

STORMWATER MANAGEMENT PLAN (SWMP)

for

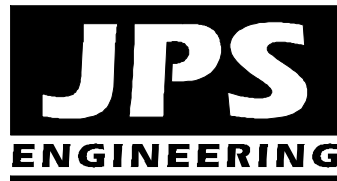
WALDEN PRESERVE 2 - FILING NO. 4

Applicant / Qualified Stormwater Manager / Contractor:

Walden Holdings I, LLC
1230 Scarsbrook Court
Monument, CO 80132

September 30, 2019

Prepared by:



19 E. Willamette Ave.
Colorado Springs, CO 80903
(719)-477-9429
www.jpsengr.com

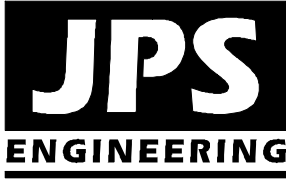
JPS Project No. 040201
PCD File No. SF-18-034

WALDEN PRESERVE 2 - FILING NO. 4
STORMWATER MANAGEMENT PLAN (SWMP)
TABLE OF CONTENTS

	<u>PAGE</u>
1. APPLICANT / CONTACT INFORMATION.....	1
2. SITE DESCRIPTION	1
3. SITE MAP.....	2
4. BMP'S FOR STORMWATER POLLUTION PREVENTION	2
5. FINAL STABILIZATION AND LONG-TERM STORMWATER MANAGEMENT	6
6. OTHER CONTROLS.....	6
7. INSPECTION AND MAINTENANCE	7

FIGURES

Figure A1 Vicinity Map
 GEC Plans



WALDEN PRESEVE 2 – FILING NO. 4 STORMWATER MANAGEMENT PLAN (SWMP)

September, 2019

1. Applicant / Contact Information

Owner/Developer: Walden Holdings I, LLC
1230 Scarsbrook Court
Monument, CO 80132
Attn: Matt Dunston, (719)-339-2410
mattdunston@hotmail.com

Engineer: JPS Engineering, Inc.
19 E. Willamette Avenue
Colorado Springs, CO 80903
Attn: John P. Schwab, P.E. (719)-477-9429
john@jpsengr.com

Contractor: TBD

2. Site Description

- a. The Walden Preserve 2 PUD is a single-family rural residential subdivision development consisting of 116 single-family lots with 1-acre minimum lot sizes on a 209-acre parcel in northern El Paso County, Colorado. Filing No. 4 consists of 23 lots and two open space tracts on 45.3 acres located along the proposed extension of Pinehurst Circle northeast of Walden Way. Site development activities will consist of site grading, utilities, and roadway construction.
- b. Proposed sequence of major activities:
 - Mobilization / implementation of BMP's
 - Clearing and grubbing
 - Grading of proposed roads
 - Site utilities
 - Roadway paving
 - Individual lot grading
- c. Total site area = 45.3 acres; Projected disturbed area = 27.5 acres (approx.)

- d. Historic runoff coefficient, $C = 0.35$;
Developed runoff coefficient, $C = 0.40$
- e. Existing vegetation on site: native meadow grasses and shrubs (approx. 70% coverage)
- f. Potential pollution sources: vehicle fueling on-site
- g. Non-stormwater components of discharge: none anticipated
- h. Receiving water: West Cherry Creek Drainage Basin; surface drainage from this site will continue to follow historic drainage patterns, draining to the existing tributary drainage channels flowing northwesterly through the property, ultimately reaching West Cherry Creek.
- i. Stream crossings: No streams cross the project area.
- j. Soil erosion potential and potential impacts upon discharge: On-site soils are comprised of a combination of Tomah-Crowfoot loamy sands, Pring sandy loam, and Elbeth sandy loam, all of which are classified as Hydrologic Soils Group B (moderate erosion hazard).

3. Site Map (see Construction Drawings – Sheet C1.1)

4. BMP's for Stormwater Pollution Prevention (See Sheet C1.1):

Narrative Description of Appropriate Stormwater Controls and Measures

Construction Phasing

Phase 1 – Mobilization, Clearing & Grubbing Operations

Clearing and grubbing will be completed prior to initial grading activities for this site. Perimeter control measures will be installed prior to the start of construction operations, including clearing and grubbing, with the exception of the clearing and grubbing necessary to install perimeter controls. These perimeter controls will include silt fencing (SF) and vehicle tracking control (VTC) pads.

Phase 2 – Earthwork, Road Grading, and Utility Installation

Major earthwork activities will include site grading, backfill and compaction, utility construction, and rough grading for site improvements. Interim controls will include a Temporary Sediment Basin (TSB).

Phase 3 – Site Construction and Final Grading Activities

This phase will include final grading of subdivision development areas. Appropriate temporary BMP's will be maintained until vegetation is re-established throughout the site.

Phase 4 – Stabilization

All disturbed areas within the project will be revegetated. The specific revegetation requirements will include the following:

- Landscape plantings – per approved landscape plans
- Native seeding – all other disturbed areas

Phase 5 – Removal of Temporary Control Measures

Temporary sediment control measures shall remain in place until vegetation has been adequately established to prevent erosion from storm runoff. Once adequate vegetation has been established, the temporary erosion control measures will be removed and disposed of off-site.

Phasing Summary

<u>Phase</u>	<u>BMP</u>
Clearing and Grubbing necessary for perimeter controls	VTC's
Initiation of perimeter controls	Silt Fence
Remaining clearing and grubbing	
Road grading	Straw Bales
Ditch grading	Seed / ECB
Stabilization	Seeding
Rain Garden	RG
Removal of erosion control measures	

Timing Schedule

The anticipated start and completion time period of the construction activities is from November, 2019 through August, 2020. The estimated schedule for erosion control activities is as follows:

- Install BMP's: November, 2019
- Site Grading: November, 2019
- Seeding & Mulching: April, 2020
- Stabilization: August, 2021

Control Measures

- a. Erosion and Sediment Controls
 - 1) Structural Practices:
 - Silt fence at toe of slope along downstream limits of disturbed areas
 - Straw bales along drainage swales
 - Inlet protection at culvert inlets
 - Rain Garden C2
 - Protect existing Retention Pond B

2) Non-Structural Practices:

- Preserve existing vegetation beyond limits of work
- Temporary seeding of areas to remain disturbed for significant periods of time
- Permanent seeding/mulching upon completion of rough grading

b. Materials Handling and Spill Prevention

- General Materials Handling Practices:
 - Potential pollutants shall be stored and used in a manner consistent with the manufacturer's instructions in a secure location. To the extent practical, material storage areas should not be located near storm drain inlets and should be equipped with covers, roofs, or secondary containment as required to prevent storm water from contacting stored materials. Chemicals that are not compatible shall be stored and segregated areas so that spilled materials cannot combine and react.
 - Disposal of materials shall be in accordance with the manufacturer's instructions and applicable local, state, and federal regulations.
 - Materials no longer required for construction shall be removed from the site as soon as possible.
 - Adequate garbage, construction waste, and sanitary waste handling and disposal facilities shall be provided as necessary to keep the site clear of obstruction and BMPs clear and functional.
- Specific Materials Handling Practices:
 - All pollutants, including waste materials and demolition debris, that occur on-site during construction shall be handled in a way that does not contaminate storm water.
 - All chemicals including liquid products, petroleum products, water treatment chemicals, and wastes stored on site shall be covered and contained and protected from vandalism.
 - Maintenance and repair of all equipment and vehicles involving oil changes, hydraulic system drain down, degreasing operations, fuel tank drain down and removal, and other activities which may result in the accidental release of contaminants, shall be conducted under cover during wet weather and on an impervious surface to prevent release of contaminants onto the ground. Materials spilled during maintenance operations shall be cleaned up immediately and properly disposed of.
 - Wheel wash water shall be settled and discharged on site by infiltration. Wheel wash water shall not be discharged to the storm water system.

- Application of agricultural chemicals, including fertilizers and pesticides, shall be conducted in a manner and at application rates that will not result in loss of chemical to storm water runoff. Follow manufacturer's recommendations for application rates and procedures.
- pH-modifying sources shall be managed to prevent contamination of runoff and storm water collected on site. The most common sources of pH-modifying materials are bulk cement, cement kiln dust (CKD), fly ash, new concrete washing and curing waters, waste streams generated from concrete grinding and sawing, exposed aggregate processes, and concrete pumping and mixer washout waters.
- Equipment maintenance and fueling: Contractor shall implement appropriate spill prevention and response procedures
- Spill Prevention and Response Procedures:
 - The primary objective in responding to a spill is to quickly contain the material(s) and prevent or minimize their migration into storm water runoff and conveyance systems. If the release has impacted on-site storm water, it is critical to contain the released materials on site and prevent their release into receiving waters.
 - Spill Response Procedures:
 - Notify site superintendent immediately when a spill, or the threat of a spill, is observed. The superintendent shall assess the situation and determine the appropriate response.
 - If spills represent an imminent threat of escaping on-site facilities and entering the receiving waters, site personnel shall respond immediately to contain the release and notify the superintendent after the situation has stabilized.
 - The site superintendent, or his designee, shall be responsible for completing a spill reporting form and for reporting the spill to the appropriate agency.
 - Spill response equipment shall be inspected and maintained as necessary to replace any materials used in spill response activities.
 - Spill kits shall be on-hand at all fueling sites. Spill kit location(s) shall be reported to the SWMP Administrator.
 - Absorbent materials shall be on-hand at all fueling areas for use in containing inadvertent spills. Containers shall be on-hand at all fueling sites for disposal of used absorbents.
 - Recommended components of spill kits include the following:
 - Oil absorbent pads (one bale)
 - Oil absorbent booms (40 feet)
 - 55-gallon drums (2)

- 9-mil plastic bags (10)
 - Personal protective equipment including gloves and goggles
- Concrete Wash Water: Unless confined in a pre-defined, bermed containment area, the cleaning of concrete truck delivery chutes is prohibited at the job site. The discharge of water containing waste cement to the storm drainage system is prohibited.
- No Concrete Batch Plants are proposed at this site.
- Notification Procedures:
 - In the event of an accident or spill, the SWMP Administrator shall be notified as a minimum.
 - Depending on the nature of the spill material involved, the Colorado Department of Public Health and Environment (24-hour spill reporting line: 877-518-5608), downstream water users, or other agencies may also need to be notified.
 - Any spill of oil which 1) violates water quality standards, 2) produces a “sheen” on a surface water, or 3) causes a sludge or emulsion, or any hazardous substance release, or hazardous waste release which exceeds the reportable quantity, must be reported immediately by telephone to the National Response Center Hotline at (800)-424-8802.

5. Final Stabilization and Long-term Stormwater Management

1. Permanent seeding will be provided to achieve long-term stabilization of the site.
2. Seed Mix: “Foothills Mix” or approved equal.
3. Seeding Application Rate: Drill seed 0.25” to 0.5” into the soil. In small areas not accessible to a drill, hand broadcast at double the rate and rake 0.25” to 0.5” into the soil. Apply seed at the following rates:
 - Dryland: 20-25 lbs/acre
 - Irrigated: 40 lbs/acre
4. Soil Stabilization Practices:
 - Mulching Application: Apply 1-1/2 tons of certified weed free hay per acre mechanically crimped into the soil in combination with an organic mulch tackifier. On slopes and ditches requiring a blanket, the blanket shall be placed in lieu of mulch and mulch tackifier.
5. Soil Conditioning and Fertilizer Requirements:
 - Soil conditioner, organic amendment shall be applied to all seeded areas at 3 CY / 1000 SF.
 - Fertilizer shall consist of 90% fungal biomass (mycelium) and 10% potassium-magnesia with a grade of 6-1-3 or approved equal. Fertilizer shall be applied as recommended by seed supplier.
6. Final stabilization is reached when all soil-disturbing activities at the site have been completed, and uniform vegetative cover has been established with an individual plant density of at least 70 percent of pre-disturbance levels, or

equivalent permanent, physical erosion reduction methods have been employed.

6. Other Controls

- Contractor shall dispose of all waste materials at a permitted off-site disposal site.
- Vehicle tracking pads will be installed at all access points to limit off-site soil tracking.

7. Inspection and Maintenance

a. Inspection Schedules:

- Contractor shall inspect BMPs bi-weekly as a minimum, and immediately (within 24 hours) after any precipitation or snowmelt event that causes surface erosion (i.e. that results in stormwater running across the ground), to ensure that BMPs are maintained in effective operating condition.

b. Inspection Procedures:

1) Site Inspection / Observation Items:

- Construction site perimeter and discharge points (including discharges into a storm sewer system)
- All disturbed areas
- Areas used for material / waste storage that are exposed to precipitation
- Other areas having a significant potential for stormwater pollution, such as demolition areas or concrete washout locations, or locations where vehicles enter or leave the site
- Erosion and sediment control measures identified in the SWMP
- Any other structural BMPs that may require maintenance, such as secondary containment around fuel tanks, or the condition of spill response kits.

2) Inspection Requirements:

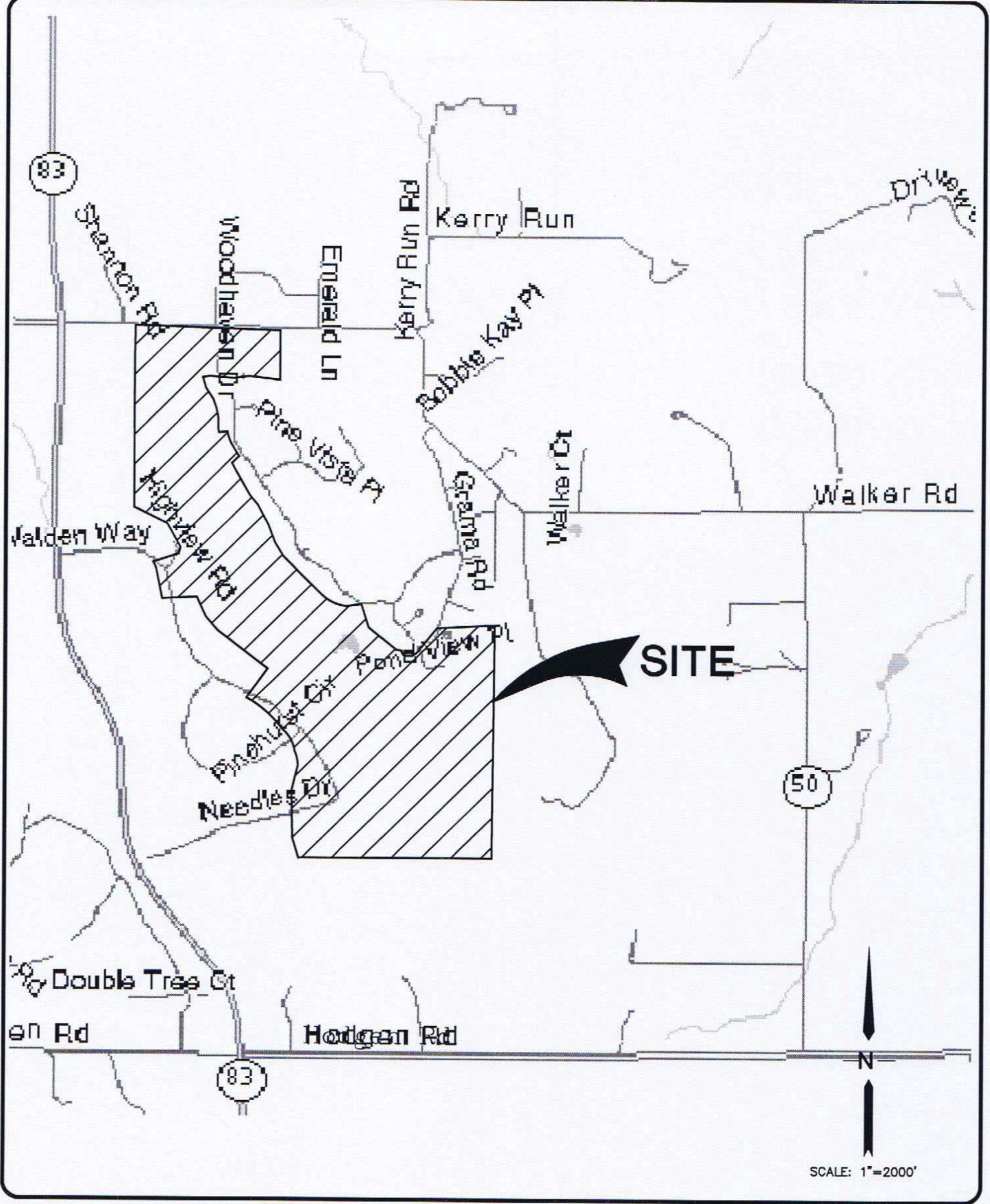
- Determine if there is any evidence of, or potential for, pollutants entering the drainage system.
- Review BMPs to determine if they still meet design and operational criteria in the SWMP, and if they continue to adequately control pollutants at the site.
- Upgrade and/or revise any BMPs not operating in accordance with the SWMP and update the SWMP to reflect any revisions.

c. BMP Maintenance / Replacement and Failed BMPs:

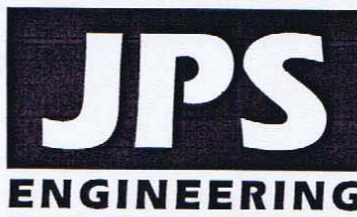
- Contractor shall remove sediment that has been collected by perimeter controls, such as silt fence and inlet protection, on a regular basis to prevent failure of BMPs, and remove potential of sediment from being discharged from the site in the event of BMP failure.

- Removed sediment must be moved to an appropriate location where it will not become an additional pollutant source and should never be placed in ditches or streams.
 - Contractor shall update Erosion Control Plans as required with any new BMPs added during the construction period.
 - Contractor shall address BMPs that have failed, or have the potential to fail without maintenance or modifications, as soon as possible, immediately in most cases, to prevent discharge of pollutants.
- d. Record Keeping and Documenting Inspections:
- Contractor shall maintain records of all inspection reports, including signed inspection logs, at the project site.
 - Permittee shall document inspection results and maintain a record of the results for a period of 3 years following expiration or inactivation of permit coverage.
 - Site inspection records shall include the following:
 - Inspection date
 - Name and title of personnel making the inspection
 - Location of discharges of sediment or other pollutants from the site
 - Location(s) of BMPs that need to be maintained
 - Location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location
 - Location(s) where additional BMPs are needed that were not in place at the time of inspection
 - Deviations from the minimum inspection schedule

J:\jsprojects\040201.walden PRESERVE 2\DWG\CIVIL\A1.dwg, 8/14/2014 2:51:45 PM



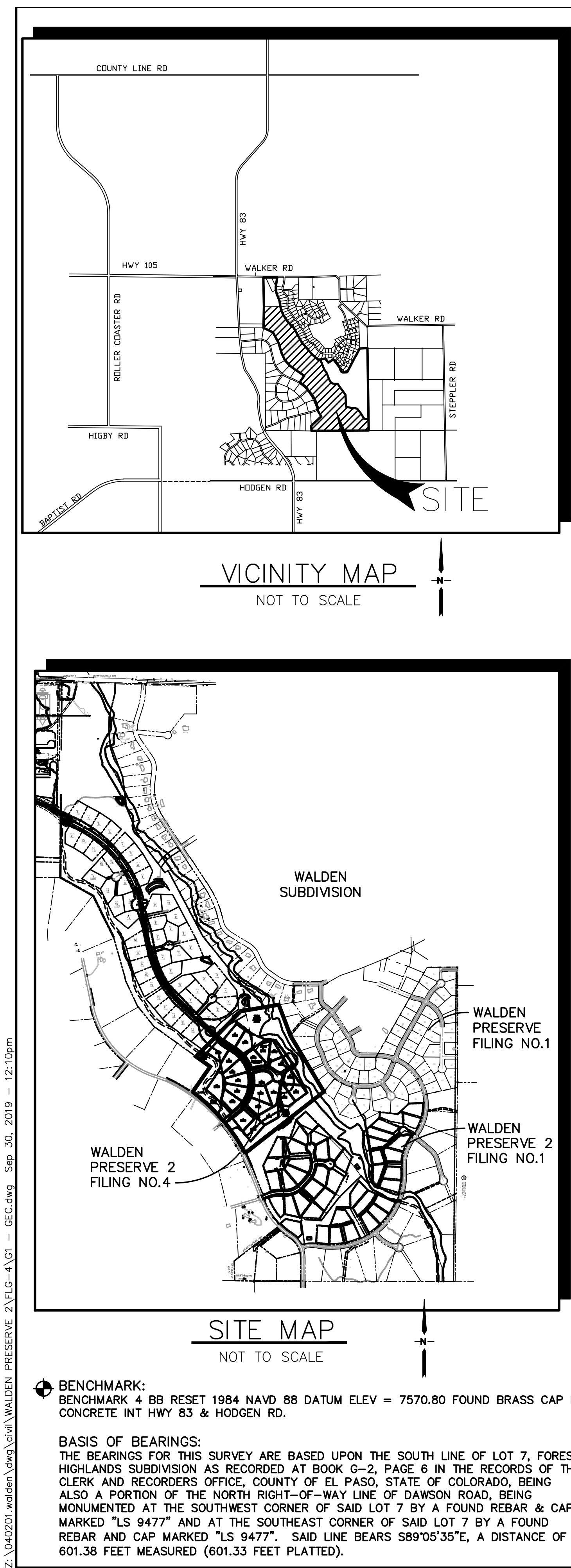
VICINITY MAP



WALDEN PRESERVE

FIGURE A1

JPS PROJ NO. 040201



WALDEN PRESERVE 2

Filing No. 4

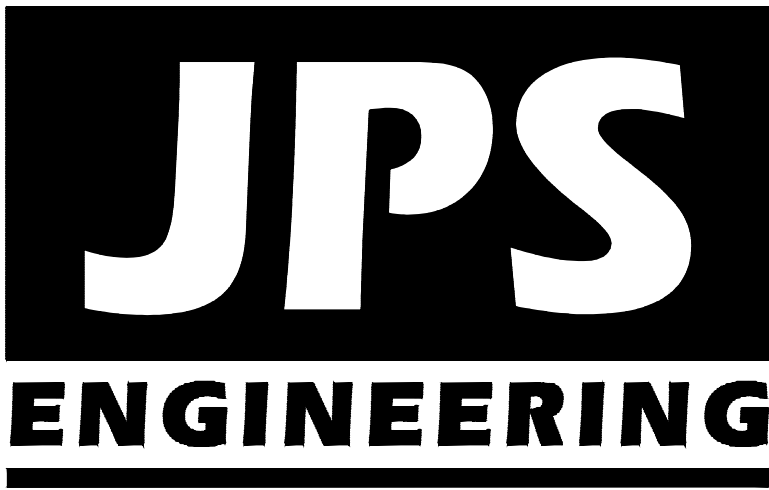
Grading & Erosion

Control Plans

El Paso County, Colorado

PREPARED FOR:
Custom Castles, Inc.
17145 Colonial Park Drive
Monument, CO 80132

PREPARED BY:



PREPARED BY:
19 East Willamette Avenue
Colorado Springs, Colorado 80903
September, 2019

AGENCIES/CONTACTS

DEVELOPER:	CUSTOM CASTLES, INC. 17145 COLONIAL PARK DRIVE MONUMENT, CO 80132 MR. BILL DUNSTON (719)243-1111	WATER/WASTEWATER:	WALDEN CORPORATION PO BOX 1870 MONUMENT, CO 80132 MR. MATT DUNSTON (719)339-2410
CIVIL ENGINEER:	JPS ENGINEERING, INC. 19 E. WILLAMETTE AVENUE COLORADO SPRINGS, CO 80903 MR. JOHN P. SCHWAB, P.E. (719)477-9429	GAS DEPARTMENT:	BLACK HILLS ENERGY MR. SEBASTIAN SCHWENDER (719)399-3176
LOCAL ROADS & DRAINAGE:	EL PASO COUNTY PCD 2880 INTERNATIONAL CIRCLE COLORADO SPRINGS, CO 80910 MR. GILBERT LAFORCE, P.E. (719)520-7945	ELECTRIC DEPARTMENT:	MOUNTAIN VIEW ELECTRIC ASSOCIATION 11140 E. WOODMEN ROAD COLORADO SPRINGS, CO 80908 MR. DAVE WALDNER (719)495-2283
STATE HIGHWAY	COLORADO DEPARTMENT OF TRANSPORTATION REGION 2 5615 WILLS BLVD. PUEBLO, CO 81008 MS. VALERIE SWORD (719)546-5407	TELEPHONE COMPANY:	CENTURY LINK COMMUNICATIONS (LOCATORS) (800)922-1987 A.T. & T. (LOCATORS) (719)635-3674

SHEET INDEX

G1	TITLE SHEET
G2	GENERAL NOTES & LEGEND
C1	OVERALL SITE PLAN
C1.1	SITE GRADING & EROSION CONTROL PLAN
C1.2	LOT GRADING NOTES & DETAILS
C2.1	ENLARGED SITE GRADING PLAN - SOUTH
C2.2	ENLARGED SITE GRADING PLAN - NORTH
C3.1	EROSION CONTROL NOTES
C3.2	EROSION CONTROL DETAILS
C4	RAIN GARDEN C2 PLAN & DETAILS
C5.1	POND B UPGRADE DETAILS
C5.2	POND B OUTLET STRUCTURE UPGRADE DETAILS
TY1	TYPICAL SECTIONS & DETAILS

ENGINEER:

DESIGN ENGINEER'S STATEMENT:

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED ROADWAY, DRAINAGE, GRADING AND EROSION CONTROL PLANS AND SPECIFICATIONS, AND SAID PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH APPLICABLE MASTER DRAINAGE PLANS AND MASTER TRANSPORTATION PLANS. SAID PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR ROADWAY AND DRAINAGE FACILITIES ARE DESIGNED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I ACCEPT RESPONSIBILITY FOR LIABILITY CAUSED BY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARATION OF THESE DETAILED PLANS AND SPECIFICATIONS.

JOHN P. SCHWAB, P.E. #29891

DATE

OWNER/DEVELOPER'S STATEMENT:

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH ALL OF THE REQUIREMENTS SPECIFIED IN THESE DETAILED PLANS AND SPECIFICATIONS.

DATE

CUSTOM CASTLES, INC.
17145 COLONIAL PARK DRIVE
MONUMENT, COLORADO 80132

EL PASO COUNTY:

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

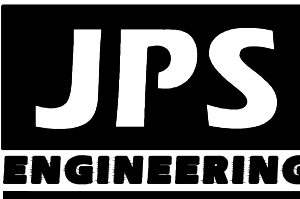
IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THEY WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTOR'S DISCRETION.

JENNIFER IRVINE, P.E.,
COUNTY ENGINEER / ECM ADMINISTRATOR

DATE

PCD FILE NO. SF-18-034

WALDEN PRESERVE 2 - FILING NO. 4



19 E. Willamette Ave.
Colorado Springs, CO
80903

PH: 719-477-9429
FAX: 719-471-0766
www.jpseng.com



CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL BEFORE YOU DIG
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES

REVISION	DATE	BY
COUNTY COMMENTS	2/26/19	JPS
COUNTY COMMENTS	5/15/19	JPS
COUNTY COMMENTS	7/10/19	JPS
COUNTY COMMENTS	8/30/19	JPS
COUNTY COMMENTS	9/30/19	JPS

TITLE SHEET

HORZ. SCALE:	HS	DRAWN:	BJJ
VERT. SCALE:	VS	DESIGNED:	JPS
SURVEYED:	PINNACLE	CHECKED:	JPS
CREATED:	1/05/18	LAST MODIFIED:	9/30/19
PROJECT NO:	040201	MODIFIED BY:	BJJ

SHEET:

G1

Z:\040201.walden\dwg\civil\WALDEN PRESERVE 2\PLG-4\G2.dwg May 16, 2019 -- 9:25am

COUNTY GENERAL NOTES:

1. ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD LOCATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, BEFORE BEGINNING CONSTRUCTION. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CALL 811 TO CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC).
3. CONTRACTOR SHALL KEEP A COPY OF THESE APPROVED PLANS, THE GRADING AND EROSION CONTROL PLAN, THE STORMWATER MANAGEMENT PLAN (SWMP), THE SOILS AND GEOTECHNICAL REPORT, AND THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES, INCLUDING THE FOLLOWING:
 - A. EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
 - B. CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2
 - C. COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
 - D. CDOT M & S STANDARDS
4. NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING. ANY MODIFICATIONS NECESSARY TO MEET CRITERIA AFTER-THE-FACT WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.
5. IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ACCURATELY SHOW EXISTING CONDITIONS, BOTH ONSITE AND OFFSITE, ON THE CONSTRUCTION PLANS. ANY MODIFICATIONS NECESSARY DUE TO CONFLICTS, OMISSIONS, OR CHANGED CONDITIONS WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.
6. CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT (PCD) – INSPECTIONS, PRIOR TO STARTING CONSTRUCTION.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES AND TO OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO EL PASO COUNTY EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP), REGIONAL BUILDING FLOODPLAIN DEVELOPMENT PERMIT, U.S. ARMY CORPS OF ENGINEERS–ISSUED 401 AND/OR 404 PERMITS, AND COUNTY AND STATE FUGITIVE DUST PERMITS.
8. CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE DESIGN ENGINEER AND DSD. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.
9. ALL STORM DRAIN PIPE SHALL BE CLASS III RCP WITH CLASS B BEDDING UNLESS OTHERWISE NOTED AND APPROVED BY PCD.
10. CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECM STANDARDS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY DSD PRIOR TO PLACEMENT OF CURB AND GUTTER AND PAVEMENT.
11. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
12. SIGHT VISIBILITY TRIANGLES AS IDENTIFIED IN THE PLANS SHALL BE PROVIDED AT ALL INTERSECTIONS. OBSTRUCTIONS GREATER THAN 18 INCHES ABOVE FLOWLINE ARE NOT ALLOWED WITHIN SIGHT TRIANGLES.
13. SIGNING AND STRIPING SHALL COMPLY WITH EL PASO DEPARTMENT OF PUBLIC WORKS (DPW) AND MUTCD CRITERIA.
14. CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO DEPARTMENT OF PUBLIC WORKS (DPW), INCLUDING WORK WITHIN THE RIGHT-OF-WAY AND SPECIAL TRANSPORT PERMITS.
15. THE LIMITS OF CONSTRUCTION SHALL REMAIN WITHIN THE PROPERTY LINE UNLESS OTHERWISE NOTED. THE OWNER/DEVELOPER SHALL OBTAIN WRITTEN PERMISSION AND EASEMENTS, WHERE REQUIRED, FROM ADJOINING PROPERTY OWNER(S) PRIOR TO ANY OFF-SITE DISTURBANCE, GRADING, OR CONSTRUCTION.

PROJECT GENERAL NOTES:

1. EXISTING CONTOUR DATA CONSISTS OF AERIAL TOPOGRAPHIC SURVEY DATA PROVIDED BY OWNER. JPS ENGINEERING TAKES NO RESPONSIBILITY FOR THE ACCURACY OF EXISTING TOPOGRAPHIC MAPPING.
2. STATIONING IS AT CENTERLINE UNLESS OTHERWISE NOTED. ALL ELEVATIONS ARE AT EDGE OF ASPHALT (EOA) UNLESS OTHERWISE NOTED. ALL DIMENSIONS ARE FROM EDGE OF ASPHALT TO EDGE OF ASPHALT UNLESS OTHERWISE NOTED.
3. PROPOSED CONTOURS SHOWN ARE TO FINISHED GRADE.
4. LENGTHS SHOWN FOR STORM SEWER PIPES ARE TO CENTER OF MANHOLE.
5. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, DEBRIS, WASTE AND OTHER UNSUITABLE FILL MATERIAL FOUND WITHIN THE LIMITS OF EXCAVATION.
6. MATCH INTO EXISTING GRADES AT 3:1 MAX CUT AND FILL SLOPES.
7. REVEGETATION OF ALL DISTURBED AREAS SHALL BE DONE WITH SPECIFIED SEED MIX WITHIN 60 DAYS AFTER FINE GRADING IS COMPLETE.
8. EROSION CONTROL SHALL CONSIST OF SILT FENCE AND BMP'S AS SHOWN ON THE DRAWING, AND TOPSOIL WITH GRASS SEED, WHICH WILL BE WATERED UNTIL VEGETATION HAS BEEN REESTABLISHED.
9. THE EROSION CONTROL MEASURES OUTLINED ON THIS PLAN ARE THE RESPONSIBILITY OF THE DEVELOPER TO MONITOR AND REPLACE, REGRADE, AND REBUILD AS NECESSARY UNTIL VEGETATION IS RE-ESTABLISHED.
10. EROSION CONTROL MEASURES SHALL BE IMPLEMENTED IN A MANNER THAT WILL PROTECT ADJACENT PROPERTIES AND PUBLIC FACILITIES FROM THE ADVERSE EFFECTS OF EROSION AND SEDIMENTATION AS A RESULT OF CONSTRUCTION AND EARTHWORK ACTIVITIES WITHIN THE PROJECT SITE.
11. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS DETERMINED BY SITE CONDITIONS.
12. THE CONTRACTOR WILL TAKE THE NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES FROM DAMAGE DUE TO THIS OPERATION. ANY DAMAGE TO THE UTILITIES WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, AND ANY SERVICE DISRUPTION WILL BE SETTLED BY THE CONTRACTOR.
13. ALL BACKFILL, SUB-BASE, AND/OR BASE COURSE MATERIAL SHALL BE COMPACTED PER EL PASO COUNTY AND CDOT STANDARDS AND SPECIFICATIONS.
14. ALL FINISHED GRADES SHALL HAVE A MINIMUM 1.0% SLOPE TO PROVIDE POSITIVE DRAINAGE.
15. IN CASE OF CONFLICT BETWEEN PROPOSED SLOPES AND PROPOSED SPOT ELEVATIONS, SPOT ELEVATIONS SHALL GOVERN.
16. CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO BEGINNING WORK.

GENERAL DRAINAGE NOTES:

1. INDIVIDUAL BUILDERS SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND ACCOUNT FOR POTENTIAL CROSS-LOT DRAINAGE IMPACTS WITHIN EACH LOT.
2. BUILDERS AND PROPERTY OWNERS SHALL IMPLEMENT & MAINTAIN EROSION CONTROL BEST MANAGEMENT PRACTICES FOR PROTECTION OF DOWNSTREAM PROPERTIES AND FACILITIES INCLUDING PROTECTION OF EXISTING GRASS BUFFER STRIPS ALONG THE DOWNSTREAM PROPERTY BOUNDARIES.
3. GRADING AND DRAINAGE WITHIN LOTS IS THE RESPONSIBILITY OF THE INDIVIDUAL BUILDERS AND PROPERTY OWNERS.

COUNTY SIGNING AND STRIPING NOTES:

1. ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN COMPLIANCE WITH THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
2. REMOVAL OF EXISTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY A METHOD THAT DOES NOT MATERIALLY DAMAGE THE PAVEMENT. THE PAVEMENT MARKINGS SHALL BE REMOVED TO THE EXTENT THAT THEY WILL NOT BE VISIBLE UNDER DAY OR NIGHT CONDITIONS. AT NO TIME WILL IT BE ACCEPTABLE TO PAINT OVER EXISTING PAVEMENT MARKINGS.
3. ANY DEVIATION FROM THE STRIPING AND SIGNING PLAN SHALL BE APPROVED BY EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT (PCD).
4. ALL SIGNS SHOWN ON THE SIGNING AND STRIPING PLAN SHALL BE NEW SIGNS. EXISTING SIGNS MAY REMAIN OR BE REUSED IF THEY MEET CURRENT EL PASO COUNTY AND MUTCD STANDARDS.
5. STREET NAME AND REGULATORY STOP SIGNS SHALL BE ON THE SAME POST AT INTERSECTIONS.
6. ALL REMOVED SIGNS SHALL BE DISPOSED OF IN A PROPER MANNER BY THE CONTRACTOR.
7. ALL STREET NAME SIGNS SHALL HAVE "D" SERIES LETTERS, WITH LOCAL ROADWAY SIGNS BEING 4" UPPER-LOWER CASE LETTERING ON 8" BLANK AND NON-LOCAL ROADWAY SIGNS BEING 6" LETTERING, UPPER-LOWER CASE ON 12" BLANK, WITH WHITE BORDER THAT IS NOT RECESSED. MULTI-LANE ROADWAYS WITH SPEED LIMITS OF 40 MPH OR HIGHER SHALL HAVE 8" UPPER-LOWER CASE LETTERING ON 18" BLANK WITH A WHITE BORDER THAT IS NOT RECESSED. THE WIDTH OF THE NON-RECESSED WHITE BORDERS SHALL MATCH PAGE 255 OF THE 2012 MUTCD "STANDARD HIGHWAY SIGNS".
8. ALL TRAFFIC SIGNS SHALL HAVE A MINIMUM HIGH INTENSITY PRISMATIC GRADE SHEETING.
9. ALL LOCAL RESIDENTIAL STREET SIGNS SHALL BE MOUNTED ON A 1.75" X 1.75" SQUARE TUBE SIGN POST AND STUB POST BASE. FOR OTHER APPLICATIONS, REFER TO THE CDOT STANDARD S-614-8 REGARDING USE OF THE P2 TUBULAR STEEL POST SLIPBASE DESIGN.
10. ALL SIGNS SHALL BE SINGLE SHEET ALUMINUM WITH 0.100" MINIMUM THICKNESS.
11. ALL LIMIT LINES/STOP LINES, CROSSWALK LINES, PAVEMENT LEGENDS, AND ARROWS SHALL BE A MINIMUM 125 MIL THICKNESS PREFORMED THERMOPLASTIC PAVEMENT MARKINGS WITH TAPERED LEADING EDGES PER CDOT STANDARD S-627-1. WORD AND SYMBOL MARKINGS SHALL BE THE NARROW TYPE. STOP BARS SHALL BE 24" IN WIDTH. CROSSWALKS LINES SHALL BE 12" WIDE AND 8" LONG PER CDOT S-627-1.
12. ALL LONGITUDINAL LINES SHALL BE A MINIMUM 15MIL THICKNESS EPOXY PAINT. ALL NON-LOCAL RESIDENTIAL ROADWAYS SHALL INCLUDE BOTH RIGHT AND LEFT EDGE LINE STRIPING AND ANY ADDITIONAL STRIPING AS REQUIRED BY CDOT S-627-1.
13. THE CONTRACTOR SHALL NOTIFY EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT (PCD) (719) 520-6819 PRIOR TO AND UPON COMPLETION OF SIGNING AND STRIPING.
14. THE CONTRACTOR SHALL OBTAIN A WORK IN THE RIGHT OF WAY PERMIT FROM THE EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS PRIOR TO ANY SIGNAGE OR STRIPING WORK WITHIN AN EXISTING EL PASO COUNTY ROADWAY.

DESIGN DATA		REFERENCE
ROAD CLASSIFICATION:	RURAL LOCAL	STANDARD
DESIGN SPEED:	30 MPH	ECM TABLE 2-5
POSTED SPEED:	30 MPH	ECM TABLE 2-5
ROADWAY WIDTH:	28' EOA-EOA	ECM FIGURE 2-8
MIN. HORIZONTAL RADIUS:	300'	ECM TABLE 2-5
MIN. GRADE:	1.0%	ECM TABLE 2-5
MAX. GRADE:	8.0%	ECM TABLE 2-5
MAX. CUL-DE-SAC GRADE	2.0%	ECM TABLE 2-31
MIN. K-VALUE (CREST):	19	ECM TABLE 2-12
MIN. K-VALUE (SAG):	37	ECM TABLE 2-14

LEGEND:

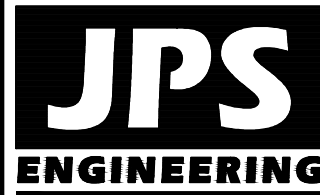
-----	NEW/EXISTING
-----	SECTION LINE -- NEW/EXISTING
-----	EASEMENT LINE -- NEW/EXISTING
6230	CONTOUR -- NEW/EXISTING
-----	PROPERTY LINE -- NEW/EXISTING
-----	FENCE -- NEW/EXISTING
-----	OVERHEAD ELECTRIC LINE W/ POWER POLE NEW/EXISTING
-----	UNDERGROUND ELECTRIC LINE NEW/EXISTING
-----	UNDERGROUND ELECTRIC -- NEW/EXISTING
-----	TELEPHONE -- NEW/EXISTING
-----	GAS -- NEW/EXISTING
-----	WATER -- NEW/EXISTING
-----	ECB -- DITCH LINING
▲	SECTION NUMBER
1 P1	SHEET ON WHICH SECTION IS SHOWN

WALDEN PRESERVE 2 - FILING NO. 4

GENERAL NOTES
& LEGEND

HORIZ. SCALE:	HS	DRAWN:	BJJ
VERT. SCALE:	VS	DESIGNED:	JPS
SURVEYED:	RAMPART	CHECKED:	JPS
CREATED:	9/05/18	LAST MODIFIED:	5/15/19
PROJECT NO:	040201	MODIFIED BY:	JPS

SHEET: G2



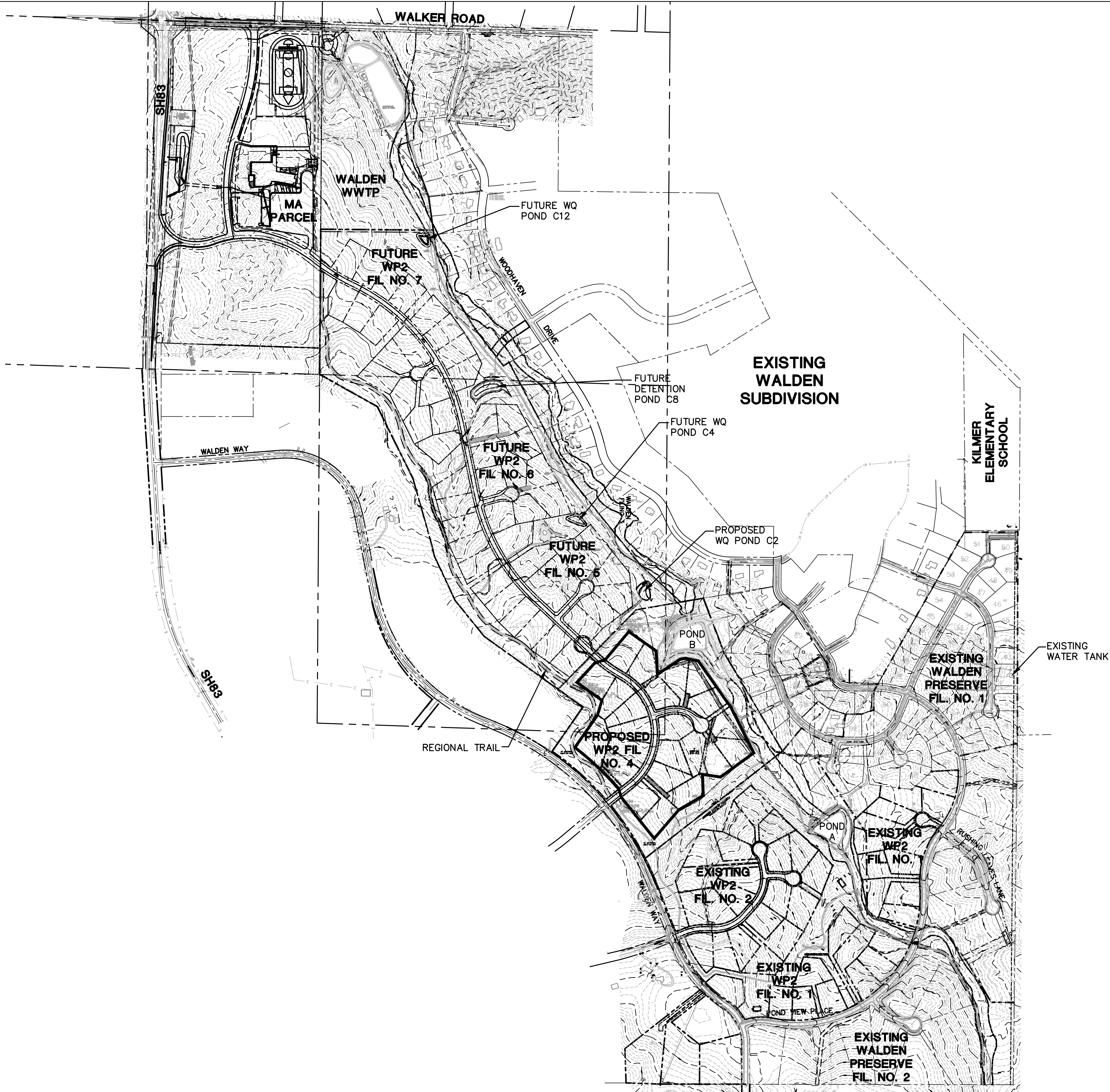
19 E. Willamette Ave.
Colorado Springs, CO
80903

PH: 719-477-9429
FAX: 719-471-0766
www.jpsengr.com



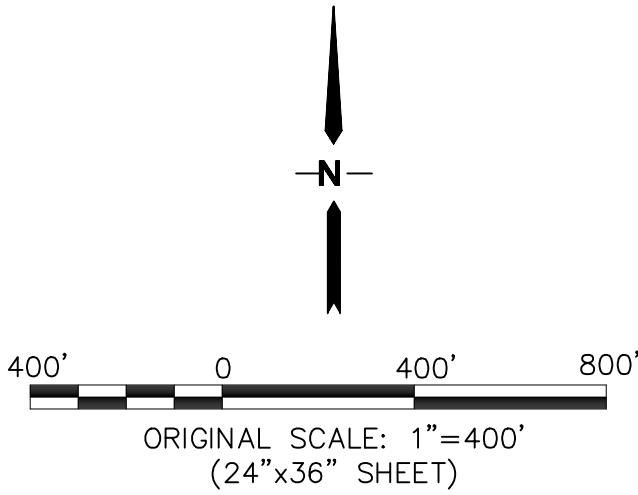
CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL 811 TO LOCATE UTILITIES
BEFORE YOU DIG GRADE OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES

Z:\040201\walden\dwg\civil\WALDEN PRESERVE 2\FLG-4\01.dwg May 16, 2019 - 12:39pm

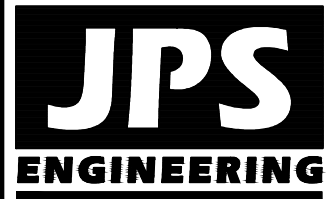


DRIVEWAY CULVERT TABLE	
FIL 4 LOT NO.	SIZE (D)
1	18"
2	18"
3	18"
4	18"
5	18"
6	18"
7	18"
8	42"
9	42"
10	42"
11	18"
12	18"
13	18"
14	18"
15	18"
16	18"
17	18"
18	18"
19	18"
20	18"
21	18"
22	18"
23	18"

NOTE: AT LOCATIONS WHERE ROADSIDE DITCHES ARE MINIMAL, DRIVEWAY CULVERTS MAY BE DELETED IN SOME CASES UPON FIELD REVIEW WITH COUNTY APPROVAL



WALDEN PRESERVE 2 - FILING NO. 4



19 E. Willamette Ave.
Colorado Springs, CO 80903
PH: 719-477-9429
FAX: 719-471-0766
www.jpsengr.com



CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL 2-48 HOURS BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

No.	REVISION	BY	DATE
1	DP SUBMITTAL	JPS	9/05/18
2	COUNTY COMMENTS	JPS	2/25/19
3	COUNTY COMMENTS	JPS	5/15/19

OVERALL SITE PLAN

HORZ. SCALE: 1"=400'	DRAWN: BJJ
VERT. SCALE: N/A	DESIGNED: JPS
SURVEYED:	CHECKED: JPS
CREATED: 10/05/17	LAST MODIFIED: 5/15/19
PROJECT NO: 040201	MODIFIED BY: BJJ

SHEET: C1

Z:\040201\walden\dwg\civil\WALDEN PRESERVE 2\PLG-4\CL1.dwg Aug 30, 2019 - 4:46pm

CONTROL MEASURE/BMP PHASING PLAN:

INITIAL CONTROL MEASURES:

- VTC AT SITE ACCESS
- SILT FENCE ALONG DOWNSTREAM GRADING LIMITS

INTERIM CONTROL MEASURES:

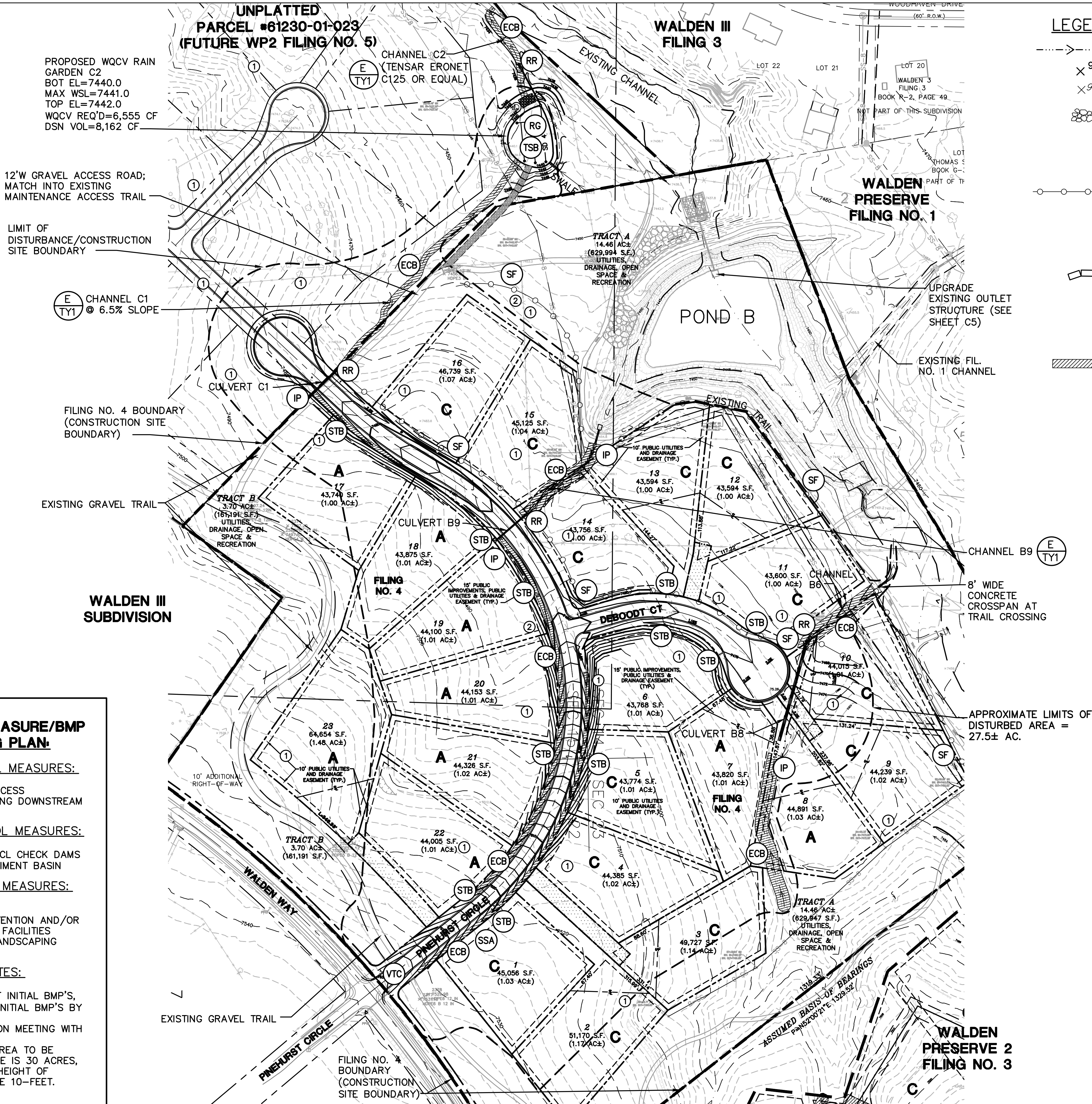
- STRAW BALES/SCL CHECK DAMS
- TEMPORARY SEDIMENT BASIN

FINAL CONTROL MEASURES:

- RIPRAP APRONS
- PERMANENT DETENTION AND/OR WATER QUALITY FACILITIES
- SEEDING AND LANDSCAPING

SEQUENCING NOTES:

- INSTALLATION OF INITIAL BMP'S,
- INSPECTION OF INITIAL BMP'S BY COUNTY STAFF,
- PRECONSTRUCTION MEETING WITH COUNTY STAFF,
- THE MAXIMUM AREA TO BE OPENED AT ANY TIME IS 30 ACRES, AND THE MAXIMUM HEIGHT OF STOCKPILES IS TO BE 10-FEET.



LEGEND:

- >---> FLOWLINE
X 99.00 PROPOSED SPOT ELEVATION (FLOWLINE)
X 95.10 EXISTING SPOT ELEVATION
- RR RIPRAP (10'L x 6'W x 2'D;
d₅₀=12" RR UNLESS
OTHERWISE NOTED)
- IP INLET PROTECTION
(GRAVEL FILTER)
- SF SILT FENCE
- VTC VEHICLE TRACKING CONTROL PAD
- TM TEMPORARY SEED AND MULCH
ON DISTURBED SLOPES
- STB STRAW BALE BARRIER @ 300' SPACING
IN ALL ROADSIDE DITCHES (TYP.) OR
SEDIMENT CONTROL LOGS
- SCL SEDIMENT CONTROL LOGS
- TSB TEMPORARY SEDIMENT BASIN
(SEE DETAILS ON SH. C3)
- ECB EROSION CONTROL BLANKET
(TENSAR ERONET SC150 OR
APPROVED EQUAL); UNLESS
NOTED OTHERWISE
- RG RAIN GARDEN
- SSA STABILIZED STAGING AREA
- A B C RECOMMENDED LOT
GRADING TYPES PER
SHEET C1.2

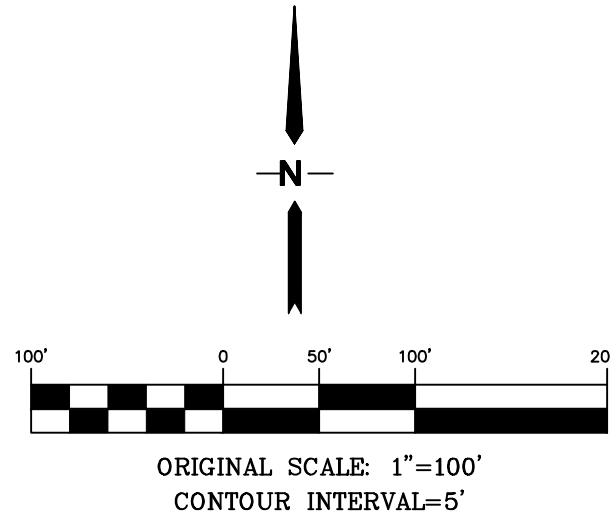
ESTIMATED EARTHWORK QUANTITY:

UNCLASSIFIED EXCAVATION (TOTAL CUT) = 14,069 CY
* EMBANKMENT FILL = 2,759 CY
NET (CUT) = 11,310 CY
* (ASSUMES 15% COMPACTION FACTOR)

NOTE: THIS ESTIMATE IS PROVIDED FOR INFORMATION ONLY, REPRESENTING THE CALCULATED BULK EARTHWORK VOLUME TO FINISHED GRADE, EXCLUDING ANY ADJUSTMENT FOR PAVEMENT DEPTHS, ETC. CONTRACTOR SHALL MAKE HIS OWN DETERMINATION OF EARTHWORK QUANTITIES AS BASIS FOR BID PRICING AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

KEYED NOTES:

- CONTRACTOR MAY WASTE EXCESS CUT MATERIAL OR BORROW SUITABLE FILL MATERIAL FROM THIS AREA. MATCH INTO EXISTING GRADES WITH 3:1 MAX CUT AND FILL SLOPES AND MAINTAIN POSITIVE DRAINAGE IN ALL AREAS.
- TOPSOIL STOCKPILE AREA



BENCHMARK:
BENCHMARK 4 BB RESET 1984 NAVD
88 DATUM ELEV.=7570.80 FOUND
BRASS CAP IN CONCRETE INT HWY 83
& HODGEN RD.

NOTE:
REFER TO LOT GRADING NOTES & DETAILS ON SHEET C1.2

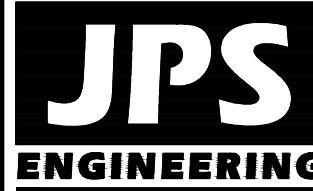
WALDEN PRESERVE 2 - FILING NO. 4

SITE GRADING & EROSION CONTROL PLAN

HORZ. SCALE: 1"=100'	DRAWN: RMD
VERT. SCALE: N/A	DESIGNED: JPS
SURVEYED: RAMPART	CHECKED: JPS
CREATED: 7/03/14	LAST MODIFIED: 8/30/19
PROJECT NO: 040201	MODIFIED BY: BJJ

SHEET:

C1.1



19 E. Willamette Ave.
Colorado Springs, CO
80903

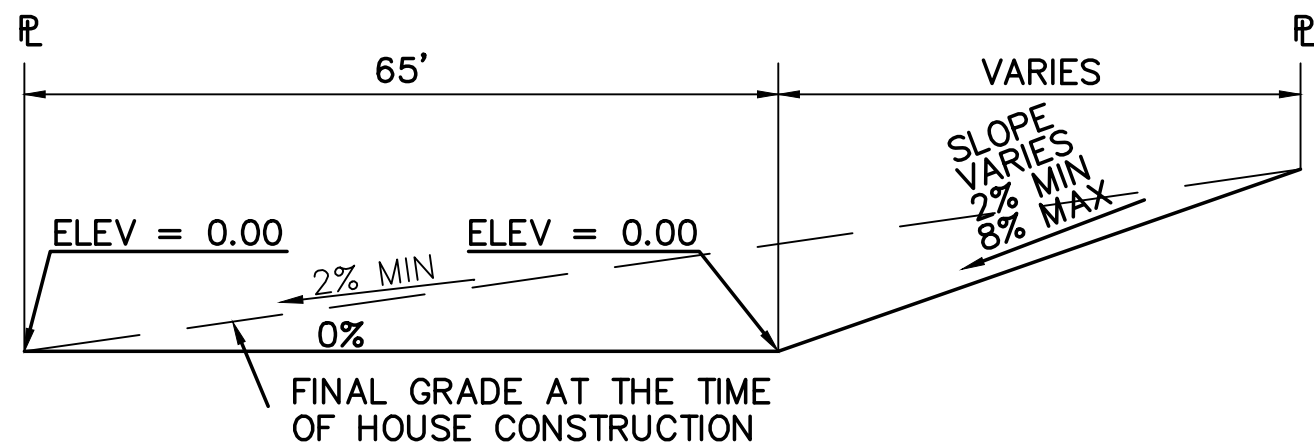
PH: 719-477-9429
FAX: 719-471-0766
www.jpsengr.com



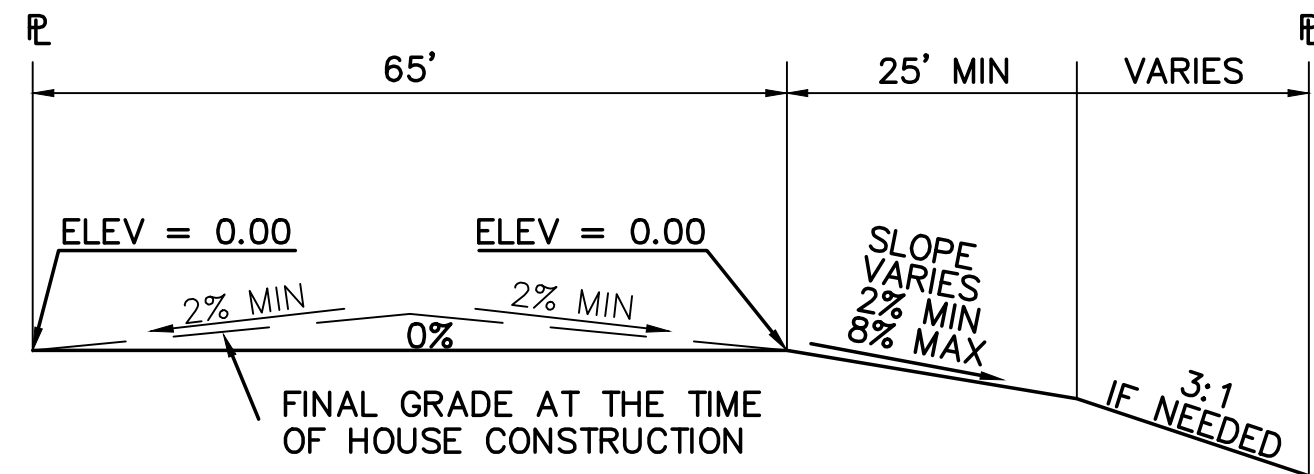
CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL 24 HOURS BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

REVISION	DATE	BY
FINAL PLAT SUBMITTAL	9/05/18	JPS
COUNTY COMMENTS	2/25/19	JPS
COUNTY COMMENTS	5/15/19	JPS
COUNTY COMMENTS	7/11/19	JPS
COUNTY COMMENTS	8/30/19	JPS

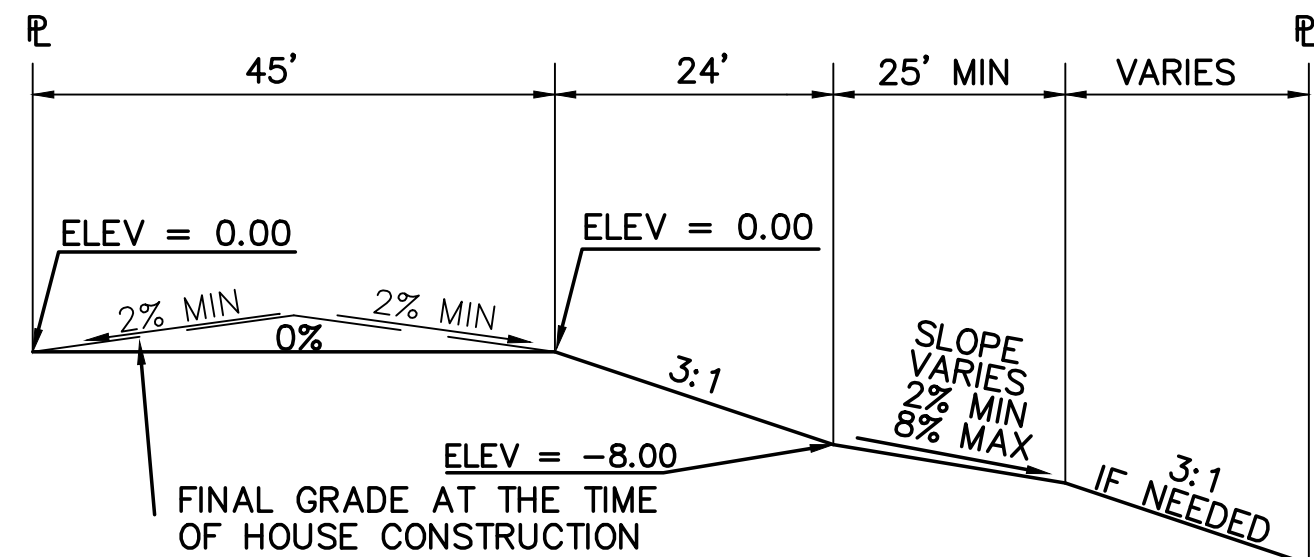
Z:\040201.walden\dwg\civil\WALDEN PRESERVE 2\PLG-4\C1.2.dwg Feb 18, 2019 -- 1:28pm



TYPICAL "A" LOT
SCALE: 1"=20'



TYPICAL "B" LOT
SCALE: 1"=20'



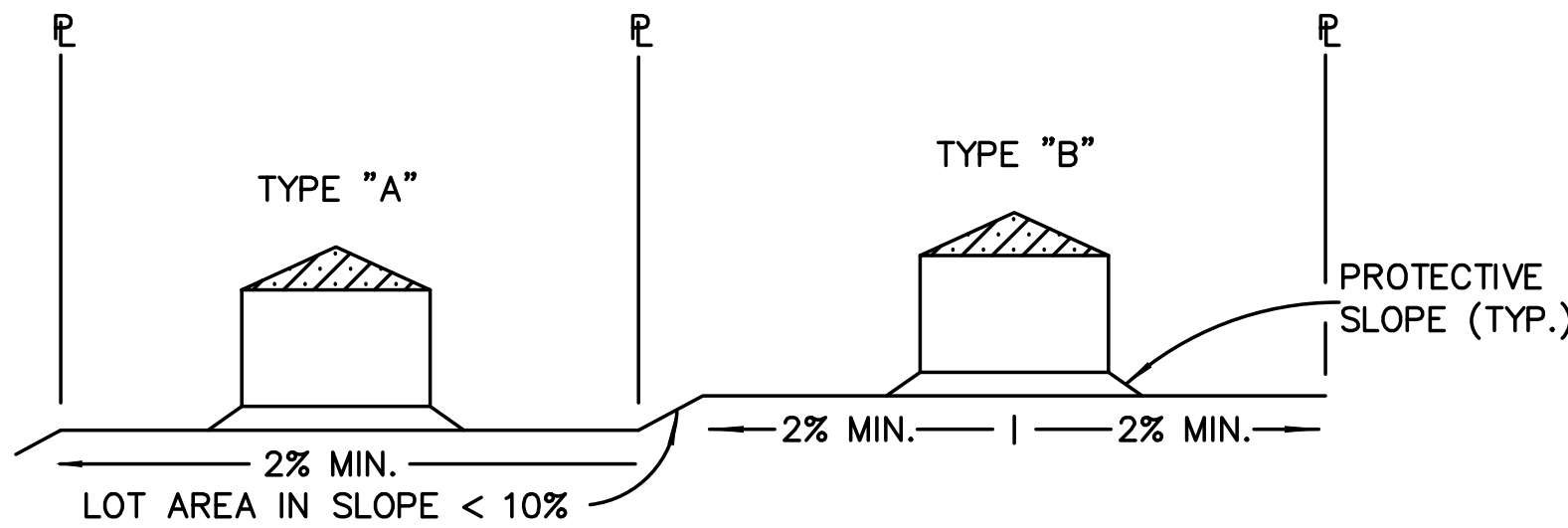
TYPICAL "WALK-OUT" LOT - "C" LOT
SCALE: 1"=20'

OVERLOT GRADING NOTE:

WHILE SIGNIFICANT OVERLOT GRADING IS NOT PLANNED AS PART OF THIS SUBDIVISION DEVELOPMENT, SELECTED LOTS MAY BE GRADED PER THE RECOMMENDED LOT TYPES AS NOTED ON SH. C1.1 TO ASSIST IN BALANCING EARTHWORK ON SITE.

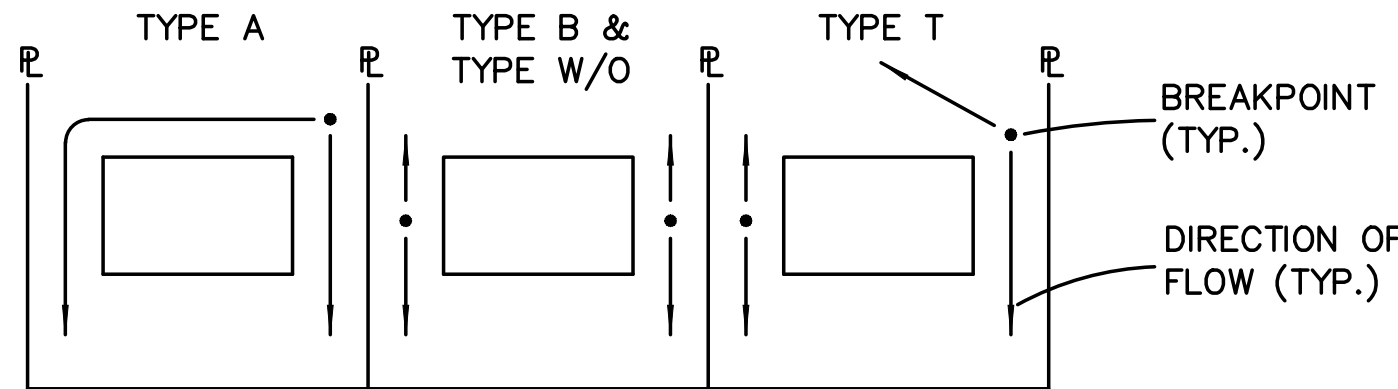
NOTES:

1. LOT GRADING & DRAINAGE IS THE RESPONSIBILITY OF THE INDIVIDUAL LOT BUILDERS & OWNERS.
2. INDIVIDUAL BUILDERS SHALL PROVIDE POSITIVE DRAINAGE WITHIN EACH LOT AND ACCOUNT FOR POTENTIAL CROSS-LOT DRAINAGE ON DOWNGRADIENT LOTS.
3. FINAL GRADING TO COMPLY WITH H.U.D. STANDARDS CONTAINED IN SECTION 310 AND 602 OF THE MINIMUM PROPERTY STANDARDS (MPS) 4900.1, HANDBOOK 4140.3 CHG (DATA SHEET 79g), IF APPLICABLE, AND ALL LEGAL STANDARDS.

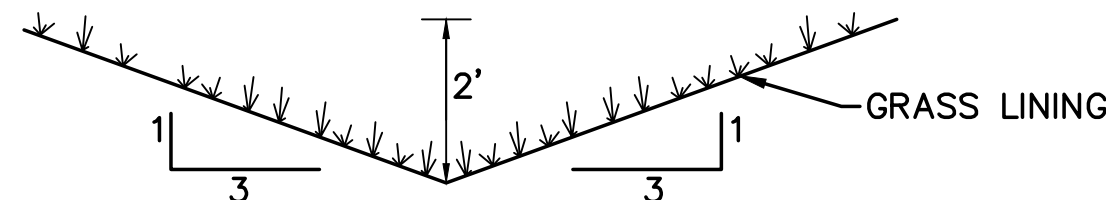


TYPICAL LOT SECTION DETAIL
N.T.S.

NOTE:
FINAL GRADING TO COMPLY WITH H.U.D. STANDARDS CONTAINED IN SECTION 310 AND 602 OF THE MINIMUM PROPERTY STANDARDS (MPS) 4900.1, HANDBOOK 4140.3 CHG (DATA SHEET 79g), IF APPLICABLE, AND ALL LEGAL STANDARDS.

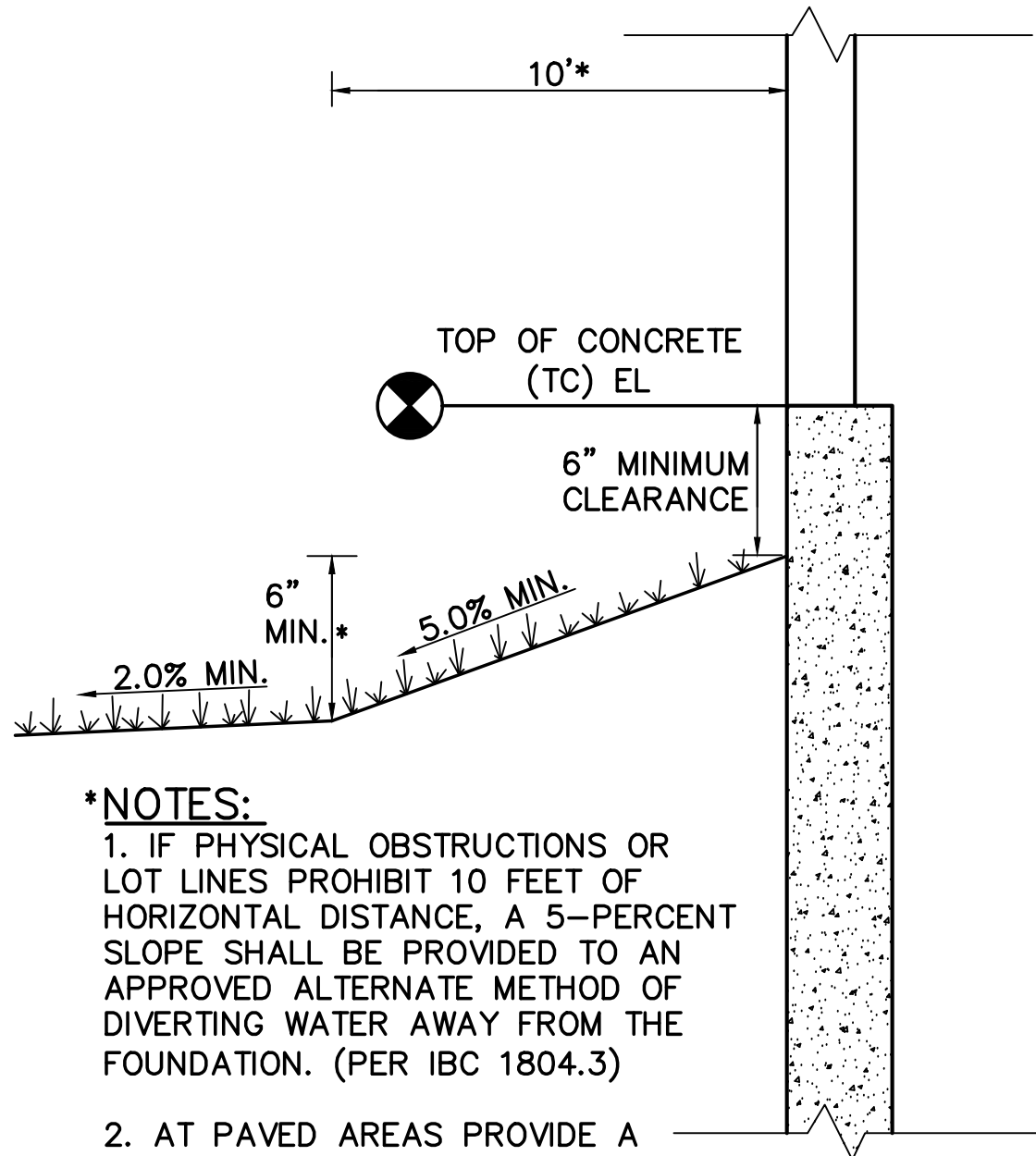


LOT DRAINAGE TYPES
N.T.S.



TYPICAL SIDE/REAR LOT SWALE (A)
N.T.S.

NOTE: BUILDERS AND OWNERS SHALL MAINTAIN PROPER PROTECTIVE SLOPES & SIDE/REAR LOT SWALES DURING AND AFTER HOME CONSTRUCTION.



*NOTES:
1. IF PHYSICAL OBSTRUCTIONS OR LOT LINES PROHIBIT 10 FEET OF HORIZONTAL DISTANCE, A 5-PERCENT SLOPE SHALL BE PROVIDED TO AN APPROVED ALTERNATE METHOD OF DIVERTING WATER AWAY FROM THE FOUNDATION. (PER IBC 1804.3)

2. AT PAVED AREAS PROVIDE A MINIMUM 2.0% SLOPE AWAY FROM THE BUILDING FOR THE FIRST 10 FEET OF HORIZONTAL DISTANCE.

TYPICAL BUILDING DRAINAGE DETAIL (B)
N.T.S.

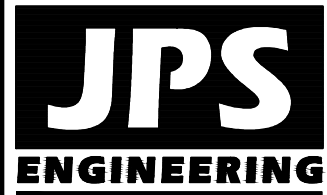
WALDEN PRESERVE 2 - FILING NO. 4

LOT GRADING NOTES
& DETAILS

HORZ. SCALE:	N/A	DRAWN:	BJJ
VERT. SCALE:	N/A	DESIGNED:	JPS
SURVEYED:	RAMPART	CHECKED:	JPS
CREATED:	10/21/14	LAST MODIFIED:	2/15/19
PROJECT NO:	040201	MODIFIED BY:	BJJ

SHEET:

C1.2



19 E. Willamette Ave.
Colorado Springs, CO
80903

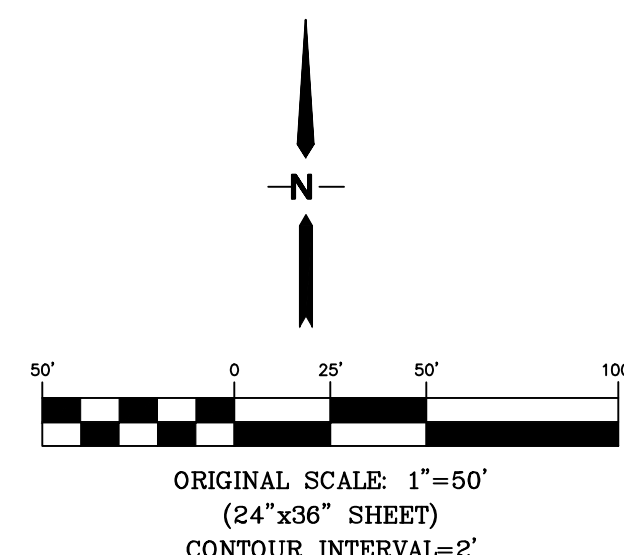
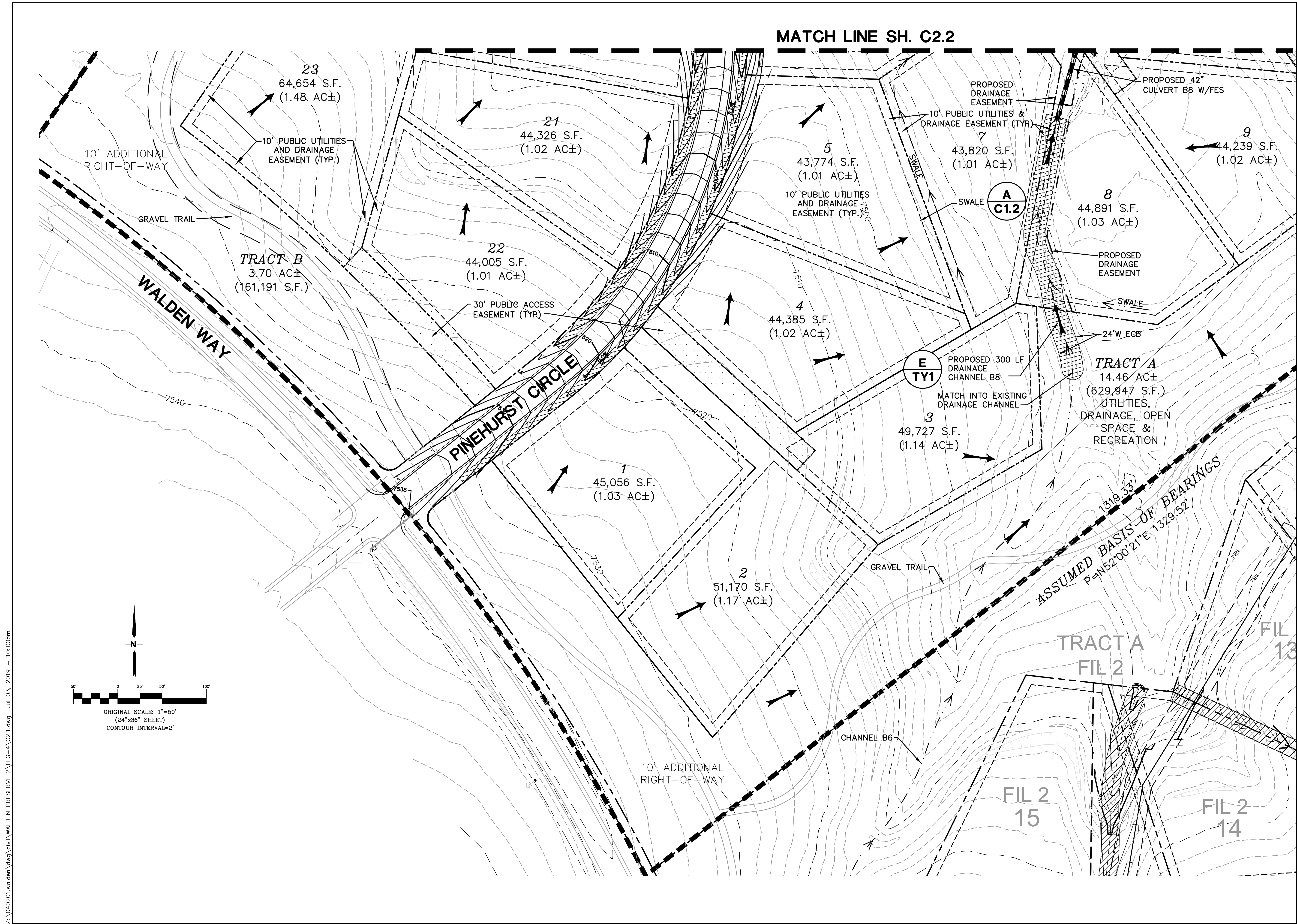
PH: 719-477-9429
FAX: 719-471-0766
www.jpsengr.com



CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL OR VISIT US IN ADVANCE
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES

No.	REVISION	BY	DATE
A	FINAL PLAT SUBMITTAL	JPS	9/05/18
A	COUNTY COMMENTS	JPS	2/15/19

Z:\040201\walden\dwg\civil\WALDEN PRESERVE 2\FILG-4\C2.1.dwg Jul 03, 2019 - 10:00am




WALDEN PRESERVE 2 - FILING NO. 4

ENLARGED SITE GRADING PLAN - SOUTH

JPS
ENGINEERING

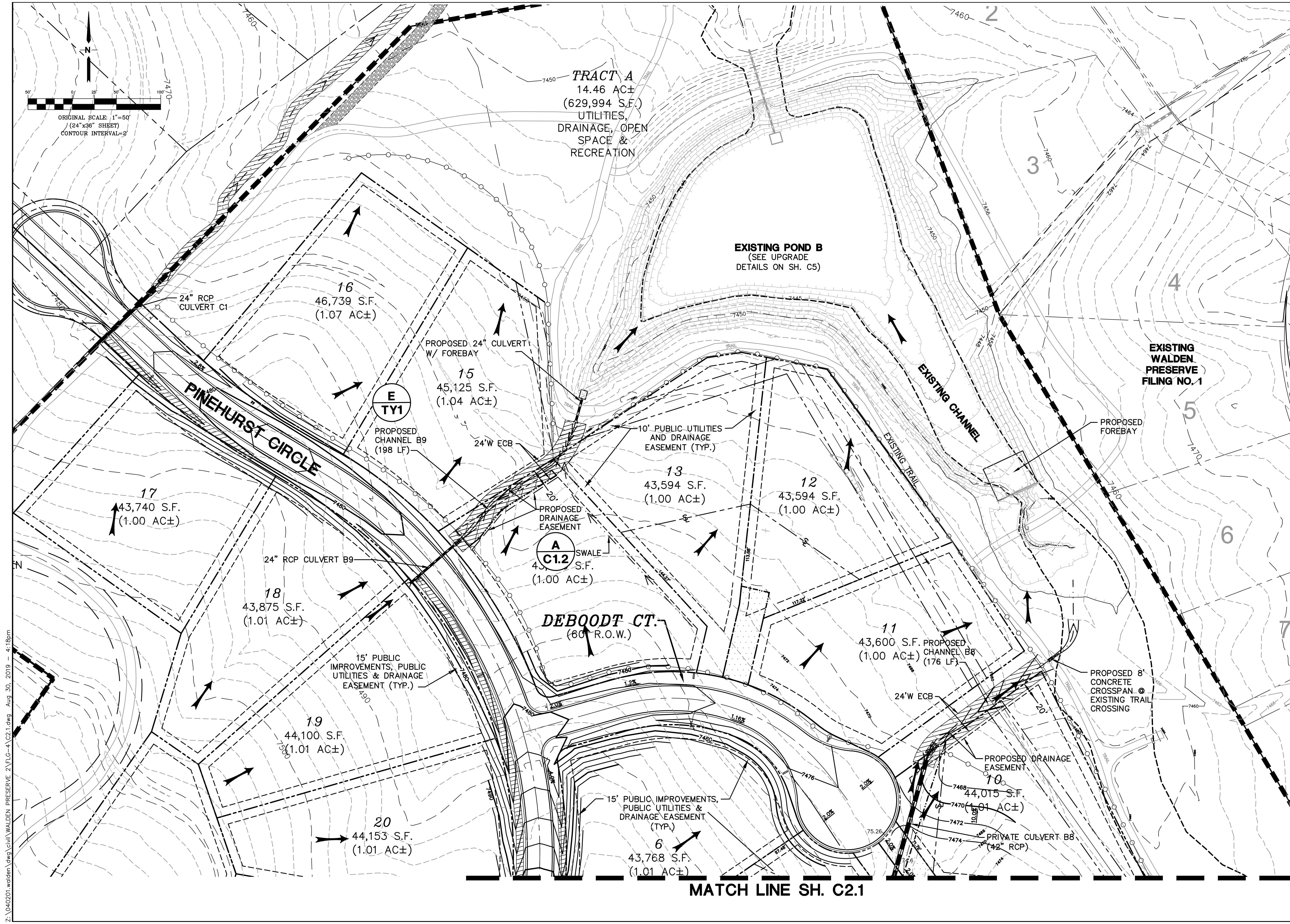
19 E. Willamette Ave.
Colorado Springs, CO
80903

PH: 719-477-9429
FAX: 719-471-0766
www.jpsengr.com


CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL OR VISIT US IN ADVANCE
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES

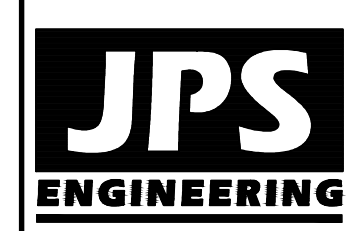
No.	REVISION	DATE	BY
1	FINAL PLAT SUBMITTAL	9/05/18	JPS
2	COUNTY COMMENTS	2/25/19	JPS
3	COUNTY COMMENTS	5/15/19	JPS
4	COUNTY COMMENTS	7/03/19	JPS

HORZ. SCALE: 1"=50'	DRAWN: RMD
VERT. SCALE: N/A	DESIGNED: JPS
SURVEYED: RAMPART	CHECKED: JPS
CREATED: 8/14/14	LAST MODIFIED: 03/19
PROJECT NO: 040201	MODIFIED BY: BJJ
SHEET:	C2.1



WALDEN PRESERVE 2 - FILING NO. 4

ENLARGED SITE
GRADING PLAN - NORTH



19 E. Willamette Ave.
Colorado Springs, CO
80903
PH: 719-477-9429
FAX: 719-471-0766
www.jpsengr.com



CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL 3 DAYS BEFORE ANY EXCAVATION
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES

BY	DATE	REVISION
JPS	9/05/18	FINAL PLAT SUBMITTAL
JPS	2/25/19	COUNTY COMMENTS
JPS	5/15/19	COUNTY COMMENTS
JPS	8/30/19	COUNTY COMMENTS

HORZ. SCALE: 1"=50'	DRAWN: RMD
VERT. SCALE: N/A	DESIGNED: JPS
SURVEYED: RAMPART	CHECKED: JPS
CREATED: 8/14/14	LAST MODIFIED: 8/30/19
PROJECT NO: 040201	MODIFIED BY: BJJ
SHEET:	C2.2

Z:\040201\walden\dwg\civil\walden preserve 2\PLG-4\c2.1.dwg Aug 30, 2019 - 4:18pm

Z:\040201.walden\dwg\civil\WALDEN PRESERVE 2\PLG-4\C3.1.dwg Aug 30, 2019 - 4:12pm

STANDARD NOTES FOR EL PASO COUNTY GRADING AND EROSION CONTROL PLANS:

REVISED 7/02/19

1. STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFF-SITE WATERS, INCLUDING WETLANDS.
2. NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.
3. A SEPARATE STORMWATER MANAGEMENT PLAN (SMWP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. MANAGEMENT OF THE SWMP DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR. THE SWMP SHALL BE LOCATED ON SITE AT ALL TIMES DURING CONSTRUCTION AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
4. ONCE THE ESQCP IS APPROVED AND A "NOTICE TO PROCEED" HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE APPROVED GEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY STAFF.
5. CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES THAT COULD CONTRIBUTE POLLUTANTS TO STORMWATER. CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, AND DISTURBED LAND AREAS SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF THE DISTURBANCE.
6. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REMAIN IN EFFECTIVE OPERATING CONDITION UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND FINAL STABILIZATION IS ESTABLISHED. ALL PERSONS ENGAGED IN LAND DISTURBANCE ACTIVITIES SHALL ASSESS THE ADEQUACY OF CONTROL MEASURES AT THE SITE AND IDENTIFY IF CHANGES TO THOSE CONTROL MEASURES ARE NEEDED TO ENSURE THE CONTINUED EFFECTIVE PERFORMANCE OF THE CONTROL MEASURES. ALL CHANGES TO TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES MUST BE INCORPORATED INTO THE STORMWATER MANAGEMENT PLAN.
7. TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED OR TEMPORARILY CEASED FOR LONGER THAN 14 DAYS.
8. FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND DISTURBING ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL PLANT DENSITY OF 70 PERCENT OF PRE-DISTURBANCE LEVELS ESTABLISHED OR EQUIVALENT PERMANENT ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE.
9. ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DESIGNED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT AFFECT THE DESIGN OR FUNCTION OF PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE ECM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
10. EARTH DISTURBANCES SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME. PRE-EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 HORIZONTAL FEET OF A WATERS OF THE STATE UNLESS SHOWN TO BE INFEASIBLE AND SPECIFICALLY REQUESTED AND APPROVED.
11. COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED. IF COMPACTION PREVENTION IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, ALL AREAS DESIGNATED FOR INFILTRATION AND VEGETATION CONTROL MEASURES MUST BE LOOSENEED PRIOR TO INSTALLATION OF THE CONTROL MEASURE(S).
12. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF SITE.
13. CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO ENTER STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES. CONCRETE WASHOUTS SHALL NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT, OR WITHIN 50 FEET OF A SURFACE WATER BODY, CREEK OR STREAM.
14. DURING DEWATERING OPERATIONS OF UNCONTAMINATED GROUND WATER MAY BE DISCHARGED ON SITE, BUT SHALL NOT LEAVE THE SITE IN THE FORM OF SURFACE RUNOFF UNLESS AN APPROVED STATE DEWATERING PERMIT IS IN PLACE.
15. EROSION CONTROL BLANKETING OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE.
17. WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. CONTROL MEASURES MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
18. TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF-SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
19. THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, SOIL, AND SAND THAT MAY ACCUMULATE IN ROADS, STORM DRAINS AND OTHER DRAINAGE CONVEYANCE SYSTEMS AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
20. THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABELS.
21. NO CHEMICAL(S) HAVING THE POTENTIAL TO BE RELEASED IN STORMWATER ARE TO BE STORED OR USED ONSITE UNLESS PERMISSION FOR THE USE OF SUCH CHEMICAL(S) IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING APPROVAL FOR THE USE OF SUCH CHEMICAL(S), SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
22. BULK STORAGE OF ALLOWED PETROLEUM PRODUCTS OR OTHER ALLOWED LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL REQUIRE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS ONSITE AND TO PREVENT ANY SPILLED MATERIALS FROM ENTERING STATE WATERS, ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR OTHER FACILITIES.
23. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER OR DITCH EXCEPT WITH APPROVED SEDIMENT CONTROL MEASURES.
24. OWNER/DEVELOPER AND THEIR AGENTS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS), AND THE "CLEAN WATER ACT" (33 USC 1344), IN ADDITION TO THE REQUIREMENTS OF THE LAND DEVELOPMENT CODE, DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (1041, NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND OTHER LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, LOCAL, OR COUNTY AGENCIES, THE MOST RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
25. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE ONLY AT APPROVED CONSTRUCTION ACCESS POINTS.
26. PRIOR TO CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
27. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND SHALL BE UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
28. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY KUMAR & ASSOC., DATED 2/25/19 AND SHALL BE CONSIDERED A PART OF THESE PLANS.
29. AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB ONE (1) ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
WATER QUALITY CONTROL DIVISION
WOOD - PERMITS
4300 CHERRY CREEK DRIVE SOUTH
DENVER, CO 80246-1530
ATTN: PERMITS UNIT

SEEDING MIX:

GRASS	VARIETY	AMOUNT IN PLS	
		LBS. PER ACRE	
CRESTED WHEAT GRASS	EPHRAIM OR HYCREST	4.0 LBS.	
PERENIAL RYE	LINN	2.0 LBS.	
WESTERN WHEATGRASS	SARTON	3.0 LBS.	
SMOOTH BROME GRASS	LINCOLN OR MANCHAR	5.0 LBS.	
SIDEOATS GRAMA	EPHRAIM	2.5 LBS.	
TOTAL:		16.5 LBS.	

SEEDING & FERTILIZER APPLICATION: DRILL SEED OR
HYDRO-SEED PER
CDOT SPEC. SECTION 212.

MULCHING APPLICATION: CONFORM TO CDOT
SPEC-SECTION 213.

ESTIMATED TIME SCHEDULE:

INSTALL BMP'S	OCTOBER, 2019
GRADING START	OCTOBER, 2019
GRADING COMPLETION	APRIL, 2020
SEEDING & MULCHING	APRIL, 2020
STABILIZATION	AUGUST, 2021

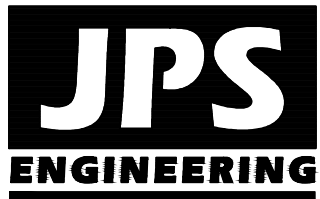
SEDIMENT CONTROL MAINTENANCE PROGRAM:

	FREQUENCY
PERIODIC SITE INSPECTIONS	BI-WEEKLY
RE-VEGETATION OF EXPOSED SOILS	WITHIN 21 DAYS OF GRADING
SEDIMENT REMOVAL FROM BMP'S	MONTHLY
REMOVAL OF BMP'S	AFTER STABILIZATION ACHIEVED

¹ AND AFTER ANY PRECIPITATION OR SNOW MELT EVENT THAT CAUSES SURFACE EROSION.

² ACCUMULATED SEDIMENT AND DEBRIS SHALL BE REMOVED WHEN THE SEDIMENT LEVEL REACHES ONE HALF THE HEIGHT OF THE BMP OR AT ANY TIME THAT SEDIMENT OR DEBRIS ADVERSELY IMPACTS THE FUNCTION OF THE BMP.

WALDEN PRESERVE 2 - FILING NO. 4



19 E. Willamette Ave.
Colorado Springs, CO
80903

PH: 719-477-9429
FAX: 719-471-0766
www.jpsengr.com



CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL BEFORE YOU DIG
BEFORE YOU DIG OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES.

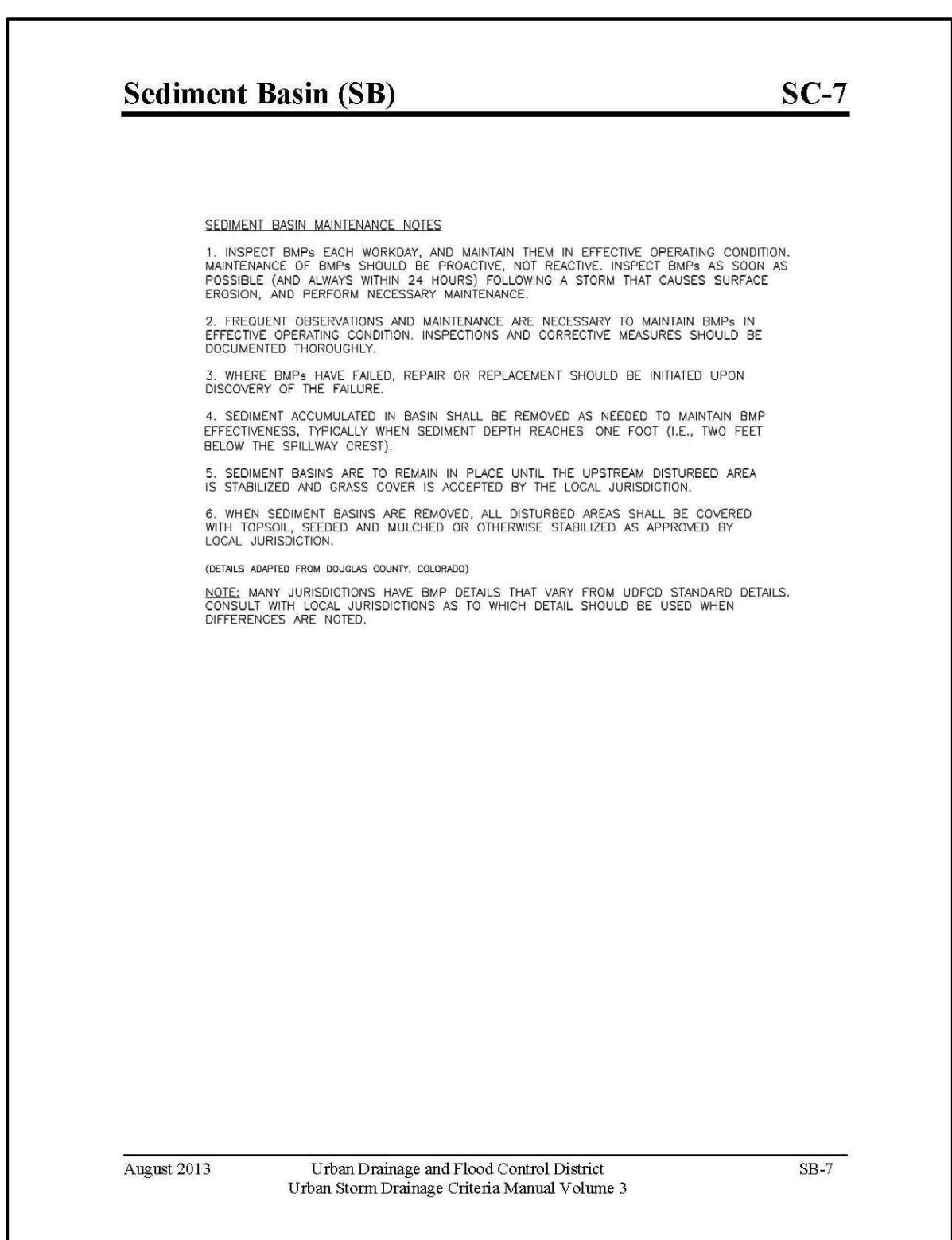
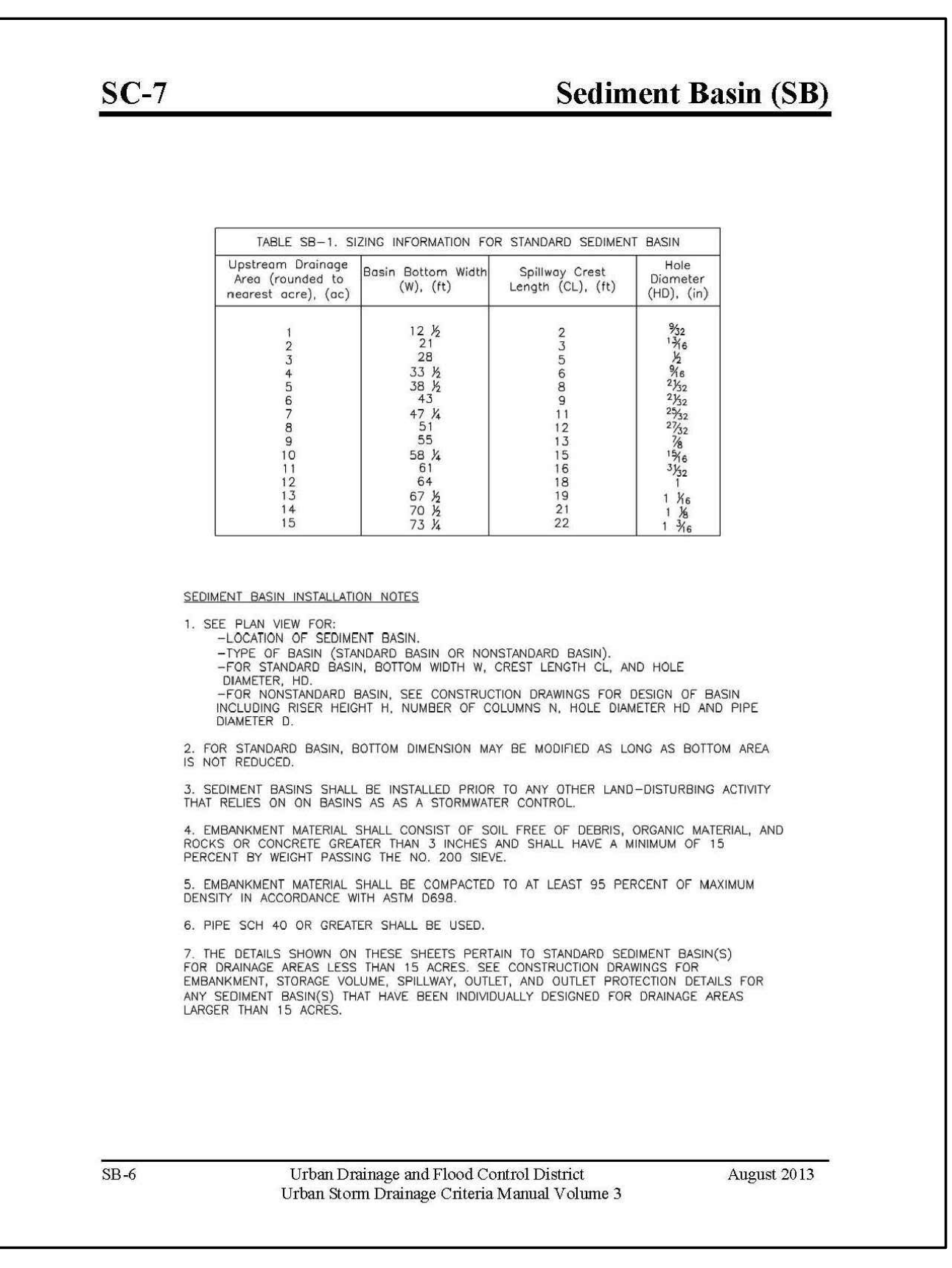
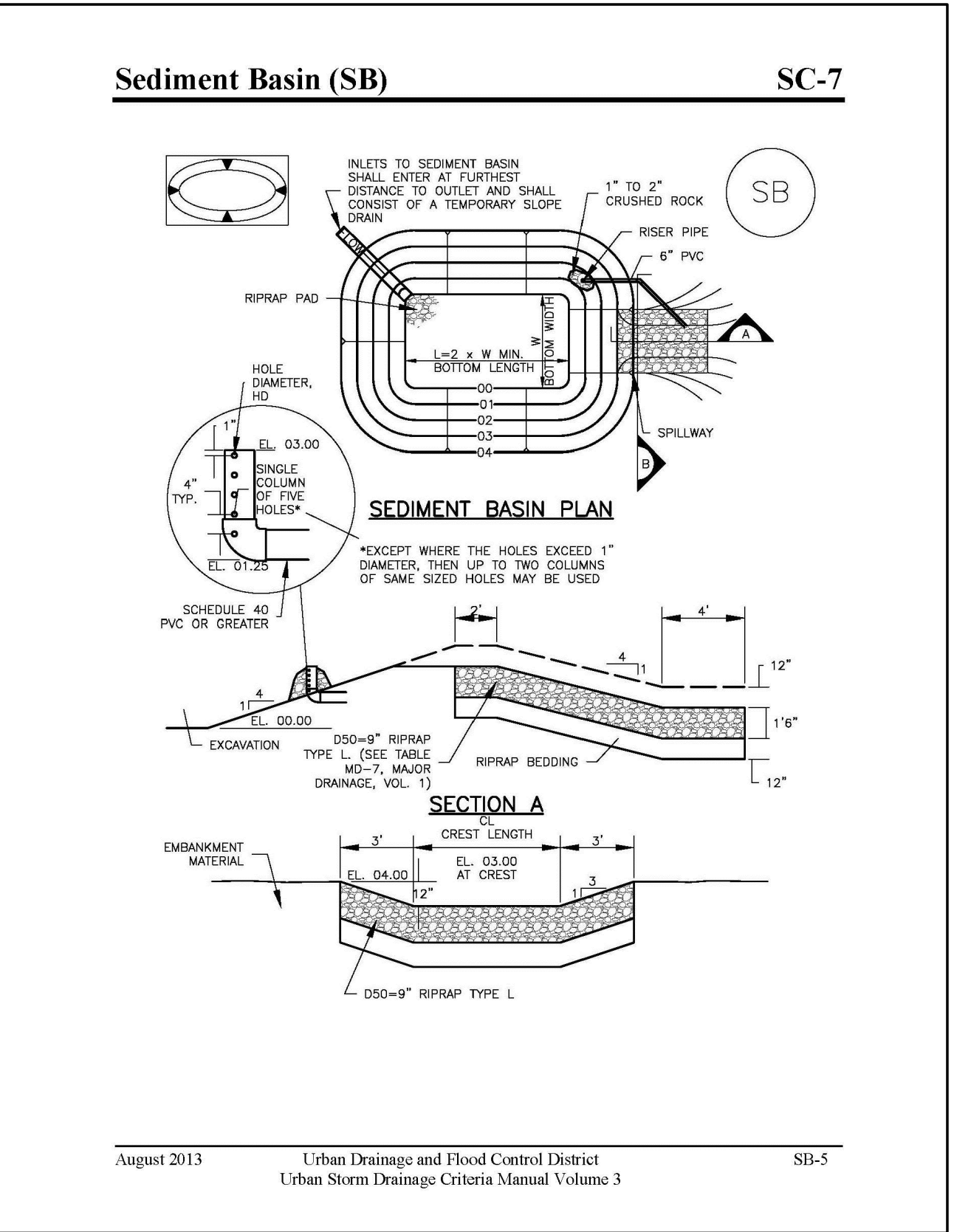
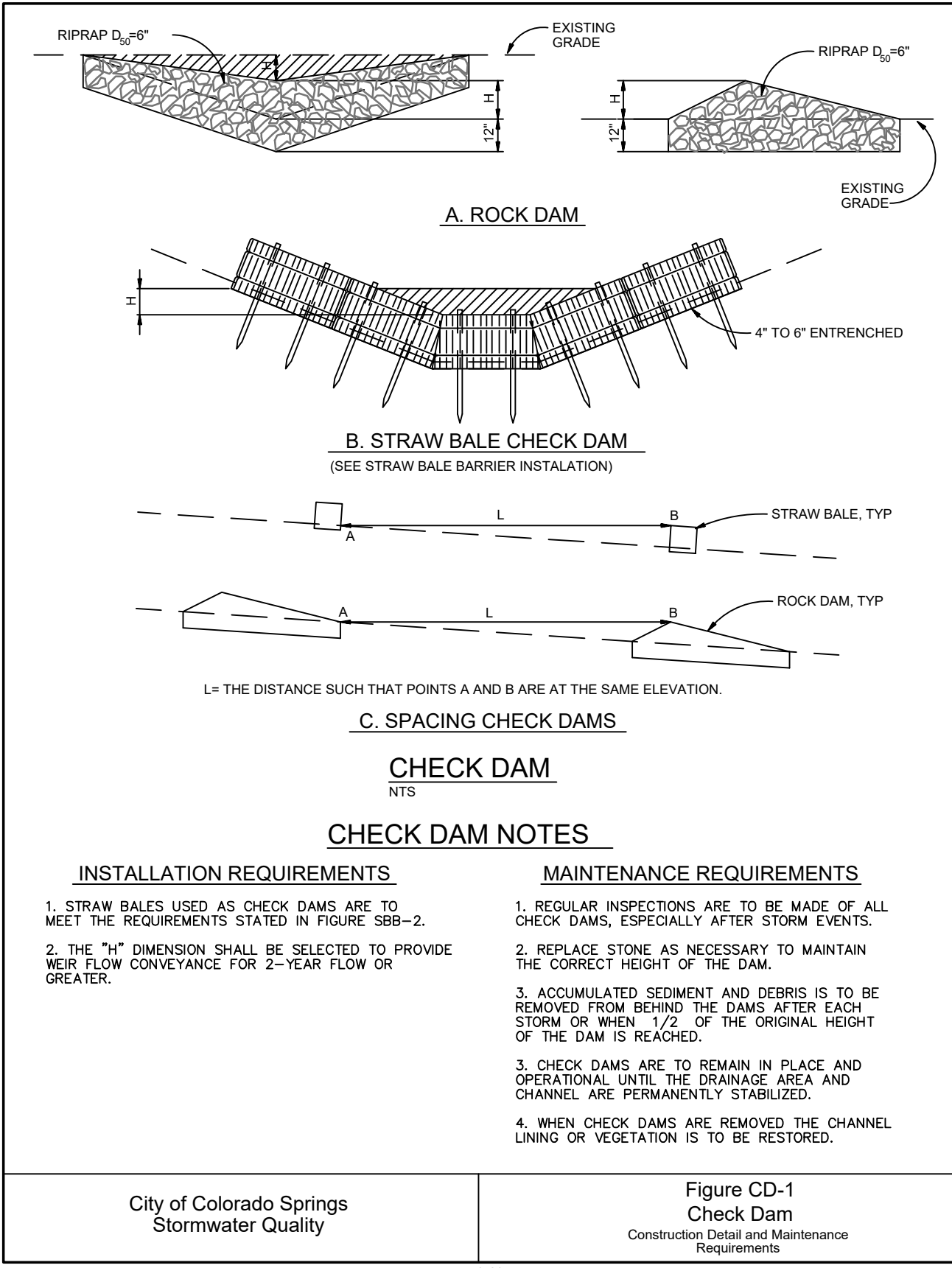
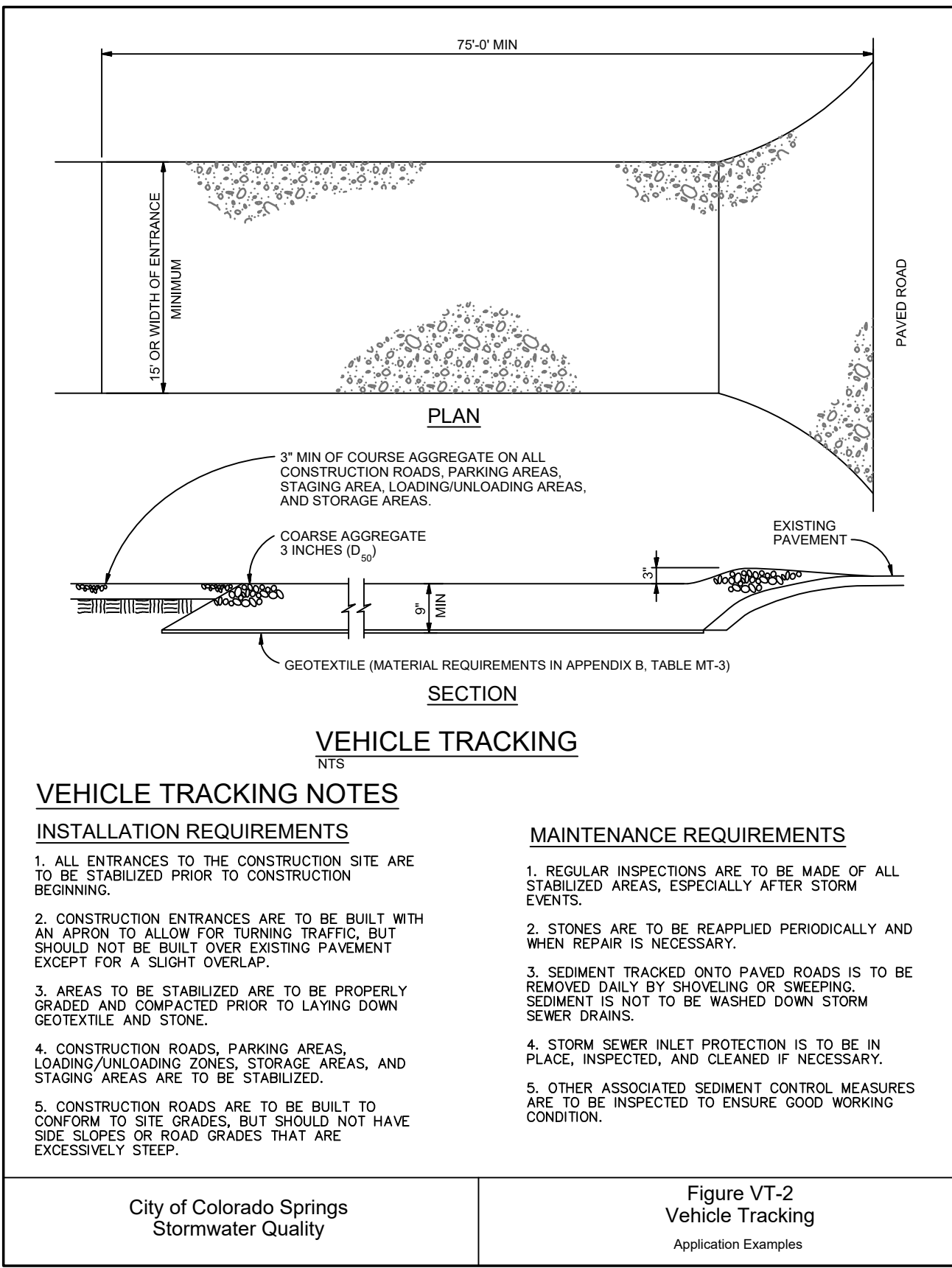
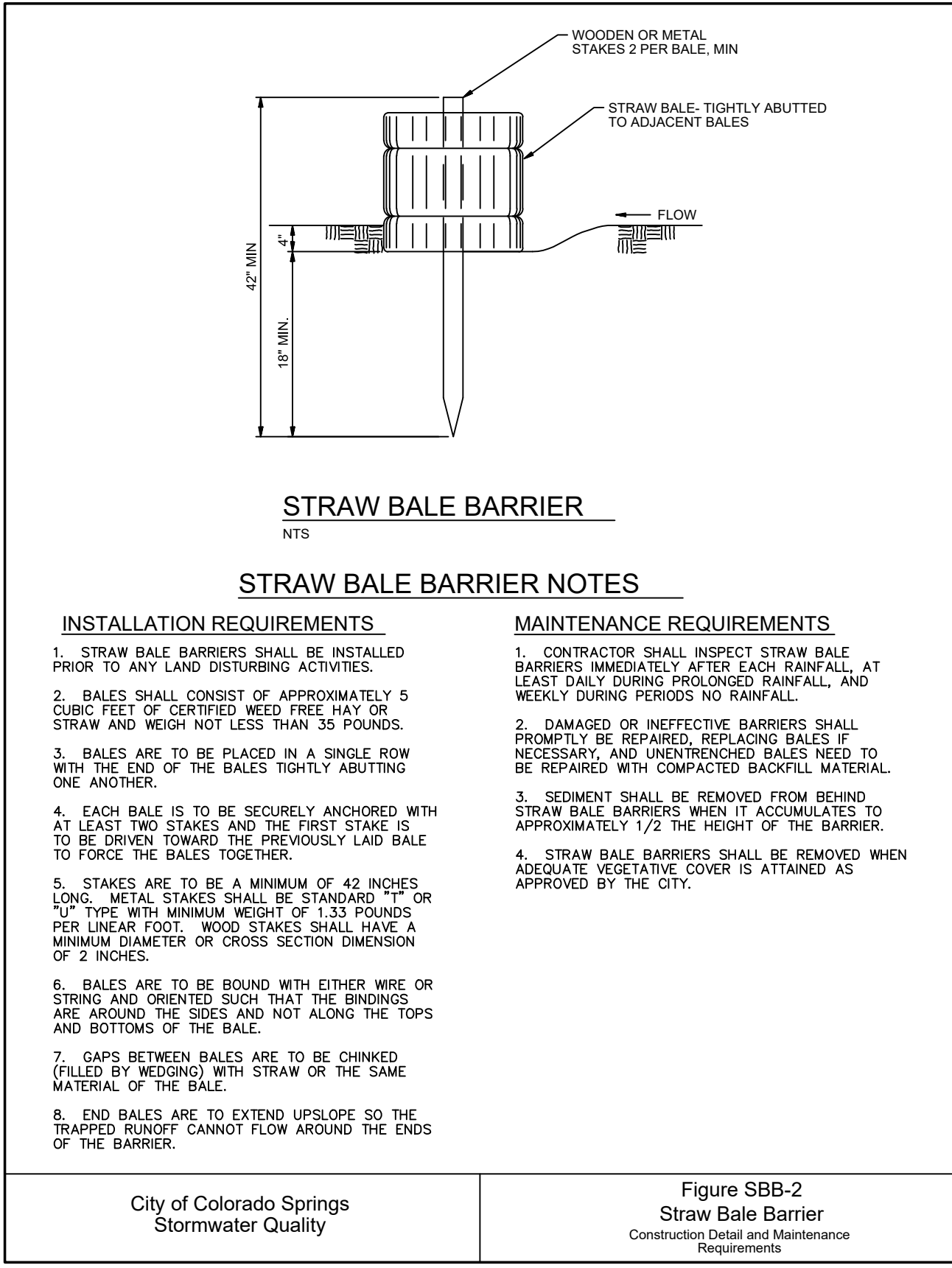
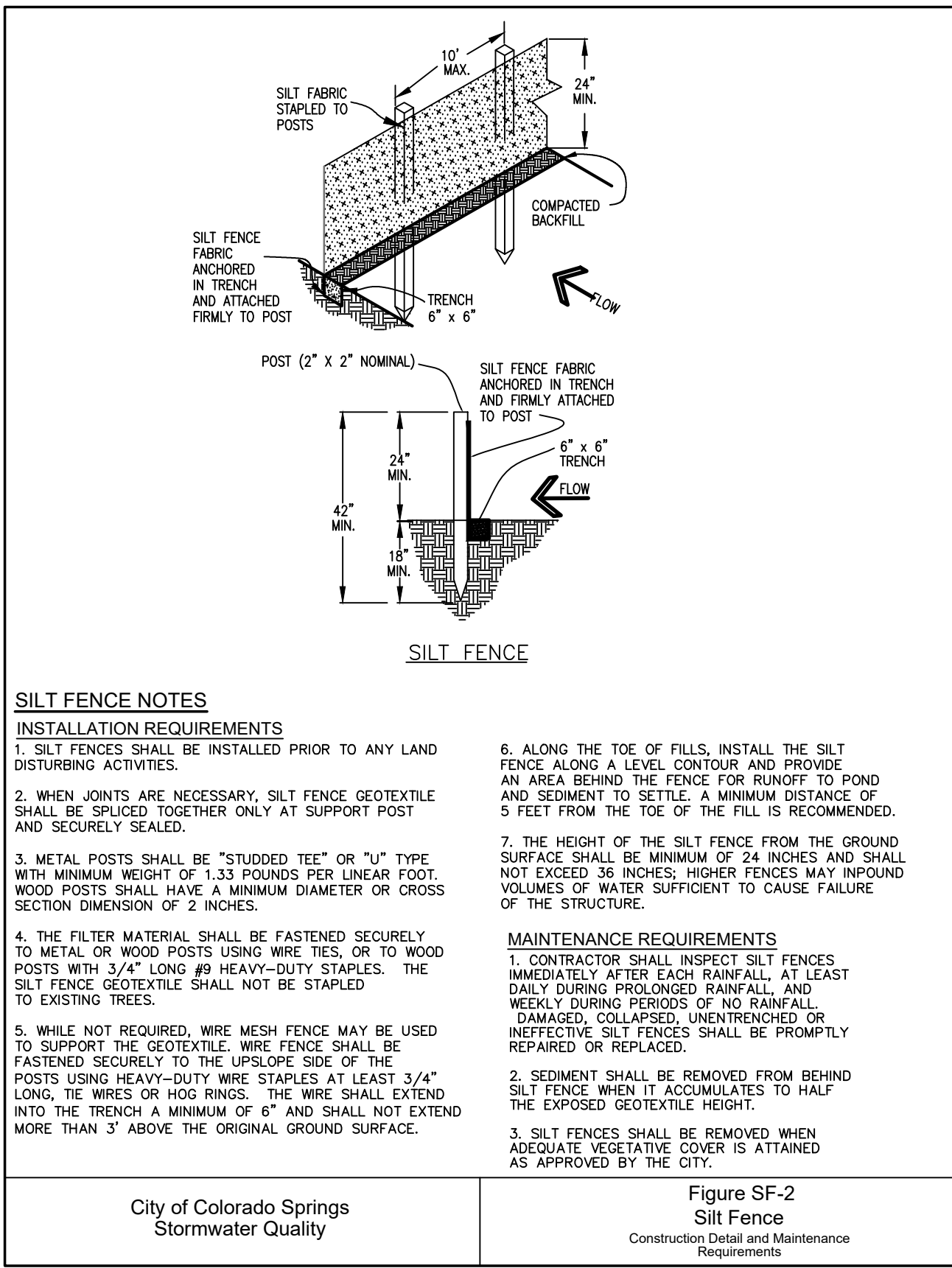
No.	REVISION	BY	DATE
△	FINAL PLAT SUBMITTAL	JPS	9/05/18
△	COUNTY COMMENTS	JPS	2/15/19
△	COUNTY COMMENTS	JPS	5/15/19
△	COUNTY COMMENTS	JPS	7/09/19
△	COUNTY COMMENTS	JPS	8/30/19

EROSION CONTROL
NOTES

HORZ. SCALE:	NTS	DRAWN:	BJJ
VERT. SCALE:	N/A	DESIGNED:	JPS
SURVEYED:	PINNACLE	CHECKED:	JPS
CREATED:	6/30/14	LAST MODIFIED:	8/30/19
PROJECT NO:	040201	MODIFIED BY:	BJJ

SHEET:

C3.1

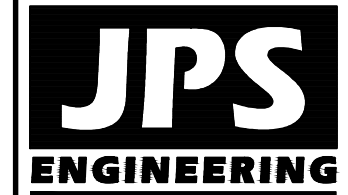


TEMPORARY SEDIMENT BASIN DESIGN DATA			
BASIN	DRAINAGE AREA (AC)	CL (FT)	HD (IN)
C2	22.8	22	1-3/16"

WALDEN PRESERVE 2 - FILING NO. 4

HORZ. SCALE:	NTS	DRAWN:	BJJ
VERT. SCALE:	N/A	DESIGNED:	JPS
SURVEYED:	PINNACLE	CHECKED:	JPS
CREATED:	6/30/14	LAST MODIFIED:	8/30/19
PROJECT NO:	040201	MODIFIED BY:	BJJ

EROSION CONTROL DETAILS



19 E. Willamette Ave.
Colorado Springs, CO
80903
PH: 719-477-9429
FAX: 719-471-0766
www.jspsngr.com

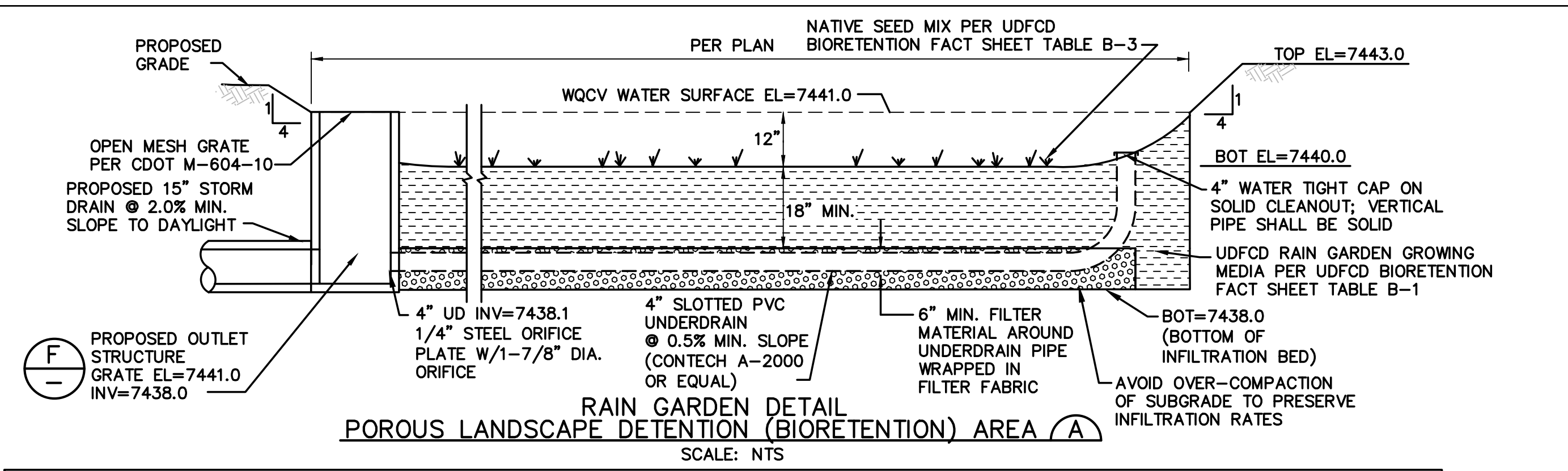
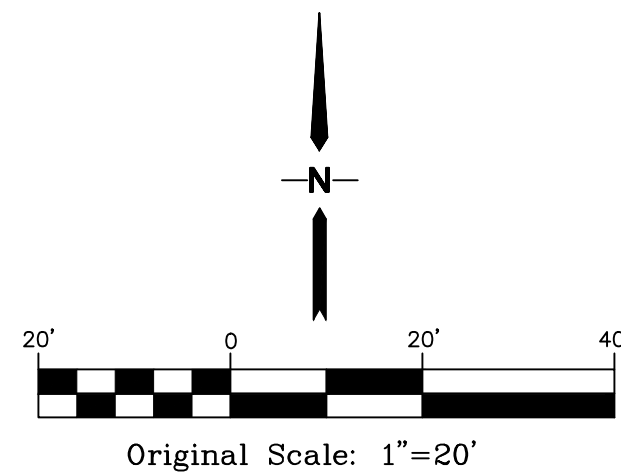
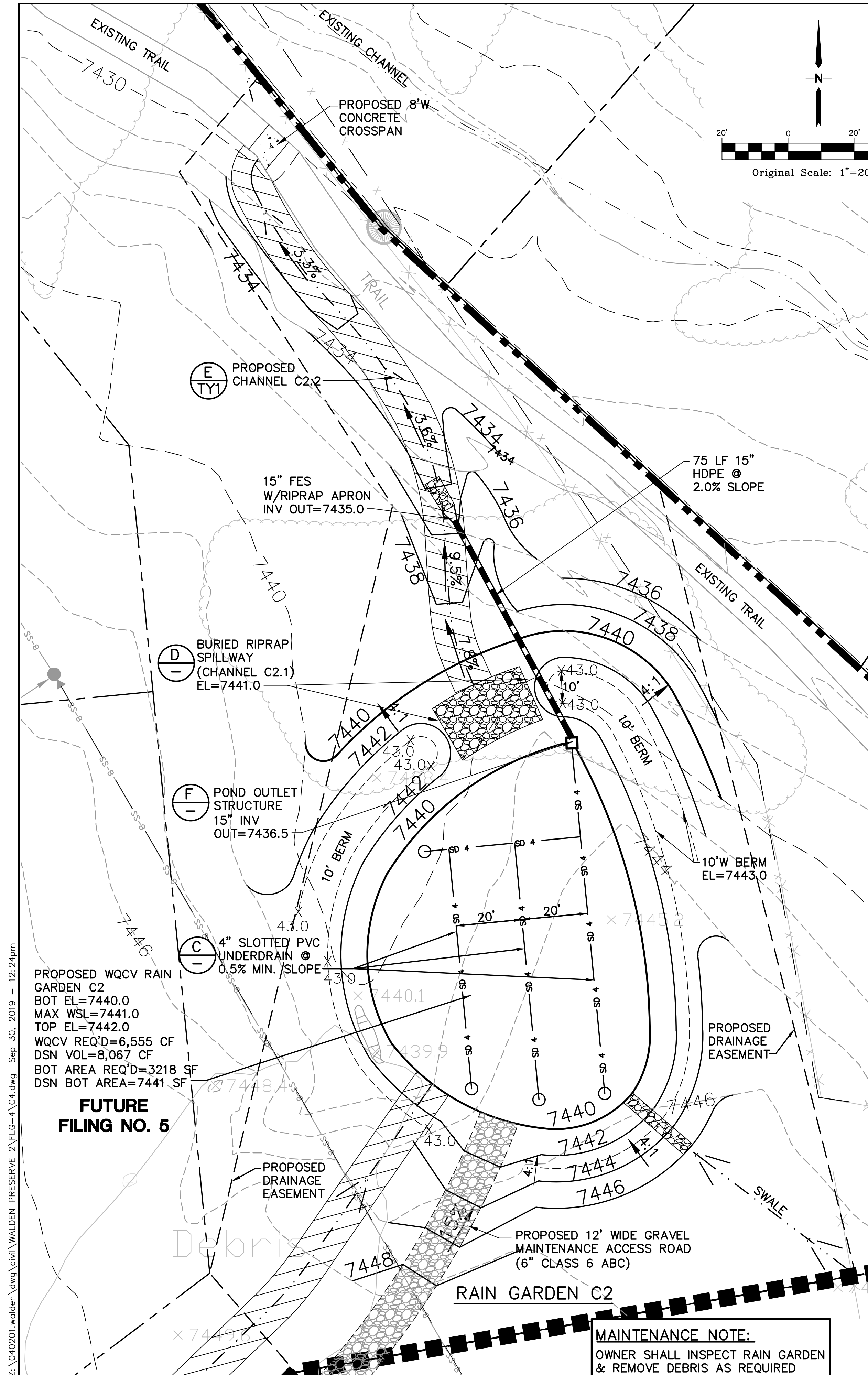


CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL OR VISIT US
BEFORE YOU DIG, GRADE OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES.

NO.	REVISION	BY	DATE
1	FINAL PLAT SUBMITTAL	JPS	9/05/18
2	COUNTY COMMENTS	JPS	2/15/19
3	COUNTY COMMENTS	JPS	5/15/19
4	COUNTY COMMENTS	JPS	7/09/19
5	COUNTY COMMENTS	JPS	8/30/19

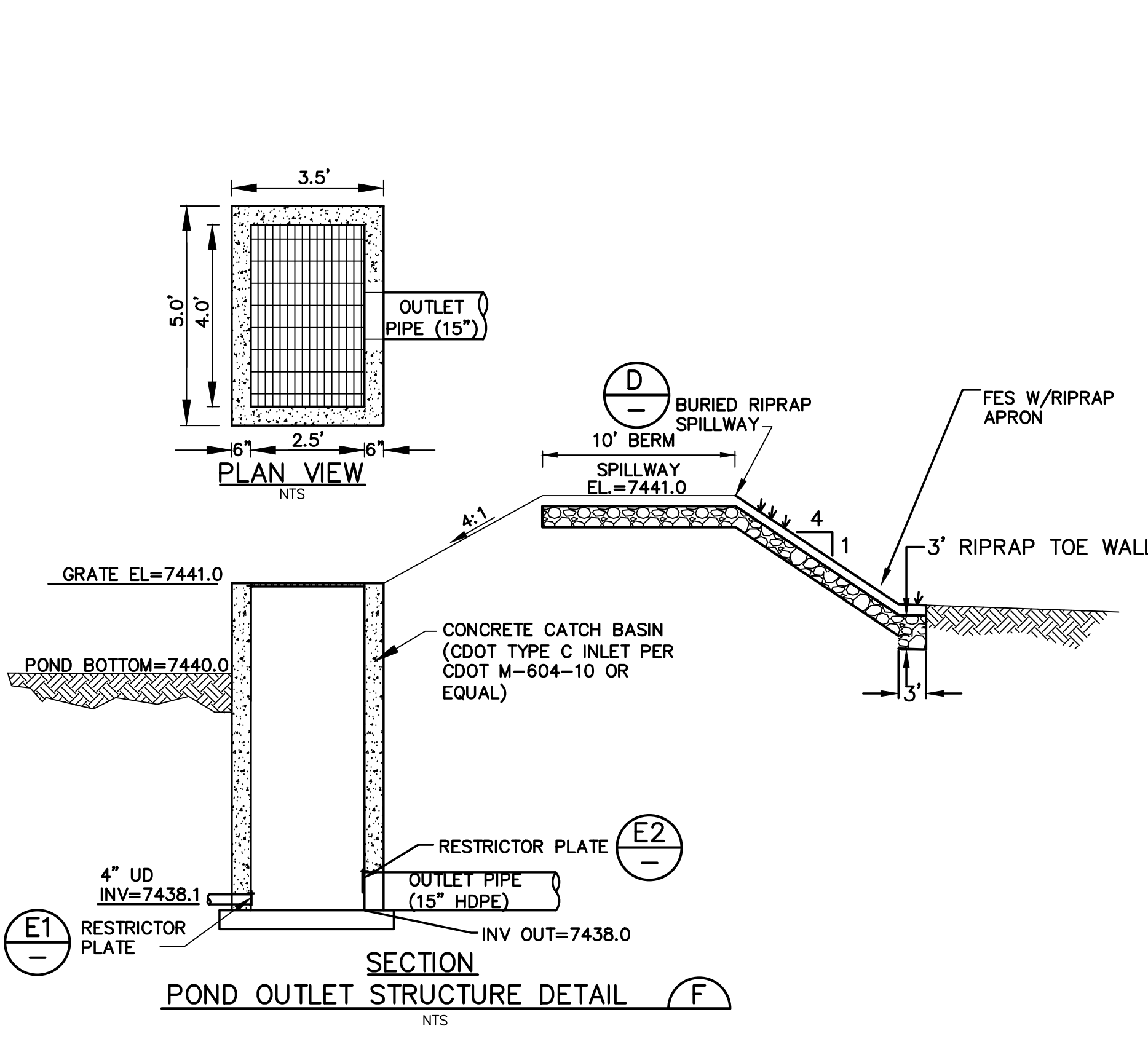
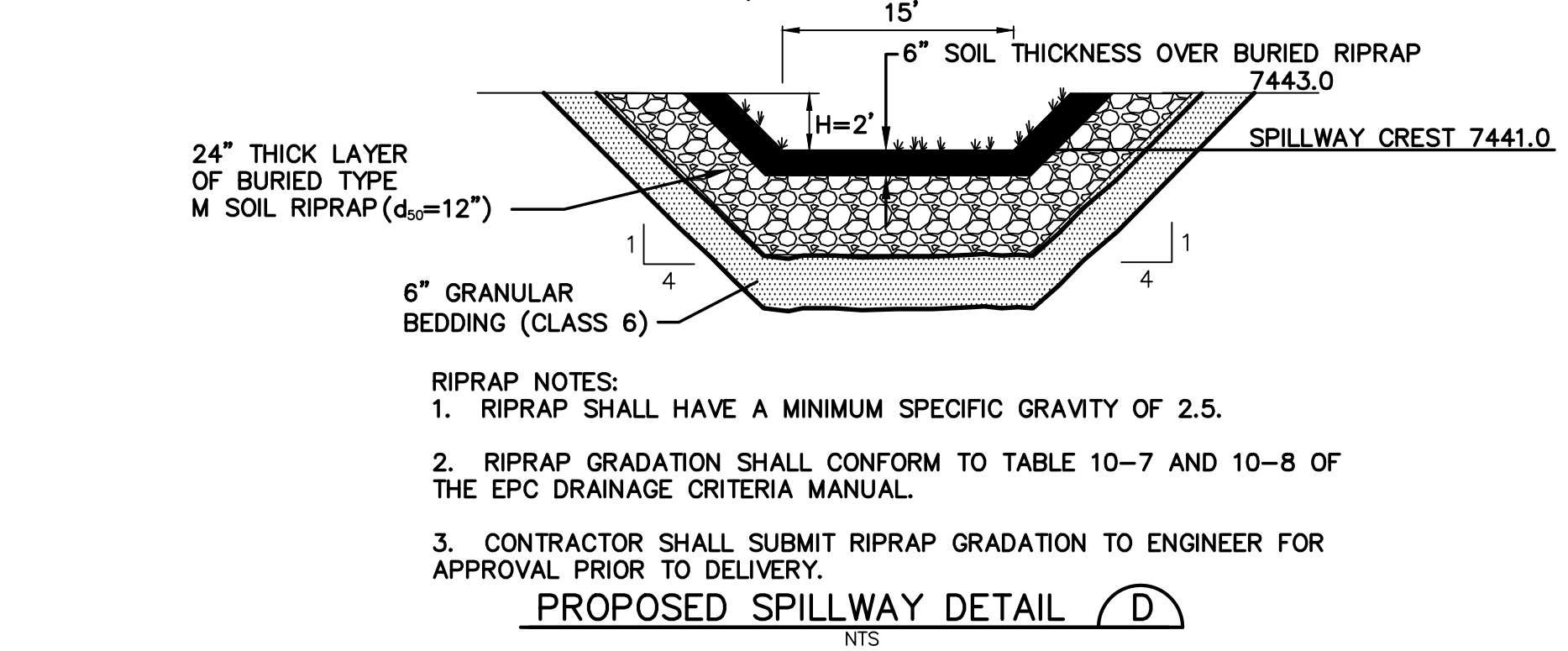
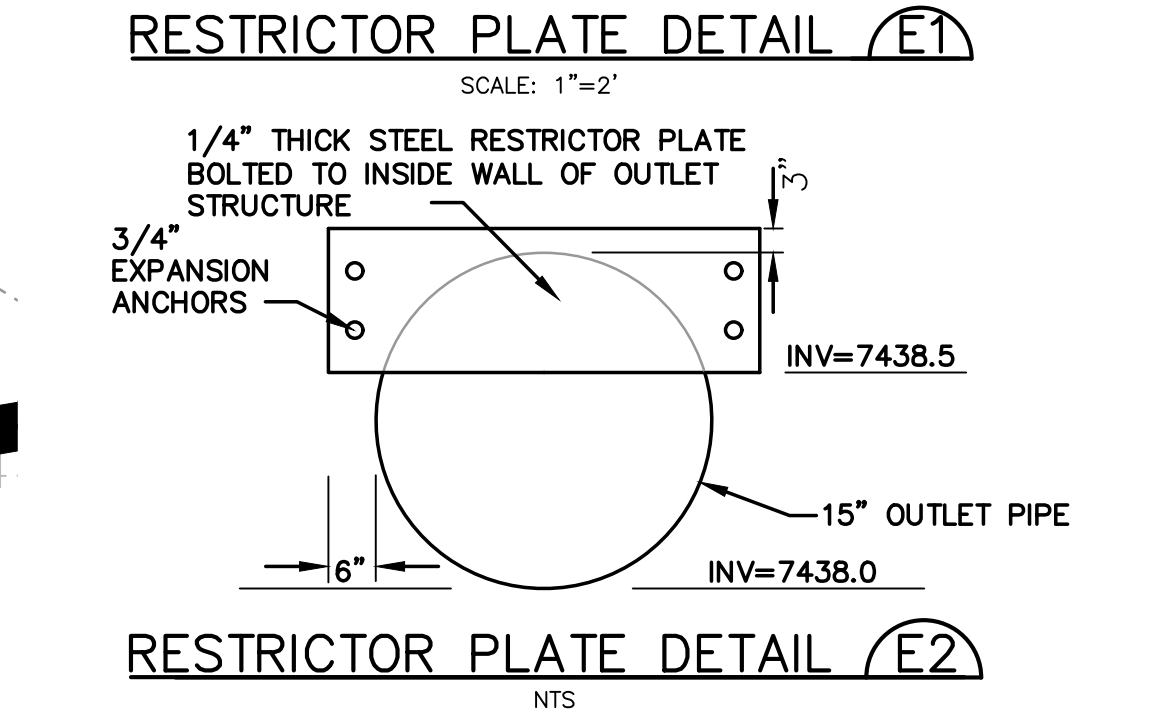
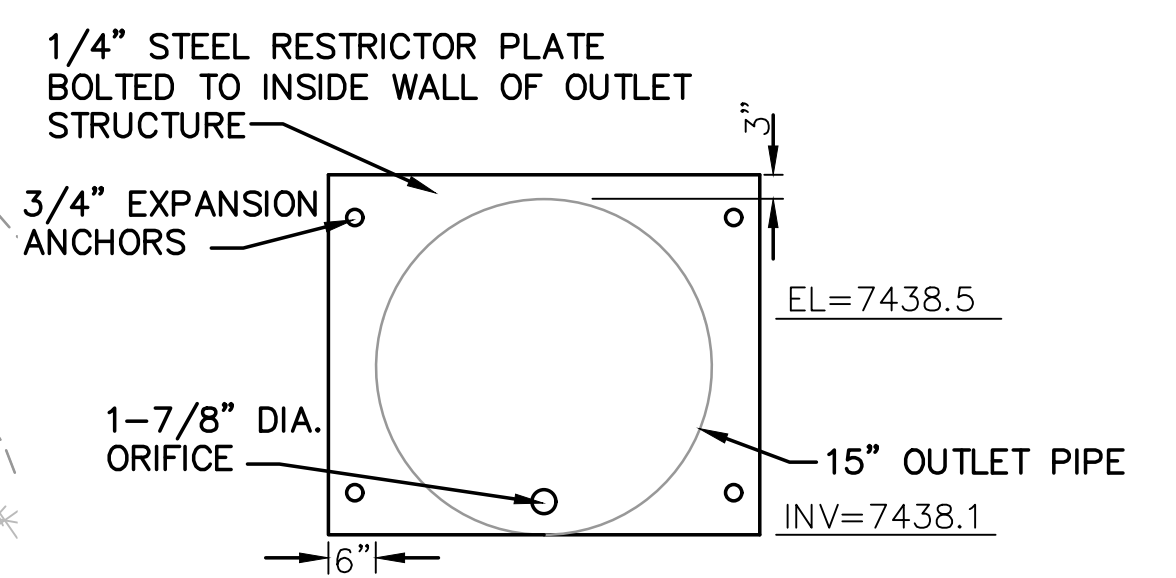
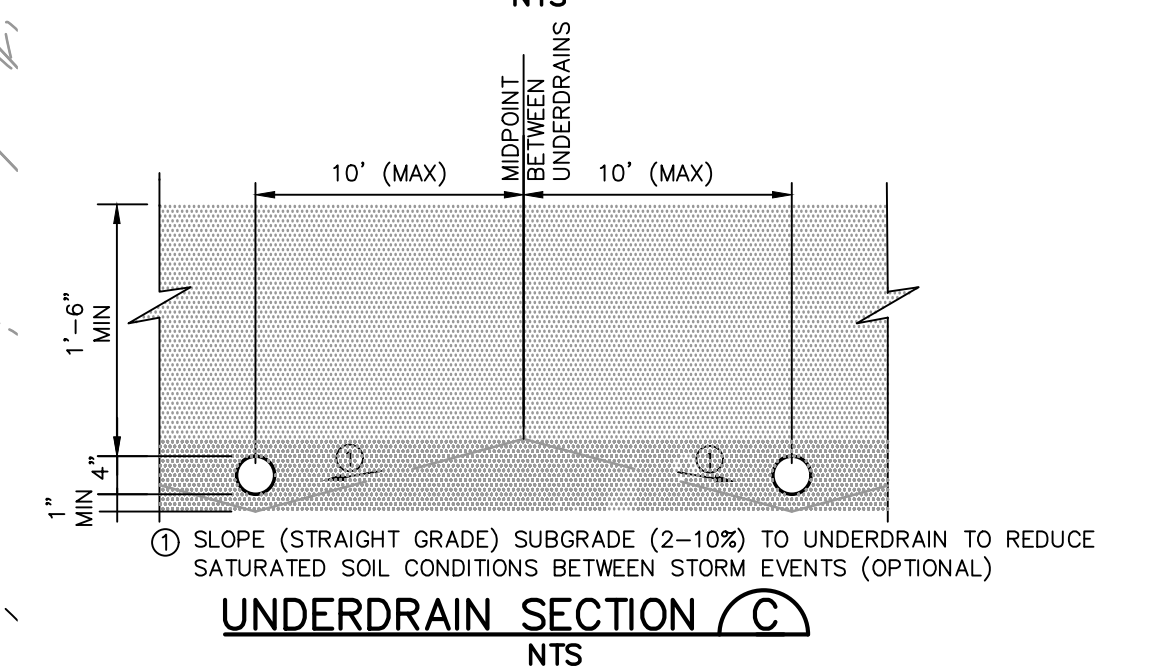
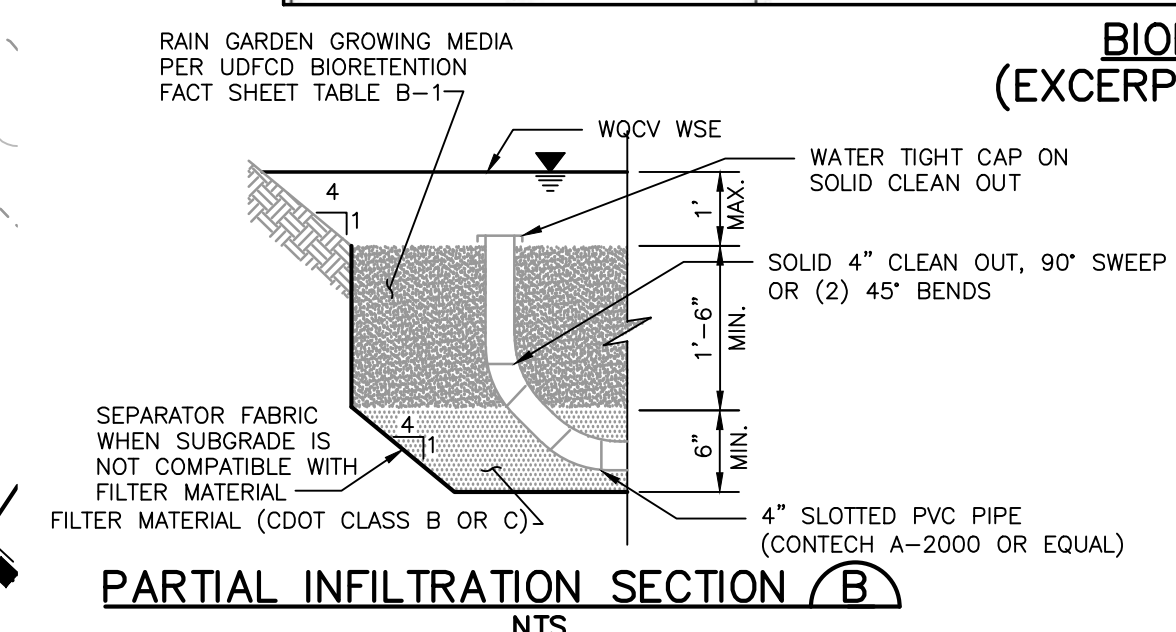
C3.2

Z:\040201\walden\dwg\civil\WALDEN PRESERVE 2\PLG-4\C4.dwg Sep 30, 2019 - 12:24pm



Material	Specification	Submittals	Testing	Notes
Bioretention Growing Media (soil + organics)	Particle size distribution: 80-90% sand (0.05 - 2.0 mm diameter) 3-17% silt (0.002-0.5 mm diameter) 3-17% clay (<0.002 diameter) Chemical attribute and nutrient analysis: pH 6.8 - 7.5 organic matter < 15% nitrogen < 15 ppm phosphorus < 15 ppm salinity < 6 mmhos/cm		Particle size distribution and nutrient analysis required.	Percentages are in weight.
Bioretention organics	3 to 5% shredded mulch (by weight of growing media)			bioretention soil required. Aged 6 months (minimum).

BIORETENTION FACT SHEET TABLE B-1
(EXCERPT FROM TABLE B-1; UDSCM VOLUME 3)



WALDEN PRESERVE 2 - FILING NO. 4

19 E. Willamette Ave.
Colorado Springs, CO 80903
PH: 719-477-9429
FAX: 719-471-0766
www.jpsengr.com

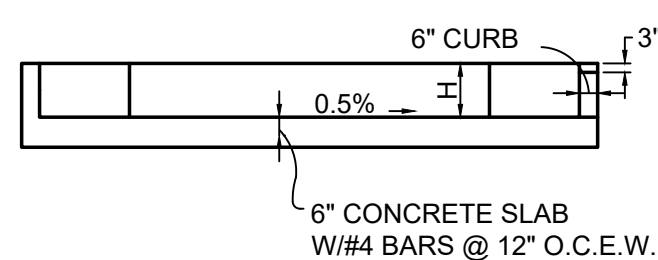
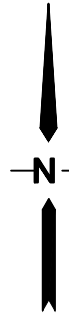
CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL 3 BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

No.	REVISION	DATE	BY
A	COUNTY COMMENTS	2/15/19	JPS
A	COUNTY COMMENTS	5/15/19	JPS
A	COUNTY COMMENTS	7/11/19	JPS
A	COUNTY COMMENTS	8/30/19	JPS
A	COUNTY COMMENTS	9/30/19	JPS

RAIN GARDEN C2
PLAN & DETAILS

HORZ. SCALE: N/A
VERT. SCALE: N/A
SURVEYED: RAMPART
CREATED: 9/05/18
PROJECT NO: 040201
SHEET: C4

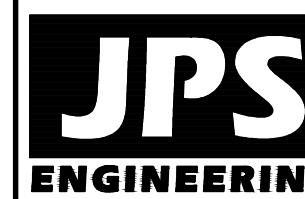
DRAWN: MSP
DESIGNED: JPS
CHECKED: JPS
LAST MODIFIED: 9/30/19
MODIFIED BY: BJJ



FOREBAY	L (FT)	W (FT)	SLOT WIDTH-W2 (IN)	HEIGHT H(IN)
B9	10' x	8'	4.5"	18"
B10	40' x	50'	18.9"	24"



WALDEN PRESERVE 2 - FILING NO. 4



19 E. Willamette Ave.
Colorado Springs, CO
80903

PH: 719-477-9429
FAX: 719-471-0766
www.jpsengr.com

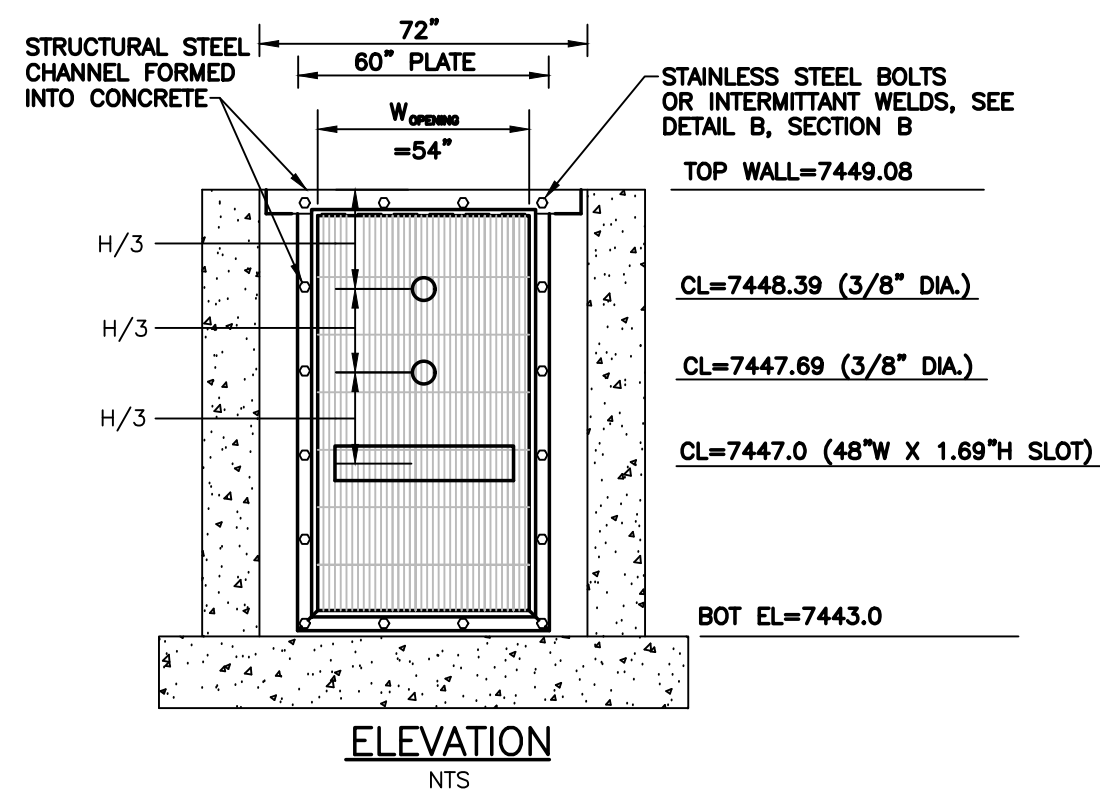
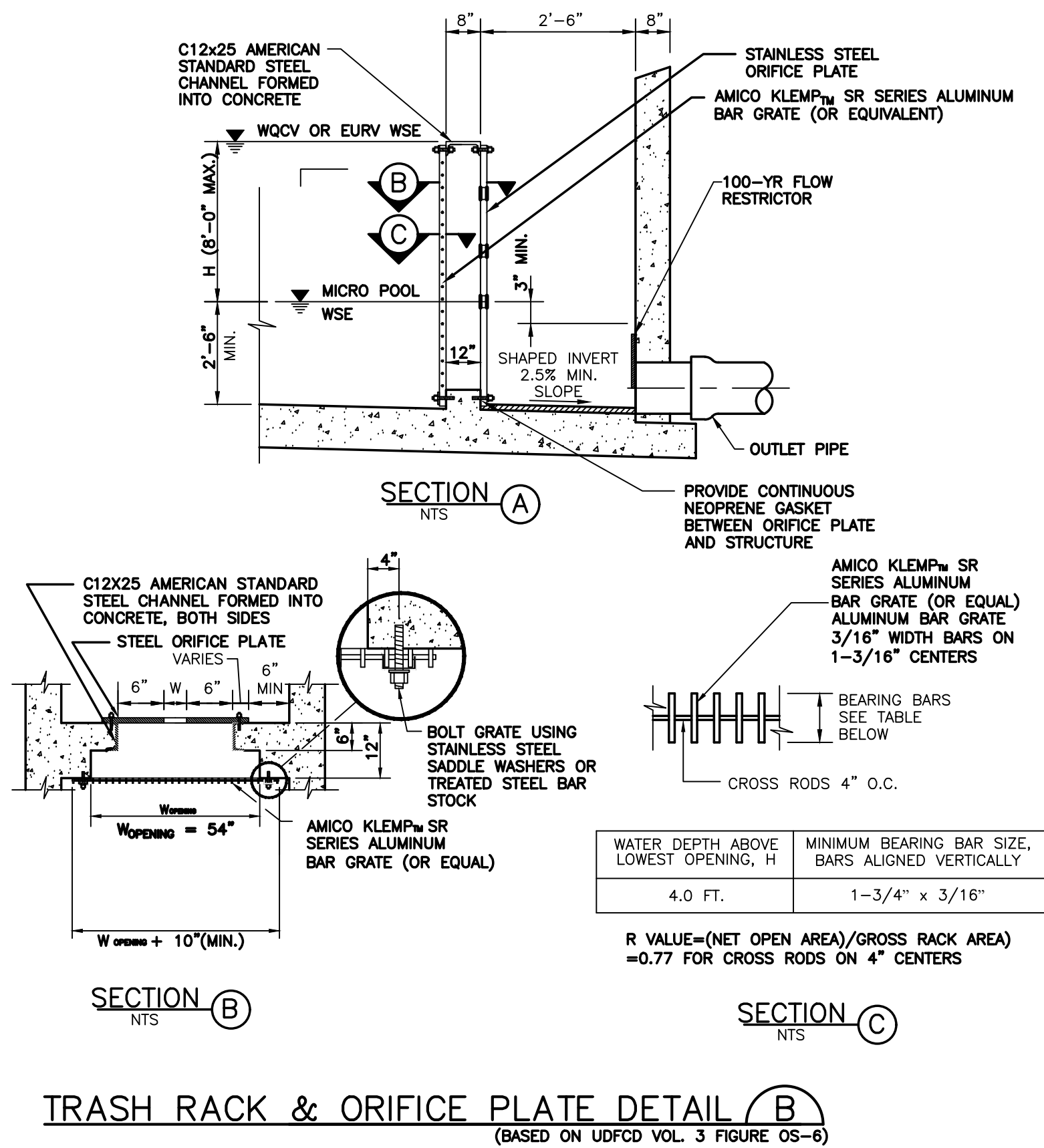
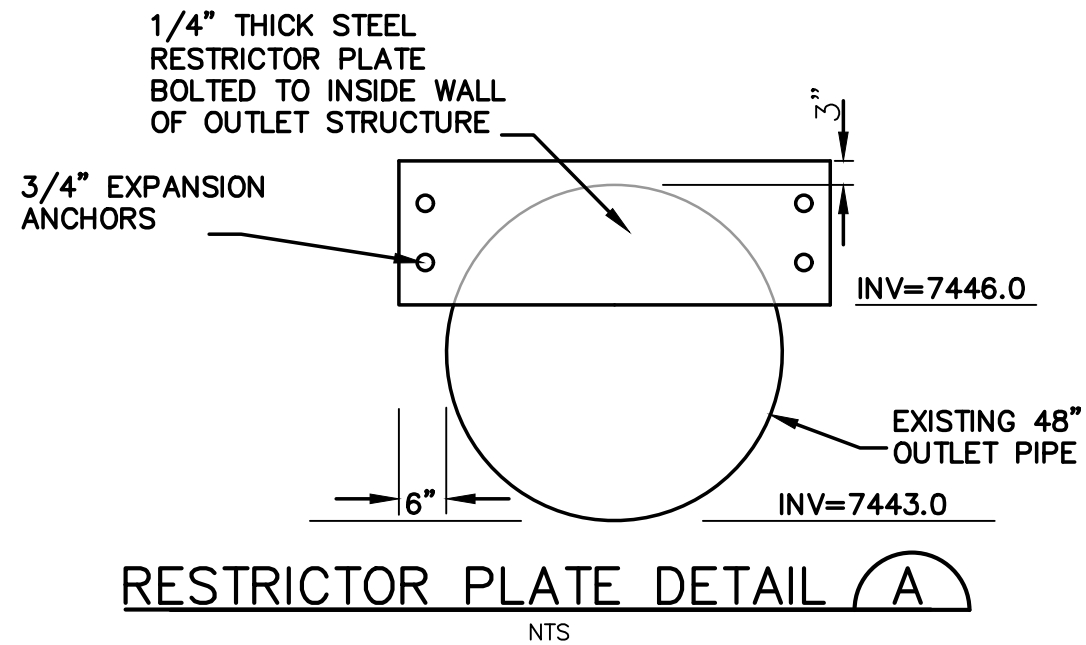


CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND

No.	REVISION	BY	DATE
A	FINAL PLAT SUBMITTAL	JPS	7/23/14
B	EPC COMMENTS	JPS	9/17/14
C	FSD OUTLET STRUCTURE UPGRADE	JPS	8/9/19
D	EPC COMMENTS	JPS	8/30/19

HORIZ. SCALE:	1"=50'	DRAWN:	M
VERT. SCALE:	N/A	DESIGNED:	JF
SURVEYED:	RAMPART	CHECKED:	JF
CREATED:	7/17/14	LAST MODIFIED:	9/30/14
PROJECT NO:	040201	MODIFIED BY:	B

Z:\040201.walden\dwg\civil\WALDEN PRESERVE 2\PLG-4\C5.2.dwg Sep 30, 2019 -- 11:15am



- ORIFICE PLATE NOTES:
1. PROVIDE CONTINUOUS NEOPRENE GASKET MATERIAL BETWEEN THE ORIFICE PLATE AND CONCRETE.
 2. BOLT PLATE TO CONCRETE 12" MAX. ON CENTER. 0.5" PLATE THICKNESS.
- EURV AND WQCV TRASH RACKS:
1. WELL-SCREEN TRASH RACKS SHALL BE STAINLESS STEEL AND SHALL BE ATTACHED BY INTERMITTENT WELDS ALONG THE EDGE OF THE MOUNTING FRAME.
 2. BAR GATE TRASH RACKS SHALL BE ALUMINUM AND SHALL BE BOLTED USING STAINLESS STEEL HARDWARE.
- OVERFLOW SAFETY GRATES:
1. ALL SAFETY GRATES SHALL BE MOUNTED USING STAINLESS STEEL HARDWARE AND PROVIDED WITH HINGED AND LOCKABLE OR BOLTABLE ACCESS PANELS.
 2. SAFETY GRATES SHALL BE STAINLESS STEEL, ALUMINUM, OR STEEL. STEEL GRATES SHALL BE HOT DIP GALVANIZED AND MAY BE HOT POWDER COATED AFTER GALVANIZING.

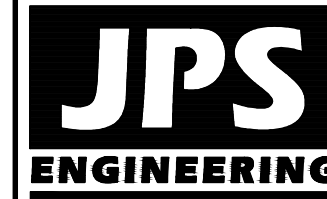
WALDEN PRESERVE 2 - FILING NO. 4

POND B - OUTLET STRUCTURE UPGRADE DETAILS

HORZ. SCALE: 1"=50'	DRAWN: MJP
VERT. SCALE: N/A	DESIGNED: JPS
SURVEYED: RAMPART	CHECKED: JPS
CREATED: 7/17/14	LAST MODIFIED: 8/30/19
PROJECT NO: 040201	MODIFIED BY: BJJ

SHEET:

C5.2



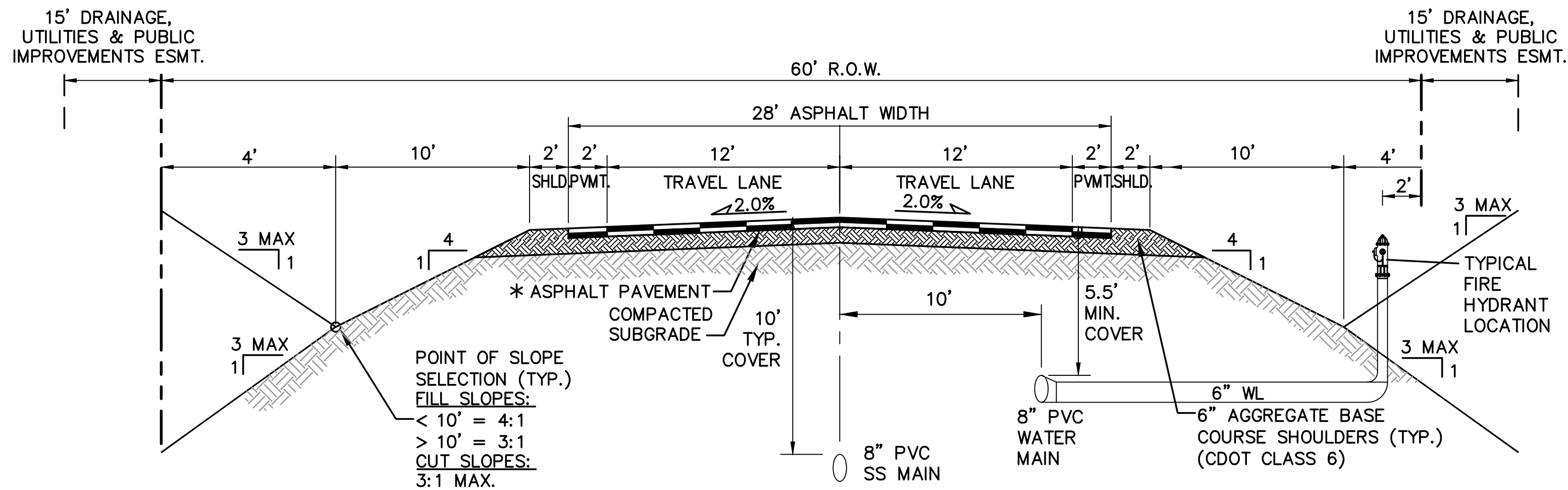
19 E. Willamette Ave.
Colorado Springs, CO 80903
PH: 719-477-9429
FAX: 719-471-0766
www.jpsengr.com



CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL 2-48 HOURS BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

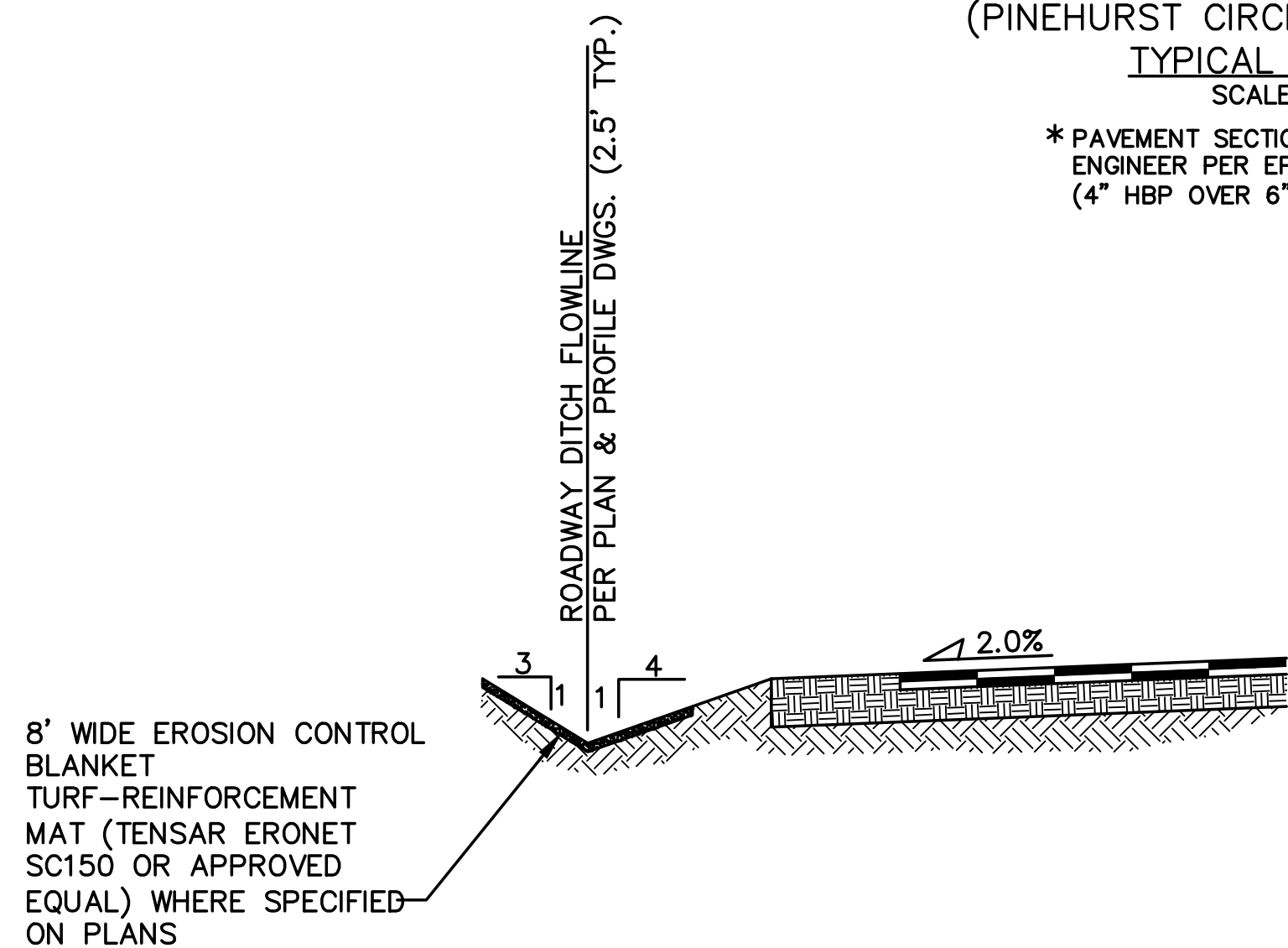
No.	REVISION	BY	DATE
1	FINAL PLAT. SUBMITTAL	JPS	7/23/14
2	EPC COMMENTS	JPS	9/17/14
3	FSD OUTLET STRUCTURE UPGRADE	JPS	8/9/19
4	EPC COMMENTS	JPS	8/30/19
5	EPC COMMENTS	JPS	9/30/19

Z:\040201.walden\dwg\civil\WALDEN PRESERVE 2\FLG-4\TY1.dwg Jul 12, 2019 -- 2:39pm

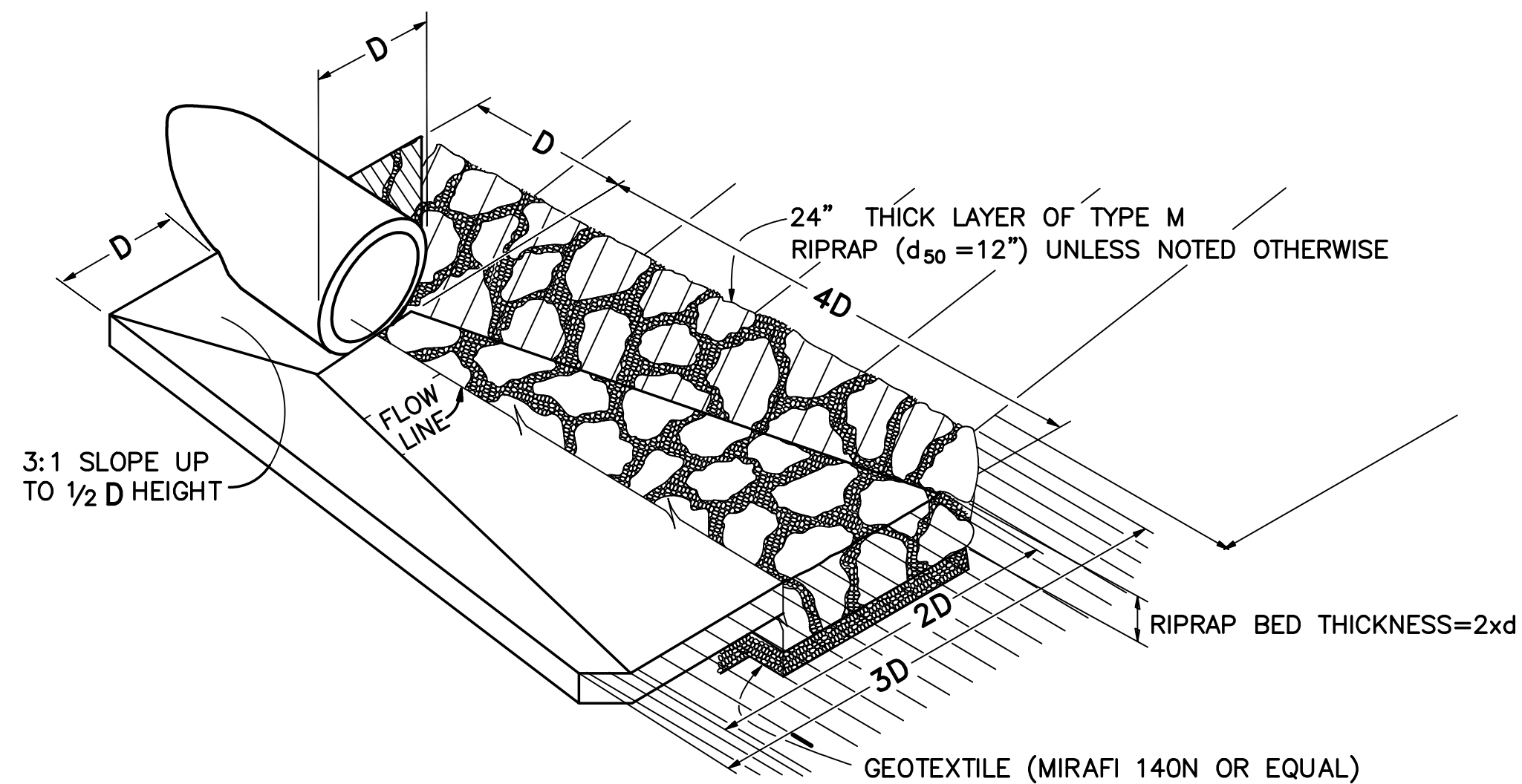


RURAL LOCAL-PAVED ROAD (PUBLIC)
(PINEHURST CIRCLE &, DEBOODT CT)
TYPICAL SECTION (A)
SCALE: 1"=5'

* PAVEMENT SECTION TO BE DESIGNED BY GEOTECHNICAL ENGINEER PER EPC SPECIFICATIONS.
(4" HBP OVER 6" ABC FOR BIDDING PURPOSES)



TYPICAL DITCH SECTION WITH
EROSION CONTROL BLANKET LINING (B)
SCALE : NTS



TYPICAL RIPRAP APRON/
CULVERT OUTLET PAVING (C)
NOT TO SCALE

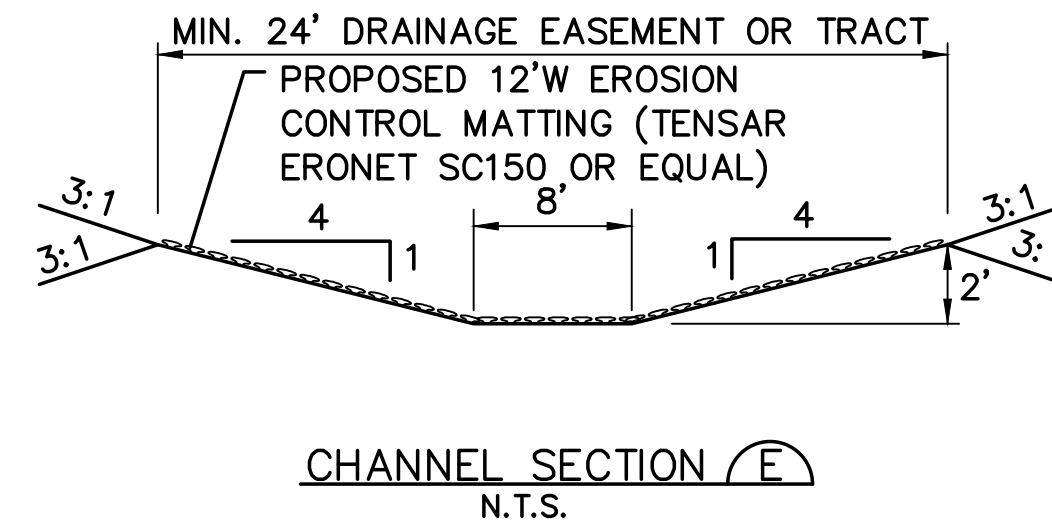
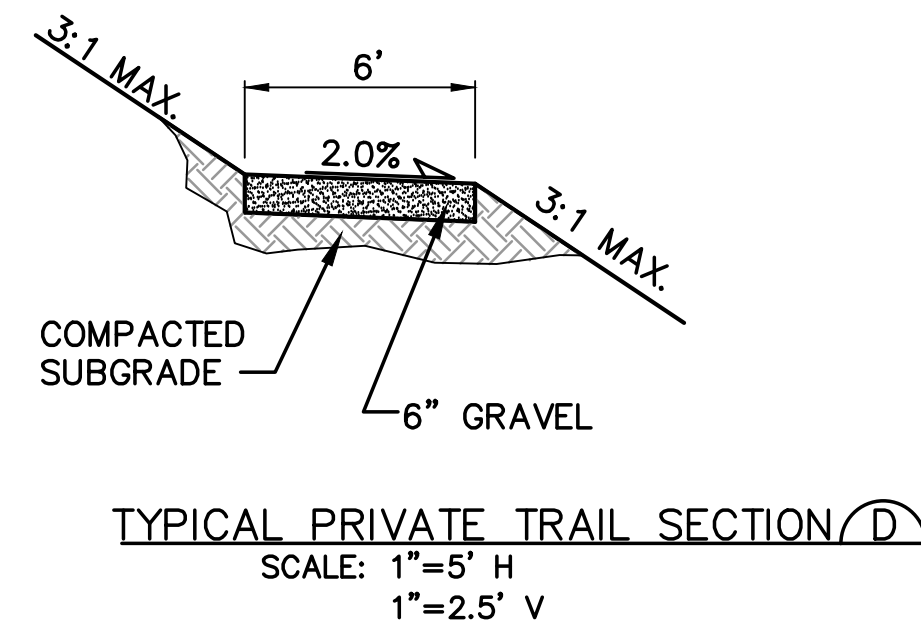


Table MD-7—Classification and Gradation of Ordinary Riprap

Riprap Designation	% Smaller Than Given Size by Weight	Intermediate Rock Dimensions (inches)	d_{50} (inches)*
Type VL	70-100	12	6**
	50-70	9	
	35-50	6	
	2-10	2	
Type L	70-100	15	9**
	50-70	12	
	35-50	9	
	2-10	3	
Type M	70-100	21	12**
	50-70	18	
	35-50	12	
	2-10	4	
Type H	70-100	30	18
	50-70	24	
	35-50	18	
	2-10	6	
Type VH	70-100	42	24
	50-70	33	
	35-50	24	
	2-10	9	

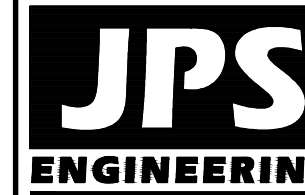
* d_{50} = mean particle size (intermediate dimension) by weight.

** Mix VL, L and M riprap with 35% topsoil (by volume) and bury it with 4 to 6 inches of topsoil, all vibration compacted, and revegetate.

Basic requirements for riprap stone are as follows:

- Rock shall be hard, durable, angular in shape, and free from cracks, overburden, shale, and organic matter.
- Neither breadth nor thickness of a single stone should be less than one-third its length, and rounded stone should be avoided.
- The rock should sustain a loss of not more than 40% after 500 revolutions in an abrasion test (Los Angeles machine—ASTM C-535-69) and should sustain a loss of not more than 10% after 12 cycles of freezing and thawing (AASHTO test 103 for ledge rock procedure A).
- Rock having a minimum specific gravity of 2.65 is preferred; however, in no case should rock have a specific gravity less than 2.50.

RIPRAP DETAILS (F)



19 E. Willamette Ave.
Colorado Springs, CO
80903

PH: 719-477-9429
FAX: 719-471-0766
www.jpsengr.com



CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL 2-4 HOURS BEFORE ANY EXCAVATE
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES

REVISION	DATE	BY	No.
FINAL PLAT SUBMITTAL	9/05/18	JPS	A
COUNTY COMMENTS	2/15/19	JPS	A
COUNTY COMMENTS	5/15/19	JPS	A
COUNTY COMMENTS	7/11/19	JPS	A

TYPICAL SECTIONS AND DETAILS

HORZ. SCALE: AS SHOWN	DRAWN: BJJ
VERT. SCALE: AS SHOWN	DESIGNED: JPS
SURVEYED: RAMPART	CHECKED: JPS
CREATED: 9/05/18	LAST MODIFIED: 11/19
PROJECT NO: 040201	MODIFIED BY: BJJ

SHEET:

TY1

WALDEN PRESERVE 2 - FILING NO. 4