

TOWN OF VAIL - GENERAL NOTES

1.

Obtain a Public Way permit from the Town of Vail Department of Public Works, (970) 479-2158. Obtain all required building permits through the Town of Vail Department of Community Development, 75 S. Frontage Road, Vail, CO, 81657.
2.

All contractors shall be licensed to perform work within the Town of Vail. Obtain and pay for contractor's license at the Town of Vail Department of Community Development, 75 S. Frontage Road, Vail, CO 81657.
3.

The contractor shall obtain all necessary standards, specifications, permits, bonds, etc. from all applicable agencies prior to commencement of construction.
4.

The public and the Town of Vail will have the right occupy the public Right-of-Way and adjacent facilities during the entire period of construction. Perform site work operations to minimize conflicts and to facilitate use of the premises and conduct of normal operations.
5.

All materials, workmanship, and construction of public improvements shall meet or exceed the standards and specifications set forth in the Town of Vail Code, Development Standards Handbook, Construction Details and applicable state and federal regulations. Where there is conflict between these plans and the specifications, or applicable standards, the most restrictive standard shall apply. All work shall be inspected and approved by the Town of Vail.
6.

All references to any published standards shall refer to the latest revision of said standard, unless specifically stated otherwise.
7.

The engineer who has prepared these plans, by execution and/or seal hereof, does hereby affirm responsibility to the Town of Vail, as beneficiary of said engineer's work, for any errors and omissions contained in these plans, and approval of these plans by the Town of Vail Engineer shall not relieve the engineer who has prepared these plans of all such responsibility. Further, to the extent permitted by law, the engineer hereby agrees to hold harmless and indemnify the Town of Vail, and its officers and employees, from and against all liabilities and damages which may arise from any negligent errors and omissions contained in these plans.
8.

All sanitary sewer, storm sewer, and water line construction, as well as power and other "dry" utility installations, shall conform to the local utility entities standards and specifications current at the date of approval of the plans by the Town of Vail.
9.

The type, size, location and number of all known underground utilities are approximate when shown on the drawings. It shall be the responsibility of the contractor to verify the existence and location of all underground utilities along the route of the work before commencing new construction. The contractor shall be responsible for unknown underground utilities.
10.

These drawings represent only the approximate location of utilities and are included only for the convenience of the contractor. Contractor shall be responsible for locating all utilities, pipes and structures. Contact utility notification center of Colorado (800)922-1987 to locate underground facilities. Contact Town of Vail for additional locates (970) 479-2158. Contact Eagle River Water and Sanitation District for additional locates (970)-476-7480 ext. 114. Utility locates to be performed at least 72 hours prior to any construction activity. Contractor shall ensure that work performed in the proximity to utilities shall be according to the requirements of the requirements of these agencies. The contractor shall notify the owner's representative of any existing utilities which may interfere with the proposed work prior to construction. The contractor shall repair all existing utilities to remain which are damaged during construction at no additional cost to the owner.
11.

The contractor shall coordinate and cooperate with the Town of Vail, and all utility companies involved, assuring that the work is accomplished in a timely fashion and with a minimum disruption of service. The contractor shall be responsible for contacting, in advance, all parties affected by any disruption of any utility service as well as the utility companies.
12.

A State Construction Dewatering Wastewater Discharge Permit is required if dewatering is required in order to facilitate construction or if any water is discharged into a storm sewer, channel, irrigation ditch or any waters of the United States.
13.

The contractor shall submit for approval and comply with all terms and conditions of the Colorado Permit for Storm Water Discharge (Contact Colorado Department of Health, Water Quality Control Division, at (303) 692-3590) OR the Town of Vail Storm Water Discharge Permit (Contact 970-479-2333) whichever is deemed necessary, to the Storm Water Management Plan, and the Erosion Control Plan. Alpine Engineering will prepare the Storm Water Permit, and SWMP and Erosion Control Plan.
14.

Contractor shall provide and maintain approved erosion and sediment control "best management practices" (BMP) for the project duration. Contractor shall inspect BMP's weekly and after every precipitation event. Contractor shall document inspection and make reports available upon request. Accumulated sediment and debris shall be removed from a bmp when the sediment level reaches one half the bmp heights or, at any time that the BMP functionality is adversely impacted. All necessary maintenance and repair shall be completed within 48 hours of identification, unless otherwise agreed upon.
15.

The Town of Vail shall not be responsible for the maintenance of storm drainage facilities located on private property. Maintenance of on site drainage facilities shall be the responsibility of the private owners.
16.

The Town of Vail shall not be responsible for any damage or injuries sustained as a result of the construction of this project as a result of groundwater seepage, whether resulting from groundwater flooding, structural damage or other damage.
17.

The contractor shall be responsible for insuring that no mud or debris shall be tracked onto the existing public street system. Mud and debris must be removed within 24 hours by an appropriate mechanical method (i.e. machine broom sweep, light duty front-end loader, etc.) as approved by the Town of Vail construction inspector.
18.

The contractor shall notify the Town of Vail Construction Inspector (970-479-2198) 72 hours prior to the start of any construction. If work is suspended for any period of time after initial start-up, the contractor shall notify the Town of Vail of reason for suspension and estimated time of suspension. Contractor shall notify the Town of Vail 72 hours prior to restart of construction.
19.

The contractor shall notify the Town of Vail Environmental Health Inspector (970-479-2333) at least 2 working days prior to the start of any earth disturbing activity, or construction on any and all public improvements.
20.

The Owner shall be responsible for obtaining and submitting to the Town of Vail Construction Inspector material tests in accordance with the applicable standards and specifications for all work within the Public Right-of-Way. If the final soils/pavement design report does not correspond with the results of the original geotechnical report, the Owner shall be responsible for a re-design of the subject pavement section. All final soils/pavement design reports shall be prepared by a licensed Professional Engineer. The final report shall be submitted to the Town of Vail Construction Inspector prior to placement of base and asphalt.
21.

Prior to placement of H.B.P. or concrete within the public Right of Way a mechanical "proof roll" will be required. The entire subgrade and/or base material shall be rolled with a heavily loaded vehicle having minimum single axle weight of at least 18,000 lbs. Any subgrade/base section exhibiting excessive pumping or deformation as determined by the construction inspector shall be reworked, replaced or modified to form a non-yielding surface. The Town of Vail Construction Inspector shall be notified 24 hours prior to a "proof roll".
22.

The contractor shall furnish electronic and hard copy reproducible As-Built record drawings showing horizontal and vertical locations and elevations of constructed improvements including all utilities, and drainage appurtenances prior to acceptance of the project.
23.

The contractor shall video camera (TV) all installed public storm sewer pipe prior to final paving and/ or other final surface treatments are completed. A copy of the video taping shall be provided to the Town of Vail for review and approval and record keeping.
24.

The contractor shall be responsible for all aspects of safety-including, but not limited to, excavation, trenching, shoring, traffic control, and security. Refer to OSHA Publication 2226, Excavating and Trenching.
25.

The contractor shall submit and have approved a Construction Traffic Control Plan, in accordance with the MUTCD (Manual of Uniform Traffic Control Devices), to the Town of Vail Construction Inspector, prior to any construction activities within or affecting, the Right-of-Way. The contractor shall be responsible for providing any and all traffic control devices as may be required by the construction activities.
26.

The contractor shall submit to the Town of Vail Construction Inspector and gain approval for a construction staging plan, schedule and phasing plan prior to the start of construction.
27.

Construction sites and staging areas must be fenced and maintained in a secure condition at all times. Keep fencing and surrounding areas clear of trash and debris. Any construction debris or mud dropped into manholes shall be removed immediately by contractor. Contractor shall repair any excavations or pavement failures caused by construction within or in the vicinity of the limits of construction. The contractor shall be responsible for damage due to construction at no additional costs to owner. The contractor shall remove all sediment, mud, and construction debris that may accumulate in the flow lines, private property, and public rights of ways of the town as a result of this construction project. Removal shall be conducted within 48 hours. Return all construction staging sites to their original condition upon completion of the construction project.
28.

Dimensions for layout and construction are not to be scaled from any drawing. If pertinent dimensions are not shown, contact the Designer for clarification, and annotate the dimension on the as-built record drawings.
29.

The contractor shall have, onsite at all times, one (1) signed copy of the approved plans, one (1) copy of the appropriate standards and specifications, and a copy of any permits and extension agreements needed for the job.
30.

If, during the construction process, conditions are encountered which could indicate a situation that is not identified in the plans or specifications, the contractor shall contact the Owner, the Design Engineer and the Town of Vail Construction Inspector immediately.
31.

The Designer shall provide, in this location on the plan, the location and description of the nearest survey benchmarks for the project as well as the basis of bearings. The information shall be as follows:  
Project Benchmark: HARN CONTROL POINT "SPRADDLE" ELEV: 8287.82  
Basis of Bearings: THE LINE CONNECTING THE MONUMENTS FOUND AT THE CENTER ¼ CORNER AND THE WEST ¼ CORNER OF SECTION 12, T5S, R81W OF THE 6TH P.M. BEING N89°25'23"E.  
Project Benchmark and Basis of Bearings provided by Peak Land Consultants.
32.

Locate, protect, and maintain bench marks, monuments, control points and project engineering reference points. Reestablish disturbed or destroyed items at Contractor's expense.
33.

The contractor shall be responsible for replacement of any existing materials that are damaged during construction within the limits of construction or in the vicinity of the limits of construction, at no additional cost to the Owner.
34.

When an existing asphalt street must be cut, the street must be restored to a condition equal to or better than its original condition. Patching shall be done in accordance with the Town of Vail Street Repair Standards and/or CDOT requirements. The seams of the asphalt patches shall be infrared unless otherwise instructed by the Town of Vail Engineer.
35.

Upon completion of construction, the site shall be cleaned and restored to a condition equal to, or better than, that which existed before construction, or to the grades and condition as required by these plans.
36.

Standard Handicap ramps are to be constructed at all curb returns as identified on these plans. The construction of these handicap ramps shall be in accordance to ADA current standards.
37.

After acceptance by the Town of Vail, public improvements depicted in these plans shall be guaranteed to be free from material and workmanship defects for a minimum period of two years from the date of acceptance.
38.

The Contractor shall be solely and completely responsible for the conditions at and adjacent to the job site, including safety of persons and property during performance of the work. The contractor shall provide lights, signs, barricades, flagmen, or other devices necessary to provide for public safety, pedestrian and vehicular access as needed. This requirement shall apply continuously and not be limited to normal working hours.
39.

The Contractor shall not willfully proceed with construction as designed when it is obvious that previously unknown obstructions and/or grade differences exist that may not have been known during design. Such conditions shall be immediately brought to the attention of the owner's representative for direction. The contractor shall assume full responsibility for all necessary revisions and repairs due to failure to give such notification at no additional cost to the Owner.
40.

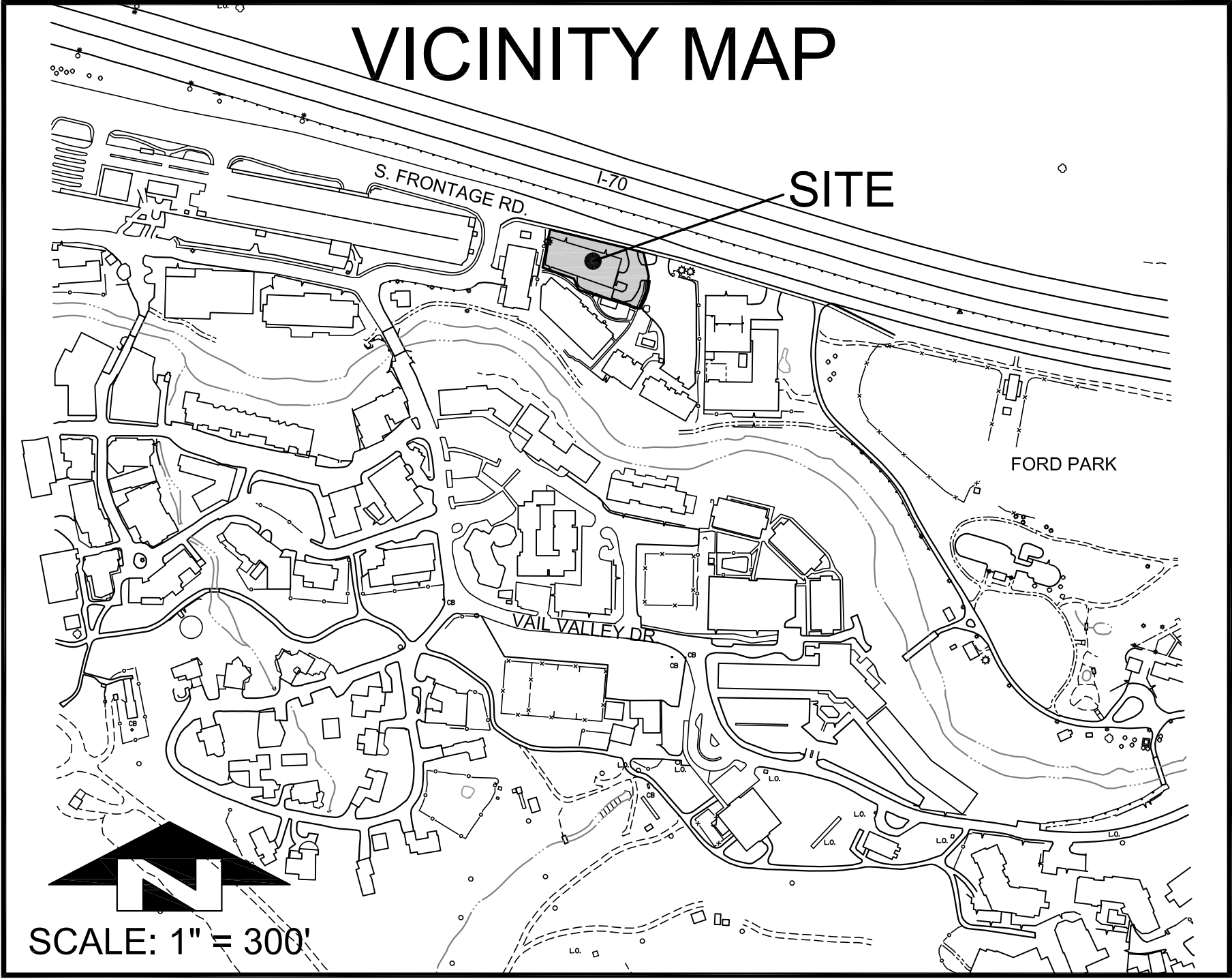
At the end of each working day, the Contractor shall be responsible for connecting the existing storm drainage pipes to the newly installed storm drainage system. All drainage systems within the construction limits shall be maintained by the Contractor for the entire duration of the construction project. The contractor shall be responsible to maintain all drainage within the construction site and offsite drainage which is directly affected by construction.
41.

Contractor shall be responsible for maintaining the operation of the existing Town street lights within the project limits. The contractor may provide temporary street lighting approved by Town of Vail, when existing street lights are removed.
42.

Contractor shall be responsible for maintaining the operation of existing Town irrigation lines within the project limits unless otherwise approved by the Town of Vail.
43.

It is the responsibility of the contractor to protect and preserve all trees, bushes, shrubs and cover in a manner acceptable to the owner. All areas of Town of Vail Right-of-Way disturbed during construction shall be well graded to drain, covered with a minimum of 4-inches of top soil, fertilized, mulched and re-seeded according to the Town of Vail's standard specifications.
44.

Contractor shall maintain access to fire department hydrants and connections shall be maintained throughout construction unless otherwise approved by the Town of Vail Fire Department.



GENERAL NOTES

1.

The contractor shall conform to all Town of Vail (TOV) rules, regulations and stipulations while accessing the site or working on the site.
2.

The Contractor is warned that conflicts with existing utility services may exist, including shallow utilities, culverts, sub-drains, roof drains, irrigation lines, water and sewer lines, electric service lines, etc. Prior to beginning any construction, the Contractor shall contact all appropriate utility companies for line locations, and Contractor shall then locate all utilities (including depth). Alpine Engineering, Inc. assumes no responsibility for utility locations. Any conflicts with the proposed construction shall be brought to the attention of the Engineer so that minor line or grade changes can be made to eliminate any conflicts with these existing utilities. All existing utilities shall be protected from damage by the Contractor. Utilities that are damaged by the contractor that were properly marked/located shall be repaired by the contractor at no expense to the owner or engineer.
3.

All work shall conform to the Technical Specifications.
4.

Contractor shall obtain at his expense all permits and inspections which are necessary to perform the proposed work.
5.

Observations of the work in progress and on-site visits are not to be construed as a guarantee or warranty by the Engineer of the Contractor's contractual responsibilities.
6.

Safety is the responsibility of the Contractor. The Engineer is not responsible for safety in, on, or about the project site, nor for compliance by the appropriate party with any regulations relating thereto.
7.

The contractor shall take all appropriate precautions to significantly reduce any potential pollution caused by his activities, including vehicle fueling, storage of fertilizers or chemicals, etc. The contractor shall have identified procedures for handling potential pollutants and have identified spill prevention and response procedures prior to any activities at the project site.
8.

If any groundwater is encountered, the contractor shall contact Alpine Engineering, Inc. and the Project Geotechnical Engineer immediately.
9.

The contractor shall maintain existing drainage channels, culverts and appurtenances during construction as necessary to protect roads and property.
10.

Contractor shall minimize construction disturbance to the satisfaction of the owner.
11.

Contractor is to dispose of spoil material off site.
12.

The Contractor shall protect and preserve all trees, bushes, shrubs and ground cover, not designated for removal, in a manner acceptable to the Owner. Contractor is to repair and/or replace any landscaping damaged as a result of construction to a condition equal to or better than existing.
13.

Existing survey information was provided to AEI by others.
14.

Off-site roads shall be kept clean to the satisfaction of the owner and TOV.
15.

The Contractor shall provide all lights, signs, barricades, flagmen, or other devices necessary to provide for public safety in accordance with the current Manual on Uniform Traffic Control Devices.
16.

The Contractor is responsible to install and maintain sediment control measures to insure that sediment-laden water does not leave the site. Certain sediment control measures have been shown these plans. These measures may not be all that is necessary to provide adequate sediment and erosion control. Contractor shall provide ongoing inspection and maintenance of all sediment control features.
17.

All inlet frames/grates, manhole and vault lids, valve box covers and irrigation boxes shall be set to match the adjacent finished grades and slopes.
18.

Any water valve box or sewer manhole adjustments shall conform to Eagle River Water and Sanitation District's standards and specifications. All materials and workmanship shall be subject to inspection by the districts and/or their representatives. The District reserves the right to accept or reject any such materials and workmanship that do not conform to district standards and specifications.
19.

The Contractor shall repair and/or replace any existing undergrounds, culverts or existing utilities disturbed by construction, and that are intended to remain, to the satisfaction of the Engineer and the respective utility company of the damaged utility.
20.

All work shall conform to the recommendations & requirements of the Geotechnical Study, prepared by H-P Geotech, dated May 25, 2006, Job # 106 0297.

WATER NOTES

1.

Water construction shall conform to Eagle River Water & Sanitation District's standards and specifications.
2.

All materials and workmanship shall be subject to inspection by the district and/or its representatives. The district reserves the right to accept or reject any materials and workmanship that do not conform to district standards or specifications.
3.

ERWSD and Alpine Engineering is to be notified by the Contractor at least 48 hours prior to any water line construction for a pre-construction meeting.
4.

Compaction of all trenches must be attained and compaction test results submitted to Alpine Engineering prior to acceptance. All pipe shall be constructed with pipe bedding as shown in the water plans and details. If trench conditions vary or if rock or water is encountered, Alpine Engineering is to be notified prior to proceeding with construction..
5.

The Contractor shall at all times keep a separate full set of contract drawings marked up to fully indicate as-built conditions. Said drawings shall be provided to Alpine Engineering upon completion of the work. Contractor is to provide at least two ties from physical monuments to all fittings, tees, curb stops, valves and manholes.
6.

Water mains shall be constructed with ductile iron pipe, AWWA C151, AWWA C111, class 52, pressure rating 350 psi. All water mains, fire hydrant lines and water service lines shall have a minimum cover of 7' unless noted otherwise.
7.

All water mains shall be hydrostatically tested in accordance with ERWSD standards. Chlorine testing shall be done in accordance with ERWSD standards.
8.

Provide thrust blocks and megaulons on all waterline bends and fittings per ERWSD specifications.
9.

Angles of water line bends are shown only as a guideline; all bends have not been identified or dimensioned, and additional bends may be required during construction.
10.

Install 10 gauge insulated copper tracer wire along the water mains, and cad-weld, per current ERWSD requirements.
11.

Verify all existing pipe invert elevations prior to construction.
12.

As part of these plans, several adjacent properties will be disconnected from the existing water and sewer mains and reconnected to the new mains proposed herein. Prior to beginning any construction, Contractor shall provide to the Engineer, a sequence of construction that outlines the methods and procedures to be used that will maintain water, sewer and fire protection services to these adjacent properties.
13.

Any service tap fees that may be required as part of these proposed utility installations are to be paid prior to making the connection to the main.
14.

No fire hydrant extensions are allowed by ERWSD on new installations.
15.

The center line of the fire hydrant discharge must be a min. of 36" above finished grade. Coordinate all fire hydrant locations in the field with Mike Vaughn (TOV FD) prior to installation of any hydrant. A dielectric fitting shall be installed between dissimilar metals.

CENTURYLINK COMMUNICATIONS STRUCTURAL SPECIFICATIONS

1. CONDUIT:

- A.

All conduits are to be equipped with minimum ¼" polypropylene pull line.
- B.

All conduit bends are to be steel sweeps or no less than PVS Schedule-80 fully encased. Long radius sweeps are to be used in main trench sections. Standard radius sweeps may be used at closure locations.
- C.

All conduit runs are designed on the basis that each separate run will have no more than two (2) 90° bends without the insertion of an appropriately sized pull box.
- D.

All conduits will be PVC Schedule-40 or better unless specified otherwise. If steel or iron pipe is used between the building and the property line, the pipe must be kept free from contact with any reinforcing steel or other conductors within the building foundation wall.
- E.

Conduit(s) will be furnished and installed by contractor for the exclusive use of CenturyLink Communications.
- F.

Conduits placed in the same trench with power supply conductors/conduits must be separated by a minimum of 12" of compacted soil or 3" of slurry encasement and have minimum depth of cover of not less than 24" on private property and 36" of cover at the property line.
- G.

Labs, water/gas pipe, flex conduit or plumbing fittings shall not be deemed acceptable for use by CenturyLink communications.

CIVIL SHEET INDEX

CIVIL COVER SHEET AND NOTES	C1.00
PROPOSED GRADING PLAN (OPTION A)	C1.01A
FULL S.F. ROAD LANES PLAN (OPTION B)	C1.01B
PROPOSED UTILITY PLAN	C1.02
DETAILS	C1.03
FIRE STAGING & TURNING MOVEMENT SIMULATION	C1.04

PROJECT CONTACTS

OWNER (GORE CREEK GROUP LLC)	PETE CARLSON	(952) 210-0095
ARCHITECT (359 DESIGN)	JOE COLEMAN	(303) 619-5195
LANDSCAPE ARCHITECT (MACDESIGN)	JAMIE MCCLUSKIE	(970) 513-9345
CIVIL ENGINEER (ALPINE ENGINEERING)	TIM LEININGER	(970) 926-3373
STRUCTURAL ENGINEER (MONROE-NEWELL)	PETER MONROE	(970) 949-7768
GEOTECHNICAL ENGINEER (H-P / KUMAR)	STEVE PAWLAK	(970) 945-7988
TOWN OF VAIL	TOM KASSMEL	(970) 479-2235

HOLY CROSS ENERGY CONSTRUCTION SPECIFICATIONS

I. TRENCH AND CONDUIT

1.

The developer or contractor will contact Holy Cross Energy before conduit and vault installation begins to schedule a pre-construction meeting with the project inspector.
2.

Changes in power facility construction from that shown on the project plans will not be made without advance approval from the Holy Cross Energy inspector.
3.

Holy Cross Energy material shall not be moved from the project to which it was assigned without the advance approval of the inspector and the completion of necessary paperwork. Holy Cross Energy material shall not be installed for any use other than construction of power facilities.
4.

All roads will be built to subgrade and all drainages will be constructed to grade before any vaults or conduits are installed.
5.

All trench will be excavated deep enough to ensure that the top of installed power facilities will be 48" below final grade. Special care must be taken to insure that the top of conduits will be 48" below the bottom of drainage ditches and all other low areas.
6.

Trench will be as straight as possible between vaults and shall have a smooth bottom free from low and high spots. Six inches of ¾" rod base will be placed the entire length of the trench and well compacted prior to conduit installation. When placed in the trench, the conduit shall be in continuous contact with the compacted rod base with no hold down weight added. Twelve inches of ¾" rod base, as measured from the top of the conduit, will be placed on the conduit and well compacted prior to returning any native backfill to the trench. Large rocks shall not be placed directly on the rod base layer. Care must be taken to avoid conduit damage during backfill and compaction; conduits found to be unusable at the time of power cable installation will be repaired by the developer or contractor before power can be made available.
7.

Power facilities to be placed parallel to deeper utilities will have a horizontal separation from the deeper utility greater than the depth of such utility below final grade less four feet (see attached drawing). When crossing a deeper utility is unavoidable, the crossing will be made as close to perpendicular as possible.
8.

Power line conduits will be installed with a minimum separation of 12" from all other new or existing underground utility lines. Wherever possible, this separation will be horizontal. The power line separation from plastic gas lines will be greater than this minimum wherever practicable. Power line conduits will be located deeper in the trench than the facilities of all other utilities unless the inspector grants a waiver prior to the start of construction.
9.

Backfill and compaction above the road base layer will be as required by the governmental entity or other party having jurisdiction.
10.

Conduit bell ends will not be allowed in the vaults. Holy Cross Energy will supply factory couplers, 90°, 45°, and 221/2° elbows as needed for job. Non-factory bends and heated bends will not be allowed. No more than two 90° elbows will be allowed in a conduit run of 500 feet. The conduit shall run straight between factory bends. Allowed bends must be further than 5' from a vault. Factory elbows supplied must be used intact; they cannot be cut to make a lesser bend. Bells will not be cut off conduit sticks to use as couplers. Holy Cross Energy elbows and pipe will be used only for the power facility installation.
11.

The conduit will not be backfilled without the Holy Cross Energy inspector seeing all joints unless the inspector gives prior permission. All joints shall be completely seated to the line marked on the male end of the conduit after sufficient glue is applied to both conduits being joined, even in areas where the trench cannot be excavated completely straight. Glue in the joint shall be allowed to completely dry prior to any stress being applied to the conduit on either side of the joint. Trench backfilled without the inspector viewing each joint or giving prior permission to cover the conduit will be re-excavated to expose the conduit, or the contractor will put a camera through each conduit in the span which was prematurely backfilled to verify the joint seating and conduit condition. The camera verification will be witnessed by the Holy Cross Energy inspector.
12.

Individual conduits shall enter each vault at a consistent location. There is to be no crossing of conduits in the trench.
13.

Both ends of a conduit run shall be securely plugged at the time of installation with Holy Cross Energy supplied material. Conduit ending outside a vault shall be marked with a 4" x 4" post or other approved method.
14.

Red trench marking tape will be supplied by Holy Cross Energy and shall be installed 18" to 24" above the conduit during backfill.
15.

At completion of the job, the inspector will do a final inspection. If the job does not meet with Holy Cross Energy's specifications or the approval of inspector, service will not be provided until specifications are met.

II. VAULTS

1.

Vaults shall be installed as follows:
- 1.1.

Splice vaults shall be installed with the manhole lid grade being slightly above final grade of the surrounding area, except when the vault is in a roadway, the manhole lid grade shall match the grade of the finished roadway surface.
- 1.2.

Splice vaults located in roads or other sloped areas will be installed so that the concrete base and lid are at the slope of the surrounding area. Vaults placed in roads will not be located in areas normally traversed by vehicle wheels. The inspector must approve all vaults installed at a slope.
- 1.3.

Transformer vaults and switchgear vaults will be installed with the bottom of the lid at final grade. The lid will be level.
- 1.4.

Where transformer and switchgear vaults are set into hillsides or sloped cuts, the downhill side of the vault will be graded according to C above. The slope behind the vault will be laid back sufficiently to prohibit soil or rocks from sloughing onto the vault. If the slope cannot be laid back far enough, a retaining wall shall be constructed behind the vault at the direction of the inspector.
- 1.5.

All vault pads will be placed on the vaults at the time of vault installation to protect the public and wildlife, unless otherwise instructed by the inspector. The holes through transformer and switchgear pads will be covered at the time of vault installation with concrete pieces supplied by Holy Cross Energy, unless otherwise instructed by the inspector.
- 1.6.

Large vault pieces shall be jointed with a lat type sealant provided by Holy Cross Energy, with the exception of the vault lid, at the direction of the inspector.
2.

Holes knocked in vaults for conduit installation shall be as small as possible and shall be grouted closed on the outside of the vault prior to backfill.
3.

Conduit shall enter vaults perpendicular to the vault wall, at least 2" from any adjacent walls and at least 2" above the vault base. There shall be a minimum separation of 1" between conduits. See vault drawings.
4.

Conduit will extend 4" into the vault (measured from the inside wall of the vault) after backfilling is complete.
5.

Ground rods in vaults for underground cable installation shall be laid in the trench with the conduits. The end of the rod shall extend approximately 6" into the vault through the conduit knockout. The rod will have a 45° bend located approximately 3" from the vault end, with the bend going away from the conduits. The bent end of the rod must be far enough from the vault wall to allow crimping the grounding conductor onto the rod. The rod must be at least 2" from the conduit at its entrance into the vault. See vault drawings.
6.

After the vault has been set, pipes extended in and grouted and the ground rod is in place, vaults shall be swept out removing all dirt or rocks. Cleanup shall be completed to the satisfaction of the inspector prior to cable installation being scheduled.
7.

Pedestals for other utilities shall not be located closer than 10' to a vault on sides where transformers or switchgear will have access doors. Pedestals shall not be located closer than 5' to a vault on sides where the pad-mounted equipment will not have access doors.

SEWER NOTES

1.

All sanitary sewer construction shall conform to Eagle River Water and Sanitation District's standards and specifications. All sewer mains and service lines proposed herein shall conform to ASTM D2241 "Standard Specifications for PVC, pressure rated pipe (SDR Series)" and shall be constructed to the lines and grades shown herein.
2.

All materials and workmanship shall be subject to inspection by the districts and/or their representatives. The district reserves the right to accept or reject any such materials and workmanship that do not conform to district standards or specifications.
3.

The district and its engineer are to be notified by the Contractor at least 48 hours prior to any utility construction.
4.

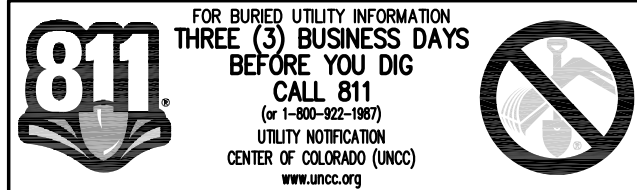
The Contractor shall at all times keep a separate full set of contract drawings marked up to fully indicate as-built conditions. Said drawings shall be provided to Alpine Engineering upon completion of the work. Contractor is to provide at least two ties from physical monuments to all fittings, valves and manholes.
5.

The contractor shall verify existing pipe or manhole inverts at tie-in points prior to construction staking.
6.

Manhole rims shall be set at an elevation relative to the pavement in accordance with District and Town of Vail requirements. Precast adjusting rings shall be used to adjust rim elevations to final grade. The maximum acceptable vertical adjustment is 12 inches. Manhole steps shall conform to OSHA step standards.
7.

The Contractor shall take care to properly shape all manhole inverts and benches to promote smooth flow through the manhole. Inverts of lines intersecting at 90 degrees and at highly divergent or flat slopes are especially critical. Manhole inverts shall be constructed with a smooth trowel finish and benches shall be finished with a light broom non-skid finish. All concrete for manhole construction shall be made with Type II cement with a minimum 28-day compressive strength of 3000 psi.
8.

All pipe shall be constructed with pipe bedding as shown in the sanitary sewer plans and details. If trench conditions vary or if rock or water is encountered, Alpine Engineering is to be notified prior to proceeding with construction. .



PRELIMINARY  
JUNE, 2017  
NOT FOR CONSTRUCTION

359  
DESIGN

3630 OSAGE STREET  
DENVER, CO 80211  
720.512.3437

VAIL MOUNTAIN VIEW  
PHASE II

434 SOUTH FRONTAGE ROAD EAST,  
VAIL, CO 81657

REVISION		
No.	Description	Date

PROJECT NUMBER	PROJECT NUMBER
ISSUE DATE	2017-06-12

ISSUE:

PEC SUBMITTAL

SHEET TITLE

PLAN-CIVIL COVER

SHEET NO.

C1.00



## VAIL MOUNTAIN VIEW

[illegible]

PROJECT NUMBER	PROJECT NUMBER
ISSUE DATE	2017-06-12

SUE

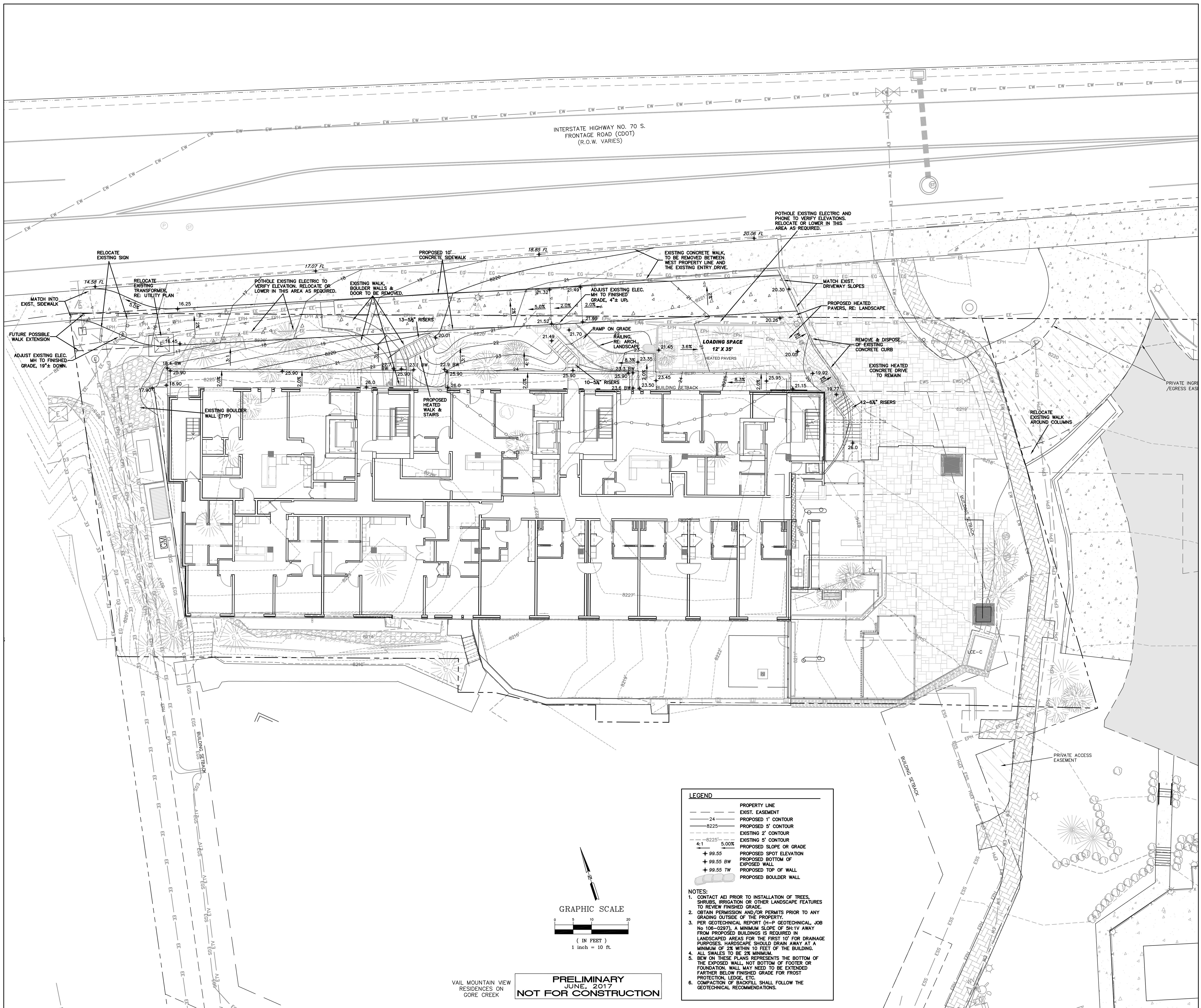
## EC SUBMITTAL

ET TITLE

**TRADING - A**

ET NO.

**C1.01A**



VAIL MOUNTAIN VIEW  
RESIDENCES ON  
GORE CREEK

PRELIMINARY  
JUNE, 2017  
NOT FOR CONSTRUCTION



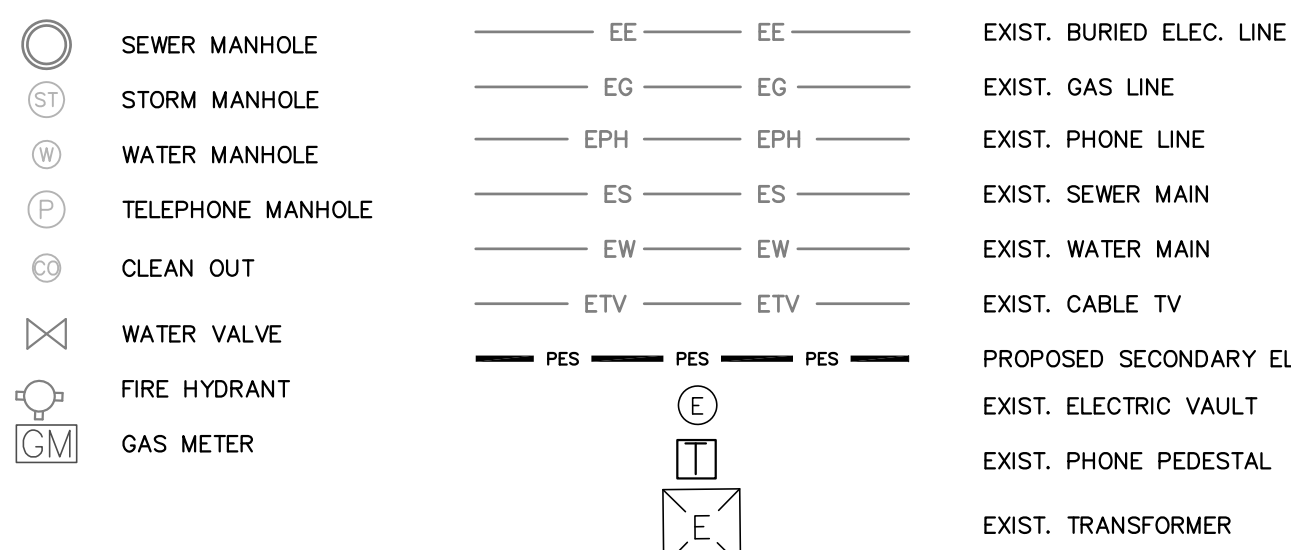
VAIL, CO 81657

PROJECT NUMBER	PROJECT NUMBER
ISSUE DATE	2017-06-12

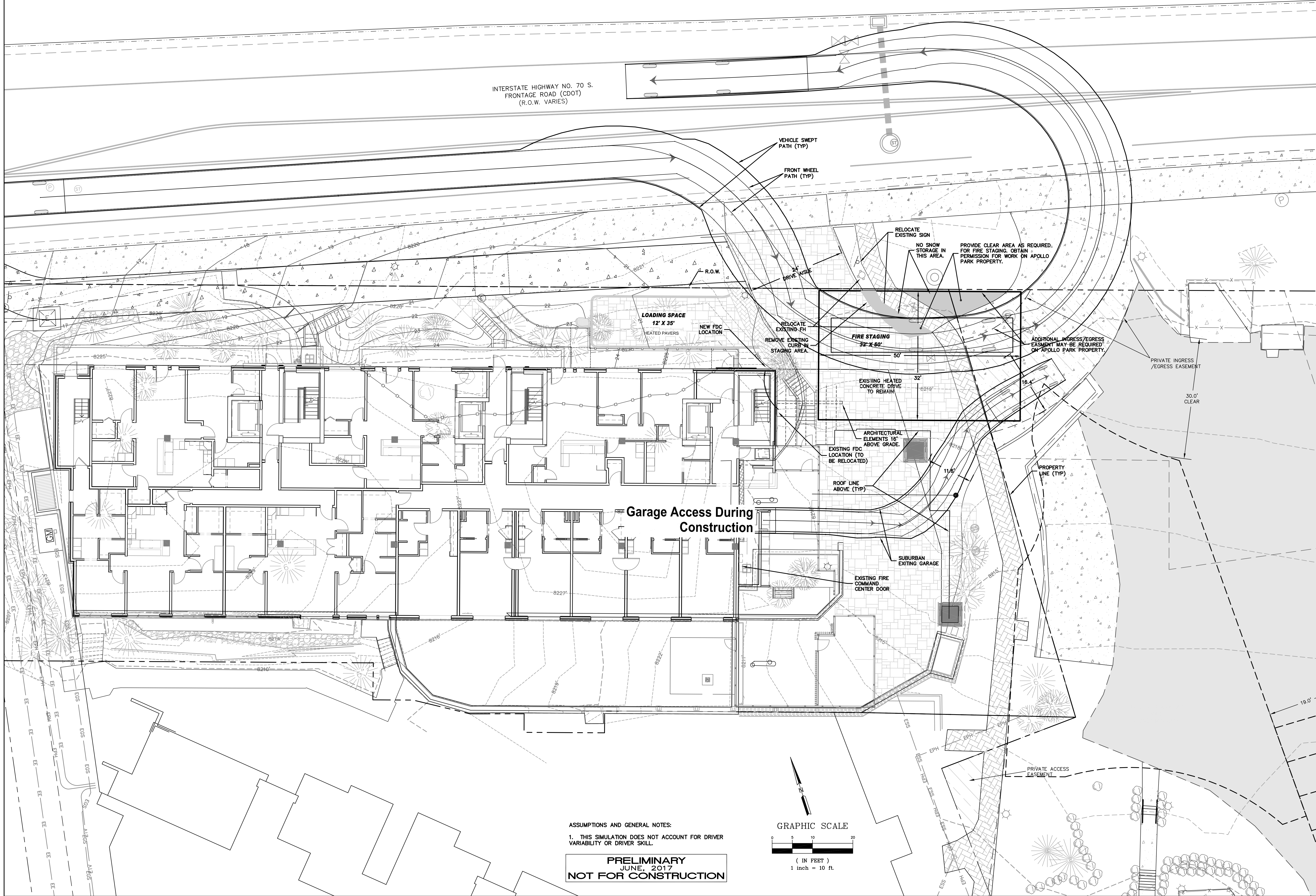
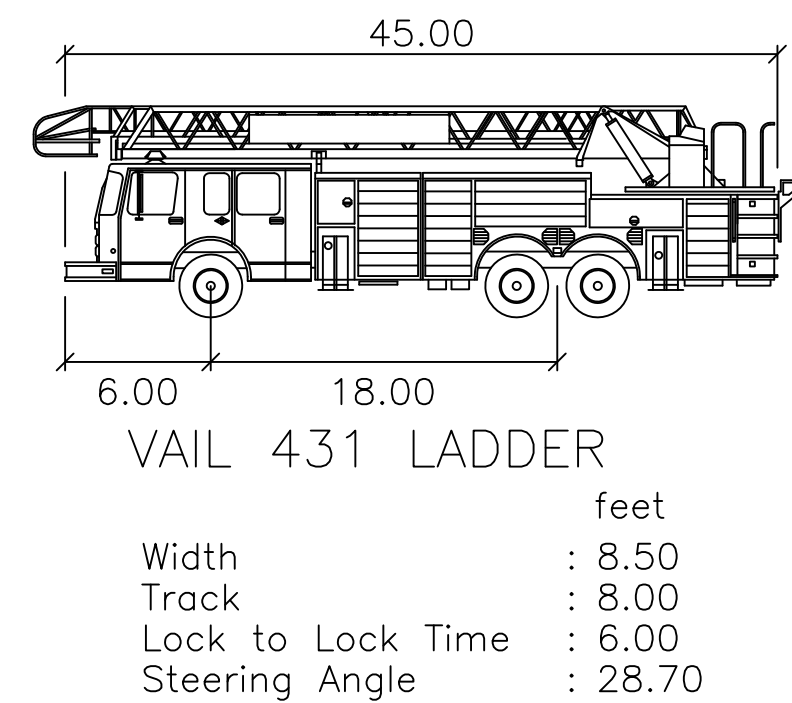
## EC SUBMITTAL

## LAN-UTILITY

## C1.02

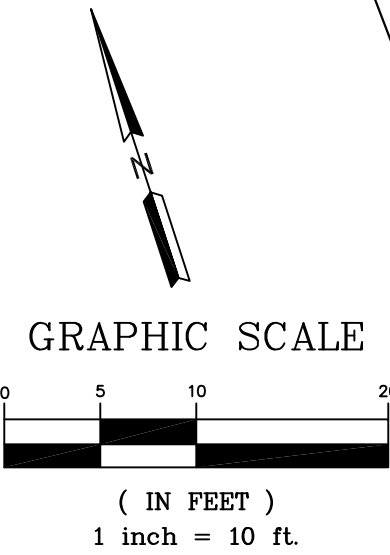






ASSUMPTIONS AND GENERAL NOTES:  
1. THIS SIMULATION DOES NOT ACCOUNT FOR DRIVER VARIABILITY OR DRIVER SKILL.

**PRELIMINARY**  
JUNE, 2017  
**NOT FOR CONSTRUCTION**



**359**  
DESIGN

3630 OSAGE STREET  
DENVER, CO 80211  
720.512.3437

**VAIL MOUNTAIN VIEW**  
**PHASE II**  
434 SOUTH FRONTAGE ROAD EAST,  
VAIL, CO 81657

REVISION		
No.	Description	Date

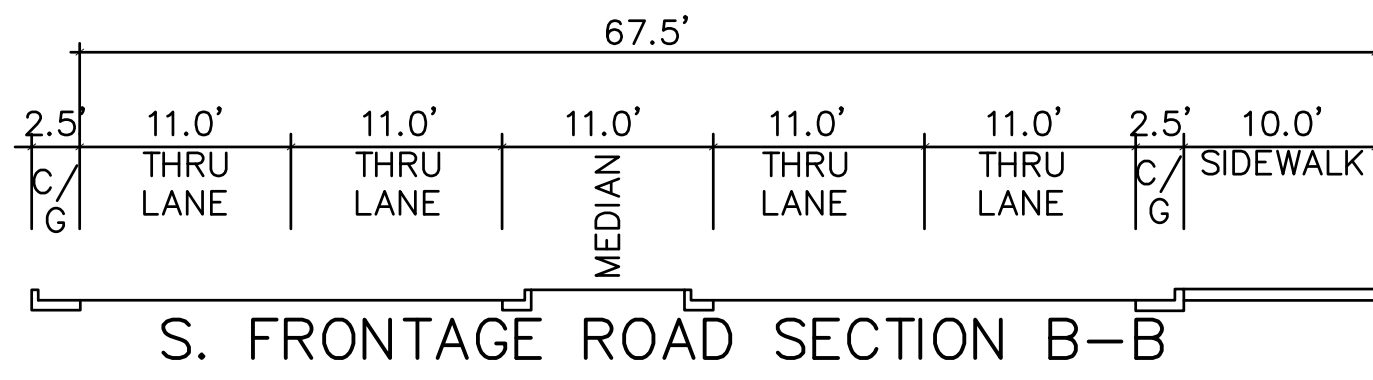
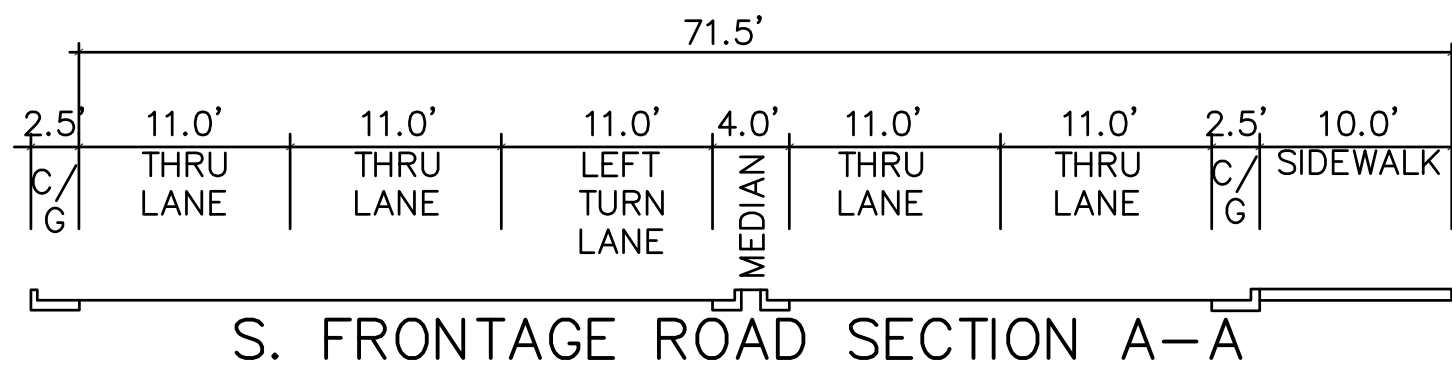
PROJECT NUMBER: PROJECT NUMBER  
ISSUE DATE: 2017-06-12

ISSUE:  
**PEC SUBMITTAL**

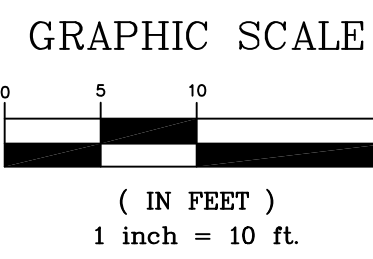
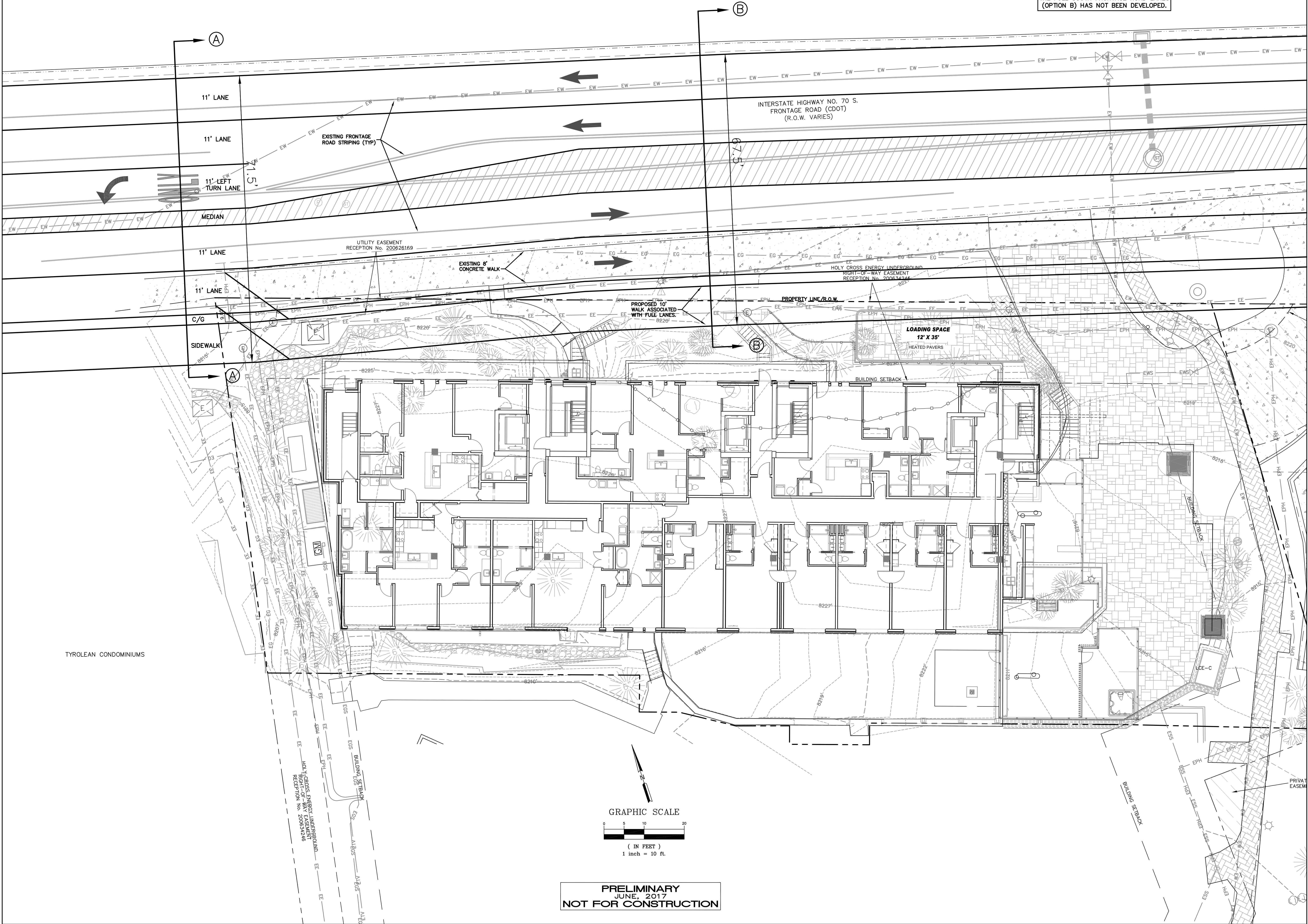
SHEET TITLE:  
**FIRE STAGING &  
LADDER TRUCK  
SIMULATION PLAN**  
SHEET NO.

**C1.04**





NOTE: SITE GRADING ASSOCIATED WITH THE FULL SOUTH FRONTAGE ROAD LANES (OPTION B) HAS NOT BEEN DEVELOPED.



PRELIMINARY  
JUNE, 2017  
NOT FOR CONSTRUCTION

359  
DESIGN

3630 OSAGE STREET  
DENVER, CO 80211  
720.512.3437

VAIL MOUNTAIN VIEW

PHASE II

434 SOUTH FRONTAGE ROAD EAST,  
VAIL, CO 81657

REVISION		
No.	Description	Date

PROJECT NUMBER PROJECT NUMBER  
ISSUE DATE 2017-06-12

ISSUE

PEC SUBMITTAL

SHEET TITLE

FULL S.F. RD LANES - B

SHEET NO.

C1.01B



**C1.03**









Wall Accent

3630 OSAGE STREET  
DENVER, CO 80211  
720.512.3437

DISCIPLINE STAMP

[illegible]

ISSUE

SDD

SHEET TITLE

## LIGHTING PLAN

SHEET NO.

## A9.11

