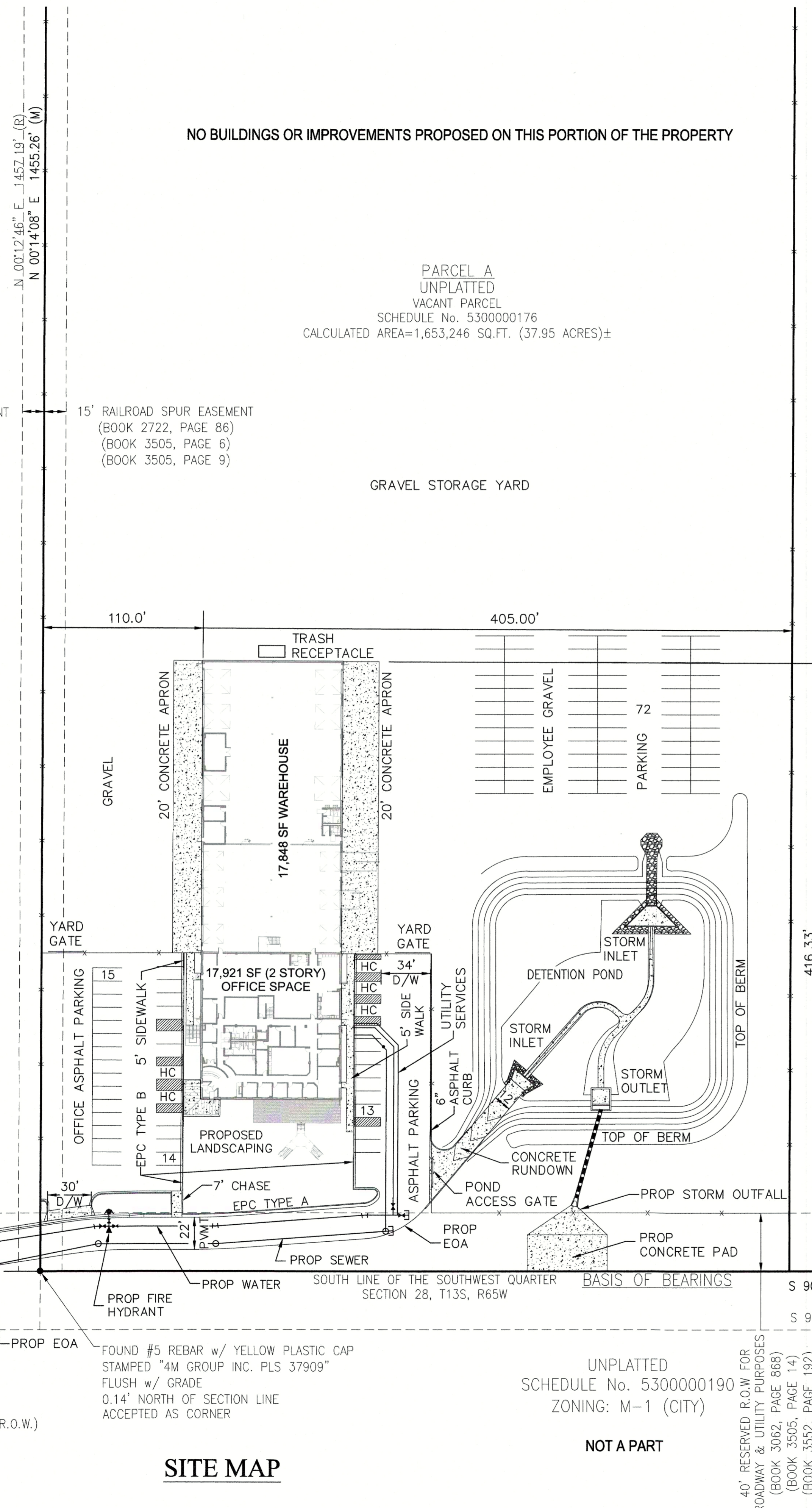
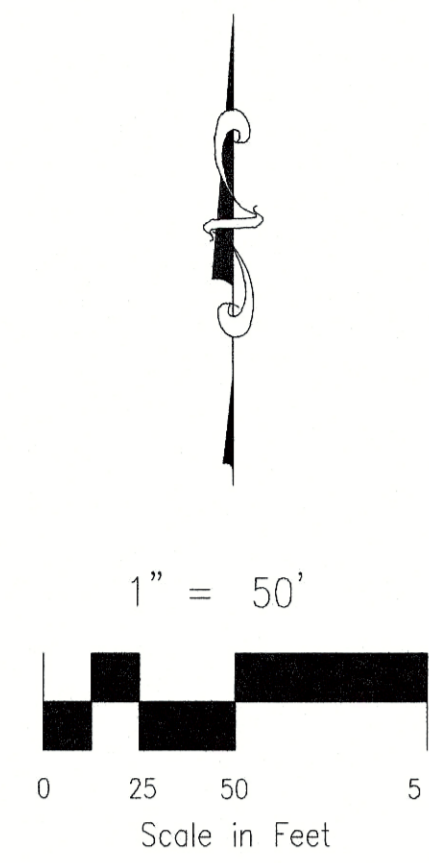


TIMBERLINE STORAGE YARD - GRADING AND EROSION CONTROL PLAN

EL PASO COUNTY, STATE OF COLORADO

A PORTION OF THE SOUTHWEST QUARTER OF SECTION 28, TOWNSHIP 13 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN,

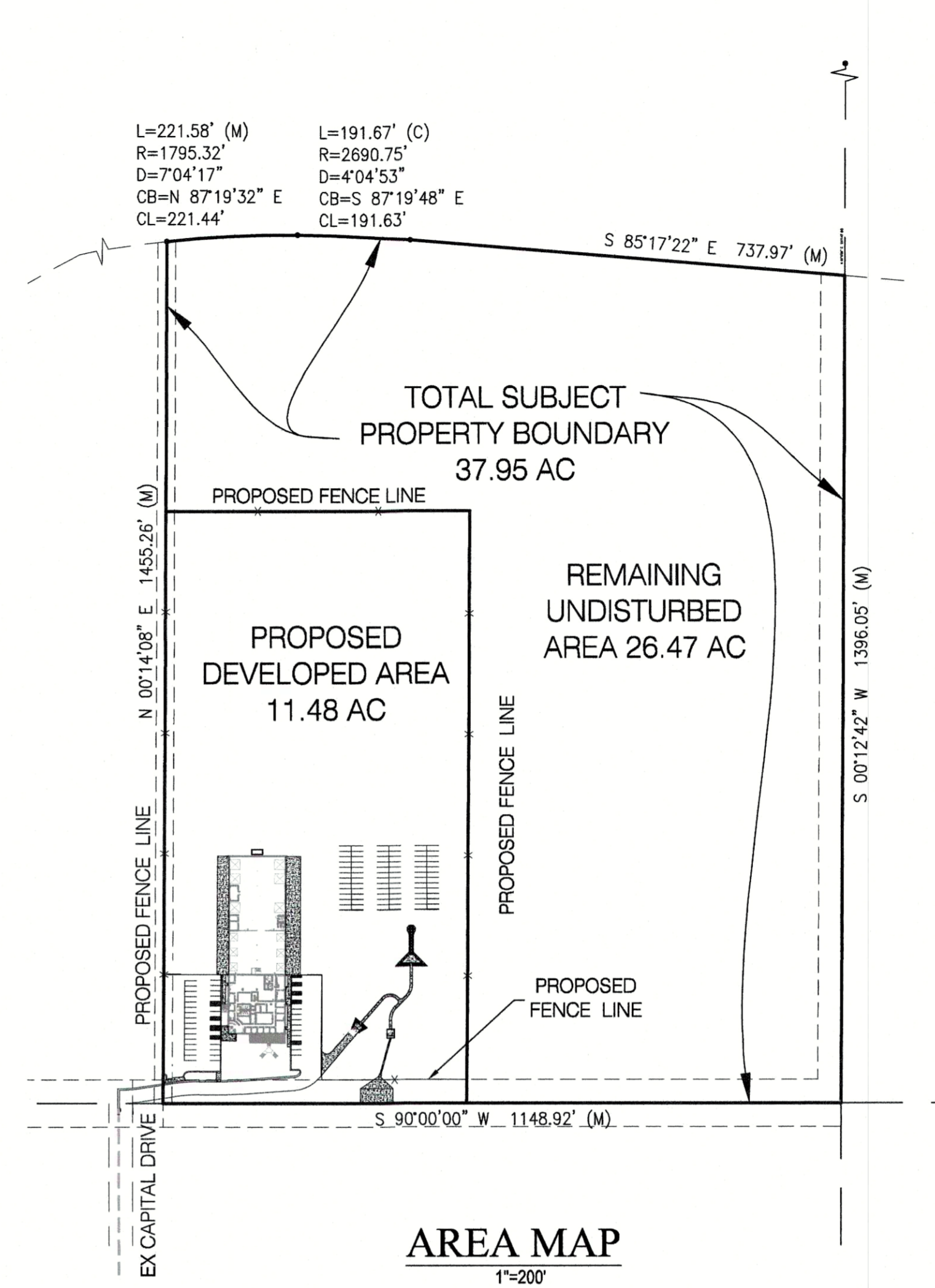


NO BUILDINGS OR IMPROVEMENTS PROPOSED ON THIS PORTION OF THE PROPERTY

PARCEL A
UNPLATTED
VACANT PARCEL
SCHEDULE No. 5300000176
CALCULATED AREA=1,653,246 SQ.FT. (37.95 ACRES)±

UNPLATTED
SCHEDULE No. 5300000552
ZONING: 1-3 (COUNTY)
NOT A PART

SITE MAP



AREA MAP
1"=200'

LEGAL DESCRIPTION:

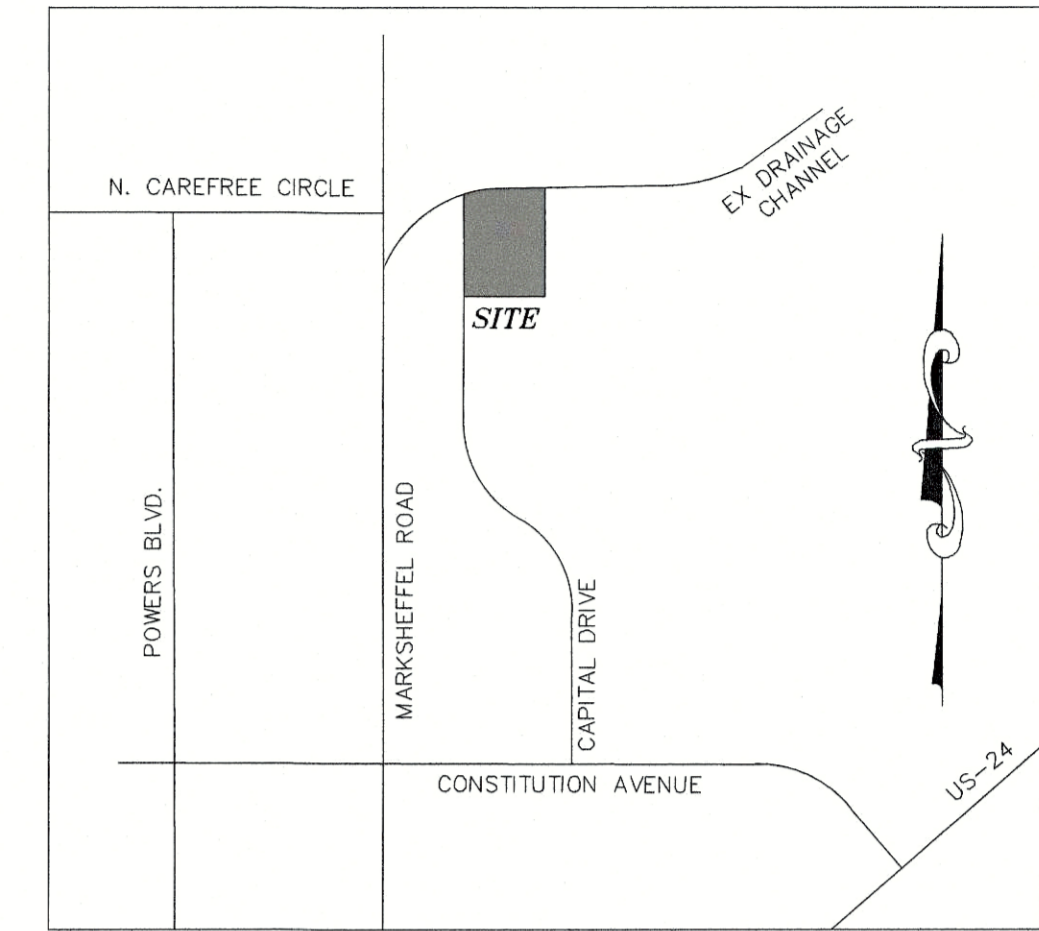
THAT PORTION OF THE SOUTHWEST QUARTER OF SECTION 28, TOWNSHIP 13 SOUTH, RANGE 65 WEST OF THE 6TH P.M., EL PASO COUNTY, COLORADO, DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF SAID SOUTHWEST QUARTER; THENCE ON THE WEST LINE OF SAID SOUTHWEST QUARTER, NORTH 00 DEGREES 02 MINUTES 12 SECONDS WEST A DISTANCE OF 298.20 FEET TO INTERSECT THE SOUTHEASTERLY RIGHT-OF-WAY LINE OF THE CHICAGO, ROCK ISLAND AND PACIFIC RAILROAD; THENCE NORTHEASTERLY AND EASTERLY ON SAID RIGHT-OF-WAY LINE ON A CURVE TO THE RIGHT WHOSE RADIUS IS 1,795.32 FEET, THROUGH A CENTRAL ANGLE OF 63 DEGREES 33 MINUTES 20 SECONDS AN ARC DISTANCE OF 1,991.47 FEET FOR THE POINT OF BEGINNING OF THE TRACT TO BE DESCRIBED HEREBY; THENCE CONTINUE ON THE LAST MENTIONED CURVE, WHOSE RADIUS IS 1,795.32 FEET, THROUGH A CENTRAL ANGLE OF 06 DEGREES 58 MINUTES 39 SECONDS AN ARC DISTANCE OF 217.59 FEET; THENCE ON A SPIRAL CURVE, WHOSE LONG CHORD BEARS SOUTH 86 DEGREES 25 MINUTES 49 SECONDS EAST A DISTANCE OF 195.23 FEET TO A POINT OF TANGENCY; THENCE SOUTH 85 DEGREES 25 MINUTES 17 SECONDS EAST A DISTANCE OF 738.04 FEET MORE OR LESS TO INTERSECT THE EAST LINE OF SAID SOUTHWEST QUARTER; THENCE ON SAID EAST LINE SOUTH 00 DEGREES 12 MINUTES 46 SECONDS WEST A DISTANCE OF 1,395.80 FEET TO THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER; THENCE ON THE SOUTH LINE OF SAID SOUTHWEST QUARTER, SOUTH 90 DEGREES 00 MINUTES 00 SECONDS WEST A DISTANCE OF 1,148.00 FEET; THENCE NORTH 00 DEGREES 12 MINUTES 46 SECONDS EAST A DISTANCE OF 1,457.19 FEET MORE OR LESS TO THE POINT OF BEGINNING.

CALCULATED AREA=1,653,246 SQ.FT. (37.95 ACRES)±

CONTACTS

- OWNER**
TIMBERLINE LANDSCAPING, INC.
3499 CAPITAL DRIVE
COLORADO SPRINGS, CO 80939
- CIVIL ENGINEER**
MS CIVIL CONSULTANTS, INC.
102 E. PIKES PEAK AVE. STE 306
COLORADO SPRINGS, CO 80903
VIRGIL A. SANCHEZ, P.E.
719-491-0818
- WATER AND WASTEWATER**
CHEROKEE METROPOLITAN DISTRICT
6250 PALMER PARK BOULEVARD
COLORADO SPRINGS, CO 80915-1721
JONATHAN SMITH
719-597-5080
- COUNTY ENGINEER**
EL PASO COUNTY
PLANNING AND COMMUNITY DEVELOPMENT
2880 INTERNATIONAL CIRCLE, SUITE 110
COLORADO SPRINGS, COLORADO 80910
GILBERT LAFORCE, P.E.
719-520-7945
- FIRE DEPARTMENT**
CAMARON HILLS FIRE DEPARTMENT
1835 TUSKESSEE PLACE
COLORADO SPRINGS, CO 80915
719-591-0960
- TELEPHONE COMPANY**
U.S. WEST COMMUNICATIONS (LOCATORS)
800-922-1987
AT&T (LOCATORS)
719-635-3674



VICINITY MAP
N.T.S.

DESIGN ENGINEER'S STATEMENT

THIS GRADING AND EROSION CONTROL PLAN WAS PREPARED UNDER MY DIRECTION AND SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. SAID PLAN HAS BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR GRADING AND EROSION CONTROL PLANS. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARING THIS PLAN.



VIRGIL A. SANCHEZ, COLORADO P.E. #37160
FOR AND ON BEHALF OF M & S CIVIL CONSULTANTS, INC.

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.

NAME: *Virgil Sanchez* DATE: *1-3-18*
BUSINESS NAME: *Timberline Landscaping, Inc.*
ADDRESS: *2499 N. Powers Blvd. Colorado Springs, CO 80915*

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, 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 DIRECTOR'S DISCRETION.



JENNIFER IRVINE, P.E. El Paso County Department of Public Works
COUNTY ENGINEER / ECM ADMINISTRATOR

PAGE INDEX	
1 OF 8	COVER SHEET
2&3 OF 8	GRADING & EROSION CONTROL
4 OF 8	GRADING & EROSION CONTROL DETAILS
5-8 OF 8	POND DETAILS & STORM SEWER PLANS

EL PASO COUNTY FILE NO. PPR 17-018

TIMBERLINE STORAGE YARD
GRADING AND EROSION CONTROL PLAN
PROJECT NO. 43-085
SCALE: 1"=50'
DATE: 12/02/2017
DESIGNED BY: GW
DRAWN BY: GW
CHECKED BY: VAS
SHEET 1 OF 8
GRO1

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.555.5465

M & S CIVIL CONSULTANTS, INC.

VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160

FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

EL PASO COUNTY REGISTERED PROFESSIONAL ENGINEER
#37160
1-3-18

REVISIONS:
NO. DATE DESCRIPTION
APPROVED BY: DATE

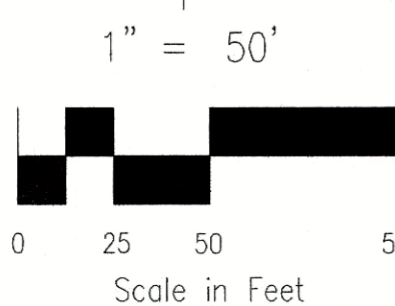
THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

CAUTION

GRADING AND EROSION CONTROL NOTES:

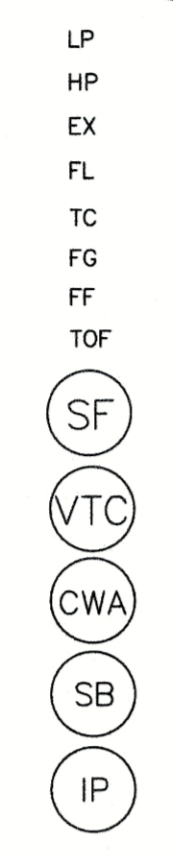
- CONSTRUCTION MAY NOT COMMENCE UNTIL A CONSTRUCTION PERMIT IS OBTAINED FROM DEVELOPMENT SERVICES AND A PRECONSTRUCTION CONFERENCE IS HELD WITH DEVELOPMENT SERVICES INSPECTIONS.
- STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION 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 TO 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 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 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 DORMANT 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 60 DAYS SHALL ALSO BE SEED. 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 SPECIFICATION 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 RUNOFF TO STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
- EROSION CONTROL BLANKETING IS TO 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. BMP'S 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 OFFSITE 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 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 CHEMICALS ARE TO BE USED BY THE CONTRACTOR, WHICH HAVE THE POTENTIAL TO BE RELEASED IN STORMWATER UNLESS PERMISSION FOR THE USE OF A SPECIFIC CHEMICAL IS GRANTED IN WRITING BY THE EGM 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, CRS), 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 CTL THOMPSON, INC. # CS18748-125 DATED MAY 5, 2017, 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
WOOD - PERMITS
4300 CHERRY CREEK DRIVE SOUTH
DENVER, CO 80246-1530
ATTN: PERMITS UNIT



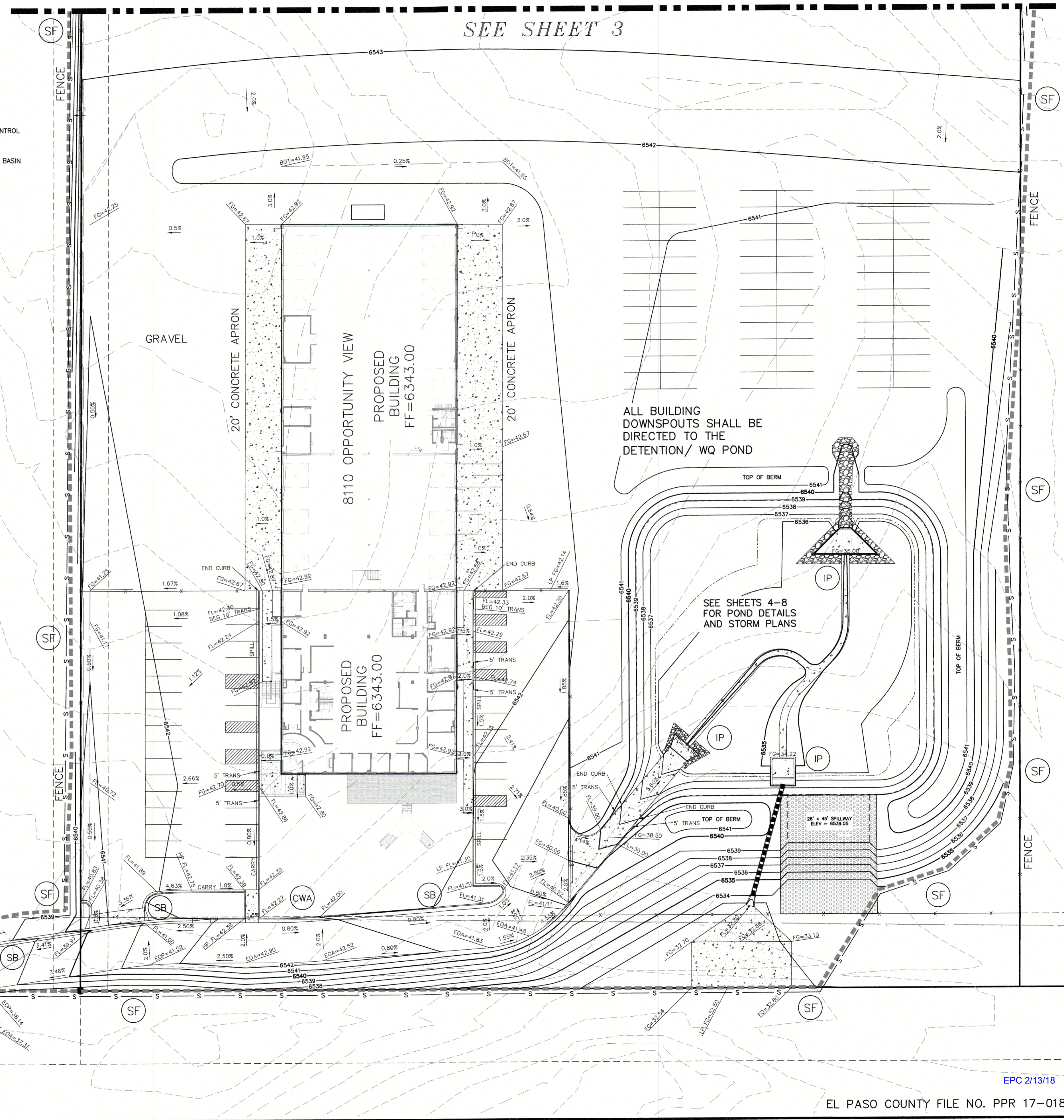
LEGEND

- EX MAJ CONT
- EX MIN CONT
- PROP MAJ CONT
- PROP MIN CONT
- LOW POINT
- HIGH POINT
- EXISTING FLOWLINE
- TOP OF CURB
- FINISH GRADE
- FINISH FLOOR
- TOP OF FOOTING
- SILT FENCE
- VEHICLE TRACKING CONTROL
- CONCRETE WASH-OUT BASIN
- STRAW BALE
- INLET PROTECTION



TIMBERLINE STORAGE YARD

GRADING AND EROSION CONTROL PLAN



ALL BUILDING DOWNSPOUTS SHALL BE DIRECTED TO THE DETENTION/ WQ POND

SEE SHEETS 4-8 FOR POND DETAILS AND STORM PLANS

EPC 2/13/18

EL PASO COUNTY FILE NO. PPR 17-018

TIMBERLINE STORAGE YARD

GRADING AND EROSION CONTROL PLAN

PROJECT NO. 43-095 DATE: 12/02/2017 SHEET 2 OF 8 **GR02**

SCALE: HORIZONTAL: 1"=50' VERTICAL: N/A

DESIGNED BY: BW DRAWN BY: BW CHECKED BY: WAS

20 ROLLER CREEK, SUITE 110
CO. GRADDO SPRINGS, CO 80803
PHONE: 719.585.5465

CIVIL CONSULTANTS, INC.

FOR AND ON BEHALF OF MESSRS. CIVIL CONSULTANTS, INC.

PROFESSIONAL ENGINEER
37160
VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160

APPROVED BY: _____ DATE: _____

NO. _____ DATE _____ BY: _____ DESCRIPTION: _____

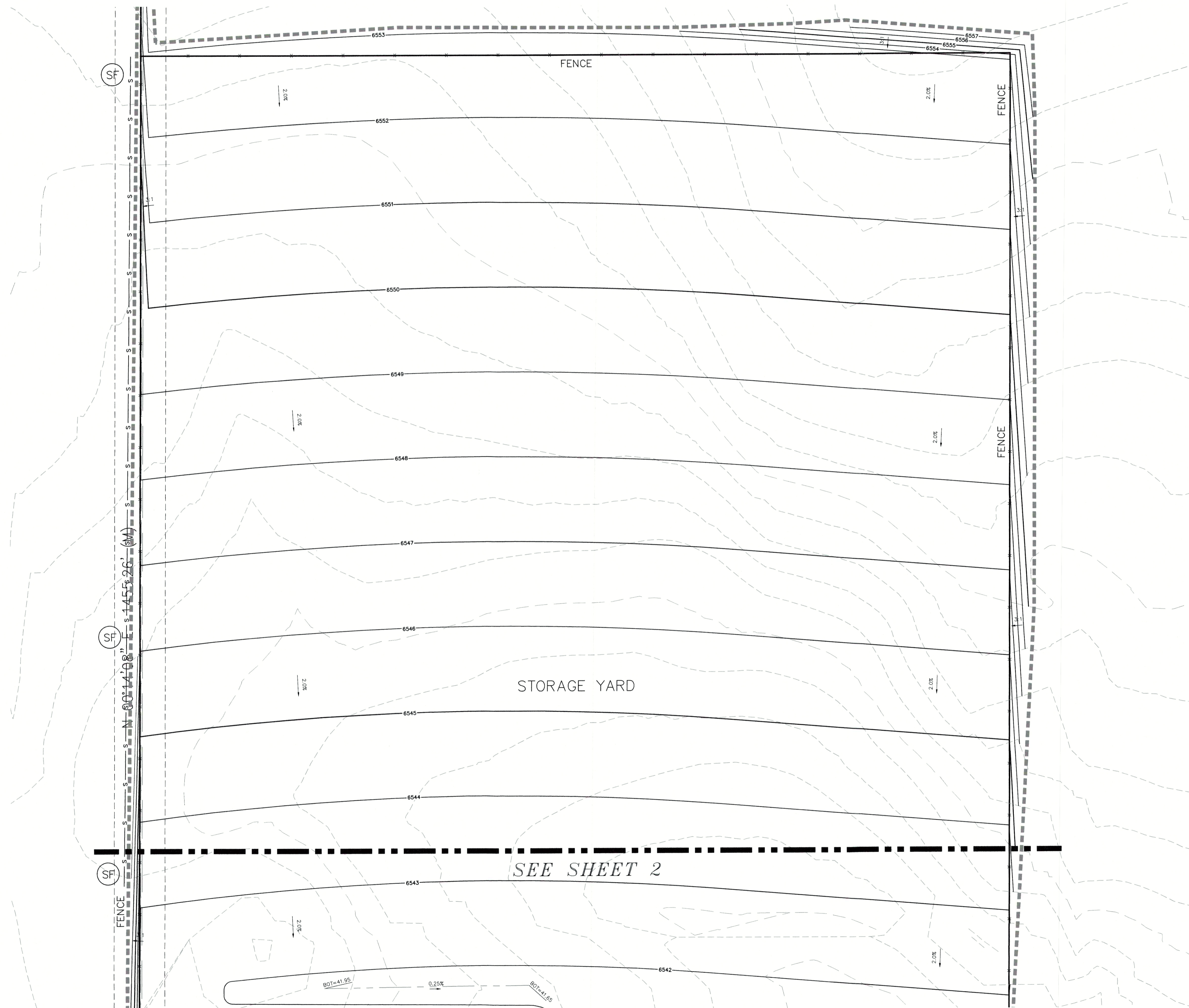
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CAUTION

File: 0_143095A\Tim Emick\dwg\Dev Plan\43095 Grading Plan.dwg PlotStamp: 12/2/2017 7:18 PM

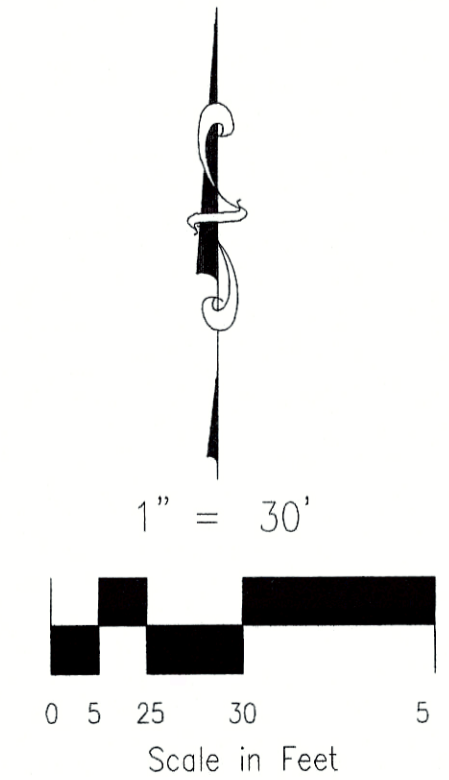
TIMBERLINE STORAGE YARD

GRADING AND EROSION CONTROL PLAN



LEGEND

	EX MAJ CONT
	EX MIN CONT
	PROP MAJ CONT
	PROP MIN CONT
LP	LOW POINT
HP	HIGH POINT
FL	EXISTING FLOWLINE
TC	TOP OF CURB
FG	FINISH GRADE
FF	FINISH FLOOR
TOF	TOP OF FOOTING
	SILT FENCE
	VEHICLE TRACKING CONTROL
	CONCRETE WASH-OUT BASIN
	STRAW BALE
	INLET PROTECTION



TIMBERLINE STORAGE YARD	
GRADING AND EROSION CONTROL PLAN	
PROJECT NO. 43-095	DATE: 12/02/2017
DESIGNED BY: GW	SCALE: HORIZONTAL: 1"=50'
DRAWN BY: GW	VERTICAL: N/A
CHECKED BY: VAS	SHEET 3 OF 8
	GR02

20 BOULDER CRESCENT, SUITE 110
 COLORADO SPRINGS, CO 80903
 PHONE: 719.555.5465

M&S
 CIVIL CONSULTANTS, INC.

FOR AND ON BEHALF OF
 M&S CIVIL CONSULTANTS, INC.

Virgil A. Sanchez, Colorado, P.E. No. 37160

NO.	DATE	DESCRIPTION	APPROV. BY	DATE

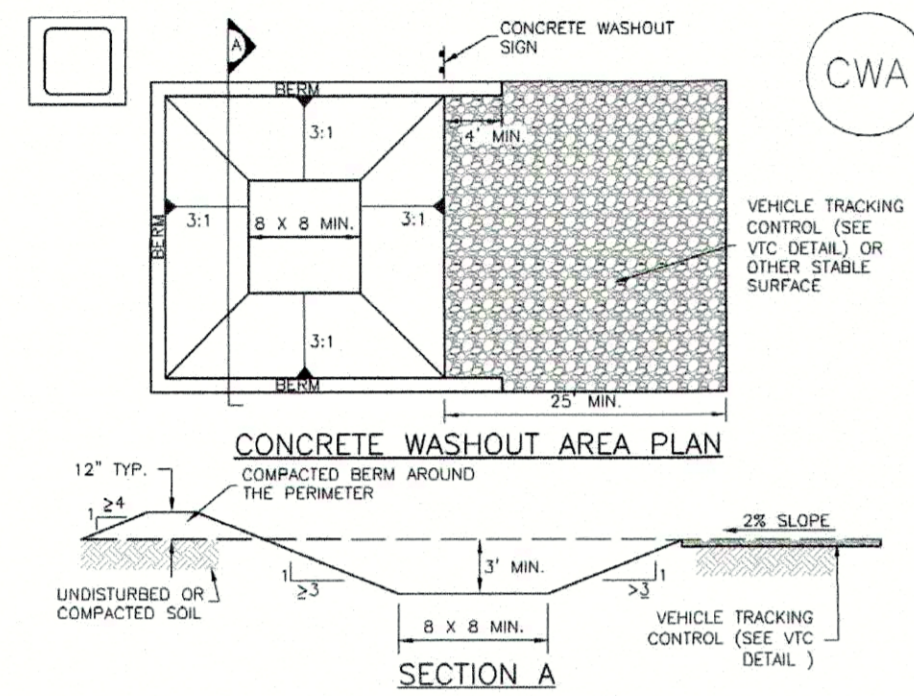
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CAUTION

EL PASO COUNTY FILE NO. PPR 17-018

EPC 2/13/18

Concrete Washout Area (CWA) MM-1



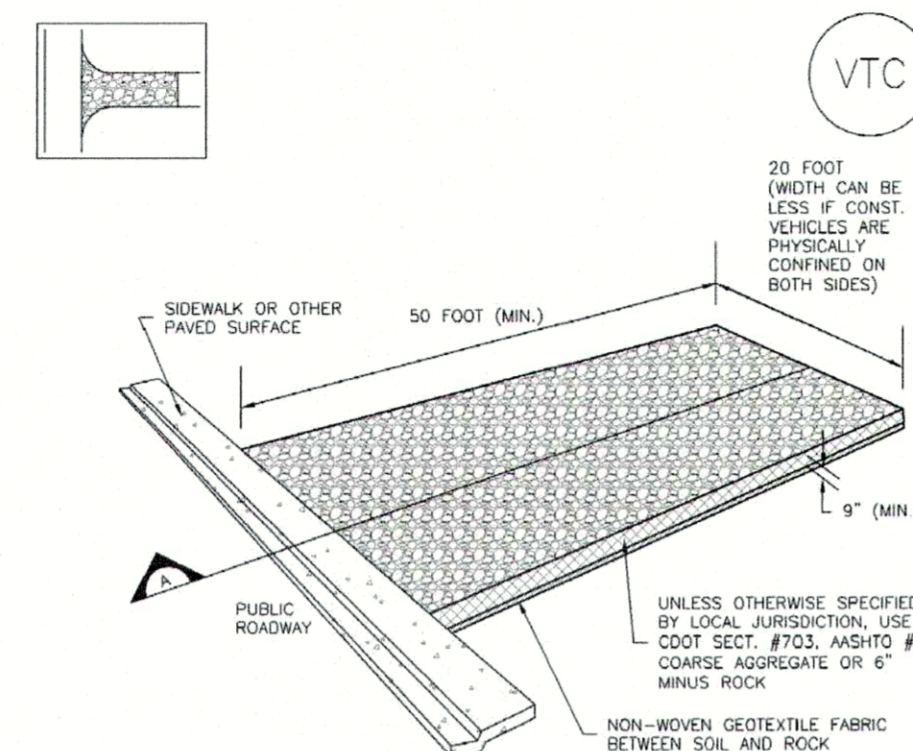
CWA-1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

- SEE PLAN VIEW FOR CWA INSTALLATION LOCATION.
- DO NOT LOCATE AN UNGRAINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (1/8 MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.
- THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
- CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8" BY 8" SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.
- BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.
- VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.
- SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP TRUCKS.
- USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

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

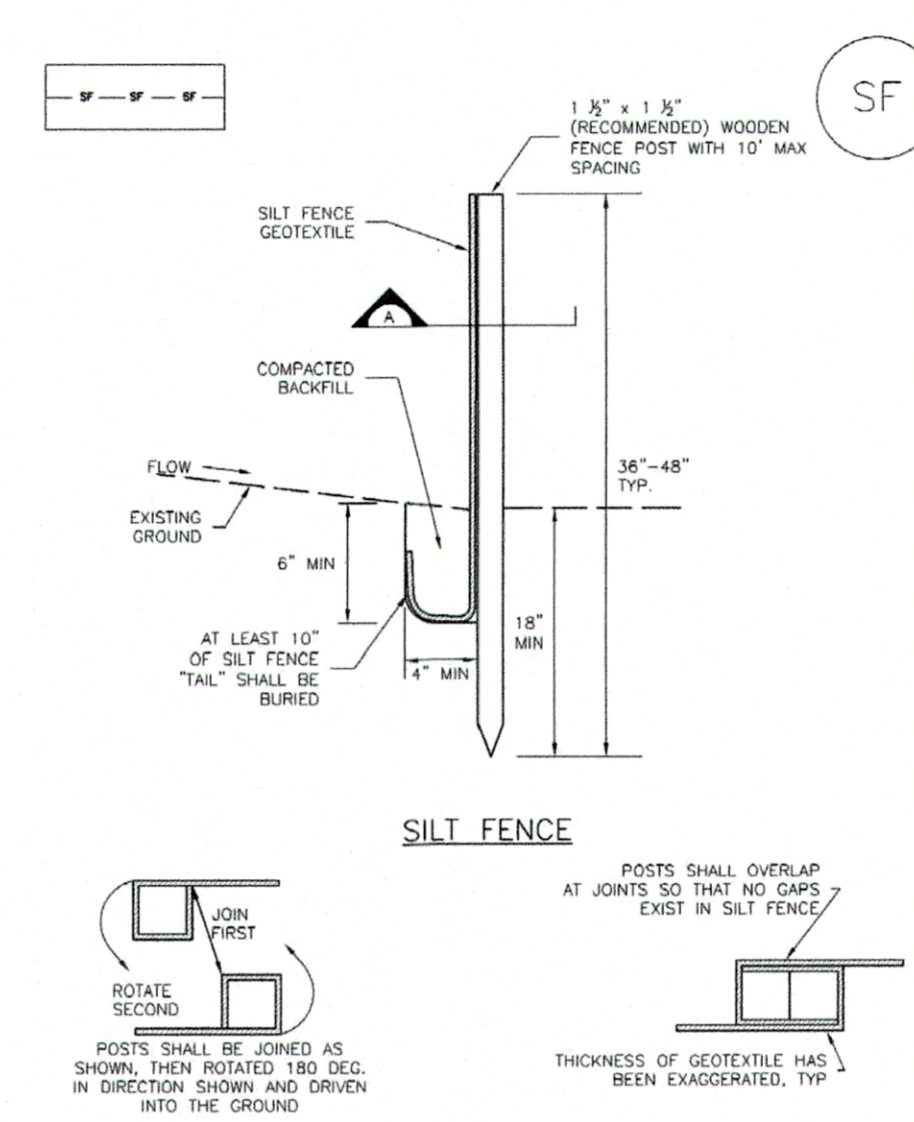
Vehicle Tracking Control (VTC) SM-4



VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

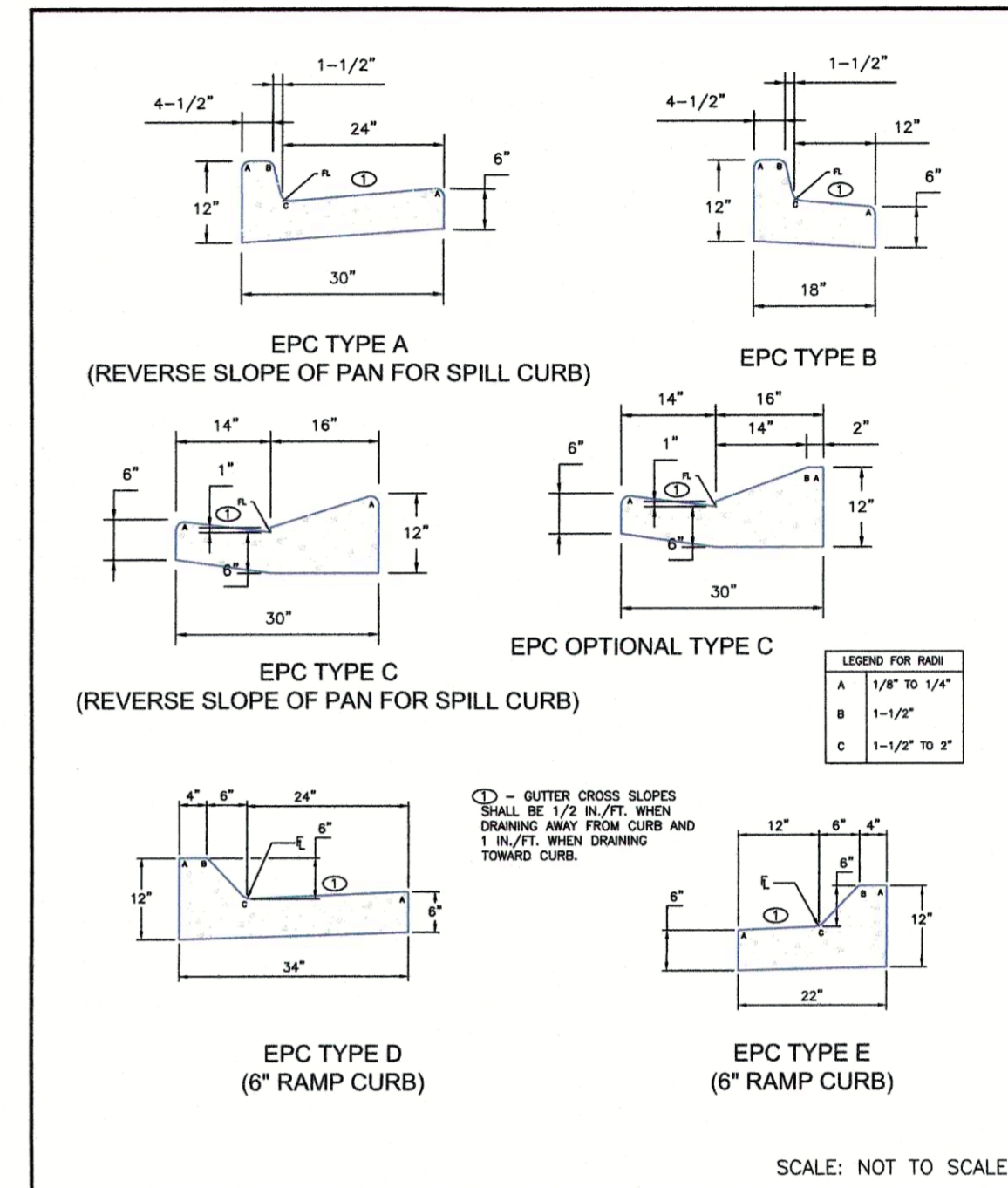
November 2010 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 VTC-3

Silt Fence (SF) SC-1



SF-1. SILT FENCE

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



8/11/11 DATE APPROVED: André P. Brackin
 12/8/15 REGION DATE: SD_2-20 FILE NAME: CIVIL COUNTY DEPARTMENT OF TRANSPORTATION

EC-2 Temporary and Permanent Seeding (TS/PS)

Table TS/PS-2. Minimum Drill Seeding Rates for Perennial Grasses

Common Name	Botanical Name	Growth Season	Growth Form	Seeds/Pound	Pounds of PLS/acre
Alkali Soil Seed Mix					
Alkali acorn	<i>Sporobolus airoides</i>	Cool	Bunch	1,750,000	0.25
Basin wildrye	<i>Elymus cinereus</i>	Cool	Bunch	165,000	2.5
Sodiar streambank wheatgrass	<i>Agropyron repens 'Sodiar'</i>	Cool	Sod	170,000	2.5
Jose tall wheatgrass	<i>Agropyron elongatum 'Jose'</i>	Cool	Bunch	79,000	7.0
Arriba western wheatgrass	<i>Agropyron smithii 'Arriba'</i>	Cool	Sod	110,000	5.5
Total					17.75
Fertile Loam Soil Seed Mix					
Ephraim crested wheatgrass	<i>Agropyron cristatum 'Ephraim'</i>	Cool	Sod	175,000	2.0
Dural hard fescue	<i>Festuca ovina 'Duralcaval'</i>	Cool	Bunch	565,000	1.0
Lincoln smooth brome	<i>Bromus inermis leys 'Lincoln'</i>	Cool	Sod	130,000	3.0
Sodiar streambank wheatgrass	<i>Agropyron repens 'Sodiar'</i>	Cool	Sod	170,000	2.5
Arriba western wheatgrass	<i>Agropyron smithii 'Arriba'</i>	Cool	Sod	110,000	7.0
Total					18.5
High Water Table Soil Seed Mix					
Meadow fescue	<i>Alpecurus pratensis</i>	Cool	Sod	900,000	0.5
Redtop	<i>Agrostis alba</i>	Warm	Open sod	5,000,000	0.25
Red canarygrass	<i>Phalaris arundinacea</i>	Cool	Sod	68,000	0.5
Lincoln smooth brome	<i>Bromus inermis leys 'Lincoln'</i>	Cool	Sod	130,000	3.0
Pathfinder switchgrass	<i>Panicum virgatum 'Pathfinder'</i>	Warm	Sod	380,000	1.0
Albar tall wheatgrass	<i>Agropyron elongatum 'Albar'</i>	Cool	Bunch	79,000	5.5
Total					10.75
Transition Turf Seed Mix					
Rubens Canadian bluegrass	<i>Poa compressa 'Rubens'</i>	Cool	Sod	2,500,000	0.5
Dural hard fescue	<i>Festuca ovina 'Duralcaval'</i>	Cool	Bunch	565,000	1.0
Citation perennial ryegrass	<i>Lolium perenne 'Citation'</i>	Cool	Sod	247,000	3.0
Lincoln smooth brome	<i>Bromus inermis leys 'Lincoln'</i>	Cool	Sod	130,000	3.0
Total					7.5

TS/PS-4 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 June 2012

Temporary and Permanent Seeding (TS/PS) EC-2

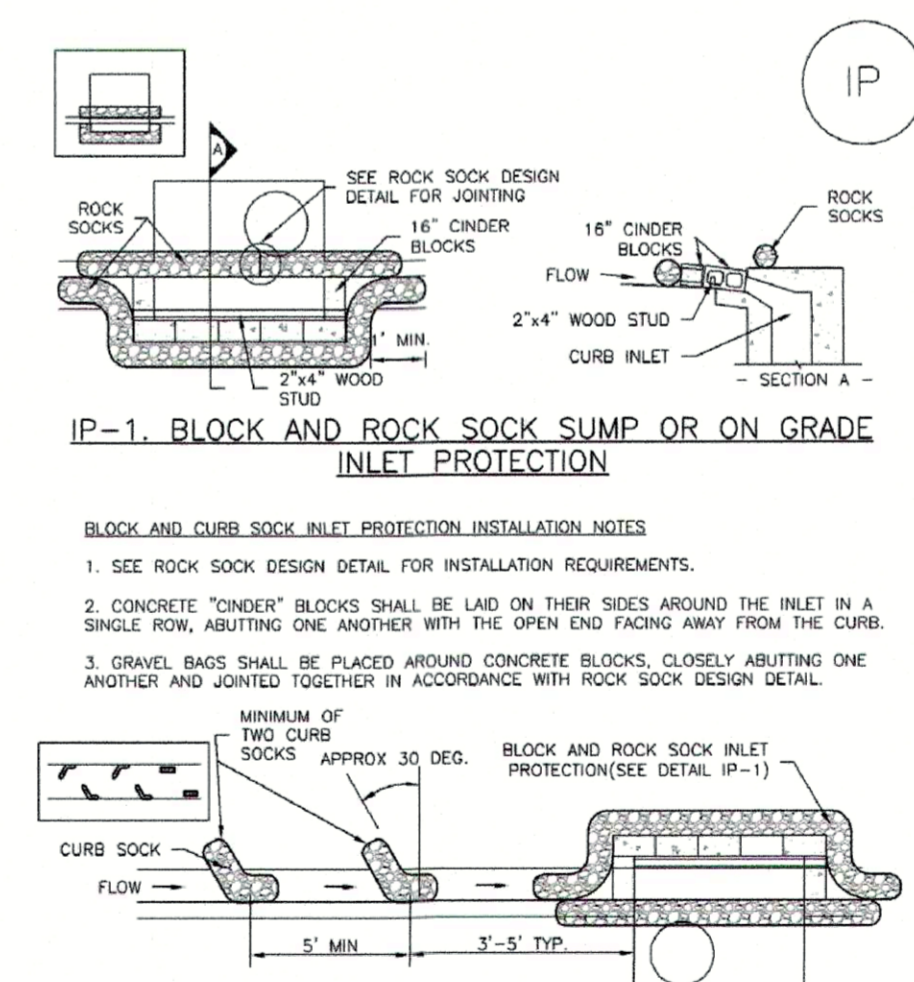
Table TS/PS-2. Minimum Drill Seeding Rates for Perennial Grasses (cont.)

Common Name	Botanical Name	Growth Season	Growth Form	Seeds/Pound	Pounds of PLS/acre
Sandy Soil Seed Mix					
Blue grama	<i>Bouteloua gracilis</i>	Warm	Sod-forming bunchgrass	825,000	0.5
Camper litle bluestem	<i>Schizachyrium scoparium 'Camper'</i>	Warm	Bunch	240,000	1.0
Prairie sandreed	<i>Calamagrostis longifolia</i>	Warm	Open sod	274,000	1.0
Sand dropseed	<i>Sporobolus cryptandrus</i>	Cool	Bunch	5,298,000	0.25
Vaughn sideoats grama	<i>Bouteloua curtipendula 'Vaughn'</i>	Warm	Sod	191,000	2.0
Arriba western wheatgrass	<i>Agropyron smithii 'Arriba'</i>	Cool	Sod	110,000	5.5
Total					10.25
Heavy Clay, Rocky Foothill Seed Mix					
Ephraim crested wheatgrass ¹	<i>Agropyron cristatum 'Ephraim'</i>	Cool	Sod	175,000	1.5
Oahu Intermediate wheatgrass	<i>Agropyron intermedium 'Oahu'</i>	Cool	Sod	115,000	5.5
Vaughn sideoats grama ²	<i>Bouteloua curtipendula 'Vaughn'</i>	Warm	Sod	191,000	2.0
Lincoln smooth brome	<i>Bromus inermis leys 'Lincoln'</i>	Cool	Sod	130,000	3.0
Arriba western wheatgrass	<i>Agropyron smithii 'Arriba'</i>	Cool	Sod	110,000	5.5
Total					17.5

¹ All of the above seeding mixes and rates are based on drill seeding followed by crimped straw mulch. These rates should be doubled if soil is broadcast and should be increased by 50 percent if the seeding is done using a Biltmore Drill or is applied through hydraulic seeding. Hydraulic seeding may be substituted for drilling only where slopes are steeper than 3:1. If hydraulic seeding is used, hydraulic mulching should be done as a separate operation.
² See Table TS/PS-3 for seeding dates.
³ If this is to be irrigated, the transition turf seed rates should be doubled.
⁴ Crested wheatgrass should not be used on slopes steeper than 6H to 1V.
⁵ Can substitute 0.5 lbs PLS of blue grama for the 2.0 lbs PLS of Vaughn sideoats grama.

June 2012 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 TS/PS-5

SC-6 Inlet Protection (IP)



IP-1. BLOCK AND ROCK SOCK SUMP OR ON GRADE INLET PROTECTION
 BLOCK AND CURB SOCK INLET PROTECTION INSTALLATION NOTES
 1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
 2. CONCRETE 'TONGUE' BLOCKS SHALL BE LAID ON THEIR SIDES AROUND THE INLET IN A SINGLE ROW, ABUTTING ONE ANOTHER WITH THE OPEN END FACING AWAY FROM THE CURB.
 3. GRAVEL BAGS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ABUTTING ONE ANOTHER AND JOINED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL.

IP-2. CURB ROCK SOCKS UPSTREAM OF INLET PROTECTION
 CURB SOCK INLET PROTECTION INSTALLATION NOTES
 1. SEE ROCK SOCK DESIGN DETAIL INSTALLATION REQUIREMENTS.
 2. PLACEMENT OF THE SOCK SHALL BE APPROXIMATELY 30 DEGREES FROM PERPENDICULAR IN THE OPPOSITE DIRECTION OF FLOW.
 3. SOCKS ARE TO BE FLUSH WITH THE CURB AND SPACED A MINIMUM OF 5 FEET APART.
 4. AT LEAST TWO CURB SOCKS IN SERIES ARE REQUIRED UPSTREAM OF ON-GRADE INLETS.

IP-4 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 August 2013

TIMBERLINE STORAGE YARD
 GRADING AND EROSION CONTROL DETAILS
 PROJECT NO. 43-095
 SCALE: 12/02/2017
 DESIGNED BY: N/A
 DRAWN BY: GW
 CHECKED BY: VAS
 SHEET 4 OF 8
 GR03

20 BOULDER CRESCENT SUITE 110
 COLORADO SPRINGS, CO 80903
 PHONE 719.555.5463

CIVIL CONSULTANTS, INC.

FOR AND ON BEHALF OF MRS. CHLOE CONSULTANTS, INC.

REGISTERED PROFESSIONAL ENGINEER
 NO. 37160
 VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160

REVISIONS:
 NO. DATE BY DESCRIPTION
 APPROVED BY: DATE

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE OR LIABLE FOR UNAUTHORIZED CHANGES TO OR ALTERATIONS OF THESE PLANS. ALL CHANGES TO THESE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE ENGINEER PREPARING THESE PLANS.

EPC 2/13/18
 EL PASO COUNTY FILE NO. PPR 17-018
 CAUTION

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES
 FOR BURIED UTILITY INFORMATION
 48 HRS BEFORE YOU DIG
 CALL 1-800-922-1987

TIMBERLINE STORAGE YARD
 FULL SPECTRUM DET. POND 1 SITE PLAN
 PROJECT NO. 43-095
 DATE: 12/02/2017
 SCALE: HORIZONTAL: 1"=20' VERTICAL: N/A
 DESIGNED BY: DLM
 DRAWN BY: DLM
 CHECKED BY: WAS
 SHEET 6 OF 8
 ST03

20 BOULDER CRESCENT, SUITE 110
 COLORADO SPRINGS, CO 80903
 PHONE: 719.535.5465

 CIVIL CONSULTANTS, INC.

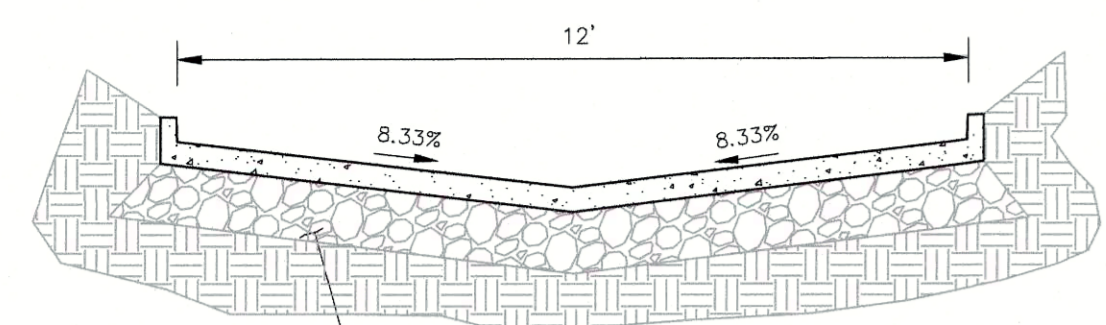
FOR AND ON BEHALF OF
 CIVIL CONSULTANTS, INC.

 VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160

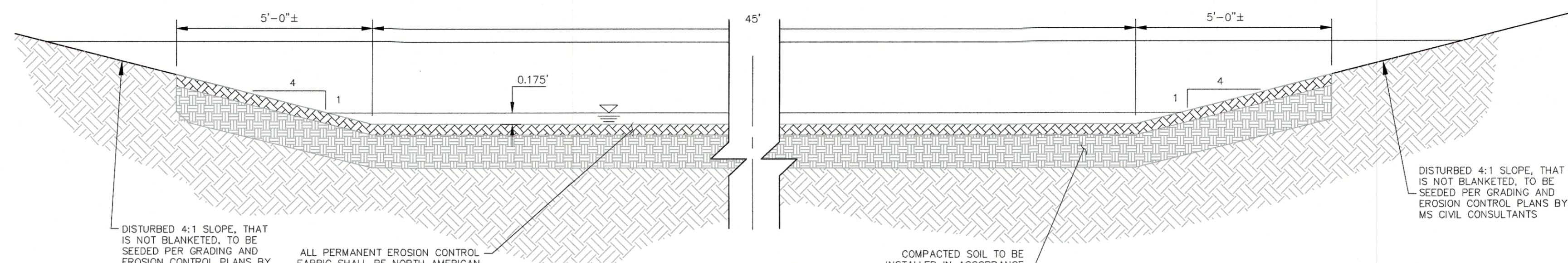
NO.	DATE	DESCRIPTION	APPR'D. BY:	DATE

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR UNAUTHORIZED CHANGES TO OR ALTERATIONS TO THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

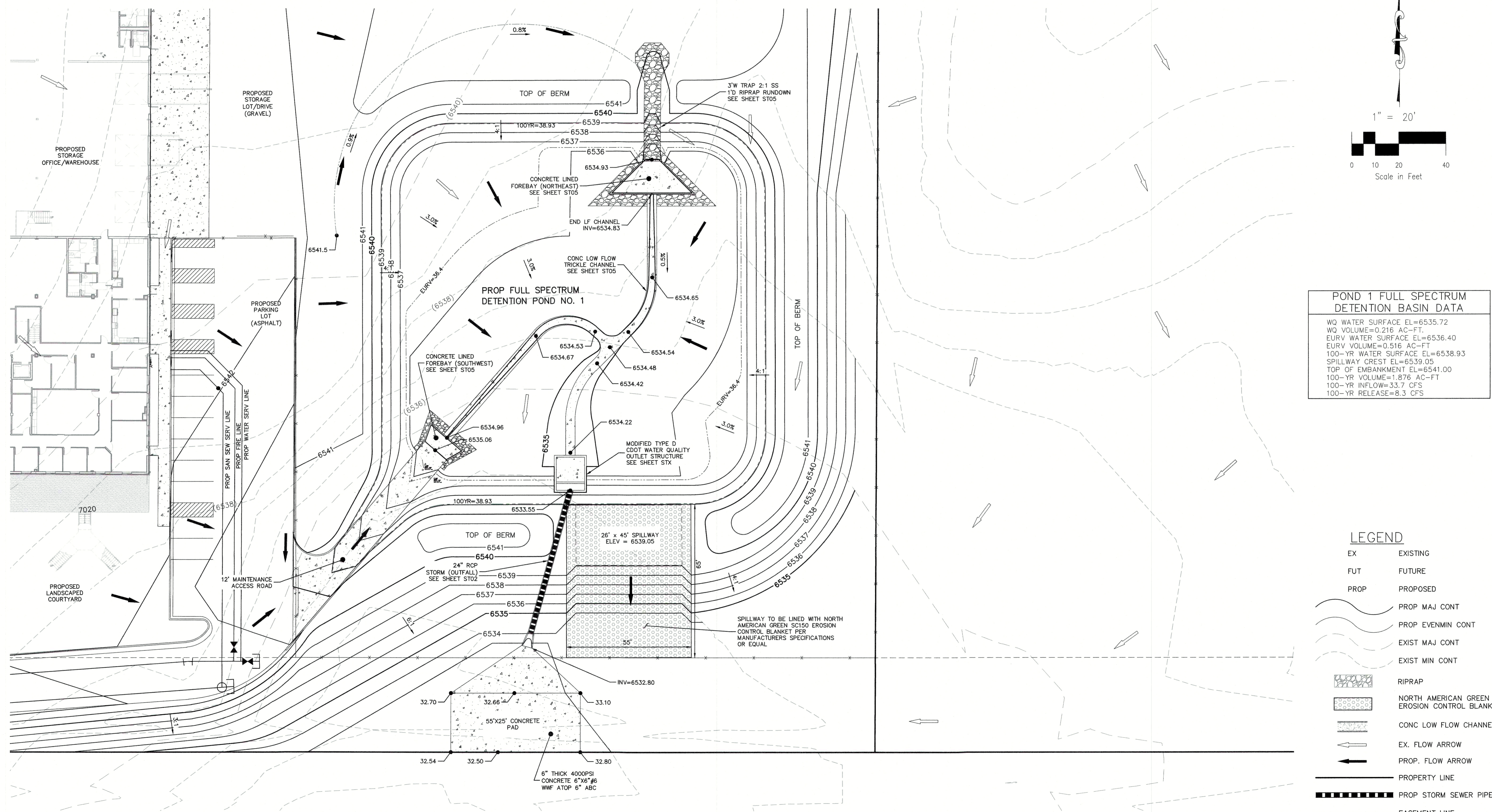
CAUTION



MAINTENANCE & ACCESS ROAD ABOVE & BELOW EURV TYPICAL SECTION
 NOT TO SCALE



TYPICAL SPILLWAY SECTION
 NOT TO SCALE



POND 1 FULL SPECTRUM DETENTION BASIN DATA

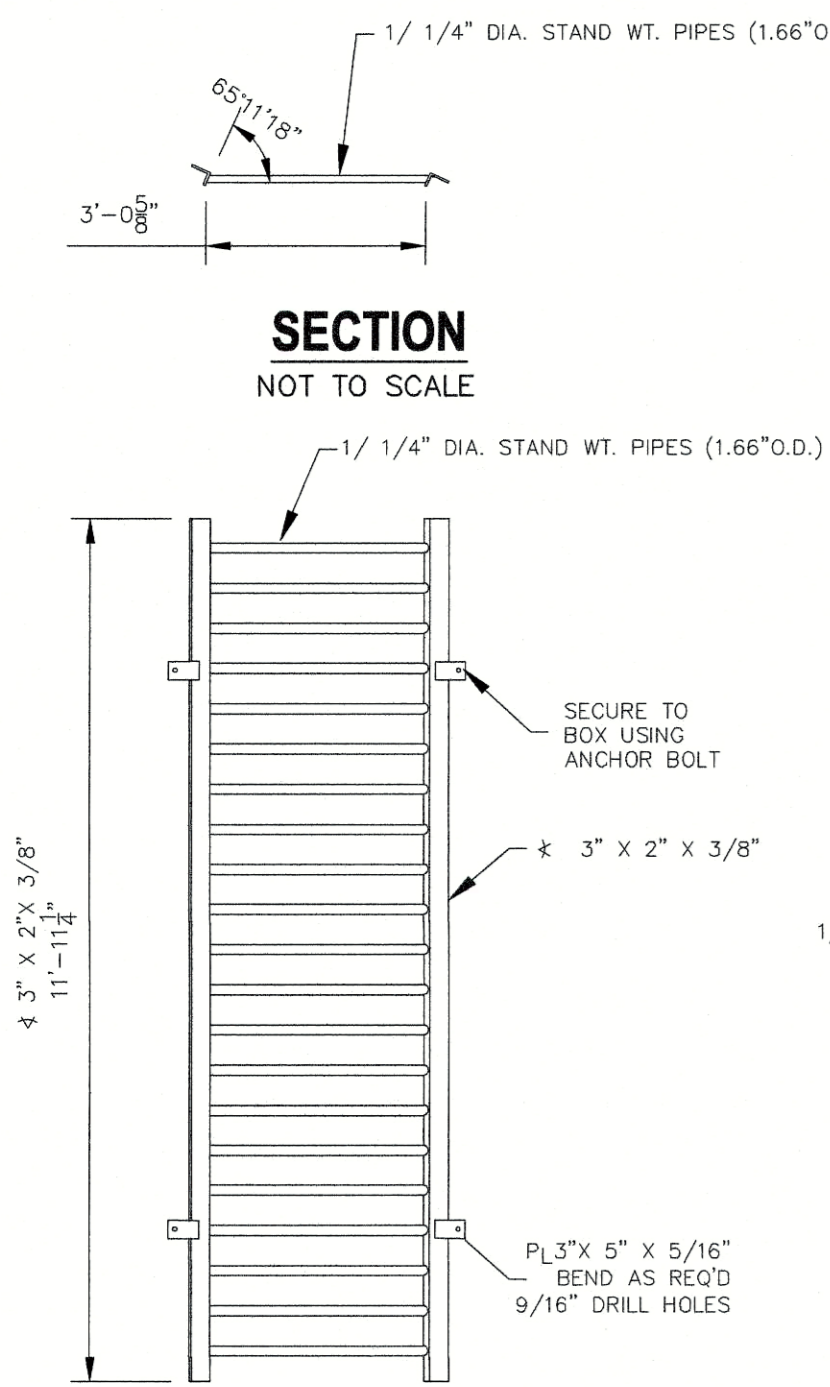
WQ WATER SURFACE EL=6535.72
WQ VOLUME=0.216 AC-FT.
EURV WATER SURFACE EL=6536.40
EURV VOLUME=0.516 AC-FT.
100-YR WATER SURFACE EL=6538.93
SPILLWAY CREST EL=6539.05
TOP OF EMBANKMENT EL=6541.00
100-YR VOLUME=1.876 AC-FT
100-YR INFLOW=33.7 CFS
100-YR RELEASE=8.3 CFS

LEGEND

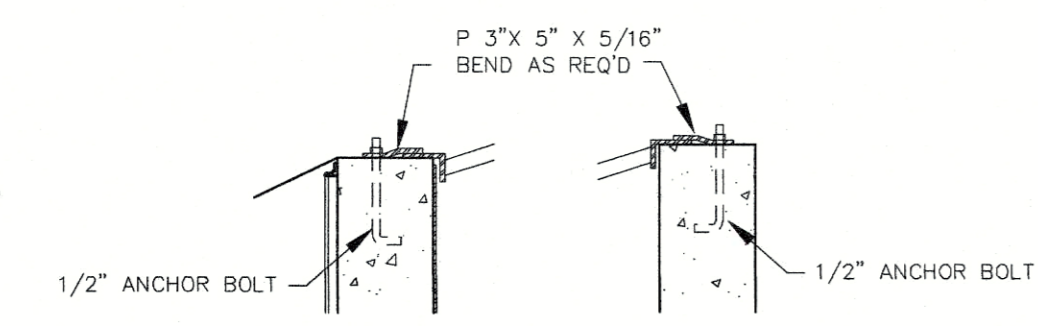
EX	EXISTING
FUT	FUTURE
PROP	PROPOSED
	PROP MAJ CONT
	PROP EVENMIN CONT
	EXIST MAJ CONT
	EXIST MIN CONT
	RIPRAP
	NORTH AMERICAN GREEN EROSION CONTROL BLANKET
	CONC LOW FLOW CHANNEL
	EX. FLOW ARROW
	PROP. FLOW ARROW
	PROPERTY LINE
	PROP STORM SEWER PIPE
	EASEMENT LINE

FULL SPECTRUM DETENTION POND 1 SITE PLAN
 SCALE 1"=20'

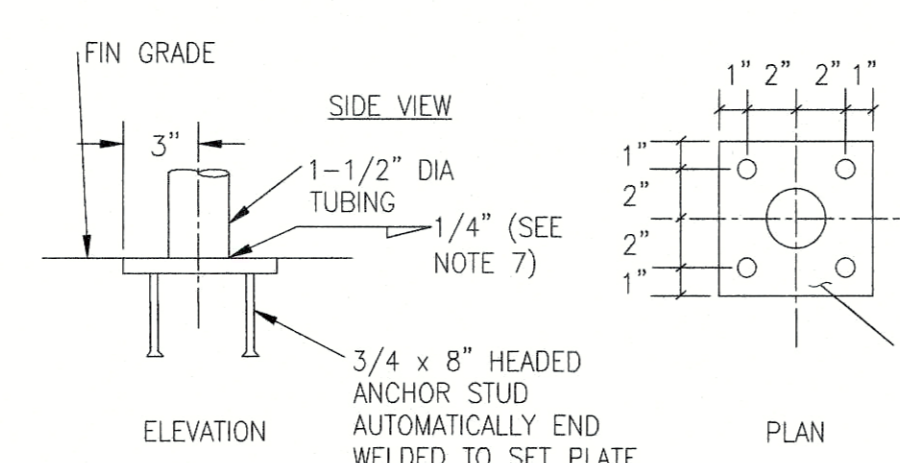
EPC 2/13/18



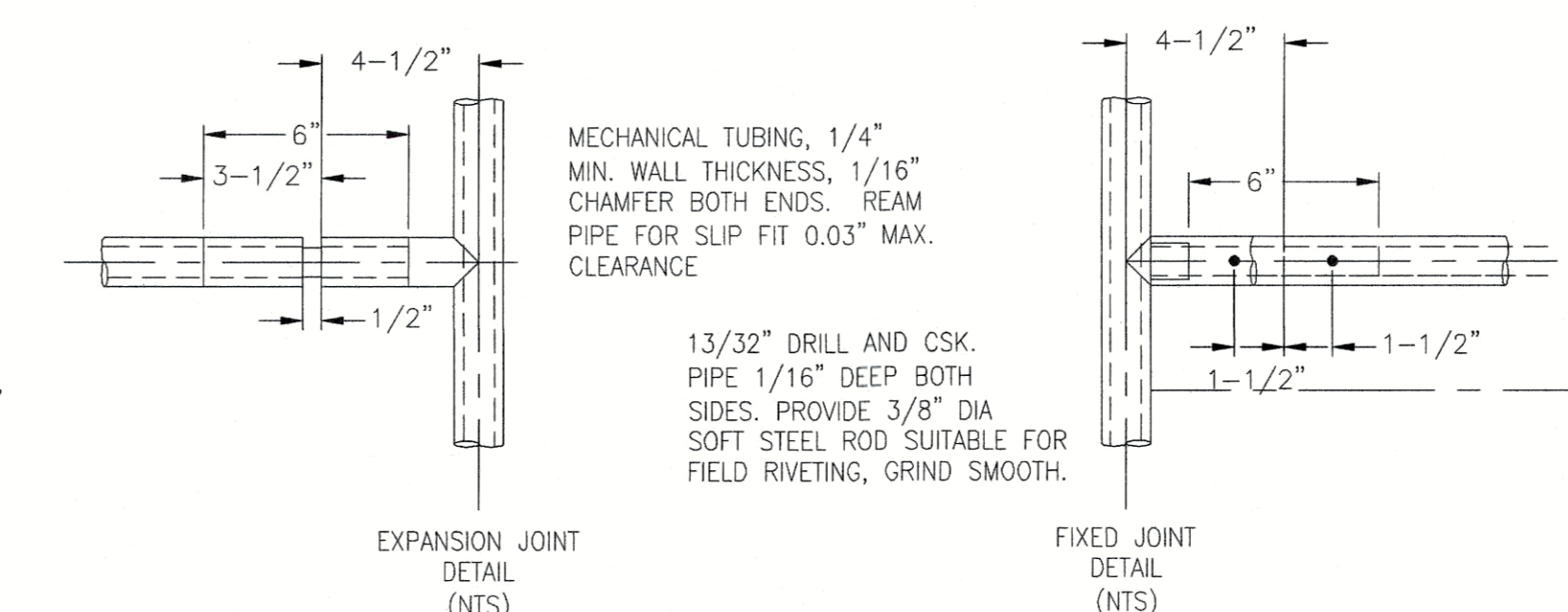
GRATE PLAN
NOT TO SCALE



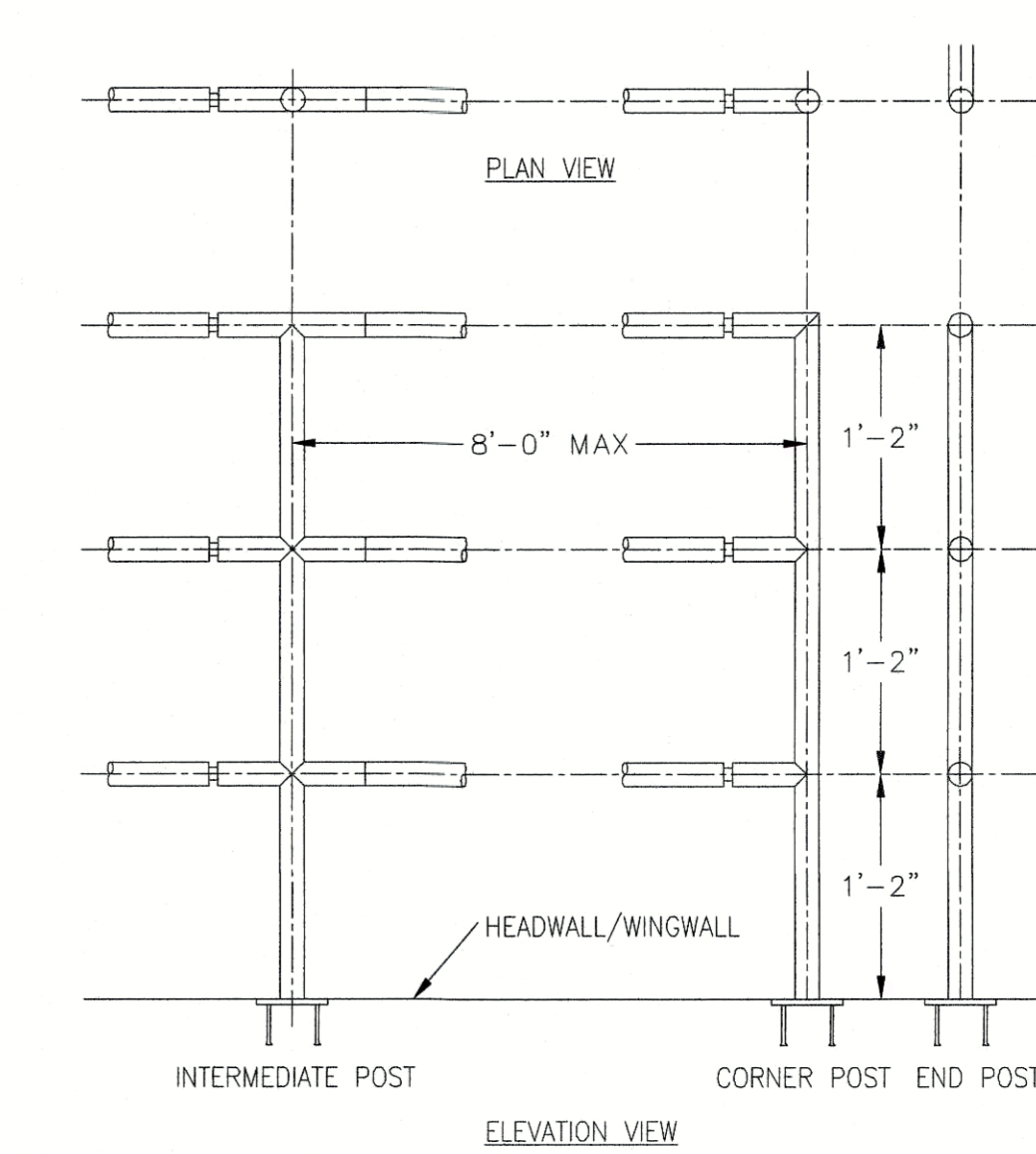
GRATE DETAIL "A"
GRATE DETAIL "B"



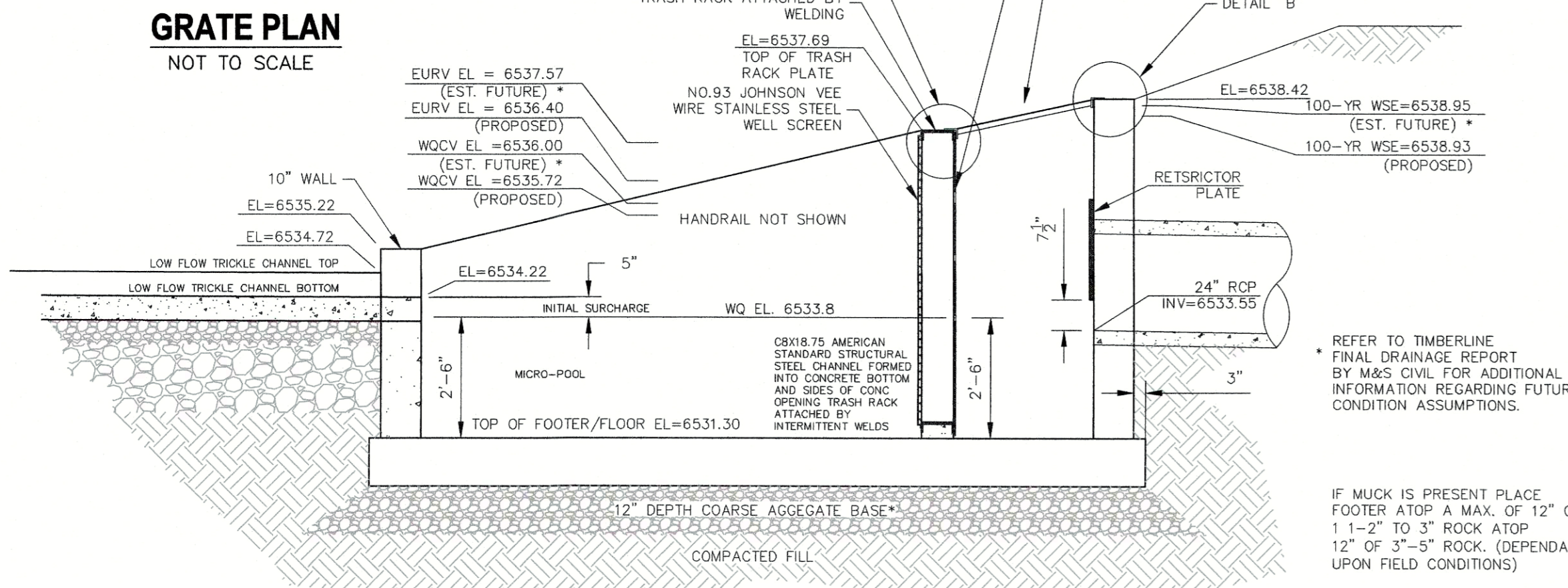
SET PLATE ANCHOR DETAILS
(NTS)



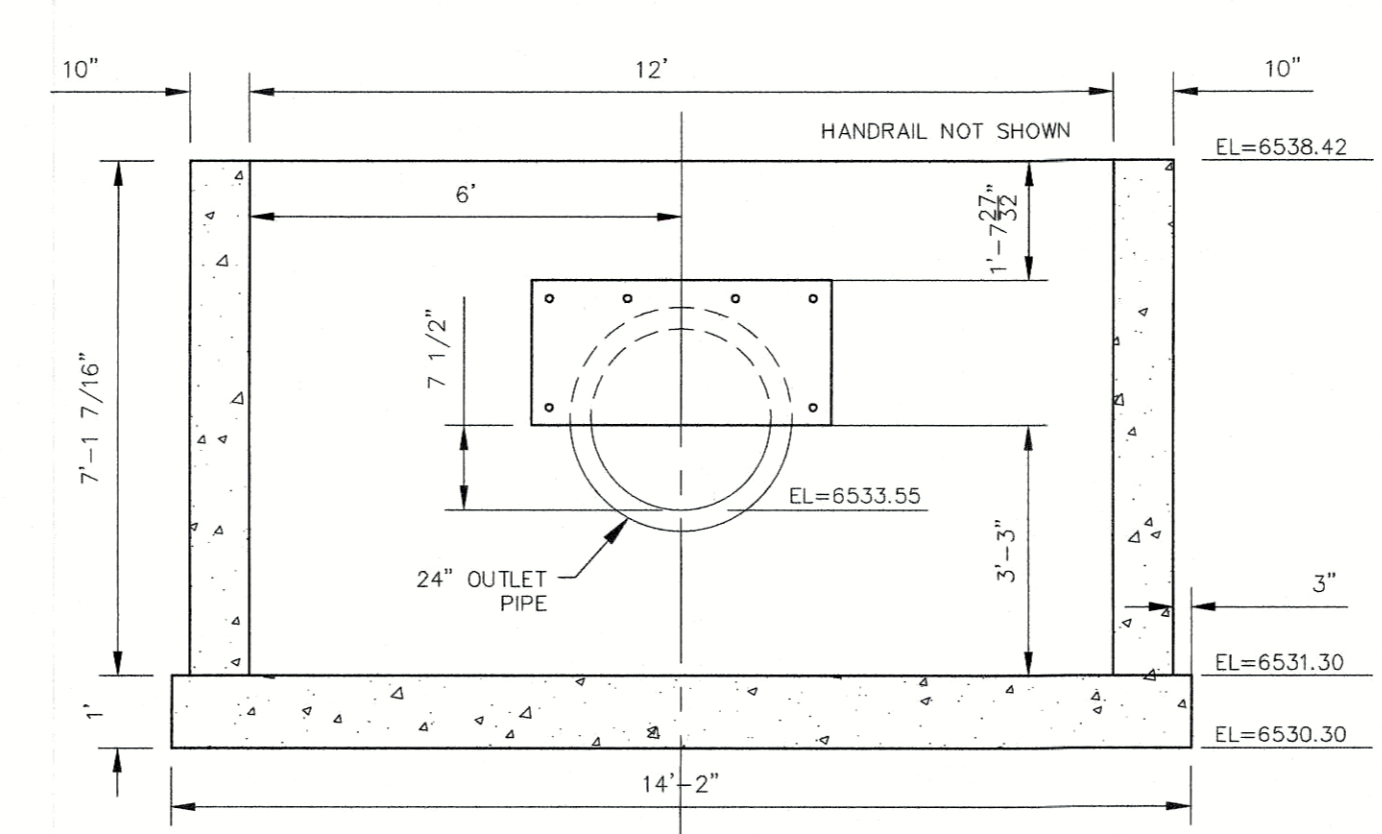
HANDRAIL ASSEMBLY DETAILS
NOT TO SCALE



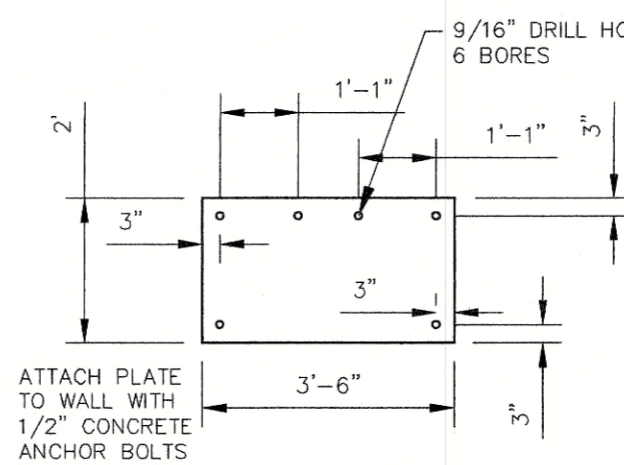
HEADWALL/WINGWALL
ELEVATION VIEW



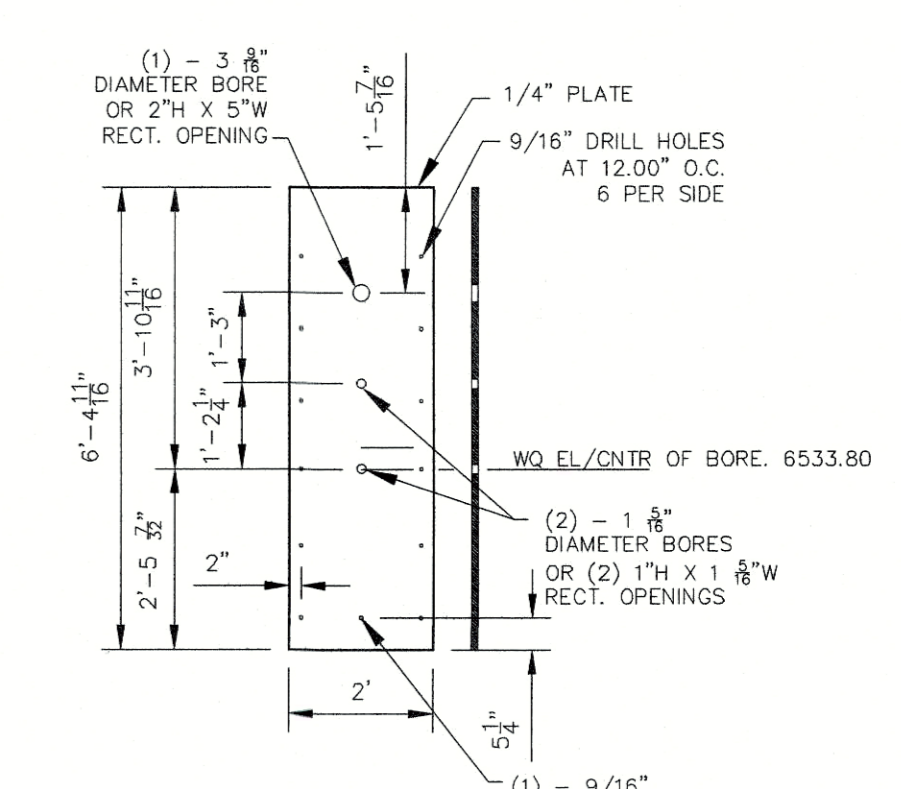
SECTION A-A
NOT TO SCALE



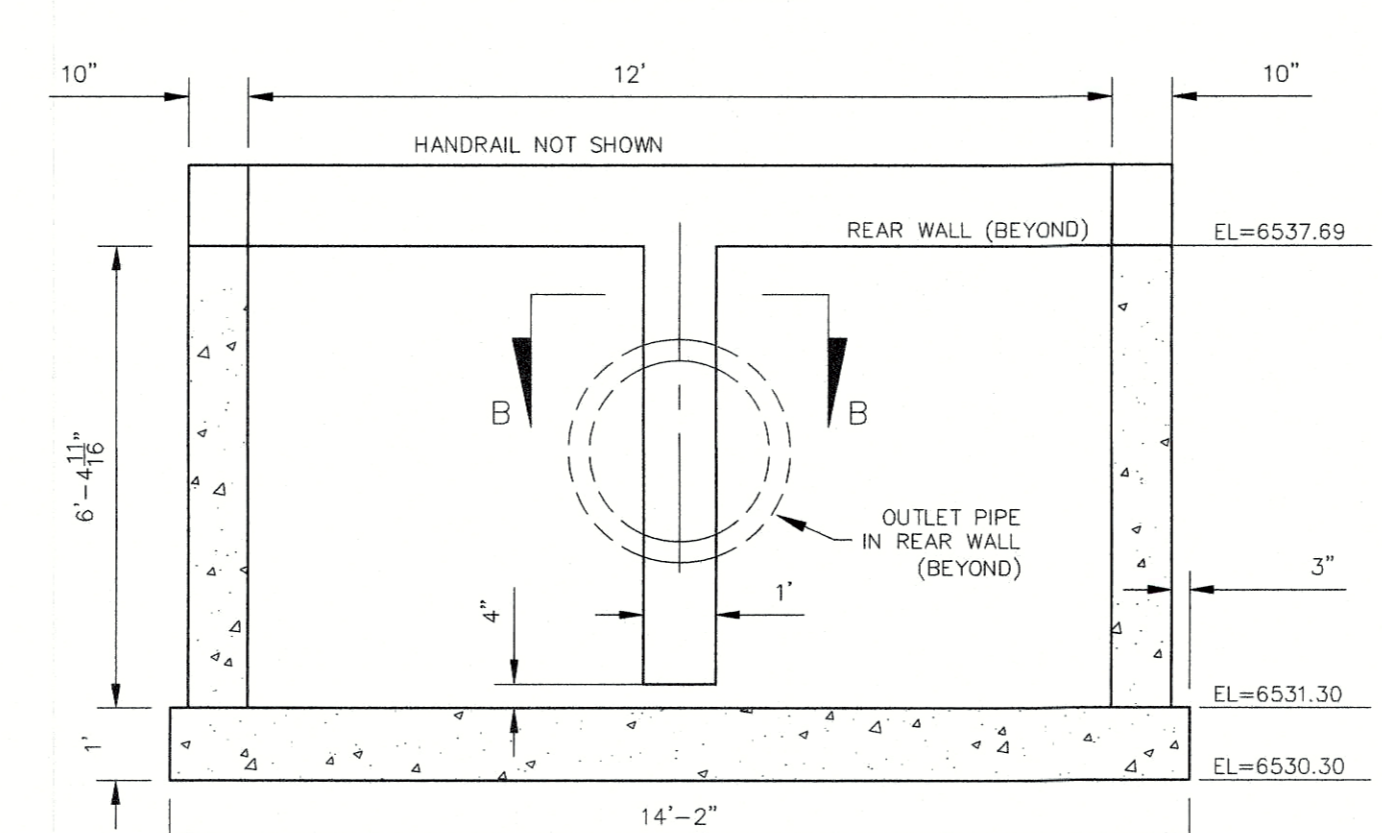
REAR WALL
NOT TO SCALE



RESTRICTOR PLATE
NOT TO SCALE

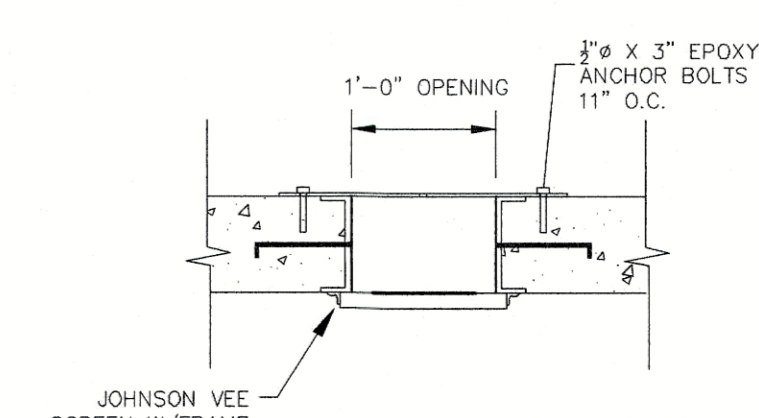


ORIFICE PLATE
NOT TO SCALE

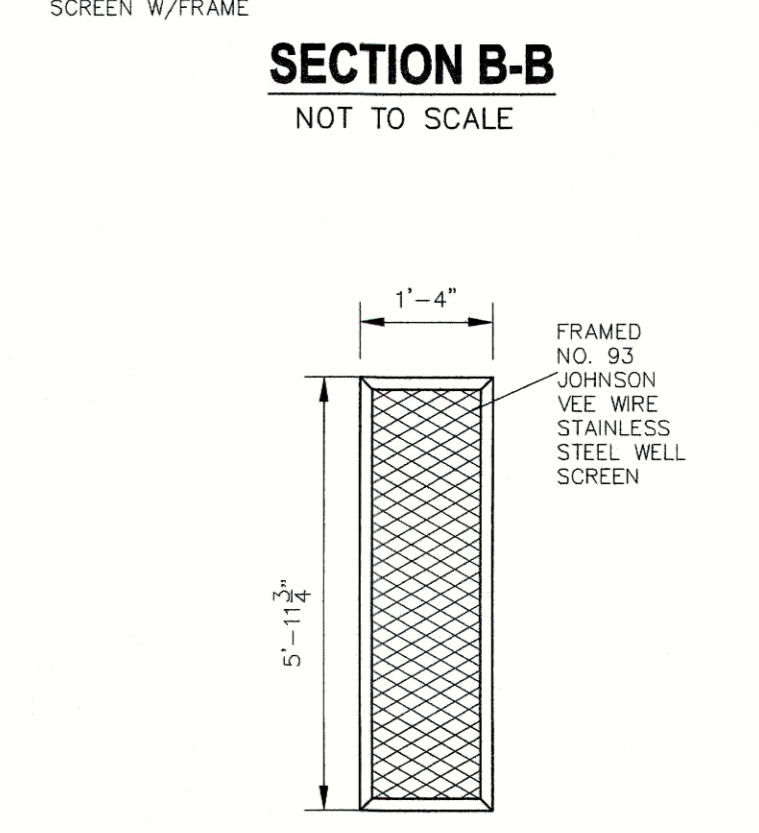


MIDDLE WALL
NOT TO SCALE

NOTE:
ALL GRATES, IMBEDS, AND FASTENERS SHALL BE FABRICATED USING GALVANIZED STEEL, UNLESS OTHERWISE NOTED.
ALL GRATE DIMENSIONS TO BE FIELD VERIFIED PRIOR TO FABRICATION. ALL GRATE MATERIAL SHALL BE GALVANIZED.

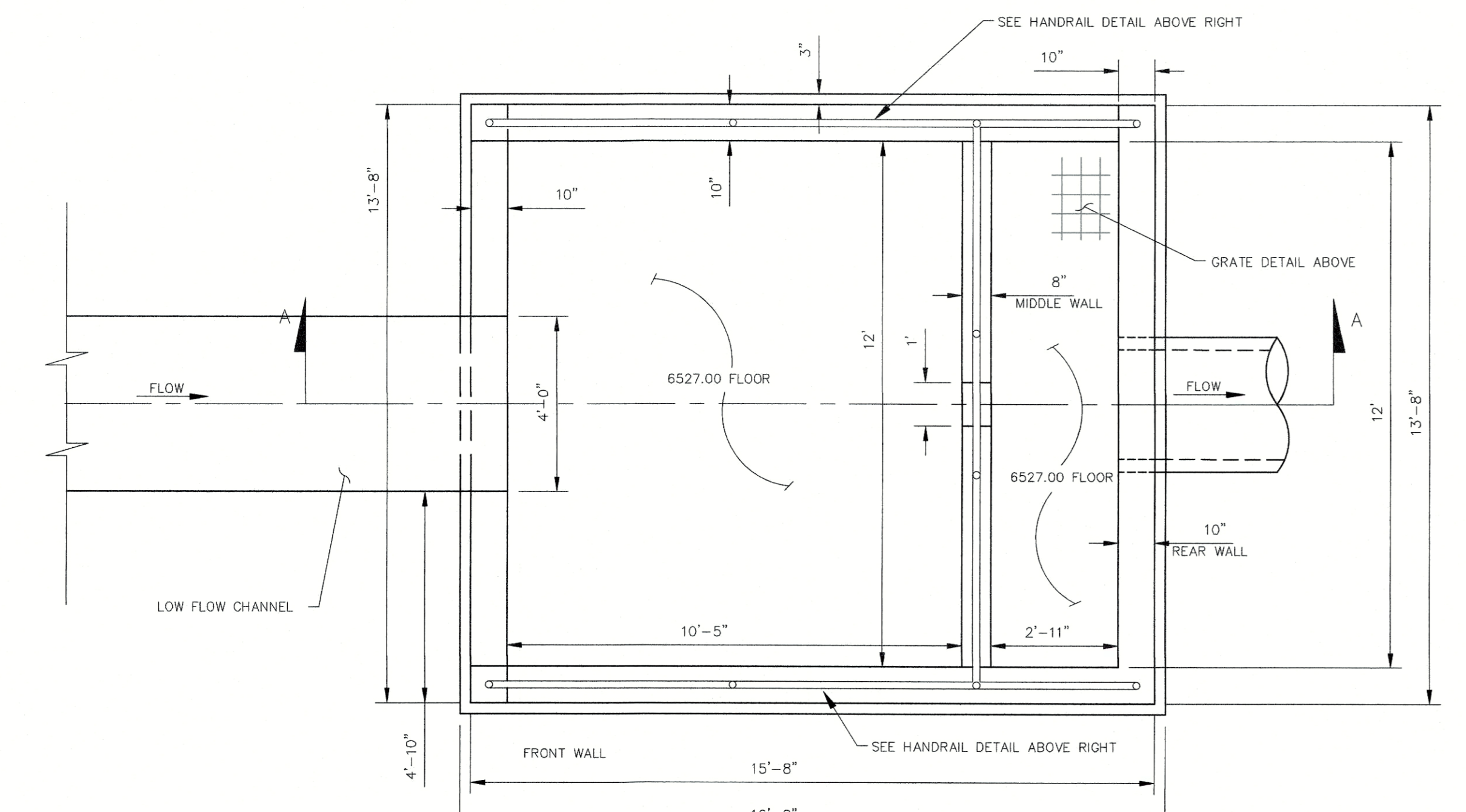


SECTION B-B
NOT TO SCALE



TRASH SCREEN DETAIL
NOT TO SCALE

NOTE:
CENTER ORIFICE PLATE AND TRASH SCREEN HORIZONTALLY ACROSS 1'-0" OPENING IN STRUCTURE



POND 1 WATER QUALITY OUTLET STRUCTURE
NOT TO SCALE

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- 1) WELD PLATES MAY BE SUBSTITUTED FOR PIPE EMBEDMENT.
- 2) CONTRACTOR TO SUBMIT SHOP DRAWINGS TO ENGINEER OF RECORD FOR APPROVAL PRIOR TO FABRICATION.
- 3) DESIGN CRITERIA SHALL BE IN ACCORDANCE WITH AASHTO STANDARDS.
- 4) HANDRAIL DESIGN SHALL BE COMPATIBLE WITH THE DESIGN OF THE WINGWALLS AND HEADWALLS.
- 5) RAILING POSTS SHALL BE SET TO NORMAL TO GRADE. RAILS SHALL RUN PARALLEL TO THE SLOPES OF THE TOP OF WALLS.
- 6) ALL RAILS SHALL BE FREE OF ANY SHARP EDGES OR CORNERS.

TIMBERLINE STORAGE YARD
FULL SPECTRUM DETENTION POND DETAILS
PROJECT NO. 43-095
DATE: 12/02/2017
SCALE: HORIZONTAL: N/A, VERTICAL: N/A
DESIGNED BY: ET, DRAWN BY: DIM, CHECKED BY: VAS
SHEET 7 OF 8
ST04

20 BOULDER CRESCENT SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.555.6465

CIVIL CONSULTANTS, INC.

FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160

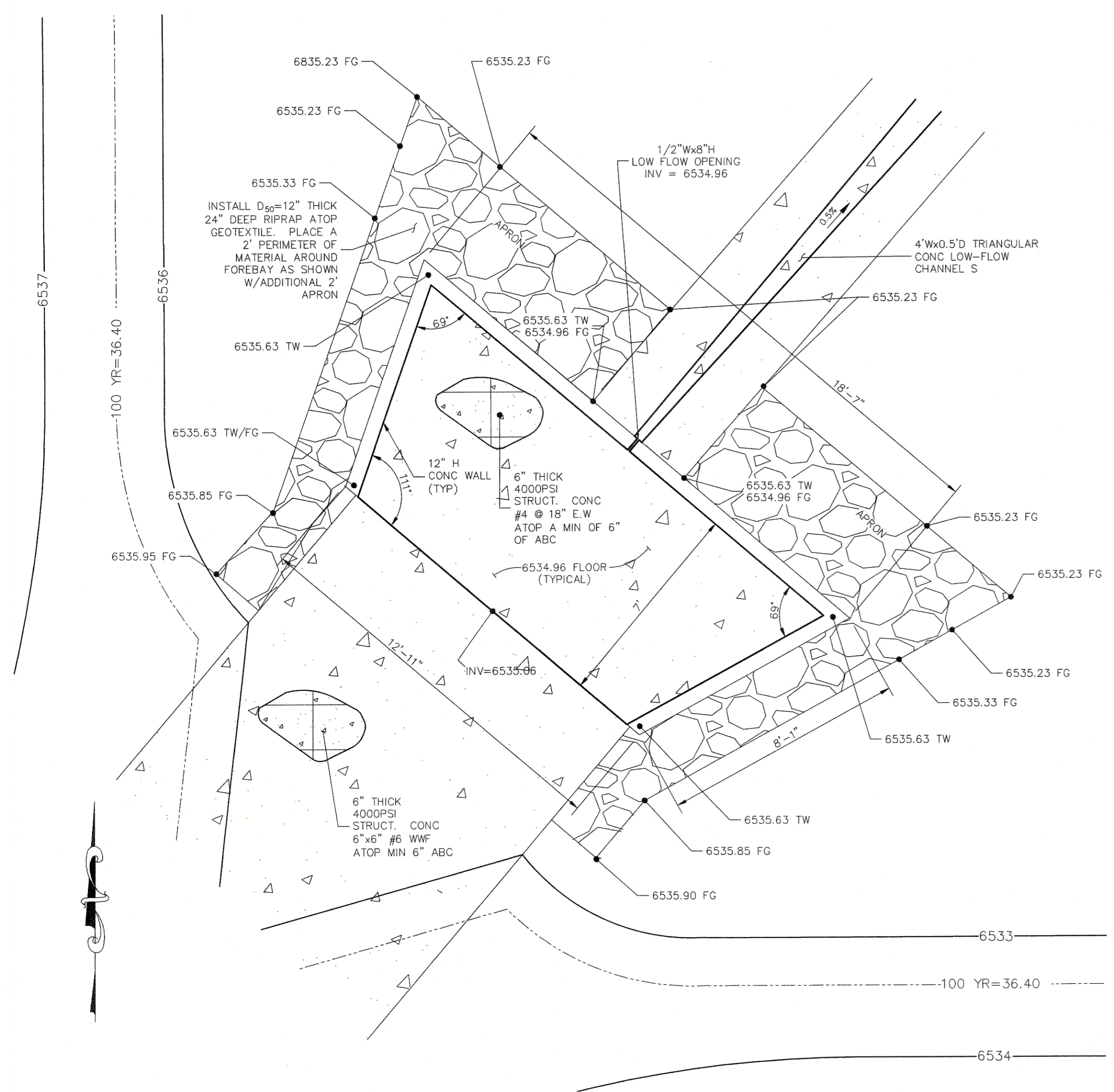
REGISTERED PROFESSIONAL ENGINEER
NO. 37160
EXPIRES 12/31/2018

REVISONS:	NO.	DATE:	DESCRIPTION:	APPRD. BY:	DATE:

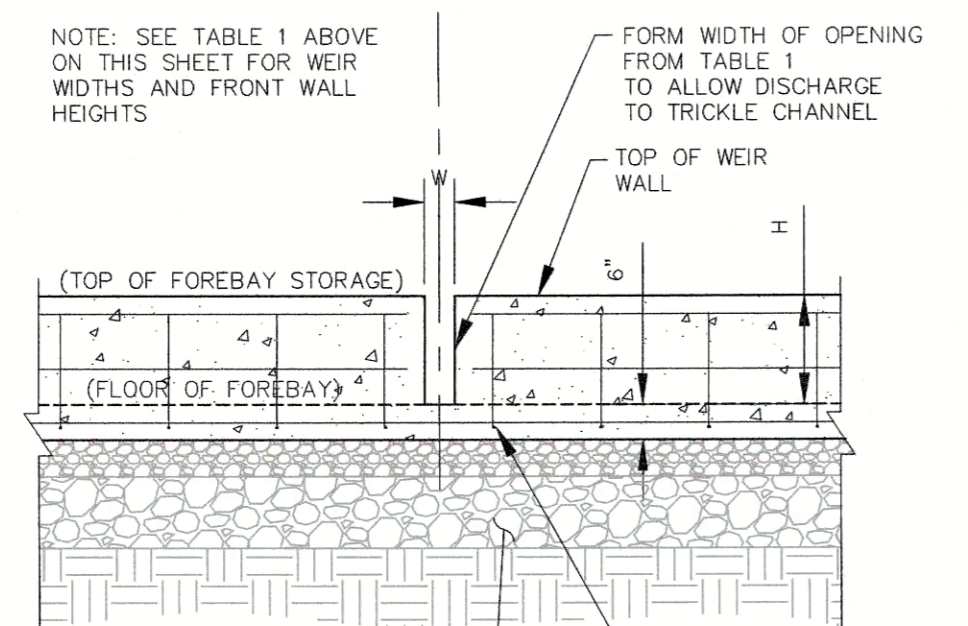
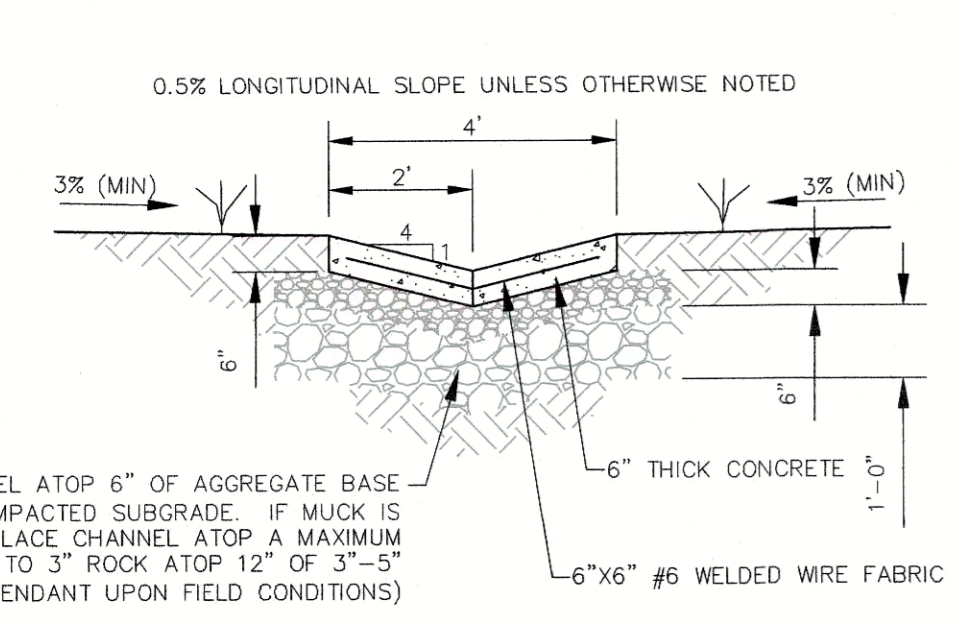
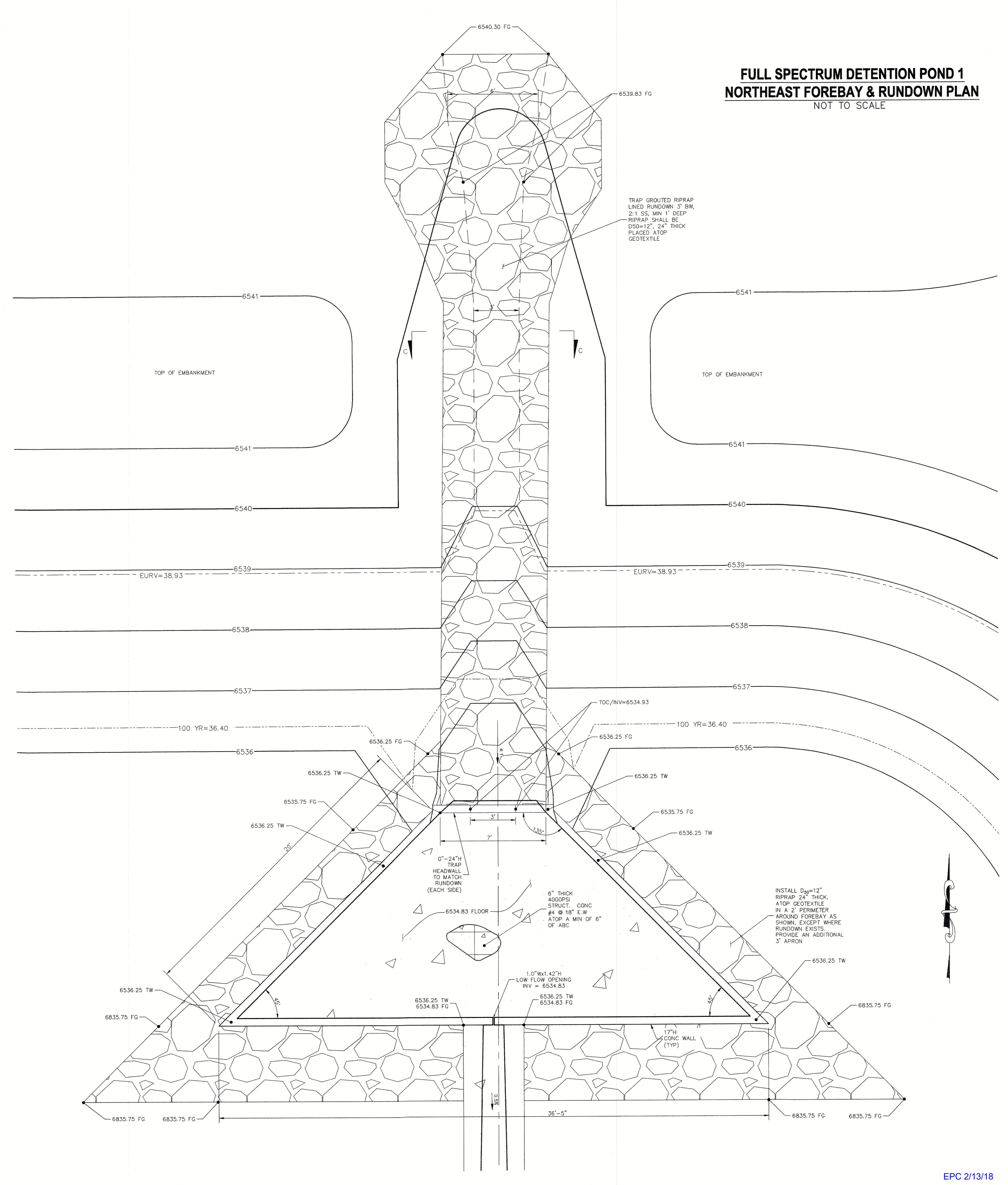
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CAUTION

EPC 2/13/18

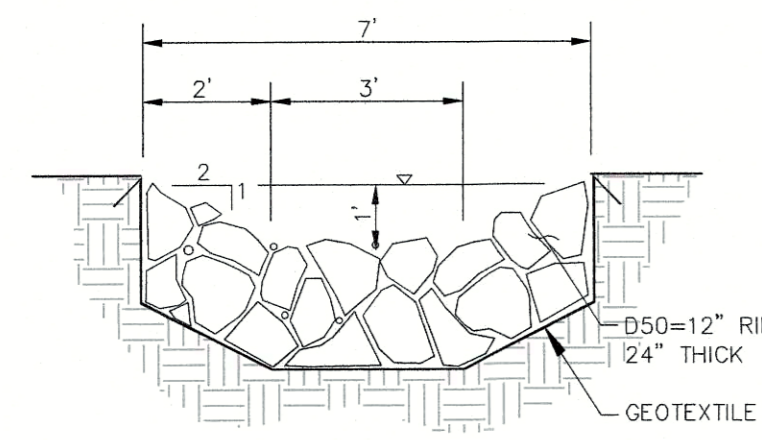


**FULL SPECTRUM DETENTION POND 1
SOUTHWEST FOREBAY PLAN**
NOT TO SCALE



**LOW FLOW CHANNEL
TYPICAL SECTION**
NOT TO SCALE

TYPICAL FOREBAY FRONT WALL W/NOTCH
NOT TO SCALE



SECTION C-C - NE FOREBAY RIPRAP RUNDOWN
NOT TO SCALE

FOREBAY	WIDTH (W)	HEIGHT (H)
N.E.	1.0'	1.42'
S.W.	0.5'	0.67'

**FULL SPECTRUM DETENTION POND 1
NORTHEAST FOREBAY & RUNDOWN PLAN**
NOT TO SCALE

TIMBERLINE STORAGE YARD

FULL SPECTRUM DET. POND 1 DETAILS

PROJECT NO. 43-095
SCALE: HORIZONTAL: N/A
DESIGNED BY: DJM
DRAWN BY: DLM
CHECKED BY: VAS

DATE: 12/02/2017
SHEET 8 OF 8
ST05

20 BOULDER CRESCENT SUITE 110
COLORADO SPRINGS CO 80903
PHONE 719.535.5488

AS&S
CIVIL CONSULTANTS, INC.

FOR AND ON BEHALF OF CONSULTANTS, INC.

VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160

NO.	DATE	DESCRIPTION

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CAUTION

File: c:\p3095a\Tim Etmick\veg\Const Dwg\ST05.dwg Plotstamp: 12/4/2017 8:16 AM

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