

HAVEN VALLEY

EL PASO COUNTY, COLORADO

GRADING AND EROSION CONTROL DOCUMENTS

PREPARED BY:



DREXEL, BARRELL & CO.
Engineers & Surveyors
101 SAWATCH STREET, #100
COLORADO SPGS, COLORADO 80903
CONTACT: TIM D. MCCONNELL, P.E.
(719)260-0887
COLORADO SPRINGS • LAFAYETTE

CLIENT:

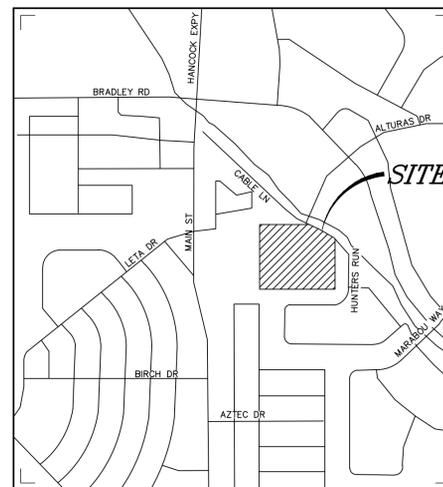
MIDCO INVESTMENTS, LLC

P.O. BOX 60069
COLORADO SPRINGS, CO 80960
CONTACT: ROBERT C. IRWIN
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CONSTRUCTION DOCUMENTS FOR:

HAVEN VALLEY

(LETA DR.) BRADLEY RD/ALTURAS DR.
SECURITY, EL PASO COUNTY, COLORADO



VICINITY MAP
NOT TO SCALE



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AGENCY CONTACTS

ENGINEERING	EL PASO COUNTY PLANNING & COMMUNITY DEVELOPMENT JOSHUA PALMER, COUNTY ENGINEER 3275 AKERS DRIVE COLORADO SPRINGS, CO 80922 (719) 520-6460
PLANNING	EL PASO COUNTY PLANNING & COMMUNITY DEVELOPMENT KARI PARSONS, PROJECT MANAGER/PLANNER II 2880 INTERNATIONAL CIRCLE, SUITE 110 COLORADO SPRINGS, CO 80910 (719) 520-6300
FIRE	SECURITY FIRE PROTECTION DISTRICT DAVID GIRARDIN, FIRE CHIEF 400 SECURITY BLVD COLORADO SPRINGS, CO 80911 (719) 392-7121
WATER	SECURITY WATER & SANITATION DISTRICT ROY HEALD, DISTRICT MANAGER 231 SECURITY BLVD COLORADO SPRINGS, CO 80911 (719) 392-3475
WASTEWATER	SECURITY WATER & SANITATION DISTRICT ROY HEALD, DISTRICT MANAGER 231 SECURITY BLVD COLORADO SPRINGS, CO 80911 (719) 392-3475

ELECTRIC	C.S.U. ELECTRIC DEPT. SYSTEM PLANNING MARY HOADLAND 1521 HANCOCK EXPY. COLORADO SPRINGS, CO 80903 (719) 668-5557
GAS	COLORADO SPRINGS UTILITIES TODD STURTEVANT 1521 HANCOCK EXPRESSWAY COLORADO SPRINGS, CO 80947 (719) 668-3556
TELEPHONE	CENTURY LINK PATTY MOORE (719) 636-6096 (LOCATORS) (719) 597-8418 AT&T (LOCATORS) (719) 635-3674
CABLE	COMCAST RICKEY NELSON 215 N. UNION BLVD COLORADO SPRINGS, CO 80909 RICKEY_NELSON@CABLE.COMCAST.COM

ESTIMATED COST OF TEMPORARY + PERMANENT BMPs INCLUDING INSTALLATION AND MAINTENANCE UNTIL FINAL STABILIZATION (FINAL + INTERIM STAGE)

Description	Quantity	Units	Unit Cost	Total	(with Pre-Flat Construction)	
					% Complete	Remaining
SECTION 1 - GRADING AND EROSION CONTROL (Construction and Permanent BMPs)						
Earthwork						
less than 1,000; \$5,300 min		CY	\$ 8.00	= \$ -		\$ -
1,000-5,000; \$8,000 min		CY	\$ 6.00	= \$ -		\$ -
5,001-20,000; \$30,000 min		CY	\$ 5.00	= \$ -		\$ -
20,001-50,000; \$100,000 min	48620	CY	\$ 3.50	= \$ 170,170.00		\$ 170,170.00
50,001-200,000; \$175,000 min		CY	\$ 2.50	= \$ -		\$ -
greater than 200,000; \$500,000 min		CY	\$ 2.00	= \$ -		\$ -
Permanent Erosion Control Blanket	1978	SY	\$ 9.00	= \$ 17,802.00		\$ 17,802.00
Permanent Seeding (inc. noxious weed mgmt.) & Mulch	10.5	AC	\$ 2,018.00	= \$ 21,189.00		\$ 21,189.00
Permanent Pond/BMP (provide engineer's estimate)	1	EA	\$ 200,000.00	= \$ 200,000.00		\$ 200,000.00
Concrete Washout Basin	1	EA	\$ 1,172.00	= \$ 1,172.00		\$ 1,172.00
Inlet Protection	9	EA	\$ 217.00	= \$ 1,953.00		\$ 1,953.00
Rock Check Dam	21	EA	\$ 651.00	= \$ 13,671.00		\$ 13,671.00
Safety Fence		LF	\$ 3.00	= \$ -		\$ -
Sediment Basin	1	EA	\$ 2,294.00	= \$ 2,294.00		\$ 2,294.00
Sediment Trap		EA	\$ 538.00	= \$ -		\$ -
Silt Fence	615	LF	\$ 3.00	= \$ 1,845.00		\$ 1,845.00
Slope Drain		LF	\$ 43.00	= \$ -		\$ -
Straw Bale		EA	\$ 33.00	= \$ -		\$ -
Straw Wattle/Rock Sock	36	LF	\$ 8.00	= \$ 288.00		\$ 288.00
Surface Roughening		AC	\$ 269.00	= \$ -		\$ -
Temporary Erosion Control Blanket		SY	\$ 3.00	= \$ -		\$ -
Temporary Seeding and Mulching		AC	\$ 1,793.00	= \$ -		\$ -
Vehicle Tracking Control	1	EA	\$ 3,085.00	= \$ 3,085.00		\$ 3,085.00
[insert items not listed but part of construction plans]				= \$ -		\$ -
MAINTENANCE (35% of Construction BMPs)				= \$ 8,097.60		\$ 8,097.60
Section 1 Subtotal				= \$ 441,566.60		\$ 441,566.60

* - Subject to defect warranty financial assurance. A minimum of 20% shall be retained until final acceptance (MAXIMUM OF 80% COMPLETE ALLOWED)

STRUCTURAL FILL

DURING EARTHWORK BALANCING ACROSS THE SITE, AREAS TO RECEIVE STRUCTURAL FILL SHOULD HAVE TOPSOIL, ORGANIC MATERIAL, OR DEBRIS REMOVED. LOOSE, WET SOILS, ESPECIALLY THOSE FROM NOTED DRAINAGE AREAS, SHOULD BE EXCAVATED TO DRY SOLID MATERIAL, STOCKPILED AND EVALUATED FOR SUITABILITY OF RE-USE AS STRUCTURAL FILL. IF SOIL IS FOUND TO BE UNSUITABLE AS STRUCTURAL FILL, IT MAY STILL BE SUITABLE AS BACKFILL IN NON-STRUCTURAL APPLICATIONS.

STRUCTURAL FILL COMPOSED OF ON-SITE SOILS SHOULD CONSIST OF GRANULAR, NIL TO LOW-EXPANSIVE MATERIAL. IF CLAYSTONE IS ELECTED TO BE RE-USED IT SHOULD BE THOROUGHLY PROCESSED, MOISTURE CONDITIONED AND BLENDED WITH SAND SOIL. FILL SHOULD BE SPREAD ACROSS THE SITE AND PLACED IN EVEN LOOSE LIFTS NOT EXCEEDING 10-INCHES. MOISTURE CONDITIONED TO FACILITATE COMPACTION (USUALLY WITHIN 2 PERCENT OF THE OPTIMUM MOISTURE CONTENT), AND COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROTOR TEST, ASTM D-698. THE MATERIALS SHOULD BE SPREAD AND COMPACTED BY MECHANICAL MEANS.

STRUCTURAL FILL PLACED ON SLOPES SHOULD BE BENCHMARKED INTO THE SLOPE. MAXIMUM BENCH HEIGHTS SHOULD NOT EXCEED 4 FEET, AND BENCH WIDTHS SHOULD BE WIDE ENOUGH TO ACCOMMODATE COMPACTION EQUIPMENT. MATERIALS USED FOR STRUCTURAL FILL SHOULD BE APPROVED BY RMG PRIOR TO USE. STRUCTURAL FILL SHOULD NOT BE PLACED ON FROZEN SUBGRADE OR ALLOWED TO FREEZE DURING MOISTURE CONDITIONING AND PLACEMENT.

BENCHMARK

CHISELED "X" IN WING WALL ELEVATION 5859.54 (FMS DATUM), NORTH EAST CORNER OF FMIC SUPERDITCH AND ALTURAS DR.

LEGAL DESCRIPTION

THE NORTH HALF OF THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 15 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO.

FLOODPLAIN STATEMENT

ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) PANEL #08041C0763G (DECEMBER 7, 2018) THE PROJECT SITE IS NOT WITHIN A DESIGNATED 100-YR FLOODPLAIN.

TIMING

ANTICIPATED STARTING AND COMPLETION TIME PERIOD OF SITE GRADING: FALL/WINTER 2023-SPRING/SUMMER 2024

AREAS

TOTAL AREA OF THE SITE TO BE CLEARED, EXCAVATED OR GRADED: APPROXIMATELY 13.6 ACRES

RECEIVING WATERS

FOUNTAIN CREEK

SOILS

HYDROLOGIC TYPE A: BLAKELAND LOAMY SAND

VEGETATION

EXISTING SITE IS UNDEVELOPED AND COVERED WITH NATIVE GRASSES

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 ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARING THIS PLAN.

Tim D. McConnell

TIM D. MCCONNELL DATE
P.E.# 33797

OWNER'S STATEMENT

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN

JEFF MARK OWNER DATE

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 EGM SECTION 112, 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.

JOSHUA PALMER, P.E. COUNTY ENGINEER DATE

ISSUE	DATE
INITIAL ISSUE	3/15/22
LATEST ISSUE	6/10/24

DESIGNED BY:	SBN
DRAWN BY:	SBN
CHECKED BY:	TDM
FILE NAME:	21085-03ECCV

PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF DREXEL, BARRELL & CO.

DRAWING SCALE:
HORIZONTAL: N/A
VERTICAL: N/A

EROSION CONTROL COVER SHEET

PROJECT NO. 21085-03CSCV
DRAWING NO.

ECCV

SHEET: 43 OF 52

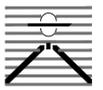
STANDARD NOTES FOR EL PASO COUNTY GRADING AND EROSION CONTROL PLANS

1. STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFF SITE WATERS, INCLUDING WETLANDS.
2. NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS TO REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.
3. A SEPARATE STORMWATER MANAGEMENT PLAN (SWMP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. MANAGEMENT OF THE SWMP DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR. THE SWMP SHALL BE LOCATED ON-SITE AT ALL TIMES DURING CONSTRUCTION AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
4. ONCE THE ESQCP IS APPROVED AND A "NOTICE TO PROCEED" HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL BMPs AS INDICATED ON THE REC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY STAFF.
5. CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES THAT COULD CONTRIBUTE POLLUTANTS TO STORMWATER. CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, AND DISTURBED LAND AREAS SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF THE DISTURBANCE.
6. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REMAIN IN EFFECTIVE OPERATING CONDITION UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND FINAL STABILIZATION IS ESTABLISHED. ALL PERSONS ENGAGED IN LAND DISTURBANCE ACTIVITIES SHALL ASSESS THE ADEQUACY OF CONTROL MEASURES AT THE SITE AND IDENTIFY IF CHANGES TO THOSE CONTROL MEASURES ARE NEEDED TO ENSURE THE CONTINUED EFFECTIVE PERFORMANCE OF THE CONTROL MEASURES. ALL CHANGES TO TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES MUST BE INCORPORATED INTO THE STORMWATER MANAGEMENT PLAN.
7. TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED OR TEMPORARILY CEASED FOR LONGER THAN 14 DAYS.
8. FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND DISTURBING ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL PLANT DENSITY OF 70 PERCENT OF PRE-DISTURBANCE LEVELS ESTABLISHED OR EQUIVALENT PERMANENT ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE.
9. ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DESIGNED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT EFFECT THE DESIGN OR FUNCTION OF PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE ECM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
10. EARTH DISTURBANCES SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME. PRE-EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 HORIZONTAL FEET OF A WATERS OF THE STATE UNLESS SHOWN TO BE INFEASIBLE AND SPECIFICALLY REQUESTED AND APPROVED.
11. COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED. IF COMPACTION PREVENTION IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, ALL AREAS DESIGNATED FOR INFILTRATION AND VEGETATION CONTROL MEASURES MUST BE LOOSENEED PRIOR TO INSTALLATION OF THE CONTROL MEASURE(S).
12. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF-SITE.
13. CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO ENTER STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES. CONCRETE WASHOUTS SHALL NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT, OR WITHIN 50 FEET OF A SURFACE WATER BODY, CREEK OR STREAM.
14. DURING DEWATERING OPERATIONS, 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.
15. EROSION CONTROL BLANKETING OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE.
17. WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. CONTROL MEASURES MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
18. TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF-SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
19. THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, SOIL, AND SAND THAT MAY ACCUMULATE IN ROADS, STORM DRAINS, AND OTHER DRAINAGE CONVEYANCE SYSTEMS AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
20. THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABELS.

21. NO CHEMICAL(S) HAVING THE POTENTIAL TO BE RELEASED IN STORMWATER ARE TO BE STORED OR USED 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.
22. BULK STORAGE OF ALLOWED PETROLEUM PRODUCTS OR OTHER ALLOWED LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL REQUIRE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS ON-SITE AND TO PREVENT ANY SPILLED MATERIALS FROM ENTERING STATE WATERS, ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR OTHER FACILITIES.
23. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER OR DITCH EXCEPT WITH APPROVED SEDIMENT CONTROL MEASURES.
24. OWNER/DEVELOPER AND THEIR AGENTS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS), AND THE "CLEAN WATER ACT" (33 USC 1344), IN ADDITION TO THE REQUIREMENTS OF THE LAND DEVELOPMENT CODE, DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (1041, NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND OTHER LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, LOCAL, OR COUNTY AGENCIES, THE MOST RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
25. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE ONLY AT APPROVED CONSTRUCTION ACCESS POINTS.
26. PRIOR TO CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
27. A WATER SOURCE SHALL BE AVAILABLE ON-SITE DURING EARTHWORK OPERATIONS AND SHALL BE UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
28. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY CTL THOMPSON, DATED AUGUST 5, 2021 AND SHALL BE CONSIDERED A PART OF THESE PLANS.
29. AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB ONE (1)ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN(SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:

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

PREPARED BY:



DREXEL, BARRELL & CO.
Engineers • Surveyors
101 SAWATCH STREET, #100
COLORADO SPGS, COLORADO 80903
CONTACT: TIM D. MCCONNELL, P.E.
(719)260-0887
COLORADO SPRINGS • LAFAYETTE

CLIENT:

MIDCO INVESTMENTS, LLC

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COLORADO SPRINGS, CO 80960
CONTACT: ROBERT C. IRWIN
(719) 475-7474

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HAVEN VALLEY

(LETA DR.) BRADLEY RD/ALTURAS DR.
SECURITY, EL PASO COUNTY, COLORADO

ISSUE	DATE
INITIAL ISSUE	3/15/22
LATEST ISSUE	6/10/24
DESIGNED BY:	SBN
DRAWN BY:	SBN
CHECKED BY:	TDM
FILE NAME:	21085-03ECVC

PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF DREXEL, BARRELL & CO.

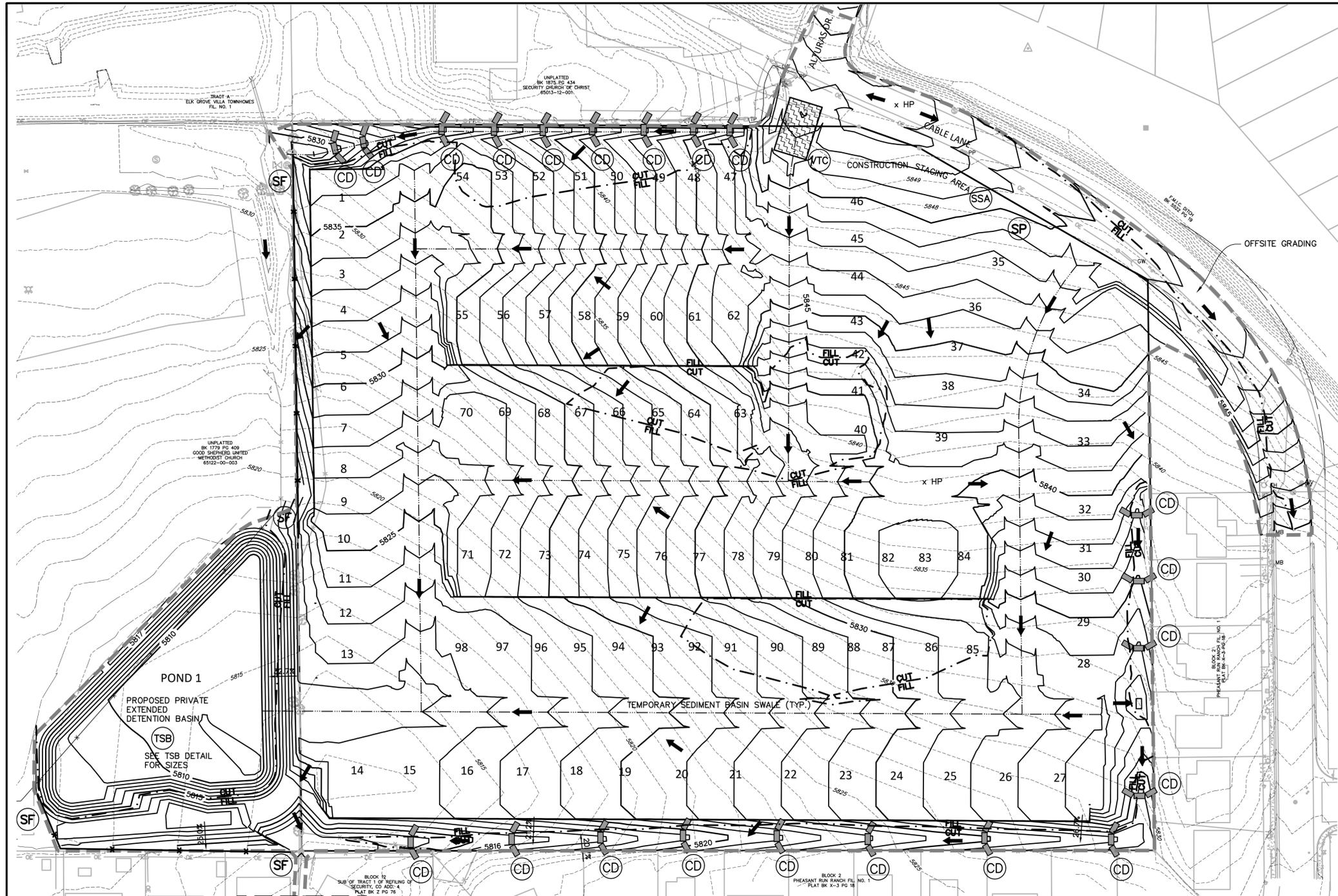
DRAWING SCALE:
HORIZONTAL: N/A
VERTICAL: N/A

EROSION CONTROL NOTES

PROJECT NO. 21085-03CSCV
DRAWING NO.

ECNT

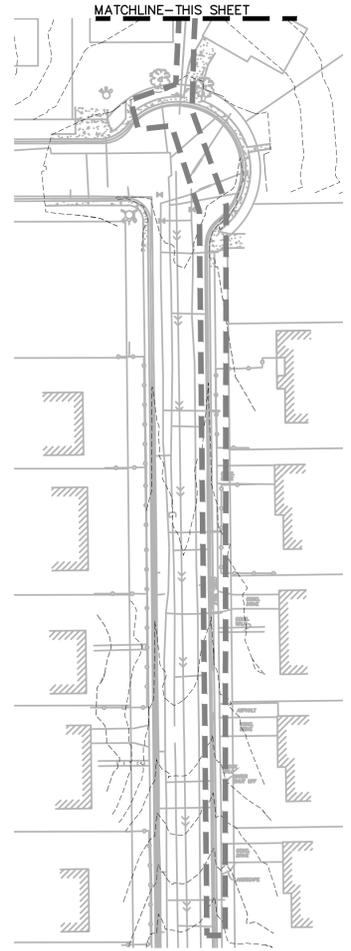
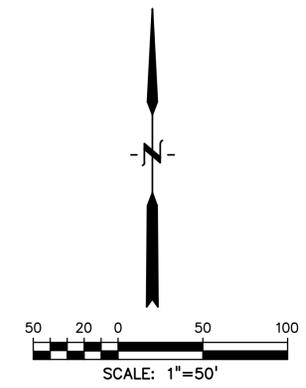
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- NOTES:**
- REFER TO LANDSCAPING PLANS FOR ONSITE VEGETATION
 - REFER TO SWMP FOR NON-STRUCTURAL CONTROL MEASURES.
 - ALL DISTURBED AREAS SHALL BE SEEDED WITHIN 30 DAYS OF DISTURBANCE.
 - ALL AREAS TO BE VEGETATED WITH PERMANENT SEEDED SHOULD ALSO BE TEMPORARILY STABILIZED VIA TRACK ROLLING OR SOME APPROVED MEANS.

LEGEND

PROPOSED INTERMEDIATE CONTOUR 5522	INLET PROTECTION IP	VEHICLE TRACKING CONTROL VTC
PROPOSED INDEX CONTOUR 5520	ROCK SOCKS RS	EROSION CONTROL BLANKET ECB
EX. INTERMEDIATE CONTOUR 5364	CONCRETE WASHOUT AREA CWA	SEEDING/MULCHING SM
EX. INDEX CONTOUR 5365	SILT FENCE SF	
DIRECTION OF FLOW	TEMPORARY SEDIMENT BASIN TSB	
HIGH POINT HP	CHECK DAM CD	
LOW POINT LP	STOCKPILE PROTECTION SP	
PROPOSED INLET	STABILIZED STAGING AREA SSA	
PROPOSED MANHOLE		
PROPERTY BOUNDARY		
LIMIT OF CONSTRUCTION/DISTURBANCE		



PREPARED BY:



CLIENT:

MIDCO INVESTMENTS, LLC

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COLORADO SPRINGS, CO 80960
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(719) 475-7474

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(LETA DR.) BRADLEY RD/ALTURAS DR.
SECURITY, EL PASO COUNTY, COLORADO

ISSUE	DATE
INITIAL ISSUE	3/15/22
LATEST ISSUE	6/10/24

DESIGNED BY:	TDM
DRAWN BY:	SBN
CHECKED BY:	TDM
FILE NAME:	21085-03EC01

PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF DREXEL, BARRELL & CO.
DRAWING SCALE:
HORIZONTAL: 1" = 50'
VERTICAL: N/A

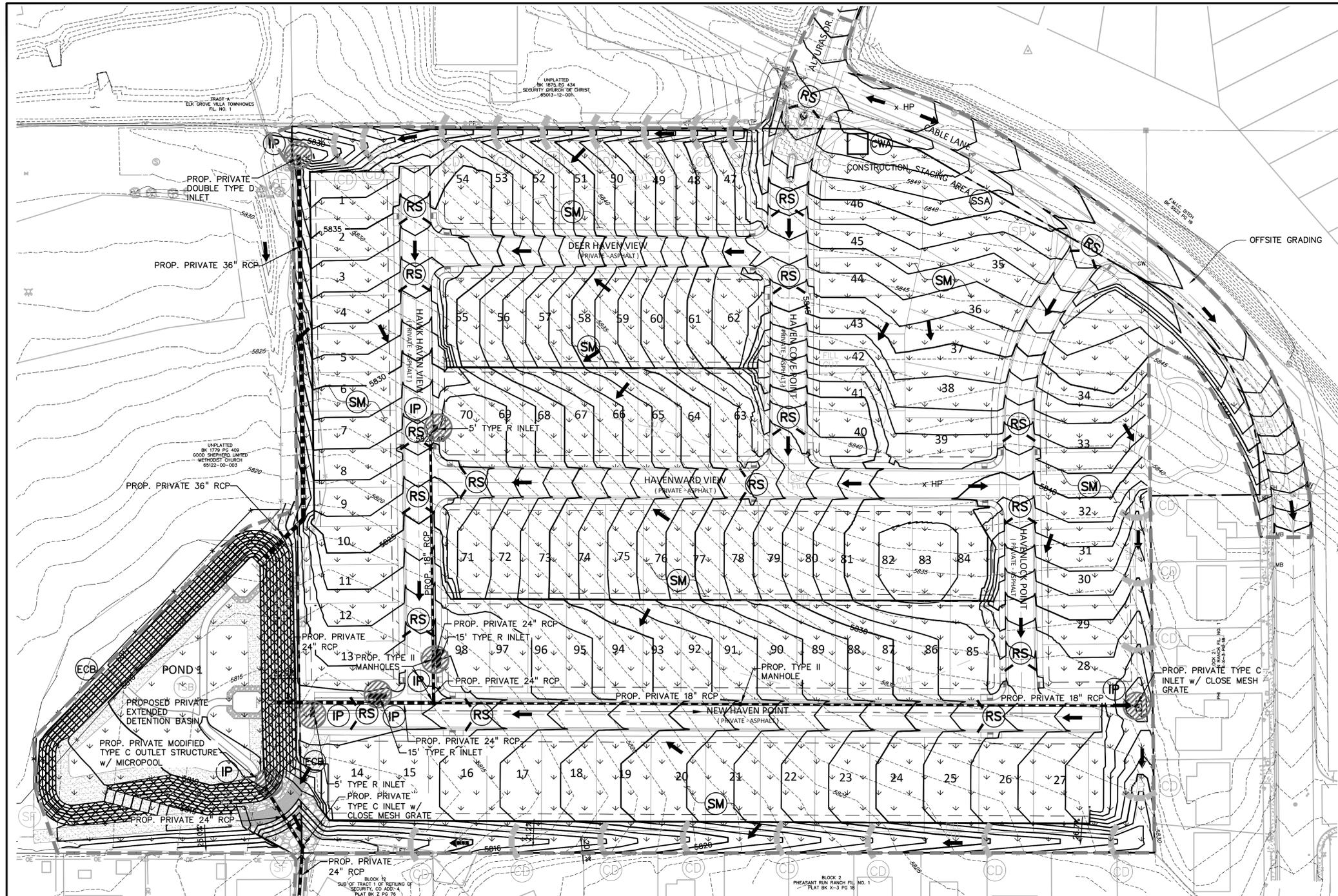
INITIAL GRADING AND EROSION CONTROL PLAN

PROJECT NO. 21085-03CSCV
DRAWING NO.

EC01

SHEET: 45 OF 52

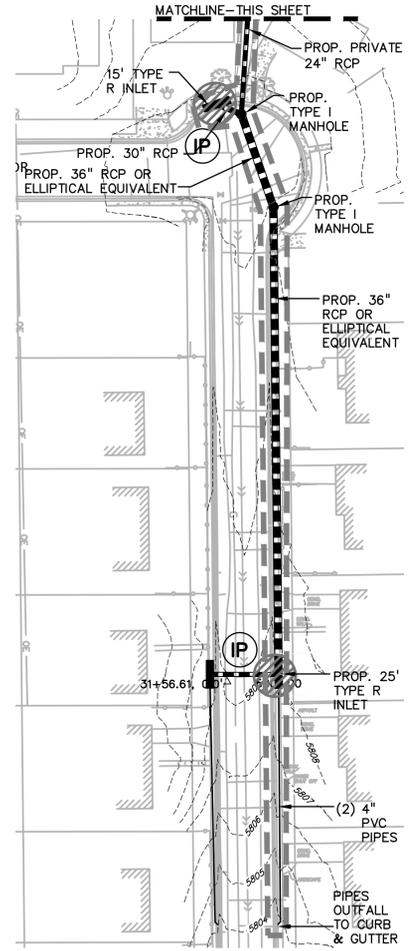
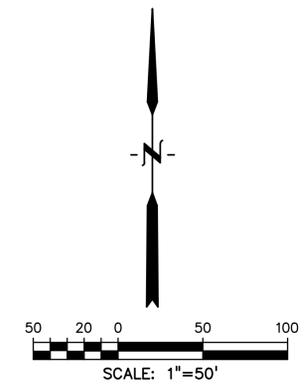




- NOTES:**
- REFER TO LANDSCAPING PLANS FOR ONSITE VEGETATION
 - REFER TO SWMP FOR NON-STRUCTURAL CONTROL MEASURES.
 - ALL DISTURBED AREAS SHALL BE SEEDED WITHIN 30 DAYS OF DISTURBANCE.
 - ALL AREAS TO BE VEGETATED WITH PERMANENT SEEDING SHOULD ALSO BE TEMPORARILY STABILIZED VIA TRACK ROLLING OR SOME OTHER APPROVED MEANS.

- LEGEND**
- PROPOSED INTERMEDIATE CONTOUR 5522
 - PROPOSED INDEX CONTOUR 5520
 - EX. INTERMEDIATE CONTOUR 5364
 - EX. INDEX CONTOUR 5365
 - DIRECTION OF FLOW
 - HIGH POINT HP
 - LOW POINT LP
 - PROPOSED INLET
 - PROPOSED MANHOLE
 - PROPERTY BOUNDARY
 - LIMIT OF CONSTRUCTION/DISTURBANCE

- INLET PROTECTION IP
- ROCK SOCKS RS
- CONCRETE WASHOUT AREA CWA
- SILT FENCE SF
- TEMPORARY SEDIMENT BASIN TSB
- CHECK DAM CD
- STOCKPILE PROTECTION SP
- STABILIZED STAGING AREA SSA
- VEHICLE TRACKING CONTROL VTC
- EROSION CONTROL BLANKET ECB
- SEEDING/MULCHING SM



PREPARED BY:

DREXEL, BARRELL & CO.
 Engineers • Surveyors
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 COLORADO SPGS, COLORADO 80903
 CONTACT: TIM D. MCCONNELL, P.E.
 (719)260-0887
 COLORADO SPRINGS • LAFAYETTE

CLIENT:
 MIDCO INVESTMENTS, LLC
 P.O. BOX 60069
 COLORADO SPRINGS, CO 80960
 CONTACT: ROBERT C. IRWIN
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CONSTRUCTION DOCUMENTS FOR:
HAVEN VALLEY
 (LETA DR.) BRADLEY RD/ALTURAS DR.
 SECURITY, EL PASO COUNTY, COLORADO

ISSUE	DATE
INITIAL ISSUE	3/15/22
LATEST ISSUE	6/10/24
DESIGNED BY:	TDM
DRAWN BY:	GES
CHECKED BY:	TDM
FILE NAME:	21085-03EC02

PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF DREXEL, BARRELL & CO.
 DRAWING SCALE:
 HORIZONTAL: 1" = 50'
 VERTICAL: N/A

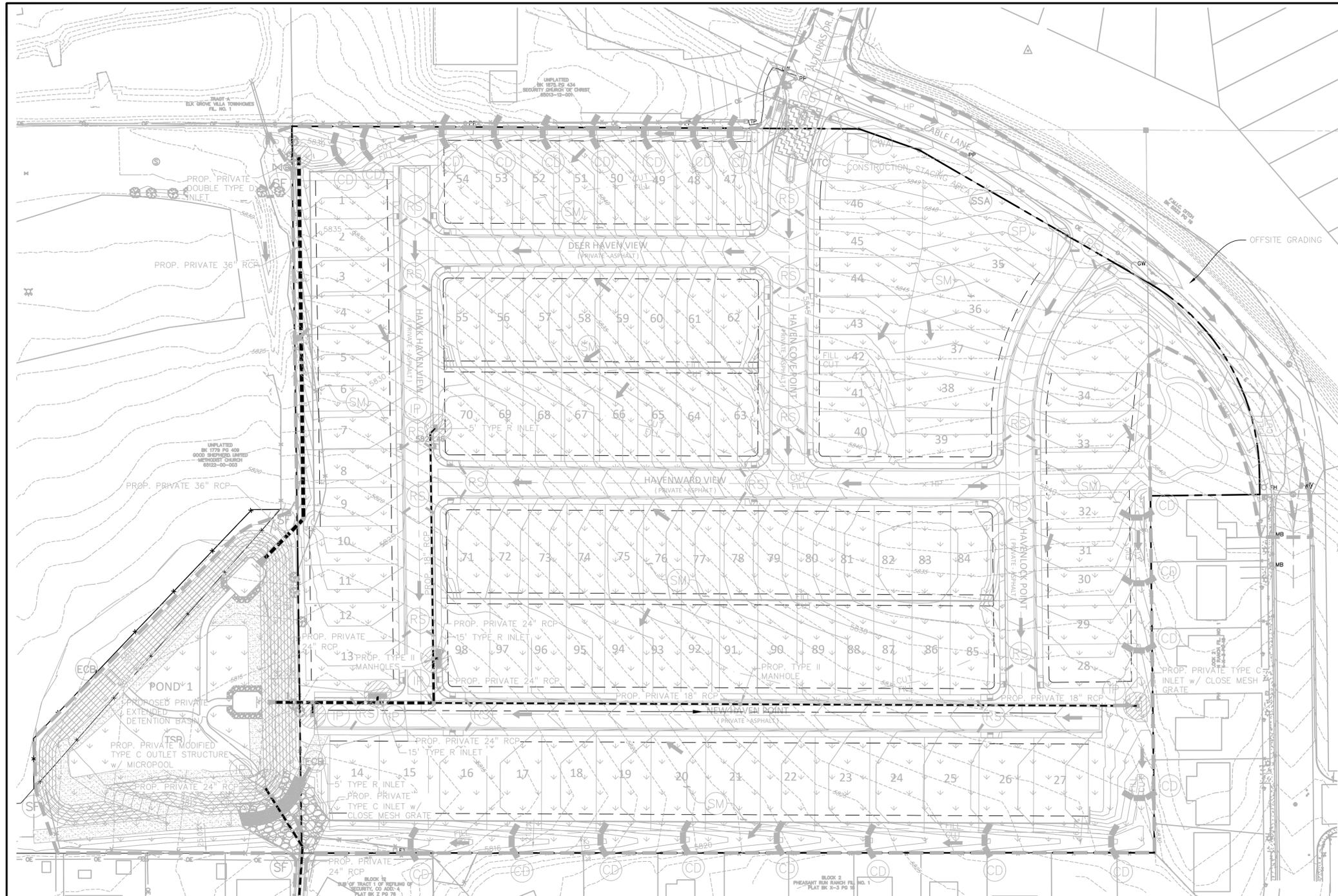
INTERIM GEC PLAN

PROJECT NO. 21085-03CSCV
 DRAWING NO.

EC02

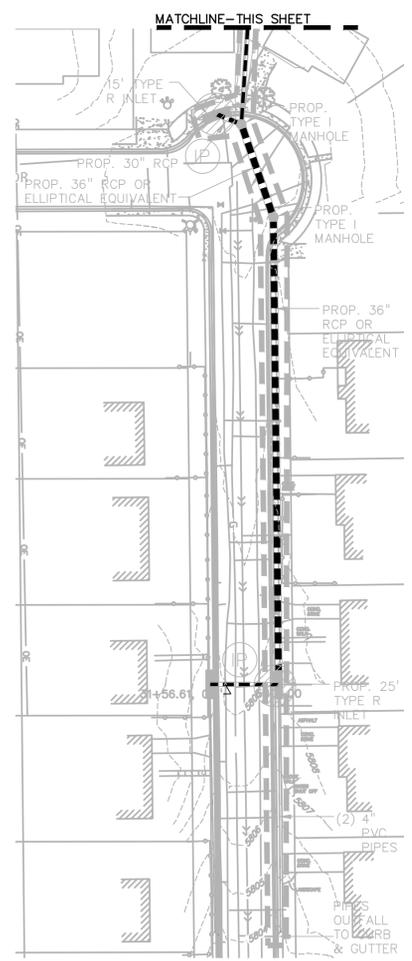
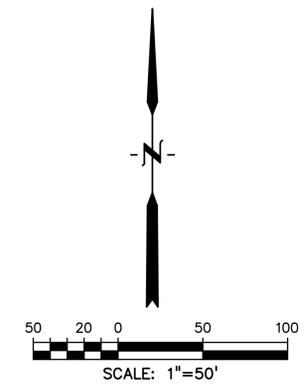
SHEET: 46 OF 52





- NOTES:**
- REFER TO LANDSCAPING PLANS FOR ONSITE VEGETATION
 - REFER TO SWMP FOR NON-STRUCTURAL CONTROL MEASURES.
 - ALL DISTURBED AREAS SHALL BE SEEDED WITHIN 30 DAYS OF DISTURBANCE.
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LEGEND		
PROPOSED INTERMEDIATE CONTOUR 5522	INLET PROTECTION IP	VEHICLE TRACKING CONTROL VTC
PROPOSED INDEX CONTOUR 5520	ROCK SOCKS RS	EROSION CONTROL BLANKET ECB
EX. INTERMEDIATE CONTOUR 5364	CONCRETE WASHOUT AREA CWA	SEEDING/MULCHING SM
EX. INDEX CONTOUR 5365	SILT FENCE SF	
DIRECTION OF FLOW ←	TEMPORARY SEDIMENT BASIN TSB	
HIGH POINT HP	CHECK DAM CD	
LOW POINT LP	STOCKPILE PROTECTION SP	
PROPOSED INLET —	STABILIZED STAGING AREA SSA	
PROPOSED MANHOLE ●		
PROPERTY BOUNDARY - - - - -		
LIMIT OF CONSTRUCTION/DISTURBANCE - - - - -		



811 Know what's below. Call before you dig.
 CALL 3-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

PREPARED BY:

DREXEL, BARRELL & CO.
 Engineers • Surveyors
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 COLORADO SPGS, COLORADO 80903
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 COLORADO SPRINGS, CO 80960
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CONSTRUCTION DOCUMENTS FOR:
HAVEN VALLEY
 (LETA DR.) BRADLEY RD/ALTURAS DR.
 SECURITY, EL PASO COUNTY, COLORADO

ISSUE	DATE
INITIAL ISSUE	3/15/22
LATEST ISSUE	6/10/24
DESIGNED BY:	TDM
DRAWN BY:	SBN
CHECKED BY:	TDM
FILE NAME:	21085-03EC03

PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF DREXEL, BARRELL & CO.
 DRAWING SCALE:
 HORIZONTAL: 1" = 50'
 VERTICAL: N/A

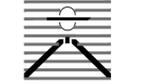
FINAL/VERTICAL GEC PLAN

PROJECT NO. 21085-03CSCV
 DRAWING NO.

EC03

SHEET: 47 OF 52

PREPARED BY:



DREXEL, BARRELL & CO.
Engineers-Surveyors
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CONSTRUCTION DOCUMENTS FOR:

HAVEN VALLEY
(LETA DR.) BRADLEY RD/ALTURAS DR.
SECURITY, EL PASO COUNTY, COLORADO

ISSUE DATE
INITIAL ISSUE 3/15/22
LATEST ISSUE 6/10/24

DESIGNED BY: SBN
DRAWN BY: SBN
CHECKED BY: TDM
FILE NAME: 21085-03ECDT

PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF DREXEL, BARRELL & CO.

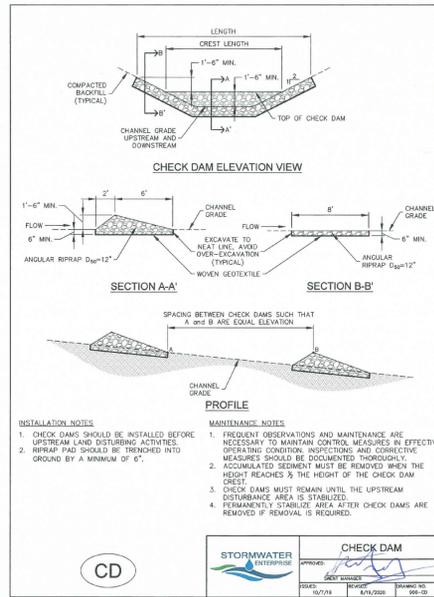
DRAWING SCALE:
HORIZONTAL: N/A
VERTICAL: N/A

EROSION CONTROL DETAILS

PROJECT NO. 21085-03CSCV
DRAWING NO.

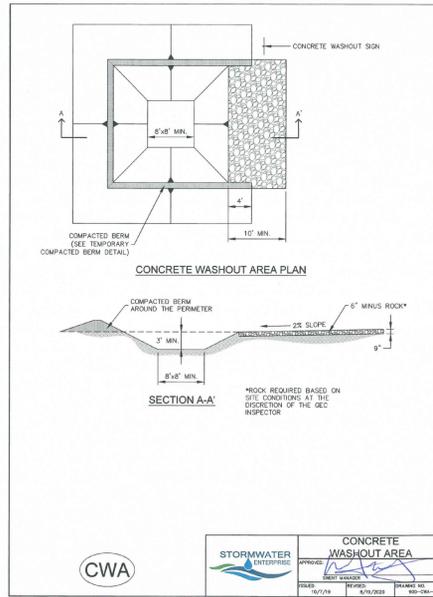
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SHEET: 48 OF 52



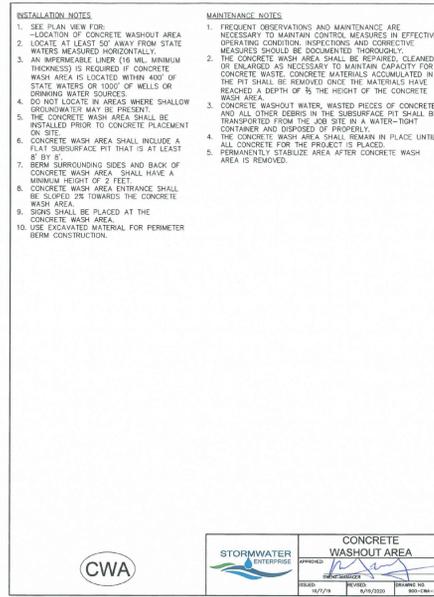
CD

STORMWATER ENTERPRISE logo and signature block for Check Dam.



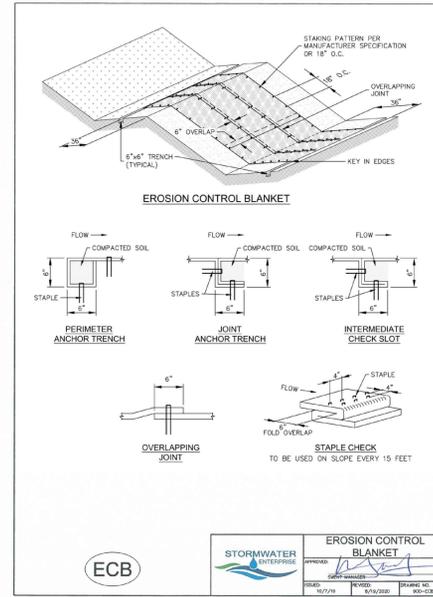
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STORMWATER ENTERPRISE logo and signature block for Concrete Washout Area.



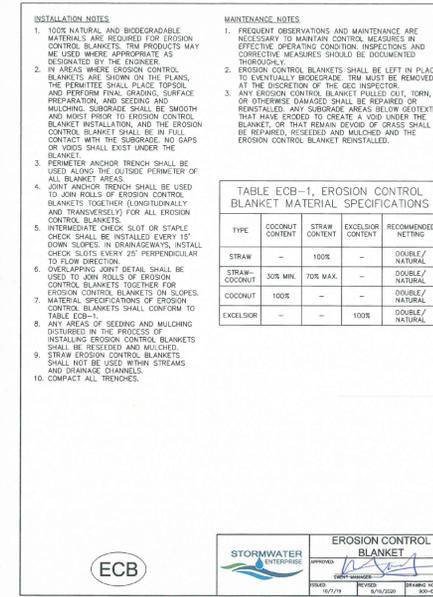
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STORMWATER ENTERPRISE logo and signature block for Concrete Washout Area.



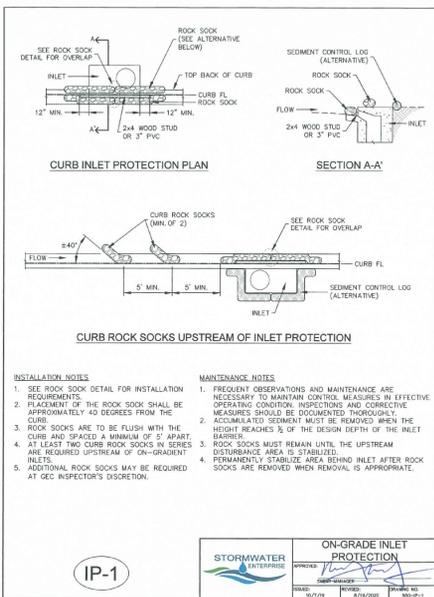
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STORMWATER ENTERPRISE logo and signature block for Erosion Control Blanket.



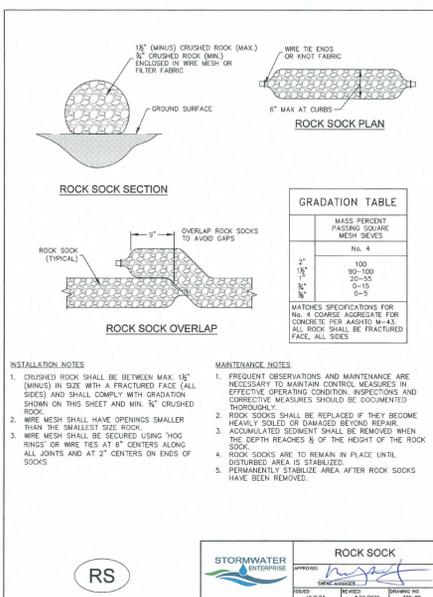
ECB

STORMWATER ENTERPRISE logo and signature block for Erosion Control Blanket.



IP-1

STORMWATER ENTERPRISE logo and signature block for On-Grade Inlet Protection.



RS

STORMWATER ENTERPRISE logo and signature block for Rock Sock.



Know what's below.
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PREPARED BY:

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 Engineers • Surveyors
 101 SAWATCH STREET, #100
 COLORADO SPGS, COLORADO 80903
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CONSTRUCTION DOCUMENTS FOR:

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INITIAL ISSUE	3/15/22
LATEST ISSUE	6/10/24

DESIGNED BY: SBN
 DRAWN BY: SBN
 CHECKED BY: TDM
 FILE NAME: 21085-03ECOT

PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF DREXEL, BARRELL & CO.

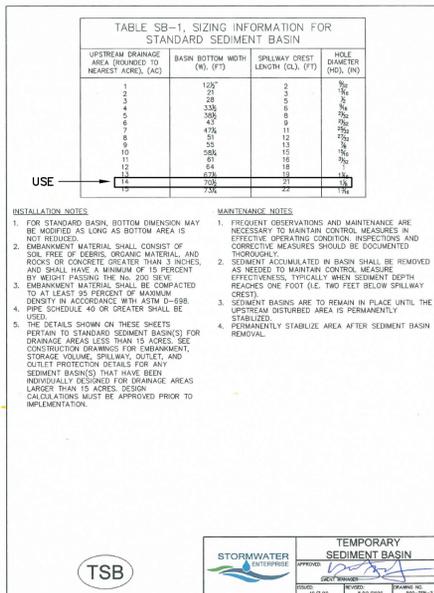
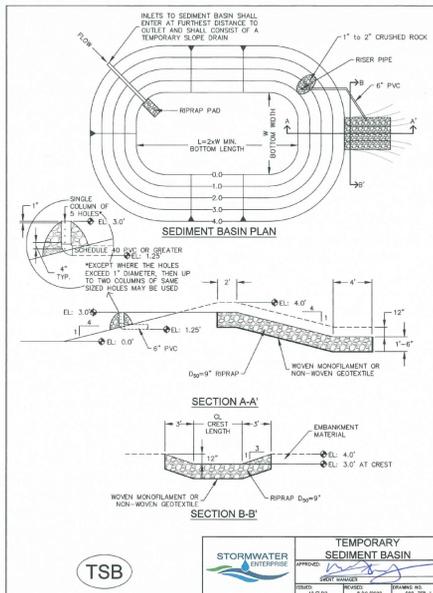
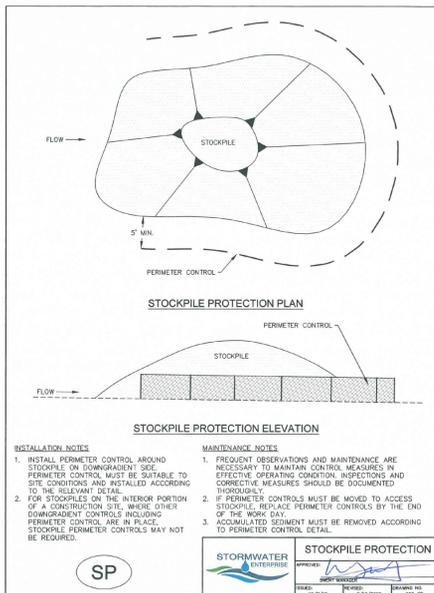
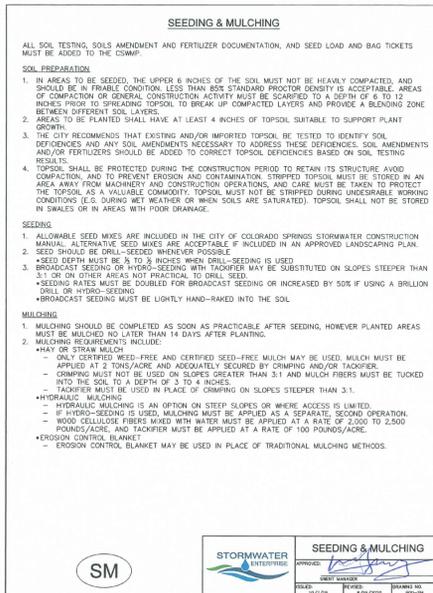
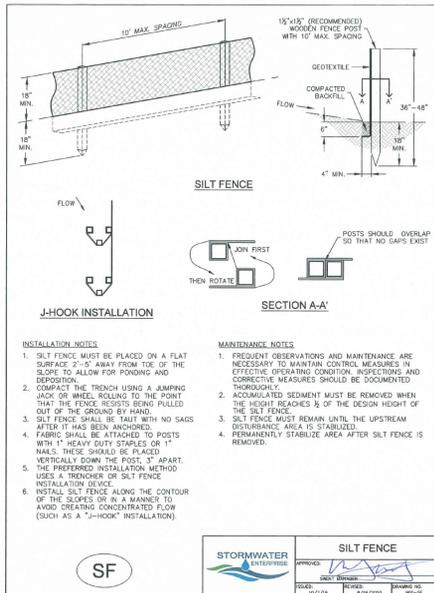
DRAWING SCALE:
 HORIZONTAL: N/A
 VERTICAL: N/A

EROSION CONTROL DETAILS

PROJECT NO. 21085-03CSCV
 DRAWING NO.

ECDT

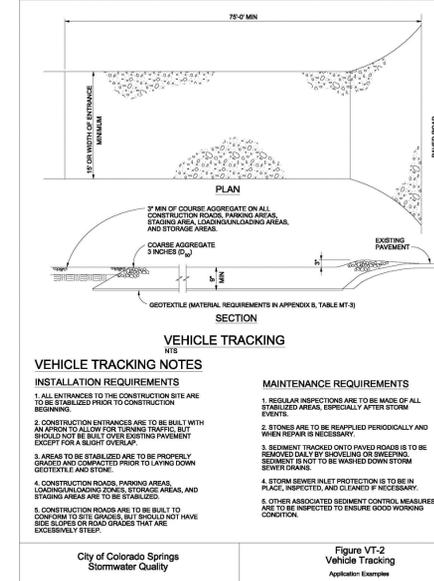
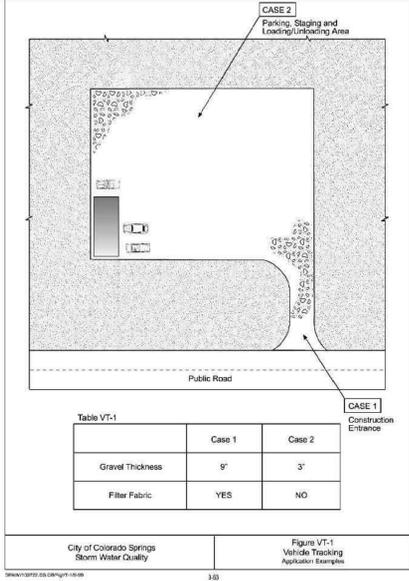
SHEET: 49 OF 52



SHOTGUN NATIVE GRASS SEED MIX

Mixture/Variety

- 20% Western Wheatgrass, Arriba
- 20% Big Bluestem, Kaw
- 10% Switchgrass, Blackwell
- 10% Green Needlegrass, Lodorm
- 10% Sideoats Grama, El Reno
- 10% Little Bluestem, Camper
- 10% Prairie Sandreed, Goshen
- 10% Yellow Indiangrass, Cheyenne



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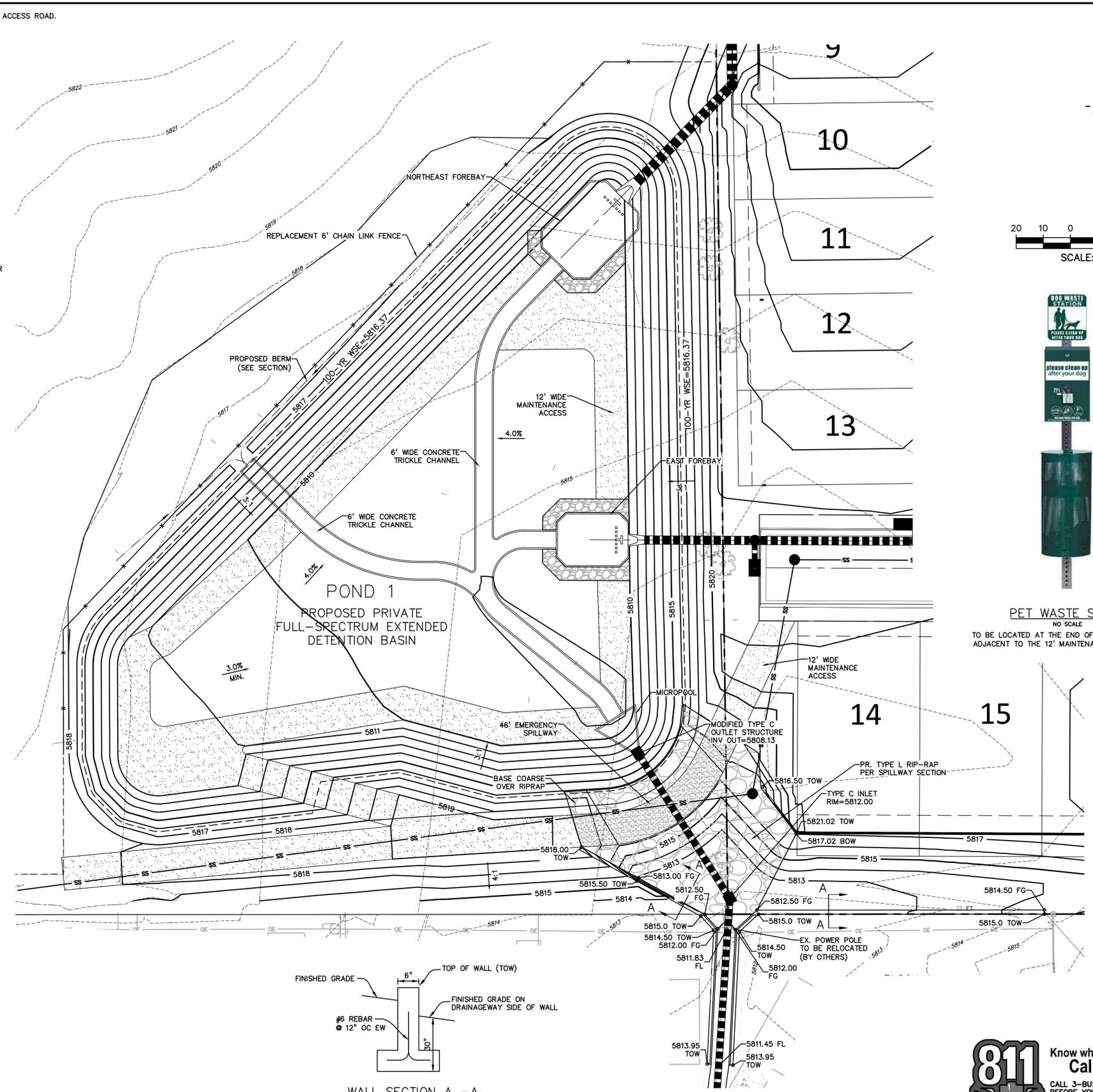
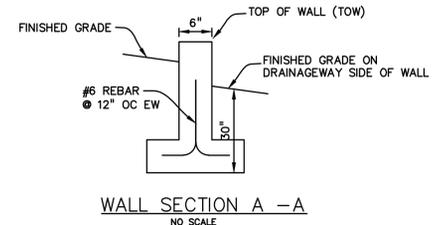
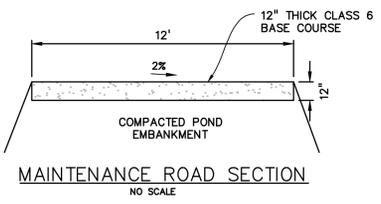
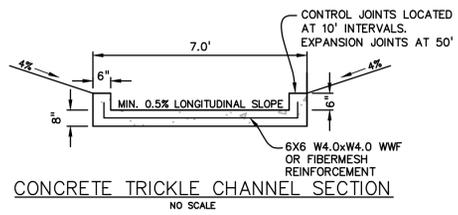
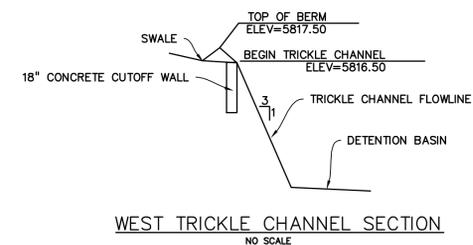
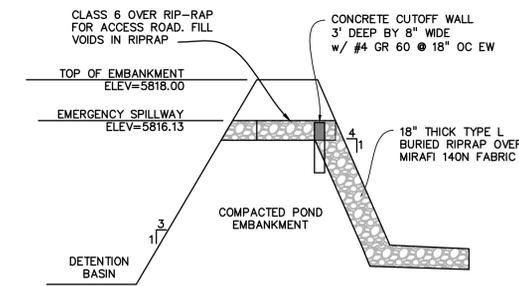
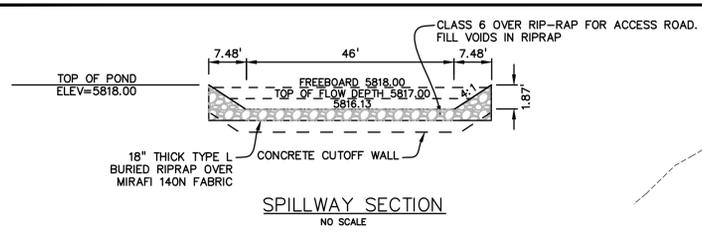
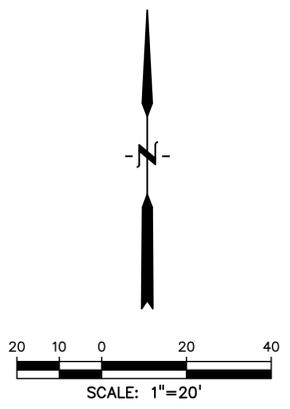
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 (LETA DR.) BRADLEY RD/ALTURAS DR.
 SECURITY, EL PASO COUNTY, COLORADO

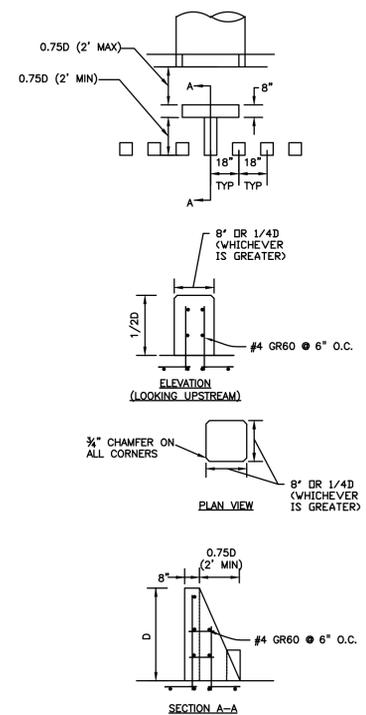
ISSUE	DATE
INITIAL ISSUE	3/15/22
LATEST ISSUE	6/10/24
DESIGNED BY:	TDM
DRAWN BY:	SNB
CHECKED BY:	TDM
FILE NAME:	21085-03PD01

PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF DREXEL, BARRELL & CO.
 DRAWING SCALE:
 HORIZONTAL: 1" = 50'
 VERTICAL: N/A

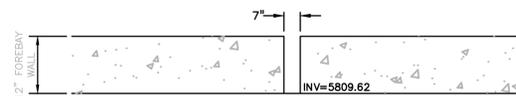
DETENTION POND DETAILS
 PROJECT NO. 21085-03CSCV
 DRAWING NO.

PD01
 SHEET: 50 OF 52

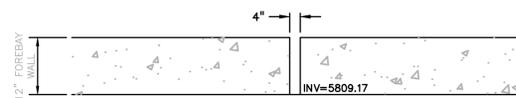




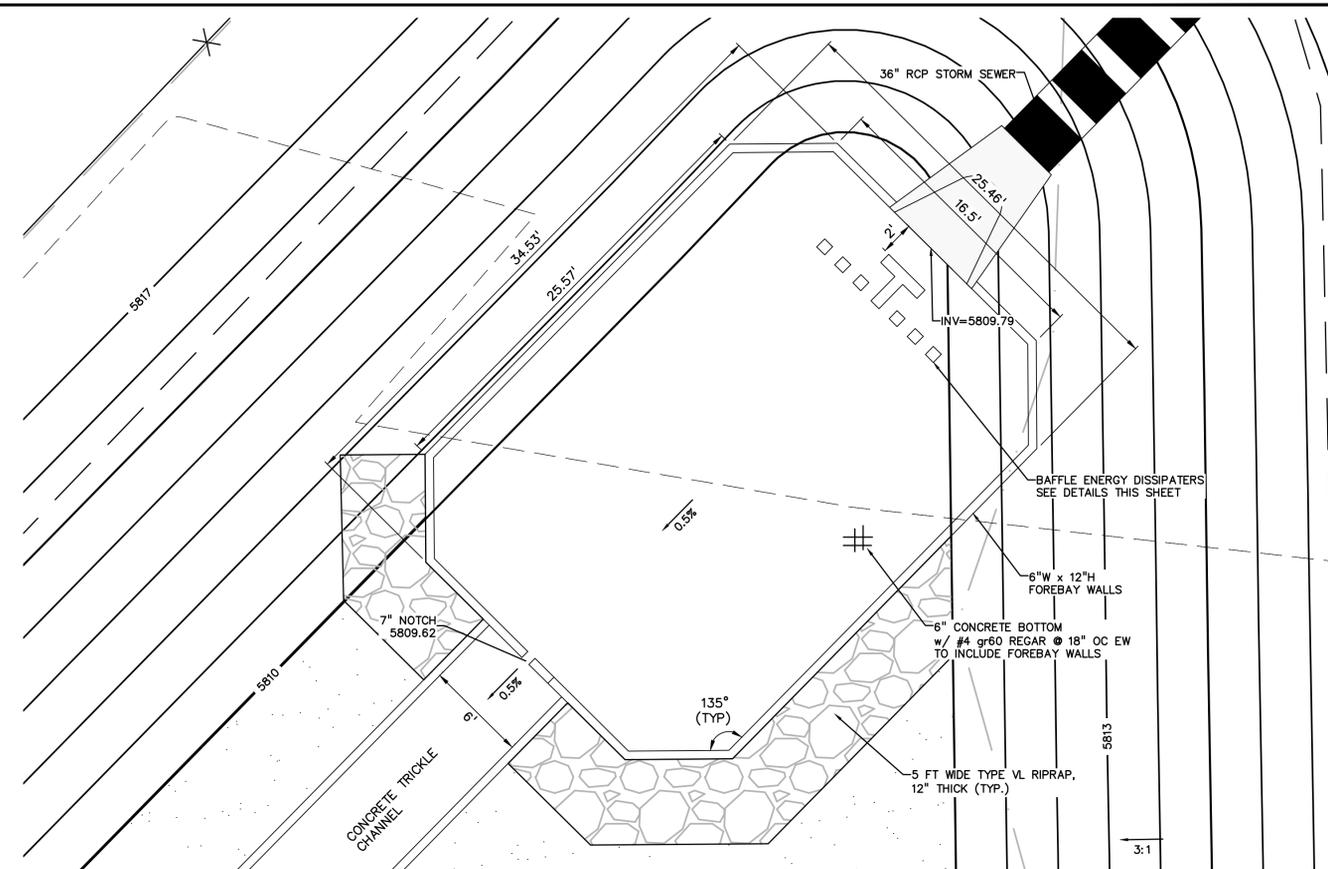
FOREBAY BAFFLE ENERGY DISSIPATORS
NO SCALE



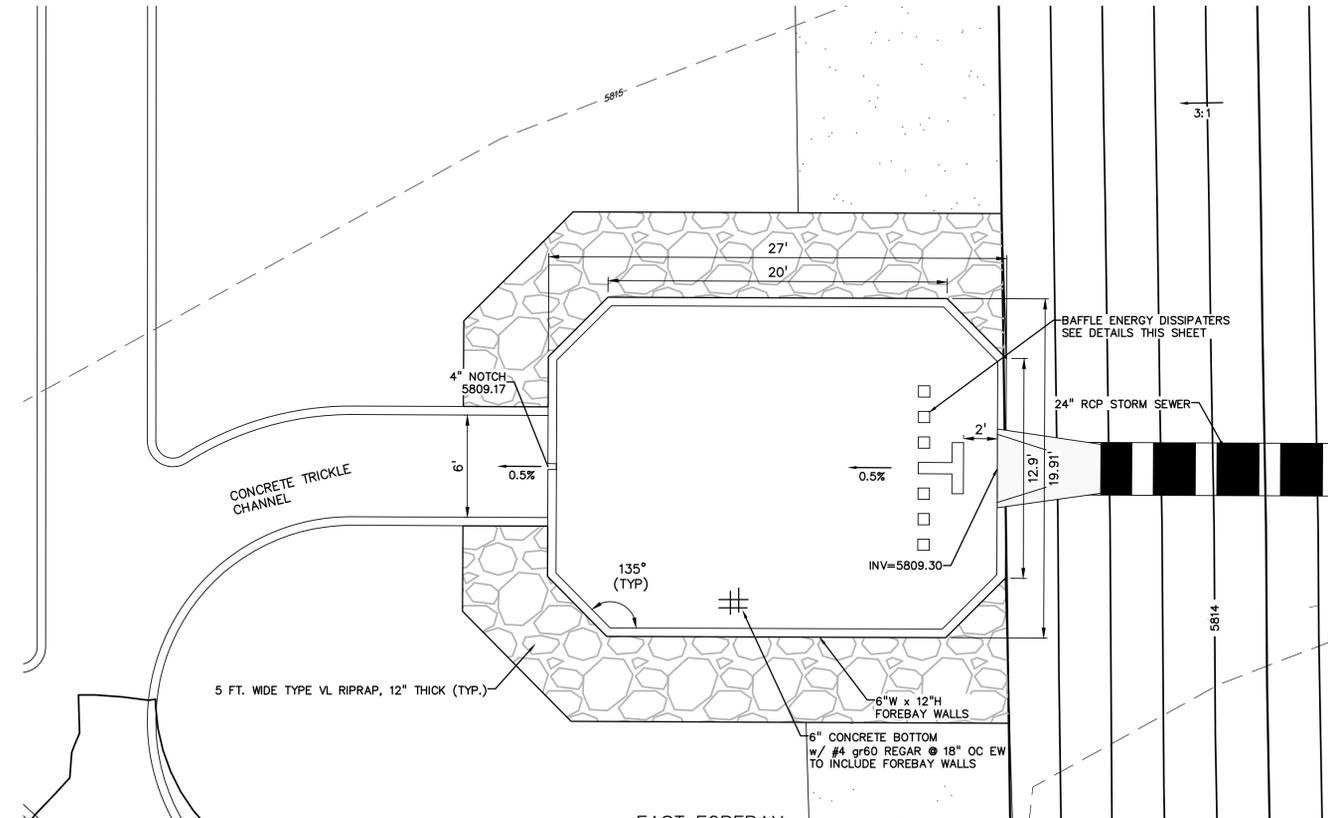
NORTHEAST FOREBAY NOTCH
NO SCALE



EAST FOREBAY NOTCH
NO SCALE



NORTHEAST FOREBAY
1"=5'



EAST FOREBAY
1"=5'

PREPARED BY:

DREXEL, BARRELL & CO.
Engineers • Surveyors
101 SAWATCH STREET, #100
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DRAWN BY:	SBN
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DRAWING SCALE:
HORIZONTAL: 1" = 5'
VERTICAL: N/A

CONCRETE FOREBAY DETAILS
PROJECT NO. 21085-03CSCV
DRAWING NO.

PD02
SHEET: 51 OF 52

