HARLEY'S POND

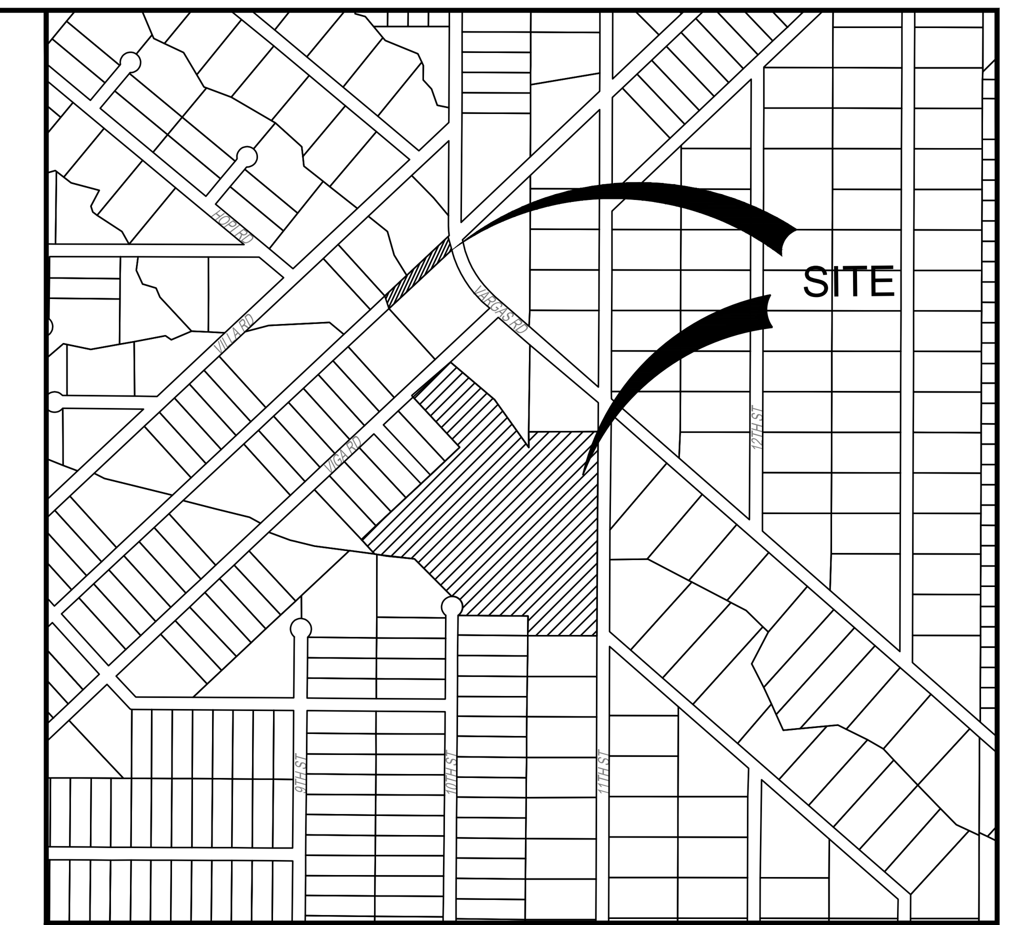
CONSTRUCTION PLANS

SOUTHERN SANDOVAL COUNTY ARROYO FLOOD CONTROL AUTHORITY
SANDOVAL COUNTY, NEW MEXICO

AUGUST 2021

SSCAFCA PROJECT NO. BL-P0019-04

FUNDING SOURCE - NMFA 5116-WPF



ZONE ATLAS MAP U10 R-1 VICINITY MAP

SSCAFCA

SOUTHERN SANDOVAL COUNTY ARROYO FLOOD CONTROL AUTHORITY
1041 Commercial Drive SE
Rio Rancho, NM 87124
(505) 892-7246 Office Phone
(505) 892-7241 Fax

APPROVALS

SSCAFCA:

Charles Thomas
Digitally signed by Charles Thomas
DN: cn=Charles Thomas, o=SSCAFCA, ou=Executive Engineer, email=cthomas@sscafca.com, c=US
Date: 2021.08.24 13:02:11 -06'00'

DATE:

EXECUTIVE ENGINEER

CITY OF RIO RANCHO:

David Serrano
Digitally signed by David Serrano
DN: C=US, E=dserrano@rrnm.gov, CN=David Serrano
Date: 2021.08.24 13:41:26-06'00'

DATE:

DEVELOPMENT SERVICES DEPARTMENT

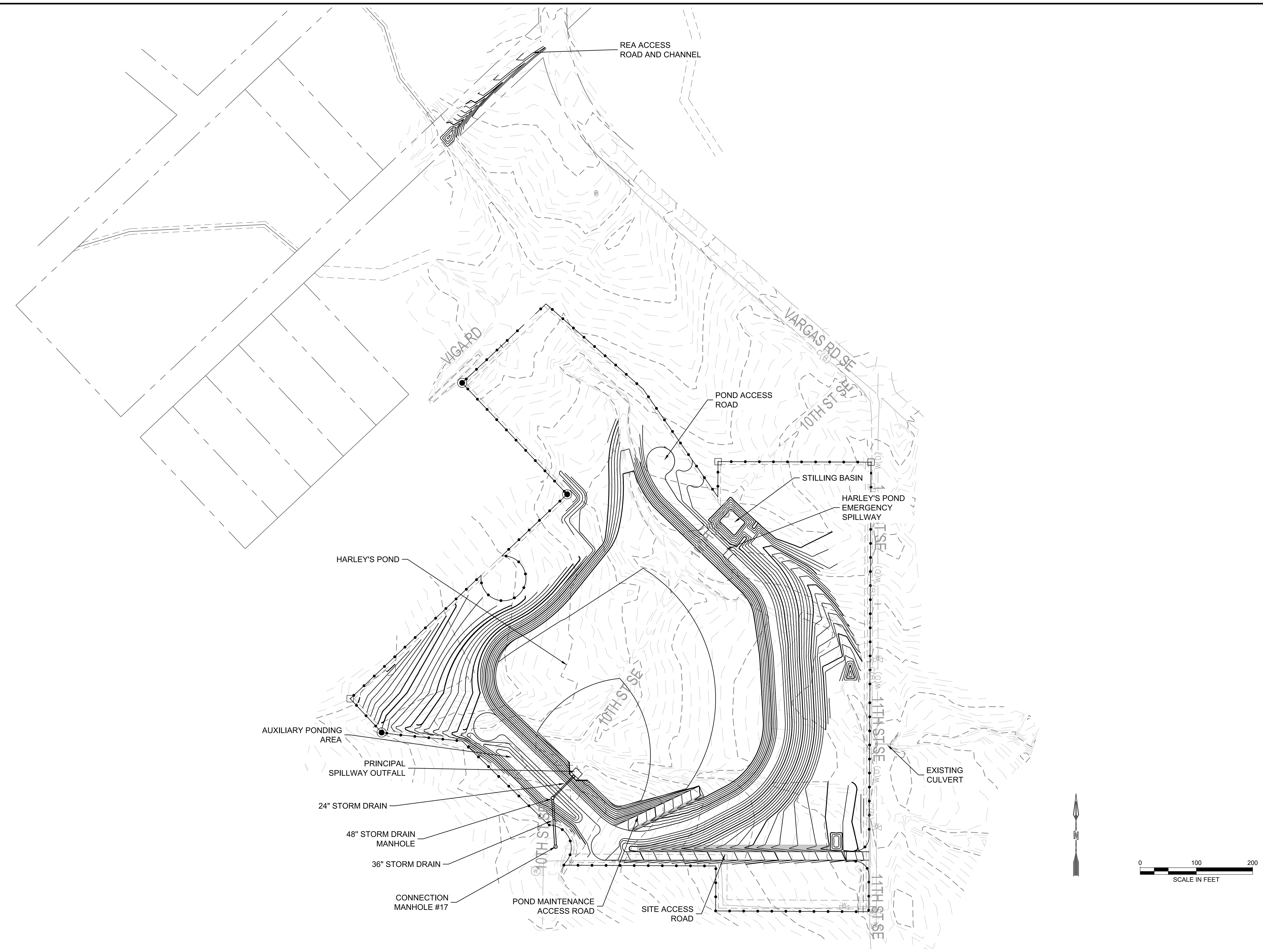
This contract allows the owner to make payment within 45 days after submission of an undisputed request for payment

EDWARD CHRISTIAN NAIDU
NEW MEXICO
22997
PROFESSIONAL ENGINEER

RESPEC

RESPEC
COMMUNITY DESIGN SOLUTIONS
5971 JEFFERSON STREET SUITE 101
ALBUQUERQUE, NEW MEXICO 87109
WWW.RESPEC.COM PHONE: (505)253-9718

N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\G-100 COVER.dwg Wed, 8.18.21 - 1600, LSB Nirit.Finkelshtin



HARLEY'S POND ROUTING SUMMARY TABLE

Design Storm	Drainage Area	Inflow Volume	Outflow Volume	Inflow Discharge	Outflow Peak Discharge	Peak Attenuated	Design Pond Storage volume from Grading Plan	Peak Stored Volume for Design Storm	Pond Depth	Peak Water Surface Elevation	Peak Water Depth	Pond Invert	Emergency Spillway Elevation	Top Of Pond Elevation	Freeboard to Emergency Spillway	Freeboard to Top of Pond Embankment
	sq. mi	ac-ft	ac-ft	cfs	cfs	cfs	ac-ft	ac-ft	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.
100-Yr 24-hr	0.47	41.8	41.8	356.7	41.4	315.3	41.5	24.9	11	5454.7	7.7	5447.0	5457.0	5458.0	2.3	3.3
500-Yr 24-hr	0.47	57.1	57.1	521.1	62.3	458.8	41.5	37.4	11	5457.2	10.2	5447.0	5457.0	5458.0	-0.3	0.8

NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\G-101 POND LOCATION AND INFORMATION.dwg PLOT DATE: Aug 18, 2021 4:43pm

REVISION

DESIGNED DESIGN BY
DRAWN DRAWN BY
CHECKED CHECKED BY
DATE 8.18.2021

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COMMUNITY DESIGN SOLUTIONS
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STAMP

EDWARD CHRISTIAN NADDU
NEW MEXICO
22997
PROFESSIONAL ENGINEER

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PROJECT NAME: HARLEY'S POND

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

SHEET TITLE: POND LOCATION AND INFORMATION

SUBMITTED FOR: CONSTRUCTION

SHEET NUMBER: G-101

GENERAL NOTES

1. THE SPECIFICATIONS FOR THIS PROJECT ARE LISTED BELOW AND ARE IDENTIFIED IN ALL BUILD/PAY NOTES AS APPLICABLE .
A. THE NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION, LATEST EDITION UNLESS OTHERWISE NOTED ON PLANS: STD. SPEC. SECT

B. THE NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION: NMDOT STD. SPEC. SECT.

C. THE SUPPLEMENTAL TECHNICAL SPECIFICATIONS: SUP. SPEC. SECT.

D. THE CITY OF RIO RANCHO STANDARD DRAWINGS/SPECIFICATIONS. *ALL SPECIFICATIONS MUST BE ONSITE THROUGHOUT PROJECT.

2. FIVE (5) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR WILL SUBMIT A DETAILED CONSTRUCTION SCHEDULE TO THE SOUTHERN SANDOVAL COUNTY ARROYO FLOOD CONTROL AUTHORITY (SSCAFCA), THE CONTRACTOR SHALL OBTAIN A HAUL PERMIT FROM THE CITY OF RIO RANCHO, HAUL PERMIT COSTS AND COORDINATION WITH THE CITY OF RIO RANCHO IS CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT. THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CITY OF RIO RANCHO TWO (2) DAYS PRIOR TO CONSTRUCTION.

3. THE CONTRACTOR WILL BE RESPONSIBLE FOR DISPOSING OF ALL DEBRIS, INCLUDING, BUT NOT LIMITED TO HAZARDOUS WASTE AT DISPOSAL SITES APPROVED BY GOVERNMENTAL AGENCIES REGULATING THE DISPOSAL OF SUCH MATERIALS.

4. ALL SIGNS AND CODING WILL BE IN ACCORDANCE WITH THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" CURRENT EDITION PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION.

5. THE CONTRACTOR IS TO EXERCISE CARE TO AVOID DISTURBING ANY EXISTING UNDERGROUND UTILITIES. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE UTILITY COMPANIES IN ORDER TO PREVENT ANY SERVICE DISRUPTION.

6. WHEN ABUTTING NEW PAVEMENT TO EXISTING INTERSECTING STREETS OR PATHS, SAW CUT EXISTING PAVEMENT TO A STRAIGHT LINE AND AT RIGHT ANGLES AND REMOVE ANY BROKEN OR CRACKED PAVEMENT. NO DIRECT PAYMENT WILL BE MADE FOR SAWCUTTING.

7. ALL GAS VALVES, GAS MANHOLES, ELECTRICAL MANHOLES, TELEPHONE MANHOLES, AND UTILITY POLES WILL BE ADJUSTED TO GRADE BY EACH UTILITY COMPANY. CONTRACTOR SHALL COORDINATE THIS EFFORT WITH THE UTILITY COMPANIES

8. THE CONTRACTOR WILL NOTIFY NEW MEXICO ONE CALL SYSTEM 811 TWO (2) WORKING DAYS PRIOR TO COMMENCING WORK IN NEW AREAS.

9. CONTRACTOR WILL MAKE ALL WATER VALVES AND MANHOLES ACCESSIBLE TO CITY OF RIO RANCHO AT ALL TIMES.

10. CONTRACTOR WILL CONFINE HIS WORK WITHIN THE CONSTRUCTION EASEMENT LIMITS AND/OR RIGHT-OF-WAY, OR PROVIDE COPIES OF AGREEMENTS WITH ADJACENT LANDOWNERS TO SSCAFCA.

11. ALL WATER VALVES AND FIRE HYDRANTS REMOVED TO BE SALVAGED AND RETURNED TO THE CITY OF RIO RANCHO.

12. MINIMUM BOTTOM WIDTH OF TRENCHES FOR RIGID PIPE SHALL BE EQUAL TO THE OUTSIDE DIAMETER PLUS 16 INCHES. BEDDING MATERIAL SHALL BE CLASS II, III, OR IV UNLESS OTHERWISE SPECIFICALLY NOTED ON THE PLANS.

13. THE CONTRACTOR AGREES TO TAKE NECESSARY SAFETY PRECAUTIONS AS REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES TO PROTECT PEDESTRIAN AND VEHICULAR TRAFFIC IN THE CONSTRUCTION AREA, WHICH WILL INCLUDE BUT ARE NOT LIMITED TO: MAINTAINING ADEQUATE WARNING SIGNS, BARRICADES, LIGHTS , GUARD FENCES, WALKS AND BRIDGES.

14. ALL STRUCTURAL CONCRETE TO BE 3,000 PSI UNLESS OTHERWISE NOTED ON PLANS.

15. ALL REINFORCING STEEL TO BE GRADE 60.

16. ALL EXPOSED EDGES ON CAST-IN-PLACE CONCRETE STRUCTURES WILL HAVE A 1" CHAMFER UNLESS OTHERWISE NOTED.

17. ALL SPLICES IN REINFORCING STEEL TO BE 2-FOOT 6-INCH MINIMUM UNLESS OTHERWISE NOTED.

18. PRIOR TO CONSTRUCTION THE CONTRACTOR WILL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL POTENTIAL CONFLICTING UTILITIES. SHOULD A CONFLICT EXIST BETWEEN THE FIELD INFORMATION AND THE PLANS, THE CONTRACTOR WILL NOTIFY THE SSCAFCA PROJECT MANAGER SO THE CONFLICT CAN BE RESOLVED WITH MINIMUM DELAY.

19. ALL NEW STREET PAVING, DRIVEWAYS, SIDEWALKS,AND CURB AND GUTTERS, ABUTTING EXISTING AREAS SHALL MATCH THE ELEVATION OF THOSE AREAS.

20. ALL EXCAVATED MATERIAL THAT IS NOT REQUIRED TO BE REUSED MUST BE REMOVED FROM THE PROJECT AREA WITHIN FOUR DAYS OF EXCAVATION. SPOIL PILES WILL BE ALLOWED ONLY AS DIRECTED BY THE SSCAFCA PROJECT MANAGER OR AS INDICATED ON THE PLANS.

21. THE CONTRACTOR WILL COORDINATE THE CONSTRUCTION ACTIVITIES WITH ALL OTHER CONTRACTORS AND UTILITY COMPANIES WORKING IN THE SAME AREA. THE CONTRACTOR MAY BE REQUIRED TO RESCHEDULE THEIR ACTIVITIES TO ALLOW UTILITY CREWS TO PERFORM THEIR REQUIRED WORK. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR DELAYS OR INCONVENIENCE CAUSED BY UTILITY COMPANY WORK CREWS.

22. ALL CONSTRUCTION EASEMENTS ON PRIVATE PROPERTY WILL BE OBTAINED BY SSCAFCA PRIOR TO THE BEGINNING OF CONSTRUCTION.

23. ALL TRAFFIC CONTROL DEVICES REQUIRED FOR DRIVEWAY CLOSURES, UTILITY CONSTRUCTION OR FOR OTHER REASONS AND NOT SHOWN ON THE SIGNING PLANS WILL BE FURNISHED BY THE CONTRACTOR AND WILL BE PAID AS SPECIFIED IN THE TECHNICAL SPECIFICATIONS AND BID PROPOSAL. PRIOR TO PLACING THE TRAFFIC CONTROL DEVICES, THE CONTRACTOR WILL NOTIFY THE AFFECTED OWNERS IN ACCORDANCE WITH THE SPECIFICATIONS.

24. ALL UTILITY LINES WHICH ARE NOT SPECIFICALLY DESIGNATED TO BE REMOVED AND REPLACED ON THE PLANS. WILL BE MAINTAINED IN SERVICE. SHORING, SHEETING AND OTHER MEANS OF SUPPORT SHALL BE EMPLOYED BY THE CONTRACTOR TO PREVENT DAMAGE OR LOSS OF THESE EXISTING UTILITIES. MEAN AND CABLE OR OTHER ADEQUATE SUPPORTS WILL BE USED OR TEMPORARY SUPPORT OF ALL UTILITY LINES WHICH CROSS THE TRENCH. ANY DAMAGE TO EXISTING UTILITIES WILL PROMPTLY BE REPAIRED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR WILL NOTIFY THE ENGINEER IMMEDIATELY OF ANY SIGNIFICANT DEVIATION OF EXPOSED UTILITIES FROM THE LOCATIONS SHOWN ON THE PLANS SO THAT CONFLICTS CAN BE RESOLVED IN A TIMELY MANNER.

25. THE CONTRACTOR WILL ASSUME RESPONSIBILITY FOR ANY DAMAGE TO EXISTING NMDOT/CITY OF RIO RANCHO/SANDOVAL COUNTY/SSCAFCA/RIO RANCHO PUBLIC SCHOOLS AND PRIVATE LOTS INFRASTRUCTURE (C & G, PAVING, ETC.) DURING CONSTRUCTION, APART FROM THOSE SECTIONS INDICATED FOR REMOVAL ON THE PLANS, AND WILL REPAIR OR REPLACE SAME AT HIS OWN EXPENSE. HE WILL SUITABLY PROTECT THE CURB AND GUTTER FROM INCIDENTAL SPLASHING DURING THE TACK COAT APPLICATION AND WILL BE RESPONSIBLE FOR CLEANING SAME AT HIS OWN COST SHOULD SPLASHING OCCUR.
26. ALL INTERFERING PORTIONS OF ABANDONED UTILITY LINES WHICH ARE EXPOSED AS A RESULT OF CONSTRUCTION WILL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.

27. THE CONTRACTOR WILL BE RESPONSIBLE FOR SECURING NPDES PERMITS AND OTHER PERMITS AS REQUIRED BY APPLICABLE CITY, COUNTY, STATE, AND FEDERAL REGULATIONS .

28. CONTRACTOR WILL SURVEY AND LOG EXISTING ELEVATIONS OF CURB-AND-GUTTER, SIDEWALK, AND PAVEMENT WHICH WILL BE REMOVED FOR CONSTRUCTION OR IMPROVEMENTS. CONTRACTOR WILL REPLACE REMOVED CURB-AND-GUTTER, SIDEWALK, DRIVE PADS, AND PAVEMENT TO ELEVATIONS PRIOR TO REMOVAL UNLESS OTHERWISE INDICATED ON THE PLANS.

29. ALL RIPRAP MATERIAL USED ON THIS PROJECT SHALL BE A NATURAL ROCK MATERIAL CONFORMING TO THE SIZE AND MATERIAL PROPERTY REQUIREMENTS SET FORTH IN THE STANDARD SPECIFICATIONS. NO BROKEN CONCRETE OR RUBBLE WILL BE ACCEPTED.

30. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY AND ALL GRAFFITI FROM EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.

31. FOR STORM DRAIN CONSTRUCTION, RCP PIPE OR OTHER MATERIAL JOINTS SHALL NOT BE GROUTED PRIOR TO FINAL INSPECTION. FINAL INSPECTION WILL DETERMINE JOINTS TO BE GROUTED FOR FINAL ACCEPTANCE OF THE CONSTRUCTION.

32. SSCAFCA PROJECT MANAGER SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY WORK WITHIN THE SSCAFCA R/W. TELEPHONE (505) 892-7246.

33. SSCAFCA PROJECT MANAGER SHALL BE NOTIFIED 48 HOURS PRIOR TO FINAL INSPECTION OF ANY FACILITIES WITHIN THE SSCAFCA R/W.

34. AREAS DESIGNATED ON PLANS SHALL BE REVEGETATED IN ACCORDANCE WITH STANDARD SPECIFICATION 1012.

35. STORM DRAINS AND CULVERT PIPES ARE CALLED OUT AS "STORM DRAIN" (SD). SD IS TO BE BUILT WITH EITHER CLASS III REINFORCED CONCRETE PIPE PER APWA SPECIFICATION 910 OR ENGINEER APPROVED EQUIVALENT OF ASTM F2764.

36. CONTRACTOR SHALL USE THE NMAPWA SPECIFICATION "603 - RIPRAP SURFACE TREATMENT" FOR RIP RAP STONE GRADATION AND GRAVEL FILTER MATERIAL ASSOCIATED WITH ALL CONSTRUCTION OF "PLUNGE POOLS/STILLING BASIN". GRADATIONS ARE SHOWN ON THIS SHEET.

37. CONTRACTOR WILL BE RESPONSIBLE TO RESEED ANY ADDITIONAL AREA DISTURBED OUTSIDE OF THE LIMITS SHOWN ON THE PLANS. ADDITIONAL RE-SEEDING WILL BE INCIDENTAL TO THE PROJECT

NOTE: CLASSIFICATION GRADATION WILL APPLY FOR RIPRAP AND ARMORING ON SHEET C-103 AND C-106. SEE BELOW FOR CLASSIFICATION.

FOR ALL RIPRAP: FILL VOIDS OF RIPRAP WITH GRAVEL FILTER MATERIAL.

CLASSIFICATION GRADATION

DESIGNATION	MAX. DIMENSIONS	%SMALLER	Km [1]
TYPE VL	12 (0.30)	100	
	9 (0.25) 50-70		
	6 (0.15) 35-55		
	3 (0.08) 10		6
TYPE L	18 (0.45)	100	
	12 (0.30)	50-70	
	6 (0.15) 35-55		
	3 (0.08) 10		9
TYPE M	24 (0.60)	100	
	18 (0.45)	50-70	
	12 (0.30)	30-55	12
	6 (0.15)	10	

[1] Km = mean particle size (inches)

FILTER MATERIAL

FILTER MATERIAL SHALL BE CONSIST OF CRUSHED ROCK MEETING THE FOLLOWING GRADATION, OR ENGINEER APPROVED EQUIVALENT.

U.S. STANDARD SIEVE SIZE	PASSING BY WEIGHT
1"	100
¾"	45-65
#4	25-45
#40	0-20
#200	0-5

FILTER MATERIAL SHALL BE PLACED BENEATH THE RIP-RAP AS SHOWN HEREON. THE FILTER MATERIAL SHALL BE TAMPED AND SHAPED TO FORM A SMOOTH, EVEN, AND FIRM FOUNDATION FOR THE OVERLYING RIPRAP. THE CONTRACTOR'S OPERATIONS AND METHODS OF PLACING SHALL PREVENT SEGREGATION OF THE MATERIALS. THE FILTER MATERIAL SHALL ALSO BE PLACED AND COMPACTED IN THE VOID SPACES OF THE RIPRAP.

EROSION CONTROL/ENVIRONMENTAL PROTECTIONS/STORM WATER POLLUTION PREVENTION PLAN

1. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE AND FEDERAL DUST AND EROSION CONTROL REGULATIONS. THE CONTRACTOR SHALL PREPARE AND OBTAIN ANY NECESSARY DUST OR EROSION CONTROL PERMITS FROM REGULATORY AGENCIES.

2. THE CONTRACTOR SHALL PROMPTLY REMOVE ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY TO KEEP IT FROM WASHING OFF THE PROJECT SITE.

3. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO OTHER PROPERTY BY CONSTRUCTING TEMPORARY EROSION CONTROL BERMS OR PLAN. INSTALLING SILT FENCES AT THE PROPERTY LINES AND AS NEEDED TO PREVENT MIGRATION OF SEDIMENT INTO CHANNEL.

4. THE CONTRACTOR SHALL MITIGATE EROSION OF THE TEMPORARY OR PERMANENT DIRT SWALES BY INSTALLING CHECK DAMS IN THE SWALES PERPENDICULAR TO THE DIRECTION OF FLOW.

5. THE CONTRACTOR SHALL WET THE SOIL AS NEEDED TO KEEP IT FROM BLOWING. WATERING, AS REQUIRED FOR CONSTRUCTION AND DUST CONTROL, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND NO MEASUREMENT OR PAYMENT SHALL BE MADE THEREFOR. CONSTRUCTION AREAS SHALL BE WATERED FOR DUST CONTROL IN COMPLIANCE WITH GOVERNMENT ORDINANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SUPPLYING WATER AS REQUIRED.

6. ANY AREAS DISTURBED BY CONSTRUCTION AND NOT COVERED BY LANDSCAPING OR ANY IMPERVIOUS SURFACE SHALL BE REVEGETATED WITH NATIVE GRASS SEEDING. WHEN CONSTRUCTION ACTIVITIES CEASE AND EARTH DISTURBING ACTIVITIES WILL NOT RESUME WITHIN 14 DAYS, STABILIZATION MEASURES MUST BE INITIATED. UNLESS INDICATED OTHERWISE ON THESE PLANS OR ON THE LANDSCAPING PLAN. SEEDING SHALL BE NATIVE GRASS SEEDING PER SECTION 1012 OF THE APWA STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.

7. ALL WASTE PRODUCTS FROM THE CONSTRUCTION SITE, INCLUDING ITEMS DESIGNATED FOR REMOVAL, CONSTRUCTION WASTE, CONSTRUCTION EQUIPMENT WASTE PRODUCTS (OIL, GAS, TIRES, ETC.) GARBAGE, GRUBBING, EXCESS CUT MATERIAL, VEGETATIVE DEBRIS, ETC. SHALL BE APPROPRIATELY DISPOSED OF OFF SITE AT NO ADDITIONAL COST TO THE OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN PERMITS REQUIRED FOR HAUL OR DISPOSAL OF WASTE PRODUCTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE WASTE DISPOSAL SITE COMPLIES WITH GOVERNMENT REGULATIONS REGARDING THE ENVIRONMENT, ENDANGERED SPECIES AND ARCHAEOLOGICAL RESOURCES.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANUP AND REPORTING OF SPILLS OF HAZARDOUS MATERIALS ASSOCIATED WITH THE CONSTRUCTION SITE. HAZARDOUS MATERIALS INCLUDE GASOLINE, DIESEL FUEL, MOTOR OIL, SOLVENTS, CHEMICALS, PAINTS, ETC. WHICH MAY BE A THREAT TO THE ENVIRONMENT. THE CONTRACTOR SHALL REPORT THE DISCOVERY OF PAST OR PRESENT SPILLS TO THE NEW MEXICO ENVIRONMENT DEPARTMENT EMERGENCY RESPONSE AT 1-(505)-827-9329.

9. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS CONCERNING SURFACE AND UNDERGROUND WATER. CONTACT WITH SURFACE WATER BY CONSTRUCTION EQUIPMENT AND PERSONNEL SHALL BE MINIMIZED. EQUIPMENT MAINTENANCE AND REFUELING OPERATIONS SHALL BE PERFORMED IN AN ENVIRONMENTALLY SAFE MANNER IN COMPLIANCE WITH GOVERNMENT REGULATIONS.
10. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS CONCERNING CONSTRUCTION NOISE AND HOURS OF OPERATION.

11. WHERE STORM INLETS ARE SUSCEPTIBLE TO INFLOW OF SILT OR DEBRI S FROM CONSTRUCTION ACTIVITIES, PROTECTION SHALL BE INSTALLED ON THEIR UPSTREAM SIDE.

12. THE CONTRACTOR SHALL PREPARE AND MAINTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) ON-SITE AT ALL TIMES, AND COMPLY WITH THE REQUIREMENTS INDICATED ON THAT PLAN.

13. A MINIMUM OF 21 DAYS PRIOR TO COMMENCING EARTH DISTURBING ACTIVITIES , CONTRACTOR SHALL FILE A NOTICE OF INTENT (NOI) WITH EPA FOR CONSTRUCTION GENERAL PERMIT COMPLIANCE. COPIES OF THE NOI RECEIPT AND SWPPP SHALL BE SENT TO OWNER.

14. AT END OF CONSTRUCTION AND AFTER STABILIZATION ACTIVITES CONTRACTOR SHALL SUBMIT NOTICE OF TERMINATION (NOT).

15. CONTRACTOR SHALL CONFORM TO USACE 404 PERMIT CONDITIONS.

DRAWING SIZE NOTES:

1. IF THIS DRAWING IS OTHER THAN FULL SIZE, 24"x36", UTILIZE BAR SCALE IN LIEU OF NUMERIC SCALE.

CONTACTS

SSCAFCA CONTACT - ANDRES SANCHEZ P.E. (505) 892-7246

CITY OF RIO RANCHO CONTACT - JOE MAUSER, P.E. (505) 891-5040

RESPEC - E. CHRISTIAN NAIDU, P.E. (505) 933-1379

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL REMAIN WITHIN SSCAFCA R/W AND TEMPORARY CONSTRUCTION EASEMENTS (TCE) OBTAINED BY SSCAFCA.

2. IN THE EVENT OF EXCESS MATERIAL AT SEDIMENT STOCK PILE LOCATIONS: COORDINATE WITH AND PROVIDE SSCAFCA PROJECT MANAGER 48-HOURS PRIOR NOTICE FOR HAULING SEDIMENT.
3. ENGINEER TO APPROVE RIPRAP SAMPLE PROVIDED BY CONTRACTOR PRIOR TO CONSTRUCTION.

LEGEND

PROPERTY LINE	
EXISTING CONTOUR MAJOR	
EXISTING CONTOUR MINOR	
EXISTING UTILITY EASEMENT	
EXISTING WATERLINE	W(D)
EXISTING CABLE TV	C(B)
EXISTING CULVERT	
EXISTING EDGE OF ROAD	
PROPOSED CONTOUR MAJOR	
PROPOSED CONTOUR MINOR	
PROPOSED FENCE	
PROPOSED SILT FENCE	SF SF

REVISION

DESIGNED DESIGN BY
DRAWN DRAWN BY
CHECKED CHECKED BY
DATE 8.18.2021

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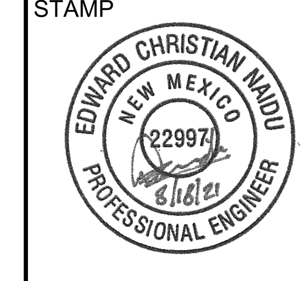

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Know what's below. Call before you dig.

PROJECT NAME: HARLEY'S POND

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

SHEET TITLE: GENERAL NOTES & LEGEND

SUBMITTED FOR: CONSTRUCTION

SHEET NUMBER: G-102

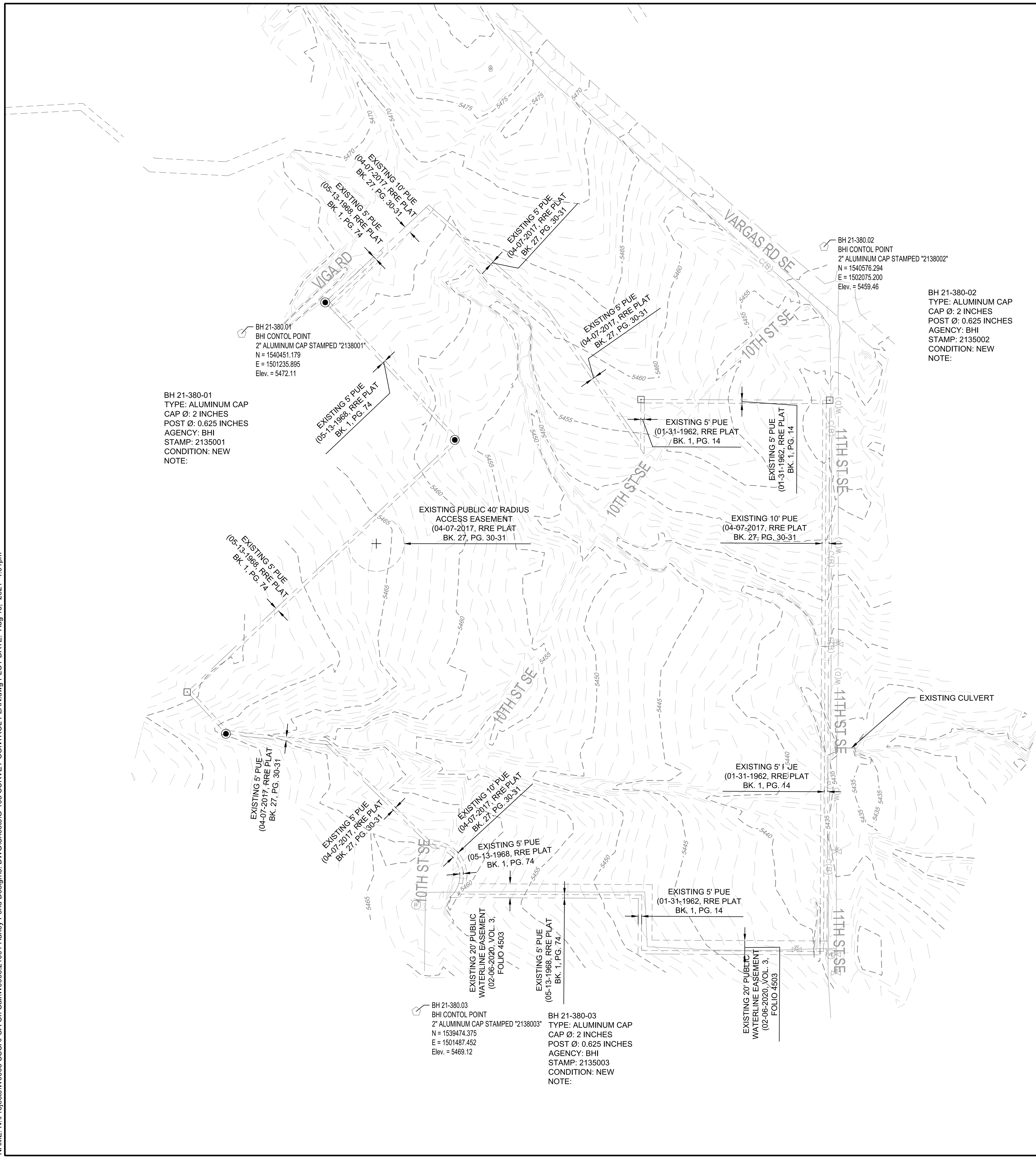
SURVEY NOTES:

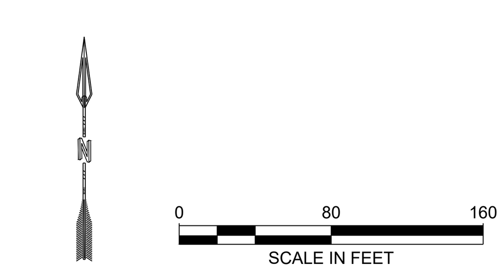
Introduction:

This control was established for the purposes of providing construction control for the Harley Pond Project. Monuments were established with RTK as initialized through the Trimble VRS Network. Checks were made to OPUS derived solution of control. Datasheets provide the specific metadata for each monument established.

Project Control Specifications:

Units:	US Survey Foot
Horizontal Datum:	NAD_83(2011)(EPOCH:2010.0000)
Vertical Datum:	NAVD88
Geoid Model:	GEOID 18
Projection:	Transverse Mercator
State Plane and/or UTM Zone:	New Mexico Central Zone (3002)
Basis of Bearing:	Grid Bearings
Project Combined Factor:	0.999663970
Modification Method Used:	Scaled State Plane coordinates about origin (0,0) no truncation
Field Methodology:	RTK Solution
Equipment Used:	Trimble GPS Equipment (R8 and R10 Dual Frequency Receivers)
Control Set Date:	January 18, 2021
Observation Date:	January 18, 2021
Adjustment/ Publication Date:	February 16, 2021





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REVISION

DESIGNED DESIGN BY
DRAWN DRAWN BY
CHECKED CHECKED BY
DATE 8.18.2021

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PROFESSIONAL ENGINEER

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PROJECT NAME: HARLEY'S POND

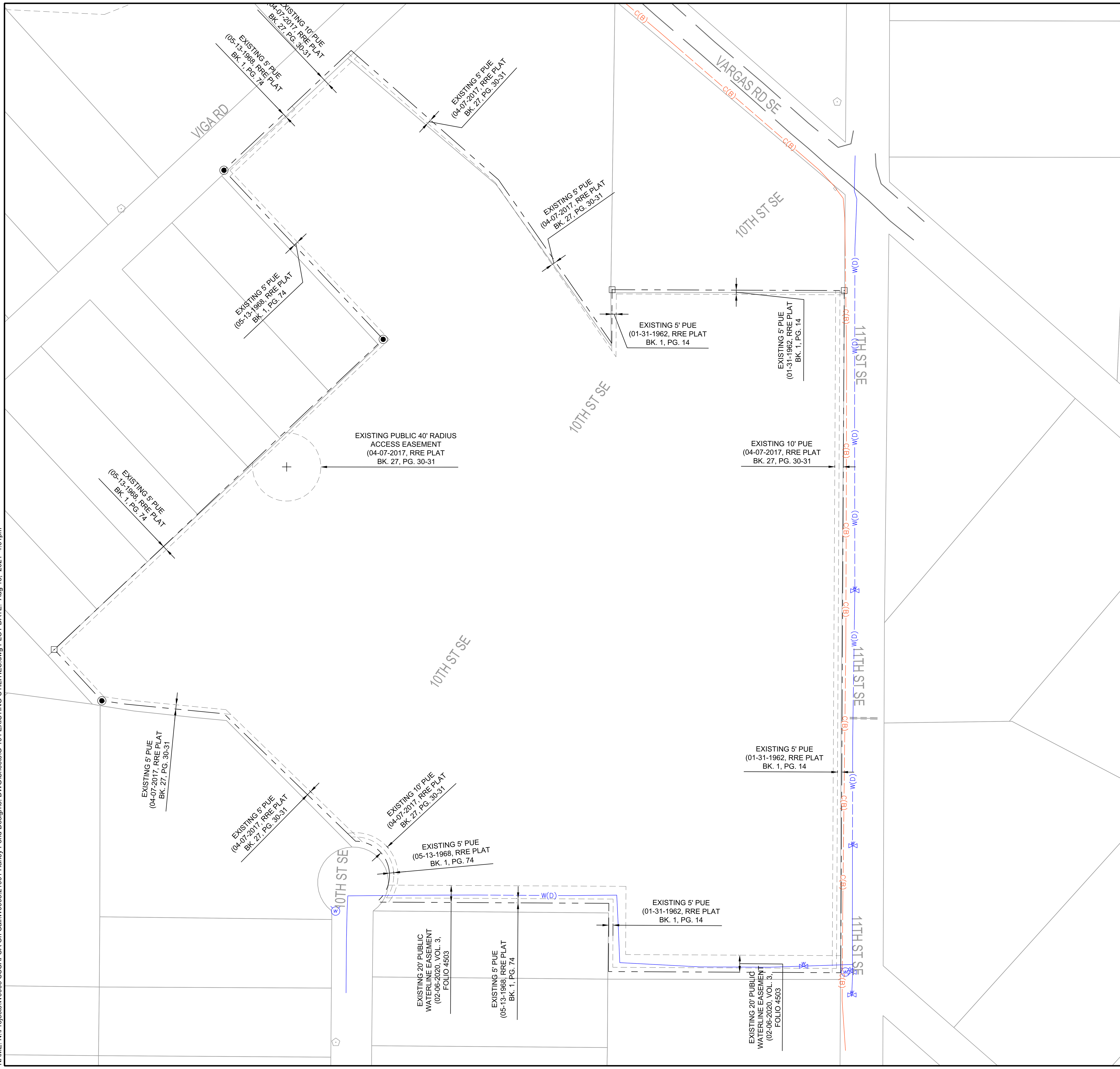
This contract allows the owner to make payment within 45 days after submission of an undisputed request for payment

SHEET TITLE: SURVEY CONTROL PLAN

SUBMITTED FOR: CONSTRUCTION

SHEET NUMBER:

G-103



NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\G-104 EXISTING UTILITIES.dwg PLOT DATE: Aug 18, 2021 4:01pm

UTILITY COMPANY CONTACTS

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(505) 271-3644
mike_mortus@cable.comcast.com

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ALBUQUERQUE, NEW MEXICO 87102
(505) 217-0038

WINDSTREAM
RICHARD MUELLER
SUPERVISOR AT OUTSIDE TECHS
505 MARQUETTE AVE NW SUITE 1600
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LEVEL 3 COMMUNICATIONS LLC
ALAN SMITH
RESOURCE SUPERVISOR
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centurylinknationalosp@centuryline.com

VERIZON/MCI WORLDCOM
MATT STURGIS
ADVANCED TELECOM TECHNICIAN
6001 MIDWAY PARK BLVD NE
ALBUQUERQUE, NEW MEXICO 87109
(505) 348-8613

NM GAS COMPANY
CHRIS MONETTE, AREA MANGER
RUBEN SOSA, SUPERVISOR
7120 WYOMING BLVD NE #20
ALBUQUERQUE, NEW MEXICO 87109
(505) 697-3188

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DRAWN	DRAWN BY
CHECKED	CHECKED BY
DATE	8.18.2021

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EDWARD CHRISTIAN NAIDU
NEW MEXICO
22997
PROFESSIONAL ENGINEER

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PROJECT NAME:
HARLEY'S POND

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

SHEET TITLE:
EXISTING UTILITIES

SUBMITTED FOR:
CONSTRUCTION

SHEET NUMBER:
G-104

BUILD NOTES:

5	TEMPORARY CONSTRUCTION FENCE

NOTE:

1. TRAFFIC CONTROL: CONTRACTOR TO COORDINATE WITH THE CITY OF RIO RANCHO, DAVID SERRANO, P.E. (505) 891.5059 FOR ALL PERMITS AND OTHER ITEMS RELATED TO TRAFFIC CONTROL.
2. ALL CONSTRUCTION SHALL REMAIN WITHIN SSCAFCA R/W AND TEMPORARY CONSTRUCTION EASEMENTS (TCE) OBTAINED BY SSCAFCA.
3. TEMPORARY CONSTRUCTION FENCE TO BE PLACED WITHIN THE PROPERTY BOUNDARIES

0 100 200
SCALE IN FEET

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PROJECT NAME: HARLEY'S POND

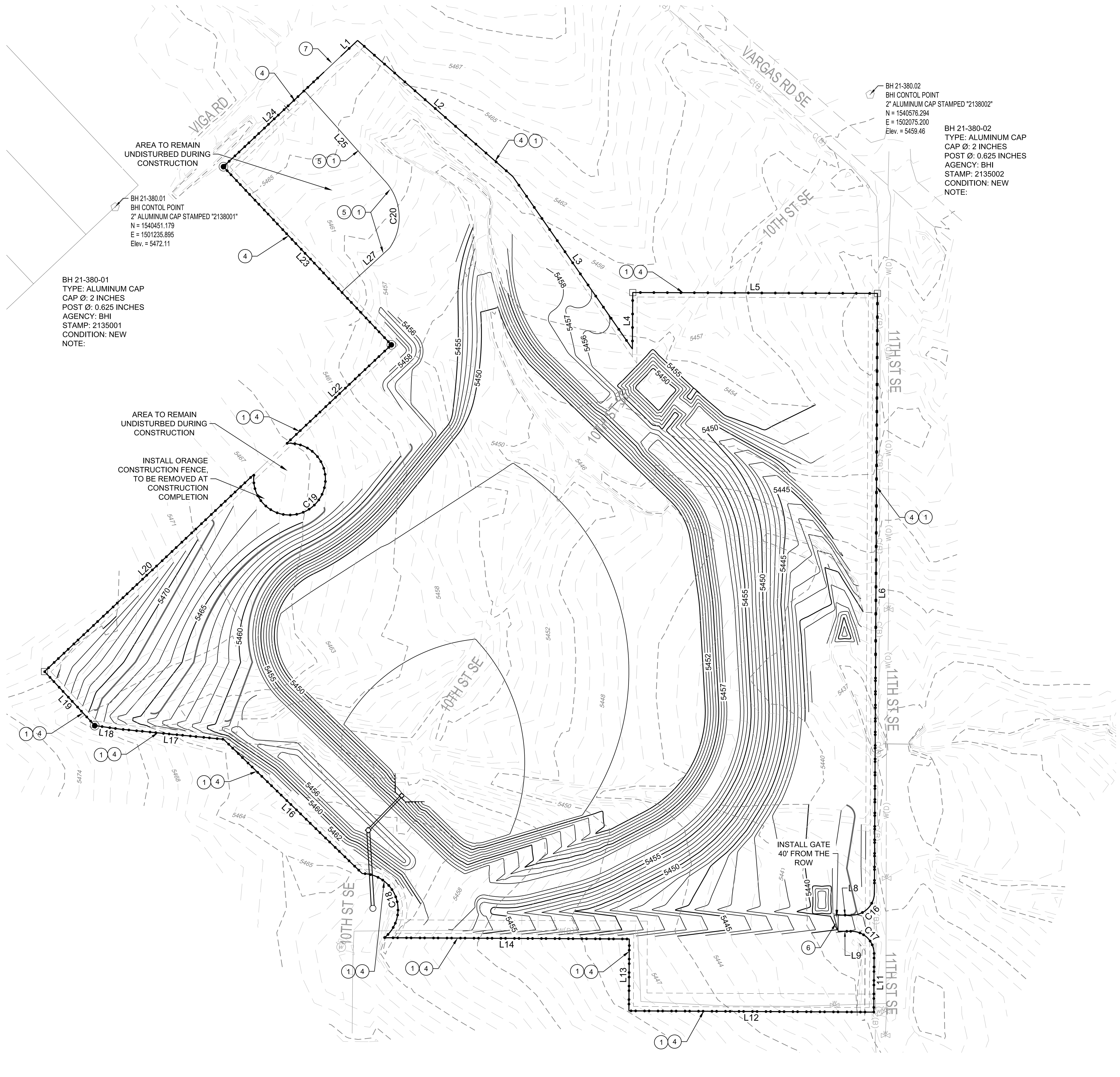
This contract allows the owner to make payment within 45 days after submission of an undisputed request for payment

SHEET TITLE: CONTRACTOR STAGING AREA AND ALLOWABLE HAUL ROUTES

SUBMITTED FOR: CONSTRUCTION

SHEET NUMBER: G-105

NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\G-105 CONTRACTOR STAGING AREA AND ALLOWABLE HAUL ROUTES.dwg PLOT DATE: Aug 18, 2021 4:01pm



BUILD NOTES: (#)

1	APWA 201	SITE CLEAR & GRUB LIMITS
4	SSCAFCA M100	5 STRAND BARBLESS WIRE FENCE WITH WOOD POST- HARLEY'S POND PER DETAIL #2 ON SHEET C-500
5	TEMPORARY CONSTRUCTION FENCE	
6	SSCAFCA M101	SSCAFCA STANDARD MAINTENANCE ACCESS GATE PER DETAIL #3 ON SHEET C-500
7	SSCAFCA M104	CABLE SAG AND ALERT SIGN AT ENTRANCE OF HARLEY'S POND, 20-FT WIDE. SEE SHEET C-501

LINE TABLE

LINE #	BEARING	DISTANCE
L1	N46°41'42"E	25.79
L2	S48°44'50"E	229.77
L3	S34°42'49"E	233.16
L4	N00°18'11"E	62.82
L5	S89°47'33"E	272.10
L6	S00°17'31"W	666.62
L8	N90°00'00"W	15.14
L9	N90°00'00"E	14.87
L11	S00°17'31"W	64.74
L12	N89°42'29"W	272.26
L13	N00°18'11"E	79.93
L14	N89°42'01"W	272.27
L16	N45°54'54"W	214.64
L17	N84°23'26"W	115.94
L18	N81°53'59"W	28.09
L19	N42°53'40"W	81.99
L20	N46°41'53"E	319.97
L22	N46°41'53"E	159.74
L23	N43°17'30"W	272.21
L24	N46°44'02"E	153.28

LINE TABLE

LINE #	BEARING	DISTANCE
L25	N41°41'58"W	132.76
L27	N47°30'10"E	71.48

CURVE TABLE

CURVE #	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C16	39.14	25.00	89°42'29"	S45°08'45"W	35.27
C17	39.40	25.00	90°17'31"	S44°51'15"E	35.45
C18	98.67	40.00	141°20'21"	N19°02'29"W	75.49
C19	196.59	39.90	282°18'04"	N46°41'53"E	50.06
C20	82.17	59.80	78°43'54"	N04°20'31"W	75.85

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PROJECT NAME: HARLEY'S POND

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

SHEET TITLE: FENCING PLAN

SUBMITTED FOR: CONSTRUCTION

SHEET NUMBER: G-106

NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\G-106 FENCING PLAN.dwg PLOT DATE: Aug 18, 2021 4:02pm

NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-100 HARLEY'S POND SITE PLAN.dwg PLOT DATE: Aug 18, 2021 4:02pm

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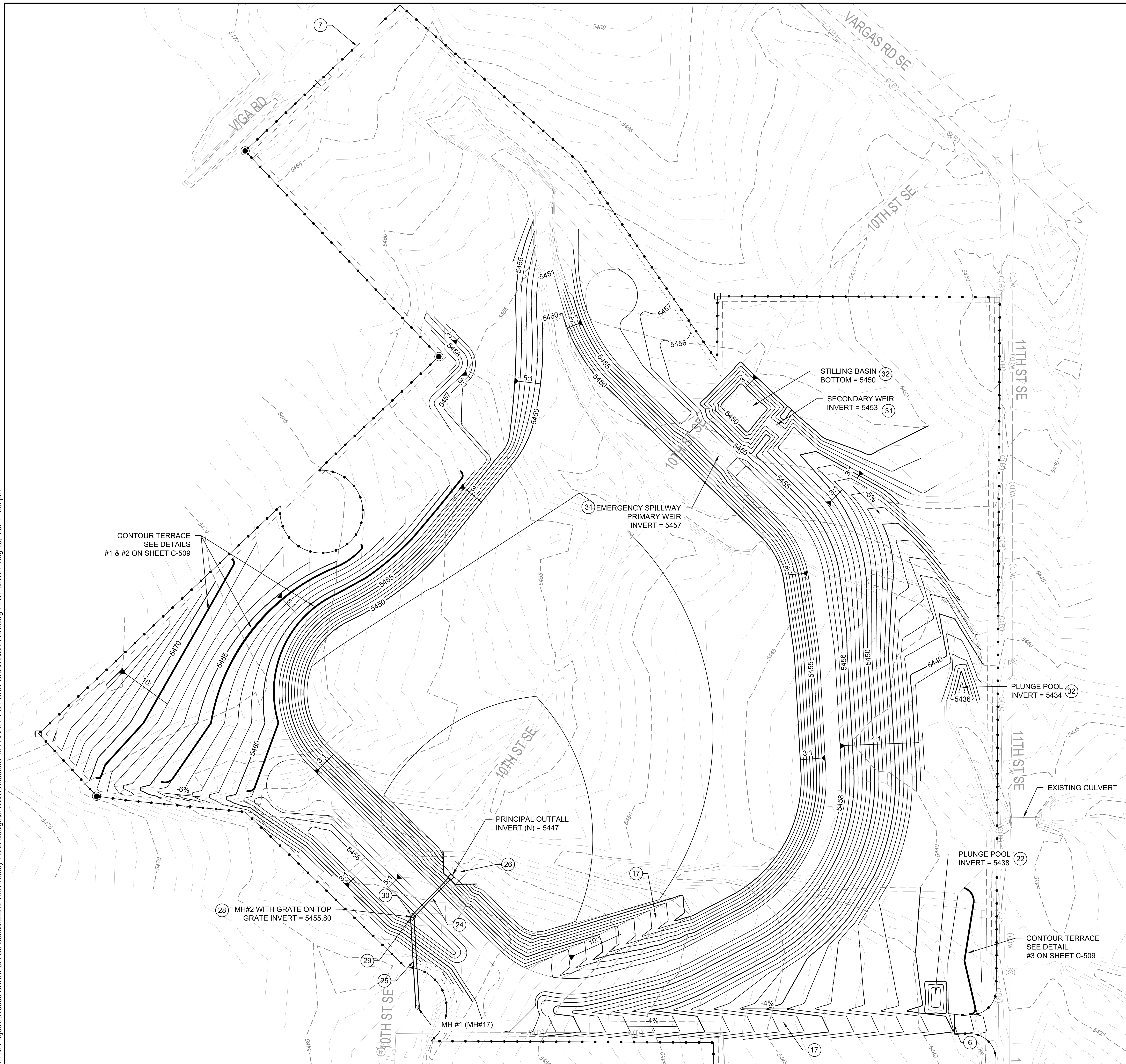
PROJECT NAME:
HARLEY'S POND

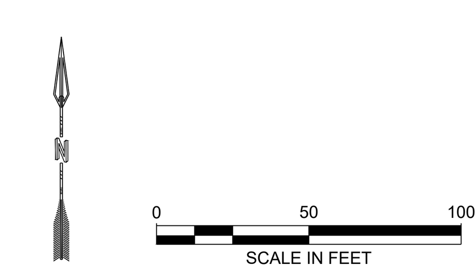
This contract allows the owner to make payment within 45 days after submission of an undisputed request for payment

SHEET TITLE:
HARLEY'S POND SITE PLAN

SUBMITTED FOR:
CONSTRUCTION

SHEET NUMBER:
C-100





NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-101 HARLEY'S POND GRADING PLAN.dwg PLOT DATE: Aug 18, 2021 4:02pm

BUILD NOTES: (#)

6	SSCAFCA M101	SSCAFCA STANDARD MAINTENANCE ACCESS GATE SEE DETAIL #3 ON SHEET C-500
7	SSCAFCA M104	CABLE SAG AND ALERT SIGN AT ENTRANCE OF HARLEY'S POND SEE DETAIL ON SHEET C-501
17	NMDOT 303	ACCESS ROAD AROUND THE HARLEY'S POND, 6" AGGREGATE BASE COARSE (INCLUDING EMERGENCY ACCESS ROAD INTO THE POND BOTTOM) SEE CROSS SECTIONS A-A & B-B ON SHEET C-112
22	APWA 603	RIP-RAP TYPE VL: ACCESS ROAD SWALES, PLUNGE POOL & AND AUXILIARY SWALE, INCLUDES D50=6" RIPRAP, C.I.P.
24	HDPE/RCP	24" STORM DRAIN AT PRINCIPLE SPILLWAY, C.I.P SEE P&P ON SHEET C-109
25	HDPE/ RCP	36" STORM DRAIN, C.I.P SEE P&P ON SHEET C-109
26	APWA 510	STRUCTURAL CONCRETE HARLEY'S POND OUTLET STRUCTURE, C.I.P SEE DETAILS ON SHEETS C-502 THROUGH C-506
28	APWA 920	MH, 4' DIA, C or E,>10'-14'D, SEE DETAIL #1 ON SHEET C-514
29	CONTECH OR EQUALE	STORM RACK GRATE TYPE RS-48 TO BE PLACED ON TOP OF MANHOLE, SEE DETAIL #2 ON SHEET C-514
30	APWA 510	5'X5' CONCRETE PAD AROUND MANHOLE, SEE DETAIL #3 ON SHEET C-514
31	NMDOT 519	6" THICK STRUCTURAL SHOCRETE LINING AT TOP OF EMERGENCY SPILLWAY WEIR (12:1 SIDE SLOPES) SEE CROSS SECTION E-E ON SHEETS C-512 AND AT STILLING BASIN (3:1 SIDE SLOPES) C.I.P. SEE CROSS SECTIONS A-A, B-B, C-C & D-D ON SHEETS C-510 & C-511
32	APWA 603	RIP-RAP TYPE L: STILLING BASIN AND PLUNGE POOLS, INCLUDES TYPE L RIPRAP, C.I.P. FOR STILLING BASIN SEE CROSS SECTIONS A-A, B-B, C-C & D-D ON SHEETS C-510 & C-511 FOR PLUNGE POOL SEE SECTION A-A ON SHEET C-513

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PROJECT NAME: HARLEY'S POND

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

SHEET TITLE: HARLEY'S POND GRADING PLAN

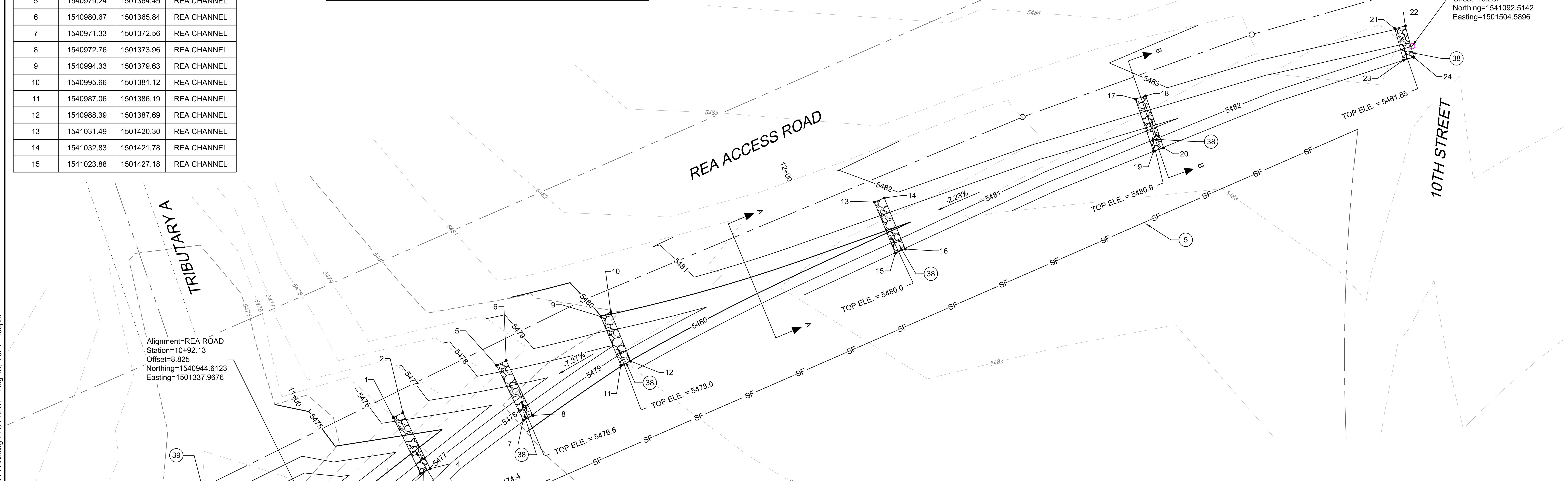
SUBMITTED FOR: CONSTRUCTION

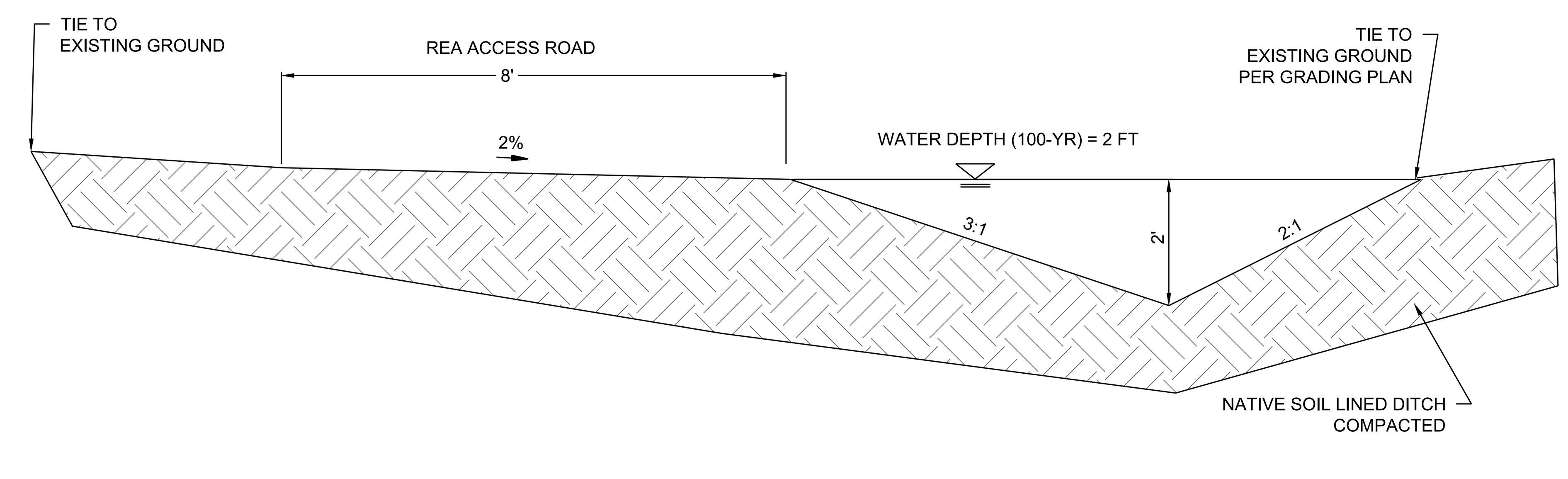
SHEET NUMBER: C-101

Point Table			
POINT #	NORTHING	EASTING	DESCRIPTION
1	1540963.65	1501349.65	REA CHANNEL
2	1540965.08	1501351.04	REA CHANNEL
3	1540955.58	1501357.93	REA CHANNEL
4	1540957.01	1501359.33	REA CHANNEL
5	1540979.24	1501364.45	REA CHANNEL
6	1540980.67	1501365.84	REA CHANNEL
7	1540971.33	1501372.56	REA CHANNEL
8	1540972.76	1501373.96	REA CHANNEL
9	1540994.33	1501379.63	REA CHANNEL
10	1540995.66	1501381.12	REA CHANNEL
11	1540987.06	1501386.19	REA CHANNEL
12	1540988.39	1501387.69	REA CHANNEL
13	1541031.49	1501420.30	REA CHANNEL
14	1541032.83	1501421.78	REA CHANNEL
15	1541023.88	1501427.18	REA CHANNEL

BUILD NOTES: (#)

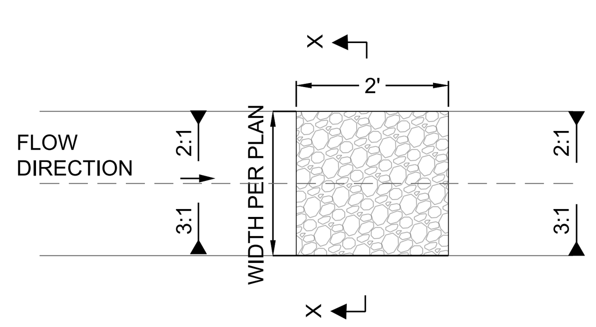
5		TEMPORARY CONSTRUCTION FENCE
38	APWA 603	RIP-RAP TYPE VL: ROCK GRADE CONTROL STRUCTURE, (ACROSS THE REA CROSS SECTION) SEE PLANSET FOR LOCATIONS, INCLUDES TYPE VL, C.I.P. SEE DETAIL THIS SHEET
39	APWA 603	RIP-RAP CLASS M: PLUNGE POOL FOR REA CHANNEL, INCLUDES TYPE M RIPRAP, C.I.P.



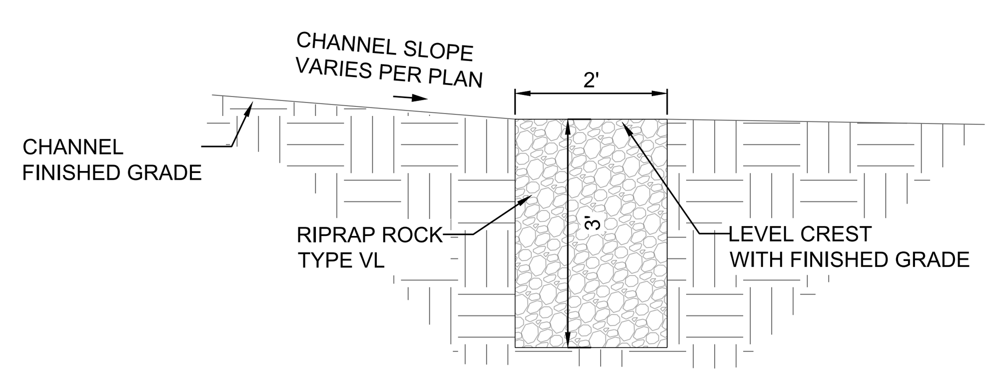


SECTION A-A ROADSIDE SWALE - DIRT LINING - NTS

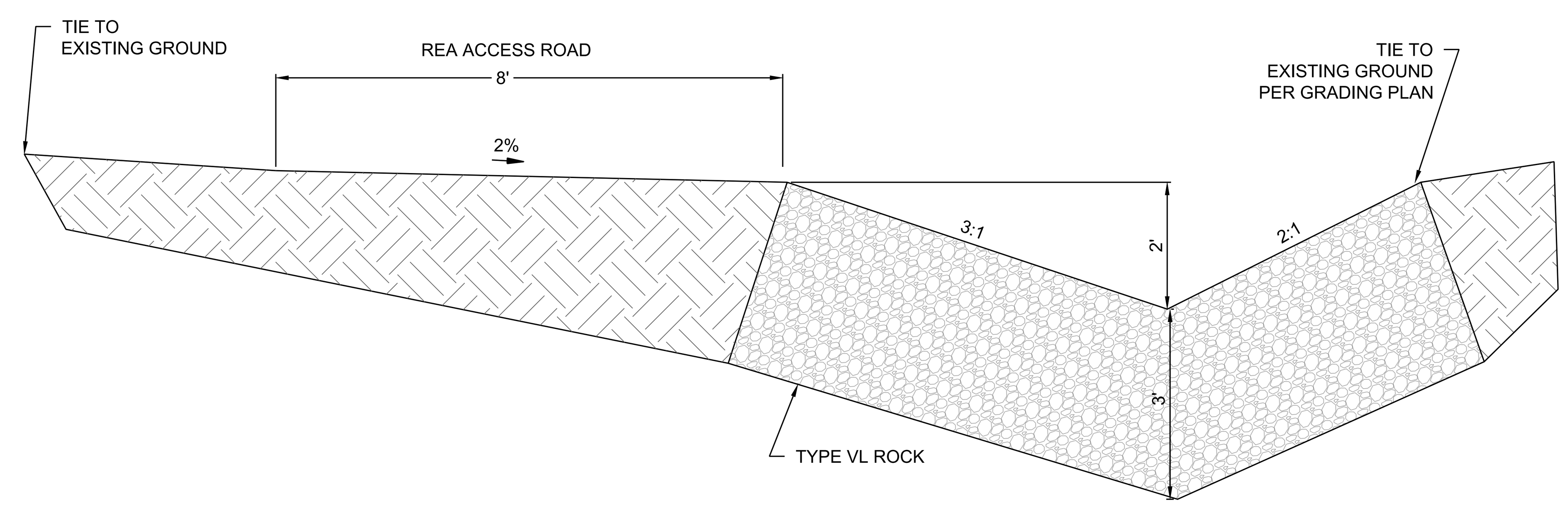
GRADE CONTROL CHECK STRUCTURE - NTS



PLAN VIEW



SECTION VIEW X-X



SECTION B-B ROADSIDE SWALE - GRADE CHECK SECTION - NTS

0 10 20
SCALE IN FEET

NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-102 REA ACCESS ROAD AND CHANNEL GRADING PLAN.dwg PLOT DATE: Aug 18, 2021 4:03pm

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PROJECT NAME: HARLEY'S POND

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

SHEET TITLE: REA ACCESS ROAD AND CHANNEL GRADING PLAN

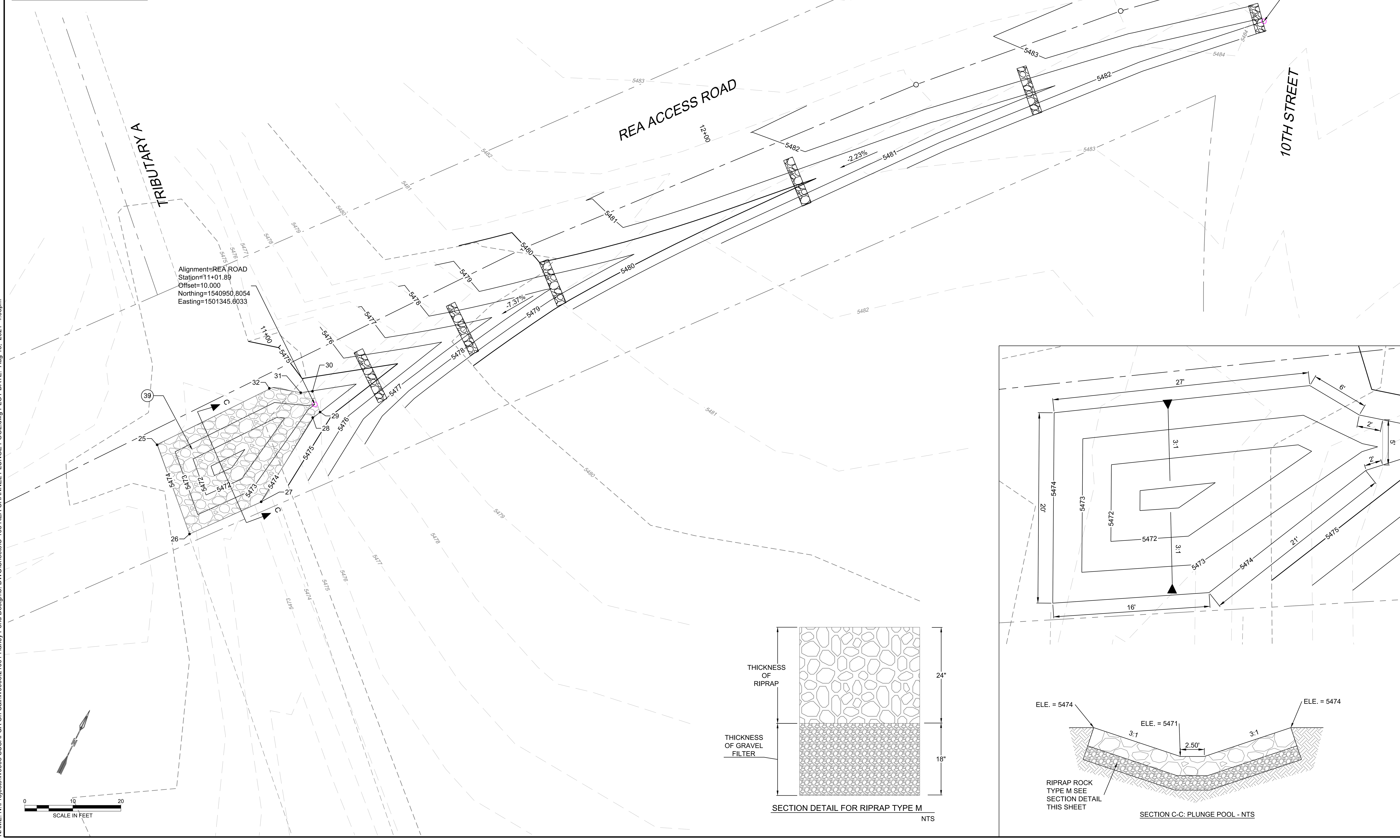
SUBMITTED FOR: CONSTRUCTION

SHEET NUMBER: C-102

Point Table		
POINT #	NORTHING	EASTING
25	1540931.82	1501317.54
26	1540916.61	1501330.16
32	1540950.77	1501335.56
27	1540927.97	1501341.93
31	1540952.11	1501342.01
30	1540953.21	1501344.21
28	1540948.08	1501346.12
29	1540949.67	1501347.17

BUILD NOTES: #

39	APWA 603	RIP-RAP TYPE M: PLUNGE POOL FOR REA CHANNEL, INCLUDES TYPE M RIPRAP, C.I.P.



SECTION DETAIL FOR RIPRAP TYPE M

NTS

SECTION C-C: PLUNGE POOL - NTS

NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-103 REA CHANNEL PLUNGE POOL.dwg PLOT DATE: Aug 18, 2021 4:03pm

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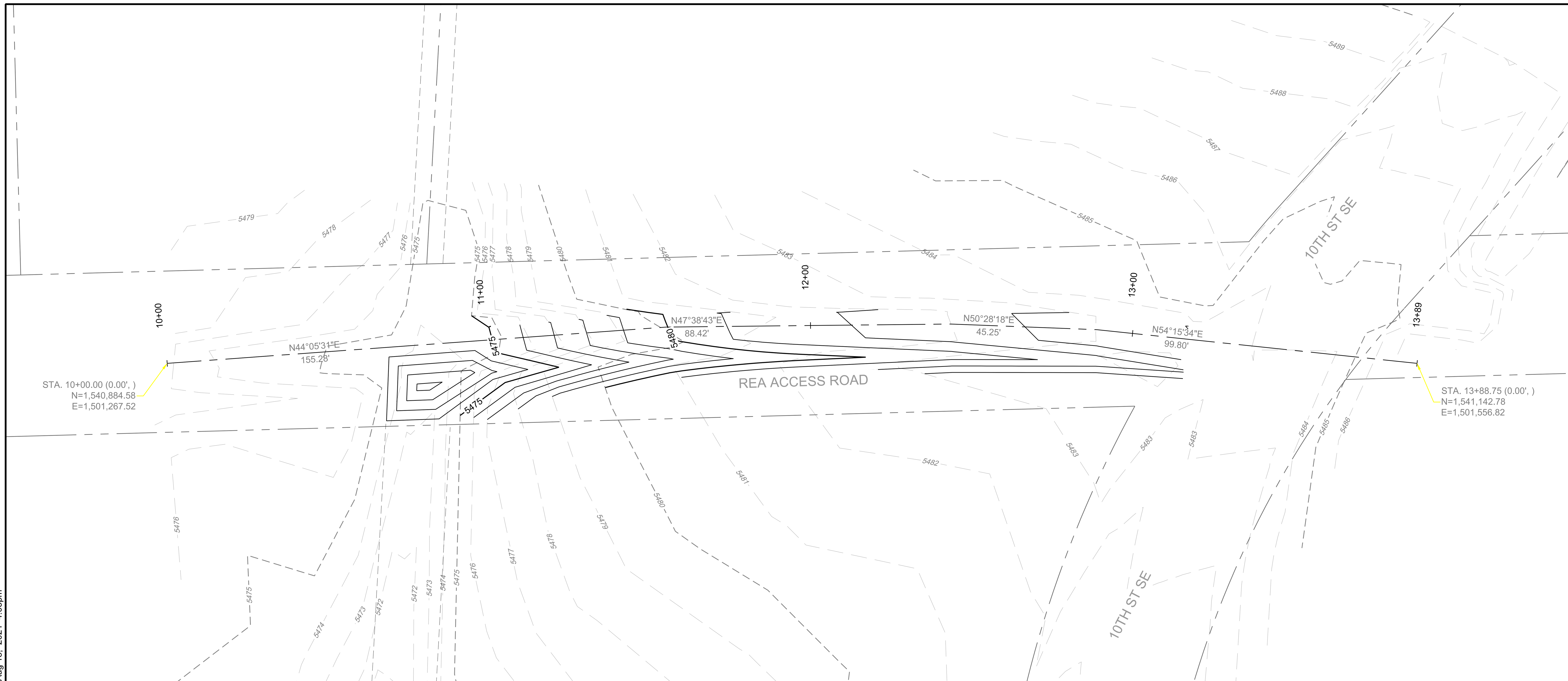
PROJECT NAME: HARLEY'S POND

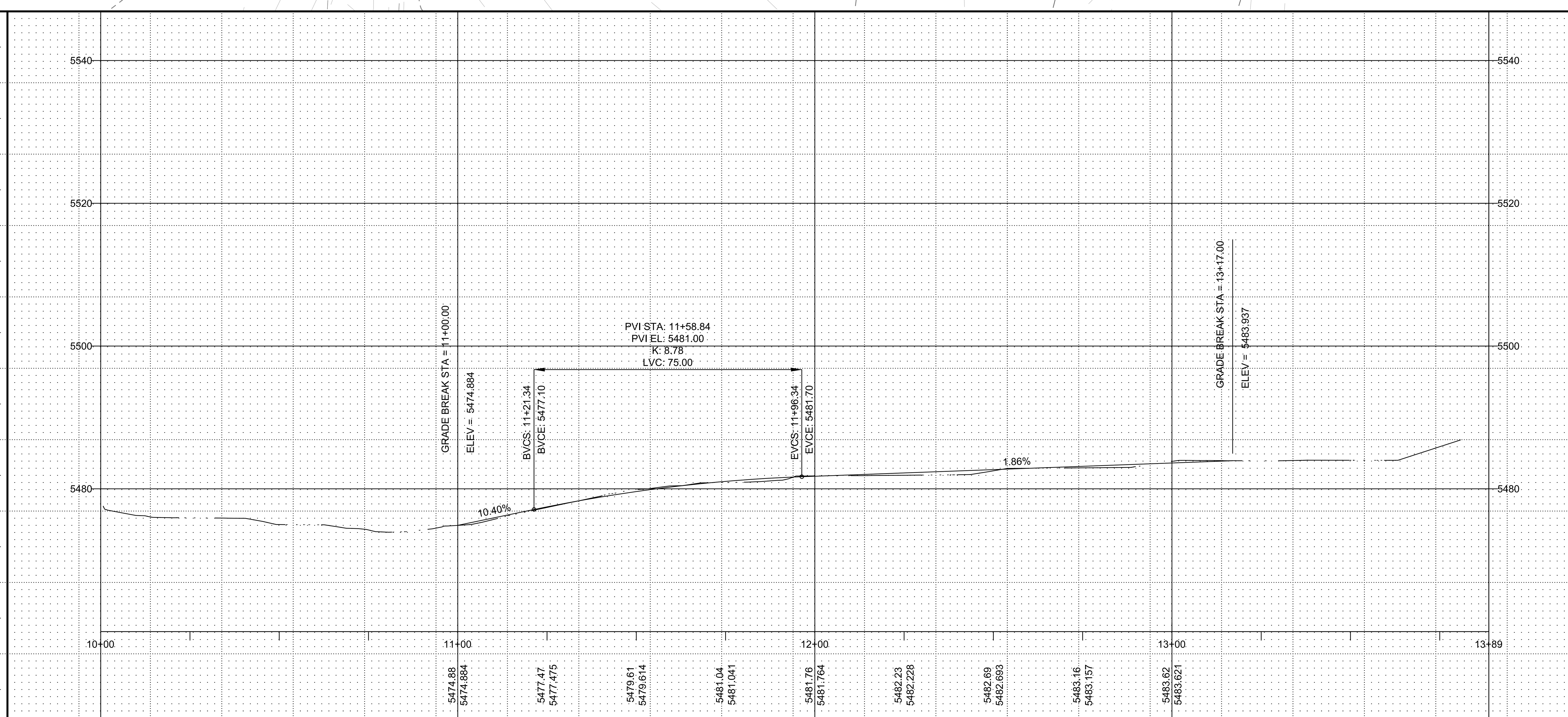
This contract allows the owner to make payment within 45 days after submission of an undisputed request for payment

SHEET TITLE: REA CHANNEL PLUNGE POOL

SUBMITTED FOR: CONSTRUCTION

SHEET NUMBER: C-103





SCALE:
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 10'

NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-104 REA ACCESS ROAD PLAN & PROFILE.dwg PLOT DATE: Aug 18, 2021 4:03pm

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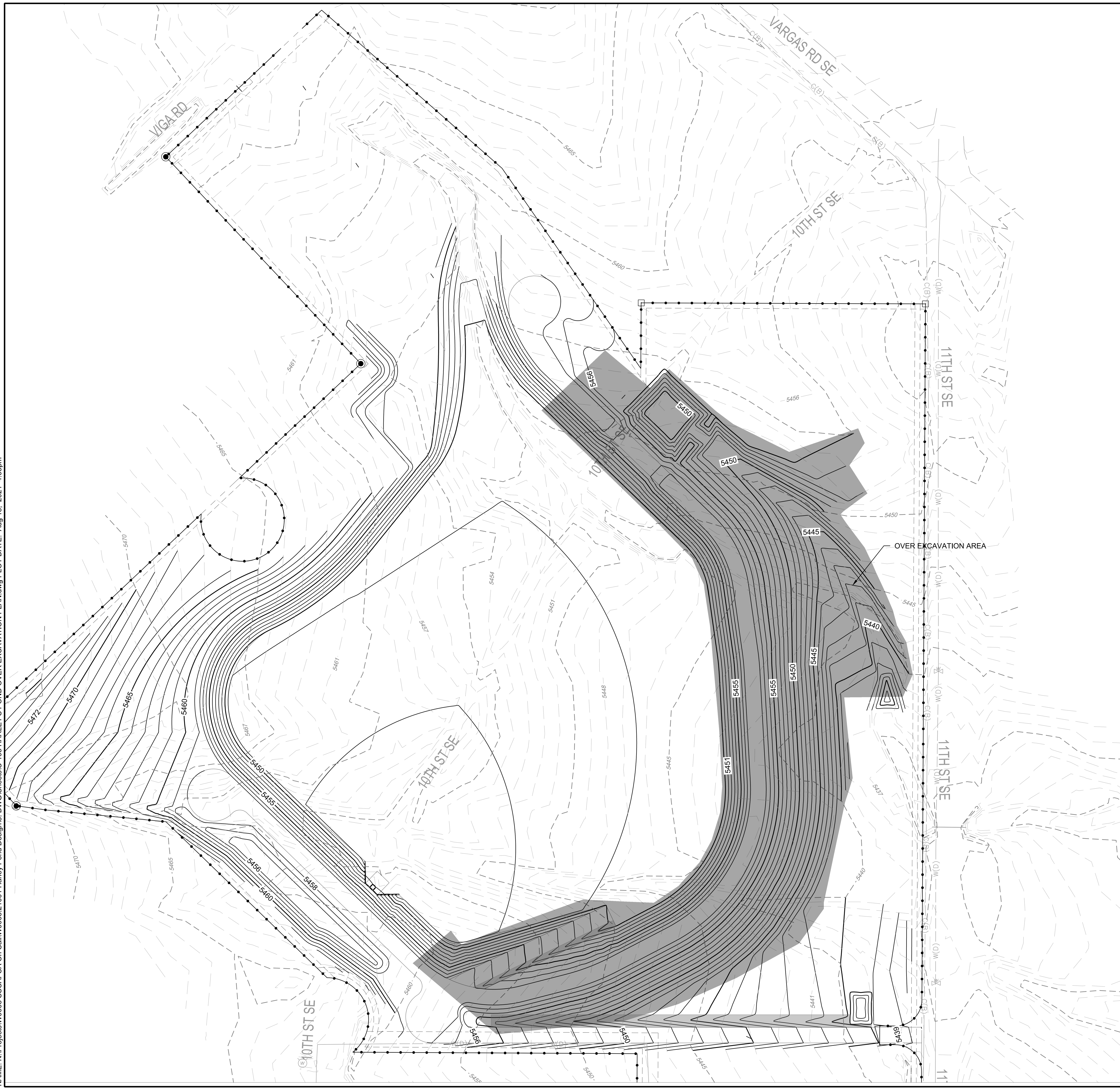
SHEET TITLE:
REA ACCESS ROAD PLAN & PROFILE

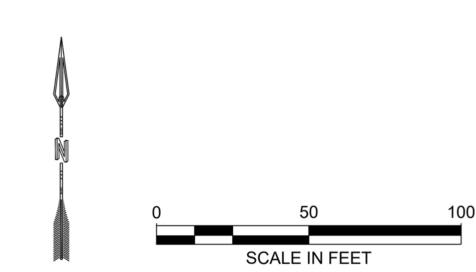
SUBMITTED FOR:
CONSTRUCTION

SHEET NUMBER:
C-104



LEGEND

3' OVER EXCAVATION LIMITS PER GEOTECHNICAL REPORT



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PROJECT NAME:
HARLEY'S POND

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

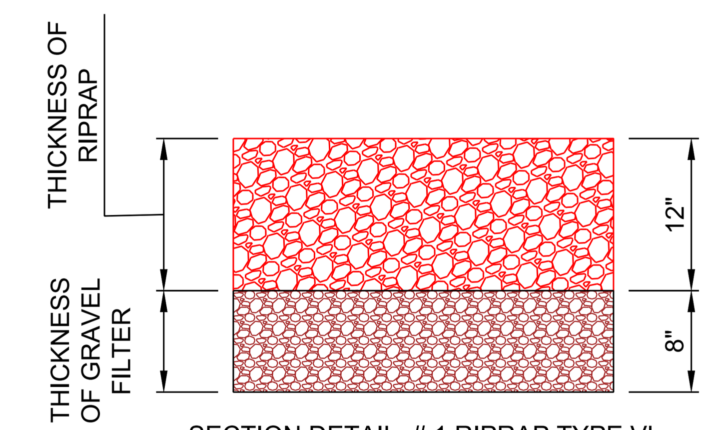
SHEET TITLE:
HARLEY'S POND OVER EXCAVATION PLAN

SUBMITTED FOR:
CONSTRUCTION

SHEET NUMBER:
C-105

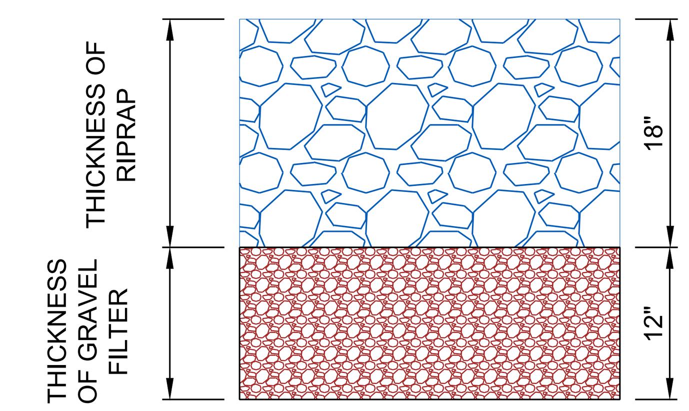
NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-106 HARLEY'S POND ARMORING PLAN.dwg PLOT DATE: Aug 18, 2021 4:04pm

GRAVEL MULCH RESEEDING	
CLASS L DUMPED RIPRAP	
CLASS VL DUMPED RIPRAP	
NATIVE GRASS SEEDING PER APWA SPECIFICATION 1012	
BASE COURSE	
SHOTCRETE	
CONCRETE	



SECTION DETAIL # 1 RIPRAP TYPE VL

NTS



SECTION DETAIL # 2 RIPRAP TYPE L

NTS

BUILD NOTES: (#)

14	NMDOT 632	SEEDING WITH GRAVEL MULCH: INCLUDES SOIL PREPARATION, INSTALL 2-INCH THICK GRAVEL AND SEED, SOIL AMENDMENTS AND FERTILIZER NOT REQUIRED. C.I.P.
15	APWA 1012	NATIVE GRASS SEEDING (AT ANY DISTURBED AREA BETWEEN POND AND ROADS) , C.I.P
17	NMDOT 303	ACCESS ROAD AROUND THE HARLEY'S POND, 6" THICK AGGREGATE BASE COARSE (INCLUDING EMERGENCY ACCESS ROAD INTO THE POND BOTTOM)
18	APWA 510	4" THICK NON-STRUCTURAL CONCRETE WITH FIBER MESH TYPE F-100 BY MASTER BUILDER SOLUTIONS OR EQUIVALENT. TO BE PLACED AT BOTH SITE ACCESS ROAD AND POND ACCESS ROAD SIDE SWALE. C.I.P. SEE CROSS SECTIONS A-A AND B-B ON SHEETC-112
20	APWA 603	RIP-RAP TYPE L: POND INLET ARMORING, INCLUDES D50=9" RIPRAP, C.I.P. SEE DETAIL #1 SECTION A-A ON SHEET C-508
22	APWA 603	RIP-RAP TYPE VL: ACCESS ROAD SWALES, PLUNGE POOL & AND AUXILIARY SWALE, INCLUDES D50=6" RIPRAP, C.I.P. SEE PLUNGE POOL DETAIL #2 ON SHEET C-513
31	NMDOT 519	6" THICK STRUCTURAL SHOCRETE LINING AT TOP OF EMERGENCY SPILLWAY WEIR (12:1 SIDE SLOPES) SEE CROSS SECTION E-E ON SHEETS C-512 AND AT STILLING BASIN (3:1 SIDE SLOPES) C.I.P. SEE CROSS SECTIONS A-A, B-B, C-C & D-D ON SHEETS C-510 & C-511
32	APWA 603	RIP-RAP TYPE L: STILLING BASIN AND PLUNGE POOLS, INCLUDES TYPE L RIPRAP, C.I.P. FOR STILLING BASIN SEE CROSS SECTIONS A-A, B-B, C-C & D-D ON SHEETS C-510 & C-511 FOR PLUNGE POOL DETAIL #1 ON SHEET C-513
34	APWA 603	RIP-RAP TYPE L: EMERGENCY SPILLWAY CHANNEL RIGHT BANK, INCLUDES TYPE L RIPRAP, C.I.P. SEE CROSS SECTION A-A ON SHEET C-111
36	APWA 603	RIP-RAP TYPE VL: EMERGENCY SPILLWAY CHANNEL BOTTOM + LEFT BANK , INCLUDES TYPE VL RIPRAP, C.I.P. SEE CROSS SECTION A-A ON SHEET C-111

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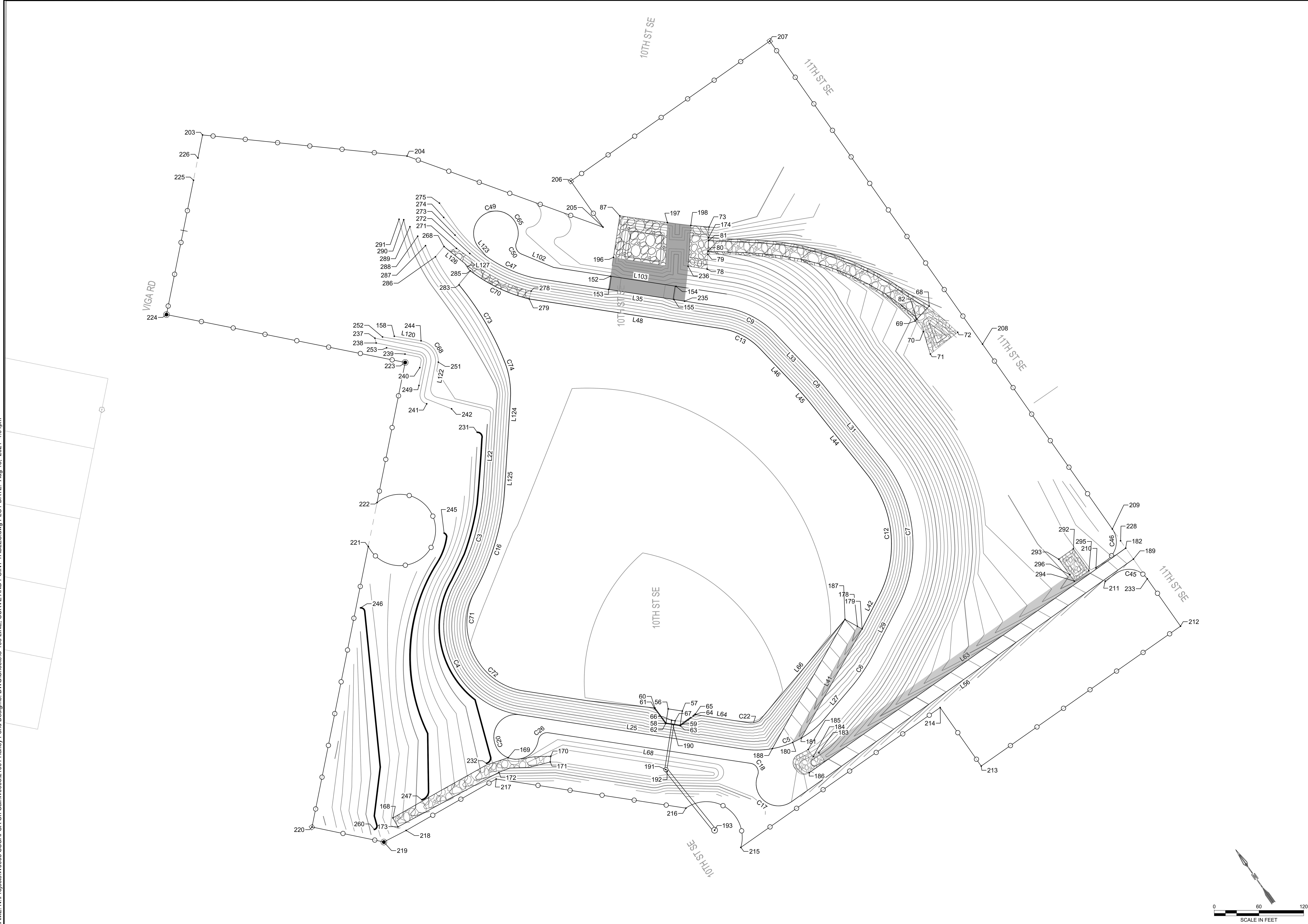
PROJECT NAME: HARLEY'S POND

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

SHEET TITLE: HARLEY'S POND ARMORING PLAN

SUBMITTED FOR: CONSTRUCTION

SHEET NUMBER: C-106



REVISION

DESIGNED DESIGN BY
DRAWN DRAWN BY
CHECKED CHECKED BY
DATE 8.18.2021

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COMMUNITY DESIGN SOLUTIONS
5971 JEFFERSON STREET SUITE 101
ALBUQUERQUE, NEW MEXICO 87109
WWW.RESPEC.COM PHONE (505)253-9718

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PROFESSIONAL ENGINEER

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PROJECT NAME:
HARLEY'S POND

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

SHEET TITLE:
LINE, CURVE AND POINT DATA PLAN

SUBMITTED FOR:
CONSTRUCTION

SHEET NUMBER:
C-107

NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-108 LINE, CURVE AND POINT TABLES.dwg PLOT DATE: Aug 18, 2021 4:04pm

NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-108 LINE, CURVE AND POINT TABLES.dwg PLOT DATE: Aug 18, 2021 4:13pm

Point Table

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
190	1539794.88	1501552.87	5453.33	24" STORM DRAIN
192	1539755.70	1501517.40	5456.00	36" STORM DRAIN
191	1539758.12	1501517.27	5456.00	48" STORM DRAIN MH
187	1539779.11	1501777.79	5449.99	ACCESS ROAD
188	1539708.28	1501627.83	5458.00	ACCESS ROAD
189	1539647.48	1502079.81	5437.27	ACCESS ROAD
272	1540355.55	1501672.41	5455.00	ARROYO TIE IN
273	1540381.84	1501670.83	5456.00	ARROYO TIE IN
274	1540405.31	1501671.96	5457.00	ARROYO TIE IN
275	1540421.11	1501677.34	5458.00	ARROYO TIE IN
268	1540378.55	1501653.43	5451.00	ARROYO TIE IN/RIPRAP
271	1540368.78	1501663.57	5454.00	ARROYO TIE IN/RIPRAP
158	1540328.92	1501550.02	5456.00	BERM
237	1540339.68	1501531.13	5458.00	BERM
238	1540334.52	1501529.12	5458.00	BERM
239	1540305.75	1501548.24	5456.00	BERM
240	1540283.81	1501552.95	5456.00	BERM
241	1540246.34	1501535.86	5458.00	BERM
242	1540225.68	1501555.27	5458.00	BERM
244	1540307.46	1501571.47	5456.00	BERM
249	1540268.09	1501540.65	5457.00	BERM
251	1540276.82	1501573.41	5456.00	BERM

Point Table

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
252	1540335.88	1501538.84	5457.00	BERM
253	1540323.38	1501535.50	5457.00	BERM
231	1540187.75	1501563.47	5459.50	CONTOUR TERRACE
232	1539879.81	1501357.73	5459.50	CONTOUR TERRACE
245	1540117.25	1501468.10	10928.00	CONTOUR TERRACE
246	1540103.12	1501343.47	10931.00	CONTOUR TERRACE
247	1539888.46	1501275.21	5464.50	CONTOUR TERRACE
260	1539892.06	1501212.63	10931.00	CONTOUR TERRACE
68	1540010.35	1502057.29	5439.55	EMERGENCY SPILLWAY
80	1540203.34	1501890.98	5450.00	EMERGENCY SPILLWAY
81	1540212.82	1501898.37	5450.78	EMERGENCY SPILLWAY
82	1540006.41	1502037.42	5438.13	EMERGENCY SPILLWAY
152	1540243.75	1501786.06	5458.00	EMERGENCY SPILLWAY
153	1540232.98	1501775.63	5458.00	EMERGENCY SPILLWAY
154	1540192.19	1501839.15	5458.00	EMERGENCY SPILLWAY
155	1540181.47	1501828.76	5458.00	EMERGENCY SPILLWAY
174	1540215.65	1501900.58	5451.00	EMERGENCY SPILLWAY
193	1539671.23	1501522.41	5461.94	MH #17
56	1539811.92	1501558.63	5447.35	OUTFALL STRUCTURE
57	1539800.79	1501570.13	5447.24	OUTFALL STRUCTURE
58	1539800.43	1501547.50	5453.33	OUTFALL STRUCTURE
59	1539789.29	1501559.00	5453.17	OUTFALL STRUCTURE
60	1539821.35	1501547.17	5447.33	OUTFALL STRUCTURE
61	1539821.34	1501546.50	5447.33	OUTFALL STRUCTURE
62	1539800.14	1501546.84	5453.33	OUTFALL STRUCTURE
63	1539788.62	1501558.73	5452.97	OUTFALL STRUCTURE
64	1539788.96	1501579.93	5447.07	OUTFALL STRUCTURE
65	1539789.63	1501579.92	5447.01	OUTFALL STRUCTURE
66	1539799.32	1501554.41	5453.00	OUTFALL STRUCTURE

Point Table

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
67	1539796.55	1501557.27	5453.00	OUTFALL STRUCTURE
278	1540281.58	1501703.93	5450.00	RIPRAP
283	1540333.81	1501642.31	5450.00	RIPRAP
279	1540275.64	1501697.17	5450.00	RIPRAP
196	1540259.10	1501800.94	5455.00	SHOTCRETE
197	1540255.88	1501872.62	5455.00	SHOTCRETE
198	1540238.16	1501892.10	5455.00	SHOTCRETE
235	1540173.17	1501837.32	5458.00	SHOTCRETE
203	1540636.53	1501505.44	5466.35	SITE FENCE
204	1540485.02	1501678.19	5461.86	SITE FENCE
205	1540293.36	1501810.96	5454.29	SITE FENCE
206	1540356.18	1501811.30	5458.24	SITE FENCE
207	1540355.20	1502083.40	5448.92	SITE FENCE
208	1539941.16	1502081.29	5437.16	SITE FENCE
209	1539688.58	1502080.00	5436.74	SITE FENCE
210	1539663.71	1502039.86	5439.00	SITE FENCE
211	1539645.70	1502039.77	5439.00	SITE FENCE
212	1539555.84	1502079.32	5438.56	SITE FENCE
213	1539557.22	1501807.07	5449.88	SITE FENCE
214	1539637.15	1501807.48	5447.39	SITE FENCE
215	1539638.58	1501535.22	5460.61	SITE FENCE
216	1539709.94	1501510.59	5464.11	SITE FENCE
217	1539859.27	1501356.42	5462.03	SITE FENCE
218	1539870.60	1501241.03	5467.88	SITE FENCE
219	1539874.56	1501213.22	5469.57	SITE FENCE
220	1539934.62	1501157.41	5475.81	SITE FENCE
221	1540154.07	1501390.27	5466.71	SITE FENCE
222	1540188.40	1501426.70	5465.10	SITE FENCE
223	1540297.96	1501542.95	5456.29	SITE FENCE

Point Table

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
224	1540496.09	1501356.29	5468.96	SITE FENCE
225	1540601.15	1501467.90	5466.00	SITE FENCE
226	1540618.51	1501486.30	5466.14	SITE FENCE
233	1539620.57	1502079.65	5438.18	SITE FENCE
69	1540005.87	1502034.73	5439.31	STILLING BASIN
70	1539990.89	1502035.41	5438.04	STILLING BASIN
71	1539965.86	1502027.30	5437.97	STILLING BASIN
72	1539968.04	1502066.27	5438.62	STILLING BASIN
73	1540224.85	1501907.66	5454.59	STILLING BASIN
78	1540187.63	1501878.79	5452.22	STILLING BASIN
79	1540200.81	1501889.01	5450.30	STILLING BASIN
87	1540292.73	1501833.56	5455.00	STILLING BASIN
236	1540202.72	1501863.26	5453.00	STILLING BASIN
168	1539890.62	1501237.10	5466.82	SWALE
169	1539870.98	1501381.09	5459.00	SWALE
170	1539844.72	1501421.00	5456.00	SWALE
171	1539839.82	1501416.74	5456.00	SWALE
172	1539863.63	1501363.30	5459.57	SWALE
173	1539879.12	1501235.87	5466.87	SWALE
178	1539764.72	1501784.58	5450.00	SWALE
179	1539759.31	1501787.16	5450.00	SWALE
180	1539700.75	1501650.51	5458.00	SWALE
181	1539699.19	1501661.11	5458.00	SWALE
182	1539662.48	1502079.81	5436.97	SWALE
183	1539674.48	1501667.68	5459.59	SWALE
184	1539674.48	1501659.96	5455.00	SWALE
186	1539662.48	1501645.93	5456.17	SWALE
228	1539672.47	1502079.92	5436.97	SWALE
185	1539684.24	1501659.91	5458.00	SWALE

LINE TABLE

LINE #	BEARING	DISTANCE
L22	S38°56'00"W	70.34
L25	S45°54'54"E	252.71
L27	N75°37'03"E	45.35
L29	N62°27'26"E	60.16
L31	N03°11'18"W	103.38
L33	N08°05'16"W	61.28
L35	N45°53'09"W	215.40
L41	N64°30'03"E	139.66
L42	N62°27'26"E	41.82
L44	N03°11'18"W	103.38
L45	N05°38'17"W	19.32
L46	N08°05'16"W	61.28
L48	N45°53'00"W	217.31
L56	N90°00'00"W	468.89
L63	N90°00'00"E	433.88
L64	S45°54'57"E	58.35
L66	N75°31'34"E	148.04
L68	N46°01'33"W	227.77
L102	S32°01'56"E	39.21

LINE TABLE

LINE #	BEARING	DISTANCE
L103	S45°53'09"E	195.72
L120	S44°58'23"E	30.34
L122	S45°59'07"W	29.52
L123	N04°47'37"W	13.46
L124	S38°56'00"W	45.43
L125	S39°13'48"W	68.83
L126	S15°30'32"E	30.13
L127	S02°36'09"W	8.16

CURVE TABLE

CURVE #	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C3	112.91	250.44	25°49'57"	S51°52'17"W	111.96
C4	192.49	100.00	110°17'14"	S09°13'43"W	164.12
C5	102.05	100.00	58°28'03"	S75°08'56"E	97.67
C6	45.94	200.00	13°09'37"	N69°02'14"E	45.84
C7	171.86	150.00	65°38'44"	N29°38'04"E	162.61
C8	21.38	250.00	4°53'58"	N05°38'17"W	21.37
C9	65.97	100.00	37°47'54"	N26°59'12"W	64.78
C12	144.36	126.00	65°38'44"	N29°38'04"E	136.59
C13	50.14	76.00	37°47'54"	N26°59'12"W	49.23
C16	109.18	273.66	22°51'30"	S53°14'48"W	108.45
C17	63.97	25.00	146°36'16"	N16°41'52"W	47.89
C18	18.77	10.00	107°32'21"	N02°50'05"E	16.13
C20	117.81	25.00	270°00'00"	N00°54'54"W	35.36

CURVE TABLE

CURVE #	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C22	14.29	19.11	42°50'19"	S63°38'13"E	13.96
C26	15.71	10.00	90°00'00"	S89°05'06"W	14.14
C45	39.40	25.00	90°17'31"	S44°51'15"E	35.45
C46	39.14	25.00	89°42'29"	S45°08'45"W	35.27
C47	59.68	151.24	22°36'36"	S30°10'47"E	59.29
C49	100.38	24.97	230°19'04"	S66°38'55"E	45.20
C50	13.12	10.34	72°40'24"	S05°45'55"W	12.26
C65	100.38	24.97	230°19'04"	S66°38'55"E	45.20
C68	33.50	23.40	82°01'47"	S03°37'21"E	30.71
C70	75.53	177.34	24°24'16"	S28°44'56"E	74.96
C71	58.45	74.53	44°56'03"	S39°30'26"W	56.96
C72	84.48	72.97	66°20'26"	S13°17'10"E	79.84
C73	107.10	318.92	19°14'24"	S05°23'37"W	106.59

CURVE TABLE

CURVE #	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C74	107.10	318.92	19°14'24"	S05°23'37"W	106.59

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DATE 8.18.2021

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22997
8/18/21
PROFESSIONAL ENGINEER

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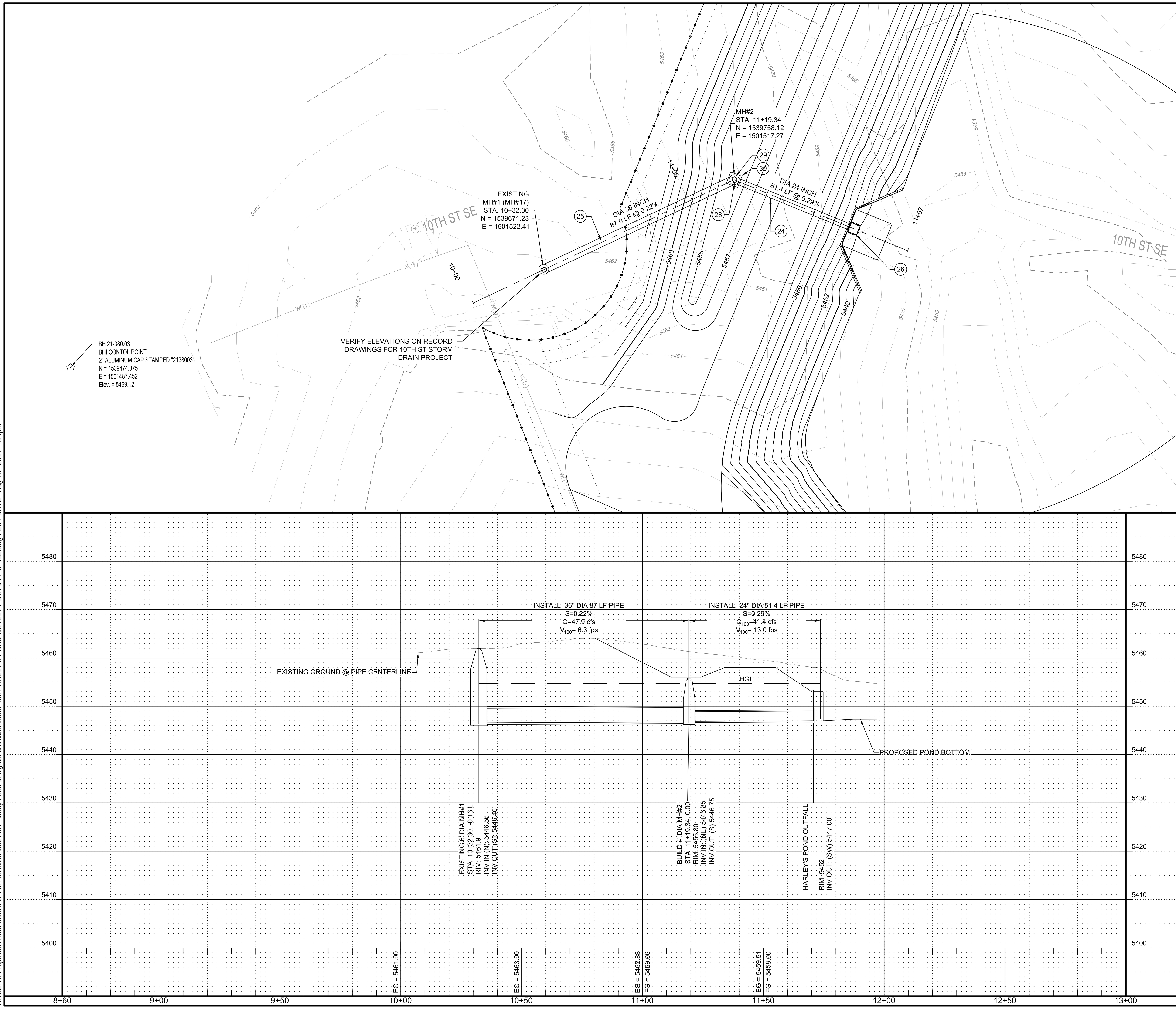
PROJECT NAME:
HARLEY'S POND

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

SHEET TITLE:
LINE, CURVE AND POINT TABLES

SUBMITTED FOR:
CONSTRUCTION

SHEET NUMBER:
C-108



SCALE:
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 10'

BUILD NOTES: (#)

24	HDPE/RCP	24" STORM DRAIN AT PRINCIPLE SPILLWAY, C.I.P SEE P&P ON SHEET C-109
25	HDPE/ RCP	36" STORM DRAIN, C.I.P SEE P&P ON SHEET C-109
26	APWA 510	STRUCTURAL CONCRETE HARLEY'S POND OUTLET STRUCTURE, C.I.P SEE DETAILS ON SHEETS C-502 THROUGH C-506
28	APWA 920	MH, 4' DIA, C or E,>10'-14'D, SEE DETAIL #1 ON SHEET C-514
29	CONTECH OR EQUAL	STORM RACK GRATE TYPE RS-48 TO BE PLACED ON TOP OF MANHOLE, SEE DETAIL #2 ON SHEET C-514
30	APWA 510	5'X5' CONCRETE PAD AROUND MANHOLE, SEE DETAIL #3 ON SHEET C-514

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PROJECT NAME: HARLEY'S POND

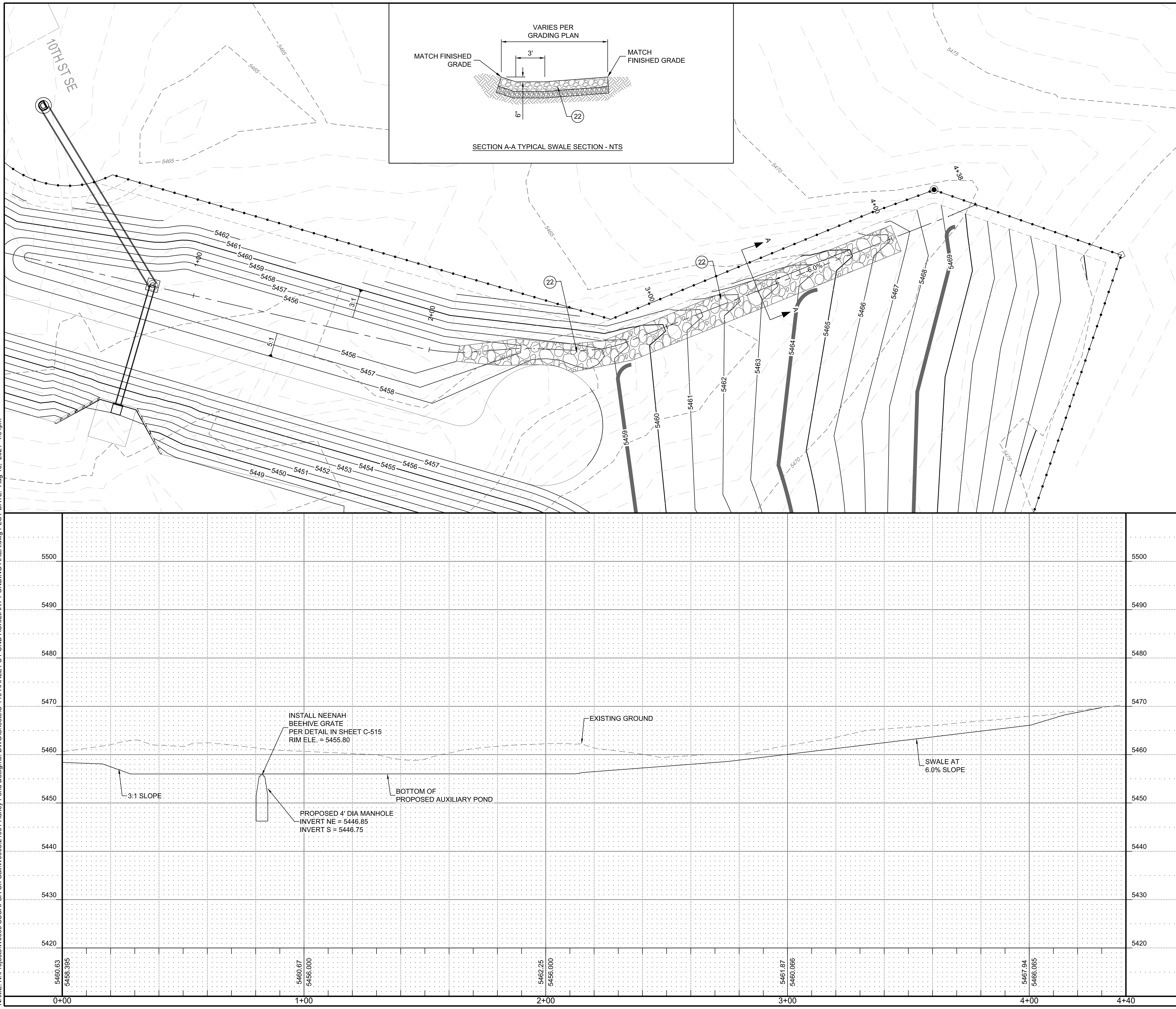
This contract allows the owner to make payment within 45 days after submission of an undisputed request for payment

SHEET TITLE: HARLEY'S POND OUTLET PLAN & PROFILE

SUBMITTED FOR: CONSTRUCTION

SHEET NUMBER: C-109

NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-109 HARLEY'S POND OUTLET PLAN & PROFILE.dwg PLOT DATE: Aug 18, 2021 4:04pm



NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-110 HARLEY'S POND AUXILIARY PONDING AREA.dwg PLOT DATE: Aug 18, 2021 4:04pm

BUILD NOTES: (#)

22	APWA 603	RIP-RAP TYPE VL: ACCESS ROAD SWALE, & SWALES AROUND THE POND. C.I.P. INCLUDES TYPE VL RIPRAP, C.I.P.

SCALE:
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 10'

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PROJECT NAME: HARLEY'S POND

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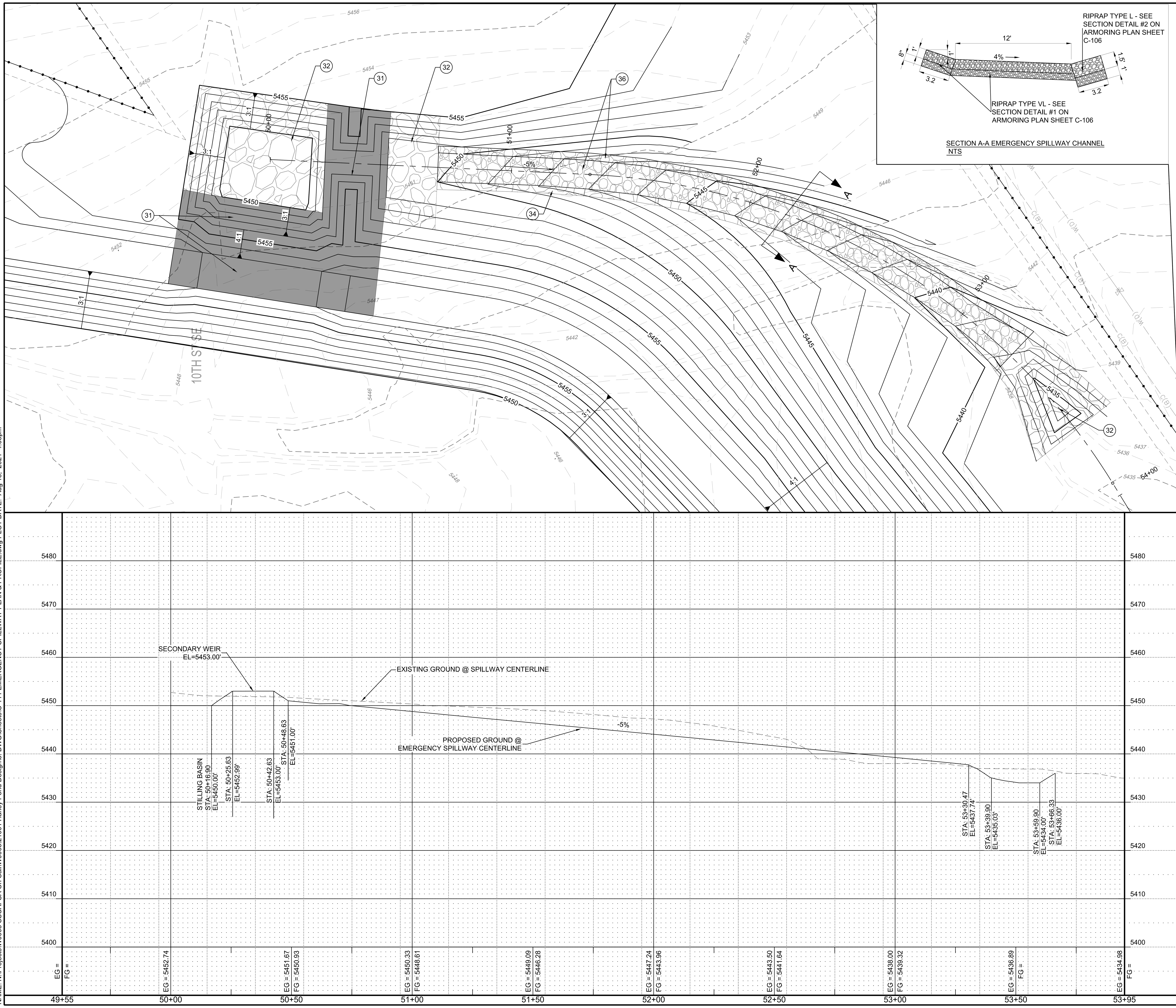
SHEET TITLE: HARLEY'S POND AUXILIARY PONDING AREA

SUBMITTED FOR: CONSTRUCTION

SHEET NUMBER: C-110



BUILD NOTES: (#)

31	NMDOT 519	6" THICK STRUCTURAL SHOCRETE LINING AT TOP OF EMERGENCY SPILLWAY WEIR (12:1 SIDE SLOPES) SEE CROSS SECTION E-E ON SHEETS C-512 AND AT STILLING BASIN (3:1 SIDE SLOPES) C.I.P. SEE CROSS SECTIONS A-A, B-B, C-C & D-D ON SHEETS C-510 & C-511
32	APWA 603	RIP-RAP TYPE L: STILLING BASIN AND PLUNGE POOLS, INCLUDES TYPE L RIPRAP, C.I.P. FOR STILLING BASIN SEE CROSS SECTIONS A-A, B-B, C-C & D-D ON SHEETS C-510 & C-511 FOR PLUNGE POOL SEE DETAIL #1 ON SHEET C-513
34	APWA 603	RIP-RAP TYPE L: EMERGENCY SPILLWAY CHANNEL RIGHT BANK, INCLUDES TYPE L RIPRAP, C.I.P. SEE CROSS SECTION A-A ON SHEET C-111
36	APWA 603	RIP-RAP TYPE VL: EMERGENCY SPILLWAY CHANNEL BOTTOM + LEFT BANK , INCLUDES TYPE VL RIPRAP, C.I.P. SEE CROSS SECTION A-A ON SHEET C-111

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PROJECT NAME: HARLEY'S POND

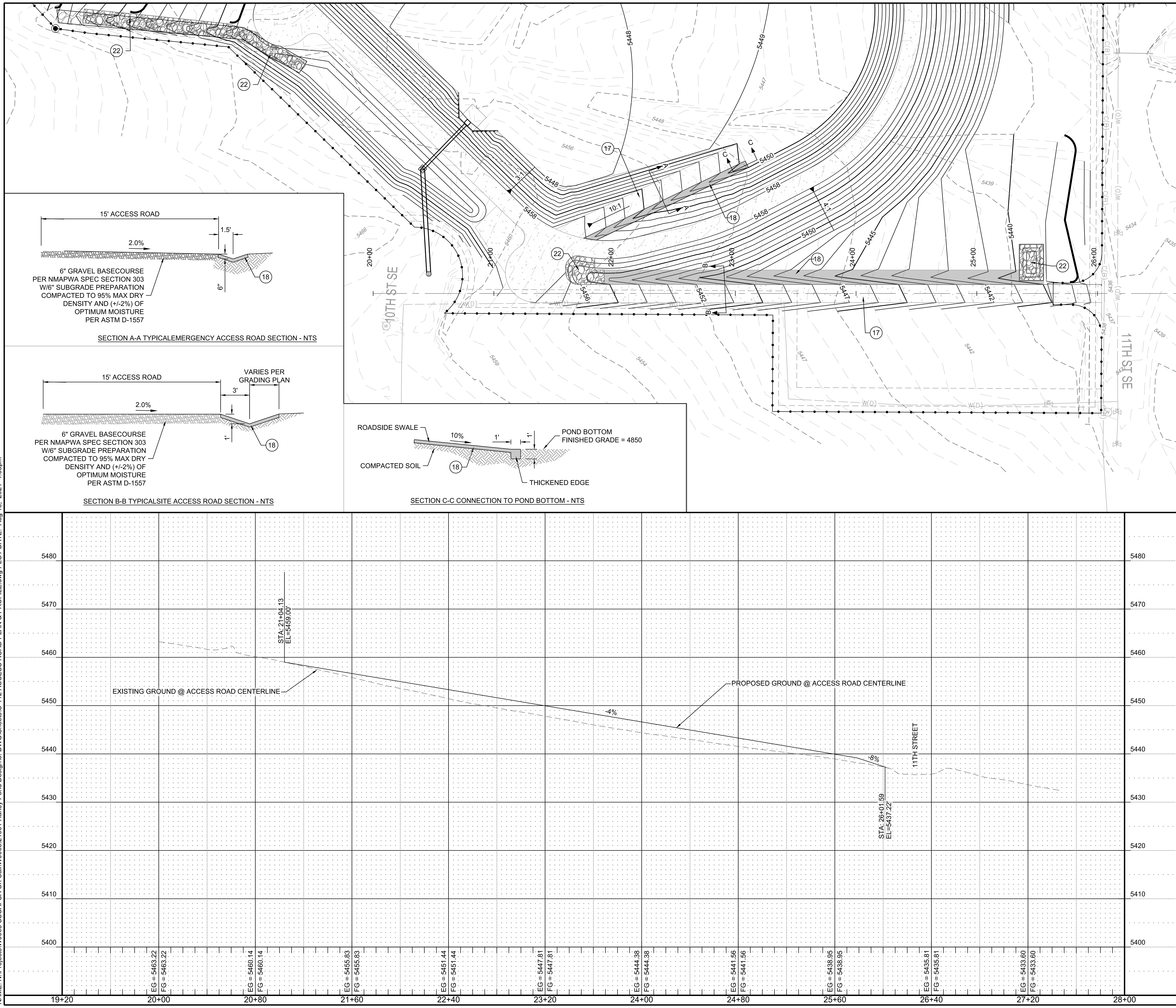
This contract allows the owner to make payment within 45 days after submission of an undisputed request for payment

SHEET TITLE: EMERGENCY SPILLWAY PLAN & PROFILE

SUBMITTED FOR: CONSTRUCTION

SHEET NUMBER: C-111

NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-111 EMERGENCY SPILLWAY PLAN & PROFILE.dwg PLOT DATE: Aug 18, 2021 4:05pm



NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-112 ACCESS ROAD PLAN & PROFILE.dwg PLOT DATE: Aug 18, 2021 4:05pm

BUILD NOTES:

17	NMDOT 303	ACCESS ROAD AROUND THE HARLEY'S POND, 6" AGGREGATE BASE COARSE (INCLUDING EMERGENCY ACCESS ROAD INTO THE POND BOTTOM) SEE CROSS SECTIONS A-A & B-B ON THIS SHEET
18	APWA 510	4" THICK NON-STRUCTURAL CONCRETE WITH FIBER MESH TYPE F-100 BY MASTER BUILDER SOLUTIONS OR EQUIVALENT. TO BE PLACED AT BOTH SITE ACCESS ROAD AND POND ACCESS ROAD SIDE SWALE. C.I.P
22	APWA 603	RIP-RAP TYPE VL: ACCESS ROAD SWALES, PLUNGE POOL & AND AUXILIARY SWALE, INCLUDES D50=6" RIPRAP, C.I.P. SEE PLUNGE POOL DETAIL #2 ON SHEET C-513

SCALE:
HORIZONTAL: 1" = 40'
VERTICAL: 1" = 10'

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DRAWN	DRAWN BY
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DATE	8.18.2021

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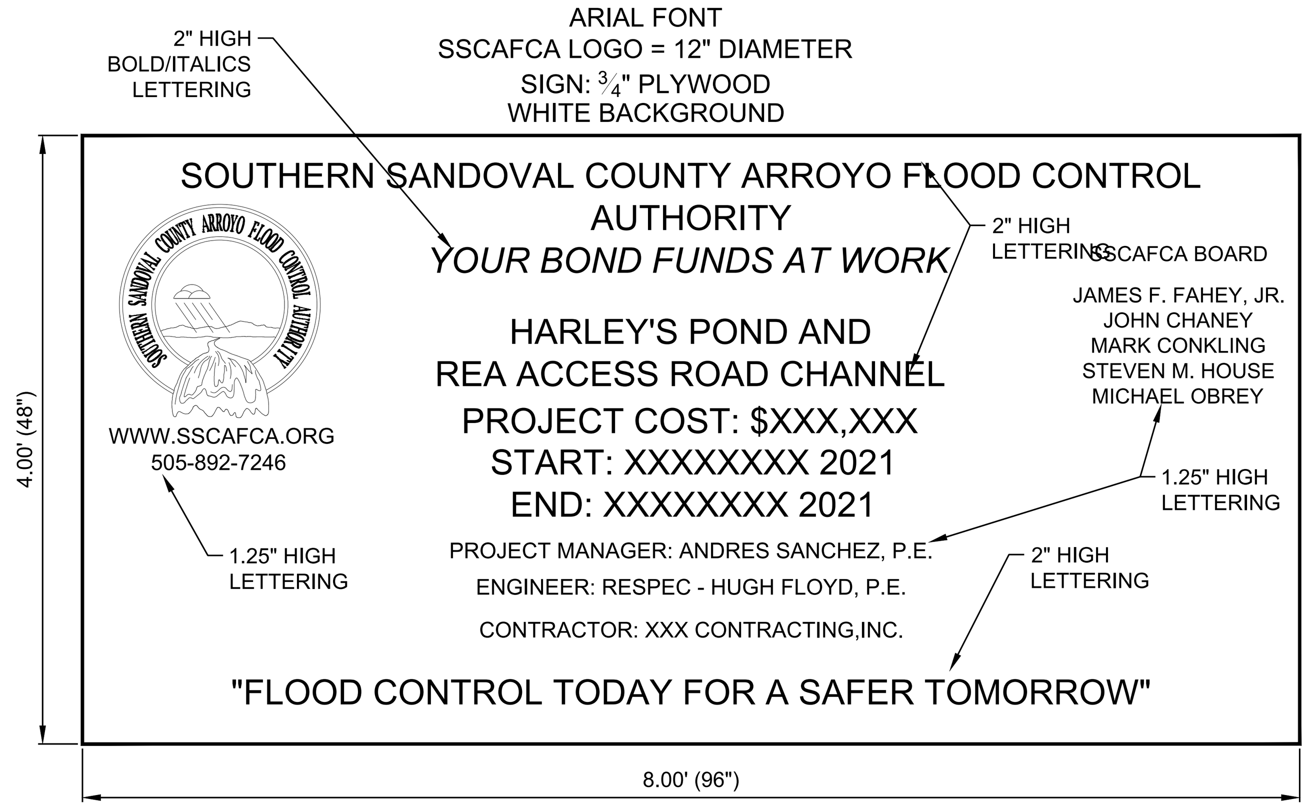
This contract allows the owner to make payment within 45 days after submission of an undisputed request for payment

SHEET TITLE: ACCESS ROAD PLAN & PROFILE

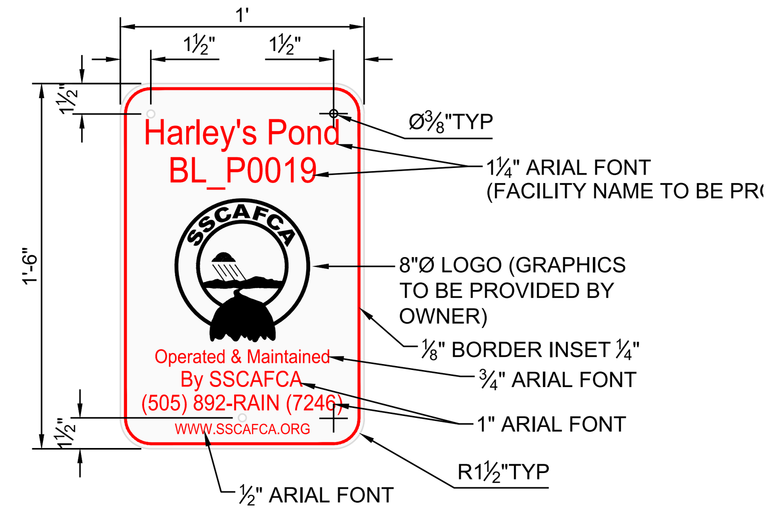
SUBMITTED FOR: CONSTRUCTION

SHEET NUMBER: C-112

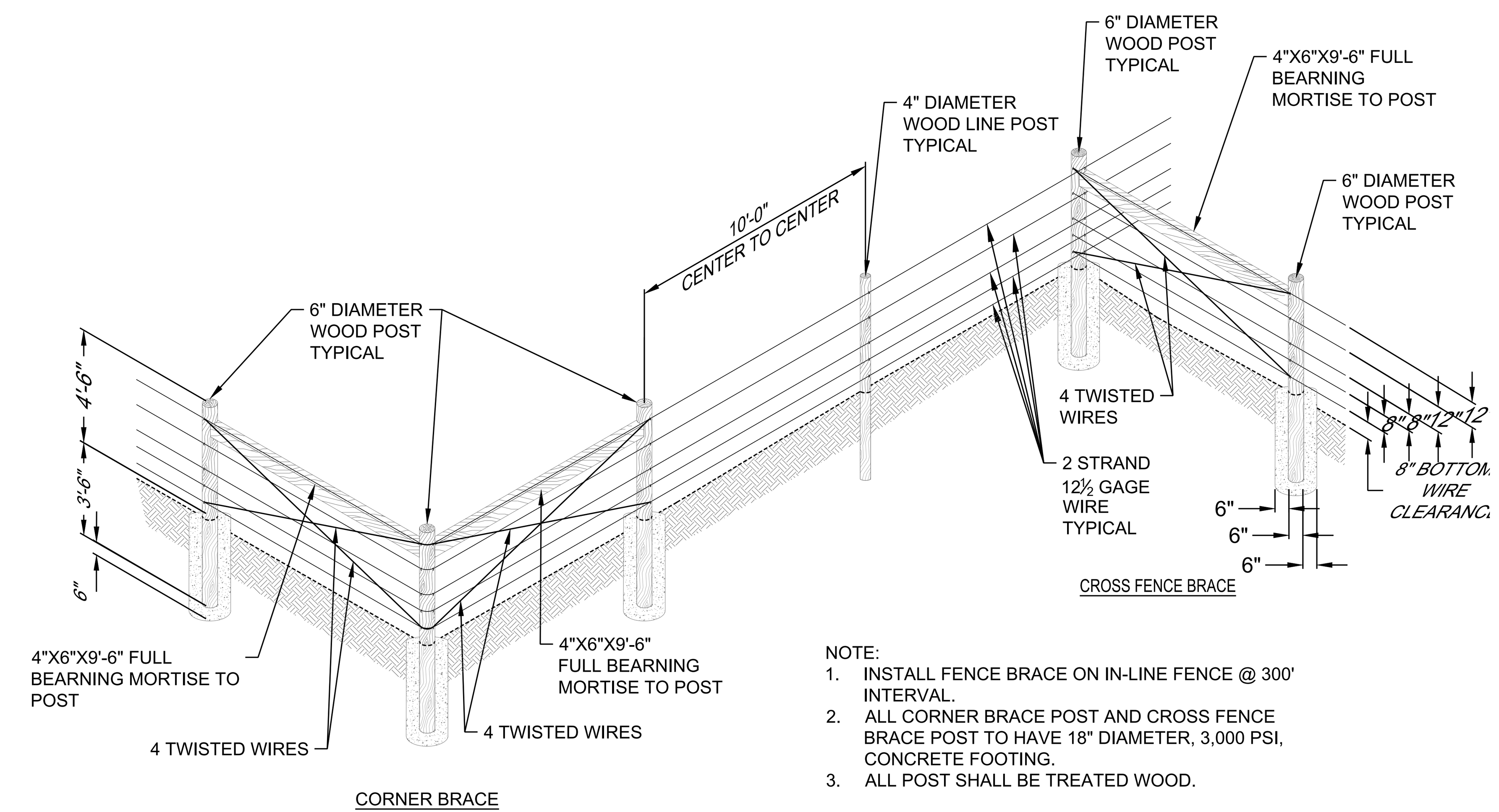
DETAIL #1 - PROJECT SIGN



PROJECT SIGN DETAIL
NTS



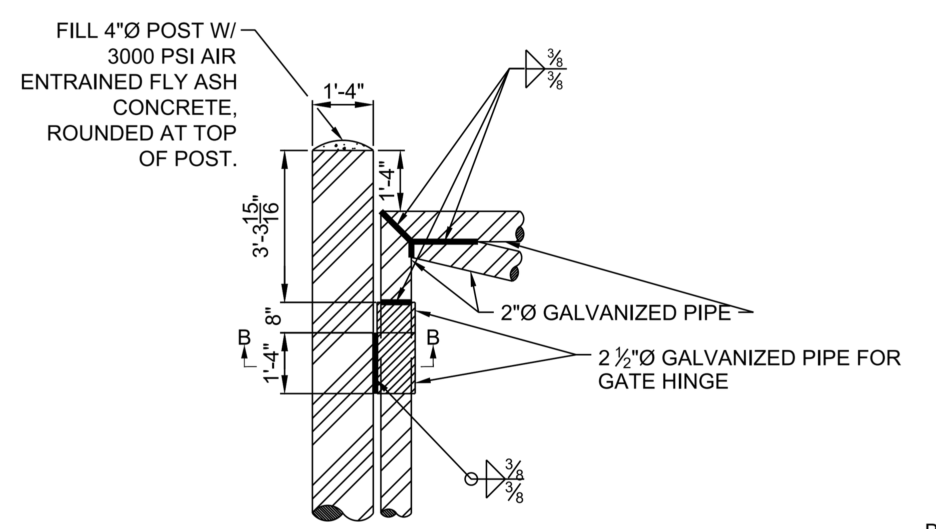
DETAIL #2 - BARBLSS WIRE FENCE

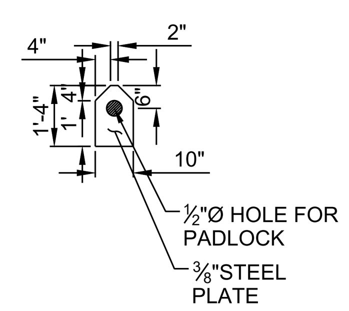


NOTE:
1. INSTALL FENCE BRACE ON IN-LINE FENCE @ 300' INTERVAL.
2. ALL CORNER BRACE POST AND CROSS FENCE BRACE POST TO HAVE 18" DIAMETER, 3,000 PSI, CONCRETE FOOTING.
3. ALL POST SHALL BE TREATED WOOD.

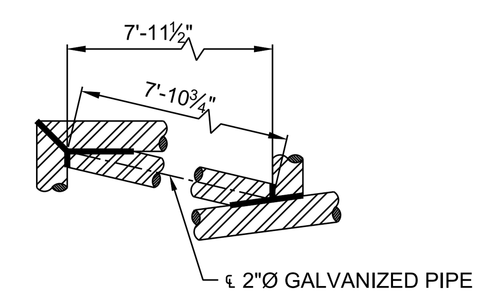
DETAIL 2 - 5 STRAND BARBLESS WIRE FENCE
NTS

DETAIL #3 - MAINTENANCE ACCESS GATE

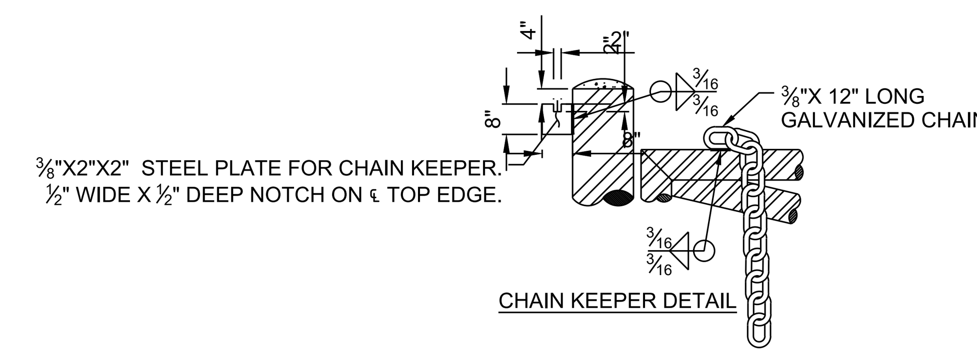




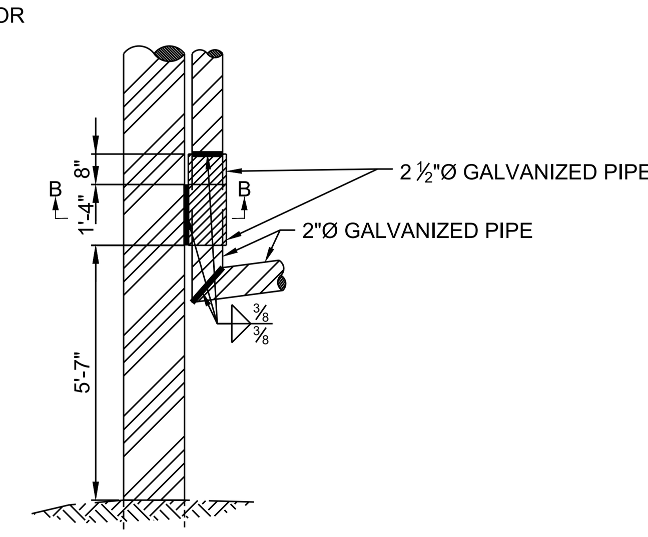
FLANGE ENLARGEMENT



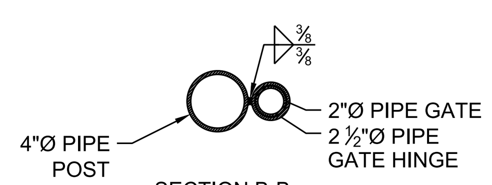
CONNECTION DETAIL



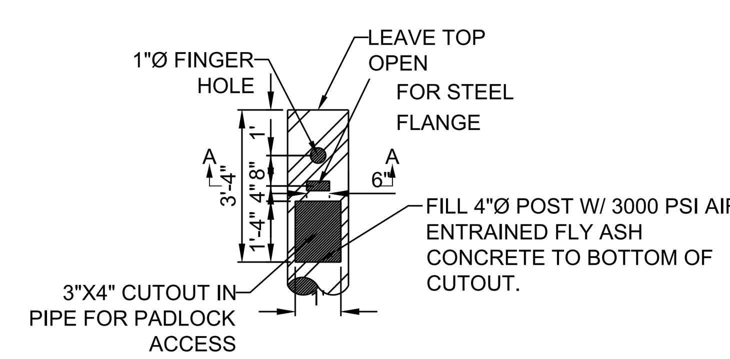
CHAIN KEEPER DETAIL



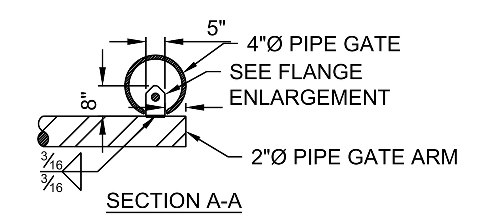
HINGE DETAIL



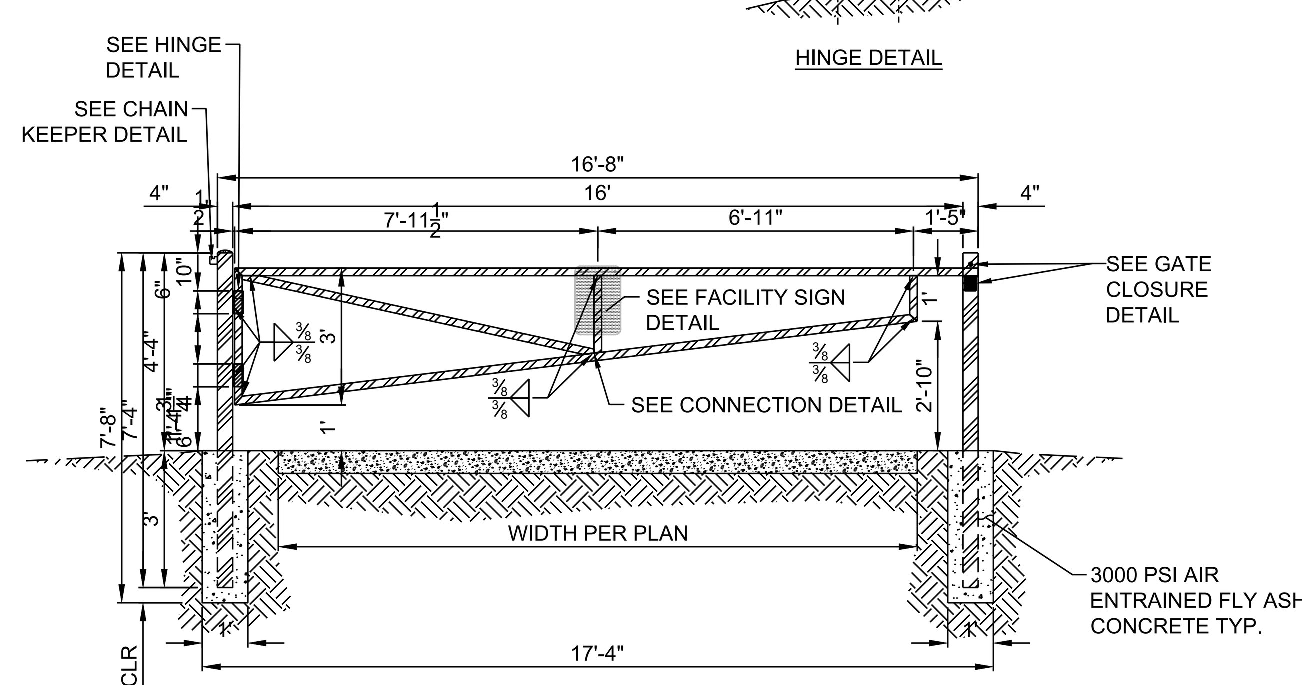
SECTION B-B



GATE CLOSURE DETAIL



SECTION A-A



DETAIL 3 - MAINTENANCE ACCESS GATE DETAIL

GENERAL NOTES:

- ALL WELDED AND CUT AREAS TO BE CLEANED THOROUGHLY WITH A WIRE BRUSH AND OR SAND BLAST AND REGALVANIZED.
- REGALVANIZING SHALL BE WITH SHERWIN WILLIAMS ZINC CLAD 7 PRIMER OR EQUAL.
- AFTER PRIMING, PAINT ALL PIPES, HINGES, ETC. WITH TWO (2) COATS OF OSHA SAFETY BLUE OR EQUAL.
- CONFIRM GATE SWING DIRECTION W/ENGINEER PRIOR TO SHOP DRAWING SUBMITTAL.

CONSTRUCTION NOTES:

- 2" NOMINAL DIA. GALVANIZED PIPE, MIN. 3.65 LBS/FT.
- 2 ½" NOMINAL DIA. GALVANIZED PIPE, MIN. 5.79 LBS/FT.
- 4" NOMINAL DIA. GALVANIZED PIPE, MIN. 10.79 LBS/FT.

DESIGNED	DESIGN BY
DRAWN	DRAWN BY
CHECKED	CHECKED BY
DATE	8.18.2021

REVISION

RESPEC
COMMUNITY DESIGN SOLUTIONS
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ALBUQUERQUE, NEW MEXICO 87109
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STAMP

EDWARD CHRISTIAN NADDU
NEW MEXICO
22997
PROFESSIONAL ENGINEER

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PROJECT NAME:
HARLEY'S POND

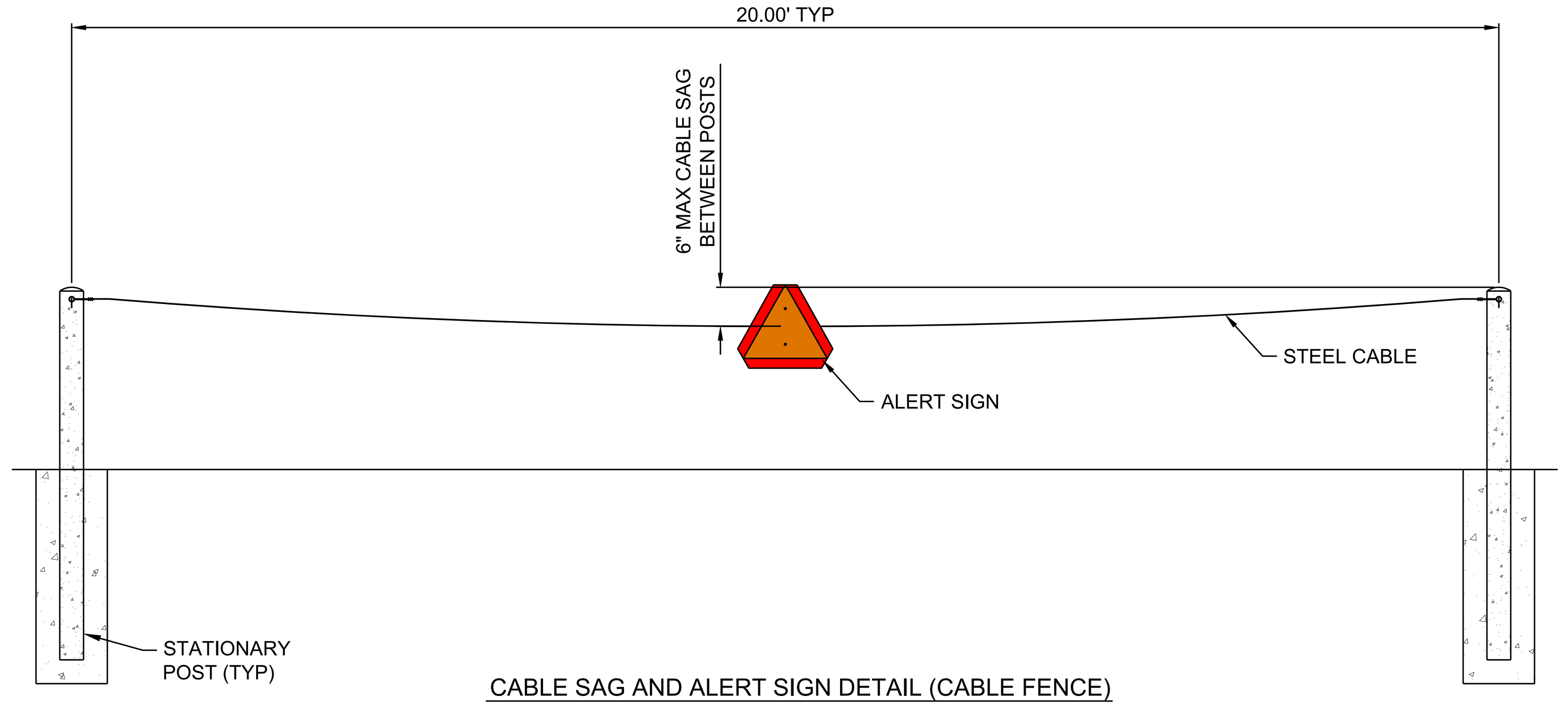
This contract allows the owner to make payment within 45 days after submission of an undisputed request for payment

SHEET TITLE:
GATE, FENCE AND SIGNAGE DETAILS

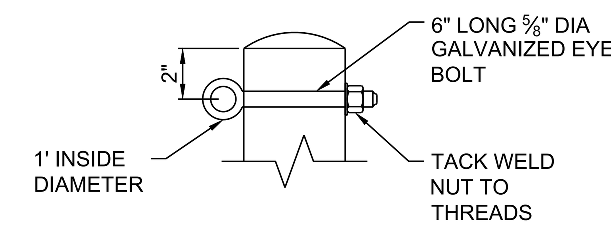
SUBMITTED FOR:
CONSTRUCTION

SHEET NUMBER:
C-500

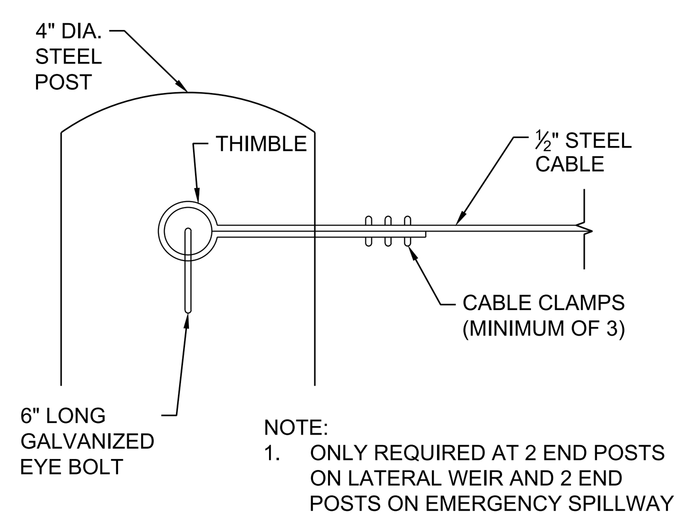
NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-500 GATE FENCE AND SIGNAGE DETAILS.dwg PLOT DATE: Aug 18, 2021 4:05pm



CABLE SAG AND ALERT SIGN DETAIL (CABLE FENCE)
NTS

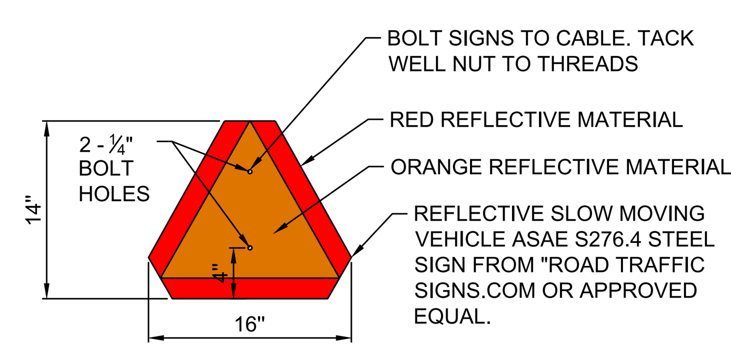


CABLE BOLT DETAIL
NTS

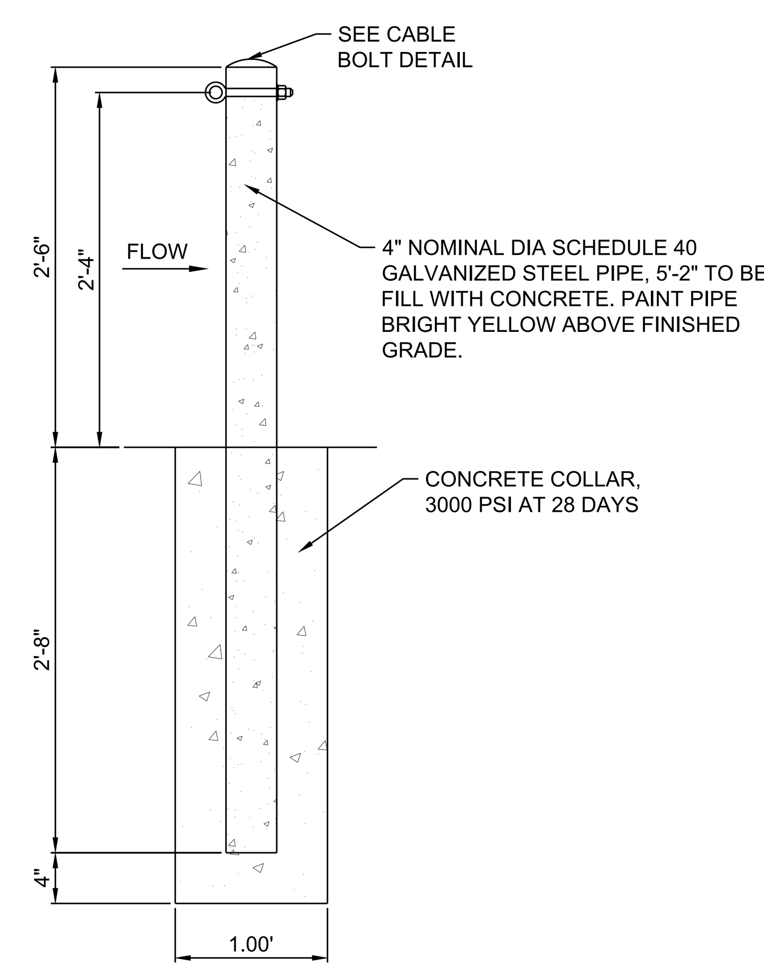


NOTE:
1. ONLY REQUIRED AT 2 END POSTS ON LATERAL WEIR AND 2 END POSTS ON EMERGENCY SPILLWAY

CABLE CLAMP DETAIL
NTS



CABLE ALERT SIGN
NTS



STATIONARY POST DETAIL
NTS

NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-501 CABLE FENCE DETAILS.dwg PLOT DATE: Aug 18, 2021 4:05pm

REVISION

DESIGNED DESIGN BY
DRAWN DRAWN BY
CHECKED CHECKED BY
DATE 8.18.2021

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PROFESSIONAL ENGINEER

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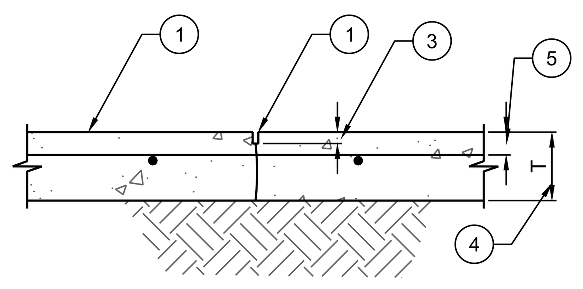
PROJECT NAME:
HARLEY'S POND

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

SHEET TITLE:
CABLE SAG DETAILS

SUBMITTED FOR:
CONSTRUCTION

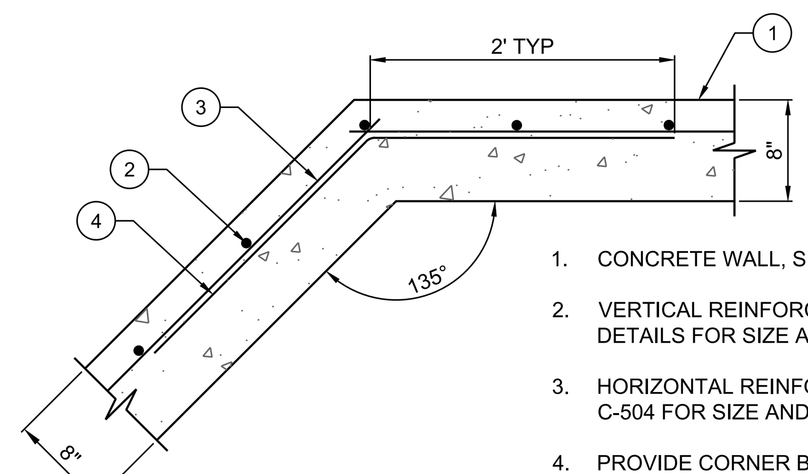
SHEET NUMBER:
C-501



SAW CUT JOINT

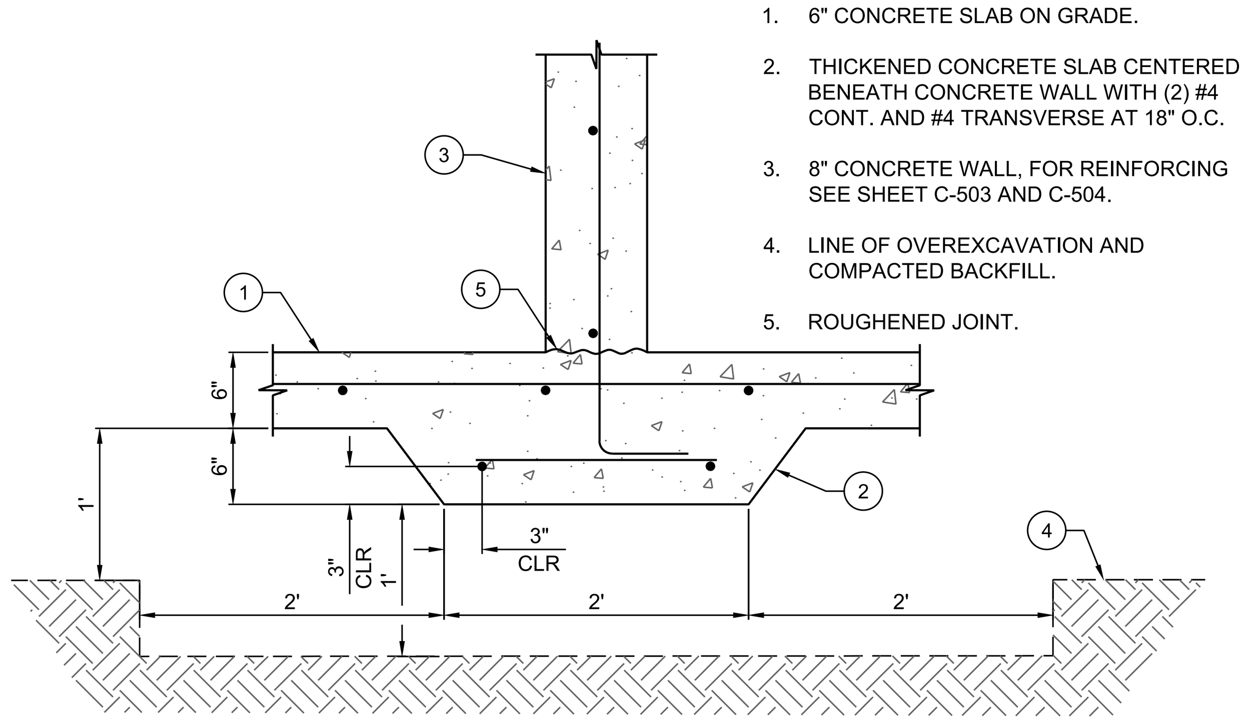
1. CONCRETE SLAB OVER STRUCTURAL FILL PER THE G.S.N.
2. SAWCUT SLAB AFTER CONCRETE IS HARD ENOUGH TO AVOID SPALLING AND DAMAGE BUT NOT LATER THAN 12 HOURS AFTER CONCRETE PLACEMENT.
3. DEPTH OF CUT=T/4.
4. SEE SHEET C-506 FOR (T) SLAB THICKNESS.
5. 2" MINIMUM COVER.

TYPICAL CONTRACTION JOINT IN SLAB
NTS



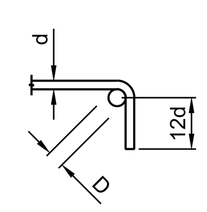
1. CONCRETE WALL, SEE PLAN.
2. VERTICAL REINFORCING, SEE PLANS AND DETAILS FOR SIZE AND SPACING.
3. HORIZONTAL REINFORCING, SEE SHEET C-504 FOR SIZE AND SPACING.
4. PROVIDE CORNER BARS AT OUTSIDE FACE. MATCH HORIZONTAL REINFORCING SIZE AND SPACING.

TYPICAL WALL CORNER DETAIL
NTS

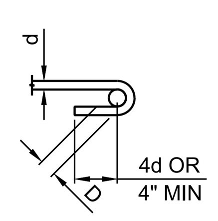


1. 6" CONCRETE SLAB ON GRADE.
2. THICKENED CONCRETE SLAB CENTERED BENEATH CONCRETE WALL WITH (2) #4 CONT. AND #4 TRANSVERSE AT 18" O.C.
3. 8" CONCRETE WALL, FOR REINFORCING SEE SHEET C-503 AND C-504.
4. LINE OF OVEREXCAVATION AND COMPACTED BACKFILL.
5. ROUGHENED JOINT.

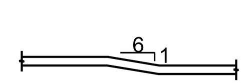
TYPICAL THICKENED SLAB AT WALL
NTS



90° STD. HOOK



180° STD. HOOK

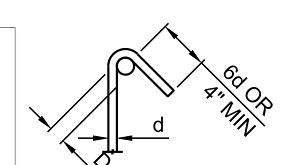


MAX OFFSET BEND

D=6d FOR #3 TO #8
D=8d FOR #9 TO #11
D=12d FOR #14 AND #18

PRINCIPAL REINFORCING

MIN. D=1 1/2" FOR #3
MIN. D=2" FOR #4
MIN. D=2 1/2" FOR #5
MIN. D=4 1/2" FOR #6
MIN. D=5 1/4" FOR #7
MIN. D=6" FOR #8



135° STD. HOOK

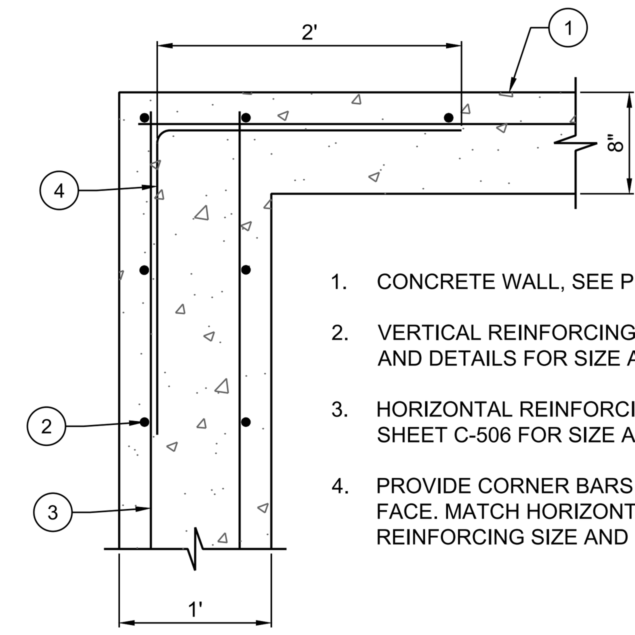
STIRRUP AND TIES

NOTE:

A. ALL BENDS SHALL BE MADE COLD.

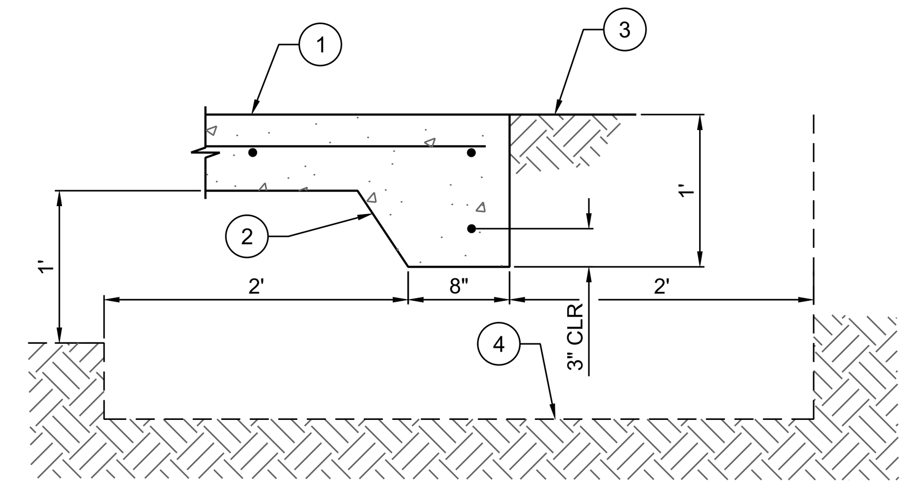
B. #14 AND #18 BARS SHALL BE BEND TESTED AND LAB APPROVED PRIOR TO BENDING.

TYPICAL BAR BENDS
NTS



1. CONCRETE WALL, SEE PLAN.
2. VERTICAL REINFORCING, SEE PLANS AND DETAILS FOR SIZE AND SPACING.
3. HORIZONTAL REINFORCING, SEE SHEET C-506 FOR SIZE AND SPACING.
4. PROVIDE CORNER BARS AT OUTSIDE FACE. MATCH HORIZONTAL REINFORCING SIZE AND SPACING.

TYPICAL WALL CORNER DETAIL
NTS



1. 6" CONCRETE SLAB ON GRADE.
2. CONTINUOUS THICKENED EDGE AS SHOWN WITH (1) #4 CONT.
3. FINISH GRADE AS OCCURS.
4. LINE OF OVEREXCAVATION AND COMPACTED FILL.

TYPICAL SLAB EDGE
NTS

1. TABULATED VALUES ARE BASED ON GRADE 60 UNCOATED REINFORCING BARS, NORMAL WEIGHT CONCRETE AND MIN. COVER OF d_b WITH MIN. CLEAR SPACING OF $2d_b$.
2. TENSION LAP SPLICES ARE CALCULATED PER ACI 318 SECTIONS 12.2 AND 12.15.
3. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST BELOW THE BARS.
4. FOR GRADE 40 REINFORCING BARS MULTIPLY THE TABULATED VALUES BY 0.67 (12" MIN. LAP).
5. FOR LIGHT WEIGHT CONCRETE MULTIPLY THE TABULATED VALUES BY 1.3.
6. ALL LAP SPLICES ARE CLASS B SPLICES PER ACI 318 SECTION 12.15.

LAP SPLICE LENGTHS (IN.)

BAR SIZE	LENGTHS (IN.)					
	3000 PSI		4000 PSI		5000 PSI	
	TOP BARS [3]	OTHER BARS	TOP BARS [3]	OTHER BARS	TOP BARS [3]	OTHER BARS
#3	28	21	24	18	22	17
#4	37	28	32	25	29	22
#5	46	36	40	31	36	28
#6	56	43	48	37	43	33
#7	81	62	70	54	63	48
#8	93	71	80	62	72	55
#9	104	80	90	70	81	62
#10	118	90	102	78	91	70
#11	131	100	113	87	101	78

LAP-SPLICE SCHEDULE FOR CONCRETE REINFORCING
NTS

GENERAL STRUCTURAL NOTES
APPLY UNLESS NOTED ON STRUCTURAL DRAWINGS. IN CASE OF CONFLICT BETWEEN GSN, DETAILS AND PLANS, THE GREATER REQUIREMENTS GOVERN.

CODE:
ALL CONSTRUCTION SHALL CONFORM TO "CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION". DESIGN IS IN ACCORDANCE WITH INTERNATIONAL BUILDING CODE (IBC) 2015.

DESIGN LOADS:
GRATE LIVE LOADS: 100 PSF

FOUNDATIONS:
FOOTINGS SHALL BEAR ON A MINIMUM OF 12 INCHES OF ADEQUATELY PLACED AND COMPACTED STRUCTURAL FILL. SOIL BENEATH FOOTINGS SHALL BE SCARIFIED TO A DEPTH OF 12 INCHES, MOISTURE CONDITIONED TO OPTIMUM MOISTURE CONTENT ±2% AND COMPACTED TO A MINIMUM OF 95% MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM-D-698. ALL STRUCTURAL FILL SHALL BE CLASS I OR II SOILS IN ACCORDANCE WITH STD. SPEC. SEC. 501.

ALL EARTHWORK, FOOTING DEPTHS, AND EXCAVATIONS FOR FOUNDATIONS SHALL BE INSPECTED TO VERIFY ASSUMED ALLOWABLE SOIL BEARING AND LOW SETTLEMENT AND SWELL POTENTIAL. ASSUMED ALLOWABLE BEARING = 2000 PSF.

CONCRETE:
UNLESS NOTED OTHERWISE, CONCRETE SHALL BE IN ACCORDANCE WITH STD. SPEC. SEC. 510 AND SEC. 101 FOR HYDRAULIC CONCRETE WITH MIN. COMP. STRENGTH Fc=4000 PSI AT 28 DAYS. ALL REINFORCING STEEL SHALL BE BLACK, GRADE 60 CONFORMING TO ASTM A615.

MAXIMUM SLUMP:..4" - 7"
MAXIMUM AGGREGATE SIZE:..1"
AIR CONTENT:..6% ± 1 1/2%
MAXIMUM W/C RATIO:..0.45

FINISH SHALL BE ORDINARY SURFACE FINISH IN ACCORDANCE WITH STD. SPEC. SEC. 510. MINIMUM STRENGTH FOR REMOVAL OF FORMS AND SHORING SHALL BE 75% OF SPECIFIED STRENGTH AT 28 DAYS.

BACKFILL (WHERE OCCURS) SHALL NOT BE PLACED BEHIND HEADWALLS UNTIL CONCRETE HAS ATTAINED 100% OF DESIGN STRENGTH.

REINFORCING:
LATEST ACI CODE AND DETAILING MANUAL APPLY. ALL REINFORCING BARS DEFORMED.

ALL REINFORCING SHALL BE ASTM A-615 GRADE 60.

CLEAR CONCRETE COVER TO REINFORCING ARE AS FOLLOWS, UNLESS NOTED OTHERWISE:

CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH..3"
EXPOSED TO EARTH OR WEATHER:
#6 THROUGH #18..2"
#5 AND SMALLER..1 1/2"

LAP SPLICES IN CONCRETE SHALL BE CLASS B TENSION LAPS PER DETAIL 1 THIS SHEET. SPLICE BOTTOM BAR OVER SUPPORTS AND TOP BAR AT MIDSPAN ONLY.

FOR TYPICAL BAR BENDS, SEE DETAIL 2 THIS SHEET.

PROVIDE SHOP DRAWINGS AND FABRICATE AFTER REVIEW. PLACE REBAR PER CRSI STANDARDS.

REBAR SPACING GIVEN IS MAXIMUM ON CENTER AND ALL REBAR IS CONTINUOUS UNLESS OTHERWISE NOTED. PROVIDE BENT CORNER REBAR TO MATCH AND LAP WITH HORIZONTAL REBARS AT CORNERS AND INTERSECTIONS OF WALLS. DOWEL ALL VERTICAL WALL REBAR TO FOUNDATIONS. SECURELY TIE ALL REBAR, INCLUDING DOWELS, IN LOCATION BEFORE PLACING CONCRETE.

STRUCTURAL STEEL:
FOR ALL STRUCTURAL STEEL FABRICATION AND CONSTRUCTION, STD. SPEC. SEC. 520, LATEST AISC HANDBOOKS AND CODES SHALL APPLY. ALL STEEL FABRICATION IS REQUIRED TO BE COMPLETED BY AN APPROVED STEEL FABRICATOR RECOGNIZED BY THE BUILDING DEPARTMENT.

ASTM A-36, EXCEPT AS FOLLOWS: WIDE FLANGE SECTIONS, ASTM A992 GRADE 50.

HIGH STRENGTH BOLTS, A-325-X OR A-325-SC.

WELDING:
ALL CONSTRUCTION AND TESTING PER AMERICAN WELDING SOCIETY CODES AND RECOMMENDATIONS. ALL WELDING SHALL BE BY WELDERS HOLDING CURRENT VALID CERTIFICATES AND HAVING CURRENT EXPERIENCE IN TYPE OF WELD CALLED FOR. WELDING RODS SHALL BE LOW HYDROGEN TYPE, E70.

ALL WELDING OF STRUCTURAL STEEL SHALL CONFORM TO THE "STRUCTURAL WELDING CODES-STEEL" AWS D1.1, CURRENT EDITION.

RECTANGULAR BAR GRATING:
MATERIAL DESIGN AND MANUFACTURE SHALL BE BY McNICHOLS OR APPROVED EQUAL.

PREFABRICATED RECTANGULAR BAR PANELS AS FOLLOWS:

MATERIAL: HOT-DIPPED GALVANIZED STEEL BEARING BARS AND 1/4" SQUARE GALVANIZED STEEL TWISTED CROSS BARS.
BEARING BAR SIZE: 3/16"x1 3/4"
BAR SPACING: 1 3/16" BEARING BAR CENTERS AND 4" CROSS BAR CENTERS.

NUMBER OF PANELS: 8'-0"x8'-0" = 3, 10'-0"x10'-0" = 4
PANEL LENGTH: 8'-0"x8'-0" = 6'-11", 10'-0"x10'-0" = 8'-11" (a)
PANEL WIDTHS: 8'-0"x8'-0" = (1) PANEL 32 1/4", (2) PANELS 25 1/8" (a)
10'-0"x10'-0" = (1) PANEL 32 1/4", (2) PANELS 25 1/8", (1) PANEL 23 15/16" (a)
WEIGHT: 12.5 LBS./SQ. FT. (a)
TOTAL WEIGHT: 8'-0"x8'-0" = 583.3 LBS., 10'-0"x10'-0" = 975.0 LBS. (a)

(a) CONTRACTOR TO VERIFY PANEL LENGTHS, WIDTHS AND WEIGHTS WITH ACTUAL FIELD MEASUREMENTS AND MANUFACTURER.

REVISION

DESIGNED DESIGN BY
DRAWN DRAWN BY
CHECKED CHECKED BY
DATE 8.18.2021

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22997
8/18/21
PROFESSIONAL ENGINEER

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PROJECT NAME: HARLEY'S POND

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

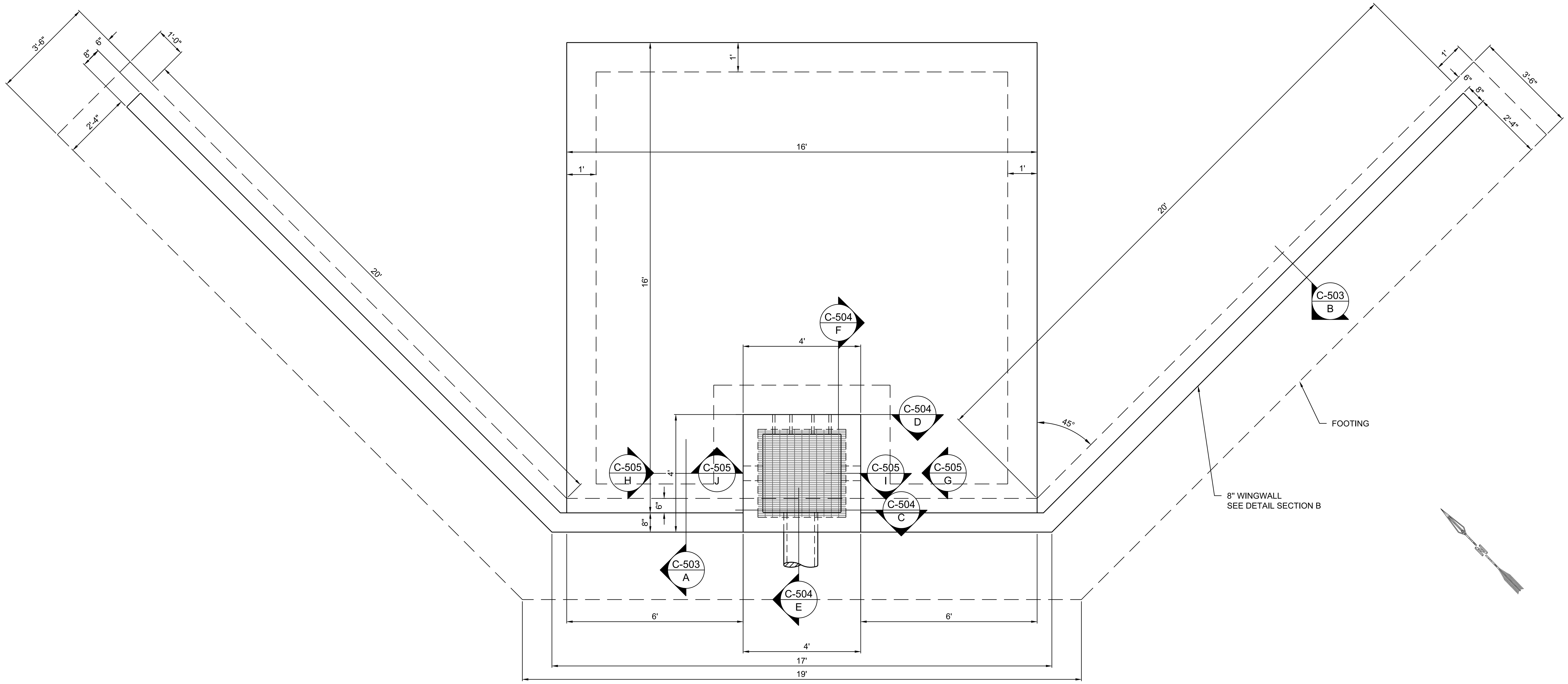
SHEET TITLE: PORTED RISER STRUCTURAL DETAILS

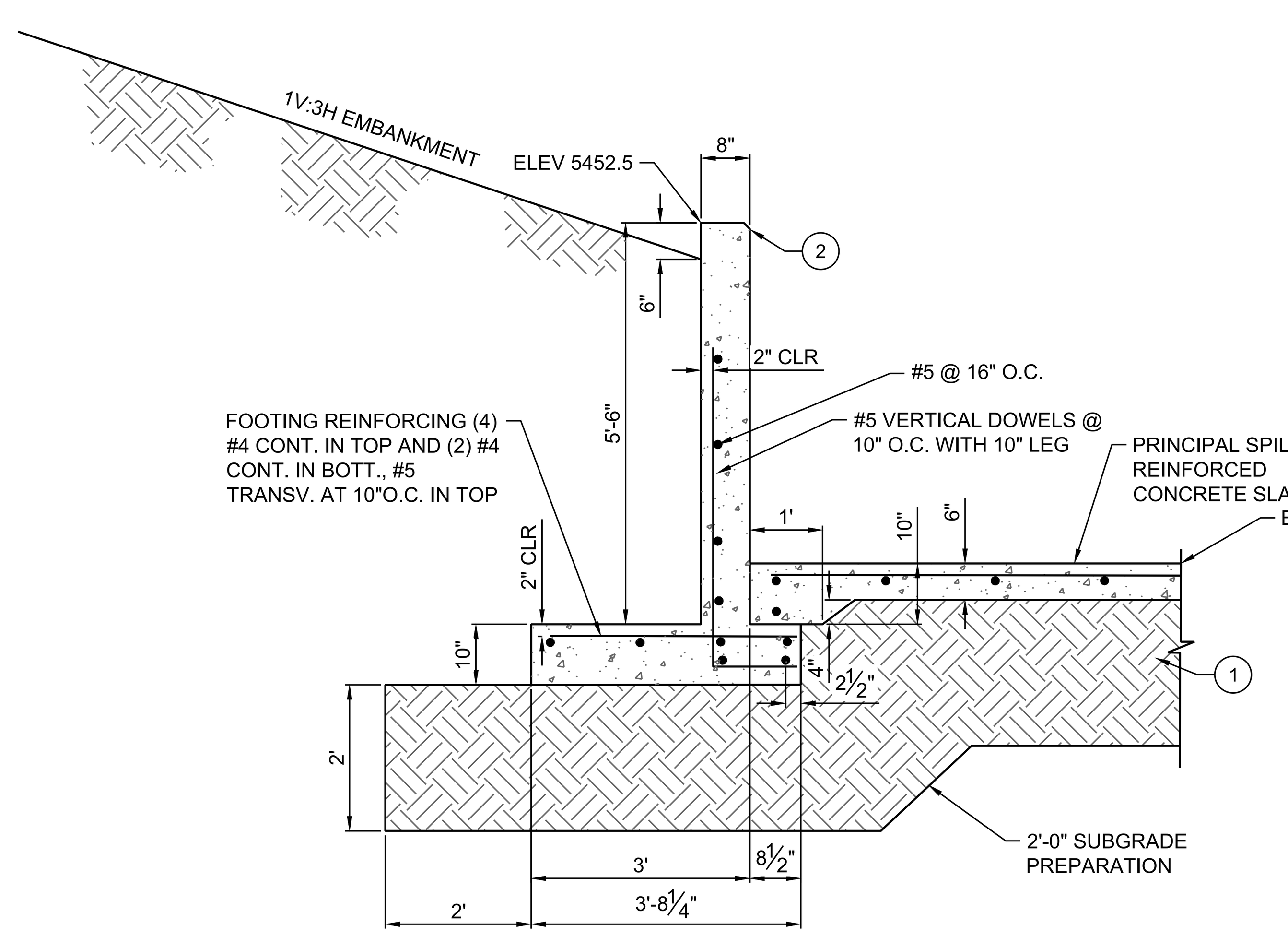
SUBMITTED FOR: CONSTRUCTION

SHEET NUMBER: C-502

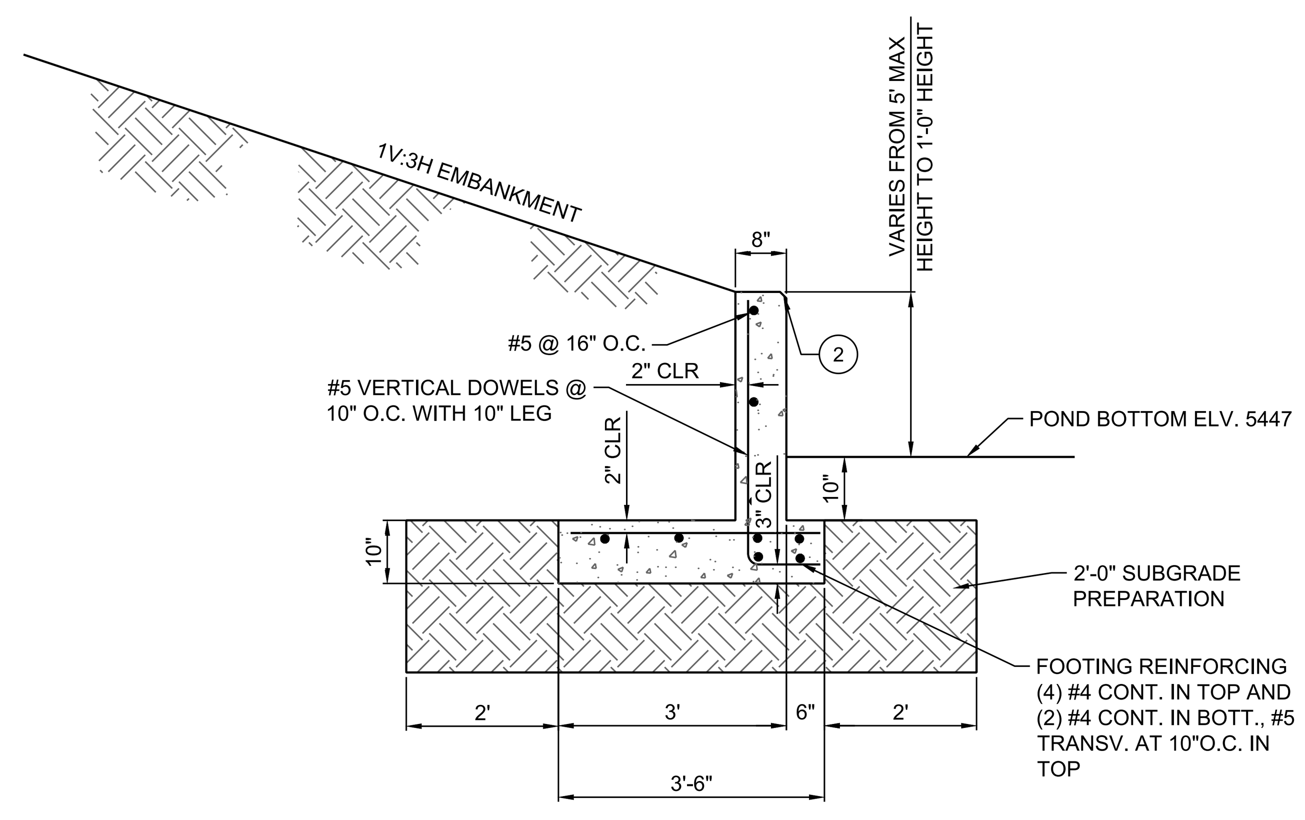
NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-502 PORTED RISER STRUCTURAL DETAILS.dwg PLOT DATE: Aug 18, 2021 4:05pm

NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-506 PORTED RISER STRUCTURE PROFILE.dwg PLOT DATE: Aug 18, 2021 4:05pm





C-503
A
SECTION A: HEADWALL DETAIL
NTS



C-503
B
SECTION B: WINGWALL DETAIL
NTS

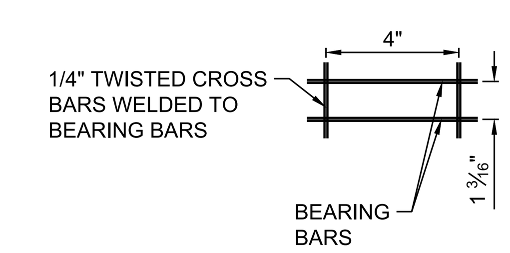
CONSTRUCTION NOTES:

1. COMPACTED SUB-GRADE - 95% MODIFIED PROCTOR. PER ASTM D1557
2. ALL EXPOSED EDGES ON CAST-IN-PLACE CONCRETE STRUCTURES SHALL HAVE A 1-IN CHAMFER UNLESS OTHERWISE NOTED ON PLANS.

DESIGN DATA

A. CAST-IN-PLACE CONCRETE: F'C = 4000 PSI
B. REINFORCING STEEL: ASTM A615 GRADE 60
C. MOISTURE AND DENSITY CONTROL: ASTM D-1557 ALL FILL MATERIAL SHALL BE PLACED IN HORIZONTAL LIFTS OF 8" MAXIMUM AND COMPACTED TO 95 PERCENT OF MAXIMUM DRY DENSITY. THE MOISTURE CONTENT SHALL BE OPTIMUM TO ±2 PERCENT.
D. SPECIFICATIONS FOR PRINCIPAL SPILLWAY: RECTANGULAR BAR GRATING

PREFABRICATED RECTANGULAR BAR PANELS: MATERIAL: HOT DIPPED GALVANIZED STEEL WELDED BEARING BARS AND 1/4 INCH SQUARE TWISTED CROSS BARS.



REVISION

DESIGNED DESIGN BY
DRAWN DRAWN BY
CHECKED CHECKED BY
DATE 8.18.2021

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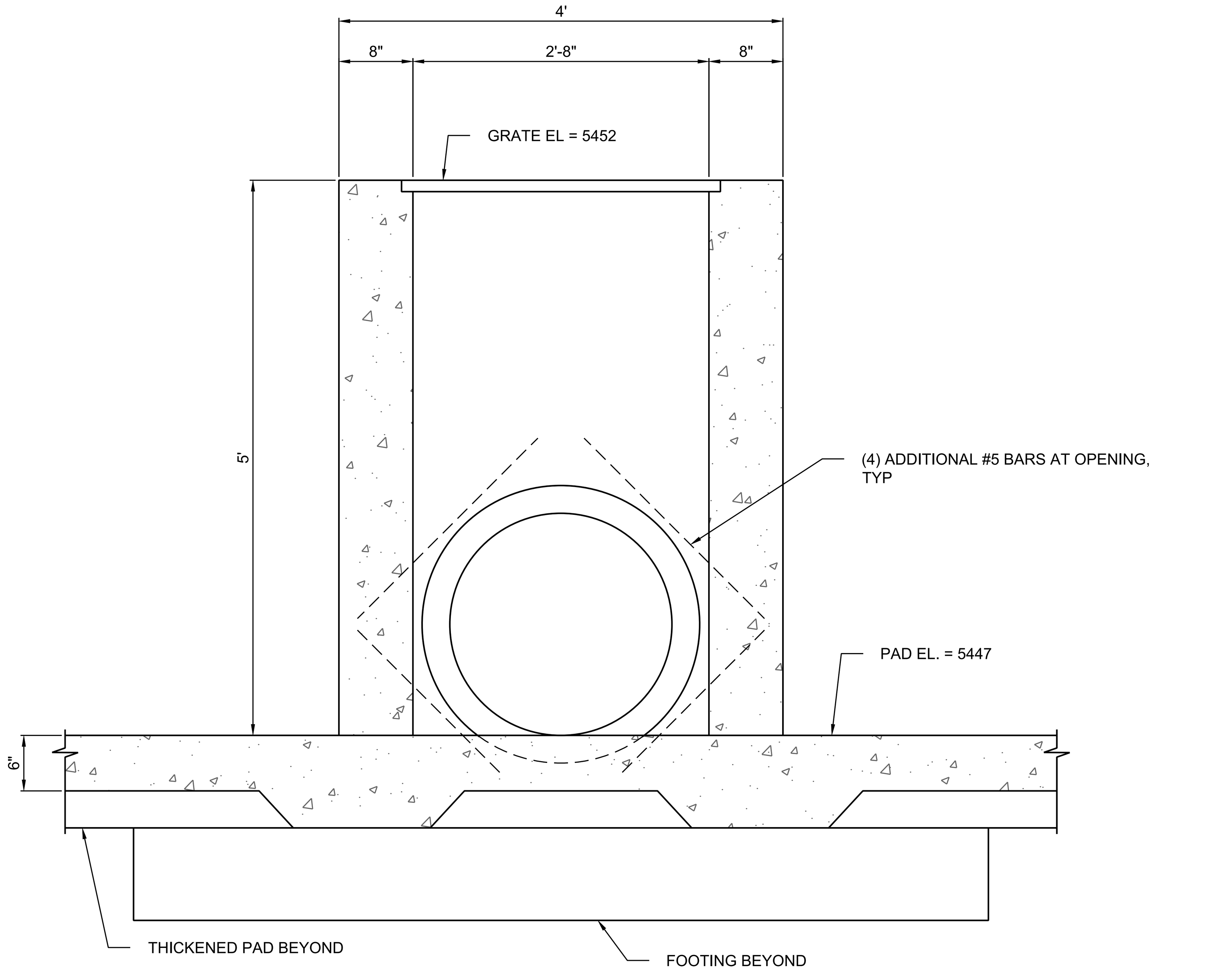
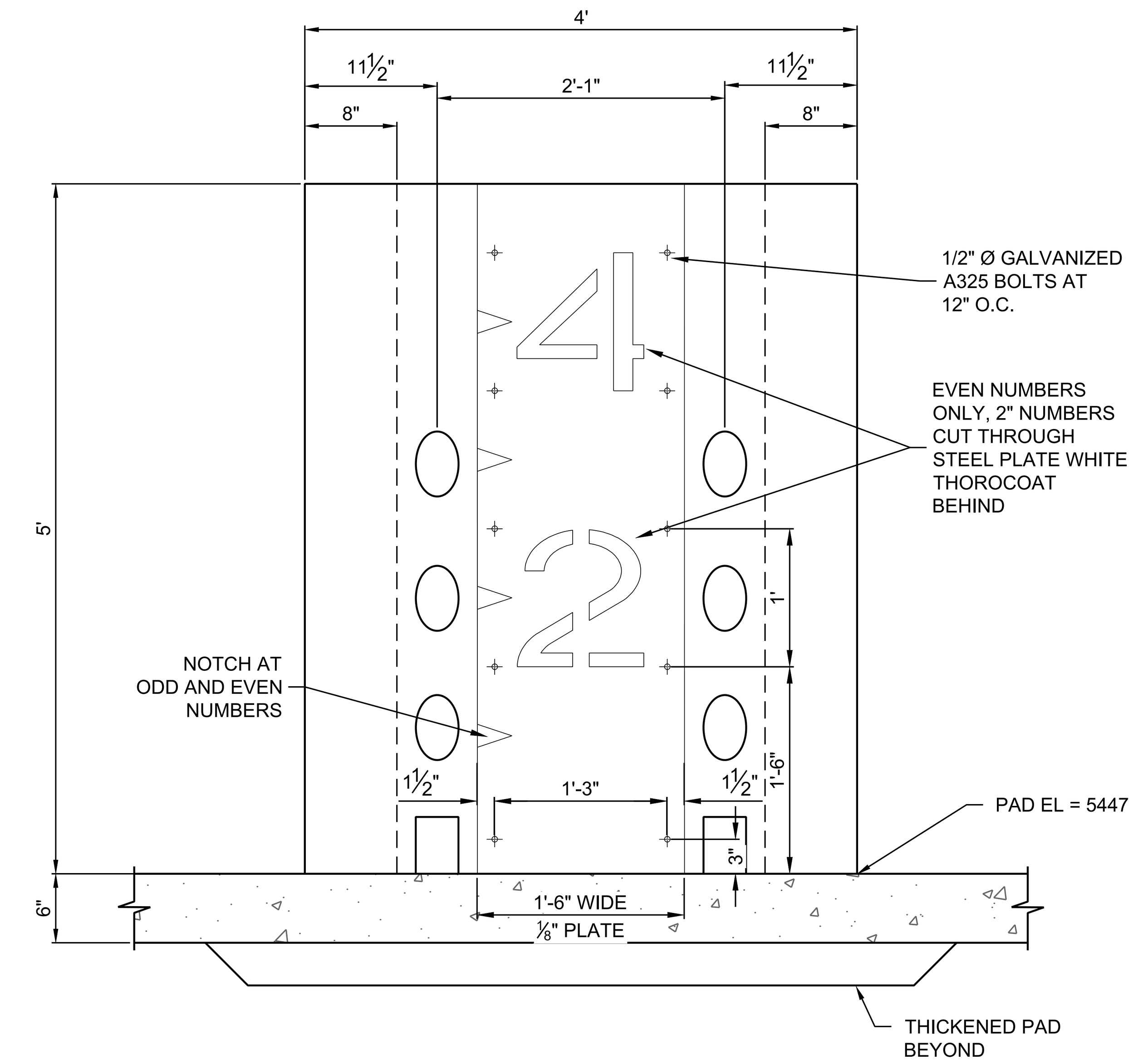
SUBMITTED FOR: CONSTRUCTION

SHEET NUMBER:

C-503



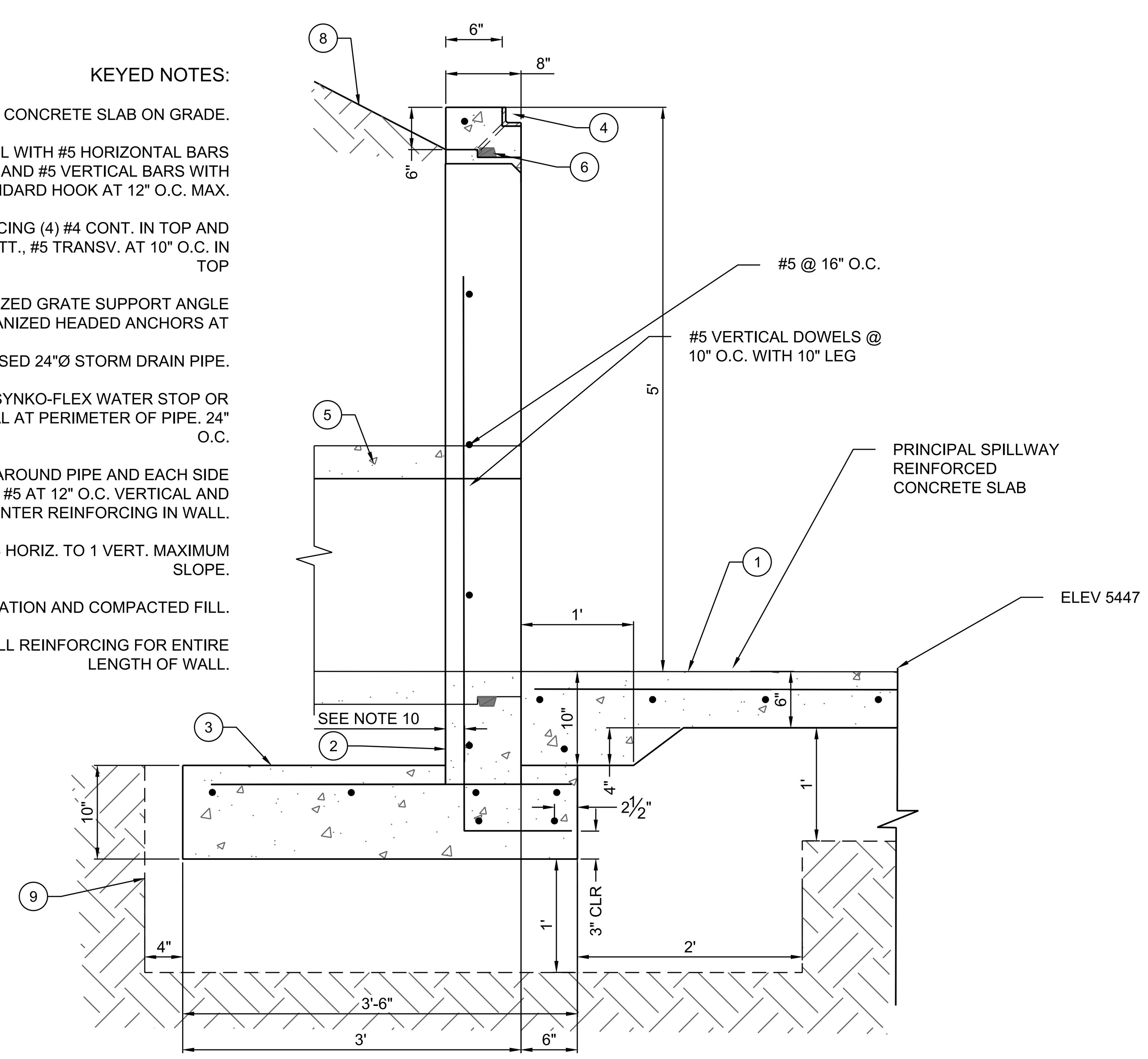
C-504 C SECTION C: OUTFALL PIPE
NTS



C-504 D SECTION D: FRONT OF OUTFALL STRUCTURE
NTS

KEYED NOTES:

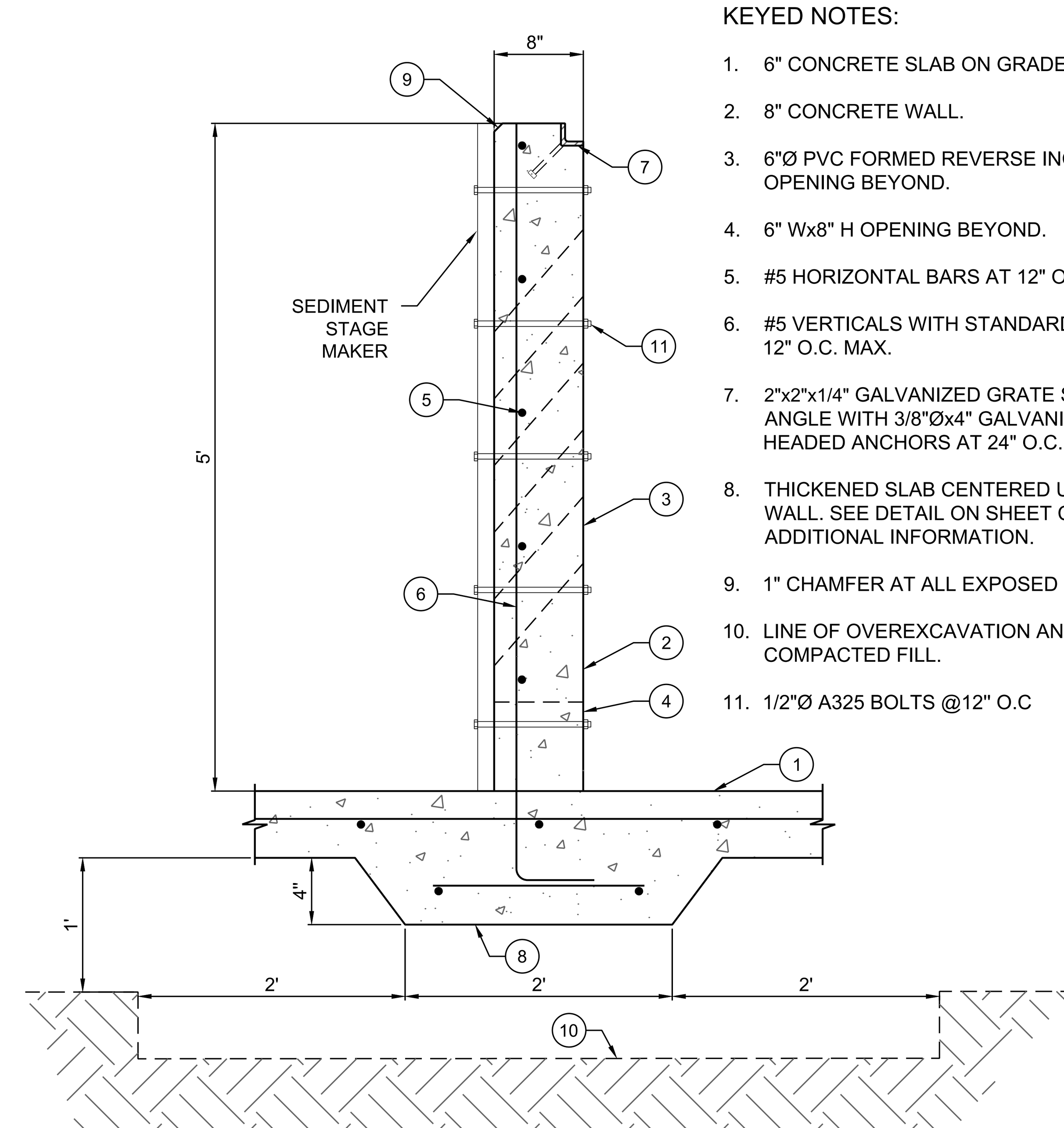
1. 6" CONCRETE SLAB ON GRADE.
2. 8" CONCRETE WALL WITH #5 HORIZONTAL BARS AT 12" O.C. MAX. AND #5 VERTICAL BARS WITH STANDARD HOOK AT 12" O.C. MAX.
3. FOOTING REINFORCING (4) #4 CONT. IN TOP AND (2) #4 CONT. IN BOTT., #5 TRANSV. AT 10" O.C. IN TOP
4. 2x2x1/4 GALVANIZED GRATE SUPPORT ANGLE WITH 3/8"Øx4" GALVANIZED HEADED ANCHORS AT
5. PROPOSED 24"Ø STORM DRAIN PIPE.
6. PROVIDE SF302 SYNKO-FLEX WATER STOP OR APPROVED EQUAL AT PERIMETER OF PIPE. 24" O.C.
7. REINFORCE WALL AROUND PIPE AND EACH SIDE OF PIPE WITH #5 AT 12" O.C. VERTICAL AND HORIZONTAL. CENTER REINFORCING IN WALL.
8. FINISHED GRADE, 3 HORIZ. TO 1 VERT. MAXIMUM SLOPE.
9. LINE OF OVEREXCAVATION AND COMPACTED FILL.
10. 2" CLEAR TYP. ALL REINFORCING FOR ENTIRE LENGTH OF WALL.



C-504 E SECTION E: REINFORCED CONCRETE PIPE
NTS

KEYED NOTES:

1. 6" CONCRETE SLAB ON GRADE.
2. 8" CONCRETE WALL.
3. 6"Ø PVC FORMED REVERSE INCLINE PORT OPENING BEYOND.
4. 6" Wx8" H OPENING BEYOND.
5. #5 HORIZONTAL BARS AT 12" O.C. MAX.
6. #5 VERTICALS WITH STANDARD HOOK AT 12" O.C. MAX.
7. 2"x2"x1/4" GALVANIZED GRATE SUPPORT ANGLE WITH 3/8"Øx4" GALVANIZED HEADED ANCHORS AT 24" O.C.
8. THICKENED SLAB CENTERED UNDER WALL. SEE DETAIL ON SHEET C-502. FOR ADDITIONAL INFORMATION.
9. 1" CHAMFER AT ALL EXPOSED EDGES.
10. LINE OF OVEREXCAVATION AND COMPACTED FILL.
11. 1/2"Ø A325 BOLTS @12" O.C



C-504 F SECTION F: SEDIMENT MARKER PLATE
NTS

NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-506 PORTED RISER STRUCTURE PROFILE.dwg PLOT DATE: Aug 18, 2021 4:05pm

DESIGNED	DESIGN BY
DRAWN	DRAWN BY
CHECKED	CHECKED BY
DATE	8.18.2021

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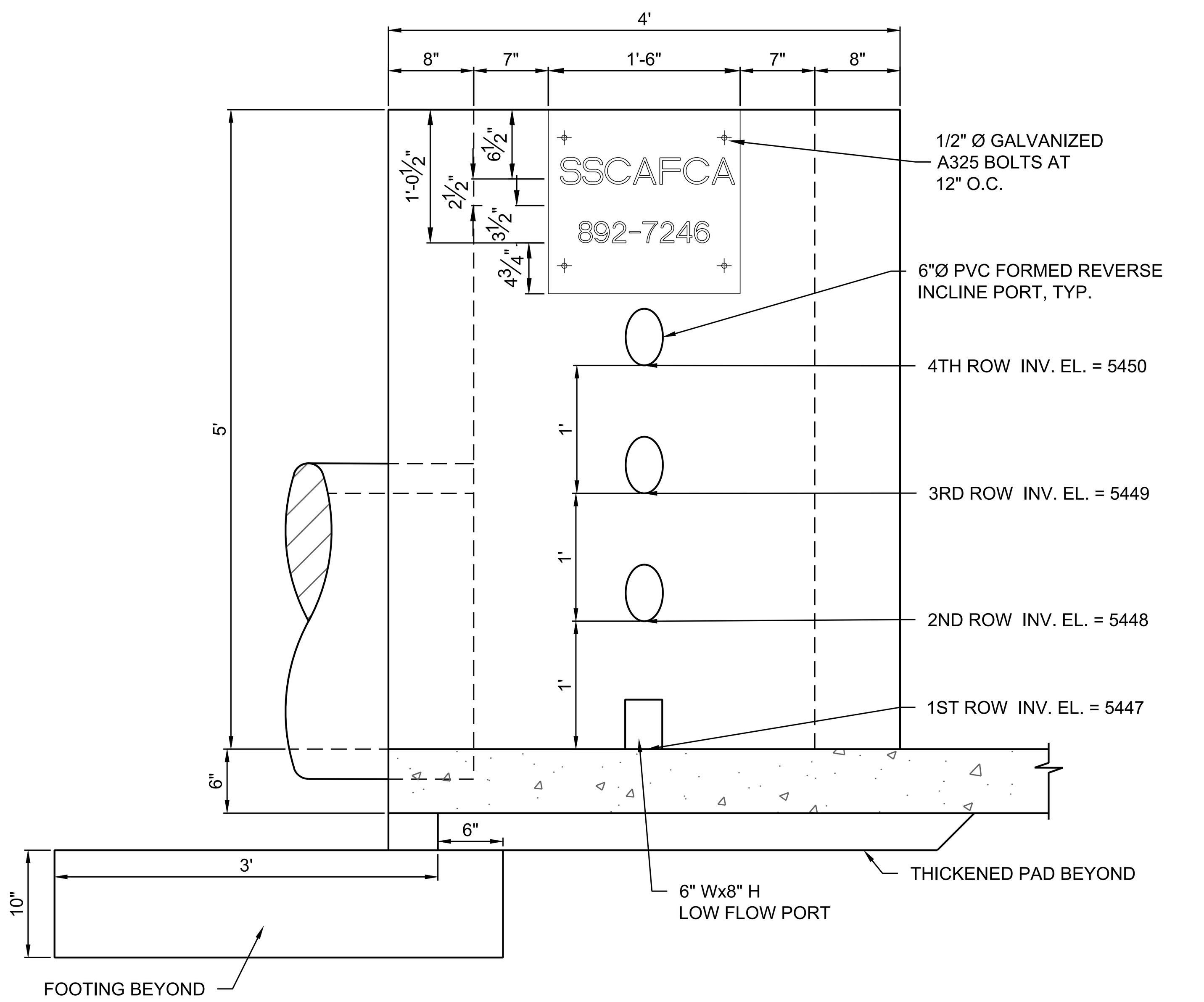
PROJECT NAME: HARLEY'S POND

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

SHEET TITLE: PORTED RISER DETAIL

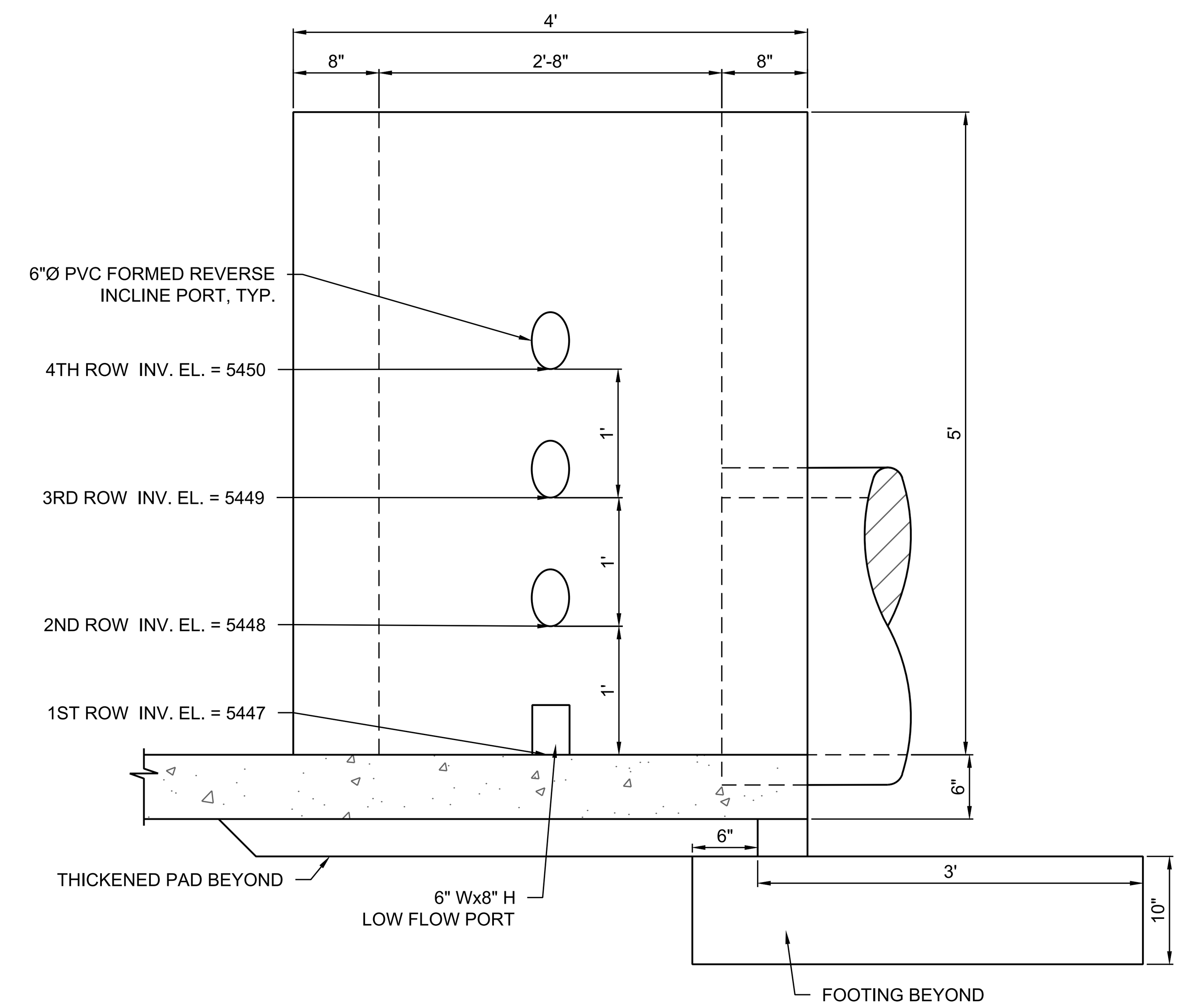
SUBMITTED FOR: CONSTRUCTION

SHEET NUMBER: C-504



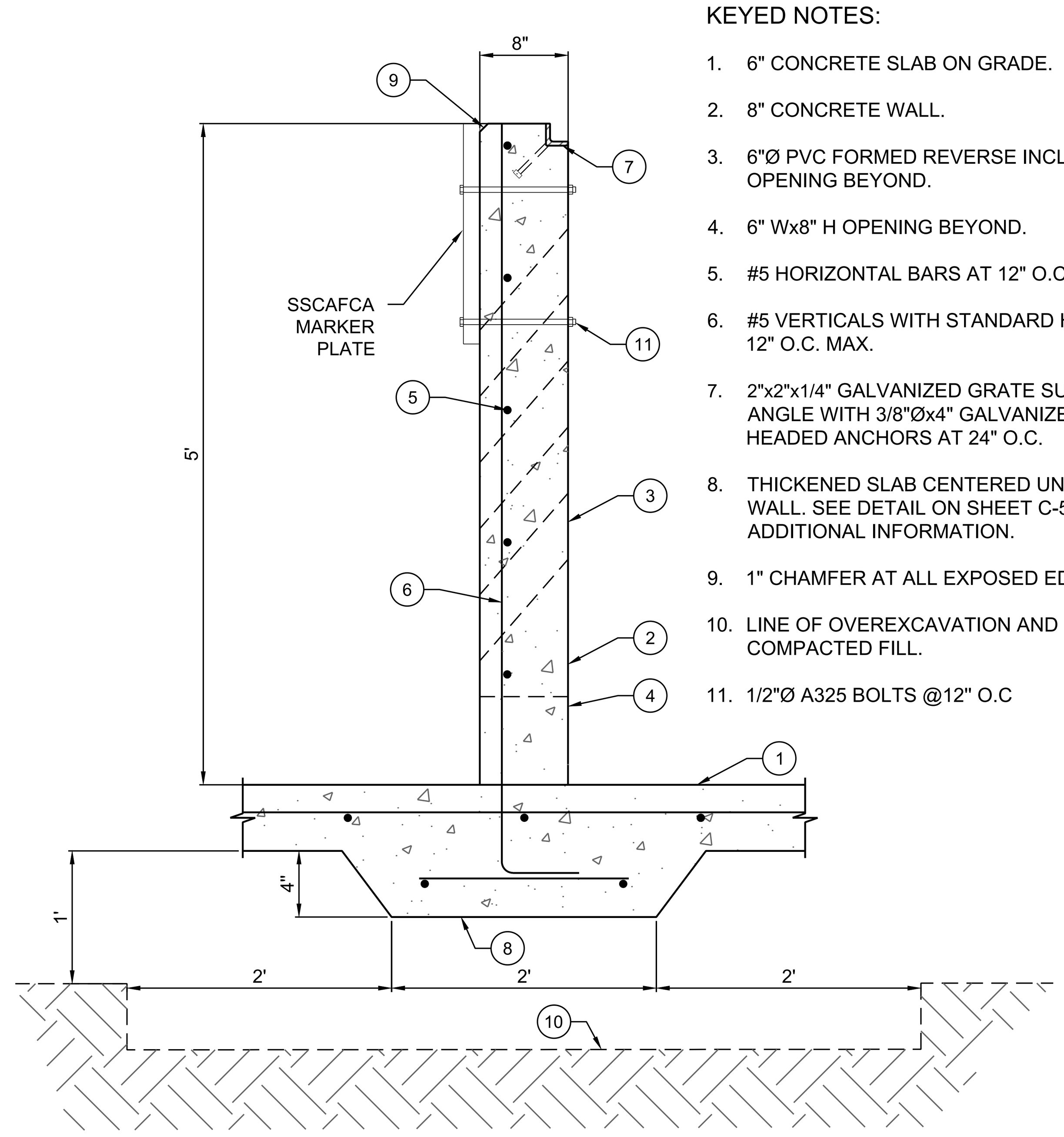
C-505 G SECTION G: EAST SIDE OF OUTFALL STRUCTURE

NTS



C-505 H SECTION H: WEST SIDE OF OUTFALL STRUCTURE

NTS



KEYED NOTES:

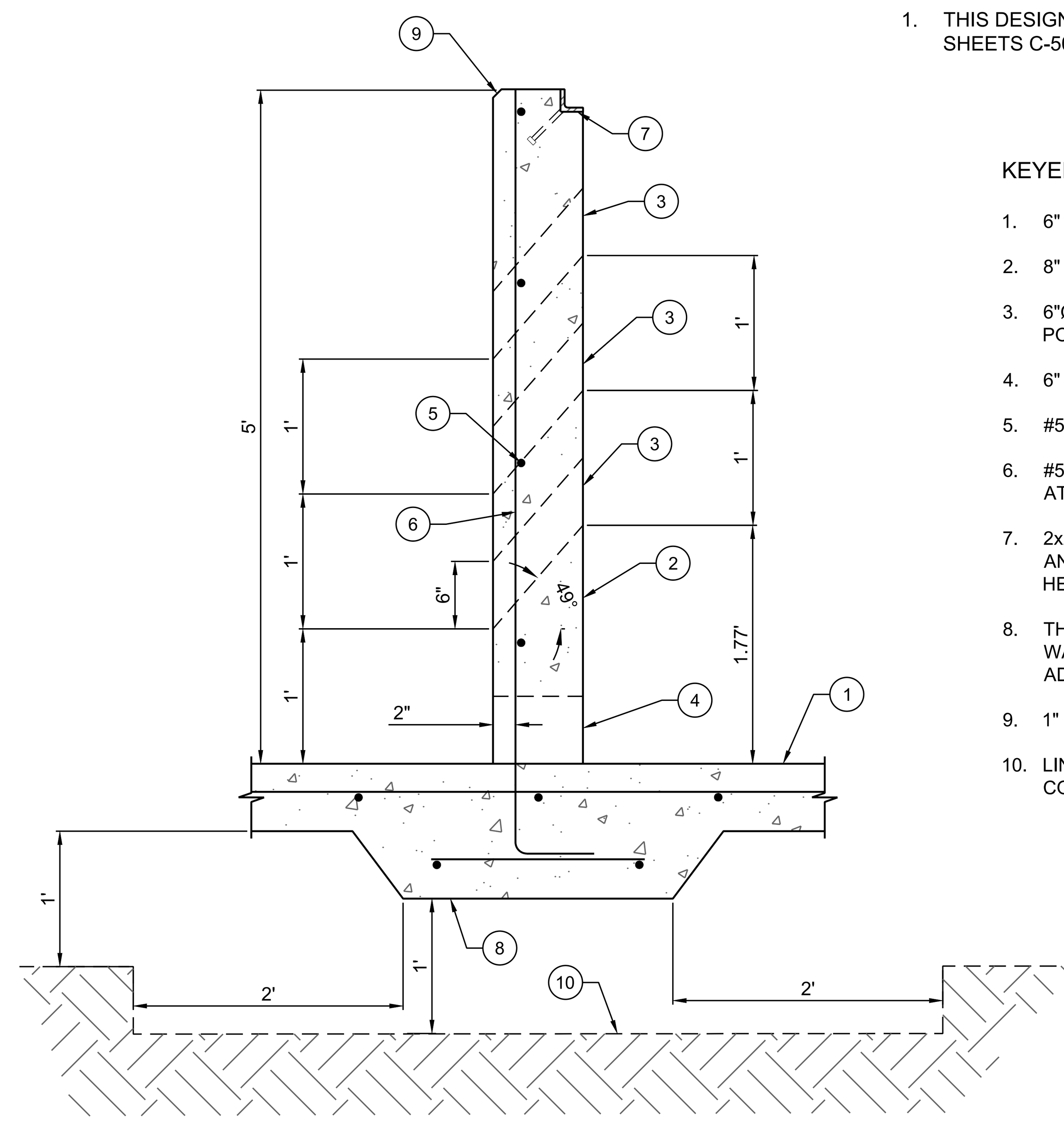
1. 6" CONCRETE SLAB ON GRADE.
2. 8" CONCRETE WALL.
3. 6"Ø PVC FORMED REVERSE INCLINE PORT OPENING BEYOND.
4. 6" Wx8" H OPENING BEYOND.
5. #5 HORIZONTAL BARS AT 12" O.C. MAX.
6. #5 VERTICALS WITH STANDARD HOOK AT 12" O.C. MAX.
7. 2"x2"x1/4" GALVANIZED GRATE SUPPORT ANGLE WITH 3/8"Øx4" GALVANIZED HEADED ANCHORS AT 24" O.C.
8. THICKENED SLAB CENTERED UNDER WALL. SEE DETAIL ON SHEET C-502. FOR ADDITIONAL INFORMATION.
9. 1" CHAMFER AT ALL EXPOSED EDGES.
10. LINE OF OVEREXCAVATION AND COMPACTED FILL.
11. 1/2"Ø A325 BOLTS @12" O.C

C-505 I SECTION I SSCAFCA MARKER PLATE

NTS

NOTES:

1. THIS DESIGN IS TO BE ISSUED ALONG WITH SHEETS C-502, C-503, C-505, C-506 & C-507



KEYED NOTES:

1. 6" CONCRETE SLAB ON GRADE.
2. 8" CONCRETE WALL.
3. 6"Ø PVC FORMED REVERSE INCLINE PORT OPENING BEYOND.
4. 6" Wx8" H OPENING BEYOND.
5. #5 HORIZONTAL BARS AT 12" O.C. MAX.
6. #5 VERTICALS WITH STANDARD HOOK AT 12" O.C. MAX.
7. 2x2x1/4 GALVANIZED GRATE SUPPORT ANGLE WITH 3/8"Øx4" GALVANIZED HEADED ANCHORS AT 24" O.C.
8. THICKENED SLAB CENTERED UNDER WALL. SEE DETAIL ON SHEET C-502 FOR ADDITIONAL INFORMATION.
9. 1" CHAMFER AT ALL EXPOSED EDGES.
10. LINE OF OVEREXCAVATION AND COMPACTED FILL.

C-505 J SECTION J: REVERSE INCLINE PORTS

NTS

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DATE	8.18.2021

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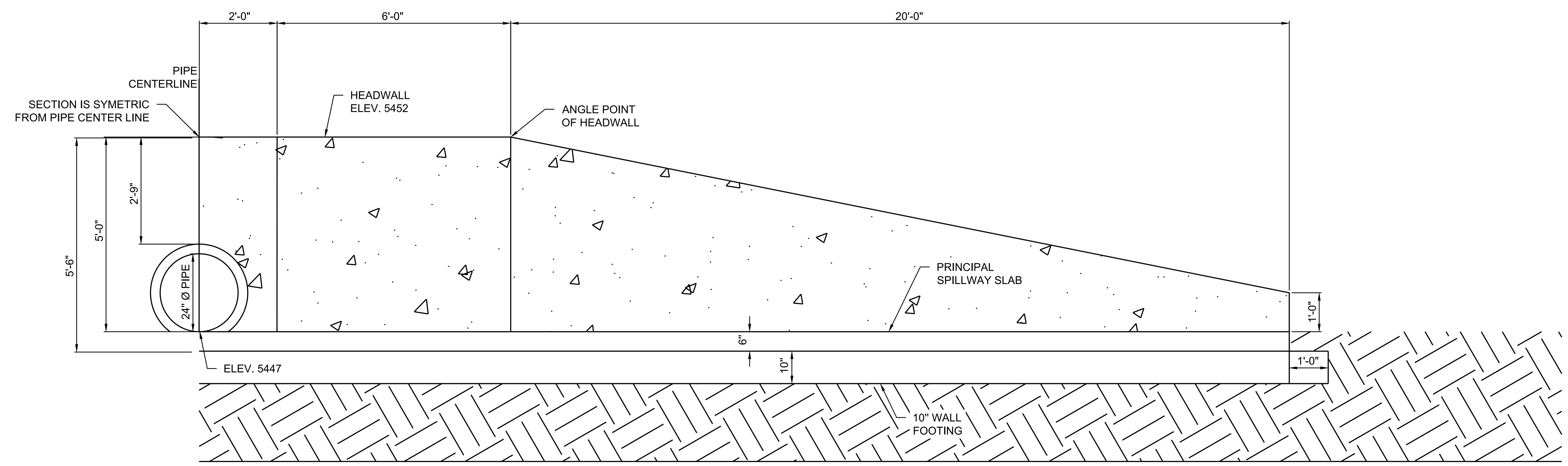
SHEET TITLE: PORTED RISER DETAIL

SUBMITTED FOR: CONSTRUCTION

SHEET NUMBER:

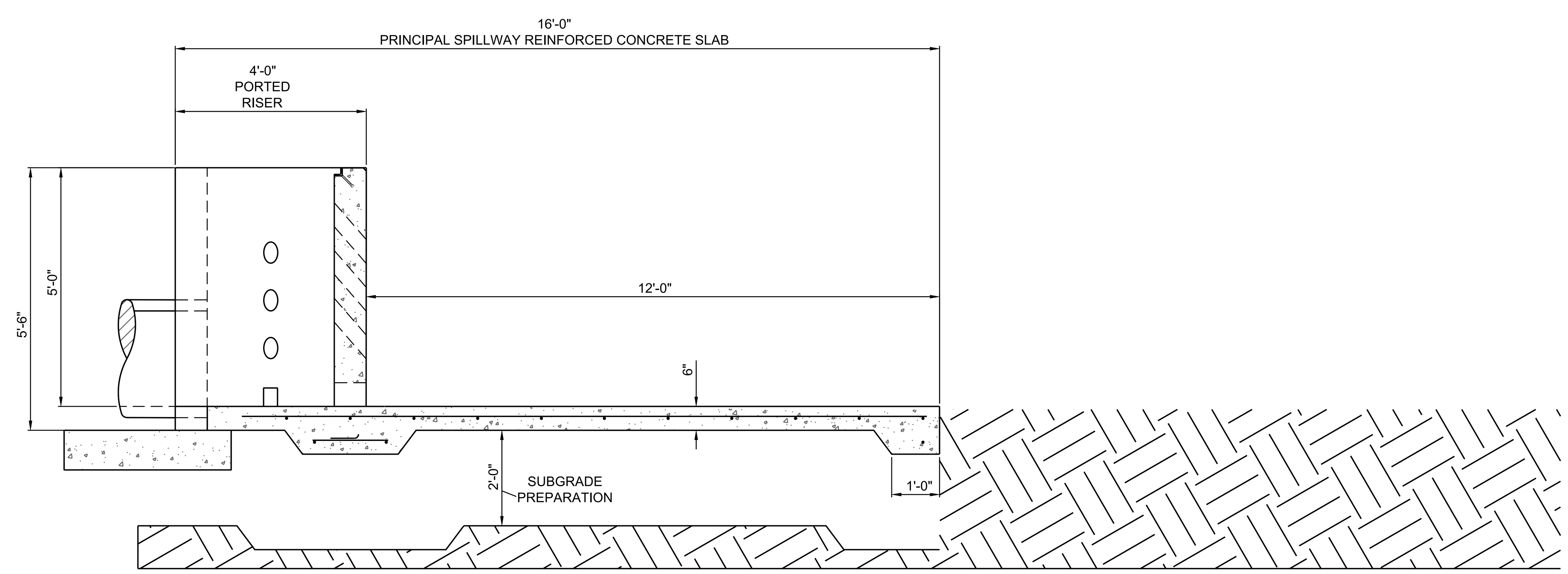
C-505

NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-506 PORTED RISER STRUCTURE PROFILE.dwg PLOT DATE: Aug 18, 2021 4:06pm



PRINCIPAL SPILLWAY HEADWALL/WINGWALL PROFILE SECTION

NTS



PRINCIPAL SPILLWAY DETAIL SECTION

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PROJECT NAME:
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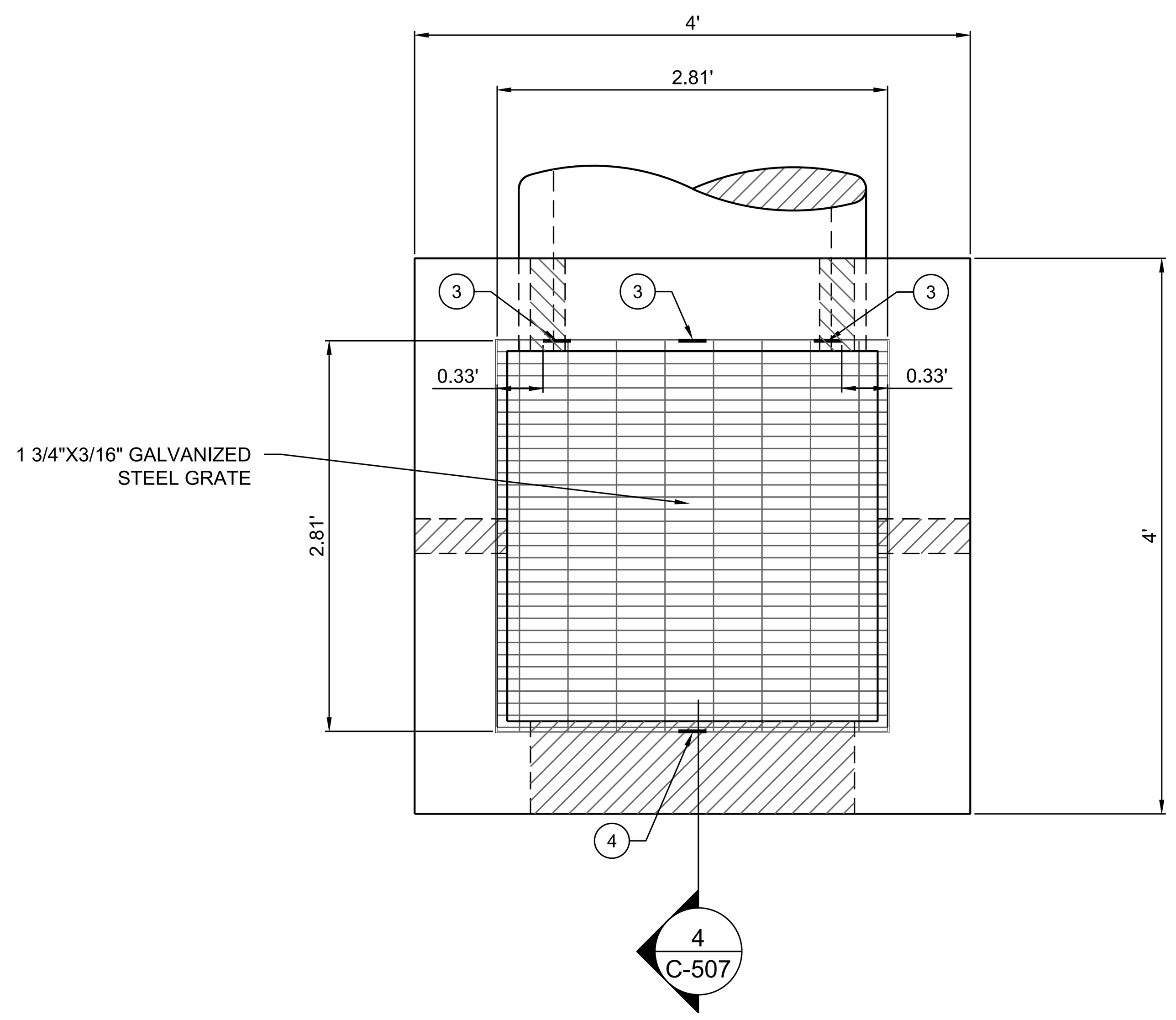
This contract allows the owner to make payment within 45 days after submission of an undisputed request for payment

SHEET TITLE:
PORTED RISER STRUCTURE PROFILE

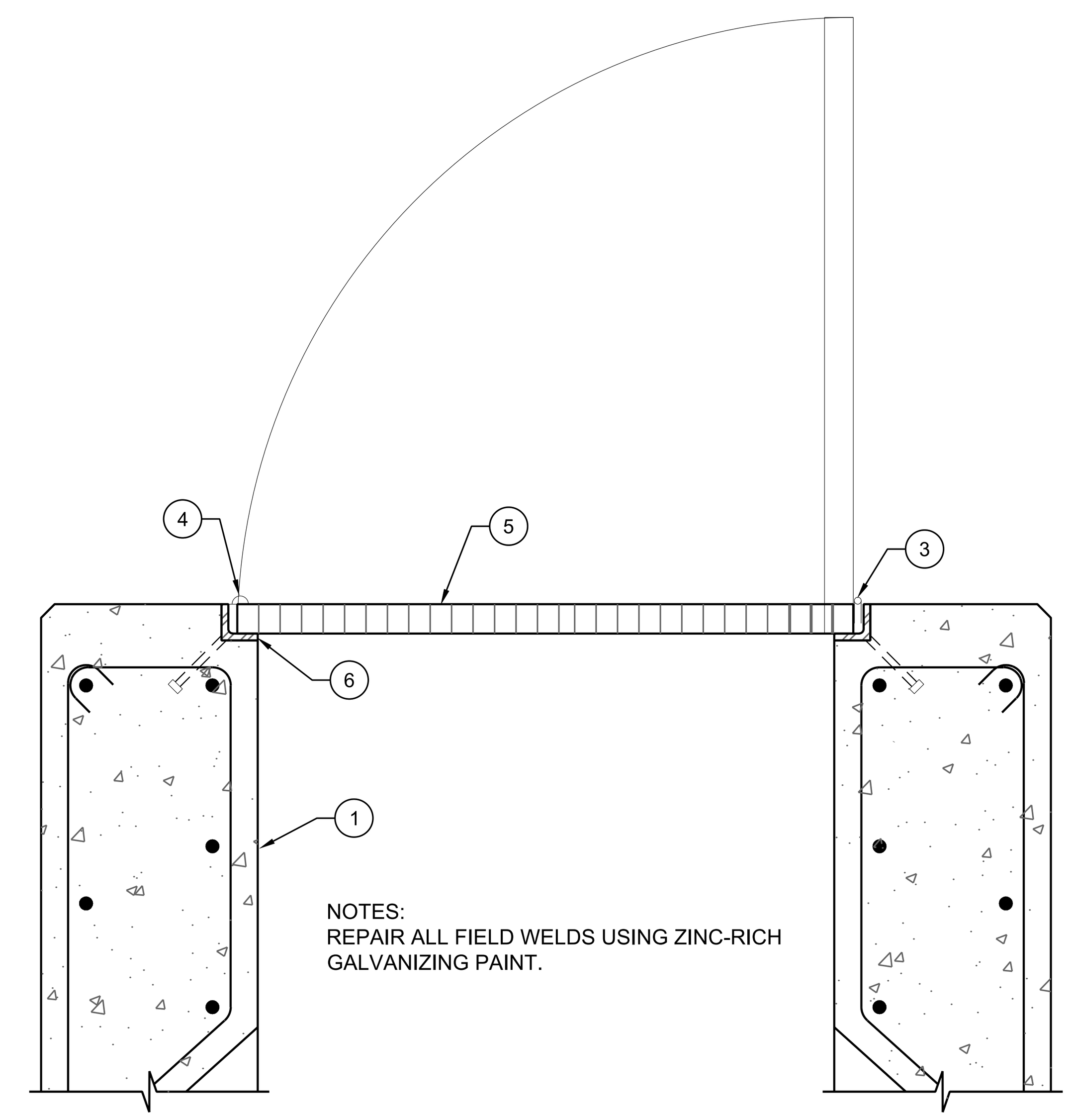
SUBMITTED FOR:
CONSTRUCTION

SHEET NUMBER:
C-506

NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-506 PORTED RISER STRUCTURE PROFILE.dwg PLOT DATE: Aug 18, 2021 4:06pm

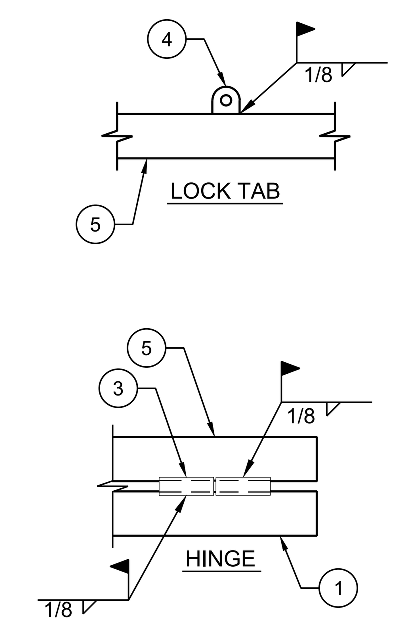


4'-0"x4'-0" OUTFALL STRUCTURE-GRATE DETAIL PLAN VIEW
NTS



NOTES:
REPAIR ALL FIELD WELDS USING ZINC-RICH GALVANIZING PAINT.

SECTION AT ACCESS HATCH (4 / C-507)
NTS



1. CONCRETE WALL, SEE SHEET C-504 FOR DETAILS.
2. NOT USED.
3. (3) HEAVY DUTY BARREL TYPE GALVANIZED HINGES PER HATCH WITHIN 4" OF END OF HATCH.
4. 3/16x1x0'-1" GALVANIZED BAR AS SHOWN WITH 3/8"Ø HOLE FOR PADLOCK WELDED TO GRATING AND SUPPORT ANGLE. TO BE CENTERED ON GALVANIZED GRATE.
5. GALVANIZED GRATE, SEE SHEET C-503 DESIGN DATA D.

NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-507 PORTED RISER GRATE DETAILS.dwg PLOT DATE: Aug 18, 2021 4:06pm

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DATE 8.18.2021

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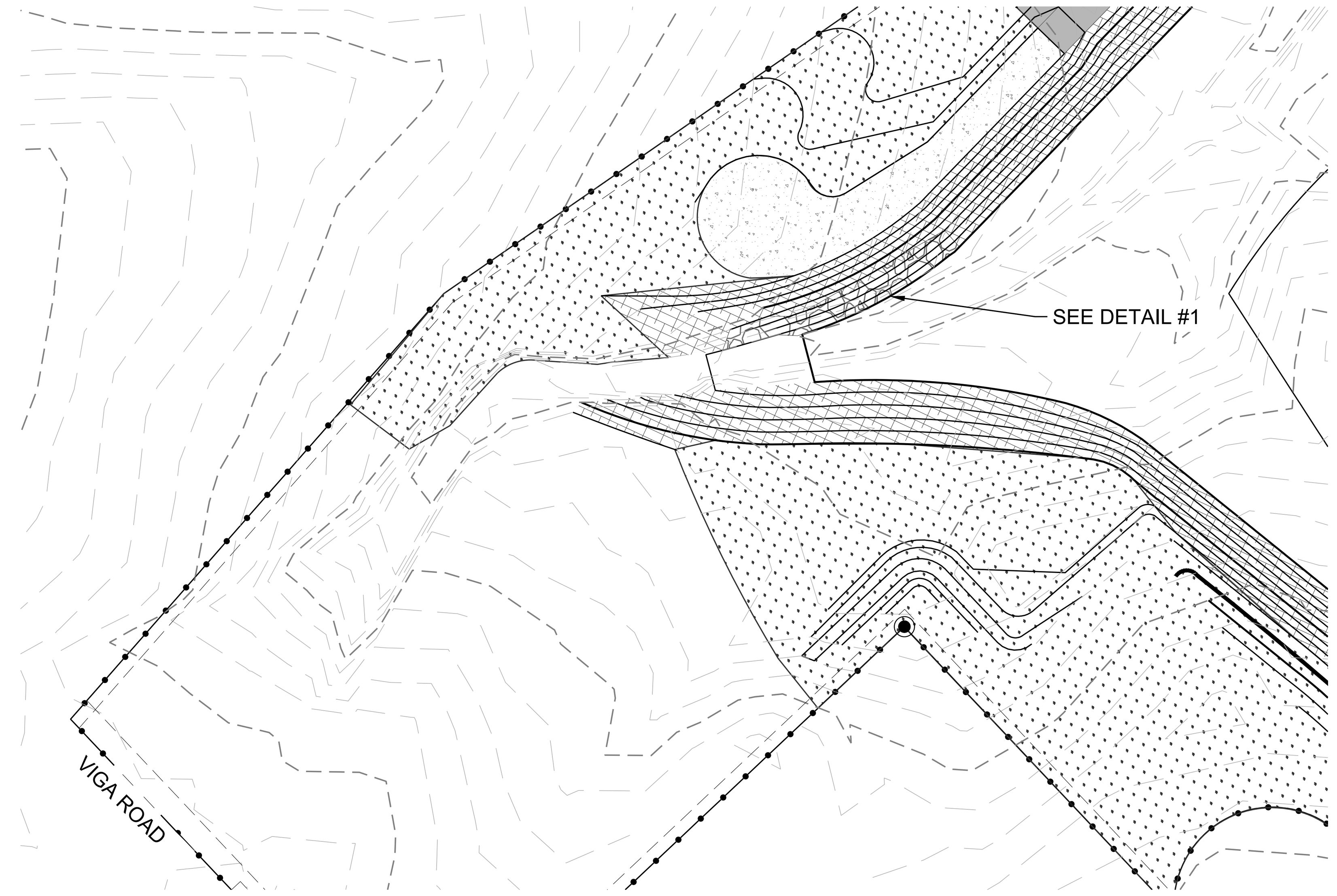
This contract allows the owner to make payment within 45 days after submission of an undisputed request for payment

SHEET TITLE:
PORTED RISER GRATE DETAILS

SUBMITTED FOR:
CONSTRUCTION

SHEET NUMBER:
C-507



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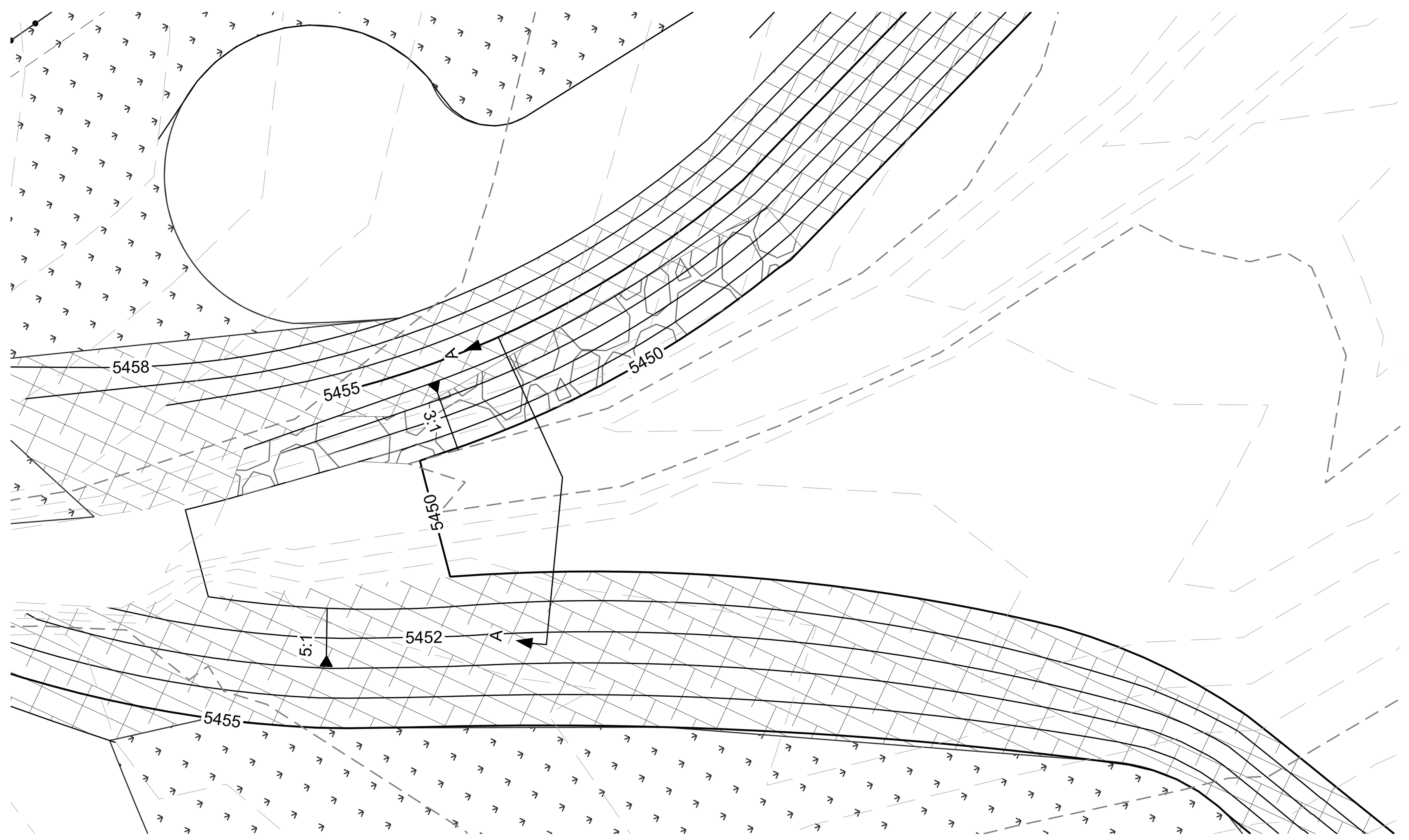
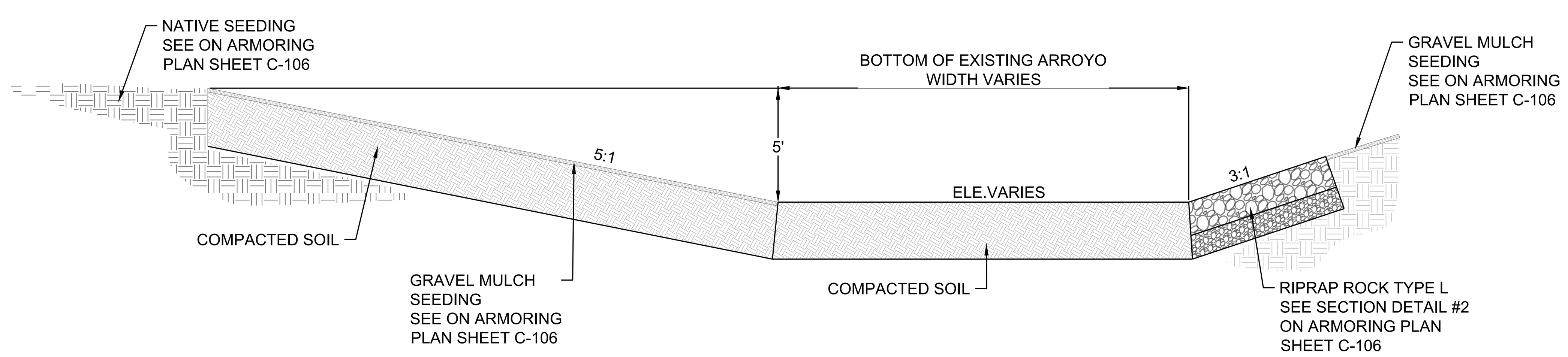
SCALE IN FEET



INLET ARMORING - PLAN VIEW



SECTION A-A

DETAIL #1 POND INLET ARMORING - NTS

NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-508 HARLEY'S POND INLET.dwg PLOT DATE: Aug 18, 2021 4:06pm

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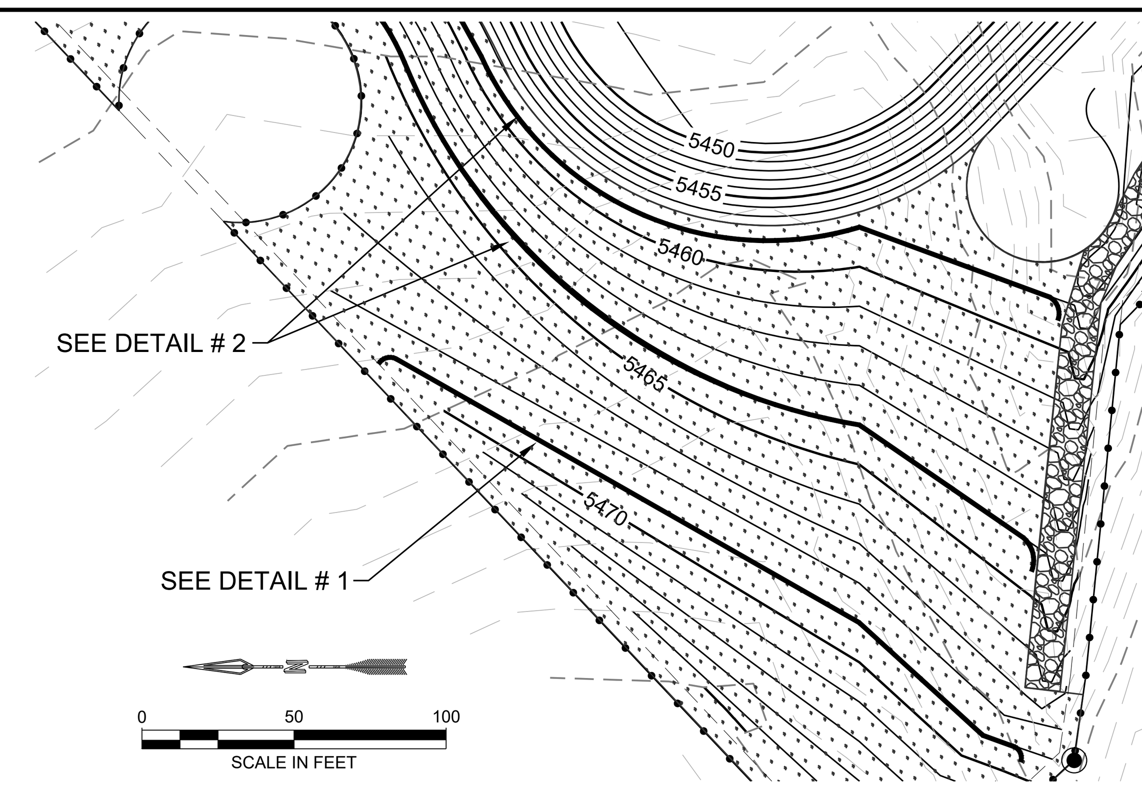
HARLEY'S POND

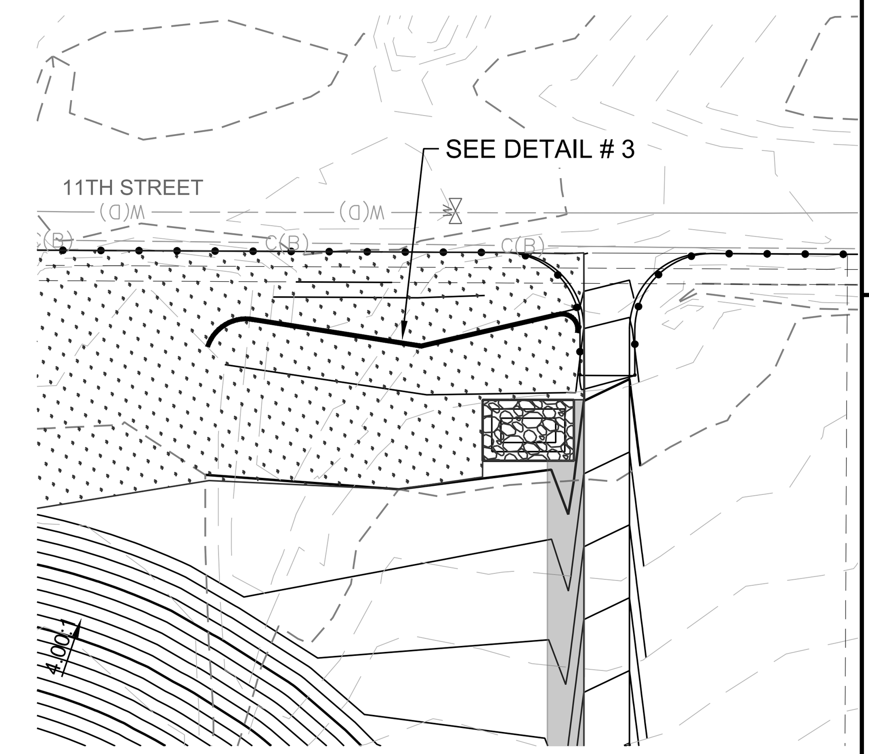
This contract allows the owner to make payment within 45 days after submission of an undisputed request for payment

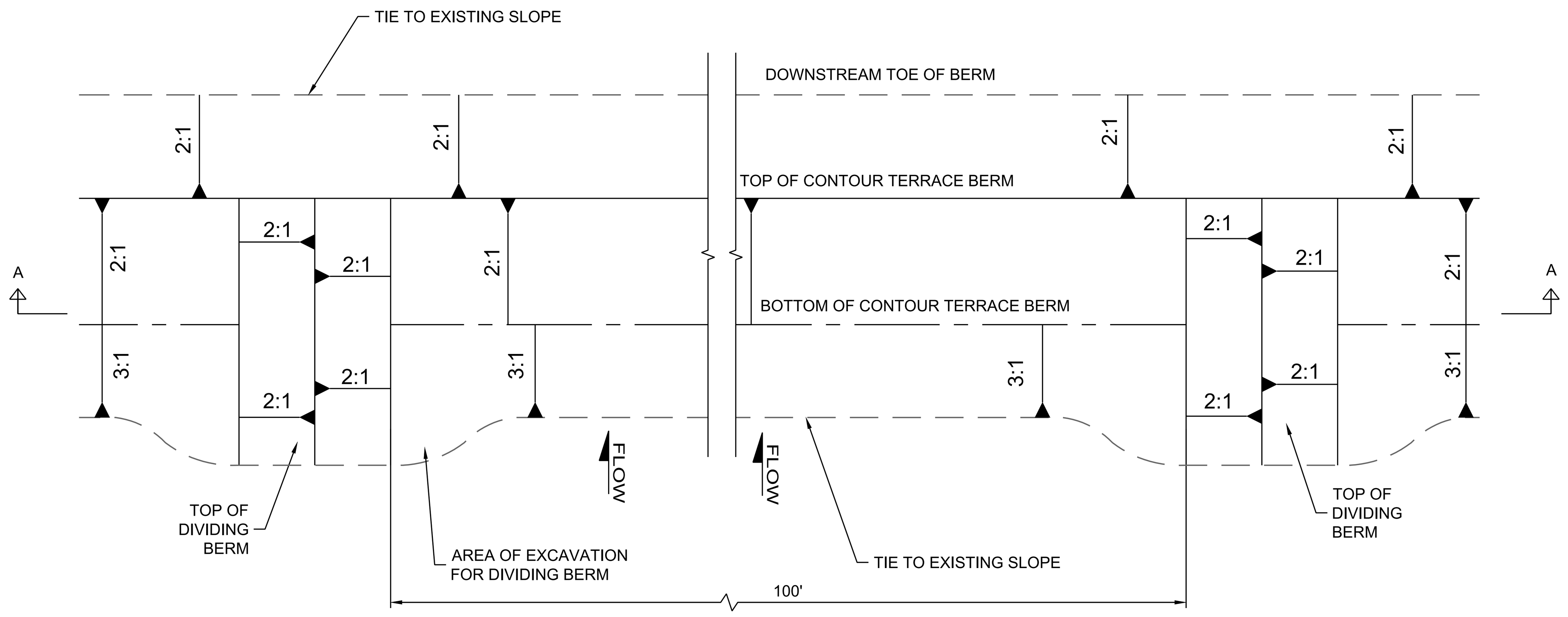
SHEET TITLE:
HARLEY'S POND INLET

SUBMITTED FOR:
CONSTRUCTION

SHEET NUMBER:
C-508

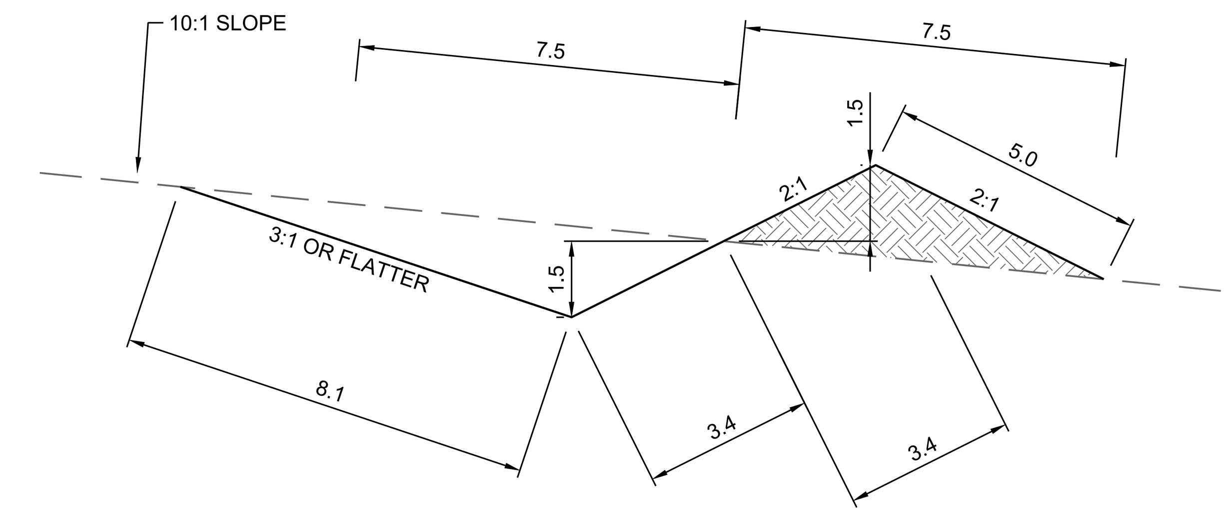






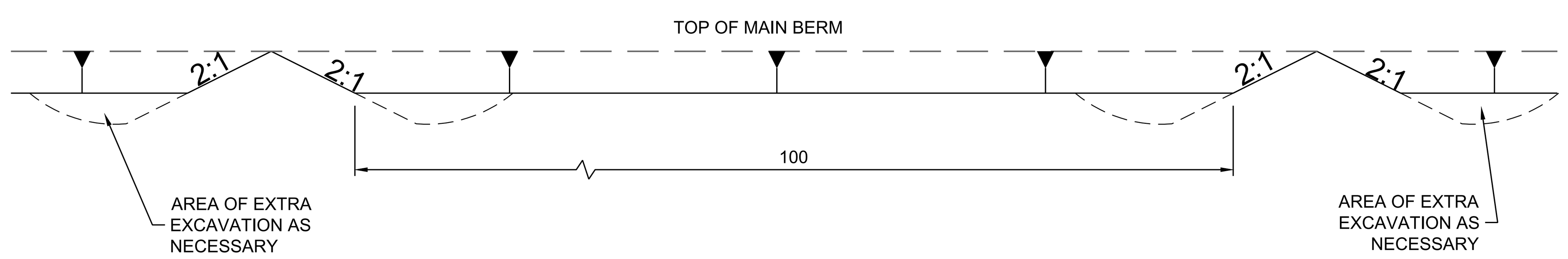
CONTOUR TERRACE PLAN VIEW - DIVIDING BERM SPACING

NTS



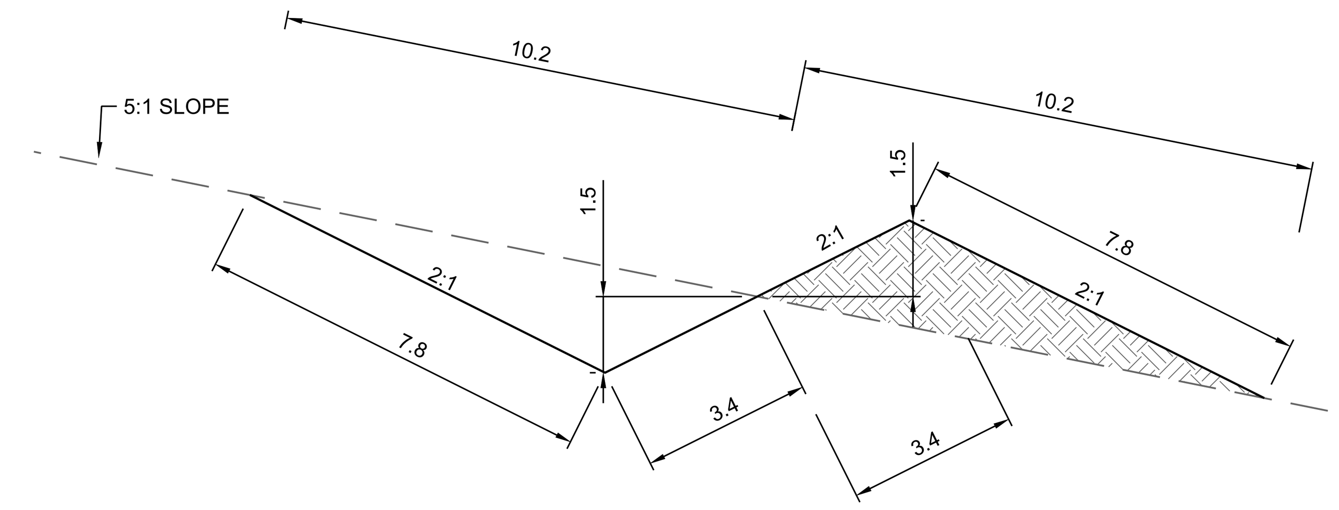
DETAIL #1 CONTOUR TERRACE

NTS



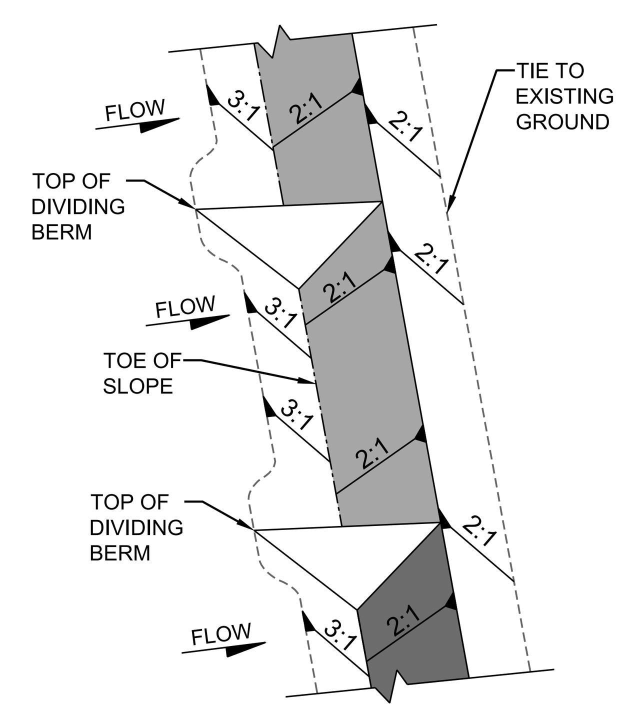
CONTOUR TERRACE W/DIVIDING BERM SECTION A-A

NTS

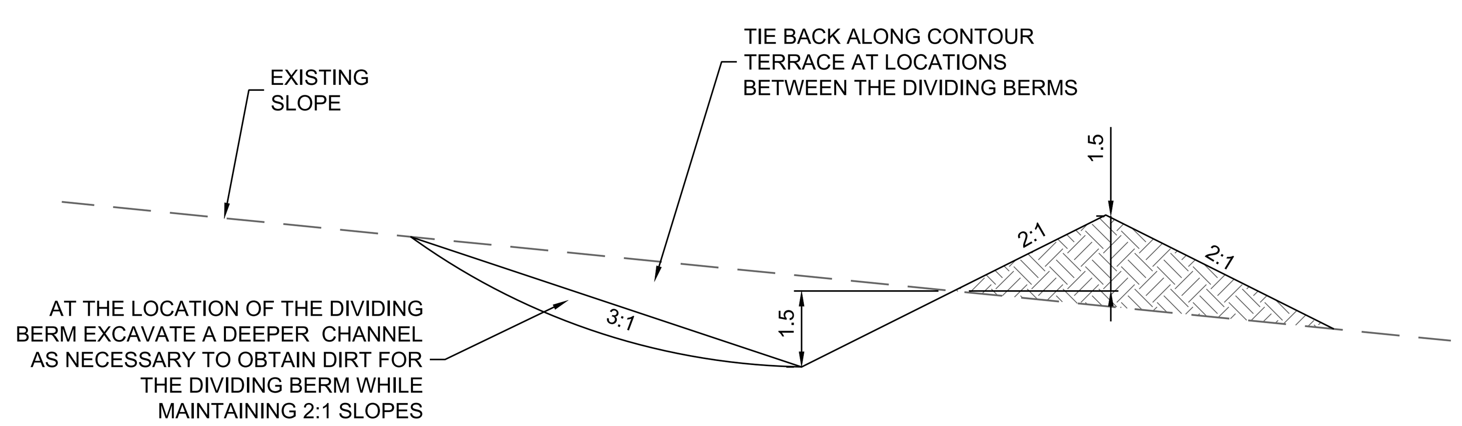


DETAIL #2 CONTOUR TERRACE

NTS

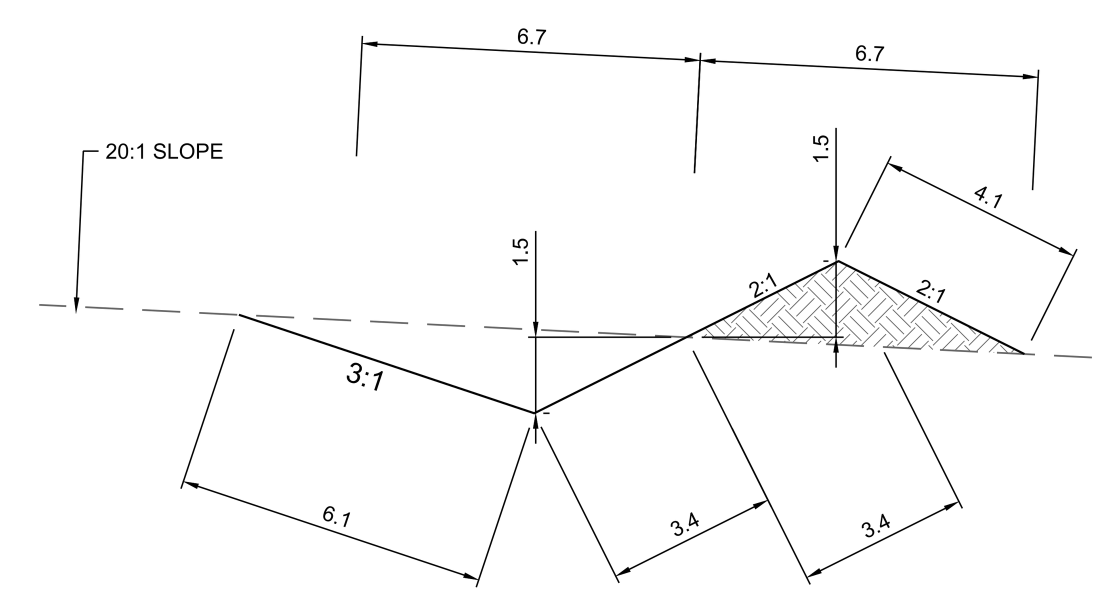


ISOMETRIC VIEW CONTOUR TERRACE



CONTOUR TERRACE DETAIL ADJACENT TO BERMS CROSS SECTION VIEW

NTS



DETAIL #3 CONTOUR TERRACE

NTS

NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-509 CONTOUR TERRACE DETAILS.dwg PLOT DATE: Aug 18, 2021 4:06pm

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CHECKED	CHECKED BY
DATE	8.18.2021

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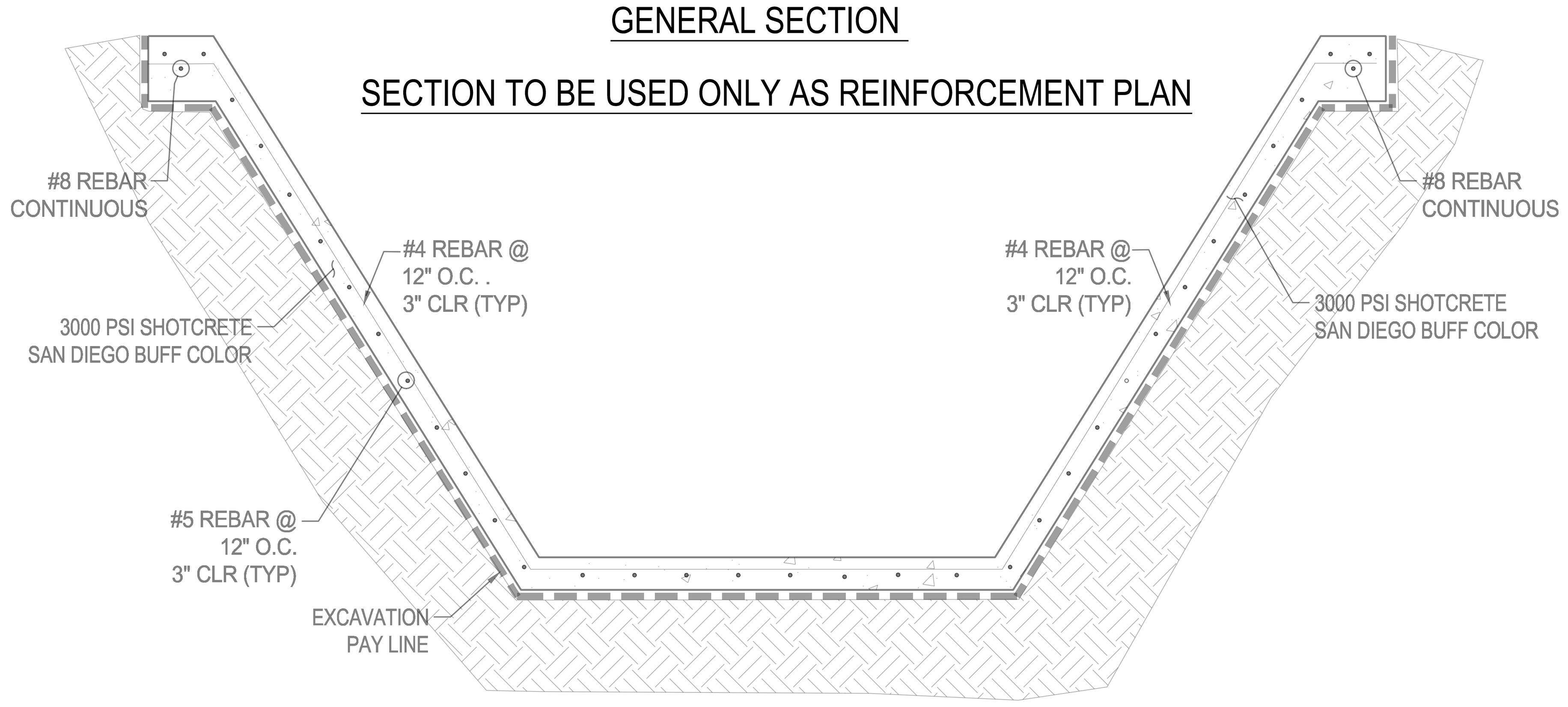
SHEET TITLE: CONTOUR TERRACE DETAILS

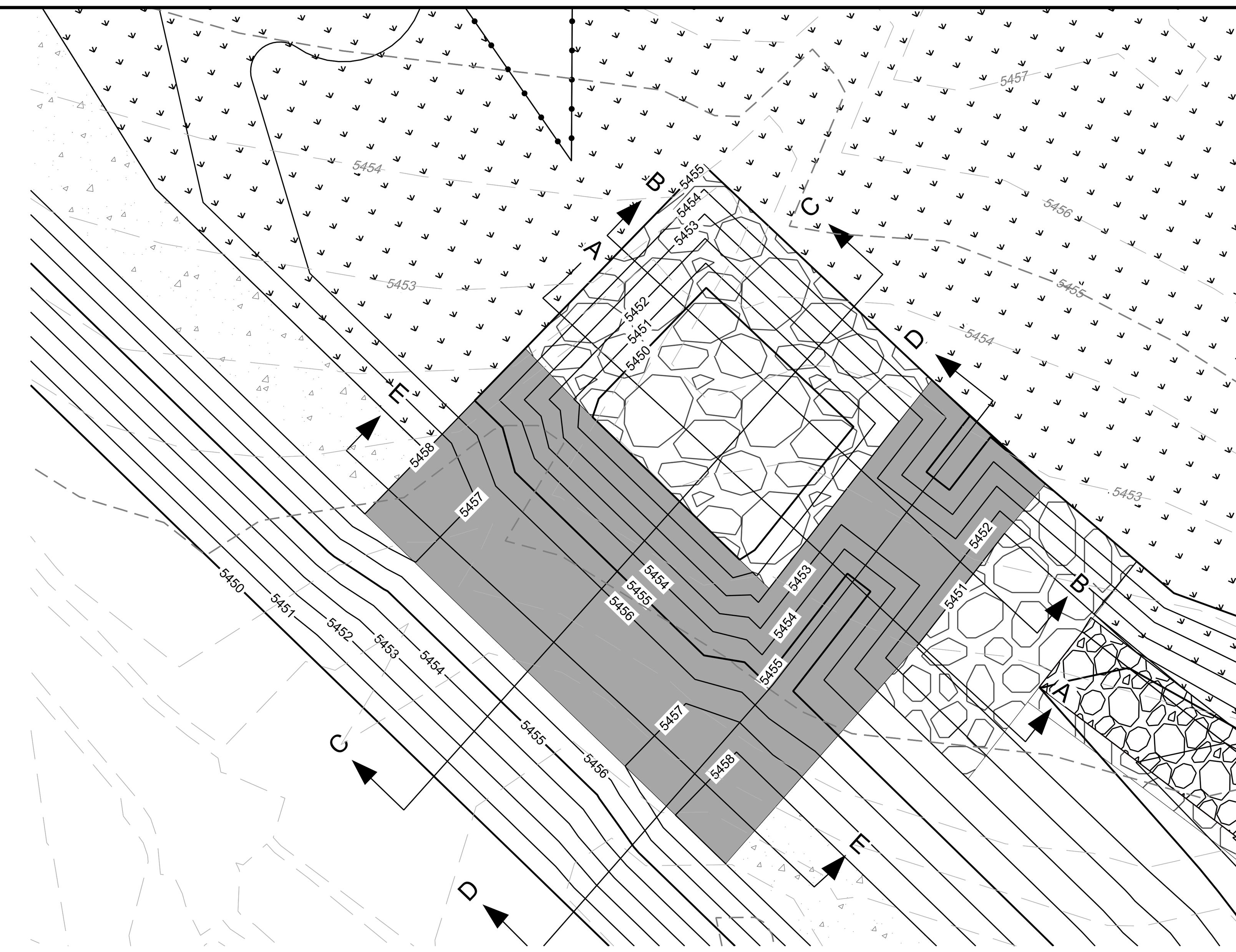
SUBMITTED FOR: CONSTRUCTION

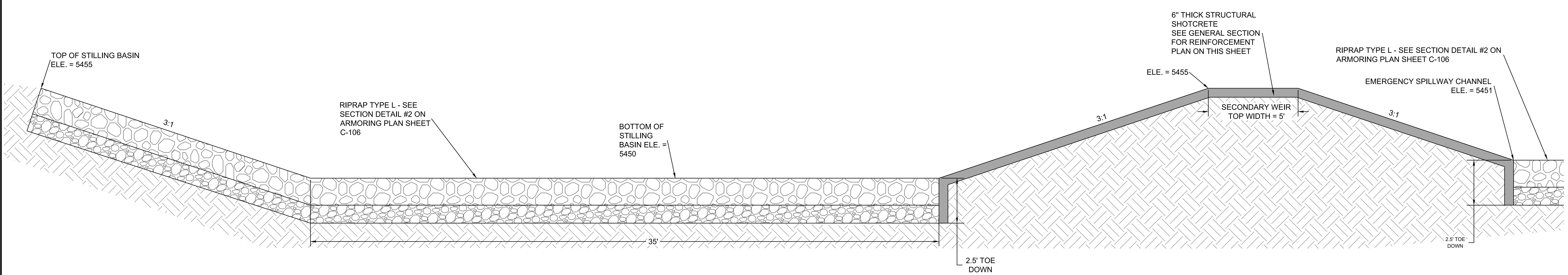
SHEET NUMBER: C-509



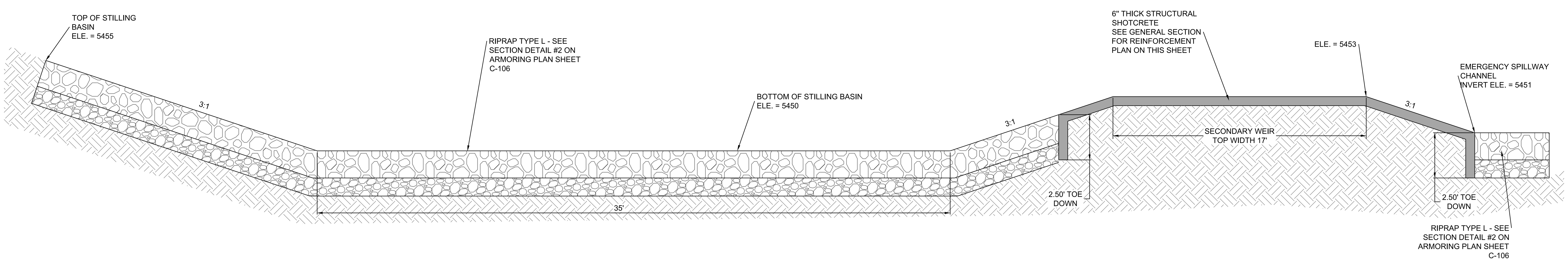
GENERAL NOTES:

1. SUBGRADE COMPACTION UNDER SHOTCRETE CHANNEL AND SIDE SLOPES SHALL BE 1' DEEP AND COMPACTED TO A DRY DENSITY GREATER THAN 95% OF MAXIMUM DRY DENSITY IN A MOISTURE RANGE OF OPTIMUM MOISTURE +/- 2% AS DETERMINED IN ACCORDANCE WITH ASTM D1557
2. SHOTCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH SSCAFCA "SHOTCRETE CHANNEL FULL SECTION DETAIL", SEE THIS SHEET.





SECTION A-A STILLING BASIN SECTION - NTS



SECTION B-B STILLING BASIN SECTION - NTS

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DATE 8.18.2021

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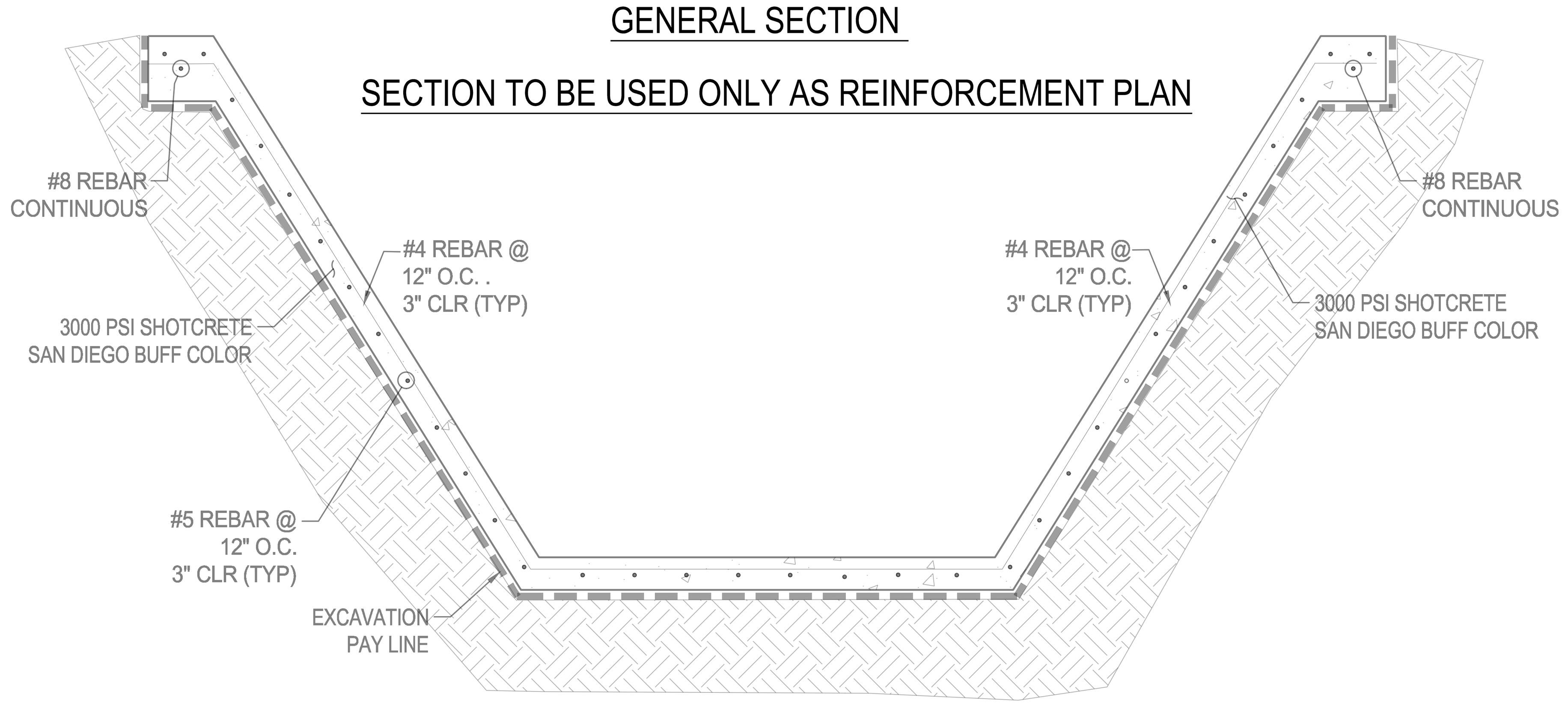
SHEET TITLE: STILLING BASIN CROSS SECTIONS

SUBMITTED FOR: CONSTRUCTION

SHEET NUMBER: C-510

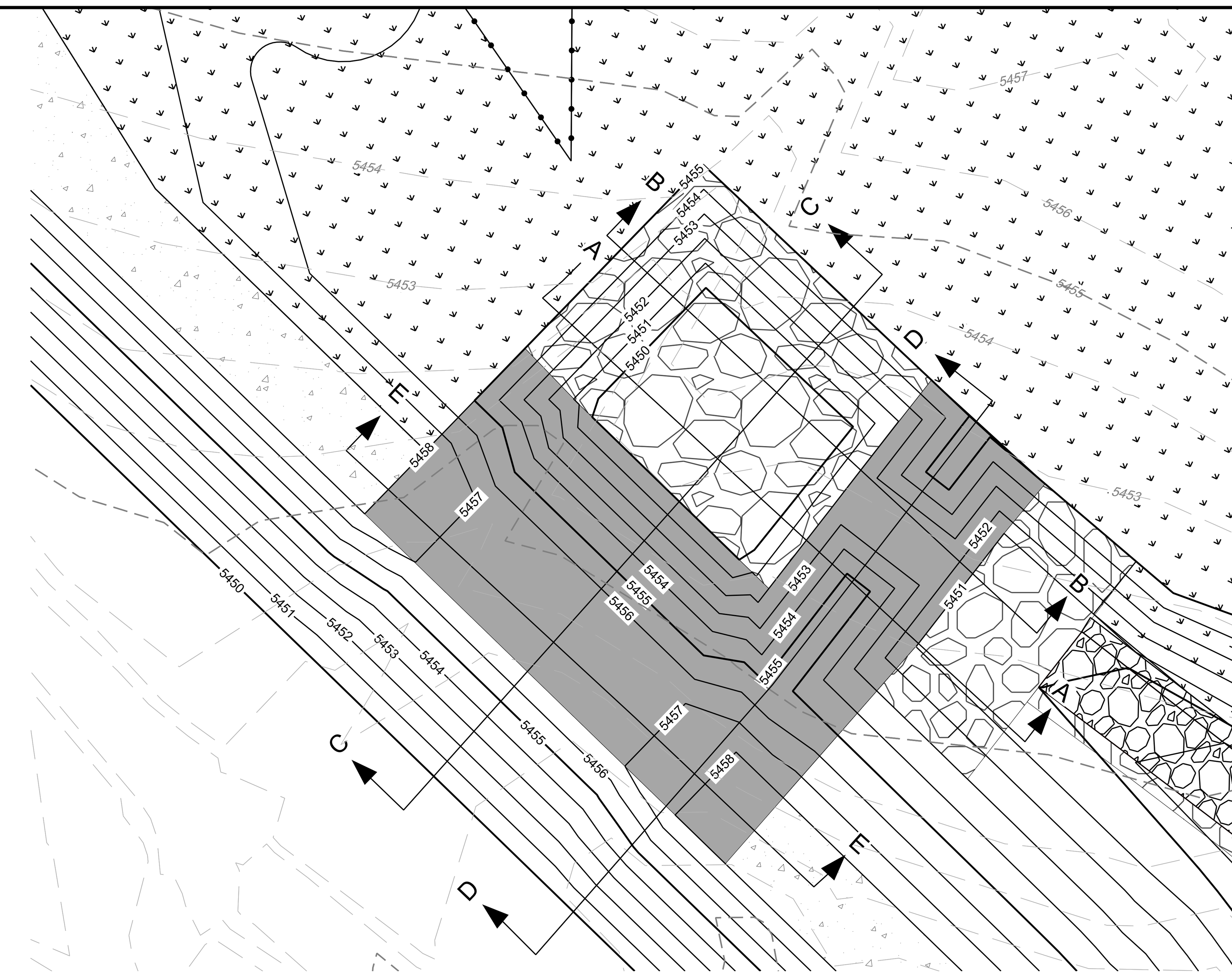
GENERAL SECTION

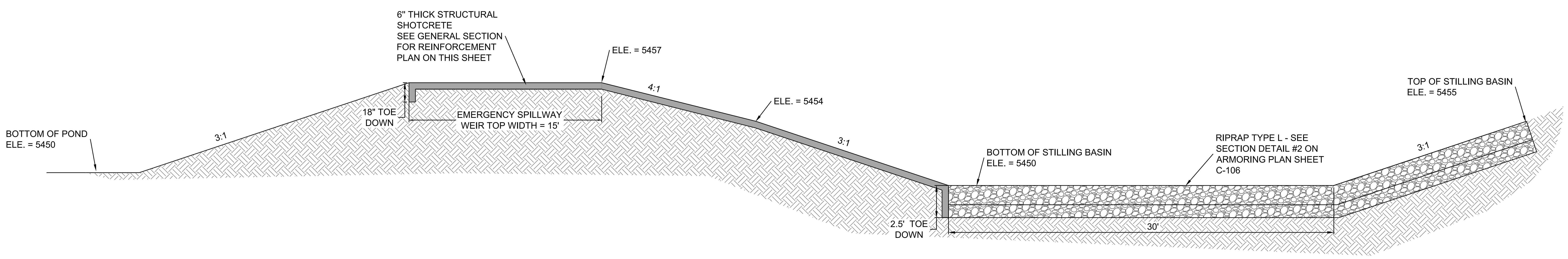
SECTION TO BE USED ONLY AS REINFORCEMENT PLAN



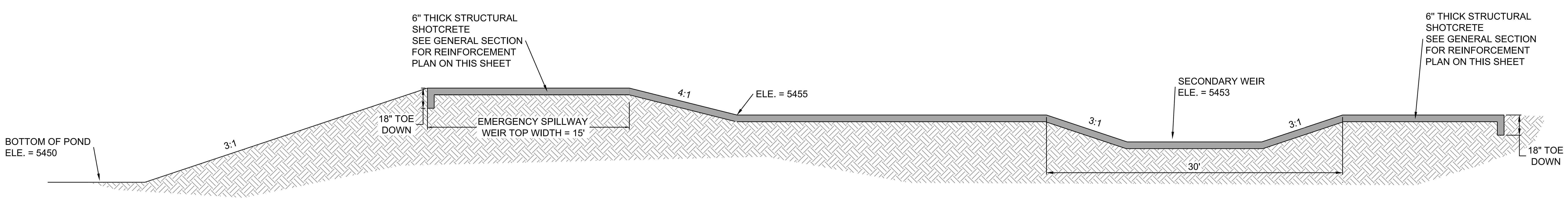
GENERAL NOTES:

1. SUBGRADE COMPACTION UNDER SHOTCRETE CHANNEL AND SIDE SLOPES SHALL BE 1' DEEP AND COMPACTED TO A DRY DENSITY GREATER THAN 95% OF MAXIMUM DRY DENSITY IN A MOISTURE RANGE OF OPTIMUM MOISTURE +/- 2% AS DETERMINED IN ACCORDANCE WITH ASTM D1557
2. SHOTCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH SSCAFCA "SHOTCRETE CHANNEL FULL SECTION DETAIL", SEE THIS SHEET.





SECTION C-C STILLING BASIN SECTION - NTS



SECTION D-D STILLING BASIN SECTION - NTS

NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-512 STILLING BASIN CROSS SECTIONS CONT..dwg PLOT DATE: Aug 18, 2021 4:07pm

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DRAWN DRAWN BY
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DATE 8.18.2021

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

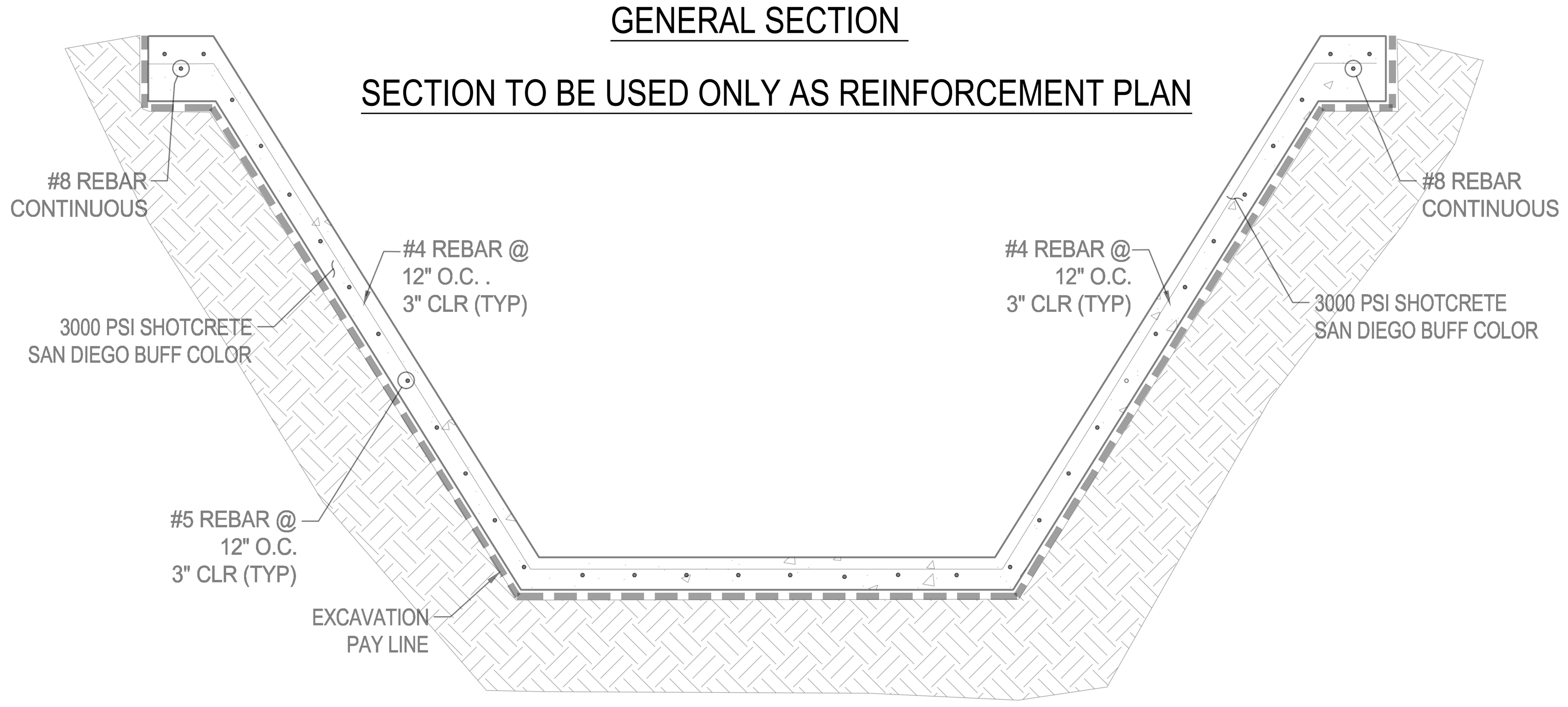
SHEET TITLE:
STILLING BASIN CROSS SECTIONS CONT.

SUBMITTED FOR:
CONSTRUCTION

SHEET NUMBER:
C-511

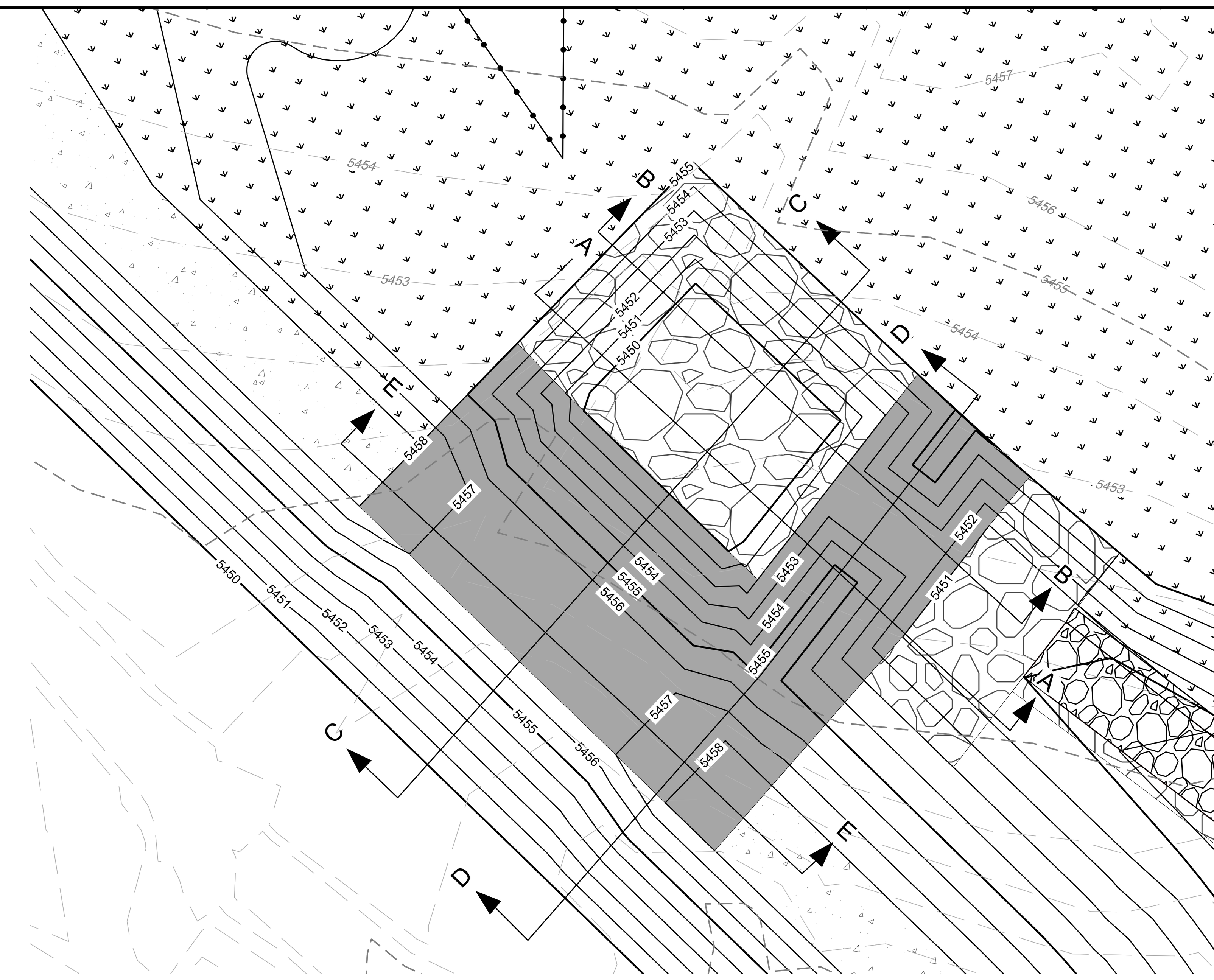
GENERAL SECTION

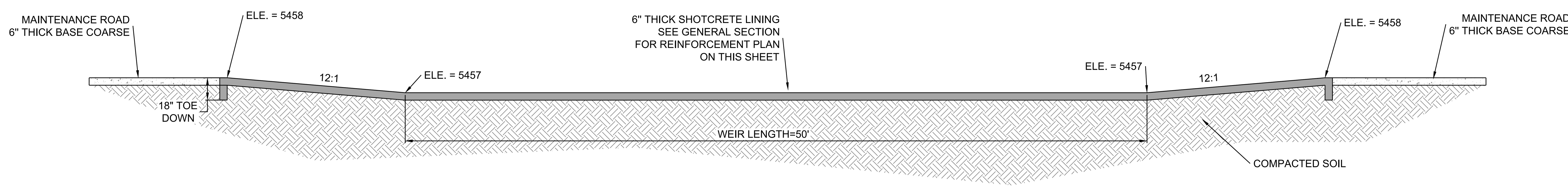
SECTION TO BE USED ONLY AS REINFORCEMENT PLAN



GENERAL NOTES:

1. SUBGRADE COMPACTION UNDER SHOTCRETE CHANNEL AND SIDE SLOPES SHALL BE 1' DEEP AND COMPACTED TO A DRY DENSITY GREATER THAN 95% OF MAXIMUM DRY DENSITY IN A MOISTURE RANGE OF OPTIMUM MOISTURE +/- 2% AS DETERMINED IN ACCORDANCE WITH ASTM D1557
2. SHOTCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH SSCAFCA "SHOTCRETE CHANNEL FULL SECTION DETAIL", SEE THIS SHEET.





SECTION E-E EMERGENCY SPILLWAY WEIR - NTS

NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-512 STILLING BASIN CROSS SECTIONS CONT..dwg PLOT DATE: Aug 18, 2021 4:07pm

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CHECKED	CHECKED BY
DATE	8.18.2021

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PROJECT NAME: HARLEY'S POND

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

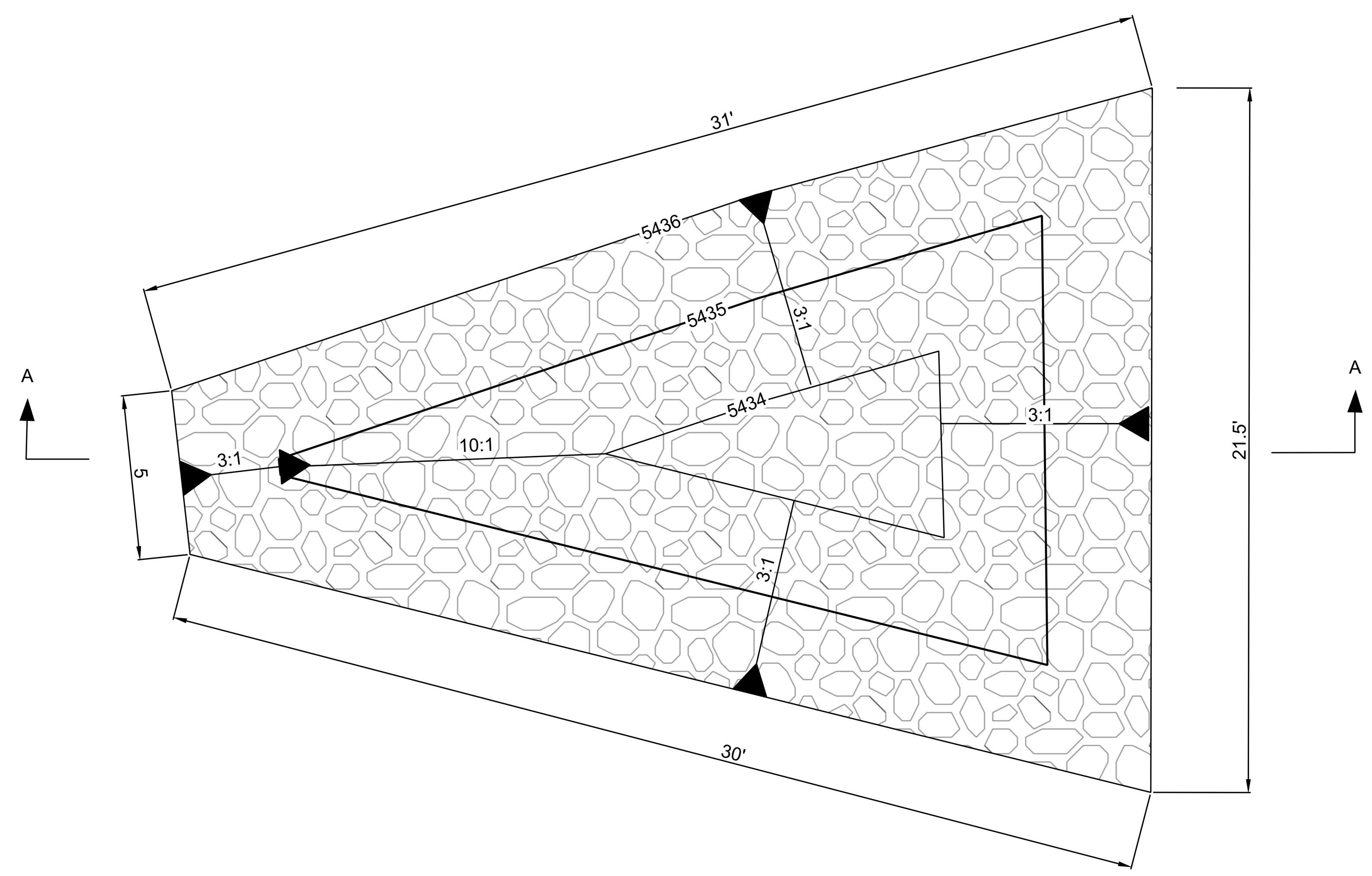
SHEET TITLE: STILLING BASIN CROSS SECTIONS CONT.

SUBMITTED FOR: CONSTRUCTION

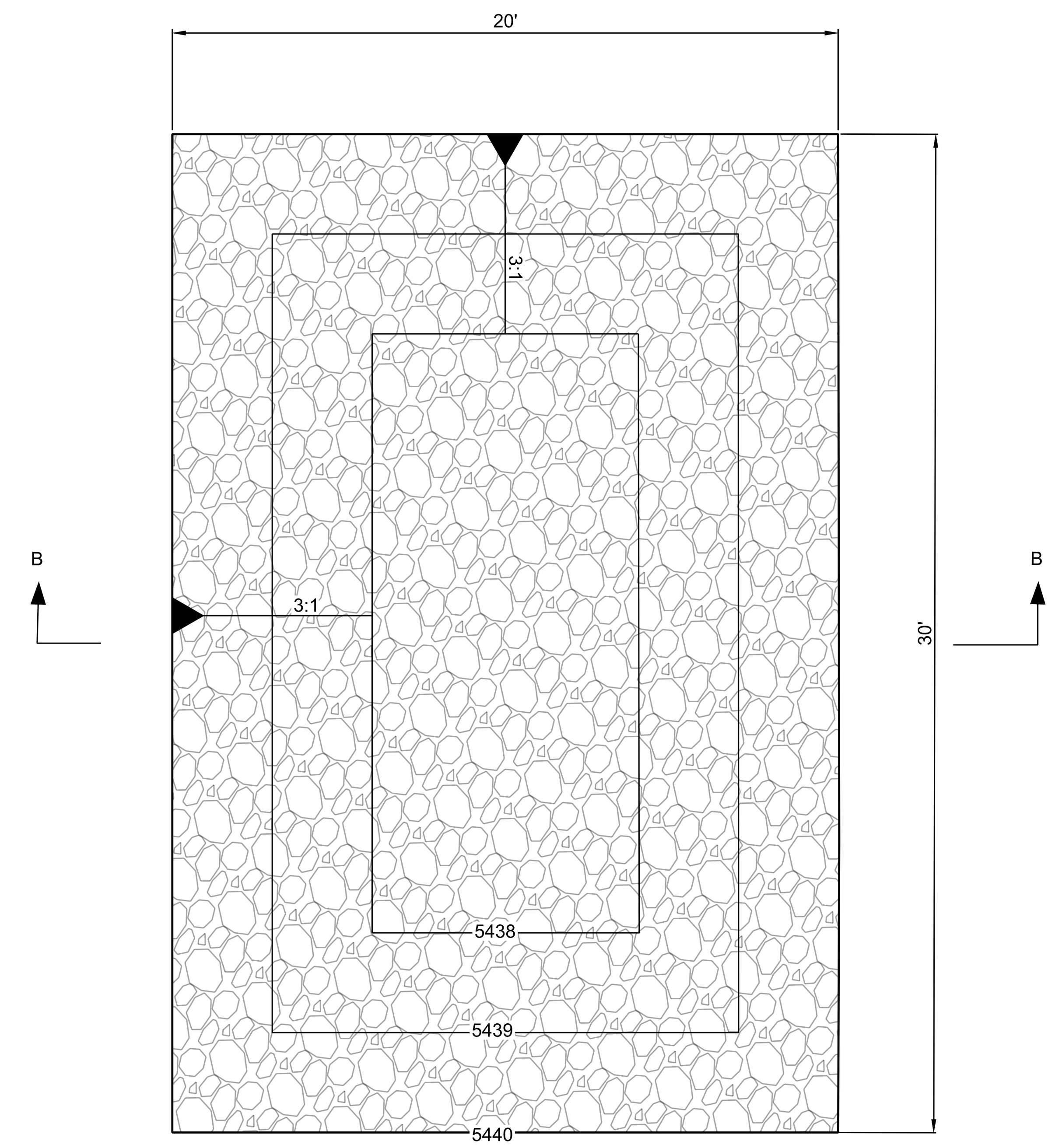
SHEET NUMBER: C-512

NOTE:

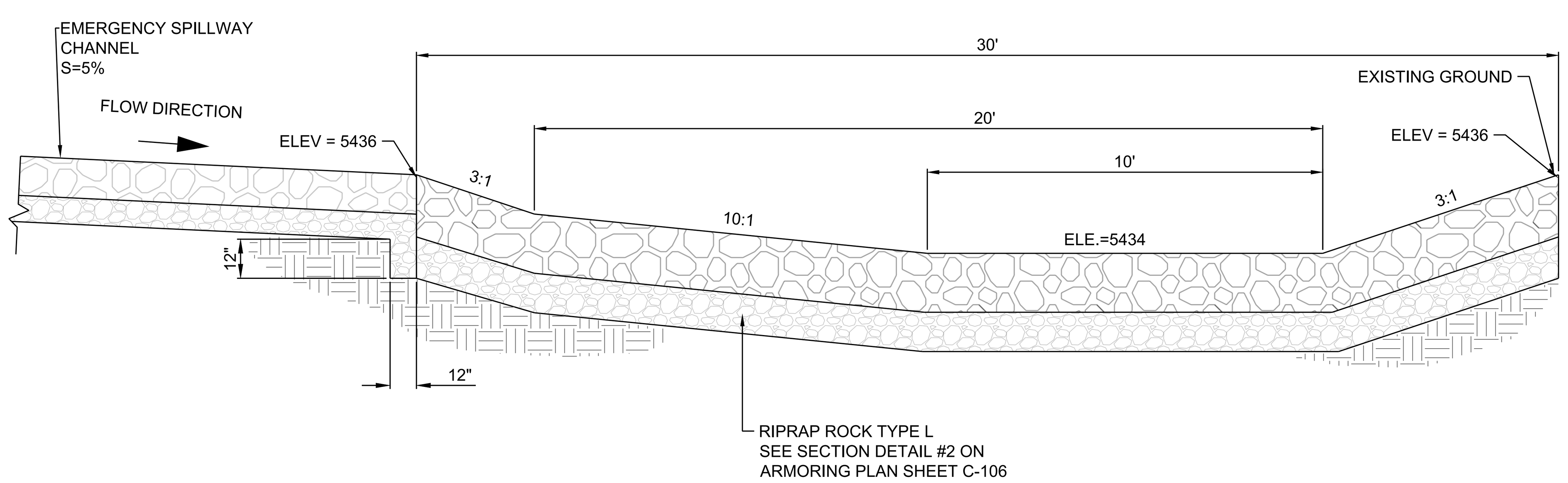
1. REFER TO POINTS DATA PLAN ON SHEET C-107 FOR MORE INFORMATION.



EMERGENCY SPILLWAY CHANNEL PLUNGE POOL - PLAN VIEW

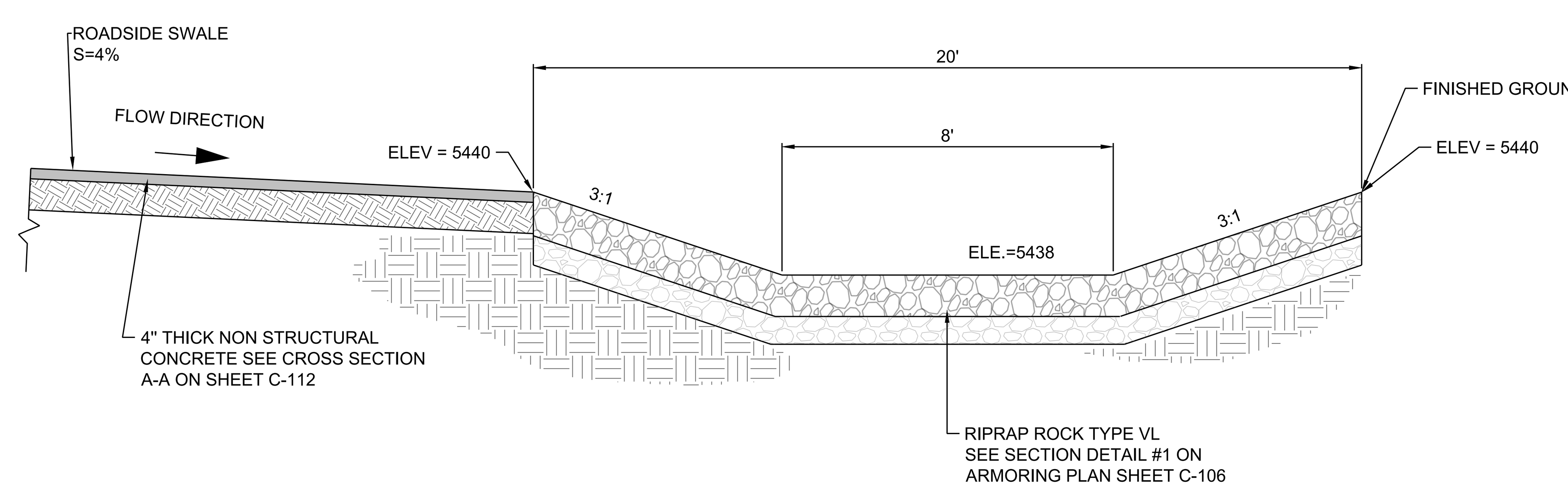


SITE ACCESS ROADS WALE PLUNGE POOL - PLAN VIEW



SECTION VIEW A-A

DETAIL #1 - PLUNGE POOL DETAIL AT BOTTOM OF EMERGENCY SPILLWAY CHANNEL - NTS



SECTION VIEW B-B

DETAIL #2 - PLUNGE POOL DETAIL AT BOTTOM OF SITE ACCESS ROADSIDESWALE- NTS

NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-513 PLUNGE POOL DETAILS.dwg PLOT DATE: Aug 18, 2021 4:07pm

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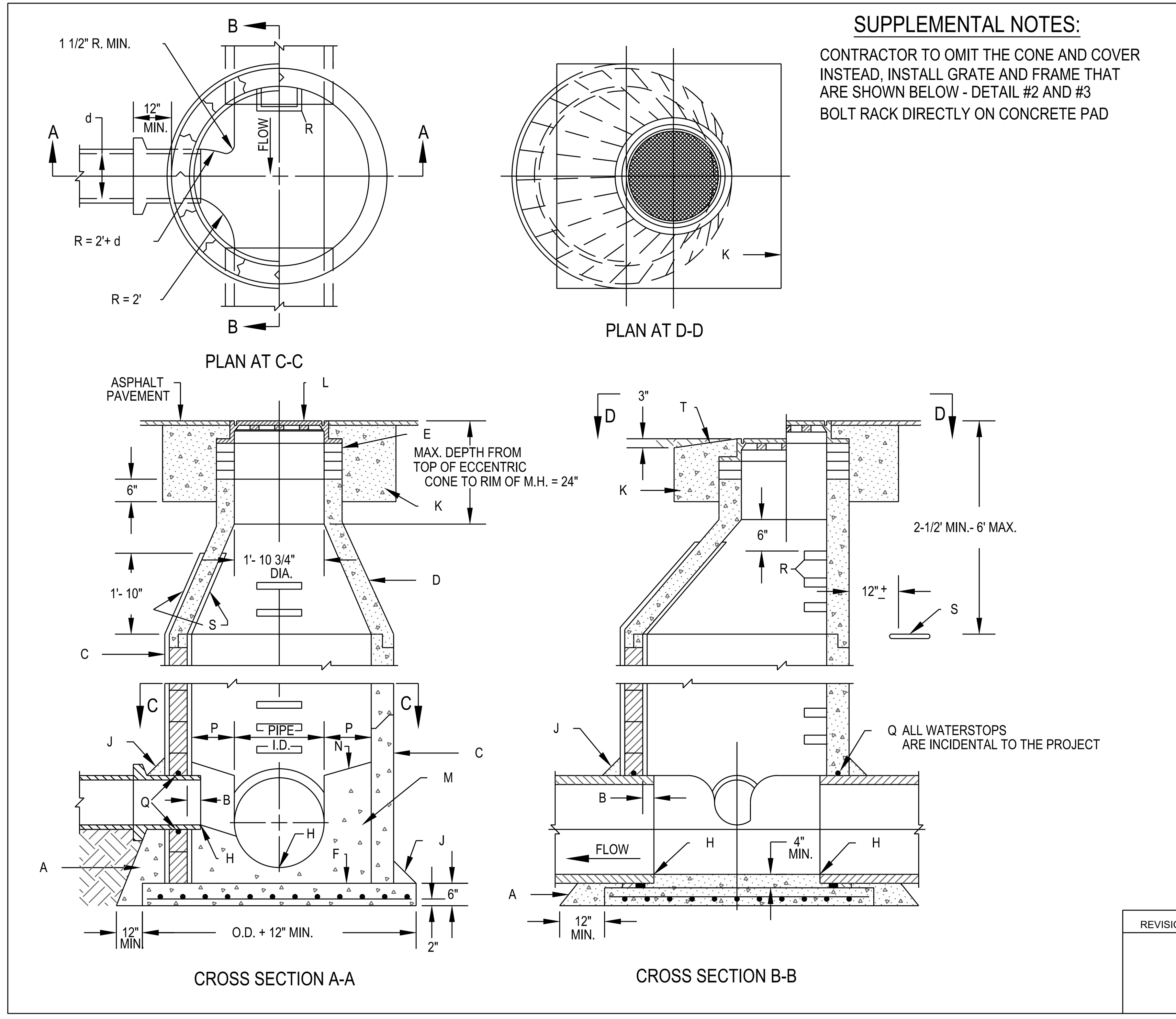
SHEET TITLE:
PLUNGE POOL DETAILS

SUBMITTED FOR:
CONSTRUCTION

SHEET NUMBER:
C-513

DETAIL #1 MANHOLE TYPE E



SUPPLEMENTAL NOTES:

CONTRACTOR TO OMIT THE CONE AND COVER INSTEAD, INSTALL GRATE AND FRAME THAT ARE SHOWN BELOW - DETAIL #2 AND #3 BOLT RACK DIRECTLY ON CONCRETE PAD

GENERAL NOTES:

1. TYPE E M.H. NOT TO BE USED FOR DEPTHS LESS THAN 6' MEASURED FROM INV. TO RIM.
2. M.H. GREATER THAN 18' IN DEPTH SHALL BE OF PRECAST CONC. SECTIONS ONLY.
3. DESIGN APPLIES TO 4' AND 6' I.D. MANHOLES.
4. USE NON-SHRINK GROUT FOR JOINTS, FILLETS & PIPE PENETRATIONS.
5. COMPACT ALL BACKFILL AROUND M.H. TO 95%.
6. POSITION M.H. OPENING OVER THE UPSTREAM SIDE OF MAIN LINE.

CONSTRUCTION NOTES:

A. CONCRETE PIPE SUPPORTS SHALL EXTEND OUTSIDE OF M.H. TO BELL OF FIRST JOINT AND SHALL CRADLE PIPE TO SPRING LINE.

B. PIPE PENETRATION INTO MANHOLE SHALL BE FLUSH TO 2" MAX., MEASURED AT SPRINGLINE OF PIPE.

E. USE MAX. 4 COURSES GR. MS BRICK ON UNPAVED STREET FOR FUTURE ADJ. OF FRAME TO PAVEMENT GRADE. PLASTER INSIDE WITH 1/2" MORTAR.

F. BASE TO BE POURED IN PLACE USING NO. 4 BARS AT 6" O.C. EA. WAY FOR M.H. DEPTH OF 16' OR GREATER. NO. 4 BARS AT 12" O.C. EA. WAY FOR M.H. LESS THAN 16' DEEP.

H. INV. ELEV. OF STUB OR LATERAL AS SHOWN ON PLANS.

J. 6" GROUT FILLET ON UPPER HALF OF PIPE AND AROUND BASE.

K. USE A 5' X 5' CONCRETE PAD IN ALL AREAS.

L. M.H. FRAME AND COVER, SEE THIS DETAIL #2 THIS SHEET

M. CONCRETE FILL, 3000 PSI.

N. SLOPE 1" PER FT. FROM PIPE CROWN.

P. SHELF TO BE 9" WIDE MIN.

Q. APPROVED WATERSTOP TO BE WITH TYPE OF PIPE.

R. STEPS TO BE INSTALLED AS PER SPEC. SECTION 920.4.7.

S. EMD (IN UNPAVED AREAS).

T. IN UNPAVED AREAS SET FRAME TO GRADE AND SLOPE TOP OF PAD.

NM APWA

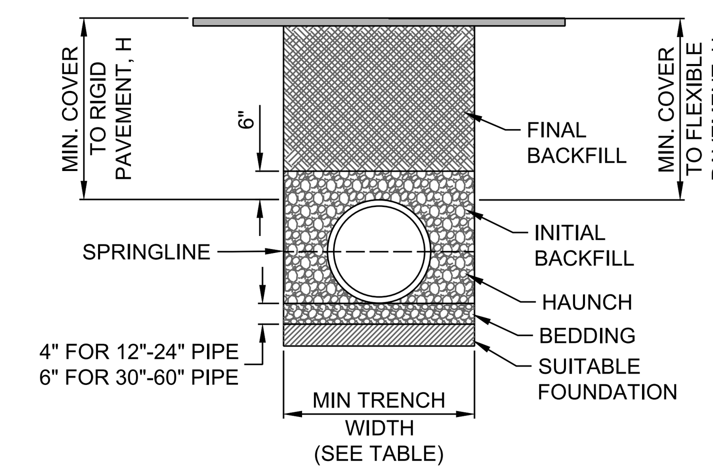
REVISIONS

SEWER
MANHOLE TYPE "E"

DWG. 2102

FEB. 2006

DETAIL #4 TRENCH



NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH D2321, "STANDARD PRACTICE FOR UNDER-GROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWER AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION

2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.

3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER, AS STABILIZED USING A GEOTEXTILE MATERIAL.

4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I OR II. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. COMPACTION SHALL BE SPECIFIED BY THE ENGINEER IN ACCORDANCE WITH TABLE 3 FOR THE APPLICABLE FILL HEIGHTS LISTED. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 12"-24" DIAMETER PIPE (300mm-600mm); 6" (150mm) FOR 30"-60" (750mm-1500mm) DIAMETER PIPE. THE MIDDLE ⅓ BENEATH THE PIPE INVERT SHALL BE LOOSELY PLACED.

5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I OR II IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION. COMPACTION SHALL BE SPECIFIED BY THE ENGINEER IN ACCORDANCE WITH TABLE 3 FOR THE APPLICABLE FILL HEIGHTS LISTED.

6. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" (300mm) FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS; CLASS I OR II MATERIAL COMPACTED TO 90% SPD IS REQUIRED. MINIMUM COVER, H, IS 12" (300mm) UP TO 48" (1200mm) DIAMETER PIPE AND 24" (600mm) OF COVER FOR 60" (1500mm) DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

TABLE 1, RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
12" (300mm)	30" (762mm)
15" (375mm)	34" (864mm)
18" (450mm)	39" (991mm)
24" (600mm)	48" (1219mm)
21" (525mm)	43" (1092mm)
30" (750mm)	56" (1422mm)
36" (900mm)	64" (1626mm)
42" (1050mm)	72" (1829mm)
48" (1200mm)	80" (2032mm)
60" (1500mm)	96" (2438mm)

TABLE 2, MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS

	SURFACE LIVE LOADING CONDITION	
PIPE DIAM.	H-25	HEAVY CONSTRUCTION (75T AXLE LAOD) *
12" - 48" (300mm - 1200mm)	12" (305mm)	48" (1219mm)
60" (1500mm)	24" (610mm)	60" (1524mm)

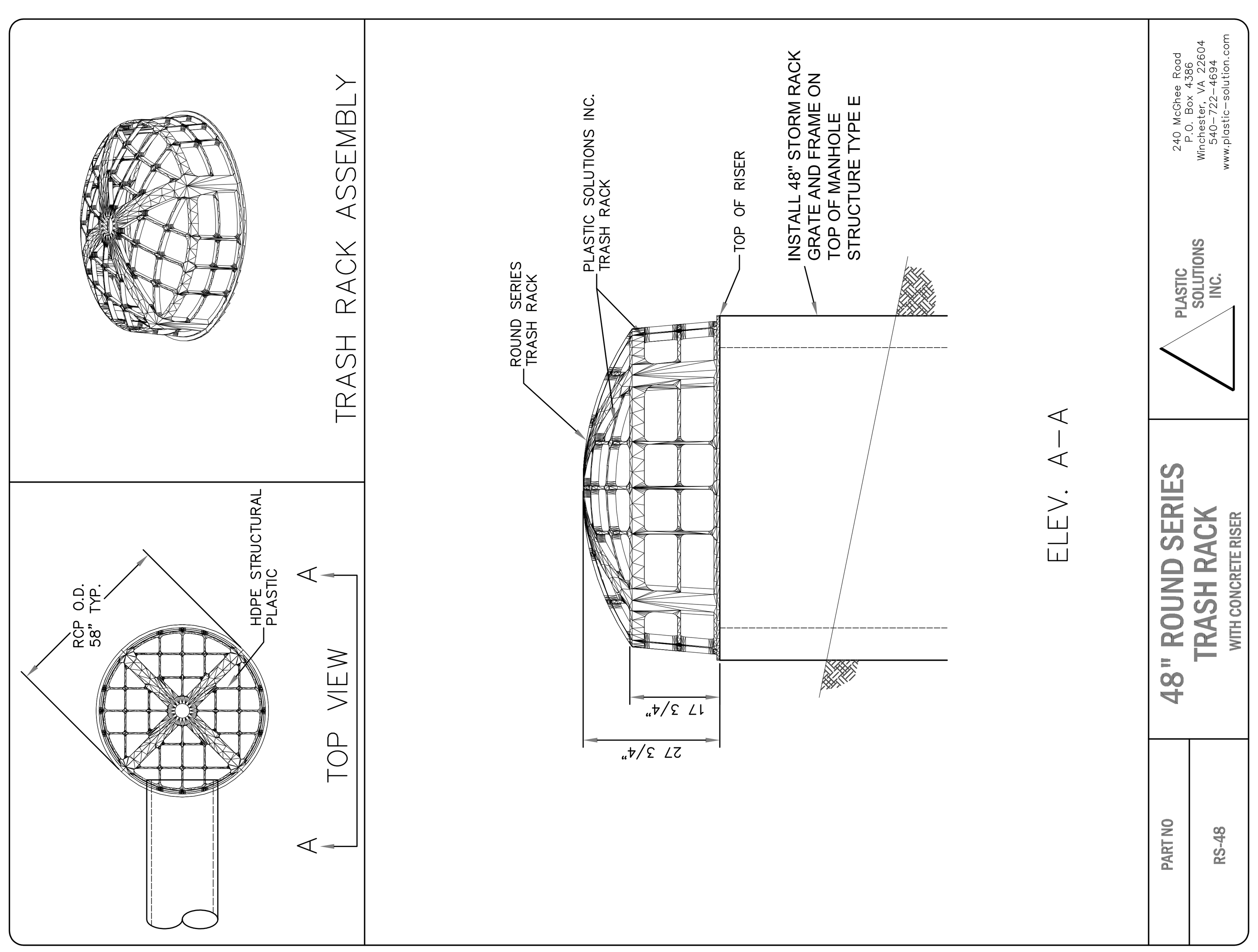
* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER

TABLE 3, MAXIMUM COVER FOR ADS SANITITE HP PIPE, ft (m)

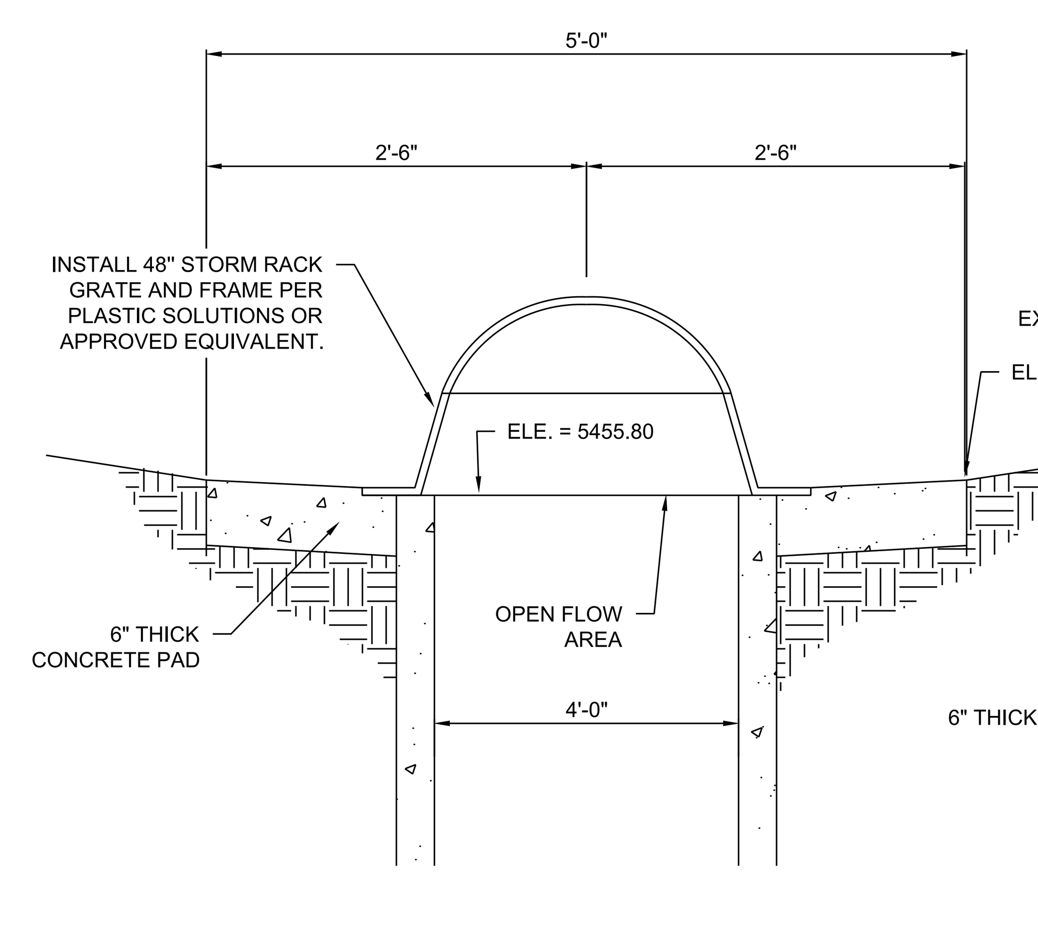
	CLASS I	CLASS II	
PIPE DIAM.	COMPACTED	95%	90%
12" (300mm)	39 (11.9m)	27 (8.2m)	20 (6.1m)
15" (375mm)	42 (12.8m)	29 (8.8m)	21 (6.4m)
18" (450mm)	36 (11.0m)	25 (7.6m)	18 (5.5m)
21" (525mm)	39 (11.9m)	27 (8.2m)	19 (5.8m)
24" (600mm)	31 (9.4m)	22 (6.7m)	16 (4.9m)
30" (750mm)	30 (9.1m)	22 (6.7m)	16 (4.9m)
36" (900mm)	31 (9.4m)	22 (6.7m)	15 (4.6m)
42" (1050mm)	33 (10.1m)	23 (7.0m)	17 (5.2m)
48" (1200mm)	34 (10.4m)	24 (7.3m)	17 (5.2m)
60" (1500mm)	32 (9.8m)	22 (6.7m)	16 (4.9m)

FILL HEIGHT TABLE GENERATED USING AASHTO SECTION 12, LOAD RESISTANCE FACTOR DESIGN (LRFD) PROCEDURE WITH THE FOLLOWING ASSUMPTIONS:
NO HYDROSTATIC PRESSURE, UNIT WEIGHT OF SOIL (γ_s) = 120 PCF

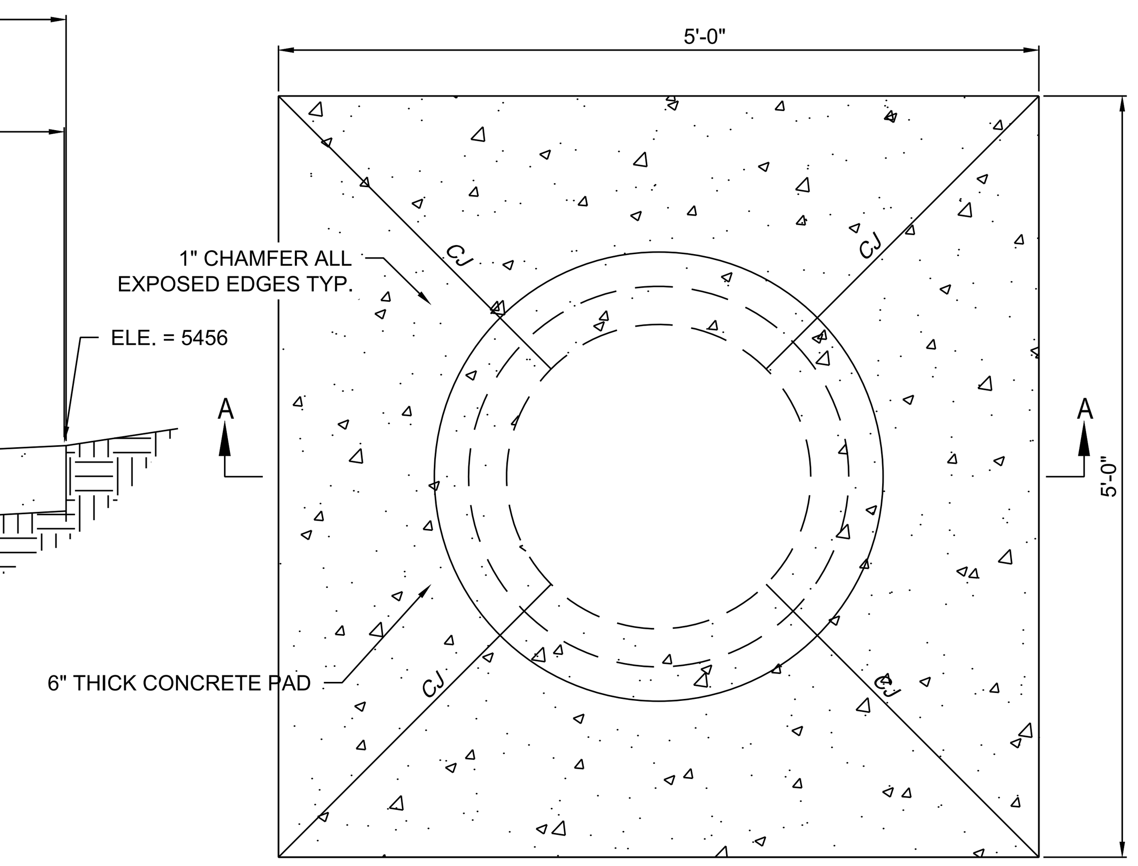
DETAIL #2 GRATE AND FRAME



DETAIL #3 CONCRETE PAD



CROSS SECTION A-A



CONCRETE SLAB DETAIL

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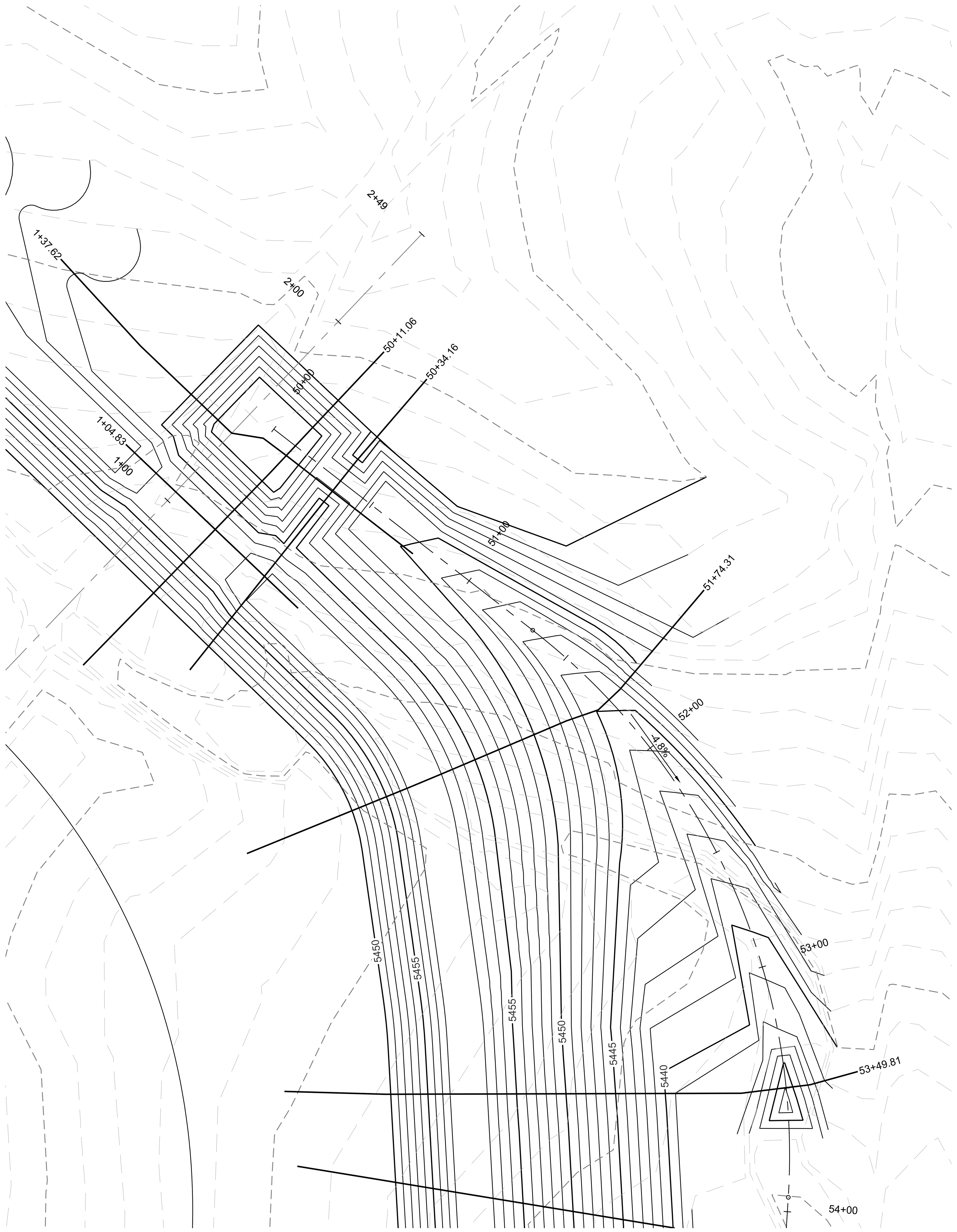
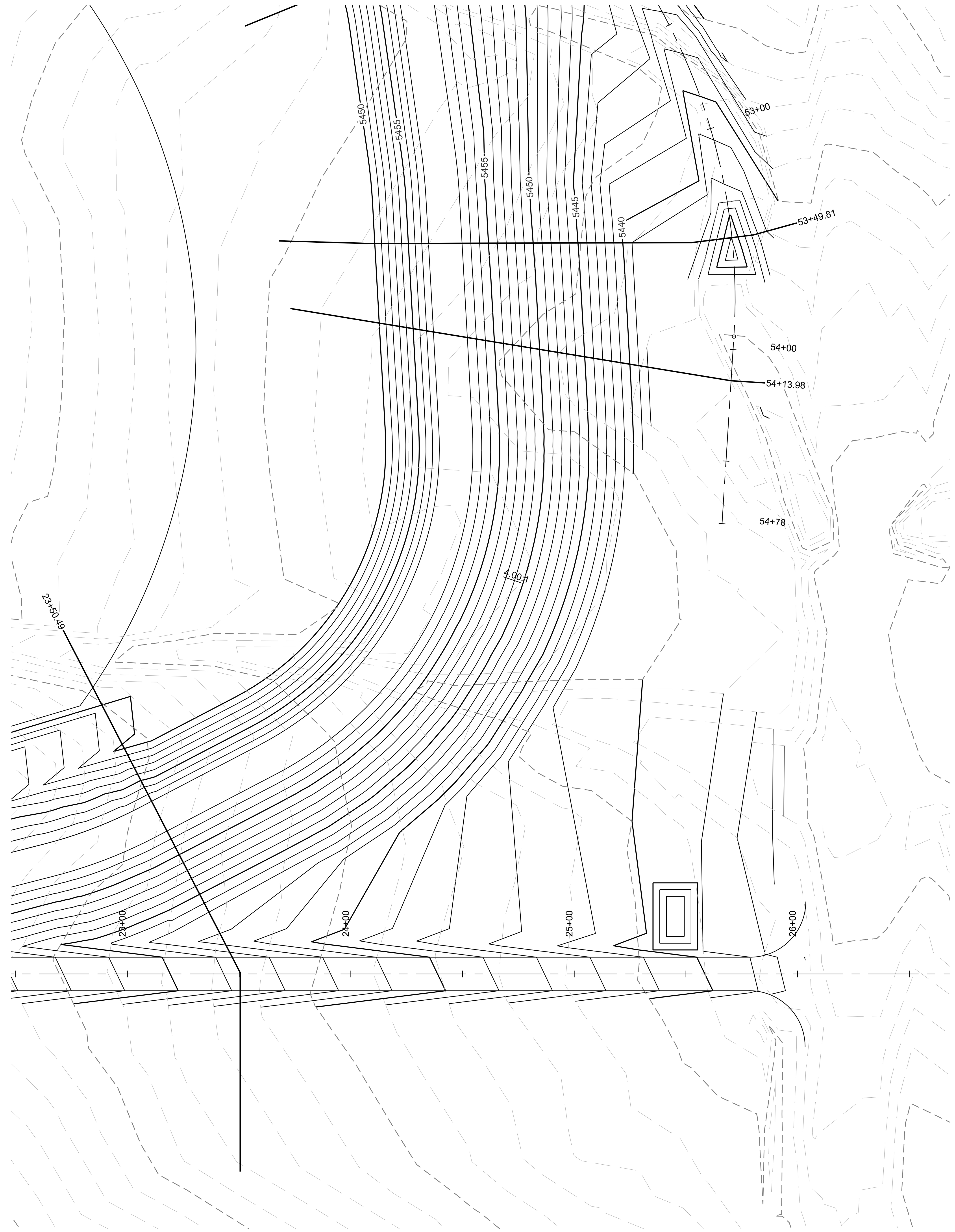
SHEET TITLE:
MANHOLE AND TRENCH DETAILS

SUBMITTED FOR:
CONSTRUCTION

SHEET NUMBER:
C-514





NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-515 CROSS SECTIONS PLAN VIEW FOR INFORMATION ONLY.dwg PLOT DATE: Aug 18, 2021 4:07pm

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CROSS SECTIONS PLAN VIEW FOR INFORMATION ONLY

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CONSTRUCTION

SHEET NUMBER:

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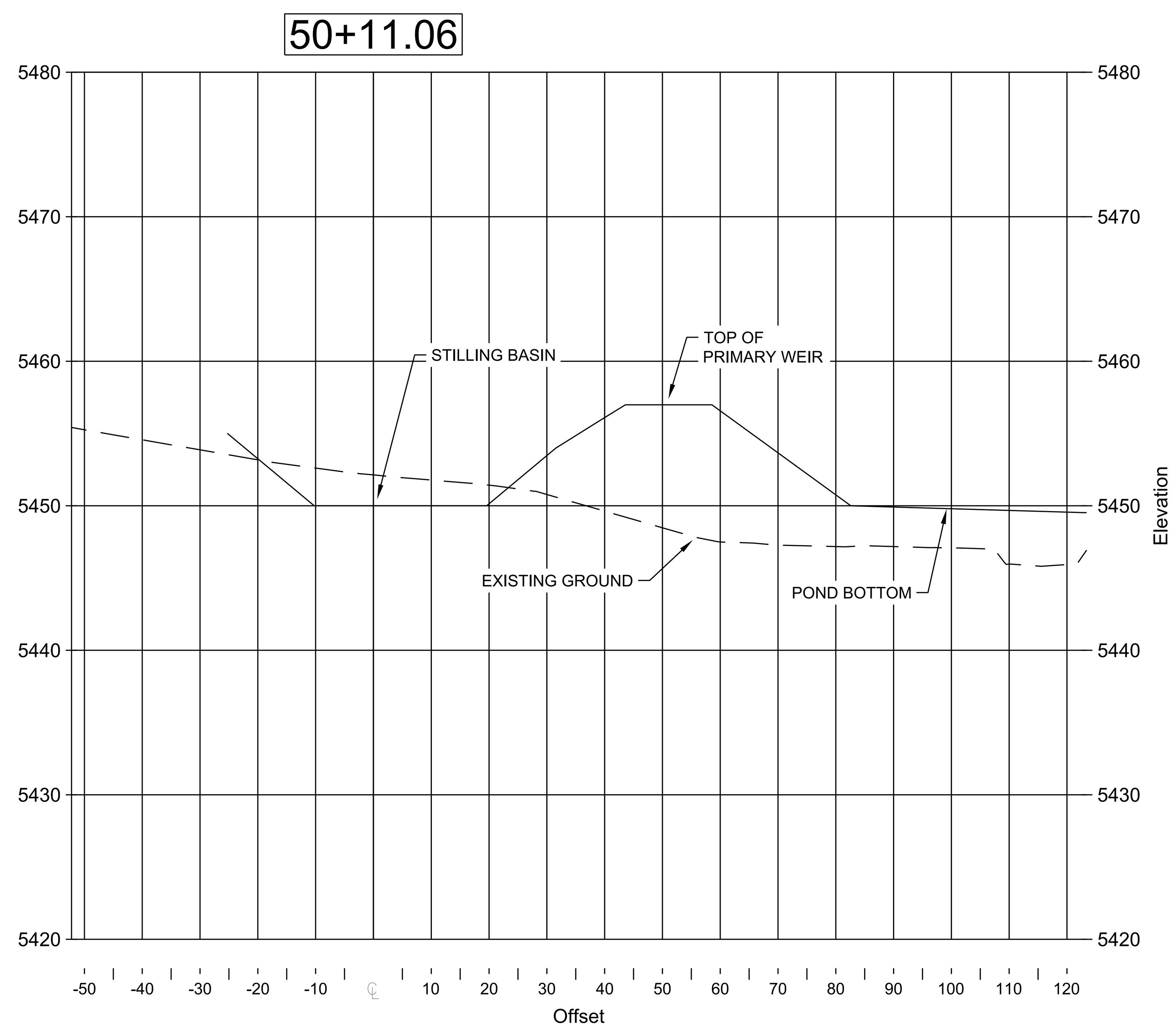
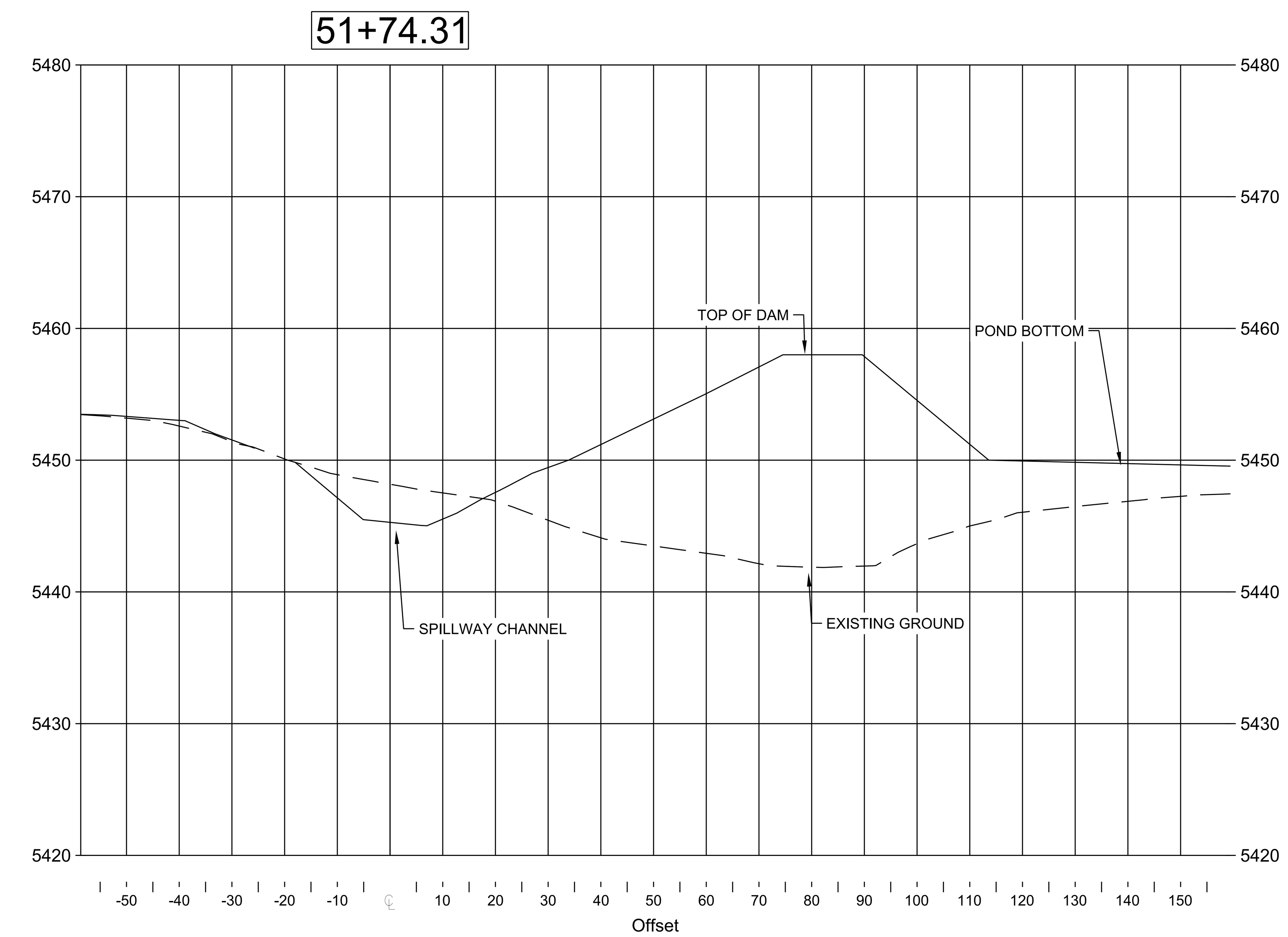


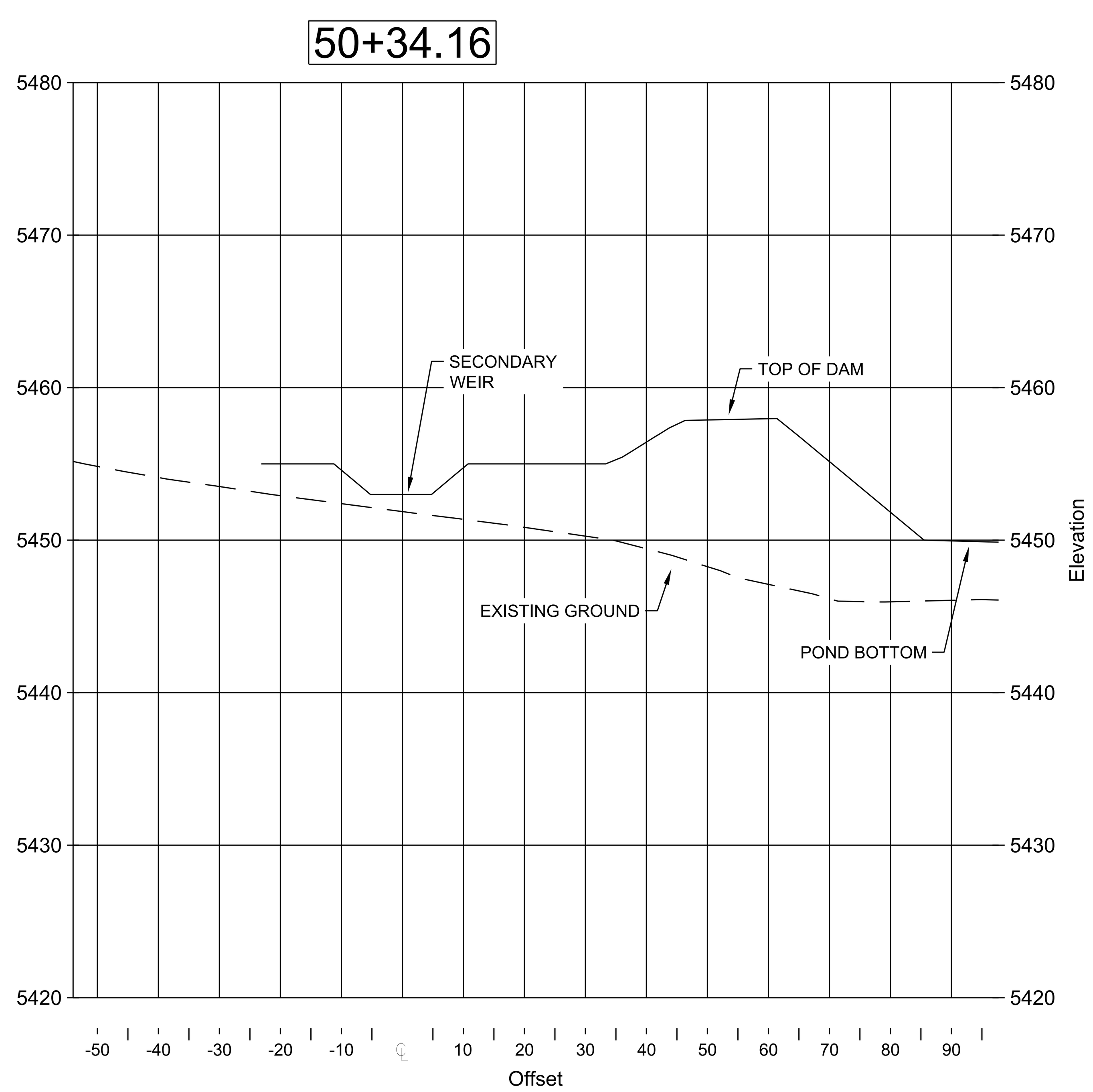
STA 50+11.06 HARLEY'S POND/EMERGENCY SPILLWAY CROSS SECTION

SCALE: 1" = 20'



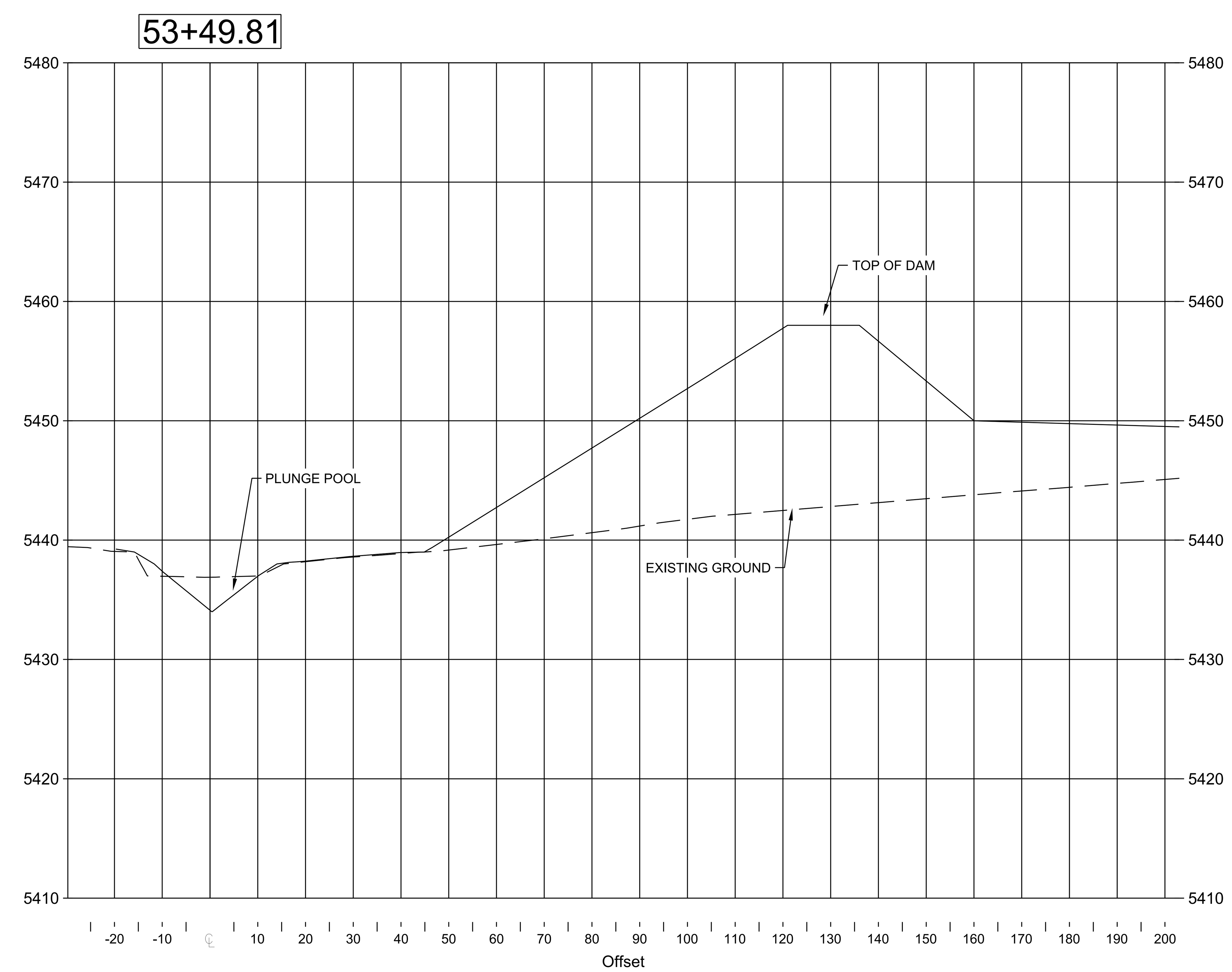
STA 51+74.31 HARLEY'S POND/EMERGENCY SPILLWAY CROSS SECTION

SCALE: 1" = 20'



STA 50+34.16 HARLEY'S POND/EMERGENCY SPILLWAY CROSS SECTION

SCALE: 1" = 20'



STA 53+49.81 HARLEY'S POND/EMERGENCY SPILLWAY CROSS SECTION

SCALE: 1" = 20'

NAME: N:\Projects\W0005 SSCAFCA On Call\W0005.21001 Harley Pond Design\3. DWG\Sheets\C-516 CROSS SECTIONS FOR INFORMATION ONLY.dwg PLOT DATE: Aug 18, 2021 4:08pm

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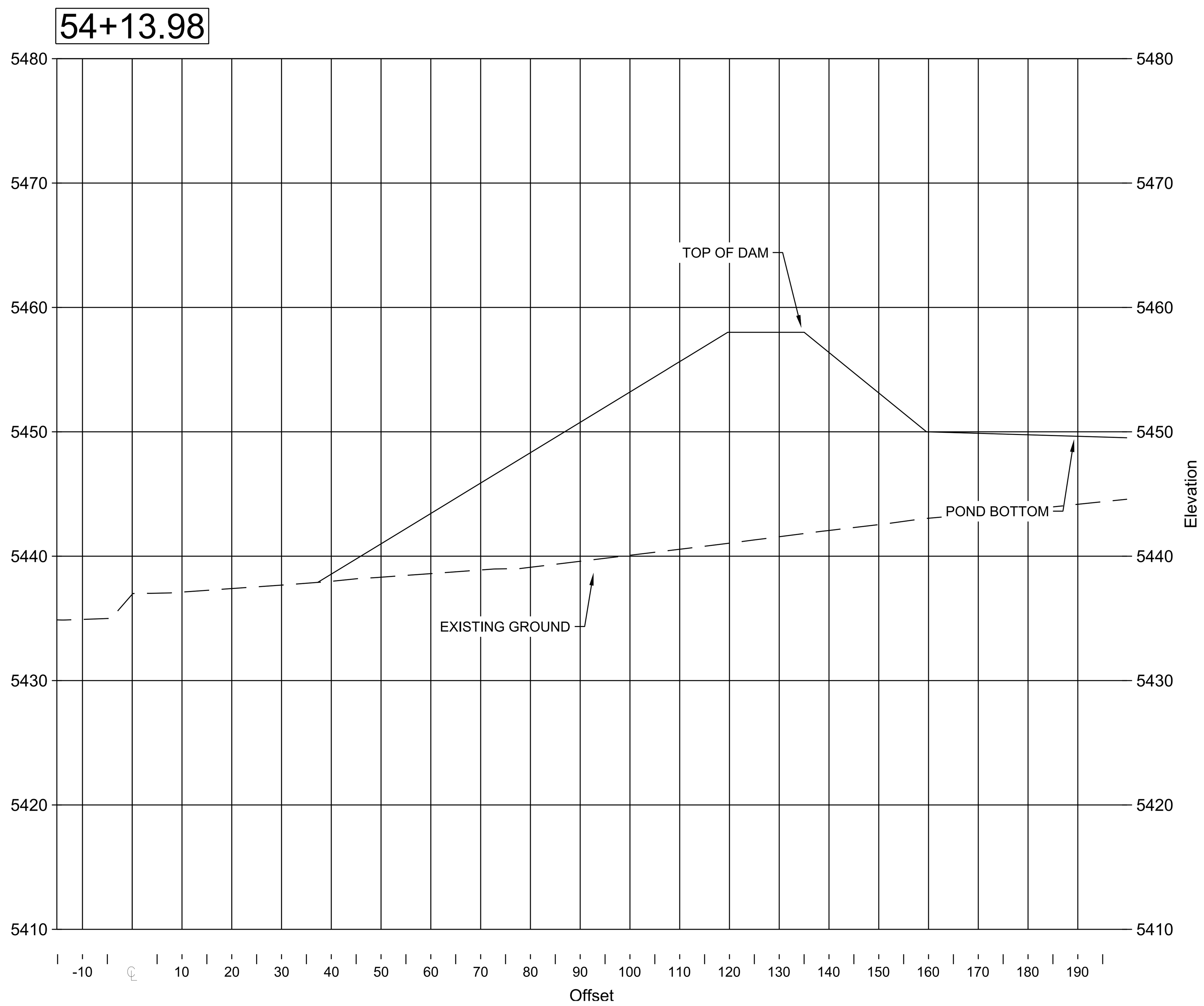
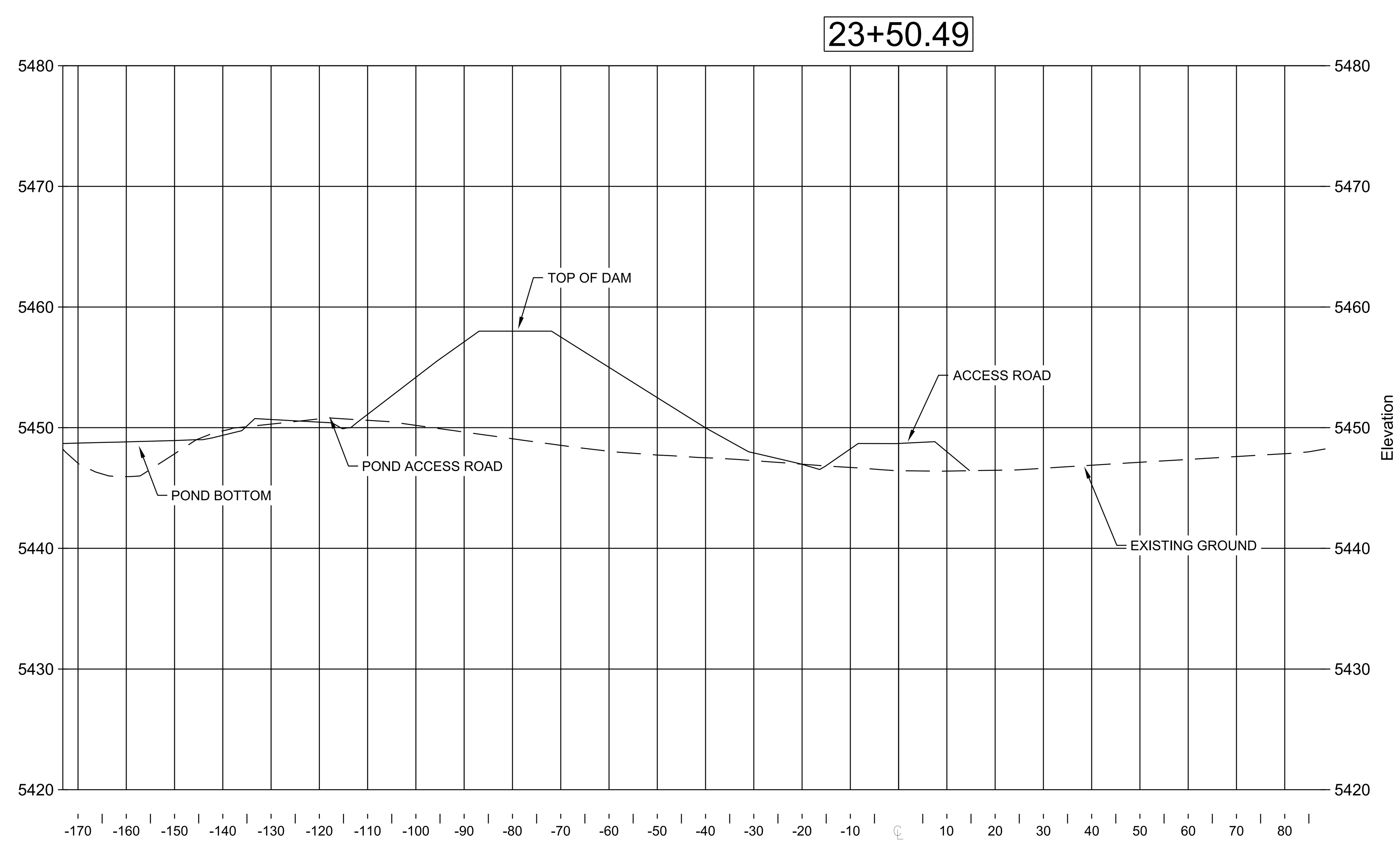
CONSTRUCTION

SHEET NUMBER:
C-516



STA 50+13.98 HARLEY'S POND/EMERGENCY SPILLWAY CROSS SECTION
SCALE: 1" = 20'

STA 1+32.43 EMERGENCY SPILLWAY/STILLING BASIN CROSS SECTION
SCALE: 1" = 20'



STA 23+50.49 HARLEY'S POND/ACCESS ROAD SECTION
SCALE: 1" = 20'

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CROSS SECTIONS FOR INFORMATION ONLY CONT.

SUBMITTED FOR:
CONSTRUCTION

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