

#### **Community Planning & Permitting**

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## BOULDER COUNTY PLANNING COMMISSION PUBLIC HEARING

December 20, 2023 at 1:30 p.m.

Boulder County Courthouse, 3rd Floor, 1325 Pearl Street, Boulder Virtual and in-person

#### STAFF RECOMMENDATION

STAFF PLANNER: Pete L'Orange, Planner II

**DATE ISSUED:** December 13, 2023

#### **Docket SU-23-0002: Legacy Church Sanctuary Expansion and Parking Lot**

Request: Special Use Review to recognize an existing church use with an occupant load

greater than 100 persons per lot, expansion of sanctuary space, and for earthwork/grading in excess of 500 cubic yards for new parking lot.

Location: 270 N. 76<sup>th</sup> Street, located on the east side of N. 76<sup>th</sup> Street, approximately 0.25

mile north of the intersection of South Boulder Road and N. 76th Street, in

Section 1, Township 1S, Range 70W.

Zoning: Estate Residential (ER)
Owner: Rock Creek Church

Applicant: Grant Hansen, Legacy Church

Representative: Patrick McTavish, DAO Architecture

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#### **SUMMARY**

The subject application is for a Special Review and Site-Specific Development Plan to recognize an existing church use with an occupant load greater than 100 persons per lot, expand sanctuary space, and for earthwork/grading in excess of 500 cubic yards for a new parking lot. With the recommended conditions of approval, staff finds the proposal can meet the Special Review Criteria in Article 4-601 of the Boulder County Land Use Code (the Code) and recommends conditional approval to the Planning Commission.

#### DISCUSSION

The subject parcel (the Property) is an approximately 11-acre parcel, which was created through a 1990 Subdivision Exemption. The Property is located on the east side of N. 76<sup>th</sup> Street, approximately 0.25 mile north of the intersection of South Boulder Road and N. 76th Street (see Figure 1 below). An approximately 18,400-square-foot church structure exists on the Property.



Figure 1: Aerial photograph of subject parcel

The applicants have proposed to make modifications to the church structure including reconfiguring the worship space by removing and relocating some of the interior walls to eliminate some existing "classrooms" on either side of the worship space (see Figures 2 and 3 below). The applicants propose to reduce the number of seats in the worship space from 411 to 405. While the square footage of the worship space will increase, the applicants will be using larger chairs and increasing the spacing between rows for comfort and as a result the total seating will decrease. The applicants also propose to install new exterior egress doors. The current worship space is approximately 2,077 square feet; the remodeled worship space will be 5,083 square feet. The proposal does not change the existing total floor area, building footprint, or building height. Finally, the applicants propose to replace the existing gravel parking lot with a new asphalt parking lot in generally the same location (see Figure 4 below). As part of the new parking lot development, the applicants plan to make modifications to the subject parcel in order to effectively handle stormwater runoff on site. The application as originally submitted included only the request to recognize the church use and for the modifications to worship space; the applicants originally intended to submit a separate application for the earthwork and parking lot. Based on discussions with staff, the applicants subsequently decided to include both projects in a single review process.

A church is a use permitted by right in the Estate Residential zoning district; however, per Article 4-104.F.2.b, Special Review is required for any use which has an occupant load greater than or equal to 100 persons per lot. The occupant load for the church use is currently 410 persons. At the time the church was established, the Code did not have any special review requirements that would have been triggered. As such, the church use is considered a non-conforming use under Article 4-1003 of the Code (due to having an occupant load greater than or equal to 100 persons) and proposals to modify

or expand a non-conforming use must come into conformance with the Code through the appropriate reviews and/or approvals. In this case, the required review and approval is a Special Review.

Docket SU-90-12 approved the onsite wastewater treatment system for the church which can accommodate up to 800 attendees; however, this review was limited to the onsite wastewater treatment system and did not consider the church use. In addition to its use as a church, the structure is also used for a day care facility (pre-school) which was approved through docket SU-18-0009.

The proposed parking lot and stormwater management will require approximately 2,670 cubic yards of earthwork and grading. Per Article 4-104.C.12, grading of more than 500 cubic yards is allowed in the Estate Residential district through Limited Impact Special Review.

Per the Boulder County Comprehensive Plan, there are no identified resources on the subject parcel (see Figure 5 below). There is a Viewshed Protection Score for N. 76th Street (west of the subject parcel) ranging from 0.83 to 1.35 out of 5. The potential impacts related to View Protection Score resulting from the proposal are discussed in the criteria review below.

There are a few parcels identified as public lands near the subject parcel (see Figure 6 below). The parcel to the east and north of the subject parcel is open space owned by the City of Boulder Open Space and Mountain Parks. There are also a couple of county-held conservation easements in the vicinity. However, there are no conservation easements on the subject parcel.

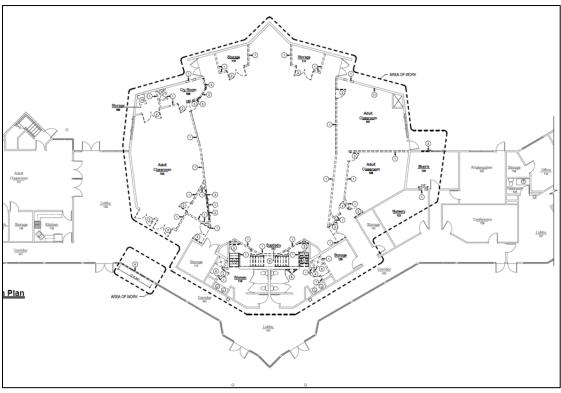


Figure 2. Existing floor plan of worship space, with the areas of work indicate by dashed lines.

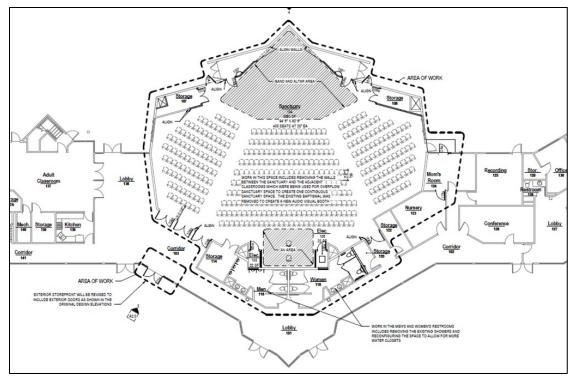


Figure 3. Proposed floor plan, with areas of work indicated by dashed lines.

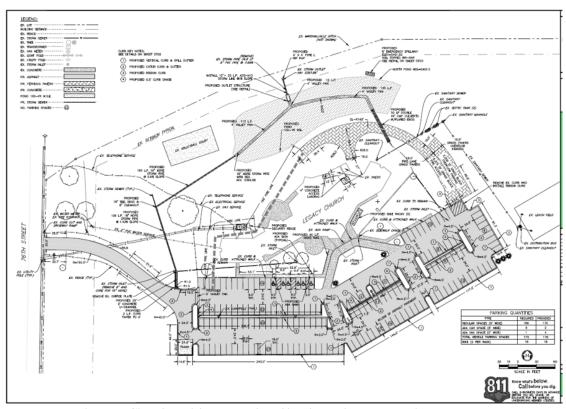


Figure 4. Site plan with proposed parking lot and stormwater improvements.



Figure 5: Comprehensive Plan map

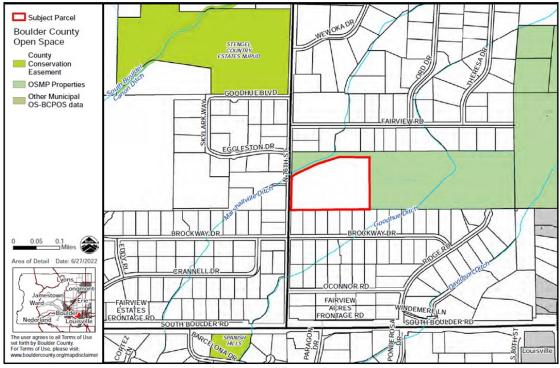


Figure 6: Public Lands map.

As detailed in the criteria review below, staff finds that the existing church use, the proposed modifications, and the earthwork and grading for the proposed new parking lot can all meet the Special Review Criteria in Article 4-601 of the Code, with the recommended conditions of approval. As such, staff recommends that the Planning Commission recommend approval of the application, subject to the conditions of approval recommended by staff.

#### REFERRALS

This application was referred to the typical agencies, departments, and adjacent property owners. The original application for the recognition of the church use and the modifications to the worship space was referred out on April 13, 2023; the revised application with the inclusion of the earthwork and parking lot was re-referred out on October 25, 2023. All responses received are attached and summarized below.

**Boulder County Building Safety & Inspection Services Team:** This team reviewed the proposal and stated that building permits will be required for the proposed work. The team noted the proposed project is considered a change in occupancy and design analysis will be required. They also noted the minimum wind and snow loading requirements.

**Boulder County Public Health:** This team reviewed the request and responded that the existing onsite wastewater treatment system (OWTS) exceeds the threshold of 2,000 gallons and is, therefore, permitted through the Colorado Department of Public Health and Environment (CDPHE). They noted that the applicants must contact CDPHE to ensure compliance with CDPHE's requirements; the Public Health team noted that the applicant must provide documentation of this compliance. The Public Health team also provided standard comments related to avoiding damage to the OWTS during construction.

**Boulder County Public Works – Stormwater Team:** This team reviewed the proposal and noted that, as a part of Boulder County's water quality protection and Municipal Separate Storm Sewer System (MS4) Construction Program, a Stormwater Quality Permit (SWQP) is required for this project. They provide specific items which are required as part of the SWQP.

County Development Review Team – Access & Engineering: This team reviewed the proposal and initially placed the application on hold, pending submission of a Transportation System Impact Review (TSIR); based on the TSIR submitted by the applicant, the team lifted the hold. They also provide comment on the Land Use Code requirements for parking and physical access.

**Mountain View Fire Rescue:** This agency reviewed the proposal and stated that the building was originally supposed to have a fire suppression system, but that no such system has been installed. They have requested a fire protection engineering analysis be made for the building, but noted they have not yet received or approved any such report.

**Xcel Energy:** This agency reviewed the proposed project and requested that the existing underground electric distribution line be shown on the plan in relation to the proposed activities west of the church. They also provided standard comments related to gas and electrical facilities along N. 76<sup>th</sup> Street.

**Adjacent Property Owners:** Notices were sent to property owners within 1,500 feet of the subject parcel. To date, staff have not received any comments.

**Agencies that responded with no conflict:** Boulder County Parks and Open Space – Natural Resources Planner; City of Boulder Open Space and Mountain Parks.

**Agencies that did not respond:** Boulder County Long Range Planning; Boulder County Assessor; Boulder County Wildfire Mitigation Team; Boulder County Sheriff; Boulder County Treasurer; Boulder County Surveyor; and City of Louisville.

#### SPECIAL REVIEW CRITERIA

The Community Planning & Permitting staff has evaluated the Special Review standards per Article 4-601 of the Code, and finds the following:

(1) Complies with the minimum zoning requirements of the zoning district in which the use is to be established, and will also comply with all other applicable requirements;

As discussed above, a church use is permitted by right in the Estate Residential zoning district. However, per Article 4-104.F.2, a use with an occupant load greater than or equal to 100 persons per lot requires Special Review. Additionally, grading and earthwork in excess of 500 cubic yards is allowed in the Estate Residential zoning district with Limited Impact Special Review. When two components of a proposal are subject to different reviews, the more intensive review process takes precedence. As such, both the use and earthwork can be reviewed under the same Special Review process.

The existing church structure meets all required setbacks in the Estate Residential zoning district; the proposed modifications to the worship space will not change the footprint of the existing structure. As such, staff finds the proposal will still comply with all minimum zoning requirements.

Per Article 4-504.D.3 of the Code, church uses are required to provide 1 parking space per 30 square feet of worship area, plus any parking required for incidental uses, which would include the day care facility use approved through SU-18-0009. Per the application materials, after the reconfiguration of the worship space, the resulting floor area would be 5,083 square feet, which requires a total of 175 parking spaces; the applicants have proposed 176 spaces, including the required number of ADA accessible parking spaces. The day care facility approved through SU-18-0009 is required to have 29 spaces. Per Article 4-516.W.3.c of the Code, when there are multiple uses on a parcel, the most intensive use (e.g. – the use which requires the greatest number of parking spaces) determines the total number required. In this case, the church use is the more intensive use, so the 175 spaces required for that use applies. Additionally, staff finds that, since the days and hours of operation for the church and the day care facility uses do not conflict, it is not necessary to require separate parking for the two uses. Staff finds the proposed 176 parking spaces meets the minimum number of parking spaces required by the Code.

Section 4-516.W.5 of the Code requires that expanded parking lots with 15 or more spaces must provide electric vehicle charging stations and that parking lots with 50 or more spaces have landscaping interior to the lot that covers at least 5% of the parking area. Staff recommends as a condition of all approval that plans submitted for permitting show the required electric vehicle charging stations and interior landscaped areas.

The subject parcel is located within the Boulder County Urbanized Area and the proposed parking lot and associated stormwater management measures will result in more than 1-acre of disturbance. As such, the project requires a Stormwater Quality Permit (SWQP). The applicants are currently working with the Boulder County Stormwater team on the SWQP. Staff recommends as a condition of approval that the applicants apply for and obtain the SWQP.

Therefore, as conditioned, staff finds this criterion can be met.

(2) Will be compatible with the surrounding area. In determining compatibility, the Board should consider the location of structures and other improvements on the site; the size, height and massing of the structures; the number and arrangement of structures; the design of structures and other site features; the proposed removal or addition of vegetation; the extent of site disturbance, including, but not limited to, any grading and changes to natural topography; and the nature and intensity of the activities that will take place on the site. In determining the surrounding area, the Board should consider the

unique location and environment of the proposed use; assess the relevant area that the use is expected to impact; and take note of important features in the area including, but not limited to, scenic vistas, historic townsites and rural communities, mountainous terrain, agricultural lands and activities, sensitive environmental areas, and the characteristics of nearby development and neighborhoods;

The neighborhood for the subject property includes residential parcels to the north, west, and south, and a residential subdivision in the City of Louisville to the east (across McCaslin Blvd.) and is characterized by majestic views of the mountains to the west. The subject parcel is 5.4 acres, with the existing structure located approximately 385 feet from McCaslin Blvd. and aligned east-west. The church is also separated from the nearby residences by at least 285 feet. The church building was constructed in 1995 and has been primarily utilized for church purposes, although it has changed ownership. Churches are a common use in and near residential areas, and staff finds the use to be compatible with the surrounding area.

The proposed modifications, per the application materials, will reduce the maximum number of seats in the worship space. To ensure that the occupant load does not exceed that which has been evaluated through this docket, staff recommends as condition of the approval that seating in the worship space be limited to 405 seats as proposed by the applicants. This will help to ensure that the nature and intensity of the church use remains compatible with the character of the surrounding area.

The proposed parking lot will replace an existing parking lot in approximately the same location and of approximately the same size. Staff does not anticipate the proposed parking lot to result in any negative impacts on the character of the surrounding area and no referral agencies have expressed any such concerns.

Therefore, as conditioned, staff finds this criterion can be met.

#### (3) Will be in accordance with the Boulder County Comprehensive Plan;

Staff reviewed the proposed project in relation to the Boulder County Comprehensive Plan. As discussed above, there are no Comprehensive Plan designations on the Property. Staff also identified a few goals and policies of the Comprehensive Plan which are particularly applicable to this proposal.

<u>Countywide Goal 1 Cluster Development</u>. This goal directs the county to direct development to existing urban areas in order to minimize and prevent sprawl. The subject parcel is located in a largely developed area west of the City of Louisville. Staff finds that the church continuing to operate in this location is in line with this goal as it is relatively clustered with the municipality, rather than being located in a more rural, undeveloped portion of the county.

Economics Element Policy EC 3.04 Transit Oriented Development. This policy states that Boulder County will work with municipalities to encourage patterns of development that support the use of public transit and development near public transit stops. While this application is related to an already existing use, it is located approximately ¼-mile away from a bus stop, in an already developed portion of the county. At the very least, allowing the existing church to continue to operate in its current location ensures that it is located near public transit, rather than some other location farther removed from public transit options. Therefore, staff finds the proposal is consistent with this policy.

Staff has not identified any conflicts with the Comprehensive Plan related to this application; additionally, no referral agencies have responded with any such concerns.

Therefore, staff finds this criterion is met.

(4) Will not result in an over-intensive use of land or excessive depletion of natural resources. In evaluating the intensity of the use, the Board should consider the extent of the proposed development in relation to parcel size and the natural landscape/topography; the area of impermeable surface; the amount of blasting, grading or other alteration of the natural topography; the elimination or disruption of agricultural lands; the effect on significant natural areas and environmental resources; the disturbance of plant and animal habitat, and wildlife migration corridors; the relationship of the proposed development to natural hazards; and available mitigation measures such as the preservation of open lands, the addition or restoration of natural features and screening, the reduction or arrangement of structures and land disturbance, and the use of sustainable construction techniques, resource use, and transportation management.

The proposed modifications to the existing church structure will not result in any increase in the level of activities or intensity of use; per the application materials and as conditioned in Criterion 2 above, the maximum number of seats in the worship space will decrease slightly. As such, the use will not result in an over-intensive use of the subject parcel.

The proposed parking lot project includes approximately 1,164 cubic yards of earthwork and grading and will result in an increase in the amount of impermeable surface on the subject parcel. This increase will alter the existing drainage patterns on the subject parcel as discussed in Criterion 13 below; staff has recommended conditions of approval under Criterion 13 below to address these impacts. However, staff finds that development of a paved parking area is in character with the existing church use on the Property and will not result in an over-intensive use of land.

Therefore, as conditioned in other criteria, staff finds this criterion can be met.

#### (5) Will not have a material adverse effect on community capital improvement programs;

There is no indication the proposal will have an adverse effect on community capital improvement programs, and no referral agency has responded with such a concern.

Therefore, staff finds this criterion is met.

## (6) Will not require a level of community facilities and services greater than that which is available;

The church is currently served by an existing onsite wastewater treatment system (OWTS); per docket SU-90-12, the existing OWTS is sized to handle up to 800 persons. Staff finds no conflict with the proposed recognition of the church use and the exiting OWTS. However, as discussed in the referral response from Boulder County Public Health, the existing OWTS exceeds 2,000 gallons per day and falls under the jurisdiction of Colorado Department of Public Health and Environment (CDPHE). To ensure that the existing system is operating appropriately, staff recommends as a condition of approval that the applicants contact CDPHE to verify the OWTS is in compliance with all of the state's requirements, and then provide documentation of this verification to Boulder County Community Planning & Permitting and Boulder County Public Health.

Also, per the Public Health referral response, staff recommends as condition of approval that heavy equipment should be restricted from the surface of the absorption field during construction to prevent damage to OWTS.

Per the referral response from Mountain View Fire Rescue (MVFR), the existing structure was supposed to have a fire suppression system, but it appears it was never installed. The agency has requested that a fire protection engineering analysis be undertaken for the existing building and demonstration of how the proposed modifications will comply with the intent of the Fire Code. To ensure that the building meets the fire code requirements, staff recommends as a condition of approval that the applicants work with Mountain View Fire Rescue to address their concerns and then, prior to the issuance of any building permit for any modifications to the existing building, provide documentation of compliance with the International Fire Code to Boulder County Community Planning & Permitting.

Therefore, as conditioned, staff finds this criterion can be met.

## (7) Will support a multimodal transportation system and not result in significant negative impacts to the transportation system or traffic hazards;

The subject parcel is accessed from N. 76<sup>th</sup> Street, a paved Boulder County owned and maintained right-of-way (ROW) with a functional classification of minor arterial. Legal access is demonstrated via adjacency to N. 76<sup>th</sup> Street.

N. 76<sup>th</sup> Street is one lane each direction, within a minimal shoulder and no center turn lane. As such, there is the potential for construction traffic related to the proposed projects to impact traffic along N. 76<sup>th</sup> Street, especially during peak travel times ("rush hour"). As such staff recommends as a condition of approval that construction traffic to and from the subject parcel be limited to outside of peak traffic hours.

As discussed above the church use requires a total of 175 parking spaces; the applicants have proposed 176 spaces. Also as discussed above, staff finds that additional parking is not required for the day care facility use. As such, staff finds the proposal meets the minimum number of parking spaces required by the Code. Additionally, with the recommended conditions of approval related to Article 4-516.W of the Code discussed in Criterion 1 above, staff finds the proposed parking lot can meet the requirements of the Boulder County Multimodal Transportation Standards (MMTS).

The site plans as submitted show bicycle parking for 18 bicycles, which complies with the MMTS. However, plans as submitted do not show the specifics of the bicycle racks to be installed. To ensure that the racks meet the MMTS, staff recommends as a condition of approval that the plans submitted for building/grading permit for the parking include details on the bicycle parking and demonstrate that MMTS requirements are met.

Finally, to ensure that construction activities do not pose any negative impacts to the transportation system in the area of the subject parcel, staff recommends as a condition of approval that all construction equipment and materials be stored and staged on the subject parcel; no equipment or materials may be stored or staged in the public right-of-way.

Therefore, as conditioned in this criterion and Criterion 1 above, staff finds this criterion can be met.

#### (8) Will not cause significant air, odor, water, or noise pollution;

Staff has no concerns that the proposal will result in the creation of air, odor, water, or noise pollution. Additionally, no referral agencies have responded with any such concerns.

Therefore, staff finds this criterion is met.

#### (9) Will be adequately buffered or screened to mitigate any undue visual impacts of the use;

The church structure is existing and most of the proposed modifications to the structure are on the interior. The only proposed exterior modifications to the structure are a few new egress doors; staff finds these will not have any undue visual impacts.

The proposed parking lot is at ground level and will not have any significant visual impacts. The applicants have not proposed to install any new exterior light fixtures on the structure or in the parking lot. Per the site plans submitted, the applicants have proposed a concrete pad for trash receptacles in the southwest corner of the parking lot. To ensure that these receptacles do not have a negative visual impact on the surrounding properties, staff recommends as a condition of approval that the applicants install a solid fence around all four sides of the trash area.

Therefore, as conditioned, staff finds this criterion can be met.

## (10) Will not otherwise be detrimental to the health, safety, or welfare of the present or future inhabitants of Boulder County;

There is no indication the proposal will have detrimental effects on the health, safety, or welfare of the present or future inhabitants of Boulder County, and no referral agency has responded with such a concern.

Therefore, staff finds this criterion is met.

(11) Will establish an appropriate balance between current and future economic, environmental, and societal needs by minimizing the consumption and inefficient use of energy, materials, minerals, water, land, and other finite resources;

Staff has not identified any concerns related to the consumption and inefficient use of energy, materials, minerals, water, land, and other finite resources; additionally, no referral agencies responded with any such concerns.

Therefore, staff finds this criterion is met.

(12) Will not result in unreasonable risk of harm to people or property – both onsite and in the surrounding area – from natural hazards. Development or activity associated with the use must 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; all as identified in the Comprehensive Plan Geologic Hazard and Constraint Areas Map or through the Special Review or Limited Impact Special 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.

The Comprehensive Plan does not identify any natural hazards on or near the subject parcel. Staff has not identified any potential risks from natural hazards; additionally, no referral agencies have responded with any such concerns.

Therefore, staff finds this criterion is met.

(13) The proposed use shall not alter historic drainage patterns and/or flow rates unless the associated development includes acceptable mitigation measures to compensate for anticipated drainage impacts. The best available information should be used to evaluate these impacts, including without limitation the Boulder County Storm Drainage Criteria Manual, hydrologic evaluations to determine peak flows, floodplain mapping studies, updated topographic data, Colorado Geologic Survey landslide, earth/debris flow data, and creek planning studies, all as applicable given the context of the subject property and the application.

Staff finds that recognition of the existing church use will not have any impacts on historic drainage patterns or flow rates. Additionally, staff finds the proposed modifications to the existing structure will not have any impacts to drainage.

As discussed above, however, the proposed parking lot project will result in a significant increase in impervious surface on the subject parcel; this will significantly alter the drainage patterns on the subject parcel. Per the site plans and drainage report, both dated October 2023, the increased stormwater runoff will be directed to an onsite detention pond, located north of the existing building (see Figure 7 below). These measures are intended to ensure that the changes in existing stormwater drainage patterns are handled on-site and do not adversely impact any adjacent parcels or public infrastructure systems. Per the November 30, 2023 referral response from the Boulder County Access & Engineering Team, the submitted drainage report has been reviewed and found to be acceptable.

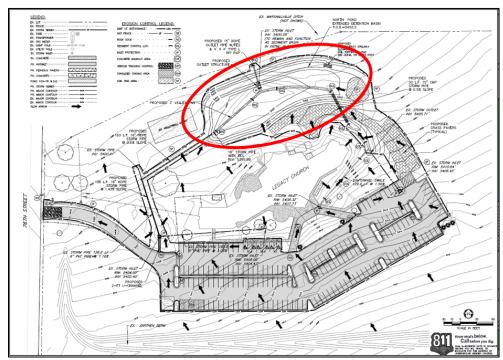


Figure 7: October 2023 drainage plan, with detention pond location indicated in red.

Per the referral response from the Boulder County Stormwater Team, the proposed parking lot project will involve more than one acre of ground disturbance and is located within the Boulder County Urbanized Area. As such, a Stormwater Quality Permit is required. The applicants are actively working with the Stormwater Team to ensure that plans submitted for permitting meet the SWQP requirements. Staff recommends as a condition of approval that the applicants submit an application for a SWQP at building permit application and that the SWQP be obtained before any work commences.

Therefore, as conditioned, staff finds this criterion can be met.

#### RECOMMENDATION

Staff has determined that the proposal can meet all the applicable criteria of the Boulder County Land Use Code for Special Review. Therefore, staff recommends the Boulder County Planning Commission recommend the Board of County Commissioners *CONDITIONALLY APPROVE* docket SU-23-0002 Legacy Church Sanctuary Expansion and Parking Lot with the following conditions:

- 1. The site plans dated October 16, 2023 are approved as submitted, subject to all additional conditions of approval.
- 2. Prior to the issuance of any permits by the Boulder County Community Planning & Permitting Department and within one-year of the signing of the Resolution, the applicants must provide a Development Agreement for review and approval by County staff. Once approved by County staff, the Development Agreement must be signed and notarized by the applicants, and will be recorded by County staff.
- 3. *At building permit application*, the applicants must submit a Boulder County Stormwater Quality Permit application. The Stormwater Quality Permit must be issued before any groundwork can commence.
- 4. *At building permit application*, plans submitted for permitting of the parking lot must show electric vehicle charging stations (EVSE) as required in Article 4-516.W.5 of the Land Use Code. A Level 2 or Level 3 EVSE with a minimum of one SAE J1772 EV Plug, or the equivalent, is required for the first 15 automotive parking spaces. If no Level 3 EVSE is installed then for each additional 25 automotive parking spaces, one additional Level 2 EVSE with a minimum of one SAE J1772 EV Plug, or the equivalent, is required. If Level 3 EVSE is installed, then no additional EVSE is required.
- 5. *At building permit application*, plans submitted for permitting of the parking lot must show a minimum of 5% of the interior of the parking lot area as landscaped as required in Article 4-516.W.5 of the Land Use Code.
- 6. To ensure that the number of seats in the worship space does not result in reduced aisleways or restrict movement of people in the worship space, the total number of seats in the worship space shall be limited to 405 seats.
- 7. **Prior to the issuance of any building permits for the existing structure,** the applicants must contact the Colorado Department of Public Health and the Environment to verify that the existing onsite wastewater treatment system (OWTS) is in compliance with all applicable state requirements; the applicants must provide documentation of verification of compliance to Boulder County Public Health and Boulder County Community Planning & Permitting.

- 8. **During construction,** heavy equipment must be restricted from the surface of the onsite wastewater treatment system absorption field to prevent damage to the OWTS. Caution should be used in conducting trenching and excavation activities so that sewer lines and other OWTS components are not damaged.
- 9. The applicants must work with Mountain View Fire Rescue to address the concerns outlined in their referral response. *Prior to the issuance of any building permit for any modifications to the existing building*, the applicants must provide documentation of compliance with the International Fire Code to Boulder County Community Planning & Permitting.
- 10. *During construction*, construction traffic to and from the subject parcel is limited to between 8:30 am and 3:30 pm, Monday through Friday.
- 11. *At building/grading permit application for the parking lot*, plans submitted for permitting of the parking lot must show a minimum of 18 bicycle parking spaces. The bicycle racks must meet the Boulder County Multimodal Transportation Standards.
- 12. **During construction**, all construction equipment and materials be stored and staged on the subject parcel; no equipment or materials may be stored or staged in the public right-of-way at any time.
- 13. At building/grading permit application for the parking lot, plans submitted for permitting of the parking lot must show a solid fence around all four sides of the trash area. This fence must be of sufficient height and materials so as to completely visually screen the trash receptacles from adjacent parcels and the public right-of-way.
- 14. The applicants are subject to the terms, conditions, and commitments of record and in the file for docket *SU-23-0002 Legacy Church Sanctuary Expansion and Parking Lot*.



#### **Boulder County Land Use Department**

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Phone: 303-441-3930

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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 ☐ Correction Plat ☐ Exemption Plat ☐ Final Plat ☐ Limited Impact Spe ☐ Limited Impact Spe ☐ Location and Exter	cial Use Waiver	Review Modificati Use Preliminar	ation of Special  ary Plan (vision (Replat)  Road/  Site Pl  Sketch		Road/Easement Vacation Site Plan Review Site Plan Review Waiver Sketch Plan		☐ Special Use (Oil & Gas development) ☐ State Interest Review (1041) ☐ Subdivision Exemption ☐ Variance ☐ Other:	
Location(s)/Street Address(e	270 N. 76th St	reet, Boulder CO 80303						
Subdivision Name - NO	ONE -	•						
Lot(s)	Block(s)	ONE -	Section(s) A part of the South 1.	Township(s) Township 1 South			Range(s) Range 70 West, 6th P.M.	
Area in Acres 11.02 Acres	Existing Zoning	Existing Zoning Existing Use of Pro					Number of Proposed Lots	
Proposed Water Supply	Existing Water Supply	- Laffayette	Proposed Sewage			c Tank and Le	ach Field	
Applicants:								
Applicant/Property Owner  LEGACY CHURCH, a regis  Mailing Address 270 N. 1	tered trade name of ROCK	CREEK CHURCH, a Co	lorado non-profit corpora	Email gh	ansen@mac.com			
City	State CO	Zip Code 80303		Phone (720) 560-7500				
oplicant/Property Owner/Agent/Consultant  Grant Hansen, Elder Chair / Corporation President		Email ghansen@mac.com						
Mailing Address 270 N. 7	76th Street							
City Boulder	State	Zip Code	80303 Pho		Phone (720) 560-7500			
Agent/Consultant		-		Email				
Mailing Address								
City	State	Zip Code		Phone				
Certification (Please	refer to the D	ulatia un acidi						

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 And Hamm	Printed Name Grant Hansen	Date 3/1/202	
Signature of Property Owner	Printed Name	Date	

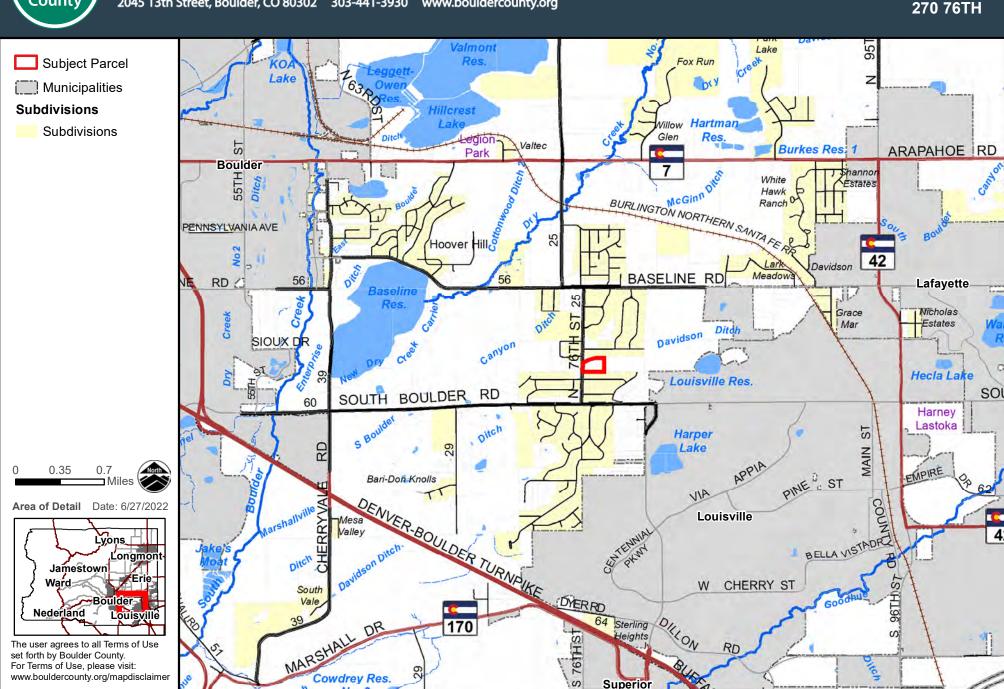
The Land Use Director may waive the landowner signature requirement for good cause, under the applicable provisions of the Land Use Code.



## **Community Planning & Permitting**

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

**Vicinity** 





# Community Planning & Permitting 2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org

**Aerial** 270 76TH





set forth by Boulder County. For Terms of Use, please visit: www.bouldercounty.org/mapdisclaimer

**∼**Boulder

Jamestown

Nederland -



# Community Planning & Permitting 2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org

**Aerial** 270 76TH



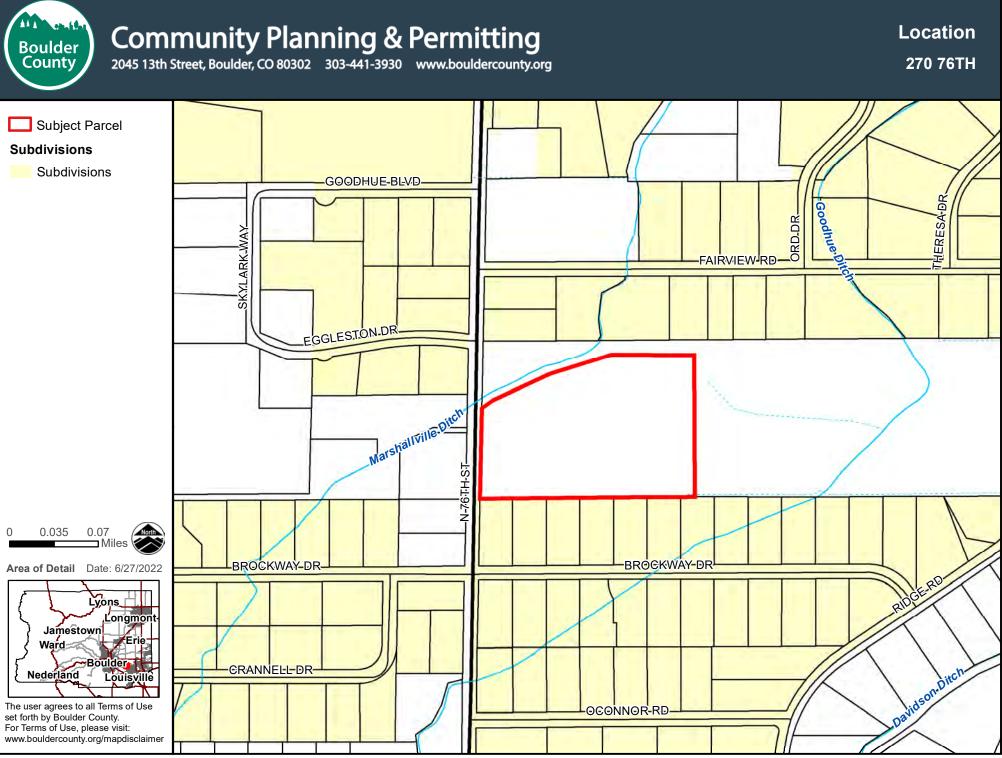


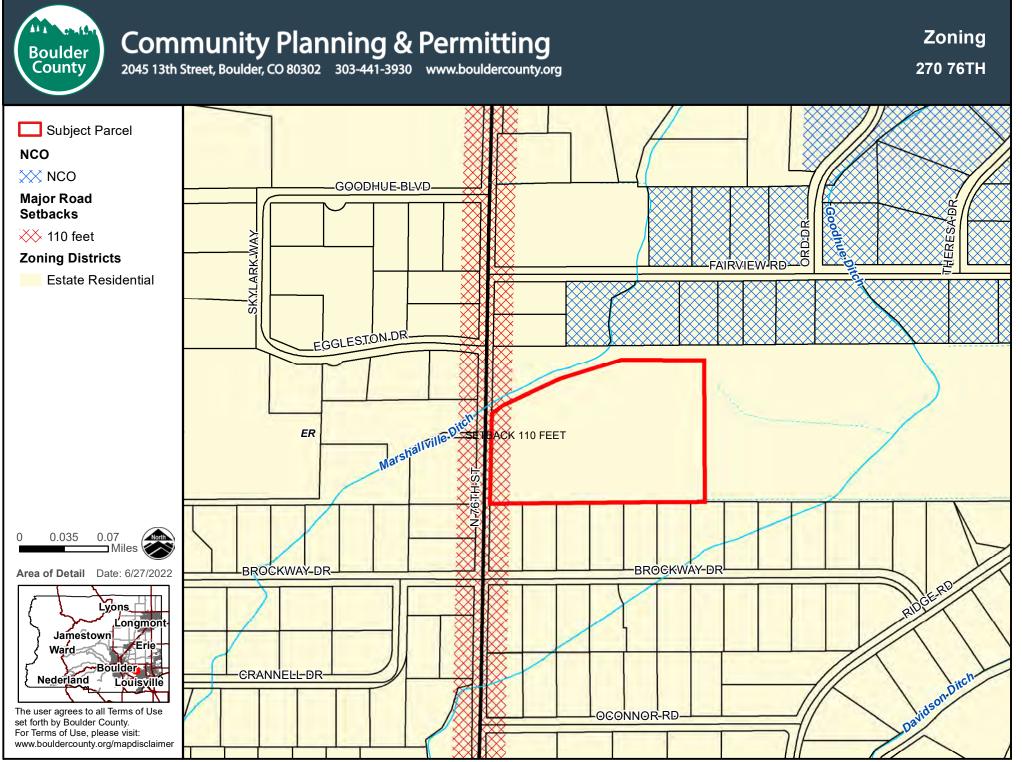
Jamestown

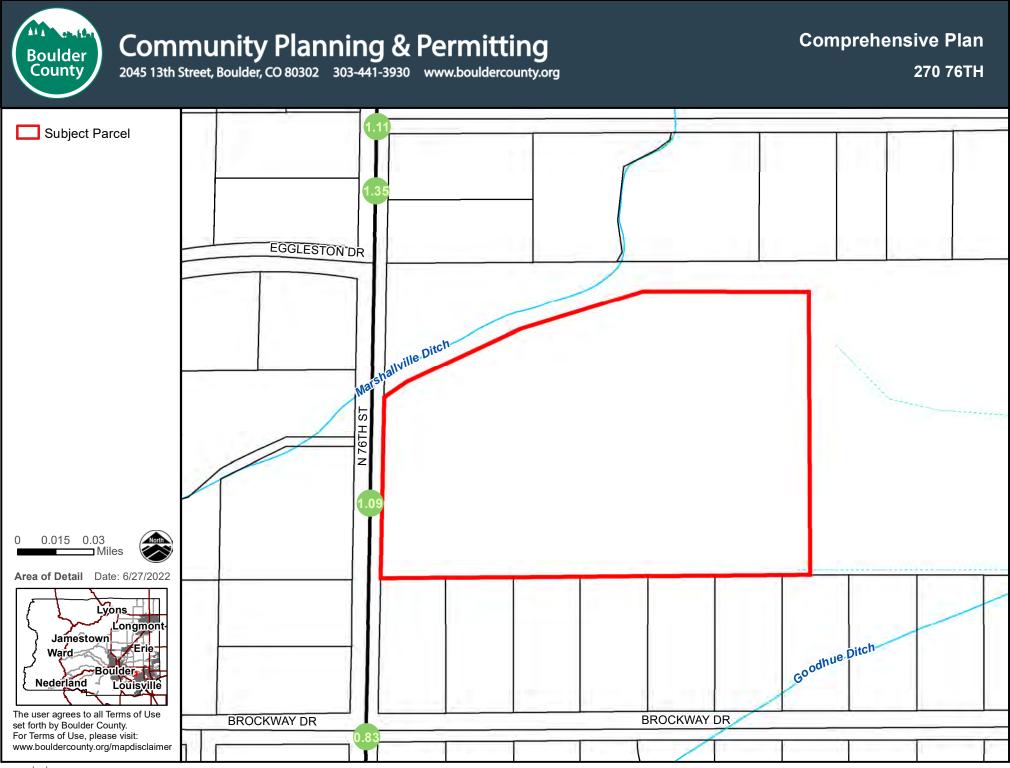
Nederland -

set forth by Boulder County. For Terms of Use, please visit:

-Boulder





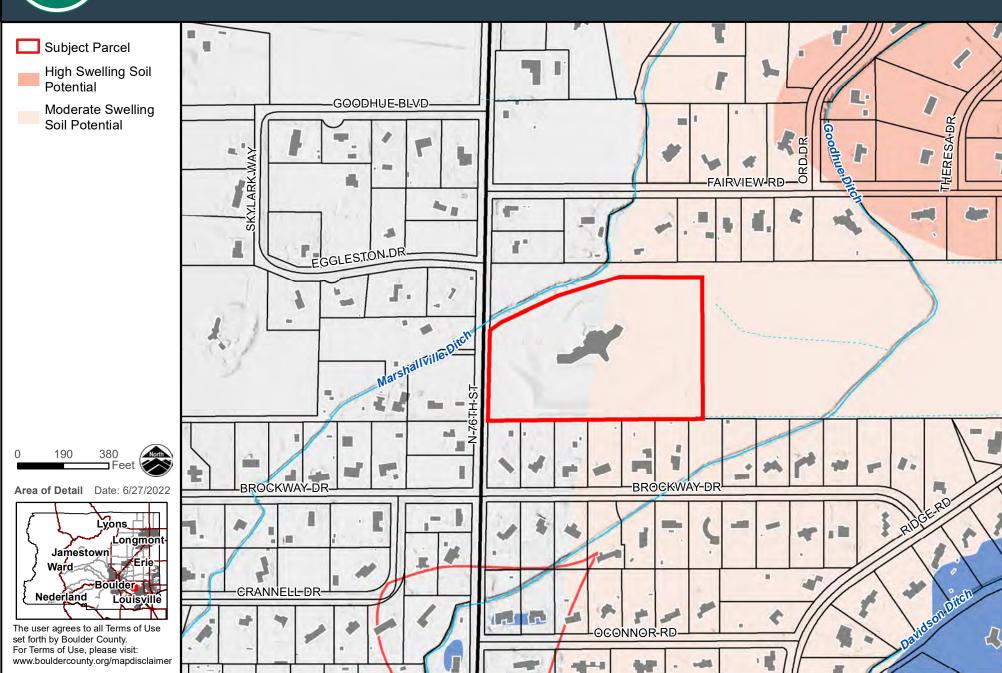


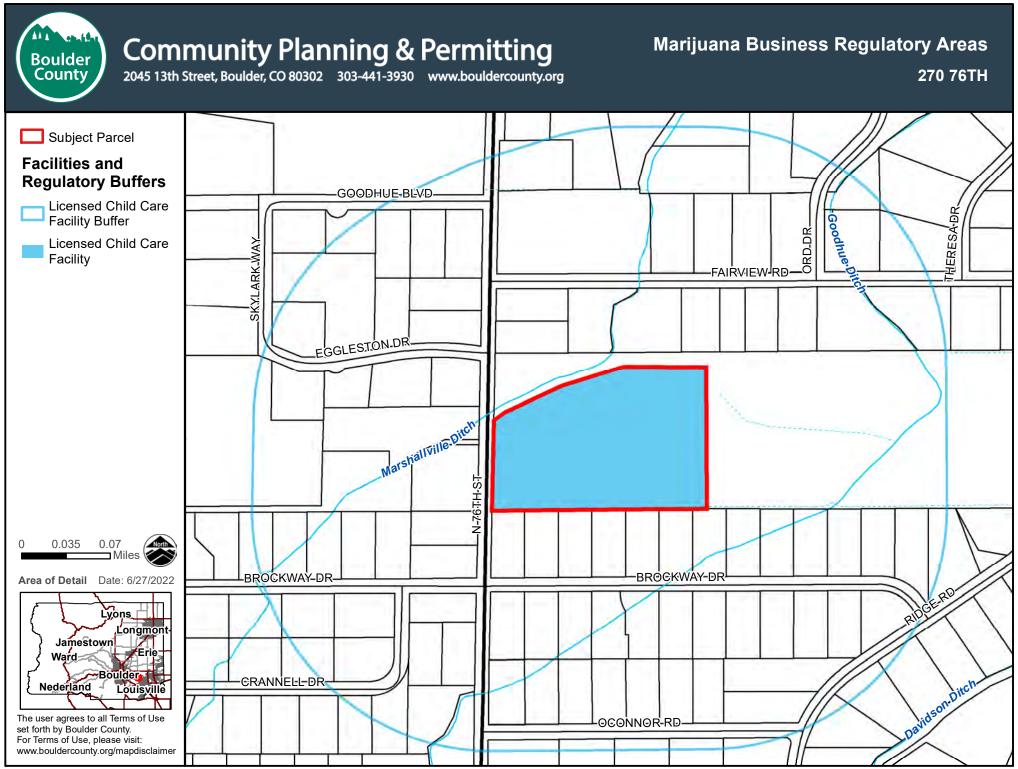


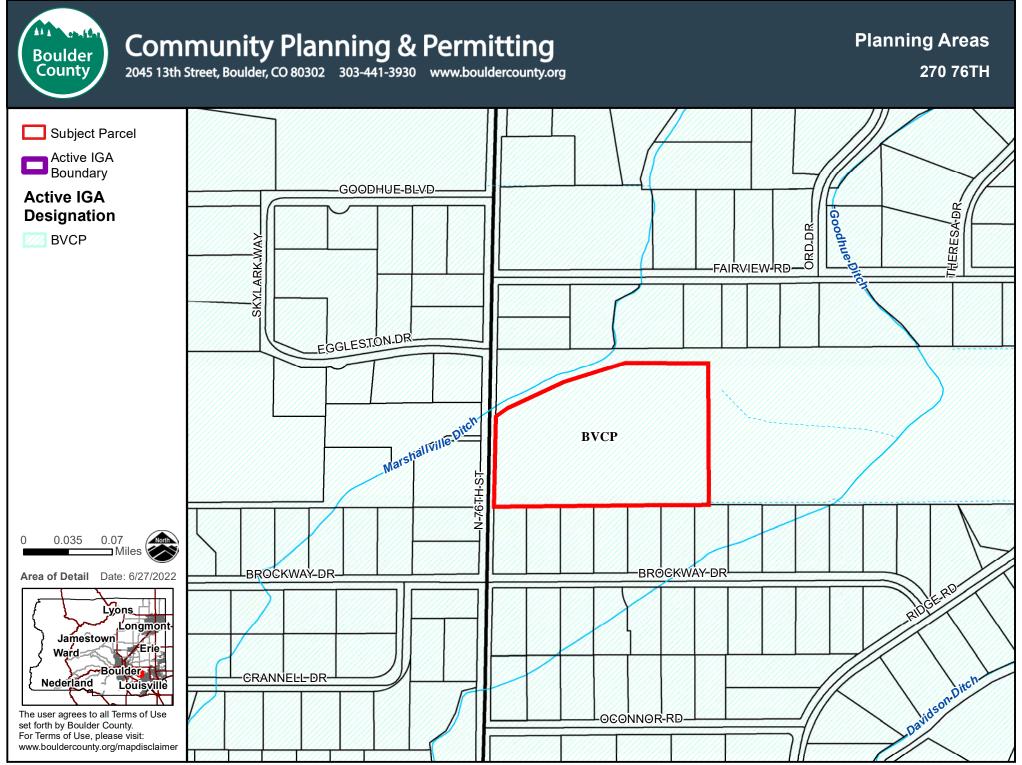
## **Community Planning & Permitting**

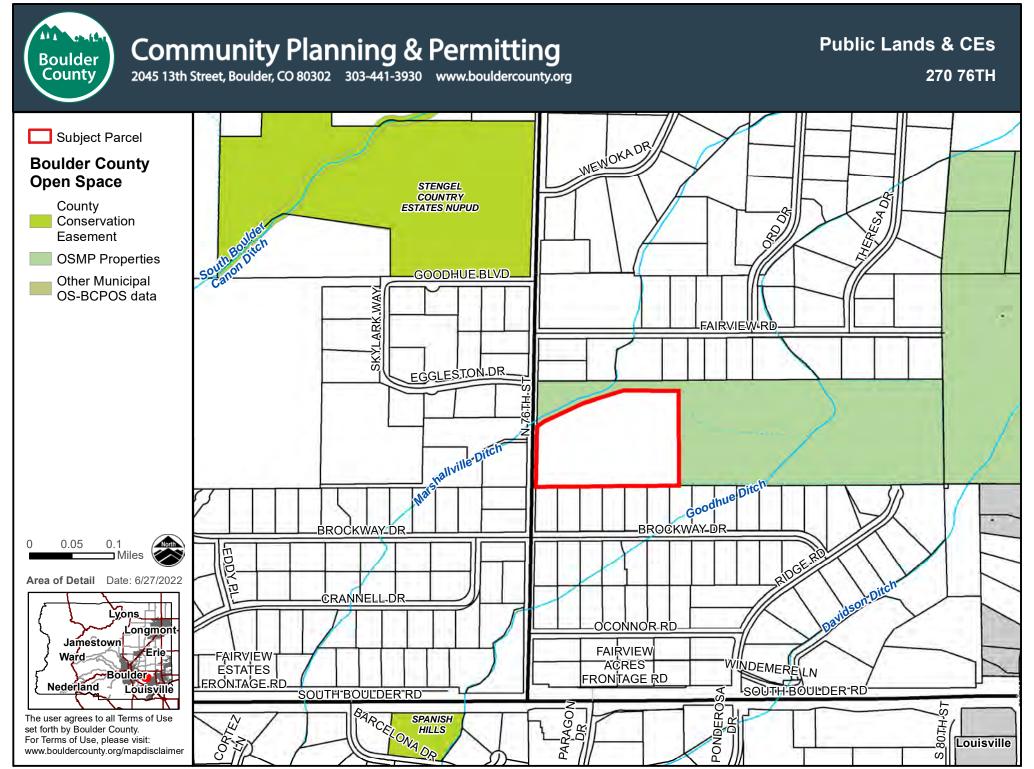
2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org

Geologic Hazards 270 76TH











February 21, 2023

**Boulder County** 

Re: Traffic Letter – Pre-Application Methodology Statement

Legacy Boulder Church - Site Work Package and Sanctuary Renovations

270 76th Street

Boulder County, Colorado

Dear Sir or Madam:

This letter is intended to document the traffic flow for the proposed remodel of the existing Legacy Boulder Church (formerly known as Boulder Church of Christ) worship area. This letter will serve as part of the Pre-Application Methodology Statement as directed by Boulder County

Legacy Boulder Church is located at 270 N. 76<sup>th</sup> Street in Boulder County. It is bounded by South Boulder Road on the south and Baseline Road on the north. The Church is located on the east side of N 76<sup>th</sup> Street. Other major roads in the area are McCaslin Blvd and N 75<sup>th</sup> Street. See the attached Site Plan and location map. The documentation submitted to Boulder County in November of 1991 shows access to The Church of Christ (now known as the Legacy Boulder Church), is a driveway from N 76<sup>th</sup> Street. N 76<sup>th</sup> Street at that point is two lanes with shoulders on both sides (solid white painted lines that also serve as bike paths). The posted speed limit is 40 miles per hour on N. 76<sup>th</sup> Street.

There are signalized intersections at N. 76<sup>th</sup> Street and South Boulder Road and Baseline Road. The intersections at South Boulder Road and McCaslin, and Baseline Road and N 75<sup>th</sup> Street are also signalized.

There are no sidewalks on either side of N. 76th Street. The existing drive entry into the church is a 2-lane curb cut. The entry drive is bounded by a split rail fence and there are no sidewalks from N. 76th Street to the building.

The church is in a primarily residential area. Nearby residential neighborhoods are Grandview Estates, Indian Hills, Fairview Estates Paragon Estates, Spanish Hills and Longs View to the west. The church sits on the west side of a Boulder Open Space area that was purchased from Boulder County in 1991. The Open Space does not have a name but is shown on the maps and is to the east of the church property. Access to the Open Space would be off on N. 76th Street on the north side of the church's property. This access has not yet been developed. This access is referenced in the sale of the property to the Boulder Valley Church of Christ.

Other information about the area includes:

- 1. There are no RTD bus stops on N. 76<sup>th</sup> Street. There are RTD bus stops on South Boulder Road and Baseline Road.
- 2. Boulder Valley School District currently stops on N. 76th Street for children pick up. The specific numbers and locations of stops are unknown.
- 3. Mountain View Fire/Rescue has a station on Baseline Road, just east of the intersection of Baseline Road and N. 76<sup>th</sup> Street.
- 4. There are also two (2) other churches on N. 76<sup>th</sup> Street between South Boulder Road and Baseline Road. The larger of the two, Reclamation Church, is north of the Legacy property. From their website, they have various group functions Monday thru Friday. Some are at 6:30 am and others are at 6:30 pm. These are small less than 100 people. The other church is small and is located about halfway between Legacy Church and Baseline Road. There is no information on when they meet for services or other functions.

The existing Boulder Legacy Church currently is 17,224 square feet, and this is not being modified by the proposed project. The existing Worship Area is 2,976.7 sq. ft. There are also three classrooms adjacent to the Worship Area that were used as overflow spaces using closed circuit TV monitors. These two areas are about 1726 square feet. The existing Worship Area has a seating capacity of 411 seats per the attached document from the submittal to Boulder County in 1991.

The remodel will consist of removing the walls that separate two classroom/overflow areas to the east and west from the current worship area. The original design planned that these walls could be removed to expand the worship area. Reference the attached new floor plan. The new worship area will become 5240 sq. ft. with a capacity of 405 seats. In addition to the changes to the worship area two new doors will to added to the worship area for exiting and one new door will be added to the Mom's room, also for exiting. These three doors will all be on the north side and will be painted to match the siding.

The project will remove the two showers in the restrooms to the south of the worship area. The women's restroom will be moved to where the current men's restroom is located, and two additional water closets will be installed. The existing women's restroom will become the men's restroom and two existing urinals will be moved and three urinals will be added.

The remodel will pave the parking lot which is currently gravel and includes the construction of fire apparatus access roads at the request of Mountain View Fire Rescue. The fire access roads will be constructed of concrete blocks with openings in them to allow grass to grow and rainwater to pass into the subsoil.

The existing site drawing A-1.0 (attached) shows 154 parking spaces including 4 handicapped spaces. Section 4-404 of the Boulder County Land Use Code in subsection D. Church 3. Parking requires 1 parking space per 30 sq. ft. of worship area. The revised parking plan SP01 shows 176 spaces including 2 ADA car and 4 ADA Van. There is also 2,000 sq. ft. of overflow parking along the new fire access road on the east end of the building. These spaces are not counted for the required parking.

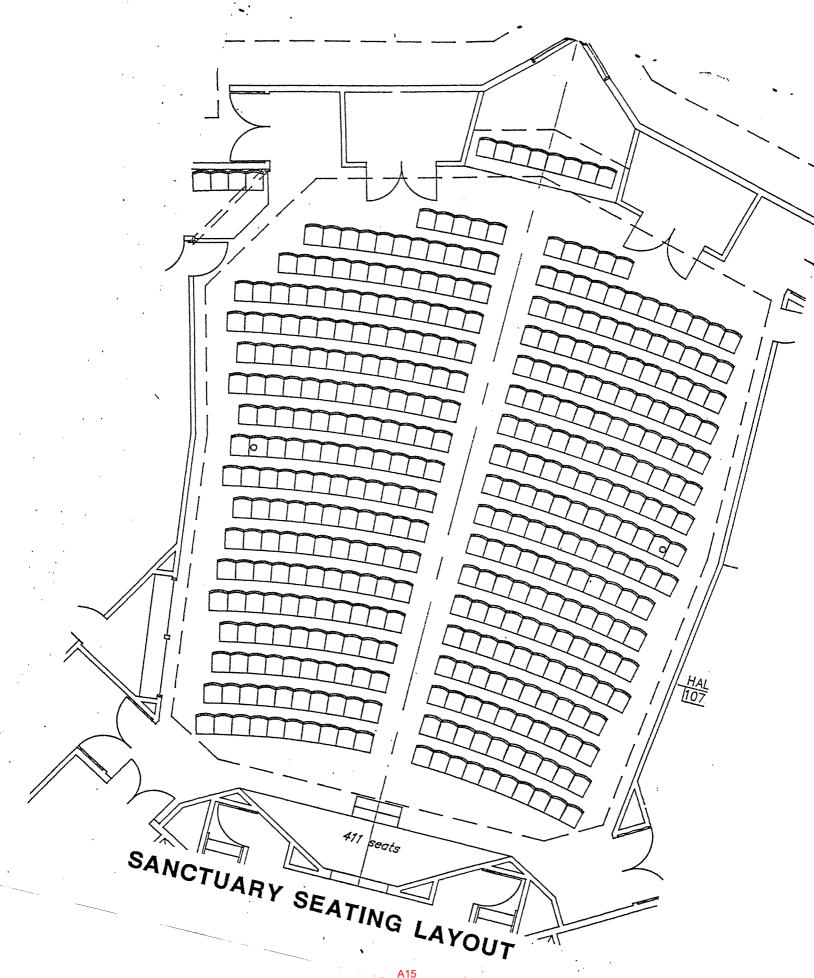
Boulder Legacy currently has one service held every Sunday at 10:00 AM. The service usually consists of approximately 100 vehicles and 250 people. Christmas service in 2022 had about 325 people in the worship area and up to 20 people including kids and teachers in other parts of the building. There were about 140 vehicles at that service.

Randomly scheduled events occur during the week with up to 15 people and 10 cars attending during these events. Currently, cars arrive from 7:30 AM on Sunday till about 10:15 with the majority arriving between 9:30 and 10:15. From observations, cars leaving after the service leave from approximately 11:15 AM to 12:30 PM. At no time are there any more than 5 cars waiting to get onto N 76th Street.

The usage and attendance of the building will not be significantly altered or impacted by this project, as such, we request that a full traffic study not be required for this project.

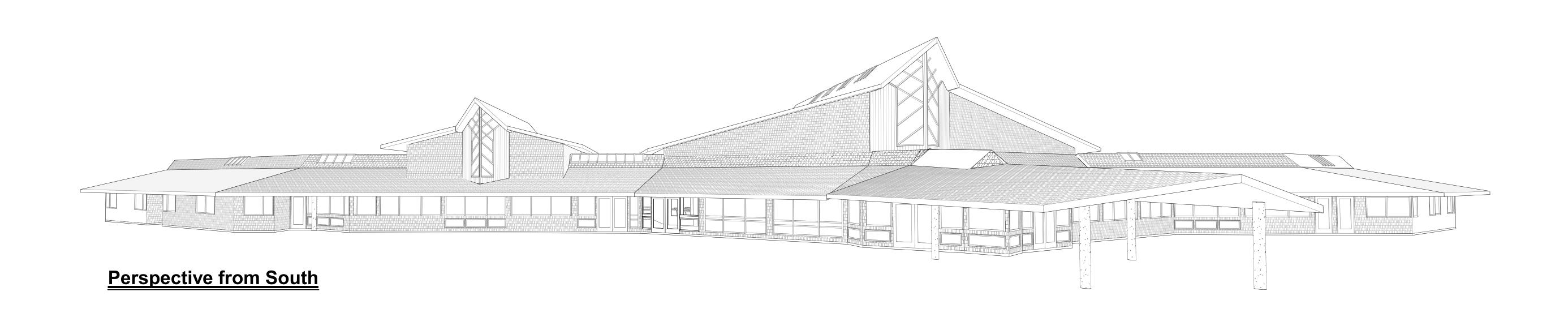
Sincerely,

John M. McGovern



# Legacy Church

Parking Lot and Sanctuary Renovations 270 N 76th St. Boulder, CO 80303 DAO No.: 2022-016 Special Use Review Submittal March 6, 2023



## **DRAWING INDEX**

Elevations

GENERAL
Cover Cover Sheet
G0.0 Standard Symbols, Abbreviations & General Notes

CIVIL
C1.0 Site Plan
C2.0 Grading Plan

ARCHITECTURE



Email: dan@daoarch.com

OWNER: LEGACY CHURCH 270 NORTH 76TH STREET BOULDER, CO 80303 CONTACT: JOHN McGOVERN PHONE #: 720.320.4884

ARCHITECT:
DAO ARCHITECTURE
7230 MEADE ST
WESTMINSTER, CO 80030
CONTACT: DAN ORECCHIO

PHONE #: 720.273.0431

STRUCTURAL ENGINEERS:
TJF STRUCTURAL DESIGN, INC.
5995 GREENWOOD PLAZA BLVD. SUITE 120
GREENWOOD VILLAGE, CO 80111
CONTACT: TROY FORNSTROM
PHONE #: 303 618 4555

LANDSCAPE ARCHITECTS / CIVIL ENGINEERS: DREXEL,BARRELL & CO 1376 MINERS DRIVE, SUITE 107 LAFAYETTE, CO 80026 CONTACT: BRIAN CHARLAND, PE PHONE: 303.442.4338

Legacy Church

Parking Lot and Sanctuary Renovations 270 N 76th St. Boulder, CO 80303

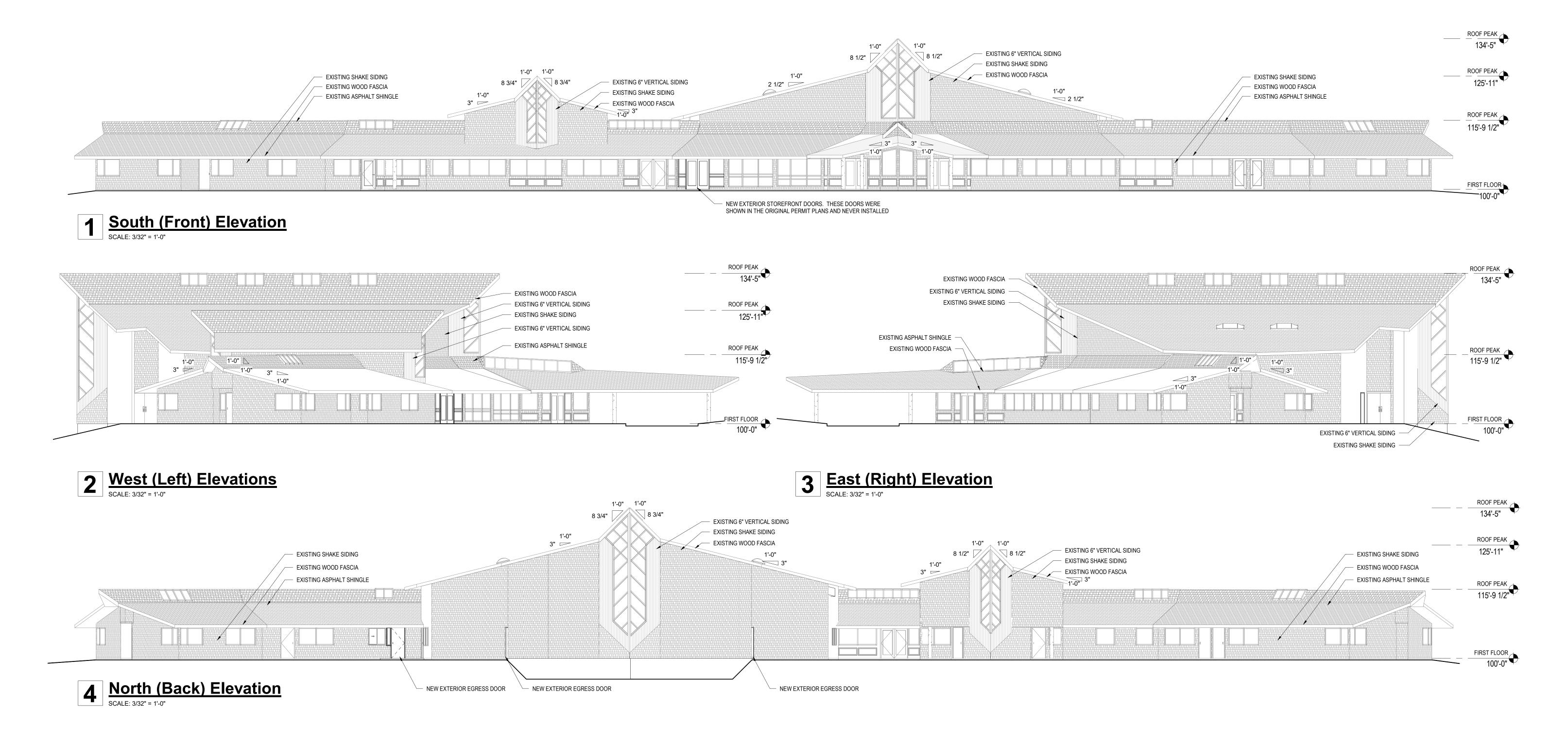
DAO No.: 2022-016

March 6, 2023

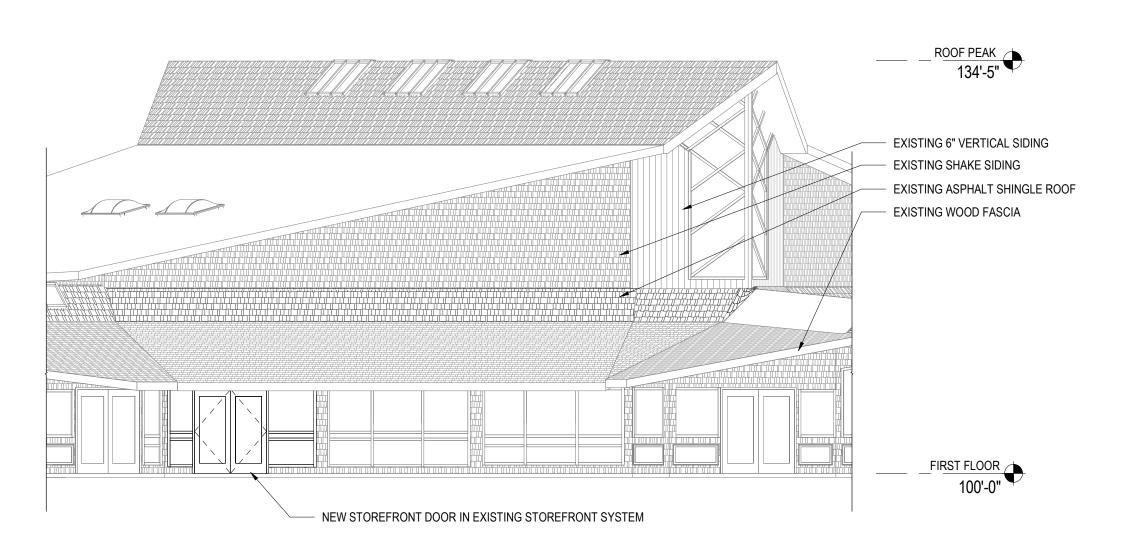
SPECIAL USE REVIEW SUBMITTAL



Attachment A - Application Materials



NOTE: THE EXTERIOR OF THE BUILDING ENVELOPE IS ONLY BEING MODIFIED FOR THE ADDITION OF NEW DOORS



5 Elevation at New Door
SCALE: 1/8" = 1'-0"

Legacy Church

Parking Lot and Sanctuary Renovations 270 N 76th St. Boulder, CO 80303

DAO No.:2022-016

March 6, 2023

levations

Attachment A - Application Materials

## GENERAL DEMOLITION NOTES

- THE GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS SHOWN ON THE PLANS PRIOR TO COMMENCEMENT OF THE WORK. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO COORDINATE INSTALLATION OF NEW WORK WITHIN THESE EXISTING CONDITIONS. ANY DEVIATIONS IN EXISTING CONDITIONS OR DIMENSIONS INDICATED SHALL BE COORDINATED WITH THE ARCHITECT/ENGINEER AND OWNER IN ORDER TO MODIFY THE PLANS ACCORDINGLY.
- THE EXISTING BUILDING SHALL BE PROTECTED FROM WEATHER AT ALL TIMES.
   OPENINGS AND PENETRATIONS SHALL BE PROTECTED WITH DURABLE,
   INSULATED TEMPORARY CONSTRUCTION. COORDINATE SECURITY
   REQUIREMENTS WITH THE OWNER.
- 3. ALL WORK IS TO BE PERFORMED IN SUCH A MANNER AS TO MINIMIZE THE IMPACT ON AREAS ADJACENT TO THE AREAS OF CONSTRUCTION.
- REMOVE EXISTING FLOORS, WALLS AND CEILINGS AS REQUIRED FOR NEW CONSTRUCTION. PATCH, REPAIR AND PREPARE ADJACENT SURFACES AS REQUIRED FOR NEW CONSTRUCTION AND FINISHES.
- 5. REFER TO MECHANICAL, ELECTRICAL, PLUMBING, AND LANDSCAPE/CIVIL DRAWINGS FOR ADDITIONAL INFORMATION PERTAINING TO DEMOLITION.
- 6. REMOVE EXISTING FURNITURE, FIXTURES AND EQUIPMENT (INCLUDING ARTWORK AND MARKER/TACK BOARDS AS REQUIRED FOR NEW CONSTRUCTION. COORDINATE SALVAGE AND STORAGE OF EQUIPMENT WITH OWNER AS REQUIRED. PROTECT AND STORE ALL ITEMS DESIGNATED TO BE SALVAGED FOR REINSTALLATION.
- REMOVE EXISTING SIGNAGE AS REQUIRED FOR DEMOLITION AND STORE DURING CONSTRUCTION. REINSTALL WHEN APPLICABLE. PATCH AND PREPARE ADJACENT SURFACES AS REQUIRED FOR NEW FINISHES. ALL NEW SIGNAGE TO BE PROVIDED BY OWNER.
- 8. ALL OPENINGS AND VOIDS LEFT BY THE REMOVAL OF EXISTING CONSTRUCTION, EQUIPMENT, PIPING, DUCTS, ETC. SHALL BE PROPERLY PATCHED AND CLOSED OFF TO MAINTAIN PROPER FIRE RATING IN WALLS, IF APPLICABLE. PATCH AND PREPARE ANY AREAS TO RECEIVE NEW FINISHES AS REQUIRED.
- 9. THE ARCHITECT ASSUMES NO RESPONSIBILITY FOR THE DETECTION OR REMOVAL OF ANY HAZARDOUS MATERIALS, INCLUDING, BUT NOT LIMITED TO, ASBESTOS IN ANY FORM. PARTIES RESPONSIBLE FOR DEMOLITION SHALL NOTIFY THE OWNER IMMEDIATELY OF ANY SUSPECTED MATERIALS.
- 10. THE OWNER HAS THE RIGHT TO CLAIM ANY MATERIALS AND/OR EQUIPMENT THAT IS SCHEDULED TO BE DEMOLISHED OR REMOVED FROM THE SITE.
- 11. ALL EXISTING BUILDING ELEMENTS TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION.

FINISH PLAN FOR ADDITIONAL INFORMATION.

- 12. REMOVE EXISTING FLOOR FINISHES WHERE INDICATED. DEMOLITION INCLUDES REMOVAL OF EXISTING ADHESIVES, GROUTING BED, ETC. PATCH AND PREPARE FLOOR AND WALL SURFACES AS REQUIRED FOR NEW CONSTRUCTION AND FINISHES. WHERE FLOOR FINISH IS REMOVED, BASE WILL BE REMOVED. SEE
- 13. PREPARE EXISTING SUBSTRATES TO REMAIN AS REQUIRED TO RECEIVE NEW FINISHES.
- 14. EXISTING FLOOR SLABS ARE CONCRETE. ANY DEMOLITION OF EXISTING FLOOR SLABS WILL REQUIRE GPR X-RAY PRIOR TO DEMOLITION.

## <u>DEMOLITION KEY NOTES</u>

- 1. REMOVE EXISTING WALL ASSEMBLY IN ITS ENTIRETY OR AS REQUIRED FOR NEW CONSTRUCTION. PATCH AND PREPARE ADJACENT SURFACES AS
  - REQUIRED FOR NEW CONSTRUCTION.

REMOVE EXISTING DOOR AND FRAME IN ITS ENTIRETY. PATCH AND PREPARE

CONSTRUCTION. PATCH AND PREPARE ADJACENT SURFACES AS REQUIRED

3. REMOVE EXISTING WINDOW ASSEMBLY IN ITS ENTIRETY. PATCH AND

ADJACENT SURFACES AS REQUIRED FOR NEW CONSTRUCTION.

- PREPARE ADJACENT SURFACES AS REQUIRED FOR NEW CONSTRUCTION.

  (4.) REMOVE EXISTING STOREFRONT ASSEMBLY AS REQUIRED FOR NEW
- FOR NEW CONSTRUCTION.

  5. REMOVE EXISTING SHOWER AND ALL ASSOCIATED COMPONENTS IN ITS ENTIRETY. PATCH AND PREPARE ADJACENT SURFACES AS REQUIRED FOR
- ENTIRETY. PATCH AND PREPARE ADJACENT SURFACES AS REQUIRED FOR NEW CONSTRUCTION.

REMOVE EXISTING URINAL AND SALVAGE FOR REINSTALLATION. PATCH AND

- PREPARE ADJACENT SURFACES AS REQUIRED FOR NEW CONSTRUCTION.
- REMOVE EXISTING MECHANICAL DUCT TO BE RELOCATED. PATCH AND PREPARE ADJACENT SURFACES AS REQURIED FOR NEW CONSTRUCTION.
- 8.) REMOVE EXISTING STAIR ASSEMBLY IN ITS ENTIRETY. PATCH AND PREPARE
- ADJACENT SURFACES AS REQUIRED FOR NEW CONSTRUCTION.

  9. REMOVE EXISTING BAPTISTRY IN ITS ENTIRETY. PATCH AND PREPARE

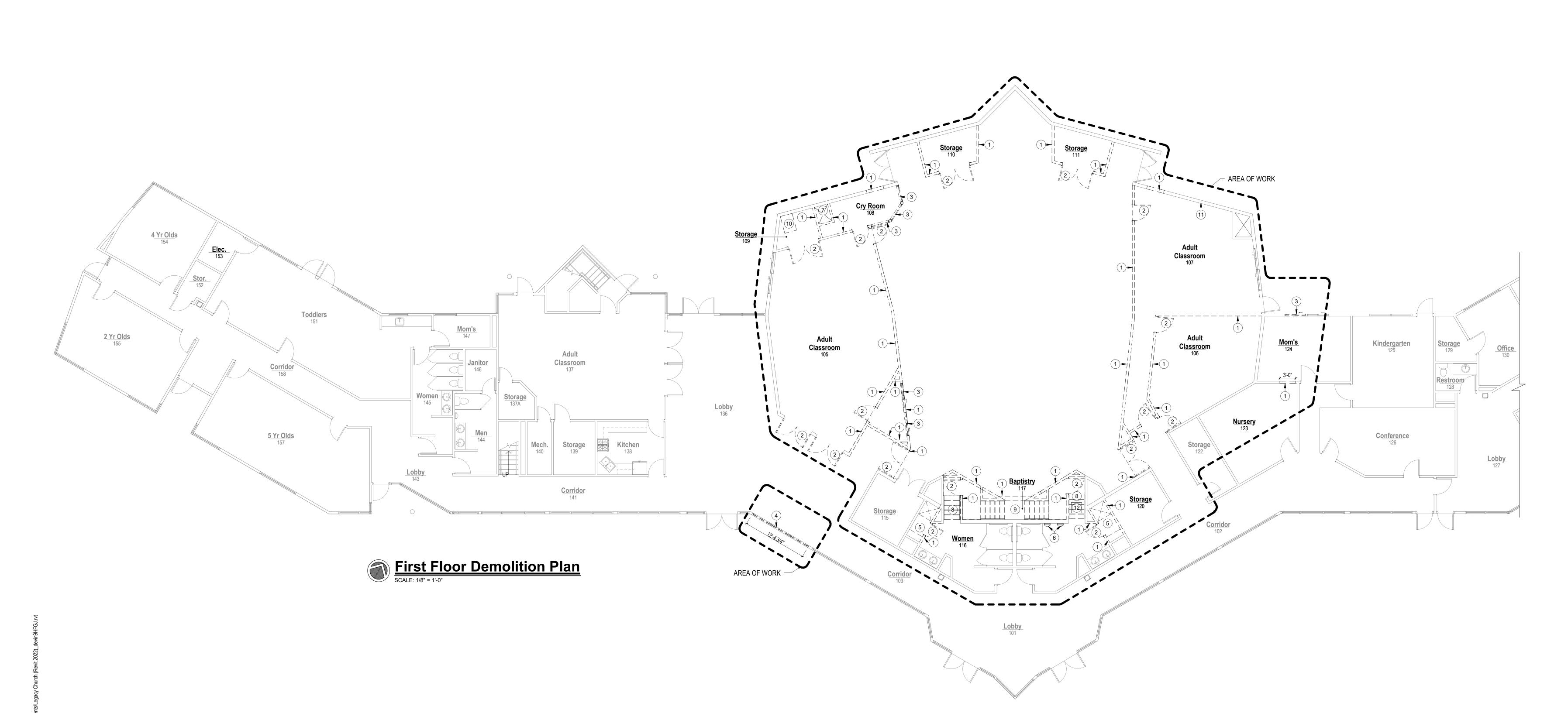
ADJACENT SURFACES AS REQUIRED FOR NEW CONSTRUCTION.

(10.) REMOVE PORTION OF (e) CONCRETE SLAB AS REQUIRED FOR INSTALLATION OF RELOCATED MECHANICAL DUCT. SEE MECHANICAL SHEETS FOR

MECHANICAL SHEETS FOR ADDITIONAL INFORMATION.

- ADDITIONAL INFORMATION.

  REMOVE PORTION OF EXISTING EXTERIOR WALL ASSEMBLY AS REQUIRED FOR THE INSTALLATION OF NEW EXHAUST FAN. PATCH AND PREPARE ADJACENT SURFACES AS REQUIRED FOR NEW CONSTRUCTION. SEE
- (12) REMOVE PORTION OF EXISTING FLOOR SLAB FOR NEW CRAWL SPACE ACCESS. PATCH AND PREPARE ADJACENT SURFACES AS REQUIRED FOR NEW CONSTRUCTION.



Legacy Church

CO 80303

Parking Lot and Sanctuary Renovations 270 N 76th St. Boulder,

Westminster, CO 80030

Phone: 720.273.0431

Web: www.daoarch.com

Email: dan@daoarch.com

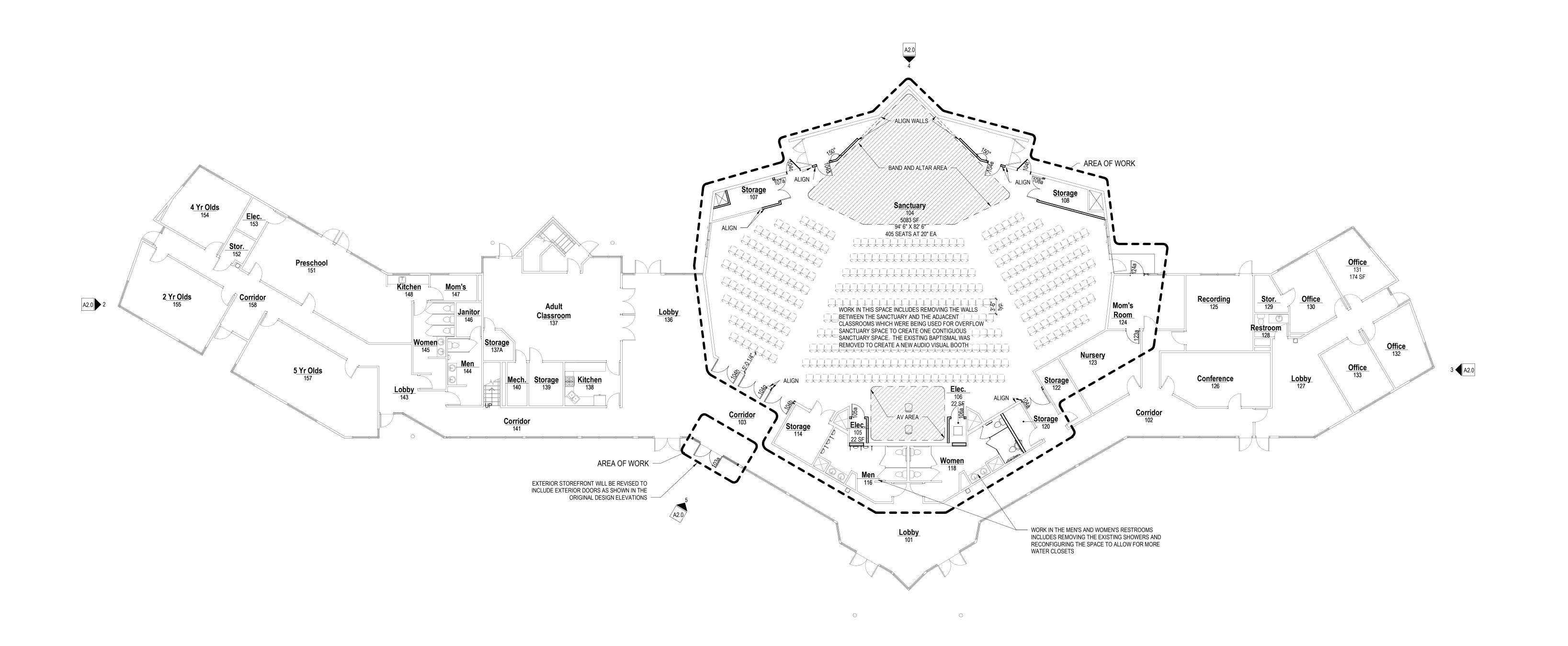
DAO No.:2022-016

February 21, 2023

First Floor Demolition Plan

**AD1.0** 





1 Floor Plan
SCALE: 3/32" = 1'-0"

(

Legacy Church

Parking Lot and Sanctuary Renovations 270 N 76th St. Boulder, CO 80303

DAO No.:2022-016

March 6, 2023

loor Plan

**A1.0** 

### **GENERAL NOTES**

- 1. ALL CONTRACTORS UTILIZING THIS PLAN AND THE INFORMATION CONTAINED THEREON ARE CAUTIONED TO COMPLY WITH THE REQUIREMENTS OF COLORADO CODE TITLE 9, ARTICLE 1.5, AS AMENDED, CONCERNING PREVENTION OF DAMAGE TO UNDERGROUND FACILITIES RESULTING FROM EXCAVATIONS (Utility Notification Act). LOCATION OF EXISTING AND PROPOSED UNDERGROUND UTILITIES AND FACILITIES SHOWN ON THE DRAWINGS HAVE BEEN DEVELOPED FROM INFORMATION MADE AVAILABLE. COMPLETENESS AND ACCURACY OF LOCATION AND DEPTH OF UTILITIES AND FACILITIES SHOWN ON THESE PLANS CANNOT BE GUARANTEED. OTHER UTILITIES MAY BE PRESENT AT THIS LOCATION NOT SHOWN ON THIS PLANS. THE CONTRACTOR IS TO VERIFY THE DEPTH AND LOCATION OF ALL UTILITIES AND FACILITIES BEFORE THE START OF WORK. UTILIZE HAND EXCAVATION AS REQUIRED. WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARDS OF THE UTILITY COMPANIES WHOSE FACILITIES ARE IN THE PROXIMITY OF THE WORK. PURSUANT TO THE REQUIREMENTS OF COLORADO CODE, THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO AT PHONE NUMBER "811", AT LEAST 2 DAYS PRIOR TO EXCAVATION.
- 2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE FEDERAL, STATE AND LOCAL CODES, AND ALL REGULATIONS APPURTENANT TO THE OCCUPATIONAL SAFETY AND
- 3. CONTRACTOR SHALL PROVIDE PROTECTION AND SUPPORT FOR EXISTING UTILITIES UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL IMMEDIATELY REPAIR ANY UTILITY LINE INTERRUPTION AT NO ADDITIONAL CONTRACT COST.
- 4. CONTRACTORS SHALL VERIFY ALL DIMENSIONS, INVERTS, ELEVATIONS, AND EXISTING CONDITIONS PRIOR TO PROCEEDING WITH THE WORK. VARIATIONS BETWEEN DRAWINGS AND ACTUAL FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND RESOLVED PRIOR TO PROCEEDING WITH THE WORK.
- 5. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR TO ANY SIDEWALKS, LAWN, TREES, PAVING, AND OTHER IMPROVEMENTS DISTURBED OR DAMAGED BY CONSTRUCTION OR DEMOLITION ACTIVITIES PROPOSED HEREIN.
- 6. CONTRACTOR SHALL PROVIDE PROPER TEMPORARY BRACING AND SHORING OF ALL CONSTRUCTION OR DEMOLITION WORK IN PROGRESS.
- 7. CONTRACTOR SHALL PROVIDE THE LAYOUT, LINE AND GRADE UNLESS OTHERWISE NOTED.
- 8. CONTRACTOR SHALL WORK ALL THE PROJECT DRAWINGS AND SPECIFICATIONS TOGETHER.
- 9. CONTRACTOR SHALL COORDINATE EXISTING AND PROPOSED CONSTRUCTION WITH OTHER PROJECT CONSTRUCTION PACKAGES.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE AND PROTECTION OF VEHICULAR AND PEDESTRIAN TRAFFIC. ALL TRAFFIC CONTROL MEASURES SHALL BE IN ACCORDANCE WITH LOCAL, STATE, AND OSHA REGULATIONS.
- 11. CONTRACTOR SHALL PROVIDE TEMPORARY DEWATERING OF EXCAVATIONS THROUGHOUT THE DURATION OF CONTRACT AT NO ADDITIONAL COST.
- 12. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES WITHIN THE DRAWINGS, SPECIFICATIONS, CODES OR STANDARDS FOR DIRECTION PRIOR TO START OF WORK.
- 13. CONTRACTORS SHALL HAVE ALL REQUIRED SUBMITTAL APPROVALS PRIOR TO BEGINNING THE WORK OR ORDERING MATERIALS.
- 14. PROFESSIONAL INSPECTION AND ACCEPTANCE OF CONSTRUCTION FOR CONFORMANCE TO THE APPLICABLE STANDARDS AND CODES IS THE RESPONSIBILITY OF THE OWNER. SITE OBSERVATION OF THE GEOTECHNICAL ASPECTS OF THE PROJECT IS TO BE DONE UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER. THE OWNER OR THE OWNER'S CONSTRUCTION REPRESENTATIVE RESERVES THE RIGHT TO INSPECT ANY PORTION OF THE WORK AND REQUEST CORRECTION TO THE OWNER'S SATISFACTION FOR ALL WORK NOT COMPLETED IN ACCORDANCE WITH THE SPECIFICATIONS AND DRAWINGS. INSPECTION OR SITE OBSERVATION OF WORK BY THE ENGINEER DOES NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY OF CONFORMING TO THE DRAWINGS AND SPECIFICATIONS FOR ALL CONSTRUCTION.

## **DEMOLITION NOTES**

- 1. THE CONTRACTOR SHALL DOCUMENT THE CONDITION OF ALL EXISTING FEATURES TO REMAIN PRIOR TO THE BEGINNING OF WORK. ALL ITEMS DAMAGED OR DISTURBED SHALL BE REPAIRED OR REPLACED IN KIND TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL
- 2. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS TO OBTAIN WRITTEN PERMISSION FROM PROPERTY OWNERS FOR DISPOSAL LOCATIONS OUTSIDE THE LIMITS OF THE PROJECT. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL CONSTRUCTION DEBRIS IN A MANNER
- WHERE NEW CONSTRUCTION TIES INTO EXISTING IMPROVEMENTS, SUCH AS PAVEMENT, SIDEWALKS, CURBS, THE CONTRACTOR SHALL SAW CUT THE EXISTING IMPROVEMENTS TO A TRUE LINE, WITH A VERTICAL FACE AND TO A MINIMUM DEPTH OF 2-INCHES OR TO THE DEPTH OF THE REINFORCING STEEL, WHICHEVER OCCURS FIRST. IF THE EDGE IS DAMAGED DURING CONSTRUCTION, IT SHALL BE RE-CUT PRIOR TO CONSTRUCTING THE NEW IMPROVEMENTS. THE MINIMUM WIDTH FOR ALL SAWCUTS OF ASPHALT PAVEMENT SHALL BE
- 4. CONTRACTOR SHALL INSTALL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE CLEARING OR DEMOLITION ACTIVITIES. SEE EROSION CONTROL PLANS.
- 5. DRAINAGE STRUCTURES SHALL NOT BE REMOVED UNTIL SATISFACTORY ARRANGEMENTS HAVE BEEN MADE TO ACCOMMODATE TRAFFIC AND DRAINAGE.

## **GRADING NOTES**

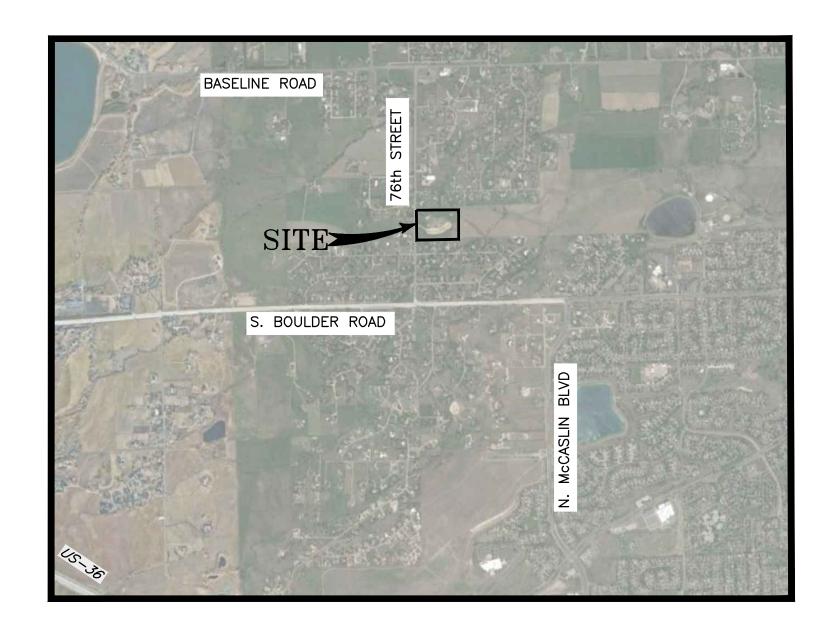
- 1. MATCH EXISTING GRADES AT LIMITS OF CONSTRUCTION.
- 2. IN AREAS OF UTILITY CONSTRUCTION OR DEMOLITION, RESTORE SURFACE TO EXISTING GRADES UNLESS OTHERWISE INDICATED.
- 3. ALL SPOT ELEVATIONS ARE FLOWLINE OF CURB AND GUTTER OR TOP OF PAVING UNLESS OTHERWISE NOTED.
- 4. ALL PROPOSED CONTOURS ARE TO TOP OF FINISHED PAVING AND LANDSCAPED AREAS UNLESS OTHERWISE NOTED.
- 5. MAXIMUM LANDSCAPE SLOPE SHALL BE 4 (HOR) TO 1 (VERT) UNLESS OTHERWISE NOTED.
- 6. REFER TO SOILS REPORT FURNISHED BY OWNER FOR ALL COMPACTION REQUIREMENTS.
- 7. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN AND PROVIDE FOR ADEQUATE DRAINAGE THROUGH THE SITE DURING THE PROCESS OF EXCAVATION, GRADING AND EMBANKMENT. THE GRADE SHALL BE MAINTAINED IN SUCH CONDITION THAT IT IS WELL DRAINED AT ALL TIMES. THE CONTRACTOR SHALL NOT REDIRECT OR CONCENTRATE FLOWS SUCH THAT DAMAGE TO DOWNSTREAM PROPERTIES WILL OCCUR.

CONSTRUCTION PLANS FOR:

# LEGACY CHURCH 270 76TH STREET BOULDER, COLORADO 80303

OCTOBER 2023

LOCATED IN THE SE 1/4 OF SECTION 1, TOWNSHIP 1 SOUTH, RANGE 67 WEST, OF THE 6TH P.M., CITY OF BOULDER, BOULDER COUNTY, STATE OF COLORADO





## **OWNER**

Legacy Church 270 76th Street BOULDER, CO 80303 CONTACT: JOHN McGOVERN (720) 320-4884

## **CIVIL ENGINEER**

Drexel, Barrell & Co. 1376 MINERS DRIVE, SUITE 107 LAFAYETTE, CO 80026 CONTACT: CAMERON W. KNAPP P.E. (303) 442-4338

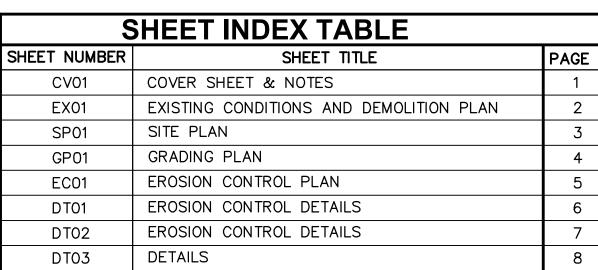
SHEET INDEX TABLE				
SHEET NUMBER	SHEET TITLE	PAGE		
CV01	COVER SHEET & NOTES	1		
EX01	EXISTING CONDITIONS AND DEMOLITION PLAN	2		
SP01	SITE PLAN	3		
GP01	GRADING PLAN	4		
EC01	EROSION CONTROL PLAN	5		
DT01	EROSION CONTROL DETAILS	6		
DT02	EROSION CONTROL DETAILS	7		
DT03	DETAILS	8		
DTO4	DETAILS	9		

#### **BASIS OF BEARINGS:**

BEARINGS ARE BASED ON NAD83 COLORADO STATE PLANE COORDINATES NORTH ZONE (0501), GRID BEARINGS.

#### **BENCHMARK**

BENCHMARK ARE BASED ON THE FINISHED FLOOR OF THE EXISTING BUILDING LOCATED AT 270 76TH STREET, BOULDER. CO 80303. SAID POINT IS THE THRESHOLD OF THE MAIN DOOR. THE ELEVATION OF THE BUILDING IS 5409.50'.



PREPARED BY:



DREXEL, BARRELL & CO. Engineers • Surveyors
1376 MINERS DRIVE, SUITE 107 LAFAYETTE, COLORADO 80026 CONTACT: CAMERON W. KNAPP, P.E.

LAFAYETTE . COLORADO SPRINGS

(303) 442-4338

OWNER/CLIENT:



270 76TH STREET BOULDER, CO 80303 303-494-2927

HUR (O)

CONSTRUCTION

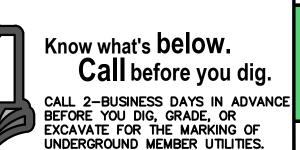
DATE
9/06/2023
10/16/2023
CWK
MAB



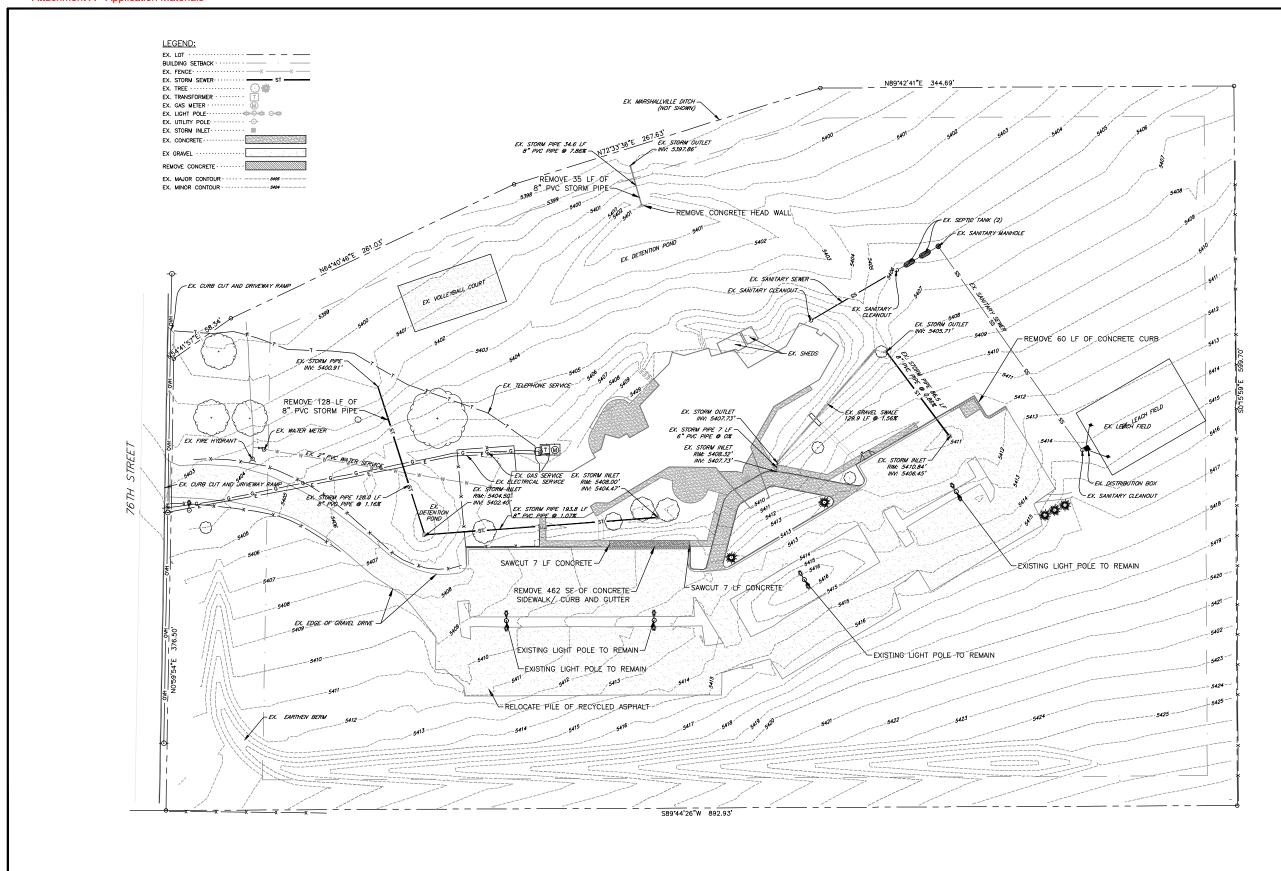
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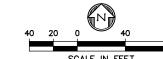
COVER SHEET

PROJECT NO. 21650-00GRCV









SCALE IN FEET

Know what's below.

Call before you dig. CALL 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

SHEET: 2 OF 9

A21

DBC Drexel, Barrell & Co.

PREPARED BY:

DREXEL, BARRELL & CC Engineers • Surveyors
1376 MINERS DRIVE, SUITE 107
LAFAYETTE, COLORADO 8002 CONTACT: CAMERON W. KNAPP, P.E.

(303) 442-4338 LAFAYETTE . COLORADO SPRINGS

OWNER/CLIENT:



270 76TH STREET BOULDER, CO 80303 303-494-2927

CHURCH LEGACY

CONSTRUCTION PLANS

ISSUE DATE COUNTY SUBMITTAL 9/06/2023 2ND SUBMITTAL 10/16/2023

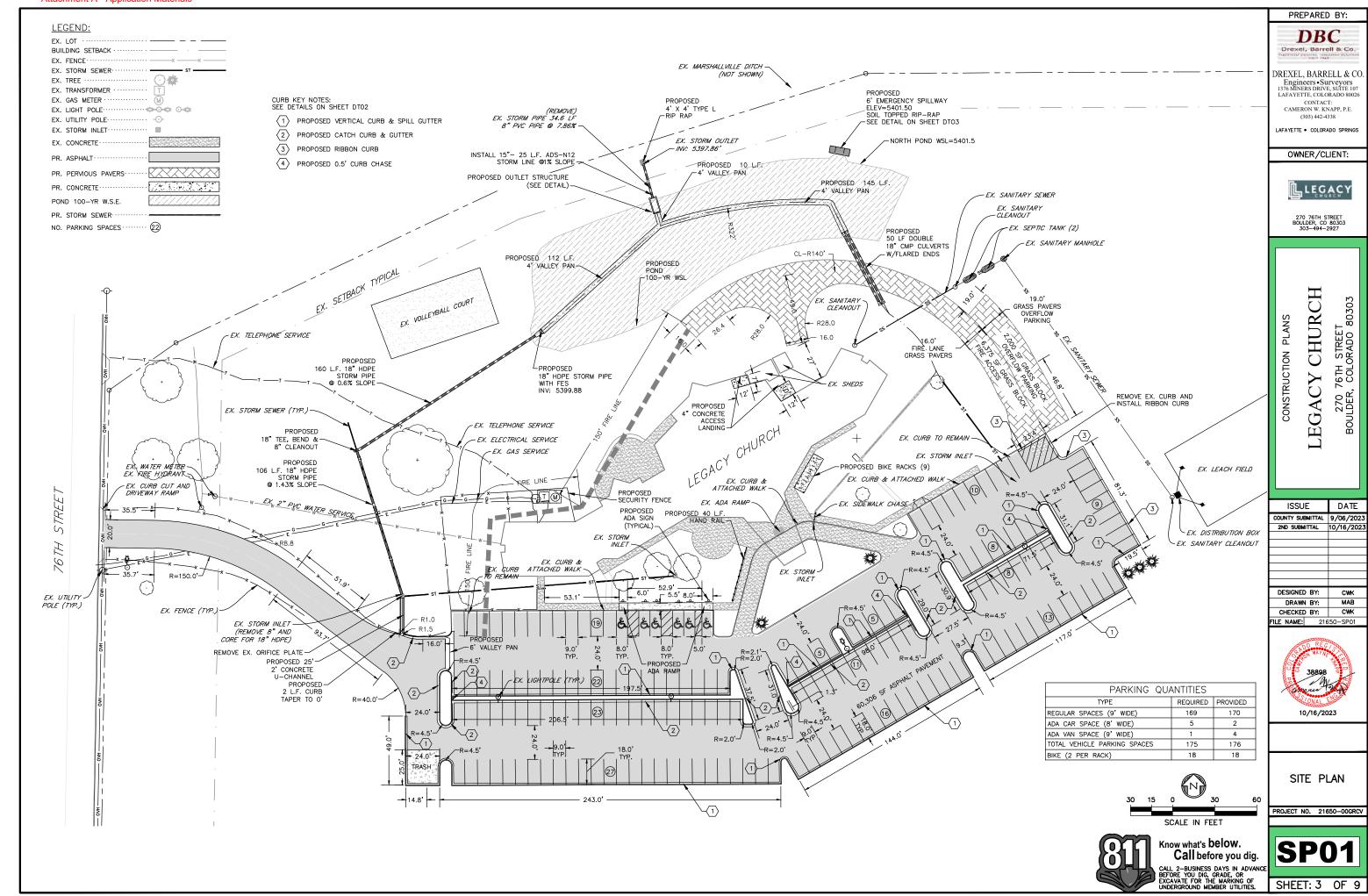
CWK DRAWN BY: MAB CHECKED BY: CWK FILE NAME:

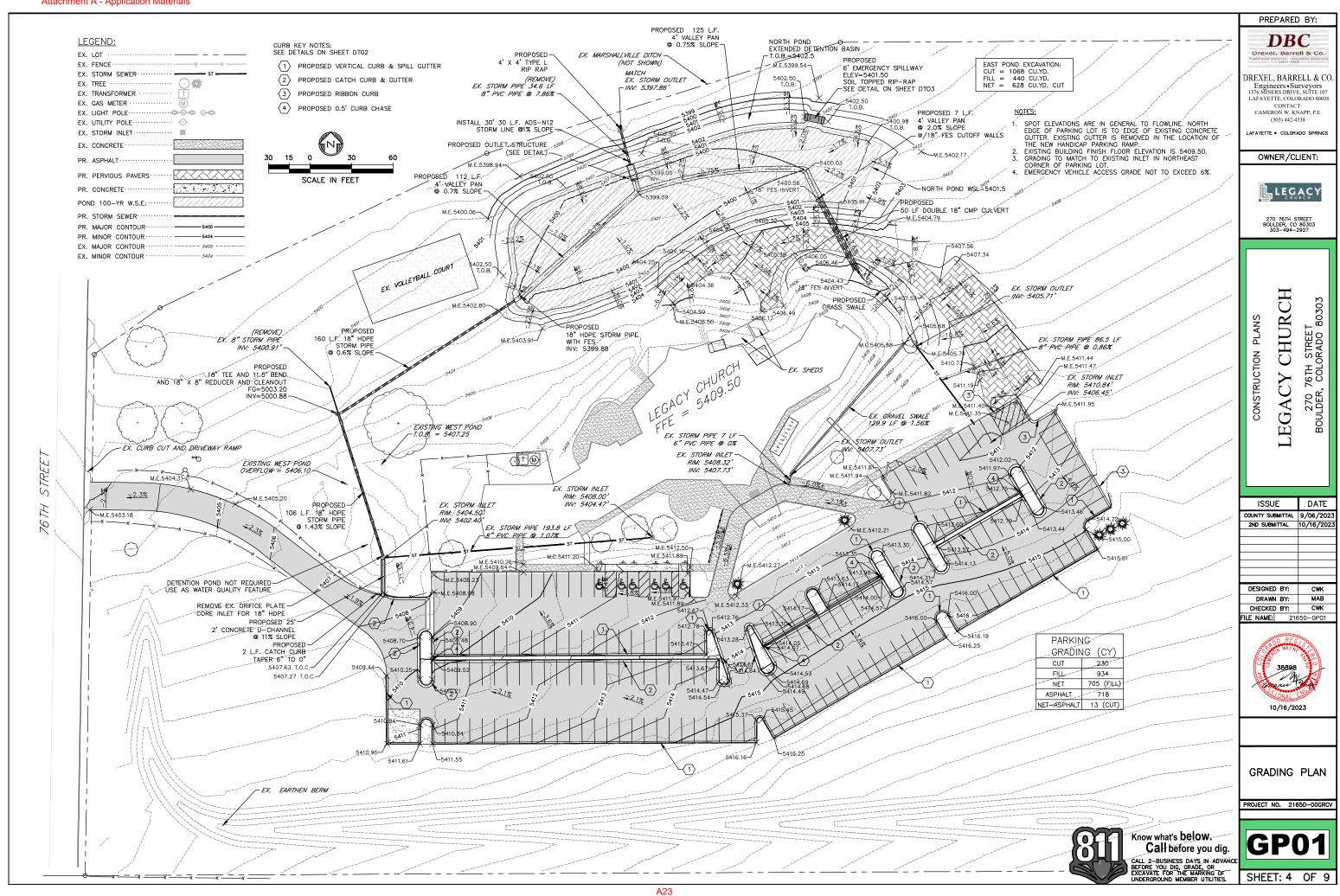


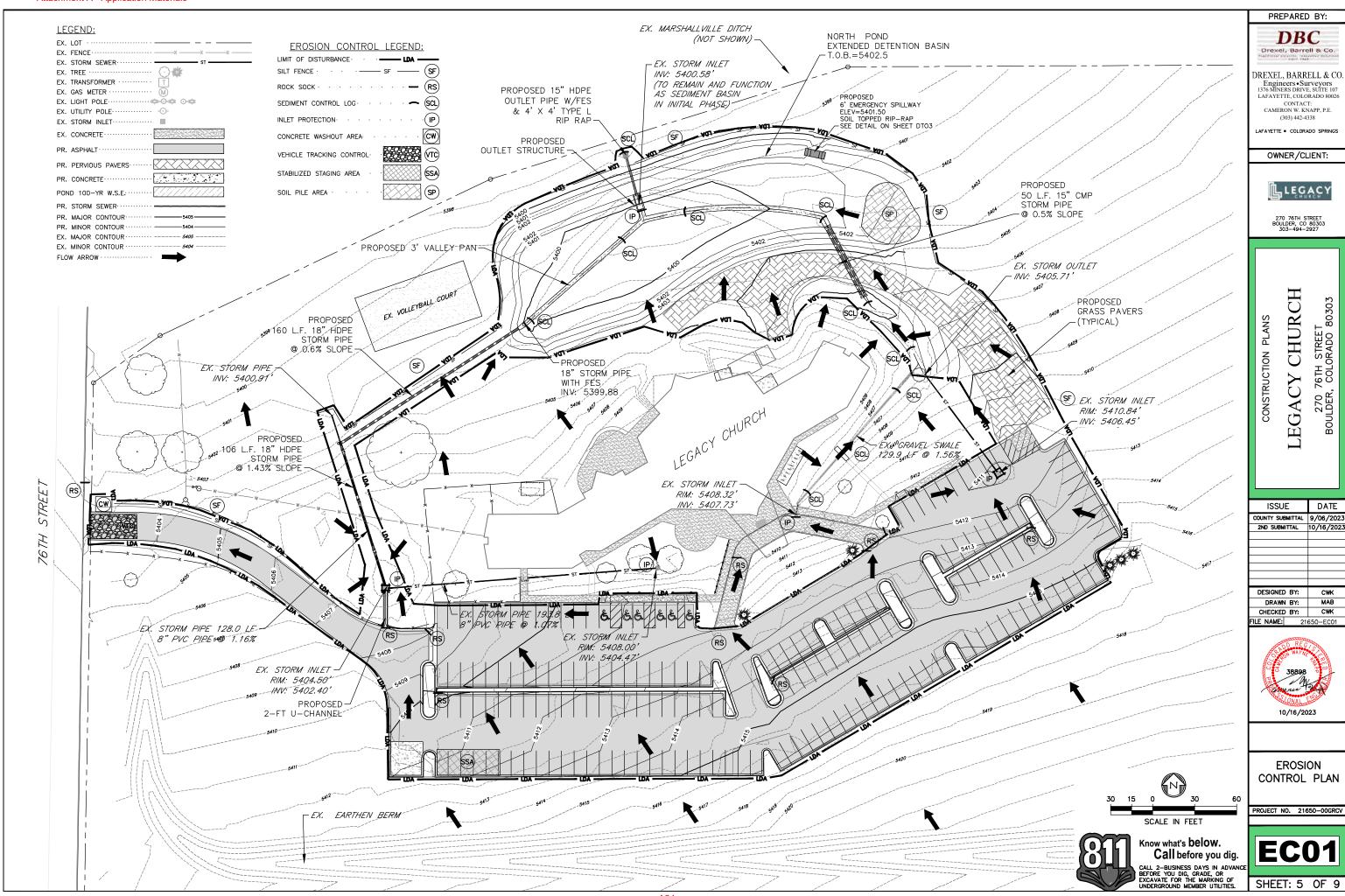
EX. CONDITIONS

& DEMOLITION SHEET

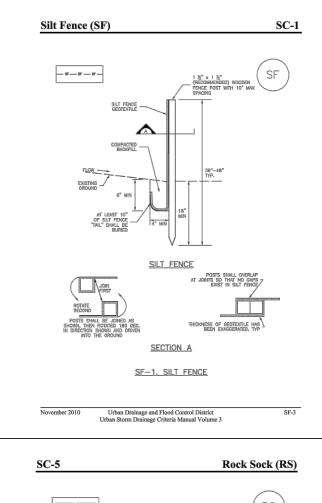
PROJECT NO. 21650-00GRC







۱24



#### SC-1 Silt Fence (SF) SILT FENCE INSTALLATION NOTES 1. SLT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING, SLLT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2-5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR BOWNING AND PERSONNEY. A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE, NO ROAD GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING, COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND. 4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES, THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES. 5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE. 6. AT THE END OF A RUN OF SLT FENCE ALONG A CONTOUR, THE SLT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J-HOOK." THE "J-HOOK ENTENDED FENCE COLORUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNDEF FROM FOUNDS AROUND THE END OF THE SLT FENCE (TYPICALLY 10" - 26"). 7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES. SILT FENCE MAINTENANCE NOTES INSPECT BMP# EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMP# SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMP# AS SOON AS POSSIBLE (AND JAMIN'S WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM INCESSIRATY MAINTENANCE. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPB IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGH. 3. WHERE BMP0 HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6".

 ${\tt S.}$  REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE.

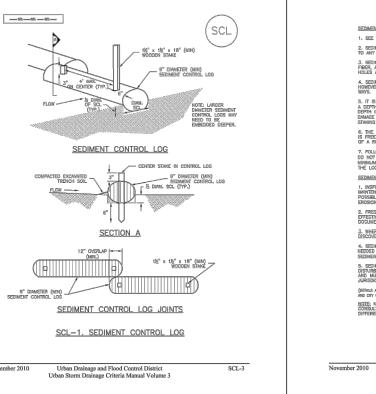
7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL. SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, NOT AGREABLE IN AUTODAS)

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

## SCL 1½° x 1½° x 18° (NIN) WOODEN STAKE SEDIMENT CONTROL LOG - CENTER STAKE IN CONTROL LOG SECTION A 1½" x 1½" x 18" (MIN) WOODEN STAKE SEDIMENT CONTROL LOG JOINTS SCL-1. SEDIMENT CONTROL LOG Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

Sediment Control Log (SCL)



SC-2

SM-4



3. SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELSIOR OR COCCONUT FIBER, AND SHALL BE FREE OF ANY NORMOUS WEED SEEDS OR DEFECTS INCLUDING RIPS, HOLES AND DEMOUS WEAT.

SEDIMENT CONTROL LOG MAINTENANCE NOTES

INSPECT BIMP, EACH WORKDAY, AND MARITAIN THEM IN EFFECTIVE OPERATING CONDITION MANIFEMANCE OF BAMPS SHOULD BE PROACTIVE, NOT REACTIVE, INSPECT BAMPS AS 900M AS POSSIBLE (AND ALMAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM INCOESSARY MAINTENANCE.

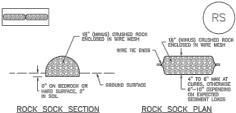
FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BINPS IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE  ${\rm BMP}_{\rm R}$  HAVE FALLED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FALLIFE.

5. SEDIMENT CONTROL LOG SHALL BE REMOVED AT THE END OF CONSTRUCTION. IF DISTURBED AREAS EXIST AFTER REMOVAL, THEY SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED OR OTHERWISE STABLEDED IN A MANNER APPROVED BY THE LOCAL.

NOTE: MANY JURISDICTIONS HAVE BUY DETAILS THAT VARY FROM LIDEOD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DEFERENCES ARE MITTER

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3



GRADATION TABLE

SIEVE SIZE MASS PERCENT PASSING SQUARE MESH SIEVES ROCK SOCK JOINTING NO. 4 ROCK SOCK INSTALLATION NOTES

2. CRUSHED ROCK SHALL BE 1M" (MINUS) IN SIZE WITH A FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON THIS SHEET ( $18^{\circ}$  MINUS). 3. WIRE MESH SHALL BE FABRICATED OF 10 GAGE POULTRY MESH, OR EQUIVALENT, WITH A MAXIMUM OFENING OF  $\S^n$ , RECOMMENDED MINIMUM ROLL WIDTH OF  $48^n$ 

5. SOME MUNICIPALITIES MAY ALLOW THE USE OF FILTER FABRIC AS AN ALTERNATIVE TO WIRE MESH FOR THE ROOK ENGLOSURE.

RS-2

RS-1. ROCK SOCK PERIMETER CONTROL

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 November 2010 Rock Sock (RS)

SC-5

FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BNPs IN EFFECTIVE OPERATING CONDITION, INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THROUGHNIS.

3. WHERE  $\text{BMP}_{\text{B}}$  HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE. 4. ROCK SOCKS SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED, OR DAMAGED BEYOND REPAIR.

SEDIMENT ACCUMULATED UPSTREAM OF ROCK SOCKS SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BURP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY & OF THE HEIGHT OF THE ROCK SOCK.

6. ROCK SOCKS ARE TO REMAIN IN FLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

 WHEN ROCK SOCKS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL LIBERATURE. NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS.
CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN
DIFFERENCES ARE NOTED.

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

SO FOOT (MIN.) INSTALL ROCK FLUSH WITH OR BELOW TOP OF PAVEMENT SECTION A

VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

A25

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

SM-4

**Vehicle Tracking Control (VTC)** 

STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES

SEE PLAN VIEW FOR -LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S). -TYPE OF CONSTRUCTION ENTRANCE(S)/EXITS(S) (WITH/WITHOUT WHEEL WASH, CONSTRUCTION MAT OR TRAIL).

 A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE LOCATED AT ALL ACCESS POINTS WHERE VEHICLES ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT-OF-WAYS. 4. STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

5. A NON-WOVEN GEOTEXTILE FABRIC SHALL BE PLACED LINDER THE STABILIZED CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK.

6. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. §703, AASHTO §3 COARSE AGGREDATE OR 6° (MINUS) ROCK. STABILIZED CONSTRUCTION ENTRANCE/EXIT MAINTENANCE NOTES

z. Frequent observations and maintenance are necessary to maintain smps in effective operating condition. Inspections and corrective measures should be occurrent throughly the state of the property of the

3. WHERE BMPs HAVE FALLED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED THROUGHOUT THE DAY AND AT THE END OF THE DAY BY SHOVELING OR SWEEPING, SEDIMENT MAY NOT BE WASHED DOWN STORM SEMER DANNE.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCO STANDARD DETAILS CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM CITY OF BROOMFIELD, COLORADO, NOT AVAILABLE IN AUTOCAD)

VTC-6

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

**DETAIL SHEET** 

PROJECT NO. 21650-00GRC



Vehicle Tracking Control (VTC)

VTC-3

PREPARED BY:

DBC Drexel, Barrell & Co

DREXEL, BARRELL & CC Engineers • Surveyors
1376 MINERS DRIVE, SUITE 10
LAFAYETTE, COLORADO 800 CONTACT:

CAMERON W. KNAPP, P.E. (303) 442-4338 LAFAYETTE . COLORADO SPRINGS

OWNER/CLIENT:



270 76TH STREET BOULDER, CO 80303 303-494-2927

STREE-ORADO EGA

PLANS

CONSTRUCTION

ISSUE DATE

COUNTY SUBMITTAL 9/06/2023 2ND SUBMITTAL 10/16/2023

CWK DRAWN BY: MAB

CHECKED BY: CWK FILE NAME: 21650-DT01

## Stabilized Staging Area (SSA) SSA

SSA-1. STABILIZED STAGING AREA

STABILIZED STAGING AREA INSTALLATION NOTES

2. STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.

3. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.

4. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.

5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. \$703, ASSITO \$3 COARSE AGGREGATE OR 6" (MINUS) ROCK. 6. ACCITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT PERICE AND CONSTRUCTION FENCING.

STABILIZED STAGING AREA MAINTENANCE NOTES

I. INSPECT BINPE EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION.
MAINTENANCE OF BINPE SHOULD BE PROACTIVE, NOT REACTIVE, INSPECT BINPE AS SOOM AS
POSSIBLE (AND ALMAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE
EROSION, AND DEPERSOR METAGEMENT MAINTENANCE.

TO SHOULD S

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BINFO IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED TARGET THE TRANSPORTED TO THE TRANSPORTED TARGET TAR

3. WHERE  $BMP_0$  HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED,

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

SSA-3

SM-6

SLT FENCE OR CONSTRUCTION FENCING AS NEEDED

**SM-6** 

MM-2

SSA-4 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

STOCKPILE PROTECTION MAINTENANCE NOTES

STOCKPILE PROTECTION MAINTENANCE NOTES

(DETAILS ADAPTED FROM PAPKER, COLORADO, NOT AVAILABLE IN AUTOCAD)

INSPECT BIMP® EACH WORKDAY, AND MANITAIN THEM IN EFFECTIVE OPERATING CONDITION.
MAINTENANCE OF BIMP® SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BIMP® AS BOOM AS
POSSIBLE (AND ALMAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE
ERGISION, AND PERFORM NECESSARY MAINTENANCE.

FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGH.

3. WHERE  $\textsc{BMP}_{\text{B}}$  HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. IF PERIMETER PROTECTION MUST BE MOVED TO ACCESS SOIL STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORKDAY.

5. STOCKPILE PERIMETER CONTROLS CAN BE REMOVED ONCE ALL THE MATERIAL FROM THE STOCKPILE HAS BEEN USED,

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFOD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN

Stabilized Staging Area (SSA)

Stockpile Management (SM)

STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING JORDING OPERATIONS.

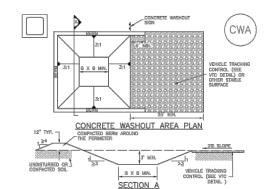
NOTE: MANY MUNICIPALITIES PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STRABLIZED STRAINER, AREAS DUE TO DIFFUSION BY AREAS MAJERE RECYCLED, CONCRETE WAS BUILDED WITH RE-ESTABLISHMENT OF VECETATION BY AREAS MAJERE RECYCLED, CONCRETE WAS BUILDED.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

Concrete Washout Area (CWA)

MM-1

MM-1



CWA-1. CONCRETE WASHOUT AREA

CWA\_INSTALLATION\_NOTE

SEE PLAN VIEW FOR:
 CWA INSTALLATION LOCATION.

2. DO NOT LOCATE AN UNLIMED CWA WITHIN 400' OF ANY NATURAL BRANNAE PATHWAY OR WATERBOOK, DO NOT LOCATE WITHIN 1,000' OF ANY WILLS OR DINNORS WATER SOURCES. IF THE CARE WATER TO THE HISTALD WHITHIN INTERNATIONAL LIMEN (THE HISTALD WHITH AN INFERNMENTEL LIMEN (THE MILM, THORSESS) OR A LIMEN ABOVE OR CAUCHO STORMAE WE SHOULD BE USED.

3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.

CWA SHALL INCLIDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8" BY 8" SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3/1 OR FLATTER. THE PIT SHALL BE AT LEAST 3" DEEP.

5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.

6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.

7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PLIMP RICS.

B. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

**Native Seed Mixes** 

Samples for Boulder County.

CWA-3

15% 9.33 12.5% 3.96 12.5% 3.96 13% 1.74

Lodorm 12% or Native

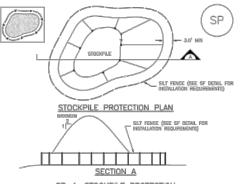
Totals: 100% 24.88

CWA-4

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 November 2010

Stockpile Management (SP)

MM-2



SP-1. STOCKPILE PROTECTION

Urban Drainage and Flood Control District

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3



Native

**Boulder County** Land Use Department Seed Mixes

Stina viridula

Foothills Seed Mix 5,500 Feet to 7,000 Feet Elevation

estern Wheatgrass 8% 1.07 10% 1.93 Green Needlegrass Stipa viridula Totals: 100% 16.95

#### Mountain Seed Mix 7.000 Feet and Above Elevation

lender Wheatgrass Elymus trachycaulus Sandberg's Bluegrass Poa secunda

Rates are for broadcast seeding. If using a seed drill, reduce rates by half. PLS = Pure Live Seed.

Form: P/18 • Rev. 06.07.10 • q:/publications/planning/P18NativeSeedMixes.pdf

PREPARED BY:

Concrete Washout Area (CWA)

INSPECT BMP# EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION MAINTENANCE OF BMP# SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMP# AS SOON AS POSSIBLE (AND ALMAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE ERUSION, AND PERFORM NECESSARY MAINTENANCE.

Frequent observations and maintenance are necessary to maintain BMPs in effective operating condition. Inspections and corrective measures should be documented transforms.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOMERY OF THE PAILURE.

4. THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE, CONCRETE MATERIALS, ACCUMULATED IN PIT, SHALL BE REMOYED DICE THE MATERIALS HAVE REACHED A DEPTH OF 2".

5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER—TIGHT CONTAINER AND DISPOSED OF PROPERLY.

6. THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED,

7. WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

CONTROL ADMOTED FROM DOLICIAS COUNTY, COLORADO AND THE CITY OF PARMER, COLORADO, NOT AVAILABLE IN AUTOCAD

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DISERSEMENTS ARE MOTEN.

DBC Drexel, Barrell & Co.

DREXEL, BARRELL & CC Engineers • Surveyors
1376 MINERS DRIVE, SUITE 10
LAFAYETTE, COLORADO 800 CONTACT: CAMERON W. KNAPP, P.E.

(303) 442-4338 LAFAYETTE . COLORADO SPRINGS

OWNER/CLIENT:



270 76TH STREET BOULDER, CO 80303 303-494-2927

CH CHUR STREE-ORADO **EGA**(

PLANS

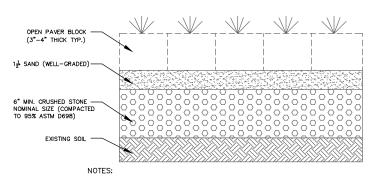
CONSTRUCTION

ISSUE DATE COUNTY SUBMITTAL 9/06/2023 2ND SUBMITTAL 10/16/2023

CWK DRAWN BY: MAB CHECKED BY: CWK FILE NAME: 21650-DT01

**DETAIL SHEET** PROJECT NO. 21650-00GRCV

SHEET: 7 OF 9



1) USE TURFSTONE OPEN PAWER SYSTEM OR APPROVED EQUAL. CONTRACTOR SHALL SUBMIT SHOP DRAWING FOR APPROVAL OF CITY AND ARCHITECT, PRIOR TO INITIATING CONSTRUCTION.

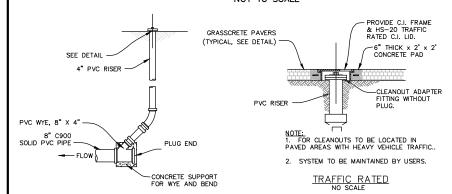
2) INSTALL PAVER SYSTEM IN STRICT ACCORDANCE WITH CURRENT MANUFACTURER'S RECOMMENDATIONS

3) FINAL THICKNESS AND COMPACTION OF SUBGRADE SOILS AND AGGREGATE BASE COURSE SHALL BE DETERMINED BY PROJECT GEOTECHNICAL ENGINEER.

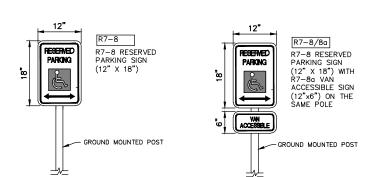
4) OPEN PAVER BLOCKS SHALL BE INFILLED WITH AN APPROPRIATE MIXTURE OF TOPSOIL AND FERTILIZER, AND THEN SEEDED OR SPRIGGED TO ESTABLISH ADEQUATE VEGETATIVE COVER.

#### GRASSCRETE DETAIL

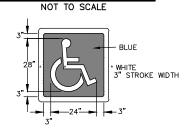
NOT TO SCALE



#### STORM SEWER CLEANOUT DETAIL NOT TO SCALE



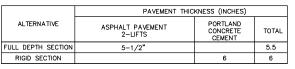
#### ADA SIGNAGE DETAIL



#### HANDICAP PAVEMENT MARKING DETAIL

NOT TO SCALE NOTES:

1. PAVEMENT SYMBOLS TO BE THERMOPLASTIC. 2. DETAILS BASED ON CDOT STANDARD PLAN S-627-1.

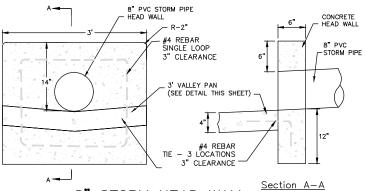


#### NOTES:

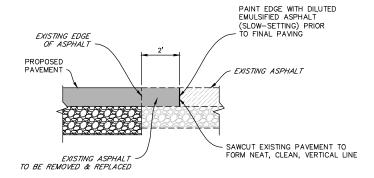
2. EXISTING GRAVEL PARKING SUBGRADE TO BE GRADED AS NEEDED AND RECOMPACTED, MOISTURE TREATED AND COMPACTED TO BETWEEN OPTIMUM AND PLUS 3% OF OPTIMUM AS PER ASTM D-1557. SOIL SHALL BE COMPACTED TO 95-100% OF MAXIMUM DENSITY AS PER ASTM D-1557.

#### PAVEMENT SECTION DETAIL

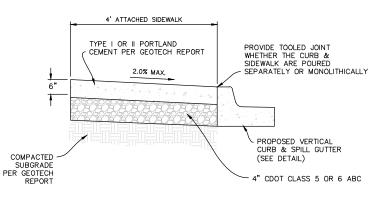
NOT TO SCALE



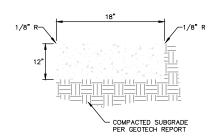
8" STORM HEAD WALL NO SCALE



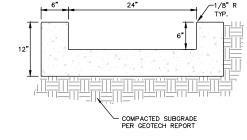
#### SAWCUT DETAIL NOT TO SCALE



SIDEWALK DETAIL NOT TO SCALE



RIBBON CURB DETAIL NO SCALE

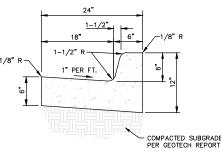


2' U-CHANNEL NO SCALE

1 1/2"

SLOPE 1/2" PER

COMPACTED SUBGRADE PER GEOTECH REPORT



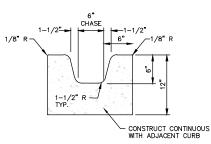
ONSITE CATCH CURB & GUTTER DETAIL

NOT TO SCALE

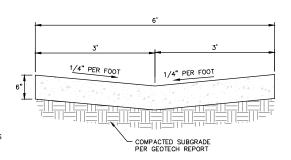
ONSITE VERTICAL CURB & SPILL GUTTER DETAIL NOT TO SCALE

4 1/2"

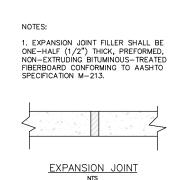
1/8" F



0.5' CURB & GUTTER CHASE DETAIL NOT TO SCALE



6' DRIVEWAY PAN DETAIL NO SCALE



CHAULK & SEAL JOINT PARKING LOT 1.5' (2') 1.5' (2') - ASPHALT 1" PER FOOT 1" PER FOOT AGGREGATE -BASE COURSE COMPACTED SUBGRADE PER GEOTECH REPORT

3' & (4') DRAINAGE PAN DETAIL NO SCALE

PREPARED BY: DBC Drexel, Barrell & Co

DREXEL, BARRELL & CO Engineers • Surveyors
1376 MINERS DRIVE, SUITE 10
LAFAYETTE, COLORADO 800 CONTACT:

CAMERON W. KNAPP, P.E. (303) 442-4338 LAFAYETTE . COLORADO SPRINGS

OWNER/CLIENT:



270 76TH STREET BOULDER, CO 80303 303-494-2927

CHURCH 76TH STREET, COLORADO EGACY

PLANS

CONSTRUCTION

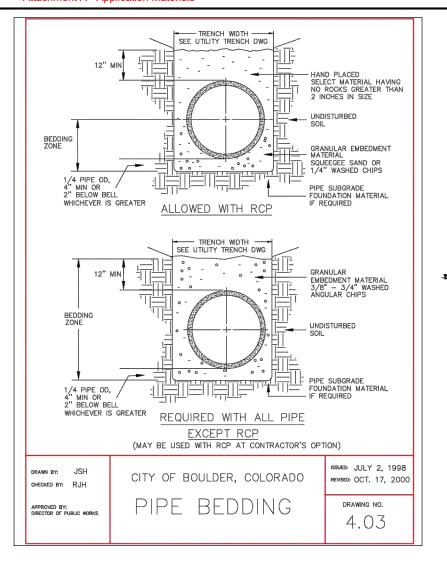
ISSUE DATE COUNTY SUBMITTAL 9/06/2023 2ND SUBMITTAL 10/16/202 CWK DRAWN BY: MAB CHECKED BY: CWK

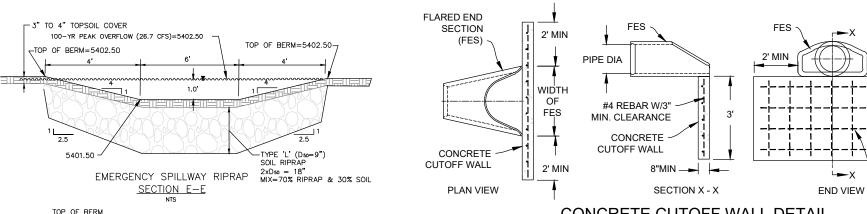


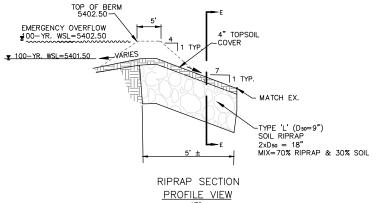
**DETAIL SHEET** 

PROJECT NO. 21650-00GRC

SHEET: 8 OF 9





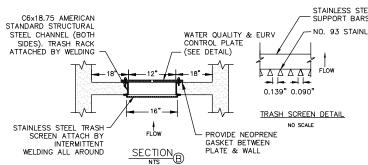


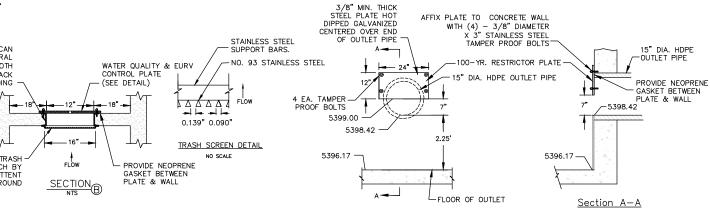
#### CONCRETE CUTOFF WALL DETAIL TUBULAR TRASH RACK ON 6" CENTERS - #4 REBAR @8" O.C. - 8" SEE SECTION 'B' PROPOSED 15" DIA. 5'-4" HDPE OUTLET PIPE EURV & WQCV -#4 REBAR W/3" MIN. CLEARANCE TUBULAR TRASH RACK -PLATE ON 6" CENTERS

### OVERFLOW SPILLWAY DETAIL

#### TRASH SCREEN SPECIFICATIONS

- SUPPORT ROD TYPE: TE
- 0.074"x0.50" SUPPORT ROD SPACING: 1" O.C.
- TOTAL SCREEN THICKNESS: 0.655"
- CARBON STEEL FRAME TYPE: 3/4"x1.0" ANGLE





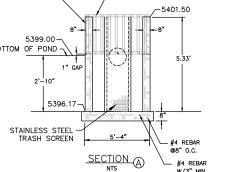
#### PROVIDE A GASKET BETWEEN ORIFICE PLATE AND CONCRETE TUBULAR TRASH RACK ON 6" CENTERS PROVIDES OVERFLOW DURING - LARGE STORM EVENTS BOLT DOWN OF LOCK DOWN RACK SWIVEL HINGE RACK SWIVEL HINGE 100-YR WSL @5401.50 TOP OF FREEBOARD=5402.50 EURV WSL @5400.75 #4 REBAR @8" O.C. (TYP.) #4 REBAR W/3" MIN. CLEARANCE (TYP.) WQCV WSL @5400.18 TUBULAR TRASH RACK ON 6" CENTERS BOLT DOWN OR LOCK DOWN : ALLOW 1" GAP UNDER TRASH RACK 5401.50 - 100-YR RESTRICTOR PLATE (SEE DETAIL) 5399.p PROPOSED CONCRETE TRICKLE PAN -INV.=5398.42 MICRO POOL WSE @5398.67 - PROPOSED 15" DIA. HDPE OUTFALL PIPE 5396.17 STEEL EURV & WQCV ORIFICE CONTROL PLATE B.O. PLATE -5396.17 NO. 93 JOHNSON VEE WIRET STAINLESS STEEL WELL SCREEN (OR EQUIVALENT PER TABLES **PROFILE** C8X18.75 AMERICAN STANDARD STRUCTURAL STEEL CHANNEL FORMED INTO CONCRETE BOTTOM AND SIDES OF TRASH SCREEN OS-2A AND OS-2B ATTACHED BY INTERMITTENT WELDS.

## OUTLET STRUCTURE DETAIL

#### OVERFLOW TRASH RACKS

- 1. ALL TRASH RACKS SHALL BE MOUNTED USING STAINLESS STEEL HARDWARE AND PROVIDED WITH HINGED AND LOCKABLE OR BOLTABLE ACCESS PANELS.
- 2. TRASH RACKS SHALL BE STAINLESS STEEL, ALUMINUM, OR STEEL. STEEL TRASH RACKS SHALL BE HOT DIP GALVANIZED AND MAY BE HOT POWDER PAINTED AFTER GALVANIZING.
- 3. TRASH RACKS SHALL BE DESIGNED SUCH THAT THE DIAGONAL DIMENSION OF EACH OPENING IS SMALLER THAN THE DIAMETER OF THE OUTLET PIPE
- 4. STRUCTURAL DESIGN OF TRASH RACK SHALL BE BASED ON FULL HYDROSTATIC HEAD WITH ZERO HEAD DOWNSTREAM OF THE RACK,

#### TUBULAR TRASH RACK SIDE WALLS ON 6" CENTERS -5401.50 5399.00-BOTTOM OF POND -



#### 2" DIA. ORIFICE OPENING FOR EURV RELEASE RATE -5400.75 5400 18-1 COLUMN OF 3 ROWS 0.5' O.C. 1.51, 2.C WITH 7/8" DIA. O.C. OPENINGS 0.5' O.C. CENTER 1/4" STEEL 5396.25

<u>PLAN</u>

NTS

AFFIX PLATE TO CONCRETE WALL

100-YR. RESTRICTOR CONTROL PLATE DETAIL

ORIFICE PLATE NOTES:

MATERIAL SHALL CONSIST OF 1/4" STAINLESS STEEL PLATE.

PROVIDE NEOPRENE GASKET MATERIAL BETWEEN THE ORIFICE PLATE AND CONCRETE WALL.

BOLT PLATE TO CONCRETE 12" MAX. O CENTER WITH STAINLESS STEEL BOLTS.

#### WQCV & EURV ORIFICE CONTROL PLATE

#### WQCV TRASH RACKS:

- 1. WELL-SCREEN TRASH RACKS SHALL BE STAINLESS STEEL AND SHALL BE ATTACHED BY INTERMITTANT WELDS ALONG THE EDGE OF THE MOUNTING FRAME.
- 2. BAR GRATE TRASH RACKS SHALL BE ALUMINUM AND SHALL BE BOLTED USING STAINLESS STEEL HARDWARE.
- 3. TRASH RACK WIDTHS ARE FOR SPECIFIED TRASH RACK MATERIAL.
- 4. STRUCTURAL DESIGN OF TRASH RACK SHALL BE BASED ON FULL HYDROSTATIC HEAD WITH ZERO HEAD DOWNSTREAM OF THE RACK.

PREPARED BY: **DBC** Drexel, Barrell & Co

DREXEL, BARRELL & CO Engineers • Surveyors
1376 MINERS DRIVE, SUITE 10
LAFAYETTE, COLORADO 800 CONTACT:

CAMERON W. KNAPP, P.E. (303) 442-4338 LAFAYETTE . COLORADO SPRINGS

OWNER/CLIENT:

#4 REBAR

@ 12" O.C.



270 76TH STREET BOULDER, CO 80303 303-494-2927

CH CHUR EGA

PLANS

TRUCTION

CONSI

**ISSUE** DATE COUNTY SUBMITTAL 9/06/202 2ND SUBMITTAL 10/16/202

MAB DRAWN BY: CHECKED BY: CWK FILE NAME:



**DETAIL SHEET** 

PROJECT NO. 21650-00GRC

**DT04** SHEET: 9 OF 9

#### **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 Use Review (LISR) is required. A Limited Impact Special Use 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	230 CY	934 CY	1,164 CY				
Berm(s)							
Other Grading Pond area	1,068 CY	440 CY	1,508 CY				
Subtotal	1,298 CY	1,347 CY	2,672 CY				
* If the total in Box 1 is greater than 500 cubic yards, then a Limited Impact Special Review is required.							
	Cut	Fill	Total				
Foundation							

#### Excess Material will be Transported to the Following Location:

Excess Materials Transport Location:						

#### Is Your Property Gated and Locked?

**Note:** If county personnel cannot access the property, 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	Date



#### LSC TRANSPORTATION CONSULTANTS, INC.

1889 York Street Denver, CO 80206 (303) 333-1105 FAX (303) 333-1107

E-mail: lsc@lscdenver.com

August 25, 2023

Mr. Grant Hansen Legacy Boulder Church 4816 Wagontrail Court Parker, CO 80134

Re: Legacy Boulder Church

Transportation System Impact

Review (TSIR)

Boulder County, CO

LSC #230530

Dear Mr. Hansen:

In response to your request, LSC Transportation Consultants, Inc. has prepared this Transportation System Impact Review (TSIR) for the Legacy Boulder Church in Boulder County, Colorado. Figure 1 shows a vicinity map.

#### REPORT CONTENTS

This report contains the following: a project description; the existing roadway and traffic conditions in the vicinity of the site including the lane geometries, traffic controls, posted speed limits, etc.; the existing Sunday site peak-hours and average daily traffic volumes; the typical Sunday site-generated arrival and departure traffic volume projections for the site; the assignment of the projected traffic volumes to the area roadways; the site's projected traffic impacts; and any recommended roadway improvements to mitigate the site's traffic impacts.

#### PROJECT DESCRIPTION

#### Land Use

The site includes an existing church and is proposing to remodel the sanctuary for a capacity of 405 seats by removing some walls within the building but not change the overall building size. The applicant also plans to pave the existing parking lot and driveway. No increase in congregation size is anticipated. Currently the existing sanctuary overflows into the adjacent rooms with a closed circuit audio/video feed. No additional services or activities are proposed on the site.

The highest traffic impact will be the typical Sunday morning services. Other activities that typically occur with lesser impacts are shown in the following table provided by the applicant:

Event	Frequency	Day of Week	Number of people	Description
Men's Friday Morning AXIS	Weekly, 6:30 AM	Friday	7-10	Small group of men meeting
Boy Scouts	Weekly, 6:30 AM	Tuesday	15-30	Local Boyscout Troop meeting
Women's Bible Study	Weekly, 7:00-8:30 PM	Tuesday	10-15	Small group of women
Alex's Study	Weekly, 6:30 AM	Thursday	5	Small group of men
Legacy Church Worship	Weekly, 10:00 AM	Sunday	200	Church service and kids classes
Promise Preschool	Weekly 9:00 AM-1:00 PM	M-W-F	11 kids/3 adults	Part-time preschool
Youth Group	Weekly, 6:30 PM	Thursday	12 kids/4 adults	Middle School and High School student gathering
Staff Meetings	Weekly, 3:45 PM	Monday	5	Meeting
Community Choir	Weekly, 6:00-8:00 PM	Monday	100	Boulder Community Choir
Boulder County SWAT	Few Times/Year	Various Days	30	SWAT Training
Christmas Eve Service	Once/Year	6:00 PM	180-250	Community Gathering
Good Friday Service	Once/Year	6:00 PM	75-115	Community Gathering
Girl Scouts	One week in June	Annual Camp	50	Annual Girl Scout Camp

#### **PAMS**

The Pre-Application Methodology Statement (PAMS) and another PAMS for the earlier preschool project (2017) are attached for reference because they include considerable detail on the site and the surrounding area.

#### **Phasing and Timing**

Any proposed new construction is planned to be started once all necessary approvals are secured.

#### **STUDY AREA**

Figure 2 shows the proposed site plan. The non-highway public streets directly impacted by the site are N.  $76^{th}$  Street, S. Boulder Road, and Baseline Road. The intersections of N.  $76^{th}$  Street with S. Boulder Road and Baseline Road are traffic signal controlled so can accommodate considerable traffic volumes.

#### **Area Roadways**

The major roadways in the site's vicinity are shown on Figure 1 and are described below.

- **Baseline Road** is an east-west, two-lane minor arterial roadway north of the site. The intersection with N. 76<sup>th</sup> Street is signalized with auxiliary turn lanes. The posted speed limit in the vicinity of the site is 45 mph. There are no pedestrian facilities but paved shoulders on both sides of the roadway are used by cyclists.
- **N. 76<sup>th</sup> Street** is a north-south, two-lane minor arterial roadway west of the site. The intersections with Baseline Road and S. Boulder Road are signalized with auxiliary turn lanes. The posted speed limit in the vicinity of the site is 40 mph. There are no pedestrian facilities but paved shoulders on both sides of the roadway are used by cyclists.
- **S. Boulder Road** is an east-west, four-lane major arterial roadway south of the site. The intersection with N. 76<sup>th</sup> Street is signalized with auxiliary turn lanes. The posted speed limit in the vicinity of the site is 45 mph. There are limited pedestrian facilities but paved shoulders on both sides of the roadway are used by cyclists. There are bus stops near the intersection with N. 76<sup>th</sup> Street.

#### **Existing Pedestrian and Bike Facilities**

There are little or no existing pedestrian facilities along Baseline Road, N. 76<sup>th</sup> Street, or S. Boulder Road although all have paved shoulders that are used by cyclists. The majority of church members arrive/depart via private automobile but carpooling is and will be encouraged. No additional pedestrian or bicycle facilities are proposed or recommended. The applicant plans to add 18 bicycle parking spaces on the southeast side of the building.

#### Sight Distance From Existing Driveway

The site has an existing driveway on N. 76<sup>th</sup> Street. The sight distance in each direction of N. 76<sup>th</sup> Street is good because the horizontal and vertical alignments of N. 76<sup>th</sup> Street are relatively straight in the vicinity of the site.

#### **Existing Transit Service**

There is no bus service along N.  $76^{th}$  Street. The nearest bus stops to the site are located on S. Boulder Road near the intersection with N.  $76^{th}$  Street. The site is located just over a quarter mile north of S. Boulder Road. No additional transit routes or stops are proposed or recommended.

#### **Accident History**

Accident history was not evaluated but N. 76<sup>th</sup> Street is relatively straight and flat in the vicinity of the site so minimal accident history would be expected at the site access intersection.

#### **Access and Parking**

The site has an existing unpaved full movement access directly to N. 76<sup>th</sup> Street. The site includes considerable existing parking. No change in congregation size is expected so no addi-

tional demand for parking is expected. The applicant proposes to pave the existing parking lot and driveway.

The site currently includes 154 parking spaces including 4 ADA spaces and is proposed to include 176 parking spaces including 2 ADA and 4 ADA van parking spaces to meet current code. There is the capacity for overflow parking along the new fire access road on the east end of the building - this area is not included in the parking spaces detailed above.

#### **Existing Traffic Conditions**

Figure 3 shows the existing daily and the arrival and departure peak-hour traffic volumes in the site's vicinity on a typical Sunday. The peak-hour traffic volumes and the daily traffic volumes are from the attached traffic counts conducted by Counter Measures, Inc. in July, 2023. The daily traffic counts show there are considerably fewer daily trips on N. 76<sup>th</sup> Avenue on a Sunday than a weekday.

#### 2024 AND 2043 BACKGROUND TRAFFIC

Figure 4 shows the 2024 background traffic volumes and Figure 5 shows the 2043 background traffic volumes. The background traffic volumes assume an annual growth rate of one percent on N. 76<sup>th</sup> Street to maintain a conservative analysis. The existing church trips were removed from these scenarios. The full trip generation potential of the site is evaluated in the Total Traffic scenarios.

Figures 4 and 5 also show the assumed lane geometry and traffic control which is expected to remain as is.

#### EXISTING TRAFFIC LEVELS OF SERVICE

Level of service (LOS) is a quantitative measure of the level of congestion or delay at an intersection. Level of service is indicated on a scale from "A" to "F." LOS A is indicative of little congestion or delay and LOS F is indicative of a high level of congestion or delay. Attached are specific level of service definitions for unsignalized intersections.

The site access intersection in Figures 3 was analyzed to determine the existing traffic levels of service using Synchro. Table 1 shows the level of service analysis results. The level of service reports are attached.

1. **N. 76<sup>th</sup> Street/Site Access:** All movements at this stop-sign controlled intersection currently operate at LOS "B" or better during both arrival and departure peak-hours.

#### TRIP GENERATION

The existing building configuration is too small for the existing congregation which frequently spills over into the adjacent rooms. The primary reason for the building modification is to make the sanctuary large enough to house all attendees for any given service within the expanded sanctuary. No increase in congregation size is planned or expected.

The proposed 405-seat sanctuary is projected to generate about 895 one-way vehicle-trips on the average Sunday, with about half entering and half exiting during a 24-hour period. During the Sunday peak-hour, about 101 vehicles would enter during the arrival peak-hour between 9:30 a.m. and 10:30 a.m. and about 105 vehicles would exit the site during the departure peak-hour between 11:00 a.m. and 12:00 p.m.

#### **MODE SHARE**

Mode share is expected to be primarily private automobile but carpooling is and will be encouraged.

#### TRIP DISTRIBUTION AND ASSIGNMENT

The estimated trip distribution of the trips generated is shown in Figure 6 and is based on the existing traffic counts in Figure 3.

Figure 7 shows the estimated assignment of full buildout site-generated traffic based on the estimated trips in Table 2 applied at the percentages shown in Figure 6.

#### 2024 AND 2043 TOTAL TRAFFIC

Figure 8 shows the 2024 total traffic volumes which is the sum of the 2024 background traffic volumes in Figure 4 and the site-generated traffic volumes in Figure 7. Figure 8 also shows the 2024 lane geometry and traffic control which is expected to remain as is.

Figure 9 shows the 2043 total traffic volumes which is the sum of the 2043 background traffic volumes in Figure 5 and the site-generated traffic volumes in Figure 7. Figure 9 also shows the 2043 lane geometry and traffic control which is expected to remain as is.

#### 2024 AND 2043 TOTAL TRAFFIC LEVELS OF SERVICE

The intersections in Figures 8 and 9 were analyzed as appropriate to determine the 2024 and 2043 total traffic levels of service using Synchro. Table 1 shows the level of service analysis results. The level of service reports are attached.

1. N. 76<sup>th</sup> Street/Site Access: All movements at this stop-sign controlled intersection are expected to operate at LOS "B" or better during both arrival and departure peak-hours through 2043.

#### **CONCLUSIONS**

#### **Trip Generation**

1. The proposed 405-seat sanctuary is projected to generate about 895 one-way vehicle-trips on the average Sunday, with about half entering and half exiting during a 24-hour period. During the Sunday peak-hour, about 101 vehicles would enter during the arrival peak-

Mr. Grant Hansen

Page 6

August 25, 2023 Legacy Boulder Church TSIR

hour between 9:30 a.m. and 10:30 a.m. and about 105 vehicles would exit the site during the departure peak-hour between 11:00 a.m. and 12:00 p.m.

#### **Projected Levels of Service**

2. All movements at the stop-sign controlled site access intersection are expected to operate at LOS "B" or better through 2043.

#### Recommendations

3. The impact of the proposed building modification can be accommodated by the existing roadway network - no additional analysis should be needed.

\* \* \* \* \*

We trust this information will assist you in planning for the proposed building modifications to the Legacy Boulder Church.

Respectfully submitted,

LSC Transportation

By: Christopher

Principal/Presi

CSM/wc

8-25-23

Enclosures: Tables 1 and 2

Figures 1 - 9

Pre-Application Methodology Statement (PAMS) for current Legacy Boulder

Church project

2017 PAMS for previous pre-school project on the site

**Traffic Counts** 

Level of Service Definitions Capacity Analysis Reports

W:\LSC\Projects\2023\230530-LegacyBoulderChurch\Report\LegacyChurchBoulder\_TSIR-082523.wpd

# Table 1 Intersection Levels of Service Analysis Legacy Boulder Church Boulder County, CO LSC #230530; August, 2023

		Existing Traffic		2024 Total		2043 Total	
		Level of	Level of	Level of	Level of	Level of	Level of
	Traffic	Service	Service	Service	Service	Service	Service
Intersection No. & Location	Control	AM	PM	AM	PM	AM	PM
1) N. 76th Avenue/Site Access	TWSC						
SB Approach		Α	В	Α	В	Α	В
WB Approach		Α	Α	Α	Α	Α	Α
Critical Movement Delay		9.6	13.0	8.0	13.3	8.2	14.9

# Table 2 ESTIMATED TRAFFIC GENERATION Legacy Boulder Church Boulder County, CO

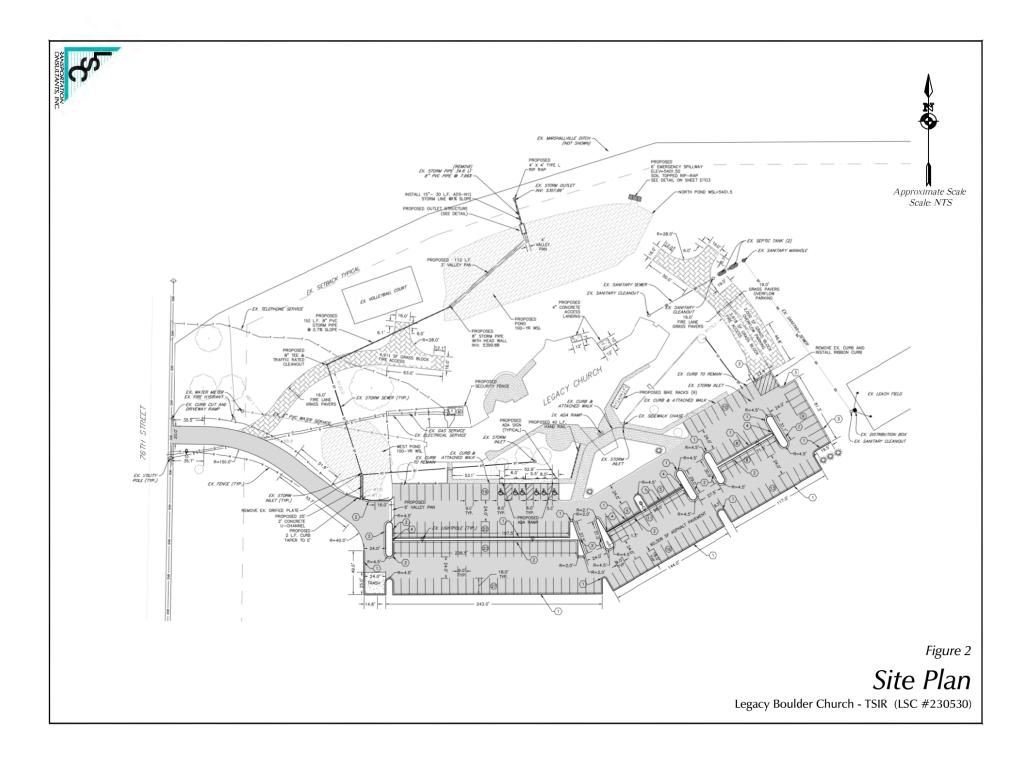
LSC #230530; August, 2023

		Trip Generation Rates (1)			Vehicle-Trips Generated		
		Average	Peak-Hour		Average	Average Peak-Ho	
Trip Generating Category	Quantity	Sunday	ln	Out	Sunday	ln	Out
CURRENTLY PROPOSED LAND USE Church (2)	405 Seats	2.21	0.25	0.26	895	101	105

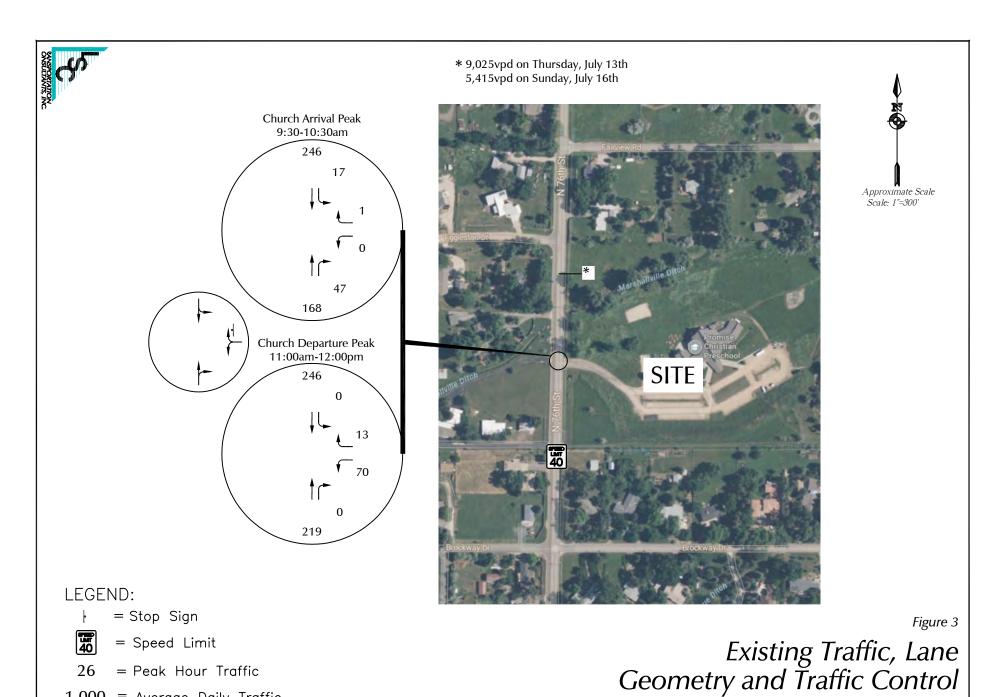
#### Notes:

- (1) Source: Trip Generation, Institute of Transportation Engineers, 11th Edition, 2021
- (2) ITE Land Use No. 560 Church the arrival peak-hour is typically from 9:30 am to 10:30 am and the departure peak-hour is typically from 11:00 am to 12:00 pm.





1,000 = Average Daily Traffic



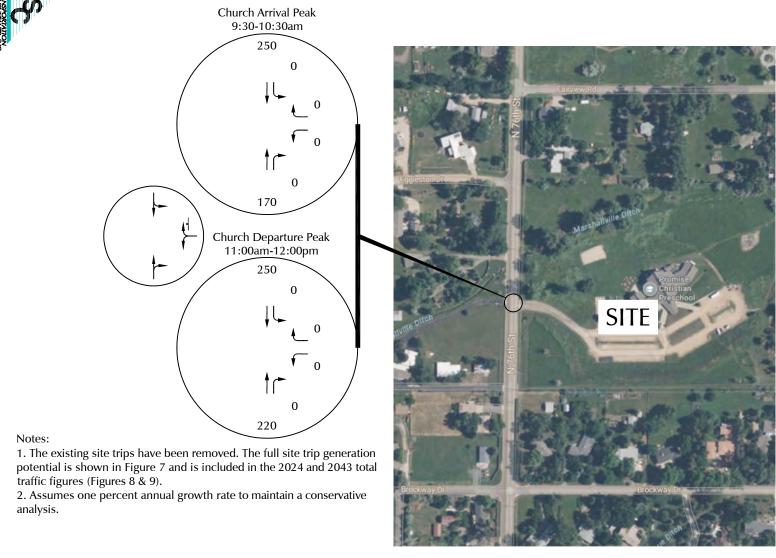


Figure 4

Approximate Scale Scale: 1"=300'

## Year 2024 Background Traffic, Lane Geometry and Traffic Control

Legacy Boulder Church - TSIR (LSC #230530)

#### LEGEND:

├ = Stop Sign

26 = Peak Hour Traffic

1,000 = Average Sunday Traffic

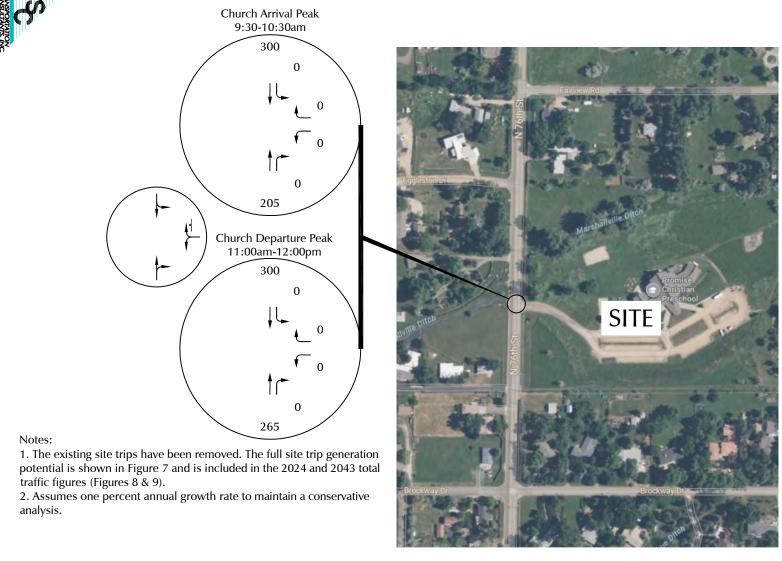


Figure 5

Approximate Scale Scale: 1"=300'

## Year 2043 Background Traffic, Lane Geometry and Traffic Control

Legacy Boulder Church - TSIR (LSC #230530)

#### LEGEND:

├ = Stop Sign

26 = Peak Hour Traffic

1,000 = Average Sunday Traffic







Note: Based on directional distribution from existing traffic counts.

LEGEND:

65% =

Percent Directional Distribution

Figure 6

## Directional Distribution of Site-Generated Traffic

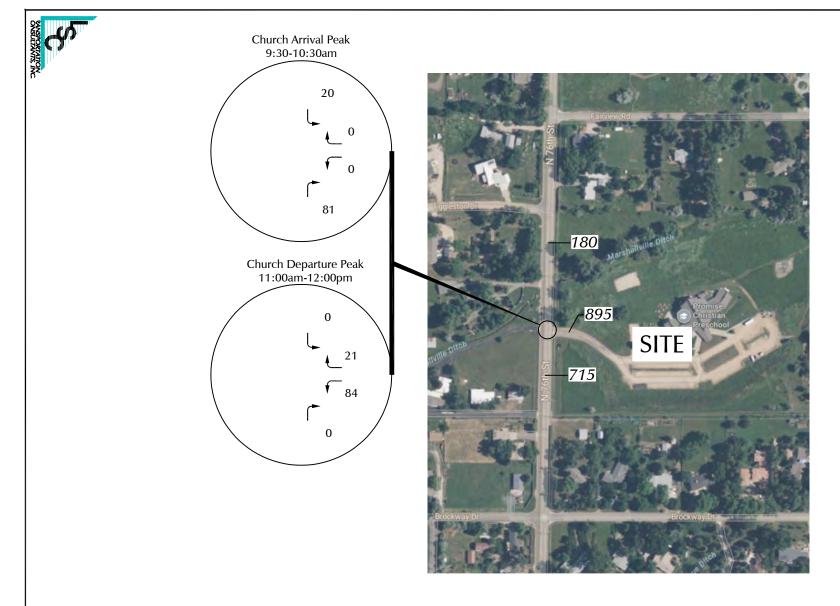


Figure 7

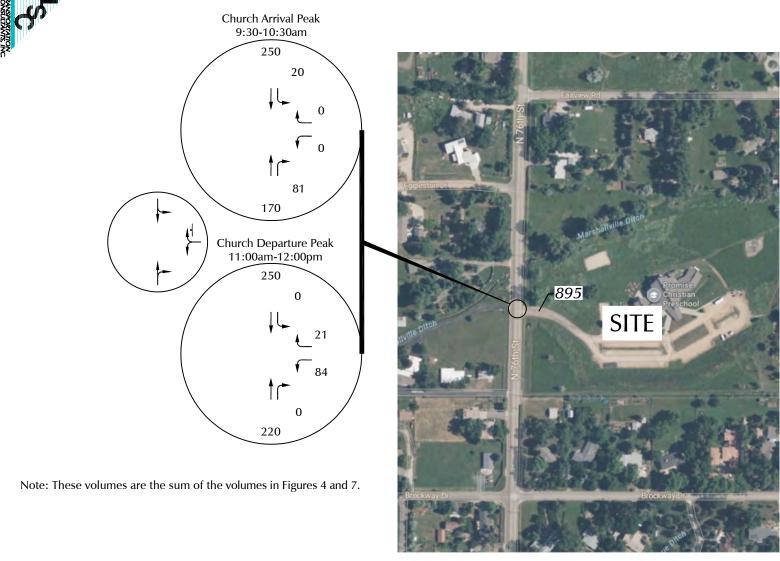
Approximate Scale Scale: 1"=300'

LEGEND:

26 = Peak Hour Traffic

1,000 = Average Sunday Traffic

Assignment of Site-Generated Traffic



Approximate Scale Scale: 1'=300'

LEGEND:

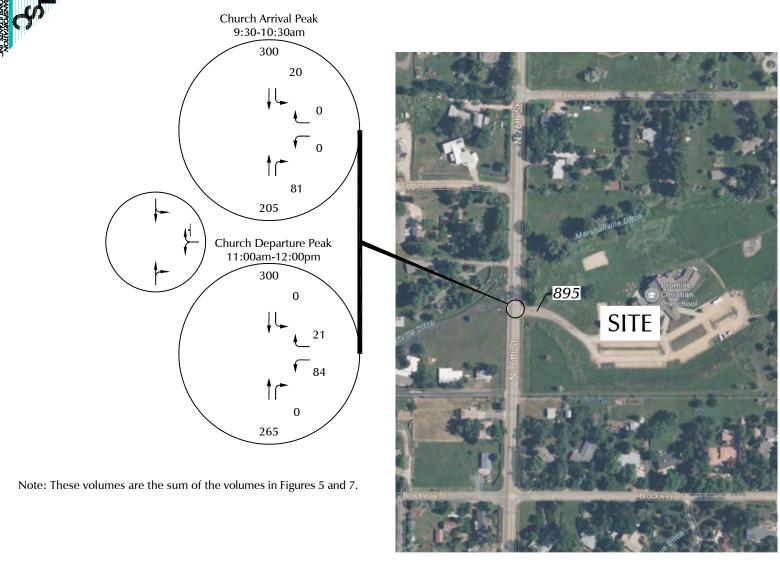
} = Stop Sign

26 = Peak Hour Traffic

1,000 = Average Sunday Traffic

Figure 8

Year 2024 Total Traffic, Lane Geometry and Traffic Control





LEGEND:

} = Stop Sign

26 = Peak Hour Traffic

1,000 = Average Sunday Traffic

Figure 9

Year 2043 Total Traffic, Lane Geometry and Traffic Control

February 21, 2023

**Boulder County** 

Re: Traffic Letter – Pre-Application Methodology Statement

Legacy Boulder Church - Site Work Package and Sanctuary Renovations

270 76th Street

Boulder County, Colorado

Dear Sir or Madam:

This letter is intended to document the traffic flow for the proposed remodel of the existing Legacy Boulder Church (formerly known as Boulder Church of Christ) worship area. This letter will serve as part of the Pre-Application Methodology Statement as directed by Boulder County

Legacy Boulder Church is located at 270 N. 76<sup>th</sup> Street in Boulder County. It is bounded by South Boulder Road on the south and Baseline Road on the north. The Church is located on the east side of N 76<sup>th</sup> Street. Other major roads in the area are McCaslin Blvd and N 75<sup>th</sup> Street. See the attached Site Plan and location map. The documentation submitted to Boulder County in November of 1991 shows access to The Church of Christ (now known as the Legacy Boulder Church), is a driveway from N 76<sup>th</sup> Street. N 76<sup>th</sup> Street at that point is two lanes with shoulders on both sides (solid white painted lines that also serve as bike paths). The posted speed limit is 40 miles per hour on N. 76<sup>th</sup> Street.

There are signalized intersections at N. 76<sup>th</sup> Street and South Boulder Road and Baseline Road. The intersections at South Boulder Road and McCaslin, and Baseline Road and N 75<sup>th</sup> Street are also signalized.

There are no sidewalks on either side of N. 76th Street. The existing drive entry into the church is a 2-lane curb cut. The entry drive is bounded by a split rail fence and there are no sidewalks from N. 76th Street to the building.

The church is in a primarily residential area. Nearby residential neighborhoods are Grandview Estates, Indian Hills, Fairview Estates Paragon Estates, Spanish Hills and Longs View to the west. The church sits on the west side of a Boulder Open Space area that was purchased from Boulder County in 1991. The Open Space does not have a name but is shown on the maps and is to the east of the church property. Access to the Open Space would be off on N. 76th Street on the north side of the church's property. This access has not yet been developed. This access is referenced in the sale of the property to the Boulder Valley Church of Christ.

Other information about the area includes:

- 1. There are no RTD bus stops on N. 76<sup>th</sup> Street. There are RTD bus stops on South Boulder Road and Baseline Road.
- 2. Boulder Valley School District currently stops on N. 76th Street for children pick up. The specific numbers and locations of stops are unknown.
- 3. Mountain View Fire/Rescue has a station on Baseline Road, just east of the intersection of Baseline Road and N. 76<sup>th</sup> Street.
- 4. There are also two (2) other churches on N. 76<sup>th</sup> Street between South Boulder Road and Baseline Road. The larger of the two, Reclamation Church, is north of the Legacy property. From their website, they have various group functions Monday thru Friday. Some are at 6:30 am and others are at 6:30 pm. These are small less than 100 people. The other church is small and is located about halfway between Legacy Church and Baseline Road. There is no information on when they meet for services or other functions.

The existing Boulder Legacy Church currently is 17,224 square feet, and this is not being modified by the proposed project. The existing Worship Area is 2,976.7 sq. ft. There are also three classrooms adjacent to the Worship Area that were used as overflow spaces using closed circuit TV monitors. These two areas are about 1726 square feet. The existing Worship Area has a seating capacity of 411 seats per the attached document from the submittal to Boulder County in 1991.

The remodel will consist of removing the walls that separate two classroom/overflow areas to the east and west from the current worship area. The original design planned that these walls could be removed to expand the worship area. Reference the attached new floor plan. The new worship area will become 5240 sq. ft. with a capacity of 405 seats. I addition to the changes to the worship area two new doors will to added to the worship area for exiting and one new door will be added to the Mom's room, also for exiting. These three doors will all be on the north side and will blend into the siding.

The project will remove the two showers in the restrooms to the south of the worship area. The women's restroom will be moved to where the current men's restroom is located, and two additional water closets will be installed. The existing women's restroom will become the men's restroom and two existing urinals will be moved and three urinals will be added.

The remodel will pave the parking lot which is currently gravel and includes the construction of fire apparatus access roads at the request of Mountain View Fire Rescue. The fire access roads will be constructed of concrete blocks with openings in them to allow grass to grow and rainwater to pass into the subsoil.

The existing site drawing A-1.0 (attached) shows 154 parking spaces including 4 handicapped spaces. Section 4-404 of the Boulder County Land Use Code in subsection D. Church 3. Parking requires 1 parking space per 30 sq. ft. of worship area. The revised parking plan SP01 shows 176 spaces including 2 ADA car and 4 ADA Van. There is also 2,000 sq. ft. of overflow parking along the new fire access road on the east end of the building. These spaces are not counted for the required parking.

Boulder Legacy currently has one service held every Sunday at 10:00 AM. The service usually consists of approximately 100 vehicles and 250 people. Christmas service in 2022 had about 325 people in the worship area and up to 20 people including kids and teachers in other parts of the building. There were about 140 vehicles at that service.

Randomly scheduled events occur during the week with up to 15 people and 10 cars attending during these events. Currently, cars arrive from 7:30 AM on Sunday till about 10:15 with the majority arriving between 9:30 and 10:15. From observations, cars leaving after the service leave from approximately 11:15 AM to 12:30 PM. At no time are there any more than 5 cars waiting to get onto N 76th Street.

The usage and attendance of the building will not be significantly altered or impacted by this project, as such, we request that a full traffic study not be required for this project.

Sincerely,

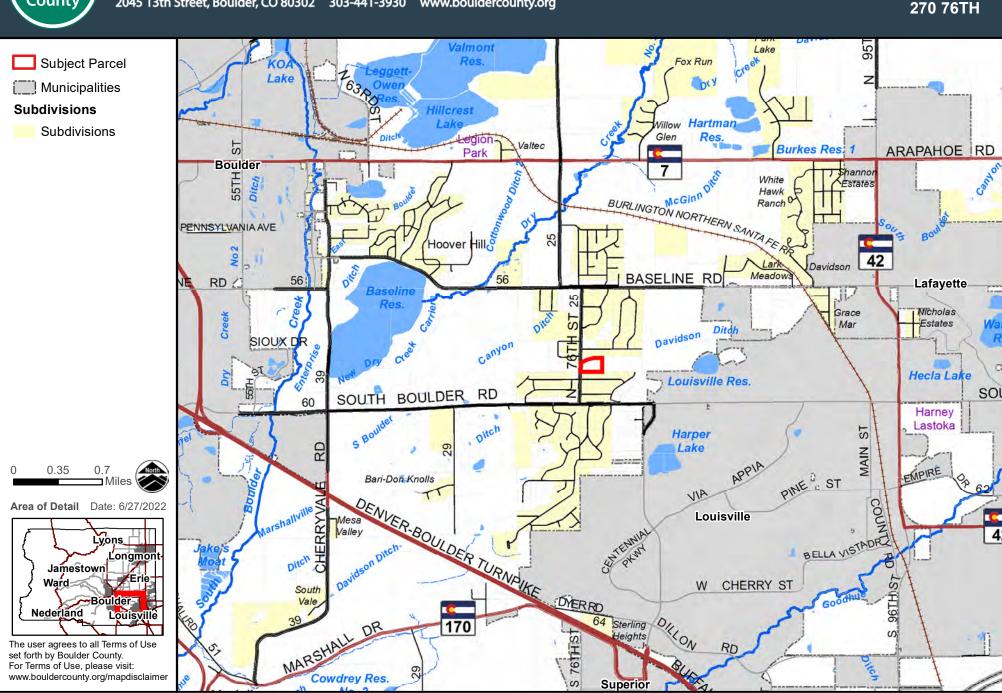
John M. McGovern

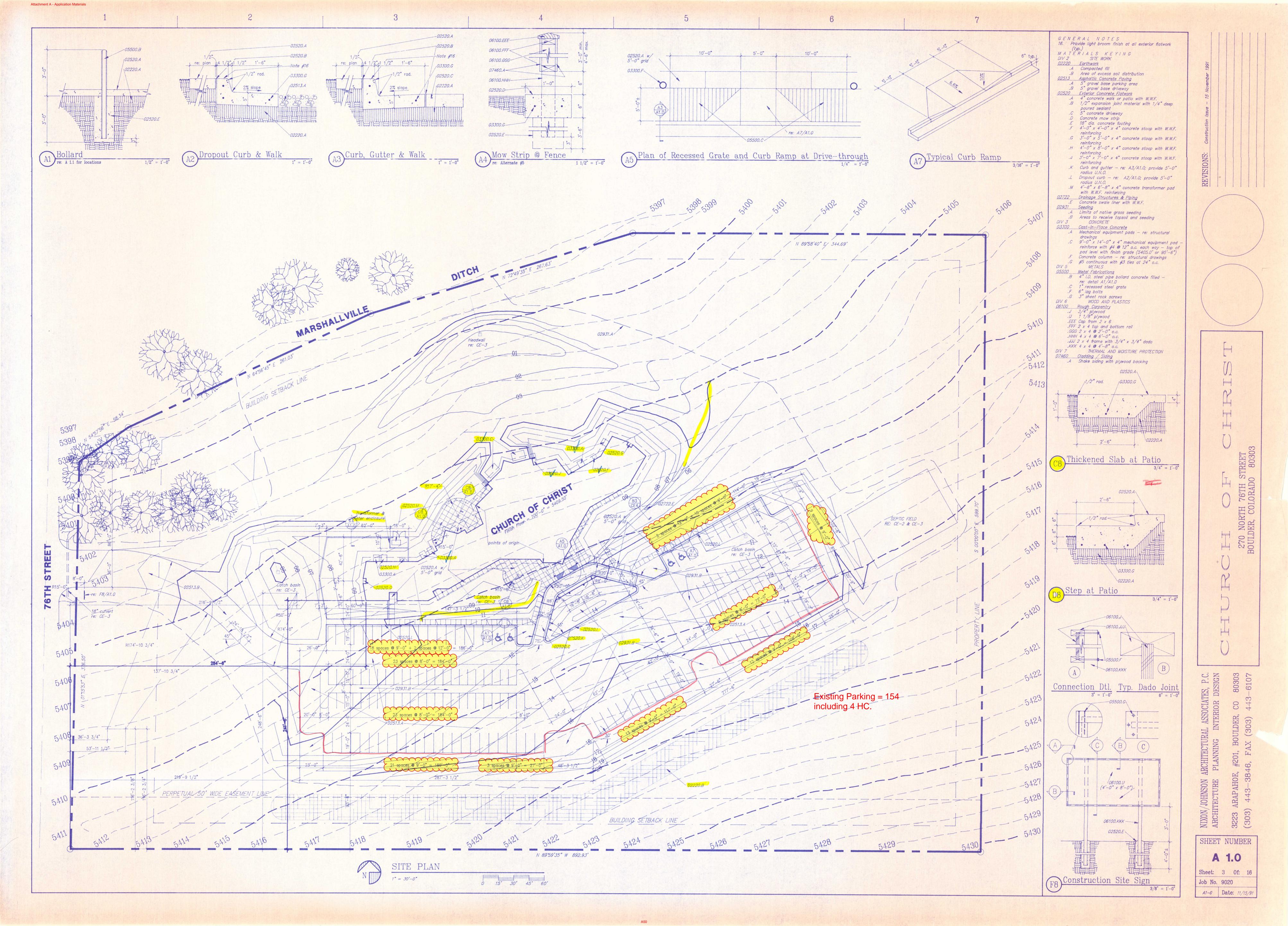


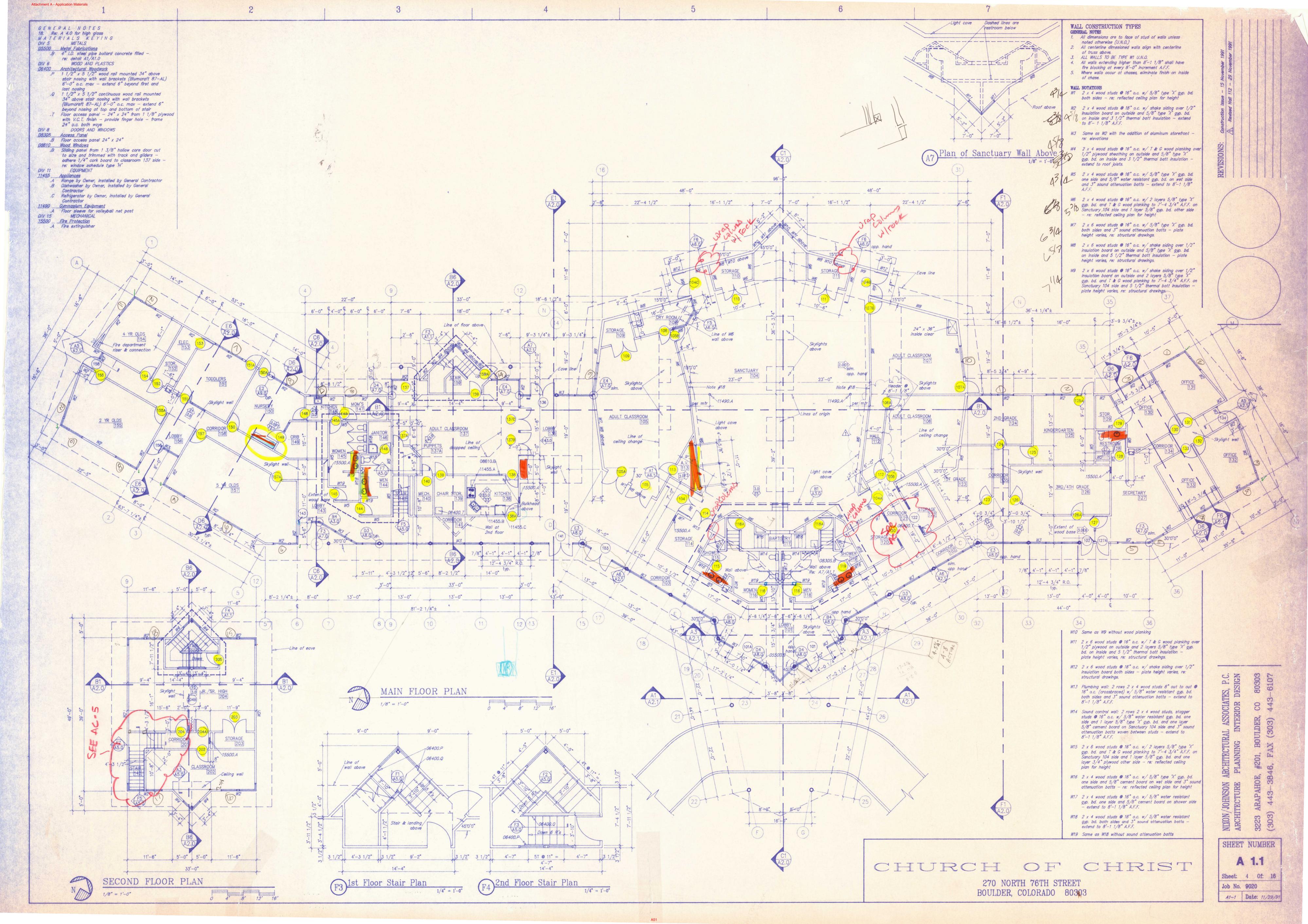
### **Community Planning & Permitting**

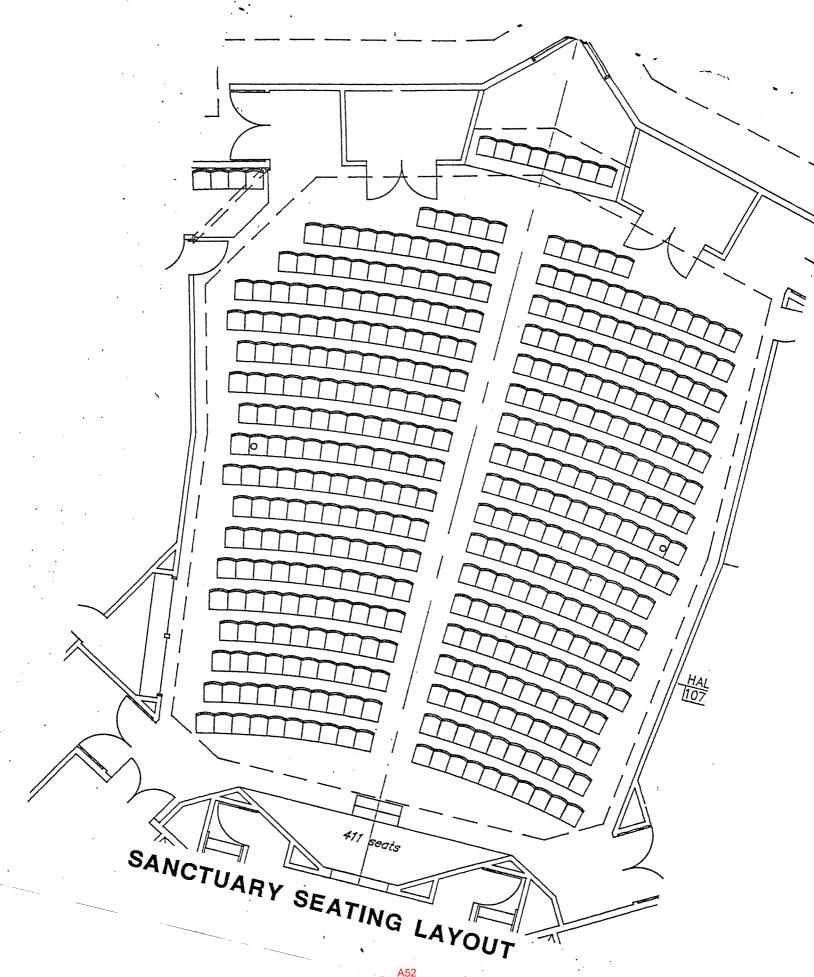
2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org

**Vicinity** 









Attachment A - Application Materials

## GENERAL DEMOLITION NOTES

- THE GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS SHOWN ON THE PLANS PRIOR TO COMMENCEMENT OF THE WORK. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO COORDINATE INSTALLATION OF NEW WORK WITHIN THESE EXISTING CONDITIONS. ANY DEVIATIONS IN EXISTING CONDITIONS OR DIMENSIONS INDICATED SHALL BE COORDINATED WITH THE ARCHITECT/ENGINEER AND OWNER IN ORDER TO MODIFY THE PLANS ACCORDINGLY.
- THE EXISTING BUILDING SHALL BE PROTECTED FROM WEATHER AT ALL TIMES.
   OPENINGS AND PENETRATIONS SHALL BE PROTECTED WITH DURABLE,
   INSULATED TEMPORARY CONSTRUCTION. COORDINATE SECURITY
   REQUIREMENTS WITH THE OWNER.
- 3. ALL WORK IS TO BE PERFORMED IN SUCH A MANNER AS TO MINIMIZE THE IMPACT ON AREAS ADJACENT TO THE AREAS OF CONSTRUCTION.
- REMOVE EXISTING FLOORS, WALLS AND CEILINGS AS REQUIRED FOR NEW CONSTRUCTION. PATCH, REPAIR AND PREPARE ADJACENT SURFACES AS REQUIRED FOR NEW CONSTRUCTION AND FINISHES.
- 5. REFER TO MECHANICAL, ELECTRICAL, PLUMBING, AND LANDSCAPE/CIVIL DRAWINGS FOR ADDITIONAL INFORMATION PERTAINING TO DEMOLITION.
- REMOVE EXISTING FURNITURE, FIXTURES AND EQUIPMENT (INCLUDING ARTWORK AND MARKER/TACK BOARDS AS REQUIRED FOR NEW CONSTRUCTION. COORDINATE SALVAGE AND STORAGE OF EQUIPMENT WITH OWNER AS REQUIRED. PROTECT AND STORE ALL ITEMS DESIGNATED TO BE SALVAGED FOR REINSTALLATION.
- REMOVE EXISTING SIGNAGE AS REQUIRED FOR DEMOLITION AND STORE DURING CONSTRUCTION. REINSTALL WHEN APPLICABLE. PATCH AND PREPARE ADJACENT SURFACES AS REQUIRED FOR NEW FINISHES. ALL NEW SIGNAGE TO BE PROVIDED BY OWNER.
- 8. ALL OPENINGS AND VOIDS LEFT BY THE REMOVAL OF EXISTING CONSTRUCTION, EQUIPMENT, PIPING, DUCTS, ETC. SHALL BE PROPERLY PATCHED AND CLOSED OFF TO MAINTAIN PROPER FIRE RATING IN WALLS, IF APPLICABLE. PATCH AND PREPARE ANY AREAS TO RECEIVE NEW FINISHES AS REQUIRED.
- 9. THE ARCHITECT ASSUMES NO RESPONSIBILITY FOR THE DETECTION OR REMOVAL OF ANY HAZARDOUS MATERIALS, INCLUDING, BUT NOT LIMITED TO, ASBESTOS IN ANY FORM. PARTIES RESPONSIBLE FOR DEMOLITION SHALL NOTIFY THE OWNER IMMEDIATELY OF ANY SUSPECTED MATERIALS.
- 10. THE OWNER HAS THE RIGHT TO CLAIM ANY MATERIALS AND/OR EQUIPMENT THAT IS SCHEDULED TO BE DEMOLISHED OR REMOVED FROM THE SITE.
- 11. ALL EXISTING BUILDING ELEMENTS TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION.
- 12. REMOVE EXISTING FLOOR FINISHES WHERE INDICATED. DEMOLITION INCLUDES REMOVAL OF EXISTING ADHESIVES, GROUTING BED, ETC. PATCH AND PREPARE FLOOR AND WALL SURFACES AS REQUIRED FOR NEW CONSTRUCTION AND FINISHES. WHERE FLOOR FINISH IS REMOVED, BASE WILL BE REMOVED. SEE FINISH PLAN FOR ADDITIONAL INFORMATION.
- 13. PREPARE EXISTING SUBSTRATES TO REMAIN AS REQUIRED TO RECEIVE NEW FINISHES.

14. EXISTING FLOOR SLABS ARE CONCRETE. ANY DEMOLITION OF EXISTING FLOOR

SLABS WILL REQUIRE GPR X-RAY PRIOR TO DEMOLITION.

- S DEMOLITION KEY NOTES
  - 1.) REMOVE EXISTING WALL ASSEMBLY IN ITS ENTIRETY OR AS REQUIRED FOR NEW CONSTRUCTION. PATCH AND PREPARE ADJACENT SURFACES AS
  - REQUIRED FOR NEW CONSTRUCTION.
  - ADJACENT SURFACES AS REQUIRED FOR NEW CONSTRUCTION.

    3. REMOVE EXISTING WINDOW ASSEMBLY IN ITS ENTIRETY. PATCH AND

REMOVE EXISTING DOOR AND FRAME IN ITS ENTIRETY. PATCH AND PREPARE

CONSTRUCTION. PATCH AND PREPARE ADJACENT SURFACES AS REQUIRED

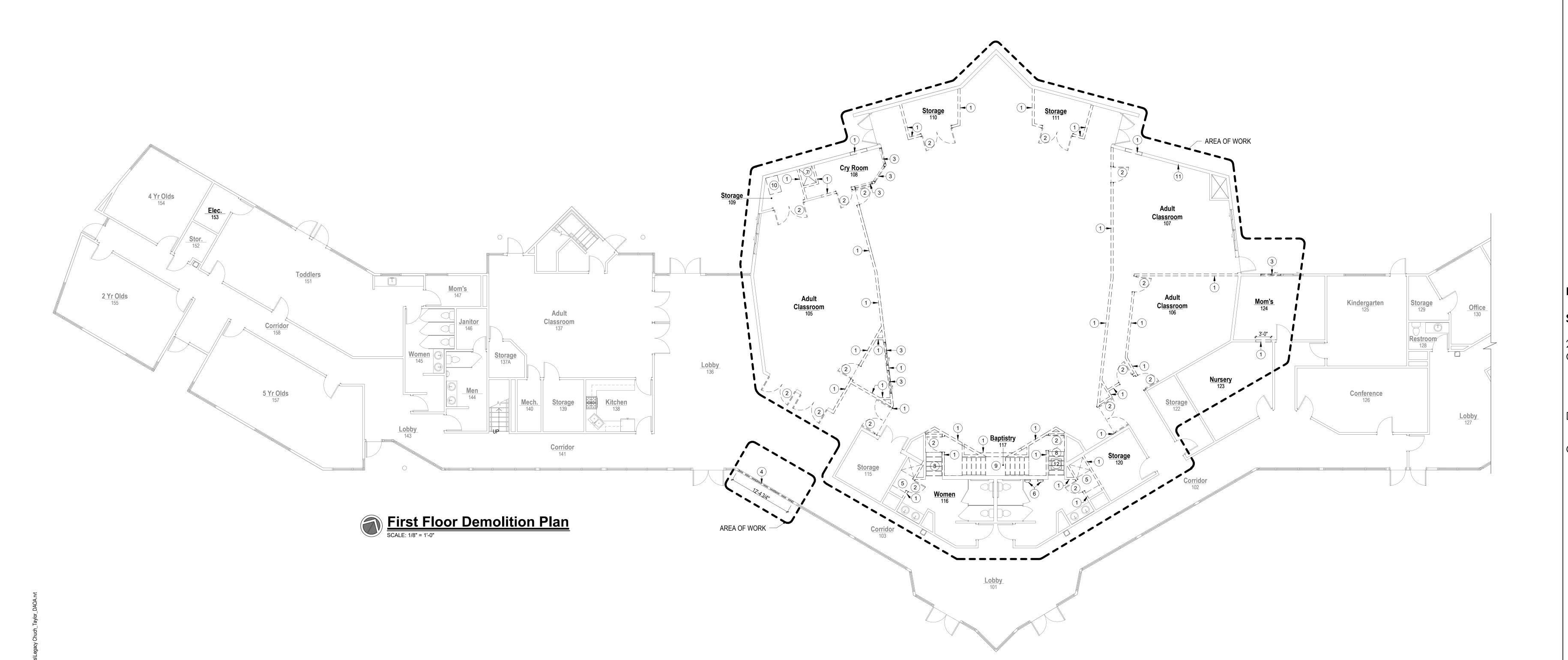
- PREPARE ADJACENT SURFACES AS REQUIRED FOR NEW CONSTRUCTION.

  (4.) REMOVE EXISTING STOREFRONT ASSEMBLY AS REQUIRED FOR NEW
- FOR NEW CONSTRUCTION.

  5. REMOVE EXISTING SHOWER AND ALL ASSOCIATED COMPONENTS IN ITS ENTIRETY. PATCH AND PREPARE ADJACENT SURFACES AS REQUIRED FOR
- ENTIRETY. PATCH AND PREPARE ADJACENT SURFACES AS REQUIRED FOR NEW CONSTRUCTION.

REMOVE EXISTING URINAL AND SALVAGE FOR REINSTALLATION. PATCH AND

- PREPARE ADJACENT SURFACES AS REQUIRED FOR NEW CONSTRUCTION.
- REMOVE EXISTING MECHANICAL DUCT TO BE RELOCATED. PATCH AND PREPARE ADJACENT SURFACES AS REQURIED FOR NEW CONSTRUCTION.
- REMOVE EXISTING STAIR ASSEMBLY IN ITS ENTIRETY. PATCH AND PREPARE ADJACENT SURFACES AS REQUIRED FOR NEW CONSTRUCTION.
- 9. REMOVE EXISTING BAPTISTRY IN ITS ENTIRETY. PATCH AND PREPARE ADJACENT SURFACES AS REQUIRED FOR NEW CONSTRUCTION.
- (10.) REMOVE PORTION OF (e) CONCRETE SLAB AS REQUIRED FOR INSTALLATION OF RELOCATED MECHANICAL DUCT. SEE MECHANICAL SHEETS FOR ADDITIONAL INFORMATION.
- REMOVE PORTION OF EXISTING EXTERIOR WALL ASSEMBLY AS REQUIRED FOR THE INSTALLATION OF NEW EXHAUST FAN. PATCH AND PREPARE ADJACENT SURFACES AS REQUIRED FOR NEW CONSTRUCTION. SEE MECHANICAL SHEETS FOR ADDITIONAL INFORMATION.
- (12) REMOVE PORTION OF EXISTING FLOOR SLAB FOR NEW CRAWL SPACE ACCESS. PATCH AND PREPARE ADJACENT SURFACES AS REQUIRED FOR NEW CONSTRUCTION.



Legacy Church

Keep door & frame for

potential reuse. ECTURE

7230 Meade St.

Westminster, CO 80030

Phone: 720.273.0431

Web: www.daoarch.com

Email: dan@daoarch.com

Sanctuary Remodel

270 N 76th St. Boulder, CO 80303

DAO No.:2022-016

October 5, 2022

First Floor Demolition Plan

**AD1.0** 

Attachment A - Application Materials

## GENERAL PLAN NOTES

- DRAWINGS & SPECIFICATIONS ARE COMPLIMENTARY COMPONENTS OF THE CONTRACT DOCUMENTS, REVIEW ALL DRAWINGS AND SPECIFICATIONS FOR THE COMPLETE SCOPE OF WORK. NOTIFY ARCHITECT IMMEDIATELY FOR CLARIFICATION IF INCONSISTENCIES, CONTRADICTIONS OR OMISSIONS ARE DISCOVERED.
- 2. DO NOT SCALE DRAWINGS, IF DIMENSIONAL INFORMATION IS REQUIRED & NOT FOUND, NOTIFY ARCHITECT IMMEDIATELY FOR CLARIFICATION.
- 3. ALL DIMENSIONS ARE TO COLUMN CENTERLINES OR FACE OF FINISHED WALLS OR SURFACES UNLESS NOTED OTHERWISE.
- 4. REFER TO DEMOLITION DRAWINGS FOR WORK REQUIRED IN ADVANCE OF
- CONSTRUCTION AND COORDINATE ACCORDINGLY.

  5. ALL DOOR FRAMES ARE TO BE INSTALLED 4" AWAY OF ADJACENT

PERPENDICULAR WALLS UNLESS NOTED OTHERWISE.

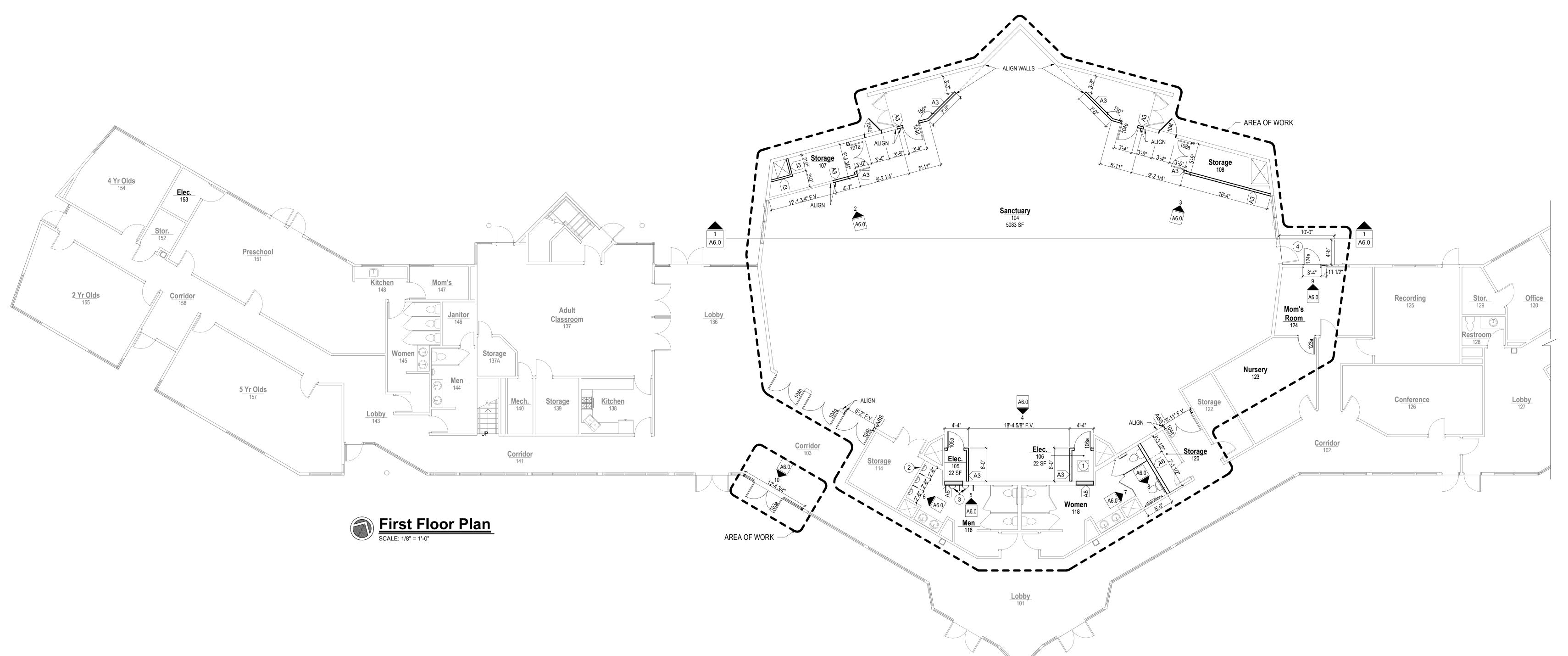
- 6. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
- 7. FURNITURE AND EQUIPMENT PROVIDED BY OWNER.

## **KEY NOTES**

- 1. NEW CRAWL SPACE ACCESS.
- 2. NEW MOP SINK FAUCET WITH HOT AND COLD WATER.
- 3. REINSTALL SALVAGED URINALS FOR REUSE.
- 4. NEW CONCRETE SLAB

## WALL PARTITION TYPES

- 5/8" TYPE 'X' GPDW, 4" WOOD STUDS AT 16" O.C., 5/8" TYPE 'X' GPDW. FROM FINISHED FLOOR TO 6" ABOVE FINISHED CEILING. BRACE AS REQUIRED.
- 5/8" TYPE 'X' GPDW, 4" WOOD STUDS AT 16" O.C. FROM FINISHED FLOOR TO B.O. STRUCTURE. BRACE AS REQUIRED.
- 5/8" TYPE 'X' GPDW, 6" WOOD STUDS AT 16" O.C. FROM FINISHED FLOOR TO 6" ABOVE FINISHED CEILING, BRACE AS REQUIRED.
- 5/8" TYPE 'X' GPDW, 6" WOOD STUDS AT 16" O.C. WITH BATT INSULATION
  BETWEEN STUDS, (2) LAYERS OF 5/8" TYPE 'X' GPDW, FROM FINISHED FLOOR
  TO B.O. STRUCTURE
  1 HOUR RATED UL U305
- 5/8" WATER RESISTANT GPDW, 5/8" TYPE 'X' GPDW, 2 ROWS OF 2X4 WOOD STUDS, STAGGER STUDS AT 16" O.C., 5/8" TYPE 'X' GPDW. FROM FINISHED FLOOR TO FINISHED CEILING.



Legacy Church

Sanctuary Remodel

DAO ARCHITECTURE

Westminster, CO 80030

Phone: 720.273.0431 Email: dan@daoarch.com

Web: www.daoarch.com

270 N 76th St. Boulder, CO 80303

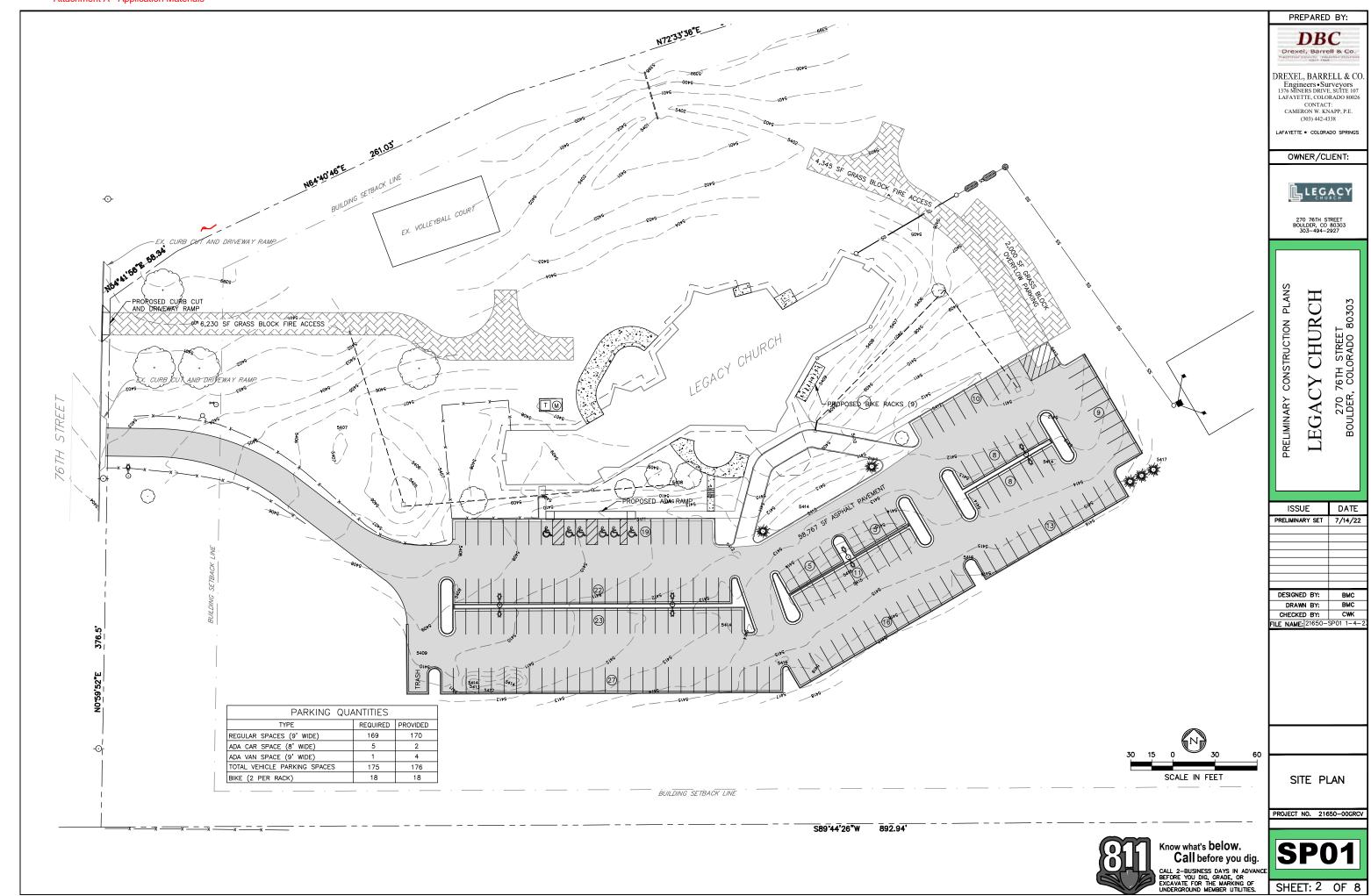
DAO No.:2022-016

October 5, 2022

First Floor Plan

C.Osels if aylor Documents Legacy Critica Fragio EDA 10/5/2022 5:00:27 PM

41.0





#### Aldridge Transportation Consultants, LLC

Advanced Transportation Planning and Traffic Engineering

John M.W. Aldridge, PE, PTOE, AICP Colorado Licensed Professional Engineer 1082 Chimney Rock Road Highlands Ranch, CO 80126 Tele: 303-703-9112 Mobile: 303-594-4132 Email: john@atceng.com

December 22, 2017

Ms. Rebecca Kinney Promise Christian Preschool Boulder Valley Church of Christ 270 76<sup>th</sup> Street, Boulder CO 80303

RE: Pre-Application Methodology Statement

Promise Christian Preschool

Dear Ms. Kinney:

With this letter we are providing a Pre-Application Methodology Statement for the referenced project in accord with Section 4.4.4 of the Boulder County Multi-Modal Transportation Standards. Promise Christian Preschool is applying for a minor modifications variance to allow a preschool (classified as Group E Daycare) to reside in a building that currently has a site specific Special Use approval under the docket SU-90-0012 and operates as the Boulder Valley Church of Christ.

#### IMPACT AREA

Boulder Valley Church of Christ is located at 270 76th Street in Boulder, CO 80303. The aerial graphic on page 2 shows the location and surrounding area. The property is accessed directly from 76<sup>th</sup> St, at approximately 1,600 feet north of South Boulder Road. 76<sup>th</sup> St. is a two-lane, undivided minor arterial roadway that features bike lanes and curb and gutter on both sides but no sidewalks. Per the current traffic counts from Boulder County it carries 9,500 AADT on the north end at Baseline Road and 11,100 on the south end at South Boulder Road. The speed limit is 40 mph. The intersections of South Boulder Road and Baseline Road are traffic signal controlled.

#### PROJECT COMPONENTS

Promise Christian Preschool is a privately operated 501c (3) not-for-profit organization that was founded in 1992. It is a preschool that exists for the primary purpose of providing an age-appropriate Christian education for children ages three through five. Promise is an independent preschool licensed by the State of Colorado and accredited through the Colorado Shines Rating System. They formerly leased space and operated out of a small church in Lafayette that was recently sold. They now can partner and operate from the Boulder Valley Church of Christ



Page 2 of 4

Promise Christian Preschool hopes to rent space at Boulder Valley Church of Christ for a minimum of 3 years and hopes to develop a long-term relationship with the church. Promise



Christian Preschool has asked to rent two classrooms from the facility and plans to make minor modifications to the space including the removal of a demising wall between two classrooms to create one large classroom approximately 600 square feet.

#### TRIP GENERATION RATES



Page 3 of 4

Their program is made up of a preschool class that consists of no more than 15 three-year-old students meeting Tuesday/Thursday mornings. The Pre-Kindergarten class consists of no more than 20 four and five-year-old students meeting Monday/Wednesday/Friday mornings. Both classes meet 9:00am-11:30am. Four times a month, they offer an optional extended day called "Lunch Bunch" offered through 12:30pm for an additional minimal expense. They have also provided the option of early drop-off (at 8:30am) for both preschool and pre-K children for an additional expense. Historically, approximately 5 families have utilized this early drop-off option. The staff is made up of one full-time director and two full-time teachers who teach all 5 days a week.

They are in session September through May and do not currently have a summer program. They have a set drop-off time before school begins that usually lasts10-15 minutes from about 8:50 am – 9:05 am. They have two set pick up times, the first from 11:20-11:35 pm, and the second from 12:20-12:35 pm. So, while they have about 18-20 cars entering the parking lot daily, it will be for short intervals. There is no bus transportation. The proposed location currently has plenty of parking spaces available, and the parking lot is never at capacity.

In summary and terms of daily trips, staff in and out trips amounts to 6 and student in and out trips amounts to 40. The total number of daily trips on Monday, Wednesday, and Friday is 46.

#### **MODE SHARE**

Some families will carpool however, the number is unpredictable and insignificant.

#### TRIP DISTRIBUTION

As the former location is just up the road from the proposed location (formerly at 9880 Baseline Road), they already have a strong customer base from Boulder, Lafayette, Louisville, Superior and Erie that plans to follow to the new location. We would expect a 50/50 north/south to/from split on  $76^{th}$  St.

#### RECOMMENDATION

Although the number of daily trips between 30 and 50 qualifies it for a Transportation System Impact Letter, the additional information required for impact letter is limited and can be addressed per the following:

- 1) 76<sup>th</sup> St. in this location is straight and generally level. The sight distance is more than adequate at well over 500 feet in each direction.
- 2) The existing access to the Boulder Valley Church of Christ will function adequately for the preschool and no modification or relocation is necessary. Although the driveway and parking lot are gravel, the required 3-foot paved section prior to entering the roadway has been installed.
- 3) Bike lanes currently exist on both sides of 76<sup>th</sup> St. There are no sidewalks currently and nothing to connect to. Installation of sidewalks on the frontage of the church property would serve no purpose.

The estimated trips for the Promise Christian Preschool is in my professional opinion reasonable and consistent with the accepted practice of transportation planning and traffic engineering. We trust that the analysis presented herein provides the County sufficient information to determine



Page 4 of 4

that no further transportation impact study is necessary and that such study would not provide any meaningful results.

Should you have any questions or need additional information please call me at 303-703-9112. Thank you for the opportunity to be of service.

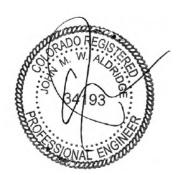
Respectfully submitted,

Aldridge Transportation Consultants, LLC

John M.W. Aldridge, PE, PTOE, AICP Principal

jmwa/me/

ATC is professional service firm specializing in traffic engineering and transportation planning. ATC's principal, John M.W. Aldridge, is a Colorado licensed professional engineer. In the past 20 years, ATC has prepared over 1,000 traffic impact studies, designed over 100 traffic signals, and has provided expert witness testimony on engineering design and access issues on multi-million-dollar interchange and highway projects in Kansas and Colorado.



#### **COUNTER MEASURES INC.**

1889 YORK STREET DENVER.COLORADO 303-333-7409

N/S STREET: 76TH ST

E/W STREET: LEGACY CHURCH ENTRANCE

CITY: BOULDER COUNTY: BOULDER Start Date : 7/9/2023
Page No : 1
Groups Printed- VEHICLES
LEGACY CHURCH 76TH ST NO ACCESS

File Name: 76THLEGACY

Site Code : 00000011

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09:30 AM	2	53	0	4	0	0	0	0	0	47	8	1	0	0	0	0	115
09:45 AM	6	81	0	2	0	0	1	0	0	49	27	4	0	0	0	0	170
Total	8	134	0	6	0	0	1	0	0	96	35	5	0	0	0	0	285
10:00 AM	5	59	0	2	0	0	0	0	0	44	11	2	0	0	0	0	123
10:15 AM	4	53	0	2	0	0	0	0	0	28	1	2	0	0	0	0	90
10:30 AM	0	75	0	1	0	0	1	0	0	56	2	2	0	0	0	0	137
10:45 AM	0	50	0	2	3	0	0	0	0	47	0	1	0	0	0	0	103
Total	9	237	0	7	3	0	1	0	0	175	14	7	0	0	0	0	453
11:00 AM	0	50	0	2	17	0	5	0	0	58	0	1	0	0	0	0	133
11:15 AM	0	57	0	3	21	0	6	0	0	70	0	0	0	0	0	0	157
11:30 AM	0	71	0	2	16	0	0	0	0	41	0	1	0	0	0	0	131
11:45 AM	0	68	0	1	16	0	2	0	0	50	0	1	0	0	0	0	138
Total	0	246	0	8	70	0	13	0	0	219	0	3	0	0	0	0	559
<b>Grand Total</b>	17	617	0	21	73	0	15	0	0	490	49	15	0	0	0	0	1297
Apprch %	2.6	94.2	0.0	3.2	83.0	0.0	17.0	0.0	0.0	88.4	8.8	2.7	0.0	0.0	0.0	0.0	
Total %	1.3	47.6	0.0	1.6	5.6	0.0	1.2	0.0	0.0	37.8	3.8	1.2	0.0	0.0	0.0	0.0	

#### **COUNTER MEASURES INC.**

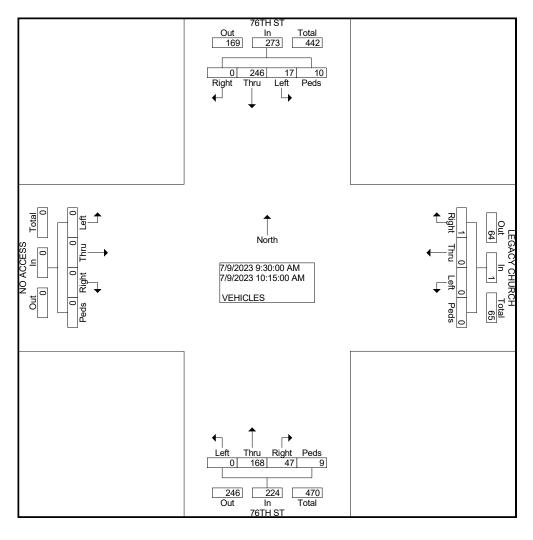
1889 YORK STREET DENVER.COLORADO 303-333-7409

N/S STREET: 76TH ST

E/W STREET: LEGACY CHURCH ENTRANCE

CITY: BOULDER COUNTY: BOULDER File Name: 76THLEGACY
Site Code: 00000011
Start Date: 7/9/2023
Page No: 2

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09:45 Volume	6	81	0	2	89	0	0	1	0	1	0	49	27	4	80	0	0	0	0	0	170
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High Int.	09:45	5 AM				09:45	AM				09:45	AM				9:15:	00 AM				
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#### **COUNTER MEASURES INC.**

1889 YORK STREET DENVER.COLORADO 303-333-7409

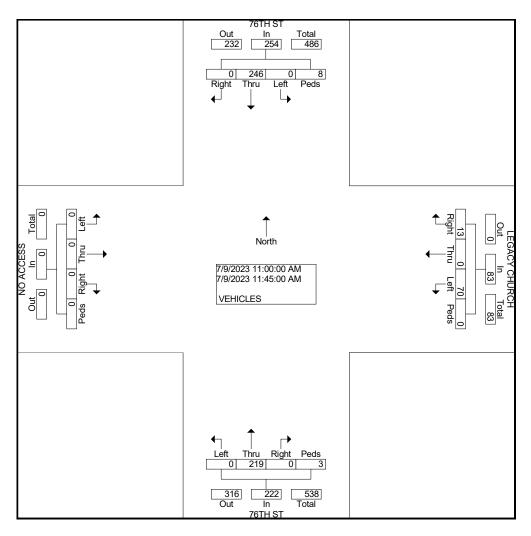
N/S STREET: 76TH ST

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Site Code: 00000011
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Page No: 3

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Volume	0	246	0	8	254	70	0	13	0	83	0	219	0	3	222	0	0	0	0	0	559
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Peak					0.87					0.76					0.79						
Factor					0					9					3						



Location: 76TH ST N-O LEAGCY CHURCH

City: BOULDER
County: BOULDER
Direction: NORTH/SOUTH

Site Code: 2314304 2312304 Station ID: 2313304 Start Date: 06142023 7/13/2023 End Date: 06152023 7/14/2023

Latitude: 0.000000

Time         Total           1200 AM         11         11         12           2100 A         1         12         13           2-00         6         2         8           3300         2         2         3           4400         13         8         21           5500         64         32         96           6:00         121         126         96           6:00         257         242         499           8:00         383         365         498           8:00         284         300         594           10:00         264         283         557           11:00         285         289         574           12:00 PM         268         325         580           2:00         272         325         580           2:00         272         325         580           2:00         272         325         580           2:00         272         325         580           2:00         272         325         580           2:00         272         325         382 <t< th=""><th></th><th></th><th></th><th></th><th>Longitude: 0.000000</th></t<>					Longitude: 0.000000
1200 AM       11       11       12         1:00       1       12       13         2:00       6       2       8         3:00       2       3       5         4:00       13       8       21         5:00       64       32       96         6:00       121       126       247         7:00       257       242       499         8:00       383       365       748         9:00       294       300       594         1:00       264       283       547         1:00       285       289       574         1:00       285       289       574         1:00       286       325       593         1:00       286       325       593         1:00       286       294       560         2:00       272       325       597         3:00       336       393       729         4:00       351       531       882         5:00       379       508       887         6:00       233       231       464         7:00       15	7/13/2023	NORTH	SOUTH		
1:00       1       12       13         2:00       6       2       8         3:00       2       3       5         4:00       13       8       21         5:00       64       32       96         6:00       121       126       247         7:00       257       242       499         8:00       383       385       748         9:00       294       300       594         10:00       264       283       547         11:00       285       289       574         11:00 PM       268       325       593         1:00 DM       286       294       580         2:00 272       325       597         3:00 336       393       729         4:00 351       531       882         5:00 379       508       887         6:00 233       231       464         9:00 79       86       264         9:00 79       86       264         9:00 79       86       366         10:00 64       72       366         10:00 64       72       366 <th></th> <th></th> <th></th> <th></th> <th></th>					
2:00       6       2       3       5         4:00       13       8       21         5:00       64       32       96         6:00       121       126       247         7:00       257       242       499         8:00       383       365       748         9:00       294       300       594         1:00       264       283       547         1:1:00       285       289       574         1:00 PM       286       294       580         2:00 PM       286       294       580         2:00 DM       272       325       597         3:00       336       393       729         4:00       351       531       882         5:00       379       508       887         6:00       233       231       464         7:00       154       152       306         8:00       148       116       264         9:00       79       86       66         10:00       64       72       36         10:00       64       72       36					22
4:00       13       8       21         5:00       64       32       96         6:00       121       126       247         7:00       257       242       499         8:00       383       365       748         9:00       294       300       594         10:00       264       283       547         11:00       285       289       574         12:00 PM       268       325       593         1:00       286       294       580         2:00       272       325       597         3:00       336       393       729         4:00       351       531       882         5:00       379       508       887         6:00       233       231       464         7:00       154       152       306         8:00       148       116       264         9:00       79       86       165         11:00       28       20       48         11:00       28       20       48         10:00       64       72       136         11:00 </td <td></td> <td></td> <td></td> <td></td> <td>13</td>					13
4:00       13       8       21         5:00       64       32       96         6:00       121       126       247         7:00       257       242       499         8:00       383       365       748         9:00       294       300       594         10:00       264       283       547         11:00       285       289       574         12:00 PM       268       325       593         1:00       286       294       580         2:00       272       325       597         3:00       336       393       729         4:00       351       531       882         5:00       379       508       887         6:00       233       231       464         7:00       154       152       306         8:00       148       116       264         9:00       79       86       165         11:00       28       20       48         11:00       28       20       48         10:00       64       72       136         11:00 </td <td></td> <td></td> <td></td> <td></td> <td>8</td>					8
5:00       64       32       96         6:00       121       126       247         7:00       257       242       499         8:00       383       365       748         9:00       294       300       594         10:00       264       283       547         11:00       285       289       574         12:00 PM       268       325       583         1:00       286       294       580         2:00       272       325       580         3:00       336       393       729         4:00       351       531       882         5:00       379       508       887         6:00       233       231       464         7:00       154       152       306         8:00       148       116       264         9:00       79       86       165         10:00       64       72       136         10:00       64       72       136         10:00       429       4726       9025         Percent       47.6%       52.4%       500					5
6:00       121       126       247         7:00       257       242       499         8:00       383       365       748         9:00       294       300       594         10:00       264       283       597         11:00       285       289       574         12:00 PM       268       325       593         1:00       286       294       580         2:00       272       325       597         3:00       336       393       729         4:00       351       531       882         5:00       379       508       887         6:00       233       231       464         7:00       154       152       306         8:00       148       116       264         9:00       79       86       165         10:00       64       72       136         11:00       28       20       136         11:00       28       20       48         9ercent       47.6%       52.4%         80       748         PM Peak       5:00       4:00 <td></td> <td></td> <td></td> <td></td> <td>21</td>					21
7:00       257       242       499         8:00       383       365       748         9:00       294       300       594         10:00       264       283       547         11:00       285       289       574         12:00 PM       268       325       593         1:00       286       294       580         2:00       272       325       597         3:00       336       393       729         4:00       351       551       882         5:00       379       508       887         6:00       233       231       464         7:00       154       152       306         8:00       148       116       264         9:00       79       86       165         10:00       64       72       136         11:00       28       20       48         Percent       47.6%       52.4%         AM Peak       8:00       8:00         Volume       383       365       748         PH Peak       5:00       4:00       5.00         Volume					96
8:00       383       365       748         9:00       294       300       594         10:00       264       283       547         11:00       285       289       574         1:00       286       325       593         1:00       286       294       580         2:00       272       325       597         3:00       336       393       729         4:00       351       531       882         5:00       379       508       887         6:00       233       231       464         7:00       154       152       306         8:00       148       116       264         9:00       79       86       165         10:00       64       72       136         11:00       28       20       48         Percent       47.6%       52.4%         AM Peak       8:00       8:00         Volume       383       365       748         PM Peak       5:00       4:00       5:00         Volume       379       531       887         Grand Total					
9:00       294       300       594         10:00       264       283       547         11:00       285       289       574         12:00 PM       268       325       593         1:00       286       294       580         2:00       272       325       597         3:00       336       393       729         4:00       351       531       882         5:00       379       508       887         6:00       233       231       464         7:00       154       152       306         8:00       148       116       264         9:00       79       86       165         10:00       64       72       136         11:00       28       20       48         Total       4299       4726       9025         Percent       47.6%       52.4%       800         AM Peak       8:00       8:00       8:00         Volume       383       365       748         PM Peak       8:00       4:00       5:00         Volume       379       531       887					
10:00     264     283       11:00     285     289       12:00 PM     268     325       1:00     286     294     580       2:00     272     325     597       3:00     336     393     729       4:00     351     531     882       5:00     379     508     887       6:00     233     231     464       7:00     154     152     306       8:00     148     116     264       9:00     79     86     165       10:00     64     72     136       11:00     28     20     48       Total     4299     4726     902       Percent     47.6%     52.4%     500       AM Peak     8:00     8:00     8:00       Volume     383     365     748       PM Peak     5:00     4:00     5:00       Volume     379     531     887       Grand Total     4299     4726     902       Percent     47.6%     52.4%     902					
11:00       285       289       574         12:00 PM       268       325       593         1:00       286       294       580         2:00       272       325       597         3:00       336       393       729         4:00       351       531       882         5:00       379       508       887         6:00       233       231       464         7:00       154       152       306         8:00       148       116       264         9:00       79       86       165         10:00       64       72       136         11:00       28       20       48         Total       4299       4726       9025         Percent       47.6%       52.4%       5:00         Volume       383       365       87         PM Peak       5:00       4:00       5:00         Volume       379       531       887         Grand Total       4299       4726       9025         Percent       47.6%       52.4%       50.00         Percent       47.6%       52.4%					594
12:00 PM       268       325       593         1:00       286       294       580         2:00       272       325       597         3:00       336       393       729         4:00       351       531       882         5:00       379       508       887         6:00       233       231       464         7:00       154       152       306         8:00       148       116       264         9:00       79       86       165         10:00       64       72       136         11:00       28       20       48         Total       429       4726       9025         Percent       47.6%       52.4%         AM Peak       8:00       8:00         Volume       383       365       8:00         Volume       379       531       887         Grand Total       4299       4726       9025         Percent       47.6%       52.4%         Percent       47.6%       52.4%					
1:00       286       294       580         2:00       272       325       597         3:00       336       393       729         4:00       351       531       882         5:00       379       508       887         6:00       233       231       464         7:00       154       152       306         8:00       148       116       264         9:00       79       86       165         10:00       64       72       136         11:00       28       20       48         Total       4299       4726       9025         Percent       47.6%       52.4%       800         Volume       383       365       887         PM Peak       5:00       4:00       5:00         Volume       379       531       887         Grand Total       4299       4726       9025         Percent       47.6%       52.4%       9025					
2:00     272     325       3:00     336     393       4:00     351     531       5:00     379     508       6:00     233     231       7:00     154     152       8:00     148     116       9:00     79     86       10:00     64     72       11:00     28     20       AM Peak     4299     4726       Percent     47.6%     52.4%       AM Peak     8:00     8:00       Volume     383     365       Grand Total     4299     4726       Percent     47.6%     52.4%       Grand Total     4299     4726       Percent     47.6%     52.4%					593
3:00       336       393       729         4:00       351       531       882         5:00       379       508       887         6:00       233       231       464         7:00       154       152       306         8:00       148       116       264         9:00       79       86       165         10:00       64       72       136         11:00       28       20       48         Total       4299       4726       9025         Percent       47.6%       52.4%         AM Peak       8:00       8:00         Volume       383       365       5:00         Volume       379       531       887         Grand Total       4299       4726       9025         Percent       47.6%       52.4%       50.00					
4:00       351       531       882         5:00       379       508       887         6:00       233       231       464         7:00       154       152       306         8:00       148       116       264         9:00       79       86       165         10:00       64       72       136         11:00       28       20       48         Total       4299       4726       9025         Percent       47.6%       52.4%       800         Volume       383       365       800         Volume       379       531       5.00         Grand Total       4299       4726       9025         Percent       47.6%       52.4%       9025					
5:00       379       508       887         6:00       233       231       464         7:00       154       152       306         8:00       148       116       264         9:00       79       86       165         10:00       64       72       136         11:00       28       20       48         Total       4299       4726       9025         Percent       47.6%       52.4%       800         AM Peak       8:00       8:00       8:00         Volume       383       365       365         PM Peak       5:00       4:00       5:00         Volume       379       531       887         Grad Total       4299       4726       9025         Percent       47.6%       52.4%					
6:00       233       231       464         7:00       154       152       306         8:00       148       116       264         9:00       79       86       165         10:00       64       72       36         11:00       28       20       48         Total       4299       4726       9025         Percent       47.6%       52.4%       8:00         Volume       383       365       748         PM Peak       5:00       4:00       5:00         Volume       379       531       5:00         Grand Total       4299       4726       9025         Percent       47.6%       52.4%					
7:00       154       152       306         8:00       148       116       264         9:00       79       86       165         10:00       64       72       136         11:00       28       20       48         Total       4299       4726       9025         Percent       47.6%       52.4%       8:00         Volume       383       365       8:00         Volume       379       531       5:00         Volume       379       531       887         Grand Total       4299       4726       9025         Percent       47.6%       52.4%					
8:00       148       116       264         9:00       79       86       165         10:00       64       72       136         11:00       28       20       48         Total       4299       4726       9025         Percent       47.6%       52.4%         AM Peak       8:00       8:00       8:00         Volume       383       365       8:00         PM Peak       5:00       4:00       5:00         Volume       379       531       887         Grand Total       4299       4726       9025         Percent       47.6%       52.4%					464
9:00       79       86       165         10:00       64       72       136         11:00       28       20       48         Total       4299       4726       9025         Percent       47.6%       52.4%       8:00         AM Peak       8:00       8:00       8:00         Volume       383       365       748         PM Peak       5:00       4:00       5:00         Volume       379       531       887         Grand Total       4299       4726       9025         Percent       47.6%       52.4%       9025					306
10:00       64       72         11:00       28       20         Total       4299       4726         Percent       47.6%       52.4%         AM Peak       8:00       8:00         Volume       383       365         PM Peak       5:00       4:00         Volume       379       531         Grand Total       4299       4726         Percent       47.6%       52.4%					
11:00       28       20         Total       4299       4726         Percent       47.6%       52.4%         AM Peak       8:00       8:00         Volume       383       365       748         PM Peak       5:00       4:00       5:00         Volume       379       531       887         Grand Total       4299       4726       9025         Percent       47.6%       52.4%					165
Total       4299       4726         Percent       47.6%       52.4%         AM Peak       8:00       8:00         Volume       383       365       748         PM Peak       5:00       4:00       5:00         Volume       379       531       887         Grand Total       4299       4726       9025         Percent       47.6%       52.4%					136
Percent         47.6%         52.4%           AM Peak         8:00         8:00           Volume         383         365           PM Peak         5:00         4:00           Volume         379         531           Grand Total         4299         4726           Percent         47.6%         52.4%					48
AM Peak       8:00       8:00         Volume       383       365         PM Peak       5:00       4:00         Volume       379       531         Grand Total       4299       4726         Percent       47.6%       52.4%					9025
Volume       383       365         PM Peak       5:00       4:00         Volume       379       531         Grand Total       4299       4726         Percent       47.6%       52.4%					
PM Peak       5:00       4:00         Volume       379       531         Grand Total       4299       4726         Percent       47.6%       52.4%					
Volume         379         531           Grand Total         4299         4726           Percent         47.6%         52.4%					
Grand Total         4299         4726           Percent         47.6%         52.4%					
Percent 47.6% 52.4%					
					9025
ADT ADT: 9,025 AADT: 9,025		47.6%			
	ADT		ADT: 9,025	AADT: 9,025	

Location: 76TH ST N-O LEAGCY CHURCH

City: BOULDER
County: BOULDER
Direction: NORTH/SOUTH

Site Code: 2314304 2312304 Station ID: 2313304 Start Date: 06142023 7/16/2023 End Date: 06152023 7/17/2023

Latitude: 0.000000 Longitude: 0.000000

Tribin         South         Total           12:00 AM         33         27         60           10:100         17         8         25           2:00         7         8         15           3:00         6         3         9           4:00         5         6         11           5:00         15         17         32           6:00         46         64         110           7:00         82         105         187           8:00         105         132         237           9:00         178         221         399           10:00         163         226         389           11:00         221         239         460           12:00 PM         191         244         455           1:00         212         205         417           2:00         202         136         389           4:00         218         200         418           5:00         190         167         90           6:00         158         144         302           7:00         149         129         48 <th></th> <th></th> <th></th> <th></th> <th>Longitude: 0.000000</th>					Longitude: 0.000000
12:00 AM 33 27 60 1:00 177 8 25 2:00 7 8 15 3:00 6 3 8 9 4:00 5 6 3 9 4:00 5 6 6 31 6:00 46 64 110 7:00 82 105 187 8:00 105 132 237 9:00 178 221 399 10:00 183 226 388 3:00 183 208 389 11:00 212 205 417 2:00 202 186 388 3:00 188 5:00 199 167 6:00 158 144 398 5:00 199 167 288 8:00 190 178 299 399 14:00 218 200 418 8:00 109 183 208 389 14:00 218 200 418 8:00 190 167 388 1100 218 200 418 8:00 190 167 388 1100 218 200 418 8:00 190 167 388 1100 218 200 418 8:00 190 167 387 8:00 190 167 387 8:00 190 167 387 8:00 190 167 387 8:00 190 167 387 8:00 190 167 388 110 199 9:00 77 90 167 9:00 158 144 302 7:00 149 129 388 11:00 23 20 43 11:00 23 20 43 11:00 23 20 43 11:00 23 20 43 11:00 23 20 43 11:00 23 20 43 11:00 23 20 43 11:00 23 20 43 11:00 23 20 43 11:00 23 20 43 11:00 23 20 43 11:00 23 20 43 11:00 23 20 43 11:00 23 20 43 11:00 24 288 26 26 26 26 26 26 26 26 26 26 26 26 26 2	7/16/2023	North	South		
1:00       17       8       25         2:200       7       8       15         3:00       6       3       9         4:00       5       6       11         5:00       15       17       32         6:00       46       64       110         7:00       82       105       187         8:00       105       132       237         9:00       178       221       399         10:00       163       226       389         11:00       221       239       460         12:00 PM       191       244       435         1:00       212       205       417         2:00       202       186       388         3:00       183       208       391         4:00       218       200       418         5:00       190       167       357         6:00       158       144       302         7:00       149       129       99         9:00       77       90       48         10:00       47       41       88         7total       26	Time				Total
2:00 7 8 15 3:00 6 3 9 4:00 5 6 3 9 4:00 5 6 11 5:00 46 64 110 7:00 82 105 187 8:00 105 132 237 9:00 178 221 399 10:00 163 226 389 11:00 221 239 460 12:00 PM 191 244 435 5:00 102 188 200 418 5:00 102 188 200 418 5:00 190 167 327 6:00 158 144 302 7:00 149 129 278 8:00 89 110 228 8:00 89 110 228 8:00 89 110 329 320 433 7 100 158 144 302 7:00 149 129 328 8:00 89 110 89 8:00 89 110 89 8:00 89 18 8:00 89					
3:00       6       3         4:00       5       6         5:00       15       17         6:00       46       64         107:00       82       105         8:00       105       132         9:00       178       221         9:00       178       221         10:00       163       226         389       11:00       221       239         11:00       221       239       460         12:00 PM       191       244       435         1:00       212       205       417         2:00       202       186       388         3:00       183       208       391         4:00       218       200       418         5:00       190       167       357         6:00       158       144       302         7:00       149       129       278         8:00       89       110       199         9:00       77       90       43         10:00       47       41       88         11:00       43       26         7erent </td <td></td> <td>17</td> <td></td> <td></td> <td>25</td>		17			25
4:00       5       6         5:00       15       17         6:00       46       64         7:00       82       105         8:00       105       132         9:00       178       221         9:00       163       226         11:00       221       239         11:00       221       239         15:00 PM       191       244         1:00 222       186       388         3:00       183       208       391         4:00       218       200       418         4:00       218       200       418         5:00       190       167       357         6:00       158       144       302         7:00       149       129       278         8:00       89       110       199         9:00       77       90       167         10:00       47       41       88         11:00       23       20       43         Total       2617       2800       5417         Percent       48.3%       51.7%       5417         Percent <td></td> <td></td> <td></td> <td></td> <td>15</td>					15
5:00       15       17       32         6:00       46       64       110         7:00       82       105       187         8:00       105       132       237         9:00       178       221       399         10:00       163       226       389         11:00       221       239       460         12:00 PM       191       244       435         1:00       212       205       417         2:00       202       186       388         3:00       183       208       391         4:00       218       200       418         5:00       190       167       357         6:00       158       144       302         7:00       149       129       278         8:00       89       110       199         9:00       77       90       167         10:00       47       41       88         11:00       23       20       43         Total       2617       2800       5417         Percent       48.3%       51.7%       5417					
6:00       46       64       110         7:00       82       105       187         8:00       105       132       237         9:00       178       221       399         10:00       163       226       389         11:00       221       239       460         12:00 PM       191       244       435         1:00       212       205       417         2:00       202       186       388         3:00       183       208       381         4:00       218       200       418         5:00       190       167       357         6:00       158       144       302         8:00       89       110       199         9:00       77       90       167         10:00       47       41       88         11:00       23       20       43         Total       2617       2800       517%         Percent       48.3%       51.7%       5417         PM Peak       4:00       12:00 PM       460         PM Peak       4:00       12:00 PM       480					
7:00       82       105       187         8:00       105       132       237         9:00       178       221       399         10:00       163       226       389         11:00       221       239       460         12:00 PM       191       244       435         1:00       212       205       417         2:00       202       186       388         3:00       183       208       391         4:00       218       200       418         5:00       190       167       357         6:00       158       144       302         7:00       149       129       278         8:00       89       110       199         9:00       77       90       167         10:00       47       41       88         11:00       23       20       43         Total       2617       2800       517%         AM Peak       11:00       11:00         Volume       221       239       460         PM Peak       4:00       12:00 PM         Volume					32
8:00       105       132       237         9:00       178       221       399         10:00       163       226       389         11:00       221       239       460         12:00 PM       191       244       435         1:00       212       205       417         2:00       202       186       388         3:00       183       208       391         4:00       218       200       418         5:00       190       167       357         6:00       158       144       302         7:00       149       129       278         8:00       89       110       199         9:00       77       90       167         10:00       47       41       88         11:00       23       20       43         Total       2617       2800       51.7%         AM Peak       11:00       11:00       11:00         Volume       221       239       460         PM Peak       4:00       12:00 PM       460         PM Peak       4:00       12:00 PM       435<	6:00		64		110
9:00     178     221     399       10:00     163     226     388       11:00     221     239     460       12:00 PM     191     244     435       1:00     212     205     417       2:00     202     186     388       3:00     183     208     391       4:00     218     200     418       5:00     190     167     357       6:00     158     144     302       7:00     149     129     278       8:00     89     110     919       9:00     77     90     167       10:00     47     41     88       11:00     23     20     43       Total     2617     2800     5417       Percent     48.3%     51.7%     51.7%       AM Peak     11:00     11:00     11:00       Volume     221     239     460       PM Peak     4:00     12:00 PM     460       Porcent     48.3%     51.7%     51.7%       AM Peak     11:00     10:00 PM     40       Volume     218     244     435       Fercent     48.3%     51.7%					
10:00       163       226       389         11:00       221       239       460         12:00 PM       191       244       435         1:00       212       205       417         2:00       202       186       388         3:00       183       208       391         4:00       218       200       418         5:00       190       167       357         6:00       158       144       302         7:00       149       129       278         8:00       89       110       199         9:00       77       90       167         10:00       47       41       88         11:00       23       20       43         Total       2617       2800       5417         Percent       48.3%       51.7%       460         AM Peak       11:00       11:00       11:00         Volume       221       239       40         PM Peak       4:00       12:00 PM       40         Volume       218       244       435         Grand Total       2617       2800 <t< td=""><td></td><td></td><td></td><td></td><td></td></t<>					
11:00       221       239       460         12:00 PM       191       244       435         1:00       212       205       417         2:00       202       186       388         3:00       183       208       391         4:00       218       200       418         5:00       190       167       357         6:00       158       144       302         7:00       149       129       278         8:00       89       110       199         9:00       77       90       167         10:00       47       41       88         11:00       23       20       43         Total       2617       2800       5417         Percent       48.3%       51.7%       11:00         Volume       221       239       460         PM Peak       4:00       12:00 PM       460         PM Peak       4:00       12:00 PM       435         Grand Total       281       284       435         Fercent       48.3%       51.7%       5417	9:00				399
12:00 PM       191       244       435         1:00       212       205       417         2:00       202       186       388         3:00       183       208       391         4:00       218       200       418         5:00       190       167       357         6:00       158       144       302         7:00       149       129       278         8:00       89       110       199         9:00       77       90       167         10:00       47       41       88         11:00       23       20       43         Total       2617       2800       5417         Percent       48.3%       51.7%       460         AM Peak       11:00       11:00       11:00         Volume       221       239       460         PM Peak       4:00       12:00 PM         Volume       218       244       435         Grand Total       2617       2800       5417         Percent       48.3%       51.7%       5417	10:00	163	226		389
1:00       212       205       417         2:00       202       186       388         3:00       183       208       391         4:00       218       200       418         5:00       190       167       357         6:00       158       144       302         7:00       149       129       278         8:00       89       110       199         9:00       77       90       167         10:00       47       41       88         11:00       23       20       43         Total       2617       2800       5417         Percent       48.3%       51.7%       11:00         Volume       221       239       460         PM Peak       4:00       12:00 PM       435         Volume       218       244       435         Grand Total       2617       2800       5417         Percent       48.3%       51.7%       5417	11:00	221	239		460
2:00       202       186       388         3:00       183       208       391         4:00       218       200       418         5:00       190       167       357         6:00       158       144       302         7:00       149       129       278         8:00       89       110       199         9:00       77       90       199         10:00       47       41       88         11:00       23       20       43         Total       2617       2800       5417         Percent       48.3%       51.7%       460         PM Peak       4:00       12:00 PM         Volume       21       239       460         PM Peak       4:00       12:00 PM         Volume       218       244       435         Grand Total       2617       2800       5417         Percent       48.3%       51.7%       51.7%	12:00 PM				
3:00       183       208       391         4:00       218       200       418         5:00       190       167       357         6:00       158       144       302         7:00       149       129       278         8:00       89       110       199         9:00       77       90       167         10:00       47       41       88         11:00       23       20       43         Total       2617       2800       5417         Percent       48.3%       51.7%       11:00         Volume       221       239       460         PM Peak       4:00       12:00 PM         Volume       218       244       435         Grand Total       2617       2800       5417         Percent       48.3%       51.7%       5417					
4:00       218       200         5:00       190       167         6:00       158       144         7:00       149       129         8:00       89       110         9:00       77       90         10:00       47       41         88       11:00       23       20         Total       2617       2800       5417         Percent       48.3%       51.7%       5417         AM Peak       11:00       11:00       11:00         Volume       221       239       460         PM Peak       4:00       12:00 PM       460         Volume       218       244       35         Grand Total       2617       2800       5417         Percent       48.3%       51.7%       5417					
5:00       190       167         6:00       158       144         7:00       149       129         8:00       89       110         9:00       77       90         10:00       47       41         11:00       23       20         Ads       43         Total       2617       2800         Percent       48.3%       51.7%         AM Peak       11:00       11:00         Volume       221       239       460         PM Peak       4:00       12:00 PM         Volume       218       244       435         Grand Total       2617       2800       5417         Percent       48.3%       51.7%       5417	3:00	183	208		391
6:00       158       144       302         7:00       149       129       278         8:00       89       110       199         9:00       77       90       167         10:00       47       41       88         11:00       23       20       43         Total       2617       2800       5417         Percent       48.3%       51.7%       5417         AM Peak       11:00       11:00       11:00         Volume       221       239       460         PM Peak       4:00       12:00 PM         Volume       218       244       345         Grand Total       2617       2800       5417         Percent       48.3%       51.7%       5417					
7:00       149       129       278         8:00       89       110       199         9:00       77       90       167         10:00       47       41       88         11:00       23       20       43         Total       2617       2800       5417         AM Peak       11:00       11:00       11:00         Volume       221       239       460         PM Peak       4:00       12:00 PM       460         PM Peak       4:00       12:00 PM       12:00 PM         Volume       218       244       435         Grand Total       2617       2800       5417         Percent       48.3%       51.7%	5:00	190	167		
8:00       89       110       199         9:00       77       90       167         10:00       47       41       88         11:00       23       20       43         Total       2617       2800       5417         Percent       48.3%       51.7%       5417         AM Peak       11:00       11:00       11:00         Volume       221       239       460         PM Peak       4:00       12:00 PM       460         Volume       218       244       435         Grand Total       2617       2800       5417         Percent       48.3%       51.7%       51.7%					
9:00       77       90       167         10:00       47       41       88         11:00       23       20       43         Total       2617       2800       5417         Percent       48.3%       51.7%       5417         AM Peak       11:00       11:00         Volume       221       239       460         PM Peak       4:00       12:00 PM       12:00 PM         Volume       218       244       435         Grand Total       2617       2800       5417         Percent       48.3%       51.7%       51.7%					278
10:00       47       41       88         11:00       23       20       43         Total       2617       2800       5417         Percent       48.3%       51.7%       5417         AM Peak       11:00       11:00         Volume       221       239       460         PM Peak       4:00       12:00 PM         Volume       218       244       435         Grand Total       2617       2800       5417         Percent       48.3%       51.7%       51.7%	8:00				199
10:00       47       41       88         11:00       23       20       43         Total       2617       2800       5417         Percent       48.3%       51.7%       5417         AM Peak       11:00       11:00         Volume       221       239       460         PM Peak       4:00       12:00 PM         Volume       218       244       435         Grand Total       2617       2800       5417         Percent       48.3%       51.7%       51.7%	9:00	77	90		167
Total Percent       2617       2800       5417         Percent       48.3%       51.7%       51.7%         AM Peak       11:00       11:00         Volume       221       239       460         PM Peak       4:00       12:00 PM         Volume       218       244       435         Grand Total       2617       2800       5417         Percent       48.3%       51.7%	10:00	47	41		88
Percent         48.3%         51.7%           AM Peak         11:00         11:00           Volume         221         239           PM Peak         4:00         12:00 PM           Volume         218         244           Grand Total         2617         2800           Percent         48.3%         51.7%	11:00				
AM Peak       11:00       11:00         Volume       221       239         PM Peak       4:00       12:00 PM         Volume       218       244         Grand Total       2617       2800         Percent       48.3%       51.7%	Total	2617			5417
Volume       221       239       460         PM Peak       4:00       12:00 PM       12:00 PM         Volume       218       244       435         Grand Total       2617       2800       5417         Percent       48.3%       51.7%					
PM Peak       4:00       12:00 PM         Volume       218       244         Grand Total       2617       2800       5417         Percent       48.3%       51.7%	AM Peak	11:00			11:00
Volume         218         244           Grand Total         2617         2800         5417           Percent         48.3%         51.7%					
Grand Total         2617         2800         5417           Percent         48.3%         51.7%					
Percent 48.3% 51.7%	Volume				435
					5417
ADT ADT: 5,417 AADT: 5,417		48.3%	51.7%		
	ADT		ADT: 5,417	AADT: 5,417	

Location: 76TH ST N-O LEAGCY CHURCH

City: BOULDER
County: BOULDER
Direction: NORTH/SOUTH

Site Code: 2314304 2312304

Station ID: 2313304 Start Date: 06142023 7/12/2023

End Date: 06152023 7/17/2023

Latitude: 0.000000 Longitude: 0.000000

																e: 0.000000
7/10/2023	Mor	nday	Tues	sday	Wedn	esday	Thur	sday	Fric	lay	Satu	rday	Sun	day	Week A	verage
Time	NORTH	SOUTH	NORTH	SOUTH	NORTH	SOUTH	NORTH	SOUTH								
12:00 AM	*	*	*	*	*	*	11	11	17	14	37	10	33	27	24	16
1:00	*	*	*	*	*	*	1	12	3	9	20	11	17	8	10	10
2:00	*	*	*	*	*	*	6	2	2	7	6	7	7	8	5	6
3:00	*	*	*	*	*	*	2	3	2	2	0	1	6	3	2	2
4:00	*	*	*	*	*	*	13	8	4	11	6	4	5	6	7	7
5:00	*	*	*	*	*	*	64	32	32	37	13	25	15	17	31	28
6:00	*	*	*	*	*	*	121	126	109	110	50	74	46	64	82	94
7:00	*	*	*	*	*	*	257	242	219	219	103	114	82	105	165	170
8:00	*	*	*	*	*	*	383	365	361	326	146	174	105	132	249	249
9:00	*	*	*	*	*	*	294	300	292	305	193	226	178	221	239	263
10:00	*	*	*	*	*	*	264	283	238	306	208	251	163	226	218	266
11:00	*	*	*	*	162	228	285	289	233	306	224	274	221	239	225	267
12:00 PM	*	*	*	*	265	277	268	325	256	291	269	255	191	244	250	278
1:00	*	*	*	*	252	276	286	294	289	307	225	259	212	205	253	268
2:00	*	*	*	*	307	307	272	325	274	324	225	240	202	186	256	276
3:00	*	*	*	*	349	458	336	393	357	411	222	240	183	208	289	342
4:00	*	*	*	*	355	480	351	531	328	417	201	219	218	200	291	369
5:00	*	*	*	*	339	491	379	508	274	365	204	225	190	167	277	351
6:00	*	*	*	*	242	234	233	231	177	228	157	129	158	144	193	193
7:00	*	*	*	*	166	151	154	152	156	137	130	95	149	129	151	133
8:00	*	*	*	*	166	159	148	116	106	97	108	95	89	110	123	115
9:00	*	*	*	*	76	87	79	86	111	101	91	83	77	90	87	89
10:00	*	*	*	*	41	42	64	72	67	50	76	62	47	41	59	53
11:00	*	*	*	*	29	24	28	20	44	22	35	56	23	20	32	28
Total	0	0	0	0	2749	3214	4299	4726	3951	4402	2949	3129	2617	2800	3518	3873
Day	(	)	(	)	59	63	90:	25	83	53	60	78	54	17	739	<b></b> }1
AM Peak					11:00	11:00	8:00	8:00	8:00	8:00	11:00	11:00	11:00	11:00	8:00	11:00
Volume					162	228	383	365	361	326	224	274	221	239	249	267
PM Peak					4:00	5:00	5:00	4:00	3:00	4:00	12:00 PM	1:00	4:00	12:00 PM	4:00	4:00
Volume					355	491	379	531	357	417	269	259	218	244	291	369

Location: 76TH ST N-O LEAGCY CHURCH

City: BOULDER
County: BOULDER
Direction: NORTH/SOUTH

Site Code: 2314304 2312304

Station ID: 2313304

Start Date: 06142023 7/12/2023 End Date: 06152023 7/17/2023

Latitude: 0.000000

-																e: 0.000000
7/17/2023	Mond		Tues			esday	Thur			day	Satu		Sun		Week A	
Time	NORTH	SOUTH	NORTH	SOUTH	NORTH	SOUTH	NORTH	SOUTH	NORTH	SOUTH	NORTH	SOUTH	NORTH	SOUTH	NORTH	SOUTH
12:00 AM	25	13	*	*	*	*	*	*	*	*	*	*	*	*	25	13
1:00	6	1	*	*	*	*	*	*	*	*	*	*	*	*	6	1
2:00	2	0	*	*	*	*	*	*	*	*	*	*	*	*	2	0
3:00	2	9	*	*	*	*	*	*	*	*	*	*	*	*	2	9
4:00	14	11	*	*	*	*	*	*	*	*	*	*	*	*	14	11
5:00	50	34	*	*	*	*	*	*	*	*	*	*	*	*	50	34
6:00	137	109	*	*	*	*	*	*	*	*	*	*	*	*	137	109
7:00	251	238	*	*	*	*	*	*	*	*	*	*	*	*	251	238
8:00	117	75	*	*	*	*	*	*	*	*	*	*	*	*	117	75
9:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12:00 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
6:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
7:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
8:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
9:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	604	490	0	0	0	0	0	0	0	0	0	0	0	0	604	490
Day	109		C	)		0	Ċ	)		0	(	)	C	)	109	
AM Peak	7:00	7:00													7:00	7:00
Volume	251	238													251	238
PM Peak																
Volume																
Comb Total	109		C		59	63	90	25	83	53	60	78	54	17	848	35
ADT	Α	DT: 7,218	A/	ADT: 7,218												

#### **LEVEL OF SERVICE DEFINITIONS**

From Highway Capacity Manual, Transportation Research Board, 2016, 6th Edition

#### **UNSIGNALIZED INTERSECTION LEVEL OF SERVICE (LOS)**

Applicable to Two-Way Stop Control, All-Way Stop Control, and Roundabouts

LOS	Average Vehicle Control Delay	Operational Characteristics
A	<10 seconds	Normally, vehicles on the stop-controlled approach only have to wait up to 10 seconds before being able to clear the intersection. Left-turning vehicles on the uncontrolled street do not have to wait to make their turn.
В	10 to 15 seconds	Vehicles on the stop-controlled approach will experience delays before being able to clear the intersection. The delay could be up to 15 seconds. Left-turning vehicles on the uncontrolled street may have to wait to make their turn.
С	15 to 25 seconds	Vehicles on the stop-controlled approach can expect delays in the range of 15 to 25 seconds before clearing the intersection.  Motorists may begin to take chances due to the long delays, thereby posing a safety risk to through traffic. Left-turning vehicles on the uncontrolled street will now be required to wait to make their turn causing a queue to be created in the turn lane.
D	25 to 35 seconds	This is the point at which a traffic signal may be warranted for this intersection. The delays for the stop-controlled intersection are not considered to be excessive. The length of the queue may begin to block other public and private access points.
E	35 to 50 seconds	The delays for all critical traffic movements are considered to be unacceptable. The length of the queues for the stop-controlled approaches as well as the left-turn movements are extremely long. There is a high probability that this intersection will meet traffic signal warrants. The ability to install a traffic signal is affected by the location of other existing traffic signals. Consideration may be given to restricting the accesses by eliminating the left-turn movements from and to the stop-controlled approach.
F	>50 seconds	The delay for the critical traffic movements are probably in excess of 100 seconds. The length of the queues are extremely long. Motorists are selecting alternative routes due to the long delays. The only remedy for these long delays is installing a traffic signal or restricting the accesses. The potential for accidents at this intersection are extremely high due to motorist taking more risky chances. If the median permits, motorists begin making two-stage left-turns.

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		- ↑	,		4
Traffic Vol, veh/h	0	1	168	47	17	246
Future Vol, veh/h	0	1	168	47	17	246
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	_	None	_		_	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage		-	0	_	_	0
Grade, %	0	_	0	_	_	0
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	230	64	23	337
		•		•		
	Minor1		Major1		Major2	
Conflicting Flow All	645	262	0	0	294	0
Stage 1	262	-	-	-	-	-
Stage 2	383	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518		-	-	2.218	-
Pot Cap-1 Maneuver	437	777	-	-	1268	_
Stage 1	782	-	-	-	-	-
Stage 2	689	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	427	777	-	-	1268	_
Mov Cap-2 Maneuver	427	-	-	-	-	-
Stage 1	782	-	_	_	_	_
Stage 2	674	_	_	-	_	_
5 m.g =						
	\A/D		ND		0.0	
Approach	WB		NB		SB	
HCM Control Delay, s	9.6		0		0.5	
HCM LOS	Α					
Minor Lane/Major Mvn	nt	NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)				777	1268	-
HCM Lane V/C Ratio		_	_	0.002		_
HCM Control Delay (s		<u>-</u>	_	9.6	7.9	0
HCM Lane LOS		<u> </u>	_	9.0 A	7.9 A	A
HCM 95th %tile Q(veh	1	<u>-</u>	-	0	0.1	٨
	1	<u>-</u>	_	U	0.1	_

## HCM 6th TWSC 3: N 76th St & Church Driveway

Intersection						
Int Delay, s/veh	2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
		VVDR		INDIX	ODL	
Lane Configurations	70	40	<b>^</b>	0	0	4
Traffic Vol, veh/h	70	13	219	0	0	246
Future Vol, veh/h	70	13	219	0	0	246
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	,# 0	-	0	-	_	0
Grade, %	0	_	0	_	_	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	79	15	246	0	0	276
IVIVIIIL FIOW	19	10	240	U	U	210
Major/Minor N	Minor1	N	Major1	N	Major2	
Conflicting Flow All	522	246	0	0	246	0
Stage 1	246		_	_		_
Stage 2	276	_	_	_	_	_
Critical Hdwy	6.42	6.22	_	_	4.12	_
	5.42	0.22	_	_	4.12	_
Critical Hdwy Stg 1			_	-	_	
Critical Hdwy Stg 2	5.42	-	-	-	-	-
	3.518		-	-		-
Pot Cap-1 Maneuver	515	793	-	-	1320	-
Stage 1	795	-	-	-	-	-
Stage 2	771	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	515	793	_	_	1320	-
Mov Cap-2 Maneuver	515	-	_	_	-	_
Stage 1	795	_		_	_	_
	771		_	_		_
Stage 2	// 1	-		-	-	
Approach	WB		NB		SB	
HCM Control Delay, s	13		0		0	
HCM LOS	В		U		J	
HOW LOS						
Minor Lane/Major Mvm	t	NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)		-	-	545	1320	-
HCM Lane V/C Ratio		-	-	0.171	-	_
		_	_	13	0	_
HCM Control Delay (s)					-	
HCM Lane LOS			_		Δ	_
HCM Control Delay (s) HCM Lane LOS HCM 95th %tile Q(veh)		-	-	B 0.6	A 0	-

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	¥	WDIX	\$	NUIN	ODL	<u>€</u>
Traffic Vol, veh/h	0	0	170	81	20	250
Future Vol, veh/h	0	0	170	81	20	250
Conflicting Peds, #/hr	0	0	0	0	0	250
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	Stop -	None	-			None
Storage Length	0	NOILE	-	NONE -	_	NOHE
Veh in Median Storage		_	0	_	_	0
Grade, %	s, # 0 0	<u>-</u>	0	_	_	0
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	2	2	2	2	2	2
	0	0	233	111	27	342
Mvmt Flow	U	U	233	111	21	342
Major/Minor I	Minor1	N	//ajor1	- 1	Major2	
Conflicting Flow All	685	289	0	0	344	0
Stage 1	289	-	-	-	-	-
Stage 2	396	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	_	_	_	_	_
Follow-up Hdwy	3.518	3.318	_	_	2.218	_
Pot Cap-1 Maneuver	414	750	_	_	1215	_
Stage 1	760	-	-	-	-	_
Stage 2	680	_	-	-	-	_
Platoon blocked, %			_	_		_
Mov Cap-1 Maneuver	403	750	_	_	1215	_
Mov Cap-2 Maneuver	403	-	_	_	-	_
Stage 1	760	_	_	_	_	_
Stage 2	662	_	_	_	_	_
Olage 2	002					
Approach	WB		NB		SB	
HCM Control Delay, s	0		0		0.6	
HCM LOS	Α					
Minor Lane/Major Mvm	nt	NBT	NRRV	VBLn1	SBL	SBT
Capacity (veh/h)		IIDI	INDIN		1215	-
HCM Lane V/C Ratio		-	-		0.023	<u>-</u>
HCM Control Delay (s)		<del>-</del>	-	0	0.023	0
HCM Lane LOS		-	-	A	A	A
HCM 95th %tile Q(veh	١	-		- -	0.1	- A
HOW SOUL WHIE Q(VEI)	)	-	-	-	0.1	-

Intersection						
Int Delay, s/veh	2.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		ĵ.			4
Traffic Vol, veh/h	84	21	220	0	0	250
Future Vol. veh/h	84	21	220	0	0	250
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	_		_	None
Storage Length	0	_	_	_	_	_
Veh in Median Storage		_	0	_	_	0
Grade, %	0	_	0	_	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	94	24	247	0	0	281
William Town	0.			•	•	20.
	Minor1		Major1		Major2	
Conflicting Flow All	528	247	0	0	247	0
Stage 1	247	-	-	-	-	-
Stage 2	281	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	511	792	-	-	1319	-
Stage 1	794	-	-	-	-	-
Stage 2	767	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	511	792	-	-	1319	-
Mov Cap-2 Maneuver	511	_	-	_	_	_
Stage 1	794	_	-	-	-	_
Stage 2	767	_	_	_	_	_
otago L						
Approach	WB		NB		SB	
HCM Control Delay, s	13.3		0		0	
HCM LOS	В					
Minor Lane/Major Mvn	nt	NBT	NRRV	VBLn1	SBL	SBT
Capacity (veh/h)		1101	HOIN	550	1319	OD I
HCM Lane V/C Ratio		_	_	0.215		_
HCM Control Delay (s)		-	-	13.3	-	-
HCM Lane LOS		-	-	13.3 B	0 A	-
HCM 95th %tile Q(veh	\	-	-	0.8	0	-
	1	_	-	0.0	U	-

Int Delay, s/veh 0.3					
WBL	WBR	NBT	NBR	SBL	SBT
					4
	0		81	20	300
					300
					0
					Free
					None
	-	_	-		-
		0	_	_	0
					0
					73
					2
					411
U	U	201	111	21	411
Minor1		Major1			
802	337	0	0	392	0
337	-	-	-	-	-
465	-	-	-	-	-
6.42	6.22	-	-	4.12	-
5.42	-	-	-	-	-
	-	-	-	-	-
	3.318	_	_	2.218	-
		_	-		_
	-	_	_	-	_
	_	_	_	_	_
002		_	_		_
342	705		_	1167	_
			_		_
			_		-
013	-	-	-	-	_
WB		NB		SB	
0		0		0.5	
Α					
	NET	NIDDY	VDL 4	051	OPT
AT.	NBT	NRKA	vBLn1		SBT
IL	1151				
IL	-	-	-	1167	-
	-	-	-	0.023	-
)	-	- - -	- 0	0.023 8.2	0
	- - - -	- - -	-	0.023	
	WBL  0 0 0 Stop - 0 73 2 0  Minor1 802 337 465 6.42 5.42 5.42 5.42 3.518 353 723 632 342 342 723 613  WB 0 A	WBL WBR  0 0 0 0 0 0 Stop Stop - None 0 - 3, # 0 - 0 0  Minor1	WBL         WBR         NBT           0         0         205           0         0         0           0         0         0           Stop         Stop         Free           None         -         0           0         -         0           73         73         73           2         2         2           0         0         281    Minor1  Major1  802  337	WBL         WBR         NBT         NBR           0         0         205         81           0         0         0         0         0           Stop         Stop         Free         Free         Free           -         None         -         None         -           0         -         0         -         -           0         -         0         -         -           0         -         0         -         -           73         73         73         73         73         73           2	WBL         WBR         NBT         NBR         SBL           Y         Image: Control of the control of th

Intersection						
Int Delay, s/veh	2.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WDL	אופאי	1\D1	NOIN	ODL	- <del>3</del> 1
Traffic Vol, veh/h	84	21	265	0	0	300
Future Vol, veh/h	84	21	265	0	0	300
Conflicting Peds, #/hr	04	0	203	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	Stop -	None	-	None	-	None
Storage Length	0	None -	_	-	<u> </u>	NOHE
			0			0
Veh in Median Storage	•		0			
Grade, %	0	-		- 00	- 00	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	94	24	298	0	0	337
Major/Minor	Minor1	N	//ajor1	_	Major2	
Conflicting Flow All	635	298	0	0	298	0
Stage 1	298	-	-	-		-
Stage 2	337	<u>-</u>	_	_	_	_
Critical Hdwy	6.42	6.22	_	_	4.12	_
Critical Hdwy Stg 1	5.42	- 0.22	_	_	7.12	_
Critical Hdwy Stg 2	5.42	_	_	<del>-</del>	_	
Follow-up Hdwy		3.318	_	_	2.218	_
Pot Cap-1 Maneuver	443	741	-	_	1263	
		741	-	-	1203	-
Stage 1	753	-	-	-	-	
Stage 2	723	-	-	-	-	-
Platoon blocked, %	4.40	744	-	-	4000	-
Mov Cap-1 Maneuver	443	741	-	-	1263	-
Mov Cap-2 Maneuver	443	-	-	-	-	-
Stage 1	753	-	-	-	-	-
Stage 2	723	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	14.9		0		0	
HCM LOS	14.3 B		U		U	
I IOW LOS	Ь					
Minor Lane/Major Mvm	nt	NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)		_	-	482	1263	-
HCM Lane V/C Ratio		-	-	0.245	-	-
HCM Control Delay (s)		-	-		0	-
HCM Lane LOS		-	-	В	A	-
HCM 95th %tile Q(veh	)	-	-	1	0	-
J 22 70 5 5 (1011	,			•		

# STORM WATER MANAGEMENT PLAN For Legacy Church

270 76<sup>th</sup> Street Boulder, Colorado 80303

October 16, 2023

#### PREPARED FOR:

Legacy Church 270 76th Street Boulder, CO 80303 Contact: John McGovern (720) 320-4884



Drexel, Barrell & Co.

Engineers / Surveyors 1376 Miners Drive, Suite 107 Lafayette, CO 80026 (303) 442-4338

Prepared By: Cameron W. Knapp, P.E.

Project Number 21650-00GRCV

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#### **APPENDICES**

- Vicinity Map A.
- Erosion Control Plan & BMP Details B.
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- CDOT Inspection Report Form Boulder County Post-Construction Checklist D.

#### 1. SITE DESCRIPTION

Legacy Church is located at 270 76th Street, Boulder, Colorado 80303 between Baseline Road and South Boulder Road. This property is in the southeast quarter of Section 1, in Township 1S, Range 70W. Zoning for this property and surrounding lots is Estate Residential. The property abuts City of Boulder Open Space on the north and east sides, Brockway Drive neighborhood to the south, and 76th Street R.O.W. to the west. A Vicinity Map is included in Appendix A.

The property is 10.95 acres and has existing infrastructure; approximately 21,500 square foot Church building, existing gravel parking that is partially curbed, and (2) two existing detention ponds. The remainder of the property is mostly covered in unirrigated grasses with some planted trees and landscaped areas. The site is mostly level generally sloping at 2-4% to the northwest. This site is located within the Dry Creek major drainageway. The entire site is within Zone X, area of minimal flood hazard according to the FEMA FIRMette (Appendix B).

#### A. NATURE OF THE CONSTRUCTION ACTIVITY AT THE SITE:

The main improvement proposed is the asphalting of the existing gravel parking lot. To bring the site up to current codes, two grass paver fire access lanes will be installed and the detention will be upsized to accommodate the increased imperviousness. No revisions to the building footprint are proposed.

#### B. PROPOSED SEQUENCING FOR MAJOR ACTIVITIES:

- 1. Install silt fence
- 2. Install outlet protection, existing features
- 3. Install vehicle tracking pad and Stabilized staging area
- 4. Install Concrete washout
- 5. Clearing and grubbing, retain topsoil for areas that will be revegetated.
- 6. Install rock socks and inlet protection on existing curb and inlets
- 7. Install outlet protection on existing storm lines
- 8. Existing detention ponds will function as sediment control ponds
- 9. Grading of expanded detention ponds
- 10. Install water quality outlet structure on north pond
- 11. Install storm line
- 12. Install parking lot paving
- 13. Install fire access pavers
- 14. Install concrete walks and landings
- 15. Revegetation/seeding
- 16. Remove concrete washout area, vehicle tracking and stabilized staging areas
- 17. Remove silt fencing, sediment control logs and outlet protection

#### C. ACRES OF DISTURBANCE:

- 1. Limits of disturbance, approximately 3.0 acres.
- 2. Staging and storage areas will be provided at the existing gravel parking area.
- 3. Acreage of seeding/landscaping is approximately 1 acres.
- 4. Area of new imperviousness, 1.3 acres of paved parking.
- 5. Disturbance shall be minimized and limited to the defined limits of disturbance.

1

#### D. EXISTING SOIL DATA:

The NRCS report for the property shows the site is Ascalon Sandy Loam which is classified as Hydrologic Soil Group B. According to the geotechnical report conditions in all locations were consistent with sand and clay mixtures. Also, ground water was not encountered in any of the eight boring locations that were performed to a depth of ten feet below grade.

#### E. EXISTING VEGETATION, INCLUDING PERCENT COVER:

The site is fully vegetated. Existing vegetation generally consists of native and turf grass with mature trees. Vegetative cover is estimated at 90%. based on site visit.

#### F. ALLOWABLE NON-STORMWATER DISCHARGES:

- 1. Groundwater and stormwater dewatering (is not anticipated): Discharges to the ground of water from construction dewatering activities may be authorized provided that:
  - a. the source is groundwater and/or groundwater combined with stormwater that does not contain pollutants
  - b. the source and BMPs are identified in the SWMP
  - c. discharges do not leave the site as surface runoff or to surface waters.
- 2. If discharges do not meet the above criteria a separate permit from the Department of Health will be required. Contaminated groundwater requiring coverage under a separate permit may include groundwater contaminated with pollutants from a landfill, mining activities, industrial pollutant plumes, underground storage tank, etc.

#### G. RECEIVING WATER:

The site is directly tributary to Marshallville Ditch on the north side which is ultimately tributary to South Boulder Creek, 3 miles away. The site is within a Zone X, area of minimal flood hazard.

#### H. STREAM CROSSINGS:

There are no stream crossings or irrigation ditches on the site. The site drains to the Marshallville Ditch on the north side of the lot. The Goodhue Ditch runs along the south side of the lot, a berm on the south side of the lot will prohibit any off-site drainage or ditch overflow from running onto the site.

#### I. QUALIFIED SWMP MANAGER:

Name/Title	9:
Company:	
Address:_	
Email:	
Phone:	

#### 2. STORMWATER CONTROL MEASURES:

#### A. POTENTIAL POLLUTANTS SOURCES & BMPS:

1) Disturbed and stored soils:

Potential for contribution of pollutants to stormwater discharges: Medium

Frequency of activity: Constant

BMP/Associated measures: Outlet Protection, surface roughening, sediment control logs.

2) Vehicle tracking and sediments:

Potential for contribution of pollutants to stormwater discharges: High

Frequency of activity: Daily

BMP/Associated measures: VTC, Stabilized Staging Areas, Wash Racks, Street

Sweeping

3) Management of Contaminated soils:

Potential for contribution of pollutants to stormwater discharges: Low

Frequency of activity: Constant

BMP/Associated measures: No contaminated soils have been identified within the limits of the project. If contaminated soils are encountered disturbance should cease until a corrective plan is approved. Berms or a temporary soil cap shall be installed prevent the transportation of contaminated soils.

4) Loading and unloading operations:

Potential for contribution of pollutants to stormwater discharges: Low

Frequency of activity: Daily

BMP/Associated measures: All loading and unloading of equipment and fabricated construction materials shall be performed on the stabilized staging and storage area. Loading and unloading of soil and landscaping materials shall not take place on any paved surface or public road. All loading and unloading of soil and landscaping materials must be performed within the limits of disturbance.

5) Outdoor Storage Activities:

Potential for contribution of pollutants to stormwater discharges: High

Frequency of activity: Daily

BMP/Associated measures: All construction materials shall be stored on a stabilized surface with silt fence for containment. Hazardous or toxic materials shall be stored off site if possible. If stored on-site, all hazardous and toxic materials shall be stored in a metal leak proof fully enclosed container. A sign shall be posted with instructions for storing the materials as well as a list of the materials and safety precautions.

6) Vehicle and equipment maintenance and fueling:

Potential for contribution of pollutants to stormwater discharges: High

Frequency of activity: Daily

BMP/Associated measures: Spill prevention procedures, stabilized staging area.

7) Dust or particulate generation from earthmoving activities and vehicle movement:

Potential for contribution of pollutants to stormwater discharges: High

Frequency of activity: Daily

BMP/Associated measures: water trucks and/or magnesium chloride.

#### 8) Routine Maintenance Activities.

Potential for contribution of pollutants to stormwater discharges: Low Frequency of activity: Scheduled

BMP/Associated measures: Fertilizers, pesticides, detergents, fuels, solvents and oils shall be stored off-site if practical. If stored on-site refer to item 5 above. Spill prevention plans shall be in place as described below. When possible, activities shall take place in stabilized areas with designated containment such as berms or straw waddles. Where fertilizers or pesticides are used, professionals shall be used to apply and regulate the amounts so as not to over apply.

#### 9) On site waste management practices.

Potential for contribution of pollutants to stormwater discharges: High Frequency of activity: Daily

BMP/Associated measures: (waste piles, liquid wastes, dumpsters): Piles of construction debris shall be contained with berms and or silt fencing. Efforts should be made to remove such debris piles from the site as soon as possible. All other trash shall be contained in an approved dumpster located on the site. The dumpster shall be covered to prevent windblown trash. Liquid waste shall have a separate container for disposal. All liquid waste shall remain in the original container from the manufacture with all labels visible and readable.

#### 10) Concrete washing:

Potential for contribution of pollutants to stormwater discharges: High

Frequency of activity: Daily

BMP/Associated measures: Designated area for concrete washout & disposal.

#### 11) Dedicated asphalt and concrete batch plants:

Potential for contribution of pollutants to stormwater discharges: Low

Frequency of activity: None

BMP/Associated measures: There is no dedicated asphalt or concrete batch plants planed for the proposed site.

#### 12) Worker trash and portable toilets:

Potential for contribution of pollutants to stormwater discharges: Moderate

Frequency of activity: Daily

BMP/Associated measures: Container placement, covering and disposal. Portable toilets shall be anchored.

#### 13) Equipment repair or maintenance beyond normal fueling operations:

Potential for contribution of pollutants to stormwater discharges: Low

Frequency of activity: Scheduled

BMP/Associated measures: Spill prevention procedures.

#### 14) Other Areas where spills can occur:

The Stormwater Administrator shall evaluate, identify and describe all potential sources of pollutants at the site in accordance with State of Colorado requirements and place in the SWMP notebook the findings of his evaluation. All BMPs related to potential pollutants shall be shown on the SWMP site map by the Stormwater Administrator.

#### B. FINAL STABILIZATION & LONG-TERM STORMWATER MANAGEMENT

- 1) Final stabilization shall be considered complete when all ground surface disturbing activities at the site have been completed, hard surfaces are in place, and uniform vegetative cover has been established with an individual plant density of at least 70% of pre-disturbance levels.
- 2) Temporary sediment and erosion control measures installed prior to the construction phase will remain in place until this time.
- 3) Final stabilization practices will include removal of accumulated sediment in the existing street and onsite drainage swales, inspection and cleaning/removing of any sediment in the rip rap outlet areas, and final vegetation provided for all designated landscaped areas of the site.
- 4) Areas of landscaping that include gravel or wood mulch will be prepared with landscape/weed fabric. Landscaping will be conducted immediately and coordinated as final construction is wrapping up; therefore, eliminating any period of time that the final graded and prepared soil is left unprotected.
- 5) Native seeded areas shall use Boulder County Plains Seed Mix (see Erosion Control Details Sheet EC02) in Appendix B. Soil compaction must be minimized for areas where final stabilization will be achieved through vegetative cover or an infiltration control.
- 6) The Boulder County Post-Construction Checklist is to be submitted to the County for the project prior to close out of the SWQP. A copy is provided in Appendix D.

#### C. <u>IMPLEMENTATION OF CONTROL MEASURES</u>

- (a) Temporary Erosion Controls: All temporary erosion control measures for erosion and sediment control shall be installed before any construction activities take place.
- (b) Sediment Controls: Control measures for erosion and sediment control shall be implemented to prevent the release of sediment from construction sites. Vehicle tracking of sediment shall not be allowed to enter the stormwater utility system or waters of the State. Sediment shall not be tracked onto public streets and, if so, shall be immediately removed.
- (c) Water Quality Impacts: Stormwater discharges from construction activities shall not cause or threaten to cause pollution, contamination, or degradation of waters of the State.
- (d) Waste Controls. Solid waste, industrial waste, yard waste, and any other pollutants or waste on any construction site shall be controlled using control measures. Waste and/or recycling containers shall be provided and maintained by the owner or contractor on construction sites where there is the potential for release of waste. Uncontained waste that may blow, wash, or otherwise be released from the site is prohibited. Sanitary waste facilities shall be provided and maintained by the owner or contractor.
- (e) Concrete Waste: Ready-mixed concrete, or any materials resulting from the cleaning of vehicles or equipment containing or used in transporting or applying it, shall be contained with appropriate control measures and ultimately removed for proper disposal. Release of these materials is prohibited.
- (f) Chemical Storage: Bulk storage structures for petroleum products and other chemicals shall have adequate protection so as to contain all spills and prevent any spilled material from entering the stormwater utility system or waters of the State.

- (g) Surface Cover Timing: Cover shall be applied within 14 days to inactive soil stockpiles and shall be maintained for stockpiles that are proposed to remain in place longer than 30 calendar days.
- (h) Project Phasing: All earth disturbances shall be designed, constructed, and completed to limit the exposed area of any disturbed land to the shortest possible period of time.
- (i) Dust Controls: Techniques shall be used to prevent dust, sediment, or debris from blowing off the site.
- (j) Maintenance: Any damage or required maintenance to temporary and permanent controls measures shall be repaired or replaced as soon as possible, immediately in most cases.
- (k) Removal: All control measures for erosion and sediment control shall be removed and disposed within 30 days after final site stabilization is achieved or after the temporary measures are no longer needed, whichever occurs first.
- (I) Responsibility: The erosion control permittee shall be responsible for continued compliance with the requirements of Section 7.13 of the City's Design and Construction Standards during construction activity on the site.

#### 3. SPILL RESPONSE & PREVENTION PLAN

Where material can impact storm water runoff, the following existing and planned practices are established to reduce potential contamination.

Notification procedures to be used in the event of an accident:

- The Qualified Stormwater Manager should be notified. Depending on the nature of the spill and the material involved,
- If the chemical spill is of a potentially harmful nature to the general public, the Colorado Department of Health and Environment (877-518-5608), downstream water users, and any other applicable agencies shall be notified.
- Provide Instructions for clean-up procedures, and identification of spill kit location(s);
- Provisions for absorbents to be made available for use in fuel areas, and for containers to be available for used absorbents and;
- Procedures for properly washing out concrete truck chutes and other equipment in a manner and location so that the materials and wash water cannot discharge from the site, and never into a storm drain system or stream.

Specifically, a release of any chemical, oil, petroleum product, sewage, etc., which may enter waters of the State of Colorado (which include surface water, ground water and dry gullies or storm sewers leading to surface water) must be reported. More guidance is available on the division's website.

Chemical spills shall be cleaned up in accordance with the manufacturer or applicable agency recommendations. Absorbents shall be available in all fuel areas for use spill cleanup. Disposal containers for used absorbents shall also be available in all fuel areas.

Minor spills are considered:

- 1) Less than reportable quantity
- 2) Stays within the permitted area and does not threaten any stormwater conveyance.

Significant spills are considered:

- 1) Reportable quantity or 5 gallons, whichever is less
- 2) Any amount that leaves the permitted area
- 3) and/or threatens any stormwater conveyances.

Hazardous spills are considered:

1) Any substance requiring a MSDS response.

Chemicals, paints, solvents, fertilizers and other toxic materials must be stored in waterproof containers. Except during application, the contents must be kept in trucks or within storage facilities. Runoff containing such material must be collected, removed from the site, treated and disposed at an approved solid waste or chemical disposal facility.

Clean-up procedures shall be established in writing, for each particular spill as approved by the project superintendent/SWMP Administrator. The project superintendent/SWMP Administrator shall be responsible for all contractors and subcontractors working on the site to be trained and/or aware of clean-up and spill prevention procedures. Training can be through informal, mandatory pre-construction and pre-wintering meetings, and during regular and final inspection visits to transfer information to contractors.

The Colorado Department of Health and Environment and City of Boulder shall be notified within 24 hours after discovering a spill event. The project superintendent/SWMP Administrator shall provide authorities with written documentation within 5 days after the event. Documentation shall include, date, time, location, material, corrective action taken, response procedure taken, response personnel involved, notification of authorities/agencies, and other pertinent information.

#### 4. SITE MAP:

Attached as part of this plan is a SWMP Site Map (Sediment & Erosion Control Plan). The plan identifies the following:

- 1) Construction site boundary
- 2) Limits of soils/construction disturbance includes offsite improvements.
- 3) Areas of grading (proposed and existing contours)
- 4) Location of all structural erosion control BMPs

The following items are not indicated on the attached drawings, but will be determined by the individual contractors prior to and during construction activities:

- 1) Location of portable toilets and waste receptacles if necessary.
- 2) Location of additional BMP's that may become necessary as work progresses.

These items shall be added to the map by the Site Superintendent.

See Erosion Control Plan (Sheet EC01) in Appendix B

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#### 5. INSPECTION PROCEDURES

Begin site inspections within 7 days of commencement of site work.

A site inspection of all erosion control facilities will be conducted every 14 days and within 24 hours after every precipitation event. The entrance to the construction site shall be inspected daily and existing street cleaned, as necessary, of all materials tracked out of the site.

The construction site perimeter, disturbed areas, and areas used for material storage that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the SWMP shall be observed to ensure that they are operating correctly.

Based on the results of the inspection, the description of potential pollutant sources and the pollution prevention and control measures that are identified in this plan shall be revised and modified as appropriate as soon as practicable after such inspection. Modification to control measures shall be implemented in a timely manner, but in no case more than seven (7) calendar days after the inspection.

Perform inspections once every 30 days after construction is complete but final stabilization is pending.

A blank CDHPE Inspection Report form is provided in Appendix C.

#### 6. MAINTENANCE PROCEDURES

All temporary and permanent erosion and sediment control facilities shall be maintained and repaired to assure continued performance of their intended function. Repairs should be completed within 24 to 48 hours.

Temporary stabilization must be implemented for earth disturbing activities on any portion of the site where ground disturbing construction activity has permanently ceased, or temporarily ceased for more than 14 calendar days.

Long term maintenance conducted at periodic intervals of the onsite drainage facilities will include: inspection and removal of debris and sediment accumulated in the bottom of curb and gutter, valley pans, storm inlets, drainage swales, and riprap; cleaning of the concrete gutters and drainage pans to remove sediment; and mowing operations for the grassed landscaped areas. Routine maintenance activities will range in terms of the level of effort and expertise required to perform them. Silt fences will require periodic replacement.

Perform maintenance as indicated in the Boulder County Stormwater Standards Manual, per manufacturer's specifications, or other sources determined to be acceptable. The owner may wish to contract a qualified property management company to perform inspection, monitoring, and maintenance activities associated with the drainage facilities.

#### 7. RECORDKEEPING REQUIREMENTS

- 1) Retain a copy of the SWMP onsite when construction activities are occurring unless another location is specified.
- 2) The SWMP must be made available to EPA, State and local inspectors for review.
- 3) Throughout construction, the SWMP must be regularly updated and reflect site conditions at all times.
- 4) Possible updates may include modifying, replacing, or adding BMPs and identifying additional potential sources of pollution.
- 5) Hand-written notations, including the date, description and location of the change, are adequate for most plan updates.
- When deviations from the specific requirements listed below occur, the Permittee must take all necessary steps to prevent the discharge of pollutants and document the following information:
- 7) When it is infeasible to immediately take corrective actions to install or replace a control measure:
  - a. why the installation or repair of a deficient BMP cannot begin immediately;
  - b. provide a schedule for the installation or repair of the deficient BMP to restore function as soon as possible.
- 8) When it is infeasible to install temporary stabilization BMPs within 14 days:
  - a. the constraints necessitating an alternative schedule;
  - b. the alternate stabilization schedule; and
  - c. all locations to which the alternative schedule is applicable.
- 9) Changes involving design, site hydrology, project scope or additional disturbed area must be submitted for review prior to making such changes
- 10) Note other permits associated with the project, such as a CDPS Dewatering Permit.
- 11) Complete an inspection report for each inspection performed.
- 12) Keep inspection reports, maintenance records, spill response, etc. on-site as part of the SWMP.

Retain copies of all documentation for at least three years from the date the permit is terminated.

#### **APPENDIX A**

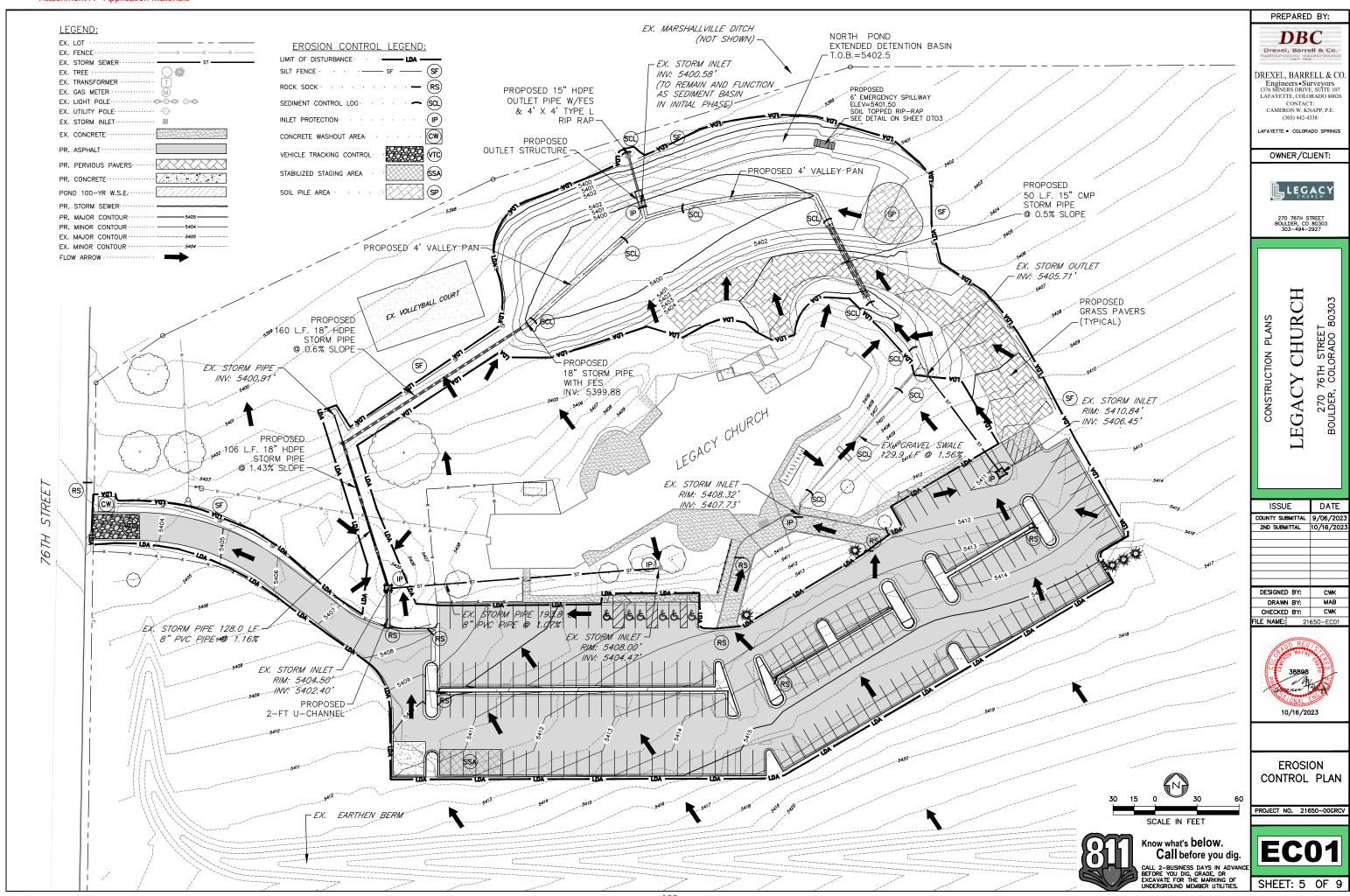
VICINITY MAP

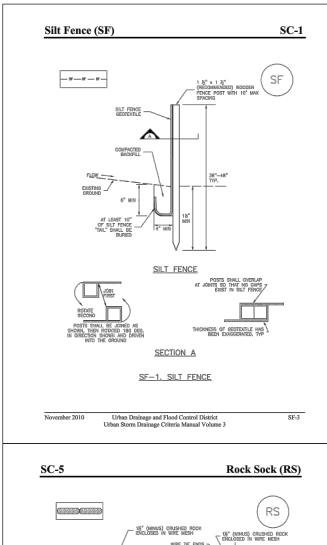




#### **APPENDIX B**

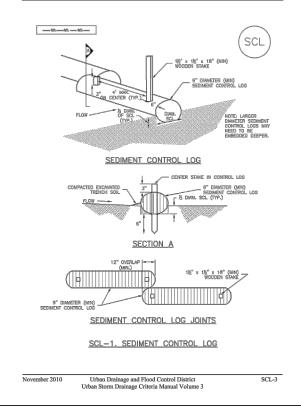
EROSION & SEDIMENT CONTROL PLAN
And BMP DETAILS



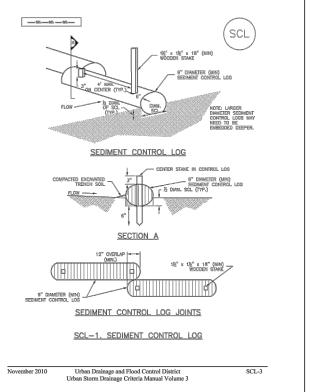


## SILT FENCE INSTALLATION NOTES 1. SLT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING, SLLT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2-5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR BOWNING AND PERSONNEY. A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE, NO ROAD GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING, COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND. 4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES, THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES. 5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE. 6. AT THE END OF A RUN OF SLT FENCE ALONG A CONTOUR, THE SLT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J-HOOK." THE "J-HOOK ENTENDED FENCE COLORUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNDEF FROM FOUNDS AROUND THE END OF THE SLT FENCE (TYPICALLY 10" - 26"). 7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES. SILT FENCE MAINTENANCE NOTES INSPECT BMP# EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMP# SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMP# AS SOON AS POSSIBLE (AND JAMIN'S WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM INCESSIRATY MAINTENANCE. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPB IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGH. 3. WHERE BMP0 HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE. 4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6". ${\tt S.}$ REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE. 7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL. SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION. (DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, NOT AGREABLE IN AUTODAS)

Silt Fence (SF)



Sediment Control Log (SCL)

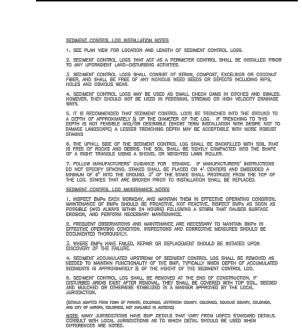


SC-2

SM-4

VTC-3

VTC



Sediment Control Log (SCL)

CONSTRUCTION EGA

SC-2

ROCK SOCK SECTION ROCK SOCK PLAN

GRADATION TABLE

SIEVE SIZE MASS PERCENT PASSING SQUARE MESH SIEVES ROCK SOCK JOINTING NO. 4 ROCK SOCK INSTALLATION NOTES

2. CRUSHED ROCK SHALL BE 1M" (MINUS) IN SIZE WITH A FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON THIS SHEET ( $18^{\circ}$  MINUS). 3. WIRE MESH SHALL BE FABRICATED OF 10 GAGE POULTRY MESH, OR EQUIVALENT, WITH A MAXIMUM OFENING OF  $\S^n$ , RECOMMENDED MINIMUM ROLL WIDTH OF  $48^n$ 

RS-2

5. SOME MUNICIPALITIES MAY ALLOW THE USE OF FILTER FABRIC AS AN ALTERNATIVE TO WIRE MESH FOR THE ROOK ENGLOSURE. RS-1. ROCK SOCK PERIMETER CONTROL

> Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 November 2010

#### Rock Sock (RS)

SC-1

SC-5

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BNPs IN EFFECTIVE OPERATING CONDITION, INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THROUGHNIS.

3. WHERE  $\text{BMP}_{\text{B}}$  HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE. 4. ROCK SOCKS SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED, OR DAMAGED BEYOND REPAIR.

SEDIMENT ACCUMULATED UPSTREAM OF ROCK SOCKS SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BURP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY & OF THE HEIGHT OF THE ROCK SOCK.

6. ROCK SOCKS ARE TO REMAIN IN FLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

WHEN ROCK SOCKS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL LIBERATURE.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS.
CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN
DIFFERENCES ARE NOTED.

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# SO FOOT (MIN.) INSTALL ROCK FLUSH WITH OR BELOW TOP OF PAVEMENT

Vehicle Tracking Control (VTC)

VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

SECTION A

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

#### SM-4

#### **Vehicle Tracking Control (VTC)**

STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES

SEE PLAN VIEW FOR -LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S). -TYPE OF CONSTRUCTION ENTRANCE(S)/EXITS(S) (WITH/WITHOUT WHEEL WASH, CONSTRUCTION MAT OR TRAIL).

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 A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE LOCATED AT ALL ACCESS POINTS WHERE VEHICLES ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT-OF-WAYS. 4. STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

5. A NON-WOVEN GEOTEXTILE FABRIC SHALL BE PLACED LINDER THE STABILIZED CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK.

6. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. §703, AASHTO §3 COARSE AGGREDATE OR 6° (MINUS) ROCK.

STABILIZED CONSTRUCTION ENTRANCE/EXIT MAINTENANCE NOTES

z. Frequent observations and maintenance are necessary to maintain smps in effective operating condition. Inspections and corrective measures should be occurrent throughly the state of the property of the

3. WHERE BMPs HAVE FALLED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED THROUGHOUT THE DAY AND AT THE END OF THE DAY BY SHOVELING OR SWEEPING, SEDIMENT MAY NOT BE WASHED DOWN STORM SEMER DANNE.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCO STANDARD DETAILS CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM CITY OF BROOMFIELD, COLORADO, NOT AVAILABLE IN AUTOCAD)

VTC-6

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

SHEET: 6 OF 9

A89



PREPARED BY: DBC

CONTACT: CAMERON W. KNAPP, P.E. (303) 442-4338

LAFAYETTE . COLORADO SPRINGS

OWNER/CLIENT:



270 76TH STREET BOULDER, CO 80303 303-494-2927

STREE-ORADO

PLANS

ISSUE DATE COUNTY SUBMITTAL 9/06/2023 2ND SUBMITTAL 10/16/2023

> CWK DRAWN BY: MAB

FILE NAME: 21650-DT01

CHECKED BY: CWK



**DETAIL SHEET** 

PROJECT NO. 21650-00GRC

# Stabilized Staging Area (SSA) SM-6 SSA

SSA-1. STABILIZED STAGING AREA

SLT FENCE OR CONSTRUCTION FENCING AS NEEDED

STABILIZED STAGING AREA INSTALLATION NOTES

Stockpile Management (SP)

2. STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.

3. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE. 4. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.

5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. \$703, ASSITO \$3 COARSE AGGREGATE OR 6" (MINUS) ROCK. 6. ACCITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT PERICE AND CONSTRUCTION FENCING.

STABILIZED STAGING AREA MAINTENANCE NOTES

I. INSPECT BINPE EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION.
MAINTENANCE OF BINPE SHOULD BE PROACTIVE, NOT REACTIVE, INSPECT BINPE AS SOOM AS
POSSIBLE (AND ALMAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE
EROSION, AND DEPERSOR METAGEMENT MAINTENANCE.

TO SHOULD S

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BINFO IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED TARGETICALLY.

3. WHERE  $BMP_0$  HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED,

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

STOCKPILE PROTECTION PLAN

SECTION A SP-1. STOCKPILE PROTECTION

Urban Drainage and Flood Control District

SSA-3

MM-2

SP

SSA-4

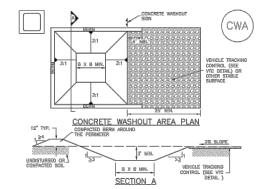
#### Stabilized Staging Area (SSA) **SM-6**

STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING JORDING OPERATIONS.

NOTE: MANY MUNICIPALITIES PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STRABLIZED STRAINER, AREAS DUE TO DIFFUSION BY AREAS MAJERE RECYCLED, CONCRETE WAS BUILDED WITH RE-ESTABLISHMENT OF VECETATION BY AREAS MAJERE RECYCLED, CONCRETE WAS BUILDED.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

Concrete Washout Area (CWA)



CWA-1. CONCRETE WASHOUT AREA

CWA\_INSTALLATION\_NOTE

SEE PLAN VIEW FOR:
 CWA INSTALLATION LOCATION.

2. DO NOT LOCATE AN UNLIMED CWA WITHIN 400' OF ANY NATURAL BRANNAGE PATHWAY OR WATERBOOK, DO NOT LOCATE WITHIN 1,000' OF ANY WILLS OR DINNORS WATER SOURCES. IF THE CARE WATER TO THE HISTALD WHITHIN INTERNATIONAL LIBER (18 HISTALDS WITHIN IN INTERNATIONAL LIBER (18 HISTALDS WITHIN IN INTERNATIONAL LIBER (18 HISTALDS WITHIN IN

3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.

CWA SHALL INCLIDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8" BY 8" SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3/1 OR FLATTER. THE PIT SHALL BE AT LEAST 3" DEEP.

5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.

6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.

7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PLIMP RICS.

B. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

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Samples for Boulder County.

CWA-3

15% 9.33 12.5% 3.96 12.5% 3.96 13% 1.74

8% 1.07 10% 1.93

Totals: 100% 16.95

Lodorm 12% or Native

Totals: 100% 24.88

MM-1

#### MM-1

CWA-4

#### Concrete Washout Area (CWA)

INSPECT BMP# EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION MAINTENANCE OF BMP# SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMP# AS SOON AS POSSIBLE (AND ALMAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE ERUSION, AND PERFORM NECESSARY MAINTENANCE.

Frequent observations and maintenance are necessary to maintain BMPs in effective operating condition. Inspections and corrective measures should be documented transforms.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOMERY OF THE PAILURE.

4. THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE, CONCRETE MATERIALS, ACCUMULATED IN PIT, SHALL BE REMOYED DICE THE MATERIALS HAVE REACHED A DEPTH OF 2".

5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER—TIGHT CONTAINER AND DISPOSED OF PROPERLY.

6. THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED, 7. WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

Urban Drainage and Flood Control District

Urban Storm Drainage Criteria Manual Volume 3

CONTROL ADMOTED FROM DOLLCLAS COUNTY, COLORADO AND THE CITY OF PARMER, COLORADO, NOT AVAILABLE IN AUTOCAD NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DISERSEMENTS ARE MOTEN.

270 76TH STREET BOULDER, CO 80303 303-494-2927

November 2010

CH CHUR

PLANS

CONSTRUCTION

PREPARED BY: DBC

Drexel, Barrell & Co.

DREXEL, BARRELL & CC Engineers • Surveyors
1376 MINERS DRIVE, SUITE 10
LAFAYETTE, COLORADO 800

CONTACT: CAMERON W. KNAPP, P.E. (303) 442-4338

LAFAYETTE . COLORADO SPRINGS

OWNER/CLIENT:

LEGACY

STREE-ORADO **EGA**(

ISSUE DATE COUNTY SUBMITTAL 9/06/2023 2ND SUBMITTAL 10/16/2023

CWK DRAWN BY: MAB

CHECKED BY: CWK FILE NAME: 21650-DT01



**DETAIL SHEET** 

PROJECT NO. 21650-00GRCV

SHEET: 7 OF 9

MM-2 Stockpile Management (SM)

Urban Drainage and Flood Control District

Urban Storm Drainage Criteria Manual Volume 3

STOCKPILE PROTECTION MAINTENANCE NOTES

INSPECT BIMP® EACH WORKDAY, AND MANITAIN THEM IN EFFECTIVE OPERATING CONDITION.
MAINTENANCE OF BIMP® SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BIMP® AS BOOM AS
POSSIBLE (AND ALMAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE
ERGISION, AND PERFORM NECESSARY MAINTENANCE.

FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGH.

3. WHERE  $\textsc{BMP}_{\text{B}}$  HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

STOCKPILE PROTECTION MAINTENANCE NOTES

4. IF PERIMETER PROTECTION MUST BE MOVED TO ACCESS SOIL STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORKDAY.

5. STOCKPILE PERIMETER CONTROLS CAN BE REMOVED ONCE ALL THE MATERIAL FROM THE STOCKPILE HAS BEEN USED,

(DETAILS ADAPTED FROM PAPKER, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFOD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN

**Native Seed Mixes** 111 **Plains Seed Mix** Below 5,500 Feet Elevation Boulder County **Boulder County** Land Use Department

Native Seed Mixes

Foothills Seed Mix 5,500 Feet to 7,000 Feet Elevation estern Wheatgrass Green Needlegrass Stipa viridula

Stina viridula

Mountain Seed Mix 7.000 Feet and Above Elevation

lender Wheatgrass Elymus trachycaulus Sandberg's Bluegrass Poa secunda

Rates are for broadcast seeding. If using a seed drill, reduce rates by half. PLS = Pure Live Seed.

Form: P/18 • Rev. 06.07.10 • q:/publications/planning/P18NativeSeedMixes.pdf

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

A90

#### **APPENDIX C**

CDHPE INSPECTION REPORT FORM

Stormwater Inspection	า Repo	ort Tei	mplat	e			
Facility Name				Permittee			
Date of Inspection				Weather Conditions			
Permit Certification #				Disturbed Acreage			
Phase of Construction Inspector Name				Inspector Title			
Is the above inspector a qualifie	d storm	water ma	anager?			YES	NO
(permittee is responsible for en				is a qualified stormwater n	nanager)		$\frac{\Pi}{\Pi}$
•			•	•	<u> </u>		
INSPECTION FREQUENCY							
Check the box that describes th	e minim	um inspe	ection fre	equency utilized when cond	ducting each insp	ection	
At least one inspection every 7							]
At least one inspection every 14 24 hours after the end of any pr							]
<ul> <li>This is this a post-storm</li> </ul>							]
Reduced inspection frequency -	Include	site cond	ditions t	hat warrant reduced inspec	tion frequency		]
<ul> <li>Post-storm inspections a</li> </ul>	it tempo	rarily idl	e sites				]
<ul> <li>Inspections at complete</li> </ul>	d sites/a	area					]
Winter conditions exclusions	sion						]
Have there been any deviations	from th	e minimu	ım inspe	ection schedule?		YES	NO
If yes, describe below.							
INSPECTION REQUIREMEN	TS*						
		ntrol me	asures a	re in effective operational	condition and are	e working	as
designed in the specification.  ii. Determine if there are new		tial sourc	es of po	Illutants			
iii. Assess the adequacy of co					new or modifie	d control r	neasures
to minimize pollutant disc	harges						
iv. Identify all areas of non-c							
*Use the attached Control M		_	_		_		
<b>Requiring Corrective Action</b>	<b>n</b> forms	s to docu	ıment re	esults of this assessment	that trigger eith	er mainte	nance or
corrective actions							
ADEAC TO DE INCREOTED							
AREAS TO BE INSPECTED	11 1 6						
Is there evidence of, or the pot drainage system or discharging					oundaries, enter	ring the sto	ormwater
		NO	YES	If "YES" describe discharg Document related mainte	nance, inadequa	te control	measures
				and corrective actions Requiring Corrective Act		Control	Measures
Construction site perimeter							
All disturbed areas							
Designated haul routes							
Material and waste storage area exposed to precipitation	IS						
Locations where stormwater has potential to discharge offsite	s the						
Locations where vehicles exit the	ne site						
Locations of installed control measures							

#### CONTROL MEASURES REQUIRING ROUTINE MAINTENANCE

Definition: Any control measure that is still operating in accordance with its design and the requirements of the permit, but requires maintenance to prevent a breach of the control measure. These items are not subject to the corrective action requirements as specified in Part I.B.1.c of the permit.

and all the control incustion incus at a not care just to the control action requirements as epi-			o po
Are there central measures requiring maintenance?	NO	YES	
Are there control measures requiring maintenance?			If "YES" document below

Date Observed	Location	Control Measure	Maintenance Required	Date Completed

#### INADEQUATE CONTROL MEASURES REQUIRING CORRECTIVE ACTION

Definition: Any control measure that is not designed or implemented in accordance with the requirements of the permit and/or any control measure that is not implemented to operate in accordance with its design. This includes control measures that have not been implemented for pollutant sources. If it is infeasible to install or repair the control measure immediately after discovering the deficiency the reason must be documented and a schedule included to return the control measure to effective operating condition as possible.

Are there inadequate control measures requiring corrective action?    NO YES	control measure to entective operating condition as possible.			
		NO	YES	
below below	Are there inadequate control measures requiring corrective action?			If "YES" document
				below
Are there additional control measures peeded that were not in place at the time of	Are there additional control measures needed that were not in place at the time of	NO	YES	
inspection?	e there additional control measures needed that were not in place at the time of			If "YES" document
below	inspection:			below

Date Discovered	Location	Description of Inadequate Control Measure	Description of Corrective Action	Was deficiency corrected when discovered? YES/NO if "NO" provide reason and schedule to correct	Date Corrected

## REPORTING REQUIREMENTS

The permittee shall report the following circumstances orally within twenty-four (24) hours from the time the permittee becomes aware of the circumstances, and shall mail to the division a written report containing the information requested within five (5) working days after becoming aware of the following circumstances. The division may waive the written report required if the oral report has been received within 24 hours.

circumstances. The division may waive the written report required if the oral report has been received within 24 hours.
All Noncompliance Requiring 24-Hour Notification per Part II.L.6 of the Permit
a. Endangerment to Health or the Environment
Circumstances leading to any noncompliance which may endanger health or the environment regardless of the cause of the incident (See Part II.L.6.a
of the Permit)
This category would primarily result from the discharge of pollutants in violation of the permit
<ul> <li>b. Numeric Effluent Limit Violations</li> <li>Circumstances leading to any unanticipated bypass which exceeds any effluent limitations (See Part II.L.6.b of the Permit)</li> <li>Circumstances leading to any upset which causes an exceedance of any effluent limitation (See Part II.L.6.c of the Permit)</li> <li>Daily maximum violations (See Part II.L.6.d of the Permit)</li> <li>Numeric effluent limits are very uncommon in certifications under the COR400000 general permit. This category of noncompliance only applies if numeric effluent limits are included in a permit certification.</li> </ul>

	NO	YES	
Has there been an incident of noncompliance requiring 24-hour notification?			If "YES" document below

Date and Time of Incident	Location	Description of Noncompliance	Description of Corrective Action	Date and Time of 24 Hour Oral Notification	Date of 5 Day Written Notification *

<sup>\*</sup>Attach copy of 5 day written notification to report. Indicate if written notification was waived, including the name of the division personnel who granted waiver.

"I verify that, to the best of my knowledge and belief, all corrective action identified during the inspection are complete, and the site is currently in compliance with the permit."				
Name of Qualified Stormwater Manager	Title of Qualified Stormwater Manager			
Signature of Qualified Stormwater Manager	Date			
Notes/Comments				

## **APPENDIX D**

Boulder County Post-Construction Checklist



## **PUBLIC WORKS DEPARTMENT**

2525 13<sup>TH</sup> STREET · BOULDER CO · 303-441-3900 tdstormwater@bouldercounty.org

## STORMWATER QUALITY PERMIT REVIEW CHECKLIST

PROJECT INFORMATION						
1. Project Name/ Applicant Name:  2. SWQP #  (Reviewer to Complete):  ———————————————————————————————————						
3. Location/Address:						
4. Submittal Date:	4. Submittal Date: (1) (2) (3) (4)					(4)
5. a. Total Lot Size or Project Size (Acres): b. Total Disturbed Area (Acres):						
c. Horizontal Distance to waterway (feet): (or zero if boring under waterway)						
	Firm:					
6. Submitted by:	Contac	ct (name and email):				
	Phone:					
7. Qualified Stormwater Manager (name and email):						
SUBMITTAL REQUIREMENTS						

## 1. General Information and Site Description

ITE		Permittee to complete: Included (I), not included (NI) or not applicable (N/A)	MS4 Reviewer to complete: (I, NI, or N/A)
a.	A completed Stormwater Quality Permit Application.		
b.	Documentation of an application for a State CDPS stormwater construction general permit (SCP).  (For sites over one acre or common plan of development)		
C.	A description of the nature and type of construction activity (e.g., low density residential, shopping mall, highway, etc.).		
d.	The proposed schedule and sequence for major construction activities and the planned implementation of control measures for each phase. (e.g., clearing, grading, utilities, vertical, etc.)		
e.	Estimates of the total acreage of the site, and the acreage expected to be disturbed by clearing, excavation, grading, or any other construction activities. SCP requires construction limits and disturbance acreages be provided. If these are the same indicate as such.		
f.	Existing data describing the soil types on the site and/or the potential for soil erosion.		
g.	A description of the percent of existing vegetative ground cover relative to the entire site and the method for determining the percentage.		
h.	A description of any allowable non-stormwater discharges at the site, including those being discharged under CDPS low risk discharge guidance policy.		

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i.	A description of areas receiving discharge from the site. Including a	
	description of the immediate source receiving the discharge. If the	
	stormwater discharge is to a municipal separate storm sewer system, the	
	name of the entity owning that system, the location of the storm sewer	
	discharge, and the ultimate receiving water(s).	
j.	A description of all stream crossings located within the construction site	
	boundary.	

## 2. SWMP Site Map Requirements

ITE		Permittee to complete: Included (I), not included (NI) or not applicable (N/A)	MS4 Reviewer to complete: (I, NI, or N/A)
a.	Construction site boundaries		
b.	Limits of Disturbance. All areas of ground surface disturbance on the site including areas of borrow and fill. The SCP requires construction and disturbance limits be illustrated on the site maps. If they are the same indicate as such on the maps.		
C.	Flow arrows that depict stormwater flow directions on-site and runoff direction		
d.	Areas used for storage of soil		
e.	Locations of all waste accumulation areas, including areas for liquid, concrete, masonry, and asphalt.  These areas must be located away from watercourses, drainage ditches, field drains, or other stormwater conveyances to the extent feasible.		
f.	Locations of dedicated asphalt, concrete batch plants, and masonry mixing stations.		
g.	The location of all structural controls, such as perimeter controls, sediment basins and vehicle tracking controls.		
h.	The location of all non-structural control measures, such as protection of existing vegetation, areas to be seeded after construction, and temporary stabilization areas. <i>Note: Temporary stabilization is anticipated to be redlined in the field.</i>		
i.	Locations of springs, streams, wetlands and other state waters, including areas that require pre-existing vegetation be maintained within 50 feet of a receiving water, where determined feasible in accordance with State SCP.		
j.	Locations of all stream crossings located within the construction site boundary		

## 3. Construction Stormwater Management Controls for Potential Pollutant Sources

		Permittee to			
ITE	·M	complete:	MS4 Reviewer to		
		Included (I), not	complete:		
		included (NI) or not	(I, NI, or NA)		
		applicable (NA)			
Αc	description of all potential pollution sources, including surface distur	bing activities, vehicle fu	eling areas, fertilizer or		
	chemical storage, concrete truck washouts, etc. (See below for m	ninimal pollutants that m	ust be evaluated):		
a.	All disturbed and stored soils				
b.	Vehicle tracking of sediments				
c.	Management of contaminated soils				
d.	Loading and unloading operations				
e.	Outdoor storage activities (erodible building materials, fertilizers, chemicals, etc.)				
f.	Vehicle and equipment maintenance and fueling				
g.	Significant dust or particulate generating processes (e.g., saw cutting material, including dust)				
h.	Routine maintenance activities involving fertilizers, pesticides, detergents, fuels, solvents, oils, etc.				

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i.	On-site waste management practices (waste piles, liquid wastes, dumpsters, etc.)	
j.	Concrete truck/equipment washing, including the concrete truck chute and associated fixtures and equipment. Note there must be adequate	
	buffering capacity for excavated washouts.	
k.	Dedicated asphalt, concrete batch plants, and masonry mixing stations	
I.	Non-industrial waste sources that may be significant such as worker	
	trash and portable toilets	
m.	Other areas or procedures where potential spills can occur	
n.	Material handling: Does the SWMP describe and locate all control	
	measures implemented at the site to minimize impacts from handling	
	significant materials (e.g., paints, concrete, trash, etc.) that could	
	contribute pollutants to runoff?	
Ο.	Spill Prevention and Response Plan - Does the SWMP have a spill	
	prevention and response plan that includes providing secondary	
	containment for 55 gallon or greater bulk storage of petroleum products	
	and other liquid chemicals?	
p.	Implementation of Control Measures – Does the SWMP include design	
	specifications that contain information on the implementation of the	
	control measure in accordance with good engineering, hydrologic and	
	pollution control practices; including as applicable drawings, dimensions,	
	installation information, materials, implementation processes, control	
	measure-specific inspection expectations, and maintenance	
	requirements.	

## **4. Effluent Limitations**

_=-	4. Lindent Limitations				
ITI	EM	Permittee to complete: Included (I), not included (NI) or not applicable (N/A)	MS4 Reviewer to complete: (I, NI, or N/A)		
	A description of effluent limitations (not already covered i	n other sections of this o	checklist).		
a.	areas and soil storage areas for which permanent or temporary stabilization has not been implemented appear to flow to at least one control measures to minimize sediment?				
b.	If there is a sediment basin or other impoundment, does the outlet draw water from the top?				
C.	Soil compaction must be minimized for areas where final stabilization will be achieved through vegetative cover or an infiltration control, is this described in the SWMP?				
d.	Topsoil must be preserved for areas that will utilize vegetative cover for final stabilization unless infeasible. Is this addressed in the SWMP?				
e.	Disturbances must be minimized, especially on steep slopes. Is this stated in the SWMP?				
f.	Temporary stabilization must be implemented for earth disturbing activities on any portion of the site where ground disturbing construction activity has permanently ceased, or temporarily ceased for more than 14 calendar days. Is this addressed in the SWMP or an alternative schedule given?				

## **5. INSPECTION AND MAINTENANCE**

ITEM	Permittee to complete: Included (I), not included (NI) or not applicable (N/A)	MS4 Reviewer to complete: (I, NI, or N/A)
a. A description of inspection frequency and maintenance practices.		

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## **6. Final Stabilization and Long-Term Stormwater Management**

The SWMP must include the following information on post-construction stabilization and long-term stormwater management:

ITEM	Permittee to complete: Included (I), not included (NI) or not applicable (N/A)	MS4 Reviewer to complete: (I, NI, or N/A)
<ul> <li>a. A description of the practices that will be used to achieve final stabilization of all disturbed areas at the site, including, but not limited to: <ul> <li>Seed mix selection and methods of seed application;</li> <li>Soil preparation and amendments;</li> <li>Soil stabilization methods (Straw, hydromulch, rolled erosion control products);</li> <li>Use of topsoil if salvation was feasible and if not feasible, information why topsoil preservation was not possible;</li> <li>Sediment control BMPs to be maintained until stabilization is achieved;</li> <li>Non-erosive surfaces (such as asphalt, concrete, riprap, gravel, etc.);</li> <li>Landscaping plans or other stabilization practices as applicable.</li> </ul> </li> <li>Sediment that collects within the site's drainage system and permanent water quality or quantity controls is considered unstabilized soil, and must be removed prior to the site being considered finally stabilized.</li> </ul>		
b. A description of structural post-construction or permanent control measure practices to manage stormwater runoff once construction activities have been completed. The post-construction checklist must also be submitted for projects disturbing one acre or more within the urbanized area. The permanent control measures must meet design requirements of SDCM Section 1204. Certain projects such as stream stabilization or trail work may qualify for an exclusion from the requirement to implement structural post-construction control measures. Post construction control measures and drainage reports are reviewed separately and have separate requirements other than just being shown on the SWMP Maps and describe briefly in the SWMP. See Boulder County Post Construction Checklist for those requirements.		

Co	ounty Reviewer Comments	:			

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### Attachment A - Application Materials

Does the SWQP submittal	meet the requirements of County regulations?	
Date of review letter:		
Reviewer's Name:		
Reviewer's Signature (to l	pe signed upon final review and acceptance):	
- '		

Note: The Boulder County Public Works Department has reviewed the Construction Stormwater Management Plan (SWMP) as part of the above referenced Stormwater Quality Permit (SWQP) submittal. The SWMP was reviewed for local-level purposes, including conformance with Boulder County Land Use Code (LUC) pertaining to erosion and sediment control. Importantly, the SWMP was not reviewed for conformance with the Colorado Discharge Permit System (CDPS) general permit for *Stormwater Discharges Associated with Construction Activities* (state stormwater discharge permit); therefore, Boulder County's review does not ensure compliance with the state stormwater discharge permit or the required SWMP contents. Additional control measures may be requested in the field if the reviewed control measures are not adequate for field conditions.

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### **Building Safety & Inspection Services Team**

### **MEMO**

TO: Pete L'Orange, Planner II

FROM: Michelle Huebner, Plans Examiner Supervisor

DATE: April 13, 2023

RE: Referral Response, SU-23-0002: LEGACY CHURCH Sanctuary Expansion. Special

Review for expansion of worship space in an existing church structure.

Location: 270 N. 76th Street

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

1. **Building Permits.** A building permit, plan review, inspection approvals, and a Certificate of Occupancy ("C.O.") are required for the proposed addition

Please refer to the county's <u>adopted 2015 editions of the International Codes and code amendments</u>, 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

The Commercial Plan Submittal Checklist: <u>B70 Commercial Plan Checklist</u> (<u>bouldercounty.gov</u>)

- 2. **Design Wind and Snow Loads.** The design wind and snow loads for the property are 155 mph (Vult) and 40 psf, respectively.
- 3. The proposed project is in an existing building with a proposed **addition** as defined by the 2015 International Existing Building Code. A Colorado licensed registrant needs to provide a design analysis in accordance with the IEBC. Please indicate the Method of Compliance for the work proposed.

tno	od of Compilance for the work proposed.
	1.) Prescriptive Compliance Method (IEBC chapters 3 and 4)
	2.) Work Area Compliance Method (IEBC chapters 3, and 5 through 13, as
	applicable)
	3.) Performance Compliance Methods (Demonstrate compliance in
	accordance with IEBC chapters 3 and 14.)
	4.) Addition (Demonstrate compliance in accordance with IEBC chapters 13
	and the IBC)

Please document steps of compliance to each appropriate section in accordance with the Method of Compliance chosen including accessibility requirements.

- 4. **Minimum Plumbing Fixtures.** The plumbing fixtures count needs to meet or exceed the requirements of IBC Chapter 29, including the need for accessible restrooms and fixtures.
- 5. Accessibility. Chapter 11 of the IBC and referenced standard ICC A117.1-09 provide for accessibility for persons with disabilities. Any building permit submittals are to include any applicable accessibility requirements, including accessible parking, signage, accessible routes and accessible fixtures and features.
- **6. Fire Department.** It appears that the site is served by Mountain View Fire Rescue District. A separate referral response from the fire department should also be forthcoming. The fire department may have additional requirements in accordance with their International Fire Code ("IFC") adoption. Also, the Fire Protection District must provide written documentation to Boulder County Building Safety and Inspection Services approving the building permit plans and specifications of projects before the building permit can be issued.
- 7. **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 Building Safety publications can be found at: <a href="Building Publications">Building Publications</a>, <a href="Applications and Forms">Applications</a>, <a href="Applications

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 <a href="mailto:building@bouldercounty.org">building@bouldercounty.org</a>



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### **Building Safety & Inspection Services Team**

### M E M O

TO: Pete L'Orange, Planner II

FROM: Michelle Huebner, Plans Examiner Supervisor

DATE: October 25, 2023

RE: Referral Response, SU-23-0002: LEGACY CHURCH Sanctuary Expansion. UPDATED: Special Use Review to recognize an existing church use with an occupant load greater than 100 persons per lot, expansion of sanctuary space, and for earthwork/grading in excess of 500 cubic yards for new parking lot.

ORIGINAL: Special Review for expansion of worship space in an existing church structure.

Location: 270 N. 76th Street

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

1. Building Permits. A building permit, plan review, inspection approvals, and a Certificate of Occupancy ("C.O.") are required for the proposed remodel.

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

The Commercial Plan Submittal Checklist: B70 Commercial Plan Checklist (bouldercounty.gov)

- 2. **Design Wind and Snow Loads.** The design wind and snow loads for the property are 155 mph (Vult) and 40 psf, respectively.
- The proposed project is in an existing building with a proposed change in occupancy as defined by the 2015 International Existing Building Code. A Colorado licensed registrant needs to provide a design analysis in accordance with the IEBC. Please indicate the Method of Compliance for the work proposed.

 1.) Prescriptive Compliance Method (IEBC chapters 3 and 4)
2.) Work Area Compliance Method (IEBC chapters 3, and 5 through 13, as
applicable)

	3.) Performance Compliance Methods (Demonstrate compliance in
	accordance with IEBC chapters 3 and 14.)
	4.) Addition (Demonstrate compliance in accordance with IEBC chapters 11
	and the IBC)
Ple	ase document steps of compliance to each appropriate section in accordance
wit	th the Method of Compliance chosen including accessibility requirements.

- 4. **Minimum Plumbing Fixtures.** The plumbing fixtures count needs to meet or exceed the requirements of IBC Chapter 29, including the need for accessible restrooms and fixtures.
- 5. **Accessibility**. Chapter 11 of the IBC and referenced standard ICC A117.1-09 provide for accessibility for persons with disabilities. Any building permit submittals are to include any applicable accessibility requirements, including **accessible parking**, signage, **accessible routes** and accessible fixtures and features.
- 6. Fire Department. It appears that the site is served by Mountain View Fire Rescue District. A separate referral response from the fire department should also be forthcoming. The fire department may have additional requirements in accordance with their International Fire Code ("IFC") adoption. Also, the Fire Protection District must provide written documentation to Boulder County Building Safety and Inspection Services approving the building permit plans and specifications of projects before the building permit can be issued.
- 7. 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 Building Safety publications can be found at: <u>Building Publications, Applications and Forms Boulder County</u>

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 <a href="mailto:building@bouldercounty.org">building@bouldercounty.org</a>



## **Public Works Department**

2525 13th Street, Suite 203 • Boulder, Colorado 80304 • Tel: 303.441.3900 • Fax: 303.441.4594 Mailing Address: P.O. Box 471 • Boulder, Colorado 80306 • www.bouldercounty.org

### Memorandum

**Date:** October 2, 2023

To: Grant Hansen, ghansen@mac..com

From: Alli Kelly, Boulder County Public Works, <a href="mailto:stormwater@bouldercounty.gov">stormwater@bouldercounty.gov</a>

Subject: Stormwater Requirements for SU-23-0002 LEGACY CHURCH Sanctuary

**Expansion 270 N 76th Street** 

1. These comments are made because this project will be disturbing an acre of more and located inside the Boulder County Urbanized Area:

- As a part of Boulder County's water quality protection and Municipal Separate Storm Sewer System (MS4) Construction Program, a Stormwater Quality Permit (SWQP) is required for this project based on the disturbance illustrated in the submitted materials including providing for detention and permanent stormwater management. The PERMANENT STORMWATER MANAGEMENT FACILITY REVIEW CHECKLIST items a-g are required for each new or modified facility:
  - a. Drainage plan and report (that meets the SDCM criteria) and includes a narrative describing the proposed post-construction controls. Final submittal must be sign and stamped by a Profession Engineer in Colorado.
  - b. Identification of the parties responsible for perpetual maintenance of proposed permanent stormwater management facility.
  - c. A site plan showing locations of the proposed post-construction controls
  - d. Operating and maintenance (O&M) plan must be submitted and once project has been completed "asbuilts" will be required before the SWQP will be closed. See Guidance on Preparing the O& M plan. (link)
  - e. Permanent easement allowing the County access to the permanent stormwater management facility.
  - f. Recorded Maintenance Agreement for the permanent stormwater management facility.
  - g. SDI Design Data Sheets. These sheets can be found at the State Engineer's office (SEO) website (link) (click on Download SDI Design Data Sheet). Permittee is responsible for uploading the sheets to SEO website. The County will be responsible for reviewing the sheets as part of the submittal.
- Additional information may be found Boulder County Stormwater Quality Permit website: <a href="https://www.bouldercounty.org/transportation/permits/stormwater-quality-permit/">https://www.bouldercounty.org/transportation/permits/stormwater-quality-permit/</a> and questions can be submitted to <a href="mailto:stormwater@bouldercounty.gov">stormwater@bouldercounty.gov</a>.



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May 18, 2023

TO: Pete L'Orange, Planner II; Community Planning & Permitting, Development

Review Team - Zoning

FROM: Anita Riley, Principal Planner; Community Planning & Permitting,

Development Review Team – Access & Engineering

SUBJECT: Docket # SU-23-0002: Boulder Country Club – 270 N. 76<sup>th</sup> Street

Hold Request

The Development Review Team – Access & Engineering staff has reviewed the above referenced docket and requests the application be put on hold for the following reason:

1. The applicants must submit a Transportation System Impact Review (TSIR).

2. The grading needed to accommodate the required increase in parking spaces is not shown on the plans submitted. The applicants must provide a grading and drainage plan that details the improvements to the site. Grading calculations should accompany the plans.

The Access & Engineering staff have reviewed the submitted components of the application and can provide the comments below to the applicants. Please note that the comments may extend beyond the scope of the application. The application narrative indicates a proposal that is narrow in scope, however the submitted plans lay out a broader scope. The comments below address the proposal suggested in the plans

### Physical and Legal Access

- 3. The subject property is accessed by N. 76<sup>th</sup> Street, a paved Boulder County owned and maintained right-of-way (ROW) with a functional classification of minor arterial. Legal access is demonstrated via adjacency to N. 76<sup>th</sup> Street.
- 4. An emergency fire access is indicated approximately 70 feet north of the primary access to the subject property. Section 5.4.1.1 of the Standards notes that a parcel may not have more than one access unless it can be shown that additional access will benefit the transportation system. The plan must be revised to accommodate the fire access in another manner.

Plans submitted at building permit must include an engineered design for the fire access roads that accommodate the roads on the subject property..

### **Parking**

- 5. With a stated sanctuary space of 4,767.33 square feet, 159 parking spaces are required. However, the plans propose a total of 176 spaces with overflow parking that can accommodate 12 additional spaces. Please provide an explanation for the need of 29 additional spaces.
- 6. There is a grade change for the parking area elevation to the structure elevation. Note that ramps runs must not be steeper than 1:12 and accessible parking spaces must be located on the shortest accessible route from parking to entrance. Staff recommends that accessible

parking spaces be centered on the path to the structure so as to reduce the distance from all accessible spaces.

Plans submitted at building permit must detail improvements related to ADA requirements.

- 7. Section 4-516.W of the Boulder County Land Use Code (Code) requires that expanded parking lots with 15 or more spaces must provide electric vehicle charging stations. Plans must be revised to demonstrate compliance with the Code.
- 8. The above-mentioned section of the Code also requires that parking lots with 50 or more spaces have landscaping interior to the lot that covers at least 5% of the parking area. Additionally, Section 5.6.2.5 of the Standards requires screening for parking lots with 6 or more spaces. Plans must be revised to demonstrate compliance with both the Code and the Standards.

### Stormwater

- 9. The proposal has been evaluated according to the Boulder County Storm Drainage Criteria Manual. Improvements to the site trigger full spectrum detention and permanent water quality treatment requirements. Plans must be revised to detail these improvements.
- 10. A Stormwater Quality Permit (SWQP) will be required prior to construction of the site improvements shown on the plans.

This concludes our comments at this time.



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November 30, 2023

TO: Pete L'Orange, Planner II; Community Planning & Permitting, Development

Review Team - Zoning

FROM: Anita Riley, Principal Planner; Community Planning & Permitting,

Development Review Team – Access & Engineering

SUBJECT: Docket # SU-23-0002: Legacy Church Sanctuary Expansion – 270 N. 76<sup>th</sup> Street

The Development Review Team – Access & Engineering staff has reviewed the transportation system impact review (TSIR), dated August 25, 2023 and the grading plan, dated October 16, 2023, and find them acceptable. A consulting engineer provided the following comments for the drainage report, dated October 2023:

- 1. Page 2 of report, regarding the release of stormwater to the Marshallville Ditch: Rate may not increase, but the volume will, and the frequency with which the ditch receives larger volumes of runoff will increase. The nature of runoff will also change for a paved parking area. Please obtain permission from ditch as requested.
- 2. Page 3: The description of the pond should note that it will detain water rather than retain as retention is not allowed without a water right.
- 3. Page 4, regarding the rundown curb that discharges into the west storm inlet: Rundown calculations show 4.5% slope with velocity of 10.55 feet/second. Please state how the rundown will be protected from eroding and call out on plans.
- 4. Page 35 of document, regarding hydraulic calculations: Please explain why EGL is lower than HGL. If HGL is correct, it shows pressurized flow at the cleanout and the HGL close to the ground surface.
- 5. Page 36, regarding hydraulic calculations: Please explain how the rundown will be armored or otherwise pritected from erosion with velocity of 10.55 ft/s.
- 6. Page 39, regarding detention calculations: WQCV, EURV, and 100-year differ from MHFD Detention output that has:
  - a. WQCV = 0.083 af
  - b. EURV = 0.221 af
  - c. 100-year = 0.422 af

These volumes are larger, which is better than being too small, but if the orifices are sized using MHFD detention, it will take longer to drain these volumes than the volumes used in the MHFD Detention Spreadsheet.

Please provide analysis to verify that larger volumes will not violate SEO requirements for maximum drain time. You may be able to do this by overriding the WQCV and EURV volumes in the MHFD Detention spreadsheet with the values in the table, and then checking the drain times in the output.

7. Page 39, regarding detention calculations: The 100-year volume on page 39 is different than the volume indicated on page 40. Please check and explain the difference.

The Access & Engineering staff also has the following comments:

### Physical and Legal Access

8. The subject property is accessed by N. 76<sup>th</sup> Street, a paved Boulder County owned and maintained right-of-way (ROW) with a functional classification of minor arterial. Legal access is demonstrated via adjacency to N. 76<sup>th</sup> Street.

### **Parking**

- 9. There is a grade change from the parking area elevation to the structure elevation. Note that ramps runs must not be steeper than 1:12 in order to meet ADA Guidelines.
- 10. Section 4-516.W of the Boulder County Land Use Code (Code) requires that expanded parking lots with 15 or more spaces must provide electric vehicle charging stations. The number of charging stations is dependent on the level the charging station is. Plans must be revised to demonstrate compliance with the Code.
- 11. The above-mentioned section of the Code also requires that parking lots with 50 or more spaces have landscaping interior to the lot that covers at least 5% of the parking area. Additionally, Section 5.6.2.5 of the Boulder County Multimodal Transportation Standards (Standards) requires screening for parking lots with 6 or more spaces. The submitted plans do not indicate screening of the parking area nor is it clear if the parking curbs include landscape areas. Plans must be revised to demonstrate compliance with both the Code and the Standards.
- 12. The subject property will require 18 bicycle parking spaces. The bicycle racks must meet the Standards.

### Construction

- 13. During construction, all materials, machinery, dumpsters, and other items shall be staged on the subject property; no items shall be stored or staged on N. 76th Street.
- 14. Hours of construction for the parking lot will be limited from 8:30 AM to 3:30 PM, Monday through Friday, to limit impacts on regular vehicular traffic, especially during peak commuter periods.

This concludes our comments at this time.



# Public Health Environmental Health Division

October 26, 2023

TO: Staff Planner, Community Planning and Permitting

FROM: Carl Job, Environmental Health Specialist

SUBJECT: SU-23-0002: LEGACY CHURCH Sanctuary Expansion project

OWNER: ROCK CREEK CHURCH

PROPERTY ADDRESS: 270 N 76TH STREET

SEC-TOWN-RANGE: 01 -1S -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. The Onsite Wastewater Treatment System (OWTS) located on this property exceeds the wastewater threshold of 2,000 gallons per day and is consequently permitted by the Colorado Department of Public Health and the Environment (CDPHE).
- 2. The owner or their agent must contact CDPHE to ensure compliance with all OWTS regulations and requirements. Please visit <a href="https://cdphe.colorado.gov/OWTS">https://cdphe.colorado.gov/OWTS</a> for more information.
- 3. Documentation must be provided to Boulder County Public Health (BCPH) demonstrating that CDPHE has been contacted and has issued approval for the proposed project.

### 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: <a href="www.SepticSmart.org">www.SepticSmart.org</a>. If you have additional questions about OWTS, please do not hesitate to email HealthOWS@bouldercounty.org

Cc: OWTS file, owner, Community Permitting and Planning



# Parks & Open Space

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

**TO:** Pete L'Orange, Community Planning & Permitting Department

**FROM:** Ron West, Natural Resource Planner

**DATE:** May 10, 2023

**SUBJECT:** Docket SU-23-0002, Legacy Church, 270 76<sup>th</sup> Street

Staff has reviewed the submitted materials, and has no natural resource concerns with the proposal. There would be no change in development footprint, and all modifications would be internal to the existing large structure.



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:

Referral Agencies

FROM:

Pete L'Orange, Planner II

DATE:

October 25, 2023

RE:

Re-Referral for Docket SU-23-0002

This proposal is being re-referred due to updated information, including revised site plans, additional traffic impact information, and stormwater management information.

**Docket SU-23-0002: LEGACY CHURCH Sanctuary Expansion** 

Request:

UPDATED: Special Use Review to recognize an existing church

use with an occupant load greater than 100 persons per lot,

expansion of sanctuary space, and for earthwork/grading in excess

of 500 cubic yards for new parking lot.

ORIGINAL: Special Review for expansion of worship space in an

existing church structure.

Location:

270 N. 76th Street (parcel no. 157701400024), located on the east

side of N. 76th Street, approximately 0.25 mile north of the intersection of South Boulder Road and N. 76th Street, in Section

1, Township 1S, Range 70W.

Zoning:

Estate Residential (ER) Zoning District

Applicant/Owner:

Legacy Church c/o Grant Hansen

Special Use Review / Site Specific Development Plan is required of uses which may have greater impacts on services, neighborhoods, or environment than those allowed with only Building Permit Review. This process will review compatibility, services, environmental impacts, and proposed site plan.

This process includes public hearings before the Boulder County Planning Commission and the Board of County Commissioners. Adjacent property owners and holders of liens, mortgages, easements or other rights in the subject property are notified of these hearings.

The Community Planning & Permitting staff, Planning Commission, and County Commissioners value 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. If you have any questions regarding application, please contact me at 303-441-1418 plorange@bouldercounty.gov.

# IF YOU HAVE REPLIED TO THE ORIGINAL REFERRAL LETTER AND HAVE NO FURTHER COMMENTS, NO ACTION IS REQUIRED.

Please return responses by November 29, 2023.

We have reviewed the proposal and have no conflicts.

Letter is enclosed.

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

11 17/		, ,
Signed Millich Kally	PRINTEDMichellik	ielly
Agency or Address Mountain	Ville Fire	
Date 11 3/23		



# Mountain View Fire Rescue

Trust • Teamwork • Professionalism

3561 N. STAGECOACH ROAD, LONGMONT, CO 80504 • 303-772-0710 • INFO@MVFPD.ORG

Boulder County
Community Planning and Permitting Department
2045 13st St
Boulder, CO 80302

RE SU-23-0002

November 3, 2023

The building was originally supposed to have a fire suppression system. It was never installed, and county records indicate the issue was never fully resolved. Initial discussions occurred and a request was made for a fire protection engineering analysis on the building and how the intent of code will be demonstrated with this proposed remodel. Mountain View Fire has not received or accepted this report and its findings.

Regards, Michelle Ehn Kelly Deputy Fire Marshal



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: Referral Agencies

FROM: Pete L'Orange, Planner II

DATE: April 13, 2023 RE: Docket SU-23-0002

### **Docket SU-23-0002: LEGACY CHURCH Sanctuary Expansion**

Request: Special Review for expansion of worship space in an existing

church structure.

Location: 270 N. 76th Street (parcel no. 157701400024), located on the east

side of N. 76th Street, approximately 0.25 mile north of the intersection of South Boulder Road and N. 76th Street, in Section

1, Township 1S, Range 70W.

Zoning: Estate Residential (ER) Zoning District Applicant/Owner: Legacy Church c/o Grant Hansen

Special Use Review / Site Specific Development Plan is required of uses which may have greater impacts on services, neighborhoods, or environment than those allowed with only Building Permit Review. This process will review compatibility, services, environmental impacts, and proposed site plan.

This process includes public hearings before the Boulder County Planning Commission and the Board of County Commissioners. Adjacent property owners and holders of liens, mortgages, easements or other rights in the subject property are notified of these hearings.

The Community Planning & Permitting staff, Planning Commission, and County Commissioners value 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.org. 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.org to request more information. If you have any 303-441-1418 questions regarding this application, please contact me plorange@bouldercounty.org.

### Please return responses by May 18, 2023.

(Please note that due to circumstances surrounding COVID-19, application timelines and deadlines may need to be modified as explained in the CPP Notice of Emergency Actions issued March 23, 2020 (see https://boco.org/covid-19-cpp-notice-20200323).

	X We have reviewed the proposal and have no conflicts Letter is enclosed.			
Signed	Jacob Ca	ssidy	_ PRINTED	Jacob Cassidy
		0		and Mountain Parks
Date	5/18/2023			

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



Right of Way & Permits

1123 West 3<sup>rd</sup> Avenue Denver, Colorado 80223 Telephone: **303.571.3306** Facsimile: 303.571.3284 Donna.L.George@xcelenergy.com

May 5, 2023

Boulder County Community Planning and Permitting PO Box 471 Boulder, CO 80306

Attn: Pete L'Orange

Re: Legacy Church Sanctuary Expansion, Case # SU-23-0002

Public Service Company of Colorado's (PSCo) Right of Way & Permits Referral Desk has reviewed the plan for **Legacy Church Sanctuary Expansion**. Please be aware PSCo owns and operates existing natural gas and underground electric *distribution* facilities along 76<sup>th</sup> Street. For any new natural gas or electric service or modification to existing facilities, the property owner/developer/contractor must complete the application process via <u>xcelenergy.com/InstallAndConnect</u>.

If additional easements need to be acquired by separate PSCo document (i.e. transformer), a Right-of-Way Agent will need to be contacted.

Additionally, if there are <u>any</u> activities in the area of the existing overhead electric *transmission* facilities along the south property line, the plan will need to be reviewed by a Land Rights Agent via either website <u>www.xcelenergy.com/rightofway</u> or email coloradorightofway@xcelenergy.com).

As a safety precaution, PSCo would like to remind the developer to contact Colorado 811 for utility locates prior to construction.

Donna George
Right of Way and Permits

Public Service Company of Colorado dba Xcel Energy

Office: 303-571-3306 – Email: Donna.L.George@xcelenergy.com



Right of Way & Permits

1123 West 3<sup>rd</sup> Avenue Denver, Colorado 80223 Telephone: **303.571.3306** Facsimile: 303.571.3284 donna.l.george@xcelenergy.com

November 6, 2023

Boulder County Community Planning and Permitting PO Box 471 Boulder, CO 80306

Attn: Pete L'Orange

Re: Legacy Church Sanctuary Expansion – Re-referral, Case # SU-23-0002

Public Service Company of Colorado's (PSCo) Right of Way & Permits Referral Desk has reviewed the documentation for **Legacy Church Sanctuary Expansion** and requests that the existing underground electric *distribution* line is shown on the plan in relation to the proposed activities west of the church. Please contact Colorado 811 before excavating. Use caution and hand dig when excavating within 18-inches of each side of the marked facilities. Please be aware that all risk and responsibility for this request are unilaterally that of the Applicant/Requestor.

There are also existing natural gas and underground electric *distribution* facilities along 76<sup>th</sup> Street. For any new natural gas or electric service or modification to existing facilities, the property owner/developer/contractor must complete the application process via <a href="mailto:xcelenergy.com/InstallAndConnect">xcelenergy.com/InstallAndConnect</a>. Additionally, if additional easements need to be acquired by separate PSCo document, a Right-of-Way Agent will need to be contacted.

If there are <u>any</u> activities in the area of the existing electric *transmission* facilities along the south property line, the property owner/developer/contractor must contact our Siting and Land Rights Department at either:

website: <a href="www.xcelenergy.com/rightofway">www.xcelenergy.com/rightofway</a>
email: <a href="mailto:coloradorightofway@xcelenergy.com">coloradorightofway@xcelenergy.com</a>

Donna George Right of Way and Permits

Public Service Company of Colorado dba Xcel Energy

Office: 303-571-3306 – Email: donna.l.george@xcelenergy.com

From: Wufoo

To: <u>LU Land Use Planner</u>

**Subject:** [EXTERNAL] Ask a Planner - Maureen Long - SU-23-0002 - 270 76th St

**Date:** Friday, November 24, 2023 4:28:53 PM

Boulder County Property Address: 270 76th St

If your comments are regarding a specific Docket, please enter the Docket number: SU-23-

0002

Name: Maureen Long

Email Address: maureenklong@gmail.com

Phone Number: (303) 464-3737

Please enter your question or comment: Along with a neighbor, Carmen Porter, I am submitting comments on the proposed docket addressing our concerns, which are in large part focused on potential traffic impacts to the neighborhood that could result if the church expands it's operations significantly. Our comments are attached.

### Thank you

Maureen Long and Carmen Porter

Attach a photo or document (optional): <a href="https://bouldercounty.wufoo.com/cabinet/c5734f3e-33a9-4ed7-8e76-c3d20df39431">https://bouldercounty.wufoo.com/cabinet/c5734f3e-33a9-4ed7-8e76-c3d20df39431</a> - 200.41 KB

Public record acknowledgement:

I acknowledge that this submission is considered a public record and will be made available by request under the Colorado Open Records Act.

### Docket SU-23-0002: Legacy Church

Comments on the Application and related documents

### **Building Remodel**

The application states in a Feb 21, 2023 letter from Legacy Church to Boulder County Re: Traffic Letter – Pre-Application Methodology Statement:

The remodel will consist of removing the walls that separate two classroom/overflow areas to the east and west from the current worship area. The original design planned that these walls could be removed to expand the worship area. The new worship area will become 5240 sq. ft. with a capacity of 405 seats. In addition to the changes to the worship area two new doors will to added to the worship area for exiting and one new door will be added to the Mom's room, also for exiting. These three doors will all be on the north side and will be painted to match the siding.

The project will remove the two showers in the restrooms to the south of the worship area. The women's restroom will be moved to where the current men's restroom is located, and two additional water closets will be installed. The existing women's restroom will become the men's restroom and two existing urinals will be moved and three urinals will be added.

#### **Comments:**

What is the maximum occupancy (per fire regulations) for the remodeled worship area?

Will there be any floor space available for temporary seating? If so, what is the maximum number of additional seats?

### Activities and Use of Building

The applicant states in the above referenced Feb 21, 2023 letter to Boulder County:

Boulder Legacy currently has one service held every Sunday at 10:00 AM. The service usually consists of approximately 100 vehicles and 250 people. Christmas service in 2022 had about 325 people in the worship area and up to 20 people including kids and teachers in other parts of the building. There were about 140 vehicles at that service.

Randomly scheduled events occur during the week with up to 15 people and 10 cars attending during these events. Currently, cars arrive from 7:30 AM on Sunday till about 10:15 with the majority arriving between 9:30 and 10:15. From observations, cars leaving after the service leave from approximately 11:15 AM to 12:30 PM. At no time are there any more than 5 cars waiting to get onto N 76th Street.

Also, in multiple places it is stated that the usage and attendance of the building will not be significantly altered or impacted by this project. No additional services or activities are proposed on this site. No increase in congregation size is planned or expected.

#### **Comments:**

Anecdotal neighborhood observations are that after Sunday services, there are frequently far more than 5 cars in line waiting to get on 76<sup>th</sup> street. Observations indicate that most of the cars coming out of the parking lot head south, requiring a potentially more dangerous left-hand turn from the church driveway.

On one exhibit in the packet it is shown that the church is a licensed child care facility. Is this still the case? Impacts of associated preschool, children's camps and other related activities should be

considered. Dropping off and picking up childcare participants would typically happen during already heavy commuter traffic hours.

What is the anticipated impact of additional Sunday services, special events such as weddings, funerals, or the space being rented out for special events?

### Parking Lot Capacity and Construction

The applicant states that the existing site has 154 parking spaces including 4 handicapped spaces. The revised parking plan shows 176 spaces including 2 ADA car and 4 ADA van spaces. There is also 2000 sq. ft. of overflow parking along a new fire access road on the east end of the building. There are no estimates given for the capacity of the overflow area. The remodel will pave the parking lot and driveway which are currently gravel.

### **Comments:**

The paving of this area will certainly cut down on the amount of dust pollution. However, it will create water and snow run-off which was not addressed in the materials reviewed.

There is a Great Horned Owl nesting site in the cottonwood trunks on the north side of the church driveway near 76<sup>th</sup> Street. The impact of the parking lot/driveway construction and traffic volume in and out on this owl site has not been addressed in this application.

Access to the Open Space east of the church property is supposed to be from 76<sup>th</sup> Street along the north side of the church property. This access has never been developed and is not addressed in the application.

### Traffic Study

1. The traffic impact study provided by the LSC Transportation Consultants, Inc on August 25, 2023 is based on the activities and number of people shown on the chart below:

Event	Frequency	Day of Week	Number of people	Description
Men's Friday Morning AXIS	Weekly, 6:30 AM	Friday	7-10	Small group of men meeting
Boy Scouts	Weekly, 6:30 AM	Tuesday	15-30	Local Boyscout Troop meeting
Women's Bible Study	Weekly, 7:00-8:30 PM	Tuesday	10-15	Small group of women
Alex's Study	Weekly, 6:30 AM	Thursday	5	Small group of men
Legacy Church Worship	Weekly, 10:00 AM	Sunday	200	Church service and kids classes
Promise Preschool	Weekly 9:00 AM-1:00 PM	M-W-F	11 kids/3 adults	Part-time preschool
Youth Group	Weekly, 6:30 PM	Thursday	12 kids/4 adults	Middle School and High School student gathering
Staff Meetings	Weekly, 3:45 PM	Monday	5	Meeting
Community Choir	Weekly, 6:00-8:00 PM	Monday	100	Boulder Community Choir
Boulder County SWAT	Few Times/Year	Various Days	30	SWAT Training
Christmas Eve Service	Once/Year	6:00 PM	180-250	Community Gathering
Good Friday Service	Once/Year	6:00 PM	75-115	Community Gathering
Girl Scouts	One week in June	Annual Camp	50	Annual Girl Scout Camp

It appears that this chart is from a December 22, 2017 study by Aldridge Transportation Consultants, LLC done for the Boulder Valley Church of Christ who was applying for changes involving the Promise Preschool.

### **Comments:**

This traffic impact report is based on data that is over 5 years old from the previous church's activities and attendance levels.

2. The traffic impact study describes 76<sup>th</sup> Street as a two-lane minor arterial roadway between Baseline Road and South Boulder Road with two additional churches having access to 76<sup>th</sup> Street.

The study fails to mention that the entire area surrounding 76<sup>th</sup> Street is 100% residential (except for the 3 churches) and 76<sup>th</sup> Street is the only entrance and exit to the area for the people living on 4 intersecting side streets and 18 direct private driveways. This includes 2 separate subdivisions and approximately 84 residences. Additionally, 3 more subdivisions including 200 plus households use another four streets that intersect 76<sup>th</sup> but have also have an exit street to either South Boulder Road or Baseline, but rely on the convenience of being able to exit and enter their neighborhood from 76<sup>th</sup> Street depending on the direction they need to travel.

All of these residents who use 76<sup>th</sup> Street must turn in and out without any traffic lights. The posted speed limit is 40 MPH but is not strictly enforced. Additionally, 76th Street is a heavily used commuter short-cut making it more difficult for the local residents to access. During heavy commute hours, the line of cars trying to make a left turn onto South Boulder Road backs up beyond the church's driveway (over ¼ mile) blocking the side street entrances and driveways.

3. The traffic impact study refers to a stop-sign controlled intersection at 76<sup>th</sup> Street and the church site driveway multiple times and that it better controls both arrivals and departure during peak hours.

### **Comments:**

There is NO stop sign located there and never has been.

4. The traffic impact study describes paved shoulders with solid white lines for bicycle paths. However, there is no data or discussion about the number and volume of cyclists using these paths.

**Comments:** There are single cyclists, groups of cyclists, and organized cycle events using these paths. There is increased use on the weekends. Due to the slope of 76<sup>th</sup> Street going downward to the south, cyclists frequently move very fast past the church.

Since there are no sidewalks, the bicycle paths are also used by walkers and joggers with increased volume on weekends. The safety of these people is not addressed.

### **Conclusion:**

Much of this application seems to be based on very old data from another church or very new estimates from a few months of operation of a new church. It is hard to be confident in what is being said or promised.

It is difficult to understand why the applicant is going through all of this effort and expense unless it expects to increase the congregational size and activity levels of this facility. If the church congregation grows significantly, it will in turn have a direct impact on 76<sup>th</sup> Street, which was never designed to handle significant increases in concentrated traffic volumes.

If this application is approved and our concerns about the potential growth of the church and subsequent impacts on 76<sup>th</sup> Street become reality, what recourse will the residents of the neighborhood have?

The neighborhood surrounding 76<sup>th</sup> Street is a very established 100% residential community with a country atmosphere. 76<sup>th</sup> Street was designed to service this neighborhood, not a large, active, growing church. We are already coping with twice-a-day, 5-day-a-week shortcut commuter traffic and noise. Significantly increased traffic volume from the church, especially on the weekends, would negatively impact the neighborhoods adjoining 76<sup>th</sup> Street.

We oppose this application because of the potential negative lasting impact on the character and livability of surrounding residential neighborhood, which can never be reversed once it happens.

Comments submitted by Mareen Long (251 N. 76<sup>th</sup> Street) and Carmen Porter (7455 Brockway Drive, Boulder, CO)

From: <u>Liz Kois</u>

To: <u>LU Land Use Planner</u>

**Subject:** [EXTERNAL] Docket SU-23-0002

**Date:** Tuesday, November 28, 2023 11:59:50 AM

### Hello,

I am writing to voice my support of the parking lot improvement as well as the sanctuary expansion. From our experience, this church has always been a great neighbor and I am happy to see them be able to improve their property as well as the preschool that operates there.

Sincerely, Elizabeth Kois 7929 Fairview Road

Sent from my iPad