

UDON SOUTH CONSTRUCTION DOCUMENTS 12265 HIGHWAY 94

THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 18, TOWNSHIP 14 SOUTH, RANGE 64 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO, EXCEPT ANY PORTION THEREOF WITHIN THE RIGHT OF WAY FOR HIGHWAY 94

GENERAL NOTES

1. 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.
2. THE OWNER AGREES ON BEHALF OF HIM/HERSELF AND ANY DEVELOPER OR BUILDER SUCCESSORS AND ASSIGNEES THAT SUBDIVIDER AND/OR SAID SUCCESSORS AND ASSIGNS SHALL BE REQUIRED TO PAY TRAFFIC IMPACT FEES IN ACCORDANCE WITH THE EL PASO COUNTY ROAD IMPACT FEE PROGRAM RESOLUTION (RESOLUTION NO. 19-471), OR ANY AMENDMENTS THERETO, AT OR PRIOR TO THE TIME OF BUILDING PERMIT SUBMITTALS. THE FEE OBLIGATION, IF NOT PAID AT FINAL PLAT RECORDING, SHALL BE DOCUMENTED ON ALL SALES DOCUMENTS AND ON PLAT NOTES TO ENSURE THAT A TITLE SEARCH WOULD FIND THE FEE OBLIGATION BEFORE SALE OF THE PROPERTY.

SITE DATA

ZONING CLASSIFICATION: COMMERCIAL SERVICE (CS)
 CURRENT LAND USE: RESIDENTIAL RURAL / COMMERCIAL
 JURISDICTION: EL PASO COUNTY
 SITE ADDRESS: 12265 & 12345 HIGHWAY 94
 TAX SCHEDULE NO.: 440000237
 BUILDING SETBACKS: 25' FRONT SETBACK
 25' REAR SETBACK
 25' SIDE SETBACK
 MAXIMUM BUILDING HEIGHT: 45 FT
 MIN. AREA PER ZONING DISTRICT: 2 ACRES
 MIN. LOT SIZE: N/A
 MAX LOT COVERAGE: N/A
 EXISTING GROSS BUILDING AREA: ±9,002 SF
 OPEN SPACE: ±10.51 AC
 LANDSCAPING: ±12.03 AC
 IMPERMEABLE SURFACE: ±1.09 AC (EXISTING)
 ±11.08 AC (PROPOSED)

LAND AREA

TOTAL PROPERTY AREA: ±34.71 ACRES

GEOLOGICAL HAZARDS NOTE:

A "SOIL, GEOLOGY, AND GEOLOGIC HAZARD EVALUATION 12265 HIGHWAY 94 EL PASO COUNTY, COLORADO" WAS PREPARED BY ENTECH, DATED MAY 19, 2022. MAPPING HAS BEEN PERFORMED ON THIS SITE TO IDENTIFY AREAS WHERE VARIOUS GEOLOGIC CONDITIONS EXIST OF WHICH DEVELOPERS SHOULD BE COGNIZANT DURING THE PLANNING, DESIGN, AND CONSTRUCTION STAGES SHOULD NEW CONSTRUCTION BE PROPOSED. THE ENGINEERING GEOLOGIC HAZARDS IDENTIFIED ON THE THIS SITE INCLUDE:

- ARTIFICIAL FILL
- EXPANSIVE SOILS
- POTENTIALLY UNSTABLE SLOPES
- DRAINAGE AREAS/FLOODPLAINS
- POTENTIALLY SEASONAL SHALLOW GROUNDWATER AREA

THE EXISTING GEOLOGIC AND ENGINEERING GEOLOGIC CONDITIONS WILL IMPOSE SOME MINOR CONSTRAINTS ON DEVELOPMENT AND CONSTRUCTION. THESE AREAS WHICH CAN BE SATISFACTORILY MITIGATED THROUGH PROPER ENGINEERING DESIGN AND CONSTRUCTION PRACTICES, OR AVOIDANCE.

LEGAL DESCRIPTION

THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 18, TOWNSHIP 14 SOUTH, RANGE 64 WEST, OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO, EXCEPT ANY PORTION THEREOF WITHIN THE RIGHT OF WAY FOR HIGHWAY 94, AS DESCRIBED IN THAT GENERAL WARRANTY DEED, RECORDED AS RECEPTION NO. 219151478, ON DECEMBER 3, 2019, IN THE OFFICIAL PUBLIC RECORDS, EL PASO COUNTY, COLORADO.

CONTAINING 34.71 +/- ACRES

BENCHMARK:

NO. 6 REBAR WITH 3-1/4" ALUMINUM CAP, STAMPED "PE-LS 9853", 0.72' ABOVE GRADE, AS SHOWN. ELEVATION: 6227.66' (NAVD 88)

BASIS OF BEARINGS:

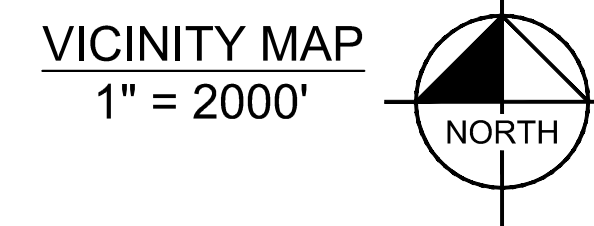
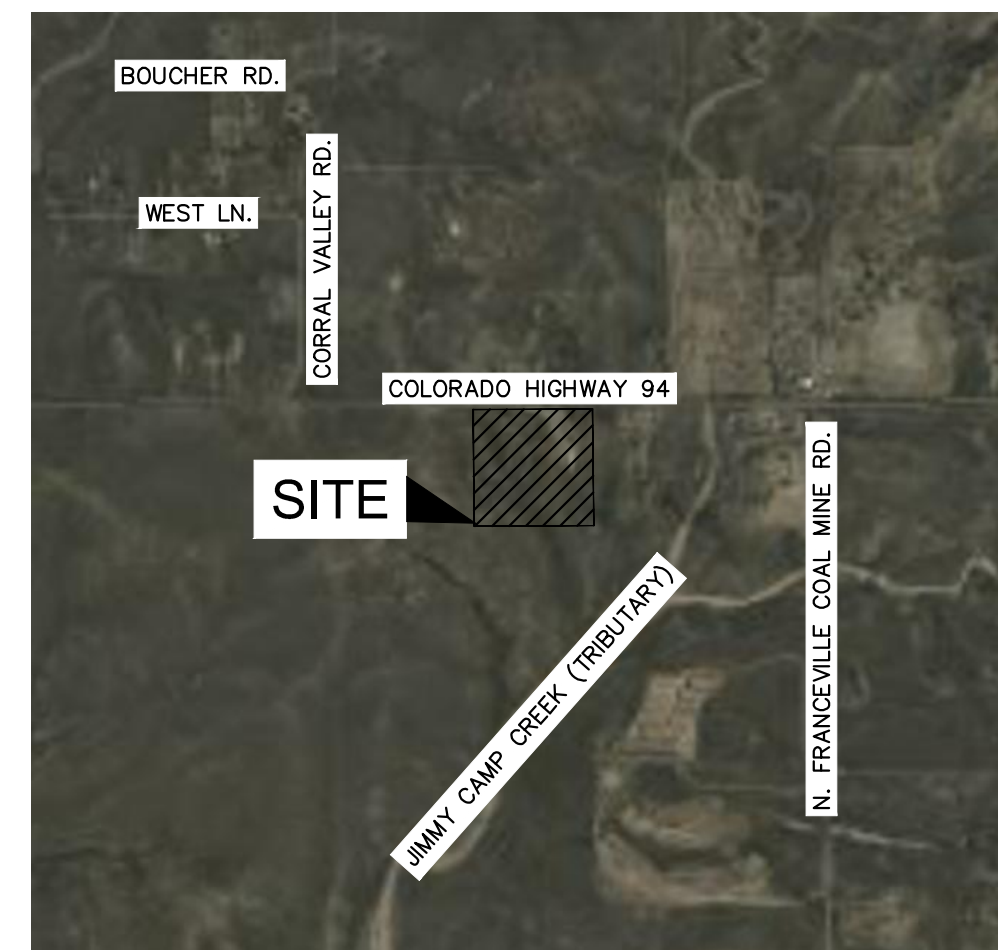
BEARINGS ARE BASED ON THE SOUTH LINE OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 18, TOWNSHIP 14 SOUTH, RANGE 64 WEST, OF THE 6TH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO, MONUMENTED AT NORTH 1/16 CENTER CORNER OF SAID SECTION 18, BY A NO. 6 REBAR WITH A 2 INCH ALUMINUM CAP, STAMPED "PLS 18465", FLUSH WITH GRADE, AND AT THE NORTHWEST 1/16 CORNER OF SAID SECTION 18, BY A NO. 6 REBAR WITH A 3-1/4 INCH ALUMINUM CAP, STAMPED "PE-LS 9853", 0.72 FEET ABOVE GRADE, AS SHOWN HEREON, AND MEASURED TO BEAR S89°48'31"W A DISTANCE OF 1246.37 FEET.

SOIL TYPE:

±100% OF THE SOIL ON SITE IS CLASSIFIED WITH THE USCS AS HYDROLOGIC SOIL GROUP D.

FEMA CLASSIFICATION:

THE PROPOSED PROJECT SITE IS LOCATED IN ZONE X AN AREA OF MINIMAL FLOOD HAZARD. FEDERAL EMERGENCY MANAGEMENT AGENCY, FLOOD INSURANCE RATE MAP, MAP NUMBERS 08041C0780G EFFECTIVE DATE DECEMBER 7, 2018.



CONTACTS:

OWNER:
 UDON HOLDINGS, LLC.
 12265 HIGHWAY 94
 COLORADO SPRINGS, CO 80929
 TEL: (719) 321-7705
 EMAIL: RILLAX2@GMAIL.COM
 CONTACT: BEN WILBOR

SURVEYOR:
 CLARK LAND SURVEYING, INC.
 177 S. TIFFANY DR. UNIT 1
 PUEBLO WEST, CO 81007
 TEL: (719) 582-1270
 CONTACT: STUART MAPES, JR, P.L.S.

ENGINEER:
 KIMLEY-HORN AND ASSOCIATES, INC.
 2 NEVADA NORTH AVE., SUITE 900
 COLORADO SPRINGS, CO 80903
 TEL: (719) 453-0180
 CONTACT: KEVIN KOFFORD, P.E.


EL PASO COUNTY:
 EL PASO COUNTY
 DEVELOPMENT SERVICES DEPARTMENT
 2880 INTERNATIONAL CIRCLE, SUITE 110
 COLORADO SPRINGS, CO 80910
 PHONE: (719) 520-3600

PLANNER:
 KIMLEY-HORN AND ASSOCIATES, INC.
 2 NEVADA NORTH AVE., SUITE 900
 COLORADO SPRINGS, CO 80903
 TEL: (719) 453-0180
 CONTACT: JIM HOUK

| CONSTRUCTION DOCUMENTS | |
|------------------------|--------------------------|
| Sheet Number | Sheet Title |
| 1 | COVER SHEET |
| 2 | GENERAL NOTES |
| 3 | OVERALL GRADING PLAN |
| 4 | ADA GRADING PLAN |
| 5 | ADA GRADING DETAILS |
| 6 | TYPICAL SECTION |
| 7 | DRIVEWAY DETAILS |
| 8 | POND A PLAN |
| 9 | POND A DETAILS |
| 10 | POND A DETAILS |
| 11 | ROCK CHUTE DETAILS |
| 12 | ROCK CHUTE DETAILS |
| 13 | CULVERT PLAN AND PROFILE |
| 14 | CULVERT PLAN AND PROFILE |

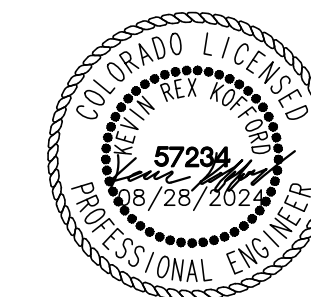
OWNER'S SIGNATURE BLOCK

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

DESIGNED BY:  DATE: 8/29/2024
 BEN WILBOR
 UDON HOLDINGS, LLC
 5755 MARK DABLING BLVD. STE. 245
 COLORADO SPRINGS, CO 80919

ENGINEER'S SIGNATURE BLOCK

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 THE 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 THE DETAILED PLANS AND SPECIFICATIONS



KEVIN R. KOFFORD, P.E. - KIMLEY-HORN AND ASSOCIATES, INC. DATE
 COLORADO REGISTERED PROFESSIONAL ENGINEER NO. 57234

EL PASO COUNTY REVIEW STATEMENT

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 DIRECTIONS DISCRETION.

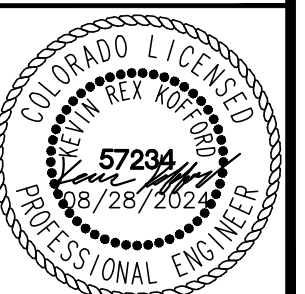
JOSHUA PALMER, P.E.
 COUNTY ENGINEER / ECM ADMINISTRATOR DATE

| NO. | REVISION | BY | DATE | APPR |
|-----|----------|----|------|------|
| | | | | |

Kimley»Horn
 2024 KIMLEY-HORN AND ASSOCIATES, INC.
 2 North Nevada Avenue, Suite 900
 Colorado Springs, Colorado 80903 (719) 453-0180

DESIGNED BY: KRK
 DRAWN BY: DPM
 CHECKED BY: KRK
 DATE: 04/16/2024

UDON SOUTH
 CONSTRUCTION DOCUMENTS
 EL PASO COUNTY, COLORADO
 COVER SHEET

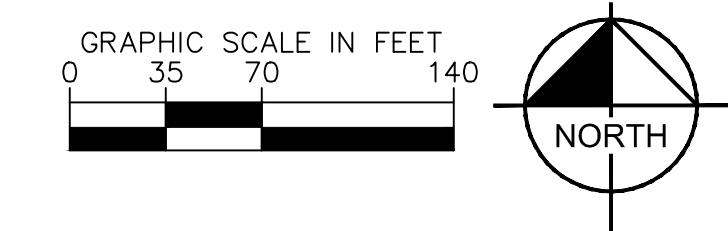
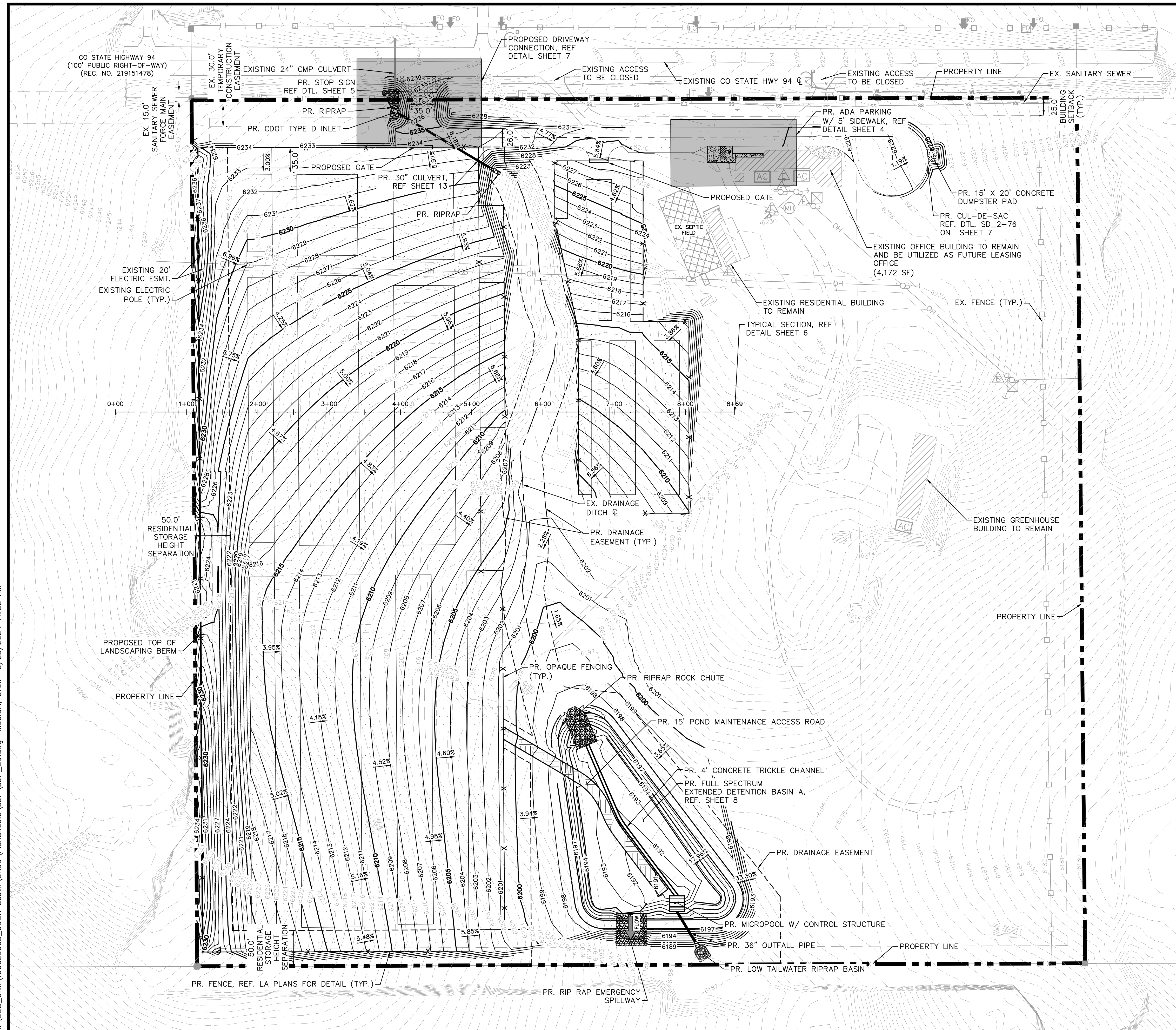


PROJECT NO.
 196020003

SHEET
 1

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LEGEND

| | |
|---------------|---------------------------------------|
| — W — | EXISTING WATER LINE |
| — G — | EXISTING GAS LINE |
| — OH — | EXISTING OVERHEAD ELECTRIC |
| — UT — | EXISTING UNDERGROUND ELECTRIC UTILITY |
| — SS — | EXISTING SANITARY SEWER |
| — [] — | EXISTING FENCE |
| — X — X — | PROPOSED FENCE |
| — [] — [] — | PROPOSED STORM PIPE |
| [] | PROPOSED GRAVEL |
| [] | PROPOSED RIPRAP |
| [] | PROPOSED CONCRETE |
| [] | PROPOSED POND MAINTENANCE ROAD |
| XXXX | EXISTING MAJOR CONTOUR |
| XXXX | EXISTING MINOR CONTOUR |
| XXXX | PROPOSED MAJOR CONTOUR |
| XXXX | PROPOSED MINOR CONTOUR |
| FFE | FINISH FLOOR ELEVATION |
| EXP | EXPOSURE |
| FG | FINISHED GRADE |
| ME | MATCH EXISTING |
| SW | SIDEWALK |
| TOP | TOP OF POND |
| BOP | BOTTOM OF POND |

CUT/FILL ORIGINAL:

| | |
|------|--------------|
| FILL | =±35827 |
| CUT | =±34831 |
| NET | =±995 (FILL) |

*NET FILL UTILIZES A FILL FACTOR OF 1.2

| NO. | REVISION | DATE | BY | APPR |
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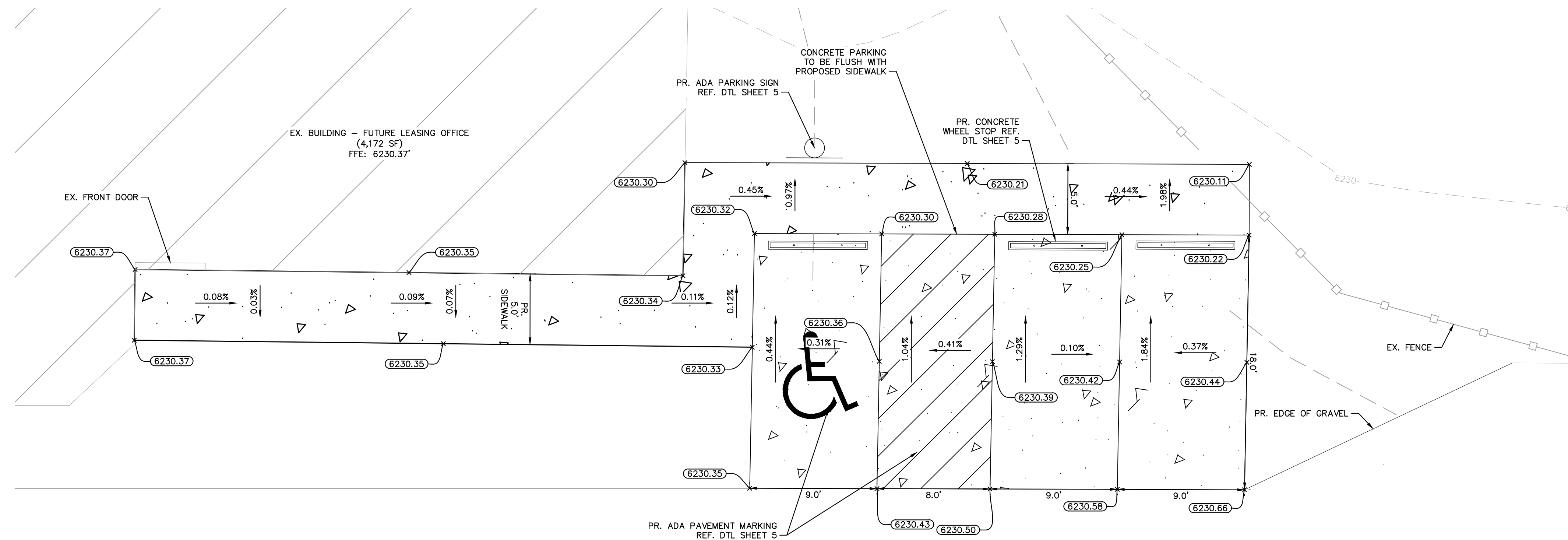
**UDON SOUTH
 CONSTRUCTION DOCUMENTS
 EL PASO COUNTY, COLORADO
 OVERALL GRADING PLAN**



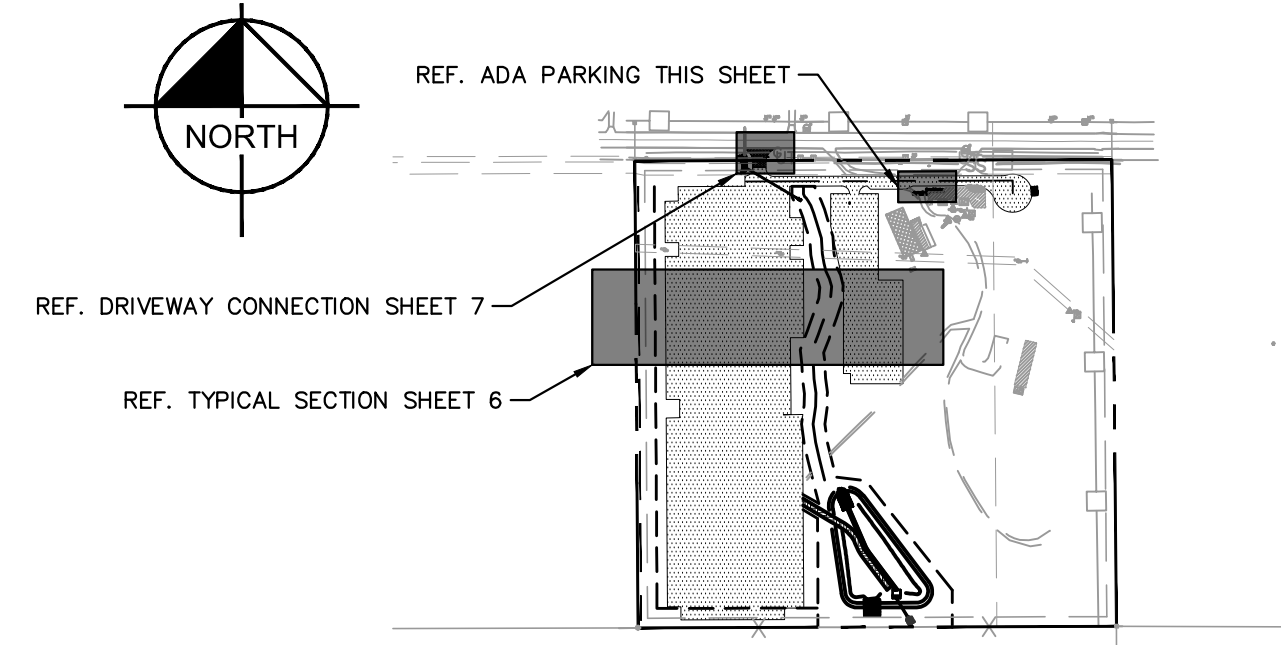
PROJECT NO.
196020003

SHEET
3

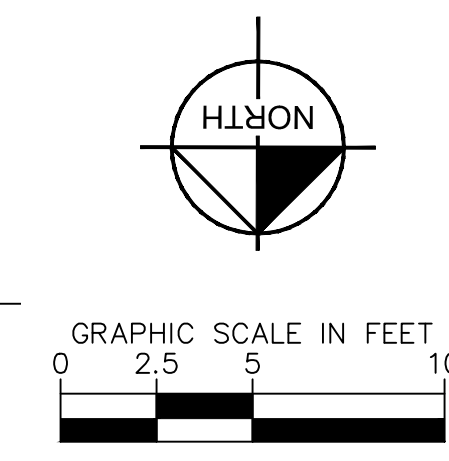
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ADA PARKING GRADING INSET



KEY MAP
1" = 500'

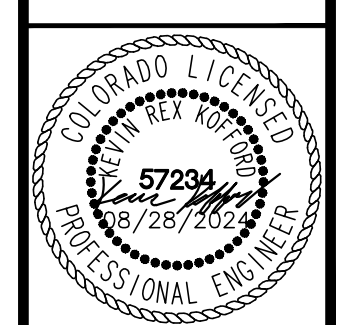


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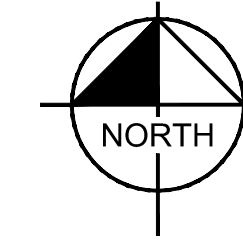
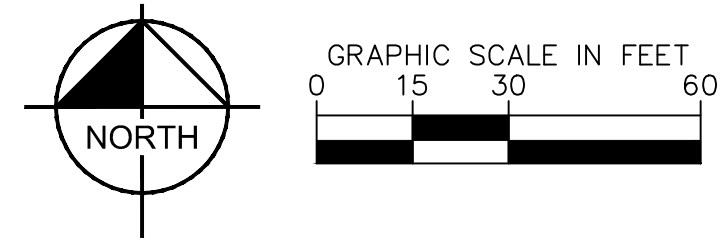
DESIGNED BY: KRK
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 CHECKED BY: KRK
 DATE: 04/16/2024

UDON SOUTH
 CONSTRUCTION DOCUMENTS
 EL PASO COUNTY, COLORADO
 ADA GRADING PLAN

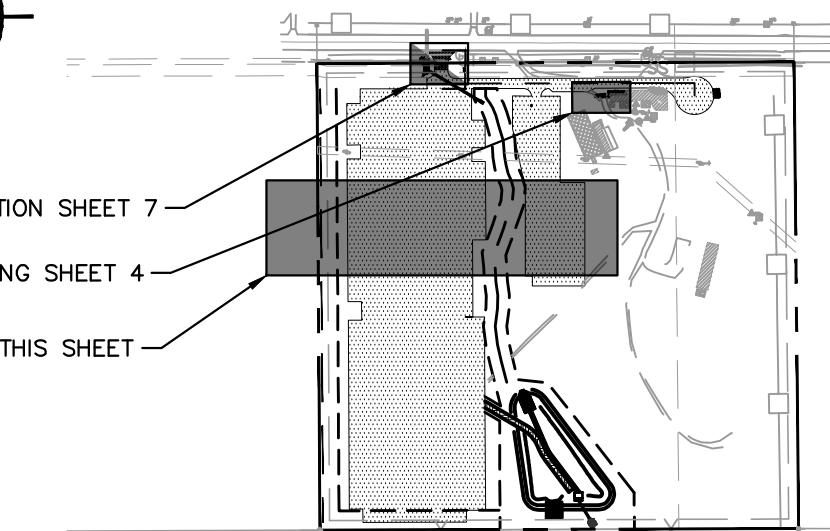


PROJECT NO.
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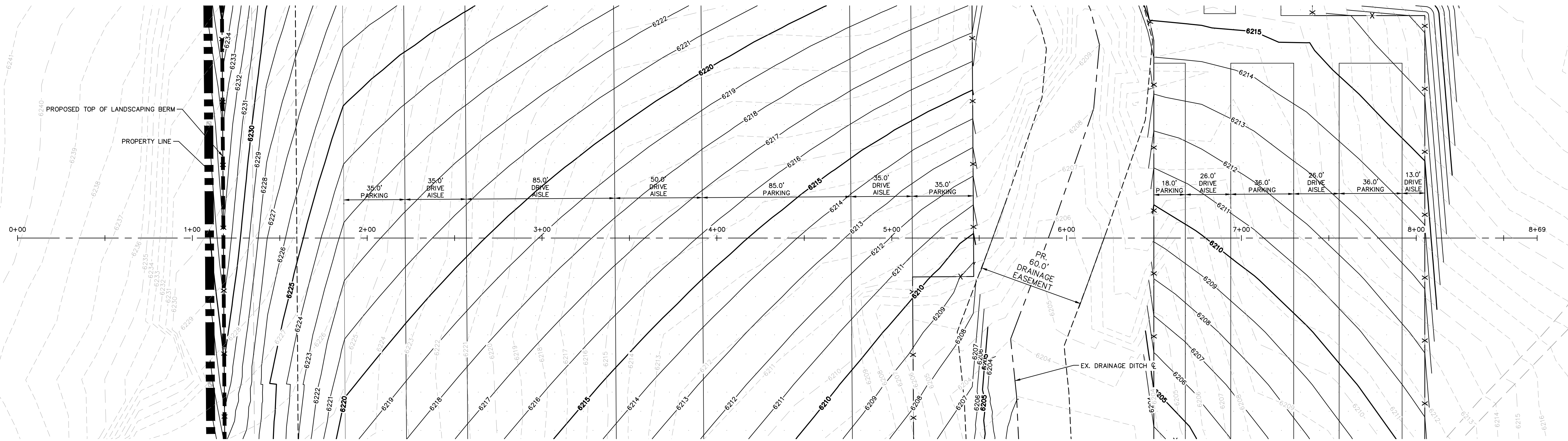
SHEET
4



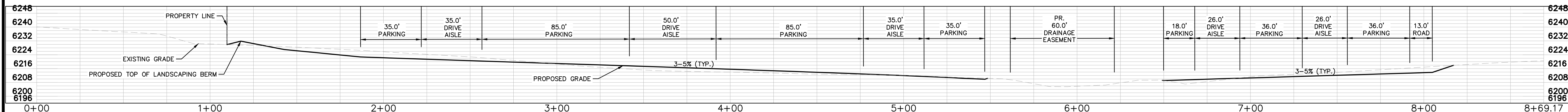
REF. DRIVEWAY CONNECTION SHEET 7
 REF. ADA PARKING SHEET 4
 REF. TYPICAL SECTION THIS SHEET



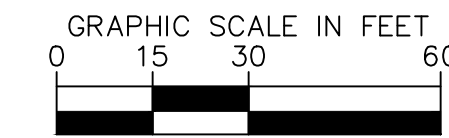
KEY MAP
 1" = 500'



TYPICAL SECTION - PLAN



TYPICAL SECTION - PROFILE



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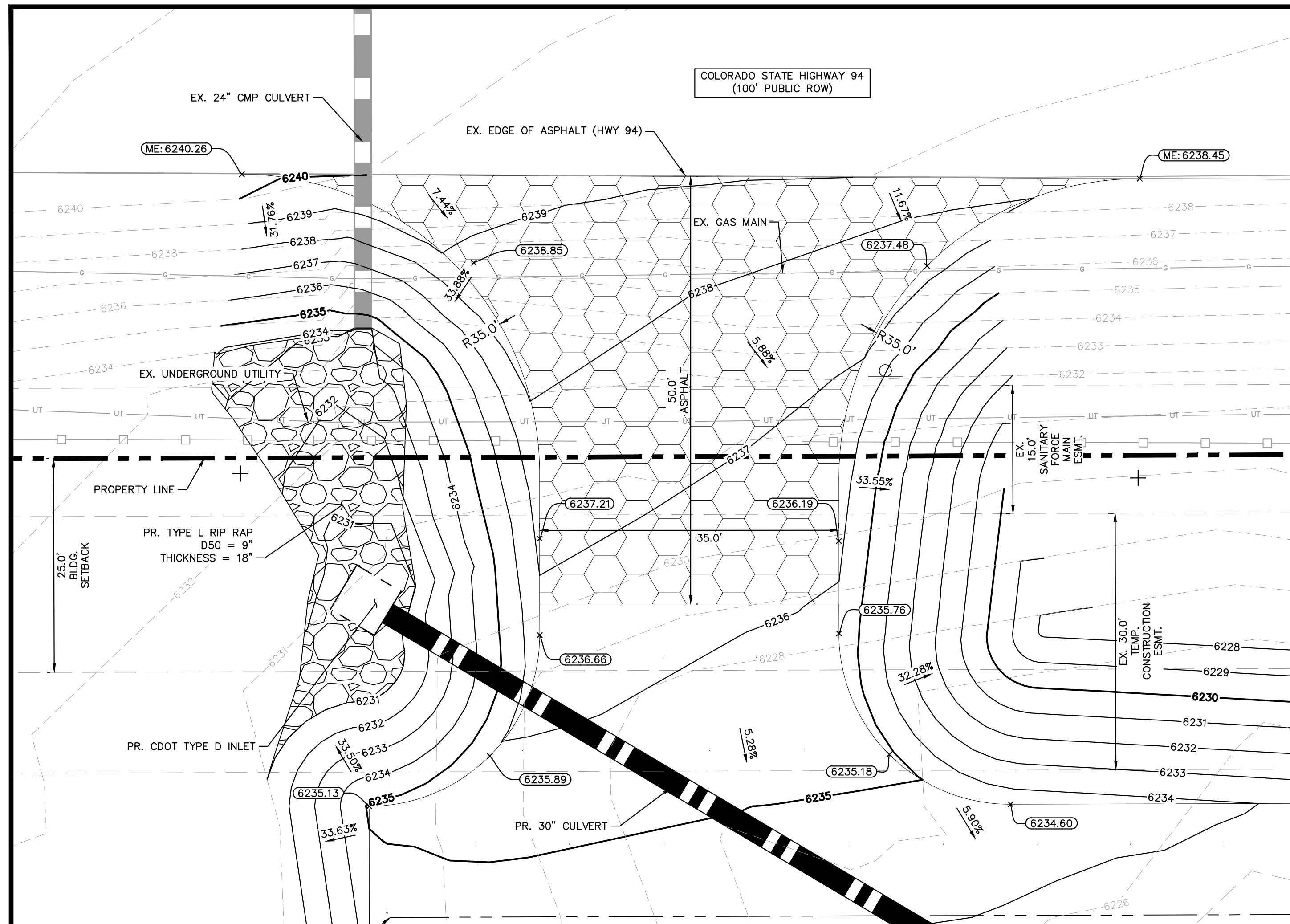
DESIGNED BY: KRK
 DRAWN BY: DPM
 CHECKED BY: KRK
 DATE: 04/16/2024

UDON SOUTH
 CONSTRUCTION DOCUMENTS
 EL PASO COUNTY, COLORADO
 TYPICAL SECTION

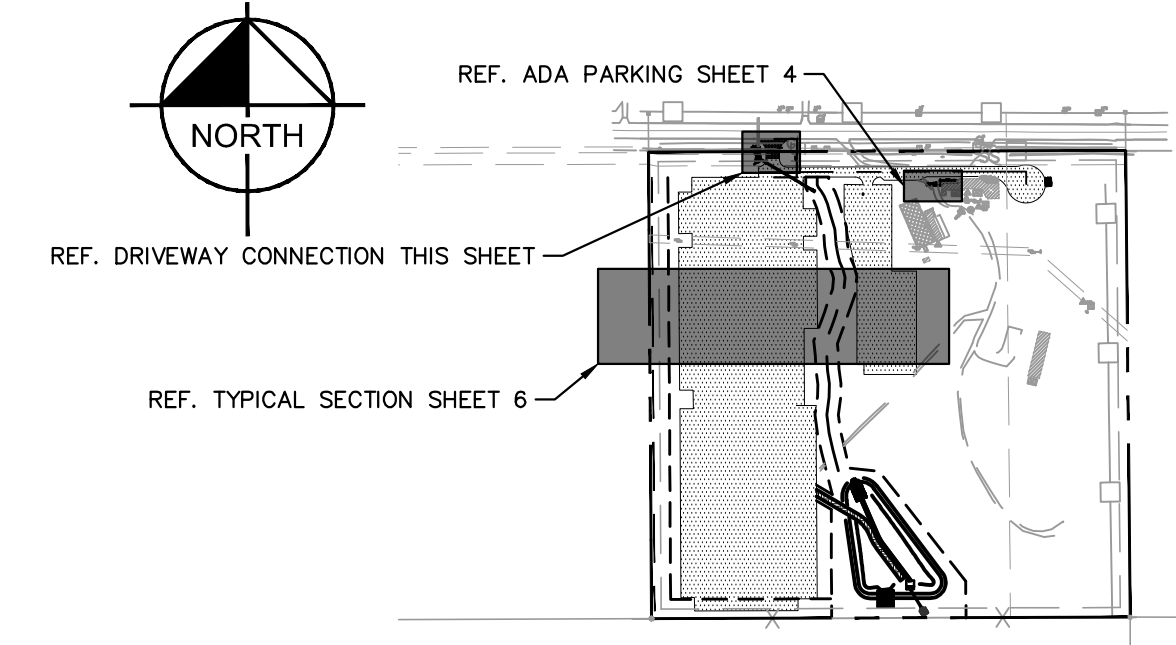
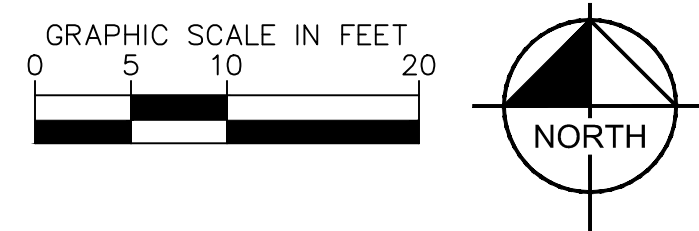


PROJECT NO.
 196020003
 SHEET
 6

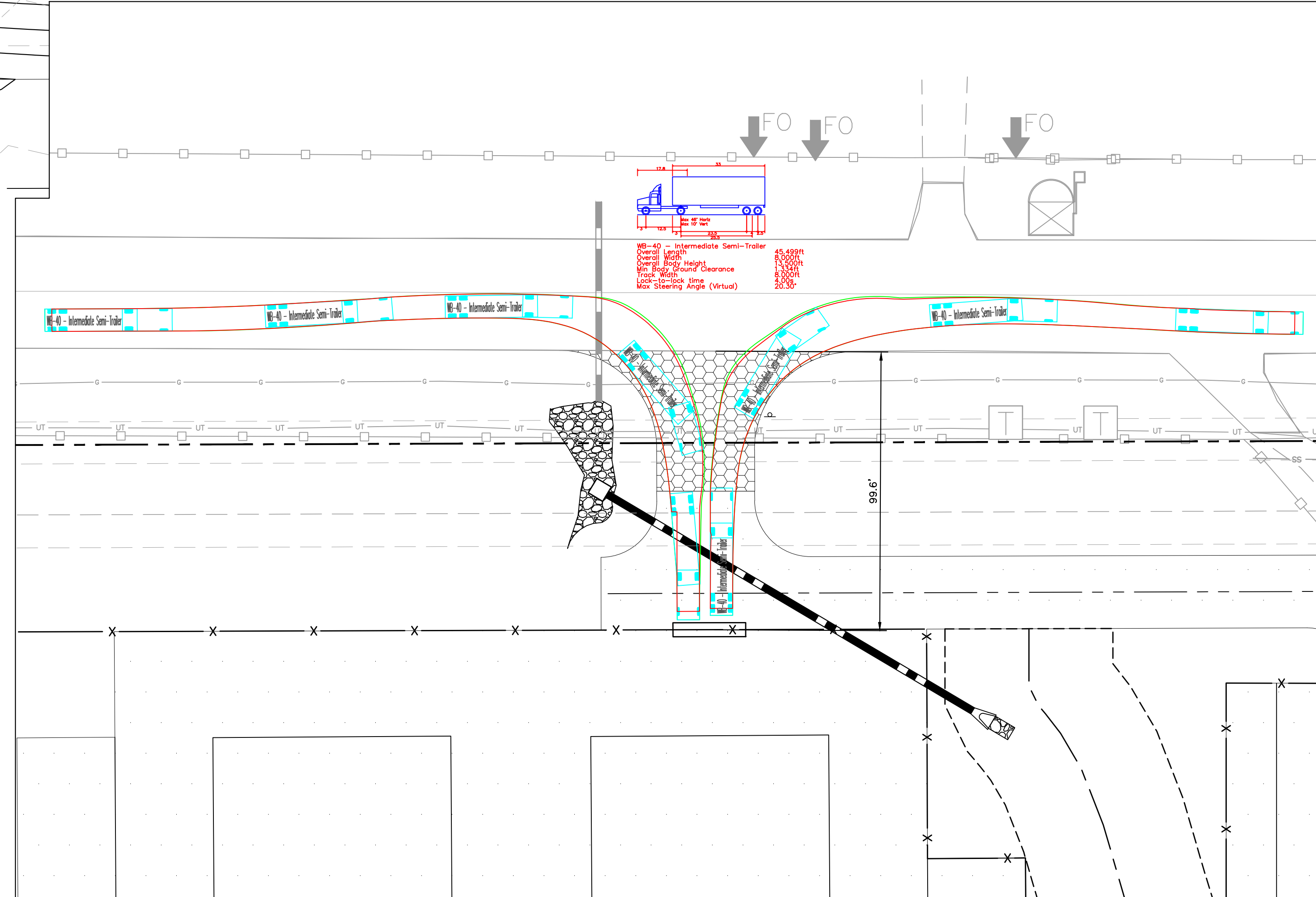
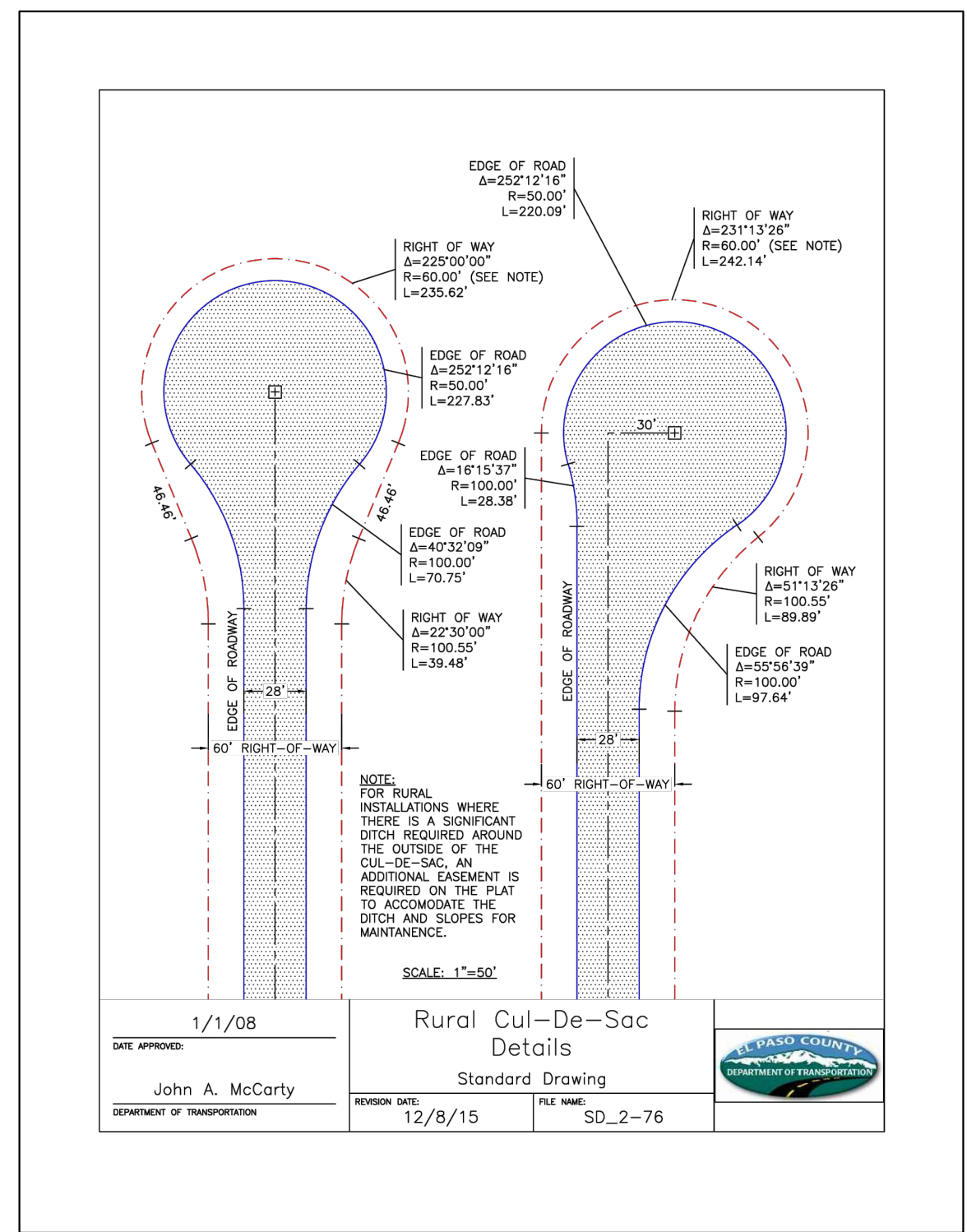
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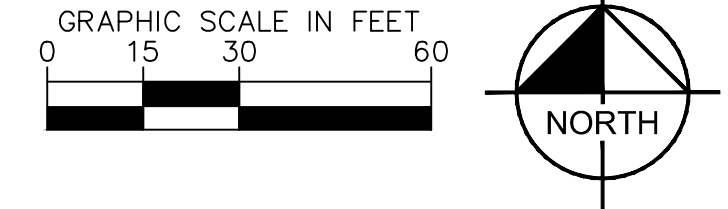
DRIVEWAY CONNECTION GRADING



KEY MAP
1" = 500'



VEHICLE TRACKING EXHIBIT



| | | | | |
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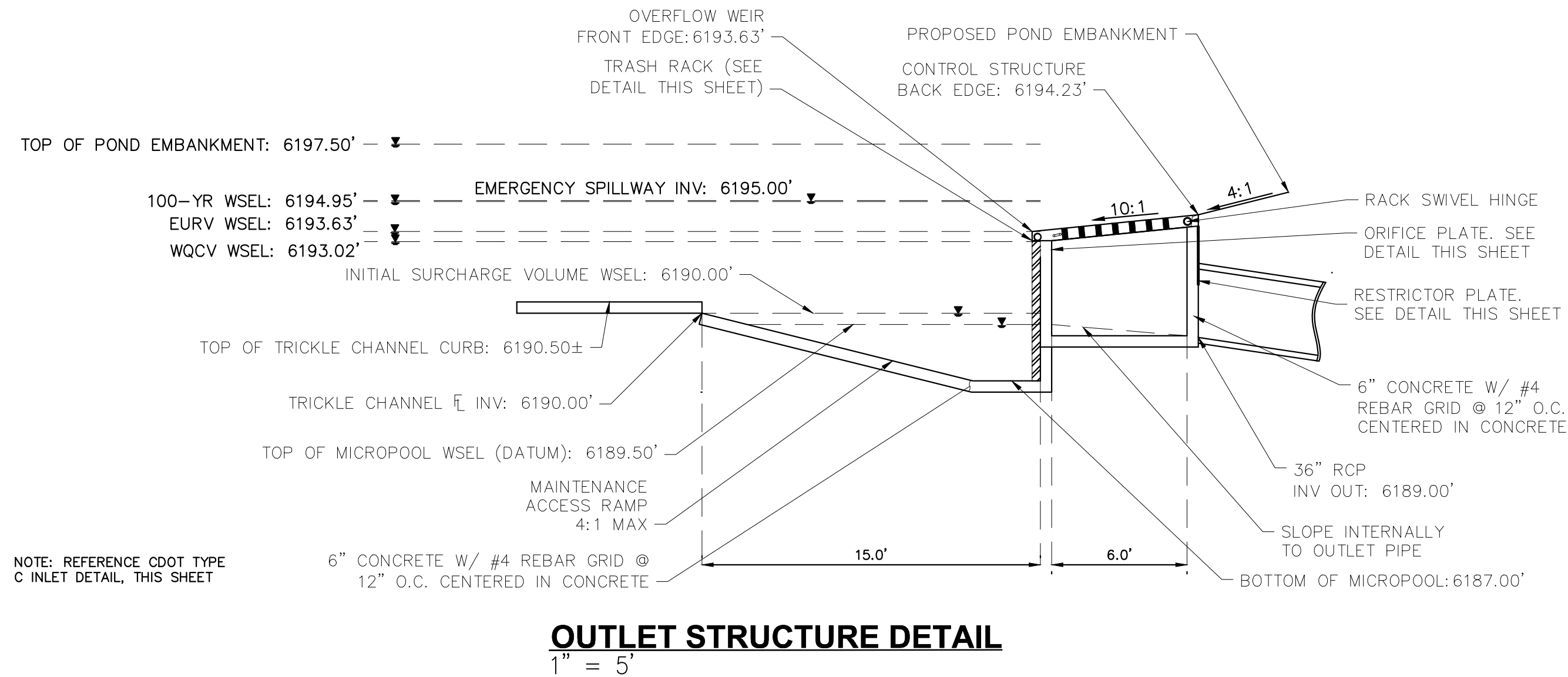
Kimley»Horn
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 2 North Nevada Avenue, Suite 900
 Colorado Springs, Colorado 80903 (719) 453-0180

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 DRAWN BY: DPM
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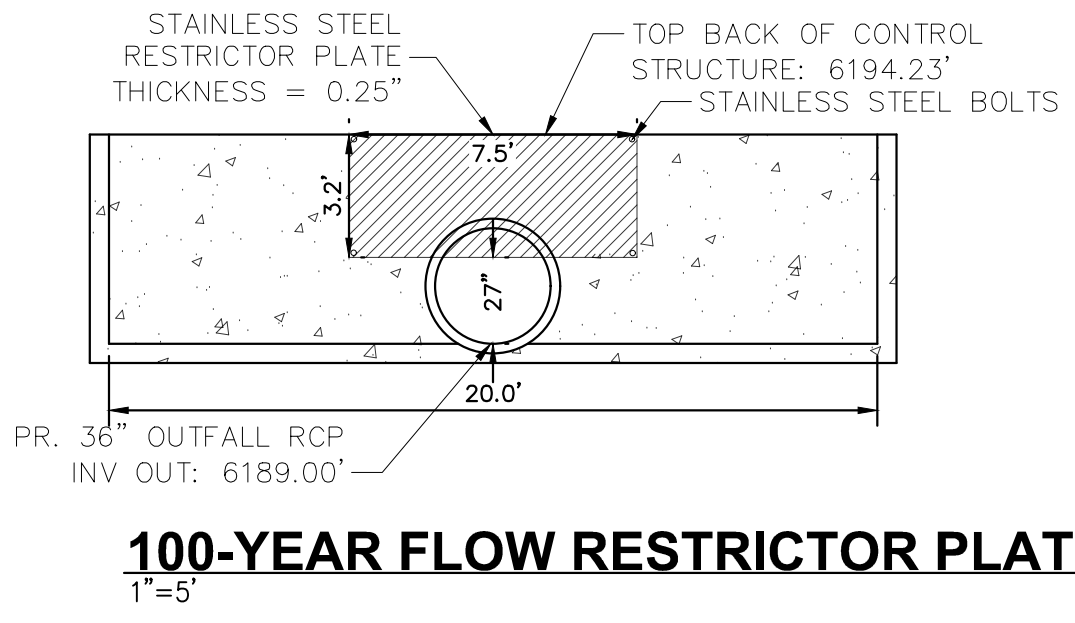
UDON SOUTH
 CONSTRUCTION DOCUMENTS
 EL PASO COUNTY, COLORADO
 DETAILS



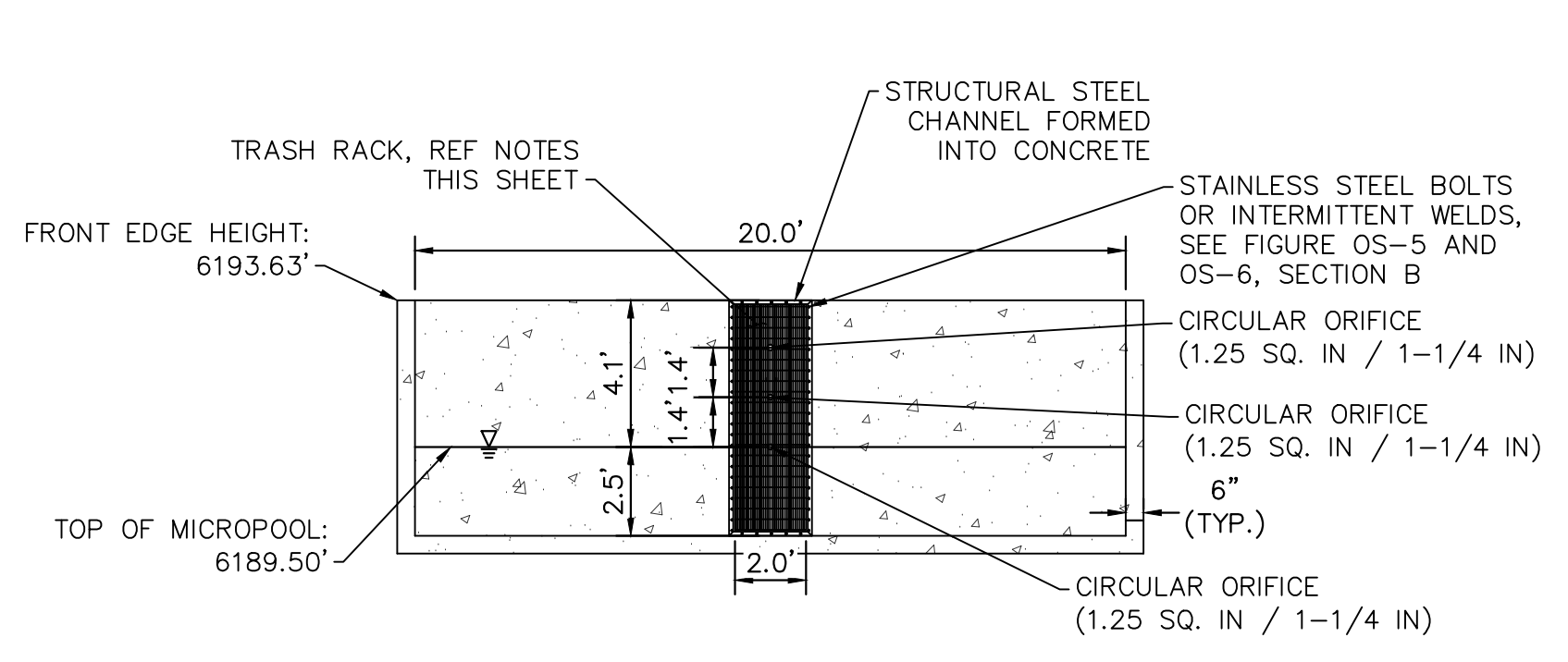
PROJECT NO.
196020003
 SHEET
7



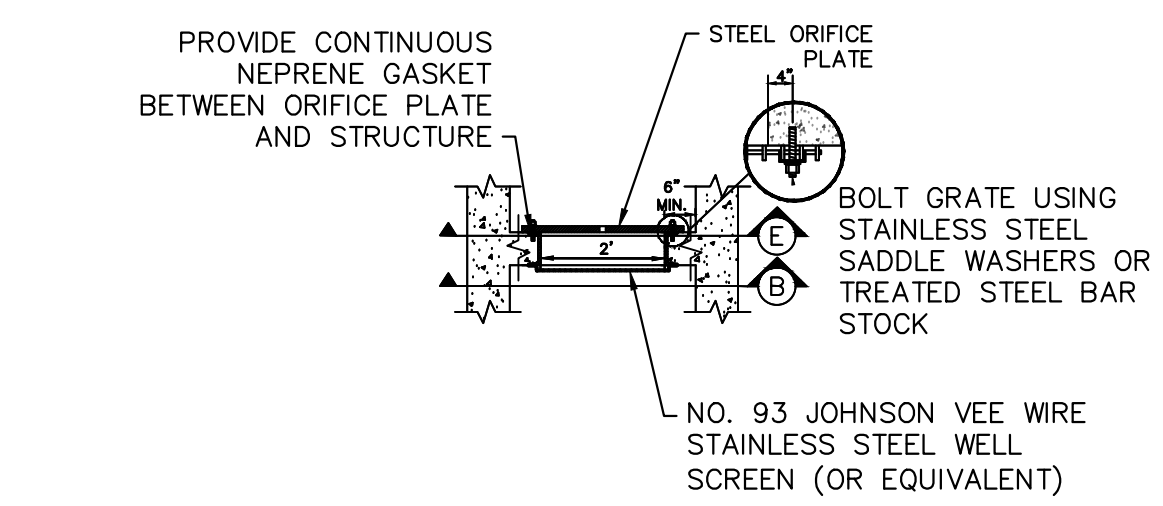
OUTLET STRUCTURE DETAIL
1" = 5'



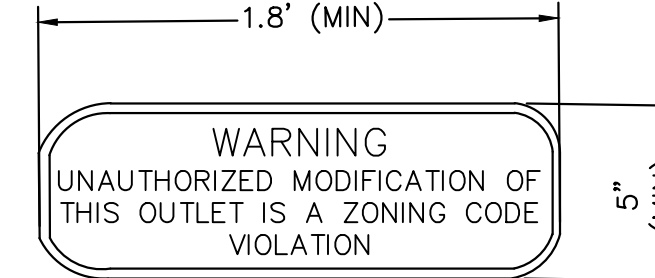
100-YEAR FLOW RESTRICTOR PLATE
1" = 5'



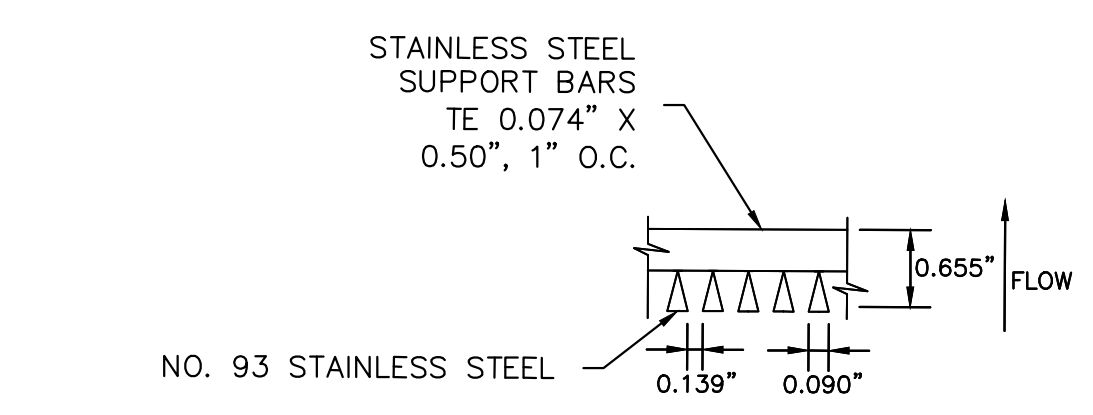
ORIFICE PLATE AND TRASH RACK DETAIL
1" = 5'



SECTION A
N.T.S.



OUTLET SIGNAGE
N.T.S.



SECTION B
N.T.S.

ORIFICE PLATE NOTES

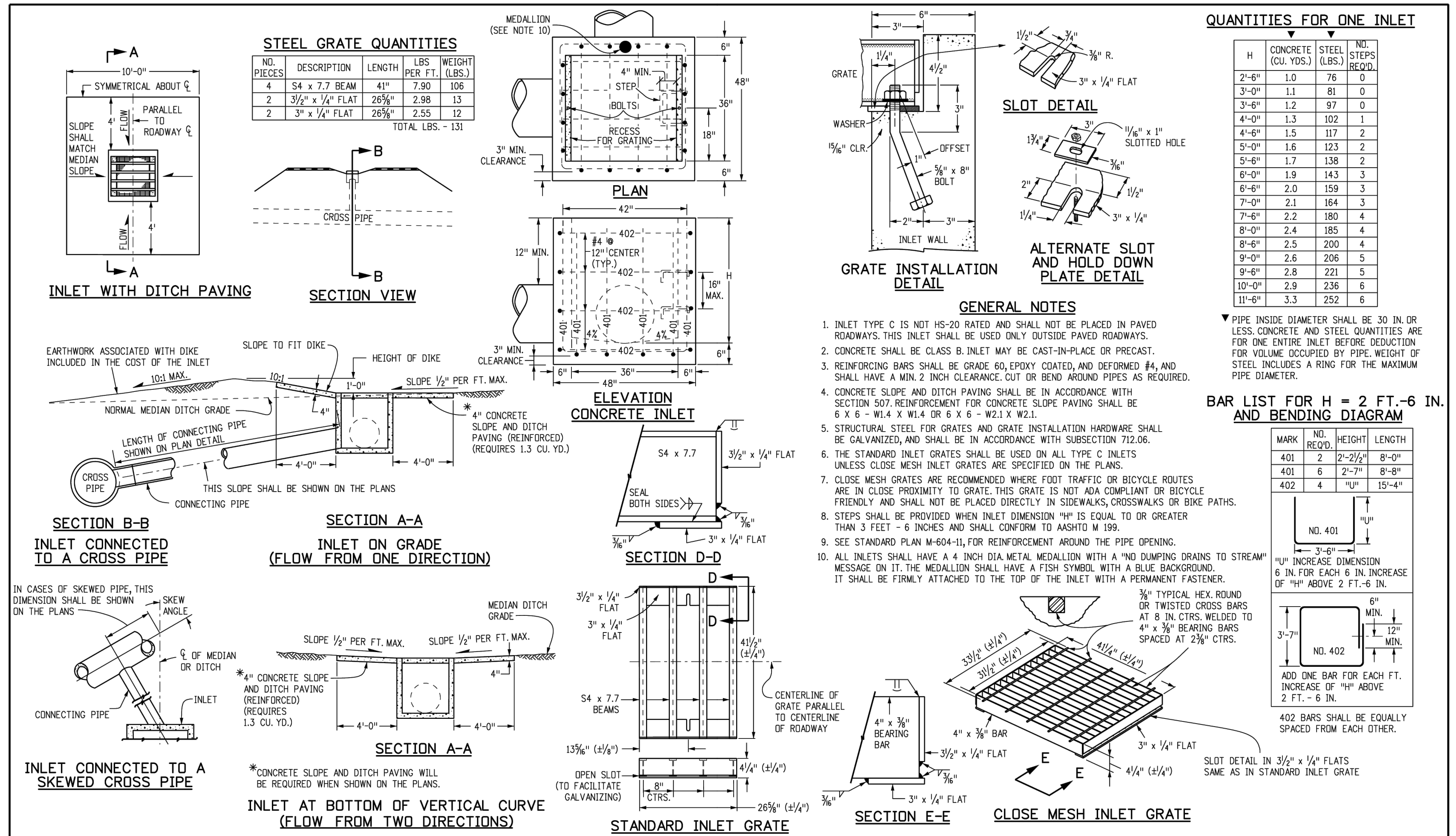
1. PROVIDE CONTINUOUS NEOPRENE GASKET MATERIAL BETWEEN THE ORIFICE PLATE AND CONCRETE.
2. BOLT PLATE TO CONCRETE 12" MAX. ON CENTER. WITH A PLATE THICKNESS OF 0.25".

EURV AND WQCV TRASH RACKS

1. WELL-SCREEN TRASH RACKS SHALL BE STAINLESS STEEL AND SHALL BE ATTACHED BY 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 MAY 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 BE 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 HOT POWDER COATED AFTER GALVANIZING.
3. SAFETY GRATES SHALL BE DESIGNED SUCH THAT THE DIAGONAL DIMENSION OF EACH OPENING IS SMALLER THAN 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.



STEEL GRATE QUANTITIES

| NO. PIECES | DESCRIPTION | LENGTH PER FT. | WEIGHT (LBS.) |
|------------|------------------|----------------|---------------|
| 4 | S4 x 7.7 BEAM | 41" | 7.90 106 |
| 2 | 3/2" x 1/4" FLAT | 26 3/4" | 2.98 13 |
| 2 | 3" x 1/4" FLAT | 26 3/4" | 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 |
| 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'-0" | 3.3 | 252 | 6 |

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

| MARK | NO. REQ'D. | HEIGHT | LENGTH |
|------|------------|-----------|--------|
| 401 | 2 | 2'-2 1/2" | 8'-0" |
| 401 | 6 | 2'-7" | 8'-0" |
| 402 | 4 | "U" | 13'-4" |

| | | | | |
|---|--|--|---|--|
| Computer File Information Creation Date: 07/31/19 Designer Initials: JBK Last Modification Date: 07/31/19 Detailer Initials: LTA CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English | Sheet Revisions Date: _____ Comments: _____ | Colorado Department of Transportation 2829 West Howard Place CDOT HQ, 3rd Floor Denver, CO 80204 Phone: 303-757-9021 FAX: 303-757-9868 Project Development Branch JBK | 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: _____ |
|---|--|--|---|--|

DATE: _____ BY: _____ REVISION: _____ NO. _____

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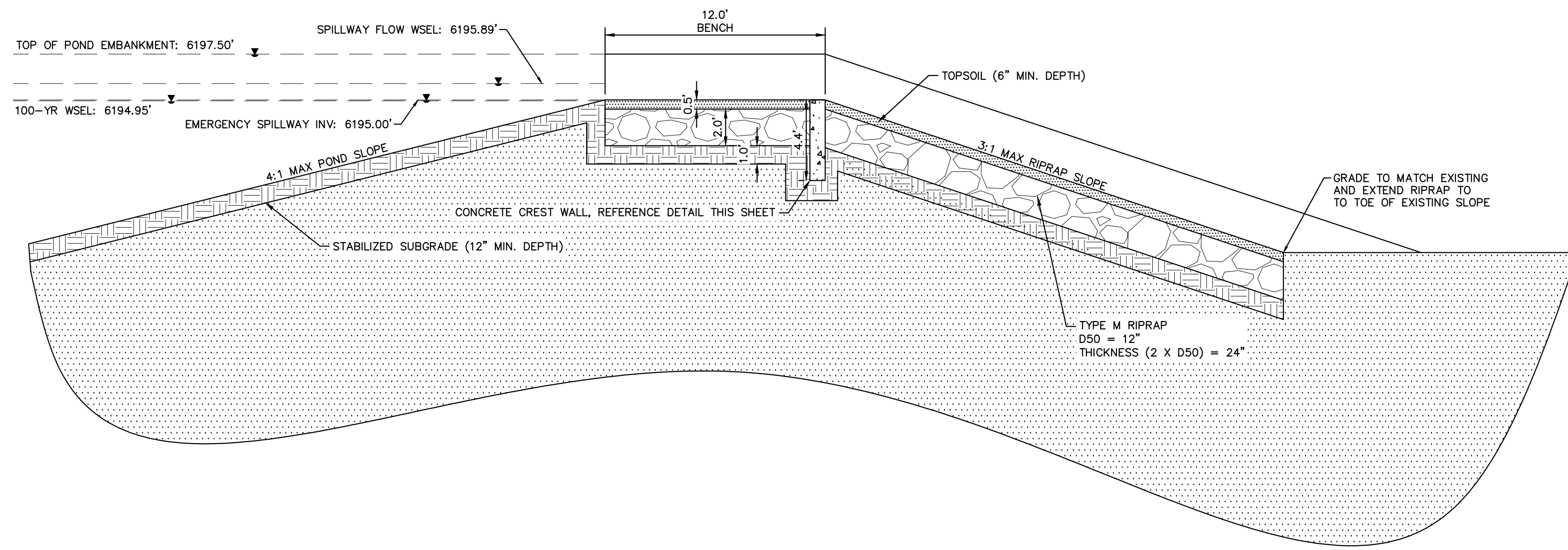
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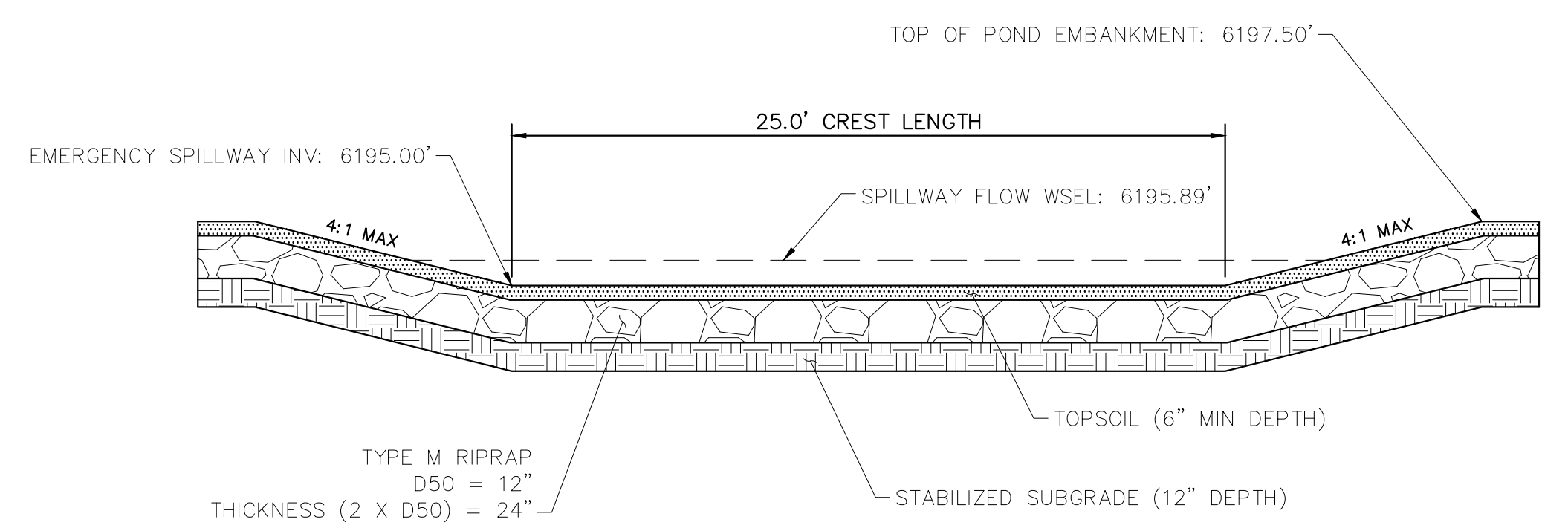
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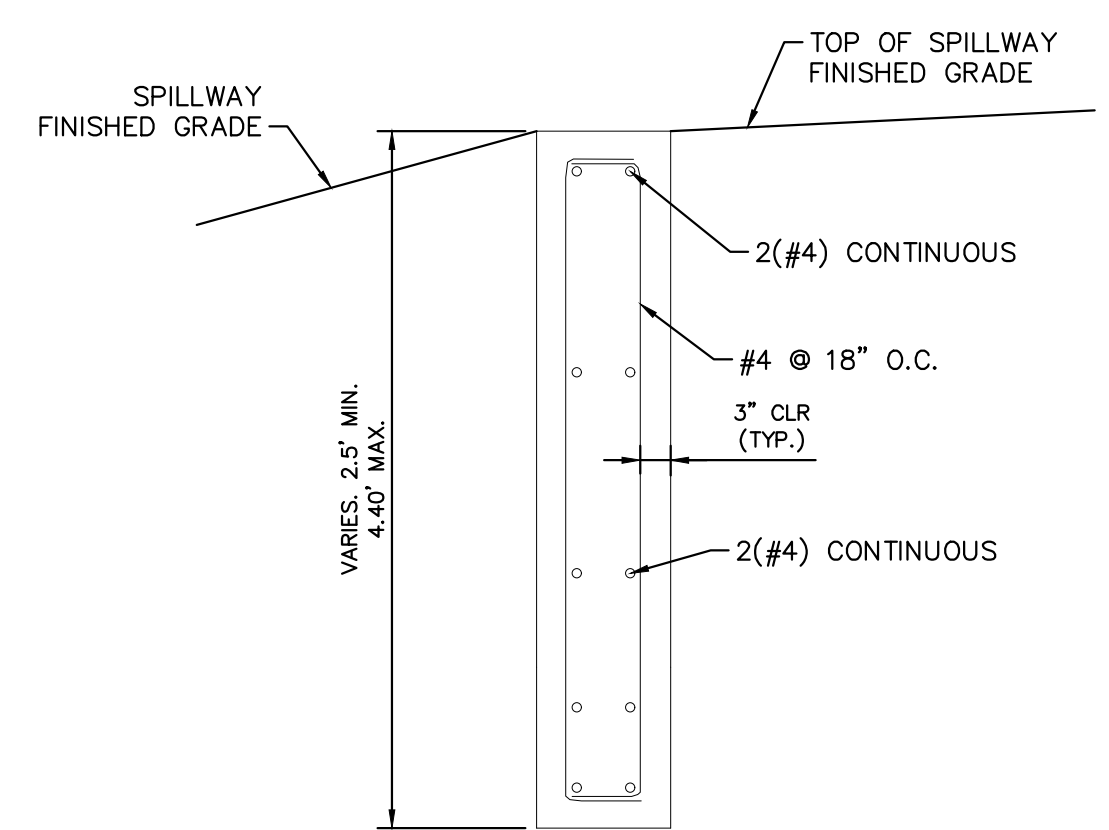
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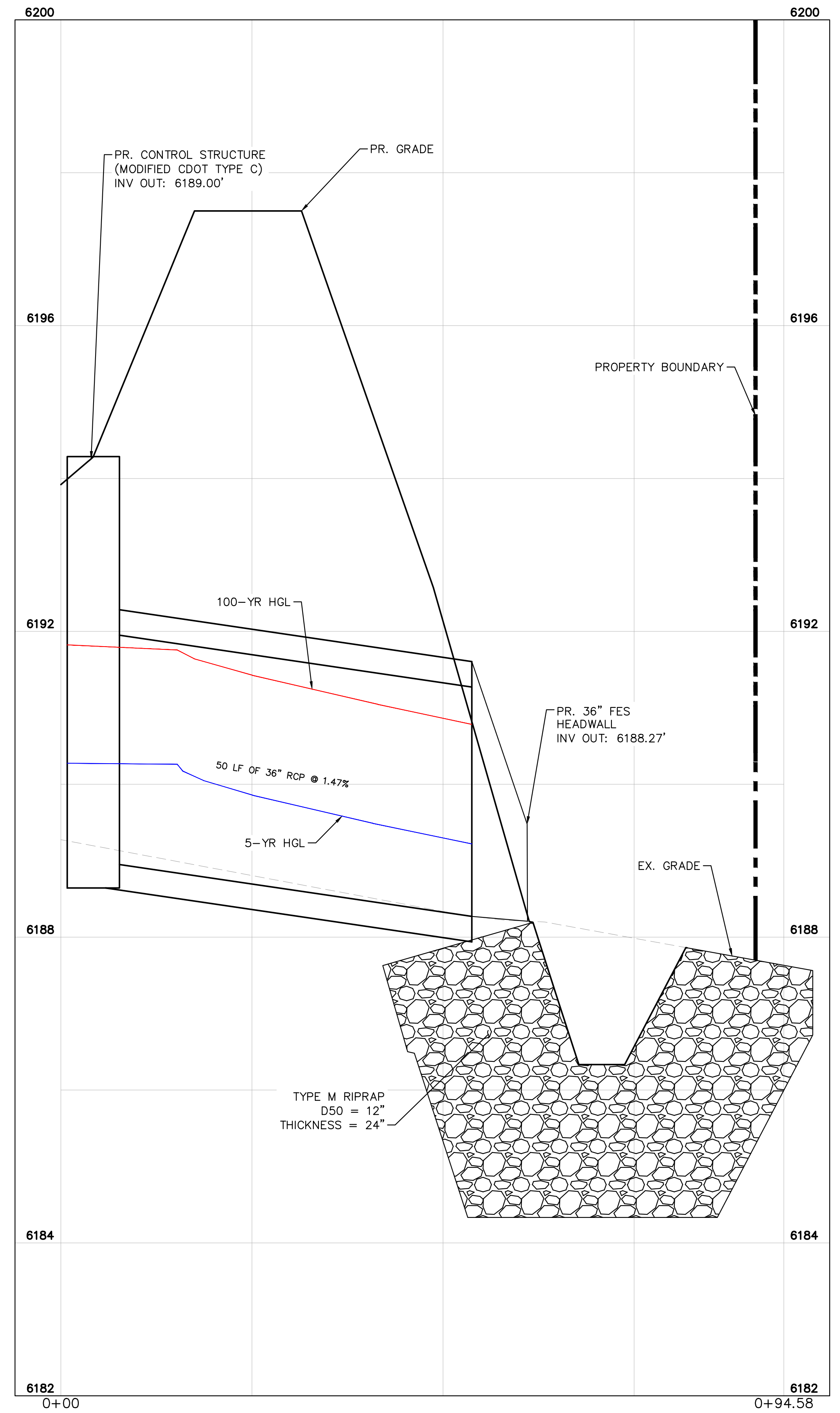
EMERGENCY SPILLWAY PROFILE VIEW
1"=10'



EMERGENCY SPILLWAY TYPICAL SECTION
1"=10'



SECTION CREST WALL DETAIL



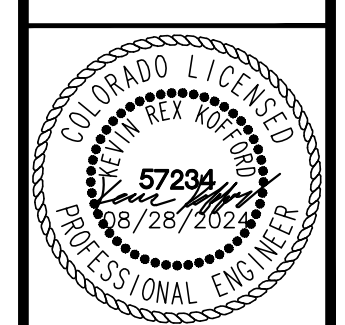
POND OUTFALL PIPE PROFILE
1"=10'

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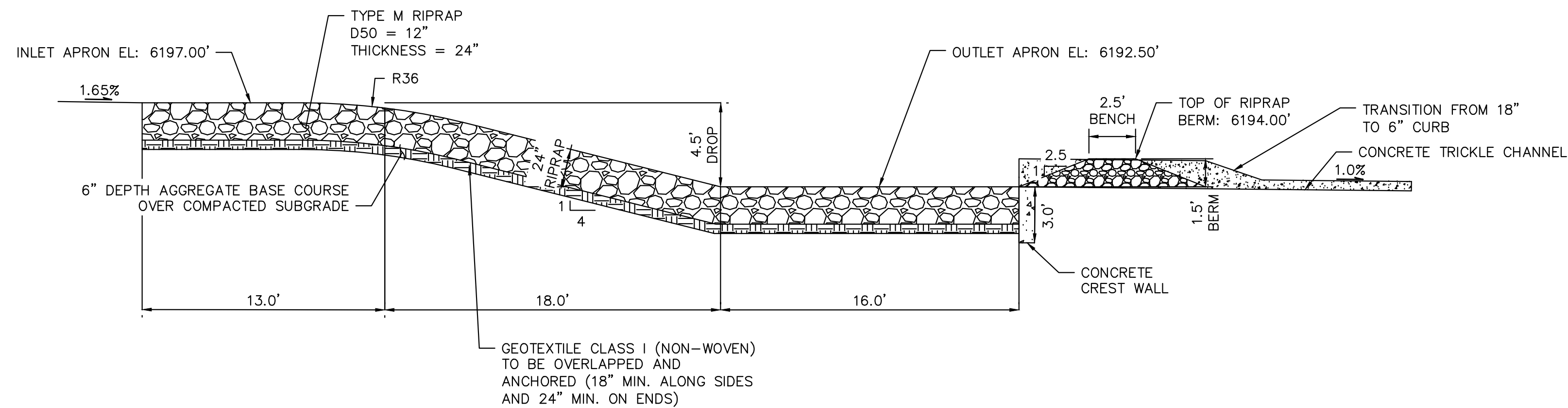
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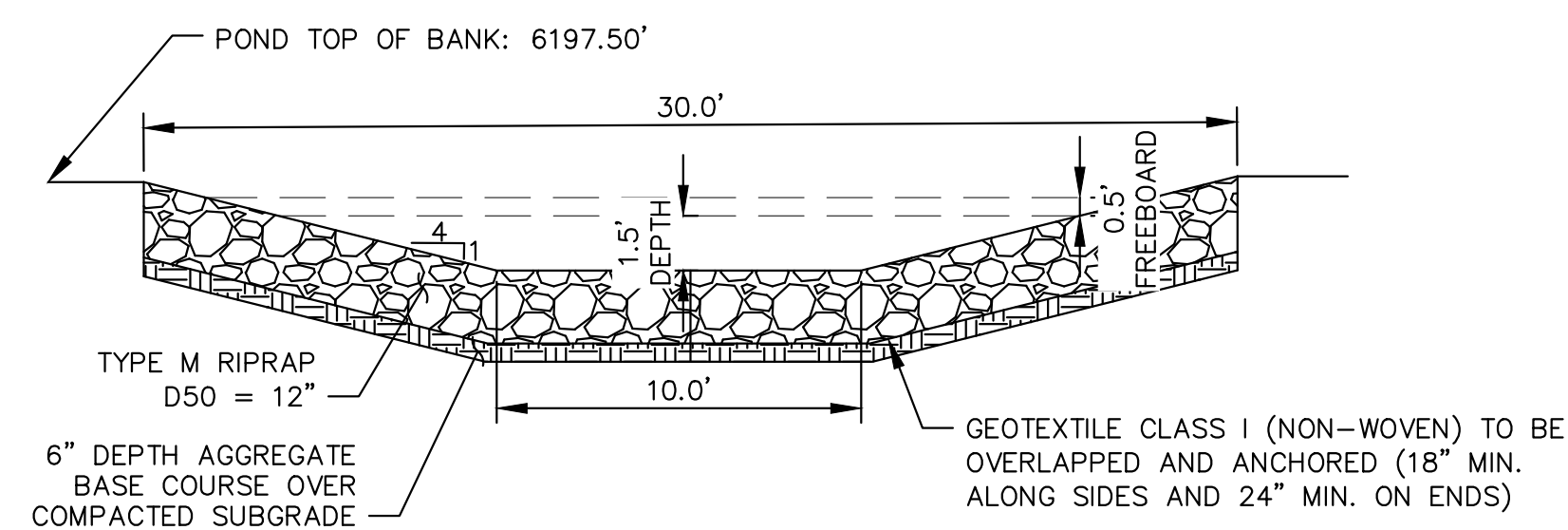
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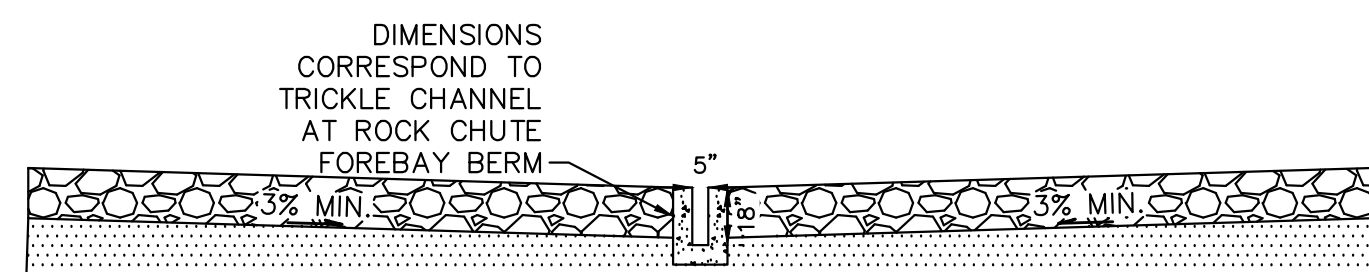
ROCK CHUTE PROFILE - POND TRICKLE CHANNEL APPLICATION

1" = 5'



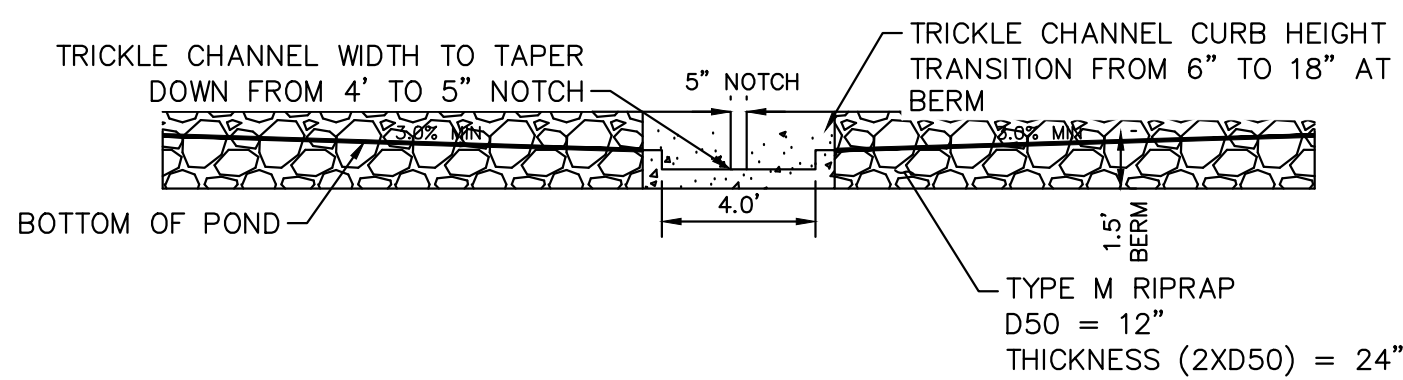
ROCK CHUTE - TYPICAL SECTION

1" = 5'



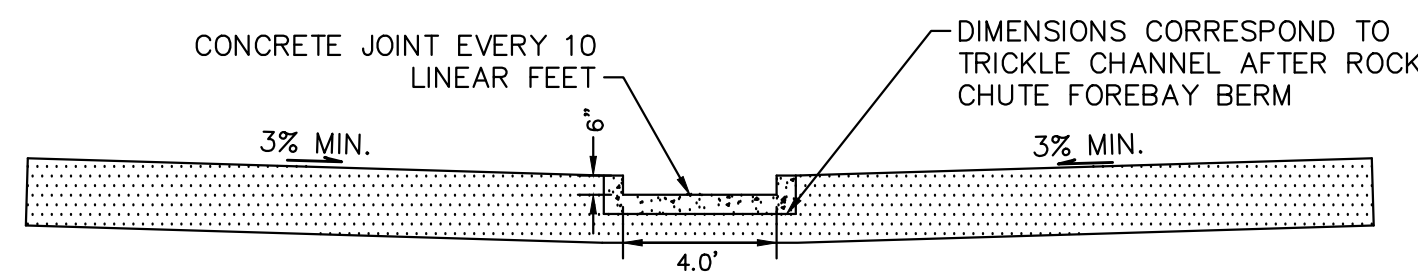
ROCK CHUTE TYPICAL SECTION - NOTCH DETAIL

1" = 5'



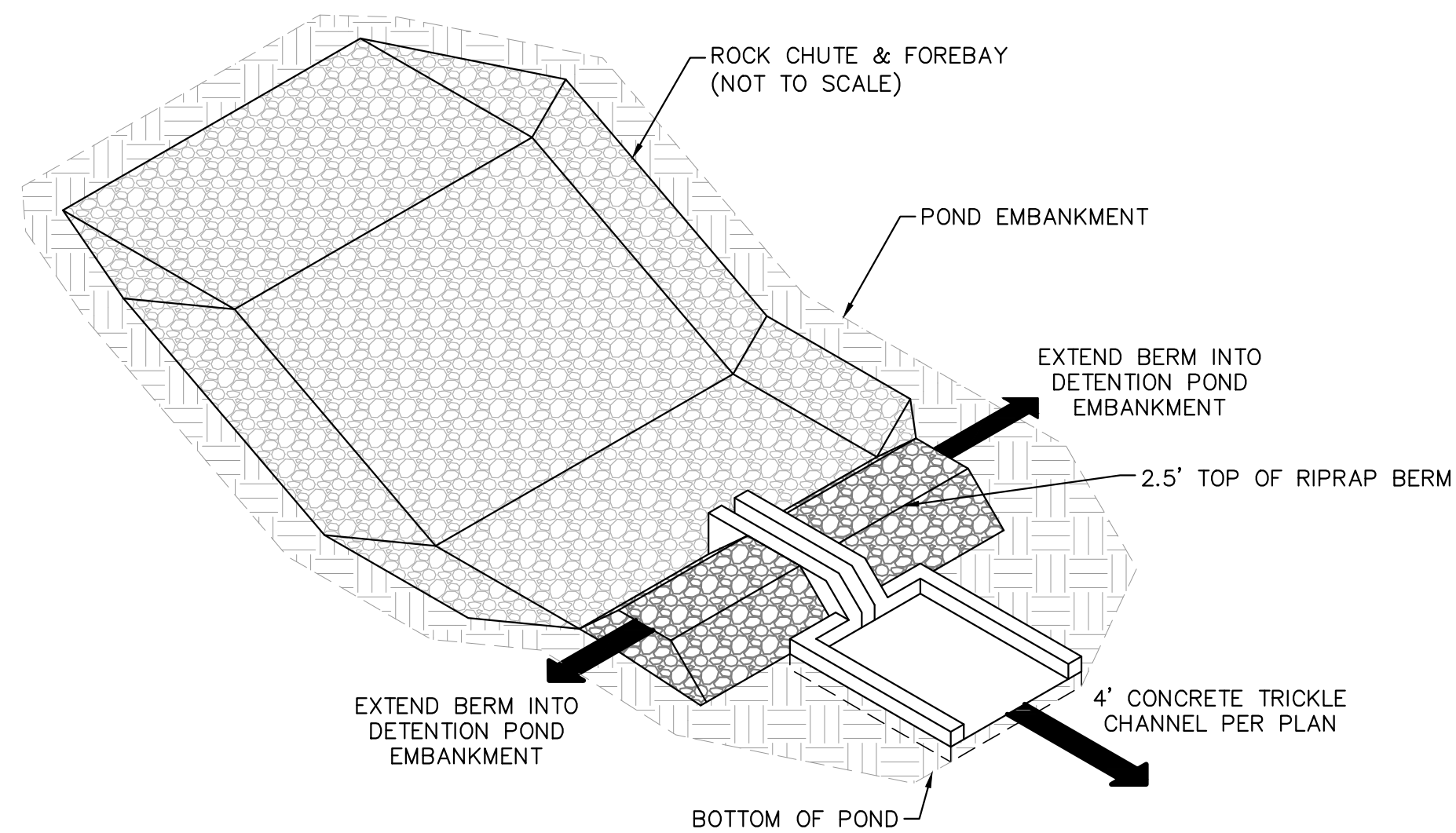
ROCK CHUTE TYPICAL SECTION - FOREBAY BERM/TRICKLE CHANNEL

1" = 5'



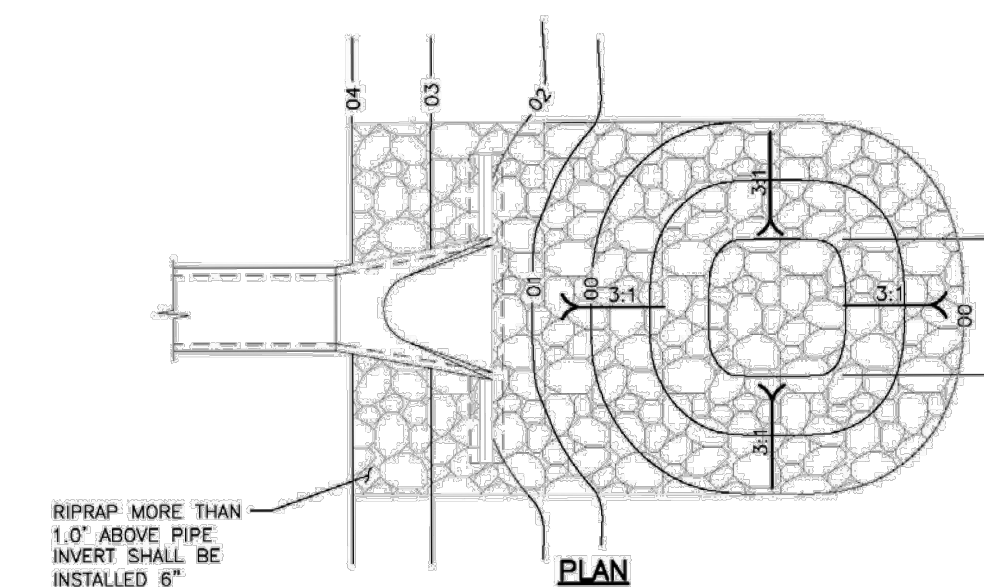
TRICKLE CHANNEL - TYPICAL SECTION

1" = 5'

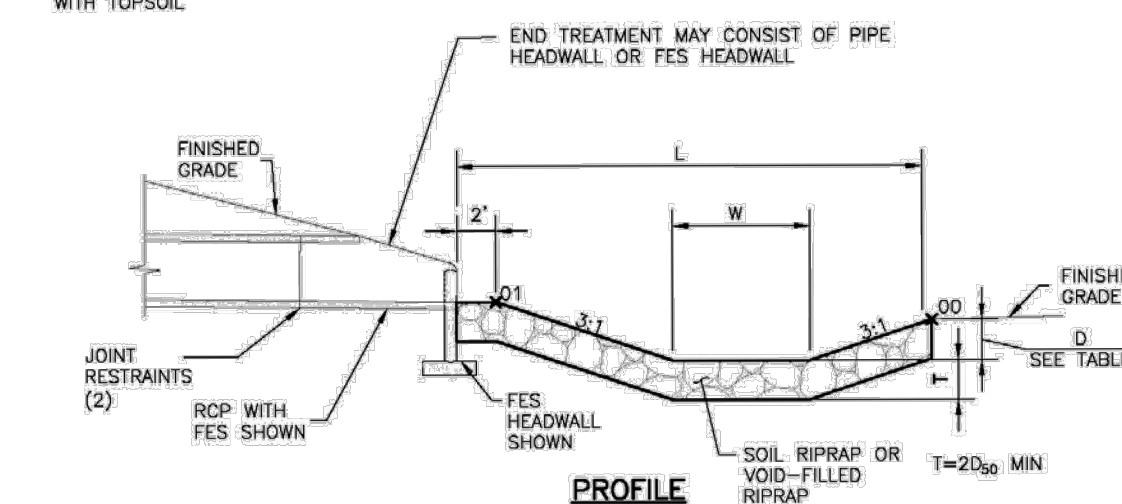


ROCK CHUTE, FOREBAY, & TRICKLE CHANNEL - ISOMETRIC DETAIL

1" = 5'



PLAN



PROFILE

| PIPE SIZE OR BOX HEIGHT | D | W* | L |
|-------------------------|-------|----|-----|
| 18" - 24" | 1'-0" | 4' | 15' |
| 30" - 36" | 1'-6" | 6' | 20' |
| 42" - 48" | 2'-0" | 7' | 24' |
| 54" - 60" | 2'-6" | 8' | 28' |
| 66" - 72" | 3'-0" | 9' | 32' |

* IF OUTLET PIPE IS A BOX CULVERT WITH A WIDTH GREATER THAN W, THEN W = CULVERT WIDTH

Figure 9-37. Low tailwater riprap basin

Table 1: Riprap Gradation

| Riprap Designation | % Smaller Than Given Size By Weight | Intermediate Rock Dimension (inches) | d ₅₀ * (inches) |
|--------------------|-------------------------------------|--------------------------------------|----------------------------|
| Type VL | 70 - 100 | 12 | 6** |
| | 50 - 70 | 9 | |
| | 35 - 50 | 6 | |
| Type L | 70 - 100 | 15 | 9** |
| | 50 - 70 | 12 | |
| | 35 - 50 | 9 | |
| Type M | 70 - 100 | 21 | 12** |
| | 50 - 70 | 18 | |
| | 35 - 50 | 12 | |
| Type H | 70 - 100 | 30 | 18 |
| | 50 - 70 | 24 | |
| | 35 - 50 | 18 | |
| Type VH | 70 - 100 | 41 | 24 |
| | 50 - 70 | 33 | |
| | 35 - 50 | 24 | |
| | 2 - 10 | 9 | |

*d₅₀ = Mean Particle Size

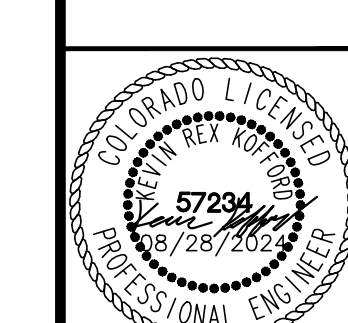
**Mix VL, L and M riprap with 35% topsoil (by volume) and bury it with 4 to 6 inches of topsoil, all vibration compacted, and revegetate.

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ROCK CHUTE DETAILS

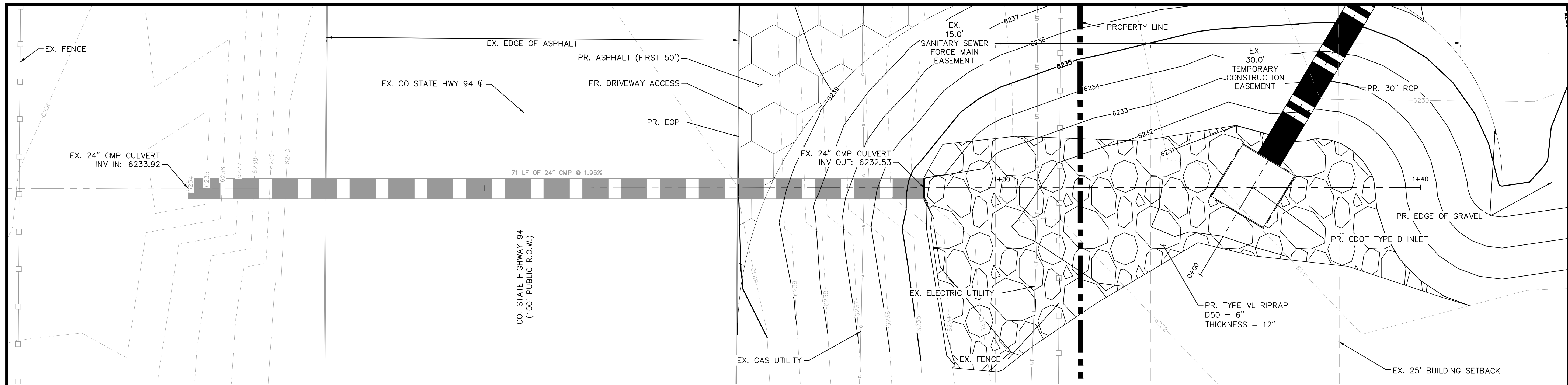


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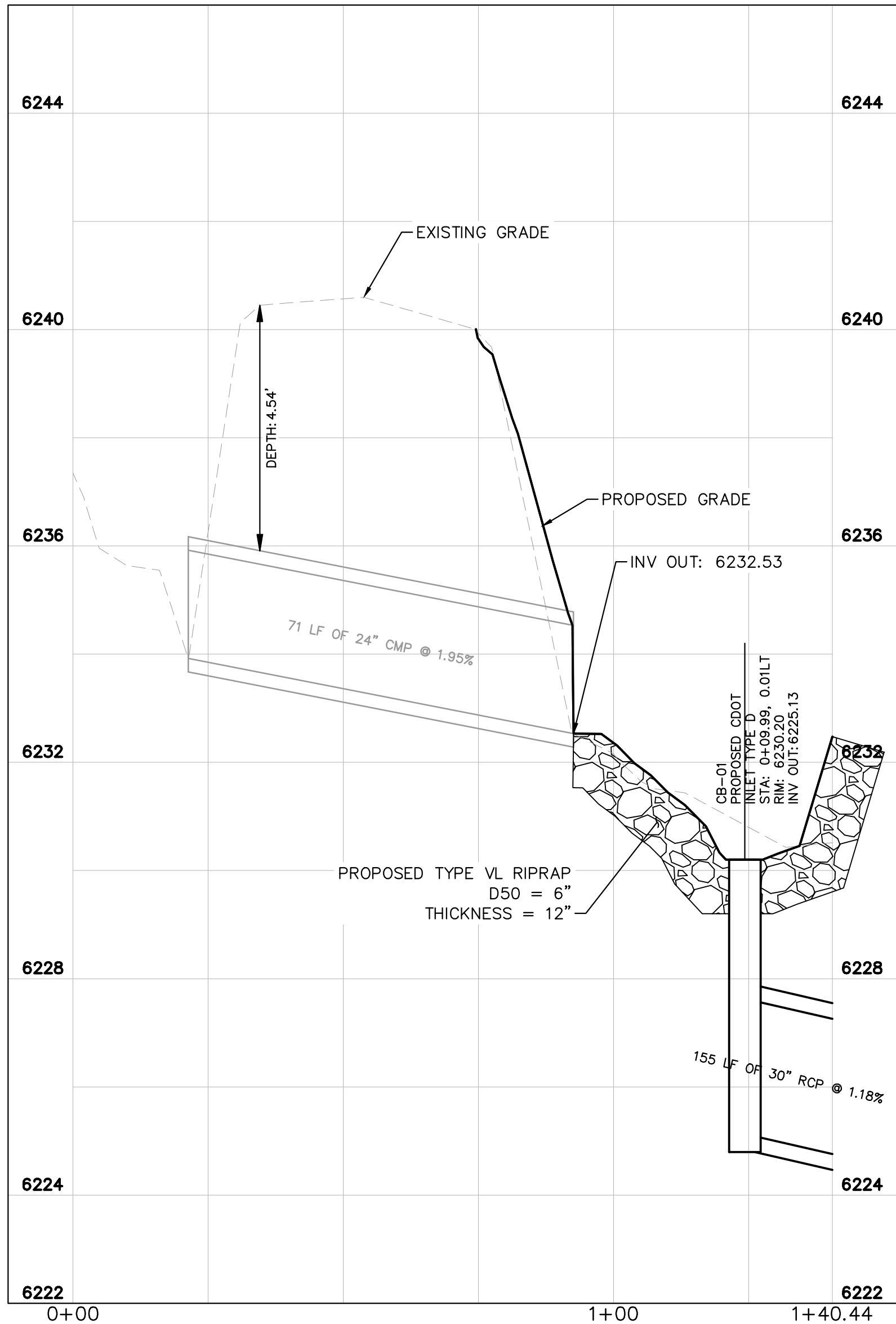
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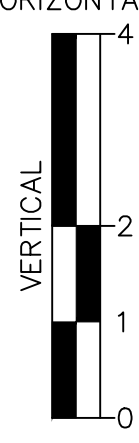
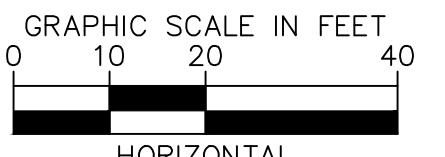
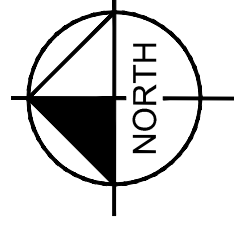
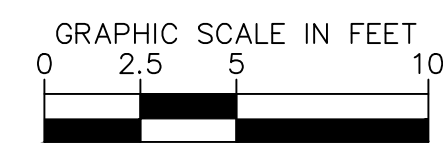
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EXISTING OFFSITE 24" CULVERT WITH PROPOSED EXTENSION PLAN VIEW



EXISTING OFFSITE 24" CULVERT WITH PROPOSED EXTENSION PROFILE VIEW



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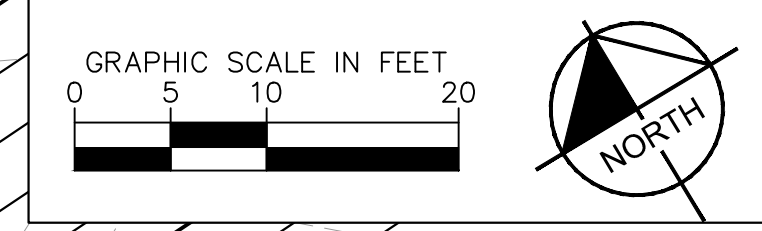
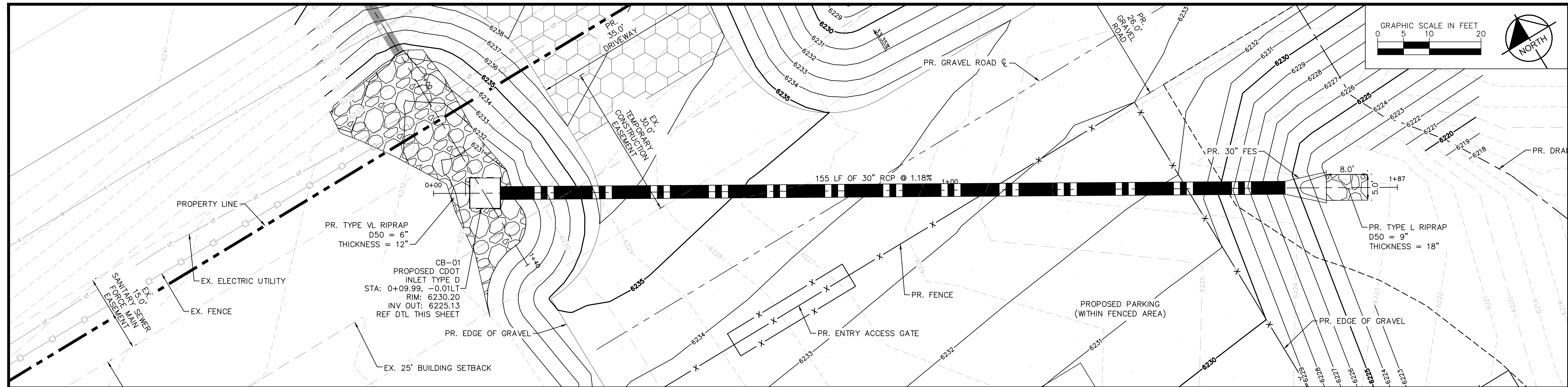
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 CULVERT PLAN AND PROFILE



PROJECT NO.
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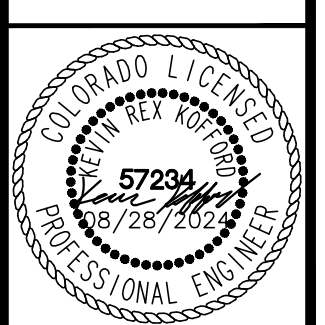


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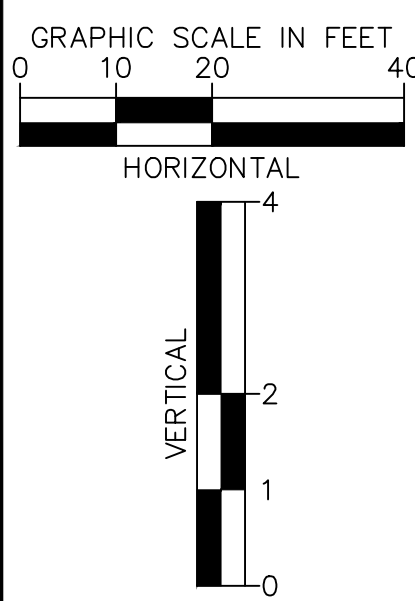
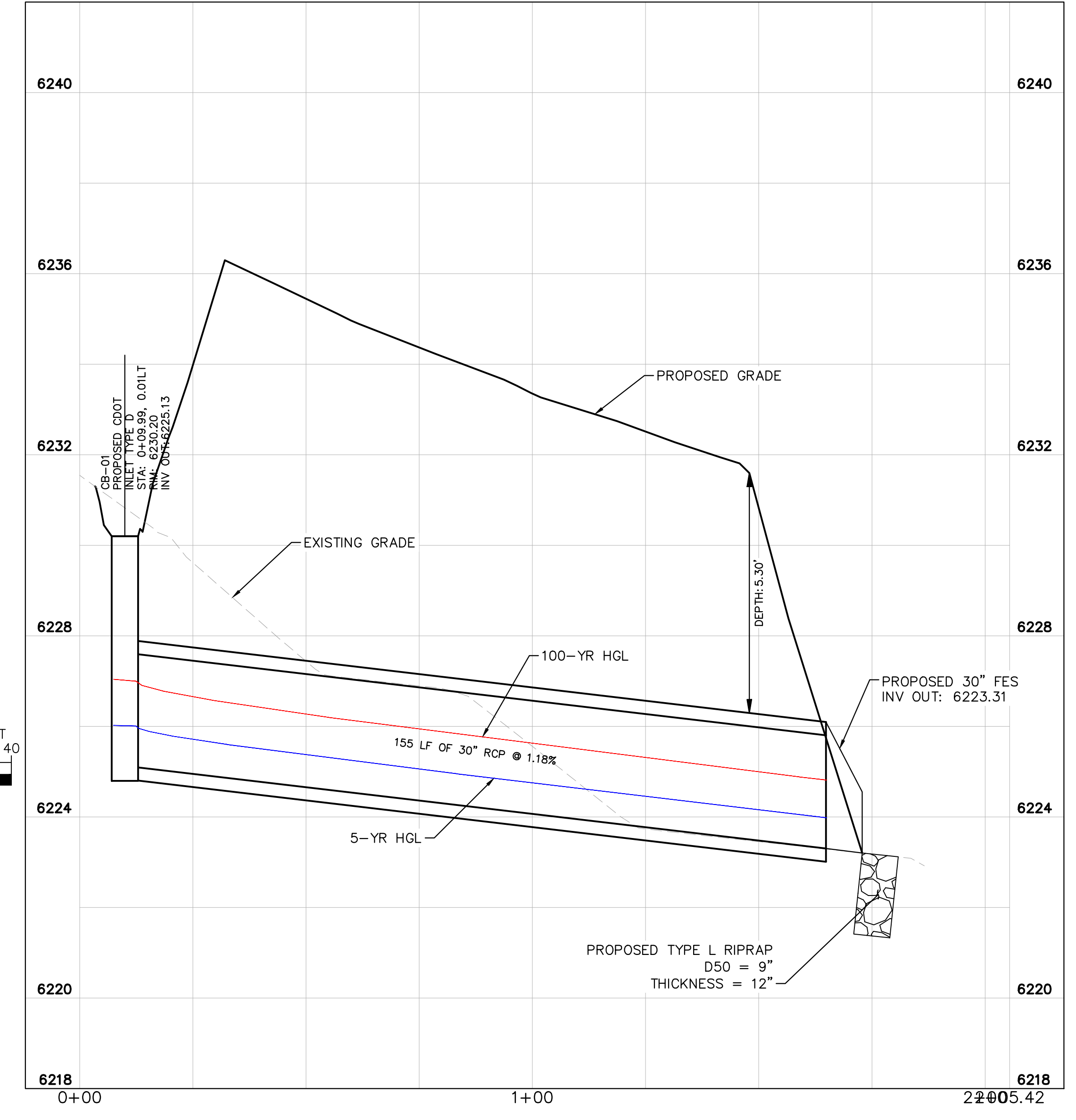
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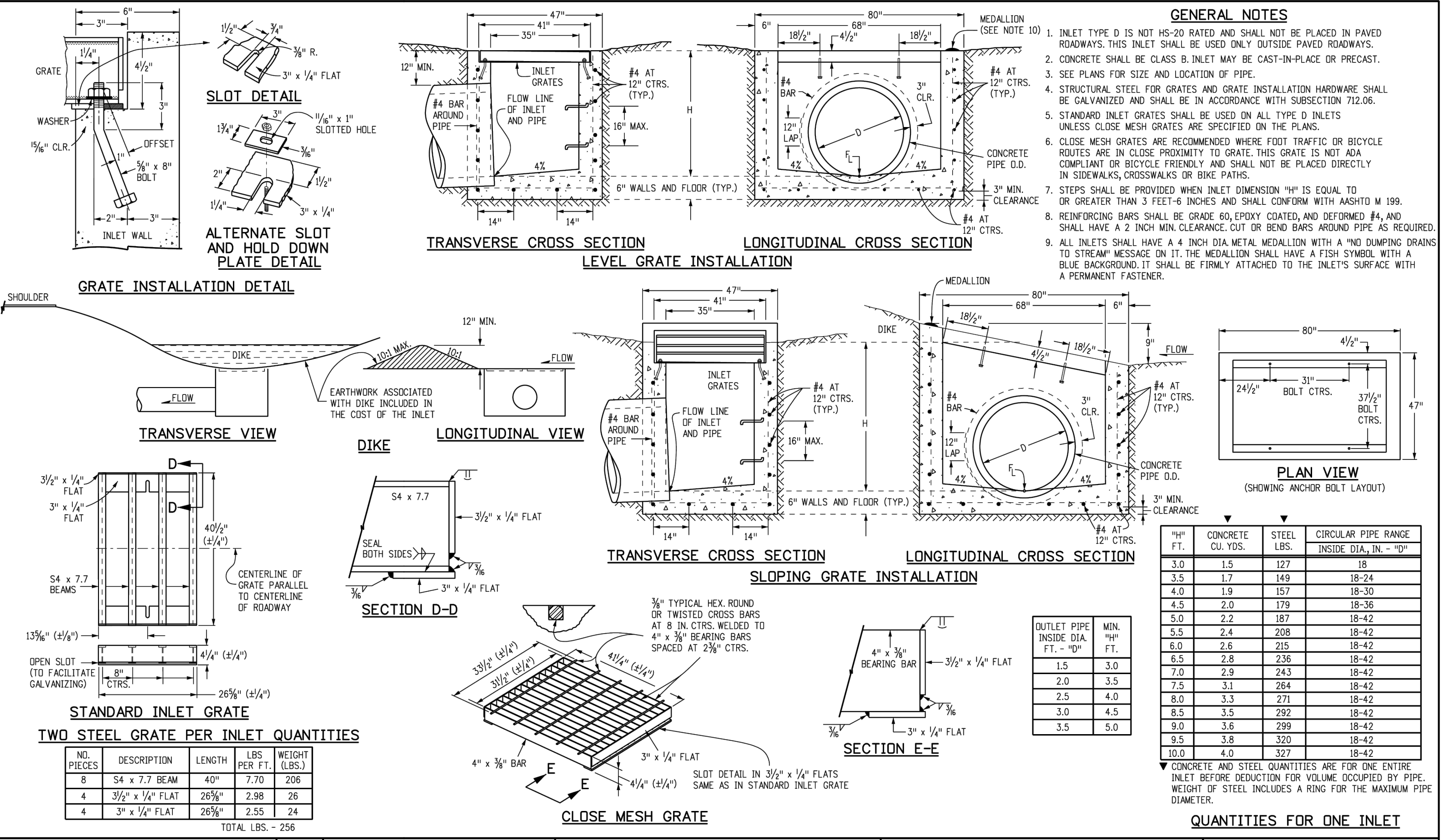
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PROPOSED 30" CULVERT PLAN VIEW



TWO STEEL GRATE PER INLET QUANTITIES

| NO. PIECES | DESCRIPTION | LENGTH PER FT. | WEIGHT (LBS.) |
|------------------|------------------|----------------|---------------|
| 8 | S4 x 7.7 BEAM | 40" | 206 |
| 4 | 3/2" x 1/4" FLAT | 26 3/8" | 26 |
| 4 | 3" x 1/4" FLAT | 25 5/8" | 24 |
| TOTAL LBS. = 256 | | | |

Sheet Revisions

| Date | Comments |
|------|----------|
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Computer File Information

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|----------------------------------|------------------------------------|
| Creation Date: 07/31/19 | |
| Designer Initials: JBK | |
| Last Modification Date: 07/31/19 | |
| Detailer Initials: LTA | |
| CAD Ver.: MicroStation V8 | Scale: Not to Scale Units: English |

Colorado Department of Transportation
 2829 West Howard Place
 CDOT HQ, 3rd Floor
 Denver, CO 80204
 Phone: 303-757-9021 FAX: 303-757-9868
 Project Development Branch JBK

INLET, TYPE D
 Issued by the Project Development Branch July 31, 2019

STANDARD PLAN NO.

| |
|---------------------------|
| M-604-11 |
| Standard Sheet No. 1 of 1 |

QUANTITIES FOR ONE INLET

| INLET HEIGHT (FT.) | CONCRETE CU. YDS. | STEEL LBS. | CIRCULAR PIPE RANGE INSIDE DIA., IN. - 10" |
|--------------------|-------------------|------------|--|
| 3.0 | 1.5 | 127 | 18 |
| 3.5 | 1.7 | 149 | 18-24 |
| 4.0 | 1.9 | 157 | 18-30 |
| 4.5 | 2.0 | 179 | 18-36 |
| 5.0 | 2.2 | 187 | 18-42 |
| 5.5 | 2.4 | 208 | 18-42 |
| 6.0 | 2.6 | 215 | 18-42 |
| 6.5 | 2.8 | 236 | 18-42 |
| 7.0 | 2.9 | 243 | 18-42 |
| 7.5 | 3.1 | 264 | 18-42 |
| 8.0 | 3.3 | 271 | 18-42 |
| 8.5 | 3.5 | 292 | 18-42 |
| 9.0 | 3.6 | 299 | 18-42 |
| 9.5 | 3.8 | 320 | 18-42 |
| 10.0 | 4.0 | 327 | 18-42 |

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