FALCON HIGHLANDS SOUTH FILING 1

PHASE 1

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 13 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO

CONSTRUCTION PLANS

PROPERTY DESCRIPTION – FALCON HIGHLANDS SOUTH FILING NO. 1

A PARCEL OF LAND LOCATED WITHIN SECTION 12, TOWNSHIP 13 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS;

BASIS OF BEARINGS: BEARINGS ARE BASED ON THE WEST LINE OF THE SOUTHWEST ONE–QUARTER OF SECTION 12, TOWNSHIP 13 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, MONUMENTED AT THE SOUTH END (SOUTHWEST CORNER OF SAID SECTION 12) BY A RECOVERED 3–1/4 INCH ALUMINUM CAP STAMPED "AZTEC CONSULTANTS PLS 38256" AND AT THE NORTH END (WEST ONE–QUARTER CORNER OF SAID SECTION 12) BY A RECOVERED 3–1/4" ALUMINUM CAP IN RANGE BOX STAMPED "PLS 4842", WHICH IS ASSUMED TO BEAR N00°23'31"W 2,627.59 FEET, WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO;

COMMENCING AT THE SOUTHEAST CORNER OF FALCON HIGHLANDS FILING NO. 2, RECORDED JULY 14, 2006 IN THE RECORDS OF THE EL PASO COUNTY CLERK AND RECORDER UNDER RECEPTION NUMBER 206712369, FROM WHENCE THE SOUTHWEST CORNER OF SAID SECTION 12 BEARS SOUTH 44°54'43" WEST 1,751.31 FEET;

THENCE ALONG THE EXTERIOR OF SAID FALCON HIGHLANDS FILING NO. 2, THE FOLLOWING (21) TWENTY–ONE COURSES:

1. ALONG THE ARC OF A 1,025.00 FOOT RADIUS NON–TANGENT CURVE TO THE LEFT, HAVING A CENTRAL ANGLE OF 15°14'54", WHOSE CHORD BEARS NORTH 09°47'43" WEST A DISTANCE OF 271.98 FEET, AND AN ARC LENGTH OF 272.79 FEET;
2. NORTH 17°24'20" WEST 554.86 FEET TO A POINT OF CURVE;
3. ALONG THE ARC OF A 1,030 FOOT RADIUS TANGENT CURVE TO THE RIGHT HAVING A CENTRAL ANGLE OF 20°57'59" AND AN ARC LENGTH OF 376.91 FEET;
4. SOUTH 86°13'54" EAST 54.48 FEET;
5. SOUTH 31°51'00" EAST 85.17 FEET;
6. SOUTH 52°36'41" EAST 76.95 FEET;
7. SOUTH 73°19'02" EAST 65.73 FEET;
8. SOUTH 74°06'49" EAST 291.13 FEET;
9. SOUTH 79°13'17" EAST 145.07 FEET;
10. SOUTH 85°23'13" EAST 145.17 FEET;
11. NORTH 88°52'41" EAST 145.19 FEET;
12. NORTH 83°36'10" EAST 131.74 FEET;
13. SOUTH 10°35'23" WEST 114.54 FEET;
14. SOUTH 31°38'08" EAST 124.91 FEET;
15. SOUTH 62°45'04" EAST 116.47 FEET;
16. NORTH 85°18'48" EAST 119.21 FEET;
17. NORTH 46°48'48" EAST 296.18 FEET;
18. NORTH 34°36'03" WEST 203.48 FEET;
19. NORTH 62°18'11" EAST 203.67 FEET;
20. SOUTH 85°51'10" EAST 75.24 FEET;
21. SOUTH 72°16'09" EAST 30.02 FEET TO A POINT ON A NON–TANGENT CURVE TO THE RIGHT;

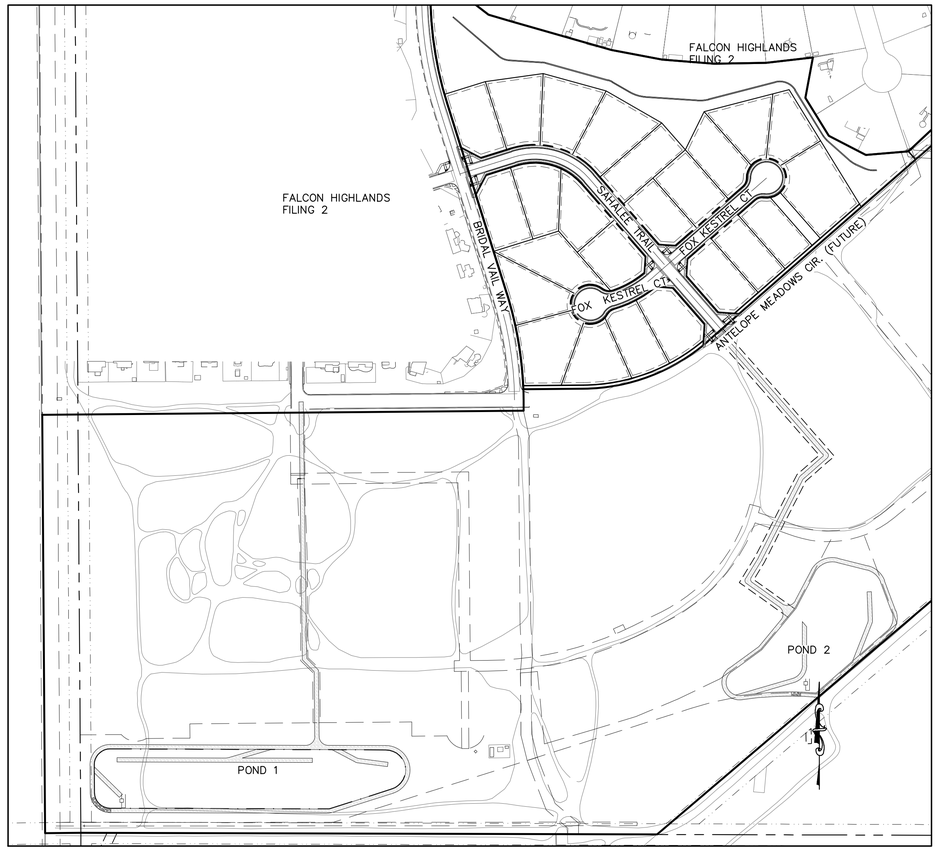
THENCE ALONG THE ARC OF AN 810.00 FOOT RADIUS NON–TANGENT CURVE TO THE RIGHT, HAVING A CENTRAL ANGLE OF 31°06'25", WHOSE CHORD BEARS SOUTH 33°16'42" WEST A DISTANCE OF 434.38 FEET, AND AN ARC LENGTH OF 439.76 FEET;

THENCE SOUTH 48°50'47" WEST 954.89 FEET TO A POINT OF CURVATURE;

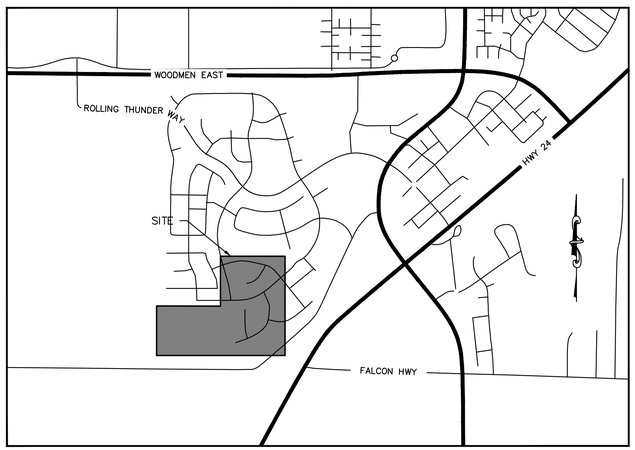
THENCE ALONG THE ARC OF A 535.79 FOOT RADIUS TANGENT CURVE TO THE RIGHT, HAVING A CENTRAL ANGLE OF 38°53'18" AND AN ARC LENGTH OF 363.66 FEET;

THENCE SOUTH 89°30'24" WEST 167.89 FEET TO THE POINT OF BEGINNING.

CONTAINING 20.874 ACRES (909,268 SQUARE FEET), MORE OR LESS.



SITE MAP
SCALE: 1" = 200'



VICINITY MAP
NTS

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NOTE:
"WORK SHALL BE CONSTRUCTED TO EL PASO COUNTY ENGINEERING CRITERIA MANUAL. THIS APPROVAL IS FOR CONFORMANCE TO THE ENGINEERING CRITERIA MANUAL AND OTHER CITY REQUIREMENTS. THE DESIGN AND CONCEPT REMAINS THE RESPONSIBILITY OF THE PROFESSIONAL ENGINEER OR LANDSCAPE PROFESSIONAL."

WATER UTILITY
WOODMEN ROAD METROPOLITAN DISTRICT
8046 EASTONVILLE ROAD
PEYTON, CO 80831
CONTACT: WALKER SCHOOL DISTRICT MANAGERS

WASTEWATER UTILITY
FALCON HIGHLANDS METROPOLITAN DISTRICT
8390 E. CRESCENT PARKWAY
SITE 300
GREENWOOD VILLAGE, CO 80111
CONTACT: CLIFTONALLENLARSON, LLLP

GAS AND ELECTRIC
MOUNTAIN VIEW ELECTRIC ASSOCIATION
11140 E. WOODMEN ROAD
FALCON, CO 80831
(719) 495–2283

FALCON FIRE PROTECTION DISTRICT:
7030 OLD MERIDIAN ROAD
PEYTON, CO 80831
(719) 495–4050

APPLICANT
CHALLENGER HOMES
8605 EXPLORER DRIVE
SITE 250
COLORADO SPRINGS, CO 80920
CONTACT: JIM BYERS

OWNERS:
CHALLENGER HOMES
8605 EXPLORER DRIVE
SITE 250
COLORADO SPRINGS, CO 80920
CONTACT: JIM BYERS

CIVIL ENGINEER:
ATWELL, LLC
6200 SOUTH SYRACUSE WAY,
SUITE 125
GREENWOOD VILLAGE, CO 80111
(303) 462–1100
CONTACT: DANIEL MADRUGA

SURVEYOR OF RECORD:
ATWELL, LLC
6200 SOUTH SYRACUSE WAY,
SUITE 125
GREENWOOD VILLAGE, CO 80111
(303) 462–1100
CONTACT: CHRISTOPHER DUDA

LANDSCAPE ARCHITECT:
MATRIX
2435 RESEARCH PKWY
STE 300
COLORADO SPRINGS, CO 80920
(719) 575–0100
CONTACT: ANDREA PAPIERSKI

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT–OF–WAY
- EXISTING RIGHT–OF–WAY
- PROPOSED LOT LINE
- EXISTING LOT LINE
- PROPOSED CATCH CURB & GUTTER
- PROPOSED SPILL CURB & GUTTER
- EXISTING CURB & GUTTER
- PROPOSED SIDEWALK
- EXISTING SIDEWALK
- EXISTING SECTION LINE
- PROPOSED EASEMENT
- EXISTING EASEMENT
- PROPOSED CONTOURS
- EXISTING CONTOURS
- PROPOSED SANITARY
- EXISTING SANITARY
- PROPOSED SANITARY SERVICE
- PROPOSED STORM
- EXISTING STORM
- PROPOSED WATER
- EXISTING WATER
- PROPOSED WATER SERVICE
- PROPOSED HYDRANT
- EXISTING HYDRANT
- PROPOSED WATER VALVE

DESIGN ENGINEER'S STATEMENT:

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED ROADWAY, DRAINAGE, GRADING AND EROSION CONTROL PLANS AND SPECIFICATIONS, AND SAID PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH APPLICABLE MASTER DRAINAGE PLANS AND MASTER TRANSPORTATION PLANS. SAID PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR ROADWAY AND DRAINAGE FACILITIES ARE DESIGNED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARATION OF THESE DETAILED PLANS AND SPECIFICATIONS.

_____ _____
DANIEL MADRUGA, P.E. DATE

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.

_____ _____
JIM BYERS, VP OF COMMUNITY DEVELOPMENT DATE
CHALLENGER HOMES
8605 EXPLORER DRIVE, SUITE 250
COLORADO SPRINGS, CO 80920

OWNER'S STATEMENT (FOR GEC PLAN WITHIN CONSTRUCTION DRAWING SET):

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

_____ _____
JIM BYERS,VP OF COMMUNITY DEVELOPMENT DATE
CHALLENGER HOMES
8605 EXPLORER DRIVE, SUITE 250
COLORADO SPRINGS, CO 80920

EL PASO COUNTY:

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

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

_____ _____
JOSHUA PALMER, P.E. DATE
COUNTY ENGINEER / ECM ADMINISTRATOR

EL PASO COUNTY GEC PLANS:

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED ROADWAY, DRAINAGE, GRADING AND EROSION CONTROL PLANS AND SPECIFICATIONS, AND SAID PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH APPLICABLE MASTER DRAINAGE PLANS AND MASTER TRANSPORTATION PLANS. SAID PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR ROADWAY AND DRAINAGE FACILITIES ARE DESIGNED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARATION OF THESE DETAILED PLANS AND SPECIFICATIONS.

DocuSigned by: 07/16/2026
_____ _____
DANIEL MADRUGA, P.E. DATE

BLACK FOREST FIRE PROTECTION DISTRICT

ALL FIRE HYDRANTS SHALL BE INSTALLED ACCORDING TO THE BLACK FOREST FIRE PROTECTION DISTRICT SPECIFICATIONS. THE NUMBER OF FIRE HYDRANTS AND HYDRANT LOCATIONS AS SHOWN ON THIS WATER INSTALLATION PLAN ARE CORRECT AND ADEQUATE TO SATISFY THE FIRE PROTECTION REQUIREMENTS AS SPECIFIED BY THE TRI–LAKES MONUMENT FIRE PROTECTION DISTRICT:

_____ _____
FOR AND ON BEHALF OF BLACK FOREST FIRE PROTECTION DISTRICT DATE

ENGINEER APPROVAL

THE FALCON ARE WATER AND WASTEWATER AUTHORITY RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN AND HAS LIMITED ITS SCOPE OF REVIEW ACCORDINGLY.

FALCON HIGHLANDS METROPOLITAN DISTRICT

DATE: _____ _____ BY: _____

PROJECT NO._____

IN CASE OF ERRORS OR OMISSIONS WITH THE WATER AND/OR WASTEWATER DESIGN AS SHOWN ON THIS DOCUMENT THE STANDARDS AS DEFINED IN THE "GENERAL NOTES" SHALL RULE.

BENCHMARK:
ELEVATIONS ARE BASED UPON SW COR SEC. 12, T13S, R65W, 6TH PM, FND. 3.25" ALUM. CAP.
(ELEVATION: 6810.43=NAVD88).

BASIS OF BEARINGS:
BEARINGS ARE BASED UPON THE WEST LINE OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 13 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, MONUMENTED AT THE SOUTH END BY A FOUND3–1/4" ALUMINUM CAP STAMPED "AZTEC CONSULTANTS PLS 38256" AND AT THE NORTH END BY A FOUND 3–1/4" ALUMINUM CAP STAMPED "PLS 4842".

Know what's below. Call before you dig.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE:
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR; NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

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303.462.1100

CHALLENGER HOMES
8605 EXPLORER DRIVE
SUITE 250 CO 80920
COLORADO SPRINGS,
719-598-5192
JIM BYERS

CLIENT
CHALLENGER HOMES
FALCON HIGHLANDS SOUTH – FILING 1
EL PASO COUNTY, COLORADO
CONSTRUCTION PLANS
COVER SHEET

DATE 5/30/2025

A	1st SUBMITTAL TO JURISDICTION 07/12/2024 – KB
B	2nd SUBMITTAL TO JURISDICTION 01/08/2025 – KB
C	3rd SUBMITTAL TO JURISDICTION 04/15/2025 – KB
D	4th SUBMITTAL TO JURISDICTION 06/02/2025 – DM
E	5th SUBMITTAL TO JURISDICTION 08/01/2025 – DM
F	6th SUBMITTAL TO JURISDICTION 09/08/2025 – DM

REVISIONS

REGISTERED PROFESSIONAL ENGINEER
DANIEL MADRUGA
No. 36834
07/15/26

COUNTY FILE NO.: SF2418

DR. TN CH. LS
P.M. KB
JOB 24004308
SHEET NO. 01

CAD FILE: 24004308-COVR.DWG

GENERAL NOTES:

1. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF PUBLIC IMPROVEMENTS SHALL MEET OR EXCEED THE STANDARDS AND SPECIFICATIONS SET FORTH IN THE **EL PASO COUNTY ENGINEERING CRITERIA MANUAL** AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS CONFLICT BETWEEN THESE PLANS AND THE SPECIFICATIONS, OR ANY APPLICABLE STANDARDS, THE MOST RESTRICTIVE STANDARD SHALL APPLY. ALL WORK SHALL BE INSPECTED AND APPROVED BY THE LOCAL ENTITY.

2. ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARD, UNLESS SPECIFICALLY STATED OTHERWISE.

3. THESE PUBLIC IMPROVEMENT CONSTRUCTION PLANS SHALL BE VALID FOR A PERIOD OF THREE YEARS FROM THE DATE OF APPROVAL BY THE LOCAL ENTITY ENGINEER. USE OF THESE PLANS AFTER THE EXPIRATION DATE WILL REQUIRE A NEW REVIEW AND APPROVAL PROCESS BY THE LOCAL ENTITY PRIOR TO COMMENCEMENT OF ANY WORK SHOWN IN THESE PLANS.

4. THE ENGINEER WHO HAS PREPARED THESE PLANS, BY EXECUTION AND/OR SEAL HEREOF, DOES HEREBY AFFIRM RESPONSIBILITY TO THE LOCAL ENTITY, AS BENEFICIARY OF SAID ENGINEER'S WORK, FOR ERRORS AND OMISSIONS CONTAINED IN THESE PLANS, AND APPROVAL OF THESE PLANS BY THE LOCAL ENTITY ENGINEER SHALL NOT RELIEVE THE ENGINEER WHO HAS PREPARED THESE PLANS OF ALL SUCH RESPONSIBILITY. FURTHER, TO THE EXTENT PERMITTED BY LAW, THE ENGINEER HEREBY AGREES TO HOLD HARMLESS AND INDEMNIFY THE LOCAL ENTITY, AND ITS OFFICERS AND EMPLOYEES, FROM AND AGAINST ALL LIABILITIES, CLAIMS, AND DEMANDS WHICH MAY ARISE FROM ANY ERRORS AND OMISSIONS CONTAINED IN THESE PLANS.

5. ALL SANITARY SEWER, STORM SEWER, AND WATER LINE CONSTRUCTION, AS WELL AS POWER AND OTHER 'DRY' UTILITY INSTALLATIONS, SHALL CONFORM TO THE LOCAL ENTITY STANDARDS AND SPECIFICATIONS CURRENT AT THE DATE OF APPROVAL OF THE PLANS BY THE LOCAL ENTITY ENGINEER.

6. THE TYPE, SIZE, LOCATION AND NUMBER OF ALL KNOWN UNDERGROUND UTILITIES ARE APPROXIMATE WHEN SHOWN ON THE DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ALONG THE ROUTE OF THE WORK BEFORE COMMENCING NEW CONSTRUCTION. THE DEVELOPER SHALL BE RESPONSIBLE FOR UNKNOWN UNDERGROUND UTILITIES.

7. THE ENGINEER SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT 1-800-922-1987, AT LEAST 2 WORKING DAYS PRIOR TO BEGINNING EXCAVATION OR GRADING, TO HAVE ALL REGISTERED UTILITY LOCATIONS MARKED. ALL OTHER UNREGISTERED UTILITY ENTITIES (I.E. DITCH / IRRIGATION COMPANY) ARE TO BE LOCATED BY CONTACTING THE RESPECTIVE REPRESENTATIVE. UTILITY SERVICE LATERALS ARE ALSO TO BE LOCATED PRIOR TO BEGINNING EXCAVATION OR GRADING. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO RELOCATE ALL EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.

8. THE DEVELOPER SHALL BE RESPONSIBLE FOR PROTECTING ALL UTILITIES DURING CONSTRUCTION AND FOR COORDINATING WITH THE APPROPRIATE UTILITY COMPANY FOR ANY UTILITY CROSSINGS REQUIRED.

9. IF A CONFLICT EXISTS BETWEEN EXISTING AND PROPOSED UTILITIES AND/OR A DESIGN MODIFICATION IS REQUIRED, THE DEVELOPER SHALL COORDINATE WITH THE ENGINEER TO MODIFY THE DESIGN. DESIGN MODIFICATION(S) MUST BE APPROVED BY THE LOCAL ENTITY PRIOR TO BEGINNING CONSTRUCTION.

10. THE DEVELOPER SHALL COORDINATE AND COOPERATE WITH THE LOCAL ENTITY, AND ALL UTILITY COMPANIES INVOLVED, TO ASSURE THAT THE WORK IS ACCOMPLISHED IN A TIMELY FASHION AND WITH A MINIMUM DISRUPTION OF SERVICE. THE DEVELOPER SHALL BE RESPONSIBLE FOR CONTACTING, IN ADVANCE, ALL PARTIES AFFECTED BY ANY DISRUPTION OF ANY UTILITY SERVICE AS WELL AS THE UTILITY COMPANIES.

11. NO WORK MAY COMMENCE WITHIN ANY PUBLIC STORM WATER, SANITARY SEWER OR POTABLE WATER SYSTEM UNTIL THE DEVELOPER NOTIFIES THE UTILITY PROVIDER. NOTIFICATION SHALL BE A MINIMUM OF 2 WORKING DAYS PRIOR TO COMMENCEMENT OF ANY WORK. AT THE DISCRETION OF THE WATER UTILITY PROVIDER, A PRE-CONSTRUCTION MEETING MAY BE REQUIRED PRIOR TO COMMENCEMENT OF ANY WORK.

12. THE DEVELOPER SHALL SEQUENCE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO MINIMIZE POTENTIAL UTILITY CONFLICTS. IN GENERAL, STORM SEWER AND SANITARY SEWER SHOULD BE CONSTRUCTED PRIOR TO INSTALLATION OF THE WATER LINES AND DRY UTILITIES.

13. THE MINIMUM COVER OVER WATER LINES IS 5.5 FEET FEET UNLESS OTHERWISE NOTED IN THE PLANS AND APPROVED BY THE WATER UTILITY.

14. A STATE CONSTRUCTION DEWATERING WASTEWATER DISCHARGE PERMIT IS REQUIRED IF DEWATERING IS REQUIRED IN ORDER TO INSTALL UTILITIES OR IF IT IS DISCHARGED INTO A STORM SEWER, CHANNEL, IRRIGATION DITCH OR ANY WATERS OF THE UNITED STATES.

15. THE DEVELOPER SHALL COMPLY WITH ALL TERMS AND CONDITIONS OF THE COLORADO PERMIT FOR STORM WATER DISCHARGE (CONTACT COLORADO DEPARTMENT OF HEALTH, WATER QUALITY CONTROL DIVISION, (303) 692-3590), THE STORM WATER MANAGEMENT PLAN, AND THE EROSION CONTROL PLAN.

16. THE LOCAL ENTITY SHALL NOT BE RESPONSIBLE FOR THE MAINTENANCE OF STORM DRAINAGE FACILITIES LOCATED ON PRIVATE PROPERTY. MAINTENANCE OF ONSITE DRAINAGE FACILITIES SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER(S).

17. PRIOR TO FINAL INSPECTION AND ACCEPTANCE BY THE LOCAL ENTITY, CERTIFICATION OF THE DRAINAGE FACILITIES BY A REGISTERED ENGINEER, MUST BE SUBMITTED TO AND APPROVED BY THE STONNWATER UTILITY DEPARTMENT. CERTIFICATION SHALL BE SUBMITTED TO THE STORMWATER UTILITY DEPARTMENT AT LEAST TWO WEEKS PRIOR TO THE RELEASE OF A CERTIFICATE OF OCCUPANCY FOR SINGLE FAMILY UNITS. FOR COMMERCIAL PROPERTIES, CERTIFICATION SHALL BE SUBMITTED TO THE STORMWATER UTILITY DEPARTMENT AT LEAST TWO WEEKS PRIOR TO THE RELEASE OF ANY BUILDING PERMITS IN EXCESS OF THOSE ALLOWED PRIOR TO CERTIFICATION PER THE DEVELOPMENT AGREEMENT.

18. THE LOCAL ENTITY SHALL NOT BE RESPONSIBLE FOR ANY DAMAGES OR INJURIES SUSTAINED IN THIS DEVELOPMENT AS A RESULT OF GROUNDWATER SEEPAGE, WHETHER RESULTING FROM GROUNDWATER, STRUCTURAL DAMAGE OR OTHER DAMAGE UNLESS SUCH DAMAGE OR INJURIES ARE SUSTAINED AS A RESULT OF THE LOCAL ENTITY FAILURE TO PROPERLY MAINTAIN ITS WATER, WASTEWATER, AND/OR STORM DRAINAGE FACILITIES IN THE DEVELOPMENT.

19. ALL RECOMMENDATIONS OF THE FINAL DRAINAGE REPORT AND EROSION CONTROL STUDY BY ATWELL, LLC SHALL BE FOLLOWED AND IMPLEMENTED.

20. TEMPORARY EROSION CONTROL DURING CONSTRUCTION SHALL BE PROVIDED AS SHOWN ON THE EROSION CONTROL PLAN. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BY THE DEVELOPER, UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREAS IS STABILIZED WITH HARD SURFACE OR LANDSCAPING.

21. THE DEVELOPER SHALL BE RESPONSIBLE FOR INSURING THAT NO MUD OR DEBRIS SHALL BE TRACKED ONTO THE EXISTING PUBLIC STREET SYSTEM. MUD AND DEBRIS MUST BE REMOVED WITHIN 24 HOURS BY AN APPROPRIATE MECHANICAL METHOD (I.E. MACHINE BROOM SWEEP, LIGHT DUTY FRONT-END LOADER, ETC.) OR AS APPROVED BY THE LOCAL ENTITY STREET INSPECTOR.

22. NO WORK MAY COMMENCE WITHIN ANY IMPROVED OR UNIMPROVED PUBLIC RIGHT-OF-WAY UNTIL A RIGHT-OF-WAY PERMIT OR DEVELOPMENT CONSTRUCTION PERMIT IS OBTAINED, IF APPLICABLE.

23. THE DEVELOPER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FOR ALL APPLICABLE AGENCIES PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE DEVELOPER SHALL NOTIFY THE LOCAL ENTITY ENGINEERING INSPECTOR **(EL PASO COUNTY)** AND THE LOCAL ENTITY EROSION CONTROL INSPECTOR **(EL PASO COUNTY)** AT LEAST 2 WORKING DAYS PRIOR TO THE START OF ANY EARTH DISTURBING ACTIVITY, OR CONSTRUCTION ON ANY AND ALL PUBLIC IMPROVEMENTS. IF THE LOCAL ENTITY ENGINEER IS NOT AVAILABLE AFTER PROPER NOTICE OF CONSTRUCTION ACTIVITY HAS BEEN PROVIDED, THE DEVELOPER MAY COMMENCE WORK IN THE ENGINEER ABSENCE. HOWEVER, THE LOCAL ENTITY RESERVES THE RIGHT NOT TO ACCEPT THE IMPROVEMENT IF SUBSEQUENT TESTING REVEALS AN IMPROPER INSTALLATION.

24. THE DEVELOPER SHALL BE RESPONSIBLE FOR OBTAINING SOILS TESTS WITHIN THE PUBLIC RIGHT-OF-WAY AFTER RIGHT OF WAY GRADING AND ALL UTILITY TRENCH WORK IS COMPLETE AND PRIOR TO THE PLACEMENT OF CURB, GUTTER, SIDEWALK AND PAVEMENT. IF THE FINAL SOILS/PAVEMENT DESIGN REPORT DOES NOT CORRESPOND WITH THE RESULTS OF THE ORIGINAL GEOTECHNICAL REPORT, THE DEVELOPER SHALL BE RESPONSIBLE FOR A RE-DESIGN OF THE SUBJECT PAVEMENT SECTION OR, THE DEVELOPER MAY USE THE LOCAL ENTITY'S DEFAULT PAVEMENT THICKNESS SECTION(S). REGARDLESS OF THE OPTION USED, ALL FINAL SOILS/PAVEMENT DESIGN REPORTS SHALL BE PREPARED BY A LICENSED PROFESSIONAL ENGINEER. THE FINAL REPORT SHALL BE SUBMITTED TO THE INSPECTOR A MINIMUM OF 10 WORKING DAYS PRIOR TO PLACEMENT OF BASE AND ASPHALT. PLACEMENT OF CURB, GUTTER, SIDEWALK, BASE AND ASPHALT SHALL NOT OCCUR UNTIL THE LOCAL ENTITY ENGINEER APPROVES THE FINAL REPORT.

25. THE CONTRACTOR SHALL HIRE A LICENSED ENGINEER OR LAND SURVEYOR TO SURVEY THE CONSTRUCTED ELEVATIONS OF THE STREET SUBGRADE AND THE GUTTER FLOWLINE AT ALL INTERSECTIONS, KNUCKLES, AND OTHER LOCATIONS REQUESTED BY THE LOCAL ENTITY INSPECTOR. THE ENGINEER OR SURVEYOR MUST CERTIFY IN A LETTER TO THE LOCAL ENTITY THAT THESE ELEVATIONS CONFORM TO THE APPROVED PLANS AND SPECIFICATIONS. ANY DEVIATIONS SHALL BE NOTED IN THE LETTER AND THEN RESOLVED WITH THE LOCAL ENTITY BEFORE INSTALLATION OF BASE COURSE OR ASPHALT WILL BE ALLOWED ON THE STREETS.

26. ALL UTILITY INSTALLATIONS WITHIN OR ACROSS THE ROADBED OF NEW RESIDENTIAL ROADS MUST BE COMPLETED PRIOR TO THE FINAL STAGES OF ROAD CONSTRUCTION. FOR THE PURPOSES OF THESE STANDARDS, ANY WORK EXCEPT C/G ABOVE THE SUBGRADE IS CONSIDERED FINAL STAGE WORK. ALL SERVICE LINES MUST BE STUBBED TO THE PROPERTY LINES AND MARKED SO AS TO REDUCE THE EXCAVATION NECESSARY FOR BUILDING CONNECTIONS.

27. ALL ROAD CONSTRUCTION IN AREAS DESIGNATED AS WILD FIRE HAZARD AREAS SHALL BE DONE IN ACCORDANCE WITH THE CONSTRUCTION CRITERIA AS ESTABLISHED IN THE WILD FIRE HAZARD AREA MITIGATION REGULATIONS IN FORCE AT THE TIME OF FINAL PLAT APPROVAL.

28. PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE LOCAL ENTITY FORESTER TO SCHEDULE A SITE INSPECTION FOR ANY TREE REMOVAL REQUIRING A PERMIT.

29. THE DEVELOPER SHALL BE RESPONSIBLE FOR ALL ASPECTS OF SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY. REFER TO OSHA PUBLICATION 2226, EXCAVATING AND TRENCHING.

30. THE DEVELOPER SHALL SUBMIT A CONSTRUCTION TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH MUTCD, TO THE APPROPRIATE RIGHT-OF-WAY AUTHORITY. (LOCAL ENTITY, COUNTY OR STATE), FOR APPROVAL, PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN, OR AFFECTING, THE RIGHT-OF-WAY. THE DEVELOPER SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY THE CONSTRUCTION ACTIVITIES.

31. PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION THAT WILL AFFECT TRAFFIC SIGNS OF ANY TYPE, THE CONTRACTOR SHALL CONTACT LOCAL ENTITY TRAFFIC OPERATIONS DEPARTMENT, WHO WILL TEMPORARILY REMOVE OR RELOCATE THE SIGN AT NO COST TO THE CONTRACTOR; HOWEVER, IF THE CONTRACTOR MOVES THE TRAFFIC SIGN THEN THE CONTRACTOR WILL BE CHARGED FOR THE LABOR, MATERIALS AND EQUIPMENT TO REINSTALL THE SIGN AS NEEDED.

32. THE DEVELOPER IS RESPONSIBLE FOR ALL COSTS FOR THE INITIAL INSTALLATION OF TRAFFIC SIGNING AND STRIPING FOR THE DEVELOPMENT RELATED TO THE DEVELOPMENT'S LOCAL STREET OPERATIONS. IN ADDITION, THE DEVELOPER IS RESPONSIBLE FOR ALL COSTS FOR TRAFFIC SIGNING AND STRIPING RELATED TO DIRECTING TRAFFIC ACCESS TO AND FROM THE DEVELOPMENT.

33. THERE SHALL BE NO SITE CONSTRUCTION ACTIVITIES ON SUNDAYS OR HOLIDAYS, UNLESS THERE IS PRIOR WRITTEN APPROVAL BY THE LOCAL ENTITY.

34. THE DEVELOPER IS RESPONSIBLE FOR PROVIDING ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS, SHOWN ON THESE DRAWINGS, OR DESIGNATED TO BE PROVIDED, INSTALLED, OR CONSTRUCTED, UNLESS SPECIFICALLY NOTED OTHERWISE.

35. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE DESIGNER FOR CLARIFICATION, AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWINGS.

36. THE DEVELOPER SHALL HAVE, ONSITE AT ALL TIMES, ONE (1) SIGNED COPY OF THE APPROVED PLANS, ONE (1) COPY OF THE APPROPRIATE STANDARDS AND SPECIFICATIONS, AND A COPY OF ANY PERMITS AND EXTENSION AGREEMENTS NEEDED FOR THE JOB.

37. IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE DEVELOPER SHALL CONTACT THE DESIGNER AND THE LOCAL ENTITY ENGINEER IMMEDIATELY.

38. THE DEVELOPER SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT INFORMATION ON A SET OF RECORD DRAWINGS KEPT ON THE CONSTRUCTION SITE, AND AVAILABLE TO THE LOCAL ENTITY'S INSPECTOR AT ALL TIMES. UPON COMPLETION OF THE WORK, THE CONTRACTOR(S) SHALL SUBMIT RECORD DRAWINGS TO THE LOCAL ENTITY ENGINEER.

39. THE DESIGNER SHALL PROVIDE, IN THIS LOCATION ON THE PLAN, THE LOCATION AND DESCRIPTION OF THE NEAREST SURVEY BENCHMARKS (2) FOR THE PROJECT AS WELL AS THE BASIS OF BEARINGS. THE INFORMATION SHALL BE AS FOLLOWS:

BENCHMARKS— ATWELL, LLC.
B.M.NUMBER ,ELEV.=5056.28'
DESCRIPTION: THE SITE BENCHMARK IS AN ESTABLISHED USGS BRASS CAP LOCATED AT THE SOUTHWEST CORNER OF SECTION 26, T.4, R.68W.

40. ALL STATIONING IS BASED ON CENTERLINE OF ROADWAYS UNLESS OTHERWISE NOTED.

41. DAMAGED CURB, GUTTER AND SIDEWALK EXISTING PRIOR TO CONSTRUCTION, AS WELL AS EXISTING FENCES, TREES, STREETS, SIDEWALKS, CURBS AND GUTTERS, LANDSCAPING, STRUCTURES, AND IMPROVEMENTS DESTROYED, DAMAGED OR REMOVED DUE TO CONSTRUCTION OF THIS PROJECT, SHALL BE REPLACED OR RESTORED IN LIKE KIND AT THE DEVELOPER'S EXPENSE, UNLESS OTHERWISE INDICATED ON THESE PLANS, PRIOR TO THE ACCEPTANCE OF COMPLETED IMPROVEMENTS AND/OR PRIOR TO THE ISSUANCE OF THE FIRST CERTIFICATE OF OCCUPANCY.

42. WHEN AN EXISTING ASPHALT STREET MUST BE CUT, THE STREET MUST BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN ITS ORIGINAL CONDITION. THE EXISTING STREET CONDITION SHALL BE DOCUMENTED BY THE LOCAL ENTITY CONSTRUCTION INSPECTOR BEFORE ANY CUTS ARE MADE. PATCHING SHALL BE DONE IN ACCORDANCE WITH THE LOCAL ENTITY STREET REPAIR STANDARDS. THE FINISHED PATCH SHALL BLEND IN SMOOTHLY INTO THE EXISTING SURFACE. ALL LARGE PATCHES SHALL BE PAVED WITH AN ASPHALT LAY-DOWN MACHINE. IN STREETS WHERE MORE THAN ONE CUT IS MADE, AN OVERLAY OF THE ENTIRE STREET WIDTH, INCLUDING THE PATCHED AREA, MAY BE REQUIRED. THE DETERMINATION OF NEED FOR A COMPLETE OVERLAY SHALL BE MADE BY THE LOCAL ENTITY ENGINEER AND/OR THE LOCAL ENTITY INSPECTOR AT THE TIME THE CUTS ARE MADE.

43. UPON COMPLETION OF CONSTRUCTION, THE SITE SHALL BE CLEANED AND RESTORED TO A CONDITION EQUAL TO, OR BETTER THAN, THAT WHICH EXISTED BEFORE CONSTRUCTION, OR TO THE GRADES AND CONDITION AS REQUIRED BY THESE PLANS.

44. STANDARD HANDICAP RAMPS ARE TO BE CONSTRUCTED AT ALL CURB RETURNS AND AT ALL "T" INTERSECTIONS.

45. AFTER ACCEPTANCE BY THE LOCAL ENTITY, PUBLIC IMPROVEMENTS DEPICTED IN THESE PLANS SHALL BE GUARANTEED TO BE FREE FROM MATERIAL AND WORKMANSHIP DEFECTS FOR A MINIMUM PERIOD OF TWO YEARS FROM THE DATE OF ACCEPTANCE.

46. APPROVED VARIANCES ARE LISTED AS FOLLOWS: (NONE AT THIS TIME)

47. THERE ARE NO DEDICATED ASPHALT OR CONCRETE BATCH PLANS ON SITE.

48. THERE ARE NO DISCHARGE POINTS, SPRINGS, STREAMS, WETLANDS OR OTHER SURFACE WATERS ON SITE.

EL PASO COUNTY GENERAL NOTES:

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 MANUAL, VOLUMES 1 AND 2
   c. COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
   d. CDOT M & S STANDARDS

4. NONWITHSTANDING 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 CONDTIONS, 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 PLANING AND COMMUNITY DEVELOPMENT DEPARTMENT (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 104 AND/OR 404 PERMITS, AND COUNTY AND STATE FUGITIVE DUST PERMITS.

8. CONTRACTORS 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 DEPARTMENT OR PUBLIC WORKS AND MUTCD CRITERIA. [IF APPLICABLE, ADDITIONAL SIGNING AND STRIPING NOTES WILL BE PROVIDED.]

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

15. THE LIMITS OF CONSTRUCTION SHALL REMAIN WITHIN THE PROPERTY LINES 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 FALCON HIGHLANDS METRO DISTRICT.

CONSTRUCTION PLAN NOTES:

A. STANDARD GRADING AND EROSION AND SEDIMENT CONTROL CONSTRUCTION PLAN NOTES

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 (SMWP) 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.

4. 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.

5. 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 SEEDED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND BMPS SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND ESTABLISHED.

6. 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.

7. 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).

8. 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.

9. 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

10. 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.

11. 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.

12. EROSION CONTROL BLANKETING IS TO BE USED ON SLOPES STEEPER THAN 3:1.

13. 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.

14. VEHICLE TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFFSITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.

15. CONTRACTOR SHALL BE RESP

EL PASO COUNTY NOTES:

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 IN 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. 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.
4. 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.
5. SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 21 CALENDER 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 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 SEEDED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND BMPS SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND ESTABLISHED.
6. 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.
7. 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).
8. 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.
9. 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.
10. 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.
11. 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.
12. EROSION CONTROL BLANKETING IS TO BE USED ON SLOPES STEEPER THAN 3:1.
13. 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.
14. VEHICLE TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFFSITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
15. 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.
16. 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 THE SITE DEVELOPMENT.
17. 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.
18. 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 ECM ADMINISTRATOR. IN GRANTING THE USE OF SUCH CHEMICALS, SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
19. 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 SYSTEMS OR FACILITIES.
20. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE FLOW LINE OF THE CURB AND GUTTER OR IN THE DITCHLINE.
21. 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 EXM 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.
22. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
23. PRIOR TO ACTUAL CONSTRUCTION THE PERMITEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
24. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
25. 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 A 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 PLEASE 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

WHMD GENERAL NOTES:

1. THE WATER UTILITY IS FHMD. THE WASTEWATER UTILITY IS WHMD.
2. ALL UTILITY CONSTRUCTION TO BE CONDUCTED IN CONFORMANCE WITH THE CURRENT WOODMEN HILLS METROPOLITAN DISTRICT (WHMD, THE DISTRICT SPECIFICATIONS.)
3. ALL PLANS ON THE JOB SITE SHALL BE SIGNED BY THE DISTRICT AND THE DISTRICT'S ENGINEER, ANY REVISIONS TO THE PLANS SHALL BE SO NOTED WITH THE OLD DRAWING MARKED "NOT VALID."
4. ALL STATIONING IS CENTERLINE UNLESS OTHERWISE NOTED. ALL ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
5. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE DISTRICT. THE DISTRICT RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.
6. ALL OVER-LOT GRADING MUST BE COMPLETED WITHIN ONE (1) FOOT OF FINAL GRADE PRIOR TO INSTALLATION OF WATER AND WASTERWATER INFRASTRUCTURE.
7. ALL WATER AND SEWER SERVICE LOCATIONS SHALL BE CLEARLY MARKED ON EITHER THE CURB HEAD OR THE FACE OF THE CURB, WITH AN "S" FOR SEWER AND A "W" FOR WATER.
8. DUCTILE IRON PIPES, INCLUDING FITTINGS, VALVES, AND FIRE HYDRANTS, SHALL BE WRAPPED WITH POLYETHYLENE TUBING, DOUBLE BONDED AT EACH JOINT, AND ELECTRICALLY ISOLATED. BONDING AND ANODE CONNECTIONS SHALL E THOROUGHLY COATED WITH BITUMINOUS COATINGS.
9. ALL DUCTILE IRON PIPES LESS THAN TWELVE (12") AND FITTINGS SHALL HAVE CATHODIC PROJECTION USING (2) NO. 6 WIRES WITH 17 LB. MAGNESIUM ANODES EVERY 400 FEET AND 9 LB MAGNESIUM ANODES AT EACH FITTING. ALL DUCTILE IRON PIPE TWELVE INCHES (12") AND GREATER AND FITTINGS SHALL HAVE CATHODIC PROTECTION USING (2) NO. 6 WIRES WITH 17 LB. MAGNESIUM ANODES EVERY 300 FEET AND 9 LB. MAGNESIUM ANODES AT EACH FITTING.
10. ALL PIPE MATERIAL, BACKFILL, AND INSTALLATION SHALL CONFORM TO THE APPLICABLE SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS, COLORADO DEPARTMENT OF TRANSPORTATION, EL PASO COUNTY DEPARTMENT OF TRANSPORTATION, COLORADO SPRINGS UTILITIES, AND THE GEOTECHNICAL ENGINEER.
11. COMPACTION TESTS SHALL BE 95% STANDARD PROCTOR AS DETERMINED BY ASTM D698, UNLESS OTHERWISE APPROVED BY THE DISTRICT OR HIGHER STANDARD AS IMPOSED BY ANOTHER AGENCIES HAVING RIGHT-OF-WAY JURISDICTION. THIS SHALL INCLUDE ALL VALVES, FIRE HYDRANT RUNS, WATER & SEWER SERVICE LINES, AND MANHOLES. ALL REPORTS SHALL BE SUBMITTED TO THE DISTRICT FOR REVIEW AND APPROVAL.
12. THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THE DRAWINGS ARE APPROXIMATE ONLY. THE LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. THE DISTRICT SHALL BE NOTIFIED OF ANY DEVIATIONS TO THE LINE AND/OR GRADE AS DEPICTED ON THE PLANS. CONTRACTOR SHALL SUBMIT TO THE DISTRICT AND THE ENGINEER OF RECORD A REPORT OF THE FIELD-VERIFIED INFORMATION PRIOR TO THE START OF CONSTRUCTION.
13. ALL BENDS SHALL BE FIELD STAKED PRIOR TO THE START OF CONSTRUCTION.
14. BENDS, DEFLECTION, AND CUT PIPE LENGTHS SHALL BE USED TO HOLD HORIZONTAL ALIGNMENT OF SEWER AND WATER LINES TO NO MORE THAN 0.5° FROM THE DESIGNED ALIGNMENT. CONSTRUCTION STAKES TO BE AT TWENTY-FIVE FEET (25') INTERVALS ALONG CURVES TO ENSURE LOCATION OF PIPELINE CONSTRUCTION.
15. AT ALL LOCATIONS WHERE CAP AND STUB IS NOTED ON DRAWINGS, PROVIDE A PLUG AT THE END OF THE PIPE JOINT NEAREST THE SPECIFIED STATION. PROVIDE A REVERSE ANCHOR AT ALL WATER LINE PLUGS.
16. ALL UNUSED, SALVAGED WATER UTILITY MATERIAL SHALL BE RETURNED TO THE METROPOLITAN DISTRICT AS REQUESTED.
17. AT THE CONTRACTOR'S EXPENSE, ALL UTILITY MAINS SHALL BE SUPPORTED AND PROTECTED SUCH THAT THEY SHALL FUNCTION CONTINUOUSLY DURING CONSTRUCTION OPERATIONS. SHOULD A UTILITY MAIN FAIL AS A RESULT OF THE CONTRACTOR'S OPERATION, IT SHALL BE REPLACED IMMEDIATELY BY THE CONTRACTOR OR BY THE DISTRICT AT FULL COST OF LABOR AND MATERIALS TO THE CONTRACTOR/DEVELOPER.
18. PUMPING OR BYPASS OPERATIONS SHALL BE REVIEWED AND APPROVED BY BOTH THE DISTRICT AND DISTRICT ENGINEER PRIOR TO EXECUTION.
19. THE CONTRACTOR SHALL REPLACE OR REPAIR DAMAGE TO ALL SURFACE IMPROVEMENTS, INCLUDING BY NOT LIMITED TO FENCES, LANDSCAPING, CURB AND GUTTER, AND/OR ASPHALT THAT MAY BE CAUSED DURING CONSTRUCTION.
20. ALL CONTRACTORS WORKING ON OR NEAR A WATER OR SEWER FACILITY (TO INCLUDE SERVICE LINES) SHALL HAVE LIABILITY INSURANCE NAMING THE DISTRICT AS AN ADDITIONAL INSURED AND SHALL PROVIDE A CURRENT COPY OF WORKERS COMPENSATION INSURANCE ON FILE WITH THE DISTRICT. NO WORK CAN PROCEED WITHOUT CURRENT CERTIFICATES ON FILE AT THE DISTRICTS' OFFICE.
21. THE CONTRACTOR SHALL NOTIFY THE DISTRICT AND ALL AFFECTED UTILITY COMPANIES ADJACENT TO THE PROPOSED UTILITY CONSTRUCTION A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO THE START OF CONSTRUCTION. A WEEKLY CONSTRUCTION MEETING SHALL BE REQUIRED WITH THE CONTRACTOR, DISTRICT ENGINEER AND ALL OTHER PARTIES AS DEEMED NECESSARY BY THE DISTRICT.
22. COMMENCEMENT OF CONSTRUCTION OF WATER/SEWER SYSTEMS WITHIN METROPOLITAN DISTRICT:
    A) PRIOR TO THE START OF CONSTRUCTION, A PRECONSTRUCTION MEETING IS REQUIRED A MINIMUM OF 48 HOURS IN ADVANCE OF COMMENCEMENT OF WORK. A REPRESENTATIVE OF THE OWNER OR DEVELOPER, A REPRESENTATIVE OF THE CONTRACTOR, AND DESIGN ENGINEER ARE REQUIRED TO ATTEND. CONTACT THE DISTRICT TO SCHEDULE THE PRECONSTRUCTION MEETING. NO PRECONSTRUCTION MEETING CAN BE SCHEDULED BEFORE FOUR (4) SIGNED/APPROVED PLAN SETS ARE RECEIVED BY THE DISTRICT.
    B) THE CONTRACTOR IS REQUIRED TO NOTIFY THE DISTRICT A MINIMUM OF 48 HOURS AND A MAXIMUM OF 2 WEEKS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL ALSO NOTIFY AFFECTED UTILITY COMPANIES AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION ADJACENT TO THE KNOWN UTILITY LINES.
23. TESTING OF FACILITIES:
    A) THE CONTRACTOR SHALL NOTIFY THE DISTRICT A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO THE START OF ANY TESTING.
    B) ALL SECTIONS OF WATER LINE ARE TO MEET THE FOLLOWING PRESSURE TESTING REQUIREMENTS
    - TEST 100% OF ALL LINES.
    - MUST PASS PRESSURE TEST TO 200 PSI FOR TWO HOURS (UNLESS OTHERWISE APPROVED ON THE PLANS).

    C) ALL SANITARY SEWER FACILITIES ARE TO MEET THE FOLLOWING TESTING REQUIREMENTS:
    - ALL LINES SHALL BE JET CLEANED PRIOR TO VACUUM OR PRESSURE TESTING.
    - ALL MANHOLES SHALL BE VACUUM TESTED WITH DISTRICT STAFF PRESENT PRIOR TO CCTV INSPECTION.
    - SEWER MAINS TO BE PRESSURE TESTED PRIOR TO CCTV INSPECTION.
    - ALL LINES SHALL BE CCTV INSPECTED AND VIDEO SHALL TO BE SUBMITTED TO THE DISTRICT FOR REVIEW AND APPROVAL.
24. PRELIMINARY ACCEPTANCE SHALL BE DEFINED AS THE POINT IN TIME THAT THE DISTRICT ACCEPTS THE FACILITY FOR USE. ALL SURFACE IMPROVEMENTS AND RESTORATION SHALL BE COMPLETED WITHIN 30 DAYS OF COMMENCEMENT. SHOULD THE CONTRACTOR FAIL TO COMPLETE ALL SURFACE IMPROVEMENTS AND RESTORATION WITHIN 30 DAYS OF COMMENCEMENT OF SERVICE, THE DISTRICT, AT THEIR DISCRETION, MAY ELECT TO COMPLETE THE IMPROVEMENTS AT THE CONTRACTOR'S COST.
25. FINAL ACCEPTANCE BY THE DISTRICT OF ANY LINE OR SYSTEM SHALL NOT OCCUR UNTIL COMPLETION OF FINAL ASPHALT LAYERS AND/OR FINAL COMPLETION AND/OR RESTORATION OF ALL SURFACE IMPROVEMENTS. THE WARRANTY PERIOD FOR ALL FACILITIES PRIOR TO FINAL ACCEPTANCE SHALL BE 24 MONTHS COMMENCING AFTER PRELIMINARY ACCEPTANCE
26. ACCEPTANCE
    A) THE DISTRICT MAY GIVE PRELIMINARY ACCEPTANCE ONCE ALL OF THE TESTS ON ALL THE LINES HAVE BEEN COMPLETED AND A WALK-THROUGH HAS OCCURRED.
    B) A SECOND ACCEPTANCE MAY OCCUR ONCE THE FIRST LIFT OF ASPHALT GOES DOWN AND A SECOND WALK-THROUGH OF THE SYSTEM OCCURS. IF ALL FACILITIES ARE CLEAN AND ACCESSIBLE, A FINAL ACCEPTANCE MAY OCCUR (THE DISTRICT MAY REQUIRE CLEANING AND RE-VIDEO OF THE SYSTEM, DEPENDING ON THE SEVERITY OF THE CONTAMINATION).
27. ALL WATER AND SEWER MAINS, INCLUDING SERVICE LINES, SHALL HAVE AS-BUILT" DRAWINGS PREPARED AND APPROVED PRIOR TO PRELIMINARY ACCEPTANCE BY THE DISTRICT.
28. ALL COMMERCIAL/BUSINESS DEVELOPMENTS SHALL HAVE AN EIGHT INCH (MIN.) WATER MAIN LOOPED THROUGH THE PROPOSED PROPERTY WITH GATE VALVES LOCATED WHERE THE MAIN ENTERS THE PROPERTY LINE. AN EIGHT-INCH SEWER MAIN SHALL BE INSTALLED FOR SERVICE TO COMMERCIAL/BUSINESS DEVELOPMENTS, AND A MANHOLE SHALL BE LOCATED WHERE THE MAIN ENTERS THE PROPERTY. THE END OF THE MAINS SHALL BE MARKED WITH THE APPROPRIATE COLORED CARSONITE MARKER ALONG WITH TRACER WIRE.
29. AFTER REVIEW AND APPROVAL OF PLANS FOR THE EXTENSION OF LINES, FACILITIES, AND/OR SERVICES, CONSTRUCTION MUST HAVE COMMENCED WITHIN 18 MONTHS FOR RESIDENTIAL SUBDIVISIONS AND 12 MONTHS FOR ANY COMMERCIAL INSTALLATIONS.
30. INSPECTION FEES: CALL THE DISTRICT (719-495-2500) FOR FEE SCHEDULE.

WATER INSTALLATION NOTES

31. ALL WATER AND FORCE MAIN PIPE SHALL BE AWWA C900 PVC, OR APPROVED EQUAL, PRESSURE CLASS 200. ALL WATER AND FORCE MAIN FITTINGS SHALL HAVE MECHANICAL RESTRAINTS AND THRUST BLOCKS. ALL WATER AND FORCE MAIN PIPE SHALL HAVE A MINIMUM COVER DEPTH OF FIVE-AND-ONE-HALF (5.5) FEET.
32. ALL WATER VALVES ASSOCIATED WITH THE POTABLE WATER SYSTEM SHALL BE OPEN CLOCKWISE. ALL VALVES INSTALLED IN LANDSCAPED AREAS AND/OR NOT WITHIN PAVED STREETS SHALL BE MARKED WITH CARSONITE MARKERS. ALL VALVES ASSOCIATED WITH THE RAW WATER SYSTEM SHALL BE OPEN COUNTERCLOCKWISE AND MARKED WITH CARSONITE MARKERS AS APPLICABLE.
33. THE DEVELOPER OR HIS ENGINEER SHALL LOCATE ALL FIRE HYDRANTS AND SERVICE STUB-OUTS FOR FUTURE DEVELOPMENT. ANY REQUIRED REALIGNMENT, HORIZONTAL OR VERTICAL, SHALL BE AT THE EXPENSE OF THE DEVELOPER. FIRE HYDRANT LOCATION SHALL BE REVIEWED AND APPROVED BY THE APPLICABLE FIRE AUTHORITY.
34. FIRE HYDRANTS SHALL BE OPEN RIGHT WITH 7/8"X 7/8"SQUARE TAPERED ALONG WITH SERVICE CAPS. LUBRICATION TYPE: GREASE. ACCEPTABLE BRAND IS KENNEDY GUARDIAN (K81D, K81A, AND K81AM). EACH FIRE HYDRANT LOCATION SHALL ALSO BE USED AS TEST STATION.
35. ALL MAIN LINES (PVC & DUCTILE IRON) SHALL BE INSTALLED WITH COATED #12 TRACER WIRE WITH TEST STATIONS AT INTERVALS NO GREATER THAN FIVE HUNDRED FEET (500') (VALVE BOXES CAN BE USED AT INTERSECTIONS AND SERVICE STUBS).
36. CONTRACTOR SHALL MAKE CONNECTIONS TO EXISTING WATER LINE WITHOUT SHUTDOWN, OR ELSE NOTIFY THE DISTRICT OF ANY SERVICE SHUTDOWNS NECESSARY TO CONNECT TO EXISTING LINES.
37. IRRIGATION SERVICES SHALL HAVE A STOP-AND-WASTE CURB STOP VALVE INSTALLED ALONG WITH TRACER WIRE EXTENDING BACK TO THE MAIN LINE.
38. COMMENCEMENT OF USE OF WATER LINES AND/OR SYSTEMS:
    A) NO WATER FACILITY SHALL BE PLACED IN SERVICE UNTIL AFTER THE COMPLETION OF ALL PRESSURE TESTING, FLUSHING, BAC-T TESTING, AND COMPACTION TESTING, AND AS-BUILT DRAWINGS ARE SUBMITTED AND APPROVED BY THE DISTRICT.
    B) NO WATER FACILITY SHALL BE PLACED IN SERVICE UNTIL ALL SERVICE LINES ARE COMPLETED AND THE FIRST LIFT OF ASPHALT IS COMPLETED OVER THE LINE. IN THE CASE WHERE NO ASPHALT IS TO BE PLACED OVER THE LINE, SURFACE IMPROVEMENTS SHALL BE COMPLETED PRIOR TO USE OF THE FACILITY.
    C) ALL EASEMENTS (PLATTED OR DEEDED) ARE DEDICATED, EXECUTED BY THE DISTRICT, AND RECORDED.

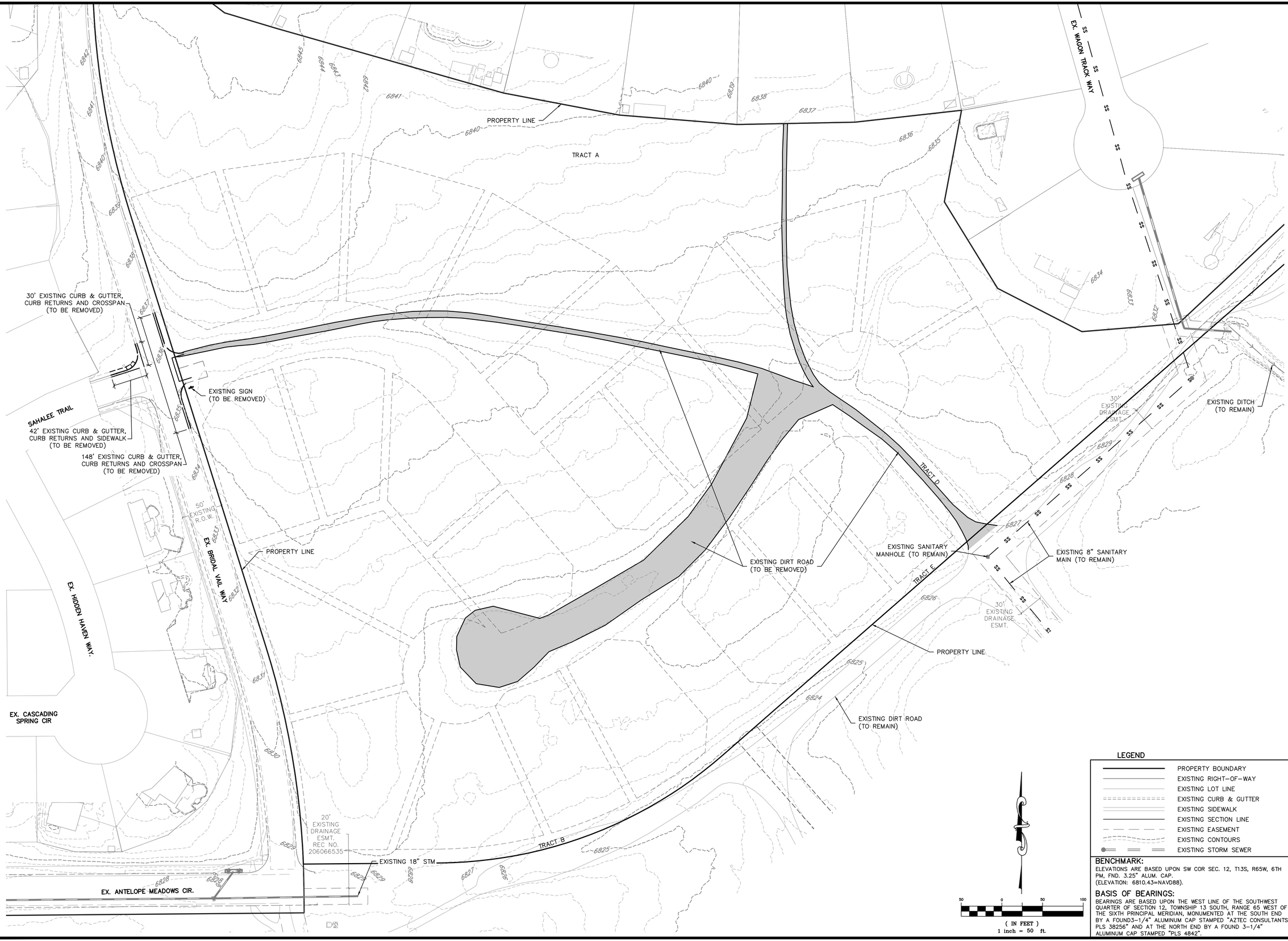
WASTEWATER INSTALLATION NOTES

39. SANITARY SEWER LENGTHS ARE MH CENTER -MH CENTER. ALL SANITARY SEWER PIPES SHALL BE SDR 35 PVC OR APPROVED EQUAL. SEWER LINES MAY NOT EXCEED 7% GRADE FOR ANY SIZE WITHOUT PRIOR APPROVAL OF THE DISTRICT. ALL NEWLY CONSTRUCTED RESIDENTIAL SANITARY SEWER TAPS SHALL USE PRE-MANUFACTURED, INLINE PVC PUSH-ON WYES. TAPPING SADDLES MAY ONLY BE USED FOR TAPPING PREEXISTING MAINS.
40. ALL SANITARY SEWER MANHOLES SHALL BE WRAPPED WITH RU116-RUBR-NEK JOINT WRAP, OR APPROVED EQUAL, AND COATED.
41. COMMENCEMENT OF USE OF SEWER LINES AND/OR SYSTEMS:
    A) NO SANITARY SEWER FACILITY SHALL BE PLACED IN SERVICE UNTIL THE COMPLETION OF ALL JET CLEANING, PRESSURE TESTING, VACUUM TESTING, CCTV INSPECTION, AND COMPACTION TESTING, AND AS-BUILT DRAWINGS ARE SUBMITTED AND APPROVED BY THE DISTRICT.
    B) NO SANITARY SEWER FACILITY SHALL BE PLACED IN SERVICE UNTIL ALL SERVICE LINES ARE COMPLETED AND THE FIRST LIFT OF ASPHALT IS COMPLETED OVER THE LINE. IN THE CASE WHERE NO ASPHALT IS TO BE PLACED OVER THE LINE, ANY REQUIRED SURFACE IMPROVEMENTS SHALL BE COMPLETED PRIOR TO USE OF THE FACILITY.
    C) ALL NECESSARY EASEMENTS (PLATTED OR DEEDED) ARE DEDICATED, EXECUTED BY THE DISTRICT, AND RECORDED.
    D) DOWNSTREAM PLUG CAN BE REMOVED ONCE THE FIRST LIFT OF ASPHALT IS DOWN AND THE ABOVE REQUIREMENTS ARE MET.

THE ABOVE GUIDELINES ARE SUBJECT TO CHANGE AT ANY TIME.

EL PASO COUNTY NOTES GRADING AND EROSION CONTROL NOTES:

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 IN 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. 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.
4. 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.
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 AREA



LEGEND

- PROPERTY BOUNDARY
- EXISTING RIGHT-OF-WAY
- EXISTING LOT LINE
- EXISTING CURB & GUTTER
- EXISTING SIDEWALK
- EXISTING SECTION LINE
- EXISTING EASEMENT
- EXISTING CONTOURS
- EXISTING STORM SEWER

BENCHMARK:
ELEVATIONS ARE BASED UPON SW COR SEC. 12, T13S, R65W, 6TH PM, FND. 3.25" ALUM. CAP.
(ELEVATION: 6810.43=NAVD88).

BASIS OF BEARINGS:
BEARINGS ARE BASED UPON THE WEST LINE OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 13 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, MONUMENTED AT THE SOUTH END BY A FOUND3-1/4" ALUMINUM CAP STAMPED "AZTEC CONSULTANTS PLS 38256" AND AT THE NORTH END BY A FOUND 3-1/4" ALUMINUM CAP STAMPED "PLS 4842".

811 Know what's below. Call before you dig.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE:
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR; NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

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CHALLENGER HOMES
8605 EXPLORER DRIVE
SUITE 250 CO 80920
COLORADO SPRINGS, CO 80920
719-598-5192
JIM BYERS

CLIENT

FALCON HIGHLANDS SOUTH – FILING 1
EL PASO COUNTY, COLORADO
CONSTRUCTION PLANS
GENERAL PLANS
EXISTING CONDITIONS & DEMOLITION PLAN

DATE 5/30/2025

A	1st SUBMITTAL TO JURISDICTION 07/12/2024 – KB
B	2nd SUBMITTAL TO JURISDICTION 01/08/2025 – KB
C	3rd SUBMITTAL TO JURISDICTION 04/15/2025 – KB
D	4th SUBMITTAL TO JURISDICTION 06/02/2025 – DM
E	5th SUBMITTAL TO JURISDICTION 08/01/2025 – DM
F	6th SUBMITTAL TO JURISDICTION 09/08/2025 – DM
G	7th SUBMITTAL TO JURISDICTION 02/16/2026 – DM

DAVID MARTIN PE 36834 07/15/26 PROFESSIONAL ENGINEER

COUNTY FILE NO.: SF2418

DR. TN | CH. LS
P.M. DM
JOB 24004308
SHEET NO. 04

CAD FILE: 24004308-DEMO.DWG

NOTES:

1. NO CONCRETE/ASPHALT BATCH PLANTS ARE ANTICIPATED ON SITE.
2. EXISTING VEGETATION CONSISTS OF NATIVE GRASSES AND WEEDS.

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CLIENT

FALCON HIGHLANDS SOUTH – FILING 1
EL PASO COUNTY, COLORADO
GRADING AND EROSION CONTROL PLANS
EROSION & SEDIMENT CONTROL PLANS
INITIAL 1

DATE 5/30/2025

A	1st SUBMITTAL TO JURISDICTION 07/12/2024 – KB
B	2nd SUBMITTAL TO JURISDICTION 01/08/2025 – KB
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D	4th SUBMITTAL TO JURISDICTION 06/02/2025 – DM
E	5th SUBMITTAL TO JURISDICTION 09/08/2025 – DM

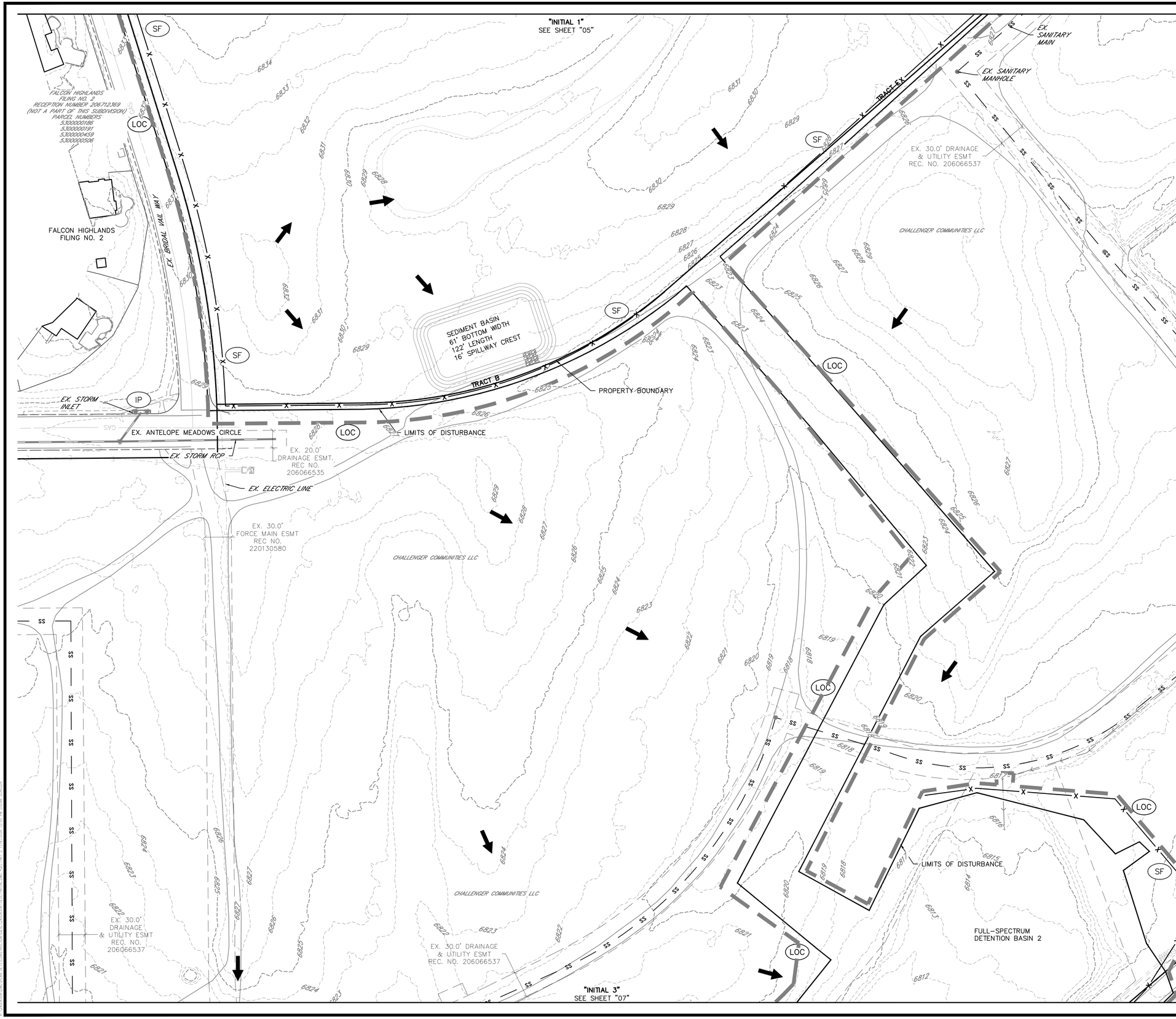
REVISIONS

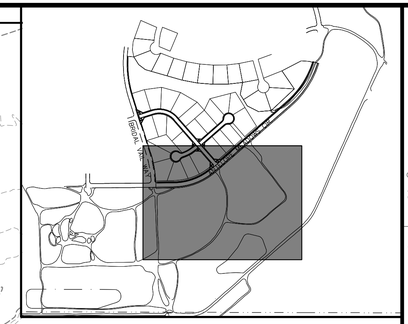
REGISTERED PROFESSIONAL ENGINEER
DANIEL MADSEN
36834
07/15/26
PROFESSIONAL ENGINEER

COUNTY FILE NO.:

DR. TN CH. KB
P.M. DM
JOB 24004308
SHEET NO. 05

CAD FILE: 24004308-GESC-INITIAL.DWG





811 Know what's below. Call before you dig.

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NOTES:

1. NO CONCRETE/ASPHALT BATCH PLANTS ARE ANTICIPATED ON SITE.
2. EXISTING VEGETATION CONSISTS OF NATIVE GRASSES AND WEEDS.

50 0 50 100
(IN FEET)
1 inch = 50 ft.

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT-OF-WAY
- EXISTING RIGHT-OF-WAY
- PROPOSED LOT LINE
- EXISTING LOT LINE
- PROPOSED CATCH CURB & GUTTER
- EXISTING CURB & GUTTER
- PROPOSED SIDEWALK
- EXISTING SIDEWALK
- EXISTING SECTION LINE
- PROPOSED EASEMENT
- EXISTING EASEMENT
- PROPOSED CONTOURS
- EXISTING CONTOURS
- PROPOSED STORM SEWER
- EXISTING STORM SEWER
- LIMITS OF DISTURBANCE
- (SF) SILT FENCE
- (CF) CONSTRUCTION FENCE
- (LOC) LIMITS OF CONSTRUCTION
- (DD) DIVERSION DITCH
- (CWA) CONCRETE WASHOUT AREA
- (SSA) STABILIZED STORAGE AREA
- (VTC) VEHICLE TRACKING CONTROL
- (IP) INLET PROTECTION
- (OP) OUTLET PROTECTION
- (SM) SEEDING AND MULCHING
- (SB) SEDIMENT BASIN
- (RS) ROCK SOCKS
- EXISTING FLOW ARROW

BENCHMARK:
ELEVATIONS ARE BASED UPON SW COR SEC. 12, T13S, R65W, 6TH PM, FND. 3.25" ALUM. CAP.
(ELEVATION: 6810.43=NAVD88).

BASIS OF BEARINGS:
BEARINGS ARE BASED UPON THE WEST LINE OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 13 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, MONUMENTED AT THE SOUTH END BY A FOUND3-1/4" ALUMINUM CAP STAMPED "AZTEC CONSULTANTS PLS 38256" AND AT THE NORTH END BY A FOUND 3-1/4" ALUMINUM CAP STAMPED "PLS 4842".

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COLORADO SPRINGS, CO 80920
719-598-5192
JIM BYERS

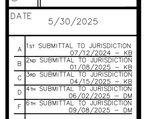
CHALLENGER HOMES
FALCON HIGHLANDS SOUTH – FILING 1
EL PASO COUNTY, COLORADO
GRADING AND EROSION CONTROL PLANS
EROSION & SEDIMENT CONTROL PLANS
INITIAL 2

CLIENT

DATE 5/30/2025

A	1st SUBMITTAL TO JURISDICTION	07/12/2024 – KB
B	2nd SUBMITTAL TO JURISDICTION	01/08/2025 – KB
C	3rd SUBMITTAL TO JURISDICTION	04/18/2025 – KB
D	4th SUBMITTAL TO JURISDICTION	05/02/2025 – DM
E	5th SUBMITTAL TO JURISDICTION	05/28/2025 – DM

REVISIONS



COUNTY FILE NO.:

DR. TN	CH. KB
P.M. DM	
JOB 24004308	
SHEET NO. 06	

CAD FILE: 24004308-GESC-INITIAL.DWG

"INITIAL 2"
SEE SHEET "06"

"INITIAL 4"
SEE SHEET "08"

CHALLENGER COMMUNITIES LLC

EX. 30.0' DRAINAGE & UTILITY ESMT REC. NO. 206066537

EX. 30.0' FORCE MAIN ESMT REC NO. 220130580

EX. 30.0' DRAINAGE & UTILITY ESMT REC. NO. 206066537

20' DRAINAGE ESMT.

25' DRAINAGE ESMT.

EXISTING LIFT STATION

EX. DRAINAGE ESMT

LIMITS OF DISTURBANCE

FULL-SPECTRUM DETENTION BASIN 2

LIMITS OF DISTURBANCE

EX. 60.0' R.O.W

EX. 30.0' DRAINAGE ESMNT REC. NO. 206133777

GLH NO 2 LLC
(NOT A PART OF THIS SUBDIVISION)
PARCEL NUMBER
5303000042

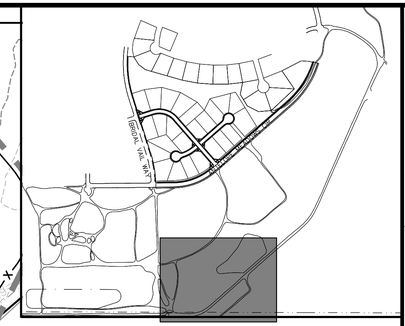
H20 SUB BLR LLC
C/O WALTON INTERNATIONAL GROUP (USA) INC
(NOT A PART OF THIS SUBDIVISION)
PARCEL NUMBER
5313000103

OZBURN LAMED C
OZBURN DELIA L
(NOT A PART OF THIS SUBDIVISION)
PARCEL NUMBER
5313000094

LOC

SF

OP



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EL PASO COUNTY, COLORADO
GRADING AND EROSION CONTROL PLANS
EROSION & SEDIMENT CONTROL PLANS
INITIAL 3

DATE 5/30/2025

A	1ST SUBMITTAL TO JURISDICTION 07/12/2024 – KB
B	2ND SUBMITTAL TO JURISDICTION 01/08/2025 – KB
C	3RD SUBMITTAL TO JURISDICTION 04/15/2025 – KB
D	4TH SUBMITTAL TO JURISDICTION 06/02/2025 – SM
E	5TH SUBMITTAL TO JURISDICTION 09/08/2025 – SM

REVISIONS

REGISTERED PROFESSIONAL ENGINEER
DAVID MADISON
36834
07/15/26

COUNTY FILE NO.:

DR. TN | CH. KB
P.M. DM
JOB 24004308
SHEET NO. 07

CAD FILE: 24004308-GESC-INITIAL.DWG

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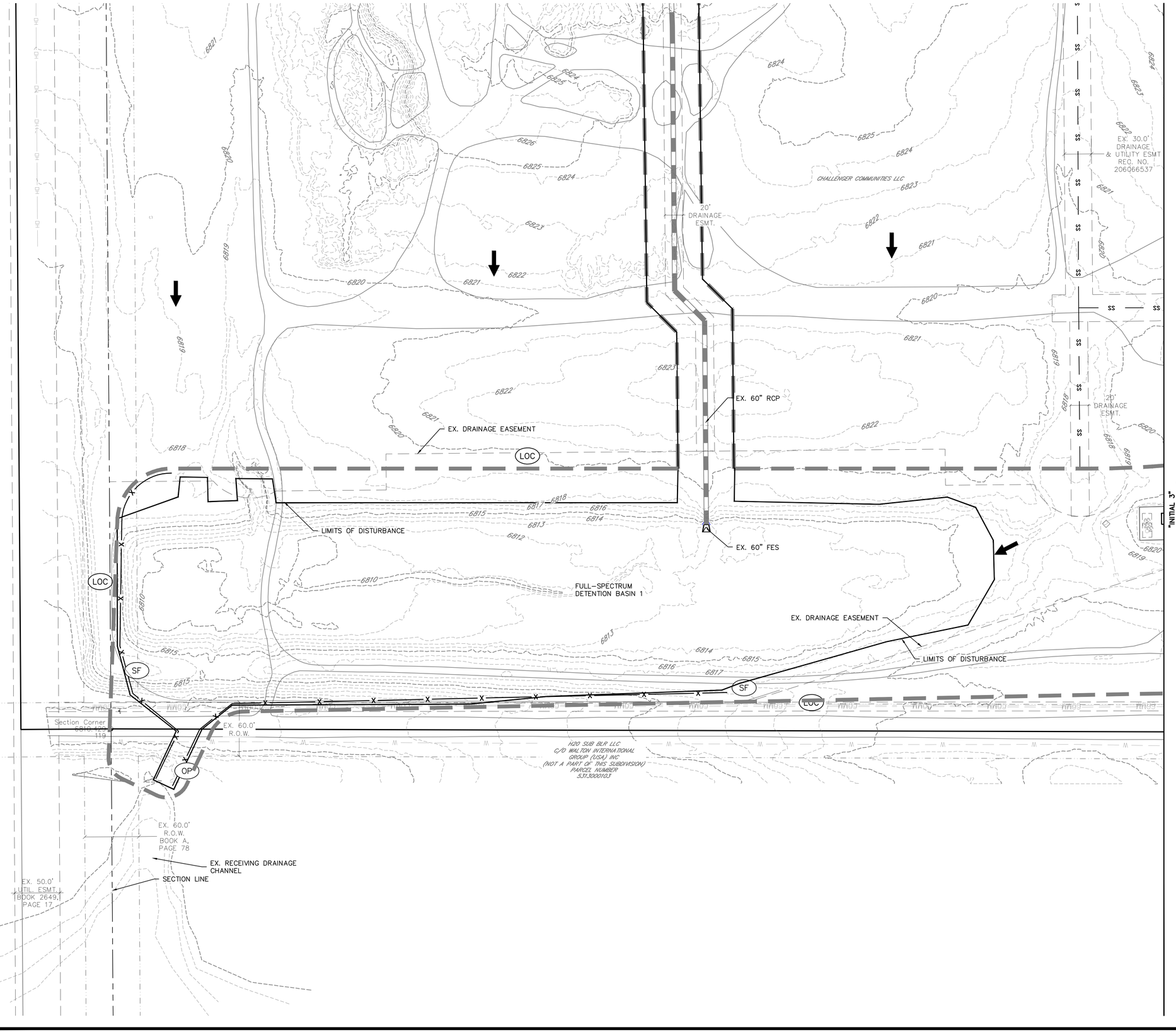

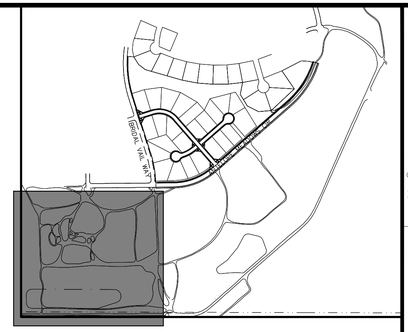

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GRADING AND EROSION CONTROL PLANS
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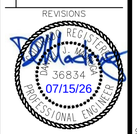
INITIAL 4

DATE 5/30/2025

A	1st SUBMITTAL TO JURISDICTION 07/12/2024 – KB
B	2nd SUBMITTAL TO JURISDICTION 01/08/2025 – KB
C	3rd SUBMITTAL TO JURISDICTION 04/15/2025 – KB
D	4th SUBMITTAL TO JURISDICTION 06/02/2025 – DM
E	5th SUBMITTAL TO JURISDICTION 09/08/2025 – DM

REVISIONS



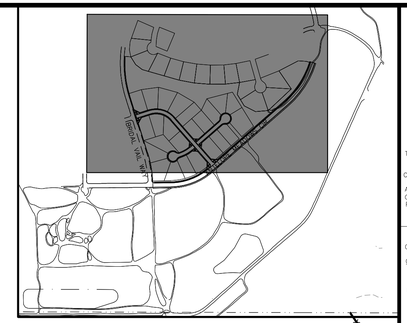
COUNTY FILE NO.:

DR. TN CH. KB
P.M. DM
JOB 24004308
SHEET NO. 08

CAD FILE: 24004308-ESC-INITIAL.DWG

Cut/Fill Summary

Name	Cut Factor	Fill Factor	2d Area	Cut	Fill	Net
VOL-EG vs Overlot	1.000	1.000	1156138.21 Sq. Ft.	19797 Cu. Yd.	46963 Cu. Yd.	27166 Cu. Yd.<Fill>
Totals			1156138.21 Sq. Ft.	19797 Cu. Yd.	46963 Cu. Yd.	27166 Cu. Yd.<Fill>



PROPERTY BOUNDARY
TRACT A
EX. WAGON TRACK WAY
LOT 1
LOT 2
LOT 3
LOT 4
LOT 5
LOT 6
LOT 7
LOT 8
LOT 9
LOT 10
LOT 11
LOT 12
LOT 13
LOT 14
LOT 15
LOT 16
LOT 17
LOT 18
LOT 19
LOT 20
LOT 21
LOT 22
LOT 23
LOT 24
SAHALEE TRAIL
FOX KESTREL COURT EAST
FOX KESTREL COURT WEST
FUTURE ANTELOPE MEADOWS CIR.
TRACT D
TRACT E
TRACT B
BRIDAL VEIL WAY
FALCON HIGHLANDS FILING NO. 2
RECEPTION NUMBER 206712369
(NOT A PART OF THIS SUBDIVISION)
PARCEL NUMBERS
5300000186
5300000191
5300000459
5300000506
CHALLENGER C
PROPERTY BOUNDARY

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT-OF-WAY
- EXISTING RIGHT-OF-WAY
- PROPOSED LOT LINE
- EXISTING LOT LINE
- PROPOSED CATCH CURB & GUTTER
- PROPOSED SPILL CURB & GUTTER
- EXISTING CURB & GUTTER
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- EXISTING SECTION LINE
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- EXISTING EASEMENT
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- EXISTING CONTOURS
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EL PASO COUNTY, COLORADO
GRADING AND EROSION CONTROL PLANS
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CUT-FILL

DATE 5/30/2025

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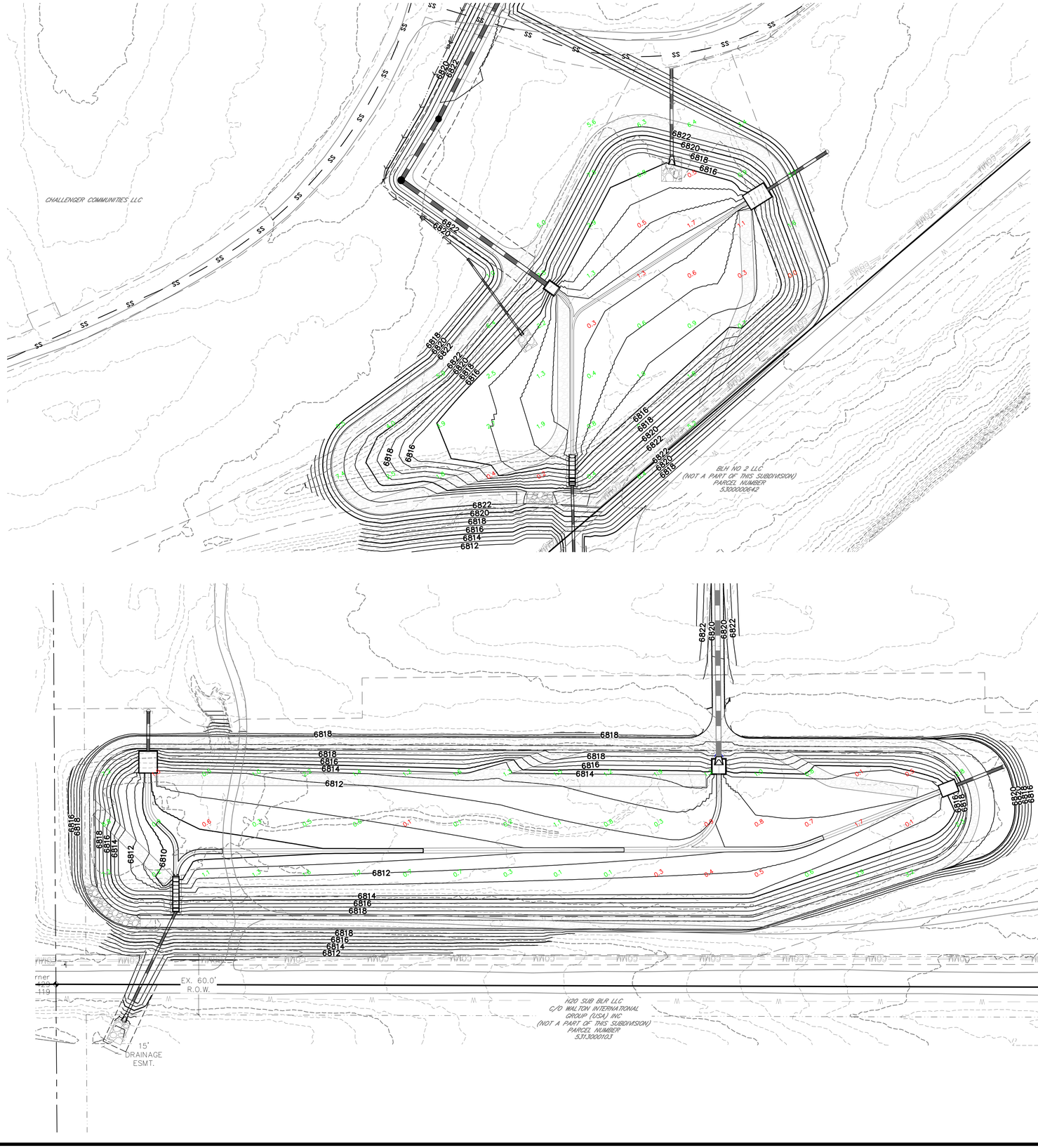
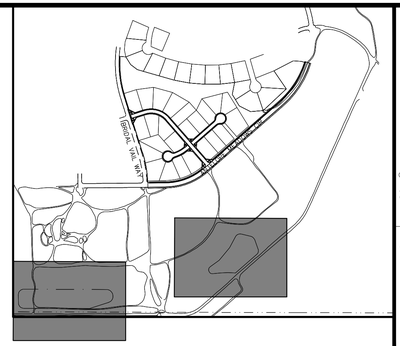
REVISIONS

COUNTY FILE NO.:

DR. TN	CH. KB
P.M. DM	
JOB 24004308	
SHEET NO. 09	

CAD FILE: 24004308-CIVIL-C01-FILLDWG





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CUT-FILL 2

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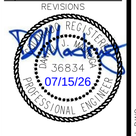
F		

REVISIONS



COUNTY FILE NO.:

DR. TN	CH. KB
P.M. DM	
JOB 24004308	
SHEET NO. 10	

LEGEND

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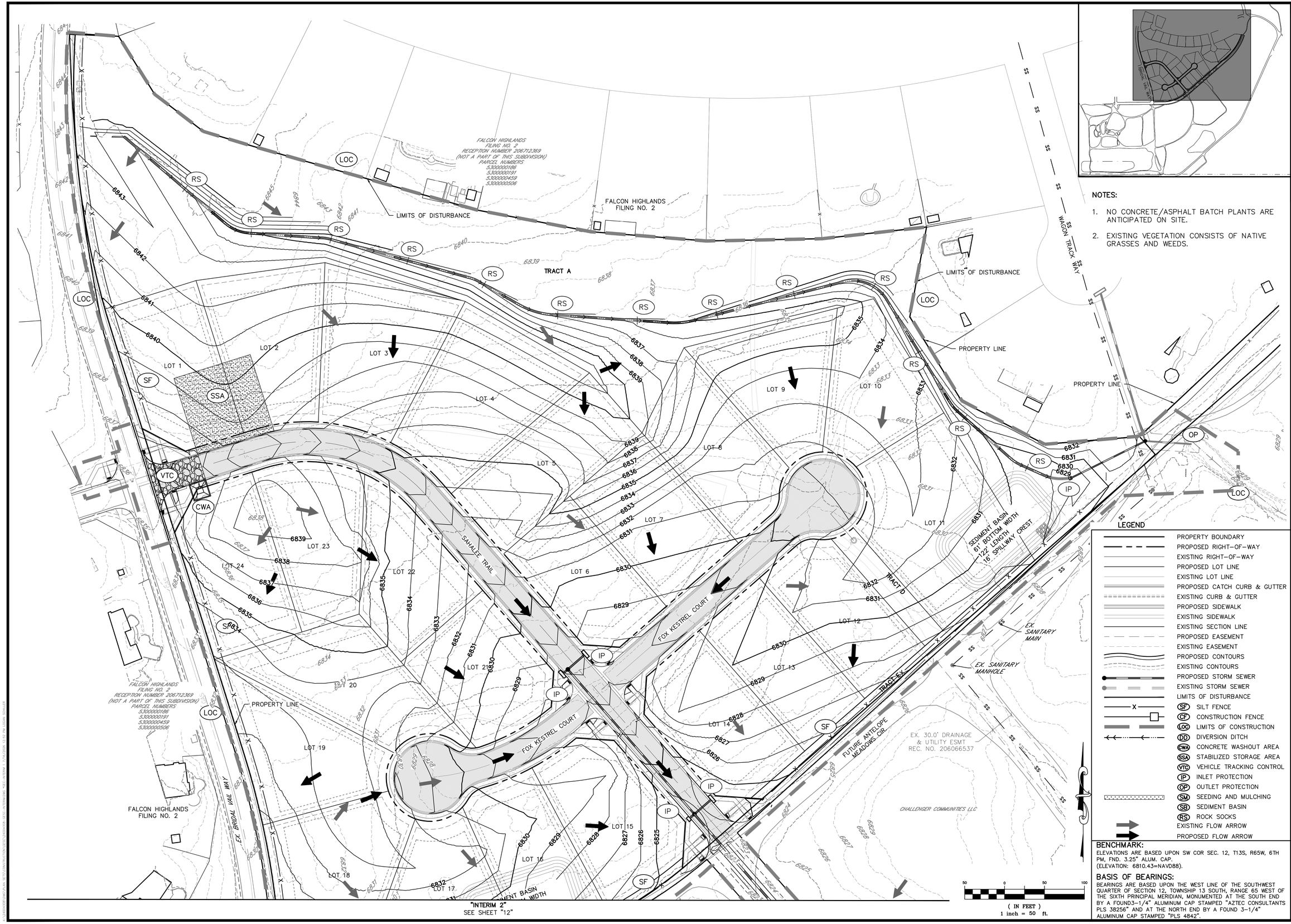
50 0 50 100
(IN FEET)
1 inch = 50 ft.

CAD FILE: 24004308-OVAL-CUT-FILLDWG



BENCHMARK:

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JIM BYERS

FALCON HIGHLANDS SOUTH – FILING 1
EL PASO COUNTY, COLORADO
GRADING AND EROSION CONTROL PLANS
EROSION & SEDIMENT CONTROL PLANS
INTERIM 1

CLIENT

DATE 5/30/2025

A	1st SUBMITTAL TO JURISDICTION 02/12/2024 – KB
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C	3rd SUBMITTAL TO JURISDICTION 04/15/2025 – KB
D	4th SUBMITTAL TO JURISDICTION 06/02/2025 – DM
E	5th SUBMITTAL TO JURISDICTION 09/08/2025 – DM

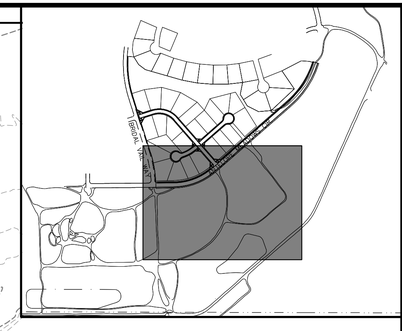
REVISIONS

DAVID MARSH
PLS 38834
07/15/26
NOT FOR CONSTRUCTION UNLESS SIGNED

COUNTY FILE NO.:

DR. TN | CH. KB
P.M. DM
JOB 24004308
SHEET NO. 11

CAD FILE: 24004308-DESC-INTERIM.DWG



NOTES:

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(IN FEET)
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LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT-OF-WAY
- EXISTING RIGHT-OF-WAY
- PROPOSED LOT LINE
- EXISTING LOT LINE
- PROPOSED CATCH CURB & GUTTER
- EXISTING CURB & GUTTER
- PROPOSED SIDEWALK
- EXISTING SIDEWALK
- EXISTING SECTION LINE
- PROPOSED EASEMENT
- EXISTING EASEMENT
- PROPOSED CONTOURS
- EXISTING CONTOURS
- PROPOSED STORM SEWER
- EXISTING STORM SEWER
- LIMITS OF DISTURBANCE
- (SF) SILT FENCE
- (CF) CONSTRUCTION FENCE
- (LOC) LIMITS OF CONSTRUCTION
- (DD) DIVERSION DITCH
- (CWA) CONCRETE WASHOUT AREA
- (SSA) STABILIZED STORAGE AREA
- (VTC) VEHICLE TRACKING CONTROL
- (IP) INLET PROTECTION
- (OP) OUTLET PROTECTION
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EL PASO COUNTY, COLORADO
GRADING AND EROSION CONTROL PLANS
EROSION & SEDIMENT CONTROL PLANS
INTERIM 2

DATE 5/30/2025

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B	2nd SUBMITTAL TO JURISDICTION 01/08/2025 – KB
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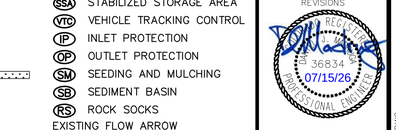
REVISIONS



COUNTY FILE NO.:

DR. TN | CH. KB
P.M. DM
JOB 24004308
SHEET NO. 12

CAD FILE: 24004308-GESC-INTERIM2.DWG

"INTERIM 2"
SEE SHEET "12"

"INTERIM 4"
SEE SHEET "14"

EX. 30.0' FORCE MAIN ESMT REC NO. 220130580

EX. 30.0' DRAINAGE & UTILITY ESMT REC. NO. 206066537

CHALLENGER COMMUNITIES LLC

EX. 30.0' DRAINAGE & UTILITY ESMT REC. NO. 206066537

EX. 30.0' DRAINAGE & UTILITY ESMT REC. NO. 206066537

20' DRAINAGE ESMT.

25' DRAINAGE ESMT.

EXISTING LIFT STATION

EX. DRAINAGE ESMT

10' UTIL ESMT

H20 SUB BLR LLC
C/O WALTON INTERNATIONAL GROUP (USA) INC
(NOT A PART OF THIS SUBDIVISION)
PARCEL NUMBER
5313000103

OGBURN LAMED C
OGBURN DELIA L
(NOT A PART OF THIS SUBDIVISION)
PARCEL NUMBER
5313000094

BLH NO 2 LLC
(NOT A PART OF THIS SUBDIVISION)
PARCEL NUMBER
5300000642

EX. 60.0' R.O.W

EX. 30.0' DRAINAGE ESMNT REC. NO. 206133777

PROPERTY BOUNDARY

LIMITS OF DISTURBANCE

PROPOSED STORM

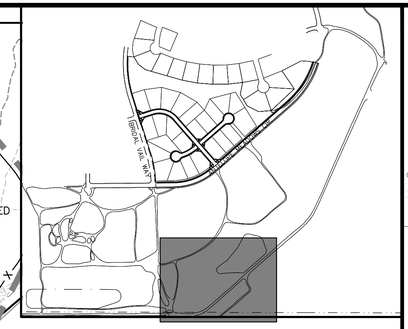
PROPOSED DETENTION BASIN 2

LIMITS OF DISTURBANCE

PROPOSED STORM

PROPERTY BOUNDARY

DD
LOC
SF
OP



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50 0 50 100
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	EXISTING CURB & GUTTER
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	EXISTING SIDEWALK
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	PROPOSED EASEMENT
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	EXISTING CONTOURS
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INTERIM 3

DATE 5/30/2025

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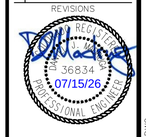
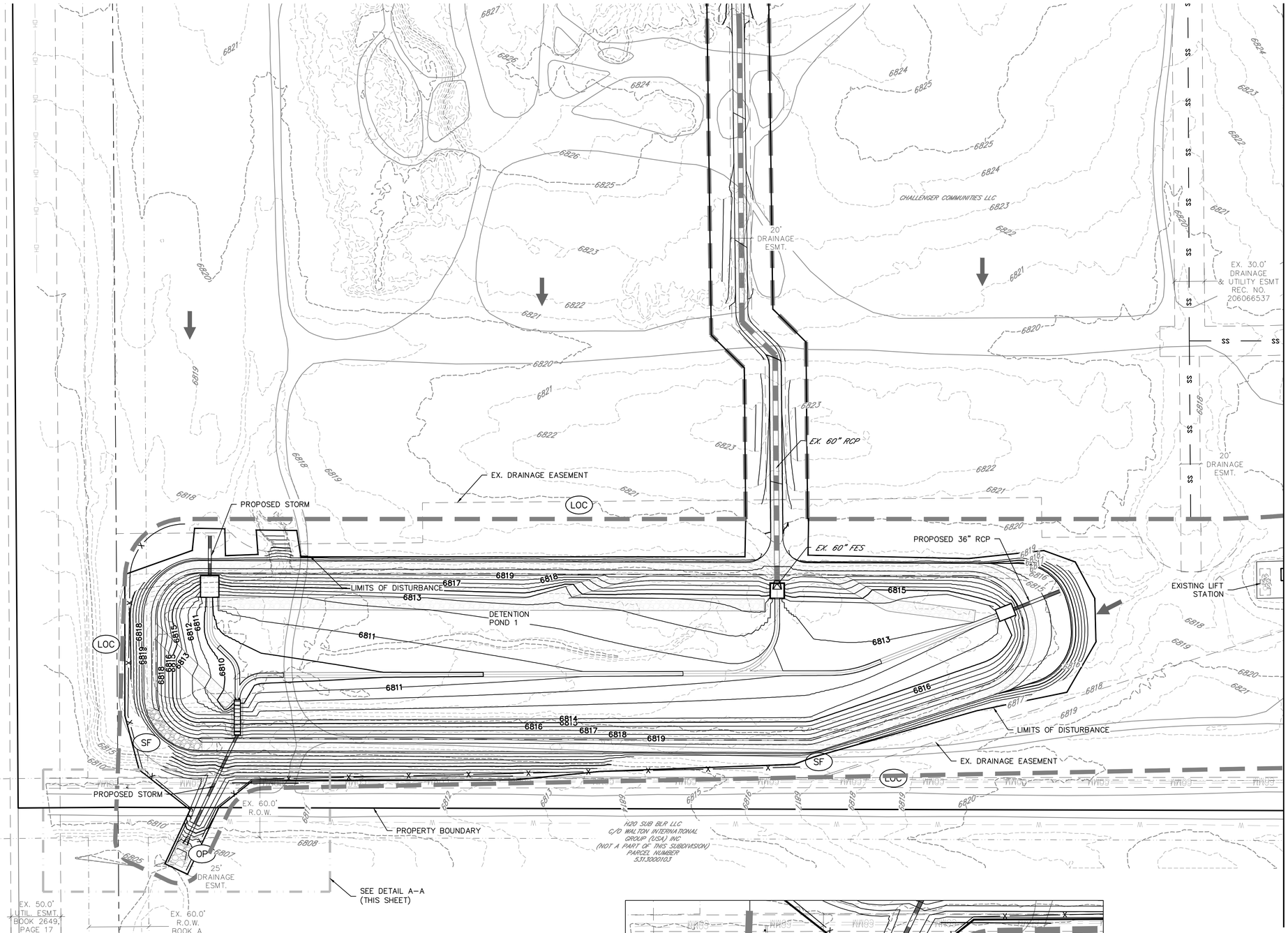
REVISIONS

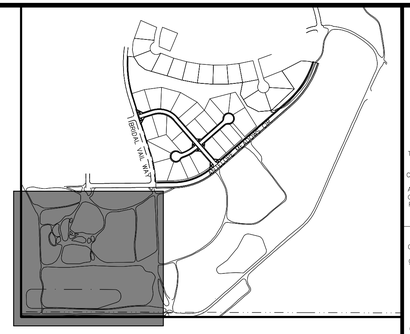


COUNTY FILE NO.:

DR. TN CH. KB
P.M. DM
JOB 24004308
SHEET NO. 13

CAD FILE: 24004308-GESC-INTERIM.DWG





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INTERIM 4

DATE 5/30/2025

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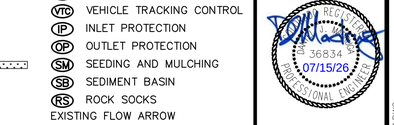
REVISIONS



COUNTY FILE NO.:

DR. TN	CH. KB
P.M. DM	
JOB 24004308	
SHEET NO. 14	

CAD FILE: 24004308-GESC-INTERIM.DWG

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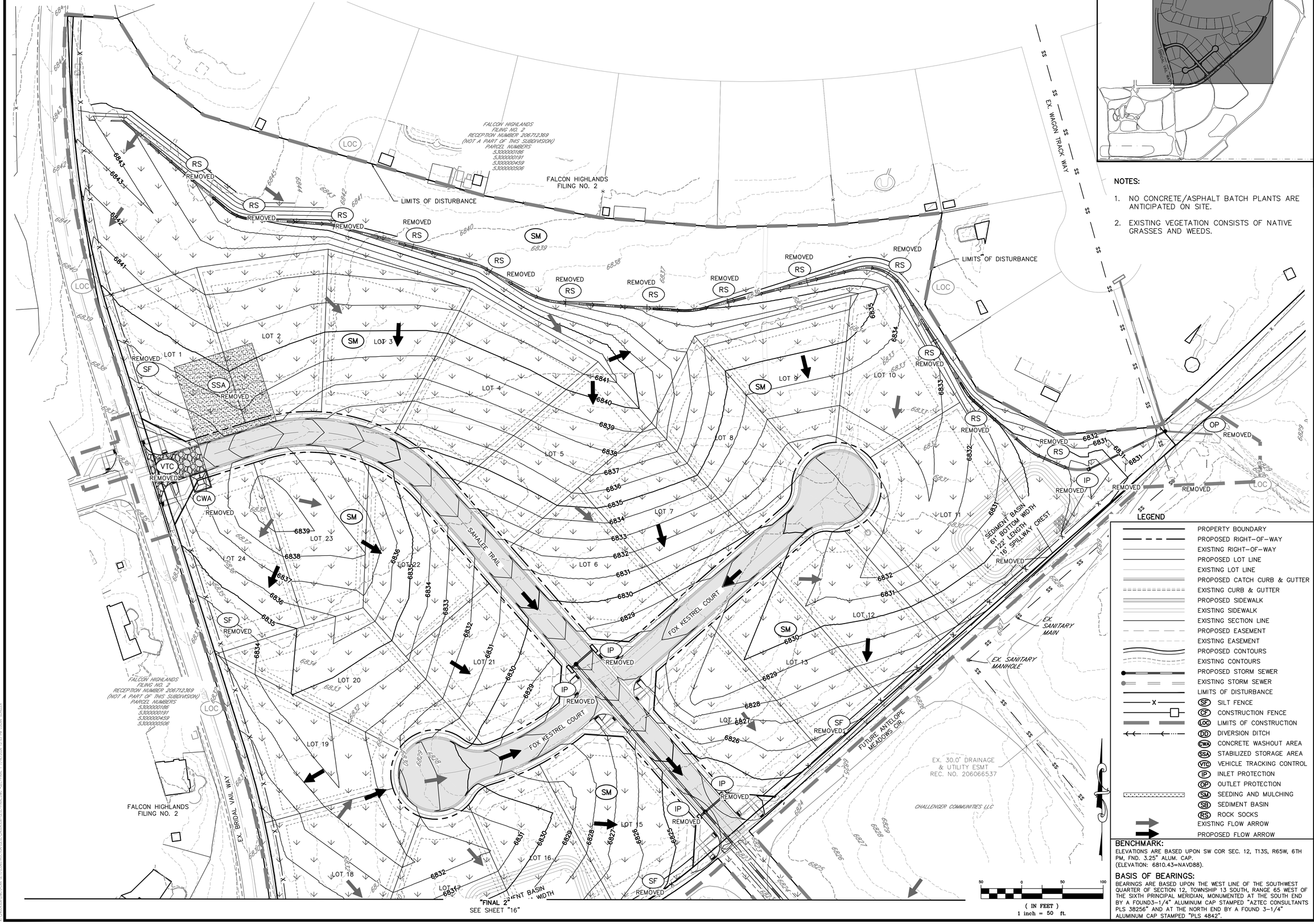

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FALCON HIGHLANDS SOUTH – FILING 1
EL PASO COUNTY, COLORADO
GRADING AND EROSION CONTROL PLANS
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FINAL 1

DATE 5/30/2025

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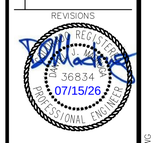
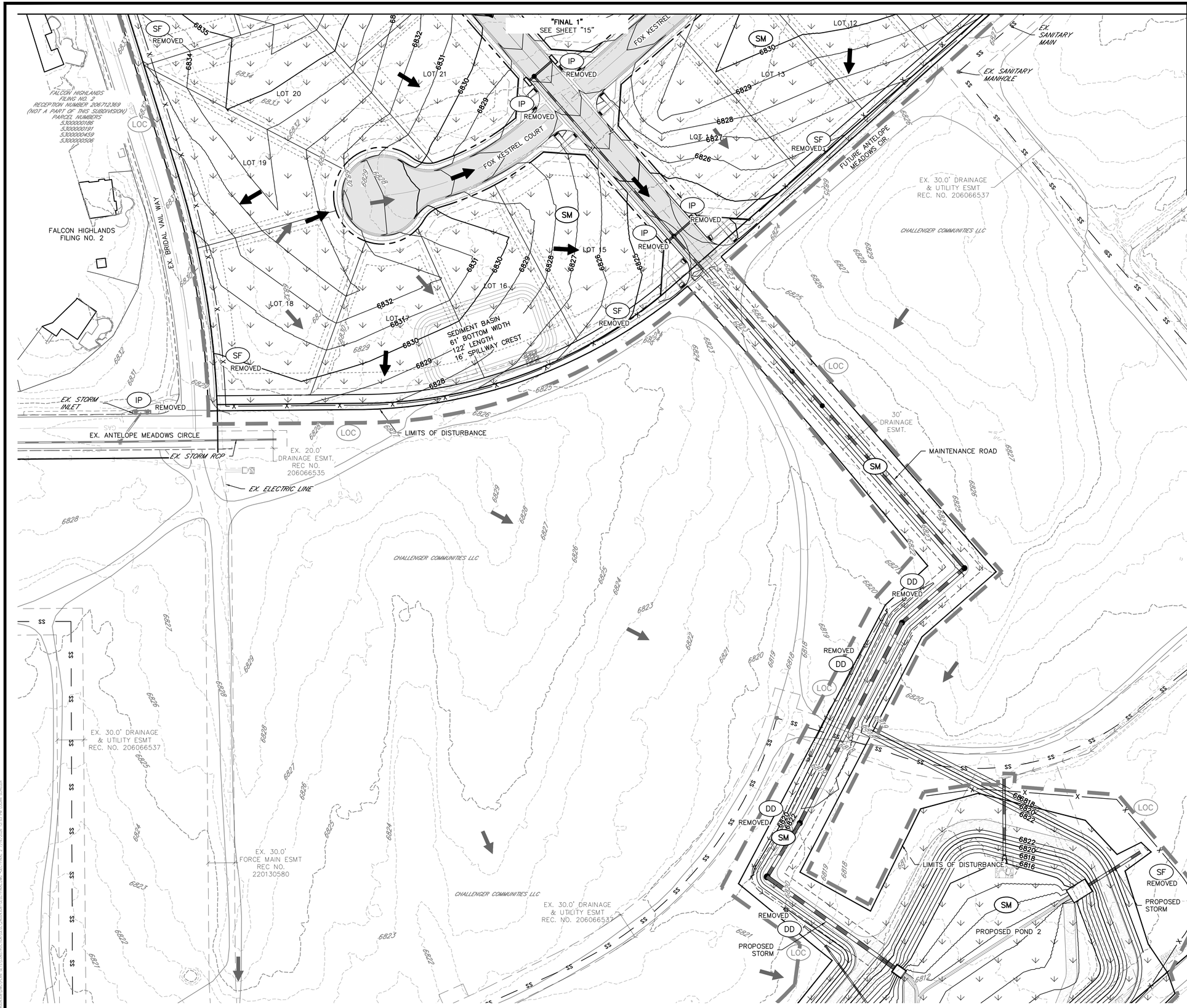
REVISIONS

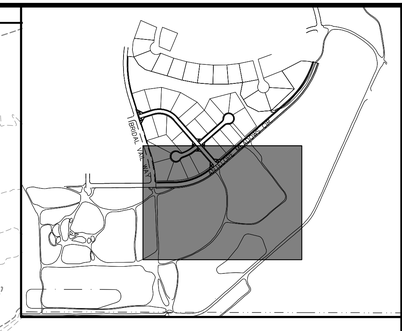


COUNTY FILE NO.:

DR. TN	CH. KB
P.M. DM	
JOB 24004308	
SHEET NO. 15	

CAD FILE: 24004308-GESC-FINAL.DWG





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2. EXISTING VEGETATION CONSISTS OF NATIVE GRASSES AND WEEDS.

(IN FEET)
1 inch = 50 ft.

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT-OF-WAY
- EXISTING RIGHT-OF-WAY
- PROPOSED LOT LINE
- EXISTING LOT LINE
- PROPOSED CATCH CURB & GUTTER
- EXISTING CURB & GUTTER
- PROPOSED SIDEWALK
- EXISTING SIDEWALK
- EXISTING SECTION LINE
- PROPOSED EASEMENT
- EXISTING EASEMENT
- PROPOSED CONTOURS
- EXISTING CONTOURS
- PROPOSED STORM SEWER
- EXISTING STORM SEWER
- LIMITS OF DISTURBANCE
- (SF) SILT FENCE
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- (LOC) LIMITS OF CONSTRUCTION
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- (SSA) STABILIZED STORAGE AREA
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(ELEVATION: 6810.43=NAVD88).

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CHALLENGER HOMES
FALCON HIGHLANDS SOUTH – FILING 1
EL PASO COUNTY, COLORADO
GRADING AND EROSION CONTROL PLANS
EROSION & SEDIMENT CONTROL PLANS
FINAL 2

DATE 5/30/2025

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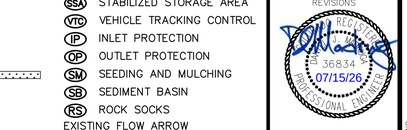
B	2nd SUBMITTAL TO JURISDICTION 01/08/2025 – KB
C	3rd SUBMITTAL TO JURISDICTION 04/15/2025 – KB
D	4th SUBMITTAL TO JURISDICTION 06/02/2025 – DM
E	5th SUBMITTAL TO JURISDICTION 09/08/2025 – DM

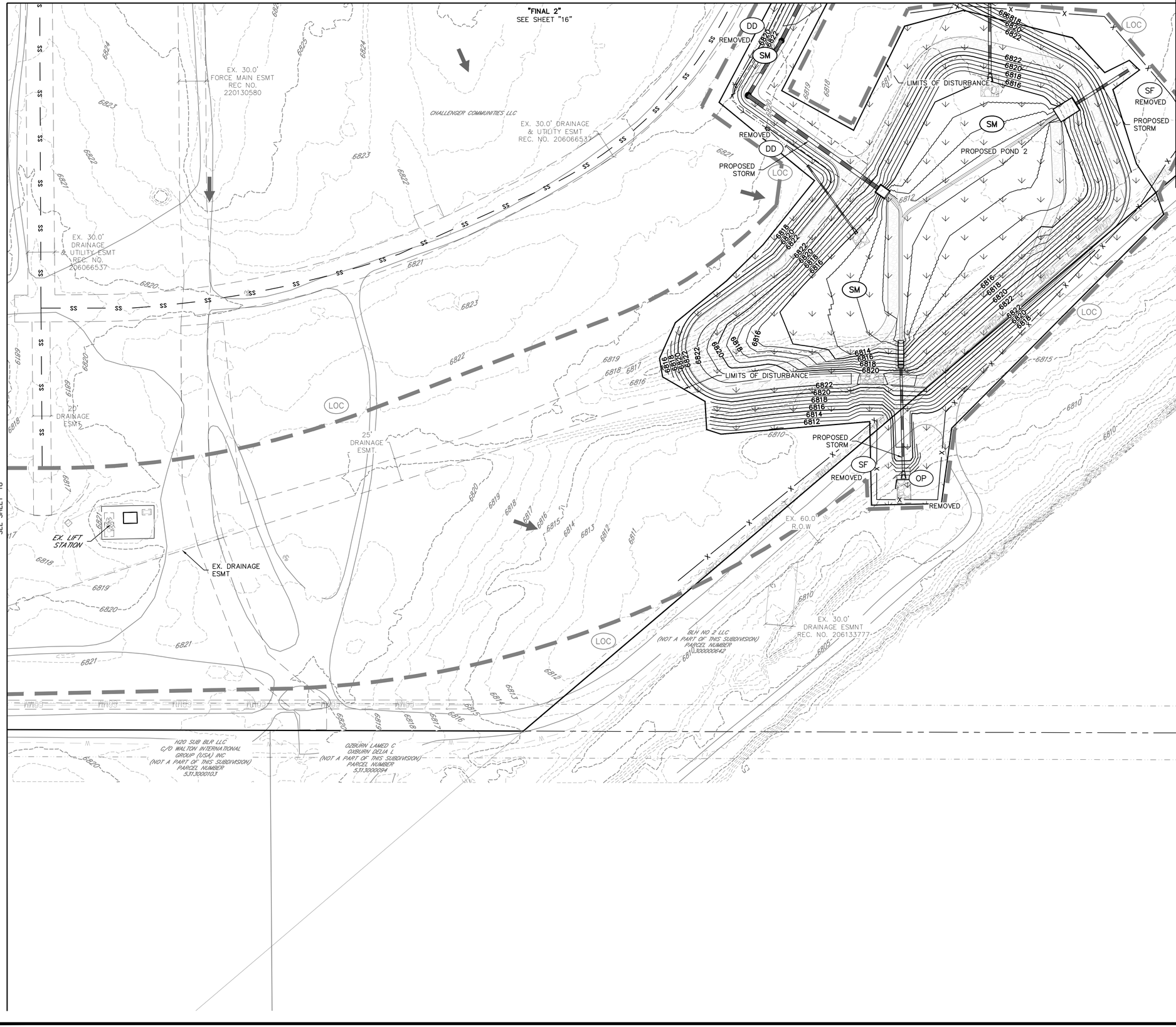
REVISIONS

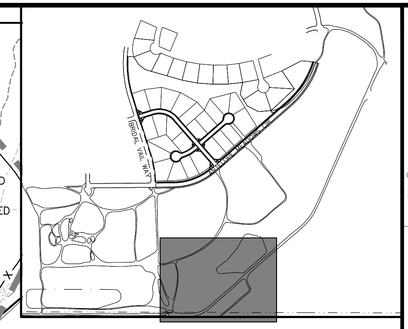


COUNTY FILE NO.:

DR.	TN
CH.	KB
P.M.	DM
JOB	24004308
SHEET NO.	16

CAD FILE: 24004308-GESC-FINALDWG





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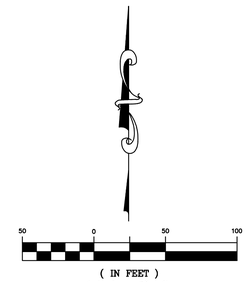

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REVISIONS

REGISTERED PROFESSIONAL ENGINEER
DAVID MADRY
36834
07/15/26
PROFESSIONAL ENGINEER

COUNTY FILE NO.:

DR. TN CH. KB
P.M. DM
JOB 24004308
SHEET NO. 17

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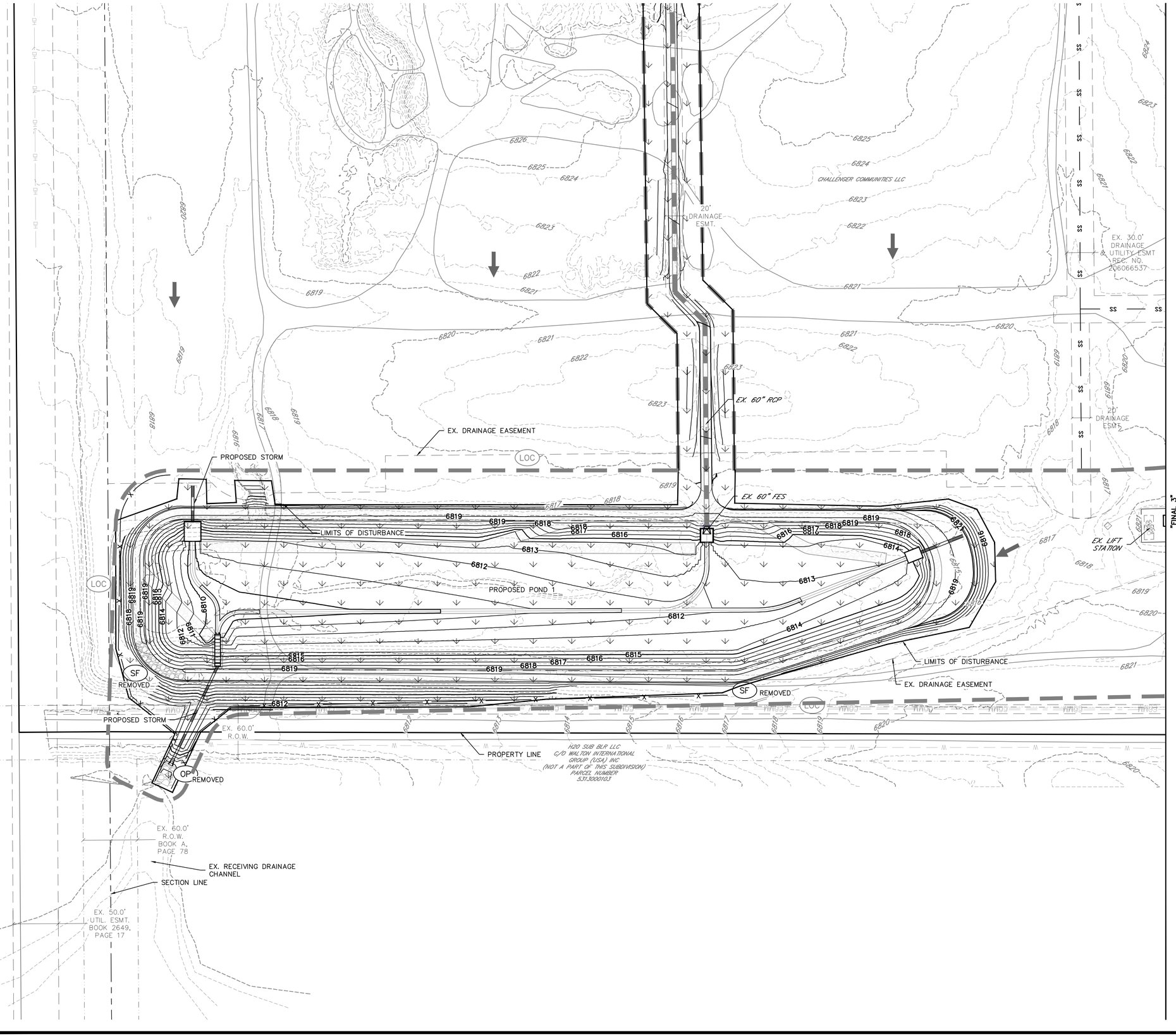

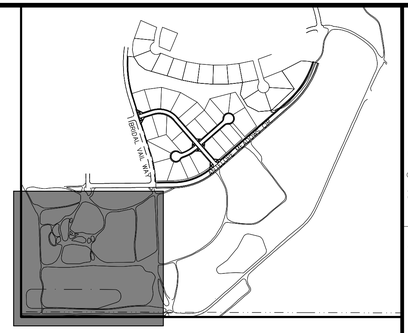

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07/15/26

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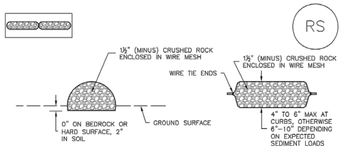

ROCK SOCK SECTION ROCK SOCK PLAN

ROCK SOCK JOINTING

GRADATION TABLE	
SIEVE SIZE	MASS PERCENT PASSING SQUARE MESH SIEVES
	NO. 4
2"	100
1½"	90 – 100
1"	20 – 55
¾"	0 – 15
¾"	0 – 5
MATCHES SPECIFICATIONS FOR NO. 4 COARSE AGGREGATE FOR CONCRETE PER AASHTO M43. ALL ROCK SHALL BE FRACTURED FACE, ALL SIDES.	

ROCK SOCK INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION(S) OF ROCK SOCKS.

2. CRUSHED ROCK SHALL BE 1½" (MINUS) IN SIZE WITH A FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON THIS SHEET (1½" MINUS).

3. WIRE MESH SHALL BE FABRICATED OF 10 GAGE POULTRY MESH, OR EQUIVALENT, WITH A MAXIMUM OPENING OF ½". RECOMMENDED MINIMUM ROLL WIDTH OF 48"

4. WIRE MESH SHALL BE SECURED USING "HOG RINGS" OR WIRE TIES AT 6" CENTERS ALONG ALL JOINTS AND AT 2" CENTERS ON ENDS OF SOCKS.

5. SOME MUNICIPALITIES MAY ALLOW THE USE OF FILTER FABRIC AS AN ALTERNATIVE TO WIRE MESH FOR THE ROCK ENCLOSURE.

RS–1. ROCK SOCK PERIMETER CONTROL

ROCK SOCK MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SOCKS SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED, OR DAMAGED BEYOND REPAIR.

5. SEDIMENT ACCUMULATED UPSTREAM OF ROCK SOCKS SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY ½ OF THE HEIGHT OF THE ROCK SOCK.

6. ROCK SOCKS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

7. WHEN ROCK SOCKS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

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.

NOTE: THE DETAILS INCLUDED WITH THIS FACT SHEET SHOW COMMONLY USED, CONVENTIONAL METHODS OF ROCK SOCK INSTALLATION IN THE DENVER METROPOLITAN AREA. THERE ARE MANY OTHER SIMILAR PROPRIETARY PRODUCTS ON THE MARKET. UDFCD NEITHER NOORSES NOR DISCOURAGES USE OF PROPRIETARY PROTECTON PRODUCTS; HOWEVER, IN THE EVENT PROPRIETARY METHODS ARE USED, THE APPROPRIATE DETAIL FROM THE MANUFACTURER MUST BE INCLUDED IN THE SWMP AND THE BMP MUST BE INSTALLED AND MAINTAINED AS SHOWN IN THE MANUFACTURER'S DETAILS.

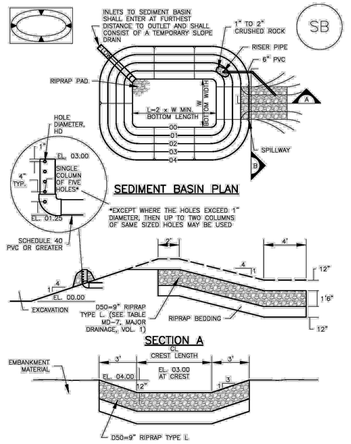

TABLE SB–1. SIZING INFORMATION FOR STANDARD SEDIMENT BASIN			
Upstream Drainage Area (rounded to nearest acre), (ac)	Basin Bottom Width (W), (ft)	Spillway Crest Length (CL), (ft)	Hole Diameter (HD), (in)
1	12 ½	2	9/32
2	21	3	13/64
3	28	5	1/4
4	33 ½	6	5/16
5	38 ½	8	7/32
6	43	9	9/32
7	47 ¾	11	11/32
8	51	12	13/32
9	55	13	3/8
10	58 ¾	15	15/64
11	61	16	31/64
12	64	18	1
13	67 ½	19	1 1/4
14	70 ½	21	1 3/4
15	73 ¼	22	1 31/64

* USING 2 SEDIMENT BASIN AT THE SAME DIMENSIONS

SEDIMENT BASIN INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION OF SEDIMENT BASIN.
   –TYPE OF BASIN (STANDARD BASIN OR NONSTANDARD BASIN).
   –FOR STANDARD BASIN, BOTTOM WIDTH W, CREST LENGTH CL, AND HOLE DIAMETER, HD.
   –FOR NONSTANDARD BASIN, SEE CONSTRUCTION DRAWINGS FOR DESIGN OF BASIN INCLUDING RISER HEIGHT H, NUMBER OF COLUMNS N, HOLE DIAMETER HD AND PIPE DIAMETER D.

2. FOR STANDARD BASIN, BOTTOM DIMENSION MAY BE MODIFIED AS LONG AS BOTTOM AREA IS NOT REDUCED.

3. SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO ANY OTHER LAND–DISTURBING ACTIVITY THAT RELIES ON ON BASINS AS AS A STORMWATER CONTROL.

4. EMBANKMENT MATERIAL SHALL CONSIST OF SOIL FREE OF DEBRIS, ORGANIC MATERIAL, AND ROCKS OR CONCRETE GREATER THAN 3 INCHES AND SHALL HAVE A MINIMUM OF 15 PERCENT BY WEIGHT PASSING THE NO. 200 SIEVE.

5. EMBANKMENT MATERIAL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.

6. PIPE SCH 40 OR GREATER SHALL BE USED.

7. THE DETAILS SHOWN ON THESE SHEETS PERTAIN TO STANDARD SEDIMENT BASIN(S) FOR DRAINAGE AREAS LESS THAN 15 ACRES. SEE CONSTRUCTION DRAWINGS FOR EMBANKMENT, STORAGE VOLUME, SPILLWAY, OUTLET, AND OUTLET PROTECTION DETAILS FOR ANY SEDIMENT BASIN(S) THAT HAVE BEEN INDIVIDUALLY DESIGNED FOR DRAINAGE AREAS LARGER THAN 15 ACRES.

SEDIMENT BASIN MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED IN BASIN SHALL BE REMOVED AS NEEDED TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN SEDIMENT DEPTH REACHES ONE FOOT (I.E., TWO FEET BELOW THE SPILLWAY CREST).

5. SEDIMENT BASINS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS ACCEPTED BY THE LOCAL JURISDICTION.

6. WHEN SEDIMENT BASINS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO)

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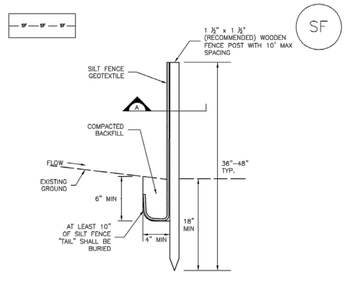

SILT FENCE

SECTION A

SF–1. SILT FENCE

SILT FENCE INSTALLATION NOTES

1. SILT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2–5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR PONDING AND DEPOSITION.

2. A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO ROAD GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED.

3. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.

4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES.

5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE.

6. AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J–HOOK." THE "J–HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' – 20').

7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

SILT FENCE MAINTENANCE NOTES

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4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6".

5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE.

6. SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURSDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER SEDIMENT CONTROL BMP.

7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, NOT AVAILABLE IN AUTOCAD)

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.

811 Know what's below. Call before you dig.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE:
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR; NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

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CLIENT

FALCON HIGHLANDS SOUTH – FILING 1
EL PASO COUNTY, COLORADO
CONSTRUCTION PLANS
GEC DETAILS

DATE 5/30/2025

A	1st SUBMITTAL TO JURISDICTION 07/12/2024 — KB
B	2nd SUBMITTAL TO JURISDICTION 01/08/2025 — KB
C	3rd SUBMITTAL TO JURISDICTION 04/25/2025 — KB
D	4th SUBMITTAL TO JURISDICTION 06/02/2025 — RM
E	5th SUBMITTAL TO JURISDICTION 08/01/2025 — RM
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G	7th SUBMITTAL TO JURISDICTION 07/16/2026 — RM

COUNTY FILE NO.: SF2418

DR. TN CH. LS
P.M. DM
JOB 24004308
SHEET NO. 19

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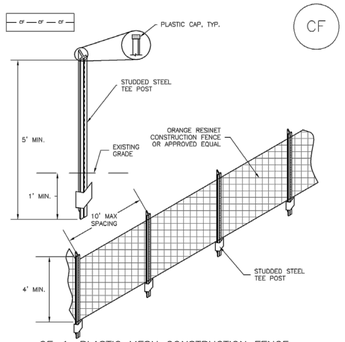


CF–1. PLASTIC MESH CONSTRUCTION FENCE

CONSTRUCTION FENCE INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION OF CONSTRUCTION FENCE.

2. CONSTRUCTION FENCE SHOWN SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

3. CONSTRUCTION FENCE SHALL BE COMPOSED OF ORANGE, CONTRACTOR–GRADE MATERIAL THAT IS AT LEAST 4' HIGH. METAL POSTS SHOULD HAVE A PLASTIC CAP FOR SAFETY.

4. STUDDED STEEL TEE POSTS SHALL BE UTILIZED TO SUPPORT THE CONSTRUCTION FENCE. MAXIMUM SPACING FOR STEEL TEE POSTS SHALL BE 10'.

5. CONSTRUCTION FENCE SHALL BE SECURELY FASTENED TO THE TOP, MIDDLE, AND BOTTOM OF EACH POST.

CONSTRUCTION FENCE MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

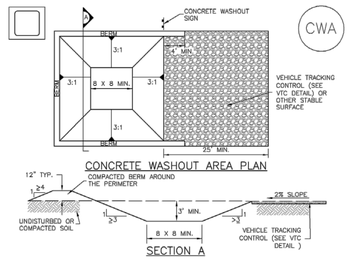
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. CONSTRUCTION FENCE SHALL BE REPAIRED OR REPLACED WHEN THERE ARE SIGNS OF DAMAGE SUCH AS RIPS OR SAGS. CONSTRUCTION FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

5. WHEN CONSTRUCTION FENCES ARE REMOVED, ALL DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE FENCE SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

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.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)



CWA–1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –CWA INSTALLATION LOCATION.

2. DO NOT LOCATE AN UNLINED 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 (18 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.

3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.

4. 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.

5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.

6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.

7. 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 RIGS.

8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

CWA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE. CONCRETE MATERIALS, ACCUMULATED IN PIT, SHALL BE REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2'.

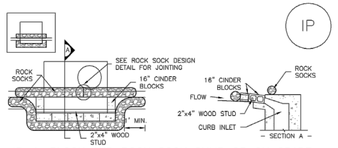
5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER–TIGHT CONTAINER AND DISPOSED OF PROPERLY.

6. THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.

7. WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM DOUGLAS COUNTY, COLORADO AND THE CITY OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD).

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.



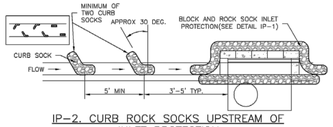
IP–1. BLOCK AND ROCK SOCK SUMP OR ON GRADE INLET PROTECTION

BLOCK AND CURB SOCK INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. CONCRETE "CINDER" 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 JOINTED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL.



IP–2. CURB ROCK SOCKS UPSTREAM OF INLET PROTECTION

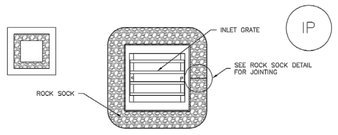
CURB ROCK SOCK INLET PROTECTION INSTALLATION NOTES

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.

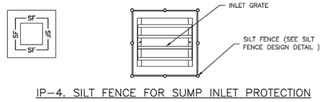
4. AT LEAST TWO CURB SOCKS IN SERIES ARE REQUIRED UPSTREAM OF ON–GRADE INLETS.



IP–3. ROCK SOCK SUMP/AREA INLET PROTECTION

ROCK SOCK SUMP/AREA INLET PROTECTION INSTALLATION NOTES
1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF ROCK SOCKS FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.



IP–4. SILT FENCE FOR SUMP INLET PROTECTION

SILT FENCE INLET PROTECTION INSTALLATION NOTES

1. SEE SILT FENCE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. POSTS SHALL BE PLACED AT EACH CORNER OF THE INLET AND AROUND THE EDGES AT A MAXIMUM SPACING OF 3 FEET.

3. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF SILT FENCE FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.

GENERAL INLET PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION OF INLET PROTECTION.
   –TYPE OF INLET PROTECTION (IP.1, IP.2, IP.3, IP.4, IP.5, IP.6)

2. INLET PROTECTION SHALL BE INSTALLED PROMPTLY AFTER INLET CONSTRUCTION OR PAVING IS COMPLETE (TYPICALLY WITHIN 48 HOURS). IF A RAINFALL/RUNOFF EVENT IS FORECAST, INSTALL INLET PROTECTION PRIOR TO ONSET OF EVENT.

3. 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.

INLET PROTECTION MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF INLET PROTECTION SHALL BE REMOVED AS NECESSARY TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN STORAGE VOLUME REACHES 50% OF CAPACITY, A DEPTH OF 6" WHEN SILT FENCE IS USED, OR ¼ OF THE HEIGHT FOR STRAW BALES.

5. INLET PROTECTION IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED, UNLESS THE LOCAL JURISDICTION APPROVES EARLIER REMOVAL OF INLET PROTECTION IN STREETS.

6. WHEN INLET PROTECTION AT AREA INLETS IS REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

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.

NOTE: THE DETAILS INCLUDED WITH THIS FACT SHEET SHOW COMMONLY USED, CONVENTIONAL METHODS OF INLET PROTECTION IN THE DENVER METROPOLITAN AREA. THERE ARE MANY PROPRIETARY INLET PROTECTION METHODS ON THE MARKET. UDFCD NEITHER ENDORSES NOR DISCOURAGES USE OF PROPRIETARY INLET PROTECTION; HOWEVER, IN THE EVENT PROPRIETARY METHODS ARE USED, THE APPROPRIATE DETAIL FROM THE MANUFACTURER MUST BE INCLUDED IN THE SWMP AND THE BMP MUST BE INSTALLED AND MAINTAINED AS SHOWN IN THE MANUFACTURER'S DETAILS.

NOTE: SOME MUNICIPALITIES DISCOURAGE OR PROHIBIT THE USE OF STRAW BALES FOR INLET PROTECTION. CHECK WITH LOCAL JURISDICTION TO DETERMINE IF STRAW BALE INLET PROTECTION IS ACCEPTABLE.

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NOTICE:
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COUNTY FILE NO.: SF2418

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P.M. DM
JOB 24004308
SHEET NO. 20

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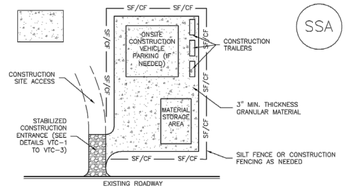
Stabilized Staging Area (SSA) SM-6



SSA-1, STABILIZED STAGING AREA

STABILIZED STAGING AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   -LOCATION OF STAGING AREA(S).
   -CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.

2. STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.

3. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.

4. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.

5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

6. ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.

STABILIZED STAGING AREA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.

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.

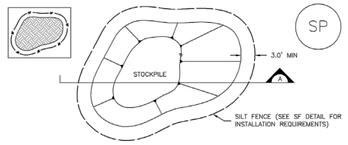
6. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE LOCAL JURISDICTION, USED ON SITE, AND THE AREA COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.

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

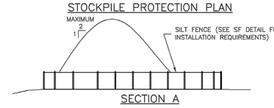
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

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

Stockpile Management (SP) MM-2



STOCKPILE PROTECTION PLAN



SECTION A

SP-1, STOCKPILE PROTECTION

STOCKPILE PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   -LOCATION OF STOCKPILES.
   -TYPE OF STOCKPILE PROTECTION.

2. INSTALL PERIMETER CONTROLS IN ACCORDANCE WITH THEIR RESPECTIVE DESIGN DETAILS. SILT FENCE IS SHOWN IN THE STOCKPILE PROTECTION DETAILS; HOWEVER, OTHER TYPES OF PERIMETER CONTROLS INCLUDING SEDIMENT CONTROL LOGS OR ROCK SOCKS MAY BE SUITABLE IN SOME CIRCUMSTANCES. CONSIDERATIONS FOR DETERMINING THE APPROPRIATE TYPE OF PERIMETER CONTROL FOR A STOCKPILE INCLUDE WHETHER THE STOCKPILE IS LOCATED ON A PERVIOUS OR IMPERVIOUS SURFACE, THE RELATIVE HEIGHTS OF THE PERIMETER CONTROL AND STOCKPILE, THE ABILITY OF THE PERIMETER CONTROL TO CONTAIN THE STOCKPILE WITHOUT FAILING IN THE EVENT THAT MATERIAL FROM THE STOCKPILE SHIFTS OR SLUMPS AGAINST THE PERIMETER, AND OTHER FACTORS.

3. STABILIZE THE STOCKPILE SURFACE WITH SURFACE ROUGHENING, TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS, OR SOIL BINDERS. SOILS STOCKPILED FOR AN EXTENDED PERIOD (TYPICALLY FOR MORE THAN 60 DAYS) SHOULD BE SEEDED AND MULCHED WITH A TEMPORARY GRASS COVER ONCE THE STOCKPILE IS PLACED (TYPICALLY WITHIN 14 DAYS). USE OF MULCH ONLY OR A SOIL BINDER IS ACCEPTABLE IF THE STOCKPILE WILL BE IN PLACE FOR A MORE LIMITED TIME PERIOD (TYPICALLY 30–60 DAYS).

4. FOR TEMPORARY STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION SITE, WHERE OTHER DOWNGRADIENT CONTROLS, INCLUDING PERIMETER CONTROL, ARE IN PLACE, STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.

MM-2 Stockpile Management (SM)

STOCKPILE PROTECTION MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

STOCKPILE PROTECTION MAINTENANCE NOTES

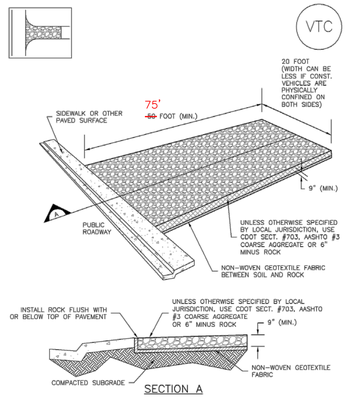
4. IF PERIMETER PROTECTION MUST BE MOVED TO ACCESS SOIL STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORKDAY.

5. STOCKPILE PERIMETER CONTROLS CAN BE REMOVED ONCE ALL THE MATERIAL FROM THE STOCKPILE HAS BEEN USED.

(DETAILS ADAPTED FROM PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)

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.

Vehicle Tracking Control (VTC) SM-4



SECTION A

VTC-1, AGGREGATE VEHICLE TRACKING CONTROL

SM-4 Vehicle Tracking Control (VTC)

STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   -LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S).
   -TYPE OF CONSTRUCTION ENTRANCE(S)/EXIT(S) (WITH/WITHOUT WHEEL WASH, CONSTRUCTION MAT OR TRM).

2. CONSTRUCTION MAT OR TRM STABILIZED CONSTRUCTION ENTRANCES ARE ONLY TO BE USED ON SHORT DURATION PROJECTS (TYPICALLY RANGING FROM A WEEK TO A MONTH) WHERE THERE WILL BE LIMITED VEHICULAR ACCESS.

3. A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE LOCATED AT ALL ACCESS POINTS WHERE VEHICLES ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT-OF-WAYS.

4. STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

5. A NON-WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STABILIZED CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK.

6. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

STABILIZED CONSTRUCTION ENTRANCE/EXIT MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

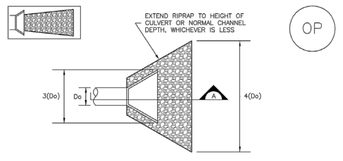
4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY TO THE STABILIZED ENTRANCE/EXIT TO MAINTAIN A CONSISTENT DEPTH.

5. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED THROUGHOUT THE DAY AND AT THE END OF THE DAY BY SHOVELING OR SWEEPING. SEDIMENT MAY NOT BE WASHED DOWN STORM SEWER DRAINS.

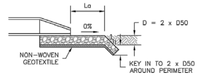
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM CITY OF BROOMFIELD, COLORADO, NOT AVAILABLE IN AUTOCAD)

EC-8 Temporary Outlet Protection (TOP)



TEMPORARY OUTLET PROTECTION PLAN



SECTION A

TABLE OP-1, TEMPORARY OUTLET PROTECTION SIZING TABLE

PIPE DIAMETER, Do (INCHES)	DISCHARGE, Q (CFS)	APRON LENGTH, La (FT)	RIPRAP D50 DIAMETER MIN (INCHES)
8	2.5	5	4
	5	10	6
12	5	10	4
	10	13	6
18	10	10	6
	20	16	9
	30	23	12
	40	26	16
24	30	16	9
	40	26	9
	50	26	12
	60	30	16

OP-1, TEMPORARY OUTLET PROTECTION

Temporary Outlet Protection (TOP) EC-8

TEMPORARY OUTLET PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   -LOCATION OF OUTLET PROTECTION.
   -DIMENSIONS OF OUTLET PROTECTION.

2. DETAIL IS INTENDED FOR PIPES WITH SLOPE ≤ 10%. ADDITIONAL EVALUATION OF RIPRAP SIZING AND OUTLET PROTECTION DIMENSIONS REQUIRED FOR STEEPER SLOPES.

3. TEMPORARY OUTLET PROTECTION INFORMATION IS FOR OUTLETS INTENDED TO BE UTILIZED LESS THAN 2 YEARS.

TEMPORARY OUTLET PROTECTION INSPECTION AND MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

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(DETAILS ADAPTED FROM AURORA, COLORADO AND PREVIOUS VERSION OF VOLUME 3, NOT AVAILABLE IN AUTOCAD)

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719-598-5192
JIM BYERS

CLIENT

CHALLENGER HOMES
FALCON HIGHLANDS SOUTH – FILING 1
EL PASO COUNTY, COLORADO
CONSTRUCTION PLANS
GEC DETAILS

DATE 5/30/2025

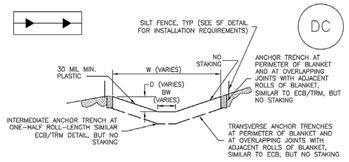
A	1st SUBMITTAL TO JURISDICTION 07/12/2024 — KB
B	2nd SUBMITTAL TO JURISDICTION 01/08/2025 — KB
C	3rd SUBMITTAL TO JURISDICTION 04/15/2025 — KB
D	4th SUBMITTAL TO JURISDICTION 06/02/2025 — DM
E	5th SUBMITTAL TO JURISDICTION 08/01/2025 — DM
F	6th SUBMITTAL TO JURISDICTION 09/08/2025 — DM
G	7th SUBMITTAL TO JURISDICTION 07/16/2026 — DM

COUNTY FILE NO.: SF2418

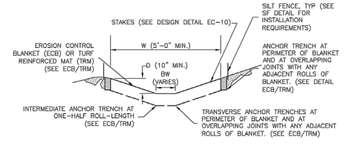
DR. TN CH. LS
P.M. DM
JOB 24004308
SHEET NO. 21

CAD FILE: 24004308-GESC-DETAILS.DWG

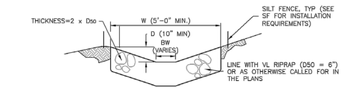
U:\DOCUMENTATION\CHALLENGER HOMES\24004308 FALCON HIGHLANDS SOUTH - FILING 1\GEC DETAILS\24004308-GESC-DETAILS.DWG, 5/30/2025 7:53:39 AM, DAVID MCCLAIN



DC–1. PLASTIC LINED DIVERSION CHANNEL



DC–2. GEOTEXTILE OR MAT LINED DIVERSION CHANNEL



DC–3. RIPRAP LINED DIVERSION CHANNEL

CHANNEL DIVERSION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION OF DIVERSION CHANNEL.
   –TYPE OF CHANNEL (UNLINED, GEOTEXTILE OR MAT LINED, PLASTIC LINE, OR RIPRAP LINED).
   –LENGTH OF EACH TYPE OF CHANNEL.
   –DEPTH, D, WIDTH, W, AND BOTTOM WIDTH, BW.
   –FOR RIPRAP LINED CHANNEL, SIZE OF RIPRAP, D50, SHALL BE SHOWN ON PLANS.
2. SEE DRAINAGE PLANS FOR DETAILS OF PERMANENT CONVEYANCE FACILITIES.
3. DIVERSION CHANNELS INDICATED ON THE SWMP PLAN SHALL BE INSTALLED PRIOR TO WORK IN DOWNGRADIENT AREAS OR NATURAL CHANNELS.
4. FOR GEOTEXTILE OR MAT LINED CHANNELS, INSTALLATION OF GEOTEXTILE OR MAT SHALL CONFORM TO THE REQUIREMENTS OF DETAIL ECB. FOR PLASTIC LINED CHANNELS, INSTALLATION OF ANCHOR TRENCHES SHALL CONFORM TO THE REQUIREMENTS OF DETAIL ECB.
5. WHERE CONSTRUCTION TRAFFIC MUST CROSS A DIVERSION CHANNEL, THE PERMITTEE SHALL INSTALL A TEMPORARY STREAM CROSSING CONFORMING TO THE REQUIREMENTS OF DETAIL TSC.

DIVERSION CHANNEL MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. DIVERSION CHANNELS ARE TO REMAIN IN PLACE UNTIL WORK IN THE DOWNGRADIENT AREA OR NATURAL CHANNEL IS NO LONGER REQUIRED. IF APPROVED BY LOCAL JURISDICTION DIVERSION CHANNEL MAY BE LEFT IN PLACE.
5. IF DIVERSION CHANNELS ARE REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO)

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.

Table TS/PS-1. Minimum Drill Seeding Rates for Various Temporary Annual Grasses

Species[a] (Common name)	Growth Season[b]	Pounds of Pure Live Seed (PLS)/acre[c]	Planting Depth (inches)
1. Oats	Cool	35 - 50	1 - 2
2. Spring wheat	Cool	25 - 35	1 - 2
3. Spring barley	Cool	25 - 35	1 - 2
4. Annual ryegrass	Cool	10 - 15	½
5. Millet	Warm	3 - 15	½ - ¾
6. Winter wheat	Cool	20–35	1 - 2
7. Winter barley	Cool	20–35	1 - 2
8. Winter rye	Cool	20–35	1 - 2
9. Triticale	Cool	25–40	1 - 2

[a] Successful seeding of annual grass resulting in adequate plant growth will usually produce enough dead-plant residue to provide protection from wind and water erosion for an additional year. This assumes that the cover is not disturbed or mowed closer than 8 inches.

Hydraulic seeding may be substituted for drilling only where slopes are steeper than 3:1 or where access limitations exist. When hydraulic seeding is used, hydraulic mulching should be applied as a separate operation, when practical, to prevent the seeds from being encapsulated in the mulch.

[b] See Table TS/PS-2 for seeding dates. Irrigation, if consistently applied, may extend the use of cool season species during the summer months.

[c] Seeding rates should be doubled if seed is broadcast, or increased by 50 percent if done using a Brillion Drill or by hydraulic seeding.

Table TS/PS-2. Seeding Dates for Annual and Perennial Grasses

	Annual Grasses (Numbers in table reference species in Table TS/PS-1)		Perennial Grasses	
Seeding Dates	**Warm**	**Cool**	**Warm**	**Cool**
January 1–March 15			✓	✓
March 16–April 30		1,2,3	✓	✓
May 1–May 15			✓	
May 16–June 30	5			
July 1–July 15	5			
July 16–August 31				
September 1–September 30		6, 7, 8, 9		
October 1–December 31			✓	✓

Mulch

Cover seeded areas with mulch or an appropriate rolled erosion control product to promote establishment of vegetation. Anchor mulch by crimping, netting or use of a non-toxic tackifier. See the USDCM Volume 2 *Revegetation* Chapter and Volume 3 Mulching BMP Fact Sheet (EC-04) for additional guidance.

Maintenance and Removal

Monitor and observe seeded areas to identify areas of poor growth or areas that fail to germinate. Reseed and mulch these areas, as needed.

If a temporary annual seed was planted, the area should be reseeded with the desired perennial mix when there will be no further work in the area. To minimize competition between annual and perennial species, the annual mix needs time to mature and die before seeding the perennial mix. To increase success of the perennial mix, it should be seeded during the appropriate seeding dates the second year after the temporary annual mix was seeded. Alternatively, if this timeline is not feasible, the annual mix seed heads should be removed and then the area seeded with the perennial mix.

An area that has been permanently seeded should have a good stand of vegetation within one growing season if irrigated and within three growing seasons without irrigation in Colorado. Reseed portions of the site that fail to germinate or remain bare after the first growing season.

Seeded areas may require irrigation, particularly during extended dry periods. Targeted weed control may also be necessary.

Protect seeded areas from construction equipment and vehicle access.

ELBERT COUNTY SEED MIX INFORMATION

Permanent Drill Seed Mix

Common Name	Botanical Name	Variety	Notes	% in Mix	Pounds of PLS Per Acre
BIG BLUESTEM	*Andropogon gerardi*	KAW	PNWS	10	1.1
YELLOW INDIANGRASS	*Sorghastrum nutans*	CHEYENNE	PNWS	10	1
SWITCHGRASS	*Panicum virgatum*	BLACKWELL	PNWS	10	0.4
SIDEOATS GRAMA	*Bouteloua curtipendula*	VAUGHN	PNWB	10	0.9
WESTERN WHEATGRASS	*Pascopyrum smithii*	ARRIBA	PNCS	10	1.6
BLUE GRAMA	*Bouteloua gracilis*	HACHITA	PNWB	10	0.3
THICKSPIKE WHEATGRASS	*Elymus lanceolatus ssp. dasystachyum*	CRITANA	PNCS	10	1
PRAIRIE SANDREED	*Calamovilfa longifolia*	GOSHEN	PNWS	10	0.7
GREEN NEEDLEGRASS	*Stipa viridula*	LODORM	PNCB	10	1
SLENDER WHEATGRASS	*Elymus trachycaulus ssp. trachycaulus*	PRYOR	PNCB	5	0.6
STREAMBANK WHEATGRASS	*Elymus lanceolatus ssp. riparium*	SODAR	PNCS	5	0.6

Temporary Drill Seeding Mix

Common Name	Botanical Name	Variety	Notes	% in Mix	Pounds of PLS Per Acre
SMOOTH BROMEGRASS	*Bromus inermis*	LINCOLN	PICS	30	3.9
INTERMEDIATE WHEATGRASS	*Elytrigia intermedia ssp. intermedia*	OAHE	PICS	30	4.5
PUBESCENT WHEATGRASS	*Elytrigia intermedia ssp. trichophorum*	LUNA	PICS	30	4.2
ANNUAL RYEGRASS	*Lolium multiflorum*	N/A	AICB	10	0.8

Low Growth Drill Seed Mix

Common Name	Botanical Name	Variety	Notes	% in Mix	Pounds of PLS Per Acre
BUFFALOGRASS	*Buchloe dactyloides*	TEXOKA	PNWS	20	3.2
BLUE GRAMA	*Bouteloua gracilis*	HACHITA	PNWB	20	0.6
WESTERN WHEATGRASS	*Pascopyrum smithii*	ARRIBA	PNCS	20	3.2
SIDEOATS GRAMA	*Bouteloua curtipendula*	VAUGHN	PNWB	20	1.8
THICKSPIKE WHEATGRASS	*Elymus lanceolatus ssp. dasystachyum*	CRITANA	PNCS	10	1
STREAMBANK WHEATGRASS	*Elymus lanceolatus ssp. riparium*	SODAR	PNCS	10	1.2

Notes: P = Perennial, A = Annual, N = Native, I = Introduced, W = Warm Season, C = Cool Season, S = Sod Former, B = Bunchgrass Elbert County follows Douglas County Seed Mix

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FALCON HIGHLANDS SOUTH – FILING 1
EL PASO COUNTY, COLORADO
CONSTRUCTION PLANS
GEC DETAILS

DATE 5/30/2025

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G	7th SUBMITTAL TO JURISDICTION 07/16/2026 – DM

REGISTERED PROFESSIONAL ENGINEER
DOUGLAS M. MACKEY
36834
07/15/26
PROFESSIONAL ENGINEER

COUNTY FILE NO.: SF2418

DR. TN CH. LS
P.M. DM
JOB 24004308
SHEET NO. 22

CAD FILE: 24004308-GESC-DETAILS.DWG
LAST SAVED BY: DMACKEY ON 7/15/2026 10:51:24 PM
PLOTTED: 7/15/2026 10:51:24 PM

TRACT A

CONCRETE LINED SWALE

CONCEPTUAL LOCATION OF FLO-WELL UNDERDRAIN SYSTEM

CONCEPTUAL LOCATION OF FLO-WELL UNDERDRAIN SYSTEM

148 LF OF 2' WIDE SAWCUT

EXISTING BROAD WILL WAY

SAHALEE TRAIL

FOX KESTREL COURT

FOX KESTREL COURT

EK WAGON TRACK WAY

(FUTURE) ANTELOPE MEADOWS CIR.

EXISTING ANTELOPE MEADOWS CIR.

EXISTING GRAVEL ROAD

TRACT B

TRACT D

TRACT E

LOT 1 T.O.F.= 6843.1

LOT 2 T.O.F.= 6843.1

LOT 3 T.O.F.= 6841.7

LOT 4 T.O.F.= 6840.0

LOT 5 T.O.F.= 6838.2

LOT 6 T.O.F.= 6833.2

LOT 7 T.O.F.= 6834.3

LOT 8 T.O.F.= 6835.8

LOT 9 T.O.F.= 6837.3

LOT 10 T.O.F.= 6836.6

LOT 11 T.O.F.= 6835.2

LOT 12 T.O.F.= 6834.5

LOT 13 T.O.F.= 6833.0

LOT 14 T.O.F.= 6832.0

LOT 15 T.O.F.= 6831.7

LOT 16 T.O.F.= 6834.2

LOT 17 T.O.F.= 6835.2

LOT 18 T.O.F.= 6835.9

LOT 19 T.O.F.= 6836.0

LOT 20 T.O.F.= 6836.0

LOT 21 T.O.F.= 6834.1

LOT 22 T.O.F.= 6838.4

LOT 23 T.O.F.= 6841.9

LOT 24 T.O.F.= 6841.9

24" RCP STM

18" RCP STM

10' TYPE R INLET

5' TYPE R INLET

NOTES:
1. DUE TO HIGH GROUND WATER IN THE AREA AN UNDERDRAIN SYSTEM WILL BE PROVIDED FOR EACH LOT AND WILL UTILIZE AN NDS FLO-WELL SYSTEM
2. EACH INDIVIDUAL LOT WITHIN THE SITE SHALL BE PROVIDED WITH ITS OWN NDS FLO-WELL SYSTEM.
3. THE OWNER SHALL BE RESPONSIBLE FOR OWNERSHIP AND MAINTENANCE OF THE FLO-WELL SYSTEM.
4. FLO-WELL LOCATIONS SHOWN ARE CONCEPTUAL; FINAL LOCATIONS SHALL BE IDENTIFIED AS PART OF THE PLOT PLAN PROCESS FOR EACH HOME. FINAL LOCATION TO BE DETERMINED BASED ON GEOTECHNICAL ENGINEER'S RECOMMENDATION.
5. SEE DETAILS FOR FLO-WELL DRY WELL SYSTEM ON SHEET 53.

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT-OF-WAY
- EXISTING RIGHT-OF-WAY
- PROPOSED LOT LINE
- EXISTING LOT LINE
- PROPOSED CATCH CURB & GUTTER
- PROPOSED SPILL CURB & GUTTER
- EXISTING CURB & GUTTER
- PROPOSED SIDEWALK
- EXISTING SIDEWALK
- EXISTING SECTION LINE
- PROPOSED EASEMENT
- EXISTING EASEMENT
- PROPOSED CONTOURS
- EXISTING CONTOURS
- PROPOSED STORM SEWER
- EXISTING STORM SEWER
- CONCEPTUAL LOCATION OF FLO-WELL UNDERDRAIN SYSTEM (TYP.)

BENCHMARK:
ELEVATIONS ARE BASED UPON SW COR SEC. 12, T13S, R65W, 6TH PM, FND. 3.25" ALUM. CAP.
(ELEVATION: 6810.43=NAVD88).

BASIS OF BEARINGS:
BEARINGS ARE BASED UPON THE WEST LINE OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 13 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, MONUMENTED AT THE SOUTH END BY A FOUND3-1/4" ALUMINUM CAP STAMPED "AZTEC CONSULTANTS PLS 38256" AND AT THE NORTH END BY A FOUND 3-1/4" ALUMINUM CAP STAMPED "PLS 4842".

50 0 50 100
(IN FEET)
1 inch = 50 ft.

811 Know what's below. Call before you dig.

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8605 EXPLORER DRIVE
SUITE 250 CO 80920
COLORADO SPRINGS, CO
719-598-5192
JIM BYERS

CLIENT: CHALLENGER HOMES
FALCON HIGHLANDS SOUTH – FILING 1
EL PASO COUNTY, COLORADO
CONSTRUCTION PLANS
GRADING PLANS
OVERALL GRADING PLAN

DATE 5/30/2025

A	1st SUBMITTAL TO JURISDICTION 07/27/2024 — KB
B	2nd SUBMITTAL TO JURISDICTION 01/08/2025 — KB
C	3rd SUBMITTAL TO JURISDICTION 04/15/2025 — KB
D	4th SUBMITTAL TO JURISDICTION 06/02/2025 — DM
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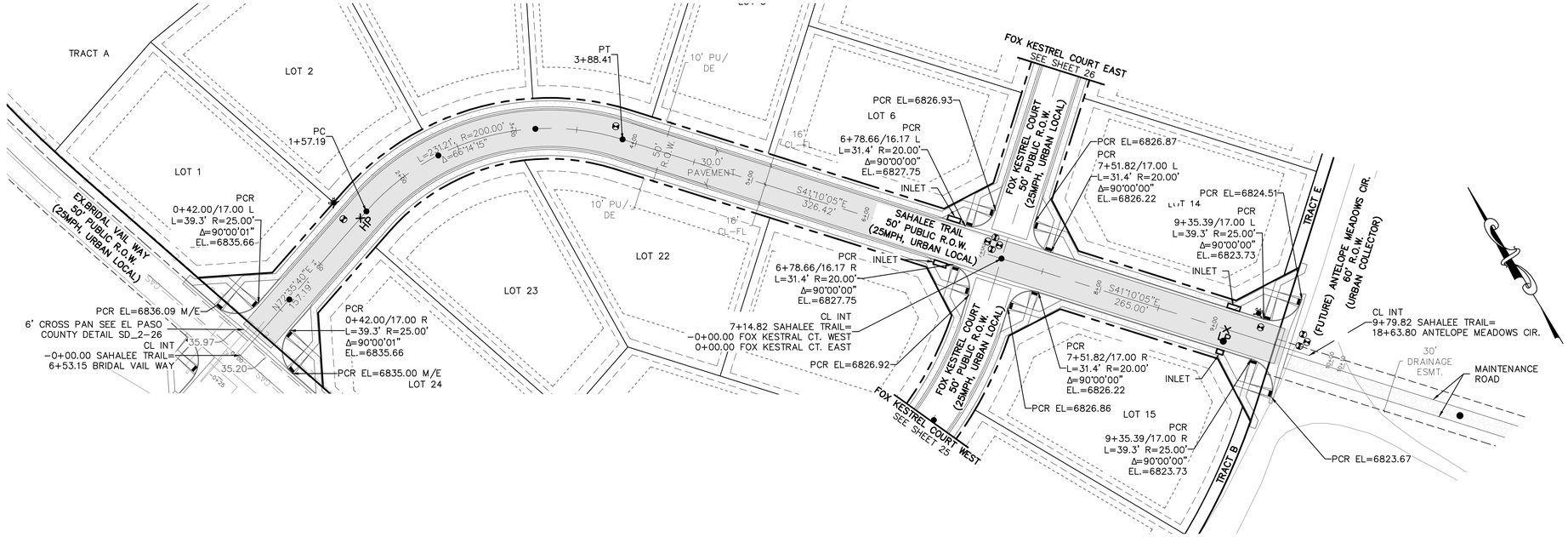
F	6th SUBMITTAL TO JURISDICTION 09/08/2025 — DM
G	7th SUBMITTAL TO JURISDICTION 07/16/2026 — DM

PROFESSIONAL ENGINEER — DAVID MARSH — 36834 — 07/15/26

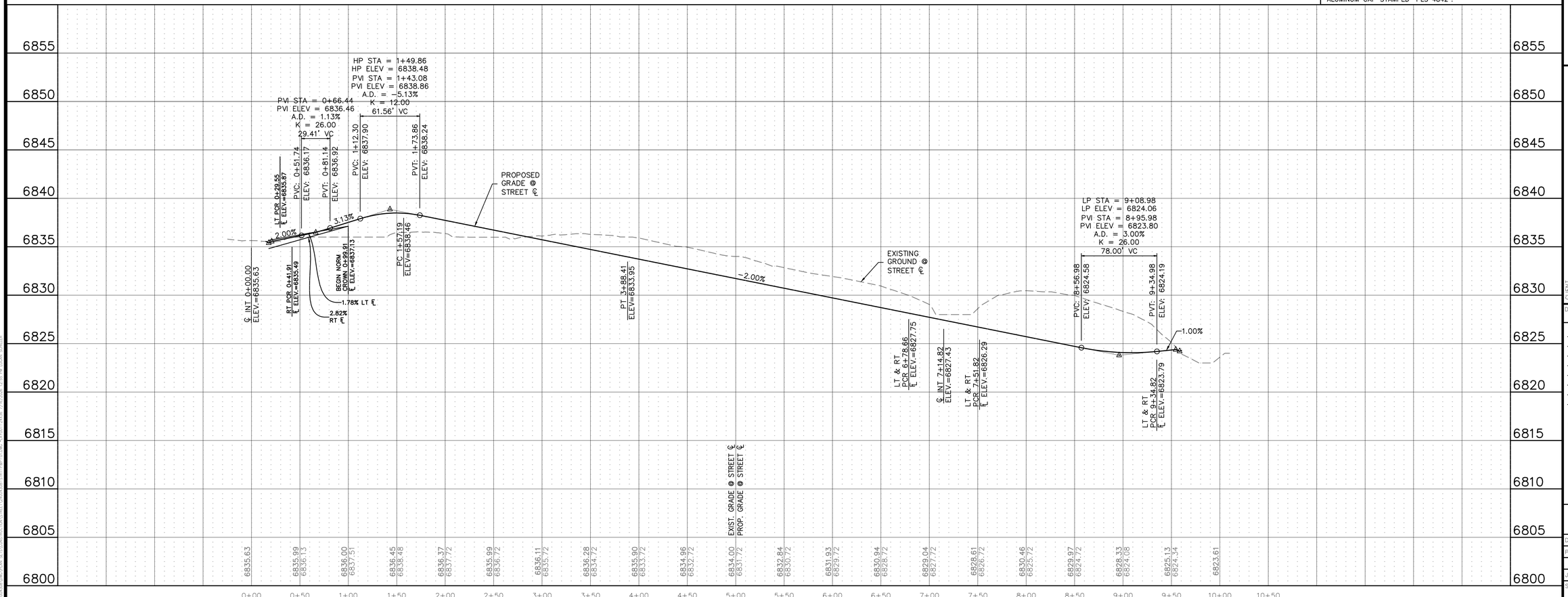
COUNTY FILE NO.: SF2418

DR. TN | CH. LS
P.M. DM
JOB 24004308
SHEET NO. 23

CAD FILE: 24004308-OVAL-GRAD.DWG



SAHALEE TRAIL



(IN FEET)
1 inch = 50 ft. (Horz)
1 inch = 5 ft. (Vert)

BENCHMARK:

ELEVATIONS ARE BASED UPON SW COR SEC. 12, T13S, R65W, 6TH PM, FND. 3.25" ALUM. CAP. (ELEVATION: 6810.43=NAVD88).

BASIS OF BEARINGS:

BEARINGS ARE BASED UPON THE WEST LINE OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 13 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, MONUMENTED AT THE SOUTH END BY A FOUND3-1/4" ALUMINUM CAP STAMPED "AZTEC CONSULTANTS PLS 38256" AND AT THE NORTH END BY A FOUND 3-1/4" ALUMINUM CAP STAMPED "PLS 4842".

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719-598-5192
JIM BYERS

CLIENT
CHALLENGER HOMES
FALCON HIGHLANDS SOUTH – FILING 1
EL PASO COUNTY, COLORADO
CONSTRUCTION PLANS
STREET PLAN & PROFILES
SAHALEE TRAIL

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F	6th SUBMITTAL TO JURISDICTION 09/08/2025 – DM

REVISIONS

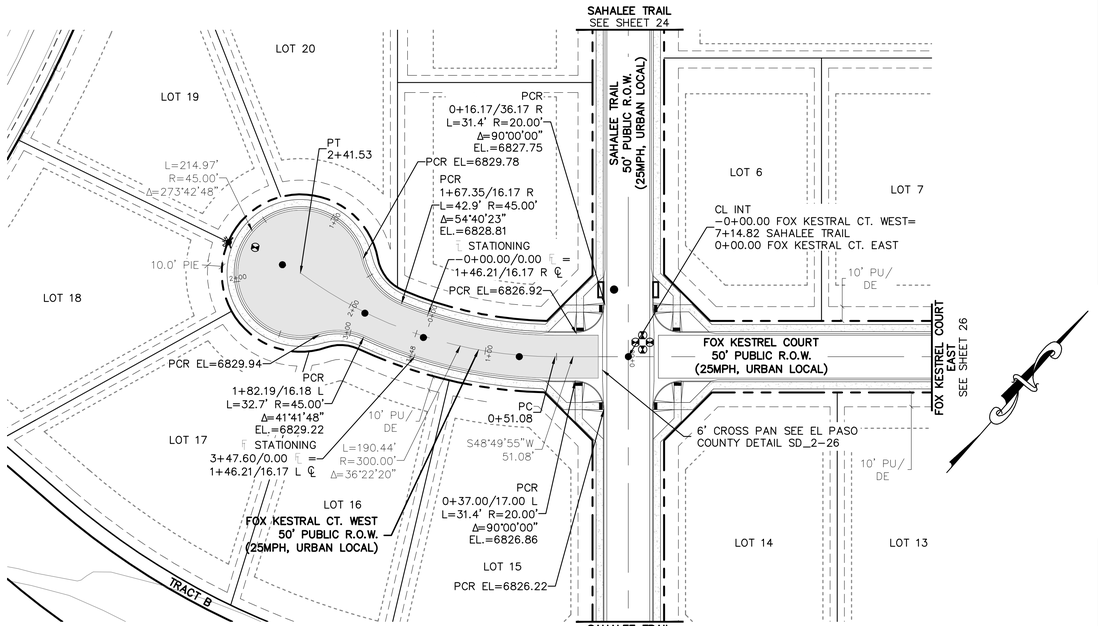
REGISTERED PROFESSIONAL ENGINEER
DAVID MADSEN
36834
07/15/26

COUNTY FILE NO.: SF2418

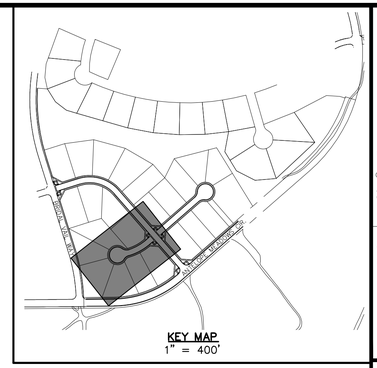
DR. TN | CH. LS
P.M. KB
JOB 24004308
SHEET NO. 24

CAD FILE: 24004308-STRT-P&P-01.DWG

C:\Users\jbyers\Atwell\Challenger Homes - Documents\Desktop Files\Jim Byers\Falcon Highlands South\24004308-STRT-P&P-01.dwg



FOX KESTREL COURT WEST



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CUL-DE-SAC FL PROFILE

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JIM BYERS

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EL PASO COUNTY, COLORADO
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STREET PLAN & PROFILES
FOX KESTREL COURT WEST

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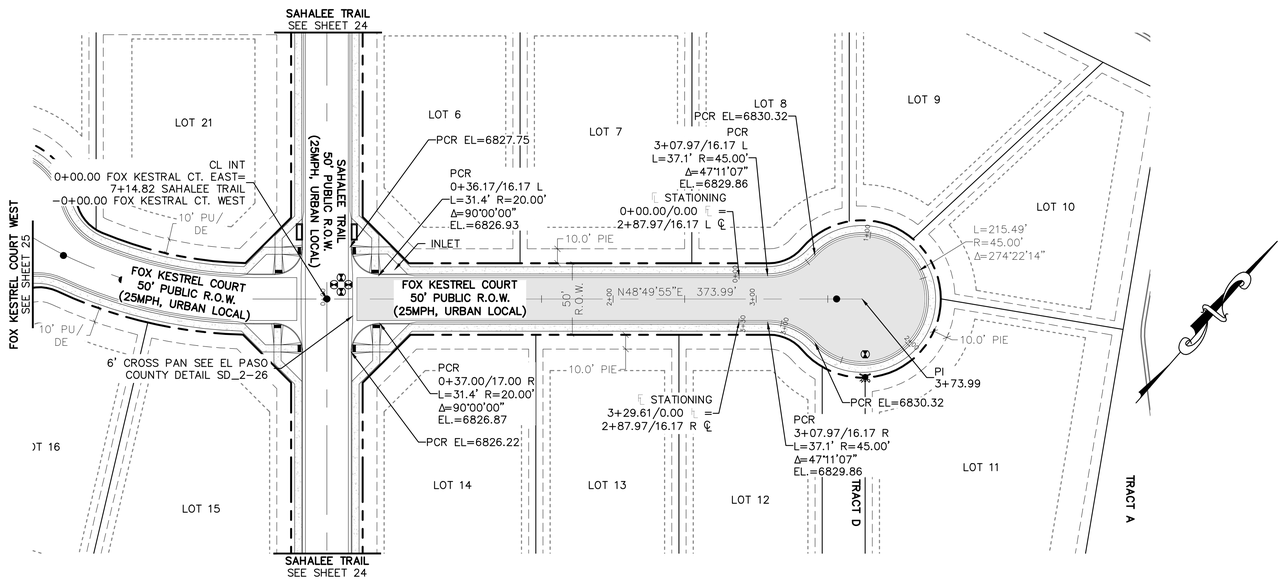
REVISIONS

REGISTERED PROFESSIONAL ENGINEER
DANIEL MADRZYK
36834
07/15/26
PROFESSIONAL ENGINEER

COUNTY FILE NO.:
SF2418

DR. TN | CH. LS
P.M. KB
JOB 24004308
SHEET NO. 25

CAD FILE: 24004308-STRT-P&P-02.DWG



50 0 50 100

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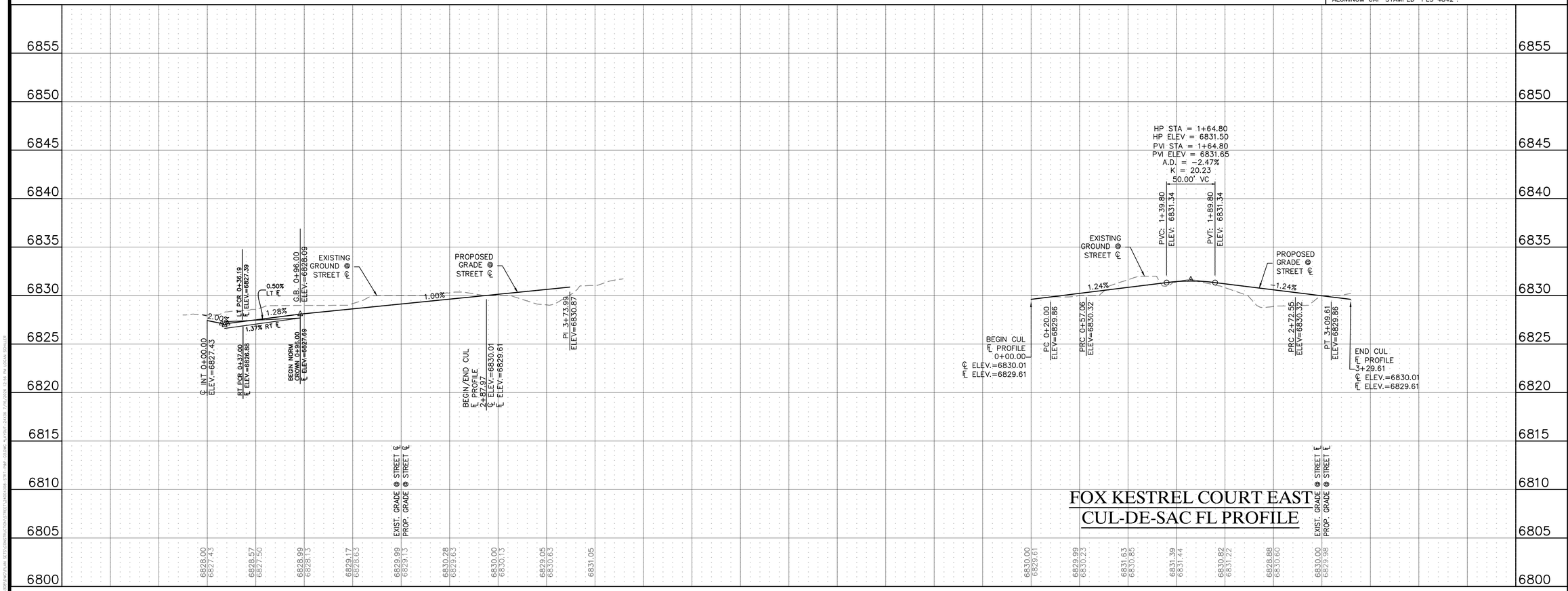
FOX KESTREL COURT EAST



FOX KESTREL COURT EAST
CUL-DE-SAC FL PROFILE

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EL PASO COUNTY, COLORADO
CONSTRUCTION PLANS
STREET PLAN & PROFILES
FOX KESTREL COURT EAST

DATE 5/30/2025

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F	6th SUBMITTAL TO JURISDICTION	09/08/2025 – DM

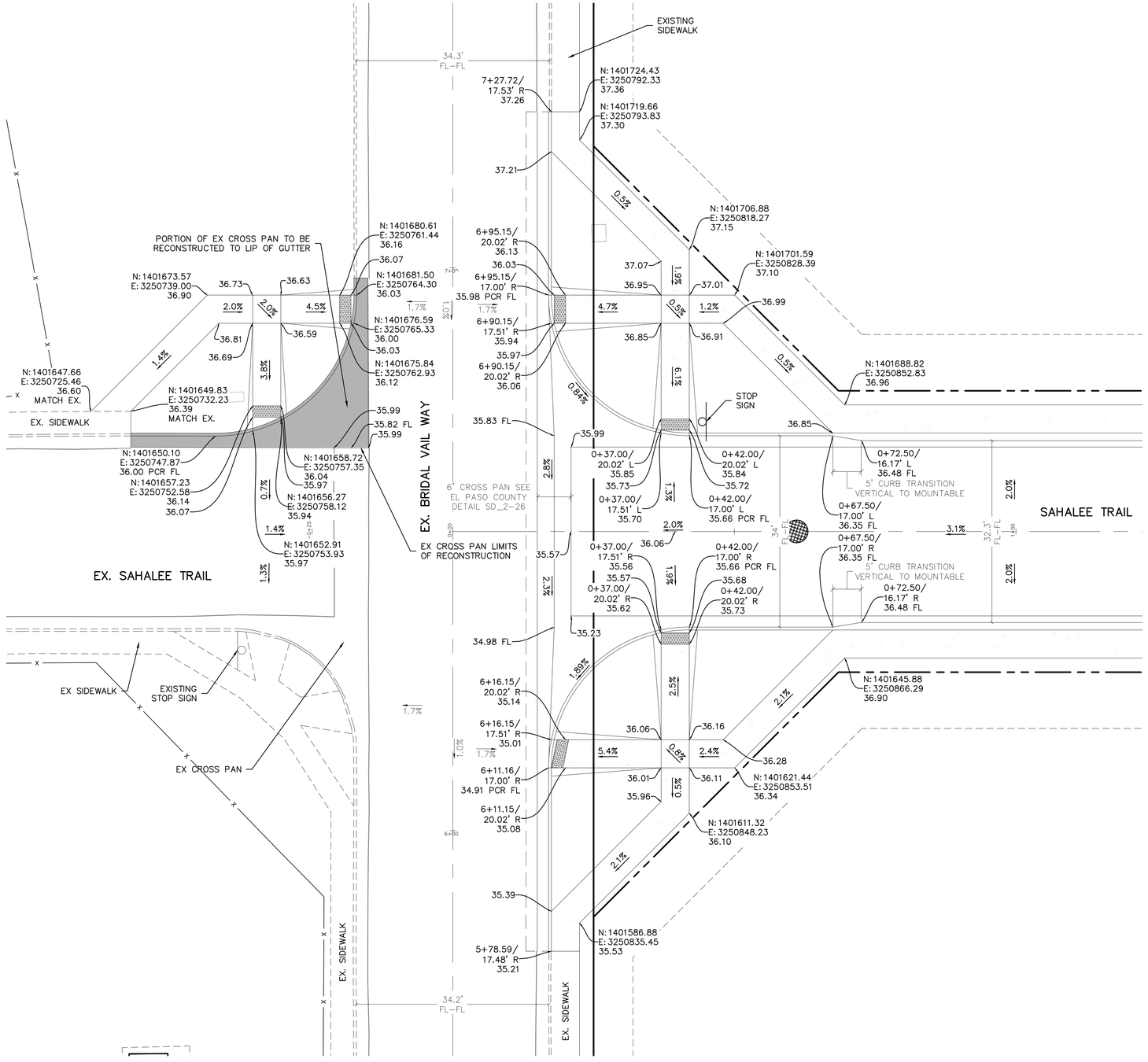
REVISIONS

REGISTERED PROFESSIONAL ENGINEER
DAVID MADSEN
36834
07/15/26
PROFESSIONAL ENGINEER

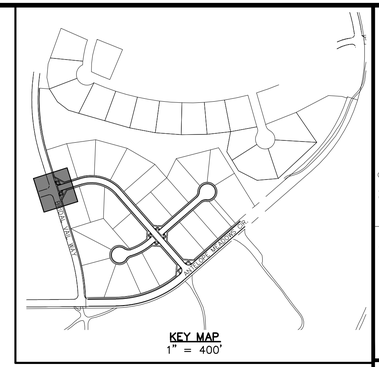
COUNTY FILE NO.: SF2418

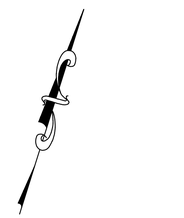
DR. TN | CH. LS
P.M. KB
JOB 24004308
SHEET NO. 26

CAD FILE: 24004308-STRT-P&P-03.DWG



SAHALEE TRAIL & BRIDAL VAIL WAY INTERSECTION DETAIL





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CONSTRUCTION PLANS
STREET INTERSECTION DETAILS
SAHALEE TRAIL & BRIDAL VAIL WAY

DATE 5/30/2025

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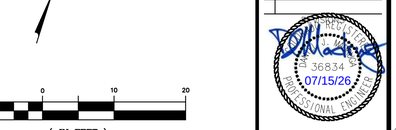

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DR. TN	CH. LS
P.M. DM	
JOB 24004308	
SHEET NO. 27	

CAD FILE: 24004308-GRAD-INTR.DWG
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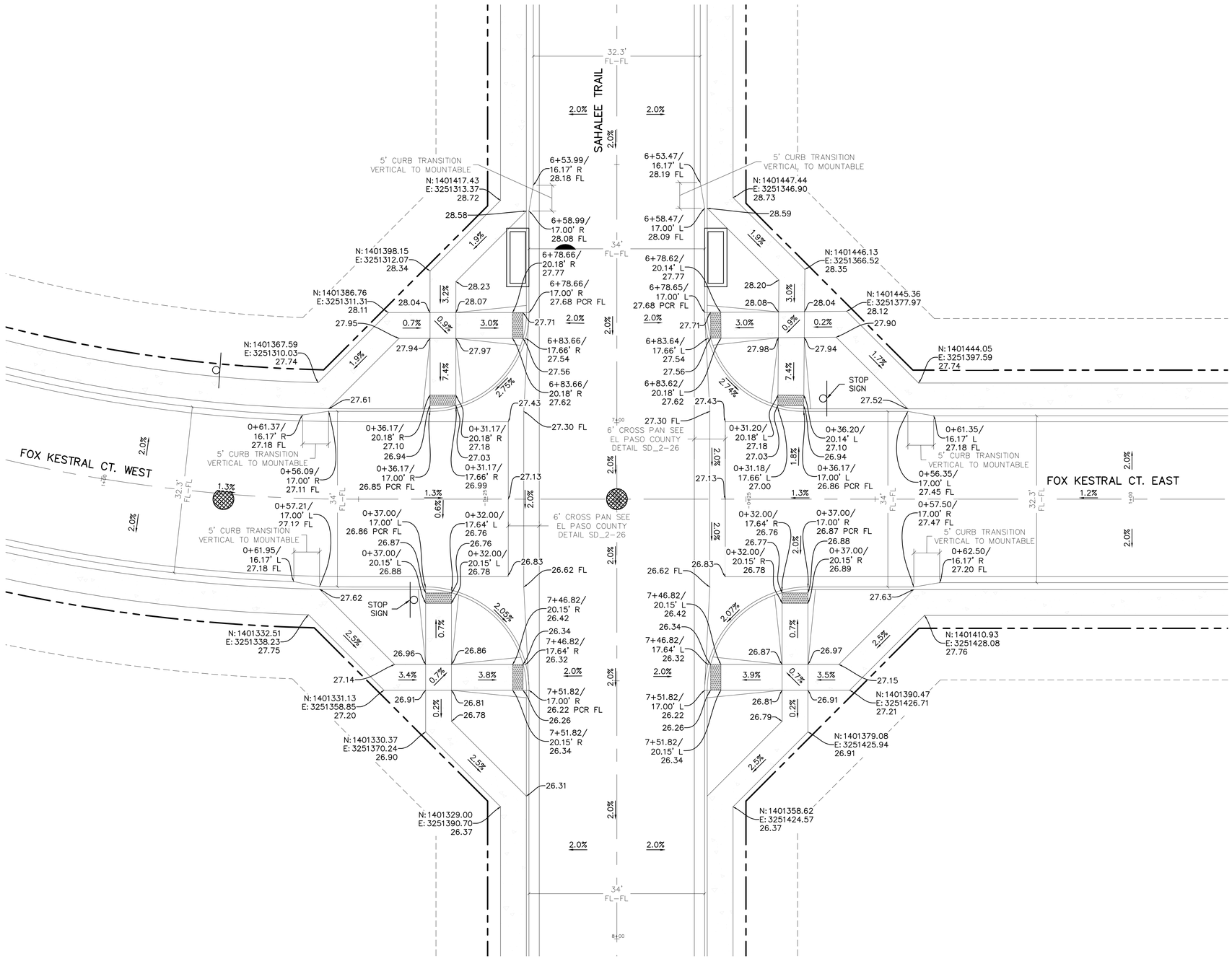
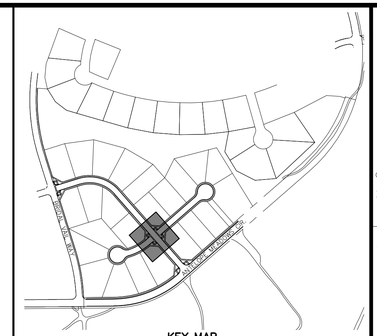
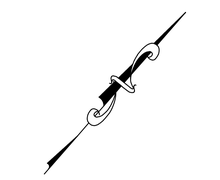


FOX KESTRAL CT & SAHALEE TRAIL INTERSECTION DETAIL



KEY MAP
1" = 400'



(IN FEET)
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COUNTY FILE NO.: SF2418

DR.	TN
CH.	LS
P.M.	DM
JOB	24004308
SHEET NO.	28

CAD FILE: 24004308-GRAD-INTR.DWG

KEY MAP
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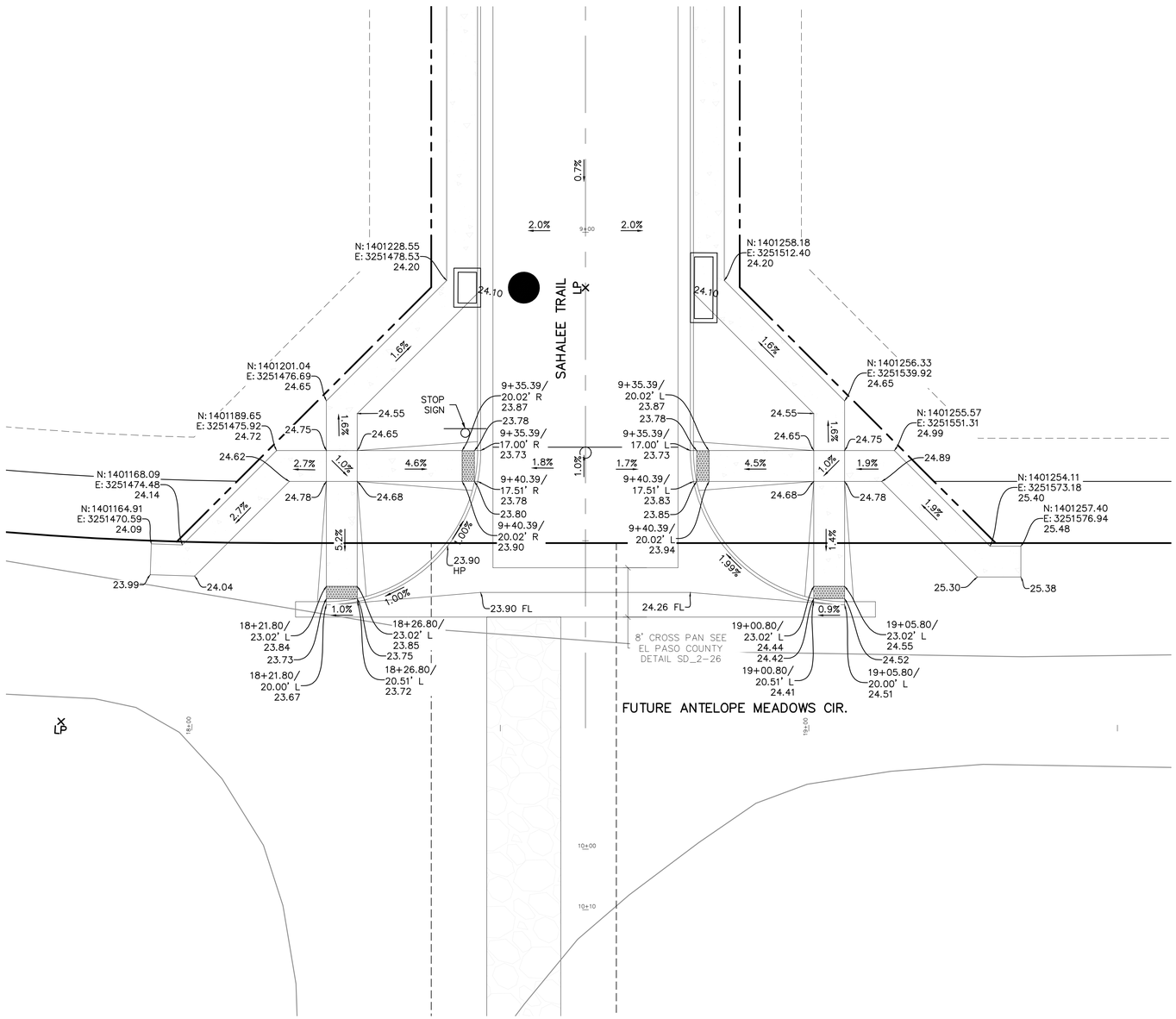

SAHALEE TRAIL & ANTELOPE MEADOWS CIRCLE INTERSECTION DETAIL

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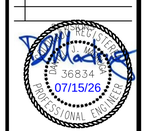

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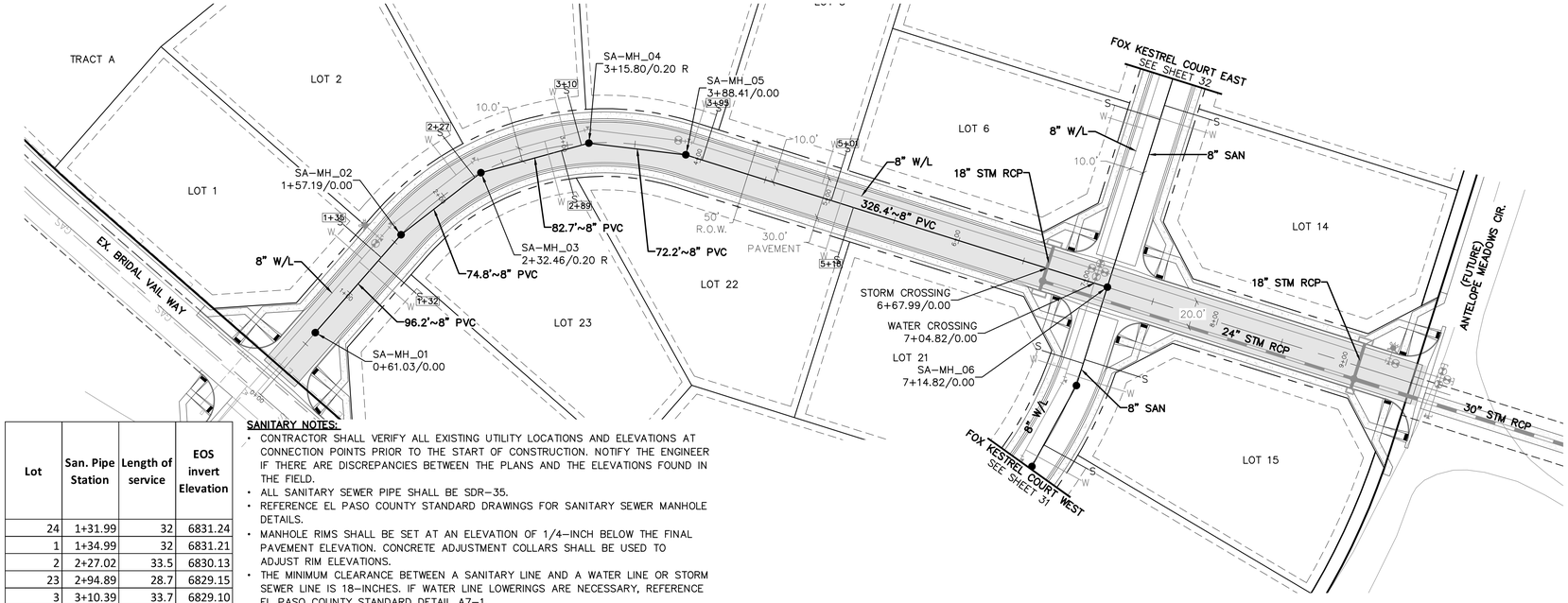
SHEET NO. 29

CAD FILE: 24004308-GRAD-INTR.DWG

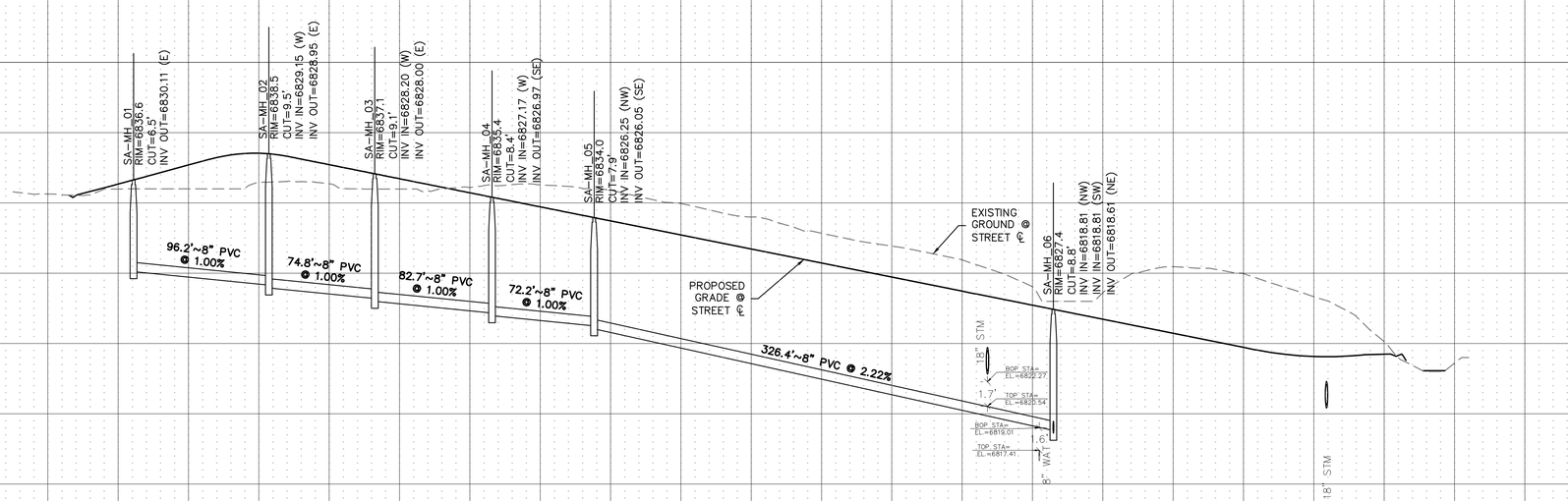


Lot	San. Pipe Station	Length of service	EOS invert Elevation
24	1+31.99	32	6831.24
1	1+34.99	32	6831.21
2	2+27.02	33.5	6830.13
23	2+94.89	28.7	6829.15
3	3+10.39	33.7	6829.10
4	4+01.11	32	6827.61
5	5+01.11	32	6825.39
22	5+18.17	32	6825.01

SANITARY NOTES:

- CONTRACTOR SHALL VERIFY ALL EXISTING UTILITY LOCATIONS AND ELEVATIONS AT CONNECTION POINTS PRIOR TO THE START OF CONSTRUCTION. NOTIFY THE ENGINEER IF THERE ARE DISCREPANCIES BETWEEN THE PLANS AND THE ELEVATIONS FOUND IN THE FIELD.
- ALL SANITARY SEWER PIPE SHALL BE SDR–35.
- REFERENCE EL PASO COUNTY STANDARD DRAWINGS FOR SANITARY SEWER MANHOLE DETAILS.
- MANHOLE RIMS SHALL BE SET AT AN ELEVATION OF 1/4–INCH BELOW THE FINAL PAVEMENT ELEVATION. CONCRETE ADJUSTMENT COLLARS SHALL BE USED TO ADJUST RIM ELEVATIONS.
- THE MINIMUM CLEARANCE BETWEEN A SANITARY LINE AND A WATER LINE OR STORM SEWER LINE IS 18–INCHES. IF WATER LINE LOWERINGS ARE NECESSARY, REFERENCE EL PASO COUNTY STANDARD DETAIL A7–1.
- REFERENCE ARCHITECTURAL PLANS FOR THE EXACT LOCATION OF ALL WATER AND SANITARY SEWER SERVICE CONNECTIONS INTO THE BUILDINGS.

SAHALEE TRAIL



(IN FEET)
1 inch = 50 ft. (Horz)
1 inch = 5 ft. (Vert)

BENCHMARK:
ELEVATIONS ARE BASED UPON SW COR SEC. 12, T13S, R65W, 6TH PM, FND. 3.25" ALUM. CAP. (ELEVATION: 6810.43=NAVD88).

BASIS OF BEARINGS:
BEARINGS ARE BASED UPON THE WEST LINE OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 13 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, MONUMENTED AT THE SOUTH END BY A FOUND3–1/4" ALUMINUM CAP STAMPED "AZTEC CONSULTANTS PLS 38256" AND AT THE NORTH END BY A FOUND 3–1/4" ALUMINUM CAP STAMPED "PLS 4842".

811 Know what's below. Call before you dig.

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FALCON HIGHLANDS SOUTH – FILING 1
EL PASO COUNTY, COLORADO
CONSTRUCTION PLANS
SANITARY PLAN & PROFILES
SAHALEE TRAIL

DATE 5/30/2025

A	1st SUBMITTAL TO JURISDICTION 07/12/2024 – KB
B	2nd SUBMITTAL TO JURISDICTION 01/08/2025 – KB
C	3rd SUBMITTAL TO JURISDICTION 04/15/2025 – KB
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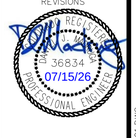

COUNTY FILE NO.: SF2418

DR. TN | CH. LS
P.M. KB
JOB 24004308
SHEET NO. 30

CAD FILE: 24004308–SSWR–P&P–01.DWG

SANITARY NOTES:

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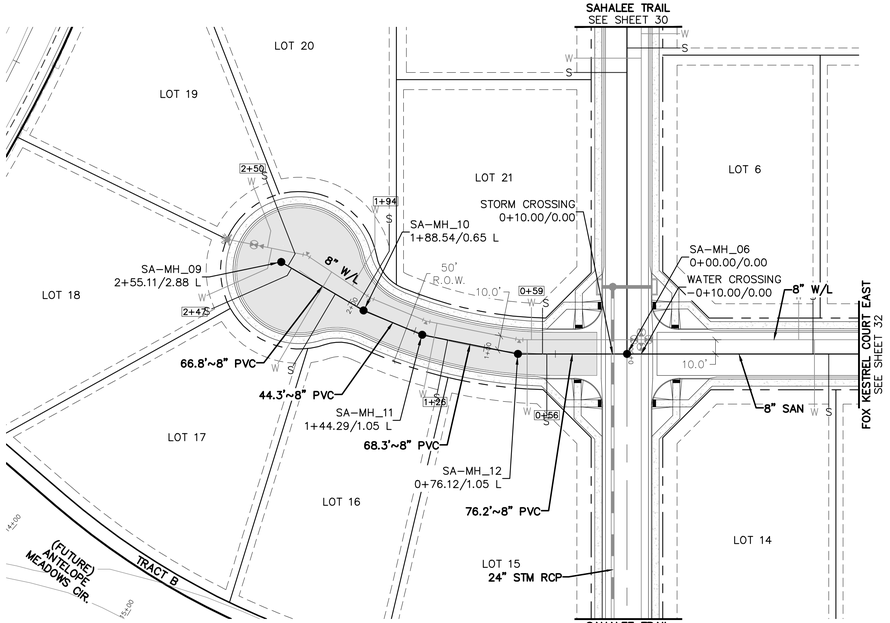
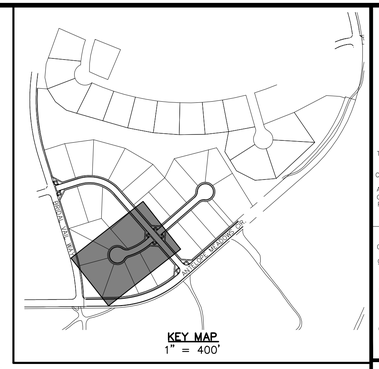
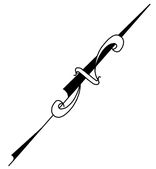
Lot	San. Pipe Station	Length of service	EOS invert Elevation
19	2+49.64	60	6824.30
18	2+46.66	59	6824.25
17	2+11.32	53	6823.78
20	1+94.02	64	6823.83
16	1+25.75	32.5	6822.11
21	0+59.00	32	6821.23
15	0+56.00	32	6821.20



FOX KESTREL COURT WEST





50 0 50 100

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1 inch = 5 ft. (Vert)

BENCHMARK:
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(ELEVATION: 6810.43=NAVD88).

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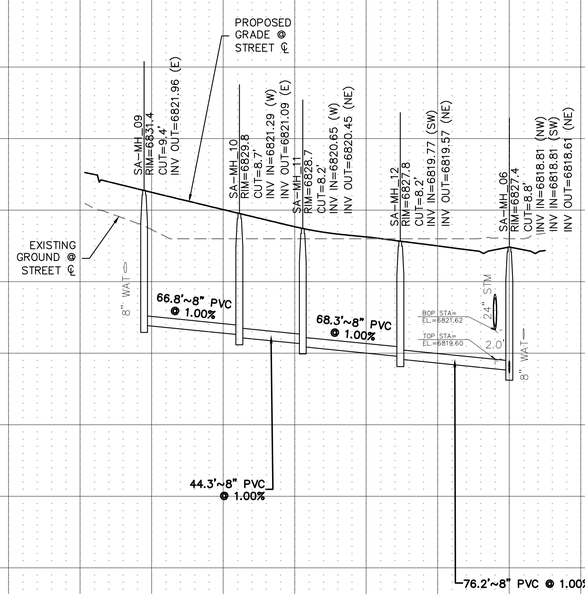

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SANITARY PLAN & PROFILES
FOX KESTREL COURT WEST

DATE 5/30/2025

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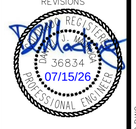
F	6th SUBMITTAL TO JURISDICTION 09/08/2025 – DM

REVISIONS



COUNTY FILE NO.:
SF2418

DR. TN | CH. LS
P.M. KB
JOB 24004308
SHEET NO. 31

CAD FILE: 24004308-SSWR-P&P-02.DWG

SANITARY NOTES:

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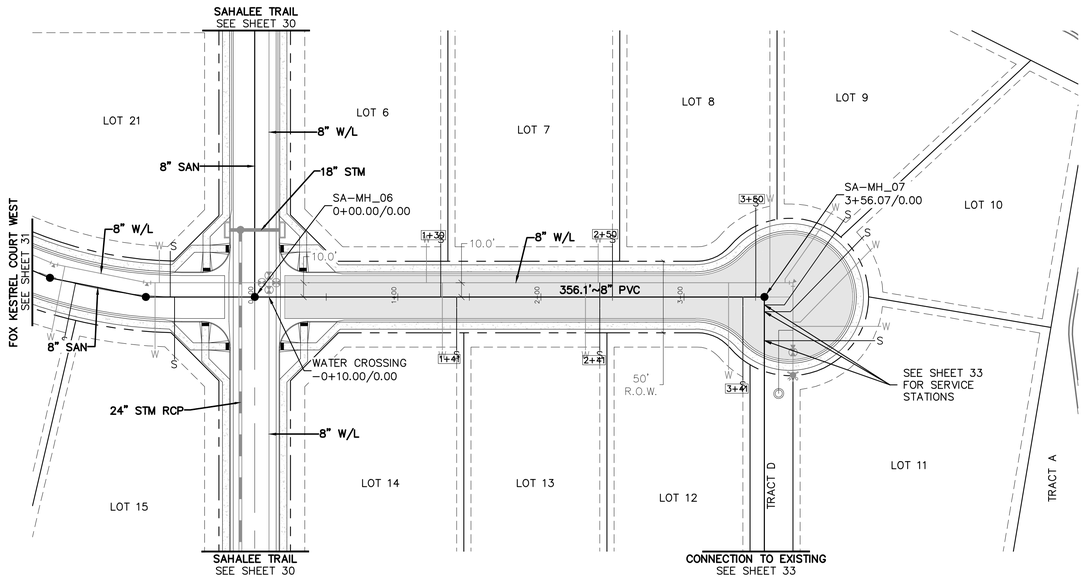
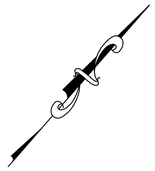
Lot	San. Pipe Station	Length of service	EOS invert Elevation
6	0+13.00	32	6819.80
14	1+41.07	32	6819.75
7	2+41.07	32	6819.25
13	2+50.00	32	6819.20
12	3+41.01	52	6819.15
8	3+50.11	57	6819.20





50 0 50 100

(IN FEET)
1 inch = 50 ft. (Horz)
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BENCHMARK:

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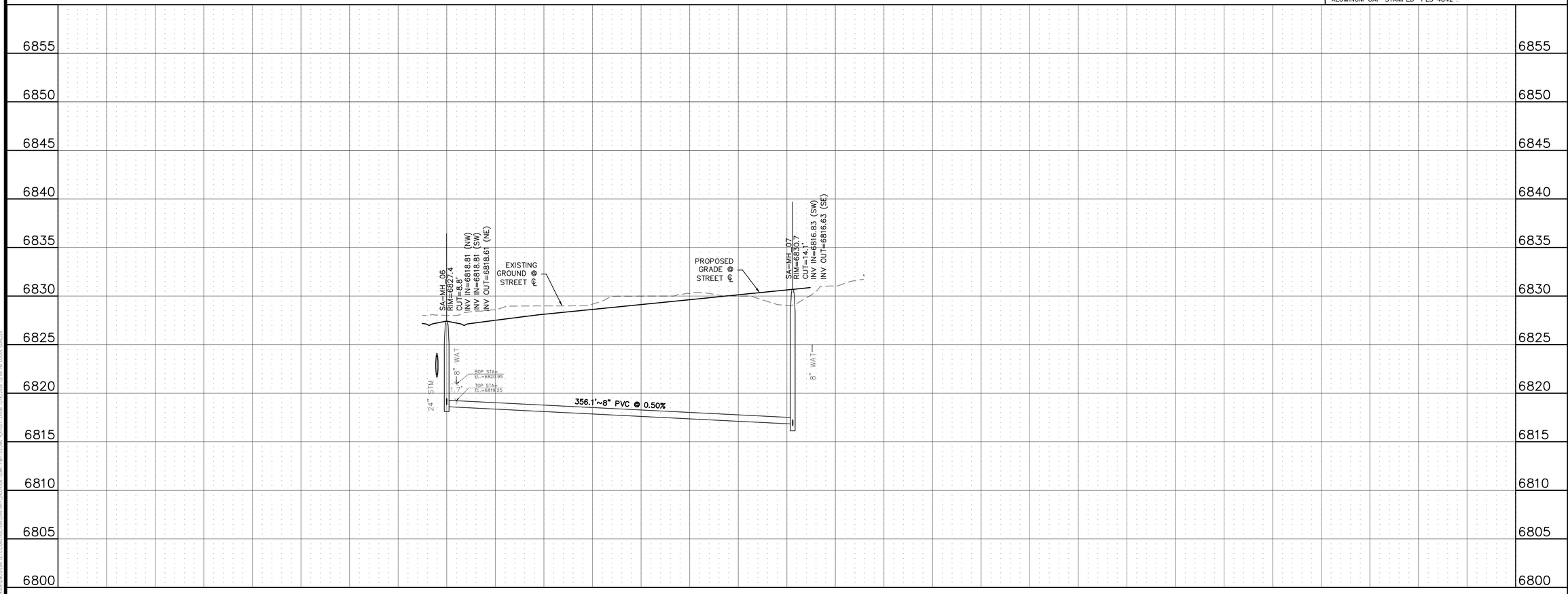
FOX KESTREL COURT EAST



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F	6th SUBMITTAL TO JURISDICTION 09/08/2025 – DM

REVISIONS

COUNTY FILE NO.: SF2418

DR. TN | CH. LS
P.M. KB
JOB 24004308
SHEET NO. 32

CAD FILE: 24004308-SSWR-PAP-03.DWG

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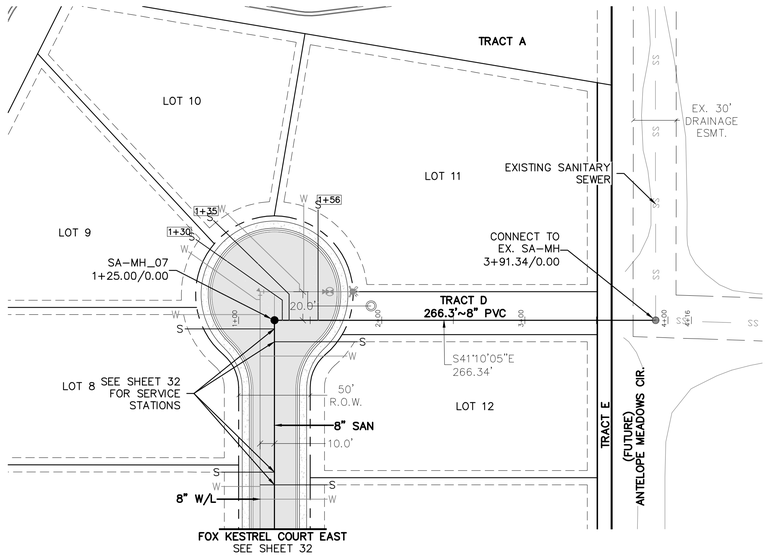
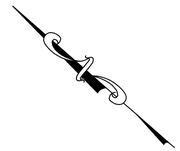
Lot	San. Pipe Station	Length of service	EOS invert Elevation
9	1+30.50	83	6819.38
10	1+35.30	87	6819.36
11	1+55.55	72	6818.66





50 0 50 100

(IN FEET)
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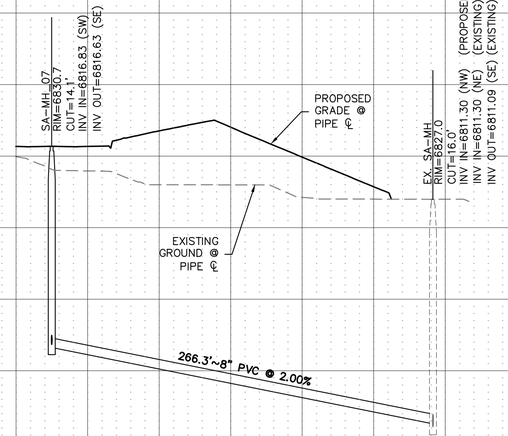
CONNECTION TO EXISTING



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REVISIONS

REGISTERED PROFESSIONAL ENGINEER
LS 36834
07/15/26
PROFESSIONAL ENGINEER

COUNTY FILE NO.: SF2418

DR. TN | CH. LS
P.M. KB
JOB 24004308
SHEET NO. 33

CAD FILE: 24004308-SSWR-P&P-04.DWG

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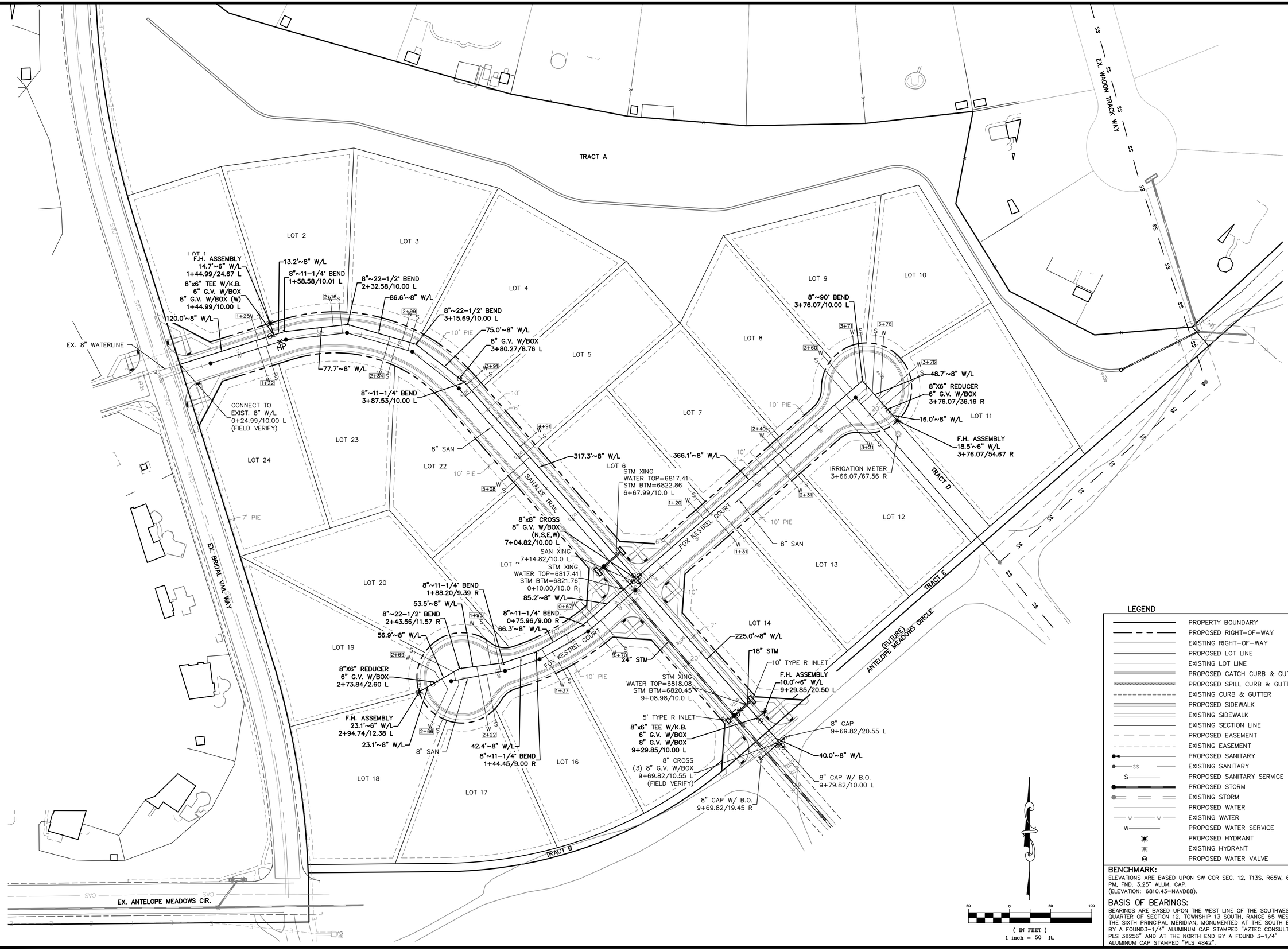

(IN FEET)
1 inch = 50 ft.

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT-OF-WAY
- EXISTING RIGHT-OF-WAY
- PROPOSED LOT LINE
- EXISTING LOT LINE
- PROPOSED CATCH CURB & GUTTER
- PROPOSED SPILL CURB & GUTTER
- EXISTING CURB & GUTTER
- PROPOSED SIDEWALK
- EXISTING SIDEWALK
- EXISTING SECTION LINE
- PROPOSED EASEMENT
- EXISTING EASEMENT
- PROPOSED SANITARY
- EXISTING SANITARY
- PROPOSED SANITARY SERVICE
- PROPOSED STORM
- EXISTING STORM
- PROPOSED WATER
- EXISTING WATER
- PROPOSED WATER SERVICE
- PROPOSED HYDRANT
- EXISTING HYDRANT
- PROPOSED WATER VALVE

BENCHMARK:

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JIM BYERS

CLIENT
CHALLENGER HOMES
FALCON HIGHLANDS SOUTH – FILING 1
EL PASO COUNTY, COLORADO
CONSTRUCTION PLANS
WATERLINE PLAN
WATER PLAN

DATE 5/30/2025

A	1st SUBMITTAL TO JURISDICTION 07/12/2024 – KB
B	2nd SUBMITTAL TO JURISDICTION 01/08/2025 – KR
C	3rd SUBMITTAL TO JURISDICTION 04/15/2025 – KR
D	4th SUBMITTAL TO JURISDICTION 06/02/2025 – DM
E	5th SUBMITTAL TO JURISDICTION 08/01/2025 – DM
F	6th SUBMITTAL TO JURISDICTION 09/08/2025 – DM
G	7th SUBMITTAL TO JURISDICTION 07/16/2026 – DM

PROFESSIONAL ENGINEER
DAVID MAHAN
36834
07/15/26
STATE OF COLORADO

COUNTY FILE NO.: SF2418

DR. TN	CH. LS
P.M. DM	
JOB 24004308	
SHEET NO. 34	

CAD FILE: 24004308-WATR-PLAN.DWG

STORM SEWER NOTES:

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5. REFERENCE ARCHITECTURAL PLANS FOR THE EXACT LOCATION OF ALL WATER AND SANITARY SEWER SERVICE CONNECTIONS INTO THE BUILDINGS.
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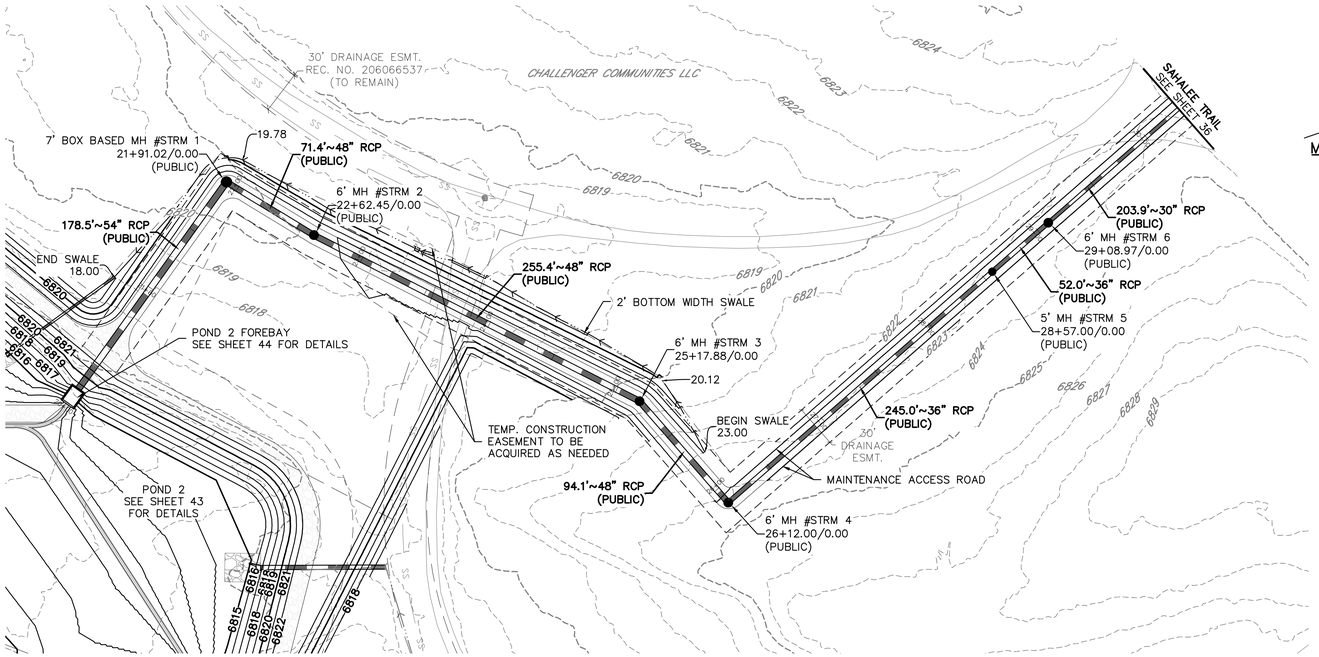
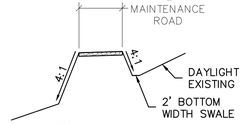


OFF-SITE



MAINTENANCE ACCESS
ROAD DETAIL
1" = 20' (HORZ)
1" = 50' (VERT)

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50 0 50 100
(IN FEET)
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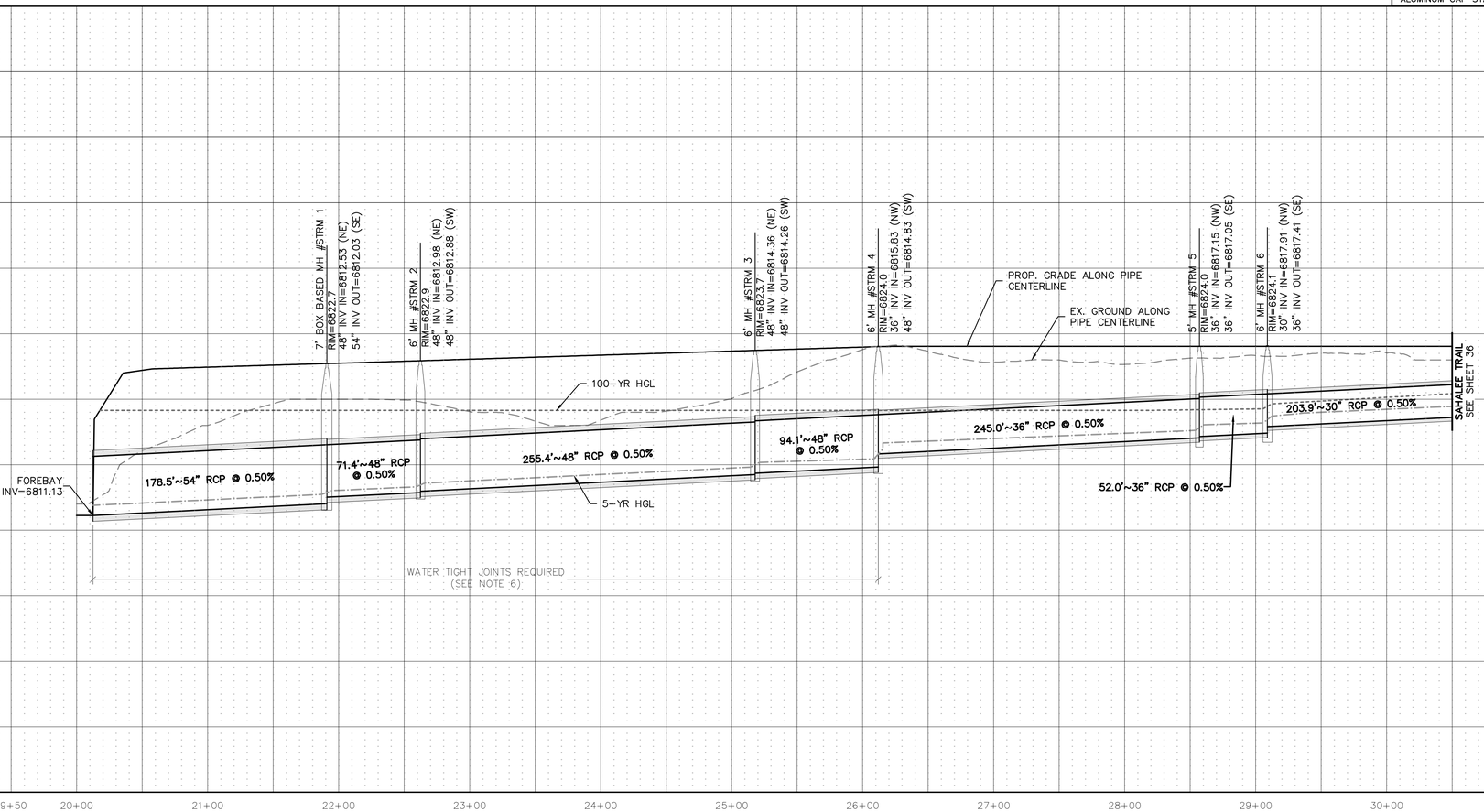

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719-598-5192
JIM BYERS

CLIENT

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EL PASO COUNTY, COLORADO
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STORM PLAN & PROFILES
OFF-SITE

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REVISIONS

REGISTERED PROFESSIONAL ENGINEER
36834
07/15/26
PROFESSIONAL ENGINEER

COUNTY FILE NO.:
SF2418

DR. TN CH. LS
P.M. KB
JOB 24004308
SHEET NO. 35

CAD FILE: 24004308-STRM-P&P-01.DWG
C:\Users\jbyers\Documents\24004308-STRM-P&P-01.dwg, 7/15/2026 7:47:27 AM, jbyers, Adobe PDF

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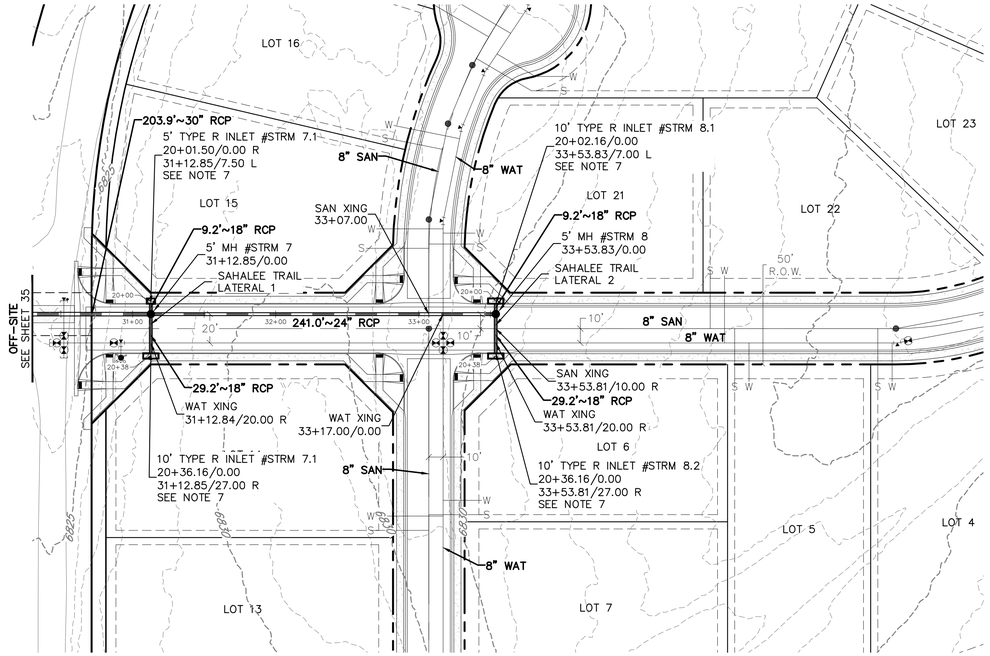
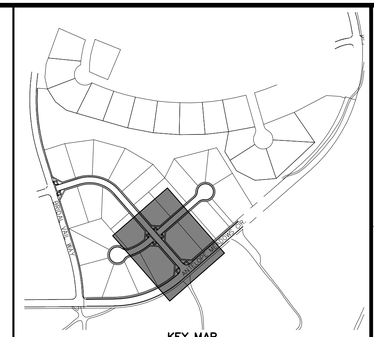
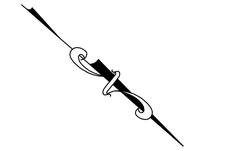


SAHALEE TRAIL



KEY MAP
1" = 400'



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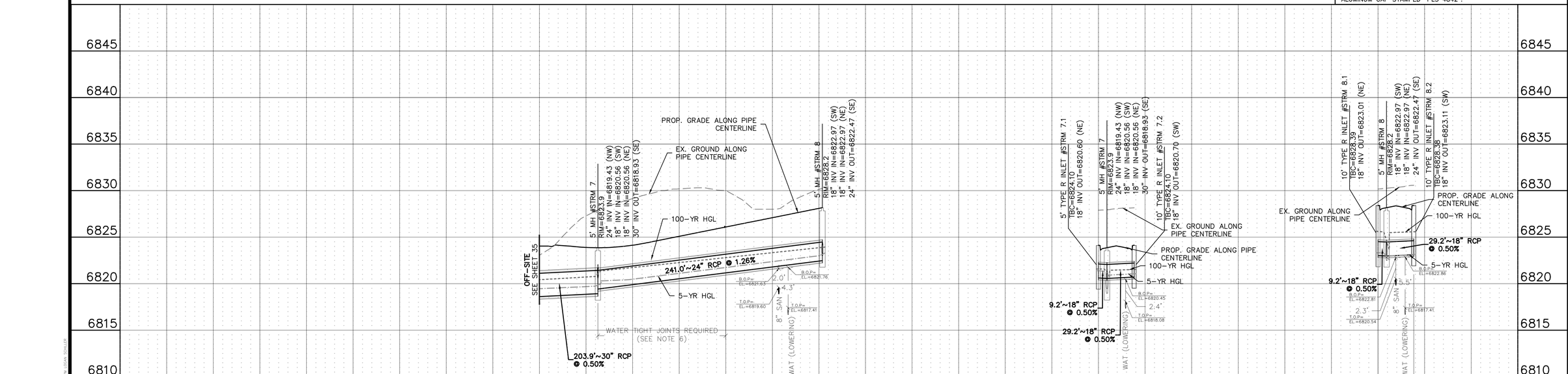

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CONSTRUCTION PLANS
STORM PLAN & PROFILES
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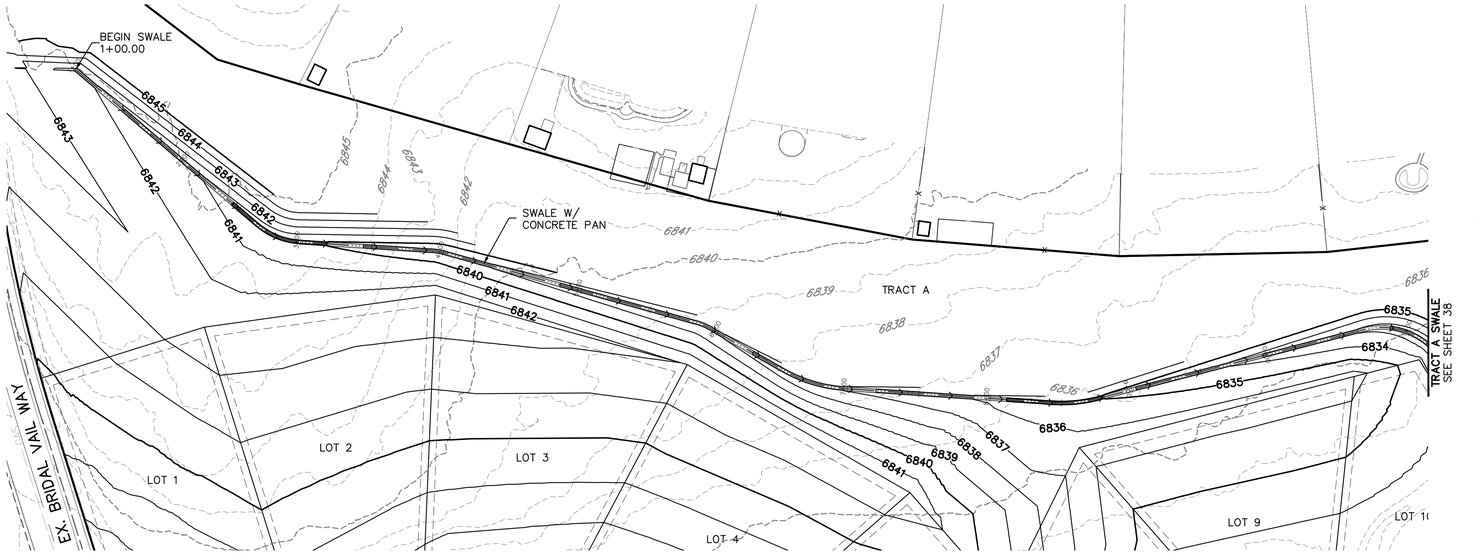
REVISIONS

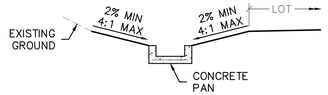
REGISTERED PROFESSIONAL ENGINEER
DANIEL M. MADRID
36834
07/15/26

COUNTY FILE NO.: SF2418

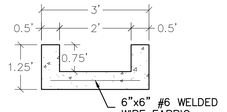
DR. TN | CH. LS
P.M. KB
JOB 24004308
SHEET NO. 36

CAD FILE: 24004308-STRM-P&P-02.DWG





SWALE WITH CONCRETE PAN DETAIL
SCALE: 1" = 5'



CONCRETE PAN DETAIL
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KEY MAP
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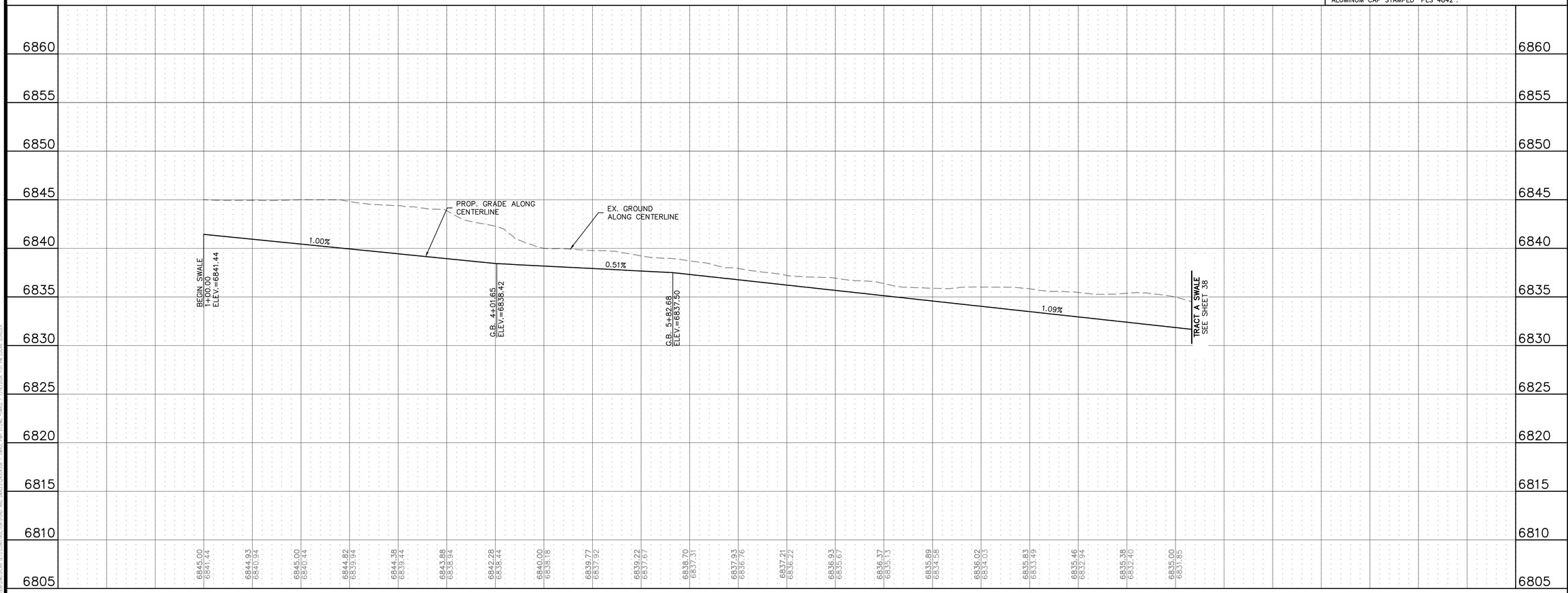
TRACT A SWALE



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REVISIONS

REGISTERED PROFESSIONAL ENGINEER
DAVID MADSEN
36834
07/15/26
PROFESSIONAL ENGINEER

COUNTY FILE NO.: SF2418

DR. TN | CH. LS
P.M. KB
JOB 24004308
SHEET NO. 37

CAD FILE: 24004308 – SWALE P&P 01.DWG

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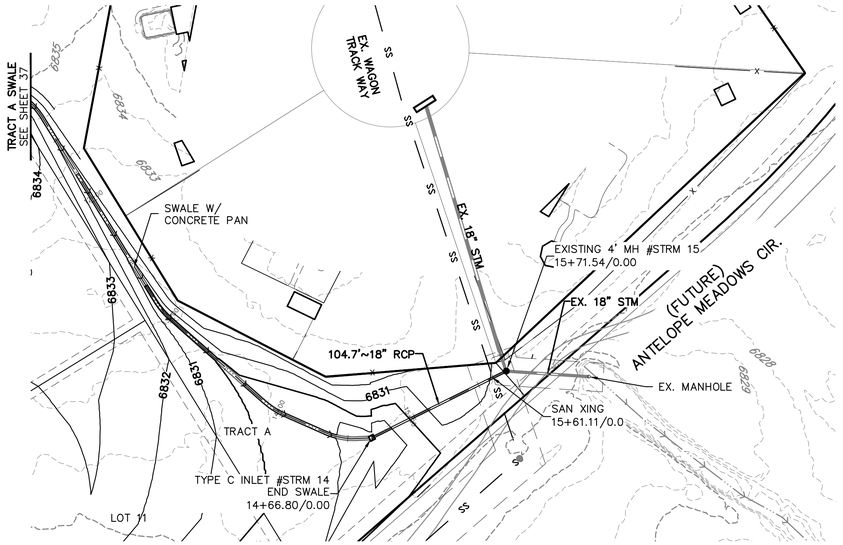

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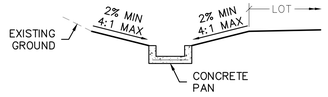
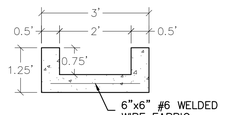


SWALE WITH CONCRETE PAN DETAIL
SCALE: 1" = 5'



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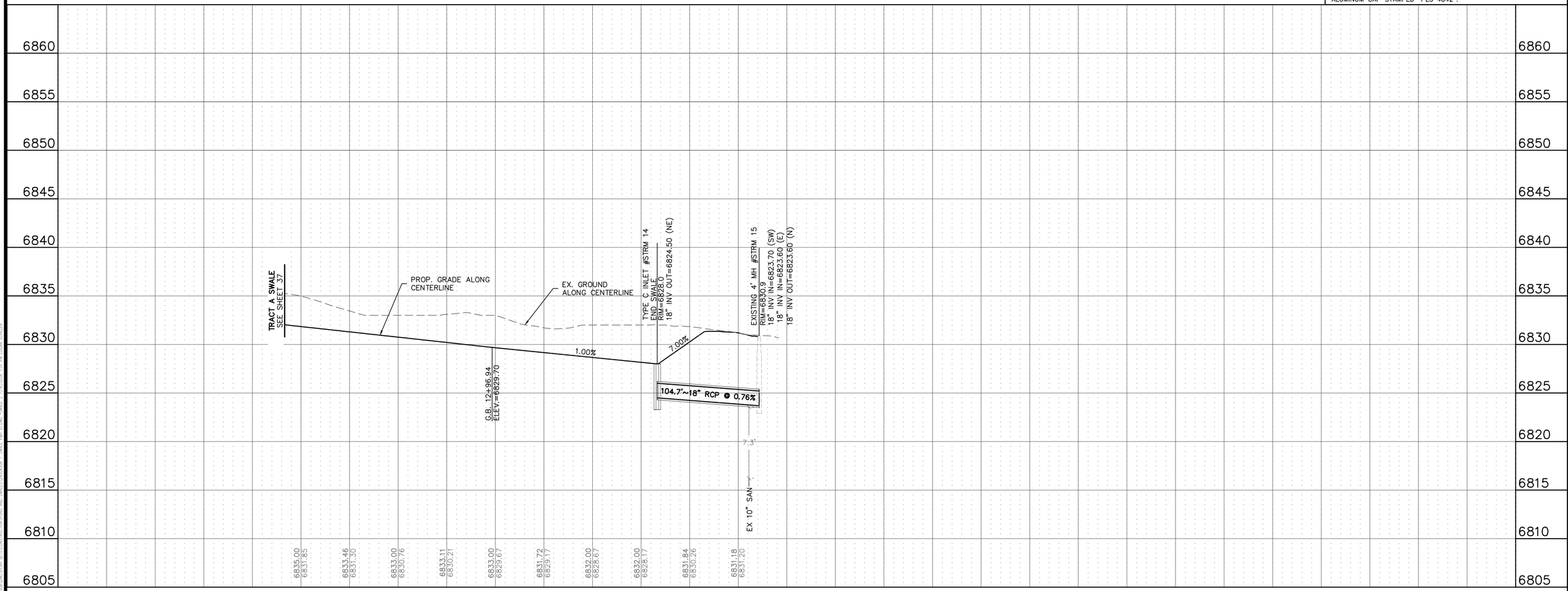

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REVISIONS

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DAVID MADSEN
36834
07/15/26
PROFESSIONAL ENGINEER

COUNTY FILE NO.: SF2418

DR. TN | CH. LS
P.M. KB
JOB 24004308
SHEET NO. 38

CAD FILE: 24004308 – SWALE P&P 01.DWG

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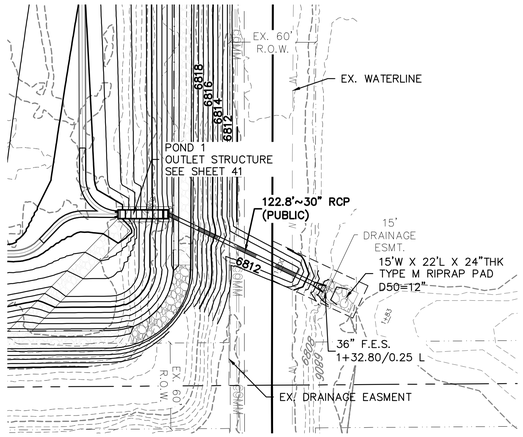

POND 1 OUTLET

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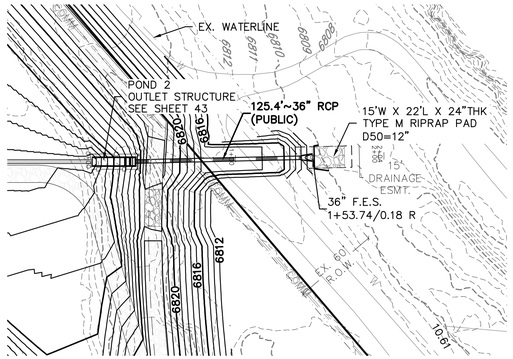
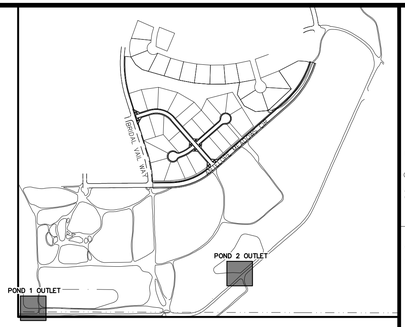
6. STORM SEWER MUST HAVE WATER TIGHT JOINTS IN ALL INSTANCES WHERE THE 100-YEAR HGL IS OUTSIDE OF THE PIPE. SEE PROFILE VIEW FOR EXTENTS OF WATER TIGHT JOINTS
7. FOR ALL ATTACHED SIDEWALK ADJACENT TO STORM INLETS, CONTRACTOR TO INSTALL EXPANSION JOINS BETWEEN SIDEWALK AND INLET TO MINIMIZE DIFFERENTIAL SETTLEMENT AND PROVIDE SMOOTH TRANSITION ACROSS INLET WITH 1.5% SLOPE OR LESS.



POND 2 OUTLET



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(ELEVATION: 6810.43=NAVD88).

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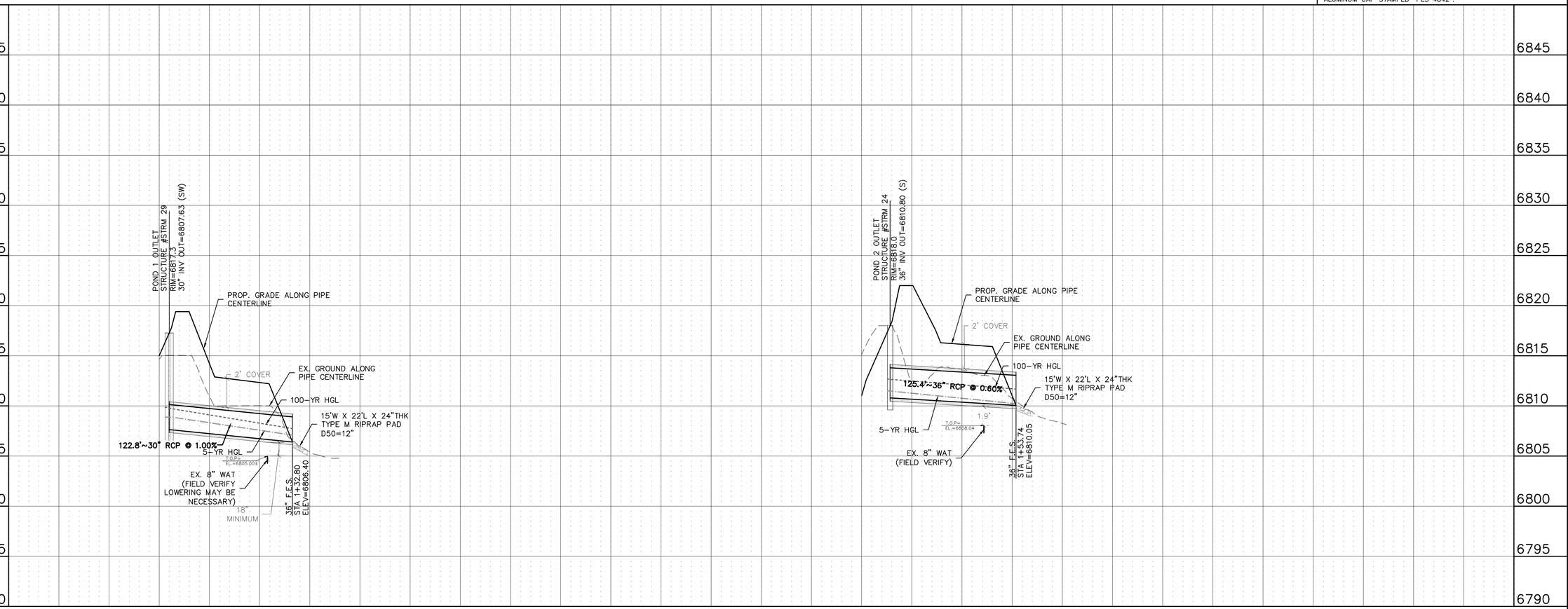

811
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REVISIONS

COUNTY FILE NO.: SF2418

DR. TN | CH. LS
P.M. KB
JOB 24004308
SHEET NO. 39

CAD FILE: 24004308-STRM-P&P-03.DWG
C:\Users\tnorton\Atwell\Documents\Documents - Falcon Highlands South\24004308-STRM-P&P-03.DWG

STORM SEWER NOTES:

1. CONTRACTOR SHALL VERIFY ALL EXISTING UTILITY LOCATIONS AND ELEVATIONS AT CONNECTION POINTS PRIOR TO THE START OF CONSTRUCTION. NOTIFY THE ENGINEER IF THERE ARE DISCREPANCIES BETWEEN THE PLANS AND THE ELEVATIONS FOUND IN THE FIELD.
2. ALL STORM SEWER PIPE HAS BEEN CALLED OUT AS "STM". THE CONTRACTOR MAY USE HDPE OR PVC FOR PRIVATE STORM SEWER PIPE IF THERE IS A COST SAVINGS OVER RCP. IF THE STORM SEWER IS PUBLIC IT MUST BE RCP. REFERENCE EL PASO COUNTY STANDARD DRAWINGS FOR MANHOLE AND INLET DETAILS.
3. INLET ELEVATIONS ARE CALLED OUT AT TOP BACK OF CURB AND AT THE CENTER OF INLET. THE MINIMUM CLEARANCE BETWEEN A STORM SEWER LINE AND A SANITARY SEWER LINE OR WATER LINE IS 18–INCHES. IF WATER LINE LOWERINGS ARE NECESSARY, REFERENCE EL PASO COUNTY STANDARD DETAIL A7–1.
4. MANHOLE RIMS SHALL BE SET AT AN ELEVATION OF 1/4–INCH BELOW THE FINAL PAVEMENT ELEVATION. CONCRETE ADJUSTMENT COLLARS SHALL BE USED TO ADJUST RIM ELEVATIONS.
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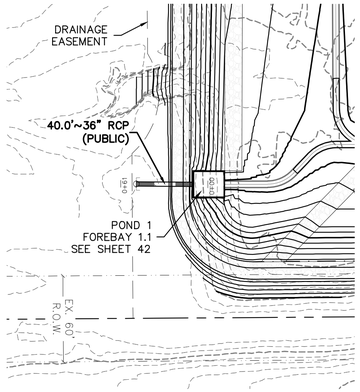
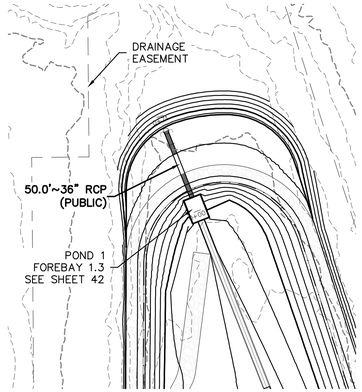


POND 1 INLET 1



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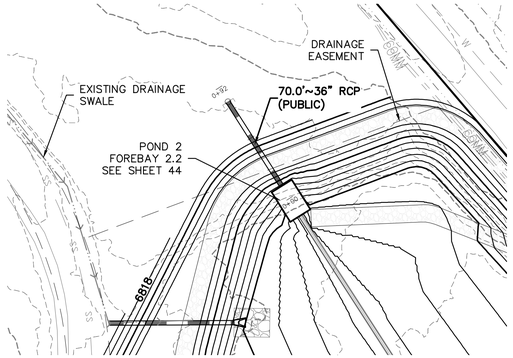
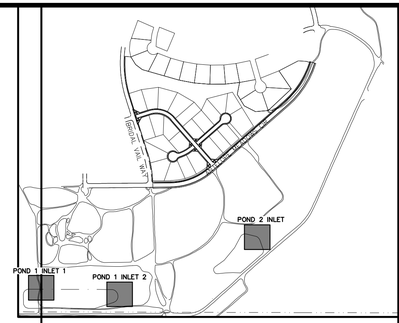
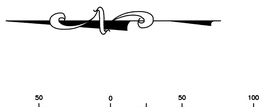


POND 2 INLET





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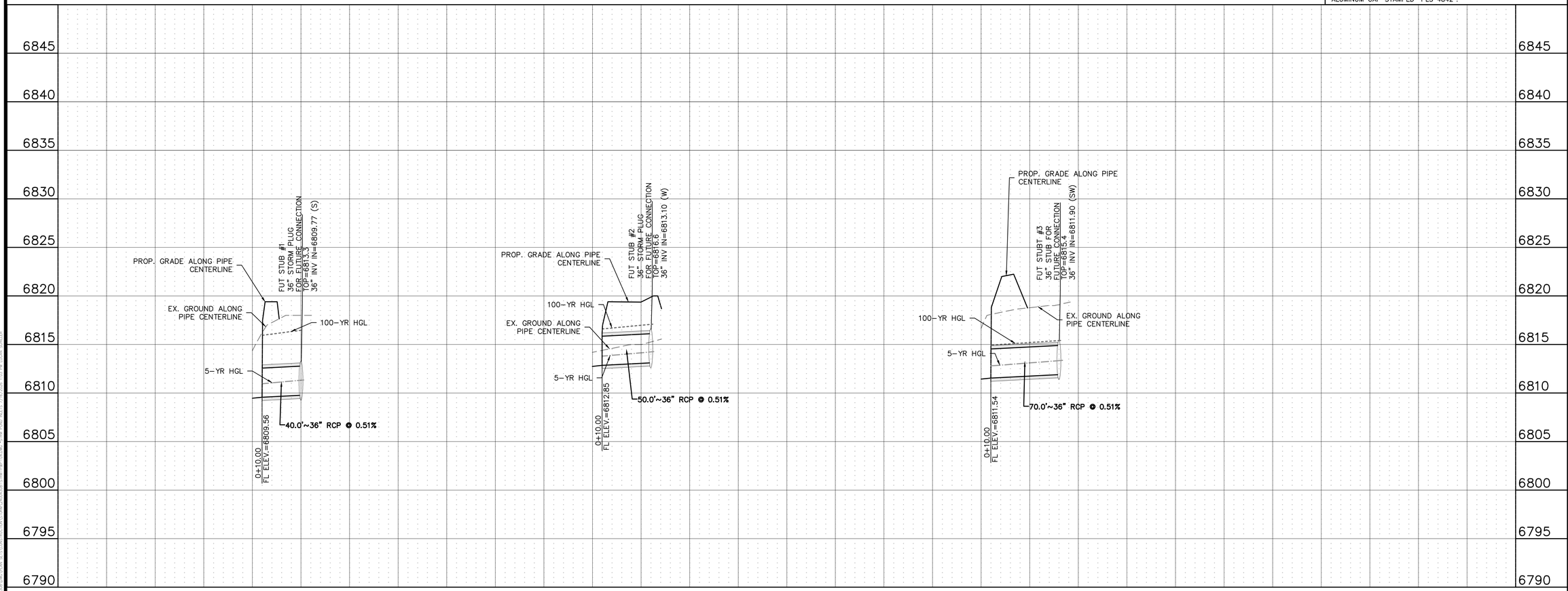

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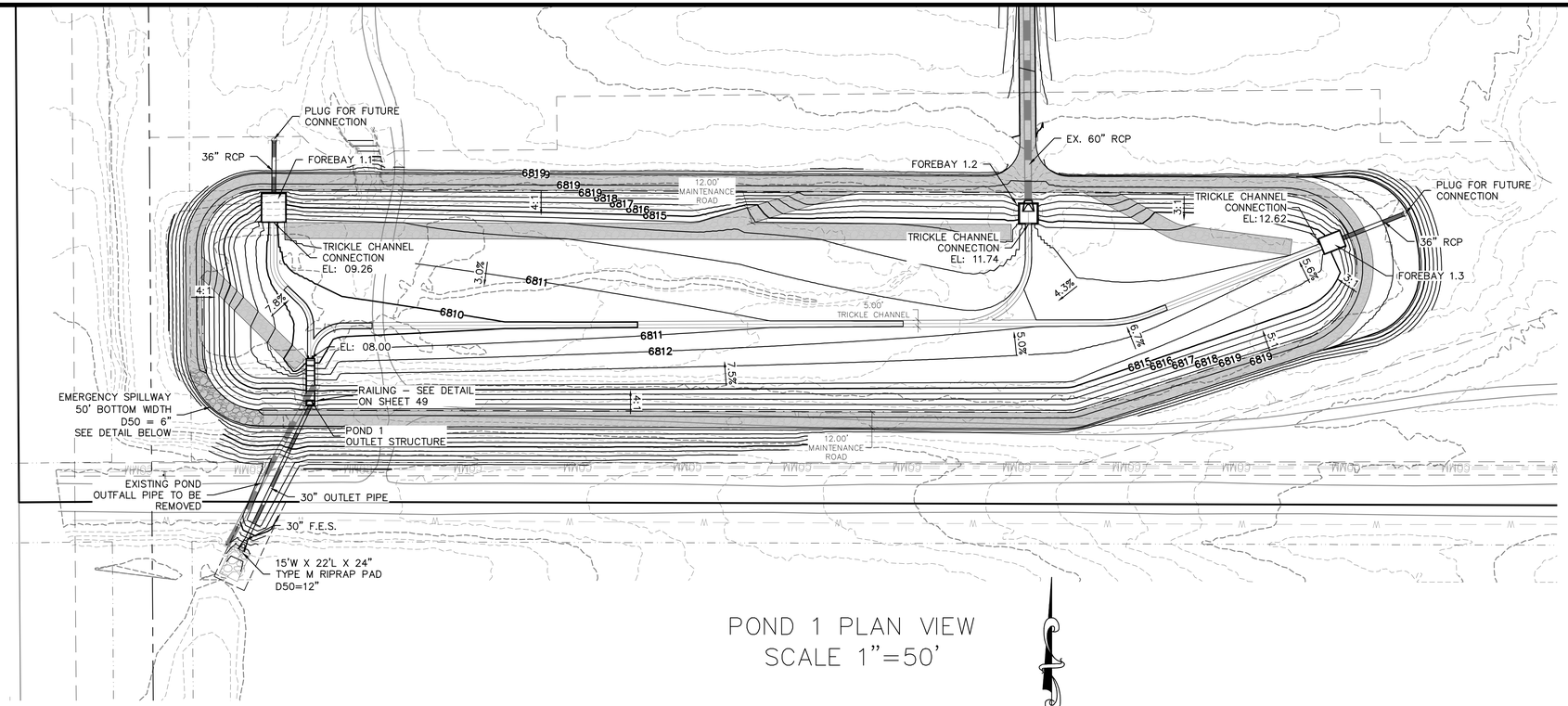
REVISIONS

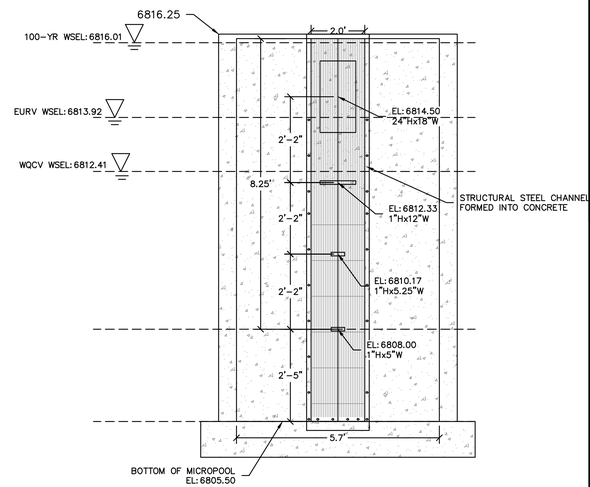
COUNTY FILE NO.: SF2418

DR. TN | CH. LS
P.M. KB
JOB 24004308
SHEET NO. 40

CAD FILE: 24004308–STRM–P&P–04.DWG



POND 1 PLAN VIEW
SCALE 1"=50'



ORIFICE PLATE AND TRASH RACK INTERIM
NTS

ORIFICE PLATE NOTES:

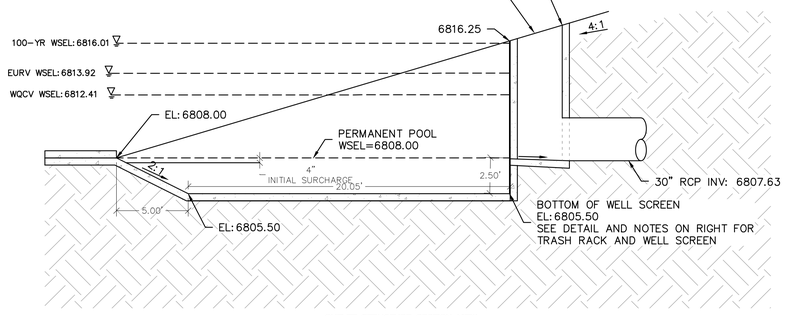
1. PROVIDE CONTINUOUS NEOPRENE GASKET MATERIAL BETWEEN THE ORIFICE PLATE AND CONCRETE
2. BOLT PLATE TO CONCRETE 12" MAX ON CENTER SEE TABLE OS-2 FOR PLATE THICKNESS

EURV AND WQCV TRASH RACK:

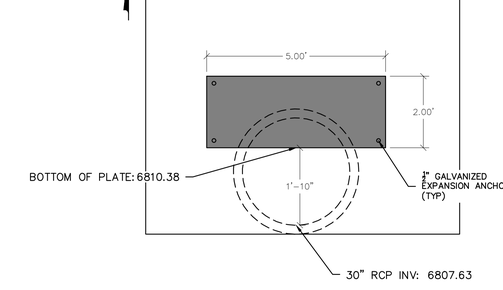
1. WELL-SCREEN TRASH RACKS SHALL BE STAINLESS STEEL AND SHALL BE ATTACHED NY INTERMITTENT WELDS ALONG THE EDGE OF THE MOUNTING FRAME
2. BAR GATE TRASH RACKS SHALL BE ALUMINUM AND SHALL BE BOLTED USING STAINLESS STEEL HARDWARE.
3. TRASH RACK OPEN AREAS ARE FOR SPECIFIED TRASH RACK MATERIALS. TOTAL TRASH RACK SIZE MY NEED TO BE ADJUSTED FOR MATERIALS HAVING DIFFERENT OPEN AREA/GROSS AREA RATIO (R VALUE).
4. STRUCTURAL DESIGN OF TRASH RACKS SHALL BE BASED ON FULL HYDROSTATIC HEAD WITH ZERO HEAD DOWNSTREAM OF THE RACK.

OVERFLOW SAFETY GRATES:

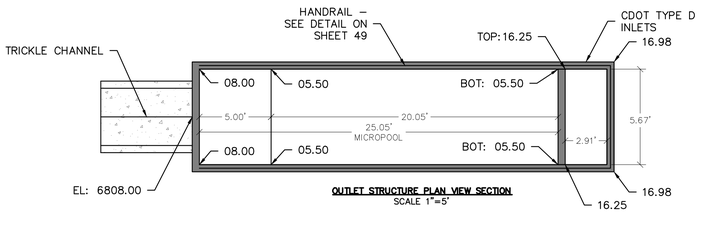
1. ALL SAFETY GRATES SHALL ME MOUNTED USING STAINLESS STEEL HARDWARE AND PROVIDED WITH HINGED AND LOCKABLE OR BOLTABLE ACCESS PANELS.
2. SAFETY GRATES SHALL BE STAINLESS STEEL, ALUMINUM, OR STEEL. STEEL GRATES SHALL BE HOT DIP GALVANIZED AND MAY BE POWDER COATED OF GALVANIZING.
3. SAFETY GRATES SHALL BE DESIGNED SUCH THAT THE DIAGONAL DIMENSION OF EACH OPENING IS SMALLER THAT THE DIAMETER OF THE OUTLET PIPE..
4. STRUCTURAL DESIGN OF SAFETY GRATES SHALL BE BASED ON FULL HYDROSTATIC HEAD WITH ZERO HEAD DOWNSTREAM OF THE RACK.



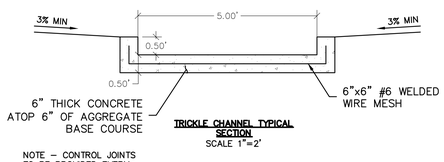
OUTLET STRUCTURE SECTION VIEW
SCALE 1"=5'



OUTLET RESTRICTOR PLATE
SCALE 1"=2'

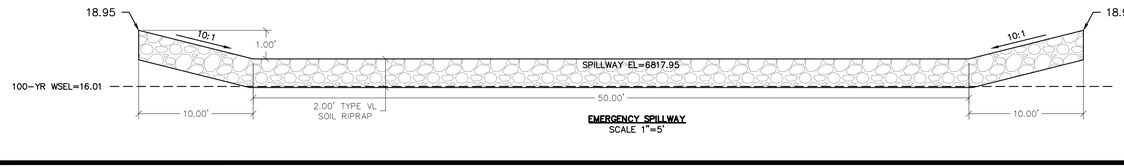


OUTLET STRUCTURE PLAN VIEW SECTION
SCALE 1"=5'

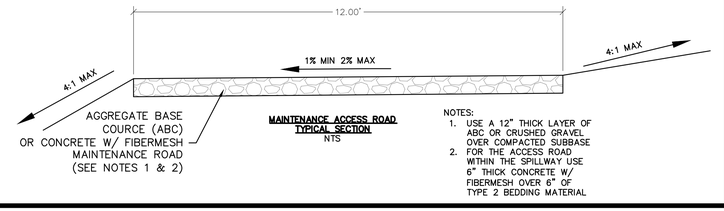


TRICKLE CHANNEL TYPICAL SECTION
SCALE 1"=2'

NOTE - CONTROL JOINTS TO BE PROVIDED EVERY 10-FEET.



EMERGENCY SPILLWAY
SCALE 1"=5'



MAINTENANCE ACCESS ROAD TYPICAL SECTION
NTS

NOTES:
1. USE A 12" THICK LAYER OF ABC OR CRUSHED GRAVEL OVER COMPACTED SUBBASE FOR THE ACCESS ROAD WITHIN THE SPILLWAY USE 6" THICK CONCRETE W/ FIBERMESH OVER 6" OF TYPE 2 BEDDING MATERIAL

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT-OF-WAY
- EXISTING RIGHT-OF-WAY
- PROPOSED LOT LINE
- EXISTING LOT LINE
- PROPOSED CATCH CURB & GUTTER
- PROPOSED SPILL CURB & GUTTER
- EXISTING CURB & GUTTER
- PROPOSED SIDEWALK
- EXISTING SIDEWALK
- EXISTING SECTION LINE
- PROPOSED EASEMENT
- EXISTING EASEMENT
- PROPOSED CONTOURS
- EXISTING CONTOURS
- PROPOSED STORM SEWER
- EXISTING STORM SEWER

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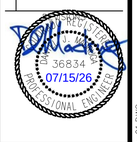
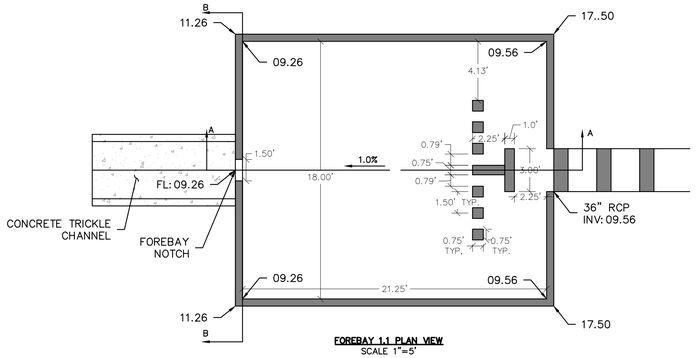
G	7th SUBMITTAL TO JURISDICTION 02/16/2026 – DM



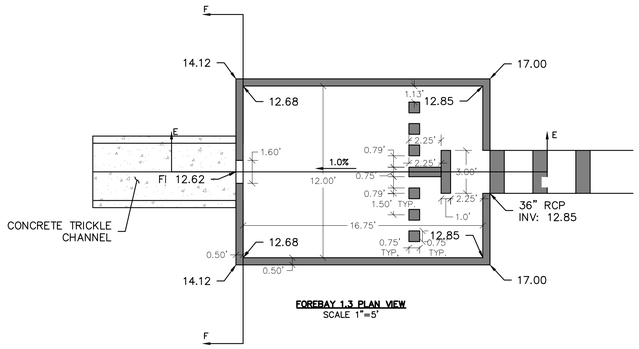
COUNTY FILE NO.: SF2418

DR. TN | CH. LS
P.M. DM
JOB 24004308
SHEET NO. 41

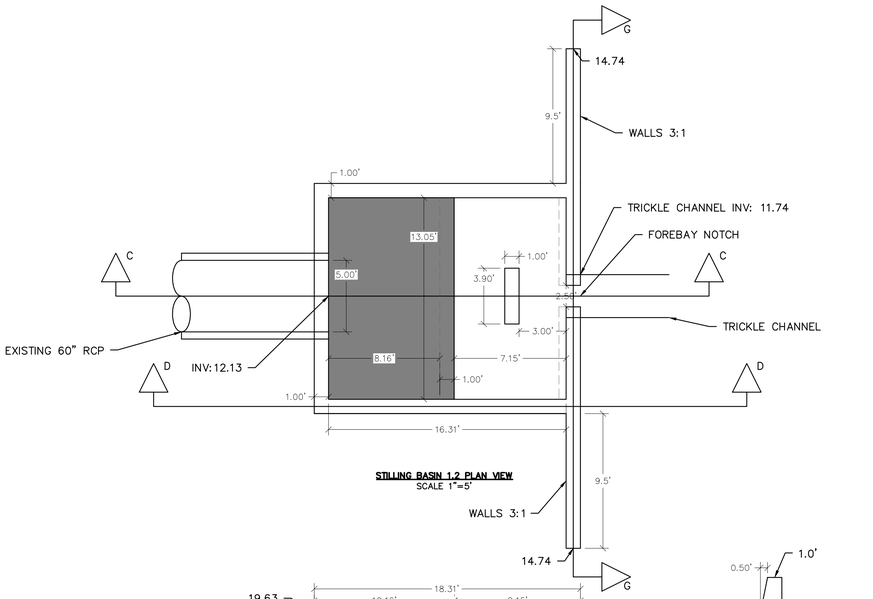
CAD FILE: 24004308-POND-PLAN-01.DWG



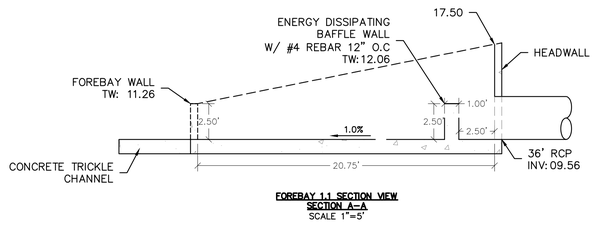
FOREBAY 1.1 PLAN VIEW
SCALE 1"=5'



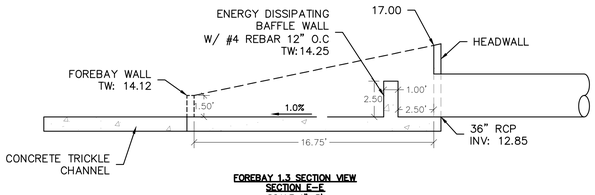
FOREBAY 1.3 PLAN VIEW
SCALE 1"=5'



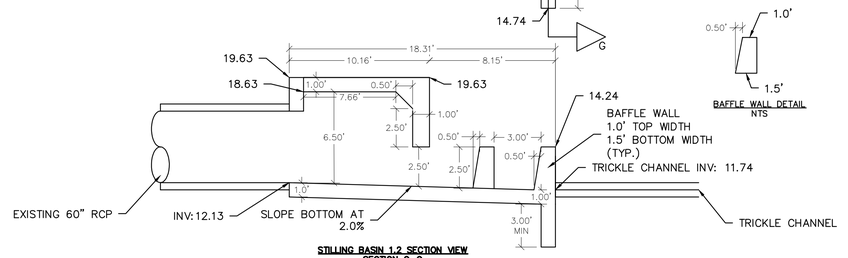
STILLING BASIN 1.2 PLAN VIEW
SCALE 1"=5'



FOREBAY 1.1 SECTION VIEW
SECTION A-A
SCALE 1"=5'

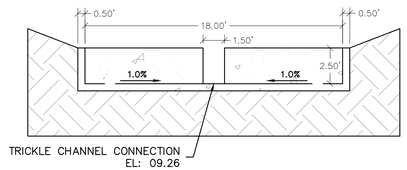


FOREBAY 1.3 SECTION VIEW
SECTION E-E
SCALE 1"=5'

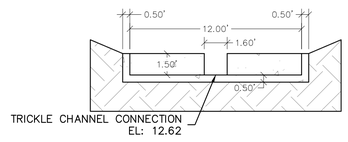


STILLING BASIN 1.2 SECTION VIEW
SECTION C-C
SCALE 1"=5'

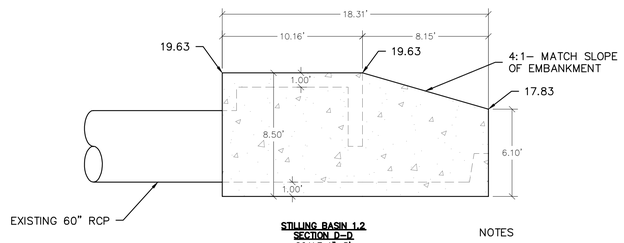
BAFFLE WALL DETAIL
NTS



FOREBAY 1.1 NOTCH
SECTION B-B
SCALE 1"=5'



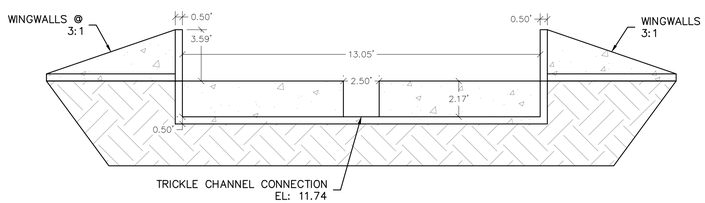
FOREBAY 1.3 NOTCH
SECTION F-F
SCALE 1"=5'



STILLING BASIN 1.2
SECTION D-D
SCALE 1"=5'

NOTES

1. A STRUCTURAL DESIGN IS REQUIRED FOR IMPACT STILLING BASIN. PLEASE FORWARD TO ENGINEER FOR REVIEW PRIOR TO START OF CONSTRUCTION
2. REFER TO MHFD STILLING BASIN DETAIL ON SHEET 44



STILLING BASIN 1.2 NOTCH
SECTION G-G
SCALE 1"=5'

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POND 1 DETAILS

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DATE 5/30/2025

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C	3rd SUBMITTAL TO JURISDICTION 04/15/2026 — KB
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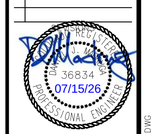

COUNTY FILE NO.: SF2418

DR. TN | CH. LS
P.M. DM
JOB 24004308
SHEET NO. 42

CAD FILE: 24004308-POND-PLAN-01.DWG

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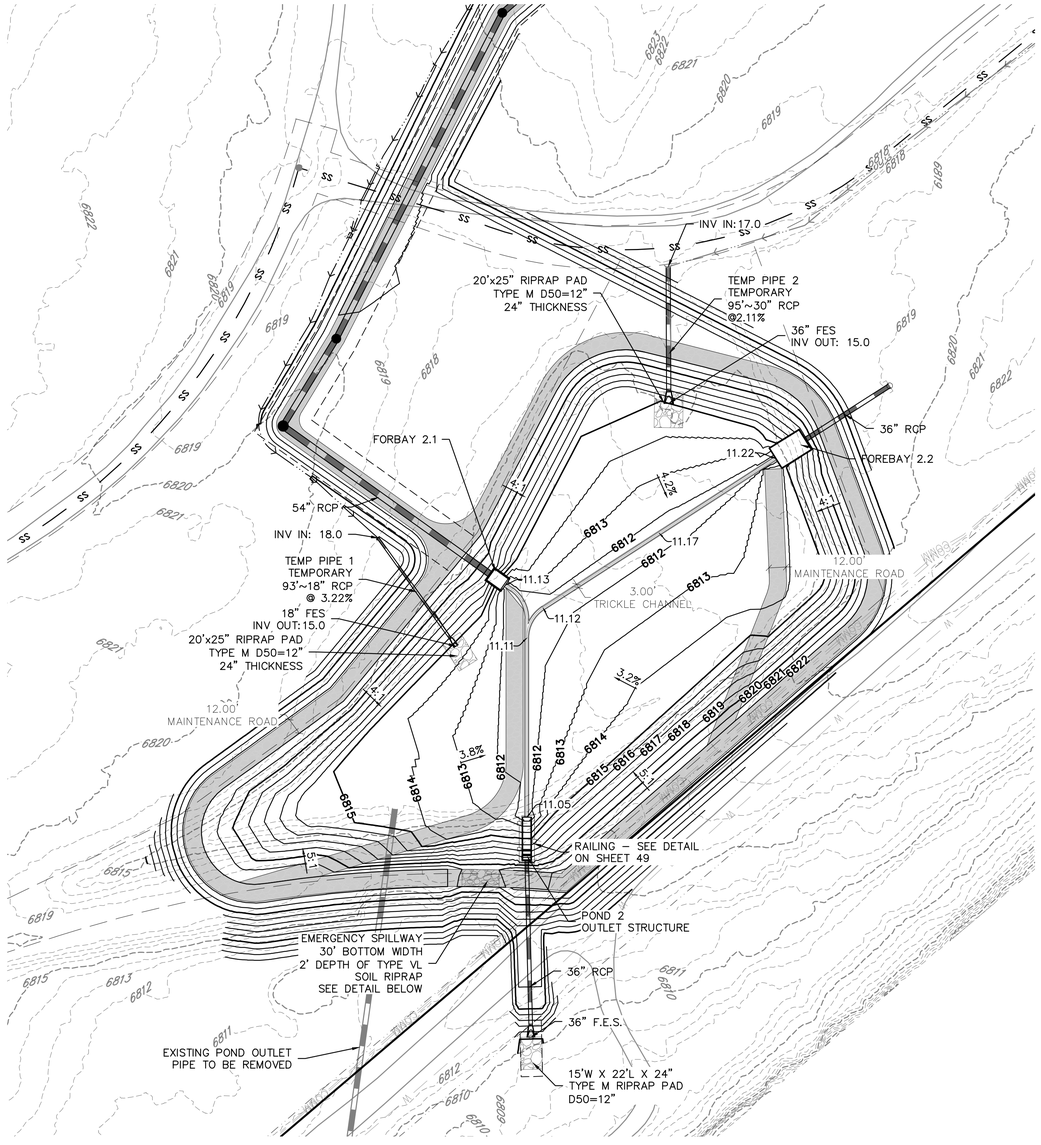
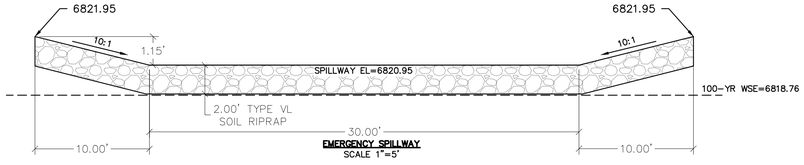
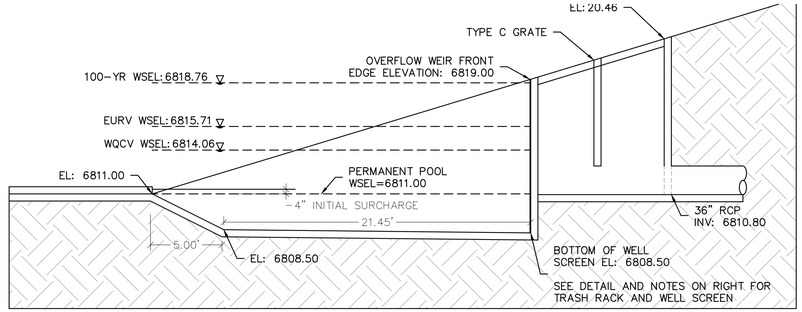


POND 2 PLAN VIEW
SCALE 1"=50'

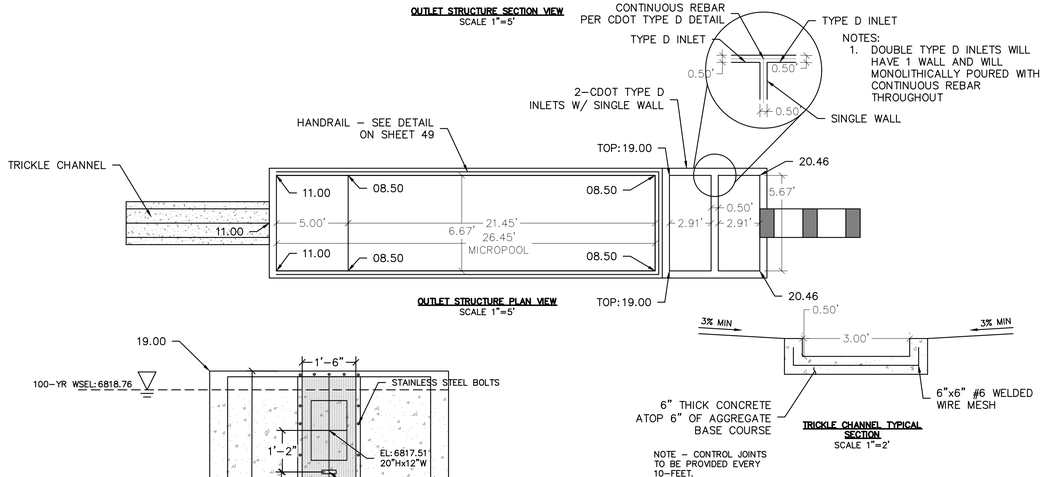
NOTES:
1. TEMPORARY PIPES SHALL BE REMOVED PRIOR TO FULL BUILD OUT CONDITION



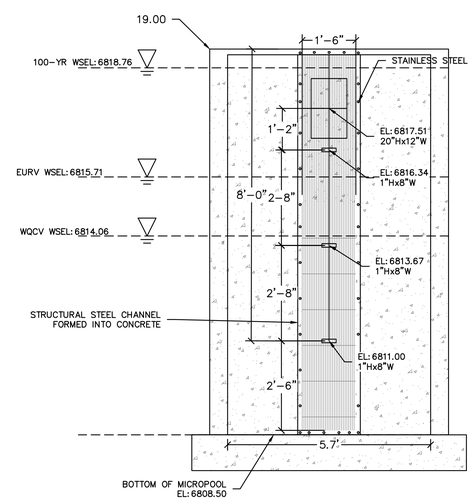
EMERGENCY SPILLWAY
SCALE 1"=5'



OUTLET STRUCTURE SECTION VIEW
SCALE 1"=5'



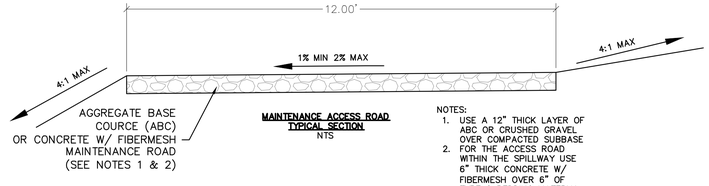
OUTLET STRUCTURE PLAN VIEW
SCALE 1"=5'



ORIFICE PLATE AND TRASH RACK INTERIM
NTS

TRICKLE CHANNEL TYPICAL SECTION
SCALE 1"=2'

NOTE - CONTROL JOINTS TO BE PROVIDED EVERY 10-FEET.



MAINTENANCE ACCESS ROAD TYPICAL SECTION
NTS

NOTES:
1. USE A 12" THICK LAYER OF ABC OR CRUSHED GRAVEL OVER COMPACTED SUBBASE
2. FOR THE ACCESS ROAD WITHIN THE SPILLWAY USE 6" THICK CONCRETE W/ FIBERMESH OVER 6" OF TYPE 2 BEDDING MATERIAL

ORIFICE PLATE NOTES:

1. PROVIDE CONTINUOUS NEOPRENE GASKET MATERIAL BETWEEN THE ORIFICE PLATE AND CONCRETE
2. BOLT PLATE TO CONCRETE 12" MAX ON CENTER SEE TABLE OS-2 FOR PLATE THICKNESS

EURV AND WQCV TRASH RACK:

1. WELL-SCREEN TRASH RACKS SHALL BE STAINLESS STEEL AND SHALL BE ATTACHED NY INTERMITTENT WELDS ALONG THE EDGE OF THE MOUNTING FRAME
2. BAR GATE TRASH RACKS SHALL BE ALUMINUM AND SHALL BE BOLTED USING STAINLESS STEEL HARDWARE.
3. TRASH RACK OPEN AREAS ARE FOR SPECIFIED TRASH RACK MATERIALS. TOTAL TRASH RACK SIZE MY NEED TO BE ADJUSTED FOR MATERIALS HAVING DIFFERENT OPEN AREA/GROSS AREA RATIO (R VALUE).
4. STRUCTURAL DESIGN OF TRASH RACKS SHALL BE BASED ON FULL HYDROSTATIC HEAD WITH ZERO HEAD DOWNSTREAM OF THE RACK.

OVERFLOW SAFETY GRATES:

1. ALL SAFETY GRATES SHALL ME MOUNTED USING STAINLESS STEEL HARDWARE AND PROVIDED WITH HINGED AND LOCKABLE OR BOLTABLE ACCESS PANELS.
2. SAFETY GRATES SHALL BE STAINLESS STEEL, ALUMINUM, OR STEEL. STEEL GRATES SHALL BE HOT DIP GALVANIZED AND MAY BE POWDER COATED OF GALVANIZING.
3. SAFETY GRATES SHALL BE DESIGNED SUCH THAT THE DIAGONAL DIMENSION OF EACH OPENING IS SMALLER THAT THE DIAMETER OF THE OUTLET PIPE..
4. STRUCTURAL DESIGN OF SAFETY GRATES SHALL BE BASED ON FULL HYDROSTATIC HEAD WITH ZERO HEAD DOWNSTREAM OF THE RACK.

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT-OF-WAY
- EXISTING RIGHT-OF-WAY
- PROPOSED LOT LINE
- EXISTING LOT LINE
- PROPOSED CATCH CURB & GUTTER
- PROPOSED SPILL CURB & GUTTER
- EXISTING CURB & GUTTER
- PROPOSED SIDEWALK
- EXISTING SIDEWALK
- EXISTING SECTION LINE
- PROPOSED EASEMENT
- EXISTING EASEMENT
- PROPOSED CONTOURS
- EXISTING CONTOURS
- PROPOSED STORM SEWER
- EXISTING STORM SEWER

BENCHMARK:
ELEVATIONS ARE BASED UPON SW COR SEC. 12, T13S, R65W, 6TH PM, FND. 3.25" ALUM. CAP.
(ELEVATION: 6810.43=NAVD88).

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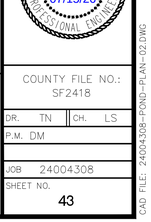

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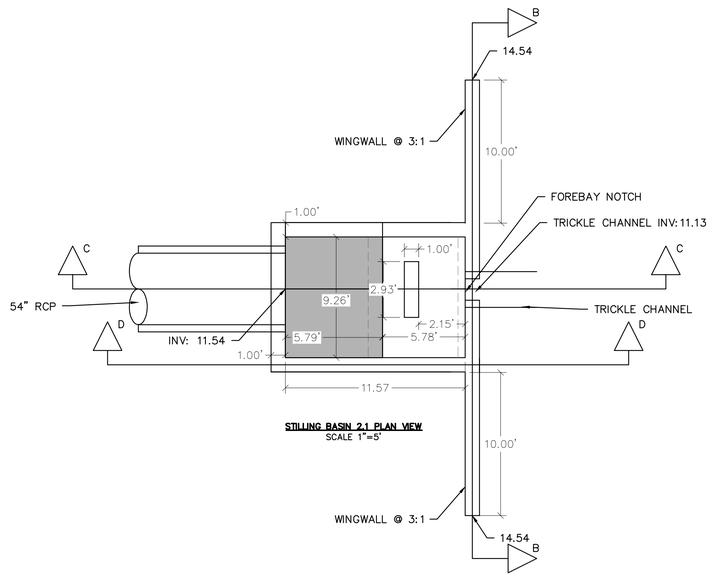
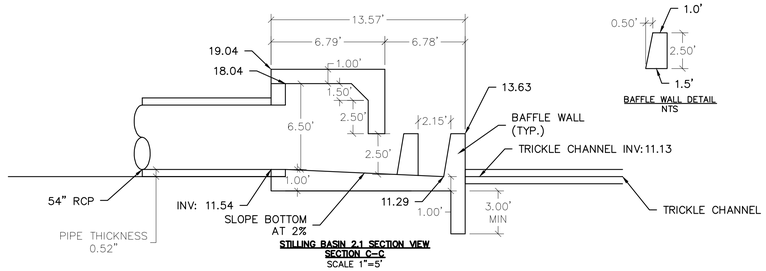
JOB 24004308	
SHEET NO. 43	

CAD FILE: 24004308-POND-PLAN-02.DWG

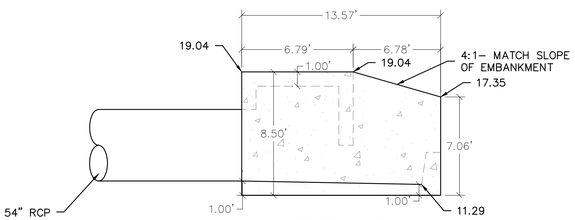


STILLING BASIN 2.1 PLAN VIEW
SCALE 1"=5'

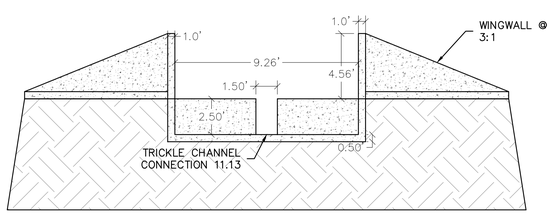


STILLING BASIN 2.1 SECTION VIEW
SECTION C–C
SCALE 1"=5'

BAFFLE WALL DETAIL
NTS



STILLING BASIN 2.1
SECTION D–D
SCALE 1"=5'



STILLING BASIN 2.1 NOTCH SECTION VIEW
SECTION B–B
SCALE 1"=5'

NOTES

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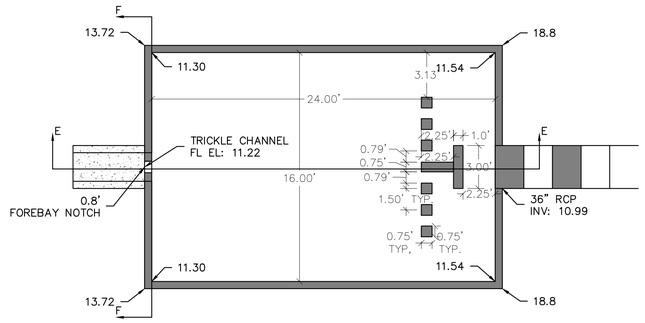
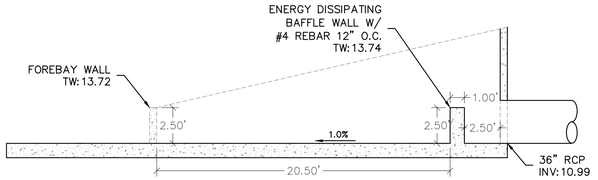
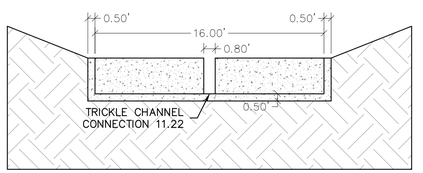
2. REFER TO MHFD STILLING BASIN DETAIL ON SHEET 44



FOREBAY 2.2 PLAN VIEW
SCALE 1"=5'



FOREBAY 2.2 SECTION VIEW
SECTION E–E
SCALE 1"=5'



FOREBAY 2.2 NOTCH SECTION VIEW
SECTION F–F
SCALE 1"=5'

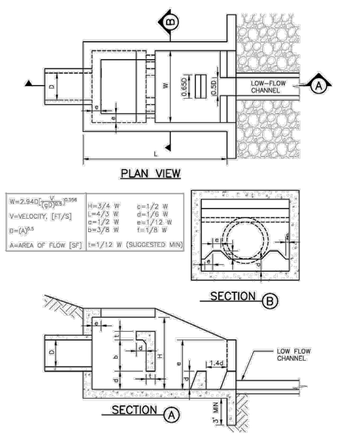


Figure 9-45. UDFCD modified USBR type VI impacts stilling basin (general design dimensions)

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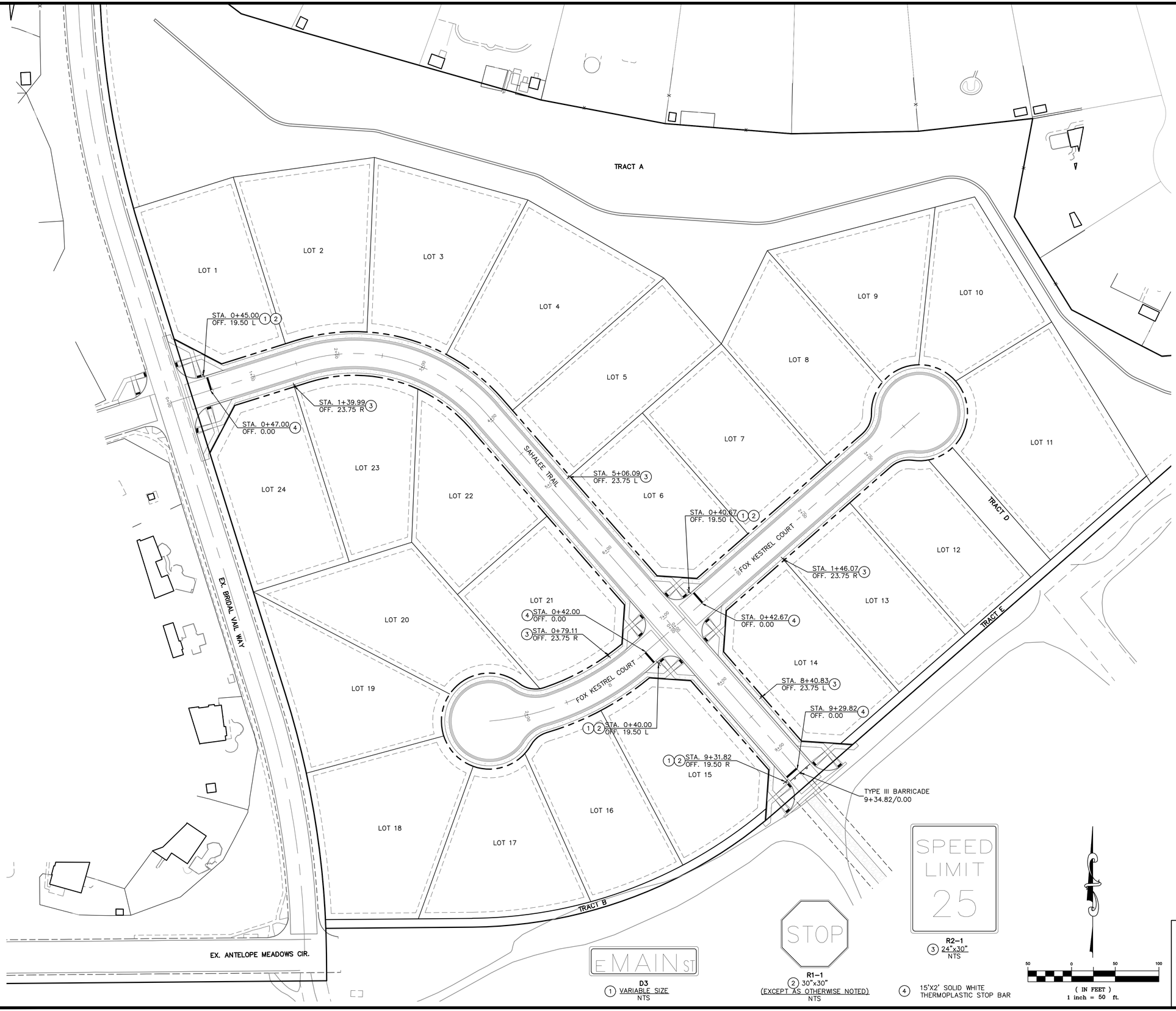
REGISTERED PROFESSIONAL ENGINEER
DAVID MARTIN
36834
07/15/26
PROFESSIONAL ENGINEER

COUNTY FILE NO.: SF2418

DR. TN CH. LS
P.M. DM
JOB 24004308
SHEET NO. 44

CAD FILE: 24004308-POND-PLAN-02.DWG



(1) D3 VARIABLE SIZE NTS

(2) R1–1 30"x30" (EXCEPT AS OTHERWISE NOTED) NTS

(3) R2–1 24"x30" NTS

(4) 15'X2' SOLID WHITE THERMOPLASTIC STOP BAR

GENERAL NOTES

1. THE CONTRACTOR SHALL HAVE A COPY OF ALL APPLICABLE STANDARDS ONSITE OF THE DURATION OF THE PROJECT.
2. THE CONTRACTOR SHALL ACQUIRE ALL NECESSARY PERMITS AND INSPECTIONS REQUIRED TO COMPLETE THE SCOPE OF WORK PRESENTED HEREIN.

TRAFFIC CONTROL

1. ALL SIGNAGE AND STRIPING SHALL FOLLOW THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", MUTCD, CURRENT EDITION, AND ALL APPLICABLE CDOT M&S STANDARDS.
2. THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN TEMPORARY TRAFFIC CONTROL DEVICES NECESSARY THROUGHOUT THE DURATION OF CONSTRUCTION IN CONFORMANCE WITH TRAFFIC CONTROL PLANS AND/OR APPROVED MHT.
3. THE TRAFFIC CONTROL SUPERVISOR SHALL COORDINATE CONSTRUCTION ZONE TRAFFIC CONTROL ACTIVITIES WITH ALL APPROPRIATE OFFICIALS.
4. THE CONTRACTOR SHALL MAINTAIN FULL COMPLIANCE PAVEMENT MARKINGS OR APPROVED DECIVES ON THE ROADWAYS DURING ALL PHASES OF THE CONSTRUCTION PERIOD.

SIGNING AND STRIPING NOTES

1. ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN COMPLIANCE WITH THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
2. REMOVAL OF EXISTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY A METHOD THAT DOES NOT MATERIALLY DAMAGE THE PAVEMENT. THE PAVEMENT MARKINGS SHALL BE REMOVED TO THE EXTENT THAT THEY WILL NOT BE VISIBLE UNDER DAYLIGHT OR NIGHT CONDITIONS. AT NO TIME WILL IT BE ACCEPTABLE TO PAINT OVER EXISTING PAVEMENT MARKINGS.
3. ANY DEVIATION FROM THE STRIPING AND SIGNING PLAN SHALL BE APPROVED BY EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT.
4. ALL SIGNS SHOWN ON THE SIGNING AND STRIPING PLAN SHALL BE NEW SIGNS. EXISTING SIGNS MAY REMAIN OR BE REUSED IF THEY MEET CURRENT EL PASO COUNTY AND MUTCD STANDARDS.
5. STREET NAME AND REGULATORY STOP SIGNS SHALL BE ON THE SAME POST AT INTERSECTIONS.
6. ALL REMOVED SIGNS SHALL BE DISPOSED OF IN A PROPER MANNER BY THE CONTRACTOR.
7. ALL STREET NAME SIGNS SHALL HAVE "D" SERIES LETTERS, WITH LOCAL ROADWAY SIGNS BEING 4" UPPER–LOWER CASE LETTERING ON 8" BLANK AND NON–LOCAL ROADWAY SIGNS BEING 6" LETTERING, UPPER–LOWER CASE ON 12" BLANK, WITH A WHITE BORDER THAT IS NOT RECESSED. MULTI–LANE ROADWAYS WITH SPEED LIMITS OF 35 MPH OR HIGHER SHALL HAVE 8" UPPER–LOWER CASE LETTERING ON 12" BLANK WITH A WHITE BORDER THAT IS NOT RECESSED. THE WIDTH OF THE NON–RECESSED WHITE BORDERS SHALL MATCH PAGE 255 OF THE 2012 MUTCD "STANDARD HIGHWAY SIGNS". SIGNAL POLE MOUNTED AND OVERHEAD STREET NAME SIGNS SHALL BE PER MUTCD STANDARDS.
8. ALL TRAFFIC SIGNS SHALL HAVE A MINIMUM HIGH INTENSITY PRISMATIC GRADE SHEETING.
9. ALL LOCAL RESIDENTIAL STREET SIGNS SHALL BE MOUNTED ON A 1.75"x1.75" SQUARE TUBE SIGN POST AND STUB POST BASE. FOR OTHER APPLICATIONS, REFER TO THE CDOT STANDARD S–614–8 REGARDING USE OF THE P2 TUBULAR STEEL POST SLIPBASE DESIGN.
10. ALL SIGNS SHALL BE SINGLE SHEET ALUMINUM WITH 0.100" MINIMUM THICKNESS.
11. ALL LIMIT LINES/STOP LINES, CROSSWALK LINES, PAVEMENT LEGENDS, AND ARROWS SHALL BE A MINIMUM 125 MIL THICKNESS PERFORMED THERMOPLASTIC PAVEMENT MARKINGS WITH TAPERED LEADING EDGES PER CDOT STANDARD S–627–1. STOP BARS SHALL BE 24" IN WIDTH. CROSSWALKS LINES SHALL BE 24" WIDE AND A MINIMUM OF 9' LONG.
12. WORD AND SYMBOL MARKINGS SHALL BE THE NARROW TYPE.
13. ALL LONGITUDINAL LINES SHALL BE A MINIMUM 15MIL THICKNESS EPOXY PAINT. ALL NON–LOCAL RESIDENTIAL ROADWAYS SHALL INCLUDE BOTH RIGHT AND LEFT EDGE LINE STRIPING AND ANY ADDITIONAL STRIPING AS REQUIRED BY CDOT S–627–1.
14. THE CONTRACTOR SHALL NOTIFY EL PASO PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT (PCD), 719–520–6819, PRIOR TO AND UPON COMPLETION OF THE SIGNING AND STRIPING.
15. THE CONTRACTOR SHALL OBTAIN A WORK IN THE RIGHT OF WAY PERMIT FROM THE EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS (DPW) PRIOR TO ANY SIGNAGE OR STRIPING WORK WITHIN AN EXISTING EL PASO COUNTY ROADWAY.

BENCHMARK:
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(ELEVATION: 6810.43=NAVD88).

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JIM BYERS

FALCON HIGHLANDS SOUTH – FILING 1
EL PASO COUNTY, COLORADO
CONSTRUCTION PLANS
SIGNAGE & STRIPING
OVERALL PLAN

DATE 5/30/2025

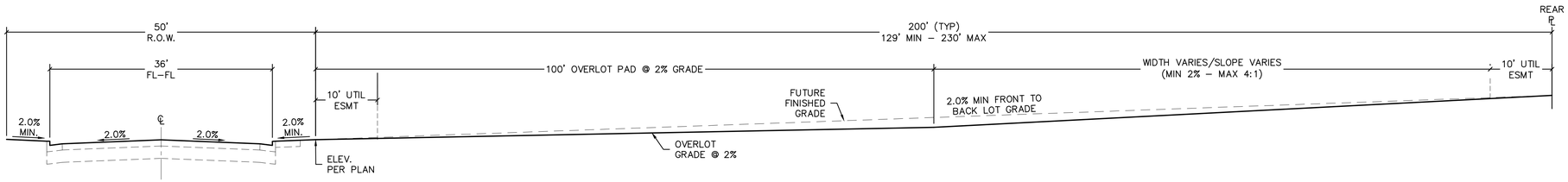
A	1st SUBMITTAL TO JURISDICTION 07/22/2024 – KR
B	2nd SUBMITTAL TO JURISDICTION 01/08/2025 – KR
C	3rd SUBMITTAL TO JURISDICTION 04/25/2025 – KR
D	4th SUBMITTAL TO JURISDICTION 06/02/2025 – DM
E	5th SUBMITTAL TO JURISDICTION 08/01/2025 – DM
F	6th SUBMITTAL TO JURISDICTION 09/08/2025 – DM
G	7th SUBMITTAL TO JURISDICTION 07/16/2026 – DM

REGISTERED PROFESSIONAL ENGINEER
TIMOTHY NOLAN
36834
07/15/26
PROFESSIONAL ENGINEER

COUNTY FILE NO.: SF2418

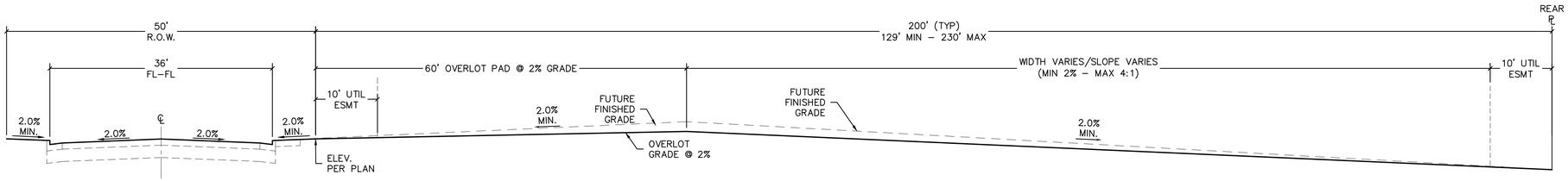
DR. TN	CH. LS
P.M. DM	
JOB 24004308	
SHEET NO. 45	

CAD FILE: 24004308-STRP-PLANDWG



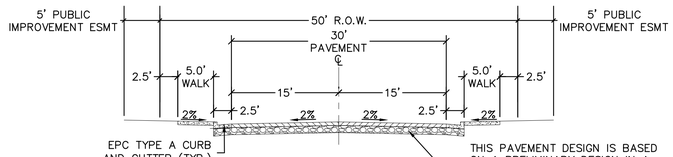
"A" LOT
N.T.S.

NOTE: REFER TO THE GOETECHNICAL REPORT
FOR OVEREXCAVATION RECOMMENDATIONS.



"B" LOT
N.T.S.

NOTE: REFER TO THE GOETECHNICAL REPORT
FOR OVEREXCAVATION RECOMMENDATIONS.

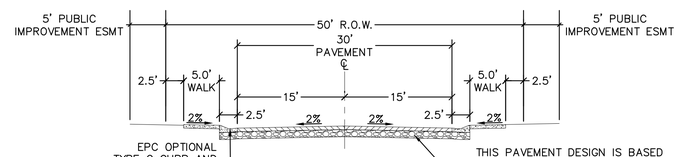


SAHALEE TRAIL, STATION RANGES
0+42.00 – 0+67.50
6+58.47 – 6+78.64
7+51.82 – 9+35.39

FOX KESTREL COURT WEST, STATION RANGES
0+36.18 – 0+57.21

FOX KESTREL COURT EAST, STATION RANGES
0+36.19 – 0+57.50

TYPICAL STREET SECTION (VERTICAL CURB)
SCALE: 1=10'



SAHALEE TRAIL, STATION RANGES
0+72.50 – 6+53.99

FOX KESTREL COURT WEST, STATION RANGES
0+61.37 – 1+81.26

FOX KESTREL COURT EAST, STATION RANGES
0+61.35 – 3+07.97

TYPICAL STREET SECTION (MOUNTABLE CURB)
SCALE: 1=10'

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SITE DETAILS

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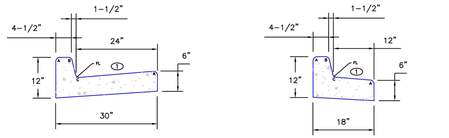
G	7th SUBMITTAL TO JURISDICTION 07/16/2026 – IM

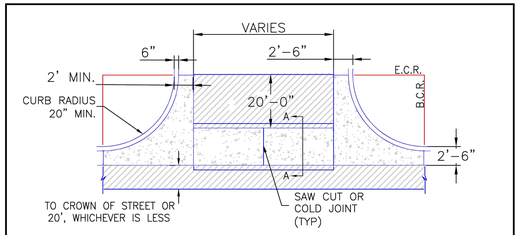
COUNTY FILE NO.:
SF2418

DR. TN | CH. LS
P.M. DM
JOB 24004308
SHEET NO. 46

CAD FILE: 24004308-DTLS-SITE.DWG
L:\2024\24004308 ENTITLEMENTS\CAD\DWG\24004308-DTLS-SITE.DWG 7/17/2026 10:16 AM Dana Decuir



6/23/20 DATE APPROVED: Joshua J. Palmer DEPARTMENT OF PUBLIC WORKS	Typical Curb and Gutter Details Standard Drawing REVISION DATE: 7/18/23 FILE NAME: SD_2-20	EL PASO COUNTY COLORADO



NOTES

1. W – WIDTH SHALL BE 6' FOR LOCAL, 8' FOR COLLECTORS, AND 10' FOR ARTERIAL ROADS.

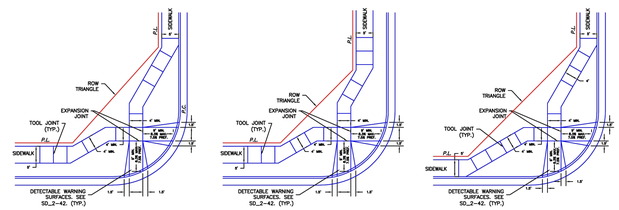
2. T – SQUARED-OFF RETURN TO BE POURED MONOLITHICALLY, 8" PCC FOR LOCAL ROADS, 9" FOR COLLECTORS WITH 6x6 – 4.4 W.W.F. OR #4 REINFORCING BAR @ 18" EACH WAY.

3. ▨ = 3" MINIMUM ASPHALT DEPTH (2 LIFTS).

4. DESIGN TO SPECIFY ELEVATIONS AT PI AND PCR.

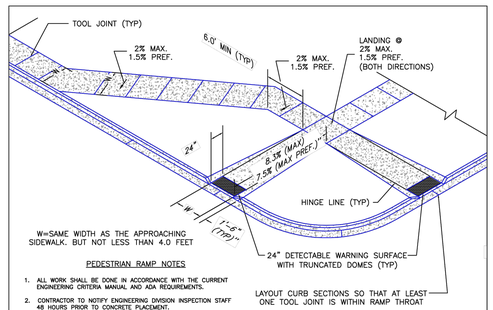
SCALE: NOT TO SCALE

8/11/11 DATE APPROVED: André P. Brackin DEPARTMENT OF TRANSPORTATION	Typical Cross Pan Layout Detail Standard Drawing REVISION DATE: 12/8/15 FILE NAME: SD_2-26	EL PASO COUNTY DEPARTMENT OF TRANSPORTATION



SCALE: NOT TO SCALE

6/23/20 DATE APPROVED: Jennifer E. Irvine DEPARTMENT OF PUBLIC WORKS	Pedestrian Curb Ramp Detail Standard Drawing REVISION DATE: 6/23/20 FILE NAME: SD_2-40	DEPARTMENT OF PUBLIC WORKS



PEDESTRIAN RAMP NOTES

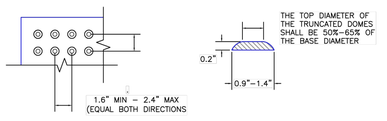
1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT ENGINEERING CRITERIA MANUAL AND ADA REQUIREMENTS.
2. CONTRACTOR TO NOTIFY ENGINEERING DIVISION INSPECTION STAFF 48 HOURS PRIOR TO CONCRETE PLACEMENT.
3. PEDESTRIAN CURB RAMP CONSTRUCTION SHALL BE A MINIMUM 4,500 PSI CONCRETE, MINIMUM 4" THICK, NON-COLORED, NON-SCORED, COARSE BROOM FINISH.
4. PEDESTRIAN CURB RAMP LOCATION AND LENGTH MAY REQUIRE MODIFICATION TO MAINTAIN THE 8.3% MAXIMUM RUNNING RAMP SLOPE DUE TO STREET INTERSECTION GRADES AND/OR ALIGNMENTS. SEE ECM SECTION 6.3.6 FOR PEDESTRIAN PUSHBUTTON LOCATION REQUIREMENTS.
5. DETECTABLE WARNING SURFACE SHALL START A MINIMUM OF 6" BUT NOT MORE THAN 8" FROM THE FLOWLINE OF THE CURB AT ANY POINT.
6. DETECTABLE WARNING SURFACE SHALL BE PREFABRICATED, CAST IRON (PATINA NATURAL FINISH) AND IN ACCORDANCE WITH ECM CHAPTER 6 AND SD_2-42. THERMOPLASTIC TRUNCATED DOMES AND PAVERS WILL NOT BE ACCEPTED.
7. THE DETECTABLE WARNING SURFACE SHALL BE 24" IN LENGTH AND THE FULL WIDTH OF THE RAMP.
8. PEDESTRIAN CURB RAMP WIDTH REQUIRED IS SAME AS APPROACHING SIDEWALK; 4' MINIMUM.
9. ALL PEDESTRIAN CURB RAMPS WILL BE PERPENDICULAR TO TRAFFIC WITH THE EXCEPTION OF MID-BLOCK OR TERMINAL RAMPS WHICH MAY BE PARALLEL, SUBJECT TO APPROVAL.
10. DRAINAGE STRUCTURES, TRAFFIC SIGNAL/SIGNAGE, UTILITIES/JUNCTION BOXES, OR OTHER OBSTRUCTIONS WITHIN PROPOSED PEDESTRIAN CURB RAMP AREAS AND LANDINGS ARE PROHIBITED.
11. THE COUNTER SLOPE OF THE GUTTER OR ROAD AT THE FOOT OF A RAMP SHALL NOT EXCEED 5%.

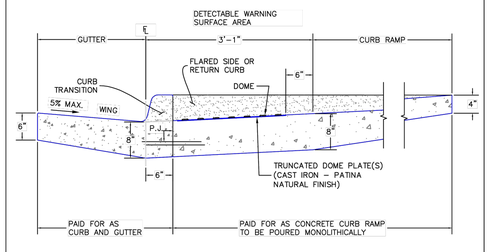
GENERAL NOTES

1. WHERE THE 1'-6" FLARED SIDE(S) OF A PERPENDICULAR CURB RAMP IS (ARE) CONTIGUOUS WITH A PEDESTRIAN OR HARD SURFACE AREA (PEDESTRIAN CIRCULATION PATH), THE MAXIMUM FLARE SLOPE SHALL NOT EXCEED 10:1.
2. PEDESTRIAN WALKWAY (PEDESTRIAN ACCESS ROUTE) AND/OR LOCATION OF EXISTING OR FUTURE PEDESTRIAN RAMPS ON OPPOSITE CORNERS SHALL BE REVIEWED BEFORE CONSTRUCTING NEW RAMPS.
3. AT MARKED PEDESTRIAN CROSSINGS, THE BOTTOM OF THE RAMPS, EXCLUSIVE OF THE FLARE SIDES, SHALL BE TOTALLY CONTAINED WITHIN THE MARKINGS.

6/23/20 DATE APPROVED: Jennifer E. Irvine DEPARTMENT OF PUBLIC WORKS	Pedestrian Curb Ramp Detail Standard Drawing REVISION DATE: 6/23/20 FILE NAME: SD_2-41	DEPARTMENT OF PUBLIC WORKS

TRUNCATED DOME DETAILS

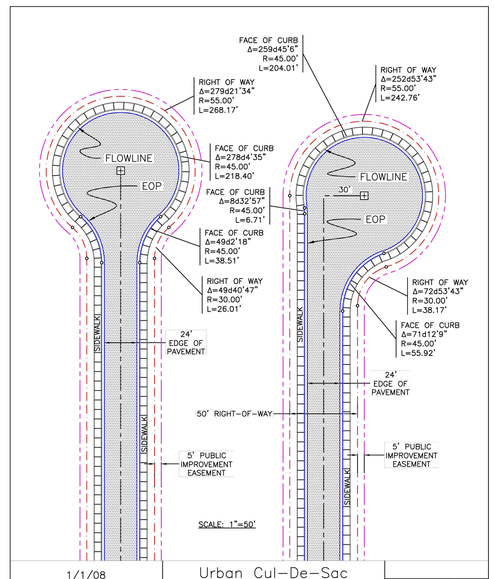




P.J.= PERMISSABLE JOINT WITH EPOXY-COATED DEFORMED NO. 4 BARS CONFORMING TO AASHTO M 284 AT 18 IN. SPACING

SIDE CROSS SECTION VIEW OF DETECTABLE WARNING SURFACE, CURB AND GUTTER

6/23/20 DATE APPROVED: Jennifer E. Irvine DEPARTMENT OF PUBLIC WORKS	Detectable Warning Surface Details Standard Drawing REVISION DATE: 6/23/20 FILE NAME: SD_2-42	DEPARTMENT OF PUBLIC WORKS



1/1/08 DATE APPROVED: John A. McCarty DEPARTMENT OF TRANSPORTATION	Urban Cul-De-Sac Details Standard Drawing REVISION DATE: 12/8/15 FILE NAME: SD_2-75	EL PASO COUNTY DEPARTMENT OF TRANSPORTATION

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EL PASO COUNTY, COLORADO
CONSTRUCTION PLANS
CONSTRUCTION DETAILS
STREET DETAILS

DATE 5/30/2025

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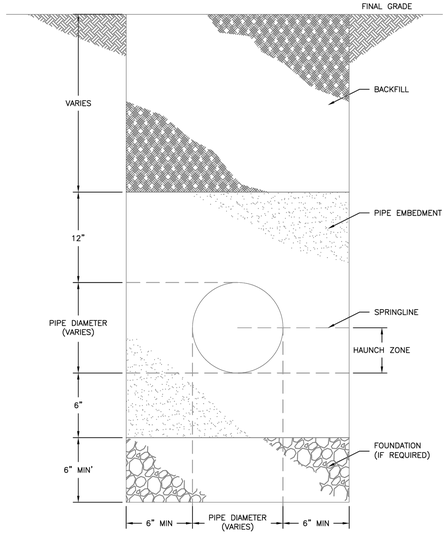
COUNTY FILE NO.: SF2418

DR.	TN	CH.	LS
P.M.	DM		

JOB 24004308
SHEET NO. 47

P:\ECM\July_2022_Edits\SD_2-20.dwg, Layout1, 7/27/2023 10:37:45 AM, dsmorton, Supersedes All Previously Dated Sets

CAD FILE: 24004308-DTLS-STR1.DWG



NOTE:

1. TRENCH BACKFILL SHALL CONFORM TO THE SPECIFICATIONS OF THE AUTHORITY HAVING JURISDICTION AND ASTM D2321.

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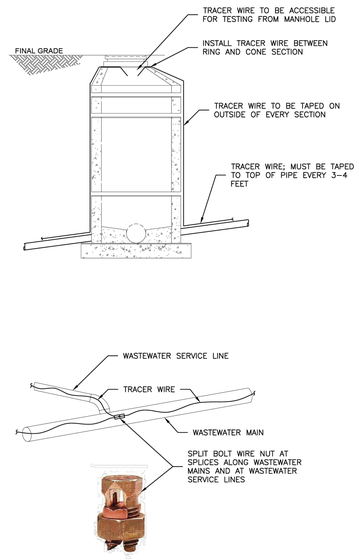
TYPICAL TRENCH SECTION

C2-1
DATED 5/2015



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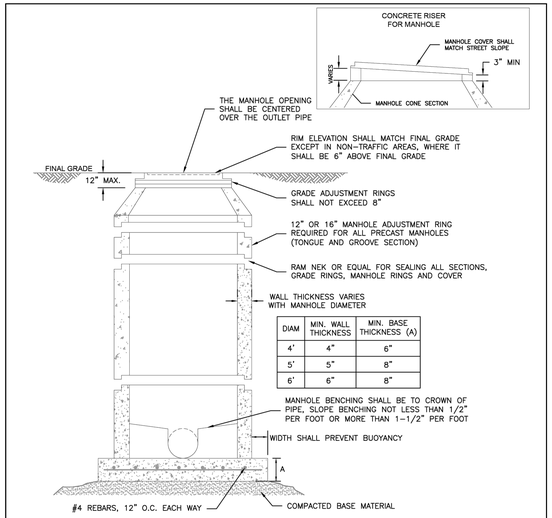
TRACER WIRE ON PVC OR HDPE PIPE

C2-3
DATED 5/2015



DIAM	MIN. WALL THICKNESS	MIN. BASE THICKNESS (A)
4'	4"	6"
5'	5"	8"
6'	6"	8"

NOTES:

1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF NOT LESS THAN 4000 PSI @ 28 DAYS AND DESIGNED FOR HS-20 LOADING CONDITIONS.
2. ALL CONCRETE SHALL BE MECHANICALLY VIBRATED.
3. FOR CAST IN PLACE MANHOLES, DO NOT DROP CONCRETE A DISTANCE OF MORE THAN 5' UNLESS APPROVED BY COLORADO SPRINGS UTILITIES.
4. 3/4" CRUSHED ROCK REQUIRED UNDER BASE TO A DEPTH OF 6" UP TO SPRINGLINE OF PIPE, 2'-3" RADIUS AROUND BASE.
5. ALL STEPS SHALL BE REMOVED FOLLOWING CONSTRUCTION.
6. STRUCTURAL REINFORCEMENT SHALL COMPLY TO ASTM C-478. ASTM C-478 SHALL BE STAMPED ON THE OUTSIDE OF THE MANHOLE.

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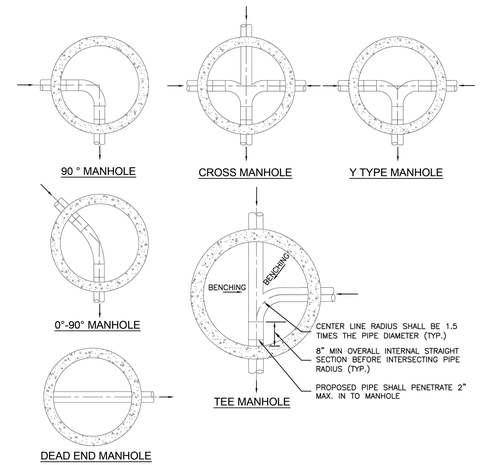
STANDARD CONCRETE MANHOLE

C3-1
DATED 5/2015

TYPICAL INTERSECTING PIPE MANHOLE LAYOUTS



NOTES:

1. SEE DETAIL DRAWING C3-1 FOR MANHOLE REQUIREMENTS.
2. LAYOUTS SHOWN ARE FOR 8"-12" PIPES; LAYOUTS FOR LARGER DIAMETER PIPELINES AND MANHOLES SHALL BE DESIGNED BY THE DESIGN ENGINEER AND APPROVED BY COLORADO SPRINGS UTILITIES.
3. TO BE READ IN CONJUNCTION WITH CHAPTER 2, MANHOLE SIZES.

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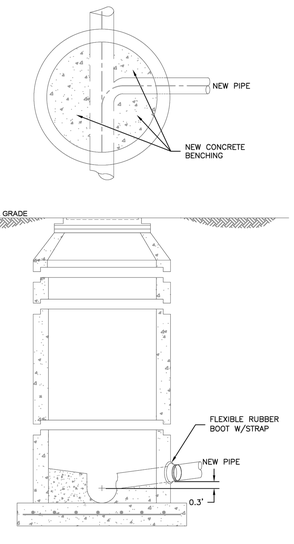
TYPICAL MANHOLE LAYOUTS AND INTERSECTIONS

C3-2
DATED 5/2015



NOTES:

1. SEE DETAIL DRAWING C3-1 FOR MANHOLE REQUIREMENTS.

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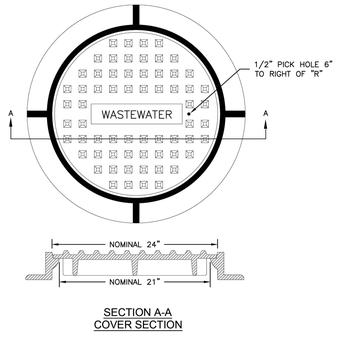
CORE DRILLING INTO AN EXISTING MANHOLE

C3-3
DATED 7/2020



SECTION A-A
COVER SECTION

NOTES:

1. SEE CHAPTER 4 FOR ADDITIONAL INFORMATION AND SPECIFIC DIMENSIONS.

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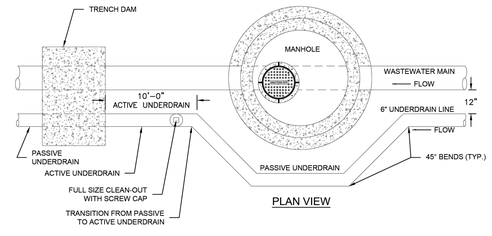
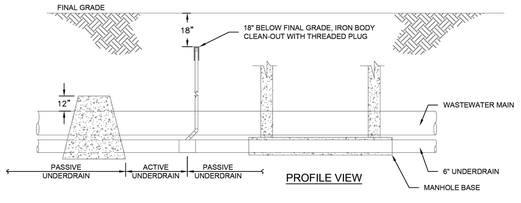
STANDARD MANHOLE RING AND COVER IN TRAFFIC AREAS

C3-9
DATED 5/2015



PLAN VIEW



PROFILE VIEW

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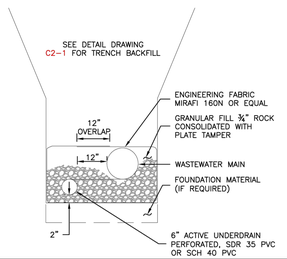
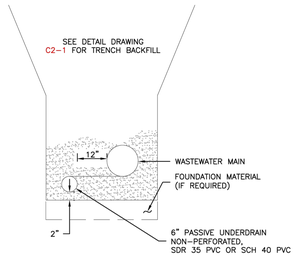
PASSIVE GROUNDWATER UNDERDRAIN SCHEMATIC

C6-1
DATED 5/2015

ACTIVE UNDERDRAIN PIPE



PASSIVE UNDERDRAIN PIPE



NOTES:

1. ACTIVE UNDERDRAIN PIPE REQUIRED FOR 10' DOWNSTREAM OF EACH MANHOLE WHERE UNDERDRAINS ARE INSTALLED.

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PREFERRED COMMON TRENCH UNDERDRAIN WITH WASTEWATER MAIN

C6-3
DATED 5/2015

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FALCON HIGHLANDS SOUTH – FILING 1
EL PASO COUNTY, COLORADO
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CONSTRUCTION DETAILS
SANITARY SEWER DETAILS

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JOB 24004308
SHEET NO. 48

CAD FILE: 24004308-DTLS-SSWR.DWG

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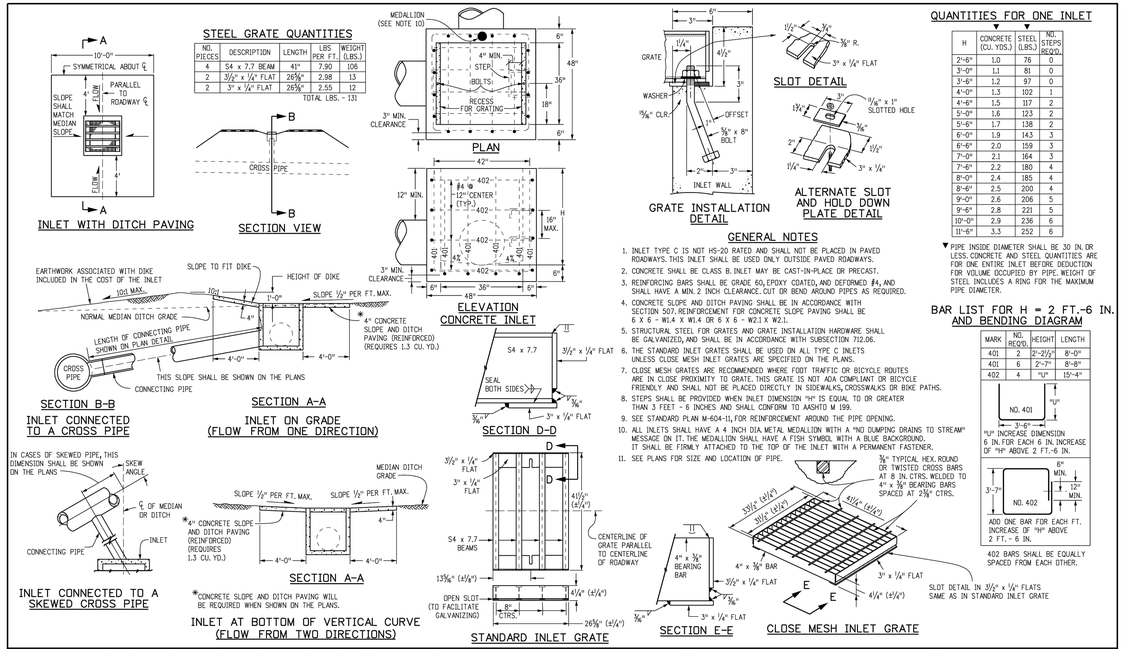

STEEL GRATE QUANTITIES

NO. PIECES	DESCRIPTION	LENGTH	LBS PER FT.	WEIGHT (LBS.)
4	S4 x 7.7 BEAM	41"	7.90	106
2	3½" x ¼" FLAT	26⅜"	2.98	13
2	3" x ¼" FLAT	26⅜"	2.55	12

TOTAL LBS. = 131

QUANTITIES FOR ONE INLET

H	CONCRETE (CU. YDS.)	STEEL (LBS.)	NO. STEPS REQ'D.
2'-6"	1.0	76	0
3'-0"	1.1	81	0
3'-6"	1.2	97	0
4'-0"	1.3	102	1
4'-6"	1.5	117	2
5'-0"	1.6	123	2
5'-6"	1.7	138	2
6'-0"	1.9	143	3
6'-6"	2.0	159	3
7'-0"	2.1	164	3
7'-6"	2.2	180	4
8'-0"	2.4	185	4
8'-6"	2.5	200	4
9'-0"	2.6	206	5
9'-6"	2.8	221	5
10'-0"	2.9	236	6
11'-6"	3.3	252	6

▼ PIPE INSIDE DIAMETER SHALL BE 30 IN. OR LESS. CONCRETE AND STEEL QUANTITIES ARE FOR ONE ENTIRE INLET BEFORE DEDUCTION FOR VOLUME OCCUPIED BY PIPE. WEIGHT OF STEEL INCLUDES A RING FOR THE MAXIMUM PIPE DIAMETER.

GENERAL NOTES

1. INLET TYPE C IS NOT HS-20 RATED AND SHALL NOT BE PLACED IN PAVED ROADWAYS. THIS INLET SHALL BE USED ONLY OUTSIDE PAVED ROADWAYS.
2. CONCRETE SHALL BE CLASS B. INLET MAY BE CAST-IN-PLACE OR PRECAST.
3. REINFORCING BARS SHALL BE GRADE 60, EPOXY COATED, AND DEFORMED #4, AND SHALL HAVE A MIN. 2 INCH CLEARANCE. CUT OR BEND AROUND PIPES AS REQUIRED.
4. CONCRETE SLOPE AND DITCH PAVING SHALL BE IN ACCORDANCE WITH SECTION 507. REINFORCEMENT FOR CONCRETE SLOPE PAVING SHALL BE 6 X 6 - W1.4 X W1.4 OR 6 X 6 - W2.1 X W2.1.
5. STRUCTURAL STEEL FOR GRATES AND GRATE INSTALLATION HARDWARE SHALL BE GALVANIZED, AND SHALL BE IN ACCORDANCE WITH SUBSECTION 712.06.
6. THE STANDARD INLET GRATES SHALL BE USED ON ALL TYPE C INLETS UNLESS CLOSE MESH INLET GRATES ARE SPECIFIED ON THE PLANS.
7. CLOSE MESH GRATES ARE RECOMMENDED WHERE FOOT TRAFFIC OR BICYCLE ROUTES ARE IN CLOSE PROXIMITY TO GRATE. THIS GRATE IS NOT ADA COMPLIANT OR BICYCLE FRIENDLY AND SHALL NOT BE PLACED DIRECTLY IN SIDEWALKS, CROSSWALKS OR BIKE PATHS.
8. STEPS SHALL BE PROVIDED WHEN INLET DIMENSION "H" IS EQUAL TO OR GREATER THAN 3 FEET - 6 INCHES AND SHALL CONFORM TO AASHTO M 199.
9. SEE STANDARD PLAN M-604-11, FOR REINFORCEMENT AROUND THE PIPE OPENING.
10. ALL INLETS SHALL HAVE A 4 INCH DIA. METAL MEDALLION WITH A "NO DUMPING DRAINS TO STREAM" MESSAGE ON IT. THE MEDALLION SHALL HAVE A FISH SYMBOL WITH A BLUE BACKGROUND. IT SHALL BE FIRMLY ATTACHED TO THE TOP OF THE INLET WITH A PERMANENT FASTENER.
11. SEE PLANS FOR SIZE AND LOCATION OF PIPE.

BAR LIST FOR H = 2 FT.-6 IN. AND BENDING DIAGRAM

MARK	NO. REQ'D.	HEIGHT	LENGTH
401	2	2'-2½"	8'-0"
401	6	2'-7"	8'-8"
402	4	"U"	15'-4"

NO. 401 — 3'-6" — "U"

"U" INCREASE DIMENSION 6 IN. FOR EACH 6 IN. INCREASE OF "H" ABOVE 2 FT.-6 IN.

NO. 402 — 3'-7" — 6" MIN. — 12" MIN.

ADD ONE BAR FOR EACH FT. INCREASE OF "H" ABOVE 2 FT. - 6 IN.

402 BARS SHALL BE EQUALLY SPACED FROM EACH OTHER.

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Date:	Comments	

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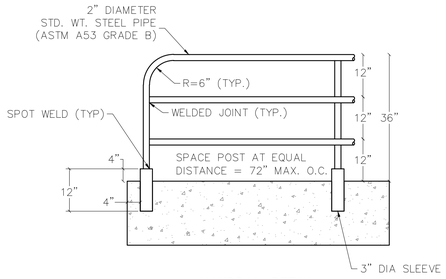
INLET, TYPE C

Issued by the Project Development Branch: July 31, 2019

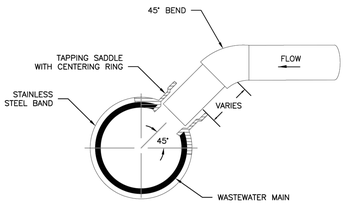
STANDARD PLAN NO.
M-604-10
Standard Sheet No. 1 of 1
Project Sheet Number:



HANDRAIL DETAIL

N.T.S.

NOTE: HANDRAIL ON FACE OF INLET
HANDRAILS REQUIRED ON ANY WALL OVER 4' INCLUDING TIERED WALLS



TYPICAL WASTEWATER SERVICE TAPPING SADDLE

NOTES:

1. WHEN THE WASTEWATER MAIN IS VCP, USE THE SDR 35 PVC SADDLE WITH A LARGER SKIRT. SADDLE SHALL BE ONE NOMINAL SIZE LARGER THAN THE WASTEWATER MAIN.
2. PIPE WILL BE CUT WITH AN O.D. HOLE SAW OR TAPPING MACHINE. A 4–1/2" O.D. HOLE SAW SHALL BE USED FOR 4" TAPS AND A 6–1/2" O.D. HOLE SAW SHALL BE USED FOR 6" TAPS.
3. ONLY 4" AND 6" TAP SIZES ARE ALLOWED.
4. WASTEWATER TAPPING SADDLES SHALL HAVE A CENTERING RING.
5. A GASKET SHALL BE USED TO ENSURE AN AIRTIGHT SEAL BETWEEN THE SADDLE AND THE PIPE.

Colorado Springs Utilities
It's how we're all connected

TYPICAL WASTEWATER SERVICE LINE TAPPING METHOD

D1–6
DATED 5/2015

811 Know what's below. Call before you dig.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE:
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR; NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

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EL PASO COUNTY, COLORADO
CONSTRUCTION PLANS
CONSTRUCTION DETAILS
SANITARY & STORM SEWER DETAILS

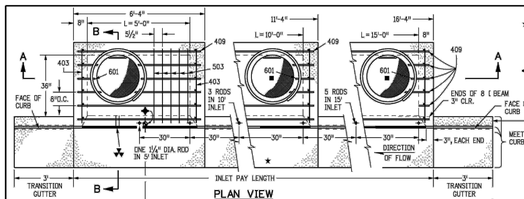
DATE 5/30/2025

A	1st SUBMITTAL TO JURISDICTION 07/12/2024 — KB
B	2nd SUBMITTAL TO JURISDICTION 11/08/2025 — KR
C	3rd SUBMITTAL TO JURISDICTION 04/15/2026 — KB
D	4th SUBMITTAL TO JURISDICTION 06/22/2026 — DM
E	5th SUBMITTAL TO JURISDICTION 08/01/2026 — DM
F	6th SUBMITTAL TO JURISDICTION 09/08/2026 — DM
G	7th SUBMITTAL TO JURISDICTION 07/16/2026 — DM

COUNTY FILE NO.: SF2418

DR. TN | CH. LS
P.M. DM
JOB 24004308
SHEET NO. 49

CAD FILE: 24004308-DTLS-SSWR.DWG



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Project Development Branch JBK

CURB INLET TYPE R

Issued by the Project Development Branch: July 31, 2019

STANDARD PLAN NO.
M-604-12
Standard Sheet No. 1 of 2
Project Sheet Number:

MARK	BAR # OR SIZE	O.C. SPACING	TYPE	ALL INLETS L = 5 FT. NO. REQ'D.	ALL INLETS L = 5 FT. LENGTH	INLETS: H ≤ 5 FT. L = 10 FT. NO. REQ'D.	INLETS: H ≤ 5 FT. L = 10 FT. LENGTH	INLETS: H ≤ 5 FT. L = 15 FT. NO. REQ'D.	INLETS: H ≤ 5 FT. L = 15 FT. LENGTH	INLETS: H > 5 FT. L = 10 FT. NO. REQ'D.	INLETS: H > 5 FT. L = 10 FT. LENGTH	INLETS: H > 5 FT. L = 15 FT. NO. REQ'D.	INLETS: H > 5 FT. L = 15 FT. LENGTH
401	4	11"	II	15	*	21	*	26	*	11	*	11	*
402	4	11"	II	7	*	13	*	18	*	7	*	7	*
403	4	9"	II	*	4'-0"	*	4'-0"	*	4'-0"	*	4'-0"	*	4'-0"
405	4	6"	VI	11	6'-10"	21	6'-10"	31	6'-10"	11	6'-10"	11	6'-10"
406	4	6"	VIII	7	8'-10"	7	13'-10"	7	18'-10"	7	8'-10"	7	8'-10"
407	4	9"	II	*	5'-10"	*	10'-10"	*	15'-10"	*	5'-10"	*	5'-10"
408	4	12"	II	3	6'-10"	3	11'-10"	3	16'-0"	3	11'-10"	3	16'-0"
409	4	8"	II	6	5'-10"	6	10'-10"	6	15'-10"	6	10'-10"	6	15'-10"
410	4	11"	VII							3	*	3	*
411	4	11"	II							3	5'-2"	3	10'-2"
412	4	11"	II							3	7'-8"	3	2'-8"
413	4	9"	II							7	10'-10"	7	15'-10"
501	5	5⅛"	IV	11	3'-4"	22	3'-4"	33	3'-4"	22	3'-4"	33	3'-4"
502	5	5⅛"	III							11	11'-0"	17	11'-0"
503	5	5⅛"	II	5	3'-6"	16	3'-6"	27	3'-6"	6	3'-6"	6	3'-6"
504	5	5⅛"	IX									5	8'-4"
601	6	2⅝"	V	2	8'-10"	2	8'-10"	2	8'-10"	2	8'-10"	4	8'-10"
■RB.5				1	5'-10"	1	10'-10"	1	15'-10"	1	10'-10"	1	15'-10"
				3 BARS, 1 RDS	—	4 BARS, 3 RDS	—	8 BARS, 5 RDS	—	4 BARS, 3 RDS	—	8 BARS, 5 RDS	—

* VARIABLE REFER TO TABLE TWO.
■ INCLUDE #4, 18 IN BARS (SEE CHANNEL LAYOUT).

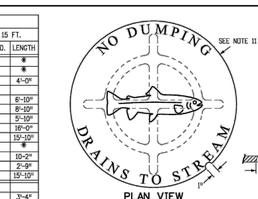
REGULAR INLETS | DROP BOX INLETS

TABLE ONE ~ BAR LIST FOR CURB INLETS, TYPE "R"

"H"	LENGTH 401	LENGTH 402	LENGTH 410	NO. REQ'D. REGULAR 403	NO. REQ'D. REGULAR 407	NO. REQ'D. DROP BOX 403	NO. REQ'D. DROP BOX 407	L = 5 FT. CONC. CU. YDS.	L = 5 FT. STEEL LBS.	L = 10 FT. CONC. CU. YDS.	L = 10 FT. STEEL LBS.	L = 15 FT. CONC. CU. YDS.	L = 15 FT. STEEL LBS.
3'-0"	2'-8"	1'-8"		10	7			3.2	285	5.3	497	7.4	706
3'-6"	3'-2"	2'-2"		10	7			3.4	305	5.7	528	7.9	747
4'-0"	3'-8"	2'-8"		12	9			3.7	326	6.0	558	8.4	788
4'-6"	4'-2"	3'-2"		12	9			3.9	334	6.4	571	8.8	803
5'-0"	4'-8"	3'-8"		14	11			4.1	354	6.7	602	9.3	844
5'-6"	5'-2"	4'-2"	3'-5"	16	13	15	6	4.4	375	6.9	607	7.4	850
6'-0"	5'-8"	4'-8"	3'-11"	16	13	16	6	4.6	382	6.2	616	7.6	860
6'-6"	6'-2"	5'-2"	4'-5"	18	15	18	8	4.8	402	6.4	637	7.8	880
7'-0"	6'-8"	5'-8"	4'-11"	20	17	19	10	5.0	423	6.6	654	8.0	897
7'-6"	7'-2"	6'-2"	5'-5"	20	17	20	10	5.3	430	6.9	664	8.3	907
8'-0"	7'-8"	6'-8"	5'-11"	22	19	22	12	5.5	451	7.1	684	8.5	927
8'-6"	8'-2"	7'-2"	6'-5"	24	21	23	14	5.7	471	7.3	702	8.7	944
9'-0"	8'-8"	7'-8"	6'-11"	24	21	24	14	6.0	479	7.6	711	9.0	954
9'-6"	9'-2"	8'-2"	7'-5"	26	23	26	16	6.2	499	7.8	732	9.2	974
10'-0"	9'-8"	8'-8"	7'-11"	28	25	27	18	6.4	520	8.0	749	9.4	992
10'-6"	10'-2"	9'-2"	8'-5"	28	25	28	18	6.7	527	8.3	759	9.7	1001
11'-0"	10'-8"	9'-8"	8'-11"	30	27	30	20	6.9	547	8.5	779	9.9	1022

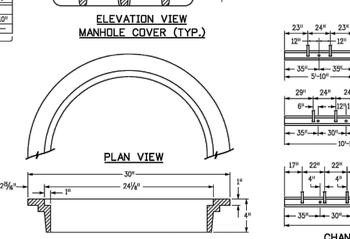
NOTES: FOR L= 5 FT, L=10 FT, AND L=15 FT.
REGULAR INLETS: TOTAL QUANTITIES NEEDED ARE OUTSIDE THE HEAVY BLACK LINE.
DROP BOX INLETS: TOTAL QUANTITIES NEEDED ARE INSIDE THE HEAVY BLACK LINE.
STEEL WEIGHTS DO NOT INCLUDE STRUCTURAL STEEL CHANNEL.

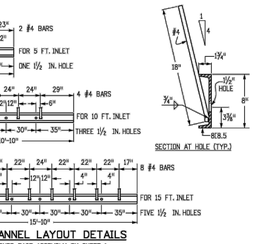
TABLE TWO ~ BARS AND QUANTITIES VARIABLE WITH "H"



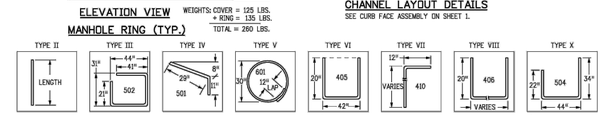
GENERAL NOTES

1. CONCRETE SHALL BE CLASS B. INLET MAY BE CAST-IN-PLACE OR PRECAST.
2. CONCRETE WALLS SHALL BE FORMED ON BOTH SIDES AND SHALL BE 8 INCHES THICK.
3. INLET STEPS SHALL BE IN CONFORMANCE WITH AASHTO M 199.
4. CURB FACE ASSEMBLY SHALL BE GALVANIZED AFTER WELDING.
5. EXPOSED CONCRETE CORNERS SHALL BE CHAMFERED ¾" OF A INCH. CURB AND GUTTER CORNERS SHALL BE FINISHED TO MATCH THE EXISTING CURB AND GUTTER BEYOND THE TRANSITION GUTTER.
6. REINFORCING BARS SHALL BE DEFORMED AND SHALL HAVE A 2 INCH MINIMUM CLEARANCE. ALL REINFORCING BARS SHALL BE GRADE 60 AND EPOXY COATED.
7. DIMENSIONS AND WEIGHTS OF TYPICAL MANHOLE RING AND COVER ARE NOMINAL.
8. MATERIAL FOR MANHOLE RINGS AND COVERS SHALL BE GRAY OR DUCTILE CAST IRON IN ACCORDANCE WITH SUBSECTION 712.06.
9. SINCE PIPE ENTRIES INTO THE INLET ARE VARIABLE, THE DIMENSIONS SHOWN ARE TYPICAL. ACTUAL DIMENSIONS AND QUANTITIES FOR CONCRETE AND REINFORCEMENT SHALL BE AS REQUIRED IN THE WORK. QUANTITIES INCLUDE VOLUMES OCCUPIED BY PIPES.
10. STRUCTURAL STEEL SHALL BE GALVANIZED AND SHALL BE IN ACCORDANCE WITH SUBSECTION 712.06.
11. ALL MANHOLE COVERS SHALL BE CAST WITH A "NO DUMPING DRAINS TO STREAM" MESSAGE AND A FISH SYMBOL. THE SURFACE OF THE MANHOLE COVER SHALL HAVE A NON-SLIP PATTERN.





CHANNEL LAYOUT DETAILS
SEE CURB FACE ASSEMBLY ON SHEET 1.



BAR BENDING DIAGRAMS ~ (DIMENSIONS ARE OUT-TO-OUT OF BAR)

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CURB INLET TYPE R

Issued by the Project Development Branch: July 31, 2019

STANDARD PLAN NO.
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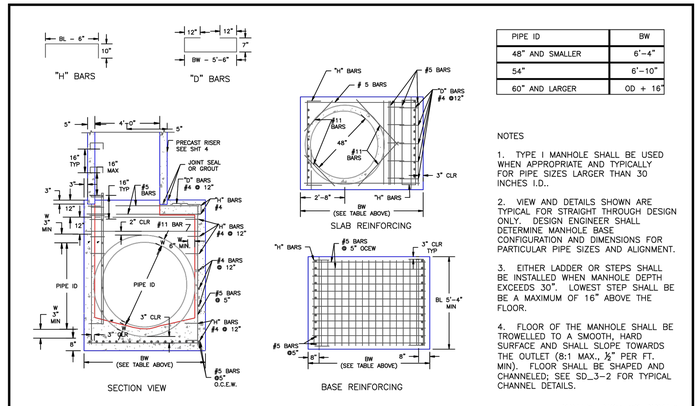
Standard Sheet No. 2 of 2
Project Sheet Number:



PIPE ID	BW
48" AND SMALLER	6'-4"
54"	6'-10"
60" AND LARGER	OD + 16"

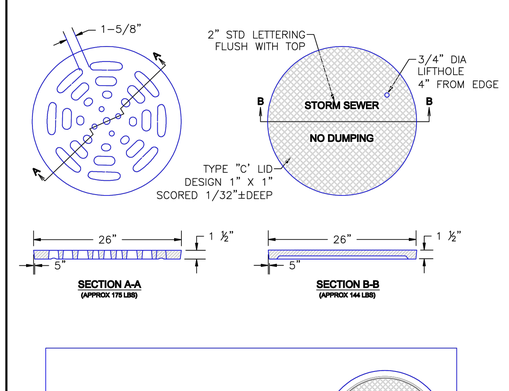
NOTES

1. TYPE I MANHOLE SHALL BE USED WHEN APPROPRIATE AND TYPICALLY FOR PIPE SIZES LARGER THAN 30 INCHES I.D..
2. VIEW AND DETAILS SHOWN ARE TYPICAL FOR STRAIGHT THROUGH DESIGN ONLY. DESIGN ENGINEER SHALL DETERMINE MANHOLE BASE CONFIGURATION AND DIMENSIONS FOR PARTICULAR PIPE SIZES AND ALIGNMENT.
3. EITHER LADDER OR STEPS SHALL BE INSTALLED WHEN MANHOLE DEPTH EXCEEDS 30". LOWEST STEP SHALL BE BE A MAXIMUM OF 16" ABOVE THE FLOOR.
4. FLOOR OF THE MANHOLE SHALL BE TROWELLED TO A SMOOTH, HARD SURFACE AND SHALL SLOPE TOWARDS THE OUTLET (8:1 MAX., ½" PER FT. MIN). FLOOR SHALL BE SHAPED AND CHANNELED; SEE SD_3-2 FOR TYPICAL CHANNEL DETAILS.

SCALE: NOT TO SCALE

7/9/09
DATE APPROVED:
André Brackin
DEPARTMENT OF TRANSPORTATION

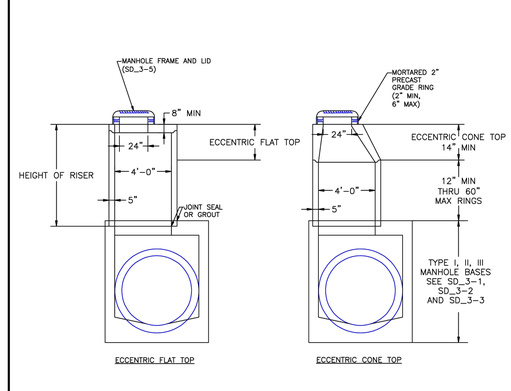
Storm Sewer Manhole Detail
Type I
Standard Drawing
REVISION DATE: 7/9/09
FILE NAME: SD_3-1



SCALE: NOT TO SCALE

9/16/10
DATE APPROVED:
André P. Brackin
DEPARTMENT OF TRANSPORTATION

Storm Sewer Manhole Details
Standard Drawing
REVISION DATE: 9/16/10
FILE NAME: SD_3-5



NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD AND SUPPLEMENTAL SPECIFICATIONS APPLICABLE TO THE PROJECT.
2. PRECAST RISERS SHALL CONFORM TO ASTM C478.
3. STEPS SHALL BE INSTALLED WHEN MANHOLE DEPTH EXCEEDS 30". STEPS SHALL BE CAST IRON OR EXTRUDED ALUMINUM, 1000 LB CAPACITY, 12" WIDE WITH NON-SKID GROOVES AND DROP FRONT ON SAFETY NOSES, IN ACCORDANCE WITH APPROVED OSHA REQUIREMENTS.

SCALE: NOT TO SCALE

8/11/11
DATE APPROVED:
André P. Brackin
DEPARTMENT OF TRANSPORTATION

Storm Sewer Manhole Riser and Cover Detail
Standard Drawing
REVISION DATE: 11/23/04
FILE NAME: SD_3-7

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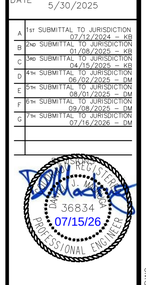
CONSTRUCTION PLANS
CONSTRUCTION DETAILS
STORM SEWER DETAILS

DATE 5/30/2025

A	1st SUBMITTAL TO JURISDICTION 07/12/2024 — KB
B	2nd SUBMITTAL TO JURISDICTION 01/08/2025 — KR
C	3rd SUBMITTAL TO JURISDICTION 04/15/2025 — KB
D	4th SUBMITTAL TO JURISDICTION 06/02/2025 — DM
E	5th SUBMITTAL TO JURISDICTION 08/01/2025 — DM
F	6th SUBMITTAL TO JURISDICTION 09/08/2025 — DM
G	7th SUBMITTAL TO JURISDICTION 07/16/2026 — DM



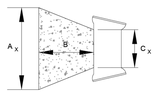
COUNTY FILE NO.: SF2418

DR. TN | CH. LS
P.M. DM
JOB 24004308
SHEET NO. 50

CAD FILE: 24004308-DTLS-STRM.DWG

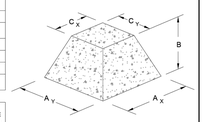
THRUST BLOCK DIMENSIONS and VOLUMES - PVC & DIP 250 psi

MAIN SIZE (in.)	TYPE OF FITTING	MINIMUM BEARING SURFACE AREA (ft^2)	MINIMUM A_X(ft)	MINIMUM A_Y(ft)	MINIMUM C_X(ft)	MINIMUM C_Y(ft)	MINIMUM B (ft)	APPROXIMATE VOLUME (yd^3)
4	11.25° BEND	1.00	1.00	1.00	0.25	0.33	2.00	0.25
4	22.5° BEND	2.00	1.41	1.41	0.21	0.33	2.00	0.25
4	45° BEND	3.50	1.87	1.87	0.42	0.33	2.00	0.25
4	TEE & DEAD END	4.75	2.18	2.18	0.67	0.33	2.00	0.25
6	11.25° BEND	2.00	1.41	1.41	0.25	0.50	2.00	0.25
6	22.5° BEND	3.75	1.94	1.94	0.38	0.50	2.00	0.25
6	45° BEND	7.25	2.69	2.69	0.58	0.50	2.00	0.25
6	TEE & DEAD END	9.50	3.08	3.08	0.83	0.50	2.00	0.50
8	11.25° BEND	3.25	1.80	1.80	0.34	0.67	2.00	0.25
8	22.5° BEND	6.50	2.55	2.55	0.48	0.67	2.00	0.25
8	45° BEND	12.50	3.57	3.50	0.67	0.67	2.00	0.50
8	TEE & DEAD END	16.25	4.64	3.50	1.08	0.67	2.00	0.75



THRUST BLOCK DIMENSIONS and VOLUMES - PVC (Maximum Static Pressure = 170 psi)

MAIN SIZE (in.)	TYPE OF FITTING	MINIMUM BEARING SURFACE AREA (ft^2)	MINIMUM A_X(ft)	MINIMUM A_Y(ft)	MINIMUM C_X(ft)	MINIMUM C_Y(ft)	MINIMUM B (ft)	APPROXIMATE VOLUME (yd^3)
12	11.25° BEND	4.75	2.18	2.18	0.43	1.00	2.00	0.25
12	22.5° BEND	9.25	3.04	3.04	0.64	1.00	2.00	0.50
12	45° BEND	18.00	4.92	3.66	1.00	1.00	2.00	0.75
12	TEE & DEAD END	23.50	6.42	3.66	1.46	1.00	2.48	1.00
16	11.25° BEND	8.00	2.83	2.83	0.44	1.33	2.00	0.50
16	22.5° BEND	16.00	4.27	3.75	0.66	1.33	2.00	0.75
16	45° BEND	31.00	8.27	3.75	1.00	1.33	3.64	1.75
16	TEE & DEAD END	40.50	10.80	3.75	1.92	1.33	4.44	3.00



THRUST BLOCK DIMENSIONS and VOLUMES - DIP (Maximum Static Pressure = 250 psi)

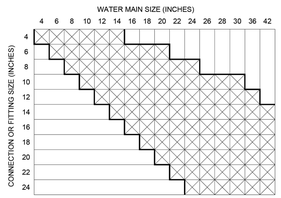
MAIN SIZE (in.)	TYPE OF FITTING	MINIMUM BEARING SURFACE AREA (ft^2)	MINIMUM A_X(ft)	MINIMUM A_Y(ft)	MINIMUM C_X(ft)	MINIMUM C_Y(ft)	MINIMUM B (ft)	APPROXIMATE VOLUME (yd^3)
12	11.25° BEND	6.75	2.60	2.60	0.43	1.00	2.00	0.50
12	22.5° BEND	13.50	3.69	3.66	0.64	1.00	2.00	0.50
12	45° BEND	26.25	7.17	3.66	1.00	1.00	3.09	1.50
12	TEE & DEAD END	34.25	9.36	3.66	1.46	1.00	3.95	2.25
16	11.25° BEND	11.75	3.43	3.43	0.44	1.33	2.00	0.50
16	22.5° BEND	23.25	6.20	3.75	0.66	1.33	2.77	1.00
16	45° BEND	45.50	12.13	3.75	1.00	1.33	5.57	4.00
16	TEE & DEAD END	59.50	15.87	3.75	1.92	1.33	6.96	6.50

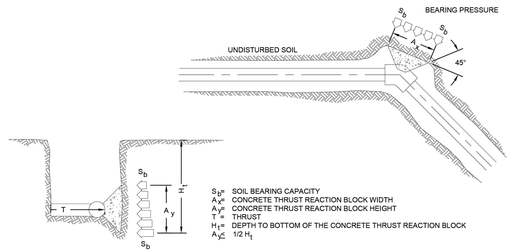
NOTES:

1. THE MINIMUM BEARING SURFACE AREAS SHOWN ARE BASED ON A MAX STATIC PIPE PRESSURE OF 170/250 POUNDS PER SQUARE INCH PLUS A SAFETY FACTOR OF 1.5 AND AN ALLOWABLE SOIL BEARING CAPACITY OF 1500 POUNDS PER SQUARE FOOT. BEARING SURFACE AREA IS ROUNDED UP TO THE NEAREST 0.25 SQUARE FEET. REFERENCE AWWA M-23 AND M-41.
2. THE DESIGN ENGINEER IS RESPONSIBLE FOR VERIFYING ASSUMPTIONS BASED ON ACTUAL SITE CONDITIONS. IF SITE CONDITIONS VARY FROM THE ASSUMPTIONS THE DESIGN ENGINEER SHALL PROVIDE A SITE SPECIFIC DESIGN IN ACCORDANCE WITH AWWA M-23, PVC PIPE - DESIGN AND INSTALLATION AND AWWA M-41, DUCTILE-IRON PIPE AND FITTINGS. SITE SPECIFIC DESIGNS INCLUDING GEOTECHNICAL INFORMATION SHALL BE SUBMITTED TO COLORADO SPRINGS UTILITIES FOR REVIEW.
3. THE MINIMUM BEARING SURFACE AREA AND APPROXIMATE VOLUME OF CONCRETE SHALL BE SHOWN ON THE CONSTRUCTION PLANS FOR ALL CONCRETE THRUST BLOCKS. CONCRETE MIX SHALL BE PER MATERIAL CHAPTER 4.
4. THE APPROXIMATE VOLUMES SHOWN ARE BASED ON THE MINIMUM BEARING SURFACE AREA AND THE MINIMUM TRENCH DIMENSIONS. THE APPROXIMATE VOLUME IS ROUNDED UP TO THE NEAREST 0.25 CUBIC YARDS.
5. THESE CHARTS MAY ONLY BE USED IF THE BLOCK HEIGHT (A_Y) IS EQUAL TO OR LESS THAN ONE HALF THE TOTAL DEPTH (H) FROM THE FINISHED GRADE TO THE BOTTOM OF THE BLOCK. THE MINIMUM DIMENSIONS SHOWN ARE BASED ON A PIPE DEPTH OF 5 FEET. SEE DETAIL DRAWING A4-3.
6. A SITE SPECIFIC DESIGN SHALL BE REQUIRED FOR PIPES LARGER THAN 16 INCHES OR MAX STATIC PIPE PRESSURES GREATER THAN 250 POUNDS PER SQUARE INCH. THE DESIGN ENGINEER HAS THE OPTION OF PROVIDING A SITE SPECIFIC DESIGN FOR PIPES SMALLER THAN 16 INCHES OR MAX STATIC PRESSURES LESS THAN 250 POUNDS PER SQUARE INCH.
7. ALL CALCULATIONS SHALL BE PROVIDED TO COLORADO SPRINGS UTILITIES FOR REVIEW.

Colorado Springs Utilities	CONCRETE THRUST REACTION BLOCKS	A4-2
It's how we're all connected		DATED 03/2014

CONCRETE THRUST REACTION BLOCK REQUIREMENTS FOR TEES OR TAPS





S_b= SOIL BEARING CAPACITY
A_x= CONCRETE THRUST REACTION BLOCK WIDTH
A_y= CONCRETE THRUST REACTION BLOCK HEIGHT
T = THRUST
H = DEPTH TO BOTTOM OF THE CONCRETE THRUST REACTION BLOCK
A_y= 1/2 H_1

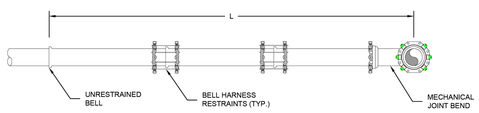
NOTES:

1. A SITE SPECIFIC DESIGN SHALL BE REQUIRED FOR CONNECTIONS OR FITTING SIZE COMBINATIONS NOT SHOWN ABOVE.
2. THE CONCRETE THRUST REACTION BLOCK SHALL BEAR AGAINST UNDISTURBED SOIL.
3. THE CONCRETE THRUST REACTION BLOCK SHALL BE INSTALLED WITH A 45° ANGLE FROM THE FITTING TO THE UNDISTURBED SOIL AS SHOWN IN THE DRAWING ABOVE.
4. REFER TO DETAIL DRAWING A4-2 FOR STANDARD CONCRETE THRUST REACTION BLOCK DIMENSIONS AND VOLUMES.
5. DUCTILE IRON FITTINGS AND PIPE SHALL BE WRAPPED IN POLYETHYLENE TUBING WHERE ADJACENT TO CONCRETE.

Colorado Springs Utilities	CONCRETE THRUST REACTION BLOCKS	A4-3
It's how we're all connected		DATED 03/2014

L = MINIMUM RESTRAINED PIPE LENGTH (FEET)

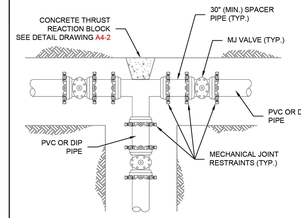
PIPE DIAMETER		45° BEND			22-1/2° BEND			11-1/4° BEND			DEAD END VALVE OR PLUG TO INCLUDE IN LINE VALVES (SEE NOTE 9)		
MAX. STATIC PRESSURE (PSI)		<100	100-150	150-200	<100	100-150	150-200	<100	100-150	150-200	<100	100-150	150-200
6 INCH	DUCTILE IRON AND PVC	6	9	12	3	5	6	2	3	3	49	73	97
8 INCH	DUCTILE IRON AND PVC	8	12	16	4	6	8	2	3	4	63	94	125
12 INCH	DUCTILE IRON AND PVC	12	17	23	6	8	11	3	4	6	89	133	177
16 INCH	DUCTILE IRON AND PVC	15	22	29	7	11	14	4	5	7	USE CONCRETE REVERSE ANCHOR	USE CONCRETE REVERSE ANCHOR	USE CONCRETE REVERSE ANCHOR
20 INCH	DUCTILE IRON AND PVC	18	26	35	9	13	17	4	6	8			
24 INCH	DUCTILE IRON AND PVC	20	30	40	10	15	20	5	7	10			
30 INCH	DUCTILE IRON AND PVC	24	36	48	12	18	24	6	9	12			
36 INCH	DUCTILE IRON AND PVC	28	42	56	14	20	27	7	10	14			



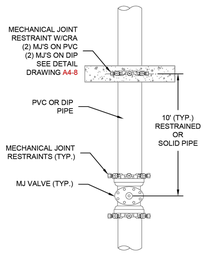
NOTES:

1. PRESSURE GREATER THAN 200 PSI REQUIRE SPECIAL DESIGN APPROVED BY SPRINGS UTILITIES. APPROVED BY COLORADO SPRINGS UTILITIES.
2. LENGTH IS BASED ON MINIMUM 5 FEET OF GROUND COVER AND SOIL COMPACTED ACCORDING TO CHAPTER 5 OF THESE WATER LESS. IF THE DEPTH IS LESS THAN 5 FEET RESTRAINED LENGTH MUST BE DESIGNED BY THE DESIGN ENGINEER.
3. APPROVED METHODS OF RESTRAINED PIPE BEYOND INITIAL FITTING SHALL BE IN ACCORDANCE WITH CHAPTER 4.
4. RESTRAINED PIPE LENGTH APPLIES TO CONDITIONS WHERE NO CONCRETE THRUST REACTION BLOCK IS PRESENT.
5. CALCULATIONS ARE BASED ON A POORLY GRADED SANDS, GRAVEL AND GRAVEL-SAND MIXTURE, LITTLE OR NO FINES, TYPE 4 BEDDING CONDITIONS - "PIPE BEDDED IN SAND, GRAVEL OR CRUSHED STONE TO A DEPTH OF 1/8 PIPE DIAMETER (4" MIN.)." FACTOR OF SAFETY 2:1.
6. FIGURES ARE BASED ON DIP WRAPPED IN POLYETHYLENE MATERIAL.
7. MEASUREMENTS ARE IN FEET.
8. USE CRA FOR DOWN TURNING BENDS.
9. RESTRAINED LENGTH FOR DEAD END MAY BE USED AT THE DISCRETION OF COLORADO SPRINGS UTILITIES.

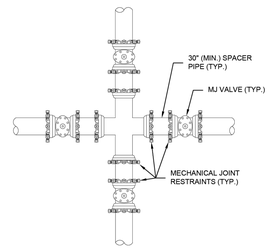
Colorado Springs Utilities	RESTRAINED PIPE LENGTH (FEET) W/MECHANICAL JOINT RESTRAINTS	A4-4
It's how we're all connected		DATED 03/2014



TEE INSTALLATION



IN LINE VALVE INSTALLATION

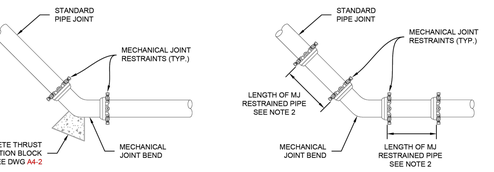


CROSS INSTALLATION

NOTES:

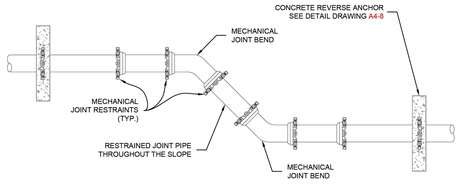
1. MECHANICAL JOINT RESTRAINTS SHALL BE APPROVED ACCORDING TO CHAPTER 4 FOR DIP AND PVC PIPE.
2. DUCTILE IRON FITTINGS AND PIPE SHALL BE WRAPPED IN POLYETHYLENE TUBING WHERE ADJACENT TO CONCRETE.

Colorado Springs Utilities	VALVE AND FITTINGS W/ MECHANICAL JOINT RESTRAINTS	A4-5
It's how we're all connected		DATED 06/2015



HORIZONTAL BENDS W/MJ RESTRAINTS AND CTRB

HORIZONTAL BENDS W/MJ RESTRAINTS WITHOUT CTRB

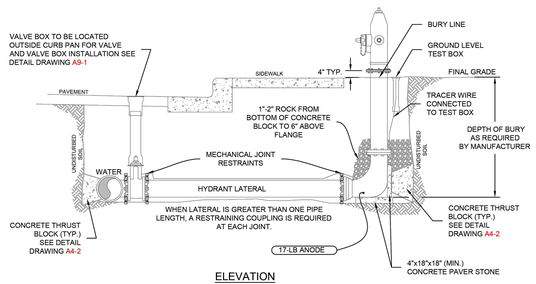


VERTICAL BENDS W/ CONCRETE REVERSE ANCHORS ON SLOPES 10% OR GREATER

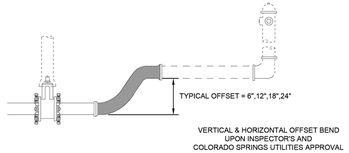
NOTES:

1. MECHANICAL JOINT RESTRAINTS SHALL BE APPROVED ACCORDING TO CHAPTER 4 FOR DIP AND PVC PIPE.
2. LENGTH OF PIPE REQUIRING JOINT RESTRAINT SHALL BE DETERMINED FROM CHART ON DETAIL DRAWING A4-4.
3. DUCTILE IRON FITTINGS AND PIPE SHALL BE WRAPPED IN POLYETHYLENE TUBING WHERE ADJACENT TO CONCRETE.

Colorado Springs Utilities	BEND CONFIGURATIONS AND RESTRAINTS	A4-6
It's how we're all connected		DATED 06/2015



ELEVATION



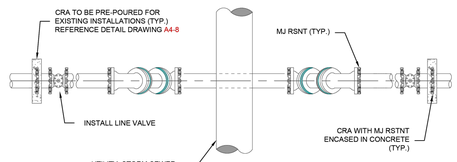
NOTE:
DIP LATERALS AND HYDRANTS SHALL BE POLY WRAPPED AND INCLUDE 1-17lb. ANODE.

ELEVATION

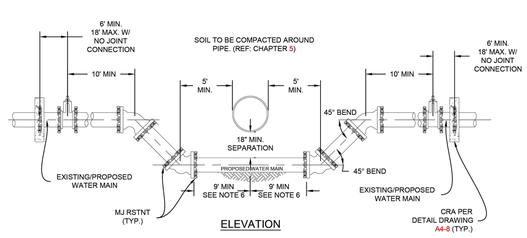
NOTES:

1. MECHANICAL JOINT RESTRAINTS SHALL BE INSTALLED PER DETAIL DRAWINGS A4-4, A4-5, & CHAPTER 5.
2. TRACER WIRE AND GROUND LEVEL TEST BOX TO BE INSTALLED WITH EACH FIRE HYDRANT. PLACE TEST BOX WITHIN 6" FROM THE HYDRANT.
3. REFERENCE DETAIL DRAWINGS A5-1 & A5-2 FOR FIRE HYDRANT LOCATION.
4. INSTALLATION OF A PRIVATE FIRE HYDRANT WILL REQUIRE A SECONDARY VALVE INSTALLED AT THE PROPERTY LINE.
5. HYDRANT BASE BLOCK SHALL BE PLACED ON UNDISTURBED EARTH.
6. DO NOT BLOCK WEEP HOLE WITH POLYWRAP.
7. COVER DRAIN ROCK WITH POLYWRAP PRIOR TO BACKFILL.
8. FOR HDPE HYDRANT CONNECTION SEE DETAIL DRAWING A10-9.
9. FOR PRIVATE FIRE HYDRANTS A SECONDARY VALVE SHALL BE INSTALLED ON THE PROPERTY LINE OR RIGHT-OF WAY LINE.

Colorado Springs Utilities	FIRE HYDRANT INSTALLATION	A5-3
It's how we're all connected		DATED 03/2014



PLAN

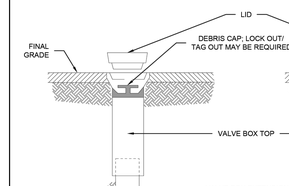


ELEVATION

NOTES:

1. ALL DUCTILE IRON FITTINGS AND PIPE SHALL BE CATHODICALLY PROTECTED PER SECTION 2.6.H.
2. ALL FITTINGS SHALL HAVE MJ RESTRAINTS IN ACCORDANCE WITH CHAPTER 5.
3. EXAMPLE CAN VARY DUE TO SITE CONDITIONS AND COLORADO SPRINGS UTILITIES INSPECTOR'S DIRECTION.
4. RESTRAINED JOINTS ARE REQUIRED WITHIN LOWERING.
5. NO TAPS OR TEES ARE ALLOWED WITHIN THE LOWERING.
6. WHERE WATER MAIN CROSSES UNDER STORM SEWER, WASTEWATER OR NON-POTABLE WATER INFRASTRUCTURE, A MINIMUM OF 9 FEET REQUIRED BETWEEN THE CENTERLINE OF THE CROSSING AND THE FIRST JOINT. THIS MEETS THE REQUIREMENTS FOR SECONDARY CONTAINMENT AS DESCRIBED IN SECTION 2.6.F.2.

Colorado Springs Utilities	LOWERING DETAIL UTILITY CROSSING 30" & SMALLER	A7-1
It's how we're all connected		DATED 06/2015



TYPICAL GATE VALVE BOX

MJ OR FLANGED BUTTERFLY VALVE WITH ROTATED ACTUATOR VALVE BOX

NOTES:

1. MAIN AND FIRE HYDRANT VALVES AND VALVE BOXES SHALL NOT BE IN THE CURB PAN, CURB OR SIDEWALK.
2. VALVE BOXES SHALL BE SLIP TYPE, PER CHAPTER 4.
3. DEBRIS CAPS SHALL BE INSTALLED AS CLOSE UNDER THE CAST IRON COVER WITHOUT INTERFERING WITH COVER OPERATIONS.
4. DEBRIS CAPS WITH FLEXIBLE SKIRTS SHALL BE TRIMMED TO PROVIDE A SMOOTH CONTACT WITH THE INTERIOR OF THE VALVE BOX.
5. FOR SERVICE LINES 4" AND GREATER, TRACER WIRE WILL BE BROUGHT UP IN THE SECONDARY VALVE BOX.

Colorado Springs Utilities	VALVE BOX INSTALLATION	A9-1
It's how we're all connected		DATED 03/2014

Know what's below. Call before you dig.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE:
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR; NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

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CLIENT
CHALLENGER HOMES
FALCON HIGHLANDS SOUTH – FILING 1
EL PASO COUNTY, COLORADO
CONSTRUCTION PLANS
CONSTRUCTION DETAILS
WATER LINE DETAILS

DATE 5/30/2025

A	1st SUBMITTAL TO JURISDICTION 07/12/2024 — KB
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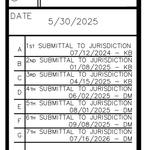

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JOB 24004308
SHEET NO. 51

CAD FILE: 24004308-DTLS-WATR.DWG

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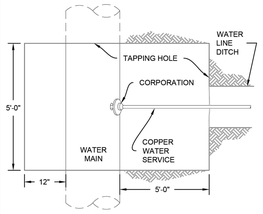
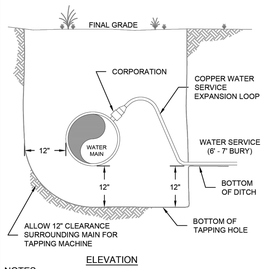
TAPPING DETAIL FOR 3/4" AND 1" CONNECTION

SERVICE TAPS 3/4" & 1"
CORPORATION ONLY (DIRECT TAPPING).



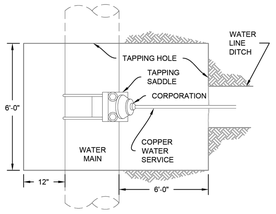
PLAN VIEW



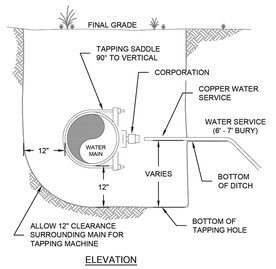
ELEVATION

TAPPING DETAIL FOR 1 1/2" AND 2" CONNECTION

SERVICE TAPS 1 1/2" & 2"
TAPPING SADDLE.



PLAN VIEW



ELEVATION

NOTES:

1. TRENCH WALLS AND SHORING SHALL COMPLY WITH OSHA STANDARDS.
2. FOR HDPE TAPS USE A SIDEWALL FUSION TAPPING SADDLE CONFIGURATION AT 90° SEE SECTION 6.7.B.
3. TO BE READ IN CONJUNCTION WITH SECTION 2.7.C AND SECTION 5.21.E
4. WHERE COMPACTION CANNOT BE ACHIEVED UNDER THE WATER MAIN FLOWFILL SHALL BE USED.
5. SEE DETAIL DRAWING A8-10 FOR CATHODIC PROTECTION.

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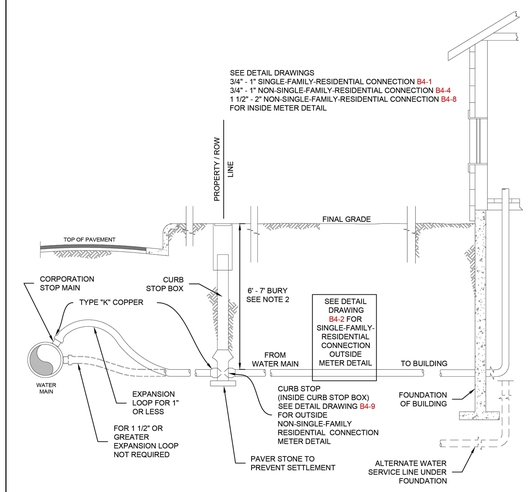
TAPPING DETAILS 3/4" THRU 2"
FOR TYPE "K" COPPER

B1-1

DATED 03/2014



NOTES:

1. REFERENCE SECTION 2.7 WATER SERVICE LINE DESIGN.
2. FOR AREAS WITH DEEPER FROST DEPTHS SEE SECTION 2.6.G.1 FOR DEPTH OF BURY REQUIREMENTS.
3. SEE DETAIL DRAWING B4-9 FOR NON-SINGLE-FAMILY-RESIDENTIAL CONNECTION OUTSIDE METER DETAIL.

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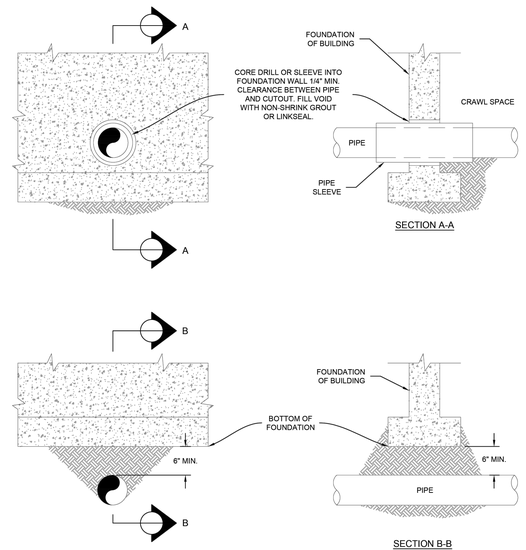
TYPICAL INSTALLATION FOR TYPE "K" COPPER SERVICE LINE, STOP BOX AND METER INSTALLATION 3/4" - 2"

B1-3

DATED 01/2017



BUILDING ENTRY ALTERNATIVES

NOTES:

1. WHERE COMPACTION CANNOT BE ACHIEVED UNDER THE WATER MAIN FLOWFILL SHALL BE USED.

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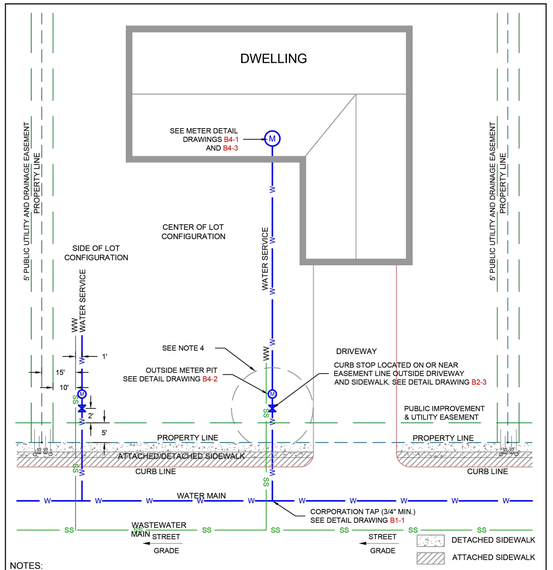
WATER SERVICE ENTRY POINT

B1-5

DATED 01/2017



NOTES:

1. DIMENSIONS SHOWN ARE TYPICAL UNLESS OTHERWISE NOTED ON PLANS.
2. EITHER CENTER-OF-LOT INSTALLATION OR SIDE-OF-LOT INSTALLATION ARE ACCEPTABLE AND AT THE ENGINEERS DISCRETION.
3. WATER/WASTEWATER SERVICE LINES SHALL BE PLACED WHEN CENTER-OF-LOT OUTSIDE DRIVEWAY, AND A MINIMUM OF 15' FROM SIDE-LOT-LINE WITH APPLICABLE SEPARATION CRITERIA.
4. IN AREAS WHERE CROSSING GAS AND ELECTRIC IN A JOINT TRENCH. THE CURB STOP SHALL BE LOCATED PER DETAIL DRAWING B2-3.
5. NO PERMANENT STRUCTURES OR LANDSCAPING SHALL BE LOCATED WITHIN 5' RADIUS OF THE CURB STOP BOX OR METER PIT.
6. CURB STOP DISTANCE FROM SIDEWALK DETACHED OR ATTACHED WILL VARY UPON WIDTH OF SIDEWALKS, SEE DETAIL DRAWING B2-3.

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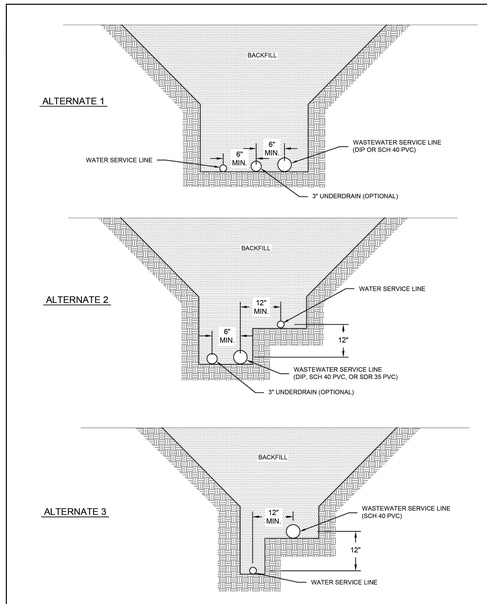
TYPICAL SERVICE LOCATIONS TO A SINGLE- FAMILY RESIDENTIAL DWELLING

B2-1

DATED 01/2016



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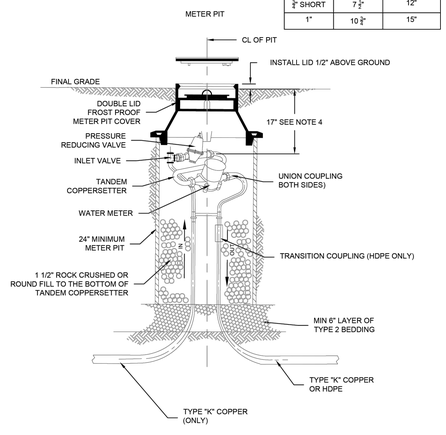
TYPICAL COMMON SERVICE TRENCH SECTION

B2-7

DATED 08/2022

METER SIZE	METER LENGTH	LAY LENGTH W/ TAILPIECES
¾" SHORT	7 ½"	12"
1"	10 ½"	15"



NOTES:

1. THE METER SHALL BE PROVIDED AND INSTALLED BY COLORADO SPRINGS UTILITIES.
2. REFERENCE SECTION 2.7 WATER SERVICE LINE DESIGN.
3. METER PIT SHALL BE INSTALLED IMMEDIATELY FOLLOWING THE CURB STOP.
4. METER AND PRESSURE REGULATOR ARE INSTALLED WITH AN APPROVED TANDEM COPPERSETTER, TANDEM COPPERSETTER SHALL BE 17" FROM THE TOP PIT LID/FINISH GRADE TO CENTER OF SETTER. TANDEM COPPERSETTER SHALL HAVE AN INLET VALVE ONLY.
5. METER PIT SHALL BE AN APPROVED PLASTIC PIT WITH A MINIMUM DIAMETER OF 24" BY 36" IN HEIGHT WITH A FROST PROOF COVER.
6. SERVICE LINE SHALL BE TYPE "K" COPPER BETWEEN THE CURB STOP AND THE TANDEM COPPERSETTER TO PROVIDE METER STABILITY. TRANSITION TO HDPE MAY BE MADE AFTER THE OUTLET SIDE OF THE TANDEM COPPERSETTER WITH AN APPROVED TRANSITION COUPLING LOCATED WITHIN THE METER PIT.
7. ALL FITTINGS IN THE METER LOOP SHALL BE SOLDERED, FLANGED OR THREADED. THE BACKFLOW PREVENTER SHALL BE SOLDERED OR FLANGED.
8. IF A BACKFLOW PREVENTION ASSEMBLY IS REQUIRED, IT MUST BE LOCATED BEFORE THE FIRST BRANCH LINE. FOR BACKFLOW PREVENTION ASSEMBLY REQUIREMENTS, INCLUDING LOCATION, SEE SECTION 2.7.N.

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3/4" THRU 1" OUTSIDE METER FOR SINGLE-FAMILY-RESIDENTIAL CONNECTIONS TYPE "K" COPPER AND HDPE SERVICE

B4-2

DATED 09/2022

811
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FALCON HIGHLANDS SOUTH – FILING 1
EL PASO COUNTY, COLORADO
CONSTRUCTION PLANS
CONSTRUCTION DETAILS
WATER LINE DETAILS

DATE 5/30/2025

A	1st SUBMITTAL TO JURISDICTION 07/12/2024 — KB
B	2nd SUBMITTAL TO JURISDICTION 01/08/2025 — KB
C	3rd SUBMITTAL TO JURISDICTION 04/15/2025 — KB
D	4th SUBMITTAL TO JURISDICTION 06/02/2025 — DM
E	5th SUBMITTAL TO JURISDICTION 08/01/2025 — DM
F	6th SUBMITTAL TO JURISDICTION 09/08/2025 — DM
G	7th SUBMITTAL TO JURISDICTION 07/16/2026 — DM

COUNTY FILE NO.: SF2418

DR. TN | CH. LS
P.M. DM
JOB 24004308
SHEET NO. 52

CAD FILE: 24004308-DTLS-WATR.DWG

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NDS

We put water in its place

DRAINAGE

FLO-WELL®: A BETTER DRY WELL

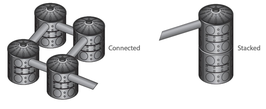
With the Flo-Well®, water can now be infiltrated into the subsoil rapidly and easily. Unlike competitive systems, there is no need for piping systems to transport stormwater to a far-off discharge point, large heavy equipment, considerable excavation of current landscaped areas, nor large labor costs that those systems incur. With Flo-Well, water infiltration is now easier than ever.

Options

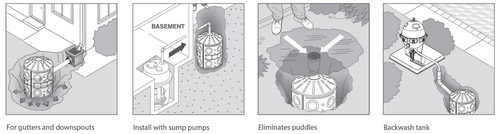
Larger 9" or 12" grates can be added to Flo-Well to manage surface water.	Ideal as a stand-alone drain:	Ideal as a stand-alone reservoir:
This option is ideal for draining:	Disturbs only 4 square feet of turf to install	Collect and hold rainwater for lawn and garden irrigation (used with a pump connected to a garden hose)
Golf course areas prone to puddling	Requires less than 10 cubic feet of soil removed to bury	Connect Flo-Well to rain gutters using a catch basin & grate below each downspout (see drawing)
Playground areas under slides and swings	Measures only 24" in diameter by 29.75" high	Ideal solution for arid areas impacted by drought
Outdoor drinking fountain runoff	Weighs only 22 pounds	Reservoir for pond and waterfall recirculation pumps
Outdoor showers at beaches	Holds over 48 gallons. Or, connect to existing system for increased drainage capabilities	
Wash-down areas		

Stackable & Expandable

Flo-Well® can be used individually, connected in series or in any array, and can be stacked up to 4 units high (with center support pipe).



Applications

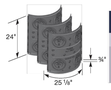


For gutters and downspouts | Install with sump pumps | Eliminates puddles | Backwash tank

FLO-WELL® ENGINEERED DRY WELL

Part No.	Description	Color	Pkg. Qty.	Wt. Ea. (lbs.)	Product Class	Specifications
FWAS24WH	24" diam. x 28.75"H Flo-Well® Stormwater Leaching System	Black	1	18.96	10FW	NDS #FWAS24WH structural foam polyolefin round drywell system with UV inhibitors. 50 gal. storage capacity.
	Includes 3 side panels, 1 top component. Fits 4" Sch. 40 Pipe and 4" DWV Pipe.					

Part No.	Description	Color	Pkg. Qty.	Wt. Ea. (lbs.)	Product Class	Specifications
FWAS24CWH	24" diam. Flo-Well® Cover	Black	2	5.92	10FW	Structural foam polyolefin round drywell system cover with UV inhibitors. 24-1/4" dia., 4-1/2" height, 3/4" outer lip, 4.5" center knockout fits NDS #FWD069, old pipe and 4" Sch. 40 pipe.
	Use with #FWAS24.					



Part No.	Description	Color	Pkg. Qty.	Wt. Ea. (lbs.)	Product Class	Specifications
FWSPS3WH	Flo-Well® Side Panels/Extension Only	Black	1	4.35	10FW	Structural foam polyolefin side panels with UV inhibitors with 22 1-1/2" knockout leaching ports and 4 4.5" knockout inlet/outlet ports per panel. 0.75" lip for firm stacking.
	Includes 3 side panels; makes 1 round drywell. (May also be used as a durable compost bin)					

Part No.	Description	Color	Pkg. Qty.	Wt. Ea. (lbs.)	Product Class	Specifications
FWBP24	24" diam. Flo-Well® Bottom	Black	5	3.41	10FW	Structural foam polyolefin round Flo-Well® bottom with UV inhibitors. 24" diameter with six 1-1/2" leaching ports. Collects debris for easy cleanout.
	Fits #FWAS24. (Not included in #FWAS24 kit)					

Part No.	Description	Color	Pkg. Qty.	Wt. Ea. (lbs.)	Product Class	Specifications
FWSD69	4" Sch. 40 Surface Drain Inlet with Grate	Black	8	1.85	10FW	Structural foam polyolefin 6" grate with 4" inlet with UV inhibitors, 6" diameter at inlet, 9" high. 4.5" OD fits Sch. 40 PVC fittings. Open surface area 8.22 square inches. 25.15 GPM.
	Fits #FWAS24 and #FWAS24C. ADA Compliant.					

Part No.	Description	Color	Pkg. Qty.	Wt. Ea. (lbs.)	Product Class	Specifications
FWFF67	Porous Filter Fabric Wrap for Flo-Well®	Black	1	0.35	10FW	7' long x 2' wide to surround Flo-Well® Drywell System. Non-woven fabric. Weight 1 oz. Mullen burst 175 psi. 200 GPM flow-through.
	Use with #FWAS24.					

DRAINAGE

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