

CITY OF BIG RAPIDS MECOSTA COUNTY, MICHIGAN

IN COOPERATION WITH THE

**MICHIGAN DEPARTMENT OF ECONOMIC DEVELOPMENT (MEDC)
AND THE MICHIGAN DEPARTMENT OF NATURAL RESOURCES (MDNR)**

HEMLOCK PARK SPLASH PAD & PLAYGROUND

MDNR LWCF LW21-0061

MEDC CDBG 222001-P6S

NOVEMBER 2023



2960 Lucerne Drive SE
Grand Rapids, MI 49546
P: 616.977.1000
F: 616.977.1005

CITY OF BIG RAPIDS
MECOSTA COUNTY, MICHIGAN

HEMLOCK PARK SPLASH PAD & PLAYGROUND

PROJECT LOCATION



LOCATION MAP

INDEX OF DRAWINGS

DESCRIPTION	SHEET NO.
COVER SHEET	G001
EXISTING CONDITIONS & REMOVALS	G002
PROPOSED SITE PLAN & UTILITIES	C101
PLAYGROUND SITE PLAN & GRADING	C102
SPLASH PAD SITE PLAN & GRADING	C103
HEMLOCK STREET - PLAN & PROFILE	C104
HEMLOCK STREET & TRAIL PLAN	C105
SPLASH PAD DRAIN - PLAN & PROFILE	C106
CROSS SECTIONS & NOTES	C201
DETAILS	C501
DETAILS	C502
DETAILS	C503
SPLASH PAD PUMP STATION DETAILS	D101
ELECTRICAL PLAN	E101
ELECTRICAL DETAILS	E501
ELECTRICAL WIRING DIAGRAMS	E601

U:\Projects\7001-858000\858220 Hemlock Park Splashpad and Playground\Drawings\858220_001_CS.dwg - plotted on 11/17/2023 2:47 PM

ISSUED FOR REBID 11/02/2023 TSR 3
ISSUED FOR BID 9/1/2023 TSR 2



Know what's below.
Call before you dig.

NOVEMBER 2023

FEV PROJECT NO.
858220

G001

BM #39B EL. 889.66'
 MAG SPIKE NE FACE WOOD LP N SIDE DRIVE TO
 HEMLOCK PARK, ±17' W OF DRINKING FOUNTAIN
 (NAVD88 GEOID18 VIA VRS, OPUS & GPS OBSV)



STM & SAN STRUCTURES INFO

EX 8" CULV END 2005
 INV.=878.85

STORM CB 1772
 RIM=886.44
 INV.=883.24(8" NE)
 INV.=883.54(8" SW)
 INV.=883.25(12" NW PER PLAN)

STORM CB 1989
 RIM=888.24
 INV.=884.09(8" NE)

APPROX SAN MH "A"
 PER PLANS
 RIM = 889.94
 INV = 884.91 (24" N)
 INV = 884.81 (24" SE)
 INV = 886.30 (8" W)

EX SAN MH (1318)
 RIM = 896.99
 INV = 890.42 (8" W)
 INV = 886.92 (18" S)
 INV = 886.92 (18" N)
 INV = 893.32 (8" N)

STORM CB 5682
 RIM=885.51
 INV.=884.65(12" NW PER PLAN)
 INV.=884.65(12" SW PER PLAN)
 INV.=884.55(12" SE PER PLAN)

STORM CB 5683
 RIM=885.51
 INV.=884.65(12" NW PER PLAN)
 INV.=884.65(12" SW PER PLAN)
 INV.=884.55(12" SE PER PLAN)

APPROX SAN MH "B"
 PER PLANS
 RIM = 892.25
 INV = 885.28 (24" NW)
 INV = 885.18 (24" S)

EX SAN MH (1322)
 RIM = 893.96
 INV = 887.06 (18" NW)
 INV = 887.01 (18" S)
 INV = 887.21 (6" E)

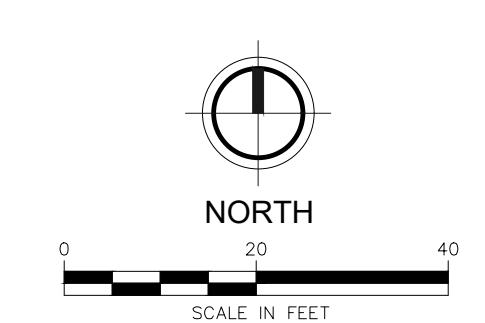
PLANNED STORM CB "C"
 PLAN RIM=890.95
 INV.=886.95(12" S PER PLAN)
 INV.=886.95(12" SE PER PLAN)
 STRUCTURE NOT LOCATED - CASTING NOT VISIBLE.

STORM CB 5645
 RIM=890.69
 INV.=887.19(12" N PER PLAN)

APPROX EX SAN MH (417)
 RIM = 895.36
 INV = 890.36 (18" W)
 INV = 890.26 (18" SE)

EX SAN MH (1321)
 RIM = 894.73
 INV = 887.78 (18" NW)
 INV = 887.48 (18" SE)
 INV = 887.53 (15" N)

EX 8" RCP END 5128
 INV.=890.02 BURIED



REMOVAL LEGEND

- PAVT, REM
- SIDEWALK, REM
- REMOVAL ITEM
- TREE, REM

SESC LEGEND

- PERMANENT / TEMPORARY SEEDING
- SILT FENCE
- INLET PROTECTION FABRIC DROP (PROVIDE AT ALL CATCH BASINS)

NOTE: REFER TO MDT STANDARD PLAN R-96 SERIES FOR KEYING.

MISCELLANEOUS QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	DESCRIPTION
17	SYD	SIDEWALK, REM
14	SYD	PAVT, REM
1	LSUM	SOIL EROSION CONTROL
1	LSUM	SITE GRADING AND EXCAVATION
1	LSUM	MDNR LWCF Sign

EXISTING FEATURES LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	TREE (DECIDUOUS)		CABLE BOX		SURVEY CONTROL POINT
	BUSH		TELEPHONE RISER		BENCHMARK
	TREE (CONIFEROUS)		TELEPHONE MANHOLE		SECTION CORNER
	DEAD TREE		TELEPHONE HANDHOLE		BOUNDARY LINE
	STUMP		ELECTRICAL RISER		PROPERTY LINE
	MANHOLE		ELECTRICAL MANHOLE		WATERMAIN
	SANITARY CLEANOUT		ELECTRICAL HANDHOLE		SANITARY SEWER
	RD. CATCH BASIN		POWER POLE		STORM SEWER
	SQ. CATCH BASIN		LIGHT POLE		CULVERT (21" AND UNDER)
	CULVERT END		GUY POLE		CULVERT (24" AND UP)
	FIRE HYDRANT		GUY ANCHOR		CABLE EX.
	WATER VALVE		PED CROSSING SIGNAL		TELEPHONE
	CURB STOP & BOX		YARD LIGHT		ELECTRIC
	WELL		SIGN		GAS
	WATER MANHOLE		MAILBOX		OVERHEAD LINES
	WATER METER		POST		GUARDRAIL
	SOIL BORING		FOUND CONC. MONUMENT		FENCE
	MONITORING WELL		FOUND IRON ROD		WOODLINE
	GAS VALVE		SET IRON ROD		BUSH/HEDGE ROW
	GAS RISER				

NOTE: ALL ITEMS LISTED ON THE LEGEND MAY NOT BE PRESENT ON DRAWING.

U:\Projects\2021-2022\858220_Hemlock Park Splashpad and Playground\CAD\Plan\858220_G002_RMV.dwg - printed on 11/27/2023 2:47 PM



2960 Lucerne Drive SE
 Grand Rapids, MI 49546
 P: 616.977.1000
 F: 616.977.1005

ISSUED FOR REBID 11/22/2023 TSR 5
 ISSUED FOR BID 9/12/2023 TSR 2
 AGENCY REVIEW 5/24/2023 TSR 1

REVISION:

CITY OF BIG RAPIDS
 MECOSTA COUNTY, MICHIGAN

HEMLOCK PARK SPLASH PAD & PLAYGROUND

EXISTING CONDITIONS / REMOVALS

DESIGN TEAM: PROJ. MGR.: TSR
 DESIGNED BY: RWT
 DRAWN BY: PAD
 CHECK BY:

DRAWING INFORMATION:
 858220_G002_REM
 110323 DWG

NOVEMBER 2023
 F&V PROJECT NO.
 858220

G002

BM #39B EL. 889.66'
 MAG SPIKE NE FACE WOOD LP N SIDE DRIVE TO
 HEMLOCK PARK, ±17' W OF DRINKING FOUNTAIN
 (NAVD88 GEOID18 VIA VRS, OPUS & GPS OBSV)

200 FT - UNDERDRAIN, SUBBASE,
 4 inch W/ NYLON SOCK

2 EA - RELOCATE PICNIC TABLES 'A'

80 FT - RELOCATE FENCE

5 - 12 MAIN PLAYGROUND STRUCTURE
 (INCLUDED IN PLAYGROUND EQUIPT & SURFACE)

SIDEWALK, CONC, 4 inch
 (6' WIDTH)

4 EA - BENCH, SURFACE MOUNTED
 (TYP 4 LOCATIONS)

PLAY AREA CONCRETE CURB EDGE

SWING AREA
 (INCLUDED IN PLAYGROUND
 EQUIPT & SURFACE)

MITCHELL CREEK

2 EA - RELOCATE BENCH

IRRIGATION SERVICE CONNECTION, SEE C503 FOR DETAILS (INCLUDED IN COST OF LANDSCAPING)

142 FT - 1 1/2" IRRIGATION PIPE

LOUNGE SEATING (SIDEWALK, CONC, 4 inch)

1300 SFT - LANDSCAPING AREA W/ METAL EDGING, LANDSCAPERS TO CONNECT IRRIGATION DRIP
 SYSTEM OR MICRO SPRAY HEADS TO IRRIGATION PIPE (INCLUDED IN COST OF LANDSCAPING).

100 YR FLOOD PLAIN
 PER FEMA MUSKEGON FLOODPLAIN MAPPER

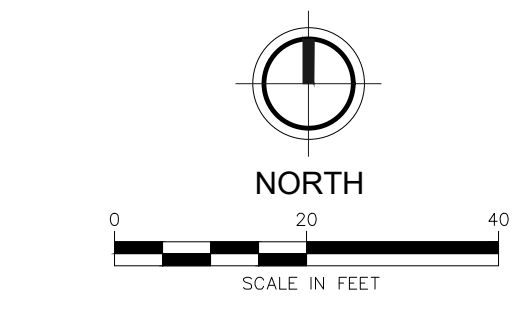
CONTRACTOR TO INSTALL PROPOSED SPLASH PAD
 DRAIN TO WITHIN 15 FT OF SPLASH PAD FOR SPLASH PAD
 INSTALLER CONNECTION, SEE SHEET C106 FOR DETAILS

12" DRAINAGE HOLE

56 FT - SEAT WALL

PROPOSED SPLASH PAD

MUSKEGON RIVER



LEGEND

- PROPOSED RUBBER SURFACE
- PROPOSED HMA PAVEMENT
- SPLASH PAD REINFORCED CONCRETE, 6 inch
- PROPOSED CONCRETE PAVEMENT
- PROPOSED PLAY AREA CONC CURB EDGE
- PROPOSED AREA LIGHT
- PROPOSED UNDERDRAIN, SUBBASE, 4 inch
- PROPOSED PVC PIPE, 6 inch

SPLASH PAD COORDINATION:

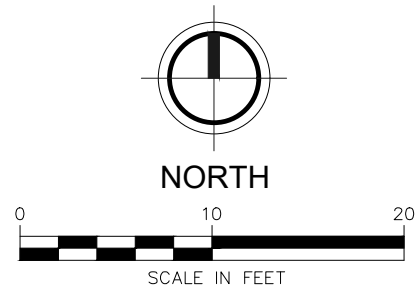
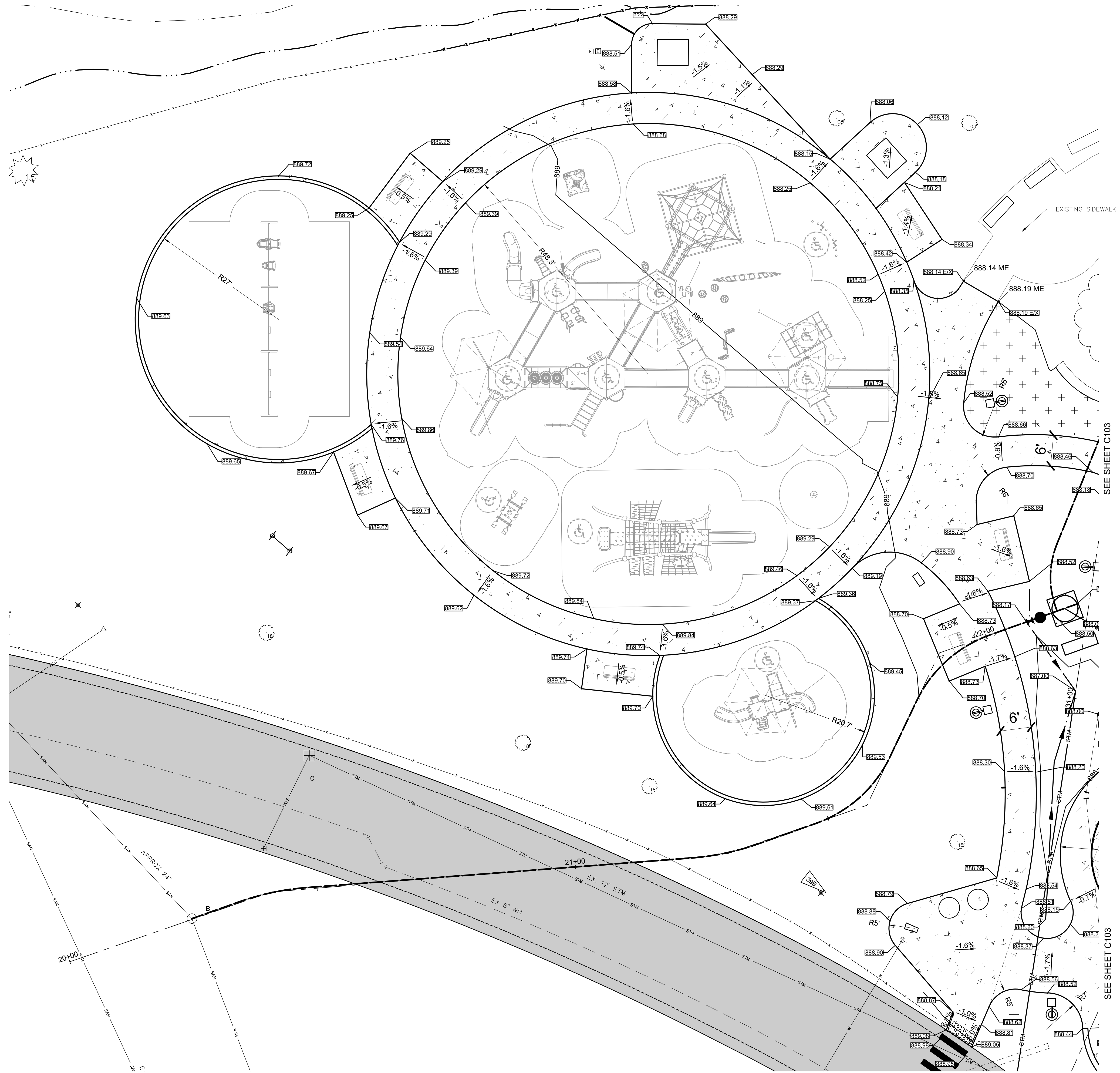
1. GENERAL CONTRACTOR TO EXCAVATE AND GRADE TO WITHIN 16 INCHES OF FINAL GRADE. MEASURED AND PAID AS "SITE EXCAVATION AND GRADING."
2. INSTALL ELECTRICAL SERVICE, 4 INCH WATER SERVICE, AND 6 INCH DRAIN LINE TO WITHIN 15 FEET OF SPLASH PAD FOR SPLASH PAD INSTALLER CONNECTION.
3. WHEN ROUGH GRADING AND STUBBING OF UTILITIES IS COMPLETE, CERTIFIED SPLASH PAD INSTALLER WILL INSTALL PLUMBING INCLUDING CONNECTION TO DRAIN AND WATER MAIN, ELECTRICAL INCLUDING LED LIGHTS AND SPLASH PAD CONTROL PANEL. (PAID AS SPLASH PAD EQUIPMENT & INSTALLATION)
4. GENERAL CONTRACTOR WILL COMPLETE FINAL GRADING INCLUDING PLACEMENT OF SAND SUBBASE AND INSTALL SPLASH PAD CONCRETE (PAID AS "SUBBASE, CIP" AND "SPLASH PAD REINFORCED CONCRETE, 6 INCH")
5. CERTIFIED SPLASH PAD INSTALLER WILL INSTALL WATER FEATURES, PERFORM SPLASH PAD STARTUP, AND PROVIDE OWNER TRAINING (PAID AS SPLASH PAD EQUIPMENT & INSTALLATION)

MISCELLANEOUS QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	DESCRIPTION
1	LSUM	SPLASH PAD EQUIPMENT AND INSTALLATION
1	LSUM	PLAYGROUND EQUIPT & SURFACE
1	LSUM	OUTDOOR FIREPLACE
800	FT	PLAY AREA CONCRETE CURB EDGE
9200	SFT	SIDEWALK, CONC, 4 inch
4600	SYD	TURF RESTORATION
615	CYD	SUBBASE, CIP
1300	SYD	21AA CRUSHED LIMESTONE, CIP
400	SYD	SPLASH PAD REINFORCED CONCRETE, 6 inch

PLANTING QUANTITIES (MISC)			
QUANTITY	UNIT	BOTANICAL NAME	COMMON NAME
2	EA	OSTRYA VIRGINIANA, 2 inch	AMERICAN HOPHORNBEAM
2	EA	ACER RUBRUM, 2 inch	RED MAPLE
2	EA	ACER X 'FREEMANII', 2 inch	FREEMANII MAPLE
2	EA	LIRIODENDRON TULIPIFERA, 2 inch	TULIP TREE

NOTE: CONTRACTOR SHALL PLANT TREE SPECIES AT LOCATIONS SELECTED BY THE CITY.
 ALL SITE PREPARATION AND MATERIALS REQUIRED FOR PLANTING ARE INCLUDED IN THE COST OF SPECIES. SEE TREE PLANTING DETAIL SHEET C501.

U:\Projects\2023-24\858220_Hemlock Park_Splashpad and Playground\CAD\Plan\858220_C101_FULL_SIT.Plan - plotter on 11/27/2023 2:47 PM



LEGEND

- PROPOSED PIP RUBBER SURFACE
- PROPOSED HMA PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- PROPOSED PLAY AREA CONC CURB EDGE
- PROPOSED AREA LIGHT
- PROPOSED UNDERDRAIN

LEGEND

- PROP. DETECTABLE WARNING SURFACE
- FLOW DIRECTION
- EMBANKMENT LIMITS (1:3 MAX)
- PROP. SPOT ELEVATION
- EX. SPOT ELEVATION
- PROP. LOW POINT ELEV.
- PROP. HIGH POINT ELEV.
- EDGE OF PAVED ROAD
- PROP. CATCH BASIN RIM ELEV.
- MATCH EXIST. SIDEWALK / PAVEMENT / CURB ELEV.
- TOW

ISSUED FOR REBID	11/22/2023	TSR	3
ISSUED FOR BID	9/17/2023	TSR	2
AGENCY REVIEW	5/24/2023	TSR	1

REVISION:

**CITY OF BIG RAPIDS
 MECOSTA COUNTY, MICHIGAN
 HEMLOCK PARK SPLASH PAD & PLAYGROUND
 PLAYGROUND SITE PLAN & GRADING**

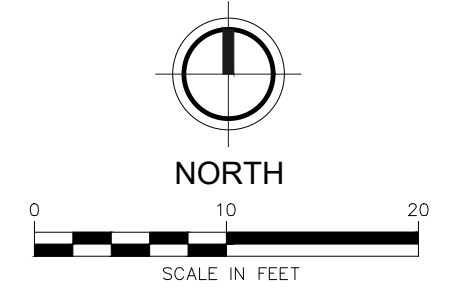
DESIGN TEAM:	PROJ MGR:	XXX
	DESIGNED BY:	XXX
	DRAWN BY:	XXX
	CHECK BY:	

DRAWING INFORMATION:
 858220_C102_PLAYGRND
 05/12/23 pdt/td

NOVEMBER 2023
 F&V PROJECT NO.
 858220

U:\Projects\2021-2022\858220_Hemlock Park Splashpad and Playground\Cadd\Plan\858220_C102_PAV\0510.dwg - plotted on 11/17/2023 2:47 PM

U:\Projects\2021-2022\858220_Hemlock Park Splashpad and Playground\Drawings\858220_C103_SPLHPAD.dwg - plotted on 11/2/2023 2:44 PM



LEGEND

- PROPOSED PIP RUBBER SURFACE
- PROPOSED HMA PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- PROPOSED PLAY AREA CONC CURB EDGE
- PROPOSED AREA LIGHT
- PROPOSED PVC PIPE
- PROPOSED HMA VALLEY GUTTER

LEGEND

- PROP. DETECTABLE WARNING SURFACE
- FLOW DIRECTION
- EMBANKMENT LIMITS (1:3 MAX)
- PROP. SPOT ELEVATION
- EX. SPOT ELEVATION
- PROP. HIGH POINT ELEV.
- EDGE OF PAVED ROAD
- PROP. CATCH BASIN RIM ELEV.
- MATCH EXIST. SIDEWALK / PAVEMENT / CURB EDGE.
- TOP OF WALL

FLEIS & VANDENBRINK
DESIGN. BUILD. OPERATE.

2960 Lucerne Drive SE
Grand Rapids, MI 49546
P: 616.977.1000
F: 616.977.1005

REVISION:

1	ISSUED FOR REBID	11/02/2023	TSR
2	ISSUED FOR BID	9/12/2023	TSR
3	AGENCY REVIEW	5/24/2023	TSR

CITY OF BIG RAPIDS
MECOSTA COUNTY, MICHIGAN

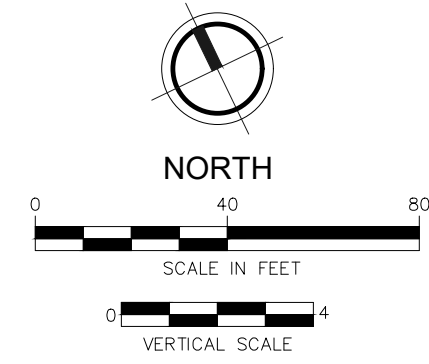
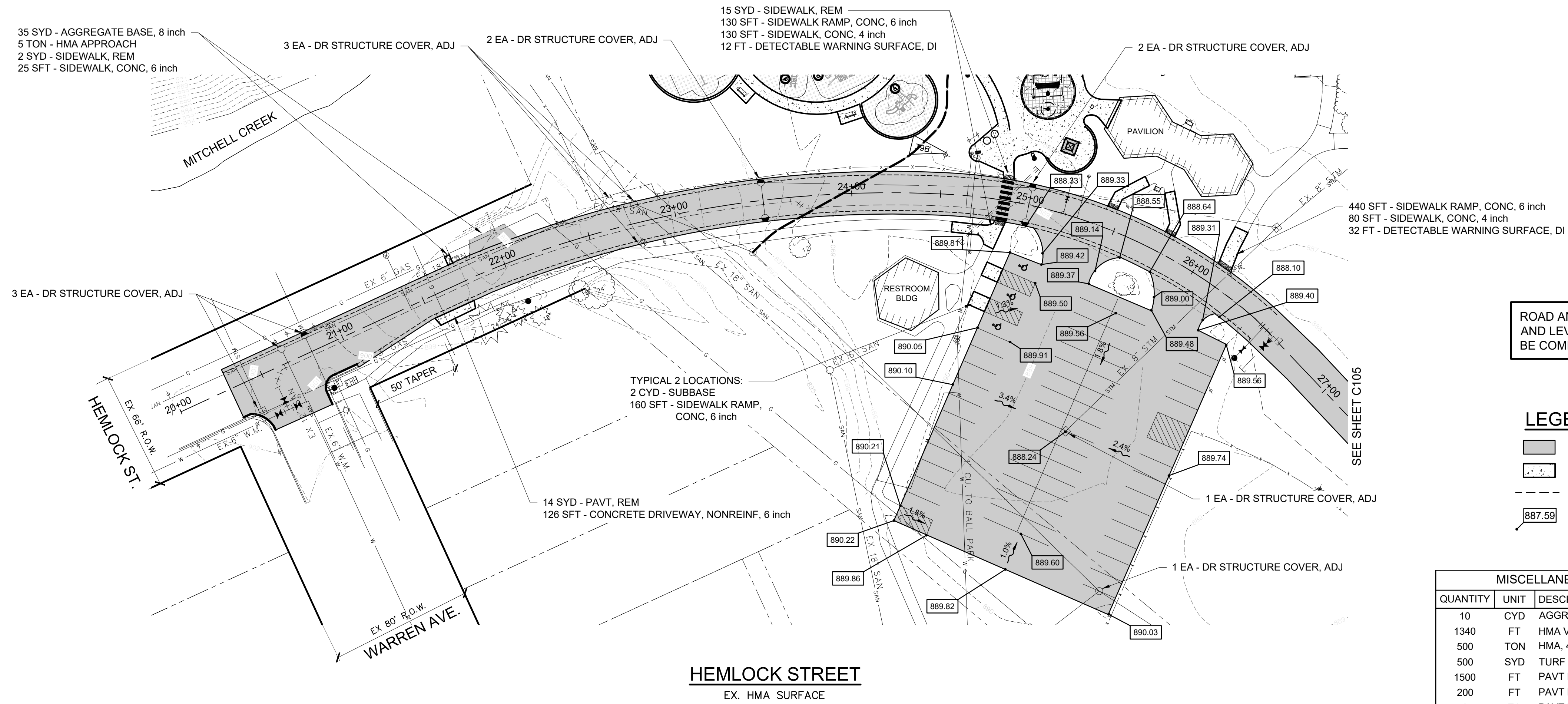
HEMLOCK PARK SPLASH PAD & PLAYGROUND
SPLASH PAD SITE PLAN & GRADING

DESIGN TEAM:	PROJ MGR: XXX
	DESIGNED BY: XXX
	DRAWN BY: XXX
	CHECK BY:

DRAWING INFORMATION:
858220_C103_SPLHPAD
110323 bank

NOVEMBER 2023
F&V PROJECT NO.
858220

BM #39B EL. 889.66'
 MAG SPIKE NE FACE WOOD LP N SIDE DRIVE TO
 HEMLOCK PARK, ±17' W OF DRINKING FOUNTAIN
 (NAVD88 GEOID18 VIA VRS, OPUS & GPS OBSV)

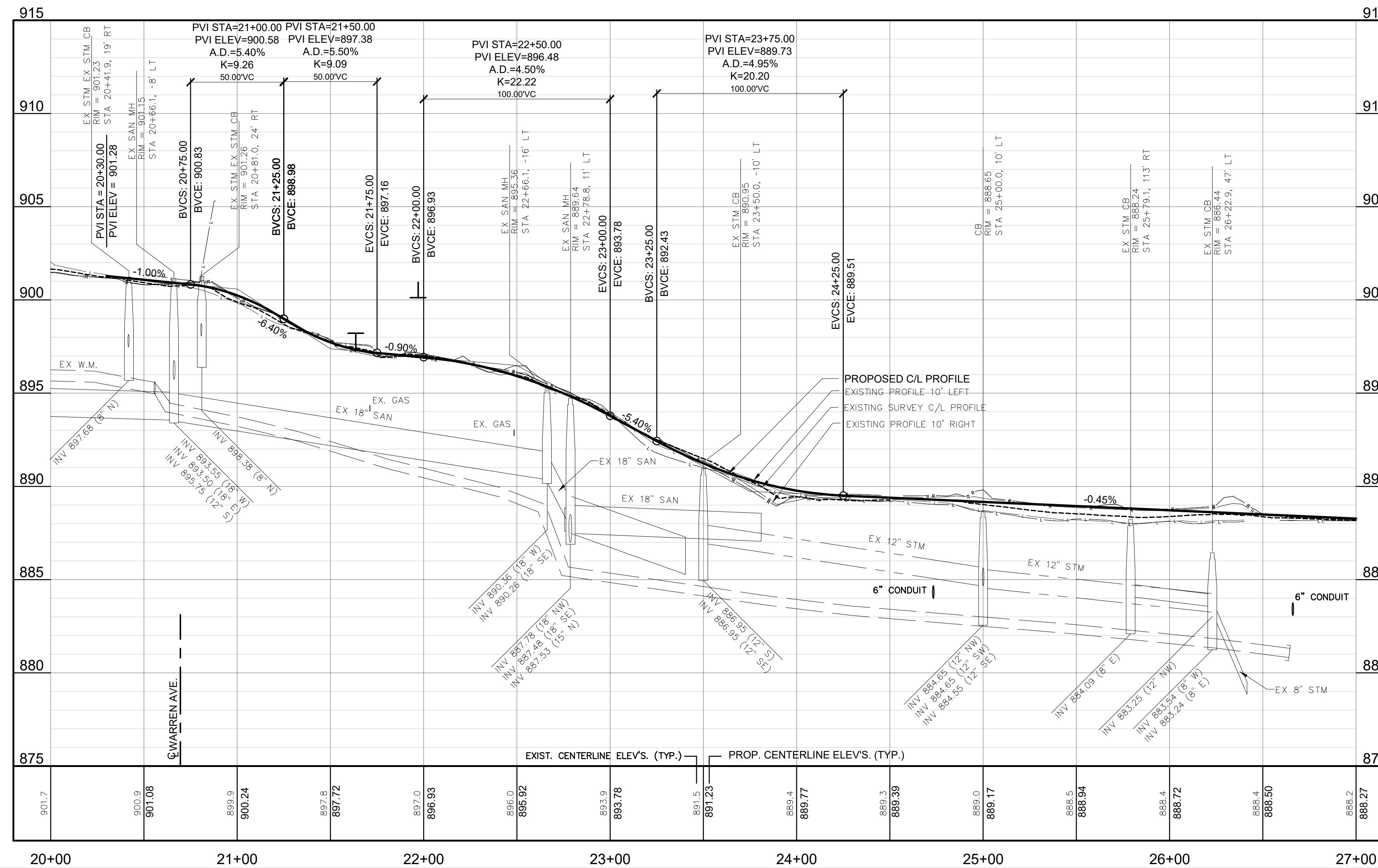


ROAD AND PARKING LOT GRADING
 AND LEVELING COURSE PAVING TO
 BE COMPLETED BY OTHERS

LEGEND

- PROPOSED HMA PAVEMENT
- PROPOSED CONCRETE
- HMA VALLEY GUTTER
- PROP. SPOT ELEVATION

MISCELLANEOUS QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	DESCRIPTION
10	CYD	AGGREGATE BASE, LM
1340	FT	HMA VALLEY GUTTER
500	TON	HMA, 4EL
500	SYD	TURF RESTORATION
1500	FT	PAVT MRKG, WATERBORNE FOR PARKING LOT, WHITE
200	FT	PAVT MRKG, WATERBORNE FOR PARKING LOT, BLUE
3	EA	PAVT MRKG, WATERBORNE, ACCESSIBLE SYM
80	FT	PAVT MRKG, WATERBORNE, 12 inch, CROSSWALK



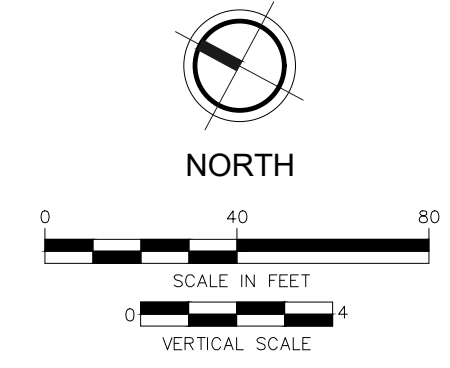
FLEIS & VANDENBRINK
 DESIGN, BUILD, OPERATE
 2960 Lucerne Drive SE
 Grand Rapids, MI 49546
 P: 616.977.1000
 F: 616.977.1005
 ISSUED FOR REBID 11/13/2023 TSR
 ISSUED FOR BID 9/11/2023 TSR
 AGENCY REVIEW 6/24/2023 TSR

REVISION:
CITY OF BIG RAPIDS
 MECOSTA COUNTY, MICHIGAN
HEMLOCK PARK SPLASH PAD & PLAYGROUND
HEMLOCK STREET - PLAN & PROFILE
 DESIGN TEAM: PROJ MGR: RWS
 DESIGNED BY: RWS
 DRAWN BY: PAD
 CHECKED BY:
 DRAWING INFORMATION:
 88220_C104_P&P
 110323 bank
 NOVEMBER 2023
 PAV PROJECT NO:
 858220

H:\Projects\2021-88220\88220 Hemlock Park Splashpad and Playground\Drawings\C104_P&P.dwg - plot.dwg on 11/17/2023 2:48 PM

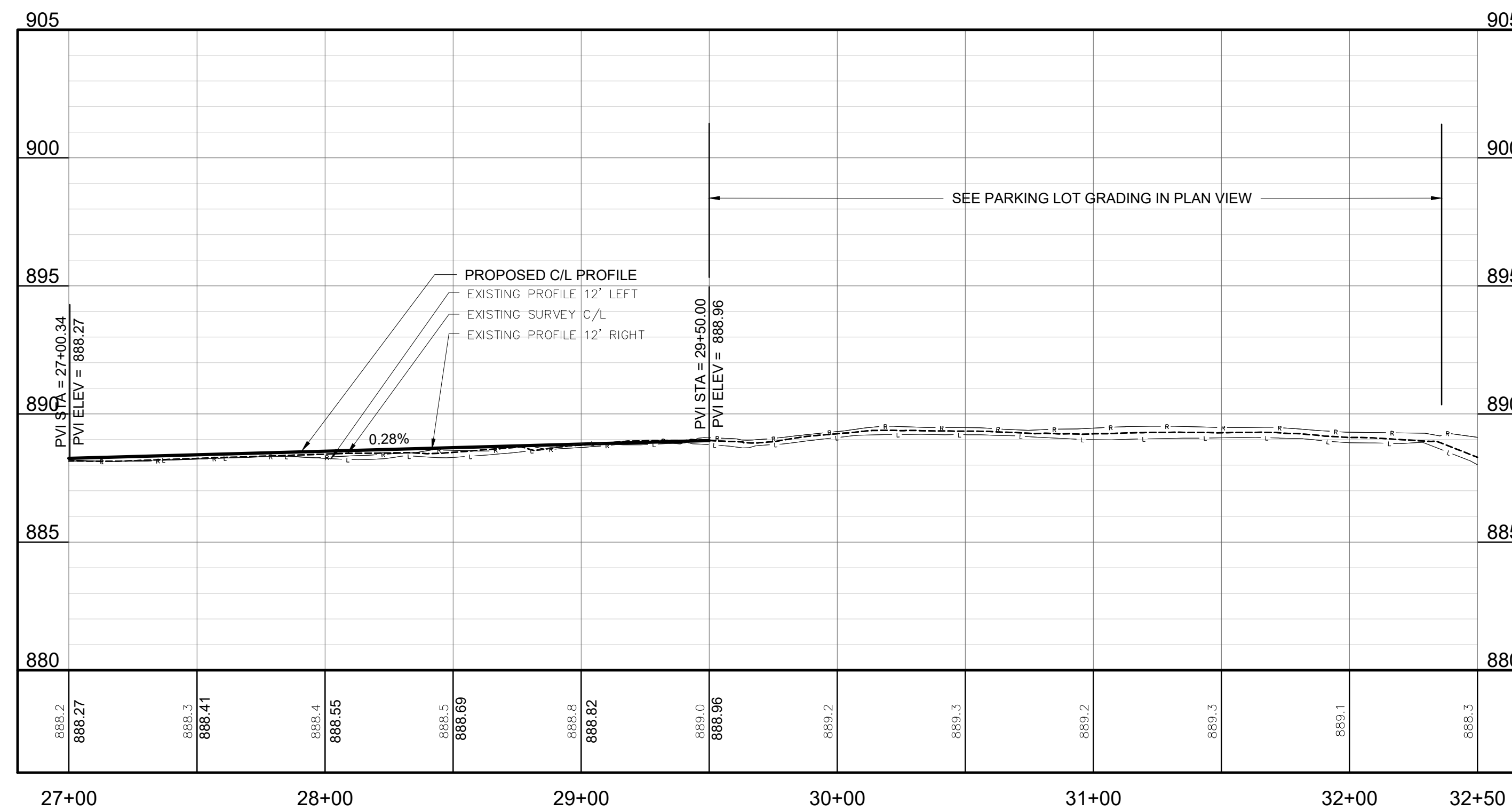
C104

BM #39A EL. 892.56'
 MAG SPIKE S FACE PP SW SIDE TENNIS COURTS,
 ±24' S OF SW CORNER COURTS
 (NAVD88 GEOD18 VIA VRS, OPUS & GPS OBSV)



HEMLOCK STREET & TRAIL PLAN
 EX. MIXED SURFACE

ALL WORK SHOWN ON THIS SHEET
 TO BE COMPLETED BY OTHERS



LEGEND

- PROPOSED HMA PAVEMENT
- PROP. SPOT ELEVATION

MISCELLANEOUS QUANTITIES THIS SHEET (BY OTHERS)		
QUANTITY	UNIT	DESCRIPTION
3600	SYD	ROADWAY GRADING
30	CYD	AGGREGATE BASE, LM
610	TON	HMA, 4EL
800	SYD	TURF RESTORATION
100	SYD	MULCH BLANKET



2960 Lucerne Drive SE
 Grand Rapids, MI 49546
 P: 616.977.1000
 F: 616.977.1005

REVISION	DATE	BY	DESCRIPTION
1	11/13/2023	TSR	ISSUED FOR REBID
2	01/12/2023	TSR	ISSUED FOR BID
3	02/24/2023	TSR	AGENCY REVIEW

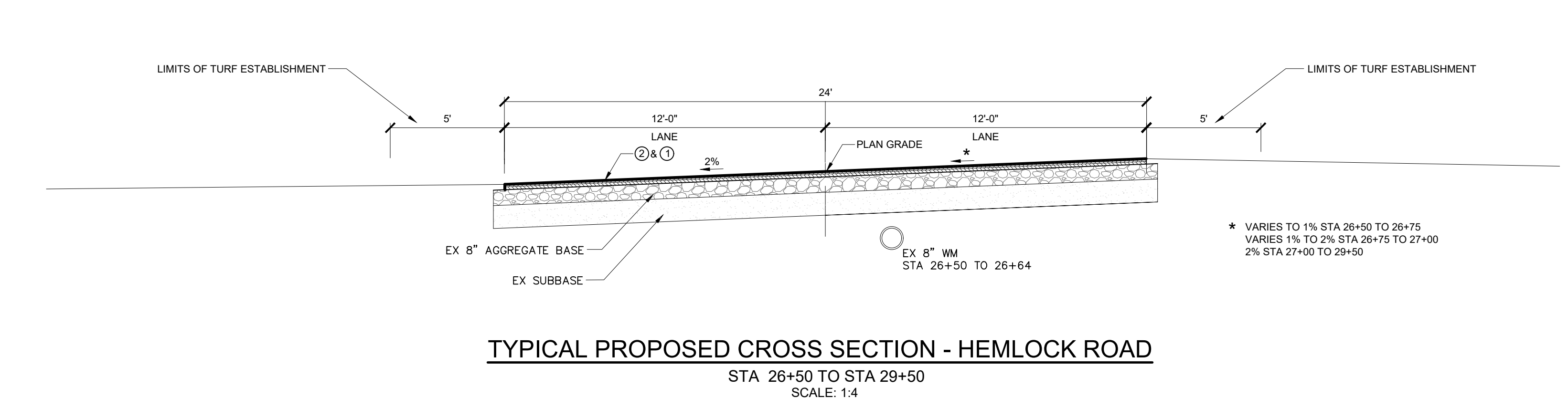
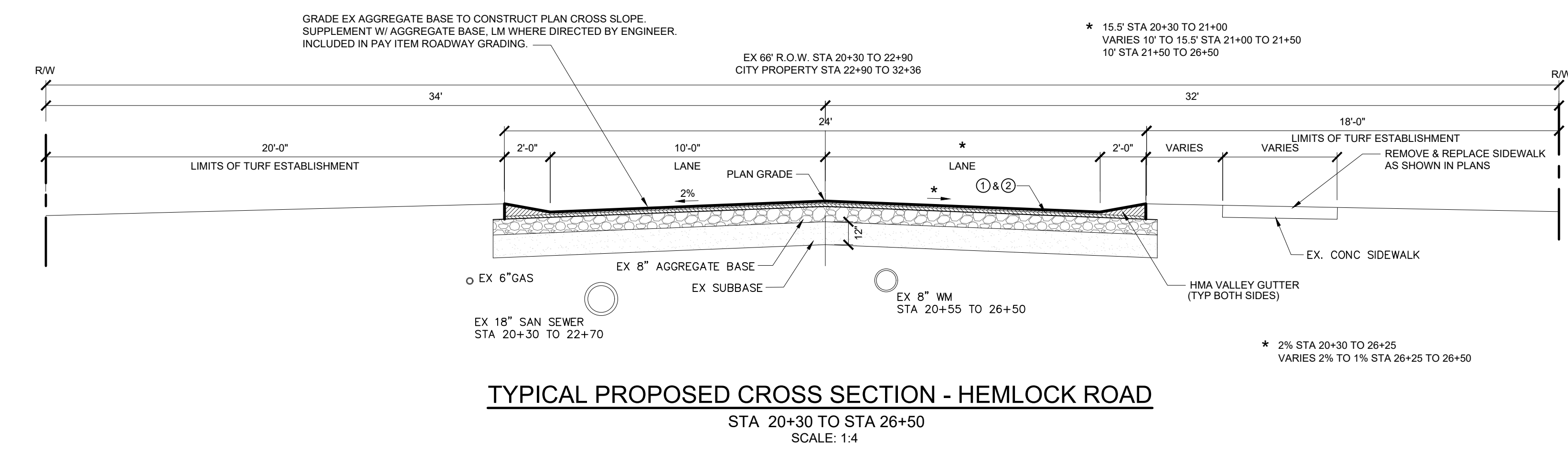
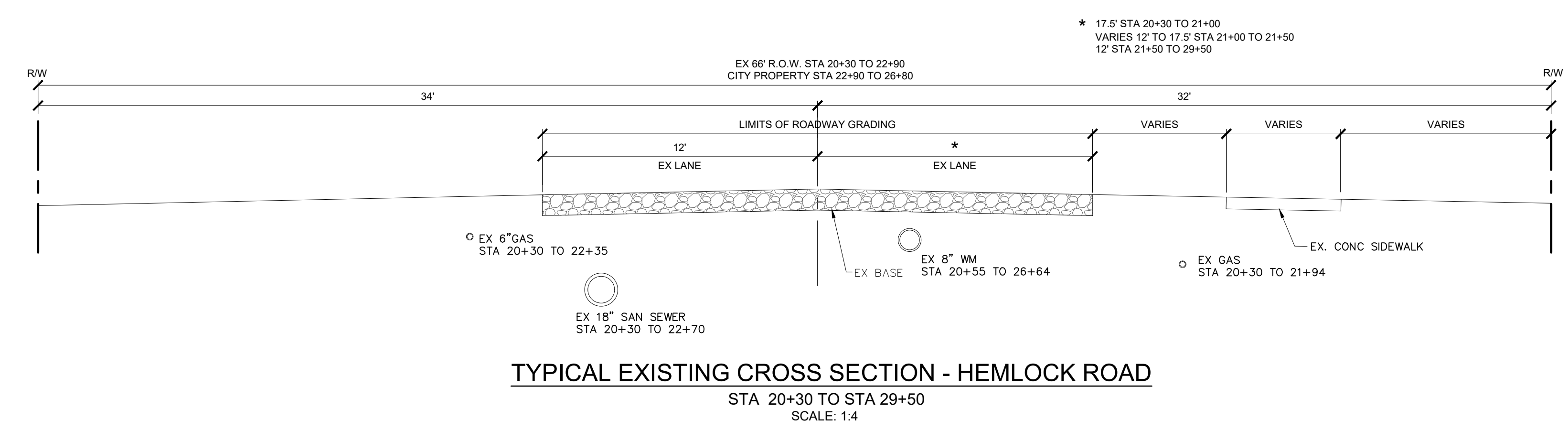
CITY OF BIG RAPIDS
 MECOSTA COUNTY, MICHIGAN
HEMLOCK PARK SPLASH PAD & PLAYGROUND
HEMLOCK STREET & TRAIL PLAN

DESIGN TEAM	FLEIS & VANDENBRINK
PROJECT MANAGER	RWB
DESIGNED BY	RWB
DRAWN BY	PAD
CHECK BY	

DRAWING INFORMATION:
 858220_C105_PLAN
 11/03/23 brk

NOVEMBER 2023
 FAV PROJECT NO.
 858220

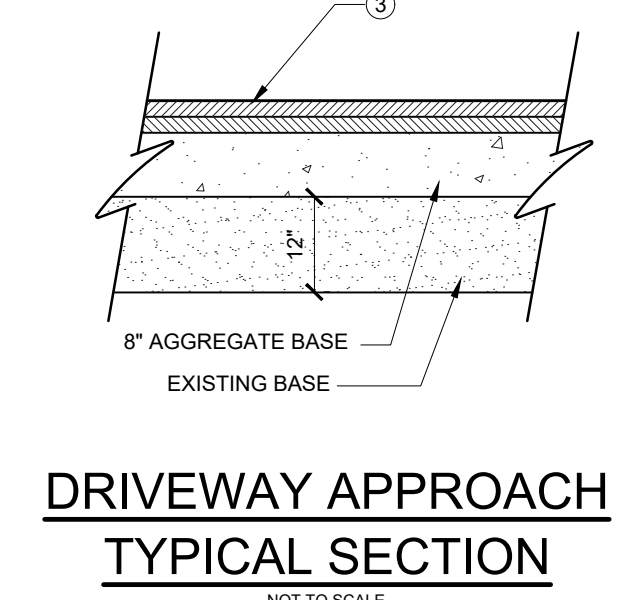
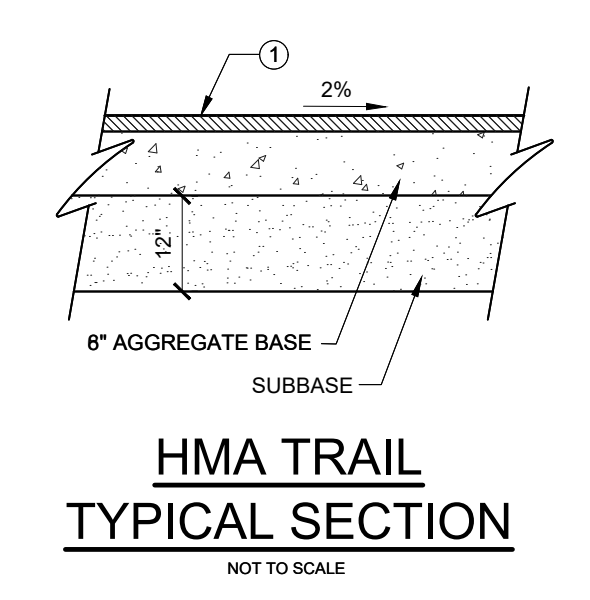
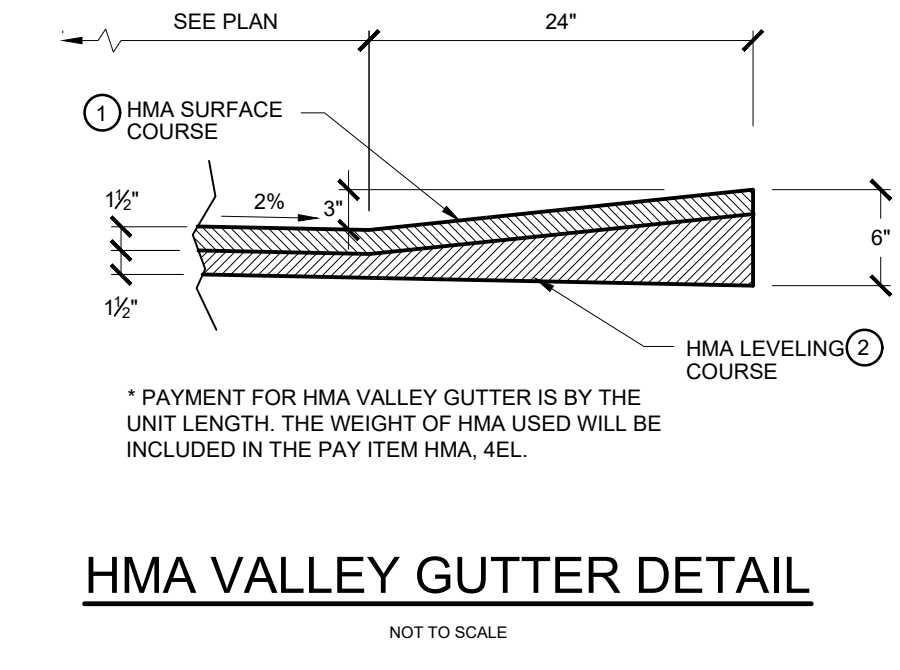
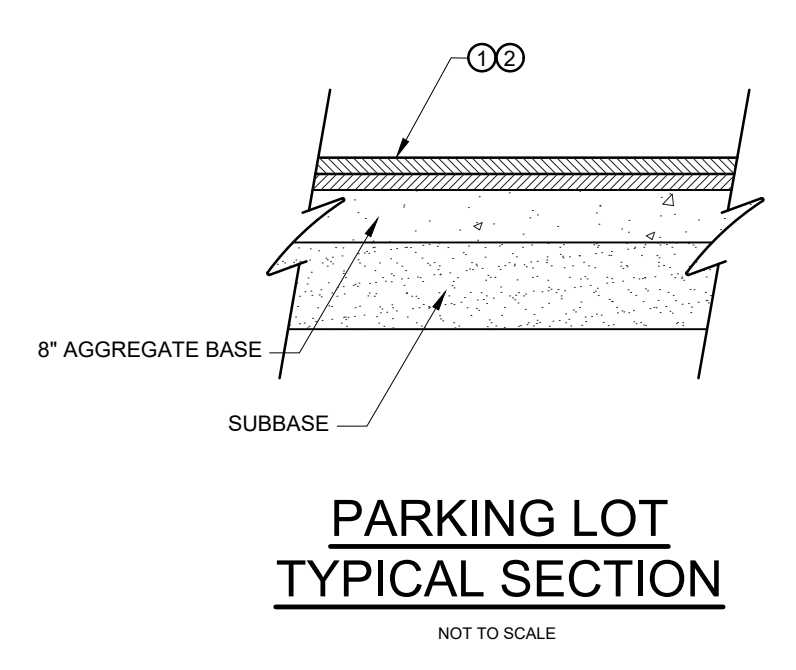
C105



LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
(Tree symbol)	TREE (DECIDUOUS)	(Square symbol)	CABLE BOX	(Triangle symbol)	SURVEY CONTROL POINT
(Bush symbol)	BUSH	(Square symbol)	TELEPHONE RISER	(Triangle symbol)	BENCHMARK
(Tree symbol)	TREE (CONIFEROUS)	(Circle symbol)	TELEPHONE MANHOLE	(Square symbol)	SECTION CORNER
(Dead tree symbol)	DEAD TREE	(Square symbol)	ELECTRICAL RISER	(Dashed line)	BOUNDARY LINE
(Stump symbol)	STUMP	(Circle symbol)	ELECTRICAL MANHOLE	(Dashed line)	PROPERTY LINE
(Circle symbol)	MANHOLE	(Dot symbol)	POWER POLE	(Dashed line)	WATERMAIN
(Circle symbol)	SANITARY CLEANOUT	(X symbol)	LIGHT POLE	(Dashed line)	SANITARY SEWER
(Circle symbol)	RD. CATCH BASIN	(Circle symbol)	GUY POLE	(Dashed line)	STORM SEWER
(Circle symbol)	SQ. CATCH BASIN	(Circle symbol)	GUY ANCHOR	(Dashed line)	CULVERT (UNDER 10')
(Circle symbol)	FIRE HYDRANT	(Circle symbol)	RAILROAD	(Dashed line)	CULVERT (24" AND UP)
(Circle symbol)	WATER VALVE	(Star symbol)	YARD LIGHT	(Dashed line)	CABLE T.V.
(Circle symbol)	CURB STOP & BOX	(Star symbol)	SIGN	(Dashed line)	TELEPHONE
(Circle symbol)	WELL	(Star symbol)	MAILBOX	(Dashed line)	ELECTRIC
(Circle symbol)	WATER MANHOLE	(Star symbol)	FOUND CONC. MONUMENT	(Dashed line)	GAS
(Circle symbol)	WATER METER	(Star symbol)	FOUND IRON ROD	(Dashed line)	OVERHEAD LINES
(Circle symbol)	SOIL BORING	(Star symbol)	SET IRON ROD	(Dashed line)	GUARDRAIL
(Circle symbol)	MONITORING WELL	(Star symbol)		(Dashed line)	FENCE
		(Star symbol)		(Dashed line)	WOODLINE

NOTE: ALL ITEMS LISTED ON THE LEGEND MAY NOT BE PRESENT ON DRAWING.



CONSTRUCTION NOTES

PLAN ELEVATIONS
ELEVATIONS SHOWN IN THESE PLANS ARE BASED ON USGS DATUM NAV 88.

PUBLIC UTILITIES

THE EXISTING UTILITIES LISTED BELOW AND SHOWN ON THESE PLANS REPRESENT THE BEST INFORMATION AVAILABLE. THIS INFORMATION DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO SATISFY HIMSELF AS TO THEIR ACCURACY OR OF HIS RESPONSIBILITY IN CASE UTILITIES HAVE BEEN CONSTRUCTED OR REMOVED.

PUBLIC WATER/SEWER	TELEPHONE
CITY OF BIG RAPIDS ATTN: HEATHER BOWMAN 226 N. MICHIGAN AVENUE BIG RAPIDS, MI 49307 PHONE: 231-592-4018	AT&T ATTN: JEFF SHUSTER 205 E HARRIS ST CADILLAC, MI 49601 PHONE: 231-779-8451
ELECTRIC	CABLE TELEVISION
CONSUMERS ENERGY ATTN: IAN MEREDITH 4000 CLAY AVENUE SW GRAND RAPIDS, MI 49548 PHONE: 616-530-4284	CHARTER COMMUNICATIONS ATTN: SCOTT VAN HOOSE 915 EAST BROOMFIELD ROAD MOUNT PLEASANT, MI 48858 PHONE: 989-621-4930
GAS	FIBER OPTIC
MICHCON/DTE ATTN: LARRY BOURKE 609 BJORNSON ROAD BIG RAPIDS, MI 49307 PHONE: 231-592-3244	MERIT NETWORK ATTN: KEN LOPEZ 4273 58TH ST. HOLLAND, MI 49423 PHONE: 616-393-0138 EXT 114

THE CONTRACTOR SHALL EXPOSE AND VERIFY LOCATION AND DEPTH OF EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CONFLICTS IN GRADES SHALL BE REPORTED TO ENGINEER AND ADJUSTMENTS SHALL BE MADE AT NO ADDITIONAL COST TO OWNER.

THE OWNERS OF EXISTING SERVICE FACILITIES THAT ARE WITHIN THE GRADING OR STRUCTURE LIMITS WILL MOVE THEM TO LOCATIONS DESIGNATED BY THE ENGINEER OR WILL REMOVE THEM ENTIRELY FROM THE ROAD RIGHT-OF-WAY. OWNERS OF PUBLIC UTILITIES WILL NOT BE REQUIRED TO MOVE ADDITIONAL POLES OR STRUCTURES IN ORDER TO FACILITATE THE OPERATION OF CONSTRUCTION EQUIPMENT UNLESS IT IS DETERMINED BY THE ENGINEER THAT SUCH POLES OR STRUCTURES CONSTITUTE A HAZARD TO THE PUBLIC OR ARE EXTRAORDINARILY DANGEROUS TO THE CONTRACTOR'S OPERATIONS.

MISCELLANEOUS QUANTITIES

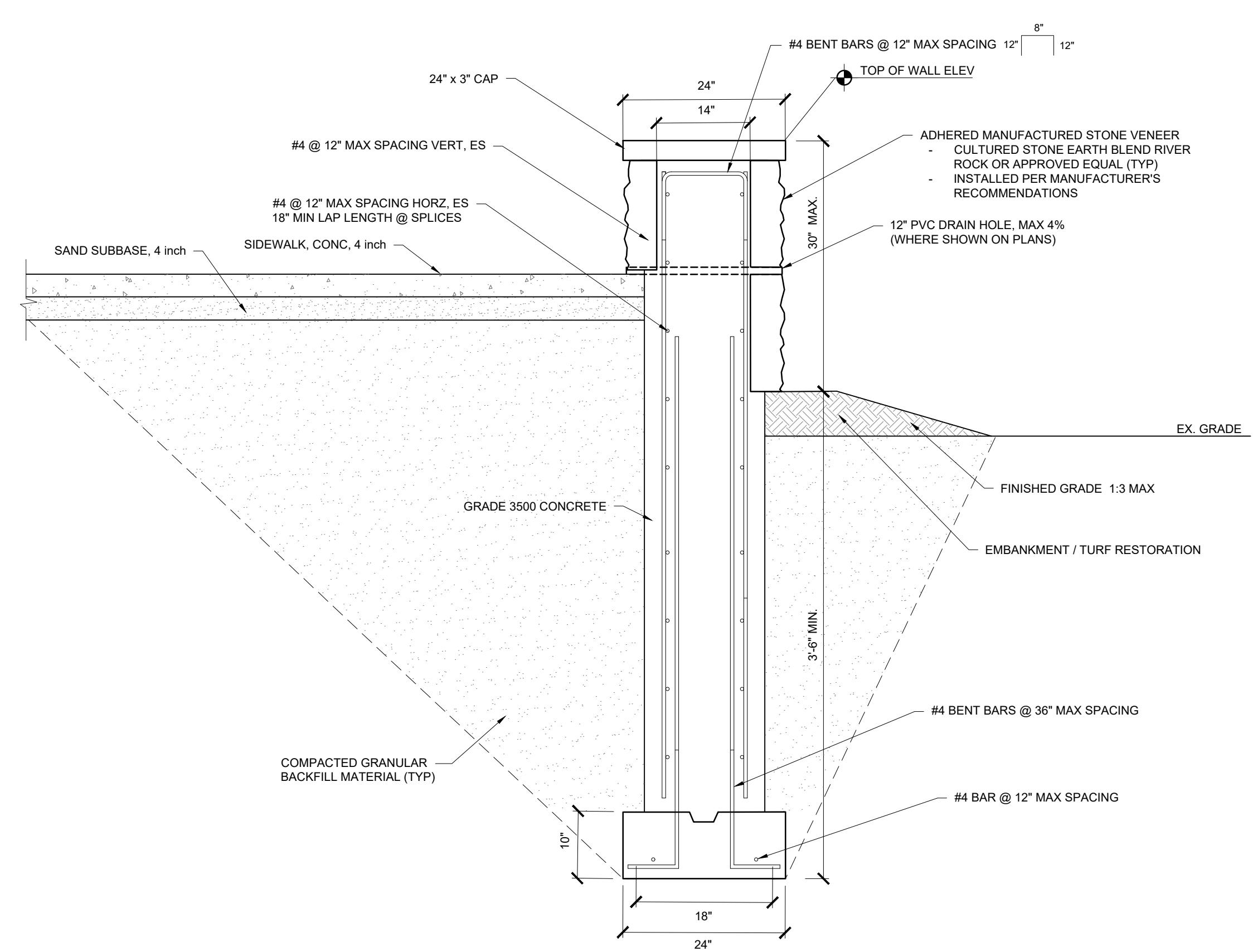
THE FOLLOWING ITEMS OF WORK SHALL BE DONE AS THEY APPLY THROUGHOUT THE PROJECT. THESE ITEMS ARE NOT DETAILED OR INCLUDED ON THE PLAN AND PROFILE SHEETS BUT ARE TO BE USED AS DIRECTED BY THE ENGINEER, WHERE REQUIRED.

QUANTITY	UNIT	DESCRIPTION
1	LSUM	GENERAL CONDITIONS, BONDS, AND INSURANCE, MAX 5%
1	LSUM	TRAFFIC CONTROL

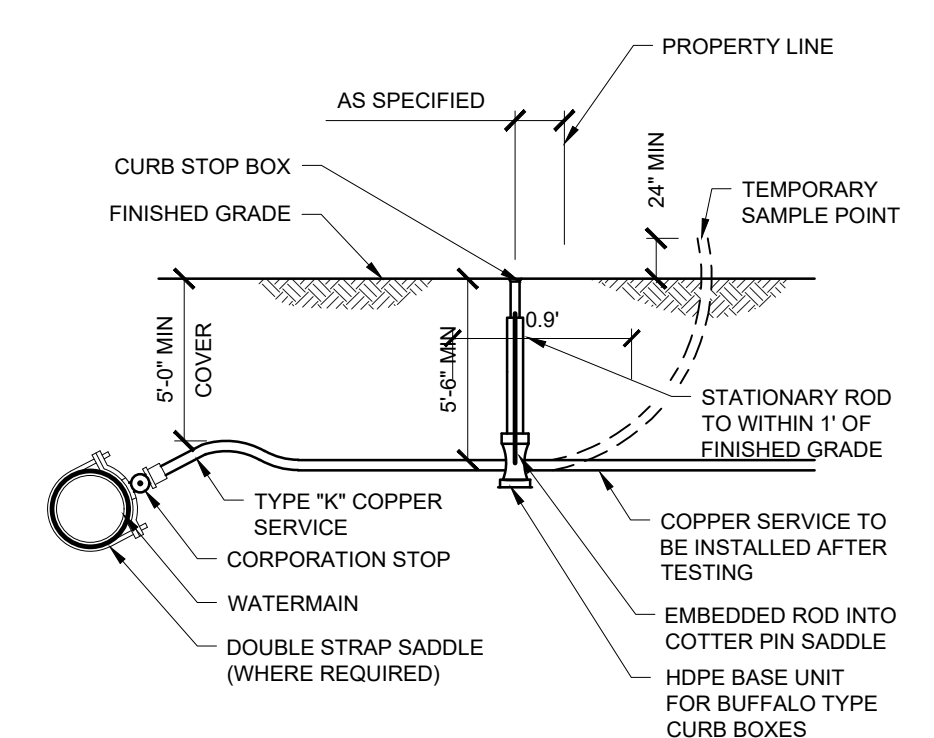
HMA APPLICATION TABLE

SYMBOL	TYPE	ITEM	EST. YIELD	PERFORMANCE GRADE	REMARKS
①	TOP	HMA, 4EL	165#/SYD	58-28	AWI=260 MIN
②	LEVELING	HMA, 4EL	165#/SYD	58-28	
③	DRIVEWAY APPROACH	HMA, APPROACH	330#/SYD	58-28	HMA, 4EL PLACED IN TWO LIFTS

NOTES: BOND COAT SHALL BE APPLIED BETWEEN SUCCESSIVE COURSES OF BIT. (INCLUDED IN HMA MIX PAY ITEM). APPLICATION RATE 0.05 - 0.15 GAL/SYD SS-IH.
HMA FOR STREET APPROACHES SHALL MATCH THE MAINLINE SECTION AND IS INCLUDED IN PAYMENT FOR MAINLINE HMA, 4EL.

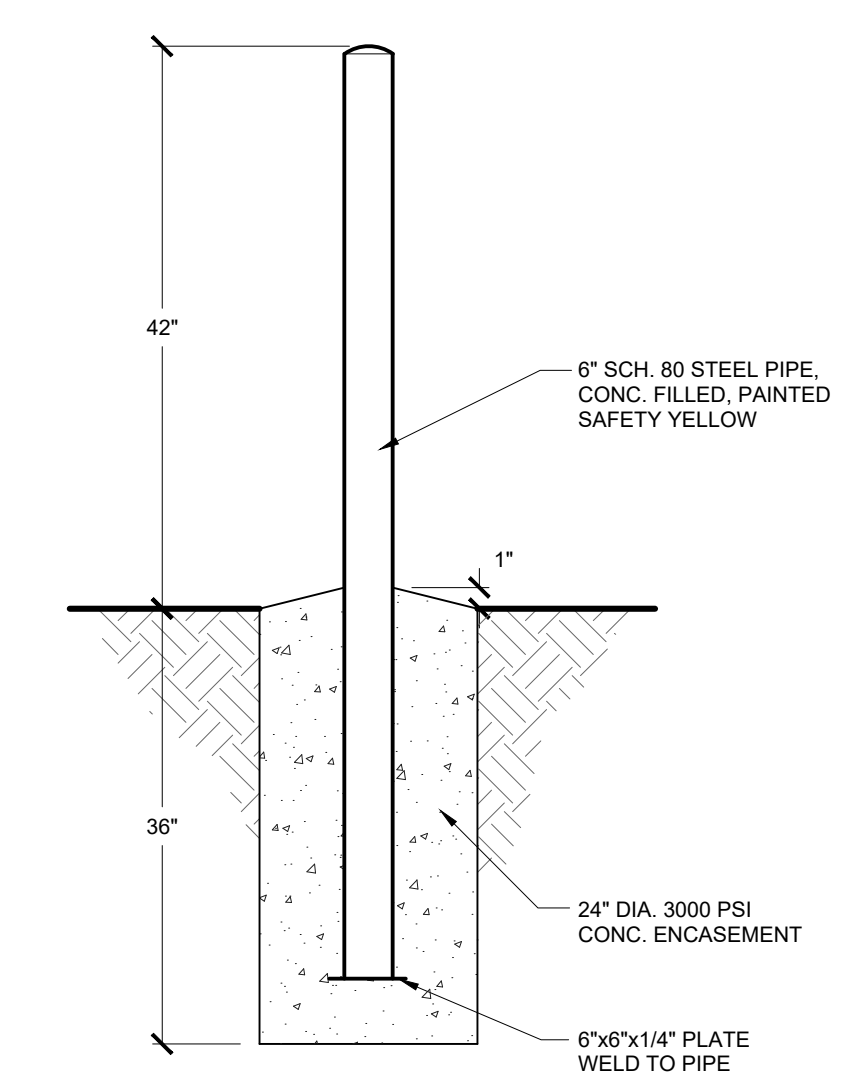


SEAT WALL SECTION
Scale: 3/4" = 1'-0"

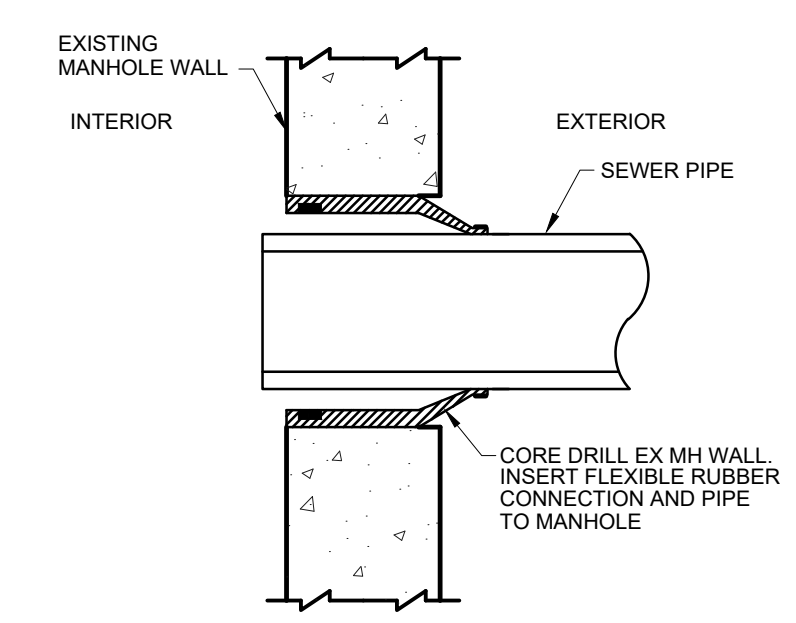


- NOTES:
1. SAMPLE POINT TO BE USED FOR FUTURE SERVICE LEAD.
2. NO TAP SHALL BE MADE CLOSER THAN 18" TO ANY COUPLING OR JOINT IN THE PIPE.
3. STATIONARY ROD REQUIRED IN AREAS OF HIGH GROUNDWATER.

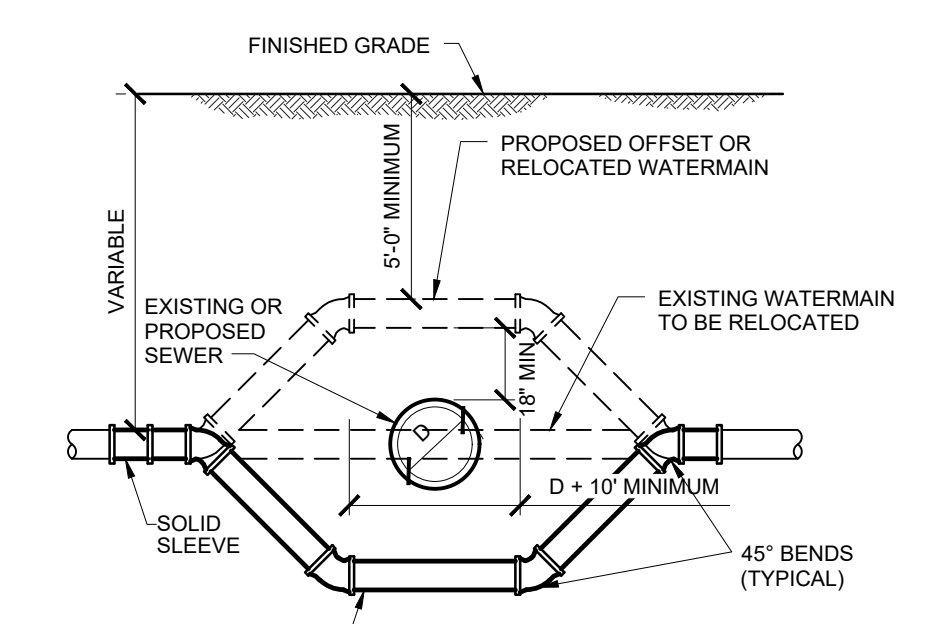
WATER SERVICE DETAIL



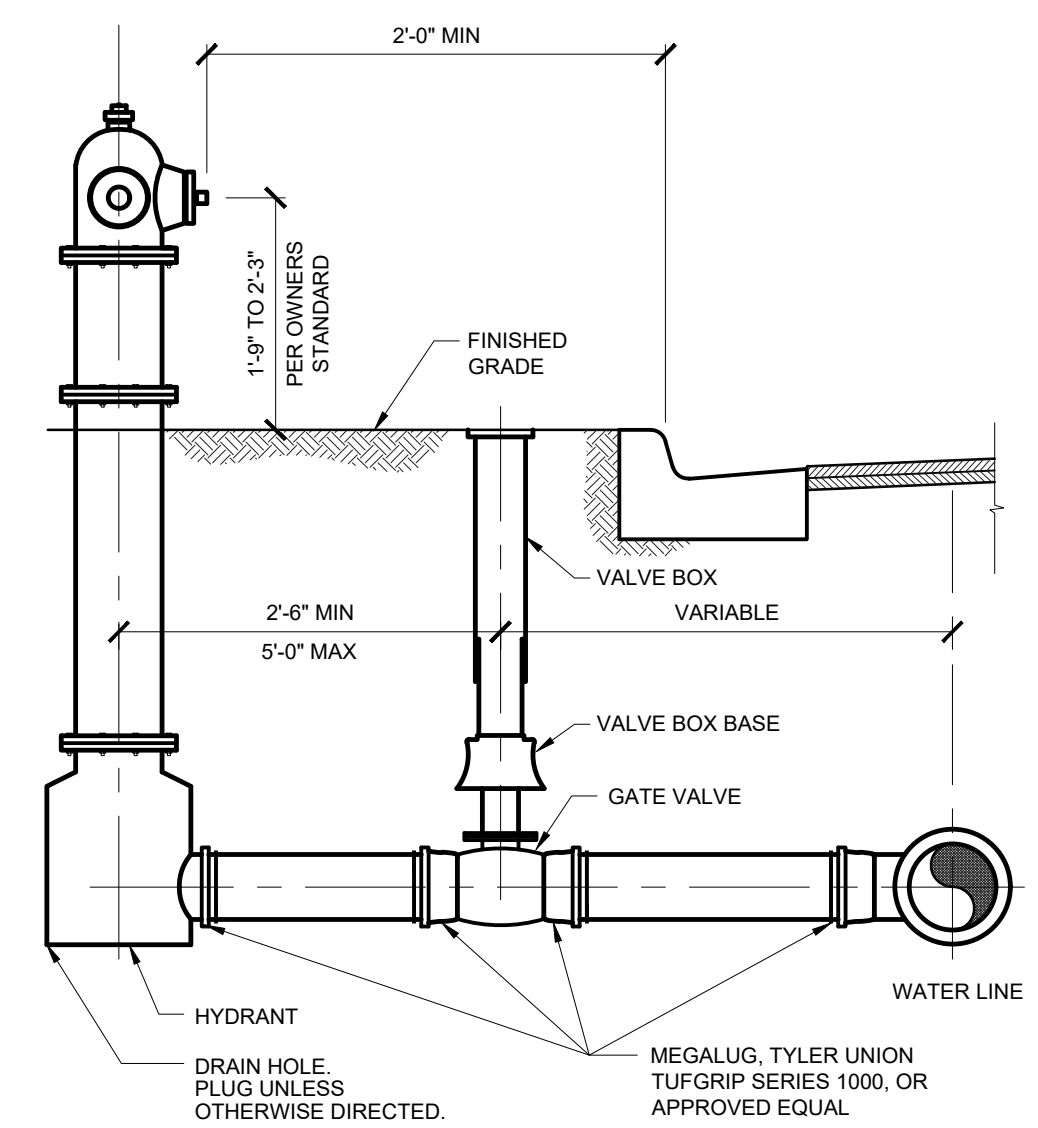
PIPE BOLLARD DETAIL
NOT TO SCALE



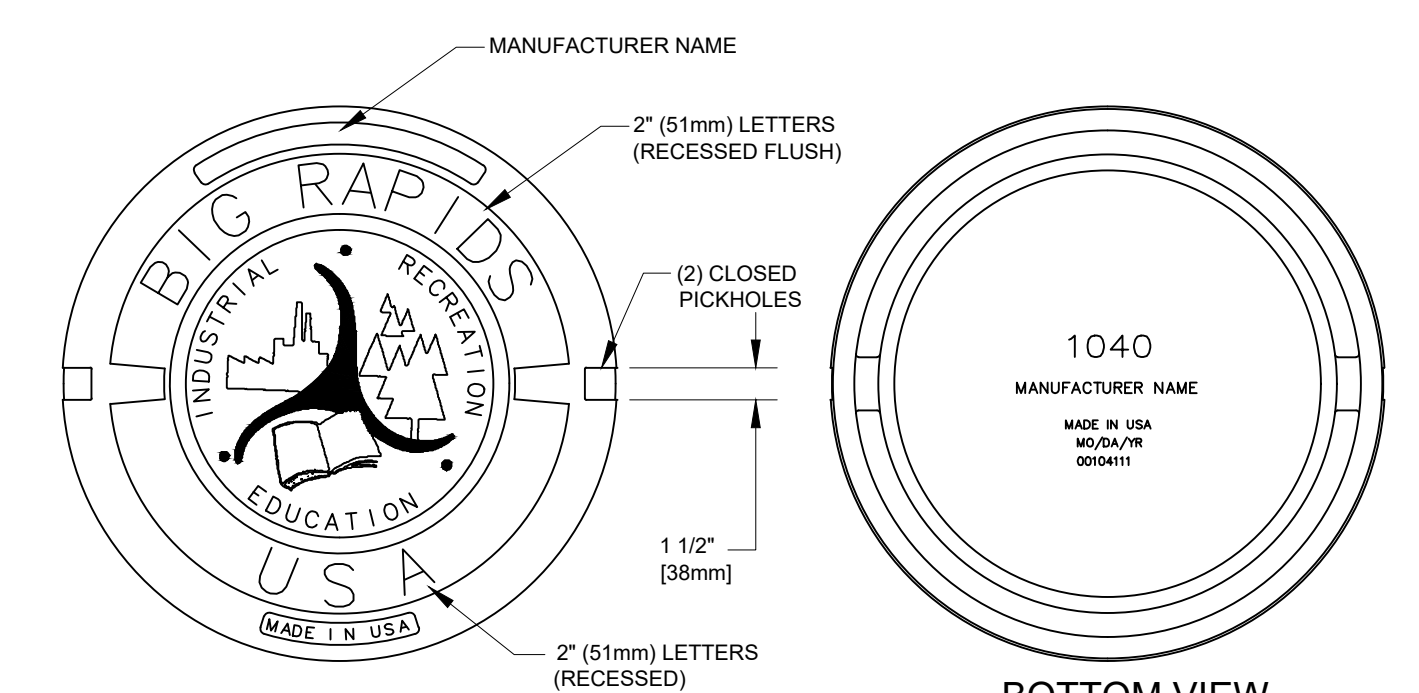
EXISTING MANHOLE PIPE CONNECTION



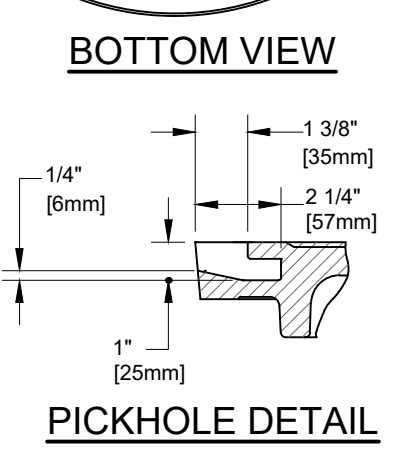
WATERMAIN OFFSET / RELOCATION DETAIL



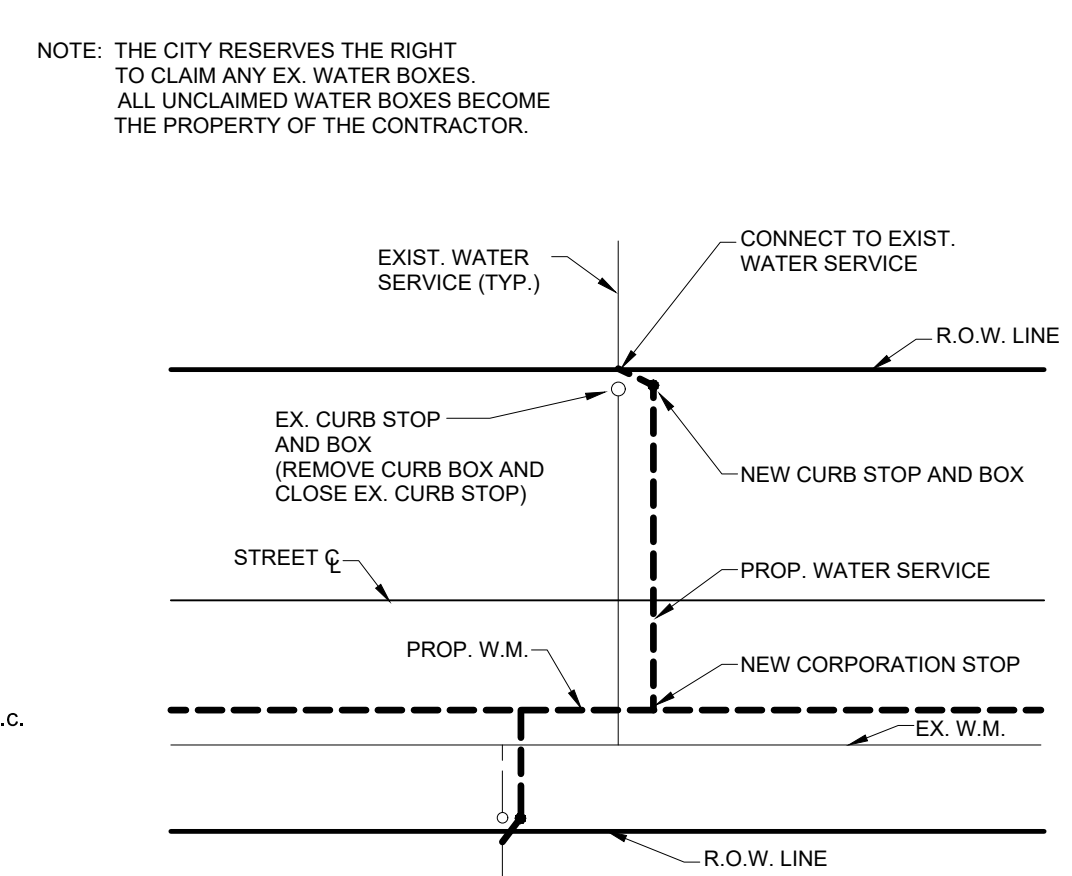
HYDRANT ASSEMBLY



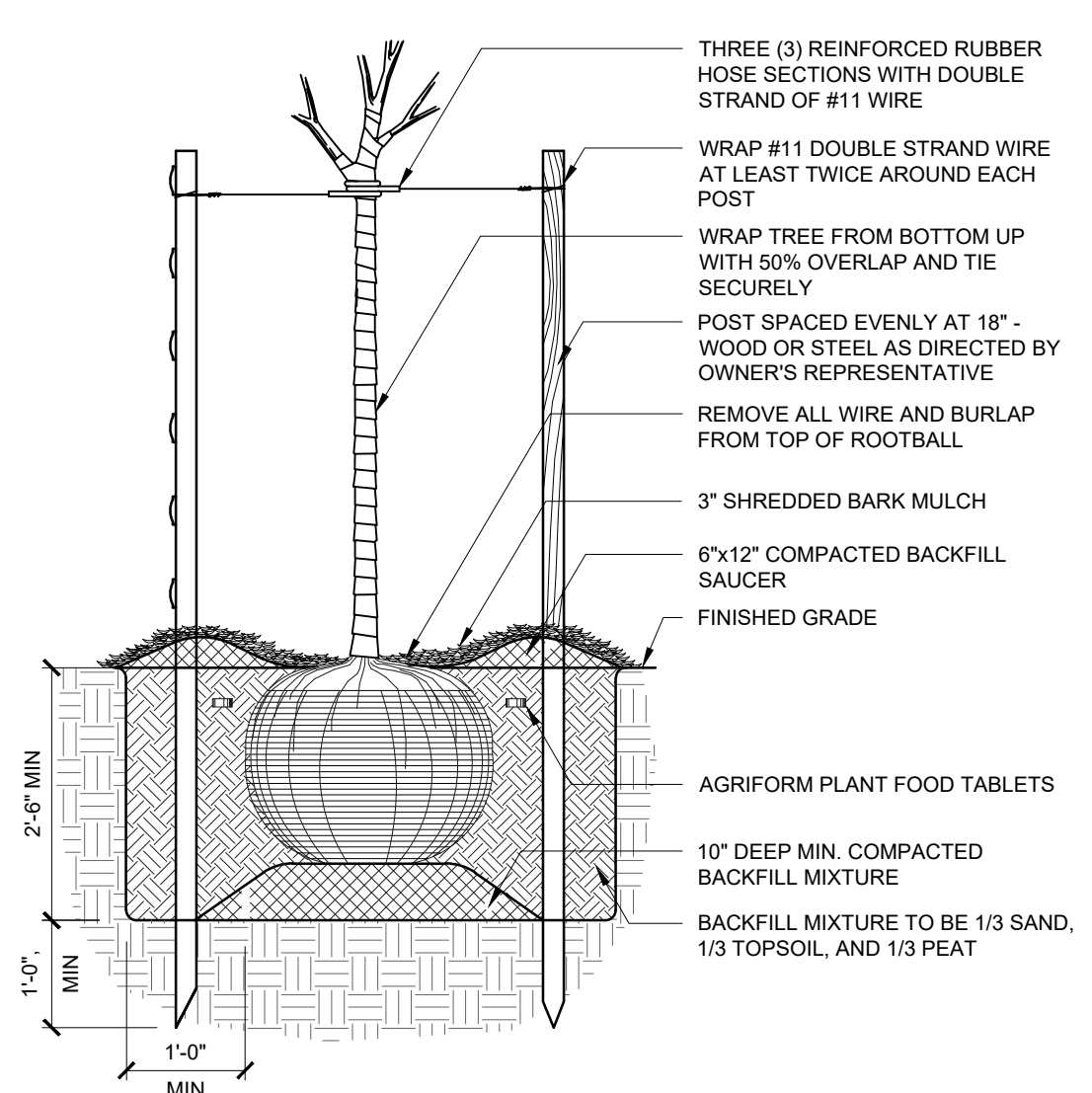
COVER SECTION



MANHOLE COVER



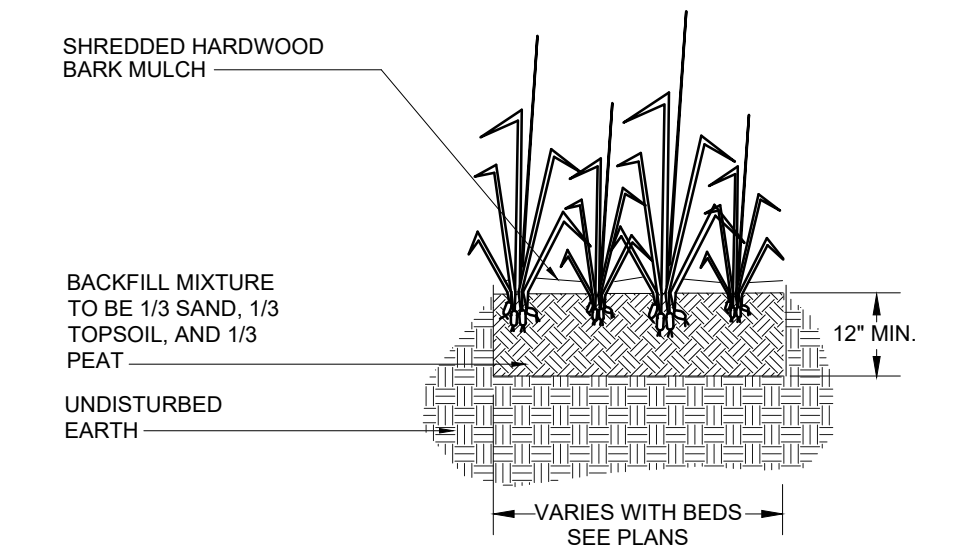
WATER SERVICE CONNECTION DETAIL
NOT TO SCALE



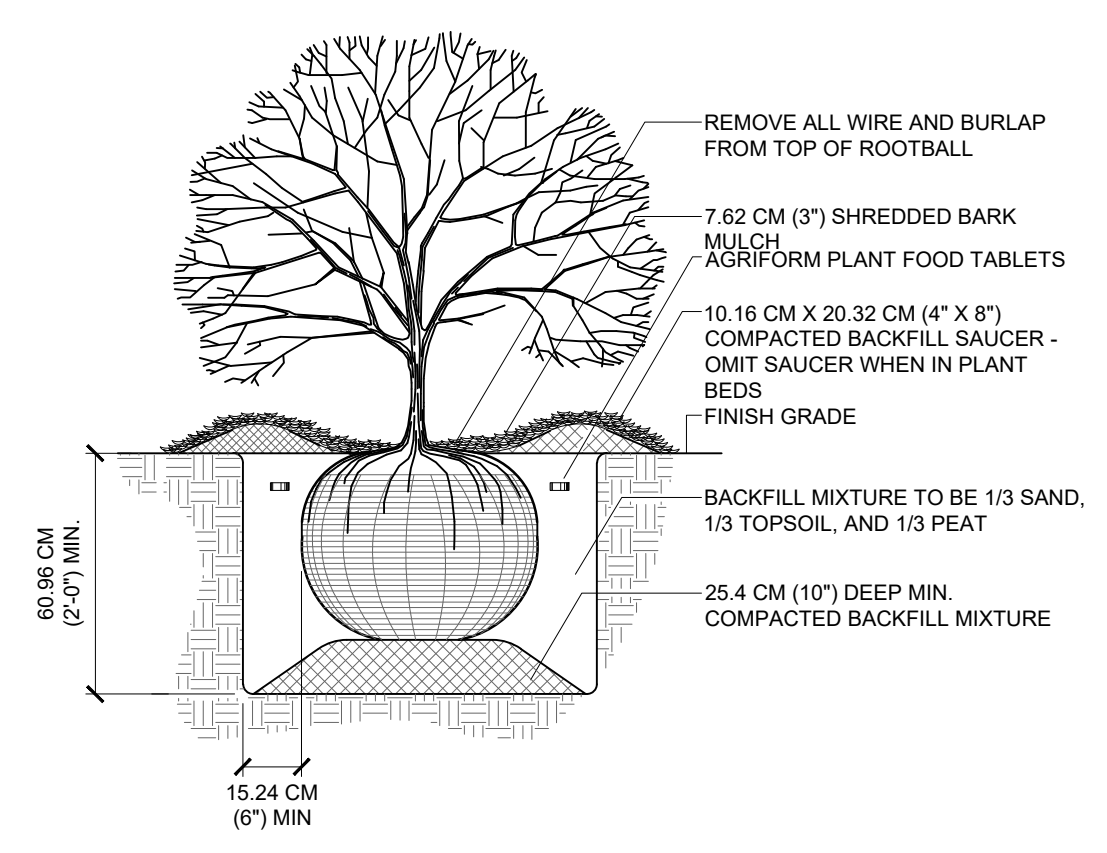
TREE PLANTING DETAIL
NOT TO SCALE

SHRUBS/PERENNIALS

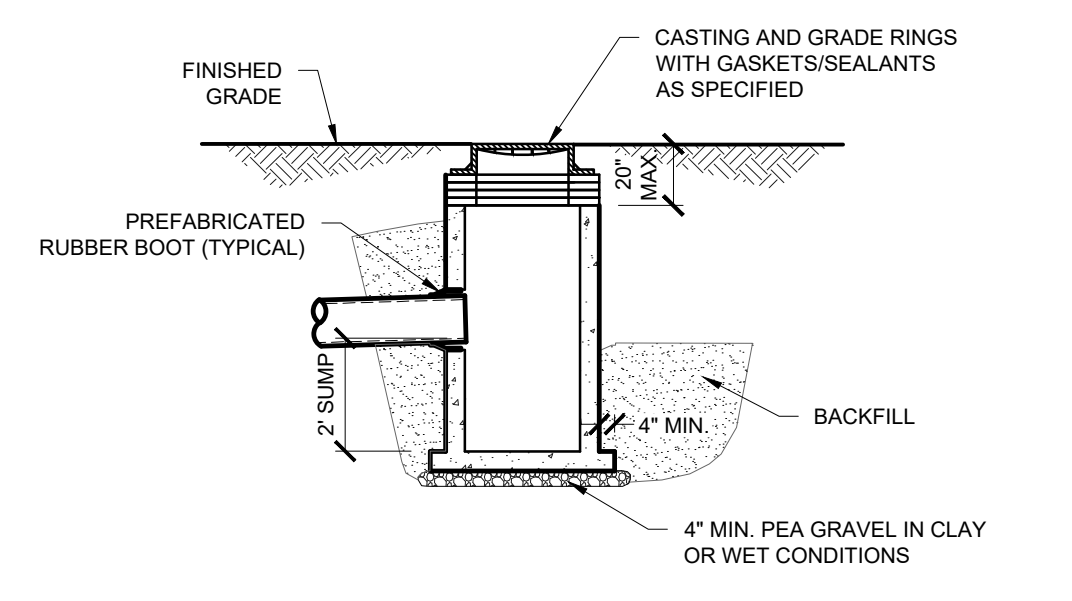
23	P.r.	<i>Pennisetum setaceum 'Rubrum'</i> Purple Fountain Grass	2 gallon pot
220	L.s.	<i>Liriope spicata</i> Creeping Lily-turf	2 1/4" pp 8" o.c.
282	H.m.	Daylily Mix - Plant in approx. 5 equal quantities of each variety	
		<i>Hermerocallis 'Little Grapette'</i> (purple) 'Little Grapette' Daylily	#1 pot
		<i>Hermerocallis 'Stella de Oro'</i> (yellow) 'Stella de Oro' Daylily	#1 pot
		<i>Hermerocallis 'Forty Second Street'</i> (pink/rose) 'Forty Second Street' Daylily	#1 pot
		<i>Hermerocallis 'Little Zinger'</i> (red) 'Little Zinger' Daylily	#1 pot
		<i>Hermerocallis 'Sunday Gloves'</i> (white) 'Sunday Gloves' Daylily	#1 pot



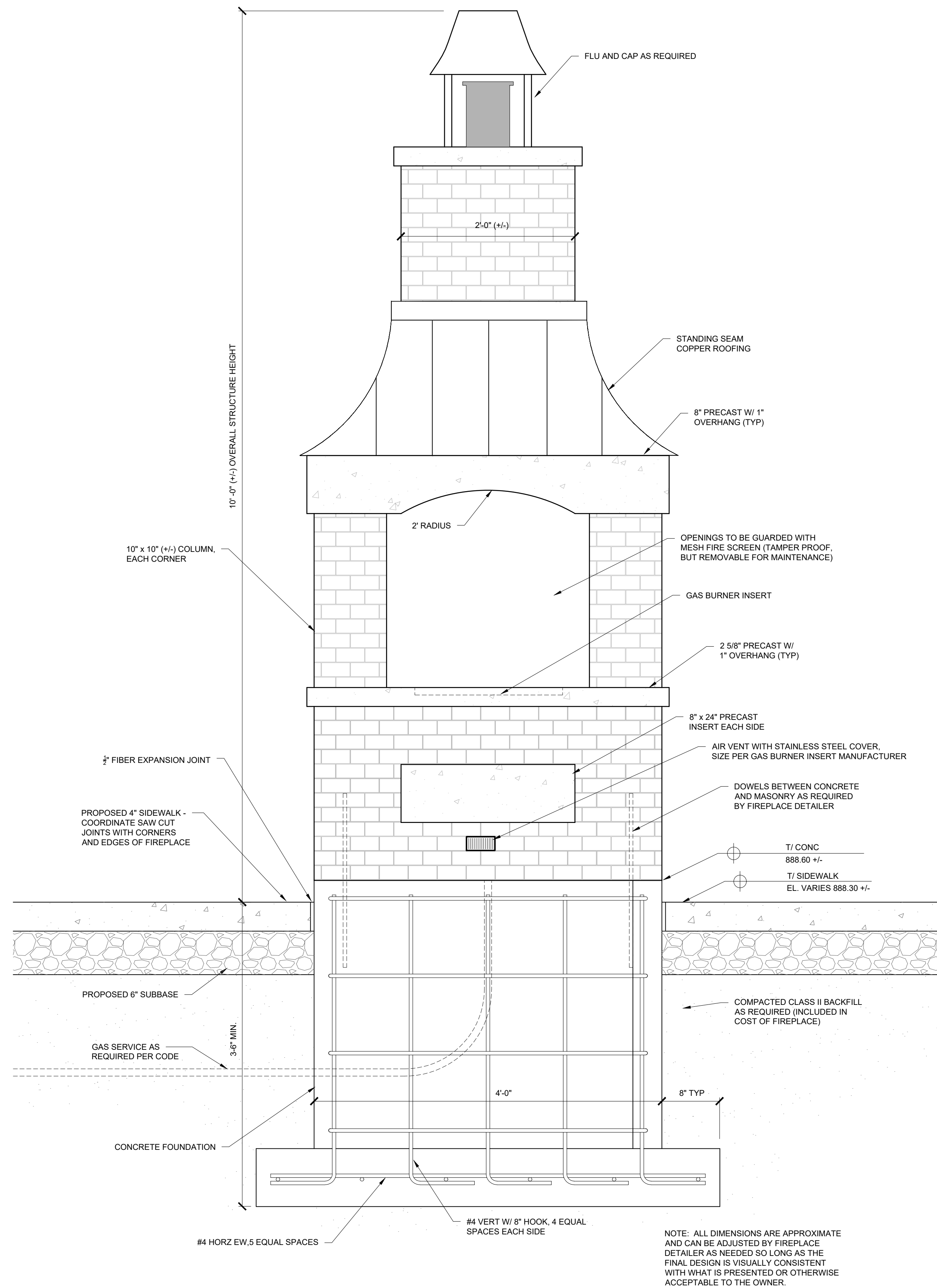
PERENNIAL BED PLANTING DETAIL
NOT TO SCALE



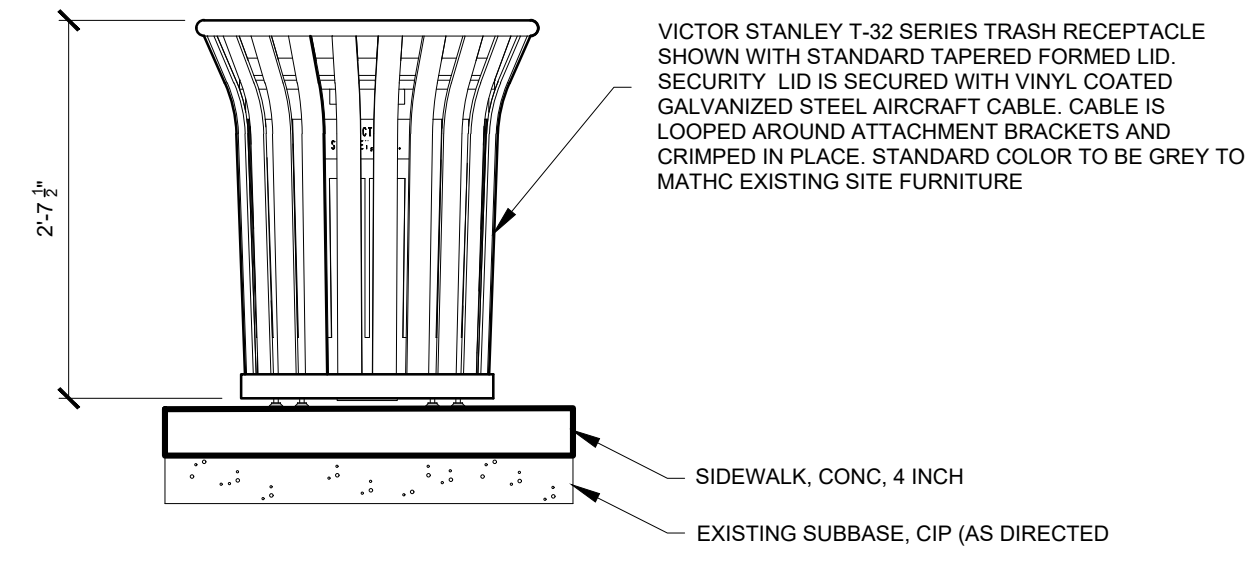
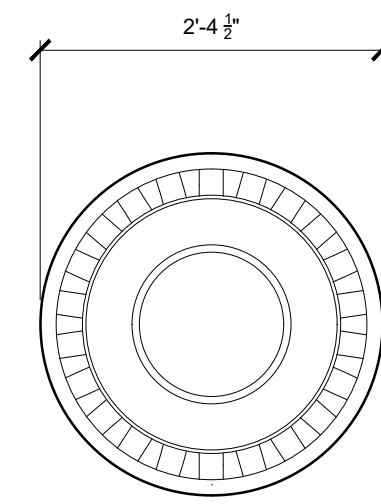
SHRUB INSTALLATION
NOT TO SCALE



2\"/>



FIREPLACE ELEVATION
NOT TO SCALE



VICTOR STANLEY T-32 SERIES TRASH RECEPTACLE SHOWN WITH STANDARD TAPERED FORMED LID. SECURITY LID IS SECURED WITH VINYL COATED GALVANIZED STEEL AIRCRAFT CABLE. CABLE IS LOOPED AROUND ATTACHMENT BRACKETS AND CRIMPED IN PLACE. STANDARD COLOR TO BE GREY TO MATCH EXISTING SITE FURNITURE

SIDEWALK, CONC, 4 INCH
EXISTING SUBBASE, CIP (AS DIRECTED)

CONTRACTOR SHALL INSTALL TRASH RECEPTACLE LEVEL IN BOTH DIRECTIONS.

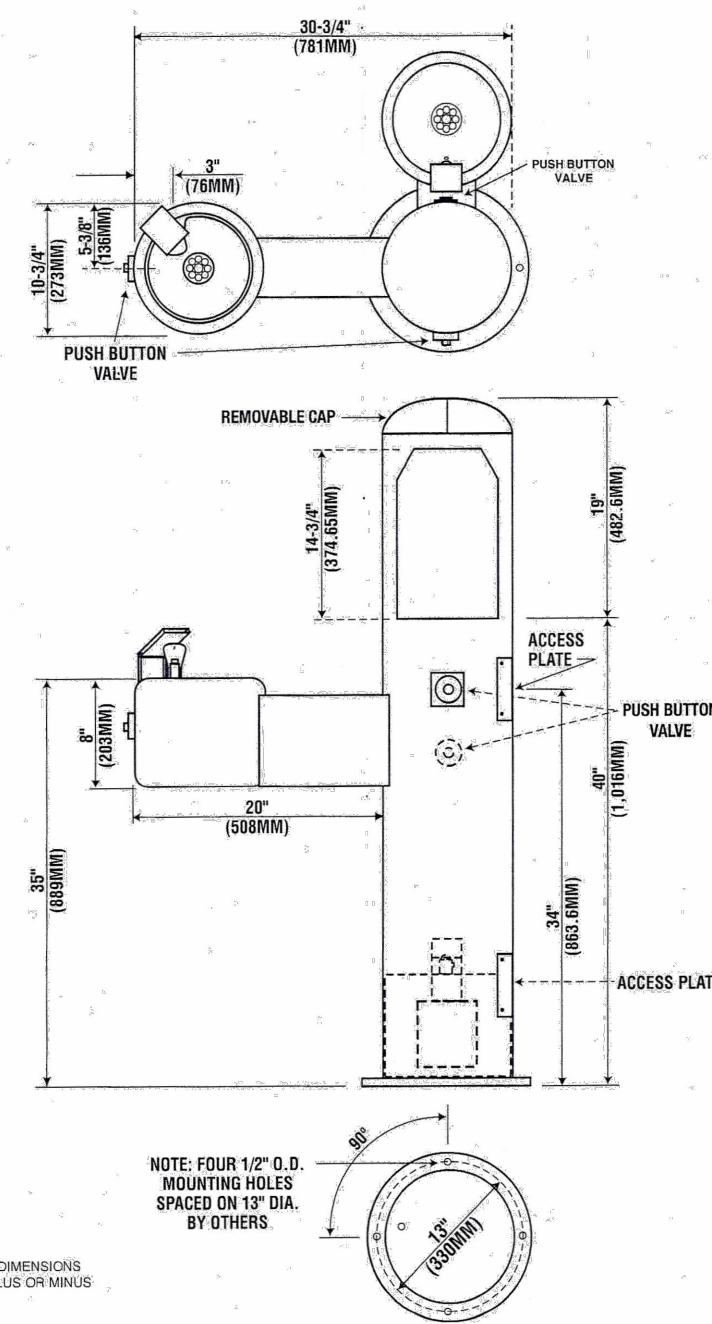
TRASH RECEPTACLE

SCALE: 3/4"=1'-0"

STERN **WILLIAMS** DIMENSIONAL INFORMATION

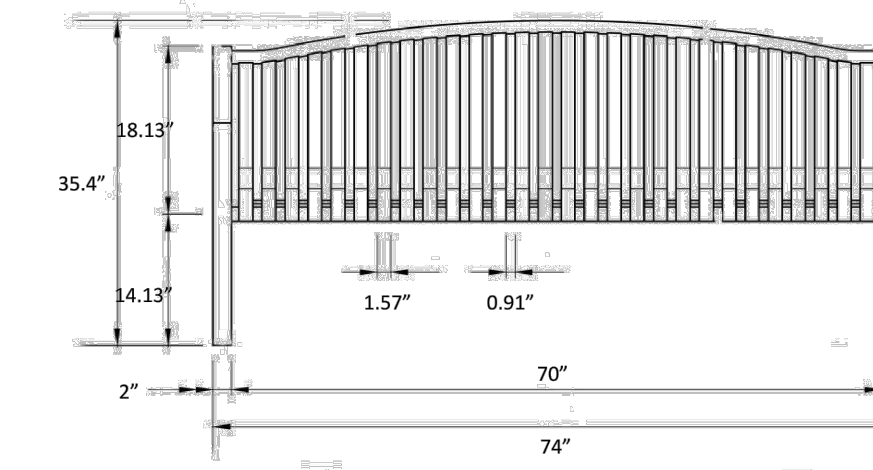
MODEL 7700-90

MODEL 7700-90
Single Fountain with
Water Bottle Filler Station and Pet Fountain

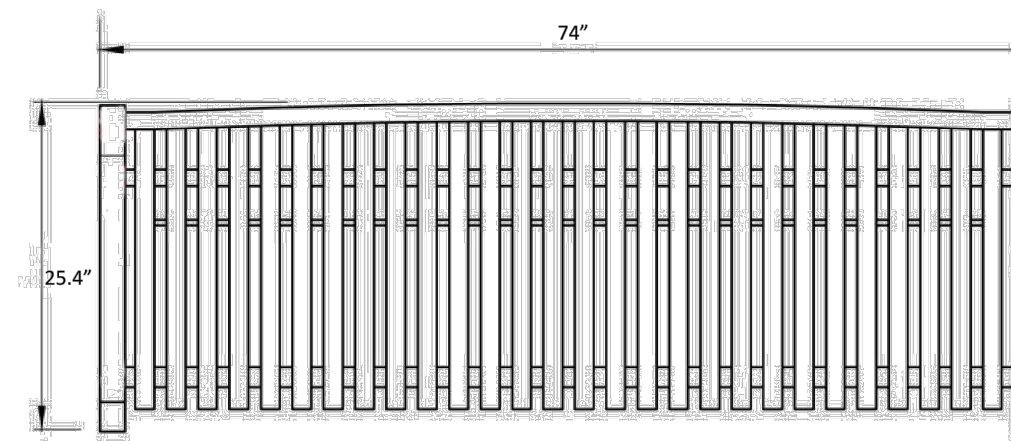


NOTE: THESE ROUGH-IN DIMENSIONS MAY VARY 1/8\"/>

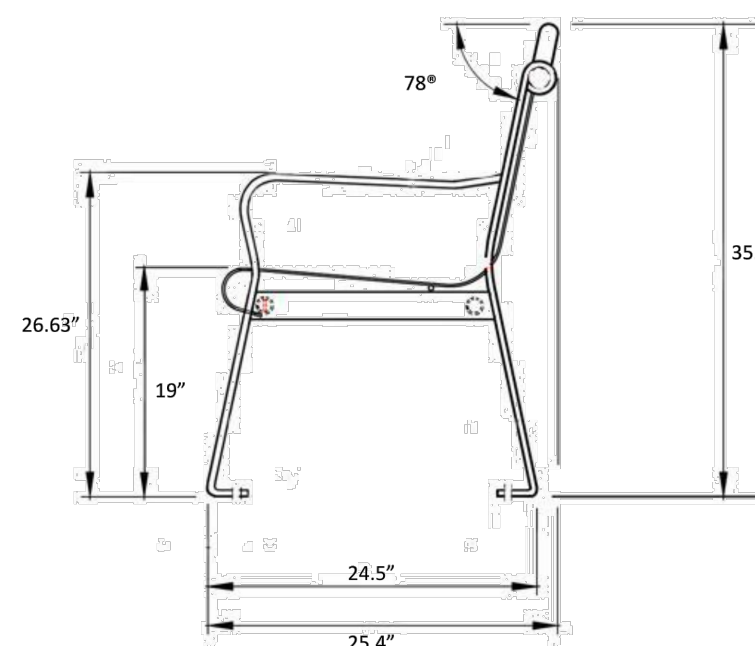
PEDESTAL BOTTLE FILLER AND DRINKING FOUNTAIN WITH PET FOUNTAIN
NOT TO SCALE



FRONT VIEW



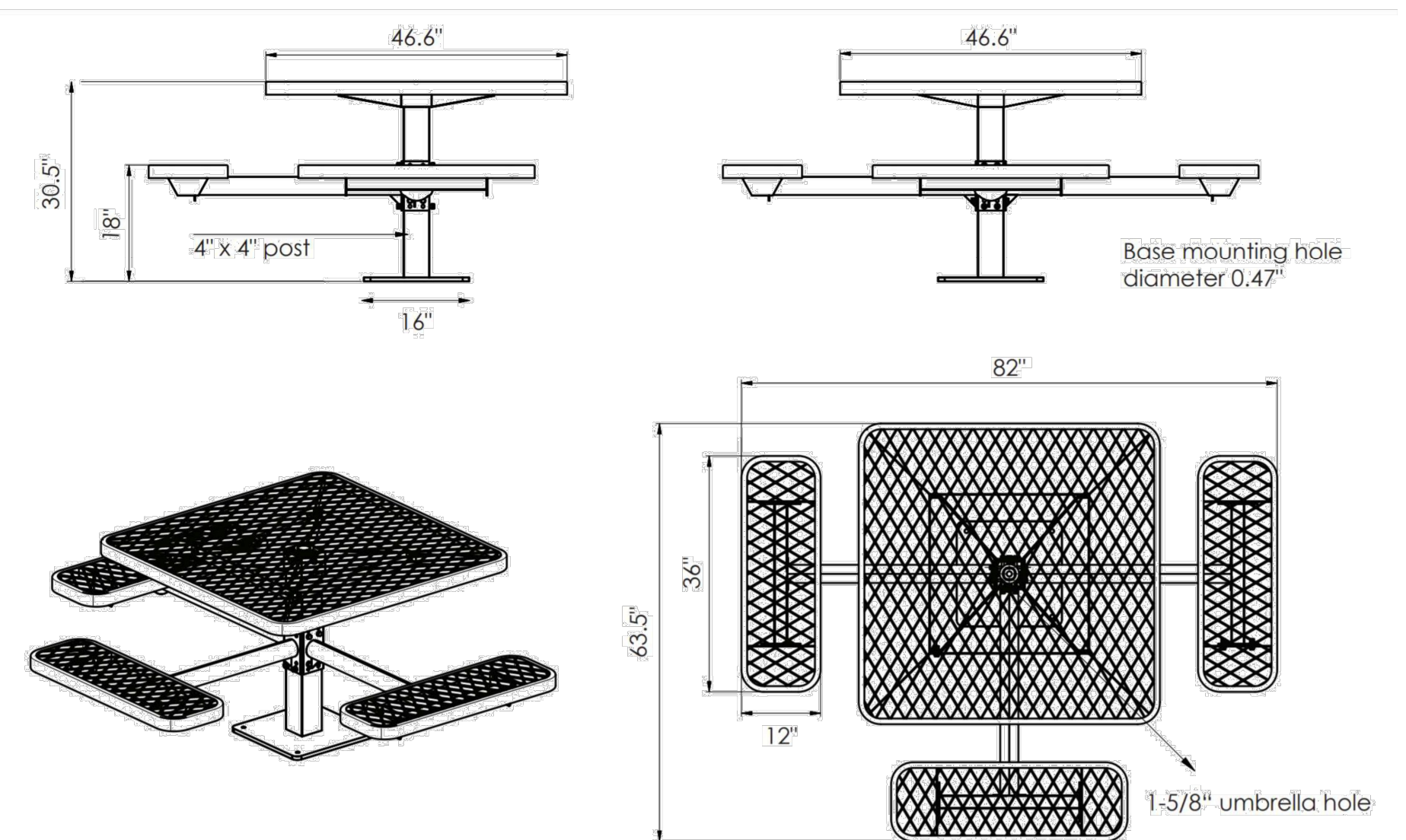
TOP VIEW



END VIEW

6\"/>

PARK BENCH DETAILS
NOT TO SCALE

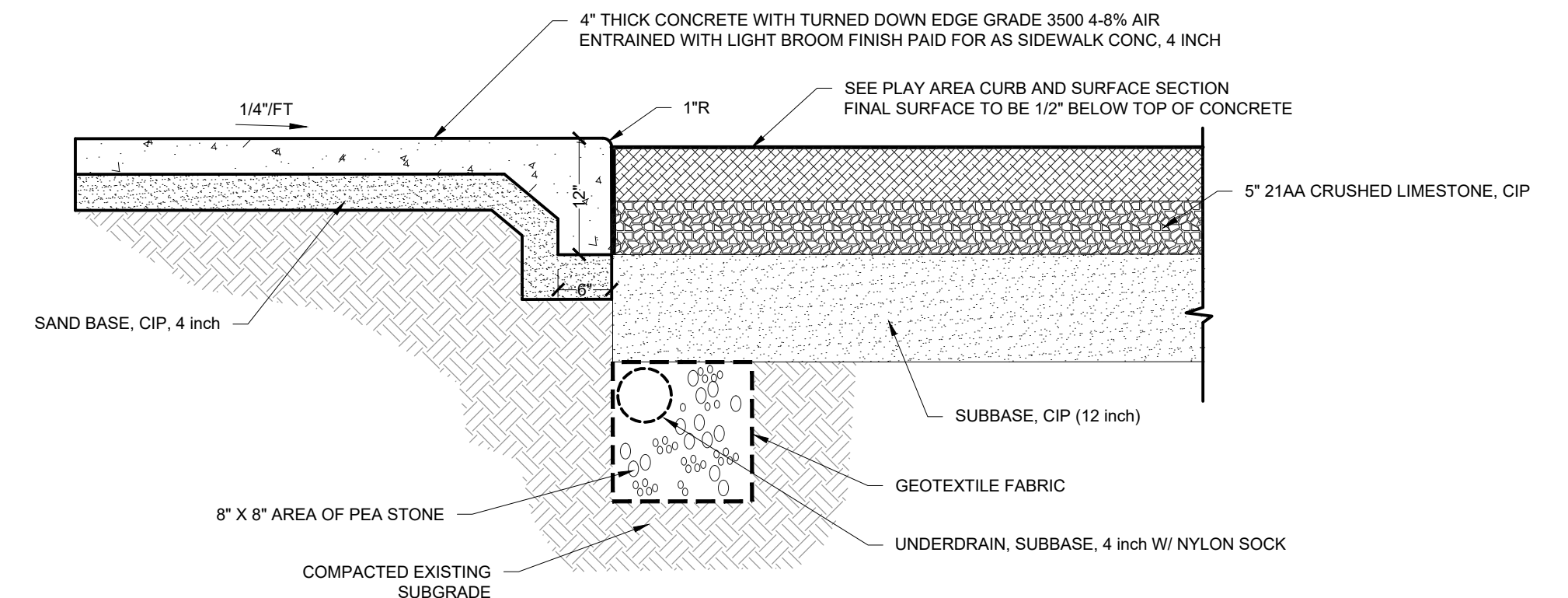


46\"/>

PICNIC TABLE DETAIL
NOT TO SCALE

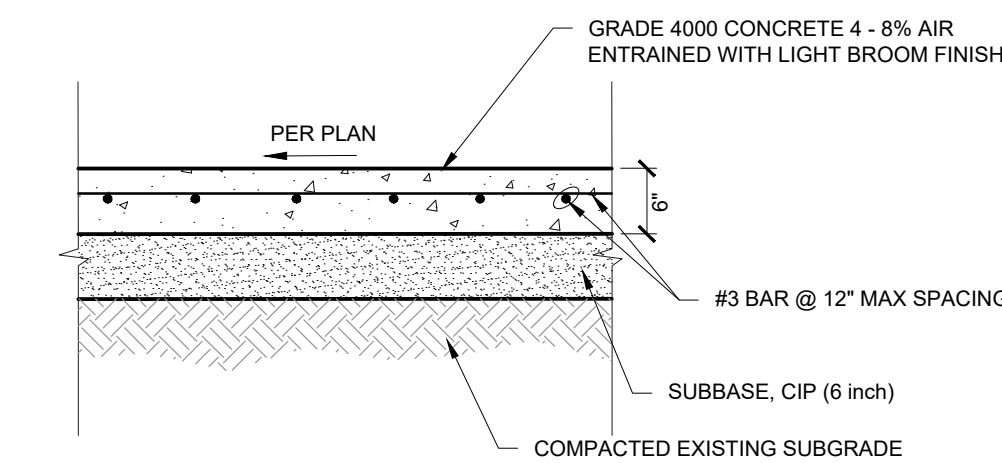
REVISION:

ITEM DESCRIPTION	FUNDING AGENCY PARTICIPATION	UNIT	TOTAL QUANTITY	G002 CDBG	G002 MDNR	C101 CDBG	C101 MDNR	C104 CDBG	C104 MDNR	C104 CITY	C106 CDBG	C106 MDNR	C106 CITY	C201 CDBG	C201 MDNR	C201 CITY	E101 CDBG	E101 MDNR	E101 CITY	
1 General Conditions, Bonds, and Insurance, Max. 5%	CDBG / MDNR	LSum	1											0.5	0.5					
2 Traffic Control	CDBG / MDNR	LSum	1											0.5	0.5					
3 Soil Erosion Control	CDBG / MDNR	LSum	1	0.5	0.5															
4 MDNR LWCF Sign	CDBG / MDNR	LSum	1		1.0															
5 Site Grading and Excavation	CDBG / MDNR	LSum	1	0.5	0.5															
6 Remove Wood Play Structure & Surrounding Fence	CDBG	LSum	1	1.0																
7 Sidewalk, Rem	MDNR	Syd	17					15.0	2.0											
8 Pavt, Rem	CITY	Syd	14						14.0											
9 Remove Picnic Table A, Salvage	CDBG	Ea	2	2.0																
10 Remove Picnic Table B, Salvage	CDBG	Ea	2	2.0																
11 Remove Bench, Salvage	CDBG	Ea	2	2.0																
12 Remove Book Library, Salvage	CDBG	Ea	1	1.0																
13 Remove Grill, Salvage	CDBG	Ea	1	1.0																
14 Remove Water Fountain, Salvage	CDBG	Ea	1	1.0																
15 Remove Sign, Salvage	CDBG	Ea	1	1.0																
16 Remove Fence, Salvage	CDBG	Ft	80	80.0																
17 Relocate Picnic Table A	CDBG	Ea	2			2.0														
18 Relocate Bench	CDBG	Ea	2			2.0														
19 Relocate Book Library	CDBG	Ea	1			1.0														
20 Relocate Grill	CDBG	Ea	1			1.0														
21 Drinking Water Bottle Refilling Station with Pet Fountain	CDBG	Ea	1			1.0														
22 Trash Receptacle	CDBG	Ea	1			1.0														
23 Recycling Receptacle	CDBG	Ea	1			1.0														
24 Relocate Sign	CDBG	Ea	1			1.0														
25 Relocate Fence	CDBG	Ft	80			80.0														
26 Splash Pad Equipment and Installation	CDBG / MDNR	LSum	1			0.5	0.5													
27 Splash Pad Reinforced Concrete, 6 inch	CDBG / MDNR	Syd	400			200.0	200.0													
28 Pump Station	CDBG / MDNR	LSum	1								0.5	0.5								
29 Playground Equip & Surface	CDBG	LSum	1			1.0														
30 24" Catch Basin	CDBG / MDNR	Ea	1								0.5	0.5								
31 Dr Structure Cover, Type G	CDBG / MDNR	Ea	1								0.5	0.5								
32 Storm Sewer, 8 inch	CDBG / MDNR	Ft	76			38.0	38.0													
33 Connect to Ex. Stm CB	CDBG / MDNR	Ea	1								0.5	0.5								
34 Connect to Ex. San MH	CDBG / MDNR	Ea	1								0.5	0.5								
35 6" San Sewer	CDBG / MDNR	Ft	20								10.0	10.0								
36 4" PVC Forcemain	CDBG / MDNR	Ft	200								100.0	100.0								
37 Play Area Concrete Curb Edge	CDBG	Ft	800					800.0												
38 Underdrain, Subbase, 4 inch	CDBG	Ft	200			200.0														
39 Dr Structure Cover, Adj	CITY	Ea	12							12.0										
40 Aggregate Base, LM	CITY	Cyd	10							10.0										
41 Aggregate Base, 8 inch	CITY / MDNR	Syd	35					17.5	17.5											
42 Subbase, CIP	CDBG / MDNR	Cyd	677			320.0	320.0	2.0	35.0											
43 HMA, 4 EL	CITY	Ton	500						500.0											
44 HMA Approach	CITY	Ton	5						5.0											
45 HMA Valley Gutter	CITY	Ft	1,340						1340.0											
46 Concrete Driveway, Nonreinf, 6 inch	CITY	Sft	126						126.0											
47 Sidewalk Ramp, Conc. 6 inch	CITY / MDNR	Sft	730					290.0	440.0											
48 Sidewalk, Conc. 4 inch	CITY / CDBG / MDNR	Sft	9,410			4600.0	4600.0	130.0	80.0											
49 Sidewalk, Conc. 6 inch	CITY	Sft	25						25.0											
50 Detectable Warning Surface, DI	CITY / MDNR	Ft	44						12.0	32.0										
51 21AA Crushed Limestone, CIP	CDBG	Syd	1,300			1300.0														
52 Seat Wall	CDBG / MDNR	Ft	120			78.0	42.0													
53 Outdoor Fireplace	CDBG	LSum	1			1.0														
54 Bench, Surface Mounted	CDBG	Ea	4			4.0														
55 Accessible Picnic Tables	CDBG	Ea	2			2.0														
56 Pavt Mrkg, Waterborne for Parking Lot, White	MDNR	Ft	1,500					1500.0												
57 Pavt Mrkg, Waterborne for Parking Lot, Blue	MDNR	Ft	200					200.0												
58 Pavt Mrkg, Polyurea, Accessible Sym	MDNR	Ea	3					3.0												
59 Pavt Mrkg, Polyurea, 12 inch, Crosswalk	MDNR	Ft	80					80.0												
60 Ostrya Virginiana, 2 inch	MDNR	Ea	2					2.0												
61 Acer Rubrum, 2 inch	MDNR	Ea	2					2.0												
62 Acer X'Freemanii', 2 inch	MDNR	Ea	2					2.0												
63 Liriodendron Tulipifera, 2 inch	MDNR	Ea	2					2.0												
64 Site Light W/Concrete Base	CDBG	Ea	6														6.0	0.0		
65 Site Electrical Distribution	CDBG / MDNR	LSum	1														0.5	0.5		
66 Gas Service	CDBG	Allowance	1			1.0														
67 4 Inch Water Service	CDBG / MDNR	Ft	90			45.0	45.0													
68 1-1/2 Irrigation Pipe	CDBG / MDNR	Ft	150			75.0	75.0													
69 Landscape Area with Metal Edging	CDBG / MDNR	Sft	1,300			650.0	650.0													
70 Turf Restoration	CITY / CDBG / MDNR	Syd	5,100			2300.0	2300.0			500.0										

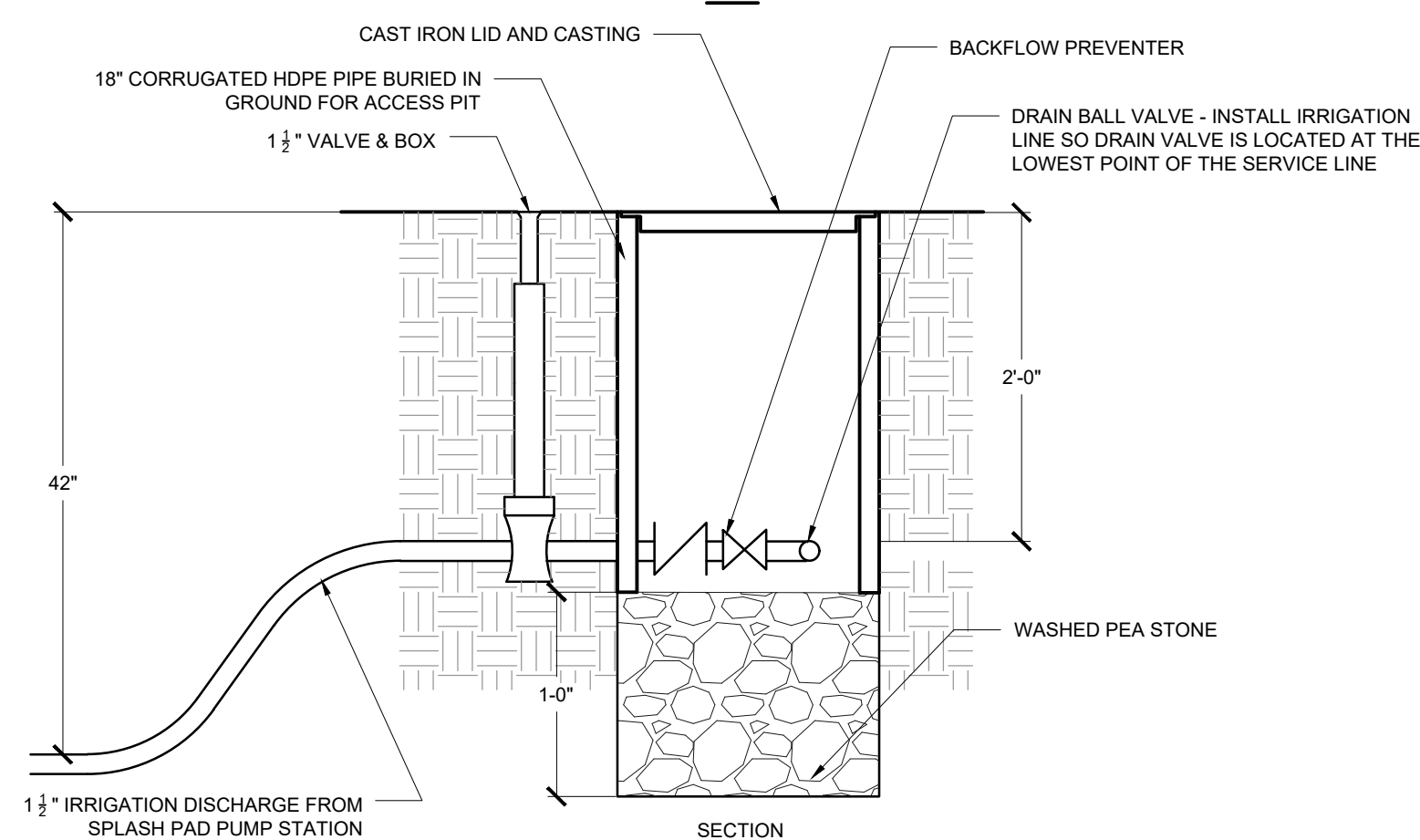
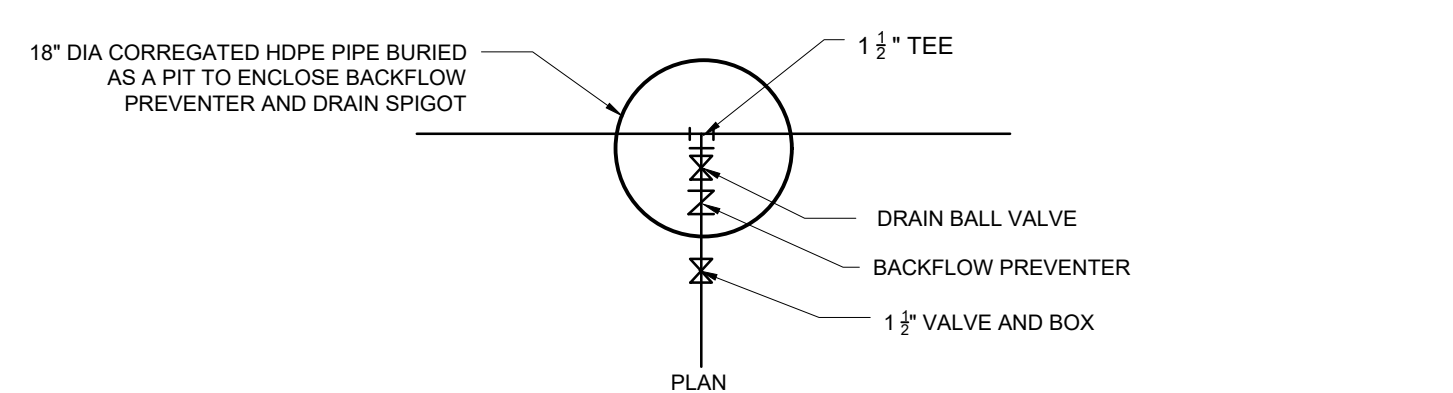


- NOTE:
- PROVIDE 1/2" EXPANSION JOINT WHERE WALK MEETS BUILDING OR RETAINING WALL.
 - PROVIDE CONTROL JOINTS AT 8' O.C.
 - REVIEW CONTROL JOINT SPACING WITH ENGINEER PRIOR TO COMMENCEMENT OF SAW CUTTING. THICKENED CONCRETE EDGE WILL BE PAID AS PART OF SIDEWALK, CONC AND NOT PAID FOR SEPARATELY.
 - SIDEWALK SECTION APPLICABLE WHERE ADJOINING PLAYGROUND OR SPLASH PAD.

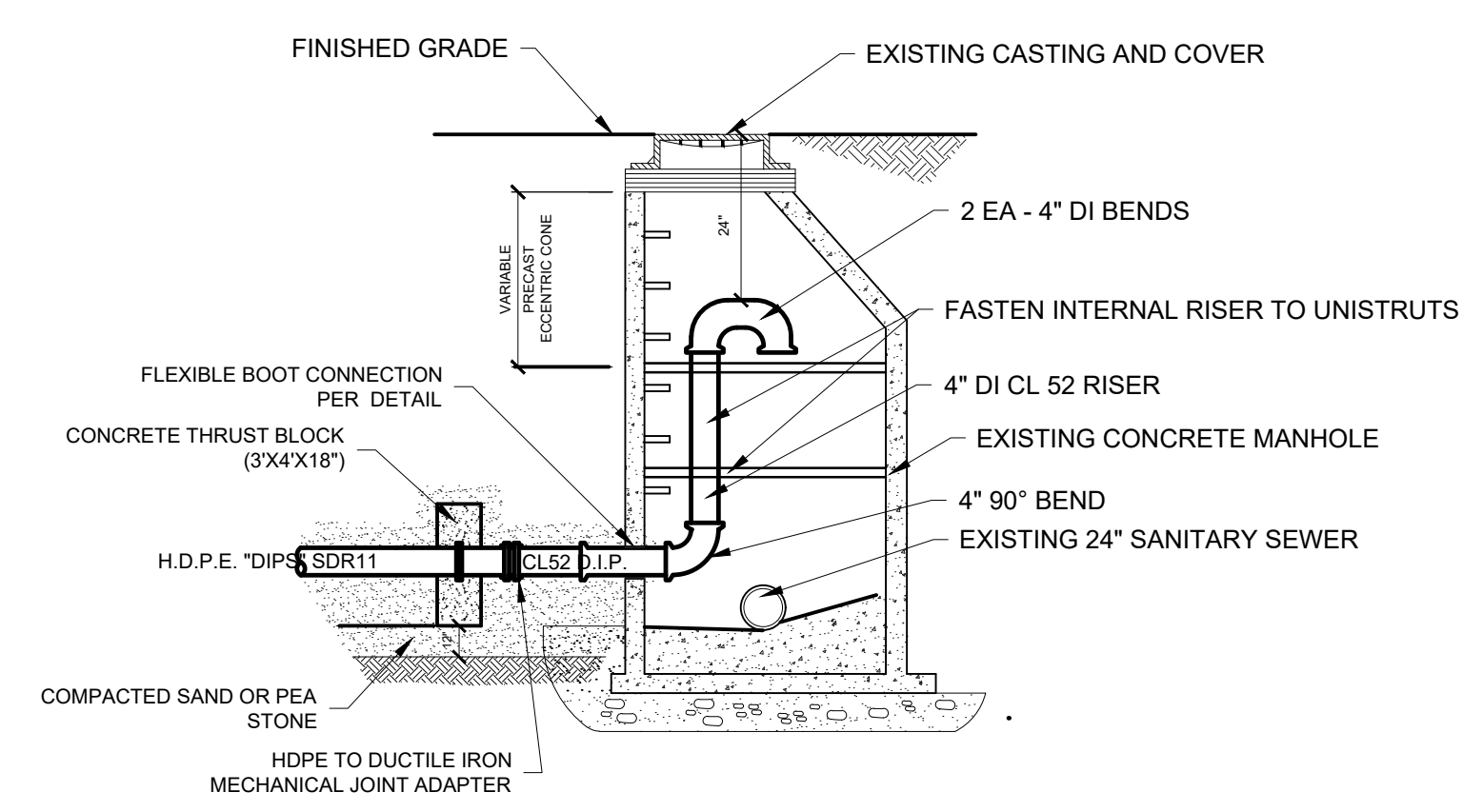
CONCRETE SIDEWALK 4" TURN DOWN EDGE
NOT TO SCALE



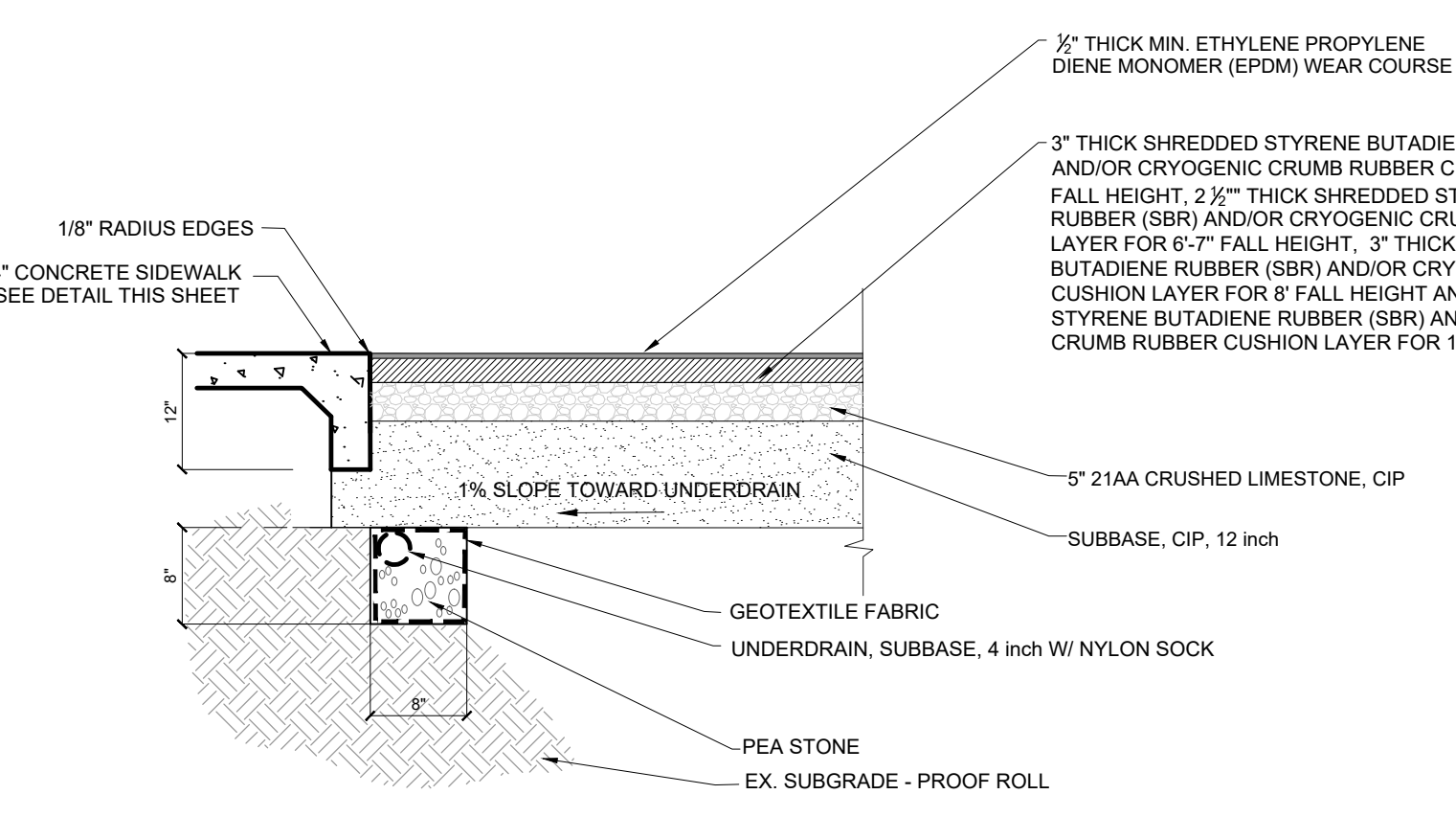
SPLASH PAD CONCRETE BASE
NOT TO SCALE



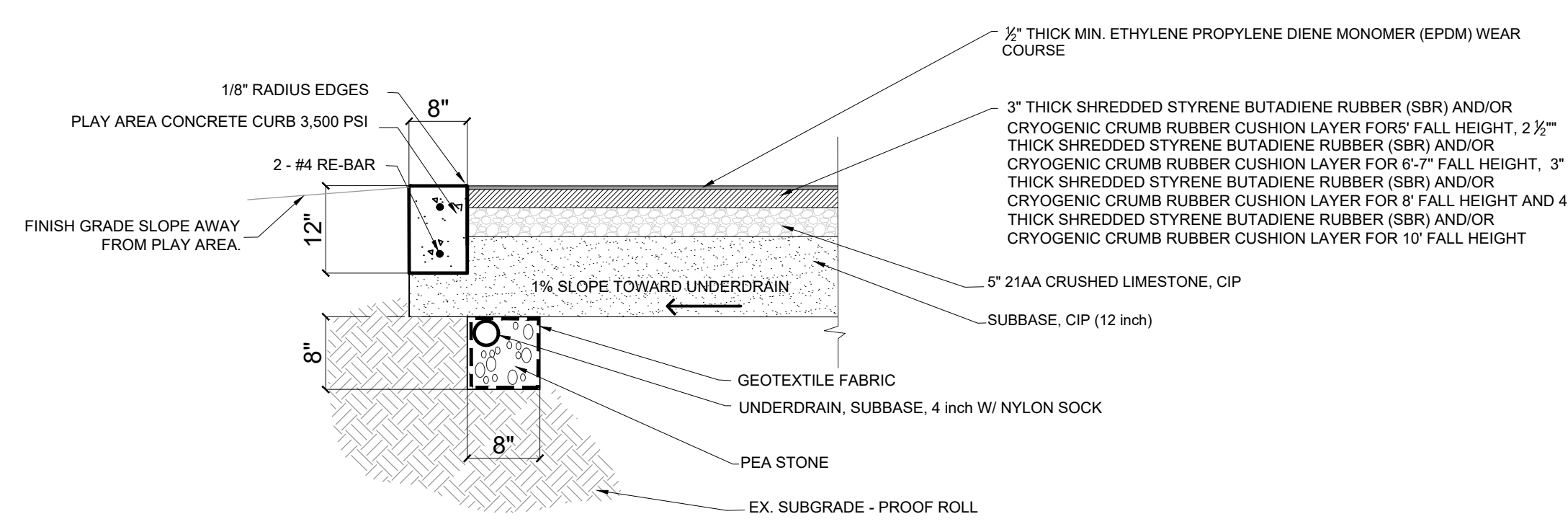
IRRIGATION SERVICE CONNECTION
NOT TO SCALE



SPLASH PAD FORCE MAIN CONNECTION DETAIL



PLAYGROUND / SAFETY SURFACE SECTION
NOT TO SCALE



PLAYGROUND AREA CONCRETE CURB AND SURFACE SECTION
NOT TO SCALE

FLEISCHMANN & WANDENBRINK
DESIGN. BUILD. OPERATE.

2960 Lucerne Drive SE
Grand Rapids, MI 49546
P: 616.977.1000
F: 616.977.1005

ISSUED FOR REBID 1/13/2023 TSR
ISSUED FOR BID 9/11/2023 TSR
AGENCY REVIEW 5/24/2023 TSR

REVISION:

CITY OF BIG RAPIDS
MECOSTA COUNTY, MICHIGAN

HEMLOCK PARK SPLASH PAD & PLAYGROUND

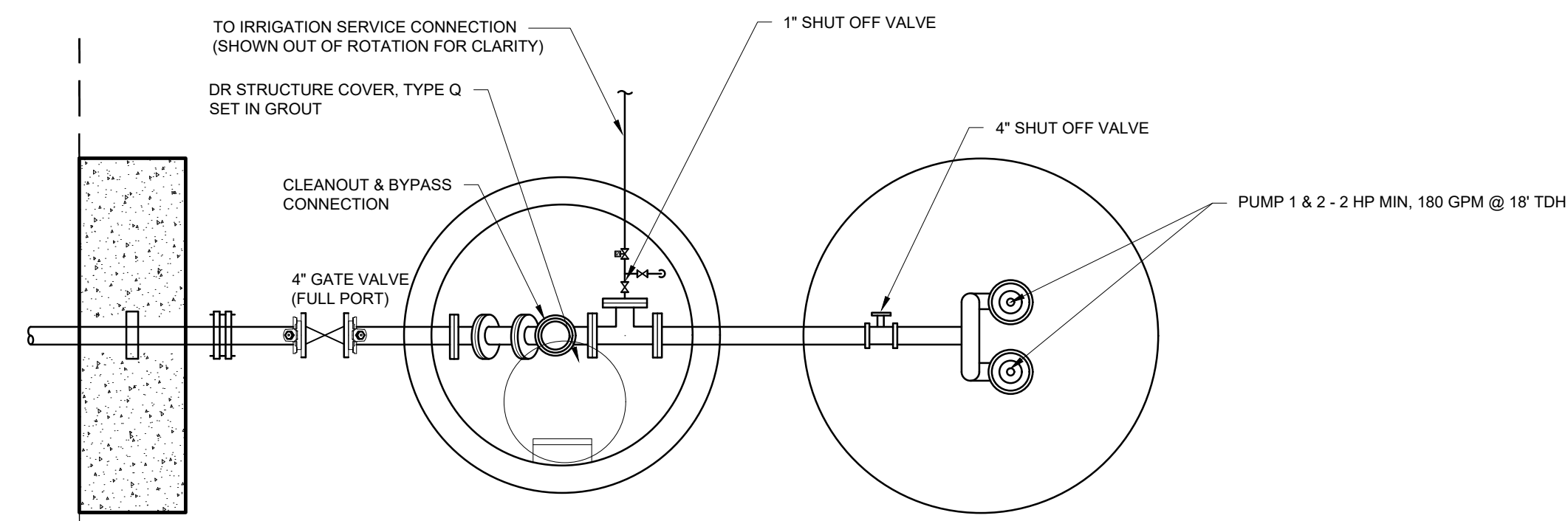
DETAILS

DESIGN TEAM: PROJ MGR: TSR
DESIGNED BY: RWT
DRAWN BY: PAD
CHECK BY:

DRAWING INFORMATION:
858220_C503_DET5
951123.pdf

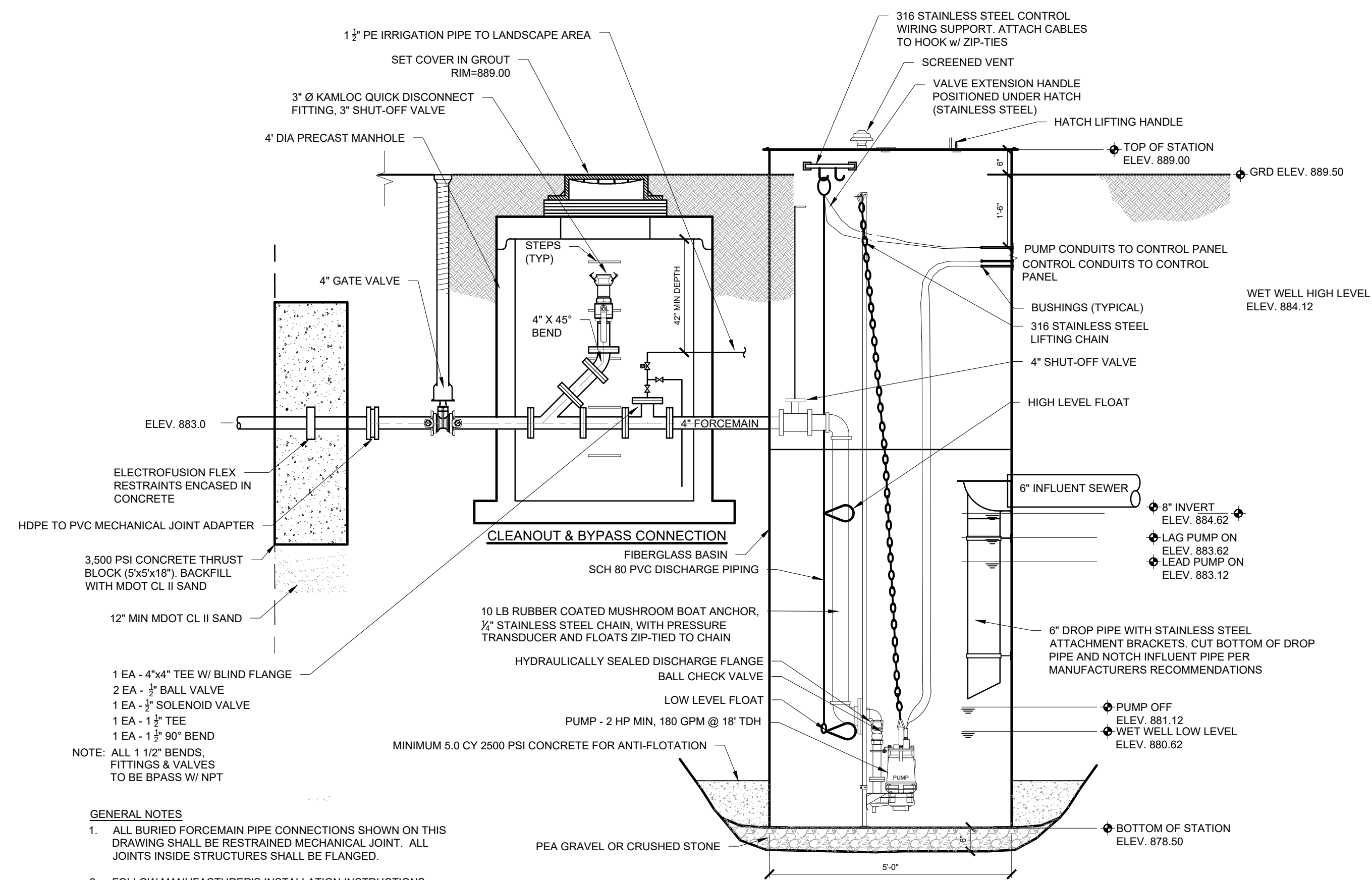
NOVEMBER 2023
REV PROJECT NO:
858220

C503



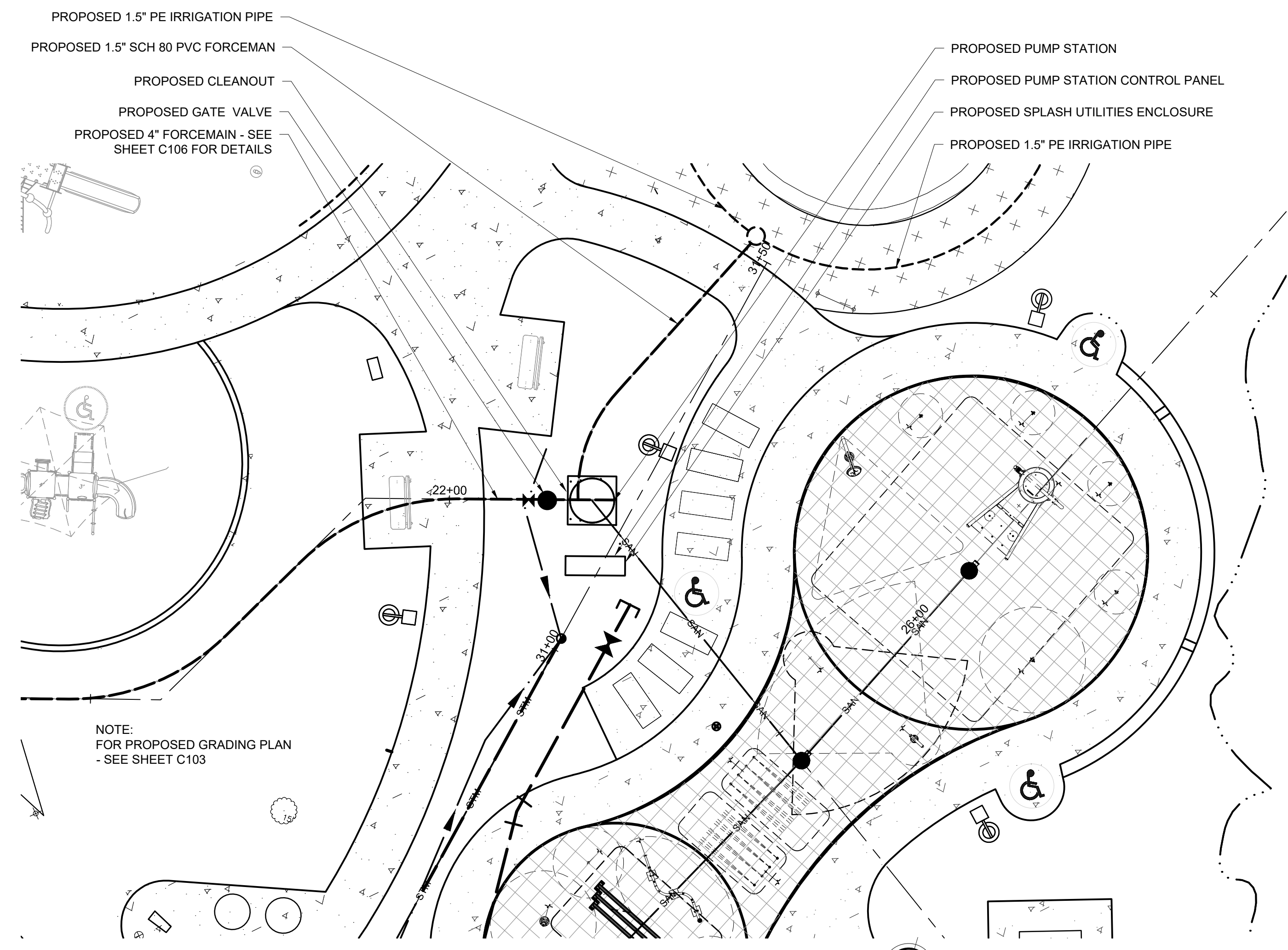
SPLASH PAD PUMP STATION PLAN VIEW

NOT TO SCALE

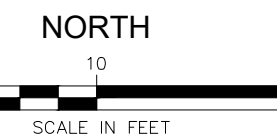


CROSS SECTION - SPLASH PAD PUMP STATION

NOT TO SCALE



SPLASH PAD PUMP STATION SITE PLAN



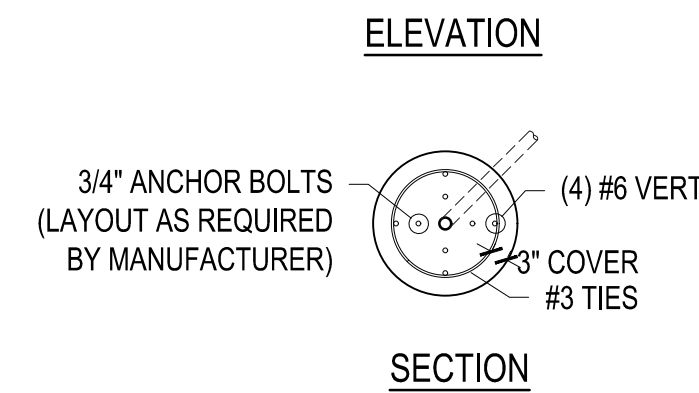
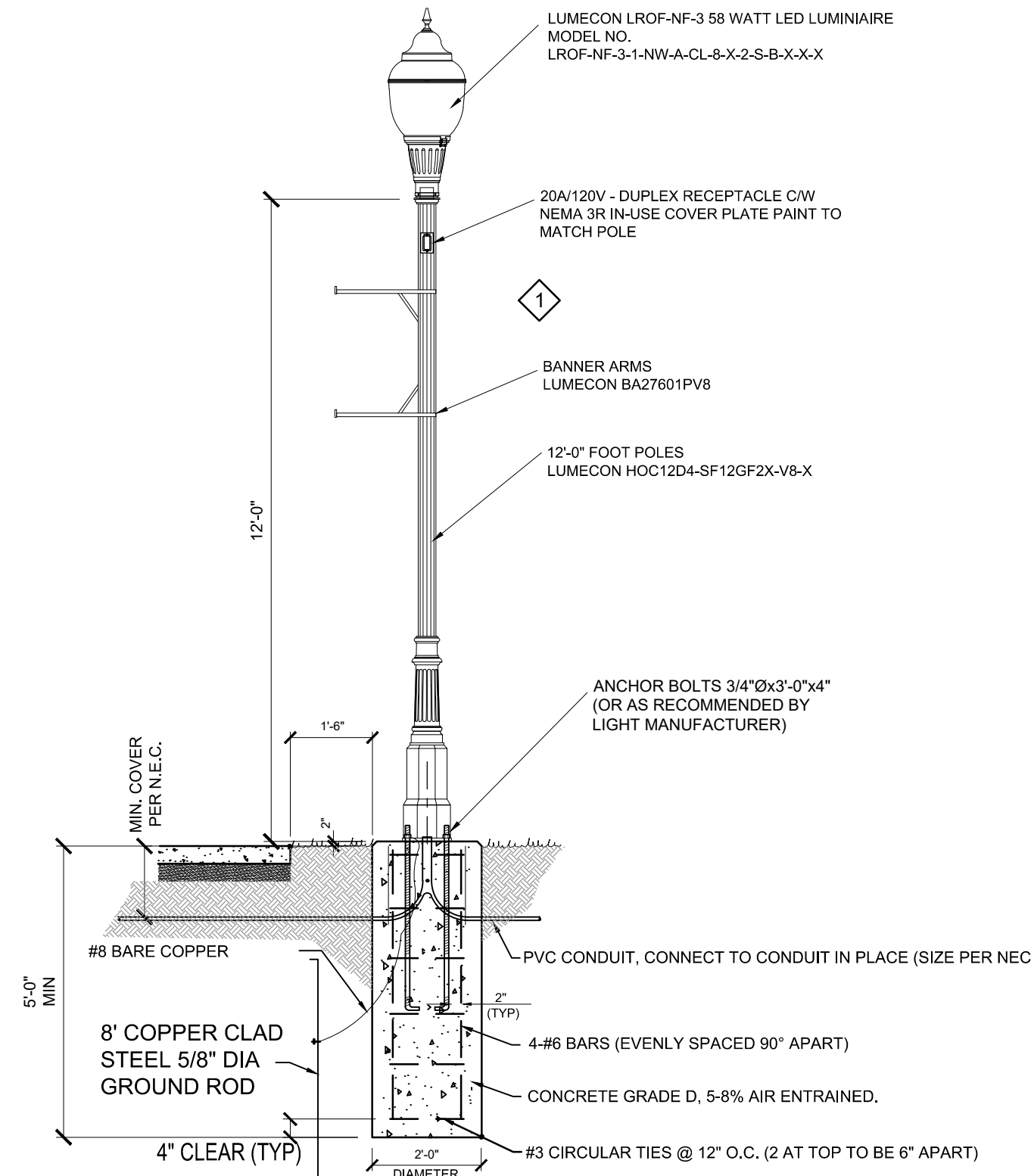
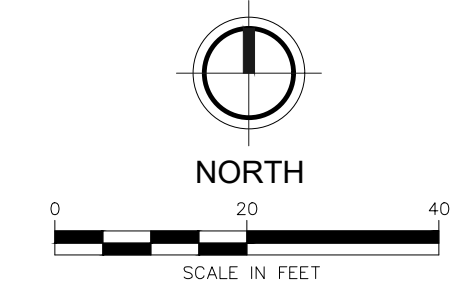
NOTE:
FOR PROPOSED GRADING PLAN
- SEE SHEET C103

- GENERAL NOTES**
1. ALL BURIED FORCEMAIN PIPE CONNECTIONS SHOWN ON THIS DRAWING SHALL BE RESTRAINED MECHANICAL JOINT. ALL JOINTS INSIDE STRUCTURES SHALL BE FLANGED.
 2. FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS WITH SPECIAL ATTENTION TO ALLOWABLE HORIZONTAL AND VERTICAL "INLET ZONE" FOR INFLUENT SEWER.

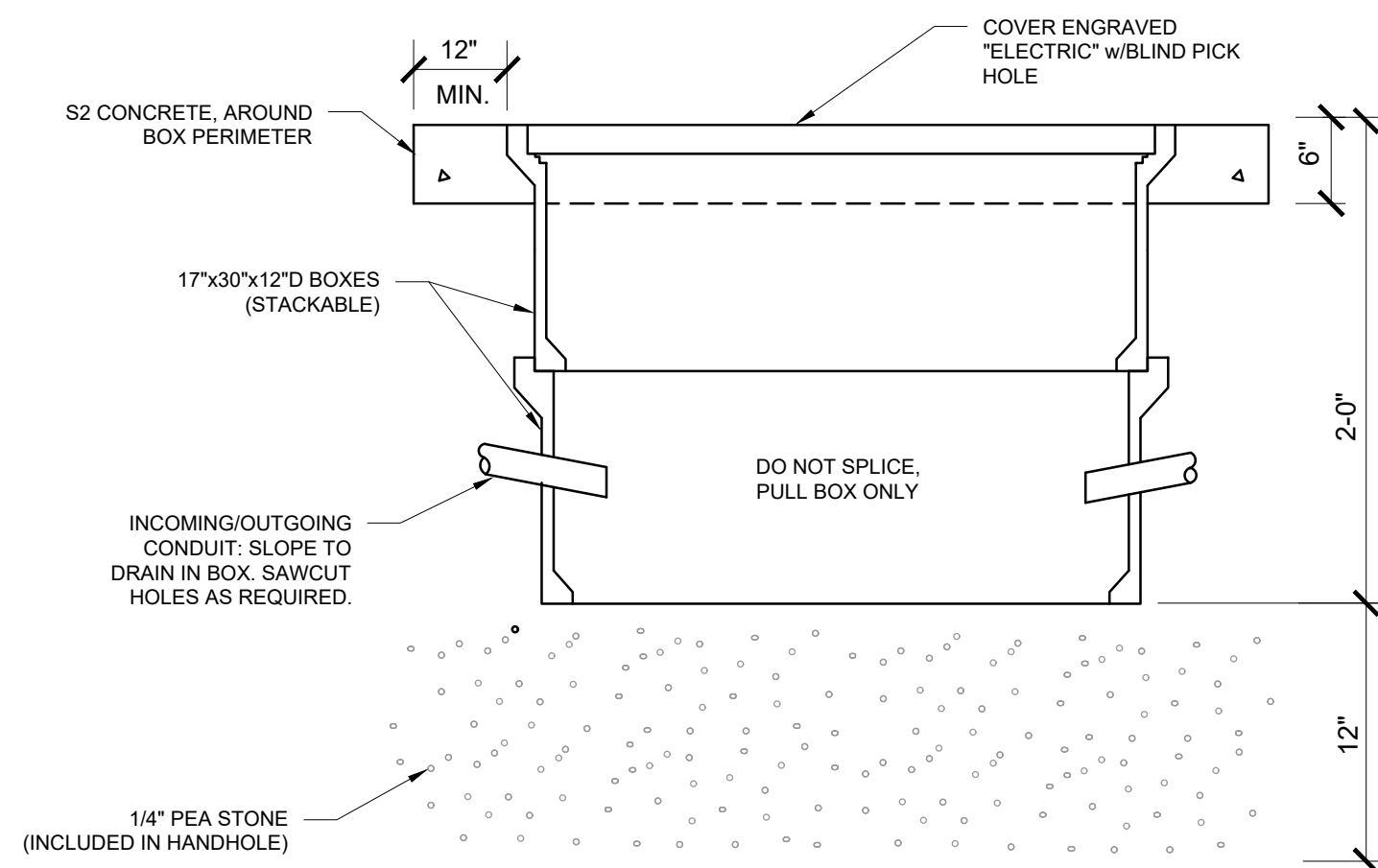
WORK DESCRIPTION NOTES:

- 1 CONTRACTOR TO PROVIDE A DUPLEX 20A RECEPTACLE IN THE OUTLET OPENING ON THE POLE.
- 2 PROVIDE 2 POLE, 100A BREAKER TO MATCH EXISTING TO FEED LP-A IN SPLASH PAD UTILITIES CONTROL CABINET.
- 3 ROUTE UNDERGROUND PVC SCH.40 CONDUIT ON CREEK SIDE OF BRIDGE ABUTMENTS, THEN SUPPORT THE EXPOSED RIGID METAL CONDUIT FROM UNDERSIDE OF BRIDGE PER NEC TABLE 344.30 (B) (2).
- 4 SEE PUMP STATION CONDUITS ON JUNCTION BOX DETAILS, SHEET E501. PUMP STATION WET WELL IS NEC CLASS 1, DIVISION 2 HAZARDOUS AREA.
- 5 2 #12 & 1 #12 GND-3/4" TO IRRIGATION SOLENOID FROM IRRIGATION TIMER.

MISCELLANEOUS QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	DESCRIPTION
1	LSUM	SITE ELECTRICAL DISTRIBUTION
6	EA	SITE LIGHT W/ CONCRETE BASE

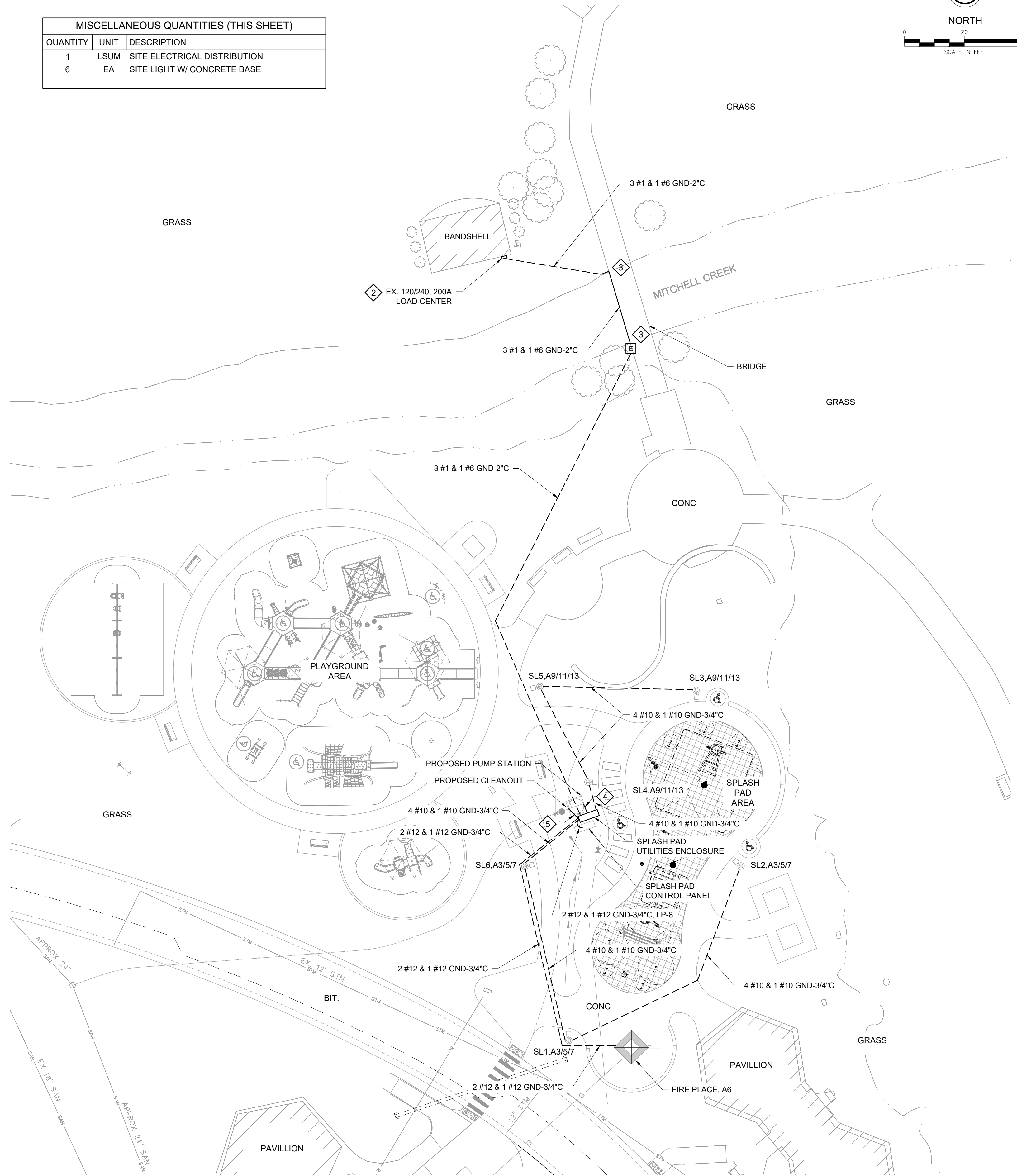


SITE LIGHT W/CONCRETE BASE



E ELECTRICAL PULL BOX DETAIL

PROVIDE ELECTRICAL PULL BOX USING QUANTITIES AND DIMENSIONS SHOWN. BOXES SHALL BE PRECAST POLYMER/CONCRETE WITH COVERS HAVING A 5000 LB. DESIGN LOAD. DESIGN BASED ON QUAZITE BOX AND COVER. ENGINEER APPROVED EQUAL PERFORMANCE BY ARMOR CAST PRODUCTS OR NORDIC PRODUCTS ACCEPTABLE.



ELECTRICAL SITE PLAN

LEGEND:

- BURIED CONDUIT
- SL#A5/7 Ⓞ SITE LIGHT, NUMBER & CIRCUIT NO. FROM LP-A
- E ELECTRICAL PULL BOX



2960 Lucerne Drive SE
Grand Rapids, MI 49546
P: 616.977.1000
F: 616.977.1005

REVISION	DATE	BY	DESCRIPTION
1	5/24/2023	TSR	AGENCY REVIEW
2	9/1/2023	TSR	ISSUED FOR BID
3	11/3/2023	TSR	ISSUED FOR REBID

**CITY OF BIG RAPIDS
MECOSTA COUNTY, MICHIGAN
HEMLOCK PARK SPLASH PAD & PLAYGROUND
ELECTRICAL PLAN**

DESIGN TEAM: PROJ MGR: EJR
DESIGNED BY: EEH
DRAWN BY: DCT
CHECK BY:

DRAWING INFORMATION:
858220_E101_ELEC PLN
102523 bmk

NOVEMBER 2023

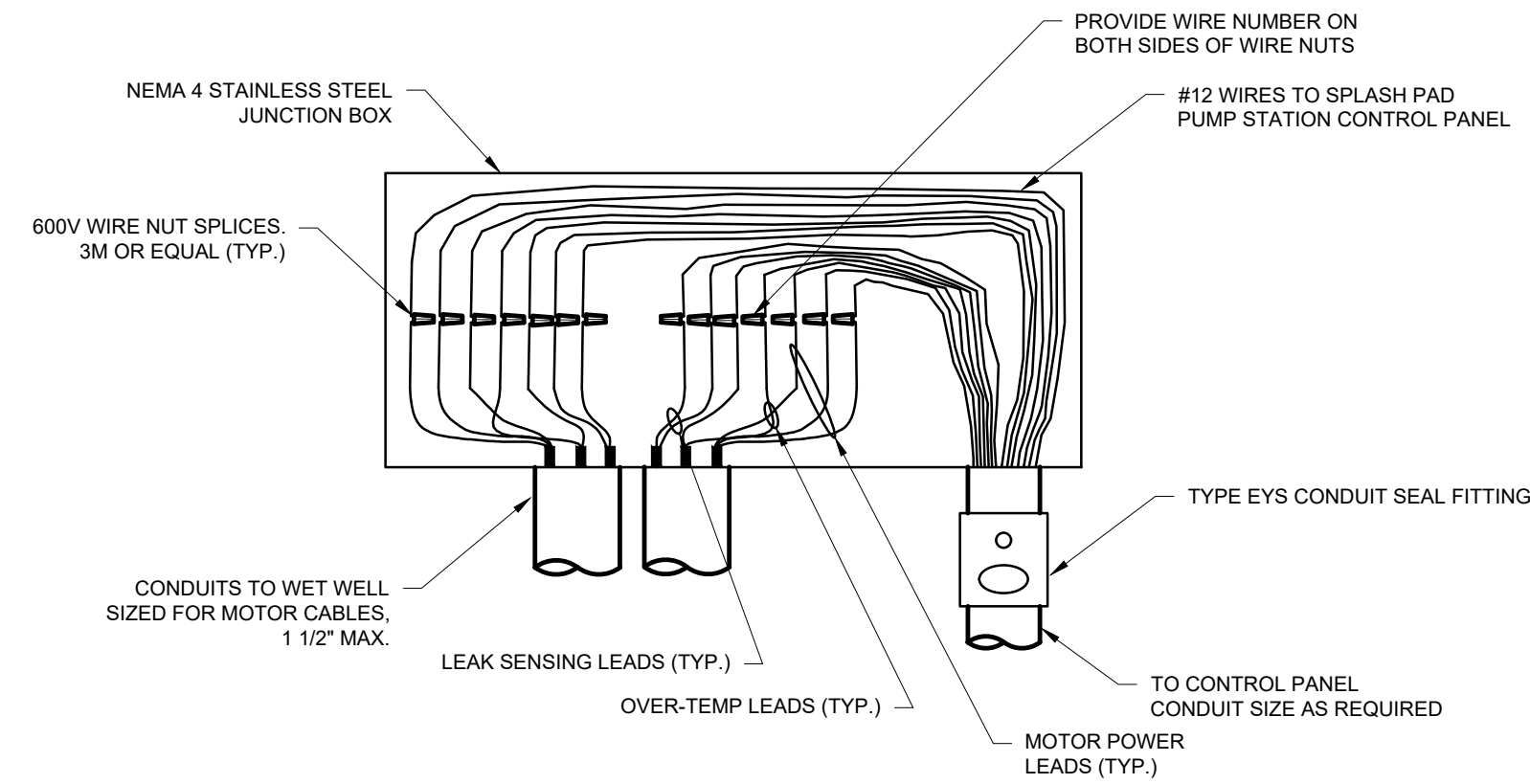
F&V PROJECT NO.
858220

E101

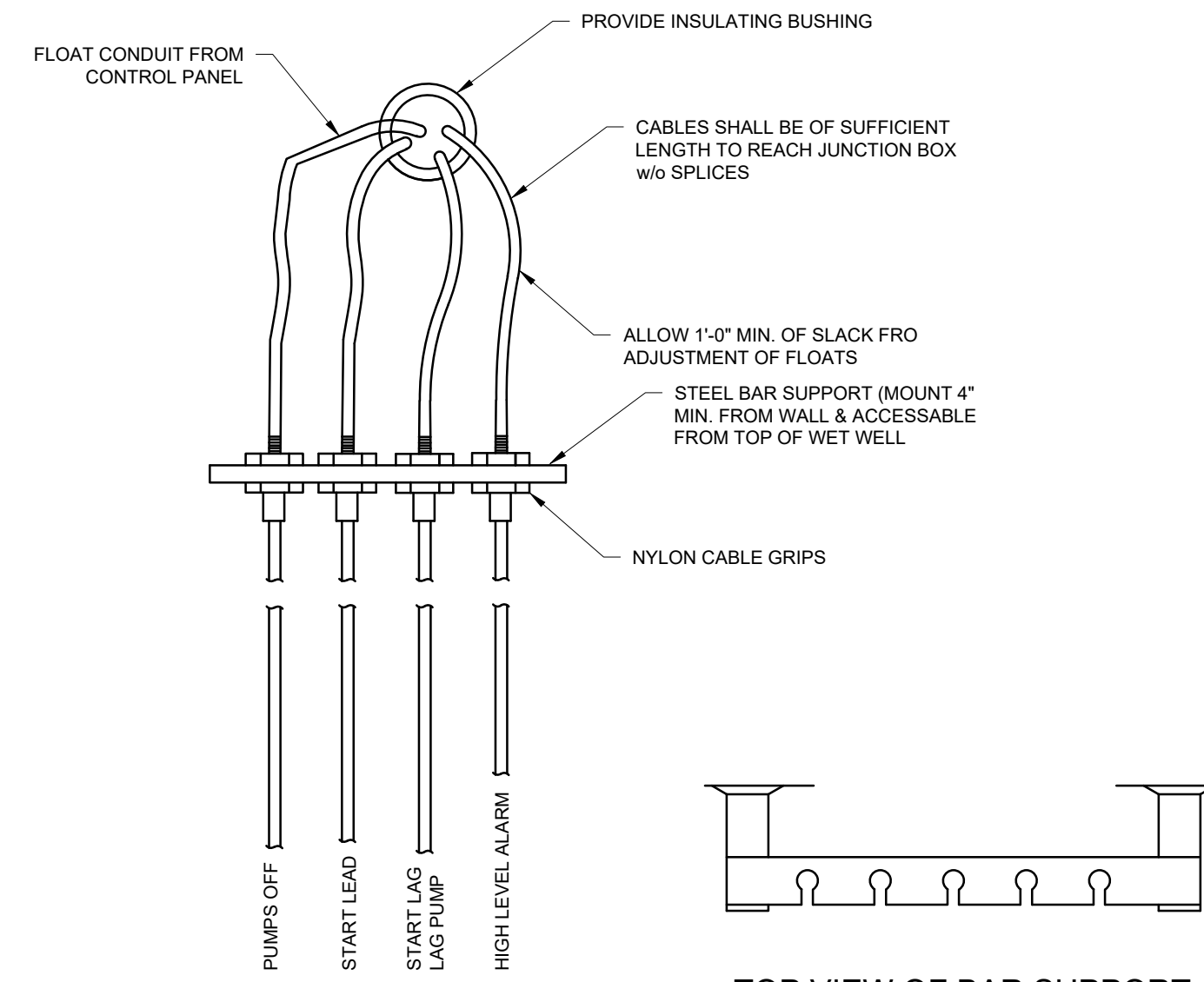
U:\Projects\2023-858220-HEMLOCK PARK SPLASH PAD AND PLAYGROUND\Drawings\858220_E101_ELEC_Plan.dwg - print on 11/2/2023, 2:50 PM

WORK DESCRIPTION NOTES:

- 1 PROVIDE 2 #8 & 1 #10 GND IN WIREWAY FROM LPA-2/4 FOR SPLASH PAD POWER SUPPLY.
- 2 PROVIDE #12 BRANCH CIRCUIT CONDUCTORS IN WIREWAY FROM LPA TO LIGHTING CONTROL, LIGHTING POWER AND RECEPTACLE POWER AS SHOWN IN SITE LIGHTING WIRING DIAGRAMS, SEE SHEET E601.
- 3 PROVIDE #12 BRANCH CIRCUIT CONDUCTORS IN WIREWAY FROM LPA TO CONVENIENCE RECEPTACLE.
- 4 PROVIDE 2 #14 & 1 #12 GND IN WIREWAY FROM SPLASH PAD PUMP STATION CONTROL PANEL TO EXTERIOR ALARM LIGHT.

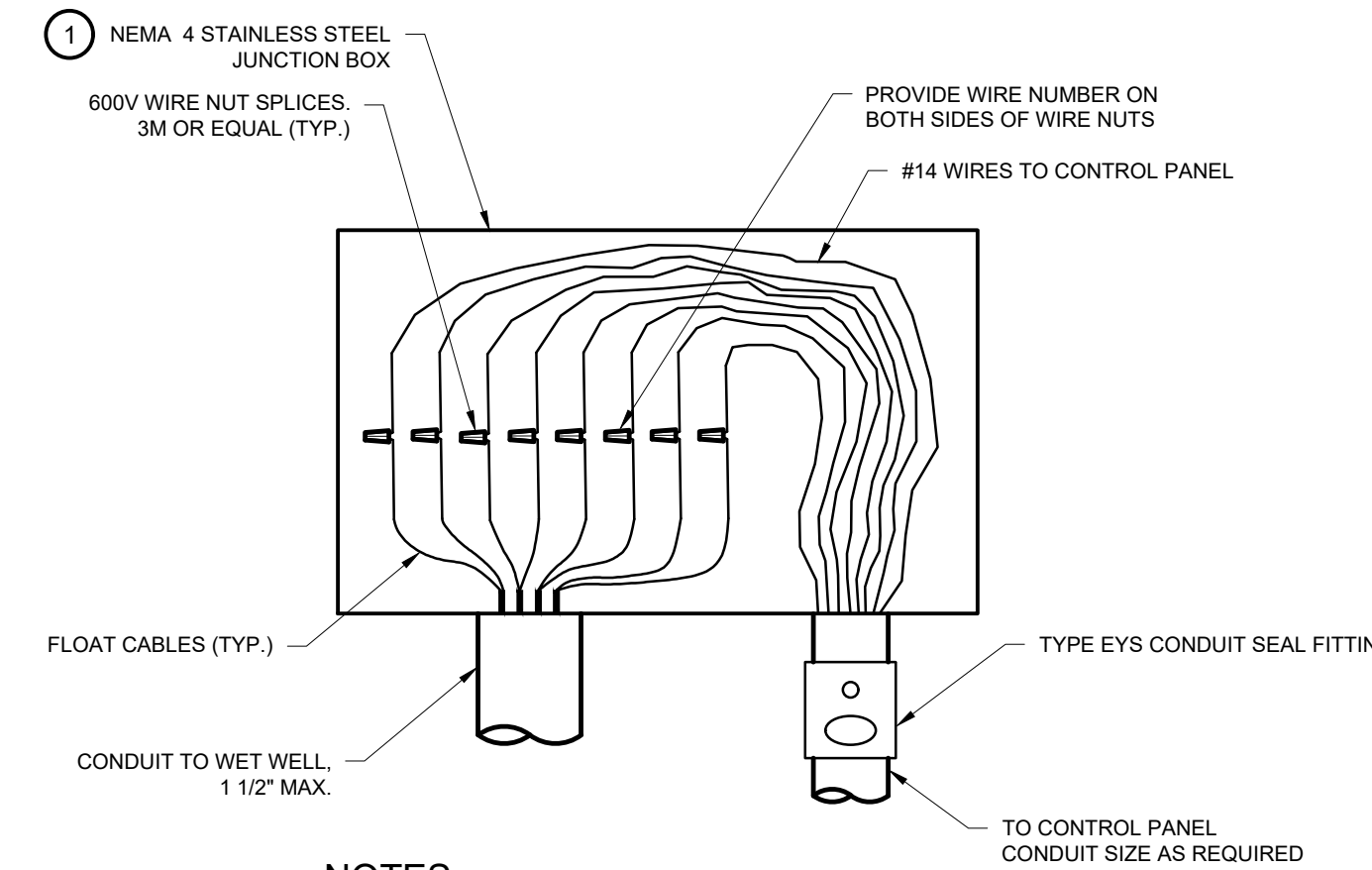


SPLASH PAD PUMP STATION MOTOR LEAD JUNCTION BOX



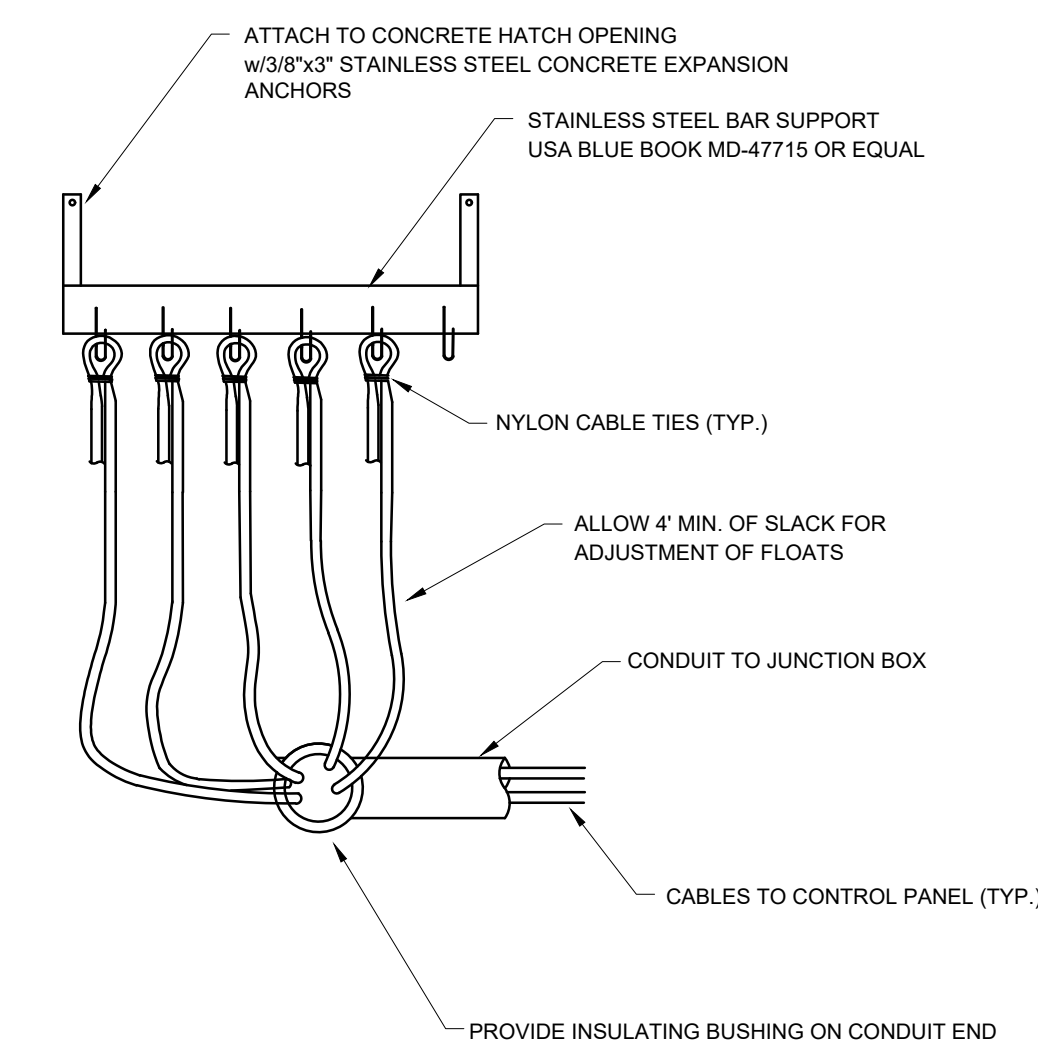
TOP VIEW OF BAR SUPPORT

SPLASH PAD PUMP STATION FLOAT TERMINATION

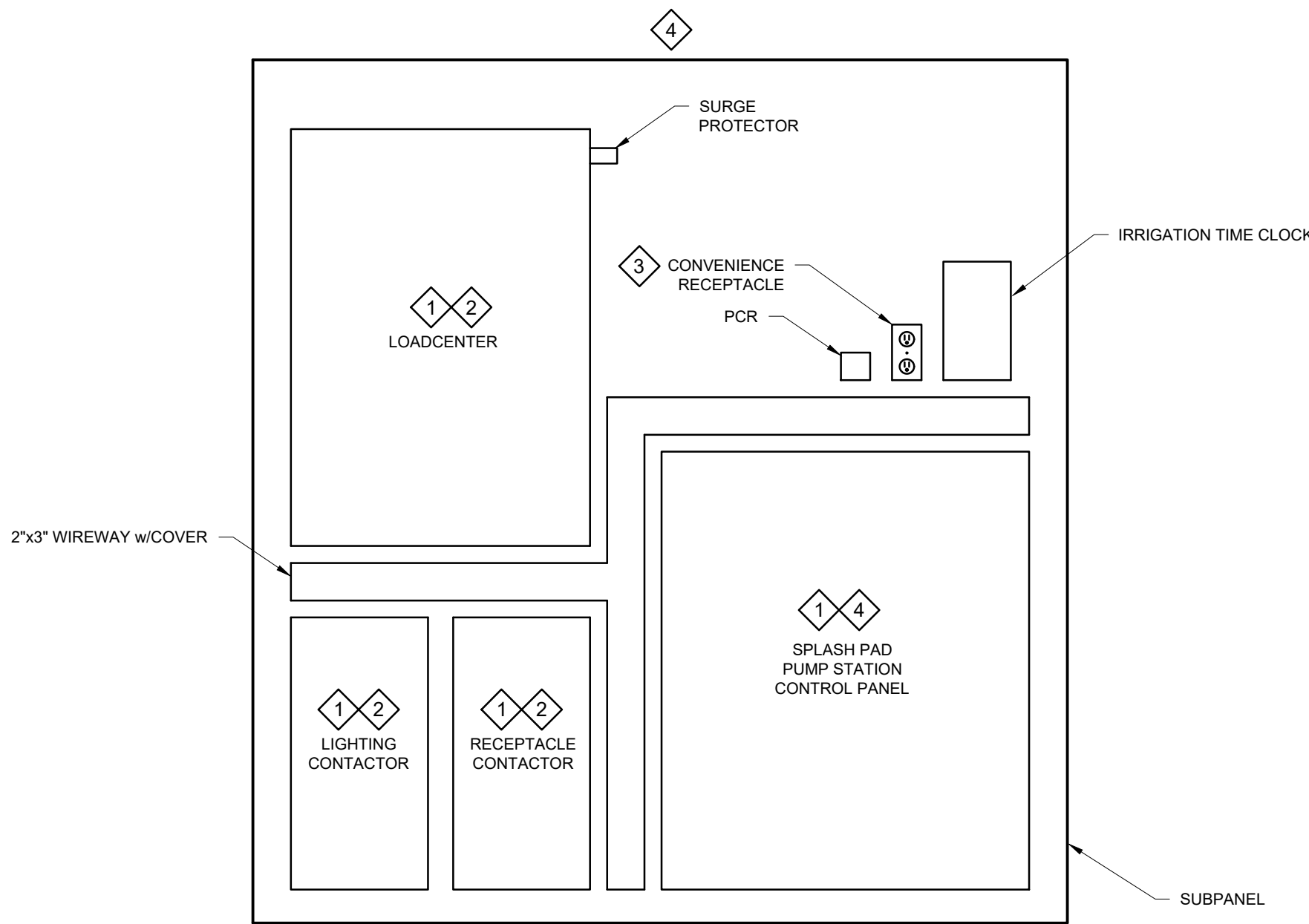


- NOTES:**
- 1 ONLY INTRINSICALLY SAFE CONDUCTORS SHALL BE PERMITTED WITHIN THIS JUNCTION BOX AND CONDUIT.

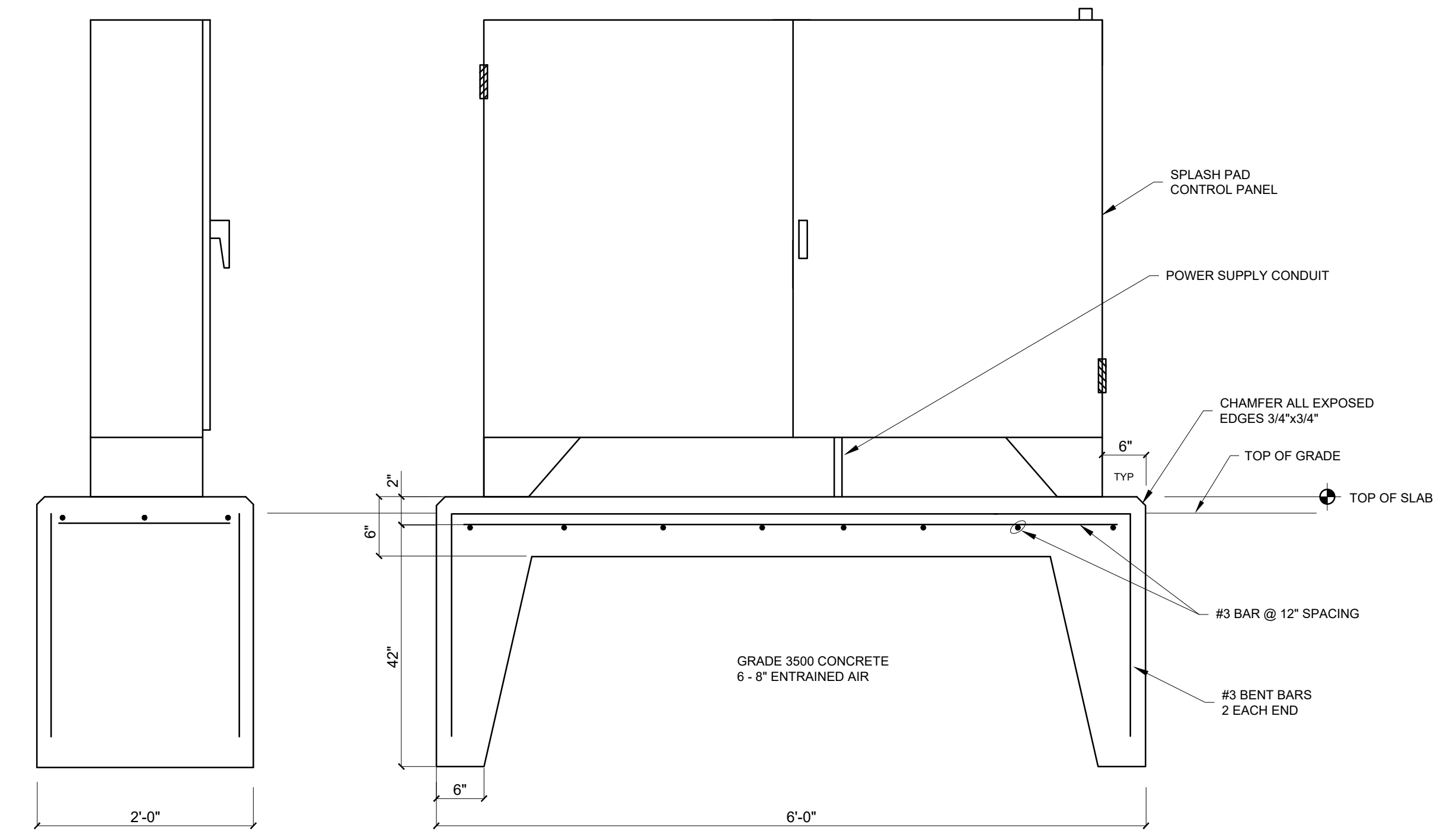
SPLASH PAD PUMP STATION LEVEL CONTROL JUNCTION BOX



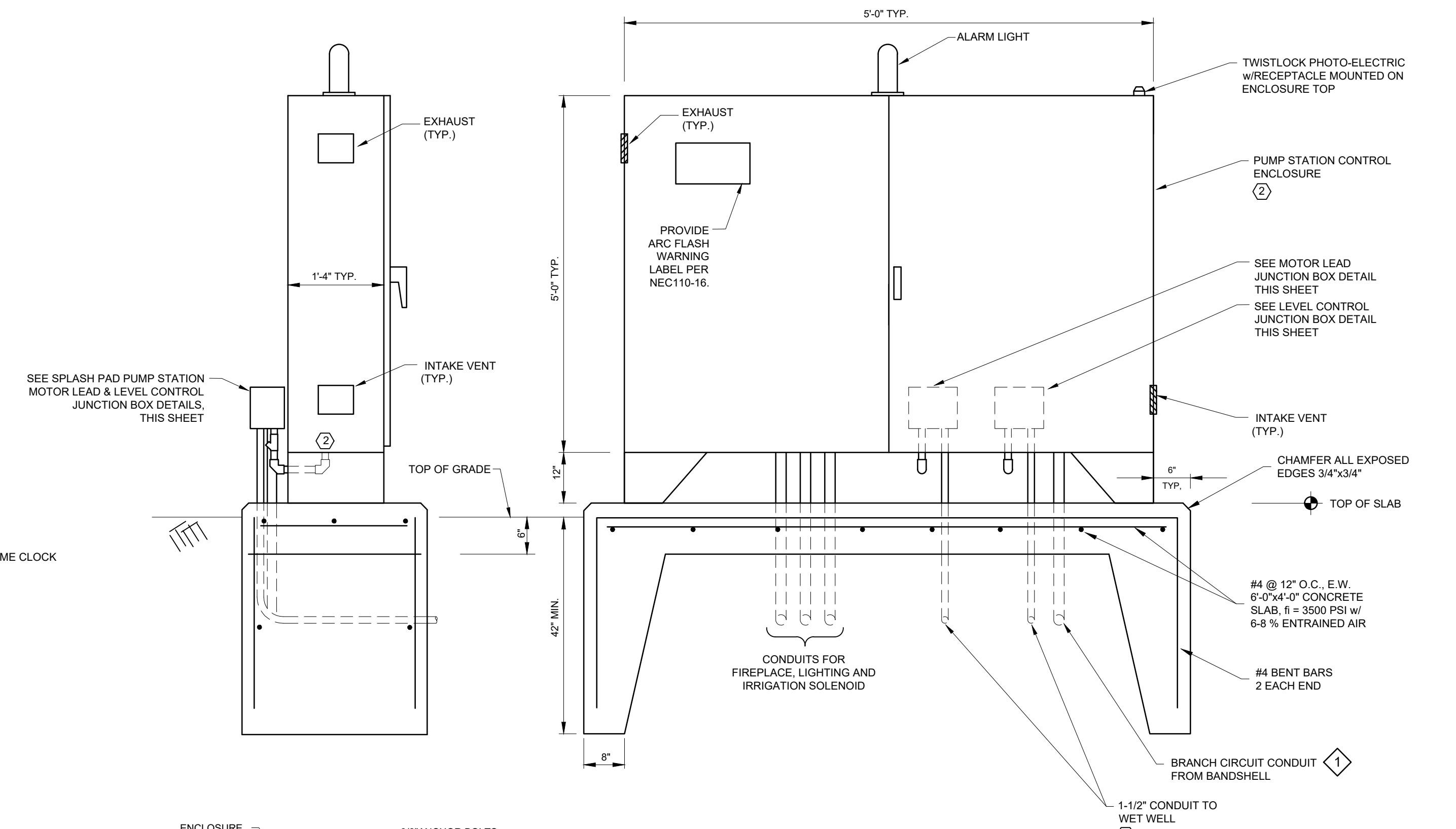
SPLASH PAD PUMP STATION LEVEL CONTROL MOUNTING
SCALE: NOT TO SCALE



SPLASH PAD UTILITIES ENCLOSURE SUB PANEL



SPLASH PAD CONTROL PANEL FOUNDATION
SCALE: NOT TO SCALE



SPLASH PAD UTILITIES ENCLOSURE (TYP.)
SCALE: NOT TO SCALE

- DETAIL NOTES:**
- 1 DEPTH PER NEC TABLE 300-5.
 - 2 DO NOT ENTER ENCLOSURE FROM THE BACK. ENTER IN BOTTOM OR SIDES.

FLEISCHMANN & WANDENBRINK
DESIGN. BUILD. OPERATE.

2960 Lucerne Drive SE
Grand Rapids, MI 49546
P: 616.977.1000
F: 616.977.1005

ISSUED FOR REBID 11/03/2023 TSR
ISSUED FOR BID 9/11/2023 TSR
AGENCY REVIEW 5/24/2023 TSR

REVISION:

CITY OF BIG RAPIDS
MECOSTA COUNTY, MICHIGAN
HEMLOCK PARK SPLASH PAD & PLAYGROUND
ELECTRICAL DETAILS

DESIGN TEAM: PROJ. MGR.: TSR
DESIGNED BY: EEH
DRAWN BY: DCT
CHECK BY:

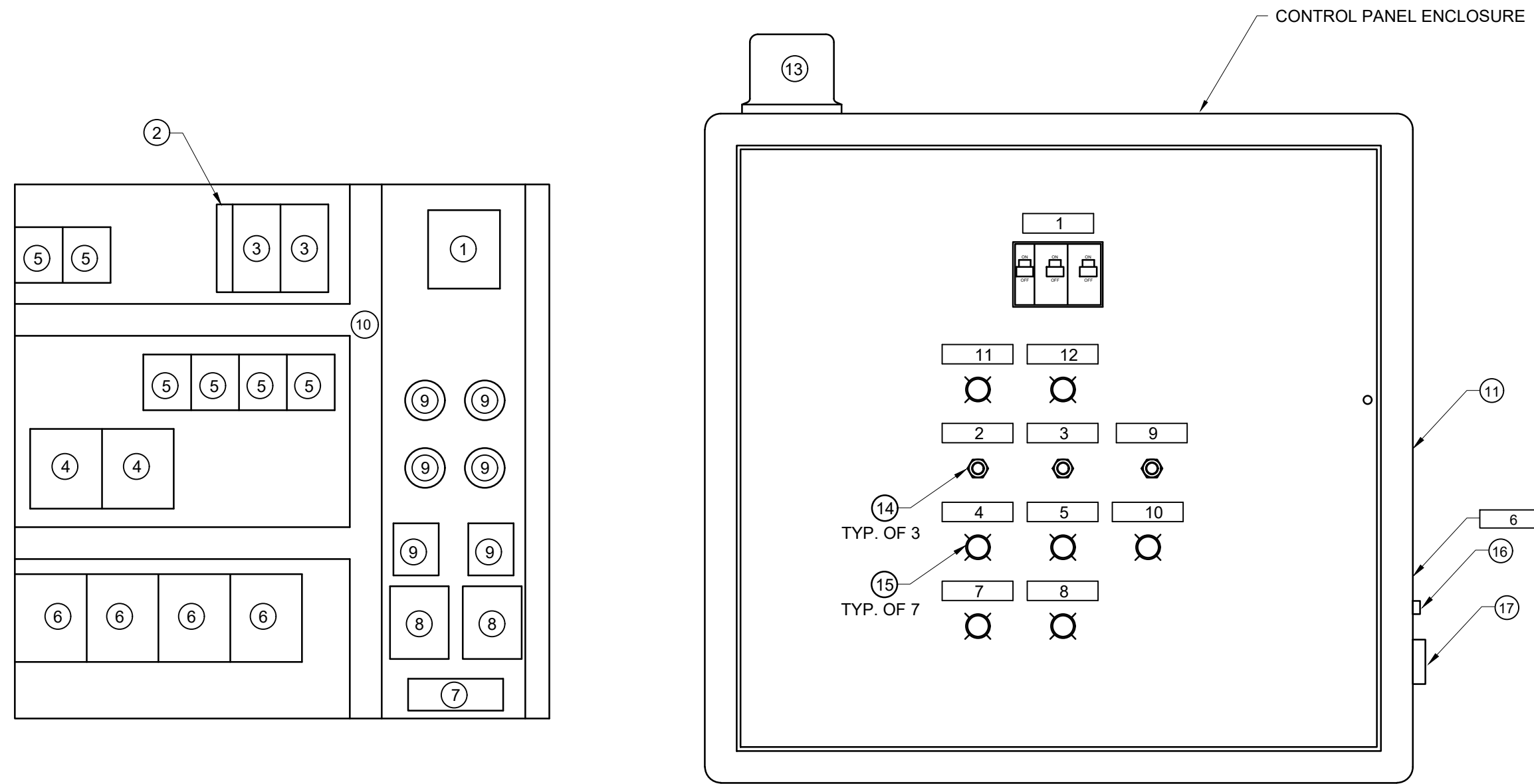
DRAWING INFORMATION:
858220_E501
853123.pdf

NOVEMBER 2023
F&V PROJECT NO.
858220

E501

WORK DESCRIPTION NOTES:

- 1 WHERE CONDUCTORS ARE OVERSIZED FOR VOLTAGE DROP. PROVIDE INSULATED WATERTIGHT POWER DISTRIBUTION BLOCK IN POLE BASE HANDHOLE TO MAKE TRANSITION FROM #12 LIGHT AND RECEPTACLE CONDUCTORS TO OVERSIZED BRANCH CIRCUIT CONDUCTORS.
- 2 FUSE EACH LIGHT AND RECEPTACLE INDIVIDUALLY AT BASE OF EACH POLE w/BREAKAWAY WATERTIGHT INLINE FUSE HOLDERS AND TIME DELAY FUSES. FUSE LIGHTS PER MANUFACTURER'S RECOMMENDED AMP RATING. FUSE RECEPTACLES AT 15 AMPS. NEUTRAL SHALL ALSO BE EQUIPPED WITH WATERTITE BREAKAWAY ONE POLE SOLID NEUTRAL DISCONNECT.



**SPLASH PAD PUMP STATION
CONTROL PANEL
SUBPANEL LAYOUT**

**SPLASH PAD PUMP STATION
CONTROL PANEL
DOOR LAYOUT**

NAMEPLATE LEGEND:

- 1. CONTROL/PUMP 1/PUMP 2
- 2. PUMP 1 HAND OFF AUTO
- 3. PUMP 2 HAND OFF AUTO
- 4. PUMP 1 OVERTEMP
- 5. PUMP 2 OVERTEMP
- 6. SILENCE
- 7. PUMP 1 SEAL FAILURE
- 8. PUMP 2 SEAL FAILURE
- 9. LEAD PUMP 1-2
- 10. HIGH WATER ALARM
- 11. PUMP 1 RUN
- 12. PUMP 2 RUN

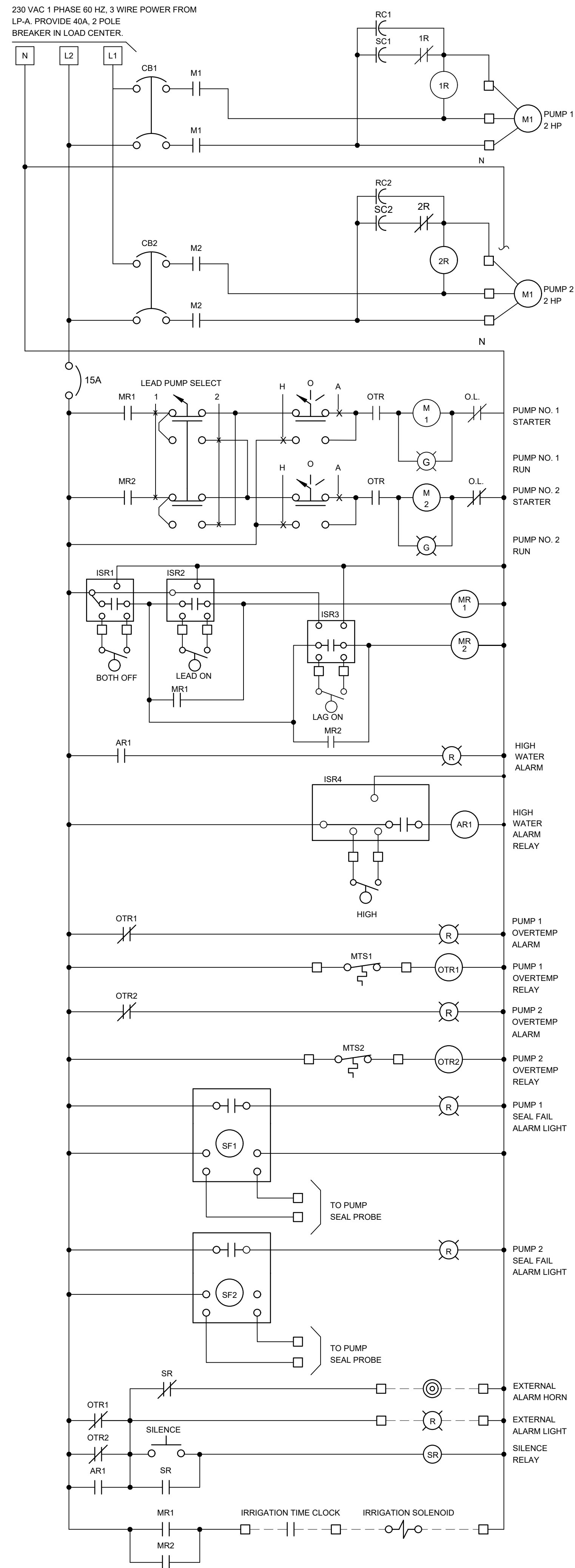
SPLASH PAD CONTROL PANEL BILL OF MATERIAL

MATERIALS LISTED BELOW ARE EXAMPLES OF ACCEPTABLE PRODUCTS. ENGINEER APPROVED EQUALS WILL BE CONSIDERED.

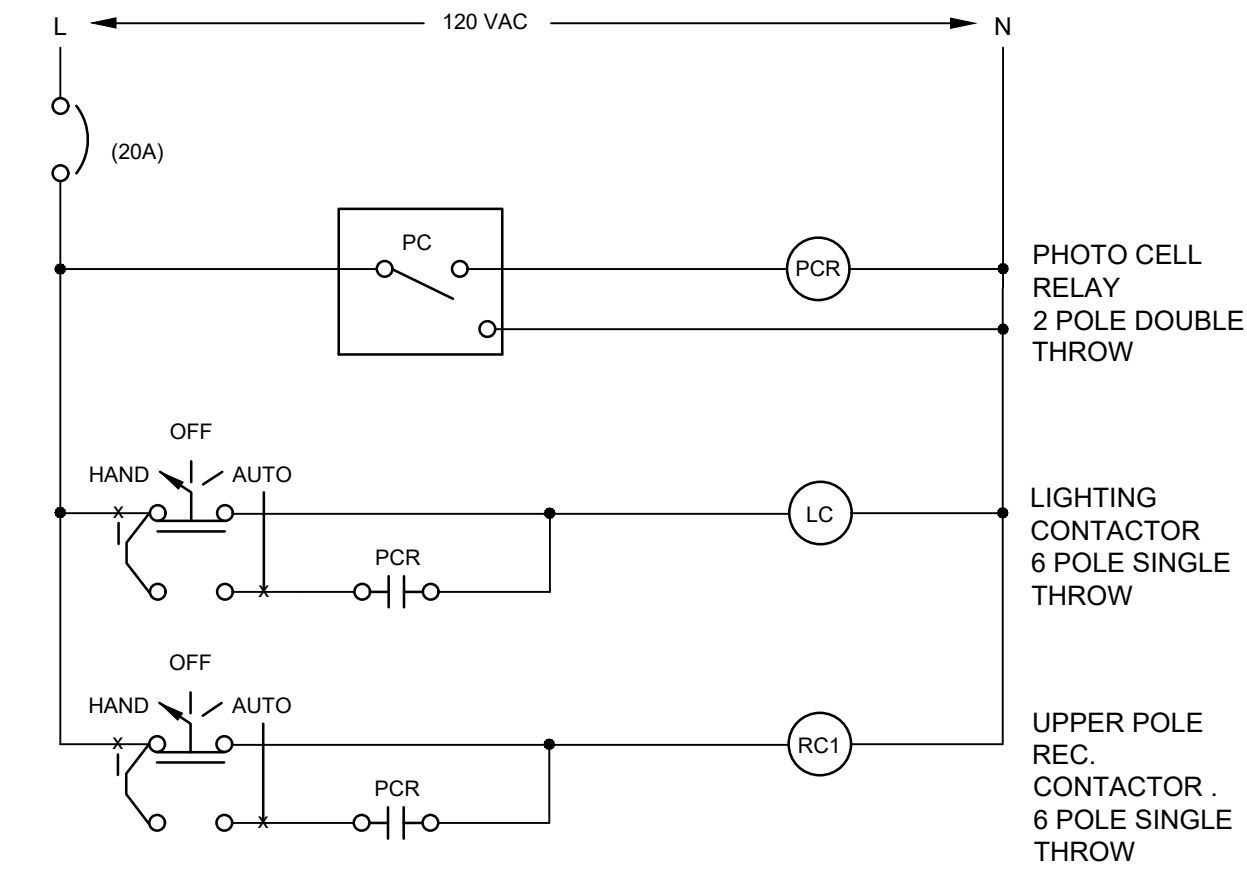
- 1. 100 AMPS, 3 POLE POWER DISTRIBUTION BLOCK, MARATHON #1423552.
- 2. THERMAL MAGNETIC 1 POLE DOOR MOUNT CIRCUIT BREAKER, 15 AMP, SQUARE D TYPE QOU115.
- 3. THERMAL MAGNETIC 2 POLE, DOOR MOUNT CIRCUIT BREAKER, SQUARE D QO SIZED TO MOTOR HP.
- 4. SEAL LEAKAGE/DETECTOR RELAY PROVIDED BY PUMP SUPPLIER.
- 5. 2P/3P 2T AS REQUIRED, PLUG-IN, 10 AMP CONTROL RELAY, 120-CONTROL RELAY, 120-VOLT COIL. PROVIDE IDEC MINIATURE TYPE SH.
- 6. INTRINSICALLY SAFE RELAYS. CONTRACTS RATED AT 10 AMPS. SEAL IN CAPABILITY. WARRICK 27A1D0.
- 7. 60 AMP TERMINAL BLOCKS. SQUARE D 9080 GR-6 OR EQUAL.
- 8. 600V, 12AMP, 3-POLE IEC CONTRACTOR. TELEMECANIQUE LC1D1210.
- 9. MOTOR STARTING RELAY, START CAPACITOR AND RUN CAPACITOR. ALL SIZED TO PUMP PROVIDED.
- 10. 1"x3" SLOTTED PLASTIC WIREWAY. PANDUIT TYPE "E" DUCT.
- 11. REFER TO SPECIFICATION SECTION 26 60 05 FOR SPLASH PAD PUMP STATION CONTROL PANEL ENCLOSURE.
- 12. NOT USED.
- 13. WEATHER PROOF RED ALARM LAMP 120 VAC, INGRAM PRODUCTS LX25RED. SHIPPED LOOSE FOR INSTALLATION ON SPLASH PAD UTILITIES ENCLOSURE.
- 14. 3 POSITION, 20 AMP, 120 VOLT TOGGLE SWITCH. MCGILL TYPE 91.
- 15. RED OR GREEN PILOT LIGHT. 120 VOLT LITTLEFUSE TYPE 930.
- 16. PUSHBUTTON SPRING RETURN RESET SWITCH, 10 AMP NORMALLY OPEN CONTACT. CUTLER HAMMER 8411K12.
- 17. ALARM HORN. INGRAM PRODUCTS PW 120A.

CIRCUIT		OUTLETS			DESCRIPTION	VOLT AMP.		DESCRIPTION	OUTLETS			CIRCUIT				
NO.	AMPS	POLES	VA	LTS.		REC.	OTHER		ØA	ØB	LTS.	REC.	OTHER	VA	POLES	AMPS
1	20	1	50			1	2950					1	2900	2	40	2
3	20	2	25	3			2975					1	2900	-	40	4
5	20	-	25	3			100					1	50	1	20	6
7	*20	1	180		3		940					1	500	1	20	8
9	20	2	25	3			255			1		180	1	20	10	
11	20	-	25	3			100			1		25	1	20	12	
13	*20	1	180		3		540								14	
15															16	
17															18	
19															20	
21															22	
23															24	
25															26	
27															28	
29															30	
						TOTALS	3845	4015								

* PROVIDE GFI BREAKER ** PROVIDE HID BREAKER



**SPLASH PAD PUMP STATION
WIRING DIAGRAM**



SITE LIGHTING WIRING DIAGRAMS

FLEISCHMANN
DESIGN. BUILD. OPERATE.

2960 Lucerne Drive SE
Grand Rapids, MI 49546
P: 616.977.1000
F: 616.977.1005

ISSUED FOR REBID 1/13/2023 TSR
ISSUED FOR BID 9/11/2023 TSR
AGENCY REVIEW 5/24/2023 TSR

REVISION:

**CITY OF BIG RAPIDS
MECOSTA COUNTY, MICHIGAN
HEMLOCK PARK SPLASH PAD & PLAYGROUND
ELECTRICAL WIRING DIAGRAMS**

DESIGN TEAM	PROJ MGR: TSR	TSR
	DESIGNED BY: EEH	ECT
	DRAWN BY: EEH	ECT
	CHECK BY:	

DRAWING INFORMATION:
858220_E601
102523_benk

NOVEMBER 2023
F&V PROJECT NO.
858220

E601