

STANDARD EL PASO COUNTY GRADING & EROSION CONTROL PLAN NOTES

- CONSTRUCTION MAY NOT COMMENCE UNTIL A CONSTRUCTION PERMIT IS OBTAINED FROM DEVELOPMENT SERVICES ADMIN. A PRE-CONSTRUCTION CONFERENCE IS HELD WITH DEVELOPMENT SERVICES INSPECTIONS.
- 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. DURING CONSTRUCTION THE SWMP IS THE RESPONSIBILITY OF THE DESIGNATED STORMWATER MANAGER. SHALL BE LOCATED ON SITE AT ALL TIMES AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
- ONCE THE ESQCP HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL BMPs AS INDICATED ON THE GEC. A PRE-CONSTRUCTION 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 DSD INSPECTIONS STAFF.
- SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 21 CALENDAR DAYS AFTER FINAL GRADING, OR FINAL EARTH DISTURBANCE, HAS BEEN COMPLETED. DISTURBED AREAS AND STOCKPILES WHICH ARE NOT AT FINAL GRADE BUT WILL REMAIN DOMINANT FOR LONGER THAN 30 DAYS SHALL ALSO BE MULCHED WITHIN 21 DAYS AFTER INTERIM GRADING. AN AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THAN 30 DAYS SHALL ALSO BE SEEDED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND BMPs SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND ESTABLISHED.
- TEMPORARY SOIL EROSION CONTROL FACILITIES SHALL BE REMOVED AND EARTH DISTURBANCE AREAS GRADED AND STABILIZED WITH PERMANENT SOIL EROSION CONTROL MEASURES PURSUANT TO STANDARDS AND SPECIFICATIONS PRESCRIBED IN THE DCM VOLUME II AND THE ENGINEERING CRITERIA MANUAL (ECM) APPENDIX I.
- ALL PERSONS ENGAGED IN EARTH DISTURBANCE SHALL IMPLEMENT AND MAINTAIN ACCEPTABLE SOIL EROSION AND SEDIMENT CONTROL MEASURES INCLUDING BMPs IN CONFORMANCE WITH THE EROSION CONTROL TECHNICAL STANDARDS OF THE DRAINAGE CRITERIA MANUAL (DCM) VOLUME II AND IN ACCORDANCE WITH THE STORMWATER MANAGEMENT PLAN (SWMP).
- ALL TEMPORARY EROSION CONTROL FACILITIES INCLUDING BMPs AND ALL PERMANENT FACILITIES INTENDED TO CONTROL EROSION OF ANY EARTH DISTURBANCE OPERATIONS, SHALL BE INSTALLED AS DEFINED IN THE APPROVED PLANS. THE SWMP AND THE DCM VOLUME II AND MAINTAINED THROUGHOUT THE DURATION OF THE EARTH DISTURBANCE OPERATION.
- ANY EARTH DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY REDUCE 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.
- ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE DESIGNED TO LIMIT THE DISCHARGE TO A NON-EROSIVE VELOCITY.
- CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO RUN OFF TO STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
- EROSION CONTROL BLANKETING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
- BUILDING, CONSTRUCTION, EXCAVATION, OR OTHER 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. BMPs MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
- VEHICLE TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF-SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
- 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.
- THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, AND SAND THAT MAY ACCUMULATE IN THE STORM SEWER OR OTHER DRAINAGE CONVEYANCE SYSTEM AND STORMWATER APURTANCES 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 CHEMICALS ARE TO BE USED BY THE CONTRACTOR, WHICH HAVE THE POTENTIAL TO BE RELEASED IN STORMWATER UNLESS PERMITTED FOR THE USE OF A SPECIFIC CHEMICAL AS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING THE USE OF SUCH CHEMICALS, SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
- BULK STORAGE STRUCTURES FOR PETROLEUM PRODUCTS AND OTHER CHEMICALS SHALL HAVE ADEQUATE PROTECTION SO AS TO CONTAIN ALL SPILLS AND PREVENT ANY SPILLED MATERIAL FROM ENTERING STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
- NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE FLOW LINE OF THE CURB AND GUTTER OR IN THE DITCHLINE.
- INDIVIDUALS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, C.R.S.) AND THE "CLEAN WATER ACT" (33 USC 1344). IN ADDITION TO THE REQUIREMENTS INCLUDED IN THE DCM VOLUME II AND THE ECM APPENDIX I, ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, OR COUNTY AGENCIES, THE MORE RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
- ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
- PRIOR TO ACTUAL CONSTRUCTION THE PERMITEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
- A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
- THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY ENTECH ENGINEERING, INC. AND SHALL BE CONSIDERED A PART OF THESE PLANS.
- AT LEAST TEN DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION FOR PROJECTS THAT WILL DISTURB 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
4500 CHERRY CREEK DRIVE SOUTH
DENVER, CO 80246-1550
ATTN: PERMITS UNIT

Revise Development Services to Planning and Community Development (PCD)

Revise DSD to PCD

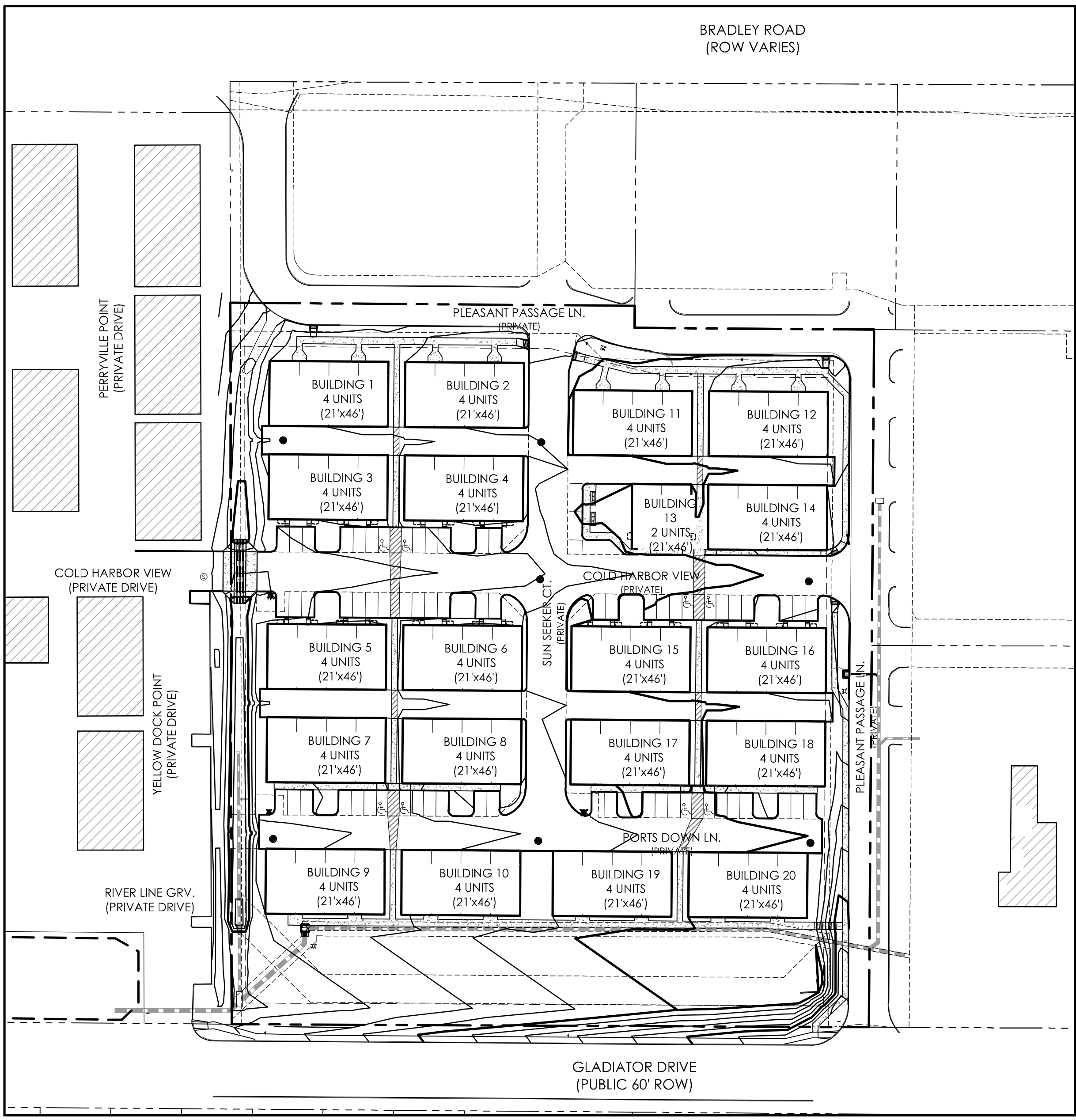
Submit a copy of the soil report

GRADING AND EROSION CONTROL PLAN

for

THE TOWNHOMES AT BRADLEY CROSSROADS

EL PASO COUNTY, COLORADO



SITE MAP
1" = 60'

MAP NOTES

- BOUNDARY BEARINGS AND DISTANCES SHOWN ON THIS MAP ARE RELATIVE TO THE SOUTH LINE OF LOT 1A, BRADLEY CROSSROADS SUBDIVISION FILING NO. 1B. ASSUMED TO BEAR N89°43'38"W.
- THE EXISTING TOPOGRAPHY SHOWN ON THIS PLAN WAS PREPARED BY MVE, INC. USING DATA PROVIDED BY POLARIS SURVEYING INC. ELEVATIONS SHOWN ARE RELATIVE TO THE CITY OF COLORADO SPRINGS CONTROL NETWORK (FIMS DATUM).

FLOODPLAIN STATEMENT

NO PORTION OF THE SUBJECT PROPERTY IS LOCATED WITHIN FEMA DESIGNATED SPECIAL FLOOD HAZARD AREA (SFHA) AS INDICATED ON THE FLOOD INSURANCE RATE MAP (FIRM) FOR EL PASO COUNTY, COLORADO AND INCORPORATED AREAS - MAP NUMBER 08041C0736F, EFFECTIVE MARCH 17, 1997.

TIMING	ANTICIPATED STARTING AND COMPLETION TIME PERIOD OF SITE GRADING: NOVEMBER 2018 - NOVEMBER, 2019
	EXPECTED DATE ON WHICH THE FINAL STABILIZATION WILL BE COMPLETED: NOVEMBER, 2019
AREAS	TOTAL AREA OF THE SITE TO BE CLEARED, EXCAVATED OR GRADED: 5.28 ACRES
RECEIVING WATERS	NAME OF RECEIVING WATERS: MOUNTAIN CREEK

Property line shown on legend does not match the property line shown on the plans. Revise.

EXISTING	PROPOSED
--- 5985 --- INDEX CONTOUR	— 5985 — INDEX CONTOUR
--- 84 --- INTERMEDIATE CONTOUR	— 84 — INTERMEDIATE CONTOUR
[Pattern] CONCRETE AREA	[Pattern] CONCRETE AREA
[Pattern] ASPHALT AREA	[Pattern] ASPHALT AREA
[Pattern] CURB AND GUTTER	[Pattern] CURB AND GUTTER
[Pattern] BUILDING/BUILDING OVERHANG	[Pattern] BUILDING/BUILDING OVERHANG
[Pattern] DECK	[Pattern] DECK
[Pattern] RETAINING WALL - SOLID/ROCK	[Pattern] RETAINING WALL - SOLID/ROCK
[Symbol] SIGN	[Symbol] SIGN
[Symbol] BOLLARD	[Symbol] BOLLARD
[Symbol] WOOD FENCE	[Symbol] TOP OF WALL/GRADE AT BOTTOM OF WALL
[Symbol] CHAIN LINK FENCE	[Symbol] TOP OF CURB/FLOWLINE
[Symbol] BARBED WIRE FENCE	[Symbol] SPOT ELEVATION FL = FLOWLINE TSW = TOP OF SIDEWALK
[Symbol] TREE (EVERGREEN/DECIDUOUS)	[Symbol] FINISHED FLOOR ELEVATION
[Symbol] SHRUB	
[Symbol] ROCK	

OWNERS STATEMENT

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

ENGINEER'S STATEMENT

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID DETAILED PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED PLANS AND SPECIFICATIONS, AND SAID DETAILED PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH THE MASTER PLAN OF THE DRAINAGE BASIN. SAID DETAILED DRAINAGE PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR DRAINAGE FACILITY IS DESIGNED. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARATION OF THE DETAILED DRAINAGE PLANS AND SPECIFICATIONS.

DAVID R. GORMAN, P.E. COLORADO NO. 31672 DATE
FOR AND ON BEHALF OF M.V.E., INC.

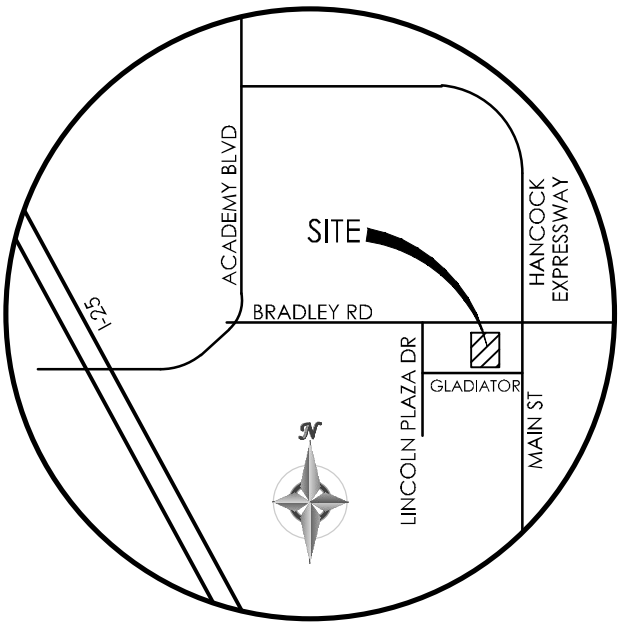
EL PASO COUNTY

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.

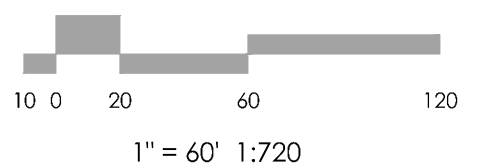
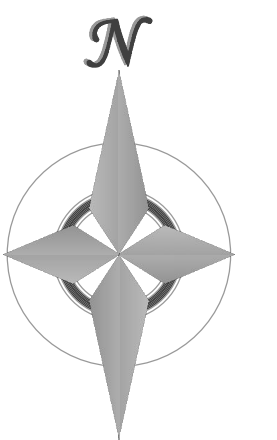
IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF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

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



VICINITY MAP
N.T.S.

BENCHMARK



1" = 60' 1:720

MVE, INC.
ENGINEERS / SURVEYORS
1903 Liberty street, suite 200 colorado springs co 80909 719.635.5736

REVISIONS

DESIGNED BY
DRAWN BY
CHECKED BY
AS-BUILTS BY
CHECKED BY

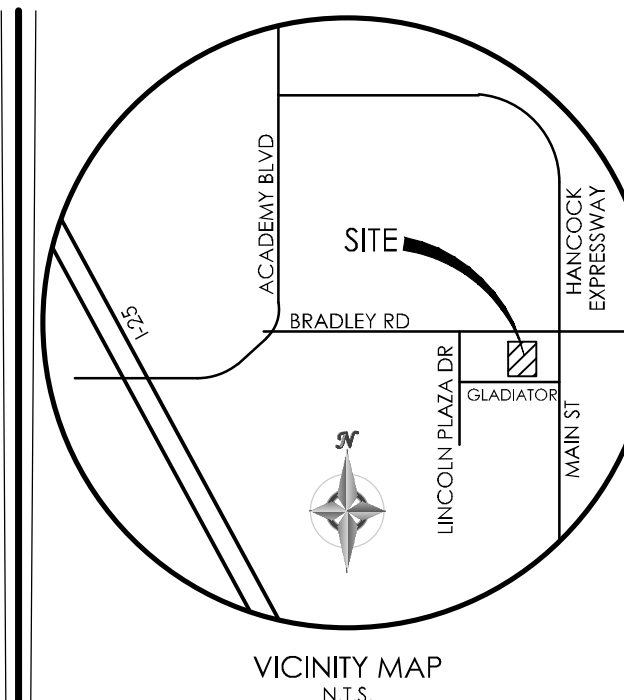
THE TOWNHOMES AT BRADLEY CROSSROADS

GRADING & EROSION CONTROL PLAN COVER SHEET

C1.1 MVE PROJECT 61093
MVE DRAWING -GEC-CS

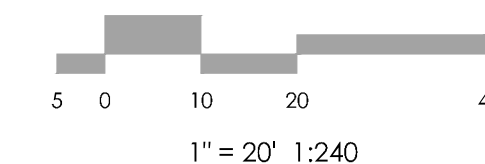
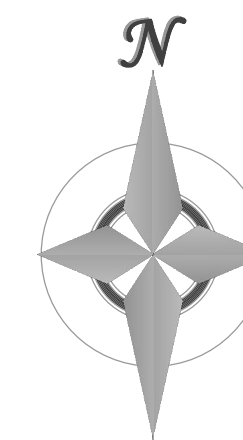
OCTOBER 17, 2018
SHEET 1 OF 6

Add PCD File No. PPR1846



VICINITY MAP
N.T.S.

BENCHMARK



REVISIONS

THE TOWNHOMES AT
BRADLEY CROSSROADS

GRADING & EROSION
CONTROL PLAN
GRADING PLAN (NORTH)

C1.2 MVE PROJECT 61093
MVE DRAWING -GEC-GP1

OCTOBER 17, 2018
SHEET 2 OF 6

Provide the longitudinal slope tags for the channels

No action required: Should a cross-pan be provided at the entrance?

Permission from the adjacent owner is required for offsite improvements. Provide a copy of the agreement.

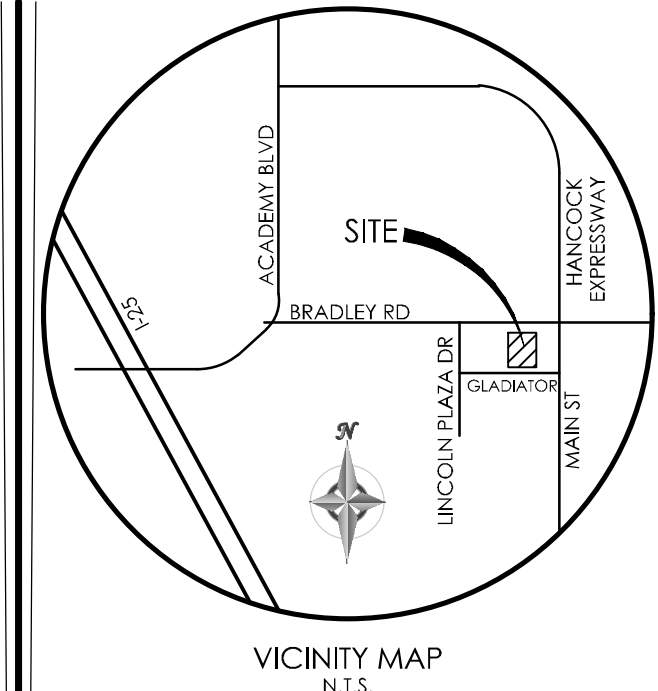


- NOTE LEGEND:**
- 1 INSTALL COUNTY STD TYPE B CURB & GUTTER
 - 2 INSTALL ASPHALT PAVING w/ PARKING LOT MARKINGS
 - 3 INSTALL CONCRETE SIDEWALK (5' WIDE)
 - 4 INSTALL CONCRETE SIDEWALK (4' WIDE)
 - 5 INSTALL PEDESTRIAN RAMP (SEE DETAILS)
 - 6 INSTALL CONCRETE CHANNEL "TEXAS CROSSING" (SEE DETAIL)
 - 7 INSTALL THICKENED EDGE SIDE WALK (SEE DETAIL)
 - 8 INSTALL 4' WIDE ROCK SWALE (SEE DETAIL "A")
 - 9 EXISTING CURB & GUTTER
 - 10 INSTALL CDOT TYPE C INLET, H=2.5' W/ CLOSED MESH GRATE
 - 11 INSTALL 5' WIDE ROCK SWALE (SEE DETAIL "B")
 - 12 INSTALL 2' WIDE CURB DEPRESSION

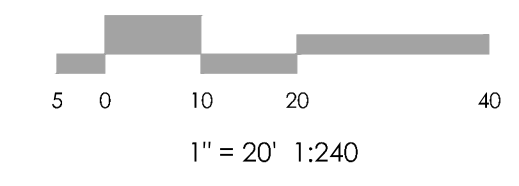
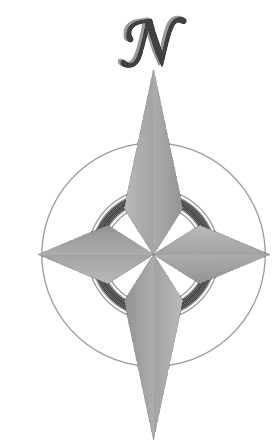
12" RCP 45° BEND
INV=41.90'
12" RCP
INV=42.00'
3 LF 12" RCP @ 80%
INSTALL 24"x12" WYE
ON EXISTING 24" RCP
INV EX. 24" = 37.66'
INV 12" RCP = 38.16'

DESIGNED BY _____
DRAWN BY _____
CHECKED BY _____
AS-BUILTS BY _____
CHECKED BY _____

Z:\MVE\Drawings\61093\GEC-GP1.dwg, 10/17/2018 10:52:29 AM, TJC:DD



BENCHMARK



MVE, INC.
ENGINEERS / SURVEYORS

1903 Liberty Street, Suite 200 Colorado Springs, CO 80909 719.635.5736

REVISIONS

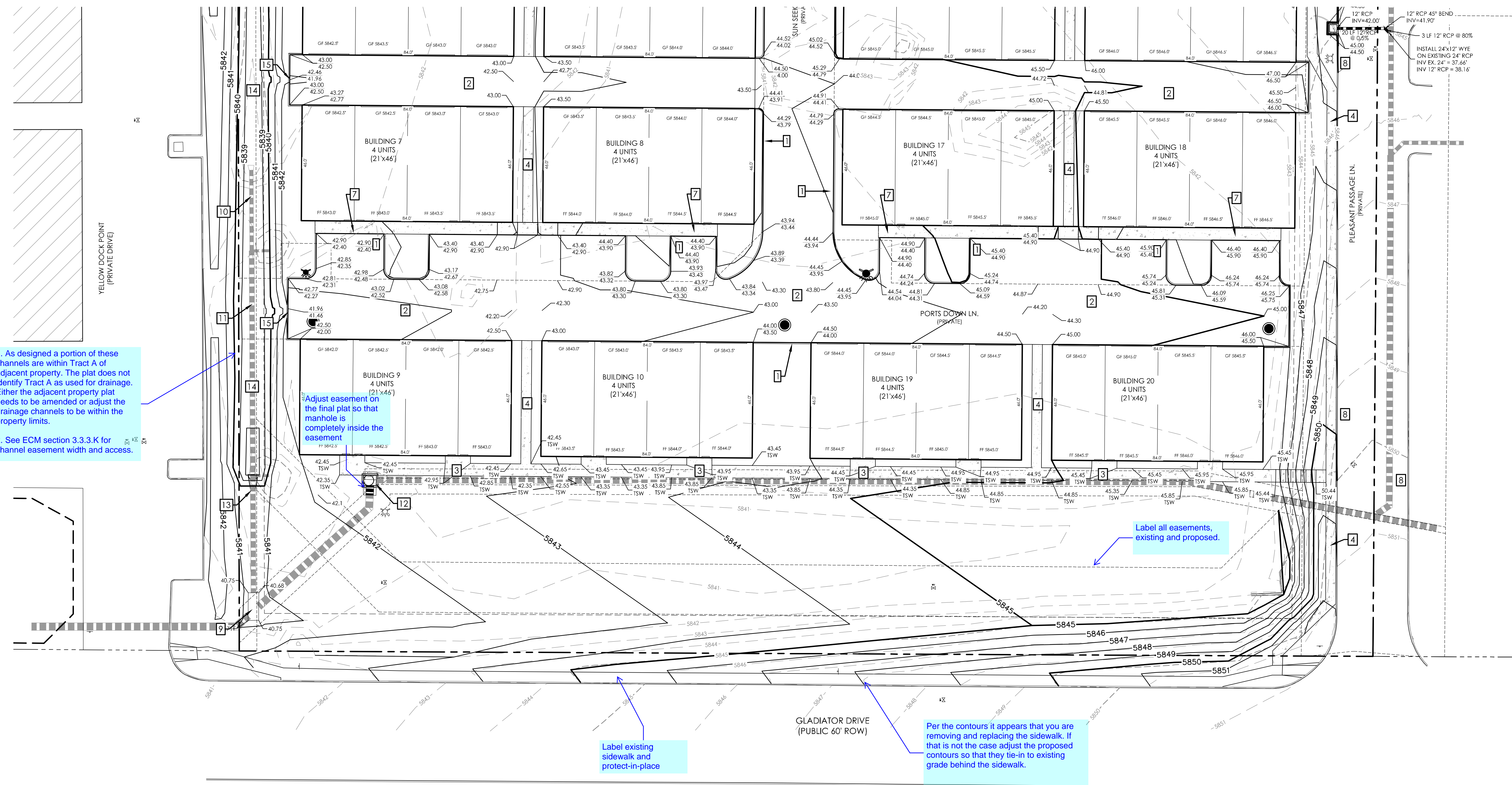
DESIGNED BY _____
DRAWN BY _____
CHECKED BY _____
AS-BUILT BY _____
CHECKED BY _____

THE TOWNHOMES AT
BRADLEY CROSSROADS

GRADING & EROSION
CONTROL PLAN
GRADING PLAN (SOUTH)

C1.2 MVE PROJECT 61093
MVE DRAWING -GEC-GP1

OCTOBER 17, 2018
SHEET 3 OF 6



1. As designed a portion of these channels are within Tract A of adjacent property. The plat does not identify Tract A as used for drainage. Either the adjacent property plat needs to be amended or adjust the drainage channels to be within the property limits.

2. See ECM section 3.3.3.K for channel easement width and access.

Adjust easement on the final plat so that manhole is completely inside the easement

Label all easements, existing and proposed.

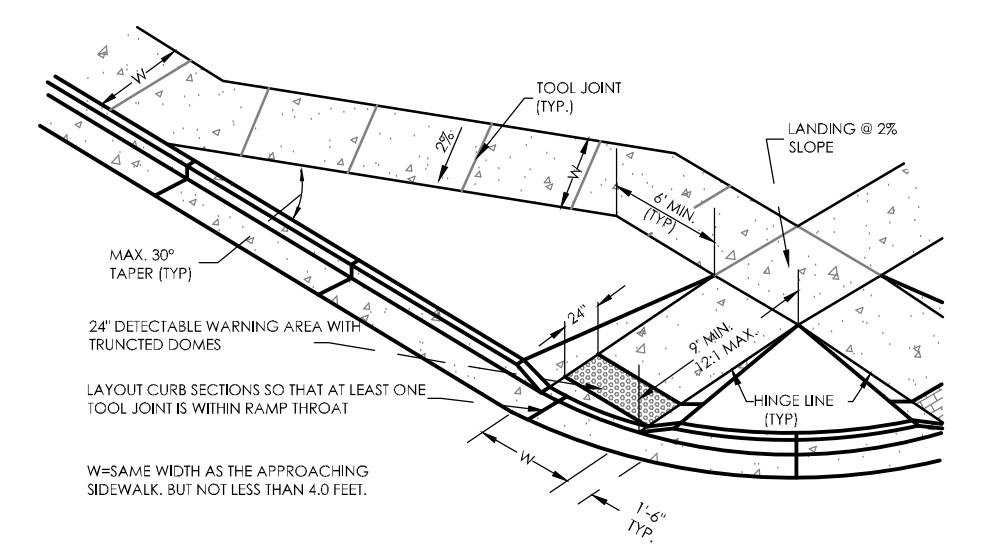
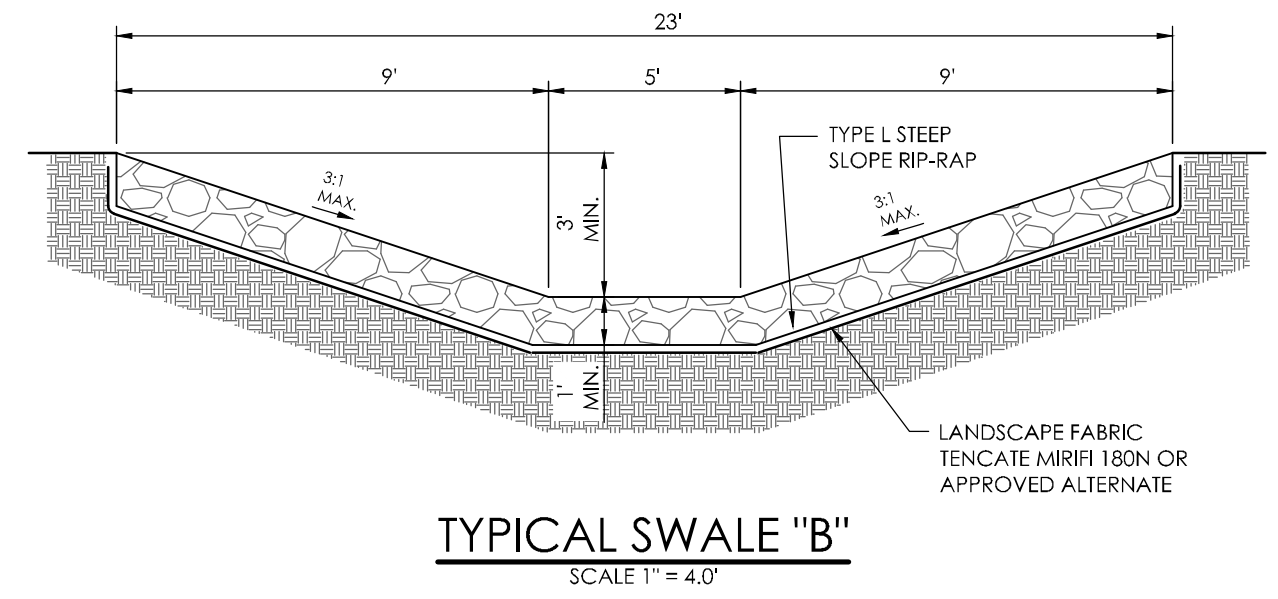
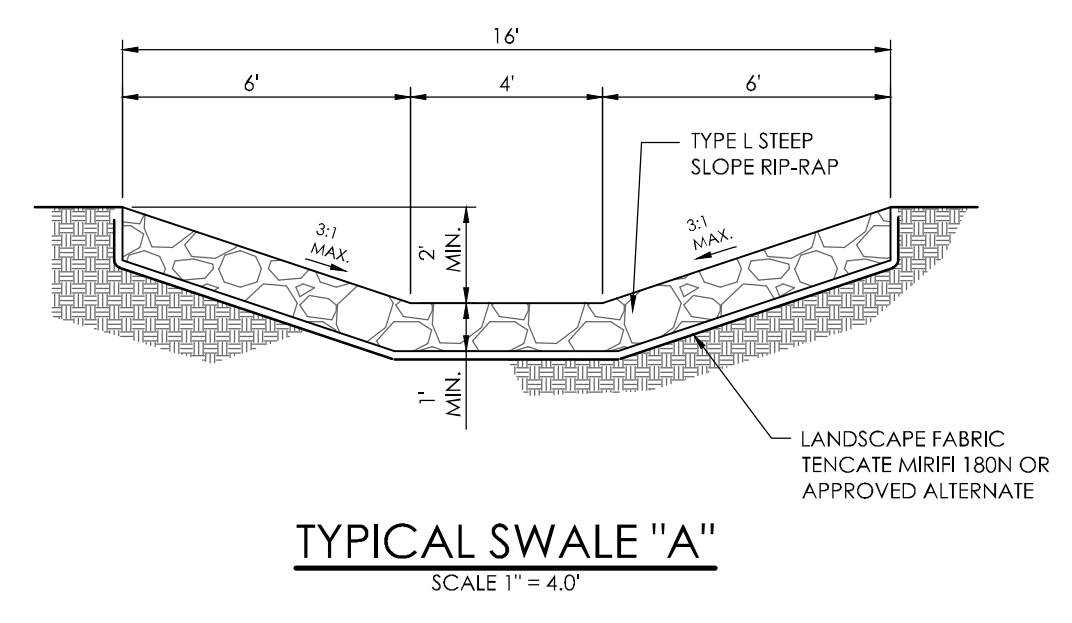
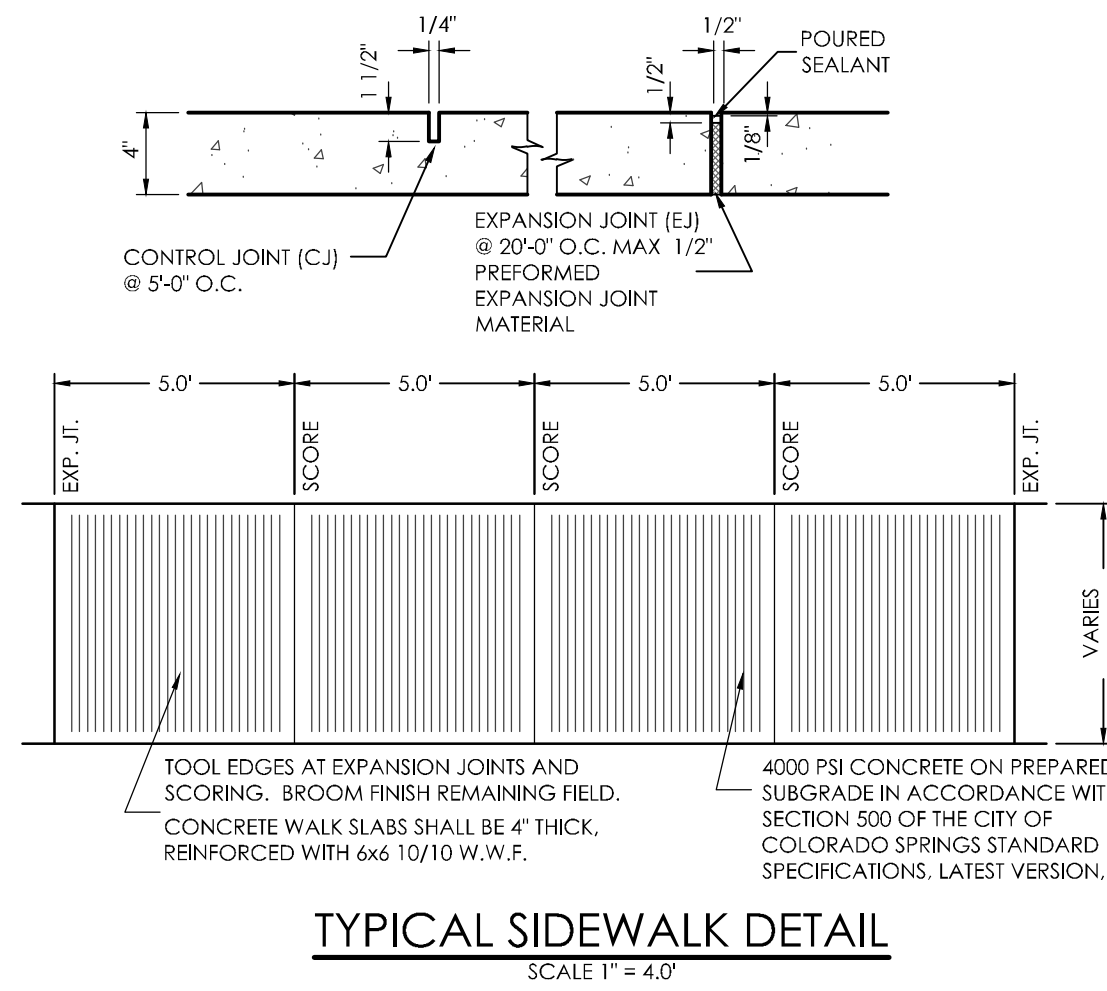
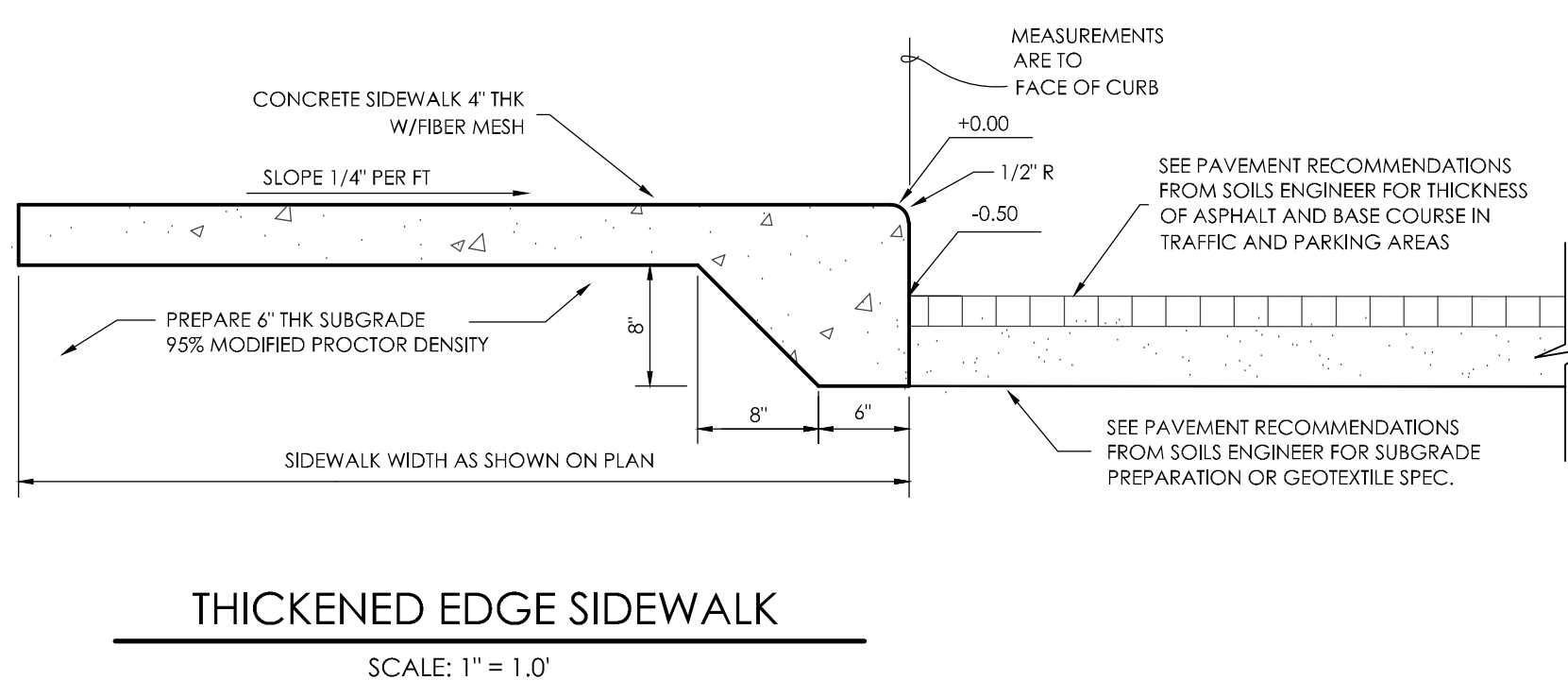
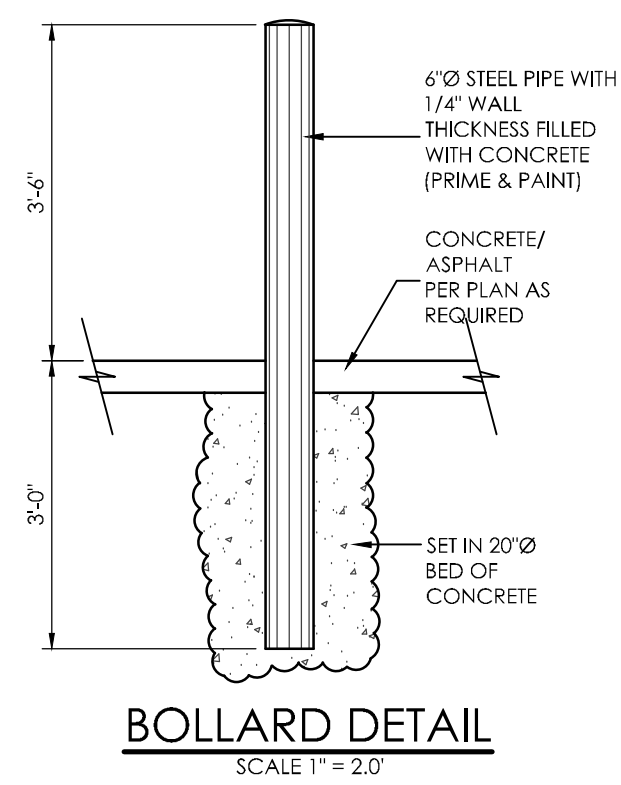
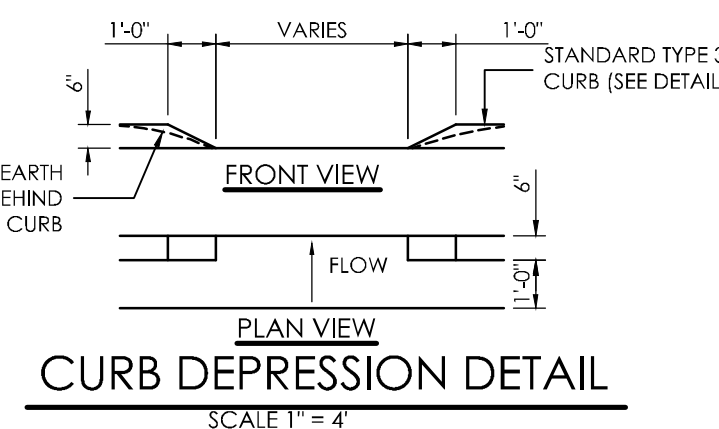
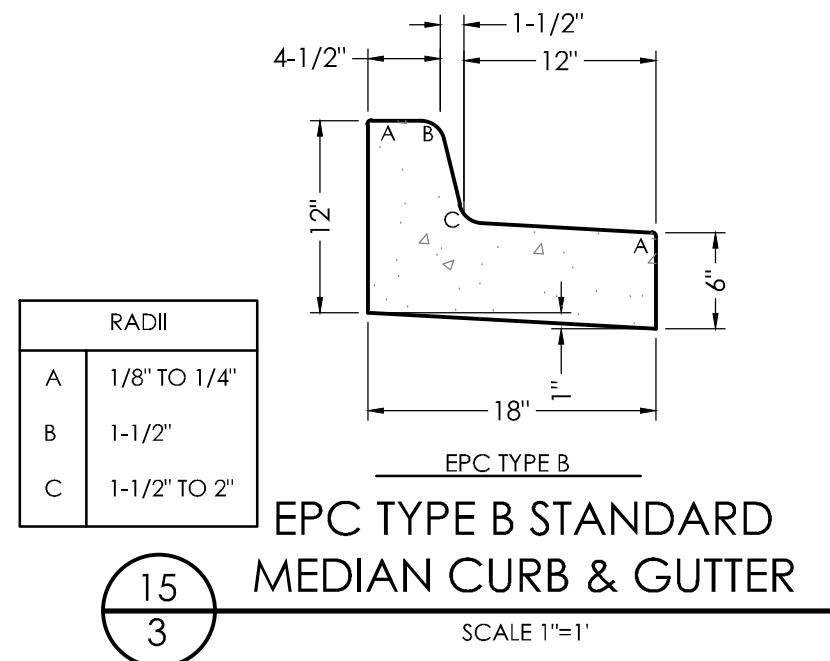
Label existing sidewalk and protect-in-place

Per the contours it appears that you are removing and replacing the sidewalk. If that is not the case adjust the proposed contours so that they tie-in to existing grade behind the sidewalk.

NOTE LEGEND:

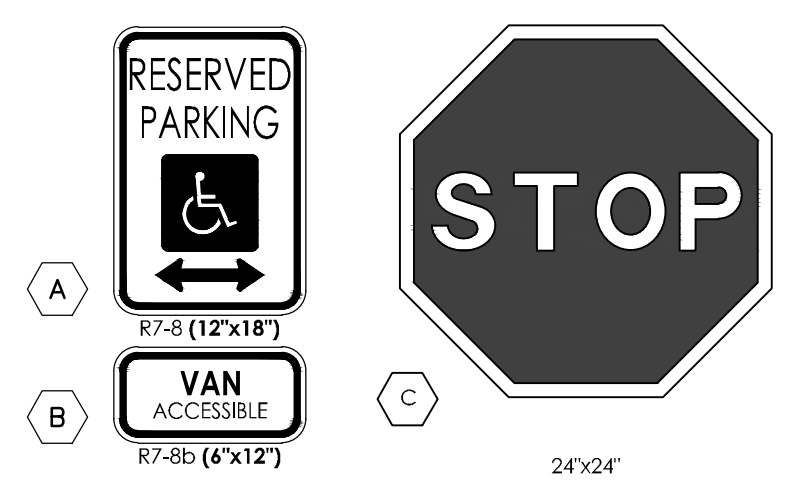
- 1 INSTALL COUNTY STD TYPE B CURB & GUTTER
- 2 INSTALL ASPHALT PAVING w/ PARKING LOT MARKINGS
- 3 INSTALL CONCRETE SIDEWALK (5' WIDE)
- 4 INSTALL CONCRETE SIDEWALK (4' WIDE) Use El Paso County standard PED ramp
- 5 INSTALL CITY STD PED RAMP D-8
- 6 INSTALL CONCRETE CHANNEL "TEXAS CROSSING" (SEE DETAIL)
- 7 INSTALL THICKENED EDGE SIDE WALK (SEE DETAIL)
- 8 EXISTING CURB & GUTTER
- 9 EXISTING INLET
- 10 REMOVE EXISTING 18" RCP
- 11 REMOVE EXISTING 24" RCP
- 12 REMOVE EXISTING INLET. INSTALL EPC TYPE 1 MANHOLE AND EXTEND EXISTING RCP AS REQUIRED. INSTALL MANHOLE RISERS AS NECESSARY TO MATCH FINISHED GRADE. CONTRACTOR TO VERIFY EXISTING PIPE INVERTS.
- 13 INSTALL 24" RCP FLARED END SECTION ON EXISTING 24" RCP LINE
- 14 INSTALL 5' WIDE ROCK SWALE (SEE DETAIL "B")
- 15 INSTALL 2' WIDE CURB DEPRESSION

Z:\MVE\Draws\10254552\GP2.dwg 10/17/2018 10:28:33 AM TJC:AD

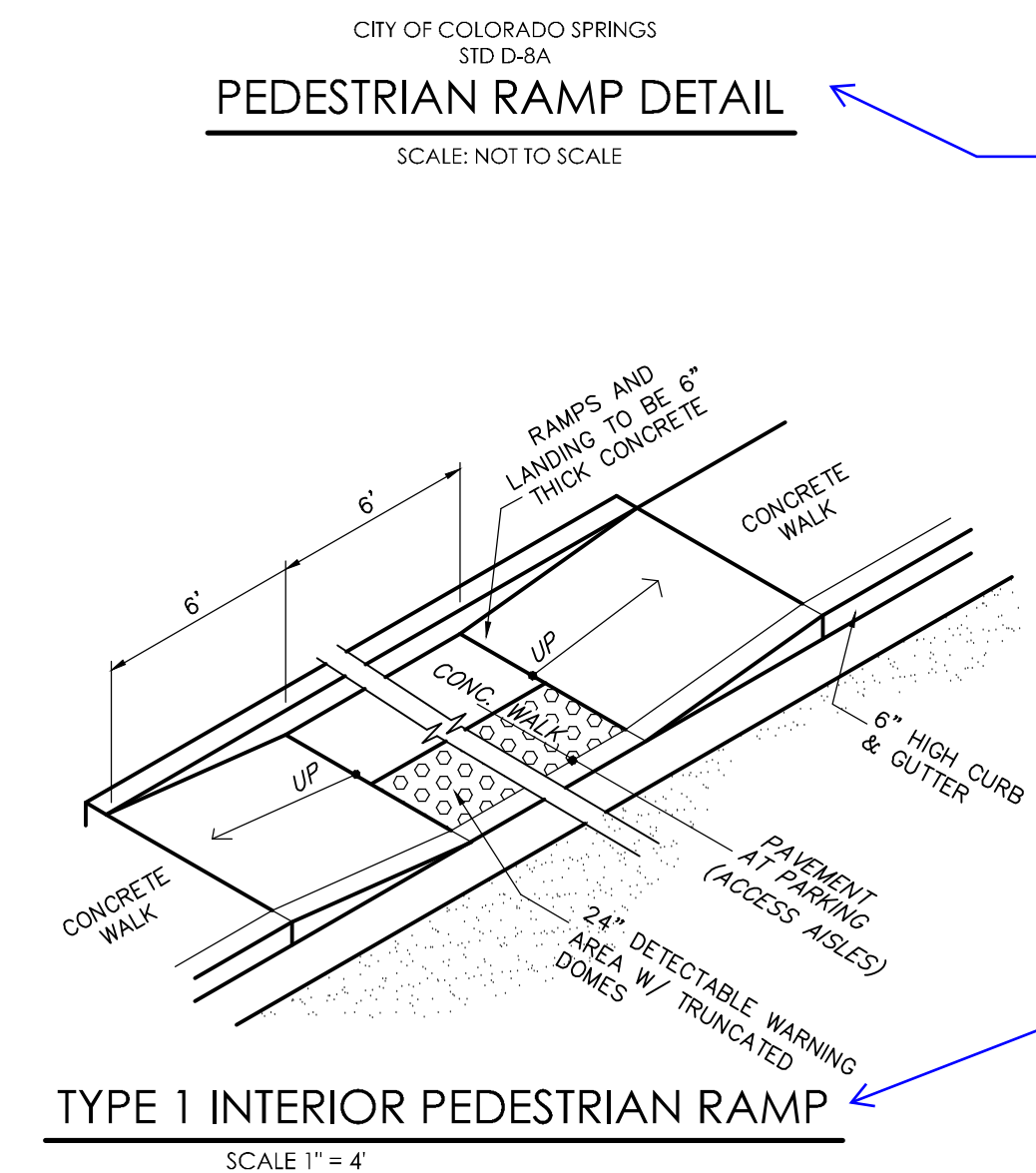
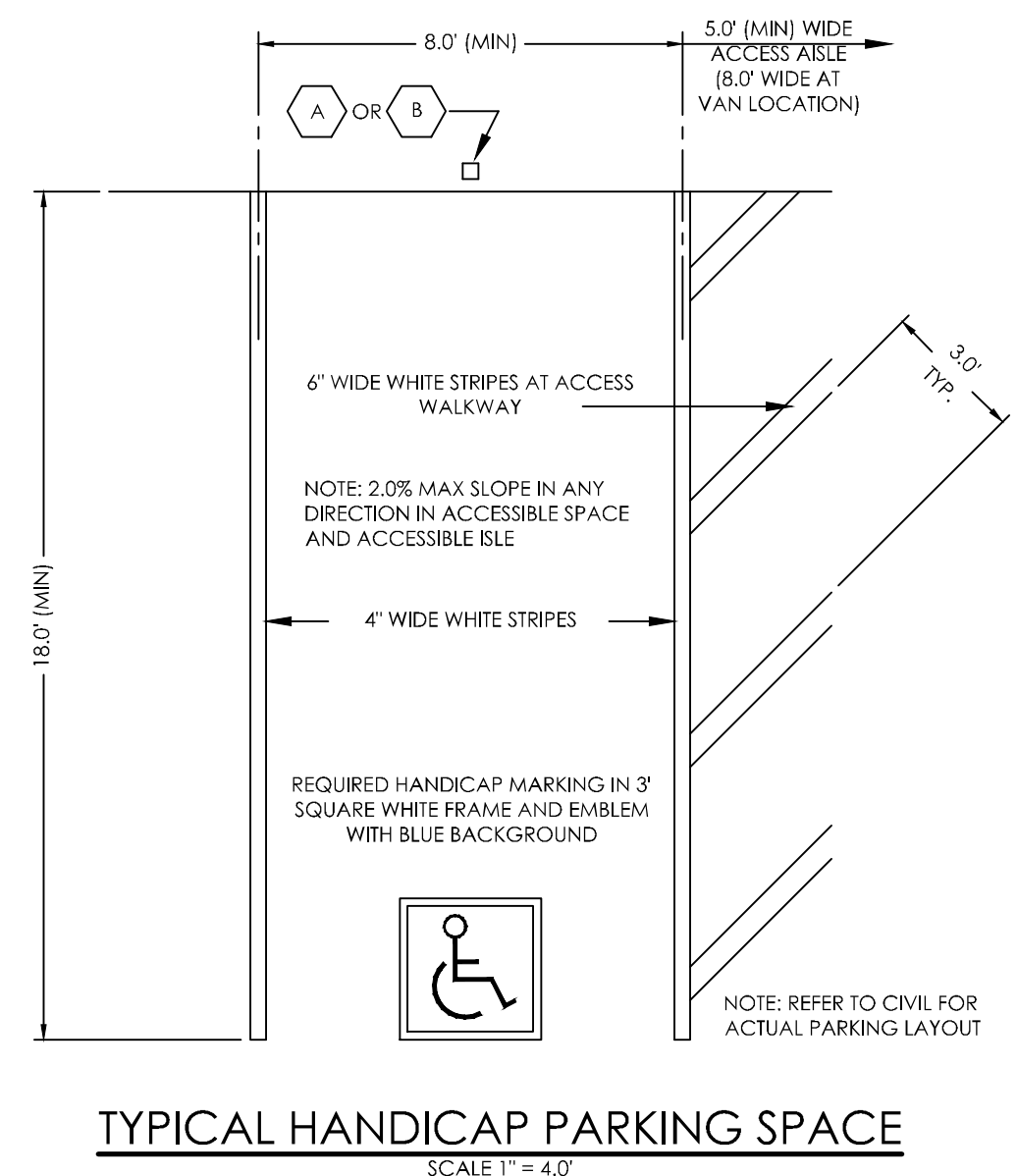


GENERAL NOTES

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH CURRENT CITY OF COLORADO SPRINGS ENGINEERING DIVISION STANDARD SPECIFICATIONS.
- CONTRACTOR TO OBTAIN REQUIRED CONCRETE PERMITS PRIOR TO CONSTRUCTION.
- CONTRACTOR TO NOTIFY ENGINEERING DIVISION INSPECTION OFFICE AT LEAST 24 HOURS PRIOR TO PLACEMENT OF ANY CONCRETE.
- PEDESTRIAN RAMPS WITH 24" DETECTABLE WARNING AREA SHALL BE 4000 PSI FLAT CONCRETE WITH A COURSE BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAVEL.
- CONTRACTOR SHALL STAMP THEIR COMPANY NAME AND CONSTRUCTION DATE WITHIN THE PEDESTRIAN RAMP AREA.
- RAMP LOCATION AND LENGTH MAY REQUIRE MODIFICATION TO MAINTAIN THE 2% MAXIMUM RUNNING SLOPE DUE TO INTERSECTION STREET GRADES AND/OR ALIGNMENT.
- WHERE THE 1/4" FLARED SIDES OF A PERPENDICULAR CURB RAMP IS FAIRLY CONTIGUOUS WITH A PEDESTRIAN OR HAND SURFACED AREA, THE FLARE WIDTH SHALL BE INCREASED TO 8" MINIMUM AND THE MAXIMUM FLARE SLOPE SHALL NOT EXCEED 10%.
- PEDESTRIAN WALKWAY AND/OR LOCATION OF EXISTING OR FUTURE PEDESTRIAN RAMPS ON OPPOSITE SIDES SHALL BE MARKED BEFORE CONSTRUCTING NEW RAMPS. NEW RAMPS SHALL ALIGN WITH EXISTING RAMPS AND PEDESTRIAN WALKWAYS.
- AT MARKED PEDESTRIAN CROSSINGS, THE BOTTOM OF THE RAMP, EXCEPT ON FLARE SIDES, SHALL BE TOTALLY CONTAINED WITHIN THE MARKINGS.
- DETECTABLE WARNING AREA SHALL BE PREFABRICATED REDDISH BROWN COLORED TRUNCATED DOME SURFACED CONCRETE PANELS OR THE PRE-CAST PANELS FROM THE CITY'S APPROVED PRODUCT LIST.

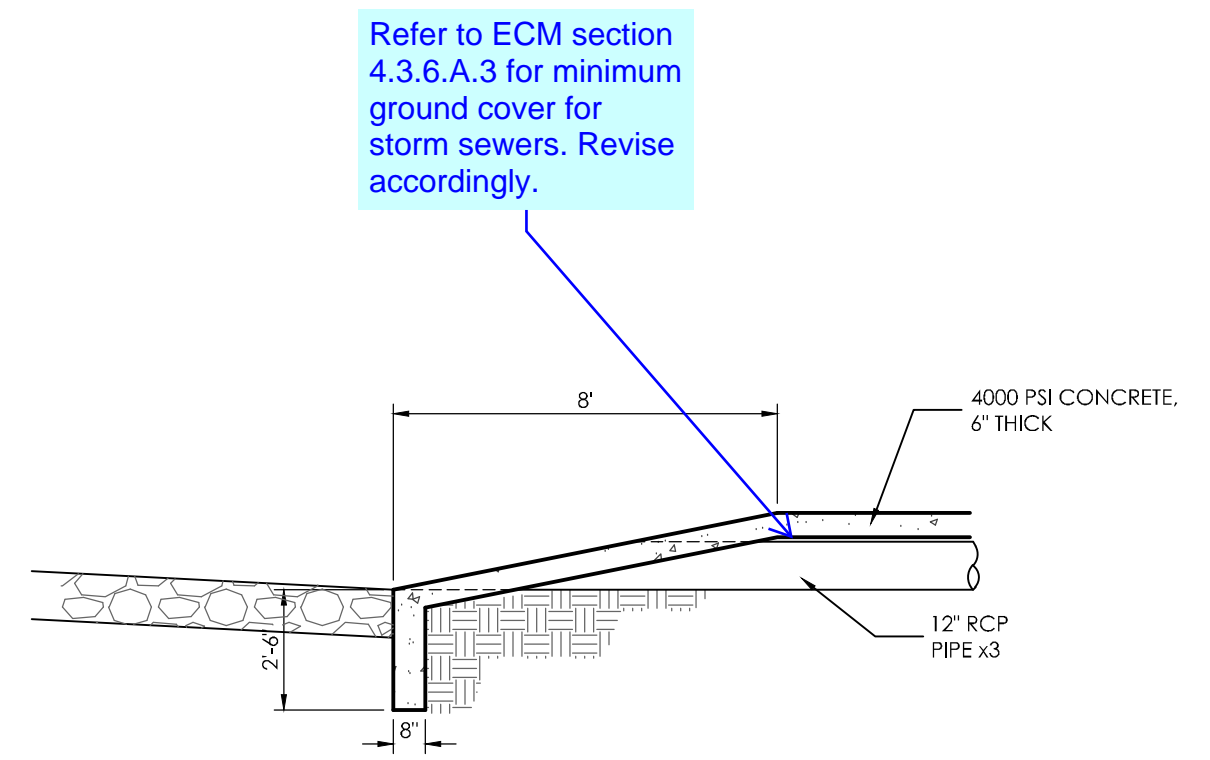
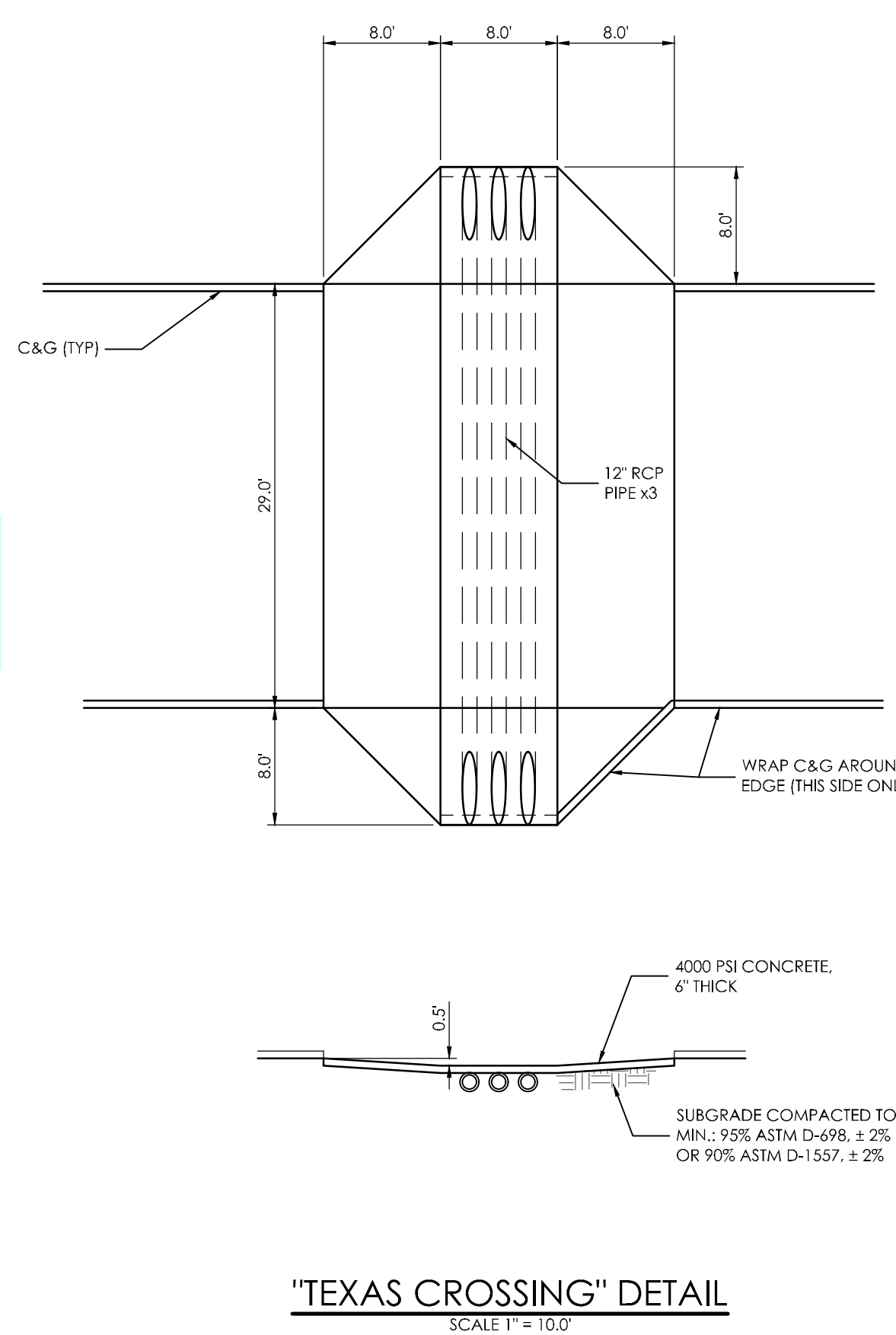


- TYPOGRAPHY TO BE HELVETICA MEDIUM
- NOTE: REFER TO SITE PLAN FOR LOCATIONS
- REMOVE EXISTING SIGNS AND REUSE WHERE APPLICABLE (NOT SHOWN)
- STOP SIGNS WILL BE INSTALLED BY THE DEVELOPER AT THE LOCATIONS SHOWN ON THE DEVELOPMENT PLAN TO MEET MUTCD STANDARDS AND THE CITY OF COLORADO SPRINGS TRAFFIC ENGINEERING STANDARDS.

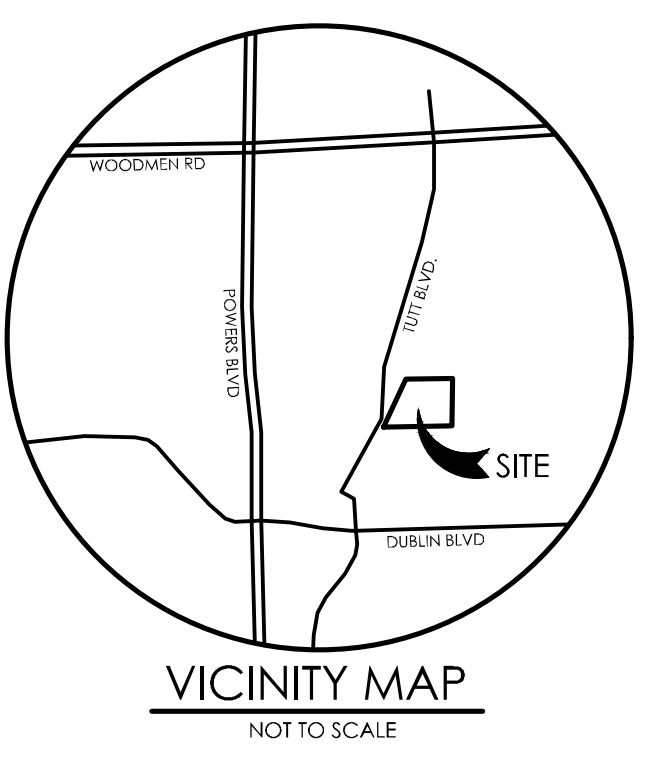


Revise detail to EPC standard pedestrian ramp detail SD_2-41 and truncated dome detail SD_2-42

Revise detail to EPC standard parallel pedestrian ramp detail SD_2-50



Refer to ECM section 4.3.6.A.3 for minimum storm cover for storm sewers. Revise accordingly.



BENCHMARK

MVE ENGINEERS
1903 Library Street, Suite 200
CO 80909 719.635.5736

REVISIONS

DESIGNED BY _____
DRAWN BY _____
CHECKED BY _____
AS-BUILT BY _____
CHECKED BY _____

THE TOWNHOMES AT BRADLEY CROSSROADS

GRADING & EROSION CONTROL PLAN CIVIL DETAILS

C1.4 MVE PROJECT 61093
MVE DRAWING -GEC-CD

OCTOBER 17, 2018
SHEET 4 OF 6



BMP LEGEND

MAP SYMBOL	KEY	DESCRIPTION
	CWA	CONCRETE WASHOUT AREA
	SF	SILT FENCE
	SCL	SEDIMENT CONTROL LOG
	SBB	STRAW BALE BARRIER
	RS	ROCK SOCK
	ECB	EROSION CONTROL BLANKET
	VTC	VEHICLE TRACKING CONTROL
	SW	STREET SWEEPING
	IP	INLET PROTECTION
	OP	PERMANENT OUTLET PROTECTION (SEE CONSTRUCTION PLANS)
	SSA	STABILIZED STAGING AREA
	MU	MULCHING
	SR	SURFACE ROUGHENING
	PS	PERMANENT SEEDING
		LIMITS OF CONSTRUCTION SITE BOUNDARIES
		LIMITS OF CUT/FILL
		LIMITS OF SOIL TYPE

SYMBOLS SHOWN IN LEGEND SHALL BE USED BY SWMP ADMINISTRATOR TO ANNOTATE ANY CHANGES AND/OR ADDITIONS TO THIS PLAN.

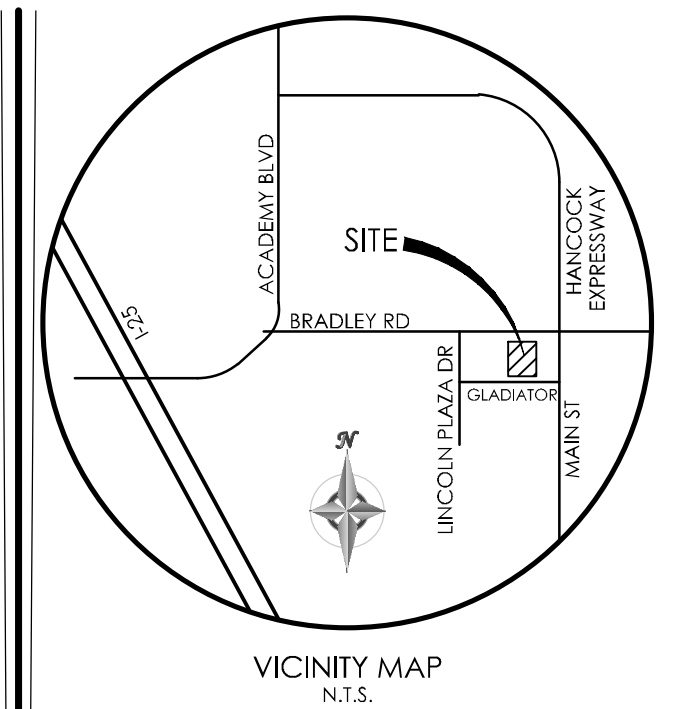
HYDROLOGIC SOIL GROUP	
MAP UNIT NUMBER	DESCRIPTION
8	BLAKELAND LOAMY SAND

EROSION CONTROL DATA

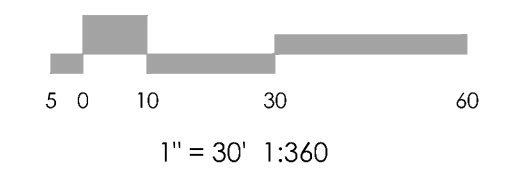
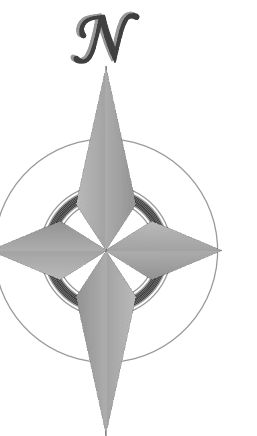
TIMING	ANTICIPATED START & COMPLETION TIME PERIOD OF SITE GRADING	NOVEMBER, 2018 TO NOVEMBER, 2019
	EXPECTED DATE ON WHICH FINAL STABILIZATION WILL BE COMPLETED	SEPTEMBER, 2019 TO JUNE, 2020
AREAS	TOTAL AREA OF THE SITE TO BE CLEARED, EXCAVATED OR GRADED	5.28 ACRES
RECEIVING WATERS	NAME OF RECEIVING WATERS	LITTLE JOHNSON
SOIL DATA	PRIMARY SOIL DESCRIPTION	BLAKELAND LOAMY SAND
	PERMEABILITY	RAPID
	SURFACE RUNOFF	LOW
	HAZARD OF EROSION	MODERATE
	HYDROLOGIC SOIL GROUP	A
	EXISTING PERCENT IMPERVIOUS	0%
	DEVELOPED PERCENT IMPERVIOUS	85.0%

Label all slopes that are steeper than 3:1 and provide erosion control blanket.

Please add this (stockpile?) to the BMP legend.



BENCHMARK



REVISIONS

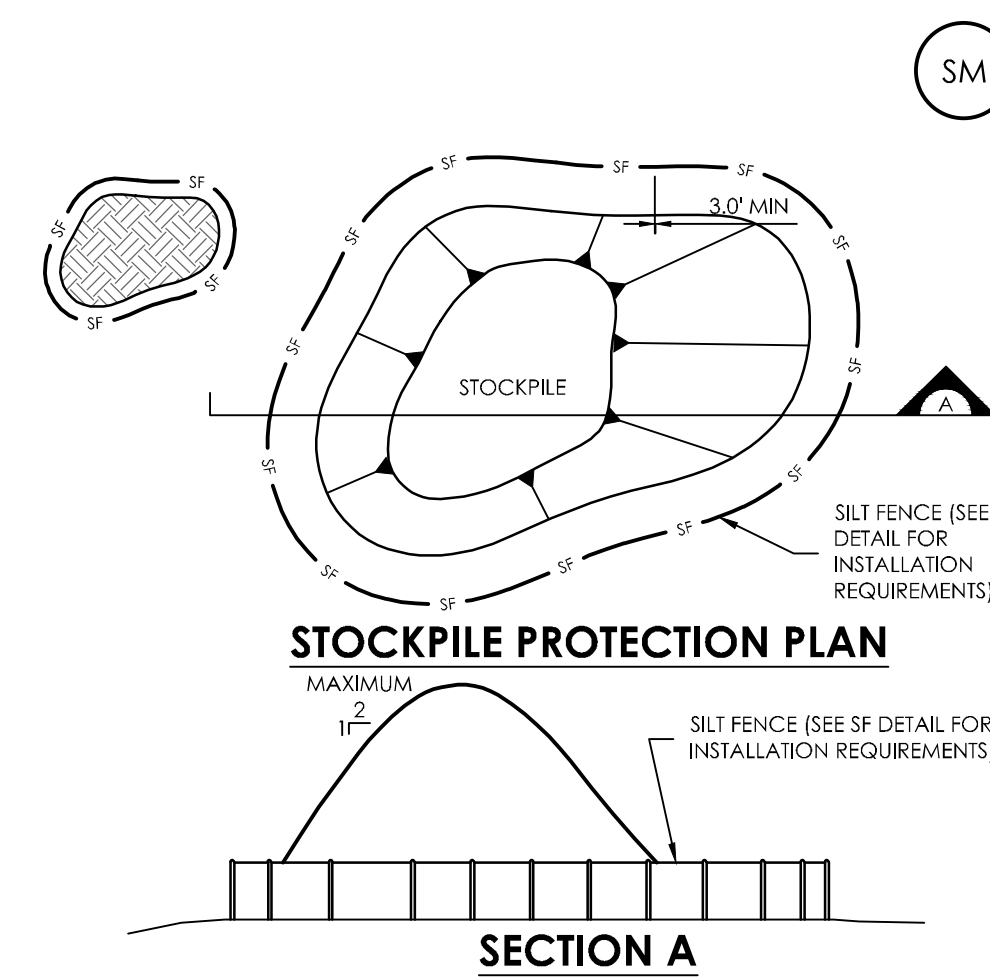
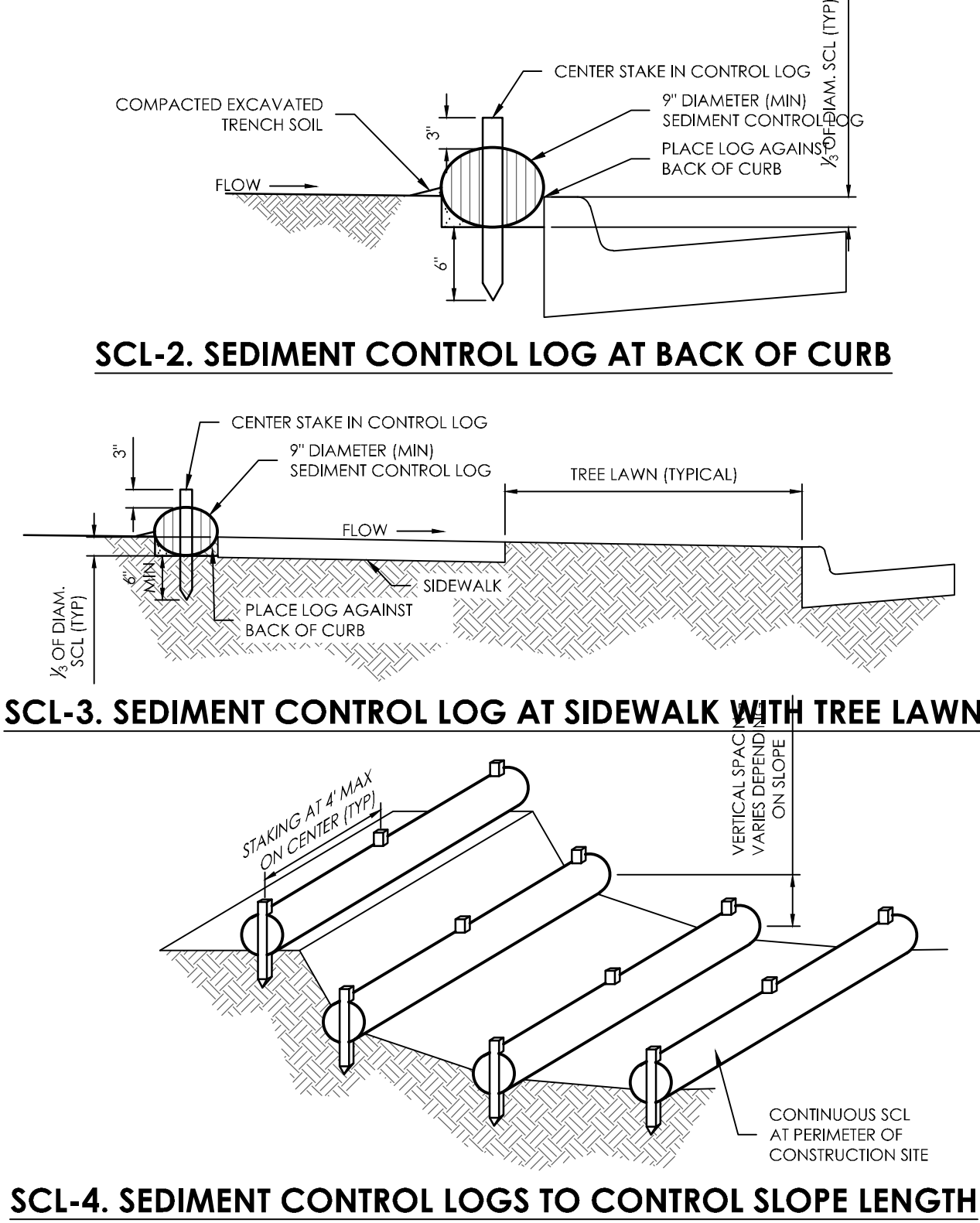
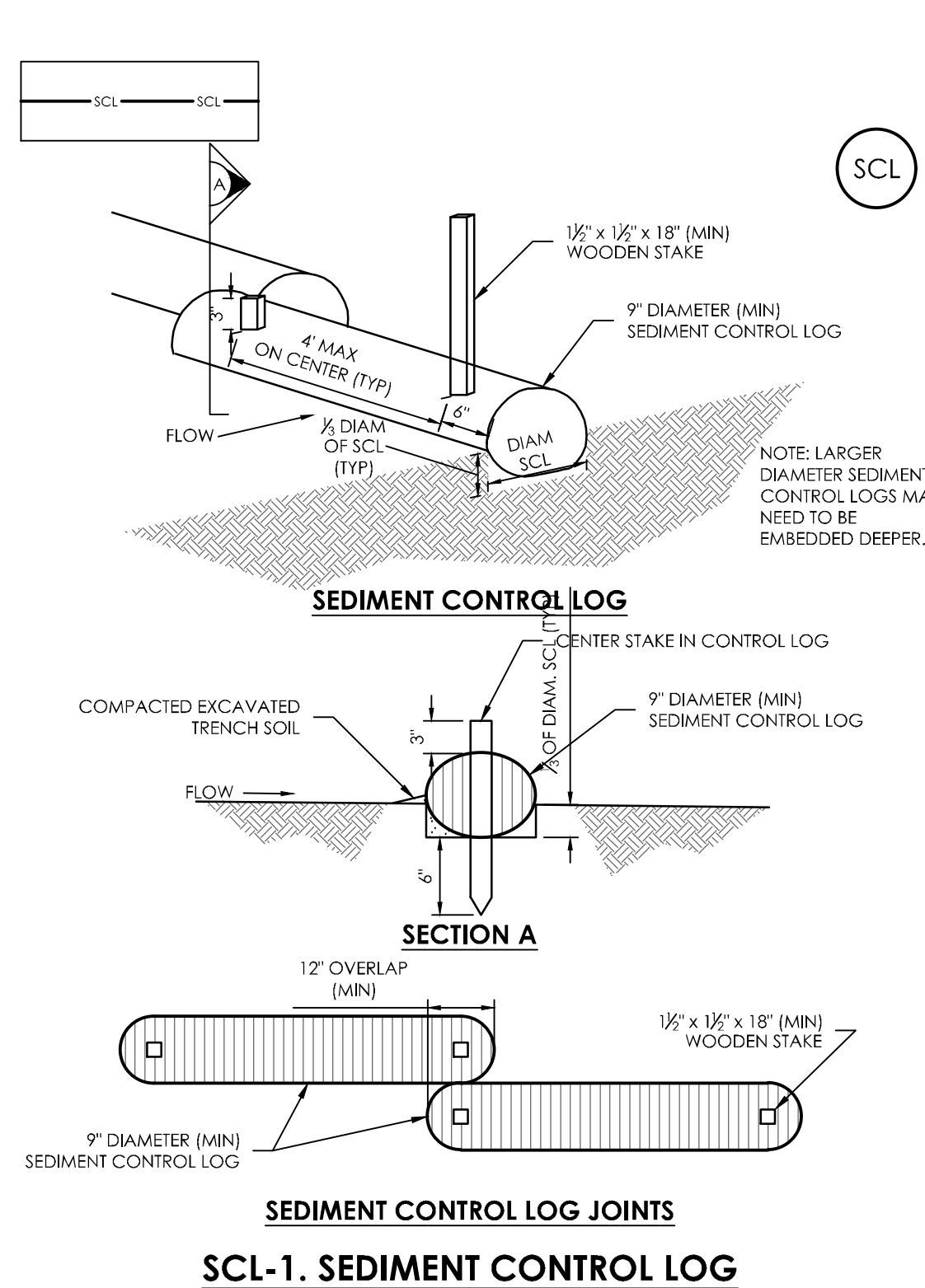
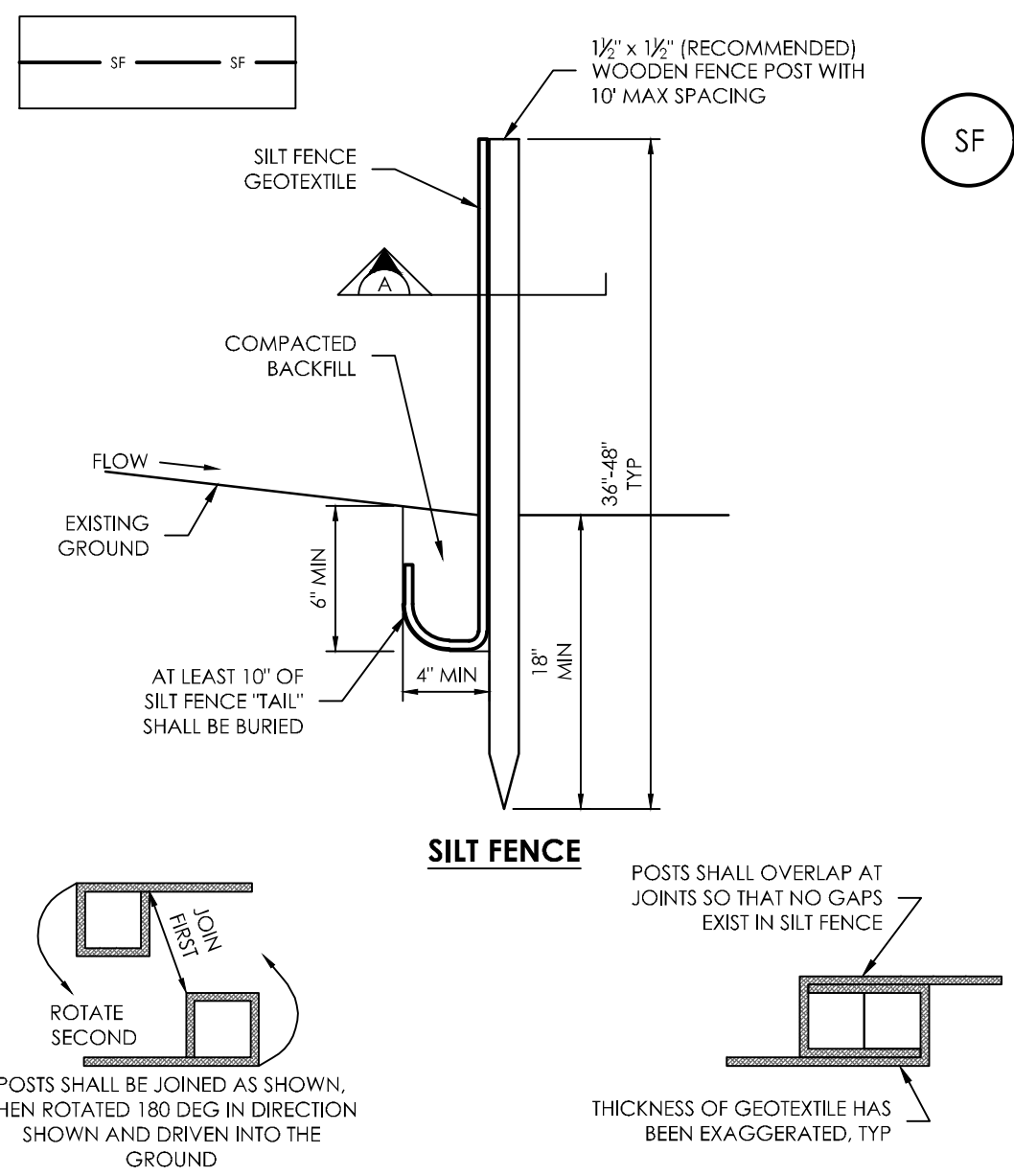
DESIGNED BY _____
 DRAWN BY _____
 CHECKED BY _____
 AS-BUILTS BY _____
 CHECKED BY _____

THE TOWNHOMES AT BRADLEY CROSSROADS

GRADING & EROSION CONTROL PLAN

C1.5 MVE PROJECT 61093
 MVE DRAWING GEC-EC

OCTOBER 17, 2018
SHEET 5 OF 6



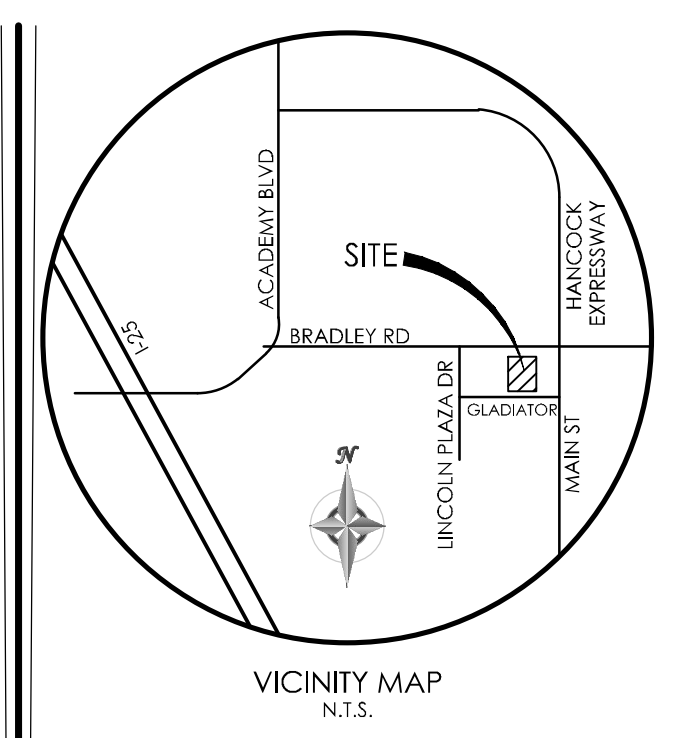
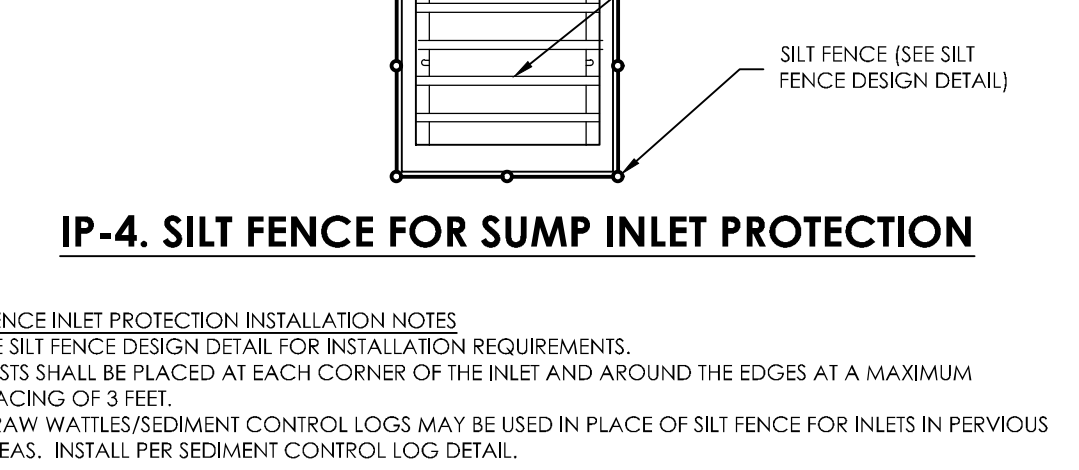
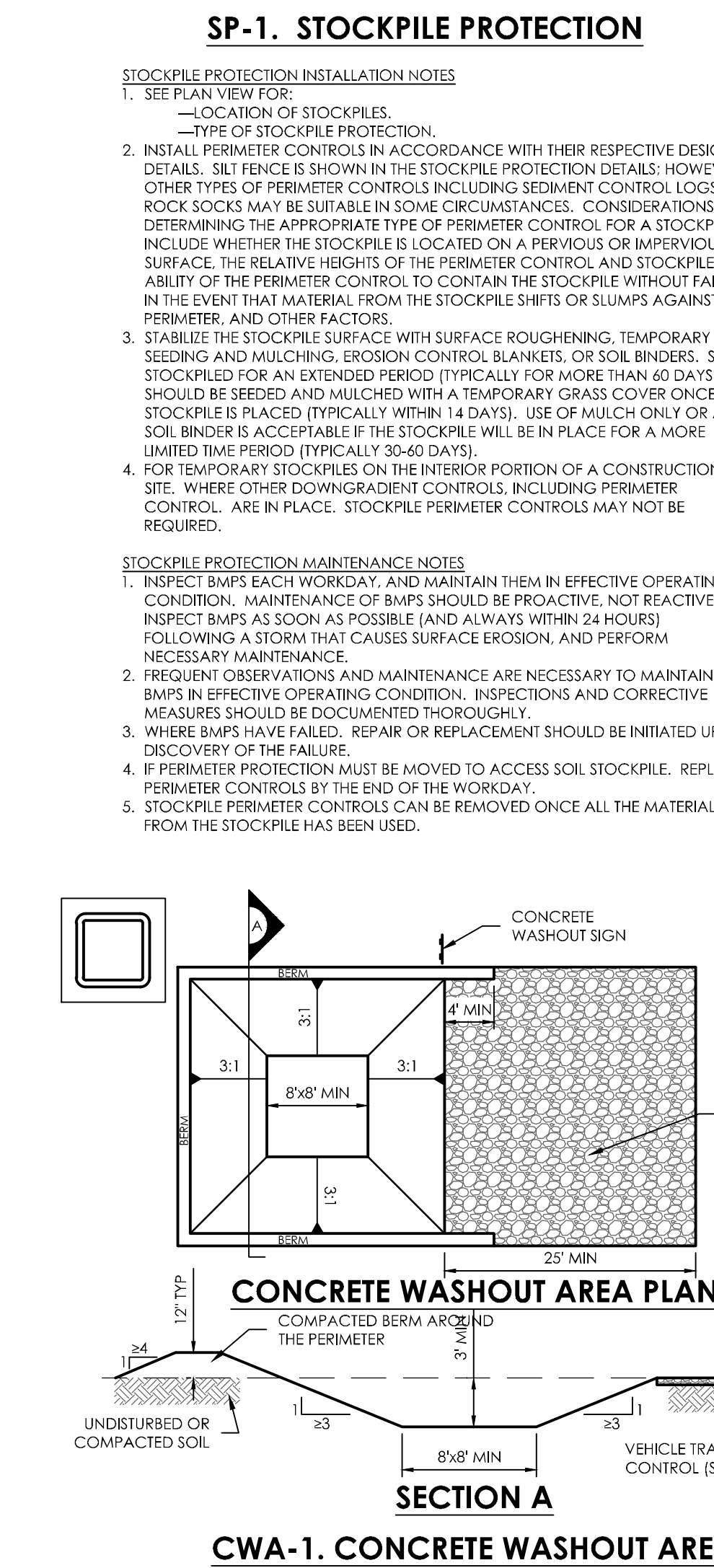
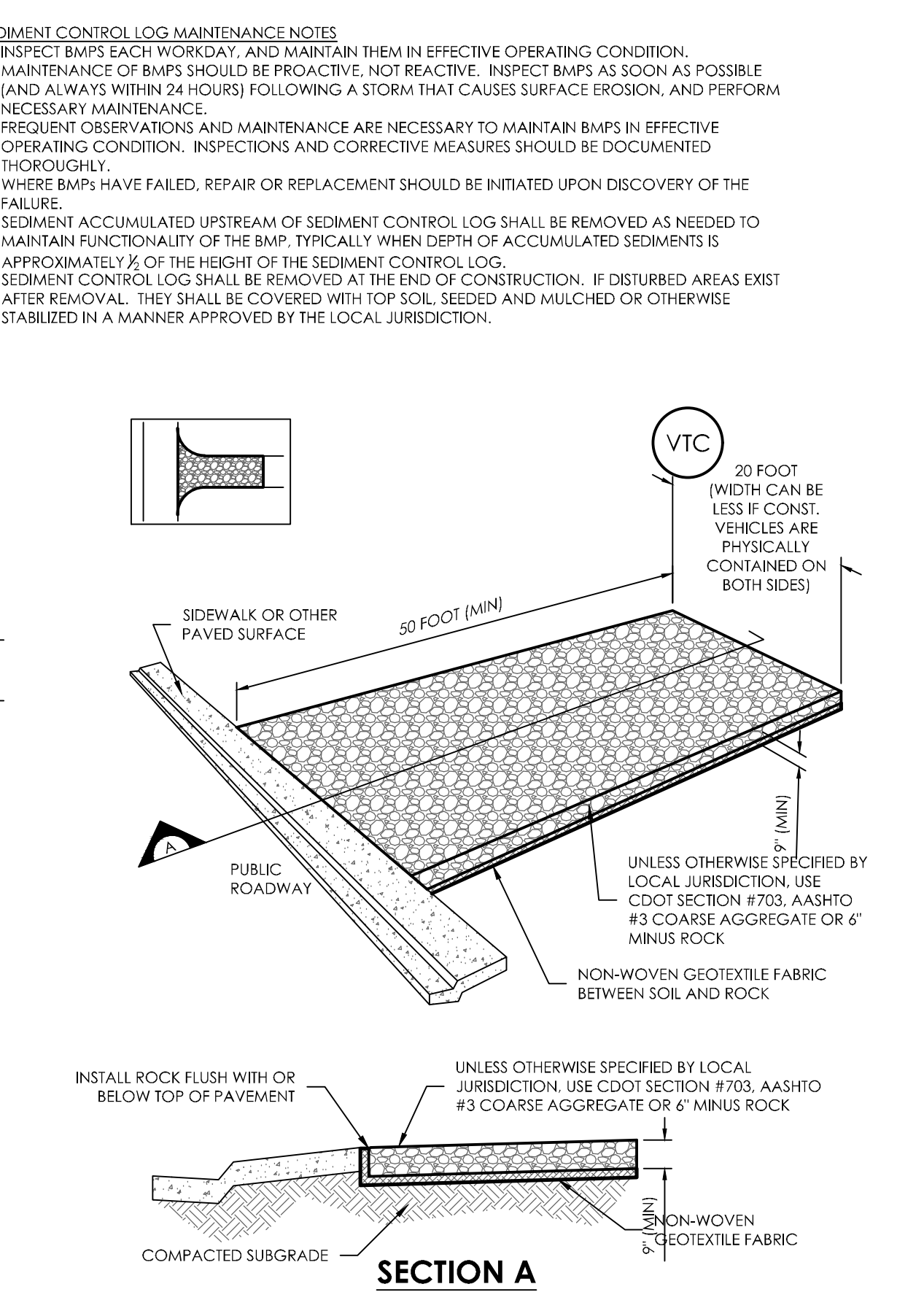
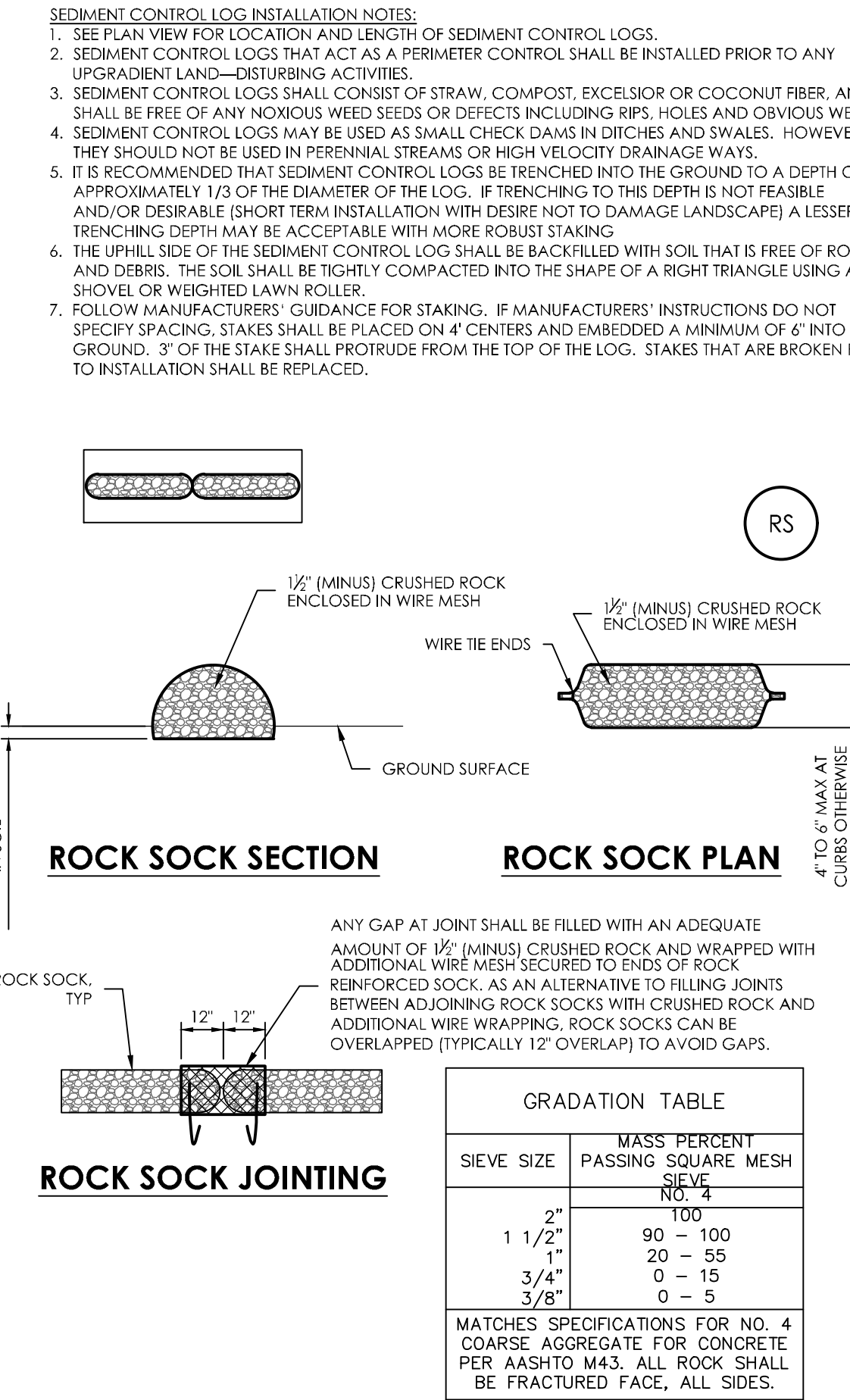
IP-3. ROCK SOCK SUMP/AREA INLET PROTECTION

ROCK SOCK SUMP/AREA INLET PROTECTION INSTALLATION NOTES:

- SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
- STRAW MATS/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF ROCK SOCKS FOR INLETS IN PVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.

ROCK SOCK MAINTENANCE NOTES:

- INSPECT B MPS EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF B MPS SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT B MPS 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 B MPS IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- WHERE B MPS HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- ROCK SOCKS SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED, OR DAMAGED BEYOND REPAIR.
- SEDIMENT ACCUMULATED UPSTREAM OF ROCK SOCKS SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE B MP. TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 1/2 OF THE HEIGHT OF THE ROCK SOCK.
- ROCK SOCKS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
- WHEN ROCK SOCKS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.



BENCHMARK

MVE INC.
ENGINEERS & SURVEYORS

1903 Liberty Street, Suite 200 Colorado Springs, CO 80909 719.635.5736

DESIGNED BY _____
DRAWN BY _____
CHECKED BY _____
AS-BUILT BY _____
CHECKED BY _____

THE TOWNHOMES AT
BRADLEY CROSSROADS

GRADING & EROSION
CONTROL PLAN
EROSION DETAILS

C1.6 MVE PROJECT 61093
MVE DRAWING GEC-EC

OCTOBER 17, 2018
SHEET 6 OF 6

Markup Summary

Callout (18)



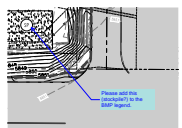
Subject: Callout
Page Label: [1] 61093-GEC-CS-C1.1
Author: Daniel Torres
Date: 11/5/2018 1:58:32 PM
Color: ■

Revise Development Services to Planning and Community Development (PCD)



Subject: Callout
Page Label: [1] 61093-GEC-CS-C1.1
Author: Daniel Torres
Date: 11/5/2018 1:59:40 PM
Color: ■

Revise DSD to PCD



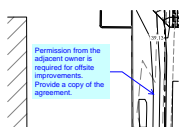
Subject: Callout
Page Label: [5] 61093-GEC-EC-C1.5
Author: Daniel Torres
Date: 11/6/2018 10:04:12 AM
Color: ■

Please add this (stockpile?) to the BMP legend.



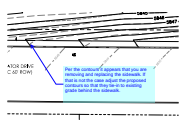
Subject: Callout
Page Label: [3] 61093-GEC-GP2-C1.3
Author: Daniel Torres
Date: 11/6/2018 11:18:38 AM
Color: ■

Use El Paso County standard PED ramp



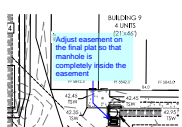
Subject: Callout
Page Label: [2] 61093-GEC-GP-C1.2
Author: Daniel Torres
Date: 11/6/2018 5:16:05 PM
Color: ■

Permission from the adjacent owner is required for offsite improvements. Provide a copy of the agreement.



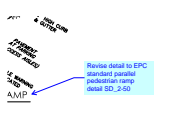
Subject: Callout
Page Label: [3] 61093-GEC-GP2-C1.3
Author: Daniel Torres
Date: 11/6/2018 5:20:34 PM
Color: ■

Per the contours it appears that you are removing and replacing the sidewalk. If that is not the case adjust the proposed contours so that they tie-in to existing grade behind the sidewalk.



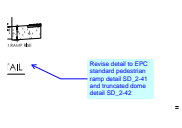
Subject: Callout
Page Label: [3] 61093-GEC-GP2-C1.3
Author: Daniel Torres
Date: 11/6/2018 5:23:03 PM
Color: ■

Adjust easement on the final plat so that manhole is completely inside the easement



Subject: Callout
Page Label: [4] 61093-GEC-CD-C1.4
Author: Daniel Torres
Date: 11/6/2018 8:21:09 AM
Color: ■

Revise detail to EPC standard parallel pedestrian ramp detail SD_2-50



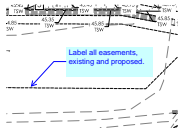
Subject: Callout
Page Label: [4] 61093-GEC-CD-C1.4
Author: Daniel Torres
Date: 11/6/2018 9:17:21 AM
Color: ■

Revise detail to EPC standard pedestrian ramp detail SD_2-41 and truncated dome detail SD_2-42



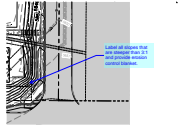
Subject: Callout
Page Label: [1] 61093-GEC-CS-C1.1
Author: Daniel Torres
Date: 11/7/2018 11:16:51 AM
Color: ■

Property line shown on legend does not match the property line shown on the plans. Revise.



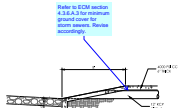
Subject: Callout
Page Label: [3] 61093-GEC-GP2-C1.3
Author: Daniel Torres
Date: 11/7/2018 11:19:28 AM
Color: ■

Label all easements, existing and proposed.



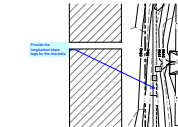
Subject: Callout
Page Label: [5] 61093-GEC-EC-C1.5
Author: Daniel Torres
Date: 11/7/2018 11:20:55 AM
Color: ■

Label all slopes that are steeper than 3:1 and provide erosion control blanket.



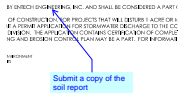
Subject: Callout
Page Label: [4] 61093-GEC-CD-C1.4
Author: Daniel Torres
Date: 11/7/2018 4:24:38 PM
Color: ■

Refer to ECM section 4.3.6.A.3 for minimum ground cover for storm sewers. Revise accordingly.



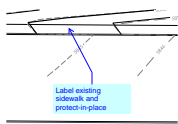
Subject: Callout
Page Label: [2] 61093-GEC-GP-C1.2
Author: Daniel Torres
Date: 11/7/2018 4:30:01 PM
Color: ■

Provide the longitudinal slope tags for the channels



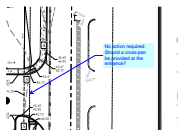
Subject: Callout
Page Label: [1] 61093-GEC-CS-C1.1
Author: Daniel Torres
Date: 11/7/2018 4:44:23 PM
Color: ■

Submit a copy of the soil report



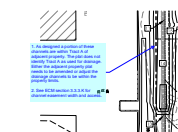
Subject: Callout
Page Label: [3] 61093-GEC-GP2-C1.3
Author: Daniel Torres
Date: 11/7/2018 4:47:46 PM
Color: ■

Label existing sidewalk and protect-in-place



Subject: Callout
Page Label: [2] 61093-GEC-GP-C1.2
Author: Daniel Torres
Date: 11/7/2018 4:55:54 PM
Color: ■

No action required: Should a cross-pan be provided at the entrance?



Subject: Callout
Page Label: [3] 61093-GEC-GP2-C1.3
Author: Daniel Torres
Date: 11/7/2018 5:47:32 PM
Color: ■

1. As designed a portion of these channels are within Tract A of adjacent property. The plat does not identify Tract A as used for drainage. Either the adjacent property plat needs to be amended or adjust the drainage channels to be within the property limits.

2. See ECM section 3.3.3.K for channel easement width and access.

Highlight (3)

ROL PLAN NOTES
FROM DEVELOPMENT SERVICES ADN A PREC
STEN TO CAUSE POLLUTION, CONTAMINATION
ONE IN A MANNER THAT MINIMIZES POLLUTION

Subject: Highlight
Page Label: [1] 61093-GEC-CS-C1.1
Author: Daniel Torres
Date: 11/5/2018 1:56:47 PM
Color: ■

DEVELOPMENT SERVICES ADN

SO COUNTY GRADING &
NOT COMMENCE UNTIL A CONSTRUCTI
) WITH DEVELOPMENT SERVICES INSPE
RICES FROM CONSTRUCTION SITES SH
ATE WATERS, ALL WORK AND EARTH D
INCLUDING WETLANDS.

Subject: Highlight
Page Label: [1] 61093-GEC-CS-C1.1
Author: Daniel Torres
Date: 11/5/2018 1:58:18 PM
Color: ■

DEVELOPMENT SERVICES

PRIOR TO A
ITY DSD INS

Subject: Highlight
Page Label: [1] 61093-GEC-CS-C1.1
Author: Daniel Torres
Date: 11/5/2018 1:59:51 PM
Color: ■

DSD

Text Box (1)

DATE
Add PCD File No. PPR1846

Subject: Text Box
Page Label: [1] 61093-GEC-CS-C1.1
Author: Daniel Torres
Date: 11/7/2018 11:20:21 AM
Color: ■

Add PCD File No. PPR1846