

PATH: P:\V\2181 208 CUNNINGHAM DR\ENGINEERING\DRAWINGS\PLANS\GEC\V2181 - CDR.DWG, PLOT DATE: 10/29/2024 1:35:10 PM, BY: ESSCA, HENY

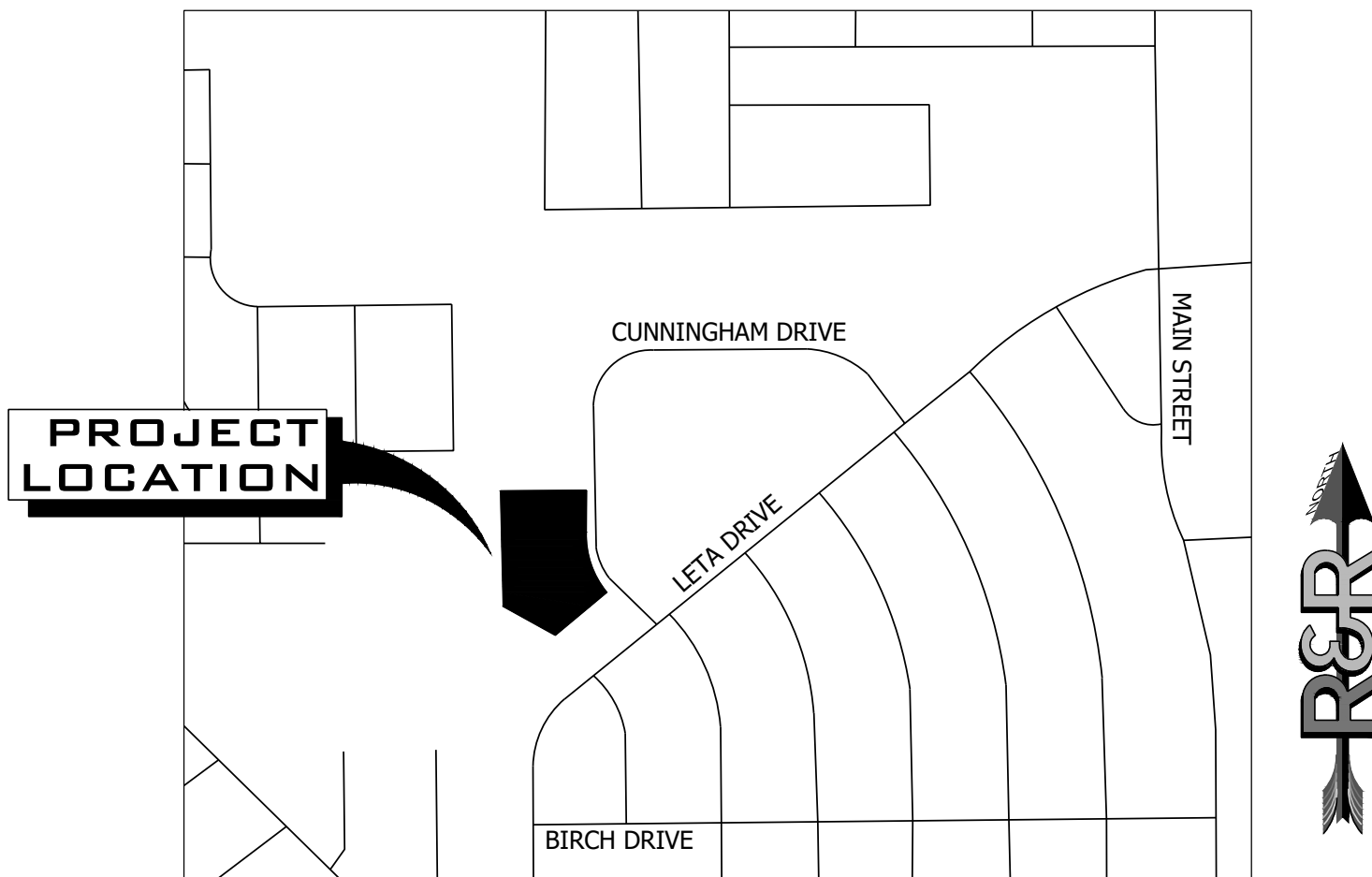
GRADING AND EROSION CONTROL PLAN

208 CUNNINGHAM DRIVE

LOCATED IN LOT 4, BLOCK 5, 1 REFILL SECURITY, COLORADO ADDITION 4 WITHIN A PORTION OF
THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 15 SOUTH, RANGE 66 WEST OF THE SIXTH
P.M., COLORADO SPRINGS, EL PASO COUNTY, STATE OF COLORADO
LOCATED AT: 208 CUNNINGHAM DR, COLORADO SPRINGS, CO 80911



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VICINITY MAP
SCALE 1" = 500'

Sheet List Table	
Sheet Number	Sheet Title
C1.0	COVER SHEET
C1.1	GENERAL NOTES
C2.0	INITIAL GRADING & EROSION CONTROL PLAN
C3.0	FINAL GRADING & EROSION CONTROL PLAN
C4.0	GEC DETAILS

CONTACT LIST		
OWNER	CIVIL ENGINEER	SURVEYOR
FOUNTAIN VALLEY SALVATION ARMY CORPS	R&R ENGINEERS-SURVEYORS, LLC	R&R ENGINEERS-SURVEYORS, LLC
208 CUNNINGHAM DRIVE COLORADO SPRINGS, CO 80911 (719) 382-1182	1635 WEST 13TH AVENUE, SUITE 310 DENVER, CO 80204 (303) 753-6730	1635 WEST 13TH AVENUE, SUITE 310 DENVER, CO 80204 (720) 381-2439
QUIANA.VARGAS@USV.SALVATIONARMY.ORG	TSTACKHOUSE@RRENGINEERS.COM	KKUCHARCZYK@RRENGINEERS.COM
CONTACT: QUIANA VARGAS	CONTACT: TIM STACKHOUSE, P.E.	CONTACT: KEVIN KUCHARCZYK

BASIS OF BEARING
BEARINGS ARE BASED ON THE NORTH LINE OF LOT 6, BLOCK 1 OF REFILING OF SECURITY, COLORADO ADDITION NO. 4 AS MONUMENTED AT THE WEST END BY A FOUND 3/4" BAR AND AT THE EAST END BY A NO. 4 REBAR. SAID LINE IS ASSUMED TO BEAR N89°10'20"E.

BENCHMARK
THE BENCHMARK FOR THIS SURVEY IS A NO. 4 REBAR LOCATED ALONG THE EASTERN BOUNDARY OF THE SUBJECT PARCEL (SEE SHEET 2). THE ELEVATION WAS DERIVED FROM GPS OBSERVATIONS USING AN OPUS DERIVED SOLUTION. ELEVATION: 5801.58 FEET (NAVD 1988 DATUM)

LEGAL DESCRIPTION PER TITLE COMMITMENT
PARCEL 1:
LOTS 4 AND 5, BLOCK 1, REFILING OF SECURITY, COLORADO ADDITION NO. 4, COUNTY OF EL PASO, STATE OF COLORADO.

PARCEL 2:
LOT 6, BLOCK 1, REFILING OF SECURITY, COLORADO ADDITION NO. 4, COUNTY OF EL PASO, STATE OF COLORADO

Engineer's Statement for standalone GEC Plan:
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 any negligent acts, errors or omissions on my part in preparing this plan.

Engineer of Record Signature: Date: 10/25/24

Owner's Statement (For standalone GEC Plan):
I, the owner/developer have read and will comply with the requirements of the Grading and Erosion Control Plan.

Owner Signature: Date: 10/25/2024

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 Ordinance Criteria Manual Volumes 1 and 2, and Engineering Criteria Manual 34 Amended.

In accordance with E.C.M. Section 1.10, these construction documents were 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.

County Engineer/PCA Administrator: _____ Date: _____

NO.	REVISION	BY	DATE
1	COUNTY COMMENTS	JLH	9-10-24

ENGINEERS
SURVEYORS

R&R ENGINEERS-SURVEYORS, INC.
1635 WEST 13TH AVENUE, SUITE 310
DENVER, COLORADO 80204
PHONE: 303-753-6730

WWW.RRENGINEERS.COM

FOUNTAIN VALLEY SALVATION ARMY	
SITE ADDRESS: 208 CUNNINGHAM DRIVE COLORADO SPRINGS, CO 80911	PREPARED FOR: FOUNTAIN VALLEY SALVATION ARMY 208 CUNNINGHAM DR COLORADO SPRINGS, CO 80911
GRADING AND EROSION CONTROL PLAN	
JOB NO. FV21181	ORG. SUBM. DATE 12/22/2023
DWN: JMP	CHKD: DW
NAME	
COVER SHEET	
NO. C1.0	

P:\T\14-V\21181-208 CUNNINGHAM DR\ENGINEERING\4. DRAWINGS\PLANS\CD\CV21181- CDR.DWG, PLOT DATE: 10/29/2024 1:35:13 PM, BY: ESQCP, JENNY

EL PASO COUNTY GRADING & EROSION CONTROL STANDARD NOTES:

- 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 (SMWP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. MANAGEMENT OF THE SWMP DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR. THE SWMP SHALL BE LOCATED ON-SITE AT ALL TIMES DURING CONSTRUCTION AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
- 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 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 EFFECT 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, UNCONTAMINATED GROUNDWATER 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 ON-SITE 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 ON-SITE 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 NRCS, 8/21/2021 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

GRADING AND EROSION CONTROL PLAN

208 CUNNINGHAM DRIVE

LOCATED IN LOT 4, BLOCK 5, 1 REFILL SECURITY, COLORADO ADDITION 4 WITHIN A PORTION OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 15 SOUTH, RANGE 66 WEST OF THE SIXTH P.M., COLORADO SPRINGS, EL PASO COUNTY, STATE OF COLORADO
LOCATED AT: 208 CUNNINGHAM DR, COLORADO SPRINGS, CO 80911

MASTER LEGEND

EXISTING	DESCRIPTION	PROPOSED
	PROPERTY LINE	
	LOT LINE	
	RIGHT OF WAY	
	CENTERLINE	
	FLOOD PLAIN	
	LIMITS OF DISTURBANCE	
	SWALE / STREAM FLOWLINE	
	OVERFLOW RELIEF PATH	
	FENCE LINE	
	EASEMENT	
	EDGE OF PAVEMENT	
	VERTICAL CURB AND GUTTER	
	MOUNTABLE CURB AND GUTTER	
	SPILL GUTTER	
	TRANSITION GUTTER	
	CONCRETE SIDEWALK	
	HANDICAP PARKING	
	SIGHT TRIANGLE	
	SIGN(S)	
	PARKING COUNT INDICATOR	
	MAJOR CONTOUR	
	MINOR CONTOUR	
	GRADE BREAK	
	SPOT ELEVATION	
	RIP RAP	
	WATER LINE	
	WATER METER	
	WATER VALVE	
	WATER REDUCER	
	WATER FITTINGS	
	FIRE HYDRANT	
	SANITARY LINE	
	SANITARY MANHOLE	
	SANITARY CLEANOUT	
	STORM SEWER PIPE	
	STORM SEWER MANHOLE	
	STORM SEWER INLET	
	STORM SEWER FLARED END SECTION	
	STORM SEWER HEADWALL	
	UNDERGROUND ELECTRIC	
	OVERHEAD ELECTRIC	
	UTILITY POLE	
	STREET LIGHT	
	CABLE TV SERVICE	
	TELECOM SERVICE	
	FIBER OPTIC SERVICE	
	NATURAL GAS SERVICE	
	TREE	
	TREE LINE	

BMP LEGEND		
	CD	ROCK CHECK DAM
	CB	COMPOST BLANKET
	CFB	COMPOST FILTER BERM
	CWA	CONCRETE WASHOUT AREA
	CF	CONSTRUCTION FENCE
	CM	CONSTRUCTION MARKERS
	DW	DEWATERING
	DD	DIVERSION DITCH
	ECB	ROCK AND RIPRAP GRADATIONS
	P	EROSION CONTROL BLANKET
	RCD	INLET PROTECTION
	RRB	REINFORCED CHECK DAM
	RRC	REINFORCED ROCK BERM
	RRB	RRB FOR CULVERT PROTECTION
	SB	SEDIMENT BASIN
	SCL	SEDIMENT CONTROL LOG
	ST	SEDIMENT TRAP
	SM	SEEDING AND MULCHING
	SF	SILT FENCE
	SSA	STABILIZED STAGING AREA
	SR	SURFACE ROUGHENING
	TRC	TEMPORARY ROAD CROSSING
	TSB	TEMPORARY SLOPE DRAIN
	TSC	TEMPORARY STREAM CROSSING
	TER	TERRACING
	VTC	VEHICLE TRACKING CONTROL
	WW	VTC WITH WHEEL WASH
	A	A LOT EROSION CONTROL
	B	B LOT EROSION CONTROL
	LOC	LIMITS OF CONSTRUCTION/LIMITS OF DISTURBANCE
		PROP. STORMWATER FLOW ARROWS
		EX. STORMWATER FLOW ARROWS
		PROP. CUT/FILL BOUNDARY
	SP	PROP. STOCKPILE PROTECTION

STANDARD NOTES FOR EL PASO COUNTY CONSTRUCTION PLANS:

1.ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL.

2.CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD NOTIFICATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, BEFORE BEGINNING CONSTRUCTION. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CALL 811 TO CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC).

3.CONTRACTOR SHALL KEEP A COPY OF THESE APPROVED PLANS, THE GRADING AND EROSION CONTROL PLAN, THE STORMWATER MANAGEMENT PLAN (SWMP), THE SOILS AND GEOTECHNICAL REPORT, AND THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES, INCLUDING THE FOLLOWING:
A.EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
B.CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2
C.COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
D.CDOT M & S STANDARDS

4.NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE 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. ANY MODIFICATIONS NECESSARY TO MEET CRITERIA AFTER-THE-FACT WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.

5.IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ACCURATELY SHOW EXISTING CONDITIONS, BOTH ONSITE AND OFFSITE, ON THE CONSTRUCTION PLANS. ANY MODIFICATIONS NECESSARY DUE TO CONFLICTS, OMISSIONS, OR CHANGED CONDITIONS WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.

6.CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT (PCD) – INSPECTIONS, PRIOR TO STARTING CONSTRUCTION.

7.IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES AND TO OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO EL PASO COUNTY EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP), REGIONAL BUILDING FLOODPLAIN DEVELOPMENT PERMIT, U.S. ARMY CORPS OF ENGINEERS-ISSUED 401 AND/OR 404 PERMITS, AND COUNTY AND STATE FUGITIVE DUST PERMITS.

8.CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE DESIGN ENGINEER AND PCD. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.

9.ALL STORM DRAIN PIPE SHALL BE CLASS III RCP UNLESS OTHERWISE NOTED AND APPROVED BY PCD.

10.CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECM STANDARDS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY PCD PRIOR TO PLACEMENT OF CURB AND GUTTER AND PAVEMENT.

11.ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.

12.SIGHT VISIBILITY TRIANGLES AS IDENTIFIED IN THE PLANS SHALL BE PROVIDED AT ALL INTERSECTIONS. OBSTRUCTIONS GREATER THAN 18 INCHES ABOVE FLOWLINE ARE NOT ALLOWED WITHIN SIGHT TRIANGLES.

13.SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY DOT AND MUTCD CRITERIA. [IF APPLICABLE, ADDITIONAL SIGNING AND STRIPING NOTES WILL BE PROVIDED.]

14.CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY DOT, INCLUDING WORK WITHIN THE RIGHT-OF-WAY AND SPECIAL TRANSPORT PERMITS.

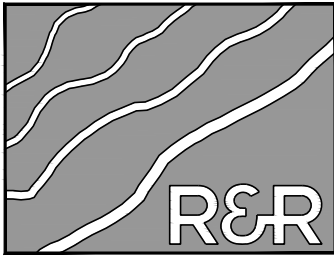
15.THE LIMITS OF CONSTRUCTION SHALL REMAIN WITHIN THE PROPERTY LINE UNLESS OTHERWISE NOTED. THE OWNER/DEVELOPER SHALL OBTAIN WRITTEN PERMISSION AND EASEMENTS, WHERE REQUIRED, FROM ADJOINING PROPERTY OWNER(S) PRIOR TO ANY OFF-SITE DISTURBANCE, GRADING, OR CONSTRUCTION.

16.EL PASO COUNTY DOES NOT OWN AND IS NOT RESPONSIBLE FOR THE UNDERDRAINS OR GROUNDWATER DISCHARGE SYSTEMS SHOWN ON THESE PLANS AND ASSUMES NO LIABILITY FOR WATER RIGHTS ADMINISTRATION BY APPROVING THESE PLANS. MAINTENANCE AND WATER RIGHTS ARE THE RESPONSIBILITY OF THE DEVELOPER AND PROPERTY OWNER'S.



Know what's below.
Call before you dig.

NO.	REVISION	BY	DATE
1	COUNTY COMMENTS	JUH	9-10-24



ENGINEERS
SURVEYORS

R&R ENGINEERS-SURVEYORS, INC.
1635 WEST 13TH AVENUE, SUITE 310
DENVER, COLORADO 80204
PHONE: 303-753-6730

WWW.RRENGINEERS.COM

FOUNTAIN VALLEY SALVATION ARMY
SITE ADDRESS: 208 CUNNINGHAM DRIVE
COLORADO SPRINGS, CO 80911
PREPARED FOR: FOUNTAIN VALLEY SALVATION ARMY
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COLORADO SPRINGS, CO 80911

GRADING AND EROSION CONTROL PLAN

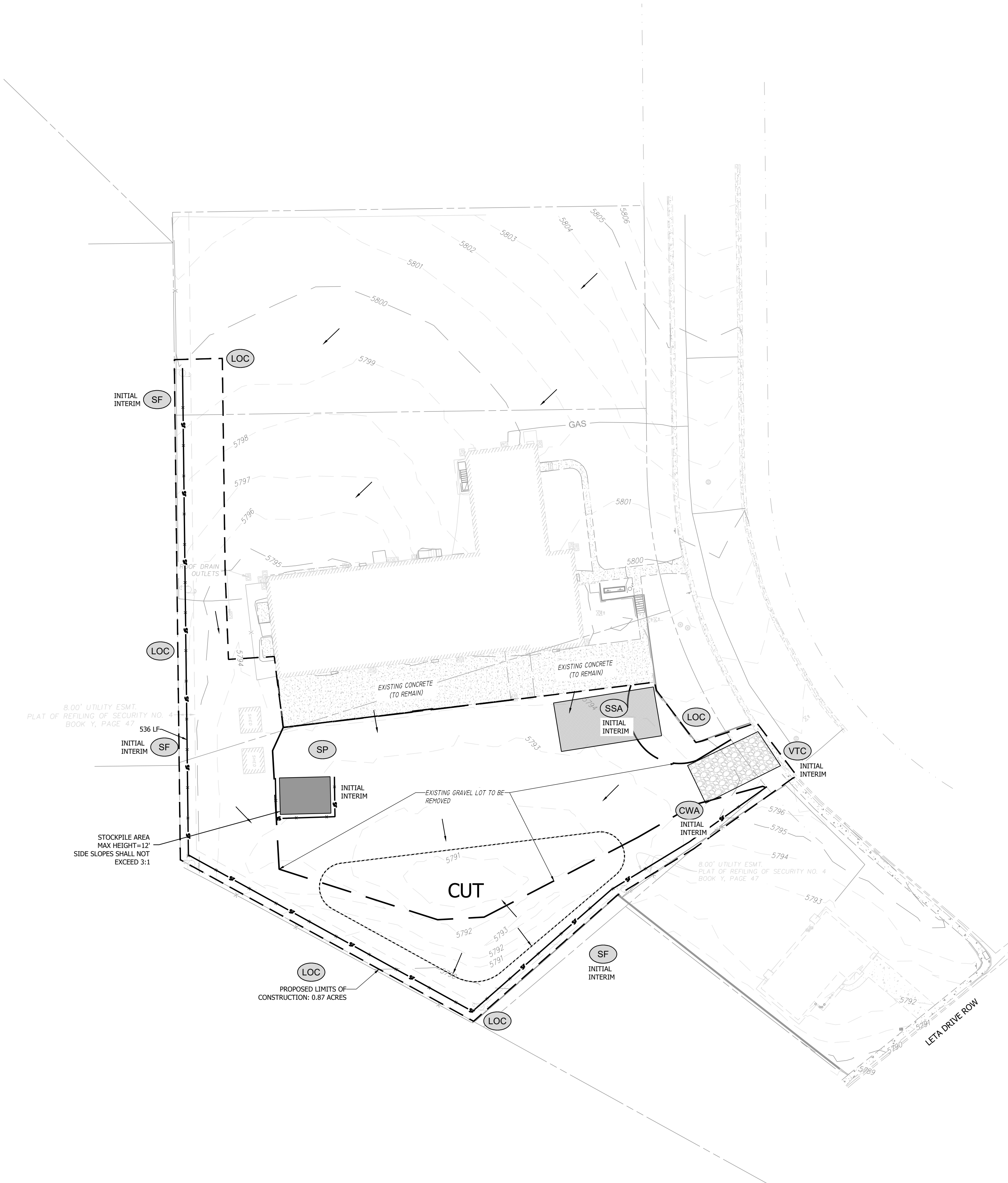
JOB NO. FV21181
ORG. SUBM. DATE 12/22/2023
DWN: JMP CHKD: DW
NAME

GENERAL NOTES

NO.

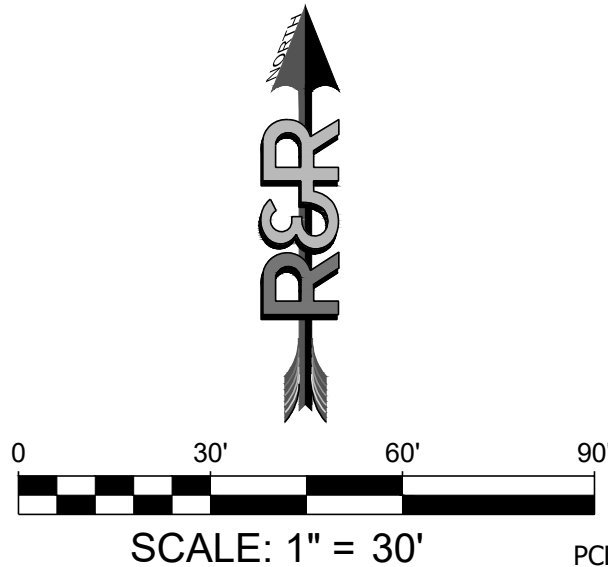
C1.1

GRADING AND EROSION CONTROL PLAN
208 CUNNINGHAM DRIVE
LOCATED IN LOT 4, BLOCK 5, 1 REFILL SECURITY, COLORADO ADDITION 4 WITHIN A PORTION OF
THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 15 SOUTH, RANGE 66 WEST OF THE SIXTH
P.M., COLORADO SPRINGS, EL PASO COUNTY, STATE OF COLORADO
LOCATED AT: 208 CUNNINGHAM DR, COLORADO SPRINGS, CO 80911



BMP LEGEND	
	CD CHECK DAM
	CB COMPOST BLANKET
	CFB COMPOST FILTER BERM
	CWA CONCRETE WASHOUT AREA
	CF CONSTRUCTION FENCE
	CM CONSTRUCTION MARKERS
	DW DEWATERING
	DD DIVERSION DITCH
	ECB EROSION CONTROL BLANKET
	P INLET PROTECTION
	RCD REINFORCED CHECK DAM
	RRB REINFORCED ROCK BERM
	RRC RRB FOR CULVERT PROTECTION
	SB SEDIMENT BASIN
	SCL SEDIMENT CONTROL LOG
	ST SEDIMENT TRAP
	SM SEEDING AND MULCHING
	SF SILT FENCE
	SSA STABILIZED STAGING AREA
	SR SURFACE ROUGHENING
	TRC TEMPORARY ROAD CROSSING
	TSD TEMPORARY SLOPE DRAIN
	TSC TEMPORARY STREAM CROSSING
	TER TERRACING
	VTC VEHICLE TRACKING CONTROL
	WW VTC WITH WHEEL WASH
	A LOT EROSION CONTROL
	B LOT EROSION CONTROL
	LOC LIMITS OF CONSTRUCTION/LIMITS OF DISTURBANCE
	PROP. STORMWATER FLOW ARROWS
	EX. STORMWATER FLOW ARROWS
	PROP. CUT/FILL BOUNDARY
	SP PROP. STOCKPILE PROTECTION

- GEC CHECKLIST NOTES:
- EXISTING VEGETATION CONSISTS OF SPARSE NATIVE GRASS
 - MINIMAL TREES AND SHRUBS EXIST ONSITE AND ARE NOT TO BE DISTURBED
 - AREAS OF CUT/FILL: THE LIMITS OF THE INFILTRATION POND IS NOTED ON THE PLAN SHEET

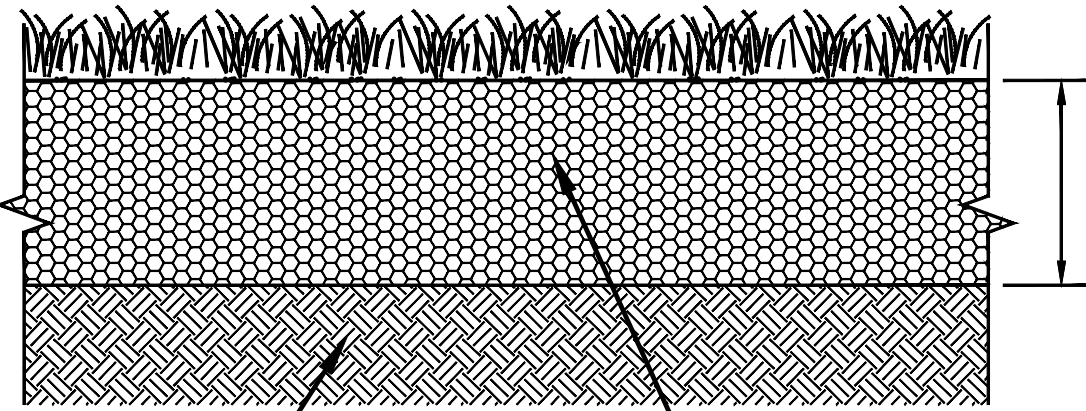


811	DATE 9-10-24
Know what's below. Call before you dig.	BY JLH
REVISION	COUNTY COMMENTS
NO. 1	
ENGINEERS-SURVEYORS, INC. 1635 WEST 13TH AVENUE, SUITE 310 DENVER, COLORADO 80204 PHONE: 303-753-6730	
WWW.RRENGINEERS.COM	
FOUNTAIN VALLEY SALVATION ARMY 208 CUNNINGHAM DRIVE COLORADO SPRINGS, CO 80911 PREPARED FOR: FOUNTAIN VALLEY SALVATION ARMY 208 CUNNINGHAM DR COLORADO SPRINGS, CO 80911	
GRADING AND EROSION CONTROL PLAN	
JOB NO. FV21181	ORG. SUBM. DATE 12/22/2023
DWN: JMP	CHKD: DW
NAME	
INITIAL GRADING & EROSION CONTROL PLAN	
NO. C2.0	

PATH: P:\V21181_208 CUNNINGHAM DR\ENGINEERING\4 DRAWINGS\PLANS\GEC\GEC V21181 - GEC.DWG, PLOT DATE: 10/29/2024 1:35:30 PM, BY: ESSCA, HWY

SOIL MATRIX AMENDMENT
CONTRACTOR REQUIRED TO REMOVE 2 FT OF NATIVE SOIL FROM THE LIMITS OF THE POND AND REPLACE WITH WELL GRADED GRAVELLY SANDS. CONTRACTOR REQUIRED TO PROVIDE A GRADATION OR SIEVE ANALYSIS AND PERMEABILITY RATES OF IMPORT SAND TO EOR FOR APPROVAL PRIOR TO PLACEMENT OF IMPORT SAND.

NOTE:
POROUS LANDSCAPE DETENTION SHOULD NOT BE INSTALLED UNTIL FINAL STABILIZATION OF THE SITE.



SCARIFY SUBGRADE MIN. DEPTH OF 6". PROVIDE LIMITED COMPACTION

IMPORT CLEAN SANDS (CONTRACTOR TO PROVIDE SIEVE ANALYSIS AND PERMEABILITY TESTING TO EOR PRIOR TO PLACEMENT)

BIORETENTION CROSS SECTION N.T.S.

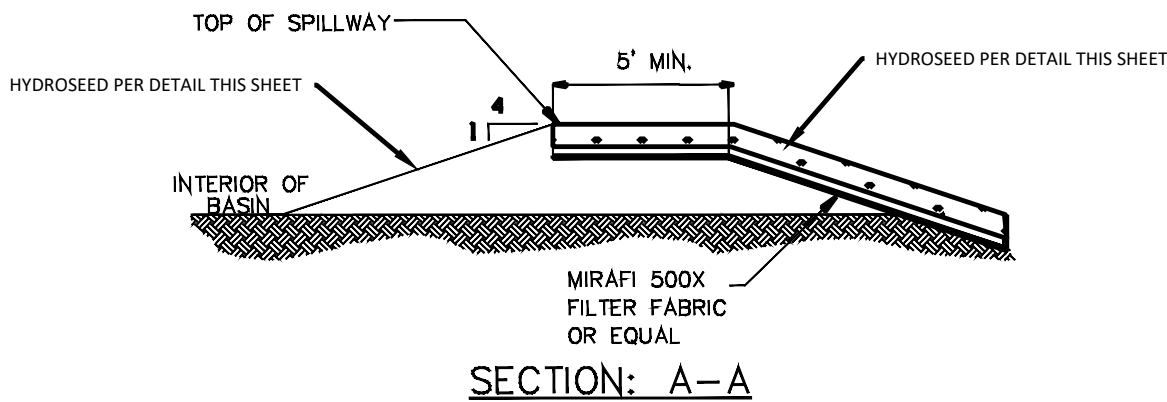
TABLE BR-3. BIORETENTION MEDIA PROPERTIES

SOIL PARAMETERS	TEST NAME	BIORETENTION MEDIA PROPERTIES
Texture/Gradation	ASTM D7928 Sedimentation (Hydrometer) Method	Particle Size Distribution: 70-80% Sand (0.05-2.0 mm diameter) 5-25% Silt (0.002-0.05 mm diameter) 5-15% Clay (<0.002 mm diameter) Notes: Sand, silt and clay percentages are by dry weight. Particle sizes are based on the USDA soil classification system. Distribution is measured after gravel > 2 mm is removed from sample. Media should have no more than 25% material > 2 mm. Equivalent sieve sizes for the upper and lower limit of sand are #10 and #240, respectively.
Organic Matter	ASTM D2974	1-5% by dry weight
pH	ASA/AASHTO	6.0 - 8.5
Salinity/Salts (EC) dS/m or mmhos/cm	Saturated Paste	<3
Nitrate Nitrogen (ppm)	ASA2 33-3	<30
Phosphorus (ppm)	Use Olsen when pH>6.2, otherwise use Mehlich-3	Olsen: <20 or Mehlich-3: <30

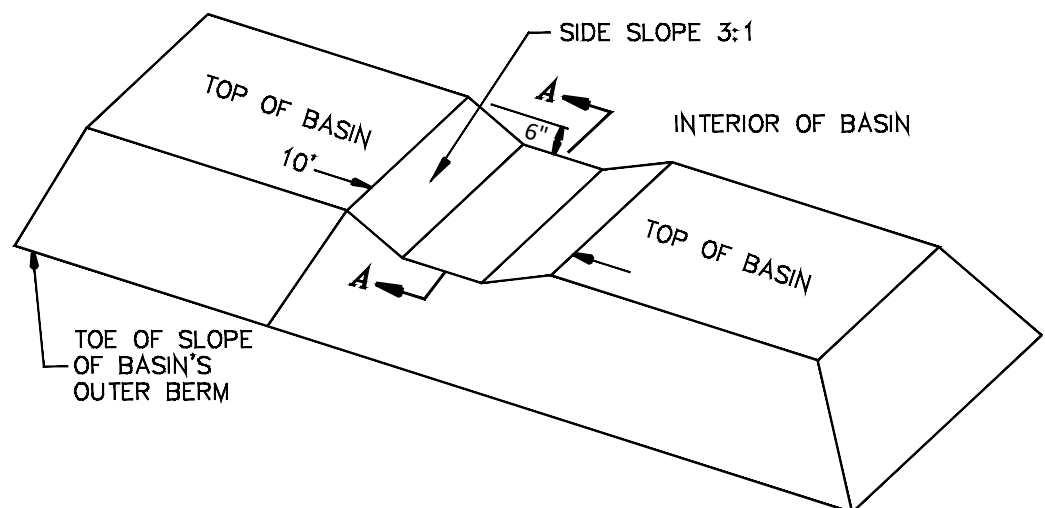
TABLE BR-4. NATIVE SEED MIX FOR BIORETENTION

COMMON NAME	SCIENTIFIC NAME	VARIETY	PURE LIVE SEED (PLS)	
			POUNDS/ACRE	OUNCES/ACRE
Sand bluestem	<i>Andropogon hallii</i>	Garden	3.5	
Sideoats grama	<i>Bouteloua curtipendula</i>	Butte	3	
Prairie sandreed	<i>Calamovilfa longifolia</i>	Goshen	3	
Indian ricegrass	<i>Oryzopsis hymenoides</i>	Paloma	3	
Switchgrass	<i>Panicum virgatum</i>	Blackwell	4	
Western wheatgrass	<i>Pascopyrum smithii</i>	Ariba	3	
Little bluestem	<i>Schizachyrium scoparium</i>	Patura	3	
Alkali sacaton	<i>Sporobolus airoides</i>		3	
Sand dropseed	<i>Sporobolus cryptandrus</i>		3	
Pasture sage ¹	<i>Artemisia frigida</i>			2
Blue aster ¹	<i>Aster laevis</i>			4
Blanket flower ¹	<i>Gaillardia aristata</i>			8
Prairie coneflower ¹	<i>Ratibida columnifera</i>			4
Purple Prairie Clover ¹	<i>Dalea (Petalostemum) purpurea</i>			4
Sub-Totals:			27.5	22
Total pounds/acre			28.9	

¹ Wildflower seed (optional) for a more diverse and natural look.



SECTION: A-A



SPILLWAY CROSS SECTION N.T.S.

GRADING AND EROSION CONTROL PLAN 208 CUNNINGHAM DRIVE

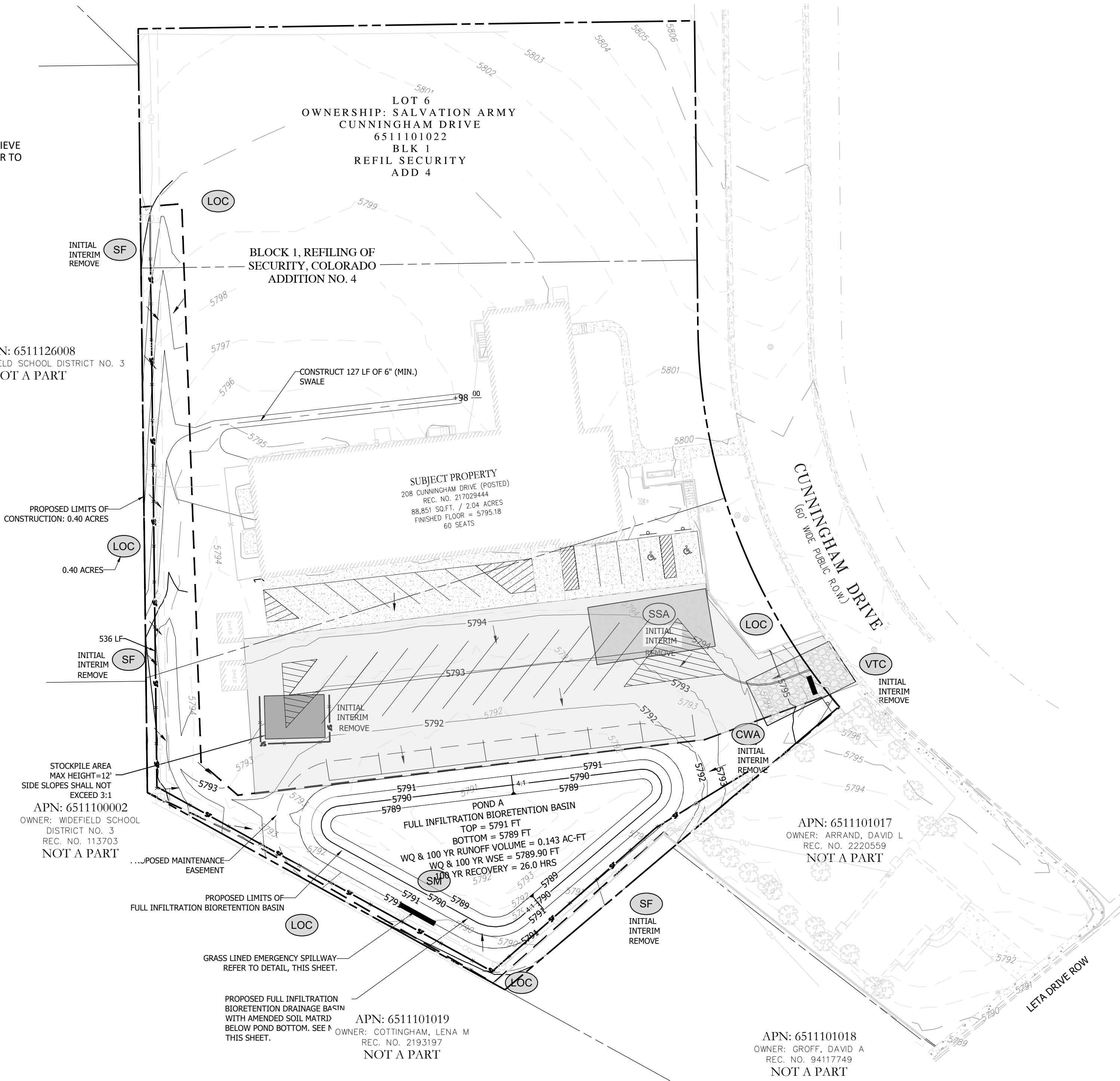
LOCATED IN LOT 4, BLOCK 5, 1 REFILL SECURITY, COLORADO ADDITION 4 WITHIN A PORTION OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 15 SOUTH, RANGE 66 WEST OF THE SIXTH P.M., COLORADO SPRINGS, EL PASO COUNTY, STATE OF COLORADO
LOCATED AT: 208 CUNNINGHAM DR, COLORADO SPRINGS, CO 80911



Know what's below.
Call before you dig.

BMP LEGEND	
	CHECK DAM
	COMPOST BLANKET
	COMPOST FILTER BERM
	CONCRETE WASHOUT AREA
	CONSTRUCTION FENCE
	CONSTRUCTION MARKERS
	DEWATERING
	DIVERSION DITCH
	EROSION CONTROL BLANKET
	INLET PROTECTION
	REINFORCED CHECK DAM
	REINFORCED ROCK BERM
	RRB FOR CULVERT PROTECTION
	SEDIMENT BASIN
	SEDIMENT CONTROL LOG
	SEDIMENT TRAP
	SEEDING AND MULCHING
	SILT FENCE
	STABILIZED STAGING AREA
	SURFACE ROUGHENING
	TEMPORARY ROAD CROSSING
	TEMPORARY SLOPE DRAIN
	TEMPORARY STREAM CROSSING
	TERRACING
	VEHICLE TRACKING CONTROL
	VTC WITH WHEEL WASH
	A LOT EROSION CONTROL
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	LIMITS OF CONSTRUCTION/LIMITS OF DISTURBANCE
	PROP. STORMWATER FLOW ARROWS
	EX. STORMWATER FLOW ARROWS
	PROP. CUT/FILL BOUNDARY
	PROP. STOCKPILE PROTECTION

APN: 6511126008
WIDEFIELD SCHOOL DISTRICT NO. 3
NOT A PART

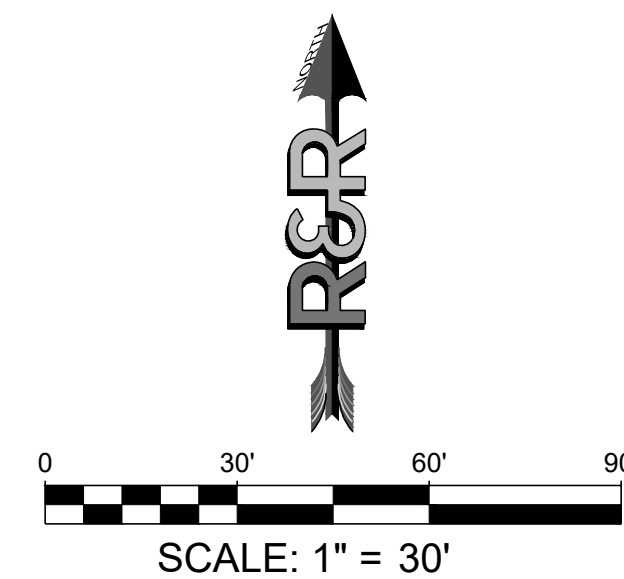


APN: 6511100002
OWNER: WIDEFIELD SCHOOL DISTRICT NO. 3
REC. NO. 113703
NOT A PART

PROPOSED FULL INFILTRATION BIORETENTION DRAINAGE BASIN WITH AMENDED SOIL MATR'D BELOW POND BOTTOM. SEE THIS SHEET.

APN: 6511101019
OWNER: COTTINGHAM, LENA M
REC. NO. 2193197
NOT A PART

APN: 6511101018
OWNER: GROFF, DAVID A
REC. NO. 94117749
NOT A PART



811

Know what's below.
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REVISION	DATE	BY
1	9-10-24	JUH

NO.	REVISION	DATE	BY
1			

ENGINEERS SURVEYORS

ENGINEERS SURVEYORS, INC.

1635 WEST 13TH AVENUE, SUITE 310
DENVER, COLORADO 80204
PHONE: 303-753-6730

WWW.RRENGINEERS.COM

FOUNTAIN VALLEY SALVATION ARMY

SITE ADDRESS:
208 CUNNINGHAM DRIVE
COLORADO SPRINGS, CO 80911

PREPARED FOR:
FOUNTAIN VALLEY SALVATION ARMY
208 CUNNINGHAM DR
COLORADO SPRINGS, CO 80911

GRADING AND EROSION CONTROL PLAN

JOB NO. FV21181
ORG. SUBM. DATE 12/22/2023
DWN: JMP CHKD: DW
NAME

FINAL GRADING & EROSION CONTROL PLAN

NO. C3.0

PCD FILE NO. CDR242

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GRADING AND EROSION CONTROL PLAN

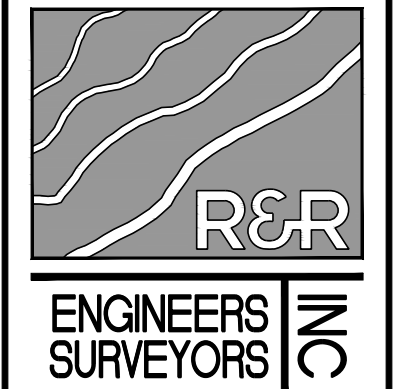
208 CUNNINGHAM DRIVE

LOCATED IN LOT 4, BLOCK 5, 1 REFILL SECURITY, COLORADO ADDITION 4 WITHIN A PORTION OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 15 SOUTH, RANGE 66 WEST OF THE SIXTH P.M., COLORADO SPRINGS, EL PASO COUNTY, STATE OF COLORADO
LOCATED AT: 208 CUNNINGHAM DR, COLORADO SPRINGS, CO 80911



Know what's below.
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DATE	BY	REVISION	NO.
9-10-24	JUH	COUNTY COMMENTS	1



R&R ENGINEERS-SURVEYORS, INC.
1635 WEST 13TH AVENUE, SUITE 310
DENVER, COLORADO 80204
PHONE: 303-753-6730

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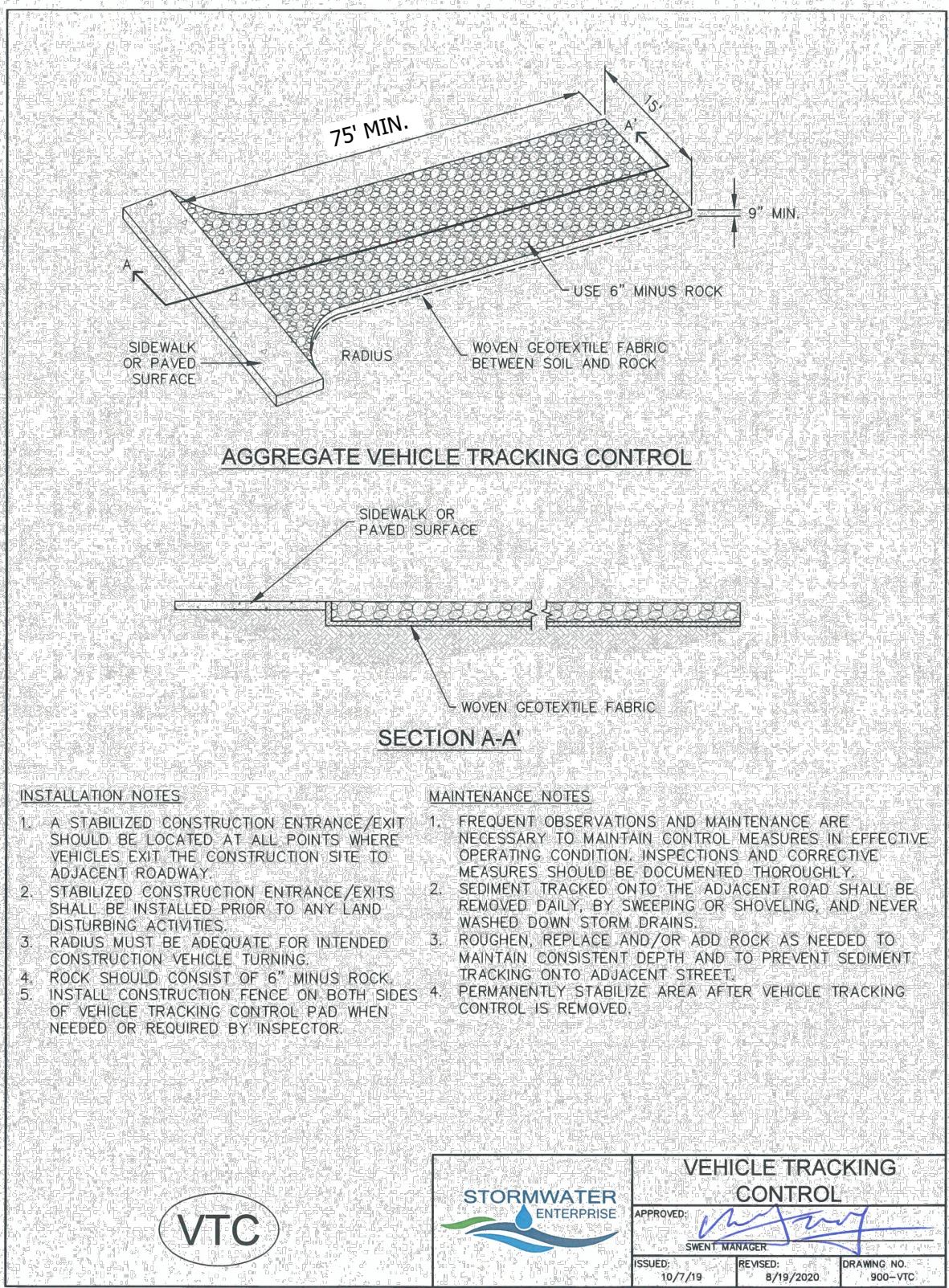
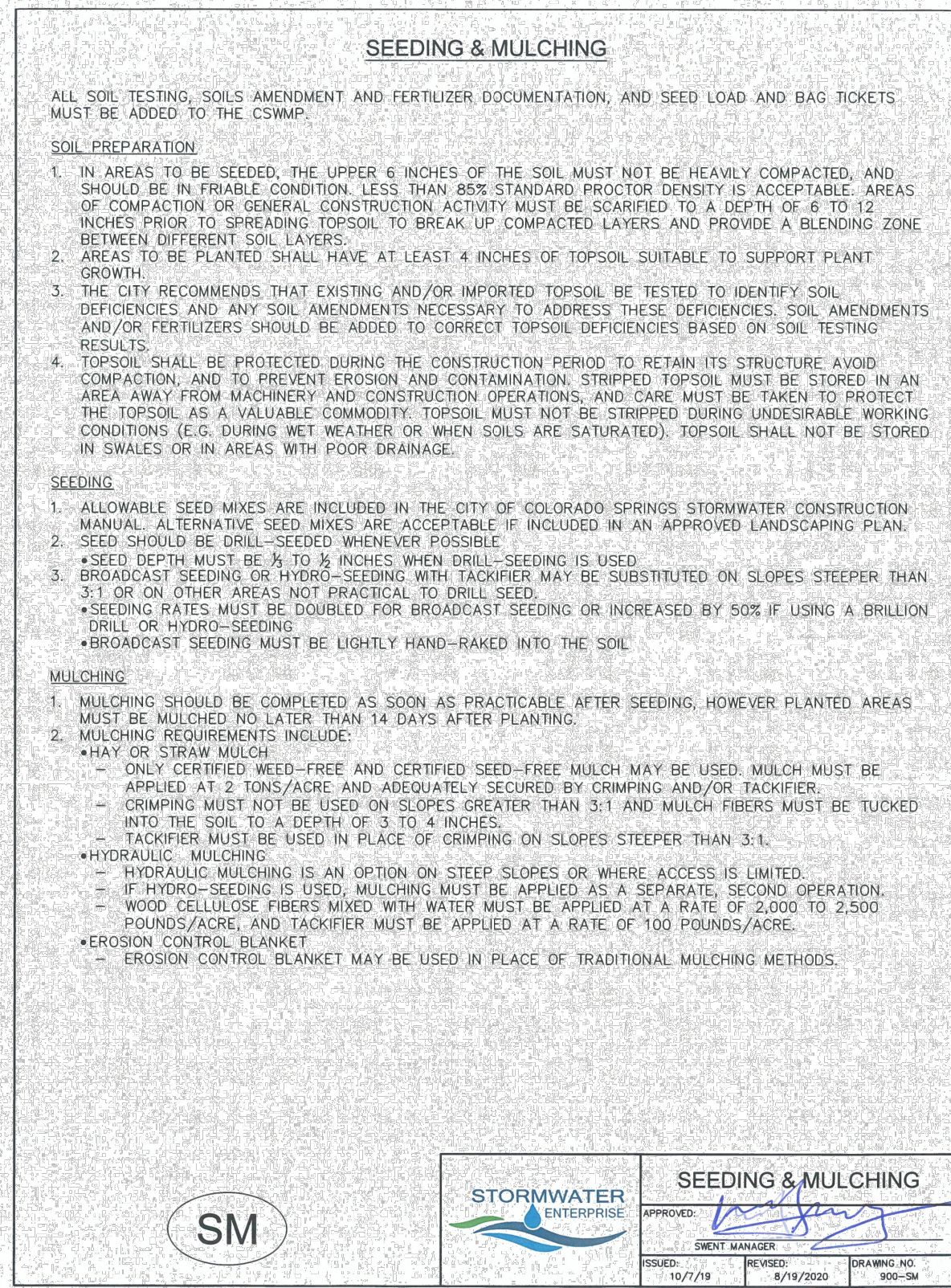
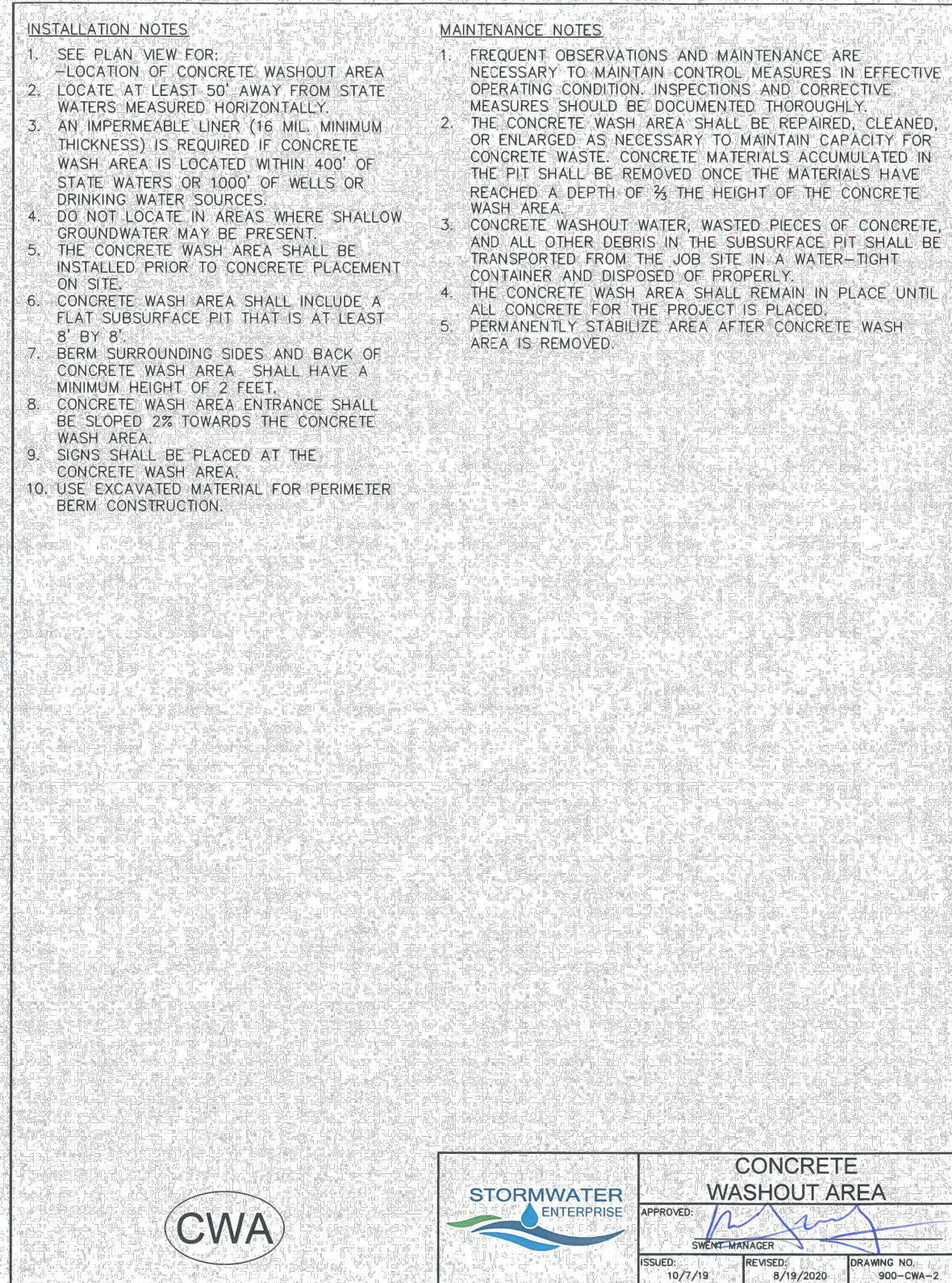
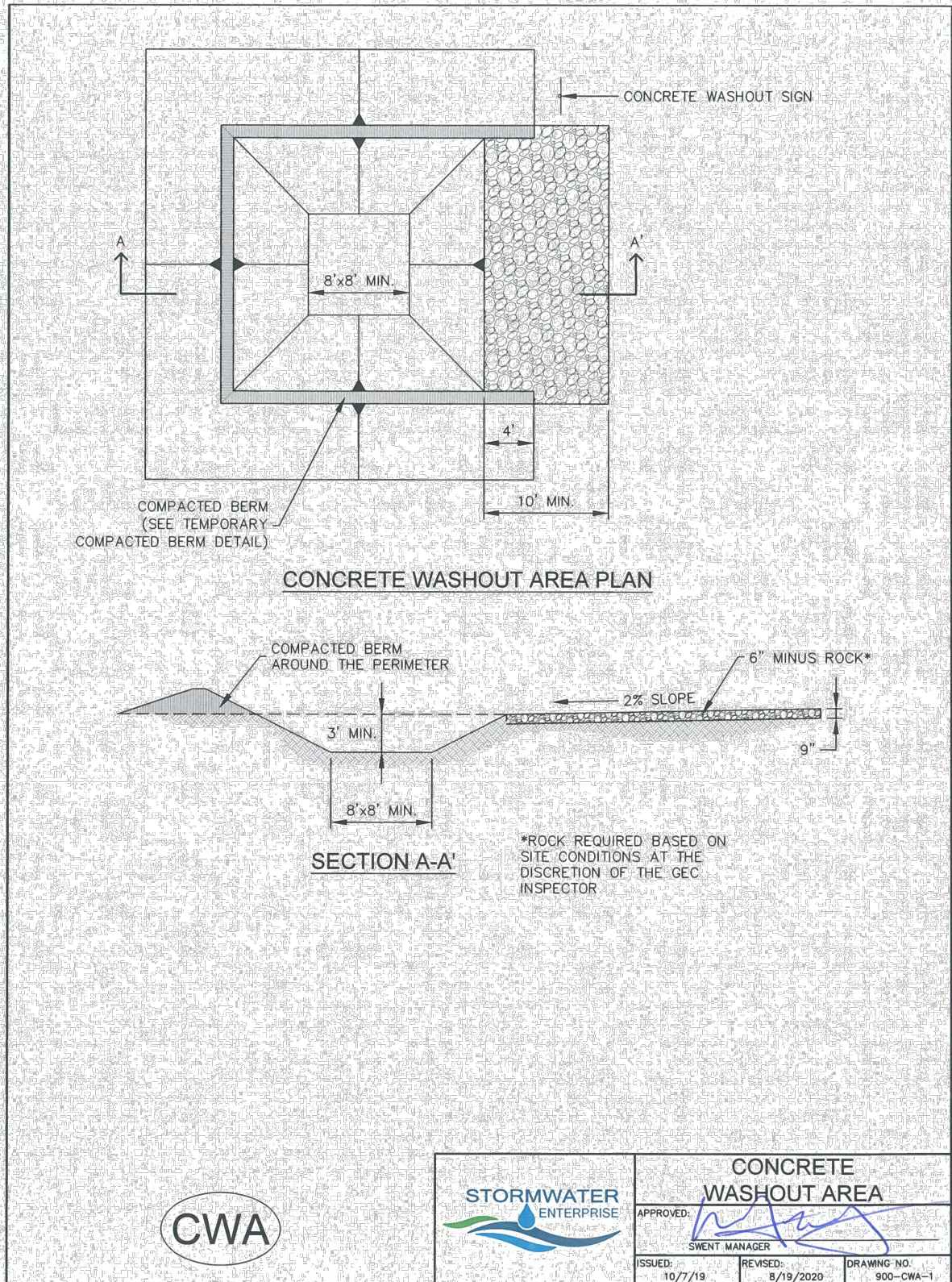
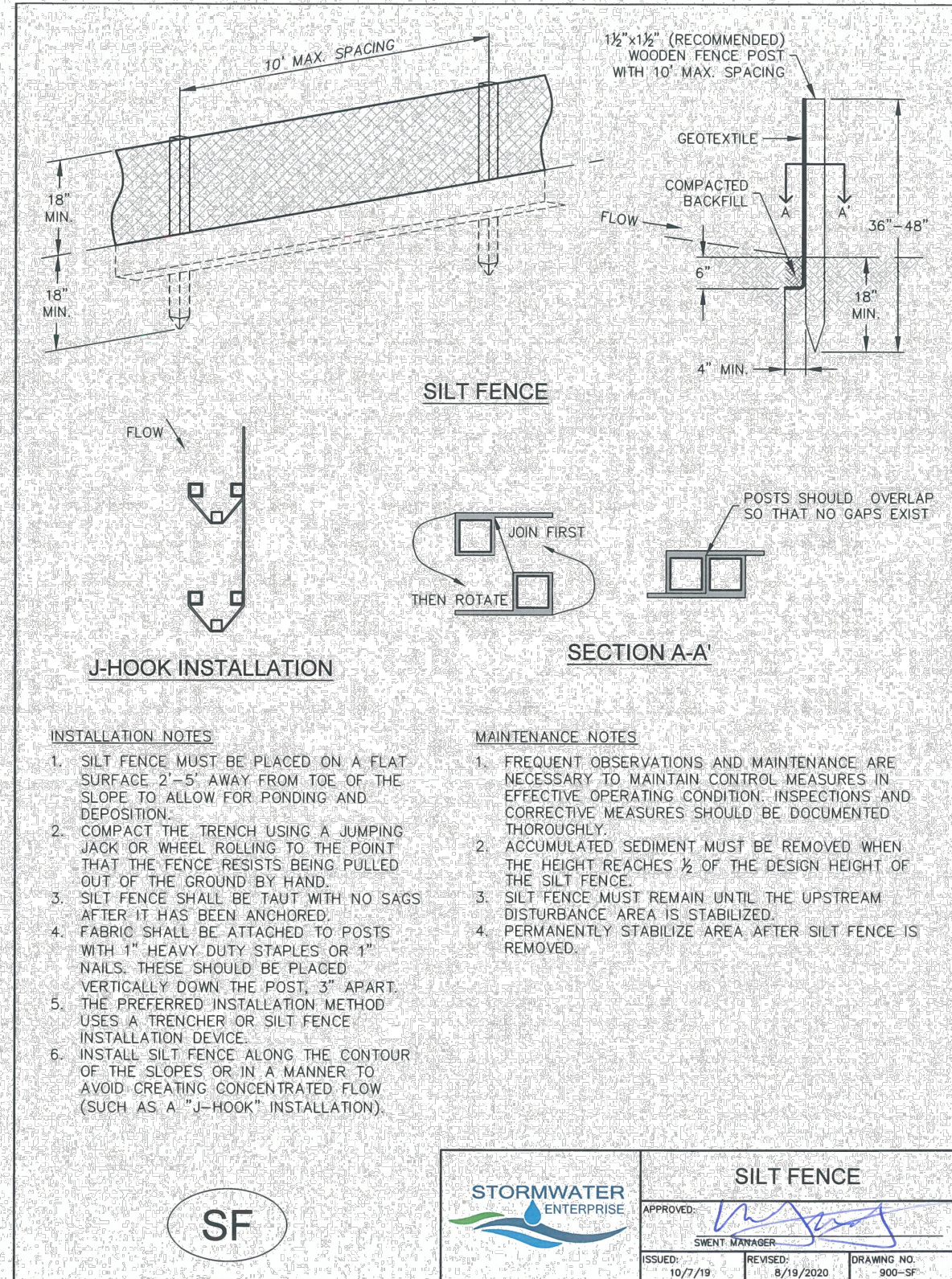
FOUNTAIN VALLEY SALVATION ARMY
SITE ADDRESS: 208 CUNNINGHAM DRIVE
COLORADO SPRINGS, CO 80911
PREPARED FOR: FOUNTAIN VALLEY SALVATION ARMY
208 CUNNINGHAM DR
COLORADO SPRINGS, CO 80911

GRADING AND EROSION CONTROL PLAN
JOB NO. FV21181
ORG. SUBM. DATE 12/22/2023
DWN: JMP CHKD: DW
NAME

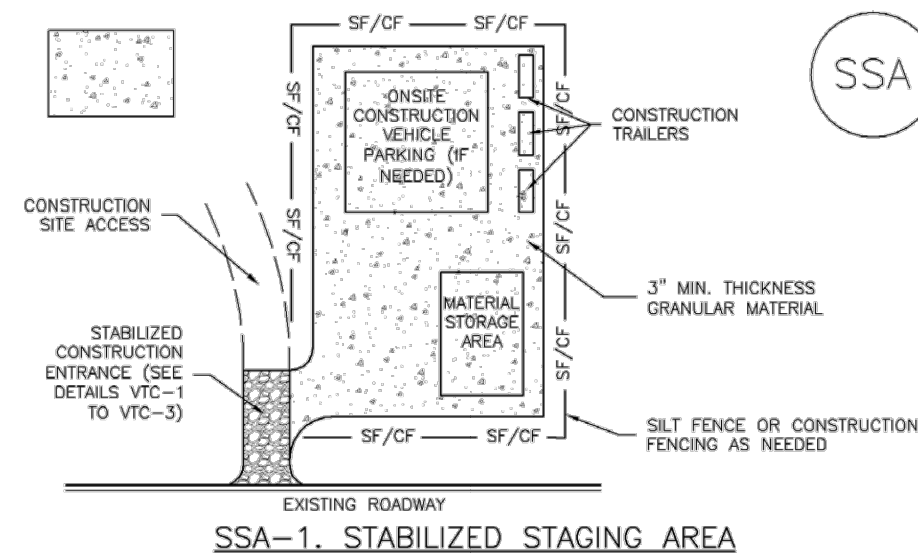
DETAILS

NO. C4.0

PCD FILE NO. CDR242



Stabilized Staging Area (SSA) SM-6



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

SSA-3

SM-6 Stabilized Staging Area (SSA)

STABILIZED STAGING AREA MAINTENANCE NOTES

5. STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING/LOADING OPERATIONS.
6. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE LOCAL JURISDICTION, USED ON SITE, AND THE AREA COVERED WITH TOPSOIL, SEED, AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.

NOTE: MANY MUNICIPALITIES PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STABILIZED STAGING AREAS DUE TO DISPARITIES WITH RE-ESTABLISHMENT OF VEGETATION IN AREAS WHERE RECYCLED CONCRETE WAS PLACED.

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

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

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

November 2010