ENVIRONMENTAL IMPACT REPORT

MIDTOWN VILLAGE

MINTURN, COLORADO

prepared for:

10th MOUNTAIN BUILDERS

1632 S MAIN ST, MINTURN, CO 81645

prepared by:

BIRCH ECOLOGY, LLC

429 MAIN ST, LYONS, CO 80540

BIRCH ECOLOGY

NOVEMBER 2022

TABLE OF CONTENTS

LIST OF FIGURES

Number / Title **Page**

LIST OF TABLES

LIST OF PHOTOS

1.0 INTRODUCTION

10th Mountain Builders is planning to redevelop six contiguous parcels into one comprehensive Plat with the vision to revive this section of Minturn into a thriving micro community. The proposed project would provide a diverse mix of affordable housing types and new commercial business space opportunities in the 900 Block of the South Town Commercial Zone of Minturn, Colorado, located in Section 35 of Township 5 South and Range 81 West in Eagle County (Figures 1 & 2). This site represents one of the remaining "infill" areas within the town of Minturn suitable for higher density redevelopment according to historical mixed uses.

To aid project planning, an Environmental Impact Report (EIR) was prepared for the Midtown Village project site. This report documents the existing and proposed conditions of the Midtown Village parcel in accordance with the EIR guidelines outlined in Article 20 of Minturn's Town Code; it discusses other required permits and coordinating agencies; and provides a summary and analysis of impacts. Please note, all figures are included in Section 7.0, tables are in Section 8.0, and Photos are in Section 9.0. Appendix A contains a discussion of air quality prepared by the Colorado Department of Public Health and Environment (CDPHE).

2.0 ENVIRONMENTAL SETTING

The EIR study area is in the South Town Commercial Zone of the town of Minturn, Colorado (Figures 1 & 2). The Midtown Village project would combine six contiguous properties into one parcel covering approximately 2.53 acres. The project site is currently characterized by residential and commercial structures, asphalt driveways and parking areas, and small areas of ornamental landscaping.

The site is bounded to the northeast by Highway 24, which provides three access points to the parcel. White River National Forest is located to the southwest (Photo 1), and Martin Creek Open Space lies to the southeast (Photo 2; Figure 2). Residential housing flanks the northwest and part of the east side of the project site (Photo 3).

Currently, the site supports a variety of land uses including residential and commercial space, parking, and storage. However, these existing structures are out-of-date and in poor condition. An approximately 40-foot-wide strip of weedy vegetation separates the parcel into two large sections (Photo 4). The northwestern section is predominately unpaved and housed nine mobile homes until they were removed in 2019 (Figure 2). This area now serves as a parking space for vehicles and contains a few small structures. The southeastern portion is primarily paved and features a commercial building with two second-story apartments, a garage/shop that is used for light industrial work (Photo 5), and several small homes and mobile homes. Piles of miscellaneous construction materials are scattered about the site (Photos 6 and 7).

The surrounding area in Minturn is developed with businesses, recreational amenities, and residences. The Eagle River is located approximately 300 feet to the northeast behind development across Highway 24. Elevations of the project area range from a high of

approximately 7,921 feet at the northeastern side of the parcel, to a low of 7,914 feet at the western extent of the study area.

3.0 EXISTING CONDITIONS

3.1 Hydrology

3.1.1 Surface Water

The project site does not contain any streams, ponds, or other surface water features. The Eagle River, a perennial stream, is located approximately 300 feet to the northeast. Both Highway 24 and additional development on the opposite side of Highway 24 separate the project site from Eagle River.

A drainage report prepared by Midwestern Consulting identified three basins that drain into the project area (Figure 3). A 38-acre basin is located to the southeast and drains directly onto the project site. Two drainage basins totaling 142 and 13.1 acres also contribute to stormwater runoff on the project area. Currently, no stormwater management infrastructure is in place.

3.1.2 Groundwater

Groundwater was evaluated as part of a Phase II Subsurface Analysis prepared by AEI Consultants. This study, which consisted of five borings, indicates that the groundwater exists at a depth of 10-12 feet below ground and flows northeast following the topographic gradient (Figure 4).

3.1.3 100-Year Floodplain

Figure 5 illustrates the 100-year floodplain of the Eagle River. The project site is located approximately 300 feet to the southwest of Eagle River, outside of the FEMA 100-year floodplain.

3.2 Atmospheric Conditions

The Colorado Department of Public Health and Environment (CDPHE) provided data on the estimated ambient air concentrations of six air pollutants for the Midtown Village project site (Table 1). Please note, local air monitoring data do not exist for Minturn, Colorado; therefore, CDPHE developed best estimates for the general geographic area using available CDPHE data. Eagle County is in an attainment area as summarized by Table 1. The estimated concentrations of each of the six air pollutants assessed for this region remained below the standard concentration. For further details, please refer to CDPHE's correspondence in Appendix A.

3.3 Geologic Conditions

3.3.1 Geology

The geology of the western portion of the site is described in the Phase I Environmental Report by Braun Environmental. The Town of Minturn is situated in a deep mountain valley between the two uplifted areas. Most of the Town of Minturn and all the Subject Property are located on locally deposited stream gravels sourced from the Eagle River. These gravels are made up of a mixture of Paleozoic sedimentary rock and metamorphosed Precambrian rock. The

bulk of this gravel is comprised of the Precambrian material as this older rock is more resistant to erosive conditions.

For further details on the geology of the surrounding areas, please refer to the geotechnical report by Braun Environmental, Inc. and the Subsoil Study report by Kumar and Associates, Inc.

3.3.2 Soils

Figure 7 illustrates the NRCS soil types for the project area. The study area is mapped as a combination of Forsey cobble loam at 3 to 12 percent slopes and Ansel-Anvik association at 25 to 45 percent slopes. Neither soil type has been rated as hydric by the NRCS.

A subsoil study was performed by Kumar and Associates, Inc. on the eastern portion of the site and completed on July 25th, 2022. A total of 15 soil borings were used to evaluate the subsoils on the site (Figure 6). Subsoils encountered in the borings consisted of approximately 1½ to 7 feet of mixed clayey silty sand, gravel, and cobble fill; 2 to 5 feet of natural sandy clay and silty sand down to about 3 to 10 feet; and were underlain by relatively dense, slightly silty to silty sand, gravel, and cobbles with possible boulders to the boring depths of 10 to 25 feet.

3.4 Biotic Conditions

3.4.1 Vegetation

The Midtown Village project site is highly disturbed and lacks any native plant communities (Photos 2 and 3). The southern edge borders U.S. Forest Service lands, where aspen *(Populus tremuloides)*, Engelmann spruce *(Picea engelmanii)*, Woods' rose *(Rosa woodsii)* and common juniper *(Juniperus communis)* extend out from the forest edge along the property line. The interior of the parcel has small areas of ornamental vegetation around existing buildings, but most of the vegetation consists of weedy, introduced species and noxious weeds. In particular, wild chamomile *(Matricaria perforata)* and plumeless thistle *(Carduus acanthoides)* are common in the disturbed soil. In addition, a few large choke cherry *(Prunus virginia var. melanocarpa)* shrubs occur in the northwestern corner and there are several planted blue spruce *(Picea pungens)* trees along the northern side near Main Street.

3.4.2 Wildlife

The project site is highly disturbed, lacks native plant communities, and does not provide significant wildlife habitat. Moreover, Highway 24, which is heavily trafficked, is directly adjacent to the property.

The project site is outside American Elk winter range mapped by CPW (Figure 8). In addition, it is not included in the areas that have been mapped as potential habitat for lynx (Figure 9). Likewise, the adjacent National Forest and Martin Creek Open Space land are outside the mapped elk winter range or potential lynx habitat.

3.5 Environmental Conditions

On June 1st, 2015 Braun Environmental, Inc. conducted a Phase 1 Environmental Investigation which revealed that some parking areas contained minor soil staining likely sourced from "drips" from vehicles. Their report stated that the stains appear to be limited to a few "drips,"

de minimis in nature, and do not represent a recognized environmental condition. Therefore, this investigation did not identify any significant environmental impacts on the property.

A Limited Phase II Subsurface Investigation of the project site prepared by AEI Consultants investigated the potential for petroleum and hazardous chemicals used for auto servicing in the green and brown buildings (Photo 5) to have infiltrated the subsurface via floor drains installed in each building. To further examine the extent of these substances in the subsurface, Site Services Drilling of Golden, Colorado drilled three borings for soil sampling and two groundwater monitoring wells (Figure 4). The results of their analysis indicate that TPH and petroleum compounds were present but remained below the limits of accepted concentrations following the US EPA Regional Screening Levels for industrial soil and protection for groundwater. Therefore, these compounds only generate low level impacts that do not require further action at this point.

3.6 Noise & Odors

The site is in the developed South Town Commercial Zone of Minturn Colorado and is directly adjacent to Highway 24 corridor. This road generates noise and odors from traffic. There are no significant sources of noise or odors from the existing land uses on the project site.

3.7 Visual Conditions

The project area is visible from Highway 24 and is currently occupied by a mix of housing, mobile homes, and commercial buildings. The existing structures are one or two stories high. The visual character is impacted by old buildings, cracked pavement, and piles of construction materials (Photo 8).

3.8 Land Uses

This area has been designated as mixed use. The existing site contains a fully occupied 3,000 sf commercial building with two apartments above (Photo 9). The site also contains four single family homes, two mobile homes, one industrial garage/shop and a large area of vacant land that formerly housed nine mobile homes (removed in 2019).

In addition, the property has been used to store miscellaneous items including vehicles, tools, and building materials.

3.9 Population

The existing population of the property is housed by the 3,000-sf commercial building with two apartments above, four single family homes, and two mobile homes.

3.10 Traffic

US Highway 24 serves as Main Street through Minturn and is the main road access to the site. Currently three entrances provide access from Highway 24.

McDowell Engineering, LLC of Eagle, Colorado prepared a Traffic Impact Study to analyze current and projected traffic along Highway 24 (Figure 12). Traffic data were documented from CDOT's Online Transportation Information System (OTIS) by assessing the nearest Traffic Counter Station (100776), which extends from Mile Marker 145.537 to Mile Marker 150.868. The most recent CDOT traffic counts at this station at the

time of analysis were taken on October 2-3, 2019. These values were adjusted based on a seasonal adjustment factor of 1.30 and an expected yearly growth rate of 0.05%.

Traffic for 2022 along Highway 24 was averaged as 302 vehicles per hour (vph) westbound and 55 vph eastbound during the morning peak hour (7:00 am), and 125 vph westbound and 303 vph eastbound during the evening peak hour (5:00 pm). By 2024, traffic along Highway 24 is projected to increase to 305 vehicles per hour westbound and 56 vph eastbound in the morning peak hour, and 126 vehicles per hour westbound and 306 vph eastbound at 5:00 pm.

The project site does not contain a sidewalk along Highway 24 or public paths/access to While River National Forest / Marin Creek Open Space.

4.0 PROPOSED PROJECT

This report describes the environmental impact of the PUD proposal for Midtown Village. The proposed project would enhance and redevelop one of the last infill areas remaining within Minturn designated for higher density redevelopment by uniting adjacent properties/addresses (947, 961, 981, 985 & 987 Main Street) into one 2.53-acre Plat.

The vision for the project is to provide a diverse mix of affordable housing types and new commercial business space opportunities with 64% of the project designated as Resident-Occupied Deed Restricted. The proposed commercial and residential spaces are designed to complement the existing residential properties and businesses surrounding the site and enhance the availability of affordable housing and commercial space within the town of Minturn. Figure 10 shows the proposed development plan.

4.1 Commercial

The existing commercial building (Photo 9) will be renovated to contain grade-level commercial space. A second commercial building will be constructed along Main Street and will occupy an area of 4,500 sf.

4.2 Apartments

Both the existing and proposed commercial buildings will contain second-story loft apartments. Two Resident-Occupied Deed Restricted Rental apartments will be located above the existing structure, and four rental apartments will be built within the new commercial building.

Construction of a sixteen-unit apartment building will be situated at the southeastern corner of the property. These units will be Resident-Occupied Deed Restricted Rentals. This structure will cover an area of 13,394 sf.

4.3 Townhomes

Two townhome buildings will contain a total of ten units available for sale. These structures will be located on the east side of the property and each cover 4,000 sf.

4.4 Single Family Homes

A total of ten single family homes situated on the west side of the property will help fulfill the vison of providing an affordable pathway to homeownership in Minturn. Eight of these homes will be Micro Homes that range from 600-1000 sf and cover an area of 500 sf. The proposed Micro Homes take inspiration from a group of houses constructed in the 1960s on the south side of town to provide schoolteacher housing.

The other two houses will be cottages each covering 920 sf of the project site.

4.5 Access and Transportation

Site access to the Midtown Village site will be provided by an existing access road at mile marker 146.16 on Highway 24. Currently, there are three access points for the six-parcels, two of which will be closed. Paved parking spaces and an underground parking garage situated beneath the apartment building will provide resident parking.

Additionally, the construction of an on-site ECO Bus shelter will provide direct public transportation to and from the site. A sidewalk will join existing sidewalks to enhance the connectivity of pedestrian infrastructure, and a trail system will facilitate access to Marin Creek Open Space and White River National Forest from Highway 24.

4.6 Utilities

Midtown Village anticipates that the Town water system would supply 100% of the domestic water and ERWSD would provide 100% of the sanitary sewer service. The developer has accounted for the current state of Minturn's water resources and the proposed improvements that are in process.

The capacity for both water and sewer resources is anticipated to be available and sufficient for the project by the time of buildout of each phase. Phase 1 of the development (which encompasses upgrading the current site infrastructure, renovating the existing commercial building, constructing the apartment building, and creating the ECO Bus shelter) will reallocate the water supply and number of taps currently used on this site. New water and sewer main and service lines will be installed. The existing overhead Xcel Power lines will be removed and replaced by buried power services.

Phase 2 (single family homes and townhomes) and Phase 3 (the new commercial building) will entail the purchase of 22.5 water taps and a Commercial tap after the town water system changes are in place, additional water capacity is available, and the moratorium is lifted. Sewer services for Phases 2 and 3 will be available after the completion of the ERWSD Dowd lift station project.

4.7 Stormwater Management

The stormwater management system will facilitate infiltration of stormwater into the subsurface to recharge the groundwater, aided by the highly infiltrative nature of on-site subsurface material. Stormwater runoff will be routed to StormTech SC-740 belowground detention chambers with a capacity of 1000 CF. The overflow outlet will tie into the Town's stormwater conveyance system, which was designed to take on the capacity of water

draining from the project site and surrounding National Forest / Martin Creek Open Space in the event of a significant storm (Figures 3 and 11). A forebay with separators at storm inlets will remove sediment which can be cleaned out for maintenance.

This stormwater system will be complemented by landscaping that improves infiltration. Xeriscape and native seed mix will increase green space by 40,000 sf.

5.0 IMPACTS & MITIGATION

5.1 Hydrology

5.1.1 Surface Water

The construction of Midtown Village is anticipated to have a positive impact on water quality by promoting infiltration of stormwater runoff. While the proposed project will increase the impervious surfaces, the existing site has no stormwater system and runoff sheet flows across the site. Stormwater will be routed to underground detention chambers where infiltration can occur. In addition, runoff from the three adjacent basins shown in Figure 3 will be integrated into the system. Designated sites for snow storage upon removal from streets, sidewalks, and parking areas will facilitate proper snowmelt drainage into the planned stormwater detention.

5.1.2 Groundwater

The proposed project will enhance groundwater recharge by utilizing the infiltrative properties of the on-site soil. Stormwater will recharge groundwater by infiltrating into the subsurface in the underground stormwater detention chambers, and additional surface water will infiltrate into the ground with the expansion of green space by 40,000 sf.

5.1.3 100-Year Floodplain

Figure 5 illustrates the extent of the 100-year floodplain. The project will not impact or be impacted by the 100-year floodplain.

5.2 Atmospheric Conditions

There would be a short-term increase in hydrocarbon pollutants and dust during the construction process. Over the long-term, the proposed project would have a small and unmeasurable impact on air quality due to a projected increase in traffic. Over time, increased use of multimodal transportation, encouraged by the installation of the ECO bus shelter and sidewalks, could reduce the effects of increased traffic. Eagle County is in an air quality attainment area (Table 1; Appendix A).

5.3 Geologic Conditions

5.3.1 Geology

No geologic hazards such as debris flows, avalanches, or rock falls have been documented for this site.

5.3.2 Soils

A subsoil investigation performed by Kumar and Associates, Inc., which focused on the eastern portion of the site, noted that the current substrate is not particularly suitable to support buildings or pavement. They proposed the use of lightly loaded spread footings to

rest upon the natural soils and structural fill, and moderately loaded spread footings to extend down to the denser sandy gravel and cobble soils beneath the less stable surface layers. If heavier loads are necessary, Kumar and Associates requested to be contacted for further guidance.

Erosion during site construction will be mitigated by the installation of BMPs including temporary geotextile silt fences, vehicle tracking control, and catch basin/inlet filters.

5.4 Biotic Conditions

5.4.1 Vegetation

The project will have no impact on existing native plant communities because none occur within the Midtown Village project site. The proposed landscape plan utilizes a mix of nonnative and native plant species. A native seed mix will be used to revegetate the portion of the property adjacent to White River National Forest. The project would increase green space by approximately 40,000 sf.

5.4.2 Wildlife

Both the current and proposed project area consist of housing and commercial developments that do not provide significant wildlife habitat (Figures 8 and 9). The surrounding parcels are occupied by a heavily traveled highway, housing, and business developments that limit the wildlife habitat potential. Redeveloping the site should not significantly alter wildlife behavior or habitat due to the existing low value of the site. However, increased recreational use of adjacent open space has the potential to generate an indirect impact on wildlife.

5.5 Environmental Impacts

The developer has taken into consideration that old buildings potentially contain asbestos and is coordinating with CDPHE to address this issue. One building that has been identified to contain asbestos will be mitigated in accordance with legal requirements. A CDPHE demo permit has been acquired for this structure.

5.6 Noise & Odors

A short-term increase in noise and odors will occur during the construction phase, but will subside following the completion of the project. The noise and odor level associated with the long-term change in residential and commercial use is anticipated to be minimal.

5.7 Visual Impacts

The proposed PUD will upgrade the existing old commercial and residential structures to contemporary structures, infrastructure, and landscaping. An HOA will maintain the grounds. While additional structures will be constructed, these buildings will not exceed 28 ft. in height, in accordance with code guidelines.

All aspects of architecture, design details and landscaping are controlled by the Midtown Village team and will not be left to an outside party. All proposed designs will be shared during the PUD approval process.

5.8 Land Uses

The project expands the historical use of this property for diverse land uses by providing commercial space and various types of residential units. 25,000 sf of are designated as open space in keeping with the vision of the Community Plan. Part of this open space will be allocated to residential community gathering areas. The open space will also contain an internal network of new sidewalks and trails which will not only connect directly to the new HWY 24 Sidewalk project, but will also extend the existing sidewalk, which currently ends at 997 Main Street, to 1041 Main Street. The proposed internal trail system will provide direct access to Martin Creek / National Forest open space safely away from Highway 24.

5.9 Population

The current residential site structures consist of four single family homes, two mobile homes, and two apartments above the commercial building. The planned PUD would support an increased population as there will be more occupiable structures. These include ten-single family townhouse units, two cottages, eight single family homes, sixteen rental apartments, and six lofts above the commercial buildings. The PUD would increase the residential capacity from eight to thirty-six units.

Commercial space will also expand upon the single existing commercial building to incorporate a second commercial structure. This new building is proposed to be used in part as a COWORK / Shared Community Workspace to facilitate affordable office space for local businesses.

5.10 Traffic

The completed project will have one main entrance and close the two additional existing driveways. McDowell Engineering, LLC of Eagle, Colorado prepared a traffic study projecting potential traffic conditions associated with the use of this single access. This study shows that at buildout, the proposed development may generate approximately 54 vehicles trips in the morning peak hour (7:00 am) and 75 vehicle trips in the evening peak hour (5:00 pm). Such traffic increase requires the construction of a right-turn deceleration lane. A State Highway Access Permit is necessary to approve the proposed traffic adjustments with a recommended design hour volume of 75 vehicles per hour.

Personal vehicle traffic impacts will be minimized by the construction of an ECO bus shelter and the connection and extension of the Minturn sidewalk system. The construction of a trail system will facilitate access to White River National Forest and Martin Creek Open Space from Highway 24.

5.11 Fiscal Impacts

This project is anticipated to generate revenue for the Town of Minturn. A fiscal impact analysis was developed by Stan Bernstein and Associates of Vail, Colorado on June 1st, 2021 based upon the construction of a total of 42 residential units and 3,000 sf of commercial space. This report anticipates that between 2021-2030, the General Fund will exceed expenditures by $817,000 and the Incremental Capital Fund will generate around $475,000. The installation of additional 23-25 SFE Residential Taps and a Commercial Water Tap will generate Incremental Water Tap fee revenues. Revenue for the Town of Minturn will likely also be generated from increased Cash in Lieu, Real Estate Transfer, Construction Use, and

Sales/Property Taxes. The developer envisions the new commercial space to be used in a way that would generate Sales Tax or Fees for the Town of Minturn and potentially serve as a COWORK space.

The Town of Minturn Public Works department is not anticipated to be significantly impacted because project site maintenance (including snow removal) will be managed by an HOA and property residents.

5.12 Permits & Coordinating Agencies

- McDowell Engineering's report states that a State Highway Access Permit will be required for the installation of a right-turn deceleration lane on Highway 24.

- Because site grading will disturb more than one acre, a stormwater permit may be required from the Colorado Department of Public Health and Environment (CDPHE).

- A CDPHE demo permit has been obtained for the demolition of the existing structures that contain asbestos.

- A water main easement, sanitary sewer easement, and the re-alignment of a sewer main will be coordinated with the Town of Minturn and ERWSD.

- The developer will coordinate with Xcel power to replace existing overhead power lines with buried power infrastructure.

- Ability-to-serve letters have been issued by emergency services.

6.0 SUMMARY OF ENVIRONMENTAL IMPACTS

The proposed project is an opportunity to provide significant upgrades over the existing condition.

- The construction of Midtown Village is anticipated to have a positive impact on water quality. The installation of an underground stormwater system and 40,000 sf of additional green space will facilitate infiltration and groundwater recharge of runoff that currently sheet flows across the site.

- The subsurface soil of the site is somewhat unstable and merits the use of spread footings of varying depths based upon the amount of loading.

- The proposed project will not impact native vegetation communities since none are present on the project site. Instead, the project will increase green space by 40,000 sf, including an area landscaped with a native seed mix.

- The project site does not provide quality wildlife habitat and is outside the areas mapped as elk winter range or potential habitat for Canada lynx. Increased recreation use of adjacent open spaces may generate indirect habitat impacts.

- A Phase I Environmental Report and Phase II Subsurface Investigation Report identified some soil staining from vehicle "drips" as well as TPH and petroleum compounds from automobile servicing. However, the concentrations of these hazards were below US EPA Regional Screening Levels such that no further action is necessary at this point.

- The presence of asbestos in existing buildings will be mitigated following legal guidelines. Necessary CDPHE demo permits will be obtained.

- A short-term increase in hydrocarbons, dust, noise, and odors is expected during construction activities. Over the long term, there will be a minimal impact from increased traffic.

- The visual character of the site will be upgraded from old buildings to modern structures. Weedy vegetation and stacked construction materials will be replaced by landscaping that includes xeriscaping and native seed mix revegetation.

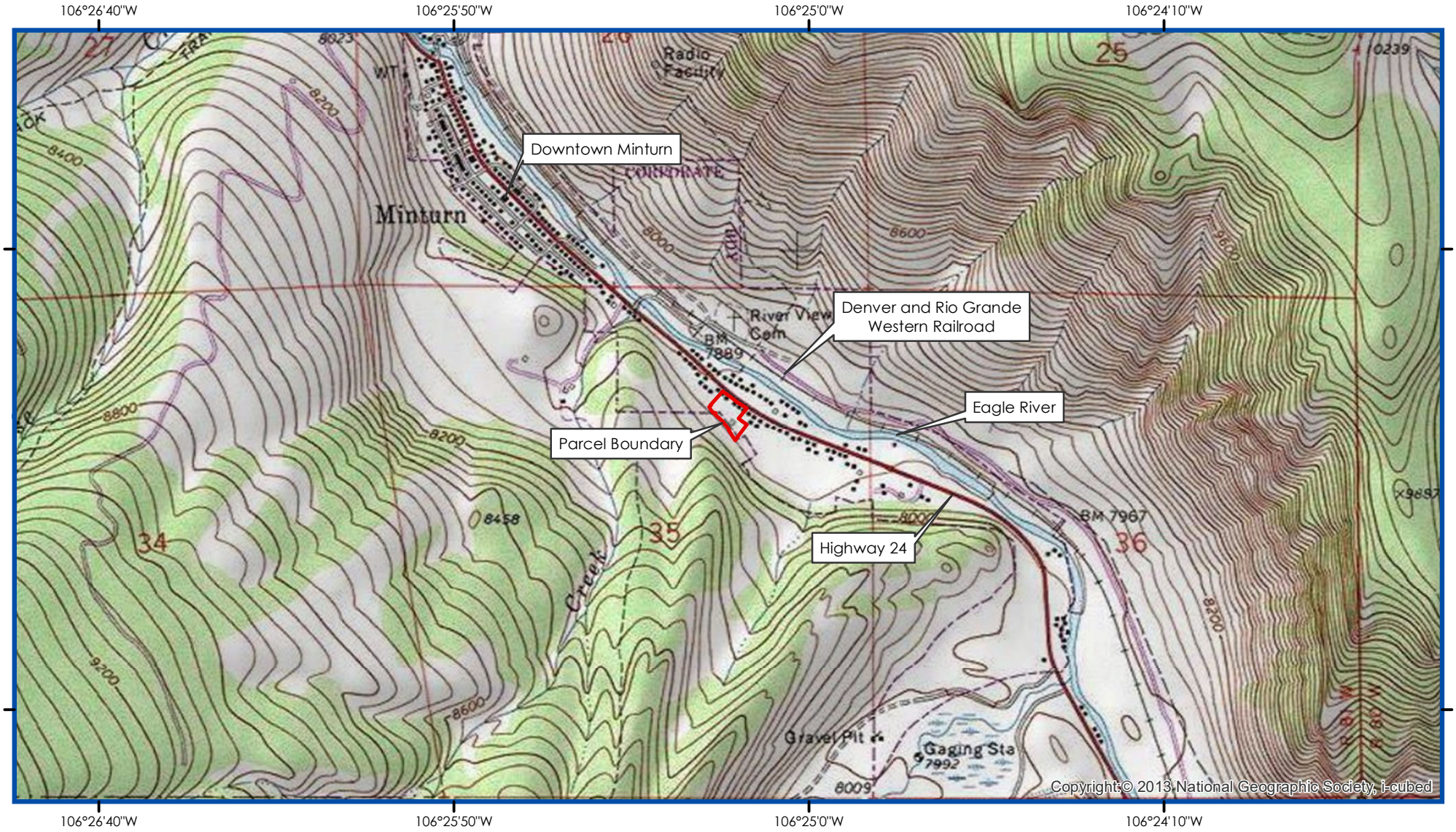
- The development is projected to increase traffic in the peak hours by 45 trips per hour at 7:00 am and 75 trips per hour at 5:00 pm. The remaining entrance warrants a right-turn deceleration lane.

- The historic designation of mixed residential and commercial use will be maintained, while also increasing the number of affordable housing and commercial spaces. A trail and sidewalk network will connect the sidewalk at 997 Main Street, to 1041 Main Street and provide access to Martin Creek / National Forest open space.

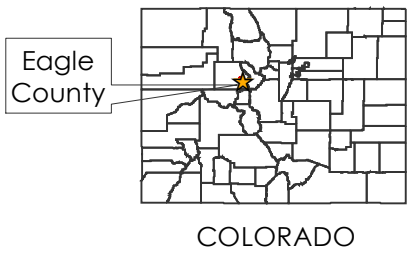
- The population capacity of the site will increase from 8 to 36 residential units with the vision of expanding available affordable housing for the local workforce. A renovated commercial space and new commercial building are anticipated to provide office space (possibly a COWORK space rental) and/or an area for lease.

- The PUD is predicted to generate positive fiscal impacts for the Minturn community. The local workforce will be provided with additional affordable housing and commercial space. The Town of Minturn will likely obtain revenue from increased Cash in Lieu, Real Estate Transfer, Construction Use, and Sales/Property Taxes.

7.0 FIGURES



BASE: USGS 7.5' Minturn Quadrangle, Colorado



Parcel Boundary

N

1:24,000

0 600 1,200 2,400
Feet

FIGURE 1. PROJECT LOCATION MAP
MIDTOWN VILLAGE

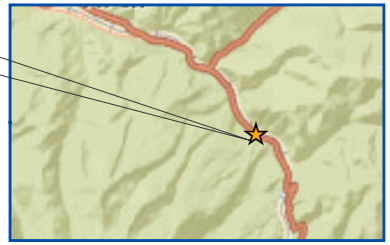
November 2022

Prepared by:

Birch Ecology LLC

429 Main Street
P.O. Box 170
Lyons, CO 80540
(720) 350-2530
www. birchecology.com

Survey Area



Credits: Esri World Imagery Basemap, Esri World Street Map Basemap

LEGEND

Project Site

N

1:2,000

0 50 100 200

Feet

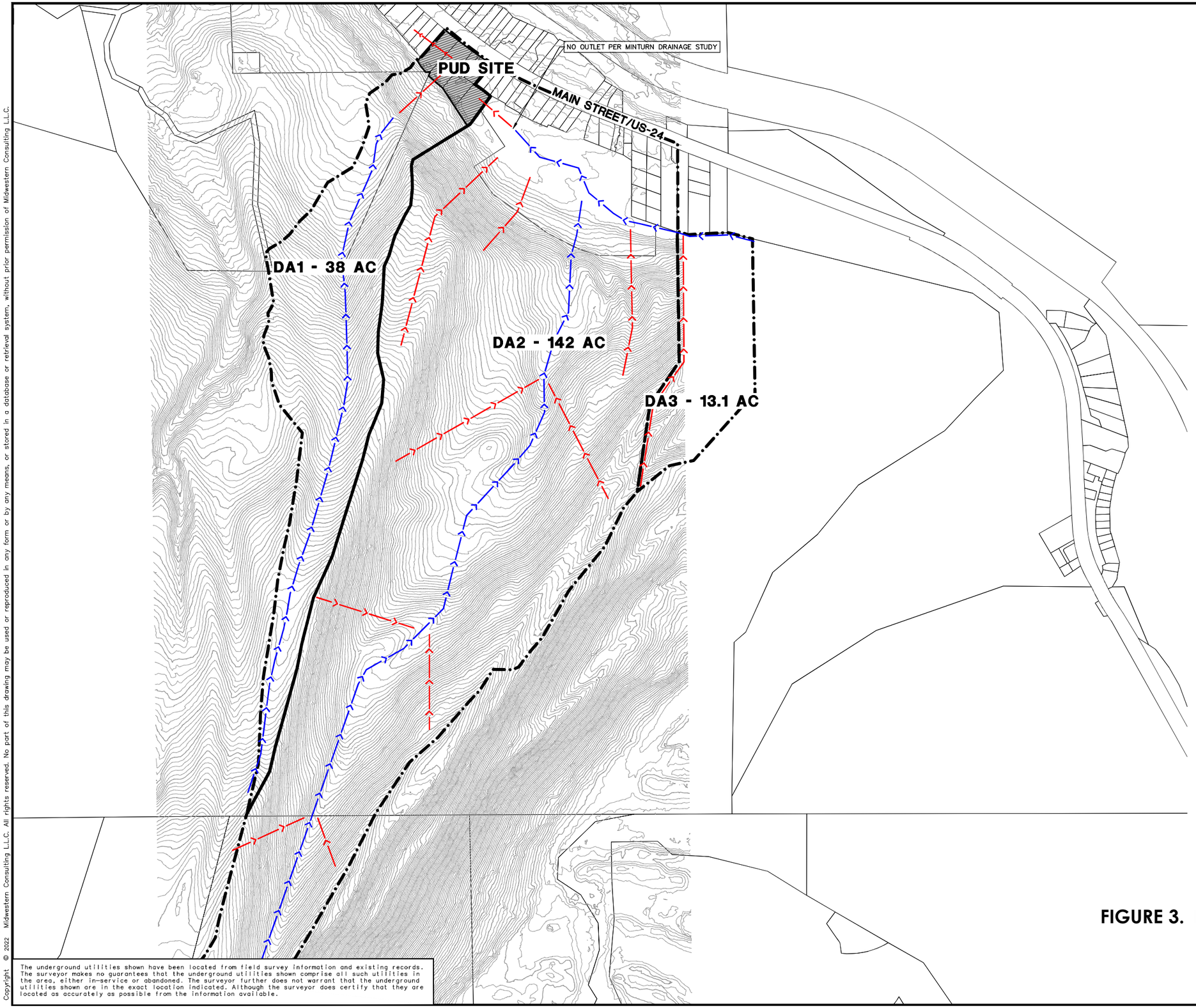
14

FIGURE 2. AERIAL PHOTO
MIDTOWN VILLAGE
November 2022

Prepared by:

Birch Ecology LLC

429 Main Street
P.O. Box 170
Lyons, CO 80540
(720) 350-2530
www. birchecology.com



SCALE: 1" = 100'

0 100 200 300

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

NOTES

1. CONTOURS ARE NOT FIELD VERIFIED AND ARE INSERTED PER USGS GIS DATA
2. EXISTING DRAINAGE AREA PATTERNS AND AREAS ARE ESTIMATED.

LEGEND

- 838 — EXIST. CONTOUR
- EXIST. DRAINAGE AREA BOUNDARY
- FLOW PATH CONCENTRATED FLOW
- FLOW PATH SHEET FLOW

The underground utilities shown have been located from field survey information and existing records. The surveyor makes no guarantees that the underground utilities shown comprise all such utilities in the area, either in-service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated. Although the surveyor does certify that they are located as accurately as possible from the information available.

FIGURE 3. EXISTING DRAINAGE PLAN
MIDTOWN VILLAGE
November 2022

MIDWESTERN CONSULTING
3851 Plaza Drive Ann Arbor, Michigan 48108
(734) 995-0200 • www.midwesternconsulting.com
Land Development • Water Resources • Water & Wastewater • Municipal
Wireless Communications • Transportation • Landfill Services

CLIENT
10TH MOUNTAIN BUILDERS
1632 MAIN STREET
MINTURN, CO 81645
JEFFREY D. ARMSTEAD
970-471-0618

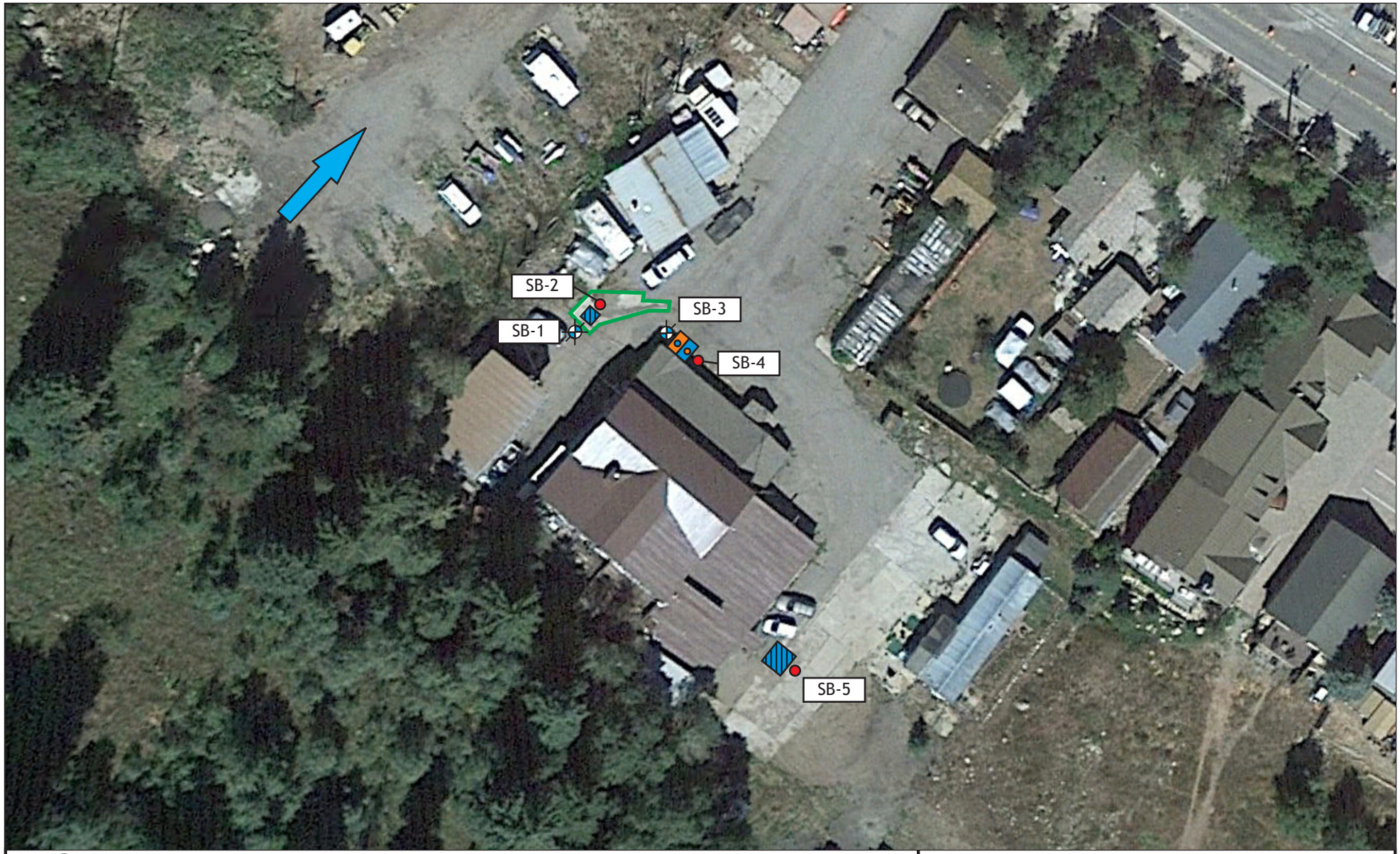
MIDTOWN VILLAGE PUD

EXISTING DRAINAGE PLAN

03

JOB No. 20067
REVISIONS: REV. DATE

DATE: 8/24/22
SHEET 03 OF 27
CADD:
ENG: ROW
PIC: KEB
FILE: I:\20067DA1



LEGEND

- Approximate clean-out area
- Approximate Groundwater Flow Direction
- Drain
- Oil/Water Separator
- Soil Boring
- Soil Boring/Temporary Monitoring Well

N

0 33’ 66’

SCALE: 1” = 66’

SAMPLE LOCATION MAP

AEI

987 Main Street
Minturn, Colorado

FIGURE 3
Project No. 468525

FIGURE 4. SOIL BORINGS BY AEI CONSULTANTS
November 2022

LEGEND

- Parcel Boundary
- 100-Year Floodplain

N

0 125 250 500

Feet

FIGURE 5. 100-YEAR FLOODPLAIN
MIDTOWN VILLAGE

November 2022

Birch Ecology LLC
429 Main Street
P.O. Box 170
Lyons, CO 80540
(720) 350-2530
www. birchecology.com

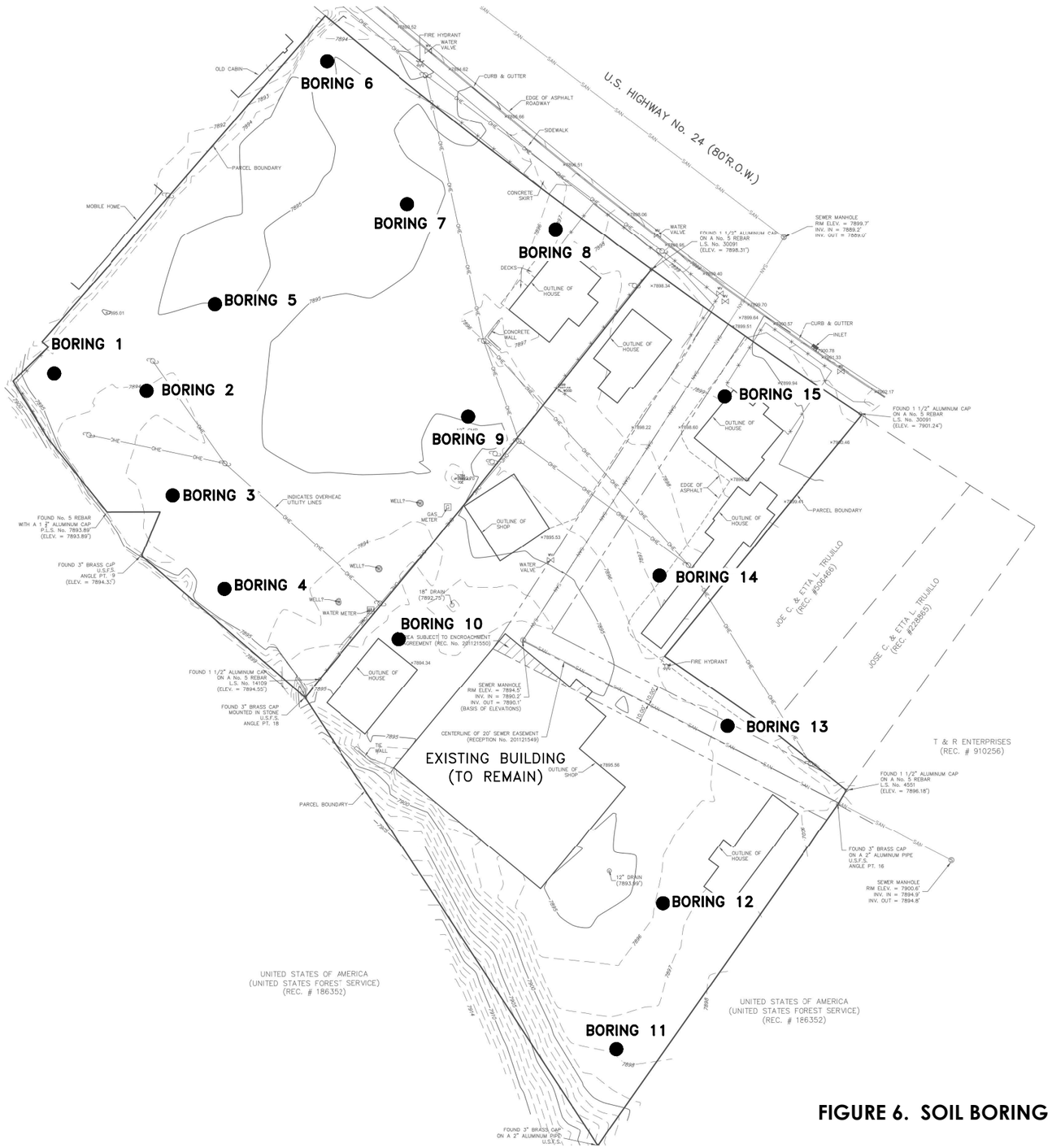


FIGURE 6. SOIL BORING MAP BY KUMAR AND ASSOCIATES INC.
MIDTOWN VILLAGE
November 2022

22–7–293	Kumar & Associates	MIDTOWN VILLAGE, MINTURN	LOCATION OF EXPLORATORY BORINGS	Fig. 1

July 25, 2022 – 06:36am
C:\Users\mromero\AppData\Local\Temp\AcPublish_16764\227293 01.dwg

FIGURE 7. NRCS SOIL MAP
MIDTOWN VILLAGE

November 2022

LEGEND

Parcel Boundary

NRCS Soil Types

45—Forsey cobbly loam, 3 to 12 % slopes

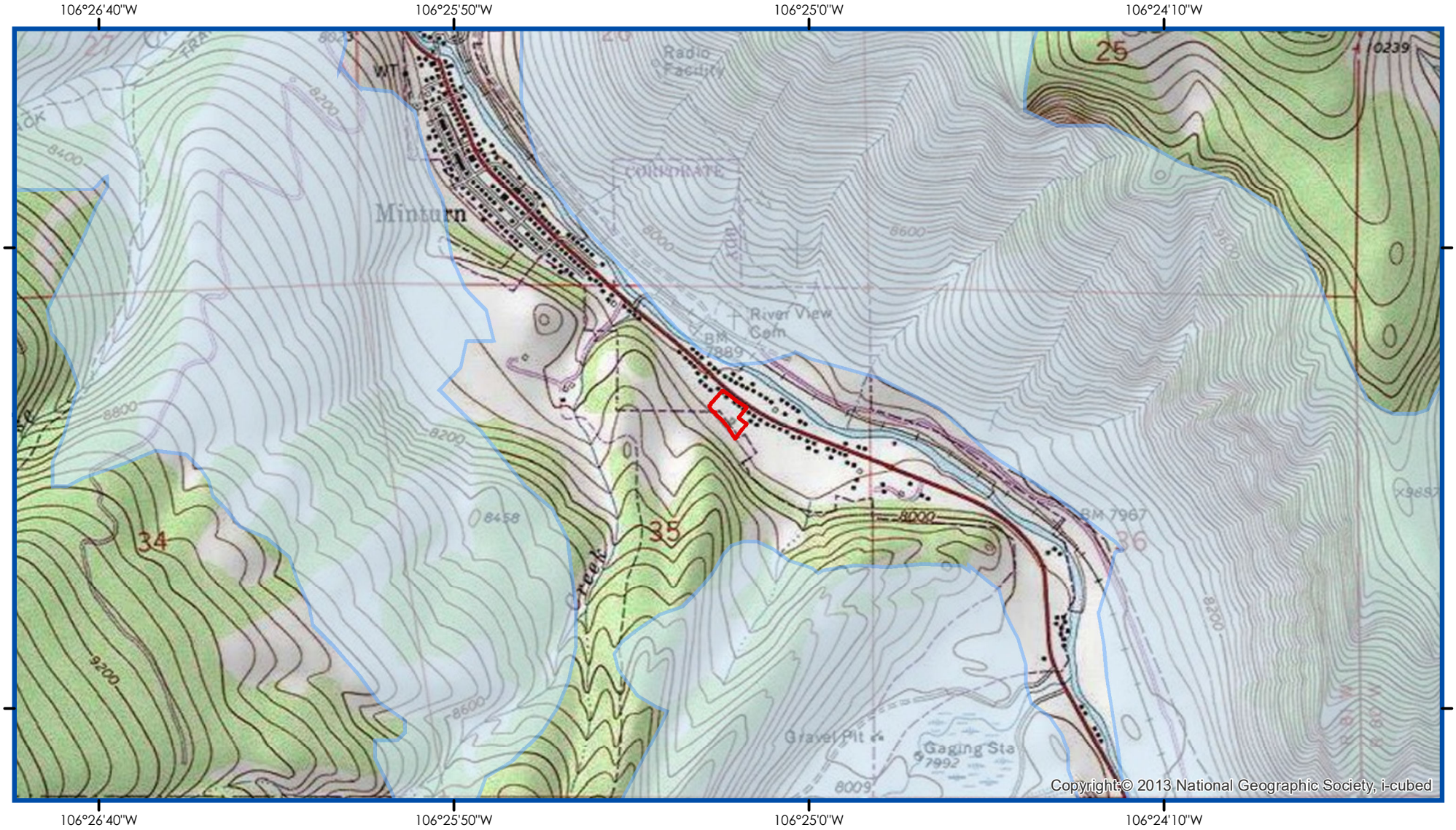
9—Ansel-Anvik association, 25 to 45 % slopes

N

0 50 100 200

Feet

Birch Ecology LLC
429 Main Street
P.O. Box 170
Lyons, CO 80540
(720) 350-2530
www. birchecology.com



BASE: USGS 7.5' Minturn Quadrangle, Colorado

LEGEND

- Winter Range
- Parcel Boundary

N

1:24,000

0 600 1,200 2,400

Feet

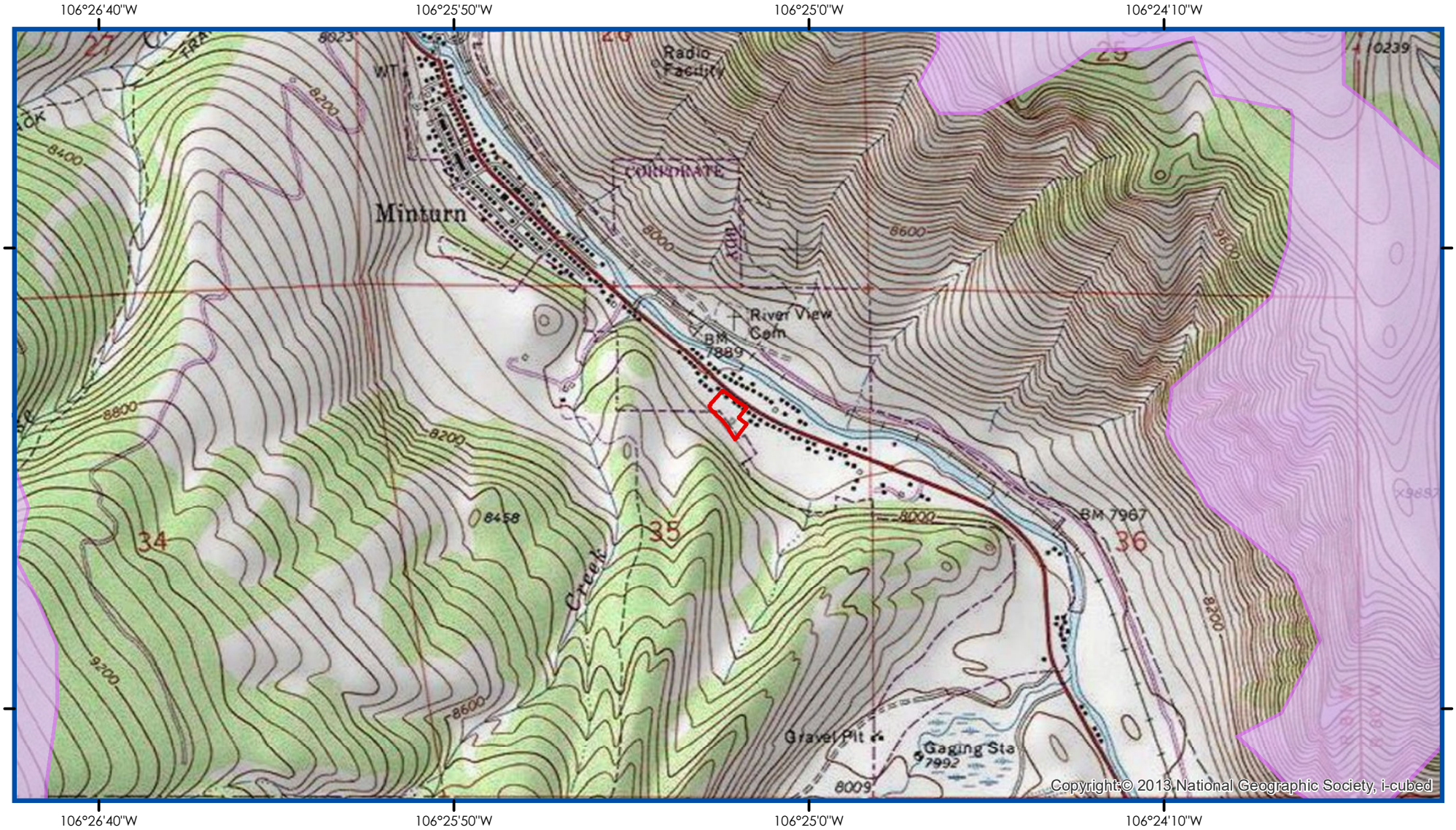
FIGURE 8. ELK WINTER RANGE
MIDOWN VILLAGE

November 2022

Prepared by:

Birch Ecology LLC

429 Main Street
P.O. Box 170
Lyons, CO 80540
(720) 350-2530
www. birchecology.com



BASE: USGS 7.5' Minturn Quadrangle, Colorado

FIGURE 9. POTENTIAL LYNX HABITAT
MIDTOWN VILLAGE
November 2022

LEGEND

- Potential Lynx Habitat
- Parcel Boundary

N

1:24,000

0 600 1,200 2,400
Feet

Prepared by:

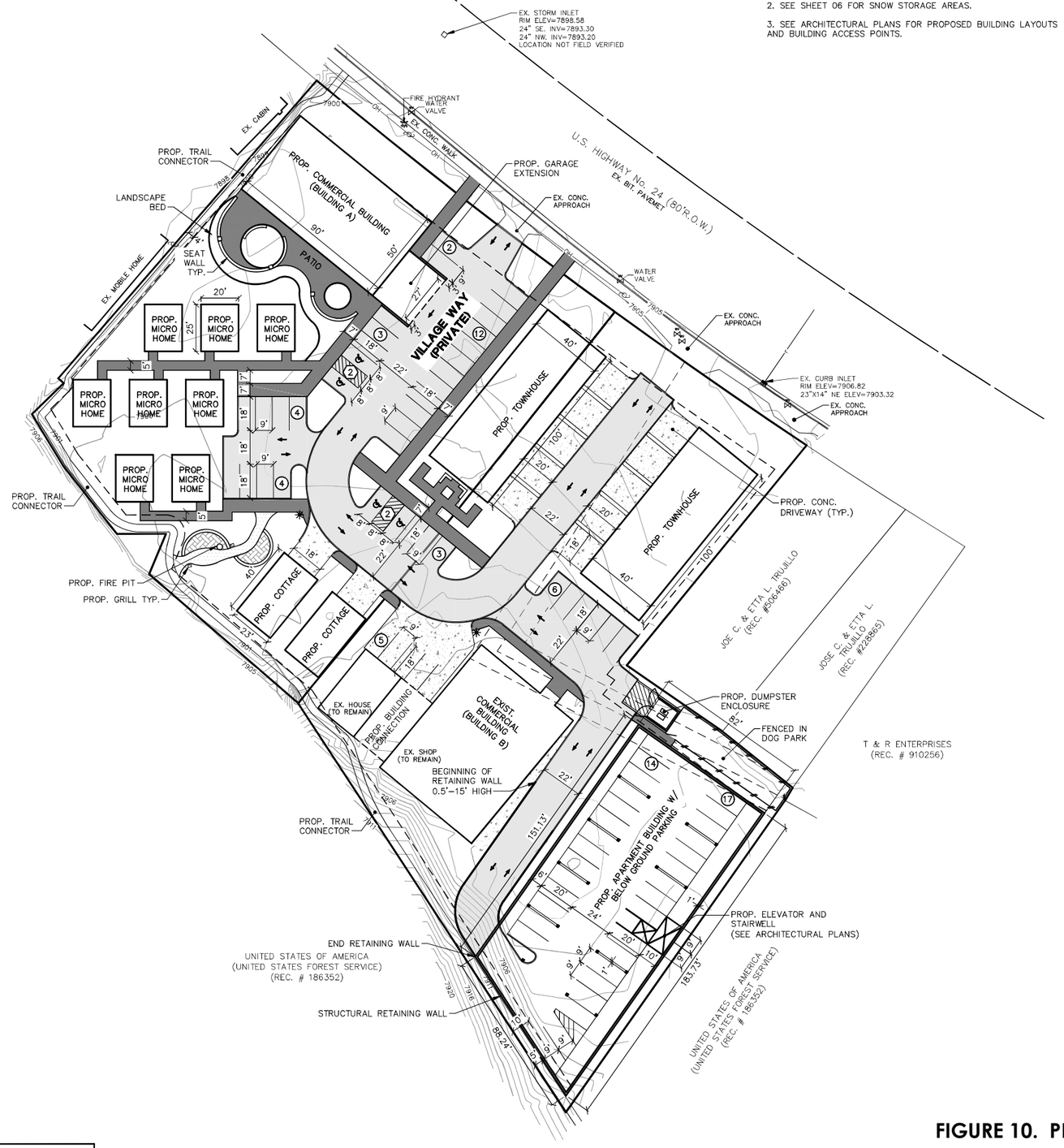
Birch Ecology LLC
429 Main Street
P.O. Box 170
Lyons, CO 80540
(720) 350-2530
www. birchecology.com

NOTES

1. ALL CONCRETE WALKS SHALL BE 5 FEET WIDE EXCEPT WHERE OTHERWISE DIMENSIONED ON THE PLANS.

2. SEE SHEET 06 FOR SNOW STORAGE AREAS.

3. SEE ARCHITECTURAL PLANS FOR PROPOSED BUILDING LAYOUTS AND BUILDING ACCESS POINTS.



LEGEND

- EXIST. UTILITY POLE
- EXIST. OVERHEAD UTILITY LINE
- EXIST. HYDRANT
- EXIST. WATER VALVE
- EXIST. STORM SEWER
- EXIST. CATCH BASIN OR INLET
- EXIST. SANITARY SEWER
- SIGN
- POST
- EXIST. GAS VALVE
- WELL
- FENCE
- PROPOSED CONC. WALK
- PROPOSED BIT. PAVEMENT
- PROPOSED CONC. PAVEMENT
- NUMBER OF STANDARD PARKING SPACES IN ROW
- NUMBER OF BARRIER FREE PARKING SPACES IN ROW
- TRAFFIC DIRECTION ARROWS
- PROP. LIGHT POLE

SCALE: 1" = 30'

0 30 60 90

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

FIGURE 10. PROPOSED DEVELOPMENT PLAN
MIDTOWN VILLAGE
November 2022

The underground utilities shown have been located from field survey information and existing records. The surveyor makes no guarantees that the underground utilities shown comprise all such utilities in the area, either in-service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated. Although the surveyor does certify that they are located as accurately as possible from the information available.

MIDWESTERN CONSULTING
385 S Plaza Drive Ann Arbor, Michigan 48108
(734) 995-0200 • www.midwesternconsulting.com
Land Development • Land Surveying • Water Resources • Municipal
Wireless Communications • Transportation • Landfill Services

CLIENT
10TH MOUNTAIN BUILDERS
1632 MAIN STREET
MINTURN, CO 81645
JEFFREY D. ARMISTEAD
970-471-0618

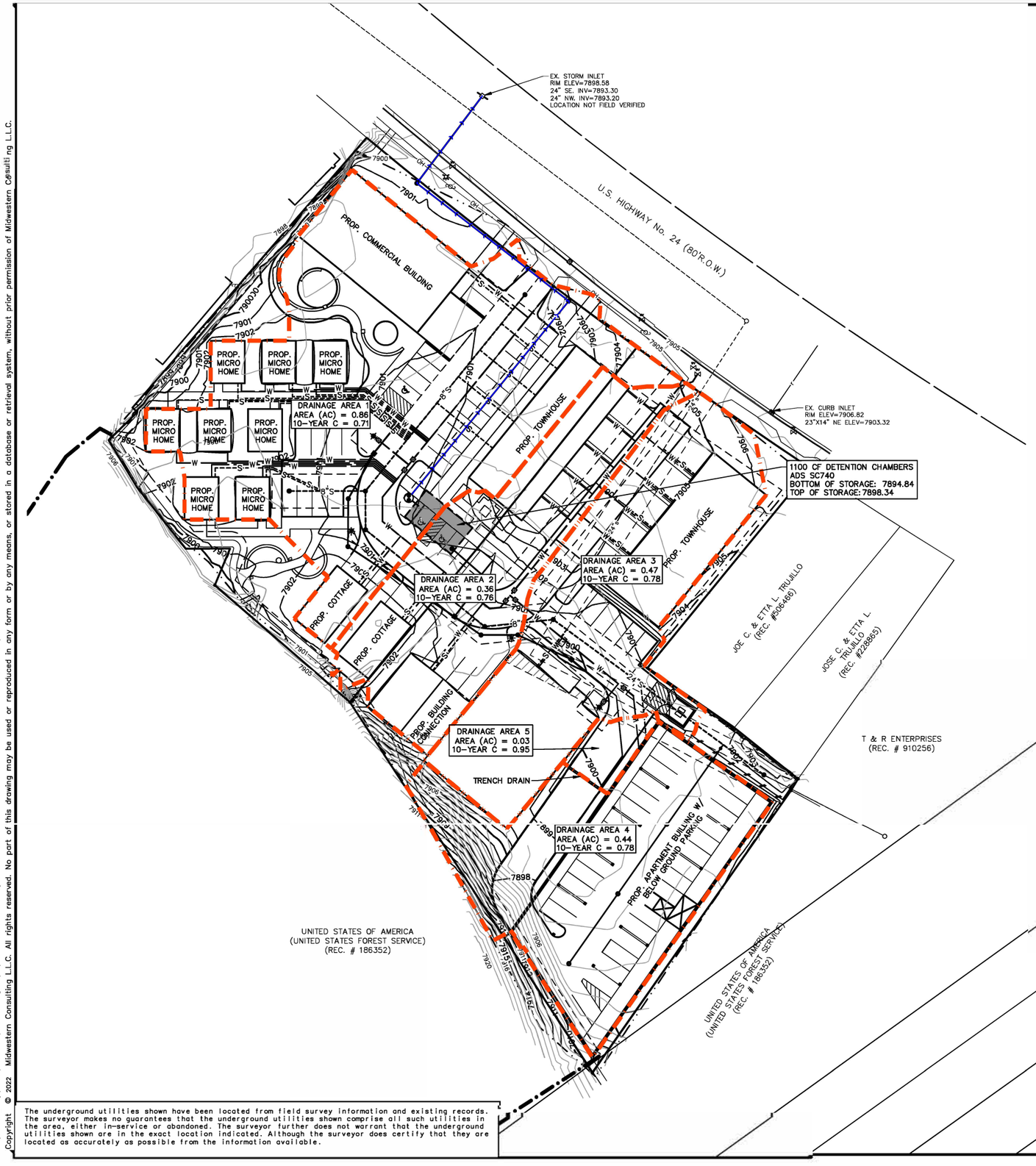
MIDTOWN VILLAGE PUD

SITE PLAN

05

DATE: 10/5/22
SHEET 05 OF 27
CADD:
ENG: ROW
MAN: KEB
TECH:
Z0067SP1

JOB No. 20067
REVISIONS:
REV. DATE



LEGEND

- EXIST. UTILITY POLE
- EXIST. OVERHEAD UTILITY LINE
- EXIST. HYDRANT
- EXIST. WATER VALVE
- EXIST. STORM SEWER
- EXIST. CATCH BASIN OR INLET
- EXIST. SANITARY SEWER
- SIGN
- POST
- EXIST. GAS VALVE
- WELL
- FENCE
- PROP. SANITARY SEWER
- PROP. WATER MAIN
- PROP. CATCH BASIN OR INLET
- PROP. DRAINAGE AREA
- PROP. UNDERGROUND STORM SEWER STORAGE
- EMERGENCY OVERFLOW ROUTING

SCALE: 1" = 30'

0 30 60 90

Know what's below. Call before you dig.

STORMWATER VOLUME CALCULATIONS

Subcatchment Name	Area (ac)	NRCS Hydrologic	Percent Impervio	Runoff Coefficient, C						
				2-yr	5-yr	10-yr	25-yr	50-yr	100-yr	500-yr
Existing Site	2.52	C	28.0	0.20	0.26	0.34	0.48	0.53	0.60	0.68
Proposed Site	2.52	C	72.0	0.58	0.62	0.66	0.72	0.75	0.78	0.81

SITE DRAINAGE AREA CHARACTARISTICS - EXISTING CONDITIONS

Tributary Area (A) = 2.52 Acres
Run-off Coefficient (C) = 0.34
Existing Constant (Ke) = 0.85
Allowable Outflow Rate (Qa)* = 0.50 cfs*

* Allowable outflow rate (Qa) is computed by one of the following equations:
Case 1 Qa = capacity of existing discharge conduit or channel
Case 2 Qa = q * A where q = Permissible discharge rate per acre of tributary area = N/A cfs / Acre

SITE DRAINAGE AREA CHARACTARISTICS - PROPOSED CONDITIONS

Tributary Area (A) = 2.52 Acres
Run-off Coefficient (C) = 0.66
Design Constant (Kd) = 1.67
Allowable Outflow Rate (Qa)* = 0.50 cfs*

* Allowable outflow rate Qa is computed by one of the following cases:
Case 1 Qa = capacity of existing discharge conduit or channel
Case 2 Qa = q * A where q = Permissible discharge rate per acre of tributary area = N/A cfs / Acre

1-HOUR RAINFALL DEPTH P1

2-yr	5-yr	10-yr	25-yr	50-yr	100-yr	500-yr
0.53	0.69	0.83	1.06	1.26	1.47	2.05

DETENTION BASIN SIZING

10 YEAR STORM

1 Duration (Minutes)	2 Duration (Seconds)	3 Intensity (10- yr Storm) (In/Hr)	4 Col. #2 x Col. #3 (Inches)	5 Existing Peak Flow, Q (CFS)	6 Proposed Peak Flow, Q (CFS)	7 Net Peak Flow, Q (CFS) Col. #6 - Col. #5	8 Existing Volume Generated= Col. #4 x Ke	9 Proposed Volume Generated = Col. #4 x Kd	10 Net Volume Generated	11 Outflow Volume = Col. #2 x Qa (Cu. Ft.)	12 Storage Volume = Col. #10 - Col. #11 Cu
5	300	3.83	848	3.44	4.79	2.39	722	1,412	691	151	540
10	600	2.25	1,382	1.92	3.76	1.84	1151	2,253	1,102	302	800
15	900	1.69	1,702	1.61	3.15	1.54	1431	2,775	1,344	453	892
30	1,800	1.31	2,353	1.11	2.18	1.07	2205	3,920	1,917	907	1,010
40	2,400	1.10	2,632	0.93	1.83	0.89	2241	4,388	2,145	1,210	935
60	3,600	0.84	3,091	0.72	1.40	0.68	2586	5,050	2,470	1,814	656
90	5,400	0.64	3,435	0.54	1.06	0.52	2924	5,723	2,799	2,722	78

Note: > Figures in Columns (3) are computed by Equation 5-3 in the UDCSM per the Town of Minturn Ordinance

Eq. 5-3

$$I = \frac{28.5\,P_1}{(10 + T_d)^{0.786}}$$

1-HOUR RAINFALL DEPTH P1

2-yr	5-yr	10-yr	25-yr	50-yr	100-yr	500-yr
0.53	0.69	0.83	1.06	1.26	1.47	2.05

DETENTION BASIN SIZING

5 YEAR STORM

1 Duration (Minutes)	2 Duration (Seconds)	3 Intensity (10- yr Storm) (In/Hr)	4 Col. #2 x Col. #3 (Inches)	5 Existing Peak Flow (CFS)	6 Proposed Peak Flow (CFS)	7 Net Peak Flow (CFS) Col. #6 -Col. #5	8 Existing Volume Generated= Col. #4 x Ke	9 Proposed Volume Generated = Col. #4 x Kd	10 Net Volume Generated	11 Outflow Volume = Col. #2 x Qa (Cu. Ft.)	12 Storage Volume = Col. #10 - Col. #11 (Cu
5	300	3.83	848	1.98	3.87	1.89	593	1,161	568	151	417
10	600	1.85	1,112	1.58	3.09	1.51	947	1,853	906	302	604
15	900	1.56	1,400	1.30	2.55	1.27	1167	2,332	1,141	454	687
30	1,800	1.07	1,935	0.91	1.79	0.88	1647	3,223	1,577	907	669
40	2,400	0.90	2,164	0.77	1.50	0.73	1843	3,607	1,764	1,210	554
60	3,600	0.69	2,462	0.60	1.15	0.56	2122	4,153	2,031	1,814	217

Note: > Figures in Columns (3) are computed by Equation 5-3 in the UDCSM per the Town of Minturn Ordinance

Eq. 5-3

$$I = \frac{28.5\,P_1}{(10 + T_d)^{0.786}}$$

FIGURE 11. STORMWATER MANAGEMENT PLAN
MIDTOWN VILLAGE
November 2022

MIDWESTERN CONSULTING
385 S Plaza Drive, Ann Arbor, Michigan 48108
(734) 995-0200 • www.midwesternconsulting.com
Land Development • Site Design • Municipal • Institutional
Wireless Communications • Transportation • Landfill Service

CLIENT
10TH MOUNTAIN BUILDERS
1632 MAIN STREET
MINTURN, CO 81645
JEFFREY D. ARMISTEAD
970-471-0618

MIDTOWN VILLAGE PUD

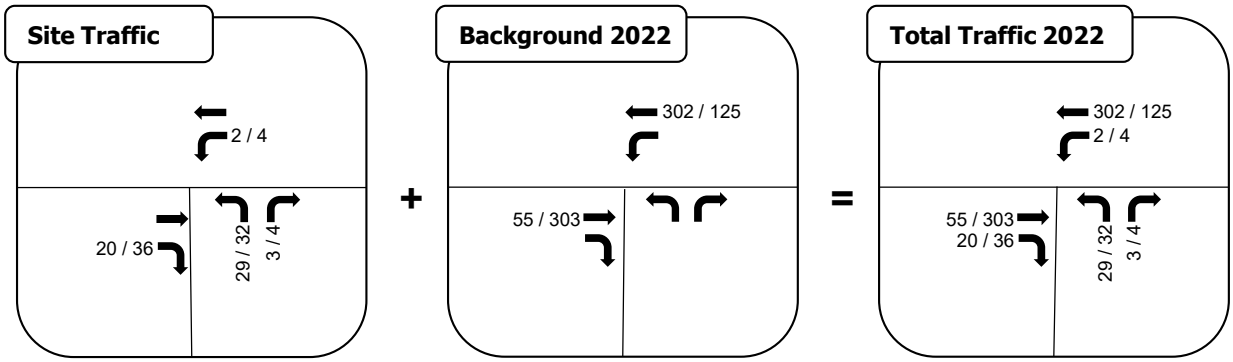
PRELIMINARY STORM WATER MANAGEMENT PLAN

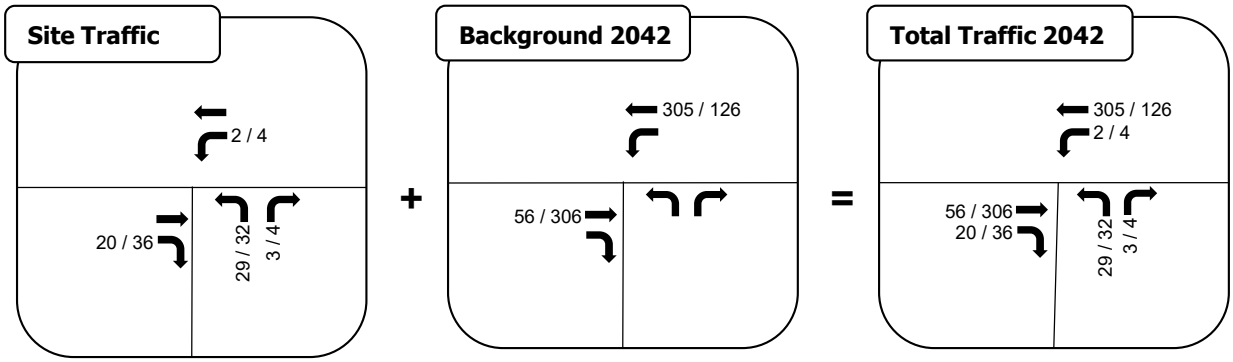
13

DATE: 10/7/22
SHEET 13 OF 27
CADD:
ENG: ROW
PM: KEB
FILE: 20067SR1

REV.	DATE

JOB No. 20067
REVISIONS:





(NTS)

LEGEND
XX/XX = AM/PM Volumes (vph)
Turning Movements

8.0 TABLES

TABLE 1
CDPHE Ambient Air Concentration Estimates
Midtown Village

POLLUTANT	AVERAGING TIME	STANDARD	ESTIMATED CONCENTRATION	BASIS FOR ESTIMATE
Carbon Monoxide (CO)	1-Hour Second Maximum	35 ppm	1 ppm	Grand Junction, 2016-2018
	8-Hour Second Maximum	9 ppm	1 ppm	
Ozone (O3)	8-Hour Fourth Maximum	0.070 ppm	0.06 ppm	Rifle, 2017-2019
Sulfur Dioxide (SO2)	1-Hour 99th Percentile	0.075 ppm	0.012 ppm	RM Steel, Print Shop, 2013-2018
	3-Hour Second Maximum	0.5 ppm	0.008 ppm	
Nitrogen Dioxide (NO2)	Annual Mean	0.053 ppm	0.005 ppm	Glenwood Springs, 2015
	1-Hour 98th Percentile	0.100 ppm	0.033 ppm	
PM10	24-Hour Second Maximum	150 (ug/m3)	37 (ug/m3)	Carbondale, 2014-2016
PM2.5	Annual Mean	12 (ug/m3)	5 (ug/m3)	Carbondale, 2014-2016
	24-Hour 98th Percentile	35 (ug/m3)	10 (ug/m3)	
Lead (Pb)	3-Month Average	0.15 (ug/m3)	0.006 (ug/m3)	Denver Municipal Animal Shelter, 2009

Additional details are included in Appendix A.

TABLE 2
Vascular Plant Species List
Midtown Village

Scientific Name	Common Name	Family	Origin*
Trees			
Picea engelmannii	Engelmann spruce	Pinaceae	N
Populus tremuloides	Aspen	Salicaceae	N
Shrubs			
Juniperus communis ssp. alpina	Common juniper	Cupressaceae	N
Prunus virginiana var. melanocarpa	Choke cherry	Rosaceae	N
Rosa woodsii	Woods' rose	Rosaceae	N
Perennial Graminoids			
Bromus inermis	Smooth brome	Poaceae	I
Mahonia repens	Oregon grape	Berberidaceae	N
Rumex crispus	Curly dock	Polygonaceae	I
Taraxacum officinale	Dandelion	Asteraceae	I
Annual/Biennial Forbs			
Carduus acanthoides	Plumeless thistle	Asteraceae	I+
Cynoglossum officinale	Houndstongue	Boraginaceae	I+
Matricaria perforata (Tripleurospermum)	Wild chamomile	Asteraceae	I+
Melilotus officinalis	Yellow sweet clover	Fabaceae	I
Verbascum thapsus	Great mullein	Scrophulariaceae	I+

*Origin:
N = Native
I = Introduced
I+ = Colorado State-Listed Noxious Weed

9.0 PHOTOS

Photo 1. The site is adjacent to the White River National Forest on the southwest property line. (5/10/22).

Photo 2. A panoramic view from the southeast corner of the site displays Martin Creek Open Space on the right, stacked construction materials on the property in the center of the picture, and National Forest land to the left. (5/10/22).

Photo 3. The area on the northwest side of the site that once housed trailer homes is now empty land. The northwest boundary with adjacent residential housing (a light pink trailer home) is visible to the left side of the picture. (5/10/22).

Photo 4. A vegetated strip dominated by weeds separates the parcel into two sections. (5/10/22).

Photo 5. A mixture of building types characterizes the southeast side of the project area. An existing commercial building which will be renovated in the proposed project is visible on the left. A blue apartment building and brown garage/shop are also currently located on the property. (5/10/22).

Photo 6. Construction materials are amassed along the White River National Forest boundary. (5/10/22).

Photo 7. Construction and miscellaneous materials are piled by the far north entrance. (5/10/22).

Photo 8. Cracked patchwork pavement, old buildings, and piled construction supplies (just visible behind the white van in the center of the photo) make this site not visually appealing in its current state. (5/10/22).

Photo 9. An existing commercial building with loft apartments will be renovated. (5/10/22).

10.0 REFERENCES

10th Mountain Builders, LLC. 2021. Midtown Village Conceptual PUD Application.

Ackerfield, J. 2015. The Flora of Colorado. BRIT Press, Ft. Worth, Texas. 818 p.

Advanced Drainage Systems Inc. 2022. SC-740 Stormtech Full Detail Sheet. https://www.adspipe.com/water-management-solutions/detention-infiltration/stormtech-sc740

AEI Consultants. 2022. Limited Phase II Subsurface Investigation Report. Report prepared for 10th Mountain Builders.

Armstrong D. M. Fitzgerald J. P. Meaney C. A. 2011. Mammals of Colorado, 2nd Edition. Denver Museum of Nature & Science and University Press of Colorado, Boulder.

CPW Species Activities Mapping. 2022. ArcGIS Online Basemap.

Kumar and Associates. 2022. Subsoil Study for Foundation Design Proposed Midtown Village US Highway 24 Minturn, Colorado. Report prepared for 10th Mountain Builders.

McDowell Engineering, LLC. 2021. Auxiliary Turn Lane Assessment Transportation Impact Study for Midtown Lofts Minturn, Colorado. 20 p.

Midwestern Consulting, LLC. 2022. Midtown Village PUD Minturn, Eagle County, Colorado Preliminary PUD Plan. Report prepared for 10th Mountain Builders.

NatureServe Explorer: An Online Encyclopedia of Life. http://www.natureserve.org/explorer/

USDA, NRCS. 2022. The PLANTS Database (http://plants.usda.gov). National Plant Data Team, Greensboro, NC 27401-4901 USA.

University of Colorado Herbarium (COLO). Specimen Database of Colorado Vascular Plants. http://cumuseum.colorado.edu/Research/Botany/Databases/search.php

Weber, W.A. & R.C. Wittmann, 1992. Catalog of the Colorado Flora: a Biodiversity Baseline. University Press of Colorado. Niwot, Colorado. Including most recent addenda available from CU Herbarium (COLO), Boulder, Colorado.

APPENDIX A. CDPHE AIR QUALITY DATA

COLORADO
Air Pollution Control Division
Department of Public Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

Joe DiMaria
By email: joe@birchecology.com

May 6, 2022

Dear Mr. DiMaria,

You recently requested background estimates for air pollution in the area of the following project:

Midtown Village
10th Mountain Builders

County:		Eagle	
Latitude:	NAD83:	39.5784	AND / OR NAD27
Longitude:		-106.4198	

The estimates, and their bases, are given below.

Pollutant Standard	Standard	Estimated Concentration	Basis for Estimate
CO requested? **Yes**			
CO 1 Hour Second Maximum (ppm)	35	1	Grand Junction, 2016 - 2018.
CO 8 Hour Second Maximum (ppm)	9	1	
O3 requested? **Yes**			
O3 8 Hour Fourth Maximum (ppm)	0.070	0.06	Rifle, 2017 - 2019.
SO2 requested? **Yes**			
SO2 1 Hour 99th Percentile	0.075	0.012	RM Steel, Print Shop, 2013 - 2015.
SO2 3 Hour Second Maximum (ppm) (Secondary Standard)	0.5	0.008	
SO2 24 Hour Second Maximum (ppm)			
SO2 Annual Mean (ppm) .			
NO2 requested?) **Yes**			
NO2 Annual Mean (ppm)	0.053	0.005	Glenwood Springs, 2015.
NO2 1 Hour 98th Percentile (ppm)	0.100	0.033	
PM10 requested? **Yes**	150	37	Carbondale, 2014 - 2016.
PM10 24 Hour Second Maximum (ug/m3)			
PM2.5 requested? **Yes**			
PM2.5 Annual Mean (ug/m3)	12.0	5	Carbondale, 2014 - 2016.
PM2.5 24 Hour 98th Percentile (ug/m3)	35	10	
Pb requested? **Yes**			
Pb Rolling 3-Month Average (ug/m3)	0.15	0.006	Denver Municipal Animal Shelter, 2009.

Any ozone concentrations provided here are for informational purposes only. They are not for use in modeling. Ozone concentrations for use in modeling (AERMOD / OLM) should be requested separately.

Upon request, refinement of a single value background concentration listed above may be conducted by the modeling staff (email: emmett.malone@state.co.us), if applicable, appropriate, and justified.

These estimates are derived from ambient monitored concentrations that are available to the Division to represent background levels (added to the impacts of the project emissions and emissions from other nearby sources) in cumulative ambient air impacts for comparison to the NAAQS. They are not suitable for applications beyond that scope of use. The quantity of data is sometimes limited and may be of uncertain quality. The ambient background concentrations -

1. Do not necessarily substitute for on-site monitoring data; i.e., for permitting actions subject to PSD rules, pre-construction monitoring may be required.

2. Indicate the ambient levels in general geographic areas, not a specific location. This is particularly true for particulate concentration values.

3. Are subject to change without notice as new information is acquired.

Use of these background estimates should be accompanied by an appropriate citation that indicates their source and their limitations. Referencing this letter would be adequate, but an expanded explanation is suggested.

If you have questions, I can be reached at 303-692-3226, or email: nancy.chick@state.co.us.

Sincerely,

Nancy D. Chick
Environmental Protection Specialist
Air Pollution Control Division

C:\background concentration\request no. 241