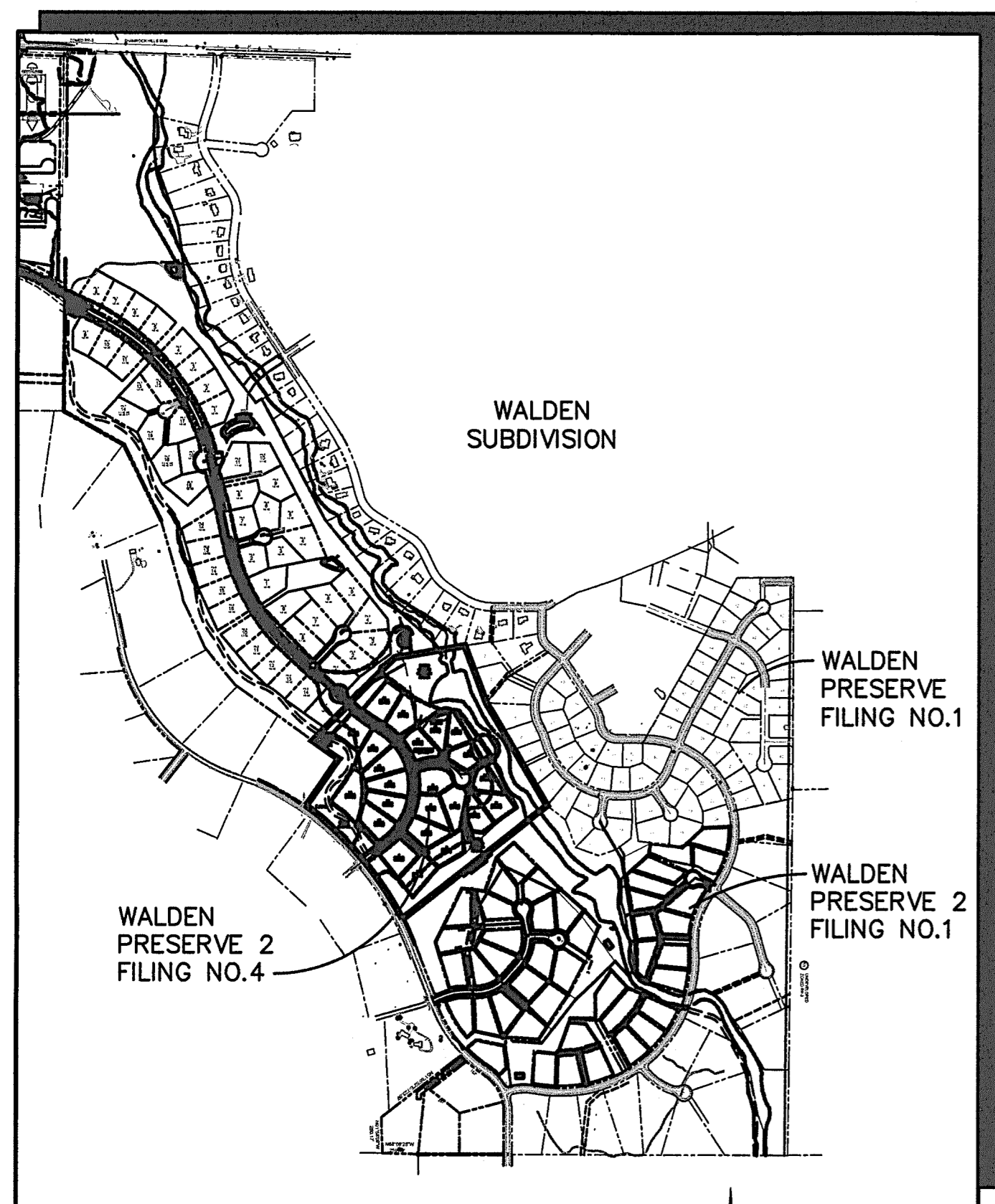




VICINITY MAP  
NOT TO SCALE



SITE MAP  
NOT TO SCALE

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

**BASIS OF BEARINGS:**  
THE BEARINGS FOR THIS SURVEY ARE BASED UPON THE SOUTH LINE OF LOT 7, FOREST HIGHLANDS SUBDIVISION AS RECORDED AT BOOK G-2, PAGE 6 IN THE RECORDS OF THE CLERK AND RECORDERS OFFICE, COUNTY OF EL PASO, STATE OF COLORADO, BEING ALSO A PORTION OF THE NORTH RIGHT-OF-WAY LINE OF DAWSON ROAD, BEING MONUMENTED AT THE SOUTHWEST CORNER OF SAID LOT 7 BY A FOUND REBAR & CAP MARKED "LS 9477" AND AT THE SOUTHEAST CORNER OF SAID LOT 7 BY A FOUND REBAR AND CAP MARKED "LS 9477". SAID LINE BEARS S89°05'35"E, A DISTANCE OF 601.38 FEET MEASURED (601.33 FEET PLATTED).

# WALDEN PRESERVE 2

## Filing No. 4

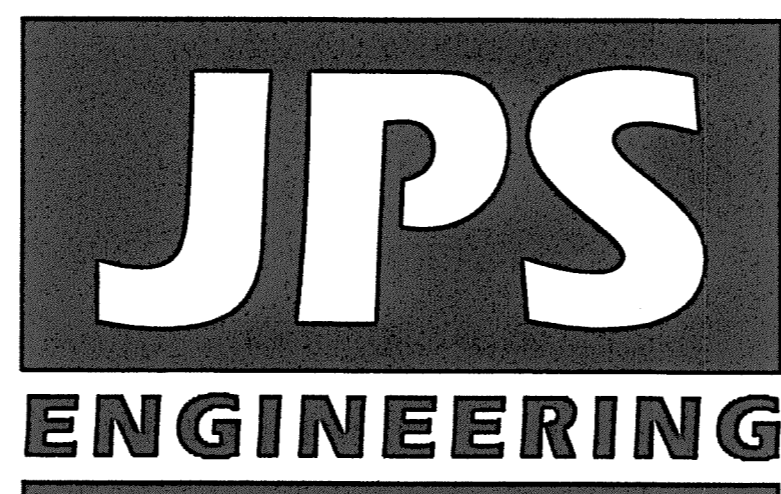
# Grading & Erosion Control Plans

## 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 OF NEGLIGENCE, ERRORS OR OMISSIONS ON MY PART IN PREPARATION OF THESE DETAILED PLANS AND SPECIFICATIONS.

#### 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.

*Matthew W. Dunston* 10/4/19  
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.

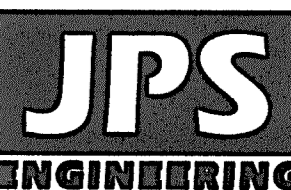
IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THEY WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW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

TITLE SHEET



19 E. Willamette Ave.  
Colorado Springs, CO  
80903

PH: 719-477-9429  
FAX: 719-477-0766  
www.jpsegr.com



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

No.	REVISION	DATE	BY
1	COUNTY COMMENTS	2/26/19	JPS
2	COUNTY COMMENTS	5/15/19	JPS
3	COUNTY COMMENTS	7/10/19	JPS
4	COUNTY COMMENTS	8/30/19	JPS
5	COUNTY COMMENTS	9/30/19	JPS

HORIZ. 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**

**COUNTY GENERAL NOTES:**

- 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.
- 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).
- 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:
  - EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
  - CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2
  - COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
  - CDOT M & S STANDARDS
- 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.
- 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.
- CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT (PCD) - INSPECTIONS, PRIOR TO STARTING CONSTRUCTION.
- 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.
- 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.
- ALL STORM DRAIN PIPE SHALL BE CLASS III RCP WITH CLASS B BEDDING UNLESS OTHERWISE NOTED AND APPROVED BY PCD.
- 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.
- ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
- 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.
- SIGNING AND STRIPING SHALL COMPLY WITH EL PASO DEPARTMENT OF PUBLIC WORKS (DPW) AND MUTCD CRITERIA.
- 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.
- 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:**

- EXISTING CONTOUR DATA CONSISTS OF AERIAL TOPOGRAPHIC SURVEY DATA PROVIDED BY OWNER. JPS ENGINEERING TAKES NO RESPONSIBILITY FOR THE ACCURACY OF EXISTING TOPOGRAPHIC MAPPING.
- 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.
- PROPOSED CONTOURS SHOWN ARE TO FINISHED GRADE.
- LENGTHS SHOWN FOR STORM SEWER PIPES ARE TO CENTER OF MANHOLE.
- CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, DEBRIS, WASTE AND OTHER UNSUITABLE FILL MATERIAL FOUND WITHIN THE LIMITS OF EXCAVATION.
- MATCH INTO EXISTING GRADES AT 3:1 MAX CUT AND FILL SLOPES.
- REVEGETATION OF ALL DISTURBED AREAS SHALL BE DONE WITH SPECIFIED SEED MIX WITHIN 60 DAYS AFTER FINE GRADING IS COMPLETE.
- 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.
- 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.
- 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.
- ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS DETERMINED BY SITE CONDITIONS.
- 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.
- ALL BACKFILL, SUB-BASE, AND/OR BASE COURSE MATERIAL SHALL BE COMPACTED PER EL PASO COUNTY AND CDOT STANDARDS AND SPECIFICATIONS.
- ALL FINISHED GRADES SHALL HAVE A MINIMUM 1.0% SLOPE TO PROVIDE POSITIVE DRAINAGE.
- IN CASE OF CONFLICT BETWEEN PROPOSED SLOPES AND PROPOSED SPOT ELEVATIONS, SPOT ELEVATIONS SHALL GOVERN.
- CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO BEGINNING WORK.

**GENERAL DRAINAGE NOTES:**

- INDIVIDUAL BUILDERS SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND ACCOUNT FOR POTENTIAL CROSS-LOT DRAINAGE IMPACTS WITHIN EACH LOT.
- 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.
- GRADING AND DRAINAGE WITHIN LOTS IS THE RESPONSIBILITY OF THE INDIVIDUAL BUILDERS AND PROPERTY OWNERS.

**COUNTY SIGNING AND STRIPING NOTES:**

- ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN COMPLIANCE WITH THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- 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.
- ANY DEVIATION FROM THE STRIPING AND SIGNING PLAN SHALL BE APPROVED BY EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT (PCD).
- 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.
- STREET NAME AND REGULATORY STOP SIGNS SHALL BE ON THE SAME POST AT INTERSECTIONS.
- ALL REMOVED SIGNS SHALL BE DISPOSED OF IN A PROPER MANNER BY THE CONTRACTOR.
- 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".
- ALL TRAFFIC SIGNS SHALL HAVE A MINIMUM HIGH INTENSITY PRISMATIC GRADE SHEETING.
- 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.
- ALL SIGNS SHALL BE SINGLE SHEET ALUMINUM WITH 0.100" MINIMUM THICKNESS.
- 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.
- 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.
- 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.
- 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 STANDARD
ROAD CLASSIFICATION:	RURAL LOCAL
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

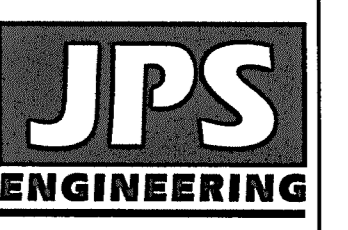
**LEGEND:**

-----	NEW/EXISTING
-----	SECTION LINE - NEW/EXISTING
-----	EASEMENT LINE - NEW/EXISTING
-----	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
-----	SHEET ON WHICH SECTION IS SHOWN

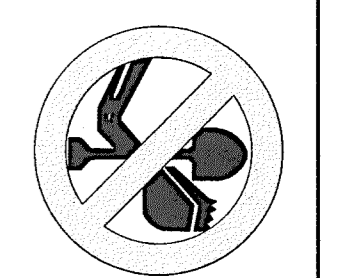


**WALDEN PRESERVE 2 - FILING NO. 4**

**GENERAL NOTES & LEGEND**



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



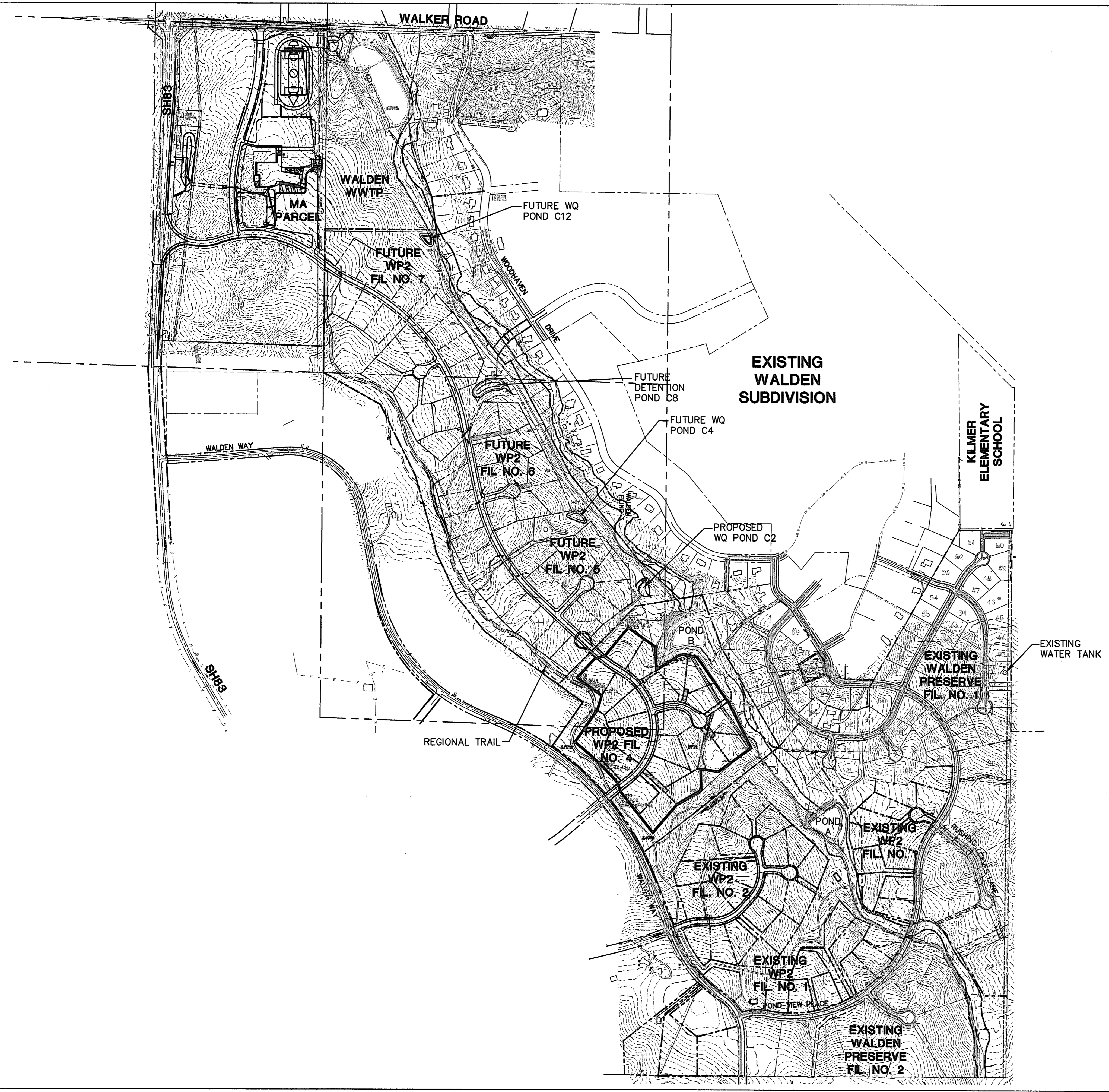
CALL UTILITY NOTIFICATION CENTER OF COLORADO  
1-800-922-1987  
CALL 24 HOURS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

REVISION	DATE	BY
FINAL PLAT SUBMITTAL	9/05/18	JPS
CITY COMMENTS	2/15/19	JPS
CITY COMMENTS	5/15/19	JPS

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:	<b>G2</b>		

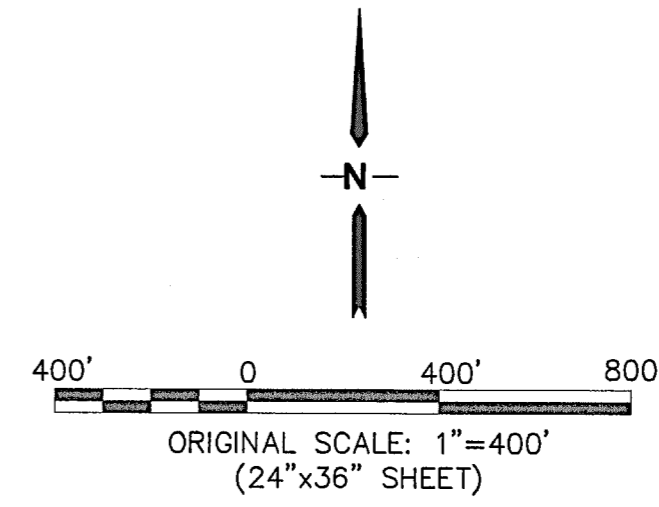
Z:\040201.walden\Civil\WALDEN PRESERVE 2.FLG-A\02.dwg May 16, 2019 9:25am

Z:\040201\_walden\civil\walden preserve 2\FLG-4\C1.dwg May 16, 2019 - 12:39pm



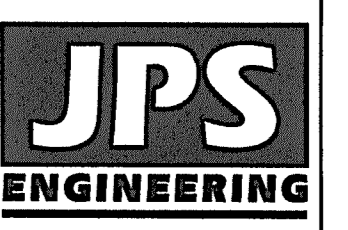
DRIVEWAY CULVERT TABLE	
FIL 4 LOT NO.	SIZE (D)
1	18"
2	18"
3	18"
4	18"
5	18"
6	18"
7	18"
8	42"
9	42"
10	42"
11	18"
12	18"
13	18"
14	18"
15	18"
16	18"
17	18"
18	18"
19	18"
20	18"
21	18"
22	18"
23	18"

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

## OVERALL SITE PLAN



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



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FOR THE MARKING OF UNDERGROUND  
MEMBER UTILITIES

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

HORIZ. 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**

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**CONTROL MEASURE/BMP PHASING PLAN:**

**INITIAL CONTROL MEASURES:**

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

**INTERIM CONTROL MEASURES:**

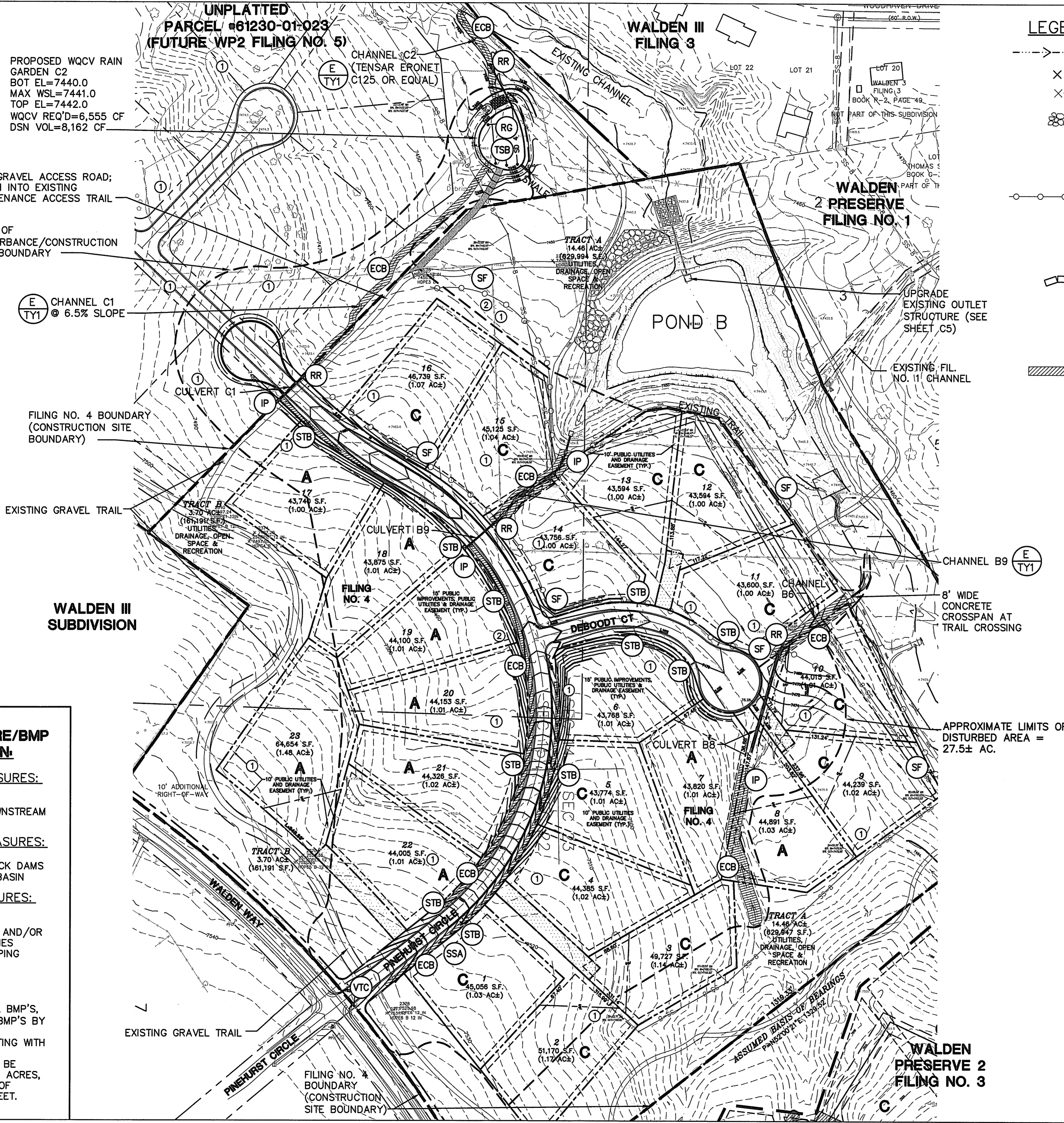
- STRAW BALES/SCL CHECK DAMS
- TEMPORARY SEDIMENT BASIN

**FINAL CONTROL MEASURES:**

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

**SEQUENCING NOTES:**

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



**LEGEND:**

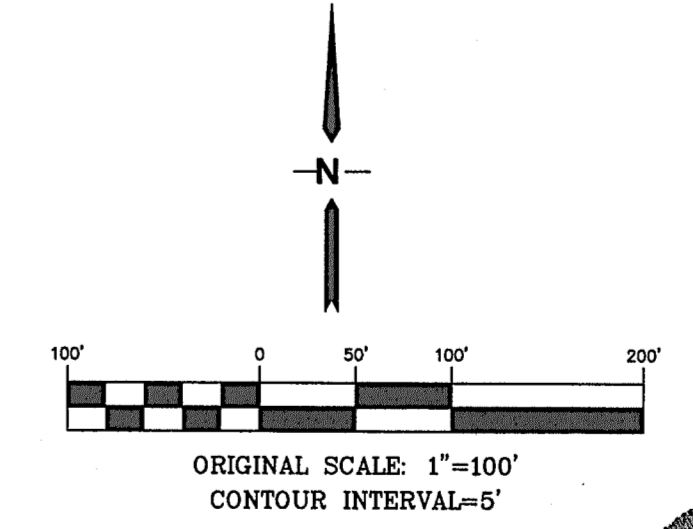
- >---> FLOWLINE
- X 99.00 PROPOSED SPOT ELEVATION (FLOWLINE)
- X 95.10 EXISTING SPOT ELEVATION
- RR RIPRAP (10'L x 6'W x 2'D; d50=12" RR UNLESS OTHERWISE NOTED)
- IP INLET PROTECTION (GRAVEL FILTER)
- SF SILT FENCE
- VTC VEHICLE TRACKING CONTROL PAD
- TM TEMPORARY SEED AND MULCH ON DISTURBED SLOPES
- 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:**

1. 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.
2. TOPSOIL STOCKPILE AREA



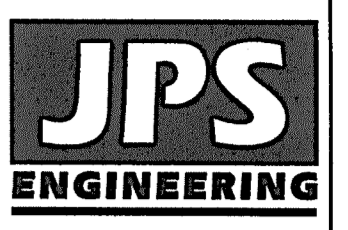
BENCHMARK:  
 BENCHMARK 4 BB RESET 1984 NAVD  
 88 DATUM ELEV.=7570.80 FOUND  
 BRASS CAP IN CONCRETE INT HWY 83  
 & HODGEN RD.



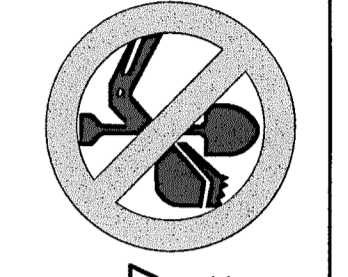
NOTE:  
 REFER TO LOT GRADING NOTES & DETAILS ON SHEET C1.2

**WALDEN PRESERVE 2 - FILING NO. 4**

**SITE GRADING & EROSION CONTROL PLAN**



19 E. Willamette Ave.  
 Colorado Springs, CO 80903  
 PH: 719-477-9429  
 FAX: 719-471-0765  
 www.jpsegr.com

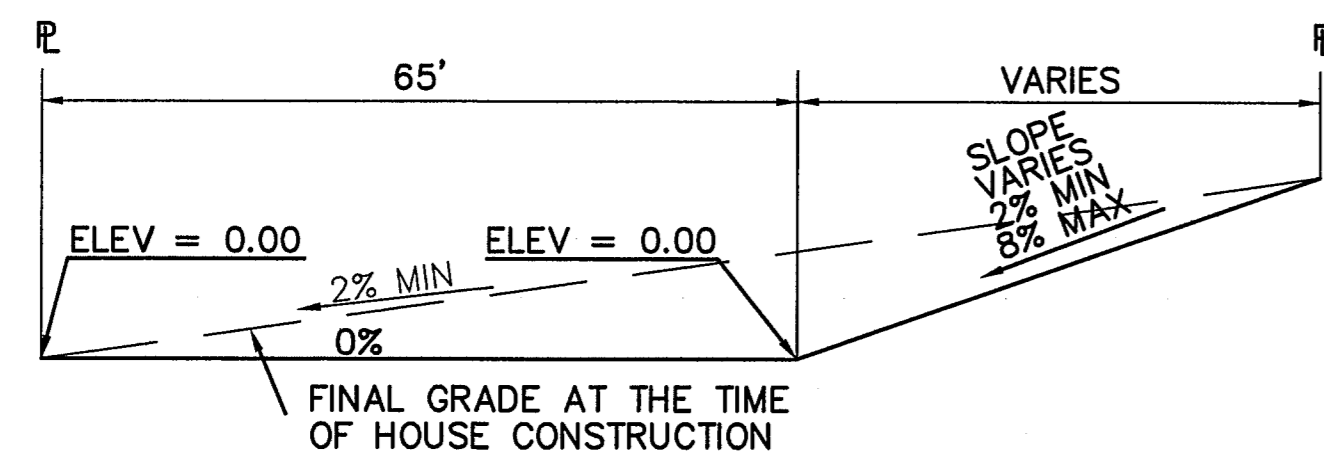


CALL UTILITY NOTIFICATION CENTER OF COLORADO  
 1-800-922-1987  
 CALL 2-BUSINESS DAYS IN ADVANCE BEFORE THE MARKING OF UNDERGROUND MEMBER UTILITIES.

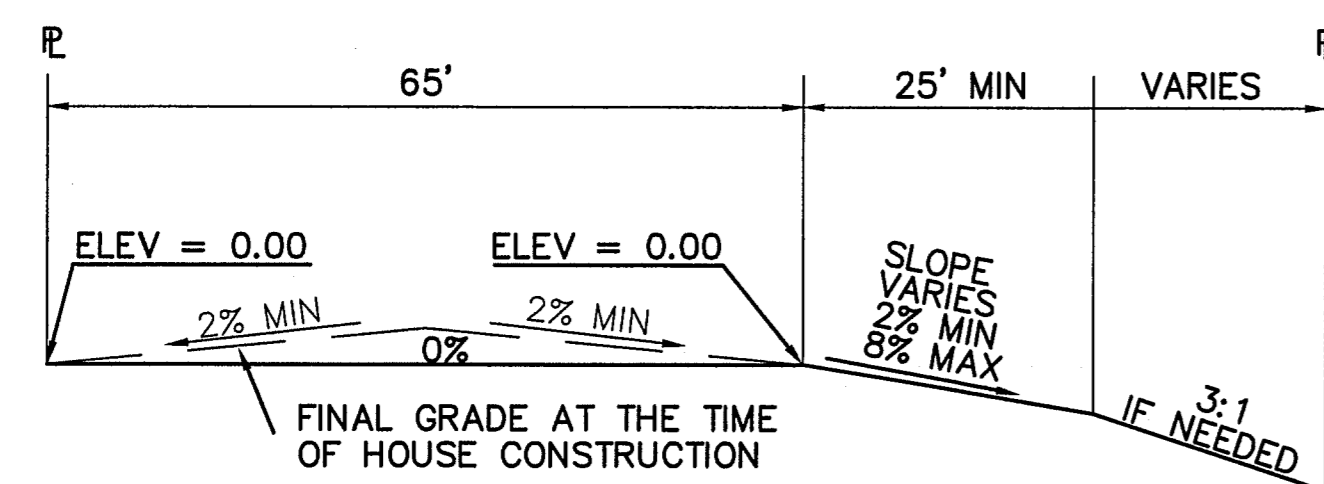
No.	REVISION	DATE	BY
1	FINAL PLAT SUBMITTAL	9/05/18	JPS
2	COUNTY COMMENTS	2/25/19	JPS
3	COUNTY COMMENTS	5/15/19	JPS
4	COUNTY COMMENTS	7/11/19	JPS
5	COUNTY COMMENTS	8/30/19	JPS

HORIZ. 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

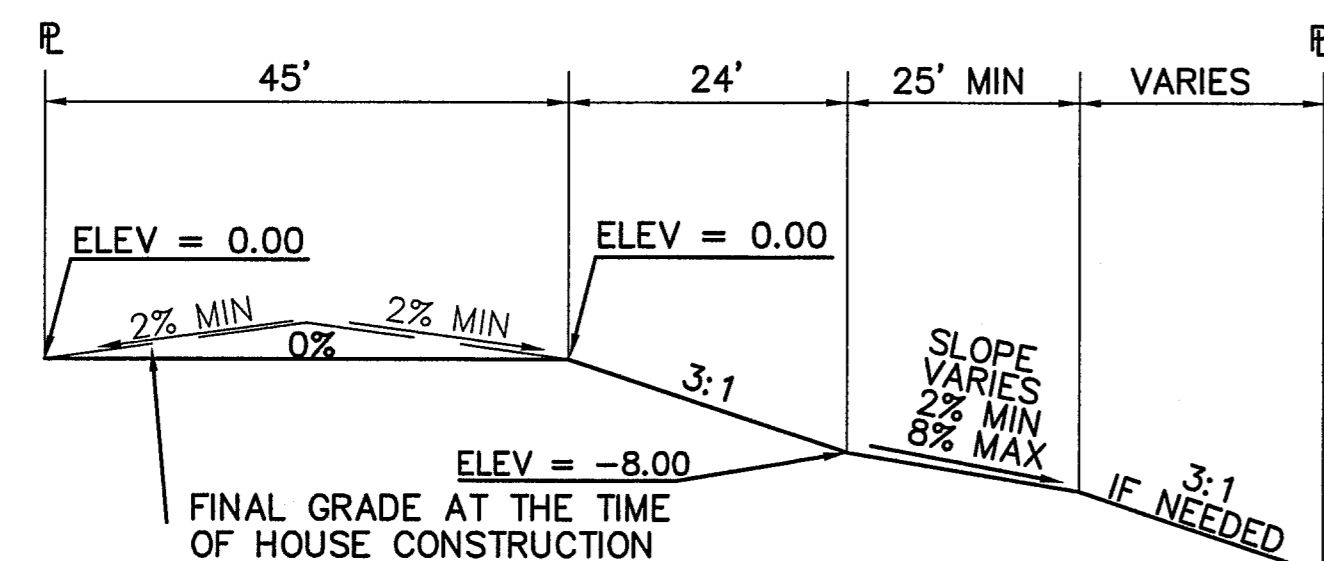
SHEET: **C1.1**



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



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



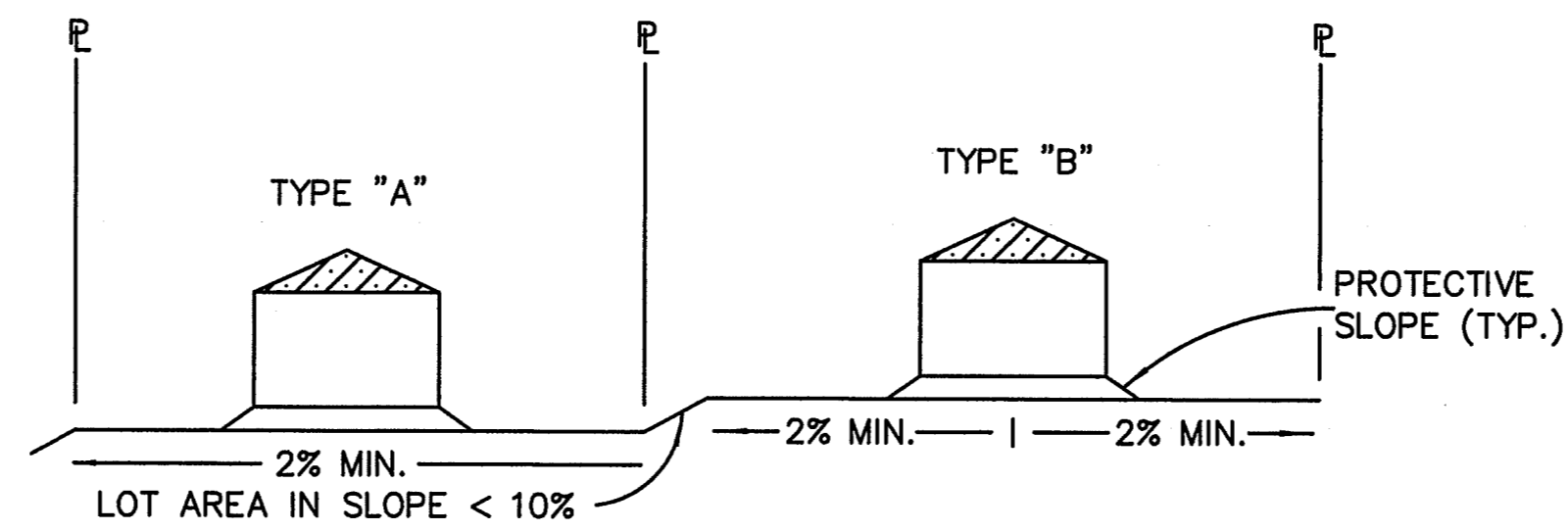
**TYPICAL "WALK-OUT" LOT - "C" LOT**  
SCALE: 1"=20'

**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.

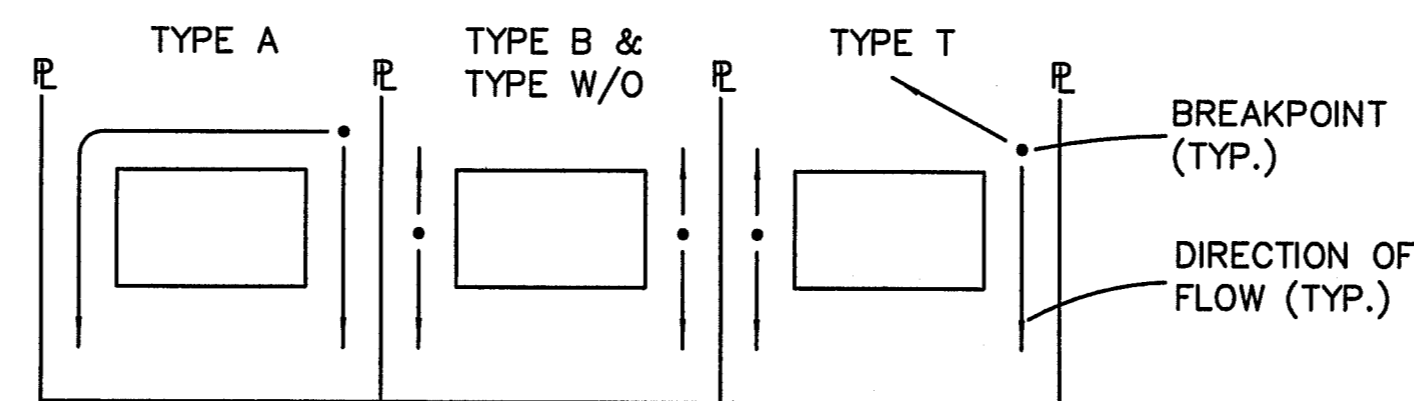
**NOTES:**

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.

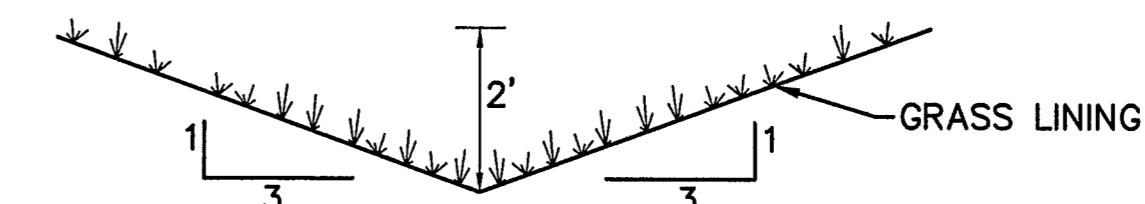


**TYPICAL LOT SECTION DETAIL**  
N.T.S.

**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.

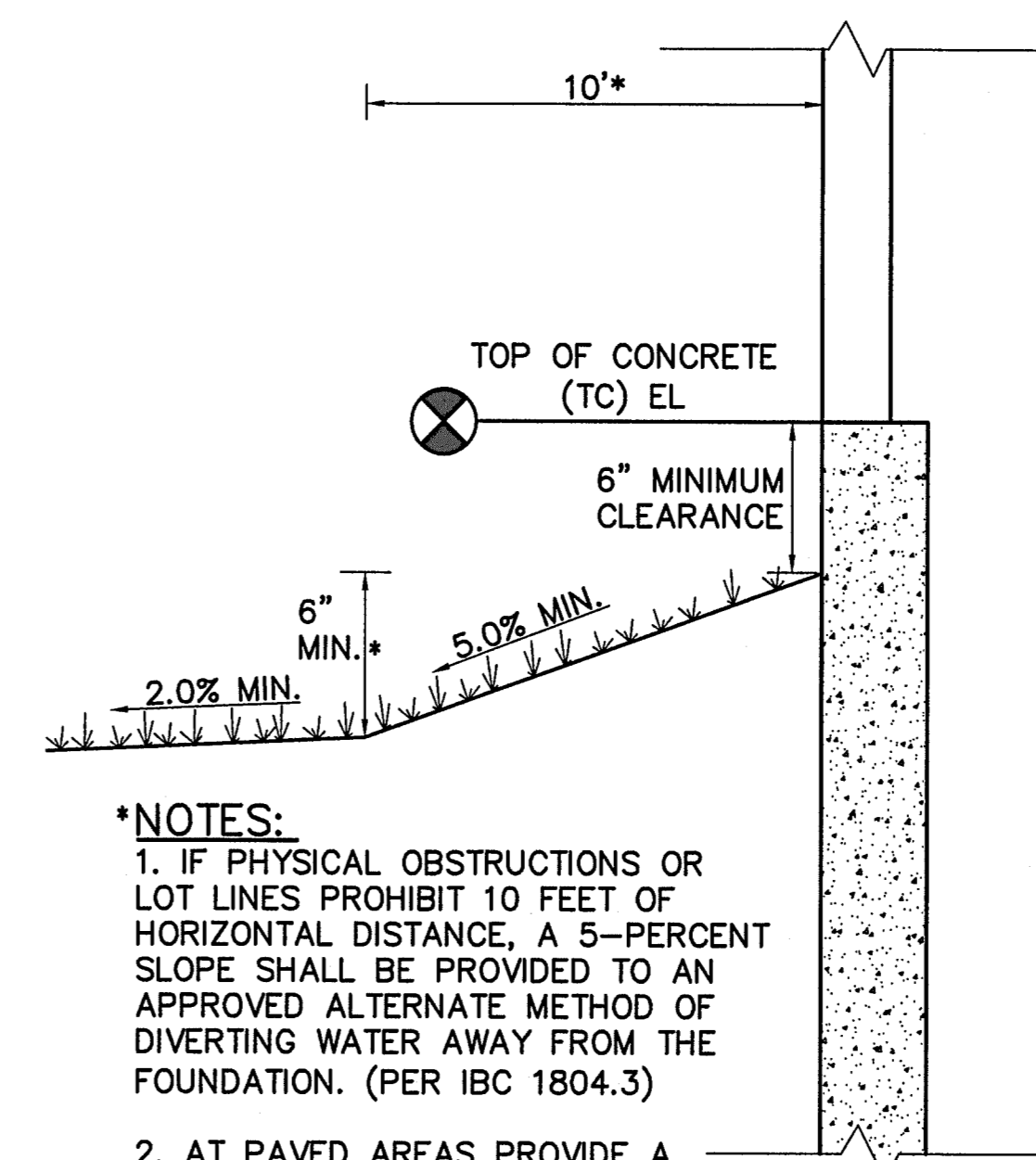


**LOT DRAINAGE TYPES**  
N.T.S.



**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:**

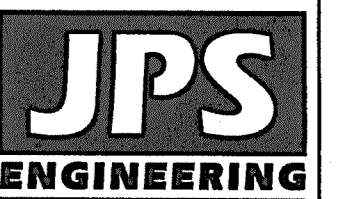
1. IF PHYSICAL OBSTRUCTIONS OR LOT LINES PROHIBIT 10 FEET OF HORIZONTAL DISTANCE, A 5-PERCENT SLOPE SHALL BE PROVIDED TO AN APPROVED ALTERNATE METHOD OF DIVERTING WATER AWAY FROM THE FOUNDATION. (PER IBC 1804.3)
2. AT PAVED AREAS PROVIDE A MINIMUM 2.0% SLOPE AWAY FROM THE BUILDING FOR THE FIRST 10 FEET OF HORIZONTAL DISTANCE.

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



**WALDEN PRESERVE 2 - FILING NO. 4**

**LOT GRADING NOTES & DETAILS**



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



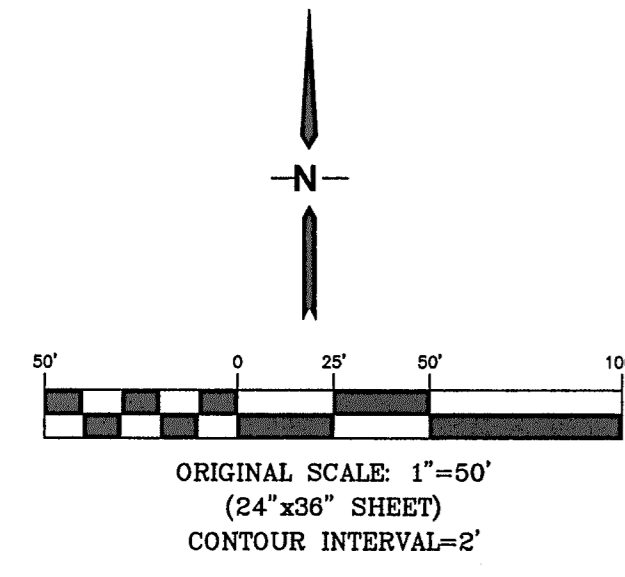
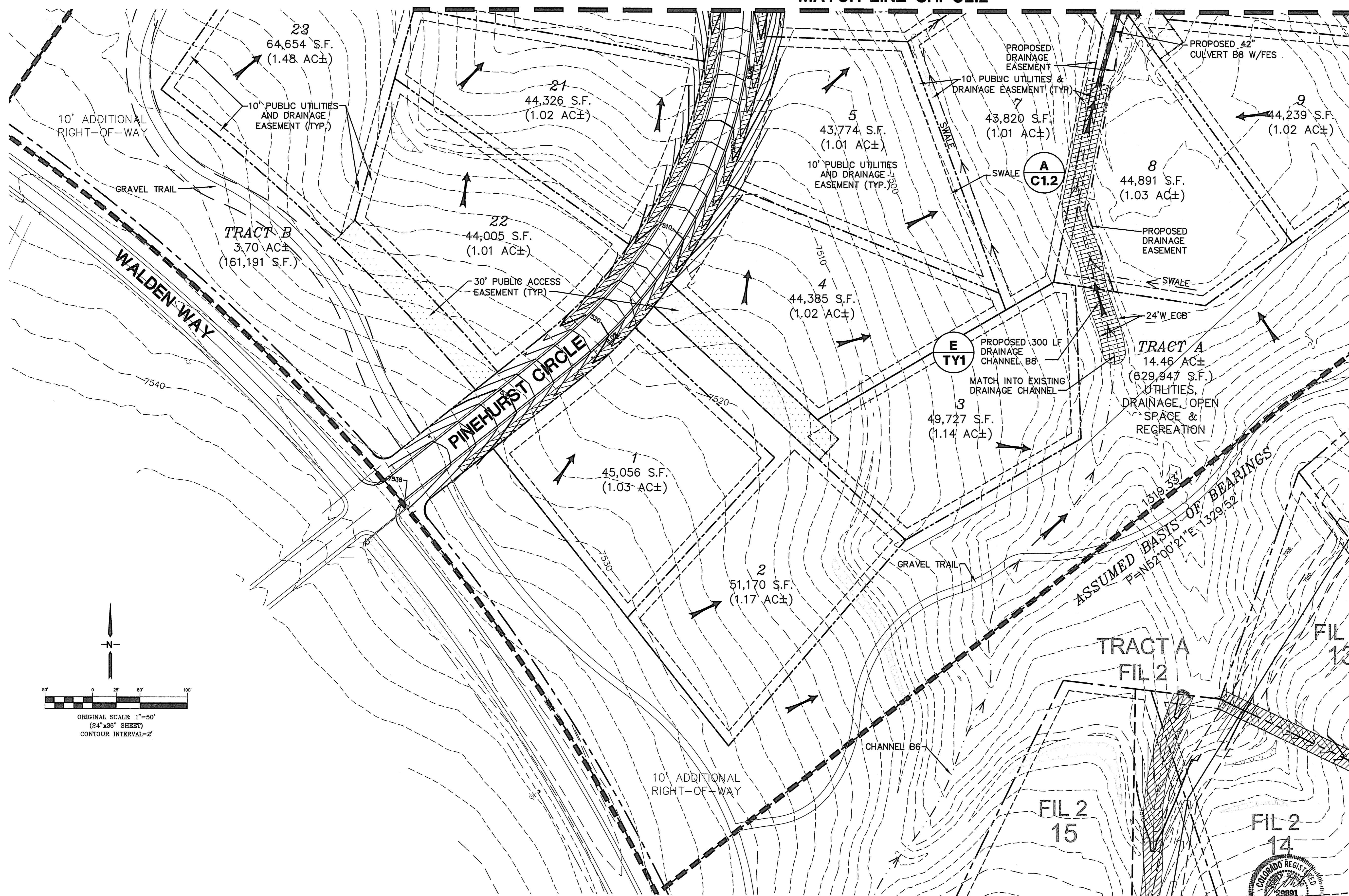
CALL UTILITY NOTIFICATION CENTER OF COLORADO  
1-800-922-1987  
1-800-922-1987  
CALL BEFORE YOU DIG TO AVOID DAMAGE TO UNDERGROUND UTILITIES.

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

HORIZ. 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

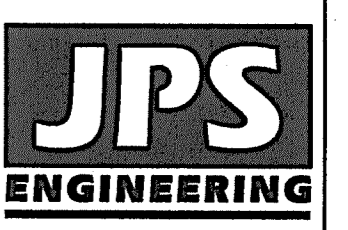
SHEET: **C1.2**

Z:\040201\_walden\dwg\civil\WALDEN PRESERVE 2.FLG-A\C2.1.dwg Jul 03, 2019 - 10:00am



**WALDEN PRESERVE 2 - FILING NO. 4**

**ENLARGED SITE GRADING PLAN - SOUTH**



19 E. Willamette Ave.  
Colorado Springs, CO  
80903  
Ph: 719-477-9429  
Fax: 719-471-0766  
www.psengr.com



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

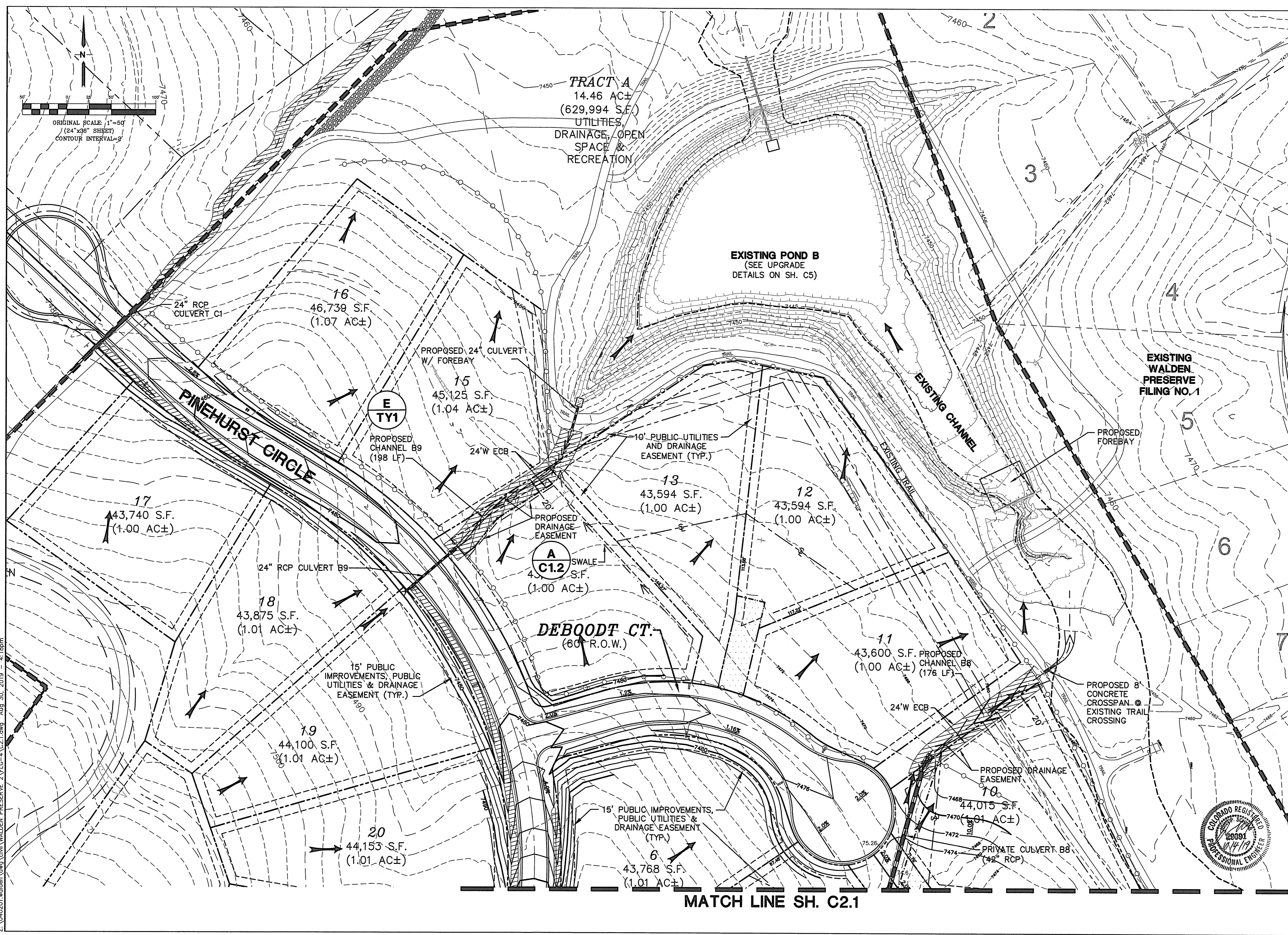
NO.	REVISION	DATE	BY
1	FINAL PLAT SUBMITTAL	9/05/18	JPS
2	COUNTY COMMENTS	2/25/19	JPS
3	COUNTY COMMENTS	5/15/19	JPS
4	COUNTY COMMENTS	7/03/19	JPS

HORZ. SCALE: 1"=50'	DRAWN: RMD
VERT. SCALE: N/A	DESIGNED: JPS
SURVEYED: RAMPART	CHECKED: JPS
CREATED: 8/14/14	LAST MODIFIED: 7/03/19
PROJECT NO: 040201	MODIFIED BY: BJJ
SHEET:	



**C2.1**

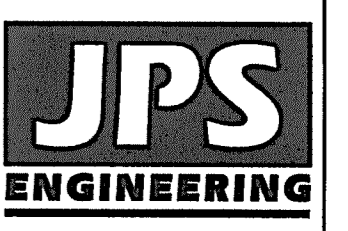
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MATCH LINE SH. C2.1

**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.jpseng.com



CALL UTILITY NOTIFICATION  
CENTER OF COLORADO  
1-800-922-1987  
CALL BEFORE YOU DIG  
BEFORE YOU 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
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4	COUNTY COMMENTS	8/30/19	JPS

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**



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

REVISED 7/02/19

- 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.
- 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.
- A SEPARATE STORMWATER MANAGEMENT PLAN (SWMP) 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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).
- 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.
- 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.
- 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.
- EROSION CONTROL BLANKETING OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
- 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.
- 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.
- TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF-SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
- 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.
- 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.
- 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.
- 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.
- NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER OR DITCH EXCEPT WITH APPROVED SEDIMENT CONTROL MEASURES.
- 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.
- ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE ONLY AT APPROVED CONSTRUCTION ACCESS POINTS.
- PRIOR TO CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
- 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.
- 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.
- 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  
 WQCD - 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

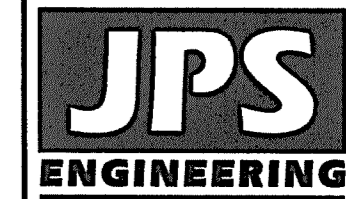
**SEDIMENT CONTROL MAINTENANCE PROGRAM:**

	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

<sup>1</sup> AND AFTER ANY PRECIPITATION OR SNOW MELT EVENT THAT CAUSES SURFACE EROSION.

<sup>2</sup> 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.jpsegr.com



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

No.	REVISION	DATE	BY
1	FINAL PLAT SUBMITTAL	9/05/18	JPS
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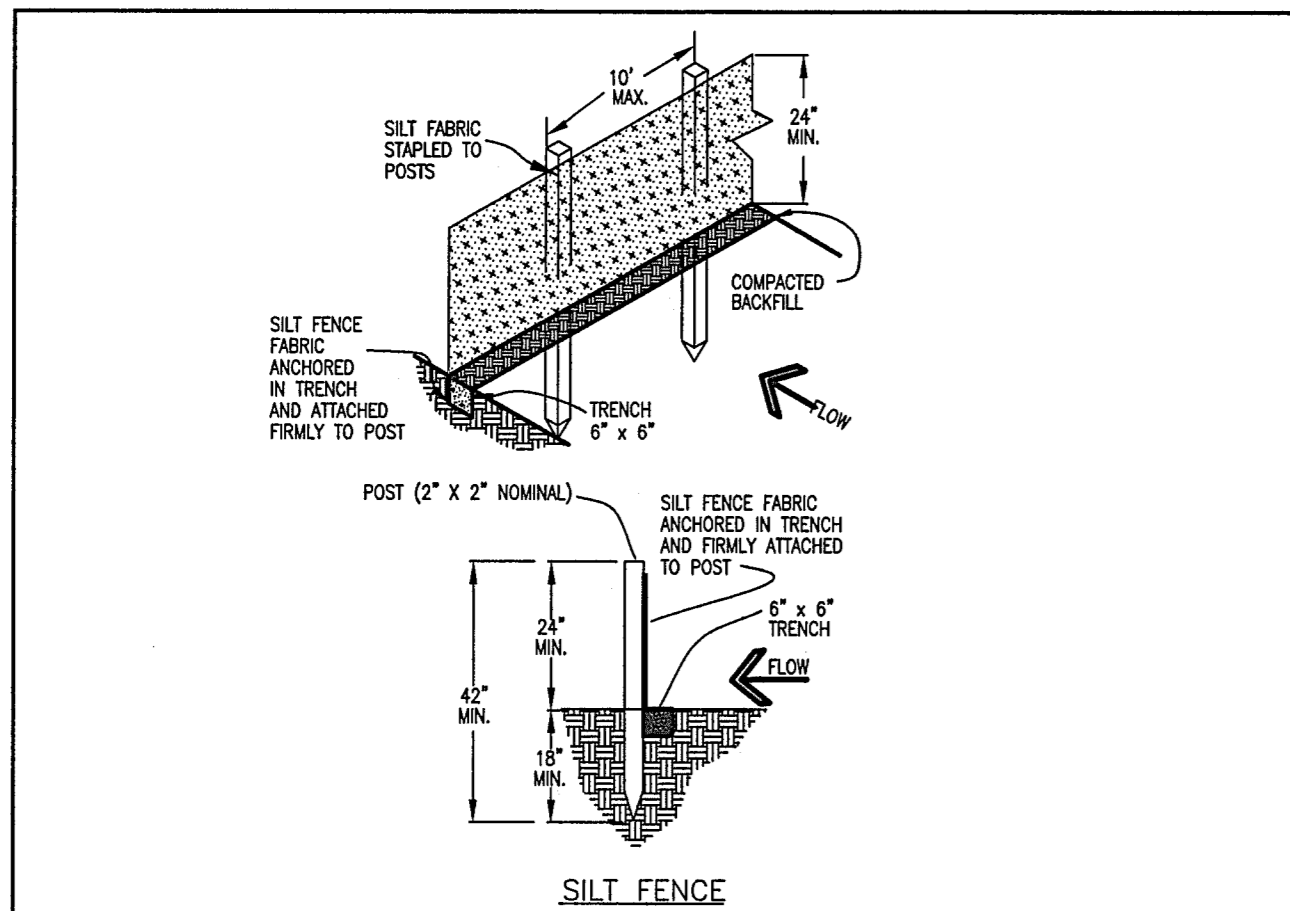
**EROSION CONTROL NOTES**



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

SHEET: **C3.1**





**SILT FENCE NOTES**

**INSTALLATION REQUIREMENTS**

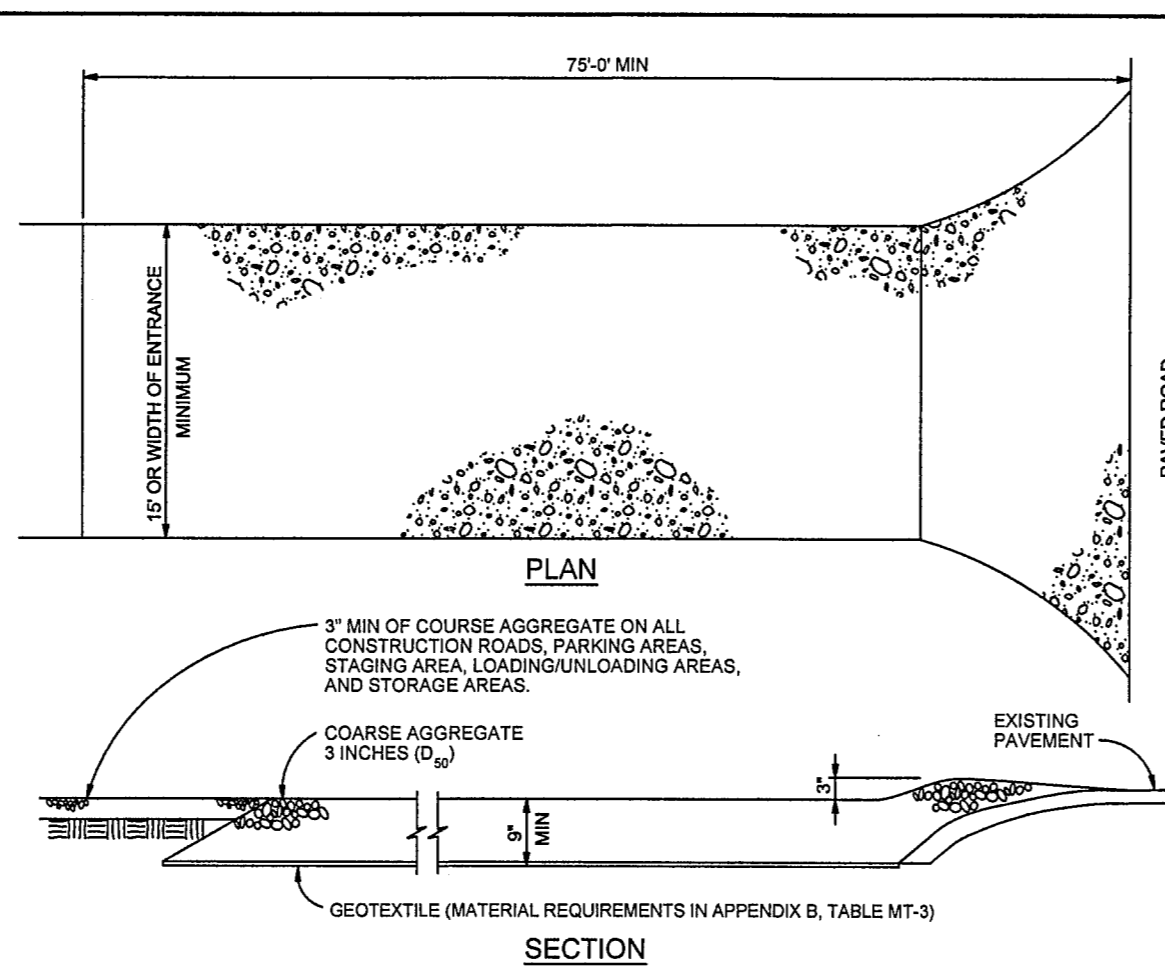
- SILT FENCES SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
- WHEN JOINTS ARE NECESSARY, SILT FENCE GEOTEXTILE SHALL BE SPUN TOGETHER ONLY AT SUPPORT POST AND SECURELY SEALED.
- METAL POSTS SHALL BE "STUDDED TEE" OR "U" TYPE WITH MINIMUM WEIGHT OF 1.33 POUNDS PER LINEAR FOOT. WOOD POSTS SHALL HAVE A MINIMUM DIAMETER OR CROSS SECTION DIMENSION OF 2 INCHES.
- THE FILTER MATERIAL SHALL BE FASTENED SECURELY TO METAL OR WOOD POSTS USING WIRE TIES, OR TO WOOD POSTS WITH 3/4" LONG #8 HEAVY-DUTY STAPLES. THE SILT FENCE GEOTEXTILE SHALL NOT BE STAPLED TO EXISTING TREES.
- WHILE NOT REQUIRED, WIRE MESH FENCE MAY BE USED TO SUPPORT THE GEOTEXTILE. WIRE FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY-DUTY WIRE STAPLES AT LEAST 1/2" LONG. THE WIRES OR HOOP RINGS, THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 6" AND SHALL NOT EXTEND MORE THAN 3' ABOVE THE ORIGINAL GROUND SURFACE.
- ALONG THE TOE OF FILLS, INSTALL THE SILT FENCE ALONG A LEVEL CONTOUR AND PROVIDE AN AREA BEHIND THE FENCE FOR RUNOFF TO POND AND SEDIMENT TO SETTLE. A MINIMUM DISTANCE OF 5 FEET FROM THE TOE OF THE FILL IS RECOMMENDED.
- THE HEIGHT OF THE SILT FENCE FROM THE GROUND SURFACE SHALL BE MINIMUM OF 24 INCHES AND SHALL NOT EXCEED 36 INCHES. HIGHER FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE.

SILT FENCE

City of Colorado Springs  
Stormwater Quality

Figure SF-2  
Silt Fence  
Construction Detail and Maintenance Requirements

3-38



**VEHICLE TRACKING NOTES**

**INSTALLATION REQUIREMENTS**

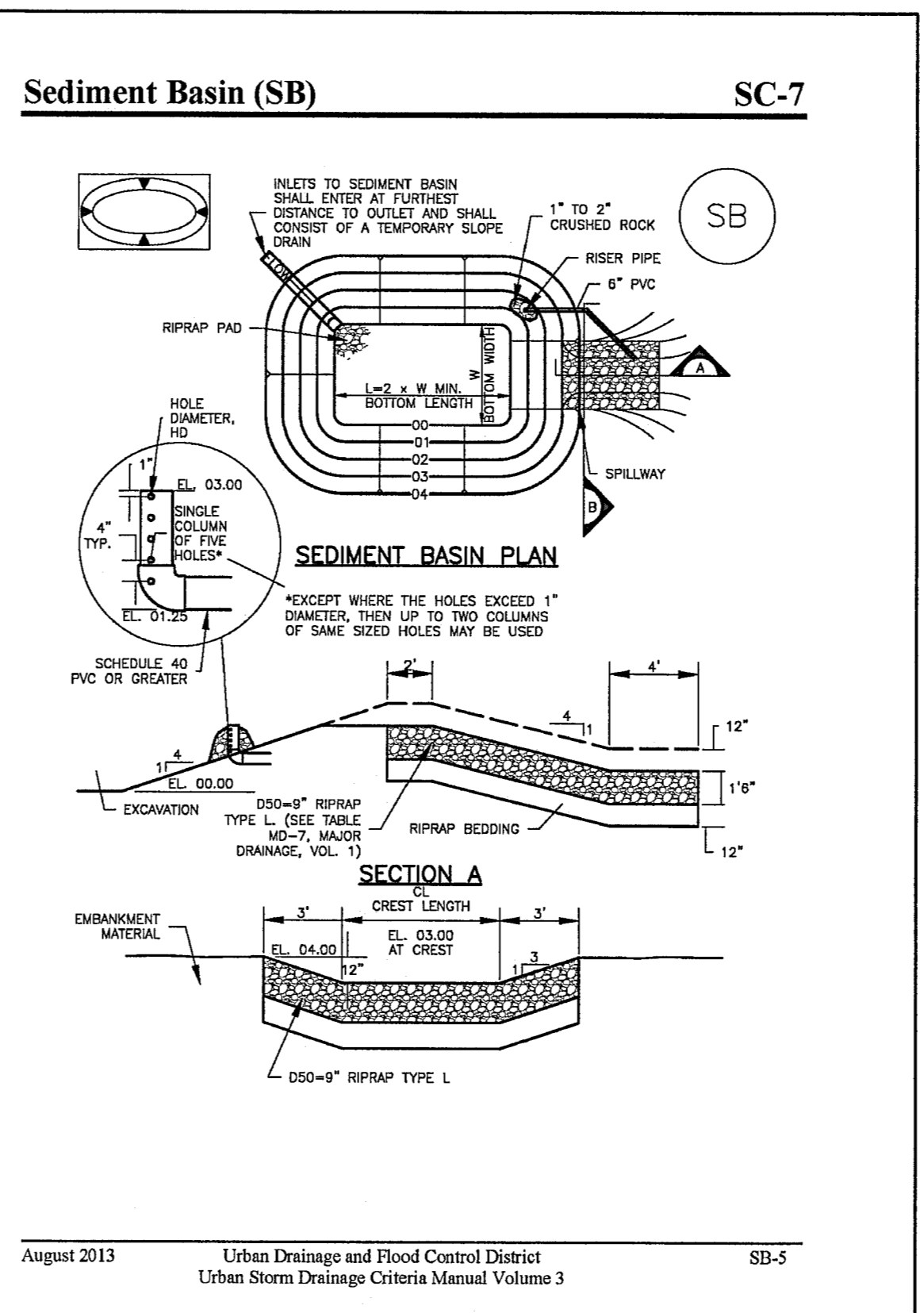
- CONSTRUCTION ENTRANCES ARE TO BE BUILT WITH AN APRON TO ALLOW FOR TURNING TRAFFIC, BUT SHOULD NOT BE BUILT OVER EXISTING PAVEMENT EXCEPT FOR A SLIGHT OVERLAP.
- AREAS TO BE STABILIZED ARE TO BE PROPERLY GRADED AND COMPACTED PRIOR TO LAYING DOWN GEOTEXTILE AND STONE.
- CONSTRUCTION ROADS, PARKING AREAS, LOADING/UNLOADING ZONES, STORAGE AREAS, AND STAGING AREAS ARE TO BE STABILIZED.
- CONSTRUCTION ROADS ARE TO BE BUILT TO CONFORM TO SITE GRADES, BUT SHOULD NOT HAVE STEEP SLOPES OR ROAD GRADES THAT ARE EXCESSIVELY STEEP.
- REGULAR INSPECTIONS ARE TO BE MADE OF ALL STABILIZED AREAS, ESPECIALLY AFTER STORM EVENTS.
- STONES ARE TO BE REAPPLIED PERIODICALLY AND WHEN REPAIR IS NECESSARY.
- SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED DAILY BY SHOVELING OR SWEEPING. SEDIMENT IS NOT TO BE WASHED DOWN STORM SEWER DRAINS.
- STORM SEWER INLET PROTECTION IS TO BE IN PLACE, INSPECTED, AND CLEANED IF NECESSARY.
- OTHER ASSOCIATED SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED TO ENSURE GOOD WORKING CONDITION.

VEHICLE TRACKING

City of Colorado Springs  
Stormwater Quality

Figure VT-2  
Vehicle Tracking  
Application Examples

3-54



**SC-7 Sediment Basin (SB)**

TABLE SB-1. SIZING INFORMATION FOR STANDARD SEDIMENT BASIN

Upstream Drainage Area (rounded to nearest acre), (ac)	Basin Bottom Width (ft), (ft)	Spillway Crest Length (ft), (ft)	High Diameter (ft), (ft)
1	12 1/2	2	1/2
2	18	3	3/4
3	24	4	1
4	30	5	1 1/4
5	36	6	1 1/2
6	42	7	1 3/4
7	48	8	1 3/4
8	54	9	1 3/4
9	60	10	1 3/4
10	66	11	1 3/4
11	72	12	1 3/4
12	78	13	1 3/4
13	84	14	1 3/4
14	90	15	1 3/4
15	96	16	1 3/4

**SEDIMENT BASIN INSTALLATION NOTES**

- SEE PLAN VIEW FOR:
  - LOCATION OF SEDIMENT BASIN.
  - TYPE OF BASIN (STANDARD BASIN OR NONSTANDARD BASIN).
  - FOR STANDARD BASIN, BOTTOM WIDTH W, CREST LENGTH CL, AND HOLE DIAMETER, HD.
  - FOR NONSTANDARD BASIN, SEE CONSTRUCTION DRAWINGS FOR DESIGN OF BASIN INCLUDING RISER HEIGHT H, NUMBER OF COLUMNS N, HOLE DIAMETER HD AND PIPE DIAMETER D.
- FOR STANDARD BASIN, BOTTOM DIMENSION MAY BE MODIFIED AS LONG AS BOTTOM AREA IS NOT REDUCED.
- SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO ANY OTHER LAND-DISTURBING ACTIVITY THAT RELIES ON BASINS AS A STORMWATER CONTROL.
- EMBANKMENT MATERIAL SHALL CONSIST OF SOIL FREE OF DEBRIS, ORGANIC MATERIAL, AND ROCKS OR CONCRETE GREATER THAN 3 INCHES AND SHALL HAVE A MINIMUM OF 15 PERCENT BY WEIGHT PASSING THE NO. 200 SIEVE.
- EMBANKMENT MATERIAL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.
- PIPE SO140 OR GREATER SHALL BE USED.
- THE DETAILS SHOWN ON THESE SHEETS PERTAIN TO STANDARD SEDIMENT BASINS FOR DRAINAGE AREAS LESS THAN 15 ACRES. SEE CONSTRUCTION DRAWINGS FOR EMBANKMENT, STORAGE VOLUME, SPILLWAY, OUTLET, AND OUTLET PROTECTION DETAILS FOR ANY SEDIMENT BASINS THAT HAVE BEEN INDIVIDUALLY DESIGNED FOR DRAINAGE AREAS LARGER THAN 15 ACRES.

SB-6

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

August 2013

**Sediment Basin (SB) SC-7**

**SEDIMENT BASIN MAINTENANCE NOTES**

- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- SEDIMENT ACCUMULATED IN BASIN SHALL BE REMOVED AS NEEDED TO MAINTAIN BMP EFFECTIVENESS. TYPICALLY WHEN SEDIMENT DEPTH REACHES ONE FOOT (I.E., TWO FEET BELOW THE SPILLWAY CREST).
- SEDIMENT BASINS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS ACCEPTED BY THE LOCAL JURISDICTION.
- WHEN SEDIMENT BASINS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

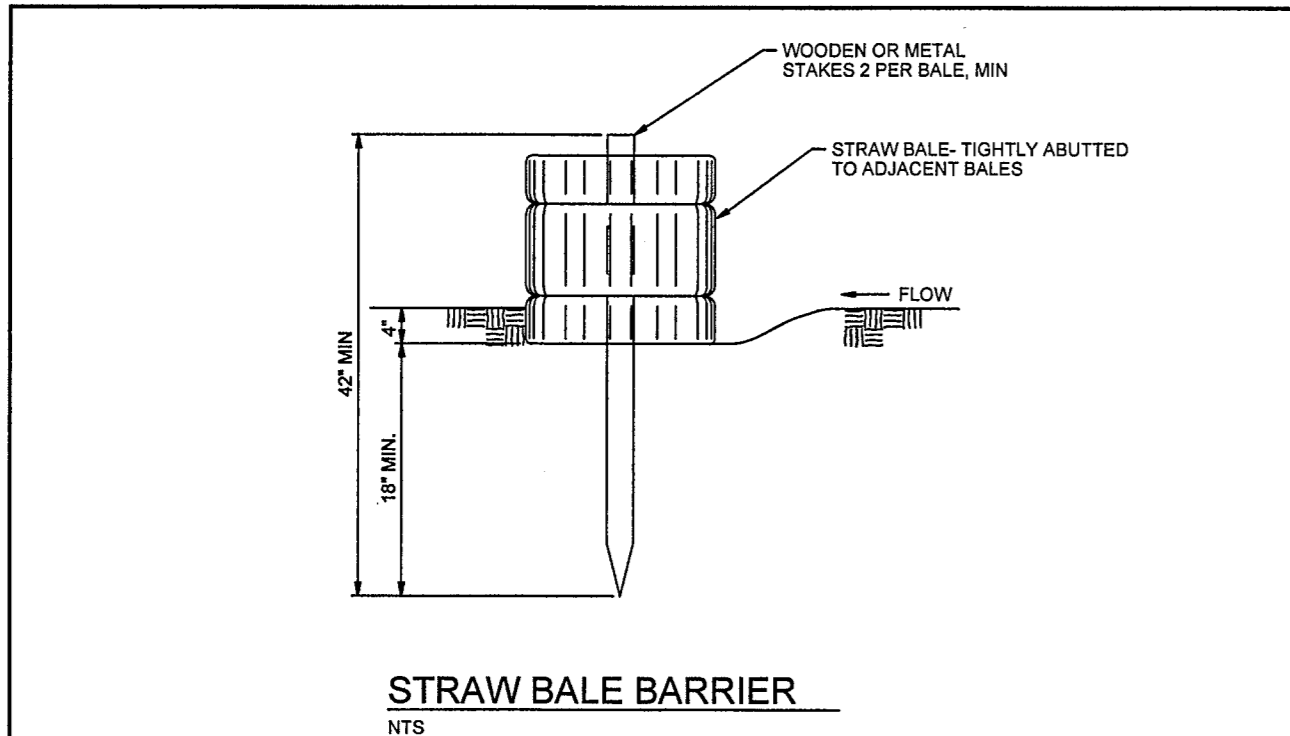
**SEDIMENT BASIN MAINTENANCE NOTES**

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

August 2013

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

SB-7



**STRAW BALE BARRIER NOTES**

**INSTALLATION REQUIREMENTS**

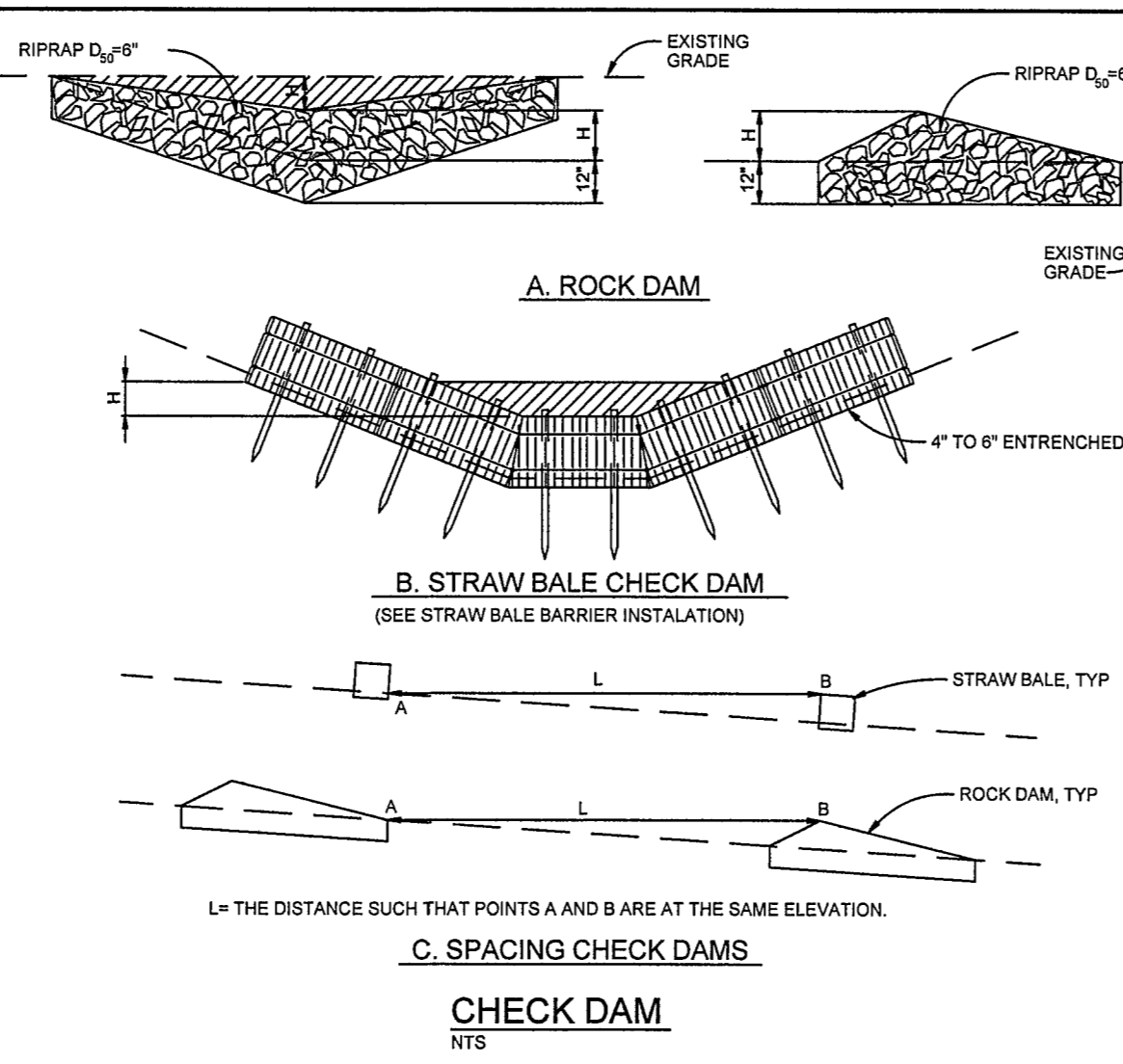
- STRAW BALE BARRIERS SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
- BALES SHALL CONSIST OF APPROXIMATELY 5 CUBIC FEET OF CERTIFIED WEDD FREE HAY OR STRAW AND WEIGH NOT LESS THAN 35 POUNDS.
- BALES ARE TO BE PLACED IN A SINGLE ROW WITH THE END OF THE BALES TIGHTLY ABUTTING ONE ANOTHER.
- EACH BALE IS TO BE SECURELY ANCHORED WITH AT LEAST TWO STAKES AND THE FIRST STAKE IS TO BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE TO FORCE THE BALES TOGETHER.
- STAKES ARE TO BE A MINIMUM OF 42 INCHES LONG. METAL STAKES SHALL BE STANDARD "U" OR "U" TYPE WITH MINIMUM WEIGHT OF 1.33 POUNDS PER LINEAR FOOT. WOOD STAKES SHALL HAVE A MINIMUM DIAMETER OR CROSS SECTION DIMENSION OF 2 INCHES.
- BALES ARE TO BE BOUND WITH EITHER WIRE OR STRAP AND ORIENTED SUCH THAT THE BINDINGS ARE AROUND THE SIDES AND NOT ALONG THE TOPS AND BOTTOMS OF THE BALE.
- GAPS BETWEEN BALES ARE TO BE CHINKED (FILLED BY WEEDING) WITH STRAW OR THE SAME MATERIAL OF THE BALE.
- END BALES ARE TO EXTEND UPSLOPE SO THE TRAPPED RUNOFF CANNOT FLOW AROUND THE ENDS OF THE BARRIER.

STRAW BALE BARRIER

City of Colorado Springs  
Stormwater Quality

Figure SBB-2  
Straw Bale Barrier  
Construction Detail and Maintenance Requirements

3-42



**CHECK DAM NOTES**

**INSTALLATION REQUIREMENTS**

- STRAW BALES USED AS CHECK DAMS ARE TO MEET THE REQUIREMENTS STATED IN FIGURE SBB-2.
- THE "H" DIMENSION SHALL BE SELECTED TO PROVIDE WEIR FLOW CONVEYANCE FOR 2-YEAR FLOW OR GREATER.
- ACCUMULATED SEDIMENT AND DEBRIS IS TO BE REMOVED FROM BEHIND THE DAMS AFTER EACH STORM OR WHEN 1/2 OF THE ORIGINAL HEIGHT OF THE DAM IS REACHED.
- CHECK DAMS ARE TO REMAIN IN PLACE AND OPERATIONAL UNTIL THE DRAINAGE AREA AND CHANNEL ARE PERMANENTLY STABILIZED.
- WHEN CHECK DAMS ARE REMOVED THE CHANNEL LINING OR VEGETATION IS TO BE RESTORED.
- REGULAR INSPECTIONS ARE TO BE MADE OF ALL CHECK DAMS, ESPECIALLY AFTER STORM EVENTS.
- REPLACE STONE AS NECESSARY TO MAINTAIN THE CORRECT HEIGHT OF THE DAM.
- ACCUMULATED SEDIMENT AND DEBRIS IS TO BE REMOVED FROM BEHIND THE DAMS AFTER EACH STORM OR WHEN 1/2 OF THE ORIGINAL HEIGHT OF THE DAM IS REACHED.
- CHECK DAMS ARE TO REMAIN IN PLACE AND OPERATIONAL UNTIL THE DRAINAGE AREA AND CHANNEL ARE PERMANENTLY STABILIZED.
- WHEN CHECK DAMS ARE REMOVED THE CHANNEL LINING OR VEGETATION IS TO BE RESTORED.

CHECK DAM

City of Colorado Springs  
Stormwater Quality

Figure CD-1  
Check Dam  
Construction Detail and Maintenance Requirements

3-20

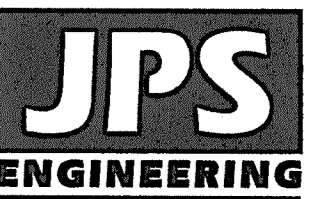
**TEMPORARY SEDIMENT BASIN DESIGN DATA**

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

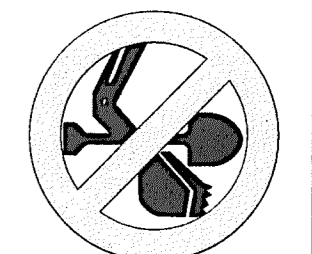


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VERT. SCALE:	N/A	DESIGNED:	JPS
SURVEYED:	PINNACLE	CHECKED:	JPS
DATE:	6/30/14	LAST MODIFIED:	8/30/19
PROJECT NO.:	040201	MODIFIED BY:	BJJ
SHEET:	C3.2		

WALDEN PRESERVE 2 - FILING NO. 4



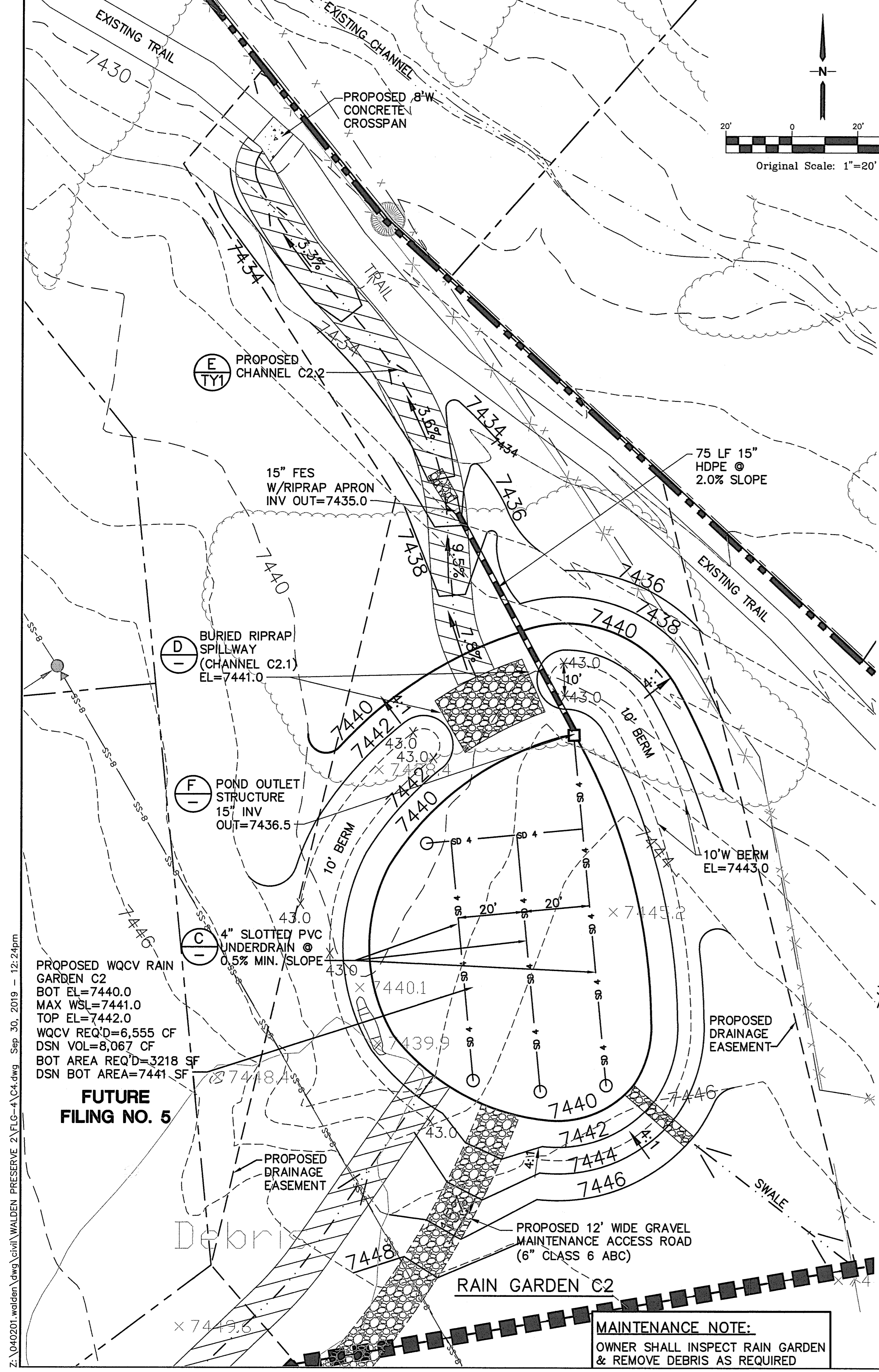
19 E. Willamette Ave.  
Colorado Springs, CO  
80903  
PH: 719-477-9429  
FAX: 719-471-0768  
www.psengr.com



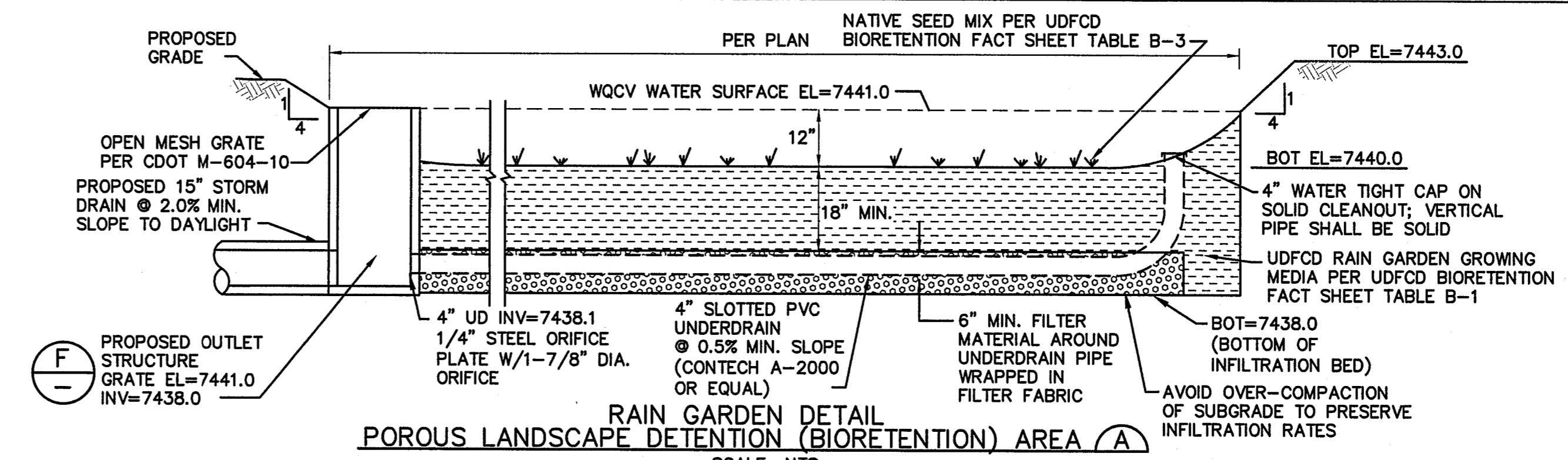
CALL UTILITY NOTIFICATION CENTER OF COLORADO  
1-800-922-1987  
CALL BEFORE YOU DIG OR EXCAVATE  
BEFORE THE MARKING OF UNDERGROUND MEMBER UTILITIES.

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

EROSION CONTROL DETAILS

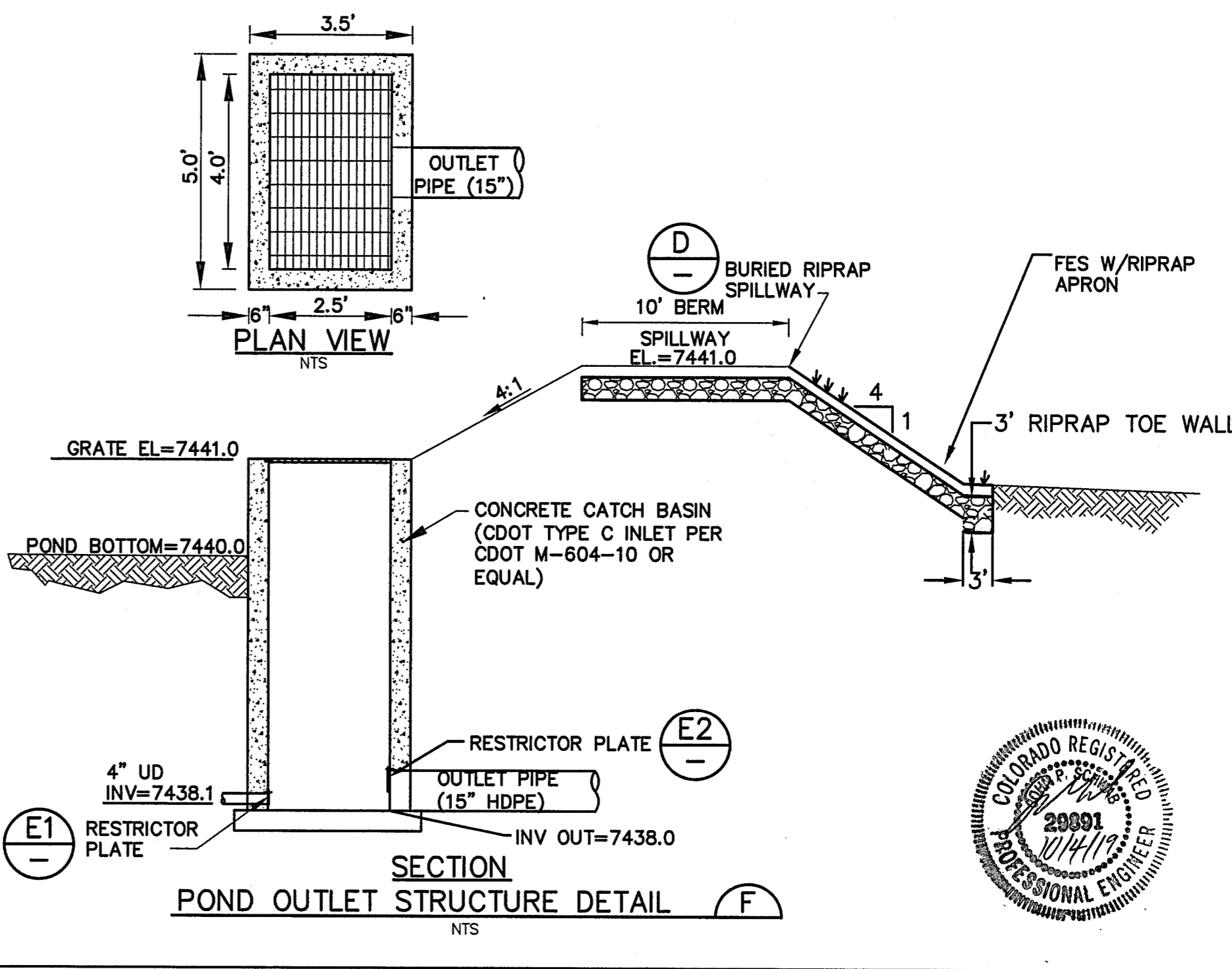
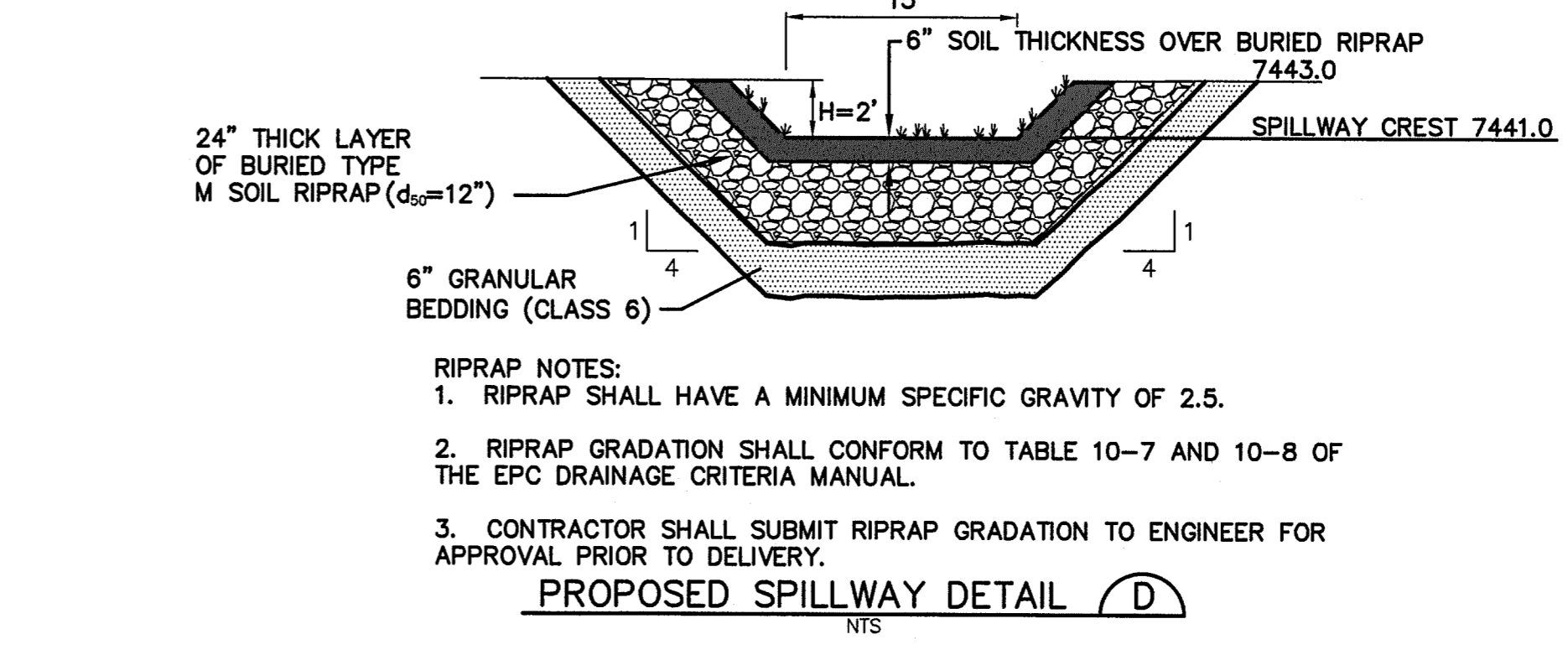
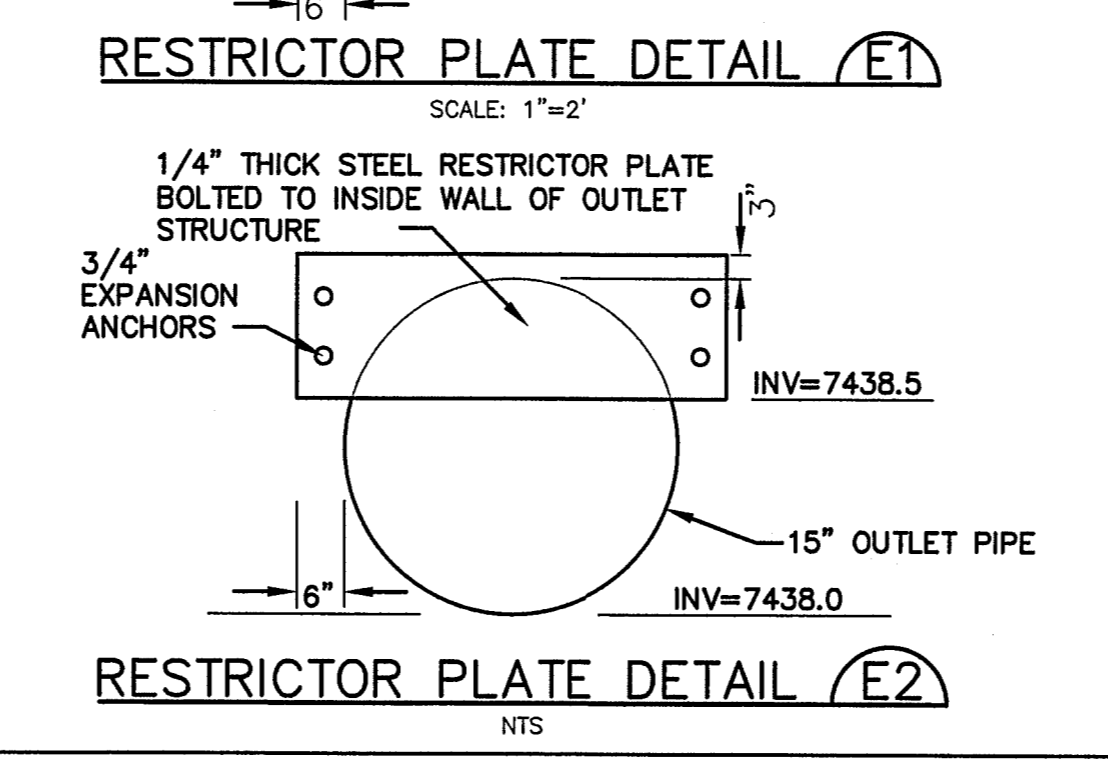
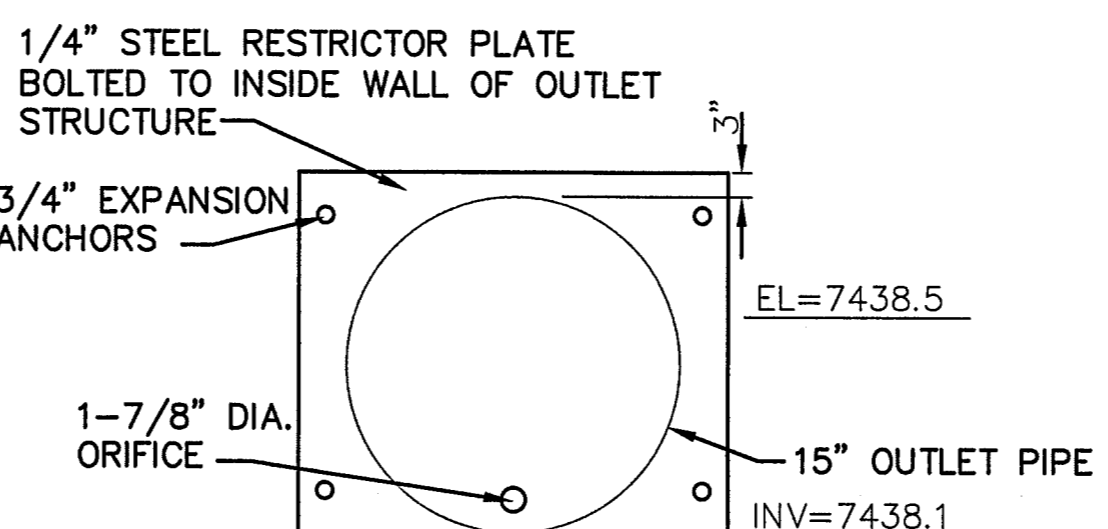
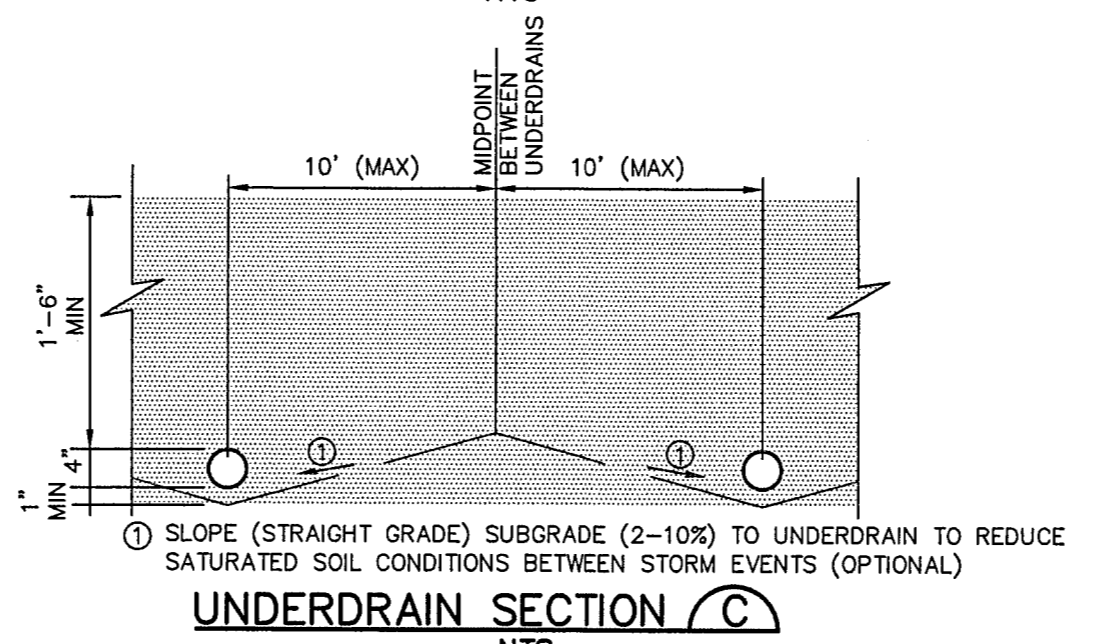
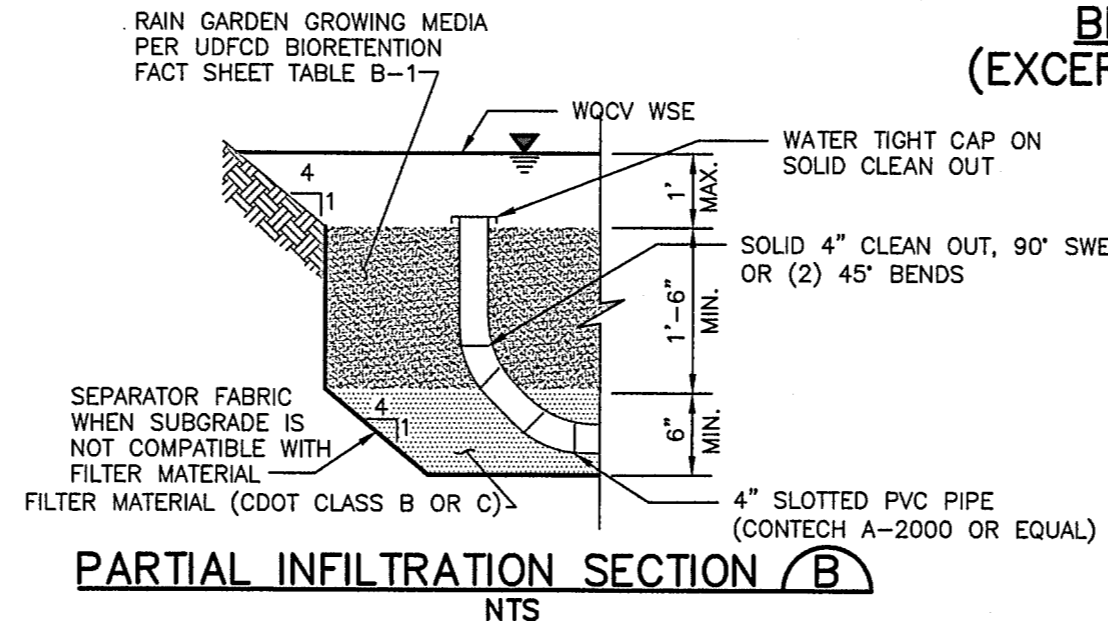


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 PROPOSED QVCV RAIN GARDEN C2  
 BOT EL=7440.0  
 MAX WSL=7441.0  
 TOP EL=7442.0  
 QVCV REQ'D=6,555 CF  
 DSN VOL=8,067 CF  
 BOT AREA REQ'D=3218 SF  
 DSN BOT AREA=7441 SF  
**FUTURE FILING NO. 5**

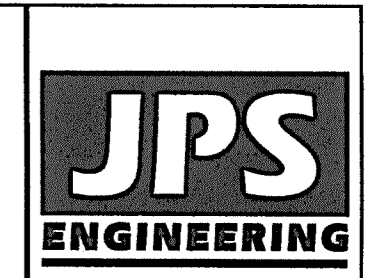


Material	Specification	Submittals	Testing	Notes
Bioretention soil	<b>Particle size distribution:</b> 80-90% sand (0.05 - 2.0 mm diameter) 3-17% silt (0.002-0.5 mm diameter) 3-17% clay (<0.002 diameter) <b>Chemical attribute and nutrient analysis:</b> pH 6.8 - 7.5 organic matter < 15% nitrogen < 15 ppm phosphorus < 15 ppm salinity < 8 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  
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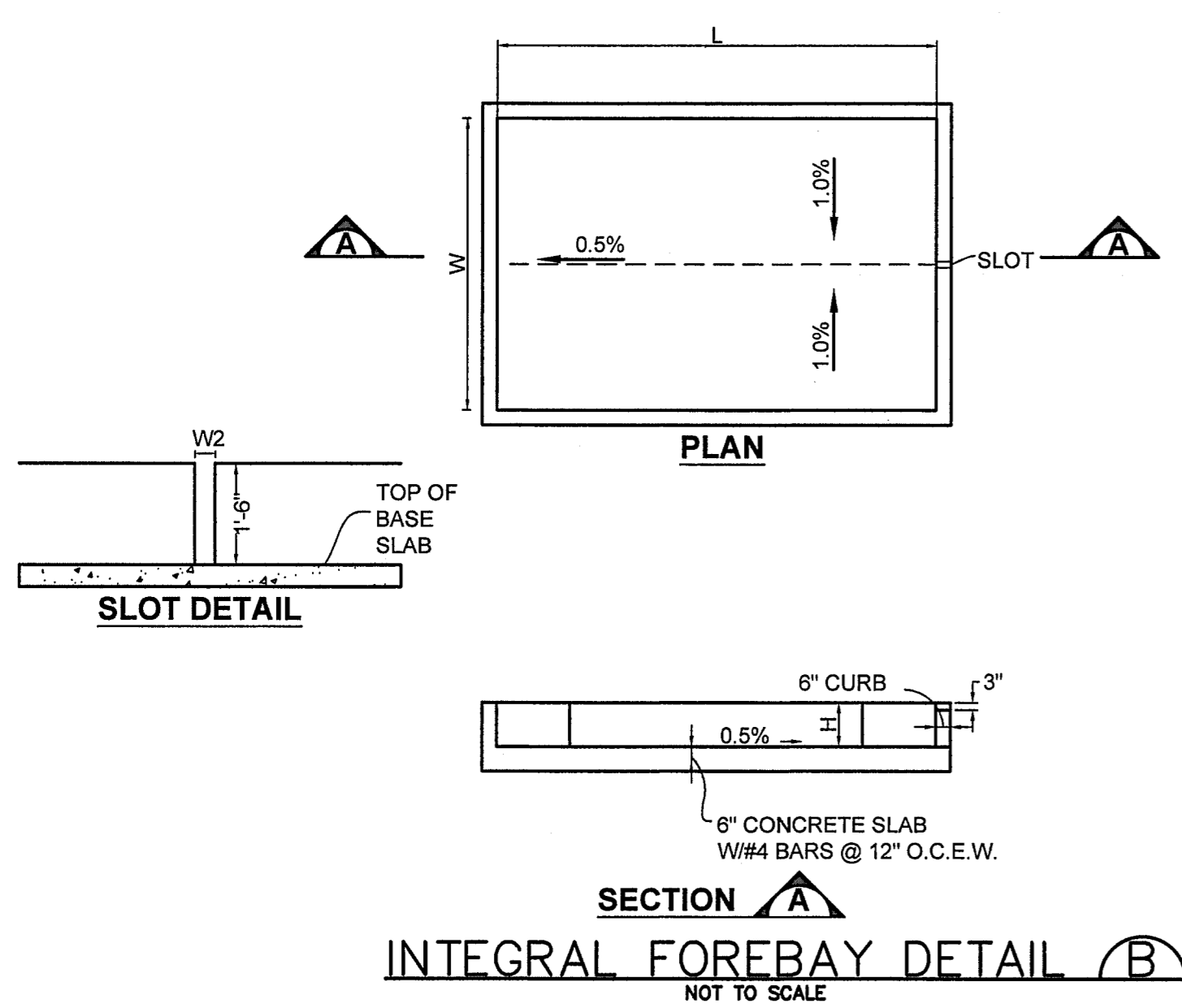
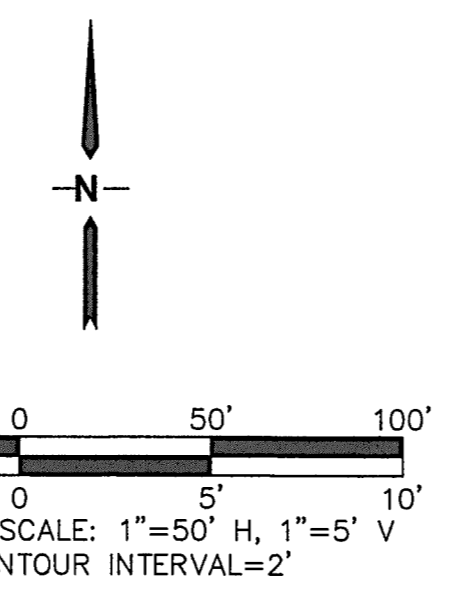
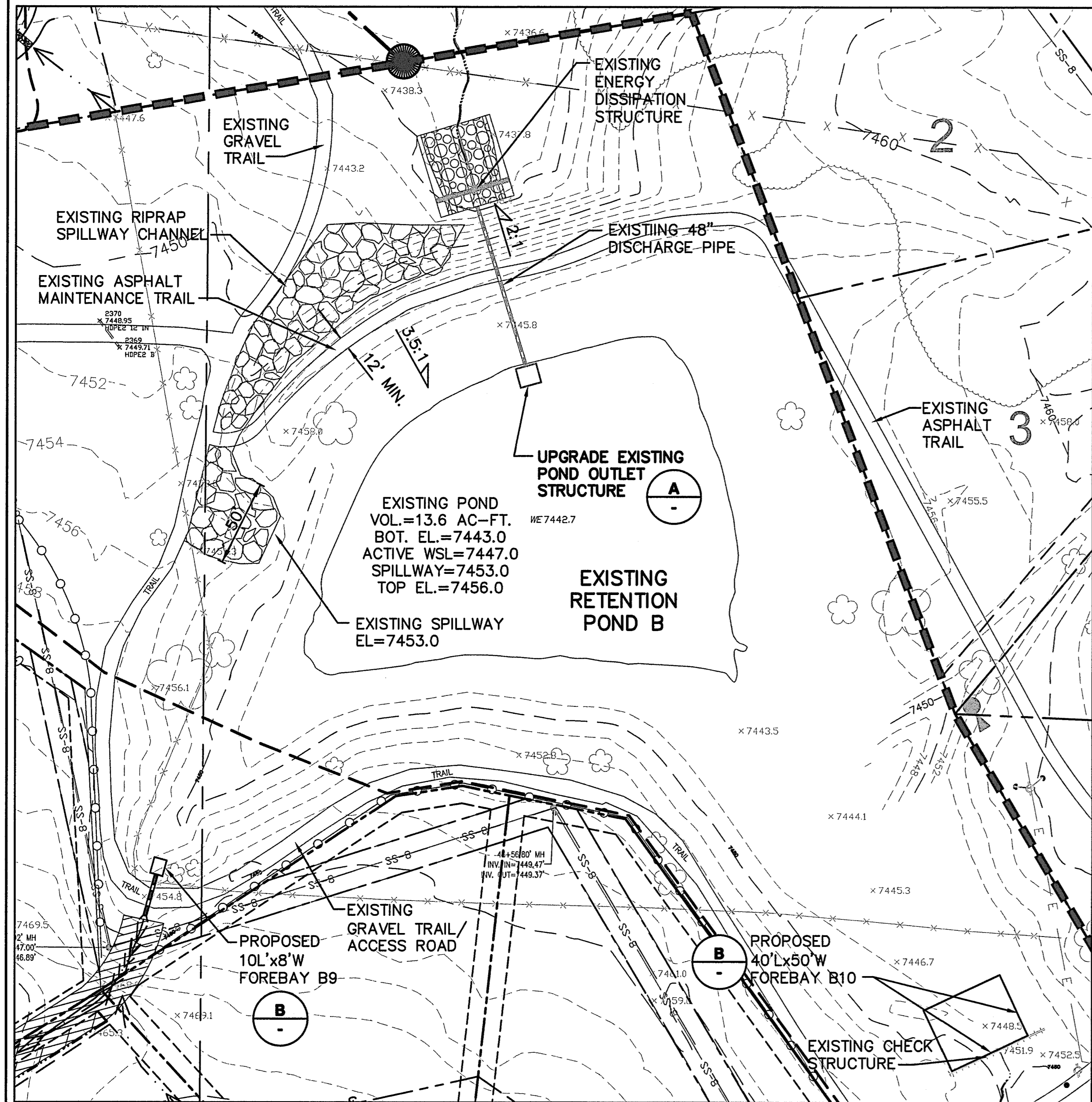
CALL UTILITY NOTIFICATION CENTER OF COLORADO  
**1-800-922-1987**  
 2-BUSINESS DAYS IN ADVANCE BEFORE THE MARKING OF UNDERGROUND MEMBER UTILITIES.

No.	REVISION	DATE
1	COUNTY COMMENTS	2/15/19
2	COUNTY COMMENTS	5/15/19
3	COUNTY COMMENTS	7/11/19
4	COUNTY COMMENTS	8/30/19
5	COUNTY COMMENTS	9/30/19

**RAIN GARDEN C2 PLAN & DETAILS**

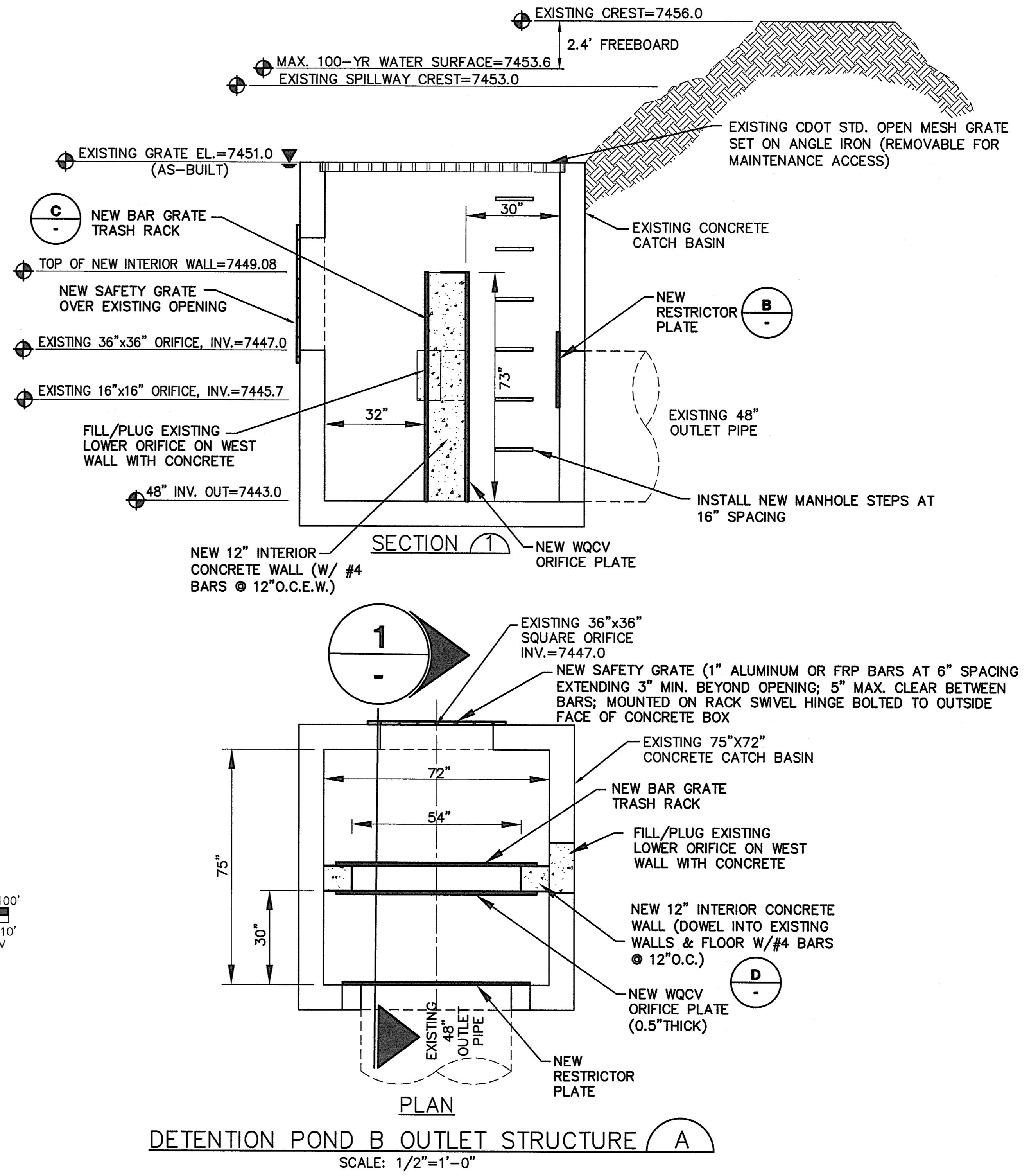
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VERT. SCALE:	N/A	DESIGNED:	JPS
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CREATED:	9/05/18	LAST MODIFIED:	9/30/19
PROJECT NO.:	040201	MODIFIED BY:	BJJ
SHEET:	<b>C4</b>		





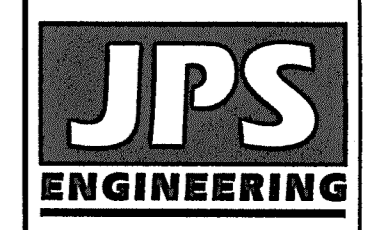
**FOREBAY DESIGN TABLE**

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

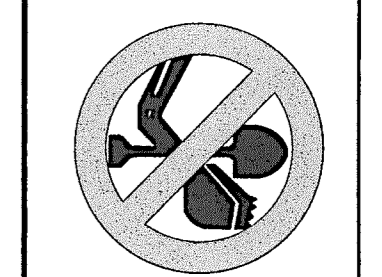


**WALDEN PRESERVE 2 - FILING NO. 4**

**POND B  
UPGRADE DETAILS**



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80903  
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CALL UTILITY NOTIFICATION CENTER OF COLORADO  
1-800-922-1987  
BEFORE ANY WORK BEGINS TO AVOID DAMAGE TO UNDERGROUND UTILITIES

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

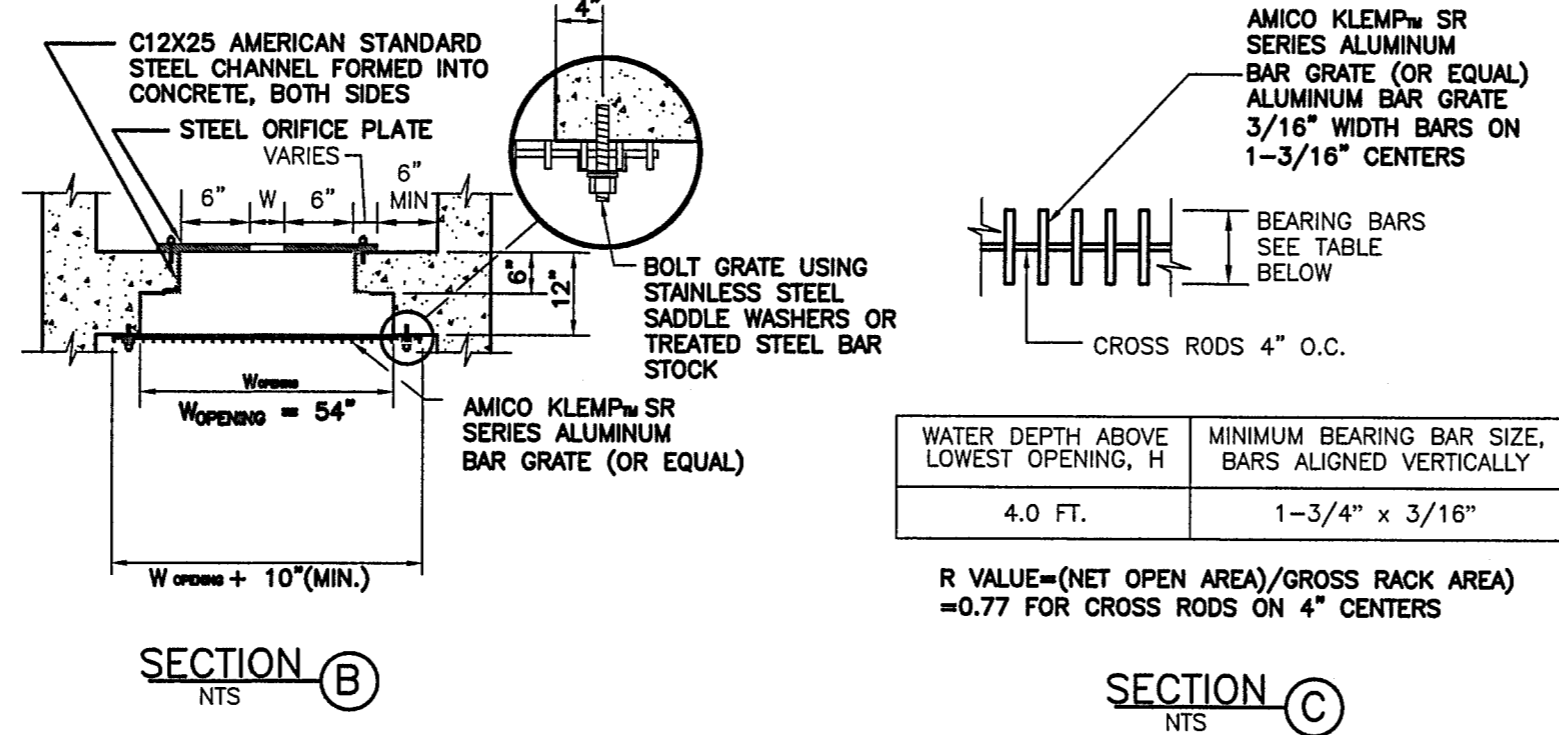
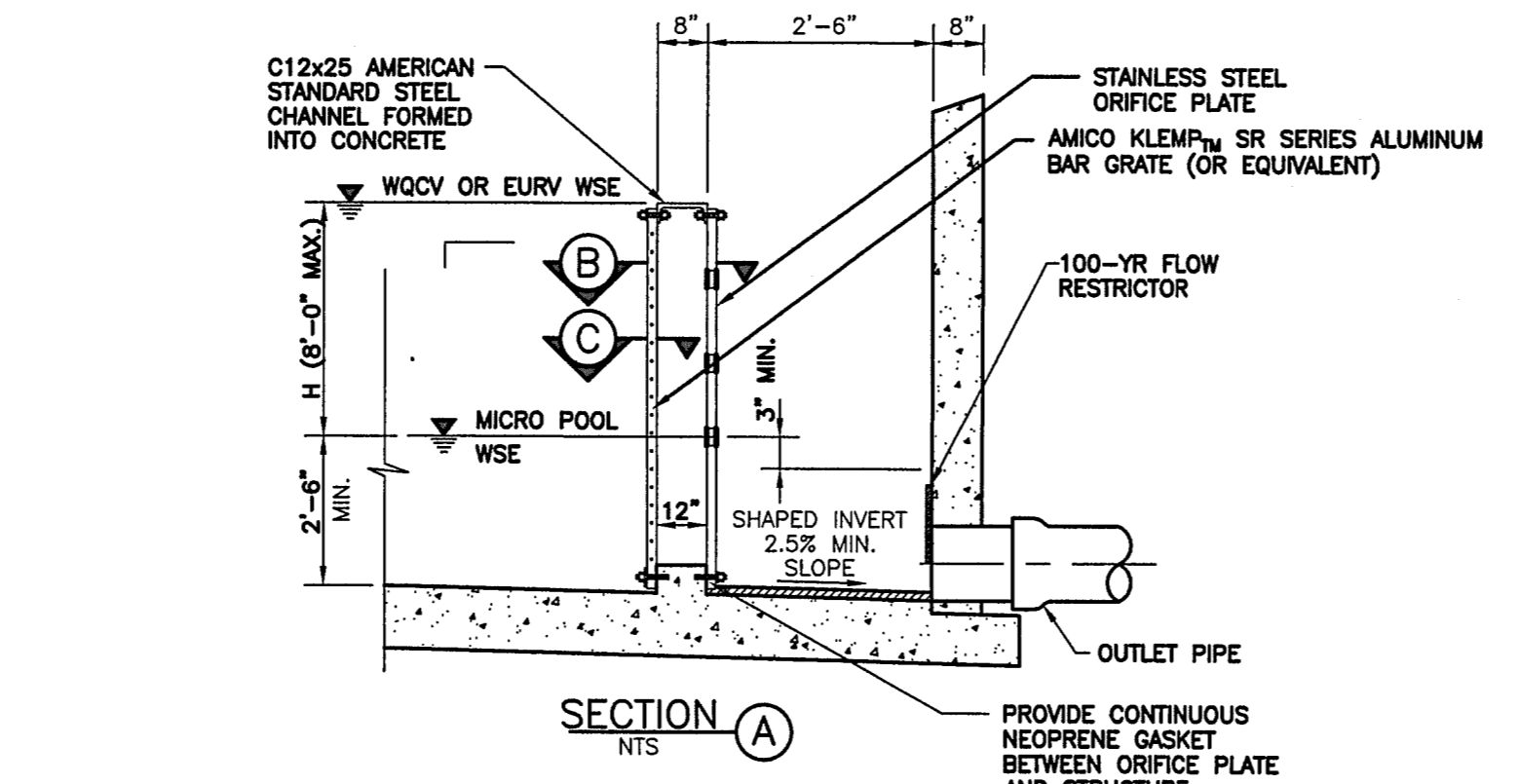
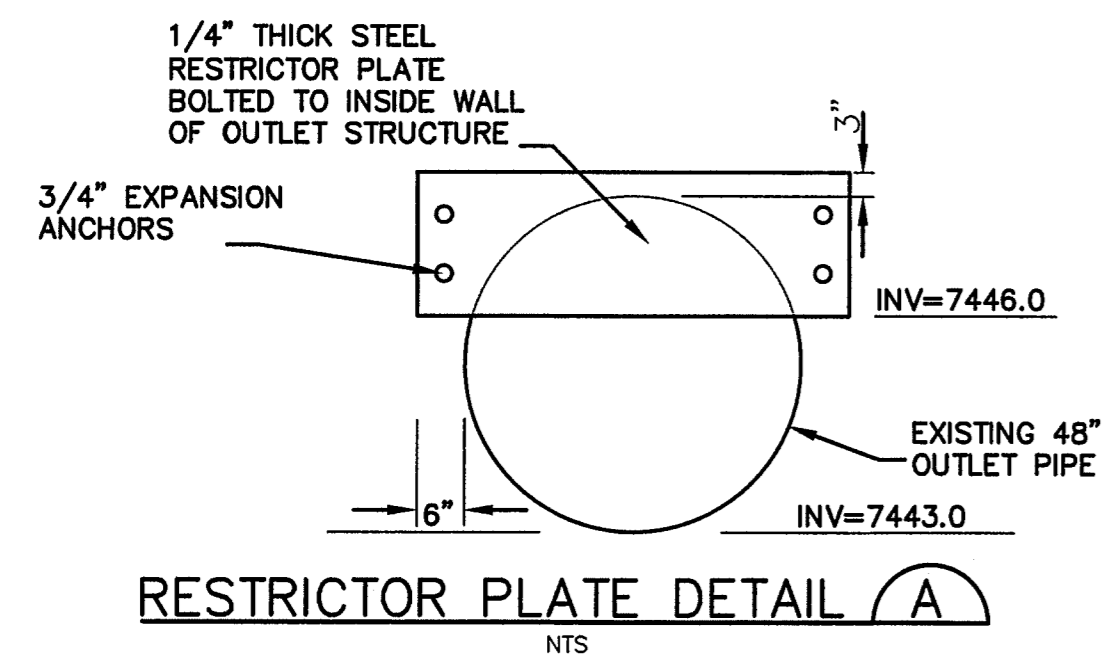
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CREATED: 7/17/14	LAST MODIFIED: 9/30/19
PROJECT NO: 040201	MODIFIED BY: BJJ
SHEET:	

**C5.1**

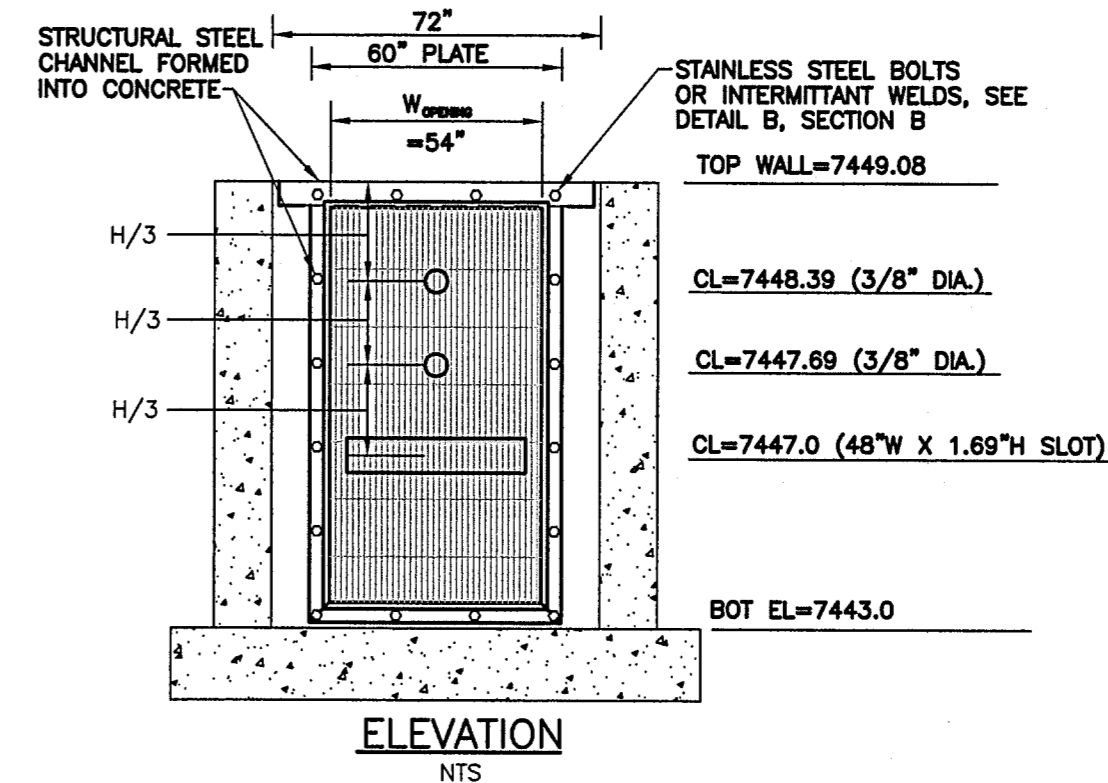


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Z:\040201.walden\dwg\civil\WALDEN PRESERVE 2\FIG-4\C5.2.dwg Sep. 30, 2019 - 11:15am



**TRASH RACK & ORIFICE PLATE DETAIL B**  
(BASED ON UDFCD VOL. 3 FIGURE OS-6)

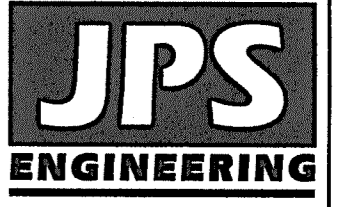


- ORIFICE PLATE NOTES:**
1. PROVIDE CONTINUOUS NEOPRENE GASKET MATERIAL BETWEEN THE ORIFICE PLATE AND CONCRETE.
  2. BOLT PLATE TO CONCRETE 12" MAX. ON CENTER. 0.5" PLATE THICKNESS. EURV AND WQCV TRASH RACKS:
1. WELL-SCREEN TRASH RACKS SHALL BE STAINLESS STEEL AND SHALL BE ATTACHED BY INTERMITTENT WELDS 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.

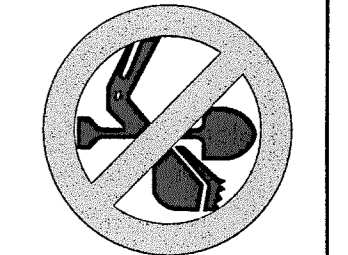
**ORIFICE PLATE AND TRASH RACK DETAIL & NOTES C**  
(BASED ON UDFCD VOL. 3 FIGURE OS-4)

**WALDEN PRESERVE 2 - FILING NO. 4**

**POND B - OUTLET STRUCTURE UPGRADE DETAILS**



19 E. Willamette Ave.  
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FAX: 719-471-0766  
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CALL UTILITY NOTIFICATION CENTER OF COLORADO  
1-800-922-1987  
CALL 2-BUSINESS DAYS IN ADVANCE BEFORE THE MARKING OF UNDERGROUND MEMBER UTILITIES.

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

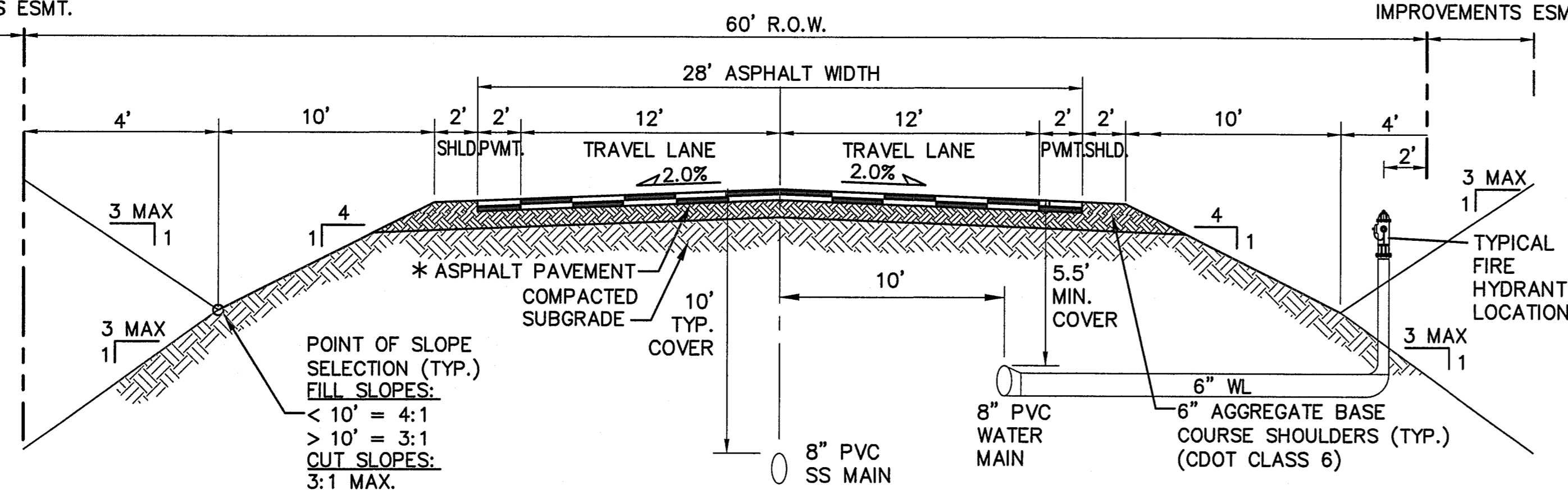


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PROJECT NO: 040201	MODIFIED BY: BJJ

SHEET: **C5.2**

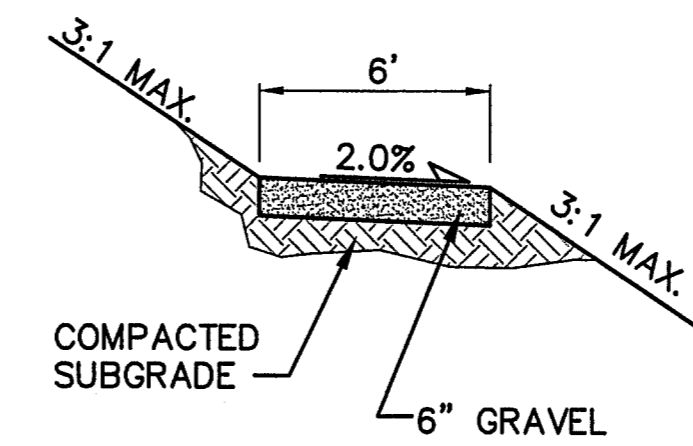
15' DRAINAGE, UTILITIES & PUBLIC IMPROVEMENTS ESMT.

15' DRAINAGE, UTILITIES & PUBLIC IMPROVEMENTS ESMT.

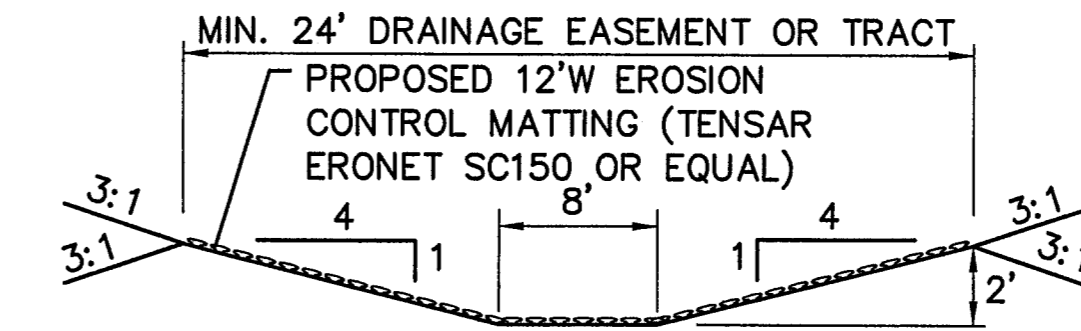


RURAL LOCAL-PAVED ROAD (PUBLIC)  
(PINEHURST CIRCLE & DEBOODT CT)  
TYPICAL SECTION (A)  
SCALE: 1"=5'

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



TYPICAL PRIVATE TRAIL SECTION (D)  
SCALE: 1"=5' H  
1"=2.5' V

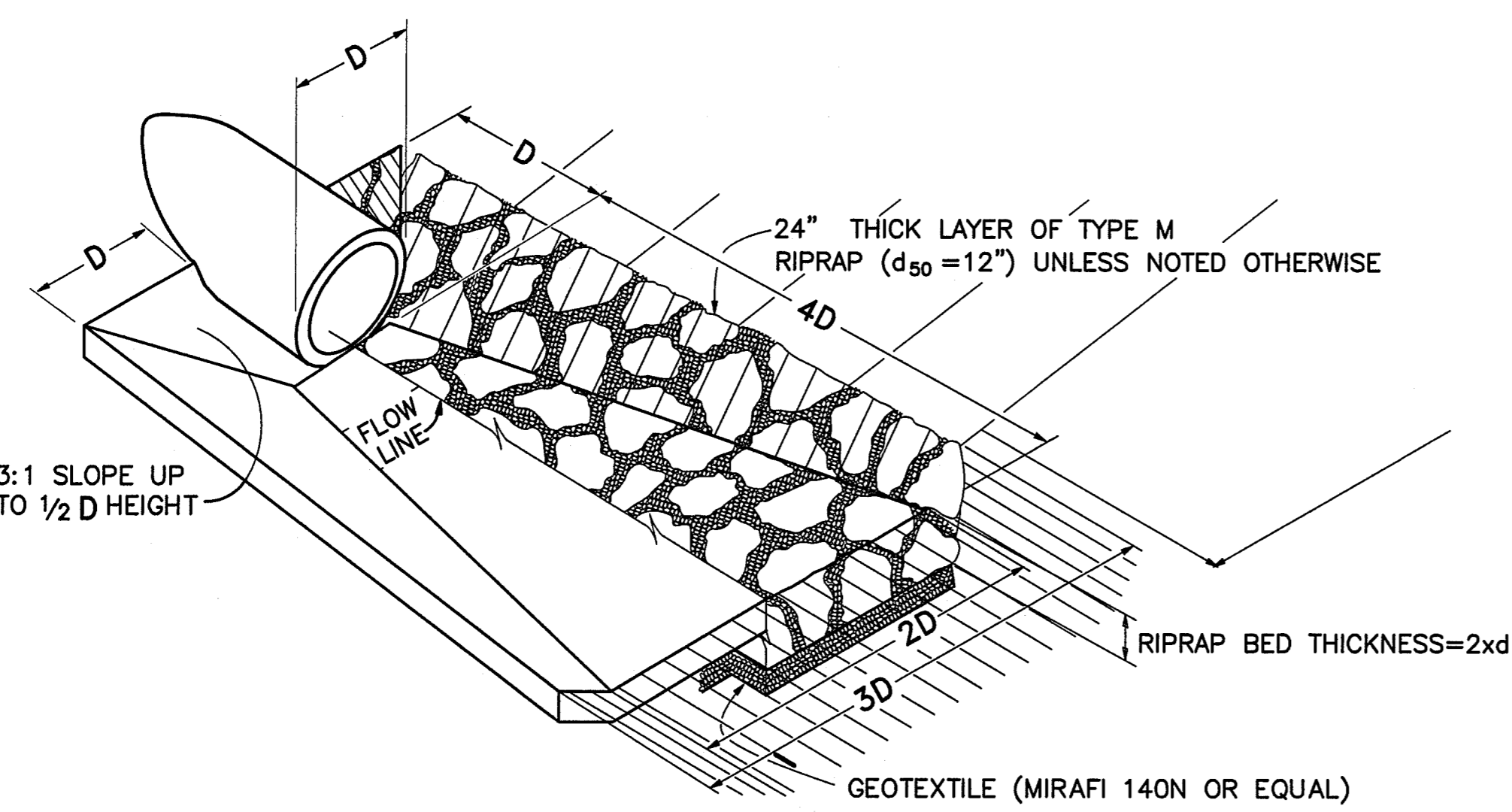


CHANNEL SECTION (E)  
N.T.S.

ROADWAY DITCH FLOWLINE PER PLAN & PROFILE DWGS. (2.5' TYP.)

8' WIDE EROSION CONTROL BLANKET TURF-REINFORCEMENT MAT (TENSAR ERONET SC150 OR APPROVED EQUAL) WHERE SPECIFIED ON PLANS

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



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

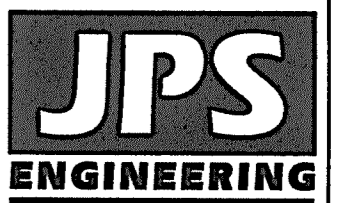
Table MD-7—Classification and Gradation of Ordinary Riprap

Riprap Designation	% Smaller Than Given Size by Weight	Intermediate Rock Dimensions (inches)	d <sub>50</sub> (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<sub>50</sub> = 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.jpsegr.com



CALL UTILITY NOTIFICATION CENTER OF COLORADO  
1-800-922-1987  
EACH 2-BUSINESS DAYS IN ADVANCE BEFORE THE MARKING OF UNDERGROUND MEMBER UTILITIES.

WALDEN PRESERVE 2 - FILING NO. 4

No.	REVISION	DATE
1	FINAL PLAT SUBMITTAL	9/05/18
2	COUNTY COMMENTS	2/15/19
3	COUNTY COMMENTS	5/15/19
4	COUNTY COMMENTS	7/11/19

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: 7/11/19
PROJECT NO: 040201	MODIFIED BY: BJJ

SHEET: TY1

