for each type. We have greatly reduced the mass and bulk of the project. We have provided a very functional and viable transition, again, moving away from both immediately adjacent properties. We have incorporated key master plan guidance into this design, and we are happy to further explore such elements with staff and the Planning Commission.

Conclusion

In summary, we are proud to say that we have worked closely with staff and the Planning Commission to develop a creative approach to the development of this Property that greatly

enhances its overall compatibility with the immediate vicinity. To accomplish this task, we have had to make costly concessions, but concessions which are pragmatic and enhance the overall design and aesthetics of the project. We have submitted a thoroughly designed site plan, in light of the sketch plan level of review here.

We did not rest on our laurels after the April 17 sketch plan review. Instead, we took efforts to further enhance the qualities of the project and reflect the additional input from the Planning Commission and staff as much as possible. Unfortunately, as with any development progression, we are reaching the limits of that flexibility, and thus face the law of diminishing returns. In other words, we have tried to make all the adjustments and concessions that were reasonably practicable. Any other measures which are not reflected in this new site plan proposal are not absent due to indifference. Instead, they reflect a lack of much more flexibility to affect any more changes without severely impacting the viability of development. In that light we are of course open to further suggestions and input, and eager to continue down this road, yet we are also facing the confines of our project flexibility, from an economic and viability standpoint.

Gain, the RPPUD has established a longstanding vision for this neighborhood, which remains a significant guidance as to what overall compatibility in this vicinity should look like. Ultimately, we feel that we have proposed a revised design that well warrants CUP approval of the conversion to 100% residential use, reduces density and impacts, such as traffic, noise and lighting, and offers a complementary transition point for the entire neighborhood. We welcome the insight and guidance from both staff and the planning commission and look forward to working with you all closely in this endeavor.

If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,
Daniel Teodoru, Esq.
Timberline Law LLC

Traffic Memorandum

To: **Blue River Real Estate**
Attn. Seth Francis
PO Box 7035
Breckenridge, CO 80424

From: Kari J. McDowell Schroeder, PE, PTOE

Date: April 28, 2025

Re: **The Glade**
200 N. 7th Avenue
Frisco, Colorado

Project Background:

The Glade project is located at 200 North 7th Avenue in Frisco, Colorado. The project parcel is located within the River Pines Subdivision between North 7th Avenue and North Summit Boulevard. Access to the site is via North 7th Avenue. The project site depicts a single access to North 7th Avenue. The proposed site plan is shown in **Figure 1**.

The site currently has one single-family home. This home is proposed to be demolished and redeveloped with 11 residential dwelling units.

- 2 single-family homes
- 3 duplexes (6 total units)
- 1 triplex (3 total units)

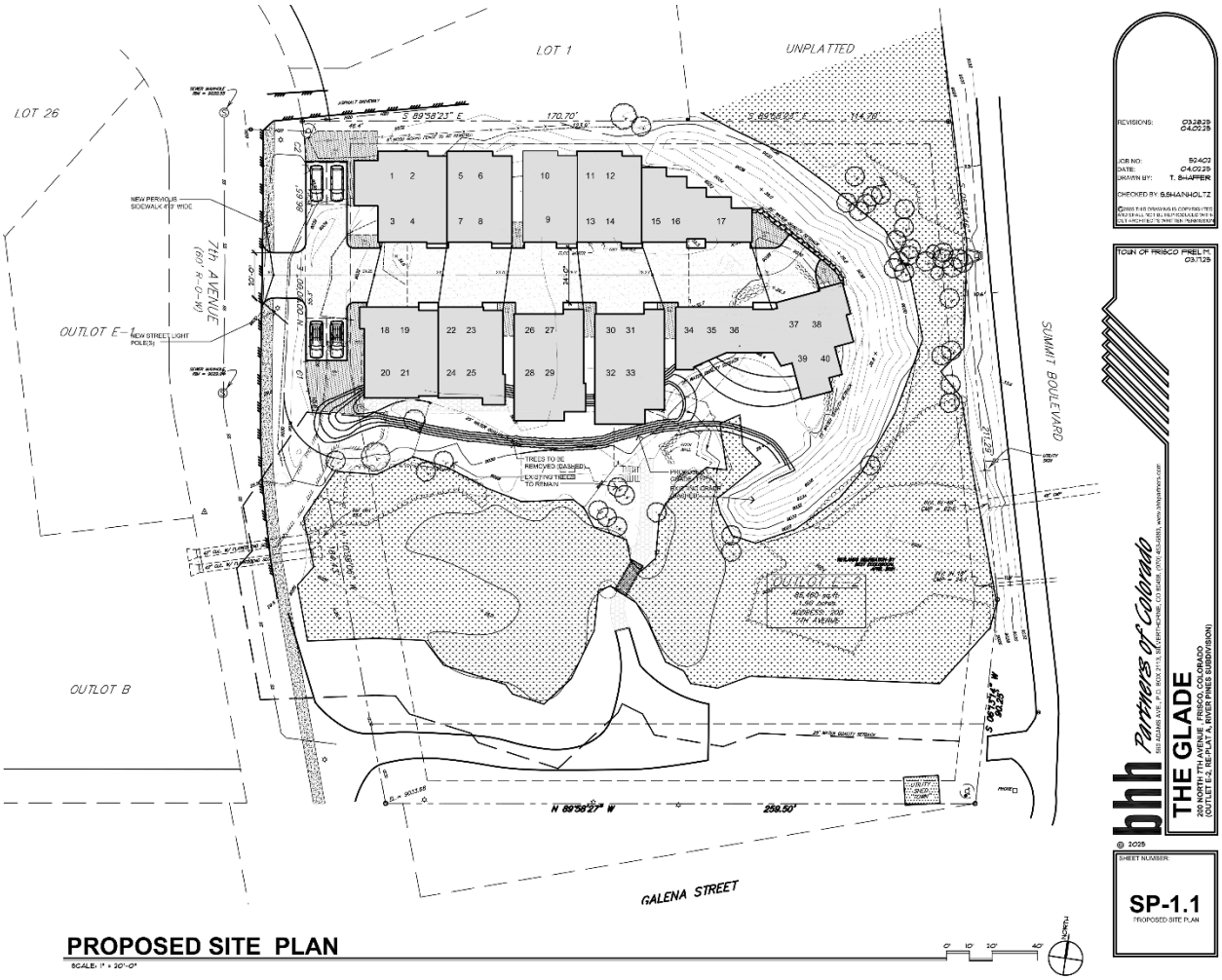
Traffic Analysis:

McDowell Engineering has prepared this Traffic Memorandum with the purpose of forecasting and analyzing the impacts of the additional traffic volumes associated with the residential development on the surrounding roadway network. The included intersection analysis locations include:

1. Main Street & Galena Street
2. Galena Street & 6th Avenue
3. 7th Avenue & Site Access

This analysis uses the 602 Galena Street project as a basis for this analysis. This neighboring development project was recently analyzed by McDowell Engineering in the February 2025 *Transportation Impact Analysis for 602 Galena Street, Frisco, Colorado (602 Galena Street TIS)*[7].

Figure 1: Site Plan



Existing Conditions:

Main Street is a two-lane, east-west, paved roadway. This is a major collector roadway that serves intracommunity traffic. The posted speed limit is 20mph near the project vicinity. Main Street is controlled by stop signs through the Town of Frisco.

Galena Street is a two-lane, east-west, paved roadway. This roadway is a collector roadway that serves neighborhood traffic movements over short distances. The posted speed limit is 20mph within the vicinity of the project site. Galena Street is traffic-controlled by stop signs and extends from 1st Avenue (western limit) to 7th Avenue (eastern limit). The analysis of Galena Street will

utilize the *State Highway Access Code*[1] for turn lane criteria such as turn lane lengths, storage requirements, etc.

Sixth (6th) Avenue is a two-lane, north-south, paved roadway. This roadway is a collector roadway that serves neighborhood traffic movements over short distances. The posted speed limit is 20mph within the vicinity of the project site. The analysis of 6th Avenue will utilize the *State Highway Access Code*[1] for turn lane criteria such as turn lane lengths, storage requirements, etc.

The 602 Galena Street project collected traffic data at the analysis intersections. A seasonal adjustment factor and volume balancing were applied to the count data as described in the 6*02 Galena Street TIS*[7]. A seasonal adjustment factor was applied to equate the data to Main Street's peak July traffic volumes.

An annual traffic growth rate of 1% was used for the expected growth on the Town of Frisco's local roads. A standard 1% traffic growth rate was used based on previous Town of Frisco traffic impact studies performed by McDowell Engineering. Additionally, many of the lots surrounding the roads studied in this analysis are nearly fully developed. Therefore, to provide a conservative estimate of future traffic, a growth rate of 1% was applied.

The 602 Galena Street project is constructing 54 multifamily residential units and 5,000sf of office space. Traffic projections from the *602 Galena Street TIS*[7] were added to both short-term and long-term background traffic projections.

The Town of Frisco is not currently planning for any capital improvement projects near the project vicinity.

Project Traffic:

The applicant proposes to develop 11 residential dwelling units. The estimated trip generation for the proposed development was calculated using the Institute of Transportation Engineer's (ITE's) *Trip Generation Handbook*[5]. The proposed land uses fall under two land use codes (LUC) per the Institute of Transportation Engineers' 11th *Edition of the Trip Generation Manual*[4] *(Trip Generation Manual)*, #210 Single-Family Detached Housing and #215 Single-Family Attached Housing. Given the small size of the project, ITE's average rate equations were applied to the proposed land uses.

A 10% multimodal reduction was applied when calculating the total number of vehicular trips. The project site is located near historic downtown Frisco with commercial/retail buildings. Biking or walking to these commercial/retail buildings is possible due to the proximity.

A vehicle trip refers to every time a vehicle enters (or leaves) the site. It is not the number of cars that will be added to the site. In total, the project is anticipated to generate 76 vehicle trips per day (vpd). This is inclusive of 8 vehicle trips per hour (vph) in the morning peak hour and 9vph in

[1] *State Highway Access Code. State of Colorado, 2002.*

the evening peak hour. Refer to **Table 1** for trip generation calculations and further breakdown of these trips.

Table 1: Trip Generation Table

			ITE Trip Generation Equation[3]			Average Weekda	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 (vph)	% Trips	Trips (vph)	% Trips	Trips (vph)	% Trips	Trips (vph)
Proposed Land Use														
#210 - Single-Family Detached Housing	2 DU	Type a= b=	Rate 9.43	Rate 0.75	Rate 0.99	19	26%	1	74%	2	64%	2	36%	1
#215 - Single-Family Attached Housing	9 DU	Type a= b=	Rate 7.20	Rate 0.55	Rate 0.61	65	25%	2	75%	4	62%	4	38%	3
Multi-Modal Reduction	*-10%*					*-8*		*0*		*-1*		*-1*		*0*
Proposed New Trips						**76**		**3**		**5**		**5**		**4**

Notes:

[1] Values obtained from *Trip Generation, 11th Edition,* Institute of Transportation Engineers, September 2021.

[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

The anticipated trip distribution routes anticipated with the arrival and departure of site traffic are influenced by several factors including the following:

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

All the commercial developments and population centers are located south of the project site. Therefore, it was assumed 100% of the site-generated traffic would originate south of the project site. Ninety percent of traffic is likely to access the site via 6th Avenue. Ten percent of traffic is likely to access the site via Galena Street. Seventy percent of the 6th Avenue traffic is anticipated to be to/from the east. Twenty percent of the 6th Avenue traffic is anticipated to be to/from the west.

Total Traffic:

The total traffic anticipated is the sum of the forecasted background traffic with the site-generated traffic.

Figure 2 depicts the methodology of forecasting the background traffic volumes, site-generated traffic, and total Year 2045 long-term traffic projections.

When the trip generation expected for the residential development (**Table 1**) is applied to the estimated trip distribution, the result is the anticipated assignment of trips on the roadway system. Refer to **Figure 3**.

The long-term Year 2045 total traffic conditions were calculated by adding the Year 2045 background traffic volumes and the site's anticipated project-generated traffic. **Figure 4** depicts the projected long-term year 2045 total traffic conditions.

Figure 2: Traffic Forecasting Methodology

Traffic Analysis

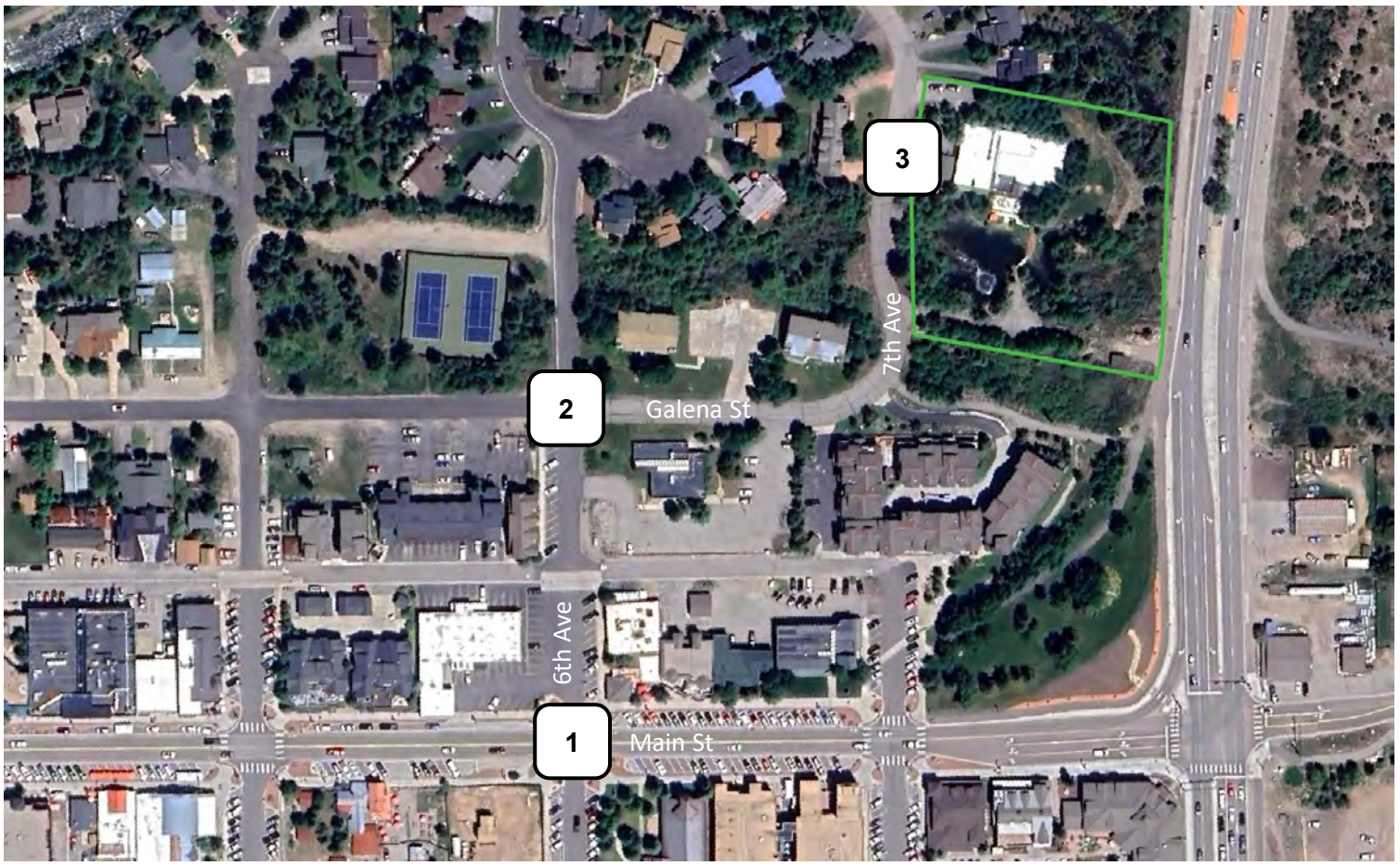
The *Access Code*[1] was used for auxiliary turn lane requirements. The *Access Code* establishes the need for auxiliary turn lanes on Colorado's highway network. Several criteria apply when determining the traffic volume thresholds such as highway classification, posted speed limit, turning traffic volumes, and safety/operations.

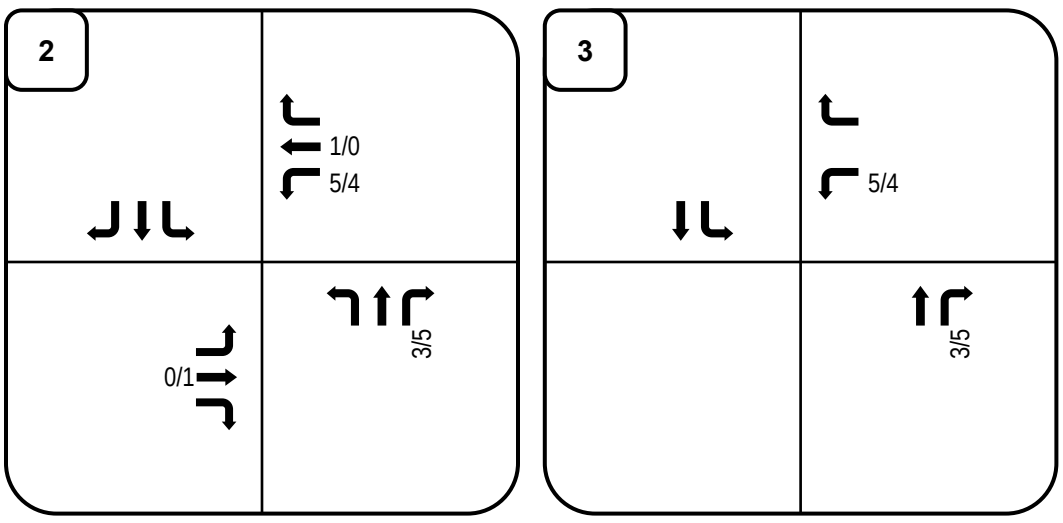
Main Street, 6th Avenue, and Galena Street were assumed to be categorized as a non-rural arterial (NR-C) with a posted speed limit of 20mph. Section 3.12(4) of the *Access Code* requires auxiliary turn lanes for certain turning movement volumes. Auxiliary turn lanes are required on Main Street, 6th Avenue, and Galena Street for more than 50 vehicles/hour making an inbound right turn movement and 25 vehicles/hour making an inbound left turn movement. Acceleration lanes are generally not required unless warranted for safety and operations of the highway.

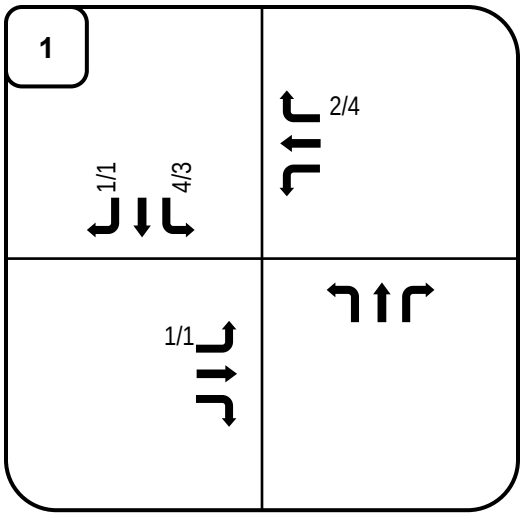
An *HCM* Level of Service (LOS) analysis for long-term total traffic conditions was performed for the study area intersections. The results can be seen in **Table 2**.

Based upon the traffic analyses, all intersections are anticipated to operate at an acceptable overall LOS A through long-term Year 2045 total traffic conditions.

Figure 3: Project Generated Traffic Assignment







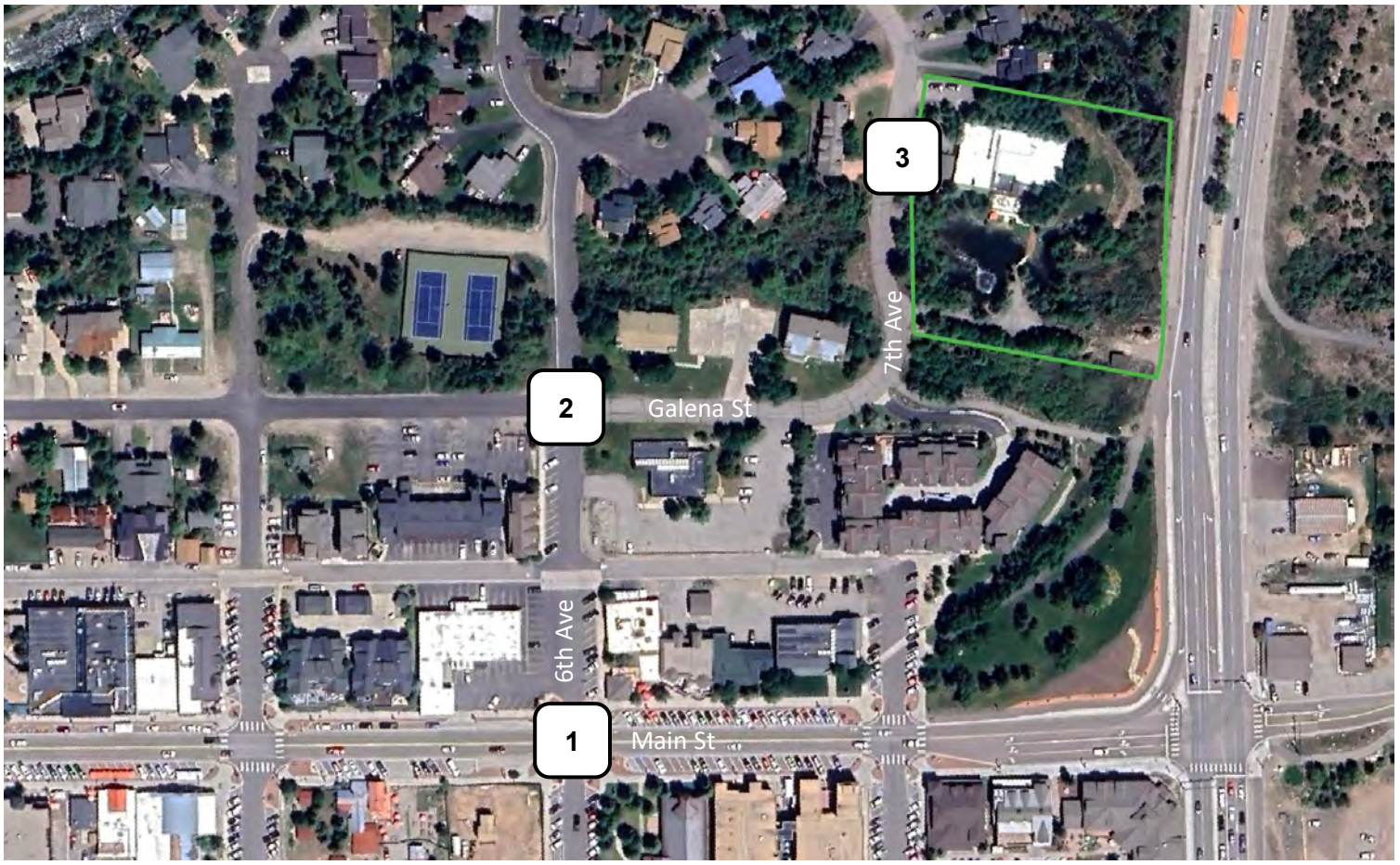
LEGEND:
Directional Distribution = Inbound% (Outbound %)
AM/PM/SAT Volumes = XX/XX/XX VPH (in PCEs)
Turning Movements

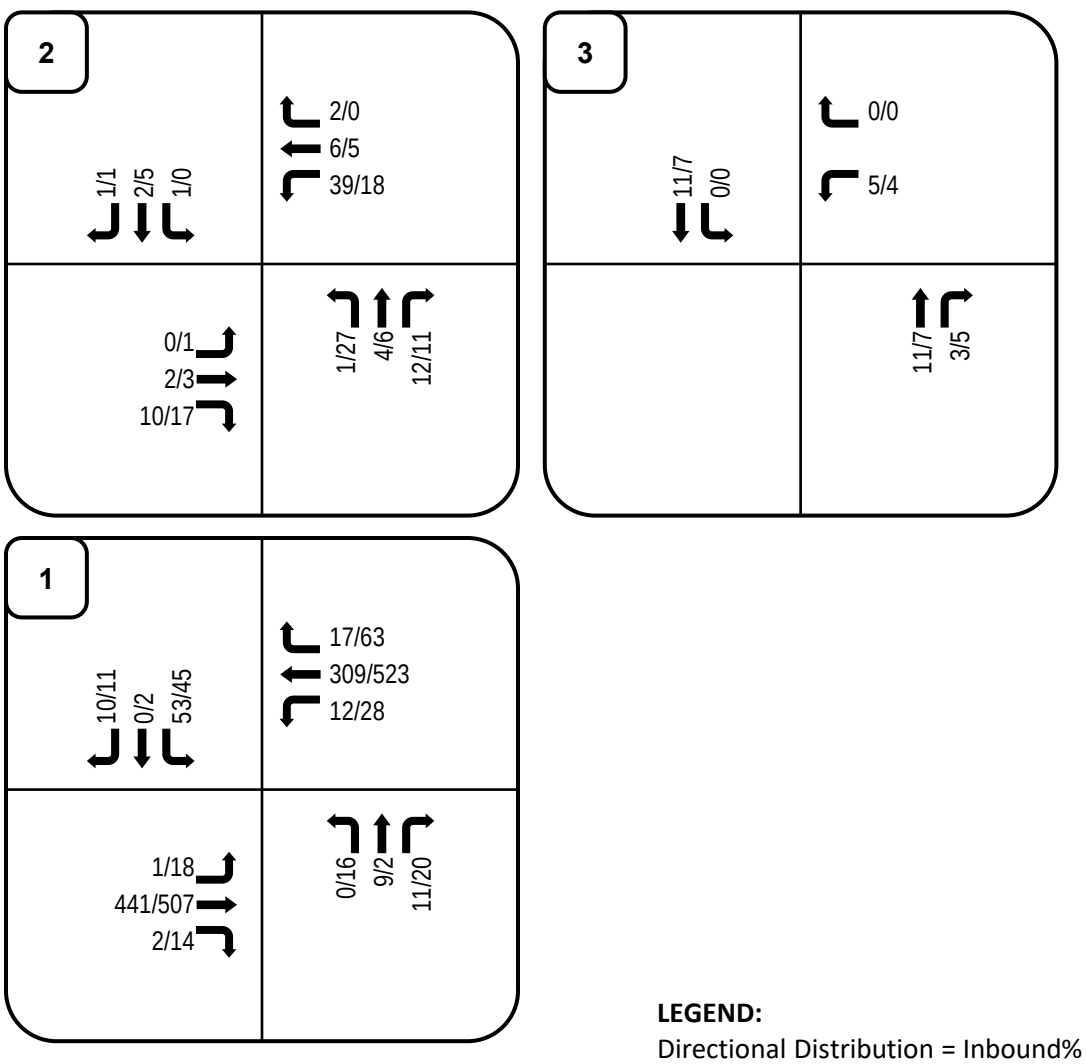
McDOWELL ENGINEERING, LLC
TRANSPORTATION ENGINEERING CONSULTANTS

Project Number	M1669
Prepared By	KJS
	4/28/2025

200 N 7th Ave
Frisco, CO

Figure 4: Year 2045 Total Traffic





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

McDOWELL ENGINEERING, LLC
TRANSPORTATION ENGINEERING CONSULTANTS

Project Number	M1669
Prepared By	KJS
	4/28/2025

200 N 7th Ave
Frisco, CO

Table 2: Level of Service (LOS) Table

#	Int.	Traffic Control	Approach	Year 2045 Total Level of Service (Delay in Seconds)	
				AM	PM
1	Main St & 6th Ave	NB/SB Stop	EB	A (0.0)	A (0.3)
			WB	A (0.3)	A (0.4)
			NB	B (14.5)	D (25.1)
			SB	C (21.4)	E (44.9)
2	Galena St & 6th Ave	EB/WB Stop	EB	A (8.5)	A (8.6)
			WB	A (8.9)	A (9.4)
			NB	A (0.4)	A (4.5)
			SB	A (1.8)	A (0.0)
3	West Acc. & 6th Ave	WB Stop	WB	A (8.7)	A (8.6)
			NB	A (0.0)	A (0.0)
			SB	A (0.0)	A (0.0)

Main Street & 6th Avenue: No auxiliary turn lanes are required at this intersection.

The north leg is anticipated to operate at a failing LOS E with Year 2045 background traffic conditions due to the high southbound left turn traffic volumes. All other legs are anticipated to operate at an acceptable LOS.

This condition occurs with or without traffic from the proposed project.

The addition of a southbound left turn lane will not significantly impact the operations at this intersection. No auxiliary turn lanes are warranted due to operational or safety reasons.

A more impactful option would be to convert the intersection into an all-way stop in the future if MUTCD all-way stop warrants are met.

6th Avenue & Galena Street: No auxiliary turn lanes are required at this intersection.

This intersection is anticipated to have acceptable LOS conditions through the long-term Year 2045 total traffic conditions. The 95th percentile vehicle queue is anticipated to be less than one vehicle. Therefore, no auxiliary turn lanes are warranted due to operational or safety reasons.

N. 7th Avenue & Site Access: No deceleration lanes are warranted at this intersection.

This intersection is anticipated to have acceptable LOS conditions through the long-term Year 2045 total traffic conditions. The 95th percentile vehicle queue is anticipated to be less than one vehicle. Therefore, no auxiliary turn lanes are warranted due to operational or safety reasons.

Site Access Recommendations:

Sight distance requirements are determined by Section 3.2.2 of the American Association of State Highway and Transportation Officials (AASHTO): *A Policy on Geometric Design of Highways and Streets*[6] (AASHTO's Greenbook). Table 3-1 *Stopping Sight Distance on Level Roadways* identifies sight distance requirements based on speed limits. A roadway with a posted speed limit of 20mph requires a 115ft of sight distance. The civil and landscape design shall keep sight distance triangles clear.

The site access shall be constructed to the current Town of Frisco Standards.

Summary:

Based upon the analysis presented in this report, The Glade development at 200 N. 7th Avenue in Frisco is anticipated to be successfully incorporated into the existing roadway network.

Please call if you would like any additional information or have any questions regarding this memorandum.

Sincerely,
McDowell Engineering, LLC

Kari J. McDowell, PE, PTOE
Traffic Engineer

Appendix:

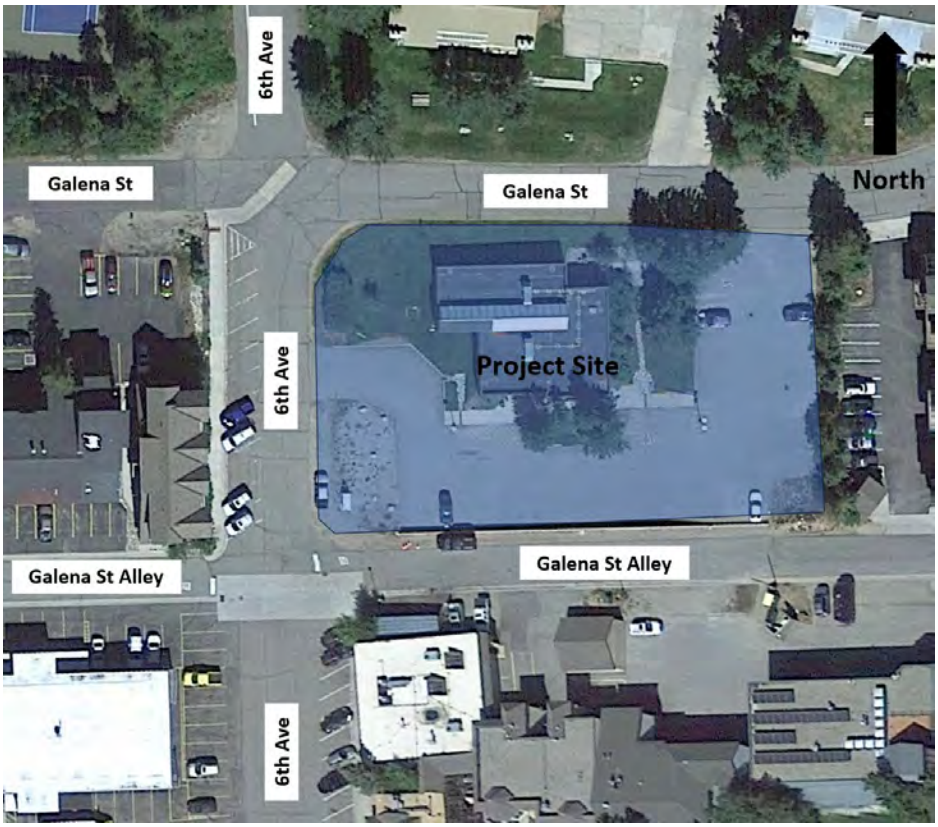
1. *602 Galena Street TIS*[7]
2. Synchro reports

Reference Documents:

1. *State Highway Access Code*. State of Colorado, 2002.
2. Colorado Department of Transportation, Online Transportation Information System, 2023.
3. *Highway Capacity Manual, 6th Edition*. Transportation Research Board, 2016.
4. *Trip Generation Manual, 11th Edition*. Institute of Transportation Engineers, 2021.
5. *Trip Generation Handbook, An ITE Recommended Practice*. Institute of Transportation Engineers, 2001.
6. *A policy on Geometric Design of Highways and Streets 7th Edition*. American Association of State Highway and Transportation Officials, 2018.
7. *Transportation Impact Analysis for 602 Galena Street, Frisco, Colorado.* McDowell Engineering, February 24, 2025.

Appendix 1 - 602 Galena Street TIS

Transportation Impact Analysis
for
602 Galena Street
Frisco, Colorado



February 24, 2025

PREPARED FOR:
Allen-Guerra Architecture
PO Box 5540
Frisco, CO 80443
970.453.7002
Contact: Andy Stabile

PREPARED BY:
McDowell Engineering, LLC
PO Box 4259
Eagle, CO 81631
970.623.0788

Contact: Kari J. McDowell Schroeder, PE, PTOE
Project Number: M1627

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-eight 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.

Transportation Impact Analysis

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Figures and Tables

1.0 Project Description

McDowell Engineering has prepared this Level Three Auxiliary Transportation Impact Analysis for the proposed residential development at 602 Galena Street in Frisco, Colorado. The purpose of this transportation impact analysis is to forecast and analyze the impacts of the additional traffic volumes associated with the residential development on the surrounding roadway network.

The development is located directly northeast of the Galena Street Alley and 6th Avenue intersection. The proposed development will be constructed on a single lot. The Frisco Colorado Workforce Center currently occupies the proposed project site. The owner is proposing to demolish the existing workforce building and develop multifamily residential units.

The project site currently has two accesses located on the north and west side of the parcel. One access has direct connectivity to Galena Street and the other to 6th Avenue. The proposed site plan is shown in **Figure 1**.

Figure 1: Site Plan

1.1 Project Phasing

The residential development at 602 Galena Street is proposed to be constructed in one phase. This study analyzes the subdivision's buildout condition, which is estimated to be completed in 2024. Analysis has been performed for both short-term buildout conditions in Year 2024 and long-range planning conditions in Year 2045.

1.2 Project Access Locations

The residential development at 602 Galena Street will have two accesses with direct connectivity to Galena Street and 6th Avenue. Refer to the site plan in **Figure 1**.

1. Galena Street & North Site Access
2. 6th Avenue & West Site Access

1.3 Intersection Analysis Locations

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

1. Galena Street & 6th Avenue
2. Galena Street Alley & 6th Avenue
3. Main Street & 6th Avenue

2.0 Existing Conditions

2.1 Road Network

Galena Street: Galena Street is a two-lane, east-west, paved roadway. This roadway is a collector roadway that serves neighborhood traffic movements over short distances. The posted speed limit is 20mph within the vicinity of the project site. Galena Street is traffic-controlled by stop signs and extends from 1st Avenue (western limit) to 7th Avenue (eastern limit).

6th Avenue: 6th Avenue is a two-lane, north-south, paved roadway. This roadway is a collector roadway that serves neighborhood traffic movements over short distances. The posted speed limit is 20mph within the vicinity of the project site.

Main St: Main Street is a two-lane, east-west, paved roadway. This is a major collector roadway that serves intracommunity traffic. The posted speed limit is 20mph near the project vicinity. Main Street is controlled by stop signs through the Town of Frisco.

2.2 Traffic Data Collection

2023 Traffic Data Collection: Current Year 2023 traffic data was collected at the intersections of 6th Avenue with Galena Street and the Galena Street Alley. Weekday peak hour turning movement counts were taken on Thursday, August 17, 2023, from 7:00am – 9:00am and 4:00pm – 6:00pm. The observed weekday morning peak traffic hour occurred between 8:00am – 9:00am. The observed weekday afternoon peak traffic hour occurred between 4:30pm – 5:30pm.

These traffic counts were taken in August. However, historical traffic data shows that the traffic peak near Frisco, CO occurs in July. A seasonal adjustment factor (SAF) was applied to the August traffic counts to equate them to peak season traffic counts. See **Section 3.4** for more details regarding the SAF factor applied to the June 2023 traffic counts.

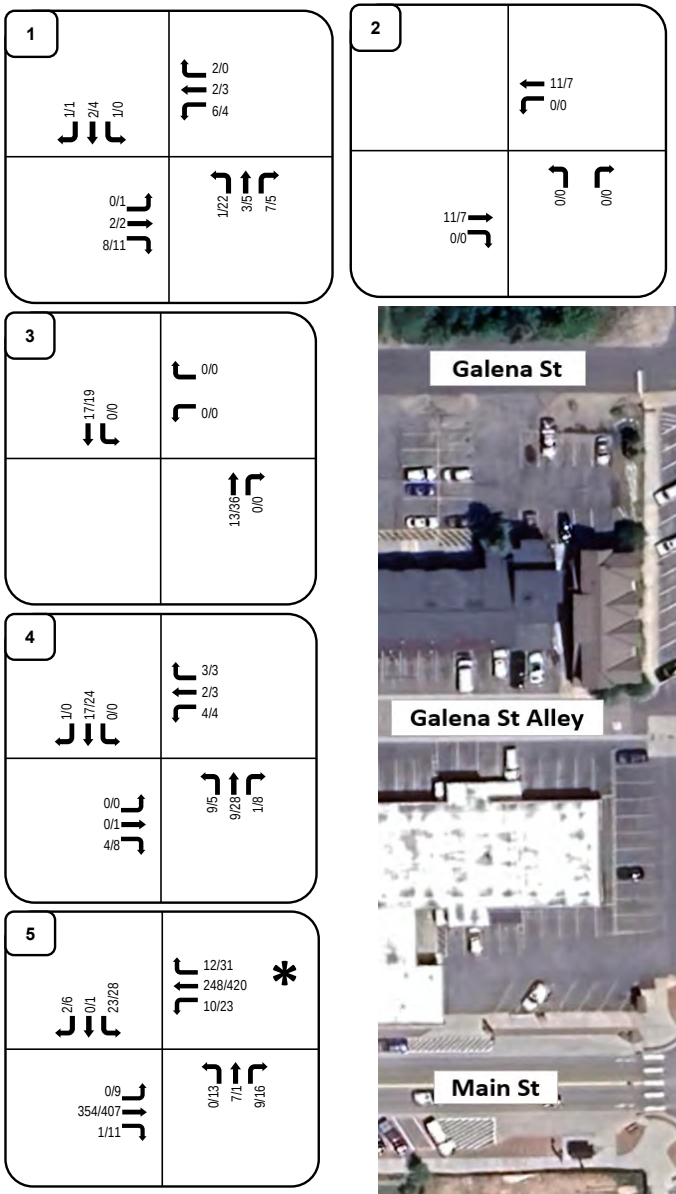
2024 Traffic Data Collection: Year 2024 traffic data was collected at the 6th Avenue and Main Street intersection. Weekday morning peak hour turning movement counts were taken on Thursday, April 25, 2024, from 7:00am – 9:00am. Weekday afternoon peak hour turning movement counts were taken on Wednesday, April 24, 2024, from 4:00pm – 6:00pm.

These traffic counts were taken in April. However, historical traffic data shows that the traffic peak near Frisco, CO occurs in July. A SAF was applied to the April traffic counts to equate them to peak season traffic counts. See **Section 3.4** for more details regarding the SAF applied to the Year 2024 June traffic counts. Year 2024 April traffic counts were backtracked to Year 2023 to match with the traffic counts taken in Year 2023 for the previous study intersections. Additionally, the SAFs applied to the intersections were different based upon when they were taken. Therefore, Intersection #5 was volume-balanced.

Site Access Traffic Volumes: Traffic counts were not collected at the north and south site access. Therefore, the traffic counts at the Galena Street & 6th Avenue intersection and at the Galena Street Alley & 6th Avenue intersection were used to extrapolate the traffic volumes at the site accesses.

Figure 2 shows the Year 2023 existing traffic volumes with the SAF. The raw traffic data collected can be found in the **Appendix**.

Figure 2: Year 2023 EXIST with SAF & Adjusted Traffic



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

***Intersection #5 counts were taken in April Year 2024. They were seasonally adjusted and balanced to intersection #4**

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3.0 Infrastructure Assumptions

3.1 Existing & Committed Capital Improvement Projects

The Town of Frisco is not currently planning for any capital improvement projects near the project vicinity.

3.2 Planned or Existing Land Development Projects

There are currently no planned or existing land development projects near the project vicinity.

3.3 Background Traffic Growth

A traffic growth rate of 1.0% was used for the expected annual growth on the Town of Frisco's local roads. A standard 1.0% traffic growth rate was used based on previous direction from the Town of Frisco. Many of the lots surrounding the roads studied in this analysis are fully developed. Therefore, the 1.0% annual growth rate on 6th Avenue, Galena Street, and Main Street is considered a conservative (high) estimate of future traffic growth.

3.4 Seasonal Adjustment Factor

As mentioned in **Section 2.3**, a SAF was used to convert the August 2023 and April 2024 counts to equivalent peak July 2023 summer traffic volumes. The SAFs were calculated using CDOT *OTIS's*[1] continuous traffic count data SAF on State Highway 9 near Frisco, CO. This SAF was then applied to the street network studied in this analysis. The SAF for the August 2023 traffic counts equaled 1.05. The SAF for the April 2024 traffic counts equaled 1.43. These factors were applied to the street network in this analysis. The continuous traffic count data used to derive the seasonal adjustment factor can be found in the **Appendix**.

Projected Year 2024 and 2045 background traffic are shown in **Figure 3** and **Figure 4**, respectively.

[1] Colorado Department of Transportation, Online Transportation Information System, 2023.

Figure 3: Year 2024 Background Traffic

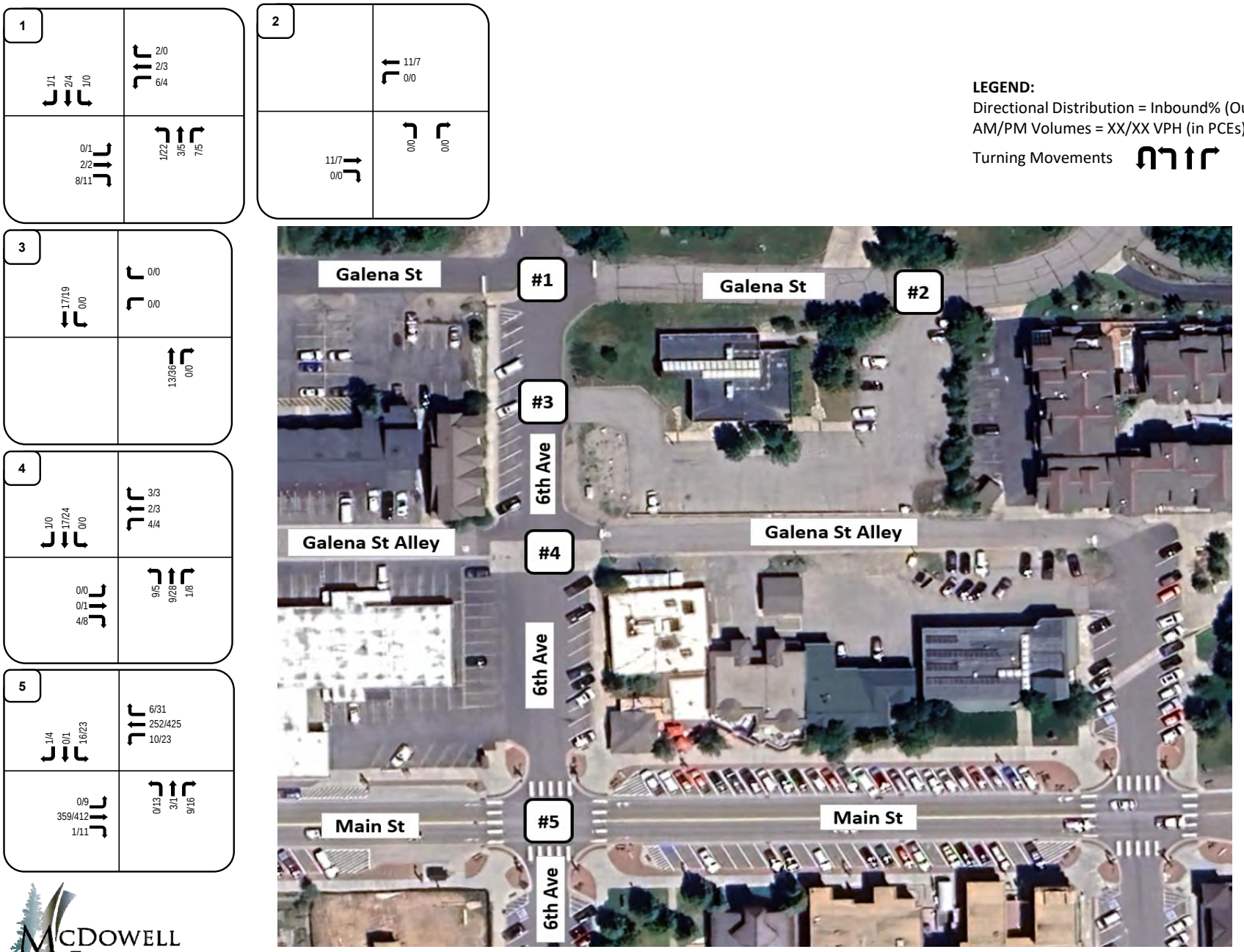
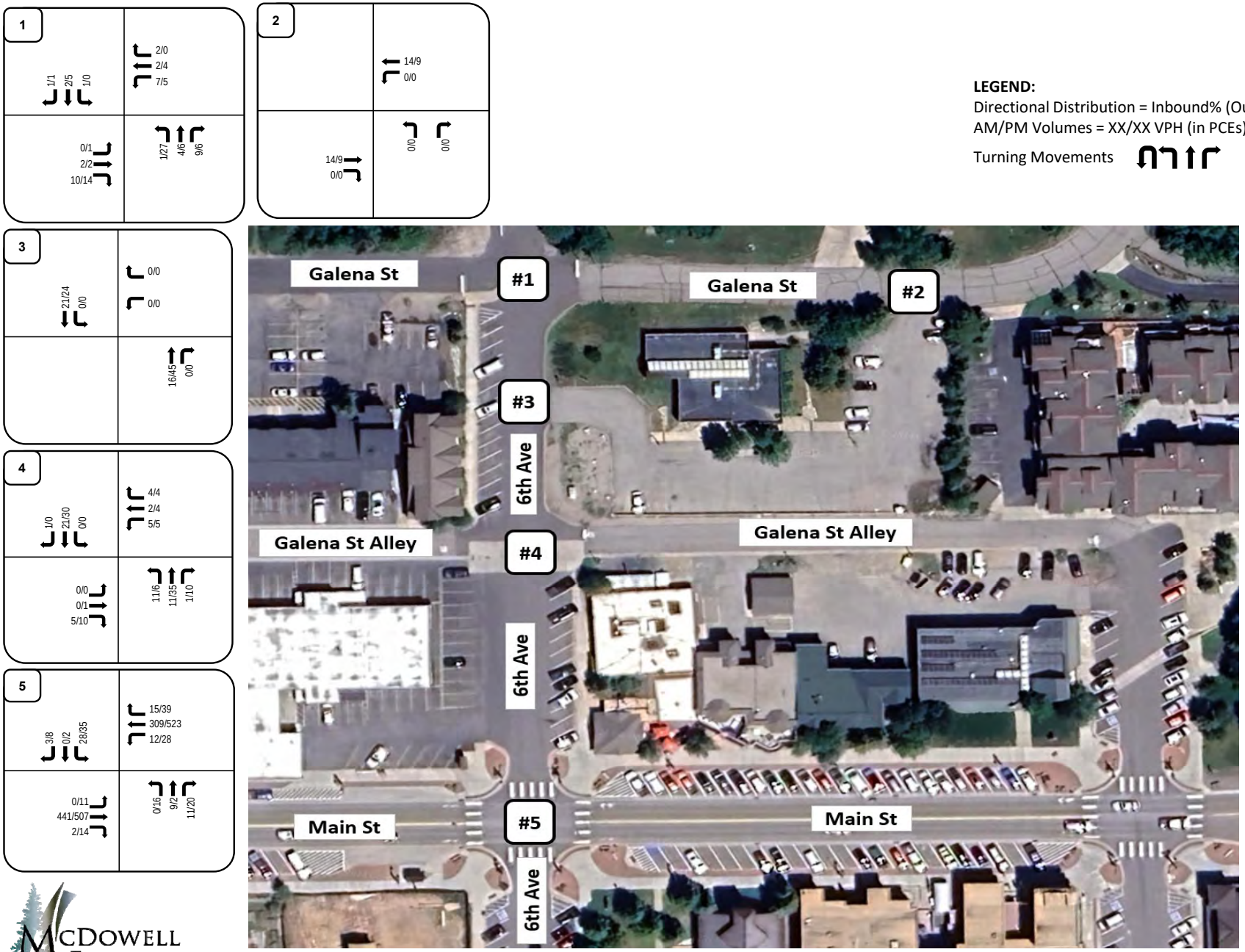


Figure 4: Year 2045 Background Traffic



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3.5 Background Intersection Traffic Levels of Service and Recommendations

Using *Highway Capacity Manual 6th Edition 2016*[2] *(HCM)* methodology, Synchro Version 10 software was used to determine the delay (in seconds) 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 queueing that may cause severe congestion affecting other traffic movements in the intersection. This condition usually warrants improving the intersection.	>80	>50

Table 2 shown below shows the resulting LOS as determined by *HCM* analysis:

Table 2: Background Traffic Level of Service

#	Int.	Traffic Control	Approach or Control Delay	Approach	Year 2023 Existing Level of Service (Delay in Seconds)		Year 2024 Background Level of Service (Delay in Seconds)		Year 2045 Background Level of Service (Delay in Seconds)	
					AM	PM	AM	PM	AM	PM
1	Galena St & 6th Ave	EB/WB Stop	A	EB	A (8.5)	A (8.6)	A (8.5)	A (8.6)	A (8.5)	A (8.6)
			A	WB	A (8.7)	A (9.2)	A (8.7)	A (9.2)	A (8.8)	A (9.3)
			A	NB	A (0.6)	A (5.2)	A (0.6)	A (5.2)	A (0.5)	A (4.9)
			A	SB	A (1.8)	A (0.0)	A (1.8)	A (0.0)	A (1.8)	A (0.0)
2	North Acc. & Galena St	NB Stop	A	EB	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
			A	WB	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
			A	NB	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
3	West Acc. & 6th Ave	WB Stop	A	WB	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
			A	NB	A (0.0)	A (0.0)	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)	A (0.0)	A (0.0)
4	Galena St Alley & 6th Ave	EB/WB Stop	A	EB	A (8.4)	A (8.6)	A (8.4)	A (8.6)	A (8.4)	A (8.6)
			A	WB	A (8.8)	A (9.0)	A (8.8)	A (9.0)	A (8.8)	A (9.1)
			A	NB	A (3.5)	A (0.8)	A (3.5)	A (0.8)	A (3.5)	A (0.9)
			A	SB	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
5	Main St & 6th Ave	NB/SB Stop	A	EB	A (0.0)	A (0.3)	A (0.0)	A (0.3)	A (0.0)	A (0.3)
			A	WB	A (0.4)	A (0.6)	A (0.4)	A (0.6)	A (0.4)	A (0.8)
			A	NB	B (12.6)	C (17.0)	B (11.4)	C (17.1)	B (14.5)	C (23.3)
			A	SB	C (15.8)	C (22.9)	C (15.6)	C (23.1)	C (19.9)	E (37.4)

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

As can be seen in **Table 2**, most intersections are anticipated to operate at an acceptable overall LOS A through long-term Year 2045 background traffic conditions.

Galena Street & 6th Avenue: This intersection is anticipated to operate at an acceptable LOS A through Year 2045 background traffic conditions.

North Access & Galena Street: This intersection is anticipated to operate at an acceptable LOS A through Year 2045 background traffic conditions.

West Access & 6th Avenue: This intersection is anticipated to operate at an acceptable LOS A through Year 2045 background traffic conditions.

Galena Street Alley & 6th Avenue: This intersection is anticipated to operate at an acceptable LOS A through Year 2045 background traffic conditions.

Main Street & 6th Avenue: This intersection is northbound and southbound stop-controlled. Vehicles on the north and south legs must wait for a gap on Main Street to be able to merge onto the road. Left turns onto Main Street are difficult to execute due to the high eastbound and westbound traffic volumes on Main St.

The north leg is anticipated to operate at a failing LOS E with Year 2045 background traffic conditions due to the high southbound left turn traffic volumes and high Main Street traffic volumes. All other legs are anticipated to operate at an acceptable LOS. This condition occurs with or without traffic from the proposed project.

This situation with failing left turns onto Main Street will occur throughout the downtown corridor at many intersections that do not have an all-way stop condition. The intersection could be converted to an all-way stop if MUTCD all-way stop warrants are met in the future.

The Synchro reports can be found in the **Appendix**.

4.0 Project Traffic

4.1 Trip Generation

Existing Land Use: The existing lot currently has the Frisco Colorado Workforce Center building. This building was estimated to measure approximately 5,000 square ft. This building will be demolished to make space for the proposed residential development.

Proposed Residential Development: The owner is proposing to develop 54 residential dwelling units.

Trip Generation Analysis: The existing and proposed land uses fall under two land use codes (LUC) per the Institute of Transportation Engineers' 11th *Edition of the Trip Generation Manual*[3] *(Trip Generation Manual)*, #220 Multifamily Housing (Low-Rise), #710 – General Office Building.

As per ITE's *Trip Generation Handbook*[4] methodology, the trip generation regression equations were utilized as part of this analysis.

Multimodal Reduction: A 5% multimodal reduction was applied when calculating the total number of vehicular trips. The project site is located near several commercial/retail buildings. Biking or walking to these commercial/retail buildings is possible due to their proximity. The low-speed limits on Galena Street, 6th Avenue, and Galena Street Alley encourage multimodal modes of transportation. Therefore, a multimodal reduction was applied.

Project Trip Generation: The project is anticipated to generate a total of 400 vehicle trips per day (vpd) on the average weekday, including 44 vehicles per hour (vph) during the morning peak hour and 55vph during the evening peak hour.

This equates to an increase of 318vpd over the traffic generated by the existing land use. The new residential use is anticipated to generate an additional 32vph in the morning peak hour and 42vph in the evening peak hour.

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

[3] Trip Generation Manual, 11th Edition. Institute of Transportation Engineers, 2021.
[4] Trip Generation Handbook, An ITE Recommended Practice. Institute of Transportation Engineers, 2001.

Table 3: Trip Generation Table

ITE Code	Units [2]	Eq. Coef	ITE Trip Generation Equation[3] Avg. Weekday	AM Peak Hour	PM Peak Hour	Average Weekday Trips (VPD)	Morning Peak Hour Inbound % Trips	Morning Peak Hour Inbound Trips	Morning Peak Hour Outbound % Trips	Morning Peak Hour Outbound Trips	Evening Peak Hour Inbound % Trips	Evening Peak Hour Inbound Trips	Evening Peak Hour Outbound % Trips	Evening Peak Hour Outbound Trips
Existing Land Use														
#710 - General Office Building	5 KSF	Type a= b=	B 0.87 3.05	B 0.86 1.16	B 0.83 1.29	86	88%	11	12%	2	17%	3	83%	11
Multi-Modal Reduction	*-5%*					*-4*		*-1*		*0*		*0*		*-1*
Existing Trips						**82**		**10**		**2**		**3**		**10**
Proposed Land Use														
#220 - Multifamily Housing (Low-Rise)	54 DU	Type a= b=	A 6.41 75.31	A 0.35 28.13	A 0.42 34.78	421	24%	11	76%	36	62%	36	38%	22
Multi-Modal Reduction	*-5%*					*-21*		*-1*		*-2*		*-2*		*-1*
Proposed Trips						**400**		**10**		**34**		**34**		**21**
Proposed New Trips						**318**		**0**		**32**		**31**		**11**

Notes:

[1] Values obtained from *Trip Generation, 11th Edition,* Institute of Transportation Engineers, September 2021.

[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

4.2 Trip Distribution

The anticipated arrival and departure routes of project-generated traffic is influenced by several factors including the following:

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

Directional Distribution: All the commercial developments and population centers are located south of the project site. Therefore, it was assumed 100% of the site-generated traffic would originate south of the project site. The site plan shown in **Figure 1** shows the internal road will be one way with the west access serving as the site entrance and the north accesses serving as the site exit. Refer to **Figure 5** for a detailed graphic of the anticipated directional distribution.

4.3 Site-Generated Traffic

When the trip generation expected for the residential development (**Table 3**) is applied to the estimated trip distribution (**Figure 5**), the result is the anticipated

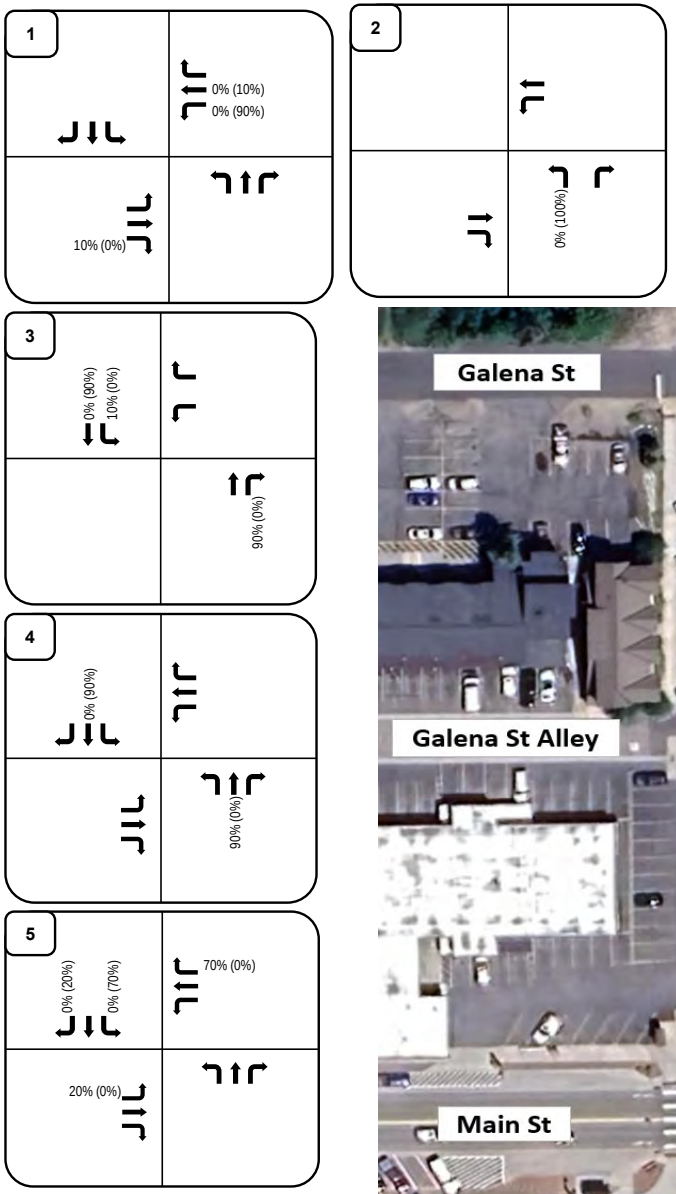
assignment of trips on the roadway system. **Figure 6** depicts the new vehicle trips that are anticipated from residential development.

4.4 Total Traffic

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

For Year 2024, the background traffic (**Figure 3**) added to the site-generated traffic (**Figure 6**) yields the total Year 2024 traffic in **Figure 7**. For Year 2045, the background traffic (**Figure 4**) added to the site-generated traffic (**Figure 6**) yields the total Year 2045 traffic in **Figure 8**.

Figure 5: Project Generated Traffic Distribution (602 Galena St)



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

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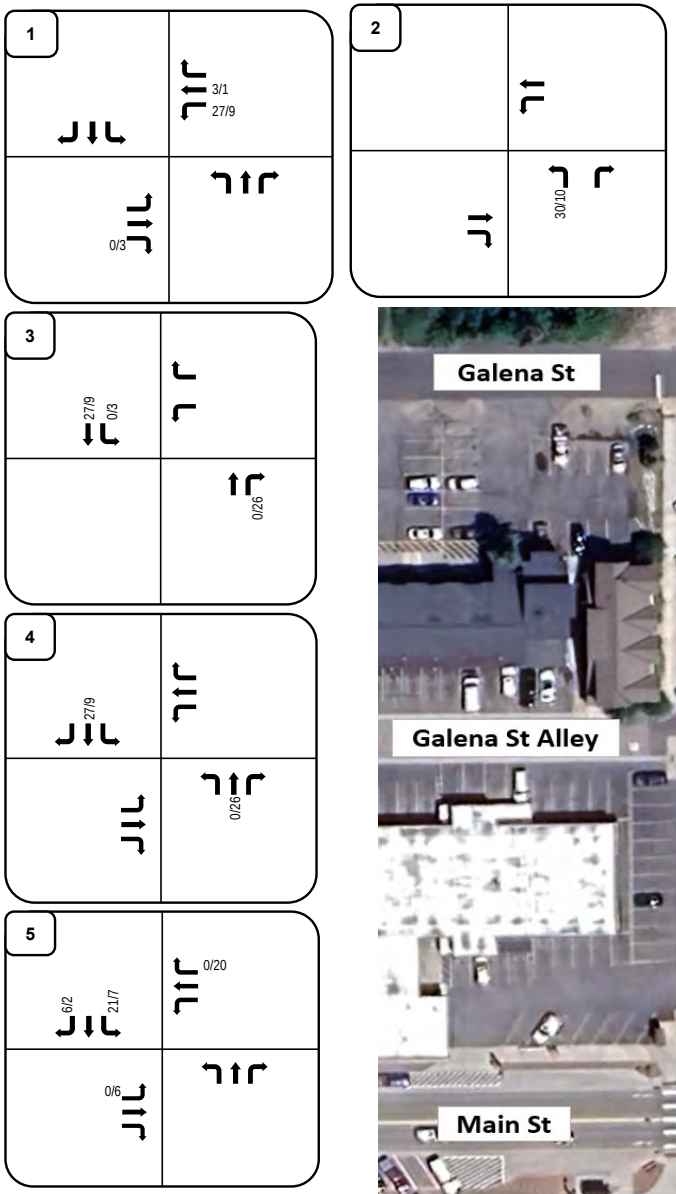
Figure 6: Project Generated Traffic Assignment (602 Galena St)



LEGEND:
Directional Distribution = Inbound% (Outbound %)
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Turning Movements

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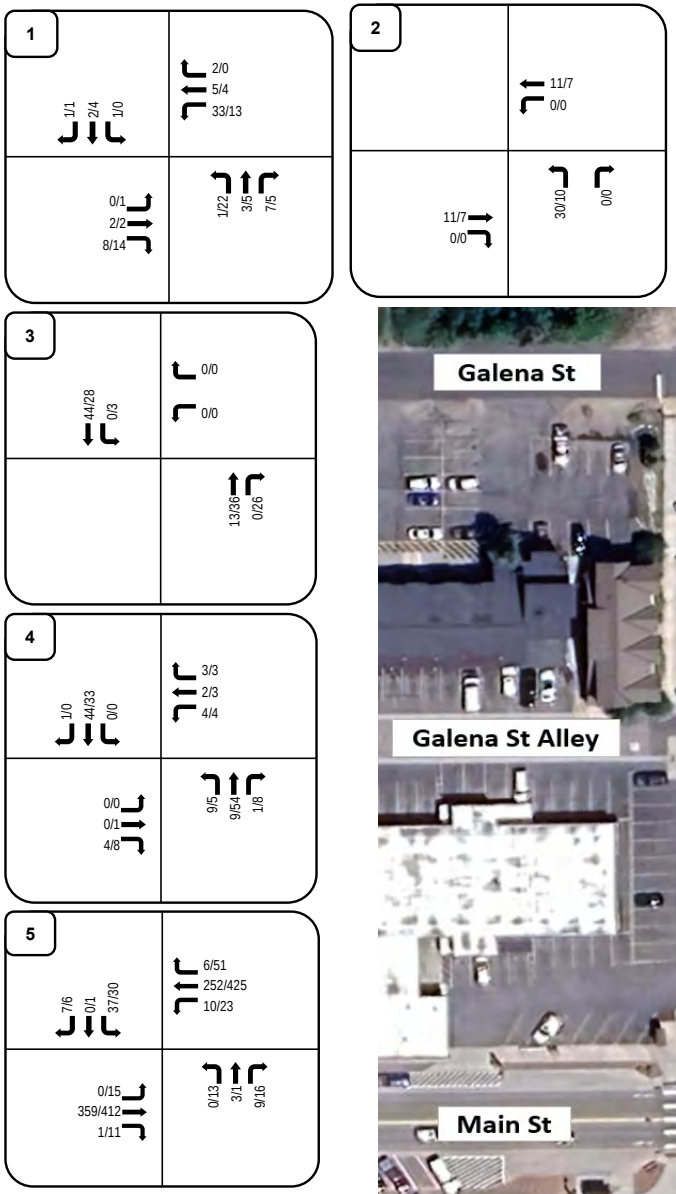
Figure 7: Year 2024 Total Traffic



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

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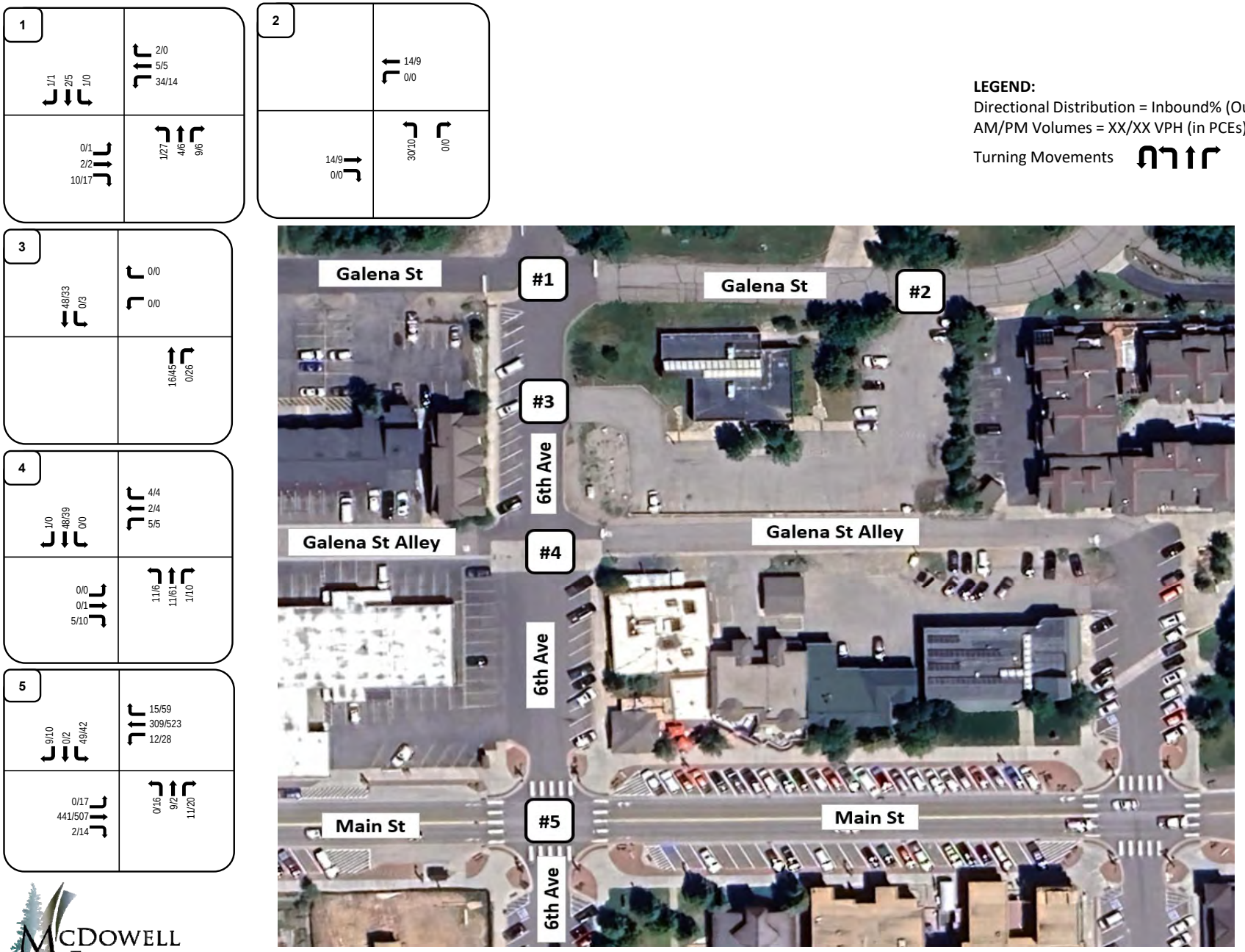
Figure 8: Year 2045 Total Traffic



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

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5.0 Traffic Analysis

5.1 Total Traffic Level of Service

An *HCM* analysis under total traffic conditions was performed for the proposed site access under both short-term Yer 2024 and long-term Year 2045 traffic conditions. The results can be seen in **Table 4**.

Table 4: Total Traffic Level of Service

#	Int.	Traffic Control	Approach or Control Delay	Approach	Year 2024 Total Level of Service (Delay in Seconds)		Year 2045 Total Level of Service (Delay in Seconds)	
					AM	PM	AM	PM
1	Galena St & 6th Ave	EB/WB Stop	A	EB	A (8.5)	A (8.6)	A (8.5)	A (8.6)
			A	WB	A (8.9)	A (9.2)	A (8.9)	A (9.4)
			A	NB	A (0.6)	A (5.2)	A (0.5)	A (4.9)
			A	SB	A (1.8)	A (0.0)	A (1.8)	A (0.0)
2	North Acc. & Galena St	NB Stop	A	EB	A (0.0)	A (0.0)	A (0.0)	A (0.0)
			A	WB	A (0.0)	A (0.0)	A (0.0)	A (0.0)
			A	NB	A (8.8)	A (8.6)	A (8.8)	A (8.7)
3	West Acc. & 6th Ave	WB Stop	A	WB	A (0.0)	A (0.0)	A (0.0)	A (0.0)
			A	NB	A (0.0)	A (0.7)	A (0.0)	A (0.6)
			A	SB	A (0.0)	A (0.0)	A (0.0)	A (0.0)
4	Galena St Alley & 6th Ave	EB/WB Stop	A	EB	A (8.5)	A (8.6)	A (8.6)	A (8.6)
			A	WB	A (8.9)	A (9.2)	A (9.0)	A (9.3)
			A	NB	A (3.5)	A (0.5)	A (3.6)	A (0.6)
			A	SB	A (0.5)	A (0.0)	A (0.0)	A (0.0)
5	Main St & 6th Ave	NB/SB Stop	A	EB	A (0.0)	A (0.5)	A (0.0)	A (0.5)
			A	WB	A (0.4)	A (0.6)	A (0.4)	A (0.8)
			A	NB	B (11.7)	C (17.8)	B (14.5)	C (24.2)
			A	SB	C (15.9)	C (25.0)	C (21.0)	E (42.6)

As can be seen in **Table 4**, most intersections are anticipated to operate at an acceptable overall LOS A through long-term Year 2045 total traffic conditions.

Galena Street & 6th Avenue: This intersection is anticipated to operate at an acceptable LOS A through Year 2045 total traffic conditions.

North Access & Galena St: This intersection is anticipated to operate at an acceptable LOS A through Year 2045 total traffic conditions.

West Access & 6th Avenue: This intersection is anticipated to operate at an acceptable LOS A through Year 2045 total traffic conditions.

Galena Street Alley & 6th Avenue: This intersection is anticipated to operate at an acceptable LOS A through Year 2045 total traffic conditions.

Main Street & 6th Avenue: This intersection is northbound and southbound stop-controlled. Vehicles on the north and south legs must wait for a gap on Main Street

to be able to merge onto the road. Left turns onto Main Street are difficult to execute due to the high eastbound and westbound traffic volumes on Main St.

The north leg is anticipated to operate at a failing LOS E with Year 2045 background traffic conditions due to the high southbound left turn traffic volumes. All other legs are anticipated to operate at an acceptable LOS. This condition occurs with or without traffic from the proposed project.

This situation with failing left turns onto Main Street will occur throughout the downtown corridor at many intersections that do not have an all-way stop condition. The intersection could be converted to an all-way stop in the future is MUTCD all-way stop warrants are met.

The Synchro reports can be found in the **Appendix**

5.2 Auxiliary Turn Lane Analysis

The need for auxiliary turn lanes at the analyzed intersections was based upon the anticipated operational results from Synchro HCM analysis, turning movement volumes, through movement volumes, and posted speed limit. summarizes the recommended auxiliary turn lane requirements.

Galena Street & 6th Avenue: No auxiliary turn lanes are required at this intersection. This intersection is anticipated to have acceptable LOS conditions through the long-term Year 2045 total traffic conditions. The 95th percentile vehicle queue is anticipated to be less than one vehicle. Therefore, no auxiliary turn lanes are warranted due to operational or safety reasons.

North Access & Galena Street: No auxiliary turn lanes are required at this intersection. This intersection is anticipated to have acceptable LOS conditions through the long-term Year 2045 total traffic conditions. The 95th percentile vehicle queue is anticipated to be less than one vehicle. Therefore, no auxiliary turn lanes are warranted due to operational or safety reasons.

West Access & 6th Avenue: No auxiliary turn lanes are required at this intersection. This intersection is anticipated to have acceptable LOS conditions through the long-term Year 2045 total traffic conditions. The 95th percentile vehicle queue is anticipated to be less than one vehicle. Therefore, no auxiliary turn lanes are warranted due to operational or safety reasons.

Galena Street Alley & 6th Avenue: No auxiliary turn lanes are required at this intersection. This intersection is anticipated to have acceptable LOS conditions through the long-term Year 2045 total traffic conditions. The 95th percentile vehicle queue is anticipated to be less than one vehicle. Therefore, no auxiliary turn lanes are warranted due to operational or safety reasons.

Main Street & 6th Avenue: No auxiliary turn lanes are required at this intersection. The north leg is anticipated to operate at a failing LOS E with Year 2045 background

traffic conditions due to the high southbound left turn traffic volumes. All other legs are anticipated to operate at an acceptable LOS. This condition occurs with or without traffic from the proposed project. The addition of a southbound left turn lane will not significantly impact the operations at this intersection. No auxiliary turn lanes are warranted due to operational or safety reasons.

A more impactful option would be to convert the intersection into an all-way stop in the future is MUTCD all-way stop warrants are met.

5.3 Site Accesses Sight Distance

Sight distance requirements are determined by **Section 3.2.2** of the *American Association of State Highway and Transportation Officials (AASHTO): A Policy on Geometric Design of Highways and Streets*[5] *(AASHTO's Greenbook)*. *Table 3-1 Stopping Sight Distance on Level Roadways*[3] identifies sight distance requirements based on speed limits. A roadway with a posted speed limit of 20mph requires a 115ft of sight distance. The civil and landscape design shall keep sight distance triangles.

[5] AASHTO's A policy on Geometric Design of Highways and Streets

6.0 Summary and Recommendations

The proposed development at 602 Galena Street will be constructed on one lot. The lot currently has the Frisco Colorado Workforce Center building. The workforce center building will be demolished to accommodate the proposed 54 residential dwelling units.

Trip Generation: The project is anticipated to generate a total of 400 vehicle trips per day (vpd) on the average weekday, including 44 vehicles per hour (vph) during the morning peak hour and 55vph during the evening peak hour.

This equates to an increase of 318vpd over the traffic generated by the existing land use. The new residential use is anticipated to generate an additional 32vph in the morning peak hour and 42vph in the evening peak hour.

Site Access: The project site currently has two accesses located on the north and west side of the parcel. One access has direct connectivity to Galena Street and the other to 6th Avenue. The proposed site plan is shown in **Figure 1**.

Background and Total Level of Service and Recommendations: As can be seen in **Table 2** and **Table 5**, most intersections are anticipated to operate at an acceptable overall LOS A through long-term Year 2045 total traffic conditions. No auxiliary turn lanes are required at the analyzed intersections.

The north leg of the Main Street & 6th Avenue intersection is anticipated to operate at a failing LOS E with Year 2045 background traffic conditions due to the high southbound left turn volumes and high Main Street traffic volumes. All other legs are anticipated to operate at an acceptable LOS. This condition occurs with or without traffic from the proposed project.

No auxiliary turn lanes are required at this intersection. The addition of a southbound left turn lane will not significantly impact the operations at this intersection. A more impactful option would be to convert the intersection into an all-way stop in the future is MUTCD all-way stop warrants are met.

This situation with failing left turns onto Main Street will occur throughout the downtown corridor at many intersections that do not have an all-way stop condition. The intersection could be converted to an all-way stop if MUTCD all-way stop warrants are met in the future.

Site Access Sight Distance: The civil and landscape design shall keep sight distance triangles clear.

Summary: Based upon the analysis presented in this report, the proposed development at 602 Galena Street is anticipated to be successfully incorporated into the existing roadway network.

7.0 Appendix

7.1 Reference Documents

1. *State Highway Access Code*. State of Colorado, 2002.

2. Colorado Department of Transportation, Online Transportation Information System, 2023.

3. *Highway Capacity Manual, 6th Edition*. Transportation Research Board, 2016.

4. *Trip Generation Manual, 11th Edition*. Institute of Transportation Engineers, 2021.

5. *Trip Generation Handbook, An ITE Recommended Practice*. Institute of Transportation Engineers, 2001.

6. *A Policy on Geometric Design of Highways and Streets 7th Edition*, American Association of State Highway and Transportation Officials, 2018.

7.2 Included Documents

1. McDowell Engineering Scoping Form

2. IDAX Traffic Counts

3. Seasonal Adjustment Factor Calculations

4. Synchro reports

Traffic Study Scoping Form

Contact Information	
Consultant Name:	McDowell Engineering
Tele:	(970)623-0788
E-mail:	kari@mcdowelleng.com
Developer/Owner Name:	NHP Foundation

Project Information (*Attach proposed site plan.*)								
Project Name:								
Project Location:	602 Galena Street, Frisco, CO 80443							
Project Description: Application type (rezoning, subdivision), acreage, new or re-development, etc.	Developing multifamily residential homes. 3 stories with 48 total units							
Existing Land Uses	ITE Code	#units or Size	Proposed Land Uses	ITE Code	#units or Size	Existing / Proposed Land Uses	ITE Code	#units or Size
Frisco Colorado Workforce Center	#710	5 KSF	Multifamily Housing Low Rise	#221	48 DU			
Please attach Trip Generation Summary table for large or mixed use projects.								

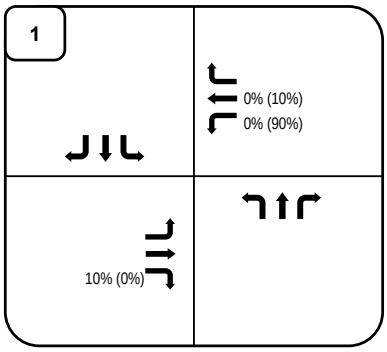
Assumptions				
Study Horizons	Current Year: 2023		Buildout Year: 2024	Long Term Year: 2045
Study Area Boundaries *(Attach map if needed.)*	North: Galena St		South: Galena St Alley	
	East: Existing Building		West: 6th Ave	
Intersections to be Evaluated *(Attach map if needed.)*	1. 6th Ave & Galena St		6.	
	2. 6th Ave & Galena St Alley		7.	
	3. Site Access West of site		8.	
	4. Site Access North of site		9.	
	5.		10.	
Trip Distribution	*See attached sketch.*			
Trip Reductions*	Internal Capture	Use: 0%	Pass By	Use: 0%
	Multimodal Reduction	Use: 10%		
**Include in Trip Generation table if provided. Submit calculations based upon ITE's* Trip Generation Handbook.				

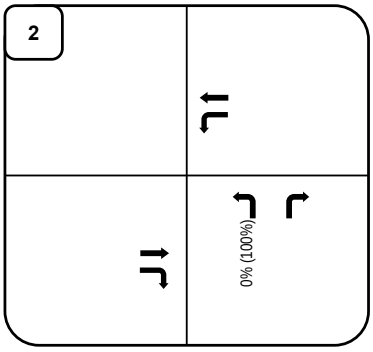
Assumptions (continued)			
Anticipated Future Traffic Growth Rates *(Describe methodology.)*	1.0% growth rate based on previous McDowell Engineering TIS studies in Frisco, CO	Study Time Periods *(Check all that apply.)*	☒ AM (7-9) ☒ PM (4-6) ☐ SAT (noon) ☐ Other:
Other Factors (Proposed/assumed transportation improvements, other studies, nearby proposed developments, etc.)	Will apply a seasonal adjustment factor to convert the traffic counts to peak traffic volumes which are during the month of July. Trip generation table will be included in TIS report with the confirmed exisitng and proposed land uses.		
Analysis Methods & Issues *(Check all that apply.)*	☒ Synchro ☐ HCS ☐ aaSidra or Rodel ☐ Intersections ☐ Roadway Sections ☐ Signal Warrants ☐ Safety/Sight Distance ☐ Queuing & Storage ☐ CDOT (Access Permit, etc.) ☒ Identify Bicycle, Pedestrian & Transit Accomodations ☐ TDM ☐ Neighborhood Impacts ☐ Other:		

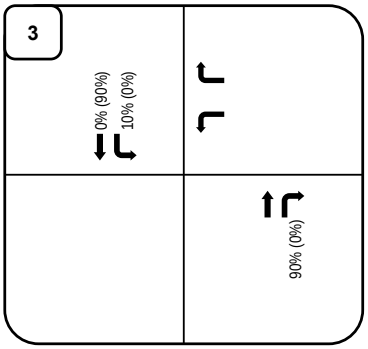
Attachments, Notes, & Other Assumptions:

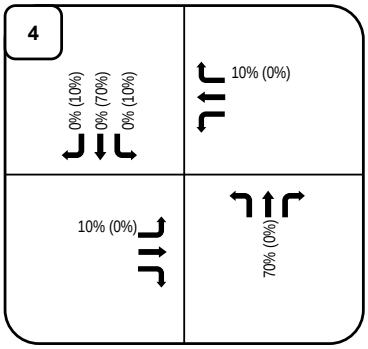
Signed: (Applicant or Consultant) Print Name: (Applicant or Consultant) Date:	Review Agency: Department: Signed: Print Name: Date:

Project Generated Traffic Distribution (602 Galena St)









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

McDOWELL ENGINEERING, LLC
TRANSPORTATION ENGINEERING CONSULTANTS

Project Number	M1627
Prepared By	EP

602 Galena St
Frisco, CO

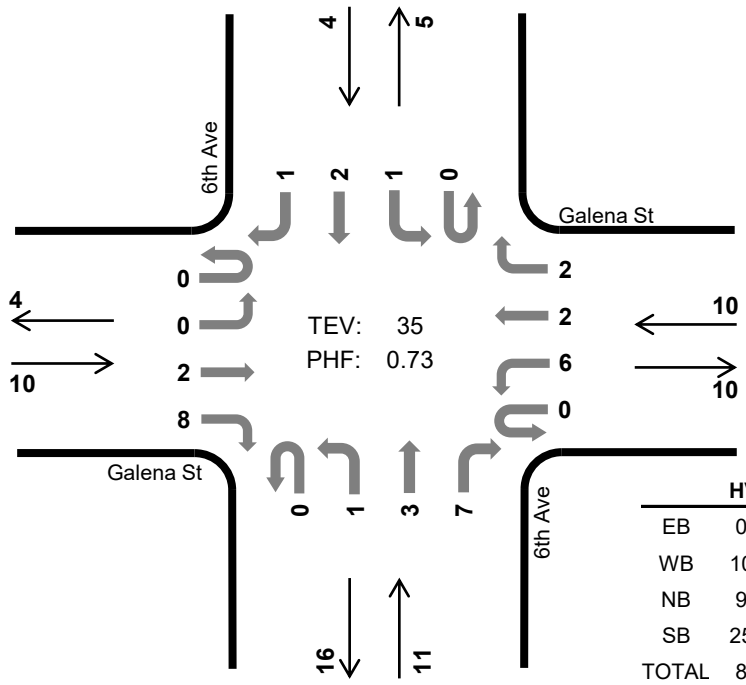
8/31/2023
DRAFT - FOR INTERNAL USE ONLY

6th Ave
Galena St

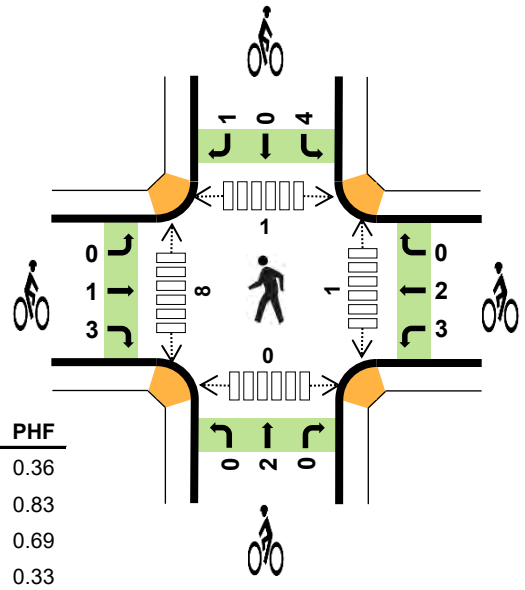
N

Peak Hour

Date: 08/17/2023
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM



	HV %:	PHF
EB	0.0%	0.36
WB	10.0%	0.83
NB	9.1%	0.69
SB	25.0%	0.33
TOTAL	8.6%	0.73



Two-Hour Count Summaries

Interval Start	Galena St Eastbound				Galena St Westbound				6th Ave Northbound				6th Ave 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	1	0	1	0	0	0	0	0	1	0	0	0	0	3	0
7:15 AM	0	1	0	3	0	0	0	0	0	0	0	0	0	0	2	0	6	0
7:30 AM	0	0	0	1	0	2	0	0	0	1	0	0	0	0	1	0	5	0
7:45 AM	0	0	0	1	0	1	0	0	0	1	0	2	0	0	0	0	5	19
8:00 AM	**0**	**0**	**1**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**7**	23
8:15 AM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**4**	21
8:30 AM	**0**	**0**	**0**	**7**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**12**	28
8:45 AM	**0**	**0**	**1**	**1**	**0**	**1**	**1**	**1**	**0**	**1**	**3**	**0**	**0**	**1**	**1**	**1**	**12**	**35**
Count Total	0	1	2	14	0	10	2	2	0	3	3	10	0	1	5	1	54	0
Peak Hour All	**0**	**0**	**2**	**8**	**0**	**6**	**2**	**2**	**0**	**1**	**3**	**7**	**0**	**1**	**2**	**1**	**35**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**3**	**0**
Peak Hour HV%	**-**	**-**	**0%**	**0%**	**-**	**0%**	**0%**	**50%**	**-**	**0%**	**0%**	**14%**	**-**	**0%**	**0%**	**100%**	**9%**	**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	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	1	0	0	*1*
7:30 AM	0	0	0	0	*0*	0	2	1	0	*3*	0	0	0	0	*0*
7:45 AM	0	0	0	0	*0*	0	0	0	1	*1*	1	0	0	0	*1*
8:00 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**1**	***2***	**1**	**4**	**1**	**0**	*6*
8:15 AM	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**1**	**3**	***5***	**0**	**0**	**0**	**0**	*0*
8:30 AM	**0**	**0**	**1**	**0**	***1***	**2**	**3**	**0**	**0**	***5***	**0**	**2**	**0**	**0**	*2*
8:45 AM	**0**	**1**	**0**	**1**	***2***	**2**	**1**	**0**	**1**	***4***	**0**	**2**	**0**	**0**	***2***
Count Total	0	1	1	1	*3*	4	7	3	6	*20*	2	9	1	0	*12*
Peak Hour	**0**	**1**	**1**	**1**	***3***	**4**	**5**	**2**	**5**	***16***	**1**	**8**	**1**	**0**	***10***

TJ Wethington
720-646-1008
tj.wethington@idaxdata.com

www.idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Galena St Eastbound				Galena St Westbound				6th Ave Northbound				6th Ave 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	0	0	0	0
7:15 AM	0	0	0	0	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	0	0	0	0
7:45 AM	0	0	0	0	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**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**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**	**1**	**0**	**0**	**0**	**0**	**1**	1
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**3**
Count Total	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	3	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**3**	**0**

Two-Hour Count Summaries - Bikes

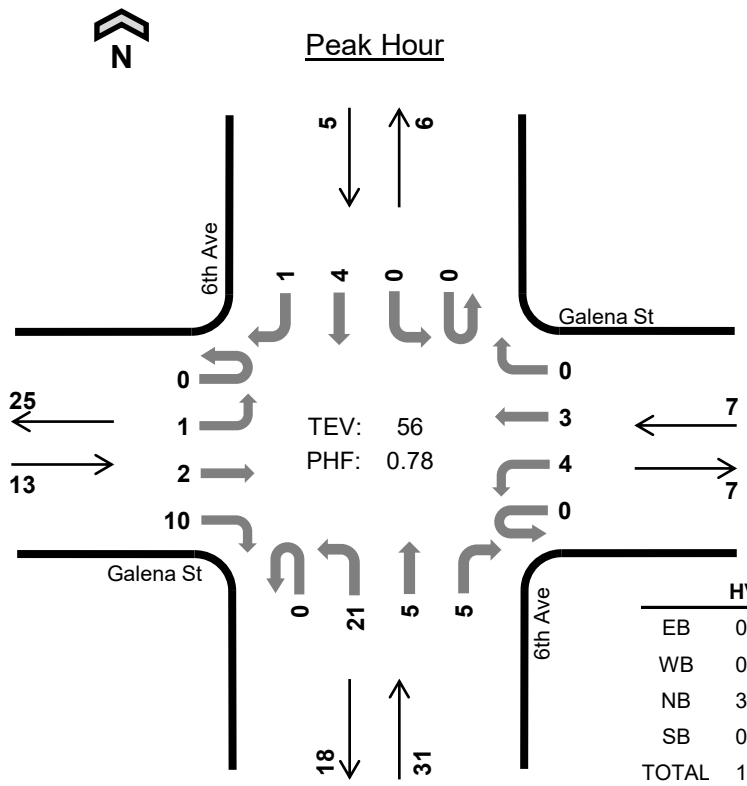
Interval Start	Galena St Eastbound			Galena St Westbound			6th Ave Northbound			6th Ave Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	2	0	0	0	1	0	0	0	3	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	4
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**2**	6
8:15 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**3**	**0**	**0**	**5**	11
8:30 AM	**0**	**0**	**2**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	13
8:45 AM	**0**	**1**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**4**	**16**
Count Total	0	1	3	3	4	0	0	2	1	4	1	1	20	0
Peak Hour	**0**	**1**	**3**	**3**	**2**	**0**	**0**	**2**	**0**	**4**	**0**	**1**	**16**	**0**

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

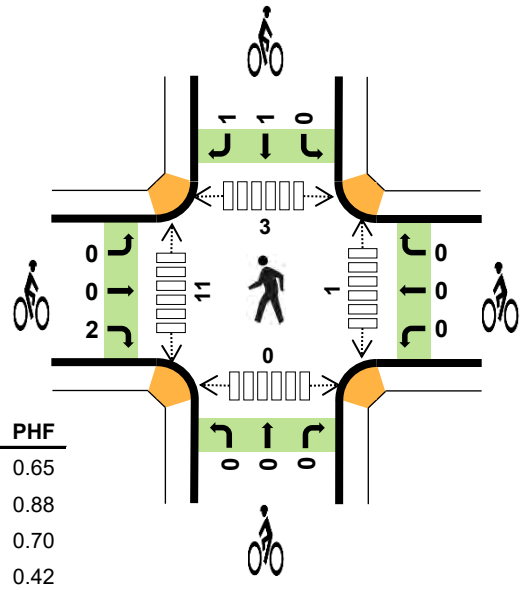
TJ Wethington
720-646-1008
tj.wethington@idaxdata.com

6th Ave
Galena St

Date: 08/17/2023
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV %:	PHF
EB	0.0%	0.65
WB	0.0%	0.88
NB	3.2%	0.70
SB	0.0%	0.42
TOTAL	1.8%	0.78



Two-Hour Count Summaries

Interval Start	Galena St Eastbound				Galena St Westbound				6th Ave Northbound				6th Ave 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	1	0	1	0	1	0	0	0	4	0	2	0	0	1	0	10	0
4:15 PM	1	0	0	1	0	1	2	0	0	3	1	0	0	0	1	0	10	0
4:30 PM	**0**	**0**	**0**	**3**	**0**	**2**	**0**	**0**	**0**	**5**	**0**	**2**	**0**	**0**	**0**	**0**	**12**	0
4:45 PM	**0**	**0**	**0**	**3**	**0**	**0**	**1**	**0**	**0**	**7**	**2**	**2**	**0**	**0**	**3**	**0**	**18**	50
5:00 PM	**0**	**1**	**1**	**3**	**0**	**2**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**1**	**0**	**13**	53
5:15 PM	**0**	**0**	**1**	**1**	**0**	**0**	**2**	**0**	**0**	**4**	**3**	**1**	**0**	**0**	**0**	**1**	**13**	**56**
5:30 PM	0	0	0	4	0	3	0	0	0	1	1	1	0	0	2	0	12	56
5:45 PM	0	0	0	1	0	1	1	0	0	3	1	2	0	0	0	0	9	47
Count Total	1	2	2	17	0	10	6	0	0	32	8	10	0	0	8	1	97	0
Peak Hour All	**0**	**1**	**2**	**10**	**0**	**4**	**3**	**0**	**0**	**21**	**5**	**5**	**0**	**0**	**4**	**1**	**56**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**
Peak Hour HV%	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**-**	**-**	**5%**	**0%**	**0%**	**-**	**-**	**0%**	**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	0	0	0	0	*0*	3	0	2	0	*5*	0	3	2	0	*5*
4:15 PM	0	1	0	0	*1*	0	1	0	0	*1*	1	1	0	0	*2*
4:30 PM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**1**	***1***	**1**	**0**	**0**	**0**	*1*
4:45 PM	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***	**0**	**2**	**1**	**0**	*3*
5:00 PM	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**1**	***2***	**0**	**6**	**0**	**0**	*6*
5:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**3**	**2**	**0**	***5***
5:30 PM	0	0	0	0	*0*	1	0	1	0	*2*	0	3	1	0	*4*
5:45 PM	0	0	0	0	*0*	0	0	0	1	*1*	0	0	0	0	*0*
Count Total	0	1	1	0	*2*	6	1	3	3	*13*	2	18	6	0	*26*
Peak Hour	**0**	**0**	**1**	**0**	***1***	**2**	**0**	**0**	**2**	***4***	**1**	**11**	**3**	**0**	***15***

TJ Wethington
720-646-1008
tj.wethington@idaxdata.com

www.idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Galena St Eastbound				Galena St Westbound				6th Ave Northbound				6th Ave 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	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
4:45 PM	**0**	**0**	**0**	**0**	**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**	**0**	**0**	**0**	**0**	2
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
5:30 PM	0	0	0	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	0	0	0
Count Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Galena St Eastbound			Galena St Westbound			6th Ave Northbound			6th Ave Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	1	2	0	0	0	0	1	1	0	0	0	0	5	0
4:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	1	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	0
4:45 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	8
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	5
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**
5:30 PM	1	0	0	0	0	0	1	0	0	0	0	0	2	5
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	5
Count Total	2	2	2	1	0	0	2	1	0	0	2	1	13	0
Peak Hour	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**4**	**0**

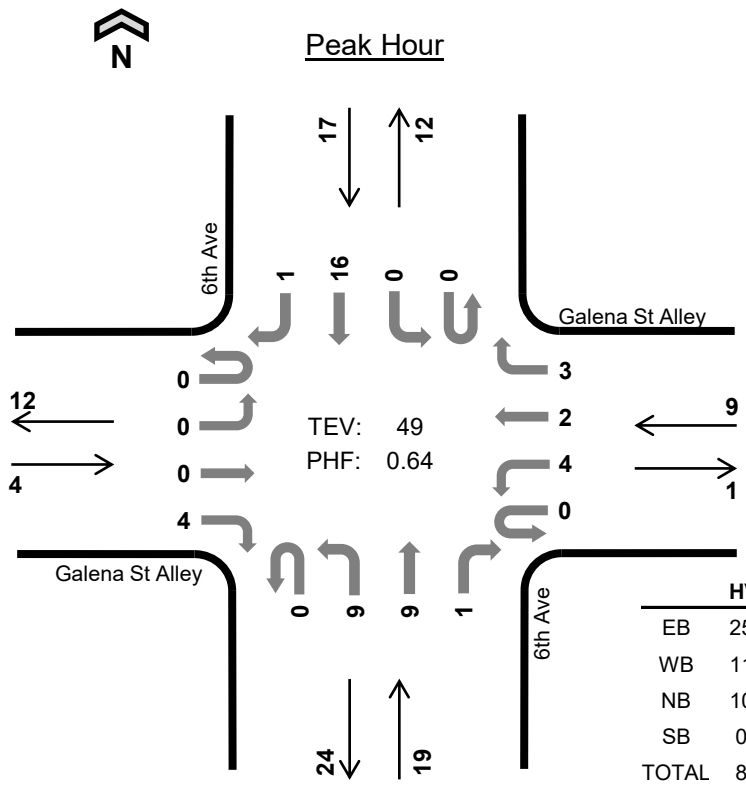
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

TJ Wethington
720-646-1008
tj.wethington@idaxdata.com

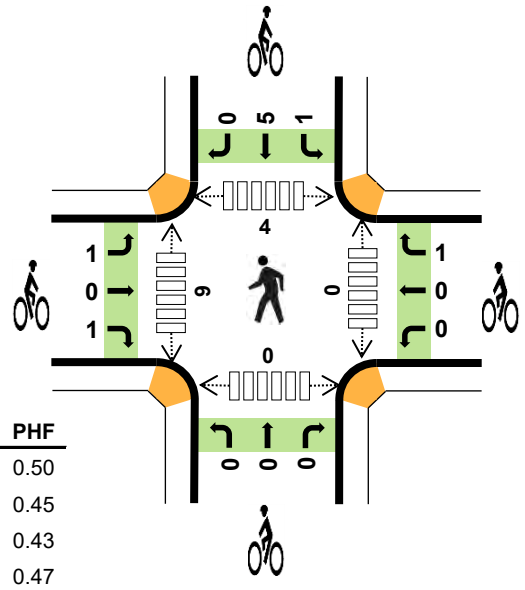
6th Ave
Galena St Alley

Peak Hour

Date: 08/17/2023
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM



	HV %:	PHF
EB	25.0%	0.50
WB	11.1%	0.45
NB	10.5%	0.43
SB	0.0%	0.47
TOTAL	8.2%	0.64



Two-Hour Count Summaries

Interval Start	Galena St Alley Eastbound				Galena St Alley Westbound				6th Ave Northbound				6th Ave 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	1	0	0	0	2	0	3	0
7:15 AM	0	0	0	1	0	0	0	0	0	0	1	0	0	0	6	0	8	0
7:30 AM	0	0	0	2	0	0	0	0	0	0	1	1	0	0	4	0	8	0
7:45 AM	0	0	0	1	0	0	2	0	0	2	3	1	0	0	2	1	12	31
8:00 AM	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**2**	**0**	**8**	36
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**2**	**0**	**5**	33
8:30 AM	**0**	**0**	**0**	**1**	**0**	**1**	**2**	**2**	**0**	**1**	**0**	**1**	**0**	**0**	**8**	**1**	**17**	42
8:45 AM	**0**	**0**	**0**	**2**	**0**	**1**	**0**	**1**	**0**	**7**	**4**	**0**	**0**	**0**	**4**	**0**	**19**	**49**
Count Total	0	0	0	8	0	4	4	3	0	11	15	3	0	0	30	2	80	0
Peak Hour All	**0**	**0**	**0**	**4**	**0**	**4**	**2**	**3**	**0**	**9**	**9**	**1**	**0**	**0**	**16**	**1**	**49**	**0**
Peak Hour HV	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**
Peak Hour HV%	**-**	**-**	**-**	**25%**	**-**	**0%**	**0%**	**33%**	**-**	**22%**	**0%**	**0%**	**-**	**-**	**0%**	**0%**	**8%**	**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	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	1	0	0	0	*1*	0	0	0	0	*0*	0	2	0	0	*2*
7:30 AM	0	0	0	0	*0*	0	0	1	0	*1*	0	2	0	0	*2*
7:45 AM	0	1	0	0	*1*	0	0	1	1	*2*	2	0	0	0	*2*
8:00 AM	**1**	**0**	**0**	**0**	***1***	**1**	**0**	**0**	**0**	***1***	**0**	**4**	**4**	**0**	*8*
8:15 AM	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
8:30 AM	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**5**	***5***	**0**	**3**	**0**	**0**	*3*
8:45 AM	**0**	**0**	**2**	**0**	***2***	**1**	**0**	**0**	**1**	***2***	**0**	**2**	**0**	**0**	***2***
Count Total	2	2	2	0	*6*	2	1	2	7	*12*	2	13	4	0	*19*
Peak Hour	**1**	**1**	**2**	**0**	***4***	**2**	**1**	**0**	**6**	***9***	**0**	**9**	**4**	**0**	***13***

TJ Wethington
720-646-1008
tj.wethington@idaxdata.com

www.idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Galena St Alley				Galena St Alley				6th Ave				6th Ave				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	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	1	0	0	0	0	0	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	0	0	0	0
7:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	2
8:00 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	3
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	3
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**4**
Count Total	0	0	0	2	0	0	1	1	0	2	0	0	0	0	0	0	6	0
Peak Hour	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**

Two-Hour Count Summaries - Bikes

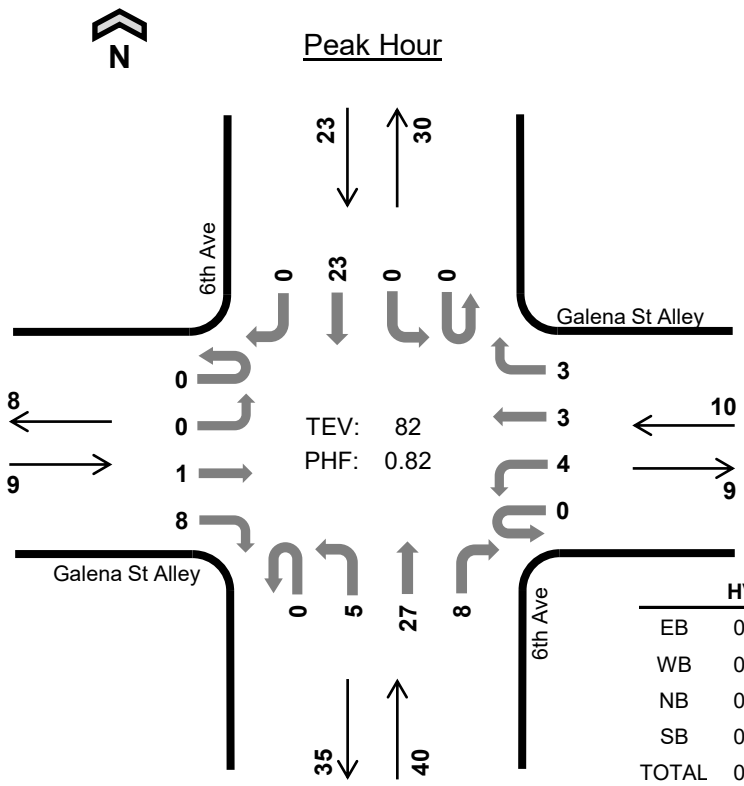
Interval Start	Galena St Alley			Galena St Alley			6th Ave			6th Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	0	1	0	1	0	2	3
8:00 AM	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	4
8:15 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	5
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**4**	**0**	**5**	9
8:45 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**9**
Count Total	1	0	1	0	0	1	0	1	1	1	6	0	12	0
Peak Hour	**1**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**5**	**0**	**9**	**0**

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

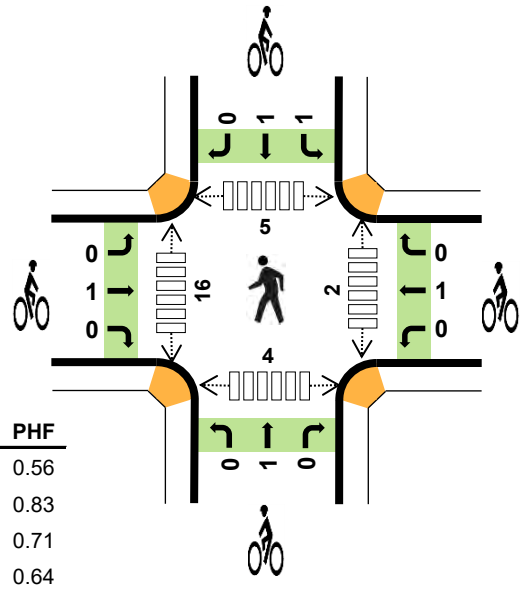
TJ Wethington
720-646-1008
tj.wethington@idaxdata.com

6th Ave
Galena St Alley

Date: 08/17/2023
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	0.0%	0.56
WB	0.0%	0.83
NB	0.0%	0.71
SB	0.0%	0.64
TOTAL	0.0%	0.82



Two-Hour Count Summaries

Interval Start	Galena St Alley Eastbound				Galena St Alley Westbound				6th Ave Northbound				6th Ave 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	1	0	0	4	0	0	0	4	8	0	0	0	2	0	19	0
4:15 PM	0	0	1	4	0	3	0	1	0	1	4	0	0	0	4	0	18	0
4:30 PM	0	1	0	1	0	2	0	1	0	1	5	1	0	0	5	0	17	0
4:45 PM	**0**	**0**	**0**	**1**	**0**	**1**	**1**	**1**	**0**	**2**	**11**	**1**	**0**	**0**	**7**	**0**	**25**	79
5:00 PM	**0**	**0**	**1**	**3**	**0**	**1**	**0**	**1**	**0**	**1**	**6**	**2**	**0**	**0**	**6**	**0**	**21**	81
5:15 PM	**0**	**0**	**0**	**2**	**0**	**1**	**1**	**1**	**0**	**0**	**7**	**4**	**0**	**0**	**1**	**0**	**17**	80
5:30 PM	**0**	**0**	**0**	**2**	**0**	**1**	**1**	**0**	**0**	**2**	**3**	**1**	**0**	**0**	**9**	**0**	**19**	**82**
5:45 PM	0	0	0	1	0	2	0	1	0	4	9	2	0	0	3	0	22	79
Count Total	0	1	3	14	0	15	3	6	0	15	53	11	0	0	37	0	158	0
Peak Hour All	**0**	**0**	**1**	**8**	**0**	**4**	**3**	**3**	**0**	**5**	**27**	**8**	**0**	**0**	**23**	**0**	**82**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Peak Hour HV%	**-**	**-**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**-**	**0%**	**-**	**0%**	**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	0	*1*	0	1	0	0	*1*	1	4	1	0	*6*
4:15 PM	0	0	0	0	*0*	0	0	0	1	*1*	5	1	1	1	*8*
4:30 PM	1	0	0	0	*1*	0	0	0	1	*1*	2	3	0	2	*7*
4:45 PM	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**1**	***2***	**0**	**2**	**0**	**0**	*2*
5:00 PM	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**1**	***2***	**1**	**6**	**2**	**0**	*9*
5:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**5**	**2**	**1**	*8*
5:30 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	***1***	**1**	**3**	**1**	**3**	***8***
5:45 PM	0	1	0	0	*1*	0	1	0	1	*2*	1	0	4	0	*5*
Count Total	1	1	1	0	*3*	1	3	1	5	*10*	11	24	11	7	*53*
Peak Hour	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**1**	**2**	***5***	**2**	**16**	**5**	**4**	***27***

TJ Wethington
720-646-1008
tj.wethington@idaxdata.com

www.idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Galena St Alley				Galena St Alley				6th Ave				6th Ave				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	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:45 PM	**0**	**0**	**0**	**0**	**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**	**0**	**0**	**0**	**0**	1
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1
Count Total	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	3	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Galena St Alley			Galena St Alley			6th Ave			6th Ave			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	1	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	0
4:45 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	5
5:00 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	6
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	5
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**5**
5:45 PM	0	0	0	1	0	0	0	0	0	0	1	0	2	5
Count Total	0	1	0	1	1	1	0	1	0	2	2	1	10	0
Peak Hour	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**1**	**1**	**0**	**5**	**0**

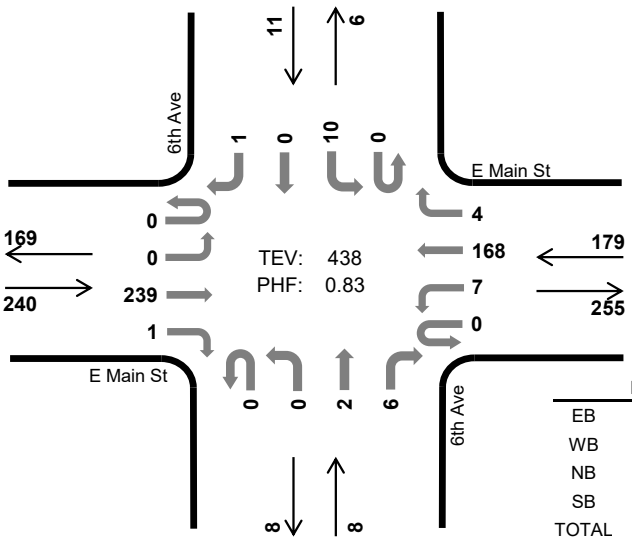
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

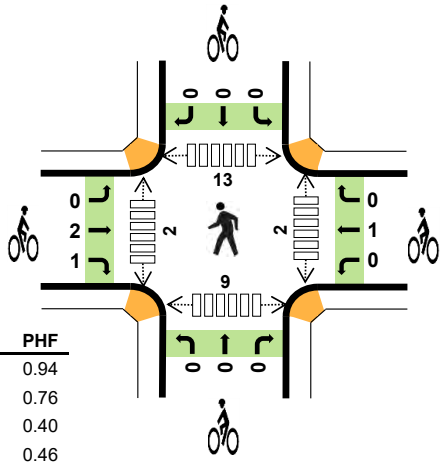
TJ Wethington
720-646-1008
tj.wethington@idaxdata.com

6th Ave
E Main St

Peak Hour

Date: 04/25/2024
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM





	HV %:	PHF
EB	5.0%	0.94
WB	3.9%	0.76
NB	12.5%	0.40
SB	0.0%	0.46
TOTAL	4.6%	0.83

Two-Hour Count Summaries

Interval Start	E Main St Eastbound				E Main St Westbound				6th Ave Northbound				6th Ave 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	27	1	0	0	26	0	0	0	0	0	0	1	0	1	57	0
7:15 AM	0	0	36	0	0	0	24	2	0	0	0	0	0	1	0	2	65	0
7:30 AM	**0**	**0**	**64**	**0**	**0**	**2**	**56**	**1**	**0**	**0**	**2**	**3**	**0**	**3**	**0**	**1**	**132**	0
7:45 AM	**0**	**0**	**62**	**1**	**0**	**3**	**47**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**116**	370
8:00 AM	**0**	**0**	**57**	**0**	**0**	**0**	**31**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**89**	402
8:15 AM	**0**	**0**	**56**	**0**	**0**	**2**	**34**	**1**	**0**	**0**	**0**	**2**	**0**	**6**	**0**	**0**	**101**	**438**
8:30 AM	0	0	59	3	0	2	42	3	0	0	0	2	0	2	1	0	114	420
8:45 AM	0	0	44	5	0	9	48	6	0	1	1	0	0	3	1	0	118	422
Count Total	0	1	405	10	0	18	308	15	0	1	3	8	0	17	2	4	792	0
Peak Hour All	**0**	**0**	**239**	**1**	**0**	**7**	**168**	**4**	**0**	**0**	**2**	**6**	**0**	**10**	**0**	**1**	**438**	**0**
Peak Hour HV	**0**	**0**	**12**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**20**	**0**
Peak Hour HV%	**-**	**-**	**5%**	**0%**	**-**	**0%**	**4%**	**0%**	**-**	**-**	**50%**	**0%**	**-**	**0%**	**-**	**0%**	**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	4	4	0	0	*8*	0	0	0	0	*0*	0	1	0	0	*1*
7:15 AM	1	0	0	1	*2*	0	0	0	0	*0*	0	1	1	3	*5*
7:30 AM	**4**	**4**	**1**	**0**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**4**	**2**	*7*
7:45 AM	**1**	**0**	**0**	**0**	***1***	**0**	**1**	**0**	**0**	***1***	**1**	**0**	**1**	**1**	*3*
8:00 AM	**4**	**3**	**0**	**0**	***7***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**3**	**2**	*5*
8:15 AM	**3**	**0**	**0**	**0**	***3***	**2**	**0**	**0**	**0**	***2***	**1**	**1**	**5**	**4**	***11***
8:30 AM	3	3	0	0	*6*	0	0	1	2	*3*	0	0	0	1	*1*
8:45 AM	1	1	1	0	*3*	0	1	0	0	*1*	0	2	0	0	*2*
Count Total	21	15	2	1	*39*	3	2	1	2	*8*	2	6	14	13	*35*
Peak Hour	**12**	**7**	**1**	**0**	***20***	**3**	**1**	**0**	**0**	***4***	**2**	**2**	**13**	**9**	***26***

TJ Wethington
720-646-1008
tj.wethington@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Main St				E Main St				6th Ave				6th Ave				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	1	3	0	0	0	4	0	0	0	0	0	0	0	0	0	8	0
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0
7:30 AM	**0**	**0**	**4**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**9**	0
7:45 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	20
8:00 AM	**0**	**0**	**4**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	19
8:15 AM	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**20**
8:30 AM	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6	17
8:45 AM	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	3	19
Count Total	0	1	20	0	0	0	15	0	0	0	2	0	0	0	0	1	39	0
Peak Hour	**0**	**0**	**12**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**20**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	E Main St			E Main St			6th Ave			6th Ave			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**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	1
8:00 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	2
8:15 AM	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**4**
8:30 AM	0	0	0	0	0	0	0	1	0	0	2	0	3	7
8:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	7
Count Total	0	2	1	0	2	0	0	1	0	0	2	0	8	0
Peak Hour	**0**	**2**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**

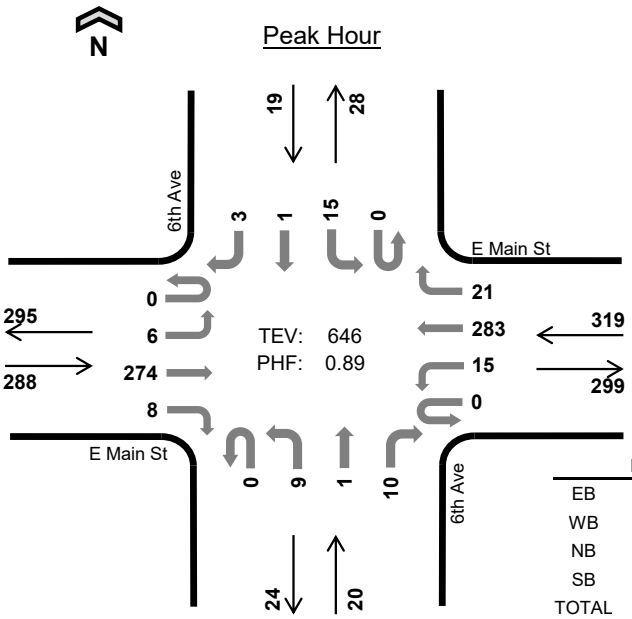
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

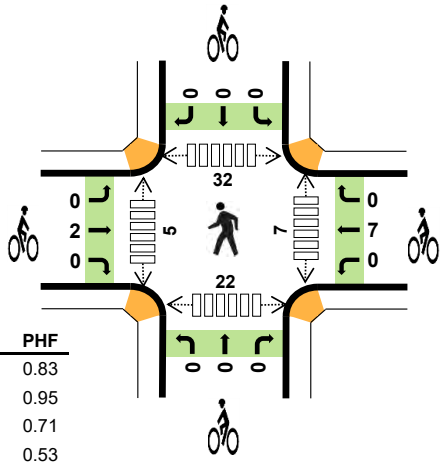
TJ Wethington
720-646-1008
tj.wethington@idaxdata.com

6th Ave
E Main St

Date: 04/24/2024
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM

Peak Hour





	HV %:	PHF
EB	2.4%	0.83
WB	2.5%	0.95
NB	5.0%	0.71
SB	5.3%	0.53
TOTAL	2.6%	0.89

Two-Hour Count Summaries

Interval Start		E Main St Eastbound				E Main St Westbound				6th Ave Northbound				6th Ave 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	59	3	0	4	59	5	0	1	0	4	0	2	0	0	137	0
4:15 PM		0	1	59	2	0	6	49	8	0	1	0	5	0	4	2	1	138	0
4:30 PM		**0**	**1**	**67**	**2**	**0**	**4**	**70**	**6**	**0**	**4**	**0**	**3**	**0**	**2**	**0**	**1**	**160**	0
4:45 PM		**0**	**0**	**71**	**1**	**0**	**5**	**65**	**5**	**0**	**2**	**0**	**0**	**0**	**6**	**1**	**0**	**156**	591
5:00 PM		**0**	**4**	**79**	**4**	**0**	**3**	**70**	**7**	**0**	**2**	**0**	**3**	**0**	**7**	**0**	**2**	**181**	635
5:15 PM		**0**	**1**	**57**	**1**	**0**	**3**	**78**	**3**	**0**	**1**	**1**	**4**	**0**	**0**	**0**	**0**	**149**	**646**
5:30 PM		0	0	66	0	0	3	69	2	0	1	0	9	0	2	0	1	153	639
5:45 PM		0	0	45	0	0	4	49	3	0	1	0	1	0	5	0	0	108	591
Count Total		0	7	503	13	0	32	509	39	0	13	1	29	0	28	3	5	1,182	0
Peak Hour	**All**	**0**	**6**	**274**	**8**	**0**	**15**	**283**	**21**	**0**	**9**	**1**	**10**	**0**	**15**	**1**	**3**	**646**	**0**
	HV	**0**	**0**	**7**	**0**	**0**	**1**	**7**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**17**	**0**
	HV%	**-**	**0%**	**3%**	**0%**	**-**	**7%**	**2%**	**0%**	**-**	**0%**	**100%**	**0%**	**-**	**7%**	**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
4:00 PM	1	2	0	0	*3*	1	2	0	0	*3*	2	2	1	13	*18*
4:15 PM	2	2	0	1	*5*	5	1	0	0	*6*	1	4	8	15	*28*
4:30 PM	**2**	**2**	**0**	**1**	***5***	**0**	**4**	**0**	**0**	***4***	**2**	**2**	**14**	**9**	*27*
4:45 PM	**1**	**1**	**0**	**0**	***2***	**0**	**1**	**0**	**0**	***1***	**2**	**1**	**10**	**4**	*17*
5:00 PM	**2**	**4**	**0**	**0**	***6***	**0**	**1**	**0**	**0**	***1***	**1**	**1**	**3**	**2**	*7*
5:15 PM	**2**	**1**	**1**	**0**	***4***	**2**	**1**	**0**	**0**	***3***	**2**	**1**	**5**	**7**	***15***
5:30 PM	2	2	0	0	*4*	5	0	1	0	*6*	0	3	11	1	*15*
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	10	7	*18*
Count Total	12	14	1	2	*29*	13	10	1	0	*24*	10	15	62	58	*145*
Peak Hour	**7**	**8**	**1**	**1**	***17***	**2**	**7**	**0**	**0**	***9***	**7**	**5**	**32**	**22**	***66***

TJ Wethington
720-646-1008
tj.wethington@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Main St				E Main St				6th Ave				6th Ave				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	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3	0
4:15 PM	0	0	2	0	0	0	1	1	0	0	0	0	0	0	0	1	5	0
4:30 PM	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**5**	0
4:45 PM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	15
5:00 PM	**0**	**0**	**2**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	18
5:15 PM	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**4**	**17**
5:30 PM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	16
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Count Total	0	0	12	0	0	1	12	1	0	0	1	0	0	1	0	1	29	0
Peak Hour	**0**	**0**	**7**	**0**	**0**	**1**	**7**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**17**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	E Main St			E Main St			6th Ave			6th Ave			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	1	0	0	2	0	0	0	0	0	0	0	3	0
4:15 PM	0	5	0	0	1	0	0	0	0	0	0	0	6	0
4:30 PM	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	0
4:45 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	14
5:00 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	12
5:15 PM	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**9**
5:30 PM	1	4	0	0	0	0	0	1	0	0	0	0	6	11
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Count Total	1	12	0	0	10	0	0	1	0	0	0	0	24	0
Peak Hour	**0**	**2**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**0**

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

TJ Wethington
720-646-1008
tj.wethington@idaxdata.com

Monthly Summary Data

CDOT OTIS Station ID 000240, ON US 9 South of Frisco

CALYR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2023	25561	26129	25423	20266	17932	22107	26085	24365				
2022	25343	26314	25528	19385	17755	22419	25576	25157	23340	20126	19542	23392
2021	23613	23681	24455	19981	18729	23885	26569	24052	22303	19357	19779	23740
2020	26091	24334	16206	8459	12873	20096	25398	24184	23870	21272	18851	22557
2019	26864	25558	25043	19475	17420	19707	22715	25287	23769	18932	19522	23106
2018	24454	23112	23746	17638	16681	21491	25586	23805	21848	17993	19613	24572
2017	22314	22238	22640	16863	15739	20133	23872	22365	20694	17736	17914	22213
2016	20067	20166	19771	15583	15315	20234	24369	22538	21058	17606	17498	20596
2015	22254	24105	22746	16768	14626	19975	24189	22612	20612	17216	16072	18628
2014	22074	21741	22695	17203								21545
2013	19202	21802	21597	15304	14226	18639	23409	22113	18964	16174	17346	20515
2012	21020	20867	21856	14988	13970	18252	21689	21020	18465	15317	14911	16463
2011	19904	19013	19970	14963	12362	17049	20609	20745	18187	15322	15089	20645
2010	21080	20612	21125	15130	13030	17052	21181	19662	18019	14514	15010	19458
2009	21034	20678	20526	15689	13641	17657	21077	19819	17562	14586	15975	19679
2008	20905	20794	21778	16242	14218	17918	21285	20247	18055	15894	15800	19566
2007	17702	17620	18759	14050	12673				18771	16492	17633	19734
2006		20998	21722	16262	14383	18215	21499	19876	17816	14343	16474	17318
2005	18989	20995	21210	15207	13908	18387	21607	19988	17201	14418	14704	16870
2004	19416	19455	20094	14881	13235	16055	23816	22623	20655	16435	11737	19643
2003	20478	20373	20468	15362	13761	18156	20179	19480	16843	14964	14829	18654
2002	20789	21729	22454	16137	14536	17957	22030	20763	18125	15505	16223	19895
Average	**21,864**	**21,923**	**21,810**	**16,174**	**14,810**	**19,269**	**23,137**	**22,035**	**19,808**	**16,710**	**16,726**	**20,419**

Seasonal Adjustment Factors

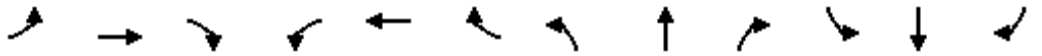
CDOT OTIS Station ID 000240, ON US 9 South of Frisco

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		21,864	21,923	21,810	16,174	14,810	19,269	23,137	22,035	19,808	16,710	16,726	20,419
Jan	21,864	1.00	1.00	1.00	0.74	0.68	0.88	1.06	1.01	0.91	0.76	0.76	0.93
Feb	21,923	1.00	1.00	0.99	0.74	0.68	0.88	1.06	1.01	0.90	0.76	0.76	0.93
Mar	21,810	1.00	1.01	1.00	0.74	0.68	0.88	1.06	1.01	0.91	0.77	0.77	0.94
Apr	16,174	1.35	1.36	1.35	1.00	0.92	1.19	1.43	1.36	1.22	1.03	1.03	1.26
May	14,810	1.48	1.48	1.47	1.09	1.00	1.30	1.56	1.49	1.34	1.13	1.13	1.38
Jun	19,269	1.13	1.14	1.13	0.84	0.77	1.00	1.20	1.14	1.03	0.87	0.87	1.06
Jul	23,137	0.95	0.95	0.94	0.70	0.64	0.83	1.00	0.95	0.86	0.72	0.72	0.88
Aug	22,035	0.99	0.99	0.99	0.73	0.67	0.87	1.05	1.00	0.90	0.76	0.76	0.93
Sep	19,808	1.10	1.11	1.10	0.82	0.75	0.97	1.17	1.11	1.00	0.84	0.84	1.03
Oct	16,710	1.31	1.31	1.31	0.97	0.89	1.15	1.38	1.32	1.19	1.00	1.00	1.22
Nov	16,726	1.31	1.31	1.30	0.97	0.89	1.15	1.38	1.32	1.18	1.00	1.00	1.22
Dec	20,419	1.07	1.07	1.07	0.79	0.73	0.94	1.13	1.08	0.97	0.82	0.82	1.00

Monthly Summary Data from CDOT OTIS:

https://dtdapps.coloradodot.info/otis/TrafficData#ui/0/0/1/station/000126/criteria//19/false/true/

Data Retrieved on September 25, 2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2	8	6	2	2	1	3	7	1	2	1
Future Volume (Veh/h)	0	2	8	6	2	2	1	3	7	1	2	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	0	2	9	7	2	2	1	3	8	1	2	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	16	18	2	24	14	7	3			11		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	16	18	2	24	14	7	3			11		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	99	99	100	100	100			100		
cM capacity (veh/h)	994	875	1082	977	879	1075	1619			1608		

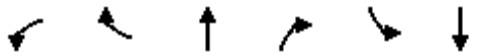
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	11	11	12	4
Volume Left	0	7	1	1
Volume Right	9	2	8	1
cSH	1037	974	1619	1608
Volume to Capacity	0.01	0.01	0.00	0.00
Queue Length 95th (ft)	1	1	0	0
Control Delay (s)	8.5	8.7	0.6	1.8
Lane LOS	A	A	A	A
Approach Delay (s)	8.5	8.7	0.6	1.8
Approach LOS	A	A		

Intersection Summary				
Average Delay	5.4			
Intersection Capacity Utilization	15.7%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	11	0	0	11	0	0
Future Volume (Veh/h)	11	0	0	11	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	0	0	12	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			12		24	12
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			12		24	12
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1607		992	1069

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	12	12	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.01	0.01	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS			A
Approach Delay (s)	0.0	0.0	0.0
Approach LOS			A

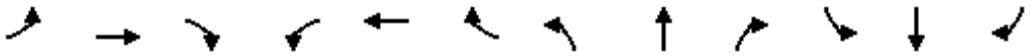
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	13	0	0	17
Future Volume (Veh/h)	0	0	13	0	0	17
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	14	0	0	18
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	32	14			14	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	32	14			14	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	982	1066			1604	

Direction, Lane #	NB 1	SB 1
Volume Total	14	18
Volume Left	0	0
Volume Right	0	0
cSH	1700	1604
Volume to Capacity	0.01	0.00
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	4	4	2	3	9	9	1	0	17	1
Future Volume (Veh/h)	0	0	4	4	2	3	9	9	1	0	17	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	0	0	4	4	2	3	10	10	1	0	18	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	53	50	18	53	50	10	19			11		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	53	50	18	53	50	10	19			11		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	99			100		
cM capacity (veh/h)	937	837	1060	937	837	1071	1597			1608		

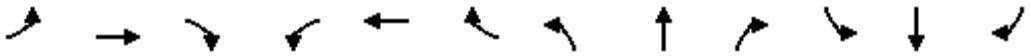
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	4	9	21	19
Volume Left	0	4	10	0
Volume Right	4	3	1	1
cSH	1060	951	1597	1608
Volume to Capacity	0.00	0.01	0.01	0.00
Queue Length 95th (ft)	0	1	0	0
Control Delay (s)	8.4	8.8	3.5	0.0
Lane LOS	A	A	A	
Approach Delay (s)	8.4	8.8	3.5	0.0
Approach LOS	A	A		

Intersection Summary				
Average Delay	3.5			
Intersection Capacity Utilization	18.4%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	354	1	10	248	11	0	6	8	22	0	2
Future Volume (Veh/h)	0	354	1	10	248	11	0	6	8	22	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	0	385	1	11	270	12	0	7	9	24	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	282			386			686	690	386	696	684	276
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	282			386			686	690	386	696	684	276
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	98	99	93	100	100
cM capacity (veh/h)	1280			1172			358	365	662	344	368	763

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	386	293	16	26
Volume Left	0	11	0	24
Volume Right	1	12	9	2
cSH	1280	1172	488	359
Volume to Capacity	0.00	0.01	0.03	0.07
Queue Length 95th (ft)	0	1	3	6
Control Delay (s)	0.0	0.4	12.6	15.8
Lane LOS		A	B	C
Approach Delay (s)	0.0	0.4	12.6	15.8
Approach LOS			B	C

Intersection Summary				
Average Delay	1.0			
Intersection Capacity Utilization	36.5%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	2	11	4	3	0	22	5	5	0	4	1
Future Volume (Veh/h)	1	2	11	4	3	0	22	5	5	0	4	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	1	2	12	4	3	0	24	5	5	0	4	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	62	62	4	73	60	8	5			10		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	62	62	4	73	60	8	5			10		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	99	100	100	100	99			100		
cM capacity (veh/h)	920	816	1079	896	818	1075	1616			1610		

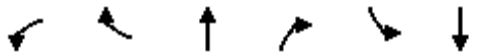
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	15	7	34	5
Volume Left	1	4	24	0
Volume Right	12	0	5	1
cSH	1023	861	1616	1610
Volume to Capacity	0.01	0.01	0.01	0.00
Queue Length 95th (ft)	1	1	1	0
Control Delay (s)	8.6	9.2	5.2	0.0
Lane LOS	A	A	A	
Approach Delay (s)	8.6	9.2	5.2	0.0
Approach LOS	A	A		

Intersection Summary				
Average Delay	6.0			
Intersection Capacity Utilization	18.5%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	7	0	0	7	0	0
Future Volume (Veh/h)	7	0	0	7	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	0	0	8	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			8		16	8
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			8		16	8
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1612		1002	1074

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	8	8	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS			A
Approach Delay (s)	0.0	0.0	0.0
Approach LOS			A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	36	0	0	19
Future Volume (Veh/h)	0	0	36	0	0	19
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	39	0	0	21
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	60	39			39	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	60	39			39	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	947	1033			1571	

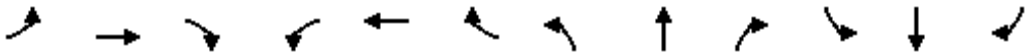
Direction, Lane #	NB 1	SB 1
Volume Total	39	21
Volume Left	0	0
Volume Right	0	0
cSH	1700	1571
Volume to Capacity	0.02	0.00
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1	8	4	3	3	5	28	8	0	24	0
Future Volume (Veh/h)	0	1	8	4	3	3	5	28	8	0	24	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	0	1	9	4	3	3	5	30	9	0	26	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	75	75	26	80	70	34	26			39		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	75	75	26	80	70	34	26			39		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	99	100	100	100	100			100		
cM capacity (veh/h)	908	813	1050	897	817	1039	1588			1571		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	10	10	44	26
Volume Left	0	4	5	0
Volume Right	9	3	9	0
cSH	1020	908	1588	1571
Volume to Capacity	0.01	0.01	0.00	0.00
Queue Length 95th (ft)	1	1	0	0
Control Delay (s)	8.6	9.0	0.8	0.0
Lane LOS	A	A	A	
Approach Delay (s)	8.6	9.0	0.8	0.0
Approach LOS	A	A		

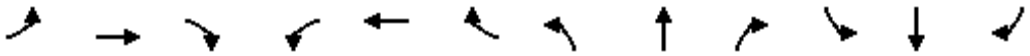
Intersection Summary				
Average Delay	2.4			
Intersection Capacity Utilization	17.0%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	407	11	22	420	31	12	1	15	27	1	6
Future Volume (Veh/h)	9	407	11	22	420	31	12	1	15	27	1	6
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	10	442	12	24	457	34	13	1	16	29	1	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	491			454			998	1007	448	1006	996	474
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	491			454			998	1007	448	1006	996	474
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			98			94	100	97	86	100	99
cM capacity (veh/h)	1072			1107			214	233	611	208	237	590

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	464	515	30	37
Volume Left	10	24	13	29
Volume Right	12	34	16	7
cSH	1072	1107	329	238
Volume to Capacity	0.01	0.02	0.09	0.16
Queue Length 95th (ft)	1	2	7	14
Control Delay (s)	0.3	0.6	17.0	22.9
Lane LOS	A	A	C	C
Approach Delay (s)	0.3	0.6	17.0	22.9
Approach LOS			C	C

Intersection Summary				
Average Delay	1.7			
Intersection Capacity Utilization	45.3%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2	8	6	2	2	1	3	7	1	2	1
Future Volume (Veh/h)	0	2	8	6	2	2	1	3	7	1	2	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	0	2	9	7	2	2	1	3	8	1	2	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	16	18	2	24	14	7	3			11		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	16	18	2	24	14	7	3			11		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	99	99	100	100	100			100		
cM capacity (veh/h)	994	875	1082	977	879	1075	1619			1608		

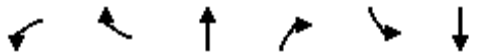
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	11	11	12	4
Volume Left	0	7	1	1
Volume Right	9	2	8	1
cSH	1037	974	1619	1608
Volume to Capacity	0.01	0.01	0.00	0.00
Queue Length 95th (ft)	1	1	0	0
Control Delay (s)	8.5	8.7	0.6	1.8
Lane LOS	A	A	A	A
Approach Delay (s)	8.5	8.7	0.6	1.8
Approach LOS	A	A		

Intersection Summary				
Average Delay	5.4			
Intersection Capacity Utilization	15.7%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	11	0	0	11	0	0
Future Volume (Veh/h)	11	0	0	11	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	0	0	12	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			12		24	12
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			12		24	12
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1607		992	1069

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	12	12	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.01	0.01	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS			A
Approach Delay (s)	0.0	0.0	0.0
Approach LOS			A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	13	0	0	17
Future Volume (Veh/h)	0	0	13	0	0	17
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	14	0	0	18
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	32	14			14	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	32	14			14	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	982	1066			1604	

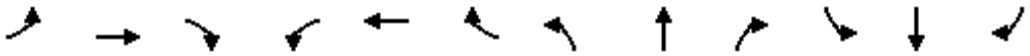
Direction, Lane #	NB 1	SB 1
Volume Total	14	18
Volume Left	0	0
Volume Right	0	0
cSH	1700	1604
Volume to Capacity	0.01	0.00
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	4	4	2	3	9	9	1	0	17	1
Future Volume (Veh/h)	0	0	4	4	2	3	9	9	1	0	17	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	0	0	4	4	2	3	10	10	1	0	18	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	53	50	18	53	50	10	19			11		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	53	50	18	53	50	10	19			11		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	99			100		
cM capacity (veh/h)	937	837	1060	937	837	1071	1597			1608		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	4	9	21	19
Volume Left	0	4	10	0
Volume Right	4	3	1	1
cSH	1060	951	1597	1608
Volume to Capacity	0.00	0.01	0.01	0.00
Queue Length 95th (ft)	0	1	0	0
Control Delay (s)	8.4	8.8	3.5	0.0
Lane LOS	A	A	A	
Approach Delay (s)	8.4	8.8	3.5	0.0
Approach LOS	A	A		

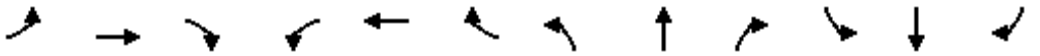
Intersection Summary				
Average Delay	3.5			
Intersection Capacity Utilization	18.4%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	358	1	10	251	5	0	2	8	15	0	1
Future Volume (Veh/h)	0	358	1	10	251	5	0	2	8	15	0	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	0	389	1	11	273	5	0	2	9	16	0	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	278			390			688	690	390	697	688	276
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	278			390			688	690	390	697	688	276
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	99	99	95	100	100
cM capacity (veh/h)	1285			1169			357	365	659	347	366	763

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	390	289	11	17
Volume Left	0	11	0	16
Volume Right	1	5	9	1
cSH	1285	1169	575	358
Volume to Capacity	0.00	0.01	0.02	0.05
Queue Length 95th (ft)	0	1	1	4
Control Delay (s)	0.0	0.4	11.4	15.6
Lane LOS		A	B	C
Approach Delay (s)	0.0	0.4	11.4	15.6
Approach LOS			B	C

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	35.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	2	11	4	3	0	22	5	5	0	4	1
Future Volume (Veh/h)	1	2	11	4	3	0	22	5	5	0	4	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	1	2	12	4	3	0	24	5	5	0	4	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	62	62	4	73	60	8	5			10		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	62	62	4	73	60	8	5			10		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	99	100	100	100	99			100		
cM capacity (veh/h)	920	816	1079	896	818	1075	1616			1610		

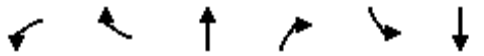
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	15	7	34	5
Volume Left	1	4	24	0
Volume Right	12	0	5	1
cSH	1023	861	1616	1610
Volume to Capacity	0.01	0.01	0.01	0.00
Queue Length 95th (ft)	1	1	1	0
Control Delay (s)	8.6	9.2	5.2	0.0
Lane LOS	A	A	A	
Approach Delay (s)	8.6	9.2	5.2	0.0
Approach LOS	A	A		

Intersection Summary				
Average Delay	6.0			
Intersection Capacity Utilization	18.5%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	7	0	0	7	0	0
Future Volume (Veh/h)	7	0	0	7	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	0	0	8	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			8		16	8
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			8		16	8
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1612		1002	1074

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	8	8	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS			A
Approach Delay (s)	0.0	0.0	0.0
Approach LOS			A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	36	0	0	19
Future Volume (Veh/h)	0	0	36	0	0	19
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	39	0	0	21
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	60	39			39	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	60	39			39	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	947	1033			1571	

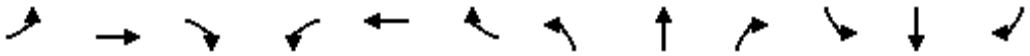
Direction, Lane #	NB 1	SB 1
Volume Total	39	21
Volume Left	0	0
Volume Right	0	0
cSH	1700	1571
Volume to Capacity	0.02	0.00
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1	8	4	3	3	5	28	8	0	24	0
Future Volume (Veh/h)	0	1	8	4	3	3	5	28	8	0	24	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	0	1	9	4	3	3	5	30	9	0	26	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	75	75	26	80	70	34	26			39		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	75	75	26	80	70	34	26			39		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	99	100	100	100	100			100		
cM capacity (veh/h)	908	813	1050	897	817	1039	1588			1571		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	10	10	44	26
Volume Left	0	4	5	0
Volume Right	9	3	9	0
cSH	1020	908	1588	1571
Volume to Capacity	0.01	0.01	0.00	0.00
Queue Length 95th (ft)	1	1	0	0
Control Delay (s)	8.6	9.0	0.8	0.0
Lane LOS	A	A	A	
Approach Delay (s)	8.6	9.0	0.8	0.0
Approach LOS	A	A		

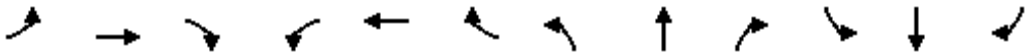
Intersection Summary				
Average Delay	2.4			
Intersection Capacity Utilization	17.0%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	411	11	22	424	31	12	1	15	22	1	4
Future Volume (Veh/h)	8	411	11	22	424	31	12	1	15	22	1	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	9	447	12	24	461	34	13	1	16	24	1	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	495			459			1002	1014	453	1014	1003	478
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	495			459			1002	1014	453	1014	1003	478
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			98			94	100	97	88	100	99
cM capacity (veh/h)	1069			1102			214	231	607	206	235	587

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	468	519	30	29
Volume Left	9	24	13	24
Volume Right	12	34	16	4
cSH	1069	1102	328	227
Volume to Capacity	0.01	0.02	0.09	0.13
Queue Length 95th (ft)	1	2	7	11
Control Delay (s)	0.3	0.6	17.1	23.1
Lane LOS	A	A	C	C
Approach Delay (s)	0.3	0.6	17.1	23.1
Approach LOS			C	C

Intersection Summary			
Average Delay	1.6		
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2	10	7	2	2	1	4	9	1	2	1
Future Volume (Veh/h)	0	2	10	7	2	2	1	4	9	1	2	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	0	2	11	8	2	2	1	4	10	1	2	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	18	20	2	28	16	9	3			14		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	18	20	2	28	16	9	3			14		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	99	99	100	100	100			100		
cM capacity (veh/h)	991	872	1082	970	877	1073	1619			1604		

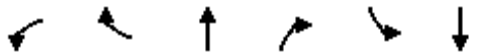
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	13	12	15	4
Volume Left	0	8	1	1
Volume Right	11	2	10	1
cSH	1043	968	1619	1604
Volume to Capacity	0.01	0.01	0.00	0.00
Queue Length 95th (ft)	1	1	0	0
Control Delay (s)	8.5	8.8	0.5	1.8
Lane LOS	A	A	A	A
Approach Delay (s)	8.5	8.8	0.5	1.8
Approach LOS	A	A		

Intersection Summary				
Average Delay	5.2			
Intersection Capacity Utilization	16.6%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	14	0	0	14	0	0
Future Volume (Veh/h)	14	0	0	14	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	15	0	0	15	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			15		30	15
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			15		30	15
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1603		984	1065

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	15	15	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.01	0.01	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS			A
Approach Delay (s)	0.0	0.0	0.0
Approach LOS			A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	16	0	0	21
Future Volume (Veh/h)	0	0	16	0	0	21
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	17	0	0	23
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	40	17			17	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	40	17			17	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	972	1062			1600	

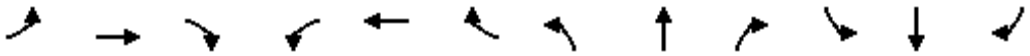
Direction, Lane #	NB 1	SB 1
Volume Total	17	23
Volume Left	0	0
Volume Right	0	0
cSH	1700	1600
Volume to Capacity	0.01	0.00
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	5	5	2	4	11	11	1	0	21	1
Future Volume (Veh/h)	0	0	5	5	2	4	11	11	1	0	21	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	0	0	5	5	2	4	12	12	1	0	23	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	65	60	24	65	60	12	24			13		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	65	60	24	65	60	12	24			13		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	99	100	100	99			100		
cM capacity (veh/h)	918	824	1053	919	824	1068	1591			1606		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	5	11	25	24
Volume Left	0	5	12	0
Volume Right	5	4	1	1
cSH	1053	947	1591	1606
Volume to Capacity	0.00	0.01	0.01	0.00
Queue Length 95th (ft)	0	1	1	0
Control Delay (s)	8.4	8.8	3.5	0.0
Lane LOS	A	A	A	
Approach Delay (s)	8.4	8.8	3.5	0.0
Approach LOS	A	A		

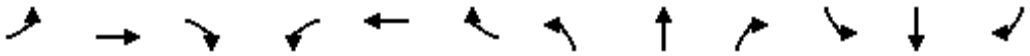
Intersection Summary				
Average Delay	3.5			
Intersection Capacity Utilization	19.6%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	441	2	12	309	15	0	9	11	28	0	3
Future Volume (Veh/h)	0	441	2	12	309	15	0	9	11	28	0	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	0	479	2	13	336	16	0	10	12	30	0	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	352			481			853	858	480	867	851	344
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	352			481			853	858	480	867	851	344
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	97	98	88	100	100
cM capacity (veh/h)	1207			1082			275	291	586	258	294	699

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	481	365	22	33
Volume Left	0	13	0	30
Volume Right	2	16	12	3
cSH	1207	1082	401	274
Volume to Capacity	0.00	0.01	0.05	0.12
Queue Length 95th (ft)	0	1	4	10
Control Delay (s)	0.0	0.4	14.5	19.9
Lane LOS		A	B	C
Approach Delay (s)	0.0	0.4	14.5	19.9
Approach LOS			B	C

Intersection Summary				
Average Delay	1.3			
Intersection Capacity Utilization	42.0%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	2	14	5	4	0	27	6	6	0	5	1
Future Volume (Veh/h)	1	2	14	5	4	0	27	6	6	0	5	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	1	2	15	5	4	0	29	7	7	0	5	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	76	78	6	90	74	10	6			14		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	76	78	6	90	74	10	6			14		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	99	99	100	100	98			100		
cM capacity (veh/h)	898	798	1077	868	801	1071	1615			1604		

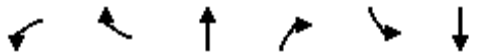
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	18	9	43	6
Volume Left	1	5	29	0
Volume Right	15	0	7	1
cSH	1026	837	1615	1604
Volume to Capacity	0.02	0.01	0.02	0.00
Queue Length 95th (ft)	1	1	1	0
Control Delay (s)	8.6	9.3	4.9	0.0
Lane LOS	A	A	A	
Approach Delay (s)	8.6	9.3	4.9	0.0
Approach LOS	A	A		

Intersection Summary				
Average Delay	5.9			
Intersection Capacity Utilization	18.8%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	9	0	0	9	0	0
Future Volume (Veh/h)	9	0	0	9	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	0	0	10	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			10		20	10
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			10		20	10
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1610		997	1071

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	10	10	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.01	0.01	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS			A
Approach Delay (s)	0.0	0.0	0.0
Approach LOS			A

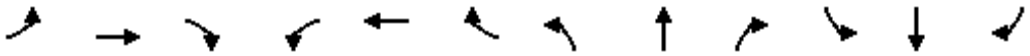
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	45	0	0	24
Future Volume (Veh/h)	0	0	45	0	0	24
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	49	0	0	26
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	75	49			49	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	75	49			49	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	928	1020			1558	

Direction, Lane #	NB 1	SB 1
Volume Total	49	26
Volume Left	0	0
Volume Right	0	0
cSH	1700	1558
Volume to Capacity	0.03	0.00
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

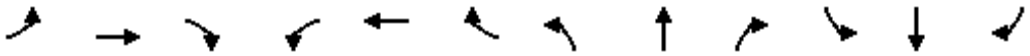
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1	10	5	4	4	6	35	10	0	30	0
Future Volume (Veh/h)	0	1	10	5	4	4	6	35	10	0	30	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	0	1	11	5	4	4	7	38	11	0	33	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	96	96	33	102	90	44	33			49		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	96	96	33	102	90	44	33			49		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	99	99	99	100	100			100		
cM capacity (veh/h)	876	791	1041	866	796	1027	1579			1558		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	12	13	56	33
Volume Left	0	5	7	0
Volume Right	11	4	11	0
cSH	1014	885	1579	1558
Volume to Capacity	0.01	0.01	0.00	0.00
Queue Length 95th (ft)	1	1	0	0
Control Delay (s)	8.6	9.1	0.9	0.0
Lane LOS	A	A	A	
Approach Delay (s)	8.6	9.1	0.9	0.0
Approach LOS	A	A		

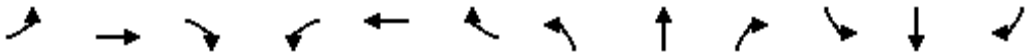
Intersection Summary				
Average Delay	2.4			
Intersection Capacity Utilization	19.4%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	507	14	28	523	39	16	2	20	35	2	8
Future Volume (Veh/h)	11	507	14	28	523	39	16	2	20	35	2	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	12	551	15	30	568	42	17	2	22	38	2	9
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	610			566			1242	1252	558	1254	1239	589
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	610			566			1242	1252	558	1254	1239	589
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			97			88	99	96	72	99	98
cM capacity (veh/h)	969			1006			143	165	529	137	168	508

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	578	640	41	49
Volume Left	12	30	17	38
Volume Right	15	42	22	9
cSH	969	1006	237	159
Volume to Capacity	0.01	0.03	0.17	0.31
Queue Length 95th (ft)	1	2	15	31
Control Delay (s)	0.3	0.8	23.3	37.4
Lane LOS	A	A	C	E
Approach Delay (s)	0.3	0.8	23.3	37.4
Approach LOS			C	E

Intersection Summary			
Average Delay	2.7		
Intersection Capacity Utilization	55.5%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2	8	33	5	2	1	3	7	1	2	1
Future Volume (Veh/h)	0	2	8	33	5	2	1	3	7	1	2	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	0	2	9	36	5	2	1	3	8	1	2	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	18	18	2	24	14	7	3			11		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	18	18	2	24	14	7	3			11		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	99	96	99	100	100			100		
cM capacity (veh/h)	989	875	1082	977	879	1075	1619			1608		

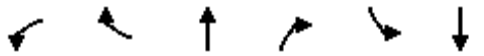
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	11	43	12	4
Volume Left	0	36	1	1
Volume Right	9	2	8	1
cSH	1037	969	1619	1608
Volume to Capacity	0.01	0.04	0.00	0.00
Queue Length 95th (ft)	1	3	0	0
Control Delay (s)	8.5	8.9	0.6	1.8
Lane LOS	A	A	A	A
Approach Delay (s)	8.5	8.9	0.6	1.8
Approach LOS	A	A		

Intersection Summary				
Average Delay	7.0			
Intersection Capacity Utilization	18.9%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	11	0	0	11	30	0
Future Volume (Veh/h)	11	0	0	11	30	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	0	0	12	33	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			12		24	12
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			12		24	12
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		97	100
cM capacity (veh/h)			1607		992	1069

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	12	12	33
Volume Left	0	0	33
Volume Right	0	0	0
cSH	1700	1700	992
Volume to Capacity	0.01	0.01	0.03
Queue Length 95th (ft)	0	0	3
Control Delay (s)	0.0	0.0	8.8
Lane LOS			A
Approach Delay (s)	0.0	0.0	8.8
Approach LOS			A

Intersection Summary			
Average Delay	5.1		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	13	0	0	44
Future Volume (Veh/h)	0	0	13	0	0	44
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	14	0	0	48
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	62	14			14	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	62	14			14	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	944	1066			1604	

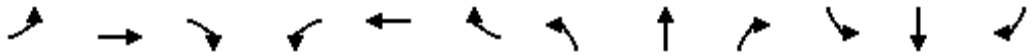
Direction, Lane #	NB 1	SB 1
Volume Total	14	48
Volume Left	0	0
Volume Right	0	0
cSH	1700	1604
Volume to Capacity	0.01	0.00
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	4	4	2	3	9	9	1	0	44	1
Future Volume (Veh/h)	0	0	4	4	2	3	9	9	1	0	44	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	0	0	4	4	2	3	10	10	1	0	48	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	83	80	48	83	80	10	49			11		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	83	80	48	83	80	10	49			11		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	99			100		
cM capacity (veh/h)	895	806	1020	896	806	1071	1558			1608		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	4	9	21	49
Volume Left	0	4	10	0
Volume Right	4	3	1	1
cSH	1020	923	1558	1608
Volume to Capacity	0.00	0.01	0.01	0.00
Queue Length 95th (ft)	0	1	0	0
Control Delay (s)	8.5	8.9	3.5	0.0
Lane LOS	A	A	A	
Approach Delay (s)	8.5	8.9	3.5	0.0
Approach LOS	A	A		

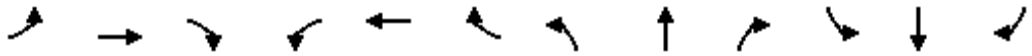
Intersection Summary				
Average Delay	2.3			
Intersection Capacity Utilization	18.4%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	359	1	10	252	6	0	3	9	37	0	7
Future Volume (Veh/h)	0	359	1	10	252	6	0	3	9	37	0	7
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	0	390	1	11	274	7	0	3	10	40	0	8
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	281			391			698	694	390	702	690	278
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	281			391			698	694	390	702	690	278
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	99	98	88	100	99
cM capacity (veh/h)	1282			1168			349	363	658	343	365	761

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	391	292	13	48
Volume Left	0	11	0	40
Volume Right	1	7	10	8
cSH	1282	1168	554	378
Volume to Capacity	0.00	0.01	0.02	0.13
Queue Length 95th (ft)	0	1	2	11
Control Delay (s)	0.0	0.4	11.7	15.9
Lane LOS		A	B	C
Approach Delay (s)	0.0	0.4	11.7	15.9
Approach LOS			B	C

Intersection Summary				
Average Delay	1.4			
Intersection Capacity Utilization	37.6%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	2	14	13	4	0	22	5	5	0	4	1
Future Volume (Veh/h)	1	2	14	13	4	0	22	5	5	0	4	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	1	2	15	14	4	0	24	5	5	0	4	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	62	62	4	76	60	8	5			10		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	62	62	4	76	60	8	5			10		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	99	98	100	100	99			100		
cM capacity (veh/h)	919	816	1079	889	818	1075	1616			1610		

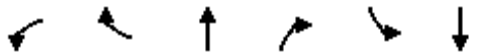
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	18	18	34	5
Volume Left	1	14	24	0
Volume Right	15	0	5	1
cSH	1032	872	1616	1610
Volume to Capacity	0.02	0.02	0.01	0.00
Queue Length 95th (ft)	1	2	1	0
Control Delay (s)	8.6	9.2	5.2	0.0
Lane LOS	A	A	A	
Approach Delay (s)	8.6	9.2	5.2	0.0
Approach LOS	A	A		

Intersection Summary				
Average Delay	6.6			
Intersection Capacity Utilization	21.0%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	7	0	0	7	10	0
Future Volume (Veh/h)	7	0	0	7	10	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	0	0	8	11	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			8		16	8
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			8		16	8
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			1612		1002	1074

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	8	8	11
Volume Left	0	0	11
Volume Right	0	0	0
cSH	1700	1700	1002
Volume to Capacity	0.00	0.00	0.01
Queue Length 95th (ft)	0	0	1
Control Delay (s)	0.0	0.0	8.6
Lane LOS			A
Approach Delay (s)	0.0	0.0	8.6
Approach LOS			A

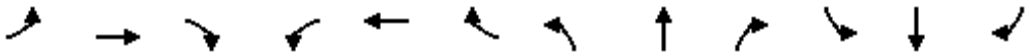
Intersection Summary			
Average Delay	3.5		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	36	26	3	28
Future Volume (Veh/h)	0	0	36	26	3	28
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	39	28	3	30
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	89	53			67	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	89	53			67	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	910	1014			1535	

Direction, Lane #	NB 1	SB 1
Volume Total	67	33
Volume Left	0	3
Volume Right	28	0
cSH	1700	1535
Volume to Capacity	0.04	0.00
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.7
Lane LOS		A
Approach Delay (s)	0.0	0.7
Approach LOS		

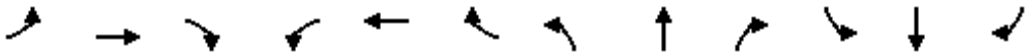
Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	7.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1	8	4	3	3	5	54	8	0	33	0
Future Volume (Veh/h)	0	1	8	4	3	3	5	54	8	0	33	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	0	1	9	4	3	3	5	59	9	0	36	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	114	114	36	119	110	64	36			68		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	114	114	36	119	110	64	36			68		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	99	100	100	100	100			100		
cM capacity (veh/h)	856	774	1037	846	778	1001	1575			1533		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	10	10	73	36
Volume Left	0	4	5	0
Volume Right	9	3	9	0
cSH	1003	864	1575	1533
Volume to Capacity	0.01	0.01	0.00	0.00
Queue Length 95th (ft)	1	1	0	0
Control Delay (s)	8.6	9.2	0.5	0.0
Lane LOS	A	A	A	
Approach Delay (s)	8.6	9.2	0.5	0.0
Approach LOS	A	A		

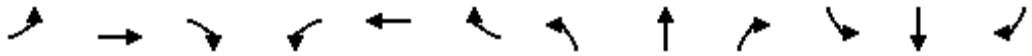
Intersection Summary				
Average Delay	1.7			
Intersection Capacity Utilization	18.3%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	412	11	23	425	51	13	1	16	30	1	6
Future Volume (Veh/h)	15	412	11	23	425	51	13	1	16	30	1	6
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	16	448	12	25	462	55	14	1	17	33	1	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	517			460			1033	1053	454	1043	1032	490
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	517			460			1033	1053	454	1043	1032	490
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			98			93	100	97	83	100	99
cM capacity (veh/h)	1049			1101			201	218	606	195	224	579

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	476	542	32	41
Volume Left	16	25	14	33
Volume Right	12	55	17	7
cSH	1049	1101	313	221
Volume to Capacity	0.02	0.02	0.10	0.19
Queue Length 95th (ft)	1	2	8	17
Control Delay (s)	0.5	0.6	17.8	25.0
Lane LOS	A	A	C	C
Approach Delay (s)	0.5	0.6	17.8	25.0
Approach LOS			C	C

Intersection Summary			
Average Delay	2.0		
Intersection Capacity Utilization	45.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2	10	34	5	2	1	4	9	1	2	1
Future Volume (Veh/h)	0	2	10	34	5	2	1	4	9	1	2	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	0	2	11	37	5	2	1	4	10	1	2	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	20	20	2	28	16	9	3			14		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	20	20	2	28	16	9	3			14		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	99	96	99	100	100			100		
cM capacity (veh/h)	986	872	1082	970	877	1073	1619			1604		

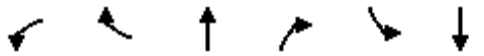
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	13	44	15	4
Volume Left	0	37	1	1
Volume Right	11	2	10	1
cSH	1043	962	1619	1604
Volume to Capacity	0.01	0.05	0.00	0.00
Queue Length 95th (ft)	1	4	0	0
Control Delay (s)	8.5	8.9	0.5	1.8
Lane LOS	A	A	A	A
Approach Delay (s)	8.5	8.9	0.5	1.8
Approach LOS	A	A		

Intersection Summary				
Average Delay	6.8			
Intersection Capacity Utilization	18.9%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	14	0	0	14	30	0
Future Volume (Veh/h)	14	0	0	14	30	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	15	0	0	15	33	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			15		30	15
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			15		30	15
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		97	100
cM capacity (veh/h)			1603		984	1065

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	15	15	33
Volume Left	0	0	33
Volume Right	0	0	0
cSH	1700	1700	984
Volume to Capacity	0.01	0.01	0.03
Queue Length 95th (ft)	0	0	3
Control Delay (s)	0.0	0.0	8.8
Lane LOS			A
Approach Delay (s)	0.0	0.0	8.8
Approach LOS			A

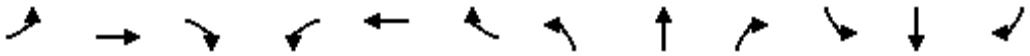
Intersection Summary			
Average Delay	4.6		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	16	0	0	48
Future Volume (Veh/h)	0	0	16	0	0	48
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	17	0	0	52
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	69	17			17	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	69	17			17	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	936	1062			1600	

Direction, Lane #	NB 1	SB 1
Volume Total	17	52
Volume Left	0	0
Volume Right	0	0
cSH	1700	1600
Volume to Capacity	0.01	0.00
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

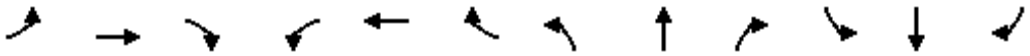
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	5	5	2	4	11	11	1	0	48	1
Future Volume (Veh/h)	0	0	5	5	2	4	11	11	1	0	48	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	0	0	5	5	2	4	12	12	1	0	52	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	94	90	52	94	90	12	53			13		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	94	90	52	94	90	12	53			13		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	99	100	100	99			100		
cM capacity (veh/h)	879	794	1015	880	794	1068	1553			1606		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	5	11	25	53
Volume Left	0	5	12	0
Volume Right	5	4	1	1
cSH	1015	921	1553	1606
Volume to Capacity	0.00	0.01	0.01	0.00
Queue Length 95th (ft)	0	1	1	0
Control Delay (s)	8.6	9.0	3.6	0.0
Lane LOS	A	A	A	
Approach Delay (s)	8.6	9.0	3.6	0.0
Approach LOS	A	A		

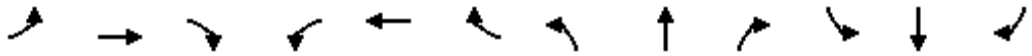
Intersection Summary				
Average Delay	2.4			
Intersection Capacity Utilization	19.6%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	441	2	12	309	15	0	9	11	49	0	9
Future Volume (Veh/h)	0	441	2	12	309	15	0	9	11	49	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	0	479	2	13	336	16	0	10	12	53	0	10
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	352			481			860	858	480	867	851	344
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	352			481			860	858	480	867	851	344
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	97	98	79	100	99
cM capacity (veh/h)	1207			1082			270	291	586	258	294	699

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	481	365	22	63
Volume Left	0	13	0	53
Volume Right	2	16	12	10
cSH	1207	1082	401	287
Volume to Capacity	0.00	0.01	0.05	0.22
Queue Length 95th (ft)	0	1	4	21
Control Delay (s)	0.0	0.4	14.5	21.0
Lane LOS		A	B	C
Approach Delay (s)	0.0	0.4	14.5	21.0
Approach LOS			B	C

Intersection Summary				
Average Delay	1.9			
Intersection Capacity Utilization	43.5%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	2	17	14	5	0	27	6	6	0	5	1
Future Volume (Veh/h)	1	2	17	14	5	0	27	6	6	0	5	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	1	2	18	15	5	0	29	7	7	0	5	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	76	78	6	93	74	10	6			14		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	76	78	6	93	74	10	6			14		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	98	98	99	100	98			100		
cM capacity (veh/h)	896	798	1077	862	801	1071	1615			1604		

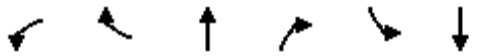
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	21	20	43	6
Volume Left	1	15	29	0
Volume Right	18	0	7	1
cSH	1033	846	1615	1604
Volume to Capacity	0.02	0.02	0.02	0.00
Queue Length 95th (ft)	2	2	1	0
Control Delay (s)	8.6	9.4	4.9	0.0
Lane LOS	A	A	A	
Approach Delay (s)	8.6	9.4	4.9	0.0
Approach LOS	A	A		

Intersection Summary				
Average Delay	6.4			
Intersection Capacity Utilization	22.4%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	9	0	0	9	10	0
Future Volume (Veh/h)	9	0	0	9	10	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	0	0	10	11	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			10		20	10
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			10		20	10
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			1610		997	1071

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	10	10	11
Volume Left	0	0	11
Volume Right	0	0	0
cSH	1700	1700	997
Volume to Capacity	0.01	0.01	0.01
Queue Length 95th (ft)	0	0	1
Control Delay (s)	0.0	0.0	8.7
Lane LOS			A
Approach Delay (s)	0.0	0.0	8.7
Approach LOS			A

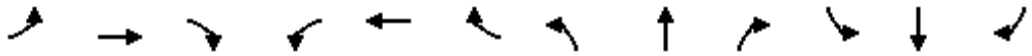
Intersection Summary			
Average Delay	3.1		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	45	26	3	33
Future Volume (Veh/h)	0	0	45	26	3	33
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	49	28	3	36
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	105	63			77	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	105	63			77	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	891	1002			1522	

Direction, Lane #	NB 1	SB 1
Volume Total	77	39
Volume Left	0	3
Volume Right	28	0
cSH	1700	1522
Volume to Capacity	0.05	0.00
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.6
Lane LOS		A
Approach Delay (s)	0.0	0.6
Approach LOS		

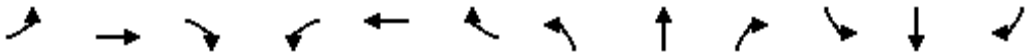
Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	7.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1	10	5	4	4	6	61	10	0	39	0
Future Volume (Veh/h)	0	1	10	5	4	4	6	61	10	0	39	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	0	1	11	5	4	4	7	66	11	0	42	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	134	133	42	139	128	72	42			77		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	134	133	42	139	128	72	42			77		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	99	99	99	100	100			100		
cM capacity (veh/h)	829	754	1029	819	760	991	1567			1522		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	12	13	84	42
Volume Left	0	5	7	0
Volume Right	11	4	11	0
cSH	998	844	1567	1522
Volume to Capacity	0.01	0.02	0.00	0.00
Queue Length 95th (ft)	1	1	0	0
Control Delay (s)	8.6	9.3	0.6	0.0
Lane LOS	A	A	A	
Approach Delay (s)	8.6	9.3	0.6	0.0
Approach LOS	A	A		

Intersection Summary				
Average Delay	1.8			
Intersection Capacity Utilization	20.6%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	507	14	28	523	59	16	2	20	42	2	10
Future Volume (Veh/h)	17	507	14	28	523	59	16	2	20	42	2	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	18	551	15	30	568	64	17	2	22	46	2	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	632			566			1266	1286	558	1278	1262	600
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	632			566			1266	1286	558	1278	1262	600
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			97			87	99	96	65	99	98
cM capacity (veh/h)	951			1006			136	156	529	131	162	501

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	584	662	41	59
Volume Left	18	30	17	46
Volume Right	15	64	22	11
cSH	951	1006	229	153
Volume to Capacity	0.02	0.03	0.18	0.39
Queue Length 95th (ft)	1	2	16	41
Control Delay (s)	0.5	0.8	24.2	42.6
Lane LOS	A	A	C	E
Approach Delay (s)	0.5	0.8	24.2	42.6
Approach LOS			C	E

Intersection Summary			
Average Delay	3.2		
Intersection Capacity Utilization	55.2%	ICU Level of Service	B
Analysis Period (min)	15		

Appendix 2 - Synchro reports

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	1	441	2	12	309	17	0	9	11	53	0	10
Future Vol, veh/h	1	441	2	12	309	17	0	9	11	53	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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	1	479	2	13	336	18	0	10	12	58	0	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	354	0	0	481	0	0	859	862	480	864	854	345
Stage 1	-	-	-	-	-	-	482	482	-	371	371	-
Stage 2	-	-	-	-	-	-	377	380	-	493	483	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1205	-	-	1082	-	-	277	293	586	274	296	698
Stage 1	-	-	-	-	-	-	565	553	-	649	620	-
Stage 2	-	-	-	-	-	-	644	614	-	558	553	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1205	-	-	1082	-	-	269	288	586	258	291	698
Mov Cap-2 Maneuver	-	-	-	-	-	-	269	288	-	258	291	-
Stage 1	-	-	-	-	-	-	564	552	-	648	611	-
Stage 2	-	-	-	-	-	-	624	605	-	536	552	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	14.5	21.4
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	400	1205	-	-	1082	-	-	287
HCM Lane V/C Ratio	0.054	0.001	-	-	0.012	-	-	0.239
HCM Control Delay (s)	14.5	8	0	-	8.4	0	-	21.4
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.9

Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	2	10	39	6	2	1	4	12	1	2	1
Future Vol, veh/h	0	2	10	39	6	2	1	4	12	1	2	1
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	-	-	-	-	-	-	-	-	-	-	-	-
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	0	2	11	42	7	2	1	4	13	1	2	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	22	24	3	24	18	11	3	0	0	17	0	0
Stage 1	5	5	-	13	13	-	-	-	-	-	-	-
Stage 2	17	19	-	11	5	-	-	-	-	-	-	-
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	990	869	1081	987	876	1070	1619	-	-	1600	-	-
Stage 1	1017	892	-	1007	885	-	-	-	-	-	-	-
Stage 2	1002	880	-	1010	892	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	981	867	1081	974	874	1070	1619	-	-	1600	-	-
Mov Cap-2 Maneuver	981	867	-	974	874	-	-	-	-	-	-	-
Stage 1	1016	891	-	1006	884	-	-	-	-	-	-	-
Stage 2	992	879	-	996	891	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.5	8.9	0.4	1.8
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1619	-	-	1038	964	1600	-	-
HCM Lane V/C Ratio	0.001	-	-	0.013	0.053	0.001	-	-
HCM Control Delay (s)	7.2	0	-	8.5	8.9	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	0	11	3	0	11
Future Vol, veh/h	5	0	11	3	0	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
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	5	0	12	3	0	12

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	26	14	0	0	15	0
Stage 1	14	-	-	-	-	-
Stage 2	12	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	989	1066	-	-	1603	-
Stage 1	1009	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	989	1066	-	-	1603	-
Mov Cap-2 Maneuver	989	-	-	-	-	-
Stage 1	1009	-	-	-	-	-
Stage 2	1011	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	989	1603	-
HCM Lane V/C Ratio	-	-	0.005	-	-
HCM Control Delay (s)	-	-	8.7	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	18	507	14	28	523	63	16	2	20	45	2	11
Future Vol, veh/h	18	507	14	28	523	63	16	2	20	45	2	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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	20	551	15	30	568	68	17	2	22	49	2	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	636	0	0	566	0	0	1268	1295	559	1273	1268	602
Stage 1	-	-	-	-	-	-	599	599	-	662	662	-
Stage 2	-	-	-	-	-	-	669	696	-	611	606	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	947	-	-	1006	-	-	145	162	529	144	168	500
Stage 1	-	-	-	-	-	-	488	490	-	451	459	-
Stage 2	-	-	-	-	-	-	447	443	-	481	487	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	947	-	-	1006	-	-	132	150	529	129	155	500
Mov Cap-2 Maneuver	-	-	-	-	-	-	132	150	-	129	155	-
Stage 1	-	-	-	-	-	-	473	475	-	437	437	-
Stage 2	-	-	-	-	-	-	414	422	-	445	472	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.4	25.1	44.9
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	220	947	-	-	1006	-	-	151
HCM Lane V/C Ratio	0.188	0.021	-	-	0.03	-	-	0.418
HCM Control Delay (s)	25.1	8.9	0	-	8.7	0	-	44.9
HCM Lane LOS	D	A	A	-	A	A	-	E
HCM 95th %tile Q(veh)	0.7	0.1	-	-	0.1	-	-	1.8

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	3	17	18	5	0	27	6	11	0	5	1
Future Vol, veh/h	1	3	17	18	5	0	27	6	11	0	5	1
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	-	-	-	-	-	-	-	-	-	-	-	-
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	1	3	18	20	5	0	29	7	12	0	5	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	80	83	6	87	77	13	6	0	0	19	0	0
Stage 1	6	6	-	71	71	-	-	-	-	-	-	-
Stage 2	74	77	-	16	6	-	-	-	-	-	-	-
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	908	807	1077	899	813	1067	1615	-	-	1597	-	-
Stage 1	1016	891	-	939	836	-	-	-	-	-	-	-
Stage 2	935	831	-	1004	891	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	891	792	1077	868	798	1067	1615	-	-	1597	-	-
Mov Cap-2 Maneuver	891	792	-	868	798	-	-	-	-	-	-	-
Stage 1	998	891	-	922	821	-	-	-	-	-	-	-
Stage 2	912	816	-	983	891	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.6	9.4	4.5	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1615	-	-	1015	852	1597	-	-
HCM Lane V/C Ratio	0.018	-	-	0.022	0.029	-	-	-
HCM Control Delay (s)	7.3	0	-	8.6	9.4	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	0	7	5	0	7
Future Vol, veh/h	4	0	7	5	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
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	4	0	8	5	0	8

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	19	11	0	0	13	0
Stage 1	11	-	-	-	-	-
Stage 2	8	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	998	1070	-	-	1606	-
Stage 1	1012	-	-	-	-	-
Stage 2	1015	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	998	1070	-	-	1606	-
Mov Cap-2 Maneuver	998	-	-	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	1015	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	998	1606	-
HCM Lane V/C Ratio	-	-	0.004	-	-
HCM Control Delay (s)	-	-	8.6	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

CTL | THOMPSON INCORPORATED

SOILS AND FOUNDATION INVESTIGATION
PROPOSED REDEVELOPMENT
LOT E-2
RIVER PINES SUB RESUB OUTLOT E REPLAT A RIVER PINES
200 NORTH 7TH AVENUE
FRISCO, COLORADO

Prepared For:

Blue River Real Estate
PO Box 7035
Breckenridge, Colorado 80424

Attention: Seth Francis

Project No. SU02498.000-120

July 5, 2024

500 Brian Avenue, Unit A, Silverthorne, Colorado 80498
Telephone: 970-453-2047 www.ctlthompson.com

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SCOPE OF WORK

This report presents the results of our Soils and Foundation Investigation for the Proposed Redevelopment on Lot E-2 , River Pines Sub Resub Outlot E Replat A River Pines, 200 North 7th Avenue, in Frisco, Colorado. We conducted this investigation to evaluate subsurface conditions at the site and provide geotechnical engineering recommendations for the proposed condominiums and/or townhomes. Our report was prepared from data developed during our field exploration, engineering analysis, and experience with similar conditions. This report includes a description of the subsurface conditions observed in our exploratory borings and presents geotechnical engineering recommendations for design and construction of the residence foundations, floor systems, and details influenced by the subsoils. The scope of work was described in a Service Agreement (SU-24-0024) dated April 5, 2024.

Recommendations contained in this report were developed based on our understanding of the planned construction. Once building plans are finalized, we should review to determine whether our recommendations and design criteria are appropriate. If plans differ significantly from the descriptions contained in the report, we should be informed so that we can determine whether our recommendations and design criteria are appropriate. A summary of our conclusions is presented below.

SUMMARY OF CONCLUSIONS

1. Subsurface conditions observed in our exploratory borings consisted of about 5 to 6 feet of undocumented fill underlain by native gravel, sand, and silt. The maximum depth explored was 30 feet.

2. Groundwater was encountered during drilling at a depth of 9.5 feet in TH-1 and TH-2, and 10 feet in TH-3. Groundwater was measured at a depth of 5.25 feet in TH-3 when checked 18 days after drilling operations were complete. Groundwater will likely be encountered during excavations.

3. We anticipate that excavations for the new buildings will result in native

gravel being the predominant soil at anticipated foundation elevations, though silt may also be encountered. The residence can be constructed on footing foundations supported by the undisturbed, native gravel. Undocumented fill or silt, if encountered, should be removed from the building footprint and replaced with structural fill. Design and construction criteria are presented in the report. It is critical that we observe the excavation to check whether conditions are as anticipated, prior to placing footings.

4. Surface drainage should be designed to provide for rapid removal of surface water away from the residence.

5. The design and construction criteria for foundations and floor systems in this report were compiled with the expectation that all other recommendations presented related to surface and subsurface drainage, landscaping irrigation, backfill compaction, etc. will be incorporated into the project and that the owners will maintain the structure, use prudent irrigation practices, and maintain surface drainage. It is critical that all recommendations in this report are followed.

SITE CONDITIONS

The site is located at 200 North 7th Avenue in Frisco, Colorado, as shown on Figure 1. The property is bordered by single-family residences and townhomes to the north and west, and Summit Boulevard, a.k.a. Colorado Highway 9, to the east. To the south is vacant land, and beyond that, condominiums. There is an existing lodge structure on the property. The ground surface across the site is variable and heavily man-made from previous site improvements. From North 7th Avenue, the site generally slopes up to the east, then flattens throughout the driveway and existing building footprint. East of the existing building, there is an excavated depressional feature. Along the east side of the property and to the northeast corner, there is a berm, likely formed from fills excavated during original construction. South of the existing building and deck area, there is a pond on the property. Vegetation on the site is variable and largely planted/managed. There is a wetland delineated (performed by others) on the site around the existing pond.

PROPOSED CONSTRUCTION

Building plans for the residence have not yet been finalized. We understand that multiple layouts are being considered, but generally consist of multiple town-homes and/or condominium structures. The structures will likely be at least two stories. Garages, attached or detached, are being considered. Due to local floodplain regulations, the structures will not contain below grade spaces. Floors will likely be slab-on-grade. Required excavations could be on the order of 6 to 7 feet for foundations. Foundation loads are expected to be about 1 to 3 kips per linear foot of foundation wall, with maximum column loads of 40 kips or less. Once building plans have been finalized, we should be contacted to re-evaluate our recommendations.

INVESTIGATION

The field investigation included drilling three exploratory borings at the approximate locations shown on Figure 2. The borings were drilled to depths of 30 and 40 feet below the existing ground surface. Summary logs of the exploratory borings are presented on Figure 3. The borings were drilled using track-mounted Geoprobe drill rig and a down-hole hammer and casing (ODEX Method). Drilling was observed by our representative who logged the strata encountered. A groundwater monitoring well consisting of a 2-inch diameter slotted PVC and riser was installed in TH-3 with filter sand and a bentonite seal to facilitate delayed groundwater measurements and future groundwater sampling for dewatering, if necessary.

Soil samples obtained during drilling were returned to our laboratory and visually examined by our engineer. Laboratory testing included moisture content, percent silt and clay-sized particles, Atterberg limits, and water-soluble sulfate concentration. Laboratory test results are summarized in Table I.

SUBSURFACE CONDITIONS

Subsurface conditions observed in the TH-1 consisted of approximately 6 feet of undocumented gravel fill underlain by approximately 10 feet of silty, clayey gravel with sand (GM), then approximately 14 feet of poorly-graded sand with silt (SP-SM). Fill and gravel soils contained cobbles and boulders up to 3 feet in diameter. Gravel was generally medium dense to very dense, moist to wet with depth, and brown in color. Fill was loose to medium dense. The sand was generally medium dense to dense, very moist to wet with depth, and brown in color. The sand contained pockets of silt and clay. Groundwater was observed in the boring at a depth of 9.5 feet below the existing ground surface.

Subsurface conditions observed in TH-2 consisted of approximately 5 feet of undocumented gravel fill underlain by approximately 1 foot of sandy silt with gravel (ML). Below the silt, we encountered poorly-graded gravel with silt and sand (GP-GM) to a depth of 20 feet below the ground surface. Fill and gravel soils contained cobbles and boulders up to 3 feet in diameter. Gravel was generally medium dense to very dense, moist to wet with depth, and brown in color. Fill was loose to medium dense. Groundwater was observed in the boring at a depth of 9.5 feet below the existing ground surface.

Subsurface conditions observed in TH-3 consisted of approximately 5 feet of undocumented gravel fill underlain by poorly-graded gravel with silt and sand (GP-GM) to a depth of 24 feet. Below the gravel, we encountered sand that ranged between a silty sand with gravel (SM) and a poorly-graded sand with silt and gravel (SP-SM). The sand was generally medium dense to dense, very moist to wet with depth, and brown in color. Groundwater was observed in the boring at a depth of 10 feet below the existing ground surface, and at a depth of 5.25 feet below the ground surface when checked 18 days after completion of drilling.

GEOLOGIC HAZARDS

We reviewed the following geologic mapping showing the site.

1. Geologic Map of the Frisco Quadrangle, Summit County, Colorado, (Map MF-2340) by Karl S. Kellogg, Paul J Bartos and Cindy L. Williams with the U.S. Geologic Survey, 2002.

The site is mapped as alluvium. Our field investigation and observations at the site generally support the mapping.

The site is less than 300 feet from Tenmile Creek, and seasonal groundwater rise should be expected. In depth analysis of flood risk and debris flow risk, and associated impacts on groundwater level, is beyond the scope of this study. We judge the risk at this site to be low based on our current monitoring and groundwater measurements. We recommend that a civil engineer assess flood and potential debris flow risk in case of high-water events to minimize risks of severe damages to the structure within a reasonable service life.

FOUNDATIONS

The proposed residences can be supported on footing foundations on the undisturbed, native gravel or sand soils or compacted fill. All topsoil, existing, uncontrolled fill, silt layers, clay pockets, organic materials, and existing building materials should be removed below footing areas. Prior to concrete placement, the footing areas should be moistened and compacted to provide a flat and level subgrade. Loose and disturbed soils should be removed or compacted. Structural fill, if required, should be tested by our representative and meet the criteria in Structural Fill. Our representative should observe conditions exposed in the completed foundation excavation to confirm whether the exposed soils are as anticipated and suitable for

support of the foundation. If subexcavation and replacement of soils beneath footings is necessary due to removal of fill, silt, or clay, our representative should observe the subexcavation process prior to fill placement.

1. Soils loosened during the forming process for the footings should be removed or compacted prior to placing concrete. Lean concrete may also be used to fill depressions resulting from the removal of boulders.

2. Footings can be sized using a maximum allowable soil pressure of 3,000 psf. We expect settlement of footings will be approximately 1 inch or less. Differential settlement of up to ½-inch should be considered in the design.

3. To resist lateral loads, a coefficient of friction of 0.40 can be used for concrete in contact with soil.

4. Continuous wall footings should have a minimum width of at least 16 inches. Foundations for isolated columns should have minimum dimensions of 24 inches by 24 inches. Larger sizes may be required, depending upon foundation loads.

5. Grade beams and foundation walls should be well reinforced, top and bottom, to span undisclosed loose or soft soil pockets and resist lateral earth pressures. We recommend reinforcement sufficient to span an unsupported distance of at least 10 feet. Reinforcement should be designed by the structural engineer.

6. The soils under exterior footings should be protected from freezing. We recommend the bottom of footings be constructed at a depth of at least 40 inches below finished exterior grade.

SLABS-ON-GRADE

Slab-on-grade lower level floors are desired. Based on our laboratory test data and experience, we judge slab-on-grade construction supported by the undisturbed, native gravel, sand, or properly placed granular structural fill will have a low risk of damaging differential movement. All topsoil, existing, uncontrolled fill, silt layers, clay pockets, organic materials, and existing building materials must be removed beneath slabs. Fill placed to attain subgrade elevations below floor slabs

should be placed in accordance with the recommendations outlined in Structural Fill. We recommend the following precautions for slab-on-grade construction at this site. These precautions will not prevent movement from occurring; they tend to reduce damage if slab movement occurs.

1. Slabs should be separated from exterior walls and interior bearing members with slip joints that allow free vertical movement of the slabs.

2. Underslab plumbing should be pressure tested for leaks before the slabs are constructed. Plumbing and utilities that pass through slabs should be isolated from the slabs with sleeves and provided with flexible couplings.

3. Frequent control joints should be provided, in accordance with American Concrete Institute (ACI) recommendations, to reduce problems associated with shrinkage and curling.

4. We recommend a 4-inch layer of clean gravel be placed beneath the slabs to provide a flat, uniform subgrade. This material should consist of minus 2 inch aggregate with at least 50% retained on the No. 4 sieve and less than 2% passing the No. 200 sieve. To prevent water from collecting below the slabs, the underslab gravel should be connected to the perimeter underdrain system on the downhill side of the building. Typically, this can be accomplished at the lower level frost wall footing step. We can provide additional recommendations for drain system layout upon request.

5. The 2018 International Residential Code (IRC R506) states that a 4-inch base course layer consisting of clean graded sand, gravel, crushed stone or crushed blast furnace slag shall be placed beneath below grade floors (unless the underlying soils are free-draining), along with a vapor retarder.

   IRC states that the vapor retarder can be omitted where approved by the building official. The merits of installation of a vapor retarder below floor slabs depend on the sensitivity of floor coverings and building use to moisture. A properly installed vapor retarder is more beneficial below concrete slab-on-grade floors where floor coverings, painted floor surfaces, or products stored on the floor will be sensitive to moisture. The vapor retarder is most effective when concrete is placed directly on top of it, rather than placing a sand or gravel leveling course between the vapor retarder and the floor slab. Placement of concrete on the vapor retarder may increase the risk of shrinkage cracking and

curling. Use of concrete with reduced shrinkage characteristics including minimized water content, maximized coarse aggregate content, and reasonably low slump will reduce the risk of shrinkage cracking and curling. Considerations and recommendations for the installation of vapor retarders below concrete slabs are outlined in Section 3.2.3 of the 2006 American Concrete Institute (ACI) Committee 302, “Guide for Concrete Floor and Slab Construction (ACI 302.R-96)”.

FOUNDATION WALLS

Foundation walls that extend below-grade should be designed for lateral earth pressures where backfill is not present to about the same extent on both sides of the wall. Many factors affect the values of the design lateral earth pressure. These factors include, but are not limited to, the type, compaction, slope, and drainage of the backfill, and the rigidity of the wall against rotation and deflection. For a very rigid wall where negligible or very little deflection will occur, an “at-rest” lateral earth pressure should be used in design. For walls that can deflect or rotate 0.5 to 1 percent of wall height (depending upon the backfill types), lower “active” lateral earth pressures are appropriate. Our experience indicates typical below-grade walls in residences deflect or rotate slightly under normal design loads, and that this deflection results in satisfactory wall performance. Thus, the earth pressures on the walls will likely be between the “active” and “at-rest” conditions.

If on-site soils are used as backfill, we recommend design of foundation walls at this site using an equivalent fluid density of at least 50 pcf. This value assumes deflection; some minor cracking of walls may occur. If very little wall deflection is desired, a higher design value is appropriate. The structural engineer should also consider site-specific grade restrictions, and the need for lateral bracing during backfill. Retaining walls that are free to rotate and allow the active earth pressure condition to develop can be designed using an equivalent fluid density of at least 40 pcf for on-site gravel soil backfill.

Foundation Wall Backfill

Onsite gravel and sand soils may be used for foundation wall backfill that will support improvements (slabs, patios, asphalt, etc.) Onsite silt and clays may only be used for exterior foundation wall backfill in landscape areas. Proper placement and compaction of foundation backfill is important to reduce infiltration of surface water and settlement of backfill. The upper 2 feet of fill should be a relatively impervious material to limit infiltration.

Backfill that will support improvements (imported granular soils) should be placed in thin loose lifts, moisture conditioned to within +/-2 percent of optimum moisture content and compacted to at least 95 percent of ASTM D 698 maximum dry density. Backfill in landscape areas should be compacted to at least 90 percent of ASTM D 698 maximum dry density. All onsite silt soil backfill (used in landscape areas only) should be placed at a moisture content at or above optimum and compacted as described above.

Thickness of lifts will likely need to be reduced if there are small, confined areas of backfill, that limit the size and weight of compaction equipment. Some settlement of the backfill should be expected even if the material is placed and compacted properly. In our experience, settlement of properly compacted granular backfill could be on the order of 0.5 to 1 percent of backfill thickness. The native soils, particularly silts and sands, have a higher settlement potential (1 to 2 percent). Increasing the minimum compaction level will reduce settlement potential. Care should be taken not to over-compact the backfill and damage foundation walls. Moisture content and density of the backfill should be tested during placement by a representative of our firm.

SUBSURFACE DRAINAGE

Our subsurface investigation indicated groundwater seepage, as well as the

seasonal groundwater level, near the proposed foundation level. Additionally, water from snow melt, precipitation and surface irrigation of lawns and landscaping frequently flows through relatively permeable backfill placed adjacent to a residence and collects on the surface of less permeable soils occurring at the bottom of foundation excavations. This process, combined with shallow groundwater, can cause wet or moist basement conditions after construction. To reduce the likelihood water pressure will develop outside foundation walls and the risk of accumulation of water at basement level, we recommend installing a foundation drain system, as well as an underslab drain system.

The lower foundation drain should be installed prior to footing construction, if seepage is encountered. The necessity of the lower drain should be determined by CTL|T at the time of construction. If the excavation for the residence is to be stepped into the hillside, the drain should be installed around the perimeter of each level of excavation. The invert of the lower foundation drain should be at least 12 inches below adjacent footing subgrade elevation and sloped to a minimum of 1 percent to a gravity outlet. The drain should consist of a 4-inch diameter perforated or slotted drain pipe encased in free-draining gravel and covered with filter fabric (Mirafi 140N or equivalent) to protect the drain from clogging. After wall construction, the fabric should be removed to expose clean gravel and the upper foundation drain should then be installed.

The upper foundation drain should be installed after foundation construction and prior to wall backfill. The invert of the upper drain should be below bottom of footing and at least 12 inches below adjacent finished grade (top of slab). The drain should be sloped to a suitable gravity outlet. The upper foundation drain should be installed around the perimeter of each level of excavation.

In order to reduce the risk of water collecting beneath the residence, we recommend providing lateral drains beneath the basement floor slab. The lateral drains should consist of 4-inch diameter, perforated or slotted pipe encased in free draining

gravel. The invert elevation of the lateral drains should be at least 12 inches below top of basement slab. In some cases, it is beneficial to place the lateral drains in underslab plumbing trenches. The drain pipes should be sloped at least 1/8 inch per foot and be connected to the exterior drain system on the downhill side of the building. If connecting to the exterior drain system is not feasible, the interior drains should outlet into a sump and pump system. The horizontal spacing of the lateral drains should not be more than 20 feet. We can provide additional recommendations for the lateral drains upon request.

The drains should lead to a positive gravity outlet or sump where water can be removed by pumping. Sump pumps and gravity outlet locations must be maintained by the homeowner. A foundation drain detail and notes for basement construction are presented on Figures 4 and 5.

CONCRETE

Concrete in contact with soil can be subject to sulfate attack. We measured the water-soluble sulfate concentration in a sample taken from the site at less than 0.01 percent. For this level of sulfate concentration, ACI 332-08 *Code Requirements for Residential Concrete* indicates there are no special requirements for sulfate resistance.

Superficial damage may occur to the exposed surfaces of highly permeable concrete, even though sulfate levels are likely relatively low. To control this risk and to resist freeze-thaw deterioration, the water-to-cementitious materials ratio should not exceed 0.50 for concrete in contact with soils that are likely to stay moist due to surface drainage or high water tables. Concrete should have a total air content of 6 percent ± 1.5 percent. We advocate all foundation walls and grade beams in contact with the subsoils (including the inside and outside faces of garage and crawlspace grade beams) be damp-proofed.

SURFACE DRAINAGE

Surface drainage is critical to the performance of foundations, floor slabs and concrete flatwork. Recommendations in this report are based on effective drainage for the life of the structure and cannot be relied upon if effective drainage is not maintained. We recommend the following precautions be observed during construction and maintained at all times after construction is completed:

1. The ground surface surrounding the exterior of the building should be sloped to drain away from the building in all directions. We recommend providing a slope of at least 12 inches in the first 10 feet in landscape areas. There are instances where this slope cannot be achieved. A slope of 6 inches in the first 10 feet should be used as a minimum. We recommend a slope of at least 3 inches in the first 10 feet in paved areas. A swale should be provided around the uphill side of the building to divert surface runoff.

2. Backfill around the exterior of foundation walls should be placed as described in Foundation Wall Backfill. Increases in the moisture content of the backfill soils after placement often results in settlement. Settlement is most common adjacent to north facing walls. Re-establishing proper slopes (homeowner maintenance) away from the building may be necessary.

3. Landscaping should be carefully designed to minimize irrigation. Plants used near foundation walls should be limited to those with low moisture requirements; irrigated grass should not be located within 5 feet of the foundation. Lawn sprinklers should not discharge within 5 feet of the foundation and should be directed away from the building. Low-volume emitters can be used within 5 feet of the foundation.

4. Impervious plastic membranes should not be used to cover the ground surface immediately surrounding the building. These membranes tend to trap moisture and prevent normal evaporation from occurring. Geotextile fabrics can be used to control weed growth and allow some evaporation to occur.

5. Roof downspouts and drains should discharge well beyond the limits of all backfill. Splash blocks and/or extensions should be provided at all downspouts so water discharges onto the ground beyond the backfill. We generally recommend against burial of downspout discharge. Where it is necessary to bury downspout discharge, solid, rigid pipe

should be used and it should slope to an open gravity outlet. Buried downspout discharge pipes should be heated (with thermostat) during winter months to prevent freezing. Downspout extensions, splash blocks and buried outlets must be maintained by the homeowner.

CONSTRUCTION OBSERVATIONS

We recommend that CTL|Thompson, Inc. provide construction observation services to allow us the opportunity to verify whether soil conditions are consistent with those found during this investigation. If others perform these observations, they must accept responsibility to judge whether the recommendations in this report remain appropriate.

STRUCTURAL ENGINEERING SERVICES

CTL|Thompson, Inc. is a full-service geotechnical, structural, materials, and environmental engineering firm. Our services include preparation of structural framing and foundation plans. We can also design earth retention systems. Based on our experience, CTL|T typically provides value to projects from schedule and economic standpoints, due to our combined expertise and experience with geotechnical, structural, and materials engineering. We would like the opportunity to provide proposals for structural engineering services on your future projects.

GEOTECHNICAL RISK

The concept of risk is an important aspect with any geotechnical evaluation primarily because the methods used to develop geotechnical recommendations do not comprise an exact science. We never have complete knowledge of subsurface conditions. Our analysis must be tempered with engineering judgment and experience. Therefore, the recommendations presented in any geotechnical evaluation should not be considered risk-free. Our recommendations represent our judgment of those measures that are necessary to increase the chances that the structure will

perform satisfactorily. It is critical that all recommendations in this report are followed during construction. The owners must assume responsibility for maintaining the structures and use appropriate practices regarding drainage and landscaping. Improvements performed by the owner after construction, such as finishing a basement or construction of additions, retaining walls, decks, patios, landscaping, and exterior flatwork, should be completed in accordance with recommendations in this report.

RADON

Radon is a gaseous, radioactive element that comes from the radioactive decay of uranium, which is commonly found in igneous rocks. The average indoor radon level in Summit County is 7.6 pCi/L (http://county-radon.info/CO/Summit.html), which is above the recommended action level of 4 pCi/L as recommended by the Environmental Protection Agency. Testing for radon gas at the site is beyond the scope of this study. Due to the many factors that affect the radon levels in a specific building, accurate testing of radon levels is usually only possible after construction is complete. Typically, radon mitigation systems in this area consist of ventilation systems installed beneath lower level slabs and crawlspaces. The infrastructure for such a mitigation system can normally be installed during construction at a relatively low cost, which is recommended. The buildings should be tested for radon once construction is complete. If test results indicate mitigation is required, the installed system can then be used for mitigation. We are not experts in radon testing or mitigation. If the client is concerned about radon, then a professional in this special field of practice should be consulted.

LIMITATIONS

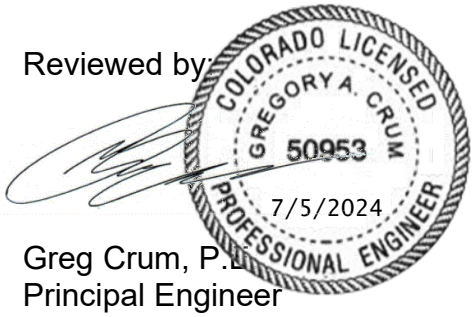
This report has been prepared for the exclusive use of Blue River Real Estate and the design/construction team for the purpose of providing geotechnical design and construction criteria for the proposed project. The information, conclusions, and

recommendations presented herein are based upon consideration of many factors including, but not limited to, the type of structure proposed, the geologic setting, and the subsurface conditions encountered. The conclusions and recommendations contained in the report are not valid for use by others. Standards of practice evolve in the area of geotechnical engineering. The recommendations provided in this report are appropriate for about three years. If the proposed project is not constructed within about three years, we should be contacted to determine if we should update this report.

Our exploratory borings were located to provide a reasonably accurate picture of subsurface conditions. Variations in the subsurface conditions not indicated by the borings will occur. A representative of our firm should observe placement of and test structural fill. We should observe the installation of the drilled piers to confirm that the subsurface conditions encountered are suitable for support of the foundation as designed. This investigation was conducted in a manner consistent with that level of care and skill ordinarily exercised by geotechnical engineers currently practicing under similar conditions in the locality of this project. No warranty, express or implied, is made. If we can be of further service in discussing the contents of this report, please call.

CTL|THOMPSON, INC.

Reviewed by:



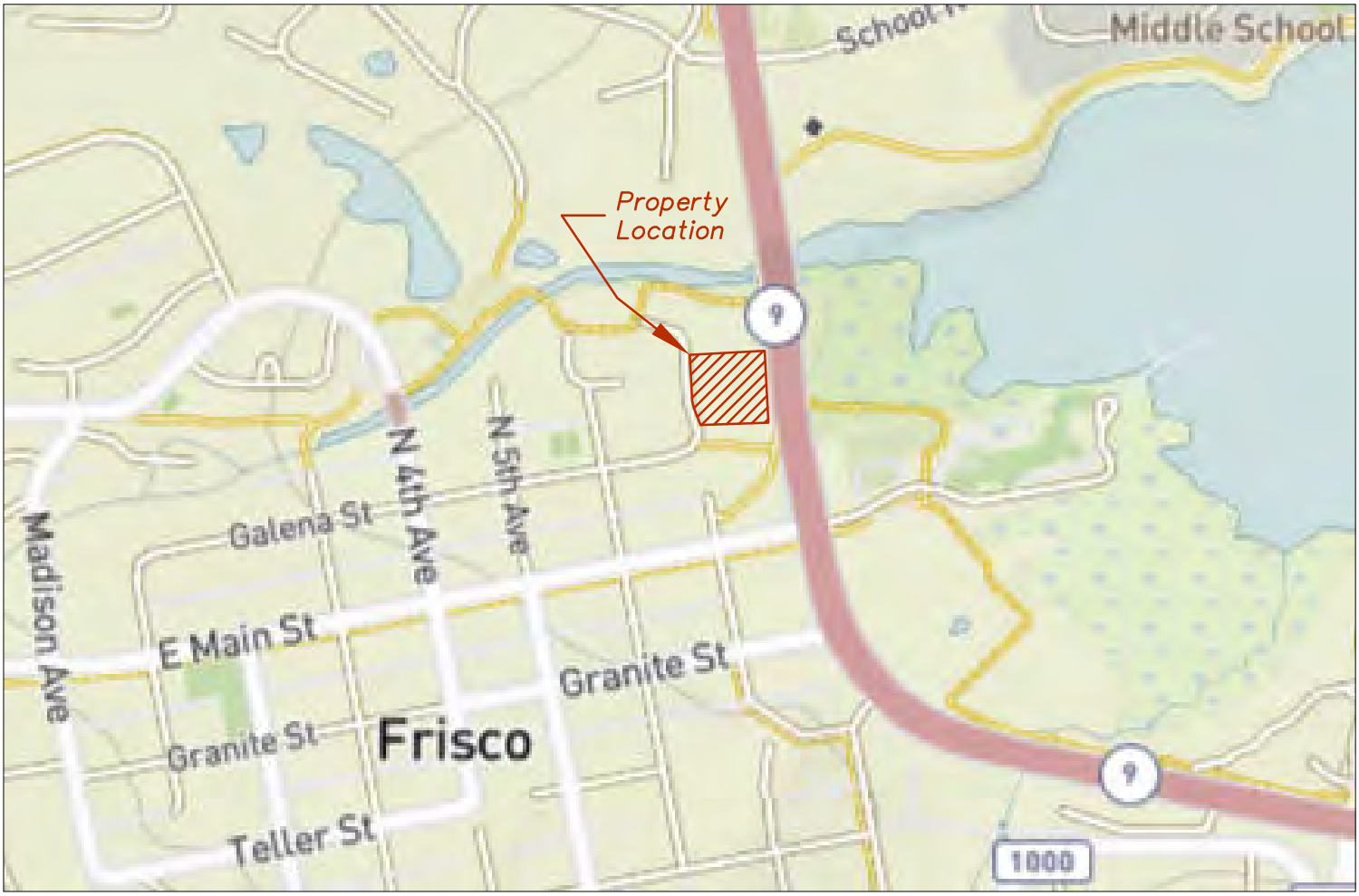
Laura Mooney
Staff Scientist

Greg Crum, P.E.
Principal Engineer

LM:GC

cc: sjfrancis1985@gmail.com

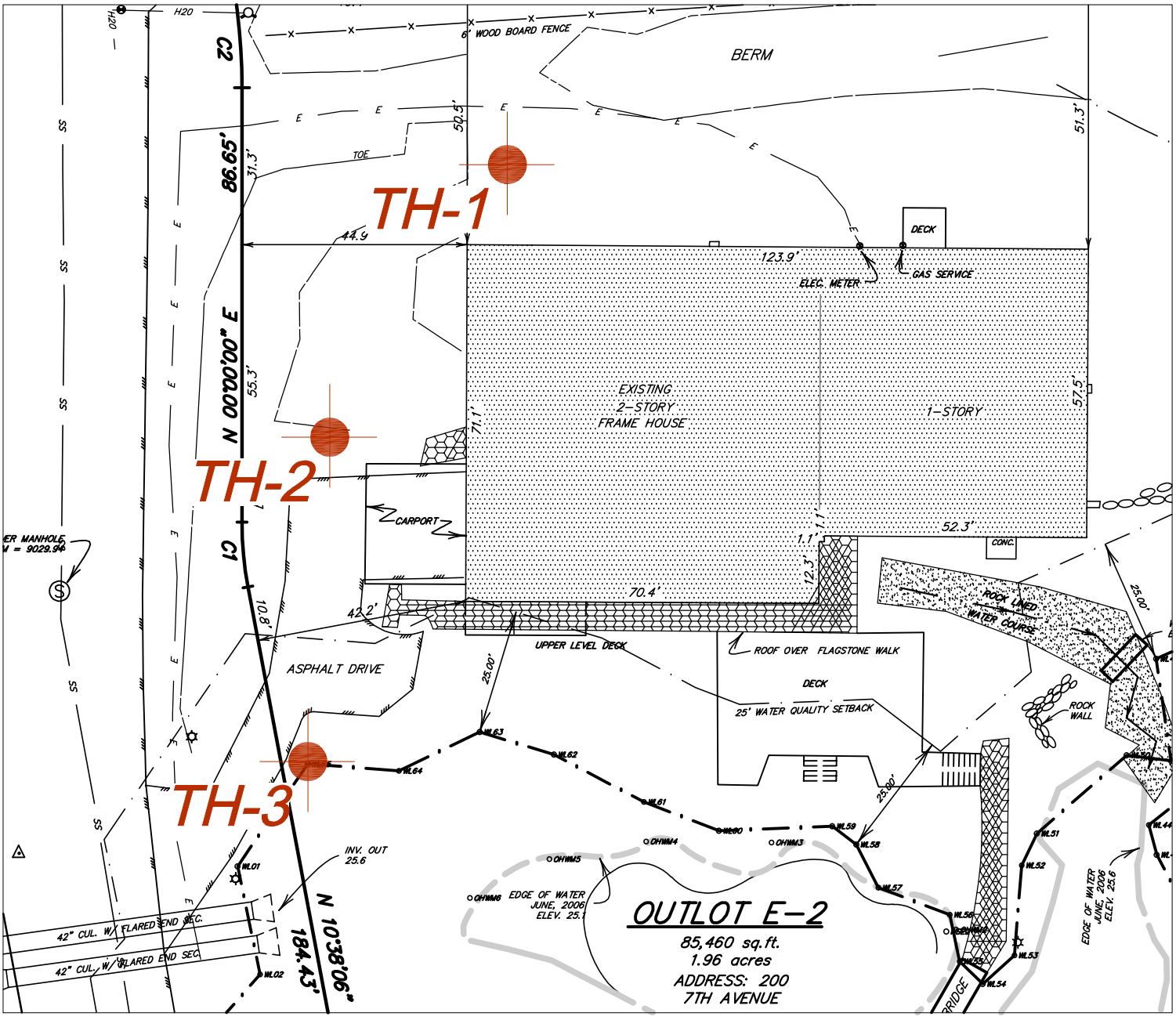
Not to scale



Seth Francis
200 North 7th Avenue
Project No. SU02498.000-120

VICINITY MAP
Figure 1

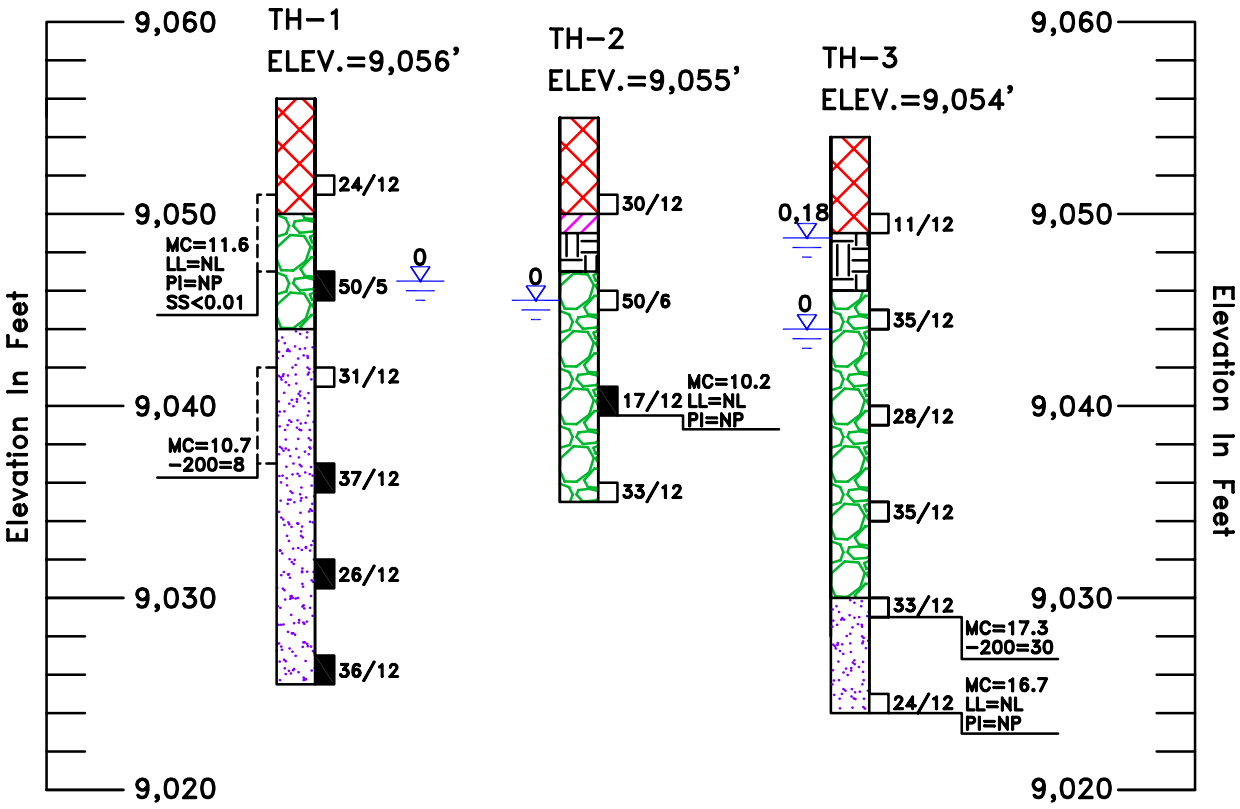
Scale: 1 inch = 30 feet



Seth Francis
200 North 7th Avenue
Project No. SU02498.000-120

LOCATIONS OF EXPLORATORY BORINGS

Figure 2



LEGEND:

FILL; ranges between silty, clayey gravel with sand and poorly-graded gravel with silt and sand, with cobbles and boulders up to 3 feet in diameter, loose to medium dense, moist, brown.

GRAVEL; ranges between poorly-graded gravel with silt and sand and silty, clayey gravel with sand, boulders up to 3 feet in diameter, medium dense to very dense, moist to wet with depth, brown (GP-GM, GC).

BOULDER - Drilled through boulder at depth indicated.

SILT; sandy silt with gravel, medium stiff, very moist, brown (ML).

SAND; silty sand with gravel, medium dense to dense, very moist to wet with depth, brown (SM).

Drive Sample; The symbol 50/12 indicates 50 blows of a 140-pound hammer falling 30 inches were required to drive a 2.5-inch O.D. sampler 12 inches.

Drive Sample; The symbol 50/12 indicates 50 blows of a 140-pound hammer falling 30 inches were required to drive a 2-inch O.D. sampler 12 inches.

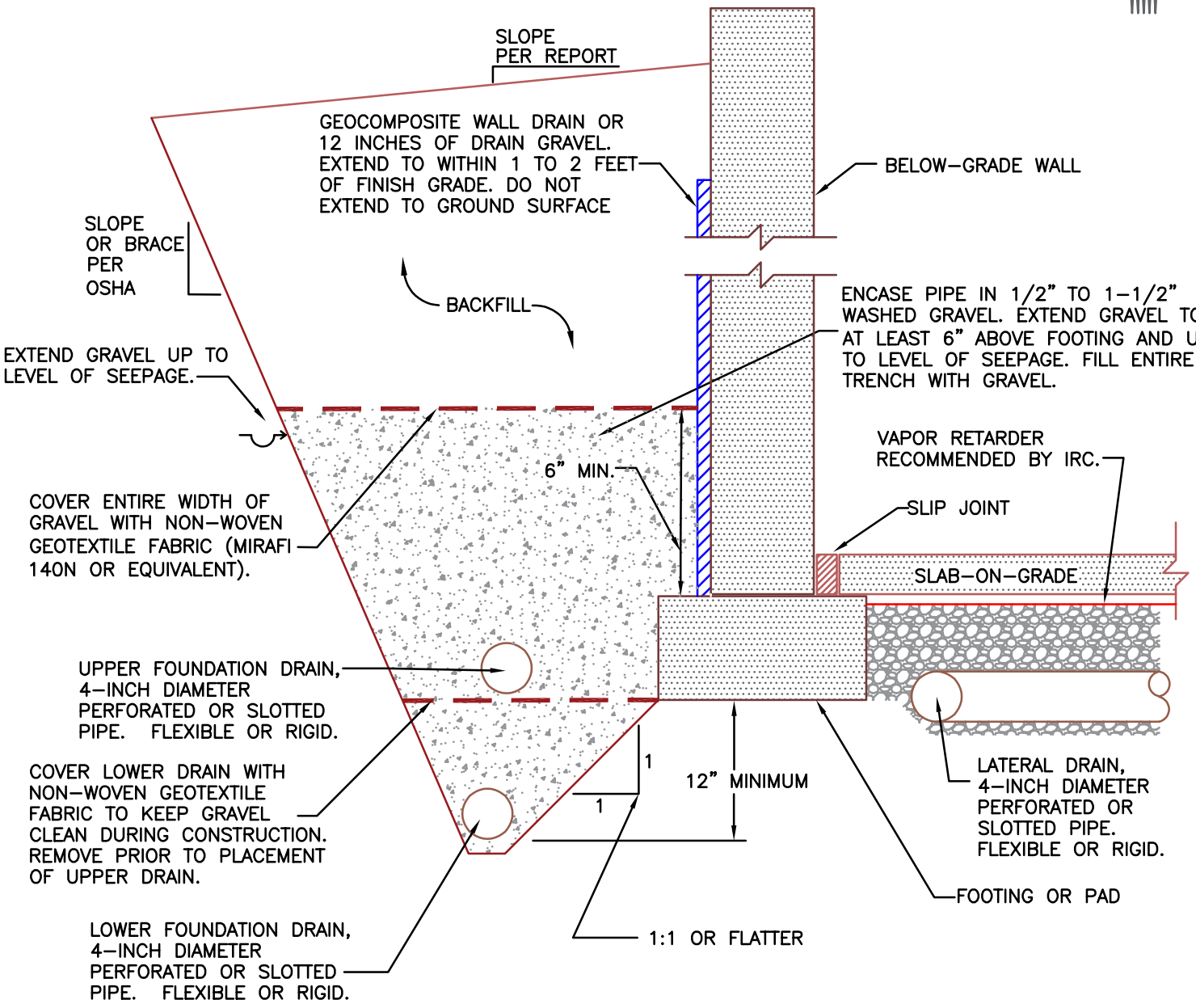
0,X

Depth of groundwater level in boring at time of drilling (0) and when checked x days after drilling.

NOTES:

1. The borings were drilled on May 24, 2024 using a track-mounted Geoprobe drill rig and a down-hole hammer and casing (ODEX Method).
2. Groundwater levels shown above were measured at the time and under the conditions indicated. Groundwater levels can fluctuate.
3. Boring locations as shown on Figure 2 were measured from site features and should be considered approximate.
4. Boring elevations are estimated from Google Earth and should be considered approximate.
5. These exploratory borings are subject to the explanations, limitations and conclusions contained in this report.

SUMMARY LOGS OF EXPLORATORY BORINGS



SEE FOUNDATION DRAIN NOTES FOR MORE INFORMATION.

Seth Francis
200 North 7th Avenue
Project No. SU02498.000-120

FOUNDATION DRAIN SYSTEM

Figure 4

LOWER FOUNDATION DRAIN NOTES:

1. The lower drain should be installed prior footing construction if seepage is encountered. The necessity of the lower drain should be determined by CTL at the time of construction.

2. The invert of the lower drain should be at least 12 inches below adjacent footing subgrade elevation. Slope the drainpipe (1% min.) to a suitable gravity outlet. At least 2 inches of gravel should be placed below the drainpipe. A minimum of 2 outlets should be provided for the drain system. If gravity outlets are not feasible, a sump and pump system should be provided.

3. Perforated (or slotted) drainpipe should be 4–inch diameter, flexible or rigid pipe. If perforated rigid pipe is used, the perforations should consist of 1/2–inch holes spaced at 6 inch intervals. Two rows of perforations placed downward symmetrically in accordance with ASTM D–3034. Rigid pipe should be SDR 35 or stronger.

4. The lower drain should be installed around the perimeter of each level of excavation. Installing a drain on the downhill side of the lower frost wall may not be necessary.

5. The gravel for the lower drain should be covered with filter fabric (Mirafi 140N or equivalent) to protect the drain against clogging. Slough may collect above the drain during footing/wall construction. Slough that collects on top of the drain should be removed as needed to keep the drain operational. After wall construction, the fabric should be removed to expose clean gravel. The upper foundation drain can then be installed.

6. CTL should observe the excavation and installation of the drain system to confirm our recommendations are interpreted appropriately.

UPPER FOUNDATION DRAIN NOTES:

1. The upper drain should be installed after foundation construction and prior to wall backfill.

2. The invert of the upper drain should be at least 12 inches below adjacent finish grade (interior top of slab). Slope the drainpipe (1% min.) to a suitable gravity outlet. At least 2 inches of gravel should be placed below the drainpipe. A minimum of 2 outlets should be provided for the drain system. If gravity outlets are not feasible, a sump and pump system should be provided.

3. The upper drain should be installed around the perimeter of each level of excavation. Installing a drain on the downhill side of the lower frost wall may not be necessary.

4. CTL should observe the installation of the drain system to confirm our recommendations are interpreted appropriately.

UNDERSLAB (LATERAL) DRAIN SYSTEM NOTES:

1. Lateral drains should be placed below the lower level floor slab with a horizontal spacing of 20 feet or less. We can provide additional recommendations regarding layout upon request.

2. The drainpipes should be bedded in $\frac{1}{2}$" to $1\frac{1}{2}$" clean gravel.

3. The inverts of the lateral drains should be at least 12 inches below top of slab elevation. At least 2 inches of gravel should be placed below the drainpipe. Slope the drainpipes (1% min.) and connect to the perimeter drain system on the downhill side of the building.

4. The subgrade between the lateral drains should be sloped towards drains or crowned to prevent ponding below the slab.

5. Cap upslope ends of drainpipes.

6. CTL should observe the installation of the drain system to confirm our recommendations are interpreted appropriately.

Seth Francis
200 North 7th Avenue
Project No. SU02498.000–120

FOUNDATION DRAIN NOTES
Figure 5

TABLE I

SUMMARY OF LABORATORY TESTING
CTL|T PROJECT NO. SU02498.000-120

EXPLORATORY BORING	DEPTH (FEET)	MOISTURE CONTENT (%)	ATTERBERG LIMITS		SULFATE CONC. (%)	PASSING NO. 200 SIEVE (%)	DESCRIPTION
			LIQUID LIMIT (%)	PLASTICITY INDEX (%)			
TH-1	5-9	11.6	NL	NP	<0.01		Poorly-graded gravel with silt & sand (GP-GM)
TH-1	15-19	10.7				8	Poorly-graded sand with silt & gravel (SP-SM)
TH-2	14	10.2	NL	NP			Poorly-graded gravel with silt & sand (GP-GM)
TH-3	24	17.3				30	Silty sand with gravel (SM)
TH-3	29	16.7	NL	NP			Silty sand with gravel (SM)

CAMPBELL
CONSTRUCTION & ENGINEERING

April 21, 2025

Dear Town of Frisco,

I am writing in my capacity as the designated General Contractor for the development project located at 200 N. 7th Avenue, Frisco, CO 80443, under the direction of Blue River Real Estate Fund IV, LLC.

Please accept this letter as formal confirmation that no wetlands setbacks will be impacted by construction activities, with the sole exception of limited disturbance necessary for the removal of the existing structure on-site.

To ensure protection of the surrounding area, a wetlands disturbance construction fence will be installed prior to the commencement of any demolition work. This will serve to clearly delineate and safeguard the boundaries of the wetland setback areas from unintended encroachment.

Following demolition and construction, all temporarily disturbed portions of the wetlands setback will be fully restored to their original condition and consistent with wetland setback standards.

Should you require any additional information or documentation, please do not hesitate to contact me

Regards,

Pete Campbell
Campbell Construction, LLC
110 S. 1st Ave Unit 1, PO Box 4272, Frisco, CO 80443
C: 970-389-7246
F: 970-668-6187
pcampbell@co-cce.com
CC&E Home Page

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS ALBUQUERQUE DISTRICT REGULATORY DIVISION
NW COLORADO BRANCH, GRAND JUNCTION OFFICE
400 ROOD AVENUE, ROOM 224
GRAND JUNCTION, CO 81501-2520

December 5, 2024

Regulatory Division

SUBJECT: No Permit Required (SPA-2024-00373)

Blue River Real Estate
Attn: Seth Francis
PO Box 7035,
Breckenridge, CO 80424
sjfrancis1985@gmail.com

Dear Mr. Francis:

This letter responds to your request for a determination of Department of the Army (DA) permit requirements for the proposed *200 North 7th Ave Outlot E-2, River Pines Subdivision* project located at latitude 39.57823° North, longitude -106.093882° West, in Summit County, Colorado. The work will consist of the demolition of existing structures followed by construction of a new building, driveway areas, and parking areas expanding from the original footprint. All construction will have a 25-foot setback from wetlands that are located outside the review area. There will be no discharge of fill material to wetlands based on a wetland delineation completed during 2021. All discharge will occur in the original footprint and the expanded footprint, both of which have been determined to be uplands. We have assigned DA file number SPA-2024-00373 to this project. Please reference this number in all future correspondence concerning the project.

Based on the information provided, we have determined that a DA permit is not required since the site consists entirely of uplands. However, please be advised that there are potential waters of the U.S. located in the vicinity of the project site and it is incumbent upon you to remain informed of any changes in the U.S. Army Corps of Engineers (Corps) Regulatory Program regulations and policy as they relate to your project. If your plans change such that waters of the U.S. could be impacted by the proposed project, please contact our office for a reevaluation of permit requirements

Please also note that a Corps permit decision does not constitute approval of project design features, nor does it imply that the construction is adequate for its intended purpose. Additionally, a Corps permit decision does not authorize any injury to property or invasion of rights or any infringement of federal, state, or local laws or regulations. The responsible party and/or any contractors acting on behalf of the responsible party must possess the authority and any other approvals required by law, including property rights, in order to undertake the proposed work.

This determination applies only to this project. Other project proposals require a new determination. If your plans change, please contact our office for a reevaluation of permit requirements.

We are enclosing a copy of the Approved Jurisdictional Determination Form for your review area (Enclosure 2). A copy of this JD is also available at http://www.spa.usace.army.mil/reg/JD. This approved JD is valid for 5 years from the date of this letter unless new information warrants revision of the determination before the expiration date. If you intend to conduct work that could result in a discharge of dredged or fill material into waters of the United States, please contact this office for a determination of Department of the Army permit requirements.

The delineation included herein has been conducted to identify the location and extent of the aquatic resources for purposes of the Clean Water Act for the particular site identified in this request. This delineation may not be valid for the Wetland Conservation Provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should discuss the applicability of an NRCS Certified Wetland Determination with the local USDA service center, prior to starting work.

You may accept or appeal this approved JD or provide new information in accordance with the attached Notification of Administrative Appeal Options and Process and Request for Appeal (Enclosure 3). If you elect to appeal this approved JD, you must complete Section II of the form and return it to the Army Engineer Division, South Pacific, CESPD-PDS-O, Attn: Travis Morse, Administrative Appeal Review Officer, by email at w.travis.morse@usace.army.mil within 60 days of the date of this notice. Failure to notify the Corps within 60 days of the date of this notice means that you accept the approved JD in its entirety and waive all rights to appeal.

If you have any questions, please contact me at (970) 243-1199 X 1013 or by e-mail at Tyler.R.Adams@usace.army.mil. At your convenience, please complete a Customer Service Survey on-line available at https://regulatory.ops.usace.army.mil/customer-service-survey/

Sincerely,

Tyler R. Adams
Project Manager
NW Colorado Branch

Enclosures

THE GLADE

VIEW FROM SOUTHEAST

UNIT MATRIX

UNIT #	PARKING	BEDRMS	OFFICES	BATHS	FINISH SF
N-101	4	4	1	4.5	3,029 SF
N-103	4	4	1	3.5	2,757 SF
N-105	3	3	1	3.5	2,345 SF
N-107	4	4	1	3.5	2,757 SF
N-109	3	3	1	3	2,709 SF
S-102	4	4	1	4.5	2,939 SF
S-104	4	4	1	3.5	3,106 SF
S-106	4	6	0	4.5	3,859 SF
S-108	4	6	1	5.5	4,170 SF
S-110	3	3	0	3.5	2,682 SF
S-111	4	4	1	4.5	2,926 SF

TABLE 6-1 REQUIRED NUMBER OF PARKING SPACES BY LAND USE

USE CATEGORY	USE TYPE		PARKING SPACE REQUIREMENTS
Household Living	Accessory dwelling unit	Per accessory unit:	1.0
		Per Lock-Off:	1.0
	Duplex and two-unit townhomes	Per Bedroom:	1.0
		Minimum Per Unit:	2.0
		Maximum per Unit	4.0
	Single-household	Per Bedroom:	1.0
		Minimum Per Unit:	2.0
		Maximum Per Unit:	4.0
	Multi-unit (3+ Units) [1]	Studio:	1.0
		Per Bedroom:	1.0
		Maximum Per Unit:	4.0
	Deed restricted units (affordable units)	Studio:	1.0
		Per Bedroom:	1.0
		Maximum Per Unit:	2.0

GENERAL NOTES

1) COPYRIGHT:
ALL PLANS, DESIGNS, AND CONCEPTS SHOWN IN THESE DRAWINGS ARE THE EXCLUSIVE PROPERTY OF BHH PARTNERS PLANNERS/ARCHITECTS, A.I.A./P.C. AND SHALL NOT BE USED, DISCLOSED, OR REPRODUCED FOR ANY PURPOSE WHATSOEVER WITHOUT THE ARCHITECT'S WRITTEN PERMISSION.

2) CODES:
THIS PROJECT IS GOVERNED BY THE INTERNATIONAL RESIDENTIAL CODE, 2018 EDITION AS ADOPTED BY TOWN OF FRISCO, COLORADO. CODE COMPLIANCE IS MANDATORY. THE DRAWINGS AND SPECIFICATIONS SHALL NOT PERMIT WORK THAT DOES NOT CONFORM TO THESE CODES. THE GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR SATISFYING ALL APPLICABLE CODES AND OBTAINING ALL PERMITS AND REQUIRED APPROVALS. BUILDING AREAS ARE SHOWN FOR CODE PURPOSES ONLY AND SHALL BE RECALCULATED FOR ANY OTHER PURPOSES.

3) FIELD VERIFICATION:
VERIFY ALL DIMENSIONS, CONDITIONS, AND UTILITY LOCATIONS ON THE JOB SITE PRIOR TO BEGINNING ANY WORK OR ORDERING ANY MATERIALS. NOTIFY ARCHITECT OF ANY CONFLICTS OR DISCREPANCIES IN THE DRAWINGS IMMEDIATELY.

4) DIMENSIONS:
WRITTEN DIMENSIONS ALWAYS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS SHOWN PRIOR TO BEGINNING ANY WORK AND NOTIFY ARCHITECT OF ANY CONFLICTS OR DISCREPANCIES FOR INTERPRETATION OR CLARIFICATION. PLAN DIMENSIONS ARE TO THE FACE OF FRAMING MEMBERS, FACE OF WOOD FURRING OR FACE OF CONCRETE WALLS UNLESS OTHERWISE NOTED. SECTION OR ELEVATION DIMENSIONS ARE TO TOP OF CONCRETE, TOP OF PLYWOOD, OR TOP OF WALL PLATES OR BEAMS UNLESS OTHERWISE NOTED.

5) DISCREPANCIES:
THE OWNER HAS REQUESTED THE ARCHITECT TO PROVIDE LIMITED ARCHITECTURAL AND ENGINEERING SERVICES. IN THE EVENT ADDITIONAL DETAILS OR GUIDANCE IS NEEDED BY THE CONTRACTOR FOR CONSTRUCTION OF ANY ASPECT OF THIS PROJECT, HE SHALL IMMEDIATELY NOTIFY THE ARCHITECT. FAILURE TO GIVE SIMPLE NOTICE SHALL RELIEVE THE ARCHITECT OF RESPONSIBILITY. DO NOT PROCEED IN AREAS OF DISCREPANCY UNTIL ALL SUCH DISCREPANCIES HAVE BEEN FULLY RESOLVED WITH WRITTEN DIRECTION FROM THE ARCHITECT.

6) DUTY OF COOPERATION:
RELEASE OF THESE PLANS CONTEMPLATES FURTHER COOPERATION AMONG THE OWNER, HIS CONTRACTOR, AND THE ARCHITECT. DESIGN AND CONSTRUCTION ARE COMPLEX. ALTHOUGH THE ARCHITECT AND HIS CONSULTANTS HAVE PERFORMED THEIR SERVICES WITH DUE CARE AND DILIGENCE, THEY CANNOT GUARANTEE PERFECTION. COMMUNICATION IS IMPERFECT, AND EVERY CONTINGENCY CANNOT BE ANTICIPATED. ANY AMBIGUITY OR DISCREPANCY DISCOVERED BY THE USE OF THESE PLANS SHALL BE REPORTED IMMEDIATELY TO THE ARCHITECT. FAILURE TO NOTIFY THE ARCHITECT COMPOUNDS MISUNDERSTANDING AND INCREASES CONSTRUCTION COSTS. A FAILURE TO COOPERATE BY A SIMPLE NOTICE TO THE ARCHITECT SHALL RELIEVE THE ARCHITECT FROM RESPONSIBILITY FOR ALL CONSEQUENCES.

7) CHANGES TO THE WORK:
ANY ITEMS DESCRIBED HEREIN THAT IMPACT PROJECT BUDGET OR TIME SHALL BE REQUESTED FROM THE CONTRACTOR VIA A WRITTEN CHANGE ORDER REQUEST PRIOR TO SUCH WORK. PERFORMANCE OF SUCH WORK WITHOUT APPROVAL BY CHANGE ORDER INDICATES GENERAL CONTRACTOR'S ACKNOWLEDGMENT OF NO INCREASE IN CONTRACT SUM OR TIME. CHANGES FROM THE PLANS OR SPECIFICATIONS MADE WITHOUT CONSENT OF THE ARCHITECT ARE UNAUTHORIZED AND SHALL RELIEVE THE ARCHITECT OF RESPONSIBILITY FOR ANY AND ALL CONSEQUENCES RESULTING FROM SUCH CHANGES.

8) WORKMANSHIP:
IT IS THE INTENT AND MEANING OF THESE DRAWINGS THAT THE CONTRACTOR AND EACH SUBCONTRACTOR PROVIDE ALL LABOR, MATERIALS, TRANSPORTATION, SUPPLIES, EQUIPMENT, ETC., TO OBTAIN A COMPLETE JOB WITHIN THE RECOGNIZED STANDARDS OF THE INDUSTRY.

9) SUBSTITUTIONS:
SUBSTITUTION OF "EQUAL" PRODUCTS WILL BE ACCEPTABLE WITH ARCHITECT'S WRITTEN APPROVAL. SEE SPECIFICATIONS.

10) CONSTRUCTION SAFETY:
THESE DRAWINGS DO NOT INCLUDE THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THE GENERAL CONTRACTOR SHALL PROVIDE FOR THE SAFETY, CARE OF UTILITIES AND ADJACENT PROPERTIES DURING CONSTRUCTION, AND SHALL COMPLY WITH STATE AND FEDERAL SAFETY REGULATIONS.

11) EXCAVATION PROCEDURES:
UPON COMPLETION OF ANY EXCAVATION, THE OWNER SHALL RETAIN A SOILS ENGINEER TO INSPECT THE SUBSURFACE CONDITIONS IN ORDER TO DETERMINE THE ADEQUACY OF FOUNDATION DESIGN. SEE SPECIFICATIONS. CONTRACTOR SHALL NOT POUR ANY CONCRETE UNTIL APPROVAL IS OBTAINED FROM SOILS ENGINEER.

12) FIELD CUTTING OF STRUCTURAL MEMBERS:
THE GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL FIELD COORDINATE AND OBTAIN APPROVAL FROM ENGINEER BEFORE ANY CUTTING, NOTCHING OR DRILLING OF ANY CAST-IN-PLACE CONCRETE, STEEL FRAMING, OR ANY OTHER STRUCTURAL ELEMENTS WHICH MAY AFFECT THE STRUCTURAL INTEGRITY OF THE BUILDING. REFER TO CURRENT INTERNATIONAL BUILDING CODE, MANUFACTURER'S OR SUPPLIER'S INSTRUCTIONS, AND STRUCTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

13) EXTERIOR MATERIAL MOCKUP:
THE GENERAL CONTRACTOR SHALL PROVIDE A MOCKUP OF ALL EXTERIOR MATERIALS FOR REVIEW BY THE OWNER, ARCHITECT, AND INTERIOR DESIGNER. THIS MOCKUP SHALL BE PROVIDED AND SIGNED OF IN WRITING PRIOR TO ANY EXTERIOR FINISH WORK. THE SAMPLE SHALL INCLUDE FASCIA, TRIM WINDOW CLADDING, AND ALL OTHER EXTERIOR FINISHES INCLUDING 3'X3' SAMPLE OF EXTERIOR STONEWORK. THIS SHALL BE RETAINED ON SITE UNTIL THE FINAL PUNCH LIST IS COMPLETE.

14) WEATHER CONDITIONS:
THE OWNER HAS BEEN ADVISED THAT DUE TO HARSH WINTER CONDITIONS, ROOF AND DECK SURFACES MUST BE MAINTAINED REASONABLY FREE OF ICE AND SNOW TO ENSURE MINIMAL PROBLEMS WITH THESE SURFACES. ALL ROOFING, ROOFING MEMBRANES, AND WATERPROOFING SHALL BE APPROVED IN WRITING BY PRODUCT MANUFACTURER (W.R. GRACE FOR BITUTHENE, ETC.) PRIOR TO PROCEEDING WITH ANY WORK. FAILURE TO PROVIDE THESE WRITTEN APPROVALS REMOVES ALL RESPONSIBILITY FOR THE WORK FROM THE ARCHITECT.

15) BUILDING AREA
BUILDING AREAS ARE SHOWN FOR CODE PURPOSES ONLY AND SHALL BE RECALCULATED FOR ANY OTHER USE.

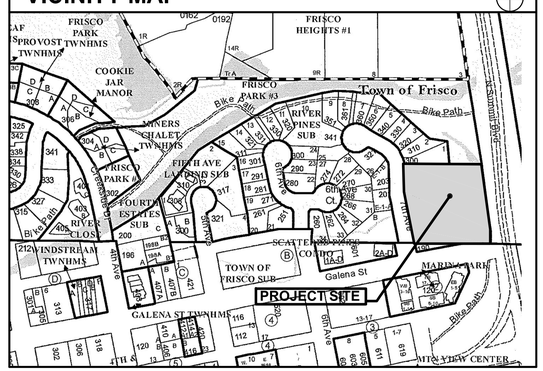
16) PROJECT STAKING
THE GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING GRADES AND STAKE ALL BUILDING CORNERS AND DRIVEWAY LOCATION FOR OWNER/ARCHITECT AND DESIGN REVIEW BOARD APPROVAL PRIOR TO BEGINNING ANY SITE CLEARING.

17) SITE DISTURBANCE
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT THE EXISTING TREES TO REMAIN AND ADJACENT PROPERTIES FROM DAMAGE DURING CONSTRUCTION. PROVIDE PROTECTIVE FENCING THROUGHOUT CONSTRUCTION.

18) PROJECT GRADES
THE GENERAL CONTRACTOR SHALL CHECK AND VERIFY ALL GRADES INCLUDING PAVED AREA SLOPES PRIOR TO POURING ANY FOUNDATIONS. SURVEY WORK SHOULD BE VERIFIED IN DETAIL. SEE NUMBERS 5 AND 6.

19) 3D MODELING
THIS PROJECT HAS BEEN DIGITALLY MODELED IN 3D SOFTWARE. THE DIGITAL MODEL IS PROVIDED FOR REFERENCE PURPOSES ONLY. TRANSMISSION OF DIGITAL MODEL FILES CONSTITUTES A WARRANTY BY THE PARTY TRANSMITTING FILES TO THE PARTY RECEIVING FILES THAT THE TRANSMITTING PARTY IS THE COPYRIGHT OWNER OF THE DIGITAL DATA. UNLESS OTHERWISE AGREED IN WRITING, ANY USE OF, TRANSMISSION OF, OR RELIANCE ON THE MODEL IS AT THE RECEIVING PARTY'S RISK. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF QUESTIONS OR COORDINATION ISSUES BETWEEN THE CONTRACT DOCUMENTS AND DIGITAL MODEL.

VICINITY MAP



FIRE SPRINKLER SYSTEM & F.D. REQ'MNTS

1) PROVIDE NFPA 13 AUTOMATIC FIRE SPRINKLER SYSTEM FOR 11 SINGLE FAMILY UNITS.
2.)PROVIDE SIDE WALL HEADS TO GREATEST EXTENT POSSIBLE.
3.)PROVIDE SUBMITTAL FOR AUTOMATIC FIRE SPRINKLER SYSTEM.
4.)A NEW FIRE HYDRANT WILL BE ADDED BETWEEN UNITS 106 & 108.
5.)THE ENTIRE LENGTH OF THE DRIVE ACCESS WILL BE DESIGNATED A FIRE LANE AND SIGNAGE SHALL BE POSTED.
6.)DRIVE WIDTH IS 24'-0", AND A CLEAR DISTANCE OF 26'X13'6" WITH NO ENCROACHMENT.

FINISHED FLOOR ELEVS.

UNIT 101&102- (varies from unit to unit)	U.S.G.S.	ARCHITECTURAL
GROUND - T.O. CONC.	9,030.5'	100'-0"
LEVEL 2 - T.O. PLYWD.	9,040.5'	110'-0"
LEVEL 3 - T.O. PLYWD.	9,051.5'	121'-0"
LEVEL 4 - T.O. PLYWD.	9,061.5'	131'-0"

AREA CALCULATIONS

	UN-FINISHED	FINISHED	TOTAL
GROUND	10,291	2,984	13,182 SF
LEVEL 2	00	13,847	13,847 SF
LEVEL 3	00	10,955	10,955 SF
LEVEL 4	00	5,493	5,493 SF
TOTAL	10,291 SF	33,279 SF	43,570 SF

\+ 194 SQ. FT. UN-FINISHED DUMPSTER AREA (COMMON AREA)

5/8" TYPE GYPSUM BOARD USED THROUGHOUT

NOTE: SQUARE FOOTAGES ARE CALCULATED FOR CODE PURPOSES ONLY AND SHOULD BE RECALCULATED FOR ANY OTHER PURPOSES.

SEE UNIT MATRIX FOR UNIT FINISHED SQ. FT. CALCULATIONS.

LEGAL DESCRIPTION

ADDRESS: 200N 7TH AVENUE, FRISCO, COLO.

LOT E-2 RIVER PINES SUBDIVISION
A RESUB OUTLOT E,R
LOT AREA: 85,377 SQ.FT. / 1.96 ACRES
ZONING: MU MIXED USE
RIVER PINES PUD

PARCEL: 2097-3521-03-001

SHEET INDEX

REVISIONS: 05.29.25, 06.25.25

JOB NO: 52402
DATE: 06.25.25
DRAWN BY: T. SHAFFER
CHECKED BY: Z. LEVIN

TOWN OF FRISCO FINAL
07.11.25

bhh Partners of Colorado
560 ADAMS AVE., P.O. BOX 2113, SILVERTHORNE, CO 80498, (970) 453-6880, www.bhhpartners.com

THE GLADE
200 NORTH 7TH AVENUE , FRISCO, COLORADO
(OUTLET E-2, RE-PLAT A, RIVER PINES SUBDIVISION)

SHEET NUMBER:

T-1.1

TITLE SHEET, GENERAL NOTES, SCHEDULES AND INFORMATION

BLANK:	CIVIL ENGINEER:	STRUCT'L ENG'R:	SURVEYOR:	CONTRACTOR:	ARCHITECT:	OWNER:
	TEN MILE ENGINEERING INC. JOSEPH MAGLICIC PO BOX 1785 FRISCO, CO 80443 PH: 970.485.5773	ROCKY'S ENGINEERING, LLC. MICHAEL CAMPBELL 970.389.4895 rockysengineering1@gmail.com	RANGE WEST INC. JESSICA KOETTERITZ P.O. BOX 589 SILVERTHORNE, CO 80498 970.468.6281	**GENERAL CONTRACTOR** CAMPBELL CONSTRUCTION LLC. PETE CAMPBELL 110 S. 1ST AVE UNIT 1, PO BOX 4272 FRISCO, CO 80443 PH: 970.389.7246	BHH Partners, Planners and Architects 160 EAST ADAMS STREET P.O BOX 931 BRECKENRIDGE, CO 80424 (970) 453-6880 tshaffer@bhhpartners.com	BLUE RIVER REAL ESTATE FUND IV LLC. SETH FRANCIS PO BOX 7035 BRECKENRIDGE, CO 80424 PH: 347.834.1009

SITE NOTES

1. ELECTRIC, CABLE T.V. AND TELEPHONE UNDERGROUND IN COMMON TRENCH
2. VERIFY ALL UTILITY LOCATIONS PRIOR TO ANY WORK COORDINATE UTILITY ROUTING WITH APPLICABLE UTILITY COMPANY. ALL UTILITIES TO BE UNDERGROUND.
3. TOPOGRAPHIC INFORMATION OBTAINED FROM RANGE WEST ENGINEERS & SURVEYORS, JOB #
4. PROVIDE POSITIVE DRAINAGE AT BUILDING PERIMETER (SLOPE AWAY FROM BUILDING AT 1:12 MIN.)
5. REFER TO FOUNDATION PLAN FOR FOUNDATION DRAIN LOCATION AND SLOPE. DRAINS TO BE SLOPED TO DAYLIGHT TO NATURAL TRENCH
6. FLAG ALL TREES FOR OWNER PRIOR TO THINNING OR REMOVING
7. PROTECT ALL REMAINING TREES WITH SNOW FENCE OR OTHER APPROVED BARRIER DURING CONSTRUCTION
8. PROVIDE 6" DIA. STONE RIP RAP OVER WEED BARRIER FABRIC AT EAVES AND VALLEY DRIP LOCATIONS
9. STAKE HOUSE LOCATION FOR OWNER AND ARCHITECT PRIOR TO ANY WORK
10. GENERAL CONTRACTOR TO REVIEW & COMPLY WITH ALL SUBDIVISION CONDITIONS. COPIES OF CONDITIONS ARE AVAILABLE FROM ARCHITECT
11. TREES TO BE REMOVED TO ALLOW 10' BETWEEN CANOPIES WITH EXCEPTION OF CLUSTERS TO BE APPROVED BY SUMMIT COUNTY.

CONTOUR LEGEND

EXISTING MINOR	DRAINAGE ARROW
EXISTING MAJOR	
PROPOSED	SPOT GRADE AT DOT (3,028')

CODE DATA

MULTIFAMILY DEVELOPMENT DENSITY:

TOTAL LOT AREA: 85,460 SQ.FT. / 1.9619 ACRE
WETLAND AREA (2021 SURVEY) : 27,372 SQ.FT. / .6284 ACRE
TOTAL AREA ALLOCATED FOR DENSITY : 58,088 SQ.FT. / 1.3335 ACRE

ALLOWED LOT DENSITY: 14 DWELLING UNITS PER ACRE = 1.3335 X 14 = 18.669

19 TOTAL DWELLING UNITS ALLOWED, 11 UNITS PROVIDED

MULTIFAMILY PARKING REQUIREMENTS:

1 STALL REQUIRED FOR EVERY BEDROOM
1 STALL FOR EVERY BEDROOM, 4 STALLS MAXIMUM PER UNIT

ACCESSIBLE STALLS REQUIRED: N/A
ACCESSIBLE STALLS PROVIDED: N/A

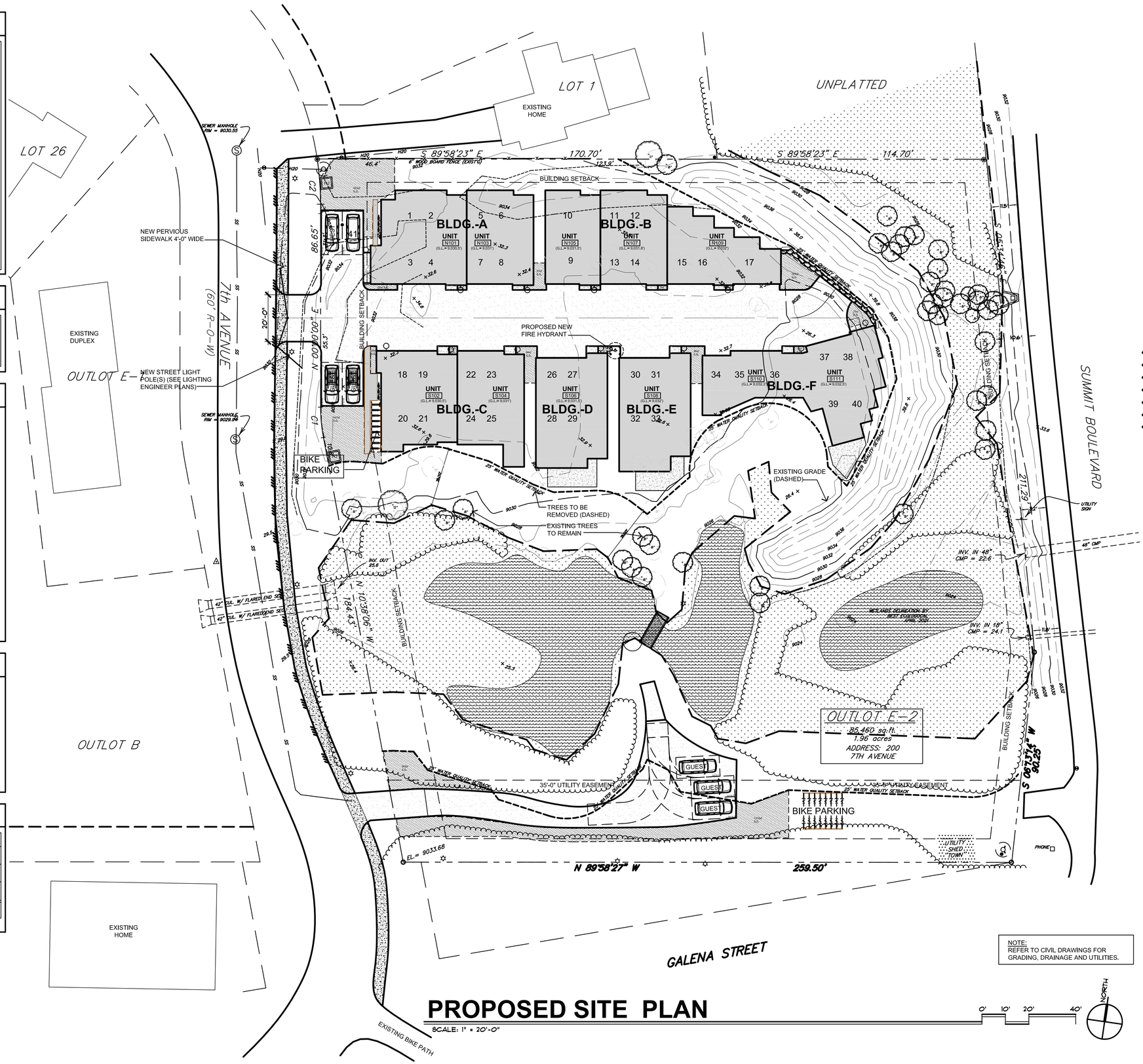
1 VISITOR PARKING SPACE FOR EVERY 5 UNITS IN MULTI-FAMILY & MIXED USE DEVELOPMENTS:
11 UNITS/5 = 3 GUEST PARKING STALLS REQUIRED
GUEST PARKING STALLS PROVIDED: 6

REQUIRED SNOWSTACK

	SQ. FT.	PERCENTAGE
HARDSCAPE (DRIVEWAY(S) & CONC. SIDEWALKS,PATIOS)	10,207 S.F.	100%
UN-COVERED DECKS ALONG DRIVE AISLE	623 S.F.	100%
REQ'D SNOW STACK (25% OF HARDSCAPE)	2,707 S.F.	25%
TOTAL SNOW STACK PROVIDED	3,315 S.F.	30.6%

LOT COVERAGE

	SQ. FT.	PERCENTAGE
BUILDING - (roof overhangs and decks)	16,658 S.F.	19.4%
HARDSCAPE (Driveways,parking, sidewalks and patios)	10,207 S.F.	11.9%
OPEN SPACE	58,595 S.F.	68.7%
TOTAL LOT SIZE	85,460 S.F.	100%



PROPOSED SITE PLAN

SCALE: 1" = 20'-0"

0' 10' 20' 40'

NORTH

NOTE:
REFER TO CIVIL DRAWINGS FOR GRADING, DRAINAGE AND UTILITIES.

REVISIONS: 05.29.25, 06.25.25

JOB NO: 52402
DATE: 06.25.25
DRAWN BY: T. SHAFFER
CHECKED BY: Z. LEVIN

TOWN OF FRISCO FINAL 07.11.25

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THE GLADE

200 NORTH 7TH AVENUE , FRISCO, COLORADO
(OUTLET E-2, RE-PLAT A, RIVER PINES SUBDIVISION)

SHEET NUMBER:

SP-1.1

PROPOSED SITE PLAN

LANDSCAPE NOTES

1. PROVIDE 3" (MIN.) CLAYFREE TOPSOIL AND SEED ALL DISTURBED AREAS WITH SHORT SEED MIX (AS APPROVED BY SUMMIT COUNTY STRIP AND STOCKPILE EXISTING TOPSOIL IN CONSTRUCTION AREA. SCREEN TOPSOIL PRIOR TO INSTALLATION.)
2. KEEP EXISTING TREES WHERE POSSIBLE, TAKING INTO CONSIDERATION DRIP LINES AND ROOT STRUCTURE. PROTECT EXISTING TREES WITH FENCING LOCATED AT OR OUTSIDE DRIP LINE OF TREE. STOCKPILE AND REUSE EXISTING TREES WHERE POSSIBLE.
3. GENERAL CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL BUILDING FOUNDATIONS PER SPECIFICATIONS AND CODE REQUIREMENTS.
4. PRIOR TO ANY LANDSCAPE WORK, REMOVE ALL DEBRIS, PAINT, CONCRETE, STUMPS, SLASH, ETC. FROM LANDSCAPE AREA.
5. LOCATE ALL PLANTINGS TO AVOID SNOW STACKING & SNOW SLIDE AREAS FROM ABOVE.
6. SHRUBS ARE TO BE FIELD LOCATED AS APPROVED BY OWNER AND ARCHITECT.
7. ALL NEW LANDSCAPING TO BE IRRIGATED WITH DRIP IRRIGATION SYSTEM. MAXIMUM 1,000 SF IRRIGATED SPACE. PROVIDE SUBMITTAL.
8. ALL NEW PLANTINGS SHOULD BE HIGH ALTITUDE GROWN AND OR COLLECTED TO ENSURE BETTER SURVIVAL.
9. NATURALIZE GROUPING OF TREES BY VARYING HEIGHT & LOCATION WHEREVER POSSIBLE.
10. SCREEN ALL UTILITY PEDESTALS WITH LANDSCAPE MATERIAL.
11. PROVIDE 3" TO 4" DIAMETER STONE RIPRAP OVER WEED BARRIER FABRIC AT BUILDING DRIP LINES. UNDULATE EDGES AND PROVIDE LANDSCAPE EDGING AT RIPRAP TO TOPSOIL JUNCTURE.
12. INSTALL & BACKFILL ALL PLANTINGS WITH SOIL MIX INCLUDING ORGANIC SOIL AMENDMENTS PER SPECIES REQUIREMENTS AND LANDSCAPE DETAILS.
13. ROOT FEED ALL NEWLY PLANTED TREES DURING INSTALLATION. PROVIDE LIQUID GROWTH TREE STIMULATOR AND SOLUABLE FERTILIZER AT RECOMMENDED RATE FOR EACH TREE SPECIES.
14. PROVIDE 3" OF SHREDDED BARK MULCH AT ALL SHRUB AND TREE WELLS.
15. LANDSCAPE BOULDERS OF 2' OR LARGER SHALL BE RETAINED ON SITE FOR USE IN LANDSCAPE WORK. BURY DECORATIVE BOULDERS ONE-HALF OF DIAMETER AS APPROVED BYTOWN OF BRECKENRIDGE PRIOR TO INSTALLATION.
16. ALL ROCK OUTCROPPINGS THAT ARE TO REMAIN SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITY.
17. ADDITIONAL CONSULTATION WITH A QUALIFIED LANDSCAPE PROFESSIONAL AT OWNER OPTION IS RECOMMENDED.

NOTE: ALL LANDSCAPING SHALL BE INSTALLED IN STRICT ACCORDANCE WITH TOWN OF FRISCO AND HOA.

REVEGETATION NOTES

REVEGETATE ALL DISTURBED AREAS ON THE SITE WITH:

SHORT DRY GRASS MIX @2 LBS/1000 SF:

HARD FESCUE	30%
CREEPING RED FESCUE	30%
SHEEP FESCUE	25%
CANADA BLUEGRASS	10%
CANBY BLUEGRASS	5%

SLOPES OVER 3:1 SHALL BE HAY TACKIFIED OR NETTED.

MOUNTAIN MAGIC WILDFLOWER MIX @1 LB/10,000 SF:

BABY'S BREATH	BLANKETFLOWER
CALIFORNIA POPPY	SHIRLEY POPPY
BLUE FLAX	LUPINE MIX
WALLFLOWER	MAIDEN PINKS
PENSTEMON, ROCKY MOUNTAIN	WILD THYME

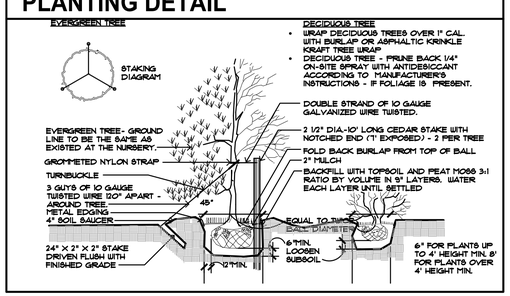
ROCKY MOUNTAIN BLUE COLUMBINE MIX @1LB/25,000 SF OR
WESTERN NATIVE WILDFLOWER MIX @1 LB/6000 SF:

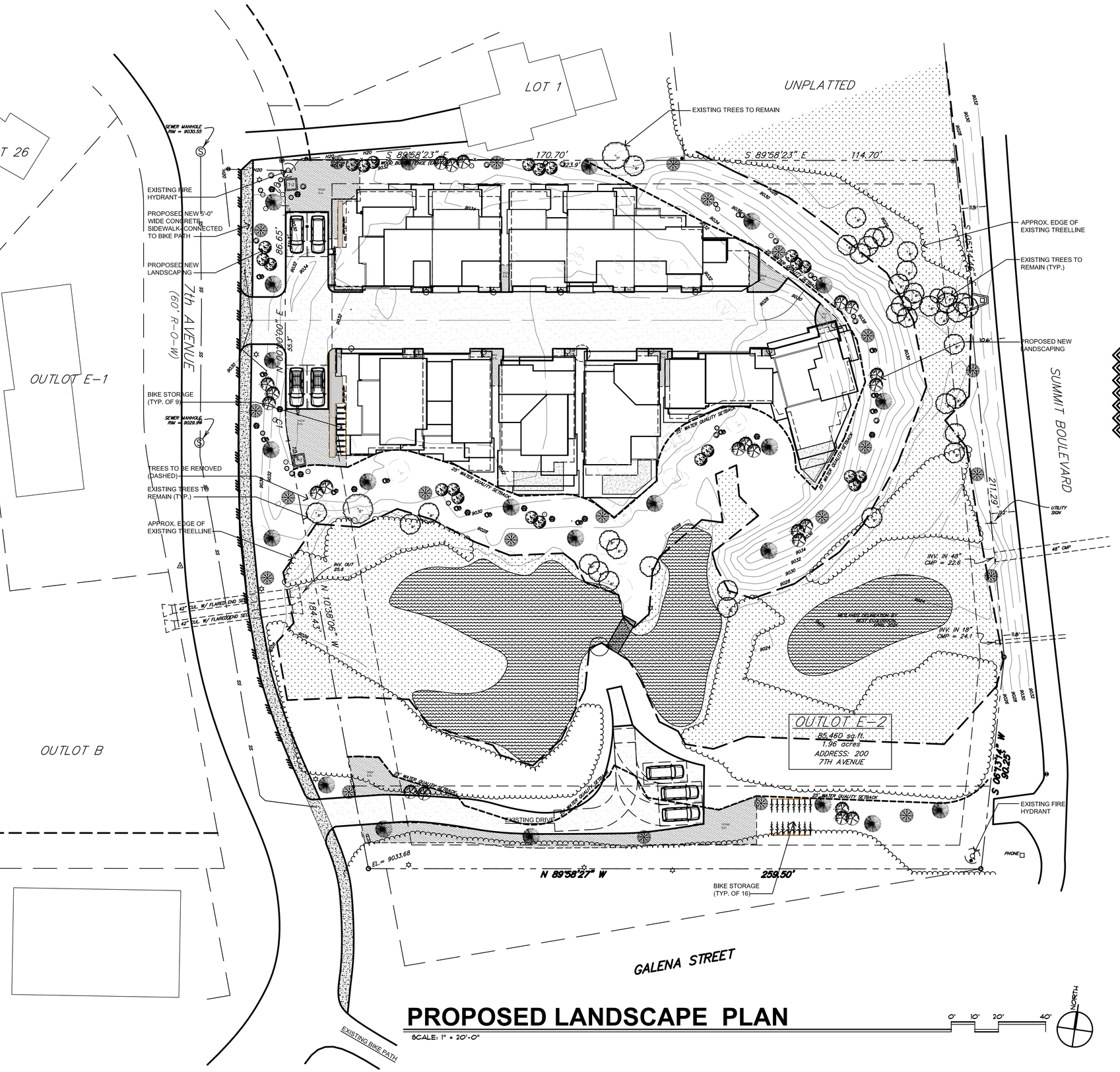
MOUNTAIN LUPINE	CONEFLOWER, WESTERN	PENSTEMON, SMALL FLOWERED
COLUMBINE, COLORADO	SULFUR FLOWER	PENSTEMON, ROCKY MOUNTAIN
GERANIUM, RICHARDSON	NODDING GROUNDSEL	PENSTEMON, WASATCH
ASTER, ENGLEMANNS	WESTERN LARKSPUR	PENSTEMON, RYDBERGS
ORANGE MOUNTAIN DAISY	AMERICAN VETCH	GAILLARDIA/BLANKETFLOWER
GIANT LOUSEWORT		

PLANTING LIST

KEY	COMMON	BOTANICAL	NO.	SIZE	NOTES
EXISTING TREES					
	EXISTING	VARIES	--	SEE SITE PLAN	
EXISTING TREES TO BE REMOVED (NOTED PINE TREES >=6" & , ASPENS >=4")					
	PINE TREE W/ TRUNK DIAMETER 6" & <		3	SEE PLAN	
	SPRUCE		0	SEE PLAN	
	ASPEN		19	SEE PLAN	
	WILLOW PLANT		4	SEE PLAN	
PROPOSED TREES/SHRUBS TO BE ADDED					
	COLORADO SPRUCE	PICEA PUNGENS -blue spruce	22	(10) 8' TALL (12) 10' TALL	
	COLORADO SPRUCE	PICEA ENGELMANNI -englemen spruce	22	(10) 8' TALL (12) 10' TALL	
	ASPEN-broad leaf	POPULUS TREMULODES	22	2"-3" CALIPER 50% MULTI-STEM	
	ASPEN-big tooth	POPULUS GRANDIDENTATA	22	2" CAL	
	POTENTILLA	POTENTILLA FRUTICOSA	12	5 GAL.	NEEDS SUN (36" TALL, 4'-0" WIDE)
	BUFFALO JUNIPER	JUNIPERUS SABINA	12	5 GAL.	NEEDS SUN (12" TALL, 8'-0" WIDE)
	SILVER BUFFALO BERRY	SHEPHERDIA ARGENTA	12	5 GAL.	GROWS TO 6-10' TALL
	ALPINE CURRANT	RIBIES ALPINUM	12	5 GAL.	GROWS TO 3-6' TALL
	PEKING COTONEASTER	COTONEASTER LUCIDAS OR APICALTUS	12	5 GAL.	GROWS TO 6-10' TALL
	NATIVE GROUND COVER AND PERENNIALS	PROVIDE SUBMITTAL	8	1 FLAT	PROVIDE TO ALL DISTURBED AREAS

PLANTING DETAIL





PROPOSED LANDSCAPE PLAN

SCALE: 1" = 20'-0"

0' 10' 20' 40' NORTH

REVISIONS: 05.29.25, 06.25.25

JOB NO: 52402
DATE: 06.25.25
DRAWN BY: T. SHAFFER
CHECKED BY: Z. LEVIN

TOWN OF FRISCO FINAL 07.11.25

bhh Partners of Colorado
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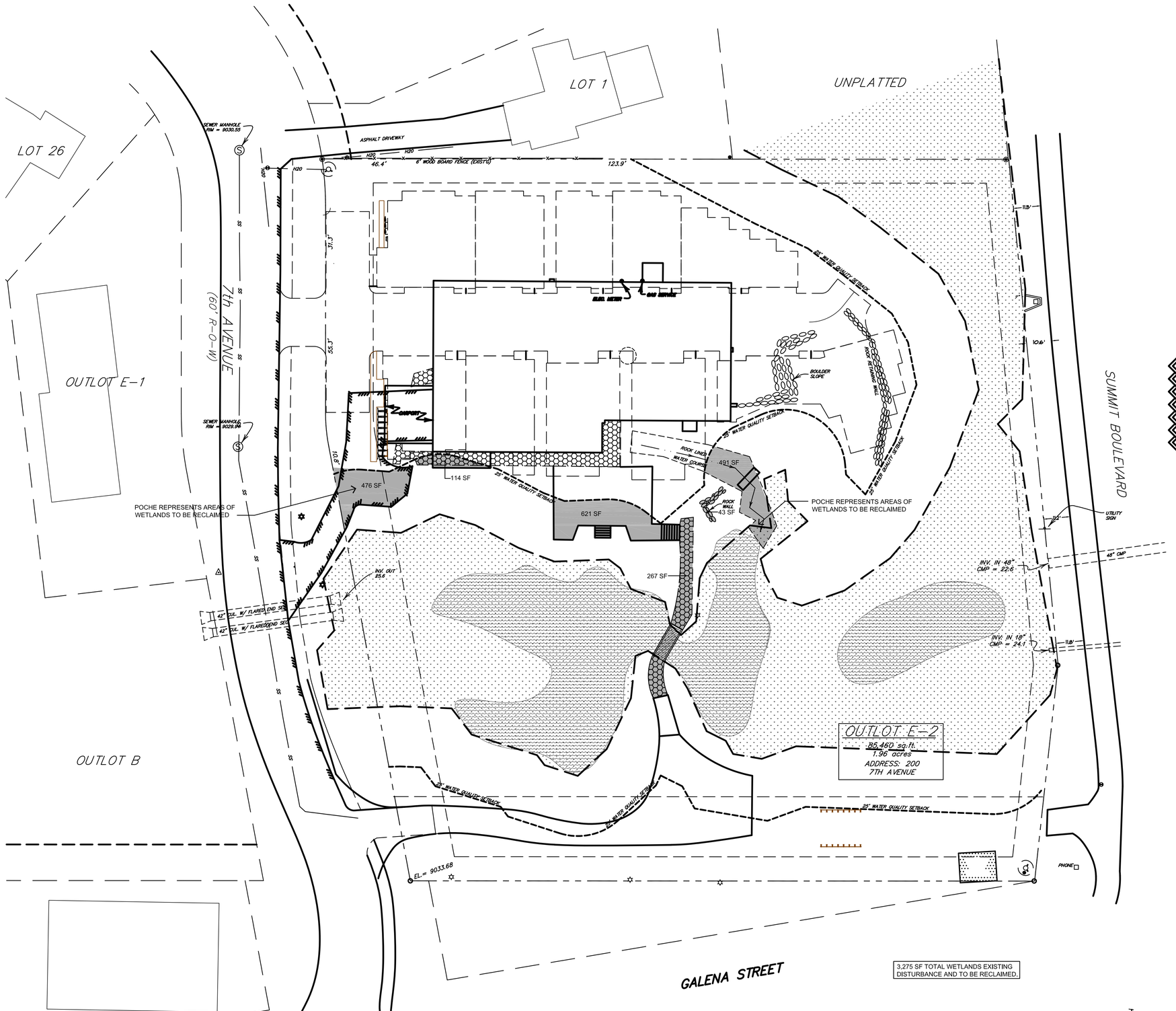
THE GLADE

200 NORTH 7TH AVENUE , FRISCO, COLORADO
(OUTLET E-2, RE-PLAT A, RIVER PINES SUBDIVISION)

SHEET NUMBER:

SP-1.2

PROPOSED LANDSCAPE PLAN



WETLANDS DISTURBANCE/ RECLAMATION PLAN

SCALE: 1" = 20'-0"

0' 10' 20' 40' NORTH

REVISIONS: 05.29.25
06.25.25

JOB NO: 52402
DATE: 06.25.25
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THE GLADE
200 NORTH 7TH AVENUE , FRISCO, COLORADO
(OUTLET E-2, RE-PLAT A, RIVER PINES SUBDIVISION)

SHEET NUMBER:

SP-1.3
WETLANDS DISTURBANCE/RECLAMATION PLAN

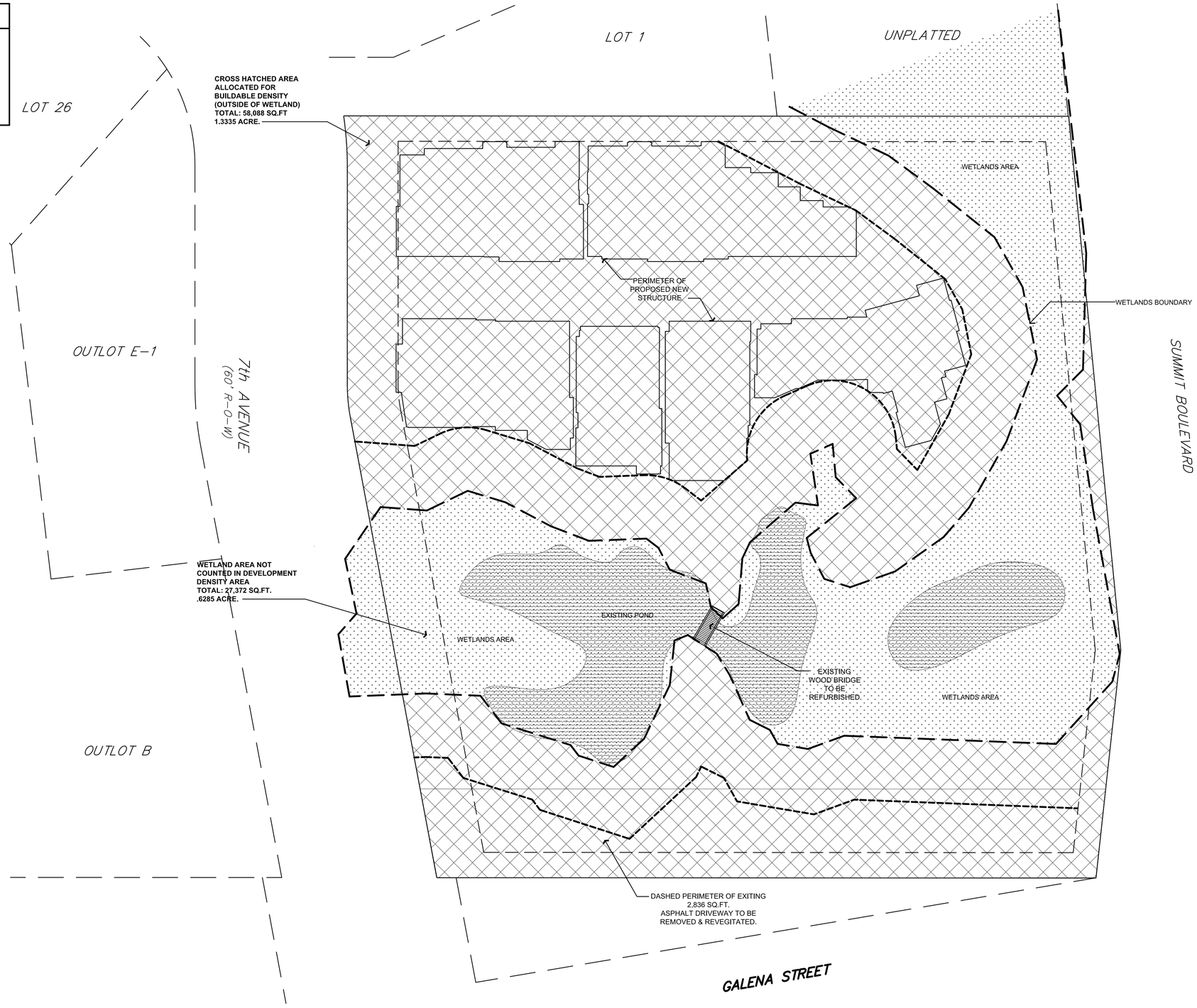
CODE DATA

MULTIFAMILY DEVELOPMENT DENSITY:

TOTAL LOT AREA: 85,460 SQ.FT. / 1.9619 ACRE
WETLAND AREA (2021 SURVEY) : 27,372 SQ.FT. / .6284 ACRE
TOTAL AREA ALLOCATED FOR DENSITY (CROSS HATCH): 58,088 SQ.FT. / 1.3335 ACRE

ALLOWED LOT DENSITY: 14 DWELLING UNITS PER ACRE = 1.3335 X 14 = 18.669

19 TOTAL DWELLING UNITS ALLOWED, 11 UNITS PROPOSED



DEVELOPMENT DENSITY DIAGRAM

SCALE: 1" = 20'-0"

0' 10' 20' 40' NORTH

REVISIONS: 05.29.25, 06.25.25

JOB NO: 52402
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DRAWN BY: T. SHAFFER

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TOWN OF FRISCO FINAL 07.11.25

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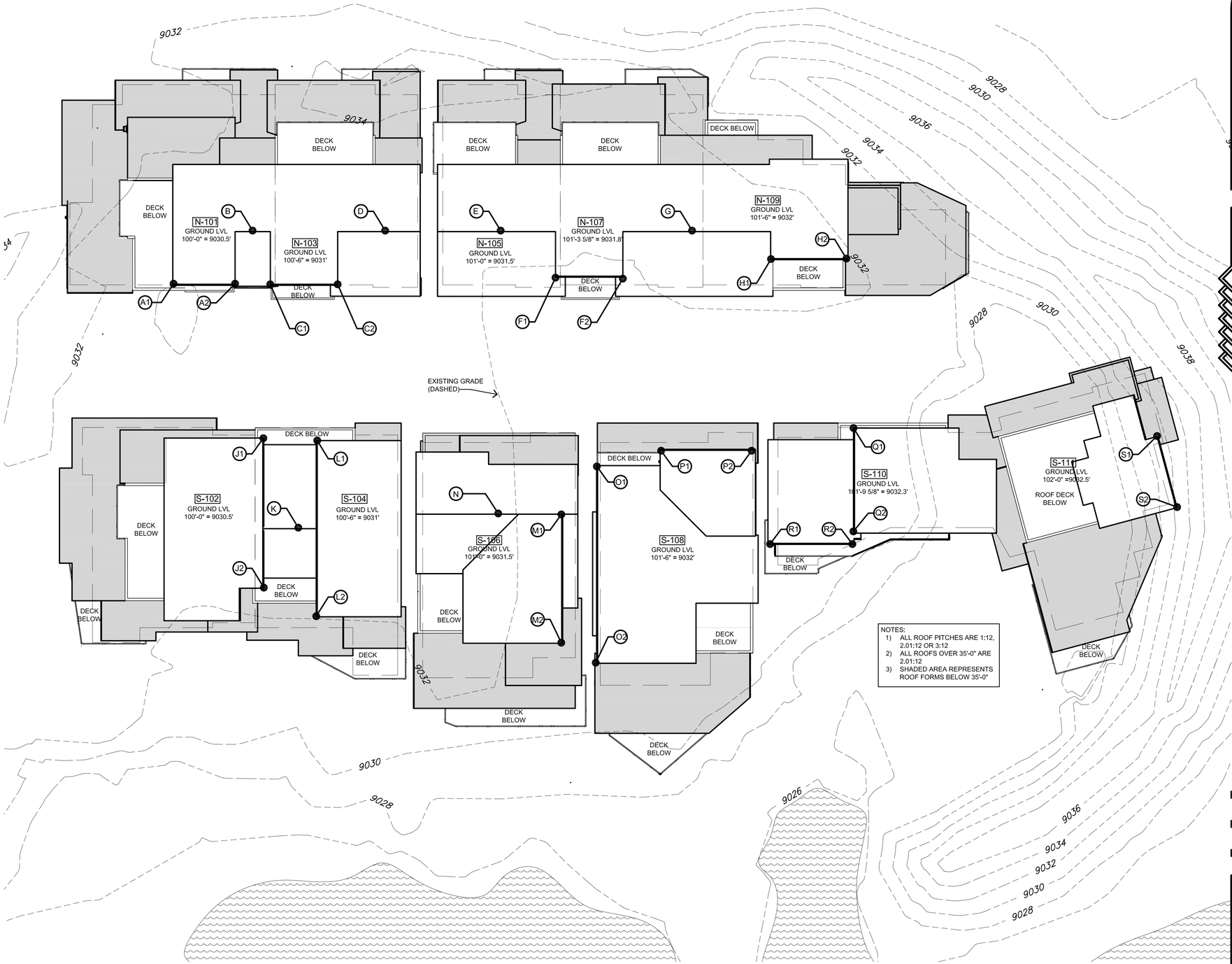
THE GLADE
200 NORTH 7TH AVENUE , FRISCO, COLORADO
(OUTLET E-2, RE-PLAT A, RIVER PINES SUBDIVISION)

SHEET NUMBER:

SP-1.4
DEVELOPMENT DENSITY DIAGRAM

BUILDING HEIGHT TABLE

RIDGE POINT	RIDGE ELEVATION	NATURAL EXIST'G GRADE ELEVATION (APPROX.)	FINISHED GRADE ELEVATION	AS MEASURED FROM	CALCULATIONS	HEIGHT
A1	9,074.84'	9,034'	9,030.5'	FINISHED	9,074.84' - 9,030.5' =	44.34'
A2	9,074.84'	9,033.5'	9,030.5'	FINISHED	9,074.84' - 9,030.5' =	44.34'
B	9,073.07'	9,032'	9,030.5'	EXIST'G	9,073.07' - 9,032' =	41.07'
C1	9,074.84'	9,032'	9,031'	EXIST'G	9,074.84' - 9,032' =	42.84'
C2	9,074.84'	9,032'	9,031'	EXIST'G	9,074.84' - 9,032' =	42.84'
D	9,073.07'	9,032'	9,031'	EXIST'G	9,073.07' - 9,032' =	41.07'
E	9,073.88'	9,032'	9,031.5'	EXIST'G	9,073.88' - 9,032' =	41.88'
F1	9,075.37'	9,032'	9,031.5'	EXIST'G	9,075.37' - 9,032' =	43.37'
F2	9,075.37'	9,032'	9,031.8'	EXIST'G	9,075.37' - 9,032' =	43.37'
G	9,073.88'	9,032'	9,031.8'	EXIST'G	9,073.88' - 9,032' =	41.88'
H1	9,074.78'	9,032'	9,032'	FINISHED	9,074.78' - 9,032' =	42.78'
H2	9,074.78'	9,032'	9,032'	FINISHED	9,074.56' - 9,031.5' =	42.78'
I	BLANK					
J1	9,074.38'	9,032'	9,031'	EXIST'G	9,074.38' - 9,032' =	42.38'
J2	9,074.38'	9,032'	9,031'	EXIST'G	9,074.38' - 9,032' =	42.38'
K	9,073.25'	9,032'	9,031'	EXIST'G	9,073.25' - 9,032' =	41.25'
L1	9,074.68'	9,032'	9,031'	EXIST'G	9,074.68' - 9,032' =	42.68'
L2	9,074.68'	9,032'	9,031'	EXIST'G	9,074.68' - 9,032' =	42.68'
M1	9,074.76'	9,031.75'	9,031.5'	EXIST'G	9,074.76' - 9,031.75' =	43.01'
M2	9,074.76'	9,031.75'	9,031.5'	EXIST'G	9,074.76' - 9,031.75' =	43.01'
N	9,073.32'	9,031.65'	9,031.5'	FINISHED	9,073.32' - 9,031.5' =	41.82'
O1	9,074.79'	9,031.5'	9,032'	FINISHED	9,074.79' - 9,032' =	42.79'
O2	9,074.79'	9,031.5'	9,032'	FINISHED	9,074.79' - 9,032' =	42.79'
P1	9,074.02'	9,031'	9,032'	EXIST'G	9,074.02' - 9,031' =	43.02'
P2	9,074.02'	9,031'	9,032'	EXIST'G	9,074.02' - 9,031' =	43.02'
Q1	9,074.45'	9,030.5'	9,032.3'	EXIST'G	9,074.45' - 9,030.5' =	44.25'
Q2	9,074.45'	9,030.2'	9,032.3'	EXIST'G	9,074.45' - 9,030.5' =	44.25'
R1	9,073.68'	9,030.3'	9,032.3'	EXIST'G	9,073.68' - 9,030.3' =	43.38'
R2	9,073.68'	9,030.3'	9,032.3'	EXIST'G	9,073.68' - 9,030.3' =	43.38'
S1	9,073.55'	9,033.6'	9,032.5'	EXIST'G	9,073.55' - 9,033.6' =	39.95'
S2	9,073.55'	9,034.25'	9,032.5'	FINISHED	9,073.55' - 9,032.25' =	41.3'



NOTES:
1) ALL ROOF PITCHES ARE 1:12, 2.01:12 OR 3:12
2) ALL ROOFS OVER 35'-0" ARE 2.01:12
3) SHADED AREA REPRESENTS ROOF FORMS BELOW 35'-0"

BUILDING HEIGHT DIAGRAM AND EXHIBIT

SCALE: 1" = 10'-0"

0' 5' 10' 20'

NORTH

REVISIONS: 05.29.25
06.25.25

JOB NO: 52402
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DRAWN BY: T.SHAFFER
CHECKED BY: Z. LEVIN

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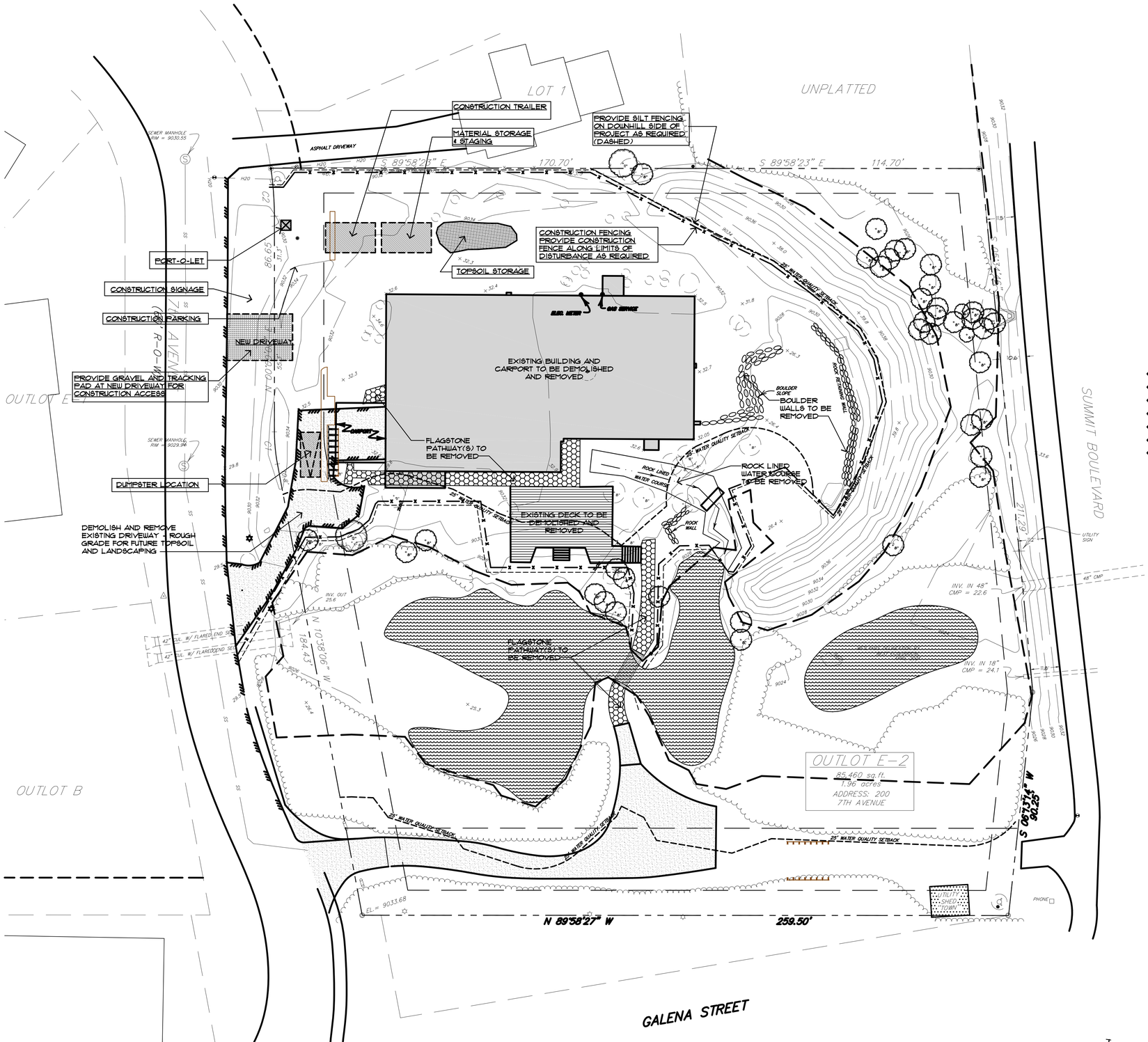
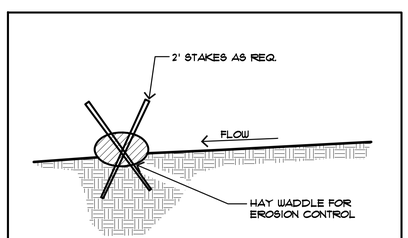
560 ADAMS AVE, SILVERTHORNE, CO 80497 P.O BOX 7399-334 BRECKENRIDGE, CO 80424 (970) 453-6880

THE GLADE
200 NORTH 7TH AVENUE , FRISCO, COLORADO
(OUTLET E-2, RE-PLAT A, RIVER PINES SUBDIVISION)

SHEET NUMBER:
SP-1.5
BUILDING HEIGHT DIAGRAM AND EXHIBIT





1 / CS-1 **EROSION CONTROL FENCE**

3/4" = 1'-0"

CONSTRUCTION MANAGMENT PLAN FOR DEMOLITION

SCALE: 1" = 20'-0"

0' 10' 20' 40' NORTH

REVISIONS: 05.29.25, 06.25.25

JOB NO: 52402
DATE: 06.25.25
DRAWN BY: T. SHAFFER
CHECKED BY: Z. LEVIN

TOWN OF FRISCO FINAL 07.11.25

bhh Partners of Colorado
560 ADAMS AVE SILVERTHORNE, CO 80498 - P.O BOX 7399-334 BRECKENRIDGE, CO 80424 (970) 453-6880

THE GLADE

200 NORTH 7TH AVENUE , FRISCO, COLORADO
(OUTLET E-2, RE-PLAT A, RIVER PINES SUBDIVISION)

SHEET NUMBER:

CMP-1.1

CONSTRUCTION MANAGEMENT PLAN FOR DEMOLITION

GROUND LEVEL PLAN

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

0' 4' 8' 16' 32'

NORTH

2,984 SQ. FT. FINISHED
10,291 SQ. FT. UN-FINISHED
191 SQ. FT. UN-FIN DUMPSTER

NORTH PROPERTY LINE
WEST PROPERTY LINE
BUILDING SETBACK
25' WETLAND SETBACK
PRIVATE DRIVE ℄
GRAVEL PATHWAY ALONG ELEC/GAS METERS
GRAVEL PATHWAY ALONG ELEC/GAS METERS & BIKE STOR.
CONCRETE SIDEWALK
BIKE STORAGE ALONG WALL (TYP. OF 9)
GUEST PARKING
UNIT 105 PARKING
DUMPSTER
TURNOUT
3'-0" CONSTRUCTION BUFFER
TYPICAL EXTERIOR LIGHT FIXTURE (SEE CUT SHEET AND BUILDING ELEVATIONS)
REPRESENTS HEATED CONCRETE APRON and ENTRY SLAB
TYPICAL EXTERIOR LIGHT FIXTURE MOUNTED 7'-0" A.F.F.

UNIT 101 1061sf
UNIT 102 1026sf
UNIT 103 878sf
UNIT 104 913sf
UNIT 105 678sf
UNIT 106 1090sf
UNIT 107 878sf
UNIT 108 1102sf
UNIT 109 611sf
UNIT 110 762sf
UNIT 111 937sf
250sf
299sf
304sf
346sf
340sf
355sf
219sf
210sf
266sf
PATIO (CONC.)

REVISIONS: 05.29.25, 06.25.25

JOB NO: 52402
DATE: 06.25.25
DRAWN BY: T. SHAFFER
CHECKED BY: Z. LEVIN

TOWN OF FRISCO FINAL 07.11.25

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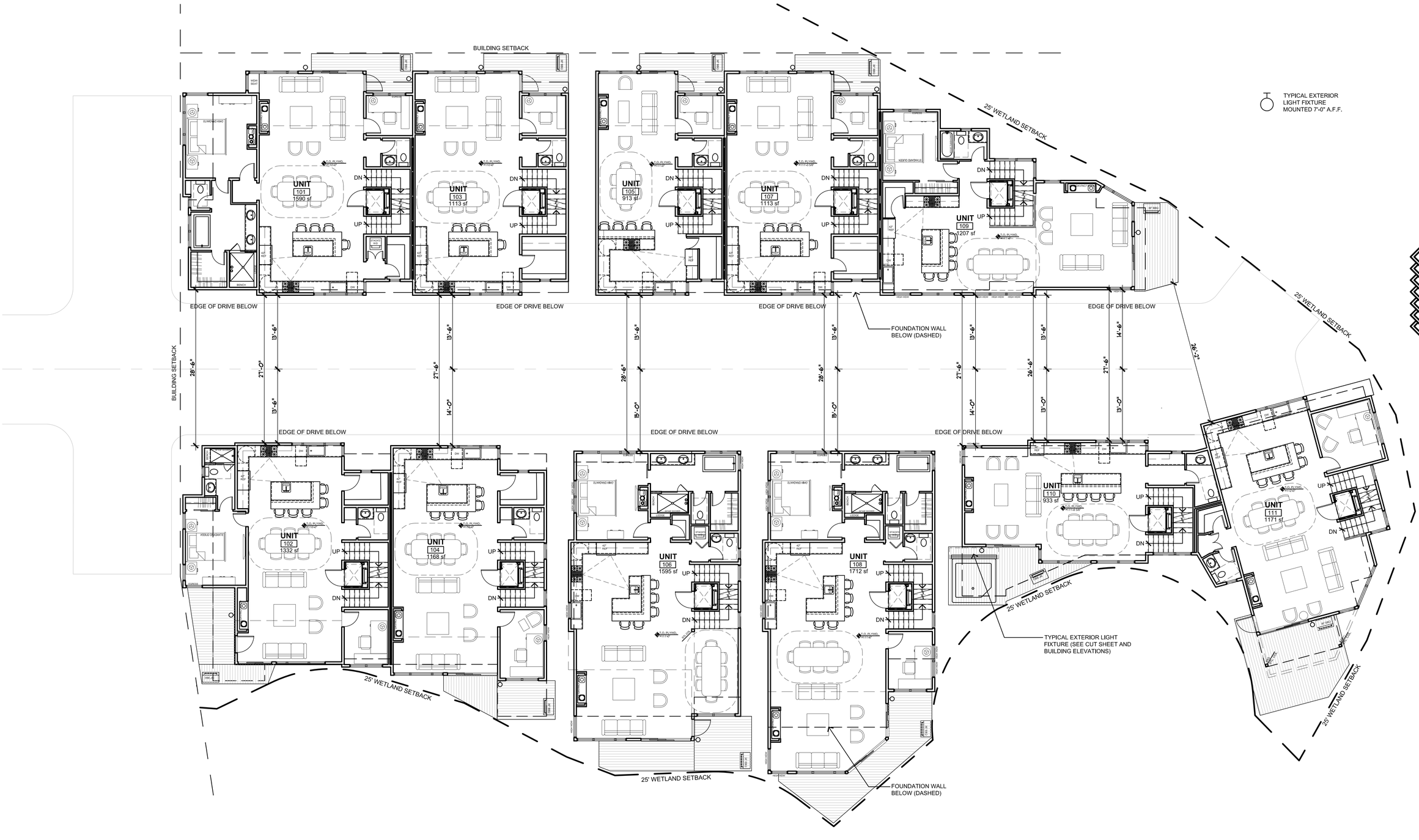
THE GLADE

200 NORTH 7TH AVENUE , FRISCO, COLORADO
(OUTLET E-2, RE-PLAT A, RIVER PINES SUBDIVISION)

SHEET NUMBER:

A-1.1

GROUND LEVEL PLAN



LEVEL 2 PLAN

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

13,847 FINISHED SQ. FT.

0' 4' 8' 16' 32'

NORTH

REVISIONS: 05.29.25, 06.25.25

JOB NO: 52402
DATE: 06.25.25
DRAWN BY: T. SHAFFER
CHECKED BY: Z. LEVIN

TOWN OF FRISCO FINAL 07.11.25

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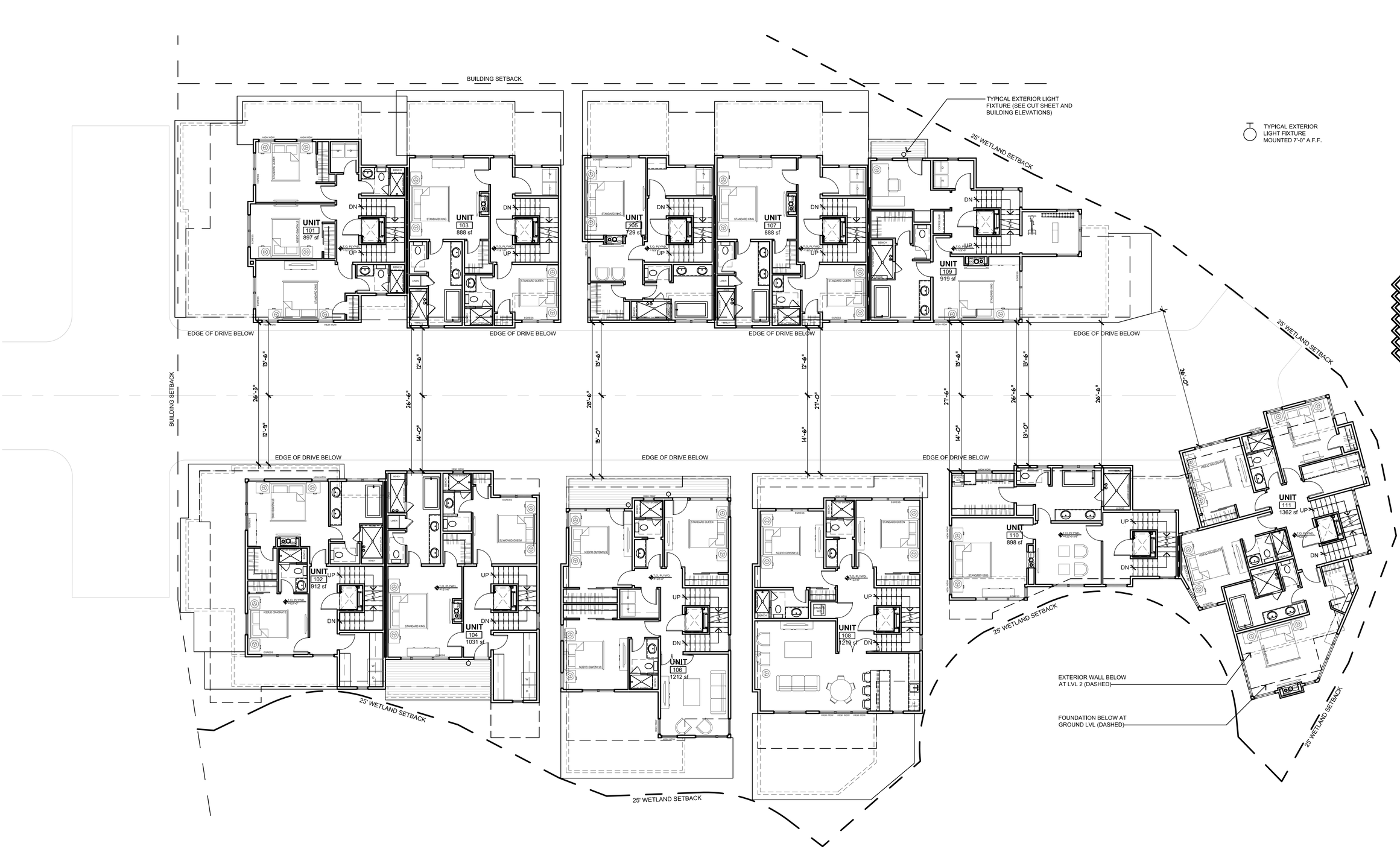
THE GLADE

200 NORTH 7TH AVENUE, , FRISCO, COLORADO
(OUTLET E-2, RE-PLAT A, RIVER PINES SUBDIVISION)

SHEET NUMBER:

A-1.2

LEVEL 2 PLAN



LEVEL 3 PLAN

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

0' 4' 8' 16' 32'

10,955 SQ. FT. FINISHED

REVISIONS: 05.29.25, 06.25.25

JOB NO: 52402
DATE: 06.25.25
DRAWN BY: T. SHAFFER
CHECKED BY: Z. LEVIN

TOWN OF FRISCO FINAL 07.11.25

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THE GLADE
200 NORTH 7TH AVENUE , FRISCO, COLORADO
(OUTLET E-2, RE-PLAT A, RIVER PINES SUBDIVISION)

SHEET NUMBER:

A-1.3
LEVEL 3 PLAN

BUILDING SETBACK

25' WETLAND SETBACK

UNIT 101 292sf

UNIT 103 506sf

UNIT 105 453sf

UNIT 107 506sf

UNIT 109 364sf

EDGE OF DRIVE BELOW

EDGE OF DRIVE BELOW

EDGE OF DRIVE BELOW

EDGE OF DRIVE BELOW

25' WETLAND SETBACK

BUILDING SETBACK

UNIT 102 396sf

UNIT 104 603sf

UNIT 106 706sf

UNIT 108 899sf

UNIT 110 641sf

UNIT 111 127sf

EDGE OF DRIVE BELOW

EDGE OF DRIVE BELOW

EDGE OF DRIVE BELOW

25' WETLAND SETBACK

25' WETLAND SETBACK

25' WETLAND SETBACK

TYPICAL EXTERIOR LIGHT FIXTURE (SEE CUT SHEET AND BUILDING ELEVATIONS)

FOUNDATION WALL BELOW AT GARAGE LVL (LARGE DASHED)

EXTERIOR WALL BELOW AT LVL 2 (MEDIUM DASHED)

EXTERIOR WALL BELOW AT LVL 3 (SMALL DASHED)

TYPICAL EXTERIOR LIGHT FIXTURE MOUNTED 7'-0" A.F.F.

LEVEL 4 PLAN

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

0' 4' 8' 16' 32'

NORTH

5,493 SQ. FT. SQ. FT. FINISHED

REVISIONS: 05.29.25
06.25.25

JOB NO: 52402
DATE: 06.25.25
DRAWN BY: T. SHAFFER

CHECKED BY: Z. LEVIN

TOWN OF FRISCO FINAL
07.11.25

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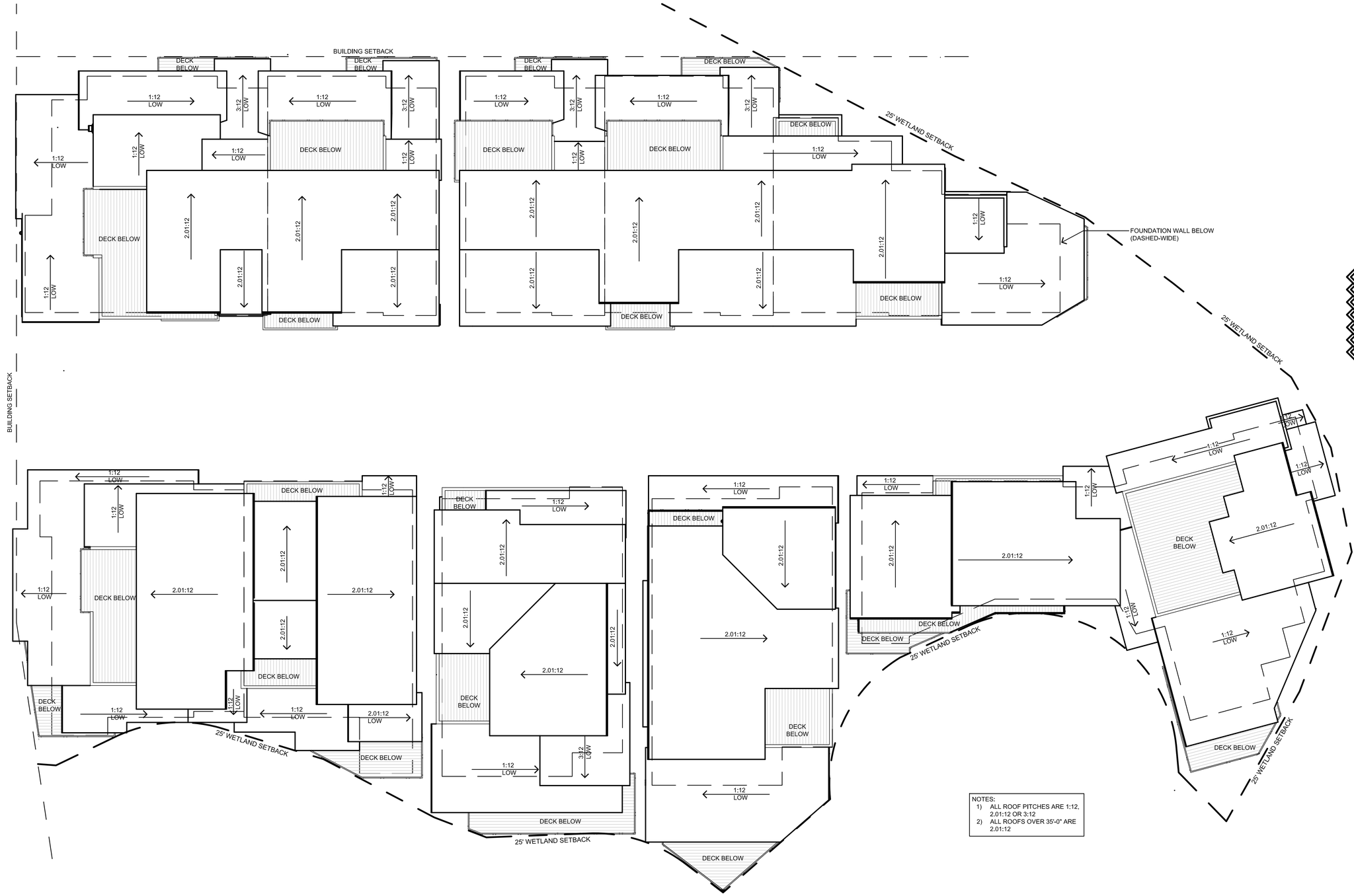
THE GLADE
200 NORTH 7TH AVENUE, , FRISCO, COLORADO
(OUTLET E-2, RE-PLAT A, RIVER PINES SUBDIVISION)

SHEET NUMBER:

A-1.4
LEVEL 4 PLAN



NOTES:
1) ALL ROOF PITCHES ARE 1:12, 2.01:12 OR 3:12
2) ALL ROOFS OVER 35'-0" ARE 2.01:12

ROOF PLAN

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

0' 4' 8' 16' 32' NORTH

REVISIONS: 05.29.25, 06.25.25

JOB NO: 52402
DATE: 06.25.25
DRAWN BY: T. SHAFFER
CHECKED BY: Z. LEVIN

TOWN OF FRISCO FINAL 07.11.25

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THE GLADE

200 NORTH 7TH AVENUE , FRISCO, COLORADO
(OUTLET E-2, RE-PLAT A, RIVER PINES SUBDIVISION)

SHEET NUMBER:

A-1.5

ROOF PLAN

VIEW FROM SOUTH AT OLD DRIVE

SCALE: N.T.S.

VIEW FROM WEST ON 7TH AVE.

SCALE: N.T.S.

VIEW FROM EAST ON SUMMIT BLVD.

SCALE: N.T.S.

VIEW FROM NORTH AT BIKE PATH

SCALE: N.T.S.

REVISIONS:

JOB NO: 52402
DATE: 06.25.25
DRAWN BY: T. SHAFFER
CHECKED BY: Z. LEVIN

TOWN OF FRISCO FINAL
07.17.25

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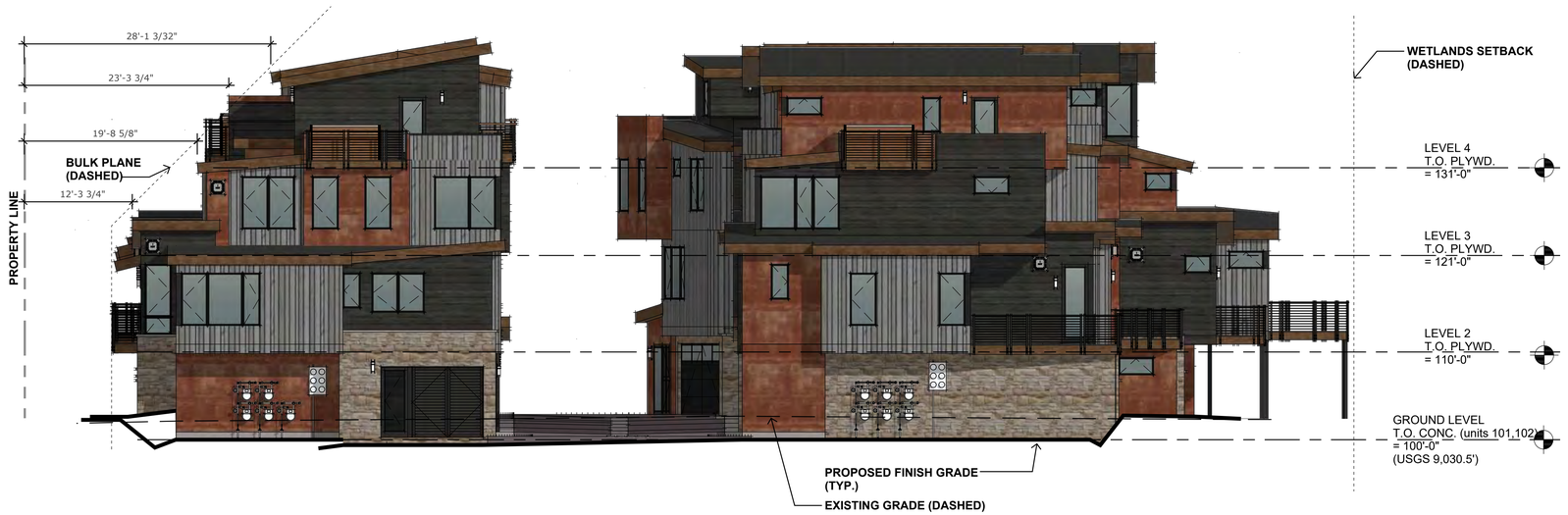
THE GLADE
200 NORTH 7TH AVENUE, FRISCO, COLORADO
(OUTLET E-2, RE-PLAT A, RIVER PINES SUBDIVISION)

SHEET NUMBER:

A-2.0
BUILDING PERSPECTIVES

COLOR LEGEND

1	METAL ROOF -IMAGE II (STAND'G SEAM)	mfgr: BERRIDGE color: MATTE BLACK
2	WOOD FASCIA	mfgr: SPECIALTY WOOD PRODUCTS color: CIMMARON
3	WINDOW CLAD and FLASHINGS	mfgr: SIERRA PACIFIC color: BLACK
4	HORIZONTAL SIDING -1X10 CHANNEL RUSTIC	mfgr: SPECIALTY WOOD PRODUCTS color: BLACKHAWK
5	VERTICAL SIDING -1X4,1X8,1X10 T&G	mfgr: SPECIALTY WOOD PRODUCTS color: POWDERHORN
6	METAL SIDING -PANELS	mfgr: CORTEN color: RUST
7	STONE VENEER	mfgr:TELLURIDE STONE CO. color: COLORADO BUFF STRIP



WEST ELEVATION

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

0' 4' 8' 16' 32'

NOTES:
1) ALL ROOF PITCHES ARE 1:12, 2.01:12 OR 3:12.
2) ALL ROOFS OVER 35'-0" ARE 2.01:12.
3) SEE SHEET A-2.1 FOR TYPICAL NOTES AND MATERIALS.

EAST ELEVATION

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

0' 4' 8' 16' 32'

REVISIONS:

JOB NO: 52402
DATE: 06.25.25
DRAWN BY: T. SHAFFER
CHECKED BY: Z. LEVIN

TOWN OF FRISCO FINAL
07.17.25

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THE GLADE
200 NORTH 7TH AVENUE, FRISCO, COLORADO
(OUTLET E-2, RE-PLAT A, RIVER PINES SUBDIVISION)

SHEET NUMBER:

A2.1
BUILDING ELEVATIONS

SOUTH ELEVATION

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

NOTES:
1) ALL ROOF PITCHES ARE 1:12, 2.01:12 OR 3:12.
2) ALL ROOFS OVER 35'-0" ARE 2.01:12.
3) SEE SHEET A-2.1 FOR TYPICAL NOTES AND MATERIALS.

NORTH ELEVATION

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

0' 4' 8' 16' 32'

REVISIONS:

JOB NO: 52402
DATE: 06.25.25
DRAWN BY: T. SHAFFER
CHECKED BY: Z. LEVIN

TOWN OF FRISCO FINAL
07.17.25

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THE GLADE
200 NORTH 7TH AVENUE, FRISCO, COLORADO
(OUTLET E-2, RE-PLAT A, RIVER PINES SUBDIVISION)

SHEET NUMBER:

A2.2
BUILDING ELEVATIONS

SOUTH ELEVATION at NORTH BUILDINGS

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

0' 4' 8' 16' 32'

NOTES:
1) ALL ROOF PITCHES ARE 1:12, 2.01:12 OR 3:12.
2) ALL ROOFS OVER 35'-0" ARE 2.01:12.
3) SEE SHEET A-2.1 FOR TYPICAL NOTES AND MATERIALS.

NORTH ELEVATION at SOUTH BUILDINGS

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

0' 4' 8' 16' 32'

REVISIONS:

JOB NO: 52402
DATE: 06.25.25
DRAWN BY: T. SHAFFER
CHECKED BY: Z. LEVIN

TOWN OF FRISCO FINAL
07.17.25

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THE GLADE
200 NORTH 7TH AVENUE, FRISCO, COLORADO
(OUTLET E-2, RE-PLAT A, RIVER PINES SUBDIVISION)

SHEET NUMBER:

A2.3
BUILDING ELEVATIONS at DRIVE AISLE

EAST AERIAL PERSPECTIVE

SCALE: N.T.S.

WEST AERIAL PERSPECTIVE

SCALE: N.T.S.

VIEW FROM WEST PERSPECTIVE

SCALE: N.T.S.

VIEW FROM EAST PERSPECTIVE

SCALE: N.T.S.

REVISIONS:

JOB NO: 52402
DATE: 06.25.25
DRAWN BY: T. SHAFFER

CHECKED BY: Z. LEVIN

TOWN OF FRISCO FINAL
07.17.25

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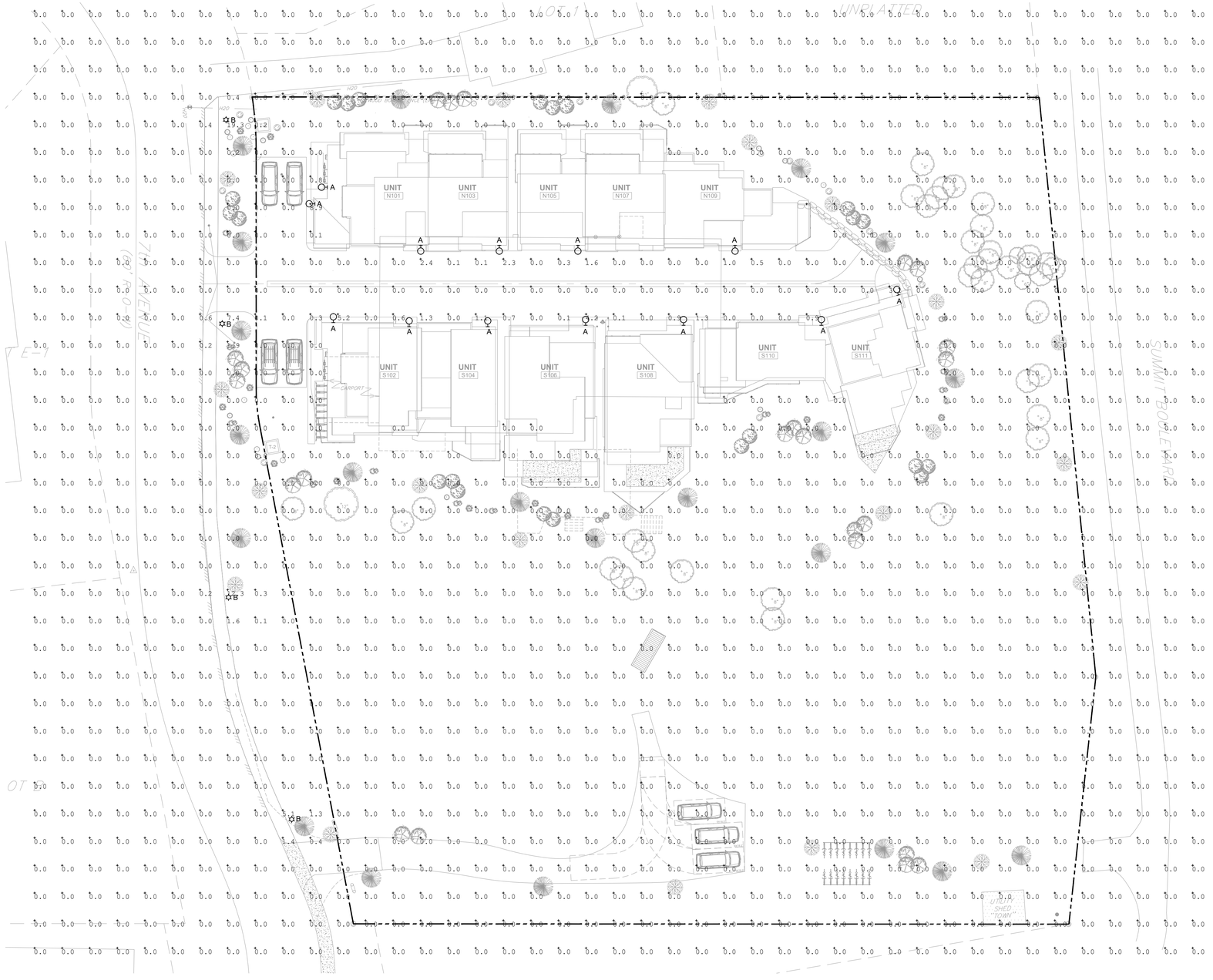
THE GLADE

200 NORTH 7TH AVENUE, FRISCO, COLORADO
(OUTLET E-2, RE-PLAT A, RIVER PINES SUBDIVISION)

SHEET NUMBER:

A-2.4
BUILDING PERSPECTIVES



1 SITE PHOTOMETRIC PLAN
SCALE: 1" = 20'-0"

N

KAZIN
& ASSOCIATES
CONSULTING ELECTRICAL ENGINEERS
9364 TEDDY LANE, SUITE 101
LONE TREE, CO 80124
(720) 489-1609

THE GLADE

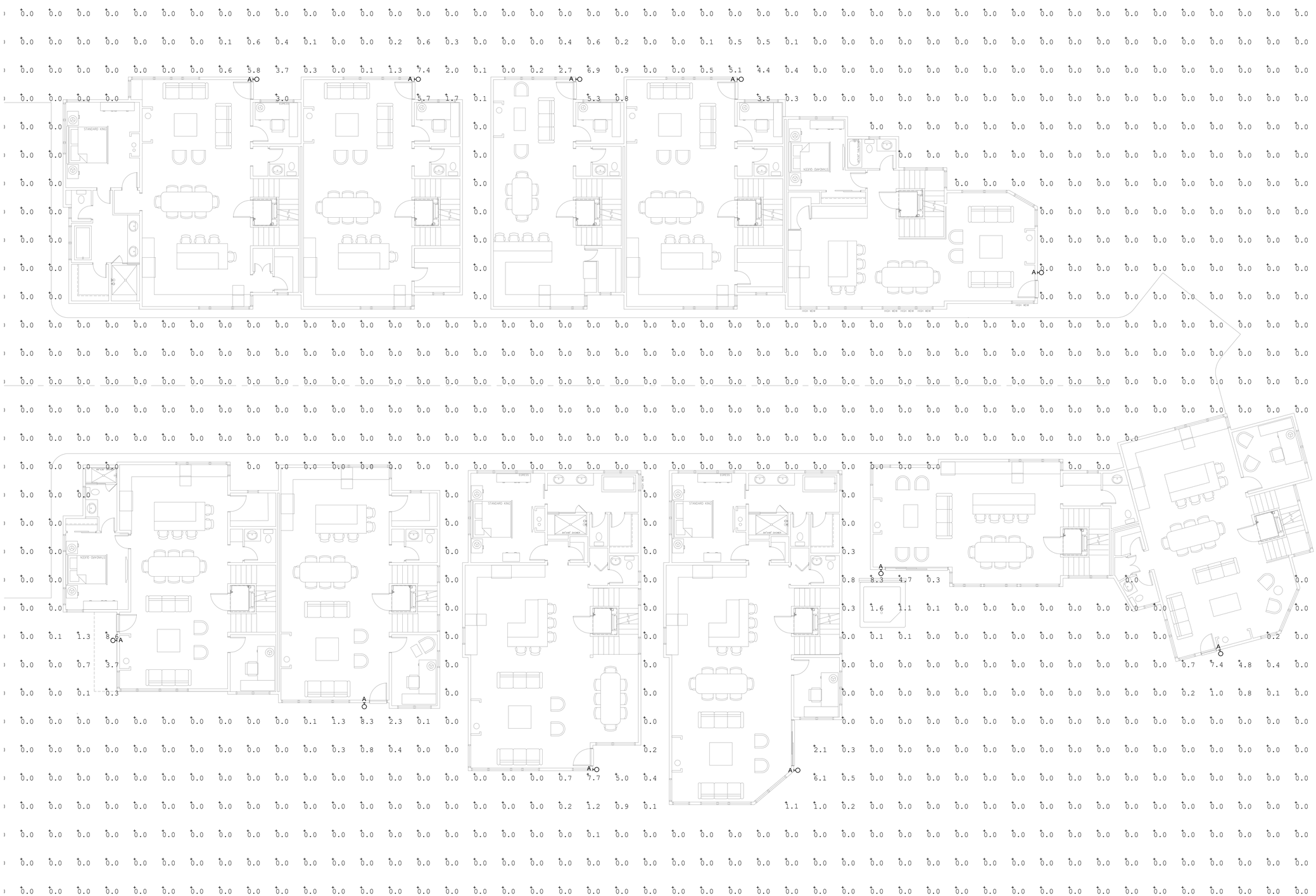
200 NORTH 7TH AVNUE
FRISCO, CO

REVISIONS		
NO.	DESCRIPTION	DATE

CLIENT:

PROJECT NUMBER	25137
DATE	6-10-25
DRAWN BY	DMK
CHECKED BY	DMK

PH1.1



1 LEVEL 2 PHOTOMETRIC PLAN
SCALE: 1/8" = 1'-0"

N

KAZIN
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CONSULTING ELECTRICAL ENGINEERS
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LONE TREE, CO 80124
(720) 489-1609

THE GLADE

200 NORTH 7TH AVNUE
FRISCO, CO

REVISIONS		
NO.	DESCRIPTION	DATE

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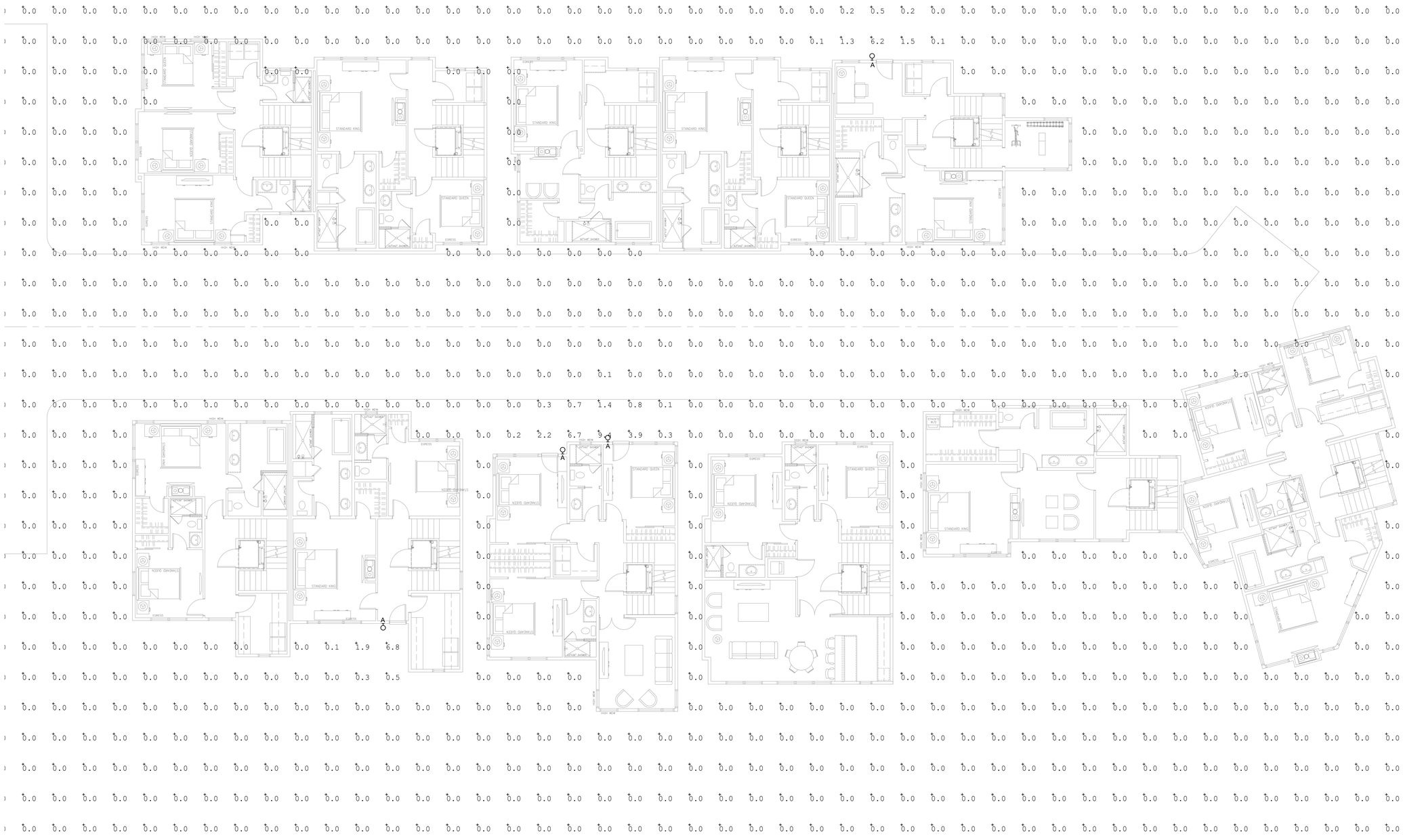
PH1.2



1 LEVEL 3 PHOTOMETRIC PLAN
SCALE: 1/8" = 1'-0"

N

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& ASSOCIATES
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THE GLADE

200 NORTH 7TH AVNUE
FRISCO, CO

REVISIONS		
NO.	DESCRIPTION	DATE

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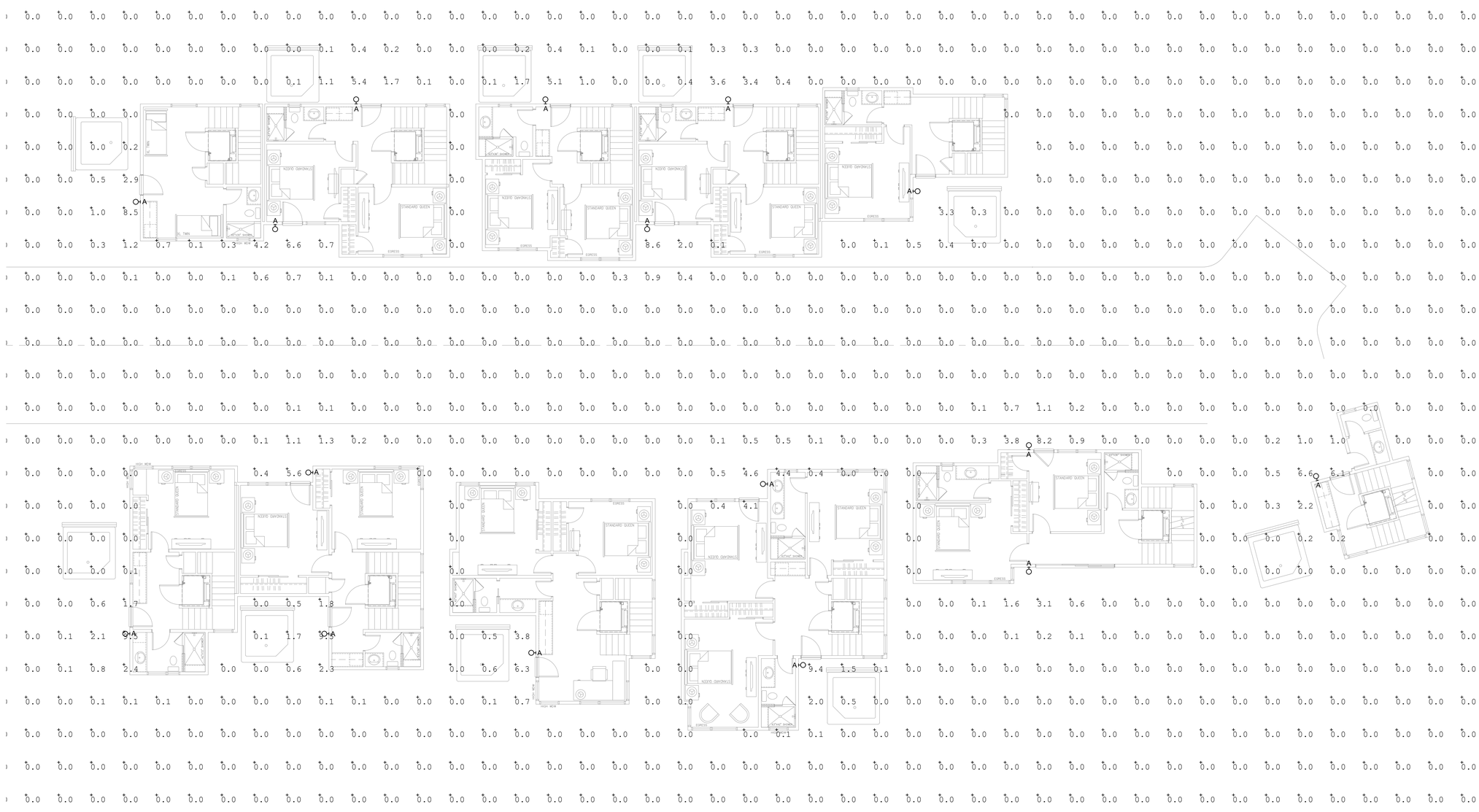
PH1.3



1 LEVEL 4 PHOTOMETRIC PLAN
SCALE: 1/8" = 1'-0"

N

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(720) 489-1609

THE GLADE

200 NORTH 7TH AVNUE
FRISCO, CO

REVISIONS		
NO.	DESCRIPTION	DATE

CLIENT:

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DRAWN BY	DMK
CHECKED BY	DMK

PH1.4

ARIA

2305KZ

LARGE WALL MOUNT LANTERN

Aria is a contemporary style that effortlessly complements the facade of any exterior. Its modern shape in durable aluminum is enhanced by a stainless steel mesh shade. Aria's high style and low maintenance comes standard Dark Sky compliant.

DETAILS	
FINISH:	Buckeye Bronze
MATERIAL:	Aluminum
DIMMABLE:	YES - CL TYPE DIMMER (SSL7A)

DIMENSIONS	
WIDTH:	7.3"
HEIGHT:	21.8"
WEIGHT:	3lb
BACK PLATE:	4.5"W X 8.25"H
EXTENSION:	8.8"
TOP TO OUTLET:	5"

LIGHT SOURCE	
LIGHT SOURCE:	Socketed
LED NAME:	6.5WR20-30K
WATTAGE:	1-6.50w Med. LED *Included, 50w Equiv.
VOLTAGE:	120v
CRI:	90
INCANDESCENT EQUIVALENCY:	1 x 50w
DIMMABLE:	YES - CL TYPE DIMMER (SSL7A)

SHIPPING	
CARTON LENGTH:	20.5
CARTON WIDTH:	10.5
CARTON HEIGHT:	10
CARTON WEIGHT:	5

PRODUCT DETAILS:

- Angular lines, a bold finish and robust details create an industrial edge to add flair to any type of facade
- Suitable for use in wet (outdoor direct rain) locations as defined by NEC and CEC. Meets United States UL Underwriters Laboratories & CSA Canadian Standards Association Product Safety Standards
- 2-year finish warranty
- Fixture is Dark Sky compliant and engineered to minimize light glare upward into the night sky

HINKLEY

HINKLEY
33000 Pin Oak Parkway
Avon Lake, OH 44012

PHONE: (440) 653-5500
Toll Free: 1 (800) 446-5539

hinkley.com

1 FIXTURE TYPE A
NOT TO SCALE

ATLANTIS

1641SK-LED

LARGE POST TOP OR PIER MOUNT LANTERN

Atlantis features a minimalist design for the ultimate in urban sophistication. Constructed of solid aluminum and Dark Sky compliant, Atlantis provides a chic solution to eco-conscious homeowners.

DETAILS	
FINISH:	Satin Black
MATERIAL:	Aluminum
GLASS:	Etched Lens
DIMMABLE:	YES - 0-10V TYPE DIMMER ONLY

DIMENSIONS	
WIDTH:	6.8"
HEIGHT:	24.5"
DEPTH:	3
WEIGHT:	4lb

LIGHT SOURCE	
LIGHT SOURCE:	Integrated LED
LED NAME:	LC1-30 & LC2-60
WATTAGE:	15w LED *Included
VOLTAGE:	120v/277v
LUMENS:	1200
CRI:	96
INCANDESCENT EQUIVALENCY:	2 x 60w
DIMMABLE:	YES - 0-10V TYPE DIMMER ONLY

SHIPPING	
CARTON LENGTH:	10
CARTON WIDTH:	27
CARTON HEIGHT:	7
CARTON WEIGHT:	12

PRODUCT DETAILS:

- LED components carry a 5-year limited warranty
- Suitable for use in wet (outdoor direct rain) locations as defined by NEC and CEC. Meets United States UL Underwriters Laboratories & CSA Canadian Standards Association Product Safety Standards
- 2-year finish warranty
- Equipped with a 120/277 universal driver. 0-10 dimming.
- Bold lines and a clean, minimalist style complement contemporary architecture
- Fixture is Dark Sky compliant and engineered to minimize light glare upward into the night sky

HINKLEY

HINKLEY
33000 Pin Oak Parkway
Avon Lake, OH 44012

PHONE: (440) 653-5500
Toll Free: 1 (800) 446-5539

hinkley.com

2 FIXTURE TYPE B
NOT TO SCALE

7FT POST

6660TK

7' DIRECT BURIAL POST

DETAILS	
FINISH:	Textured Black
MATERIAL:	Aluminum
DIMMABLE:	DOES NOT APPLY

DIMENSIONS	
WIDTH:	3"
HEIGHT:	84"
WEIGHT:	5lb

SHIPPING	
CARTON LENGTH:	85
CARTON WIDTH:	4
CARTON HEIGHT:	4
CARTON WEIGHT:	7

PRODUCT DETAILS:

- 2-year finish warranty
- This post must be buried at least 18" below ground level

HINKLEY

HINKLEY
33000 Pin Oak Parkway
Avon Lake, OH 44012

PHONE: (440) 653-5500
Toll Free: 1 (800) 446-5539

hinkley.com

KAZIN
& ASSOCIATES
CONSULTING ELECTRICAL ENGINEERS
9364 TEDDY LANE, SUITE 101
LONE TREE, CO 80124
(720) 489-1609

THE GLADE

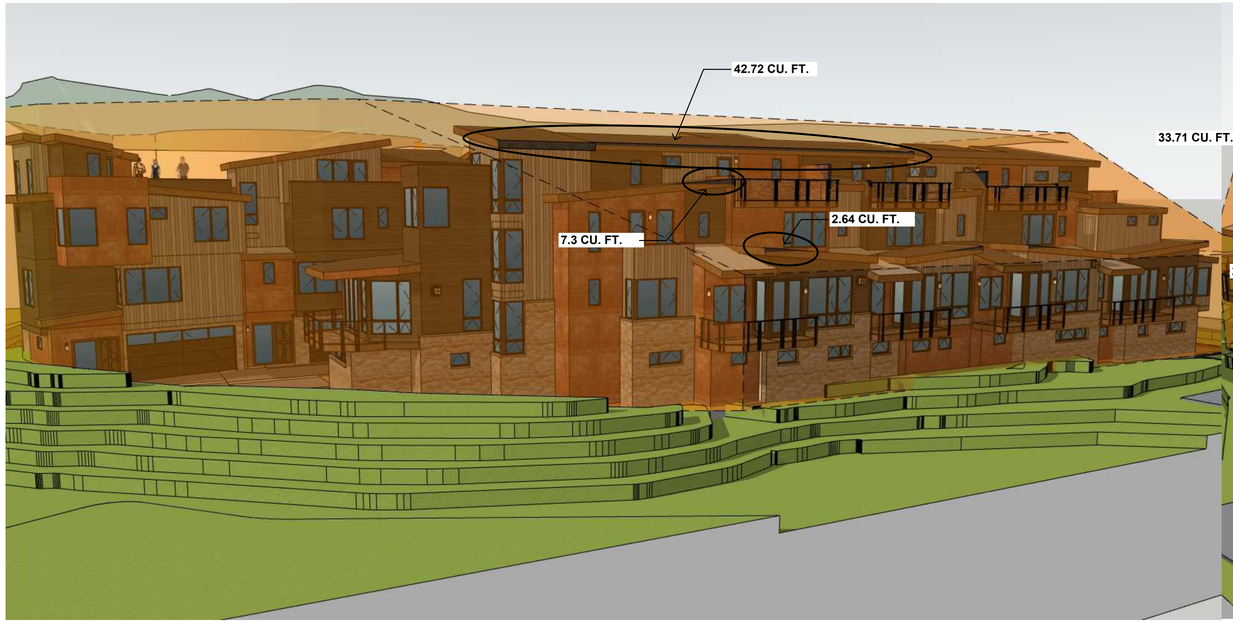
200 NORTH 7TH AVNUE
FRISCO, CO

REVISIONS		
NO.	DESCRIPTION	DATE

CLIENT:

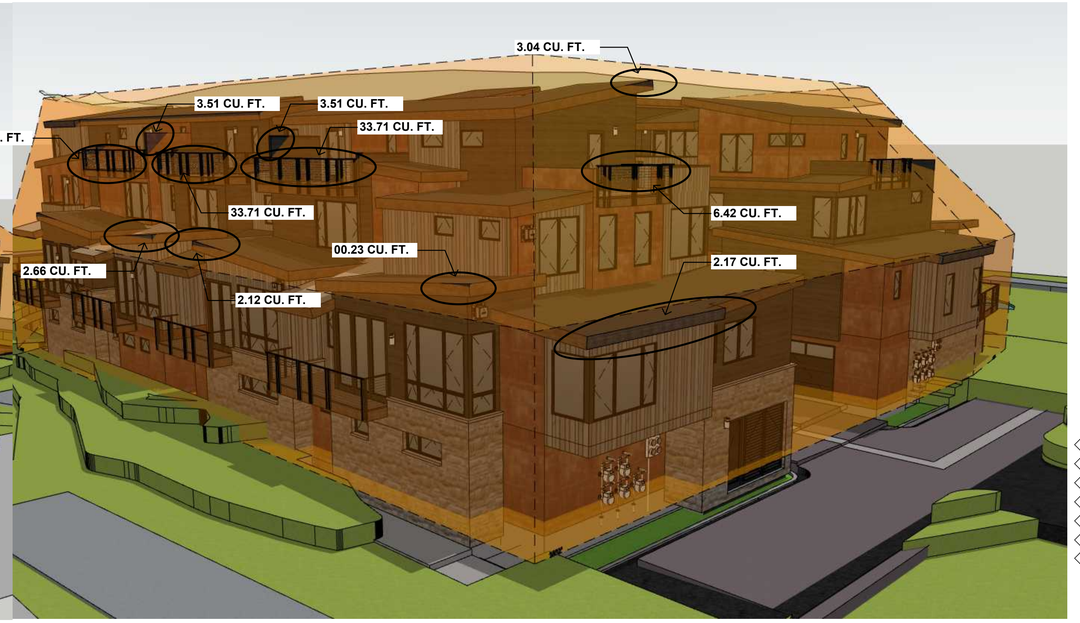
PROJECT NUMBER	25137
DATE	6-10-25
DRAWN BY	DMK
CHECKED BY	DMK

PH2.1



NORTHEAST AERIAL PERSPECTIVE

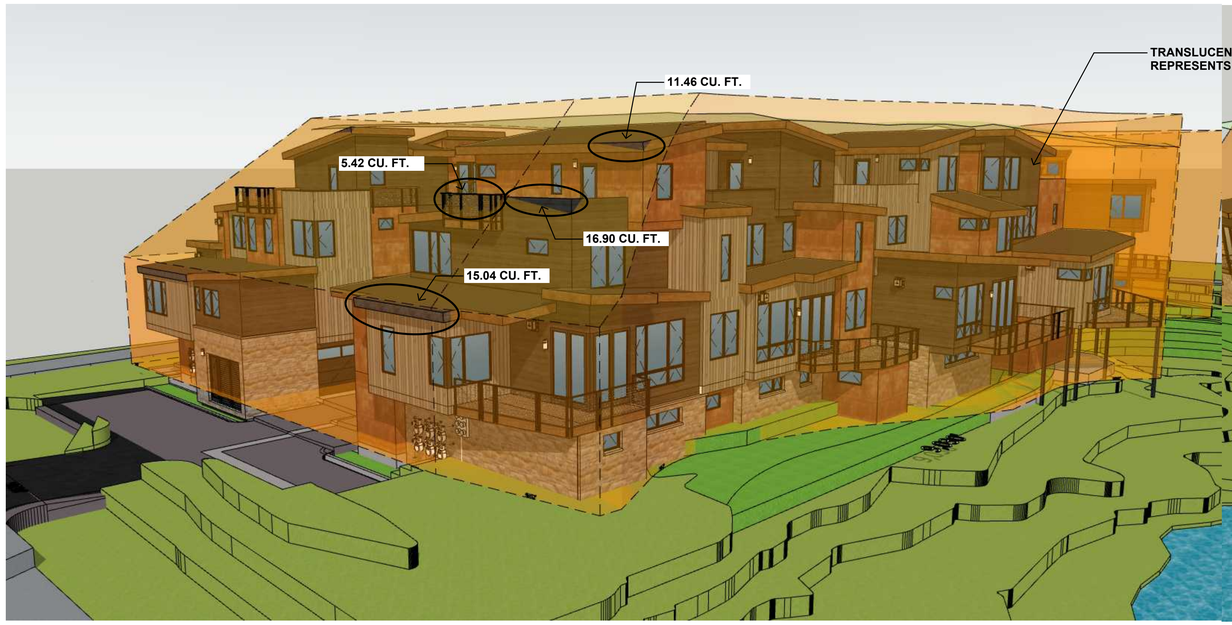
SCALE: N.T.S.



BULK PLANE PENETRATION = 226.27 CUBIC FEET

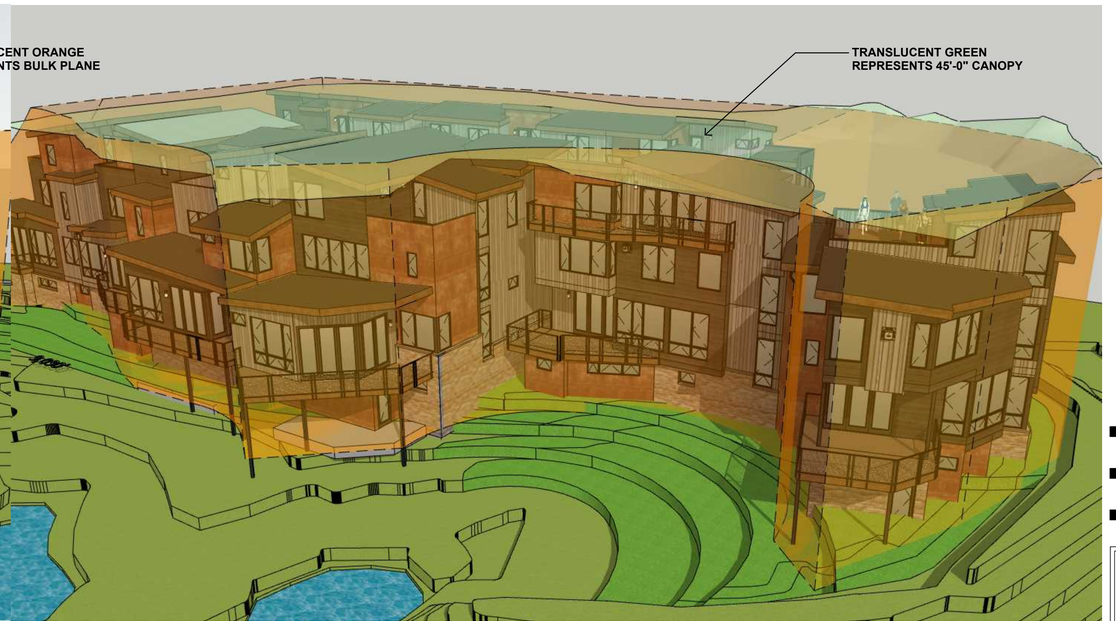
NORTHWEST AERIAL PERSPECTIVE

SCALE: N.T.S.



SOUTHWEST AERIAL PERSPECTIVE

SCALE: N.T.S.



SOUTHEAST AERIAL PERSPECTIVE

SCALE: N.T.S.

REVISIONS:

JOB NO: 52402
DATE: 06.25.25
DRAWN BY: T. SHAFFER
CHECKED BY: Z. LEVIN

TOWN OF FRISCO FINAL
07.17.25

bhh Partners of Colorado
560 ADAMS AVE. SILVERTHORNE, CO 80497 P.O BOX 7399-334 BRECKENRIDGE, CO 80424 (970) 453-6880

THE GLADE

200 NORTH 7TH AVENUE, FRISCO, COLORADO
(OUTLET E-2, RE-PLAT A, RIVER PINES SUBDIVISION)

SHEET NUMBER:

EXHIBIT 'A'

BULK PLANE PERSPECTIVES

METAL ROOFING

- METAL SALES
PROFILE: STANDING SEAM
(COLOR: BLACK)

WOOD FASCIA
- 2X12

- SPECIALTY WOOD PRODUCTS
SERIES: NEW AGE MODERN
(COLOR: CIMMARON)

WINDOW CLADDING
and FLASHINGS

- SIERRA PACIFIC
(COLOR: BLACK)

HORIZONTAL SIDING
1X10 CHANNEL RUSTIC

- SPECIALTY WOOD PRODUCTS
SERIES: NEW AGE MODERN
(COLOR: BLACKHAWK)

1x4 VERTICAL SIDING
- 1X4,1X8,1X10 T&G

-SPECIALTY WOODS PRODUCTS
SERIES: NEW AGE MODERN
(COLOR: POWDERHORN)

METAL SIDING
PANELS

-CORTEN
PROFILE: 3'X3'
(COLOR: RUST)

STONE VENEER

-TELLURIDE STONE COMPANY
(COLOR:COLORADO BUFF STRIP)

bhh Partners
P.O BOX 931, 160 EAST ADAMS BRECKENRIDGE, CO 80424 (970) 453-6880
P.0. BOX 2113, 560 ADAMS AVENUE SILVERTHORNE, CO 80498 (970) 513-1000

#52402
5.23.25

THE GLADE