Boulder County

Community Planning and Permitting

Courthouse Annex • 2045 13th Street • Boulder, Colorado 80302 • Tel: 303.441.3930 • Fax: 303.441.4856
Mailing Address: P.O. Box 471 • Boulder, Colorado 80306 • **www.bouldercounty.gov**

BOULDER COUNTY
BOARD OF COUNTY COMMISSIONERS
PUBLIC HEARING

April 2, 2024 at 1:00 p.m.

All Commissioners' public hearings and meetings will be offered in a hybrid format where attendees can join **through Zoom** or **in-person** at the Boulder County Courthouse, 3rd Floor, 1325 Pearl Street, Boulder.

STAFF PLANNER: Dana Yelton – Planner I

SPR-23-0108: Piscopio-Huang Residential Remodel and New Accessory Structure

Request: **PROPOSED**: Site Plan Review for the deconstruction of 1,699 square feet and the addition of 45 square feet to the existing 5,848-square-foot residence and a new 1,641-square-foot residential accessory structure on a 0.83-acre parcel where the size presumed to be compatible with the neighborhood is 4,881-square-feet.

APPROVED: A single residential structure in the location of the existing structure with a maximum of 5,848 square feet and a maximum of 4,221 square feet above grade on a 0.83-acre parcel where the size presumed to be compatible with the neighborhood is 4,881-square-feet.

Location: 5986 Heather Way
Zoning: Rural Residential (RR) Zoning District
Applicant: Anthony Piscopio and Huiqiong Huang
Agent: Kyle Callahan

STAFF RECOMMENDATION:
Staff recommends that the Board of County Commissioners uphold the Director's Determination for SPR-23-0108, Piscopio-Huang Residential Remodel and New Accessory Structure.

PACKET CONTENTS:

SUMMARY:

The applicants submitted a Site Plan Review application (SPR-23-0108) for the deconstruction of 1,699 square feet and the addition of 45 square feet and 245 square feet of covered porches to the existing 5,848-square-foot residence and a new 1,641-square-foot residential accessory structure, resulting in a total of 5,835 square feet of residential floor area on the subject property. Per Article 4-802.A of the Boulder County Land Use Code (the Code), Site Plan Review was required for this proposed development because it would (1) result in a cumulative increase in floor area of more than 1,000 square feet over that existing as of September 8, 1998, and (2) result in a total residential floor area greater than 125% of the median residential floor area for the defined neighborhood in which the subject parcel is located. Accordingly, Community Planning & Permitting reviewed this application in accordance with the Site Plan Review standards provided for in Article 4-806.A of the Code.

On December 15, 2023, Community Planning & Permitting (CPP) issued a determination conditionally approving the proposal but limiting the size to a single residential structure in the location of the existing structure with a maximum of 5,848 square feet and a maximum of 4,221 square feet above grade and visible (Attachment B). The residential size that is presumed to be compatible within the defined neighborhood, the Brigadoon Glen subdivision, is 4,881 square feet. In addition to the size limitations of the residence, the Determination requires a Floodplain Development Permit (FDP) to remodel the existing residence.

On December 19, 2023, the applicants appealed the December 15, 2023, SPR-23-0108 Determination (Attachment A). On March 11, 2024 the applicants submitted an Appeal Narrative (Attachment C) noting objections to section 2 regarding the approved size and ability to overcome the size presumption, section 4 regarding the Floodplain Overlay (FO) District, and section 11 regarding the location of the proposed accessory structure.

DISCUSSION:

Article 4-807.B of the Code states that if the application is found to not meet the applicable standards of Article 4-806, the Director of Community Planning and Permitting must approve the application with reasonable conditions that will avoid or acceptably mitigate the significant adverse impacts of the development. In this case, the Director found conflicts with Article 4-806.A.2 and Article 4-806.A.4 of the Code. In particular, the Director found that impacts of the proposal could be mitigated by limiting the size to a single residential structure in the location of the existing structure. These standards and conditions are discussed further below.

A. Size of the Proposed Residence and Accessory Structure

Article 4-806.A.2 of the Code states that the size of resulting development (residential or nonresidential) must be compatible with the general character of the neighborhood, which is presumed to be 125% of the median residential floor area. Article 4-806.A.2.b of the Code describes a number of methods by which a development proposal can potentially overcome the presumption. As part of staff's analysis of this SPR application, staff considered all relevant factors outlined in Article 4-806.A.2.b of the Code to determine if the proposed development could exceed the presumed compatible size (4,881 square feet residential floor area). Of particular relevance to this proposal was 4-806.A.2.b.i.E of the Code, that allows for the demolition and rebuilding of legally existing residential floor area that is not in conflict with the other standards set forth in Section 4-806.

Staff determined that that the demolition and rebuilding of legally existing residential floor area may be applied to the legally existing residence but does not apply to the proposed accessory structure as the new structure does not constitute legally existing residential floor area currently existing on the parcel.

The distribution of legally existing residential floor area includes 4,221 square feet that is above grade and visible, with a 2,321-square-foot first floor, a 1,130-square-foot second floor, and a 770-square-foot attached garage. The applicants propose to deconstruct 1,699 square feet of the existing residence by converting the 1,627-square-foot basement to crawlspace and deconstructing 72 square feet of the first floor, and to construct 45 square feet of residential additions on the first floor, resulting in a total size of 4,194 square feet, all above grade and visible.

Staff found the dominant size range of above grade and visible residential floor area in the Brigadoon Glen subdivision is between 2,500 and 4,500 square feet. Given this above grade and visible size range in the surrounding neighborhood, staff found that the proposed above grade and visible residential floor area of 5,835 square feet, including the proposed 4,194-square-foot residential remodel and the proposed 1,641-square-foot accessory structure, would not be compatible with the neighborhood. However, staff found that 4,194 square feet for the existing residential remodel would be compatible with the neighborhood.

B. Location of the Structure

In addition to the issues related to above grade size limitations outlined above, the Director did not approve the application for the accessory structure due to its proposed location in the floodway. The accessory structure was proposed to be located within the Floodplain Overlay (FO) District, specifically within the Lefthand Creek Floodway. Article 4-404.B.1 of the Code prohibits the construction of new permanent buildings in the floodway There are a few exceptions to this rule outlined in Article 4-404.C of the Code, such as some agricultural uses, but the proposed accessory structure does not qualify for any of these exceptions.

The applicants argue that Boulder County should conditionally approve the location of the proposed accessory structure because the current floodplain and floodway designations are not accurate, and they plan to apply for a Letter of Map Revision (LOMR) from FEMA. In addition to already determining that the proposed above grade size of the accessory structure is not compatible with the surrounding neighbor, Boulder County cannot recommend approval of a permanent residential structure in a location that is currently designated as a floodway.
If the applicants successfully obtain a LOMR that places the proposed location of the accessory structure outside of the floodway, they can submit a new Site Plan Review application to the county for review. The new application will be reviewed according to the requirements of the Boulder County Land Use Code at the time of submittal.

RECOMMENDATION
Staff recommends that the Board of County Commissioners uphold the Director's Determination for SPR-23-0108, Piscopio-Huang Residential Remodel and New Accessory Structure.

ATTACHMENT A

From: Kyle Callahan
To: Yelton, Dana; tpiscopio@proton.me
Cc: Case, Dale
Subject: [EXTERNAL] RE: CPP SPR Determination: SPR-23-0108 at 5986 Heather Way
Date: Tuesday, December 19, 2023 1:33:23 PM
Attachments: image001.png

Thanks Dana –
Disappointing, but not entirely unanticipated. Dana – based on our site visit together, the data analysis that I prepared demonstrating inconsistencies in water depth on the north and the south side of the creek, we're going to appeal this decision to the BOCC. Please take the necessary actions to do that – thanks.

Anthony Piscopio and I were just on a call with Dale Case about this issue. Dale is aware of my observations regarding the topographic survey provided by BOCO, and my claim that it seems to not be consistent with the way flood water would behave. You and I were onsite together, and could observe the grades on the south side of the creek being far lower than the north side. So we have a legitimate concern that the floodway is incorrectly defined on this lot. Going forward – we're developing a response as to how we fix it. In my understanding, based on maps available, FEMA doesn't really adhere to the floodway definition – that's a construct developed by Boulder County. Our first course of action is to have our flood engineer consider the hydrologic data and topo and see what conclusions he derives. If the floodway is incorrectly defined, then we have to figure out how it gets corrected. If it is somehow determined to be correct, then it is up to us to get a LOMR. If it's a mistake in the mapping, then I would expect Boulder County to make the corrections. First step is engineering evaluation of the data.

This is a kind of long way of saying yes, we appeal the decision. However, we need to allay, for a bit, the scheduling of the hearing with the BOCC.

We will also want to confirm that the project would not otherwise be rejected. We have seen the neighbor's similar structure (the Ioppolo family at the end of the street), so there seems to be precedence. Please advise if I am mistaken.

Thanks for your help on this interesting and challenging project.

Kyle Callahan

Community Planning & Permitting

ATTACHMENT B

Courthouse Annex • 2045 13th Street • Boulder, Colorado 80302
Mailing Address: P.O. Box 471 • Boulder, Colorado 80306
303-441-3930 • www.BoulderCounty.gov

Claire Levy *County Commissioner* **Marta Loachamin** *County Commissioner* **Ashley Stolzmann** *County Commissioner*

12/15/2023

Kyle Callahan
2975 Valmont Road
Suite 100
Boulder, CO 80301

Anthony Piscopio and Huiqiong Huang
5986 Heather Way
Longmont, CO 80503

Dear Applicant(s):

This letter certifies that in accordance with section 4-800 of the Boulder County Land Use Code, the Boulder County CPP Director has Approved with Conditions the site plan for the following, effective December 15, 2023.

Docket:	**SPR-23-0108 Piscopio-Huang Residential Remodel and New Accessory Structure**
Request:	PROPOSED: Site Plan Review for the deconstruction of 1,699 square feet and the addition of 45 square feet to the existing 5,848-square-foot residence and a new 1,641-square-foot residential accessory structure on a 0.83-acre parcel where the size presumed to be compatible with the neighborhood is 4,881-square-feet. APPROVED: A single residential structure in the location of the existing structure with a maximum of 5,848 square feet and a maximum of 4,221 square feet above grade on a 0.83-acre parcel where the size presumed to be compatible with the neighborhood is 4,881-square-feet.
Location:	5986 HEATHER WAY
Zoning:	Rural Residential
Applicant:	Kyle Callahan

This is a Conditional Approval made by the CPP Director, and is not final until a 14-day referral period has transpired. During the next 14 days, the Board of County Commissioners (BOCC) may choose to call this docket up for a public hearing. If no hearing is required, this letter will serve as the final determination. Building, grading and access permits will be subject to any and all conditions of approval.

If the BOCC should decide to modify the CPP Director's approval, or determines that further review is necessary, a public hearing will be held. Upon completion of the public hearing and approval by the BOCC, if a building, grading or access permit has been applied for, it will continue in the process and permits may be issued subject to any and all conditions of approval.

In the event that you wish to appeal any conditions of the CPP Director's determination, you are entitled to appeal the determination to the BOCC. You must file an appeal for this purpose with the CPP Department in writing no later than 14 days after the date of this letter. If an appeal is requested, the BOCC will review the CPP Director's determination at a public meeting.

Please be aware that the attached Conditions of Approval become final if the docket is not called up by the BOCC at the end of the 14-day review period. There are no other administrative means to appeal. If you wish to resubmit information with regards to complying with any of the attached Conditions of Approval, and have this information reviewed for approval by staff prior to the end of the 14-day review period, your submissions must be received by the office no later than 10 days from the date of this letter.

Site Plan Review approval is valid for three years from the date of this letter although any changes in County regulations could affect the proposal prior to application for a building permit. In order to be issued a building permit, the project must comply with all policies and regulations in effect at the time of permit application.

A Building Permit cannot be issued for this project until the applicable conditions above have been met. Furthermore, a Certificate of Occupancy cannot be issued for this project until the applicable conditions above have been met. A SPR inspection will need to be scheduled with this department prior to the issuance of a Certificate of Occupancy. None of the conditions of approval will be waived or a Certificate of Occupancy issued for this project based upon the applicant's need to meet financial obligations (i.e., construction cost overruns or loan closing dates). Any future additions to the approved structure, regardless of size, will require SPR approval to amend this SPR.

The Public Notice sign must remain posted for 14 days after the date of this letter and then returned to the CPP Department in a timely manner after this date. Or, if your Site Plan Review application requires a public hearing, please return the sign after the final public hearing. We will begin processing a refund for the $25 sign deposit when your sign is returned, and a check will be mailed to you within approximately 2 weeks.

Please carefully review the attached conditions of approval. Compliance with these conditions will be confirmed as is necessary throughout the process.

Dana Yelton

Planner I

APPLICATION #:	SPR-23-0108
APPLICANTS:	Anthony Piscopi & Huiqiong Huang
PROJECT LOCATION:	5986 Heather Way
PROJECT SUMMARY:	PROPOSED: Site Plan Review for the deconstruction of 1,699 square feet and the addition of 45 square feet to the existing 5,848-square-foot residence and a new 1,641-square-foot residential accessory structure on a 0.83-acre parcel where the size presumed to be compatible with the neighborhood is 4,881-square-feet. APPROVED: A single residential structure in the location of the existing structure with a maximum of 5,848 square feet and a maximum of 4,221 square feet above grade on a 0.83-acre parcel where the size presumed to be compatible with the neighborhood is 4,881-square-feet.

CONDITIONS OF APPROVAL

Per Article 4-802.A of the Boulder County Land Use Code (the Code), Site Plan Review is required for this proposed development because it is (1) resulting in a cumulative increase in floor area of more than 1,000 square feet over that existing as of September 8, 1998, and (2) resulting in a total residential floor area greater than 125% of the median residential floor area for the defined neighborhood in which the subject parcel is located. In this case, the applicants propose to deconstruct 1,699 square feet of the existing residence, construct 45 square feet of residential additions, and to construct a new 1,641-square-foot residential accessory structure resulting in a total of 5,835 square feet of residential square footage on the property, which is 954 square feet over the size presumed to be compatible with the defined neighborhood.

All Site Plan Review applications are reviewed in accordance with the Site Plan Review standards set forth in Article 4-806 of the Code. Accordingly, the Community Planning & Permitting Department has reviewed this application in accordance with the standards provided for in Article 4-806.A of the Code and has determined that approval is appropriate, with the conditions set forth below. ***Only those standards applicable to this project are included in this list.***

1. To provide a greater measure of certainty as to the applicable neighborhood relevant for comparison, the following definition of neighborhood shall be used to review proposed Site Plan Review applications:

a. For applications inside platted subdivisions, which have seven or more developed lots, the neighborhood is that platted subdivision.

The applicable neighborhood for the subject parcel is the platted subdivision of Brigadoon Glen.

2. The size of the resulting development (residential or nonresidential) must be compatible with the general character of the defined neighborhood.

a. In determining size compatibility of residential structures within the defined neighborhood, it is presumed that structures of a size within the larger of a total residential floor area of either (1) 125% of the median residential floor area for that defined neighborhood or (2) of a total residential floor area of 1,500 square feet in the mapped townsites of Allenspark, Eldora, Eldorado Springs, Raymond, and Riverside, or 2,500 square feet for all other areas of the County, are compatible with that neighborhood, subject also to a determination that the resulting size complies with the other Site Plan Review standards in this section 4-806.A.

A. SIZE PRESUMPTION

The presumed compatible size of residential structures within the defined neighborhood (see Standard 1 above for the applicable neighborhood) is 4,881 square feet.

Median (total residential floor area) in the defined neighborhood*	3,905 square feet
125% of the median residential floor area in the defined neighborhood	4,881 square feet
Total existing residential floor area on the subject parcel*	5,848 square feet
Total proposed residential floor area	5,835 square feet

**Source: Boulder County Assessor's records, as verified by CPP staff for the subject parcel.*

b. Either the applicant or the Director may demonstrate that this presumption does not adequately address the size compatibility of the proposed development with the defined neighborhood.

i. Factors to be considered when determining the adequacy of this presumption and whether it can be overcome include:

(E) Demolition and rebuilding of legally existing residential floor area that is not in conflict with the other standards set forth in this Section 4-806.

B. ABILITY TO OVERCOME THE SIZE PRESUMPTION

The presumed compatible size of residential structures within the defined neighborhood is 4,881 square feet. The applicants propose to deconstruct 1,699 square feet of the existing residence and construct 45 square feet of residential additions resulting in a 2,294-square-foot first floor, an 1,130-square-foot second floor, a 770-square-foot attached garage, and 245 square feet of covered porches. The applicants also propose to construct a 1,641-square-foot residential accessory structure, resulting in a total of 5,835 square feet of residential floor area, all above grade and visible. Per Article 18-162 of the Code, covered porch area attached to the primary structure does not count as residential floor area. Therefore, the 245 square feet of covered porches do not count as residential floor area.

Article 4-806.A.2.b. of the Code provides that either the applicants or Director may demonstrate that the presumed compatible size does not adequately address the size compatibility of the proposed development within the defined neighborhood. Per Article 4-806.A.2.b.i.E of the Code, a proposed development may be able to overcome the presumed compatible size due to the demolition and rebuilding of legally existing residential floor area that is not in conflict with the other standards set forth in this Section 4-806.

In this case, staff finds that the demolition and rebuilding of legally existing residential floor area may be applied to the legally existing residence but does not apply to the proposed accessory structure as the new structure does not constitute legally existing residential floor area currently existing on the parcel.

The distribution of legally existing residential floor area includes 4,221 square feet that is above grade and visible, with a 2,321-square-foot first floor, an 1,130-square-foot second floor, and a 770-square-foot attached garage. The applicants propose to deconstruct 1,699 square feet of the existing residence by converting the 1,627-square-foot basement to crawlspace and deconstructing 72 square feet of the first floor, and to construct 45 square feet of residential additions on the first floor, resulting in a total size of 4,194 square feet, all above grade and visible.

C. APPROVED SIZE

RESIDENTIAL FLOOR AREA*	
TOTAL approved resulting residential floor area	A single residential structure in the location of the existing structure with a Maximum 5,848 square feet / Maximum 4,221 square feet above grade and visible

**Residential Floor Area includes all attached and detached floor area on a parcel including principal and accessory structures used or customarily used for residential purposes, such as garages, studios, pool houses, home offices, and workshops, excluding covered deck. Floor area does not include the area of any covered porch. Gazebos, carports, detached greenhouses and hoophouses up to a total combined size of 400 square feet are also exempt.*

The dominant size range of above grade and visible residential floor area in the Brigadoon Glen subdivision is between 2,500 and 4,500 square feet. Considering this, staff finds that the proposed above grade and visible residential floor area of approximately 4,194 square feet for the existing residential remodel is compatible with the neighborhood. However, staff finds that the resulting above grade and visible residential floor area of 5,835 square feet, including the proposed 4,194-square-foot residential remodel and the proposed 1,641-square-foot accessory structure, would not be compatible with the neighborhood. Thus, the Director approves only the 4,194-square-foot residential remodel.

For these reasons, staff finds that Article 4-806.A.2.b.i.E only allows the proposed development to the existing residence to overcome the presumed compatible size, with a maximum of 5,848 square feet of residential floor area and a maximum of 4,221 square feet above grade and visible. Further, staff finds no significant adverse impacts related to standards 3-15 of Article 4-806.A with the limitation outlined above.

3. The location of existing or proposed buildings, structures, equipment, grading, or uses shall not impose an undue burden on public services and infrastructure.

ACCESS REQUIREMENTS

The subject property is accessed from Heather Way, an unpaved Boulder County owned but not maintained right-of-way (ROW) with a Functional Classification of Local. Legal access has been demonstrated via adjacency to this public ROW.

At building permit, an Access Improvement and Maintenance Agreement (AIMA) will be issued for the shared roadway. An AIMA is an agreement for future maintenance responsibility. The property owner must sign and notarize the AIMA as part of the building permit approval process.

A drainage letter that meets the requirements outlined in the attached Boulder County Public Works memo dated November 9, 2021 must be submitted to determine if a culvert is needed for the existing driveway. Driveway culverts must be a minimum 18-inch or equivalent capacity RCP or CMP in public ROW per Standard Drawing 15.

At building permit, submit a drainage letter that determines the sizing of any required culverts.

Prior to issuance of a Certificate of Occupancy, the Community Planning & Permitting Department must inspect and verify that any required culvert has been installed and meets the size requirement as specified on plans submitted at building permit.

During construction, all vehicles, materials, machinery, dumpsters, and other items shall be staged on the subject property or to one side of the private road so as to not impede the travel way.

4. The proposed development shall avoid natural hazards, including those on the subject property and those originating off-site with a reasonable likelihood of affecting the subject property. Natural hazards include, without limitation, expansive soils or claystone, subsiding soils, soil creep areas, or questionable soils where the safe-sustaining power of the soils is in doubt; landslides, mudslides, mudfalls, debris fans, unstable slopes, and rockfalls; flash flooding corridors, alluvial fans, floodways, floodplains, and flood-prone areas; and avalanche corridors. Natural hazards may be identified in the Comprehensive Plan Geologic Hazard and Constraint Areas Map or through the Site Plan Review process using the best available information. Best available information includes, without limitation, updated topographic or geologic data, Colorado Geologic Survey landslide or earth/debris flow data, interim floodplain mapping data, and creek planning studies. Development within or affecting such natural hazards may be approved, subject to acceptable measures that will satisfactorily mitigate

all significant hazard risk posed by the proposed development to the subject property and surrounding area, only if there is no way to avoid one or more hazards, no other sites on the subject property can be reasonably developed, or if reasonably necessary to avoid significant adverse impacts based upon other applicable Site Plan Review criteria.

FLOODPLAIN OVERLAY DISTRICT

The proposed accessory structure is located within the Floodplain Overlay (FO) District, specifically within the Lefthand Creek Floodway. Construction of new permanent buildings is prohibited in the Floodway, per Article 4-404.B.1 of the Code. Additionally, the proposed accessory structure is not approved for the reasons stated in section 2 of this determination.

The existing residential structure is located within the FO District. A Floodplain Development Permit (FDP) is required to remodel the existing residence, per Article 4-404 of the Code.

5. The site plan shall satisfactorily mitigate the risk of wildfire both to the subject property and those posed to neighboring properties in the surrounding area by the proposed development. In assessing the applicable wildfire risk and appropriate mitigation measures, the Director shall consider the referral comments of the County Wildfire Mitigation Coordinator and the applicable fire district, and may also consult accepted national standards as amended, such as the Urban-Wildland Interface Code; National Fire Protection Association (NFPA); International Fire Code; and the International Building Code.

WILDFIRE MITIGATION

The proposed project is in Wildfire Zone 2 (eastern area of unincorporated Boulder County). In response to catastrophic wildfire events of the recent past and continued hazards of a changing climate, on May 12, 2022, the Board of County Commissioners adopted revisions to the Boulder County Building Code to ensure a minimum level of ignition resistance for all structures in Wildfire Zone 2. The approved updates to the Building Code took effect on June 6, 2022, and require the use of ignition-resistant materials for construction and a minimum three-foot non-combustible perimeter around the structure. Please contact the Building Division to learn more about the updated ignition-resistant construction requirements included in the Building Code Amendments.

7. The development shall avoid significant natural ecosystems or environmental features, including but not necessarily limited to riparian corridors and wetland areas, plant communities, and wildlife habitat and migration corridors, as identified in the Comprehensive Plan or through the site plan review process. Development within or affecting such areas may be approved, subject to acceptable mitigation measures and in the discretion of the Director, only if no other sites on the subject property can be reasonably developed, or only if reasonably necessary to avoid significant adverse impacts based upon other applicable site plan review criteria.

ECOSYSTEMS OR ENVIRONMENTAL FEATURES IDENTIFIED

The parcel is designated as having Riparian Areas as identified by the Boulder County Comprehensive Plan. The proposed residential additions will be located in the same location as the existing residence on this parcel, which should not further impact the Riparian Areas. To ensure protection of the Riparian Areas, a construction fence must be installed immediately south of the proposed silt fence, as shown on the submitted site plan dated November 13, 2023, to protect the southeastern portion of the property. Installation of the construction fence must be examined by the county before any ground disturbance begins, and must be maintained until re-vegetation is complete. No machinery entry or ground disturbance may occur south of the construction fence.

Prior to issuance of building or grading permits, details regarding the placement and construction of the construction fence must be submitted to and approved by the Community Planning & Permitting Department. The placement and profile of the construction fence may be shown the Revegetation Plan. The construction fence must be installed before construction commences and remain in place until vegetation is sufficiently established on the disturbed soil.

Prior to any grading or site disturbance, the construction fence location and materials must be installed as required per the approved plans.

At the time of the footing foundation inspection and all subsequent inspections, the Community Planning & Permitting Department must confirm the construction fence location and materials have been installed as required per the approved plans.

9. The development shall avoid significant historic or archaeological resources as identified in the Comprehensive Plan or the Historic Sites Survey of Boulder County, or through the site plan review process. Development within or affecting such resources may be approved, subject to acceptable mitigation measures and in the discretion of the Director, only if no other sites on the subject property can be reasonably developed, or only if reasonably necessary to avoid significant adverse impacts based upon other applicable site plan review criteria.

ARCHEOLOGICALLY SENSITIVE AREA

An Archeologically Sensitive Area is present on the subject parcel, as identified by the Boulder County Comprehensive Plan meaning that the potential for the presence of archaeological resources is considered higher than other areas. If human remains or burials are found, local law enforcement must be contacted. The Colorado Historical Society Office of Archaeology and Historic Preservation has conducted a search of the Colorado Inventory of Cultural Resources and found no sites located in the designated area.

10. The development shall not have a significant negative visual impact on the natural features or neighborhood character of surrounding area. Development shall avoid prominent, steeply sloped, or visually exposed portions of the property. Particular consideration shall be given to protecting views from public lands and rights-of-way, although impacts on views of or from private properties shall also be considered. Development within or affecting features or areas of visual significance may be

approved, subject to acceptable mitigation measures and in the discretion of the Director, only if no other sites on the subject property can be reasonably developed, or only if reasonably necessary to avoid significant adverse impacts based upon other applicable site plan review criteria.

b. For development anywhere in the unincorporated areas of the county, mitigation of visual impact may include changing structure location, reducing or relocating windows and glazing to minimize visibility, reducing structure height, changing structure orientation, requiring exterior color and materials that blend into the natural environment, and/or lighting requirements to reduce visibility at night.

	APPROVED
Location:	Residential remodel as shown on the site plan dated 11/13/2023 and identified in the field
Elevations:	Residential remodel as shown in the application materials dated 11/13/2023, except for the south elevation (see glazing requirements in section 10.A)
Height:	26 feet from existing grade for the residential remodel
Exterior Materials:	Fiber Cement & Stone siding and EPDM & Standing Seam Metal roofing for the residential remodel
Exterior Colors:	Dark Brown and Cream siding and Bronze roofing for the residential remodel

A. SOUTH ELEVATION GLAZING

The submitted narrative dated November 13, 2023 that was included with application materials states that the existing basement will be converted to crawlspace. However, the elevations and floor plans dated November 13, 2023 include existing windows to remain on the south elevation at the basement level. To comply with the Building Code, windows are not permitted in a crawlspace.

At time of building permit, submit revised elevations reflecting removal of the basement level glazing on the south-facing façade for review and approval by Community Planning & Permitting Staff.

B. EXTERIOR COLORS AND MATERIALS

Digital samples of proposed exterior colors and materials were included with the application materials, including brown wood vertical siding, Limestone (light gray) stone siding, black panther (dark gray) accent paint, and black corrugated steel siding. The submitted color samples are approved as proposed, except for the black corrugated steel siding. The application materials indicate dark brown and cream will be used for the siding and bronze will be used for the roofing, although, no color samples were provided. Metal is also proposed to be used for the siding and roofing. Due to the structure's visible position in the landscape, samples of the exterior colors and metallic materials shall be provided to ensure visual impacts of the development are minimized. Colors should be carefully selected to blend in with the natural environment and neighborhood character of surrounding area and materials should have a matte finish. This ensures that they are

compatible with the policies and goals established by the Comprehensive Plan and provisions of the Land Use Code and will not result in an adverse impact on surrounding properties.

Prior to issuance of building permits, submit to the Community Planning & Permitting Department for review and approval, exterior color samples (color chips, brochure, or catalog page) and material samples to be used including roof, siding and trim. Please note that digital samples may be submitted and will be kept for the record. Samples should be included as part of the building plan set required at the time of permit application.

Prior to issuance of a Certificate of Occupancy/At the final inspection, the Community Planning & Permitting Department must inspect and verify that the approved color samples are used on the new structure.

C. EXTERIOR LIGHTING

The locations of exterior lighting fixtures are approved as proposed on the elevations for the residential remodel dated November 13, 2023. The Abra Yoga Rectangular LED Outdoor Wall Sconce exterior light fixture that was submitted with application materials is not approved because it does not meet down lighting requirements.

Prior to issuance of building permits, lighting cut sheets (manufacturer's specifications with picture or diagram) of all proposed exterior fixtures must be submitted to the Community Planning & Permitting Department for review and approval. Down lighting is required, meaning that all bulbs must be fully shielded to prevent light emissions above a horizontal plane drawn from the bottom of the fixture.

Prior to issuance of a Certificate of Occupancy/At the final inspection, the full installation of the approved lighting plan must be inspected and approved by the Community Planning & Permitting Department.

11. The location of the development shall be compatible with the natural topography and existing vegetation and the development shall not cause unnecessary or excessive site disturbance. Such disturbance may include but is not limited to long driveways, over-sized parking areas, or severe alteration of a site's topography. Driveways or grading shall have a demonstrated associated principal use.

A. LOCATION

The location of the residential remodel shown on the site plan dated November 13, 2023 and identified in the field is approved as proposed. The location of the accessory structure is not approved.

B. EARTHWORK AND GRADING

The following earthwork and grading requirements are approved.

Foundational Earthwork: (exempt from 500 cubic yards threshold)	0 cubic yards cut and 91 cubic yards backfill to convert the existing basement to crawlspace

C. GRADING NARRATIVE

The application materials indicate that deconstruction of the existing basement, the residential remodel, and construction of a new accessory structure will require 13 cubic yards of foundation cut and 91 cubic yards of backfill. 13 cubic yards of non-foundational grading is also proposed for a new driveway to the accessory structure. The accessory structure is not approved, and therefore, only the foundational fill required to convert the basement of the existing residence to crawlspace is approved; any foundational or non-foundational grading associated with the accessory structure is not approved.

Prior to issuance of building or grading permits, submit to this office revised grading calculations to include only the foundational fill required to convert the basement of the existing residence to crawlspace.

All reasonable efforts shall be made to minimize the site disturbance associated with this development proposal. Total earthwork (excluding normal excavation contained within structure footings and foundations) approaching the 500 cubic yard trigger for Limited Impact Special Use Review will require grading plans certified by a registered Professional Engineer.

12. Runoff, erosion, and/or sedimentation from the development shall not have a significant adverse impact on the surrounding area.

A. REVEGETATION PLAN

A revised revegetation plan is required regarding the proposed method of revegetation for site disturbances associated with construction of the residential remodel.

Prior to issuance of building or grading permits, submit to the Community Planning & Permitting Department for review and approval one copy of the proposed Revegetation Plan that conforms to the requirements as described on the materials located on our Revegetation Page.

The plan must also show the location of all erosion control devices such as silt fence, straw bales, riprap and retaining walls. Cut and fill slopes are not to exceed a slope of 2:1 (slopes of 1.5:1 may be allowed in areas with soils and exposures conducive to good revegetation or if the plan takes steps to improve the revegetative properties of the site.) The grade of all cut and fill slopes must be included on the revegetation plan. The plan must include details regarding the reclamation of existing and proposed cut and fill slopes. New horticultural plantings should emphasize xeriscaping principles

Prior to issuance of a Certificate of Occupancy /At the time of final inspection, the full installation of the approved revegetation plan must be inspected and approved by the Community Planning & Permitting Department. If weather is not conducive to seeding or if adequate revegetation efforts have not occurred and vegetation is not adequately established at the time of final inspection request, an irrevocable letter of credit or monies deposited into a County Treasurer account will be required to assure the success of

revegetation. You should consider the following well in advance of your revegetation inspection:

a. Whether you are applying for a Certificate of Occupancy, final inspection, or the return of funds held in escrow for completion of revegetation, some level of germination and growth of grass seed is required.
b. Keep in mind that the steeper the slopes and dryer the soil, the greater the attention needed to establish a level of germination adequate to obtain revegetation approval.
c. Areas of disturbance found at inspection not included on the revegetation plan are still subject to reseeding and matting.

Incomplete revegetation is the leading cause for delays in obtaining a Certificate of Occupancy.

B. EROSION CONTROL

A silt barrier must be installed down slope of all disturbed areas prior to construction and maintained throughout the construction process until revegetation has been established. Silt barrier construction shall be in accordance with the Colorado Storm Water regulations (see our silt barrier handout). If any surface water is channeled around or through the disturbed areas, anchored straw bale barriers shall also be installed to filter and slow channeled flow.

Prior to issuance of building or grading permits, details regarding the placement and construction of the silt barrier must be submitted to and approved by the Community Planning & Permitting Department. The placement and profile of the silt barrier may be shown on the Revegetation Plan. The silt barrier must be installed before construction commences and remain in place until vegetation is sufficiently established on the disturbed soil.

Prior to any grading or site disturbance, the silt barrier location and materials must be installed as required per the approved plans.

At the time of the footing foundation inspection and all subsequent inspections, the Community Planning & Permitting Department must confirm the silt barrier location and materials have been installed as required per the approved plans. Any other areas on site are subject to installation of silt fences, if needed.

15. The proposal shall be consistent with the Comprehensive Plan, any applicable intergovernmental agreement affecting land use or development, and this Code.

LOCATION: SETBACK SURVEY REQUIREMENT

The site plan dated November 13, 2023 submitted with the application materials indicates that the footprint of the proposed residential remodel is within 20 percent of the minimum required 25-foot front (i.e., north) yard setback for the Rural Residential Zoning District.

Therefore, a Setback Survey Verification Form is required. This form will be provided at the time a building permit is processed.

Prior to the foundation form inspection, the Setback Survey Verification Form must be completed by a licensed surveyor and submitted to the Community Planning & Permitting Department**.**

ADDITIONAL REQUIREMENTS AND INFORMATION:

BUILDING PERMIT: A building permit, plan review, inspections approvals, and a Certificate of Occupancy ("C.O.") are required for the proposed residential addition.

Please refer to the county's adopted 2015 editions of the International Codes and code amendments, which can be found under the link:

2015 Building Code Adoption & Amendments:
Amendments to Boulder County Building Code effective June 6, 2022

AUTOMATIC FIRE SPRINKLER SYSTEM: According to R313.2.1 of the currently adopted 2015 Boulder County Building Code this addition triggers the requirement for an automatic residential fire sprinkler system to be installed throughout the home. This system shall be designed and installed in accordance with NFPA 13D or IRC Section P2904.

> ***R313.2.1 Additions to existing one- and two-family dwellings****. An automatic residential fire sprinkler system shall be installed throughout existing one- and two-family dwellings with additions when the sum of the total floor area of the addition plus the existing one- and two-family dwelling is increased to 4,800 sq. ft. or greater. The floor area of detached structures having floor areas of 120 square feet or greater that are located less than 50 feet from the dwelling shall be included in the floor area calculated for the dwelling.*
> Exceptions:
> 1. One-time additions not exceeding 200 square feet in floor area, and
> 2. Carport additions which are exempt from the definition of "Residential Floor Area" in Section 18-189D of the Boulder County Land Use Code.

BUILDSMART: Please refer to the county's adoption and amendments to Chapter 11 of the IRC, the county's "BuildSmart" program, for the applicable requirements for energy conservation and sustainability for residential additions and new residential buildings. Please be aware that there are energy related requirements of this code that may require the use of renewable energy systems (such as rooftop solar systems) that will also need to be approved by your electric utility provider. In some cases, there may be limitations on the size of on-site systems allowed by your utility provider that could constrain the project design. We strongly encourage discussions between the design team and the utility company as early in the process as possible in order to identify these constraints.

DESIGN WIND AND SNOW LOADS: The design wind and ground snow loads for the property are 155 mph (Vult) and 40 psf, respectively.

IGNITION-RESISTANT CONSTRUCTION AND DEFENSIBLE SPACE: Please refer to Section R327 of the Boulder County Building Code for wildfire hazard mitigation requirements, including ignition-resistant construction and defensible space.

PLAN REVIEW: The items listed above are a general summary of some of the county's building code requirements. A much more detailed plan review will be performed at the time of building permit application, when full details are available for review, to assure that all applicable minimum building codes requirements are to be met. Our Residential Plan Check List and other Building Safety publications can be found at: Building Publications, Applications and Forms - Boulder County

PUBLIC HEALTH ONSITE WASTEWATER TREATMENT SYSTEM REQUIREMENTS:

OWTS:

1. Boulder County Public Health issued a new permit for the installation of an absorption bed system on 02/29/1996. The permit was issued for an onsite wastewater treatment system (OWTS) adequate for a 3-bedroom house. Boulder County Public Health approved the installation of the OWTS on 01/31/1997.

Avoid Damage to OWTS:

1. Heavy equipment should be restricted from the surface of the absorption field during construction to avoid soil compaction, which could cause premature absorption field malfunction. Caution should be used in conducting trenching and excavation activities so that sewer lines and other OWTS components are not damaged.

FLOODPLAIN DEVELOPMENT PERMITTING REQUIREMENTS:

The applicants must submit to floodplainadmin@bouldercounty.gov an itemized list of project costs using the guidance found online: Individual Floodplain Development Permit (FDP) Checklist – Buildings. Article 4-413 of the Boulder County Land Use Code requires nonconforming structures to track major repairs, remodeling, additions, and other improvements to determine when such work would constitute a Substantial Improvement as defined in Article 18-206. To make a Substantial Improvement determination, Boulder County compares the cost of the proposed improvement to the market value of the building (excluding land, accessory structures, landscaping, bridges, water wells, onsite wastewater treatment systems, and other incidental items). If the resulting ratio equals or exceeds 50%, the entire structure must be brought into compliance with the flood protection requirements in LUC Article 4-405. If the resulting ratio is less than 50%, the new work must meet the flood protection requirements in LUC Article 4-405. All improvements made to a structure after September 11, 2013 are cumulative towards reaching the 50% limit.

Flood-resistant materials must be used up to the Flood Protection Elevation (FPE).

New service equipment, including but not limited to electrical, heating, ventilation, plumbing, and air conditioning equipment must be located at or above the FPE.

The crawlspace must:

a. Have an interior grade no lower than two feet below the Lowest Adjacent Grade;

b. Not exceed four feet in height at any point, as measured from the interior grade to the top of the foundation wall;
c. Have an adequate drainage system that allows floodwaters to drain from the interior area; and
d. Be "wet-floodproofed" with a minimum of two openings on at least 2 walls having a total net area of not less than one square inch for every square foot of enclosed area. The bottom of all openings must be no higher than one foot above grade.

The applicant must submit an FDP application with the building permit application for the residential remodel. The FDP application must include:

a. A Site Plan showing the proposed building and all staging/storage areas in relation to regulatory floodplain and property boundaries.
b. Construction design, stamped, signed, and dated by a Colorado-licensed Professional Engineer (P.E.) that depicts the Base Flood Elevation (BFE) and Flood Protection Elevation (FPE) on all design plans and demonstrates conformance with all applicable flood protection measures required in Land Use Code Article 4-405, including those listed above.
c. Certification by a Colorado-licensed P.E. that demonstrates the retrofitting will withstand the loads associated with a 1%-annual-chance flood event.

The BFE for the existing residence is 5193.0 feet (NAVD88). The FPE is two feet above the BFE.

Prior to issuance of a Certificate of Occupancy/At the final inspection, pursuant to Article 4-405.J, a "Final Construction" FEMA Elevation Certificate must be completed by a Colorado-registered land surveyor and submitted to floodplainadmin@bouldercounty.gov.

SANITARY FACILITIES: Sanitary facilities must be provided during construction and shall consist of a portable chemical toilet fabricated from steel, fiberglass or wood. Each facility must be well ventilated, must conform to State law, and must have a vented chemical tank and a separate urinal.

ATTACHMENT B

Boulder County Land Use Department
Courthouse Annex Building
2045 13th Street • PO Box 471 • Boulder, Colorado 80302
Phone: 303-441-3930
Email: planner@bouldercounty.org
Web: www.bouldercounty.org/lu
Office Hours: Mon., Wed., Thurs., Fri. 8 a.m. to 4:30 p.m.
Tuesday 10 a.m. to 4:30 p.m.

Shaded Areas for Staff Use Only
Intake Stamp

Planning Application Form

The Land Use Department maintains a submittal schedule for accepting applications. Planning applications are accepted on Mondays, by appointment only. Please call 303-441-3930 to schedule a submittal appointment.

Project Number	Project Name

☐ Appeal	☐ Modification of Site Plan Review	☐ Road Name Change	☐ Special Use (Oil & Gas development)
☐ Correction Plat	☐ Modification of Special Use	☐ Road/Easement Vacation	☐ State Interest Review (1041)
☐ Exemption Plat	☐ Preliminary Plan	■ Site Plan Review	☐ Subdivision Exemption
☐ Final Plat	☐ Resubdivision (Replat)	☐ Site Plan Review Waiver	☐ Variance
☐ Limited Impact Special Use	☐ Rezoning	☐ Sketch Plan	☐ Other:
☐ Limited Impact Special Use Waiver		☐ Special Use/SSDP	
☐ Location and Extent			

Location(s)/Street Address(es) 5986 Heather Way Longmont, Colorado 80503				
Subdivision Name Brigadoon Glen				
Lot(s) 7	Block(s)	Section(s) 27	Township(s) 2N	Range(s) 70 W
Area in Acres 0.83	Existing Zoning RR	Existing Use of Property Single Family Detached		Number of Proposed Lots 1
Proposed Water Supply Public (Lefthand)		Proposed Sewage Disposal Method		

Applicants:

Applicant/Property Owner Anthony Piscopio			Email tpiscopio@proton.me
Mailing Address 5986 Heather Way			
City Longmont	State CO	Zip Code 80503	Phone 720-323-9110
Applicant/Property Owner/Agent/Consultant Kyle Callahan			Email kyle@clearwaterdesignstudio.com
Mailing Address 2975 Valmont Road, suite 100			
City Boulder	State CO	Zip Code 80301	Phone 303-545-2007
Agent/Consultant			Email
Mailing Address			
City	State	Zip Code	Phone

Certification (Please refer to the Regulations and Application Submittal Package for complete application requirements.)

I certify that I am signing this Application Form as an owner of record of the property included in the Application. I certify that the information and exhibits I have submitted are true and correct to the best of my knowledge. I understand that all materials required by Boulder County must be submitted prior to having this matter processed. I understand that public hearings or meetings may be required. I understand that I must sign an Agreement of Payment for Application processing fees, and that additional fees or materials may be required as a result of considerations which may arise in the processing of this docket. I understand that the road, school, and park dedications may be required as a condition of approval.

I understand that I am consenting to allow the County Staff involved in this application or their designees to enter onto and inspect the subject property at any reasonable time, without obtaining any prior consent.

All landowners are required to sign application. If additional space is needed, attach additional sheet signed and dated.

Signature of Property Owner	Printed Name Anthony D. Piscopio	Date 11/3/23
Signature of Property Owner	Printed Name Huiqiong Huang	Date 11/14/23

The Land Use Director may waive the landowner signature requirement for good cause, under the applicable provisions of the Land Use Code.

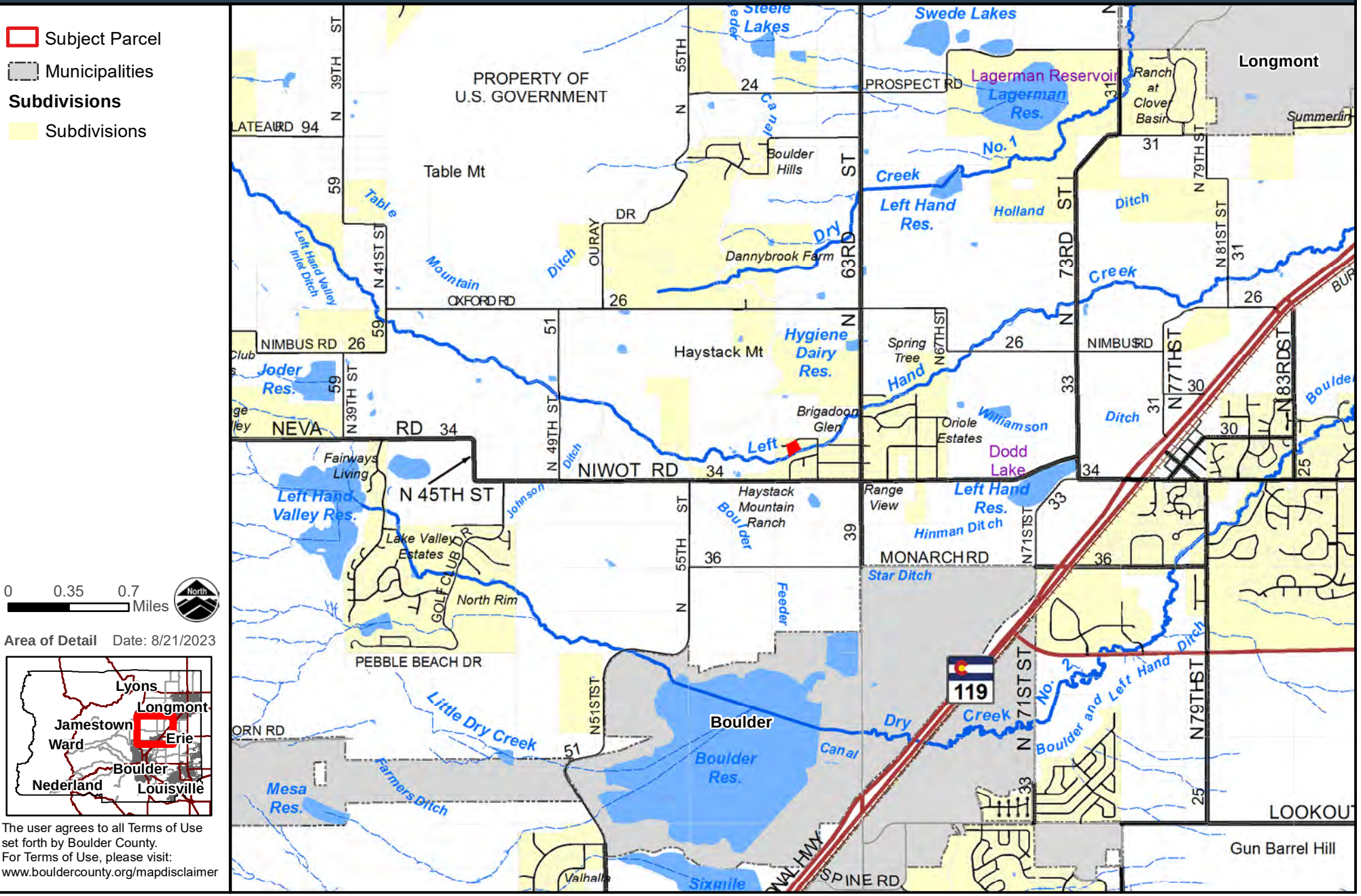
Community Planning & Permitting

2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org

ATTACHMENT B

Vicinity

5986 HEATHER WAY



joryan

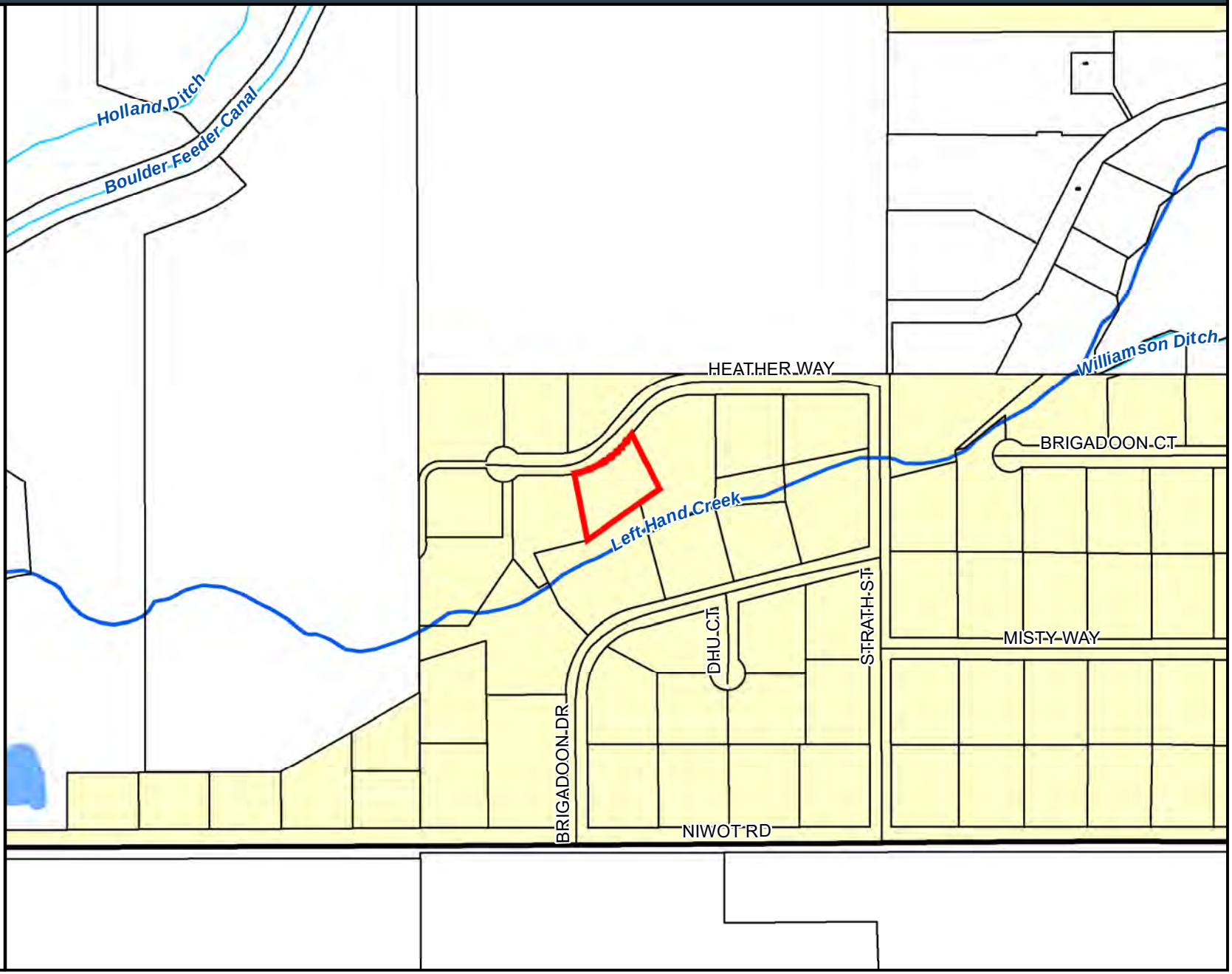
Community Planning & Permitting

2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org

ATTACHMENT B

Location

5986 HEATHER WAY



Subject Parcel

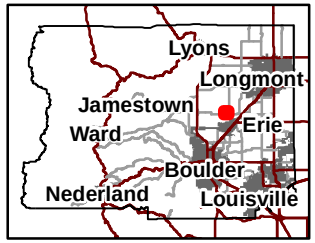
Subdivisions

Subdivisions

0 0.035 0.07 Miles

North

Area of Detail Date: 8/21/2023



joryan

Community Planning & Permitting

2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org

ATTACHMENT B

Aerial

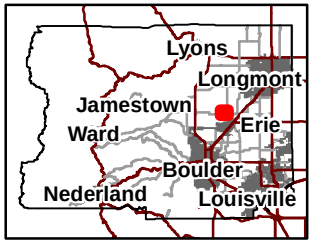
5986 HEATHER WAY

Subject Parcel

0 0.05 0.1 Miles

North

Area of Detail Date: 8/21/2023



joryan

ATTACHMENT B

Community Planning & Permitting

2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org

Aerial

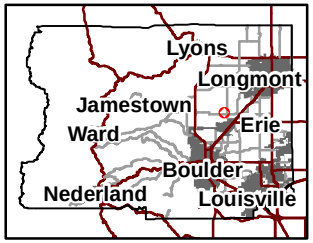
5986 HEATHER WAY

Subject Parcel

0 0.004 0.008 Miles

North

Area of Detail Date: 8/21/2023



joryan

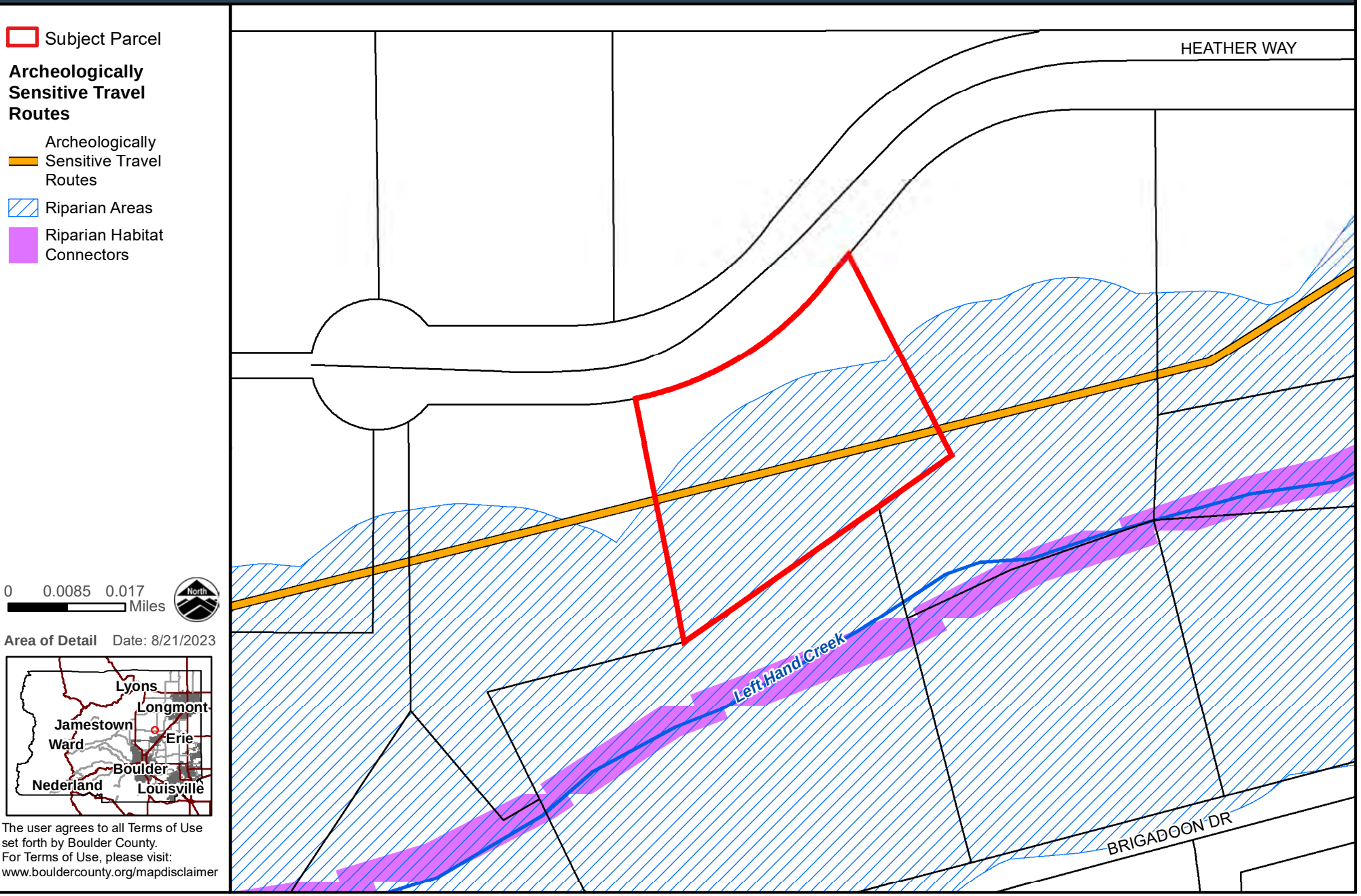
Community Planning & Permitting

2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org

ATTACHMENT B

Comprehensive Plan

5986 HEATHER WAY



joryan

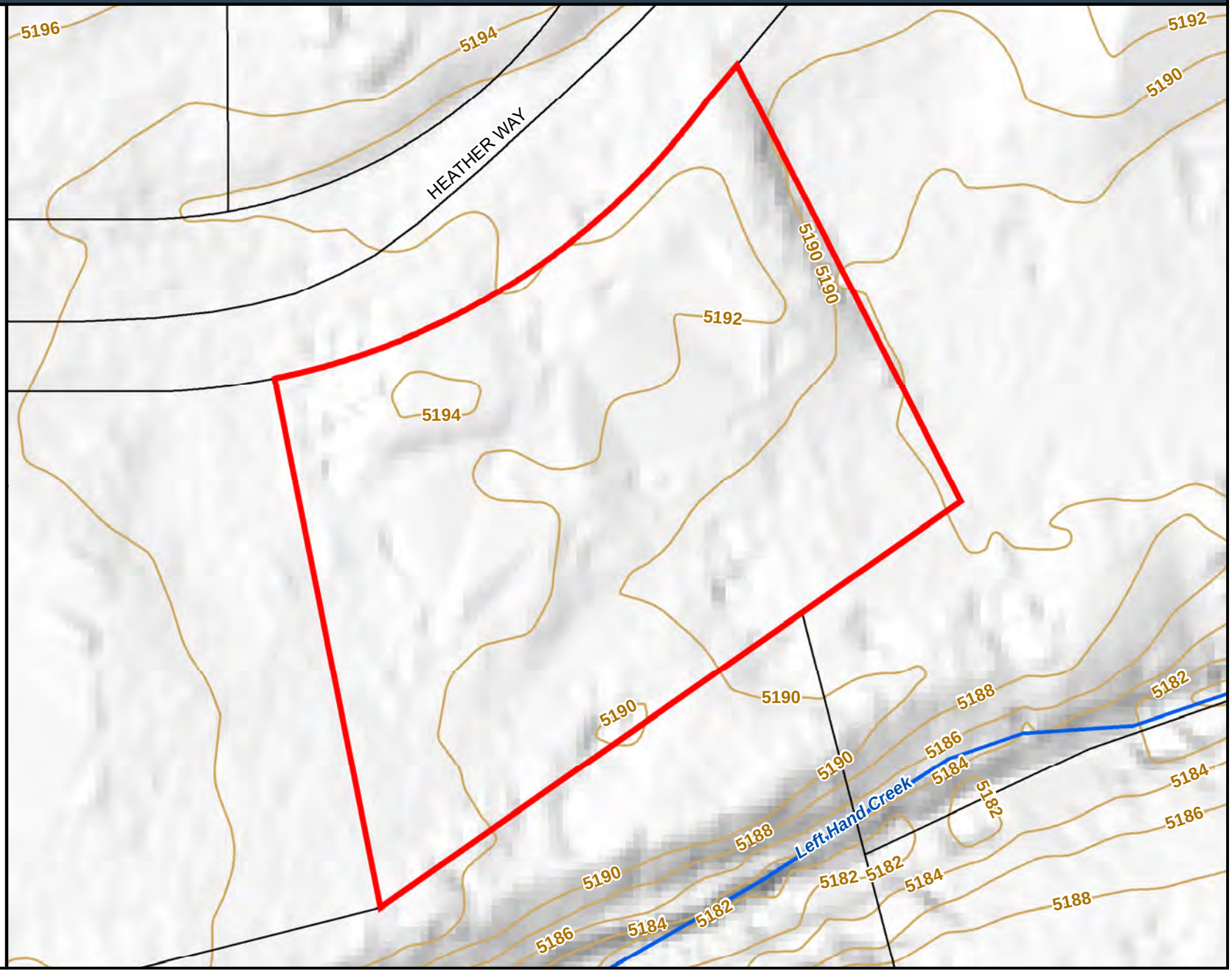
Community Planning & Permitting

2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org

ATTACHMENT B

Elevation Contours

5986 HEATHER WAY



joryan

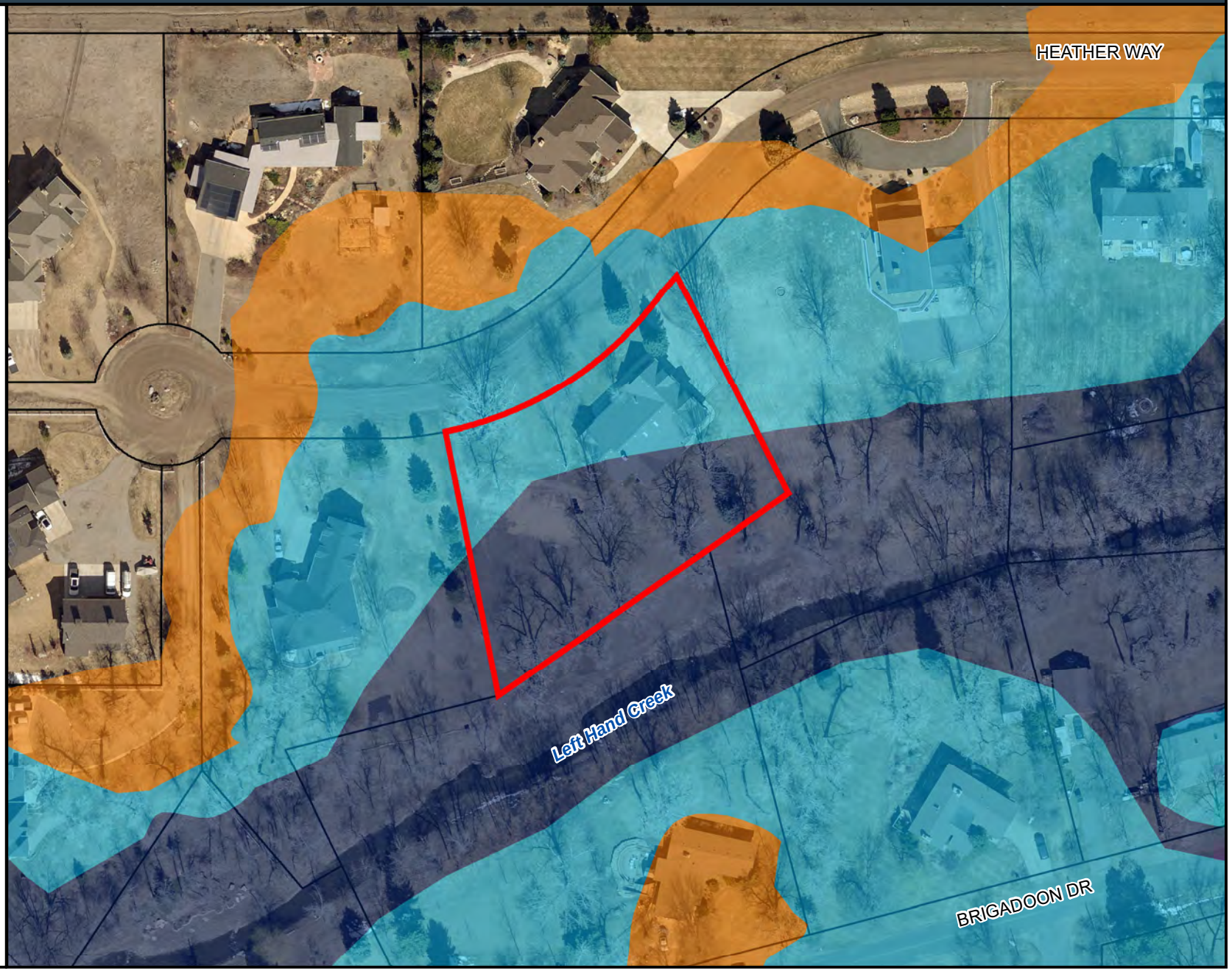
Community Planning & Permitting

2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org

ATTACHMENT B

Floodplain

5986 HEATHER WAY



Subject Parcel

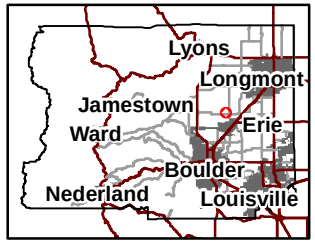
Floodplain

- 100-Year Floodplain - Zones AE, A, AO and AH
- Floodway
- 500-Year Floodplain - Zone X500

0 0.0085 0.017 Miles

North

Area of Detail Date: 8/21/2023



joryan

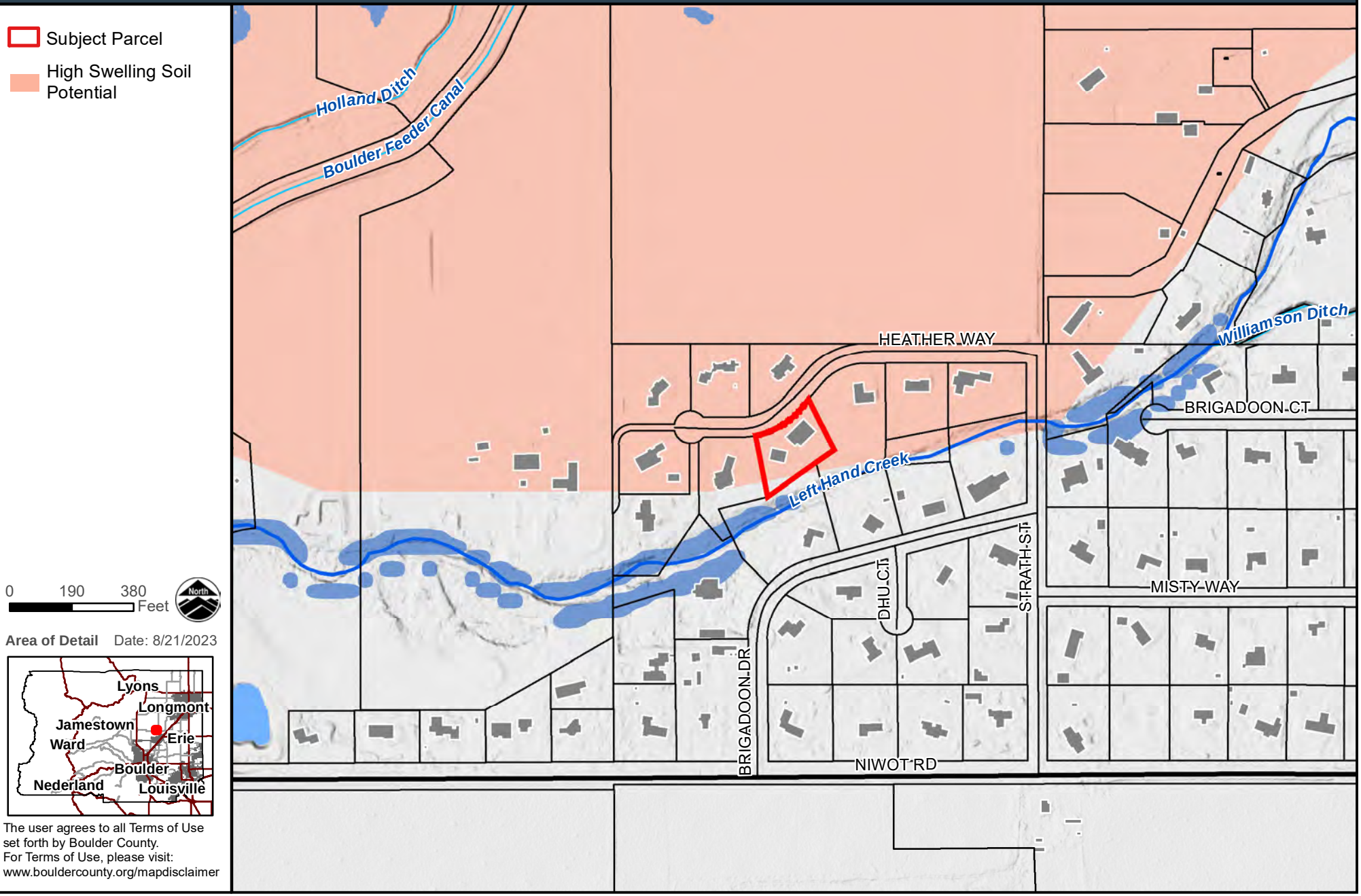
Community Planning & Permitting

2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org

ATTACHMENT B

Geologic Hazards

5986 HEATHER WAY



joryan

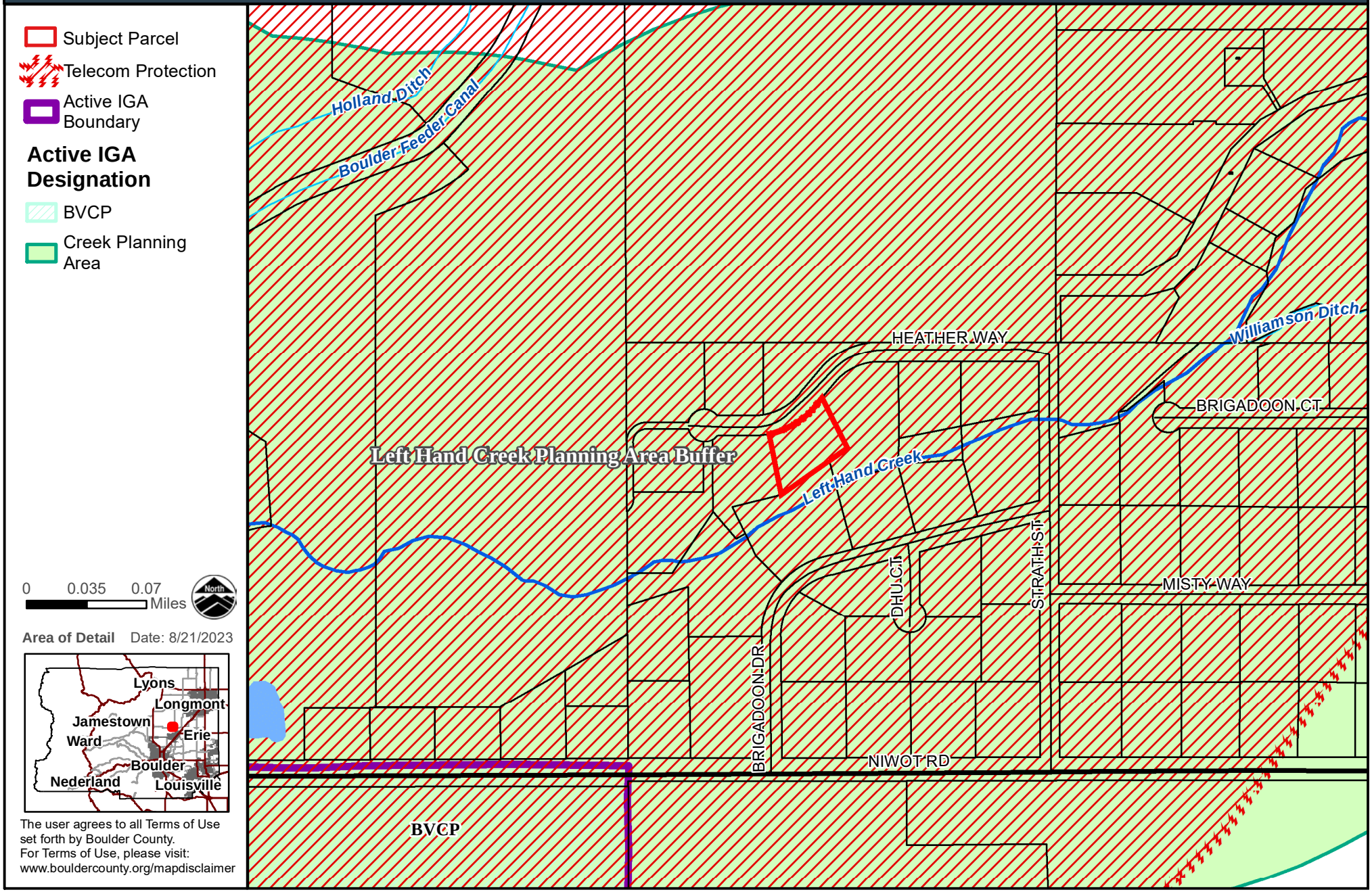
Community Planning & Permitting

2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org

ATTACHMENT B

Planning Areas

5986 HEATHER WAY



joryan

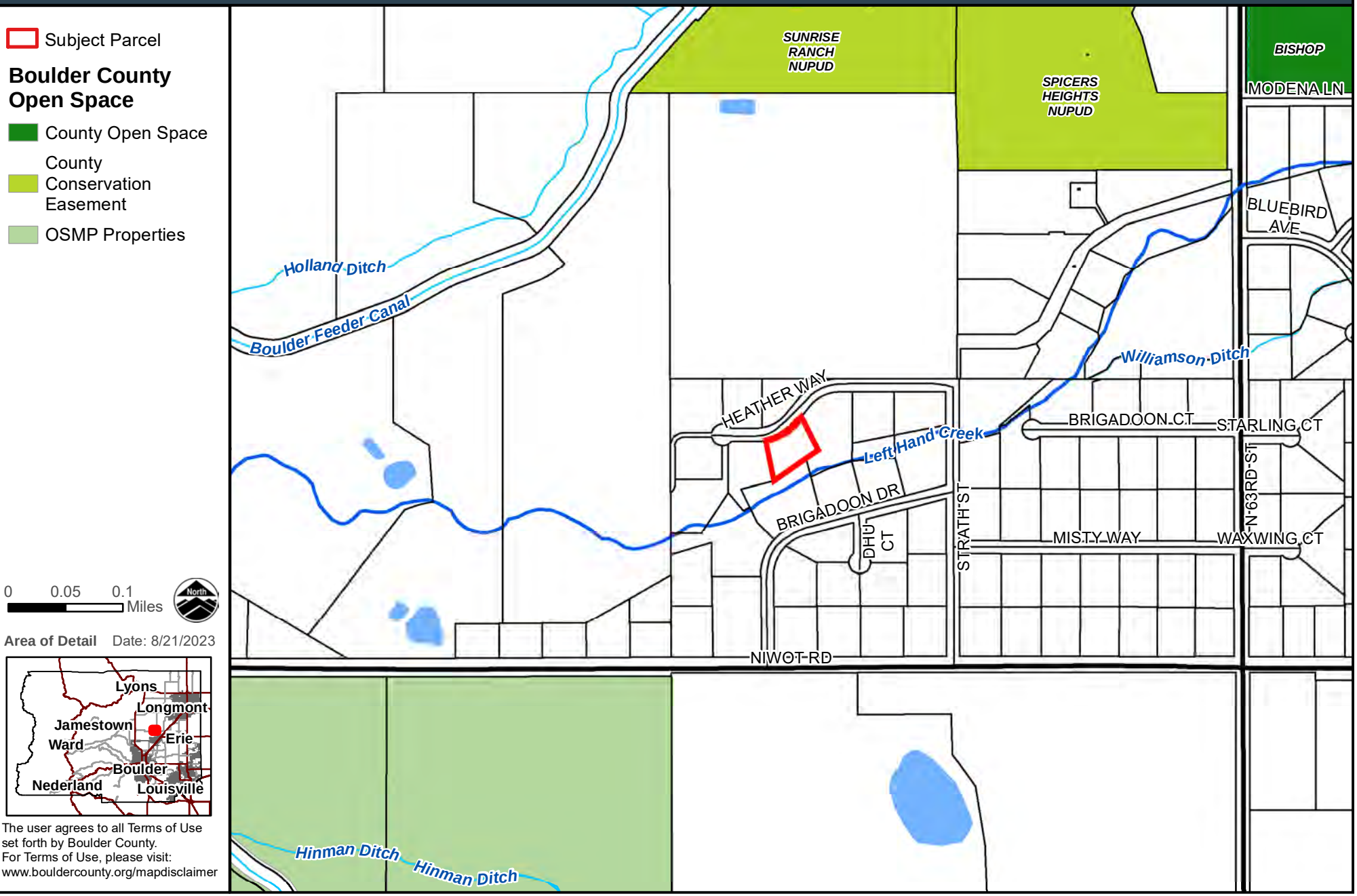
ATTACHMENT B

Community Planning & Permitting

2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org

Public Lands & CEs

5986 HEATHER WAY



joryan

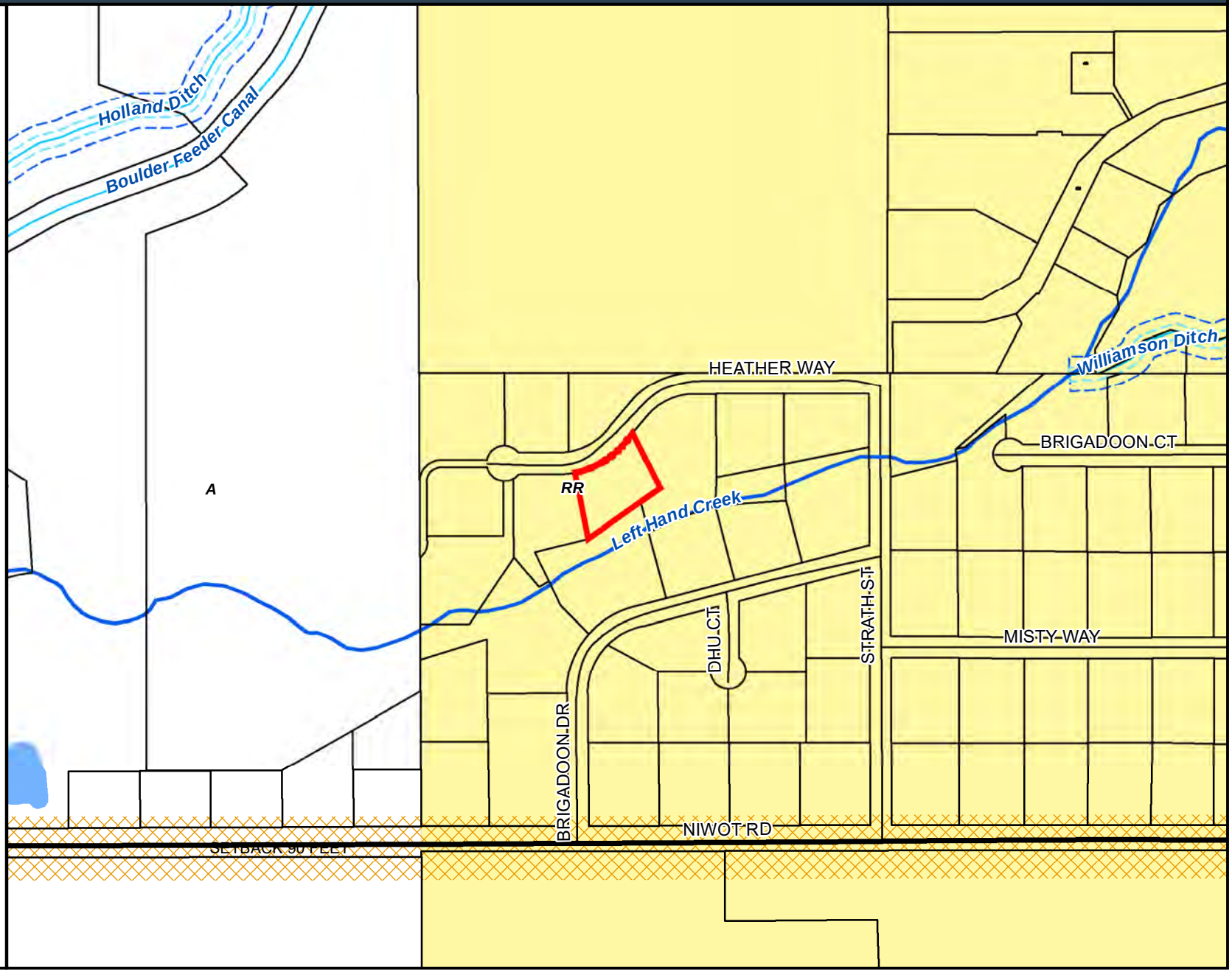
ATTACHMENT B

Community Planning & Permitting

2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org

Zoning

5986 HEATHER WAY



Subject Parcel

Zoning Districts

Agricultural

Rural Residential

Ditch Setbacks

20 feet

50 feet

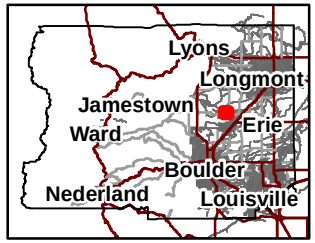
Major Road Setbacks

90 feet

0 190 380 Feet

North

Area of Detail Date: 8/21/2023



joryan

ATTACHMENT B

Site Plan Review Fact Sheet

The applicant(s) is/are required to complete each section of this Site Plan Review (SPR) Fact Sheet even if the information is duplicated elsewhere in the SPR application. Completed Fact Sheets reduce the application review time which helps expedite the Director's Determination. Please make duplicates of this SPR Fact Sheet if the project involves more than two structures.

Project Identification:

Project Name:	Piscopio Residence and Accessory
Property Address/Location:	5986 Heather Way
Current Owner:	Anthony Piscopio
Size of Property in Acres:	0.83

Structure #1 Information

Type of Structure: (e.g. residence, studio, barn, etc.)	Accessory Structure			
Total Existing Floor Area: (Finished + Unfinished square feet including garage if attached.)	0 sq. ft.	**Deconstruction:**	sq. ft.	

Are new floor areas being proposed where demolition will occur?
■ **No** ☐ **Yes** (include the new floor area square footage in the table below)

Proposed Floor Area (New Construction Only)	**Finished**	**Unfinished**	**Total**	☐ Residential ☐ Non-Residential	
Basement:	0 sq. ft.	0 sq. ft.	0 sq. ft.	**Height** (above existing grade)	26'-9"
First Floor:	242 sq. ft.	0 sq. ft.	242 sq. ft.	**Exterior Wall Material**	fiber cement stone
Second Floor:	801 sq. ft.	0 sq. ft.	801 sq. ft.	**Exterior Wall Color**	dark brown cream
Garage: ☐ Detached ☑ Attached	0 sq. ft.	598 sq. ft.	598 sq. ft.	**Roofing Material**	stnd seam metal, epdm
***Covered Porch:**	0 sq. ft.	0 sq. ft.	0 sq. ft.	**Roofing Color**	Bronze
Total:	1,043 sq. ft.	598 sq. ft.	1,641 sq. ft.	**Total Bedrooms**	0

Structure #2 Information

Type of Structure: (e.g. residence, studio, barn, etc.)	Primary residence			
Total Existing Floor Area: (Finished + Unfinished square feet including garage if attached.)	5,848 sq. ft.	**Deconstruction:**	1,699 sq. ft.	

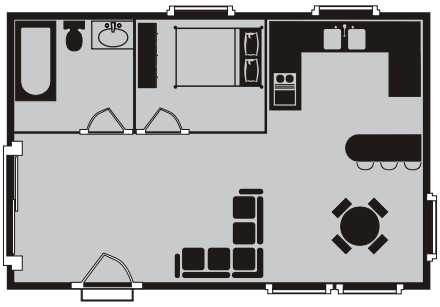
Are new floor areas being proposed where demolition will occur?
■ **No** ☐ **Yes** (include the new floor area square footage in the table below)

Proposed Floor Area (New Construction Only)	**Finished**	**Unfinished**	**Total**	■ Residential ☐ Non-Residential	
Basement:	0 sq. ft.	0 sq. ft.	0 sq. ft.	**Height** (above existing grade)	
First Floor:	45 sq. ft.	0 sq. ft.	45 sq. ft.	**Exterior Wall Material**	fiber cement stone
Second Floor:	0 sq. ft.	0 sq. ft.	0 sq. ft.	**Exterior Wall Color**	dark brown cream
Garage: ☐ Detached ☑ Attached	0 sq. ft.	0 sq. ft.	0 sq. ft.	**Roofing Material**	stnd seam metal, epdm
***Covered Porch:**	0 sq. ft.	0 sq. ft.	0 sq. ft.	**Roofing Color**	dark bronze
Total:	45 sq. ft.	0 sq. ft.	45 sq. ft.	**Total Bedrooms**	3

*See Article 18-131A for definition of covered porch.

Determining Floor Area

Floor Area is measured in terms of square feet. The total square footage is as everything within the exterior face of the exterior walls including garages and basements. **Covered porch area that is attached to the principal structure is not included (see Article 18-131A).** The shaded area on the diagram indicates the area counted as square feet.



Residential vs. Non-Residential Floor Area

Residential Floor Area includes all attached and detached floor area (as defined in Article 18-162) on a parcel, including principal and accessory structures used or customarily used for residential purposes, such as garages, studies, pool houses, home offices and workshops. Gazebos and carports up to a total combined size of 400 square feet are exempt. Barns used for agricultural purposed are not considered residential floor area.

Note: If an existing wall(s) and/or roof(s) are removed and a new wall(s)/roof(s) are constructed, the associated floor area due to the new wall(s)/roof(s) are considered new construction and must be included in the calculation of floor area for the Site Plan Review and shown on this Fact Sheet.

If a Limited Impact Special Review is required, then call 303-441-3930 and ask for a new Pre-Application conference for the Limited Impact Special Review.

ATTACHMENT B

Grading Calculation

Cut and fill calculations are necessary to evaluate the disturbance of a project and to verify whether or not a Limited Impact Special Review is required. Limited Impact Special Review is required when grading for a project involves more than 500 cubic yards (minus normal cut/fill and backfill contained within the foundation footprint).

If grading totals are close to the 500 yard trigger, additional information may be required, such as a grading plan stamped by a Colorado Registered Professional Engineer.

Earth Work and Grading

This worksheet is to help you accurately determine the amount of grading for the property in accordance with the Boulder County Land Use Code. Please fill in all applicable boxes.

Note: Applicant(s) must fill in the shaded boxes even though foundation work does not contribute toward the 500 cubic yard trigger requiring Limited Impact Special Use Review. Also, all areas of earthwork must be represented on the site plan.

Earth Work and Grading Worksheet:

	Cut	Fill	Subtotal
Driveway and Parking Areas		44	44
Berm(s)			
Other Grading _____			
Subtotal			44 Box 1

* If the total in Box 1 is greater than 500 cubic yards, then a Limited Impact Special Review is required.

	Cut	Fill	Total
Foundation	13	91	104
Material cut from foundation excavation to be removed from the property			0

Excess Material will be Transported to the Following Location:

Excess Materials Transport Location:
There will be no export material - this is a fill site

Narrative

Use this space to describe any special circumstances that you feel the Land Use Office should be aware of when reviewing your application, including discussion regarding any factors (listed in Article 4-806.2.b.i) used to demonstrate that the presumptive size limitation does not adequately address the size compatibility of the proposed development with the defined neighborhood. If more room is needed, feel free to attach a separate sheet.

see attached

Is Your Property Gated and Locked?

Note: If county personnel cannot access the property, then it could cause delays in reviewing your application.

Certification

I certify that the information submitted is complete and correct. I agree to clearly identify the property (if not already addressed) and stake the location of the improvements on the site within four days of submitting this application. I understand that the intent of the Site Plan Review process is to address the impacts of location and type of structures, and that modifications may be required. Site work will not be done prior to issuance of a Grading or Building Permit.

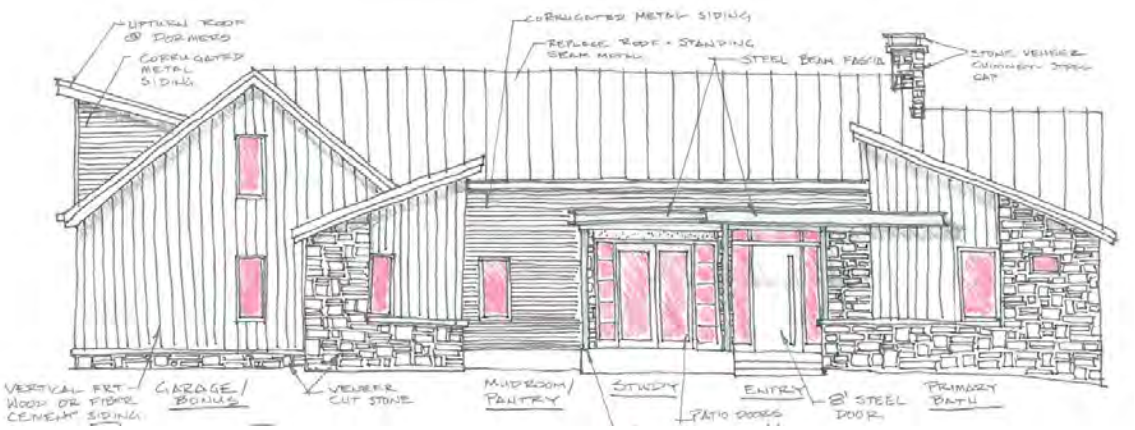
Signature		Print Name	Date
Kyle Callahan	Digitally signed by Kyle Callahan Date: 2023.11.13 12:46:37 -07'00'	Kyle Callahan	11/13/2023

Clearwater Design Studio
ARCHITECTURE

Architecture
Planning
Interiors
Landscape Design

November 13, 2023

Site Plan Review Narrative
5986 Heather Way, Longmont (Boulder County)



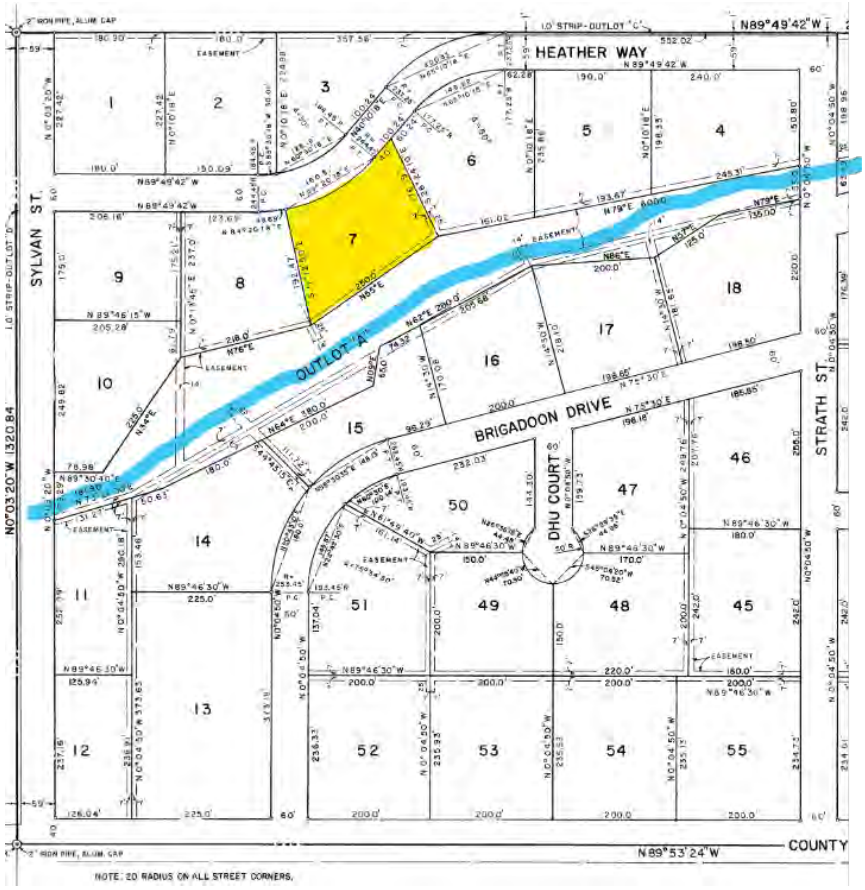
Project Description and background

The project at 5986 Heather Way, described in this narrative and illustrated by the included site plan and Architectural Design Drawings is made up of two related components:

1. Remodeling the existing residence.
2. Construction of a new detached accessory structure.

This site plan review application and accompanied information presents the materials in support of the work necessary to do so.

The Lot upon which this existing dwelling is built is part of the Brigadoon Glen subdivision. Brigadoon Glen is zoned Rural Residential (RR) per Boulder County Land Use. The subdivision is made up of a variety of lot sizes and configurations positioned north of County Road 34 (Monarch road) and west of County Road 39 (63rd street) in north central Boulder County – approximately 7 miles northeast of the City of Boulder. Many of the lots in Brigadoon Glenn are set in a traditional street grid. Lefthand Creek crosses through the subdivision, with larger and less uniformly shaped and proportioned lots north of Brigadoon Drive and on both sides of Heather Way. This subject Lot 7 is one of the larger, uniquely shaped lots north of Lefthand Creek and south of Heather Way. The lot slopes down at a moderate pitch from northwest towards the southeast, eventually spilling into the Lefthand creek south of the property line. The general alignment of existing contours is from southwest to northeast. The lot is fairly large and is populated with numerous existing mature trees and vegetation in a parklike backyard, and along the perimeter of the existing lot, complemented with grasses and low growing shrubs and bushes. A snip of the original plat is shown on the following page, with the subject lot being highlighted in yellow, and the approximate alignment of Lefthand Creek being shown in cyan.



The property is bordered on the east and west, and across Lefthand Creek, by improved lots and residential development. An existing concrete driveway and parking area serve the existing 2 car attached garage. Owing to the passing of Lefthand Creek directly south of this lot, the entire lot is situated within the presently-defined extents of 100 year floodplain and floodway of Lefthand Creek.

The lot has been previously improved with a 3-bedroom residence and a livestock barn. The existing residence was constructed circa 1996 – replacing the original residence, which was deconstructed. The barn was constructed circa 1986 and was deconstructed in 2019 by the Piscopio Family – shortly after they moved into the residence.

The residence is served by a septic system and lift station positioned north and west of the footprint. Installed in 1997 by Richard Gapter, the septic system is sized for 3 bedrooms. The residence is served by municipal water from Lefthand Water District. Electricity and natural gas service is supplied by Xcel Energy. An existing well is positioned in the backyard, south of the residence.

The Piscopio family purchased Lot 7, the existing home and the unfinished barn at 5986 Heather way in late December of 2018. The site and building features that the family found attractive are the generally quiet neighborhood, large lots and mature vegetation. The

Piscopio family are longtime residents of Boulder County, have been members of the community for over 25 years. The family has had a profound and positive impact on the local environment and economy – having created businesses and supported major job creation over that time. It's important to recognize that they are not motivated by speculative development but by improving the home and community to more closely align with their needs.

At the time of purchase, the existing home was serviceable for the Piscopio family, albeit being dated and generally low performing in terms of energy and space efficiency. The existing 1,728 SF onsite barn – erected circa 1987 – proved to be less useful for the family's needs and was deconstructed in 2019, shortly after the home was purchased.

Proposed improvements and overall project sequencing

Given the age and marginal energy performance of the exterior envelope of the existing residence, existing window placement that does not suitably address the onsite and offsite natural features, fragmented and inefficient interior layout of the home, and the existing unused garden-level basement set below the Base Flood Elevation of Lefthand Creek, the Piscopio family has determined the need to improve their existing home significantly. To that end, we have laid out a program for the improvements to the existing home and construction of an additional structure intended to perform as follows:

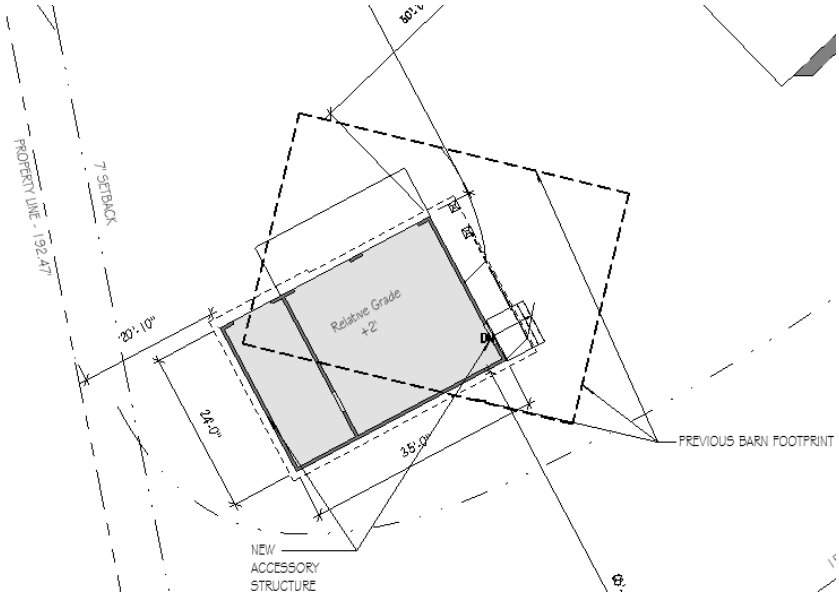
- Update the energy efficiency and durability / maintainability of both the interior and exterior of the home with new finishes, increased insulation, higher performing modern windows, and integrate roof forms to accommodate a PV solar array unencumbered by the existing tree cover.
- Provide onsite renewable energy production systems in the form of roof-mounted photovoltaic solar panels.
- Update the exterior materials and forms to provide a more contemporary image.
- Open up the interior of the home to connect more seamlessly with the surrounding exterior space.
- Increase the privacy of bedrooms and other more intimate areas within the home through integration of layers of seclusion imposed by the interior space plan.
- Repair damaged and deficient construction, such as the exterior decking, exterior siding and roofing.
- Eliminate the existing unused garden-level basement floor area, which is below the Base Flood Elevation of Lefthand Creek, by constructing a new crawl space floor 3' clear below the existing main floor, utilizing the lumber and materials from the deconstruction.
- Create additional above-grade storage for personal property and vehicle storage and for recreation / entertaionment above the Base Flood Elevation.

We understand from discussion with General Contractor Robert Henson, and in consultation with the Piscopio family, that the work needed to construct these improvements will be very invasive, preventing the Piscopio family from living in the home during the renovation. As such, we have considered the opportunity to develop a longer-term holistic site improvement program based on construction of a temporary dwelling for the family and their dogs, to then

renovate the home, and finally convert the temporary dwelling to serve as the recreation/storage space removed from the project by infilling the basement. This phased project that will accomplish the various improvements incrementally. The following is our proposed approach to the site-wide improvements:

1. Deconstruct the existing Barn to clear that portion of the site for a new Accessory Structure (completed previously).

2. Execute a flood plain analysis – to be conducted by Don Ash of Siteworks – to demonstrate that the Floodway will remain unaffected by the construction of a new accessory structure, particularly considering the smaller 800 SF footprint of the proposed accessory structure when compared with the 1,728 SF footprint of the original barn structure. The site plan snip below shows the location of the existing barn (dashed lines) relative to the proposed location of the new accessory building (light gray poche) described next in item 3. Per Don Ash's initial review, the affect on the floodway by the construction of this small footprint accessory structure will be negligible. Further, the orientation of the new building is in parallel alignment with any potential flood waters from Lefthand Creek, and directly "upstream" in orientation with the existing residence, shown at the very upper right edge of the snip.



3. Construct a new accessory structure to be used long term as storage for the Piscopio family's personal property and vehicles, plus a recreation room on the upper level of a two-story structure. The position for this accessory structure will be within the general area of the footprint of the original barn. The new structure will be set with the lower floor slab set 2' above the base flood elevation. There will be a small amount of landfill placed on the north side of the structure to provide access to the main floor garage area for vehicles. The south side of the structure will be raised atop a low retaining wall foundation, thus minimizing the changes required to the land.

Over the short term, the Piscopio family will use the accessory structure for their temporary accommodation while the primary residence is renovated, and as such the interior of the accessory structure will be configured with two temporary sleeping rooms, a bathroom, and an efficiency kitchen. We'll connect the accessory structure to the existing onsite utility infrastructure and improve the pre-existing driveway alignment that served the original barn to provide vehicle access to this structure.

4. Upon temporary relocation of the Piscopio family to the accessory structure to live in the upper level and store furnishings and equipment in the lower level – set 2' above the Base Flood Elevation, General Contractor Robert Henson's crew will partly deconstruct the existing residence to allow for a renovation and improvements to support the family's program listed previously herein. Robert Henson's crews will then create the necessary improvements and additionally construct an infill floor in the basement of the existing residence to remove the garden level area below, thus converting this space to "crawl space". We will reposition mechanical equipment in this crawl space and provide access from the main floor to the crawl space through an interior scuttle.

5. The Piscopio family will then move back into the renovated 3-bedroom home. In doing so, the sleeping and cooking improvements in the accessory structure will be removed, and the interior will be reconfigured to serve as recreation space and a work-from-home office for Anthony Piscopio on the upper floor, with a workshop and vehicle storage on the main floor – 2' above the Base Flood Elevation.

Site Plan Review required

We have discovered through our initial research and the preapplication conference that there are several challenges to address prior to completing this project as described above:

1. Residential Floor Area maximum already exceeded, and the net reduction of 73 SF RFA
As currently configured, the residential floor area (RFA) of the existing residence exceeds the maximum size as determined by Boulder County Planning staff (Sam Walker), shown by the Neighborhood Size Analysis (NSA) provided to us on June 23, 2023. The existing floor area considers all RFA in the garden level, main level and upper level of the existing home as presented by the Boulder County Assessor. The neighborhood is defined as Brigadoon Glen Subdivision. The NSA shows that the maximum floor area (125% of the neighborhood median) to be **4,881 SF** of RFA. Based upon county records and consideration of the original blueprints, we find that the existing residence includes **5,849 SF** of total RFA allocated over the main floor (2,321 SF), existing attached garage (770 SF), the partial second floor (1,131 SF) and the partial garden level daylit basement (1,627 SF). Below are the floor area records excerpted from Boulder County Assessor data:

Section:	1
Class:	SINGLE FAM RES IMPROVEMENTS
Built:	1996
Design:	2-3 Story

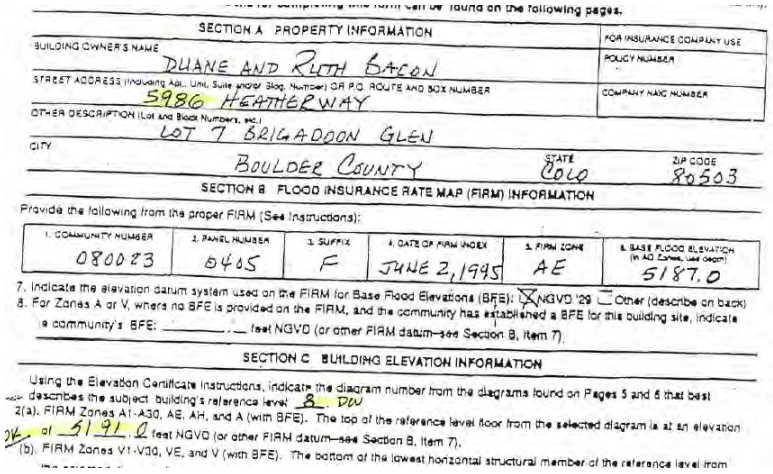
Number of rooms:

Total:	9
Bedrooms:	3
Full Bath:	2
3/4 Bath:	0
Half Bath:	2

Areas of levels in sq. ft.

FIRST FLOOR (ABOVE GROUND) FINISHED AREA	2321
2ND FLOOR AND HIGHER FINISHED AREA	1130
GARDEN BASEMENT UNFINISHED AREA	1627
ATTACHED GARAGE AREA	770

The existing garden level of the home currently houses the mechanical equipment for the home but is otherwise unused owing to its position below the Base Flood Elevation. The Piscopio family has provided an elevation certificate from FEMA (attached for reference to this SPR and a snip of which is below) showing the Base Flood Elevation to be **5187.0**. This certificate indicates that the lowest floor area should be **5189.0**. The flood certificate states that the existing residence main floor elevation is **5191.0**. Considering the floor structure and height of the daylit garden level walls, the floor elevation of the garden level is determined to be +/- **5181.9** – about 5' below the Base Flood Elevation where 2' above Base Flood Elevation is required.



SECTION A PROPERTY INFORMATION

BUILDING OWNER'S NAME: DUANE AND RUTH BACON
FOR INSURANCE COMPANY USE
POLICY NUMBER
STREET ADDRESS (Including Apt., Unit, Suite and/or Bldg. Number) OR P.O. ROUTE AND BOX NUMBER: 5986 HEATHERWAY
COMPANY NAIC NUMBER
OTHER DESCRIPTION (Lot and Block Numbers, etc.): LOT 7 BRIGADOON GLEN
CITY: BOULDER COUNTY
STATE: COLO
ZIP CODE: 80503

SECTION B FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

Provide the following from the proper FIRM (See Instructions):

1. COMMUNITY NUMBER	2. PANEL NUMBER	3. SUFFIX	4. DATE OF FIRM INDEX	5. FIRM ZONE	6. BASE FLOOD ELEVATION (In AO Zones, use depth)
080023	0405	F	JUNE 2, 1995	AE	5187.0

7. Indicate the elevation datum system used on the FIRM for Base Flood Elevations (BFE): ☒ NGVD '29 ☐ Other (describe on back)
8. For Zones A or V, where no BFE is provided on the FIRM, and the community has established a BFE for this building site, indicate the community's BFE: _____ feet NGVD (or other FIRM datum—see Section B, Item 7).

SECTION C BUILDING ELEVATION INFORMATION

Using the Elevation Certificate Instructions, indicate the diagram number from the diagrams found on Pages 5 and 6 that best describes the subject building's reference level: 8 DDV
2(a). FIRM Zones A1-A30, AE, AH, and A (with BFE). The top of the reference level floor from the selected diagram is at an elevation of 5191.0 feet NGVD (or other FIRM datum—see Section B, Item 7).
(b). FIRM Zones V1-V30, VE, and V (with BFE). The bottom of the lowest horizontal structural member of the reference level from

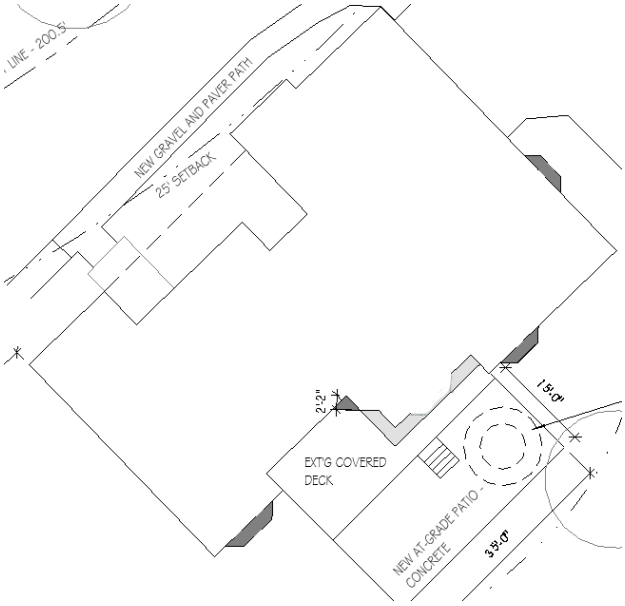
The garden level basement floor, being roughly 5' below the Base Flood Elevation, is not useful for the family, although the storage and recreation space that a flood-plain-compliant structure would provide is essential for their needs. Further, the family would benefit immeasurably from having onsite accommodation in which to reside while the home is being renovated. We have determined that the residential floor area of a detached accessory structure that will meet the Piscopio family's needs, plus two bays of parking and a storage area/workshop space would be approximately equal the size of the garden level space. As

such, and through the process of site plan review, we submit the following scope for consideration:

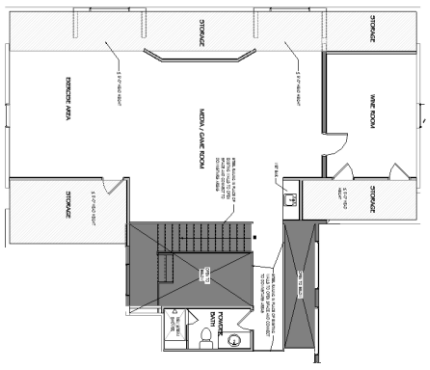
1. Eliminate the existing garden level floor area by infilling the entire space with framing to raise the floor area of the garden level to <4' below the bottom of the existing lower-level floor joists. This will result in conversion of the garden level basement to a crawl space, and thus amount to a corresponding **1,627** SF decrease in Residential Floor Area (RFA). Further, this infill of the garden level removes all of the garden level floor area from below the Base Flood Elevation – thus increasing life safety, as occupancy of this lower level would be precluded.

2. Reposition the mechanical equipment to the new floor of the crawl space.

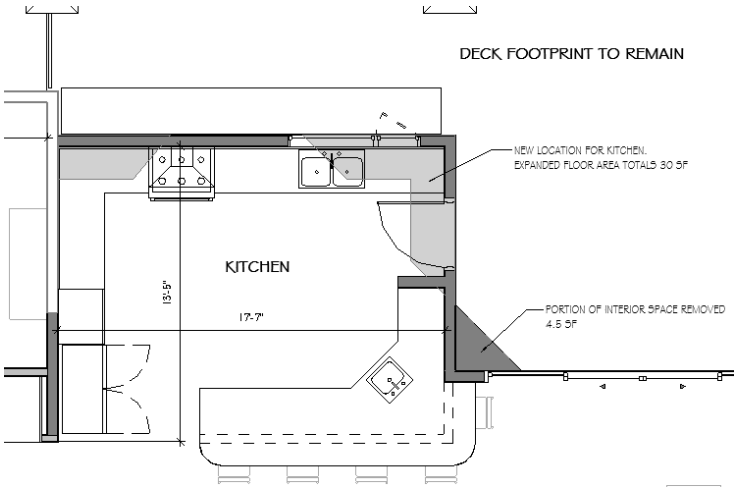
3. Remove the angled projecting bays (4 of them) from the exterior of the home, thus providing a reduction of **43** SF of RFA (shown as dark gray regions on the site plan – a snip below):



4. Remove a portion of floor area from the second floor resulting in a further reduction of **75** SF of RFA.



5. Increase the area of the relocated kitchen by **30** SF, with the increased floor area of the kitchen being fully offset with the reduction in floor area of the removed projecting bays articulated in point #3 above. Light gray shows the added floor area below



6. Construct the new detached accessory structure with an upper level containing two bedrooms, one bathroom, efficiency kitchen, family room, and main level spaces including storage and two car parking spots. These would all be minimally 2' above the Base Flood Elevation. This new building will be located within the footprint of the original barn. The sleeping and cooking spaces will be removed upon the family relocating back into the remodeled residence.

7. Connect the new building to existing utilities (water, power, natural gas, sewer).

The resulting residential floor area is shown on the plans provided along with this project narrative. By removing a portion of the existing floor area and the entire basement floor area, there will actually be a **net reduction of 73 SF of residential floor area** after renovation of the residence and construction of the new accessory structure.

The position on the lot that we have chosen to situate the accessory structure is in the approximate location of the previously deconstructed barn structure (deconstructed in 2019). This position will utilize the previous driveway alignment along the west edge of the site that connected Heather Way to the barn. That portion of the site is fairly level and does not include mature vegetation. Further, owing to the barn having been previously constructed in that position, there would be little topographic changes necessary. The footprint of the Barn and its massing were more impactful than the relatively smaller accessory building. An image of the former barn is shown on Page 15 of this narrative.

2. **Accessory unit use for temporary residence**

The construction of the accessory structure as indicated above provides the opportunity for the Piscopio family to continue living on the site during the renovation of the existing

residence. We recognize that this accessory structure could be used for occupancy **only** during the renovation of the existing residence, when the existing residence is uninhabitable. Upon completion of the renovation of the existing residence, the kitchen in the accessory structure will be removed and the bedrooms in the accessory structure converted to home office and recreation / fitness use. This strategy requires construction of the accessory structure first, in advance of the renovation of the existing residence. In doing so, we will have effectively removed **1,714 SF** of residential floor area from the site and added **1,641 SF** of residential floor area back to the site in the form of a more useful and safer building and set of spaces. The result is a net reduction of **73 SF** residential floor area.

The temporary use as a residence serves both short term and long term needs for the Piscopio family, creating material efficiency and the opportunity for the family to be present during renovation of their home.

3. Flood way / Flood Plain Development

Our initial inquiries into the potential development of the site revealed that a portion of the site – generally passing between the existing residence and Lefthand Creek – is located in the floodway. The remainder of the site is located within the 100-year floodplain. The extent of the existing floodway as provided by Boulder County is shown on the included site plan as a dashed line at the south side of the site.

The Piscopio family has provided an elevation certificate from FEMA (attached for reference to this SPR) showing the Base Flood Elevation to be **5187.0**, and also showing the lowest grade adjacent to the building to be **5186.0**. This certificate indicates that the lowest floor area allowable is to be **5189.0** – or 2' above the BFE.

We have made several inspection trips to the site, with the General Contractor and the Piscopio family. Further, we have engaged **Don Ash** of **Siteworks** to counsel us on this endeavor. Several conditions are readily apparent from our site visits:

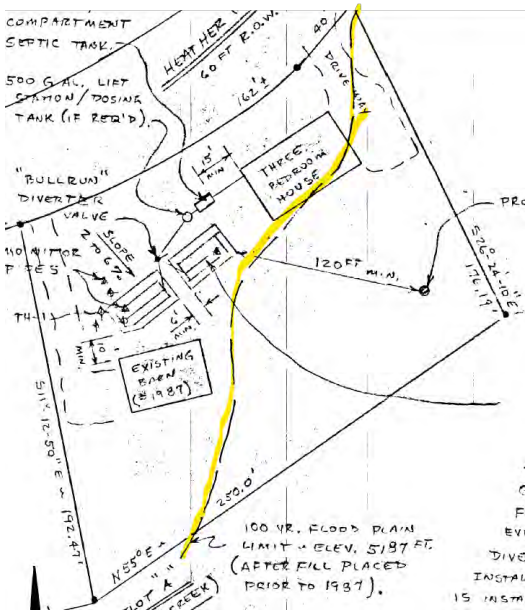
1. The extents of the floodway seem inaccurate based upon observation of the landforms at the site. The Floodway is determined by FEMA mapping procedures and are based upon less granular survey / topographic studies.

2. Building lots that are situated alongside the south bank of Lefthand creek have been observed to be lower in elevation than this site, yet the extents of the floodway does not encroach upon those sites to the extent that the floodway is shown to encroach upon 5986 Heather Way, even though they appear to be lower in elevation.

3. There are landforms on the site that do not seem to be integrated with the floodway modeling. It appears, from observation, that the proposed building footprint is up to 2' above the lowest elevation of the lot at the back of the house, referred to as elevation **5186.0** in the FEMA elevation certificate. That would put the lowest elevation of the structure at 5186, which is a foot above the BFE. A detailed survey will determine this all with great accuracy. If necessary after the survey, our engineering team will prepare and submit a LOMR with FEMA, or if finding that the build site is actually not in the floodway, engineering will submit a Floodplain

Development Permit.

4. A line drawn on a former septic system plot plan and labeled as the "100 year flood plain – elevation 5187' "that shows a different position for the floodway than shown by more recent Boulder County flood mapping. The line which does not match the current definition of the Floodway / Flood plain, in shown in yellow highlighter below. This alignment seems to more closely match what can be gleaned from a site visit, and seems closer to the actual topography.



As shown by our included site plan, the position we have selected for the new accessory structure - formerly occupied by the barn - is located within the floodway as currently defined by Boulder County mapping, however would be well outside of the floodway shown above. We understand that a new structure would not normally be permitted to be constructed within the floodway, even considering that the original barn building was situated in the same approximate location. We have engaged **Don Ash,** with **Site Works** – a well known and respected local engineering practice with great depth of experience in hydrologic studies, to provide the necessary engineering required to determine the exact position on this site of the flood plain and flood way. At the completion of their engineering work, and upon their modt likely finding no impact being imposed by the new accessory structure, we anticipate that Site Works will provide the necessary work and submissions to file a Letter of Map Revision (LOMR) with FEMA. Upon receipt of the approvals, with the building site being found outside of the floodway and of no impact to the floodway, Siteworks will file with Boulder County the application for a flood plain development permit.

We also understand that the total cost for the improvements to the existing home are limited by the assessed value of the improvements onsite without the need to fully incorporate

floodproofing of that structure – currently **$1,293,400**. This floodplain work is scheduled to begin after the completion of and as a condition of this Site Plan Review.

Included Plan Set:

Sheet 1 – combined Site Plan / Revegetation plan

This plan is provided to illustrate the general overall site development. On this sheet, we show the entirety of the site at 1" = 16' scale – to illustrate the developable and non-developable portions of the site. The site plan illustrates the following information:

- The footprints of both the proposed accessory building and the existing home.
- The former location of the barn (demolished)
- Property, setback, and easement lines are shown, as well as dimensions for the closest point of the proposed accessory building to the nearest property line.
- A cross-hatched region showing the current flood plain / floodway delineation.
- The newly proposed driveway – in the location of the previous driveway which served to access the barn
- The existing driveway and guest parking.
- Existing well and septic system locations.
- The edge of gravel of Heather Way.
- Large existing deciduous trees.

Included Building Plan Sheets

Drawing sheets 2 and 3 show the floor plans and roof plan, as well as the exterior elevations of the proposed accessory structure. Sheets 4, 5, 6 and 7 show the proposed floor plans for the existing residence after renovation is complete. Sheets 8, 9, 10, and 11 show the existing and proposed exterior elevations of the residence.

Boulder County Land Use Site Plan Review Standards – Article 4-806 of the Boulder County Land Use Code

Neighborhood

Standard 1 – To provide a greater measure of certainty as to the applicable neighborhood relevant for comparison, the following definition of neighborhood shall be used to review proposed Site Plan Review application:

a. For applications inside platted subdivisions with seven or more developed lots, the neighborhood is the platted subdivision

The lot is situated in Brigadoon Glen subdivision, which has been used for evaluation purposes of the home size – in particular the more closely situated homes along Heather Way – north of Lefthand Creek.

General character of the neighborhood

Standard 2 – The size of the resulting development (residential or nonresidential) must be compatible with the general character of the defined neighborhood.

Site plan review standards require the use of Boulder County Assessor data for determining the existing floor area of the residence and the barn. It has been our experience that the records are frequently incorrect. However – the existing floor area is as stated by the assessor. If demonstrated to be different by any County staff in subsequent approvals processes, such as building permit application, that will be considered moot. We are assuming a net change of 58SF less than the existing residence – regardless of what that may be.

Site Plan Review Standard 2 b i €
The existing home already exceeds the floor area maximum calculated for the neighborhood. it is acceptable to demolish and rebuild legally existing residential floor area that is not in conflict with other Site Plan Review standards.

We are removing a measure of existing residential floor area from the project by infilling the daylit basement – removing 1,627 SF of RFA. This garden level basement area is served with exterior windows in three locations and is thus not to be considered subterranean and unoccupied space by previous land use decisions concerning visibility of an exterior wall above grade.

This removal of the garden level basement floor area has the corollary advantage of removing the floor area below the Base Flood Elevation for the Lefthand Creek floodway.

Site Plan Review Standard 2 b i (A)
The new accessory building will be constructed upon the footprint of the previously existing barn structure, and thus will be no more visible than the previously constructed building.

Additionally, the footprint of the accessory structure will cover less than 50% of the area of the former barn structure, and thus will be less visually intrusive from the locations listed in the SPR guidelines.

Site Plan Review Standard 2 b i (F)
The proposed renovation of the existing residence is intended to substantially increase the energy efficiency of the residence through incorporation of hi performance glazing, increase insulation performance in the walls and roof planes, create roof forms that will allow integration of a photovoltaic solar array for the production of onsite renewable energy

Public Services and Infrastructure

Standard 3 – The location of existing or proposed buildings, structures, equipment, grading, or uses shall not impose an undue burden on public services and infrastructure

Thie site is currently served with all necessary utilities of water (Lefthand), Electricity and Natural Gas (Xcel) and an onsite waste treatment system (Septic system). A public road fronts the Lot – Heather Way. Heather way ends at a cul de sac on the west terminus that allows for reversing the direction of travel for emergency vehicles (the plat shows Sylvan Way connecting through to Heather – which did not occur). There currently exists a fire

hydrant along Heather way. An existing driveway serves the house, and the driveway that served the former barn will be reincorporated into the site. The home is occupied by a single family, and there is no increased density planned for the site. As such, we anticipate no additional impact to infrastructure.

Natural Hazards

Standard 4 – The proposed development shall avoid natural hazards, including those on the subject property and those originating offsite with a reasonable likelihood of affecting the subject property.

There are no geologic hazards associated with this site – it is reasonably flat. The only natural event that could have an effect would be a flood of Lefthand Creek. There's no evidence in the existing home that the flood of 2013 rose to impact the house, although the Piscopio family did not live there at the time. This is one piece of evidence that supports our previously-described endeavor to evaluate the floodway definition based on a more thorough and granular investigation, with Don Ash of Siteworks, into the definition of the floodway. Given our team's visual inspection of the landforms on this north side of Lefthand Creek, those on the south side of the creek, plus considering the hydraulic behavior of floodwater flow, we have a reasonable expectation of modifying the actual floodway. Don Ash supports this conclusion and is prepared to embark upon the detailed study upon our successful navigation of the Site Plan Review process.

An additional consideration is that the proposed accessory structure will be significantly smaller in footprint than the original barn building that it will be effectively replacing. The barn had a footprint of 1,728 SF, while the proposed accessory structure has a footprint of slightly over 800 SF – roughly half the size of the barn. Thus considered, the accessory structure will provide less of an impediment to the floodway than the previously approved and constructed barn.

Wildfire

Standard 5 – The site shall satisfactorily mitigate the risk of wildfire both to the subject property and those posed to neighboring properties in the surrounding area by the proposed development.

Wildfire mitigation will begin with our working with Wildfire Partners to achieve certification through that program (alternatively we will follow the regulatory path if demonstrated to be more effective). Additionally, all construction details will be considered for ignition resistant construction.

1. Mature stands of trees near the proposed footprint of the structure will be trimmed and/or removed to provide a suitable defensible space from the structure.
2. We propose planting several new trees as part of the visual screening we think should be done to buffer and screen the accessory structure. We will keep them offset a fair bit and will respond to comments from the BOCO wildfire coordinator review that we anticipate receiving during the site plan review process.

3. Roofs, overhangs and patio covers will be fire rated per the requirements established by Boulder County, and details will appear on the future construction plans.
4. The exterior siding for the new accessory structure and the renovation of the existing residence will be finished with ignition resistant materials.
5. Hardscape, patios, and a 3' wide rock mulch perimeter will surround the new accessory structure and existing home.

Site Drainage

Standard 6 – The proposed development shall not alter the historic drainage patterns and / or flow rates or shall include acceptable mitigation measures to compensate for anticipated drainage impacts.

The site is pitched moderately down towards the southeast to Lefthand Creek. The drainage flow will continue downhill in that basic direction, being conducted around the accessory structure with graded swales to the south and west.

A corrugated Metal Pipe (CMP) will be placed at the point of connection between the reconstructed driveway and Heather way to conduct flow of the borrow ditch north of the existing home and accessory structure.

The footprint of the roof of the accessory structure will be approximately half of the previous barn structure. As such, the permeable lot area will be increased, and concentrated sources of drainage flow, such as downspouts, will be reduced by virtue of the smaller impervious roof area.

Significant Features and Ecosystems

Standard 7 – The development shall avoid significant natural ecosystems or environmental features, including but not necessarily limited to riparian corridors and wetland areas, plant communities, and wildlife corridors.

There are no such natural spaces associated with this site as it has been previously developed. Natural / riparian corridors do occur adjacent to the site in Outlot A, which holds the Lefthand Creek Bed. All development proposed will be suitably distanced from this part of the site.

The creek and all neighboring properties and Outlot A will be protected during construction with a correctly placed and inspected silt barrier to prevent construction activities from causing sediment to encroach upon these areas.

Significant Agricultural lands

Standard 8 – The development shall avoid agricultural lands of local, state or national significance.

This is not applicable. The proposed residence is located in a developed subdivision and does not impact agricultural lands of local, state, or national significance.

Historic or Archaeological resources

Standard 9 – The development shall avoid significant historic or archaeological resources.

Being previously developed, there does not appear to be any sites of historic or archaeological significance.

In preparation for this Site Plan Review, we have consulted both the Boulder County historic and The Colorado Office of Archeology and Historic Preservation for their consideration of this site. Neither organization found any sites of significance associated with this area. Documentation is provided as attachments to this Site Plan Review submission:

Letter from History Colorado, dated October 6, 2023

Boulder County Historic Preservation Referral Form, dated September 06, 2023

Significant negative visual impact

Standard 10 – The development shall not have significant negative visual impact on the natural features or neighborhood character of the surrounding area.

The proposed accessory structure is to be located in a position occupied previously by a much larger barn structure, which has been since removed. Below is a photo from Boulder County records of the original barn – note the height of the structure being +/- 2 stories, reflective roof finish, bright white color:

Exterior finish materials for the proposed accessory structure and for the renovation of the home will be comparable to those installed on other homes in the neighborhood. Roof materials will be matte and not reflective. Exterior finishes will be stone and fiber cement boards either natural by their integral materials or otherwise finished in natural colors.

Exterior lighting will be upgraded to fixtures which screen the source of illumination.

Compatibility with existing topography and vegetation

Standard 11 – The location of the development shall be compatible with the natural topography and existing vegetation and the development shall not cause unnecessary or excessive site disturbance.

Remodeling of the existing residence will cause no changes to the natural topography, although several trees may be necessarily removed due to their proximity to the residence and for fire mitigation purposes.

The accessory structure will be constructed in the position where the original barn was previously situated. As such, any sitework or topographic changes would have to do with raising the structure to 2' above the base flood elevation. The driveway to serve this new accessory structure will match the alignment of the original driveway serving the barn. The 1996 septic system plan (provided as an attachment) shows the barn as being outside of the floodway, the diagram for which is also included on Page 6 of this narrative. Thus, we consider that the maximum imported fill to raise the garage slab to be floodplain compliant would be somewhat less than 2'. The accessory structure will be set up on a low foundation wall and thus any such required grading would be below the structure itself (foundational grading) and would not extend beyond the footprint other than as required to slope up to the slab elevation for vehicular access.

Erosion and sedimentation

Standard 12 – Runoff, erosion, and/or sedimentation from the development shall not have a significant adverse impact on the surrounding area.

During the construction period for the accessory structure and renovation of the existing residence, adjacent lots, including Outlot A (Lefthand Creek) will be protected from silt through a properly installed and maintained silt fence. Post construction, a primary consideration would be the position for the accessory structure – which is approximately 75' from Lefthand Creek. The space between the accessory structure and the creekbed is currently and will be blanketed with turf grass and other normal landscape improvements. Such landscape features would serve to interrupt any concentrated overlot flow and allow for settling out of any sediment carried by the flow. There will be no bare areas or hardscape between the new structure and the creek to concentrate drainage flow.

Flow from the impervious area and roof of the new accessory structure will be less than the previous barn owing to the smaller footprint. The roof drainage will be directed to a landscaped swale.

Natural Landmarks and Natural areas

Standard 13 – The development shall avoid Natural Landmarks and Natural Areas designated by the Comp plan and zoning district maps of Boulder County.

There are no Natural Landmarks or natural areas on the site.

Replacement structures

Standard 14 – Where an existing principal structure is proposed to be replaced by a new principle structure, construction or subsequent enlargement of the new structure shall not cause significantly greater impact (with regards to these standards) than the original structure.

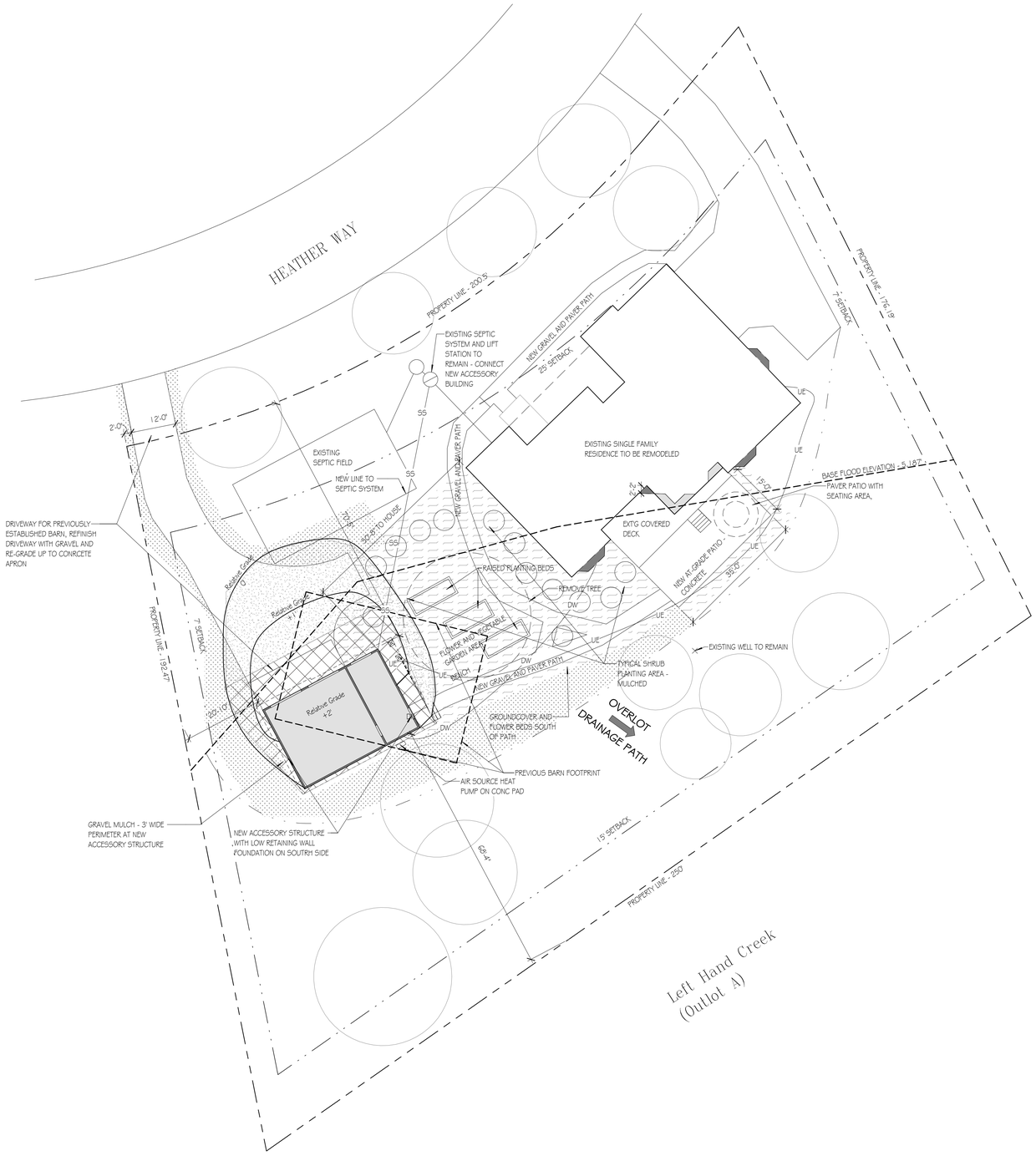
The existing principle structure will remain. The original barn, since removed, was more visually and site impactful than the proposed accessory structure.

Consistency with the comprehensive plan

Standard 15 – The proposal shall be consistent with the Comp plan, any intergovernmental agreement affecting land use or development, and the Boulder County Land Use Code.

There is no change to the proposed land use or other aspects of the comp plan. The proposed development is compliant with the Land Use Code in all aspects and is consistent with pre-existing developments in the surrounding neighborhood.

ATTACHMENT B



1 *Site Plan*
1/16" = 1'-0"

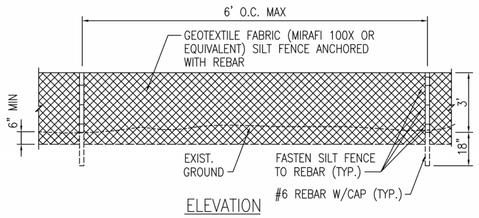
Symbol Legend	
	REVEGETATION AREA -SEED MIX -NATIVE GROUND COVER -NATIVE BUSHES
	MULCHED PLANTER WITH AMENDED SOIL - MIX IN COMPOST TOP 12"
	STRAW BALE BARRIER
	NEW EVERGREEN TREE ON APPROVED BOULDER COUNTY SPECIES LIST
	NEW DECIDUOUS TREE ON APPROVED BOULDER COUNTY SPECIES LIST
	LOW SHRUBS OR MASSES OF FLOWERS

Revegetation Seed Mix (RECOMMENDED)

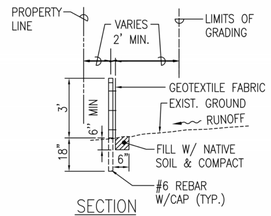
FOOTHILLS SEED MIX

COMMON NAME	VARIETY	% OF MIX	
BLUE GRAMA	NATIVE, ALMA, OR HACHITA	15%	0.63
SIDE OATS GRAMA	VAUGHN	10%	1.82
SLENDER WHEATGRASS	SAN LUIS	20%	4.38
WESTERN WHEATGRASS	ARRIBA	10%	3.17
WESTERN WHEATGRASS	NATIVE	10%	3.17
SWITCHGRASS	BLACKWELL OR NEBRASKA 28	7%	0.63
JUNEGRASS	NATIVE	10%	0.15
LITTLE BLUESTEM	CIMARRON OR PASTURA	8%	1.07
GREEN NEEDLEGRASS	LODORM OR NATIVE	10%	1.93
	TOTAL:	100%	16.95

PLS= PURE LIVE SEED

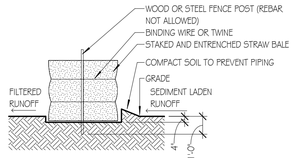


ELEVATION



SECTION

3 *SILT FENCE*
1/4" = 1'-0"



STRAW BALE DIKE INSTALLATION DETAILS

1. BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR, AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4", AND PLACE SO THE STRING OR WIRE IS HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARDS THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE TOP OF THE BALE.
4. BARRIERS MUST BE IN PLACE BEFORE SCHEDULING FIRST BUILDING INSPECTION.
5. BARRIER MUST BE MAINTAINED AND REMAIN UNTIL VEGETATION HAS ESTABLISHED.

2 *STRAW BALE*
1/4" = 1'-0"

TRUE NORTH

1/16" = 1'-0" SCALE 5 0 5 10 15 20 25 30 35 40 45 FEET

PISCOPIO FAMILY RESIDENCE

REMODEL EXISTING RESIDENCE AND BUILD NEW ACCESSORY STRUCTURE

PLANNING AND ZONING INFORMATION

PROJECT ADDRESS: 5986 HEATHER WAY, LONGMONT, COLORADO 80503

LEGAL DESCRIPTION: LOT 7 - BRIGADOON GLEN

YEAR CONSTRUCTED: 1996 (EXISTING RESIDENCE)

ZONING CLASSIFICATION: RR - RURAL RESIDENTIAL

LOT AREA: 36,282 SF / 0.83 ACRES

FLOOD ZONE: AE - FLOOD WAY, 100 YR FLOOD PLAIN

MAXIMUM HEIGHT

MAXIMUM ALLOWABLE	PROVIDED AT NEW STRUCTURE
35'-0"	24'-6"

SETBACKS (AT NEW ACCESSORY STRUCTURE)

	REQUIRED	PROVIDED AT NEW ACCESSORY STRUCTURE
NORTH (FRONT)	25'-0"	70'-5 1/2"
WEST (SIDE)	7'-0"	20'-9 1/2"
SOUTH (REAR)	15'-0"	68'-4 1/2"
EAST (SIDE)	7'-0"	155'-8 1/2"

FLOOR AREA

RESIDENTIAL FLOOR AREA	EXISTING		NEW		TOTAL
	UNFINISHED	FINISHED	UNFINISHED	FINISHED	
PROPOSED ACCESSORY STRUCTURE					
FIRST FLOOR	0 SF	0 SF	0 SF	242 SF	242 SF
SECOND FLOOR	0 SF	0 SF	0 SF	801 SF	801 SF
GARAGE	0 SF	0 SF	598 SF	0 SF	598 SF
TOTAL ACCESSORY STRUCTURE	0 SF	0 SF	598 SF	1,043 SF	1,641 SF
EXISTING RESIDENCE					
BASEMENT	1,627 SF	0 SF	-1,627 SF	0 SF	0 SF
FIRST FLOOR	0 SF	2,321 SF	30 SF	-42 SF	2,309 SF
SECOND FLOOR	0 SF	1,130 SF	0 SF	-75 SF	1,055 SF
GARAGE	0 SF	770 SF	0 SF	0 SF	770 SF
TOTAL RESIDENCE	1,627 SF	4,221 SF	-1,597 SF	-117 SF	4,134 SF
TOTAL RESIDENTIAL FLOOR AREA					5,775 SF

NON-RESIDENTIAL FLOOR AREA	EXISTING		NEW		TOTAL
	UNFINISHED	FINISHED	UNFINISHED	FINISHED	
GENERAL PURPOSE BARN NRFA (DEMOLISHED)					
FIRST FLOOR	1,728 SF	0 SF	-1,728 SF	0 SF	0 SF
TOTAL BARN (NRFA)	1,728 SF	0 SF	-1,728 SF	0 SF	0 SF
TOTAL NON-RESIDENTIAL FLOOR AREA					0 SF

PROJECT NARRATIVE

THE PISCOPIO FAMILY INTENDS TO RENOVATE THEIR EXISTING RESIDENCE IN ORDER TO MORE CLOSELY ALIGN WITH THEIR NEEDS FOR SPACE, AND TO INCREASE THE ENERGY EFFICIENCY AND EQUIPMENT PERFORMANCE FOR THE 28 YEAR OLD STRUCTURE. TOWARDS THAT END, THE HOMEOWNERS PROPOSE TO:

1. UPDATE THE EXTERIOR APPEARANCE OF THE HOME
2. REMOVE EXTERIOR FINISHES AND INSULATE THE EXTERIOR OF THE HOME
3. INSTALL NEW DURABLE AND FIRE RESISTIVE EXTERIOR FINISHES
4. REMOVE THE EXISTING ROOF FINISH AND REPLACE WITH NEW FINISH
5. REMOVE AND REPLACE WINDOWS
6. REMODEL INTERIOR
7. IMPROVE AND FINISH THE EXTERIOR BASEMENT FOR RECREATION AND OFFICE SPACE
8. IMPROVE AND ENHANCE LANDSCAPE FEATURES

DURING THE INVESTIGATION PROCESS FOR THE PROPOSED RENOVATION, WE DISCOVERED THAT THE LOWER GARDEN LEVEL FLOOR IS BELOW THE BASE FLOOD ELEVATION. AS SUCH, WE HAVE DECIDED IT TO REMOVE BASEMENT IMPROVEMENTS FROM THE SCOPE OF WORK, AND TO FURTHER ELEVATE THE MECHANICAL EQUIPMENT AT LEAST TO THE BASE FLOOD ELEVATION AND TO INFILL THE GARDEN LEVEL. THIS DOES NOT NEGATE THE HOMEOWNER'S NEED FOR THE SPACE THAT THE BASEMENT PROVIDED TO MEET THEIR PROGRAM REQUIREMENTS.

IN CONSULTATION WITH THE SELECTED GENERAL CONTRACTOR, WE HAVE DETERMINED THAT CONDITIONS WOULD NOT BE SUITABLE FOR THE HOMEOWNERS TO CONTINUE TO RESIDE IN THE HOUSE DURING RENOVATION AND CONSTRUCTION. AS SUCH, THE HOMEOWNERS WILL NEED TO MOVE OUT OF THE HOME DURING THAT TIME FRAME.

REMOVING THE FLOOR AREA OF THE GARDEN LEVEL FROM THE HOME, COMBINED WITH THE HOMEOWNER'S NEED TO RELOCATE DURING RENOVATION, HAS CREATED AN OPPORTUNITY TO RESOLVE BOTH ISSUES SIMULTANEOUSLY. THUUS WE HAVE DERIVED THE CONCEPT OF BUILDING A NEW ACCESSORY STRUCTURE TO FILL BOTH NEEDS. THE STRUCTURE WOULD BE BUILT AS A PLACE TO PROVIDE FOR THE OWNERS NEED FOR STORAGE IN THE FUTURE, AND ADDITIONALLY PROVIDE SPACE RECREATION AND HOME OFFICE SPACE. IN THE INTERRIM, DURING THE RENOVATION OF THE HOME, IT WILL BE CONFIGURED TO PROVIDE A PLACE FOR THE HOMEOWNERS TO RESIDE.

THE POSITION ON THE SITE THAT WOULD BE OPTIMAL FOR THIS NEW ACCESSORY STRUCTURE IS IN THE POSITION FORMERLY OCCUPIED BY A BARN STRUCTURE CONSTRUCTED IN 1987. THIS POSITION IS SUITABLY SET BACK FROM THE STREET AND FRONT PROPERTY LINE, IS FURTHER BACK FROM THE STREET THAN THE EXISTING RESIDENCE, IS NOT ENCUMBERED BY MATURE VEGETATION, IS REASONABLY FLAT FROM HAVING HELD THE BARN FOR 30+ YEARS. THE EXISTING BARN WAS DECONSTRUCTED AND REMOVED IN 2019, SHORTLY AFTER THE HOMEOWNERS PURCHASED THE PROPERTY. IT IS NOTED THAT THE BARN MAY HAVE BEEN LOCATED IN THE LEFTHAND CREEK FLOODWAY, BUT WE HAVE DISCOVERED CONFLICTING POSITIONS FOR THE FLOODWAY. AS A PART OF THIS PROCESS, AND AFTER CONDITIONED APPROVAL OF THE SITE PLAN REVIEW, WE WILL DETERMINE THE POSITION OF THE FLOODWAY FROM GRANULAR ON-THE-GROUND SURVEYS AND MODELING THE FLOWS AT 100 YEAR FLOOD CONDITIONS (SITEWSSE IN BOULDER IS RETAINED TO PROVIDE THIS INVESTIGATION), APPLY FOR A LETTER OF MAP REVISION (LOMR) FROM FEMA, AND FOR A FLOOD PLAIN DEVELOPMENT PERMIT FROM BOULDER COUNTY.

WE ENVISION THE FOLLOWING SEQUENCE OF CONSTRUCTION AND RENOVATION:

1. DECONSTRUCT THE EXISTING BARN (COMPLETED 2019)
2. CONSTRUCT THE 1641 SF ACCESSORY STRUCTURE CONFIGURED FOR STORAGE AND TEMPORARY RESIDENCE
3. IMPROVE A GRAVEL DRIVEWAY ALONG THE ALIGNMENT THAT SERVED THE FORMER BARN
4. HOMEOWNERS RELOCATE INTO THE UPPER LEVEL OF THE ACCESSORY AND ATORE POSSESSIONS IN THE LOWER LEVEL
5. RENOVATE THE EXISTING RESIDENCE AS DESCRIBED ABOVE
6. HOMEOWNERS RELOCATE INTO THE NEWLY REMODELED HOME
7. REMODEL THE ACCESSORY STRUCTURE TO RECREATION AND FITNESS SPACE ON THE SECOND FLOOR

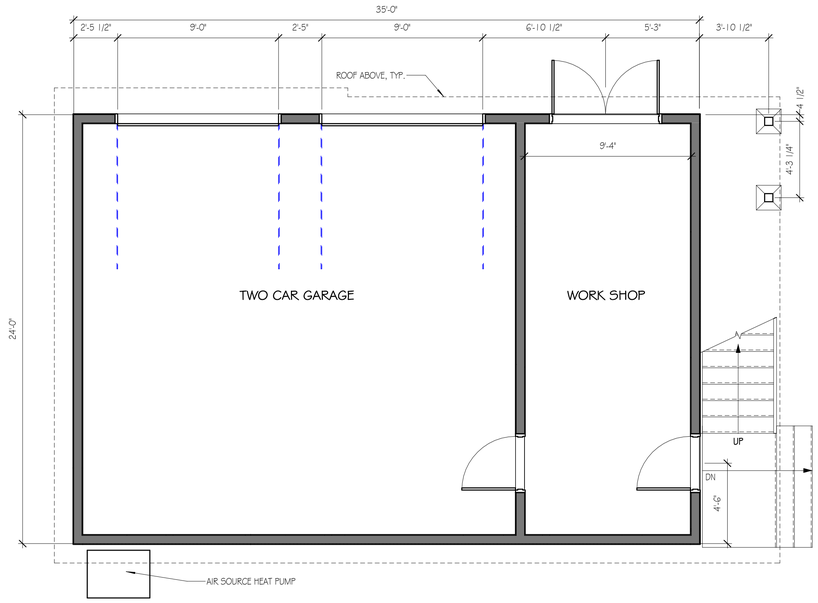
SITE PLAN SYMBOL LEGEND

- AREA OF FILL OUTSIDE 10' PERIMETER
- AREA OF INCIDENTAL CUT & FILL (UP TO 10' FROM FOOTPRINT)
- NEW FLOOR AREA (RESIDENCE)
- DEMOLISHED FLOOR AREA (RESIDENCE)
- FLOOD WAY / FLOOD PLAIN BOUNDARY (APPROXIMATE)
- SILT FENCE
- ORIGINAL CONTOUR (REMAINS)
- EXISTING CONTOUR (REVISED / REMOVED)
- NEW CONTOUR
- PROPERTY LINE
- SETBACK (MIN.)
- EASEMENT
- 2x6 FRAMED WALL
- 2x4 FRAMED WALL

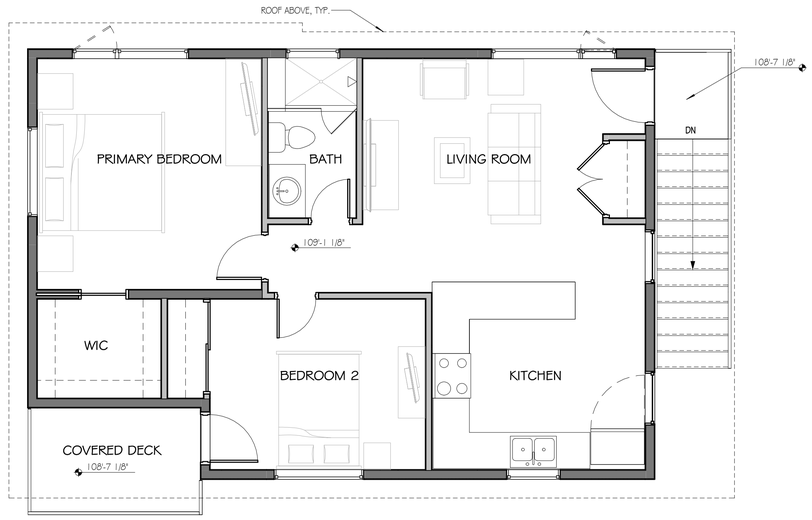
SITE / REVEGETATION PLAN

ISSUE DATE
11/13/2023

1

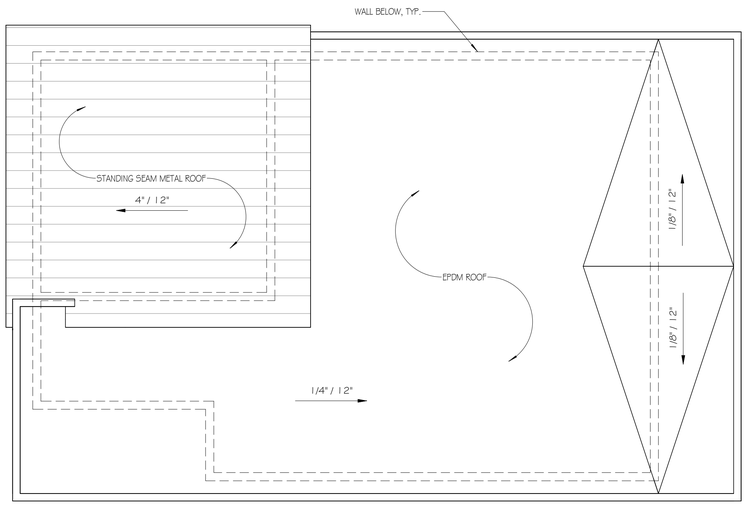


1 *Main Floor Plan*
1/4" = 1'-0"

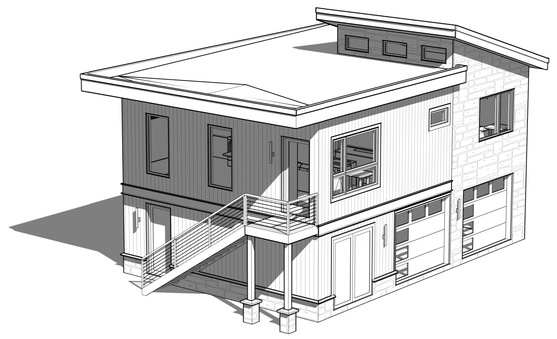


2 *Upper Floor Plan*
1/4" = 1'-0"

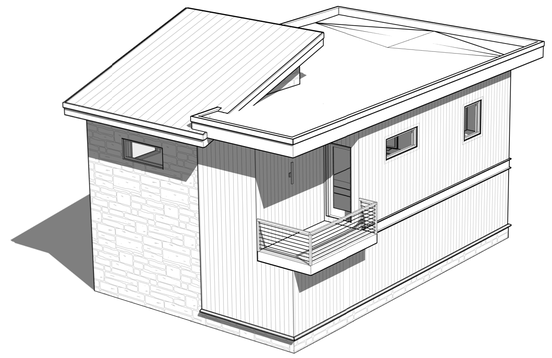
NOT APPROVED



3 *Roof Plan*
1/4" = 1'-0"



4 *North West Perspective*



5 *South East Perspective*

PISCOPIO FAMILY RESIDENCE

REMODEL EXISTING RESIDENCE AND BUILD NEW ACCESSORY STRUCTURE

1/4" = 1'-0" SCALE 2 0 2 4 6 8 10 FEET

TRUE NORTH

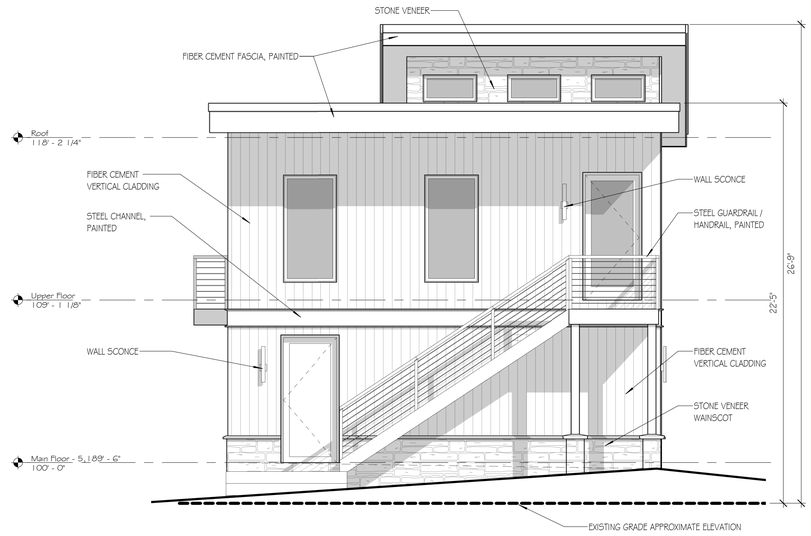
ACCESSORY STRUCTURE FLOOR AND ROOF PLANS

ISSUE DATE
11/13/2023

2

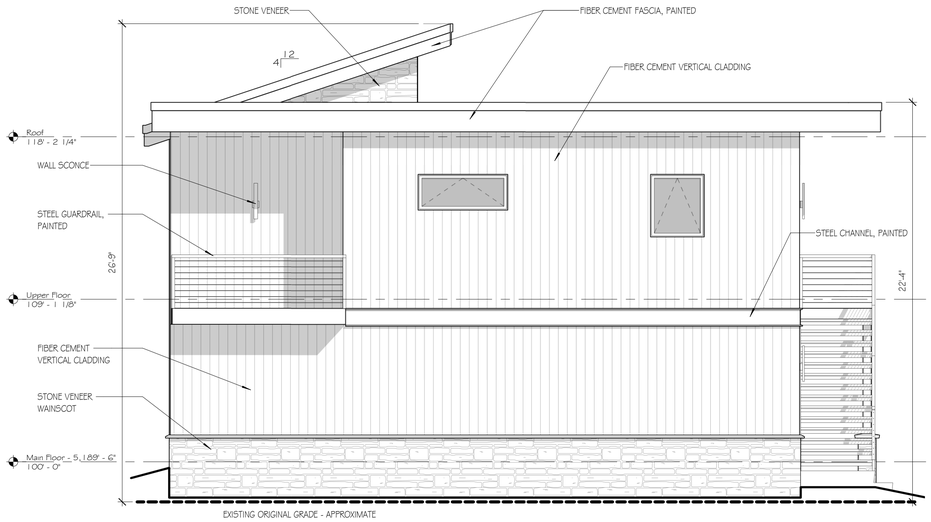
ATTACHMENT B

1 *North Exterior Elevation*
1/4" = 1'-0"

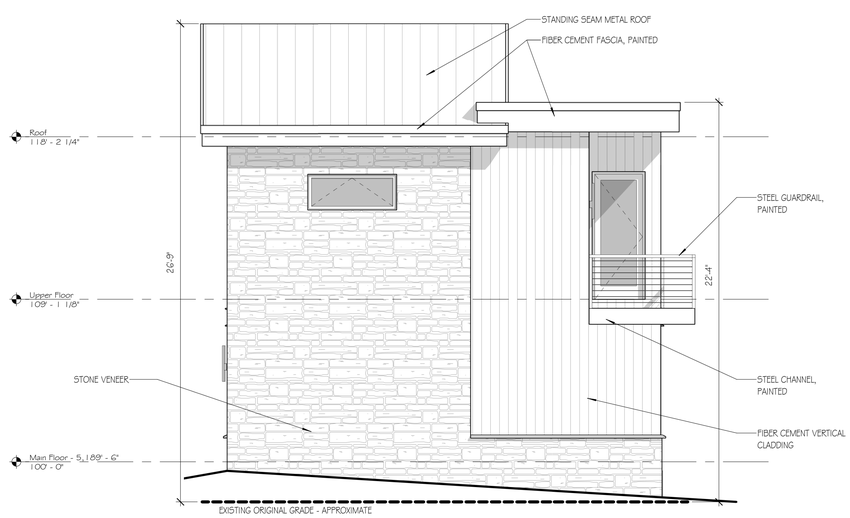


2 *East Exterior Elevation*
1/4" = 1'-0"

NOT APPROVED



3 *South Exterior Elevation*
1/4" = 1'-0"



4 *West Exterior Elevation*
1/4" = 1'-0"

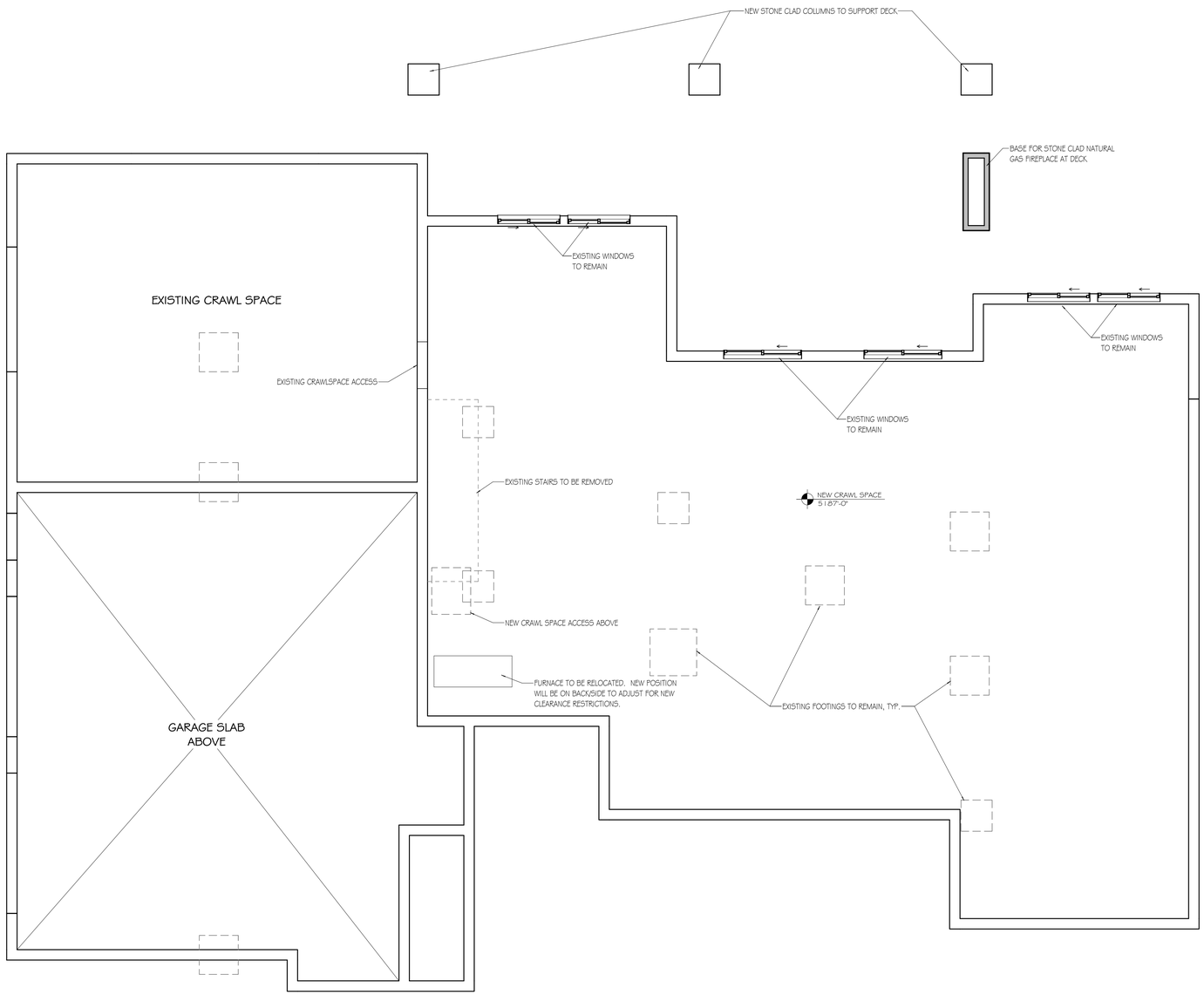
PISCOPIO FAMILY RESIDENCE

REMODEL EXISTING RESIDENCE AND BUILD NEW ACCESSORY STRUCTURE

1/4" = 1'-0" SCALE 2 0 2 4 6 8 10 FEET

ACCESSORY STRUCTURE EXTERIOR ELEVATIONS

ISSUE DATE
11/13/2023



NOTE:
LEVEL OF CRAWL SPACE TO BE BUILT UP TO USGS 5167'-0" TO REMOVE AREA FROM FLOODPLAIN LEVEL. CRAWLSPACE ACCESS WILL BE AT LOCATION SHOWN AND EXISTING FURNACE WILL BE MOVED TO IMMIDIATE VICINITY, AND LAIN ON SIDE TO ACCOUNT FOR NEW, LOW CLEARANCE SPACE.

1 *Crawlspace Plan*
1/4" = 1'-0"

PISCOPIO FAMILY RESIDENCE

REMODEL EXISTING RESIDENCE AND BUILD NEW ACCESSORY STRUCTURE

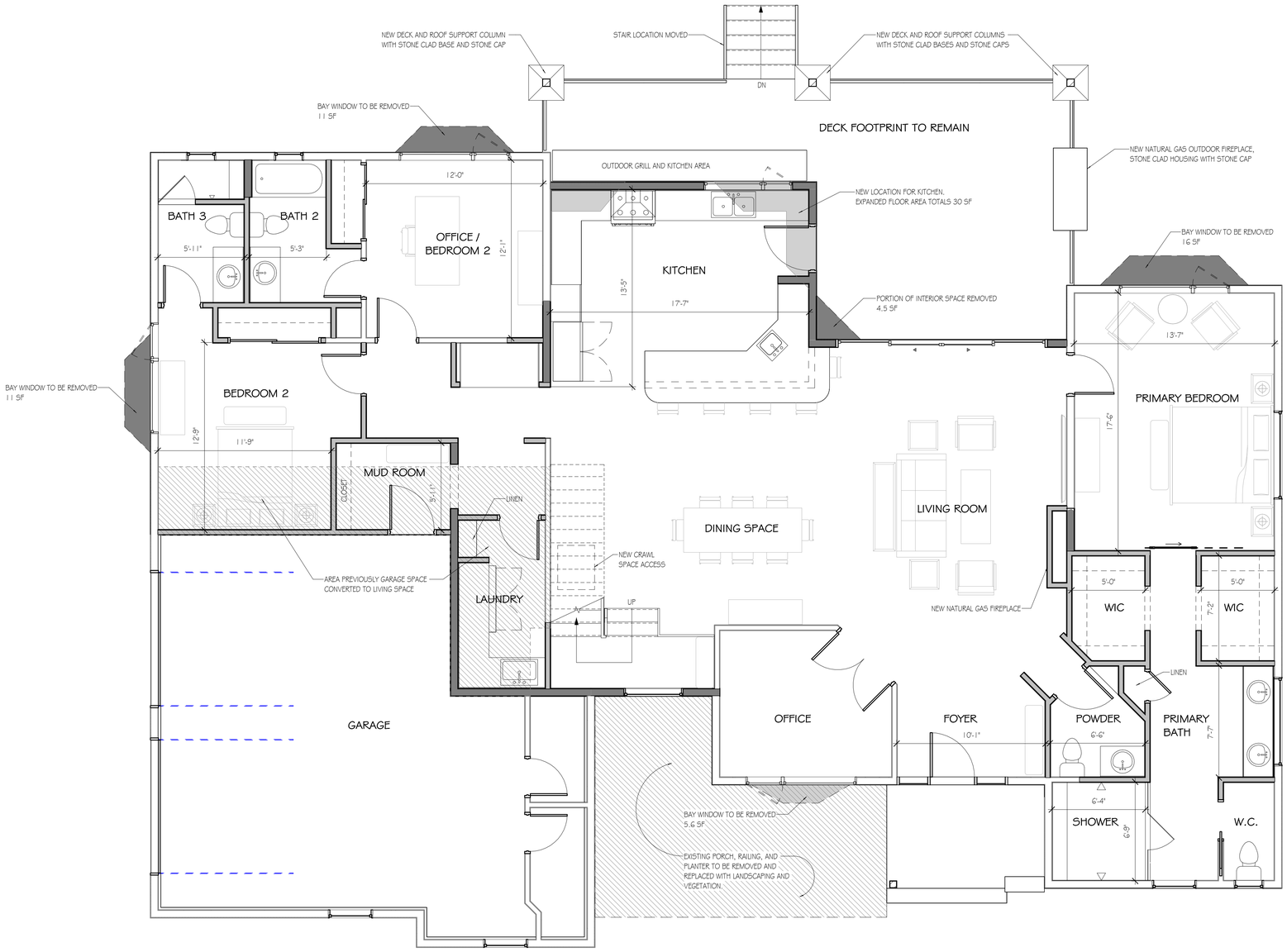
1/4" = 1'-0" SCALE 2 0 2 4 6 8 10 FEET

TRUE NORTH

RESIDENCE CRAWL SPACE PLAN

ISSUE DATE
11/13/2023

ATTACHMENT B



1 *Main Floor Plan*
1/4" = 1'-0"

PISCOPIO FAMILY RESIDENCE

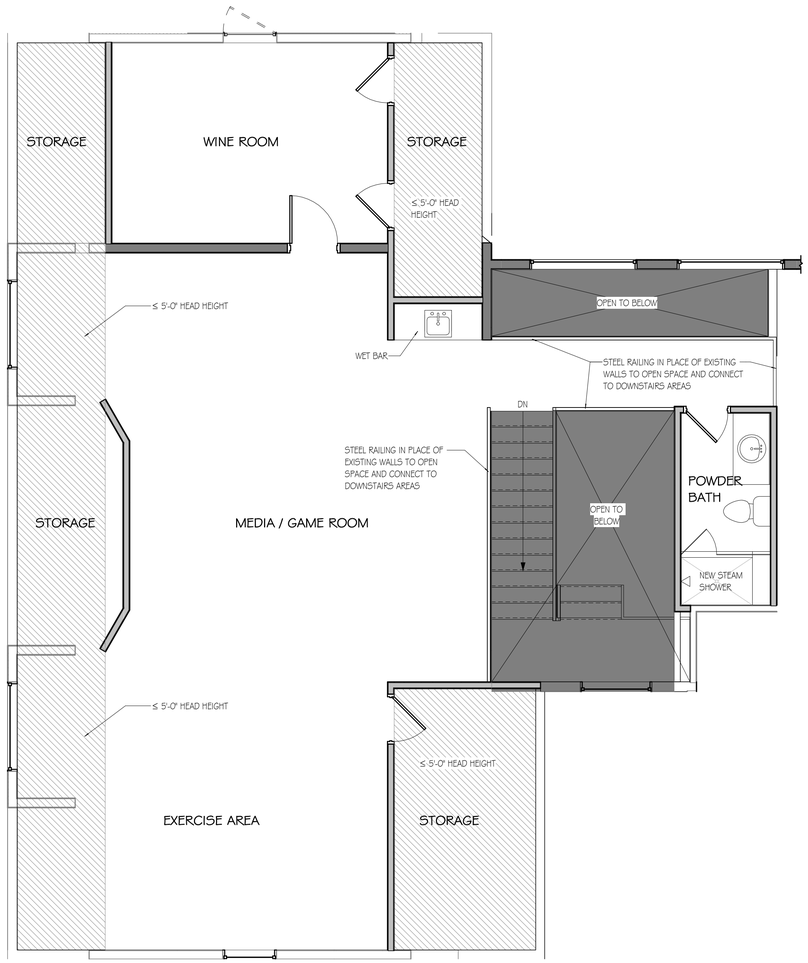
REMODEL EXISTING RESIDENCE AND BUILD NEW ACCESSORY STRUCTURE

1/4" = 1'-0" SCALE 2 0 2 4 6 8 10 FEET

TRUE NORTH

RESIDENCE MAIN FLOOR PLAN

ISSUE DATE
11/13/2023



1 *Upper Floor Plan*
1/4" = 1'-0"

PISCOPIO FAMILY RESIDENCE

REMODEL EXISTING RESIDENCE AND BUILD NEW ACCESSORY STRUCTURE

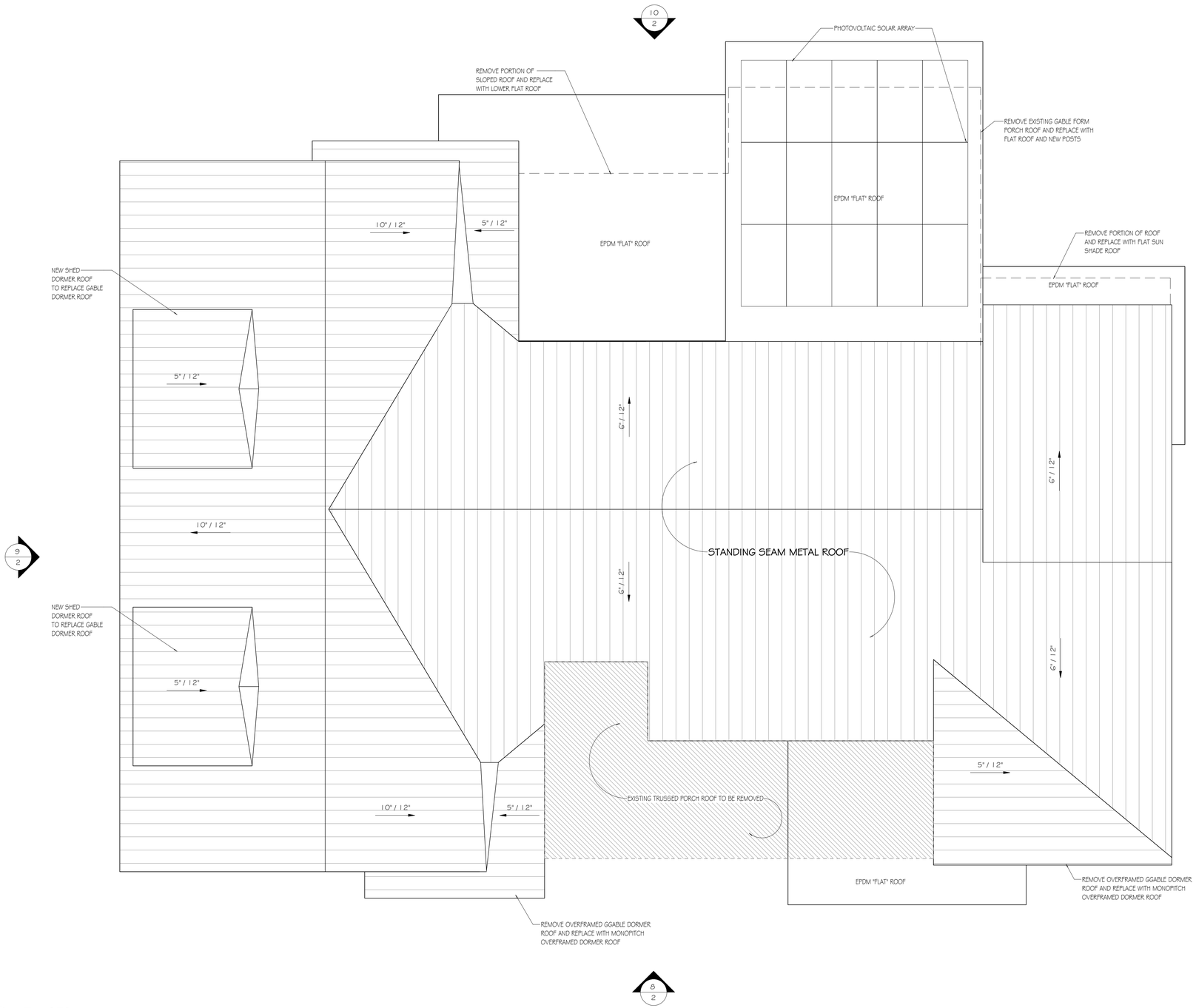
1/4" = 1'-0" SCALE 2 0 2 4 6 8 10 FEET

TRUE NORTH

RESIDENCE UPPER FLOOR PLAN

ISSUE DATE
11/13/2023

ATTACHMENT B



1 *Roof Plan*
1/4" = 1'-0"

PISCOPIO FAMILY RESIDENCE

REMODEL EXISTING RESIDENCE AND BUILD NEW ACCESSORY STRUCTURE

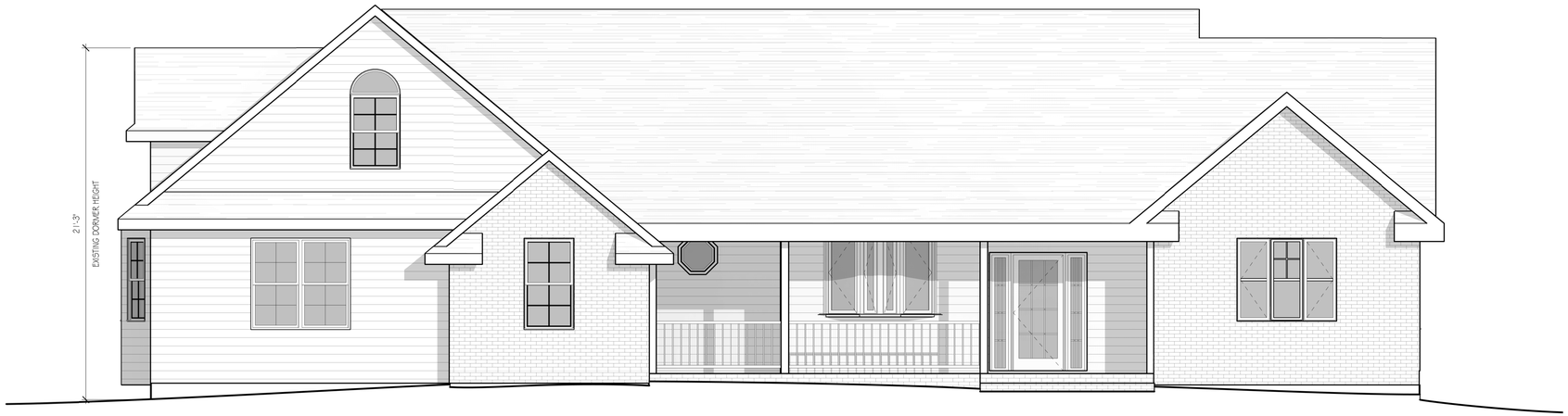
1" = 20'-0" SCALE 20 0 20 40 FEET

TRUE NORTH

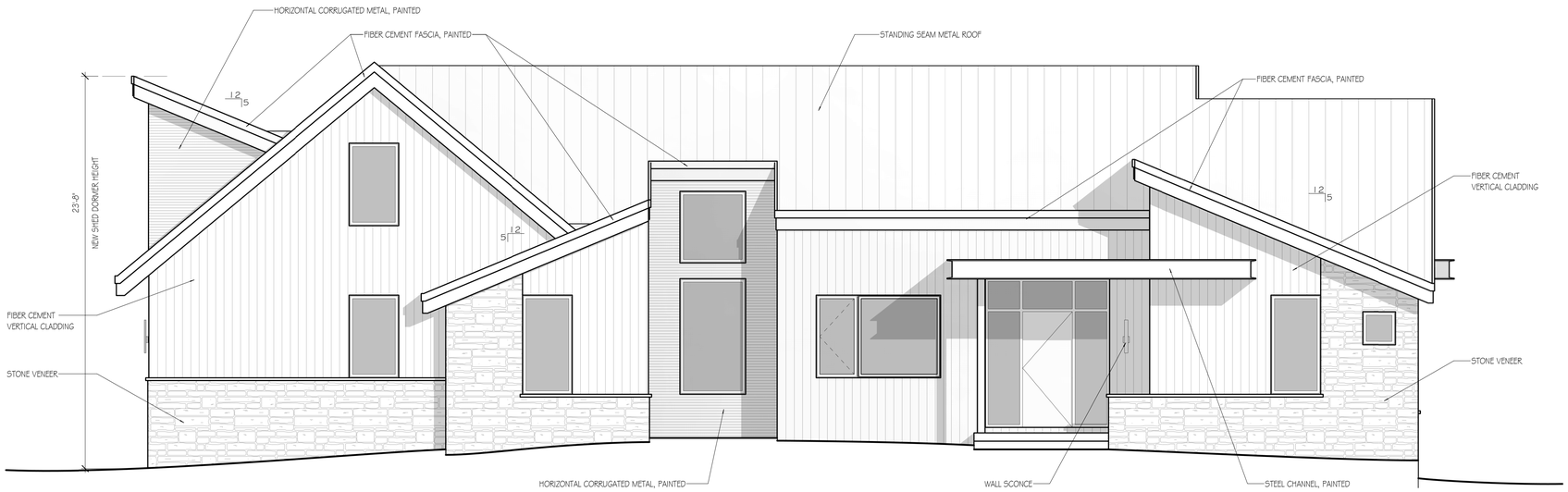
RESIDENCE ROOF PLAN

ISSUE DATE
11/13/2023

ATTACHMENT B



1 *Existing North Exterior Elevation*
1/4" = 1'-0"



2 *Proposed North Exterior Elevation*
1/4" = 1'-0"

PISCOPIO FAMILY RESIDENCE

REMODEL EXISTING RESIDENCE AND BUILD NEW ACCESSORY STRUCTURE

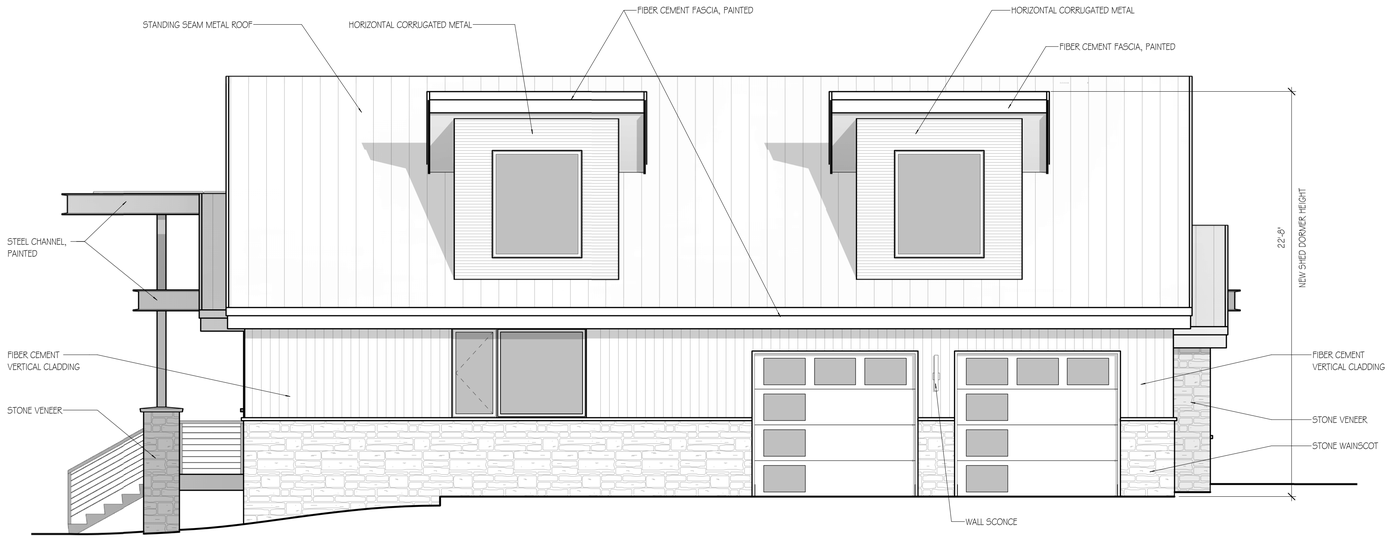
1/4" = 1'-0" SCALE 2 0 2 4 6 8 10 FEET

RESIDENCE NORTH EXTERIOR ELEVATIONS

ISSUE DATE
11/13/2023

ATTACHMENT B

1 *Existing East Exterior Elevation*
1/4" = 1'-0"



2 *Proposed East Exterior Elevation*
1/4" = 1'-0"

PISCOPIO FAMILY RESIDENCE

REMODEL EXISTING RESIDENCE AND BUILD NEW ACCESSORY STRUCTURE

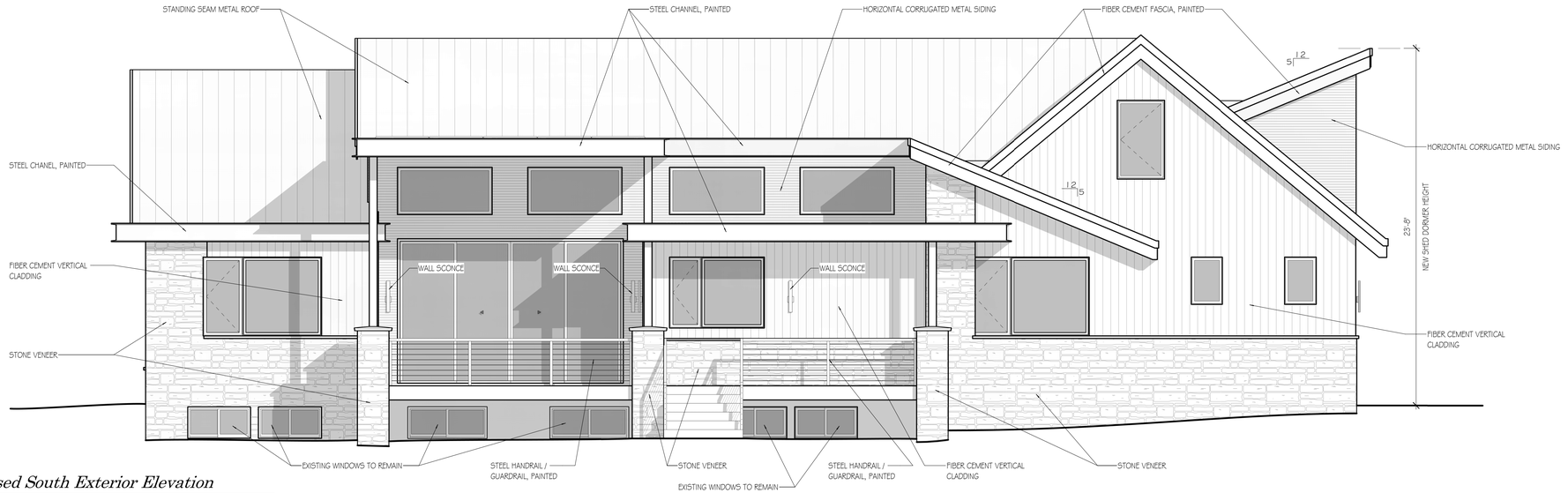
1/4" = 1'-0" SCALE 2 0 2 4 6 8 10 FEET

RESIDENCE EAST EXTERIOR ELEVATIONS

ISSUE DATE
11/13/2023

ATTACHMENT B

1 *Existing South Exterior Elevation*
1/4" = 1'-0"



2 *Proposed South Exterior Elevation*
1/4" = 1'-0"

PISCOPIO FAMILY RESIDENCE

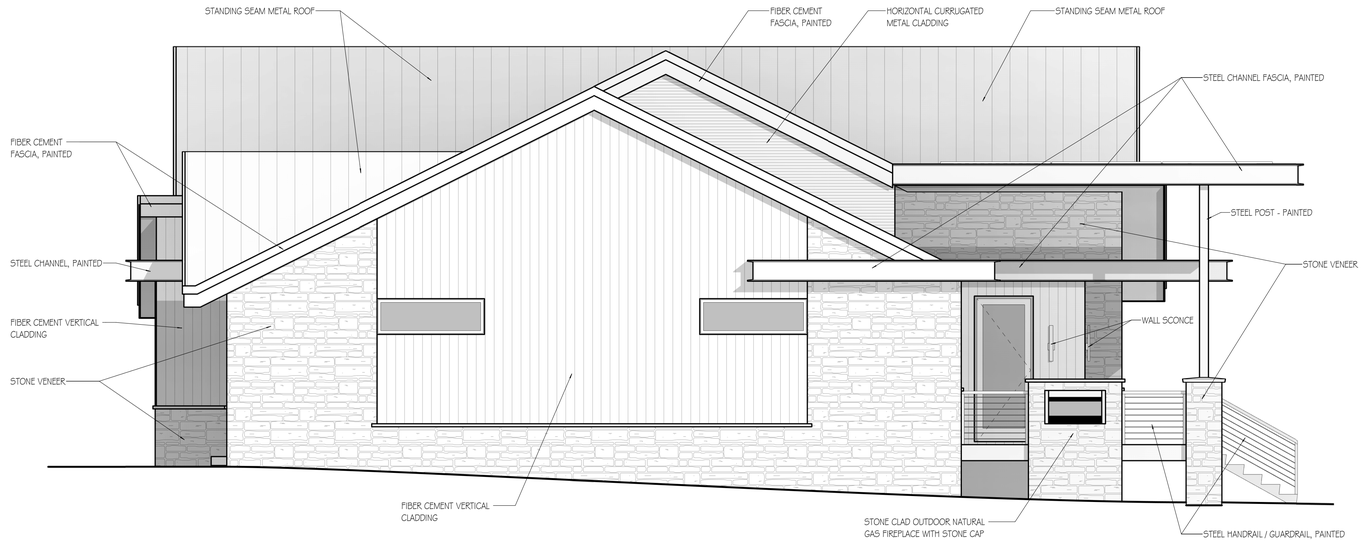
REMODEL EXISTING RESIDENCE AND BUILD NEW ACCESSORY STRUCTURE

1/4" = 1'-0" SCALE 2 0 2 4 6 8 10 FEET

RESIDENCE SOUTH EXTERIOR ELEVATIONS

ISSUE DATE
11/13/2023

1 *Existing West Exterior Elevation*
1/4" = 1'-0"



2 *Proposed West Exterior Elevation*
1/4" = 1'-0"

PISCOPIO FAMILY RESIDENCE

REMODEL EXISTING RESIDENCE AND BUILD NEW ACCESSORY STRUCTURE

RESIDENCE WEST EXTERIOR ELEVATIONS

1/4" = 1'-0" — 2 0 2 4 6 8 10 — SCALE FEET

ISSUE DATE
11/13/2023

HC-16 Panel

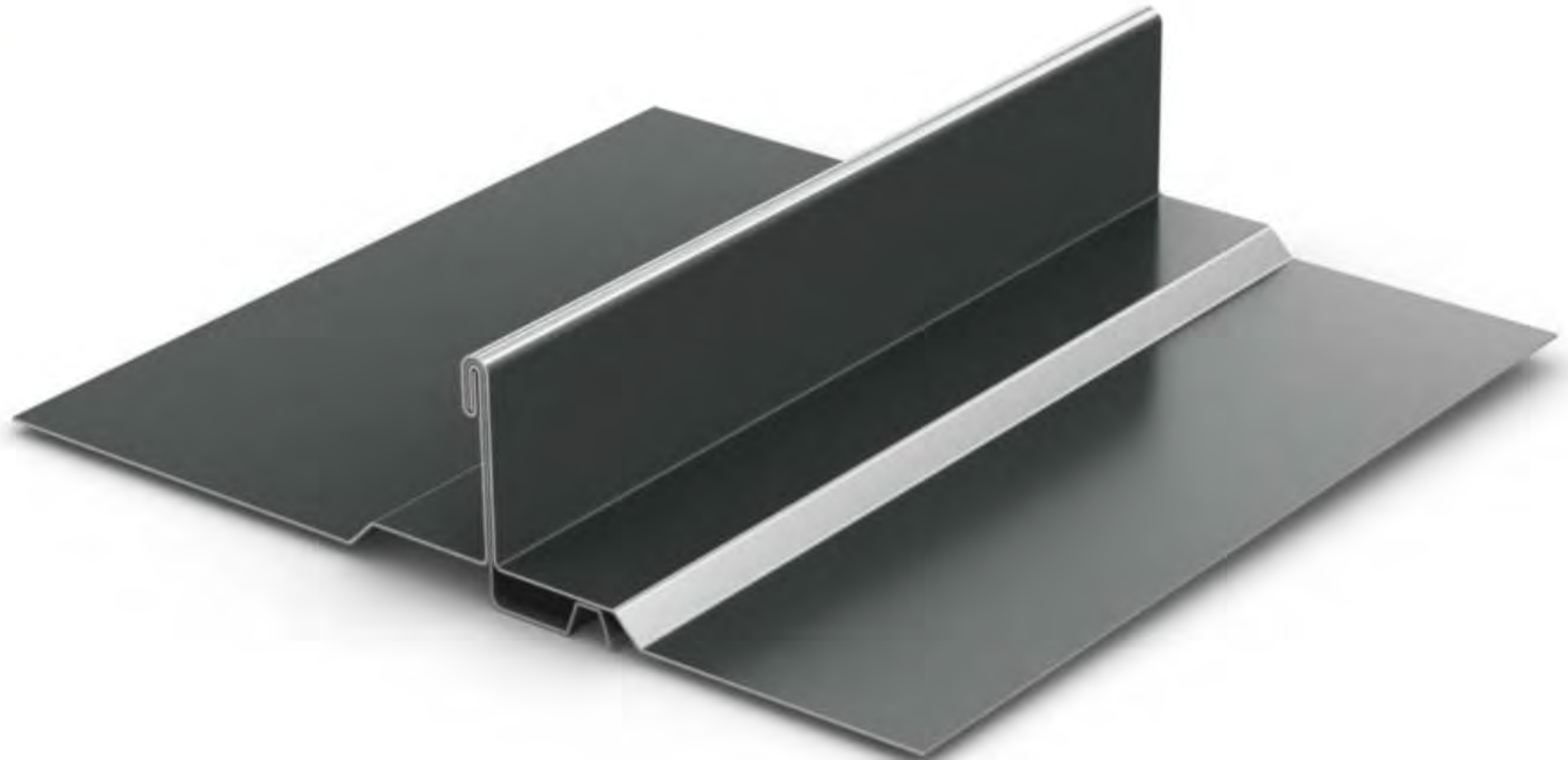
ATTACHMENT B

COLORS

Double-Lock Zee-Lock Panel

ATTACHMENT B

COLORS



ATTACHMENT B

ATTACHMENT B

Black Rundle Limestone

Print this page

ATTACHMENT B

Yoga Rectangular LED Outdoor Wall Sconce

By Abra

Call Us (877) 445-4486

Yoga Rectangular LED Outdoor Wall Sconce
By Abra

Product Options

Finish: Matte Black

Details

Mounts to a 4 inch octagonal junction box
Material: Steel
Shade Material: Frosted Acrylic
Dimmable when used with a Electronic low voltage (ELV) Dimmer (Not Included)
ADA compliant
ETL Listed Wet
Marine Grade
Made In China

Dimensions

Backplate: Width 4.53", Height 4.53"
Fixture: Width 4.53", Height 24", Depth 3.18", Weight 12Lbs

Lighting

Lamp Type	LED Built-in
Total Lumens	1785
Total Watts	28.00
Volts	120
Color Temp	3000 (Soft White)
Average Lifespan (Hours)	50,000
CRI	90
Equivalent Halogen, CFL or LED Bulb Can Be Used	No

Additional Details

Product URL:
https://www.lumens.com/yoga-rectangular-led-outdoor-wall-sconce-by-abra-ABA1926480.html
Rating: ETL Listed Wet

ITEM#: ABA1926480

Notes:

Prepared by:

Prepared for:
Project:
Room:
Placement:
Approval:

ATTACHMENT B

ELEVATION CERTIFICATE

FEDERAL EMERGENCY MANAGEMENT AGENCY
NATIONAL FLOOD INSURANCE PROGRAM

O.M.B. No 1041-0017
Expires May 31, 1991

ATTENTION: Use of this certificate does not provide a waiver of the flood insurance purchase requirement. This form is used only to provide elevation information necessary to ensure compliance with applicable community floodplain management ordinances, to determine the proper insurance premium rate, and/or to support a request for a Letter of Map Amendment or Revision (LOMA or LOMR). Instructions for completing this form can be found on the following pages.

SECTION A PROPERTY INFORMATION

FOR INSURANCE COMPANY USE

BUILDING OWNER'S NAME: DUANE AND RUTH BACON

POLICY NUMBER:

STREET ADDRESS (Including Apt., Unit, Suite and/or Bldg. Number) OR P.O. ROUTE AND BOX NUMBER: 5986 HEATHERWAY

COMPANY NAIC NUMBER:

OTHER DESCRIPTION (Lot and Block Numbers, etc.): LOT 7 BRIGADOON GLEN

CITY: BOULDER COUNTY STATE: COLO ZIP CODE: 80503

SECTION B FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

Provide the following from the proper FIRM (See Instructions):

1. COMMUNITY NUMBER	2. PANEL NUMBER	3. SUFFIX	4. DATE OF FIRM INDEX	5. FIRM ZONE	6. BASE FLOOD ELEVATION (In AO Zones, use depth)
080023	0405	F	JUNE 2, 1995	AE	5187.0

7. Indicate the elevation datum system used on the FIRM for Base Flood Elevations (BFE): [X] NGVD '29 [ ] Other (describe on back)

8. For Zones A or V, where no BFE is provided on the FIRM, and the community has established a BFE for this building site, indicate the community's BFE: _____ feet NGVD (or other FIRM datum—see Section B, Item 7).

SECTION C BUILDING ELEVATION INFORMATION

Using the Elevation Certificate Instructions, indicate the diagram number from the diagrams found on Pages 5 and 6 that best describes the subject building's reference level: 8. DW

2(a). FIRM Zones A1-A30, AE, AH, and A (with BFE). The top of the reference level floor from the selected diagram is at an elevation of 5191.0 feet NGVD (or other FIRM datum—see Section B, Item 7). OK

(b). FIRM Zones V1-V30, VE, and V (with BFE). The bottom of the lowest horizontal structural member of the reference level from the selected diagram, is at an elevation of _____ feet NGVD (or other FIRM datum—see Section B, Item 7).

(c). FIRM Zone A (without BFE). The floor used as the reference level from the selected diagram is _____ feet above [ ] or below [ ] (check one) the highest grade adjacent to the building.

(d). FIRM Zone AO. The floor used as the reference level from the selected diagram is _____ feet above [ ] or below [ ] (check one) the highest grade adjacent to the building. If no flood depth number is available, is the building's lowest floor (reference level) elevated in accordance with the community's floodplain management ordinance? [ ] Yes [ ] No [ ] Unknown

3. Indicate the elevation datum system used in determining the above reference level elevations: [X] NGVD '29 [ ] Other (describe under Comments on Page 2). *(NOTE: If the elevation datum used in measuring the elevations is different than that used on the FIRM [see Section B, Item 7], then convert the elevations to the datum system used on the FIRM and show the conversion equation under Comments on Page 2.)*

4. Elevation reference mark used appears on FIRM: [ ] Yes [X] No (See Instructions on Page 4)

5. The reference level elevation is based on: [X] actual construction [ ] construction drawings *(NOTE: Use of construction drawings is only valid if the building does not yet have the reference level floor in place, in which case this certificate will only be valid for the building during the course of construction. A post-construction Elevation Certificate will be required once construction is complete.)*

6. The elevation of the lowest grade immediately adjacent to the building is: 5184.0 feet NGVD (or other FIRM datum-see Section B, Item 7). OK

SECTION D COMMUNITY INFORMATION

If the community official responsible for verifying building elevations specifies that the reference level indicated in Section C, Item 1 is not the "lowest floor" as defined in the community's floodplain management ordinance, the elevation of the building's "lowest floor" as defined by the ordinance is: _____ feet NGVD (or other FIRM datum—see Section B, Item 7)

ATTACHMENT B

PERMIT NUMBER: 96-7 FP
BUILDING PERMIT BP#96-744

BOULDER COUNTY
FLOODPLAIN/FLOODWAY DEVELOPMENT PERMIT

DATE: 5/29/96 EFFECTIVE DATE: 5/29/96

1. Applicant Information

Name: DUANE AND RUTH BACON Phone: 651-0165 530-3969

Address: 6099 BRIGADOON DRIVE
LONGMONT, CO 80503

2. Engineers Information

Name: NONE Phone: _____

Address: _____

3. Location of Development

Name of Water Course: LEFTHAND CREEK

Floodplain Station No.: STA 451+80 (AT CROSS SECTION #95)

4. Description of Development

NEW SFR AT 6000 HEATHER WAY, LOT 7 BRIGADOON GLEN
100 YEAR FLOOD WATER SURFACE ELEVATION = 5187 FT.
LOWEST FLOOR MUST BE AT FLOOD PROTECTION ELEVATION 5189 FT.
FEMA ELEV. CERTIFICATE MUST BE COMPLETED BY PLS PRIOR TO CERT. OF OCCUPANCY (BLANK COPY ATTACHED)

5. Checklist

(✓) a. Location map (2000' scale U.S.G.S. topo)
( ) b. Development plan stamped by a Colorado Registered Professional Engineer addressing those items set forth in Section 24-602.9 of the Boulder County **Floodplain Regulations.**
( ) c. Valley cross-section at site
(✓) d. Construction and material specifications
( ) e. Description of extent to which water course will be altered
( ) f. Title report for Floodway Permit
( ) g. Floodway analysis (if required)
( ) h. Engineering report addressing those standards set forth in Section 24-603 of the Boulder County **Floodplain Regulations**
( ) i. Floodway Permit advertised (proof attached)

6. I/We hereby acknowledge and agree to the above design conditions, requirements and floodplain revisions.

Duane U Bacon
OWNER'S SIGNATURE

$50.00 FEE PAID (✓)
CHECK DATED 7/16/96

APPROVED ON: 5/29/96
DATE

BY: Curt Parker
FLOODPLAIN ADMINISTRATOR

WHITE - **Department** CANARY - **FEMA** PINK - **Applicant** GOLD - [illegible]

ATTACHMENT B

Post Office Box 471 • Boulder, Colorado 80306

Transportation Department

2045 13th Street • Boulder, Colorado 80302 • (303) 441-3900 • FAX (303) 441-4594

To: Philip Anderson, ISO/CRS Specialist

From: Dave Webster, P.E., Water Resources Engineer DW

Subject: Correction of Elevation Certificate for Bacon Residence, 5986 Heather Way, Longmont, Colorado 80503.

Date: May 7, 2001

Based on a site visit on May 7, 2001 and a follow-up discussion with the property owner, the following information was obtained:

PROPERTY ADDRESS: The address noted on the original certificate was incorrect. The correct address is provided on the attached corrected certificate.

DIAGRAM NUMBER: The structure on the property consists of a building (single family residence) in which the main floor was constructed above an unfinished space (crawl space), and most closely resembles a **Diagram Number 8**, rather than the Diagram Number 7. The certificate has been corrected to reflect this.

REFERENCE FLOOR: The structure's reference floor elevation remains 5191.0' NGVD, or 4.0 feet above the determined Base Flood Elevation of 5187.0' NGVD.

LOWEST ADJACENT GRADE (Section C6): A site visit revealed a steady drop in grade from the front of the structure to the rear, which is nearest to the Lefthand Creek. However, the lowest adjacent grade (LAG) of 5186.0' NGVD appears correct.

c: File: Elevation Certificates
File: CRS

ATTACHMENT B

ELEVATION CERTIFICATE

O.M.B. No 3067-0077
Expires May 31, 1993

FEDERAL EMERGENCY MANAGEMENT AGENCY
NATIONAL FLOOD INSURANCE PROGRAM

ATTENTION: Use of this certificate does not provide a waiver of the flood insurance purchase requirement. This form is used only to provide elevation information necessary to ensure compliance with applicable community floodplain management ordinances, to determine the proper insurance premium rate, and/or to support a request for a Letter of Map Amendment or Revision (LOMA or LOMR). **Instructions for completing this form can be found on the following pages.**

SECTION A PROPERTY INFORMATION

FOR INSURANCE COMPANY USE

BUILDING OWNER'S NAME: DUANE AND RUTH BACON

POLICY NUMBER:

STREET ADDRESS (Including Apt., Unit, Suite and/or Bldg. Number) OR P.O. ROUTE AND BOX NUMBER: 6000 HEATHERWAY

COMPANY NAIC NUMBER:

OTHER DESCRIPTION (Lot and Block Numbers, etc.): LOT 7 BRIGADOON GLEN

CITY: BOULDER COUNTY | STATE: COLO | ZIP CODE: 80503

SECTION B FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

Provide the following from the proper FIRM (See Instructions):

1. COMMUNITY NUMBER	2. PANEL NUMBER	3. SUFFIX	4. DATE OF FIRM INDEX	5. FIRM ZONE	6. BASE FLOOD ELEVATION (in AO Zones, use depth)
080023	0405	F	JUNE 2, 1995	AE	5187.0

7. Indicate the elevation datum system used on the FIRM for Base Flood Elevations (BFE): ☒ NGVD '29 ☐ Other (describe on back)
8. For Zones A or V, where no BFE is provided on the FIRM, and the community has established a BFE for this building site, indicate the community's BFE: ____.__ feet NGVD (or other FIRM datum–see Section B, Item 7).

SECTION C BUILDING ELEVATION INFORMATION

Using the Elevation Certificate Instructions, indicate the diagram number from the diagrams found on Pages 5 and 6 that best describes the subject building's reference level: 7

2(a). FIRM Zones A1-A30, AE, AH, and A (with BFE). The top of the reference level floor from the selected diagram is at an elevation of 5191.0 feet NGVD (or other FIRM datum–see Section B, Item 7).

(b). FIRM Zones V1-V30, VE, and V (with BFE). The bottom of the lowest horizontal structural member of the reference level from the selected diagram, is at an elevation of ____.__ feet NGVD (or other FIRM datum–see Section B, Item 7).

(c). FIRM Zone A (without BFE). The floor used as the reference level from the selected diagram is ____.__ feet above ☐ or below ☐ (check one) the highest grade adjacent to the building.

(d). FIRM Zone AO. The floor used as the reference level from the selected diagram is ____.__ feet above ☐ or below ☐ (check one) the highest grade adjacent to the building. If no flood depth number is available, is the building's lowest floor (reference level) elevated in accordance with the community's floodplain management ordinance? ☐ Yes ☐ No ☐ Unknown

3. Indicate the elevation datum system used in determining the above reference level elevations: ☒ NGVD '29 ☐ Other (describe under Comments on Page 2). *(NOTE: If the elevation datum used in measuring the elevations is different than that used on the FIRM [see Section B, Item 7], then convert the elevations to the datum system used on the FIRM and show the conversion equation under Comments on Page 2.)*

4. Elevation reference mark used appears on FIRM: ☐ Yes ☒ No (See Instructions on Page 4)

5. The reference level elevation is based on: ☒ actual construction ☐ construction drawings
(NOTE: Use of construction drawings is only valid if the building does not yet have the reference level floor in place, in which case this certificate will only be valid for the building during the course of construction. A post-construction Elevation Certificate will be required once construction is complete.)

6. The elevation of the lowest grade immediately adjacent to the building is: 5186.0 feet NGVD (or other FIRM datum-see Section B, Item 7).

SECTION D COMMUNITY INFORMATION

1. If the community official responsible for verifying building elevations specifies that the reference level indicated in Section C, Item 1 is not the "lowest floor" as defined in the community's floodplain management ordinance, the elevation of the building's "lowest floor" as defined by the ordinance is: ____.__ feet NGVD (or other FIRM datum–see Section B, Item 7).
2. Date of the start of construction or substantial improvement _____.

ATTACHMENT B

SECTION E CERTIFICATION

, certification is to be signed by a land surveyor, engineer, or architect who is authorized by state or local law to certify elevation information when the elevation information for Zones A1–A30, AE, AH, A (with BFE), V1–V30, VE, and V (with BFE) is required. Community officials who are authorized by local law or ordinance to provide floodplain management information, may also sign the certification. In the case of Zones AO and A (without a FEMA or community issued BFE), a building official, a property owner, or an owner's representative may also sign the certification.

Reference level diagrams 6, 7 and 8 - Distinguishing Features–If the certifier is unable to certify to breakaway/non-breakaway wall, enclosure size, location of servicing equipment, area use, wall openings, or unfinished area Feature(s), then list the Feature(s) not included in the certification under Comments below. The diagram number, Section C, Item 1, must still be entered.

I certify that the information in Sections B and C on this certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.

COLORADO REGISTERED PROFESSIONAL A. MICHAEL HASCALL LAND SURVEYOR

CERTIFIER'S NAME A. MICHAEL HASCALL LICENSE NUMBER (or Affix Seal) COLO 23560

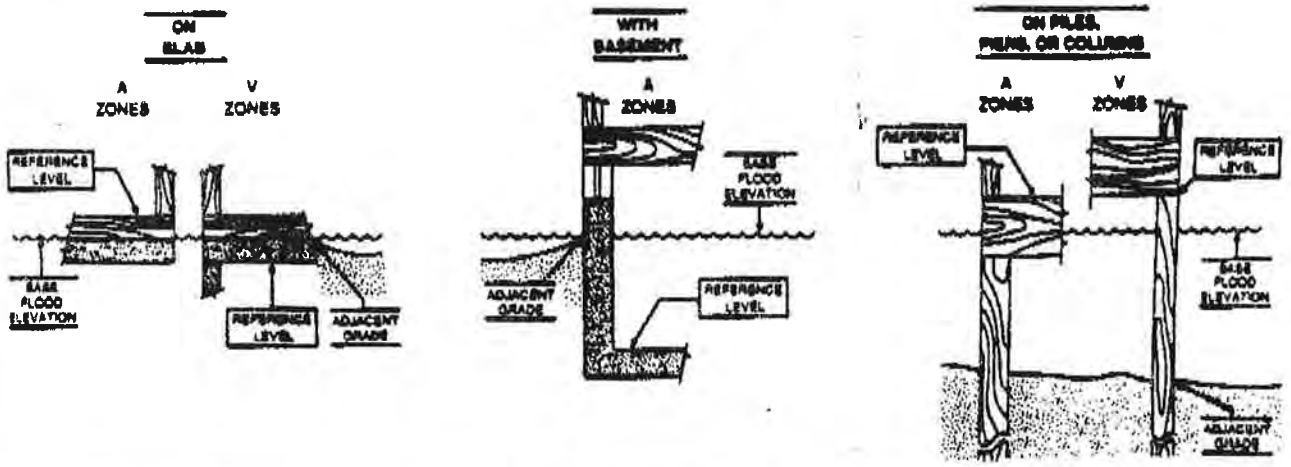
TITLE PRESIDENT COMPANY NAME HASCALL SURVEYS INC

ADDRESS 1132 N. MAIN ST CITY LONGMONT STATE CO ZIP 80501

SIGNATURE A. Michael Hascall DATE 8/23/96 PHONE 3036788324

Copies should be made of this Certificate for: 1) community official, 2) insurance agent/company, and 3) building owner.

COMMENTS:



The diagrams above illustrate the points at which the elevations should be measured in A Zones and V Zones.

Elevations for all A Zones should be measured at the top of the reference level floor.

Elevations for all V Zones should be measured at the bottom of the lowest horizontal structural member.

ATTACHMENT B

History Colorado

Kyle Callahan
Clearwater Design Studio
2975 Valmont Road, Suite 100 Boulder CO 80301

October 6, 2023

Re: Piscopio Accessory building
File Search No. 25733

At your request, the Office of Archaeology and Historic Preservation has conducted a search of the Colorado Inventory of Cultural Resources based on your specified search criteria (within the parcel boundary of the provided address), located in the following areas:

PM	T	R	S
6th	2N	70W	27

0 sites and 0 surveys were located in the search area(s).

If any site, district, building, structure, object, or survey area was identified within the search area, a spreadsheet of detailed information* accompanies this letter. Our records may not represent all cultural resources in Colorado, nor can they be considered comprehensive, as most of the state has not been surveyed for cultural resources. There is the possibility that as yet unidentified cultural resources exist within the proposed impact area.

This letter is not considered formal consultation under Section 106 of the National Historic Preservation Act (36 CFR 800) or the Colorado Register of Historic Places (CRS 24-80.1). In the event that there is federal or state agency involvement, please note that it is the responsibility of the agencies to meet the requirements of these regulations.

We look forward to consulting with you regarding the effect of the proposed project on significant cultural resources in accordance with the Advisory Council on Historic Preservation regulations titled “Protection of Historic Properties” or the Colorado Register of Historic Places, as applicable (http://www.historycolorado.org/consultation-guidance).

If you have any questions, please contact the Office of Archaeology and Historic Preservation at (303) 866-3392. Thank you for your interest in Colorado's cultural heritage.

Dawn DiPrince
State Historic Preservation Officer

*Information regarding significant archaeological resources is excluded from the Freedom of Information Act. As such, legal locations of these resources must not be included in documents for public distribution.

ATTACHMENT B

Community Planning & Permitting

Courthouse Annex • 2045 13th Street • Boulder, Colorado 80302 • Tel: 303.441.3930
Mailing Address: P.O. Box 471 • Boulder, Colorado 80306 • **www.bouldercounty.gov**

Building Safety & Inspection Services Team

M E M O

TO: Dana Yelton, Planner I
FROM: Michelle Huebner, Plans Examiner Supervisor
DATE: November 27, 2023

RE: Referral Response, SPR-23-0108: Piscopio-Huang Residential Remodel and New Accessory Structure: Site Plan Review for the deconstruction of 1,699 square feet and the addition of 45 square feet to the existing 5,848-square-foot residence and a new 1,641-square-foot residential accessory structure on a 0.83-acre parcel where the size presumed to be compatible with the neighborhood is 4,881-square-feet.

Location: 5986 Heather Way

Thank you for the referral. We have the following comments for the applicants:

1. Building permits must follow all adopted **Floodplain regulations**. If Floodplain doesn't allow development a building permit cannot be approved.

   If the Floodplain items are resolved, then:
2. **Building Permits.** A building permit, plan review and inspections approvals are required for the proposed addition. A separate building permit is required for the detached accessory structure (single family dwelling).

   The proposed accessory structure is to be used as a **dwelling** during the construction of the existing home. This accessory structure will be required to be constructed as a dwelling with a fire sprinkler system, radon system and meet BuildSmart to name a few items.

   Please refer to the county's adopted 2015 editions of the International Codes and code amendments, which can be found via the internet under the link:

   2015 Building Code Adoption & Amendments, at the following URL:
   Amendments to Boulder County Building Code effective June 6, 2022

3. **Automatic Fire Sprinkler System.** Under the 2015 International Residential Code ("IRC") as adopted by Boulder County, all new one- and two-family dwellings and

townhouses are required to be equipped with an automatic fire sprinkler system that is designed and installed in accordance with NFPA 13D or IRC Section P2904.

4. **Automatic Fire Sprinkler System.** According to R313.2.1 of the currently adopted 2015 Boulder County Building Code this addition triggers the requirement for an automatic residential fire sprinkler system to be installed throughout the home. This system shall be designed and installed in accordance with NFPA 13D or IRC Section P2904.

   > ***R313.2.1 Additions to existing one- and two-family dwellings****. An automatic residential fire sprinkler system shall be installed throughout existing one- and two-family dwellings with additions when the sum of the total floor area of the addition plus the existing one- and two-family dwelling is increased to 4,800 sq. ft. or greater. The floor area of detached structures having floor areas of 120 square feet or greater that are located less than 50 feet from the dwelling shall be included in the floor area calculated for the dwelling.*
   > Exceptions:
   > 1. One-time additions not exceeding 200 square feet in floor area, and
   > 2. Carport additions which are exempt from the definition of "Residential Floor Area" in Section 18-189D of the Boulder County Land Use Code.

5. **BuildSmart.** Please refer to the county's adoption and amendments to Chapter 11 of the IRC, the county's "BuildSmart" program, for the applicable requirements for energy conservation and sustainability for residential additions and new residential buildings. Please be aware that there are energy related requirements of this code that may require the use of renewable energy systems (such as rooftop solar systems) that will also need to be approved by your electric utility provider. In some cases, there may be limitations on the size of on-site systems allowed by your utility provider that could constrain the project design. We strongly encourage discussions between the design team and the utility company as early in the process as possible in order to identify these constraints.

6. **Design Wind and Snow Loads.** The design wind and snow loads for the property are 155 mph (Vult) and 40 psf, respectively.

7. **Ignition-Resistant Construction and Defensible Space.** Please refer to Section R327 of the Boulder County Building Code for wildfire hazard mitigation requirements, including ignition-resistant construction and defensible space.

8. **Plan Review.** The items listed above are a general summary of some of the county's building code requirements. A much more detailed plan review will be

performed at the time of building permit application, when full details are available for review, to assure that all applicable minimum building codes requirements are to be met. Our Residential Plan Check List and other Building Safety publications can be found at: Building Publications, Applications and Forms - Boulder County

If the applicants should have questions or need additional information, we'd be happy to work with them toward solutions that meet minimum building code requirements. Please call (720) 564-2640 or contact us via e-mail at building@bouldercounty.org

Boulder County

Community Planning & Permitting

Courthouse Annex • 2045 13th Street • Boulder, Colorado 80302
Mailing Address: P.O. Box 471 • Boulder, Colorado 80306
303-441-3930 • www.BoulderCounty.gov

ATTACHMENT B

December 4, 2023

To: Dana Yelton, Planner I
From: Sarah Heller, Floodplain Program Planner

Docket:	SPR-23-0108: Piscopio-Huang Residential Remodel and New Accessory Structure
Request:	Site Plan Review for the deconstruction of 1,699 square feet and the addition of 45 square feet to the existing 5,848-square-foot residence and a new 1,641-square-foot residential accessory structure on a 0.83-acre parcel where the size presumed to be compatible with the neighborhood is 4,881-square-feet.
Location:	5986 Heather Way, Section 27, Township 2N, Range 70W

The Community Planning & Permitting Department – Floodplain Management Program has reviewed the above referenced docket and has the following comments:

1. The proposed accessory structure is located within the Floodplain Overlay (FO) District, specifically within the Lefthand Creek Floodway. Construction of new permanent buildings is prohibited in the Floodway. Therefore, the project cannot be constructed as proposed.

2. The applicant proposes submitting a Letter of Map Revision (LOMR) to FEMA to change the Floodway boundary. The applicant's engineer should contact floodplainadmin@bouldercounty.gov to obtain the effective model for Lefthand Creek. This referral does not indicate that the county will approve or sign the MT-2 form for any future LOMR. The LOMR must comply with all FEMA and State of Colorado guidelines and standards for Floodways and cannot result in higher Base Flood Elevations on existing insurable structures.

3. If the applicant obtains an approved LOMR from FEMA such that the proposed accessory structure location is within the flood fringe (within the 100-year floodplain but outside the Floodway), the following requirements would apply to the new accessory structure:
    a. The structure must be adequately anchored to prevent flotation, collapse, or lateral movement resulting from hydrodynamic and hydrostatic forces;
    b. The structure must have its longitudinal axis parallel to the flow of floodwaters;
    c. Flood-resistant materials must be used up to the Flood Protection Elevation (FPE);
    d. The lowest floor and all new service equipment, including but not limited to electrical, heating, ventilation, plumbing, and air conditioning equipment must be located at or above the FPE; and

e. **At the time of Building Permit application submittal,** the applicant must submit a Floodplain Development Permit (FDP) application with the Building Permit application. The FDP application must include:
    i. A Site Plan showing the proposed building and all staging/storage areas in relation to regulatory floodplain and property boundaries; and
    ii. Construction design, stamped, signed, and dated by a Colorado-licensed Professional Engineer (P.E.) that depicts the Base Flood Elevation (BFE) and Flood Protection Elevation (FPE) on all design plans and demonstrates conformance with all applicable flood protection measures required in Land Use Code Article 4-405, including those listed above.
f. **Prior to foundation inspection**, pursuant to Article 4-405.J, a "mid-construction" FEMA Elevation Certificate must be completed by a Colorado-registered land surveyor and submitted to FloodplainAdmin@bouldercounty.gov; and
g. **Prior to final inspection or issuance of a Certificate of Occupancy**, pursuant to Article 4-405.J, a "Final Construction" FEMA Elevation Certificate must be completed by a Colorado-registered land surveyor and submitted to FloodplainAdmin@bouldercounty.gov.

4. The existing residential structure is located within the FO District. A Floodplain Development Permit (FDP) is required to remodel the existing residence.
    a. The applicant must submit to floodplainadmin@bouldercounty.gov an itemized list of project costs using the guidance found online at https://assets.bouldercounty.gov/wp-content/uploads/2018/07/floodplain-development-permit-requirements-buildings.pdf. Article 4-413 of the Boulder County Land Use Code requires nonconforming structures to track major repairs, remodeling, additions, and other improvements to determine when such work would constitute a Substantial Improvement as defined in Article 18-206. To make a Substantial Improvement determination, Boulder County compares the cost of the proposed improvement to the market value of the building (excluding land, accessory structures, landscaping, bridges, water wells, onsite wastewater treatment systems, and other incidental items). If the resulting ratio equals or exceeds 50%, the entire structure must be brought into compliance with the flood protection requirements in LUC Article 4-405. If the resulting ratio is less than 50%, the new work must meet the flood protection requirements in LUC Article 4-405. All improvements made to a structure after September 11, 2013 are cumulative towards reaching the 50% limit.
    b. Flood-resistant materials must be used up to the Flood Protection Elevation (FPE);
    c. New service equipment, including but not limited to electrical, heating, ventilation, plumbing, and air conditioning equipment must be located at or above the FPE;
    d. The crawlspace must:
        i. Have an interior grade no lower than two feet below the Lowest Adjacent Grade;

ii. Not exceed four feet in height at any point, as measured from the interior grade to the top of the foundation wall;
iii. Have an adequate drainage system that allows floodwaters to drain from the interior area; and
iv. Be "wet-floodproofed" with a minimum of two openings on at least 2 walls having a total net area of not less than one square inch for every square foot of enclosed area. The bottom of all openings must be no higher than one foot above grade.

e. **At the time of Building Permit application submittal,** the applicant must submit an FDP application with the Building Permit application. The FDP application must include:
   i. A Site Plan showing the proposed building and all staging/storage areas in relation to regulatory floodplain and property boundaries; and
   ii. Construction design, stamped, signed, and dated by a Colorado-licensed Professional Engineer (P.E.) that depicts the Base Flood Elevation (BFE) and Flood Protection Elevation (FPE) on all design plans and demonstrates conformance with all applicable flood protection measures required in Land Use Code Article 4-405, including those listed above.
   iii. Certification by a Colorado-licensed P.E. that demonstrates the retrofitting will withstand the loads associated with a 1%-annual-chance flood event.
f. The BFE for the existing residence is 5193.0 feet (NAVD88). The FPE is two feet above the BFE.
g. **Prior to final inspection or issuance of a Certificate of Occupancy**, pursuant to Article 4-405.J, a "Final Construction" FEMA Elevation Certificate must be completed by a Colorado-registered land surveyor and submitted to FloodplainAdmin@bouldercounty.gov.

Additional Information:
Portions of the property are located in the Floodway. Any future development within the Floodplain Overlay District will require an FDP and must adhere to Article 4-404B (Uses Prohibited in Floodway) and 4-404C (Uses Allowed in Floodway under Certain Conditions).

The proposed development is within a known fluvial hazard zone, which is the area a stream has occupied in recent history, could occupy, or could physically influence as it stores and transports water, sediment and debris. Parts of the proposed ditch that are outside the regulatory FO District are still within the fluvial hazard zone and may be subject to excessive erosion, sedimentation, and/or wholesale changes in the location of the stream channel. The Floodplain Management Program strongly encourages the applicant to consider scour and flood protection measures above and beyond the minimum requirements of the Land Use Code.

Please contact Sarah Heller, Floodplain Program Planner, at sheller@bouldercounty.gov to discuss this referral.

This concludes our comments at this time.

Boulder County

Community Planning & Permitting

Courthouse Annex • 2045 13th Street • Boulder, Colorado 80302
Mailing Address: P.O. Box 471 • Boulder, Colorado 80306 •
Tel: 303-441-3930 • www.BoulderCounty.gov

ATTACHMENT B

December 4, 2023

TO: Dana Yelton, Planner I; Community Planning & Permitting, Development Review Team - Zoning

FROM: Brian P. Kelly, Planner II; Community Planning & Permitting, Development Review Team – Access & Engineering

SUBJECT: Docket # SPR-23-0108: Piscopio-Huang Residential Remodel and New Accessory Structure – 5986 Heather Way.

The Development Review Team – Access & Engineering staff has reviewed the above referenced docket and has the following comments:

1. The subject property is accessed from Heather Way, an unpaved Boulder County owned but not maintained right-of-way (ROW) with a Functional Classification of Local. Legal access has been demonstrated via adjacency to this public ROW.

2. An Access Improvement and Maintenance Agreement (AIMA), which is an agreement for future maintenance responsibility, will be issued for the shared roadway during building permit review. The AIMA will be prepared by the Access & Engineering staff, signed by the property owner and notarized, and approved as part of the building permit process.

3. The driveway to the proposed accessory structure is generally in compliance with the Boulder County Multimodal Transportation Standards (MMTS, the Standards) for residential development in the plains. However, the access is located within the side yard setback. In order to comply with Standard Drawing 12 of the MMTS, the access point to Heather Way must be a minimum of 7 (side zoning setback) feet away from western lot line

4. The Earth Work and Grading Worksheet indicate 44 cubic yards of fill will be required for the proposed driveway improvements. The improved driveway must comply with the Standards for residential development in the plains, including without limitation:

    a. Table 5.5.1 – Parcel Access Design Standards (1-Lane Plains Access)
    b. Standard Drawing 11 – Private Access
    c. Standard Drawing 15 – Access Profiles

    The access drive must be between 10 and 16 feet in width.

5. The access drive to the new structure does not indicate a culvert being present, nor is there a culvert at the existing driveway to the residence. A drainage letter that meets the requirements outlined in the attached memo must be submitted to determine if culverts are needed. Driveway culverts must be a minimum 18-inch or equivalent capacity RCP or CMP in public ROW per Standard Drawing 15.

    At building permit, submit a drainage letter that determines the sizing, of any required culverts.

At building permit, submit a grading plan that clearly shows the following information: existing and proposed contours, and drainage details drainage patterns.

At building permit, revised drawings submitted for permitting must demonstrate that the proposed earthwork will not alter or increase the historic drainage patterns from the site to adjacent properties.

Be aware that Section J108 of the 2015 IBC prohibits grading within 2 feet of all property lines.

6. Appropriate erosion control measures such as erosion control logs shall be installed downslope and parallel to contours for all disturbed areas including staging areas. The location and types of erosion control shall be shown on site plans submitted for building permit approval.

7. During construction, all materials, machinery, dumpsters, and other items shall be staged on the subject property; no items shall be stored or staged on Heather Way.

8. During construction (i.e. during the day while work is being performed), all vehicles shall be parked on site or to one side of Heather Way so as to not impede the travel way.

This concludes our comments at this time.

ATTACHMENT B

Public Works

2525 13th Street • Boulder, Colorado 80304 • Tel: 303-441-3900

MEMORANDUM

November 9, 2021

Subject: Allowance of the use of Drainage Letters on Private Development and Public Capital Projects

At the discretion of the County Engineer, proposed projects may be allowed to utilize a drainage letter to satisfy the requirements of Section 204 of the Boulder County Storm Drainage Criteria Manual (SDCM), adopted November 2016. All other requirements that are not otherwise addressed by the Drainage Letter are still in force. The elements of the letter shall include, at a minimum, the following:

- Description of property location with size of property; alternately, include a vicinity map, with North arrow and nearby waterway features.
- Description of the proposed project
- Site plan showing entire property, with North arrow, scale, property size, disturbance area, and distance to waterways shown.
- Identify and address effects on adjacent or nearby major drainage features or waterways
- Existing (dashed) and proposed (solid) contours with tie-ins shown (2-foot or better resolution), and contour intervals and major contours clearly identified
- Proposed flow directions for current and proposed conditions
- Peak discharge calculations for the minor and major storm events as identified in the SDCM
- Peak flow rates to determine the sizing of drainage infrastructure, including, but not limited to, swales, inlets, storm drains, culverts, and any other infrastructure affected by the site development
- Infrastructure sizing calculations and supporting documentation
- Demonstration that detention is not required by applying one or more of the exemptions listed in SDCM section 1203.1
- Identification of potential impacts to adjacent down-gradient properties, proposed mitigation features, and certification that the project will not adversely affect downstream structures or infrastructure
- For projects that disturb an acre or more and are located within the County's MS4 permitted area, an explanation of stormwater management facilities (SWMFs) is required. The explanation may include calculations for proposed SWMF or documentation that such measures are not required.
- Lots that are within a subdivision that have an approved drainage report may reference and supply the approved drainage report as well as a statement that the lot conforms to the original drainage report criteria.

- Letter must be stamped and signed by a Colorado registered Professional Engineer in a related field
- Any other information that is necessary to satisfy drainage analysis and design for the site based on the judgement of the County Engineer.

After review of the initial letter submittal, the County Engineer may require additional information deemed necessary for adequate and appropriate drainage analysis on the site.

By: _____

Michael A. Thomas, P.E.
County Engineer, Boulder County Public Works

Effective Date: ___November 17, 2021_____

Public Health
Environmental Health Division

November 30, 2023

TO: Staff Planner, Community Planning and Permitting

FROM: Carl Job, Environmental Health Specialist

SUBJECT: SPR-23-0108: Piscopio-Huang Residential Remodel and New Accessory Structure

OWNER: PISCOPIO & HUANG

PROPERTY ADDRESS: 5986 HEATHER WAY

SEC-TOWN-RANGE: 27 -2N -70

The Boulder County Public Health – Environmental Health division has reviewed the submittals for the above referenced docket and has the following comments.

OWTS:

1. Boulder County Public Health issued a new permit for the installation of an absorption bed system on 02/29/1996. The permit was issued for an onsite wastewater treatment system (OWTS) adequate for a 3-bedroom house. Boulder County Public Health approved the installation of the OWTS on 01/31/1997.
2. The proposed scope of work will involve renovation of the existing 3-bedroom home and the construction of a new 2-bedroom residential accessory structure. The residential accessory structure will serve as a temporary residence during renovation of the primary residence. Following completion of the renovation work, the 2-bedrooms in the residential accessory structure will be converted back to a non-dwelling structure.
3. The owner or their agent must apply for an OWTS minor repair permit to connect the sewer line to the foundation of the new residential accessory structure: https://bouldercounty.gov/environment/water/septicsmart/permit-and-fee-schedule/
4. The OWTS permit must be issued prior to installation and before a building permit can be obtained. The OWTS must be installed, inspected, and approved before a Certificate of Occupancy or Final Building Inspection approval will be issued by Community Permitting and Planning.
5. Additionally, since the exiting OWTS is permitted for a total of 3-bedrooms, the Certificate of Occupancy for the renovations on the primary residence will only be issued after the residential accessory structure is converted back into a non-dwelling.
6. Setbacks between all buildings and the OWTS serving this property and OWTS serving neighboring properties, must be in accordance with the Boulder County OWTS Regulations, Table 7-1.

Avoid Damage to OWTS:

1. Heavy equipment should be restricted from the surface of the absorption field during construction to avoid soil compaction, which could cause premature absorption field malfunction. Caution should be used in conducting trenching and excavation activities so that sewer lines and other OWTS components are not damaged.

This concludes comments from the Boulder County Public Health – Environmental Health division at this time. For additional information on the OWTS application process and regulations, refer to the following website: **www.SepticSmart.org**. If you have additional questions about OWTS, please do not hesitate to email HealthOWS@bouldercounty.org

Cc: OWTS file, owner, Community Permitting and Planning

ATTACHMENT B

Community Planning & Permitting

Courthouse Annex • 2045 13th Street • Boulder, Colorado 80302
Mailing Address: P.O. Box 471 • Boulder, Colorado 80306
303-441-3930 • www.BoulderCounty.gov

MEMO TO: County Health and Parks Departments, FPD
FROM: Dana Yelton, Planner I
DATE: November 16, 2023
RE: Site Plan Review application SPR-23-0108

Docket SPR-23-0108: Piscopio-Huang Residential Remodel and New Accessory Structure

Request: Site Plan Review for the deconstruction of 1,699 square feet and the addition of 45 square feet to the existing 5,848-square-foot residence and a new 1,641-square-foot residential accessory structure on a 0.83-acre parcel where the size presumed to be compatible with the neighborhood is 4,881-square-feet.
Location: 5986 Heather Way, Section 27, Township 2N, Range 70W
Zoning: Rural Residential (RR) Zoning District
Owner/ Applicant: Anthony Piscopio & Huiqiong Huang
Agent: Kyle Callahan

Site Plan Review by the Boulder County Community Planning & Permitting Director is required for new building/grading/access or floodplain development permits in the plains and mountainous areas of unincorporated Boulder County. The subject review process considers potential significant impact to the ecosystem, surrounding land uses and infrastructure, and safety concerns due to natural hazards.

The Community Planning & Permitting staff values comments from individuals and referral agencies. Please check the appropriate response below or send a letter to the Community Planning & Permitting Department at P.O. Box 471, Boulder, Colorado 80306 or via email to planner@bouldercounty.gov. All comments will be made part of the public record and given to the applicant. Only a portion of the submitted documents may have been enclosed; you are welcome to call the Community Planning & Permitting Department at 303-441-3930 or email planner@bouldercounty.gov to request more information.

Please return responses by **December 4, 2023.**

__X__ We have reviewed the proposal and have no conflicts.
_____ Letter is enclosed.

Signed Name _____ Printed Name Jessica Fasick

Agency or Address CP&P Historic Review

Date 11/20/23

Parks & Open Space
5201 St. Vrain Road • Longmont, CO 80503
303-678-6200 • POSinfo@bouldercounty.org
www.BoulderCountyOpenSpace.org

ATTACHMENT B

TO: Dana Yelton, Community Planning & Permitting Department
FROM: Ron West, Natural Resource Planner
DATE: December 1, 2023
SUBJECT: SPR-23-0108, Piscopio-Huang, 5986 Heather Way

Staff has reviewed the submitted materials, and has visited very similar properties in the subdivision in the past. The entire lot is dominated by turf grass, horticultural trees, and existing developments. Staff has no specific resource concerns with the proposal (except a construction fence, as below). There appear to be many questions on the floodplain/floodway locations, and grading and developments within, but staff defers to the floodplain team on those complex issues.

Recommendations

A construction fence must be installed immediately south of the proposed silt fence, as shown in the Site Plan, to protect the entire southeastern property line area. This must be examined by the county before any ground disturbance begins, and must be maintained until re-vegetation is complete. No machinery entry or ground disturbance can occur south of this fence.

A Revegetation Plan is required that includes native grass species to be used, an explanation of how topsoils will be stockpiled and reused, mapped delineation of all disturbance areas (this includes construction staging areas, driveway, utility lines, and septic system), and locations of silt fence or erosion control logs down slope of disturbed areas. New horticultural plantings should emphasize xeriscaping principles (Article 7-200-B-8, Land Use Code).

ATTACHMENT B

Community Planning & Permitting

Courthouse Annex • 2045 13th Street • Boulder, Colorado 80302
Mailing Address: P.O. Box 471 • Boulder, Colorado 80306
303-441-3930 • www.BoulderCounty.gov

MEMO TO: County Health and Parks Departments, FPD
FROM: Dana Yelton, Planner I
DATE: November 16, 2023
RE: Site Plan Review application SPR-23-0108

Docket SPR-23-0108: Piscopio-Huang Residential Remodel and New Accessory Structure

Request: Site Plan Review for the deconstruction of 1,699 square feet and the addition of 45 square feet to the existing 5,848-square-foot residence and a new 1,641-square-foot residential accessory structure on a 0.83-acre parcel where the size presumed to be compatible with the neighborhood is 4,881-square-feet.
Location: 5986 Heather Way, Section 27, Township 2N, Range 70W
Zoning: Rural Residential (RR) Zoning District
Owner/ Applicant: Anthony Piscopio & Huiqiong Huang
Agent: Kyle Callahan

Site Plan Review by the Boulder County Community Planning & Permitting Director is required for new building/grading/access or floodplain development permits in the plains and mountainous areas of unincorporated Boulder County. The subject review process considers potential significant impact to the ecosystem, surrounding land uses and infrastructure, and safety concerns due to natural hazards.

The Community Planning & Permitting staff values comments from individuals and referral agencies. Please check the appropriate response below or send a letter to the Community Planning & Permitting Department at P.O. Box 471, Boulder, Colorado 80306 or via email to planner@bouldercounty.gov. All comments will be made part of the public record and given to the applicant. Only a portion of the submitted documents may have been enclosed; you are welcome to call the Community Planning & Permitting Department at 303-441-3930 or email planner@bouldercounty.gov to request more information.

Please return responses by **December 4, 2023.**

_____ We have reviewed the proposal and have no conflicts.
__X__ Comments Below

We have no issues as long as Boulder County can ensure the accessory dwelling is removed when the home remodel is finished. Otherwise, the tap will need an upgrade per District Policy 25.2.I.B.3.c. The applicant will need to submit a Tap Availability Request to the District and pay for a meter upgrade should the accessory dwelling remain.

Signed Name *Steven J. Buckbee* Printed Name Steve Buckbee

Agency or Address Left Hand Water District

Date 12-6-2023

ATTACHMENT B

Community Planning & Permitting

Courthouse Annex • 2045 13th Street • Boulder, Colorado 80302
Mailing Address: P.O. Box 471 • Boulder, Colorado 80306
303-441-3930 • www.BoulderCounty.gov

MEMO TO: County Health and Parks Departments, FPD
FROM: Dana Yelton, Planner I
DATE: November 16, 2023
RE: Site Plan Review application SPR-23-0108

Docket SPR-23-0108: Piscopio-Huang Residential Remodel and New Accessory Structure

Request: Site Plan Review for the deconstruction of 1,699 square feet and the addition of 45 square feet to the existing 5,848-square-foot residence and a new 1,641-square-foot residential accessory structure on a 0.83-acre parcel where the size presumed to be compatible with the neighborhood is 4,881-square-feet.
Location: 5986 Heather Way, Section 27, Township 2N, Range 70W
Zoning: Rural Residential (RR) Zoning District
Owner/
Applicant: Anthony Piscopio & Huiqiong Huang
Agent: Kyle Callahan

Site Plan Review by the Boulder County Community Planning & Permitting Director is required for new building/grading/access or floodplain development permits in the plains and mountainous areas of unincorporated Boulder County. The subject review process considers potential significant impact to the ecosystem, surrounding land uses and infrastructure, and safety concerns due to natural hazards.

The Community Planning & Permitting staff values comments from individuals and referral agencies. Please check the appropriate response below or send a letter to the Community Planning & Permitting Department at P.O. Box 471, Boulder, Colorado 80306 or via email to planner@bouldercounty.gov. All comments will be made part of the public record and given to the applicant. Only a portion of the submitted documents may have been enclosed; you are welcome to call the Community Planning & Permitting Department at 303-441-3930 or email planner@bouldercounty.gov to request more information.

Please return responses by **December 4, 2023.**

_X_ We have reviewed the proposal and have no conflicts.
_____ Letter is enclosed.

Signed Name LuAnn Penfold Printed Name LuAnn Penfold

Agency or Address Mountain View Fire District

Date 11-17-23

Clearwater Design Studio
ARCHITECTURE

Architecture
Planning
Interiors
Landscape Design

March 11, 2024

Board of County Commissioners Hearing
Appeal of the Land Use Director's Decision on the Site Plan Review Application
Site Plan Review – 23-0108

Purpose

Thank you all for the opportunity to discuss the fine points of this project. We have appealed the Land Use Director's determination for the recent site plan review. It is our opinion and understanding that the determination does not recognize key aspects of this site, such as the following, referenced to the sheet of the Land Use Director's determination letter:

1. **Determination Letter – page 3 of 13**
   For the maximum size presumption, the land use director has not allowed Boulder County Land Use Code section **4-806-2 b I (B) (1) (E),** which allows for demolition and rebuilding previously-existing residential floor area that exceeds the maximum allowable floor area. There is no reason given for not allowing this section.
2. **Determination letter – page 5 of 13**
   The flood plain and flood way that encroach upon this entire site are not positioned accurately and can be repositioned to take the footprint out of the flood way, as determined by our engineering team. Upon acceptance of this design by the Board of County Commissioners, we will apply for and receive a Letter of Map Revision (LOMR) from FEMA prior to application for a building permit.
3. **Determination letter – page 8 of 13**
   The location of the proposed accessory structure has been called into question by the Land Use Director. The property was purchased by the current homeowner with an existing 1,728 SF barn, which was demolished shortly after the homeowner took possession of the property. The barn is considered Non-residential floor area, and we are not suggesting that it should be considered as such. We are however recognizing that the previously existing barn was a **large building**, constructed legally in 1987, considerably larger in both footprint and massing than the residential building that we propose to erect in its previous position.

These individual issues are further elaborated below.

Project Description and background

The Piscopio family purchased Lot 7 of Brigadoon Glen, along with the existing 5,848 SF ranch home with partial second floor and garden level, and the existing 1,728 SF barn at 5986 Heather way in late December of 2018. The site and building features that the family found attractive are the generally quiet neighborhood, large lots and mature vegetation. The Piscopio family are longtime residents of Boulder County, have been members of the community for over 25 years. The family has had a profound and positive impact on the local environment and economy – having created businesses and supported major job creation over that time. It's important to recognize that they are not motivated by speculative

development but by improving the home and community to more closely align with their needs.

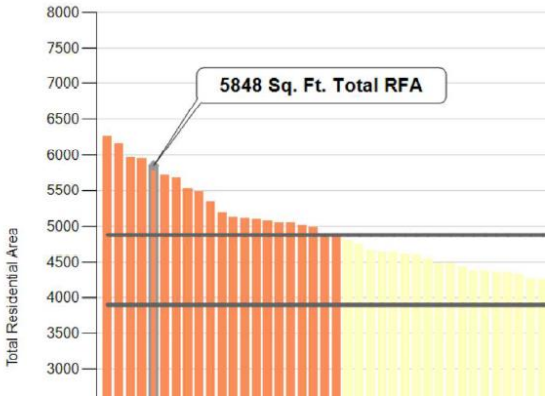
At the time of purchase, the existing home was serviceable for the Piscopio family, albeit being dated and generally low performing in terms of energy and space efficiency. The existing 1,728 SF barn – erected circa 1987 – proved to be less useful for the family's needs and was deconstructed in 2019, shortly after the home was purchased.

The project at 5986 Heather Way, described in the narrative for SPR 23-0108 and illustrated by the included site plan and Architectural Design Drawings is made up of **two related components:**

1. **<u>Project Component 1 - Remodeling the existing residence</u>**
   This part of the project has been developed in order to revise the space plan and exterior envelope energy performance. This part will be quite invasive and render the existing residence unlivable, as many existing windows, walls, and roof planes will be partly or fully deconstructed in order to achieve the level of performance required by the owners. In addition to the remodeling of the main and upper levels of the home, the owners will demolish by infill the existing garden level of the home. The Garden level floor elevation is roughly 5' below the base flood elevation for this site and 4' below the lowest adjacent grade – thus removal of the garden level floor area eliminates existing residential floor area from the flood plain. This Garden Level floor area is **existing residential floor area** per Boulder County Land Use definitions and is recognized as such by the Boulder County Assessor, as shown by the following illustrations copied from Boulder County Records:

Areas of levels in sq. ft.	
FIRST FLOOR (ABOVE GROUND) FINISHED AREA	2321
2ND FLOOR AND HIGHER FINISHED AREA	1130
GARDEN BASEMENT UNFINISHED AREA	1627
ATTACHED GARAGE AREA	770
DECK AREA	559
PORCH AREA	245

From the Neighborhood Size Analysis:



During this portion of the project, the owners will effectively **reduce** the residential floor area by an area greater than the **1,627 Square feet basement** by removing this garden level floor plus several interior and exterior renovations that remove residential floor area. Considering all demolition and addition, the net change in residential floor area proposed will be a combined **reduction of 1,714 SF.**

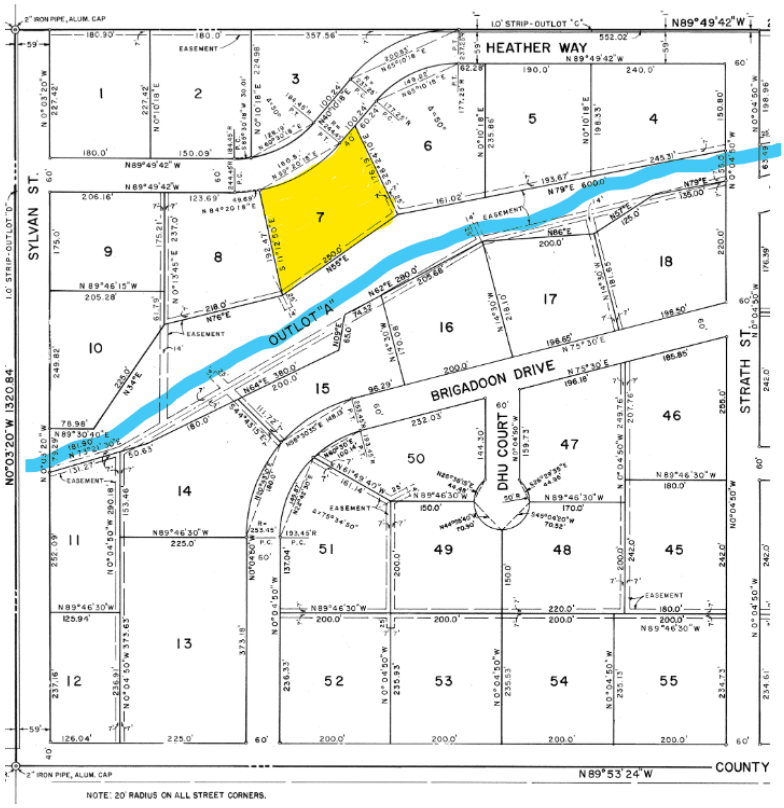
2. **Project Component 2 - Construction of a new detached accessory structure**
This part of the project has been developed in order to provide temporary accommodations and storage for the homeowners during the renovation of their home. For sequencing, this accessory structure would be built first, thus allowing the homeowners to relocate their possessions, and themselves, into this building onsite – adjacent to the existing residence. They will continue to live there, onsite, during the renovation project for their home. Upon completion of the renovation of the home, the accessory structure will be converted to a detached storage, entertainment and home office use after the family moves back into the home – all will be considered Residential Floor Area. The lower level of the accessory structure will provide space to store much of the family's possessions that are to be removed from the home. After renovation of the home, the grade level will provide necessary vehicle storage and gardening / workshop space.

   It is important to note that the combined floor area for both floors of the new accessory structure will be **1,641 SF** of residential floor area added back to the site, where **1,714 SF** has been removed, for a net **reduction of 73 SF** of residential floor area.

Lot Considerations

The Lot upon which this existing dwelling and demolished barn were built is part of the Brigadoon Glen subdivision. Brigadoon Glen is made up of a variety of lot sizes and configurations positioned north of County Road 34 (Monarch Road) and west of County Road 39 (63rd street) in north central Boulder County – approximately 7 miles northeast of the City of Boulder. Lefthand Creek crosses through the subdivision. This subject Lot 7 is one of the larger, uniquely shaped lots north of Lefthand Creek and south of Heather Way. The lot slopes down at a moderate pitch from northwest towards the southeast, approaching Lefthand creek south of the property line. The general alignment of existing contours is from southwest to northeast. The lot is fairly large and is populated with numerous existing mature trees and vegetation in a parklike setting. A snip of the original plat is shown below, with the subject lot being highlighted in yellow, and the approximate alignment of Lefthand Creek

being shown in blue.



The property is bordered on the east and west, and across Lefthand Creek, by improved lots and residential development. The entire lot is situated within the presently-defined extents of 100 year floodplain and floodway of Lefthand Creek. However, site observations and a review of the existing topography of the lot suggests that the floodway extents are incorrectly defined.

Site Plan Review Determination by the Land Use Director

The project has been submitted to Boulder County Land Use department for consideration under Article 4-806 of the Boulder County Land Use Code. All submittal plans, narratives, and other documentation are included in this appeal by reference.

The Land Use Director provided a conditional approval for the project on December 15, 2023. However, the approval denied the construction of the accessory structure, which is essential to the entire project. Of most critical concern is the director's apparent rejection of our removing **1,627 SF** of below flood elevation floor area and not allowing a practical or legal alternative to reconstruct that floor area on the site. We do not agree with the Land Use director's conclusions for Article 4-806, standard 2 and Article 4-806, standard 4. The discussion that follows addresses our considerations for the rejection by the Director and articulates why we consider the Land Use Director's determination to be erroneous and subject to amendment by the Board of County Commissioners.

1. Determination Letter – page 3 of 13

SPR Standard 2 – The size of the resulting development (residential or nonresidential) must be compatible with the general character of the defined neighborhood.

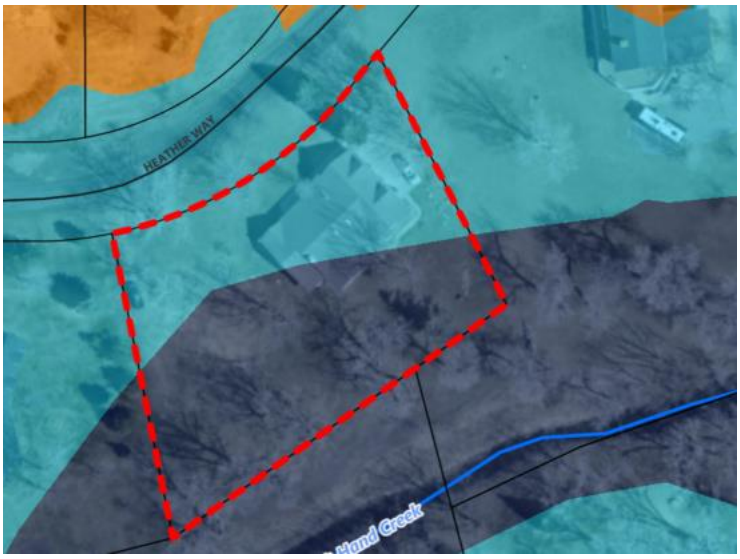
For the maximum size presumption, the land use director has not allowed Boulder County Land Use Code section 4-806-2 b I (B) (1) (E), which provides for demolition and rebuilding previously existing residential floor area that exceeds the maximum allowable floor area. The floor area proposed for removal is dangerous floor space situated below the Base Flood Elevation. The proposed reconstruction can ONLY be reconstructed above grade, as the site is completely encumbered by the floodway and flood plain. To suggest otherwise results in a taking from the client.

Site Plan Review Standard 2 b i (E)

As originally built, the existing home already exceeds the floor area maximum for the neighborhood by **967 SF**. Per Site plan review standard **4-806-2 b I (B) (1) (E)**, a homeowner is allowed to demolish and rebuild legally existing residential floor area that is not in conflict with other Site Plan Review standards. Thus, even in non-conforming situation such as this, where the existing onsite residential floor area already exceeds the presumptive maximum for the site, it would be acceptable to remove some floor area and reconstruct it elsewhere onsite. Our proposed development removes **1,714 SF** of existing floor area and builds back **1,641 SF**, for a net reduction of **73 SF**.

A key consideration is that the removal of the garden level floor area results in removing **1,627 SF** of floor area that is **Below the Base Flood Elevation** and rebuilding a similar amount of floor area above the base flood elevation and outside of the projected amended floodway. Removing residential floor area from dangerous locations, such as in the floodway and below the BFE, is a goal of Boulder County. The floor area of the Garden Level is roughly **5' below** the adjacent BFE as shown by the Elevation Certificate provided by FEMA in 1995.

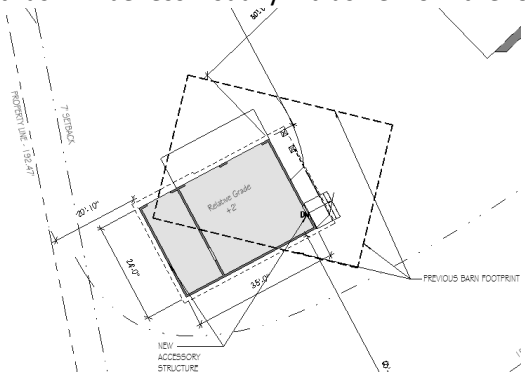
Staff's recommendation on Page 4 of the determination letter is inconsistent with the above listed Site Plan Review standard **4-806-2 b I (B) (1) (E)** and with practical considerations of development constraints having to do with the floodway and flood plain. It is our intent through this project to remove the existing floor area that is currently situated with a floor elevation below the base flood elevation and reconstruct it elsewhere on the site outside and above the Base Flood Elevation as is allowed per the land use code, Article 4-806. In the determination letter, Boulder County planning staff concludes that the maximum floor area buildable above grade at this site to be **4,221 SF** above grade, where **5,848 SF** of above grade floor area currently exists. That staff recommendation is impractical as the entire site is situated in either floodway or flood plain and as such it would be impossible to reconstruct this removed floor area below grade, as staff suggests. Please see the following diagram, by which one can see that the site is either encumbered with floodway (purple) or flood plain (light blue).



As it is our intent to remove the existing garden level from the site through infill, then reconstruction can only be affected above grade, as it is illegal to construct less than 2' above the base flood elevation in the floodplain, or to construct within the floodway at all. The floor area being reconstructed as a small detached accessory structure is the best solution, indeed the only legal and possible solution, and positioning that new reconstruction on part of the site that had been previously occupied with a legally-constructed and larger barn building for 31 years.

Site Plan Review Standard 2 b i (A)

The new accessory building will be constructed in a position that places it mostly upon the footprint of the previously existing barn structure. Below is a partial site plan – showing the footprint for the barn as a dashed line, and the footprint of the proposed accessory structure poched in gray. Heather way is located above and to the north. The new structure will be more distant from the roadway than the pre-existing barn (22'-6" further from Heather Way) and thus will be less visually intrusive than the barn. The proposed accessory structure will be **50'-6"** from the existing home where the barn was **27'-4"** from the home – thus providing more openness at the project site. The footprint of the accessory structure will cover **less than 50%** of the coverage area of the former barn structure, and thus will be less visually intrusive from the locations listed in the SPR guidelines.



The proposed accessory structure will have a footprint of **840 SF**, whereas the previous barn building had a footprint of **1,728 SF.** The smaller footprint will result in less displacement of floodwaters in the flood plain and will be removed from the floodway through the LOMR process.

2. Determination letter – page 5 of 13

SPR Standard 4 – The proposed development shall avoid natural hazards, including those on the subject property and those originating offsite with a reasonable likelihood of affecting the subject property.

The flood plain and flood way that pass over this site are not positioned correctly as has been determined by the findings of our engineering team. Upon acceptance of the design proposed in the Site Plan Review Application on November 13, 2023 by the Board of County Commissioners, we will apply for and receive a Letter of Map Revision (LOMR) from FEMA prior to application for a building permit.

Our engineering team, comprised of Don Ash and Mike Friesen of SiteWorks, in Boulder, have been retained to evaluate the extent of the floodway over this site. Based upon visual evidence, the floodway as currently shown by Boulder County seems to not relate to existing onsite topography and the positioning of the Lefthand Creek Channel. Using the floodplain model – identical to the model used by Boulder County and by FEMA - Siteworks has been able to demonstrate that repositioning the floodway to bypass the newly proposed obstruction in the detached accessory structure is in compliance with both Boulder County and FEMA considerations for the positioning, rise, and other characteristics of the Floodway. A meeting was conducted virtually on March 7, 2024 between the engineers of SiteWorks, County representatives Kevin Doyle, Kelly Watson, Sarah Heller, and the Architect. During that meeting, Siteworks was able to demonstrate real time that the floodway and flood plain could be repositioned onsite to miss the proposed new building obstruction and remain within the criteria used by FEMA to evaluate and define the floodway. Thus, we have concluded that it would be possible to amend the floodway definition through the LOMR process, redefine the floodway to miss the new building and its incidental backfill as shown by the site plan review documents submitted to Boulder County during the site plan review process.

Because the LOMR process is significantly more costly and time consuming, we have not yet begun the process. We will apply for and obtain a LOMR from FEMA prior to our submitting for and receiving a building permit for the new building. As such, we propose to address the 3 issues causing rejection of the project by the Land Use Director in his determination letter that would prevent development, listed in this letter. Upon approval of the project by the Board of County Commissioners in this appeals process, we will immediately embark upon the LOMR process.

3. Determination letter – page 8 of 13

SPR Standard 11 – The location of the accessory structure is not approved

There is no reasoning specified in the Land Use director's rejection of the location for the accessory structure, leaving us to conclude that it can only be related to standard 4. We find it inconsistent otherwise to reject any proposed development that otherwise conforms with all planning and zoning regulations, including all setbacks, height, and visibility, among others.

The proposed accessory structure is to be located in a position occupied previously by a much larger barn structure, which has been since removed. Below is a photo of the original barn – note the height of the structure being +/- 2 stories, reflective roof finish, bright white color:

Exterior finish materials for the proposed accessory structure and for the renovation of the home will be comparable to those installed on other homes in the neighborhood. Roof materials will be matte and not reflective. Exterior finishes will be stone and fiber cement boards either natural by their integral materials or otherwise finished in natural colors.

The accessory structure will be constructed in the position where the original barn was previously situated. As such, any sitework or topographic changes would only have to do with raising the structure to 2' above the base flood elevation as required for building within the flood plain. The driveway to serve this new accessory structure will occur along the alignment of the original driveway serving the barn. We believe that the maximum imported fill to raise the garage slab to be floodplain compliant (2' above the BFE) would be somewhat less than 2'. The accessory structure will be set up on a low foundation wall and thus any such required grading would be below the structure itself (foundational grading) and would not extend beyond the footprint other than as required to slope up to the slab elevation for vehicular access.

ATTACHMENT D

siteworks
creativity for
the built environment

March 12, 2024

Dana Yelton
Boulder County
Community Planning & Permitting
PO Box 471
Boulder, CO 80306

Reference: Floodway Modeling – Piscopio Residence
5986 Heather Way – Boulder County, Colorado
SiteWorks Project No. 23181A

Dear Dana:

Attached are the preliminary results of our HEC-RAS modeling for the above referenced project.

We had a meeting with Kelly Watson on February 7, 2024, to discuss the floodway modeling adjacent to the site. We discussed the limits of the floodway, and how the existing floodway modeling did not conform to the 0.5' rise under FEMA guidelines. We also shared the results of our proposed floodway modeling, which shows the limits of the floodway 70' further south on the site. The results show that the proposed building envelope is outside of the regulatory floodway.

Kelly suggested that we submit the digital model to staff for them to review and confirm the results. Once that occurs, then we would prepare the full Letter of Map Revision (LOMR) Report which would first be submitted to Staff, and then to FEMA for approval. That process would remove the building envelope from the regulatory floodway. We are separately submitting the digital data to Kelly under this letter.

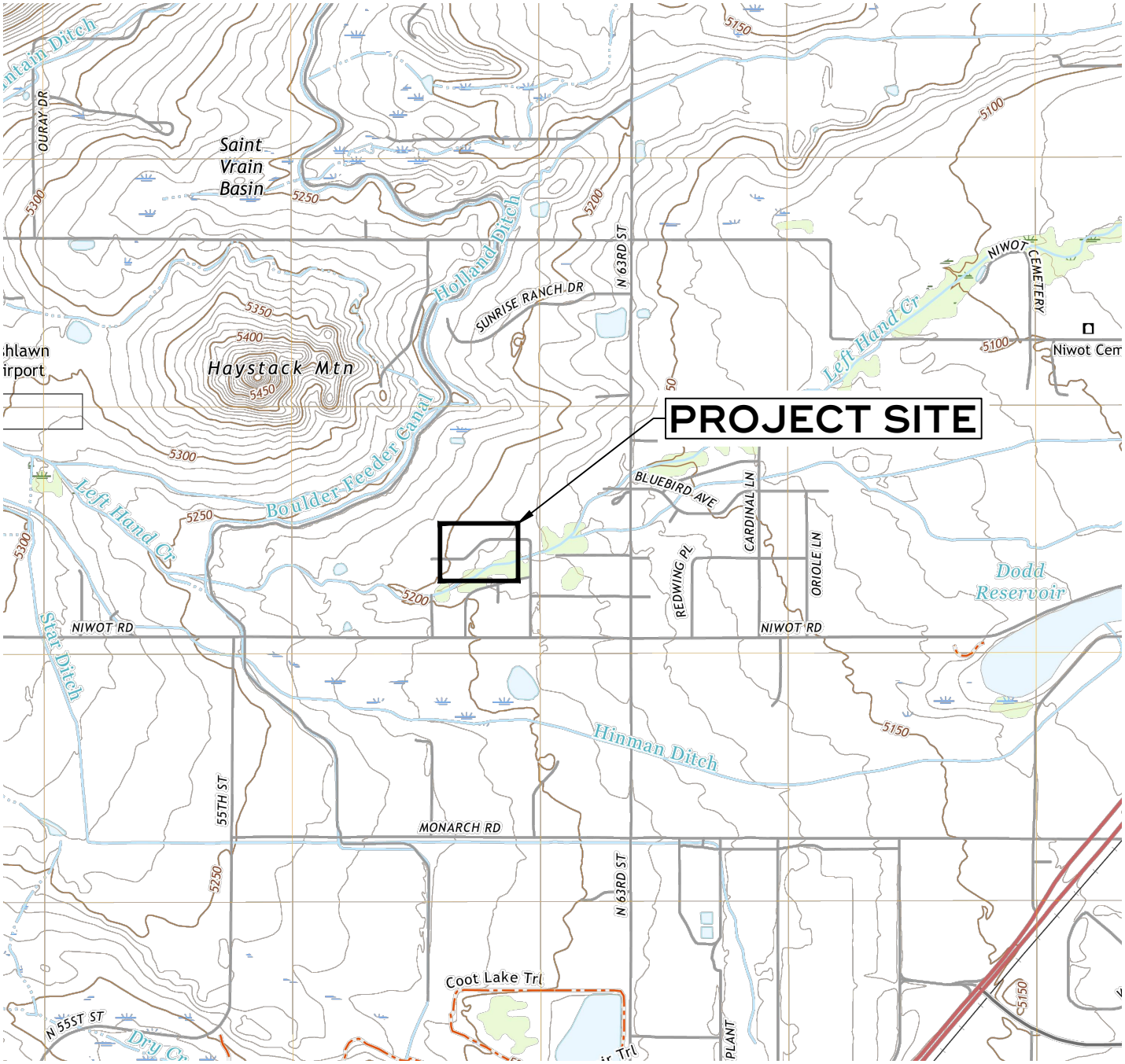
Should you have any questions or comments concerning this letter, kindly give us a call.

Sincerely,

Donald P. Ash, P.E.
Principal – SiteWorks

Attachments: Location Map
Site Plans
HEC-RAS Modeling Results
Digital Data of Above

ATTACHMENT D



1 LOCATION MAP

SCALE: 1" = 2000'

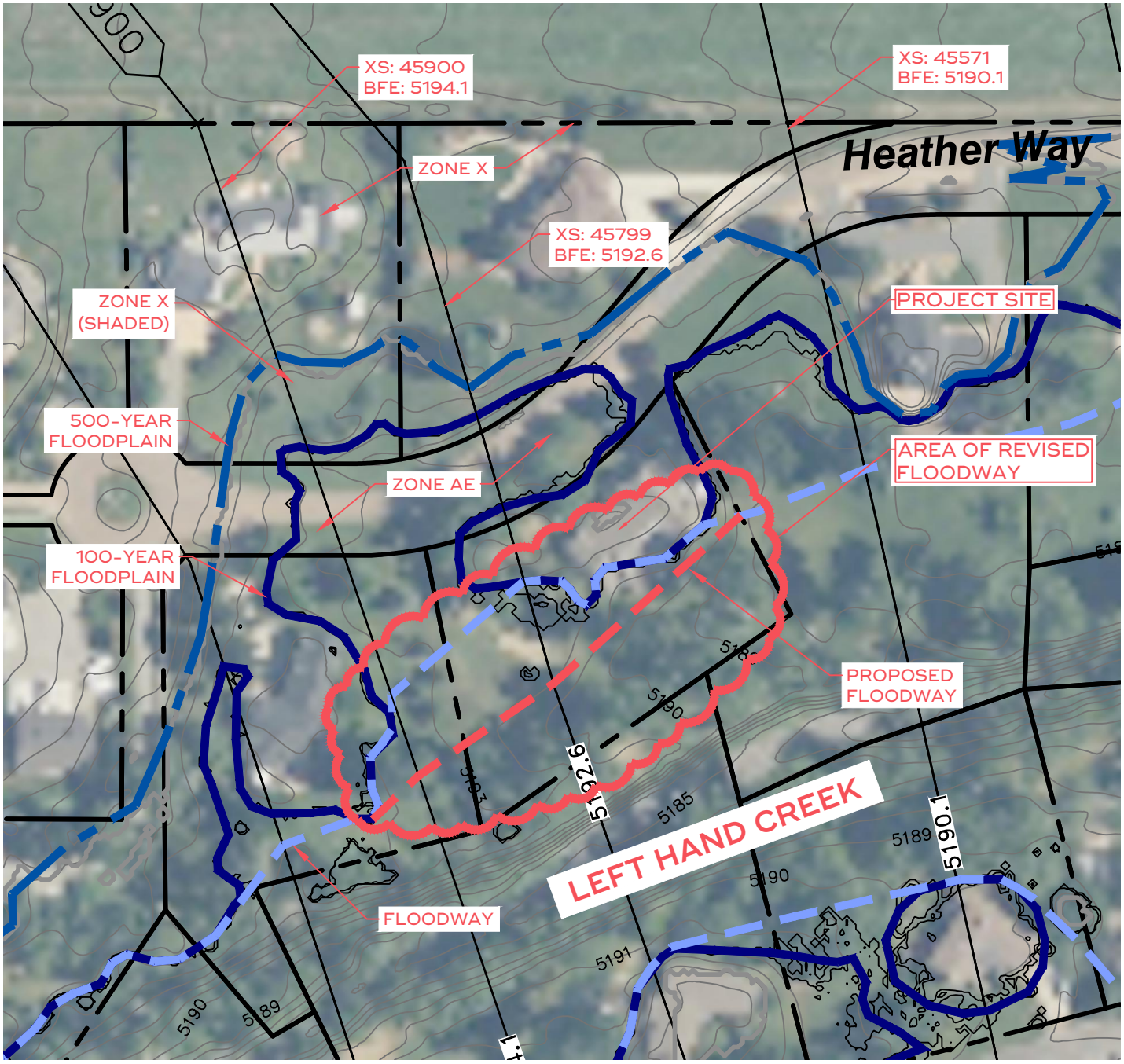
N

siteworks
creativity for the built environment

Piscopio Residence

5986 Heather Way
Boulder County, CO 80503

Project:	23181A
File:	23181A-2
Date:	03/12/24



1 SITE PLAN

SCALE: 1" = 100'

N

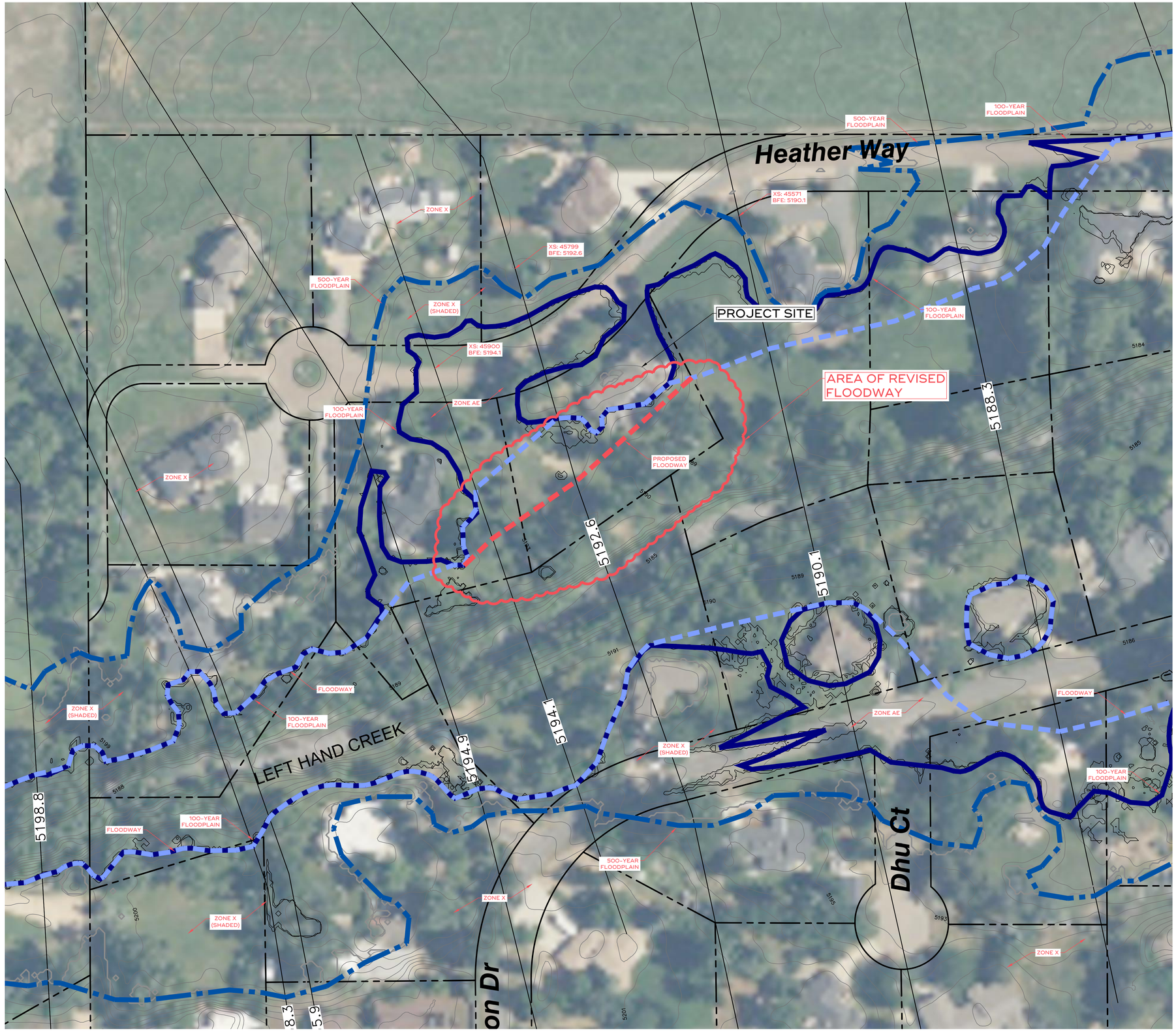
siteworks
creativity for
the built environment

Piscopio Residence

5986 Heather Way
Boulder County, CO 80503

Project:	23181A
File:	23181A-1
Date:	03/12/24

ATTACHMENT D



Scale: 1" = 50'

0 25 50 100

siteworks
creativity for the built environment

Draft
03/11/24

Piscopio Residence
5986 Heather Way
Boulder County, CO 80503

#	Date	Description

Project No: 23181A
By: JAS/MRF/DASH
File: 23181A-1.dwg

FDP Site Plan

Sheet
C-101

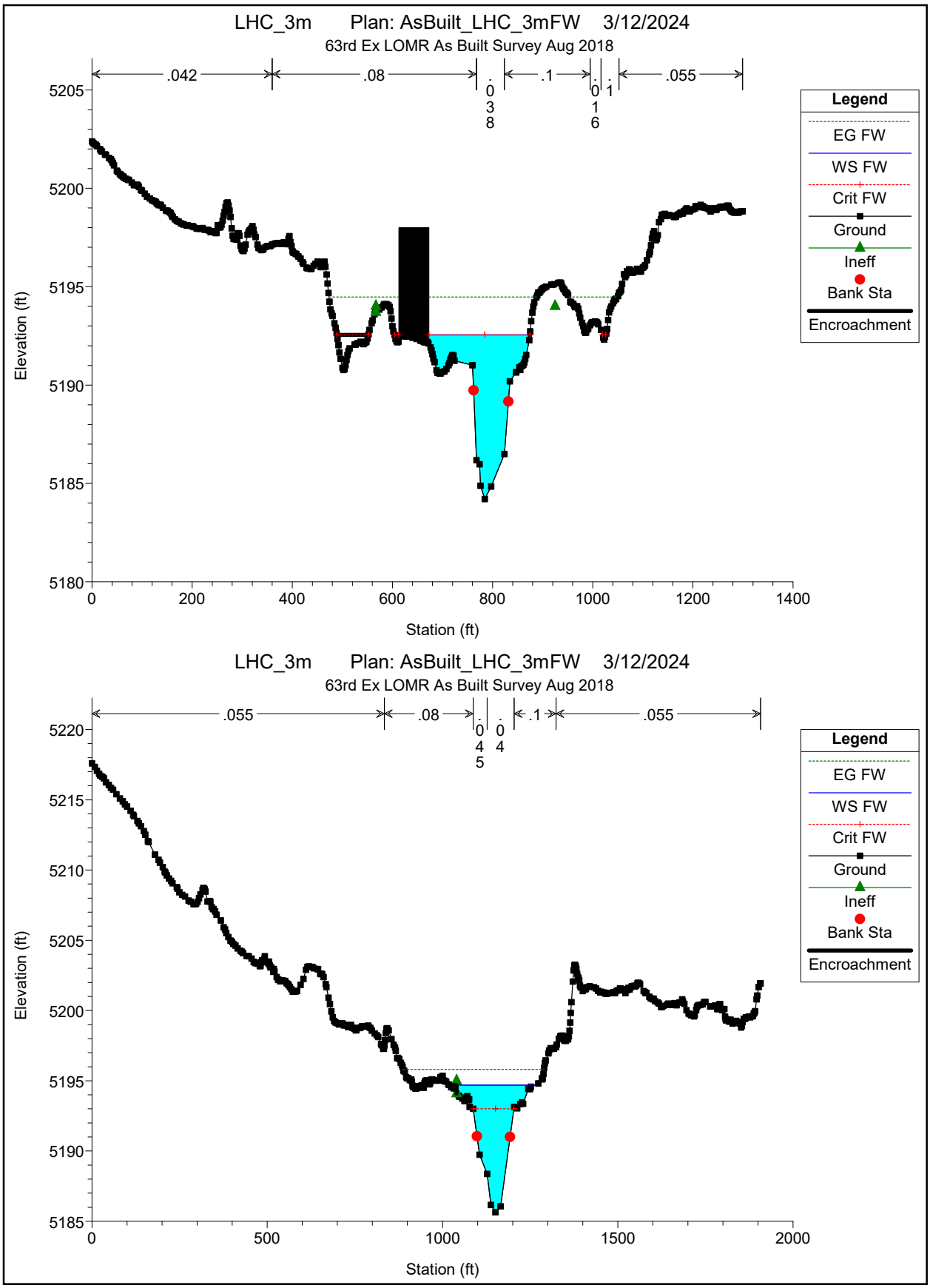
AS-BUILT LOMR HEC-RAS OUTPUT

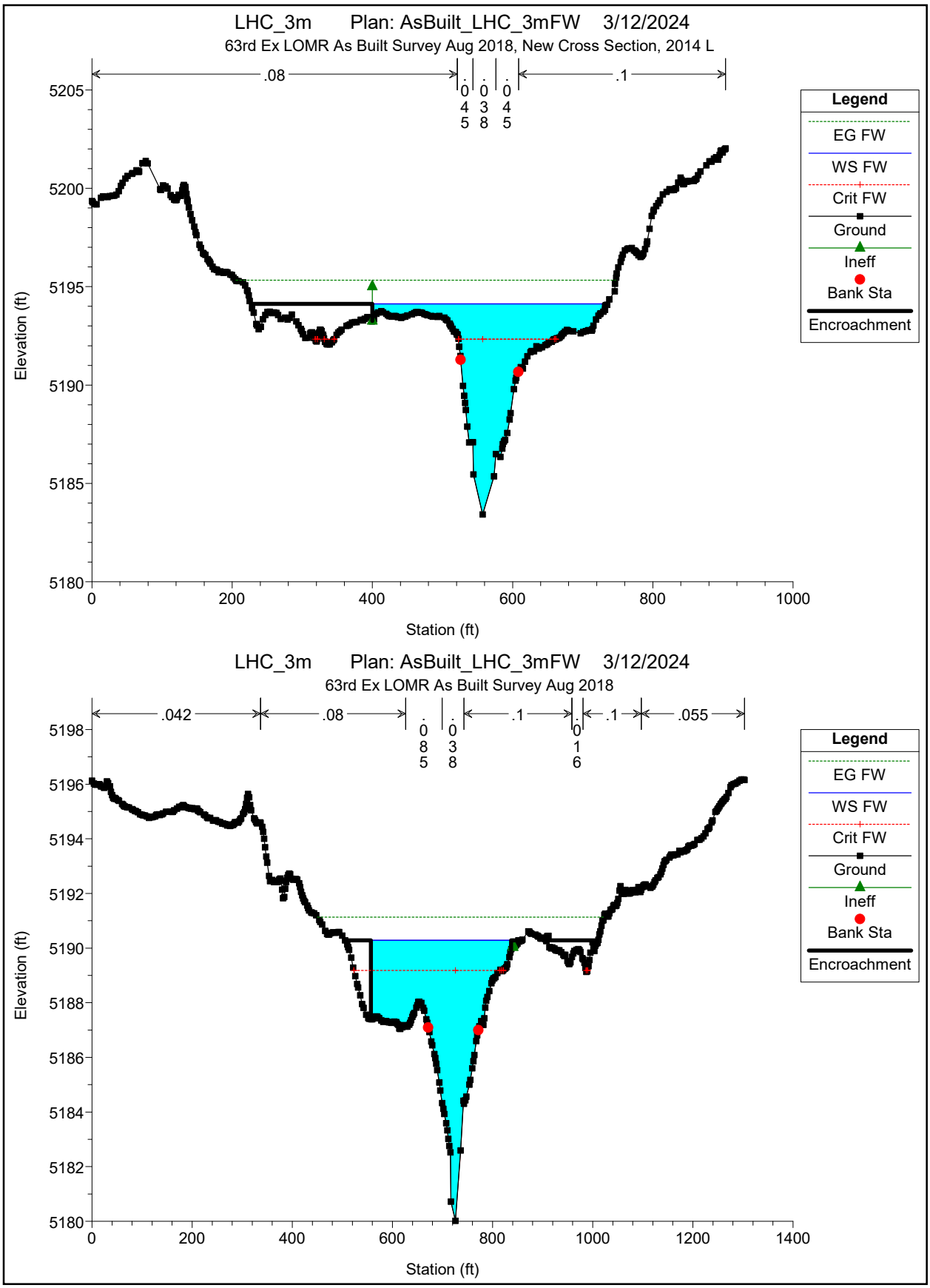
HEC-RAS Plan: AsBuilt FW River: LHC_3m Reach: LHC_3m (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
LHC_3m	49292	1%	5994.00	5225.79	5233.69	5233.69	5234.48	0.010306	10.68	1168.35	652.24	0.79
LHC_3m	49292	FW	5994.00	5225.79	5234.08	5234.08	5235.22	0.011590	11.84	906.91	326.00	0.84
LHC_3m	49118	1%	5994.00	5226.00	5230.81	5230.61	5231.34	0.012796	8.80	1149.87	685.43	0.80
LHC_3m	49118	FW	5994.00	5226.00	5231.22	5230.83	5231.89	0.012949	9.49	1035.64	426.23	0.81
LHC_3m	48665	1%	5994.00	5219.49	5226.10	5225.94	5226.91	0.010368	9.86	1034.01	622.72	0.77
LHC_3m	48665	FW	5994.00	5219.49	5226.25	5226.01	5227.15	0.011525	10.23	959.06	569.29	0.78
LHC_3m	48330	1%	5994.00	5215.46	5223.84	5223.84	5224.69	0.007126	9.47	1288.62	943.50	0.65
LHC_3m	48330	FW	5994.00	5215.46	5223.77	5223.77	5224.70	0.007650	9.75	1199.11	599.08	0.67
LHC_3m	47972	1%	5994.00	5210.63	5219.66	5219.66	5221.02	0.008666	10.54	761.52	535.99	0.70
LHC_3m	47972	FW	5994.00	5210.63	5219.66	5219.66	5221.02	0.008666	10.54	761.52	338.40	0.70
LHC_3m	47561	1%	5994.00	5207.25	5214.05	5214.05	5215.14	0.010740	10.50	861.66	337.73	0.77
LHC_3m	47561	FW	5994.00	5207.25	5214.30	5214.30	5216.33	0.015178	12.84	569.29	130.57	0.92
LHC_3m	47089	1%	5994.00	5197.53	5207.54	5207.54	5209.47	0.009385	11.83	752.36	339.60	0.74
LHC_3m	47089	FW	5994.00	5197.53	5207.24	5207.24	5209.45	0.011122	12.54	671.73	254.78	0.81
LHC_3m	46858	1%	5994.00	5192.97	5204.46	5204.46	5206.77	0.007553	13.18	749.93	422.29	0.77
LHC_3m	46858	FW	5994.00	5192.97	5204.46	5204.46	5206.77	0.007555	13.19	749.83	220.21	0.77
LHC_3m	46819		Culvert									
LHC_3m	46779	1%	5994.00	5192.22	5201.65	5201.65	5203.99	0.009247	12.55	600.52	179.22	0.88
LHC_3m	46779	FW	5994.00	5192.22	5201.65	5201.65	5203.99	0.009263	12.56	599.95	178.65	0.88
LHC_3m	46479	1%	5994.00	5188.83	5198.70	5197.36	5200.25	0.005400	10.09	615.92	107.52	0.69
LHC_3m	46479	FW	5994.00	5188.83	5198.80	5197.36	5200.30	0.005117	9.92	626.47	106.32	0.67
LHC_3m	46262	1%	5994.00	5186.51	5198.18	5195.53	5199.00	0.002794	7.43	909.43	251.40	0.48
LHC_3m	46262	FW	5994.00	5186.51	5198.33	5195.53	5199.11	0.002575	7.24	938.90	193.20	0.47
LHC_3m	46249		Bridge									
LHC_3m	46235	1%	5994.00	5186.63	5195.92	5195.92	5198.23	0.008685	12.48	521.82	155.99	0.88
LHC_3m	46235	FW	5994.00	5186.63	5195.92	5195.92	5198.23	0.008685	12.48	521.82	155.99	0.88
LHC_3m	46007	1%	5994.00	5185.64	5194.71	5193.01	5195.81	0.004364	8.69	810.41	279.04	0.59
LHC_3m	46007	FW	5994.00	5185.64	5194.70	5193.01	5195.81	0.004378	8.70	809.21	223.40	0.59
LHC_3m	45900	1%	5994.00	5183.42	5194.12	5192.33	5195.33	0.004923	9.15	912.23	509.18	0.59
LHC_3m	45900	FW	5994.00	5183.42	5194.12	5192.33	5195.33	0.004904	9.14	912.14	330.00	0.59
LHC_3m	45799	1%	5994.00	5184.20	5192.56	5192.56	5194.48	0.013202	11.62	675.64	280.51	0.79
LHC_3m	45799	FW	5994.00	5184.20	5192.55	5192.55	5194.48	0.013239	11.63	674.58	209.92	0.79
LHC_3m	45571	1%	5994.00	5180.02	5190.05	5189.21	5190.96	0.006504	8.38	1050.35	419.34	0.61
LHC_3m	45571	FW	5994.00	5180.02	5190.28	5189.19	5191.14	0.005863	8.10	1043.80	280.00	0.58
LHC_3m	45351	1%	5994.00	5178.79	5188.47	5188.47	5189.70	0.007044	10.49	1146.55	437.82	0.72
LHC_3m	45351	FW	5994.00	5178.79	5188.47	5188.47	5189.70	0.007044	10.49	1146.55	437.82	0.72
LHC_3m	45109	1%	5994.00	5176.73	5186.91	5186.91	5188.01	0.004513	10.55	1477.27	612.44	0.64
LHC_3m	45109	FW	5994.00	5176.73	5186.93	5186.93	5188.01	0.004408	10.44	1493.24	610.32	0.63
LHC_3m	45042	1%	5994.00	5175.25	5185.62	5185.62	5186.75	0.007863	9.71	1172.72	549.03	0.60
LHC_3m	45042	FW	5994.00	5175.25	5185.62	5185.62	5186.75	0.007863	9.71	1172.72	549.03	0.60
LHC_3m	45009		Mult Open									
LHC_3m	44976	1%	5994.00	5174.53	5184.46	5184.46	5185.72	0.008097	10.16	1190.61	645.95	0.70
LHC_3m	44976	FW	5994.00	5174.53	5184.48	5184.48	5185.72	0.007983	10.10	1199.88	546.58	0.70
LHC_3m	44847	1%	5994.00	5172.92	5182.20	5181.51	5183.99	0.006551	10.94	743.92	590.45	0.75
LHC_3m	44847	FW	5994.00	5172.92	5182.20	5181.51	5183.99	0.006542	10.93	730.01	350.32	0.75
LHC_3m	44652	1%	5994.00	5170.38	5179.24	5179.24	5182.10	0.015034	13.78	506.25	176.26	0.96
LHC_3m	44652	FW	5994.00	5170.38	5179.23	5179.23	5182.10	0.015128	13.81	504.51	153.68	0.96
LHC_3m	44404	1%	5994.00	5169.65	5177.14	5177.14	5178.13	0.005040	9.46	1156.15	710.75	0.64
LHC_3m	44404	FW	5994.00	5169.65	5177.19	5177.19	5178.81	0.006930	11.15	751.06	265.17	0.75
LHC_3m	44228	1%	5994.00	5164.59	5174.50	5174.50	5175.66	0.005648	10.13	1150.12	537.58	0.66
LHC_3m	44228	FW	5994.00	5164.59	5174.54	5174.54	5176.36	0.007554	11.76	793.93	227.48	0.77
LHC_3m	44111	1%	5994.00	5164.75	5172.03	5172.00	5173.57	0.010216	11.91	866.54	419.95	0.88

HEC-RAS Plan: AsBuilt FW River: LHC_3m Reach: LHC_3m (Continued)

Reach	River Sta	Profile	W.S. Elev (ft)	Prof Delta WS (ft)	E.G. Elev (ft)	Top Wdth Act (ft)	Q Left (cfs)	Q Channel (cfs)	Q Right (cfs)	Enc Sta L (ft)	Ch Sta L (ft)	Ch Sta R (ft)	Enc Sta R (ft)
LHC_3m	46858	1%	5204.46		5206.77	218.24	42.50	5094.76	856.74		957.00	998.88	
LHC_3m	46858	FW	5204.46	0.00	5206.77	218.21	42.46	5094.94	856.60	932.00	957.00	998.88	1206.00
LHC_3m	46819		Culvert										
LHC_3m	46779	1%	5201.65		5203.99	179.22	0.83	5719.98	273.18		996.00	1068.00	
LHC_3m	46779	FW	5201.65	0.00	5203.99	178.65	0.79	5720.61	272.60	995.00	996.00	1068.00	1232.00
LHC_3m	46479	1%	5198.70		5200.25	107.52	50.02	5871.56	72.43		1099.59	1186.00	
LHC_3m	46479	FW	5198.80	0.10	5200.30	106.32	54.05	5862.17	77.78	1087.59	1099.59	1186.00	1193.91
LHC_3m	46262	1%	5198.18		5199.00	197.46	256.57	5697.90	39.52		1098.42	1202.92	
LHC_3m	46262	FW	5198.33	0.15	5199.11	193.20	282.42	5663.12	48.46	1027.59	1098.42	1202.92	1220.79
LHC_3m	46249 BR U	1%	5198.18		5199.00	197.47	778.49	4991.38	218.11		1098.42	1202.92	
LHC_3m	46249 BR U	FW	5198.33	0.15	5199.11	193.20	570.92	4027.46	1391.62	1027.59	1098.42	1202.92	1220.79
LHC_3m	46249 BR D	1%	5197.95		5199.00	310.35	778.49	4991.38	218.11		1109.00	1181.14	
LHC_3m	46249 BR D	FW	5197.52	-0.43	5199.11	142.02	570.92	4027.46	1391.62	1027.59	1109.00	1181.14	1346.00
LHC_3m	46235	1%	5195.92		5198.23	117.95	125.04	5652.84	216.12		1109.00	1181.14	
LHC_3m	46235	FW	5195.92	0.00	5198.23	117.95	125.04	5652.84	216.12	1027.59	1109.00	1181.14	1346.00
LHC_3m	46007	1%	5194.71		5195.81	223.86	187.33	5616.79	189.88		1098.28	1193.00	
LHC_3m	46007	FW	5194.70	-0.01	5195.81	223.40	186.12	5618.42	189.46	1040.00	1098.28	1193.00	1271.00
LHC_3m	45900	1%	5194.12		5195.33	335.47	114.59	5553.47	325.94		525.93	608.29	
LHC_3m	45900	FW	5194.12	0.00	5195.33	330.00	114.78	5547.11	332.11	400.00	525.93	608.29	730.00
LHC_3m	45799	1%	5192.56		5194.48	210.51	362.94	5459.30	171.76		762.00	831.45	
LHC_3m	45799	FW	5192.55	0.00	5194.48	209.92	361.42	5460.40	172.19	604.00	762.00	831.45	874.00
LHC_3m	45571	1%	5190.05		5190.96	329.85	967.95	4891.59	134.47		671.53	771.46	
LHC_3m	45571	FW	5190.28	0.23	5191.14	280.00	910.07	4913.42	170.51	557.00	671.53	771.46	837.00
LHC_3m	45351	1%	5188.40		5189.39	568.32	1234.72	3991.53	767.68		707.87	767.86	
LHC_3m	45351	FW	5188.47	0.08	5189.70	437.82	1070.48	4173.71	749.81	560.00	707.87	767.86	1040.00
LHC_3m	45109	1%	5186.91		5188.01	612.44	1302.96	3741.11	949.93		544.06	586.05	
LHC_3m	45109	FW	5186.93	0.03	5188.01	610.32	1312.31	3716.21	965.47	306.85	544.06	586.05	917.17
LHC_3m	45042	1%	5185.62		5186.75	549.03	945.76	4572.31	475.93		545.46	604.03	
LHC_3m	45042	FW	5185.62	0.00	5186.75	549.03	945.76	4572.31	475.93	335.97	545.46	604.03	886.28
LHC_3m	45009		Mult Open										
LHC_3m	44976	1%	5184.46		5185.72	542.05	861.98	4637.05	494.97		535.20	604.92	
LHC_3m	44976	FW	5184.48	0.02	5185.72	543.18	868.26	4624.20	501.54	323.70	535.20	604.92	886.00
LHC_3m	44847	1%	5182.20		5183.99	435.47	136.76	5770.71	86.53		527.20	607.00	
LHC_3m	44847	FW	5182.20	0.00	5183.99	350.32	138.99	5772.43	82.58	319.00	527.20	607.00	698.00
LHC_3m	44652	1%	5179.24		5182.10	156.18	148.45	5809.85	35.70		565.63	631.59	
LHC_3m	44652	FW	5179.23	-0.01	5182.10	153.68	147.69	5810.94	35.37	307.00	565.63	631.59	738.00
LHC_3m	44404	1%	5177.14		5178.13	573.66	1321.75	4123.30	548.95		601.78	665.28	
LHC_3m	44404	FW	5177.19	0.05	5178.81	265.17	855.51	4898.31	240.19	366.00	601.78	665.28	685.28
LHC_3m	44228	1%	5174.50		5175.66	537.58	1062.53	4288.60	642.87		631.31	689.38	
LHC_3m	44228	FW	5174.54	0.04	5176.36	227.48	977.31	5008.44	8.25	463.03	631.31	689.38	690.51
LHC_3m	44111	1%	5172.03		5173.57	387.67	662.40	3889.50	1442.10		677.96	735.25	
LHC_3m	44111	FW	5172.53	0.49	5174.25	223.00	938.11	4293.94	761.96	542.00	677.96	735.25	765.00
LHC_3m	44027	1%	5171.50		5172.81	469.27	857.36	4548.23	588.41		691.52	753.47	
LHC_3m	44027	FW	5171.87	0.37	5173.21	228.16	794.63	4720.29	479.08	518.66	691.52	753.47	774.82
LHC_3m	43896	1%	5170.60		5171.62	588.94	1354.91	3964.23	674.87		689.73	750.54	
LHC_3m	43896	FW	5170.57	-0.03	5172.25	248.46	1096.82	4686.31	210.87	439.78	689.73	750.54	759.24
LHC_3m	43797	1%	5168.56		5169.46	638.19	1696.42	3387.53	910.05		600.32	650.00	
LHC_3m	43797	FW	5168.99	0.44	5170.22	330.56	2083.71	3904.92	5.37	320.00	600.32	650.00	650.56
LHC_3m	43681	1%	5167.31		5168.43	509.10	1025.25	4422.11	546.63		538.17	597.63	
LHC_3m	43681	FW	5167.38	0.07	5168.99	247.63	960.57	5033.44		350.00	538.17	597.63	597.63
LHC_3m	43611	1%	5165.77		5166.77	591.76	1699.98	3671.14	622.89		628.02	681.53	
LHC_3m	43611	FW	5165.89	0.11	5167.33	281.53	1791.91	4202.09		400.00	628.02	681.53	681.53
LHC_3m	43308	1%	5160.84		5164.01	126.24	74.21	5839.54	80.25		707.66	763.84	
LHC_3m	43308	FW	5160.84	0.00	5164.01	125.90	74.44	5839.47	80.09	385.00	707.66	763.84	831.94
LHC_3m	43224	1%	5160.80		5162.94	176.36	463.29	5416.05	114.65		916.22	971.84	
LHC_3m	43224	FW	5160.80	0.00	5162.94	175.54	462.28	5417.24	114.47	791.87	916.22	971.84	1001.62
LHC_3m	43195	1%	5161.20		5162.25	124.10	407.63	5519.08	67.29		746.85	820.49	
LHC_3m	43195	FW	5161.19	-0.01	5162.25	124.08	395.28	5531.42	67.30	710.00	746.85	820.49	834.08
LHC_3m	43154 BR U	1%	5161.05		5162.18	115.76	457.39	5460.13	76.48		746.85	820.49	


LHC_3m Plan: AsBuilt_LHC_3mFW 3/12/2024
63rd Ex LOMR As Built Survey Aug 2018
.042
.08
.038
.1
.016
.1
.055
Elevation (ft)
5205
5200
5195
5190
5185
5180
0
200
400
600
800
1000
1200
1400
Station (ft)
Legend
EG FW
WS FW
Crit FW
Ground
Ineff
Bank Sta
Encroachment
LHC_3m Plan: AsBuilt_LHC_3mFW 3/12/2024
63rd Ex LOMR As Built Survey Aug 2018
.055
.08
.045
.04
.1
.055
Elevation (ft)
5220
5215
5210
5205
5200
5195
5190
5185
0
500
1000
1500
2000
Station (ft)
Legend
EG FW
WS FW
Crit FW
Ground
Ineff
Bank Sta
Encroachment


LHC_3m Plan: AsBuilt_LHC_3mFW 3/12/2024
63rd Ex LOMR As Built Survey Aug 2018, New Cross Section, 2014 L
.08
.045
.038
.045
.1
Legend
EG FW
WS FW
Crit FW
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
LHC_3m Plan: AsBuilt_LHC_3mFW 3/12/2024
63rd Ex LOMR As Built Survey Aug 2018
.042
.08
.085
.038
.1
.016
.1
.055
Legend
EG FW
WS FW
Crit FW
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

Plan: AsBuilt FW LHC_3m LHC_3m RS: 46007 Profile: 1%

E.G. Elev (ft)	5195.81	Element	Left OB	Channel	Right OB
Vel Head (ft)	1.10	Wt. n-Val.	0.057	0.041	0.055
W.S. Elev (ft)	5194.71	Reach Len. (ft)	102.00	102.00	102.00
Crit W.S. (ft)	5193.01	Flow Area (sq ft)	80.43	646.65	83.33
E.G. Slope (ft/ft)	0.004364	Area (sq ft)	90.38	646.65	83.33
Q Total (cfs)	5994.00	Flow (cfs)	187.33	5616.79	189.88
Top Width (ft)	279.04	Top Width (ft)	113.46	94.72	70.86
Vel Total (ft/s)	7.40	Avg. Vel. (ft/s)	2.33	8.69	2.28
Max Chl Dpth (ft)	9.07	Hydr. Depth (ft)	1.38	6.83	1.18
Conv. Total (cfs)	90731.9	Conv. (cfs)	2835.6	85022.1	2874.2
Length Wtd. (ft)	102.00	Wetted Per. (ft)	58.63	95.57	71.11
Min Ch El (ft)	5185.64	Shear (lb/sq ft)	0.37	1.84	0.32
Alpha	1.30	Stream Power (lb/ft s)	0.87	16.01	0.73
Frctn Loss (ft)	0.47	Cum Volume (acre-ft)	176.83	89.09	103.00
C & E Loss (ft)	0.01	Cum SA (acres)	115.17	15.08	67.22

Plan: AsBuilt FW LHC_3m LHC_3m RS: 46007 Profile: FW

E.G. Elev (ft)	5195.81	Element	Left OB	Channel	Right OB
Vel Head (ft)	1.11	Wt. n-Val.	0.057	0.041	0.055
W.S. Elev (ft)	5194.70	Reach Len. (ft)	102.00	102.00	102.00
Crit W.S. (ft)	5193.01	Flow Area (sq ft)	80.12	646.14	82.95
E.G. Slope (ft/ft)	0.004378	Area (sq ft)	80.12	646.14	82.95
Q Total (cfs)	5994.00	Flow (cfs)	186.12	5618.42	189.46
Top Width (ft)	223.40	Top Width (ft)	58.28	94.72	70.40
Vel Total (ft/s)	7.41	Avg. Vel. (ft/s)	2.32	8.70	2.28
Max Chl Dpth (ft)	9.06	Hydr. Depth (ft)	1.37	6.82	1.18
Conv. Total (cfs)	90589.3	Conv. (cfs)	2812.8	84913.1	2863.4
Length Wtd. (ft)	102.00	Wetted Per. (ft)	59.23	95.57	70.65
Min Ch El (ft)	5185.64	Shear (lb/sq ft)	0.37	1.85	0.32
Alpha	1.30	Stream Power (lb/ft s)	0.86	16.07	0.73
Frctn Loss (ft)	0.47	Cum Volume (acre-ft)	105.44	92.37	72.31
C & E Loss (ft)	0.01	Cum SA (acres)	49.55	15.08	35.38

Plan: AsBuilt FW LHC_3m LHC_3m RS: 45900 Profile: 1%

E.G. Elev (ft)	5195.33	Element	Left OB	Channel	Right OB
Vel Head (ft)	1.21	Wt. n-Val.	0.069	0.042	0.099
W.S. Elev (ft)	5194.12	Reach Len. (ft)	109.00	109.00	109.00
Crit W.S. (ft)	5192.33	Flow Area (sq ft)	89.11	606.80	216.32
E.G. Slope (ft/ft)	0.004923	Area (sq ft)	276.71	606.80	216.32
Q Total (cfs)	5994.00	Flow (cfs)	114.59	5553.47	325.94
Top Width (ft)	509.18	Top Width (ft)	299.64	82.36	127.18
Vel Total (ft/s)	6.57	Avg. Vel. (ft/s)	1.29	9.15	1.51
Max Chl Dpth (ft)	10.70	Hydr. Depth (ft)	0.71	7.37	1.70
Conv. Total (cfs)	85430.9	Conv. (cfs)	1633.2	79152.1	4645.5
Length Wtd. (ft)	109.00	Wetted Per. (ft)	126.17	84.96	127.31
Min Ch El (ft)	5183.42	Shear (lb/sq ft)	0.22	2.19	0.52
Alpha	1.80	Stream Power (lb/ft s)	0.28	20.09	0.79
Frctn Loss (ft)	0.78	Cum Volume (acre-ft)	176.40	87.62	102.65
C & E Loss (ft)	0.07	Cum SA (acres)	114.69	14.87	66.98

Plan: AsBuilt FW LHC_3m LHC_3m RS: 45900 Profile: FW

E.G. Elev (ft)	5195.33	Element	Left OB	Channel	Right OB
Vel Head (ft)	1.20	Wt. n-Val.	0.069	0.042	0.099
W.S. Elev (ft)	5194.12	Reach Len. (ft)	109.00	109.00	109.00
Crit W.S. (ft)	5192.33	Flow Area (sq ft)	89.54	607.08	215.52
E.G. Slope (ft/ft)	0.004904	Area (sq ft)	89.54	607.08	215.52
Q Total (cfs)	5994.00	Flow (cfs)	114.78	5547.11	332.11
Top Width (ft)	330.00	Top Width (ft)	125.93	82.36	121.71
Vel Total (ft/s)	6.57	Avg. Vel. (ft/s)	1.28	9.14	1.54
Max Chl Dpth (ft)	10.70	Hydr. Depth (ft)	0.71	7.37	1.77
Conv. Total (cfs)	85595.0	Conv. (cfs)	1639.1	79213.3	4742.6
Length Wtd. (ft)	109.00	Wetted Per. (ft)	127.04	84.96	122.20
Min Ch El (ft)	5183.42	Shear (lb/sq ft)	0.22	2.19	0.54
Alpha	1.79	Stream Power (lb/ft s)	0.28	19.99	0.83
Frctn Loss (ft)	0.78	Cum Volume (acre-ft)	105.25	90.91	71.96
C & E Loss (ft)	0.07	Cum SA (acres)	49.34	14.87	35.15

Plan: AsBuilt FW LHC_3m LHC_3m RS: 45799 Profile: 1%

E.G. Elev (ft)	5194.48	Element	Left OB	Channel	Right OB
Vel Head (ft)	1.92	Wt. n-Val.	0.080	0.052	0.100
W.S. Elev (ft)	5192.56	Reach Len. (ft)	243.54	227.94	207.48
Crit W.S. (ft)	5192.56	Flow Area (sq ft)	133.84	469.94	71.86
E.G. Slope (ft/ft)	0.013202	Area (sq ft)	179.65	469.94	72.80
Q Total (cfs)	5994.00	Flow (cfs)	362.94	5459.30	171.76
Top Width (ft)	280.51	Top Width (ft)	161.15	69.45	49.91
Vel Total (ft/s)	8.87	Avg. Vel. (ft/s)	2.71	11.62	2.39
Max Chl Dpth (ft)	8.36	Hydr. Depth (ft)	1.37	6.77	1.67
Conv. Total (cfs)	52168.0	Conv. (cfs)	3158.8	47514.3	1494.9
Length Wtd. (ft)	229.15	Wetted Per. (ft)	99.23	71.29	43.38
Min Ch El (ft)	5184.20	Shear (lb/sq ft)	1.11	5.43	1.37
Alpha	1.57	Stream Power (lb/ft s)	3.01	63.11	3.26
Frctn Loss (ft)	2.26	Cum Volume (acre-ft)	175.83	86.27	102.29
C & E Loss (ft)	0.30	Cum SA (acres)	114.11	14.68	66.76

Plan: AsBuilt FW LHC_3m LHC_3m RS: 45799 Profile: FW

E.G. Elev (ft)	5194.48	Element	Left OB	Channel	Right OB
Vel Head (ft)	1.92	Wt. n-Val.	0.080	0.052	0.100
W.S. Elev (ft)	5192.55	Reach Len. (ft)	243.54	227.94	207.48
Crit W.S. (ft)	5192.55	Flow Area (sq ft)	133.37	469.60	71.62
E.G. Slope (ft/ft)	0.013239	Area (sq ft)	133.37	469.60	71.62
Q Total (cfs)	5994.00	Flow (cfs)	361.42	5460.40	172.19
Top Width (ft)	209.92	Top Width (ft)	97.92	69.45	42.55
Vel Total (ft/s)	8.89	Avg. Vel. (ft/s)	2.71	11.63	2.40
Max Chl Dpth (ft)	8.35	Hydr. Depth (ft)	1.36	6.76	1.68
Conv. Total (cfs)	52094.8	Conv. (cfs)	3141.1	47457.2	1496.5
Length Wtd. (ft)	229.01	Wetted Per. (ft)	99.16	71.29	42.95
Min Ch El (ft)	5184.20	Shear (lb/sq ft)	1.11	5.44	1.38
Alpha	1.57	Stream Power (lb/ft s)	3.01	63.30	3.31
Frctn Loss (ft)	2.19	Cum Volume (acre-ft)	104.97	89.56	71.60
C & E Loss (ft)	0.32	Cum SA (acres)	49.06	14.68	34.95

Plan: AsBuilt FW LHC_3m LHC_3m RS: 45571 Profile: 1%

E.G. Elev (ft)	5190.96	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.91	Wt. n-Val.	0.081	0.048	0.100
W.S. Elev (ft)	5190.05	Reach Len. (ft)	221.29	219.31	217.64
Crit W.S. (ft)	5189.21	Flow Area (sq ft)	374.01	583.53	92.82
E.G. Slope (ft/ft)	0.006504	Area (sq ft)	374.01	583.53	118.80
Q Total (cfs)	5994.00	Flow (cfs)	967.95	4891.59	134.47
Top Width (ft)	419.34	Top Width (ft)	160.23	99.93	159.18
Vel Total (ft/s)	5.71	Avg. Vel. (ft/s)	2.59	8.38	1.45
Max Chl Dpth (ft)	10.03	Hydr. Depth (ft)	2.33	5.84	1.33
Conv. Total (cfs)	74325.5	Conv. (cfs)	12002.5	60655.6	1667.4
Length Wtd. (ft)	219.55	Wetted Per. (ft)	160.38	101.96	69.83
Min Ch El (ft)	5180.02	Shear (lb/sq ft)	0.95	2.32	0.54
Alpha	1.80	Stream Power (lb/ft s)	2.45	19.48	0.78
Frctn Loss (ft)	1.45	Cum Volume (acre-ft)	174.28	83.52	101.84
C & E Loss (ft)	0.02	Cum SA (acres)	113.21	14.24	66.27

Plan: AsBuilt FW LHC_3m LHC_3m RS: 45571 Profile: FW

E.G. Elev (ft)	5191.14	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.85	Wt. n-Val.	0.082	0.048	0.100
W.S. Elev (ft)	5190.28	Reach Len. (ft)	221.29	219.31	217.64
Crit W.S. (ft)	5189.19	Flow Area (sq ft)	328.94	606.90	107.97
E.G. Slope (ft/ft)	0.005863	Area (sq ft)	328.94	606.90	107.97
Q Total (cfs)	5994.00	Flow (cfs)	910.07	4913.42	170.51
Top Width (ft)	280.00	Top Width (ft)	114.53	99.93	65.54
Vel Total (ft/s)	5.74	Avg. Vel. (ft/s)	2.77	8.10	1.58
Max Chl Dpth (ft)	10.26	Hydr. Depth (ft)	2.87	6.07	1.65
Conv. Total (cfs)	78280.5	Conv. (cfs)	11885.4	64168.3	2226.8
Length Wtd. (ft)	219.51	Wetted Per. (ft)	117.47	101.96	66.02
Min Ch El (ft)	5180.02	Shear (lb/sq ft)	1.02	2.18	0.60
Alpha	1.67	Stream Power (lb/ft s)	2.84	17.64	0.95
Frctn Loss (ft)	1.40	Cum Volume (acre-ft)	103.67	86.74	71.18
C & E Loss (ft)	0.04	Cum SA (acres)	48.46	14.24	34.69

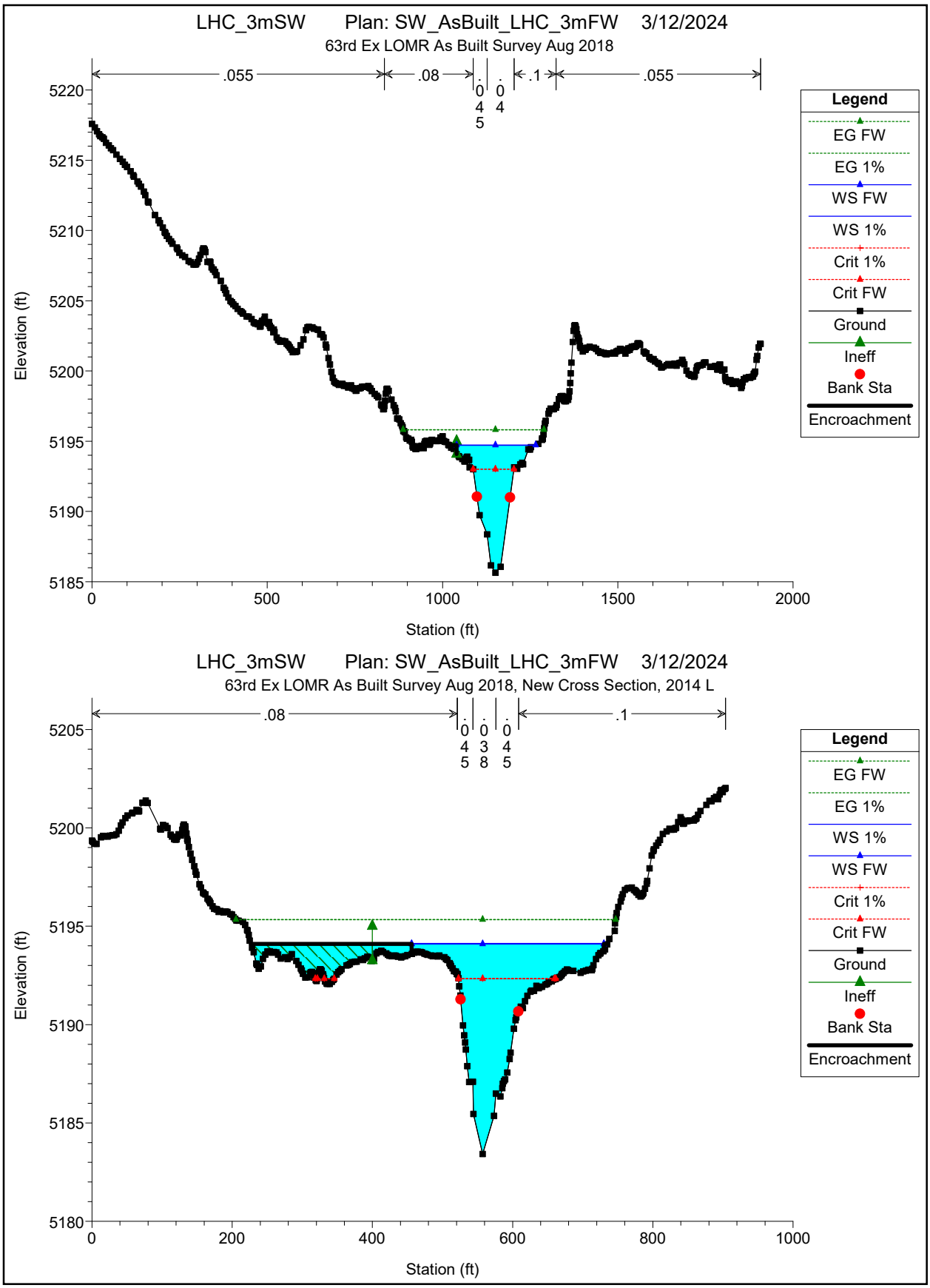
PROPOSED FLOODWAY REVISIONS
HEC-RAS OUTPUT

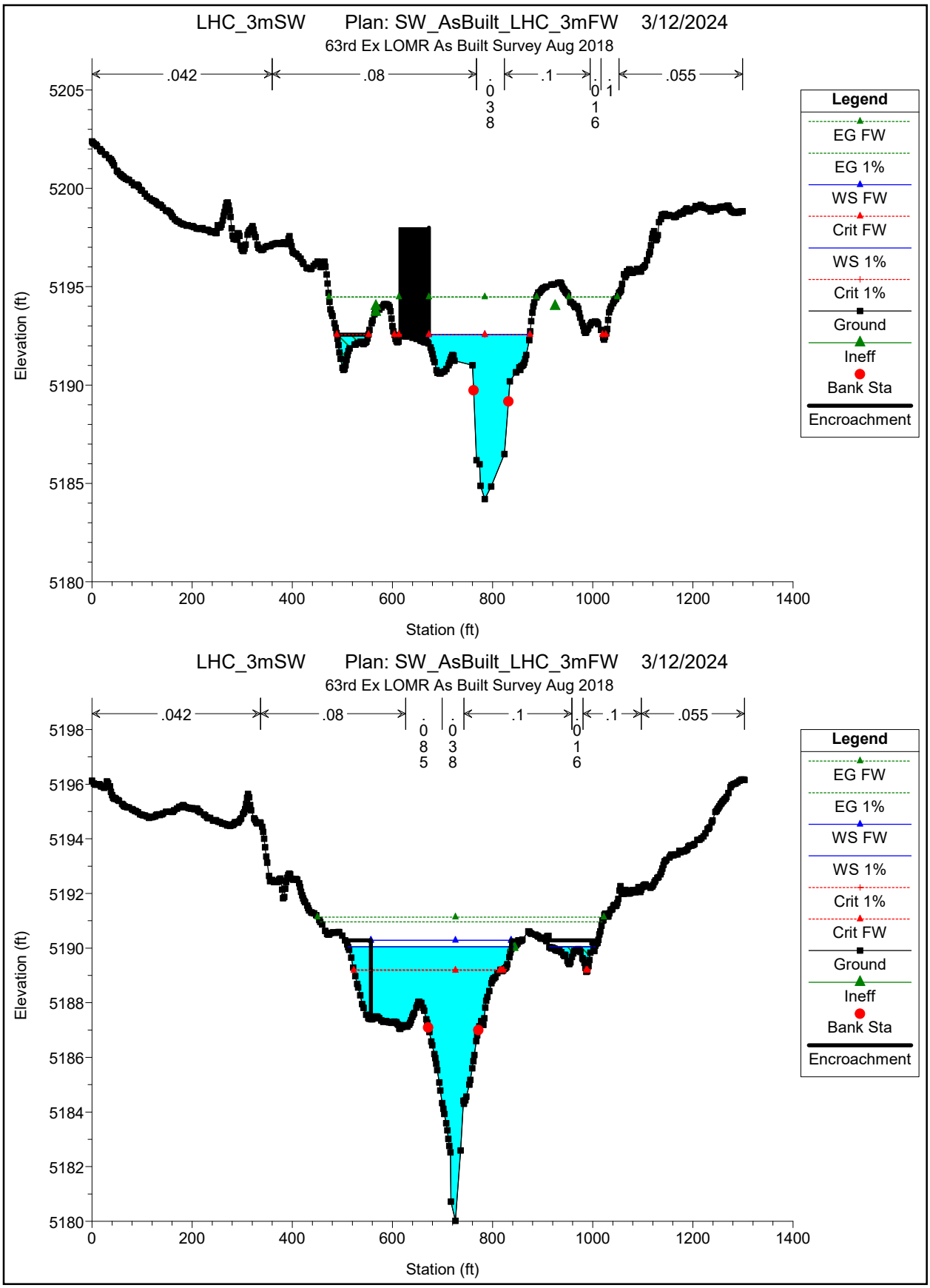
HEC-RAS Plan: SW AsBuilt FW River: LHC_3m Reach: LHC_3m (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
LHC_3m	49292	1%	5994.00	5225.79	5233.69	5233.69	5234.48	0.010306	10.68	1168.35	652.24	0.79
LHC_3m	49292	FW	5994.00	5225.79	5234.08	5234.08	5235.22	0.011590	11.84	906.91	326.00	0.84
LHC_3m	49118	1%	5994.00	5226.00	5230.81	5230.61	5231.34	0.012796	8.80	1149.87	685.43	0.80
LHC_3m	49118	FW	5994.00	5226.00	5231.22	5230.83	5231.89	0.012949	9.49	1035.64	426.23	0.81
LHC_3m	48665	1%	5994.00	5219.49	5226.10	5225.94	5226.91	0.010368	9.86	1034.01	622.72	0.77
LHC_3m	48665	FW	5994.00	5219.49	5226.25	5226.01	5227.15	0.011525	10.23	959.06	569.29	0.78
LHC_3m	48330	1%	5994.00	5215.46	5223.84	5223.84	5224.69	0.007126	9.47	1288.62	943.50	0.65
LHC_3m	48330	FW	5994.00	5215.46	5223.77	5223.77	5224.70	0.007650	9.75	1199.11	599.08	0.67
LHC_3m	47972	1%	5994.00	5210.63	5219.66	5219.66	5221.02	0.008666	10.54	761.52	535.99	0.70
LHC_3m	47972	FW	5994.00	5210.63	5219.66	5219.66	5221.02	0.008666	10.54	761.52	338.40	0.70
LHC_3m	47561	1%	5994.00	5207.25	5214.05	5214.05	5215.14	0.010740	10.50	861.66	337.73	0.77
LHC_3m	47561	FW	5994.00	5207.25	5214.30	5214.30	5216.33	0.015178	12.84	569.29	130.57	0.92
LHC_3m	47089	1%	5994.00	5197.53	5207.54	5207.54	5209.47	0.009385	11.83	752.36	339.60	0.74
LHC_3m	47089	FW	5994.00	5197.53	5207.24	5207.24	5209.45	0.011122	12.54	671.73	254.78	0.81
LHC_3m	46858	1%	5994.00	5192.97	5204.46	5204.46	5206.77	0.007553	13.18	749.93	422.29	0.77
LHC_3m	46858	FW	5994.00	5192.97	5204.46	5204.46	5206.77	0.007555	13.19	749.83	220.21	0.77
LHC_3m	46819		Culvert									
LHC_3m	46779	1%	5994.00	5192.22	5201.65	5201.65	5203.99	0.009247	12.55	600.52	179.22	0.88
LHC_3m	46779	FW	5994.00	5192.22	5201.65	5201.65	5203.99	0.009263	12.56	599.95	178.65	0.88
LHC_3m	46479	1%	5994.00	5188.83	5198.70	5197.36	5200.25	0.005400	10.09	615.92	107.52	0.69
LHC_3m	46479	FW	5994.00	5188.83	5198.80	5197.36	5200.30	0.005117	9.92	626.47	106.32	0.67
LHC_3m	46262	1%	5994.00	5186.51	5198.18	5195.53	5199.00	0.002794	7.43	909.43	251.40	0.48
LHC_3m	46262	FW	5994.00	5186.51	5198.33	5195.53	5199.11	0.002575	7.24	938.90	193.20	0.47
LHC_3m	46249		Bridge									
LHC_3m	46235	1%	5994.00	5186.63	5195.92	5195.92	5198.23	0.008685	12.48	521.82	155.99	0.88
LHC_3m	46235	FW	5994.00	5186.63	5195.92	5195.92	5198.23	0.008685	12.48	521.82	155.99	0.88
LHC_3m	46007	1%	5994.00	5185.64	5194.71	5193.01	5195.81	0.004364	8.69	810.41	279.04	0.59
LHC_3m	46007	FW	5994.00	5185.64	5194.73	5193.01	5195.82	0.004316	8.65	815.02	225.61	0.58
LHC_3m	45900	1%	5994.00	5183.42	5194.12	5192.33	5195.33	0.004923	9.15	912.23	509.18	0.59
LHC_3m	45900	FW	5994.00	5183.42	5194.11	5192.33	5195.34	0.005004	9.21	874.38	274.00	0.60
LHC_3m	45799	1%	5994.00	5184.20	5192.56	5192.56	5194.48	0.013202	11.62	675.64	280.51	0.79
LHC_3m	45799	FW	5994.00	5184.20	5192.56	5192.56	5194.48	0.013182	11.61	673.67	201.00	0.79
LHC_3m	45571	1%	5994.00	5180.02	5190.05	5189.21	5190.96	0.006504	8.38	1050.35	419.34	0.61
LHC_3m	45571	FW	5994.00	5180.02	5190.28	5189.19	5191.14	0.005863	8.10	1043.80	280.00	0.58
LHC_3m	45351	1%	5994.00	5178.79	5188.40	5188.40	5189.49	0.006666	10.15	1291.69	569.32	0.70
LHC_3m	45351	FW	5994.00	5178.79	5188.47	5188.47	5189.70	0.007044	10.49	1146.55	437.82	0.72
LHC_3m	45109	1%	5994.00	5176.73	5186.91	5186.91	5188.01	0.004513	10.55	1477.27	612.44	0.64
LHC_3m	45109	FW	5994.00	5176.73	5186.93	5186.93	5188.01	0.004408	10.44	1493.24	610.32	0.63
LHC_3m	45042	1%	5994.00	5175.25	5185.62	5185.62	5186.75	0.007863	9.71	1172.72	549.03	0.60
LHC_3m	45042	FW	5994.00	5175.25	5185.62	5185.62	5186.75	0.007863	9.71	1172.72	549.03	0.60
LHC_3m	45009		Mult Open									
LHC_3m	44976	1%	5994.00	5174.53	5184.46	5184.46	5185.72	0.008097	10.16	1190.61	645.95	0.70
LHC_3m	44976	FW	5994.00	5174.53	5184.48	5184.48	5185.72	0.007983	10.10	1199.88	546.58	0.70
LHC_3m	44847	1%	5994.00	5172.92	5182.20	5181.51	5183.99	0.006551	10.94	743.92	590.45	0.75
LHC_3m	44847	FW	5994.00	5172.92	5182.20	5181.51	5183.99	0.006542	10.93	730.01	350.32	0.75
LHC_3m	44652	1%	5994.00	5170.38	5179.24	5179.24	5182.10	0.015034	13.78	506.25	176.26	0.96
LHC_3m	44652	FW	5994.00	5170.38	5179.23	5179.23	5182.10	0.015128	13.81	504.51	153.68	0.96
LHC_3m	44404	1%	5994.00	5169.65	5177.14	5177.14	5178.13	0.005040	9.46	1156.15	710.75	0.64
LHC_3m	44404	FW	5994.00	5169.65	5177.19	5177.19	5178.81	0.006930	11.15	751.06	265.17	0.75
LHC_3m	44228	1%	5994.00	5164.59	5174.50	5174.50	5175.66	0.005648	10.13	1150.12	537.58	0.66
LHC_3m	44228	FW	5994.00	5164.59	5174.54	5174.54	5176.36	0.007554	11.76	793.93	227.48	0.77
LHC_3m	44111	1%	5994.00	5164.75	5172.03	5172.00	5173.57	0.010216	11.91	866.54	419.95	0.88

HEC-RAS Plan: SW AsBuilt FW River: LHC_3m Reach: LHC_3m (Continued)

Reach	River Sta	Profile	W.S. Elev (ft)	Prof Delta WS (ft)	E.G. Elev (ft)	Top Wdth Act (ft)	Q Left (cfs)	Q Channel (cfs)	Q Right (cfs)	Enc Sta L (ft)	Ch Sta L (ft)	Ch Sta R (ft)	Enc Sta R (ft)
LHC_3m	46858	1%	5204.46		5206.77	218.24	42.50	5094.76	856.74		957.00	998.88	
LHC_3m	46858	FW	5204.46	0.00	5206.77	218.21	42.46	5094.94	856.60	932.00	957.00	998.88	1206.00
LHC_3m	46819		Culvert										
LHC_3m	46779	1%	5201.65		5203.99	179.22	0.83	5719.98	273.18		996.00	1068.00	
LHC_3m	46779	FW	5201.65	0.00	5203.99	178.65	0.79	5720.61	272.60	995.00	996.00	1068.00	1232.00
LHC_3m	46479	1%	5198.70		5200.25	107.52	50.02	5871.56	72.43		1099.59	1186.00	
LHC_3m	46479	FW	5198.80	0.10	5200.30	106.32	54.05	5862.17	77.78	1087.59	1099.59	1186.00	1193.91
LHC_3m	46262	1%	5198.18		5199.00	197.46	256.57	5697.90	39.52		1098.42	1202.92	
LHC_3m	46262	FW	5198.33	0.15	5199.11	193.20	282.42	5663.12	48.46	1027.59	1098.42	1202.92	1220.79
LHC_3m	46249 BR U	1%	5198.18		5199.00	197.47	778.49	4991.38	218.11		1098.42	1202.92	
LHC_3m	46249 BR U	FW	5198.33	0.15	5199.11	193.20	570.92	4027.46	1391.62	1027.59	1098.42	1202.92	1220.79
LHC_3m	46249 BR D	1%	5197.95		5199.00	310.35	778.49	4991.38	218.11		1109.00	1181.14	
LHC_3m	46249 BR D	FW	5197.52	-0.43	5199.11	142.02	570.92	4027.46	1391.62	1027.59	1109.00	1181.14	1346.00
LHC_3m	46235	1%	5195.92		5198.23	117.95	125.04	5652.84	216.12		1109.00	1181.14	
LHC_3m	46235	FW	5195.92	0.00	5198.23	117.95	125.04	5652.84	216.12	1027.59	1109.00	1181.14	1346.00
LHC_3m	46007	1%	5194.71		5195.81	223.86	187.33	5616.79	189.88		1098.28	1193.00	
LHC_3m	46007	FW	5194.73	0.02	5195.82	225.61	189.33	5613.09	191.58	1040.00	1098.28	1193.00	1271.00
LHC_3m	45900	1%	5194.12		5195.33	335.47	114.59	5553.47	325.94		525.93	608.29	
LHC_3m	45900	FW	5194.11	-0.01	5195.34	274.00	83.73	5580.40	329.87	456.00	525.93	608.29	730.00
LHC_3m	45799	1%	5192.56		5194.48	210.51	362.94	5459.30	171.76		762.00	831.45	
LHC_3m	45799	FW	5192.56	0.00	5194.48	201.00	361.61	5459.26	173.13	673.00	762.00	831.45	874.00
LHC_3m	45571	1%	5190.05		5190.96	329.85	967.95	4891.59	134.47		671.53	771.46	
LHC_3m	45571	FW	5190.28	0.23	5191.14	280.00	910.07	4913.42	170.51	557.00	671.53	771.46	837.00
LHC_3m	45351	1%	5189.46		5189.49	568.32	1234.79	3991.53	767.68		707.87	767.86	
LHC_3m	45351	FW	5188.47	0.08	5189.70	437.82	1070.48	4173.71	749.81	560.00	707.87	767.86	1040.00
LHC_3m	45109	1%	5186.91		5188.01	612.44	1302.96	3741.11	949.93		544.06	586.05	
LHC_3m	45109	FW	5186.93	0.03	5188.01	610.32	1312.31	3716.21	965.47	306.85	544.06	586.05	917.17
LHC_3m	45042	1%	5185.62		5186.75	549.03	945.76	4572.31	475.93		545.46	604.03	
LHC_3m	45042	FW	5185.62	0.00	5186.75	549.03	945.76	4572.31	475.93	335.97	545.46	604.03	886.28
LHC_3m	45009		Mult Open										
LHC_3m	44976	1%	5184.46		5185.72	542.05	861.98	4637.05	494.97		535.20	604.92	
LHC_3m	44976	FW	5184.48	0.02	5185.72	543.18	868.26	4624.20	501.54	323.70	535.20	604.92	886.00
LHC_3m	44847	1%	5182.20		5183.99	435.47	136.76	5770.71	86.53		527.20	607.00	
LHC_3m	44847	FW	5182.20	0.00	5183.99	350.32	138.99	5772.43	82.58	319.00	527.20	607.00	698.00
LHC_3m	44652	1%	5179.24		5182.10	156.18	148.45	5809.85	35.70		565.63	631.59	
LHC_3m	44652	FW	5179.23	-0.01	5182.10	153.68	147.69	5810.94	35.37	307.00	565.63	631.59	738.00
LHC_3m	44404	1%	5177.14		5178.13	573.66	1321.75	4123.30	548.95		601.78	665.28	
LHC_3m	44404	FW	5177.19	0.05	5178.81	265.17	855.51	4898.31	240.19	366.00	601.78	665.28	685.28
LHC_3m	44228	1%	5174.50		5175.66	537.58	1062.53	4288.60	642.87		631.31	689.38	
LHC_3m	44228	FW	5174.54	0.04	5176.36	227.48	977.31	5008.44	8.25	463.03	631.31	689.38	690.51
LHC_3m	44111	1%	5172.03		5173.57	387.67	662.40	3889.50	1442.10		677.96	735.25	
LHC_3m	44111	FW	5172.53	0.49	5174.25	223.00	938.11	4293.94	761.96	542.00	677.96	735.25	765.00
LHC_3m	44027	1%	5171.50		5172.81	469.27	857.36	4548.23	588.41		691.52	753.47	
LHC_3m	44027	FW	5171.87	0.37	5173.21	228.16	794.63	4720.29	479.08	518.66	691.52	753.47	774.82
LHC_3m	43896	1%	5170.60		5171.62	588.94	1354.91	3964.23	674.87		689.73	750.54	
LHC_3m	43896	FW	5170.57	-0.03	5172.25	248.46	1096.82	4686.31	210.87	439.78	689.73	750.54	759.24
LHC_3m	43797	1%	5168.56		5169.46	638.19	1696.42	3387.53	910.05		600.32	650.00	
LHC_3m	43797	FW	5168.99	0.44	5170.22	330.56	2083.71	3904.92	5.37	320.00	600.32	650.00	650.56
LHC_3m	43681	1%	5167.31		5168.43	509.10	1025.25	4422.11	546.63		538.17	597.63	
LHC_3m	43681	FW	5167.38	0.07	5168.99	247.63	960.57	5033.44		350.00	538.17	597.63	597.63
LHC_3m	43611	1%	5165.77		5166.77	591.76	1699.98	3671.14	622.89		628.02	681.53	
LHC_3m	43611	FW	5165.89	0.11	5167.33	281.53	1791.91	4202.09		400.00	628.02	681.53	681.53
LHC_3m	43308	1%	5160.84		5164.01	126.24	74.21	5839.54	80.25		707.66	763.84	
LHC_3m	43308	FW	5160.84	0.00	5164.01	125.90	74.44	5839.47	80.09	385.00	707.66	763.84	831.94
LHC_3m	43224	1%	5160.80		5162.94	176.36	463.29	5416.05	114.65		916.22	971.84	
LHC_3m	43224	FW	5160.80	0.00	5162.94	175.54	462.28	5417.24	114.47	791.87	916.22	971.84	1001.62
LHC_3m	43195	1%	5161.20		5162.25	124.10	407.63	5519.08	67.29		746.85	820.49	
LHC_3m	43195	FW	5161.19	-0.01	5162.25	124.08	395.28	5531.42	67.30	710.00	746.85	820.49	834.08
LHC_3m	43154 BR U	1%	5161.05		5162.18	115.76	457.39	5460.13	76.48		746.85	820.49	


LHC_3mSW Plan: SW_AsBuilt_LHC_3mFW 3/12/2024
63rd Ex LOMR As Built Survey Aug 2018
.055
.08
.045
.04
.1
.055
Legend
EG FW
EG 1%
WS FW
WS 1%
Crit 1%
Crit FW
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
LHC_3mSW Plan: SW_AsBuilt_LHC_3mFW 3/12/2024
63rd Ex LOMR As Built Survey Aug 2018, New Cross Section, 2014 L
.08
.045
.038
.045
.1
Legend
EG FW
EG 1%
WS 1%
WS FW
Crit 1%
Crit FW
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)


LHC_3mSW Plan: SW_AsBuilt_LHC_3mFW 3/12/2024
63rd Ex LOMR As Built Survey Aug 2018
.042
.08
.038
.1
.016
.1
.055
Elevation (ft)
Station (ft)
Legend
EG FW
EG 1%
WS FW
Crit FW
WS 1%
Crit 1%
Ground
Ineff
Bank Sta
Encroachment
LHC_3mSW Plan: SW_AsBuilt_LHC_3mFW 3/12/2024
63rd Ex LOMR As Built Survey Aug 2018
.042
.08
.085
.038
.1
.016
.1
.055
Elevation (ft)
Station (ft)
Legend
EG FW
EG 1%
WS FW
WS 1%
Crit 1%
Crit FW
Ground
Ineff
Bank Sta
Encroachment

Plan: SW AsBuilt FW LHC_3m LHC_3m RS: 46007 Profile: 1%

E.G. Elev (ft)	5195.81	Element	Left OB	Channel	Right OB
Vel Head (ft)	1.10	Wt. n-Val.	0.057	0.041	0.055
W.S. Elev (ft)	5194.71	Reach Len. (ft)	102.00	102.00	102.00
Crit W.S. (ft)	5193.01	Flow Area (sq ft)	80.43	646.65	83.33
E.G. Slope (ft/ft)	0.004364	Area (sq ft)	90.38	646.65	83.33
Q Total (cfs)	5994.00	Flow (cfs)	187.33	5616.79	189.88
Top Width (ft)	279.04	Top Width (ft)	113.46	94.72	70.86
Vel Total (ft/s)	7.40	Avg. Vel. (ft/s)	2.33	8.69	2.28
Max Chl Dpth (ft)	9.07	Hydr. Depth (ft)	1.38	6.83	1.18
Conv. Total (cfs)	90731.9	Conv. (cfs)	2835.6	85022.1	2874.2
Length Wtd. (ft)	102.00	Wetted Per. (ft)	58.63	95.57	71.11
Min Ch El (ft)	5185.64	Shear (lb/sq ft)	0.37	1.84	0.32
Alpha	1.30	Stream Power (lb/ft s)	0.87	16.01	0.73
Frctn Loss (ft)	0.47	Cum Volume (acre-ft)	176.83	89.09	103.00
C & E Loss (ft)	0.01	Cum SA (acres)	115.17	15.08	67.22

Plan: SW AsBuilt FW LHC_3m LHC_3m RS: 46007 Profile: FW

E.G. Elev (ft)	5195.82	Element	Left OB	Channel	Right OB
Vel Head (ft)	1.10	Wt. n-Val.	0.057	0.041	0.055
W.S. Elev (ft)	5194.73	Reach Len. (ft)	102.00	102.00	102.00
Crit W.S. (ft)	5193.01	Flow Area (sq ft)	81.62	648.59	84.80
E.G. Slope (ft/ft)	0.004316	Area (sq ft)	81.62	648.59	84.80
Q Total (cfs)	5994.00	Flow (cfs)	189.33	5613.09	191.58
Top Width (ft)	225.61	Top Width (ft)	58.28	94.72	72.61
Vel Total (ft/s)	7.35	Avg. Vel. (ft/s)	2.32	8.65	2.26
Max Chl Dpth (ft)	9.09	Hydr. Depth (ft)	1.40	6.85	1.17
Conv. Total (cfs)	91237.0	Conv. (cfs)	2881.9	85439.1	2916.1
Length Wtd. (ft)	102.00	Wetted Per. (ft)	59.26	95.57	72.86
Min Ch El (ft)	5185.64	Shear (lb/sq ft)	0.37	1.83	0.31
Alpha	1.30	Stream Power (lb/ft s)	0.86	15.83	0.71
Frctn Loss (ft)	0.47	Cum Volume (acre-ft)	105.36	92.37	72.31
C & E Loss (ft)	0.01	Cum SA (acres)	49.38	15.08	35.38

Plan: SW AsBuilt FW LHC_3m LHC_3m RS: 45900 Profile: 1%

E.G. Elev (ft)	5195.33	Element	Left OB	Channel	Right OB
Vel Head (ft)	1.21	Wt. n-Val.	0.069	0.042	0.099
W.S. Elev (ft)	5194.12	Reach Len. (ft)	109.00	109.00	109.00
Crit W.S. (ft)	5192.33	Flow Area (sq ft)	89.11	606.80	216.32
E.G. Slope (ft/ft)	0.004923	Area (sq ft)	276.71	606.80	216.32
Q Total (cfs)	5994.00	Flow (cfs)	114.59	5553.47	325.94
Top Width (ft)	509.18	Top Width (ft)	299.64	82.36	127.18
Vel Total (ft/s)	6.57	Avg. Vel. (ft/s)	1.29	9.15	1.51
Max Chl Dpth (ft)	10.70	Hydr. Depth (ft)	0.71	7.37	1.70
Conv. Total (cfs)	85430.9	Conv. (cfs)	1633.2	79152.1	4645.5
Length Wtd. (ft)	109.00	Wetted Per. (ft)	126.17	84.96	127.31
Min Ch El (ft)	5183.42	Shear (lb/sq ft)	0.22	2.19	0.52
Alpha	1.80	Stream Power (lb/ft s)	0.28	20.09	0.79
Frctn Loss (ft)	0.78	Cum Volume (acre-ft)	176.40	87.62	102.65
C & E Loss (ft)	0.07	Cum SA (acres)	114.69	14.87	66.98

Plan: SW AsBuilt FW LHC_3m LHC_3m RS: 45900 Profile: FW

E.G. Elev (ft)	5195.34	Element	Left OB	Channel	Right OB
Vel Head (ft)	1.23	Wt. n-Val.	0.065	0.042	0.099
W.S. Elev (ft)	5194.11	Reach Len. (ft)	109.00	109.00	109.00
Crit W.S. (ft)	5192.33	Flow Area (sq ft)	55.46	605.59	213.32
E.G. Slope (ft/ft)	0.005004	Area (sq ft)	55.46	605.59	213.32
Q Total (cfs)	5994.00	Flow (cfs)	83.73	5580.40	329.87
Top Width (ft)	274.00	Top Width (ft)	69.93	82.36	121.71
Vel Total (ft/s)	6.86	Avg. Vel. (ft/s)	1.51	9.21	1.55
Max Chl Dpth (ft)	10.69	Hydr. Depth (ft)	0.79	7.35	1.75
Conv. Total (cfs)	84737.0	Conv. (cfs)	1183.7	78890.0	4663.3
Length Wtd. (ft)	109.00	Wetted Per. (ft)	70.67	84.96	122.18
Min Ch El (ft)	5183.42	Shear (lb/sq ft)	0.25	2.23	0.55
Alpha	1.69	Stream Power (lb/ft s)	0.37	20.52	0.84
Frctn Loss (ft)	0.79	Cum Volume (acre-ft)	105.20	90.91	71.96
C & E Loss (ft)	0.07	Cum SA (acres)	49.23	14.87	35.15

Plan: SW AsBuilt FW LHC_3m LHC_3m RS: 45799 Profile: 1%

E.G. Elev (ft)	5194.48	Element	Left OB	Channel	Right OB
Vel Head (ft)	1.92	Wt. n-Val.	0.080	0.052	0.100
W.S. Elev (ft)	5192.56	Reach Len. (ft)	243.54	227.94	207.48
Crit W.S. (ft)	5192.56	Flow Area (sq ft)	133.84	469.94	71.86
E.G. Slope (ft/ft)	0.013202	Area (sq ft)	179.65	469.94	72.80
Q Total (cfs)	5994.00	Flow (cfs)	362.94	5459.30	171.76
Top Width (ft)	280.51	Top Width (ft)	161.15	69.45	49.91
Vel Total (ft/s)	8.87	Avg. Vel. (ft/s)	2.71	11.62	2.39
Max Chl Dpth (ft)	8.36	Hydr. Depth (ft)	1.37	6.77	1.67
Conv. Total (cfs)	52168.0	Conv. (cfs)	3158.8	47514.3	1494.9
Length Wtd. (ft)	229.15	Wetted Per. (ft)	99.23	71.29	43.38
Min Ch El (ft)	5184.20	Shear (lb/sq ft)	1.11	5.43	1.37
Alpha	1.57	Stream Power (lb/ft s)	3.01	63.11	3.26
Frctn Loss (ft)	2.26	Cum Volume (acre-ft)	175.83	86.27	102.29
C & E Loss (ft)	0.30	Cum SA (acres)	114.11	14.68	66.76

Plan: SW AsBuilt FW LHC_3m LHC_3m RS: 45799 Profile: FW

E.G. Elev (ft)	5194.48	Element	Left OB	Channel	Right OB
Vel Head (ft)	1.92	Wt. n-Val.	0.080	0.052	0.100
W.S. Elev (ft)	5192.56	Reach Len. (ft)	243.54	227.94	207.48
Crit W.S. (ft)	5192.56	Flow Area (sq ft)	131.58	470.14	71.95
E.G. Slope (ft/ft)	0.013182	Area (sq ft)	131.58	470.14	71.95
Q Total (cfs)	5994.00	Flow (cfs)	361.61	5459.26	173.13
Top Width (ft)	201.00	Top Width (ft)	89.00	69.45	42.55
Vel Total (ft/s)	8.90	Avg. Vel. (ft/s)	2.75	11.61	2.41
Max Chl Dpth (ft)	8.36	Hydr. Depth (ft)	1.48	6.77	1.69
Conv. Total (cfs)	52206.0	Conv. (cfs)	3149.5	47548.6	1507.9
Length Wtd. (ft)	229.01	Wetted Per. (ft)	89.95	71.29	42.96
Min Ch El (ft)	5184.20	Shear (lb/sq ft)	1.20	5.43	1.38
Alpha	1.56	Stream Power (lb/ft s)	3.31	63.02	3.32
Frctn Loss (ft)	2.18	Cum Volume (acre-ft)	104.96	89.56	71.60
C & E Loss (ft)	0.32	Cum SA (acres)	49.03	14.68	34.95

Plan: SW AsBuilt FW LHC_3m LHC_3m RS: 45571 Profile: 1%

E.G. Elev (ft)	5190.96	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.91	Wt. n-Val.	0.081	0.048	0.100
W.S. Elev (ft)	5190.05	Reach Len. (ft)	221.29	219.31	217.64
Crit W.S. (ft)	5189.21	Flow Area (sq ft)	374.01	583.53	92.82
E.G. Slope (ft/ft)	0.006504	Area (sq ft)	374.01	583.53	118.80
Q Total (cfs)	5994.00	Flow (cfs)	967.95	4891.59	134.47
Top Width (ft)	419.34	Top Width (ft)	160.23	99.93	159.18
Vel Total (ft/s)	5.71	Avg. Vel. (ft/s)	2.59	8.38	1.45
Max Chl Dpth (ft)	10.03	Hydr. Depth (ft)	2.33	5.84	1.33
Conv. Total (cfs)	74325.5	Conv. (cfs)	12002.5	60655.6	1667.4
Length Wtd. (ft)	219.55	Wetted Per. (ft)	160.38	101.96	69.83
Min Ch El (ft)	5180.02	Shear (lb/sq ft)	0.95	2.32	0.54
Alpha	1.80	Stream Power (lb/ft s)	2.45	19.48	0.78
Frctn Loss (ft)	1.45	Cum Volume (acre-ft)	174.28	83.52	101.84
C & E Loss (ft)	0.02	Cum SA (acres)	113.21	14.24	66.27

Plan: SW AsBuilt FW LHC_3m LHC_3m RS: 45571 Profile: FW

E.G. Elev (ft)	5191.14	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.85	Wt. n-Val.	0.082	0.048	0.100
W.S. Elev (ft)	5190.28	Reach Len. (ft)	221.29	219.31	217.64
Crit W.S. (ft)	5189.19	Flow Area (sq ft)	328.94	606.90	107.97
E.G. Slope (ft/ft)	0.005863	Area (sq ft)	328.94	606.90	107.97
Q Total (cfs)	5994.00	Flow (cfs)	910.07	4913.42	170.51
Top Width (ft)	280.00	Top Width (ft)	114.53	99.93	65.54
Vel Total (ft/s)	5.74	Avg. Vel. (ft/s)	2.77	8.10	1.58
Max Chl Dpth (ft)	10.26	Hydr. Depth (ft)	2.87	6.07	1.65
Conv. Total (cfs)	78280.5	Conv. (cfs)	11885.4	64168.3	2226.8
Length Wtd. (ft)	219.51	Wetted Per. (ft)	117.47	101.96	66.02
Min Ch El (ft)	5180.02	Shear (lb/sq ft)	1.02	2.18	0.60
Alpha	1.67	Stream Power (lb/ft s)	2.84	17.64	0.95
Frctn Loss (ft)	1.40	Cum Volume (acre-ft)	103.67	86.74	71.18
C & E Loss (ft)	0.04	Cum SA (acres)	48.46	14.24	34.69

ATTACHMENT E

Community Planning & Permitting

Courthouse Annex • 2045 13th Street • Boulder, Colorado 80302
Mailing Address: P.O. Box 471 • Boulder, Colorado 80306
303-441-3930 • www.BoulderCounty.gov

March 20, 2024

To: Dana Yelton, Planner I
From: Kelly Watson, Principal Floodplain Planner

Docket: SPR-23-0108: Piscopio-Huang Residential Remodel and New Accessory Structure
Location: 5986 Heather Way, Section 27, Township 2N, Range 70W

On March 12, 2024, the Community Planning & Permitting Department – Floodplain Management Program received additional data related to the above referenced docket. The data included a memo stating the applicant's intention to apply to FEMA for a Letter of Map Revision (LOMR) following Boulder County staff review, as well as a preliminary hydraulic model and revised Floodway delineation. Floodplain staff have reviewed the data and have the following comments:

1. The preliminary hydraulic model shows that the Floodway can be narrowed on this property such that the existing building and proposed accessory structure are outside the Floodway but still within the 100-year floodplain ("flood fringe") while still meeting FEMA's standards and guidelines for hydraulic modeling and mapping. The proposed Floodway revision does not impact neighboring properties. If the applicant goes forward with the project, they should submit a full LOMR submittal to the county for review and concurrence. LOMR submittal guidance and checklists are available on the Colorado Water Conservation Board website: https://coloradohazardmapping.com/lomr. This letter does not indicate that the county will approve or sign the MT-2 form for any future LOMR. The LOMR must comply with all FEMA and State of Colorado guidelines and standards for Floodways and cannot result in higher Base Flood Elevations on existing insurable structures.

2. See comments #3 and #4 from our previous referral response for permitting requirements for the proposed accessory structure and improvements to the existing residence.

Additional Information:
Portions of the property will remain in the Floodway. Any future development within the Floodplain Overlay District will require an FDP and must adhere to Article 4-404B (Uses Prohibited in Floodway) and 4-404C (Uses Allowed in Floodway under Certain Conditions).

Please contact Kelly Watson and Sarah Heller, Floodplain Planners, at FloodplainAdmin@bouldercounty.gov to discuss this referral.

This concludes our comments at this time.