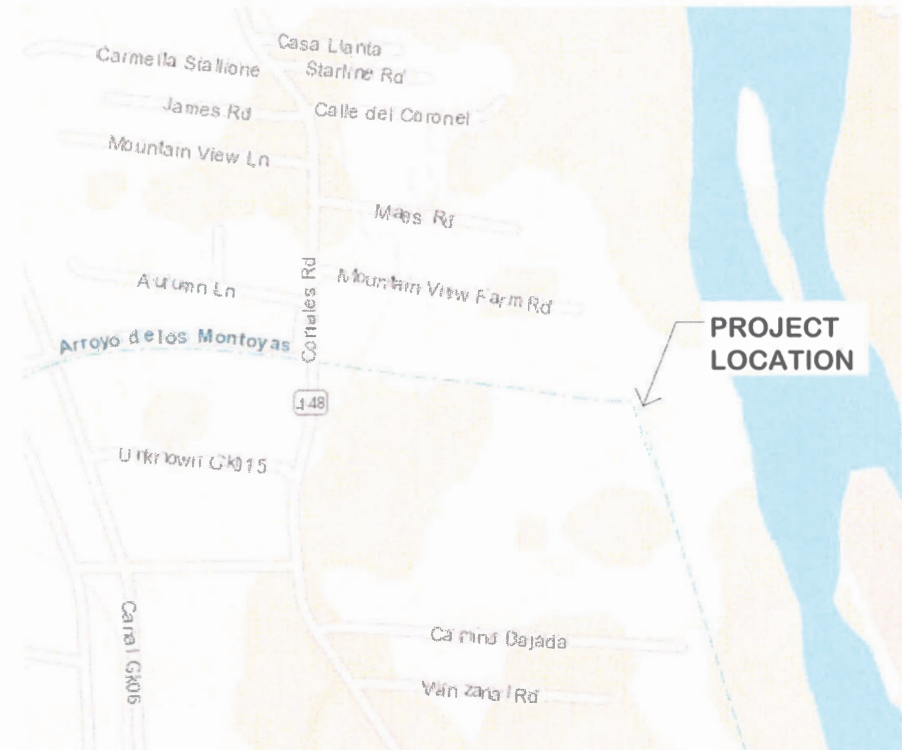


**SOUTHERN SANDOVAL COUNTY
ARROYO FLOOD CONTROL
AUTHORITY
HARVEY JONES CHANNEL
RIVER OUTFALL
SSCAFCA Project No. MO_P0040-01
MONTOYAS ARROYO WATERSHED**



**Southern Sandoval
County
Arroyo Flood Control
Authority**
1041 Commercial Dr. S.E.
Rio Rancho, New Mexico 87124
505-892-RAIN (7246)
505-892-7241 (Fax)
www.sscafca.com



VICINITY MAP

| SHEET INDEX | |
|-------------|--------------------------|
| SHEET NO. | SHEET TITLE |
| 1 | COVER SHEET |
| 2 | GENERAL NOTES |
| 3 | SURVEY SHEET 1 |
| 4 | SURVEY SHEET 2 |
| 5 | SURVEY SHEET 3 |
| 6 | SITE LAYOUT PLAN |
| 7 | GENERAL GRADING PLAN |
| 8 | GENERAL DETAILS |
| 9 | TYPICAL SECTIONS |
| S-1 | ADDITIONAL GENERAL NOTES |
| S-2 | PLAN AND SECTIONS |
| S-3 | PLAN AND SECTIONS |
| S-4 | DETAILS |
| U-1 | PLAN |
| U-2 | DETAILS |

HARVEY JONES CHANNEL
RIVER OUTFALL

COVER SHEET

APPROVALS

SSCAFCA: Charles Thomas EXECUTIVE ENGINEER DATE: _____
Digitally signed by Charles Thomas
DN: cn=Charles Thomas o=SSCAFCA
c=us, ou=Executive Engineer,
email=cthomas@sscafca.com, c=US
Date: 2021.09.07 07:47:55 -0600

CITY OF RIO RANCHO: [Signature] UTILITY DEPARTMENT DATE: 9/8/21

MIDDLE RIO GRANDE CONSERVANCY DISTRICT: [Signature] CHIEF ENGINEER DATE: 9/13/2021

| REVISIONS & CHANGE NOTICES | | |
|----------------------------|-------------|------|
| MARK | DESCRIPTION | DATE |
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PROJECT NO: MO_P0040-01
 DESIGNED BY: DG
 DRAWN BY: KLF
 CHECKED BY: AE
 DATE: 9/3/2021

1

SHEET 1 OF 9

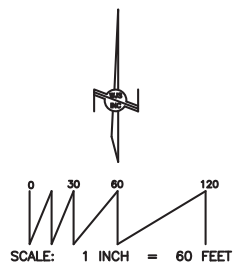
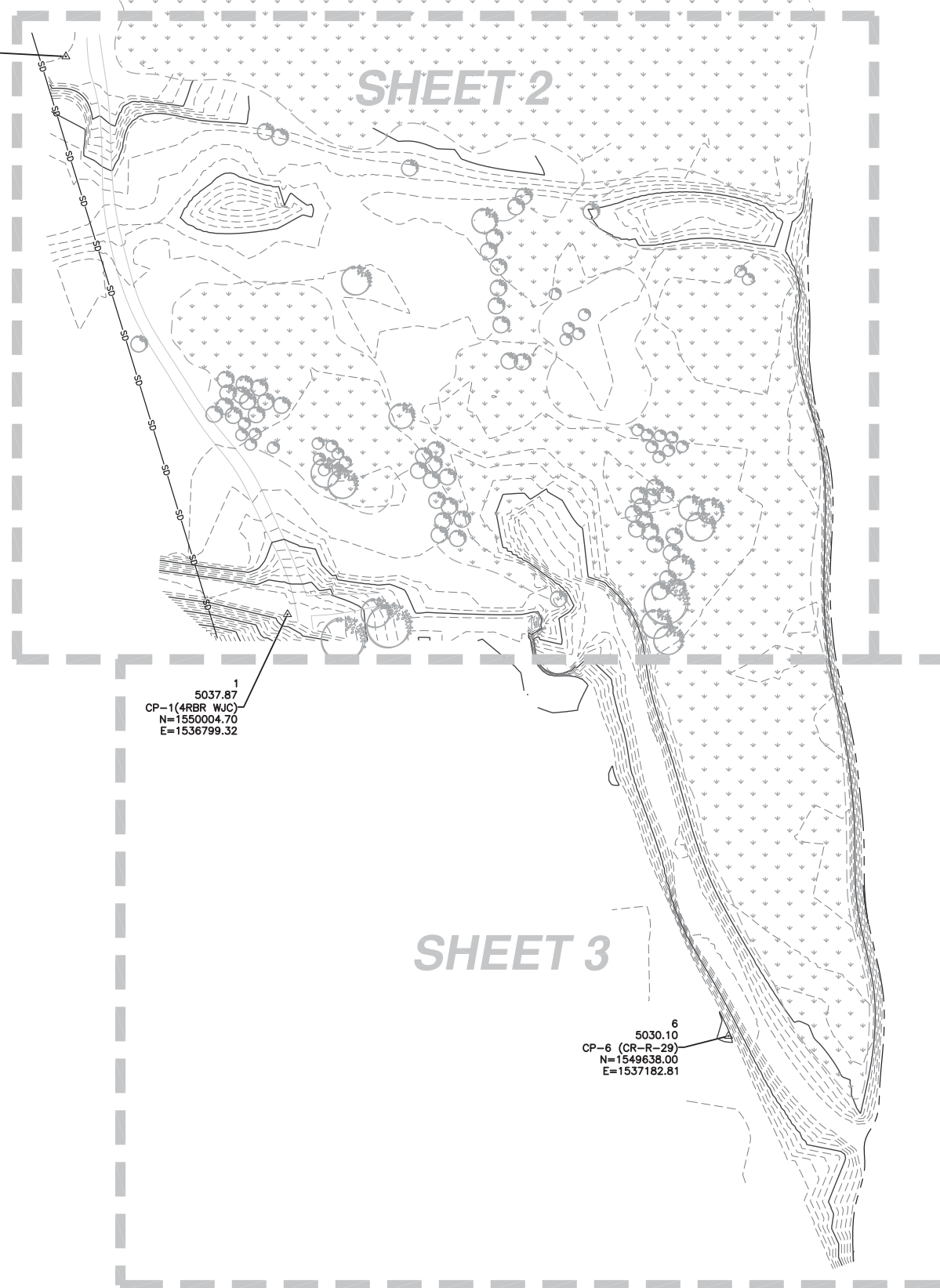
Notice of Extended Payment Provision
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Plot: September 3, 2021 8:33:31 AM
 C:\SSCAFCA\Projects\MO_P0040-01\Drawings\MO_P0040-01_S1.dwg
 Utility Engineer

TOPOGRAPHIC SURVEY

2
5037.76
CP-2 (SSCAFCA WHP-HJ02)
N=1550489.90
E=1536606.58

3
5036.53
CP-3 (SSCAFCA WHP-HJ01)
N=1550381.53
E=1536228.87



VICINITY MAP



(NOT TO SCALE)

SURVEY LEGAL DESCRIPTION:

A portion of land in and around the Harvey Jones Channel, being located adjacent to the Rio Grande River, in Corrales, Sandoval County, New Mexico.

FLOOD INFORMATION:

This property does lie in an area covered by a formal F.E.M.A. Flood Study. Property lies within Zone "AO (Depth 1") and Zone AE (Elev. 5032") (100 Flood Hazards) and is not subject to 100 Year Flood Hazards. Reference: Flood Insurance Rate Map, New Mexico Panel 350094 1913 D. Effective Date: March 18 2008.

SURVEY NOTES:

- Project Control was established using a GPS OPUS Solution at CP-1. The coordinates provided at CP-1 are NMSF Central Zone Grid (NAD 83), with a ground elevation (NAVD 88). All other control points provided for in this survey are NMSF Central Zone Ground (NAD 83), with a ground elevation (NAVD 88). To determine grid coordinates on any point in this drawing, apply a scale factor of 0.99967464 with CP-1 as the point of origin. The contents of this drawing are at ground, tied to CP-1 grid coordinates as reported below.

| | |
|---------------------------------------|-----------------|
| △ CP-1 (#4 REBAR AND CAP) | Ground-to-grid: |
| y=1,550,004.699 US SURVEY FOOT (GRID) | 0.99967464 |
| x=1,536,799.321 US SURVEY FOOT (GRID) | Mapping Angle: |
| z=5,037.67 (NAVD 88) | -00°12'01.36" |
| NMSF CENTRAL ZONE | |
| NAD 83 | |
- All distances are ground.
- Date of field survey: July 28, 2020

SURVEYOR'S CERTIFICATION

This is to certify that a topographic site survey on the above referenced property was performed by me or under my supervision and that the information contained herein is true and correct to the best of my belief and knowledge. This does not constitute a corner or boundary survey.


Thomas D. Johnston, PS 14269

8/14/2020
Date



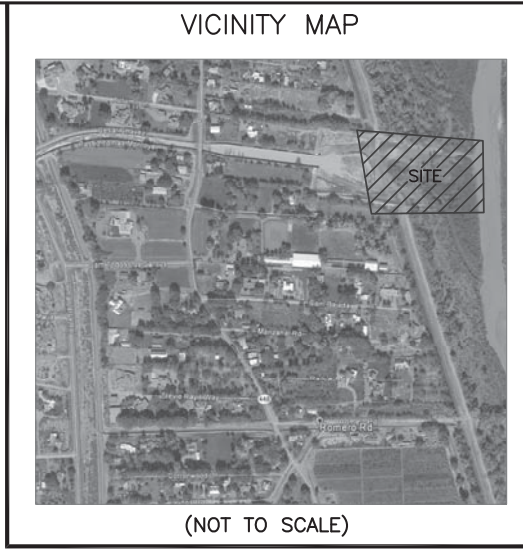
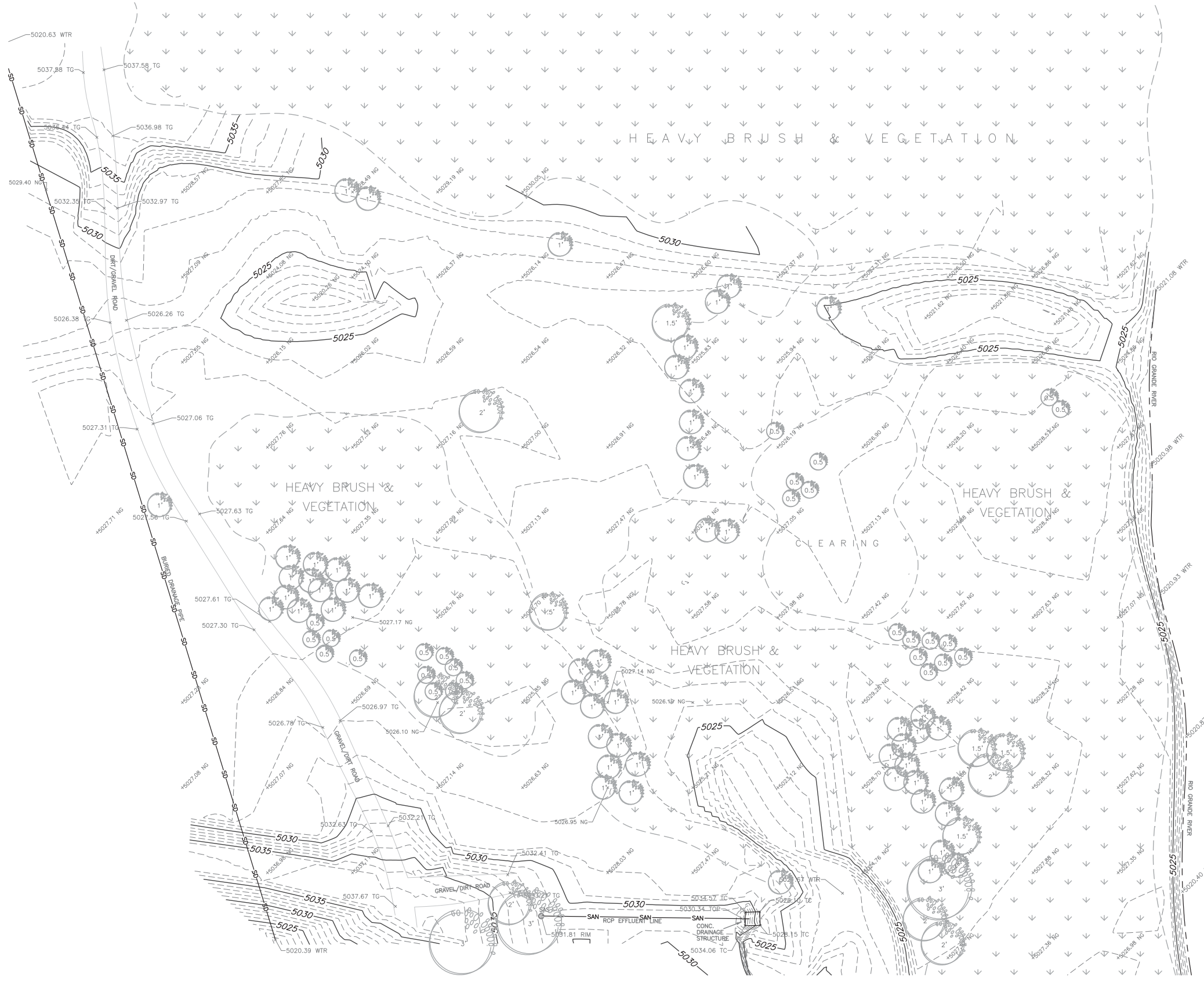
330 Louisiana Blvd, N.E. Albuquerque, NM 87108
Phone: (505) 255-2052 Fax: (505) 255-2887

Date of Survey: JULY 28, 2020 Draftsman: T R J
Date of Last Revision: 8/27/20 Job No.: EL-7-01-2020

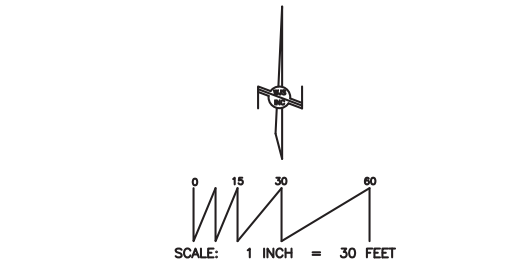
SHEET 1 OF 3


Notice of Extended Payment Provision
This contract allows the owner to make payment within 45 days after submission of an undisputed request for payment.

TOPOGRAPHIC SURVEY



- LEGEND:
- MH MANHOLE (TYPE)
 - FL FLOW-LINE
 - NG NATURAL GROUND
 - RM RIM OF MANHOLE
 - TC TOP OF CONCRETE
 - TG TOP OF GRAVEL
 - WTR WATER SURFACE ELEVATION
 - SPOT ELEVATION ELEVATIONS ARE TO ANNOTATED SPOTS
 - EXISTING CONTOURS @1 FT. INTERVALS
 - INDEX CONTOURS @5 FT. INTERVALS
 - DECIDUOUS TREE CALIPER AS NOTED
 - SAN SANITARY SEWER
 - SD STORM DRAIN





WAYJOHN SURVEYING INC.

330 Louisiana Blvd, N.E. Albuquerque, NM 87108
 Phone: (505) 255-2052 Fax: (505) 255-2887

| | |
|--------------------------------|-----------------------|
| Date of Survey: JULY 28, 2020 | Draftsman: T R J |
| Date of Last Revision: 8/27/20 | Job No.: EL-7-01-2020 |

SHEET 2 OF 3

Notice of Extended Payment Provision
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TOPOGRAPHIC SURVEY



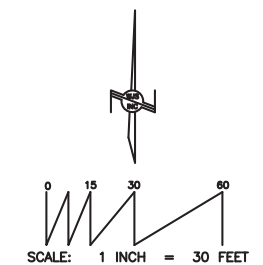
VICINITY MAP



(NOT TO SCALE)

LEGEND:

- MH MANHOLE (TYPE)
- FL FLOW-LINE
- NG NATURAL GROUND
- RM RIM OF MANHOLE
- TC TOP OF CONCRETE
- TG TOP OF GRAVEL
- WTR WATER SURFACE ELEVATION
- SPOT ELEVATION ELEVATIONS ARE TO ANNOTATED SPOTS
- EXISTING CONTOURS @1 FT. INTERVALS
- INDEX CONTOURS @5 FT. INTERVALS
- SAN SANITARY SEWER
- SD STORM DRAIN
- DECIDUOUS TREE CALIPER AS NOTED



330 Louisiana Blvd, N.E. Albuquerque, NM 87108
 Phone: (505) 255-2052 Fax: (505) 255-2887

Date of Survey: JULY 28, 2020 Draftsman: T R J
 Date of Last Revision: 8/27/20 Job No.: EL-7-01-2020

SHEET 3 OF 3

Notice of Extended Payment Provision
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0 40 80 FEET



| Point Table | | | | |
|-------------|------------|------------|-----------|--------------------------|
| Point # | Northing | Easting | Elevation | Description |
| 1 | 1550004.70 | 1536799.32 | 5037.87 | SURVEY CONTROL |
| 2 | 1550489.90 | 1536606.58 | 5037.76 | SURVEY CONTROL |
| 3 | 1550381.53 | 1536228.87 | 5036.53 | SURVEY CONTROL |
| 1000 | 1550319.12 | 1536589.61 | 5022.45 | HI-FLOW - 0+00.00 - BOA |
| 1001 | 1549962.28 | 1536813.21 | 5022.17 | HI-FLOW - 1+31.66 - RP |
| 1002 | 1550350.64 | 1536717.44 | 5022.17 | HI-FLOW - 1+31.66 - PC |
| 1003 | 1550361.26 | 1536784.73 | 5022.02 | HI-FLOW - 1+99.86 - Mid |
| 1004 | 1550360.31 | 1536852.84 | 5021.87 | HI-FLOW - 2+68.06 - PT |
| 1005 | 1550744.73 | 1537029.17 | 5021.57 | HI-FLOW - 4+05.44 - RP |
| 1006 | 1550346.70 | 1536989.54 | 5021.57 | HI-FLOW - 4+05.44 - PC |
| 1007 | 1550344.75 | 1537033.68 | 5021.48 | HI-FLOW - 4+49.64 - Mid |
| 1008 | 1550347.69 | 1537077.76 | 5021.38 | HI-FLOW - 4+93.85 - PT |
| 1009 | 1550153.49 | 1537137.34 | 5021.31 | HI-FLOW - 5+29.39 - RP |
| 1010 | 1550352.01 | 1537113.04 | 5021.31 | HI-FLOW - 5+29.39 - PC |
| 1011 | 1550351.07 | 1537168.38 | 5021.19 | HI-FLOW - 5+84.91 - Mid |
| 1012 | 1550335.00 | 153721.33 | 5021.07 | HI-FLOW - 6+40.42 - PT |
| 1013 | 1550322.10 | 1537249.20 | 5021.00 | HI-FLOW - 6+71.13 - EOA |
| 1100 | 1550319.12 | 1536589.61 | 5022.45 | LO-FLOW - 10+00.00 - BOA |
| 1101 | 1549944.06 | 1536739.34 | 5021.49 | LO-FLOW - 10+55.58 - RP |
| 1102 | 1550332.43 | 1536643.58 | 5022.31 | LO-FLOW - 10+55.58 - PC |
| 1103 | 1550338.30 | 1536806.98 | 5021.90 | LO-FLOW - 12+20.24 - Mid |
| 1104 | 1550278.30 | 1536959.07 | 5021.49 | LO-FLOW - 13+84.91 - PT |
| 1105 | 1550496.81 | 1537172.82 | 5021.06 | LO-FLOW - 14+43.49 - RP |
| 1106 | 1550246.12 | 1537008.02 | 5021.34 | LO-FLOW - 14+43.49 - PC |
| 1107 | 1550219.81 | 1537057.61 | 5021.20 | LO-FLOW - 14+99.71 - Mid |
| 1108 | 1550203.20 | 1537111.24 | 5021.06 | LO-FLOW - 15+55.93 - PT |
| 1109 | 1550102.66 | 1537103.41 | 5021.03 | LO-FLOW - 15+68.91 - RP |
| 1110 | 1550200.53 | 1537123.94 | 5021.03 | LO-FLOW - 15+68.91 - PC |
| 1111 | 1550167.29 | 1537179.72 | 5020.86 | LO-FLOW - 16+35.04 - Mid |
| 1112 | 1550106.79 | 1537203.32 | 5020.70 | LO-FLOW - 17+01.18 - PT |
| 1113 | 1549981.64 | 1537308.58 | 5020.37 | LO-FLOW - 18+30.57 - RP |
| 1114 | 1549977.51 | 1537208.66 | 5020.37 | LO-FLOW - 18+30.57 - PC |
| 1115 | 1549951.57 | 1537213.21 | 5020.31 | LO-FLOW - 18+56.99 - Mid |
| 1116 | 1549927.71 | 1537224.36 | 5020.24 | LO-FLOW - 18+83.40 - PT |
| 1117 | 1549814.18 | 1537297.06 | 5019.90 | LO-FLOW - 20+18.21 - EOA |
| 1200 | 1549994.93 | 1536904.71 | 5027.25 | EFF - 100+00.00 - BOA |
| 1201 | 1550066.43 | 1536804.71 | 5022.22 | EFF - 100+71.50 - RP |
| 1202 | 1550066.43 | 1536904.71 | 5022.22 | EFF - 100+71.50 - PC |
| 1203 | 1550093.84 | 1536900.88 | 5022.15 | EFF - 100+99.26 - Mid |
| 1204 | 1550119.15 | 1536889.68 | 5022.08 | EFF - 101+27.03 - PT |
| 1205 | 1550189.54 | 1536904.85 | 5021.96 | EFF - 101+78.85 - RP |
| 1206 | 1550163.18 | 1536862.36 | 5021.96 | EFF - 101+78.85 - PC |
| 1207 | 1550200.94 | 1536856.16 | 5021.86 | EFF - 102+18.12 - Mid |
| 1208 | 1550232.03 | 1536878.48 | 5021.77 | EFF - 102+57.39 - PT |
| 1209 | 1550220.90 | 1536955.38 | 5021.62 | EFF - 103+16.86 - RP |
| 1210 | 1550263.38 | 1536929.02 | 5021.62 | EFF - 103+16.86 - PC |
| 1211 | 1550270.89 | 1536956.03 | 5021.56 | EFF - 103+45.28 - Mid |
| 1212 | 1550262.68 | 1536982.84 | 5021.49 | EFF - 103+73.70 - PT |
| 1213 | 1550170.54 | 1536940.97 | 5022.04 | EFF - 103+89.32 - RP |
| 1214 | 1550254.10 | 1536995.90 | 5021.49 | EFF - 103+89.32 - PC |
| 1215 | 1550229.42 | 1537021.79 | 5021.49 | EFF - 104+25.28 - Mid |
| 1216 | 1550197.22 | 1537037.34 | 5021.49 | EFF - 104+61.23 - PT |
| 1217 | 1550127.46 | 1536952.89 | 5022.12 | EFF - 105+05.93 - RP |
| 1218 | 1550154.14 | 1537049.27 | 5021.37 | EFF - 105+05.93 - PC |
| 1219 | 1550141.51 | 1537051.90 | 5021.33 | EFF - 105+18.84 - Mid |
| 1220 | 1550128.65 | 1537052.89 | 5021.30 | EFF - 105+31.76 - PT |
| 1221 | 1550105.96 | 1537153.16 | 5021.13 | EFF - 105+55.63 - RP |
| 1222 | 1550104.77 | 1537053.17 | 5021.23 | EFF - 105+55.63 - PC |
| 1223 | 1550085.87 | 1537055.20 | 5021.18 | EFF - 105+74.68 - Mid |
| 1224 | 1550067.69 | 1537060.78 | 5021.13 | EFF - 105+93.72 - PT |
| 1225 | 1550023.24 | 1537079.19 | 5021.00 | EFF - 106+41.83 - EOA |



**Southern Sandoval
County
Arroyo Flood Control
Authority**
1041 Commercial Dr. S.E.
Rio Rancho, New Mexico 87124
505-892-RAIN (7246)
505-892-7241 (Fax)
www.sscasca.com



HARVEY JONES CHANNEL
RIVER OUTFALL

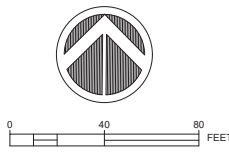
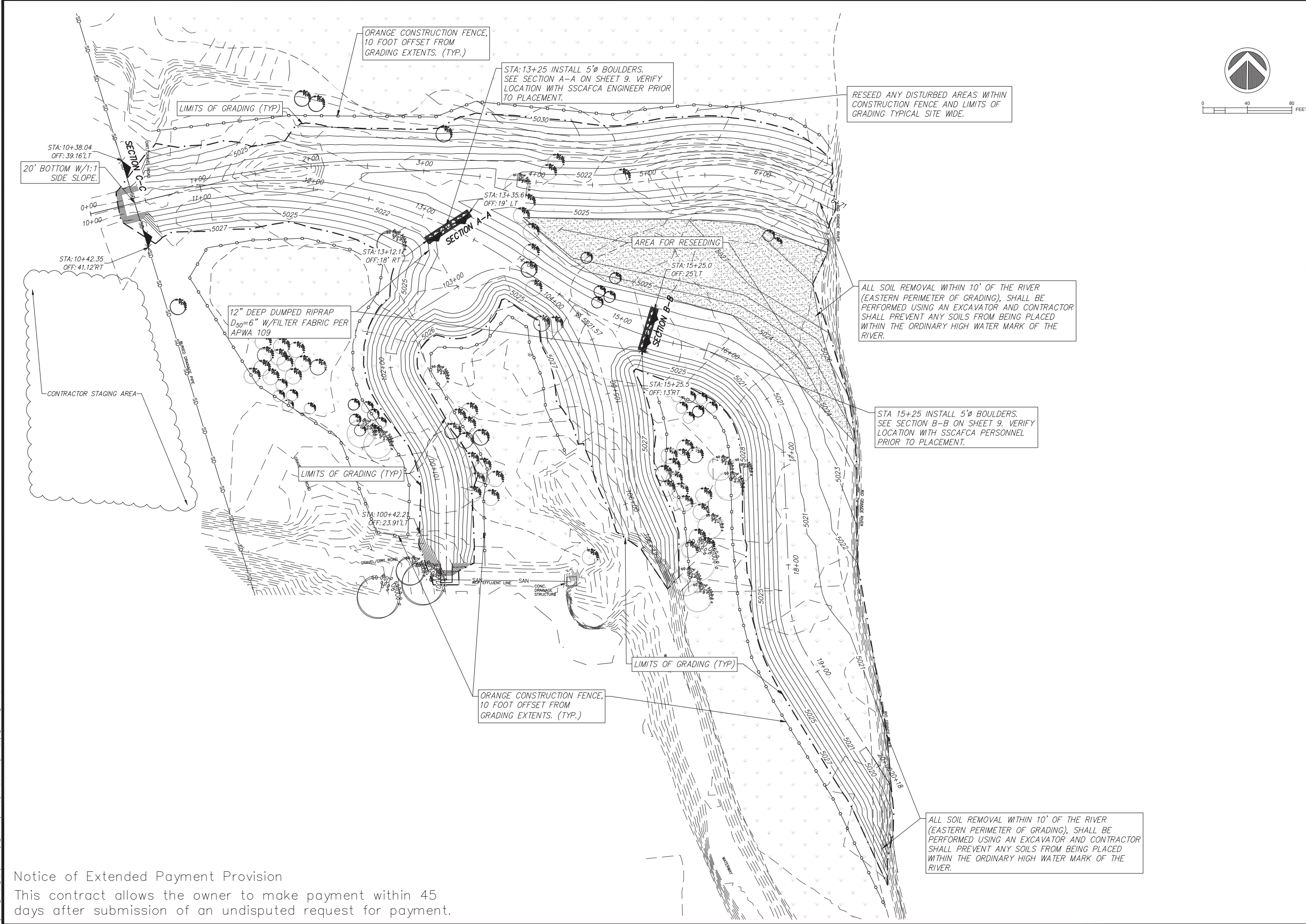
SITE LAYOUT PLAN

| REVISIONS & CHANGE NOTICES | | |
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PROJECT NO: MO_P0040-01
DESIGNED BY: DG
DRAWN BY: KLF
CHECKED BY: AE
DATE: 8/25/2021

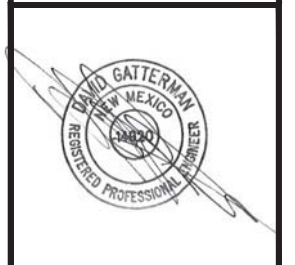
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Notice of Extended Payment Provision
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SSCAFCA

Southern Sandoval County
Arroyo Flood Control Authority
 1041 Commercial Dr. S.E.
 Rio Rancho, New Mexico 87124
 505-892-RAIN (7246)
 505-892-7241 (Fax)
 www.sscafca.com



HARVEY JONES CHANNEL
RIVER OUTFALL
GENERAL GRADING PLAN

| REVISIONS & CHANGE NOTICES | | |
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PROJECT NO: MO_P0040-01
 DESIGNED BY: DG
 DRAWN BY: KLF
 CHECKED BY: AE
 DATE: 9/2/2021

Notice of Extended Payment Provision
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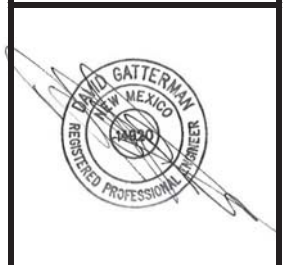
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P:\04 - September 3, 2021 8:35:16 AM - Kathy Fovander
 © SSSCA/CA Project Files Montoya_MO_P0040-01 V:\uicad\Production Drawings\Plan_Sets\MO_P0040-01_G-001.dwg

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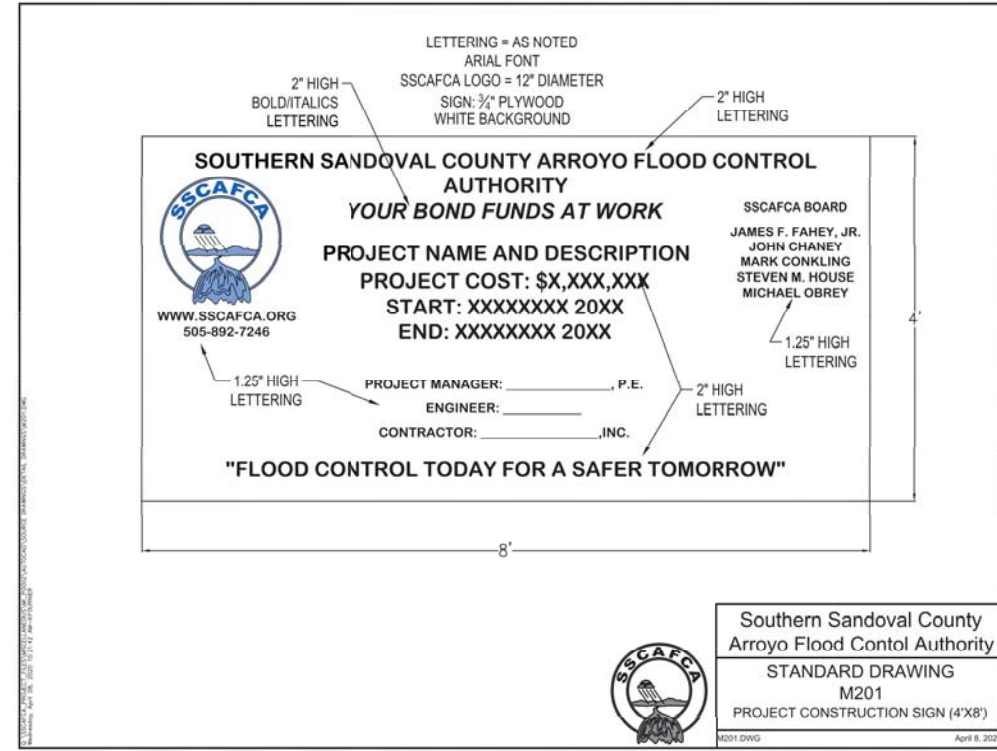


HARVEY JONES CHANNEL
 RIVER OUTFALL
 GENERAL DETAILS

| REVISIONS & CHANGE NOTICES | | |
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PROJECT NO: MO_P0040-01
 DESIGNED BY: DG
 DRAWN BY: KLF
 CHECKED BY: AE
 DATE: 9/3/2021

8
 SHEET 8 OF 9





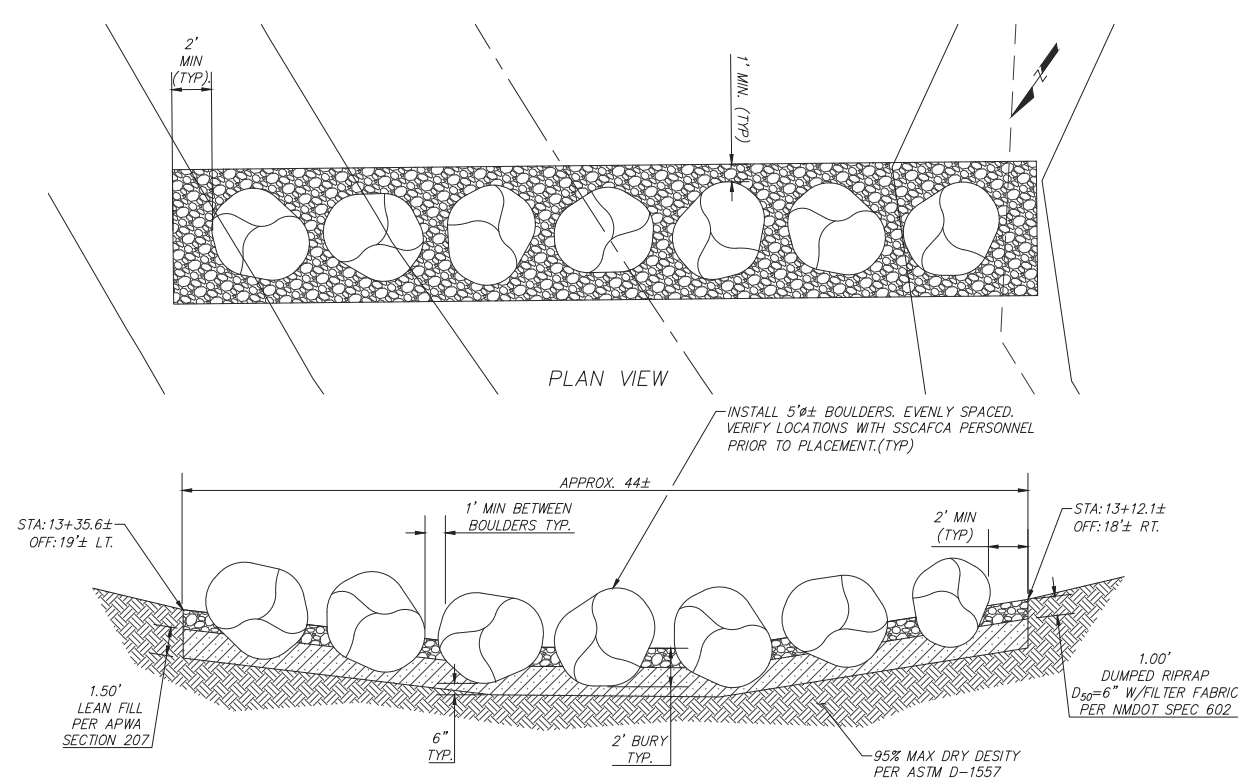
**Southern Sandoval
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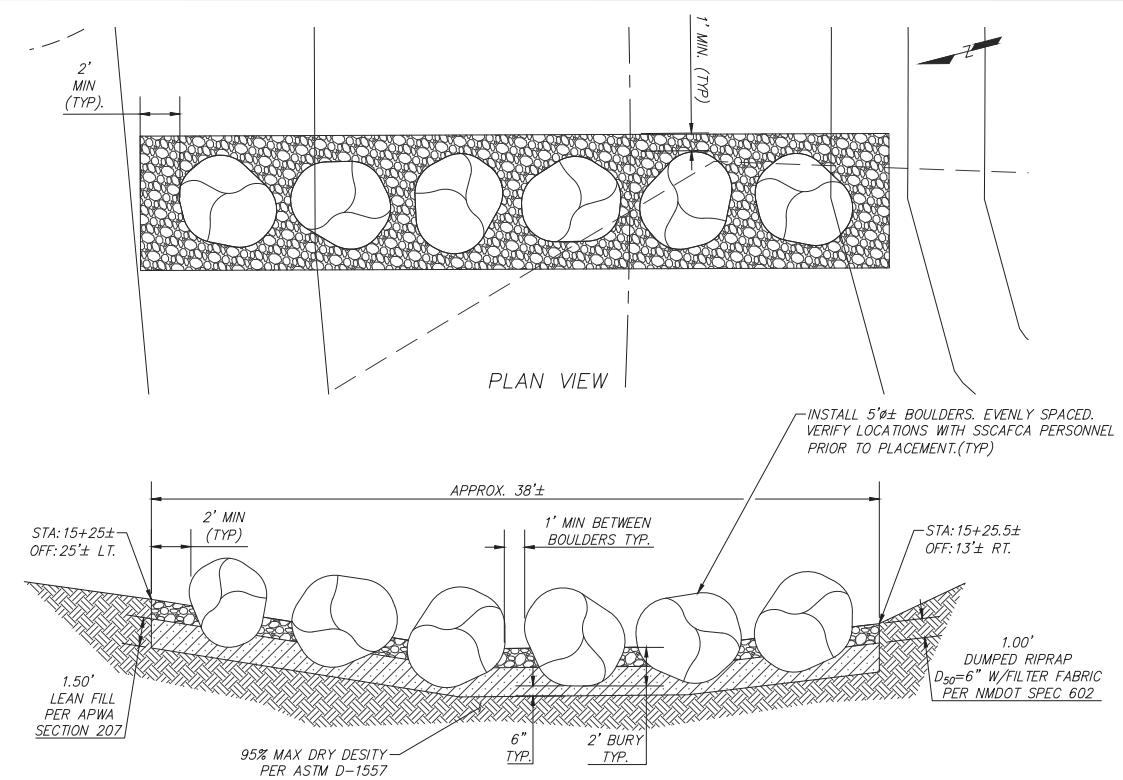


HARVEY JONES CHANNEL
RIVER OUTFALL

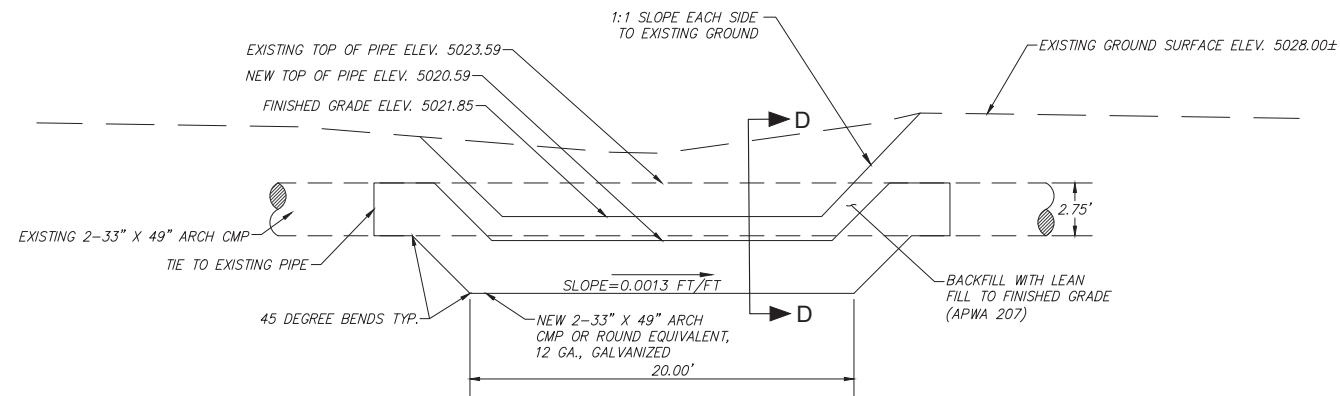
TYPICAL SECTIONS



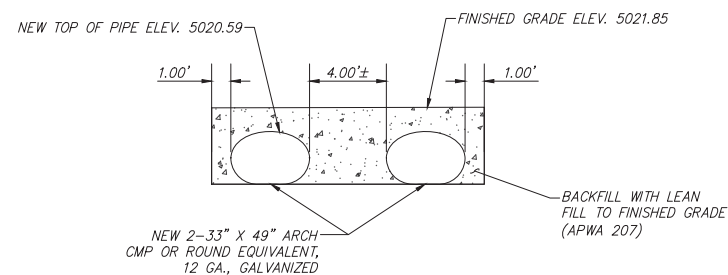
SECTION A-A
NOT TO SCALE



SECTION B-B
NOT TO SCALE



SECTION C-C
NOT TO SCALE



SECTION D-D
NOT TO SCALE

| REVISIONS & CHANGE NOTICES | | |
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| MARK | DESCRIPTION | DATE |
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PROJECT NO: MO_P0040-01
DESIGNED BY: DG
DRAWN BY: KLF
CHECKED BY: AE
DATE: 9/3/2021

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File: \\sccafca\projects\2021\09-03-21\09-03-21\AUTOCAD\SOURCE DRAWINGS\SURFACES\MO_P0040-01_C-SURF.PIC
 C:\SSCAFCA\PROJECT_FILES\MONTANAS\MO_P0040-01

| STRUCTURAL STEEL NOTES | |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NOTE | DESCRIPTION |
| 1. | ALL DETAILING, FABRICATION, AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE REQUIREMENTS OF THE AISC SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS, AND WITH ALL LOCAL LAWS AND ORDINANCES. WHERE CONFLICTING REQUIREMENTS OCCUR, THE MORE STRINGENT REQUIREMENT SHALL APPLY. |
| 2. | ALL W SHAPES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A992 GRADE 50. ALL C SHAPES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36. |
| 3. | ALL ANGLES AND PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36 UNLESS NOTED OTHERWISE. |
| 4. | ALL HOLLOW STRUCTURAL STEEL (HSS) SHALL CONFORM TO THE REQUIREMENTS OF ASTM A500 GRADE B, F _y =46 KSI OR ASTM 1085. |
| 5. | ALL STEEL PIPE SHALL CONFORM TO ASTM A53 GRADE B |
| 6. | ALL WELDS SHALL CONFORM TO THE AMERICAN WELDING SOCIETY'S D1.1 "STRUCTURAL WELDING CODE - STEEL" |
| 7. | ALL HIGH STRENGTH BOLTS SHALL CONFORM TO ASTM A325. UNLESS NOTED OTHERWISE, BOLTS SHALL BE 3/4" DIA. AND HOLES SHALL BE 1/16" LARGER THAN BOLT SIZE. BOLTED CONNECTIONS ARE DESIGNED AS BEARING TYPE WITH THREADS IN SHEAR PLANE. WASHERS SHALL BE INSTALLED UNDER NUTS OF FASTENERS WHEN REQUIRED BY THE SPECIFICATION FOR STRUCTURAL JOINTS. ALL HIGH STRENGTH BOLTS SHALL BE TIGHTENED TO THE SNUG TIGHT CONDITION. |
| 8. | UNLESS NOTED OTHERWISE, ALL SHOP CONNECTIONS SHALL BE MADE WITH WELDS OR HIGH STRENGTH BOLTS. |
| 9. | UNLESS NOTED OTHERWISE, ALL FIELD CONNECTIONS SHALL BE MADE WITH HIGH STRENGTH BOLTS. |
| 10. | NO OPENINGS MAY BE CUT IN STRUCTURAL MEMBERS UNLESS SHOWN ON THE DRAWINGS. |
| 11. | GUSSET PLATES SHALL BE 3/8" MINIMUM THICKNESS. |
| 12. | ALL EXPOSED STRUCTURAL STEEL ON THE EXTERIOR OF THE BUILDING SHALL BE HOT DIP GALVANIZED G-90 UNO. |
| 13. | PRIOR TO DETAILING CONNECTIONS FOR STRUCTURAL STEEL, THE STEEL FABRICATOR SHALL SUBMIT FOR APPROVAL REPRESENTATIVE DETAILS AND CALCULATIONS FOR EACH TYPE OF STRUCTURAL STEEL CONNECTION TO BE UTILIZED. AFTER APPROVAL, THE CONNECTIONS MAY BE INCORPORATED INTO THE SHOP DRAWINGS, ALONG WITH A TABLE OF DESIGN CAPACITIES FOR THE RANGE OF CONNECTIONS TO BE USED. |
| 14. | SPLICING OF STRUCTURAL STEEL MEMBERS WHERE NOT DETAILED ON THE CONTRACT DOCUMENTS IS PROHIBITED WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD. AS TO LOCATION, TYPE OF SPLICE, AND CONNECTION TO BE MADE. |
| 15. | NO MISFABRICATED STRUCTURAL STEEL MAY BE ERECTED PRIOR TO REVIEW BY THE STRUCTURAL ENGINEER OF RECORD. |
| 16. | PENETRATIONS SHALL NOT BE CUT IN STRUCTURAL STEEL MEMBERS UNLESS SO INDICATED IN THE DRAWINGS OR AS REVIEWED BY STRUCTURAL ENGINEER OF RECORD. |

| CONCRETE NOTES | |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NOTE | DESCRIPTION |
| 1. | ALL CONCRETE SHALL BE MADE WITH STONE AGGREGATE AND A MODIFIED TYPE II CEMENT AND SHALL DEVELOP 4,000 PSI COMPRESSIVE STRENGTH IN 28 DAYS. USE CLASS "F" FLY ASH AND A WATER/CEMENT RATIO OF 0.45. ADDITION OF ANY ADMIXTURES SHALL BE APPROVED BY THE STRUCTURAL ENGINEER. ALL CONCRETE IN CONTACT WITH SOILS OR EXPOSED TO DEICING SALTS SHALL BE MADE USING TYPE II CEMENT. USE NO CALCIUM CHLORIDE WITH TYPE II CEMENT. |
| 2. | UNLESS NOTED OTHERWISE, ALL DETAILING, FABRICATION, AND PLACING OF REINFORCING STEEL SHALL CONFORM TO "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" (ACI 315) AND "MANUAL OF ENGINEERING AND PLACING DRAWINGS FOR REINFORCED CONCRETE STRUCTURES" (ACI 315R). |
| 3. | UNLESS NOTED OTHERWISE, ALL CONCRETE SHALL HAVE NATURAL SAND FINE AGGREGATE AND NORMAL WEIGHT COARSE AGGREGATES CONFORMING TO ASTM C39, TYPE I PORTLAND CEMENT CONFORMING TO ASTM C150, AND DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI IN 28 DAYS. |
| 4. | UNLESS NOTED OTHERWISE, ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A615 GRADE 60, INCLUDING SUPPLEMENTARY REQUIREMENTS. |
| 5. | UNLESS NOTED OTHERWISE, ALL SPLICES OF REINFORCING STEEL SHALL BE CLASS B TENSION LAP SPLICES (12" MIN). |
| 6. | SPLICE TOP REINFORCING STEEL AT MID-SPAN AND BOTTOM REINFORCING STEEL OVER SUPPORTS. |
| 7. | WELDED WIRE FABRIC REINFORCING SHALL LAP TWO FULL SPACINGS OF THE CROSS WIRES AND BE SECURELY ATTACHED AT EACH END. |
| 8. | UNLESS NOTED OTHERWISE, ALL REINFORCING STEEL HOOKS SHALL BE ACI STANDARD 90° HOOKS. |
| 9. | ALL OPENINGS IN CONCRETE WHERE GREATEST DIMENSION EXCEEDS 1'-0" SHALL HAVE (2) #5 BARS ON EACH SIDE AND AT EACH CORNER. BARS SHALL EXTEND THE FULL EMBEDMENT LENGTH (2'-0" MIN.) BEYOND EDGE OF OPENING UNLESS OTHERWISE NOTED ON PLANS. |
| 10. | WHERE MAIN STEEL REINFORCEMENT IN SUPPORTED SLABS RUNS PARALLEL TO BEAMS, PROVIDE #4 BARS X 5'-0" AT 12" O.C. IN ADDITION TO REQUIRED TEMPERATURE AND SHRINKAGE REINFORCEMENT. ADDITIONAL REINFORCEMENT SHALL BE PLACED IN THE TOP FACE OF THE SLAB AND CENTERED OVER THE BEAMS. |
| 11. | UNLESS NOTED OTHERWISE, ALL CONSTRUCTION JOINTS IN SLABS AND/OR BEAMS SHALL BE MADE AT MID-SPAN. |
| 12. | UNLESS NOTED OTHERWISE, PROVIDE A 3/4"x3/4" CHAMFER AT ALL EXPOSED EXTERNAL CORNERS. |
| 13. | ALL SLOTS, SLEEVES, AND OTHER EMBEDDED ITEMS SHALL BE SET PRIOR TO CONCRETE PLACEMENT. SEE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND VENDOR DRAWINGS FOR SIZES AND LOCATIONS. |
| 14. | MIXING, TRANSPORTING, AND PLACING OF CONCRETE SHALL CONFORM TO ACI 301. |
| 15. | MINIMUM CONCRETE COVER PROTECTION FOR REINFORCEMENT BARS SHALL BE AS FOLLOWS: (SEE ACI 318 SECTION 7.7 FOR CONDITIONS NOT NOTED) CONCRETE EXPOSED TO WEATHER #5 BARS AND SMALLER ----- 1 1/2 INCHES ALL OTHER BARS ----- 2 INCHES CONCRETE CAST AGAINST EARTH GRADE BEAMS: TOP ----- 1 1/2 INCHES BOARD FORMED SIDES ----- 2 INCHES EARTH FORMED SIDES ----- 3 INCHES BOTTOM ----- 3 INCHES SLABS ON GRADE SINGLE LAYER OR TOP LAYER ----- 2 INCHES PILASTERS & PLINTHS ----- 2 INCHES STRUCTURAL SLAB ----- 3/4 INCH PROVIDE STANDARD BAR CHAIRS AND SPACERS AS REQUIRED TO MAINTAIN CONCRETE PROTECTION SPECIFIED. |
| 16. | SIZE AND PLACEMENT OF ALL CONCRETE REINFORCEMENT AND EMBEDS SHALL BE INSPECTED AND APPROVED PRIOR TO PLACING CONCRETE. |
| 17. | GROUT FOR BASE PLATES SHALL BE NON-SHRINKABLE, NON-METALLIC, CONFORMING TO ASTM C827, AND SHALL HAVE A SPECIFIED COMPRESSIVE STRENGTH AT 28 DAYS OF 5000 PSI. PREGROUTING OF BASE PLATES WILL NOT BE PERMITTED. |
| 18. | REINFORCEMENT BARS SHALL NOT BE TACK WELDED, WELDED, HEATED OR CUT UNLESS INDICATED ON THE CONTRACT DOCUMENTS OR REVIEWED BY THE STRUCTURAL ENGINEER. |
| 19. | HORIZONTAL JOINTS WILL NOT BE PERMITTED IN CONCRETE CONSTRUCTION EXCEPT AS SHOWN ON THE CONTRACT DOCUMENTS. VERTICAL JOINTS MAY OCCUR AT CENTER OF SPANS AT LOCATIONS REVIEWED BY HUITT-ZOLLARS, INC. |

| DESIGN CRITERIA | |
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| NOTE | DESCRIPTION |
| 1. | THE STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING CODE. THE DESIGN GRAVITY LOADS ARE AS FOLLOWS: LIVE LOADS: VAULT ROOF SLAB/BOTTOM SLAB ----- 100 PSF ROOF (CONTROL ROOM) ----- 20 PSF |
| 2. | THE STRUCTURE HAS BEEN DESIGNED TO WITHSTAND THE WIND PRESSURES BASED ON THE PROVISIONS OF THE INTERNATIONAL BUILDING CODE WHICH REFER TO THE AMERICAN SOCIETY OF CIVIL ENGINEERS, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, ASCE 7-10, AND THE FOLLOWING CRITERIA: ULTIMATE DESIGN WIND SPEED, V _{ult} (3-SECOND GUST) --- 105 MPH RISK CATEGORY ----- I EXPOSURE CATEGORY ----- C INTERNAL PRESSURE COEFFICIENT (GCP _i) ----- +0.18/-0.18 |
| 3. | SEISMIC DESIGN PARAMETERS - ASCE 7-10 SEISMIC SPECTRAL ACCELERATIONS S ₁ ----- 0.468g S ₂ ----- 0.141g RISK CATEGORY ----- I SITE CLASS ----- D DESIGN SPECTRAL ACCELERATIONS S ₁ ----- 0.445g S ₂ ----- 0.211g SEISMIC DESIGN CATEGORY ----- D |

| GENERAL NOTES | |
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| NOTE | DESCRIPTION |
| 1. | THE STRUCTURE SHOULD NOT BE CONSIDERED TO BE STABLE DURING CONSTRUCTION UNTIL ALL ELEMENTS ARE IN PLACE AND CONNECTED. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY CONSTRUCTION BRACING REQUIRED. |
| 2. | THE STRUCTURE HAS BEEN DESIGNED FOR THE IN-SERVICE LOADS ONLY. THE METHODS, PROCEDURES, AND SEQUENCES OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND INSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION. |
| 3. | THE REPRODUCTIVE USE OF THE STRUCTURAL CONTRACT DOCUMENTS OR ELECTRONIC FILES AS STRUCTURAL SHOP DRAWING DOCUMENTS BY THE CONTRACTOR OR SUB- CONTRACTORS IS AT THEIR OWN RISK. HUITT-ZOLLARS, INC. ASSUMES NO LIABILITY AS THE RESULT OF THE REPRODUCTIVE USE OF THE STRUCTURAL CONTRACT DOCUMENTS FOR SHOP DRAWINGS. |
| 4. | SCALES NOTED ON THE DRAWINGS ARE FOR GENERAL REFERENCE ONLY. NO DIMENSIONAL INFORMATION SHALL BE OBTAINED BY DIRECT SCALING OF THE DRAWINGS. |
| 5. | THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL RESULTING REVISIONS TO THE STRUCTURAL SYSTEM OR OTHER TRADES AS A RESULT OF ACCEPTANCE OF CONTRACTOR PROPOSED ALTERNATIVES OR SUBSTITUTIONS. |
| 6. | PRINCIPAL OPENINGS IN THE STRUCTURE ARE INDICATED ON THE CONTRACT DOCUMENTS. REFER TO THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR SLEEVES, CURBS, INSERTS, ETC. NOT HEREIN INDICATED. OPENINGS IN SLABS WITH A MAXIMUM SIDE DIMENSION OR DIAMETER OF 12 INCHES OR LESS SHALL NOT REQUIRE ADDITIONAL FRAMING OR REINFORCEMENT, UNLESS NOTED OTHERWISE. THE LOCATION OF SLEEVES OR OPENINGS IN STRUCTURAL MEMBERS SHALL BE SUBMITTED TO HUITT-ZOLLARS, INC. FOR REVIEW. |
| 7. | IN THE EVENT THAT CERTAIN FEATURES OF THE CONSTRUCTION ARE NOT FULLY SHOWN ON THE DRAWINGS, OR CALLED FOR IN THE STRUCTURAL NOTES OR IN THE SPECIFICATIONS, THEN SUCH CONSTRUCTION SHALL BE IN THE SAME CHARACTER FOR SIMILAR CONDITIONS THAT ARE SHOWN OR CALLED FOR. |

| SUBGRADE AND FOUNDATION PREP NOTES | |
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| NOTE | DESCRIPTION |
| 1. | THE FOUNDATION SYSTEM HAS BEEN DESIGNED BASED ON A REPORT PREPARED BY TERRACON, REPORT NO. 88195025, DATED MARCH 26, 2019. THE CONTRACTOR SHALL PERFORM EXCAVATIONS, FOUNDATION CONSTRUCTION, AND PREPARATION OF THE SUBGRADE UNDER THE SLABS IN ACCORDANCE WITH THE RECOMMENDATIONS CONTAINED IN THE GEOTECHNICAL REPORT AND THE PROJECT SPECIFICATIONS |
| 2. | THE CONTRACTOR SHALL PROVIDE A LICENSED GEOTECHNICAL ENGINEER TO VERIFY THAT THE BUILDING SUBGRADE PREPARATION IS SUITABLE AND THAT APPROPRIATE BEARING MATERIAL IS ACHIEVED PRIOR TO SLAB AND FOUNDATION POURS. |
| 3. | THE FOUNDATION FOR THE STRUCTURE IS A MAT FOUNDATION AND HAS BEEN DESIGNED FOR THE FOLLOWING ALLOWABLE SOIL BEARING PRESSURES AT A MINIMUM BEARING DEPTH OF 18" PER LOCAL JURISDICTION REQUIREMENTS. TOTAL LOAD ----- 2,500 PSF |
| 4. | EXCAVATIONS FOR SPREAD FOOTINGS, COMBINED FOOTINGS, CONTINUOUS FOOTINGS AND/OR MAT FOUNDATIONS SHALL BE CLEANED AND HAND TAMPED TO A UNIFORM SURFACE. FOOTING EXCAVATIONS SHALL HAVE THE SIDES AND BOTTOMS TEMPORARILY LINED WITH 6 MIL VISQUEEN IF PLACEMENT OF CONCRETE DOES NOT OCCUR WITHIN 24 HOURS OF THE EXCAVATION OF THE FOOTING. |
| 5. | GENERAL CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER 24 HOURS PRIOR TO PLACEMENT OF CONCRETE IN THE FOOTINGS. |
| 6. | PROVIDE 15 MIL VAPOR BARRIER BELOW SLABS. |
| 7. | CONCRETE SHOULD BE TREMED TO THE BOTTOM OF THE EXCAVATION TO CONTROL THE MAXIMUM FREE FALL OF THE PLASTIC CONCRETE TO LESS THAN 10 FEET. |



**Southern Sandoval
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Arroyo Flood Control
Authority**

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www.sscafca.com



HARVEY JONES CHANNEL
RIVER OUTFALL

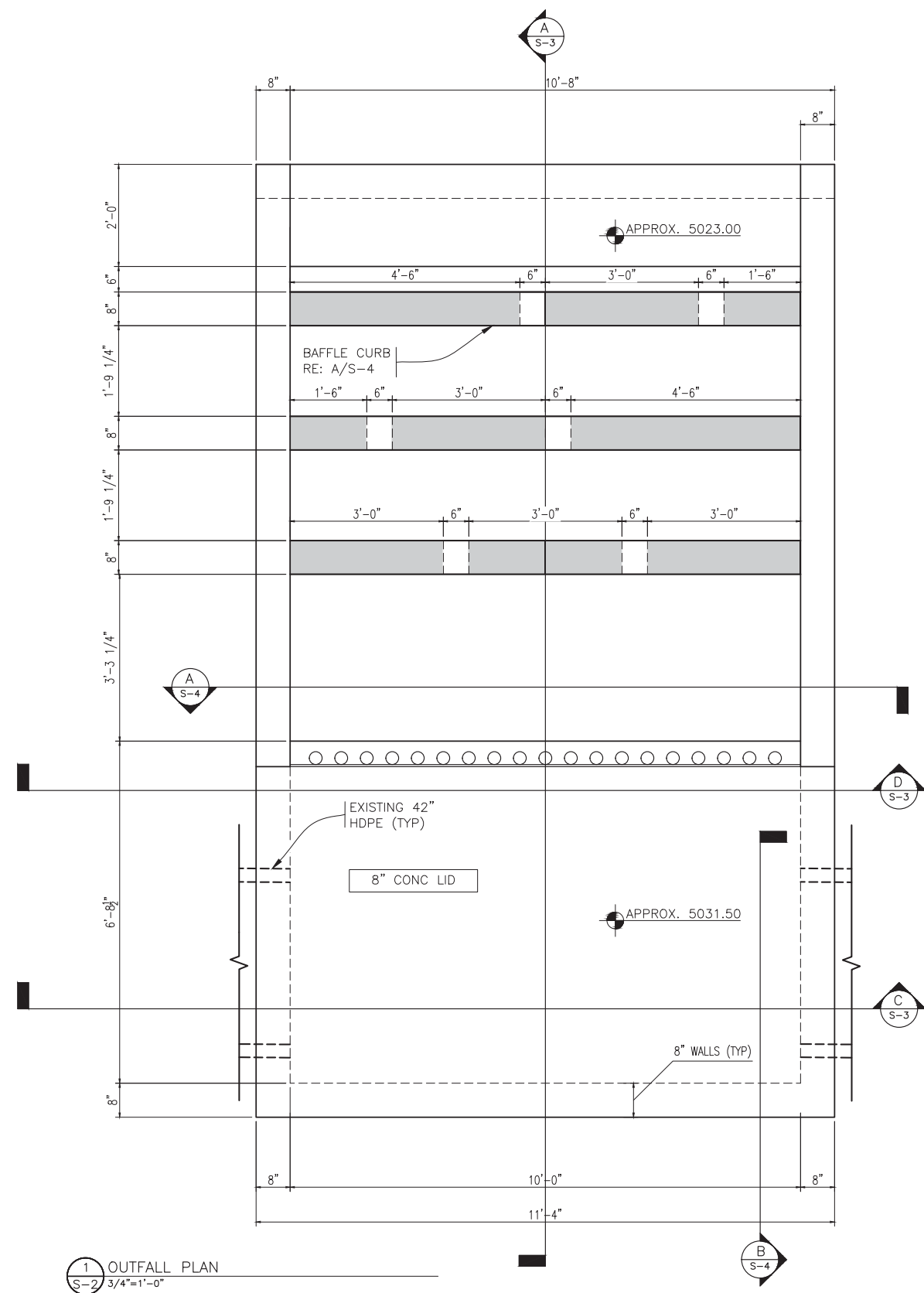
GENERAL NOTES

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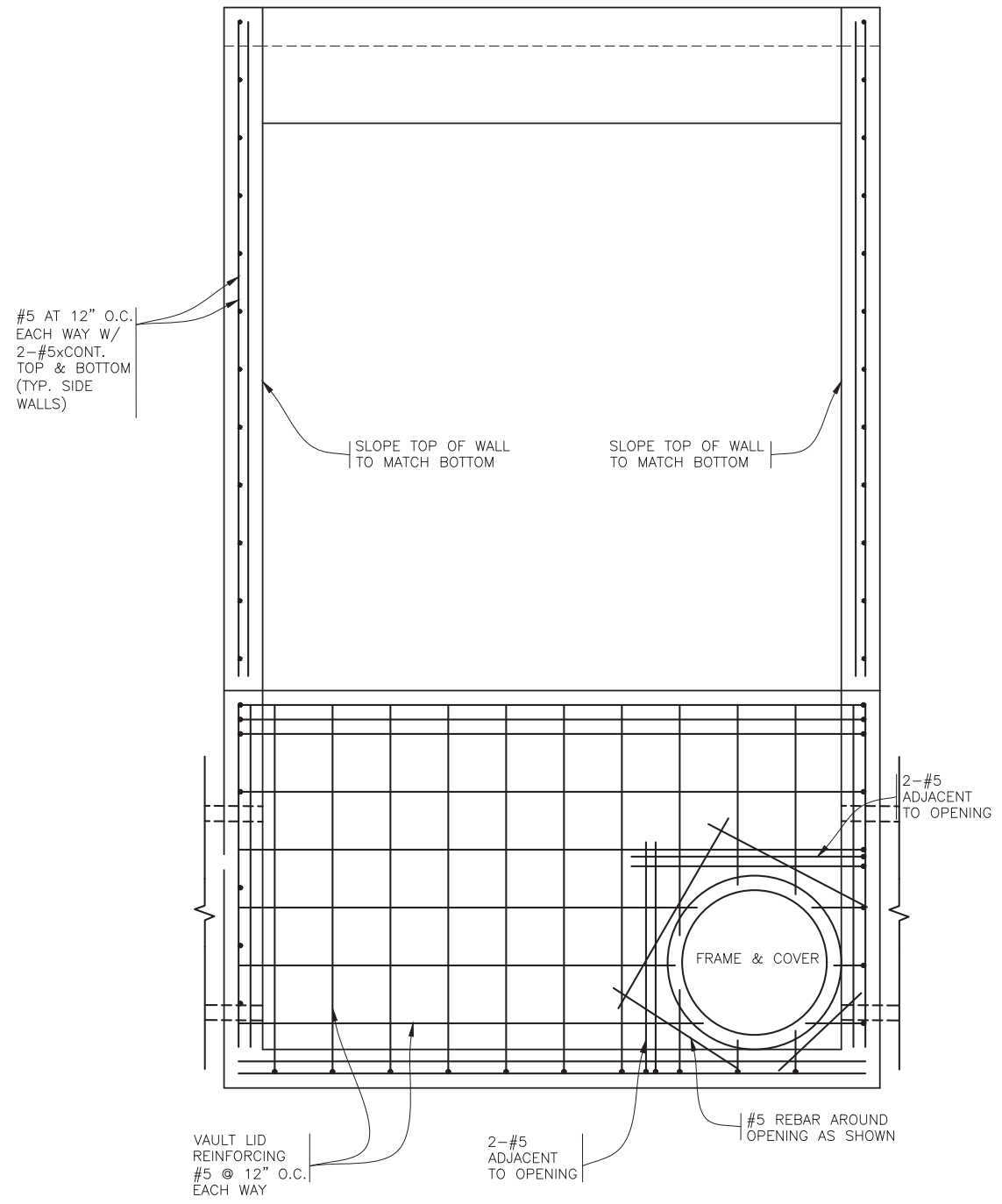
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 DESIGNED BY: WLA
 DRAWN BY: DLQ
 CHECKED BY: WLA
 DATE: 8/27/2021

S-1
SHEET 1 OF 4

Notice of Extended Payment Provision
 This contract allows the owner to make payment
 within 45 days after submission of an undisputed
 request for payment



1 OUTFALL PLAN
S-2 3/4"=1'-0"



2 OUTFALL REINFORCEMENT PLAN
S-2 3/4"=1'-0"



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HARVEY JONES CHANNEL
RIVER OUTFALL
PLAN AND SECTIONS

| REVISIONS & CHANGE NOTICES | | |
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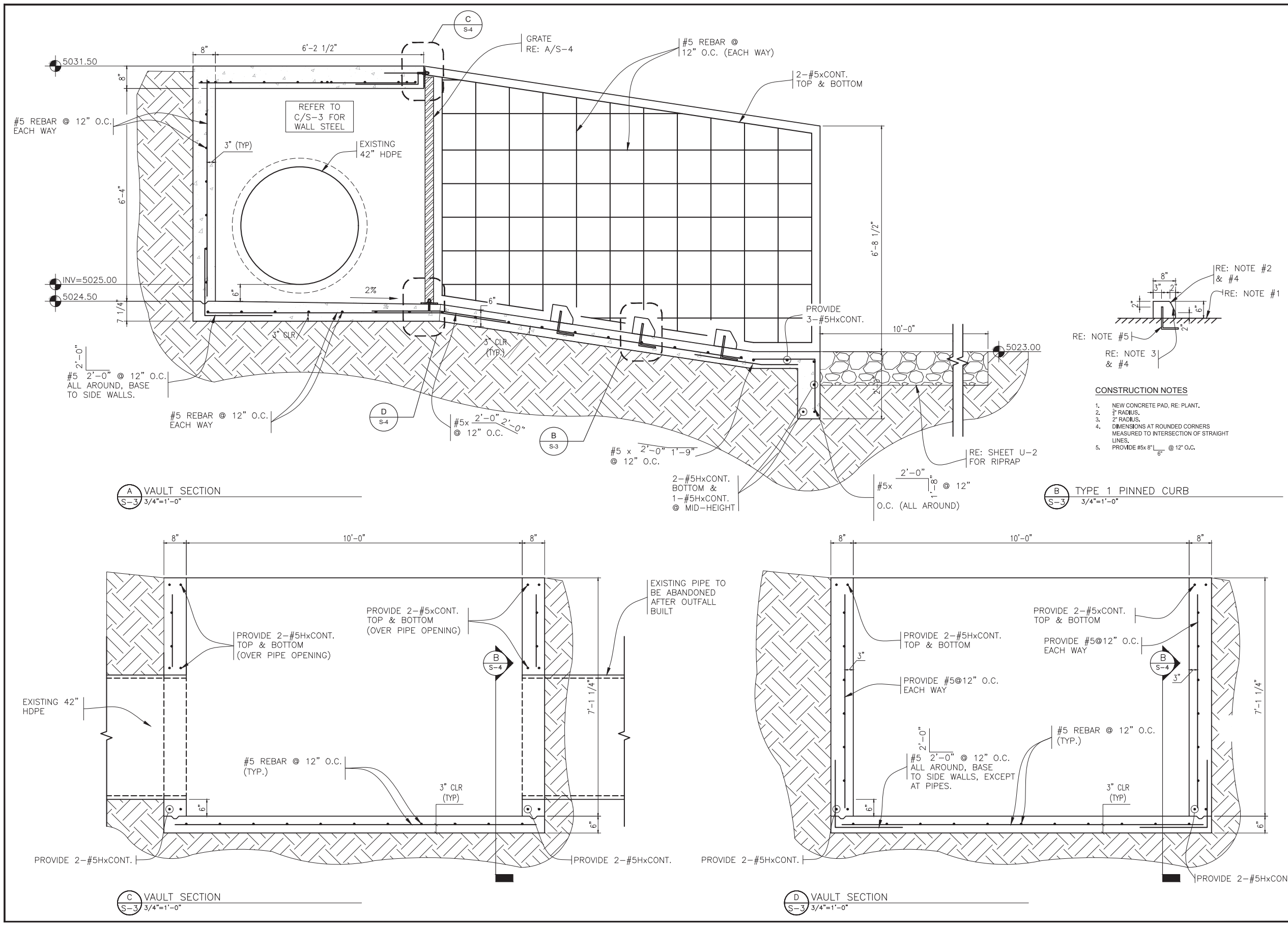
HARVEY JONES CHANNEL
RIVER OUTFALL

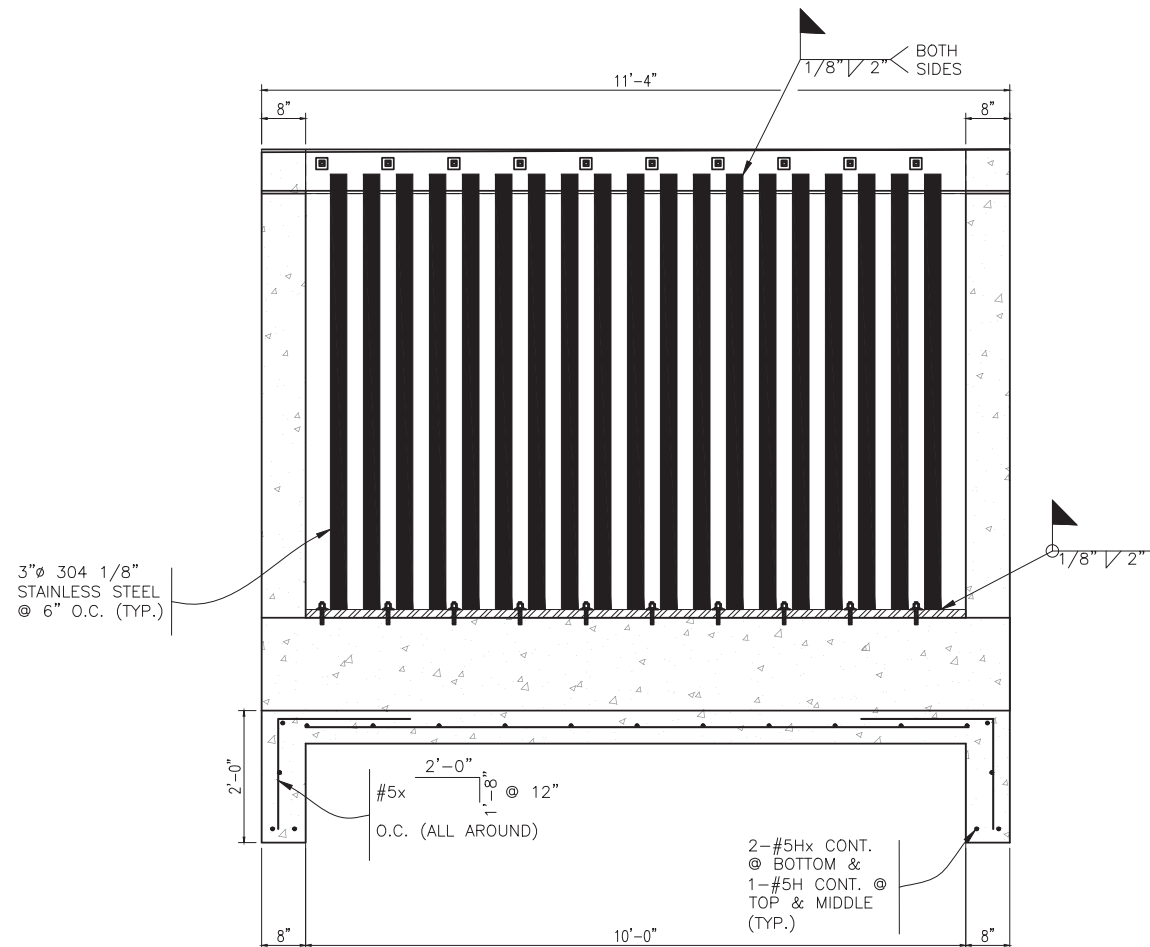
PLAN AND SECTIONS

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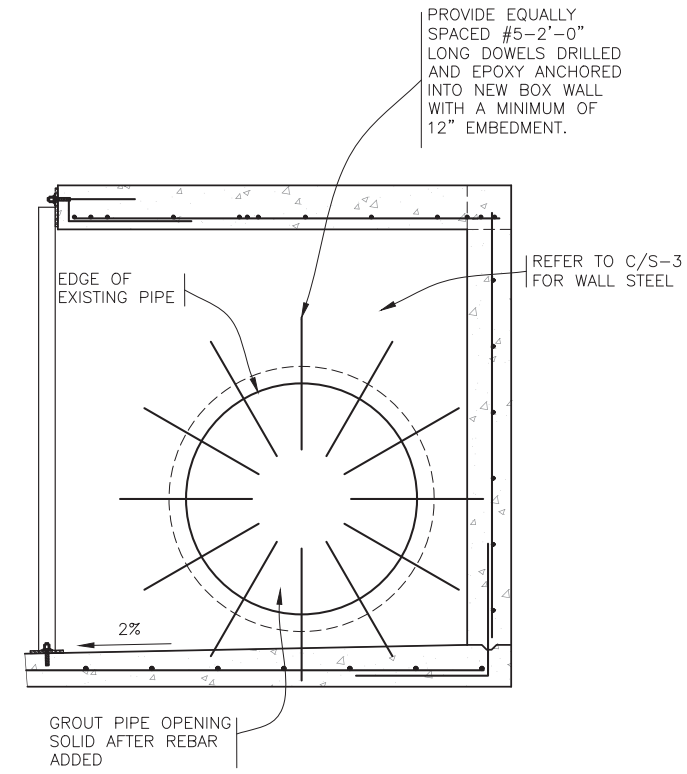
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DESIGNED BY: WLA
DRAWN BY: DLQ
CHECKED BY: WLA
DATE: 8/27/2021

S-3
SHEET 3 OF 4

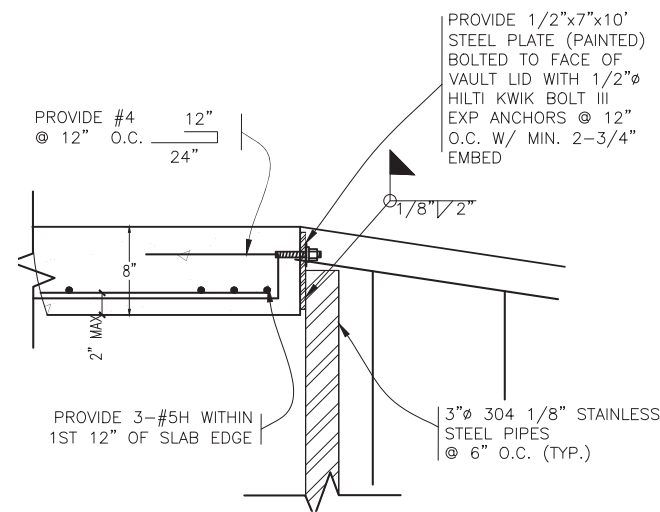




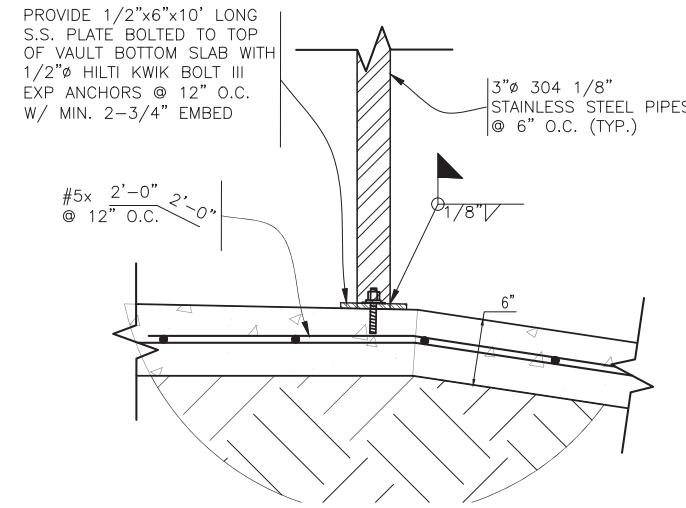
A GRATE
S-4 3/4"=1'-0"



B PLUG DETAIL
S-4 3/4"=1'-0"



C BOLT DETAIL
S-4 1-1/2"=1'-0"



D BOLT DETAIL
S-4 1-1/2"=1'-0"



Southern Sandoval County Arroyo Flood Control Authority
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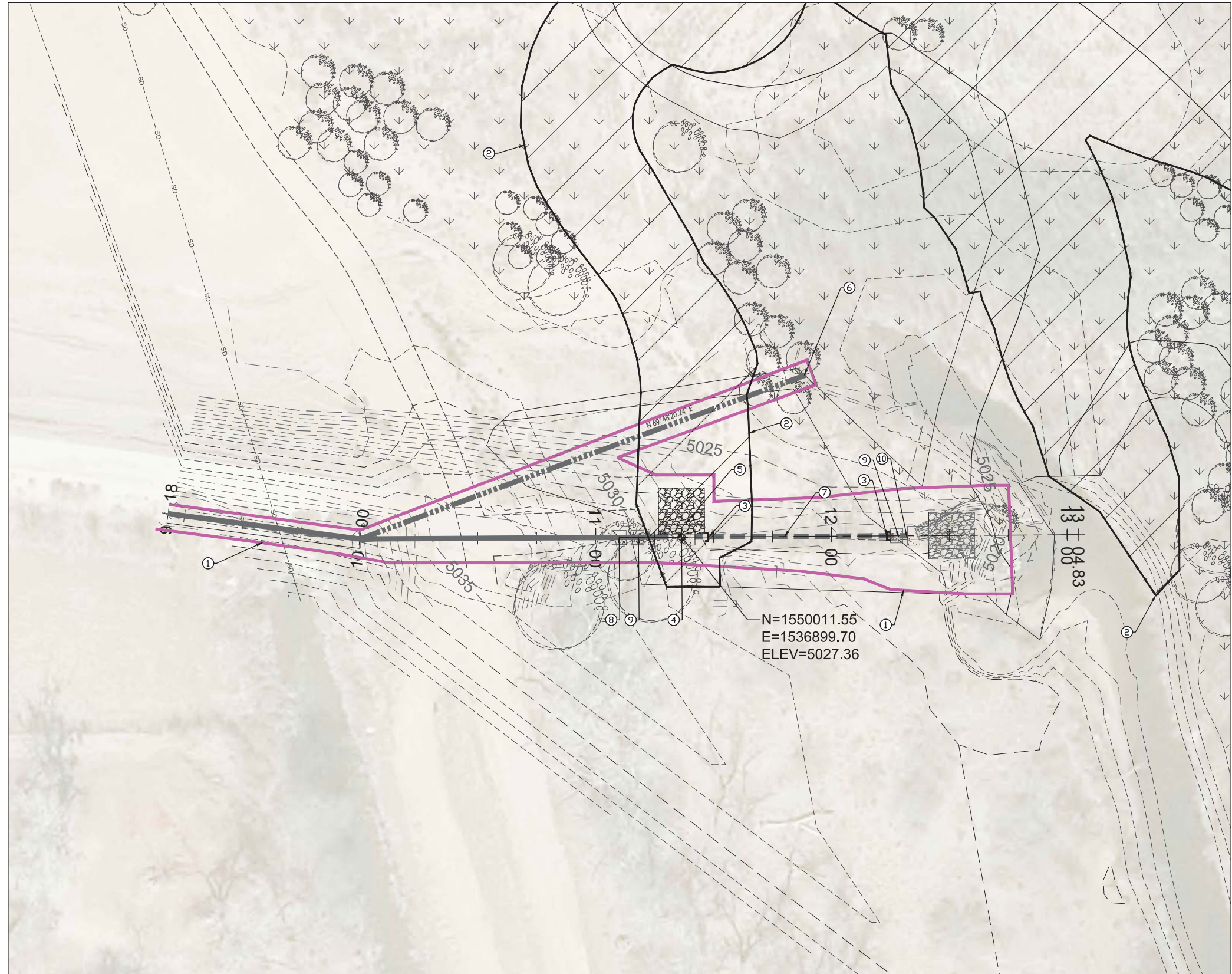
HARVEY JONES CHANNEL
 RIVER OUTFALL
 DETAILS

REVISIONS & CHANGE NOTICES

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PROJECT NO: MO_P0040-01
 DESIGNED BY: WLA
 DRAWN BY: DLQ
 CHECKED BY: WLA
 DATE: 8/27/2021

S-4
 SHEET 4 OF 4



KEYED NOTES

1. EFFLUENT OUTFALL IMPROVEMENT PLAN AREA
2. ADDITIONAL DRAINAGE IMPROVEMENTS. SEE SSCAFCA CONSTRUCTION DRAWINGS FOR COORDINATION
3. EXISTING 42" HDPE; CUT AND CAP IN PLACE
4. NEW JUNCTION BOX SEE SHEETS S1-S4
5. INSTALL 12" THICK RIPRAP WIRE ENCLOSED $D_{50}=6"$ WITH FILTER FABRIC PER NMDOT STD DWG 602-01.
6. 201.6' LF OF 20" DIA TEMPORARY BY-PASS LINE TO BE INSTALLED PER SPEC 30 00 00.
7. EXISTING 42" HDPE
8. EXISTING JUNCTION BOX
9. EXISTING THRUST BLOCK
10. EXISTING OUTFALL STRUCTURE TO BE REMOVED AND DISPOSED. EXISTING STAINLESS STEEL GRATING TO BE SALVAGED AND CREDITED BACK TO SSCAFCA/CITY OF RIO RANCHO.

LEGEND

- SSCAFCA IMPROVEMENT AREA
- PROPOSED SSCAFCA TREE LOCATION



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HARVY JONES CHANNEL
 RIVER OUTFALL
 PLAN

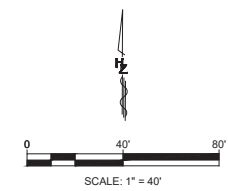
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PROJECT NO: MO_P0040_01
 DESIGNED BY: wv
 DRAWN BY: js
 CHECKED BY: wv
 DATE: 8/17/2021

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SHEET 1 OF 2



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HARVY JONES CHANNEL
RIVER OUTFALL
DETAILS

| REVISIONS & CHANGE NOTICES | | |
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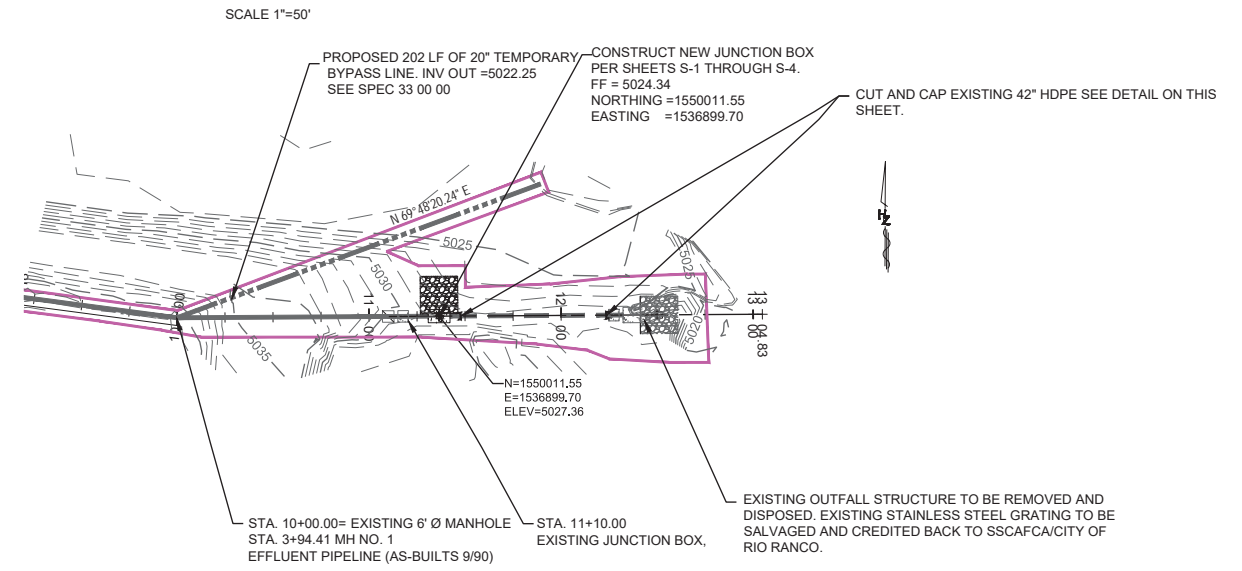
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CHECKED BY: WV
DATE: 8/19/2021

U-2
SHEET 2 OF 2

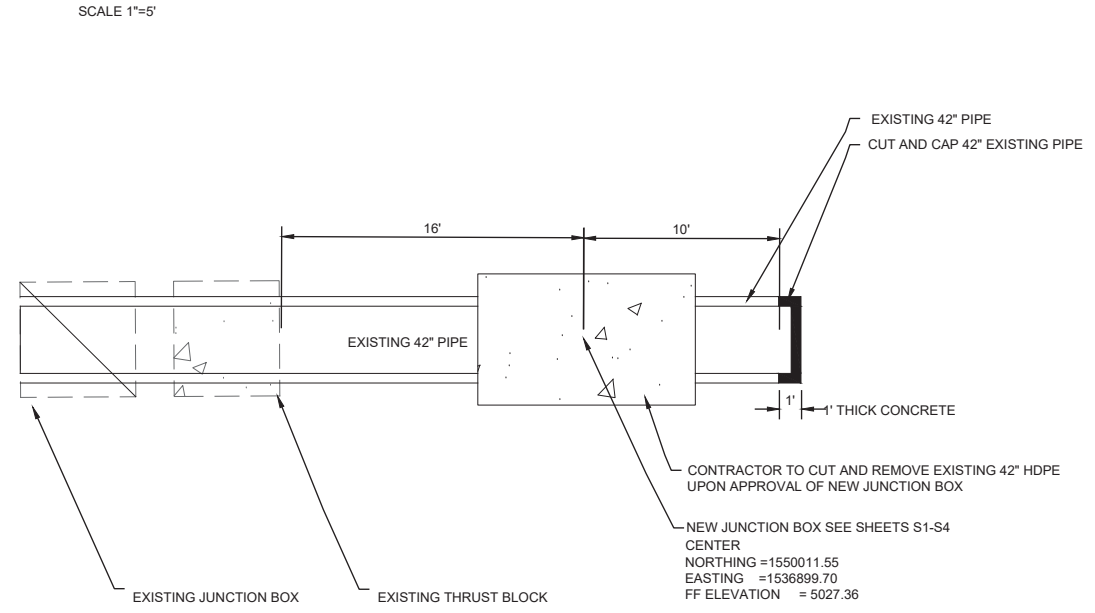
CONSTRUCTION NOTES

- ① CONTRACTOR SHALL MAINTAIN ACCESS AT ALL TIMES AND REPAIR ANY DAMAGE TO ANY EXISTING STRUCTURES, INCLUDING ACCESS ROADS, GATES, HOME ENTRANCES, ETC.
- ② CONTRACTOR SHALL VERIFY ALL ELEVATIONS PRIOR TO CONSTRUCTION
- ③ CONTRACTOR TO SUBMIT PROPOSED BY-PASS PUMPING PLAN PER SPEC 33 00 00 PRIOR TO CONSTRUCTION FOR APPROVAL.
- ④ INSTALL 12" THICK RIPRAP WIRE ENCLOSED D₅₀=6" WITH FILTER FABRIC PER NMDOT STD DWG 602-01.

EFFLUENT PIPELINE PLAN VIEW

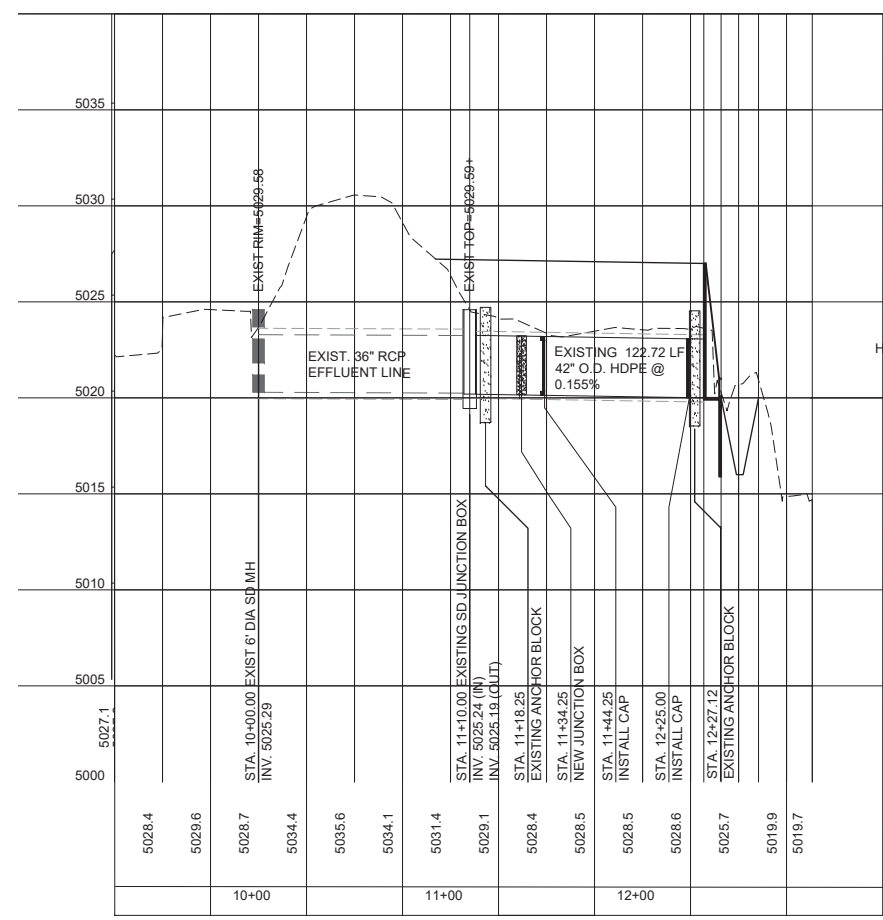


EFFLUENT PIPELINE STA 11+07 TO 11+50



EXISTING EFFLUENT PIPELINE AND NEW JUNCTION BOX

SCALE
VERTICAL 1"=5'
HORIZONTAL 1"=50'



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Friday, August 27, 2021 10:15:21 AM -SSING
H:\PROJECTS\2021\MO_P0040_01 - BSA OUTFALL BR PAKAGES\EFFLUENT OUTFALL\10-CADD & BMAP\1. AUTOCAD\SHEETS\UP-CAD.DWG