SHEET No. **INDEX OF SHEETS** TITLE SHEET GN01 **OVERALL SHEET KEY** GN02 **GENERAL NOTES** RD01-RD07 **ROADWAY PLAN & PROFILE** SDGN01 STORM DRAIN SHEET KEY 12 SDGN02 STORM DRAIN GENERAL NOTES & DETAILS 13 SD01-SD05 14-18 STORM DRAIN PLAN & PROFILE DFGN01 **DETENTION POND GENERAL NOTES** 19 20-25 DF01-DF06 DETENTION POND 1 SITE PLAN WT01 WATER CISTERN PLAN & DETAILS

# HAY CREEK VALLEY

# EL PASO COUNTY, COLORADO

# **CONSTRUCTION DOCUMENTS**

JANUARY 2024

OWNER/DEVELOPER VIEW HOMES, INC.

555 MIDDLE CREEK PARKWAY, SUITE 500

COLORADO SPRINGS, CO 80921 TIM BUSCHAR, (719)-382-9433

**CIVIL ENGINEER** MATRIX DESIGN GROUP

> 2435 RESEARCH PARKWAY, SUITE 300 COLORADO SPRINGS, CO 80920

(719)-575-0100

**ELECTRIC** MOUNTAIN VIEW ELECTRIC ASSOCIATION

15706 JACKSON CREEK PARKWAY, SUITE 100

MONUMENT, CO 80132 GINA PERRY, (719) 494-2636

**BLACK HILLS ENERGY** 

105 S VICTORIA AVENUE **PUEBLO, CO 81003** (800) 303-0752

**ENGINEERING** EL PASO COUNTY PUBLIC WORKS DEPARTMENT

3275 AKERS DRIVE

COLORADO SPRINGS, CO 80922

(719) 520-6460

TRAFFIC EL PASO COUNTY PUBLIC WORKS DEPARTMENT

> 3275 AKERS DRIVE COLORADO SPRINGS, CO 80922

(719) 520-6460

DRAINAGE EL PASO COUNTY PUBLIC WORKS DEPARTMENT

> 3275 AKERS DRIVE COLORADO SPRINGS, CO 80922

(719) 520-6460

(719)-484-0911

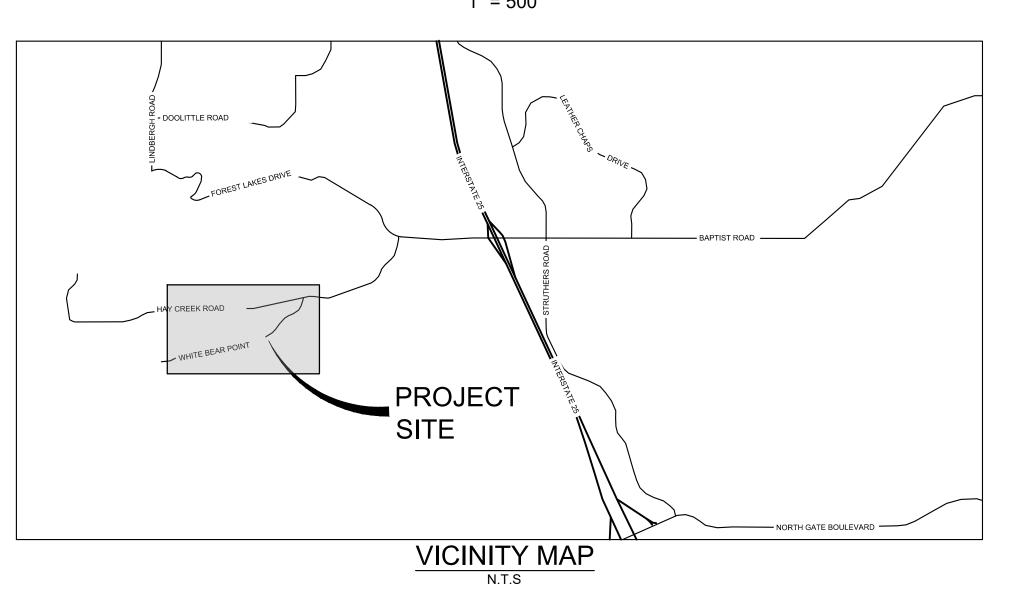
FIRE DEPARTMENT MONUMENT FIRE DISTRICT

16055 OLD FOREST POINT, SUITE 102

MONUMENT, CO 80132







THE LOCATIONS OF EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL **EXISTING UTILITIES BEFORE COMMENCING WORK. THE** CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL ABOVE GROUND AND **UNDERGROUND UTILITIES.** 



#### 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.

DATE

TIM BUSCHAR. (719)-382-9433 VIEW HOMES, INC. 555 MIDDLE CREEK PARKWAY, SUITE 500 COLORADO SPRINGS, CO 80921

#### DESIGN ENGINEER'S STATEMENT

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

DATE:

JEFFREY A. ODOR, PE #39265 FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC.

### **EL PASO COUNTY:**

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

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

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

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

THE PARTIES RESPONSIBLE FOR THIS PLAN HAVE FAMILIARIZED THEMSELVES WITH ALL CURRENT ACCESSIBILITY CRITERIA AND SPECIFICATIONS AND THE PROPOSED PLAN REFLECTS ALL SITE ELEMENTS REQUIRED BY THE APPLICABLE ADA DESIGN STANDARDS AND GUIDELINES AS PUBLISHED BY THE UNITED STATES DEPARTMENT OF JUSTICE. APPROVAL OF THIS PLAN BY EL PASO COUNTY DOES NOT ASSURE COMPLIANCE WITH THE ADA OR ANY REGULATIONS OR GUIDELINES ENACTED OR PROMULGATED UNDER OR WITH RESPECT TO SUCH LAWS.

PCD FILE #: SF2324

REFERENCE DRAWINGS							
X-TITLE-CD X-886-PR-SITE FEMA_XS X-886.066-EX-MAP-1 164022-01 Hay Creek Road BNI X-886-ALTA-SURVEY Hay Creek BFEs	Y No.	DATE	DESCRIPTION	BY			
	REVISIONS						
	COMPUTER FILE MANAGEMENT						
	FILE NAME: S:\22.886.076 Hay Creek-Forest Manor-O'Leary Properties\500 CADD\504 Plan Sets\Construction Plans\Road and Storm\TS01.dwg CTB FILE: Matrix.ctb PLOT DATE: 1/25/2024 3:56 PM THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.						

PROJECT ELEVATIONS ARE NAVD 88 ELEVATIONS BASED ON AN OPUS DERIVED ELEVATION ON CONTROL POINT 10, A NO. 5 REBAR HAVING AN ELEVATION OF 5769.92.

**BASIS OF BEARING** 

THE SOUTH LINE OF THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO, BEING MONUMENTED ON THE EASTERLY END BY A 2-12" ALUMINUM CAP STAMPED "NOLTE PLS25955 C1/4 S22 T15S, R65W 1999, "AND THE WESTERLY END BY A2-1/2" ALUMINUM CAP STAMPED "SSS PLS 16154 1/4 S21 S22 T15S, R65W 2000, "BEING ASSUMED TO BEAR S89°54'42"W, A DISTANCE OF 2,627.78 FEET.



HAY CREEK VALLEY **PRELIMINARY** 

THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

MATRIX DESIGN GROUP, INC.

PROJECT No. 22.886.076

EL PASO COUNTY, COLORADO CONSTRUCTION DOCUMENTS

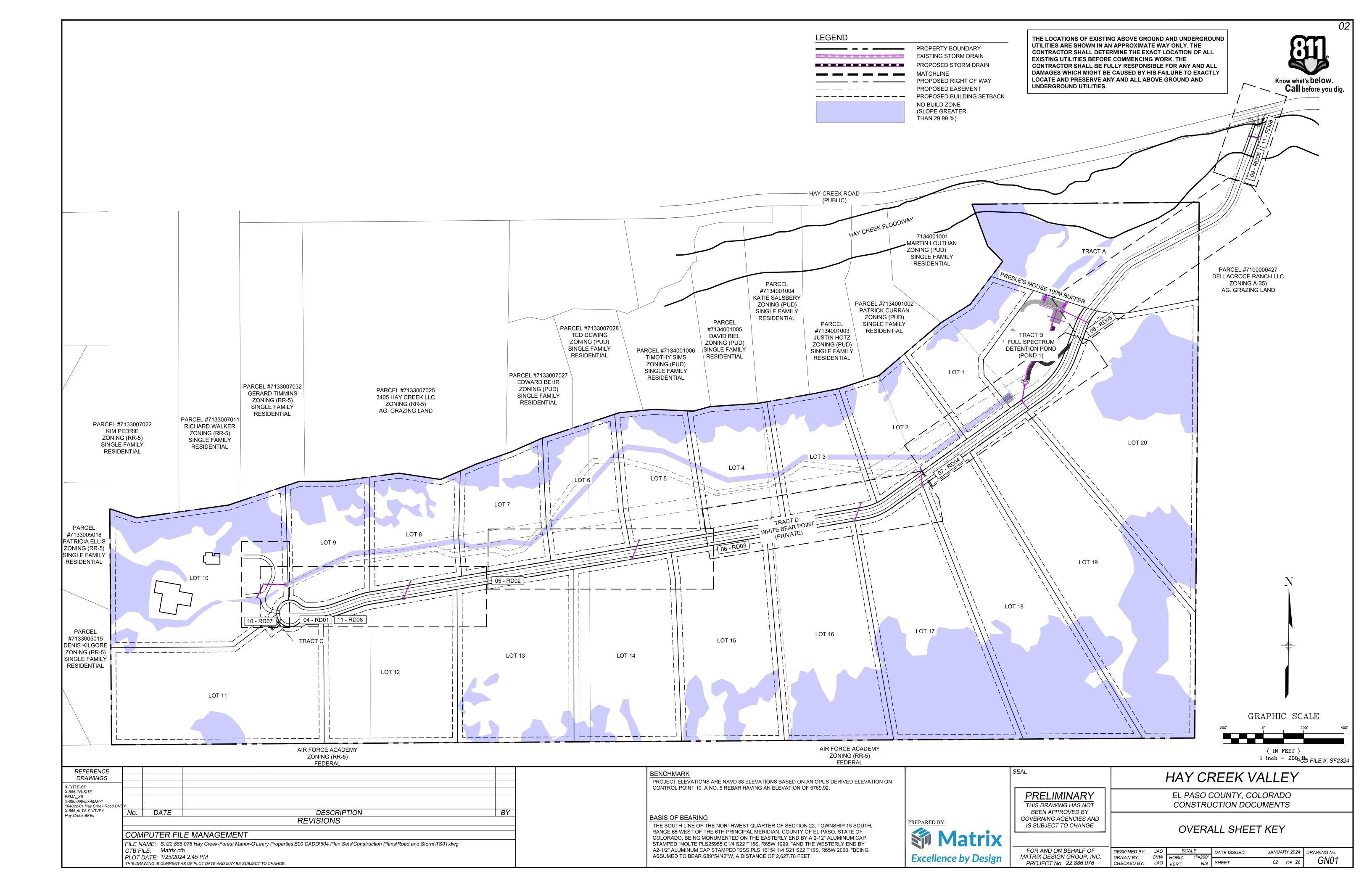
TITLE SHEET

FOR AND ON BEHALF OF DESIGNED BY:

DRAWN BY:

CHECKED BY:

SCALE JANUARY 2024 DRAWING No. DATE ISSUED: CVW HORIZ. TS01 01 OF 26



### GENERAL NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL. REVISED 12-13-2016 AND CDOT STANDARD SPECIFICATIONS. LATEST
- 2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH APPLICABLE STANDARDS AND REGULATIONS AS SET FORTH BY THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (O.S.H.A.).
- 3. NO FIELD CHANGES SHALL BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF THE FIELD **ENGINEER**
- 4. SUBMITTALS SHALL BE MADE FOR ALL MATERIALS TO BE INCORPORATED INTO THE PROJECT.
- 5. UTILITY LINES AS SHOWN ON THE PLAN SHEETS ARE PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERIFICATION AND PROTECTION OF ALL UTILITIES IN PLACE.
- 6. THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO AT 1-800-922-1987 TWO BUSINESS DAYS IN ADVANCE OF ANY EXCAVATION OR GRADING.
- . THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL UTILITY AND STRUCTURES AFFECTED BY THE WORK AND ANY DAMAGE SHALL BE REPAIRED AND RESTORED TO THE SATISFACTION OF THE RESPECTIVE UTILITY OWNER. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL UTILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE ALL UTILITY RELOCATIONS AS NECESSARY. THE COUNTY ENGINEERING INSPECTIONS, UTILITY DEPARTMENTS AND UTILITY OWNERS SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO COMMENCING WORK WHERE THESE UTILITIES MAY BE AFFECTED.
- 8. IN SOME OF THE PROPOSED AREAS OF CONSTRUCTION EXISTING UNDERGROUND TELEPHONE, FIBER AND CABLE TELEVISION FACILITIES MAY BE LOCATED IN CLOSE PROXIMITY TO THE WORK. THE CONTRACTOR MAY, IF NECESSARY, TEMPORARILY DISPLACE THE CABLES DURING CONSTRUCTION AND REINSTALL THEM IN ACCORDANCE WITH THE APPROPRIATE TELEPHONE, FIBER OR CABLE COMPANY'S GUIDELINES. COORDINATION WITH BOTH THE TELEPHONE AND CABLE TELEVISION COMPANY IS REQUIRED TO BE DONE BY THE CONTRACTOR.
- 9. THE CONTRACTOR SHALL OBTAIN AN APPROVED TRAFFIC CONTROL PLAN PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES.
- 10. THE PHYSICAL FEATURES WITHIN THE LIMITS OF THE PROJECT HAVE BEEN SHOWN BASED ON THE BEST AVAILABLE INFORMATION AT THE TIME OF DESIGN. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE FEATURES SHOWN. THE CONTRACTOR SHALL REVIEW AND VERIFY EXISTING PHYSICAL FEATURES AND ELEVATIONS THEMSELVES OF THE CONDITIONS TO BE ENCOUNTERED DURING THE CONSTRUCTION.
- 11. THE CONTRACTOR SHALL LIMIT ALL WORK AND STORAGE AREAS TO THE PUBLIC RIGHT-OF-WAYS AND EASEMENTS. USE OF ANY PRIVATE AREAS FOR THIS PROJECT BY THE CONTRACTOR MUST BE APPROVED IN WRITING BY THE PROPERTY OWNER WITH A COPY OF THIS APPROVAL PROVIDED TO THE FIELD ENGINEER PRIOR TO USAGE
- 12. ALL CONSTRUCTION IS TO INCLUDE COMPACTION AND FINISH GRADING IN THE UNIT PRICE RELATED WORK ITEM.
- 13. ALL WORK SHALL BE DONE TO THE LINES, GRADES, SECTIONS, AND ELEVATIONS SHOWN ON THE PLANS UNLESS OTHERWISE NOTED OR APPROVED BY THE FIELD ENGINEER.
- 14. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY EL PASO COUNTY AND THE FIELD ENGINEER.
- 15. THE FIELD ENGINEER SHALL BE NOTIFIED WITHIN 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.
- 16. PAYMENT, DIMENSIONS AND RADII ARE SHOWN TO THE LIP OF CURB UNLESS OTHERWISE
- 17. THE CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES TO THOSE AREAS WITHIN THE LIMITS OF DISTURBANCE AND/OR TOES OF SLOPE AS SHOWN ON THE PLANS. ANY DISTURBANCE BEYOND THESE LIMITS SHALL BE RESTORED TO ORIGINAL CONDITIONS BY THE CONTRACTOR AT HIS/HER OWN EXPENSE.
- 18. THE CONTRACTOR SHALL CLOSELY MONITOR ACCESS FOR HEAVY CONSTRUCTION EQUIPMENT THROUGH THE PROJECT AREAS.
- 19. WHERE PAVEMENT IS TO ABUT EXISTING PAVEMENT, THE EXISTING PAVEMENT SHALL BE REMOVED TO A NEAT VERTICAL LINE BY FULL DEPTH SAWING. SAWING WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCIDENTAL TO "REMOVAL OF ASPHALT PAVEMENT". THE CONTRACTOR WILL BE REQUIRED TO PAINT THE EDGE OF CUT PAVEMENT WITH DILUTED EMULSIFIED ASPHALT (SLOW SETTING) PRIOR TO PAVING OPERATIONS. VERTICAL EDGES SHALL NOT REMAIN OVERNIGHT. DILUTED EMULSIFIED ASPHALT FOR TACK COAT SHALL CONSIST OF ONE PART EMULSIFIED ASPHALT AND ONE PART WATER.
- 20. WATER SHALL BE USED AS A DUST PALLIATIVE WHERE REQUIRED. LOCATIONS SHALL BE AS ORDERED. THE COST OF WATER SHALL BE INCIDENTAL TO OTHER BID ITEMS.
- 21. THE PHYSICAL FEATURES REQUIRING REMOVAL OR OBLITERATION WITHIN THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND BE DISPOSED OF OFF-SITE.
- 22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING ANY MONUMENT, RANGE POINTS, TIES, BENCHMARKS AND/OR SURVEY CONTROL POINTS WHICH MAY BE DISTURBED OR DESTROYED BY CONSTRUCTION. SUCH POINTS SHALL BE REFERENCED AND REPLACED WITH APPROPRIATE MONUMENT BY A REGISTERED PROFESSIONAL LAND SURVEYOR AUTHORIZED TO PRACTICE LAND SURVEYING IN THE STATE OF COLORADO.
- 23. THE CONTRACTOR SHALL HAVE A COPY OF ALL APPLICABLE STANDARDS AND PLANS ON SITE FOR THE DURATION OF THE PROJECT.
- 24. THE CONTRACTOR SHALL NOT STOCKPILE MATERIAL WITHIN 10 FEET OF THE EDGE OF TRAVELED WAY

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- 25. ANY LAYER OF BITUMINOUS PAVEMENT THAT IS TO HAVE SUCCEEDING LAYER PLACED THEREON SHALL BE COMPLETED FULL WIDTH BEFORE SUCCEEDING LAYER IS PLACED.
- 26. BEFORE PLACEMENT OF THE TACK COAT, THE CONTRACTOR SHALL CLEAN THE PRESENT ROADWAY AS DIRECTED. CLEANING WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE PROJECT. REFERENCE

THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE

#### GENERAL NOTES con't.

- 27. A TACK COAT OF EMULSIFIED ASPHALT (SLOW SETTING) IS TO BE APPLIED BETWEEN PAVEMENT COURSES TO IMPROVE BOND. DILUTED EMULSIFIED ASPHALT FOR TACK COAT SHALL CONSIST OF 1 PART EMULSIFIED ASPHALT AND 1 PART WATER.
- 28. THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN TEMPORARY TRAFFIC CONTROL DEVICES NECESSARY THROUGHOUT THE DURATION OF CONSTRUCTION. THE CONTRACTOR SHALL CONTACT TRAFFIC ENGINEERING FORTY-EIGHT (48) HOURS IN ADVANCE FOR ANY REQUIRED MODIFICATION OF TRAFFIC SIGNALS WITHIN CONSTRUCTION AREAS AS NECESSARY TO MAINTAIN SAFE OPERATIONS.
- 29. ANY DISCREPANCY WITHIN THESE PLANS SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER AND WORK SHALL STOP UNTIL THE DISCREPANCY IS DISCUSSED AND DECISIONS/AGREEMENTS HAVE BEEN MADE

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LEGAL DISPOSAL OF ANY EXCESS SOIL, DEBRIS AND WASTE MATERIAL OFF OF THE PROJECT SITE.
- ANY MATERIAL NOT SUITABLE FOR BACKFILL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF, BY AND AT THE EXPENSE OF THE CONTRACTOR.
- ANY SOIL LYING BELOW THE SUBGRADE ELEVATION WHICH IS DISTURBED BY CONSTRUCTION OPERATIONS SHALL BE REMOVED AND REPLACED WITH STRUCTURAL FILL IN ACCORDANCE WITH THE SPECIFICATION REQUIREMENTS

#### BENCHMARK AND SURVEY CONTROL

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION STAKING OF BOTH HORIZONTAL AND VERTICAL LAYOUT ON THIS PROJECT. COORDINATES ARE REFERENCED IN THE COORDINATE LIST SHOWN ON THESE PLANS. THE CONTRACTOR SHALL COORDINATE WITH THE PROJECT ENGINEER FOR INTERPRETATION AND INFORMATION IN STAKING OF THE PROJECT FOR CONSTRUCTION.
- PRIOR TO PROJECT COMPLETION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF ANY PROPERTY MONUMENTATION DISTURBED OR REMOVED BY CONSTRUCTION OPERATIONS. THIS WORK SHALL BE PERFORMED BY A LAND SURVEYOR LICENSED IN THE STATE OF COLORADO. PROPERTY CORNERS WHICH FALL WITHIN NEW CONCRETE FLATWORK SHALL BE DURABLE AND SET FLUSH. THIS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT

### RAFFIC GENERAL NOTES

- THE CONTRACTOR SHALL PREPARE A DETAILED TRAFFIC CONTROL PLAN, SUBMIT TO EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS FOR APPROVAL, AND OBTAIN APPROPRIATE PERMITS IN ACCORDANCE WITH THE M.U.T.C.D.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK ZONE TRAFFIC CONTROL, INCLUDING PEDESTRIAN DETOURS. CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, INSTALLING, AND MAINTAINING THE TEMPORARY TRAFFIC CONTROL DEVICES THROUGHOUT THE DURATION OF THE PROJECT
- APPROVAL OF THESE PLANS BY THE COUNTY ENGINEER DOES NOT AUTHORIZE ANY WORK TO BE PERFORMED UNTIL A PERMIT HAS BEEN ISSUED.
- 4. THE APPROVAL OF THESE PLANS OR ISSUANCE OF A PERMIT BY EL PASO COUNTY DOES NOT AUTHORIZE THE OWNER OR CONTRACTOR TO VIOLATE ANY FEDERAL, STATE OR CITY LAWS, ORDINANCES, REGULATIONS, OR POLICIES.
- ALL TRAFFIC SIGNS, PAVEMENT MARKINGS, AND TRAFFIC SIGNALS SHALL MEET OR EXCEED M.U.T.C.D. STANDARDS.
- 6. THE CONTRACTOR SHALL NOT REMOVE ANY EXISTING SIGNS, PAVEMENT MARKINGS, OR TRAFFIC SIGNALS DURING THE PROJECT WITHOUT SIGNED AUTHORIZATION OF THE EL PASO COUNTY INSPECTOR ASSIGNED TO THE PROJECT

### CONSTRUCTION NOTES:

- ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE 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).
- 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. EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2
- c. COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
- d. CDOT M & S STANDARDS
- NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING. ANY MODIFICATIONS NECESSARY TO MEET CRITERIA AFTER-THE-FACT WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.
- IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ACCURATELY SHOW EXISTING CONDITIONS, BOTH ONSITE AND OFFSITE, ON THE CONSTRUCTION PLANS. ANY MODIFICATIONS NECESSARY DUE TO CONFLICTS, OMISSIONS, OR CHANGED CONDITIONS WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.

#### CONSTRUCTION NOTES con't.:

- 6. CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT (PCD) -INSPECTIONS, PRIOR TO STARTING CONSTRUCTION.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES AND TO OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO EL PASO COUNTY EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP), REGIONAL BUILDING FLOODPLAIN DEVELOPMENT PERMIT, U.S. ARMY CORPS OF ENGINEERS-ISSUED 401 AND/OR 404 PERMITS, AND COUNTY AND STATE FUGITIVE DUST PERMITS.
- 8. CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE DESIGN ENGINEER AND PCD. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.
- 9. ALL STORM DRAIN PIPE SHALL BE CLASS III RCP UNLESS OTHERWISE NOTED AND APPROVED BY PCD.
- 10. CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECM STANDARDS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY PCD PRIOR TO PLACEMENT OF CURB AND GUTTER AND PAVEMENT
- 11. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
- 12. SIGHT VISIBILITY TRIANGLES AS IDENTIFIED IN THE PLANS SHALL BE PROVIDED AT ALL INTERSECTIONS. OBSTRUCTIONS GREATER THAN 18 INCHES ABOVE FLOWLINE ARE NOT ALLOWED WITHIN SIGHT TRIANGLES.
- MUTCD CRITERIA. [IF APPLICABLE, ADDITIONAL SIGNING AND STRIPING NOTES WILL BE PROVIDED.1

13. SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY DOT AND

- CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY DOT, INCLUDING WORK WITHIN THE RIGHT-OF-WAY AND SPECIAL TRANSPORT PERMITS.
- 15. THE LIMITS OF CONSTRUCTION SHALL REMAIN WITHIN THE PROPERTY LINE UNLESS OTHERWISE NOTED. THE OWNER/DEVELOPER SHALL OBTAIN WRITTEN PERMISSION AND EASEMENTS, WHERE REQUIRED, FROM ADJOINING PROPERTY OWNER(S) PRIOR TO ANY OFF-SITE DISTURBANCE, GRADING, OR CONSTRUCTION.

#### SIGNING & STRIPING NOTES:

- 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 DAY OR NIGHT CONDITIONS. AT NO TIME WILL IT BE ACCEPTABLE TO PAINT OVER EXISTING PAVEMENT MARKINGS
- ANY DEVIATION FROM THE STRIPING AND SIGNING PLAN SHALL BE APPROVED BY EL PASO COUNTY PLANNING AND COMMUNITY **DEVELOPMENT**

I FFT

MAX

MH

MID

MIN

MSL

**EXISTING** 

GRADE

**MFGR** 

MAXIMUM

MANHOLE

MINIMUM

MANUFACTURER

MIDDLE or MIDPOINT

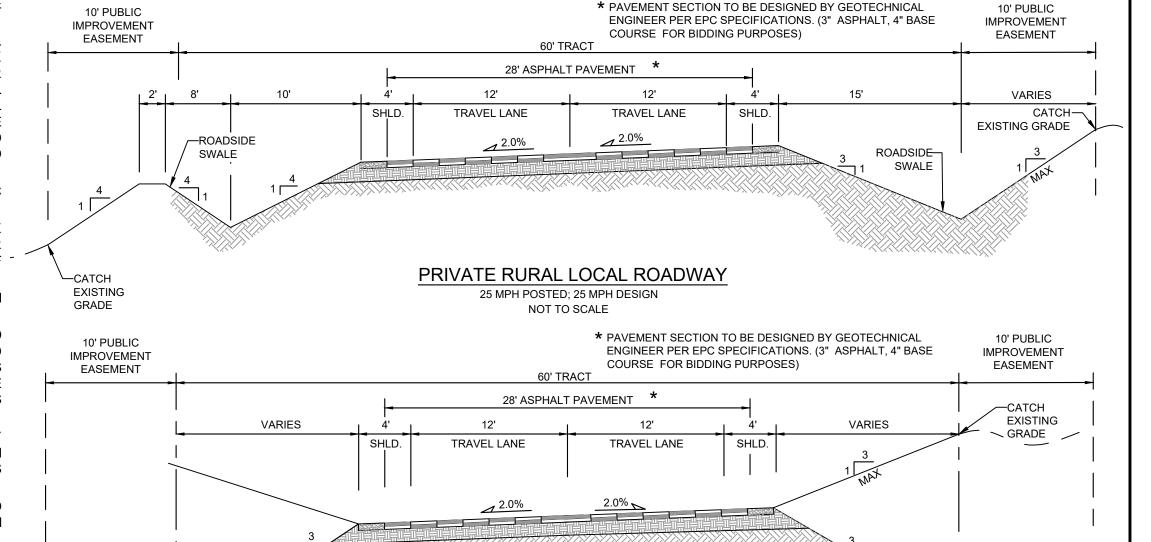
MECHANICAL JOINT

MEAN SEA LEVEL

- 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
- 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 40 MPH OR HIGHER SHALL HAVE 8" UPPER-LOWER CASE LETTERING ON 18" 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"**
- 8. ALL TRAFFIC SIGNS SHALL HAVE A MINIMUM HIGH INTENSITY PRISMATIC GRADE SHEETING.
- ALL LOCAL RESIDENTIAL STREET SIGNS SHALL BE MOUNTED ON A 1.75" X 1.75" 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 PREFORMED THERMOPLASTIC PAVEMENT MARKINGS WITH TAPERED LEADING EDGES PER CDOT STANDARD S-627-1. WORD AND SYMBOL MARKINGS SHALL BE THE NARROW TYPE. STOP BARS SHALL BE 24" IN WIDTH. CROSSWALKS LINES SHALL BE 12" WIDE AND 8' LONG PER CDOT S-627-1.
- 12. 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.
- 13. THE CONTRACTOR SHALL NOTIFY EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT (719) 520-6819 PRIOR TO AND UPON COMPLETION OF SIGNING AND STRIPING.
- 14. 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.

#### ABBREVIATIONS con't: ABBREVIATIONS: NORMAL CROWN ALGEBRAIC DIFFERENCE NIC **NOT IN CONTRACT ASSEMBLY** NO NUMBER AMERICAN SOCIETY OF TESTING AND MATERIALS

ASSY ASTM NOM **NOMINAL** APPROXIMATE or APPROXIMATELY APPROX NTS NOT TO SCALE AVE **AVENUE** OC ON CENTER AVG **AVERAGE** Know what's **below** O/S OFFSET B/C **BACK OF CURB** Call before you dig. PROPOSED ₽ or B/L BASELINE PC POINT OF CURVATURE BLVD **BOULEVARD** PCC POINT OF COMPOUND CURVE BTM BOTTOM PCR POINT OF CURB RETURN BOW **BOTTOM OF WALI** PLAIN END **CAST IRON** PIE PUBLIC IMPROVEMENT EASEMENT CEN CENTER PGL PROFILE GRADE LINE € or CL CENTERLINE PROPERTY LINE ₽ or P/L CFS CUBIC FEET PER SECOND PRC POINT OF REVERSE CURVE CLR CLEAR PΤ POINT OF TANGENCY CMP CORRUGATED METAL PIPE PVC POINT OF VERTICAL CURVE or POLYVINYL CHLORIDE CONC CONCRETE PVI POINT OF VERTICAL INTERSECTION CONST CONSTRUCTION PVMT PAVEMENT CONT CONTINUOUS PVT POINT OF VERTICAL TANGENT DIA DIAMETER R OR RAD RADIUS DN DOWN REVERSE CROWN DWG **DRAWING** RCP REINFORCED CONCRETE PIPE **EACH** RED REDUCER **ENERGY GRADE LINE** EGL **REF REFERENCE** ELEV or EL ELEVATION REINF REINFORCING ELL **ELBOW REQ** REQUIRED **ESMT** EASEMENT REV REVISION **EACHWAY** EW **ROW** RIGHT-OF-WAY EXISTING EX or EXIST RIGHT FES FLARED END **SCHEDULE** SCH FIN FINISHED SD STORM SEWER **FLOWLINE** ਾ or FL SHLD **SHOULDER** FLG FLANGE SQ **SQUARE** FT FOOT / FEET STREET FRP FIBERGLASS REINFORCED PIPE STA STATION GAL GALLON STD STANDARD GALV GALVANIZED STL STEEL GAU **GAUGE (MATERIAL)** SS OR SAN SANITARY SEWER **GATE VALVE** SW OR S/W SIDEWALK **GROUNDWATER** GW TAN TANGENT HBP HOT BITUMINOUS PAVEMENT THRUST BLOCK HGL HYDRAULIC GRADE LINE TOP BACK OF CURB **HIGH POINT** TFC TOP FACE OF CURB HORIZ HORIZONTAL THD THREADED HCL HORIZONTAL CONTROL LINE THK THICKNESS **TOW** TOP OF WALL **INVERT** TYP **TYPICAL** VERTICAL CURVE FACTOR UG **UNDERGROUND POUNDS** UTIL UTILITY LINEAR FEET VERTICAL CURVE VC LANE **VERT** VERTICAL **LOW POINT** WIDTH LANDSCAPING



#### PCD FILE #: SF2324 NOT TO SCALE HAY CREEK VALLEY **PRELIMINARY** EL PASO COUNTY, COLORADO CONSTRUCTION DOCUMENTS THIS DRAWING HAS NOT BEEN APPROVED BY **GOVERNING AGENCIES AND** IS SUBJECT TO CHANGE GENERAL NOTES FOR AND ON BEHALF OF SCALE JANUARY 2024 DRAWING No. DESIGNED BY: DATE ISSUED: MATRIX DESIGN GROUP, INC. DRAWN BY: CVW HORIZ. Excellence by Design GN02 N/A SHEET 03 OF 26 PROJECT No. 22.886.076 CHECKED BY:

PRIVATE RURAL LOCAL ROADWAY 2

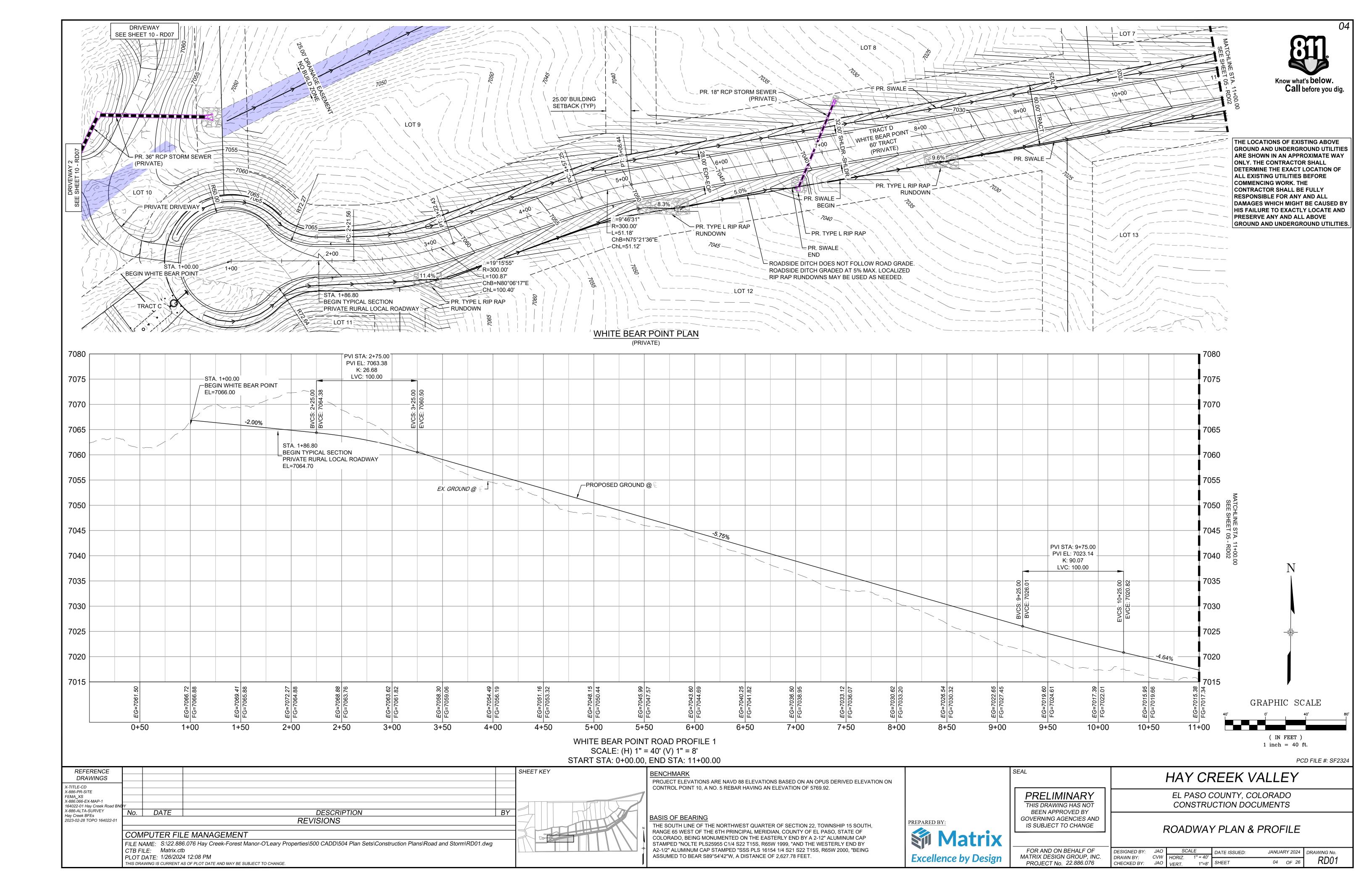
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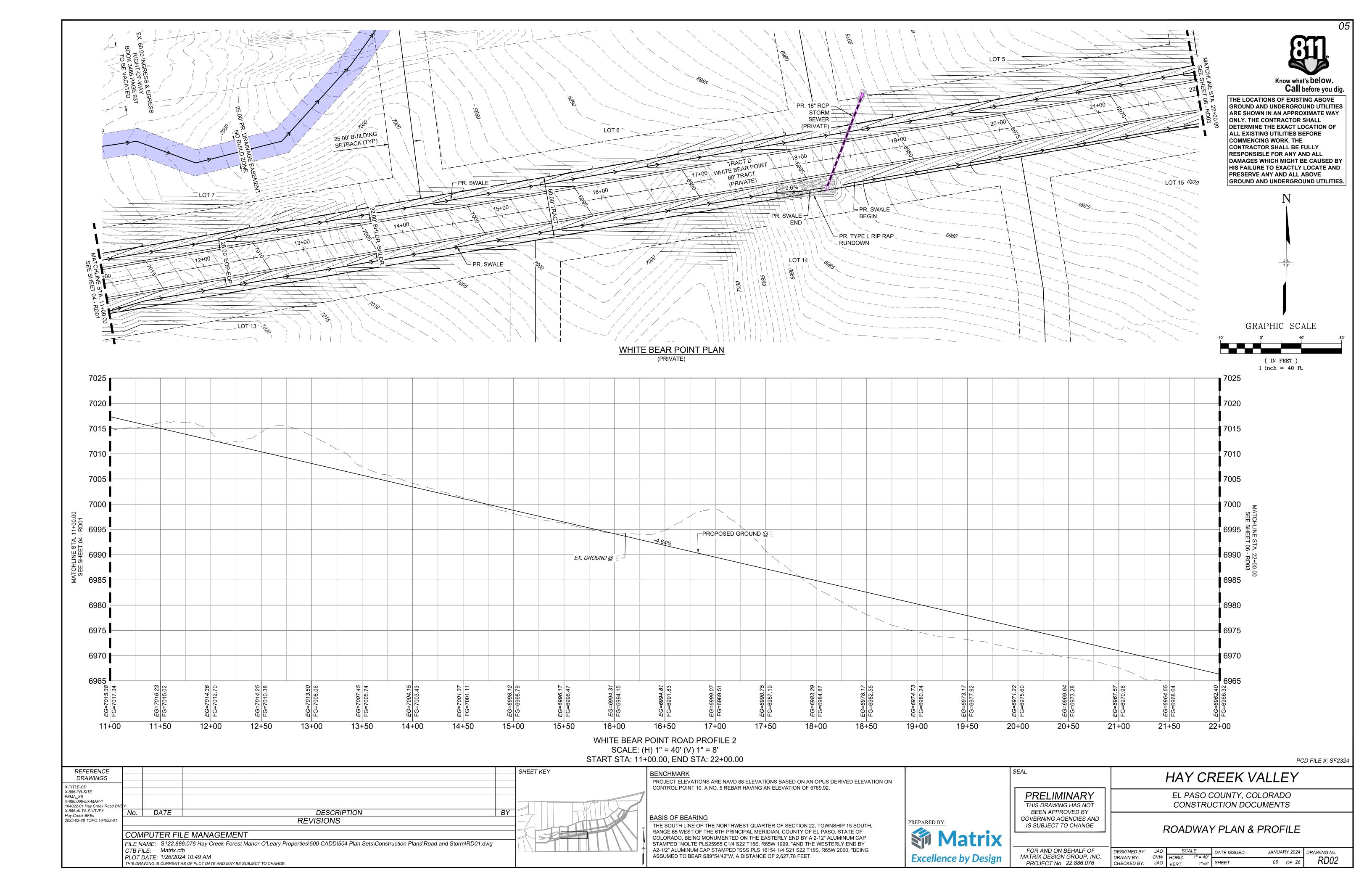
PROJECT ELEVATIONS ARE NAVD 88 ELEVATIONS BASED ON AN OPUS DERIVED ELEVATION ON CONTROL POINT 10, A NO. 5 REBAR HAVING AN ELEVATION OF 5769.92.

### BASIS OF BEARING

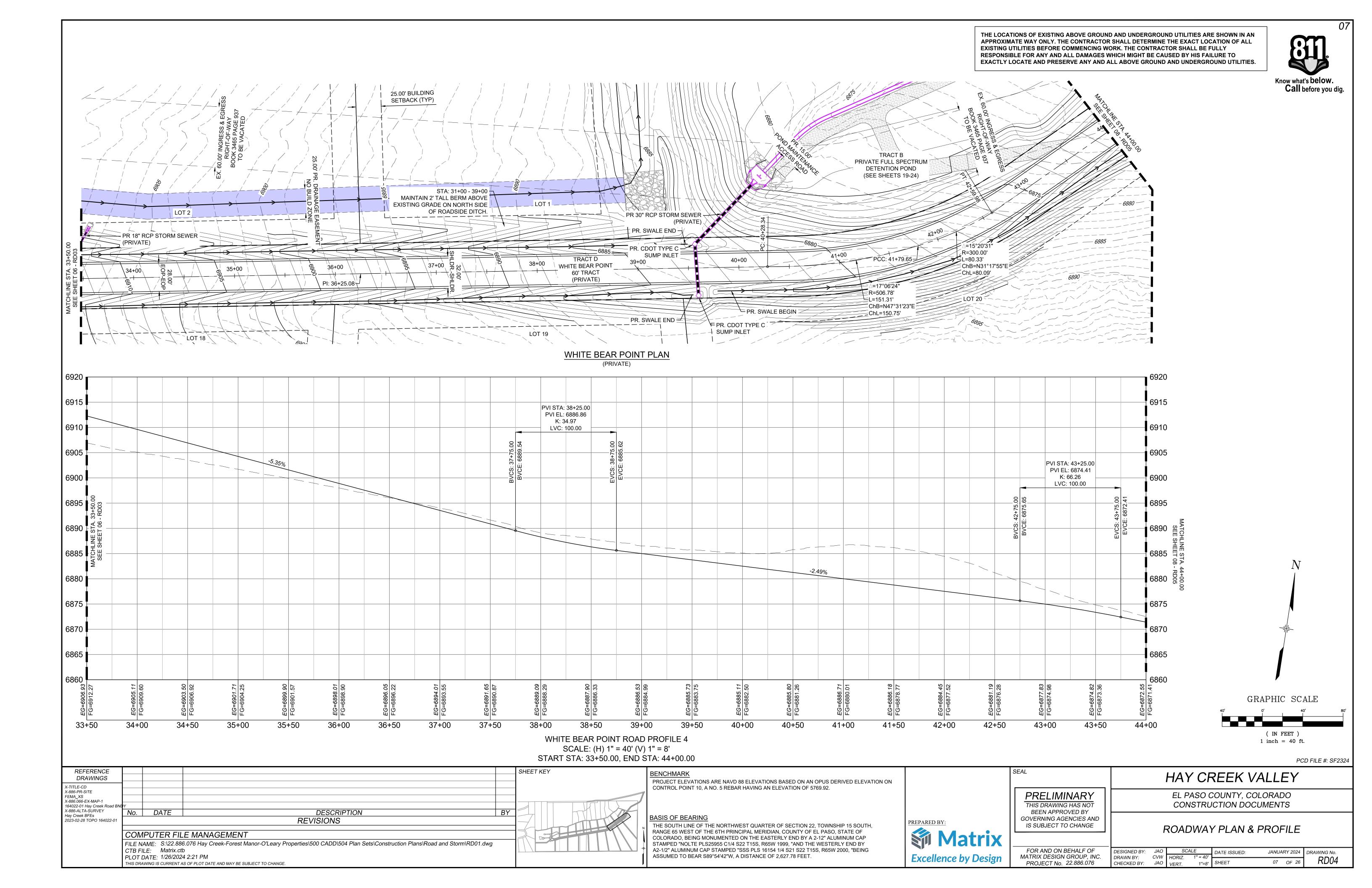
THE SOUTH LINE OF THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO, BEING MONUMENTED ON THE EASTERLY END BY A 2-12" ALUMINUM CAP STAMPED "NOLTE PLS25955 C1/4 S22 T15S, R65W 1999, "AND THE WESTERLY END BY A2-1/2" ALUMINUM CAP STAMPED "SSS PLS 16154 1/4 S21 S22 T15S, R65W 2000, "BEING ASSUMED TO BEAR S89°54'42"W, A DISTANCE OF 2,627.78 FEET.

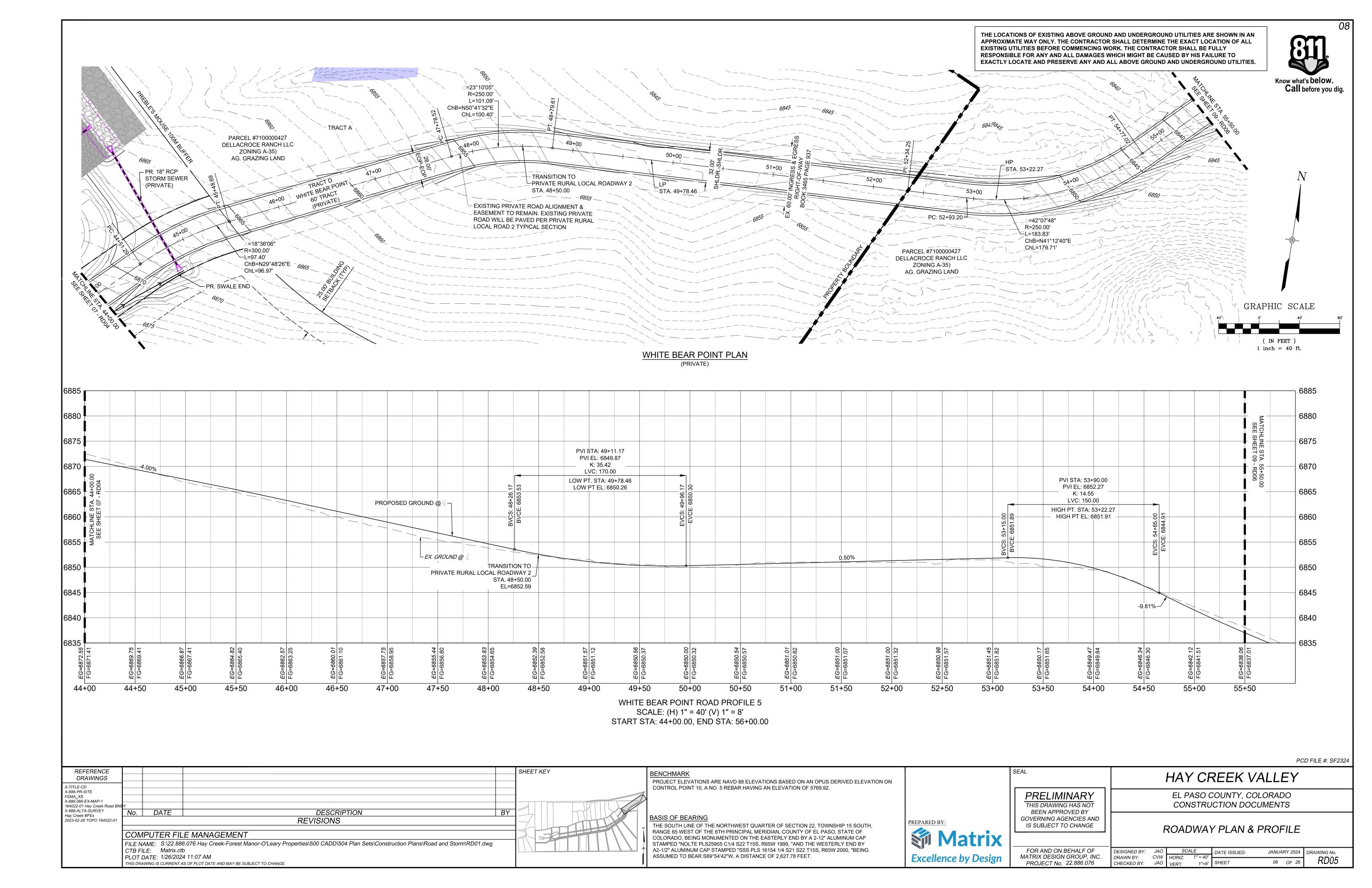
#### X-886-PR-SITE X-886.066-EX-MAP-164022-01 Hay Creek Road Bl X-886-ALTA-SURVEY DESCRIPTION No. DATE Hay Creek BFEs REVISIONS COMPUTER FILE MANAGEMENT FILE NAME: S:\22.886.076 Hay Creek-Forest Manor-O'Leary Properties\500 CADD\504 Plan Sets\Construction Plans\Road and Storm\TS01.dwg CTB FILE: Matrix.ctb





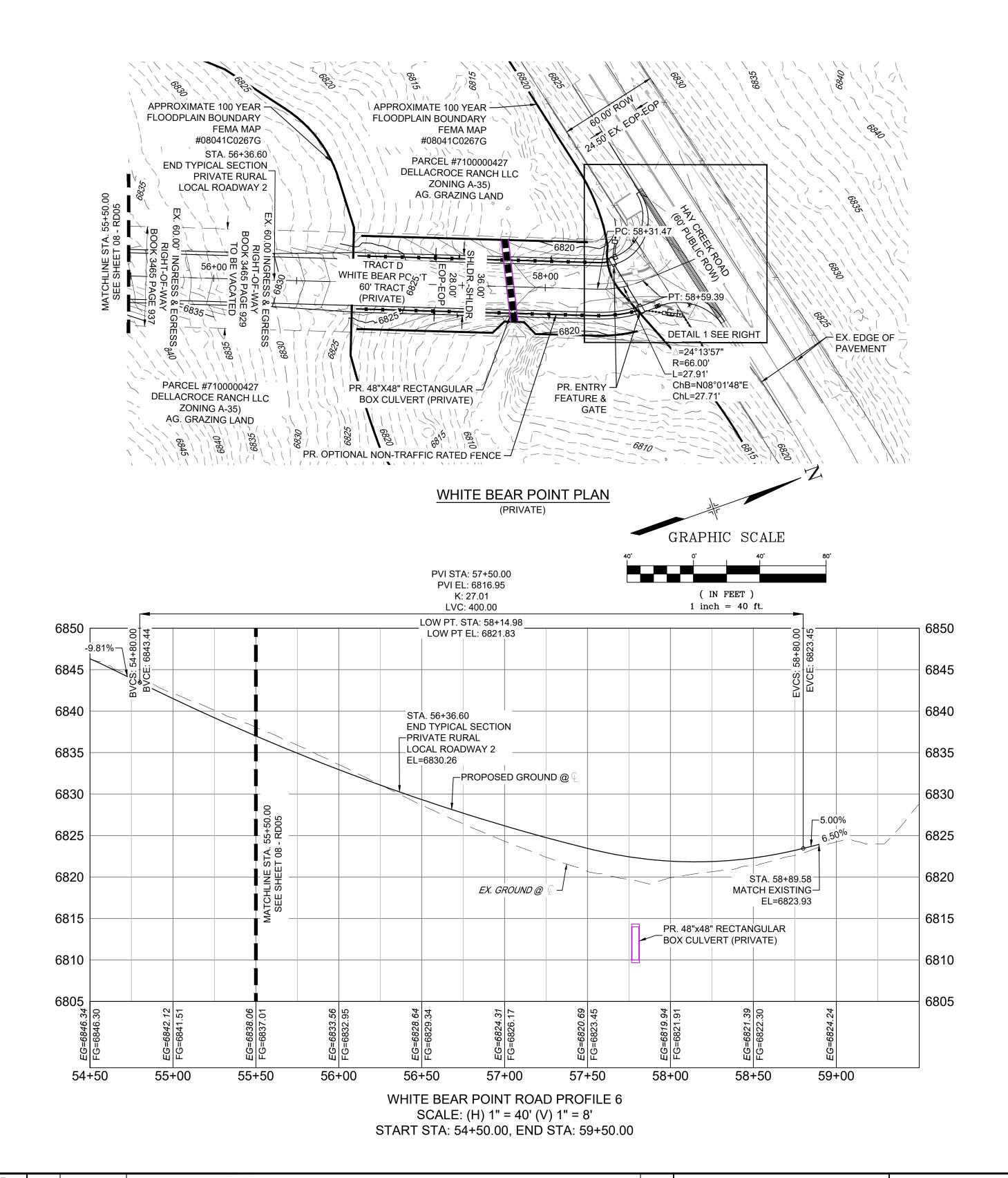
THE LOCATIONS OF EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL ABOVE GROUND AND UNDERGROUND UTILITIES. Call before you dig. STORM SEWER \* (PRIVATE) 1 STA: 31+00 - 39+00 -MAINTAIN 2' TALL BERM ABOVE EXISTING GRADE ON NORTH .: SIDE OF ROADSIDE DITCH 25.00' E LDING SETBACK (TYP) PR. TYPE L RIP RAP PR. TYPE L RIP RAP -STORM SEWER STORM SEWER PR. TYPE L RIP RAP BEGIN -27+00 WHITE BEAR POINT 26+00 60' TRACT (PRIVATE) PR. SWALE `PR. SWALE <sup>\_\_</sup> END WHITE BEAR POINT PLAN 6970 6965 6960 6960 6955 6955 PROPOSED GROUND @ 6950 6945 PVI STA: 32+50.28 EX. GROUND @ MATCHLII 6935 PVI EL: 6917.61 K: 140.45 LVC: 100.00 <sup>≤</sup> 8 − 6930 6930 6925 6925 6920 6920 6915 6910 22+00 22+50 23+00 23+50 24+50 25+00 25+50 26+50 27+00 27+50 28+50 29+50 30+00 30+50 31+00 32+00 32+50 33+00 33+50 24+00 26+00 28+00 29+00 31+50 GRAPHIC SCALE WHITE BEAR POINT ROAD PROFILE 3 SCALE: (H) 1" = 40' (V) 1" = 8' START STA: 22+00.00, END STA: 33+75.00 ( IN FEET ) 1 inch = 40 ft.PCD FILE #: SF2324 REFERENCE SHEET KEY HAY CREEK VALLEY DRAWINGS PROJECT ELEVATIONS ARE NAVD 88 ELEVATIONS BASED ON AN OPUS DERIVED ELEVATION ON X-TITLE-CD CONTROL POINT 10, A NO. 5 REBAR HAVING AN ELEVATION OF 5769.92. X-886-PR-SITE **PRELIMINARY** EL PASO COUNTY, COLORADO FEMA\_XS X-886.066-EX-MAP-1 CONSTRUCTION DOCUMENTS THIS DRAWING HAS NOT 164022-01 Hay Creek Road BN X-886-ALTA-SURVEY DESCRIPTION BEEN APPROVED BY No. DATE Hay Creek BFEs BASIS OF BEARING GOVERNING AGENCIES AND REVISIONS 2023-02-28 TOPO 164022-0 PREPARED BY: IS SUBJECT TO CHANGE THE SOUTH LINE OF THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 15 SOUTH, ROADWAY PLAN & PROFILE RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COMPUTER FILE MANAGEMENT COLORADO, BEING MONUMENTED ON THE EASTERLY END BY A 2-12" ALUMINUM CAP FILE NAME: S:\22.886.076 Hay Creek-Forest Manor-O'Leary Properties\500 CADD\504 Plan Sets\Construction Plans\Road and Storm\RD01.dwg STAMPED "NOLTE PLS25955 C1/4 S22 T15S, R65W 1999, "AND THE WESTERLY END BY A2-1/2" ALUMINUM CAP STAMPED "SSS PLS 16154 1/4 S21 S22 T15S, R65W 2000, "BEING SCALE DATE ISSUED: CTB FILE: Matrix.ctb FOR AND ON BEHALF OF DESIGNED BY: JANUARY 2024 DRAWING No. PLOT DATE: 1/26/2024 2:31 PM ASSUMED TO BEAR S89°54'42"W, A DISTANCE OF 2,627.78 FEET. **Excellence by Design** MATRIX DESIGN GROUP, INC. CVW HORIZ. 1" = 40' DRAWN BY: RD03 1"=8' SHEET 06 OF 26 PROJECT No. 22.886.076 THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. CHECKED BY: JAO VERT.

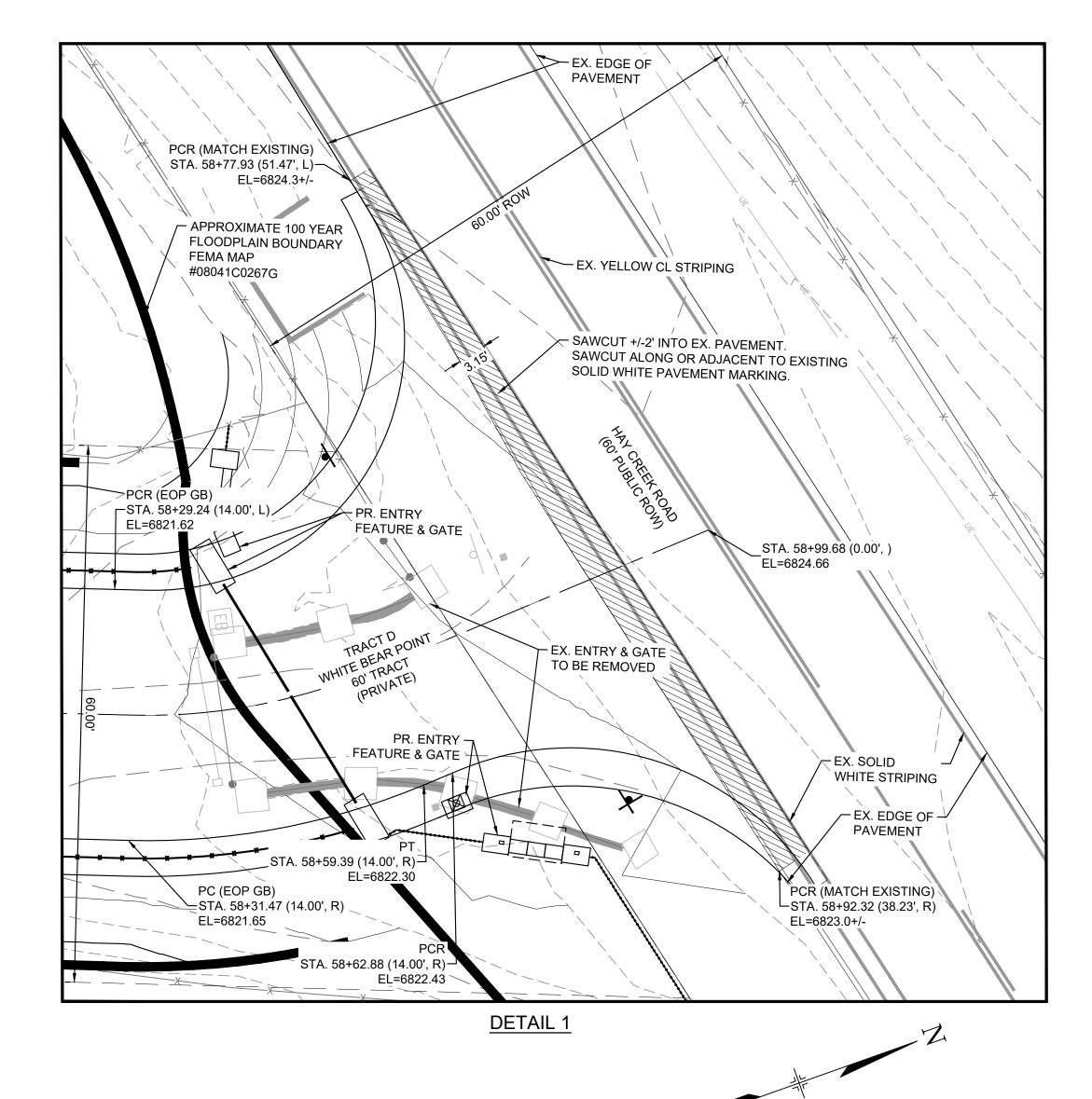




THE LOCATIONS OF EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL ABOVE GROUND AND UNDERGROUND UTILITIES.







PCD FILE #: SF2324

REFERENCE SHEET KEY DRAWINGS X-TITLE-CD X-886-PR-SITE FEMA\_XS X-886.066-EX-MAP-1 164022-01 Hay Creek Road BNi X-886-ALTA-SURVEY DESCRIPTION No. DATE Hay Creek BFEs REVISIONS 2023-02-28 TOPO 164022-0 COMPUTER FILE MANAGEMENT FILE NAME: S:\22.886.076 Hay Creek-Forest Manor-O'Leary Properties\500 CADD\504 Plan Sets\Construction Plans\Road and Storm\RD01.dwg CTB FILE: Matrix.ctb PLOT DATE: 1/26/2024 2:22 PM THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

PROJECT ELEVATIONS ARE NAVD 88 ELEVATIONS BASED ON AN OPUS DERIVED ELEVATION ON CONTROL POINT 10, A NO. 5 REBAR HAVING AN ELEVATION OF 5769.92.

## BASIS OF BEARING

THE SOUTH LINE OF THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO, BEING MONUMENTED ON THE EASTERLY END BY A 2-12" ALUMINUM CAP STAMPED "NOLTE PLS25955 C1/4 S22 T15S, R65W 1999, "AND THE WESTERLY END BY A2-1/2" ALUMINUM CAP STAMPED "SSS PLS 16154 1/4 S21 S22 T15S, R65W 2000, "BEING ASSUMED TO BEAR S89°54'42"W, A DISTANCE OF 2,627.78 FEET.

PREPARED BY: **Excellence by Design** 

SEAL
PRELIMINARY
THIS DRAWING HAS NOT

BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC. PROJECT No. 22.886.076

ROADWAY PLAN & PROFILE

GRAPHIC SCALE

( IN FEET ) 1 inch = 10 ft.

DESIGNED BY:	JAO	SC	ALE	DATE ISSUED:	JANUA	RY 2024	DRAWING No.
DRAWN BY:	CVW	HORIZ.	VARIES				DD06
CHECKED BY:	JAO	VERT.	1"=8'	SHEET	09	OF 26	טטעא

HAY CREEK VALLEY

EL PASO COUNTY, COLORADO

CONSTRUCTION DOCUMENTS

A2-1/2" ALUMINUM CAP STAMPED "SSS PLS 16154 1/4 S21 S22 T15S, R65W 2000, "BEING

ASSUMED TO BEAR S89°54'42"W, A DISTANCE OF 2,627.78 FEET.

SCALE DATE ISSUED:

1"=8' SHEET

CVW HORIZ. 1" = 40'

JAO VERT.

JANUARY 2024 DRAWING No.

10 OF 26

RD07

FOR AND ON BEHALF OF

MATRIX DESIGN GROUP, INC.

PROJECT No. 22.886.076

**Excellence by Design** 

DESIGNED BY:

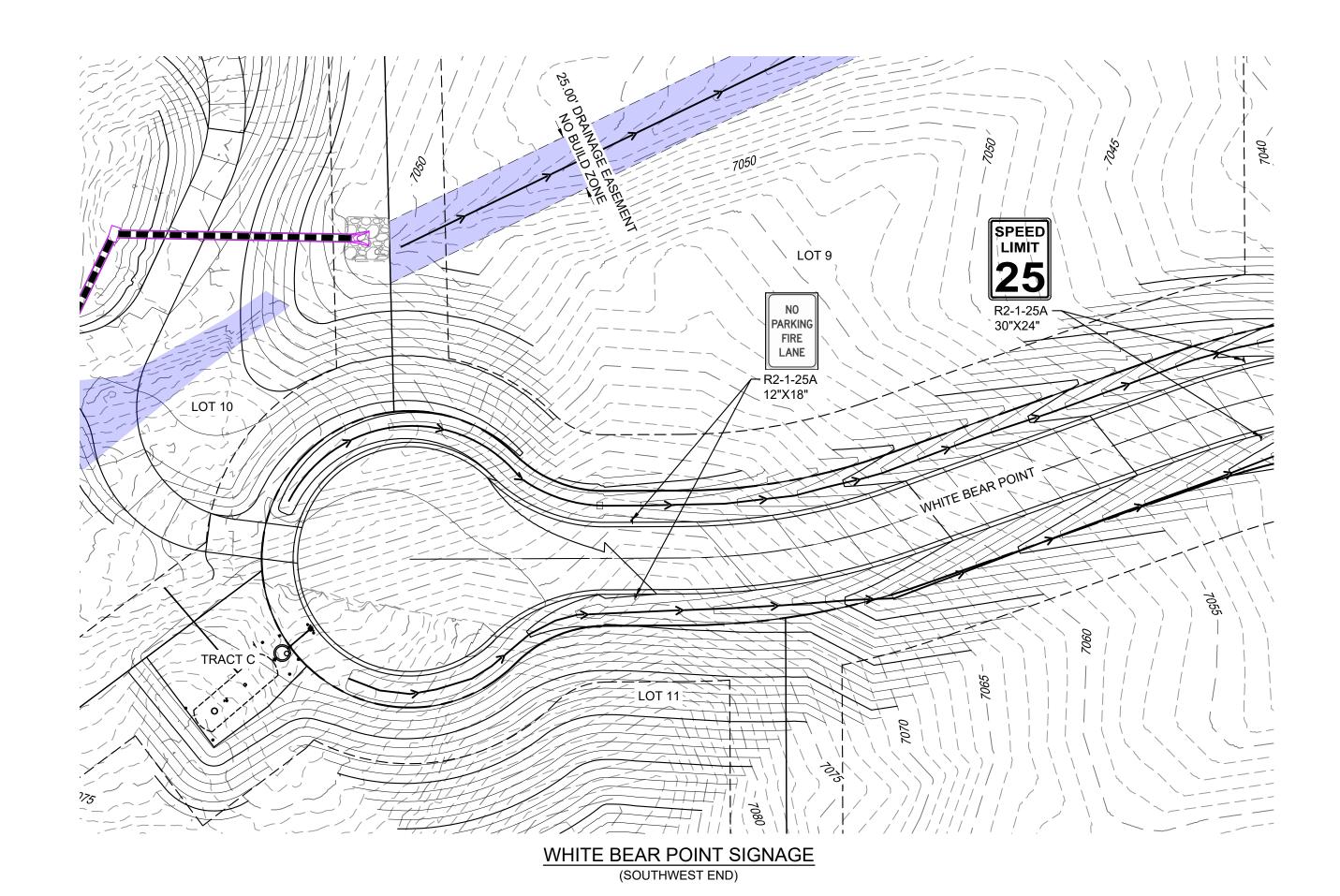
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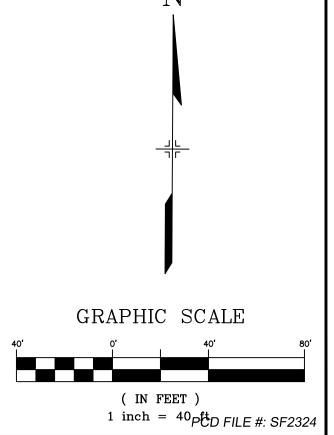
THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.



HAY CREEK 16 WHITE BEAR PT 24"X24" WHITE BEAR POINT SIGNAGE

(SOUTHEAST END)

THE LOCATIONS OF EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL ABOVE GROUND AND UNDERGROUND UTILITIES.



RD08

REFERENCE DRAWINGS					SHEET KEY
X-TITLE-CD X-886-PR-SITE FEMA_XS X-886.066-EX-MAP-1 164022-01 Hay Creek Road BNI X-886-ALTA-SURVEY Hay Creek BFES 2023-02-28 TOPO 164022-01	No.	DATE	DESCRIPTION REVISIONS	BY	
	COM	IPUTER FIL	E MANAGEMENT		
	FILE N		6.076 Hay Creek-Forest Manor-O'Leary Properties\500 CADD\504 Plan Sets\Construction Plans\Road and Storm\RD01.dwg		

PLOT DATE: 1/26/2024 11:18 AM

THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

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**Excellence by Design** 

PRELIMINARY
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GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

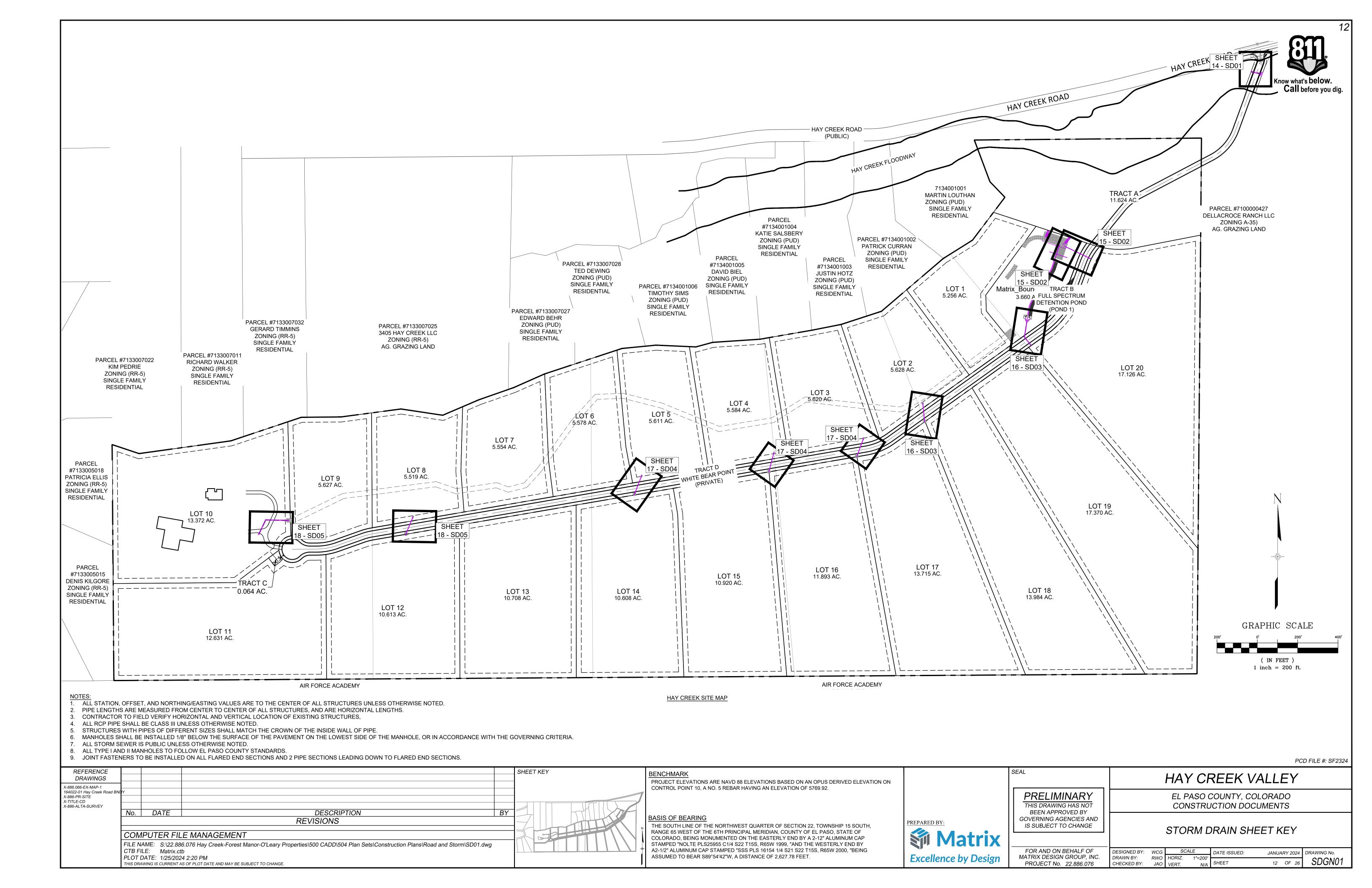
JAO	SC	ALE	DATE ISSUED:	JANUARY 2024
CVW	HODIZ	1" - 10'	-,	

HAY CREEK VALLEY

EL PASO COUNTY, COLORADO CONSTRUCTION DOCUMENTS

FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC. PROJECT No. 22.886.076 DESIGNED BY: DRAWING No. 
 DRAWN BY:
 CVW
 HORIZ.
 1" = 40'

 CHECKED BY:
 JAO
 VERT.
 1"=8'
 SHEET
 11 OF 26



#### **GENERAL NOTES:**

PER THE COLORADO SENATE BILL 18-167, ALL UNDERGROUND UTILITIES, INCLUDING STORM SEWER, MUST BE INSTALLED WITH A DETECTABLE MATERIAL SO THEY CAN BE TRACED AT GROUND LEVEL. ENSURE ALL PIPES INSTALLED ARE EQUIPPED WITH MEANS OF BEING DETECTED, AS PER CITY STANDARD D-37

- DO NOT BACKFILL INLETS PRIOR TO ONE-POUND ANODE AND 1.5# MAGNESIUM GROUND ROD INSTALLATION.
- TRACER WIRE SHALL BE INSTALLED IN ALL UNDERGROUND PIPE.
- TRACER WIRE FOR STORM SEWER AND DRAIN LINES SHALL BE GREEN IN ACCORDANCE WITH AMERICAN PUBLIC WORKS ASSOCIATION (APWA) UNIFORM COLOR CODE.
- "OPEN TRENCH" TRACER WIRE SHALL BE #8 OR #10 AWG COPPER SOLID OR #12 AWG COPPER CLAD HIGH STRENGTH WITH MINIMUM 30 MIL HDPE INSULATION THICKNESS COMPLYING WITH ASRM D-1248, AND A MINIMUM AVERAGE TENSILE BREAK LOAD OF 450-LBS, AND A 30-MIL HDPE JACKET-GREEN (TYPICAL).
- "PIPE/SLIP LINING" TRACER WIRE SHALL BE 7X7 STRANDED COPPER CLAD STEEL, EXTREME STRENGTH WITH 4,700 LB. BREAK LOAD, WITH MINIMUM 50-MIL HDPE INSULATION THICKNESS.
- TRACER WIRE SHALL BE SECURED EVERY 5-FEET TO 8-FEET ON THE TOP OF THE PIPE BY TAPING OR TYING TO THE PIPE.
- A 4-WAY CONNECTOR OR (2) 3-WAY CONNECTORS WITH SHORT JUMP WIRE ARE REQUIRED AT ALL CROSSINGS.
- TRACER WIRE SHALL BE AS CONTINUOUS AS POSSIBLE. IF SPLICING IS NECESSARY, THE ONLY APPROVED SPLICE METHOD IS A SPLIT BOLT CONNECTOR HOUSED IN A SPLIT BOLT HOUSING.
- ANY DAMAGE OCCURRING DURING INSTALLATION OF THE TRACER WIRE MUST BE IMMEDIATELY REPAIRED BY REMOVING THE DAMAGED WIRE AND INSTALLING A NEW SECTION OF WIRE WITH APPROVED CONNECTORS. TAPING AND/OR SPRAY COATING SHALL NOT BE ALLOWED AS A CONNECTION.
- EXPOSED WIRE SHALL BE WRAPPED WITH SCOTCH LINERLESS RUBBER SPLICING TAPE TO SEAL OUT MOISTURE, AND THEN COATED WITH SCOTCH SUPPER 33+ VINYL ELECTRIC TAPE TO SEAL THE RUBBER TAPE.
- TRACER WIRE CAN NOT BE PLACED INSIDE DRAINAGE INLETS.

- TRACER WIRE SHALL BE BROUGHT ABOVE GROUND AND CONNECT AT EACH INLET AND MANHOLE IN A GRADE LEVEL TRACER
- A MINIMUM OF 2-FEET OF EXCESS/SLACK WIRE IS REQUIRED IN ALL TRACER WIRE ACCESS BOXES AFTER MEETING FINAL ELEVATION.
- DRIVE-IN 1.5# MAGNESIUM GROUND RODS (ANODE) WHICH SHALL BE ATTACHED TO THE END OF THE TRACER WIRE.
- TRACER WIRE MUST BE PROPERLY GROUNDED AT ALL DEAD ENDS (INLETS, OUTFALL,ETC.), AND DRIVEN INTO NATIVE SOIL AT
- TRACER WIRE TERMINATION POINTS MUST UTILIZE A WIRE ACCESS BOX.
- TRACER WIRE ACCESS BOXES MUST INCLUDE A MANUAL INTERRUPTIBLE CONDUCTIVE/CONNECTIVE LINK BETWEEN
- TERMINAL FOR TRACER WIRE CONNECTION AND TERMINAL FOR GROUND ROD WIRE CONNECTION.
- GROUNDING ANODE WIRE AND 1.5# MAGNESIUM GROUND ROD WIRE SHALL BE CONNECTED TO THE IDENTIFIED LOCATION (BOTTOM) TERMINAL IN ALL ACCESS BOXES.
- ALL SERVICE LATERAL TRACER WIRE MUST BE PROPERLY CONNECTED TO THE MAINLINE TRACER WIRE TO ENSURE FULL TRACING/LOCATING CAPABILITIES FROM A SINGLE CONNECTION POINT.
- TRUNK LINE TRACER WIRE SHALL BE CONTINUOUS, BY-PASSING AROUND THE OUTSIDE OF MANHOLES/STRUCTURES ON THE NORTH OR EAST SIDE, UNLESS ON THE END SECTION.
- ALL NEW TRACER WIRE INSTALLATIONS SHALL BE TESTED AND LOCATED PRIOR TO ACCEPTANCE. TESTING AND LOCATING SHALL BE PERFORMED BY A THIRD PARTY AT THE COMPLETION OF ROUGH GRADING AND PRIOR TO FINAL ACCEPTANCE OF THE PROJECT. ANY DEFICIENCIES SHALL BE CORRECTED PRIOR TO FINAL ACCEPTANCE.
- 23. WHEN REPAIRS ARE PERFORMED ON STORMWATER LINE, TRACER WIRE SHALL BE TESTED PRIOR TO FINAL ACCEPTANCE.

### **GENERAL NOTES:**

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH CURRENT CITY OF COLORADO SPRINGS ENGINEERING DIVISION (THE CITY)
- STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS
- (EXCAVATION, CONCRETE, TRAFFIC CONTROL, ETC.). AND NOTIFY THE CITY BY 1500 HOURS THE BUSINESS DAY BEFORE
- INSPECTION IS REQUIRED. DO NOT BACKFILL INLETS PRIOR TO ONE-POUND ANODE AND 1.5# MAGNESIUM GROUND ROD INSTALLATION. 17. TRACER WIRE MUST BE PROPERLY GROUNDED AT ALL DEAD
- TRACER WIRE: 4. TRACER WIRE SHALL BE INSTALLED ON ALL UNDERGROUND
- TRACER WIRE FOR STORM SEWER AND DRAIN LINES SHALL BE GREEN IN ACCORDANCE WITH AMERICAN PUBLIC WORKS
- ASSOCIATION (APWA) UNIFORM COLOR CODE. "OPEN TRENCH" TRACER WIRE SHALL BE #8 OR #10 AWG COPPER SOLID OR #12 AWG COPPER CLAD HIGH STRENGTH WITH MINIMUM 30 MIL HDPE INSULATION THICKNESS COMPLYING WITH ASTM D-1248, AND A MINIMUM AVERAGE TENSILE BREAK
- "PIPE/SLIP LINING" TRACER WIRE SHALL BE 7X7 STRANDED COPPER CLAD STEEL, EXTREME STRENGTH WITH 4,700 LB.
- BREAK LOAD, WITH MINIMUM 50-MIL HDPE INSULATION TRACER WIRE SHALL BE SECURED EVERY 5-FFFT TO 8-FFFT

OAD OF 450-LBS, AND A 30-MIL HDPE JACKET-GREEN

- ON THE TOP OF THE PIPE BY TAPING OR TYING TO THE PIPE. A 4-WAY CONNECTOR OR (2) 3-WAY CONNECTORS WITH SHORT JUMP WIRE ARE REQUIRED AT ALL CROSSINGS.
- TRACER WIRE SHALL BE AS CONTINUOUS AS POSSIBLE. IF SPLICING IS NECESSARY. THE ONLY APPROVED SPLICE METHOD IS A SPLIT BOLT CONNECTOR HOUSED IN A SPLIT BOLT

ANY DAMAGE OCCURRING DURING INSTALLATION OF THE

TRACER WIRE MUST BE IMMEDIATELY REPAIRED BY REMOVING THE DAMAGED WIRE AND INSTALLING A NEW SECTION OF WIRE

WITH APPROVED CONNECTORS, TAPING AND/OR SPRAY COATING SHALL NOT BE ALLOWED AS A CONNECTION. EXPOSED WIRE SHALL BE WRAPPED WITH SCOTCH LINERLESS RUBBER SPLICING TAPE TO SEAL OUT MOISTURE, AND THEN COATED WITH SCOTCH SUPER 33+ VINYL ELECTRIC TAPE TO

3. TRACER WIRE CAN NOT BE PLACED INSIDE DRAINAGE INLETS

SEAL THE RUBBER TAPE.

INLET (SEE NOTE 2)

(TYPICAL)

TRACER WIRE PER

FUTURE STUB CONNECTION

10. WIRE SHOWN AWAY FROM PIPE FOR CLARITY. WIRE SHALL BE INSTALLED ON TOP OF THE PIPE. THE WIRE SHALL BE FASTENED TO THE PIPE WITH TAPE OR PLASTIC TIES AT 5-FOOT TO 8-FOOT

2. TRACER WIRE FOR INLETS SHALL TERMINATE AT A GRADE LEVEL IN—GROUND ACCESS BOX. DRIVE—IN MAGNESIUM GROUND ROD MUST BE USED AT ALL TERMINATION POINTS.

3. PLACE A TEST STATION WITH A DRIVEN-IN 1.5# MAGNESIUM GROUND ROD AT DEAD ENDS AND FUTURE

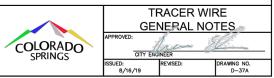
TRACER WIRE GENERAL NOTES

- 14. TRACER WIRE SHALL BE BROUGHT ABOVE GROUND AND
- CONNECT AT EACH INLET AND MANHOLE IN A GRADE LEVEL TRACER WIRE TEST BOX. 15. A MINIMUM OF 2-FEET OF EXCESS/SLACK WIRE IS REQUIRED IN
- ALL TRACER WIRE ACCESS BOXES AFTER MEETING FINAL FI EVATION. 16. DRIVE-IN 1.5# MAGNESIUM GROUND RODS (ANODE) WHICH SHALL BE ATTACHED TO THE END OF THE TRACER WIRE.
- ENDS (INLETS, OUTFALL, ETC.), AND DRIVEN INTO NATIVE SOIL 18. TRACER WIRE TERMINATION POINTS MUST UTILIZE A WIRE ACCESS BOX.
- 19. TRACER WIRE ACCESS BOXES MUST INCLUDE A MANUAL INTERRUPTIBLE CONDUCTIVE/CONNECTIVE LINK BETWEEN TERMINAL FOR TRACER WIRE CONNECTION AND TERMINAL FOR GROUND ROD WIRE CONNECTION.
- 20. GROUNDING ANODE WIRE AND 1.5# MAGNESIUM GROUND ROD WIRE SHALL BE CONNECTED TO THE IDENTIFIED LOCATION (BOTTOM) TERMINAL IN ALL ACCESS BOXES. 1. ALL SERVICE LATERAL TRACER WIRES MUST BE PROPERLY

CONNECTED TO THE MAINLINE TRACER WIRE TO ENSURE FULL

TRACING/LOCATING CAPABILITIES FROM A SINGLE CONNECTION

- 22. TRUNK LINE TRACER WIRE SHALL BE CONTINUOUS, BY-PASSING AROUND THE OUTSIDE OF MANHOLES/STRUCTURES ON THE
- NORTH OR EAST SIDE, UNLESS ON THE END SECTION. 23. ALL NEW TRACER WIRE INSTALLATIONS SHALL BE TESTED AND LOCATED PRIOR TO ACCEPTANCE. TESTING AND LOCATING SHALL BE PERFORMED BY A THIRD PARTY AT THE COMPLETION ROUGH GRADING AND PRIOR TO FINAL ACCEPTANCE OF THE PROJECT. ANY DEFICIENCIES SHALL BE CORRECTED PRIOR TO
- TRACER WIRE SHALL BE TESTED PRIOR TO FINAL ACCEPTANCE



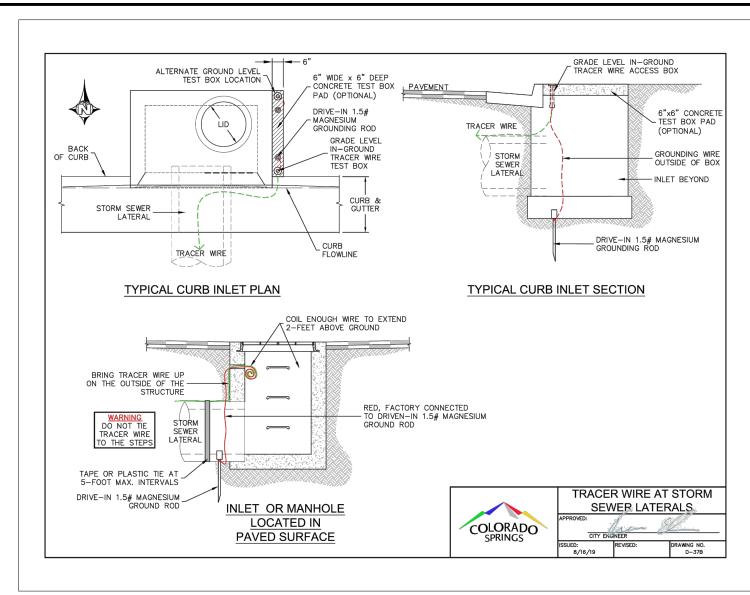
TRACER WIRE SHALL BE ROUTED AROUND MANHOLES ON THE

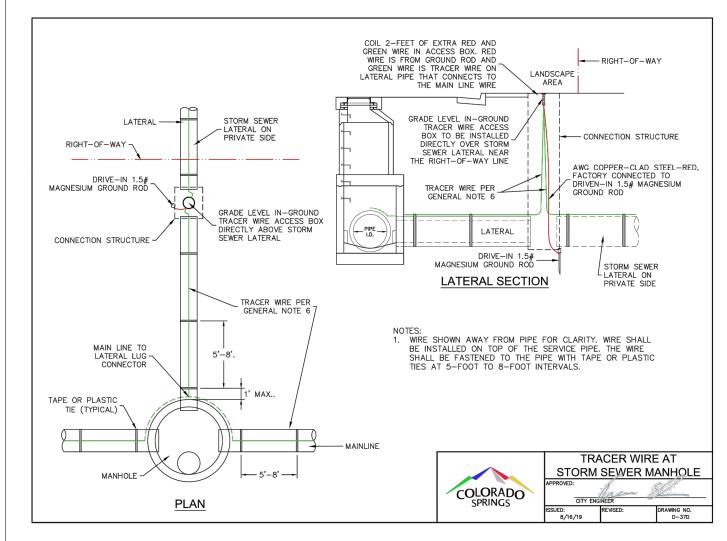
TRACER WIRE SAMPLE

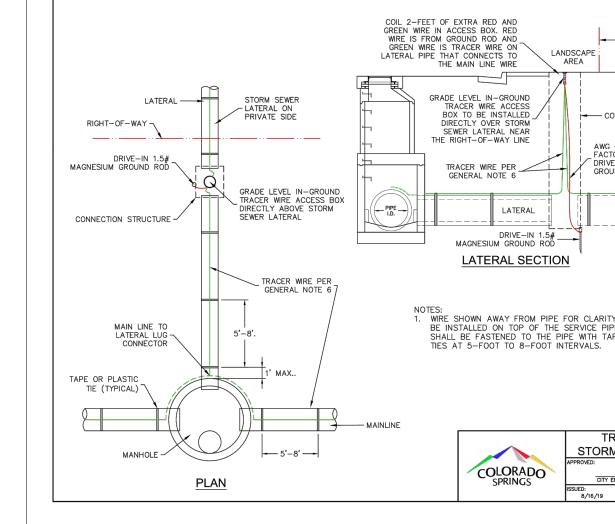
STORM SEWER PLAN

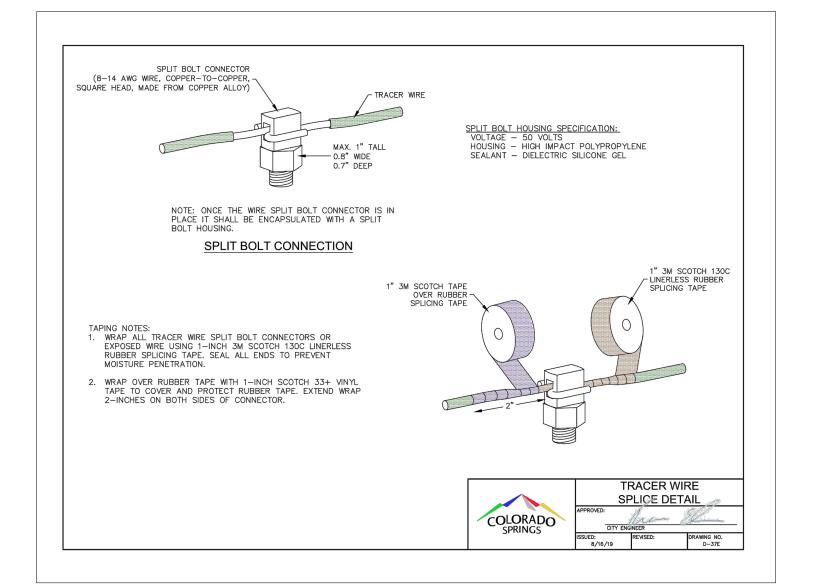
NORTH AND/OR EAST SIDE.

COLORADO









PCD FILE #: SF2324

Know what's below.

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REFERENCE DRAWINGS X-TITLE-CD X-886-PR-SITE FEMA XS X-886.066-EX-MAP-1 164022-01 Hay Creek Road BN X-886-ALTA-SURVEY DESCRIPTION No. DATE Hay Creek BFEs REVISIONS COMPUTER FILE MANAGEMENT FILE NAME: S:\22.886.076 Hay Creek-Forest Manor-O'Leary Properties\500 CADD\504 Plan Sets\Construction Plans\Road and Storm\SD00.dwg CTB FILE: Matrix.ctb PLOT DATE: 1/25/2024 2:20 PM THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE

SHEET KEY

PROJECT ELEVATIONS ARE NAVD 88 ELEVATIONS BASED ON AN OPUS DERIVED ELEVATION ON CONTROL POINT 10, A NO. 5 REBAR HAVING AN ELEVATION OF 5769.92.

### BASIS OF BEARING

THE SOUTH LINE OF THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO, BEING MONUMENTED ON THE EASTERLY END BY A 2-12" ALUMINUM CAP STAMPED "NOLTE PLS25955 C1/4 S22 T15S, R65W 1999, "AND THE WESTERLY END BY A2-1/2" ALUMINUM CAP STAMPED "SSS PLS 16154 1/4 S21 S22 T15S, R65W 2000, "BEING ASSUMED TO BEAR S89°54'42"W, A DISTANCE OF 2,627.78 FEET.

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# **PRELIMINARY** THIS DRAWING HAS NOT BEEN APPROVED BY

GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

MATRIX DESIGN GROUP, INC.

PROJECT No. 22.886.076

DRAWN BY:

CONSTRUCTION DOCUMENTS

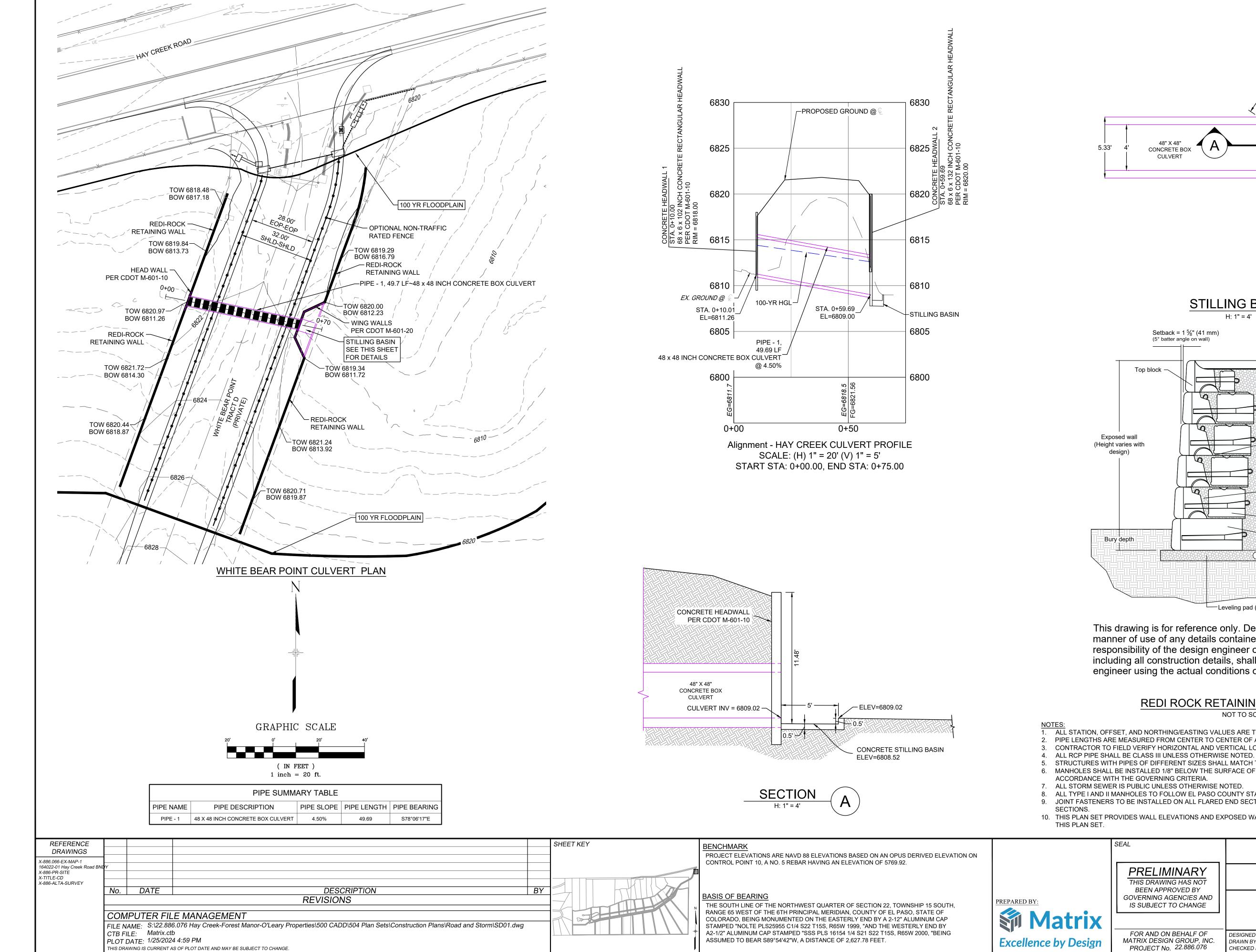
HAY CREEK VALLEY

EL PASO COUNTY, COLORADO

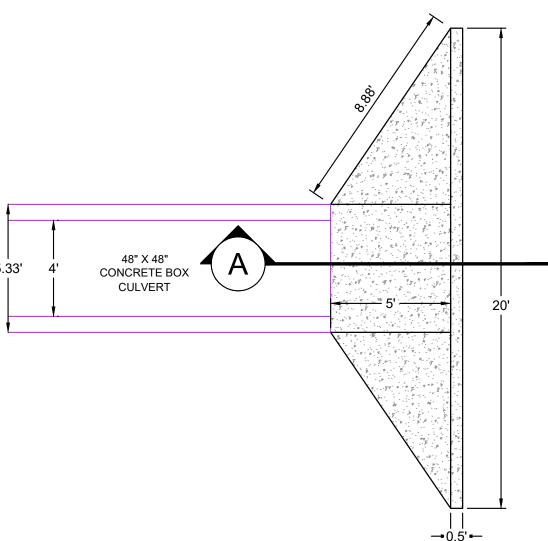
STORM DRAIN GENERAL NOTES & DETAILS

FOR AND ON BEHALF OF DESIGNED BY:

JANUARY 2024 DRAWING No. SCALE DATE ISSUED: RWO HORIZ. SDGN02 <sub>N/A</sub> | SHEET 13 OF 26 JAO CHECKED BY: VFRT

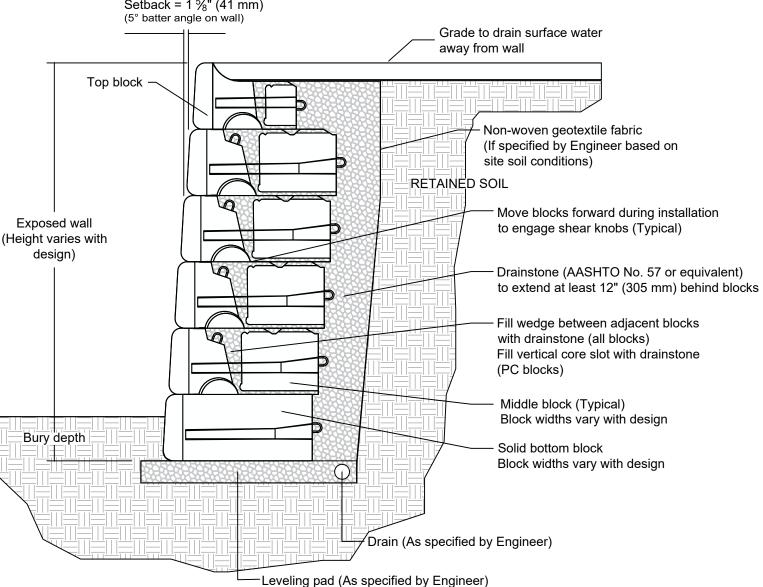


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# STILLING BASIN



This drawing is for reference only. Determination of the suitability and/or manner of use of any details contained in this document is the sole responsibility of the design engineer of record. Final project designs, including all construction details, shall be prepared by a licensed professional engineer using the actual conditions of the proposed site.

# REDI ROCK RETAINING WALL SECTION

NOT TO SCALE

- ALL STATION, OFFSET, AND NORTHING/EASTING VALUES ARE TO THE CENTER OF ALL STRUCTURES UNLESS OTHERWISE NOTED.
- PIPE LENGTHS ARE MEASURED FROM CENTER TO CENTER OF ALL STRUCTURES, AND ARE HORIZONTAL LENGTHS. CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING STRUCTURES,
- STRUCTURES WITH PIPES OF DIFFERENT SIZES SHALL MATCH THE CROWN OF THE INSIDE WALL OF PIPE.
- MANHOLES SHALL BE INSTALLED 1/8" BELOW THE SURFACE OF THE PAVEMENT ON THE LOWEST SIDE OF THE MANHOLE, OR IN
- ALL TYPE I AND II MANHOLES TO FOLLOW EL PASO COUNTY STANDARDS.
- 9. JOINT FASTENERS TO BE INSTALLED ON ALL FLARED END SECTIONS AND 2 PIPE SECTIONS LEADING DOWN TO FLARED END
- 10. THIS PLAN SET PROVIDES WALL ELEVATIONS AND EXPOSED WALL HEIGHTS. STRUCTURAL DESIGN IS NOT INCLUDED AS PART OF

PCD FILE #: SF2324

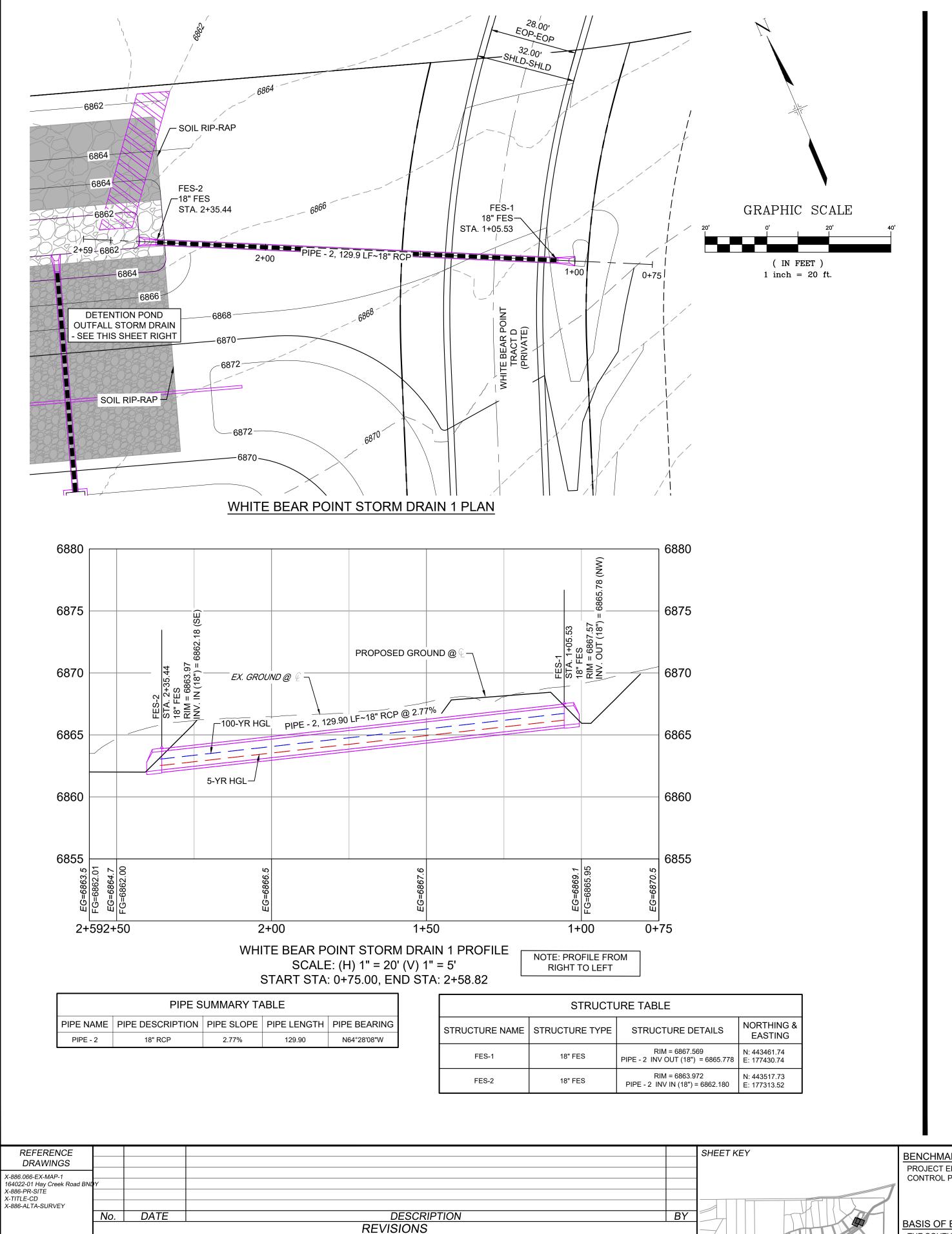


EL PASO COUNTY, COLORADO CONSTRUCTION DOCUMENTS

HAY CREEK VALLEY

STORM DRAIN PLAN & PROFILE

WCG SCALE
RWO HORIZ. VARIES JANUARY 2024 DRAWING No. DATE ISSUED: DRAWN BY: SD01 14 OF 26 CHECKED BY:



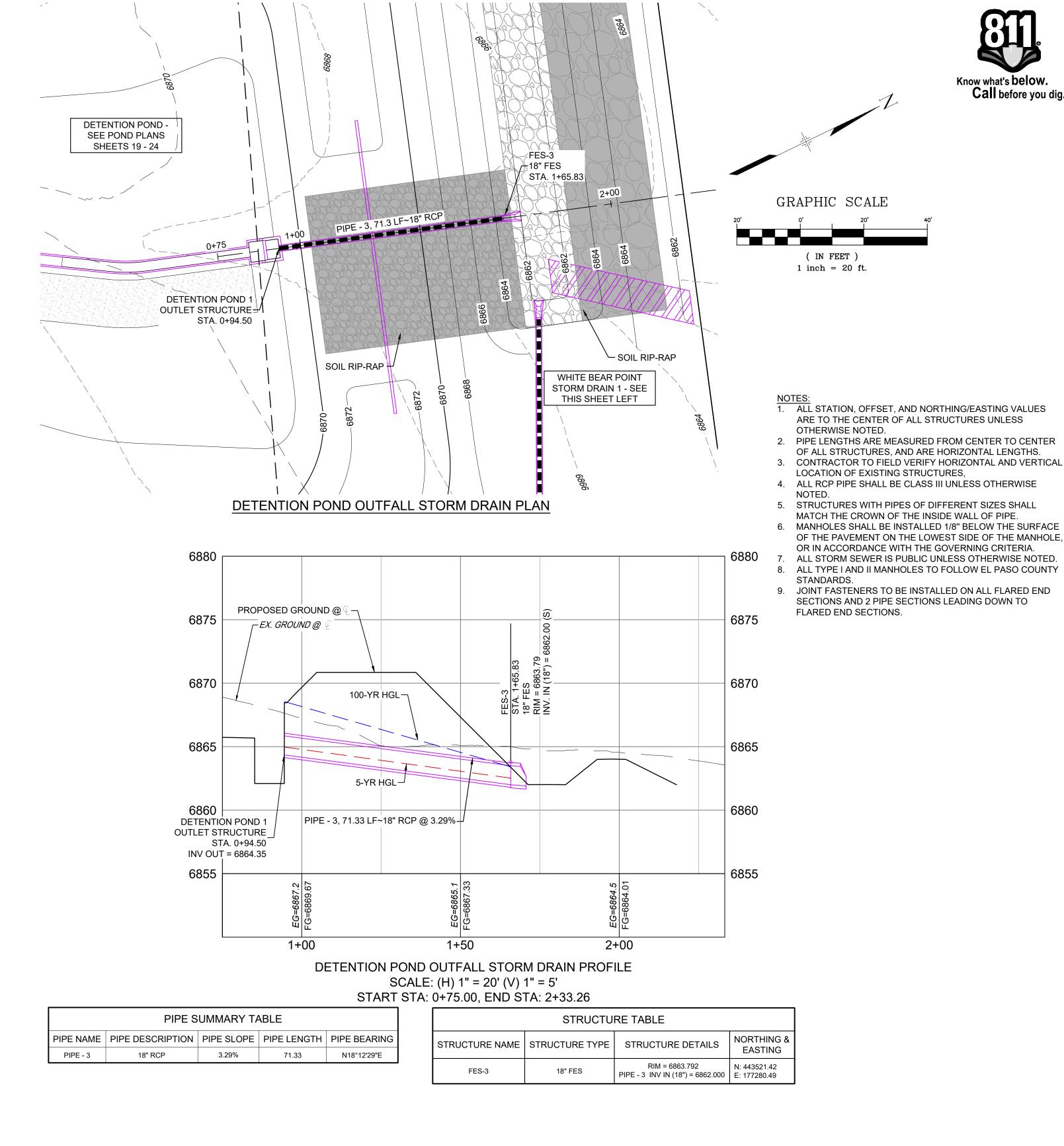
COMPUTER FILE MANAGEMENT

THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

CTB FILE: Matrix.ctb

PLOT DATE: 1/25/2024 2:21 PM

FILE NAME: S:\22.886.076 Hay Creek-Forest Manor-O'Leary Properties\500 CADD\504 Plan Sets\Construction Plans\Road and Storm\SD01.dwg



PCD FILE #: SF2324

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PROJECT ELEVATIONS ARE NAVD 88 ELEVATIONS BASED ON AN OPUS DERIVED ELEVATION ON CONTROL POINT 10, A NO. 5 REBAR HAVING AN ELEVATION OF 5769.92.

# BASIS OF BEARING

THE SOUTH LINE OF THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO, BEING MONUMENTED ON THE EASTERLY END BY A 2-12" ALUMINUM CAP STAMPED "NOLTE PLS25955 C1/4 S22 T15S, R65W 1999, "AND THE WESTERLY END BY A2-1/2" ALUMINUM CAP STAMPED "SSS PLS 16154 1/4 S21 S22 T15S, R65W 2000, "BEING ASSUMED TO BEAR S89°54'42"W, A DISTANCE OF 2,627.78 FEET.



SEAL	HAY CREEK VALLEY
PRELIMINARY THIS DRAWING HAS NOT	EL PASO COUNTY, COLORADO CONSTRUCTION DOCUMENTS

STORM DRAIN PLAN & PROFILE

IS SUBJECT TO CHANGE

WCG SCALE DATE ISSUED:

RWO HORIZ. 1"=20' DRAWN BY: CHECKED BY:

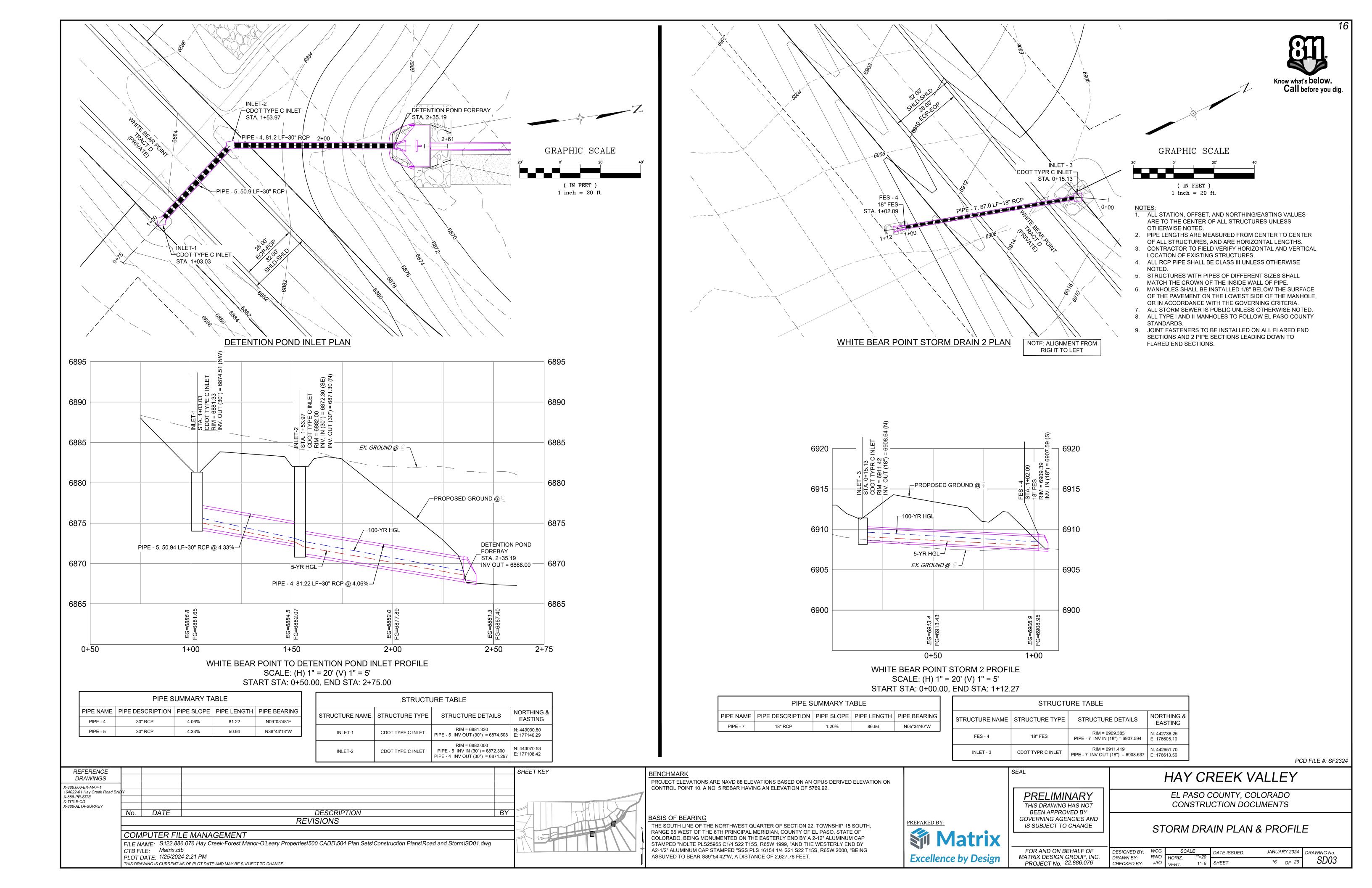
**Excellence by Design** 

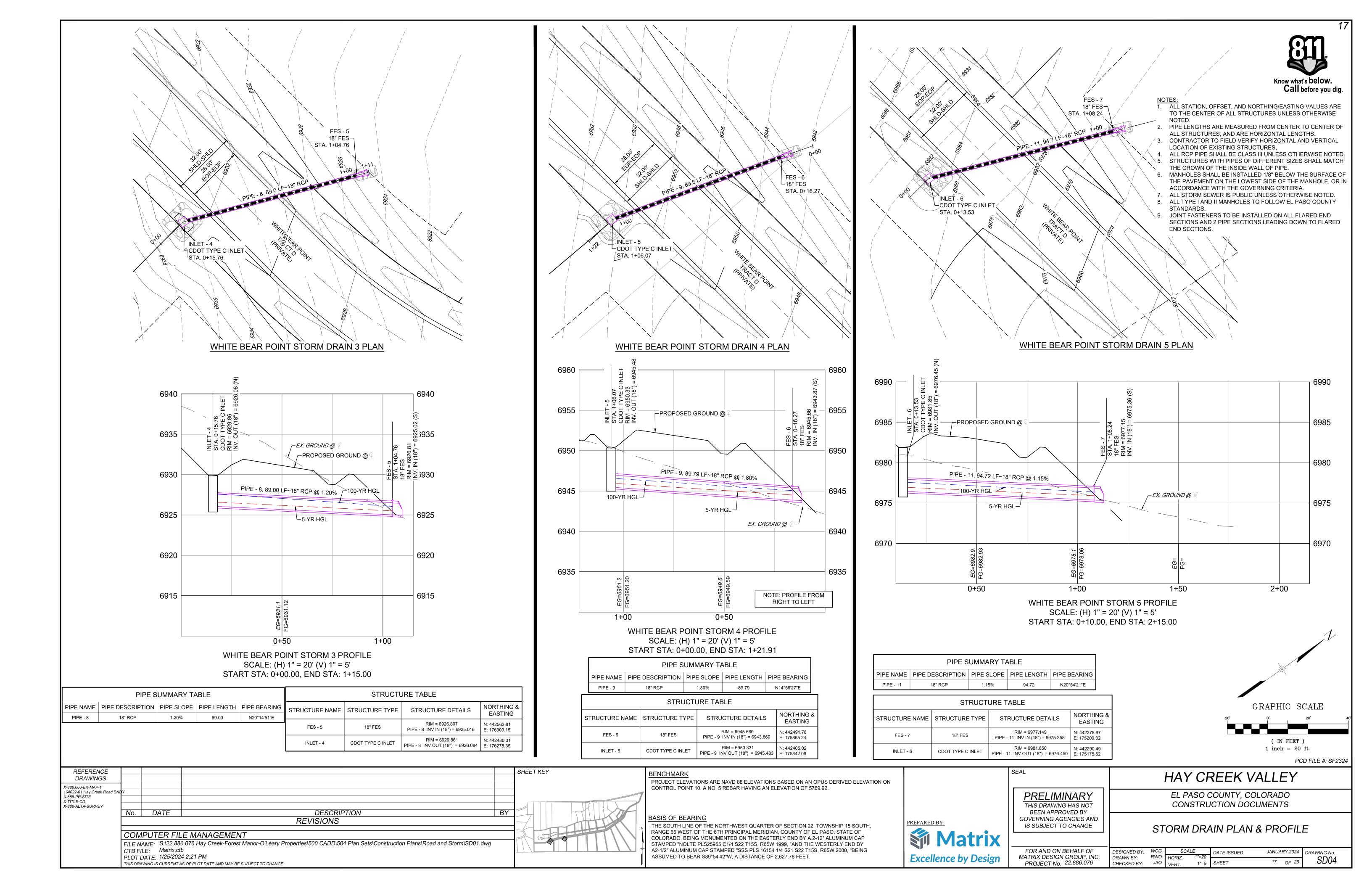
FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC. PROJECT No. 22.886.076

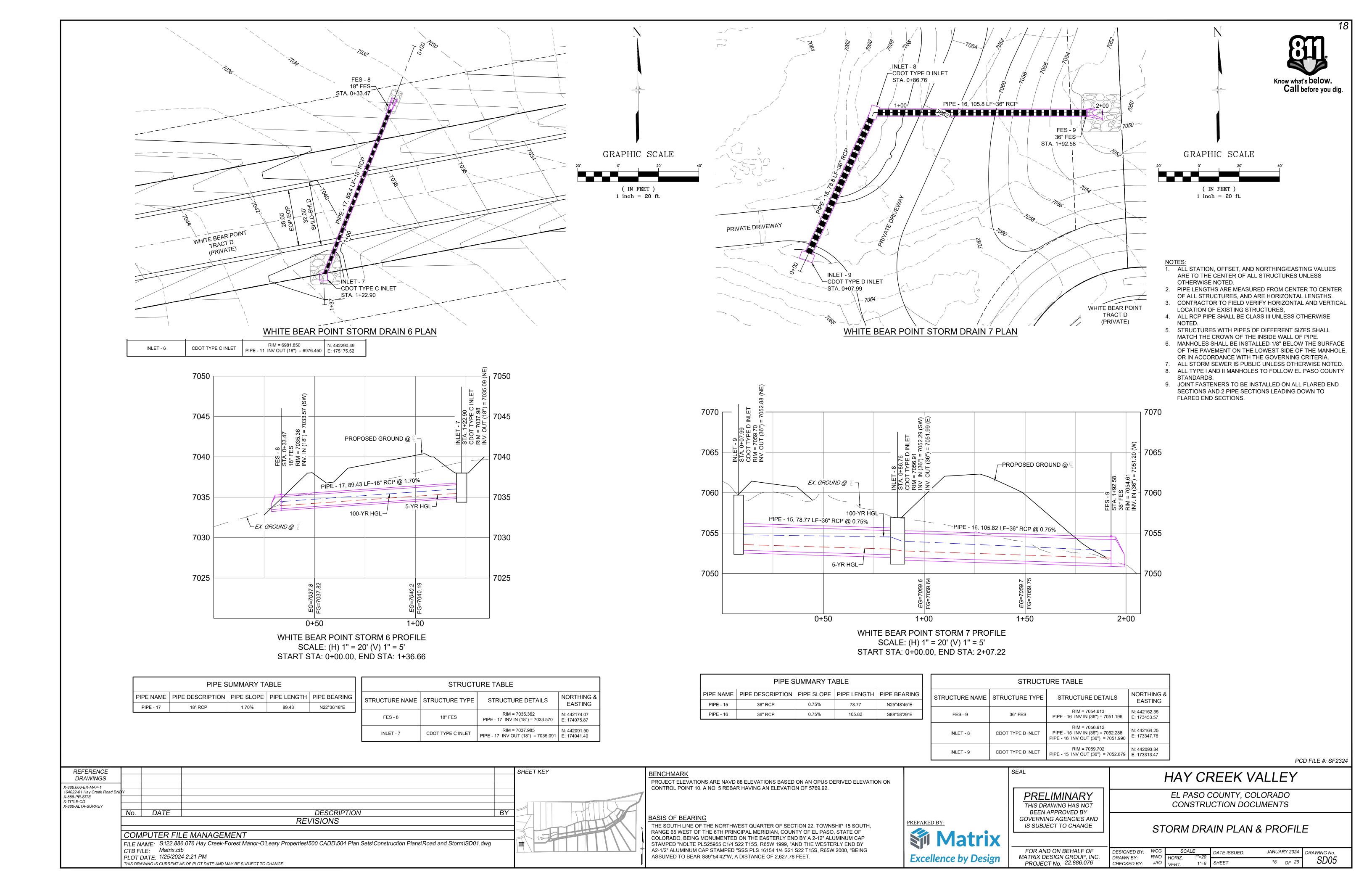
BEEN APPROVED BY

**GOVERNING AGENCIES AND** 

JANUARY 2024 DRAWING No. SD02 15 OF 26







- ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH EL PASO COUNTY SPECIFICATIONS, UNLESS NOTED OTHERWISE.
- 2. IT IS SUGGESTED THAT THE CONTRACTOR INITIATE A REQUEST TO MOUNTAIN VIEW ELECTRIC ASSOCIATION FOR ANY CONSTRUCTION RELATED TEMPORARY ELECTRICAL POWER SOURCES AS SOON AS POSSIBLE. IN SOME INSTANCES UP TO 30 DAYS MAY BE REQUIRED TO PROVIDE THE SOURCE.
- THE CONTRACTOR IS RESPONSIBLE FOR THE RE-ESTABLISHMENT OF ALL SURVEY MONUMENTS DISTURBED WITHIN THE PROJECT LIMITS.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING HIS OWN ESTIMATE OF EARTHWORK QUANTITIES.
- EXISTING DRAINAGE STRUCTURES TO BE INSPECTED AND REPAIRED AS NEEDED, AND EXISTING PIPES TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.
- IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURES AS NECESSARY TO RETURN THEM TO EXISTING CONDITIONS OR BETTER.
- CONTRACTOR SHALL ADJUST AND/OR REMOVE AND REPLACE EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
- CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.

#### **GENERAL GRADING NOTES:**

- THE SITE SHALL BE STRIPPED A MINIMUM OF 0.5' BELOW EXISTING GRADE AND STOCKPILED IN CONFORMANCE WITH THE SWMP MANAGEMENT DIRECTION.
- 2. MAXIMUM CUT/FILL SLOPES SHALL NOT EXCEED 3:1, UNLESS OTHERWISE NOTED. ALL SLOPES MUST BE PROTECTED FROM EROSION.
- IF DURING THE OVERLOT GRADING PROCESS, CONDITIONS ARE ENCOUNTERED WHICH COULD INDICATE AN UNIDENTIFIED SITUATION IS PRESENT, THE SOILS ENGINEER SHALL BE CONTACTED FOR RECOMMENDATIONS.
- THE CONTRACTOR SHALL PROTECT ALL WORK AREAS AND FACILITIES FROM FLOODING AT ALL TIMES. AREAS AND FACILITIES SUBJECTED TO FLOODING, REGARDLESS OF THE SOURCE OF WATER, SHALL BE PROMPTLY DEWATERED AND RESTORED.
- THE CONTRACTOR IS RESPONSIBLE FOR PREVENTING AND CONTROLLING EROSION DURING CONSTRUCTION ACTIVITIES AT ALL TIMES DURING GRADING AND CONSTRUCTION.
- SPOT ELEVATIONS SHALL TAKE PRECEDENCE OVER CONTOURS AND SLOPES SHOWN. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF THE SPOT ELEVATIONS THAT DO NOT APPEAR TO BE CONSISTENT WITH THE CONTOURS AND SLOPES.
- BENCHMARK VERIFICATION: CONTRACTOR SHALL USE BENCHMARKS AND DATUMS SHOWN HEREON TO SET PROJECT BENCHMARK(S), BY RUNNING A LEVEL LOOP BETWEEN AT LEAST TWO BENCHMARK, AND SHALL PROVIDE SURVEY NOTES OF SUCH TO PROJECT ENGINEER PRIOR TO COMMENCING CONSTRUCTION.
- SPOT ELEVATIONS REPRESENT FLOW LINE OR FINISH GRADE UNLESS OTHERWISE NOTED.
- 9. EXISTING GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT INTERVALS.

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- 10. PROPOSED GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT INTERVALS.
- 11. LOCATION OF SOILS STOCKPILES, DESIGNATED FOR TOPSOIL AND SUBSOIL STORAGE AREAS, WILL BE DETERMINED IN THE FIELD AT THE START OF CONSTRUCTION ACTIVITY AND INDICATED ON THE PLAN BY THE CONTRACTOR WHEN REQUIRED.
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONSTRUCT THE POND IN A MANNER WHICH COMPLIES WITH THE GEOTECHNICAL RECOMMENDATIONS FOR THE SITE AND/OR DETENTION FACILITIES

#### PROJECT DATA

#### HAY CREEK VALLEY

REPORT CONTAINING PCM DESIGN CALCULATIONS: HAY CREEK VALLEY FINAL DRAINAGE REPORT (PENDING APPROVAL)

TAX SCHEDULE NUMBERS 7100000269. PARCEL NUMBERS:

7100000268, 7100000267, 7100000270, 7133000001, 7133007014

HAY CREEK VALLEY GRADING & EROSION GEC/STORMWATER QC PLAN: CONTROL PLANS

FLOODPLAIN: THERE ARE PORTIONS OF THE SITE THAT ARE LOCATED WITHIN A REGULATORY FLOODPLAIN ZONE (FIRM 08041C0267G DECEMBER 7, 2018)

FUNCTIONAL MAINTENANCE OF PCM: HAY CREEK VALLEY HOMEOWNER'S ASSOCIATION

AESTHETIC MAINTENANCE OF PCM: HAY CREEK VALLEY HOMEOWNER'S ASSOCIATION

#### **DETENTION POND**

**WQCV WATER SURFACE ELEVATION:** 6867.87 **EURV WATER SURFACE ELEVATION:** 6868.31 100-YR WATER SURFACE ELEVATION: 6869.95

### OPINION OF PROBABLE PCM IMPROVEMENT COSTS

#### **DETENTION POND**

		TOTAL	\$2	250,250.00
7.	10% CONTINGENCY			22,750.00
6.	STILLING BASIN		\$	30,000.00
5.	EMERGENCY SPILLWAY		\$	5,000.00
4.	TRICKLE CHANNEL		\$	77,500.00
3.	OUTLET STRUCTURE		\$	40,000.00
2.	FOREBAY		\$	40,000.00
1.	DETENTION POND GRADING		\$	35,000.00

MATRIX DESIGN GROUP, INC. CANNOT AND DOES NOT GUARANTEE THAT THE CONSTRUCTION COSTS WILL NOT VARY FROM THESE OPINIONS OF PROBABLE COSTS. THESE OPINIONS REPRESENT OUR BEST JUDGEMENT AS A DESIGN PROFESSIONAL, FAMILIAR WITH THE CONSTRUCTION INDUSTRY AND THIS DEVELOPMENT.

### NRCS SOIL SURVEY FOR EL PASO COUNTY

SOIL ID NO	). SOIL TYPE	CLASSIFICATION
38	JARRE-TECOLOTE COMPLEX (8%-65% SLOPES)	В
71	PRING COARSE SANDY LOAM (3%-8% SLOPES)	В
93	TOMAH-CROWFOOT COMPLEX (8%-15% SLOPES)	В

### **ABBREVIATIONS**

APPROX	APPROXIMATE or APPROXIMATELY
B/C	BACK OF CURB
BTM	BOTTOM
CDOT	COLORADO DEPARTMENT OF
	TRANSPORTATION
CFS	CUBIC FEET PER SECOND
Ç or CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
	CONCRETE
CONC	
CONST	CONSTRUCTION
CONT	CONTINUOUS
EA	EACH
ESMT	EASEMENT
ELEV or EL	ELEVATION
EX or EXIST	EXISTING
FES	FLARED END SECTION
ি or FL	FLOWLINE
FT	FOOT/FEET
	HYDRAULIC GRADE LINE
HGL	HIGH POINT
HP	
HORIZ	HORIZONTAL
INV	INVERT
K	VERTICAL CURVE FACTOR
LBS	POUNDS
LF	LINEAR FEET
LP	LOW POINT
LT	LEFT
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
	MECHANICAL JOINT
MJ	NOT TO SCALE
NTS	
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVE
PCR	POINT OF CURB RETURN
PRC	POINT OF REVERSE CURVE
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVE or
	POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
PVMT	PAVEMENT
PVT	POINT OF VERTICAL TANGENT
	RADIUS
R or RAD	
RCP	REINFORCED CONCRETE PIPE
RED	REDUCER
ROW	RIGHT-OF-WAY
RT	RIGHT
	SCHEDULE
SCH	
SCH SD	STORM SEWER
SD	
	STORM SEWER STREET STATION

SANITARY SEWER

LEGEND

EXISTING STORM DRAIN

PROPERTY LINE PROPOSED STORM DRAIN

Know what's below.

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PROPOSED RIGHT OF WAY

PCD FILE #: SF2324

REFERENCE DRAWINGS					SHEET KEY
-886.066-EX-MAP-1 64022-01 Hay Creek Road BNE -886-PR-SITE -TITLE-CD -Title_EXHIBIT_D_(H)	No.	DATE	DESCRIPTION REVISIONS	BY	
	FILE NA	ME: S:\22.886			

PROJECT ELEVATIONS ARE NAVD 88 ELEVATIONS BASED ON AN OPUS DERIVED ELEVATION ON CONTROL POINT 10, A NO. 5 REBAR HAVING AN ELEVATION OF 5769.92.

**HYDROLOGIC** 

## BASIS OF BEARING

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MATRIX DESIGN GROUP, INC.

PROJECT No. 22.886.076

SEAL

EL PASO COUNTY, COLORADO CONSTRUCTION DOCUMENTS

**DETENTION POND GENERAL NOTES** 

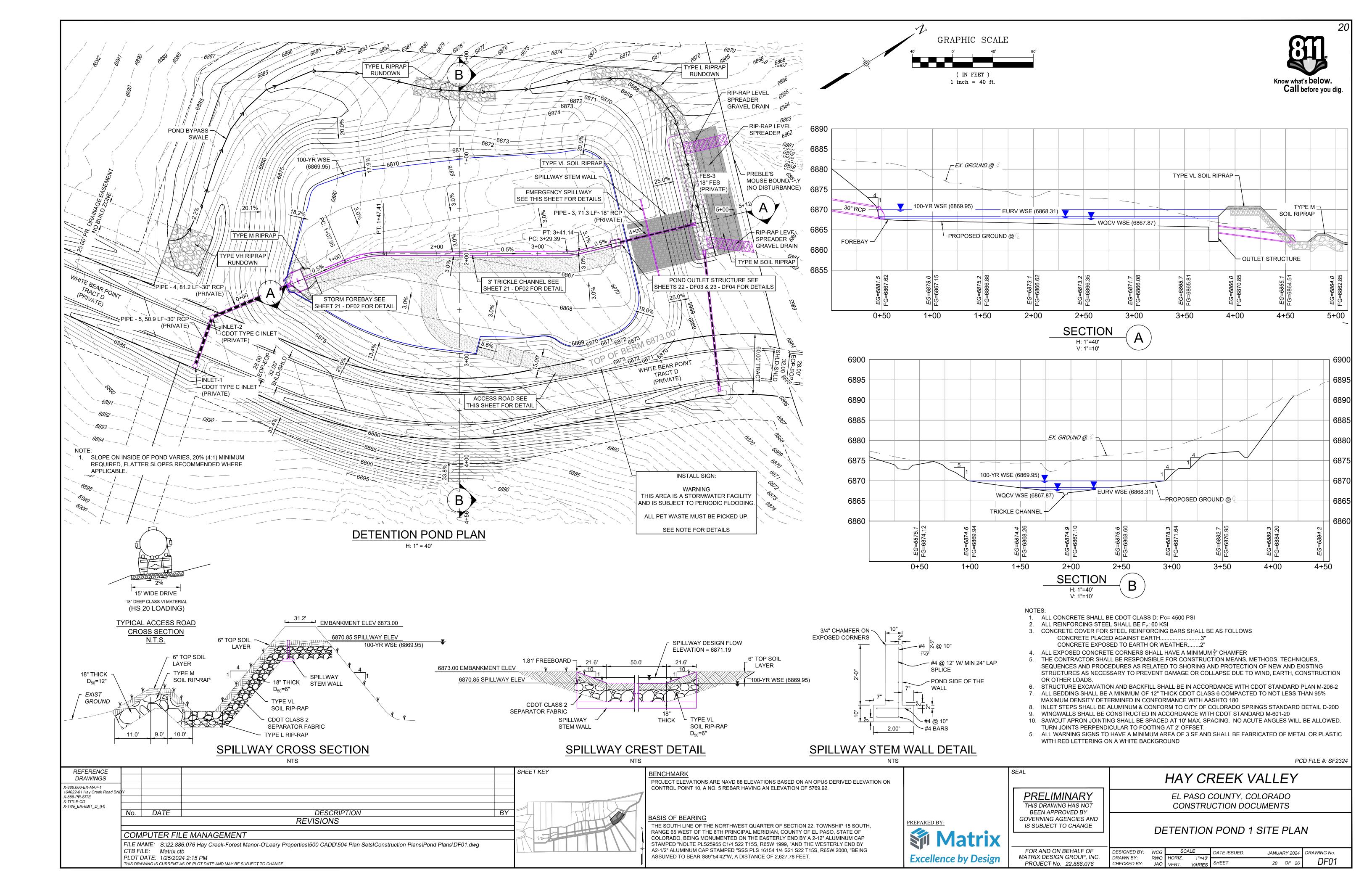
HAY CREEK VALLEY

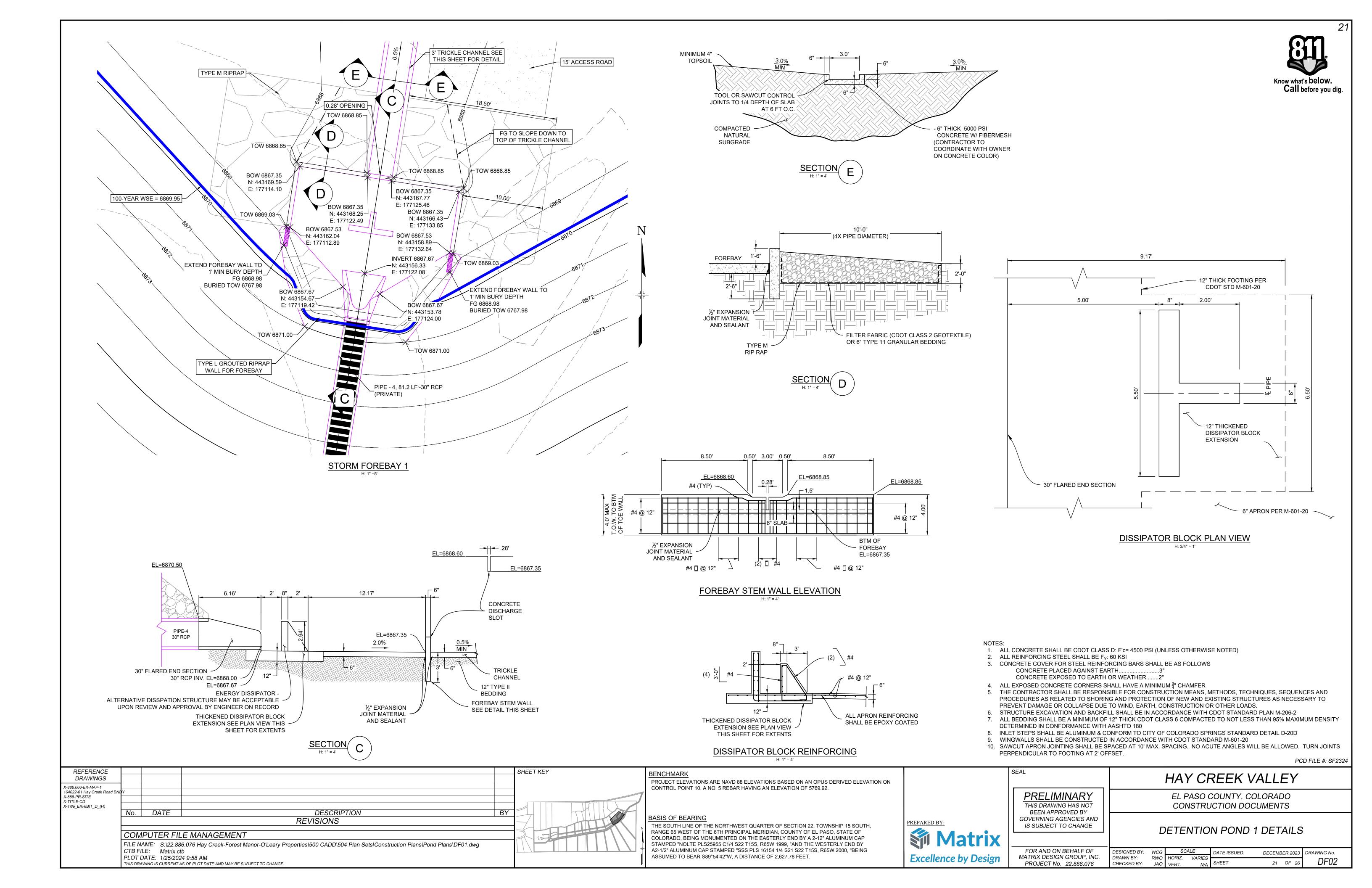
FOR AND ON BEHALF OF DESIGNED BY: WCG SCALE

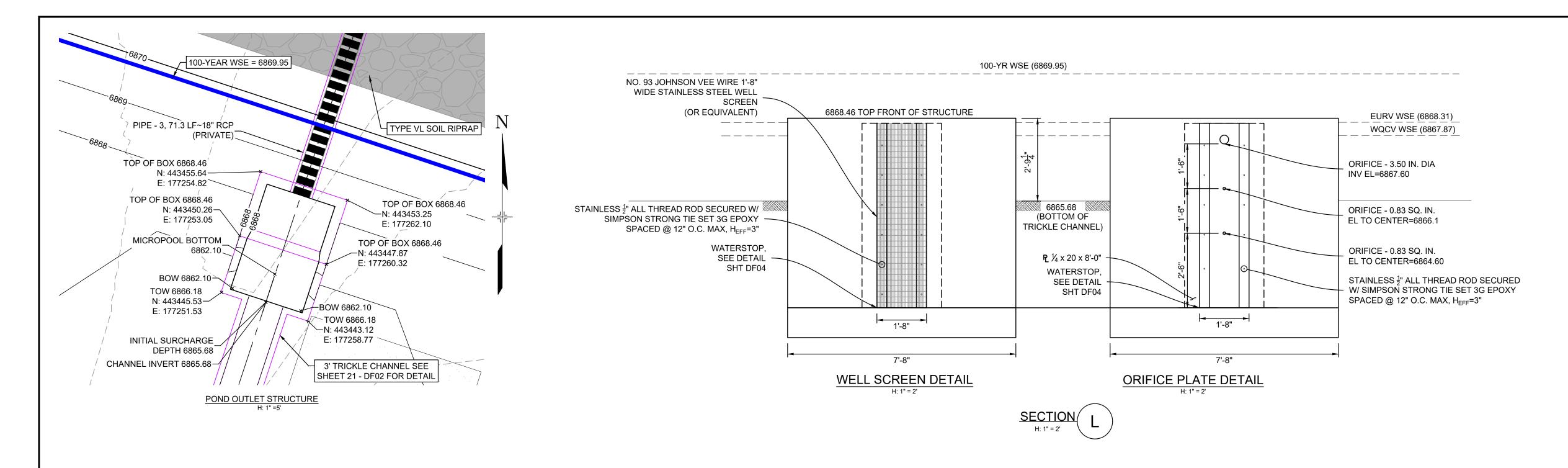
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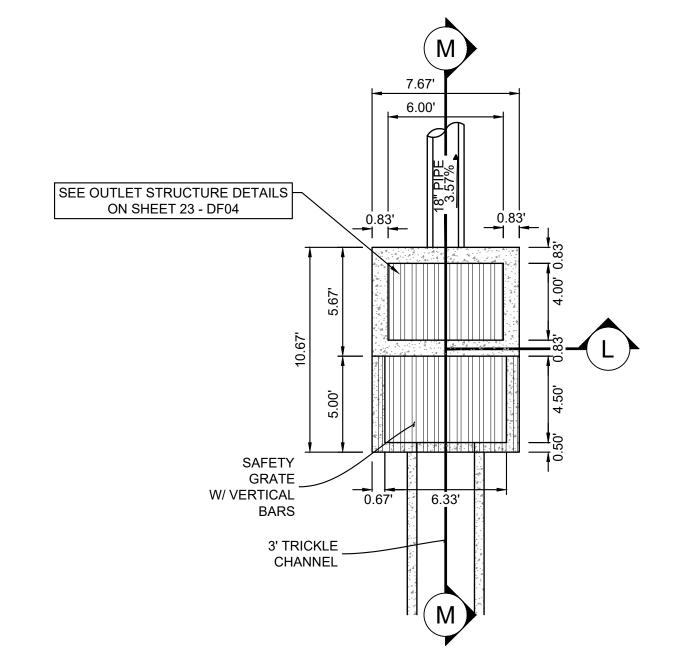
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DATE ISSUED: DECEMBER 2023 DRAWING No. DFGN01 19 OF 26



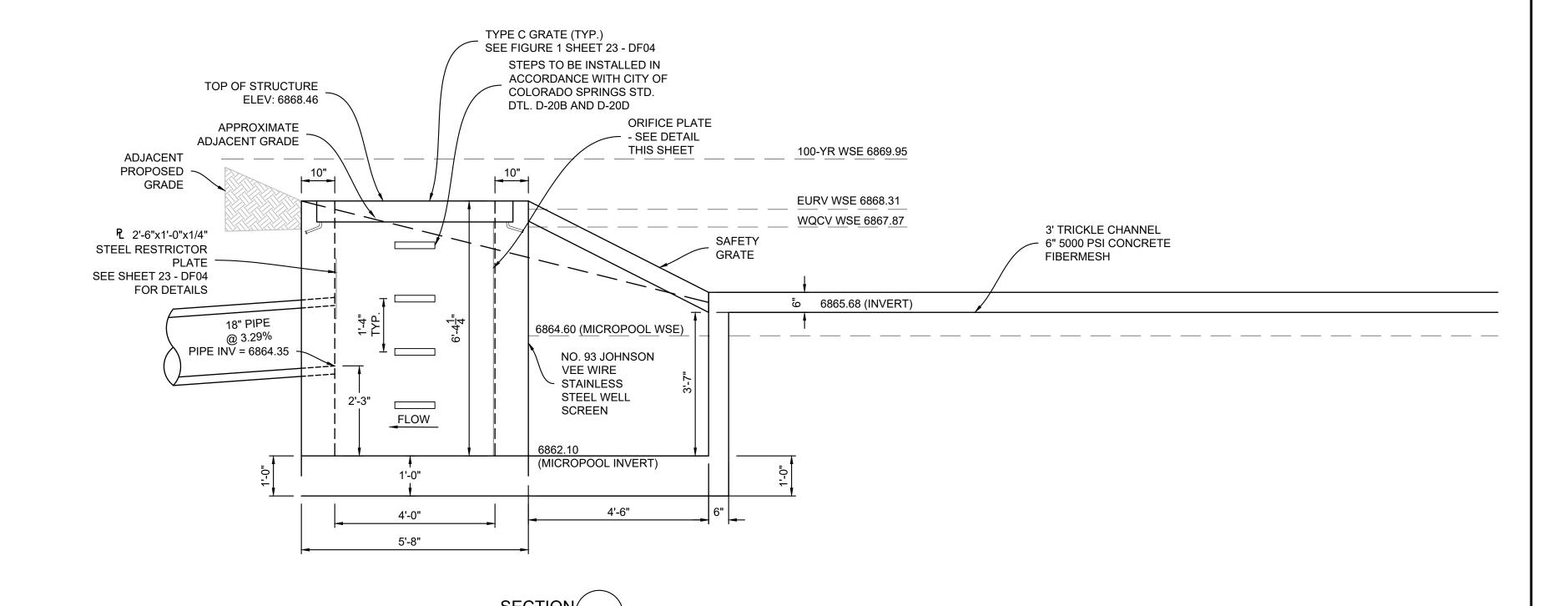






## MICROPOOL DETAILS

- 1. ALL CONCRETE SHALL BE CDOT CLASS D: F'c= 4500 PSI
- 2. ALL REINFORCING STEEL SHALL BE F<sub>Y</sub>: 60 KSI 3. CONCRETE COVER FOR STEEL REINFORCING BARS SHALL BE AS FOLLOWS CONCRETE PLACED AGAINST EARTH...
- CONCRETE EXPOSED TO EARTH OR WEATHER......2" 4. ALL EXPOSED CONCRETE CORNERS SHALL HAVE A MINIMUM \(\frac{3}{4}\)" CHAMFER
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AS RELATED TO SHORING AND PROTECTION OF NEW AND EXISTING STRUCTURES AS NECESSARY TO PREVENT DAMAGE OR COLLAPSE DUE TO WIND, EARTH, CONSTRUCTION OR OTHER LOADS.
- 6. STRUCTURE EXCAVATION AND BACKFILL SHALL BE IN ACCORDANCE WITH CDOT STANDARD PLAN M-206-2
- 7. ALL BEDDING SHALL BE A MINIMUM OF 12" THICK CDOT CLASS 6 COMPACTED TO NOT LESS THAN 95% MAXIMUM DENSITY
- DETERMINED IN CONFORMANCE WITH AASHTO 180
- 8. INLET STEPS SHALL BE ALUMINUM & CONFORM TO CITY OF COLORADO SPRINGS STANDARD DETAIL D-20D
- 9. WINGWALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CDOT STANDARD M-601-20
- 10. SAWCUT APRON JOINTING SHALL BE SPACED AT 10' MAX. SPACING. NO ACUTE ANGLES WILL BE ALLOWED. TURN JOINTS PERPENDICULAR TO FOOTING AT 2' OFFSET.



CONTROL POINT 10, A NO. 5 REBAR HAVING AN ELEVATION OF 5769.92. BASIS OF BEARING

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SEAL	HAY CREEK VALLE		
PRELIMINARY	EL PASO COUNTY, COLORADO		

DESIGNED BY: WCG

DRAWN BY:

CHECKED BY:

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FOR AND ON BEHALF OF

MATRIX DESIGN GROUP, INC.

PROJECT No. 22.886.076

CONSTRUCTION DOCUMENTS

PCD FILE #: SF2324

DECEMBER 2023 DRAWING No.

22 OF 26

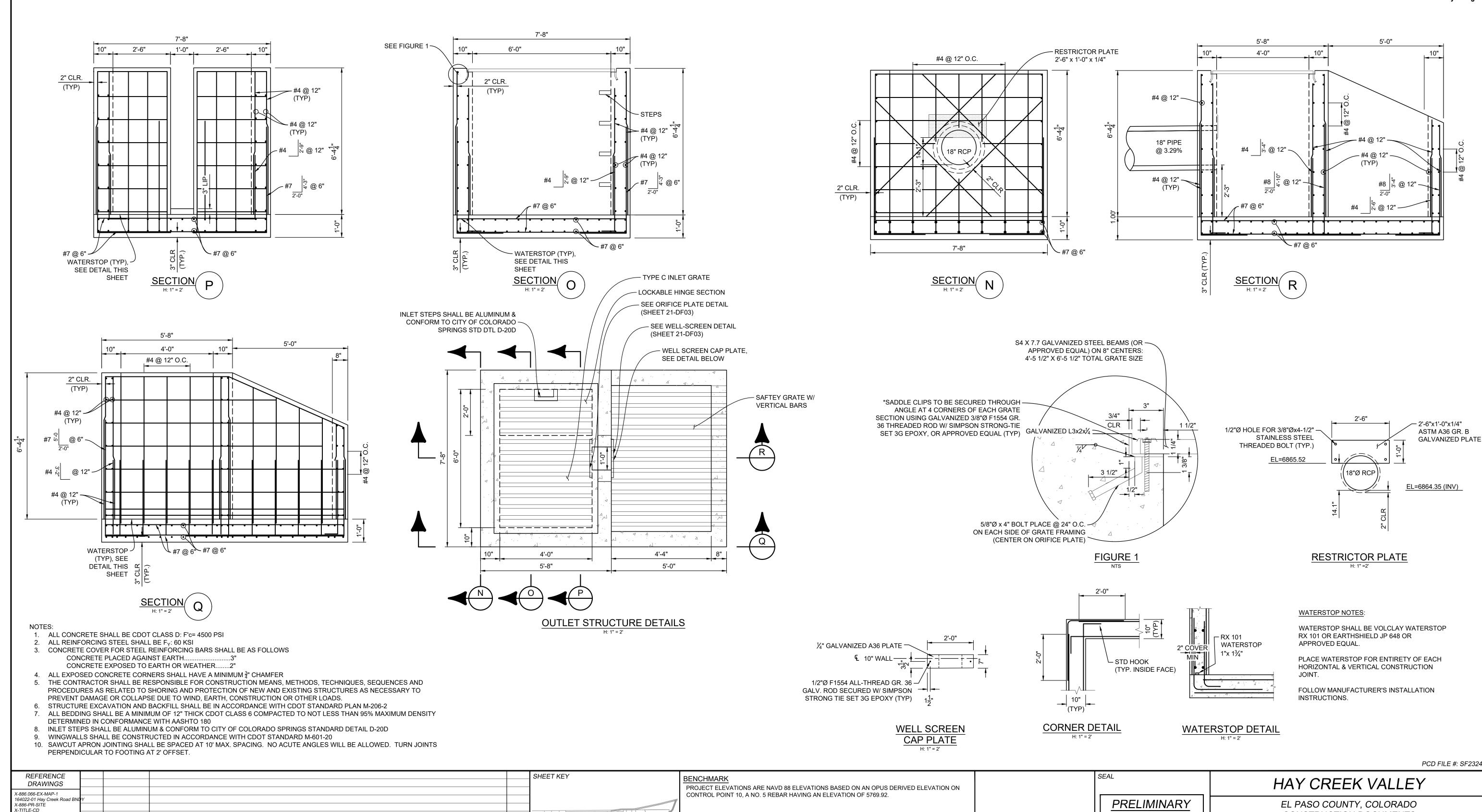
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**DETENTION POND 1 DETAILS** 

RWO HORIZ. VARIES

SCALE

REFERENCE SHEET KEY DRAWINGS X-886.066-EX-MAP-1 164022-01 Hay Creek Road B X-886-PR-SITE X-TITLE-CD X-Title\_EXHIBIT\_D\_(H) DESCRIPTION No. DATE REVISIONS COMPUTER FILE MANAGEMENT FILE NAME: S:\22.886.076 Hay Creek-Forest Manor-O'Leary Properties\500 CADD\504 Plan Sets\Construction Plans\Pond Plans\DF01.dwg CTB FILE: Matrix.ctb PLOT DATE: 1/25/2024 9:58 AM THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.



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		FILE NA	AME: S:\22.88 LE: Matrix.c	6.076 Hay Creek-Forest Manor-O'Leary Properties\500 CADD\504 Plan Sets\Construction Plans\Pond Plans\DF01.dwg			COLORADO, BEING N STAMPED "NOLTE PL A2-1/2" ALUMINUM CA ASSUMED TO BEAR
		PLOIL	)ATE: 1/25/202	24 9.30 AM			ACCOMED TO BEAUTO

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CONSTRUCTION DOCUMENTS

**DETENTION POND 1 DETAILS** 

DESIGNED BY: WCG SCALE DATE ISSUED: DECEMBER 2023 DRAWING No. MATRIX DESIGN GROUP, INC. DRAWN BY: 23 OF 26 CHECKED BY:

