PLANNING AND ZONING COMMISSION AGENDA
Monday, July 25, 2016

1. 5:30 PM - CALL TO ORDER: City Hall, 480 East Avenue North, Ketchum, Idaho

2. PUBLIC COMMENT - Communications from the public for items not on the agenda.

3. COMMUNICATIONS FROM STAFF
    a. Adams Gulch Bridge Floodplain Development Permit/Waterways Design Review Extension: The applicant is requesting a fourteen-month extension on a proposed replacement of the existing Adams Gulch Road Bridge with a new bridge. The eastern side of the bridge is under the jurisdiction of the City of Ketchum, and the western side is under the jurisdiction of Blaine County. The project was originally approved on July 14, 2014.
    b. *Continued from Monday, June 13, 2016, June 27, 2016, and July 11, 2016* - Bracken Station Conditional Use Permit Public Hearing: 911 North Main Street, Ketchum, ID (Ketchum AM Lot 5A Block 30 18,590 SF) The applicant is proposing to construct a motor vehicle fueling station with accessory food service. The property is 0.435 acres in size and zoned Light Industrial-1 (LI-1).
    c. *Continued from Monday, July 11, 2016* - Zoning Ordinance Phase II Update: Public Hearing City Initiated text amendments to the City of Ketchum Municipal Code, Title 17, Zoning Ordinance, Chapter 17.12, Establishment of Districts and Zoning Matrices, and Chapter 17.127, Signage.

4. CONSENT CALENDAR

5. FUTURE PROJECTS AND NOTICING REQUIREMENTS

6. STAFF REPORTS & CITY COUNCIL MEETING UPDATE

7. COMMISSION REPORTS AND EX PARTE DISCUSSION DISCLOSURE

8. ADJOURNMENT

Any person needing special accommodations to participate in the meeting should contact the City Clerk's Office as soon as reasonably possible at 726-3841. All times indicated are estimated times, and items may be heard earlier or later than indicated on the agenda.

City of Ketchum
Planning & Building

7/25/16

Planning and Zoning Commission
City of Ketchum
Ketchum, Idaho

Commissioners:

STAFF REPORT
KETCHUM PLANNING AND ZONING COMMISSION
REGULAR MEETING OF July 25, 2016

PROJECT:	Adam's Gulch Bridge Floodplain Development Permit/ Waterways Design Review Application Extension
FILE NUMBER:	14-052
OWNER:	Blaine County and City of Ketchum Rights-of-Way
REQUEST:	The applicant is requesting a fourteen-month extension of a Floodplain Development Permit/ Waterways Design Review, originally approved on July 14, 2014, extended in July 2015, and set to expire on July 14, 2016.
LOCATION:	Adam's Gulch Road Bridge at the Bigwood River
ZONING:	Recreational Use (RU) from the center line of Adams Gulch Road north and Limited Residential – 2 Acre (LR-2) from the center line of Adams Gulch Road south
NOTICE:	Adjacent property owners, neighboring communities and the Idaho State Floodplain Coordinator were mailed notice on May 28, 2014.
OVERLAYS:	Floodplain (FP) and Waterways (WW)
REVIEWER:	Keshia Owens, Planning Technician
ATTACHMENTS:	1. Presentation 2. Photographs 3. Letter from the applicant dated: June 6, 2016

BACKGROUND

1. On Tuesday, July 14, 2014, the Planning and Zoning Commission approved the Floodplain Development/ Waterways Design Review Application for the Adam's Gulch Bridge Replacement.

    - On June 19, 2015, City staff approved an extension for the Adams Gulch Bridge Floodplain Development Permit/Waterways Design Review. Pursuant to Ketchum Municipal (KMC) Code Section 17.96.130 "Terms of Approval", a one-year administrative extension was granted provided the following conditions were met:
        - Whether there have been significant amendments to the city's comprehensive plan, downtown master plan or ordinances which will apply to the subject design review approval;
        - Whether significant land use changes have occurred in the project vicinity which would adversely impact the project or be adversely impacted by the project;
        - Whether hazardous situations have developed or have been discovered in the project area;
        - Whether community facilities and services required for the project are now inadequate.
        - Conditions were met and a twelve-month extension of the Adams Gulch Bridge Floodplain Development Permit/Waterways Design Review were approved. This extension expired on July 14, 2016.
    - If an additional extension was required, a written request for extension must be received by the City prior to expiration of the first extension.
    - On June 6 2016, Brandon Keller requested that the Commission grant a fourteen-month extension on the Adam's Gulch Bridge Floodplain Development Permit/Waterways Design Review Application due to unforeseen circumstances with Right-of-Way acquisition. This is the second and final extension request, which must be presented to the Planning and Zoning Commission.
    - On July 25, 2016, a current report was presented to the Planning and Zoning Commission to recommend an extension to the Adam's Gulch Bridge Floodplain Development Permit/ Waterways Design Review Application. This request would be the final allowed extension.

CURRENT REPORT

The following conditions were approved on Tuesday, July 14, 2014:

1. Floodplain Development/Waterways Design Review approval shall expire one (1) year from the date of signing of approved Findings of Fact;

2. This Floodplain Development/Waterways Design Review approval is based on the plans and information presented and approved at the meeting on the date noted herein. Any building or site discrepancies which do not conform to the approved plans will be subject to removal;

3. Pursuant to Chapter 17.88.050.C.3 & 4, no chemicals or soil sterilants are allowed within 100 feet of the mean high water mark. No pesticides, herbicides, or fertilizers are allowed within 25 feet of the mean high water mark unless approved by the City Arborist;

4. All excavated materials must be removed from the riparian setback zone and deposited in an appropriate upland portion of the site and/or exported off site;

5. All USACE, IDWR, IDEQ, ITD and FEMA regulations shall be followed and conditions of approval shall be met;

6. All disturbed areas in the City of Ketchum's riparian setback zone shall be revegetated to City staff's satisfaction prior to final inspection of the bridge construction. Small areas and rip rap may be reseeded with native grasses, but larger areas will require appropriate riparian shrubs at a separation of approximately six (6) to ten (10) feet, per the City Arborist's recommendation;

7. Any irrigation system installed in the riparian zone shall be a temporary installation and shall be removed within three years of completion of the landscaping installation;

8. Once the new bridge is in place, the applicant shall obtain a LOMR to account for any small localized change in the BFE. The City of Ketchum Department of Planning and Building shall receive a copy of the LOMR application and the final LOMR approval; and

9. The County shall contact all potentially affected property owners, both upstream and downstream of the bridge, and advised them of potential changes to the BFE before proceeding with construction, so there will be no opposition to the issuance of the LOMR. Documentation of said correspondence (a copy of the letter and a list of recipients) shall be provided to the City of Ketchum Department of Planning and Building, prior to issuance of a building permit.

STAFF RECOMMENDATION

Staff recommends approval of the proposed fourteen-month Adam's Gulch Bridge Floodplain Development Permit/Waterways Design Review Application Extension.

OPTIONAL MOTIONS

1. "I move to recommend approval of the proposed fourteen-month Adam's Gulch Bridge Floodplain Development Permit/Waterways Design Review Application Extension, finding the extension in compliance with the Comprehensive Plan, the Zoning Ordinance, and the Subdivision Ordinance."

2. "I move to recommend denial of the proposed fourteen-month Adam's Gulch Bridge Floodplain Development Permit/Waterways Design Review Application Extension, finding the extension _____."

Adam's Gulch Bridge Floodplain Development Permit/Waterways Design Review Application Extension

City of Ketchum

Planning and Zoning Commission

July 25, 2016

Background

- On Tuesday, July 14, 2014, the Planning and Zoning Commission approved the Floodplain Development/ Waterways Design Review Application for the Adam's Gulch Bridge Replacement.
- On June 19, 2015, City staff approved an extension for the Adams Gulch Bridge Floodplain Development Permit/Waterways Design Review.
  - The extension was approved administratively and granted for one year.
  - The extension expired on July 14, 2016.
- On June 6 2016, Brandon Keller requested that the Commission grant a fourteen-month extension due to unforeseen circumstances in the Right of Way.

Background Continued

- On July 25, 2016, a current report was presented to the Planning and Zoning Commission to recommend an extension
  - This is the second and final extension request

Staff Recommendation

- Staff recommends approval of the proposed fourteen -month Adam's Gulch Bridge Floodplain Development Permit/Waterways Design Review Application Extension.

KELLER associates

131 SW 5th Avenue, Suite A • Meridian, ID 83642
208.288.1992 phone • 208.288.1999 fax • www.kellerassociates.com

June 6, 2016

Mr. Micah Austin, AICP
Planning and Building Director
Ketchum Planning and Building
480 East Ave. N.
Ketchum, ID 83340

RE: **Adams Gulch Bridge Replacement Floodplain Development Permit**
File No. 14-052

Dear Mr. Austin:

Due to unforeseen circumstances with Right of Way Acquisition, the Adams Gulch Bridge Replacement project has been in a holding pattern for over two years, thus postponing the completion of design and start of construction. Recently, Blaine County acquired the necessary Right of Way for this project, which in turn has allowed Keller Associates to proceed with final design. It is expected that design will be completed in the near future, followed by bidding and selection of a contractor shortly thereafter. However, due to allowed in-water-work timeframes, we do not anticipate construction starting until later this year (or perhaps as late as beginning of summer 2017). In light of this, Blaine County requests an extension of the Floodplain Development Permit (File number 14-052) that was originally approved on July 14, 2014, then extended in July 2015, and is set to expire on July 14, 2016. As there is still some uncertainty of when the construction will begin, we respectfully request a 14-month extension, thus allowing time for the contractor to start construction prior to permit expiration.

If you have any questions or comments, please feel free to contact me.

Sincerely,

KELLER ASSOCIATES, INC.

Brandon Keller, PE, SE
Project Manager

City of Ketchum
Planning & Building

July 25, 2016

Planning and Zoning Commission
City of Ketchum
Ketchum, Idaho

Commissioners:

STAFF REPORT
KETCHUM PLANNING AND ZONING COMMISSION
REGULAR MEETING OF JULY 25, 2016

PROJECT: Bracken Station Conditional Use Permit (CUP)

FILE NUMBERS: #16-034

OWNER: North Town Partners LLP

REPRESENTATIVE: Steve Cook, AIA

REQUEST: Conditional Use Permit (CUP) for a motor vehicle fueling station and food service establishment

LOCATION: 911 N. Main Street (Ketchum, AM Lot 5A, Block 30)

ZONING: Light Industrial District Number 1 (LI-1)

NOTICE: Property owners within 300 foot radius of subject property were mailed notice on May, 16, 2016. A public hearing notice was published in the Legal Notices of the Idaho Mountain Express on May 25, 2016. Notice was posted on the subject property and in three public City locations on May, 17, 2016.

Continuation of the hearing to June 27, 2016 was announced during the June 13, 2016 hearing. Continuation of the hearing to July 11, 2016 was announced during the June 27, 2016 meeting. Continuation of the hearing to July 25, 2016 was announced at the July 11, 2016 meeting.

REVIEWER: Brittany Skelton, Senior Planner

Introduction

The applicant is requesting a Conditional Use Permit (CUP) to allow redevelopment of 911 N. Main for a motor vehicle fueling station and a food service establishment. Motor vehicle fueling stations and food service (subject to limitations on hours of operation and size) are only allowed in the LI-1 District if a Conditional Use Permit (CUP) is approved. The definition of motor vehicle fueling station permits retail sales of items of convenience to the motoring public. The Planning and Zoning Commission (Commission) has complete discretionary authority to approve, deny, or conditionally approve either use (fueling station or restaurant) or approve, deny, or conditionally approve both uses on the site, basing the decision upon findings of fact.

Prior to the hearing on July 11, 2016 staff prepared a staff report that contained analysis on both new information, plans, and studies submitted by the applicant and requested by staff and the Commission and the information, plans and studies submitted previously that had not changed. During the hearing on July 11, 2016 the Commission viewed presentations from staff, the applicant's team, and the Commission also accepted verbal and written comment from the public. The applicant's presentation included a revised On-Site Vehicle Turn Circulation exhibit which was received and reviewed by city staff after the July 11, 2016 staff report was completed and distributed. Staff's comments on the revised On-Site Vehicle Turn Circulation exhibit were communicated during the hearing.

The Commission closed the public hearing after receiving verbal public comment on July 11, 2016. As such no additional public comment or new information or studies has been included in the record or this report; however, the revised On-Site Vehicle Turn Circulation exhibit prepared and submitted for the July 11, 2016 hearing has been attached to this staff report and the Public Works Department's comments regarding this exhibit are addressed in Table 1, item number 8, Table 2, item number 7 and Table 4, section 17.116.030(C). Additionally, although no additional public comment or new information is being included in the record the applicant has the opportunity to rebut public comment at the July 25, 2016 meeting.

The report that follows contains the same information and analysis as the report prepared for July 11, 2016 with the addition only of the Public Works Director's comments regarding the revised On-Site Vehicle Turn Circulation exhibit. The following report addresses the implications of the proposed motor vehicle fueling station and food service on the proposed location and contains recommendations for how the Planning and Zoning Commission may mitigate impacts. Public comment received for the June 13, June 27, and July 11, 2016 public hearings are attached to the respective staff reports.

Current Report

The location proposed for a motor vehicle fueling station and food service establishment is located on Lot 5A, Block 30, Ketchum Townsite, otherwise known as 911 N. Main Street. Three buildings currently exist on the site that are proposed to be substantially altered or removed for the project. Building "A" is the northernmost building, "B" is located in the center, and "C" is the southernmost building. The applicant proposes to partially demolish building "B" and to remodel and add an addition and a trellis patio to the remaining portion of the building. The applicant is also proposing to construct a canopy structure associated with the motor vehicle fueling station. The applicant is proposing to entirely demolish buildings "A" and "C" along with installing sidewalks, crosswalks, landscaping, lighting, parking, and drainage improvements to accommodate the development. The site does not currently meet city standards for the existing or proposed development and the site will require significant upgrades for the proposed project if the Planning and Zoning Commission determines a conditional use permit can be approved. Recommended improvements to meet city standards are contained within this report.

All city departments completed their review of the applicant's request and the analysis below, based on the plans as submitted for the July 11, 2016 Planning and Zoning meeting, reflect their comments and concerns. No new analysis has been included in this staff report. Attachment A. summarizes comments from all

departments on the proposed development. Attachment B. summarizes and analysis the new information received. Attachment C. summarizes how the project complies with the Zoning Ordinance standards.

Currently there are three fueling stations in the LI District, two restaurants, and one food mart to service the area. In total there are five existing fueling stations within a 1.5 mile radius of the proposed site. The Commission must decide if the proposed uses are appropriate for the site and location and if the uses are necessary to serve the LI district.

Analysis

The Planning and Zoning Commission must determine if a Conditional Use Permit can be approved for the fueling station and restaurant proposed for the LI-1 district. According to the Zoning Ordinance, conditional uses by definition possess characteristics that require review and appraisal by the Commission to determine whether or not the use would cause any public health, safety or welfare concerns. Conditional uses may only be allowed if the Commission determines there would be no impact to the public health, safety and welfare of the community.

A conditional use permit may be granted by the commission only if the applicant demonstrates that:

- The characteristics of the conditional use will not be unreasonably incompatible with the types of uses permitted in the applicable zoning district;
- The conditional use will not materially endanger the health, safety and welfare of the community;
- The conditional use is such that pedestrian and vehicular traffic associated with the use will not be hazardous or conflict with existing and anticipated traffic in the neighborhood;
- The conditional use will be supported by adequate public facilities or services and will not adversely affect public services to the surrounding area, or conditions can be established to mitigate adverse impacts;
- The conditional use is not in conflict with the policies of the comprehensive plan or the basic purposes of the Zoning Ordinance.

Should the Commission agree a CUP can be approved, they may attach additional conditions to the application approval as it determines necessary in order to make the uses more compatible with the vicinity and adjoining uses, mitigate impacts, and allow for health, safety and welfare. Such conditions may include, but are not limited to:

A. Minimizing adverse impact on other development.
B. Controlling the sequence and timing of development.
C. Controlling the duration of development.
D. Assuring that development is maintained properly.
E. Designating the exact location and nature of development.
F. Requiring the provision for on site or off site public facilities or services.
G. Requiring more restrictive standards than those generally required in an ordinance.
H. Requiring mitigation of effects of the proposed development upon service delivery by any political subdivision, including school districts, providing services within the city. (Ord. 1135, 2015)

STAFF RECOMMENDATION

The Commission must consider the Bracken Station CUP application as it relates to the criteria used for evaluating conditional use permits and has the option of approval or denial. If the Planning and Zoning Commission chooses to approve the application, staff recommends requiring the conditions of approval as identified in this report as a minimum. The Commission may require additional conditions based on findings received through public comment, testimony, or other discovery.

COMMISSION OPTIONS

1. **Denial of the Application**: "Motion to deny the application from North Town Partners LLP for a Conditional Use Permit application for a motor vehicle fueling station and food service, finding the application **does not** meet the standards for approval under Chapter 17.116 of Ketchum Zoning Code Title 17, for the following reasons: [cite findings for denial]."
2. **Approval of the Application**: "Motion to approve the application from North Town Partners LLP for a Conditional Use Permit application for a motor vehicle fueling station and food service, finding the application meets the standards for approval under Chapter 17.116 of Ketchum Zoning Code Title 17 with the following conditions: [insert conditions of approval here]"
3. **Continuation of the Application**: "Motion to continue the application from North Town Partners LLP to a date certain of [insert date of meeting]."
4. **Re-open the Public Hearing to Accept New Information and New Public Comment and Continuation of the Application:** "Motion to reopen the public hearing and continue the application from North Town Partners LLP to a date certain [insert date of meeting]."

RECOMMENDED CONDITIONS

Ketchum City Engineer, Streets, Utilities, Fire and Building Department requirements shall be met, including:

1. All departmental conditions as described in Table 1.
2. All building and fire code requirements as dictated by 2012 family of international building codes shall apply to all construction onsite.
3. Snow removal outside the travel lanes of Highway 75 shall be the responsibility of the property owner.
4. All light fixtures mounted on or recessed into the lower surface of the service station canopy shall be fully shielded and utilize flat lenses. Such shielding must be provided by the fixture itself; shielding by surrounding structures such as canopy edges is not permitted.
5. The applicant shall construct the public improvements recommended by staff described in Table 2.
6. The applicant shall construct the public improvements recommended by staff as described in Table 5.
7. The applicant shall construct the public improvement recommended by staff described in Table 6.
8. All storm water retention improvements shall meet the latest standards for motor vehicle fueling stations and shall be approved by the Public Works Director.
9. Per Title 17, Section 17.116.080: TERM OF PERMITS: Conditional Use Permit approval shall expire one (1) year from the date of approval if not acted upon within that time frame; and
10. This Conditional Use Permit approval is based on representations made and other components of the application presented and approved at the meeting on July 11th, 2016.

ATTACHMENTS:

A. Table 1: Requirements for All Applications
B. Table 2: Summary and Analysis of New Plans, Studies and Information Received
C. Table 3: Zoning Standards Analysis
D. Table 4: Conditional Use Permit Requirements
E. Table 5: Required Public Improvements
F. Table 6: Recommended Additional Public Improvements
G. Aerial Site Plan
H. Table 7: Uses in the LI-1 Zone
I. Table 8: Dimensional Standards in the LI-1 Zone
J. Table 9: Potential Build Out for 911 N. Main Street
K. Application
L. Revised On-Site Vehicle Turn Exhibit, dated July 11, 2016, received July 8, 2016
M. Plans as submitted for the July 11, 2016 meeting

a. A.0 – Coversheet, dated May 23, 2016
b. Existing Site Plan
c. A-2 – Conditional Use / Preapplication Site Plan, dated June 30, 2016
d. A-2.1 – Overall Conditional Use / Preapplicaiton Site plan, dated June 30, 2016
e. A.3 – North Elevation, dated May 23, 2016
f. A.5 – Proposed Flood Plan and Proposed East Elevation, dated May 23, 2016
g. A.6 – Proposed Retaining Walls at Alley, dated May 23, 2016
h. EX – Preliminary Improvements Plan, dated June 3, 2016
i. EX – Preliminary Grading & Drainage Plan, dated June 3, 2016
j. On-Site Vehicle Turn Exhibit, dated July 11, 2016
k. 10th Street Vehicle Turn Exhibit, dated July 11, 2016
l. Highway 75 Frenchman Sidewalk Connection, dated July 11, 2016
m. Profile From North of 10th Street to South of 10th Street, dated July 11, 2016
n. L1.0 – Landscape Plan, dated July 1, 2016
o. Proposed North Elevation – 10th Street View
p. L.1 – Lighting Plan, dated June 30, 2016
q. Site lighting fixtures, types A-F
r. Photometric Plan, black and white, dated June 20, 2016
s. Photometric Plan, color, no date
t. Radiosity Plan, dated June 20, 2016

N. Motor Fueling Station Pedestrian Analysis, dated June 29, 2016
O. Connector Sidewalk from Bracken Station to Frenchman's e-mail, dated June 27, 2016
P. Retail S Analysis, dated January 2016
Q. Existing conditions and proposed development renderings, north and south views
R. Chevron monument sign example
S. Idaho Department of Environmental Quality's Rules Regulating Underground Storage Tank Systems
T. Seismic Behavior of Xerxes Underground Tanks memorandum
U. Xerxes Fiberglass Underground Storage Tanks brochure
V. Ketchum – Bracken Station TIS, Additional Information memorandum, dated July 6, 2016
W. Traffic Impact Study, complete (64 p.), dated May 2016

Attachment A

Table 1: Requirements for All Applications

General Requirements for All Applications				
Compliant			**Standards and Staff Comments**	
Yes	**No**	**N/A**	**City Code**	**City Standards and *Staff Comments***
☒	☐	☐	**17.116.040(A)**	**Complete Application**
☐	☒	☐	**Department and Boards/ Commissions Comments**	**Public Works Department:** 1. The configuration of the sidewalk design creates a challenge for the City's snow removal operations. If the project is approved, a condition of approval will require the owner to remove the snow to the west of the valley gutter and the snow may not be placed back out in the roadway. 2. The additional crosswalk crossing Main Street at the northern end of the site, as proposed in the Motor Fueling Station Pedestrian Analysis and with ADA compliant ramps, is recommended. 3. Colored pedestrian areas, as proposed #4 in Figure 2 in the Pedestrian Analysis, is recommended; a Maintenance Agreement stating that owner shall maintain the pedestrian areas will be required if the conditional use permit is approved. 4. To address pedestrian traffic from the southwestern pedestrian catchment area referenced in the Pedestrian Analysis, further analysis of the need for the Rectangular Rapid Flashing Beacon at the intersection of Warm Springs Road and 10th is needed. 5. As proposed in the Pedestrian Analysis, further study of the feasibility of defining the gap in the sidewalk on the north side of 10th Street between Warm Springs Road and Main Street is needed. 6. The property owner will need to maintain the landscaping in the right-of-way, according to ITD standards. 7. The initial On Site Vehicle Turn Exhibit only illustrates turn movements in an empty parking lot, which does not adequately prove turn movements can be made in real world conditions. In order to recommend approval of the conditional use permit the On-Site Vehicle Turn Exhibit needs to be revised to include turn movements, vehicles in the parking lot, and the location(s) where vehicles can stack on site. 8. The revised On Site Vehicle Turn Exhibit-Circulation does not adequately indicate that the fueling station will not cause congestion on Main Street/HWY 75. It appears that north-bound trucks with trailers or box trucks would not be able to maneuver the site when other vehicles are positioned at the fueling islands. Submission of additional figures or modeling to show that cars and trucks will not end up queuing or backing up on Main Street/HWY 75 during peak times would be necessary to adequately address concerns regarding queuing. 9. The Preliminary Grading and Drainage Plan has been reviewed and is acceptable. Prior to issuance of a building permit a seepage test will need to be conducted and clarification regarding the infiltration rate

				and storm intensity and number of dry wells will be required. 10. The 5' sidewalk connecting to Frenchman's Place is acceptable. The existing drywell indicated on the plan is a catch basin and it shall be abandoned after installation of the new drywells.
				Fire Department: 1. The project shall meet all 2012 International Fire Code requirements in addition to specific City Building and Fire Ordinances. 2. An approved fire detection system shall be installed per City of Ketchum Ordinance #1125 ***(www.ketchumfire.org)*** and the requirements of NFPA 72. Two (2) sets of alarm system plans shall be submitted to the Ketchum Fire Department for approval and a permit is required prior to installation of alarm systems. Inspections of fire detection systems by the Fire Chief or an appointee are required and shall be scheduled at least 48 hours in advance. 3. An approved access roadway per 2012 International Fire Code Appendix D ***(www.ketchumfire.org)*** shall be installed prior to any combustible construction on the site. The road shall be a minimum of twenty (20) feet in width and capable of supporting an imposed load of at least 75,000 pounds. The road must be an all weather driving surface maintained free, clear, and unobstructed at all times. 4. Fire extinguishers shall be installed and maintained per 2012 IFC Section 906 both during construction and upon occupancy of the building. 5. An approved key box shall be installed, with the appropriate keys, for emergency fire department access in a location approved by the fire department. The key box shall be a Knox box brand and sized to accommodate keys to every door of the project. 6. The underground fuel tanks will be installed and tested following the 2012 International Fire Code, Sections 5704.2.11 through Section 5704.2.12.2. 7. Motor fuel dispensing stations will be installed following the 2012 International Fire Code, Section 2306.7 through Section 2306.7.7.2. 8. The Liquefied Petroleum Gas fuel dispensing will be installed following the 2012 International Fire Code, Section 2307.1 through Section 2307.7
				Building: • Building plans must meet 2012 International Building Code.
				Police Department: • No comment.
				Utilities: • No comment.
				Parks/Arborist: 1. The owner shall maintain the landscaping in the right-of-way, which is managed by ITD. 2. The southeastern-most Abies lasiocarpa is in close proximity to the overhead transmission line, substitute a more hardy bristlecone pine. 3. The other species are good and the diversity and placement are

				appreciated. 4. Staff recommends retaining the tree that is adjacent to the existing power pole in the right-of-way on Main Street if ITD will allow it.

Attachment B

Table 2. Summary and Analysis of New Plans, Studies and Information Received

Information Requested by Commission	Submittal from applicant	Analysis
1. Produce a pedestrian study. a. Address the locations of all proposed crosswalks. b. Address the rapid flashing beacon. c. Address whether a different/additional location for a crosswalk may be better or feasible (across Main Street at Frenchman's, for example).	"Motor Vehicle Fueling Station Pedestrian Analysis", dated June 29, 2016, Alta Planning + Design	Three major pedestrian catchment areas were defined to be associated with the site: an eastern catchment area, a southwestern catchment area, and a northwestern catchment area. Major pedestrian routes were determined to be 10th Street and Main Street with the major crossings identified as Main Street at 10th Street and Main Street at 9th Street. Recommendations to accommodate pedestrian traffic were given for specific locations; some recommendations aligned with public improvements already proposed by the City and other recommendations were new or were alternatives to recommendations proposed by the City. **Eastern Catchment Area** In the eastern catchment area the study recommends a 5' wide sidewalk connection from the site to Frenchman's Place and the rapid flashing beacon, ramps, and crosswalk across Main Street near 9th Street. These improvements align with recommendations previously made by the City that the applicant has agreed to and are indicated in the site and civil plans that have been submitted. **Southwestern Catchment Area** The southwestern catchment area includes Hemingway Elementary School. A pedestrian route identified to the site is the northern side of 10th Street; the northern side is identified as being more desirable due to the existing sidewalk, which contains only a small gap between Warm Springs Road and Main Street. Among the study recommendations are defining a pedestrian zone through the gap in the sidewalk on the northern side of 10th Street. This will require further analysis to determine if this recommendation is feasible given the right of way and current conditions. Options to define the pedestrian zone may include changing the pavement material or color in order to increase visibility of the pedestrian zone. At this time, more analysis is necessary to determine feasibility. The study reaffirms the recommendation of a crosswalk at the intersection of Main Street and 10th Street that spans 10th Street, which the applicant has agreed to and indicates on the site and civil plans. The planning and public works departments concur with the recommendation to install an additional crosswalk spanning Main Street at the Main

		Street and 10th Street intersection. The study recommends crosswalks at the Warm Springs Road and 10th Street intersection as well as consideration of a rectangular rapid flashing beacon at the intersection; crosswalks at this location already exist. The feasibility and installation of a flashing beacon requires further study and pedestrian counts to determine if pedestrian use warrants this type of device. At this time, staff cannot recommend installation of the beacon without future study. **Northwest Catchment Area** The recommendations in the Pedestrian Analysis for the southwest catchment area cover the northwest catchment area as well. Recommendations for the northwestern catchment are the same as the recommendations for the southwestern catchment area. **Motor Fueling Station** Of the recommendations for the Motor Fueling Station, the Public Works Department agrees with the recommendation to install materials to differentiate the pedestrian zone and to install the crosswalk crossing Main Street at the intersection of Main Street and 10th Street already described in the southeastern catchment area improvements section. Due to the boulevard approach being ITD's standard, the rolled curbs described in the study are not recommended, and due to the proposed sidewalk and parking improvements on 10th Street being the city's standards, the landscaped area and reduced travel lane on 10th Street are not recommended. Finally, the applicant has proposed a slight realignment of the crosswalk crossing Main Street at the southern end of the site rather than moving the crosswalk further south; the Public Works Department recommends the realignment of the crosswalk as indicated on A.2 – Site Plan.
2. Obtain traffic counts at 10th Street/Main Street intersection in order to corroborate the 2008 data in the traffic study already conducted. If the traffic engineer wants to make the case that the need for new data is superfluous, and submits a narrative explaining why, that would be acceptable. However, the request for current data at the 10th Street/Main Street intersection is driven by	"Ketchum – Bracken Station TIS, Additional Information" memorandum, dated July 6, 2016	Peak hour turning movement counts were collected on June 29, 2016; when compared to the data from February 2008, which was adjusted 30% to reflect peak seasonal conditions and was adjusted at a 1.1% growth rate per year, the estimated counts were 5% higher than the volumes collected on June 29, 2016.

public comment and providing this data also serves the purpose of addressing public concern, so obtaining the new counts is recommended.		
3. Address the projected makeup of vehicles that will be using the gas station. **a.** What percentage will be oversized vehicles (RVs, construction trailers, et cetera)? **i)** Address how the proportion of oversized vehicles impacts the amount of vehicles that can queue in the turn lane. **b.** Address potential back-up of northbound traffic lining up to make a left turn into the gas station and the implications of exceeding the length of the turn lane (e.g. traffic backed up further south than the turn lane extends).	"Ketchum – Bracken Station TIS, Additional Information" memorandum, dated July 6, 2016	On Saturday, July 2nd, 2016 between 10 a.m. and 5 p.m. and on Sunday, July 3rd between 12 p.m. and 5 p.m. Roy Bracken analyzed vehicle types patronizing the Shell gas station located at 211 Lewis Street in the LI-1 zone and reported the findings to Hales Engineering. The memo from Hales Engineering reports that during those time periods 7% of vehicles observed were large vehicles (i.e. trucks pulling trailers or recreational vehicles) and 93% were passenger cars and pickup trucks. As such, Hales Engineering determined it was not necessary to modify their assumptions of 20' of length per vehicle queuing in the proposed turn lane. The memo reiterates that the traffic study found that with future (2020) conditions plus traffic conditions generated by the project the 95th percentile queue at the intersection would extend approximately 105' and that the proposed turn lane is more than adequate to accommodate queues of such length. The memo states that it is unlikely that the left-turn queue would overflow into the thru-traffic lane but in such cases, events would likely have minimal short-term impacts on thru traffic. Further, delays for northbound left-turning vehicles at the gas station access and for vehicles at 10th Street are anticipated to be short and that when delays are short queues dissipate quickly.
4. Obtain the Idaho Transportation Department (ITD)'s approval for the Frenchman's Place connector sidewalk.	Letter from Dave Jensen, ITD District 4 Permit Coordinator, dated June 27,	The letter from Dave Jenson of ITD confirms that the ITD permit committee has approved the design of the sidewalk proposed to connect Bracken Station to the Frenchmen's Place development.

	2016	
5. Address the potential for northbound (left) and southbound (right) turn lanes on 10th Street to facilitate left and right turns onto Main Street.	"Ketchum – Bracken Station TIS, Additional Information" memorandum, dated July 6, 2016	The memorandum states, "A separate right-turn lane is not recommended at this location. Turning movement wheel path analyses show that with the current approach geometry, larger vehicles are able to execute right-turn movements with minimal encroachments into opposing traffic lanes. It is likely that the addition of a separate right-turn lane would constrain the right-turn movement such as to require significant encroachment into opposing traffic lanes. The traffic impact study found that delays at this intersection are anticipated to be relatively low, and therefore a separate right turn lane would not provide significant benefit."
6. Provide information addressing fuel spillage onto snow and snow removal from the site; what are the implications and how will they be mitigated?	No exhibit submitted.	Applicant will address this issue during the hearing.
7. Provide site circulation/turning radii information for vehicles of various sizes within the site.	On-Site Vehicle Turn Exhibit, dated July 11, 2016 and On-Site Vehicle Turn Exhibit-Circulation, dated July 11, 2016	The exhibit depicts turning radii on the site for two vehicles: a 30' length single unit truck and a 48.7' camper trailer connected to a passenger car. The exhibit depicts the circulation of each vehicle entering the site, navigating around the fueling island canopy, and exiting the site. The first On-Site Vehicle Turn Exhibit illustrates unimpeded circulation of each of the two vehicle types when no other vehicles are present on the site and does not adequately prove turn movements can be made in real world conditions. The revised On-Site Vehicle Turn Exhibit-Circulation does not adequately indicate that the fueling station will not cause congestion on Main Street/HWY 75. It appears that north-bound trucks with trailers or box trucks would not be able to maneuver the site when other vehicles are positioned at the fueling islands. Submission of additional figures or modeling to show that cars and trucks will not end up queuing or backing up on Main Street/HWY 75 during peak times would be necessary to adequately address concerns regarding queuing.
8. Provide a section drawing showing Bracken Station site, canopy, and the Tenth Street Light Industrial development.	Site Profile, dated July 11, 2016	The site profile illustrates the grade change between the Tenth Street Light Industrial Development (491 E. 10th Street) and the proposed Bracken Station property (911 N. Main) at the 10th Street and Main Street intersection. The height of the proposed gas station canopy and the landscaping proposed to buffer the canopy are shown. This cross section was requested so that the height of the proposed canopy and the canopy lighting could be evaluated

		with respect to the lower grade of 491 E. 10th Street. The site profile, in conjunction with the new LS 1.1 plan illustrating additional landscaping and the revised L 1.0 plan, indicates that the majority of the 50' length of the canopy facing 10th Street will be screened and buffered by 9 Spartan Juniper trees that are 10' at the time of planting, 1 Lodge Pole Pine that is 14' at time of planting and 1 Lodge Pole Pine that is 16' at time of planting.
Information Requested by Staff	**Submittal from applicant**	**Analysis**
1. Provide a conceptual drainage plan that indicates the site has the capacity to retain all storm water.	C.2.1 Preliminary Drainage Exhibit, dated June 3, 2016	The Public Works Department has reviewed this plan and finds it acceptable. The drainage plans include a proposed oil/water separator at the southernmost corner of the site that the on-site drywell and catch basins drain to. However, prior to issuance of a building permit a seepage test will need to be conducted and clarification regarding the infiltration rate and storm intensity and number of dry wells will be required.
2. Indicate Frenchman's connector sidewalk on site plan and landscape and civil plans to the same level of detail as the already proposed sidewalks have been shown on those plans.	A.2.1 Overall Site Plan, dated June 30, 2016 and C.2.4 Preliminary Frenchman's Sidewalk Exhibit, dated July 11, 2016	Both plans indicate a new sidewalk connecting the proposed Bracken Station property to the Frenchmen's Place development to the south. The sidewalk is indicated on C.2.4 to be 5' in width. The Public Works Department finds the 5' width to be acceptable.
3. Provide photometric data for proposed site lighting, including canopy.	Photometric Lighting Proposal (black and white), Photometric Lighting Proposal (color), dated June 30, 2016, Radiosity exhibit dated June 30, 2016	The applicant submitted a Radiosity exhibit that illustrates illuminance from canopy lighting at night. The Photometric plans indicate foot-candles calculated at a grid of points overlaid on the site plan. The Photometric plans indicate a range of 0.0 to 0.9 foot-candles measured on the northern and western property lines and a range of 0.0 to 4.9 foot-candles along the eastern property line, nearest the canopy. The average foot-candles under the canopy are calculated to be 28.51, with the minimum measurement calculated at 11.3 and the maximum at 41.3. Ketchum code 17.132.020 J. states that the average foot-candle lighting level for new and existing service stations shall be no greater than 30 foot-candles, as set by the IESNA standards for urban service stations.
4. Provide a copy of Idaho Department of Environmental Quality (DEQ) /and Environmental Protection Agency (EPA) regulations for gas stations.	Idaho Department of Environmental Quality's "Rules Regulating Underground Storage Tank	The applicant submitted IDAPA 58.01.07, "Rules Regulating Underground Storage Tank Systems". The rules establish standards and procedures necessary for the regulation of underground storage tank systems and the rules state compliance with IDAPA 58.01.07 shall not relieve persons from the obligation to comply with other applicable state or federal laws.

	Systems", IDAPA 58.01.07, submitted June 20, 2016, Seismic Behavior of Xerxes Underground Tanks memorandum, Xerxes Fiberglass Underground Storage Tanks brochure	IDAPA 58.01.07 contains rules for protecting ground water from contamination, rules for reporting when an underground storage tank releases (spills) petroleum, requirements for training of primary and daily on-site operators, and information on inspections and penalties for violations. The memorandum addresses seismic activity occurring at a distance away from the tank, which the tanks can withstand, and seismic activity occurring at or very near the location of the tank, which would cause the tank to rupture just as the ground ruptures at and near the location of seismic activity. The brochure addresses construction and safety features of Xerxes double-wall underground storage tanks.

Attachment C

Table 3. Zoning Standards Analysis

Compliance with Zoning Standards				
Compliant			**Standards and Staff Comments**	
Yes	**No**	**N/A**	**Guideline**	**City Standards and *Staff Comments***
☒	☐	☐	**17.12.030.C**	**Lot Area**
			Staff Comments	*8,000 square feet minimum is required. The lot is 0.4267 acres or 18,590 square feet.*
☒	☐	☐	**17.12.030.C & 17.128.020.C**	**Setbacks and Supplementary Yard Requirements**
			Staff Comments	*Buildings "A" and "C" currently have non-conforming setbacks on the front (eastern) property line. Building "B" currently conforms to setbacks. The applicant is proposing to demolish buildings "A" and "C" and to build an addition to building "B" which will result in a site with structures that meet setback requirements.* *Proposed Front (north – 10th Street) –20'* *Proposed Side (east – Main Street) – 13–'4"* *Proposed Rear – (west 0 alley) – 0'* *The proposed setbacks meet setback requirements.*
☒	☐	☐	**17.12.030.C**	**Building Coverage**
			Staff Comments	*Permitted - 75% Proposed – 23% (including gas station canopy)*
☒	☐	☐	**17.12.030.C**	**Building Height**
			Staff Comments	*Maximum building height permitted is 35'; the existing buildings are 13'-8" above grade on Main Street and 24'-8" above grade on 10th Street; the proposed addition to building "B" is 13'-8" above grade on Main Street and 24-8" above grade on 10th Street. The proposed canopy is 18' above grade on Main Street and 20' above grade from 10th Street at the eastern edge of the structure and 24' above grade from 10th Street at the western edge of the structure.*
☒	☐	☐	**17.125.030.H**	**Curb Cut**

			Staff Comments	*A maximum of thirty five percent (35%) of the linear footage of any street frontage can be devoted to access off street parking.* *The curb cut design was recommended by ITD is 84' (40' entrance, 4' island, 4' exit) in width, which equates to 30.6% of the linear footage frontage of the lot. (The linear footage of lot frontage is 273.97'.)*
☒	☐	☐	**17.124.060.M**	**Parking Spaces**
			Staff Comments	*Required:* *The off street parking standards apply when an existing structure or use is expanded or enlarged. Additional off street parking spaces shall be required only to serve the enlarged or expanded area, not the entire building or use.* *2 spaces per fuel pump at fuel pump; 4 pumps require 8 spaces.* *1 space per 250 square feet retail;* *1 space per 250 square feet restaurant* *There is a 508 square foot addition to the existing 2,084 square foot building proposed; 3 spaces are required.* *Proposed:* • *8 for temporary holding at the fuel pumps* • *12 to serve retail/restaurant (4 spaces are lower level accessed from 10th Street)* • *2 at vehicle charging station* • *There are 4 additional lower level parking spaces accessed from 10th Street to serve the existing uses.*
☒	☐	☐	**17.125.050**	**Off Street Parking and Loading Areas**
				In the LI-1, LI-2 and LI-3 districts, off street loading areas (containing 180 square feet with no 1 dimension less than 10 feet) shall be required as an accessory use for new construction or major additions involving an increase in floor area, as follows: One off street loading space for floor area in excess of two thousand (2,000) square feet, provided no loading space occupies any part of a public street, alley, driveway or sidewalk; except, that where practicable to do so, an alley may be used in lieu of the requirement of this section if prior permission is granted by the commission. *The project consists of 2,592 square feet and 2 off-street loading spaces are required. The minimum size of an off-street loading space is 10' x 18'; the site plan indicates 1 off-street loading space 14' x 55' which exceeds the dimensions of 3 contiguous off-street loading spaces 10' x 18' in size.*
☒	☐	☐	***17.18.140, 17.12.020 and 17.08.020***	**Zoning Matrix & Definitions**
				17.18.140 - A. Purpose: The LI-1 light industrial district number 1 is established as a transition area providing limited commercial service industries, limited retail, small light manufacturing, research and development, and offices related to building, maintenance and construction and which generate little traffic from tourists and the general public. (Ord. 1135, 2015) *Staff notes that uses in the LI-1 district are intended to generate little traffic*

				from tourists and the general public. *17.12.020 – Motor Vehicle Fueling Stations are allowed in the LI-1 zone with a Conditional Use Permit. The applicant is proposing a motor vehicle fueling station with 4 fuel pumps, two electric vehicle charging stations, and retail sales for the convenience of the motoring public. Food Service is allowed in the LI-1 zone with a Conditional Use Permit when the conditions described in footnote #15 are adhered to.* *The applicant is proposing to remodel the existing building, consisting of 2,084 square feet, and to add an addition of 508 square feet and an attached outdoor patio area with seating. The applicant is proposing to utilize the remodeled and expanded building for a retail store associated with the motor vehicle fueling station and for a deli service restaurant. The site plan indicates a food service area of 280 square feet.* *Footnote #15 limits the hours of operation of restaurants that require a conditional use permit to no later than 9:00 p.m. but gives the Commission the authority to expressly permit operation of the restaurant past 9:00 p.m. as part of the conditional use permit approval.* *The zoning code does not specify hours of operation for fuel pumps or retail sales for the convenience of the motoring public that are associated with motor vehicle fueling stations. However, the Commission may condition hours of operation in order to minimize adverse impact on other development.* *17.08.020 – Definitions: Motor Vehicle Fueling Station - A facility providing the retail sale and direct delivery to motor vehicles of fuel, including electric charging stations, lubricants and minor accessories, and retail sales for the convenience of the motoring public.* *Food Service - An establishment where food and drink are prepared, served and consumed on site with associated outdoor dining, or distributed to customers through take out, delivery or catering. Typical uses include, but are not limited to restaurants, cafes, delis, catering services and brewpubs that do not distribute beer produced for off-site consumption.* *Footnote #15. Catering and food preparation is permitted. Restaurants require a conditional use permit and shall not exceed 1,000 square feet and serve no later than 9:00 P.M. unless expressly permitted through approval of the conditional use permit.*
☒	☐	☐	***17.132.020J & 17.132.020K***	***Dark Skies***
				J. The average foot-candle lighting for service stations is required to be no greater than 30 foot-candles, as set by the IESNA for urban service stations. *K. [Canopy lights] shall be recessed sufficiently as to ensure that no light source is visible from or causes glare on public rights of way or adjoining property.*

				As indicated in the Photometric Plan, the average foot-candle lighting for the canopy is 28.51 foot-candle. *As indicated by the Lighting Fixtures exhibit, all canopy lights are CRUS-SC-LED and CRUS-AC-LED fixtures. The light source Is recessed within the fixture and the fixtures themselves will be flush mounted to the underside of the canopy.*

Attachment D

Table 4: Conditional Use Permit Requirements

Conditional Use Requirements

1. EVALUATION STANDARDS: 17.116.030 and § 67-6512 of Idaho Code

A conditional use permit shall be granted by the commission only if the applicant demonstrates that:

Compliance and Analysis				
Yes	**No**	**N/A**	**Code**	**City Standards and *Staff Comments***
☐	☒	☐	**17.116.030(A) CONDITIONAL USE**	**The characteristics of the conditional use will not be unreasonably incompatible with the types of uses permitted in the applicable zoning district.**
			Staff Comments	*The LI-1 district allows for one of the widest varieties of uses in the zoning code use matrix; uses ranging from manufacturing to personal service to warehousing and wholesaling to automotive uses are permitted.* *The LI-1 and LI-2 districts are the only districts that permit motor vehicle fueling stations within the City of Ketchum and in both the LI-1 and LI-2 districts motor vehicle fueling stations are permitted only with a conditional use permit. The city has ten districts classified as commercial or light industrial; food service is permitted in six districts of those districts and is permitted conditionally in two districts (LI-1 and LI-2).* *The proposed uses of a motor vehicle fueling station with associated food service are generally compatible with the types of uses permitted in the LI-1 district. However, Ketchum zoning code section 17.18.140 defines the purpose of the Light Industrial District Number 1 as: "A. Purpose: The LI-1 light industrial district number 1 is established as a transition area providing limited commercial service industries, limited retail, small light manufacturing, research and development, and offices related to building, maintenance and construction and which generate little traffic from tourists and the general public. (Ord. 1135, 2015)"* *The Retail S Analysis, dated January 2016 and conducted by Gmap USA and provided by the applicant states, "The population is around 3,200 people within 2.0 miles and the median age is about 47 years old. The population is somewhat lighter than ideal for this type of site location and the median age is a little high for ideal C-store customer base population. However the focus for this site is the winter and especially the summer tourists that pass through the town."* *With respect to business projections, the Retail S Analysis states, "One of the keys for this site is to provide a good operation with a good offering that will bring in the commuter that passes by the intersection on a consistent basis…The focus on the merchandising should be having a quality offering that entices the commuter/tourist traffic that passes by the site on a regular basis. The site should have a large fountain and coffee offering to entice the commuters to use the site as their refreshment spot….Overall the site is on a good corner is[sic] the area and has good potential. The traffic passing by the*

				site is strong and along with the residential backup the location should do well." *As such, while the proposed uses are generally compatible with the types of uses permitted in the LI-1 zone, the proposed uses on this specific site are dependent on traffic from tourists and the general public, which is in conflict with the purpose of the LI-1 zone.*
☐	☒	☐	**17.116.030(B)**	**The conditional use will not materially endanger the health, safety and welfare of the community.**
			Staff Comments	*As analyzed in the Proposed Public and Private Improvements table, the majority of pedestrian and vehicular safety and welfare concerns could be addressed by the sidewalks, crosswalks, rapid flashing beacon, turning lane, and reduced curb cut width proposed by the applicant.* *However, concerns still exist regarding on-site circulation and potential negative externalities, as discussed in detail in the next section. The Public Works Department has requested additional information from the applicant to prove that on-site circulation of vehicles of various sizes can occur in real world conditions.* *In regards to health, safety and welfare concerns of the motor vehicle fueling station use, as noted by the Fire Department, the underground fueling tanks and fueling stations must be constructed to meet applicable Fire Code. Additionally, state and federal environmental standards for the construction of fuel storage tanks and operation of fuel pumps will have to be met. The applicant has provided a copy of the Idaho Department of Environmental Quality's "Rules Regulating Underground Storage Tank Systems", IDAPA 58.01.07.* *The applicant has also submitted an exhibit from J.M. Plenik, P.E., regarding the Xerxes Corporation underground fuel storage tanks proposed for the site. The exhibit states that seismic activity occurring at a distance away from the tanks could be withstood but that seismic activity occurring at or very near the tanks would rupture the tanks. The applicant has also submitted a brochure for the proposed Xerxes underground tanks, which notes safety features.* *However, concerns still exist regarding gas spillage from fuel pumps onto snow or ice, because the applicant proposes to remove snow from the site rather than permanently store all snow on site. While a drainage facility that separates oil and water has been proposed by the applicant as part of the drainage plan for the site, the impact of gasoline contaminating soil and/or groundwater due to off-site snow removal has not been addressed by an exhibit submitted by the applicant; the applicant states this concern will be addressed by an expert during the hearing.* *As such, at this time the applicant has not proved that the conditional use will not materially endanger the health, safety, and welfare of the community.*
☐	☒	☐	**17.116.030(C)**	**The conditional use is such that pedestrian and vehicular traffic associated with the use will not be hazardous or conflict with existing and anticipated traffic in the neighborhood.**
			Staff Comments	*The applicant has submitted a Traffic Study prepared by Hales Engineering which analyzes existing traffic levels of service at the Main Street and 10th*

				Street intersection based on existing conditions, projected future conditions without the proposed use, and projected future conditions with the proposed use. The Traffic Study recommends improvements, namely the proposed turning lane, in order to maintain level of service. *The applicant has also submitted a Pedestrian Study prepared by Alta Planning + Design. The Pedestrian Study analyzes three pedestrian catchment areas where pedestrians traveling to the site are anticipated to be drawn from and recommends specific improvements to enhance pedestrian safety. Some recommendations reinforce recommendations previously made by staff, some recommendations are new, and some are slight variations to recommendations previously made by staff. These recommendations are discussed in depth in Table 2, Summary and Analysis of New Plans, Studies and Information Receive. Staff finds that some of the recommended improvements in Tables 2 and 3 could adequately mitigate the majority of potential hazards or conflict with existing and anticipated pedestrian and vehicular traffic associated with the use in the context of travel to the site, however, some of the recommendations will require further study and analysis before staff can make a recommendation.* *However, on-site circulation is of concern, and constraints to on-site circulation may have negative externalities impacting pedestrian, and namely, vehicular traffic associated with the use. The applicant has submitted On-Site Vehicle Turn and 10th Street Turn exhibits produced by Benchmark Associates. The On-Site Vehicle Turn exhibit indicates on-site vehicle maneuvers for 30' and 48.7' vehicles and the Turn exhibit indicates turn radii for vehicles19', 48.7' and 30' in length turning southbound from 10th Street to Main Street. As noted by the Public Works Department's comments in Table 1 and reiterated in Table 2, neither the initial On-Site Vehicle Turn Exhibit nor the revised On-Site Vehicle Turn Exhibit-Circulation adequately prove turn movements can be made in real world conditions in such a manner that does not cause traffic to back up on Main Street/Highway 75. In order to recommend approval of the conditional use permit the On-Site Vehicle Turn Exhibit needs to be revised to include turn movements, vehicles at the fueling pumps and in the parking lot parked in real world conditions, and the location(s) where vehicles can stack on site.*
☒	☐	☐	**17.116.030(D)**	**The conditional use will be supported by adequate public facilities or services and will not adversely affect public services to the surrounding area or conditions can be established to mitigate adverse impacts.**
			Staff Comments	*Due to the proposed pedestrian and vehicular public improvements, and review of the proposed use and the site, the conditional uses can be supported by adequate public facilities or services and will not adversely affect public services to the surrounding area.*
☐	☒	☐	**17.116.030(E)**	**The conditional use is not in conflict with the policies of the Comprehensive Plan or the basic purposes of this Section.**
			Staff Comments	*The Comprehensive Plan designates the property for mixed-industrial use. Primary uses specified include Light manufacturing, wholesale, services, automotive, workshops, studios, research, storage, construction supply, distribution and offices make up the bulk of development within this district. Secondary uses specified include A limited range of residential housing types, and supporting retail are provided for within this category. Uses should generate little traffic from tourists and the general public.*

				Similar to the compatibility of the proposed uses with the purpose of the LI-1 zone as stated in the zoning code, the proposed motor vehicle fueling station and food service as uses are generally consistent with the Comprehensive Plan. However, due to the location of the specific site, the use proposed will generate additional traffic from both the public and visiting tourists. This is a conflict between the Comprehensive Plan and the zoning code, which only conditionally allow for the motor vehicle fueling station and food service uses in the LI-1 and LI-2 zones. *Further, the introduction of a new fueling station and restaurant into the LI-1 District is a discretionary decision. There are currently three fueling stations in the LI District, two restaurants, and one food mart to service the area. The Commission must decide if the uses proposed are appropriate for the site and the location and are necessary to serve the LI district.*

Attachment E

All developments are required to install a minimum amount of public infrastructure, however conditional uses may be required to contribute more than the minimum due to the nature of the use and projected impacts. The following table represents the public improvements as proposed by the applicant.

Table 5: Required Public and Private Improvements

Analysis of Proposed Public and Private Improvements	
Improvement	**Description**
Main Street – Sidewalk and Landscaping	The existing buildings "A" and "C" currently have a 0' setback from Main Street/Hwy 75. There is no defined curb cut on Main Street and the entire frontage is utilized for vehicular egress to the site and parking. No sidewalk currently exists. The applicant is proposing to construct a new 8' sidewalk and landscaping in the right-of-way adjacent to Main Street spanning the entire property frontage. The applicant proposes to maintain the landscaping. The 8' sidewalk will have a 84' gap between the northern and southern segments of the sidewalk in order to accommodate the boulevard approach for vehicles. The applicant is proposing to install a surface material that is 8' in width, in alignment with the sidewalk, and visually distinguishable from the surface of the parking lot in order to provide a visual cue to pedestrian and motorists that pedestrians will be utilizing the area.
Main Street – Turn Lane	The applicant retained Hales Engineering to prepare a traffic study for the proposed use and redevelopment of the site. The traffic study recommended constructing a new turn lane on Main Street to facilitate vehicular access to the site. The applicant is proposing to construct the turn lane and staff has accepted the design. An existing valley gutter on the eastern side of Main Street/Hwy 75 across from the southern end of the site prevents the turn lane from extending further south. Circulation at the 10th Street intersection prevents the turn lane from extending further north.
Main Street and 10th Street, southwest corner curb radius	The applicant has proposed reconfiguring the curb radius at the southwest corner of the Main Street and 10th Street intersection in order to better accommodate vehicular southbound turns from 10th Street to Main Street. ITD has approved the curb radius.
10th Street - Sidewalk	There is not currently a sidewalk on the 10th Street frontage of the site. The applicant is proposing to construct a 5' paved sidewalk in the right-of-way adjacent to the property for the length of the property frontage on 10th Street.
10th Street - Staircase	The applicant is proposing to construct a new staircase at the western property corner that will provide access to the sidewalk that will be constructed on 10th Street.

	The staircase will be lit with six (6) wall mounted 4" diameter, cylinder shaped light fixtures that point downward and fully shield the LED bulbs in order to enhance pedestrian safety and draw pedestrians from 10th Street to the staircase in order to access the site.

In addition to the public improvement the applicant is proposing in the table above, staff and the Pedestrian Analysis have identified several other necessary public improvements that are required to mitigate negative impacts of the proposed development. Staff recommends the following improvements as a minimum and other improvements or conditions may be appropriate or discovery through the public process.

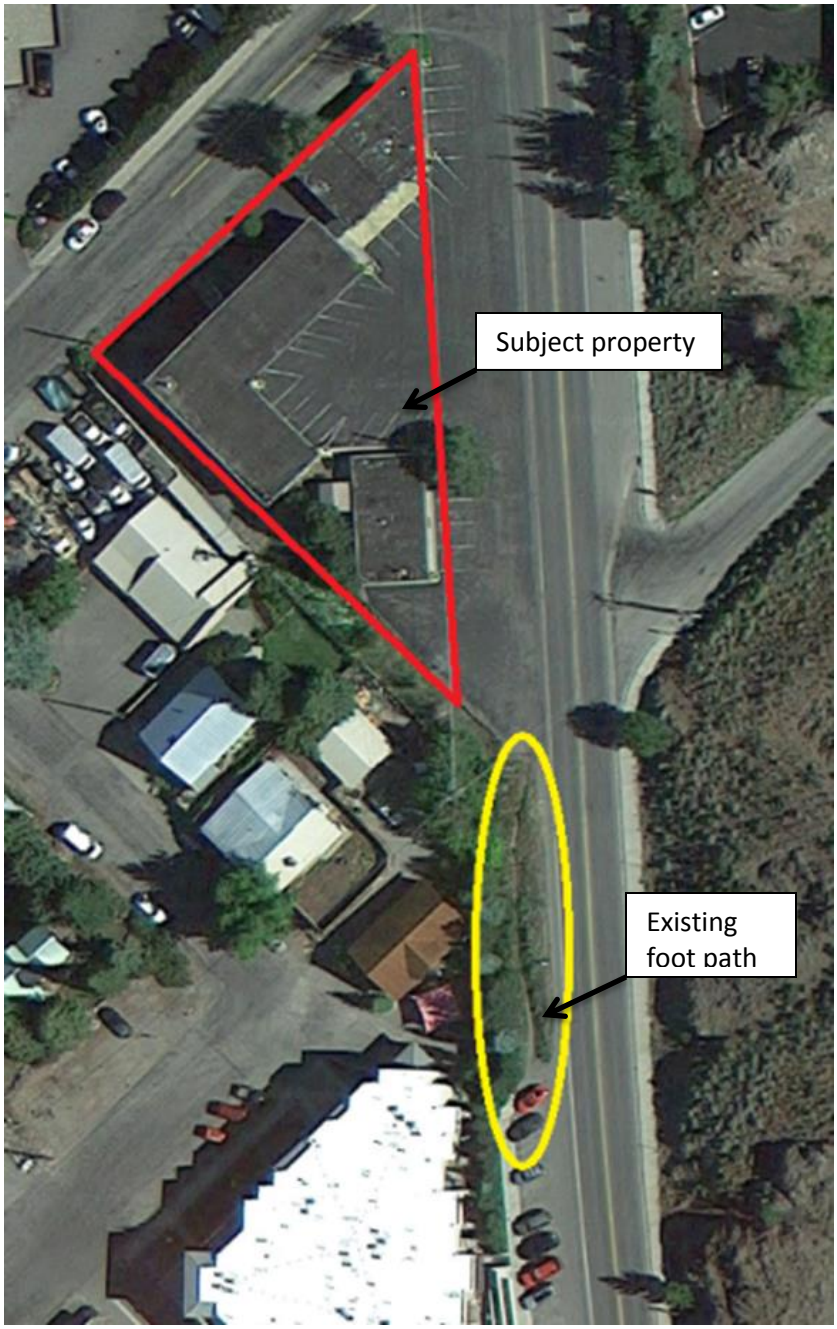
Attachment F

Table 6: Recommended Additional Public Improvements

Recommended Public Improvements to Mitigate Impacts of Development	
Public Improvement	**Description**
Boulevard Approach Pedestrian Definition	As proposed in the Pedestrian Analysis, staff recommends visually differentiating the pedestrian zone spanning across the boulevard approach with the use of color pavers or an alternative material. The owner shall enter into a Maintenance Agreement with the City to maintain the pedestrian zone. The applicant agrees to install this improvement as indicated on the Overall Site Plan (A-2.1).
Main Street – Pedestrian Crosswalk	Staff is recommending the applicant to construct a painted pedestrian crosswalk across Main Street/Hwy 75 at the southeast corner of the site. The crosswalk will include a new ADA compliant ramp to provide access to the sidewalk at the southeast corner of the site and will utilize an existing ramp on the opposite side of Main Street/Hwy 75. The applicant agrees to install this improvement as indicated on the Overall Site Plan (A-2.1).
Main Street & 9th Street – Rapid Flashing Beacon at Crosswalk	Staff is recommending the applicant to install a rapid flashing beacon at the Main Street/Hwy 75 crosswalk. The rapid flashing beacon will contain sensors that can be activated by pedestrians seeking to use cross. The applicant agrees to install this improvement as indicated on the Overall Site Plan (A-2.1).
Main Street & 10th Street Intersection – Pedestrian Crosswalk across 10th Street	Staff is recommending a painted pedestrian crosswalk across 10th Street at the intersection of 10th Street and Main Street/HWY 75. The applicant agrees to install this improvement as indicated on the Overall Site Plan (A-2.1).
10th Street & Main Street Intersection – Pedestrian Crosswalk	As proposed in the Pedestrian Analysis, staff is recommending a painted pedestrian crosswalk across Main Street at the intersection of 10th Street and Main Street/HWY 75.

across Main Street	
10th Street Pedestrian Zone definition	As proposed in the Pedestrian Analysis, this recommendation requires further review and analysis to determine feasibility in light of the existing right of way and current conditions.
10th Street and Warm Springs Road Rapid Flashing Beacon	As proposed in the Pedestrian Analysis, this recommendation requires further study and preparation of pedestrian warrants to assess if this is an appropriate device for this location.
Main Street Sidewalk Extension	Staff recommends extending the 5' sidewalk on Main Street an additional 175' in length (approximately) to connect to the existing public sidewalk located adjacent to the Frenchmen's Place condominium development. There is not currently a sidewalk connecting the two properties but there is an informally created and well-worn pedestrian foot path; the new uses proposed for the site will generate additional pedestrian trips and a 5', paved, and ADA compliant sidewalk is recommended for safety purposes. See Attachment F. The applicant agrees to install 5' sidewalk connecting to Frenchmen's Place, which has been approved by ITD, as indicated on the Overall Site Plan (A-2.1).

Attachment G.



Attachment H.

Table 7: Uses in the LI-1 Zone

Table 7: Uses in the LI-1 Zone

"P" = PERMITTED "C" CONDITIONAL "A" = ACCESSORY

	USES	LI-1
RES.	Dwelling, Multi-family	C[14]
	Dwelling, One-Family	
	Residential Care Facility	
COMMERCIAL	Agriculture, Commercial	
	Adult Only Business	
	Business Support Service	P
	Convenience Store	P[12]
	Daycare Center	C[17]
	Daycare Facility	C[17]
	Drive-Through Facility	
	Equestrian Facility	
	Food Service	PC[15]
	Golf Course	
	Grocery Store	
	Health and Fitness Facility	C
	Hotel	
	Hybrid Production Facility	P
	Instructional Service	P
	Kennel, Boarding	P
	Laundry, Industrial	P
	Lodging Establishment	
	Maintenance Service Facility	P
	Manufacturing	P
	Mortuary	
	Motor Vehicle Fueling Station	C
	Motor Vehicle Sales	C
	Motor Vehicle Service	P
	Office, Business	
	Outdoor Entertainment	
	Personal Service	P[13]
	Professional Service	P
	Recreation Facility, Commercial	
	Repair Shop	P
	Retail Trade	P[12]
	Self-Service Storage Facility	P
	Ski Facility	
	Storage Yard	P
	Studio, Commercial	P
	Tourist House	
	Tourist Housing Accommodation	
	Truck Terminal	P
	TV and Radio Broadcasting Station	P
	Veterinary Service Establishment	P
	Warehouse	P
	Wholesale	P
	Wireless Communication Facility	C[23]
PUBLIC & INSTITUTIONAL	Assembly, Place of	
	Cemetery	
	Cultural Facility	
	Geothermal Utility	
	Hospital	
	Medical Care Facility	
	Nature Preserve	P
	Parking Facility, Off-Site	
	Parking, Shared	
	Performing Arts Production	
	Public Use	C
	Public Utility	P
	Recreation Facility, Public	P
	Recycling Center	
	Semi-Public Use	
ACCESSORY	Agriculture, Urban	A[22]
	Daycare Home	C[4]
	Daycare, Onsite Employees	A
	Dwelling Unit, Accessory	
	Energy System, Solar	A
	Energy System, Wind	A
	Fallout Shelter	
	Guesthouse	
	Home Occupation	A
	Recreation Facility, Residential	A
	Equestrian Facility, Residential	
	Sawmill, Temporary	

1. A multi-family development containing up to two (2) dwelling units is permitted.

2. Two (2) one-family dwellings are permitted.

3. Religious institutions are allowed through the provision of a conditional use permit. No other assembly uses as defined in Chapter 17.08 are permitted.

4. Use is not permitted in the Avalanche Zone. Reference Zoning Map.

5. Retail trade is permitted but must not exceed 2,500 square feet.

6. Uses must be subordinate to and operated within tourist housing and not to exceed ten percent (10%) of the gross floor area of the tourist housing facility.

7. Utility for offsite use.

8. See section 17.125.070 for shared parking standards.

9. Drive-throughs are not allowed in association with food service establishments.

10. This is a permitted use, however offices and professional services on the ground floor with street frontage require a conditional use permit.

11. Tourist houses shall only be located in existing one-family dwellings. Additions to the home shall not exceed 20 percent (20%) of the existing square footage.

12. The following forms of retail trade are permitted: (a) Equipment rental, including sporting equipment and entertainment equipment, (b) Building, construction and landscaping materials; small engines with associated sales (c) Retail in conjunction with manufacturing, warehousing or wholesaling not to exceed 30% gross floor area or 800 square feet, whichever is less; no advertising is displayed from windows or building facades; and no access onto a major arterial is allowed if an alternative access is available.

13. Personal service is not allowed except for laundromats and dry cleaning establishments.

14. See section 17.124.090 of this title for industrial districts residential development standards.

15. Catering and food preparation is permitted. Restaurants require a conditional use permit and shall not exceed 1,000 square feet and serve no later than 9:00 P.M. unless expressly permitted through approval of the conditional use permit.

16. The following forms of retail trade are permitted: (a) Equipment rental, including sporting equipment and entertainment equipment (b) Building, construction and landscaping materials; small engines with associated sales (c) Furniture and appliances in conjunction with warehousing not to exceed 18% gross floor area or 900 square feet, whichever is less; (d) Other retail in conjunction with manufacturing, warehousing or wholesaling; it is limited to 10% gross floor area or 500 square feet, whichever is less. ---- Retail uses (c) & (d) shall have no advertising displayed from windows or building facades; and no access will be permitted onto a major arterial if an alternative access is available.

17. See section 17.124.120.C of this title for industrial districts daycare development standards.

18. See section 17.124.070 of this title for accessory dwelling unit development standards.

19. A maximum of five (5) dwelling units are allowed through a conditional use permit and shall be a minimum of 400 square feet and not exceed 1,200 square feet in size.

20. Indoor only.

21. Only allowed in conjunction with an equestrian facility.

22. See section 17.124.080 of this title for urban agriculture development standards.

23. See chapter 17.140 for wireless communications facility provisions.

24. Allowed on the ground floor only.

25. See section 17.124.050 of this title for hotel development standards.

26. Ground floor street frontage uses are limited to retail and/or office uses. In subdistrict A office uses require a conditional use permit.

27. Ground floor only.

28. Through the provision of a conditional use permit, the planning and zoning commission may approve a 20% increase to the total existing square footage of an existing nonconforming one-family dwelling.

29. Use is allowed as an accessory use through the provision of a conditional use permit.

Attachment I.

Table 8: Dimensional Standards for the LI-1 Zone

Table 8: Dimensional Standards for the LI-1 Zone

Dimensional Standards for LI-1

Minimum Lot Area	Minimum Lot Area w/ PUD. *See Title 16.*	Minimum Lot Area, Townhouse Sublot	Lot Width	Building Height	Maximum Building Coverage	Minimum Open Space	Front Setback	Side setback	Rear Setback	Lot Lines created by Townhouse Sublots	Setbacks from Hwy 75	Any setback along Warm Springs Road	Setbacks along 200' Former Railroad ROW
8,000 SF	N/A	N/A	80' Min.	35'	75%	N/A	20'	Zero (0')[1] for internal side yards and a min. of 10' for street side yards.	Zero (0')[1]	N/A	N/A	N/A	N/A

1. If the lot adjoins a more restrictive district on the side or rear, the more restrictive setbacks of that district shall apply.

Attachment J.

Table 9: Potential Build Out for 911 N. Main Street

Lot size	18,590 square feet
Maximum coverage in LI-1 zone	75%
Potential Lot Coverage	13, 942 square feet
Proposed Project, Lot Coverage	23%
Proposed Project, Lot Coverage Square Footage	2,592 square feet ground floor building; 1,720 square foot canopy. Total lot coverage 4,312 square feet.

Maximum building height in LI-1 zone	35'
Proposed building height, Main Street grade	13’-8”
Proposed building height, 10th Street grade	24’-8”
Proposed canopy height, Main Street grade	18'
Proposed canopy height, 10th Street grade	20' at eastern edge of canopy and 24' at western edge of canopy

RECEIVED
APR 29 2016
CITY OF KETCHUM

File No.: 16-034
Reference Design Review 16-035

CITY OF KETCHUM CONDITIONAL USE PERMIT APPLICATION

Name of Applicant: RRJ.LLC

Name of Owner of Record: NORTH TOWN PARTNERS LLC

Mailing Address: P.O. BOX 5277 KETCHUM, ID. 83340

Contact Phone Number: 208.721.0000

Street Address of Property Requiring a CUP: 911 N MAIN STREET

Legal Description of Property Requiring a CUP: KETCHUM AMENDED LOT 5A BLK 30 RPK0000030005A

Description of Proposed Conditional Use: MOTOR VEHICLE FUELING STATION AND RETAIL STORE

Description of Proposed and Existing Exterior Lighting: PROPOSED: RECESSED SOFFIT DN LIGHTS IN EXISTING ROOF OVERHANG/NEW LED, FLUSH MOUNT 16"x16" SQ FIXTURES IN CANOPY - 6 TO 8 IN NUMBER - SOFT WARM COLOR AS PER (KELVIN TEMP.)

Zoning District: LI.1

Overlay District: Flood_____ Avalanche_____ Pedestrian_____ Mountain_____

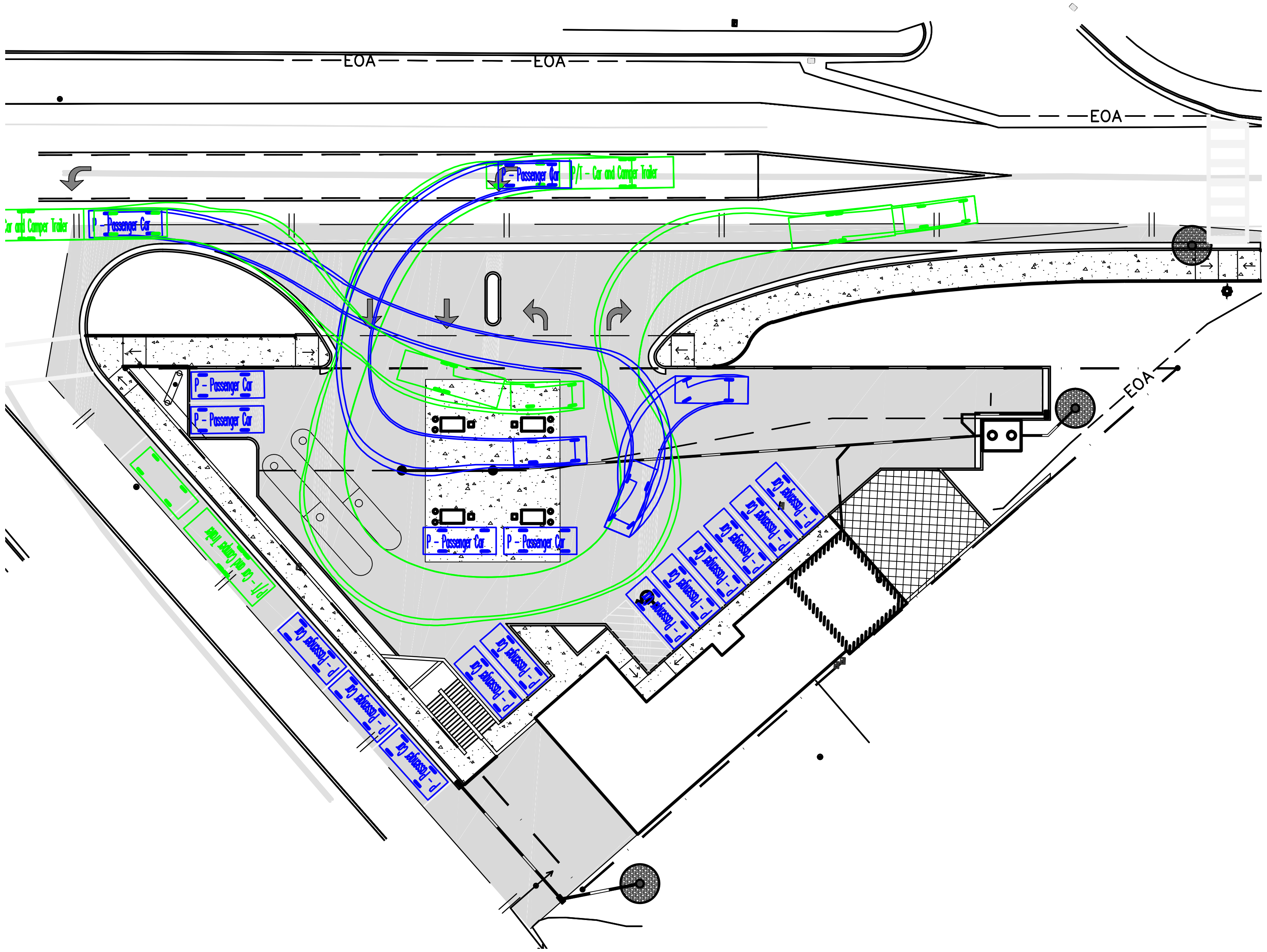
The Applicant agrees in the event of a dispute concerning the interpretation or enforcement of the Conditional Use Permit Application in which the City of Ketchum is the prevailing party to pay reasonable attorney fees, including attorney fees on appeal, and expenses of the City of Ketchum. **I hereby acknowledge** I have filled in this application accurately and provided the required information to the best of by knowledge.

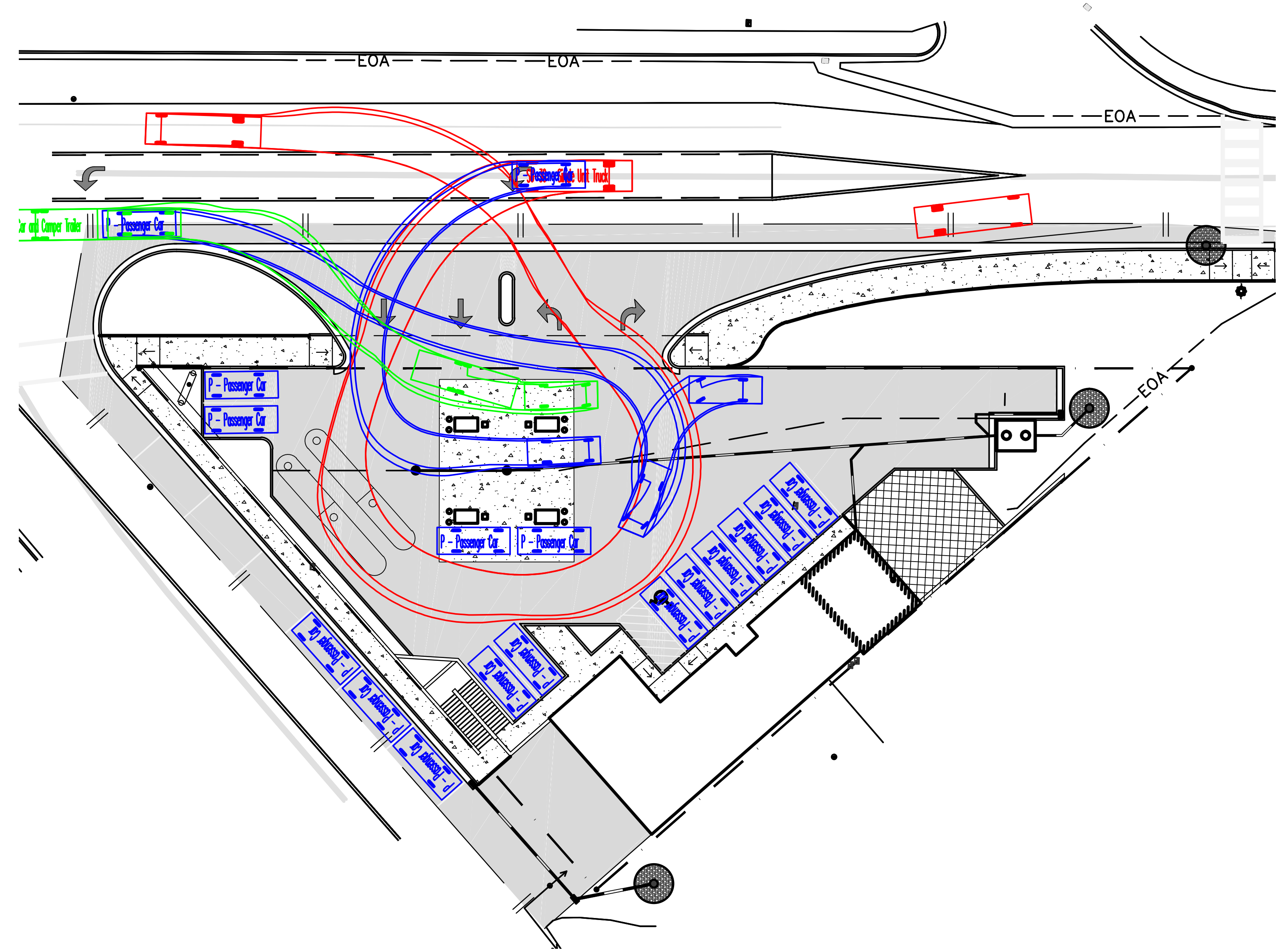
Applicant's Signature

Date 4-28-16

Pursuant to Resolution No. 08-123, any direct costs incurred by the City of Ketchum to review this application will be the responsibility of the applicant. Costs include but are not limited to: engineer review, attorney review, legal noticing, and copying costs associated with the application. The City will require a retainer to be paid by the applicant at the time of application submittal to cover said costs. Following a decision or other closure of an application, the applicant will either be reimbursed for unexpended funds or billed for additional costs incurred by the City.

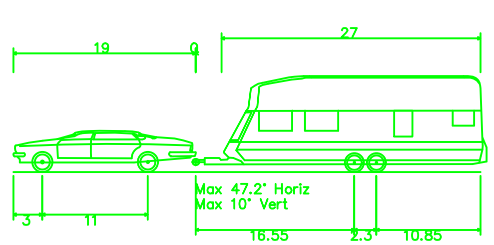
Attachment L. Revised On-Site Vehicle Turn Exhibit, dated July 11, 2016, received July 8, 2016



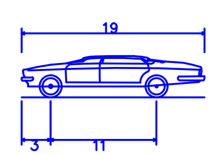


1 PASSENGER CAR WITH TRAILER CIRCULATION
SCALE: SCALE

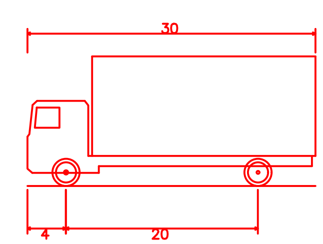
2 BOX TRUCK CIRCULATION
SCALE: SCALE



P/T – Car and Camper Trailer	
Overall Length	48.701ft
Overall Width	8.000ft
Overall Body Height	10.008ft
Min Body Ground Clearance	0.795ft
Max Track Width	8.000ft
Lock-to-lock time	4.00s
Max Steering Angle (Virtual)	21.50°



P – Passenger Car	
Overall Length	19.000ft
Overall Width	7.000ft
Overall Body Height	4.300ft
Min Body Ground Clearance	1.115ft
Track Width	6.000ft
Lock-to-lock time	4.00s
Max Steering Angle (Virtual)	31.60°



SU-30 – Single Unit Truck	
Overall Length	30.000ft
Overall Width	8.000ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.367ft
Track Width	8.000ft
Lock-to-lock time	5.00s
Max Steering Angle (Virtual)	31.80°

ON-SITE VEHICLE TURN EXHIBIT– CIRCULATION

JULY 11TH, 2016

BENCHMARK ASSOCIATES

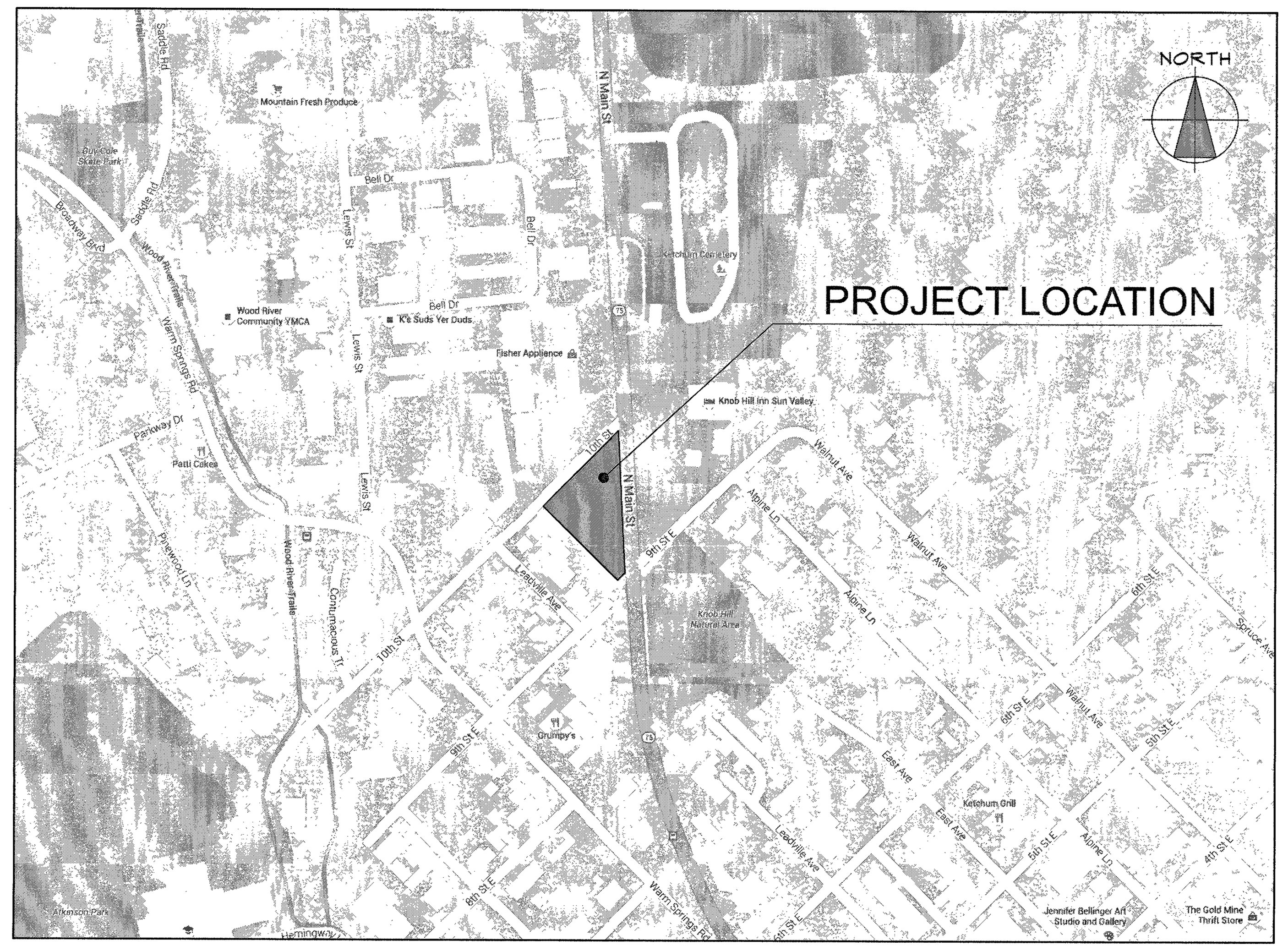
BRACKEN STATION

A CONDITIONAL USE PERMIT / DESIGN REVIEW APPLICATION

FOR:

A MOTOR VEHICLE FUELING STATION

LOT 5A / BLK 30 / ZONE LI-1



LOCATOR MAP

SITE PHOTO

DRAWING INDEX	
A.0	COVER PAGE.
A.1	EXISTING SITE PLAN. 1"= 10'
A.2	PROPOSED SITE PLAN. 1"= 10'
A.3	10TH STREET VIEW: EXISTING AND PROPOSED. 1/8"= 1'
A.4	ALLEY VIEW: EXISTING AND PROPOSED. 1/8"= 1'
A.5	STORE FRONT ELEVATION AND FLOOR PLANS WITH AREA SQ. FOOTAGE CALCULATIONS. 1/4"= 1'
A.6	ENLARGED VIEW - ALLEY RETAINING WALLS. 1/4"= 1'
C.1	SITE SURVEY.
C.2	CIVIL ACCESS PLAN TO HWY 75.
L.1.0	LANDSCAPE PLAN.
	COMPUTER GENERATED MODELS: • NORTH VIEW – BEFORE / AFTER • SOUTH VIEW – BEFORE / AFTER • NORTH ENLARGED VIEW • SOUTH ENLARGED VIEW

GENERAL CONTRACTOR AND ALL SUBCONTRACTORS TO ASSURE ALL WORK CONFORMS TO NATIONAL, STATE, AND LOCAL CODES THAT APPLY TO THIS PROJECT. WHEN INCONSISTENCIES EXIST BETWEEN DRAWINGS OR SPECS. AND APPLICABLE CODE REQUIREMENTS, CONFORMANCE TO ALL CODES SHALL HAVE PRECEDENCE OVER DRAWINGS AND SPECS.

STEVE R. COOK, ARCHITECT
323 SOUTH LEWIS ST. SUITE H, P.O. BOX 680, KETCHUM ID, 83340
PH#: (208) 725-5566
FX#: (208) 725-5568
■ ■ ■ MEMBER AMERICAN INSTITUTE OF ARCHITECTS ■ ■ ■

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[illegible] - LOT 5A BLK 30
LOT 5A / BLK 30 / ZONE LI - 1
KETCHUM, ID

REVISION RECORD		
NO.	DATE	BY

DRAWING NAME: COVER PAGE

DATE OF ISSUE: 5,23,16
SUPERSEDES ALL PREVIOUS DRAWINGS

PLOT DATE: 4/27/16

SCALE: NONE

SHEET NO. A.0


PROPERTY
9TH STREET +/-
APPROX EDGE OF EXISTING TRAVEL LANE
50' R.O.W
STATE HIGHWAY 75
STATE HIGHWAY 75
APPROX EDGE OF EXISTING TRAVEL LANE
50' ROW
25'+/-
TRASH
S 3°9'9" E
273.97'
+5847.0 AT POLE
+5845.0
STOP
PARKING (ASPALT)
LOT 5A
ALLEY
LOT 1
LOT 2
20'-0"
BUILDING C (EXISTING FLAT ROOF)
SHED
RAIL ROAD TIE RETAINING WALL
EXISTING PLANTINGS
BUILDING A (EXISTING FLAT ROOF)
WOOD DECK
GAS METER
PARKING AREA
ENTRANCE
10TH STREET
6%-7% +/-
SLOPE
TENTH STREET CENTER
2-4" GAS LINES
SLOPE
PARKING (ASPHALT)
N 45°40'02"
180.51'
SINGLE STORY
TWO(2) STORY
BUILDING B (EXISTING FLAT ROOF)
UP
UP
PARKING
39'-4"
SLOPE
+5834.7
8%-9% +/-
SLOPE
20' SETBACK
P.P.
ALLEY
72' +/- EXIST. BLDG
LOT 4
LOT 3
TOOL SHED
EXISTING BUILDINGS
EQUIPMENT STORAGE PARKING
STEVE R. COOK, ARCHITECT
323 SOUTH LEWIS ST. SUITE H, P.O. BOX 680, KETCHUM ID, 83340
PH#: (208) 725-5566
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The Drawings, Specifications, and other documents are copyright instruments of the Architect. The Architect shall be deemed the author of these instruments and will retain all common law, statutory and other reserved rights in addition to the copyright. The Drawings, Specifications, and other documents prepared by the Architect are for use solely with respect to this project.
REVISION RECORD
NO. DATE BY
DRAWING NAME:
SCALE: 1"=10'-0"
DATE OF ISSUE:
PLOT DATE:
SHEET NO.

1 / A-2

CONDTIONAL USE/ PREAPPLICATION SITE PLAN

NOTE: SEE CIVIL ENGINEERING DRAWINGS FOR ALL SITE DRAINAGE AND STREET GRADING DESIGN

scale: 1" = 10'

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PRELIMINARY DESIGN PHASE - LOT 5A BLK 30

LOT 5A / BLK 30 / ZONE LI - 1

KETCHUM, ID

REVISION RECORD		
NO.	DATE	BY

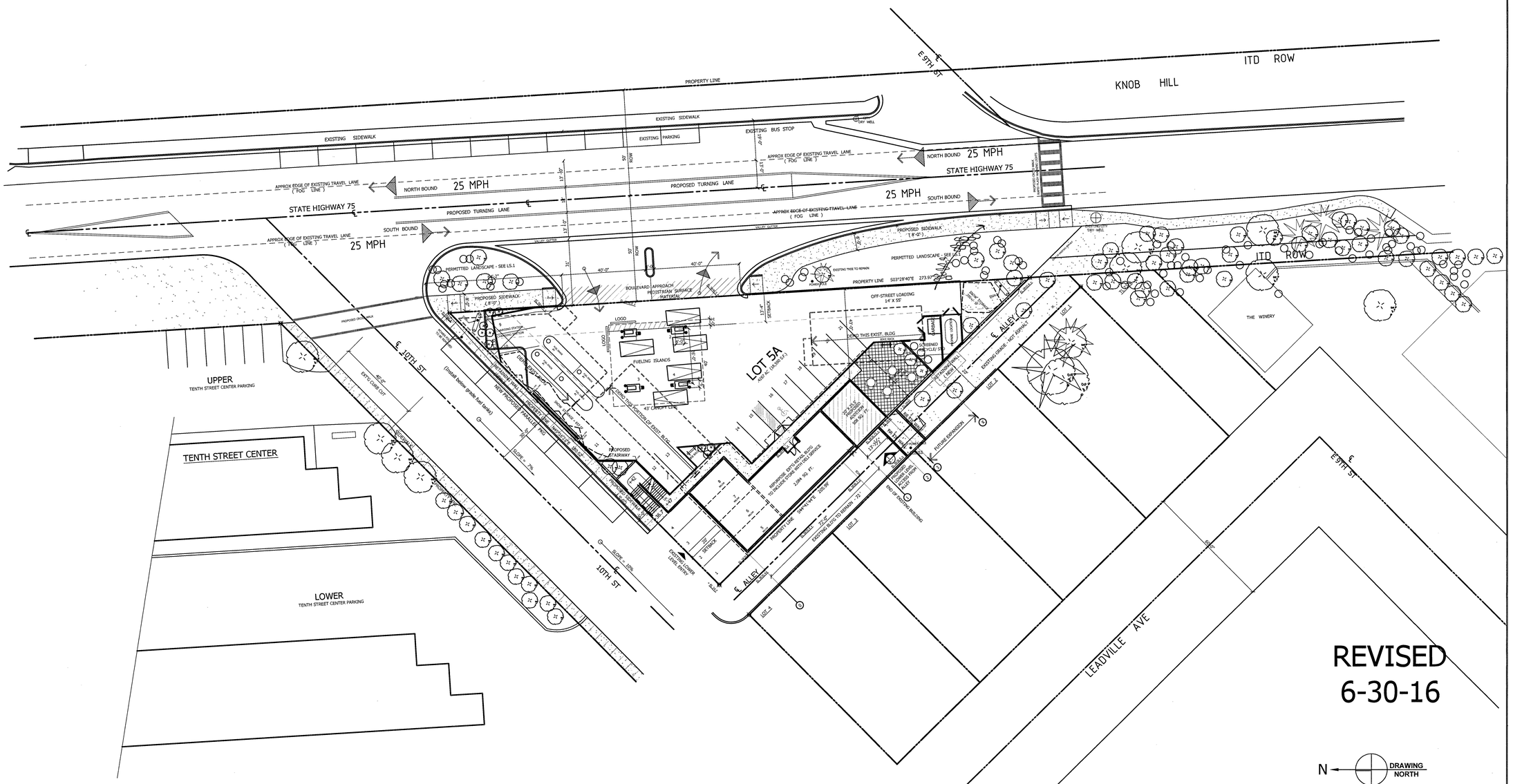
DRAWING NAME: SITE PLAN

DATE OF ISSUE: SUPERSEDES ALL PREVIOUS DRAWINGS

PLOT DATE: 6/23/16

SCALE: 1"=10'

SHEET NO. A-2



REVISED
6-30-16

N DRAWING NORTH

1 / A-2

OVERALL
CONDTIONAL USE/ PREAPPLICATION SITE PLAN

NOTE: SEE CIVIL ENGINEERING DRAWINGS FOR ALL SITE DRAINAGE AND STREET GRADING DESIGN

scale: 1"= 20'

GENERAL CONTRACTOR AND ALL SUBCONTRACTORS TO ASSURE ALL WORK CONFORMS TO NATIONAL, STATE, AND LOCAL CODES THAT APPLY TO THIS PROJECT. WHEN INCONSISTENCIES EXIST BETWEEN DRAWINGS OR SPECS. AND APPLICABLE CODE REQUIREMENTS, CONFORMANCE TO ALL CODES SHALL HAVE PRECEDENCE OVER DRAWINGS AND SPECS.

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MEMBER AMERICAN INSTITUTE OF ARCHITECTS

PRELIMINARY DESIGN PHASE - LOT 5A BLK 30

LOT 5A / BLK 30 / ZONE LI - 1

KETCHUM, ID

REVISION RECORD		
NO.	DATE	BY

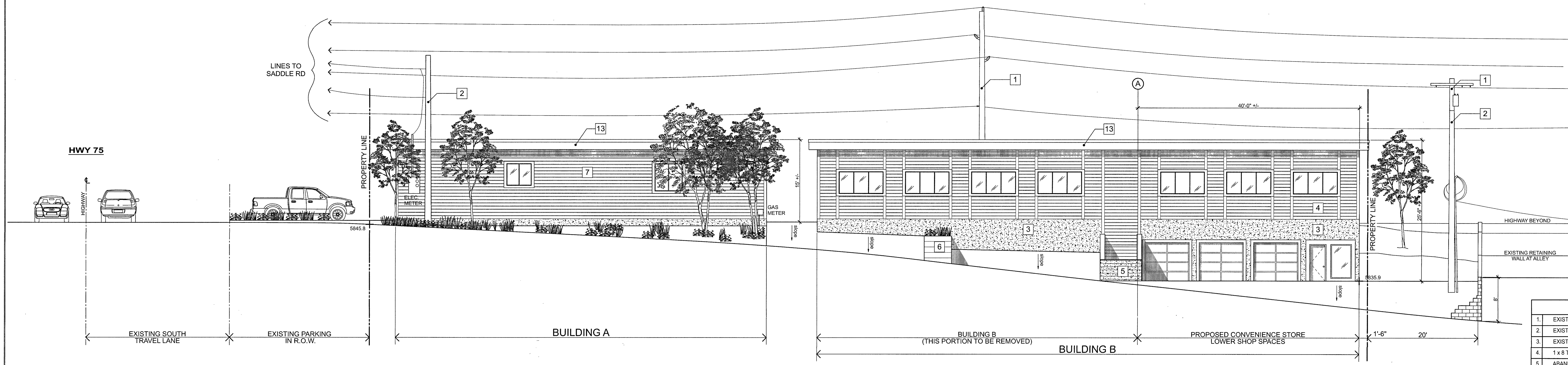
DRAWING NAME: SITE PLAN

DATE OF ISSUE: SUPERSEDES ALL PREVIOUS DRAWINGS

PLOT DATE: 6/23/16

SCALE: 1"=20'

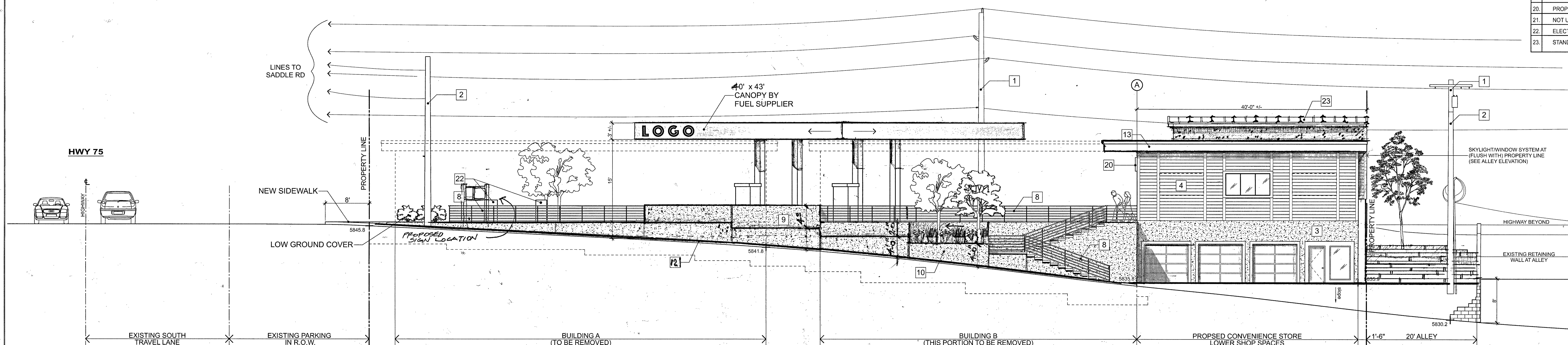
SHEET NO. A-2.1



1 EXISTING NORTH ELEVATION - 10th STREET VIEW

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

KEY INDEX	
1.	EXISTING POWER POLE- HWY 75.
2.	EXISTING POWER POLE- 10TH STREET/ALLEY.
3.	EXISTING CONC. WALL (MARINA GREY #1599).
4.	1 x 8 T&G WD SIDING (ROLLING HILLS #1497).
5.	ABANDONED STAIRWAY.
6.	ABANDONED RAILROAD PLANTER.
7.	EXISTING HORIZ. WOOD SIDING.
8.	NEW METAL GUARDRAIL/HANDRAIL- BLACK.
9.	NEW POURED-IN-PLACE RETAINING WALL- SANDBLAST (MARINA GREY STAIN).
10.	NEW STAIR - MID LANDING PLANTER.
11.	EXISTING RAILROAD RETAINING WALL AT ALLEY.
12.	PROPOSED SIDWALK.
13.	EXISTING FASCIA.
14.	MATCH EXISTING FASCIA.
15.	NEW SKYLIGHT.
16.	ELEC. METERS.
17.	RAIN GUTTER / DOWNSPOUT.
18.	ROOF DRAIN (INTERNAL).
19.	GAS METERS.
20.	PROPOSED SIGN.
21.	NOT USED.
22.	ELECTRIC CHARGING STATION(S).
23.	STANDING SEAM METAL ROOF SKYLIGHT.



2 PROPOSED NORTH ELEVATION - 10th STREET VIEW

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

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CUP APPLICATION AND
DESIGN REVIEW - PRE-APP
LOT 5A / BLK 30 / ZONE LI - 1
KETCHUM, ID

REVISION RECORD		
NO.	DATE	BY

DRAWING NAME: EXTERIOR ELEVATIONS: NORTH

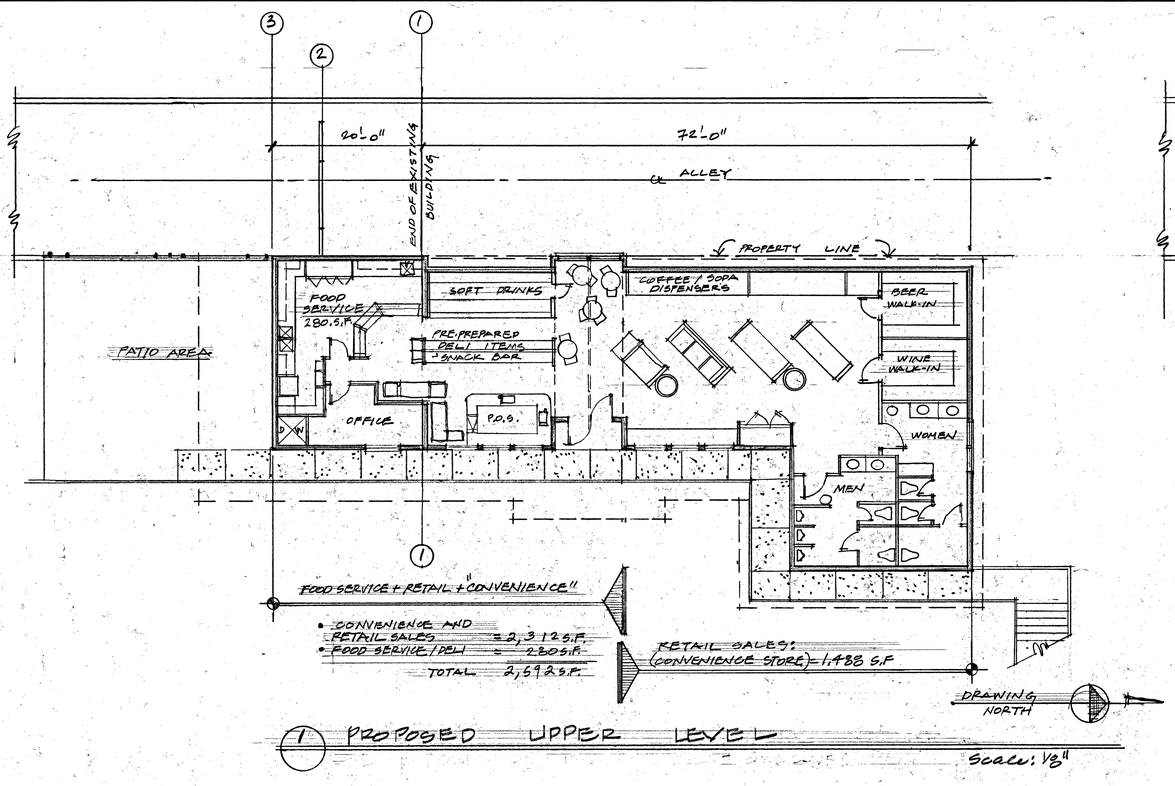
DATE OF ISSUE: 5.23.16
SUPERSEDES ALL PREVIOUS DRAWINGS

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

PLOT DATE: 4/27/16

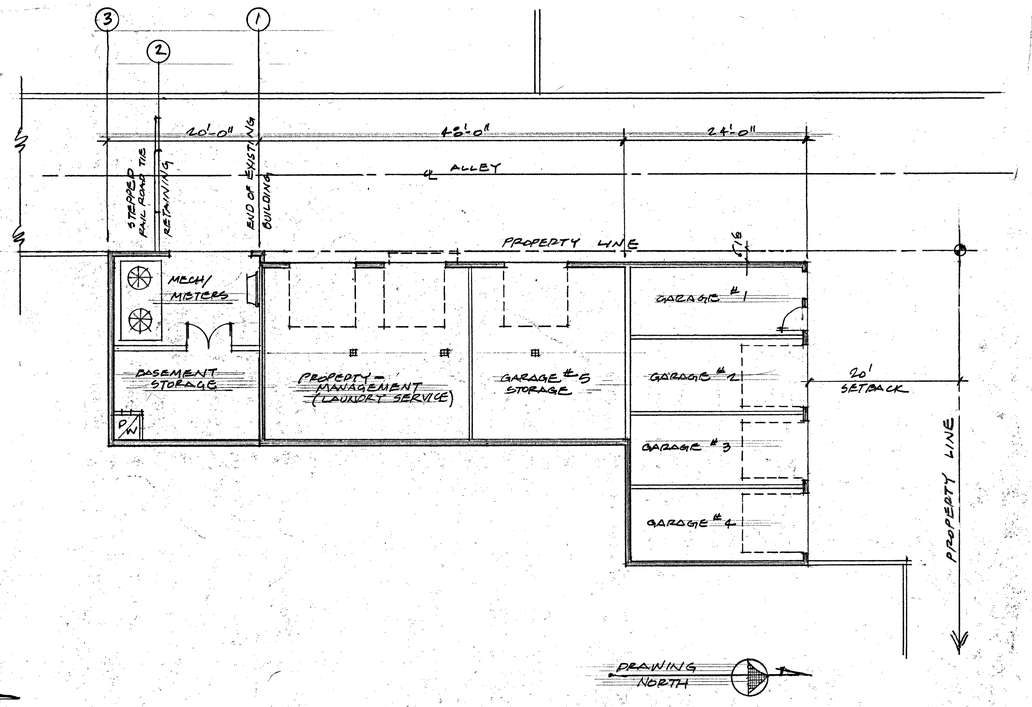
SHEET NO. A.3

Shade / shadow



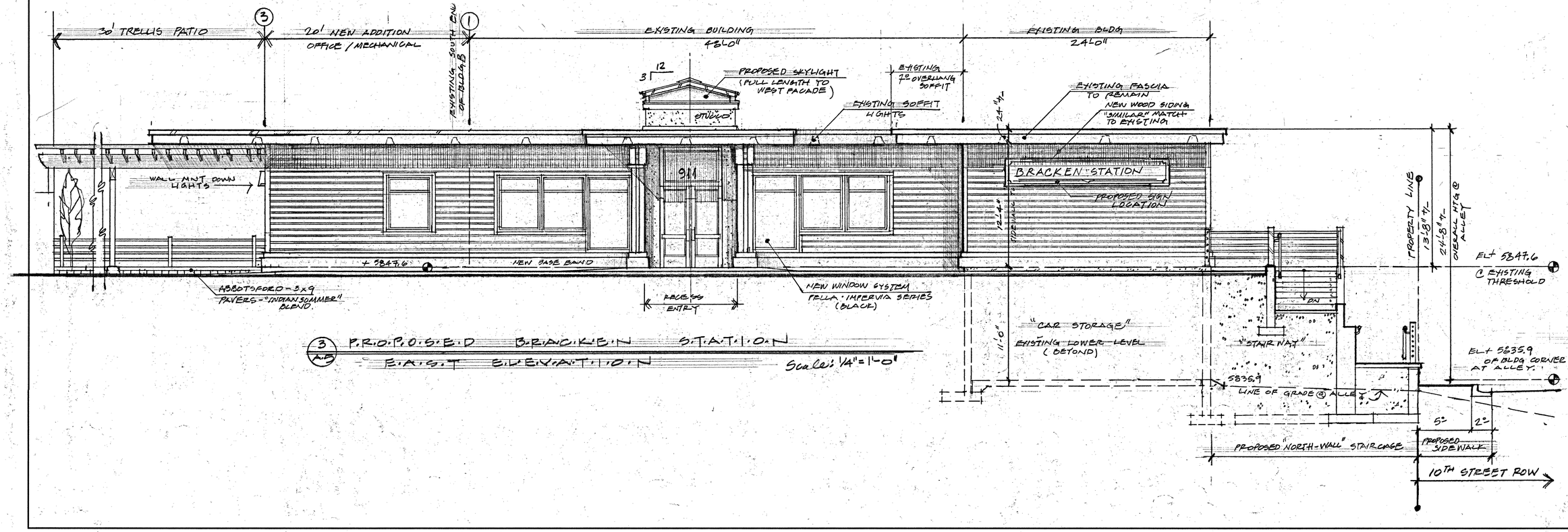
1 PROPOSED UPPER LEVEL

Scale: 1/8"



2 PROPOSED LOWER LEVEL

Scale 1/8"



3 PROPOSED BRACKEN STATION

EAST ELEVATION

Scale: 1/4"=1'-0"

THE BRACKEN STATION
LOT 5A, BLK 30, L.T.I.
KETCHUM • IDAHO

STEVE R. COOK, ARCHITECT
323 SOUTH LEWIS ST. SUITE H, P.O. BOX 680, KETCHUM ID, 83340
PHN: (208) 725-5566
FAX: (208) 725-5568
MEMBER AMERICAN INSTITUTE OF ARCHITECTS

REVISION RECORD

NO.	DATE	BY

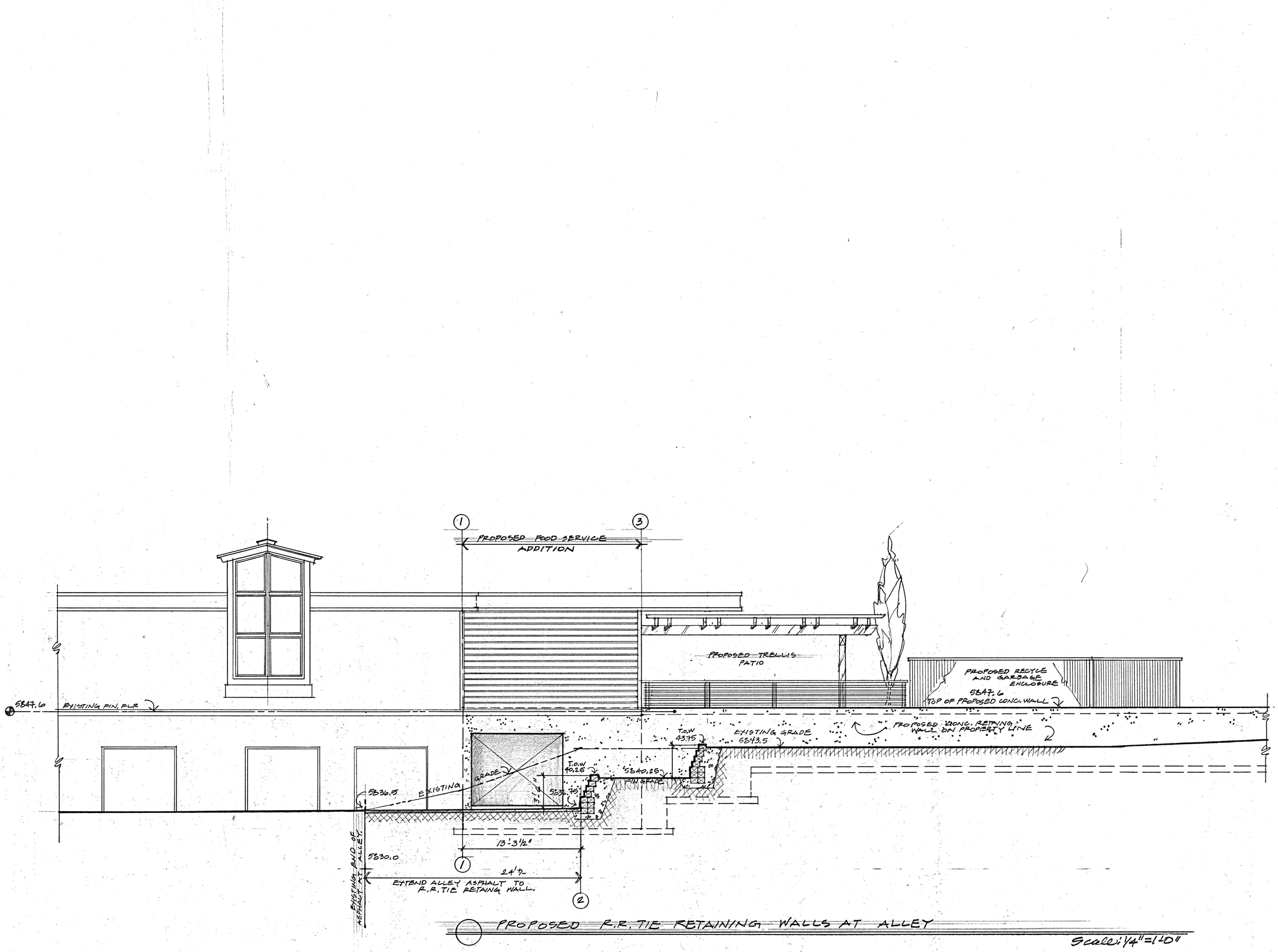
DRAWING NAME: PROPOSED FRONT ELEVATION

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

DATE OF ISSUE: 5.23.16

PLOT DATE:

SHEET NO. A-5



PROPOSED R.R. TIE RETAINING WALLS AT ALLEY

Scale: 1/4"=1'-0"

STEVE R. COOK, ARCHITECT
323 SOUTH LEWIS ST. SUITE H, P.O. BOX 680, KETCHUM, ID. 83340
PHONE (208) 725-5566
FAX (208) 725-5568
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BRACKEN STATION
LOT 6A - BLK 30
KETCHUM, IDAHO
CUP APPLICATION AND DESIGN REVIEW - PREAPP

REVISION RECORD

NO.	DATE	BY

DRAWING NAME: ALLEY R.R.TIE RETAINING WALLS

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

DATE OF ISSUE: 5. 23. 16

PLOT DATE:

SHEET NO. A·6

LEGEND:
EXISTING PROPERTY LINE
EXISTING ADJOINER
EXISTING CENTERLINE
PROPOSED CONCRETE CURB & GUTTER
PROPOSED CONCRETE
PROPOSED ASPHALT
PROPOSED PAVERS

0 20 40 Feet

KETCHUM BLOCK 50 LOT 1AA
KETCHUM BLOCK 50 LOT 2A
KETCHUM BLOCK 29 LOT 1 & 2
E 9TH STREET ℄
RECTANGULAR RAPID FLASHING BEACON
EXISTING PARALLEL PARKING
62.5'
EXISTING STRIPING
PROPOSED STRIPING
50'± 13' 13' 12' 13'
100'± R.O.W.
STATE HWY 75 ℄
71.2' (50' MIN.)
62.5'
25' 35' 23' 19'
R480'
R200'
R30'
R50'
40' 40'
13.9'
4'
R3' TYP.
50'±
PROPOSED 2' VALLEY GUTTER
ITD SNOW STORAGE AND PERMITTED LANSCAPING; SEE LANSCAPE PLANS
RETAIN AND PROTECT EXISTING TREE
ITD SNOW STORAGE AND PERMITTED LANSCAPING; SEE LANSCAPE PLANS
CONNECT TO EXISTING SIDEWALK
RETAIN AND PROTECT EXISTING POWER POLE
RECTANGULAR RAPID FLASHING BEACON
8'
24'
12.9'
EXISTING STRIPING
PROPOSED ℄ STRIPING
KETCHUM BLOCK 30 LOT 5A
10' TYP.
13'
20' TYP.
60'
E 10TH STREET ℄
PROPOSED ADDITION
EXISTING BUILDING
ALLEY
LOT 1
LOT 2
LOT 3
LOT 4
N LEADVILLE AVENUE ℄
TENTH ST LIGHT INDUSTRIAL COMPLEX
TL 4808

1 EX VICINITY MAP
SCALE: N.T.S.

PRELIMINARY ONLY NOT FOR CONSTRUCTION

REVISIONS

No.	DESCRIPTION	DATE	BY
1	EXTEND TURN LANE SOUTH	6/3/16	SKS
2	ADD DRAINAGE IMPROVEMENTS	6/28/16	SKS

PREPARED BY:
BENCHMARK ASSOCIATES, P.A.
P.O. BOX 733 100 BELL DRIVE
KETCHUM, IDAHO 83340
(208) 726-9512
FAX 726-9514
WEB: WWW.BMA5B.COM
MAIL: WWW.BMA5B.COM

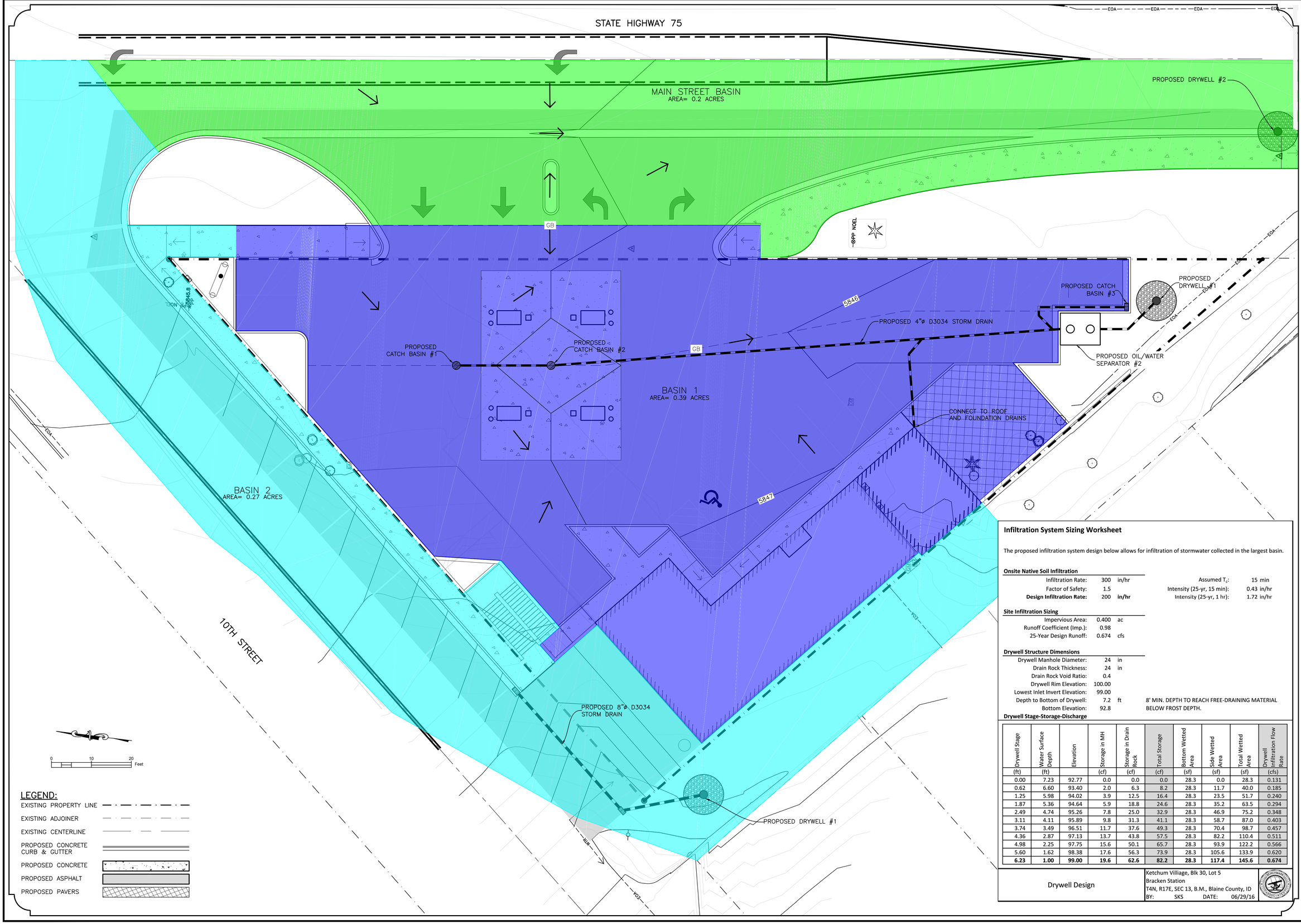
PRELIMINARY IMPROVEMENTS PLAN

KETCHUM TOWNSITE BLOCK 30, LOT 5A
T4N, R17E, SEC 13, B.M., BLAINE COUNTY, IDAHO

PREPARED FOR: ROY BRACKEN

DRAWN BY: SKS
DESIGNED BY: JPG
CHECKED BY: SB
DATE: 05/03/16
PROJECT NO.: 16051

SHEET NUMBER
EX



LEGEND:

- EXISTING PROPERTY LINE
- EXISTING ADJOINER
- EXISTING CENTERLINE
- PROPOSED CONCRETE CURB & GUTTER
- PROPOSED CONCRETE
- PROPOSED ASPHALT
- PROPOSED PAVERS

Infiltration System Sizing Worksheet

The proposed infiltration system design below allows for infiltration of stormwater collected in the largest basin.

Onsite Native Soil Infiltration

Infiltration Rate:	300	in/hr
Factor of Safety:	1.5	
Design Infiltration Rate:	200	**in/hr**

Assumed T_c:	15 min
Intensity (25-yr, 15 min):	0.43 in/hr
Intensity (25-yr, 1 hr):	1.72 in/hr

Site Infiltration Sizing

Impervious Area:	0.400	ac
Runoff Coefficient (Imp.):	0.98	
25-Year Design Runoff:	0.674	cfs

Drywell Structure Dimensions

Drywell Manhole Diameter:	24	in
Drain Rock Thickness:	24	in
Drain Rock Void Ratio:	0.4	
Drywell Rim Elevation:	100.00	
Lowest Inlet Invert Elevation:	99.00	
Depth to Bottom of Drywell:	7.2	ft
Bottom Elevation:	92.8	

8' MIN. DEPTH TO REACH FREE-DRAINING MATERIAL BELOW FROST DEPTH.

Drywell Stage-Storage-Discharge

Drywell Stage	Water Surface Depth	Elevation	Storage in MH	Storage in Drain Rock	Total Storage	Bottom Wetted Area	Side Wetted Area	Total Wetted Area	Drywell Infiltration Flow Rate
(ft)	(ft)		(cf)	(cf)	(cf)	(sf)	(sf)	(sf)	(cfs)
0.00	7.23	92.77	0.0	0.0	0.0	28.3	0.0	28.3	0.131
0.62	6.60	93.40	2.0	6.3	8.2	28.3	11.7	40.0	0.185
1.25	5.98	94.02	3.9	12.5	16.4	28.3	23.5	51.7	0.240
1.87	5.36	94.64	5.9	18.8	24.6	28.3	35.2	63.5	0.294
2.49	4.74	95.26	7.8	25.0	32.9	28.3	46.9	75.2	0.348
3.11	4.11	95.89	9.8	31.3	41.1	28.3	58.7	87.0	0.403
3.74	3.49	96.51	11.7	37.6	49.3	28.3	70.4	98.7	0.457
4.36	2.87	97.13	13.7	43.8	57.5	28.3	82.2	110.4	0.511
4.98	2.25	97.75	15.6	50.1	65.7	28.3	93.9	122.2	0.566
5.60	1.62	98.38	17.6	56.3	73.9	28.3	105.6	133.9	0.620
6.23	**1.00**	**99.00**	**19.6**	**62.6**	**82.2**	**28.3**	**117.4**	**145.6**	**0.674**

Drywell Design

Ketchum Villiage, Blk 30, Lot 5
Bracken Station
T4N, R17E, SEC 13, B.M., Blaine County, ID
BY: SKS DATE: 06/29/16

PRELIMINARY ONLY NOT FOR CONSTRUCTION

REVISIONS

No.	DESCRIPTION	DATE	BY
1	EXTEND TURN LANE SOUTH	6/3/16	SKS

PREPARED BY:
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PRELIMINARY GRADING & DRAINAGE PLAN

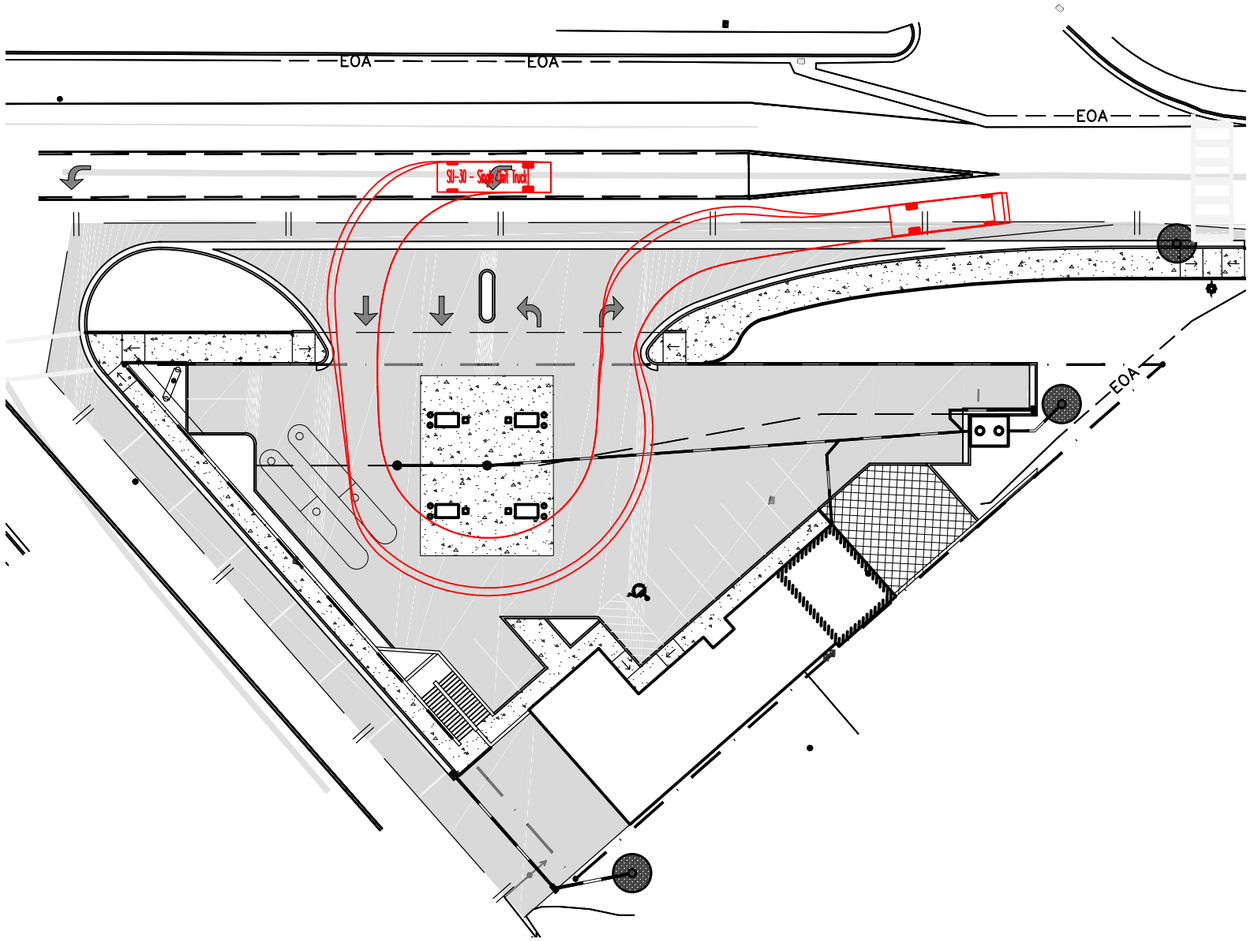
KETCHUM TOWNSITE BLOCK 30, LOT 5A
T4N, R17E, SEC 13, B.M., BLAINE COUNTY, IDAHO

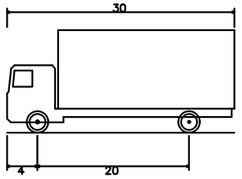
PREPARED FOR: ROY BRACKEN

DRAWN BY: SKS
DESIGNED BY: JPG
CHECKED BY: SB
DATE: 05/03/16
PROJECT NO.: 16051

SHEET NUMBER

EX

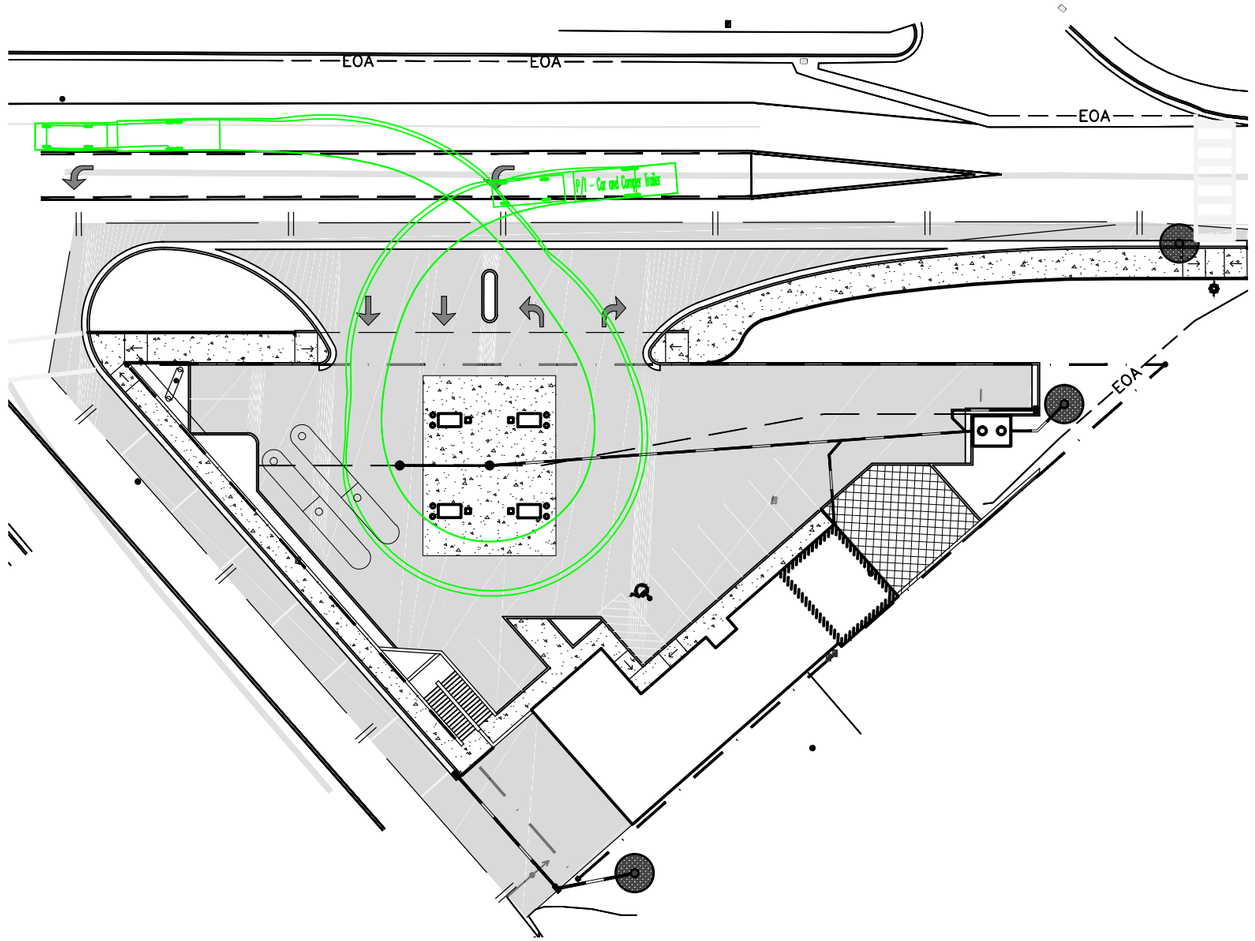


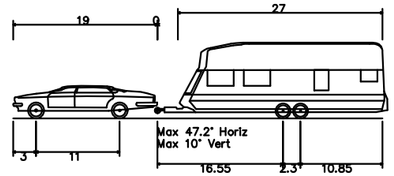


SU–30 – Single Unit Truck

Overall Length	30.000ft
Overall Width	8.000ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.367ft
Track Width	8.000ft
Lock–to–lock time	5.00s
Max Steering Angle (Virtual)	31.80°

1 — BOX TRUCK TURN
SCALE: SCALE





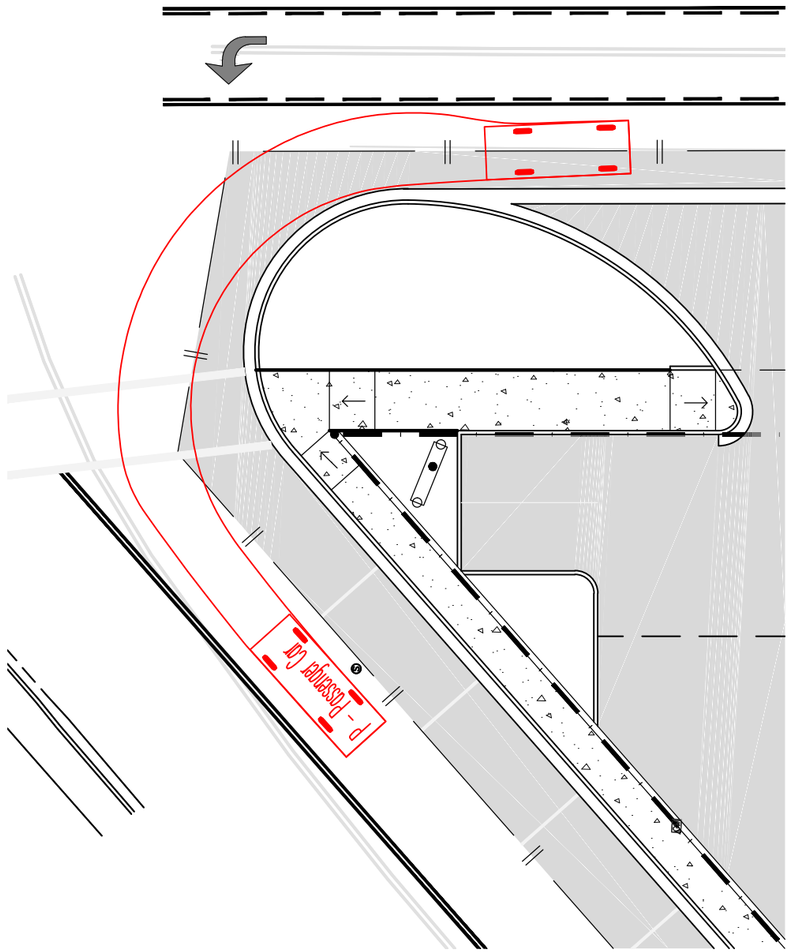
P/T – Car and Camper Trailer

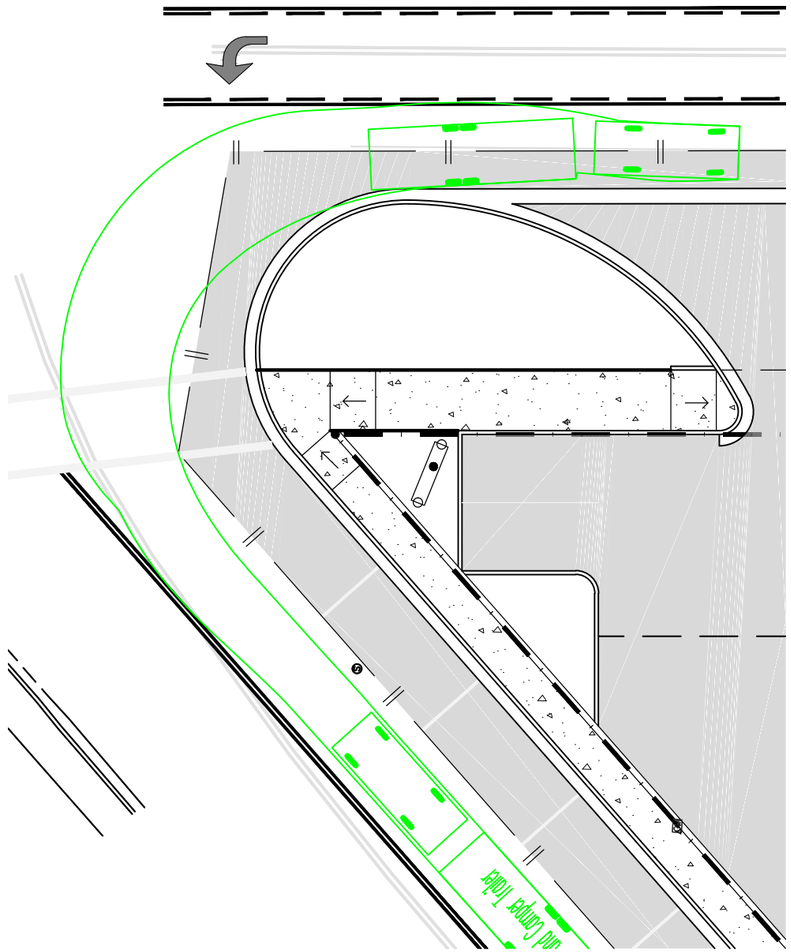
Overall Length	48.701ft
Overall Width	8.000ft
Overall Body Height	10.008ft
Min Body Ground Clearance	0.795ft
Max Track Width	8.000ft
Lock–to–lock time	4.00s
Max Steering Angle (Virtual)	21.50°

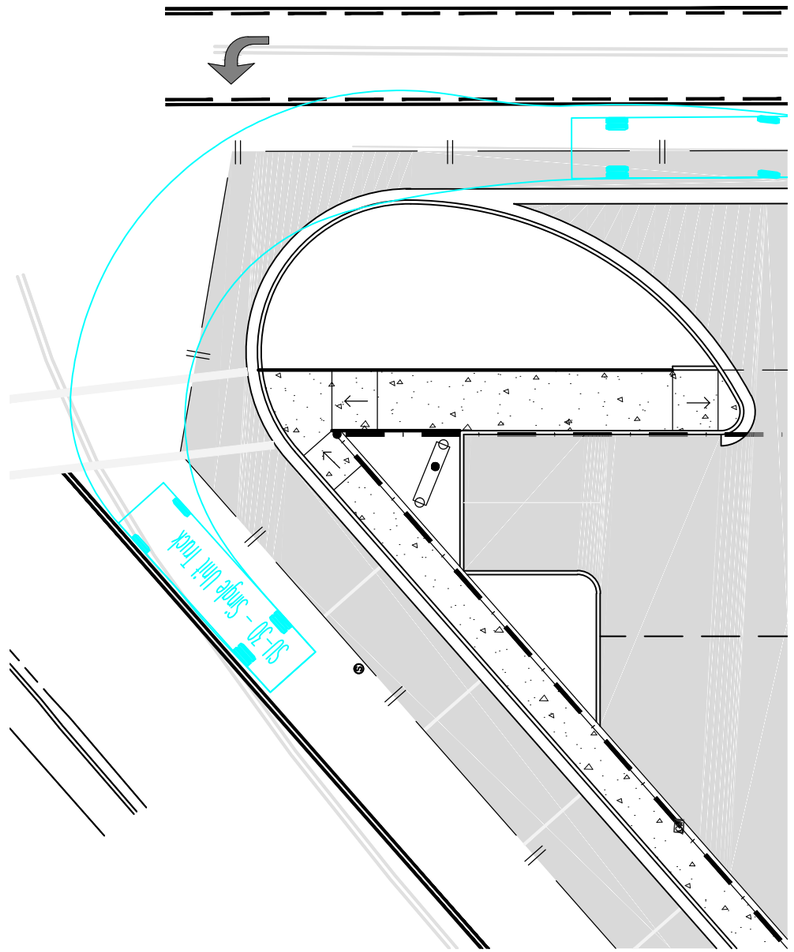
2 — PASSENGER CAR WITH TRAILER TURN
SCALE: SCALE

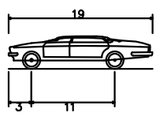
ON–SITE VEHICLE TURN EXHIBIT

JULY 11TH, 2016





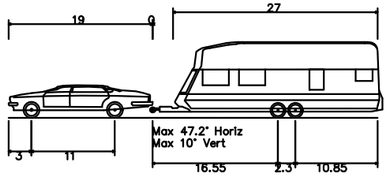




P – Passenger Car

Overall Length	19.000ft
Overall Width	7.000ft
Overall Body Height	4.300ft
Min Body Ground Clearance	1.115ft
Track Width	6.000ft
Lock–to–lock time	4.00s
Max Steering Angle (Virtual)	31.60°

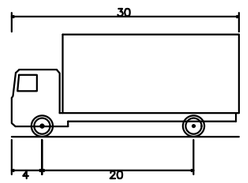
1 — PASSENGER CAR TURN
SCALE: SCALE



P/T – Car and Camper Trailer

Overall Length	48.701ft
Overall Width	8.000ft
Overall Body Height	10.008ft
Min Body Ground Clearance	0.795ft
Max Track Width	8.000ft
Lock–to–lock time	4.00s
Max Steering Angle (Virtual)	21.50°

2 — PASSENGER CAR WITH TRAILER TURN
SCALE: SCALE



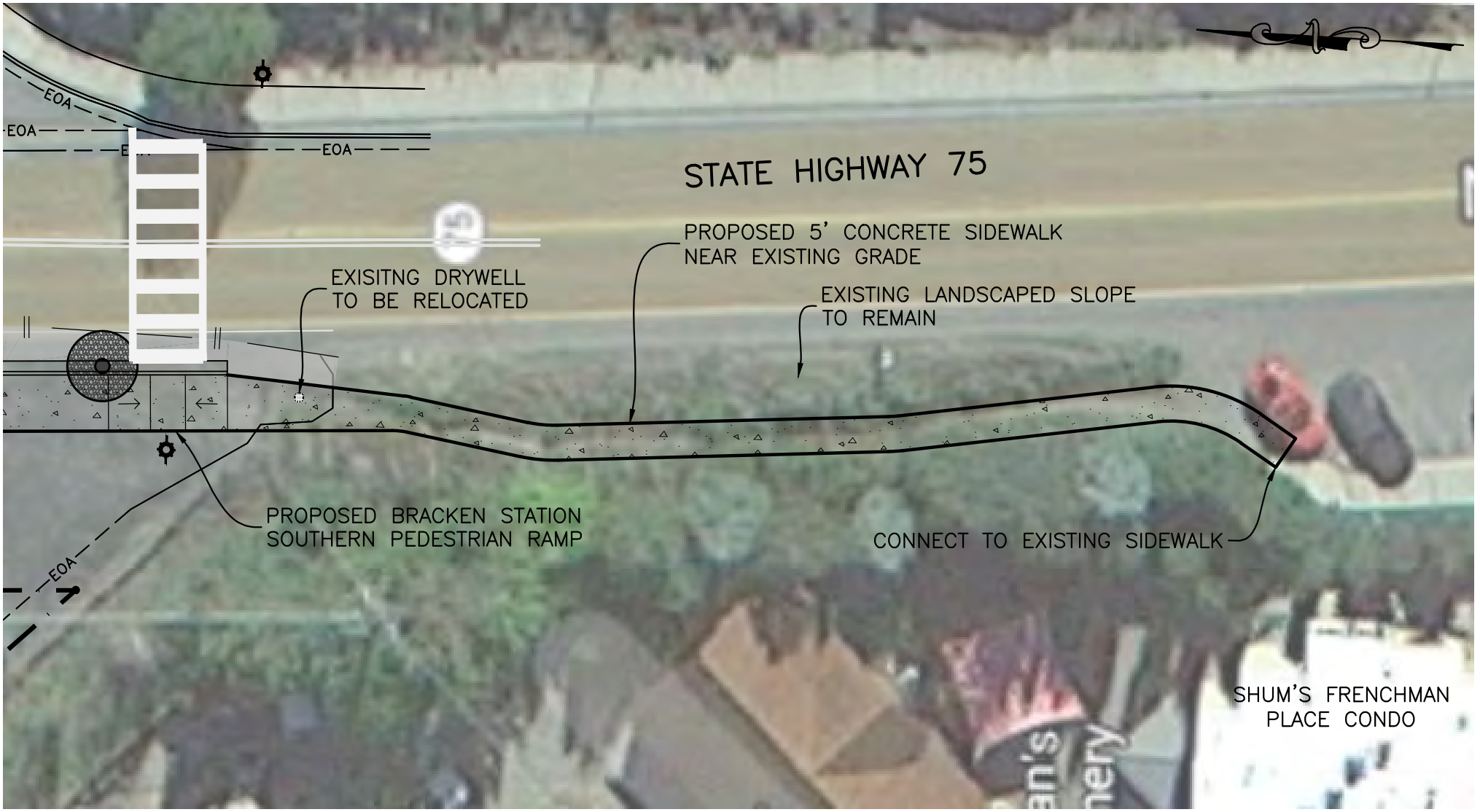
SU–30 – Single Unit Truck

Overall Length	30.000ft
Overall Width	8.000ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.367ft
Track Width	8.000ft
Lock–to–lock time	5.00s
Max Steering Angle (Virtual)	31.80°

3 — BOX TRUCK TURN
SCALE: SCALE

10TH STREET VEHICLE TURN EXHIBIT

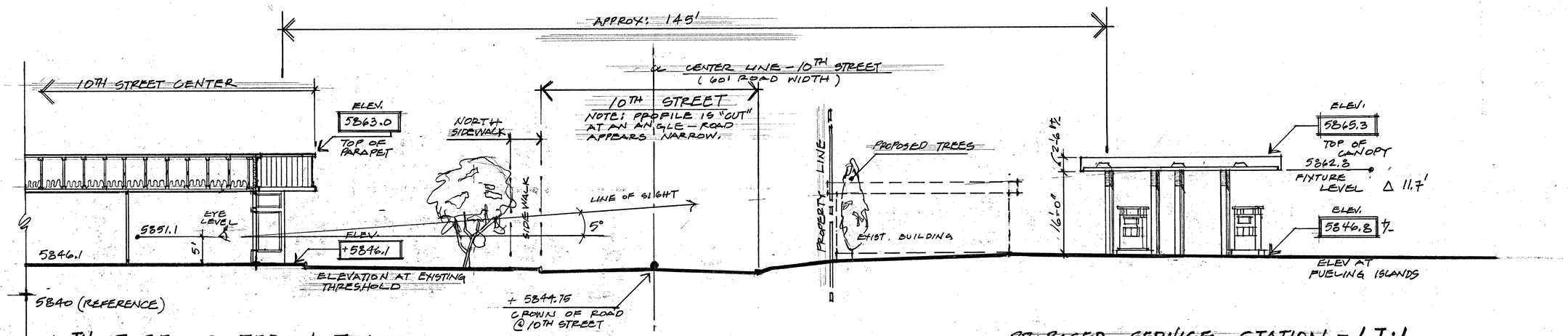
JULY 11TH, 2016



0 20 40 Feet

HIGHWAY 75 FRENCHMAN SIDEWALK CONNECTION

JULY 11TH, 2016



10TH STREET CENTER - L.I.1

PROPOSED SERVICE STATION - L.I.1

1 A.P.F EXISTING PROFILE - FROM NORTH OF 10TH STREET TO SOUTH OF 10TH STREET

Scale: 1" = 10'-0"

GENERAL CONTRACTOR AND ALL SUBCONTRACTORS TO ASSURE ALL WORK CONFORMS TO NATIONAL, STATE, AND LOCAL CODES THAT APPLY TO THIS PROJECT. WHEN INCONSISTENCIES EXIST BETWEEN DRAWINGS OR SPECS, AND APPLICABLE CODE REQUIREMENTS, CONFORMANCE TO ALL CODES SHALL HAVE PRECEDENCE OVER DRAWINGS AND SPECS.

BRACKEN - STATION
HOT SPA KETCHUM, ID.
SITE PROFILE

STEVE R. COOK, ARCHITECT
323 SOUTH LEWIS ST. SUITE H, P.O. BOX 680, KETCHUM ID. 83340
PHONE (208) 725-5566
FAX (208) 725-5568
■ ■ ■ MEMBER AMERICAN INSTITUTE OF ARCHITECTS ■ ■ ■

REVISION RECORD

NO.	DATE	BY

DRAWING NAME: SITE PROFILE

S:\CAAD\CUGH\SUD.DWG

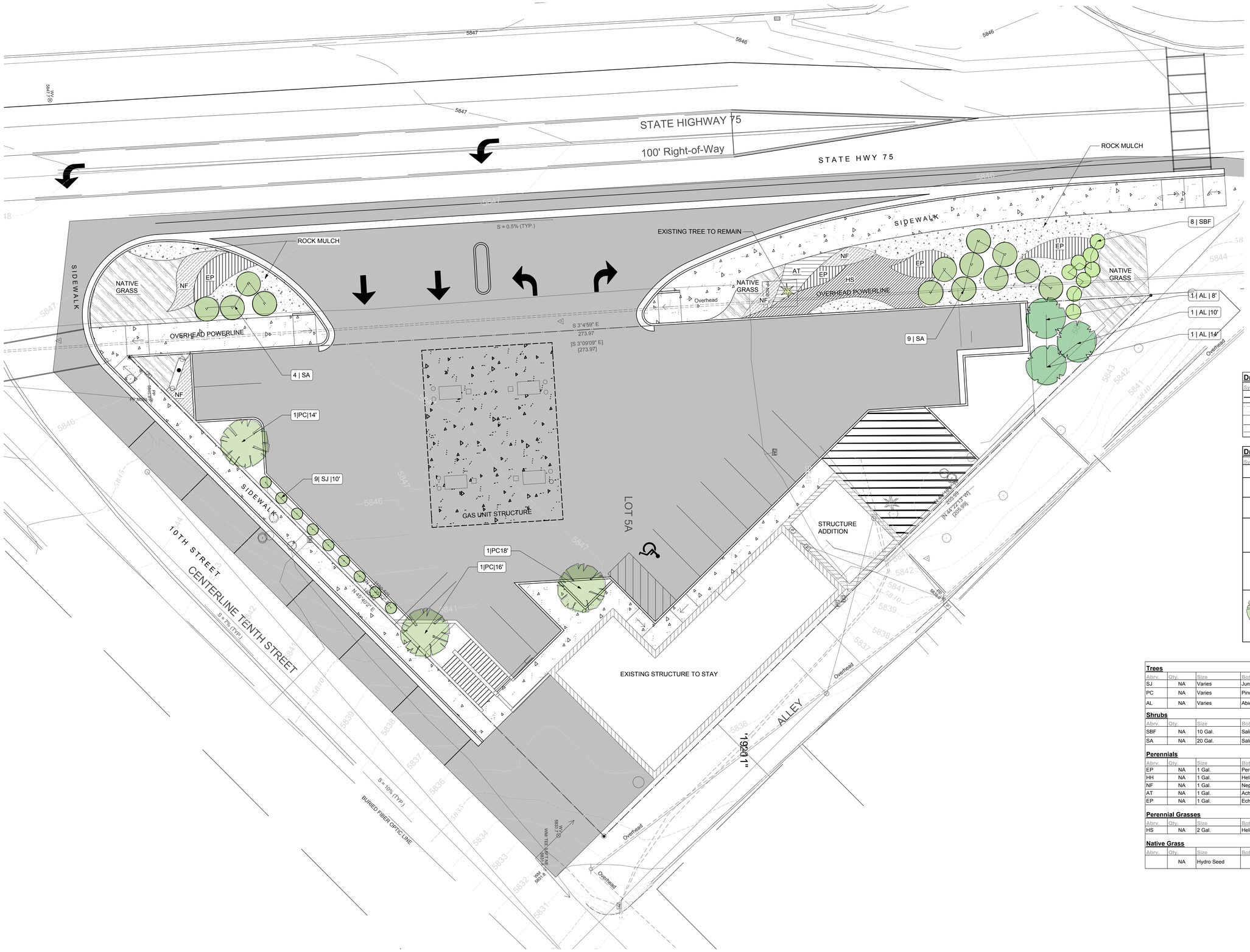
SCALE: 1:10

DATE OF ISSUE: 7.11.16

SUPERSEDES ALL PREVIOUS DRAWINGS

PLOT DATE:

SHEET NO. A·PF



Drawing Legend

Symbol	Definition
	Property Line
(80) (79)	Existing Contours
80 79	Proposed Contours

Drawing Legend

Symbol	Definition
	Concrete Walkeway
	River Rock Mulch
	Proposed Perennials: See Planting Schedule
	Existing Trees To Remain
	Proposed Shrubs: See Planting Schedule
	Proposed Evergreen Trees: See Planting Schedule

Trees

Abrv.	Qty.	Size	Botanical Name	Common Name	Spacing
SJ	NA	Varies	Juniperus chinensis 'Spartan	Spartan Juniper	Per Plan
PC	NA	Varies	Pinus contorta	Lodge Pole Pine	Per Plan
AL	NA	Varies	Abies lasiocarpa	Sub Alpine Fir	Per Plan

Shrubs

Abrv.	Qty.	Size	Botanical Name	Common Name	Spacing
SBF	NA	10 Gal.	Salix brachycarpa 'Blue Fox'	Blue Fox Willow	Per Plan
SA	NA	20 Gal.	Salix arctica	Arctic Willow	Per Plan

Perennials

Abrv.	Qty.	Size	Botanical Name	Common Name	Spacing
EP	NA	1 Gal.	Perovskia atriplicifolia	Russian Sage	Per Plan
HH	NA	1 Gal.	Heliopsis helianthoides	Sun Flower	Per Plan
NF	NA	1 Gal.	Nepeta x faassinni	Catmint	Per Plan
AT	NA	1 Gal.	Achillea millefolium 'Terracotta'	Yarrow	Per Plan
EP	NA	1 Gal.	Echinacea	Purple Cone Flower	Per Plan

Perennial Grasses

Abrv.	Qty.	Size	Botanical Name	Common Name	Spacing
HS	NA	2 Gal.	Helictotrichon sempervirens	Blue Oat Grass	Per Plan

Native Grass

Abrv.	Qty.	Size	Botanical Name	Common Name	Spacing
	NA	Hydro Seed		Native Grass Mix	Per Plan

N

0 10 20 30 40 FT

SCALE: 1"= 10'-0"

BYLA
BEN YOUNG LANDSCAPE ARCHITECTS
323 Lewis _ | Ketchum, ID
(208) 726 5997 - (208) 720 0215
www.byla.us

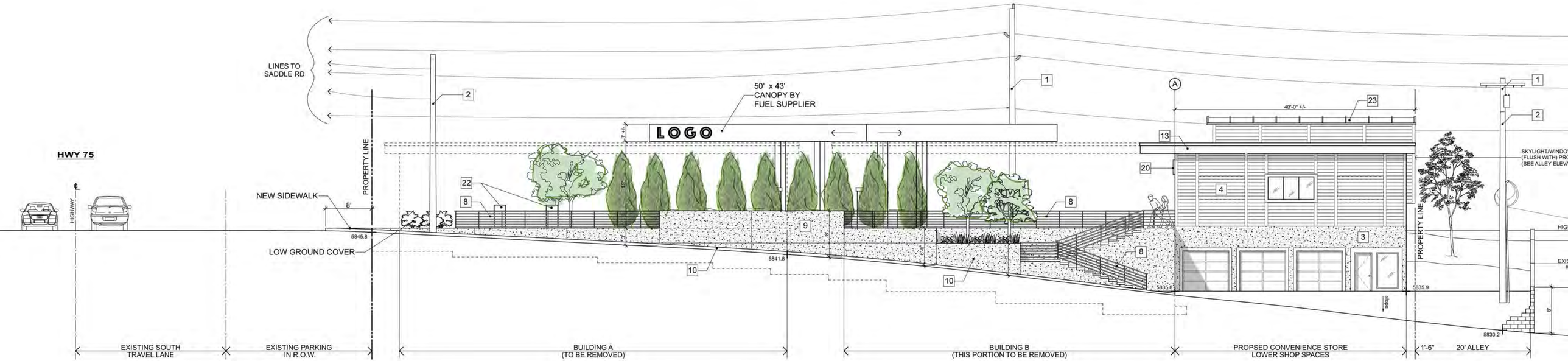
No.	Description	Signature	Date

BRACKEN STATION
BRACKEN BUILDING
LOT 5A | BLK 30 | SONE LI-1, KETCHUM, ID

LANDSCAPE OVERVIEW

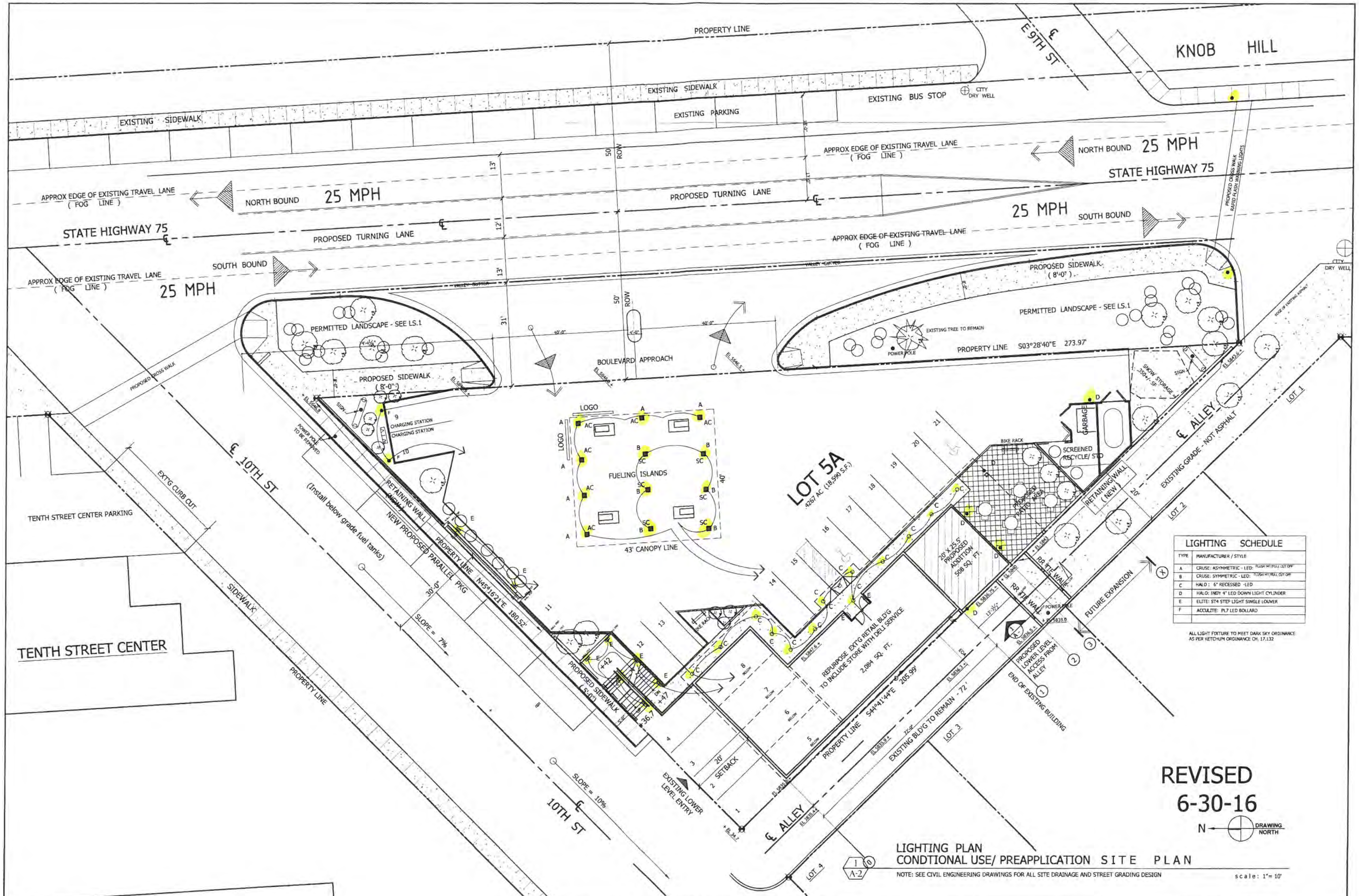
Date: 07.01.2016
Drawn By: TB
Checked By: CG
File: Filename

Sheet No.
L1.0
1



2 PROPOSED NORTH ELEVATION - 10th STREET VIEW

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



LIGHTING SCHEDULE	
TYPE	MANUFACTURER / STYLE
A	CRUSE: ASYMMETRIC - LED: FLUSH MT/FULL CUT OFF
B	CRUSE: SYMMETRIC - LED: FLUSH MT/FULL CUT OFF
C	HALO: 6" RECESSED -LED
D	HALO: INDY 4" LED DOWN LIGHT CYLINDER
E	ELITE: ST4 STEP LIGHT SINGLE LOUVER
F	ACCULITE: PL7 LED BOLLARD

ALL LIGHT FIXTURE TO MEET DARK SKY ORDINANCE AS PER KETCHUM ORDINANCE CH. 17.132

LIGHTING PLAN
CONDTIONAL USE/ PREAPPLICATION SITE PLAN

NOTE: SEE CIVIL ENGINEERING DRAWINGS FOR ALL SITE DRAINAGE AND STREET GRADING DESIGN

scale: 1"= 10'

GENERAL CONTRACTOR AND ALL SUBCONTRACTORS TO ASSURE ALL WORK CONFORMS TO NATIONAL, STATE, AND LOCAL CODES THAT APPLY TO THIS PROJECT. WHEN INCONSISTENCIES EXIST BETWEEN DRAWINGS OR SPECS. AND APPLICABLE CODE REQUIREMENTS, CONFORMANCE TO ALL CODES SHALL HAVE PRECEDENCE OVER DRAWINGS AND SPECS.

STEVE R. COOK, ARCHITECT
323 SOUTH LEWIS ST. SUITE H, P.O. BOX 680, KETCHUM ID, 83340
MEMBER AMERICAN INSTITUTE OF ARCHITECTS

PRELIMINARY DESIGN PHASE - LOT 5A BLK 30
LOT 5A / BLK 30 / ZONE LI - I
KETCHUM, ID

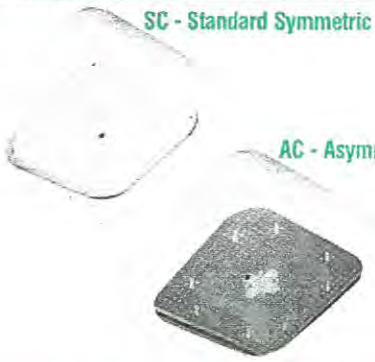
REVISION RECORD	DRAWING NAME	DATE OF ISSUE	PLOT DATE
NO. DATE BY	LIGHTING PLAN	SCALE 1"=10'	6/23/16
			SHEET NO. L .I

CRUS-SC-LED

70

A/B

LED CANOPY LIGHT - LEGACY™ (CRUS)



AC distribution utilizes a reflector which alters the look from a standard S distribution

DOE LIGHTING FACTS

Department of Energy has verified representative product test data and results in accordance with its Lighting Facts Program. Visit www.lightingfacts.com for specific catalog strings.

US & Int'l. patents pending.

HOUSING - Low profile, durable die-cast, aluminum construction, providing a reliable weather-tight seal.

LEDS - Features an array of select, mid-power, high brightness, high efficiency LED chips; 5000K color temperature, 70 CRI (nominal).

DRIVE CURRENT - Choice of Very Low Wattage (VLW), Low Wattage (LW), Super Saver (SS), High Output (HO) or Very High Output (VHO).

OPTICS / DISTRIBUTION - Choice of Symmetrical or Asymmetrical, which directs light through a clear tempered glass lens, to provide a uniform distribution of light to vertical and horizontal surfaces.

OPTICAL UNIT - Features an ultra-slim 7/8" profile die-cast housing, with a flat glass lens. Unit is water-resistant, sealed to an IP67 rating. Integral designed heat sink does not trap dirt and grime, ensuring cool running performance over the life of the fixture.

PRESSURE STABILIZING VENT - Luminaire assembly incorporates a pressure stabilizing vent breather to prevent seal fatigue and failure.

HAZARDOUS LOCATION - Designed for lighter than air fuel applications. Product is suitable for Class 1 Division 2 only when properly installed per LSI installation instructions (consult factory).

DRIVER - State-of-the-art driver technology superior energy efficiency and optimum light output. Driver components are fully encased in potting for moisture resistance. Complies with IEC and FCC standards. 0-10 V dimming supplied standard with all drive currents.

DRIVER HOUSING - Die-cast aluminum, wet location rated driver/electrical enclosure is elevated above canopy deck to prevent water entry, provide easy "knock-out" connection of primary wiring and contributes to attaining the lowest operating temperatures available. Seals to optical housing via one-piece molded silicone gasket.

OPERATING TEMPERATURE - -40°C to 50°C (-40°F to +122°F)

ELECTRICAL - Universal voltage power supply, 120-277 VAC, 50/60 HZ input. Drivers feature two-stage surge protection (including separate surge protection built into electronic driver) meets IEEE C62.41.2-2002, Scenario 1, Location Category C.

FINISH - Standard color is white and is finished with LSI's DuraGrip® polyester powder coat process. DuraGrip withstands extreme weather changes without cracking or peeling.

INSTALLATION - One person installation. No additional sealant required. Installs in a 12" or 16" deck pan. Deck penetration consists of a 4" hole, simplifying installation and water sealing. Unit is designed to quickly retrofit into existing Scottsdale (4") hole as well as openings for Encore and Encore Top Access and to reconnect wiring for the SC/ECTA without having to relocate the conduit. Retro'panels are available for existing Encores (see back page) as well as kits for recessed and 2x2 installations (see separate spec sheets). Support brackets are provided standard, to prevent sagging of deck.

SHIPPING WEIGHT - 27 pounds (single pack), 48 pounds (double pack).

EXPECTED LIFE - Minimum 60,000 to 100,000 hours depending upon the ambient temperature of the installation location. See LSI web site for specific guidance.

WARRANTY - Limited 5-year warranty.

LISTING - UL and ETL listed to UL 1598, UL 8750 and other U.S. and International safety standards. Suitable for wet locations.

PHOTOMETRICS - Please visit our web site at **www.lsi-industries.com** for detailed photometric data.

Consult Factory

Class 1, Division 2 – Standard on SS & LW.

T5 Temperature Classification – The surface temperature of this product will not rise above 100°C., within a 40°C ambient.

Gas Groups A,B,C, and D – Group A: Acetylene / Group B: Hydrogen / Group C: Propane and Ethylene / Group D: Benzene, Butane, Methane & Propane.

This product, or selected versions of this product, meet the standards listed below. Please consult factory for your specific requirements.

RoHS COMPLIANT · ETL intertek wet location · IP67 · CE · cULus LISTED wet location · DLC

Project Name _____ **Fixture Type** _____

Catalog # _____

04/29/16

A1B

LED CANOPY LIGHT - LEGACY™ (CRUS)

LUMINAIRE ORDERING INFORMATION

TYPICAL ORDER EXAMPLE: **CRUS SC LED HO 50 UE WHT**

Prefix	Distribution[1]	Light Source	Drive Current	Color Temperature	Input Voltage	Finish	Options
CRUS	SC - Standard Symmetric AC - Aymmetric	LED	VLW - Very Low Watt LW - Low Watt SS - Super Saver HO - High Output VHO - Very High Output	50 - 5000K	UE - Universal Voltage (120-277V) 347 - 480V	WHT - White BRZ - Bronze BLK - Black	None

FOOTNOTES:
1- AC distribution utilizes a reflector which alters the look from a standard S distribution.

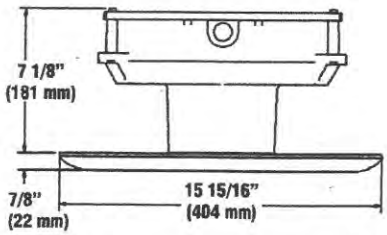
ACCESSORY ORDERING INFORMATION (Accessories are field installed)

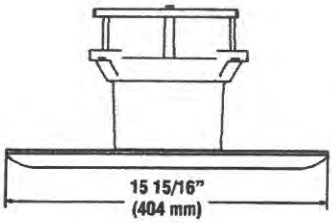
Description	Order Number
Retrofit Panels - EC / ECTA / SCF to CRU, for 16" Deck Panel	525946
Retrofit Panels - ECTA / SCF to CRU, for 12" Deck Panel	530281
Retrofit 2x2 Cover Panel Blank (no holes)	357282
Retrofit RIC Cover Panel Blank (no holes)	354702

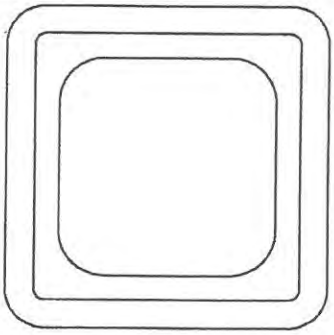
Description	Order Number
Kit - Hole Plugs and Silicone (enough for 25 retrofits)[1]	1320540

1- Consists of (25) 7/8" hole plugs and (1) 10.3 oz tube of RTV

DIMENSIONS







LIGHT OUTPUT - CRUS

		Lumens		Watts		LPW	
		SC	AC	SC	AC	SC	AC
Cool White	VLW - Very Low Watt	8842	–	79	–	112	–
	LW - Low Watt	10871	8746	88	83	124	105
	SS - Super Saver	13554	11518	114	111	119	104
	HO - High Output	18633	–	132	–	141	–
	VHO - Very High Output	22418	17262	159	157	141	110

Project Name _____ Fixture Type _____

Catalog # _____

04/29/16

Your Search For: 353TBZ

Only show: Bundle Items

Sort by: Relevance

BUNDLE ITEM

$21.99 /each
As low as: $21.11

Halo 353TBZ
Halo Recessed Lighting Trim, 6" Line Voltage Baffle Trim - Tuscan Bronze

Add to Cart

Show per page: 15

Halo H7ICT 6" Recessed Lighting Can, AIRTITE Housing for New Construction

BRAND: HALO | MODEL: H7ICT | CONDITION: NEW | WARRANTY: 1 YEAR | SKU: 166218 | CLEARANCE ITEM!

STATUS: IN STOCK

Regular Price: ~~$11.99~~

On Sale: **$9.15** + FREE Shipping! on qualified orders

Ships Same Day!
(Orders placed Mon-Fri before 1pm PST)
+ add your ZIP for shipping promos

− 1 + Add to Cart | SAVE TO LIST

Get 10% Cashback in Westside Dollars

HALO View All Halo Recessed Lighting

Promo: 10% Off recessed cans when you buy at least 10 Lutron Li... ...mers

Feedback

Description
Features
Specifications
Warranty
Customer Reviews
Questions & Answers

Description

The **Halo H7ICT** is a 6" insulated recessess housing capable of beuing installed againat ceiling insulation. Its self regulating thermal protector deactives the light should overheating occur. Many homeowners who are looking to retrofit their homes with new accent lighting often run into challenges when installing new fixtures: insulation in their ceilings that results in a potential fire hazard when exposed to a light fixture's excess heat.

The Halo H7ICT remedies this problem by utilizing Halo's integral thermal protector technology. The Halo H7ICT is also easy to install no matter where you're going to use it. The wiring connections cab be made outside the junction box. Automatic flange leveling aligns the housing allowing one to hold the housing in one hand while simultaneously drive in nails with your otehr hand. Its a snap.

Allows wiring connections to be made outside thejunction box. It features simple captive bar hangers, which enable the housing to be used anywhere within the full 24" joist span. The socket also fastens tightly into the unit's trim for proper lamp positioning.

Perfect for any home's established décor, this unit is offered in a variety of colors, including black, bronze, copper, white and brushed nickel. The Halo H7ICT is also UL listed and CSA certified, making it one of the most popular choices for modern homes.

Use with 6" Lighting Recessed Trims

- Black
- Bronze
- Brushed Nickel
- Copper
- White

Features

- Thermally Protected IC Housing
- Housing may be covered with insulation
- For use with 120V Incandescent lamps

Specifications

- 10 1/2" Long
- 7 1/2" Wide
- 7 1/2" Tall

Warranty
One (1) year through the manufacturer

Customer Reviews
There are no reviews for this product yet. Be the first to review the product!

Write Your Own Review:

Nickname*

Summary of Your Review*

Review Text*

1 star 2 stars 3 stars 4 stars 5 stars
Quality
Price
Value

Indy 4in LC4B Series, LED, Wall Mount Cylinder

FINISHES / TYPES

Black Silver White

LINE ART

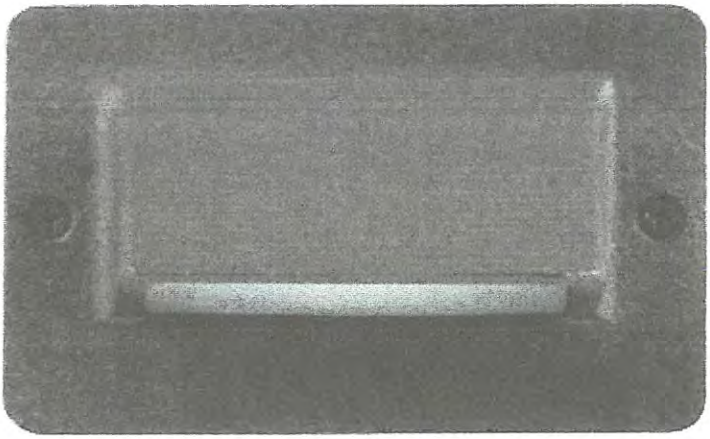
Indy™ 4-inch L-Series LED Cylinders are part of the latest generation of Indy L-Series luminaires, offering a fully coordinated family of commercial-grade quality luminaires, from LED color rendering to aperture sizes and trim finishes. These cylinders can be surface, cable, pendant, or wall-mounted. They are the energy-efficient choice for a wide range of commercial applications. Efficacies up to 111lm/W.

- Compact light source delivers uniform illumination without pixilation, enabling excellent beam control. Light levels range from 800 to 2,300 lumens
- LEDs are energy-efficient and offer exceptionally long service life
- Available in CCT's of 2700K, 3000K, 3500K and 4000K, high CRI of 80 lm/w. Optional 90 CRI and 97 CRI availble
- Lumen packages suitable for ceiling heights ranging from 8' to over 35'
- L-Series Cylinder fixtures offer hyperbolic, parabolic, baffle or wall wash reflectors and multiple trim color and finish options
- One piece heavy gauge aluminum with white, black or silver backed textured powder coat finish
- Passive Cooling; cast aluminum heat sink integrated directly with housing provides superior thermal management to ensure the long life of the LED
- LEDs contain no environmentally harmful mercury, lead, or PCBs and generate no UV or IR emissions
- LED driver accommodates 120V, 277V, or 347V inputs with 0-10V dimming standard; also available with DMX, DALI, phase cut, forward and reverse phase and Lutron drivers for use with EcoSystem®
- U/CSA Listed; RoHS compliant; ARRA compliant; ENERGY STAR® qualified

- Products
- >
- LED Step Light
- >
- ST4 Series
- >
- ST403

ST403

ST4 Series Single Louver Face Plate



Housing only:

- Specs
- Catalog

Features | Technical | Colors | Housing

Application
For concrete use only
Body
High grade die-cast aluminum with 0.3% Copper to prevent corrosion in concrete applications.
Supplied standard with four 3/4? NPS holes.
Face Plate
High-grade die-cast aluminum
Gasket
Single piece molded silicon for wet location
Lens
Frosted tempered glass
External Louver
Anodized 45" cut-off louver
Reflector
High performance aluminum reflector assembly for superb light output
Listing
UL/cUL for wet locations

Description | Catalog Numbers | | | | Literature

AccuLite PL7 Series, LED, Parklume Bollards

View Larger

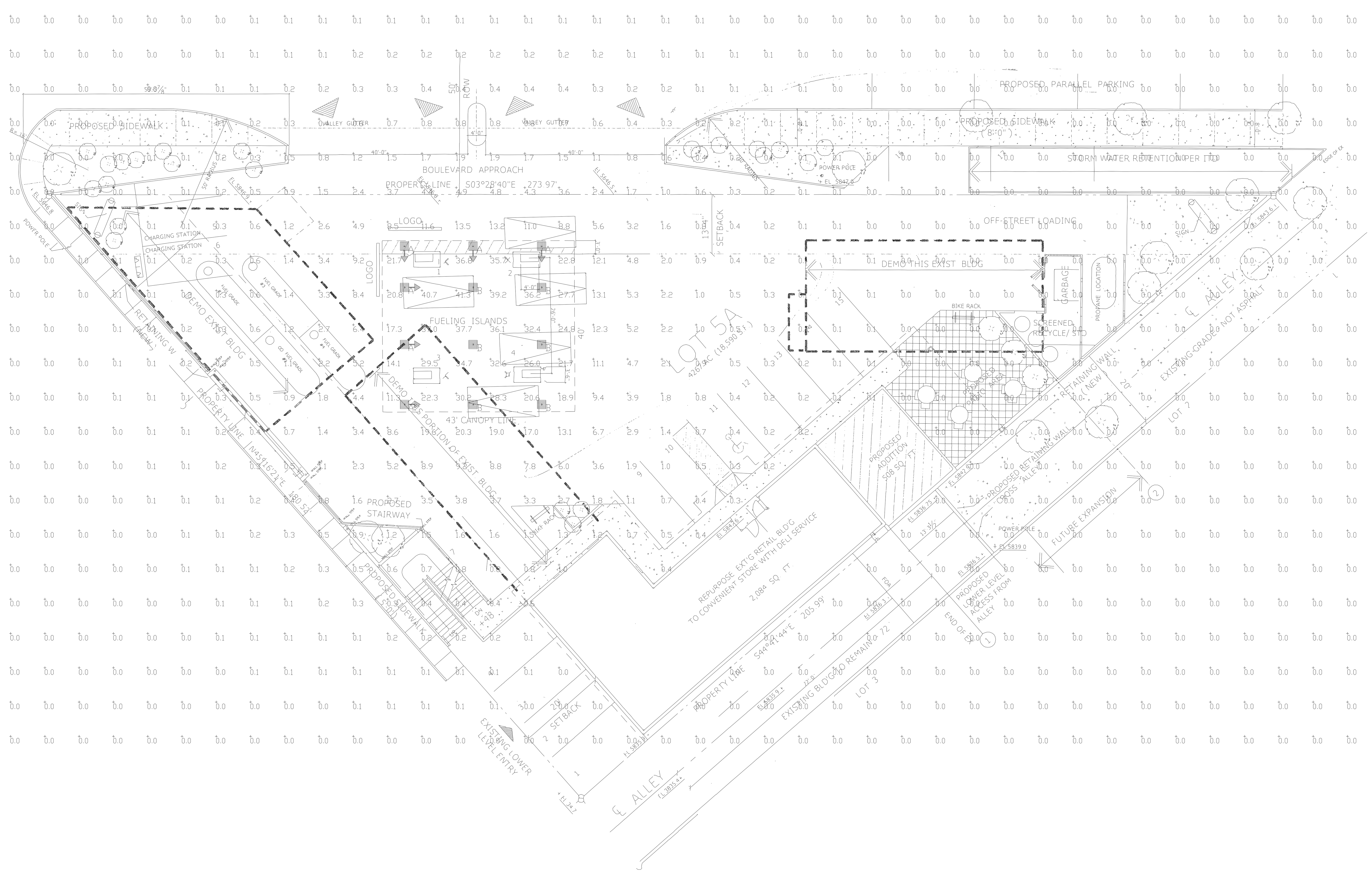
FINISHES / TYPES

Black Bronze White

LINE ART

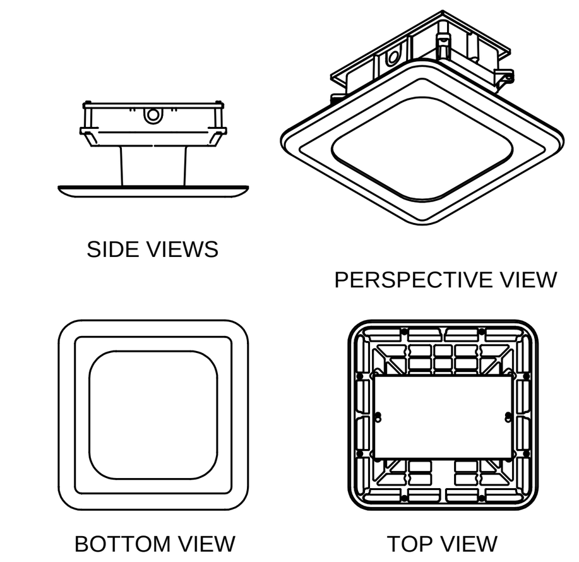
AccuLite™ Parklume area lighting bollards provide effective, energy-efficient pathway lighting in a variety of attractive styles. PL7- LED Series bollards offer a clean, contemporary look with a slim 7-inch diameter that blends easily with the landscape. LED version provides up to 1,000 lumens from just 25W input, while other efficient alternatives include HID and CFL light sources. All bollards feature vandal-resistant polycarbonate lenses and durable powder coat finishes.

- LEDs feature a top reflector that collects light and a lower cone that spreads it to the surroundings; anodized reflectors smooth light for uniform distribution
- LEDs have an aluminum heat sink that reduces heat and helps assure rated service life of 50,000 hours; universal 120-277VAC LED driver, 60Hz input
- 7-inch diameter housings feature rugged extruded-aluminum construction with cast-aluminum top and base plate
- 160-degree house-side shield is optional
- 15W or 25W LED light source; other models accept HID or CFL lamps of various types and wattages
- UL/CSA Listed; suitable for wet locations



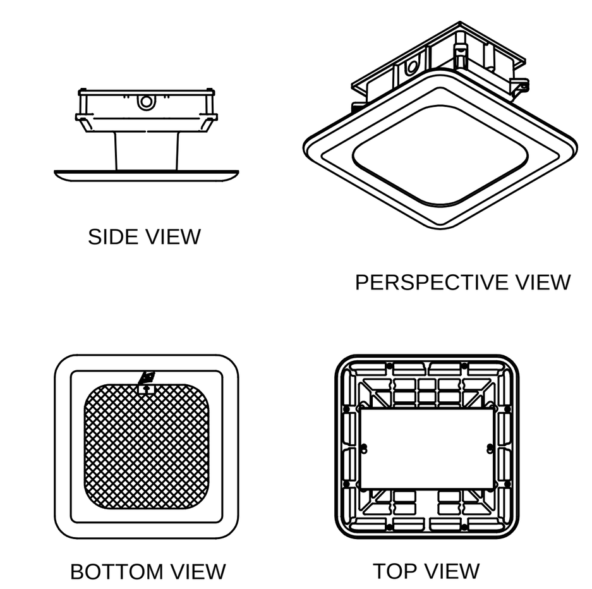
CRUS-SC-LED

LED CANOPY LIGHT - LEGACY



CRUS-AC-LED

LED CANOPY LIGHT - LEGACY



Luminaire Schedule

Symbol	Qty	Label	Arrangement	Description	LLF	Lumens/Lamp	Arr. Lum. Lumens	Arr. Watts
	6	A	SINGLE	CRUS-AC-LED-LW-CW DIMMED 15% MTD @ 15'	0.850	N.A.	8746	82.9
	6	B	SINGLE	CRUS-SC-LED-VLW-CW DIMMED 15% MTD @ 15'	0.850	N.A.	8842	78.7

Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
ALL CALC POINTS	Illuminance	Fc	1.62	41.3	0.0	N.A.	N.A.
CANOPY	Illuminance	Fc	28.51	41.3	11.3	2.52	3.65

Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and/or architect must determine the applicability of the layout to existing or future field conditions.

This lighting plan represents illumination levels calculated from laboratory data taken under controlled conditions in accordance with The Illuminating Engineering Society (IES) approved methods. Actual performance of any manufacturer's luminaires may vary due to changes in electrical voltage, tolerance in lamps/LED's and other variable field conditions. Calculations do not include obstructions such as buildings, curbs, landscaping, or any other architectural elements unless noted.

Total Project Watts
Total Watts = 969.6

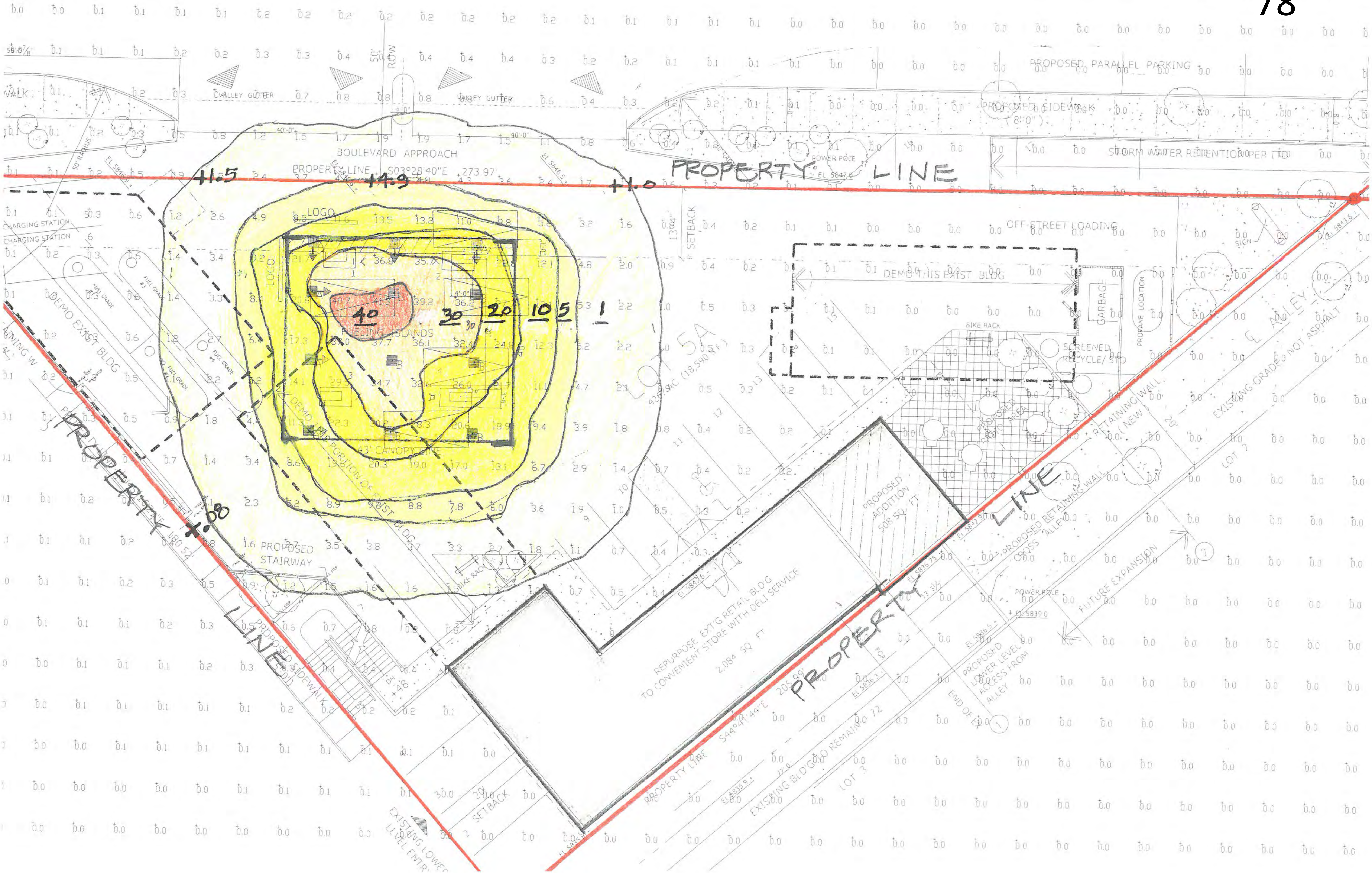
10000 ALLIANCE RD. CINCINNATI, OHIO 45242 USA
(513) 793-3200 • FAX (513) 793-6023

LIGHTING PROPOSAL LO-133509-2

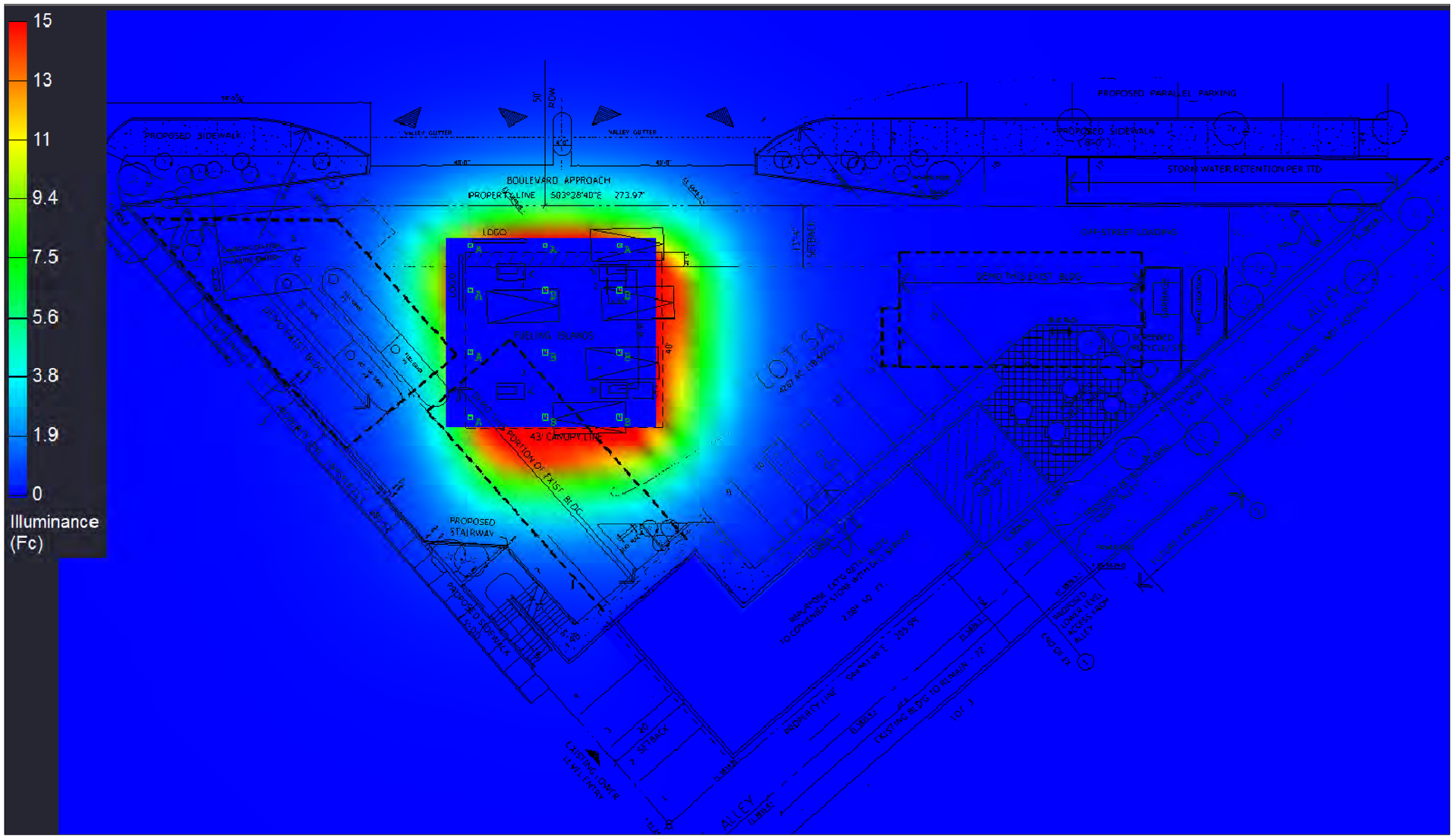
43 X 40 CANOPY
STATE HWY 75
KETCHUM,ID

BY:MWE | DATE:6-20-16 | REV:6-30-16 | SHEET 1 OF 1

SCALE: 1"=16'

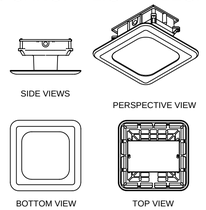

PROPOSED PARALLEL PARKING
PROPOSED SIDEWALK (8'0")
STORM WATER RETENTION PER ITD
VALLEY GUTTER
BOULEVARD APPROACH
PROPERTY LINE S03°28'40"E 273.97'
PROPERTY LINE
+1.5
+4.9
+1.0
+.08
POWER POLE
SETBACK
OFF-STREET LOADING
DEMO THIS EXIST BLDG
GARBAGE
PROPANE LOCATION
SIGN
ALLEY
EXISTING GRADE NOT ASPHALT
BIKE RACK
SCREENED RECYCLE/ STO
CHARGING STATION
CHARGING STATION
DEMO EXIST BLDG
FUEL GRADE
LOGO
40
30
20
10
5
1
FUELING ISLANDS
43' CANOPY LINE
DEMO THIS PORTION OF EXIST BLDG
PROPOSED STAIRWAY
PROPOSED SIDEWALK
PROPOSED ADDITION 508 SQ FT
PROPOSED PATIO AREA
REPURPOSE EXT'G RETAIL BLD'G TO CONVENIENT STORE WITH DELI SERVICE
2,084 SQ FT
S44°41'44"E 205.99'
EXISTING BLD'G TO REMAIN
LOT 3
LOT 2
PROPOSED RETAINING WALL
RETAINING WALL (NEW)
CROSS ALLEY
FUTURE EXPANSION
PROPOSED LOWER LEVEL ACCESS FROM ALLEY
EXISTING LOWER LEVEL ENTRY
20' SETBACK

Industries™
American Innovation Through Technology
A SmartVision® for the Future
PROGRESSIVE REFINEMENT RADIOSITY SOLUTION

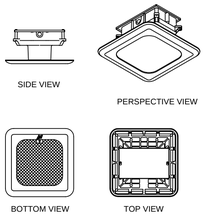


PSEUDO COLOR RADIOSITY - TOP VIEW - 15 FC SCALE

CRUS-SC-LED
LED CANOPY LIGHT - LEGACY



CRUS-AC-LED
LED CANOPY LIGHT - LEGACY



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LIGHTING PROPOSAL LD-133509-2

43 X 40 CANOPY RADIOSITY
STATE HWY 75
KETCHUM,ID

BY:MWE	DATE:6-20-16	REV:6-30-16	SHEET 1 OF 1

SCALE: 1"=16' 0 16

MEMORANDUM

125 West Main Street
Bozeman, MT 59715
(406) 624-6117
www.altaplanning.com

To: Roy Bracken
North Town Partners Lot 5A Ketchum Idaho

From: Joe Gilpin, Principal

Date: June 29, 2016

Re: Motor Fueling Station Pedestrian Analysis

Introduction

This preliminary analysis of pedestrian access at the proposed Motor Fueling Station summarizes the site, pedestrian issues and design recommendations for the site as well as an approximately 3-block area study area.

To the Station Context and Recommendations

Located at the intersection of 10th Street and North Main Street, there are three major pedestrian catchment areas associated with the motor fueling station (illustrated in Figure 1). Pedestrians from these catchment areas will primarily access the site via North Main Street and 10th Street. Major pedestrian crossing points will include the intersections of:

- North Main Street and 9th Street
- North Main Street and 10th Street

Figure 1 illustrates catchment areas and major pedestrian access routes to the motor fueling station. The catchment areas and specific pedestrian issues and design recommendations areas are described below.

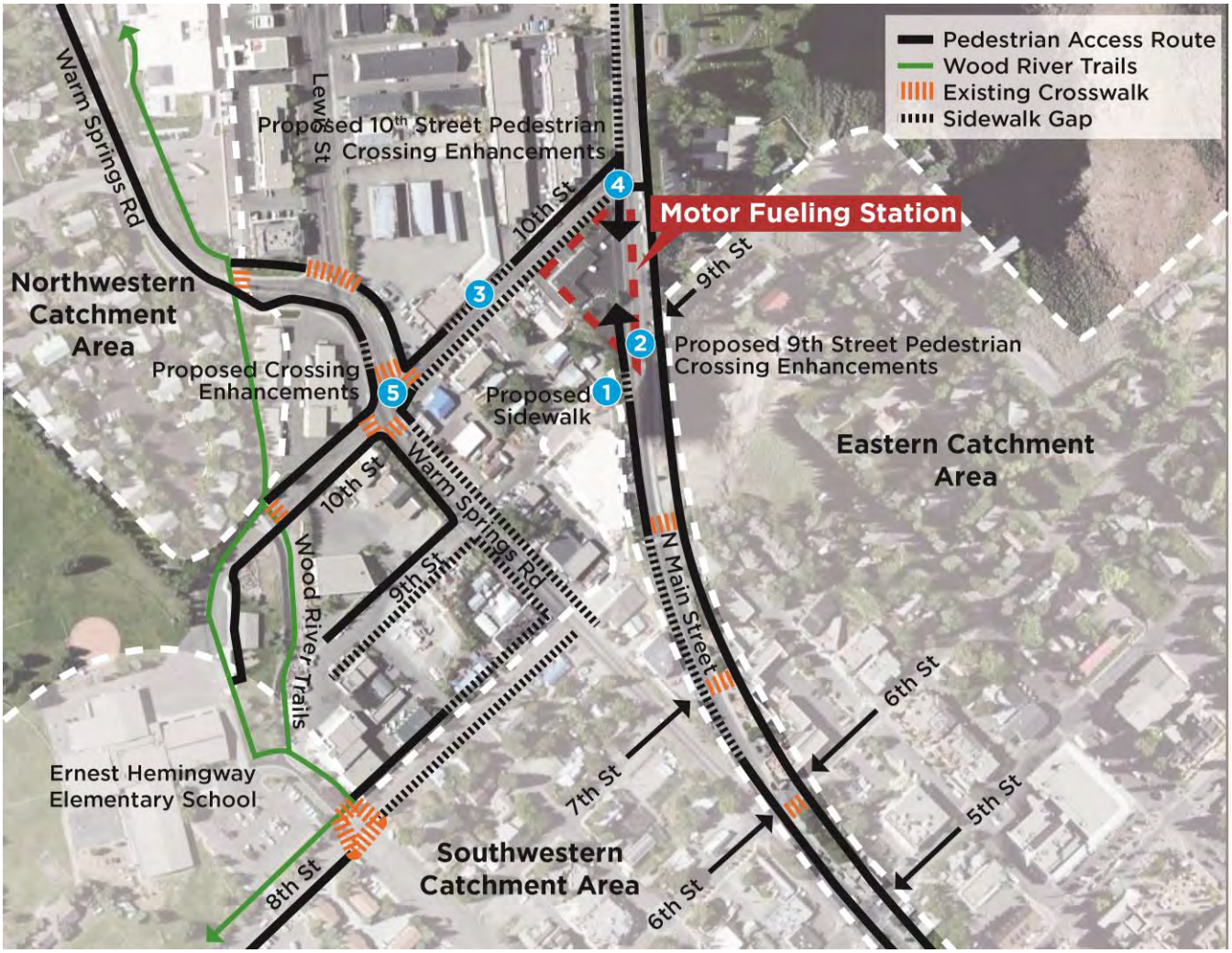


Figure 1: Pedestrian Catchment Areas and Circulation

Eastern Catchment Area Context and Recommendations

The eastern catchment area is comprised of a residential area and commercial district along North Main Street (State Highway 75). Pedestrians are likely to travel to the site along the eastern side of North Main Street and cross to the site at 9th Street. The sidewalk along the eastern side of North Main Street provides a connection from perpendicular streets to the site, with less g aps and driveway crossing than the western sidewalk. To address the existing gap in pedestrian facilities, a 5' concrete sidewalk (1) is proposed to connect pedestrians from Shum's Frenchman Place Condo to the motor fueling station.

A rectangular rapid flashing beacon (2), crosswalk and dedicated pedestrian ramps are proposed at the 9th Street crossing. The rectangular rapid flashing beacon (RRFB) would establish a high-visibility strobe-like warning to drivers when pedestrians are using the crosswalk, increasing motorist yielding compliance and pedestrian safety.

Southwestern Catchment Area Context and Recommendations

The southwestern catchment area is comprised of a residential area, commercial district along North Main Street, and the Ernest Hemingway Elementary School. Pedestrians are likely to travel to the motor fueling station along the western side of North Main Street or 10th Street. Driveways and parking along the length of 10th Street create large gaps in pedestrian facilities on both the north and south side of 10th Street. While the potential for pedestrian and vehicle conflicts are high along both sides of 10th, the north side is more desirable for pedestrian travel as only one large gap in sidewalk exists. There is no existing sidewalk on the south side of 10th, additionally the street is served with long banks of parallel parking, however there are two significant frontages where front-in perpendicular parking is present on both sides of the street. This is the least compatible parking type with pedestrians as the driver does not have any view of street conditions behind before backing up.

Options for clearly defining a pedestrian zone through this gap (3) are recommended. Converting the pull-in parking to angle parking bays would create space to establish a sidewalk between the business front and parking. If existing parking through this area prohibits a dedicated sidewalk facilities signage, changes in pavement material or color could help to define and increase visibility of pedestrian through this area.

Pedestrian crosswalks are recommended at the intersection of North Main Street and 10th Street (4) and Warm Springs Road and 10th Street (5). A RRFB should also be considered to increase pedestrian safety.

Northwestern Catchment Area Context and Recommendations

The northwestern catchment area is comprised of a residential area connected to the southwestern catchment area and motor fueling station via the Wood River Trail and existing sidewalks. Traveling along the trail or sidewalks, pedestrians are likely to travel to the motor fueling station along 10th Street.

Sidewalk and crossing improvement enhancements reflect recommendations along 10th Street outlined for the Southwestern Catchment Area.

Major Pedestrian Access Routes

Pull-in parking exists along many of the major pedestrian access routes and creates gaps in connectivity. While establishing continuous pedestrian facilities along these routes is outside of the scope of the Motor Fueling Station project, future initiatives should engage property and business owners to discuss converting pull-in spaces to angled parking bays. This would create space for the establishment of clear pedestrian zones between the angled parking and front of business, enhancing building fronts and connections to the surrounding area.

Another strategy for establishing continuous pedestrian facilities could include narrowing travel lanes and/or replacing pull-in parking with parallel parking. This would also allow for the establishment buffer area between the sidewalk and travel lanes, enhancing pedestrian comfort. The buffer area could be landscaped and act as snow storage in the winter. This strategy would result in significant loss of parking.

Motor Fueling Station Issues and Recommendations

Proposed plans (figure 2) for the Motor Fueling Station include pedestrian connections to and through the site. Existing proposals illustrate crosswalks across 10th Street and North Main Street, as described in previous catchment area recommendations. Proposed improvements also include ADA ramps at crosswalk sites and a sidewalk along North Main Street. A pedestrian crossing (1) should be considered south of the site in a location that it can be straight and moved away from the lane taper. A second pedestrian crossing should be considered in the illustrated location (2) unless moving to the north where the roadway is narrower could align with Knob Hill Inn Access. The northern crossing location would also require a pedestrian landing/sidewalk area.

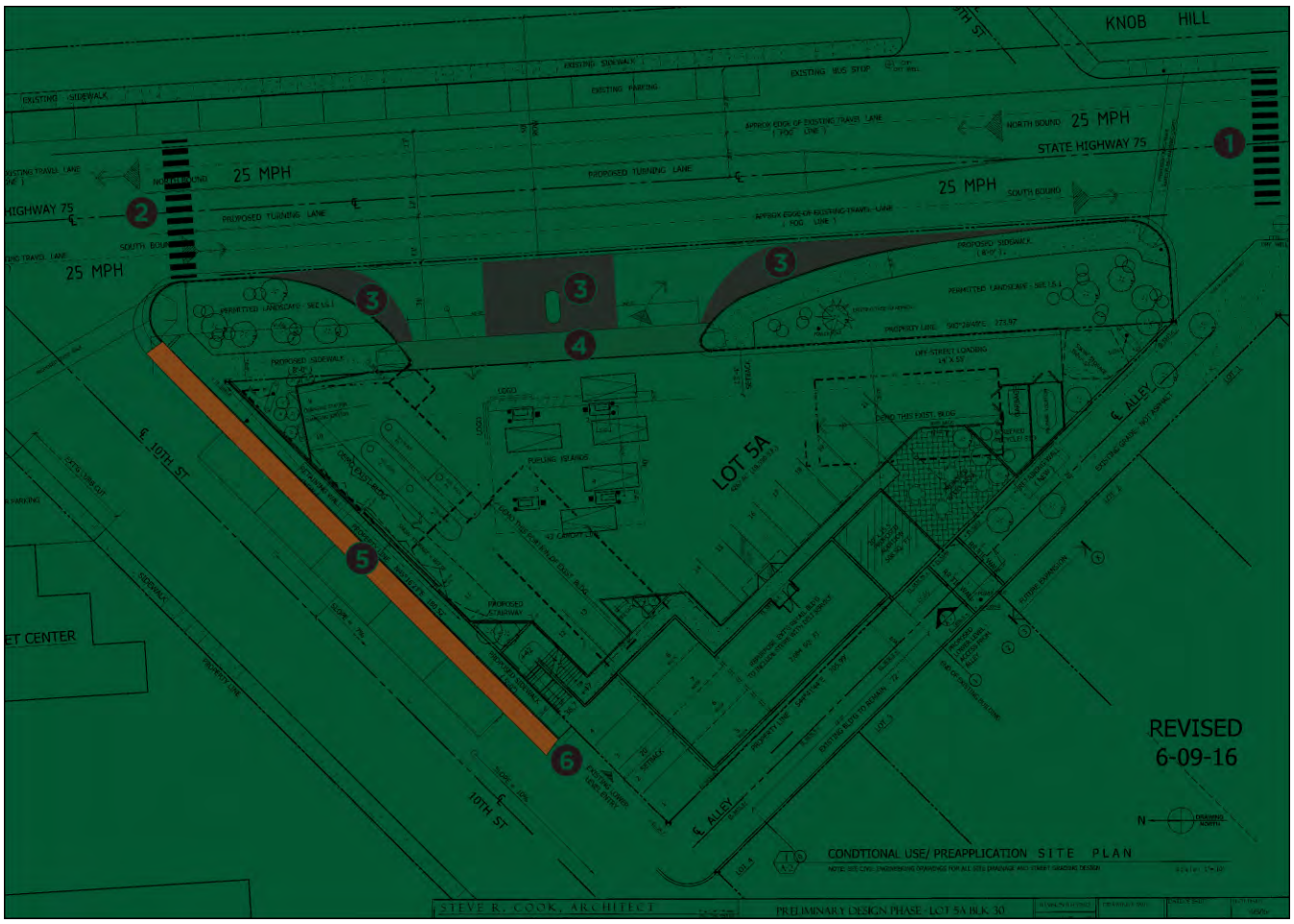


Figure 2: Proposed Site Plan

Pedestrian access to the site could be further enhanced by more clearly defining the pedestrian zone across the vehicle entrance through changes in the hardscape. One strategy is to better define the path for the most common vehicle to access the gas station (the passenger vehicle), while still allowing for the larger fueling trucks and other users to negotiate the entrance. The pictures below (figure 3) illustrate how the visibility of a pedestrian zone is enhanced through the use of colored/stamped pavement. Similar to the treatment below, the combination of rolled curbs and colored/stamped pavement (3) would maintain the wide turning radii required for large vehicles to access the site while lessening the gap in a dedicated pedestrian zone. Colored pedestrian areas (4) would also provide heightened awareness of walkers through primary vehicle access areas.

Figure 3: Stamped/colored pavement with rolled curb

Reducing the eastbound travel lane to 12' would allow for the addition of a 5' landscape area (5). The landscape area would serve as a year-round buffer between pedestrian and vehicle travel and in the winter serve as snow storage. West of this area (6), engineering solutions should be explored to continue the sidewalk beyond the retaining wall.

Gmail by Google

Steve Cook <steve@stevecookarchitect.com>

Connector Sidewalk from Bracken Station to Frenchmans

Dave Jensen <Dave.Jensen@itd.idaho.gov> Mon, Jun 27, 2016 at 10:41 AM
To: Josh Gilder <josh@bma5b.com>
Cc: Steve Cook <steve@stevecookarchitect.com>, Sam Stahlnecker <sam@bma5b.com>

The sidewalk design connecting Bracken Station to businesses to the South has been approved by the ITD permit committee.

Thank you,

Dave Jensen TTS

Permit Coordinator

Idaho Transportation Department, D-4

216 South Date Street

Shoshone ID 83352 1521

208-886-7853 office

208-886-7895 fax

208-316-6449 cell

dave.jensen@itd.idaho.gov

From: Josh Gilder [mailto:josh@bma5b.com]
Sent: Monday, June 27, 2016 9:54 AM
To: Dave Jensen
Cc: Steve Cook; Sam Stahlnecker
Subject: Connector Sidewalk from Bracken Station to Frenchmans

[Quoted text hidden]

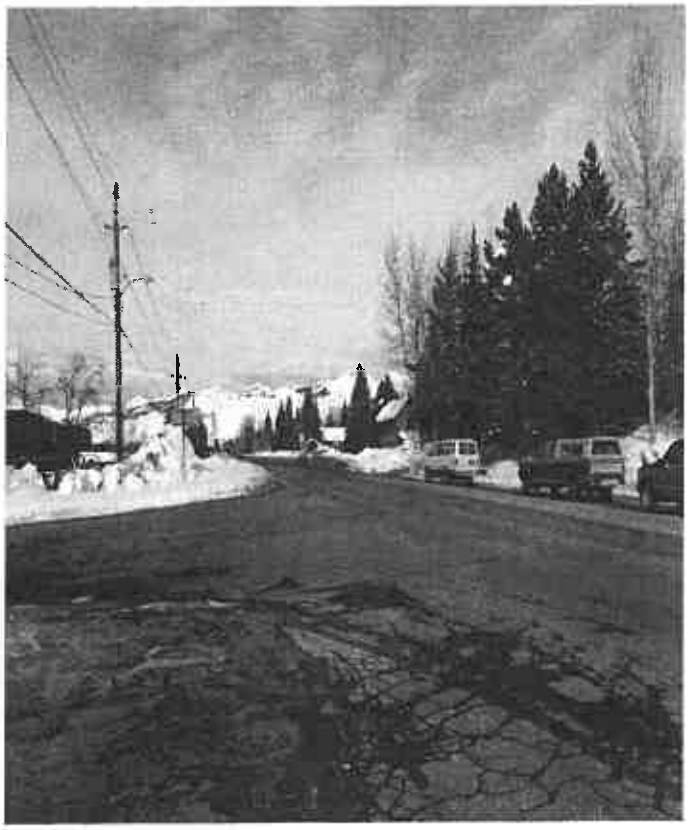
Retail S Analysis

- **Hwy 75 & 10th Street**
- **Sun Valley ID**
- **January 2016**
- **Scenario- Store with Gas**
- **GmapUSA**

GmapUSA
1023 Hartland Dr Lawrence KS 66049
703 919 2430

Retail S Analysis

- **Visibility and Access to Site**
- **Good Visibility - Open view on corner**
- **Good Access - Direct access to site from Hwy 75**



GmapUSA
1023 Hartland Dr Lawrence KS 66049
703 919 2430

Retail S Analysis

Investment Parameters

Site-type: Total New Site
Brand: Gas = Sinclair Store = Sun Valley Mart

The scope of this analysis will include the potential of a Gas and C-store site with front parking in Ketchum Idaho.

The analysis was based on a location that will offer 8 gas fueling positions. The store will be 2200 square foot with 7 front parking spots.

Data Field Review

This study is based on survey data collected for competitive retail sites within 1.00 miles of the focus site, which has no direct competition at this time.

A full site survey was completed for each of these sites. Additional demographic, and income data, as well as traffic count information, were utilized in the completion of the study.

Trade Area

The site is located at the corner of Highway 75 and 10th Street in Ketchum Idaho. It is an intersection that does not have a stoplight. The Site will have good visibility and will have good access due to wide open curb cuts and pace of traffic.

The layout with the new store and gas pumps should focus on traffic that travels on Hwy 75, which should continue to carry the main traffic flow past the site.

The population is around 3,200 people within 2.0 miles and the median age is about 47 years old. The population is somewhat lighter than ideal for this type of site location and the median age is a little high for ideal C-store customer base population. However the focus for this site is the winter and especially the summer tourists that pass through this town.

The traffic count for Hwy 75 is estimated to be about 12,000 cars a day.

There are major seasonal variations affecting this trade area.

Competitive Environment- Fuel and C-store

There is no real competition in the local trade area for this location. There are some locations off the main street but offer no real competition to the main traffic flow of this location. They are small format sites and the trade area is completely different that this location's in terms of potential customers.

So overall there is no real competition in the trade area, the opportunity exists to capture some good business at this location.

Site Layout Options

The Layout should focus on Hwy 75 and if possible the store should face the highway. The key for this site is to have a unique design and graphic package outside and inside the store. We would highly recommend using the design firm that has the ability to create a statement store for this area.

It is important that all retail options fit on the lot without interference to each other Convenience of use becomes a high priority when you are creating a new market area.

.

Business Projections

One of the keys for this site is to provide a good operation with a good offering that will bring in the commuter that passes by the intersection on a consistent basis. The store size is typically an important factor but in this area the offering and the access to the store are more important. However even more key will be the visibility and access to both the gas and store.

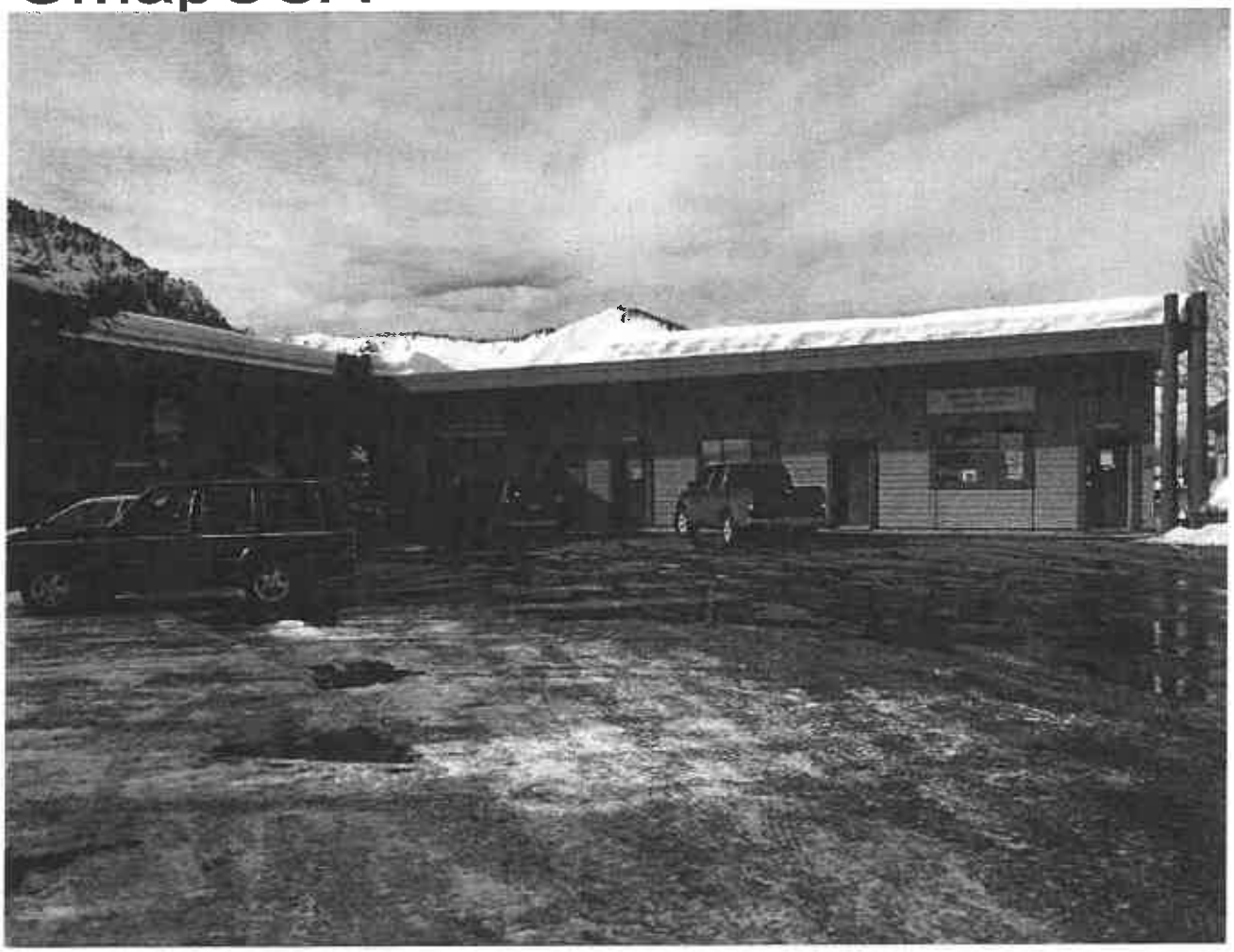
The focus on the merchandising should be having a quality offering that entices the commuter/tourist traffic that passes by the site on a regular basis. The site should have a large fountain and coffee offering to entice the commuters to use this site as their refreshment spot.

The site is on a key intersection in the local trade area, where there is no real competition within area this location, so care needs to be taken to make sure the car access points for the fuel islands and store are nice and easy with no negative impacts so this site can become a destination stop.

Overall the site is on a good corner is the area and has good potential. The traffic passing by the site is strong and along with the residential backup the location should do well. It might take a while to ramp up this location since the customer has not been conditioned to stop here, but an aggressive pricing posture would speed up the ramp up process.

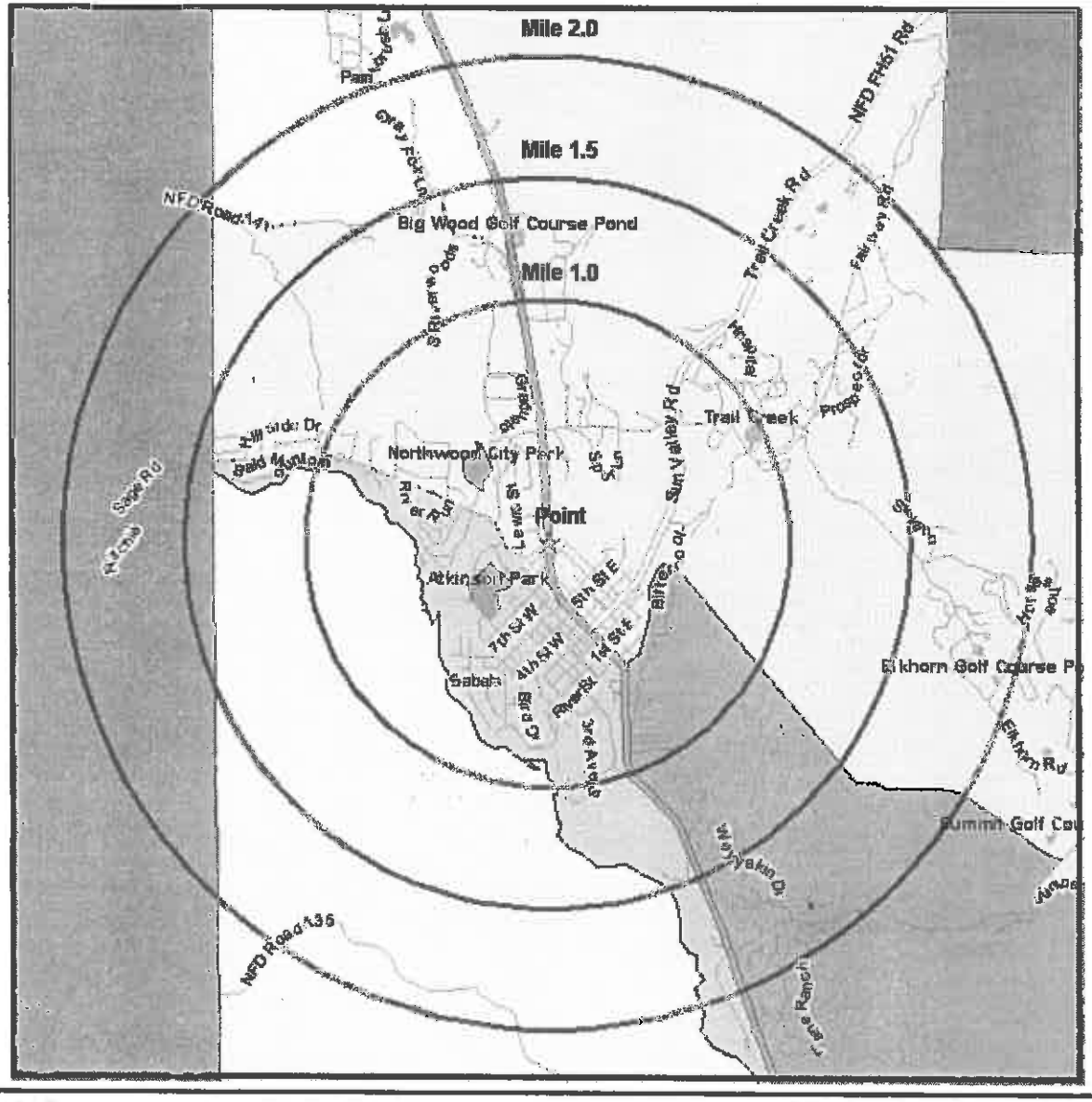
Field Survey Section Sun Valley Idado

- Hwy 75 & 10th Street
- January 2016
- GmapUSA



Population Current-Year

Sun Valley Site



N MAIN ST AT 10TH ST E
KETCHUM,ID 83340
Coord: 43.685806, -114.367549
Radius - See Appendix for Details

Prepared For: Roy Bracken

Prepared By: GmapUSA

GmapUSA

Appendix: Area Listing

Area Name:

Type: Radius 1

Radius Definition:

N MAIN ST AT 10TH ST E	Center Point:	43.685806		-114.367549
KETCHUM, ID 83340	Circle/Band:	0.00	-	1.00

Area Name:

Type: Radius 2

Radius Definition:

N MAIN ST AT 10TH ST E	Center Point:	43.685806		-114.367549
KETCHUM, ID 83340	Circle/Band:	0.00	-	1.50

Area Name:

Type: Radius 3

Radius Definition:

N MAIN ST AT 10TH ST E	Center Point:	43.685806		-114.367549
KETCHUM, ID 83340	Circle/Band:	0.00	-	2.00

Project Information:

Site: 2

Order Number: 975616310

Pop-Facts: Demographic Snapshot 2015 Report

Sun Valley Site

Radius 1: N MAIN ST AT 10TH ST E, KETCHUM, ID 83340, aggregate
Radius 2: N MAIN ST AT 10TH ST E, KETCHUM, ID 83340, aggregate
Radius 3: N MAIN ST AT 10TH ST E, KETCHUM, ID 83340, aggregate

Description	0.00 - 1.00 miles *Radius 1*	%	0.00 - 1.50 miles *Radius 2*	%	0.00 - 2.00 miles *Radius 3*	%
Population						
2020 Projection	1,771		2,390		2,989	
2015 Estimate	1,892		2,533		3,153	
2010 Census	2,099		2,782		3,442	
2000 Census	2,369		3,097		3,786	
Growth 2015-2020	-6.39%		-5.65%		-5.22%	
Growth 2010-2015	-9.84%		-8.95%		-8.38%	
Growth 2000-2010	-11.42%		-10.17%		-9.09%	
2015 Est. Population by Single-Classification Race	1,892		2,533		3,153	
White Alone	1,694	89.53	2,290	90.41	2,850	90.39
Black or African American Alone	4	0.21	4	0.16	5	0.16
Amer. Indian and Alaska Native Alone	5	0.26	7	0.28	10	0.32
Asian Alone	30	1.59	38	1.50	46	1.46
Native Hawaiian and Other Pac. Isl. Alone	0	0.00	1	0.04	2	0.06
Some Other Race Alone	137	7.24	163	6.44	204	6.47
Two or More Races	22	1.16	30	1.18	37	1.17
2015 Est. Population by Hispanic or Latino Origin	1,892		2,533		3,153	
Not Hispanic or Latino	1,704	90.06	2,303	90.92	2,862	90.77
Hispanic or Latino:	188	9.94	230	9.08	291	9.23
Mexican	111	59.04	138	60.00	177	60.82
Puerto Rican	4	2.13	5	2.17	6	2.06
Cuban	0	0.00	0	0.00	0	0.00
All Other Hispanic or Latino	72	38.30	87	37.83	109	37.46
2015 Est. Hisp. or Latino Pop by Single-Class. Race	188		230		291	
White Alone	38	20.21	51	22.17	67	23.02
Black or African American Alone	1	0.53	1	0.43	2	0.69
American Indian and Alaska Native Alone	4	2.13	5	2.17	7	2.41
Asian Alone	5	2.66	6	2.61	6	2.06
Native Hawaiian and Other Pacific Islander Alone	0	0.00	0	0.00	0	0.00
Some Other Race Alone	135	71.81	160	69.57	200	68.73
Two or More Races	5	2.66	7	3.04	9	3.09

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Description	0.00 - 1.00 miles *Radius 1*	%	0.00 - 1.50 miles *Radius 2*	%	0.00 - 2.00 miles *Radius 3*	%
2015 Est. Pop by Race, Asian Alone, by Category	30		38		46	
Chinese, except Taiwanese	0	0.00	0	0.00	0	0.00
Filipino	14	46.67	18	47.37	22	47.83
Japanese	6	20.00	8	21.05	10	21.74
Asian Indian	0	0.00	0	0.00	0	0.00
Korean	1	3.33	1	2.63	1	2.17
Vietnamese	0	0.00	0	0.00	0	0.00
Cambodian	0	0.00	0	0.00	0	0.00
Hmong	0	0.00	0	0.00	0	0.00
Laotian	0	0.00	0	0.00	0	0.00
Thai	9	30.00	11	28.95	13	28.26
All Other Asian Races Including 2+ Category	0	0.00	0	0.00	0	0.00
2015 Est. Population by Ancestry	1,892		2,533		3,153	
Arab	0	0.00	0	0.00	0	0.00
Czech	35	1.85	44	1.74	54	1.71
Danish	10	0.53	16	0.63	22	0.70
Dutch	25	1.32	32	1.26	40	1.27
English	266	14.06	372	14.69	473	15.00
French (except Basque)	48	2.54	62	2.45	76	2.41
French Canadian	0	0.00	0	0.00	0	0.00
German	208	10.99	283	11.17	355	11.26
Greek	4	0.21	5	0.20	6	0.19
Hungarian	1	0.05	2	0.08	4	0.13
Irish	129	6.82	170	6.71	210	6.66
Italian	55	2.91	72	2.84	88	2.79
Lithuanian	0	0.00	0	0.00	0	0.00
United States or American	82	4.33	111	4.38	139	4.41
Norwegian	101	5.34	130	5.13	159	5.04
Polish	18	0.95	22	0.87	26	0.82
Portuguese	0	0.00	1	0.04	1	0.03
Russian	4	0.21	6	0.24	7	0.22
Scottish	41	2.17	57	2.25	71	2.25
Scotch-Irish	47	2.48	58	2.29	70	2.22
Slovak	0	0.00	1	0.04	2	0.06
Subsaharan African	0	0.00	0	0.00	0	0.00
Swedish	30	1.59	39	1.54	47	1.49
Swiss	5	0.26	7	0.28	8	0.25
Ukrainian	0	0.00	0	0.00	0	0.00
Welsh	0	0.00	0	0.00	0	0.00
West Indian (except Hisp. groups)	0	0.00	0	0.00	0	0.00
Other ancestries	698	36.89	933	36.83	1,161	36.82

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Description	0.00 - 1.00 miles *Radius 1*	%	0.00 - 1.50 miles *Radius 2*	%	0.00 - 2.00 miles *Radius 3*	%
2015 Est. Population by Ancestry						
Ancestry Unclassified	85	4.49	110	4.34	135	4.28
2015 Est. Pop Age 5+ by Language Spoken at Home	1,825		2,448		3,048	
Speak Only English at Home	1,465	80.27	1,972	80.56	2,459	80.68
Speak Asian/Pac. Isl. Lang. at Home	5	0.27	12	0.49	19	0.62
Speak IndoEuropean Language at Home	48	2.63	61	2.49	74	2.43
Speak Spanish at Home	307	16.82	402	16.42	496	16.27
Speak Other Language at Home	0	0.00	0	0.00	0	0.00
2015 Est. Population by Sex	1,892		2,533		3,153	
Male	975	51.53	1,305	51.52	1,624	51.51
Female	917	48.47	1,228	48.48	1,529	48.49
2015 Est. Population by Age	1,892		2,533		3,153	
Age 0 - 4	67	3.54	85	3.36	105	3.33
Age 5 - 9	85	4.49	107	4.22	131	4.15
Age 10 - 14	85	4.49	110	4.34	139	4.41
Age 15 - 17	47	2.48	64	2.53	81	2.57
Age 18 - 20	41	2.17	57	2.25	73	2.32
Age 21 - 24	48	2.54	71	2.80	93	2.95
Age 25 - 34	269	14.22	342	13.50	396	12.56
Age 35 - 44	270	14.27	344	13.58	410	13.00
Age 45 - 54	289	15.27	376	14.84	459	14.56
Age 55 - 64	304	16.07	419	16.54	539	17.09
Age 65 - 74	260	13.74	371	14.65	483	15.32
Age 75 - 84	101	5.34	150	5.92	198	6.28
Age 85 and over	24	1.27	36	1.42	46	1.46
Age 16 and over	1,638	86.58	2,209	87.21	2,750	87.22
Age 18 and over	1,607	84.94	2,167	85.55	2,697	85.54
Age 21 and over	1,566	82.77	2,110	83.30	2,624	83.22
Age 65 and over	385	20.35	557	21.99	727	23.06
2015 Est. Median Age	46.1		47.3		48.2	
2015 Est. Average Age	44.6		45.5		46.0	

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Description	0.00 - 1.00 miles Radius 1	%	0.00 - 1.50 miles Radius 2	%	0.00 - 2.00 miles Radius 3	%
2015 Est. Male Population by Age	975		1,305		1,624	
Age 0 - 4	34	3.49	43	3.30	54	3.33
Age 5 - 9	45	4.62	55	4.21	66	4.06
Age 10 - 14	38	3.90	51	3.91	67	4.13
Age 15 - 17	25	2.56	33	2.53	42	2.59
Age 18 - 20	23	2.36	32	2.45	40	2.46
Age 21 - 24	26	2.67	39	2.99	51	3.14
Age 25 - 34	139	14.26	177	13.56	207	12.75
Age 35 - 44	155	15.90	197	15.10	232	14.29
Age 45 - 54	144	14.77	186	14.25	225	13.85
Age 55 - 64	156	16.00	214	16.40	275	16.93
Age 65 - 74	128	13.13	184	14.10	241	14.84
Age 75 - 84	47	4.82	72	5.52	98	6.03
Age 85 and over	15	1.54	21	1.61	27	1.66
2015 Est. Median Age, Male	45.2		46.4		47.4	
2015 Est. Average Age, Male	44.4		45.2		45.8	
2015 Est. Female Population by Age	917		1,228		1,529	
Age 0 - 4	33	3.60	42	3.42	52	3.40
Age 5 - 9	41	4.47	52	4.23	65	4.25
Age 10 - 14	47	5.13	59	4.80	72	4.71
Age 15 - 17	22	2.40	31	2.52	39	2.55
Age 18 - 20	18	1.96	25	2.04	33	2.16
Age 21 - 24	23	2.51	33	2.69	42	2.75
Age 25 - 34	130	14.18	164	13.36	190	12.43
Age 35 - 44	115	12.54	148	12.05	178	11.64
Age 45 - 54	145	15.81	190	15.47	233	15.24
Age 55 - 64	148	16.14	204	16.61	264	17.27
Age 65 - 74	131	14.29	187	15.23	242	15.83
Age 75 - 84	54	5.89	78	6.35	100	6.54
Age 85 and over	10	1.09	15	1.22	20	1.31
2015 Est. Median Age, Female	47.0		48.2		49.0	
2015 Est. Average Age, Female	44.8		45.7		46.2	

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Description	0.00 - 1.00 miles *Radius 1*	%	0.00 - 1.50 miles *Radius 2*	%	0.00 - 2.00 miles *Radius 3*	%
2015 Est. Pop Age 15+ by Marital Status	1,654		2,230		2,778	
Total, Never Married	584	35.31	730	32.74	849	30.56
Males, Never Married	368	22.25	462	20.72	539	19.40
Females, Never Married	215	13.00	268	12.02	310	11.16
Married, Spouse present	639	38.63	914	40.99	1,210	43.56
Married, Spouse absent	83	5.02	123	5.52	161	5.80
Widowed	52	3.14	87	3.90	116	4.18
Males Widowed	22	1.33	33	1.48	44	1.58
Females Widowed	30	1.81	53	2.38	71	2.56
Divorced	296	17.90	377	16.91	443	15.95
Males Divorced	111	6.71	154	6.91	192	6.91
Females Divorced	186	11.25	223	10.00	251	9.04
2015 Est. Pop Age 25+ by Edu. Attainment	1,518		2,038		2,531	
Less than 9th grade	69	4.55	85	4.17	101	3.99
Some High School, no diploma	37	2.44	45	2.21	53	2.09
High School Graduate (or GED)	181	11.92	231	11.33	277	10.94
Some College, no degree	281	18.51	385	18.89	493	19.48
Associate Degree	28	1.84	60	2.94	87	3.44
Bachelor's Degree	701	46.18	921	45.19	1,130	44.65
Master's Degree	164	10.80	210	10.30	251	9.92
Professional School Degree	38	2.50	64	3.14	85	3.36
Doctorate Degree	17	1.12	37	1.82	55	2.17
2015 Est. Pop Age 25+ by Edu. Attain., Hisp./Lat.	114		140		173	
No High School Diploma	80	70.18	98	70.00	120	69.36
High School Graduate	20	17.54	25	17.86	30	17.34
Some College or Associate's Degree	9	7.89	13	9.29	17	9.83
Bachelor's Degree or Higher	4	3.51	5	3.57	6	3.47
Households						
2020 Projection	899		1,198		1,484	
2015 Estimate	962		1,272		1,566	
2010 Census	1,071		1,401		1,712	
2000 Census	1,208		1,550		1,867	
Growth 2015-2020	-6.55%		-5.78%		-5.25%	
Growth 2010-2015	-10.17%		-9.24%		-8.55%	
Growth 2000-2010	-11.35%		-9.61%		-8.27%	

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Description	0.00 - 1.00 miles *Radius 1*	%	0.00 - 1.50 miles *Radius 2*	%	0.00 - 2.00 miles *Radius 3*	%
2015 Est. Households by Household Type	962		1,272		1,566	
Family Households	416	43.24	571	44.89	734	46.87
Nonfamily Households	546	56.76	701	55.11	832	53.13
2015 Est. Group Quarters Population	8		49		76	
2015 HHs by Ethnicity, Hispanic/Latino	58	6.03	70	5.50	87	5.56
2015 Est. Households by HH Income	962		1,272		1,566	
Income < $15,000	90	9.36	127	9.98	162	10.34
Income $15,000 - $24,999	83	8.63	106	8.33	132	8.43
Income $25,000 - $34,999	151	15.70	193	15.17	229	14.62
Income $35,000 - $49,999	113	11.75	150	11.79	189	12.07
Income $50,000 - $74,999	203	21.10	258	20.28	310	19.80
Income $75,000 - $99,999	125	12.99	157	12.34	184	11.75
Income $100,000 - $124,999	93	9.67	120	9.43	140	8.94
Income $125,000 - $149,999	25	2.60	37	2.91	52	3.32
Income $150,000 - $199,999	25	2.60	44	3.46	65	4.15
Income $200,000 - $249,999	13	1.35	20	1.57	27	1.72
Income $250,000 - $499,999	27	2.81	39	3.07	51	3.26
Income $500,000+	15	1.56	21	1.65	25	1.60
2015 Est. Average Household Income	$76,207		$78,250		$79,592	
2015 Est. Median Household Income	$55,476		$55,759		$55,671	
2015 Median HH Inc. by Single-Class, Race or Eth.						
White Alone	57,037		57,277		57,228	
Black or African American Alone	106,680		104,375		100,504	
American Indian and Alaska Native Alone	62,500		62,500		62,500	
Asian Alone	58,370		58,753		59,672	
Native Hawaiian and Other Pacific Islander Alone	0		56,250		56,250	
Some Other Race Alone	39,903		39,667		39,133	
Two or More Races	14,999		14,999		14,999	
Hispanic or Latino	58,723		58,516		57,610	
Not Hispanic or Latino	54,989		55,369		55,388	
2015 Est. Family HH Type by Presence of Own Child.	416		571		734	
Married-Couple Family, own children	115	27.64	152	26.62	194	26.43

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Description	0.00 - 1.00 miles Radius 1	%	0.00 - 1.50 miles Radius 2	%	0.00 - 2.00 miles Radius 3	%
Married-Couple Family, no own children	222	53.37	320	56.04	422	57.49
Male Householder, own children	19	4.57	23	4.03	27	3.68
Male Householder, no own children	10	2.40	13	2.28	16	2.18
Female Householder, own children	32	7.69	40	7.01	47	6.40
Female Householder, no own children	18	4.33	22	3.85	26	3.54
2015 Est. Households by Household Size	962		1,272		1,566	
1-person	396	41.16	519	40 80	629	40.17
2-person	358	37.21	484	38.05	605	38.63
3-person	110	11.43	141	11.08	170	10.86
4-person	66	6.86	85	6.68	108	6.90
5-person	24	2.49	32	2.52	41	2.62
6-person	5	0.52	7	0.55	9	0.57
7-or-more-person	3	0.31	4	0.31	5	0.32
2015 Est. Average Household Size	1.96		1.95		1.97	
2015 Est. Households by Presence of People Under 18	962		1,272		1,566	
Households with 1 or More People under Age 18:	173	17.98	224	17.61	279	17.82
Married-Couple Family	116	67.05	154	68.75	197	70.61
Other Family, Male Householder	21	12.14	26	11.61	30	10.75
Other Family, Female Householder	33	19.08	42	18.75	50	17.92
Nonfamily, Male Householder	1	0.58	1	0.45	1	0.36
Nonfamily, Female Householder	1	0.58	1	0.45	1	0.36
Households with No People under Age 18:	789	82.02	1,048	82.39	1,286	82.12
Married-Couple Family	221	28.01	318	30.34	420	32.66
Other Family, Male Householder	8	1.01	11	1.05	13	1.01
Other Family, Female Householder	17	2.15	21	2.00	24	1.87
Nonfamily, Male Householder	294	37.26	376	35.88	448	34.84
Nonfamily, Female Householder	249	31.56	322	30.73	382	29.70
2015 Est. Households by Number of Vehicles	962		1,272		1,566	
No Vehicles	68	7.07	80	6.29	87	5.56
1 Vehicle	328	34.10	442	34.75	537	34.29
2 Vehicles	380	39.50	502	39.47	627	40.04
3 Vehicles	175	18.19	232	18.24	290	18.52
4 Vehicles	8	0.83	11	0.86	16	1.02
5 or more Vehicles	4	0.42	5	0.39	9	0.57
2015 Est. Average Number of Vehicles	1.7		1.7		1.8	

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Description	0.00 - 1.00 miles *Radius 1*	%	0.00 - 1.50 miles *Radius 2*	%	0.00 - 2.00 miles *Radius 3*	%
Family Households						
2020 Projection	391		541		699	
2015 Estimate	416		571		734	
2010 Census	460		624		797	
2000 Census	484		649		826	
Growth 2015-2020	-5.98%		-5.17%		-4.75%	
Growth 2010-2015	-9.67%		-8.60%		-7.94%	
Growth 2000-2010	-4.94%		-3.89%		-3.56%	
2015 Est. Families by Poverty Status	416		571		734	
2015 Families at or Above Poverty	410	98.56	563	98.60	723	98.50
2015 Families at or Above Poverty with Children	107	25.72	146	25.57	187	25.48
2015 Families Below Poverty	5	1.20	7	1.23	10	1.36
2015 Families Below Poverty with Children	1	0.24	1	0.18	2	0.27
2015 Est. Pop Age 16+ by Employment Status	1,638		2,209		2,750	
In Armed Forces	0	0.00	0	0.00	0	0.00
Civilian - Employed	1,044	63.74	1,403	63.51	1,744	63.42
Civilian - Unemployed	119	7.26	154	6.97	188	6.84
Not in Labor Force	474	28.94	652	29.52	819	29.78
2015 Est. Civ. Employed Pop 16+ by Class of Worker	1,061		1,423		1,769	
For-Profit Private Workers	648	61.07	888	62.40	1,104	62.41
Non-Profit Private Workers	53	5.00	64	4.50	79	4.47
Local Government Workers	26	2.45	42	2.95	59	3.34
State Government Workers	27	2.54	39	2.74	47	2.66
Federal Government Workers	2	0.19	4	0.28	6	0.34
Self-Employed Workers	302	28.46	385	27.06	470	26.57
Unpaid Family Workers	1	0.09	2	0.14	4	0.23
2015 Est. Civ. Employed Pop 16+ by Occupation	1,061		1,423		1,769	
Architect/Engineer	44	4.15	57	4.01	66	3.73
Arts/Entertainment/Sports	55	5.18	74	5.20	96	5.43
Building Grounds Maintenance	70	6.60	91	6.39	110	6.22
Business/Financial Operations	13	1.23	21	1.48	30	1.70
Community/Social Services	16	1.51	20	1.41	22	1.24
Computer/Mathematical	2	0.19	6	0.42	8	0.45
Construction/Extraction	115	10.84	142	9.98	169	9.55
Education/Training/Library	36	3.39	55	3.87	69	3.90

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Description	0.00 - 1.00 miles *Radius 1*	%	0.00 - 1.50 miles *Radius 2*	%	0.00 - 2.00 miles *Radius 3*	%
Farming/Fishing/Forestry	2	0.19	6	0.42	11	0.62
Food Prep/Serving	63	5.94	101	7.10	135	7.63
Health Practitioner/Technician	18	1.70	27	1.90	38	2.15
Healthcare Support	27	2.54	31	2.18	34	1.92
Maintenance Repair	19	1.79	27	1.90	39	2.20
Legal	16	1.51	19	1.34	22	1.24
Life/Physical/Social Science	1	0.09	2	0.14	3	0.17
Management	150	14.14	221	15.53	284	16.05
Office/Admin. Support	96	9.05	122	8.57	146	8.25
Production	20	1.89	27	1.90	38	2.15
Protective Services	15	1.41	21	1.48	27	1.53
Sales/Related	190	17.91	232	16.30	272	15.38
Personal Care/Service	47	4.43	67	4.71	85	4.80
Transportation/Moving	45	4.24	56	3.94	65	3.67
2015 Est. Pop 16+ by Occupation Classification	1,061		1,423		1,769	
Blue Collar	199	18.76	252	17.71	311	17.58
White Collar	637	60.04	855	60.08	1,057	59.75
Service and Farm	224	21.11	317	22.28	401	22.67
2015 Est. Workers Age 16+ by Transp. to Work	1,052		1,411		1,753	
Drove Alone	672	63.88	870	61.66	1,070	61.04
Car Pooled	97	9.22	127	9.00	157	8.96
Public Transportation	2	0.19	5	0.35	9	0.51
Walked	76	7.22	125	8.86	162	9.24
Bicycle	74	7.03	89	6.31	102	5.82
Other Means	11	1.05	16	1.13	21	1.20
Worked at Home	120	11.41	178	12.62	233	13.29
2015 Est. Workers Age 16+ by Travel Time to Work *						
Less than 15 Minutes	753		984		1,188	
15 - 29 Minutes	177		252		333	
30 - 44 Minutes	6		12		22	
45 - 59 Minutes	3		4		6	
60 or more Minutes	6		9		14	
2015 Est. Avg. Travel Time to Work in Minutes	10.20		10.53		11.00	
2015 Est. Occupied Housing Units by Tenure	962		1,272		1,566	
Owner Occupied	568	59.04	778	61.16	989	63.15
Renter Occupied	394	40.96	494	38.84	576	36.78

Pop-Facts: Demographic Snapshot 2015 Report

Sun Valley Site

Radius 1: N MAIN ST AT 10TH ST E, KETCHUM, ID 83340, aggregate
Radius 2: N MAIN ST AT 10TH ST E, KETCHUM, ID 83340, aggregate
Radius 3: N MAIN ST AT 10TH ST E, KETCHUM, ID 83340, aggregate

Description	0.00 - 1.00 miles *Radius 1*	%	0.00 - 1.50 miles *Radius 2*	%	0.00 - 2.00 miles *Radius 3*	%
2015 Owner Occ. HUs: Avg. Length of Residence	17.3		17.3		17.4	
2015 Renter Occ. HUs: Avg. Length of Residence	7.9		7.8		7.7	
2015 Est. Owner-Occupied Housing Units by Value	568		778		989	
Value Less than $20,000	2	0.35	2	0.26	3	0.30
Value $20,000 - $39,999	7	1.23	8	1.03	11	1.11
Value $40,000 - $59,999	4	0.70	10	1.29	14	1.42
Value $60,000 - $79,999	2	0.35	3	0.39	6	0.61
Value $80,000 - $99,999	9	1.58	12	1.54	14	1.42
Value $100,000 - $149,999	16	2.82	21	2.70	27	2.73
Value $150,000 - $199,999	32	5.63	42	5.40	50	5.06
Value $200,000 - $299,999	29	5.11	40	5.14	49	4.95
Value $300,000 - $399,999	44	7.75	60	7.71	78	7.89
Value $400,000 - $499,999	18	3.17	34	4.37	46	4.65
Value $500,000 - $749,999	143	25.18	187	24.04	224	22.65
Value $750,000 - $999,999	102	17.96	137	17.61	172	17.39
Value $1,000,000 or more	160	28.17	222	28.53	294	29.73
2015 Est. Median All Owner-Occupied Housing Value	$711,172		$710,229		$718,271	
2015 Est. Housing Units by Units in Structure	2,322		3,297		4,211	
1 Unit Attached	72	3.10	110	3.34	142	3.37
1 Unit Detached	1,159	49.91	1,565	47.47	2,010	47.73
2 Units	151	6.50	235	7.13	310	7.36
3 or 4 Units	414	17.83	622	18.87	773	18.36
5 to 19 Units	374	16.11	581	17.62	754	17.91
20 to 49 Units	122	5.25	148	4.49	167	3.97
50 or More Units	19	0.82	22	0.67	26	0.62
Mobile Home or Trailer	10	0.43	13	0.39	29	0.69
Boat, RV, Van, etc.	0	0.00	0	0.00	0	0.00
2015 Est. Housing Units by Year Structure Built	2,322		3,297		4,211	
Housing Units Built 2010 or later	7	0.30	8	0.24	8	0.19
Housing Units Built 2000 to 2009	430	18.52	540	16.38	637	15.13
Housing Units Built 1990 to 1999	325	14.00	466	14.13	629	14.94
Housing Units Built 1980 to 1989	338	14.56	499	15.13	653	15.51
Housing Units Built 1970 to 1979	782	33.68	1,172	35.55	1,498	35.57
Housing Units Built 1960 to 1969	180	7.75	276	8.37	372	8.83
Housing Units Built 1950 to 1959	171	7.36	207	6.28	238	5.65

Pop-Facts: Demographic Snapshot 2015 Report

Sun Valley Site

Radius 1: N MAIN ST AT 10TH ST E, KETCHUM, ID 83340, aggregate
Radius 2: N MAIN ST AT 10TH ST E, KETCHUM, ID 83340, aggregate
Radius 3: N MAIN ST AT 10TH ST E, KETCHUM, ID 83340, aggregate

Description	0.00 - 1.00 miles		0.00 - 1.50 miles		0.00 - 2.00 miles	
	Radius 1	*%*	*Radius 2*	*%*	*Radius 3*	*%*
Housing Units Built 1940 to 1949	29	1.25	43	1.30	63	1.50
Housing Unit Built 1939 or Earlier	61	2.63	85	2.58	113	2.68
2015 Est. Median Year Structure Built**	1979		1979		1979	

*This row intentionally left blank. No total category data is available.

**1939 will appear when at least half of the Housing Units in this reports area were built in 1939 or earlier.

Pop-Facts: Demographic Snapshot 2015 Report

Sun Valley Site

Appendix: Area Listing

Area Name:

Type: Radius 1 Reporting Detail: Aggregate Reporting Level: Block Group

Radius Definition:

N MAIN ST AT 10TH ST E
KETCHUM, ID 83340

Latitude/Longitude 43.685806 -114.367549
Radius 0.00 - 1.00

Area Name:

Type: Radius 2 Reporting Detail: Aggregate Reporting Level: Block Group

Radius Definition:

N MAIN ST AT 10TH ST E
KETCHUM, ID 83340

Latitude/Longitude 43.685806 -114.367549
Radius 0.00 - 1.50

Area Name:

Type: Radius 3 Reporting Detail: Aggregate Reporting Level: Block Group

Radius Definition:

N MAIN ST AT 10TH ST E
KETCHUM, ID 83340

Latitude/Longitude 43.685806 -114.367549
Radius 0.00 - 2.00

Project Information:

Site: 1

Order Number: 975616310


WARM SPRINGS
ROAD
BRACKEN STATION
WARM SPRINGS
ROAD


WARM SPRINGS
ROAD
BRACKEN STATION

Monument Signs

The modular primary ID sign system is also available in a monument structure. The system comprises a Hallmark, price sign and an APC sign panel. Monument signs are installed where local ordinances prohibit pole signs or require smaller signs.

- Mount monument signs in masonry, stucco, metal or wood.
- Paint the masonry, stucco, metal or wood Chevron GY-210 Gray (Dark) (Dark Gray) unless prohibited by local architectural controls.
- Install the vertical column adjacent to the Hallmark and closest to the street.
- Monument signs are available in the three sizes noted.
- Only 3-product price signs are available.
- Both numeral and product grade panels are changeable.
- When using monument signs with Grand Entrance architecture, paint the base Dark Gray or Havana Cream.

◀ Street Side

The monument primary ID includes the Hallmark and price sign.

Type	Width	Height	Area Sq. Ft.
C-30M (Hallmark and price sign)	5'-1 ¾"	2'-10 ¾"	14.9
C-30M APC	5'-1 ¾"	0'- 8 ½"	3.6
C-32M (Hallmark and price sign)	6'-11 ½"	3'-10"	26.2
C-32M APC	6'-11 ½"	0'- 9 ¾"	5.7
C-45M (Hallmark and price sign)	8'- 5 ½"	4'- 8"	38.8
C-45M APC	8'- 5 ½"	0'- 9 ¾"	6.9

Primary ID Sign - Monument Retrofit

Before

After

Legacy Monument Sign (Retrofit)

- Replace legacy Hallmark faces with new Hallmark face panels across all levels.
- The new Hallmark logo and 'with TECHRON' logo panel are required.
- Replace APC faces with new design faces. Short height/ Long APCs should be refaced and converted to 2 individual faces side by side, separated by an "H" bar divider.
- Replace legacy LPS faces with new Illuminated Price Sign faces.
- In cases where Chevron branded Diesel is available at the facility, install a new Green Pricer panel below the LPS, or reface the existing diesel pricer.
- Paint monument bases Dark Gray or to match building wainscot color if the C-Store is done in the Chevron approved color scheme.

Table of Contents

58.01.07 - Rules Regulating Underground Storage Tank Systems

IDAPA 58
TITLE 01
CHAPTER 07

58.01.07 - RULES REGULATING UNDERGROUND STORAGE TANK SYSTEMS

000. LEGAL AUTHORITY.
Chapters 1 and 88, Title 39, Idaho Code, grant authority to the Board of Environmental Quality to promulgate rules for the regulation of underground storage tank systems within the state of Idaho. (4-2-08)

001. TITLE AND SCOPE.

01. Title. These rules shall be cited as IDAPA 58.01.07, "Rules Regulating Underground Storage Tank Systems." (4-2-08)

02. Scope. These rules establish standards and procedures necessary for the regulation of underground storage tank systems. Compliance with these rules shall not relieve persons from the obligation to comply with other applicable state or federal laws. (4-2-08)

002. WRITTEN INTERPRETATIONS.
As described in Section 67-5201(19)(b)(iv), Idaho Code, the Department of Environmental Quality may have written statements which pertain to the interpretation of these rules. If available, such written statements can be inspected and copied at cost at the Department of Environmental Quality, 1410 N. Hilton, Boise, Idaho 83706-1255. (4-2-08)

003. ADMINISTRATIVE PROVISIONS.
Persons may be entitled to appeal agency actions authorized under these rules pursuant to IDAPA 58.01.23, "Rules of Administrative Procedure Before the Board of Environmental Quality." (4-2-08)

004. INCORPORATION BY REFERENCE.
Any reference to any document identified in Subsection 004.01 shall constitute the full adoption by reference into IDAPA 58.01.07. (4-2-08)

01. Documents Incorporated by Reference. Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks, 40 CFR Part 280, revised as of July 1, 2007. (4-2-08)

02. Hazardous Substance Underground Storage Tank Systems. (4-2-08)

a. The following items only apply to hazardous substance underground storage tank systems and do not apply to petroleum underground storage tank systems: (4-2-08)

i. The definition of "Hazardous substance UST system" in 40 CFR 280.12 and use of this term or regulations regarding hazardous substance in 40 CFR Part 280; and (4-2-08)

ii. 40 CFR 280.42 and any reference to 40 CFR 280.42 in 40 CFR Part 280. (4-2-08)

b. All other provisions of 40 CFR Part 280 and all provisions of IDAPA 58.01.07 shall apply to hazardous substance underground storage tank systems. (4-2-08)

03. Consistency. In the event of conflict or inconsistency between the language in IDAPA 58.01.07 and that found in 40 CFR Part 280, IDAPA 58.01.07 shall prevail. (4-2-08)

04. Stringency. IDAPA 58.01.07 shall be no more stringent than federal law or regulations governing underground storage tank systems. (4-2-08)

05. Availability of Referenced Material. The federal regulations adopted by reference can be obtained at the following locations: (4-2-08)

a. U.S. Government Printing Office, www.ecfr.gov; and (4-2-08)

b. Department of Environmental Quality, Hearing Coordinator, 1410 N. Hilton, Boise, ID 83706-1255, (208)373-0502. (4-2-08)

005. OFFICE HOURS -- MAILING ADDRESS AND STREET ADDRESS.
The state office of the Department of Environmental Quality and the office of the Board of Environmental Quality are located at 1410 N. Hilton, Boise, Idaho 83706-1255, (208) 373-0502, www.deq.idaho.gov. The office hours are 8 a.m. to 5 p.m. Monday through Friday. (4-2-08)

006. CONFIDENTIALITY OF RECORDS.
Information obtained by the Department under these rules is subject to public disclosure pursuant to the provisions of Title 74, Chapter 1, Idaho Code, and IDAPA 58.01.21, "Rules Governing the Protection and Disclosure of Records in the Possession of the Idaho Department of Environmental Quality." (4-2-08)

007. -- 009. (RESERVED)

010. DEFINITIONS.
For the purpose of the rules contained in IDAPA 58.01.07, "Rules Regulating Underground Storage Tank Systems," the following definitions apply: (4-2-08)

01. **Board**. The Idaho Board of Environmental Quality. (4-2-08)

02. **Community Water System**. A public water system that serves at least fifteen (15) service connections used by year-round residents of the area served by the system or regularly serves at least twenty-five (25) year-round residents. (4-2-08)

03. **Department**. The Idaho Department of Environmental Quality. (4-2-08)

04. **Director**.The Director of the Idaho Department of Environmental Quality or his authorized agent. (4-2-08)

05. **Existing**. Solely for purposes of determining when secondary containment is required, existing is when a petroleum underground storage tank, piping, motor fuel dispensing system, facility, public water system or potable drinking water well is in place when a new installation or replacement of a tank, piping, or motor fuel dispensing system begins. (4-2-08)

06. **EPA**. The United States Environmental Protection Agency. (4-2-08)

07. **Installation of a New Motor Fuel Dispenser System**. The installation of a new motor fuel dispenser and the equipment necessary to connect the dispenser to the petroleum underground storage tank system. This equipment may include flexible connectors, risers, or other transitional components that are beneath the dispenser, below the shear valve, and connect the dispenser to the piping. It does not mean the installation of a motor fuel dispenser installed separately from the equipment needed to connect the dispenser to the petroleum underground storage tank system. (4-2-08)

08. **Installer**. Any person who installs a new or replacement petroleum underground storage tank system. (4-2-08)

09. **Motor Fuel**. Petroleum or a petroleum-based substance that is motor gasoline, aviation gasoline, No. 1 or No. 2 diesel fuel, or any grade of petroleum-blended gasohol, and is typically used in the operation of a motor engine. This includes blended petroleum motor fuels such as biodiesel and ethanol petroleum blends. (4-2-08)

10. **New Underground Storage Tank**. Has the same meaning as "underground storage tank or UST" in 40 CFR 280.12, except that such term includes tanks that have been previously used and meet the requirements of 40 CFR 280.20(a). (4-2-08)

11. **Non-Community Water System**. A public water system that is not a community water system. A

non-community water system is either a transient non-community water system or a non-transient non-community water system. (4-2-08)

12. **Person**. An individual, trust, firm, joint stock company, federal agency, corporation, state, municipality, commission, political subdivision of a state, or any interstate body. "Person" also includes a consortium, a joint venture, a commercial entity, and the United States government. (4-2-08)

13. **Piping**. A hollow cylinder or a tubular conduit constructed of non-earthen materials that routinely contains and conveys regulated petroleum substances from the petroleum underground storage tank(s) to the dispenser(s) or other end-use equipment. It does not mean vent, vapor recovery, or fill lines that do not routinely contain regulated petroleum substances. (4-2-08)

14. **Potable Drinking Water Well**. Any hole (dug, driven, drilled, or bored) that extends into the earth until it meets ground water which supplies water for a non-community public water system or otherwise supplies water for household use (consisting of drinking, bathing, and cooking, or other similar uses). Such wells may provide water to entities such as a single-family residence, group of residences, businesses, schools, parks, campgrounds, and other permanent or seasonal communities. (4-2-08)

15. **Product Deliverer**. Any person who delivers or deposits product into a petroleum underground storage tank. This term may include major oil companies, jobbers, petroleum transportation companies, or other product delivery entities. (4-2-08)

16. **Public Water System**. A system for the provision to the public of water for human consumption through pipes or, after August 5, 1998, other constructed conveyances, if such system has at least fifteen (15) service connections or regularly serves an average of at least twenty-five (25) individuals daily at least sixty (60) days out of the year. Such term includes: any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system; and, any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. Such term does not include any "special irrigation district." A public water system is either a "community water system" or a "non-community water system." (4-2-08)

17. **Red Tag**. A tamper-resistant tag, device, or mechanism attached to the tank's fill pipes that clearly identifies a petroleum underground storage tank as ineligible for product delivery. The tag or device shall be visible to the product deliverer and shall clearly state that it is unlawful to deliver to, deposit into, or accept product into the ineligible petroleum underground storage tank. (4-2-08)

18. **Repair**. Solely for purposes of determining when secondary containment is required, as it applies to petroleum underground storage tanks, piping, and motor fuel dispensers systems, repair means any activity that does not meet the definition of replace. (4-2-08)

19. **Replace**. As it applies to petroleum underground storage tanks and piping, replace is defined as follows: (4-2-08)

a. Petroleum Underground Storage Tank. Replace means to remove an existing tank and install a new tank. (4-2-08)

b. Piping. Replace means to remove and put back in one hundred (100) percent of the piping, excluding connectors, connected to a single petroleum underground storage tank system. This definition does not alter the requirement in 40 CFR 280.33(c) to replace metal pipe sections and fittings that have released product as a result of corrosion or other damage. A replacement of metal pipe section and fittings pursuant to 40 CFR 280.33(c) shall be considered a replacement under this definition only if one hundred (100) percent of the metal piping, excluding connectors, is replaced. (4-2-08)

20. **Secondary Containment**. A release detection and prevention system that meets the requirements of 40 CFR 280.43(g). The piping shall have an inner and outer barrier and a method of monitoring the space between the inner and outer barriers for a leak or release. (4-2-08)

21. Under-Dispenser Spill Containment. Containment underneath a dispenser that will prevent leaks from the dispenser from reaching soil or ground water. Such containment must: (4-2-08)

a. At installation or modification, be liquid-tight on its sides, bottom, and at any penetrations; and (4-2-08)

b. Be compatible with the substance conveyed by the piping; and either (4-2-08)

c. Allow for visual inspection and access to the components in the containment system; or (4-2-08)

d. Be monitored for releases using a release detection method that meets the requirements of 40 CFR 280.43(g). (4-2-08)

011. – 099. (RESERVED)

100. ADDITIONAL MEASURES TO PROTECT GROUND WATER FROM CONTAMINATION.

01. Notification. An owner, operator or designee must: (4-2-08)

a. Provide written notice to the Department thirty (30) days prior to the installation of a new piping system or a new or replacement petroleum underground storage tank. (4-2-08)

b. Provide notice to the Department twenty-four (24) hours prior to the installation of a replacement piping system. (4-2-08)

02. Notification Forms. The written notice required in Subsection 100.01.a. shall be made upon forms provided by the Department. (4-2-08)

03. Requirements for Petroleum UST Systems. Owners, operators, and installers of a new or replacement petroleum underground storage tank or piping system shall comply with the following requirements. (4-2-08)

a. Each new petroleum underground storage tank, or piping connected to any such new tank, installed after February 23, 2007, or any existing petroleum underground storage tank, or existing piping connected to such existing tank, that is replaced after February 23, 2007, shall have secondary containment and be monitored for leaks if the new or replaced petroleum underground storage tank or piping is within one thousand (1,000) feet of any existing public water system or any existing potable drinking water well. At a minimum, secondary containment systems must be designed, constructed, and installed to contain regulated substances released from the tank system until they are detected and removed, prevent the release of regulated substances to the environment at any time during the operational life of the petroleum underground storage tank system, and be checked for evidence of a release at least every thirty (30) days. The following conditions are excluded: (4-2-08)

i. Suction piping that meets the requirements of 40 CFR 280.41(b)(2)(i) through (v); (4-2-08)

ii. Piping that manifolds two (2) or more petroleum underground storage tanks together; (4-2-08)

iii. Existing piping to which new piping is connected to install a dispenser; and (4-2-08)

iv. Tanks identified in 40 CFR 280.10(b). (4-2-08)

b. If the owner installs, within one (1) year, a potable drinking water well at the new facility that is within one thousand (1,000) feet of the petroleum underground tanks, piping, or motor fuel dispenser system as part of the new underground storage tank facility installation, secondary containment and under-dispenser containment are required, regardless of whether the well is installed before or after the petroleum underground tanks, piping, and motor fuel dispenser system are installed. (4-2-08)

c. The notice required in Subsection 100.01 shall indicate whether the new or replacement installation

is within one thousand (1,000) feet of an existing public water system or any existing potable drinking water well. If the owner and installer certify that the installation is not within one thousand (1,000) feet of an existing public water system or any existing potable drinking water well, the owner, operator or designee shall provide and maintain documentation showing that a reasonable investigation of water systems and drinking water wells was undertaken. A reasonable investigation includes, but is not limited to, a search of the records of: (4-2-08)

i. The public or private water service provider in the area which the new or replacement installation is located (if any); (4-2-08)

ii. The city or county in which the new or replacement installation is located; (4-2-08)

iii. The Idaho Department of Water Resources; and (4-2-08)

iv. The Idaho Department of Environmental Quality. (4-2-08)

d. In the case of a replacement of an existing petroleum underground storage tank or existing piping connected to the petroleum underground storage tank, Section 100 shall apply only to the specific petroleum underground storage tank or piping being replaced, not to other petroleum underground storage tanks and connected pipes comprising such system. (4-2-08)

e. Each installation of a new motor fuel dispenser system shall include under-dispenser spill containment if the new dispenser is within one thousand (1,000) feet of any existing public water system or any existing potable drinking water well. (4-2-08)

04. Requirements for Hazardous Substance UST Systems. Owners, operators, and installers of a new or replacement hazardous substance underground storage tank or piping system shall have secondary containment as required in 40 CFR 280.42. (4-2-08)

05. Certification. Owners and operators shall also comply with the certification requirements of 40 CFR 280.22(f) as incorporated by reference into these rules. (4-2-08)

101. -- 199. (RESERVED)

200. RELEASE REPORTING REQUIREMENTS.

01. Information to be Reported. (4-2-08)

a. In addition to the requirements in IDAPA 58.01.02, "Water Quality Standards," Subsection 851.01, owners or operators shall report the following information regarding confirmed petroleum underground storage tank releases to the Department on forms provided by the Department: (4-2-08)

i. The release source; and (4-2-08)

ii. The release cause. (4-2-08)

b. Releases less than twenty-five (25) gallons that are cleaned up within twenty-four (24) hours, and which do not cause a sheen on nearby surface water, do not need to be reported. (4-2-08)

02. Release Sources. Release sources may include, but are not limited to the following: (4-2-08)

a. Petroleum Underground Storage Tanks; (4-2-08)

b. Piping; (4-2-08)

c. Dispensers, which include the dispenser and equipment used to connect the dispenser to the piping. A release from a suction pump or components located above the shear valve would be an example of a release from the dispenser; (4-2-08)

d. Submersible turbine pump area, which includes the submersible turbine pump head (typically located in the tank sump), the line leak detector, and the piping that connects the submersible turbine pump to the petroleum underground storage tank; and (4-2-08)

e. Delivery problem, which identifies releases that occurred during product delivery to the petroleum underground storage tank. Typical causes associated with this source are spills and overfills. (4-2-08)

03. Release Causes. Release causes may include, but are not limited to the following: (4-2-08)

a. Spills which may occur when the delivery hose is disconnected from the fill pipe of the petroleum underground storage tank or when the nozzle is removed from the vehicle at the dispenser; (4-2-08)

b. Overfills which may occur from the fill pipe at the petroleum underground storage tank or when the nozzle fails to shut off at the dispenser; (4-2-08)

c. Physical or mechanical damage of all types except corrosion. Examples include a puncture of the petroleum underground storage tank or piping, loose fittings, broken components, and components that have changed dimension like elongation or swelling; (4-2-08)

d. Corrosion of a metal tank, piping, flex connector, or other component; and (4-2-08)

e. Installation problem that occurs specifically because the underground storage tank system was not installed properly. (4-2-08)

04. Requirements. The reporting required in Section 200 shall be reported to the Department within ninety (90) days of a confirmed release. The reporting requirement in Section 200 shall not relieve owners or operators from the obligation to comply with IDAPA 58.01.02, "Water Quality Standards," Section 851, "Petroleum Release Reporting, Investigation, and Confirmation," and IDAPA 58.01.02, "Water Quality Standards," Section 852, "Petroleum Release Response and Corrective Action." (4-2-08)

201. -- 299. (RESERVED)

300. TRAINING REQUIREMENTS.

01. Requirements. The Department shall adopt a training program to help owners and operators comply with the requirements of these rules. The training program requirements shall: (4-2-08)

a. Be consistent with 42 U.S.C. 6991i(a), as amended by the Underground Storage Tank Compliance Act, (Pub.L. 109-58, title XV, sec. 1524(a), Aug. 8, 2005); (4-2-08)

b. Be developed in cooperation with petroleum underground storage tank owners and tank operators; (4-2-08)

c. Take into consideration training programs implemented by petroleum underground storage tank owners and operators as of August 8, 2005; (4-2-08)

d. Provide for training to be conducted on site or at another mutually convenient location; and (4-2-08)

e. Be appropriately communicated to petroleum underground storage tank owners and operators. (4-2-08)

02. Operator Designation. For each petroleum underground storage tank system regulated under these rules, the owner or operator shall: (4-2-08)

a. Designate: (4-2-08)

i. The class A operator, who is the individual(s) having primary responsibility for on-site operation

and maintenance of the petroleum underground storage tank system. This does not require that the class A operator be on site; (4-2-08)

ii. The class B operator, who is the individual(s) having daily on-site responsibility for the operation and maintenance of the petroleum underground storage tank system. This does not require that the class B operator be on site at all times; and (4-2-08)

iii. The class C operator, who is the daily, on-site individual(s) having primary responsibility for addressing emergencies presented by a spill or release from the petroleum underground storage tank system. The class C operator can be designated by the class A or B operator. (4-2-08)

b. Maintain a record at the facility where the petroleum underground storage tank is located listing each person designated in Subsections 300.02.a.i., 300.02.a.ii., and 300.02.a.iii. (4-2-08)

c. Notify the Department in writing of the individual(s) designated in Subsections 300.02.a.i. and 300.02.a.ii. within thirty (30) days of the designation. (4-2-08)

03. Training. The owner or operator of each petroleum underground storage tank system regulated under these rules shall ensure that the individual(s) identified in Subsections 300.02.a.i. and 300.02.a.ii. participate in the training conducted by the Department or a state of Idaho approved third party. (4-2-08)

a. The individual(s) identified in Subsections 300.02.a.i. or 300.02.a.ii. shall provide training to the persons identified in Subsection 300.02.a.iii. (4-2-08)

b. The individual(s) identified in Subsection 300.02.a.iii. must be trained before assuming responsibility for responding to emergencies. (4-2-08)

c. The individual(s) identified in Subsections 300.02.a.i. and 300.02.a.ii. shall repeat the training within thirty (30) days if the petroleum underground storage tank system for which they have responsibility is determined to be out of compliance with these rules. (4-2-08)

04. Unattended Sites. In the case of unattended sites, a sign must be posted in a location visible from the dispensers indicating emergency shut-off procedures and emergency contact phone numbers. (4-2-08)

301. -- 399. (RESERVED)

400. INSPECTIONS.

01. Department Authority. In order to fulfill the statutory requirements of Chapter 88, Title 39, Idaho Code, officers, employees or representatives of the Department, or third-party inspectors as described in Subsection 400.02, are authorized to inspect petroleum underground storage tanks, contents of the tanks, and associated equipment and records relating to such tanks, contents, and associated equipment. (4-2-08)

02. Third-Party Inspections. (4-2-08)

a. Third-party inspectors must be certified, licensed, or registered by an approved state program to perform on-site inspections. At a minimum, third-party inspectors must meet the requirements listed in Subsections 400.02.a.i. through 400.02.a.v.: (4-2-08)

i. Be trained in the state-specific inspection protocols and procedures, and perform inspections pursuant to such protocols and procedures; (4-2-08)

ii. Successfully complete the state's required training program. The training program for third-party inspectors must be comparable to the training program for Department inspectors; (4-2-08)

iii. Not be the owner or operator of the petroleum underground storage tank, an employee of the owner or operator of the petroleum underground storage tank, or a person having daily on-site responsibility for the operation and maintenance of the petroleum underground storage tank; (4-2-08)

iv. Use an inspection report form developed by the Department. Review of applicable records and other activities that can be accomplished off-site may be combined with activities conducted at the site to fulfill the on-site inspection requirement; and (4-2-08)

v. Complete and submit the inspection report to the Department in the manner and time frame established by the Department. All third-party inspection reports must be submitted electronically to the Department for review and for the Department to make a compliance determination for each site. If requested by the Department, third-party inspectors shall provide all supporting documentation for its inspection reports. (4-2-08)

b. Third-party inspection procedures must contain an audit program, developed by the Department, to monitor third-party inspectors on a routine basis. The audit program must include a sufficient number of on-site inspections to effectively assess inspector performance. (4-2-08)

c. If a third-party inspector fails to demonstrate to the approved state program adequate competence and proficiency to perform petroleum underground storage tank inspections, or the approved state program otherwise determines it is not appropriate for the third-party inspector to conduct on-site inspections as part of a third-party inspection program, the approved state program must take appropriate action against the third-party inspector as provided by law. (4-2-08)

03. Inspections. All inspections shall be done in accordance with the provisions of Section 39-108, Idaho Code. At a minimum, an on-site inspection must assess compliance with the following: (4-2-08)

a. Notification; (4-2-08)

b. Corrosion protection; (4-2-08)

c. Overfill prevention in place and operational; (4-2-08)

d. Spill prevention in place and operational; (4-2-08)

e. Tank and piping release detection; (4-2-08)

f. Reporting suspected releases; (4-2-08)

g. Records of tank and piping repairs; (4-2-08)

h. Secondary containment where required; (4-2-08)

i. Financial responsibility; and (4-2-08)

j. Temporary closure. (4-2-08)

401. -- 499. (RESERVED)

500. DELIVERY PROHIBITION.

01. Prohibition. Effective August 8, 2007, it shall be unlawful for any person to deliver to, deposit into, or accept a regulated petroleum substance into a petroleum underground storage tank at a facility which has been identified by the Department to be ineligible for such delivery, deposit, or acceptance. (4-2-08)

02. Classification as Ineligible. The Department shall classify a petroleum underground storage tank as ineligible for delivery, deposit, or acceptance of a regulated petroleum substance as soon as practicable after the Department determines one or more of the following conditions exists: (4-2-08)

a. Required spill prevention equipment is not installed; (4-2-08)

b. Required overfill protection equipment is not installed; (4-2-08)

c. Required leak detection equipment is not installed; or (4-2-08)

d. Required corrosion protection equipment is not installed. (4-2-08)

03. Warning of Violations. The Department may classify a petroleum underground storage tank as ineligible for delivery, deposit, or acceptance of a regulated petroleum substance if the owner or operator of the tank has been issued a written warning for any of the following violations, and the owner or operator fails to initiate corrective action within thirty (30) days of the issuance of the written warning, unless the deadline is extended by the Department: (4-2-08)

a. Failure to properly operate or maintain leak detection equipment; (4-2-08)

b. Failure to properly operate or maintain spill, overfill, or corrosion protection equipment; or (4-2-08)

c. Failure to maintain financial responsibility. (4-2-08)

04. Service of Notice. If the Department classifies a petroleum underground storage tank as ineligible for delivery, deposit, or acceptance of a regulated petroleum substance pursuant to Subsections 500.02 or 500.03, the Department shall provide a written notice of the determination to the owner or operator prior to prohibiting the delivery, deposit, or acceptance of a regulated petroleum substance. Notice is considered properly served by the Department in any of the following ways: (4-2-08)

a. The notice is personally delivered to the owner or operator; or (4-2-08)

b. The notice is clearly posted at a public entrance to the facility where the petroleum underground storage tank is located and a copy of the notice is also sent by certified mail to the last known address of the owner or operator. (4-2-08)

05. Red-Tagging. Once service of the written notice of the ineligible determination is complete, the Department shall then attach a red tag to each fill pipe of the ineligible petroleum underground storage tank clearly identifying the tank as ineligible. The Department shall also maintain a list of all petroleum underground storage tanks that are classified as ineligible for delivery, deposit, or acceptance of a regulated petroleum substance. The Department shall make the list available to the public by posting the list on the Department's website at www.deq.idaho.gov. (4-2-08)

06. Written Notice. The written notice required by Subsection 500.04 must include: (4-2-08)

a. The specific reasons or violations that led to the ineligible classification; (4-2-08)

b. A statement notifying the owner and operator that the petroleum underground storage tank is ineligible for delivery and it is unlawful for any person to deliver to, deposit into, or accept a regulated petroleum substance into the petroleum underground storage tank; (4-2-08)

c. The effective date the petroleum underground storage tank is deemed ineligible for delivery; (4-2-08)

d. The name and address of the department representative to whom a written request for re-inspection can be made, if a re-inspection is necessary; (4-2-08)

e. A statement regarding the right to appeal the Department's action regarding ineligible classification pursuant to IDAPA 58.01.23, "Rules of Administrative Procedure Before the Board of Environmental Quality"; and (4-2-08)

f. The option to request a compliance conference pursuant to Subsection 500.07. (4-2-08)

07. Compliance Conference. The owner or operator may request a compliance conference with the Department within fifteen (15) days of receipt of the notice. A compliance conference shall be scheduled within twenty (20) days and conducted in an informal manner by the Department. At the compliance conference, the owner or operator may explain why he believes the petroleum underground storage tank should not be classified as ineligible. During the compliance conference, the owner or operator and the Department will identify and establish appropriate acts and a time schedule for compliance as necessary. (4-2-08)

08. Duration of Ineligible Classification. The classification of a petroleum underground storage tank as ineligible shall remain in effect until the conditions cited in the notice no longer exist. If the Department determines that an ineligible storage tank has returned to compliance and is now eligible for delivery, deposit, or acceptance of a regulated petroleum substance, the Department or an authorized designee shall, as soon as practicable, remove the red tag from the petroleum underground storage tank and also remove the petroleum underground storage tank from the ineligible list posted on its website. The Department will also send a written notice to the owner and operator that an ineligible storage tank has returned to compliance and is now eligible for delivery, deposit, or acceptance of a regulated petroleum substance. (4-2-08)

09. Declining Classification. The Director may decline to classify a petroleum underground storage tank as ineligible if the Director decides that classifying the petroleum underground storage tank as ineligible for delivery, deposit, or acceptance is not in the best interest of the public. (4-2-08)

a. The Director may only defer application of delivery prohibition for up to one hundred eighty (180) days after determining a petroleum underground storage tank is ineligible for delivery, deposit, or acceptance of a regulated petroleum substance. (4-2-08)

b. The Director may authorize the delivery, deposit, or acceptance of product into an ineligible petroleum underground storage tank if such activity is necessary to test or calibrate the underground storage tank or dispenser system. (4-2-08)

10. Department Authority. Nothing in Section 500 shall affect or preempt the authority of the Department to prohibit the delivery, deposit, or acceptance of a regulated petroleum substance to a petroleum underground storage tank under other existing authorities. (4-2-08)

11. Proper Notice. A person shall not be in violation of Subsection 500.01 if the Department fails to provide the notice required by Subsections 500.04 and 500.05. (4-2-08)

12. Unlawful to Tamper with Red Tag. It shall be unlawful for any person to tamper with and/or remove the red tag without the Department's approval. (4-2-08)

501. -- 599. (RESERVED)

600. PETROLEUM UNDERGROUND STORAGE TANK DATABASE.

01. Maintenance. The Department shall maintain a database which provides details on the status of all petroleum underground storage tanks in the state of Idaho which are subject to regulation. The database shall be updated no less than the end of each calendar quarter. (4-2-08)

02. Identification. The database shall identify any tanks subject to delivery prohibition. (4-2-08)

03. Petition. Petroleum underground storage tank owners or operators may petition the Department to correct any inaccurate information for their tanks and the Department shall correct any such inaccurate information within thirty (30) days after verification. (4-2-08)

04. Availability. The database shall be available to the public on the Department's website at www.deq.idaho.gov. (4-2-08)

601. -- 999. (RESERVED)

Subject Index

MEMORANDUM

TO: Jim Anderson
Xerxes Corporation
1210 N. Tustin Ave.
Anaheim, CA 92807

FROM: J.M. Plecnik
Consultant
1880 San Anseline
Long Beach, CA 90815
(562) 985-4406

DATE: September 11, 2007

SUBJECT: Seismic Behavior of Xerxes Underground Tanks

The behavior of Xerxes underground tanks under seismic loading can best be summarized in two different categories. The first category would consider seismic loads occurring at some distance away from the tank, so that the rupture of the earth's crust is not in the immediate vicinity of the underground tank. That is, any rupture in the earth's crust is not occurring directly at the site of the tank. In this case, the behavior of the seismic tank is similar to that of a ball in the ocean that is subjected to an oncoming wave. Since the size of the ball is much smaller than the wave, the ball will simply move up and down with the wave motion. Likewise, in the case of an earthquake which also emits energy waves (ground waves similar to that of water in the ocean), the underground tank simply rides this energy wave without causing large localized forces on the tank itself. The second category is more critical and it consists of the rupture (fault lines) of the earth's crust occurring at or very near the location of the tank. In this case, the tank is incapable of surviving the rupture of the earth's crust and, like the soil, will also rupture.

In mid 1990's, Xerxes Corporation commissioned the CSULB Structures Lab, under the direction of J.M. Plecnik, to analyze 8 ft. diameter Xerxes underground tanks subjected to

seismic loading. This research effort culminated in several lengthy reports, including the May 28, 1997 report titled *Evaluation of 8 ft. Diameter Xerxes Underground Tanks Under Seismic Loading*. This report was utilized to obtain a design US Patent, number US 6,397,168 B1, dated May 28, 2002. The basic conclusions of this research effort are summarized in the above two categories.

The underground fiberglass storage tanks usually come with additional components, including straps and deadmen. The straps and the deadmen are intended only for uplift forces caused by buoyancy when the underground tanks are located below the water table. Hence, the straps and the deadmen are not intended to mitigate or reduce the seismic loads imposed on the underground gasoline storage tanks.

In conclusion, the seismic loads in underground tanks, located away from the fault, consist of added lateral and vertical pressures on the tank wall, which are not significant in relation to stresses produced by external soil and external hydrostatic loads, as well as internal vacuum or internal hydrostatic loads. Seismic loads are relatively short term and these added seismic loads on the tank do increase the stress levels in the tank shell. However, the increase is not critical, due to the fact that the safety factors for fiberglass underground tanks under non-seismic load conditions exceed 5.0.

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XERXES®
a ZCL company

Fiberglass Underground Storage Tanks for Petroleum Applications

making a lasting difference®

www.xerxes.com

Xerxes® Corporation – A trusted brand for more than 30 years

Xerxes History

Xerxes Corporation is widely viewed today as the leading manufacturer of underground storage tanks in the United States. Established in 1979, Xerxes has forged strong brand loyalty built on a reputation for innovation and the highest quality products and services.

Like most market leaders, we have a long history of design innovation including development of the first UL-listed double-wall fiberglass tank. We followed that with the introduction of a second-generation double-wall design, which for the first time incorporated a factory-installed hydrostatic monitoring system. This method of leak detection has become the most popular form of monitoring fiberglass underground tanks. More recently, we further improved our tank design by incorporating Parabeam®, a unique and proprietary three-dimensional glass fabric. Parabeam bonds the primary and secondary walls of our double-wall tank together for greater structural integrity, while also allowing for a free-flowing, clearly defined interstice between the two walls. Industry-leading innovations such as these, plus many others, are why petroleum equipment distributors, fuel marketers and commercial accounts rely on Xerxes for safe underground storage tank products.

One Company – Two Trusted Brands

Today, Xerxes is part of the ZCL® Composites group of companies manufacturing underground and aboveground fiberglass tanks for a wide range of applications, primarily petroleum products. ZCL Composites (ZCL) is a publicly traded company on the Toronto Stock Exchange (TSX: ZCL). Established in 1987, ZCL began manufacturing fiberglass tanks in Canada. Like Xerxes in the United States, ZCL's growth and the popularity of fiberglass tanks in Canada has been steady. Combined, the Xerxes brand in the United States and the ZCL brand in Canada make us North America's largest manufacturer of underground storage tanks. We service our underground storage tank customers from six strategically located North American manufacturing plants, four in the United States and two in Canada. Our extensive geographic coverage gives us unmatched ability to cost-effectively deliver tanks anywhere in North America. With more than 200,000 tanks installed, our position as the industry's leading manufacturer of underground storage tanks strengthens each year.

Benefits of Xerxes fiberglass underground storage tanks

Why choose a fiberglass tank?

Since their introduction in the 1960s, fiberglass underground tanks have rapidly grown in popularity. It was becoming clear that rusting steel tanks were leaking and creating serious environmental damage. Therefore, the initial focus of fiberglass manufacturers was to design storage vessels that weren't vulnerable to the effects of external corrosion.

Throughout the 1980s, major oil companies and other large fuel marketers quickly began to realize the benefits of fiberglass over steel underground tanks. Today the preference for fiberglass tanks reaches across all segments of the market and includes those who specify, install and own underground storage tanks. Further, the recognized benefits of fiberglass extend well beyond external corrosion protection. Today, with a greater industry-wide understanding of the increased regulatory burden and risks associated with storage tanks, tank buyers are much more educated and sophisticated in their product selection.

Consider the following features and benefits:

Corrosion Resistance – External corrosion protection will always be a concern, but, with the widespread use of ethanol-blended gasoline (E10, E15, E85), biodiesel fuels and ultra-low sulfer diesel (ULSD), the focus has shifted to internal corrosion protection. These new biofuels are creating increasing incidents of aggressive microbial-induced corrosion (MIC) of metal components in fueling systems. Fiberglass tanks are not vulnerable to internal corrosion caused by MIC. Neither do they rust externally due to corrosive soil environments.

Fuel Compatibility – In addition to creating corrosive conditions in tanks, new ethanol-blended fuels today also raise questions regarding compatibility of the stored fuel with tank materials. Xerxes double-wall fiberglass tanks are not only warranted for the full range of ethanol-blended gasoline, they are also UL-tested and UL-listed as compatible with 0-100 percent ethanol storage. This is a very clear and distinct difference from steel storage tanks.

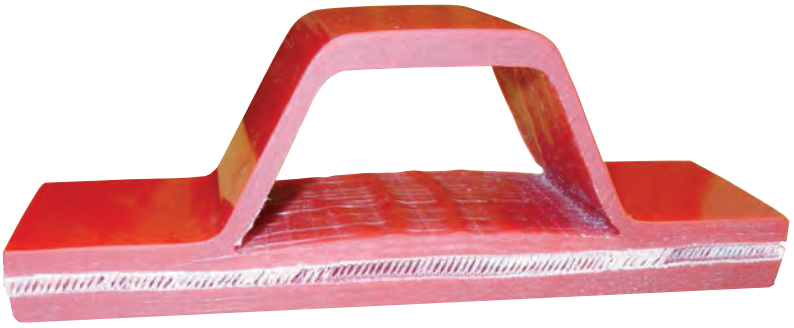
Track Record – With hundreds of thousands of tanks installed thoughout North America during the last three decades, fiberglass tanks have an outstanding record of both protecting the environment and minimizing tank owners' risk. The great majority of new underground tanks installed today for North America's largest fuel retailers and commercial fleet facilities are fiberglass tanks. After exploring their options and evaluating years of product performance, these tank owners overwhelmingly continue to choose fiberglass.

Why choose a Xerxes tank?

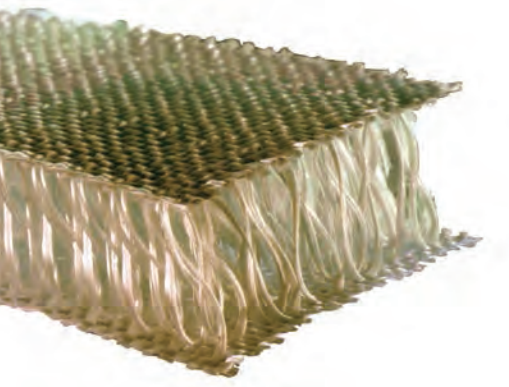
During the last three decades, Xerxes has gained a worldwide reputation as a leader in underground storage tank technology. Since its inception in 1979, Xerxes has steadily grown from a tank manufacturer with a small market share to its role today as the market leader. This recognition can be attributed to the many experienced Xerxes employees who strive to not only meet but to exceed our customers' requirements. Equally significant is the quality of the tanks and related products that we manufacture.

Underground storage tanks are not commodity products. Xerxes storage tanks offer customers a number of unique and significant design and performance differences superior to both competitive fiberglass tanks and steel tanks.

Consider the following:



Rib Design – Circumferential ribs are an important design element of any fiberglass underground vessel. Therefore, the rib geometry and how it's incorporated into the cylinder, or tank itself, is an important consideration for designers and customers as they compare products. In the Xerxes design, with its consistent, high-profile rib structure, ribs are fabricated directly into the tank cylinder – not as a secondary step in the process. This increases the overall strength of the tank and results in a structurally superior product.



Parabeam® Construction – As part of our history of continuous improvement, Xerxes introduced Parabeam, a unique and proprietary three-dimensional glass fabric, into its underground tank design. Parabeam enhances overall structural integrity by creating a bond between the primary and secondary cylinder walls, while providing a free-flowing interstitial space for monitoring capabilities. Another important benefit is the elimination of false alarms created by fluctuating reservoir levels that can be a recurring problem in other manufacturers' hydrostatically monitored tanks.

Maintenance-Free – Many manufacturers of steel tanks have reduced their warranty duration from 30 years to 10 years, and have incorporated language that requires ongoing maintenance and removal of water bottoms as a condition of warranty coverage. The presence of water in the bottom of fuel tanks is a common condition. Maintenance to frequently remove it can be expensive over both the short-term and long-term life of a tank, and can also leave an owner vulnerable to denied warranty claims should a steel tank corrode internally. Xerxes offers a 30-year limited warranty with no restrictions regarding water-bottom monitoring and removal.

Company Stability – Over the last 30 years, tank manufacturers have gone out of business or filed for bankruptcy and no longer provide warranty coverage. Customers who purchase underground tanks do so with the expectation that their tank will provide many years of trouble-free service, and that the manufacturer will be around to suppport its products and its warranties. Xerxes has a three-decade record of doing just that.

TRUCHEK®– State-of-the-art continuous monitoring

TRUCHEK® hydrostatic tank monitoring for double-wall tanks is an easy, precise and reliable method for continuous leak detection and for tank-tightness testing. For two decades, TRUCHEK has been successfully monitoring thousands of tanks in many different types of installations.

Continuous Monitoring

When you order a Xerxes double-wall tank with the TRUCHEK option, the interstice between the two tank walls is filled at the factory with a calcium-chloride fluid that also partially fills a reservoir, creating hydrostatic pressure throughout the interstice. An electronic probe placed in the tank's reservoir alarms when the fluid level either falls below or rises above the acceptable level. This increasingly popular method of leak monitoring gives tank owners greater peace of mind than the alternative method of using a simple liquid sensor, which often never detects an outer-wall breach. TRUCHEK has become the industry standard as a state-of-the-art technique for continuous monitoring.

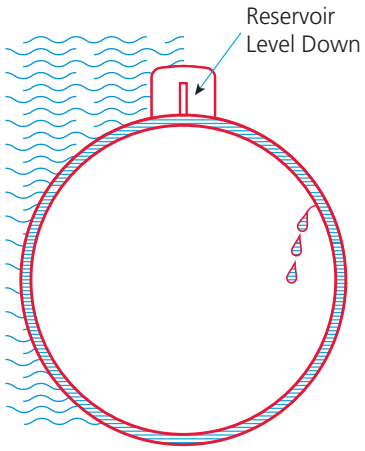
Changing regulations in some markets now require that new double-wall tanks have continuous leak detection using a constant vacuum, air pressure or hydrostatic pressure in the interstice. TRUCHEK is the ideal solution to this growing regulatory requirement.

Tank Tightness

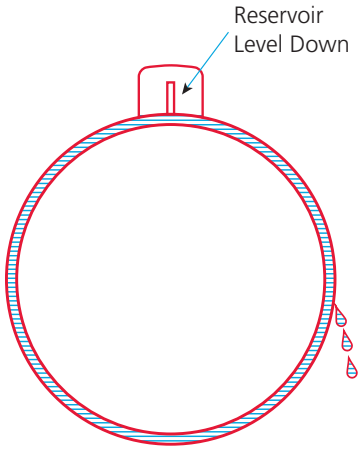
TRUCHEK also provides a simple, precise and reliable method to perform a tank-tightness test. The 10-hour tightness-test procedure meets the strict NFPA329 criteria. A shorter 4-hour test (while product is dispensing) exceeds EPA's criteria for a tank-tightness test.

How does TRUCHEK work?

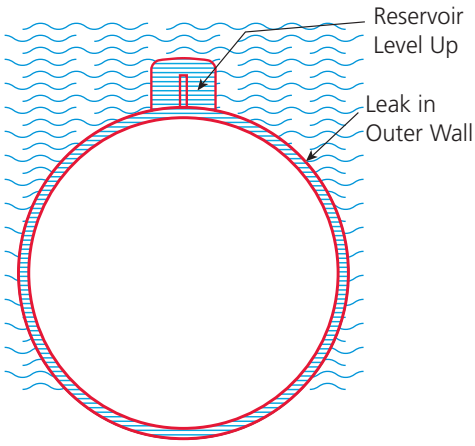
Primary-Tank Leak in Wet Hole or Dry Hole



Secondary-Tank Leak in Dry Hole



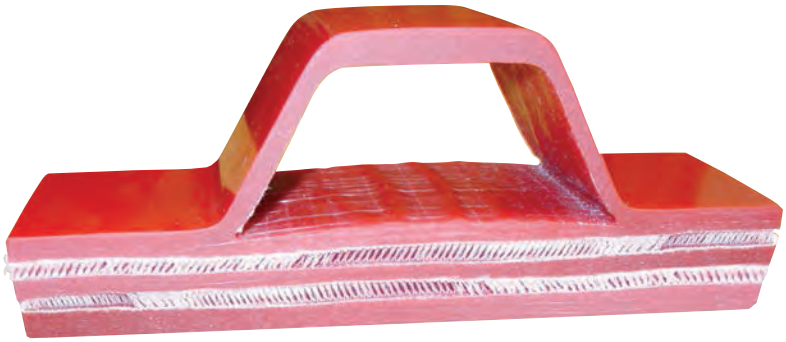
Secondary-Tank Leak in Wet Hole



Additional underground storage tank solutions

When a customer's needs go beyond the standard double-wall tank, Xerxes offers products that address a wide range of requirements. With a full line of tank accessories, we offer customers the most comprehensive range of solutions found in the petroleum equipment industry today. Please visit www.xerxes.com for additional information on each of these products.

Multicompartment Tanks – These Xerxes tanks are a popular choice among retail gasoline marketers and fleet fueling owners. The ability to store two or three grades of fuel, or gasoline and diesel, in a single tank is particularly appealing when the amount of onsite space needed for multiple tanks is either not available or difficult to obtain. Customers may also find installation and insurance cost savings when using multicompartment tanks. The Xerxes double-wall multicompartment tank comes standard with a double-wall bulkhead, while other tank manufacturers require an upgrade to a double-wall bulkhead. Xerxes offers a wide range of capacity options in 6-, 8- and 10-foot-diameter models.



Triple-Wall Tanks – Some customers and regulatory agencies now require even more enhanced protection than double-wall tanks provide. Conditions that lend themselves to considering a triple-wall tank are sensitive groundwater aquifers, or nearby lakes or streams. The Xerxes UL-listed triple-wall tank, with an additional Parabeam interstice, is the innovative and cost-effective answer when this level of containment is required.

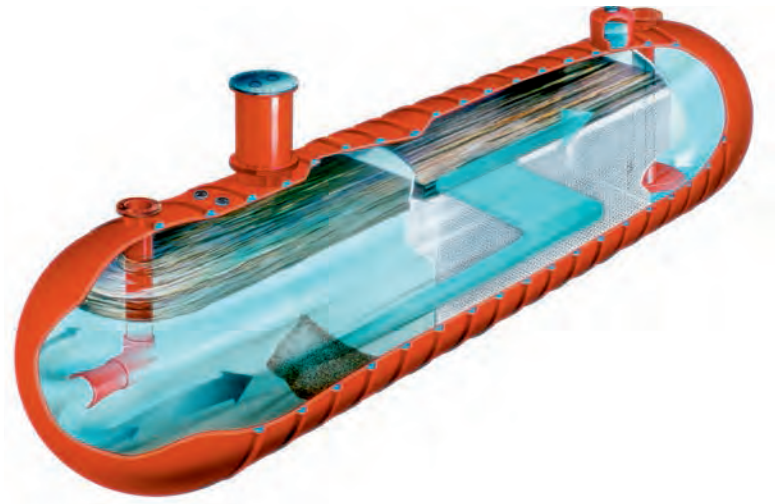
The ZCL Phoenix System® – In some situations, single-wall tanks that need to be upgraded to double-wall tanks offer site challenges that make removal of existing tanks either cost-prohibitive or extremely difficult. For instance, tanks are sometimes covered or surrounded by buildings, roads or rail lines. In such cases, converting a single-wall tank (either fiberglass or steel) into a double-wall tank might be done most efficiently with ZCL's Phoenix System. This ULC-listed system consists of two corrosion-resistant laminates with the proprietary Parabeam glass fabric between the laminates creating an interstitial space. The interstice can be either dry or hydrostatically monitored. The Phoenix System, applied onsite by trained installers, is biofuels compatible, including ethanol-blended fuels and biodiesels.

Additional underground storage tank solutions

Diesel Exhaust Fluid Tanks – Demand for diesel exhaust fluid (DEF) is growing significantly as increasing numbers of commercial, passenger, rail and marine diesel engines that require the use of DEF enter the market. A Xerxes underground tank is the ideal solution for the very unique storage requirements that DEF presents. Unlike carbon steel tanks, a Xerxes fiberglass tank does not require special coatings or linings to protect the purity of the DEF product. Extensive testing with third-party laboratories was conducted to verify the suitability of long-term storage while maintaining product quality.

Xerxes uses stainless steel fittings, manway covers and striker plates on all tanks designed for DEF storage. A UL label is attached to all tanks that meet listing criteria. Each tank interior is thoroughly cleaned and then sealed to prevent contamination during shipping and installation.

In the relatively brief period of time that DEF has been used in North America, Xerxes has established a leadership role in introducing fiberglass tanks as the bulk storage vessel of choice. With more than 1,000 DEF tanks in service, customers are clearly putting their trust in Xerxes' design innovation capabilities.

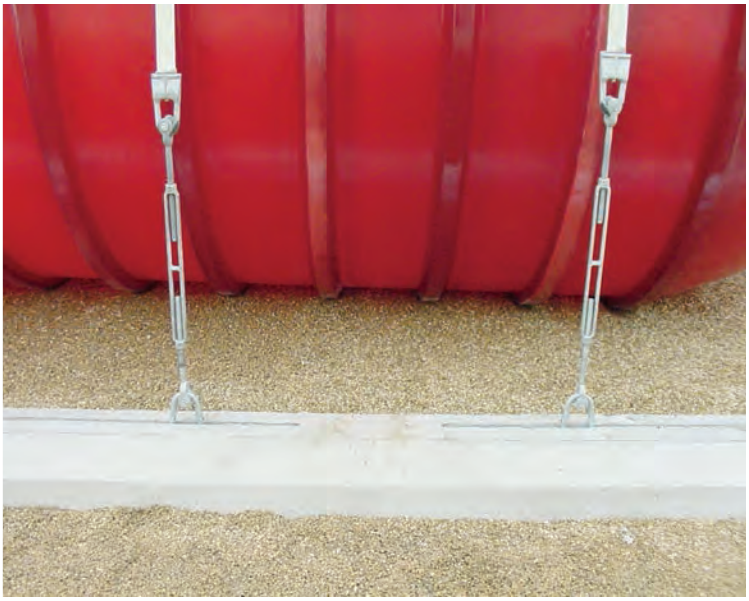


Oil/Water Separators – With a fiberglass underground tank at the heart of the design, a Xerxes oil/water separator incorporates unique refinements within the vessel to create a separator that removes free-floating oils and settleable sands from oil/water mixtures. A properly sized polypropylene vertical-tube coalescer is designed to produce effluent quality of 10 ppm free-floating oil. A Xerxes oil/water separator is an excellent choice for managing water runoff from parking lots or equipment washdown stations. This product is also available with a UL 2215 listing.

Storage tank accessories

Today's retail and commercial fueling facilities are sophisticated systems that are installed in a highly regulated environment. While the storage tank is the critical component in an underground fuel system, other important accessories are necessary in order to provide spill containment, tank anchoring, tank-top corrosion protection, leak detection and other important functions. Xerxes engineers have designed innovative, complimentary products that provide system designers and installers with cost-effective, easy-to-install accessories. Not all tank manufacturers provide the wide range of accessories that Xerxes offers. This is another example of how Xerxes' innovative spirit benefits customers.

As with many products, Xerxes tanks and accessories require proper installation to ensure that the customer receives the long-lasting, trouble-free performance that its products are designed for. To that end, Xerxes provides a comprehensive Installation Manual and Operating Guidelines document that outlines the easy, yet proper, steps necessary for a successful installation.



Containment Sumps and Collars – Sumps and collars are common accessories found on virtually all double-wall tanks installed today. Xerxes supplies optional, factory-installed containment collars that provide secondary containment around tank fittings and manways. Designed to be a custom match to the collar, the Xerxes containment sump comes in a variety of models and sizes, all engineered to accommodate different customer preferences and needs. Xerxes sumps and collars are also available in double-wall models that can be monitored with the reliable TRUCHEK hydrostatic monitoring system.

Anchoring System – Site-specific installation conditions generally dictate whether a tank-anchoring system is necessary. Some customers choose to anchor all their tanks. Xerxes offers a complete tank-anchoring system, including reinforced precast concrete deadman (designed to American Concrete Institute standards), fiberglass anchoring straps and galvanized turnbuckles. Each component is engineered to specific tank sizes and for ease of installation. In most cases concrete deadmen can be delivered on the same trailer as the tank. This both minimizes the shipping cost and assures that deadmen are ready for use when the tank is set.

Hydrostatic Monitoring – The image on page 8 illustrates the functional design of the highly effective TRUCHEK hydrostatic monitoring system. A "jacket" of calcium-chloride solution is factory-installed in the tank interstice and connected to a tank-top reservoir where the fluid level is monitored with a simple level sensor. The unique Parabeam construction of a Xerxes double-wall tank eliminates false leak alarms that can occur with other tank designs. In addition to its simple, yet highly effective, monitoring capabilities, TRUCHEK provides true continuous monitoring of both tank walls regardless of site conditions. This continuous-monitoring feature is increasingly attractive to state and federal regulators, and may become a requirement for all new double-wall tanks in the future.

Guide Specifications for Xerxes Underground Petroleum Storage Tanks

Short form:
The contractor shall provide a double-wall or triple-wall fiberglass reinforced plastic (FRP) UL-listed underground storage tank as shown on the drawings. The tank size, fittings and accessories shall be as shown on the drawings. The fiberglass tank shall be manufactured by Xerxes Corporation.

The tank shall be tested and installed according to the Xerxes Installation Manual and Operating Guidelines for Fiberglass Underground Storage Tanks in effect at time of installation.

Long form:

Part I: General

1.01 Quality Assurance

A. Acceptable Manufacturer: Xerxes Corporation

B. Governing Standards, as applicable:

1. Underwriters Laboratories (UL) Standard for Safety 1316 Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols, and Alcohol-Gasoline Mixtures. A UL label shall be attached to each tank.
2. National Fire Protection Association (NFPA) Standards: NFPA 30: Flammable and Combustible Liquids Code, NFPA 30A: Code for Motor Fuel Dispensing Facilities and Repair Garages, NFPA 31: Standard for the Installation of Oil-Burning Equipment.
3. City of New York Department of Buildings M.E.A., #161-89-M.
4. American Concrete Institute (ACI) standard ACI 318-11, Building Code Requirements for Structural Concrete.

C. Submittals

1. Contractor shall submit ___ copies of shop drawings, manufacturer's product brochures, and Installation Instructions.

Part II: Products

2.01 Double-Wall and Triple-Wall Fiberglass Reinforced Plastic (FRP) Underground Storage Tanks:

A. Loading Conditions – Tank shall meet these design criteria:

1. **Interstitial Pressure** – The interstitial space of the tank shall withstand a minimum 20-psig pressure test.
2. **Internal Load** – Tank shall withstand a 5-psig air-pressure test with a 5:1 safety factor.
3. **Surface Loads** – Tank shall withstand surface H-20 and HS-20 axle loads when properly installed according to Xerxes' current Installation Manual and Operating Guidelines.
4. **External Hydrostatic Pressure** – Tank shall be designed for 7' of overburden over the top of the tank, the hole fully flooded and a safety factor of 5:1 against general buckling.

B. Product Storage:

1. The primary compartment of double-wall and triple-wall tanks shall be vented and operated at atmospheric pressure only.
2. Tank shall be capable of storing liquids with a specific gravity up to 1.1.
3. Tank shall be capable of storing products identified in the manufacturer's standard limited warranty in effect at the time of purchase.

C. Materials:

1. The primary and secondary walls of the tank shall be manufactured with 100% premium resin and glass-fiber reinforcement. No sand or silica fillers shall be added to the resin.
2. The interstitial space between the primary and secondary walls shall be constructed with a glass reinforcement material such as Parabeam®, which provides a structural bond between the two tank walls, while creating a defined interstice that allows for free flow of liquid.

D. Tank Dimensions (Refer to Xerxes literature on gallonage):

1. Tank shall have nominal capacity of _____ gallons.
2. Tank shall have nominal outside diameter of _____ feet.
3. Tank shall have a nominal overall length of _____ feet/inches.

2.02 Tank Monitoring System

A. General

1. Tank shall be continuously monitored with the TRUCHEK® hydrostatic leak monitoring system.
2. The continuous monitoring system shall include monitoring fluid factory-installed in the interstitial space and within a fiberglass tank-top mounted reservoir.
3. The monitoring system shall be recognized by the National Work Group on Leak Detection Evaluations (NWGLDE) as continuous leak detection and as a precision tank test.
4. The monitoring system shall be independently tested by a qualified third party and verified to be capable of detecting leaks as small as .05 gallons per hour when TRUCHEK tank-tightness test procedures are followed.

B. Design

1. The continuous monitoring system shall be designed to detect a leak in either the primary or secondary wall at all times, regardless of the water-table conditions at the installation site.
2. The interstice of the tank shall be designed for a 5:1 safety factor beyond normal hydrostatic operating pressure to ensure structural integrity and to prevent false leak alarms.

2.03 Accessories

A. Tank Anchoring

1. Anchor straps shall be as supplied by tank manufacturer and designed for a maximum load of 25,000 lbs.
2. Galvanized turnbuckles (two per anchor strap) shall be supplied by the tank manufacturer.
3. Prefabricated concrete anchors shall be supplied by the tank manufacturer, designed to the ACI 318-11 standard, manufactured with 4,000 psi concrete, and shall have adjustable anchor points.

B. Manways

1. The standard manway shall be flanged, 22" I.D. and complete with UL-listed gaskets, bolts and covers as shown on tank drawings.

C. Threaded Fittings

1. All threaded fittings shall be NPT half or full couplings, in 2", 4" or 6" diameters.
2. Fittings shall be installed on the tank-top centerline or in the cover of the manway as shown on the tank drawings.

D. Containment Collars & Sumps

1. The tank shall have factory-installed 42"-or 48"-diameter containment collars as shown on the tank drawings.
2. Containment sumps in 42"-or 48"-diameter, provided by the tank manufacturer and designed for mounting on the containment collars, shall be supplied as shown on the tank drawings.
3. Adhesive shall be provided by the tank manufacturer with each containment collar and sump.
4. Containment collars and sumps shall be designed and supplied as a containment system. Only sumps provided by the manufacturer shall be allowed.

Part III: Testing and Installation

3.01 Testing

A. Testing – Tank shall be tested according to the Xerxes Installation Manual and Operating Guidelines in effect at time of installation.

3.02 Installation

A. Installation – Tank shall be installed according to the Xerxes Installation Manual and Operating Guidelines in effect at time of installation.

Part IV: Limited Warranty

4.01 Limited Warranty

A. Limited Warranty – Warranty shall be manufacturer's standard limited warranty in effect at time of purchase.

Xerxes Underground Double-Wall Tank Data

	Nominal Capacity (gallons)	Actual Capacity (gallons)	Tank Length (feet/inches)	Nominal Shipping Weights (lbs) (dry interstitial)	Nominal Shipping Weights (lbs) (wet interstitial)	Number of Anchor Straps Required
4-foot-diameter	600	602	7′-3 1/2″	900	1,100	2
	1,000	1,009	11′-7 1/2″	1,400	1,700	2
	2,000	2,013	22′ -3 5/8″	2,800	3,400	2
6-foot-diameter	2,500	2,324	13′-5 3/4″	2,200	2,800	2
	3,000	2,910	16′-4 1/4″	2,600	3,300	2
	4,000	3,789	20′-8″	3,600	4,400	2
	5,000	4,961	26′-5″	4,300	5,200	4
	6,000	5,840	30′-8 3/4″	5,000	6,100	4
8-foot-diameter	4,000	4,190	15′- 1/2″	2,700	3,600	2
	5,000	5,089	17′-8 1/2″	3,200	4,200	2
	6,000	6,044	20′-6 1/2″	3,700	4,900	2
	8,000	7,899	26′- 1/2″	4,800	6,200	4
	10,000	9,753	31′-6 1/2″	5,900	7,500	4
	12,000	11,608	37′- 1/2″	7,000	8,800	4
	15,000	14,881	46′- 9″	9,100	11,200	6
10-foot-diameter	10,000	10,420	21′-5 1/4″	4,900	6,400	4
	12,000	11,904	24′- 1/4″	5,600	7,200	4
	15,000	15,041	29′-5 3/4″	7,000	8,900	4
	20,000	19,782	37′-8 3/4″	9,000	11,300	6
	25,000	25,431	47′-6 3/4″	11,800	14,600	8
	30,000	30,172	55′-9 3/4″	14,000	17,200	10
	35,000	34,912	64′- 3/4″	16,500	20,100	12
	40,000	40,443	73′-8 1/4″	19,000	23,100	14
12-foot-diameter	20,000	20,638	29′ -4″	14,000	16,700	6
	25,000	25,381	35′ -7″	16,600	19,700	8
	30,000	31,072	43′ -1″	19,900	23,500	10
	35,000	35,815	49′ -4″	22,500	26,500	12
	40,000	39,609	54′ -4″	24,600	28,900	12
	45,000	44,352	60′ -7″	27,400	32,100	16
	48,000	48,146	65′ -7″	29,500	34,500	18
	50,000	50,044	68′ -1″	30,500	35,700	18

Notes:

1. Tank data for single-wall and multicompartment tank models is available at www.xerxes.com.
2. Actual height of the tank may be greater than the actual diameter due to fittings and accessories. Load height during shipping may vary due to tank placement on the shipping trailer.
3. If an overfill-protection device is installed in the tank, the actual capacity will be reduced.

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MEMORANDUM

Date: July 6, 2016

To: Brittany Skelton
City of Ketchum Department of Planning and Building

From: Hales Engineering

Subject: Ketchum – Bracken Station TIS, Additional Information

UT16-851

The purpose of this memorandum is to address requests for additional information from the City of Ketchum Planning Commission regarding the proposed Bracken Station in Ketchum, Idaho. This memo will address only requests regarding traffic related issues. Each request is stated as received in italics, followed by the response from Hales Engineering.

1. *Obtain traffic counts at 10th Street/Main Street intersection in order to corroborate the 2008 data in the traffic study already conducted. If the traffic engineer wants to make the case that the need for new data is superfluous, and submits a narrative explaining why, that would be acceptable. However, the request for current data at the 10th Street/Main Street intersection is driven by public comment and providing this data also serves the purpose of addressing public concern, so obtaining the new counts is recommended.*

   Hales Engineering utilized peak-hour turning movement count data collected in February 2008 for a previous traffic impact study performed in the area. Using historical traffic data for SH-75 obtained from the Idaho Transportation Department (ITD), a growth rate of 1.1% per year was calculated based on recent trends. This 1.1% growth rate as well as a 30% seasonal adjustment, to reflect peak season traffic conditions, were used to estimate 2016 traffic conditions. These estimated traffic data were used for the traffic impact study.

   In order to address concerns raised at the planning commission meeting held on June 13, 2016, additional peak hour turning movement counts were collected on June 29, 2016. When compared with the previously discussed estimated data, it was found that the traffic volumes used in the traffic impact study were **5% higher** than the volumes collected on June 29th.

2. *Address the projected makeup of vehicles that will be using the gas station.*
    a. *What percentage will be oversized vehicles (RVs, construction trailers, et cetera)?*
        i. *Address how the proportion of oversized vehicles impacts the amount of vehicles that can queue in the turn lane.*
    b. *Address potential back-up of northbound traffic lining up to make a left turn into the gas station and the implications of exceeding the length of the turn lane (e.g. traffic backed up further south than the turn lane extends).*

Vehicle classification data were collected at a local gas station over two days. Only 7% of vehicles observed during data collection activities were larger vehicles (i.e. trucks pulling trailers or recreational vehicles). The remaining 93% of vehicles observed were passenger cars or pickup trucks. Using these data, we project that the vast majority of vehicles that will use the Bracken Station will be passenger cars and pickup trucks.

Standard practice for queuing analyses is to assume an average 20 feet of queuing length per vehicle. Obviously, larger vehicles (i.e. tractor trailers, RVs, etc.) will occupy more than 20 feet of queuing length. However, the projected vehicle classification does not suggest that it would be necessary to modify the 20 feet per vehicle assumption.

The proposed left-turn lane would serve vehicles turning left from Main Street (SH-75) into the gas station, as well as vehicles turning left onto 10th Street. The traffic impact study found that with future (2020) plus project traffic conditions, the 95th percentile queue at the intersection would extend for approximately 105 feet. The proposed left-turn lane is more than adequate to accommodate queues of this length.

Although it is unlikely that the left-turn queue would overflow into the thru lane, such an event would likely have minimal short-term impacts on thru traffic. Delay for northbound left-turning vehicles at the gas station access, as well as at 10th Street are anticipated to be quite short. When delays are short, queues tend to dissipate quickly. As soon as the queue is shortened to a length that can be accommodated by the left-turn lane, the flow of thru traffic is restored.

3. *Address the potential for northbound (left) and southbound (right) turn lanes on 10th Street to facilitate left and right turns onto Main Street.*

Separate right- and left-turn lanes at stop-controlled approaches to unsignalized intersections can help to mitigate delay on the approach by allowing right-turning vehicles to execute a right-turn movement while bypassing waiting left-turning vehicles, or vice versa.

A separate right-turn lane is not recommended at this location. Turning movement wheel path analyses show that with the current approach geometry, larger vehicles are able to execute right-turn movements with minimal encroachments into opposing

traffic lanes. It is likely that the addition of a separate right-turn lane would constrain the right-turn movement such as to require significant encroachment into opposing traffic lanes. The traffic impact study found that delays at this intersection are anticipated to be relatively low, and therefore a separate right-turn lane would not provide significant benefit.

If you have any questions regarding this memo, please feel free to contact us.

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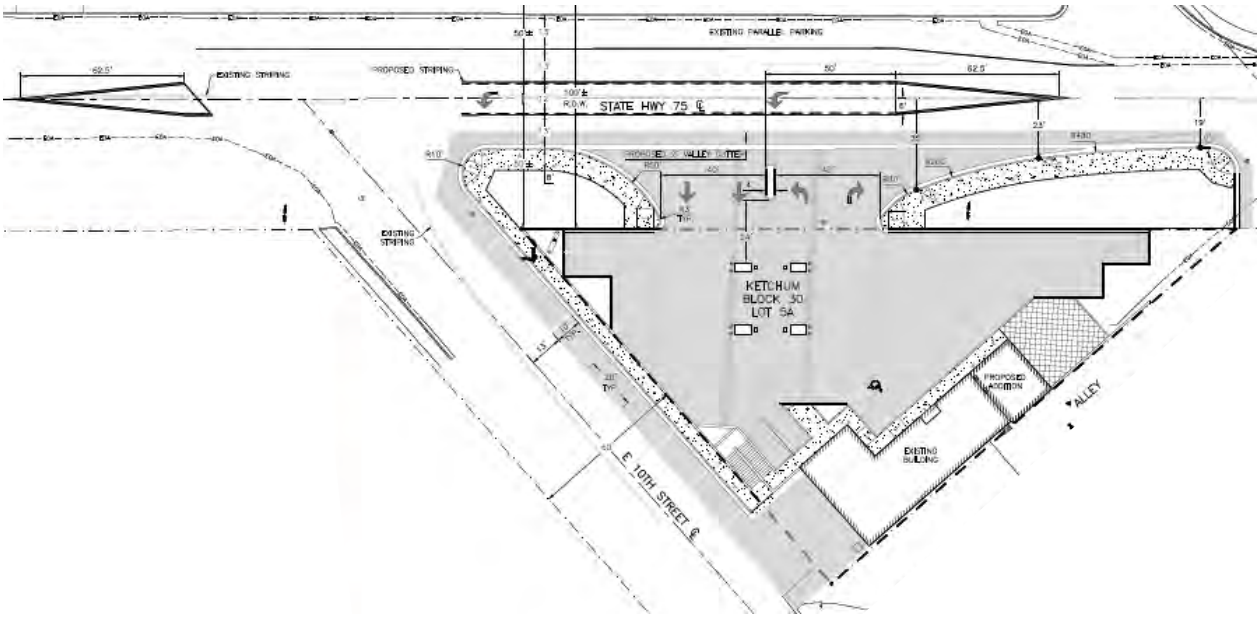
Ketchum Gas Station

Traffic Impact Study *UPDATED*



Ketchum, Idaho

May 2016

UT16-851

1220 North 500 West, Ste. 202 Lehi, UT 84043 p 801.766.4343
www.**hales**engineering.com

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EXECUTIVE SUMMARY

This study addresses the traffic impacts associated with the proposed gas station in Ketchum, Idaho. The proposed gas station will be located on the southwest corner of the Main Street (SH-75) / 10th Street intersection.

Included within the analyses for this study are the traffic operations and recommended mitigation measures for existing conditions and plus project conditions (conditions after development of the proposed project) at key intersections and roadways in the vicinity of the site. Future 2020 conditions are also analyzed.

TRAFFIC ANALYSIS

The following is an outline of the traffic analysis performed by Hales Engineering for the traffic conditions of this project.

Existing (2016) Background Conditions Analysis

Hales Engineering used previous data for weekday morning (7:00 to 9:00 a.m.) and afternoon (4:00 to 6:00 p.m.) peak period traffic counts at the following intersections:

- Main Street (SH-75) / 10th Street

These counts were performed for a previous project on Wednesday, February 13, 2008. Data from an automatic traffic recorder (ATR 68) was used to determine an annual growth rate of 1.1% and a seasonal adjustment of 30% for this segment of SH-75. Using these adjustments, peak period traffic volumes were calculated for the study intersection. The a.m. peak hour was determined to be between the hours of 8:00 and 9:00 a.m., and the p.m. peak hour was determined to be between the hours of 4:15 and 5:15 p.m. Detailed count data are included in Appendix A. The traffic volumes at this intersection was approximately 15% higher during the p.m. peak hour than during the a.m. peak hour. Therefore, the p.m. peak hour was chosen for detailed analysis as this represents the worst-case scenario.

As shown in Table ES-1, the Main Street (SH-75) / 10th Street intersection is currently operating at LOS A during the p.m. peak hour. The 95th percentile queues on the north- and eastbound approaches to the 10th Street / Main Street (SH-75) intersection was observed extend for approximately 80 feet. No other significant queuing was observed.

Project Conditions Analysis

The proposed land use for the development has been identified as follows:

- Gasoline/Service Station with Convenience Market 8 Vehicle Fueling Positions

Trip generation for the development was calculated using trip generation rates published in the Institute of Transportation Engineers (ITE) *Trip Generation (9th Edition, 2012)*. Trip generation for the proposed project is as follows:

- Weekday Daily Trips: 1,304
- a.m. Peak Hour Trips: 82
- p.m. Peak Hour Trips: 110

Existing (2016) Plus Project Conditions Analysis

As shown in Table ES-1, all study intersections are anticipated to operate at acceptable levels of service during the p.m. peak hour. During the p.m. peak hour, the 95th percentile queue length on the on the eastbound approach to the Main Street (SH-75) / 10th Street intersection is anticipated to extend for approximately 80 feet with project traffic added. Some queuing on northbound Main Street (SH-75) is also anticipated, which is likely attributed to left-turning vehicles blocking through traffic at the Main Street (SH-75) / 10th Street intersection as well as at the project access.

Future (2020) Background Conditions Analysis

As shown in Tables ES-1, the Main Street (SH-75) / 10th Street intersection is anticipated to operate at LOS C during the p.m. peak hour with future (2020) background traffic conditions. The 95th percentile queues on the north- and eastbound approaches to the Main Street (SH-75) / 10th Street intersection are anticipated to extend for approximately 110 feet. No other significant queuing is anticipated.

Future (2020) Plus Project Conditions Analysis

As shown in Tables ES-1, the Main Street (SH-75) / 10th Street intersection is anticipated to operate at LOS C with project traffic added, while the proposed access is anticipated to operate at LOS A during the p.m. peak hour. During the p.m. peak hour, the 95th percentile queue length on the northbound approach to the Main Street (SH-75) / 10th Street intersection is anticipated to extend for approximately 50 feet. All other queuing is anticipated to be nominal.

TABLE ES-1 P.M. Peak Hour ID Ketchum Gas Station TIS				
Intersection	Projected 2016 Background	Projected 2016 Plus Project	Future 2020 Background	Future 2020 Plus Project
Description	LOS (Sec/Veh[1])	LOS (Sec/Veh[1])	LOS (Sec/Veh[1])	LOS (Sec/Veh[1])
Main Street (ID-75) / 10th Street	**A (9.7) / EB**	**B (10.9) / EB**	**C (15.9) / EB**	**C (17.8) / EB**
Main Street (ID-75) / Access 1	**-**	**A (6.5) / EB**	**-**	**A (9.2) / EB**

1. Intersection LOS and delay (seconds/vehicle) values represent the overall intersection average for signalized and all-way stop controlled intersections and the worst approach for all other unsignalized intersections.

2. This is a project intersection and is only analyzed in the plus project scenarios.

Source: Hales Engineering, May 2016

RECOMMENDATIONS

The following mitigation measures are recommended:

Existing (2016) Background Conditions Analysis

No mitigation measures are recommended.

Existing (2016) Plus Project Conditions Analysis

It is recommend that a two-way left-turn lane be constructed from a location north of 10th Street to a location south of the project. No other mitigation measures are recommended.

Future (2020) Background Conditions Analysis

No additional mitigation measures are recommended.

Future (2020) Plus Project Conditions Analysis

No additional mitigation measures are recommended.

SUMMARY OF KEY FINDINGS/RECOMMENDATIONS

The following is a summary of key findings and recommendations:

- The Main Street (SH-75) / 10th Street intersection is currently operating at LOS A during the p.m. peak hour.
- With project traffic added, the Main Street (SH-75) / 10th Street intersection is anticipated to operate at LOS B, and the proposed project access is anticipated to operate at LOS A.
- It is recommended that a two-way left-turn lane be constructed on Main Street (SH-75) from a location north of 10th Street to a location south of the project.
- With future (2020) traffic conditions, the Main Street (SH-75) / 10th Street intersection is anticipated to operate at LOS C during the p.m. peak hour.
- With project traffic added, the Main Street (SH-75) / 10th Street intersection is anticipated to operate at an acceptable level of service, as well as the project access.

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I. INTRODUCTION

A. Purpose

This study addresses the traffic impacts associated with the proposed gas station in Ketchum, Idaho. The proposed gas station will be located on the southwest corner of the Main Street (SH-75) / 10th Street intersection. Figure 1 shows a vicinity map of the proposed development.

Included within the analyses for this study are the traffic operations and recommended mitigation measures for existing conditions and plus project conditions (conditions after development of the proposed project) at key intersections and roadways in the vicinity of the site. Future 2020 conditions are also analyzed.

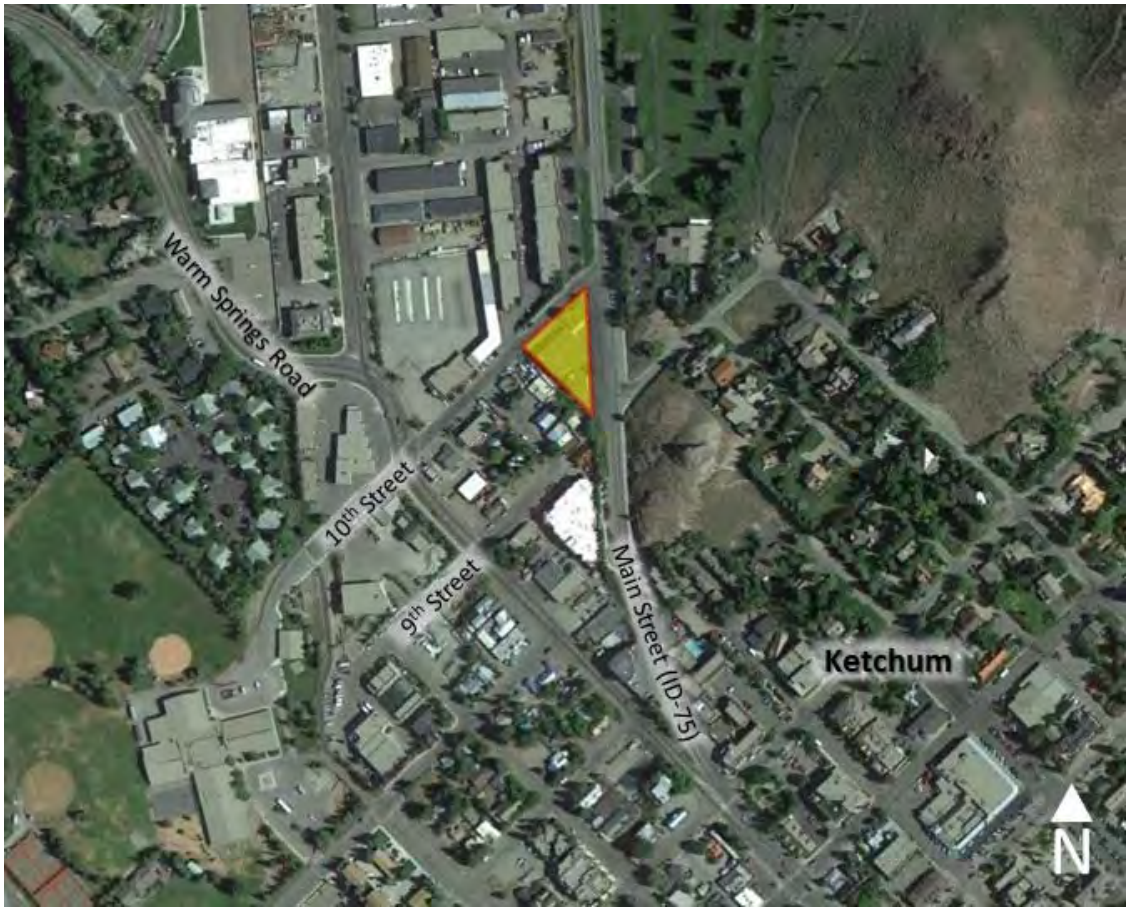

Figure 1 Vicinity map showing the project location in Ketchum, Idaho

B. Scope

The study area was defined based on conversations with the development team, following general guidelines for traffic impact studies. This study was scoped to evaluate the traffic operational performance impacts of the project on the following intersection:

- Main Street (SH-75) / 10th Street

C. Analysis Methodology

Level of service (LOS) is a term that describes the operating performance of an intersection or roadway. LOS is measured quantitatively and reported on a scale from A to F, with A representing the best performance and F the worst. Table 1 provides a brief description of each LOS letter designation and an accompanying average delay per vehicle for both signalized and unsignalized intersections.

The Highway Capacity Manual 2010 (HCM 2010) methodology was used in this study to remain consistent with "state-of-the-practice" professional standards. This methodology has different quantitative evaluations for signalized and unsignalized intersections. For signalized and all-way stop intersections, the LOS is provided for the overall intersection (weighted average of all approach delays). For all other unsignalized intersections LOS is reported based on the worst approach.

D. Level of Service Standards

For the purposes of this study, a minimum overall intersection performance for each of the study intersections was set at LOS D. However, if LOS E or F conditions exist, an explanation and/or mitigation measures will be presented. An LOS D threshold is consistent with "state-of-the-practice" traffic engineering principles for urbanized areas.

Table 1 Level of Service Descriptions

Level of Service	Description of Traffic Conditions	Average Delay (seconds/vehicle)
	Signalized Intersections	**Overall Intersection**
A	Extremely favorable progression and a very low level of control delay. Individual users are virtually unaffected by others in the traffic stream.	0 ≤ 10.0
B	Good progression and a low level of control delay. The presence of other users in the traffic stream becomes noticeable.	> 10.0 and ≤ 20.0
C	Fair progression and a moderate level of control delay. The operation of individual users becomes somewhat affected by interactions with others in the traffic stream.	>20.0 and ≤ 35.0
D	Marginal progression with relatively high levels of control delay. Operating conditions are noticeably more constrained.	> 35.0 and ≤ 55.0
E	Poor progression with unacceptably high levels of control delay. Operating conditions are at or near capacity.	> 55.0 and ≤ 80.0
F	Unacceptable progression with forced or breakdown operating conditions.	> 80.0
	Unsignalized Intersections	**Worst Approach**
A	Free Flow / Insignificant Delay	0 ≤ 10.0
B	Stable Operations / Minimum Delays	>10.0 and ≤ 15.0
C	Stable Operations / Acceptable Delays	>15.0 and ≤ 25.0
D	Approaching Unstable Flows / Tolerable Delays	>25.0 and ≤ 35.0
E	Unstable Operations / Significant Delays	>35.0 and ≤ 50.0
F	Forced Flows / Unpredictable Flows / Excessive Delays	> 50.0

Source: Hales Engineering Descriptions, based on Highway Capacity Manual, 2010 Methodology (Transportation Research Board, 2010)

II. EXISTING (2016) BACKGROUND CONDITIONS

A. Purpose

The purpose of the existing (2016) background analysis is to study the intersections and roadways during the peak travel periods of the day with background traffic and geometric conditions. Through this analysis, background traffic operational deficiencies can be identified and potential mitigation measures recommended. This analysis will provide a baseline condition that may be compared to the build conditions to identify the impacts of the development.

B. Roadway System

The primary roadways that will provide access to the project site are described below:

Main Street (SH-75) – is a state-maintained roadway that is classified by ITD as a "regional" route in the vicinity of the project. SH-75 is a north/south route connecting Ketchum, as well as other communities such as Sun Valley and Hailey, to US-20 to the south. As a regional route in an urban area with a speed limit less than 35 mph, this roadway has minimum signal spacing of 2,640 feet, and a minimum street spacing of 660 feet. The minimum driveway distance from an upstream intersection is 250 feet, the minimum distance from a downstream intersection is 660 feet, and the minimum distance between accesses is 250 feet. Main Street (SH-75) has one travel lane in each direction and the posted speed limit in the vicinity of the proposed project is 25 mph.

C. Traffic Volumes

Hales Engineering performed weekday morning (7:00 to 9:00 a.m.) and afternoon (4:00 to 6:00 p.m.) peak period traffic counts at the following intersections:

- Main Street (SH-75) / 10th Street

These counts were performed for a previous project on Wednesday, February 13, 2008. Data from a nearby automatic traffic recorder (ATR 68) was used to determine an annual growth rate of 1.1% and a seasonal adjustment of 30% for this segment of SH-75. Using these adjustments, peak period traffic volumes were calculated for the study intersection. The a.m. peak hour was determined to be between the hours of 8:00 and 9:00 a.m., and the p.m. peak hour was determined to be between the hours of 4:15 and 5:15 p.m. Detailed count data are included in Appendix A. The traffic volumes at this intersection were approximately 15% higher during the p.m. peak hour than during the a.m. peak hour. Therefore, the p.m. peak hour was chosen for detailed analysis as this represents the worst-case scenario.

Figure 2 shows the existing p.m. peak hour volume as well as intersection geometry at the study intersection.

D. Level of Service Analysis

Using Synchro/SimTraffic, which follow the Highway Capacity Manual (HCM) 2010 methodology introduced in Chapter I, the p.m. peak hour LOS was computed for the study intersection. The results of this analysis are reported in Table 2 (see Appendix B for the detailed LOS reports). Multiple runs of SimTraffic were used to provide a statistical evaluation of the intersection. These results serve as a baseline condition for the impact analysis of the proposed development during existing (2016) conditions. As shown in Table 2, the Main Street (SH-75) / 10th Street intersection is currently operating at LOS A during the p.m. peak hour.

E. Queuing Analysis

Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. The queue reports can be found in Appendix D. The 95th percentile queues on the north- and eastbound approaches to the 10th Street / Main Street (SH-75) intersection was observed extend for approximately 80 feet. No other significant queuing was observed.

F. Mitigation Measures

No mitigation measures are recommended.

Table 2 Existing (2016) Background p.m. Peak Hour Level of Service

Intersection		Worst Approach			Overall Intersection	
Description	Control	Approach[1,3]	Aver. Delay (Sec/Veh)[1]	LOS[1]	Aver. Delay (Sec/Veh)[2]	LOS[2]
Main Street (SH-75) / 10th Street	EB Stop	EB	9.7	A	-	-

1. This represents the worst approach LOS and delay (seconds / vehicle) and is only reported for non-all-way stop unsignalized intersections.
2. This represents the overall intersection LOS and delay (seconds / vehicle) and is reported for all-way stop, roundabout, and signalized intersections.
3. Southbound = Southbound approach, etc.

Source: Hales Engineering, May 2016

ID Ketchum Gas Station TIS
Existing (2016) Background

p.m. Peak Hour
Figure 2

III. PROJECT CONDITIONS

A. Purpose

The project conditions analysis explains the type and intensity of development. This provides the basis for trip generation, distribution, and assignment of project trips to the surrounding study intersections defined in the Introduction.

B. Project Description

This study addresses the traffic impacts associated with the gas station in Ketchum, Idaho. The proposed gas station will be located on the southwest corner of the Main Street (SH-75) / 10th Street intersection. A site plan for the proposed development can be found in Appendix C.

The proposed land use for the development has been identified as follows:

- Gasoline/Service Station with Convenience Market 8 Vehicle Fueling Positions

C. Trip Generation

Trip generation for the development was calculated using trip generation rates published in the Institute of Transportation Engineers (ITE) *Trip Generation (9th Edition, 2012)*. Trip Generation for the proposed project is included in Table 3.

D. Trip Distribution and Assignment

Project traffic is assigned to the roadway network based on the type of trip and the proximity of project access points to major streets, high population densities, and regional trip attractions. Existing travel patterns observed during data collection also provide helpful guidance to establishing these distribution percentages, especially in close proximity to the site. The resulting distribution of projected generated trips is as follows:

<u>To/From Project:</u>

- 15% North
- 85% South

These trip distribution assumptions and the prevailing movements at each intersection were used to assign the evening peak hour generated traffic at the study intersections to create trip assignment for the proposed development. Trip assignment for the development is shown in Figure 3.

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Table 3
ID Ketchum Gas Station TIS
Trip Generation

Weekday Daily Land Use[1]	Number of Units	Unit Type	Trip Generation	% Entering	% Exiting	Trips Entering	Trips Exiting	Total Daily Trips
Gasoline/Service Station with Convenience Marke	8	Vehicle Fueling Positions	1,304	50%	50%	652	652	**1,304**
Project Total Daily Trips						**652**	**652**	**1,304**
A.M. Peak Hour Land Use[1]	Number of Units	Unit Type	Trip Generation	% Entering	% Exiting	Trips Entering	Trips Exiting	**Total a.m. Trips**
Gasoline/Service Station with Convenience Marke	8	Vehicle Fueling Positions	82	50%	50%	41	41	**82**
Project Total a.m. Peak Hour Trips						**41**	**41**	**82**
P.M. Peak Hour Land Use[1]	Number of Units	Unit Type	Trip Generation	% Entering	% Exiting	Trips Entering	Trips Exiting	**Total p.m. Trips**
Gasoline/Service Station with Convenience Marke	8	Vehicle Fueling Positions	110	50%	50%	55	55	**110**
Project Total p.m. Peak Hour Trips						**55**	**55**	**110**

1. Land Use Code from the Institute of Transportation Engineers Trip Generation Manual (9th Edition - 2012)

SOURCE: Hales Engineering, March 2016

E. Access

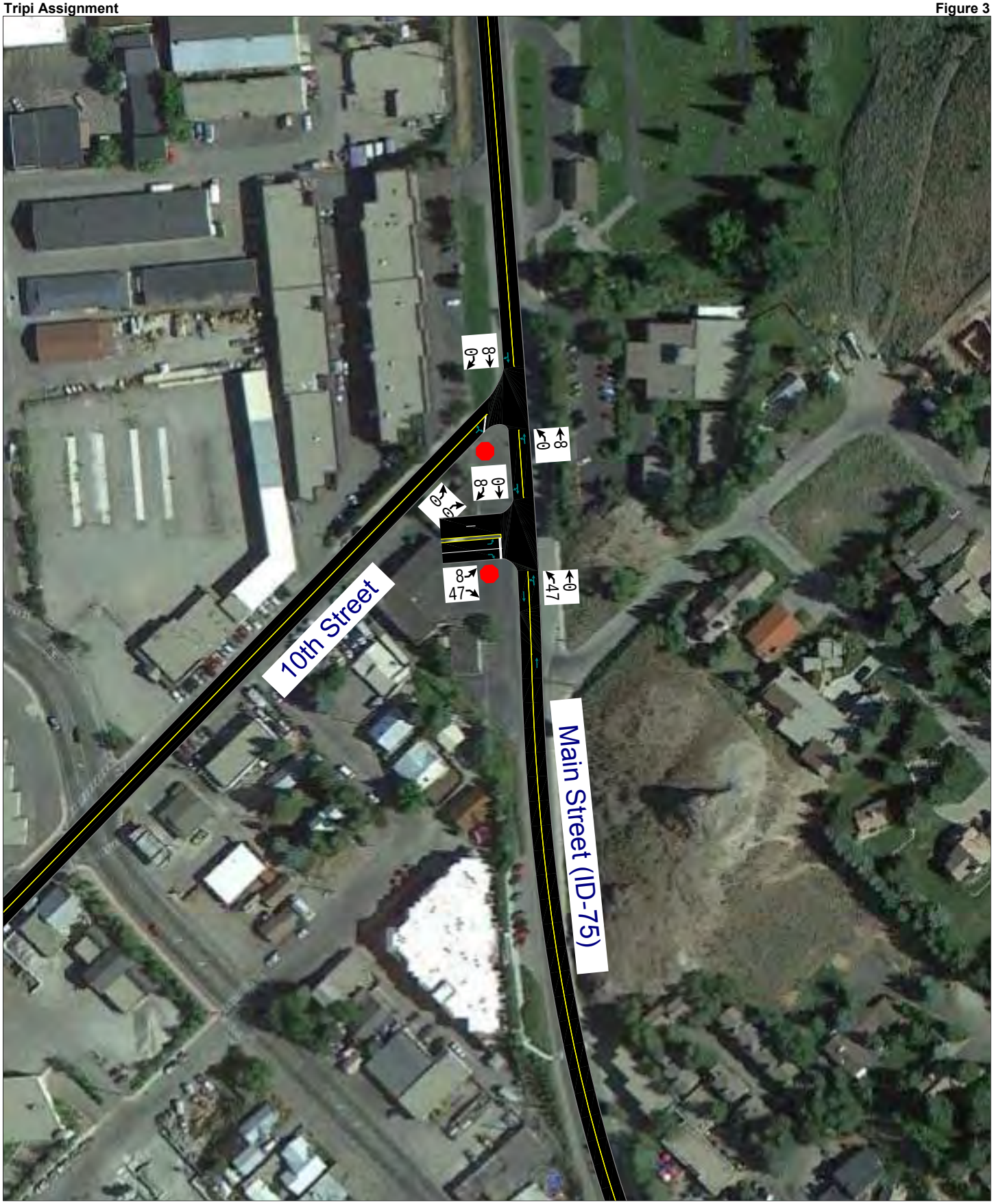
The proposed access for the site will be gained at the following locations (see also site plan in Appendix C):

Main Street (SH-75):

- One full-movement "boulevard approach" accesses is proposed on Main Street (SH-75), one approximately 60 feet south of 10th Street. A "boulevard approach" consists of two forty foot wide openings in the curb separated by a small island. One opening is for ingress movements, and the other for egress movements.

ID Ketchum Gas Station TIS
Tripi Assignment

p.m. Peak Hour
Figure 3



IV. EXISTING (2016) PLUS PROJECT CONDITIONS

A. Purpose

This section of the report examines the traffic impacts of the proposed project at each of the study intersections. The net trips generated by the proposed development were combined with the existing background traffic volumes to create the existing plus project conditions. This scenario provides valuable insight into the potential impacts of the proposed project on background traffic conditions.

B. Traffic Volumes

Project trips were assigned to the study intersections based on the trip distribution percentages discussed in Chapter III and permitted intersection turning movements. The existing (2016) plus project p.m. peak hour volumes were generated for the study intersections and are shown in Figure 4.

C. Level of Service Analysis

Using Synchro/SimTraffic, which follow the Highway Capacity Manual (HCM) 2010 methodology introduced in Chapter I, the p.m. peak hour LOS was computed for each study intersection. The results of this analysis are reported in Table 4 (see Appendix B for the detailed LOS reports). Multiple runs of SimTraffic were used to provide a statistical evaluation of the interaction between the intersections. As shown in Table 4, all study intersections are anticipated to operate at acceptable levels of service during the p.m. peak hour.

D. Queuing Analysis

Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. The queue reports can be found in Appendix D. During the p.m. peak hour, the 95th percentile queue length on the on the eastbound approach to the Main Street (SH-75) / 10th Street intersection is anticipated to extend for approximately 80 feet with project traffic added. Some queuing on northbound Main Street (SH-75) is also anticipated, which is likely attributed to left-turning vehicles blocking through traffic at the Main Street (SH-75) / 10th Street intersection as well as at the project access.

E. Mitigation Measures

It is recommend that a two-way left-turn lane be constructed from a location north of 10th Street to a location south of the project. No other mitigation measures are recommended.

Table 4 Existing (2016) Plus Project p.m. Peak Hour Level of Service

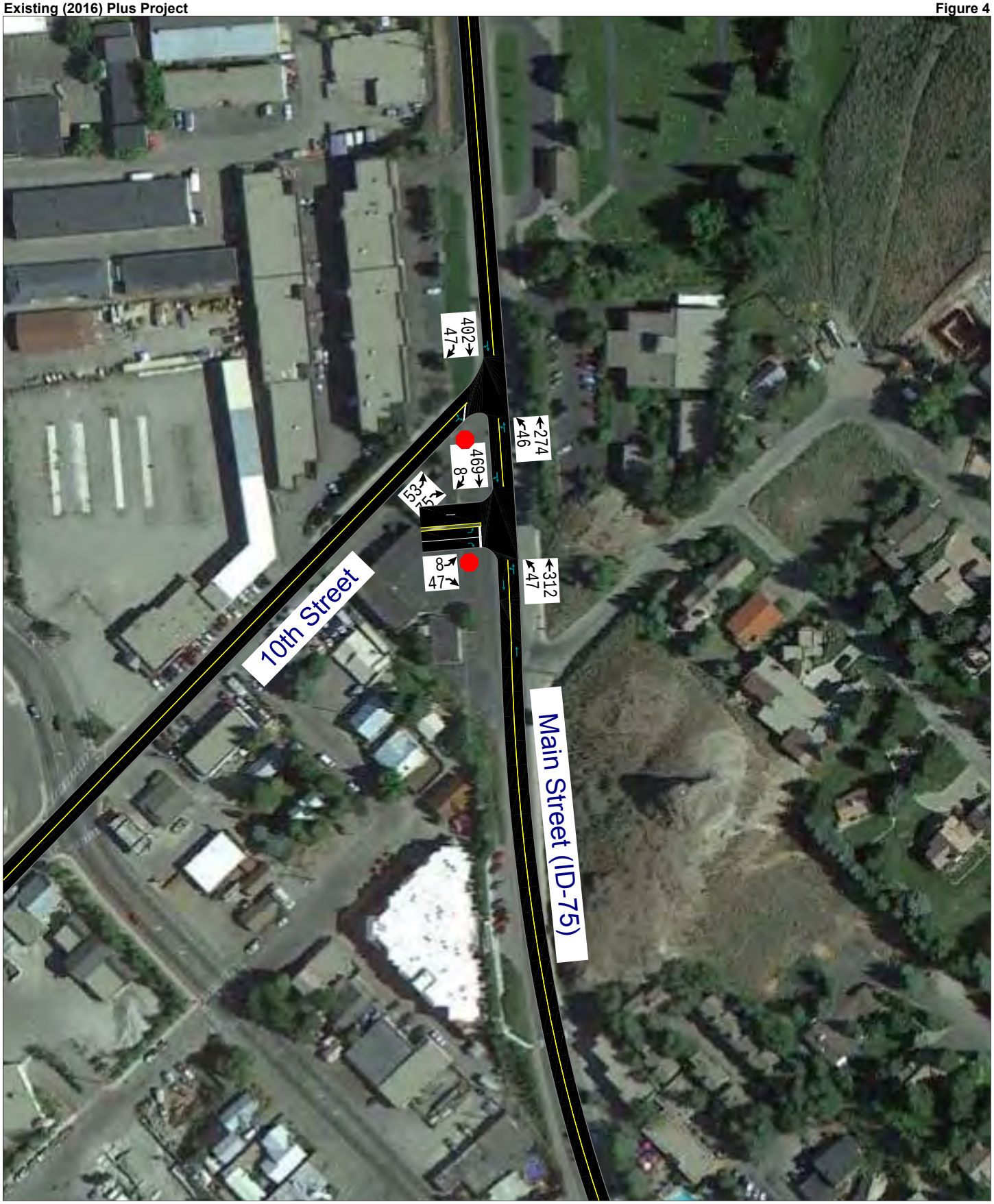
Intersection		Worst Approach			Overall Intersection	
Description	Control	Approach[1,3]	Aver. Delay (Sec/Veh)[1]	LOS[1]	Aver. Delay (Sec/Veh)[2]	LOS[2]
Main Street (SH-75) / 10th Street	EB Stop	EB	10.9	B	-	-
Main Street (SH-75) / Access 1	EB Stop	EB	6.5	A	-	-

1. This represents the worst approach LOS and delay (seconds / vehicle) and is only reported for non-all-way stop unsignalized intersections.
2. This represents the overall intersection LOS and delay (seconds / vehicle) and is reported for all-way stop, roundabout, and signalized intersections.
3. Southbound = Southbound approach, etc.

Source: Hales Engineering, May 2016

ID Ketchum Gas Station TIS
Existing (2016) Plus Project

p.m. Peak Hour
Figure 4



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V. FUTURE (2020) BACKGROUND CONDITIONS

A. Purpose

The purpose of the future (2020) background analysis is to study the intersections and roadways during the peak travel periods of the day for future background traffic and geometric conditions. Through this analysis, future background traffic operational deficiencies can be identified and potential mitigation measures recommended.

B. Roadway Network

Based on information received, no improvements are planned for any of the roadways or intersections within the study area before 2020.

C. Traffic Volumes

Hales Engineering used the calculated annual growth rate discussed in Chapter II to project future (2020) traffic volumes for the study intersection. Future 2020 p.m. peak hour turning movement volumes are shown in Figure 5.

D. Level of Service Analysis

Using Synchro/SimTraffic, which follow the Highway Capacity Manual (HCM) 2010 methodology introduced in Chapter I, the p.m. peak hour LOS was computed for each study intersection. The results of this analysis are reported in Table 5 (see Appendix B for the detailed LOS reports). Multiple runs of SimTraffic were used to provide a statistical evaluation of the interaction between the intersections. These results serve as a baseline condition for the impact analysis of the proposed development for future (2020) conditions. As shown in Table 5, the Main Street (SH-75) / 10th Street intersection is anticipated to operate at LOS C during the p.m. peak hour with future (2020) background traffic conditions.

E. Queuing Analysis

Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. The queue reports can be found in Appendix D. The 95th percentile queues on the north- and eastbound approaches to the Main Street (SH-75) / 10th Street intersection are anticipated to extend for approximately 110 feet. No other significant queuing is anticipated.

F. Mitigation Measures

No additional mitigation measures are recommended.

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Table 5 Future (2020) Background p.m. Peak Hour Level of Service

Intersection		Worst Approach			Overall Intersection	
Description	Control	Approach[1,3]	Aver. Delay (Sec/Veh)[1]	LOS[1]	Aver. Delay (Sec/Veh)[2]	LOS[2]
Main Street (SH-75) / 10th Street	EB Stop	EB	15.9	C	-	-

1. This represents the worst approach LOS and delay (seconds / vehicle) and is only reported for non-all-way stop unsignalized intersections.
2. This represents the overall intersection LOS and delay (seconds / vehicle) and is reported for all-way stop, roundabout, and signalized intersections.
3. Southbound = Southbound approach, etc.

Source: Hales Engineering, May 2016

ID Ketchum Gas Station TIS
Future (2020) Background

p.m. Peak Hour
Figure 5

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VI. FUTURE (2020) PLUS PROJECT CONDITIONS

A. Purpose

The purpose of the future (2020) plus project analysis is to study the intersections and roadways during the peak travel periods of the day for future background traffic and geometric conditions plus the net trips generated by the proposed development. This scenario provides valuable insight into the potential impacts of the proposed project on future background traffic conditions.

B. Traffic Volumes

Trips were assigned to the study intersections based on the trip distribution percentages discussed in Chapter III and permitted intersection turning movements. It was also assumed that the previously recommended center TWLTL had been constructed along the project frontage.

The future (2020) plus project p.m. peak hour volumes were generated for the study intersections and are shown in Figure 6.

C. Level of Service Analysis

Using Synchro/SimTraffic, which follow the Highway Capacity Manual (HCM) 2010 methodology introduced in Chapter I, the p.m. peak hour LOS was computed for each study intersection. The results of this analysis are reported in Table 6 (see Appendix B for the detailed LOS reports). Multiple runs of SimTraffic were used to provide a statistical evaluation of the interaction between the intersections. As shown in Table 6, the Main Street (SH-75) / 10th Street intersection is anticipated to operate at LOS C with project traffic added, while the proposed access is anticipated to operate at LOS A during the p.m. peak hour.

D. Queuing Analysis

Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. The queue reports can be found in Appendix D. During the p.m. peak hour, the 95th percentile queue length on the northbound approach to the Main Street (SH-75) / 10th Street intersection is anticipated to extend for approximately 50 feet. All other queuing is anticipated to be nominal.

E. Mitigation Measures

No additional mitigation measures are recommended.

Table 6 Future (2020) Plus Project p.m. Peak Hour Level of Service

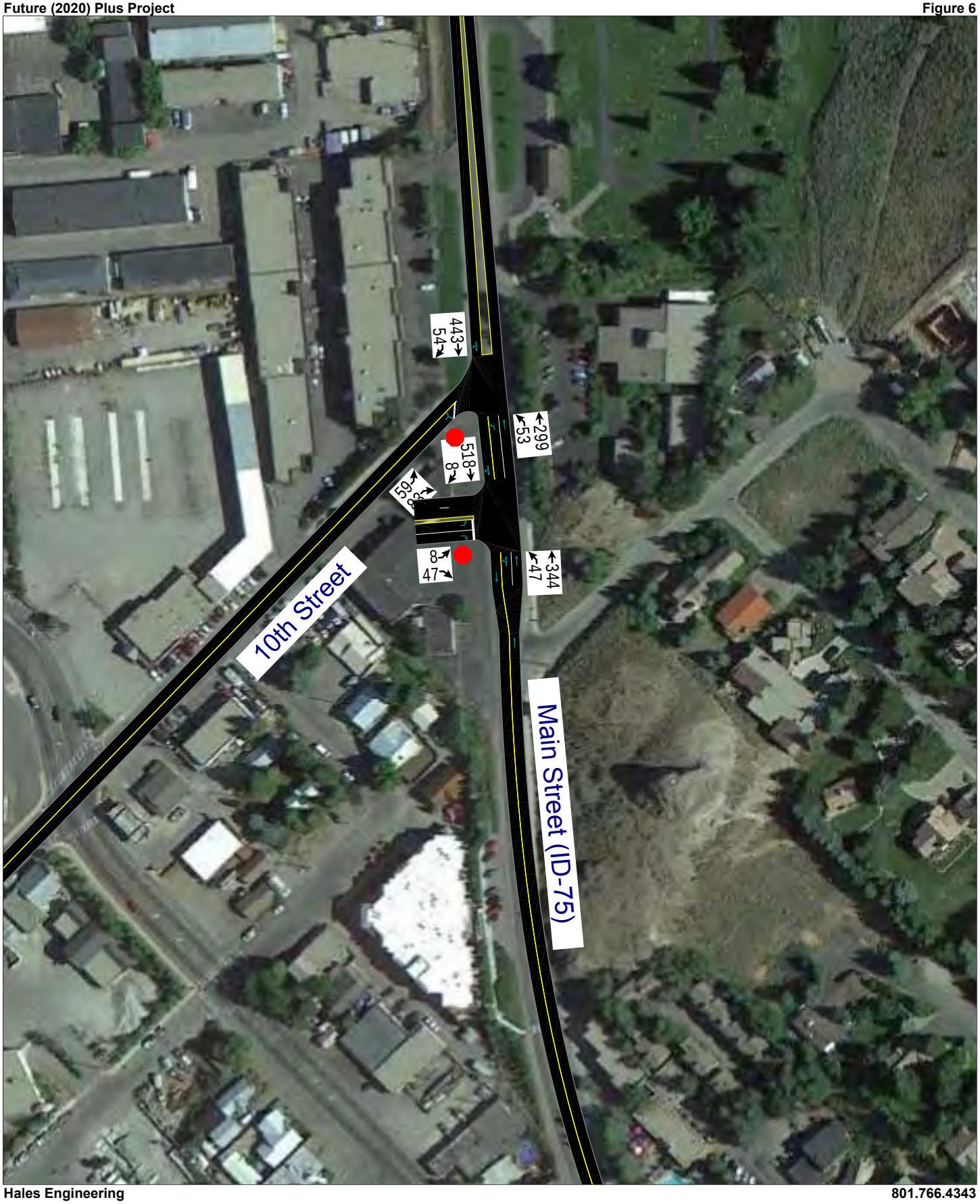
Intersection		Worst Approach			Overall Intersection	
Description	Control	Approach[1,3]	Aver. Delay (Sec/Veh)[1]	LOS[1]	Aver. Delay (Sec/Veh)[2]	LOS[2]
Main Street (SH-75) / 10th Street	EB Stop	EB	17.8	C	-	-
Main Street (SH-75) / Access 1	EB Stop	EB	9.2	A	-	-

1. This represents the worst approach LOS and delay (seconds / vehicle) and is only reported for non-all-way stop unsignalized intersections.
2. This represents the overall intersection LOS and delay (seconds / vehicle) and is reported for all-way stop, roundabout, and signalized intersections.
3. Southbound = Southbound approach, etc.

Source: Hales Engineering, May 2016

ID Ketchum Gas Station TIS
Future (2020) Plus Project

p.m. Peak Hour
Figure 6



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APPENDIX A

Turning Movement Counts

TrafficCounts
2364 North 1450 East
Lehi, UT 84043
801.636.0891

Intersection Turning Movement Summary

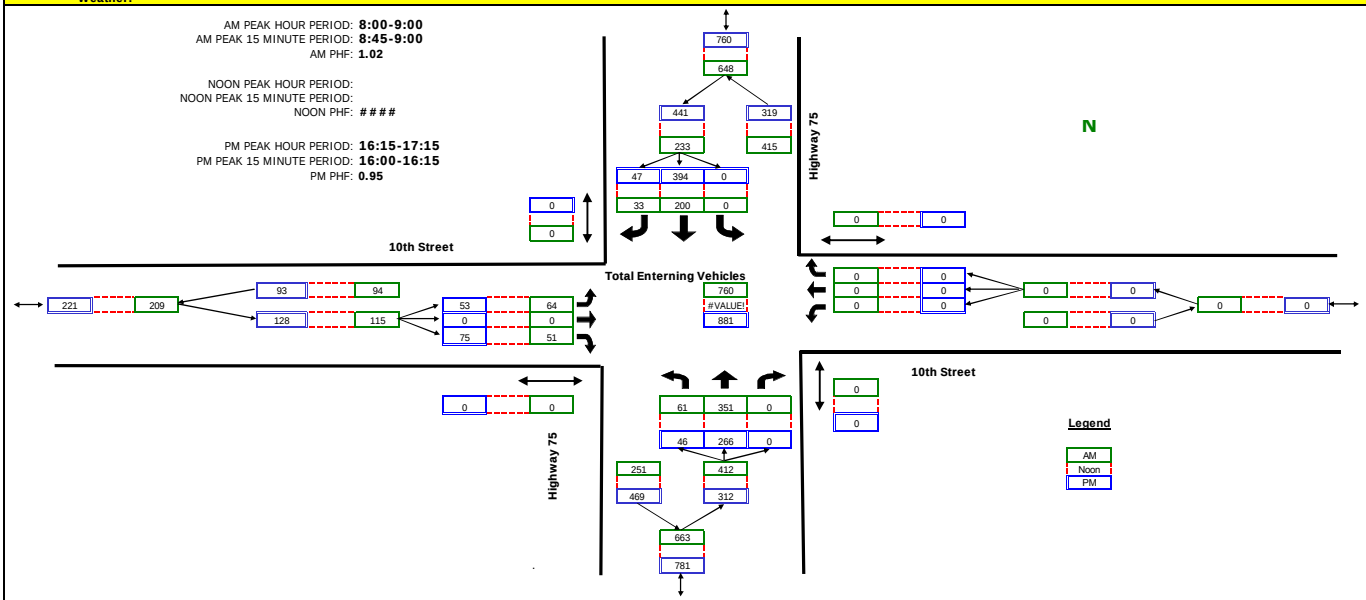
Intersection: Highway 75 / 10th Street
North/South: Highway 75
East/West: 10th Street
Jurisdiction: Ketchum, Idaho
Project Title: Ketchum - Warm Springs Road
Project No: P112
Weather:

Date: 2-13-08, Wed
Day of Week Adjustment: 100.0%
Month of Year Adjustment: 70.0%
Adjustment Station #: 68
Growth Rate: 1.1%
Number of Years: 8

AM PEAK HOUR PERIOD: **8:00-9:00**
AM PEAK 15 MINUTE PERIOD: **8:45-9:00**
AM PHF: **1.02**

NOON PEAK HOUR PERIOD:
NOON PEAK 15 MINUTE PERIOD:
NOON PHF: **####**

PM PEAK HOUR PERIOD: **16:15-17:15**
PM PEAK 15 MINUTE PERIOD: **16:00-16:15**
PM PHF: **0.95**



RAW COUNT SUMMARIES	Highway 75 Northbound				Highway 75 Southbound				10th Street Eastbound				10th Street Westbound				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	

AM PERIOD COUNTS

Period	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	TOTAL
7:00-7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15-7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30-7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45-8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00-8:15	18.5714	68.5714	0	0	0	38.571	7.1429	0	15.714	0	10	0	0	0	0	0	158.5714
8:15-8:30	17.1429	81.4286	0	0	0	45.714	7.1429	0	15.714	0	10	0	0	0	0	0	177.1429
8:30-8:45	10	82.8571	0	0	0	48.571	8.5714	0	14.286	0	10	0	0	0	0	0	174.2857
8:45-9:00	10	88.5714	0	0	0	50	7.1429	0	12.857	0	17.143	0	0	0	0	0	185.7143

NOON PERIOD COUNTS

Period	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	TOTAL
11:00-11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15-11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30-11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45-12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00-12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15-12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30-12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45-13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PM PERIOD COUNTS

Period	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	TOTAL
16:00-16:15	10	64	0	0	0	114	11	0	17	0	16	0	0	0	0	0	232
16:15-16:30	10	76	0	0	0	77	11	0	17	0	16	0	0	0	0	0	207
16:30-16:45	7	43	0	0	0	114	14	0	16	0	19	0	0	0	0	0	213
16:45-17:00	11	59	0	0	0	87	7	0	6	0	14	0	0	0	0	0	184
17:00-17:15	14	66	0	0	0	83	11	0	10	0	20	0	0	0	0	0	204
17:15-17:30	7	44	0	0	0	67	4	0	10	0	6	3	0	0	0	0	138
17:30-17:45	7	47	0	0	0	69	3	0	11	0	6	0	0	0	0	0	143
17:45-18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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APPENDIX B

Level of Service Results

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SimTraffic LOS Report

Project: ID Ketchum Gas Station TIS
Analysis Period: *Existing (2016) Background*
Time Period: *p.m. Peak Hour* **Project #:** *UT-16-851*

Intersection: 10th Street & Main Street (ID-75)
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	46	45	98	5.2	*A*
	T	266	263	99	1.0	*A*
	Subtotal	312	308	99	1.6	*A*
SB	T	394	396	101	0.8	*A*
	R	47	44	94	0.4	*A*
	Subtotal	441	440	100	0.8	*A*
NE	L	53	49	92	14.2	*B*
	R	75	76	101	6.8	*A*
	Subtotal	***128***	***125***	***98***	***9.7***	***A***
Total		880	873	99	2.4	*A*

Intersection:
Type:

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
Total						

3: 10th Street & Main Street (ID-75) Performance by movement Interval #1 4:15

Movement	NBL	NBT	SBT	SBR	NEL	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.3	0.3	0.2	0.1	0.2
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	5.7	1.0	0.8	0.5	12.0	6.0	2.2
Vehicles Entered	10	66	98	12	12	18	216
Vehicles Exited	10	66	97	12	12	19	216
Hourly Exit Rate	40	264	388	48	48	76	864
Input Volume	45	261	387	46	52	74	865
% of Volume	89	101	100	104	92	103	100

3: 10th Street & Main Street (ID-75) Performance by movement Interval #2 4:30

Movement	NBL	NBT	SBT	SBR	NEL	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.3	0.4	0.2	0.2	0.2
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	4.7	0.9	0.8	0.3	12.7	6.6	2.2
Vehicles Entered	11	66	96	11	13	20	217
Vehicles Exited	11	66	96	11	12	19	215
Hourly Exit Rate	44	264	384	44	48	76	860
Input Volume	45	261	387	46	52	74	865
% of Volume	98	101	99	96	92	103	99

3: 10th Street & Main Street (ID-75) Performance by movement Interval #3 4:45

Movement	NBL	NBT	SBT	SBR	NEL	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.4	0.4	0.2	0.2	0.2
Total Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.0	0.2
Total Del/Veh (s)	5.8	1.4	0.9	0.5	18.7	7.8	2.9
Vehicles Entered	13	66	107	11	12	20	229
Vehicles Exited	13	66	108	12	13	20	232
Hourly Exit Rate	52	264	432	48	52	80	928
Input Volume	48	280	415	49	56	79	927
% of Volume	108	94	104	98	93	101	100

3: 10th Street & Main Street (ID-75) Performance by movement Interval #4 5:00

Movement	NBL	NBT	SBT	SBR	NEL	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.3	0.2	0.2	0.2	0.2
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	4.5	0.7	0.7	0.3	12.4	5.7	2.0
Vehicles Entered	11	65	96	10	13	18	213
Vehicles Exited	10	65	95	10	12	18	210
Hourly Exit Rate	40	260	380	40	48	72	840
Input Volume	45	261	387	46	52	74	865
% of Volume	89	100	98	87	92	97	97

3: 10th Street & Main Street (ID-75) Performance by movement Entire Run

Movement	NBL	NBT	SBT	SBR	NEL	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.4	0.3	0.2	0.2	0.2
Total Delay (hr)	0.1	0.1	0.1	0.0	0.2	0.1	0.6
Total Del/Veh (s)	5.2	1.0	0.8	0.4	14.2	6.8	2.4
Vehicles Entered	45	263	396	44	49	76	873
Vehicles Exited	45	263	396	44	49	76	873
Hourly Exit Rate	45	263	396	44	49	76	873
Input Volume	46	266	394	47	53	75	880
% of Volume	98	99	101	94	92	101	99

Total Network Performance By Interval

Interval Start	4:15	4:30	4:45	5:00	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.3	0.3	0.3	0.3	0.3
Total Delay (hr)	0.2	0.2	0.3	0.2	0.9
Total Del/Veh (s)	3.4	3.4	4.3	3.3	3.8
Vehicles Entered	216	218	230	210	872
Vehicles Exited	216	217	231	209	872
Hourly Exit Rate	864	868	924	836	872
Input Volume	2497	2497	2676	2497	2542
% of Volume	35	35	35	33	34

Intersection: 3: 10th Street & Main Street (ID-75), Interval #1

Movement	NB	NE
Directions Served	LT	LR
Maximum Queue (ft)	82	73
Average Queue (ft)	27	40
95th Queue (ft)	80	72
Link Distance (ft)	274	1052
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: 10th Street & Main Street (ID-75), Interval #2

Movement	NB	NE
Directions Served	LT	LR
Maximum Queue (ft)	66	77
Average Queue (ft)	25	44
95th Queue (ft)	73	84
Link Distance (ft)	274	1052
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: 10th Street & Main Street (ID-75), Interval #3

Movement	NB	SB	NE
Directions Served	LT	TR	LR
Maximum Queue (ft)	85	2	88
Average Queue (ft)	35	0	46
95th Queue (ft)	93	5	91
Link Distance (ft)	274	610	1052
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: 10th Street & Main Street (ID-75), Interval #4

Movement	NB	NE
Directions Served	LT	LR
Maximum Queue (ft)	64	67
Average Queue (ft)	24	39
95th Queue (ft)	66	70
Link Distance (ft)	274	1052
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: 10th Street & Main Street (ID-75), All Intervals

Movement	NB	SB	NE
Directions Served	LT	TR	LR
Maximum Queue (ft)	105	2	99
Average Queue (ft)	28	0	42
95th Queue (ft)	79	2	80
Link Distance (ft)	274	610	1052
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty, Interval #1: 0
Network wide Queuing Penalty, Interval #2: 0
Network wide Queuing Penalty, Interval #3: 0
Network wide Queuing Penalty, Interval #4: 0
Network wide Queuing Penalty, All Intervals: 0

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SimTraffic LOS Report

Project: ID Ketchum Gas Station TIS
Analysis Period: *Existing (2016) Plus Project*
Time Period: *p.m. Peak Hour* **Project #:** *UT-16-851*

Intersection: 10th Street & Main Street (ID-75)
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	46	45	98	5.1	*A*
	T	274	271	99	1.0	*A*
	Subtotal	320	316	99	1.6	*A*
SB	T	402	404	100	0.9	*A*
	R	47	52	111	0.6	*A*
	Subtotal	449	456	102	0.9	*A*
NE	L	53	52	98	15.2	*C*
	R	75	73	97	7.8	*A*
	Subtotal	***128***	***125***	***98***	***10.9***	***B***
Total		897	897	100	2.5	*A*

Intersection: Main Street (ID-75) & Access 1
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	47	44	94	3.5	*A*
	T	312	309	99	0.7	*A*
	Subtotal	359	353	98	1.0	*A*
SB	T	469	470	100	0.4	*A*
	R	8	8	100	0.2	*A*
	Subtotal	477	478	100	0.4	*A*
EB	L	8	7	88	11.8	*B*
	R	47	50	107	5.8	*A*
	Subtotal	***55***	***57***	***104***	***6.5***	***A***
Total		891	888	100	1.1	*A*

1: 10th Street & Main Street (ID-75) Performance by movement Interval #1 4:15

Movement	NBL	NBT	SBT	SBR	NEL	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.4	0.4	0.2	0.2	0.2
Total Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.0	0.2
Total Del/Veh (s)	4.8	0.9	0.8	0.5	16.1	7.5	2.4
Vehicles Entered	10	69	101	13	12	18	223
Vehicles Exited	10	70	100	13	13	18	224
Hourly Exit Rate	40	280	400	52	52	72	896
Input Volume	45	270	395	46	52	74	882
% of Volume	89	104	101	113	100	97	102

1: 10th Street & Main Street (ID-75) Performance by movement Interval #2 4:30

Movement	NBL	NBT	SBT	SBR	NEL	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.3	0.3	0.2	0.2	0.2
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	4.5	0.9	0.8	0.6	12.7	6.6	2.2
Vehicles Entered	12	64	96	13	12	17	214
Vehicles Exited	12	64	97	13	12	17	215
Hourly Exit Rate	48	256	388	52	48	68	860
Input Volume	45	270	395	46	52	74	882
% of Volume	107	95	98	113	92	92	98

1: 10th Street & Main Street (ID-75) Performance by movement Interval #3 4:45

Movement	NBL	NBT	SBT	SBR	NEL	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.4	0.4	0.1	0.2	0.2
Total Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.0	0.2
Total Del/Veh (s)	6.4	1.2	1.0	0.5	14.5	8.3	2.8
Vehicles Entered	12	69	106	16	15	18	236
Vehicles Exited	12	69	104	16	14	18	233
Hourly Exit Rate	48	276	416	64	56	72	932
Input Volume	48	288	423	49	56	79	943
% of Volume	100	96	98	131	100	91	99

1: 10th Street & Main Street (ID-75) Performance by movement Interval #4 5:00

Movement	NBL	NBT	SBT	SBR	NEL	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.4	0.5	0.3	0.2	0.2
Total Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.0	0.2
Total Del/Veh (s)	5.0	0.9	0.8	0.8	14.0	8.0	2.4
Vehicles Entered	10	68	101	11	12	20	222
Vehicles Exited	10	68	102	11	12	20	223
Hourly Exit Rate	40	272	408	44	48	80	892
Input Volume	45	270	395	46	52	74	882
% of Volume	89	101	103	96	92	108	101

1: 10th Street & Main Street (ID-75) Performance by movement Entire Run

Movement	NBL	NBT	SBT	SBR	NEL	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.0	0.0	0.4	0.4	0.2	0.2	0.2
Total Delay (hr)	0.1	0.1	0.1	0.0	0.2	0.2	0.6
Total Del/Veh (s)	5.1	1.0	0.9	0.6	15.2	7.8	2.5
Vehicles Entered	45	271	404	52	51	74	897
Vehicles Exited	45	271	404	52	52	73	897
Hourly Exit Rate	45	271	404	52	52	73	897
Input Volume	46	274	402	47	53	75	897
% of Volume	98	99	100	111	98	97	100

2: Main Street (ID-75) & Access 1 Performance by movement Interval #1 4:15

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	8.7	6.3	3.4	0.7	0.4	0.3	1.0
Vehicles Entered	2	11	11	78	118	1	221
Vehicles Exited	2	11	11	78	117	1	220
Hourly Exit Rate	8	44	44	312	468	4	880
Input Volume	8	46	46	307	461	8	876
% of Volume	100	96	96	102	102	50	100

2: Main Street (ID-75) & Access 1 Performance by movement Interval #2 4:30

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	6.8	5.6	3.5	0.6	0.4	0.1	1.0
Vehicles Entered	2	13	12	75	113	2	217
Vehicles Exited	2	13	12	74	113	2	216
Hourly Exit Rate	8	52	48	296	452	8	864
Input Volume	8	46	46	307	461	8	876
% of Volume	100	113	104	96	98	100	99

2: Main Street (ID-75) & Access 1 Performance by movement Interval #3 4:45

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	14.6	5.9	3.7	0.9	0.5	0.2	1.2
Vehicles Entered	2	14	10	79	121	2	228
Vehicles Exited	2	14	10	80	120	2	228
Hourly Exit Rate	8	56	40	320	480	8	912
Input Volume	8	49	49	328	494	8	936
% of Volume	100	114	82	98	97	100	97

2: Main Street (ID-75) & Access 1 Performance by movement Interval #4 5:00

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	11.3	5.6	3.4	0.6	0.4	0.1	1.0
Vehicles Entered	2	11	11	77	118	3	222
Vehicles Exited	2	12	11	77	119	3	224
Hourly Exit Rate	8	48	44	308	476	12	896
Input Volume	8	46	46	307	461	8	876
% of Volume	100	104	96	100	103	150	102

2: Main Street (ID-75) & Access 1 Performance by movement Entire Run

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.1	0.0	0.1	0.1	0.0	0.3
Total Del/Veh (s)	11.8	5.8	3.5	0.7	0.4	0.2	1.1
Vehicles Entered	7	50	44	309	470	8	888
Vehicles Exited	7	50	44	309	470	8	888
Hourly Exit Rate	7	50	44	309	470	8	888
Input Volume	8	47	47	312	469	8	891
% of Volume	88	107	94	99	100	100	100

Total Network Performance By Interval

Interval Start	4:15	4:30	4:45	5:00	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.3	0.3	0.3	0.3	0.3
Total Delay (hr)	0.3	0.3	0.4	0.3	1.3
Total Del/Veh (s)	4.4	4.2	4.8	4.4	4.7
Vehicles Entered	245	239	261	244	989
Vehicles Exited	245	241	257	248	989
Hourly Exit Rate	980	964	1028	992	989
Input Volume	3591	3591	3840	3591	3653
% of Volume	27	27	27	28	27

Intersection: 1: 10th Street & Main Street (ID-75), Interval #1

Movement	NB	SB	NE
Directions Served	LT	TR	LR
Maximum Queue (ft)	73	3	74
Average Queue (ft)	28	0	41
95th Queue (ft)	79	6	85
Link Distance (ft)	76	610	1051
Upstream Blk Time (%)	1		
Queuing Penalty (veh)	2		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 1: 10th Street & Main Street (ID-75), Interval #2

Movement	NB	SB	NE
Directions Served	LT	TR	LR
Maximum Queue (ft)	63	2	78
Average Queue (ft)	28	0	39
95th Queue (ft)	72	5	75
Link Distance (ft)	76	610	1051
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	1		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 1: 10th Street & Main Street (ID-75), Interval #3

Movement	NB	SB	NE
Directions Served	LT	TR	LR
Maximum Queue (ft)	74	2	86
Average Queue (ft)	29	0	50
95th Queue (ft)	79	4	88
Link Distance (ft)	76	610	1051
Upstream Blk Time (%)	2		
Queuing Penalty (veh)	7		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 1: 10th Street & Main Street (ID-75), Interval #4

Movement	NB	SB	NE
Directions Served	LT	TR	LR
Maximum Queue (ft)	61	12	77
Average Queue (ft)	26	2	44
95th Queue (ft)	71	22	80
Link Distance (ft)	76	610	1051
Upstream Blk Time (%)	1		
Queuing Penalty (veh)	2		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 1: 10th Street & Main Street (ID-75), All Intervals

Movement	NB	SB	NE
Directions Served	LT	TR	LR
Maximum Queue (ft)	81	19	102
Average Queue (ft)	28	1	43
95th Queue (ft)	75	12	83
Link Distance (ft)	76	610	1051
Upstream Blk Time (%)	1		
Queuing Penalty (veh)	3		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Main Street (ID-75) & Access 1, Interval #1

Movement	EB	EB	NB	B3	SB
Directions Served	L	R	LT	T	TR
Maximum Queue (ft)	23	51	81	8	19
Average Queue (ft)	5	29	26	1	3
95th Queue (ft)	23	57	78	10	17
Link Distance (ft)	68	68	38	1119	76
Upstream Blk Time (%)		0	2		
Queuing Penalty (veh)		0	0		
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: Main Street (ID-75) & Access 1, Interval #2

Movement	EB	EB	NB	B3	SB
Directions Served	L	R	LT	T	TR
Maximum Queue (ft)	25	49	71	2	25
Average Queue (ft)	6	28	28	0	4
95th Queue (ft)	26	52	74	5	21
Link Distance (ft)	68	68	38	1119	76
Upstream Blk Time (%)		0	3		
Queuing Penalty (veh)		0	0		
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: Main Street (ID-75) & Access 1, Interval #3

Movement	EB	EB	NB	B3	SB
Directions Served	L	R	LT	T	TR
Maximum Queue (ft)	29	46	78	7	28
Average Queue (ft)	8	29	30	1	5
95th Queue (ft)	28	52	84	11	27
Link Distance (ft)	68	68	38	1119	76
Upstream Blk Time (%)		0	3		0
Queuing Penalty (veh)		0	0		0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: Main Street (ID-75) & Access 1, Interval #4

Movement	EB	EB	NB	SB
Directions Served	L	R	LT	TR
Maximum Queue (ft)	23	46	72	25
Average Queue (ft)	7	26	27	5
95th Queue (ft)	27	53	73	27
Link Distance (ft)	68	68	38	76
Upstream Blk Time (%)		0	2	
Queuing Penalty (veh)		0	0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Main Street (ID-75) & Access 1, All Intervals

Movement	EB	EB	NB	B3	SB
Directions Served	L	R	LT	T	TR
Maximum Queue (ft)	31	61	103	17	41
Average Queue (ft)	6	28	28	1	4
95th Queue (ft)	26	54	78	8	24
Link Distance (ft)	68	68	38	1119	76
Upstream Blk Time (%)		0	3		0
Queuing Penalty (veh)		0	0		0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty, Interval #1: 2
Network wide Queuing Penalty, Interval #2: 1
Network wide Queuing Penalty, Interval #3: 7
Network wide Queuing Penalty, Interval #4: 2
Network wide Queuing Penalty, All Intervals: 3

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SimTraffic LOS Report

Project: ID Ketchum Gas Station TIS
Analysis Period: *Future (2020) Background*
Time Period: *p.m. Peak Hour* **Project #:** *UT-16-851*

Intersection: 10th Street & Main Street (ID-75)
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	56	56	100	6.2	*A*
	T	323	331	103	1.6	*A*
	Subtotal	379	387	102	2.3	*A*
SB	T	479	474	99	1.0	*A*
	R	57	52	91	0.6	*A*
	Subtotal	536	526	98	1.0	*A*
NE	L	64	61	95	22.3	*C*
	R	91	90	99	11.5	*B*
	Subtotal	***155***	***151***	***97***	***15.9***	***C***
Total		1,070	1,064	99	3.6	*A*

Intersection:
Type:

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
Total						

3: 10th Street & Main Street (ID-75) Performance by movement Interval #1 4:15

Movement	NBL	NBT	SBT	SBR	NEL	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.4	0.5	0.2	0.2	0.2
Total Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.1	0.2
Total Del/Veh (s)	5.1	1.0	1.0	0.7	20.3	11.5	3.4
Vehicles Entered	13	80	114	14	16	23	260
Vehicles Exited	13	80	114	14	16	23	260
Hourly Exit Rate	52	320	456	56	64	92	1040
Input Volume	55	317	471	56	63	89	1051
% of Volume	95	101	97	100	102	103	99

3: 10th Street & Main Street (ID-75) Performance by movement Interval #2 4:30

Movement	NBL	NBT	SBT	SBR	NEL	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.4	0.4	0.2	0.2	0.2
Total Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.1	0.3
Total Del/Veh (s)	5.3	1.5	1.0	0.5	23.6	13.4	3.7
Vehicles Entered	14	86	118	14	15	21	268
Vehicles Exited	14	87	119	13	16	21	270
Hourly Exit Rate	56	348	476	52	64	84	1080
Input Volume	55	317	471	56	63	89	1051
% of Volume	102	110	101	93	102	94	103

3: 10th Street & Main Street (ID-75) Performance by movement Interval #3 4:45

Movement	NBL	NBT	SBT	SBR	NEL	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.5	0.5	0.2	0.2	0.3
Total Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.1	0.3
Total Del/Veh (s)	8.0	2.1	1.1	0.7	24.5	10.4	3.9
Vehicles Entered	16	83	125	14	15	24	277
Vehicles Exited	15	83	124	14	15	24	275
Hourly Exit Rate	60	332	496	56	60	96	1100
Input Volume	59	340	504	60	67	96	1126
% of Volume	102	98	98	93	90	100	98

3: 10th Street & Main Street (ID-75) Performance by movement Interval #4 5:00

Movement	NBL	NBT	SBT	SBR	NEL	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.4	0.4	0.1	0.2	0.2
Total Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.1	0.2
Total Del/Veh (s)	5.5	1.6	1.0	0.4	18.2	9.0	3.2
Vehicles Entered	14	81	118	11	15	22	261
Vehicles Exited	14	82	116	11	15	21	259
Hourly Exit Rate	56	328	464	44	60	84	1036
Input Volume	55	317	471	56	63	89	1051
% of Volume	102	103	99	79	95	94	99

3: 10th Street & Main Street (ID-75) Performance by movement Entire Run

Movement	NBL	NBT	SBT	SBR	NEL	NER	All
Denied Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.0	0.0	0.4	0.4	0.2	0.2	0.2
Total Delay (hr)	0.1	0.1	0.1	0.0	0.4	0.3	1.1
Total Del/Veh (s)	6.2	1.6	1.0	0.6	22.3	11.5	3.6
Vehicles Entered	56	331	474	52	61	91	1065
Vehicles Exited	56	331	474	52	61	90	1064
Hourly Exit Rate	56	331	474	52	61	90	1064
Input Volume	56	323	479	57	64	91	1070
% of Volume	100	103	99	91	95	99	99

Total Network Performance By Interval

Interval Start	4:15	4:30	4:45	5:00	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.3	0.4	0.4	0.3	0.3
Total Delay (hr)	0.4	0.4	0.5	0.4	1.6
Total Del/Veh (s)	4.8	5.1	5.5	4.7	5.3
Vehicles Entered	259	269	278	258	1064
Vehicles Exited	260	272	275	260	1065
Hourly Exit Rate	1040	1088	1100	1040	1065
Input Volume	3034	3034	3251	3034	3088
% of Volume	34	36	34	34	34

Intersection: 3: 10th Street & Main Street (ID-75), Interval #1

Movement	NB	NE
Directions Served	LT	LR
Maximum Queue (ft)	70	103
Average Queue (ft)	25	60
95th Queue (ft)	73	112
Link Distance (ft)	274	1052
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: 10th Street & Main Street (ID-75), Interval #2

Movement	NB	SB	NE
Directions Served	LT	TR	LR
Maximum Queue (ft)	97	5	112
Average Queue (ft)	40	1	63
95th Queue (ft)	102	11	124
Link Distance (ft)	274	610	1052
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: 10th Street & Main Street (ID-75), Interval #3

Movement	NB	SB	NE
Directions Served	LT	TR	LR
Maximum Queue (ft)	113	2	102
Average Queue (ft)	53	0	60
95th Queue (ft)	130	5	107
Link Distance (ft)	274	610	1052
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: 10th Street & Main Street (ID-75), Interval #4

Movement	NB	NE
Directions Served	LT	LR
Maximum Queue (ft)	97	105
Average Queue (ft)	37	53
95th Queue (ft)	102	98
Link Distance (ft)	274	1052
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: 10th Street & Main Street (ID-75), All Intervals

Movement	NB	SB	NE
Directions Served	LT	TR	LR
Maximum Queue (ft)	148	7	138
Average Queue (ft)	39	0	59
95th Queue (ft)	105	6	111
Link Distance (ft)	274	610	1052
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty, Interval #1: 0
Network wide Queuing Penalty, Interval #2: 0
Network wide Queuing Penalty, Interval #3: 0
Network wide Queuing Penalty, Interval #4: 0
Network wide Queuing Penalty, All Intervals: 0

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SimTraffic LOS Report

Project: ID Ketchum Gas Station TIS
Analysis Period: *Future (2020) Plus Project*
Time Period: *p.m. Peak Hour* **Project #:** *UT-16-851*

Intersection: 10th Street & Main Street (ID-75)
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	56	55	98	6.0	*A*
	T	332	342	103	0.2	*A*
	Subtotal	388	397	102	1.0	*A*
SB	T	487	478	98	1.1	*A*
	R	57	58	102	0.7	*A*
	Subtotal	544	536	99	1.1	*A*
NE	L	64	64	100	24.2	*C*
	R	91	92	101	13.3	*B*
	Subtotal	***155***	***156***	***101***	***17.8***	***C***
Total		1,086	1,089	100	3.4	*A*

Intersection: Main Street (ID-75) & Access 1
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	47	44	94	3.8	*A*
	T	379	386	102	0.2	*A*
	Subtotal	426	430	101	0.6	*A*
SB	T	570	564	99	0.5	*A*
	R	8	7	88	0.2	*A*
	Subtotal	578	571	99	0.5	*A*
EB	L	8	10	125	15.9	*C*
	R	47	48	103	7.8	*A*
	Subtotal	***55***	***58***	***105***	***9.2***	***A***
Total		1,058	1,059	100	1.0	*A*

1: 10th Street & Main Street (ID-75) Performance by movement Interval #1 4:15

Movement	NBL	NBT	SBT	SBR	NEL	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.4	0.4	0.2	0.2	0.2
Total Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.1	0.3
Total Del/Veh (s)	5.2	0.2	1.1	0.6	24.1	14.9	3.8
Vehicles Entered	15	81	113	14	17	23	263
Vehicles Exited	15	81	113	14	15	24	262
Hourly Exit Rate	60	324	452	56	60	96	1048
Input Volume	55	326	478	56	63	89	1067
% of Volume	109	99	95	100	95	108	98

1: 10th Street & Main Street (ID-75) Performance by movement Interval #2 4:30

Movement	NBL	NBT	SBT	SBR	NEL	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.4	0.5	0.2	0.2	0.2
Total Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.1	0.2
Total Del/Veh (s)	5.4	0.2	1.0	0.9	20.0	11.4	3.0
Vehicles Entered	14	87	120	15	15	22	273
Vehicles Exited	14	87	120	15	16	23	275
Hourly Exit Rate	56	348	480	60	64	92	1100
Input Volume	55	326	478	56	63	89	1067
% of Volume	102	107	100	107	102	103	103

1: 10th Street & Main Street (ID-75) Performance by movement Interval #3 4:45

Movement	NBL	NBT	SBT	SBR	NEL	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.5	0.4	0.1	0.2	0.3
Total Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.1	0.3
Total Del/Veh (s)	7.2	0.2	1.2	0.6	24.4	14.1	3.8
Vehicles Entered	13	86	125	15	18	24	281
Vehicles Exited	13	86	126	15	17	23	280
Hourly Exit Rate	52	344	504	60	68	92	1120
Input Volume	59	348	513	60	67	96	1143
% of Volume	88	99	98	100	101	96	98

1: 10th Street & Main Street (ID-75) Performance by movement Interval #4 5:00

Movement	NBL	NBT	SBT	SBR	NEL	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.5	0.6	0.2	0.2	0.3
Total Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.1	0.2
Total Del/Veh (s)	5.8	0.2	1.1	0.8	20.9	11.1	3.1
Vehicles Entered	12	87	119	14	14	22	268
Vehicles Exited	12	87	120	13	15	22	269
Hourly Exit Rate	48	348	480	52	60	88	1076
Input Volume	55	326	478	56	63	89	1067
% of Volume	87	107	100	93	95	99	101

1: 10th Street & Main Street (ID-75) Performance by movement Entire Run

Movement	NBL	NBT	SBT	SBR	NEL	NER	All
Denied Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.0	0.0	0.5	0.5	0.2	0.2	0.3
Total Delay (hr)	0.1	0.0	0.1	0.0	0.4	0.3	1.0
Total Del/Veh (s)	6.0	0.2	1.1	0.7	24.2	13.3	3.4
Vehicles Entered	55	342	477	58	64	92	1088
Vehicles Exited	55	342	478	58	64	92	1089
Hourly Exit Rate	55	342	478	58	64	92	1089
Input Volume	56	332	487	57	64	91	1086
% of Volume	98	103	98	102	100	101	100

2: Main Street (ID-75) & Access 1 Performance by movement Interval #1 4:15

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.2	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	17.6	7.2	3.4	0.2	0.5	0.1	1.0
Vehicles Entered	2	12	11	93	135	2	255
Vehicles Exited	2	11	12	93	135	2	255
Hourly Exit Rate	8	44	48	372	540	8	1020
Input Volume	8	46	46	372	560	8	1040
% of Volume	100	96	104	100	96	100	98

2: Main Street (ID-75) & Access 1 Performance by movement Interval #2 4:30

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.2	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	16.1	8.5	3.3	0.2	0.4	0.4	1.0
Vehicles Entered	3	12	11	98	142	1	267
Vehicles Exited	3	12	11	98	142	1	267
Hourly Exit Rate	12	48	44	392	568	4	1068
Input Volume	8	46	46	372	560	8	1040
% of Volume	150	104	96	105	101	50	103

2: Main Street (ID-75) & Access 1 Performance by movement Interval #3 4:45

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	20.6	6.9	4.3	0.2	0.5	0.2	1.0
Vehicles Entered	2	12	12	97	147	2	272
Vehicles Exited	2	12	12	97	147	2	272
Hourly Exit Rate	8	48	48	388	588	8	1088
Input Volume	8	49	49	399	601	8	1114
% of Volume	100	98	98	97	98	100	98

2: Main Street (ID-75) & Access 1 Performance by movement Interval #4 5:00

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.2	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	17.4	8.5	3.7	0.2	0.5	0.3	1.0
Vehicles Entered	2	12	10	97	140	2	263
Vehicles Exited	2	12	10	97	140	2	263
Hourly Exit Rate	8	48	40	388	560	8	1052
Input Volume	8	46	46	372	560	8	1040
% of Volume	100	104	87	104	100	100	101

2: Main Street (ID-75) & Access 1 Performance by movement Entire Run

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.2	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.1	0.0	0.0	0.1	0.0	0.3
Total Del/Veh (s)	15.9	7.8	3.8	0.2	0.5	0.2	1.0
Vehicles Entered	10	48	44	385	564	7	1058
Vehicles Exited	10	48	44	386	564	7	1059
Hourly Exit Rate	10	48	44	386	564	7	1059
Input Volume	8	47	47	379	570	8	1058
% of Volume	125	103	94	102	99	88	100

Total Network Performance By Interval

Interval Start	4:15	4:30	4:45	5:00	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.4	0.4	0.4	0.4	0.4
Total Delay (hr)	0.5	0.4	0.5	0.4	1.9
Total Del/Veh (s)	5.7	5.1	5.7	5.1	5.7
Vehicles Entered	285	295	305	291	1180
Vehicles Exited	285	297	305	294	1181
Hourly Exit Rate	1140	1188	1220	1176	1181
Input Volume	4290	4290	4594	4290	4366
% of Volume	27	28	27	27	27

Intersection: 1: 10th Street & Main Street (ID-75), Interval #1

Movement	NB	SB	NE
Directions Served	L	TR	LR
Maximum Queue (ft)	47	16	129
Average Queue (ft)	26	2	64
95th Queue (ft)	53	16	130
Link Distance (ft)	71	616	1045
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 1: 10th Street & Main Street (ID-75), Interval #2

Movement	NB	SB	NE
Directions Served	L	TR	LR
Maximum Queue (ft)	49	6	114
Average Queue (ft)	24	1	61
95th Queue (ft)	54	9	121
Link Distance (ft)	71	616	1045
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	1		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 1: 10th Street & Main Street (ID-75), Interval #3

Movement	NB	SB	NE
Directions Served	L	TR	LR
Maximum Queue (ft)	51	8	122
Average Queue (ft)	25	1	66
95th Queue (ft)	57	11	127
Link Distance (ft)	71	616	1045
Upstream Blk Time (%)	1		
Queuing Penalty (veh)	1		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 1: 10th Street & Main Street (ID-75), Interval #4

Movement	NB	SB	NE
Directions Served	L	TR	LR
Maximum Queue (ft)	41	14	94
Average Queue (ft)	18	2	56
95th Queue (ft)	50	17	103
Link Distance (ft)	71	616	1045
Upstream Blk Time (%)	1		
Queuing Penalty (veh)	1		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 1: 10th Street & Main Street (ID-75), All Intervals

Movement	NB	SB	NE
Directions Served	L	TR	LR
Maximum Queue (ft)	64	27	158
Average Queue (ft)	23	2	62
95th Queue (ft)	54	14	121
Link Distance (ft)	71	616	1045
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	1		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Main Street (ID-75) & Access 1, Interval #1

Movement	EB	EB	NB	SB
Directions Served	L	R	LT	TR
Maximum Queue (ft)	29	54	47	32
Average Queue (ft)	10	28	18	6
95th Queue (ft)	33	55	51	26
Link Distance (ft)	68	68	38	71
Upstream Blk Time (%)		0	2	
Queuing Penalty (veh)		0	0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Main Street (ID-75) & Access 1, Interval #2

Movement	EB	EB	NB	SB
Directions Served	L	R	LT	TR
Maximum Queue (ft)	32	56	40	30
Average Queue (ft)	10	31	18	7
95th Queue (ft)	33	63	46	31
Link Distance (ft)	68	68	38	71
Upstream Blk Time (%)	0	1	1	0
Queuing Penalty (veh)	0	0	0	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Main Street (ID-75) & Access 1, Interval #3

Movement	EB	EB	NB	SB
Directions Served	L	R	LT	TR
Maximum Queue (ft)	29	47	51	32
Average Queue (ft)	10	27	22	5
95th Queue (ft)	32	49	60	29
Link Distance (ft)	68	68	38	71
Upstream Blk Time (%)		0	2	0
Queuing Penalty (veh)		0	0	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Main Street (ID-75) & Access 1, Interval #4

Movement	EB	EB	NB	SB
Directions Served	L	R	LT	TR
Maximum Queue (ft)	29	61	48	30
Average Queue (ft)	8	30	16	6
95th Queue (ft)	31	61	50	26
Link Distance (ft)	68	68	38	71
Upstream Blk Time (%)	0	1	2	
Queuing Penalty (veh)	0	0	0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Main Street (ID-75) & Access 1, All Intervals

Movement	EB	EB	NB	SB
Directions Served	L	R	LT	TR
Maximum Queue (ft)	36	72	63	46
Average Queue (ft)	9	29	19	6
95th Queue (ft)	32	58	52	28
Link Distance (ft)	68	68	38	71
Upstream Blk Time (%)	0	0	2	0
Queuing Penalty (veh)	0	0	0	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty, Interval #1: 0
Network wide Queuing Penalty, Interval #2: 1
Network wide Queuing Penalty, Interval #3: 1
Network wide Queuing Penalty, Interval #4: 1
Network wide Queuing Penalty, All Intervals: 1

HALES ENGINEERING
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APPENDIX C

Site Plan

LEGEND:
EXISTING PROPERTY LINE
EXISTING ADJOINER
EXISTING CENTERLINE
PROPOSED CONCRETE CURB & GUTTER
PROPOSED CONCRETE
PROPOSED ASPHALT
PROPOSED PAVERS

0 20 40 Feet

KETCHUM BLOCK 50 LOT 1AA
KETCHUM BLOCK 50 LOT 2A
KETCHUM BLOCK 29 LOT 1 & 2
E 9TH STREET ℄
EXISTING PARALLEL PARKING
EXISTING STRIPING
PROPOSED STRIPING
62.5'
50'±
13'
12'
100'± R.O.W.
STATE HWY 75 ℄
50'
6'
23'
19'
35'
R480'
R10'
R50'
40'
4'
R30'
R200'
PROPOSED 2' VALLEY GUTTER
8'
R3' TYP.
24'
KETCHUM BLOCK 30 LOT 5A
10' TYP.
15'
20' TYP.
PROPOSED ADDITION
EXISTING BUILDING
ALLEY
60'
E 10TH STREET ℄
LOT 1
LOT 2
LOT 3
LOT 4
N LEADVILLE AVENUE ℄
TENTH ST LIGHT INDUSTRIAL COMPLEX
TL 4808

1 EX VICINITY MAP
SCALE: N.T.S.

PRELIMINARY ONLY NOT FOR CONSTRUCTION

REVISIONS

No.	DESCRIPTION	DATE	BY

PREPARED BY:
BENCHMARK ASSOCIATES, P.A.
P.O. BOX 733 100 BELL DRIVE
KETCHUM, IDAHO 83340
(208) 726-9512
FAX 726-9514
WEB: WWW.BMASB.COM
MAIL: WWW.BMASB.COM

PRELIMINARY IMPROVEMENTS PLAN

KETCHUM TOWNSITE BLOCK 30, LOT 5A
T4N, R17E, SEC 13, B.M., BLAINE COUNTY, IDAHO

PREPARED FOR: ROY BRACKEN

DRAWN BY: SKS
DESIGNED BY: JPG
CHECKED BY: SB
DATE: 05/03/16
PROJECT NO.: 16051

SHEET NUMBER
EX

HALES ENGINEERING
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APPENDIX D

95th Percentile Queue Length Reports

SimTraffic Queueing Report
Project: ID Ketchum Gas Station TIS
Time Period: p.m. Peak Hour
95th Percentile Queue Length (feet)

HALES ENGINEERING
Innovative transportation solutions

Project #: UT-16-851

Intersection	Time Period	NB	NE	SB
		LT	LR	TR
10th Street & Main Street (ID-75)	Existing (2016) Background	79	80	2

SimTraffic Queueing Report
Project: ID Ketchum Gas Station TIS
Time Period: p.m. Peak Hour
95th Percentile Queue Length (feet)

HALES ENGINEERING
Innovative transportation solutions

Project #: UT-16-851

Intersection	Time Period	B3	EB		NB	NE	SB
		T	L	R	LT	LR	TR
10th Street & Main Street (ID-75)	Existing (2016) Plus Project	--	--	--	75	83	12
Main Street (ID-75) & Access 1	Existing (2016) Plus Project	8	26	54	78	--	24

SimTraffic Queueing Report
Project: ID Ketchum Gas Station TIS
Time Period: p.m. Peak Hour
95th Percentile Queue Length (feet)

HALES ENGINEERING
Innovative transportation solutions

Project #: UT-16-851

Intersection	Time Period	NB	NE	SB
		LT	LR	TR
10th Street & Main Street (ID-75)	Future (2020) Background	105	111	6

SimTraffic Queueing Report
Project: ID Ketchum Gas Station TIS
Time Period: p.m. Peak Hour
95th Percentile Queue Length (feet)

HALES ENGINEERING
Innovative transportation solutions

Project #: UT-16-851

Intersection	Time Period	EB		NB		NE	SB
		L	R	L	LT	LR	TR
10th Street & Main Street (ID-75)	Future (2020) Plus Project	--	--	54	--	121	14
Main Street (ID-75) & Access 1	Future (2020) Plus Project	32	58	--	52	--	28

City of Ketchum
Planning & Building

July 25, 2015

Planning and Zoning Commission
City of Ketchum
Ketchum, Idaho

STAFF REPORT
KETCHUM PLANNING AND ZONING COMMISION
REGULAR MEETING OF JULY 25, 2016

PROJECT: City Initiated Text Amendments to Title 17, Zoning Regulations to Chapter 17.12 Establishment of Zoning Districts and Matrices, Repealing and Replacing Section 17.127, Signage, amending Section 17.12.040, Dimensional Standards.

REPRESENTATIVE: City of Ketchum Planning and Building Department

DESCRIPTION: City-initiated text amendments to the City of Ketchum Municipal Code to amend Title 17 Zoning Code, to align the sign ordinance with the recent Supreme Court Decision, Reed v. Town of Gilbert, to amend the Community Core matrix, and to amend the dimensional standards section.

PLANNER: Micah Austin, Planning and Building Director

ATTACHMENTS:

1. Proposed ordinance amending Title 17 with all attachments.

NOTICE: Public notice was published for the public hearing on July 11, 2016 in the Idaho Mountain Express on June 22, 2016, was posted in three public locations on June 8, and sent to outside agencies on June 8.

PUBLIC HEARINGS: Planning and Zoning
- July 11, 2016
- July 25, 2016

BACKGROUND

Phase II of the Zoning Code rewrite is well underway and this portion of the project primarily addresses the sign code and minor amendments to the dimensional standards. Regarding the sign chapter amendments, in 2015 the Federal Supreme Court ruled against any content-based signage regulations in the Reed v. Town of Gilbert case. In this case, the Supreme Court ruled that any content based regulations were unconstitutional and violated the right to free speech. As a result, all cities and towns are revising their sign ordinances in compliance

with the Supreme Court ruling. The legal advice for determining if a sign regulation is "content-based" is determined by whether the sign must be read to identify the category of signage. For example, a "political sign" must be read to determine if it qualifies as a political sign. This type of regulation has now been deemed unconstitutional and the ordinance revisions are designed to bring Ketchum's sign ordinance into full compliance. Other than the content-based regulations, staff has found the City's sign code adequate with no other significant changes required.

The second portion of the ordinance addresses changes made to the dimensional standards matrix in regards to mechanical equipment and inhabitable space on rooftops, such as greenhouses. Other clarifications and corrections were made and detailed below.

The Commission met on several occasions for work sessions and updates on these amendments. In total, these updates were generally discussed at ten Planning and Zoning meetings in 2016. A work session was conducted on April 25, 2016 to specifically discuss this amendment.

A public hearing was noticed according to Idaho Code §67-6509 and was held on July 11, 2016 and no public comment was received. The Commission continued the public hearing to July 25 at which time they will continue their deliberation on the ordinance.

TABLE 1: Summary of Amendments

SECTION	SUMMARY
17.127 SIGNAGE	
17.127 (Signage)	Entire chapter is repealed and replaced with an updated sign code that is in compliance with recent Supreme Court Decisions. Except for the content-based sign regulation, the regulations for all other signs remains identical to the existing sign code. The following structural changes were also made: - Sign matrix added as Section 17.127.050 - Section numbers updated throughout the chapter - Graphics updated - Removal of content-based regulations
17.12.040 DIMENSIONAL STANDARDS	
17.12.040 Dimensional Standards	- The Community Core dimensional standard matrix is updated to add limitations and clarity for roof top equipment and structures, particularly inhabitable structures such as greenhouses
	- Minimum lot size of 5500 square feet is corrected
	- Building Height requirements are specified
	- Setbacks for cantilevered decks is clarified

STAFF RECOMMENDATION

Staff recommends approval of proposed text amendments to Chapters 17.12 and 17.127 as proposed in Attachment 1.

OPTIONAL MOTIONS

1. "I MOVE TO RECOMMEND APPROVAL OF THE PROPOSED AMENDMENTS TO CHAPTER 17.12 and 17.129, FINDING THE AMENDMENTS IN COMPLIANCE WITH THE COMPREHENSIVE PLAN, THE ZONING ORDINANCE, AND THE SUBDIVISION ORDINANCE."

2. "I MOVE TO RECOMMEND DENIAL OF THE PROPOSED AMENDMENTS TO CHAPTER 17.12 AND 17.127, FINDING THE AMENDMENT _____"

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY OF KETCHUM, BLAINE COUNTY, IDAHO, REPEALING AND REPLACING TITLE 17, CHAPTER 17.127, SIGNAGE TO REMOVE AND REPLACE ALL CONTENT BASED REGULATIONS; AND AMENDING CHAPTER 17.12, ESTABLISHMENT OF DISTRICTS AND ZONING MATRICES, SECTION 17.12.040 DIMENSIONAL STANDARDS, COMMUNITY CORE DISTRICT MATRIX TO ADD PROVISIONS FOR ROOF TOP EQUIPMENT AND STRUCTURES, ADD MINIMUM LOT SIZE AND TO CLARIFY DEMINSIONAL STANDARDS FOR BUILDING HEIGHT, SETBACKS AND CANTILEVERED DECKS; PROVIDING A REPEALER CLAUSE; PROVIDING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR PUBLICATION BY SUMMARY; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of Ketchum is authorized to amend the city zoning ordinance pursuant to Idaho Code § 67-6511; and

WHEREAS, on June 18, 2015, the Supreme Court of the Unites States ruled on the case, Reed v. Town of Gilbert, in favor of Reed thereby determining that content-based sign regulations violate constitutional rights to freedom of speech as identified in the First Amendment to the United States Constitution; and

WHEREAS, in an effort to simplify zoning regulations and to establish clear, objective standards for roof top equipment, dimensional standards, and structures in the Community Core District (CC); and

WHEREAS, the Planning and Zoning Commission after fully considering this request held a public hearing on July 11, 2016 and recommended approval to the City Council finding that the request, on the whole, was in compliance with the 2014 Comprehensive Plan; and

WHEREAS, the Ketchum City Council, having reviewed the proposed text amendment, held a public hearing on ____, 2016; and

WHEREAS, the Ketchum City Council having considered the recommendation of the Planning and Zoning Commission and submitted comments and testimony from the public, having determined that it is in the best interests of the public and adopt the proposed text amendments to Title 17, Zoning Ordinance;

NOW, THEREFORE, BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF KETCHUM:

Section 1: AMENDMENTS TO CHAPTER 17.127 SIGNAGE. That Title 17 of the Ketchum Municipal Code be amended to delete Chapter 17.127 in its entirety and replaced with a revised Chapter 17.127 as attached and incorporated as Exhibit A to this Ordinance.

Section 2: AMENDMENTS TO SECTION 17.12.040 DIMENSIONAL STANDARDS, COMMUNITY CORE DISTRICT MATRIX. That Title 17 of the Ketchum Municipal Code be amended to delete Section 17.12.040 in its entirety and replaced with a revised Section 17.12.040 as attached and incorporated as Exhibit B to this Ordinance.

Section 3. REPEALER CLAUSE. All City of Ketchum Ordinances or parts thereof which are in conflict herewith are hereby repealed.

Section 4. SAVINGS AND SEVERABILITY CLAUSE. It is hereby declared to be the legislative intent that the provisions and parts of this Ordinance shall be severable. If any paragraph, part, section, subsection, sentence, clause or phrase of this Ordinance is for any reason held to be invalid for any reason by a Court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance.

Section 5: PUBLICATION. This Ordinance, or a summary thereof in compliance with Section 50-901A, Idaho Code, substantially in the form annexed hereto as Exhibit C shall be published once in the official newspaper of the City, and shall take effect immediately upon its passage, approval, and publication.

Section 6. EFFECTIVE DATE. This Ordinance shall be in full force and effect after its passage, approval and publication according to law.

PASSED by the CITY COUNCIL and APPROVED by the MAYOR of Ketchum, Idaho on this __ day of ____, 2016.

APPROVED:

_____
Nina Jonas, Mayor

ATTEST:

_____
Robin Crotty, Interim City Clerk

EXHIBIT A

Chapter 17.127
SIGNAGE

SECTION:

17.127.010: PURPOSE AND INTENT:

Regulations addressing the number, location, size and placement of signs, symbols, markings, and other advertising devices are necessary and intended to maintain the attractiveness and orderliness of Ketchum, to protect the city's appearance, and to protect the public safety. As a historic mountain resort community with a significant tourist economy, the visual quality and character inherent in and around the city is enhanced by the application of sign regulations that produce a deliberate, clean appearance while providing flexibility and creativity of design.

17.127.020: Applicability:

A. General: Signs shall be allowed within the city according to the regulations contained in this section. It shall be unlawful to erect or otherwise display a sign, including, but not limited to, symbols, markings and other advertising devices, without complying with the applicable terms and provisions of this section.

B. Sign Permit Required: Prior to erecting, constructing, placement, relocation, alteration, and/or modification of any permanent or temporary sign or banner, a sign permit shall be obtained from the city except as exempted in subsection C of this section. Such application for sign permit shall be subject to standards, procedures, and other requirements of this section.

C. Permit Exemptions: The following signs are exempt from permit requirements of this subsection but shall conform to specifications and definitions of chapter 17.08 of this title as noted:
    1. Signs erected by a government or public agency in the public right of way, including, but not limited to, posting or display of an official notice by a public agency, advertising on public transit vehicles, and public utility signs for directional, warning or information purposes;
    2. Signs and notices required by a public agency to be posted on private property according to local and state code;
    3. Any sign inside a building not visible from the exterior of the building;
    4. Signs affixed to the body or window of licensed, registered vehicles that are used for normal day to day operations of businesses except signs placed in or affixed to vehicles and/or trailers that are parked so as to be visible from a public right of way where the apparent purpose is to sell said vehicle, advertise a product, service or activity or direct people to a business or activity;

5. Merchandise displayed in windows;
6. Holiday decorations that are temporarily displayed on traditionally accepted, civic, patriotic and/or religious holidays, provided such decorations are maintained in safe conditions, do not constitute a fire hazard, and that the decorations comply with chapter 17.132, "Dark Skies", of this title. LED lighting may be utilized;
7. Incidental signs;
8. One gas filled light tube (neon or facsimile) per business, provided it does not exceed four (4) square feet and it is displayed from the inside of the building;
9. Interior signs, visible from the exterior of the building, not to exceed four (4) square feet per sign.
10. One freestanding (1) sign per lot, not to exceed four (4) square feet, provided there are no other signs on the lot or structure.

D. Prohibited Signs: The following signs shall be prohibited in all zoning districts:
   1. Signs located within any public street, right of way, or other public property, except as allowed in this title.
   2. Signs with intermittent or flashing illumination, animated or moving signs and video/television/computer displays visible from any public street, right of way or other public property.
   3. Any sign located so as to conflict with the clear visibility of public devices controlling public traffic or to impair the safety of a moving vehicle by distracting the vision of the driver.
   4. Roof signs, except historic signs or replicas of historic signs as allowed in this title.
   5. Signs with a translucent plastic or other translucent material background which are internally lit or backlit.
   6. Signs emitting sound.
   7. Any inflatable object used for promotional or sign purposes.
   8. LED lighting in conjunction with signage when the source is visible, except when used with holiday decorations.
   9. Beacons.

17.127.030: APPLICATION AND PROCEDURE:

The following shall apply to all signs proposed in all zoning districts:

A. General Sign Permit:
   1. Application: A completed sign permit application on a form furnished by the city and applicable fee(s) set by resolution of the Ketchum city council together with technical information published and updated from time to time by the city shall be filed by the applicant with the city.
   2. Procedure: The city may request modifications to or additional information for any sign application for purposes of achieving compliance with the sign code regulations. The city shall approve, approve with conditions, or deny the sign permit application within thirty (30) days of receipt of all requested information and notify the applicant in writing.

B. Master Signage Plan For New Construction:
   1. Application: A complete master signage plan that may include a building identification sign shall be submitted at the time of design review application for any new construction for all hotels, commercial, industrial, multi-family residential and mixed use projects. A master

signage plan shall include, but not be limited to, directional, tenant, advisory, and technical information published and updated from time to time by the city and shall show how the plan is integrated with the architecture of the building. Materials required for design review are more specifically listed in chapter 17.96 of this title.

2. Procedure: The procedure for master signage plans shall be in compliance with chapter 17.96.
3. Individual Tenant Sign Permits Required: Following approval of a master signage plan, separate sign permits shall be required for all new signs prior to installation following the application and procedure contained in subsection A, "General Sign Permit", of this section.

C. Existing Multi-Unit/Tenant And Private Institutional And Other Commercial Buildings:
   1. Application: Existing multi-tenant buildings (2 or more businesses or residences) and institutional and other commercial buildings shall submit a master signage plan when any tenant applies for new signage, except when new signage remains consistent with existing signage for the building.
   2. Procedure: Master signage plans for existing buildings shall be considered and decided administratively by the city.
   3. New Businesses In Existing Buildings: A new business in a multi-tenant building must comply with a previously approved sign plan, unless a new sign plan for all tenants is submitted and approved.

D. Historic Sign Replicas and Preservation Of Landmark Signs:
   1. Application: Applications shall be made according to subsection A of this section.
   2. Procedure: Applications shall be considered and decided by the Ketchum city council utilizing the presumption that "historic" is considered to be fifty (50) years or older. However, applications for historic sign replicas and landmark signs shall be found to meet the definition contained in chapter 17.08 of this title.
   3. Sign Area: Sign area for historic sign replicas and landmark signs shall not count toward total signage limitations.

17.127.040: GENERAL:

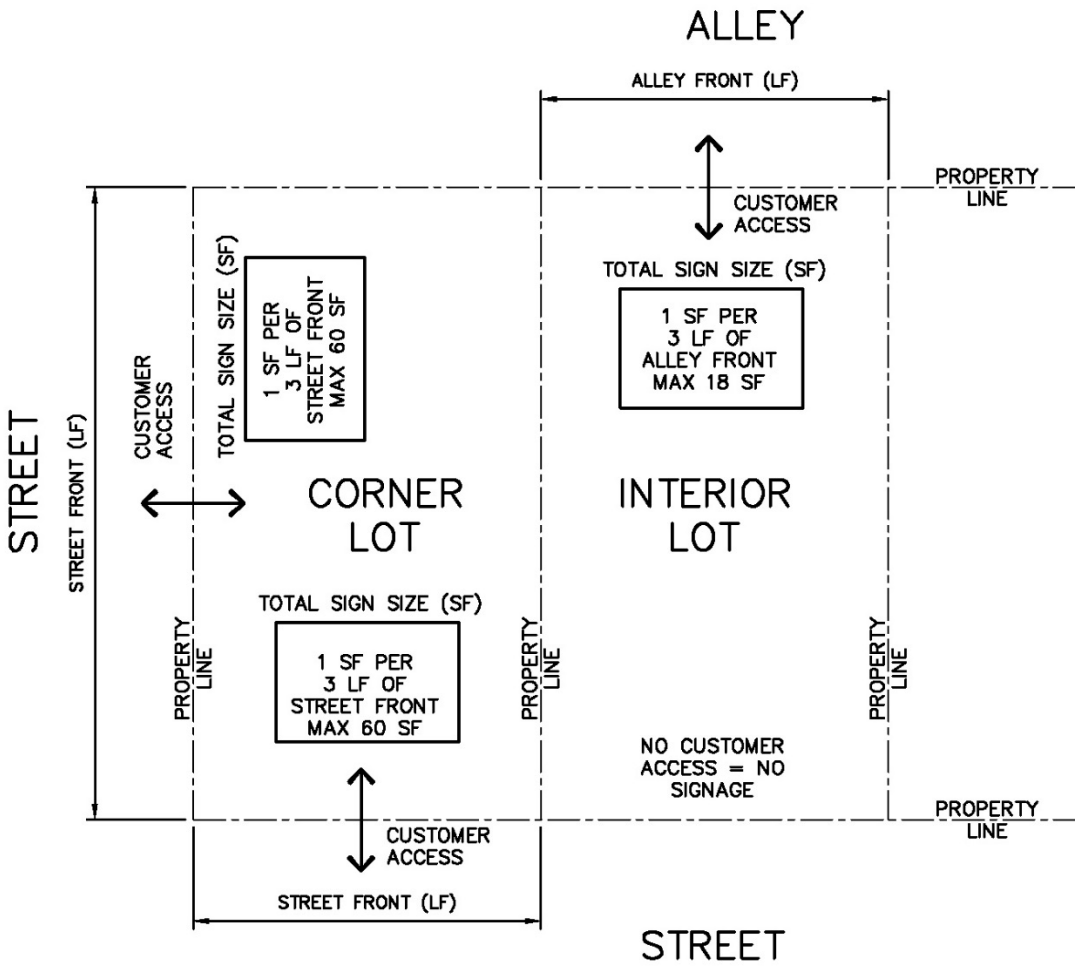
The following shall apply to all signs proposed in all zoning districts:

A. Safety:
   1. All signs shall be structurally sound and maintained in accordance with all applicable provisions of the international building code edition currently adopted by the city.
   2. Signs shall not be located in a manner that interferes with pedestrian or vehicular travel or poses a hazard to pedestrians or vehicles.

B. Computations:
   1. Sign Area: Sign area shall be measured as the area contained within the smallest polygonal shape that will enclose both the copy and the background. Sign copy mounted as individual letters or graphics against any part of a building or structure that does not have a distinct background, shall be measured as the sum of the smallest rectangle or square that will enclose each word and graphic. Where a sign consists of more than one face, section or module, all areas shall be totaled.

2. Sign Height For Freestanding And Sandwich Board/Portable Board Signs: The height of a sign shall include the frame, if any, and be computed as the distance from the base including feet of the sign, except as provided herein, at normal grade to the top of the highest attached component of the sign. Normal grade shall be the lower of either existing grade or the newly established grade after construction, exclusive of any filling, berming, mounding, or excavating. When the normal grade cannot be reasonably determined, the elevation of the nearest point of the crown of a public street or the grade of the land at the principal entrance to the principal structure on the lot, whichever is lower, shall be used as normal grade.

C. Street Frontage: Each street frontage with direct customer access is considered separately.
   1. Where building(s) have no street frontage and direct customer access is from an alley, the building is permitted one square foot of signage for every three feet (3') of linear alley frontage, not to exceed eighteen (18) square feet; and each individual permitted commercial and mixed use is allowed one sign parallel to the alley frontage with direct access and one sign that is perpendicular to the alley with direct access.



D. Sign Lighting Regulations: The following shall apply to all signs proposed in all zoning districts:

1. External illumination of signs shall conform to chapter 17.132, "Dark Skies", of this title and be designed, located, shielded and directed in such a manner that the light source is fixed and is not directly visible from any adjacent public right of way, surrounding property, or motorist's vision.
2. Internal lighting or backlighting shall conform to chapter 17.132, "Dark Skies", of this title.
3. Gas filled light tube (neon or facsimile) signs with tubes exposed to view of any size may be utilized inside the premises. One gas filled light tube (neon or facsimile) per business, provided it does not exceed four (4) square feet and it is displayed from the inside of the building.
4. LED lighting may be utilized provided the light source is recessed and not directly visible from any adjacent public right of way, surrounding property, or motorist's vision.

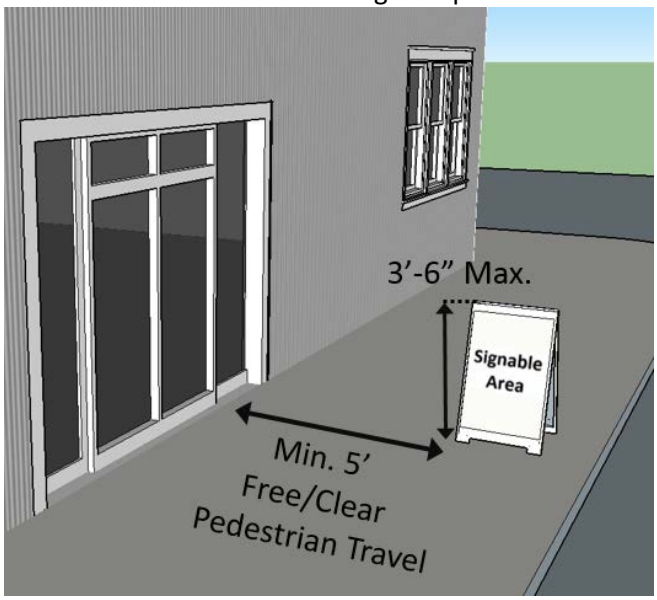
E. Signs Overhanging Public Rights Of Way: All signs, awnings, and marquees allowed to overhang a public right of way shall be subject to building code compliance, release of city liability, maintenance, safety, removal upon demand of the city, and other conditions at the time of permit issuance and prior to installation. The sign permit shall constitute an agreement between the applicant and the city concerning the public right of way.

17.127.050: SIGN SPECIFICATIONS MATRIX:

The following categories of signs shall comply with the applicable specifications and shall be counted toward the total permissible signage specified in subsection C of this section.

>>>>INSERT SIGN SPECIFICATIONS MATRIX HERE<<<<

Sandwich Board Sign Graphic



sf = square feet

Districts	Sign Types	Maximum Area/Size	Maximum Height	Setback/Location	Maximum Number	Special Provisions
CC, T, T-3000, T-4000, LI-1, LI-2, & LI-3 Districts	*Awning*	1 sf of signage for every 3 linear feet of street frontage, not to exceed 60 sf. Each street frontage with direct customer access is considered separately.	1 foot or 80% of the height of the face or valance, whichever is less. A min. of 8' of clearance to grade required for the lowest portion of the awning or marquee.	Street fronting face of the awning.	N/A	Shall be calculated as part of total signage allowed per business.
	Free Standing	For every 1 linear foot of principle building 1/2 sf of free standing signage is allowed, not to exceed 20 sf per side.	12' from highest point to adjacent grade.	25' clear zone shall be maintained per any street corner, intersection, curb cut or driveway, measured from the nearest edge of the driving surface.	One per building street frontage.	No more than two faces per freestanding sign allowed. Shall be calculated as part of total signage allowed per lot.
	Marquee	1 sf of signage for every 3 linear feet of street frontage, not to exceed 60 sf. Each street frontage with direct customer access is considered separately.	Shall not extend above the lowest portion of a flat roof, the top of a parapet wall, above the eaves line/fascia of any roof type or above the highest portion of the marquee.	Street fronting face of the marquee.		Shall be calculated as part of total signage allowed per business.
	Projecting	Determined by height, clearance and projection parameters.	A min. of 8' of clearance to grade required for the lowest portion of the projecting sign. The top of sign shall be located below the windows on the second floor of the building.	N/A	One per store front entrance.	Shall not extend more than 4' from the building. The max. profile or thickness shall not exceed 6".
	Sandwich Board (See graphic below)	6 sf of signage area	3'-6" from grade	Shall be located within the frontage of the subject property and proximate to the building entrance. A min. of 5' must be maintained for pedestrian travel.	One per business	No more than two sides per sandwich board sign. Shall not be counted toward the total size of permissible signage.

	Temporary[2]	30 sf	Shall not extend above the second story of the building the sign is displayed on and shall maintain at least 8' from grade to bottom of sign.	Shall be located on private property and not encroach into the public ROW.	No more than two allowed per business at any one time.	Shall not be counted toward the total size of permissible signage. Displayed on private property for a max. of 45 days in a calendar year, max. of 14 consecutive days at one time, and no more than 4 times in a calendar year.
	Wall[1&3]	1 sf of signage for every 3 linear feet of street frontage, not to exceed 60 sf. Each street frontage with direct customer access is considered separately.	Shall not extend above the lowest portion of a flat roof, the top of a parapet wall, or above the eaves line/fascia of any roof type.	N/A	Each individual permitted commercial use is limited to 2 signs that are parallel to the street frontage with direct customer access.	Any building façade shall not have a wall sign more than 40% of the unbroken façade area.
	Window	Shall not occupy more than 25% of the total area of a single window surface.	N/A			Any sign located inside of a building within 3' of an exterior window shall be counted as a window sign. All video displays visible from an exterior window are prohibited. Window signs are not included in the total allowed signage.
AF, RU and Residential Districts	*Free Standing*	18 sf	5' from highest point to adjacent grade.	25' clear zone shall be maintained per any street corner, intersection, curb cut or driveway, measured from the nearest edge of the driving surface.	1 per pedestrian or vehiclular entrance, not to exceed 6 sf of total signable area for the entire development.	No more than two faces per freestanding sign allowed.Shall be calculated as part of total signage allowed per lot.
	Wall	6 sf	Shall not extend above the lowest portion of a flat roof, the top of a parapet wall, or above the eaves line/fascia of any roof type.	N/A	1 per pedestrian or vehiclular entrance, not to exceed 6 sf of total signable area.	Any building façade shall not have a wall sign more than 40% of the unbroken façade area.

1. Wall signs may be mounted or painted on the gable wall as long as the top of the sign does not extend above the eaves line.
2. For single season businesses, one temporary sign or banner sign shall be allowed in addition to signage allowed for the building in which it is located, provided it does not exceed 18 sf, is located on private property, and is displayed only during the season of operation.

3. Where buildings have no street frontage and direct customer access is from an alley, the building is permitted 1 sf of signage for every 3 feet of linear alley frontage, not to exceed 18 sf. Each individual permitted commercial use is allowed one sign parallel to the alley frontage with direct customer access and one sign that is perpendicular to the alley with direct customer access.

17.127.060: EXISTING CONFORMING, NONCONFORMING, ILLEGAL AND ALLOWABLE SIGNS:

A. Existing Conforming Signs: Existing conforming signs with a valid sign permit on file with the city of Ketchum may be replaced in its exact form (same graphics, symbols or copy, color, material, size, etc.) or relocated, as is, by amending the existing sign permit, without paying an additional application fee and shall not be subject to the provisions of this section.

B. Legally Nonconforming Signs: Any sign conforming to the prior sign regulations which is not in conformance with this section:
   1. May not be replaced, except with an approved permit for new conforming sign;
   2. May not be changed in text or logo (except changeable copy signs);
   3. May not be expanded, moved or relocated; and
   4. Shall be removed if there is a change in occupancy on the premises.

C. Illegal Signs: Any sign that did not comply with sign regulations in existence at the time the sign was erected is an illegal sign and shall be removed on or before (Insert codification date here).

D. Allowable Sign Types: Sign types not specifically allowable as set forth within this section are prohibited.

17.127.070: VIOLATIONS AND ENFORCEMENT:

A. Violations: A violation of this section shall be an infraction punishable by a fine of not more than three hundred dollars ($300.00), or by imprisonment not to exceed six (6) months, or by both such fine and imprisonment. Each day the violation is not satisfied shall be considered a separate offense.

B. Responsibility For Good Repair: It shall be the responsibility of the business and/or property owner to keep signs in a good state of repair at all times. Nonconforming signs may be repaired and maintained provided the repairs are for the sole purpose of maintaining the sign to its original condition and does not increase the degree of nonconformity.

C. Unsafe Signs: Any sign which has been determined to be unsafe by the building official and/or the planning and zoning department or which has been constructed, erected or maintained in violation of this section, must be repaired, made safe, made in conformance with this section, or removed within ten (10) working days after receipt of certified notice from the city. Failure to respond to remedy the violation is unlawful and the business and/or property owner will be guilty of a misdemeanor. The city reserves the right to remove and seize any sign should it not be in conformance with this section after the final certified notice date.

D. Interpretation: The City Council has the authority and duty to interpret the provisions of this section at the request of the Administrator or when a written appeal from a decision of the Administrator is filed.

17.127.080: APPEALS:

Appeals of a decision by the Administrator or Commission shall be filed in compliance with chapter 17.144 of this title.

EXHIBIT B

17.12.040: DIMENSIONAL STANDARDS, CC DISTRICT MATRIX:

A. Development in the community core district shall comply with the standards set forth in the dimensional standards, CC district matrix. Dimensional standards for all other districts, unless otherwise specified, shall be found in section 17.12.030 of this chapter.

B. In addition to the requirements of the dimensional standards, CC district matrix, the regulations of chapter 17.128, "Supplementary Location And Bulk Regulations", of this title apply.

DIMENSIONAL STANDARDS, CC DISTRICT MATRIX

<<Insert Dimensional Standards, CC District Matrix Here>>

Community Core Dimensional Standards

Dimensional Standards		*Sub-District A: Retail Core*	*Sub-District B: Arts District*	*Sub-District C: Urban Residential*	*Sub-District D: Traditional Neighborhood*
Lot/FAR Misc.	Minimum lot size	5500 SF			
	Minimum lot width	Average of 55'			
	FAR requirements	See FAR requirements in section 17.124.130 of this title.			
Minimum Building Setbacks	Front & street side	0'	5' Average		
	Adjacent to alleyway	3'			
	Rear side not adjacent to an alleyway	0'			
	Interior side				
	Cantilevered decks and overhangs				
	Setback for 5th floors	20' from street sides and frontage and 10' on all other sides.			
	Setback for 4th floors	10'			
	Nonhabitable structures, fixed amenities, solar and mechanical equipment affixed to a roof from all building facades.				
Maximum Building Heights	Cantilevered decks and overhangs	8' above grade and/or walking surface			
	Building height	42', unless otherwise allowed in this title.			
	Height of buildings devoted 100% towards community housing	50'[1]			
	Hotel building height (For hotel development standards see section 17.124.050.B.6 of this title.)	68'[1]		N/A	
	Nonhabitable structures located on building roof tops	10'			

	Perimeter walls enclosing roof top deck and structures	4' above roof surface height. Perimeter roof top walls are required to be at least 75% transparent.
	Roof top solar and mechanical equipment above roof surface.	5'

1. All buildings greater than 48 feet in height or that contain a 5th floor shall require final approval from the city council. For Hotel height standards, see section 17.124.050.B.6 of this title.

EXHIBIT C

PUBLICATION OF SUMMARY OF ORDINANCE NO. 1158
CITY OF KETCHUM, IDAHO

AN ORDINANCE OF THE CITY OF KETCHUM, BLAINE COUNTY, IDAHO, REPEALING AND REPLACING TITLE 17, CHAPTER 17.127, SIGNAGE TO REMOVE AND REPLACE ALL CONTENT BASED REGULATIONS WITH FORM BASED REGULATIONS; AND AMENDING CHAPTER 17.12, ESTABLISHMENT OF DISTRICTS AND ZONING MATRICES, SECTION 17.12.040 DIMENSIONAL STANDARDS, COMMUNITY CORE DISTRICT MATRIX TO ADD PROVISIONS FOR ROOF TOP EQUIPMENT AND STRUCTURES, ADD MINIMUM LOT SIZE AND TO CLARIFY DEMINSIONAL STANDARDS FOR BUILDING HEIGHT, SETBACKS AND CANTILEVERED DECKS; PROVIDING A REPEALER CLAUSE; PROVIDING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR PUBLICATION BY SUMMARY; AND PROVIDING AN EFFECTIVE DATE.

A summary of the principal provisions of Ordinance No. 1158 of the City of Ketchum, Blaine County, Idaho, adopted on ____, 2016, is as follows:

SECTION 1. Repeals and replaces Chapter 17.127, Signage, in its entirety.

SECTION 2. Repeals and replaces Section 17.12.040, Dimensional Standards, CC District Matrix, in its entirety.

SECTION 3. Provides for a Repealer Clause.

SECTION 4. Provides a Savings and Severability Clause.

SECTION 5. Provides for publication of this Ordinance by Summary.

SECTION 6. Establishes an effective date.

The full text of this Ordinance is available at the City Clerk's Office, Ketchum City Hall, 480 East Avenue North, Ketchum, Idaho 83340 and will be provided to any citizen upon personal request during normal office hours.

APPROVED:

_____
Nina Jonas, Mayor

ATTEST:

_____
Robin Crotty, Interim City Clerk