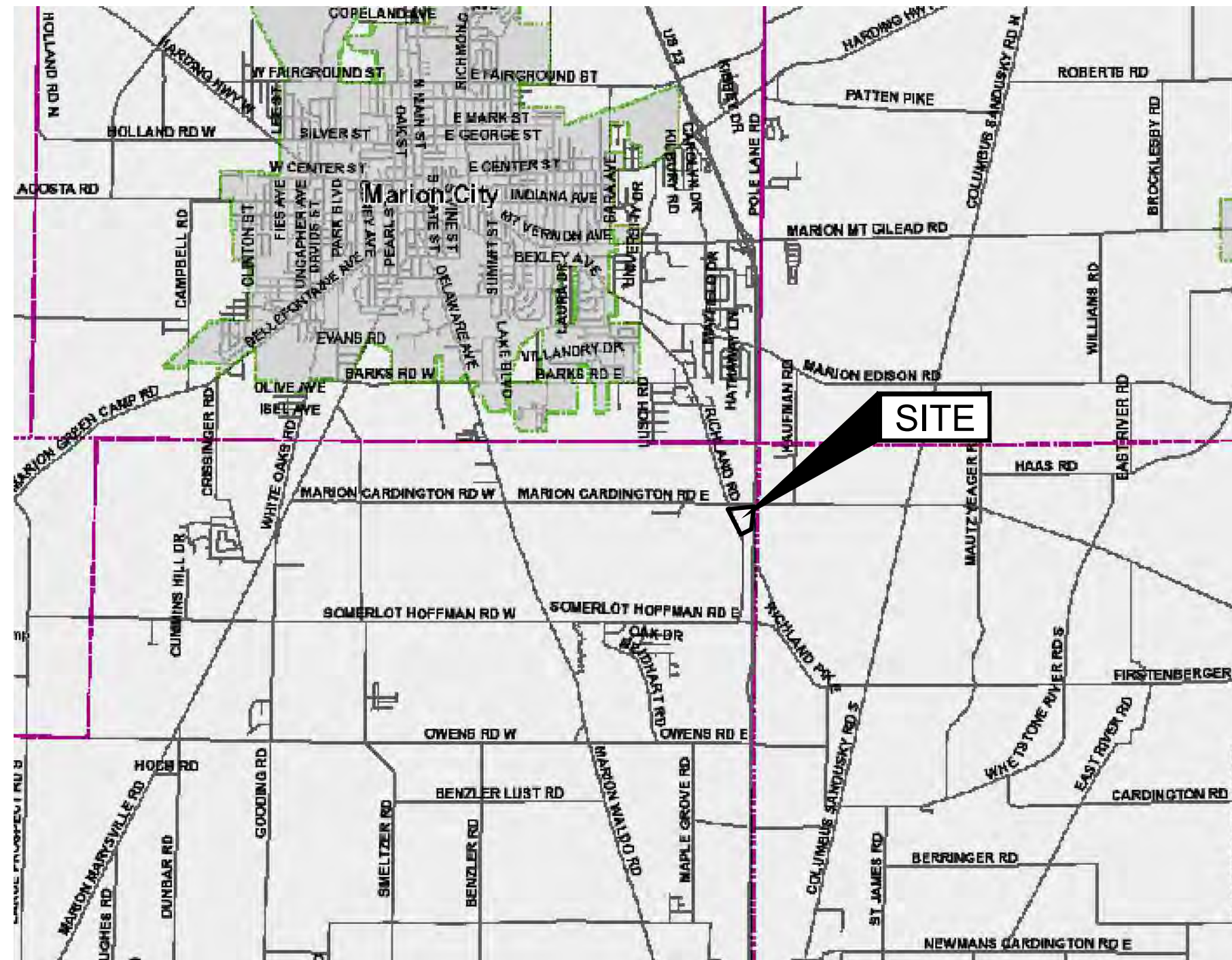


CONSTRUCTION SITE PLANS FOR: OMNESS DESIGN MARION CO. WWTP GARAGE

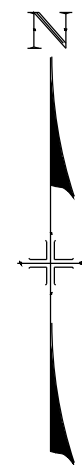
SITUATED IN THE STATE OF OHIO, COUNTY OF MARION CITY, PLEASANT TOWNSHIP



LOCATION MAP

LATITUDE: 40.548344°
LONGITUDE: -83.075984°

SCALE: NONE



SITE ADDRESS

2160 RICHLAND RD
MARION OH 43302

INDEX OF SHEETS

TITLE SHEET	1
GENERAL NOTES	2
EXISTING SITE	3
SCHEMATIC LAYOUT	4
GRADING PLAN	5
UTILITY PLAN	6
STANDARD DETAILS	7
SWP3 PLAN	8
SWP3 NOTES	9
SWP3 DETAILS	10



I HEREBY STATE THAT THESE PLANS HAVE BEEN PREPARED WITH OUR KNOWLEDGE AND CONCURRENCE AND REPRESENT OUR INTENT AND INTEREST.

MARION COUNTY SANITARY ENGINEER

DATE

EASEMENT REFERENCE				REVISIONS				Plans Prepared By :		Signatures below signify only concurrence with the general purpose and general location of the project. All technical details remain the responsibility of the engineer preparing the plans.		ENG. FILE NO. _____	
City's No.	County Recorder	Volume	Page	No.	Description	Approval	Date	_____		_____		IMP. ACCT. NO. _____	
												CONTRACT NO. _____	
										_____		COMPLETION DATE _____	
								E-86763 Ohio Reg. No.		_____		CONTRACTOR _____	
								2/8/24 Date		_____		Scale : Horiz. = AS NOTED Vert. = AS NOTED Original Sheet Size = 24"x36" Original 2D file 2024	
										_____		Sheet No. : 1 OF 10 S:\2023\202 Dwg. No. : 23-202-001	

GENERAL NOTES

WHERE SPECIFIED, THE CURRENT STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS (O.D.O.T. NUMBERS) SHALL APPLY EXCEPT AS MODIFIED OR EXPANDED HEREIN OR IN THE TECHNICAL SPECIFICATIONS

UNDERGROUND UTILITIES

THE LOCATIONS OF THE UNDERGROUND UTILITIES AS SHOWN ON THE PLANS WERE OBTAINED FROM THE OWNERS OF THE UTILITY. THE LOCATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS APPROXIMATE. THE EXACT LOCATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE EXISTING UTILITIES IN THE PROJECT AREA SHALL BE PROTECTED DURING CONSTRUCTION.

UTILITIES NOTIFICATION

AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN AN AREA WHICH MAY INVOLVE UNDERGROUND UTILITY FACILITIES, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING COMPANIES:

1. OHIO UTILITY PROTECTION SERVICE (811)
2. MARION COUNTY SANITARY ENGINEER
3. PLEASANT TOWNSHIP
- 4.
- 5.
- 6.

MAINTAINING TRAFFIC

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND CONTROLLING TRAFFIC ON ALL STREETS AND ROADS AFFECTED BY CONSTRUCTION AND SHALL, PRIOR TO ANY CONSTRUCTION, SUBMIT A CONSTRUCTION SCHEDULE TO THE LOCAL AUTHORITY FOR APPROVAL INDICATING DATES AND DURATION OF EACH PHASE OF CONSTRUCTION.

ALL CONSTRUCTION SIGNS AND TEMPORARY TRAFFIC CONTROL AND PROTECTION DEVICES SHALL BE ERECTED AND MAINTAINED IN ACCORDANCE WITH "OHIO DEPARTMENT OF TRANSPORTATION MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS," AND O.D.O.T. ITEM 614 - MAINTAINING TRAFFIC. PAYMENT FOR MAINTAINING TRAFFIC SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PROJECT.

TESTING OF MATERIALS

ANY MATERIALS DELIVERED OR OTHERWISE INCORPORATED INTO THE PROJECT MAY BE SUBJECTED TO TESTING BY THE ENGINEER TO INSURE COMPLIANCE WITH SPECIFICATIONS. TESTS PERFORMED WILL BE PAID FOR BY THE OWNER WITH NO ADDITIONAL COST ASSUMED BY THE CONTRACTOR.

MISCELLANEOUS ITEMS

THE CONTRACTOR SHALL REMOVE ANY MAILBOX, STREET SIGNS, YARD LIGHTS, FENCES, LAWN ORNAMENTS, ETC. WHICH COULD BE DAMAGED DURING THE COURSE OF CONSTRUCTION AND RESET SAME AFTER CONSTRUCTION HAS PASSED THE AREA.

ANY CATCH BASINS, LAWNS, DRIVEWAYS, OR OTHER VARIOUS ITEMS DISTURBED DURING THE CONSTRUCTION OF THE PROJECT SHALL BE REPAIRED TO A LIKE OR BETTER CONDITION. PAYMENT OF THIS WORK SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PROJECT.

TRENCH PROTECTION

THE CONTRACTOR SHALL PROVIDE SHORING, SHEETING, BRACING, TRENCH BOX, ETC., AS REQUIRED TO PROTECT EXISTING STRUCTURES, UTILITIES, WORKMEN, ETC. PAYMENT OF THIS WORK SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PROJECT.

BACKFILLING SHALL FOLLOW IMMEDIATELY BEHIND CONSTRUCTION AND ONLY THE MINIMUM LENGTH OF TRENCH REQUIRED FOR CONSTRUCTION SHALL BE OPEN AT ANY GIVEN TIME.

CONCRETE

ALL CONCRETE UTILIZED WITHIN THIS PROJECT SHALL BE O.D.O.T. CLASS "QC MISC" UNLESS OTHERWISE STATED. PAYMENT FOR CONCRETE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PROJECT.

CLEARING AND GRUBBING

THIS WORK SHALL CONSIST OF CLEARING, GRUBBING, SCALPING, REMOVAL OF TREES AND STUMPS, AND DISPOSING OF ALL VEGETATION AND DEBRIS WITHIN THE LIMITS OF THE PROJECT AREA AS DIRECTED BY THE ENGINEER. PAYMENT FOR CLEARING AND GRUBBING SHALL BE INCLUDED IN THE CONTRACT PRICES FOR THE PROJECT.

AGGREGATE BACKFILL

CONTRACTOR SHALL USE O.D.O.T. ITEM 304 BACKFILL IN ALL UTILITY TRENCHES IN ALL DISTURBED ASPHALT OR PROPOSED ASPHALT AREAS UNLESS OTHERWISE NOTED. PAYMENT FOR AGGREGATE BACKFILL MATERIAL SHALL BE INCLUDED IN THE CONTRACT PRICES FOR THE PROJECT.

EARTH BACKFILL

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLACING SUITABLE EARTH BACKFILL IN ALL GRASS AREAS. THE TOP 6 INCHES OF THE FILL MATERIAL SHALL BE TOPSOIL. PAYMENT FOR EARTH BACKFILL MATERIAL AND TOPSOIL SHALL BE INCLUDED IN THE CONTRACT PRICES FOR THE PROJECT.

SEEDING AND MULCHING

ALL GRASS AREAS DISTURBED DURING THE COURSE OF THE CONTRACT SHALL BE PROPERLY SEEDED, MULCHED, AND FERTILIZED ACCORDING TO O.D.O.T. ITEM 659. PAYMENT FOR SEEDING AND MULCHING SHALL BE INCLUDED IN THE CONTRACT PRICES FOR THE PROJECT.

EXCAVATION

CONTRACTOR SHALL REMOVE ALL TOPSOIL ENCOUNTERED PRIOR TO PLACING PROPOSED FILL MATERIAL AND REPLACE WITH SUITABLE CLAY SOIL TO SUBGRADE ELEVATIONS. IN CUT AREAS, A MINIMUM OF 12" OF 203 MATERIAL SHALL BE REMOVED AND PLACED TO PROPER GRADE AND COMPACTION. PAYMENT FOR EXCAVATION SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PROJECT.

PROOF ROLLING AND SOFT SUBGRADE REPAIRS

UPON COMPLETION OF PREPARING THE SUBGRADE AND PRIOR TO THE PLACEMENT OF THE OVERLYING COURSE, THE CONTRACTOR SHALL PROOF ROLL THE SUBGRADE WITH A LEGALLY FULLY LOADED TANDEM AXLE DUMP TRUCK IN THE PRESENCE OF AN ENGINEER. ANY SOFT SUBGRADE ENCOUNTERED, IN WHICH SATISFACTORY STABILITY CANNOT BE OBTAINED BY MOISTURE CONTROL AND COMPACTION, SHALL HAVE THE UNSTABLE MATERIAL EXCAVATED TO A DEPTH REQUIRED BY AN ENGINEER. SUITABLE MATERIAL SHALL THEN BE PLACED IN THE EXCAVATED AREA, COMPACTED, AND SHAPED TO CONFORM WITH PLAN LINES. THE REPAIRED AREAS SHALL THEN BE PROOF ROLLED TO VERIFY THEIR STABILITY. PAYMENT FOR PROOF ROLLING AND SUBGRADE REPAIRS SHALL BE INCLUDED IN THE CONTRACT PRICES FOR THE PROJECT.

STORM SEWERS

THE CONTRACTOR MAY USE THE FOLLOWING MATERIAL SPECIFICATIONS IN PREPARING THE UNIT PRICE BID FOR THE STORM SEWER CONDUIT.

1. ADS N-12 ST IB PERFORATED PIPE (PER ASTM F-2648) WITH BUILT IN BELL AND SPIGOT (PER ASTM F-2648) WITH GASKETS (PER ASTM F-477) FOR SIZES: 2" - 60"

TO INSURE PROPER HORIZONTAL AND VERTICAL ALIGNMENT OF THE STORM SEWERS DURING CONSTRUCTION, THE CONTRACTOR SHALL USE A LASER ALIGNMENT DEVICE CAPABLE OF BOTH HORIZONTAL AND VERTICAL ADJUSTMENT.

ALL TRENCHES FOR THE STORM SEWER SHALL CONFORM TO STANDARD DRAWING STM-5 BEDDING FOR STORM SEWERS LOCATED IN STANDARD DRAWINGS. PAYMENT FOR STORM SEWER TRENCH AND BEDDING SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PROJECT.

ALL CATCHBASINS SHALL CONFORM TO ODOT STANDARD DETAILS CB1 AND CB2 AS SHOWN IN THE STANDARD DETAILS. CATCHBASINS TO HAVE 2-4 FINGER DRAINS, 4"Ø, LENGTH TO FIT AREA, BUT NOT MORE THAN 15'. PERFORATED STORM CONDUITS MAY SERVICE AS FINGER DRAINS.

SANITARY SERVICE CONNECTION

THE CONTRACTOR MAY USE THE FOLLOWING MATERIAL SPECIFICATIONS IN PREPARING THE CONTRACT PRICE FOR THE PROJECT.

1. ASTM D-3034, SDR-35, POLYVINYL CHLORIDE

ALL POLYVINYL CHLORIDE PIPE SHALL MEET ASTM D-3212 JOINT SPECIFICATIONS.

TO INSURE PROPER HORIZONTAL AND VERTICAL ALIGNMENT OF THE SANITARY SEWERS DURING CONSTRUCTION, THE CONTRACTOR SHALL USE A LASER ALIGNMENT DEVICE CAPABLE OF BOTH HORIZONTAL AND VERTICAL ADJUSTMENT.

ALL TRENCHES FOR THE SANITARY SEWER SHALL CONFORM TO STANDARD DRAWING SAN-21 TRENCH AND BEDDING LOCATED IN STANDARD DRAWINGS. PAYMENT FOR SANITARY SEWER TRENCH AND BEDDING SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PROJECT.

CLEANOUTS WILL BE INSTALLED AT CHANGES IN ALIGNMENT.

ROOF AND FOUNDATION DRAIN CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED.

WATER SERVICE CONNECTION

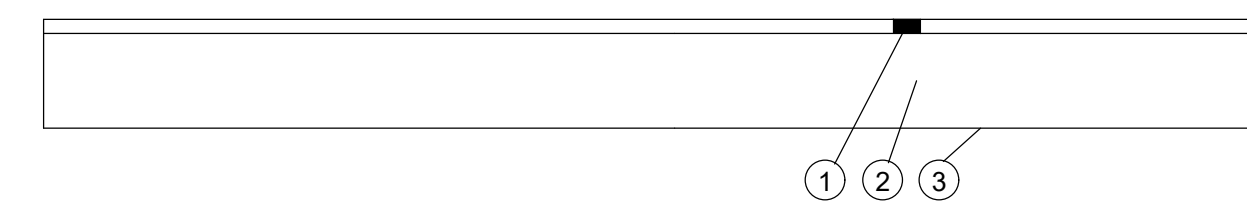
THE MATERIAL SUPPLIED FOR THE 1" WATER SERVICE LINES SHALL BE THE FOLLOWING:

1. ASTM D-2737 CTS POLYETHYLENE PIPE, DR 9, 250 PSI, WITH INSTALLATION MEETING ASTM D-2774

ITEM 452 NON-REINFORCED CONCRETE PAVEMENT

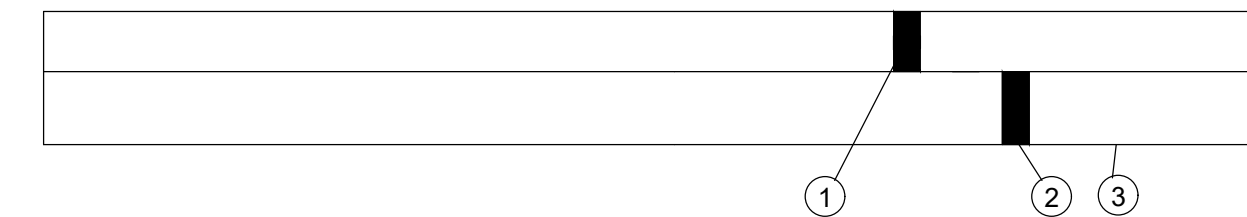
1. 8" THICK CONCRETE SLAB - 4500 PSI AT 28 DAYS, 6 % AIR ENTRAINMENT, 5" MAX. SLUMP, W/C = 0.40 (WATER TO CEMENT RATIO).
2. WITHIN 24 HOURS AFTER EACH CONCRETE SLAB PLACEMENT, SAW CUT, 2" DEPTH. SLAB JOINTS SHALL BE SPACED 10'-12' ON CENTER MAX. WITH LENGTH TO WIDTH OF SLAB AREAS NO MORE THAN 1.5:1. PROVIDE ADDITIONAL JOINTS AT BUILDING CORNERS, TRANSITIONS AND PENETRATIONS PER PRACTICE STANDARDS.

TYPICAL STONE PAVEMENT SECTION



- ① ITEM 411 STABILIZED CRUSHED AGGREGATE, 4"
- ② ITEM 304 AGGREGATE BASE, 8"
- ③ ITEM 204 SUBGRADE COMPACTION

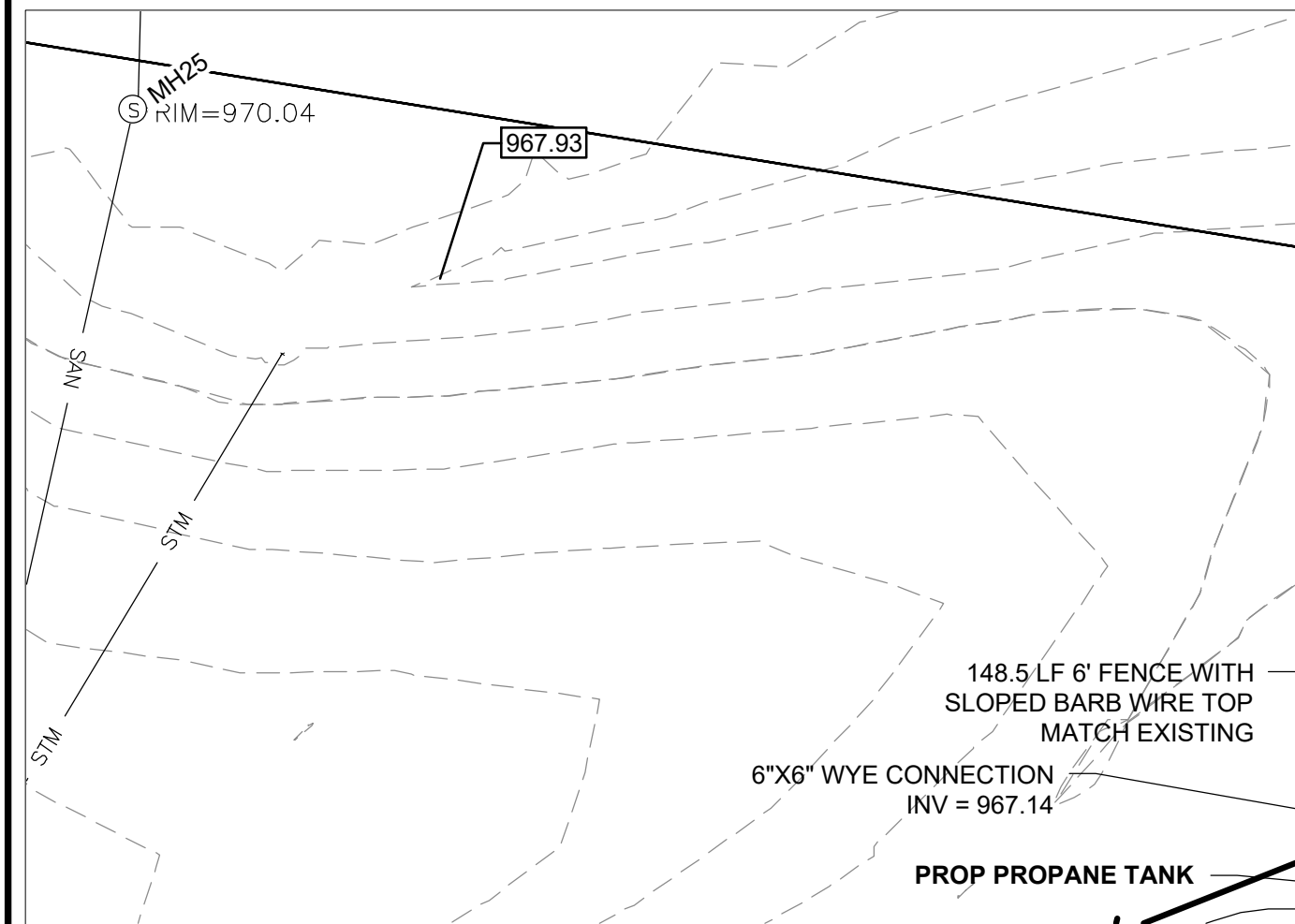
TYPICAL CONCRETE PAVEMENT SECTION



- ① ITEM 452 NON-REINFORCED CONCRETE PAVEMENT 8"
- ② ITEM 304 AGGREGATE BASE, 6"
- ③ ITEM 204 SUBGRADE COMPACTION

EASEMENT REFERENCE				REVISIONS				Plans Prepared By :				<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>Makeever & Associates, Inc. P.O. BOX 325, 1810 E. MANSFIELD ST. BUCYRUS, OHIO 44820 Phone: (419) 562-7757 Fax: (419) 562-4717</p> </div> <div style="text-align: center;"> <p>DYLAN J. WYATT E-86763 REGISTERED PROFESSIONAL ENGINEER</p> </div> </div>			
City's No.	County Recorder	Volume	Page	Grantor	No.	Description	Approval	Date	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>DYLAN J. WYATT E-86763 REGISTERED PROFESSIONAL ENGINEER</p> </div> <div style="text-align: center;"> <p>E-86763 2/8/24 Ohio Reg. No. Date</p> </div> </div>						
								AS BUILT				GENERAL NOTES			
												<div style="display: flex; justify-content: space-between;"> <div> <p>ENG. FILE NO. _____</p> <p>IMP. ACCT. NO. _____</p> <p>CONTRACT NO. _____</p> <p>COMPLETION DATE _____</p> <p>CONTRACTOR _____</p> </div> <div style="text-align: center;"> <p>OMNESS DESIGN INC.</p> <p>MARION CO. WWTP GARAGE</p> <p>2160 RICHLAND RD</p> </div> <div> <p>Scale : Horiz. = AS NOTED Vert. = AS NOTED</p> <p>Original Sheet Size = 24"x36"</p> <p>Date : 2-6-2024</p> </div> <div> <p>Sheet No. : 2 OF 10</p> <p>S:\2023\202</p> <p>Dwg. No. : 23-202-001</p> </div> </div>			

SEE SANITARY CONNECTION INSET



SANITARY CONNECTION

NOTES:

PER MARION COUNTY SANITARY ENGINEER INSTRUCTIONS, PROPOSED STORM WATER CONDUIT AND STRUCTURES SHALL BE ADDED AS NEEDED WITH DIRECT OUTLET TO GRAVE CREEK. NO STORM WATER DETENTION BE REQUIRED.

EXISTING TOPOGRAPHY PROVIDED BY ACAD FILES PROVIDED TO MAKEEVER & ASSOCIATES BY MARION COUNTY SANITARY ENGINEER.

BENCHMARKS

BM1 - CHISELED SQUARE ON THE WEST SIDE OF THE GEAR SCREW UNIT. ELEVATION - 973.27



LEGEND

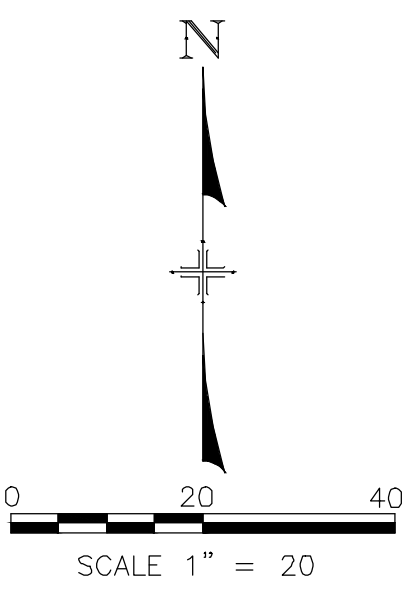
- | FOUND | SET | DESCRIPTION |
|----------|----------|------------------------------|
| ○ | ● | 3/4" IRON PIPE, UNLESS NOTED |
| ○ | ● | 5/8" IRON PIN, UNLESS NOTED |
| ○ | ● | SURVEY NAIL |
| △ | ▲ | RAIL ROAD SPIKE |
| ○ | ● | MAG SPIKE |
| □ | ■ | MONUMENT BOX |
| ⊥ | ⊥ | TBAR |
| ⊥ | ⊥ | BOLLARD |
| ⊥ | ⊥ | CATCH BASIN |
| ⊥ | ⊥ | CURB INLET |
| ⊥ | ⊥ | STORM MANHOLE |
| ⊥ | ⊥ | TILE DROP |
| ⊥ | ⊥ | CLEAN OUT |
| ⊥ | ⊥ | SANITARY MANHOLE |
| ⊥ | ⊥ | UNKNOWN MANHOLE |
| ⊥ | ⊥ | FIRE HYDRANT |
| ⊥ | ⊥ | WATER METER |
| ⊥ | ⊥ | WATER VALVE |
| ⊥ | ⊥ | WATER SERVICE VALVE |
| ⊥ | ⊥ | WELL |
| ⊥ | ⊥ | MONITORING WELL |
| ⊥ | ⊥ | ELECTRIC METER |
| ⊥ | ⊥ | ELECTRIC PULL BOX |
| ⊥ | ⊥ | ELECTRIC TRANSFORMER |
| ⊥ | ⊥ | LIGHT PULL BOX |
| ⊥ | ⊥ | YARD LITE |
| ⊥ | ⊥ | FLAG POLE |
| ⊥ | ⊥ | POWER POLE |
| ⊥ | ⊥ | POWER/TELEPHONE POLE |
| ⊥ | ⊥ | POWER/TELEPHONE/CABLE POLE |
| ⊥ | ⊥ | POWER/LIGHT POLE |
| ⊥ | ⊥ | TELEPHONE POLE |
| ⊥ | ⊥ | UNKNOWN POLE |
| ⊥ | ⊥ | YARD HYDRANT |
| ⊥ | ⊥ | GUY WIRE |
| ⊥ | ⊥ | SIGN |
| ⊥ | ⊥ | CABLE BOX |
| ⊥ | ⊥ | TELEPHONE MANHOLE |
| ⊥ | ⊥ | TELEPHONE BOX |
| ⊥ | ⊥ | TELEPHONE LINE MARKER |
| ⊥ | ⊥ | GAS METER |
| ⊥ | ⊥ | GAS MARKER |
| ⊥ | ⊥ | GAS VALVE |
| ⊥ | ⊥ | GAS SERVICE VALVE |
| ⊥ | ⊥ | MAIL BOX |
| ⊥ | ⊥ | SOIL BORING |
| ⊥ | ⊥ | TREE |
| ⊥ | ⊥ | EVERGREEN TREE |
| ⊥ | ⊥ | SHRUB |
| ⊥ | ⊥ | STUMP |
| — SAN — | — SAN — | SANITARY SEWER |
| — STM — | — STM — | STORM SEWER |
| — E — | — E — | ELECTRIC LINE |
| — W — | — W — | WATER LINE |
| — T — | — T — | TELEPHONE LINE |
| — CATV — | — CATV — | CABLE TV LINE |
| — GAS — | — GAS — | GAS LINE |
| — X — | — X — | FENCE |
| — | — | TREE LINE |

GRAVE CREEK

TOP OF BANK

25' DITCH SETBACK LINE

24" RCP EFFLUENT DISCHARGE



EASEMENT REFERENCE			
City's No.	County Recorder Volume	Page	Grantor

REVISIONS			
No.	Description	Approval	Date
	AS BUILT		

Plans Prepared By :

Makeever & Associates, Inc.
P.O. BOX 325, 1810 E. MANSFIELD ST.
BUCYRUS, OHIO 44820
Phone: (419) 562-7757 Fax: (419) 562-4717

Dylan J. Wyatt
Dylan J. Wyatt
REGISTERED PROFESSIONAL ENGINEER
STATE OF OHIO
E-86763

E-86763 2/8/24
Ohio Reg. No. Date

EXISTING SITE

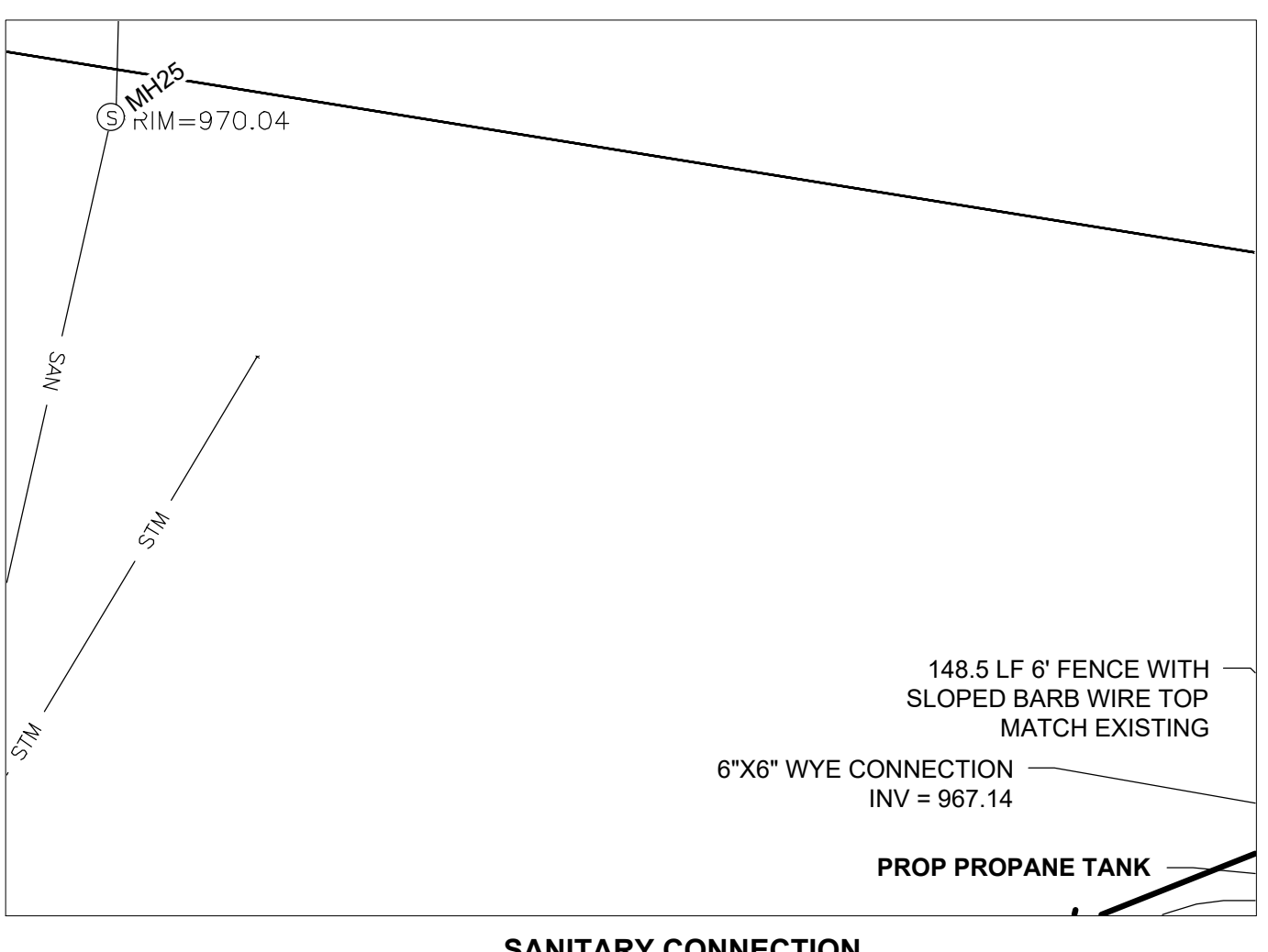
ENG. FILE NO. _____
IMP. ACCT. NO. _____
CONTRACT NO. _____
COMPLETION DATE _____
CONTRACTOR _____

OMNESS DESIGN INC.
MARION CO. WWTP GARAGE
2160 RICHLAND RD

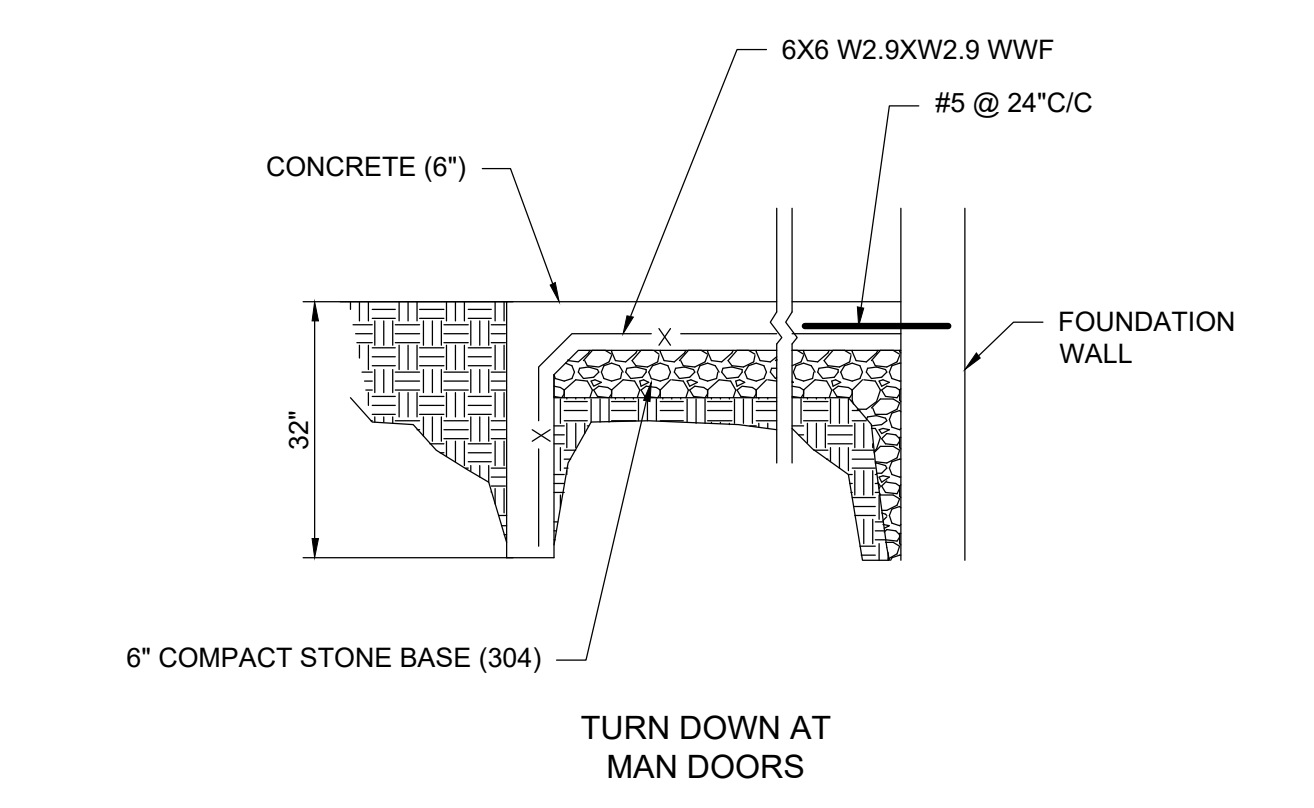
Scale : Horiz. = AS NOTED
Vert. = AS NOTED
Original Sheet Size = 24"x36"
Date : 2-6-2024

Sheet No. : 3 OF 10
S:\2023\202 Dwg. No. : 23-202-001

SEE SANITARY CONNECTION INSET

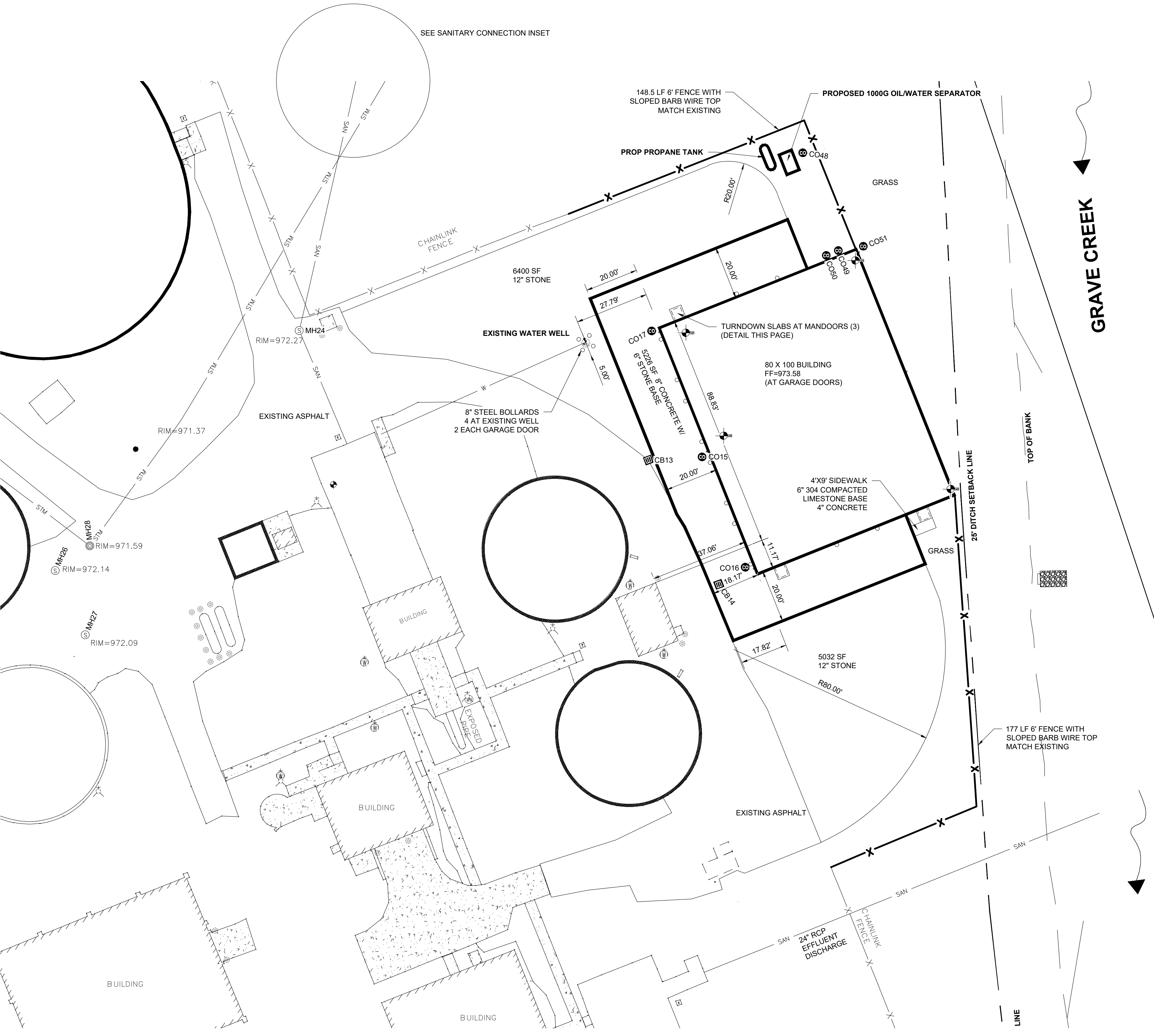


NOTES:
 PER MARION COUNTY SANITARY ENGINEER INSTRUCTIONS, PROPOSED STORM WATER CONDUIT AND STRUCTURES SHALL BE ADDED AS NEEDED WITH DIRECT OUTLET TO GRAVE CREEK. NO STORM WATER DETENTION BE REQUIRED.
 EXISTING TOPOGRAPHY PROVIDED BY ACAD FILES PROVIDED TO MAKEEVER & ASSOCIATES BY MARION COUNTY SANITARY ENGINEER.



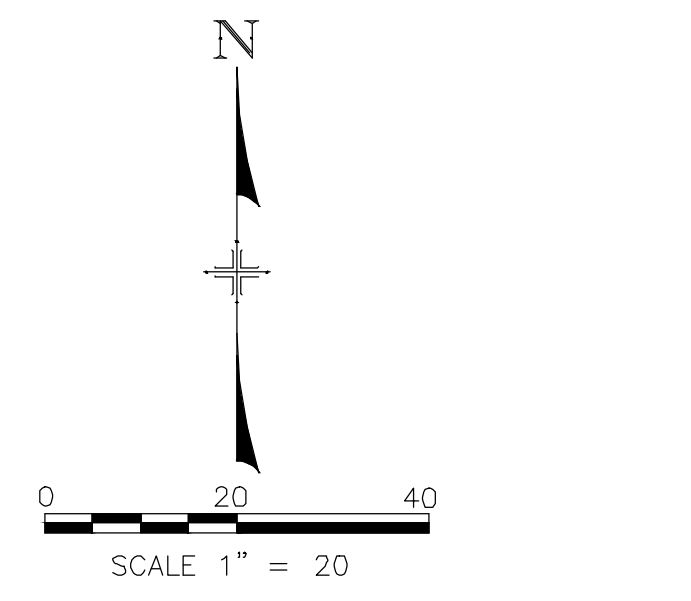
PROPOSED STORM INVERTS	PROPOSED SANITARY INVERTS
HW-1 (HW-1) INV 12\" N-12 = 968.53 (W)	CO48 (SAN-5) INV 6\" SDR35 = 967.49
CB13 (CB-1) TC 972.88 INV 12\" N-12 = 970.10 (S) INV 8\" N-12 = 970.20 (E)	CO49 (SAN-5) INV 6\" SDR35 = 968.95
CB14 (CB-1) TC 973.25 INV 12\" N-12 969.73 (E) INV 12\" N-12 969.83 (N)	CO50 (SAN-5) INV 6\" SDR35 = 970.51
CO15 (SAN-6) INV 8\" = 970.32	MH 25 (EXISTING) TC 970.04 INV 36\" = 950.44 (N) INV 36\" = 950.39 (S) INV 18\" = 951.54 (W) INV 6\" SDR35 = 961.11 (E) (NEW) SEAL NEW PENETRATION WITH BOOT SEAL CONFORMING TO ASTM C-923
CO16 (SAN-6) INV 8\" = 969.73	1000G OIL/WATER SEPERATOR STIGER GI-1000 DESIGN BASIS INV. 6\" SDR35 INLET = 969.83 INV. 6\" SDR35 OUTLET = 969.66
CO17 (SAN-6) INV 8\" = 970.51	
CO51 (SAN-6) INV 8\" = 969.37	

BENCHMARKS
 BM1 - CHISELED SQUARE ON THE WEST SIDE OF THE GEAR SCREW UNIT. ELEVATION - 973.27



LEGEND

FOUND	SET	DESCRIPTION
○	●	3/4" IRON PIPE, UNLESS NOTED
○	●	5/8" IRON PIN, UNLESS NOTED
○	●	SURVEY NAIL
○	●	RAIL ROAD SPIKE
○	●	MAG SPIKE
○	●	MONUMENT BOX
○	○	TBAR
○	○	BOLLARD
○	○	CATCH BASIN
○	○	CURB INLET
○	○	STORM MANHOLE
○	○	TILE DROP
○	○	CLEAN OUT
○	○	SANITARY MANHOLE
○	○	UNKNOWN MANHOLE
○	○	FIRE HYDRANT
○	○	WATER METER
○	○	WATER VALVE
○	○	WATER SERVICE VALVE
○	○	WELL
○	○	MONITORING WELL
○	○	ELECTRIC METER
○	○	ELECTRIC PULL BOX
○	○	ELECTRIC TRANSFORMER
○	○	LIGHT PULL BOX
○	○	YARD LITE
○	○	FLAG POLE
○	○	POWER POLE
○	○	POWER/TELEPHONE POLE
○	○	POWER/CABLE POLE
○	○	POWER/TELEPHONE/CABLE POLE
○	○	POWER/LIGHT POLE
○	○	TELEPHONE POLE
○	○	UNKNOWN POLE
○	○	YARD HYDRANT
○	○	GUY WIRE
○	○	SIGN
○	○	CABLE BOX
○	○	TELEPHONE MANHOLE
○	○	TELEPHONE BOX
○	○	TELEPHONE LINE MARKER
○	○	GAS METER
○	○	GAS MARKER
○	○	GAS VALVE
○	○	GAS SERVICE VALVE
○	○	MAIL BOX
○	○	SOIL BORING
○	○	TREE
○	○	EVERGREEN TREE
○	○	SHRUB
○	○	STUMP
○	○	SAN — SANITARY SEWER
○	○	STM — STORM SEWER
○	○	E — ELECTRIC LINE
○	○	W — WATER LINE
○	○	T — TELEPHONE LINE
○	○	CATV — CABLE TV LINE
○	○	GAS — GAS LINE
○	○	X — FENCE
○	○	~ ~ ~ — TREE LINE



EASEMENT REFERENCE

City's No.	County Recorder	Page	Grantor

REVISIONS

No.	Description	Approval	Date
	AS BUILT		

Plans Prepared By :

Makeever & Associates, Inc.
 P.O. BOX 325, 1810 E. MANSFIELD ST.
 BUCYRUS, OHIO 44820
 Phone: (419) 562-7757 Fax: (419) 562-4717

Dylan J. Wyatt
 DYLAN J. WYATT
 REGISTERED PROFESSIONAL ENGINEER

E-86763 2/8/24
 Ohio Reg. No. Date

SCHEMATIC LAYOUT

ENG. FILE NO. _____
 IMP. ACCT. NO. _____
 CONTRACT NO. _____
 COMPLETION DATE _____
 CONTRACTOR _____

OMNESS DESIGN INC.
 MARION CO. WWTP GARAGE
 2160 RICHLAND RD

Scale : Horiz. = AS NOTED
 Vert. = AS NOTED

Original Sheet Size = 24"x36"
 Date : 2-6-2024

Sheet No. : 4 OF 10
 S:\2023\202 Dwg. No. : 23-202-001

PROPOSED STORM INVERTS

HW-1 (HW-1)
INV 12" N-12 = 968.53 (W)

CB13 (CB-1)
TC 972.88
INV 12" N-12 = 970.10 (S)
INV 8" N-12 = 970.20 (E)

CB14 (CB-1)
TC 973.25
INV 12" N-12 969.73 (E)
INV 12" N-12 969.83 (N)

CO15 (SAN-6)
INV 8" = 970.32

CO16 (SAN-6)
INV 8" = 969.73

CO17 (SAN-6)
INV 8" = 970.51

CO51 (SAN-6)
INV 8" = 969.37

PROPOSED SANITARY INVERTS

CO48 (SAN-5)
INV 6" SDR35 = 967.49

CO49 (SAN-5)
INV 6" SDR35 = 968.95

CO50 (SAN-5)
INV 6" SDR35 = 970.51

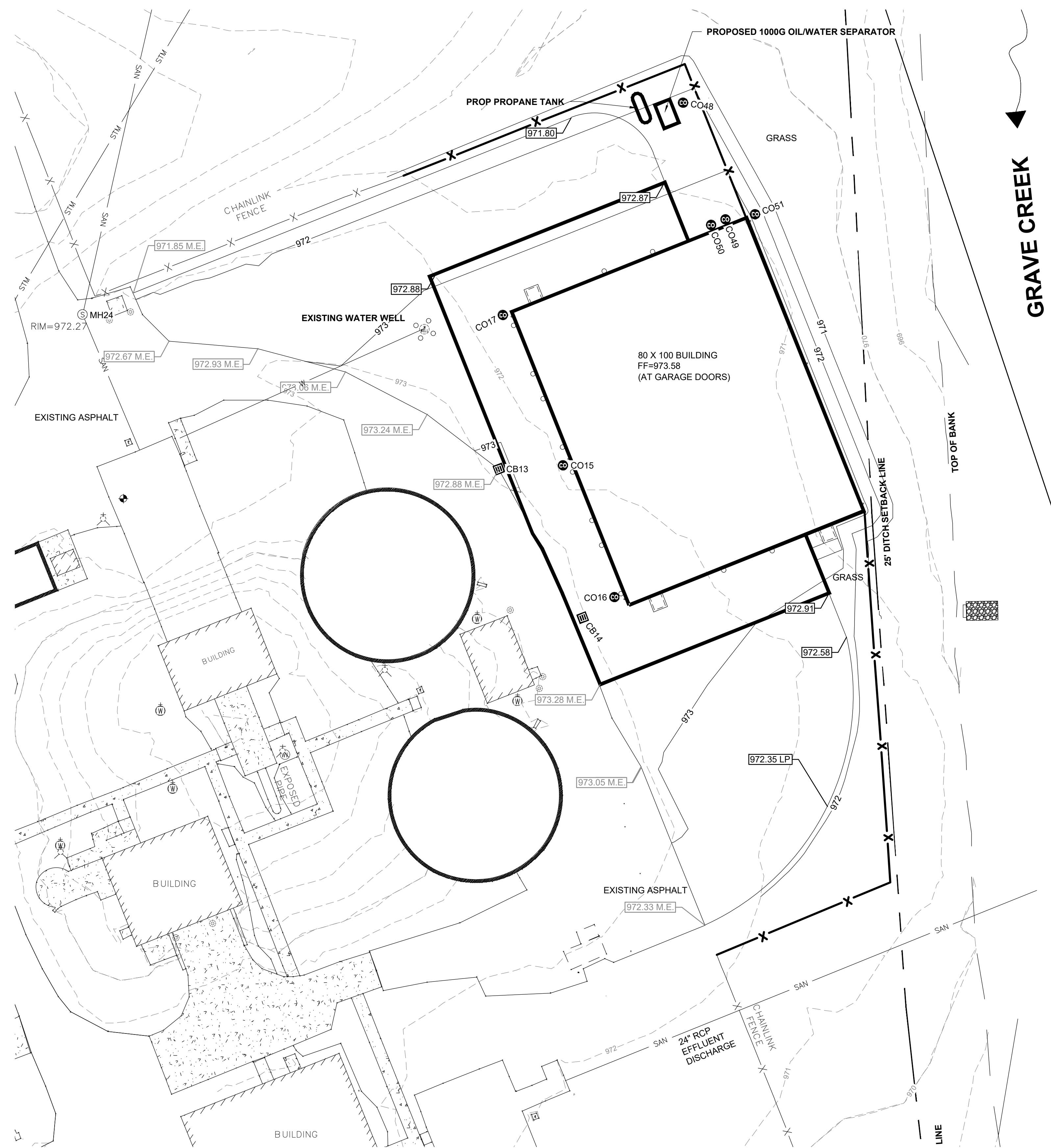
MH 25 (EXISTING)
TC 970.04
INV 36" = 950.44 (N)
INV 36" = 950.39 (S)
INV 18" = 951.54 (W)
INV 6" SDR35 = 961.11 (E) (NEW)
SEAL NEW PENETRATION WITH BOOT
SEAL CONFORMING TO ASTM C-923

1000G OIL/WATER SEPARATOR
STIGER GI-1000 DESIGN BASIS
INV. 6" SDR35 INLET = 969.83
INV. 6" SDR35 OUTLET = 969.66

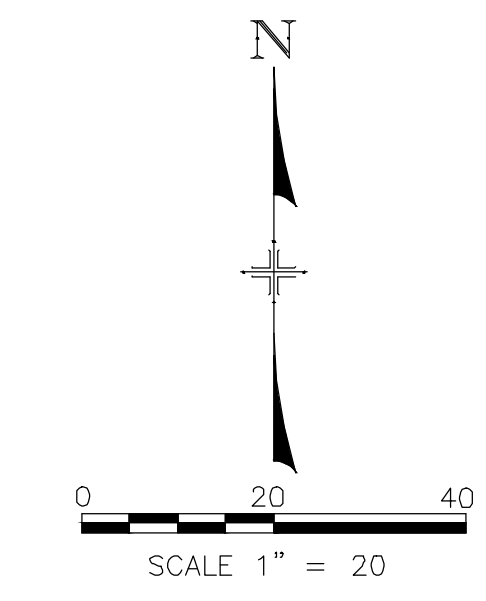
Cut/Fill Summary			
Name	Cut	Fill	Net
FINAL GRADE_to_original_less_9in_topsoil	0.00 Cu. Yd.	2143 Cu. Yd.	2143 Cu. Yd.<Fill>
TOPSOIL	879.50 Cu. Yd.	0.00 Cu. Yd.	879.50 Cu. Yd.<Cut>
STONE UNDER BUILDING (12")	0 Cu. Yd.	296 Cu. Yd.	296 Cu. Yd.<Fill>
STONE DRIVE & PARKING (12")	0 Cu. Yd.	427 Cu. Yd.	427 Cu. Yd.<Fill>
CONCRETE PAVEMENT SECTION (8" CONCRETE, 6" STONE) (14")	0 Cu. Yd.	222 Cu. Yd.	222 Cu. Yd.<Fill>
STRUCTURAL FILL REQUIRED FROM OFFSITE	0 Cu. Yd.	1198 Cu. Yd.	1198 Cu. Yd.<Fill>

BENCHMARKS

BM1 - CHISELED SQUARE ON THE WEST SIDE OF THE GEAR SCREW UNIT. ELEVATION - 973.27



FOUND	SET	DESCRIPTION
○	●	3/4" IRON PIPE, UNLESS NOTED
○	●	5/8" IRON PIN, UNLESS NOTED
○	●	SURVEY NAIL
△	▲	RAIL ROAD SPIKE
○	●	MAG SPIKE
□	■	MONUMENT BOX
—	—	TBAR
—	—	BOLLARD
—	—	CATCH BASIN
—	—	CURB INLET
—	—	STORM MANHOLE
—	—	TILE DROP
—	—	CLEAN OUT
—	—	SANITARY MANHOLE
—	—	UNKNOWN MANHOLE
—	—	FIRE HYDRANT
—	—	WATER METER
—	—	WATER VALVE
—	—	WATER SERVICE VALVE
—	—	WELL
—	—	MONITORING WELL
—	—	ELECTRIC METER
—	—	ELECTRIC PULL BOX
—	—	ELECTRIC TRANSFORMER
—	—	LIGHT PULL BOX
—	—	YARD LITE
—	—	FLAG POLE
—	—	POWER POLE
—	—	POWER/TELEPHONE POLE
—	—	LIGHT POLE
—	—	POWER/CABLE POLE
—	—	POWER/TELEPHONE/CABLE POLE
—	—	POWER/LIGHT POLE
—	—	TELEPHONE POLE
—	—	UNKNOWN POLE
—	—	YARD HYDRANT
—	—	GUY WIRE
—	—	SIGN
—	—	CABLE BOX
—	—	TELEPHONE MANHOLE
—	—	TELEPHONE BOX
—	—	TELEPHONE LINE MARKER
—	—	GAS METER
—	—	GAS MARKER
—	—	GAS VALVE
—	—	GAS SERVICE VALVE
—	—	MAIL BOX
—	—	SOIL BORING
—	—	TREE
—	—	EVERGREEN TREE
—	—	SHRUB
—	—	STUMP
—	—	SAN — SANITARY SEWER
—	—	STM — STORM SEWER
—	—	E — ELECTRIC LINE
—	—	W — WATER LINE
—	—	T — TELEPHONE LINE
—	—	CATV — CABLE TV LINE
—	—	GAS — GAS LINE
—	—	X — FENCE
—	—	— — TREE LINE



EASEMENT REFERENCE				REVISIONS			
City's No.	County Recorder	Page	Grantor	No.	Description	Approval	Date
					AS BUILT		

Plans Prepared By :

Makeever & Associates, Inc.
P.O. BOX 325, 1810 E. MANSFIELD ST.
BUCYRUS, OHIO 44820
Phone: (419) 562-7757 Fax: (419) 562-4717

Dylan J. Wyatt
Dylan J. Wyatt

E-86763 2/8/24
Ohio Reg. No. Date

STATE OF OHIO
Dylan J. Wyatt
E-86763
REGISTERED PROFESSIONAL ENGINEER

GRADING PLAN

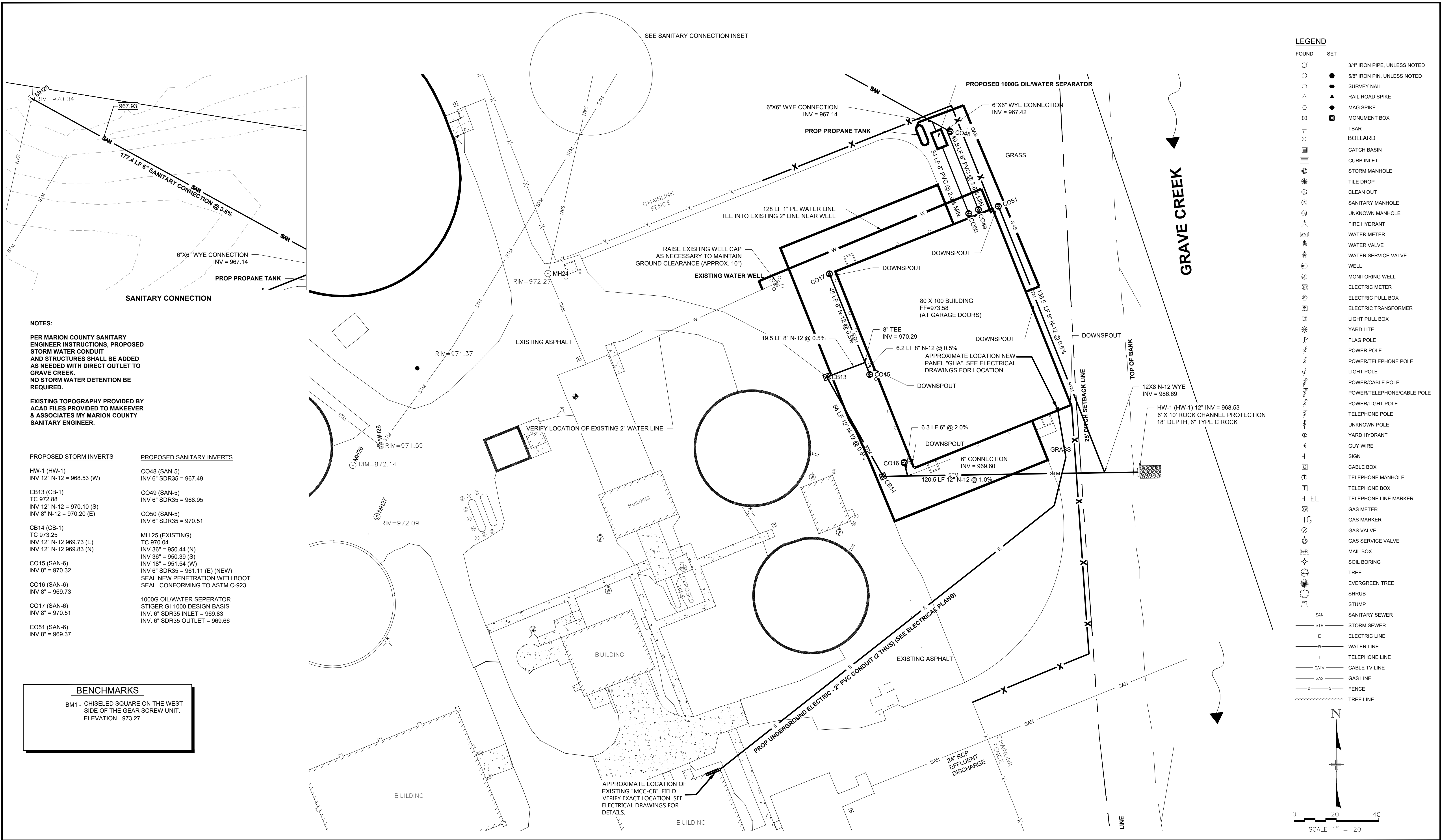
ENG. FILE NO. _____
IMP. ACCT. NO. _____
CONTRACT NO. _____
COMPLETION DATE _____
CONTRACTOR _____

OMNESS DESIGN INC.
MARION CO. WWTP GARAGE
2160 RICHLAND RD

Scale : Horiz. = AS NOTED
Vert. = AS NOTED

Original Sheet Size = 24"x36"
Date : 2-6-2024

Sheet No. : 5 OF 10
S:\2023\202
Dwg. No. : 23-202-001



EASEMENT REFERENCE			REVISIONS			
City's No.	County Recorder Volume	Page	No.	Description	Approval	Date
				AS BUILT		

No.	Description	Approval	Date

Plans Prepared By :

Makeever & Associates, Inc.
P.O. BOX 325, 1810 E. MANSFIELD ST.
BUCYRUS, OHIO 44820
Phone: (419) 562-7757 Fax: (419) 562-4717

Dylan J. Wyatt
Dylan J. Wyatt

E-86763 Date: 2/8/24
Ohio Reg. No.

STATE OF OHIO
Dylan J. Wyatt
E-86763
REGISTERED PROFESSIONAL ENGINEER

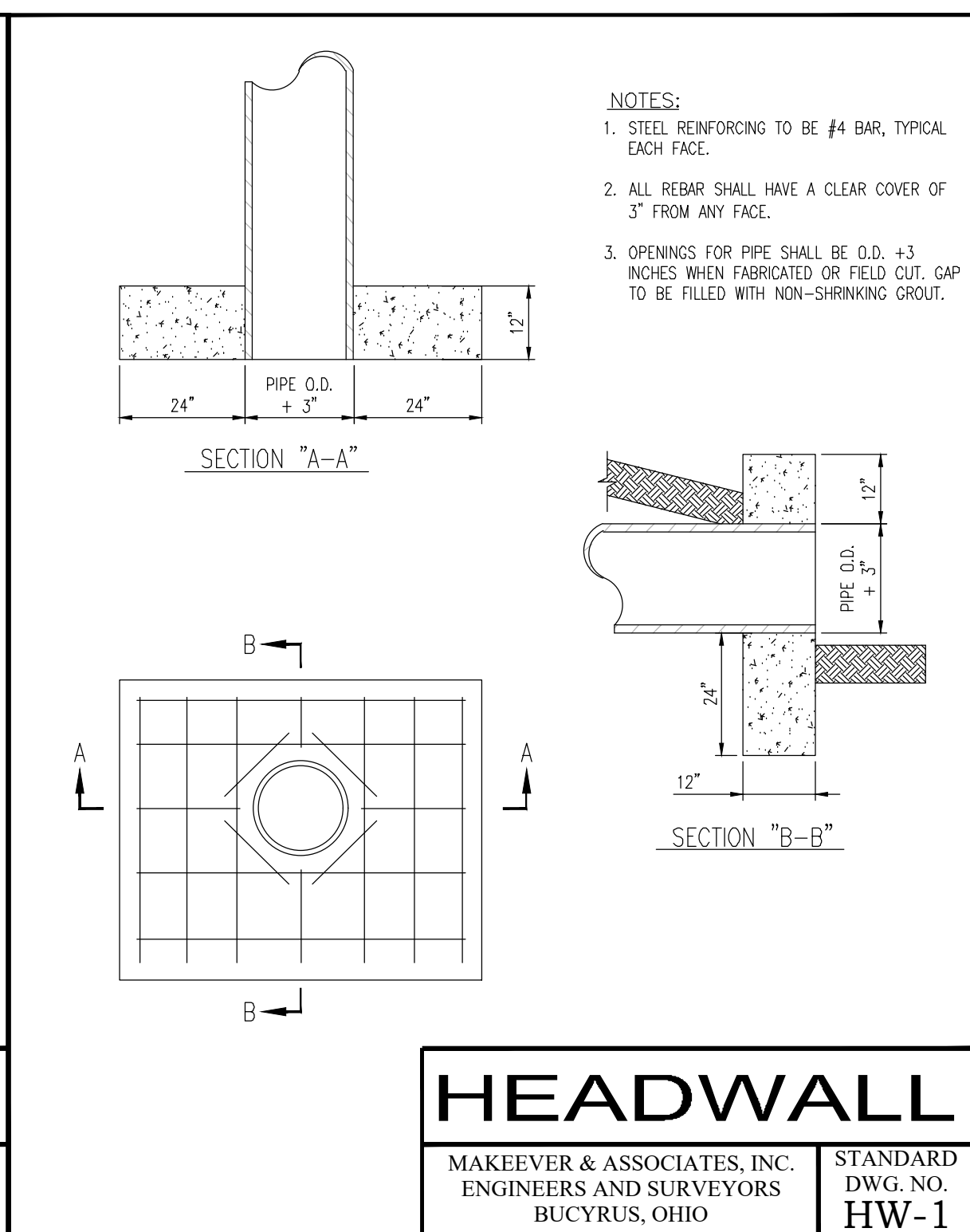
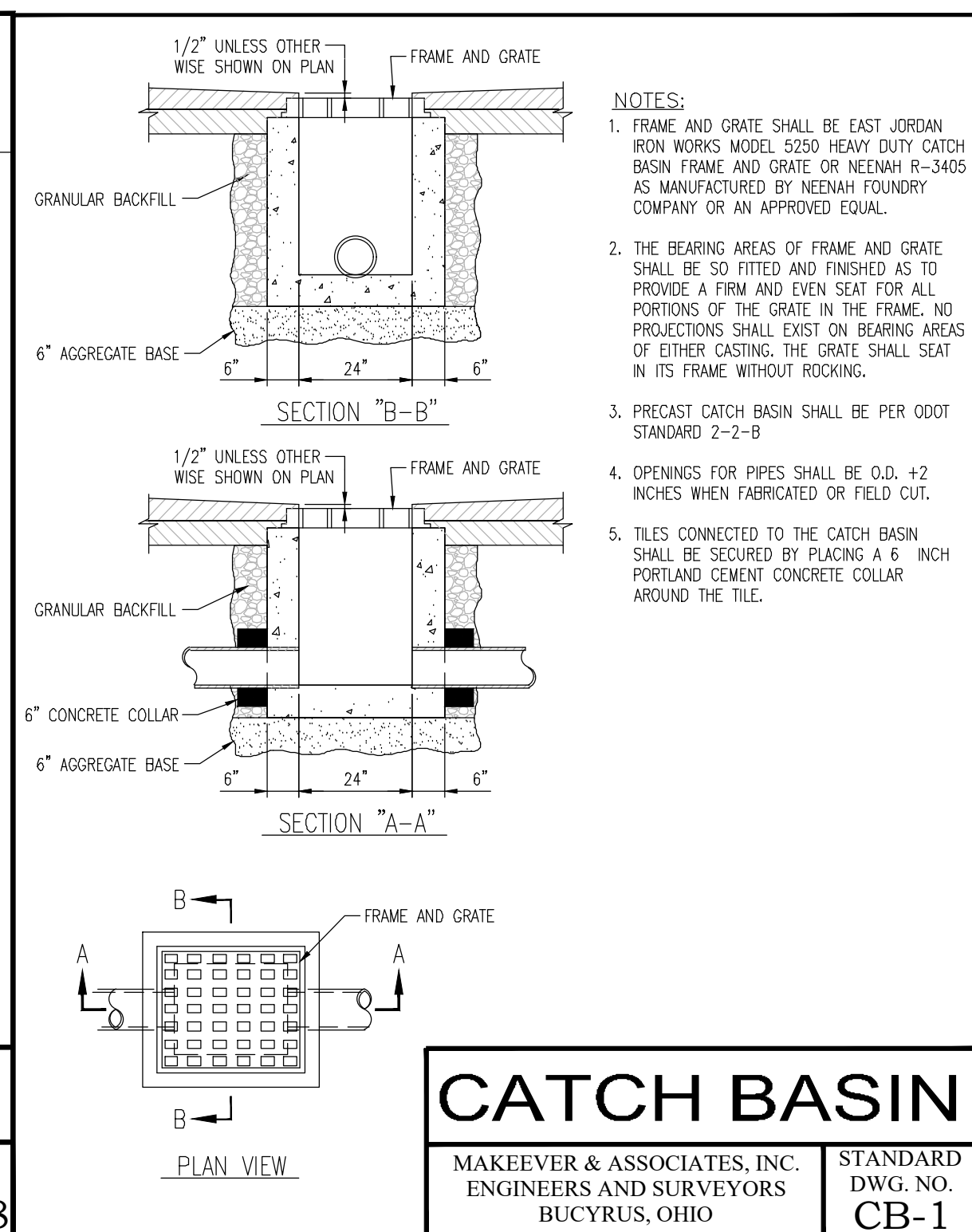
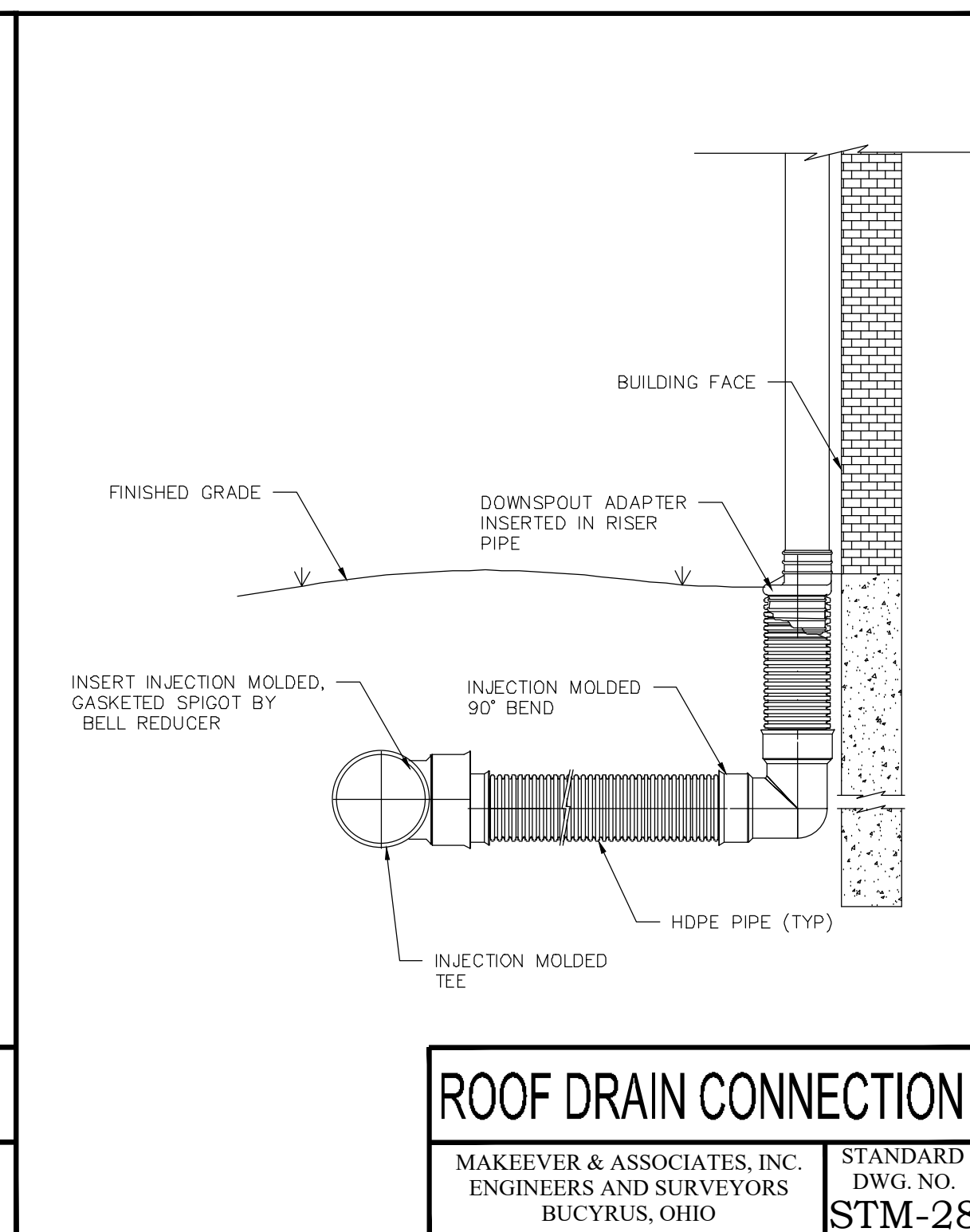
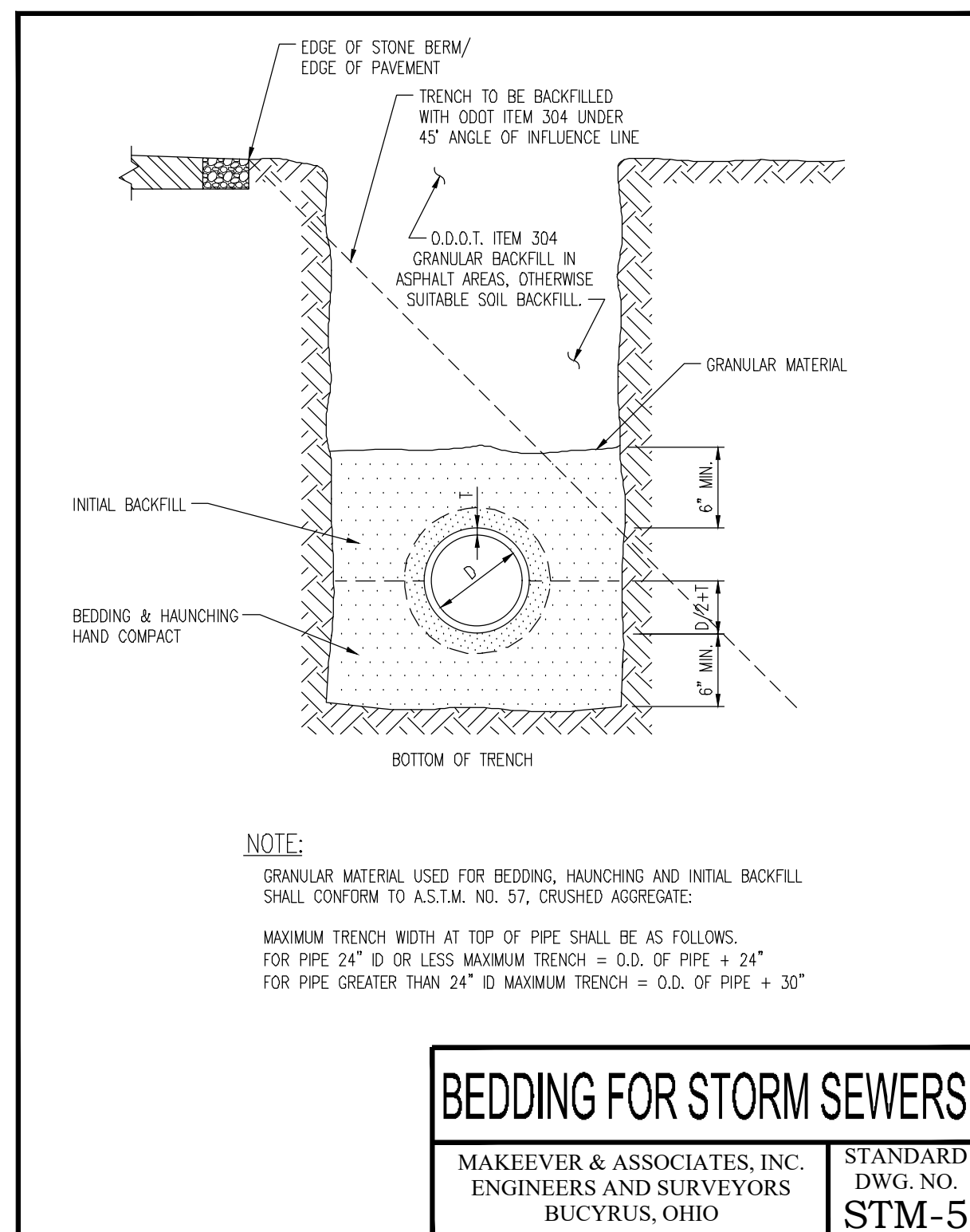
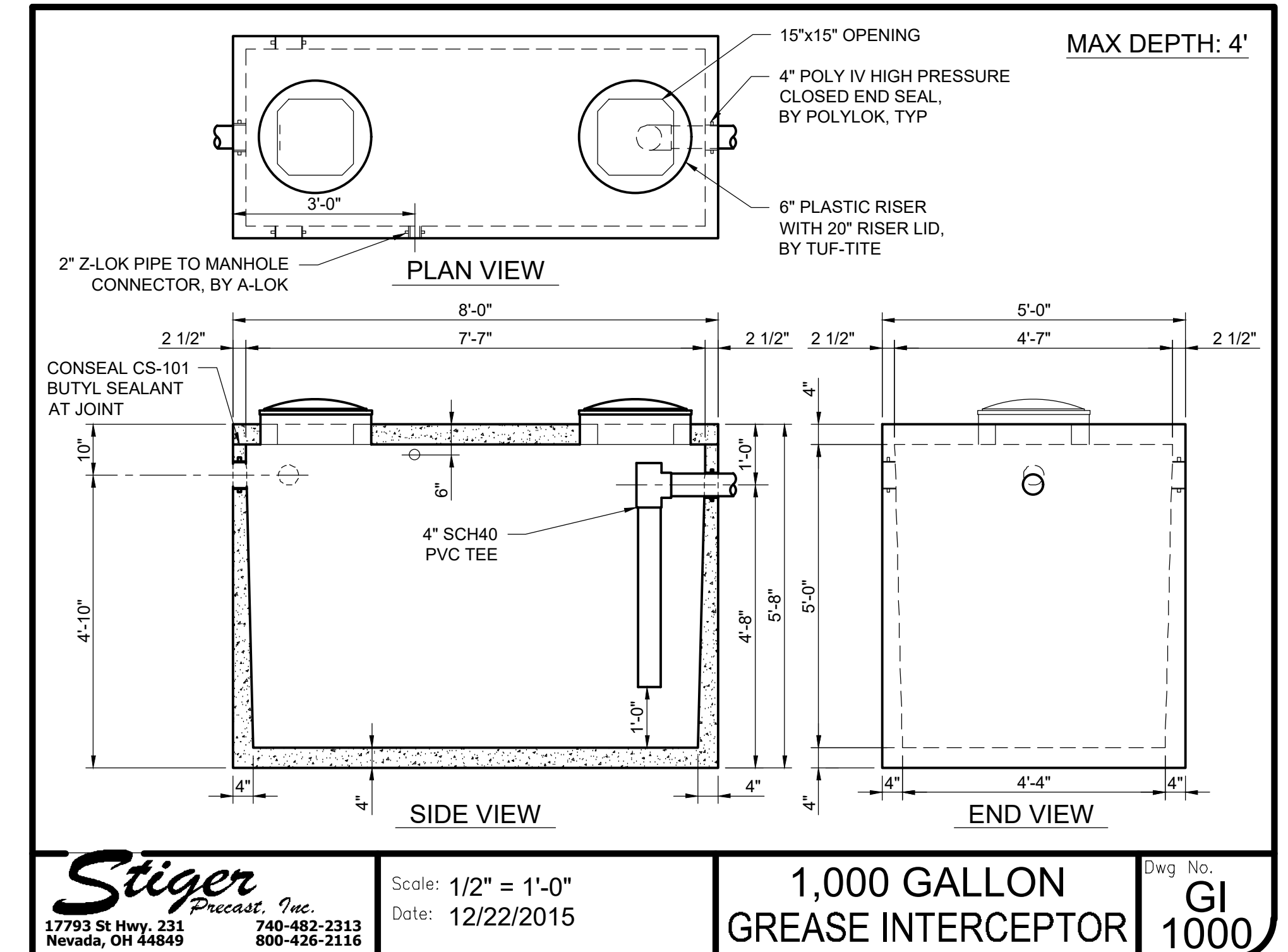
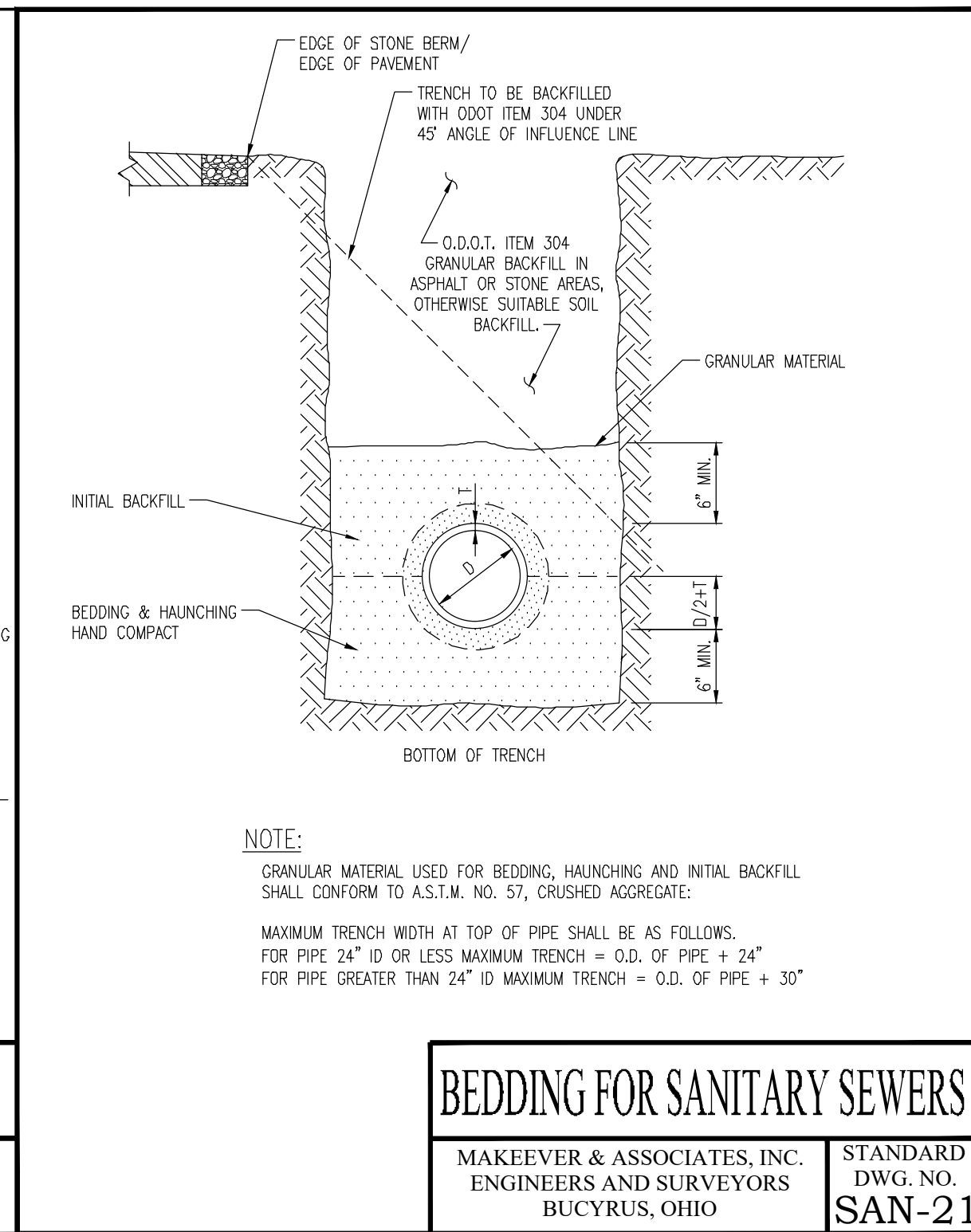
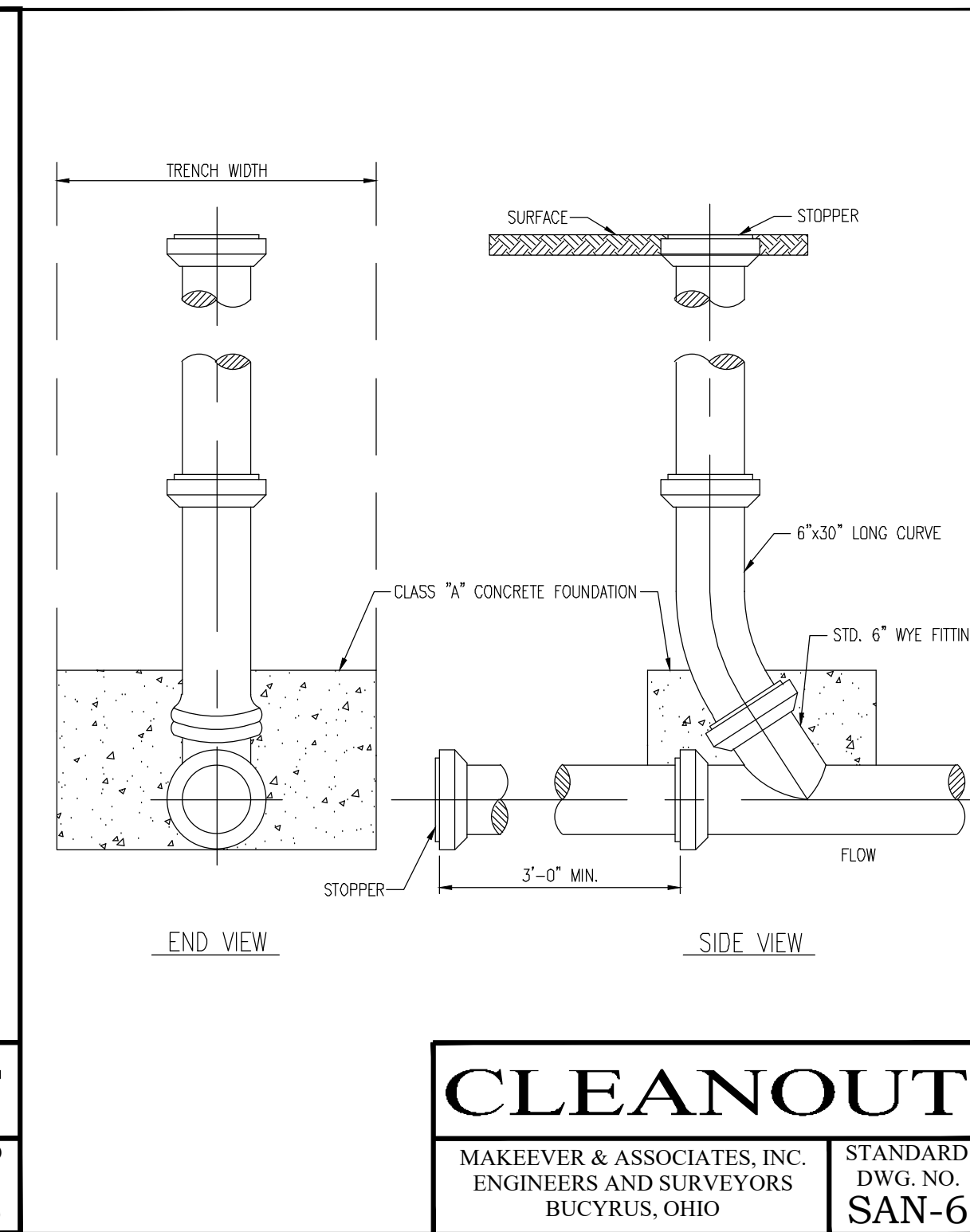
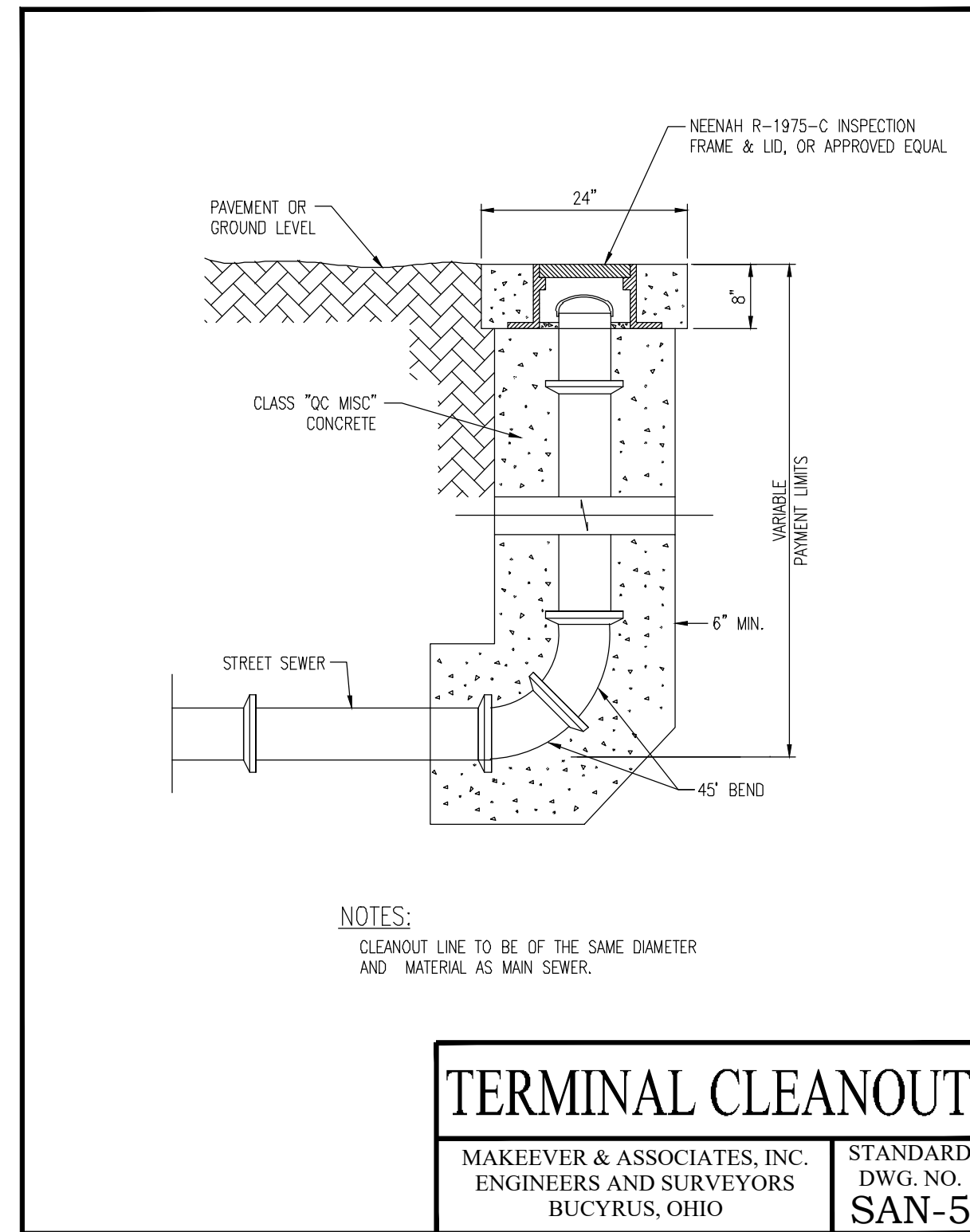
UTILITY PLAN

ENG. FILE NO. _____
IMP. ACCT. NO. _____
CONTRACT NO. _____
COMPLETION DATE _____
CONTRACTOR _____

OMNESS DESIGN INC.
MARION CO. WWTP GARAGE
2160 RICHLAND RD

Scale : Horiz. = AS NOTED
Vert. = AS NOTED
Original Sheet Size = 24"x36"
Date : 2-6-2024

Sheet No. : 6 OF 10
S:\2023\202
Dwg. No. : 23-202-001



EASEMENT REFERENCE			Grantor	No.	REVISIONS	
City's No.	County Recorder Volume	Page			Description	Approval
						AS BUILT

No.	Description	Approval	Date

Plans Prepared By :

Makeever & Associates, Inc.
P.O. BOX 325, 1810 E. MANSFIELD ST.
BUCYRUS, OHIO 44820
Phone: (419) 562-7757 Fax: (419) 562-4717

Dylan J. Wyatt
Dylan J. Wyatt

E-86763 2/8/24
Ohio Reg. No. Date

STATE OF OHIO
Dylan J. Wyatt
E-86763
REGISTERED PROFESSIONAL ENGINEER

STANDARD DETAILS

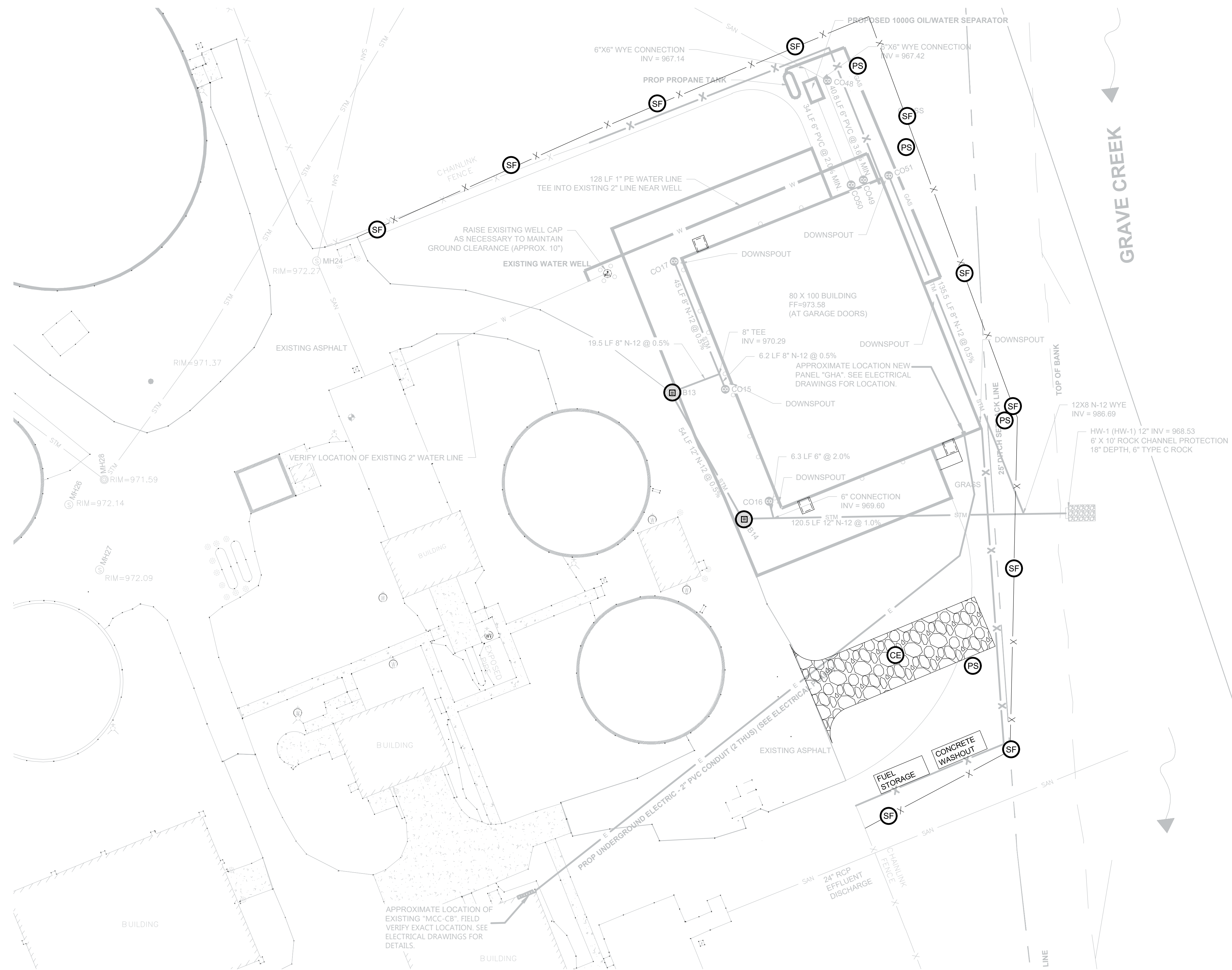
ENG. FILE NO. _____
IMP. ACCT. NO. _____
CONTRACT NO. _____
COMPLETION DATE _____
CONTRACTOR _____

OMNESS DESIGN INC.
MARION CO. WWTP GARAGE
2160 RICHLAND RD

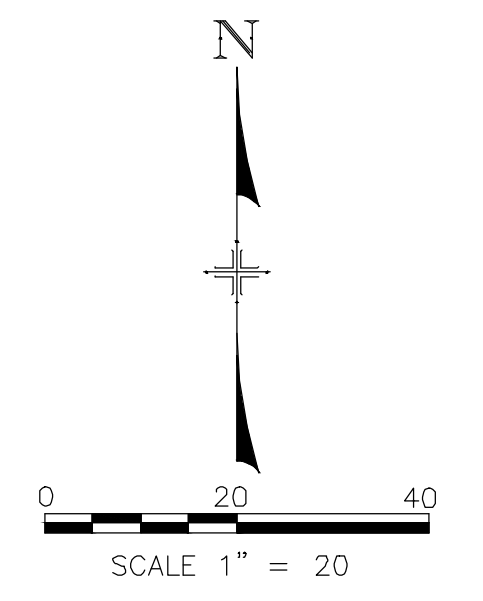
Scale : Horiz. = AS NOTED
Vert. = AS NOTED

Original Sheet Size = 24"x36"
Date : 2-6-2024

Sheet No. : 7 OF 10
S:\2023\202
Dwg. No. : 23-202-001



- LEGEND**
- (SF) SILT FENCE - 540 FT
 - (IP) INLET PROTECTION (2)
 - (OD) ODOT DM4.4 INLET PROTECTION
 - (PS) PERMANENT SEEDING
 - (CE) CONSTRUCTION ENTRANCE



EASEMENT REFERENCE			REVISIONS			
City's No.	County Recorder Volume Page	Grantor	No.	Description	Approval	Date
				AS BUILT		

Plans Prepared By :

akeever & Associates, Inc.
 P.O. BOX 325, 1810 E. MANSFIELD ST.
 BUCYRUS, OHIO 44820
 Phone: (419) 562-7757 Fax: (419) 562-4717

Dylan J. Wyatt
 DYLAN J. WYATT
 E-86763
 Ohio Reg. No. 2/8/24 Date

SWP3 PLAN

ENG. FILE NO. _____

IMP. ACCT. NO. _____

CONTRACT NO. _____

COMPLETION DATE _____

CONTRACTOR _____

OMNESS DESIGN INC.
 MARION CO. WWTP GARAGE
 2160 RICHLAND RD

Scale : Horiz. = AS NOTED
 Vert. = AS NOTED

Original Sheet Size = 24"x36"

Date : 2-6-2024

Sheet No. : 8 OF 10
 S:\2023\202 Dwg. No. : 23-202-001

STORM WATER ROUTING

OVERALL RUNOFF WILL BE COLLECTED IN CATCH BASINS AND WILL FLOW THROUGH A SERIES OF STORM SEWER PIPES. THESE STORM SEWERS IN TURN FLOW INTO THE SEDIMENT/WATER QUALITY BASIN. THE OUTLET FOR THIS SEDIMENT/WATER QUALITY BASIN WILL BE CONSTRUCTED WITH A CONCRETE STRUCTURE AND RIPRAP CHANNEL PROTECTION IN ACCORDANCE WITH ODOT SPECIFICATIONS. THE SEDIMENT/WATER QUALITY BASIN AND OUTLET STRUCTURE WILL BE CONSTRUCTED IN ACCORDANCE WITH ODOT SPECIFICATIONS.

WASTE MATERIALS

ALL WASTE MATERIALS WILL BE REMOVED AND DISPOSED FROM THE SITE DAILY. NO CONSTRUCTION WASTE MATERIALS WILL BE BURIED ONSITE. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICE STATING THESE PRACTICES WILL BE POSTED IN THE OFFICE TRAILER AND THE CONTRACTOR, THE INDIVIDUAL WHO MANAGES THE DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED DURING THE CONSTRUCTION PHASE OF THE PROJECT. CONTRACTOR SHALL KEEP CONTAINERS AVAILABLE ON SITE FOR DISPOSAL OF DEBRIS, TRASH, HAZARDOUS OR PETROLEUM WASTES. CONTAINERS SHALL BE COVERED AND LEAK-PROOF.

TOXIC OR HAZARDOUS WASTE

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES AND THE CONTRACTOR, THE INDIVIDUAL WHO MANAGES DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.

SANITARY WASTE

PORTABLE SANITARY WASTE FACILITIES WILL BE PROVIDED ONSITE AND THE COLLECTED WASTE DISPOSED OF PROPERLY.

WASTE DISPOSAL

CONTRACTOR SHALL KEEP CONTAINERS AVAILABLE ON SITE FOR DISPOSAL OF DEBRIS, TRASH, HAZARDOUS OR PETROLEUM WASTES.

CLEAN HARD FILL

BRICKS, HARDENED CONCRETE, AND SOIL WASTE THAT ARE CONTAMINATED SHALL NOT BE LOCATED NEAR CATCH BASINS, WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS AND OTHER STORM WATER DRAINAGE AREAS.

CONSTRUCTION AND DEMOLITION DEBRIS

CONSTRUCTION AND DEMOLITION DEBRIS WASTE WILL BE DISPOSED OF IN AN OHIO EPA APPROVED C&DD LANDFILL AS REQUIRED BY OHIO REVISED CODE (ORC) 3714.

CONSTRUCTION CHEMICAL COMPOUNDS

MIXING OR STORAGE OF COMPOUNDS SUCH AS FERTILIZERS, LIME, ASPHALT, AND CONCRETE SHALL NOT BE LOCATED NEAR CATCH BASINS, WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS AND OTHER STORM WATER DRAINAGE AREAS. THIS LOCATION WILL BE DETERMINED BY THE CONSTRUCTION MANAGER.

EQUIPMENT FUELING AND MAINTENANCE

DESIGNATED AREAS FOR FUELING AND/OR PERFORMING VEHICLE MAINTENANCE SHALL BE IN LOCATED AWAY FROM WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS AND OTHER STORM WATER DRAINAGE AREAS. THIS LOCATION WILL BE DETERMINED BY THE CONSTRUCTION MANAGER.

NO STORAGE TANKS SHALL BE KEPT ON SITE.

CONCRETE WASH WATER

DESIGNATED AREAS FOR CONCRETE CHUTES OR OTHER WASH WATER SHALL BE LOCATED AWAY FROM WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS AND OTHER STORM WATER DRAINAGE AREAS. THIS LOCATION WILL BE DETERMINED BY THE CONSTRUCTION MANAGER.

CONTAMINATED SOILS

ALL CONTAMINATED SOILS BY PETROLEUM OR OTHER CHEMICAL SPILLS MUST BE TREATED AND/OR DISPOSED IN OHIO EPA APPROVED SOLID WASTE MANAGEMENT FACILITIES OR HAZARDOUS WASTE TREATMENT, STORAGE OR DISPOSAL FACILITIES.

SPILL REPORTING REQUIREMENTS

IN AN EVENT OF A SMALL RELEASE, LESS THAN 25 GALLONS OF PETROLEUM WASTE, THE CONTRACTOR SHALL USE PETROLEUM BASED AND CONCRETE CURING COMPOUNDS PER MANUFACTURERS HANDLING PROCEDURES.

IN AN EVENT OF A LARGE RELEASE, MORE THAN 25 GALLON OF PETROLEUM WASTE, THE CONTRACTOR SHALL CONTACT OHIO EPA (AT 1-800-282-9378), THE LOCAL FIRE DEPARTMENT AND THE LOCAL EMERGENCY PLANNING COMMITTEE (LEPC) WITHIN 30 MINUTES OF A SPILL OF 25 OR MORE GALLONS.

OPEN BURNING

OPEN BURNING IS ONLY PERMITTED IN RESTRICTED AREAS FOR BARBECUES, HEATING, AND CERTAIN OCCUPATIONAL PURPOSES (AS DEFINED IN OAC 3745-19).

NO OPEN BURNING IS ALLOWED IN A NON-RESTRICTED AREA WHICH IS WITHIN 1000 FEET OF AN INHABITED BUILDING, OPEN BURNING IN AN UNRESTRICTED AREA IS LIMITED TO SCRAP LUMBER, WOODEN FENCE POSTS, AGRICULTURAL, LAND CLEARING, OR LANDSCAPE WASTES.

DUST CONTROLS/SUPPRESSANTS

CONTRACTOR SHALL KEEP DUST TO A MINIMUM BY SPRINKLING DUST SUPPRESSANT. THE DUST SUPPRESSANT SHALL BE KEPT AWAY FROM CATCH BASINS, WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS AND OTHER STORM WATER DRAINAGE AREAS.

AIR PERMITTING REQUIREMENTS

CONTRACTOR SHALL BEWARE THAT AIR POLLUTION PERMITS MAY BE REQUIRED FOR ACTIVITIES INCLUDING, BUT NOT LIMITED TO, MOBILE CONCRETE BATCH PLANTS, MOBILE ASPHALT PLANTS, CONCRETE CRUSHERS, AND LARGE GENERATORS.

SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC) PLAN
INVENTORY OF MATERIALS

THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ONSITE DURING CONSTRUCTION:

- CONCRETE
- DETERGENTS
- PAINTS (ENAMEL AND LATEX)
- METAL STUDS
- MASONRY BLOCK
- TAR
- FERTILIZERS
- PETROLEUM BASED PRODUCTS
- CLEANING SOLVENTS
- WOOD
- ROOFING SHINGLES
- LAMPS (INCLUDES FLUORESCENT LAMPS)

SPILL PREVENTION

MATERIAL MANAGEMENT PRACTICES:
THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

GOOD HOUSEKEEPING:
THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE DURING THE CONSTRUCTION.

- AN EFFECT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.
- ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
- PRODUCT WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
- SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
- WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
- MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.
- THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ONSITE.
- MATERIAL SAFETY AND DATA SHEETS WILL BE AVAILABLE UPON REQUEST.
- THE CONTRACTOR CAN USE PROTECTED STORAGE AREAS FOR INDUSTRIAL OR CONSTRUCTION MATERIALS TO MINIMIZE EXPOSURE TO SUCH MATERIALS TO STORM WATER.

HAZARDOUS PRODUCTS:
THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.

- PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
- ORIGINAL LABELS AND MATERIAL SAFETY DATA SHEETS (MSDS) WILL BE RETAINED ON SITE.
- IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

PRODUCT SPECIFIC PRACTICES

THE FOLLOWING PRODUCT PRACTICES WILL BE FOLLOWED ONSITE:

PETROLEUM PRODUCTS:

ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTATIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS:

FERTILIZERS USED WILL BE APPLIED PER OHIO DEPARTMENT OF TRANSPORTATION (ODOT) SPECIFICATIONS. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM SEWER. STORAGE WILL BE IN A COVERED SHED OR OFFICE. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

PAINTS:

ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE TRUCKS:

CONCRETE TRUCKS WILL WASH OUT OR DISCHARGE SURPLUS CONCRETE ONLY IN AREAS DESIGNATED. THESE DESIGNATED AREAS SHALL BE LOCATED AWAY FROM WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS AND OTHER STORM WATER DRAINAGE AREAS. THE LOCATION WILL BE DETERMINED BY THE CONSTRUCTION MANAGER.

SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

- MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
- MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS MAY INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
- ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
- THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
- SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE.
- THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.
- THE CONTRACTOR, RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS, WILL BE IN CHARGE OF SPILL PREVENTION AND CLEANUP. HE WILL DESIGNATE AT LEAST TWO OTHER SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA.

PROCESS WASTEWATER/LEACHATE MANAGEMENT

ALL PROCESS WASTEWATERS, (WHICH INCLUDES EQUIPMENT WASHING, LEACHATE ASSOCIATED WITH ON-SITE WASTE DISPOSAL, AND CONCRETE WASH-OUTS) SHALL BE COLLECTED AND DISPOSED OF PROPERLY TO A PUBLICLY OWNED TREATMENT WORKS.

OFFSITE VEHICLE TRACKING

A STABILIZED CONSTRUCTION ENTRANCE HAS BEEN PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENT. THE PAVED STREETS ADJACENT TO THE SITE ENTRANCE WILL BE MAINTAINED TO REMOVE ANY EXCESS MUD, DIRT, OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARP AULIN.

CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS

THE STORM WATER POLLUTION PREVENTION PLAN REFLECTS THE COUNTY REQUIREMENTS FOR STORM WATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL. TO ENSURE COMPLIANCE THIS PLAN WAS ESTABLISHED BASED ON A STORM WATER POLLUTION PREVENTION PLAN EXAMPLE PROVIDED BY THE OHIO EPA.

MAINTENANCE/INSPECTION PROCEDURES

THESE ARE THE INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS:

1. ALL CONTROL MEASURES WILL BE INSPECTED AT LEAST ONCE EACH WEEK AND FOLLOWED ANY STORM EVENT OF 0.5 INCHES OR GREATER BY A QUALIFIED INSPECTION PERSONNEL.
2. ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; REPAIRS REQUIRED WILL BE COMPLETED WITHIN 24 HOURS OF REPORT.
3. SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.
4. SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT AND TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POST, AND TO SEE IF THE FENCE POSTS ARE FIRMLY IN THE GROUND.
5. SEDIMENT IN THE DRAINAGE SWALES WILL BE REMOVED.
6. TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.
7. A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTOR IS ATTACHED.
8. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE INSPECTIONS, SUCH REPAIRS AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.
9. INSPECTIONS MAY BE REDUCED TO MONTHLY PLUS RAIN EVENTS IF SITE IS DORMANT.
10. REPAIR OR REPLACE MISSING OR SUB-FUNCTIONAL BMPs WITHIN 3 DAYS FOR NON-SEDIMENT PONDS AND 10 DAYS FOR SEDIMENT PONDS.
11. DOCUMENT INSPECTIONS WITH OHIO STORM WATER POLLUTION PREVENTION PLAN TEMPLATE REPORTS. MAINTAIN RECORDS FOR THREE YEARS.

NON-STORM DISCHARGES

IT IS EXPECTED THAT THE FOLLOWING NON-STORM DISCHARGE WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:

- WATER FROM WATER LINE FLUSHINGS
- PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC HAZARDOUS MATERIALS HAVE OCCURRED).
- UNCONTAMINATED GROUND WATER (FROM DEWATERING EXCAVATION).

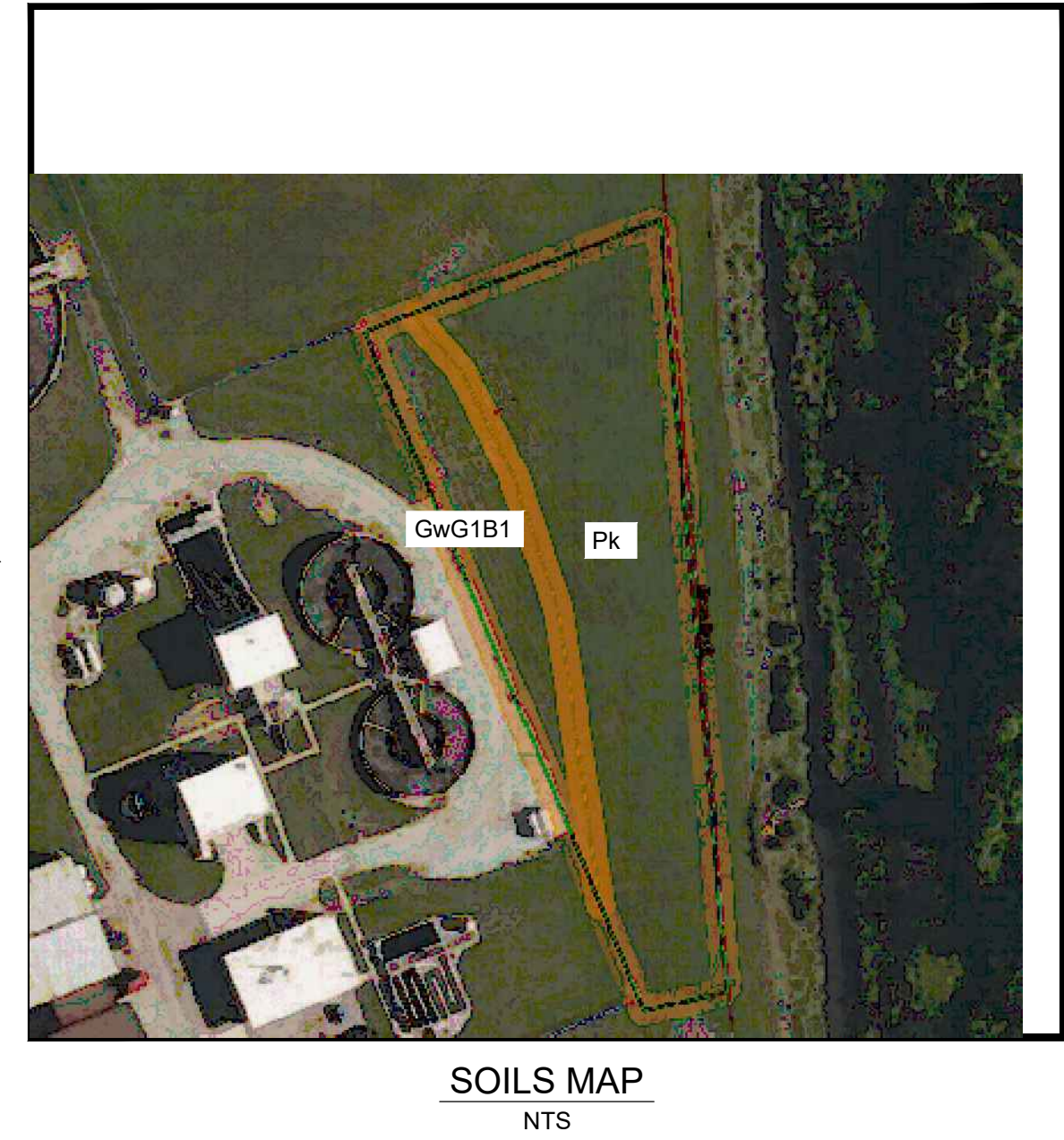
ALL NON-STORM WATER DISCHARGES WILL BE DIRECTED TO DRAINAGE SWALES PRIOR TO DISCHARGE.

DEWATERING

ALL TRENCHES, EXCAVATIONS, AND LOW AREAS THAT REQUIRE DEWATERING SHALL HAVE THE WATER DIRECTED/PUMPED TO A SEDIMENT BASIN PRIOR TO DISCHARGE FROM THE SITE. IF OILY OR CHEMICALLY CONTAMINATED WATER IS TO BE GENERATED, NOTIFY ENGINEER PRIOR TO ANY DISCHARGE.

SITE DESCRIPTION	
PROJECT NAME AND LOCATION:	MARION COUNTY WWTP GARAGE
(LATITUDE, LONGITUDE, OR ADDRESS)	2160 RICHLAND RD MARION OH 43302
OWNER NAME AND ADDRESS:	MARION COUNTY SANITARY ENGINEER 222 W. CENER ST MARION OH 43302
DESCRIPTION: (PURPOSE AND TYPES OF SOIL DISTURBING ACTIVITIES)	
THIS PROJECT IS FOR THE DEVELOPMENT A NEW VEHICLE STORAGE BUILDING	
SOIL DISTURBING ACTIVITIES WILL INCLUDE: SITE PREPARATION AND BUILDING CONSTRUCTION.	
SITE AREA:	THE SITE AREA OF 0.76 ACRES WILL HAVE .70 ACRES DISTURBED BY THE ABOVE LISTED CONSTRUCTION ACTIVITIES
RUNOFF COEFFICIENT:	PRE-CONSTRUCTION COEFFICIENT OF THE SITE IS CN = 75 POST-CONSTRUCTION COEFFICIENT FOR THE SITE WILL BE CN = 92
IMPERVIOUS AREA:	PRE-CONSTRUCTION IMPERVIOUS AREA = 0% POST-CONSTRUCTION IMPERVIOUS AREA = 74.5%
EXISTING SOIL TYPES:	Gwg1B1 - GLYNWOOD SILOT LOAM GROUND MORRAINE 2% TO 6% SLOPE Pw - PEWAMO SILTY CLAY LOAM, 0% TO 1% SLOPES
EXISTING LAND USE:	THIS SITE WAS PREVIOUSLY UNDEVELOPED FIELD AT WWTP

SEQUENCE OF CONSTRUCTION SCHEDULE ACTIVITIES:	
THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:	
1.	CLEAR AND GRUB AREA WITHIN CONSTRUCTION LIMITS
2.	INSTALL SILT FENCE, AND SEDIMENT CONTROLS WITHIN 7 DAYS OF GRUBBING ACTIVITIES
3.	INSTALL STABILIZED CONSTRUCTION ENTRANCE
4.	REMOVE TOPSOIL FROM SITE AND STOCK PILE
5.	STABILIZE STOCKPILES WITHIN 7 DAYS OF LAST CONSTRUCTION ACTIVITY
6.	PERFORM SITE GRADING ACTIVITIES
7.	INSTALL UNDERGROUND UTILITIES
8.	INSTALL SEDIMENT AND EROSION CONTROLS AROUND ALL CATCH BASINS
9.	INSTALL DRIVEWAY AND PARKING AREA
10.	CONSTRUCT BUILDINGS
11.	COMPLETE GRADING AND INSTALL PERMANENT SEEDING WITHIN 7 DAYS OF LAST CONSTRUCTION ACTIVITY
12.	REMOVE ACCUMULATED SEDIMENT FROM SEDIMENT AND EROSION CONTROL DEVICES (CONTINUAL EVENT)
13.	WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETED AND THE SITE IS STABILIZED, REMOVE SEDIMENT AND EROSION CONTROL AND RESEED ANY AREAS DISTURBED BY THIS REMOVAL
14.	OWNER TO PROVIDE MAINTENANCE
NAME OF RECEIVING WATERS:	EXISTING STORM RUNOFF DISCHARGES TO GRAVE CREEK



EASEMENT REFERENCE			REVISIONS			
City's No.	County Recorder Volume	Page	No.	Description	Approval	Date
				AS BUILT		

No.	Description	Approval	Date
	AS BUILT		

Plans Prepared By :

Makeover & Associates, Inc.
P.O. BOX 325, 1810 E. MANSFIELD ST.
BUCYRUS, OHIO 44820
Phone: (419) 562-7757 Fax: (419) 562-4717

Dylan J. Wyatt
Dylan J. Wyatt

E-86763 2/8/24
Ohio Reg. No. Date

SWP3 NOTES

ENG. FILE NO. _____

IMP. ACCT. NO. _____

CONTRACT NO. _____

COMPLETION DATE _____

CONTRACTOR _____

OMNESS DESIGN INC.
MARION CO. WWTP GARAGE
2160 RICHLAND RD

Scale : Horiz. = AS NOTED
Vert. = AS NOTED

Original Sheet Size = 24"x36"

Date : 2-6-2024

Sheet No. : 9 OF 10

S:\2023\202
Dwg. No. : 23-202-001

EROSION AND SEDIMENT CONTROL

- 1. THE IMPLEMENTATION OF EROSION AND SEDIMENT CONTROL PRACTICES SHALL CONFORM TO THE OHIO DEPARTMENT OF NATURAL RESOURCES' RAINWATER AND LAND DEVELOPMENT MANUAL, AND THE OHIO EPA'S GENERAL PERMIT PROGRAM FOR THE DISCHARGE OF STORM WATER. IF CONFLICTS EXIST REGARDING THE EROSION AND SEDIMENT CONTROL PRACTICES, THE MORE RESTRICTIVE SHALL APPLY.
- 2. EROSION AND SEDIMENT CONTROL PRACTICES NOT ALREADY ON THIS PLAN MAY BE NECESSARY DUE TO UNFORESEEN ENVIRONMENTAL CONDITIONS AND/OR CHANGES IN DRAINAGE PATTERNS CAUSED BY EARTH-MOVING ACTIVITY. ADDITIONAL PRACTICES SHALL BE IMPLEMENTED AT THE DEVELOPER'S EXPENSE AS DIRECTED BY THE OWNER, ENGINEER, OEPA OR GOVERNING AUTHORITY.
- 3. THE DEVELOPER AND/OR HIS CONSTRUCTION SUPERINTENDENT SHALL HAVE OVERALL RESPONSIBILITY FOR THE IMPLEMENTATION OF THIS STORM WATER POLLUTION PREVENTION PLAN. THEY SHALL ALSO BE RESPONSIBLE FOR MAKING ALL CONTRACTORS AND SUB-CONTRACTORS AWARE OF THE PROVISIONS ON THIS PLAN.
- 4. REPAIRS TO ANY EROSION AND SEDIMENT CONTROL MEASURES, STRUCTURES, DEVICES, OR RELATED ITEMS SHALL BE MADE WITHIN 14 DAYS.
- 5. SEDIMENT BASINS/TRAPS AND PERIMETER SEDIMENT CONTROLS SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING AND WITHIN SEVEN DAYS FROM THE START OF THE GRUBBING AND CLEARING OPERATIONS AND SHALL CONTINUE TO FUNCTION UNTIL UPLAND AREAS ARE PERMANENTLY STABILIZED.
- 6. STREAMS, INCLUDING BEDS AND BANKS, SHALL BE RESTABILIZED IMMEDIATELY AFTER IN-CHANNEL WORK IS COMPLETED, INTERRUPTED, OR STOPPED.

OHIO ENVIRONMENTAL PROTECTION AGENCY NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM NOTES

- 1. THIS CONTRACT DRAWING SHALL BE MADE AVAILABLE ON SITE AT ALL TIMES AND PRESENTED UPON REQUEST.
- 2. ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSPECTED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.50" OF RAIN PER 24-HOUR PERIOD. PERMANENT RECORDS OF MAINTENANCE AND INSPECTION MUST BE MAINTAINED FOR 2 YEARS AFTER THE COMPLETION OF CONSTRUCTION AND THE FILING OF THE NOTICE OF TERMINATION (NOT) PER THE OHIO EPA NPDES PERMIT AND SHOULD INCLUDE THE NAME OF THE INSPECTOR, MAJOR OBSERVATIONS, DATE OF INSPECTION, CERTIFICATION OF COMPLIANCE, AND CORRECTIVE MEASURES TAKEN.
- 3. NO SOLID OR LIQUID WASTE SHALL BE DISCHARGED INTO STORM WATER RUNOFF. SOLIDS, SANITARY AND TOXIC WASTE MUST BE DISPOSED OF IN A PROPER MANNER IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. IT IS PROHIBITED TO BURN, BURY OR POUR OUT ONTO THE GROUND OR INTO THE STORM SEWERS ANY SOLVENTS, PAINTS, STAINS, GASOLINES, DIESEL FUEL, USED MOTOR OIL, HYDRAULIC FLUID, ANTI-FREEZE, CEMENT CURING COMPOUNDS, AND OTHER SUCH TOXIC AND HAZARDOUS WASTE. WASH OUT OF CEMENT TRUCKS SHOULD OCCUR IN A DIKED, DESIGNATED AREA WHERE THE WASHINGS CAN COLLECT AND BE DISPOSED OF PROPERLY WHEN THEY HARDEN. STORAGE TANKS SHOULD BE LOCATED IN DIKED AREAS AWAY FROM ANY DRAINAGE CHANNELS. THE DIKED AREA SHOULD HOLD A VOLUME 110% OF THE LARGEST TANK.
- 4. THE DEVELOPER SHALL ENSURE A NOTICE OF TERMINATION (NOT) IS FILED PER THE OHIO EPA NPDES PERMIT REQUIREMENTS.

CONSTRUCTION ENTRANCE

STONE SIZE - NO. 2 (2-1/2" TO 1-1/2") OR ITS EQUIVALENT.

LENGTH - AS EFFECTIVE, BUT NOT LESS THAN 70 FEET.

THICKNESS - NOT LESS THAN EIGHT (8) INCHES.

WIDTH - TWENTY (20) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.

FILTER CLOTH - GEOTEXTILE MEETING FIGURE 7.4.1 OF THE RAINWATER AND LAND DEVELOPMENT MANUAL WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.

SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE.

WASHING - WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE THROUGH USE OF SAND BAGS, GRAVEL, BOARDS OR OTHER APPROVED METHODS.

MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.

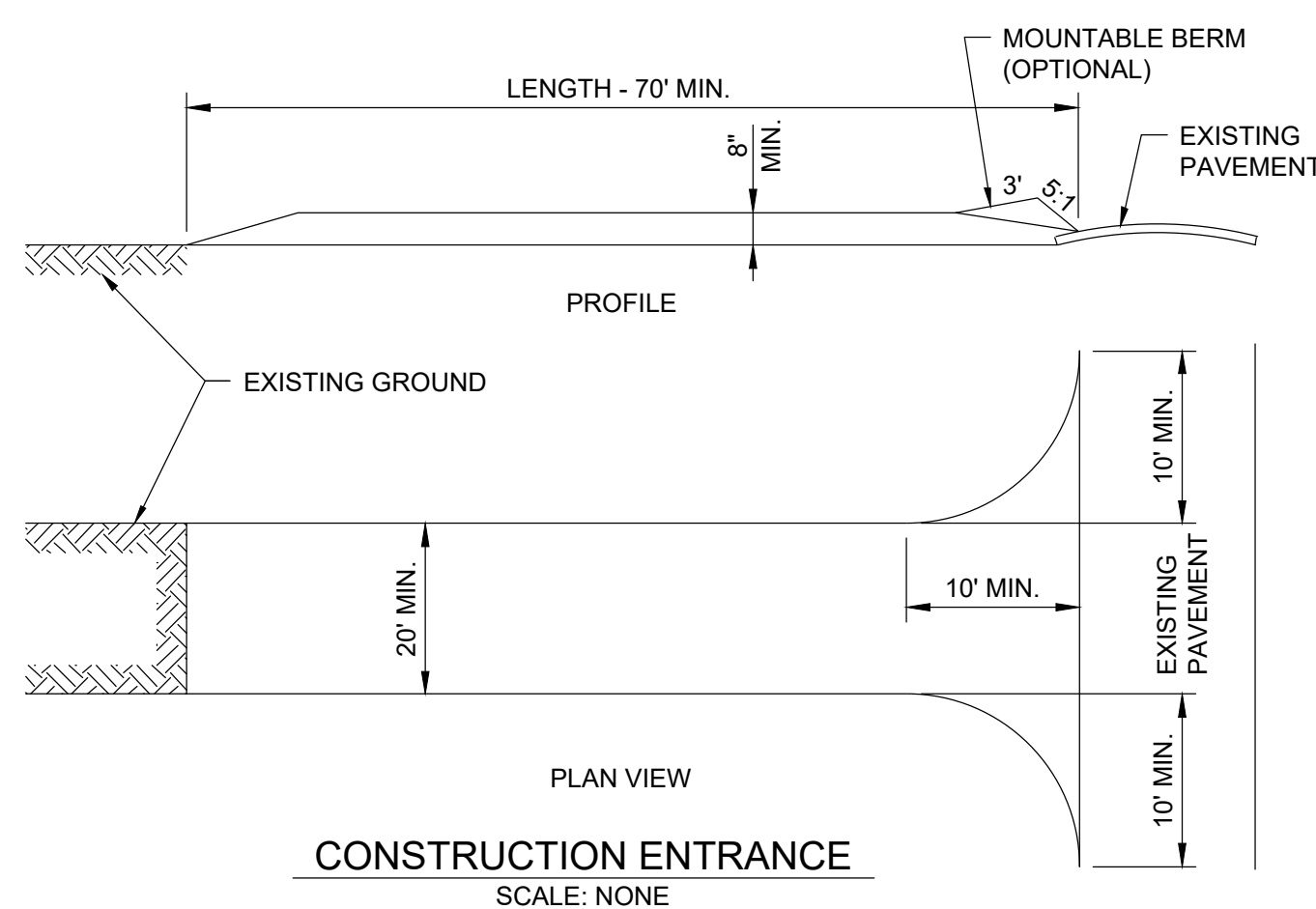
PERIODIC INSPECTION AND REQUIRED MAINTENANCE SHALL BE PERFORMED AFTER EACH RAIN.

THIS CONSTRUCTION SHALL INCLUDE ALL MATERIALS AND COSTS RELATIVE TO CONSTRUCTING, MAINTAINING, REMOVAL AND RESTORATION OF STABILIZED ENTRANCE WITHIN THE VARIOUS CONSTRUCTION ITEMS.

THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED AS SOON AS IS PRACTICAL BEFORE MAJOR GRADING ACTIVITIES. CONSTRUCTION ENTRANCES SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREA IS STABILIZED OR REPLACED WITH A PERMANENT ROADWAY SURFACE.

Figure 7.4.1 Geotextile Specification for Construction Entrance

Minimum Tensile Strength	200 lbs.
Minimum Puncture Strength	80 psi.
Minimum Tear Strength	50 lbs.
Minimum Burst Strength	220 psi.
Minimum Elongation	20%
Equivalent Opening Size	EOS < 0.6 mm.
Permittivity	1x10-3 cm/sec.



SILT FENCE NOTES

SILT FENCE SEDIMENT BARRIER UTILIZES STANDARD STRENGTH OR EXTRA STRENGTH SYNTHETIC FILTER FABRICS. IT IS DESIGNED FOR SITUATIONS IN WHICH ONLY SHEET OR OVERLAND FLOWS ARE EXPECTED.

THE HEIGHT OF A SILT FENCE SHALL NOT EXCEED 36 INCHES (HIGHER FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE TO THE STRUCTURE)

THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST WITH A MINIMUM 6-INCH OVERLAYS AND SECURELY SEALED.

WHEN STANDARD STRENGTH FILTER FABRIC IS USED A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1 INCH LONG, TIE WIRES OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.

POSTS SHALL BE SPACED A MAXIMUM OF 10 FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 12 INCHES). WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT, FENCE POST SPACING SHALL NOT EXCEED 6 FEET.

A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4 INCHES WIDE AND 4 INCHES DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER.

THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE AND 8 INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. EXCESS MATERIAL SHALL LAY AT THE BOTTOM OF THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.

WHEN EXTRA STRENGTH FILTER FABRIC AND CLOSER POST SPACING ARE USED THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED. IN SUCH A CASE THE FILTER FABRIC IS STAPLED OR WIRED DIRECTLY TO THE POSTS.

THE TRENCH SHALL BE BACKFILLED AND SOIL COMPACTED OVER THE FILTER FABRIC.

SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.

RAINWATER & LAND DEVELOPMENT MANUAL SPECIFICATIONS FOR SILT FENCE

1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.

2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS THAT MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.

3. ENDS OF THE SILT FENCES SHALL BE BROUGHT UPSLOPE SLIGHTLY SO THAT WATER PONDED BY THE SILT FENCE WILL BE PREVENTED FROM FLOWING AROUND THE ENDS.

4. SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.

5. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FEET (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE SILT FENCE.

6. THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16 INCHES ABOVE THE ORIGINAL GROUND SURFACE.

7. THE SILT FENCE SHALL BE PLACED IN AN EXCAVATED OR SLICED TRENCH CUT A MINIMUM OF 6 INCHES DEEP. THE TRENCH SHALL BE MADE WITH A TRENCHER, CABLE LAYING MACHINE, SLICING MACHINE, OR OTHER SUITABLE DEVICE THAT WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.

8. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE. A MINIMUM OF 8 INCHES OF GEOTEXTILE MUST BE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6-INCH DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED ON BOTH SIDES OF THE FABRIC.

9. SEAMS BETWEEN SECTIONS OF SILT FENCE SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST WITH A MINIMUM 6-IN. OVERLAP PRIOR TO DRIVING INTO THE GROUND. (SEE DETAILS).

10. MAINTENANCE—SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER THE FABRIC OR AROUND THE FENCE ENDS, OR IN ANY OTHER WAY ALLOWS A CONCENTRATED FLOW DISCHARGE, ONE OF THE FOLLOWING SHALL BE PERFORMED, AS APPROPRIATE: 1) THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED, 2) ACCUMULATED SEDIMENT SHALL BE REMOVED, OR 3) OTHER PRACTICES SHALL BE INSTALLED. SEDIMENT DEPOSITS SHALL BE ROUTINELY REMOVED WHEN THE DEPOSIT REACHES APPROXIMATELY ONE-HALF OF THE HEIGHT OF THE SILT FENCE. SILT FENCES SHALL BE INSPECTED AFTER EACH RAINFALL AND AT LEAST DAILY DURING A PROLONGED RAINFALL. THE LOCATION OF EXISTING SILT FENCE SHALL BE REVIEWED DAILY TO ENSURE ITS PROPER LOCATION AND EFFECTIVENESS. IF DAMAGED, THE SILT FENCE SHALL BE REPAIRED IMMEDIATELY. CRITERIA FOR SILT FENCE MATERIALS: 1. FENCE POST - THE LENGTH SHALL BE A MINIMUM OF 32 INCHES. WOOD POSTS WILL BE 2-BY-2-IN. NOMINAL DIMENSIONED HARDWOOD OF SOUND QUALITY. THEY SHALL BE FREE OF KNOTS, SPLITS AND OTHER VISIBLE IMPERFECTIONS, THAT WILL WEAKEN THE POSTS. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FT. POSTS SHALL BE DRIVEN A MINIMUM 16 INCHES INTO THE GROUND, WHERE POSSIBLE. IF NOT POSSIBLE, THE POSTS SHALL BE ADEQUATELY SECURED TO PREVENT OVERTURNING OF THE FENCE DUE TO SEDIMENT/WATER LOADING. 2. SILT FENCE FABRIC - SEE CHART BELOW.

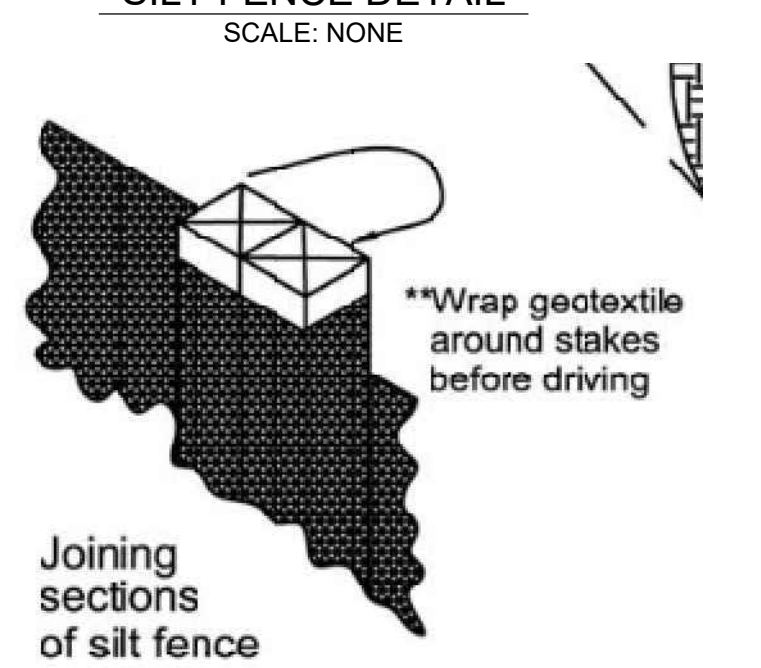
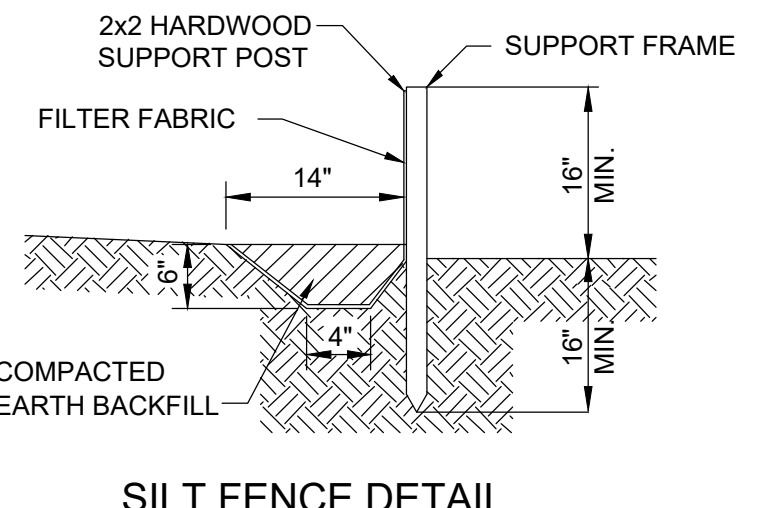


Table 6.3.2 Minimum criteria for Silt Fence Fabric (DOT, 2002)

FABRIC PROPERTIES	VALUES	TEST METHOD
Minimum Tensile Strength	120 lbs. (535 N)	ASTM D 4632
Maximum Elongation at 60 lbs	50%	ASTM D 4632
Minimum Puncture Strength	50 lbs (220 N)	ASTM D 4833
Minimum Tear Strength	40 lbs (180 N)	ASTM D 4533
Apparent Opening Size	≤ 0.84 mm	ASTM D 4751
Minimum Permittivity	1x10-2 sec.-1	ASTM D 4491
UV Exposure Strength Retention	70%	ASTM G 4355

TEMPORARY AND PERMANENT SEEDING

THE LIMITS OF SEEDING AND MULCHING AREA AS SHOWN WITHIN THE PLAN SEEDING HAS BEEN ASSUMED TO BE 5' OUTSIDE THE WORK LIMITS OR RIGHT-OF-WAY WHICHEVER IS GREATER. ALL AREAS NOT DESIGNATED TO BE SEEDED SHALL REMAIN UNDER NATURAL GROUND COVER. THOSE AREAS DISTURBED OUTSIDE THE SEEDING LIMITS SHALL BE SEEDED AND MULCHED AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL MAINTAIN A BUFFER STRIP AS DESIGNATED ON THE PLAN TO PREVENT SEDIMENT FROM LEAVING SITE. THIS STRIP SHALL BE MAINTAINED AT ALL TIMES AND NO SOIL SHALL BE PLACED ON THIS STRIP.

TEMPORARY SEED SHALL BE APPLIED BETWEEN CONSTRUCTION OPERATIONS ON SOIL THAT WILL NOT BE GRADED OR REWORKED FOR 45 DAYS OR MORE. THESE IDLE AREAS SHOULD BE SEEDED AS SOON AS POSSIBLE AFTER GRADING OR SHALL BE SEEDED WITHIN 7 DAYS. SEVERAL APPLICATIONS OF TEMPORARY SEEDING ARE NECESSARY ON TYPICAL CONSTRUCTION PROJECTS.

PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL GROUND COVER IS ACHIEVED WHICH, IN THE OPINION OF THE APPROVING AGENCY, PROVIDES ADEQUATE COVER AND IS MATURE ENOUGH TO CONTROL SOIL EROSION SATISFACTORILY AND TO SURVIVE ADVERSE WEATHER CONDITIONS.

TEMPORARY SEEDING SPECIES SELECTION

SEEDING DATES	SPECIES	LB/1,000 SF	LB./AC.
MARCH 1 TO AUGUST 15	OATS	3	4 BUSHEL
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
	PERENNIAL RYEGRASS	1	40
	TALL FESCUE	1	40
AUGUST 16 TO NOVEMBER 1	RYE	3	2 BUSHEL
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
	WHEAT	3	2 BUSHEL
	TALL FESCUE	1	40
NOVEMBER 1 TO SPRING SEEDING	PERENNIAL RYEGRASS	1	40
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
	PERENNIAL RYEGRASS	1	40
	USE MULCH ONLY, SODDING PRACTICES OR DORMANT SEEDING		

PERMANENT SEEDING

SEED MIX	SEED RATE		NOTES
	LB./1,000 SF	LB./AC.	
GENERAL USE			
CREEPING RED FESCUE	1/2-1	20-40	
DOMESTIC RYEGRASS	1/4-1/2	10-20	
KENTUCKY RYEGRASS	1/4-1/2	10-20	
TALL FESCUE	1	40	
DWARF FESCUE	1	40	
STEEP BANKS OR CUT SLOPES			
TALL FESCUE	1	40	
CROWN VETCH	1/4	10	DO NOT SEED LATER THAN AUGUST
TALL FESCUE	1/2	20	
FLAT PEA	1/2	20	DO NOT SEED LATER THAN AUGUST
TALL FESCUE	1/2	20	
ROAD DITCHES AND SWALES			
TALL FESCUE	1	40	
DWARF FESCUE	2 1/4	5	
KENTUCKY RYEGRASS	2 1/4	5	
LAWNS			
KENTUCKY BLUEGRASS	1 1/2	60	
PERENNIAL RYEGRASS	1 1/2	60	
KENTUCKY BLUEGRASS	1 1/2	60	
CREEPING RED FESCUE	1 1/2	60	FOR SHADED AREAS

Table 1: Permanent Stabilization

Area requiring permanent stabilization	Time frame to apply erosion controls
Any areas that will be cleared for one year or more	Within seven days of the start of clearing
Any areas that will be cleared for a surface water of four acres or less	Within seven days of the start of clearing
Other areas of final grade	Within seven days of final grade

Table 2: Temporary Stabilization

Area requiring temporary stabilization	Time frame to apply erosion controls
Any areas that will be cleared for less than one year or less than one acre of the total site	Within seven days of the start of clearing
Any areas that will be cleared for less than one year and less than one acre of the total site	Within seven days of the start of clearing
Any areas that will be cleared for less than one year and less than one acre of the total site	Within seven days of the start of clearing

SOIL STABILIZATION

STABILIZATION OF DISTURBED AREAS SHALL, AT A MINIMUM, BE INITIATED IN ACCORDANCE WITH THE TIME FRAMES SPECIFIED IN THE FOLLOWING TABLES.

INLET PROTECTION (DANDY SACK)

INSTALLATION: INSTALL DANDY SACK PER MANUFACTURERS RECOMMENDATION. NO CASTING SHALL BE WRAPPED WITH LOOSE GEOSYNTHETIC MATERIAL, ONLY A BAG TYPE SYSTEM IS ACCEPTABLE. SACK SHALL HAVE OVERFLOWS AND ALLOW 2' OF SEDIMENT STORAGE BEFORE OVERFLOWS ARE ENGAGED

MAINTENANCE: AFTER SILT HAS DRIED, REMOVE IT FROM THE SURFACE OF THE BAG WITH BROOM.

SEDIMENT BAGS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.

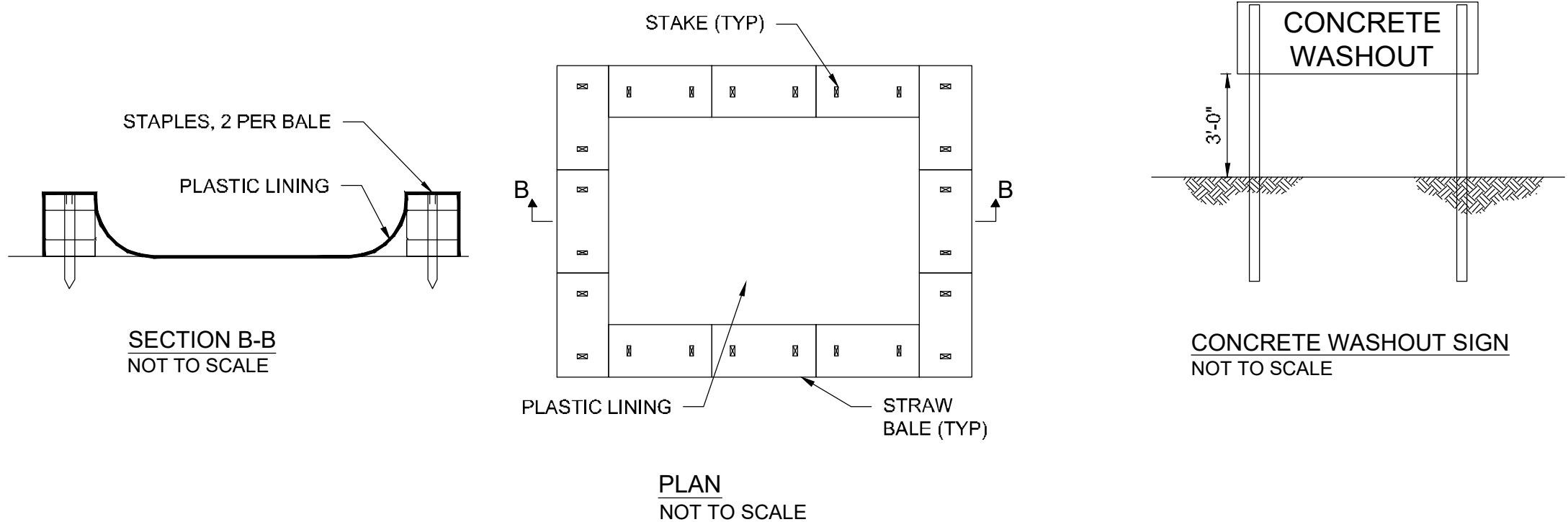
NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF SEDIMENT BAGS SHALL BE ACCOMPLISHED PROMPTLY.

SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. SEDIMENT DEPOSITS MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.

ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SEDIMENT BAG BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

CONCRETE WASHOUT

- THE CONCRETE WASHOUT SIGN SHALL BE WITHIN 30' OF THE CONCRETE WASHOUT.
- WASHOUT FACILITIES SHALL BE CLEANED OR REPLACED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL.
- WHEN THE CONCRETE WASHOUT IS NO LONGER NEEDED, THE HARDENED CONCRETE SHOULD BE REMOVED FROM THE SITE AND DISPOSED OF. MATERIALS USED TO CONSTRUCT THE CONCRETE WASHOUT SHALL ALSO BE REMOVED FROM THE SITE AND DISPOSED OF.



OMNESS DESIGN INC.
MARION CO. WWTP GARAGE
2160 RICHLAND RD

Scale : Horiz. = AS NOTED
Vert. = AS NOTED
Original Sheet Size = 24"x36"
Date : 2-6-2024
Sheet No. : 10 OF 10
S:\2023\202
Dwg. No. : 23-202-001

EASEMENT REFERENCE

City's No.	County Recorder	Page	Grantor

REVISIONS

No.	Description	Approval	Date
	AS BUILT		

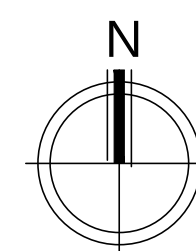
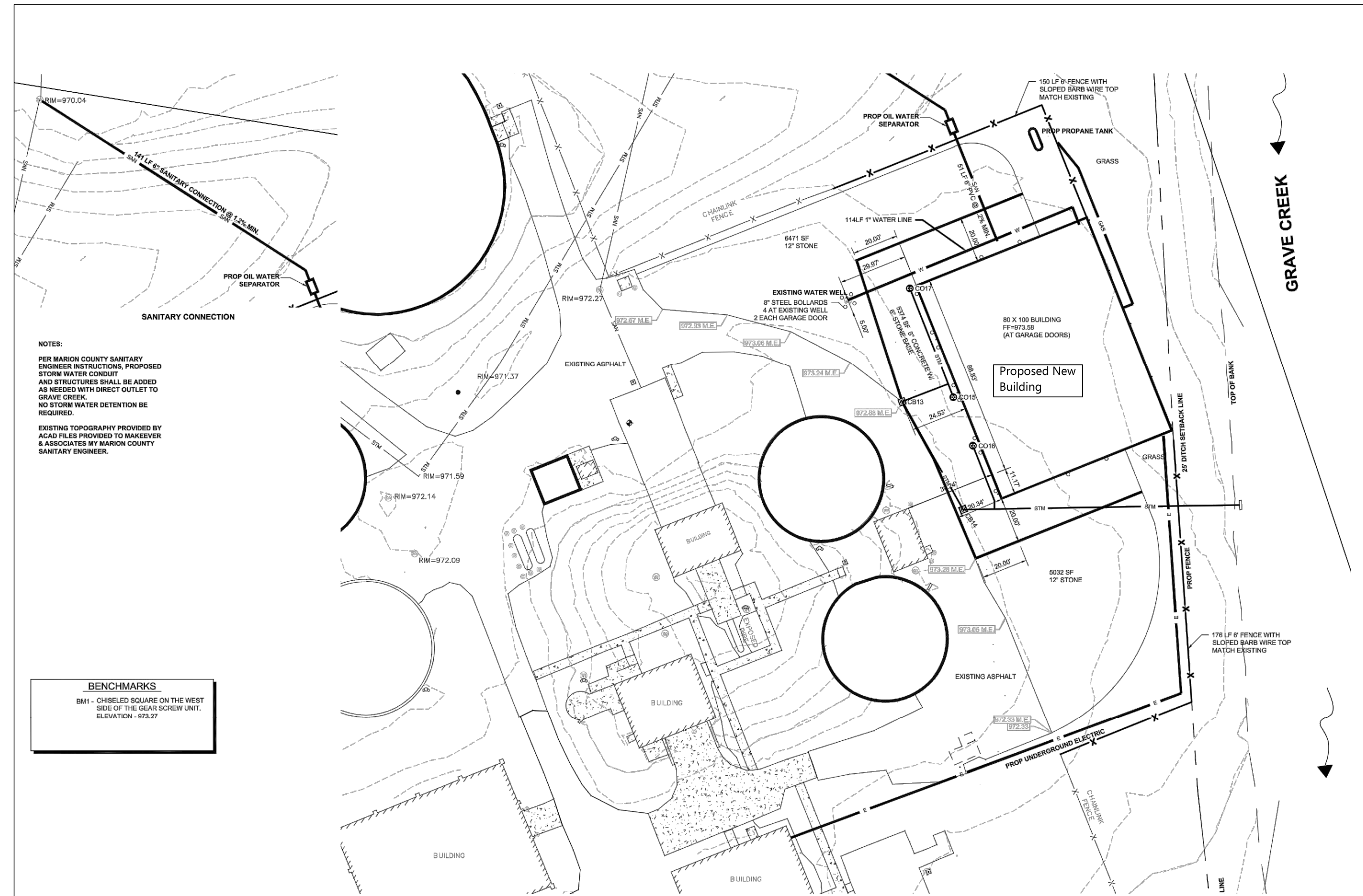
Plans Prepared By :

 Makeover & Associates, Inc.
 P.O. BOX 325, 1810 E. MANFIELD ST.
 BUCYRUS, OHIO 44820
 Phone: (419) 562-7757 Fax: (419) 562-4717

 DYLAN J. WYATT
 E-86763 Date 2/8/24
 Ohio Reg. No.

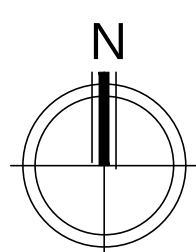
SWP3 DETAILS

ENG. FILE NO. _____
 IMP. ACCT. NO. _____
 CONTRACT NO. _____
 COMPLETION DATE _____
 CONTRACTOR _____



Partial Site Plan

1" = 10'



Overall Site/Location Plan

No Scale

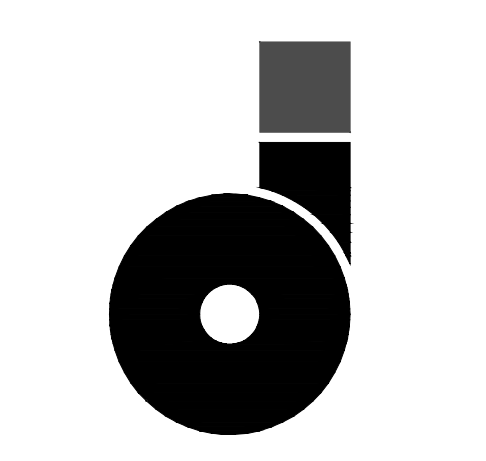
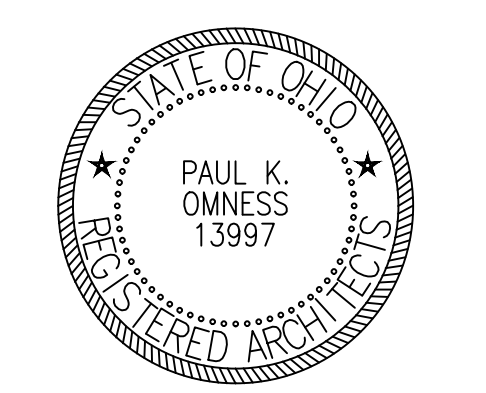
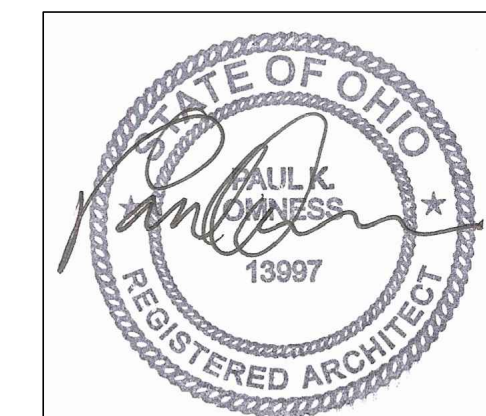
New Vehicle Storage Building

for
Marion County Engineer
Located at
2160 Richland Road
Marion, OH 43302
Marion County, OH

APPLICABLE CODES:	OHIO BUILDING CODE 2017
BUILDING CODES	OHIO MECHANICAL CODE 2017
MECHANICAL CODE	OHIO PLUMBING CODE 2017
PLUMBING CODE	NEC 2017
ELECTRICAL CODE	ICC A-117.1 2009
ACCESSIBILITY	
DESCRIPTION:	
NEW PRE-ENGINEERED METAL BUILDING USED FOR STORAGE AND REPAIR OF COUNTY VEHICLES	
USE CLASSIFICATION PROPOSED	S-1
CONSTRUCTION TYPE	IIIB
TOTAL BUILDING AREA	8,000 S.F.
ALLOWABLE TABULAR AREA	17,500 S.F.
BUILDING HEIGHT	24'
OCCUPANT LOAD ACTUAL	15
REQUIRED EGRESS WIDTH: 27 X 0.20 = 5.4' < 108" ACTUAL WIDTH PROVIDED	
EXIT ACCESS TRAVEL DISTANCE: MAXIMUM TRAVEL DISTANCE 200'	
SPRINKLER SYSTEM	N/A
FIRE ALARM SYSTEM	N/A
SMOKE DETECTION SYSTEM	N/A
FIRE DETECTION SYSTEM	N/A
PLUMBING FIXTURES	
1 UNISEX RESTROOM IN COMPLIANCE WITH OBC 2902.2, EXCEPTION 2	
1 SERVICE SINK	
1 DRINKING FOUNTAIN - ADA-COMPLIANT, WITH BOTTLE FILL	
SPECIAL INSPECTIONS REQUIRED - REFER TO STRUCTURAL SHEET S 0.1	

Index to Drawings	
Sheet No.	Description
G 1.0	General Information, Site Plan, Code Notes
G 1.1	A.D.A Standards
A 1.0	Floor Plan, Doors, Finishes
A 1.1	Enlarged Plan, Interior Elevations, Restroom Accessories
A 2.0	Exterior Elevations
A 2.1	Exterior Elevations
A 3.0	Building Section
A 3.1	Wall Sections
SP 1.0	Specifications
SP 1.1	Specifications
S0.1	Structural General Notes
S1.1	Foundation Plan
S5.1	Foundation Details
S5.2	Foundation Details
P 1.0	Plumbing - Sanitary Plan
P 2.0	Plumbing - Isometric, Details
P 3.0	Plumbing Schedules and Details
M-1	HVAC Plan
M-2	Partial Floor Plan - HVAC Schedules and Details
E 1.1	Lighting/Power Plan
E 2.0	Electrical Schedules & Single Line Diagram
E 3.0	Electrical Specifications

Paul K. Omness
OH Arch #13997
Exp. 12/31/24



OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302

CONSULTANTS

New Garage at
Marion County Wastewater Treatment Plant
for Marion County Engineer
2160 Richland Road
Marion, OH 43302

SHEET TITLE

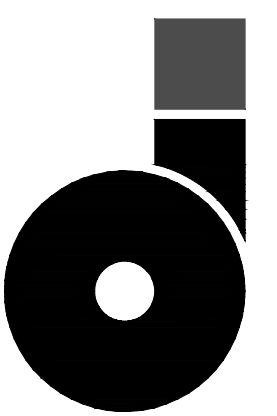
SITE PLAN

DATE	DESCRIPTION	BY	CHKD
	SCHEMATIC DESIGN		
	DESIGN DEVELOPMENT		
	CONSTRUCTION DOCUMENTS		

PROJECT NO: 23-123
CAD DWG FILE: 23-123 MWWTP
DRAWN BY: PO
CHECKED BY: PO

G 1.0

SHEET 1 of 22



OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302

CONSULTANTS

New Garage at
Marion County Wastewater Treatment Plant
for Marion County Engineer
2160 Richland Road
Marion, OH 43302

SHEET TITLE
OVERALL PLAN

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

PROJECT NO: 23-123
CAD DWG FILE: 23-123.MWWT
DRAWN BY: PO
CHECKED BY: PO

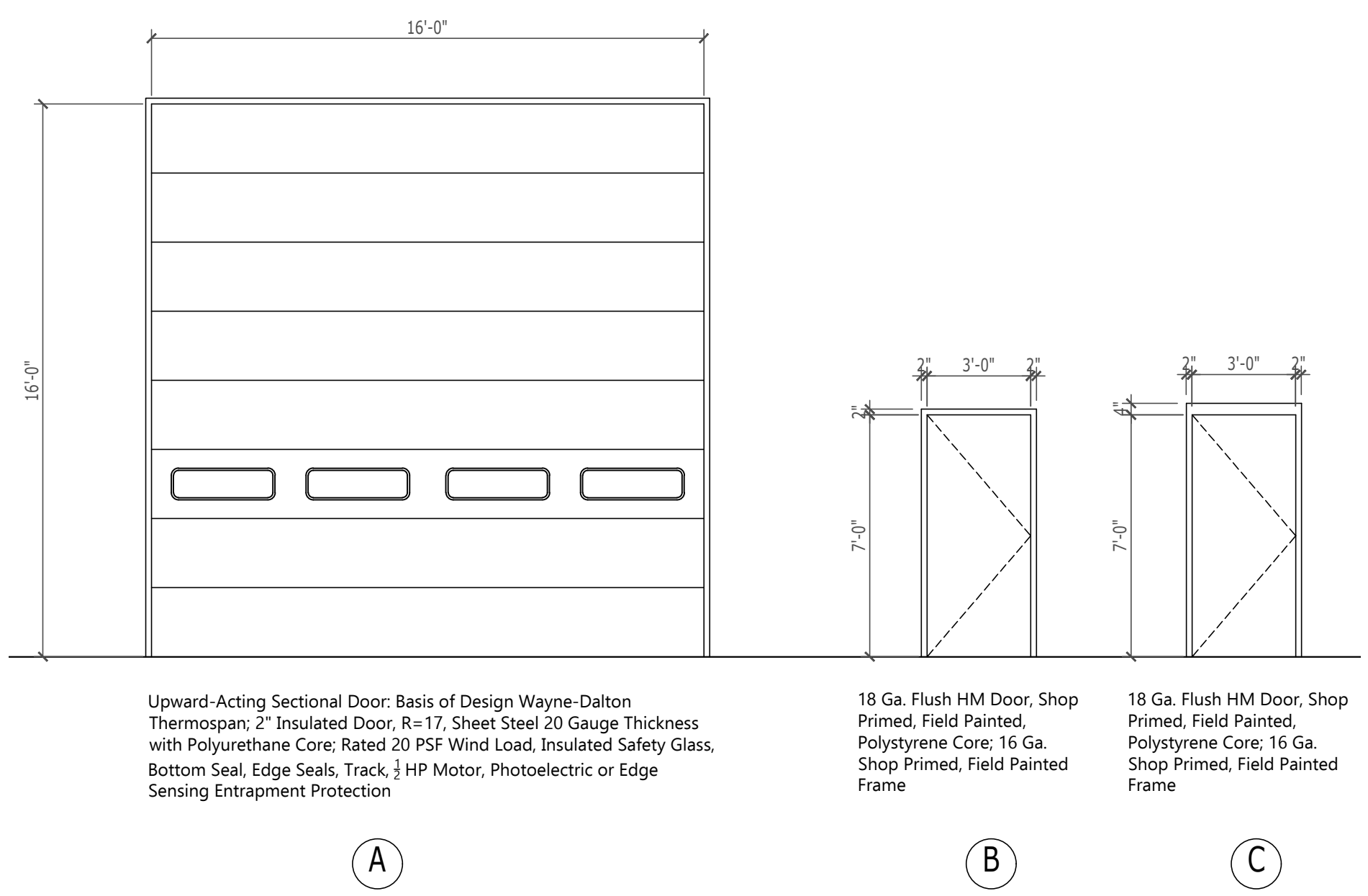
A1.0

SHEET 3 of 22

Set No.	Doors	Description
Hardware Schedule All Hardware Finishes - 626		
1	100, 100g, 100h	3 Stainless Steel Non-Removable Pin 5 Ball Bearing Hinges 1 Closer 1 ADA-Compliant Lever Lockset, Entrance Function 1 A.D.A. - Compliant Threshold 1 Set Weatherstripping
2	101	3 Stainless Steel Non-Removable Pin 5 Ball Bearing Hinges 1 Lever Lockset Storeroom Function 1 Closer 1 24" x 34" SS Kick Plate 1 Wall Stop
3	102	3 Stainless Steel Non-Removable Pin 5 Ball Bearing Hinges 1 Lever Lockset Privacy Function 1 Wall Stop
4	100a, 100b, 100c, 100d, 100e, 100f	Overhead Door Locks and Weatherstripping Pushbutton Power Operation Safety Sensor

Basis of Design Products:
Hinges: Hager BB1191
Locksets: Sargent 10 Line
Closers: LCN 4010 Series
Flush Bolts: Ives 261
Wall Bumpers: Ives WS401
Weatherstripping: Pemko 285 Gasketing, 368 Sweep
Threshold: Pemko 252 Series
Kick Plates: Ives 8400 Series

DOOR SCHEDULE						
MARK	LOCATION	SIZE	DOOR TYPE	LABEL	HARDWARE SET	REMARKS
100	Parking Bays	3'-0" X 7'-0" X 1 3/4"	B		1	
100a	Wash Bay	16'-0" X 16'-0"	A			
100b	Wash Bay	16'-0" X 16'-0"	A			
100c	Parking Bays	16'-0" X 16'-0"	A			
100d	Parking Bays	16'-0" X 16'-0"	A			
100e	Parking Bays	16'-0" X 16'-0"	A			
100f	Parking Bays	16'-0" X 16'-0"	A			
100g	Parking Bays	3'-0" X 7'-0" X 1 3/4"	B		1	
100h	Parking Bays	3'-0" X 7'-0" X 1 3/4"	B		1	
101	Mechanical Room	3'-0" X 7'-0" X 1 3/4"	C		2	
102	Unisex Restroom	3'-0" X 7'-0" X 1 3/4"	C		3	



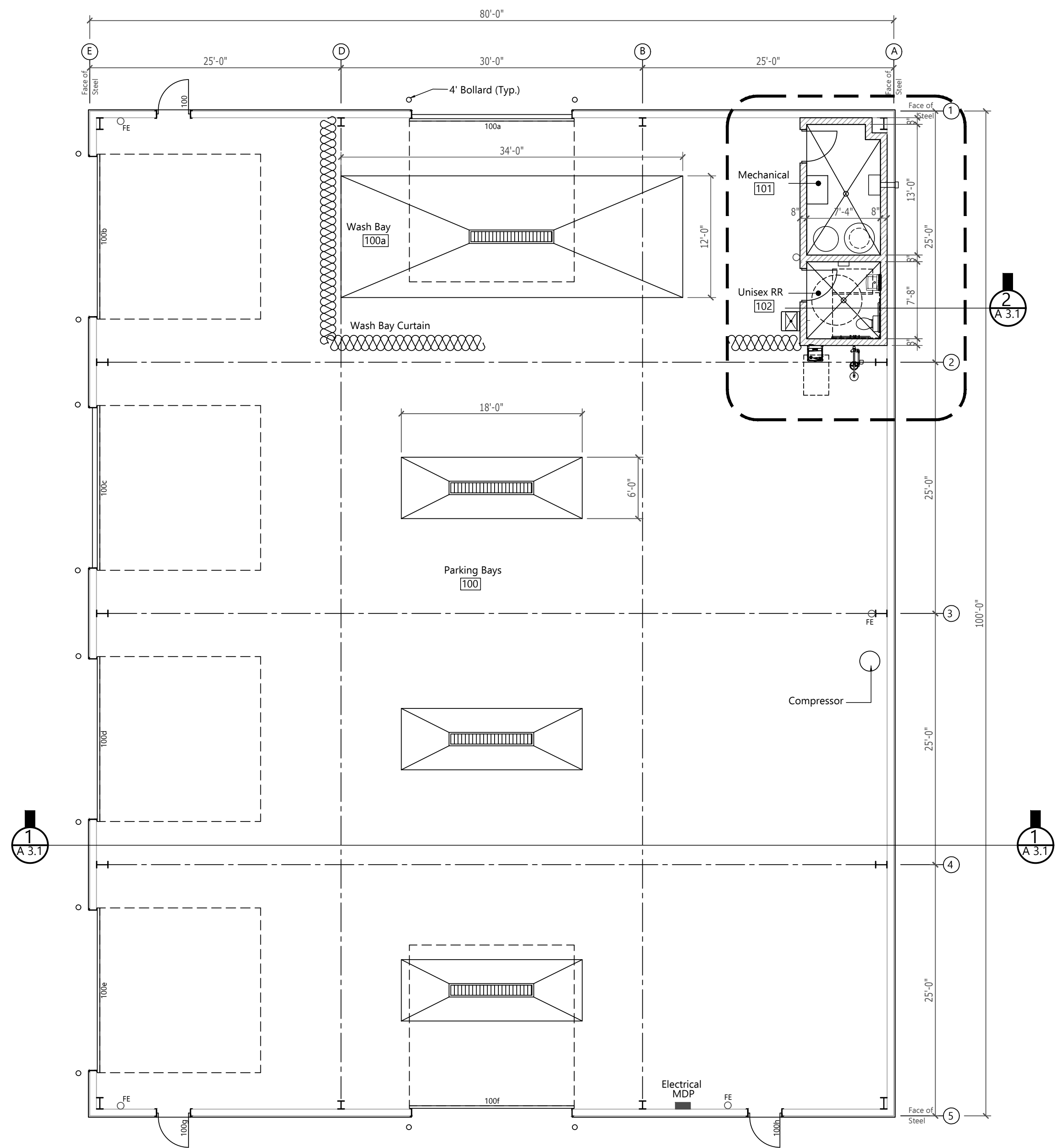
		ROOM FINISH SCHEDULE					
ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS	CEILING		REMARKS
					MATERIAL	HT.	
		Concrete	None	Painted Metal Liner Panels	Painted Metal Liner Panels		
100	Parking Bays	○	○	○	○	○	
101	Mechanical	○	○	○	○	○	
102	Unisex Restroom	○	○	○	○	○	

803.13 Wall and Ceiling Finish Requirements
Wall and ceiling finishes required by Section 803.13 to be of Class C for rooms or enclosed space and Class B for corridors.

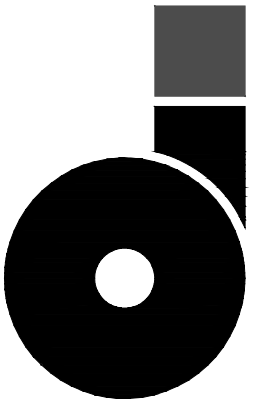
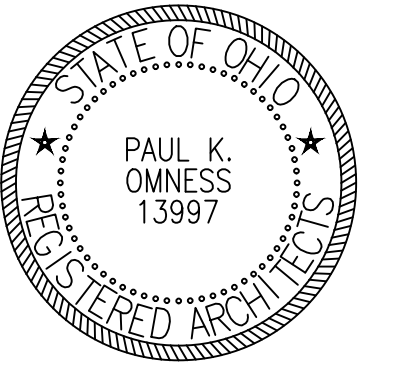
804.2 Classification
Interior floor finish and floor covering materials required by Section 804.2 to be of Class I or II materials shall be classified in accordance with ASTM E648 or NFPA 253. The classification referred to herein corresponds to the classifications determined by ASTM E648 or NFPA 253 as follows: Class I, 0.45 watts/cm2 or greater; Class II, 0.22 watts/cm2 or greater.

1210.2.1 Floors and wall bases. In other than dwelling units, toilet, bathing and shower room floor finish materials shall have a smooth, hard, nonabsorbent surface. The intersections of such floors with walls shall have a smooth, hard, nonabsorbent vertical base that extends upward onto the walls not less than 4 inches (102 mm).

1210.2.2 Walls and partitions. Walls and partitions within 2 feet (610 mm) of service sinks, urinals and water closets shall have a smooth, hard, nonabsorbent surface, to a height of not less than 4 feet (1219 mm) above the floor, and except for structural elements, the materials used in such walls shall be of a type that is not adversely affected by moisture.



Floor Plan
1/8" = 1'-0"



OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302

CONSULTANTS

New Garage at
Marion County Wastewater Treatment Plant
for Marion County Engineer
2160 Richland Road Marion, OH 43302

SHEET TITLE

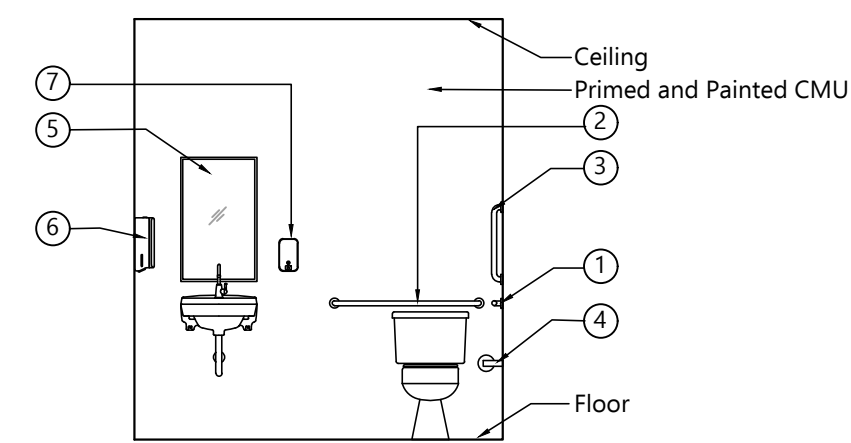
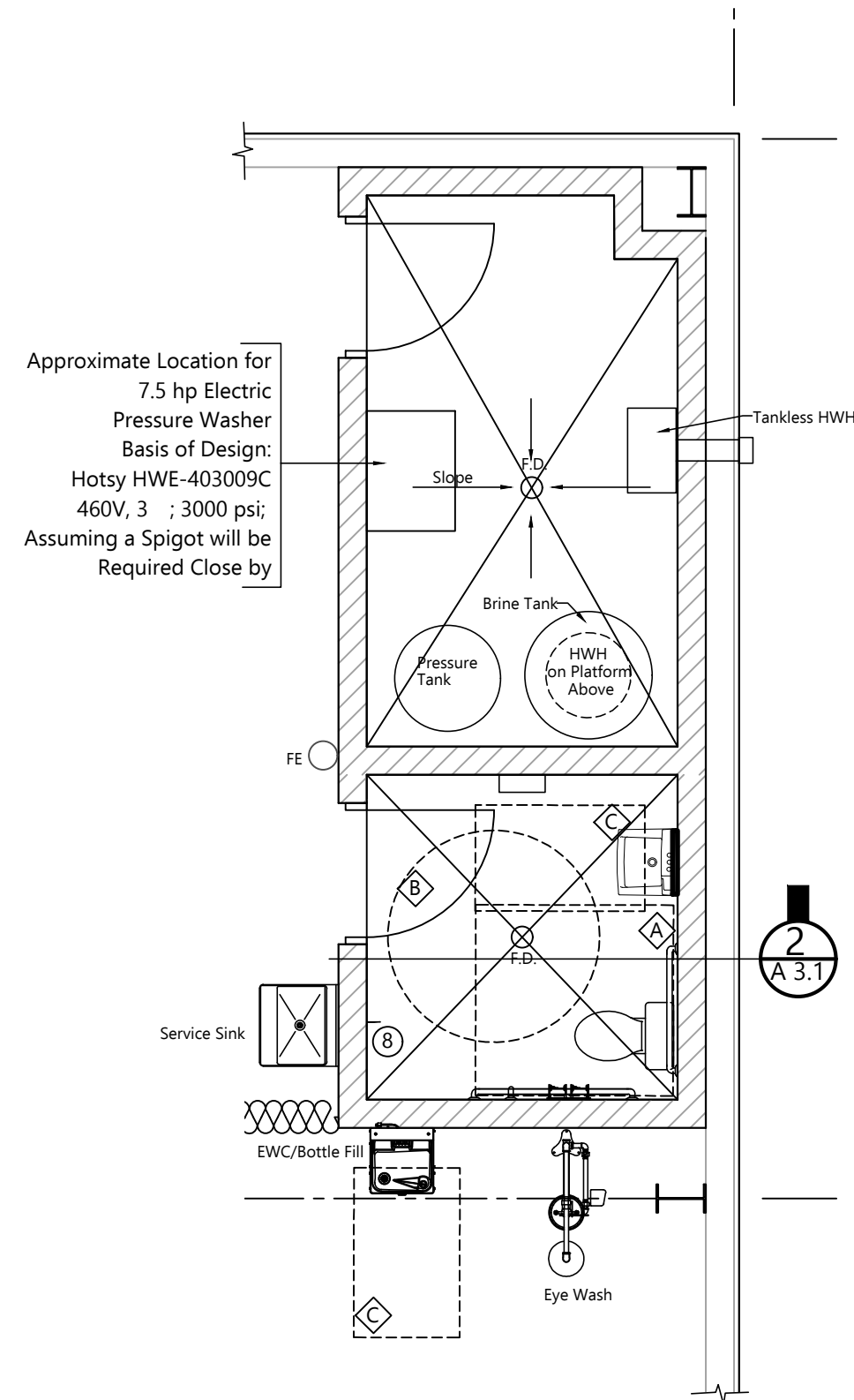
OVERALL PLAN

DATE	DESCRIPTION
	SCHEMATIC DESIGN
	DESIGN DEVELOPMENT
	CONSTRUCTION DOCUMENTS

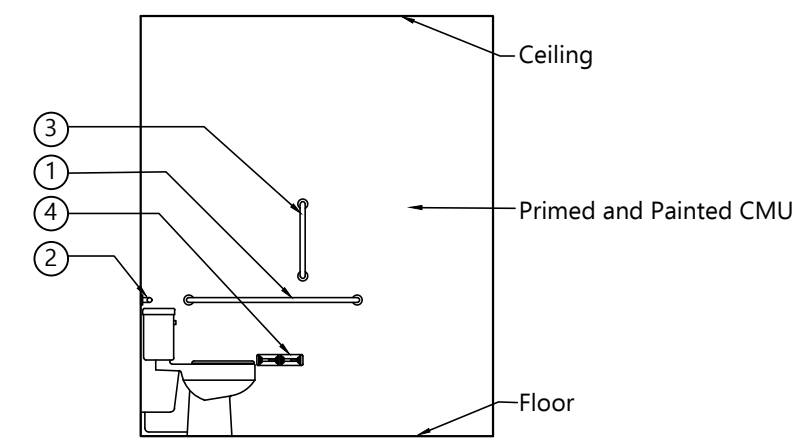
PROJECT NO: 23-123
CAD DWG FILE: 23-123 MWWTP
DRAWN BY: PO
CHECKED BY: PO

A1.1

SHEET 4 of 22



East Elevation



South Elevation

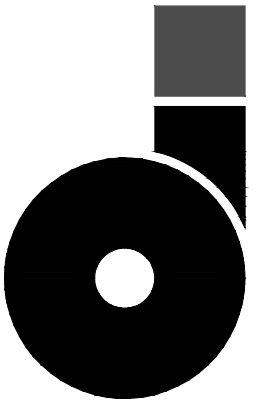
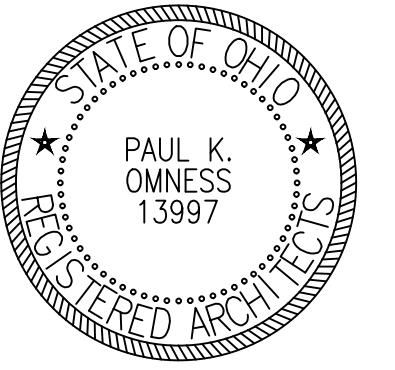
Restroom Elevations

1/4" = 1'-0"

A.D.A FLOOR CLEARANCES	
A	WATER CLOSET CLEARANCE AREA PER 604.3, 56" D X 60" W
B	CIRCULAR TURNING RADIUS PER 304.1, 60" DIAMETER
C	CLEAR FLOOR SPACE PER 305.3, 30"W X 48" D

BATHROOM ACCESSORY SCHEDULE

DESCRIPTION	MANUFACTURER	ITEM#	EQUAL MANUFACTURERS	MTG. HT. A.F.F.	MEASURED TO	DIST. FROM WALL	MEASURED TO	REMARKS
42" S.S. GRAB BAR	BOBRICK	B-5806	BRADLEY, ASI	34"	TOP OF BAR	12"	BACK WALL	
36" S.S. GRAB BAR	BOBRICK	B-5806	BRADLEY, ASI	34"	TOP OF BAR	6"	SIDE WALL	
18" S.S. GRAB BAR	BOBRICK	B-5806	BRADLEY, ASI	39"	BOTTOM OF BAR	40"	CENTER OF BAR	
DOUBLE TOILET TISSUE DISPENSERS	BOBRICK	B-274	BRADLEY, ASI	18"	BOTTOM	9"	NOSE OF TOILET	
18" x 36" MIRROR	BOBRICK	B-290	BRADLEY, ASI	39"	BOTTOM EDGE	--	CENTER ON LAV	
PAPER TOWEL DISPENSER	BOBRICK	B-4262	BRADLEY, ASI	42"	BOTTOM EDGE	--	--	
SOAP DISPENSER	BOBRICK	B-2111	BRADLEY, ASI	42"	BOTTOM EDGE	--	--	
ROBE HOOK	BOBRICK	B-211	BRADLEY, ASI	42"	CENTER	--	--	



OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302

CONSULTANTS

New Garage at
Marion County Wastewater Treatment Plant
for Marion County Engineer
2160 Richland Road Marion, OH 43302

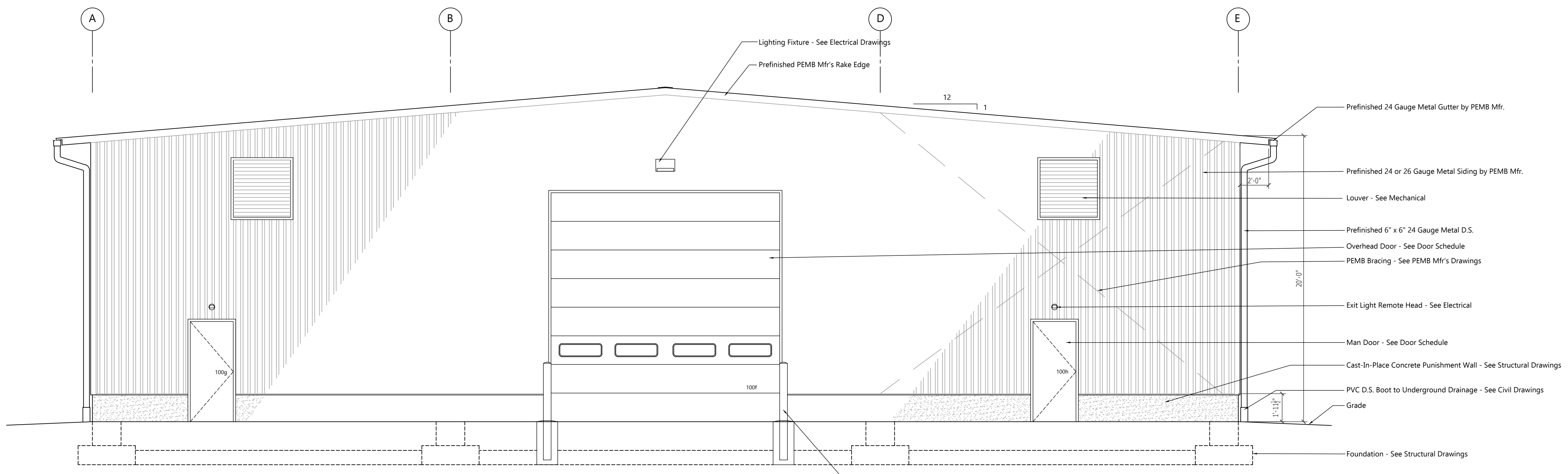
SHEET TITLE
ELEVATIONS

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

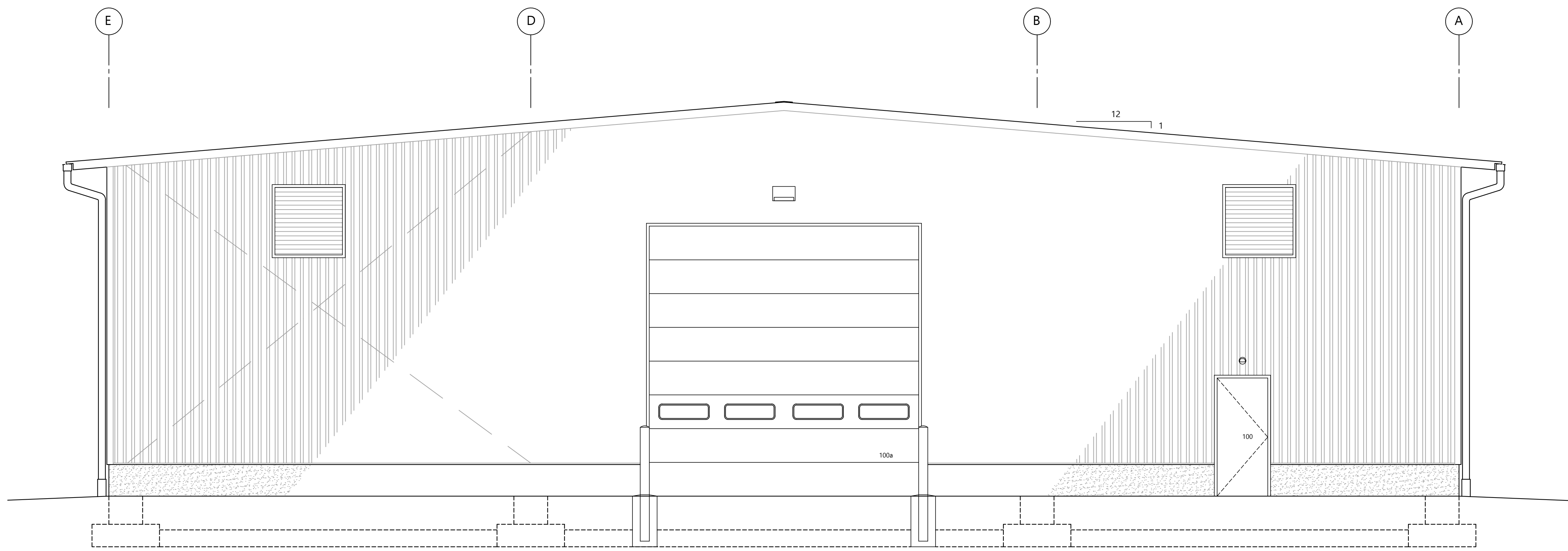
PROJECT NO: 23-123
CAD DWG FILE: 23-123 MWWTP
DRAWN BY: PO
CHECKED BY: PO

A2.0

SHEET 5 of 22

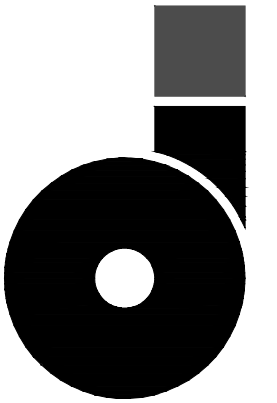
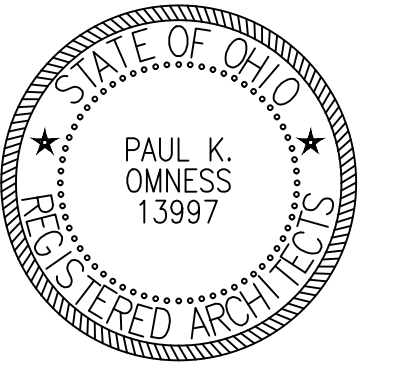


South Elevation
1/4" = 1'-0"



North Elevation
1/4" = 1'-0"

Note:
Refer to South Elevation for Similar Dimensions and Notations.



OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302

CONSULTANTS

New Garage at
Marion County Wastewater Treatment Plant
for Marion County Engineer
2160 Richland Road
Marion, OH 43302

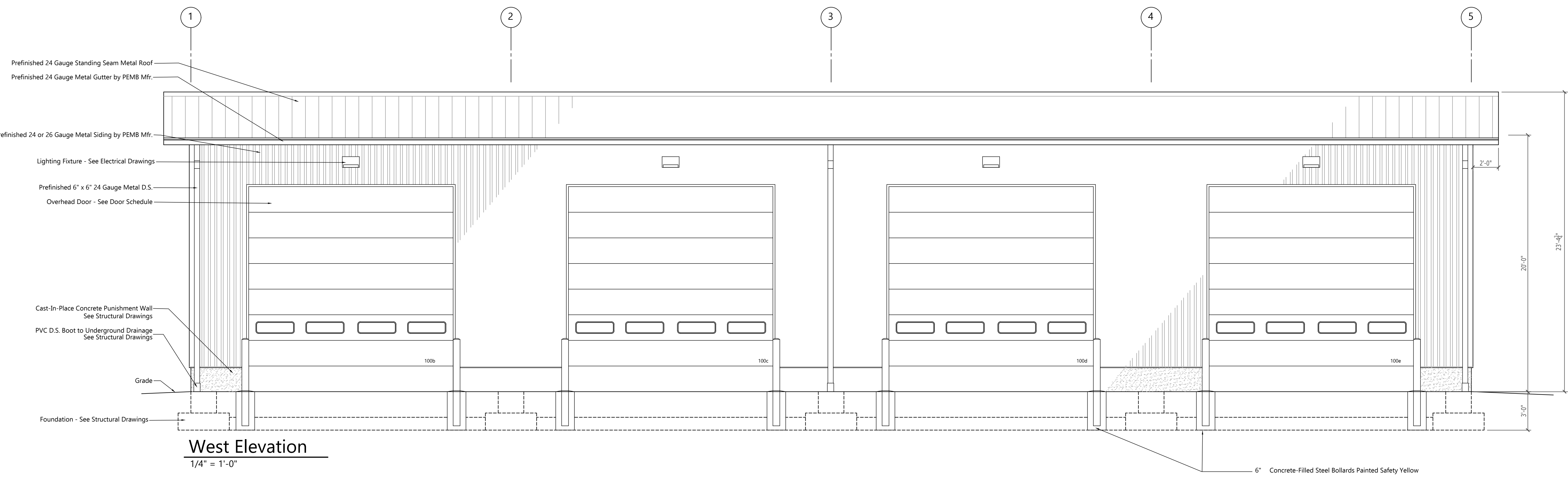
SHEET TITLE
ELEVATIONS

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

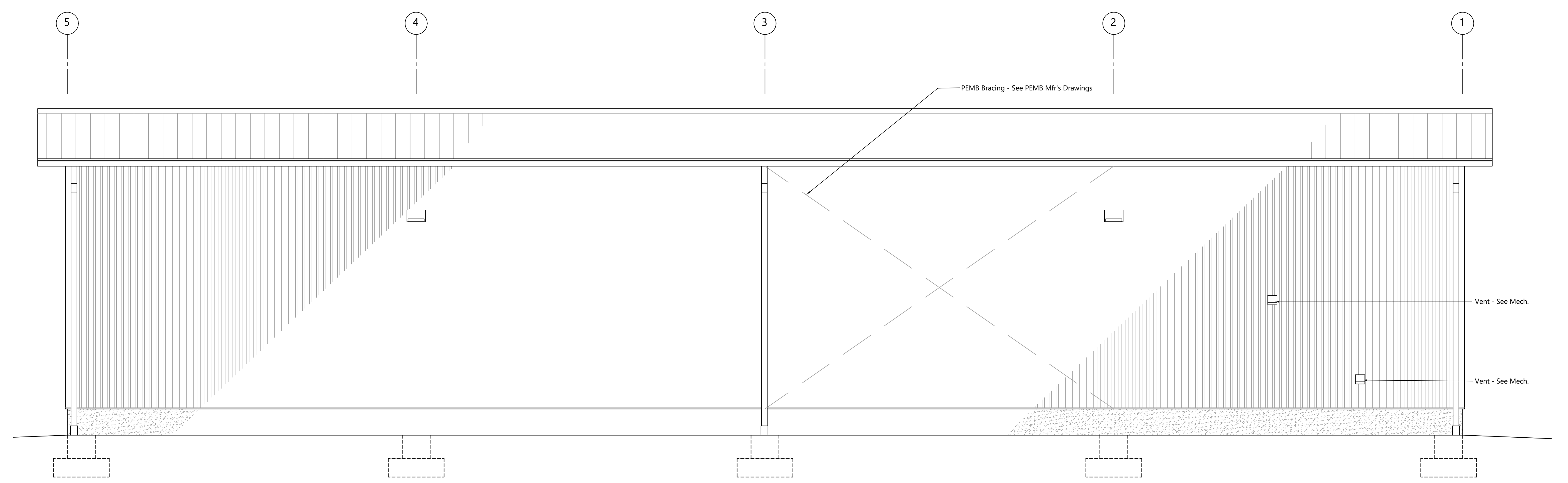
PROJECT NO: 23-123
CAD DWG FILE: 23-123 MWWTP
DRAWN BY: PO
CHECKED BY: PO

A2.1

SHEET 6 OF 22

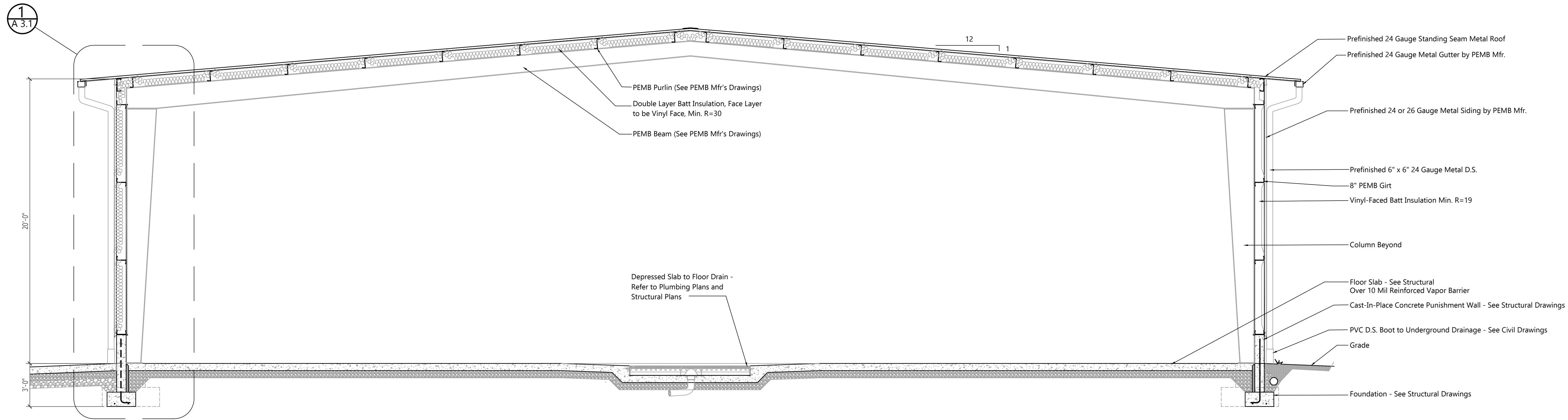


West Elevation
1/4" = 1'-0"

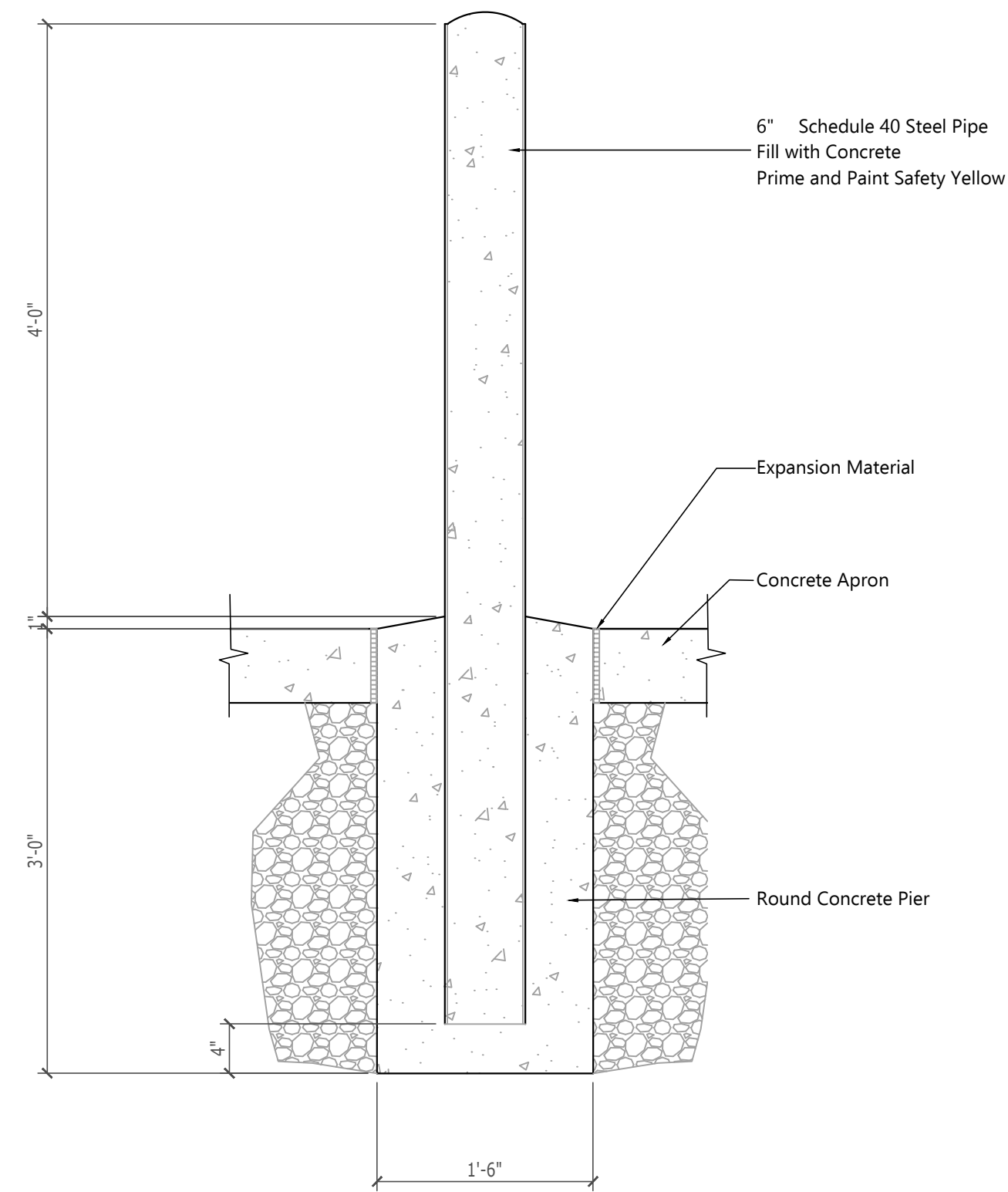


East Elevation
1/4" = 1'-0"

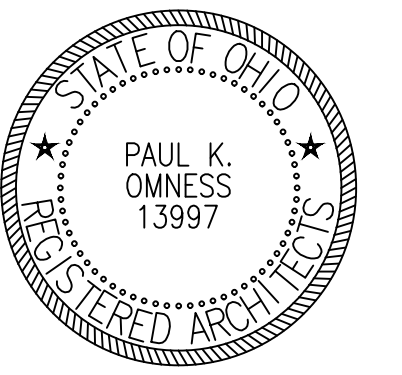
Note:
Refer to West Elevation for Similar Dimensions and Notations.



Building Section A
1/4" = 1'-0"



Bollard Detail
1" = 1'-0"



OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302

CONSULTANTS

**New Garage at
Marion County Wastewater Treatment Plant**

for Marion County Engineer
2160 Richland Road
Marion, OH 43302

SHEET TITLE

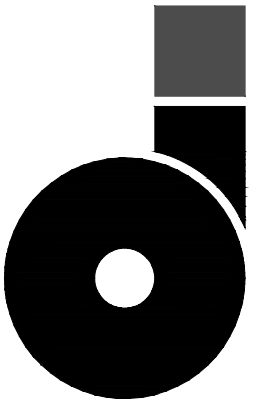
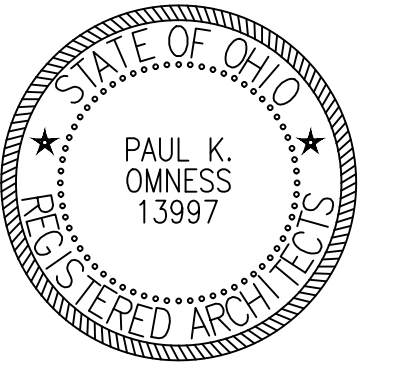
SECTIONS

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

PROJECT NO: 23-123
CAD DWG FILE: 23-123 MWWTP
DRAWN BY: PO
CHECKED BY: PO

A3.0

SHEET 7 of 22



OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302

CONSULTANTS

New Garage at
Marion County Wastewater Treatment Plant
for Marion County Engineer
2160 Richland Road Marion, OH 43302

SHEET TITLE

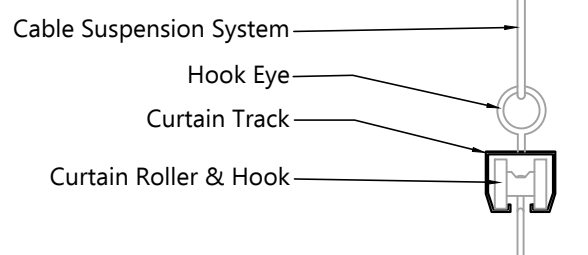
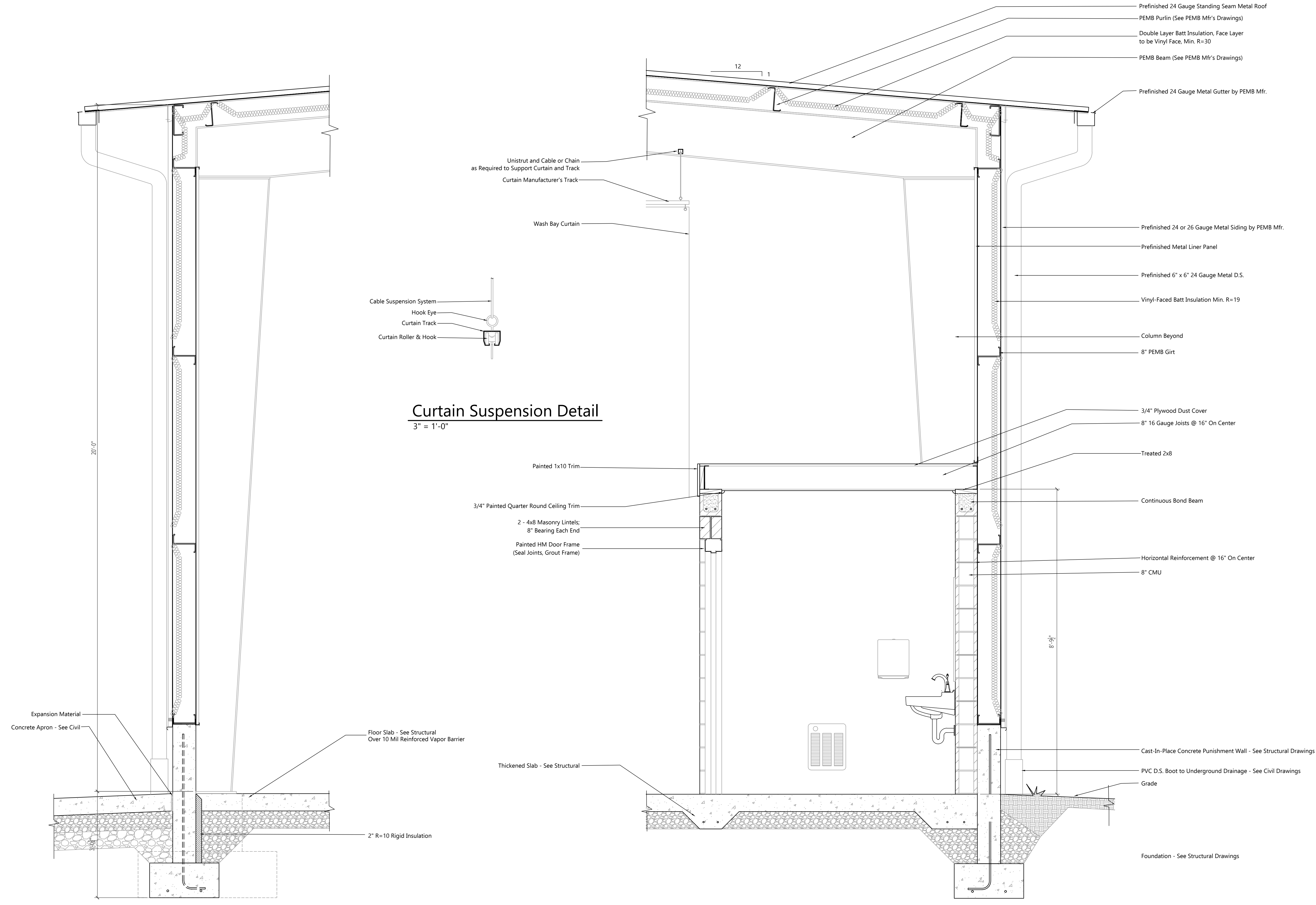
SECTIONS

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

PROJECT NO: 23-123
CAD DWG FILE: 23-123 MWWTP
DRAWN BY: PO
CHECKED BY: PO

A3.1

SHEET 8 of 22



Curtain Suspension Detail
3" = 1'-0"

Sections
1/4" = 1'-0"

1
A3.1

2
A3.1

GOVERNING CODE: 2017 OHIO BUILDING CODE

- 1. DEAD LOADS
BUILDING ROOF
A. BUILDING SELF WEIGHT = BY PEMB SUPPLIER
B. COLLATERAL = 3.0 PSF
C. TOTAL DEAD LOAD = 3.0 PSF + SELF WEIGHT
2. ROOF LIVE LOADS:
A. MINIMUM ROOF LIVE LOAD = 20 PSF
FLOOR LIVE LOADS:
A. FIRST FLOOR: = 100 PSF
3. ROOF SNOW DESIGN PARAMETERS
A. GROUND SNOW LOAD Pg = 20.0 PSF
B. FLAT ROOF SNOW LOAD Pf = 14.0 PSF
C. MINIMUM UNIFORM SNOW LOAD Pm = 20.0 PSF
D. SNOW EXPOSURE FACTOR Ce = 1.0
E. SNOW LOAD IMPORTANCE FACTOR I = 1.0
F. THERMAL FACTOR Ct = 1.0
G. DRIFTING SNOW AND UNBALANCED SNOW PER ASCE 7-10.
4. WIND DESIGN PARAMETERS
A. ULTIMATE DESIGN WIND SPEED Vult = 115 MPH
B. NOMINAL DESIGN WIND SPEED Vasd = 89 MPH
C. RISK CATEGORY = II
D. WIND EXPOSURE CATEGORY = C
E. INTERNAL PRESSURE COEFFICIENT = +/- 0.18
F. WIND DESIGN PRESSURES FOR COMPONENTS AND CLADDING PER 601.4
5. SEISMIC DESIGN PARAMETERS
A. SEISMIC IMPORTANCE FACTOR = 1.0
B. SEISMIC OCCUPANCY CATEGORY = II
C. MAXIMUM CONSIDERED EARTHQUAKE GROUND MOTION AT 0.2 SECOND PERIOD, SS = 13.2%g
D. MAXIMUM CONSIDERED EARTHQUAKE GROUND MOTION AT 1.0 SECOND PERIOD, S1 = 6.0%g
E. SITE CLASS = D
F. SDS = 0.141g
G. SD1 = 0.096g
H. SEISMIC DESIGN CATEGORY = B
I. BUILDING SYSTEM: STRUCTURAL STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE.
J. SEISMIC RESISTING SYSTEM: STRUCTURAL STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE.
K. RESPONSE MODIFICATION FACTOR, R: 3.0
L. DESIGN BASE SHEAR: 0.046W

STATEMENT OF SPECIAL INSPECTIONS:

THE OWNER WILL EMPLOY THE SERVICES OF ONE OR MORE SPECIAL INSPECTORS TO PROVIDE SPECIAL INSPECTIONS DURING CONSTRUCTION FOR THE ITEMS IN THE SPECIAL INSPECTION TABLE BELOW IN ACCORDANCE WITH THE BUILDING CODE CHAPTER 17.

"X" MARKS ARE SHOWN ON ALL WORK ITEMS REQUIRING SPECIAL INSPECTION AND THE REQUIRED FREQUENCY OF INSPECTIONS FOR THIS PROJECT PER REQUIREMENTS IN CHAPTER 17 OF OBC.

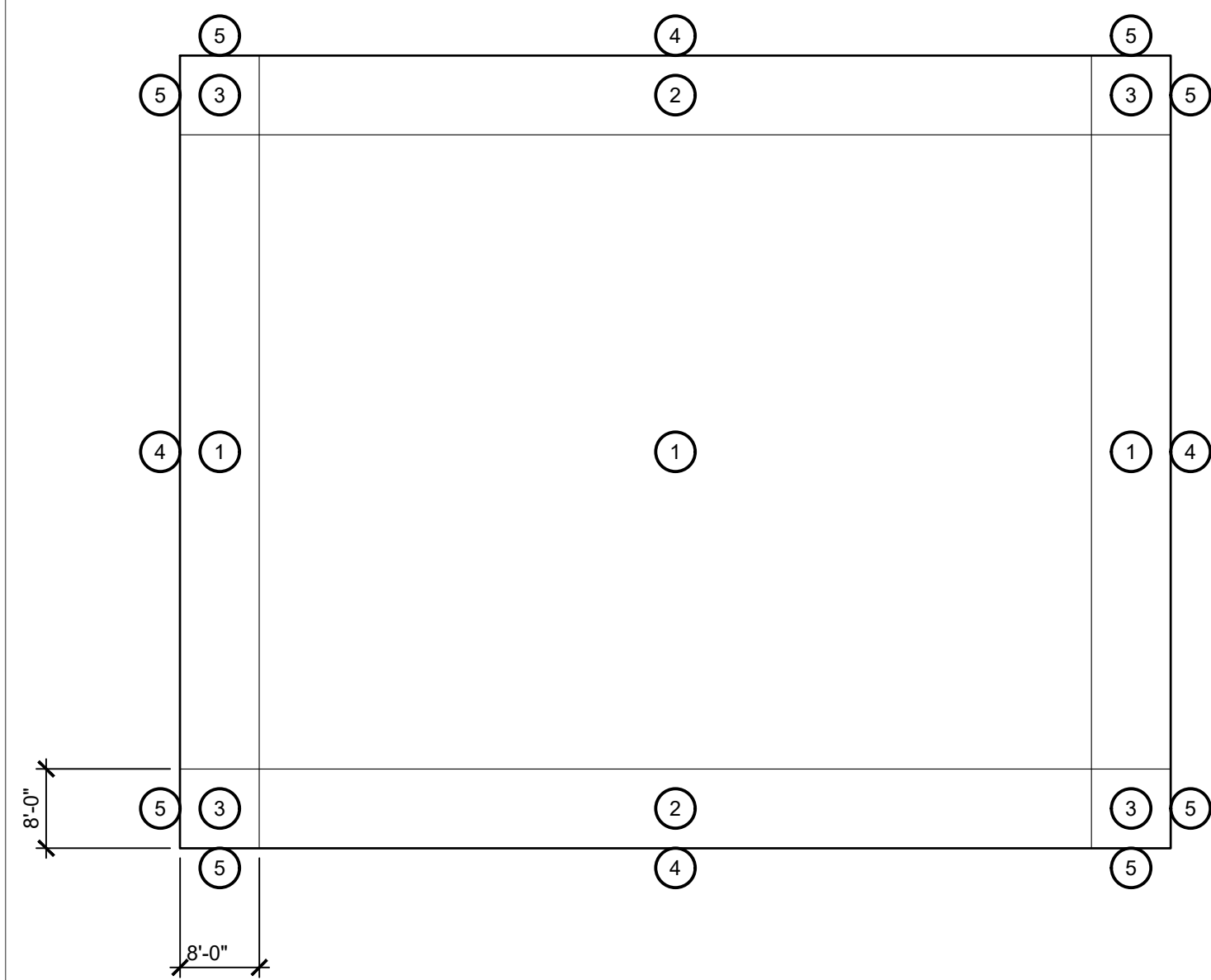
SCHEDULE OF SPECIAL INSPECTIONS table with columns: ITEM, REQ'D, INSPECTION TYPE (CONT., PER.), REFERENCED STANDARD, OBC REFERENCE. Includes sections for FABRICATORS, STEEL CONSTRUCTION, and SOILS.

DELEGATED DESIGN (PEMB):

- 1. ALL STRUCTURAL STEEL BUILDING ELEMENTS FROM THE COLUMN BASE PLATES UP, SHALL BE DESIGNED BY AN ENGINEER FAMILIAR WITH THE REQUIREMENTS OF THE CURRENT OHIO BUILDING CODE AND THE STANDARDS SET FORTH BY THE METAL BUILDING MANUFACTURER'S ASSOCIATION.
2. THE DELEGATED ENGINEER SHALL SUBMIT FABRICATION AND INSTALLATION DRAWINGS BEARING THE SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER.
3. THE MANUFACTURER SHALL IAS ACCREDITED FOR METAL BUILDING SYSTEMS AC 472.
4. THE PRE-ENGINEERED METAL BUILDING SHALL BE DESIGNED FOR THE FOLLOWING DEFLECTION AND DRIFT LIMITATIONS:

STRUCTURAL STEEL:

- 1. MATERIALS:
A. STRUCTURAL STEEL WIDE FLANGE SHAPES: ASTM A992, Fy = 50 KSI
B. STRUCTURAL STEEL CHANNELS, ANGLES, PLATES, ETC.: ASTM A36, Fy = 36 KSI
C. STRUCTURAL TUBING (INCLUDES SQUARE, RECTANGULAR AND ROUND SECTIONS): ASTM A500, GRADE C, Fy = 50 KSI
D. HIGH STRENGTH BOLTS: ASTM A325 UNLESS NOTED OTHERWISE
E. ANCHOR RODS: ASTM F1554, GRADE 36, UNLESS NOTED OTHERWISE. GALVANIZE IN EXTERIOR WALLS AND EXTERIOR LOCATIONS.
F. SHEAR STUDS: ASTM A108, Fy = 60 KSI
G. DEFORMED BAR ANCHORS: ASTM A496, Fy = 70 KSI
H. ELECTRODES: SERIES E70
I. ALL STRUCTURAL STEEL SHALL BE DOMESTICALLY PRODUCED AND COMPLY WITH ALL FEDERAL AND STATE REQUIREMENTS.
2. SPECIFICATIONS
A. WELDING PERSONNEL AND PROCEDURES ARE TO BE QUALIFIED PER AWS D1.1. UNLESS SPECIFICALLY SHOWN OTHERWISE, THE DESIGN FABRICATION AND ERECTION IS TO BE GOVERNED BY THE LATEST REVISION OF:



COMPONENT AND CLADDING WIND PRESSURES (BASED UPON WIND VELOCITY Vult = 115 MPH) table with columns: ZONE, EFFECTIVE WIND AREA (SF), POSITIVE PRESSURE (PSF), NEGATIVE PRESSURE (PSF).

01 COMPONENT AND CLADDING WIND PRESSURES
SCALE: 1/16" = 1'-0"

GENERAL NOTES:

- 1. ANY CHANGES MADE TO THE DESIGN IDENTIFIED ON THESE DRAWINGS AND/OR ASSOCIATED SPECIFICATIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO MAKING ANY MODIFICATIONS TO THE PROJECT.
2. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED.
3. IT IS SOLELY THE RESPONSIBILITY OF EACH CONTRACTOR TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
4. SHOULD ANY OF THE DETAILED INSTRUCTIONS SHOWN ON THE PLANS CONFLICT WITH THESE STRUCTURAL NOTES, OR WITH EACH OTHER, THE STRICTEST PROVISION SHALL GOVERN.

USE OF THESE DOCUMENTS:

- 1. THESE DOCUMENTS SHALL NOT BE REPRODUCED IN ANY MANNER FOR THE PRODUCTION OF FABRICATION OR ERECTION SUBMITTALS.
2. ELECTRONIC VERSIONS OF THESE DOCUMENTS ARE THE PROPERTY OF DERWACHTER & ASSOCIATES, LLC. ELECTRONIC OR CAD FILES WILL NOT BE MADE AVAILABLE FOR CONSTRUCTION PURPOSES.

FOUNDATIONS - GENERAL:

- 1. THE FOUNDATION HAS BEEN DESIGNED IN ACCORDANCE WITH THE RECOMMENDATIONS MADE IN THE GEOTECHNICAL REPORT (GCI PROJECT #23-G-28511) PREPARED BY GEOTECHNICAL CONSULTANTS, INC., DATED JANUARY 31, 2024.
2. FOOTINGS SHALL BEAR ON SOILS CAPABLE OF SUSTAINING A NET ALLOWABLE BEARING PRESSURE OF 3.0 KSF UNDER SERVICE LIVE AND DEAD LOAD.
3. ALL BEARING MATERIAL SHALL BE INSPECTED BY THE INDEPENDENT TESTING AGENCY PRIOR TO CONCRETE PLACEMENT.
4. BOTTOM OF EXTERIOR FOOTINGS SHALL BEAR 36" BELOW FINAL GRADE.
5. FOUNDATION WALLS THAT RETAIN EARTH SHALL BE BRACED AGAINST BACKFILLING PRESSURES UNTIL FLOOR SLABS AT TOP AND BOTTOM ARE IN PLACE AND CURED.
6. WHERE FOUNDATION WALLS ARE TO HAVE EARTH PLACED ON EACH SIDE, PLACE FILL SIMULTANEOUSLY SO AS TO MAINTAIN A COMMON ELEVATION ON EACH SIDE OF THE WALL.
7. FOUNDATION CONCRETE SHALL HAVE REACHED A MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI BEFORE BEING LOADED. STRENGTHS SHALL BE VERIFIED BY TEST.

REINFORCED CONCRETE:

- 1. MATERIALS:
A. SPECIFICATIONS: IN GENERAL, COMPLY WITH ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE".

CAST-IN PLACE CONCRETE table with columns: LOCATION, CLASS, Fc (PSI), MIN. CEMENT (LBS), MIN. AIR CONTENT, MAX. W/C RATIO, NOTES.

- B. SUBMIT CONCRETE MIX DESIGN FOR APPROVAL IN ACCORDANCE TO ACI 301.
2. FIELD MANUAL: PROVIDE AT LEAST ONE COPY OF THE ACI FIELD REFERENCE MANUAL, SP-15, IN THE FIELD OFFICE AT ALL TIMES.
3. CONTINGENCIES: PROVIDE SUPPORTS AS REQUIRED TO MAINTAIN ALIGNMENT OF SCHEDULED REINFORCING.
4. FOOTINGS:
A. DOWELS IN FOOTINGS TO MATCH SIZE AND SPACING OF VERTICAL WALL REINFORCING.
B. PROVIDE CONTROLLED LOW-STRENGTH MATERIAL (CLSM) UNDER FOUNDATIONS FOR ACCIDENTAL OVER-EXCAVATION, SOFT SPOTS AND TRENCHES.
5. CONSTRUCTION JOINTS:
A. PROVIDE CONSTRUCTION JOINTS AT ALL POUR STOP LOCATIONS.
B. PROVIDE CONTROLLED LOW-STRENGTH MATERIAL (CLSM) UNDER FOUNDATIONS FOR ACCIDENTAL OVER-EXCAVATION, SOFT SPOTS AND TRENCHES.

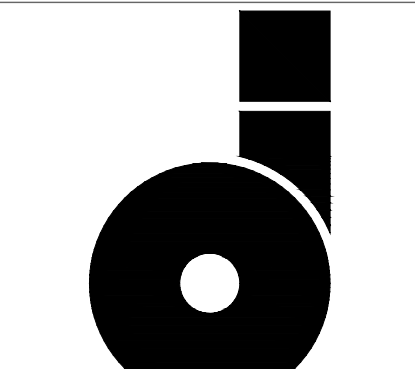
REINFORCING FOR CONCRETE:

- 1. REINFORCING SHALL CONFORM TO ASTM A615, GRADE 60 OR ASTM A706, UNLESS NOTED OTHERWISE.
2. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 (SHEETS FORM, NOT ROLLED).
3. MINIMUM CONCRETE COVER, UNLESS NOTED OTHERWISE:
A. UNFORMED SURFACE IN CONTACT WITH THE GROUND: 3 IN.
B. FORMED SURFACES EXPOSED TO EARTH OR WEATHER:
#8 BARS AND LARGER: 2 IN.
#5 BARS AND SMALLER: 1 1/2 IN.
C. FORMED SURFACES NOT EXPOSED TO EARTH OR WEATHER: BEAMS, GIRDER, AND COLUMNS: 1 1/2 IN. SLABS, WALLS, AND JOISTS: #11 BARS AND SMALLER: 3/4 IN. #14 AND #18 BARS: 1 1/2 IN.
4. LAP SPLICES SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE, UNLESS NOTED OTHERWISE.

Table for REINFORCING FOR CONCRETE with columns: BAR SIZE, CLASS B SPLICE LAP LENGTH, COMPRESSION SPLICE LAP LENGTH, BAR SIZE, CLASS B SPLICE LAP LENGTH, COMPRESSION SPLICE LAP LENGTH.

EPOXY ANCHORS:

- 1. EPOXY ANCHORING SHALL NOT BE USED EXCEPT WHERE SPECIFICALLY SHOWN ON THE STRUCTURAL DRAWINGS, OR WHEN APPROVED IN ADVANCE BY THE STRUCTURAL ENGINEER.
2. WHERE PERMITTED, EPOXY ANCHORING SHALL BE COMPLETED USING ONE OF THE FOLLOWING PRODUCTS:
FOR USE IN CONCRETE:
A. HIT-HY-200 ADHESIVE ANCHOR, BY HILTI, INC. (ICC-ES REPORT #3187)
FOR USE IN SOLID GROUTED MASONRY:
A. HIT-70 WITH HAS ROD ANCHOR SYSTEM BY HILTI, INC. (ICC-ES REPORT #2682)
B. HIT-70 WITH TZ ROD ANCHOR SYSTEM BY HILTI, INC. (ICC-ES REPORT #2682)
C. SET-ADHESIVE SYSTEMS BY SIMPSON STRONG-TIE (ICC-ES REPORT #1772)
D. CIA-GEL 7000 EPOXY BY USP STRUCTURAL CONNECTORS, INC. (ICC-ES REPORT #1702)
3. ANCHOR RODS USED FOR EPOXY ANCHORING SHALL BE THE TYPE SPECIFIED IN THE REFERENCED ICC-ES REPORT.
4. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE EPOXY MANUFACTURER'S RECOMMENDATIONS AND THE CURRENT ICC-ES REPORT.
5. DRILLING SHALL BE PERFORMED WITH A ROTARY HAMMER DRILL AND CARBIDE TIPPED DRILL BIT IN ACCORDANCE WITH INSTRUCTOR'S ACCOMPANYING ADHESIVE CARTRIDGES AND APPLICABLE ICC-ESR (ALTERNATE METHODS OF DRILLING ARE PROHIBITED UNLESS APPROVED IN ADVANCE BY THE STRUCTURAL ENGINEER.)



OMNISS DESIGN, INC. 140 FAIRFAX ROAD MARION, OHIO 43302



Marion County Wastewater Treatment Plant for Marion County Engineer 2160 Richland Road Marion, OH 43302

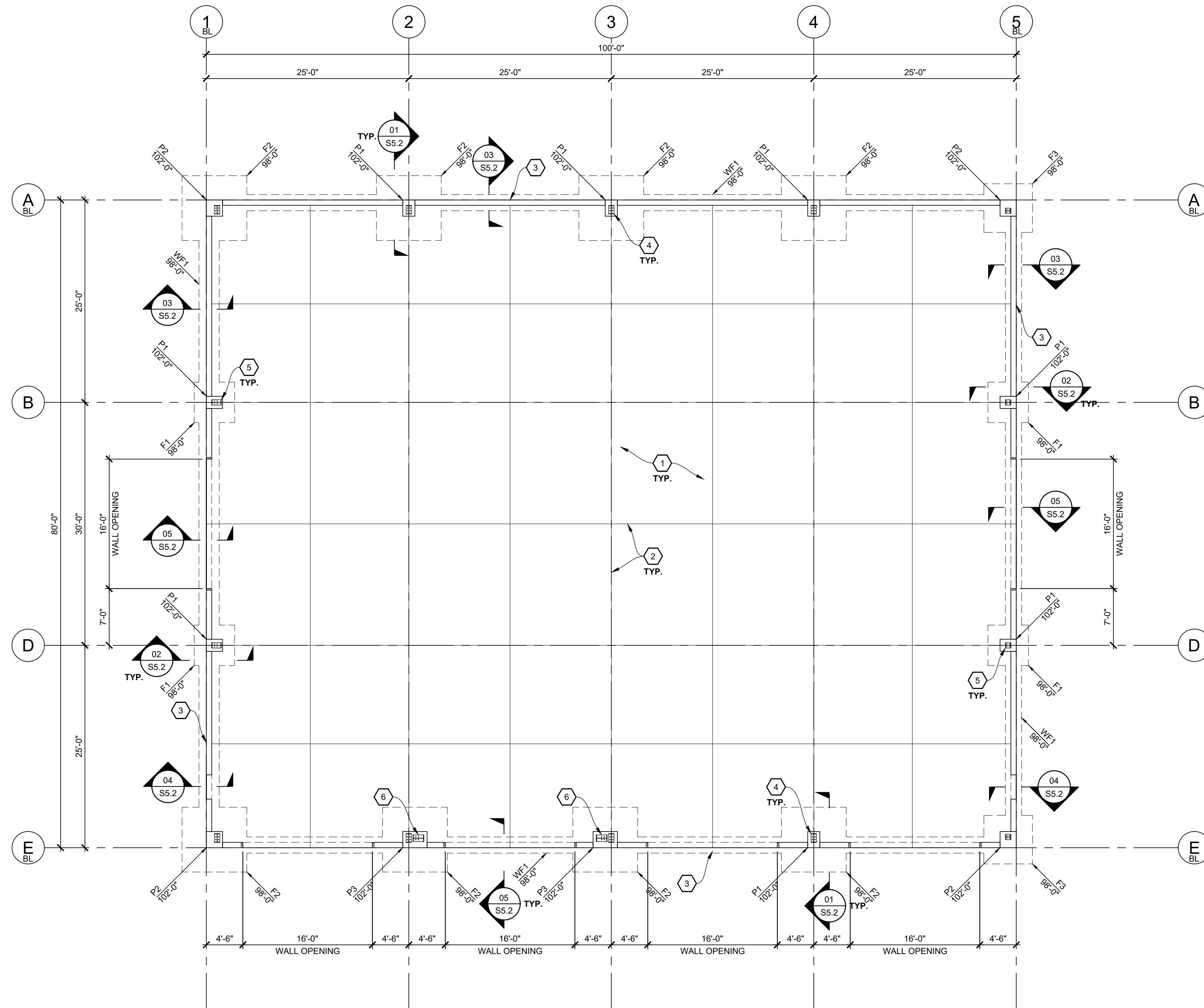
SHEET TITLE

GENERAL NOTES

Table with columns: MARK, DATE, DESCRIPTION, ISSUE.

PROJECT NO: 23-123 CAD DWG FILE: 23-121.MWWT.P DRAWN BY: DJP CHECKED BY: MDD

S0.1



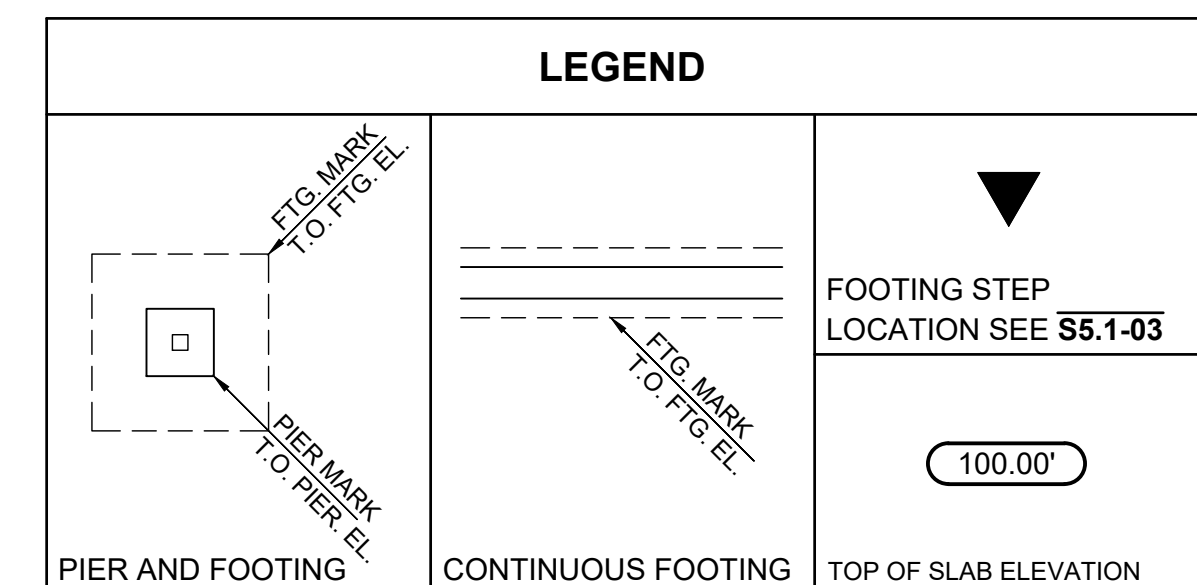
FOUNDATION PLAN NOTES	
A	SEE SHEETS S0.1 FOR GENERAL NOTES.
B	ALL ELEVATIONS ARE RELATIVE TO A FINISH FLOOR SLAB ELEVATION OF 100'-0" (REFERENCE ONLY).
C	COORDINATE DOOR OPENINGS WITH ARCHITECTURAL DRAWINGS.
D	SEE DETAIL S5.1-01 FOR TYPICAL REINFORCING DETAILING.
E	STEPS IN FOOTING AS REQUIRED TO MAINTAIN FROST DEPTH AND EMBEDMENT TO REQUIRED BEARING ELEVATION. SEE S5.1-03 FOR TYPICAL DETAIL.
F	SEE DETAIL S5.1-05 FOR RE-ENTRANT SLAB REINFORCING, TYP. AT SLAB PENETRATIONS, DOOR OPENINGS, ETC.
G	SEE DETAIL S5.1-06 FOR TYPICAL PIPE PENETRATIONS THROUGH FOUNDATIONS.
H	SEE DETAIL S5.1-02 FOR REINFORCING AT INTERSECTING FOOTINGS.
I	FOUNDATION AND PIER SIZES, LOCATIONS AND DETAILING ARE SUBJECT TO CHANGE PENDING THE FINAL DESIGN OF P.E.M.B. FABRICATION AND CONSTRUCTION SHALL NOT COMMENCE UNTIL THE FINAL SIGNED AND SEALED FOR CONSTRUCTION ANCHOR BOLT PLANS AND REACTIONS HAVE BEEN SUBMITTED TO THE ARCHITECT AND COORDINATED WITH THE ENGINEER FOR ISSUANCE OF COORDINATED FOUNDATION DRAWINGS.

KEYED NOTES	
01	6" CONCRETE SLAB, REINF. MACRO SYNTHETIC FIBERS PER S0.1. ON 15MIL. VAPOR BARRIER OVER A 4" MIN. COMPACTED COARSE AGGREGATE BASE. TOP OF SLAB AT 100'-0"
02	SLAB CONTRACTION OR CONSTRUCTION JOINT, SEE S5.1-04.
03	8" CAST-IN-PLACE PARTIAL HEIGHT CONCRETE WALL, REINF. WITH #5 AT 12" O.C., EACH WAY. SEE S5.2-06 FOR REQUIRE JOINTS.
04	RIGID FRAME P.E.M.B. COLUMN ON CONCRETE PIER AND FOOTING. SEE PIER AND FOOTING SCHEDULES FOR SIZES AND REINFORCING. FOR ANCHOR ROD INFORMATION SEE DETAIL S5.1-07.
05	P.E.M.B. END WALL COLUMN ON CONCRETE PIER AND FOOTING. SEE PIER AND FOOTING SCHEDULES FOR SIZES AND REINFORCING. FOR ANCHOR ROD INFORMATION SEE DETAIL S5.1-07.
06	P.E.M.B. PORTAL FRAME COLUMN ON CONCRETE PIER AND FOOTING. SEE PIER AND FOOTING SCHEDULES FOR SIZES AND REINFORCING. FOR ANCHOR ROD INFORMATION SEE DETAIL S5.1-07.

COLUMN FOOTING SCHEDULE		
MARK	SIZE	REINFORCING
F1	5'-0" x 5'-0" x 1'-4"	(6) #5 BARS E.W. BOTTOM
F2	8'-0" x 8'-0" x 1'-4"	(10) #6 BARS E.W. BOTTOM
F3	6'-0" x 6'-0" x 1'-4"	(7) #6 BARS E.W. BOTTOM

PIER SCHEDULE			
MARK	SIZE	DETAIL	REINFORCING
P1	1'-6" x 2'-0"	S5.1-08	(6) #6 VERTICAL BARS w/ #4 TIES
P2	2'-0" x 2'-0"	S5.1-08	(8) #6 VERTICAL BARS w/ #4 TIES
P3	3'-0" x 2'-0"	S5.1-08	(10) #10 VERTICAL BARS w/ #4 TIES

CONTINUOUS WALL FOOTING SCHEDULE			
MARK	SIZE	REINFORCING	
		LONGITUDINAL	TRANSVERSE
WF1	2'-0" x CONT. x 1'-4"	(3) #5 CONT., BOTTOM	NONE



OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302



New Garage at
Marion County Wastewater Treatment Plant
for Marion County Engineer
2160 Richland Road Marion, OH 43302

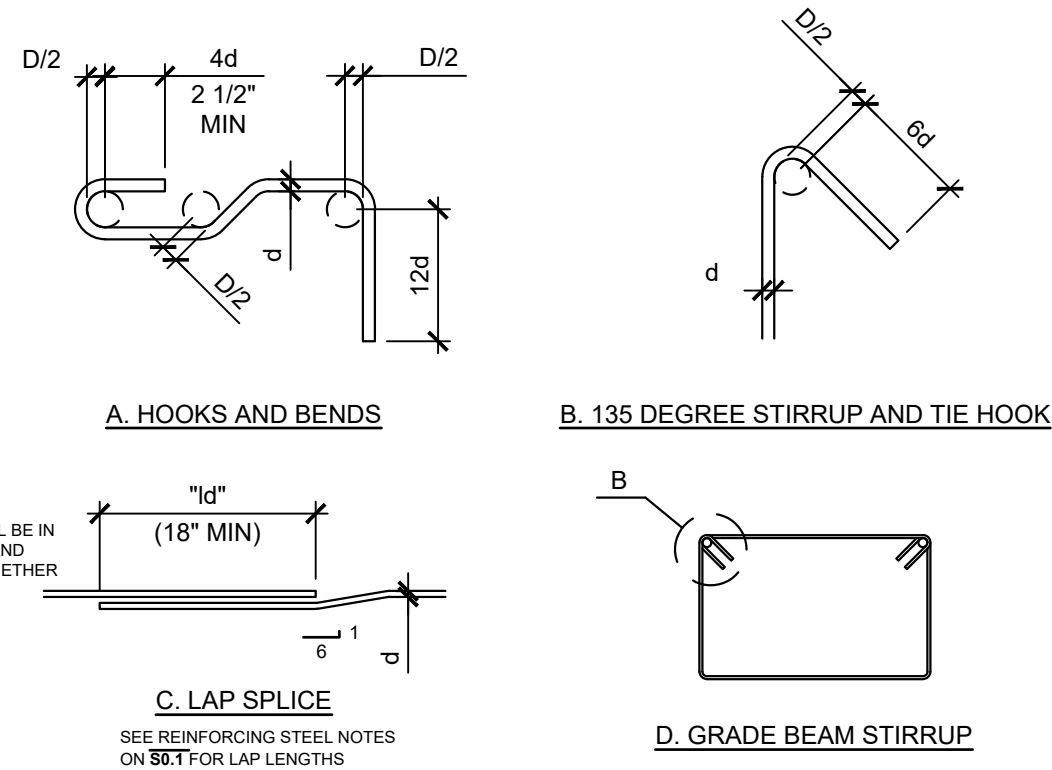
FOUNDATION PLAN

DATE	DESCRIPTION
11/28/2023	SCHEMATIC DESIGN
	DESIGN DEVELOPMENT
	CONSTRUCTION DOCUMENTS

PROJECT NO: 23-123
CAD DWG FILE: 23-121 MWWT
DRAWN BY: DJP
CHECKED BY: MDD

S1.1

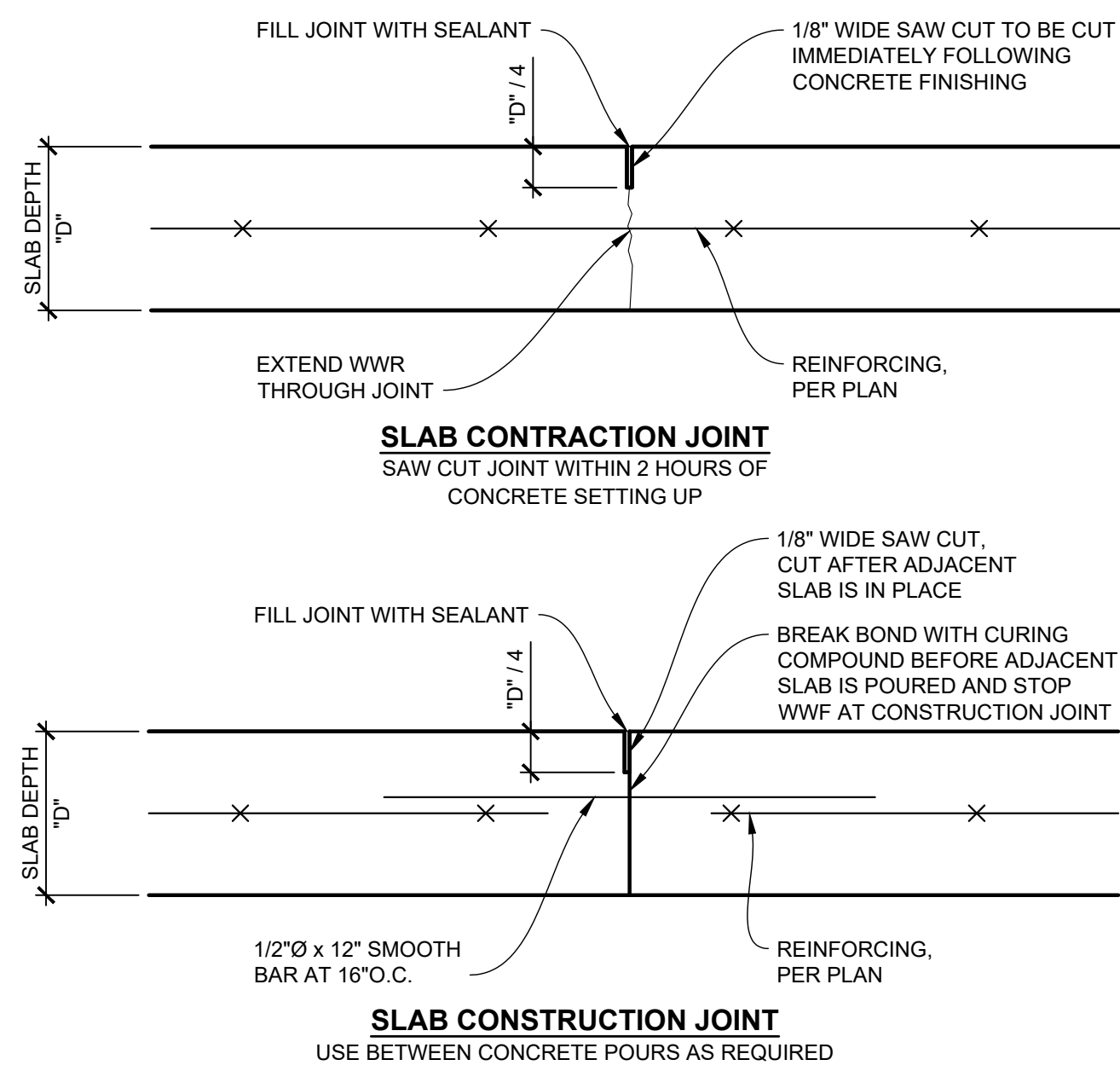
01 FOUNDATION PLAN
SCALE: 1/8" = 1'-0"



BEND DIAMETER SCHEDULE		
BAR SIZE	STANDARD BEND DIAMETER	REDUCED BEND DIAMETER FOR TIES AND STIRRUPS
#3 THROUGH #5	D = 6"d	D = 4"d
#6 THROUGH #8	D = 6"d	NA
#9 THROUGH #11	D = 8"d	NA
#14 AND #18	D = 10"d	NA

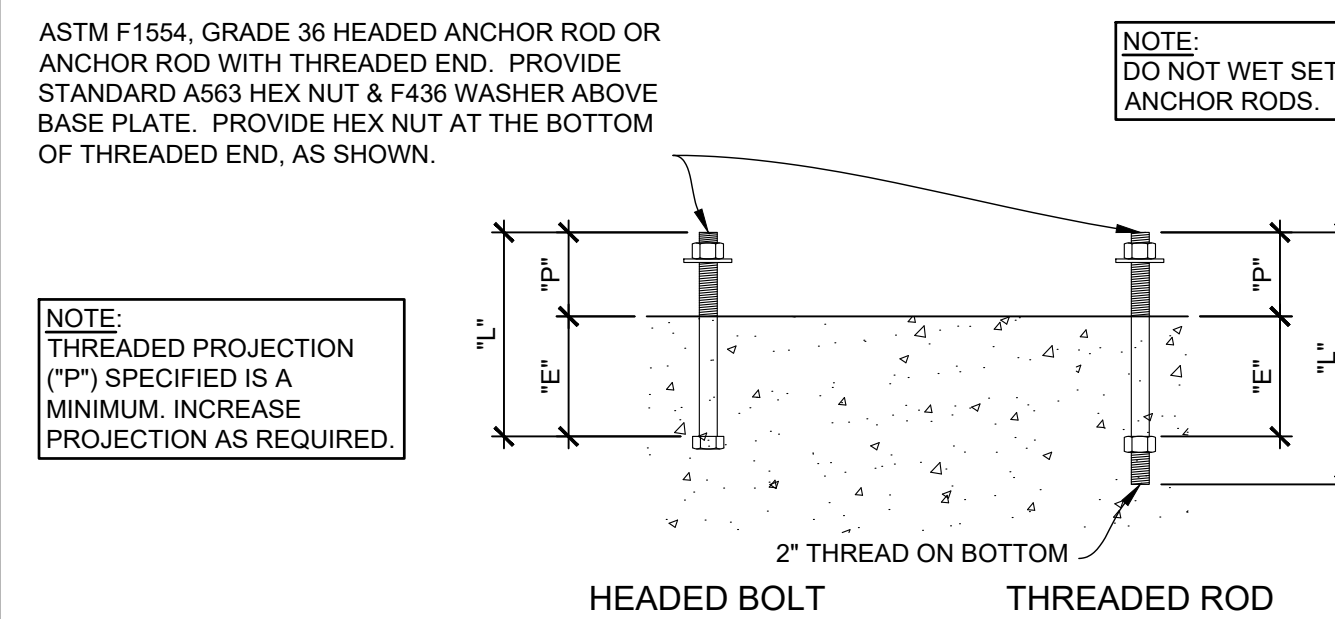
01 TYPICAL REINFORCEMENT DETAILS

SCALE: N/A



04 SLAB CONTRACTION AND CONSTRUCTION JOINT

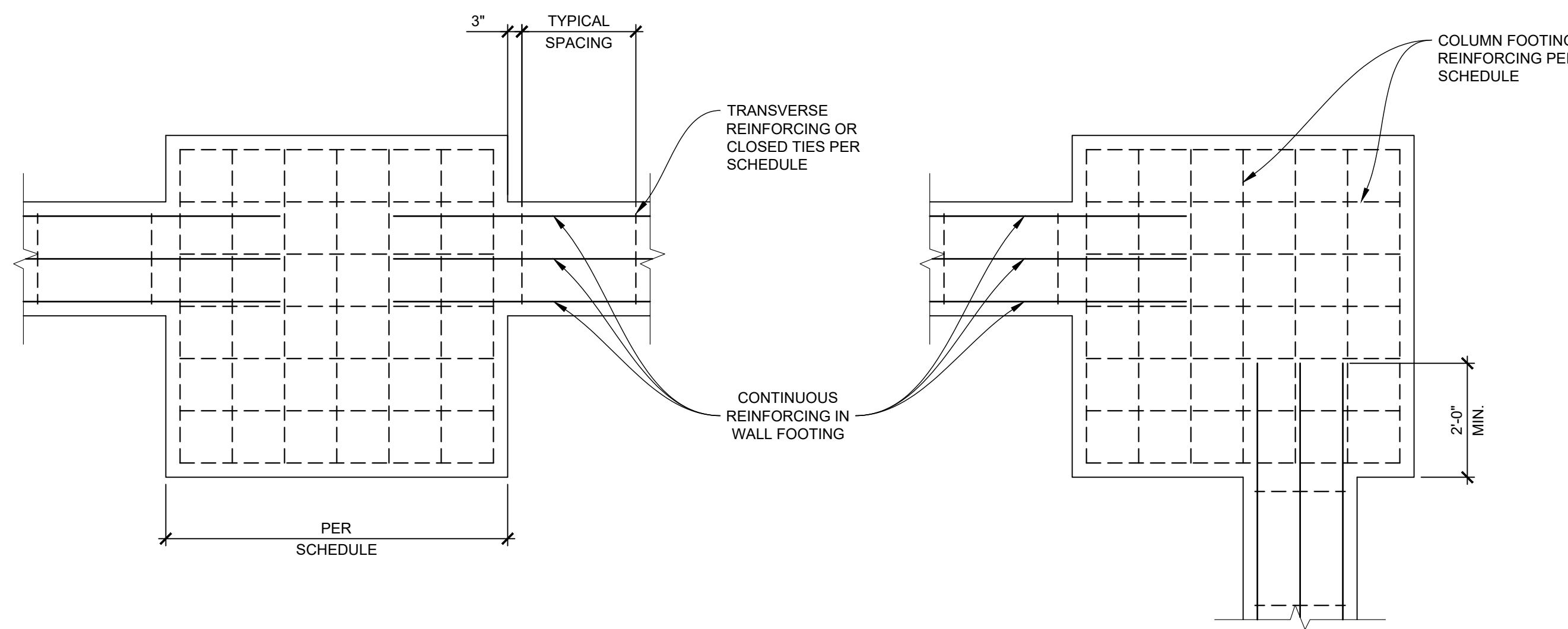
SCALE: N/A



ANCHOR ROD DIMENSIONS				
BOLT DIAMETER	EMBEDMENT "E"	THREADED PROJECTION "P"	LENGTH "L"	
			HEADED BOLT	THREADED ROD
3/4"	12"	PER PEMB	12" + P	14" + P
7/8"	14"	PER PEMB	14" + P	16" + P
1"	14"	PER PEMB	14" + P	16" + P
1 1/8"	16"	PER PEMB	16" + P	18" + P
1 1/4"	18"	PER PEMB	18" + P	20" + P

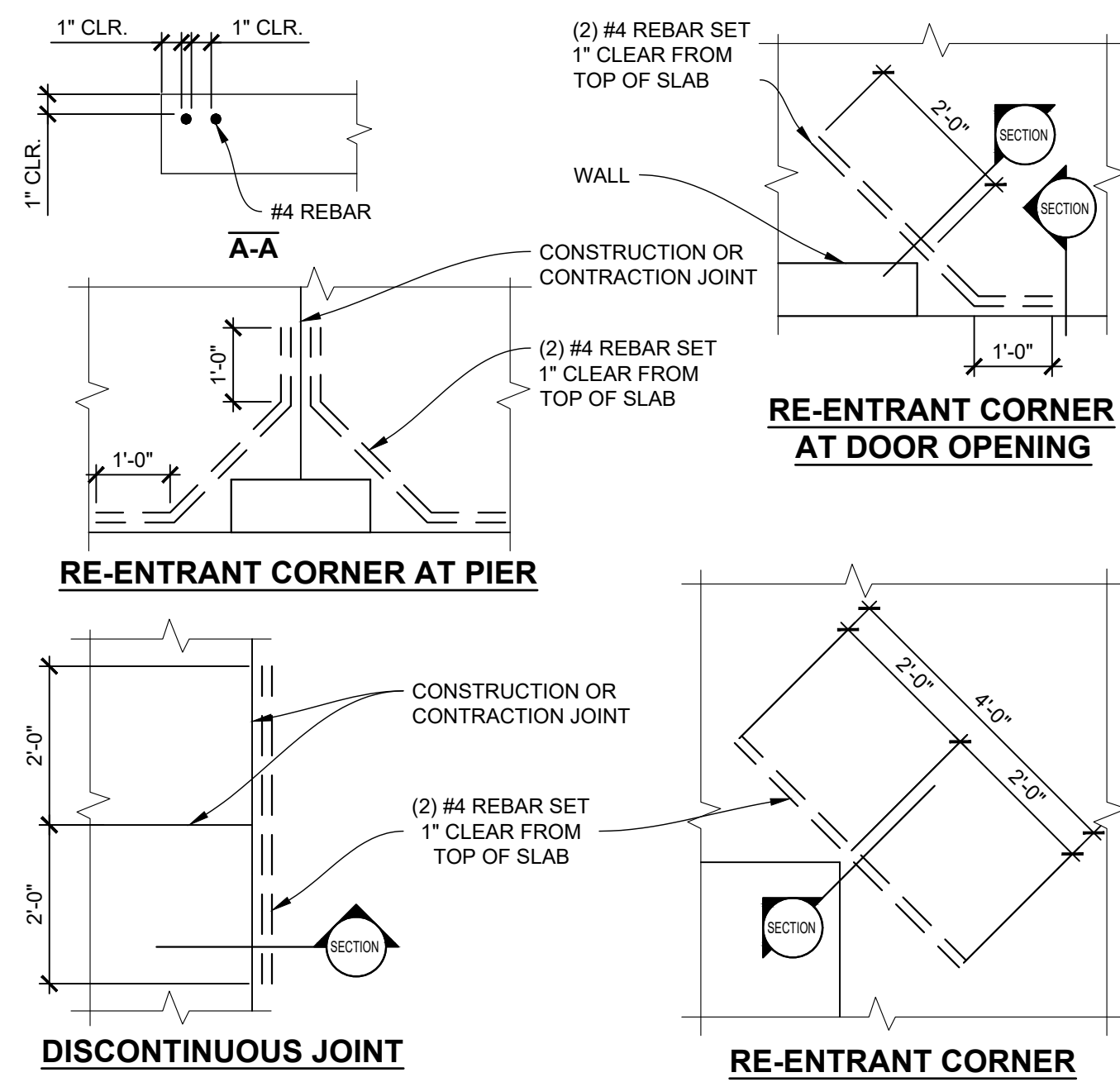
07 ANCHOR ROD DETAILS

SCALE: N/A



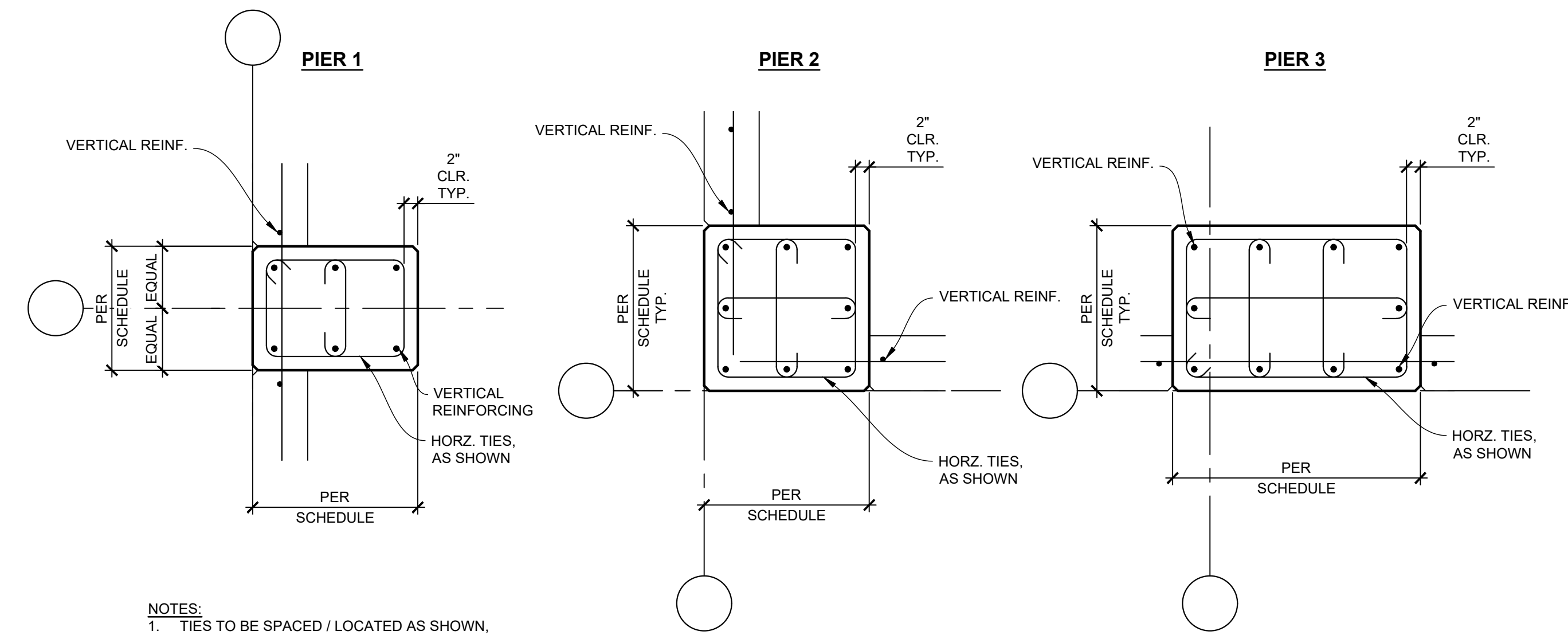
02 PLAN DETAIL AT INTERSECTING FOOTINGS

SCALE: N/A



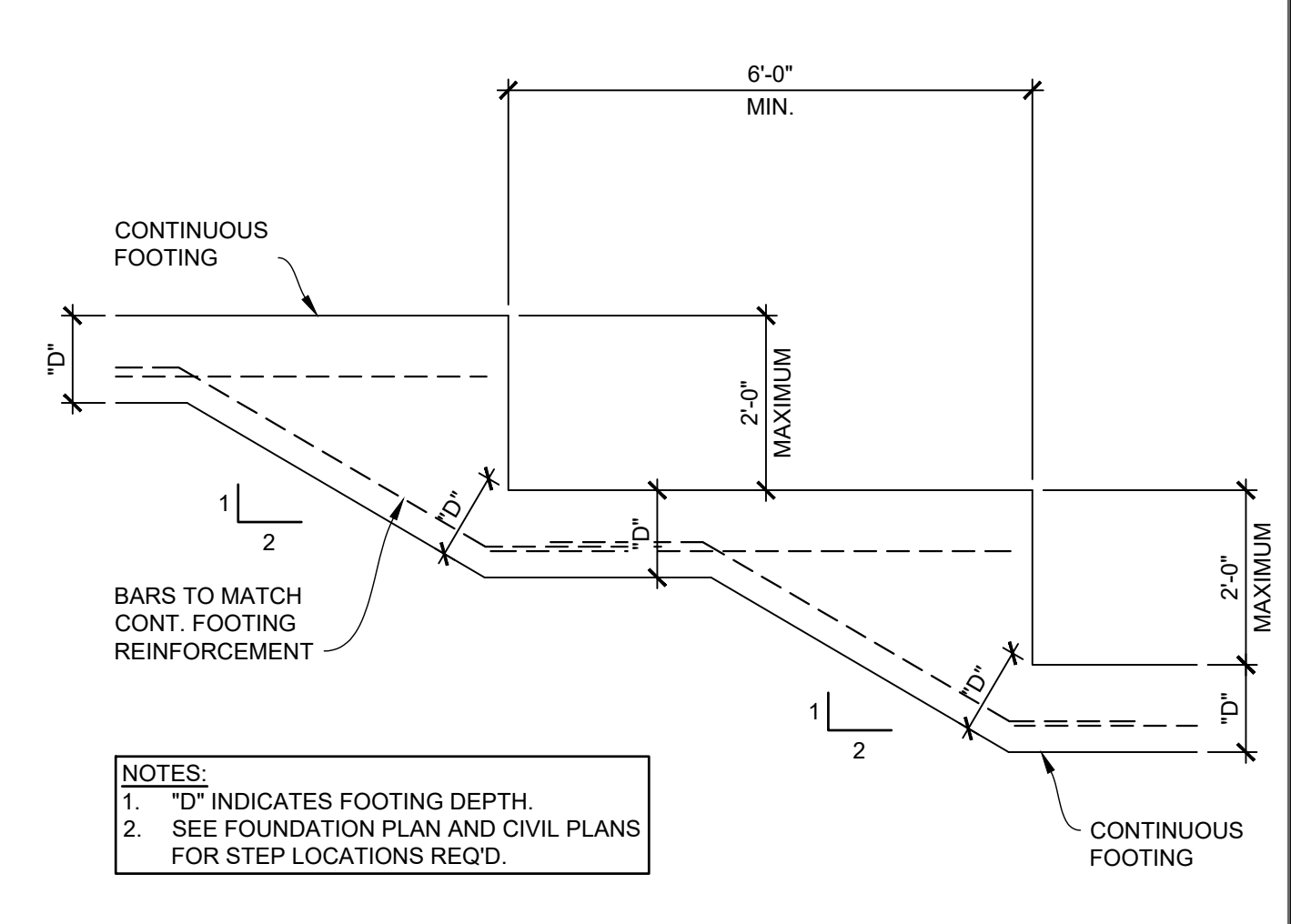
05 SLAB REINFORCEMENT

SCALE: N/A



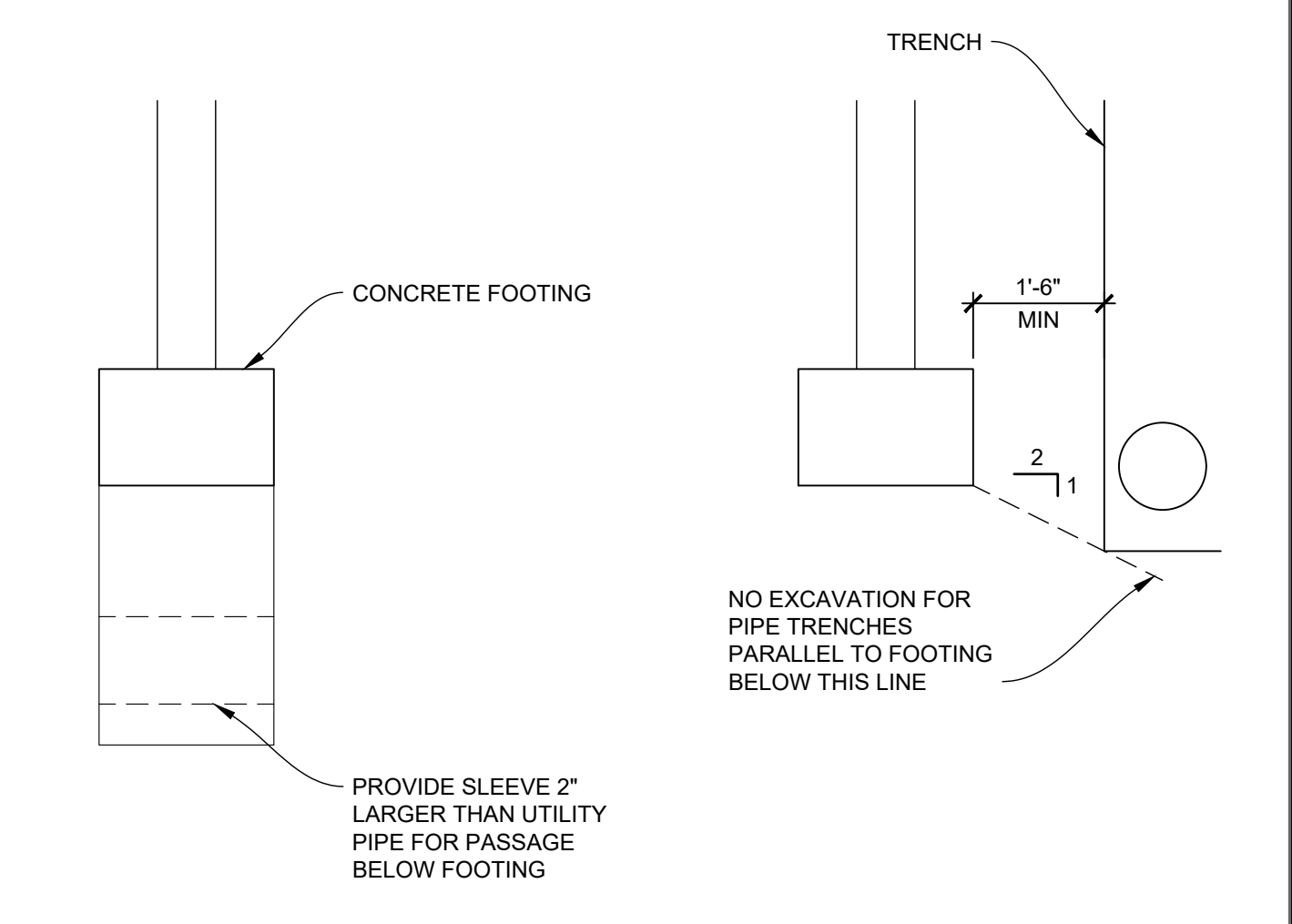
08 PIER DETAILS AT PIERS

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



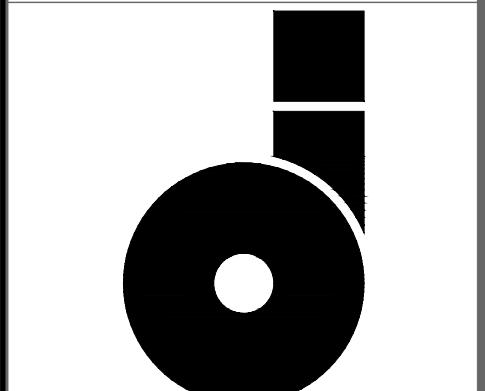
03 TYPICAL FOUNDATION STEP

SCALE: N/A



06 FOUNDATION SECTION AT PIPE PENETRATION

SCALE: N/A



OMNISS DESIGN, INC.
 140 FAIRFAX ROAD
 MARION, OHIO 43302
 CONSULTANTS
DERWACTER & ASSOCIATES, LLC
 5275 Milford Dr.,
 Zanesville, OH 43701

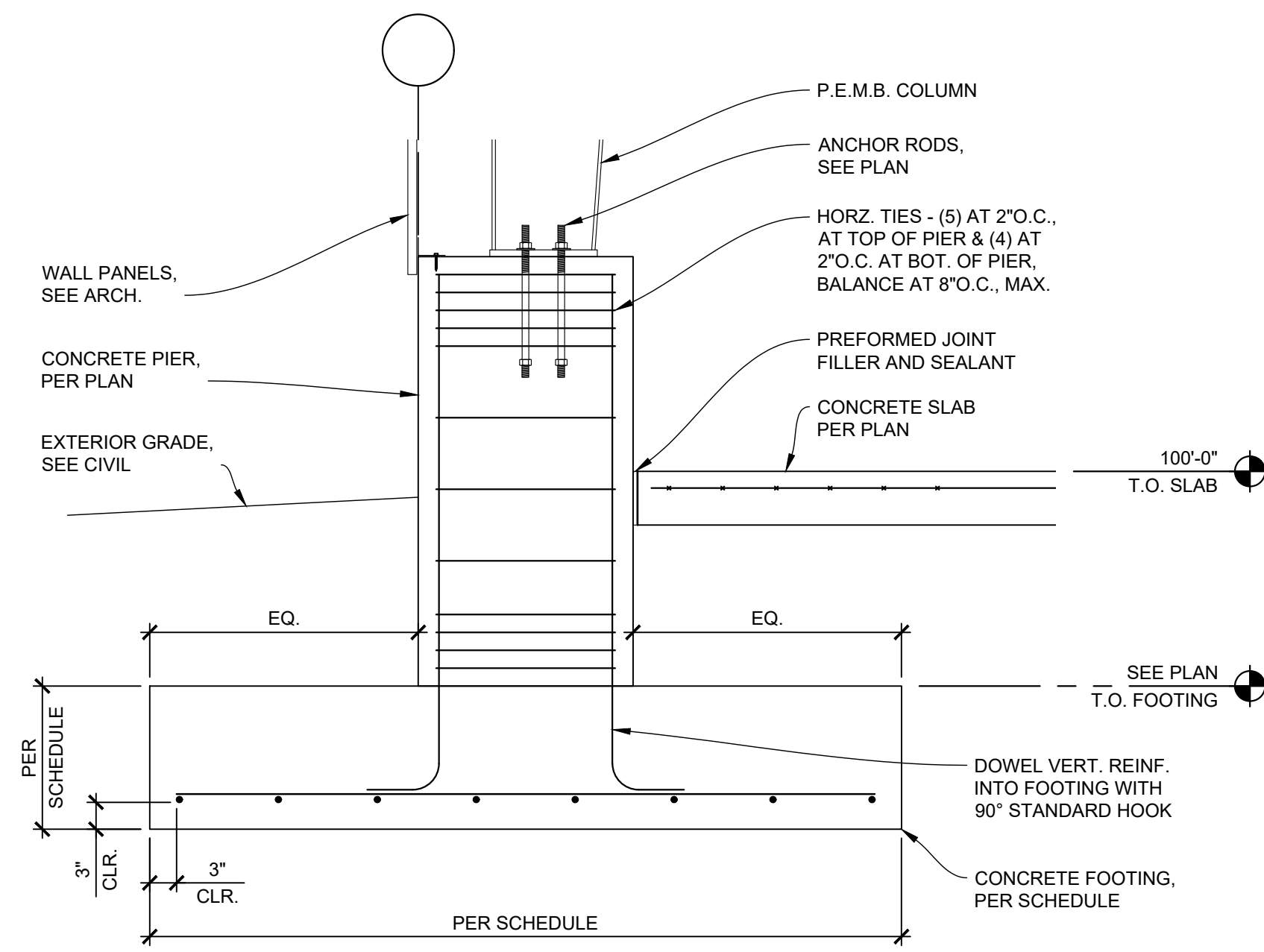
New Garage at
Marion County Wastewater Treatment Plant
 for Marion County Engineer
 2160 Richland Road Marion, OH 43302

SHEET TITLE
FOUNDATION DETAILS

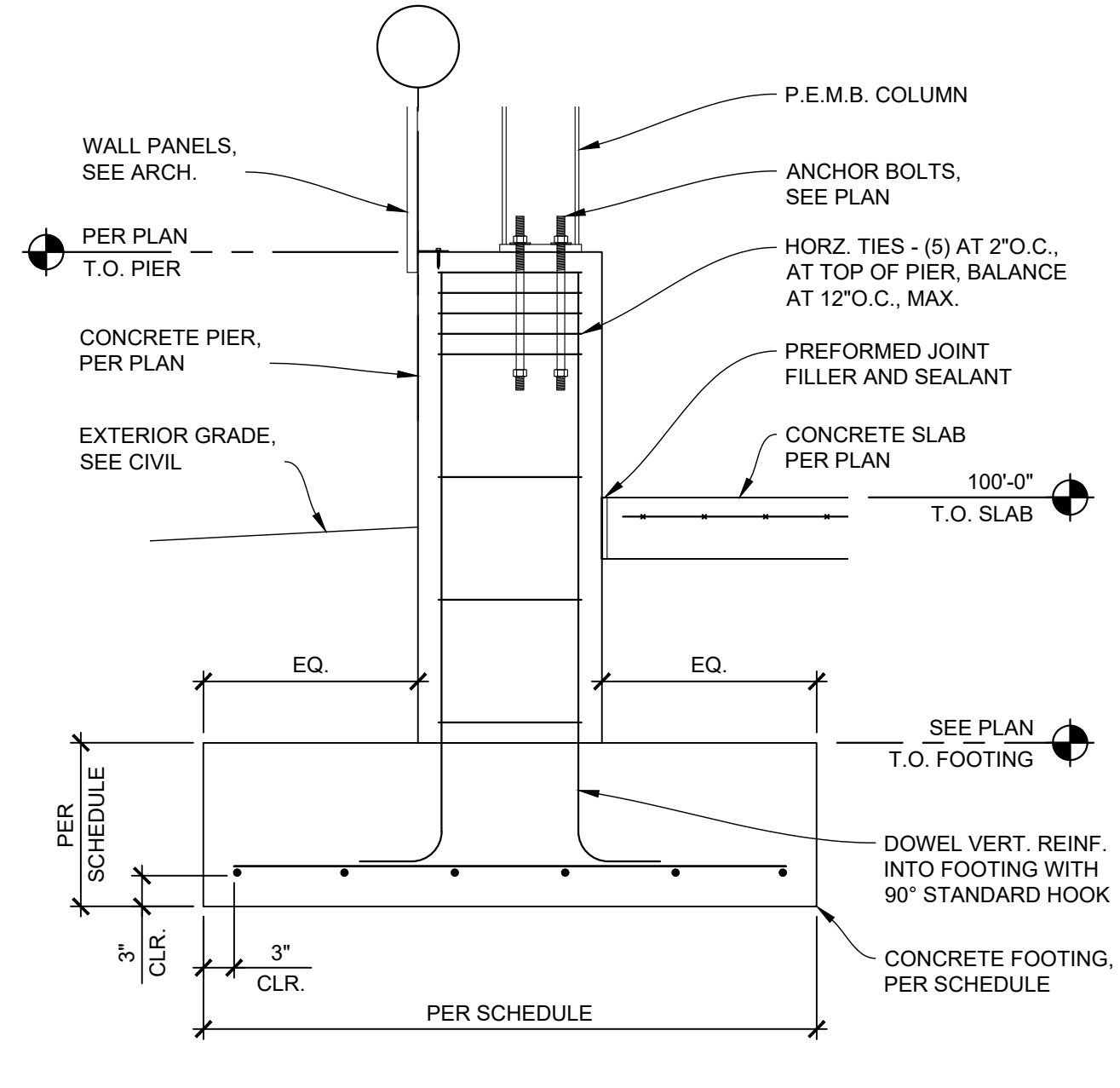
MARK	DATE	DESCRIPTION
SD	11/28/2023	SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

PROJECT NO: 23-123
 CAD DWG FILE: 23-121.MWWT.P
 DRAWN BY: DJP
 CHECKED BY: MDD

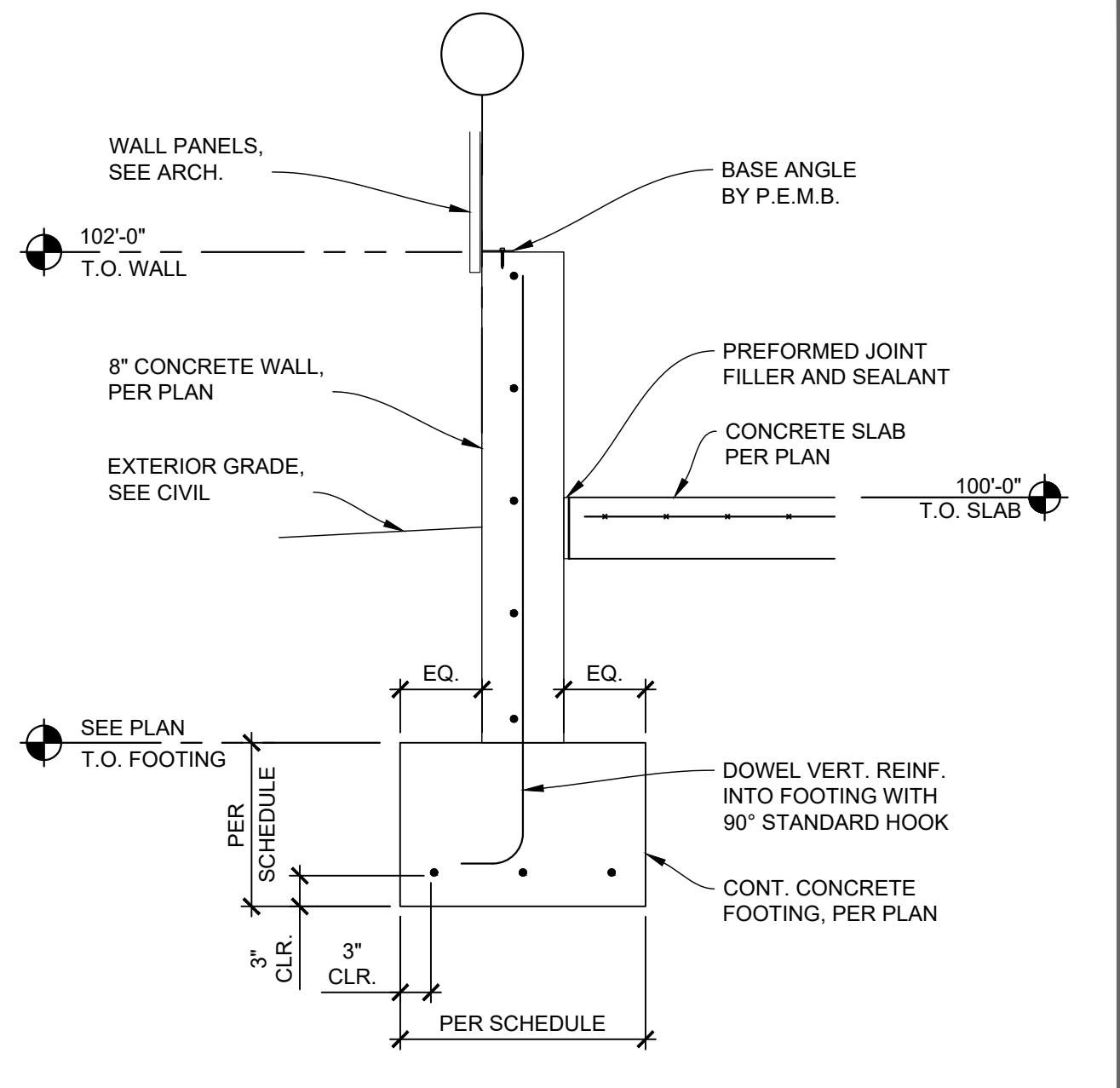
S5.1
 SHEET 13 OF 22



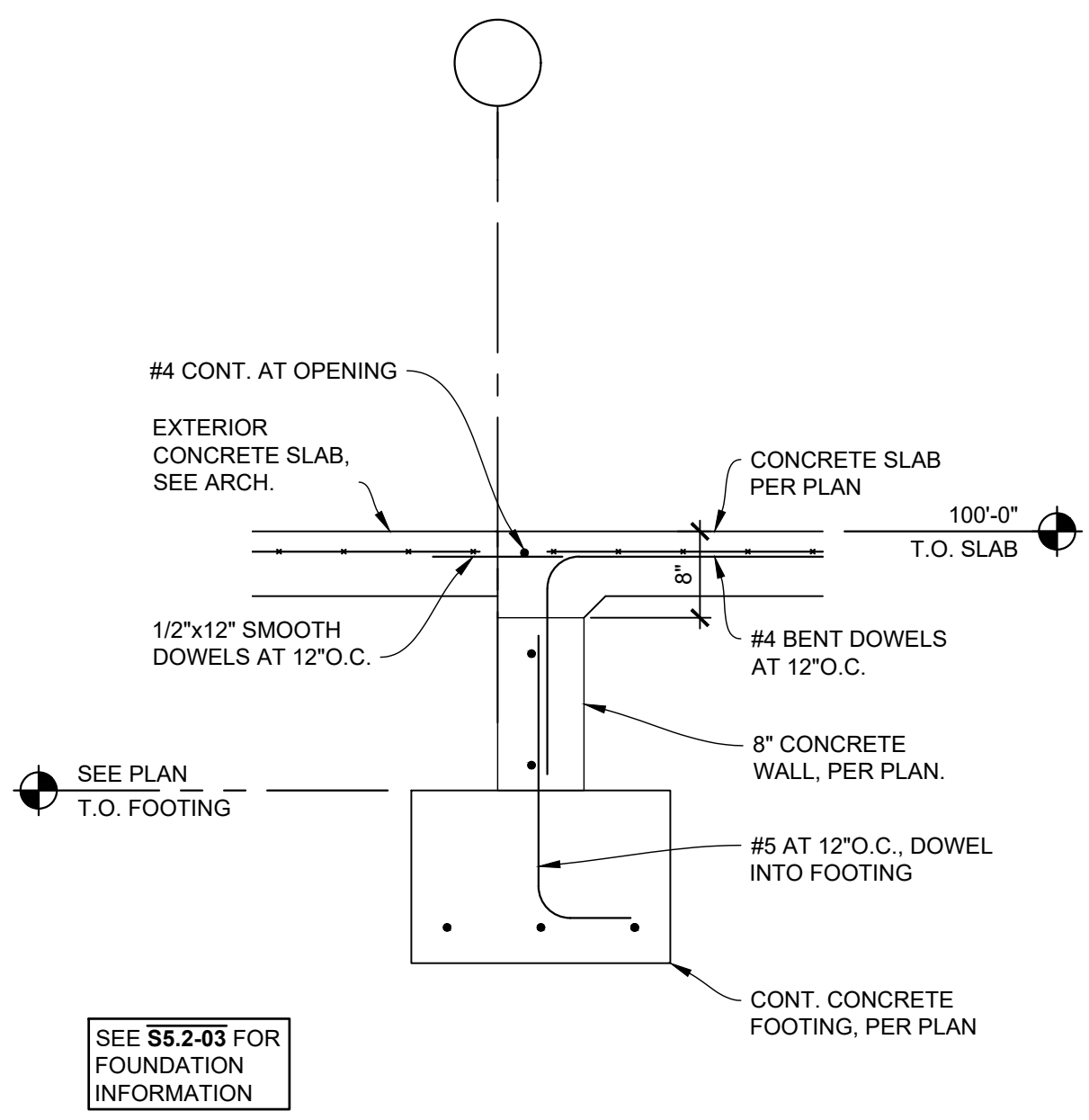
01 SECTION
SCALE: 3/4" = 1'-0"



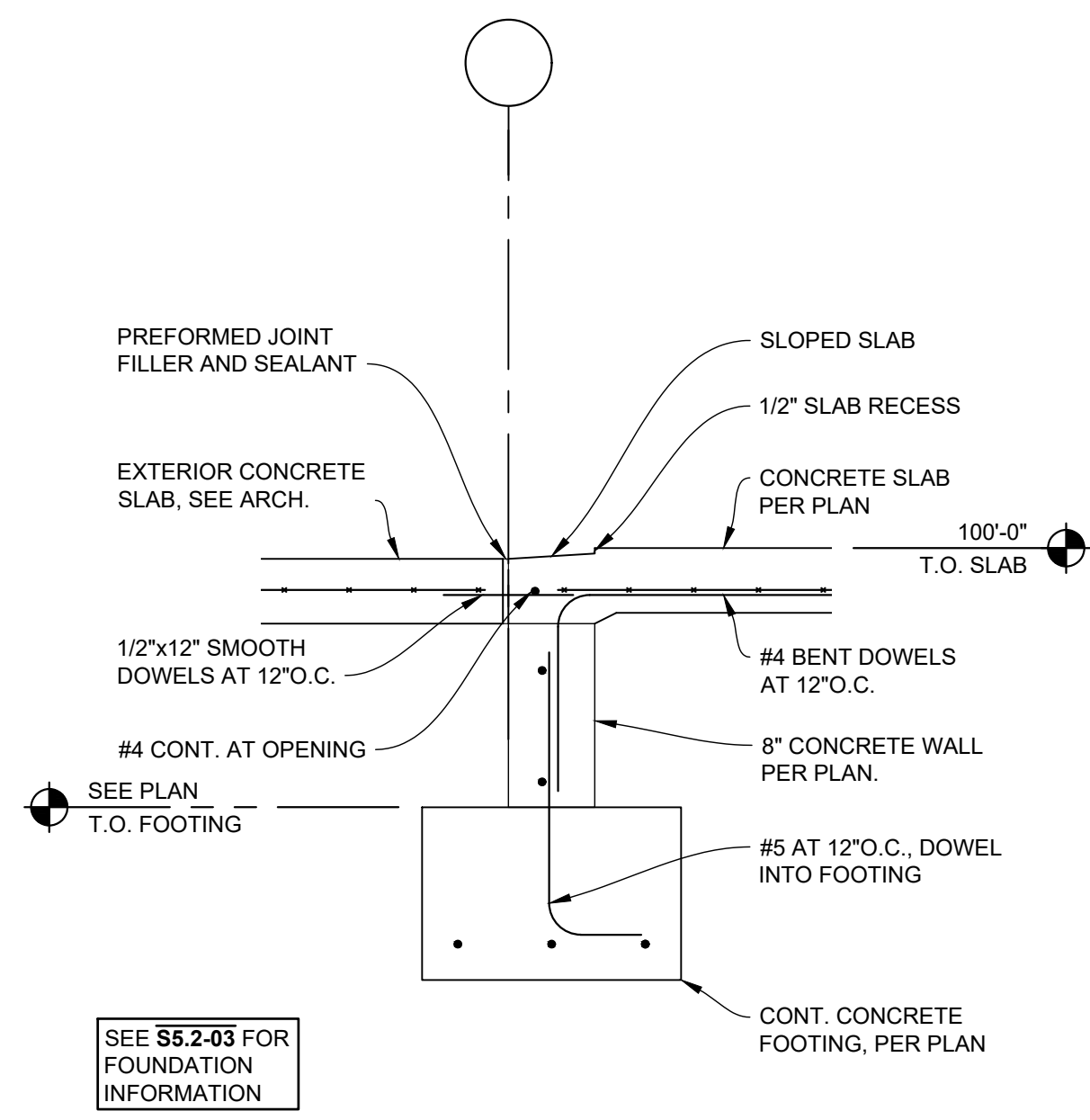
02 SECTION
SCALE: 3/4" = 1'-0"



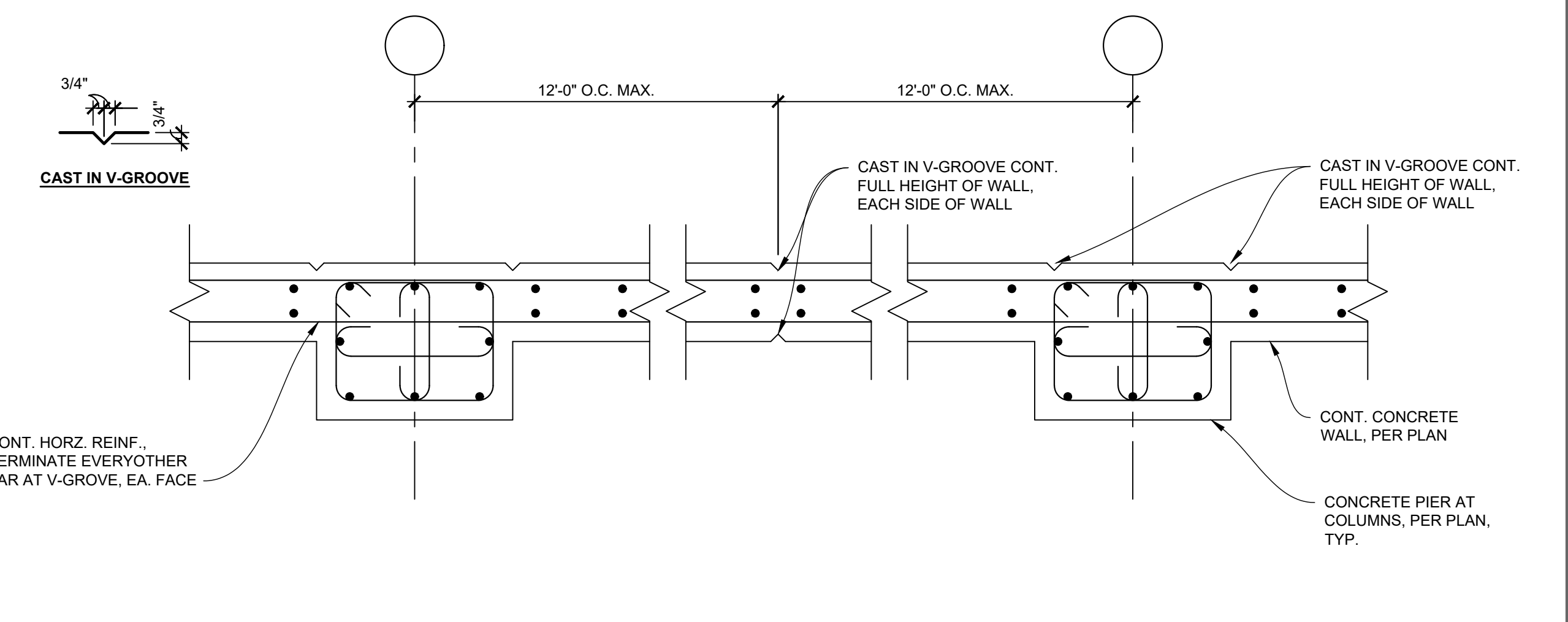
03 SECTION
SCALE: 3/4" = 1'-0"



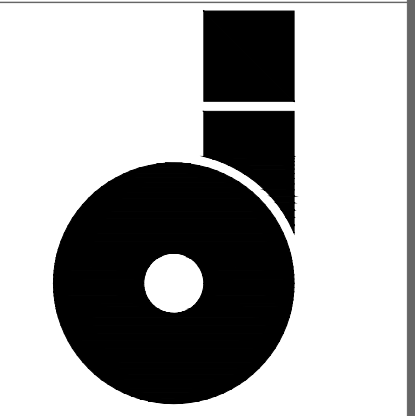
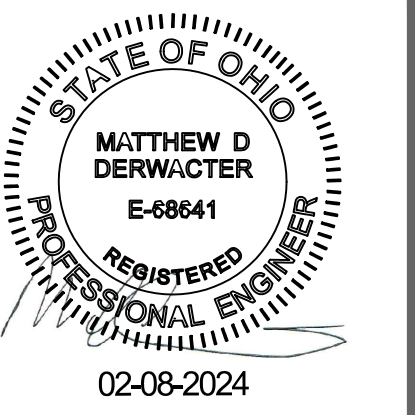
04 SECTION @ MAN DOOR
SCALE: 3/4" = 1'-0"



05 SECTION @ OVERHEAD DOOR
SCALE: 3/4" = 1'-0"



06 CONTROL JOINT IN CONCRETE WALLS
SCALE: N/A



OMNISS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302

CONSULTANTS
DERWACTER & ASSOCIATES, LLC
5275 Milford Dr.,
Zanesville, OH 43701

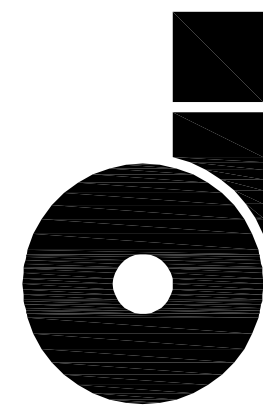
New Garage at
Marion County Wastewater Treatment Plant
 for Marion County Engineer
 2160 Richland Road Marion, OH 43302

SHEET TITLE
FOUNDATION DETAILS

MARK	DATE	DESCRIPTION
SD	11/28/2023	SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

PROJECT NO: 23-123
CAD DWG FILE: 23-121 MWWTP
DRAWN BY: DJP
CHECKED BY: MDD

S5.2



OMNESS DESIGN
 140 FAIRFAX ROAD
 ACRON, OHIO 43002

**New Garage at
 Marion County Wastewater Treatment Plant
 for Marion County Engineer
 2160 Richland Road**

SHEET TITLE
 HVAC

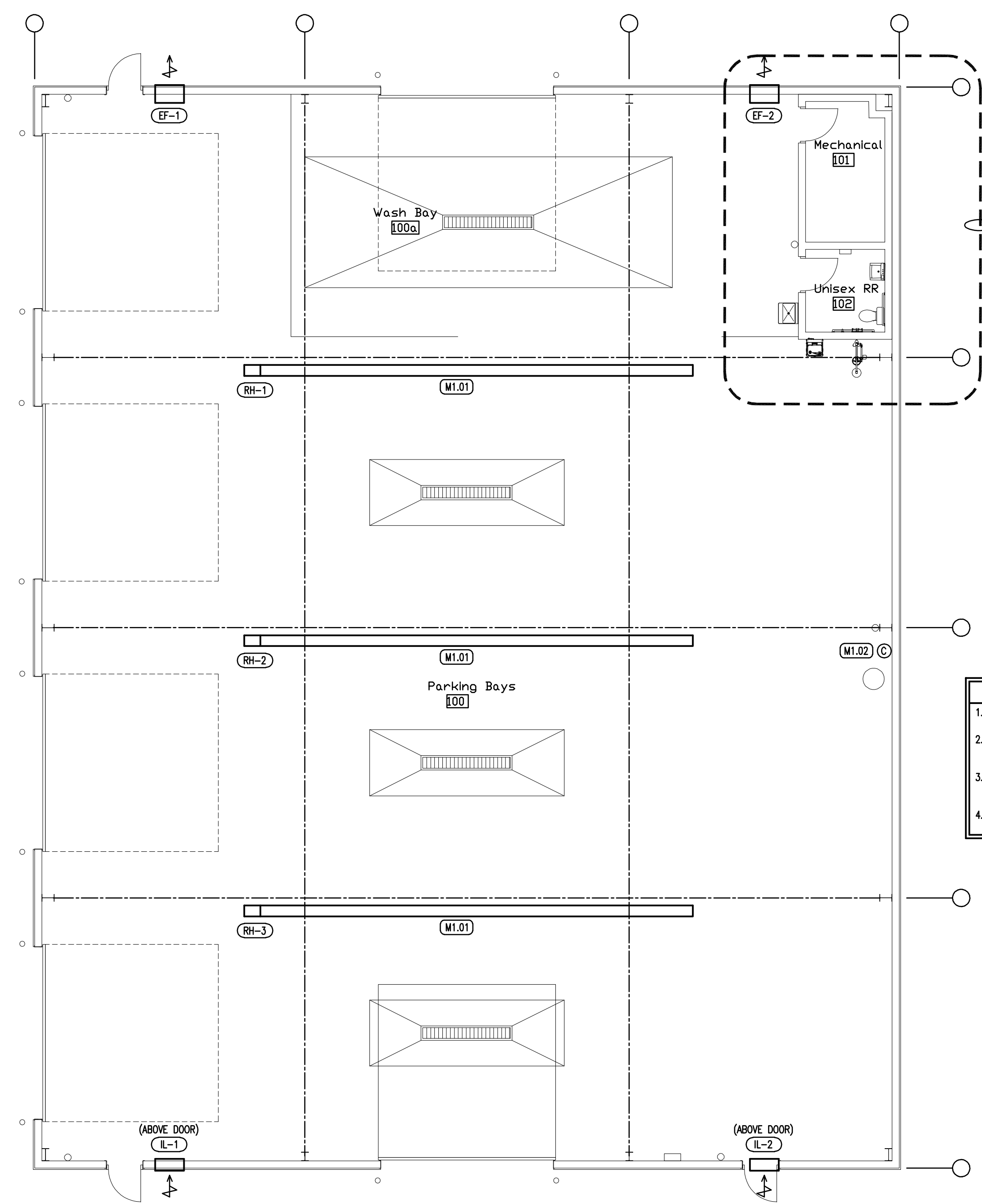
MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

PROJECT NO: 23-123
 CAD DWG FILE: 23-121 MWWT
 DRAWN BY: PD
 CHECKED BY: PD

M-1

SHEET 18 OF 22

- HVAC CODED NOTES**
- M1.01 INSTALL RADIANT HEATER PER MFG'S INSTRUCTIONS W/ CLEARANCE TO COMBUSTIBLES AS REQUIRED.
 - M1.02 INSTALL CARBON DIOXIDE DETECTOR PER MFG'S INSTRUCTIONS. INTERLOCK W/ "EF-1", "EF-2", "IL-1" & "IL-2" (SEE NOTE ON THIS SHEET).



- DEMAND VENTILATION NOTE**
- 1.) BRASCH MODEL NO. BSS-CO-STD CARBON DIOXIDE DETECTOR SHALL BE CALIBRATED AT 700 PPM.
 - 2.) WHEN CARBON DIOXIDE DETECTOR SENSES QUANTITIES OF CARBON DIOXIDE IN EXCESS OF SETPOINT, IT SHALL TURN EXHAUST FANS "EF-1" & "EF-2" ON AND OPEN INTAKE LOUVERS "IL-1" & "IL-2".
 - 3.) WHEN CONTAMINATION LEVELS HAVE BEEN DILUTED SUFFICIENTLY TO RETURN CARBON DIOXIDE DETECTOR TO ORIGINAL SETPOINT (OR BELOW), EXH. FANS "EF-1" & "EF-2" SHALL SHUT OFF AND INTAKE LOUVERS "IL-1" & "IL-2" SHALL CLOSE.
 - 4.) LOW VOLTAGE CONTROL WIRING SHALL BE FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR AS REQUIRED.

N

Floor Plan - HVAC
 1/8" = 1'-0"

MECHANICAL SPECIFICATIONS

GENERAL CONDITIONS

A. REFERENCE

- For purposes of clearness and legibility, Drawings are diagrammatic and although size and location of equipment are drawn to scale wherever possible, Contractor shall make use of all data in all of the Contract Documents and shall verify this information at the building site. Dimensions given in figures on the Drawings take precedence over scaled dimensions.
- Drawings and Specifications to be considered cooperative, and anything appearing in Specifications but not on Drawings or vice versa, shall be considered part of the Contract and must be executed.

B. QUALITY ASSURANCE

- Codes and Permits - Deliver official record of approval, by governing agencies, to Engineer to transmit to Owner.

C. OPERATING INSTRUCTIONS

- Provide to Owner, after all equipment is in operation and at an agreeable time, competent instructors for the purpose of training Owner's personnel in all phases of operation and maintenance of equipment and systems for both heating and cooling season.

D. DAMAGE AND EMERGENCY REPAIRS

- Contractor will be held responsible for any damage that may be incurred on any installed work of other trades, by any workman employed in the installation of work under this Contract. Provide covering under workbench or under any work involving cutting and fitting of materials being installed, so as not to damage surrounding finished surfaces.

E. MATERIALS

- Provide material and labor for that which is neither drawn nor specified but which is obviously a component part of and necessary to complete work which is customarily a part of work of similar character.
- All materials, fixtures, and equipment shall be new, of the best grade, and installed according to manufacturer's recommendations. Additionally, the installation shall be according to the best standards of practices, complete with all accessories and connections necessary for proper operation, and in compliance with effective State or Local Code requirements.

AIR DISTRIBUTION

A. EXHAUST FANS

- Submit detailed Shop Drawings clearly indicating make, model, location, type, and size.
- Furnish and install, where shown on Drawings, exhaust fans as manufactured by Greenheck.
- Exhaust fans shall be acceptable providing construction, capacity and operating characteristics are equal.

B. LOW PRESSURE DUCTWORK

- Ductwork shall be constructed of the following gauges, where velocity does not exceed 2500 FPM and static pressure does not exceed 2.0 WC. All is in accordance with ASHRAE and SMACNA Standards:

Largest Dimension	U.S. Gauge	Galvanized Steel
To 12"	26	
13" to 30"	24	

Duct Diameter	U.S. Gauge	Galvanized Steel
To 13"	26	
14" to 26"	24	

- All ductwork shall be constructed of galvanized steel complying with ASTM A527-71, lockforming quality. All toilet and shower room exhaust ducts shall be aluminum construction, and all joints welded or sealed with 3M Company #EC-1792 sealant. Sheetmetal must be fabricated so that the gauge of material being used is visible externally.

- Duct fasteners shall comply with SMACNA MF-1.
- Provide hot dipped galvanized steel fasteners, anchors, rods, straps, trim and angles for support of ductwork.

- Provide turning vanes in all mitered elbows and where otherwise indicated. Vanes shall be 2" galvanized steel for up to and including 18" ducts and 4-1/2" for ducts over 18". Construction of vanes shall be double wall, fixed blade type for 90 degree elbows.

- All joints and seams shall be sealed to SMACNA Class B Standards (100% sealing) with Duro-Dyne SAS-UL-C siliconized acrylic water based duct sealer.

C. GRILLES AND DIFFUSERS

1. Submittals

- Submit detailed Shop Drawings clearly indicating make, model, location, type, and size.
- Furnish and install, where shown on Drawings, grilles and diffusers as manufactured by Price.

- Grilles and diffusers as manufactured by Titus, Krueger, or Corneil will be acceptable providing construction, capacity, and operating characteristics are equal.

- All grilles and diffusers shall have a factory applied off-white finish unless otherwise noted on Plans.

- Ceiling Supply Diffusers: Fully adjustable air pattern, round or square with full flow damper. Diffusers shall be surface mount or lay-in frame to fit ceiling construction being used.

- Egg Crate Return Grilles: Aluminum frame with aluminum core grid. Egg crate grilles shall be surface mount, lay-in, or panel mounted to fit ceiling construction being used.

- Refer to Architectural Reflected Ceiling Plan for exact location of ceiling diffusers and ceiling construction being used.

D. FILTERS

- Furnish filters as manufactured by Koch, model Multi-Pleat XLB. Media shall be reinforced glass fiber supported by galvanized steel grids formed to the configuration of the pleats. The media pack shall be sealed into a galvanized frame. Filter shall have a rated average atmospheric dust spot efficiency of not less than 35 to 40% and an average synthetic arrestance of 95% when tested in accordance with ASHRAE Standards 52-76. The filter shall be capable of operating with variable face velocities up to 600 FPM without impairing performance. It shall have an initial resistance not to exceed the value selected from the capacity table and shall be classified by Underwriter Laboratories as Class II.

- Spare Filters: One original and two sets of spare filters shall be supplied. One set is for use during the construction phase and a set shall be installed for testing and balancing. One complete set of unused filters shall be turned over to the Owner at completion of the project.

- Filters as manufactured by Cambridge, Continental or American Air Filter will be acceptable providing construction, capacity, and operating characteristics are equal.

DUCTWORK AND ACCESSORIES

- Provide all sheetmetal work, as shown on the Drawings, in accordance with the latest edition of the ASHRAE guide and data book, SMACNA Standards and this Specification, the most demanding of which shall be the minimum standard.

- Install ductwork indicated on Drawings making all necessary changes in cross sections and offsets, whether or not specifically indicated.

- All changes in cross section shall be made without reducing the design area of the duct.

- Cap all open ends of ductwork until connected to grilles, diffusers, and equipment to prevent entrance of debris, dust, etc.

- Make changes in direction of ductwork, unless otherwise specified with square elbows and double thickness turning vanes; full radius elbows having inside radius equal to width of duct measured in plane of turn; or one-third radius elbows with inside radius equal to one-third duct width and a single vane radius of two-thirds duct width.

- No pipe or other obstructions shall pass through air ducts.

- Ducts shall not be hung from other ducts, pipe or conduit.

- Duct dimensions are gross except of lined ducts where dimensions are for net free area.

- All joints and seams in ducts shall be air-tight; poorly made joints, splits, visible holes at corners, etc. shall be reworked or new pieces of ductwork installed. Where excessive pulsating of ductwork or plenum housing is found, additional stiffeners shall be added. Any cracking in the coating around seams or joints, or in any other part of the formed duct that is apparent upon inspection, shall be sufficient to warrant rejection.

- Round duct joints in diameter through 60" shall be assembled and sealed as follows:

- Approved sealer is applied to the male end of the couplings and fittings. After the joint is slipped together, sheetmetal screws are placed 1/2" from the joint bead for mechanical strength. Sealer is applied to the outside of the joint extending 1" on each side of the joint bead and covering the screw heads. Plastic backed tape is immediately applied over the wet sealer.

- The duct sealer must be specifically formulated for the job of sealing the field joints for low-medium pressure systems. The sealer shall be compatible with plastic backed duct type so the two shall cure and bond together.

- Install additional balancing dampers, where required by the Air Balance Contractor, to properly adjust the systems air volumes.

INSULATION

A. SUBMITTALS

- Submit detailed Shop Drawings or descriptive literature for all insulation products to be used.

- All insulation and accessories shall have composite (insulation, jacket, and adhesive) fire and smoke hazard ratings as tested under procedure ASTM E84, NFPA 255 and UL 723, not exceeding a flame spread of 25 and smoke developed 50. All calcium silicate shall be asbestos free to comply with OSHA regulations. The above requirements apply to pipe insulation and coverings used in plenums and shafts which act as active air ducts. All other areas shall have a 25 flame spread rating and 150 smoke developed as tested above. No polyethylene insulation is acceptable.

- Materials: All insulation work shall conform to the following schedule:

Service	Type	Size	Thickness	Cons. & Exp.
Refrigerant Liquid & Suction	II	ALL	1/2"	A.P.F.
Exposed Ductwork	III	ALL	1"	A.S.J.
Concealed Ductwork	IV	ALL	2"	F.S.K.

TYPES OF COVERING

- A.S.J. All Service Jacket
F.S.K. Foil Scrim - Kraft
A.P.F. J.M. Aerotube or Armstrong ArmaFlex AP

TYPES OF INSULATION

TYPE II

- A.P.F. Armstrong ArmaFlex AP Pipe Insulation
K = .27, Density = 6.0#/ft³

TYPE III

- J.M.S. Johns-Manville Rigid "Spin-Glas" Duct Insulation
Density = 4.25#/ft³ with A.S.J. Facing

- O.V.S. Owens-Corning Rigid Vapor Seal Duct Insulation
Density = 6.0#/ft³ with A.S.J. Facing

- K.F.G. Knauf Insulation Board
Density = 3.0#/ft³ with A.S.J. Facing

TYPE IV

- J.M.M. Johns-Manville "Microlite" Flexible Fiberglass Duct Insulation,
Density = 0.6#/ft³ with F.S.K. Facing

- O.F.F. Owens-Corning Flexible Fiberglass Duct Insulation,
Density = 0.6#/ft³ with F.S.K. Facing

- K.F.G. Knauf Commercial Duct Wrapped Insulation
Density = 3/4#/ft³ with A.S.J. Facing

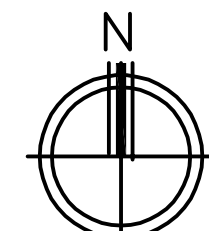
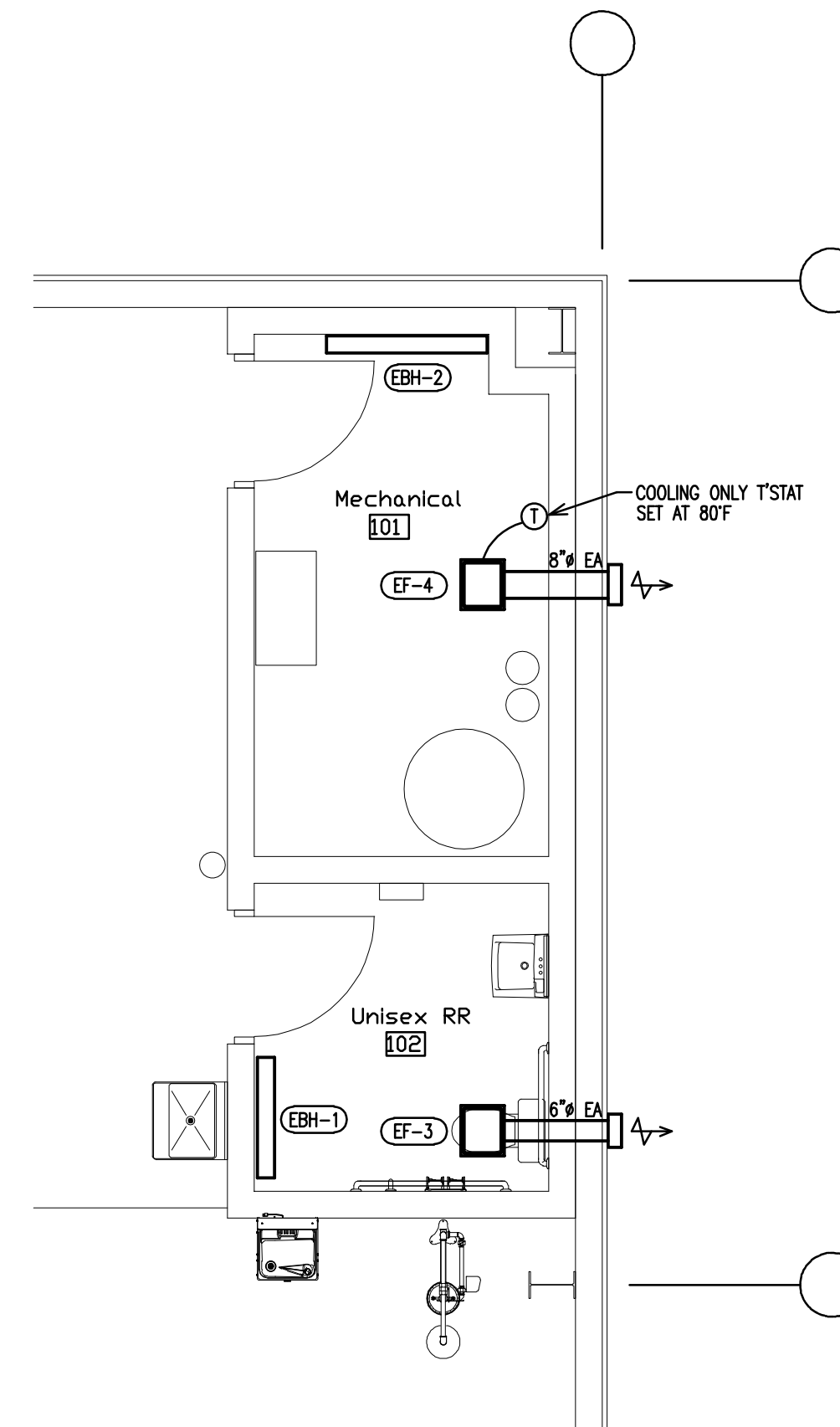
EXHAUST FAN SCHEDULE							
SYM.	MFR.	MODEL NO.	CAPACITY		MOTOR		REMARKS
			CFM	S.P.	WATTS/HP	MCA	
EF-1	GREENHECK	SBE-1H24	2906	0.25	1/3 HP	9.0	120-1-60 WALL MOUNTING W/ LOUVER, BACKDRAFT DAMPER W/ BIRDSCREEN AS REQUIRED.
EF-2	GREENHECK	SBE-1H24	2906	0.25	1/3 HP	9.0	120-1-60 WALL MOUNTING W/ LOUVER, BACKDRAFT DAMPER W/ BIRDSCREEN AS REQUIRED.
EF-3	GREENHECK	SP-A110	75	0.25	19.4 W.	0.16	120-1-60 HORIZONTAL DISCHARGE WITH GREENHECK MODEL NO. RDC-6 (6") ROUND DUCT ADAPTER, AND GREENHECK MODEL NO. WC-6 HOODED WALL CAP WITH BACKDRAFT DAMPER AND BIRDSCREEN
EF-4	GREENHECK	SP-A200	200	0.25	26.1 W.	0.47	120-1-60 HORIZONTAL DISCHARGE WITH GREENHECK MODEL NO. RDC-8 (8") ROUND DUCT ADAPTER, AND GREENHECK MODEL NO. WC-8 HOODED WALL CAP WITH BACKDRAFT DAMPER AND BIRDSCREEN

INTAKE LOUVER SCHEDULE					
SYM.	MFR.	MODEL NO.	CFM	SIZE	REMARKS
IL-2	GREENHECK	EAD-401	2906	32x44	WITH RUSKIN MOTOR-OPERATED DAMPER.

ELECTRIC BASEBOARD HEATER SCHEDULE						
SYM.	MFR.	MODEL NO.	WATTS	VOLTAGE	AMPS	REMARKS
EBH-2	Q'MARK	QMKC2514W	1000	120-1-60	8.3	WITH Q'MARK MODEL NO. TATTPAW TAMPER PROOF THERMOSTAT

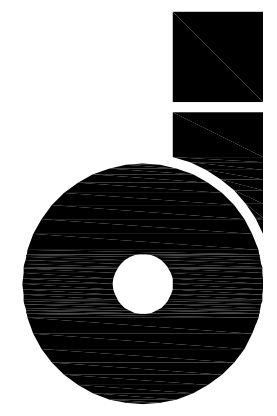
RADIANT HEATER SCHEDULE					
SYM.	MFR.	MODEL NO.	INPUT	VOLTAGE	REMARKS
RH-2	RE-VERBER-RAY	HL2-SB-40-125	125,000 BTUH	120-1-60	COMPLETE WITH REFLECTORS, TUBE HANGERS, REFLECTOR CENTER SUPPORT, REFLECTOR END CAP, 1/2" FPT GAS INLET WITH SHUT-OFF VALVE, FLEXIBLE STAINLESS STEEL SUPPLY LINE AND BLOWER MOTOR - 4.8 AMPS @ IGNITION
RH-3	RE-VERBER-RAY	HL2-SB-40-125	125,000 BTUH	120-1-60	COMPLETE WITH REFLECTORS, TUBE HANGERS, REFLECTOR CENTER SUPPORT, REFLECTOR END CAP, 1/2" FPT GAS INLET WITH SHUT-OFF VALVE, FLEXIBLE STAINLESS STEEL SUPPLY LINE AND BLOWER MOTOR - 4.8 AMPS @ IGNITION

NOTE: INSTALL HEATERS PER MANUFACTURERS INSTRUCTIONS W/ REQUIRED CLEARANCE TO COMBUSTIBLES.



Partial Floor Plan - HVAC

1/4" = 1'-0"



D M N E S S D E S I G N
I N C.
1 4 0 F A I R F A X R D
C R
M A C R O N U L T A T A H S I
W 4 3 3 0

New Garage at
Marion County Wastewater Treatment Plant
for Marion County Engineer
2160 Richland Road

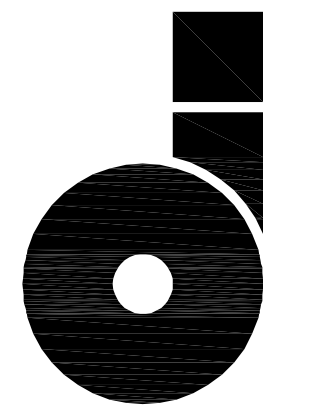
SHEET TITLE
PLUMBING

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

PROJECT NO: 23-123
CAD DWG FILE: 23-121 MW.WTP
DRAWN BY: PD
CHECKED BY: PD

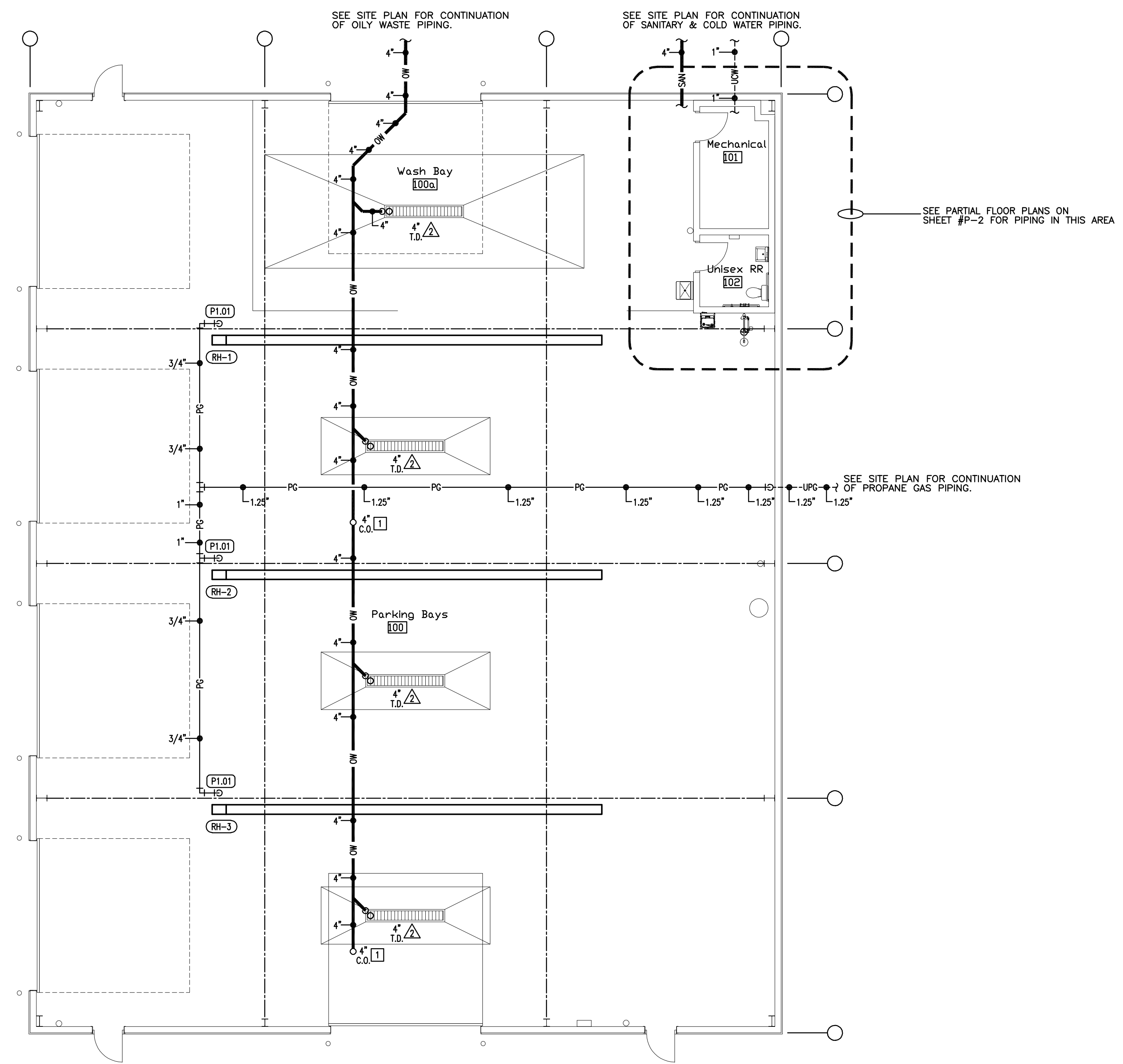
M-2

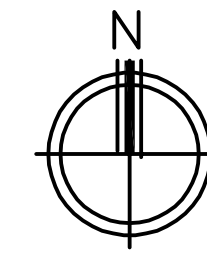
PLUMBING CODED NOTES
 (P1.01) 3/4" PROPANE GAS FROM CEILING SPACE DOWN TO RADIANT HEATER W/ GAS COCK, UNION, 6" DRIP LEG & REGULATOR AS REQUIRED.



DMNESS DESIGN
 140 FAIRFAX RD
 MACRON, OHIO 43033

**New Garage at
 Marion County Wastewater Treatment Plant
 for Marion County Engineer
 2160 Richland Road**

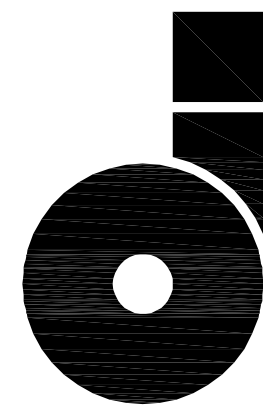


 **Floor Plan - Plumbing**
 1/8" = 1'-0"

SHEET TITLE
PLUMBING

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
CD		CONSTRUCTION DOCUMENTS

PROJECT NO: 23-123
 CAD DWG FILE: 23-121 MWWT
 DRAWN BY: PD
 CHECKED BY: PD



OMNESS DESIGN
INC.
140 FAIRFAX RD
MARIETTA, OHIO 43040
330

**New Garage at
Marion County Wastewater Treatment Plant
for Marion County Engineer
2160 Richland Road**

SHEET TITLE
PLUMBING

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
CD		DESIGN DEVELOPMENT
		CONSTRUCTION DOCUMENTS

PROJECT NO: 23-123
CAD DWG FILE: 23-121 MW/WTP
DRAWN BY: PD
CHECKED BY: PD

P-2

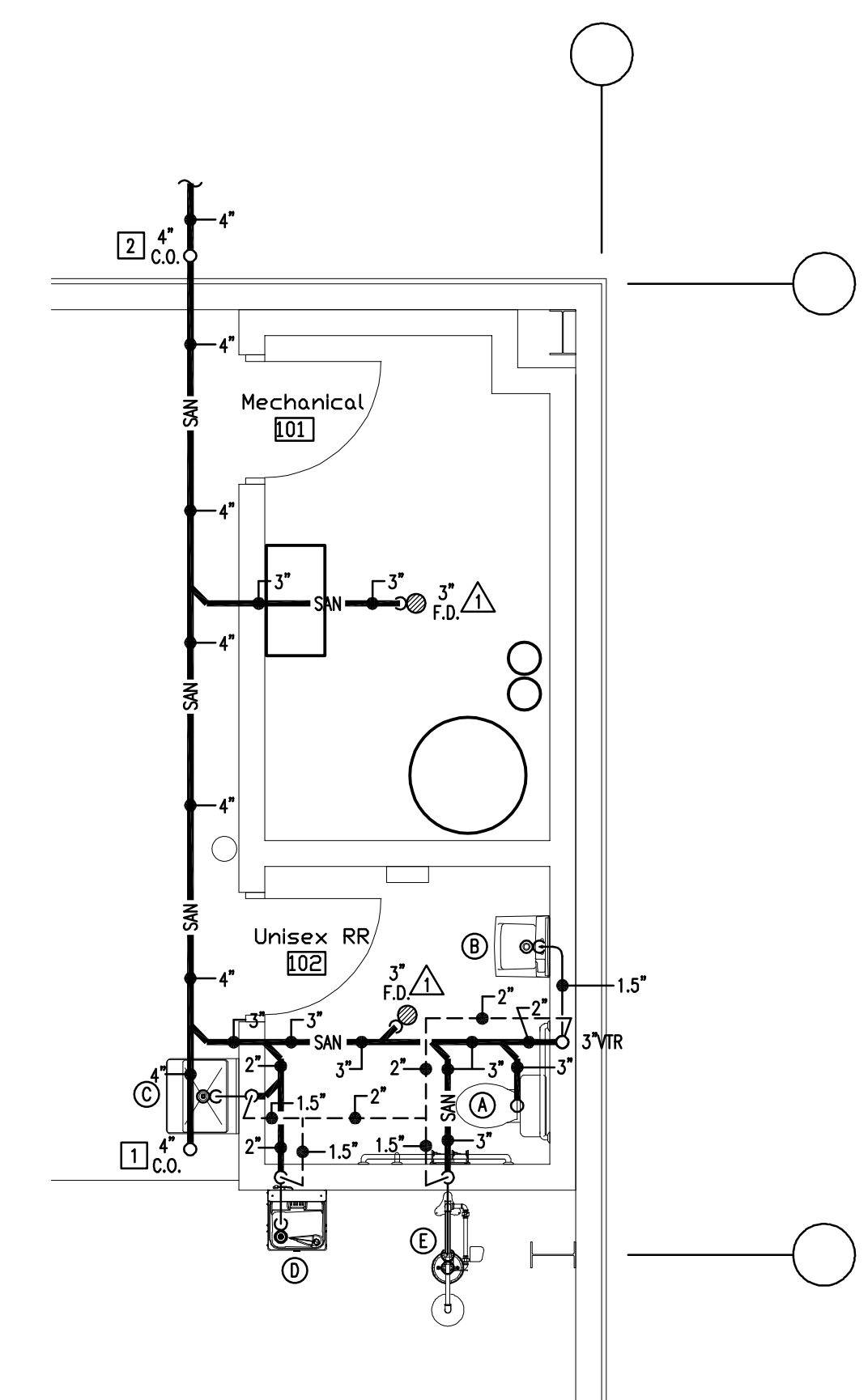
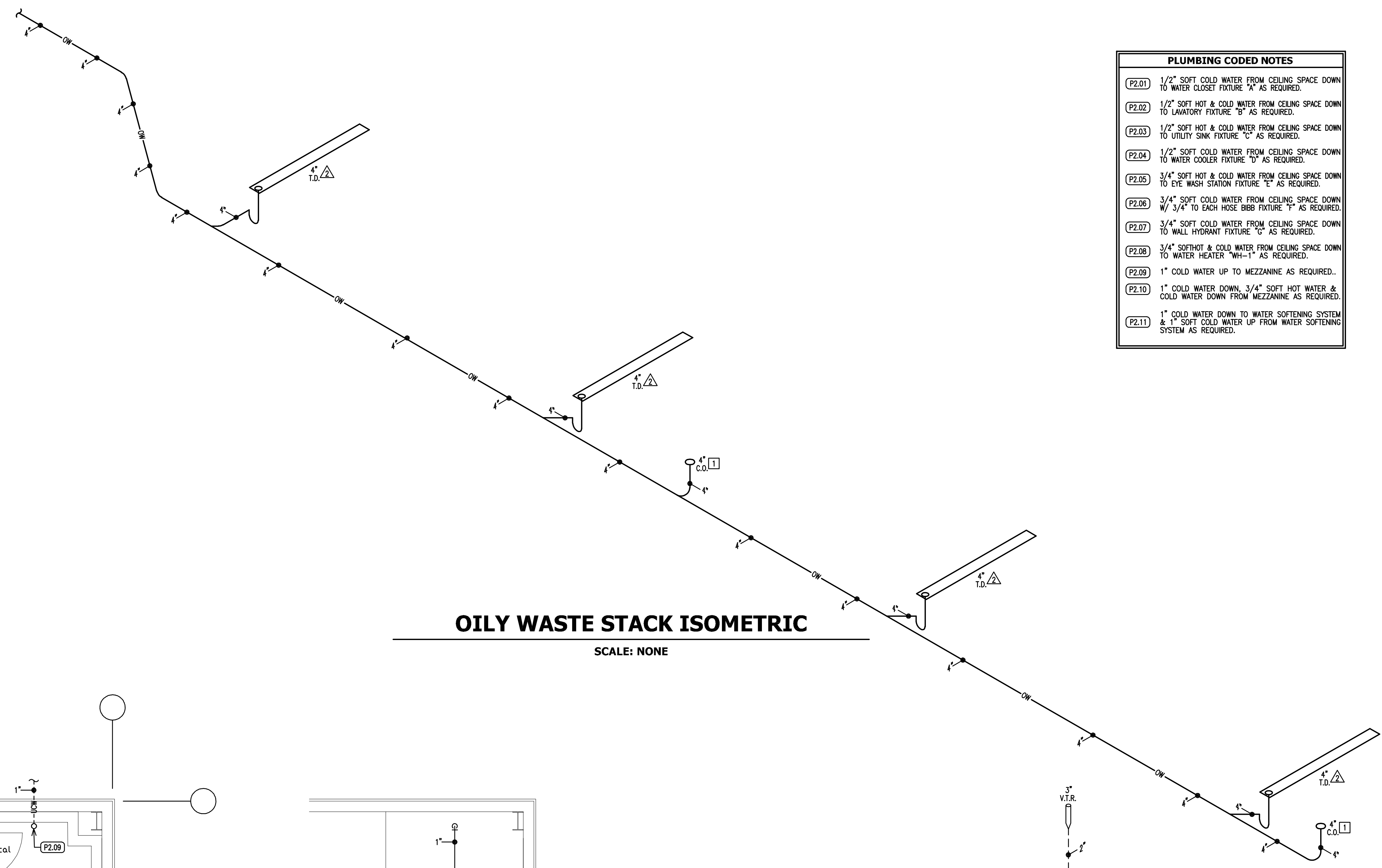
SHEET 16 OF 22

PLUMBING CODED NOTES

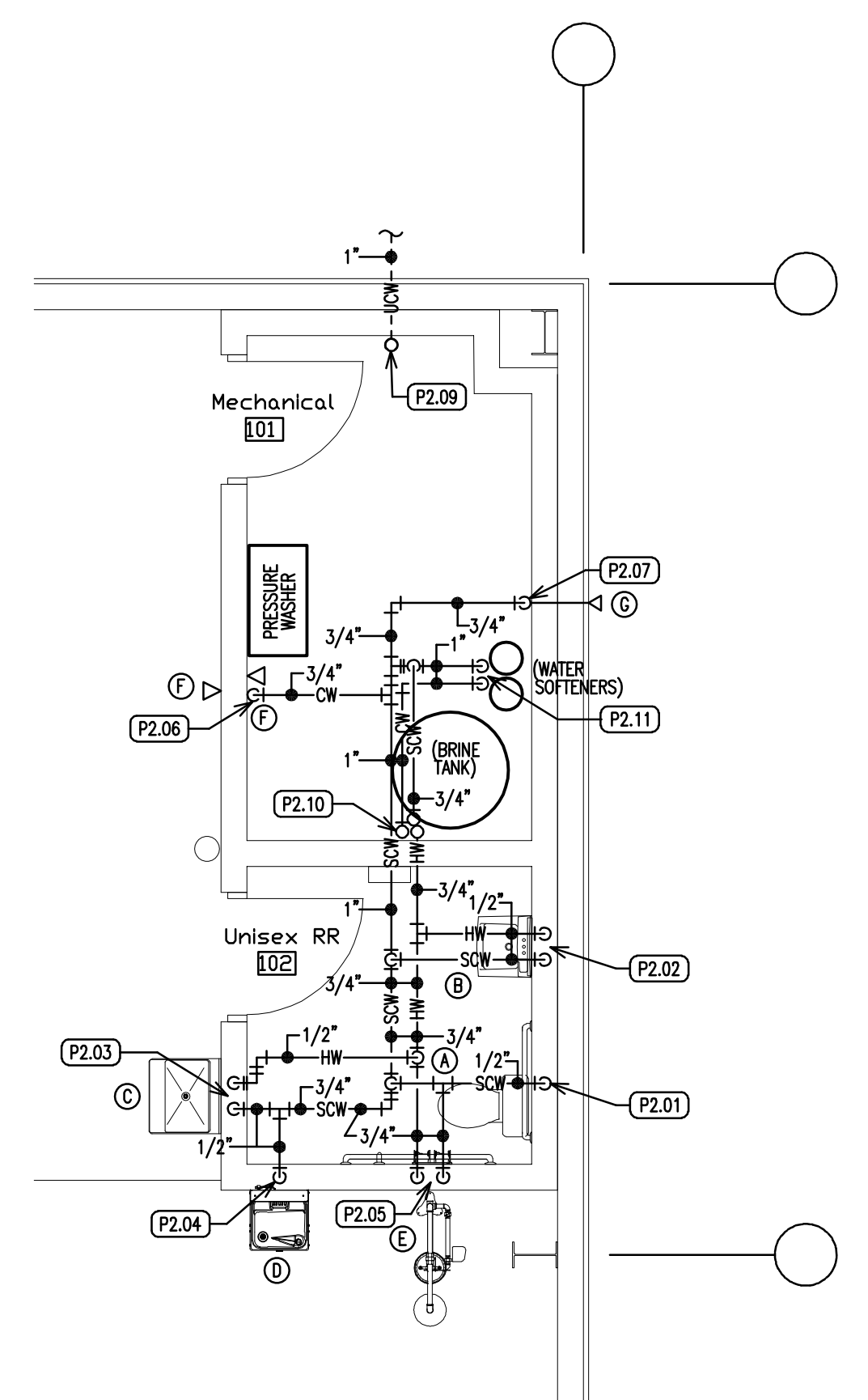
- (P2.01) 1/2" SOFT COLD WATER FROM CEILING SPACE DOWN TO WATER CLOSET FIXTURE "A" AS REQUIRED.
- (P2.02) 1/2" SOFT HOT & COLD WATER FROM CEILING SPACE DOWN TO LAVATORY FIXTURE "B" AS REQUIRED.
- (P2.03) 1/2" SOFT COLD WATER FROM CEILING SPACE DOWN TO UTILITY SINK FIXTURE "C" AS REQUIRED.
- (P2.04) 1/2" SOFT COLD WATER FROM CEILING SPACE DOWN TO WATER COOLER FIXTURE "D" AS REQUIRED.
- (P2.05) 3/4" SOFT HOT & COLD WATER FROM CEILING SPACE DOWN TO EYE WASH STATION FIXTURE "E" AS REQUIRED.
- (P2.06) 3/4" SOFT COLD WATER FROM CEILING SPACE DOWN W/ 3/4" TO EACH HOSE BIBB FIXTURE "F" AS REQUIRED.
- (P2.07) 3/4" SOFT COLD WATER FROM CEILING SPACE DOWN TO WALL HYDRANT FIXTURE "G" AS REQUIRED.
- (P2.08) 3/4" SOFTHOT & COLD WATER FROM CEILING SPACE DOWN TO WATER HEATER "WH-1" AS REQUIRED.
- (P2.09) 1" COLD WATER UP TO MEZZANINE AS REQUIRED..
- (P2.10) 1" COLD WATER DOWN, 3/4" SOFT HOT WATER & COLD WATER DOWN FROM MEZZANINE AS REQUIRED.
- (P2.11) 1" COLD WATER DOWN TO WATER SOFTENING SYSTEM & 1" SOFT COLD WATER UP FROM WATER SOFTENING SYSTEM AS REQUIRED.

OILY WASTE STACK ISOMETRIC

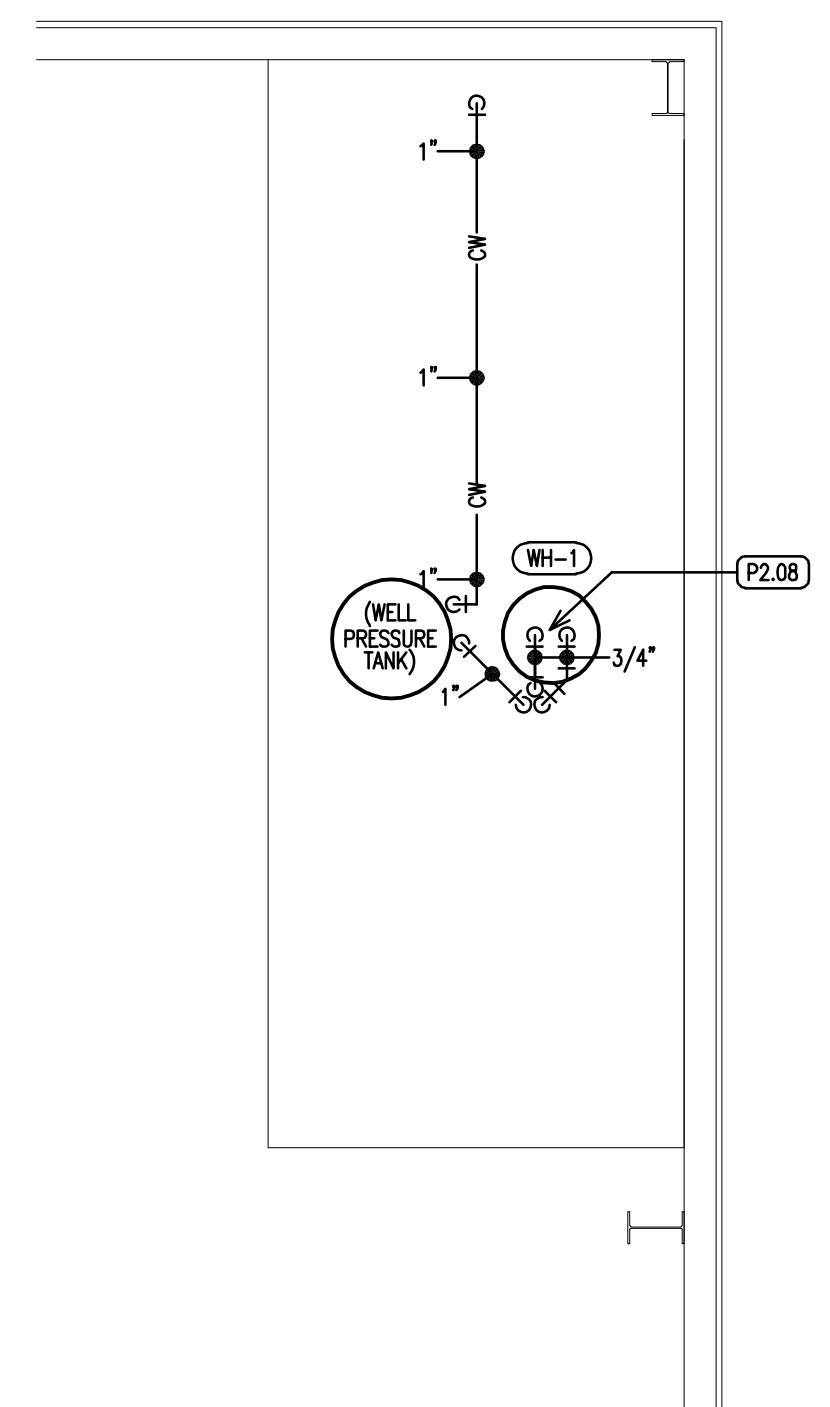
SCALE: NONE



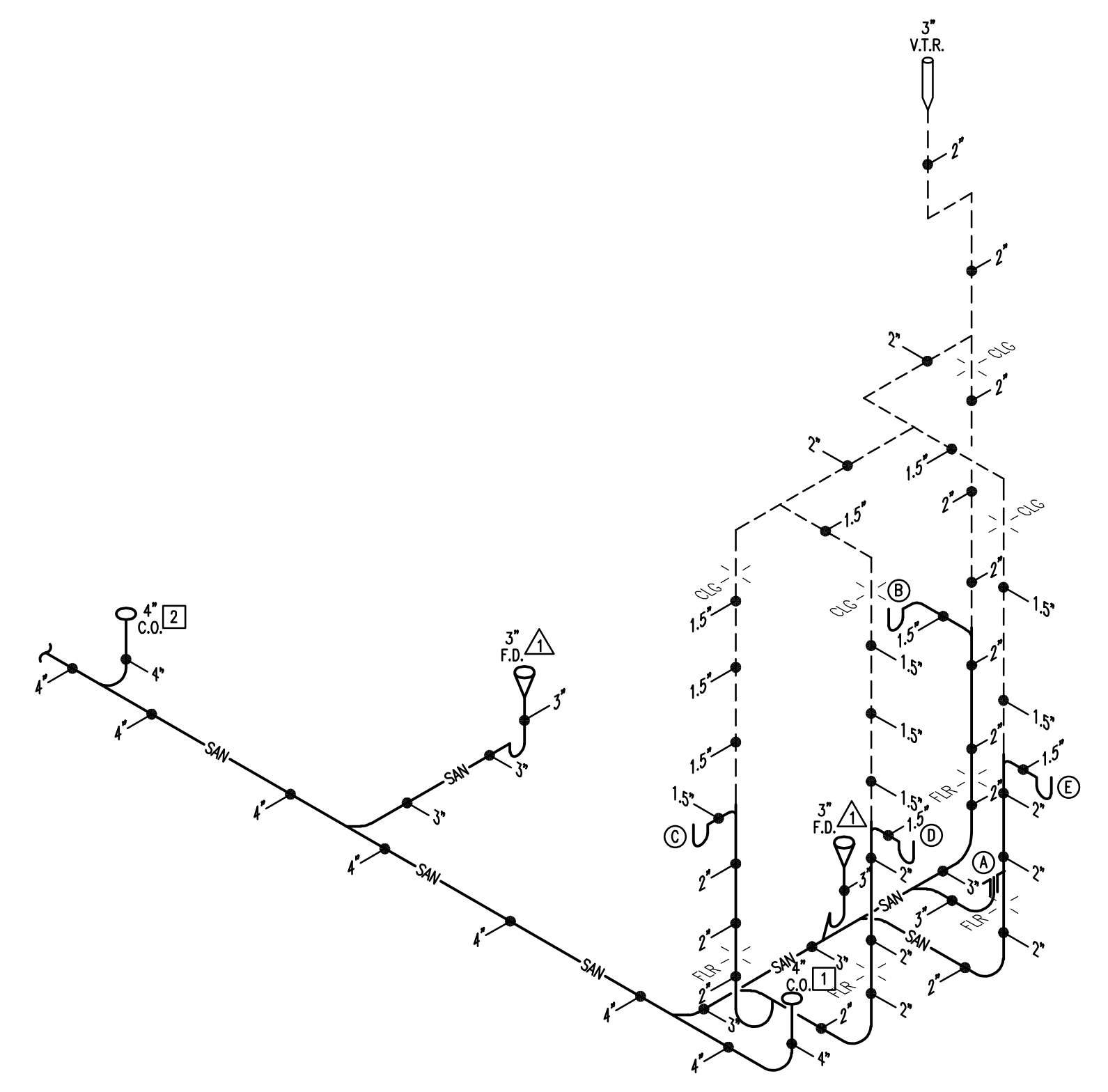
**Partial Floor Plan
- Sanitary**
1/4" = 1'-0"



**Partial Floor Plan
- Plumbing**
1/4" = 1'-0"

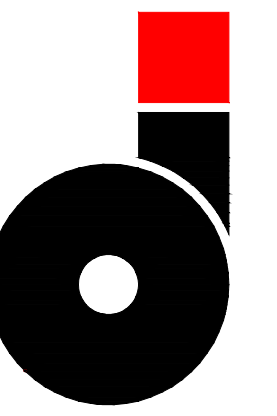


**Mezzanine Floor Plan
- Plumbing**
1/4" = 1'-0"



SANITARY STACK ISOMETRIC

SCALE: NONE



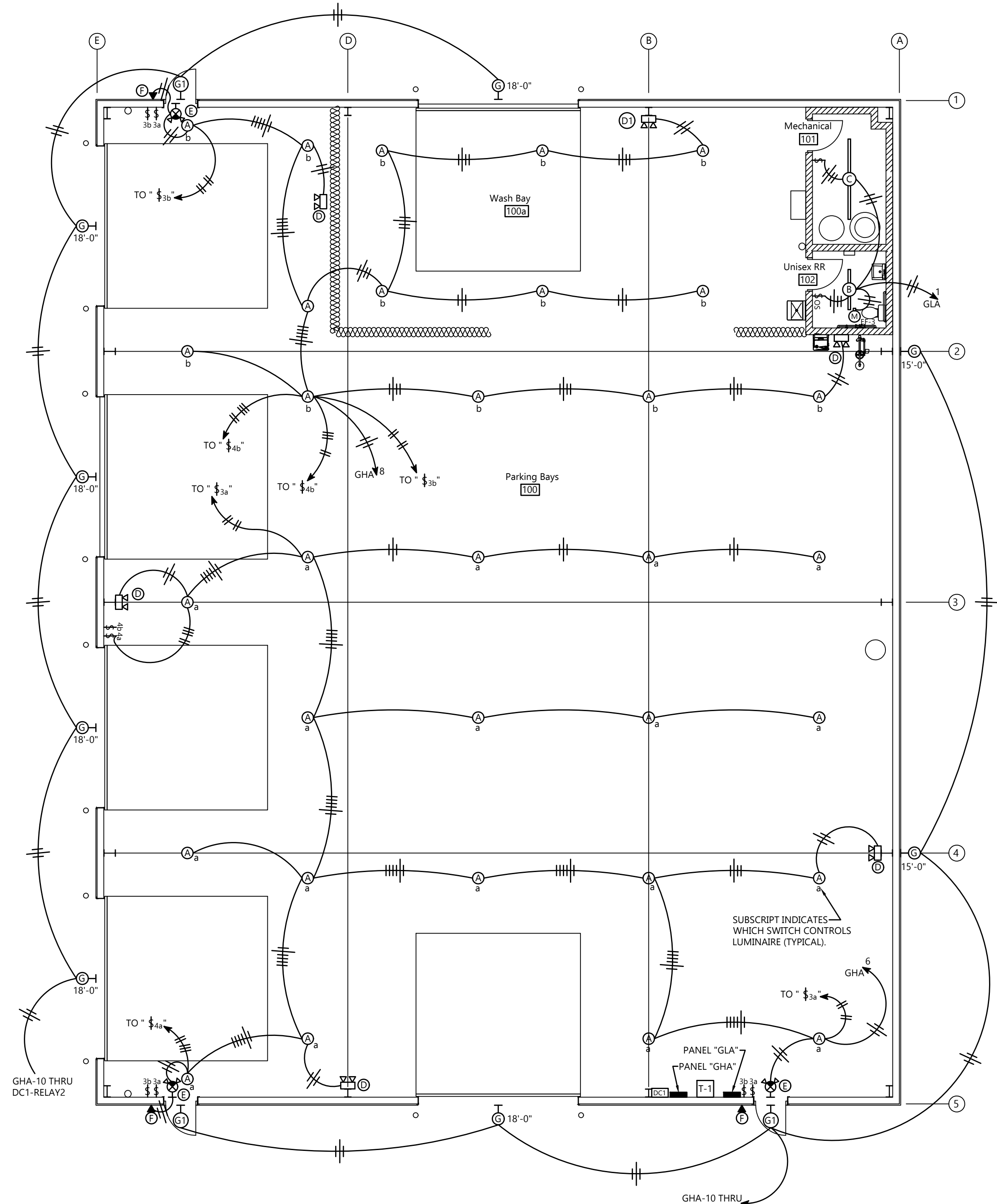
OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302

CONSULTANTS

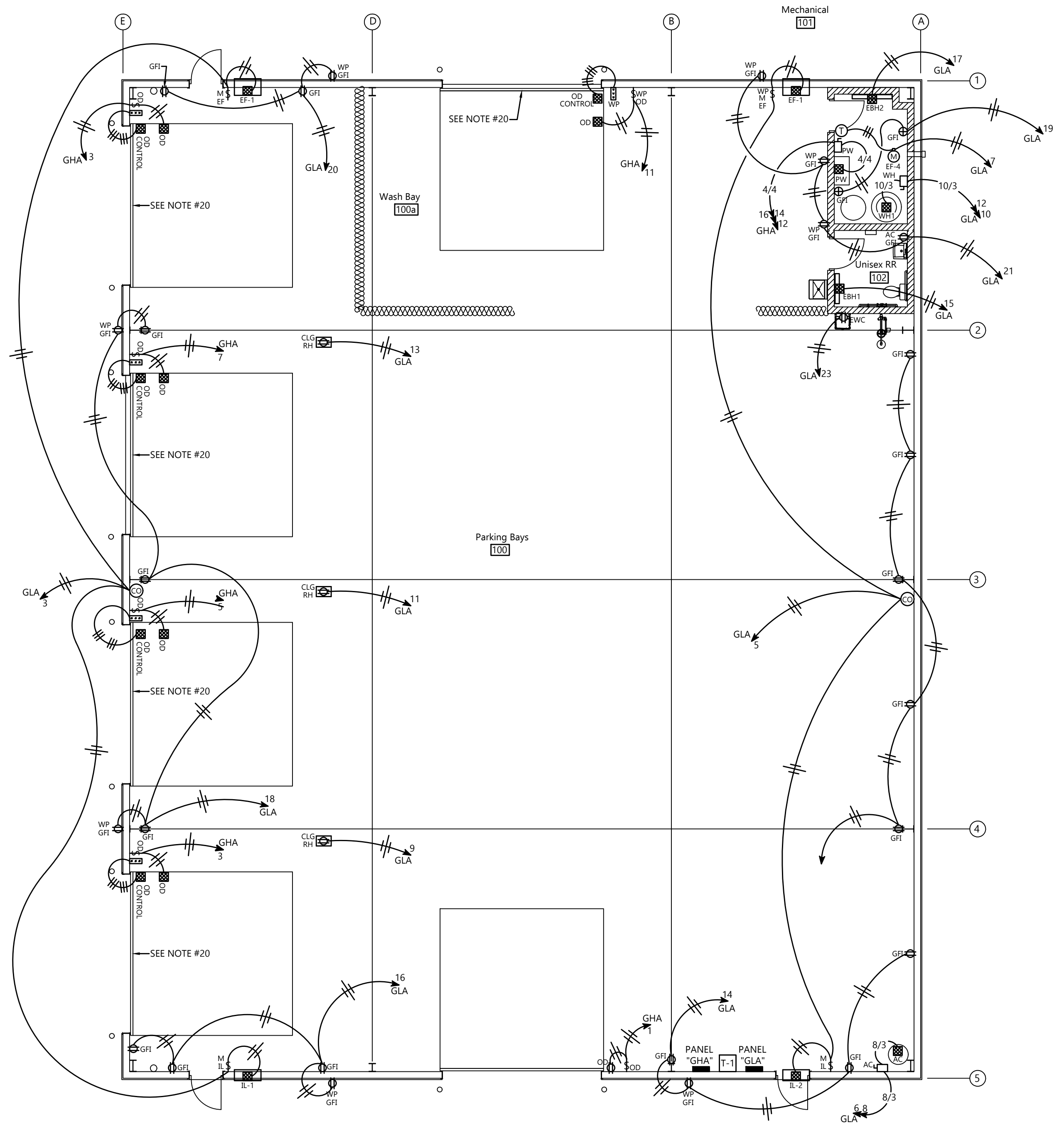
New Garage at
Marion County Wastewater Treatment Plant
for Marion County Engineer
2160 Richland Road
Marion, OH 43302

SHEET TITLE

**LIGHTING/
POWER - FLOOR PLAN**



LIGHTING - FLOOR PLAN
1/8" = 1'-0"



POWER - FLOOR PLAN
1/8" = 1'-0"

GENERAL NOTES

- ALL ELECTRIC WORK SHALL BE IN STRICT ACCORDANCE WITH CURRENT NEC, NFPA, ALL APPLICABLE NATIONAL STATE, AND LOCAL CODES AND LOCAL AUTHORITY HAVING JURISDICTION.
- CONCEAL ALL WIRING TO THE GREATEST EXTENT POSSIBLE.
- FOR PURPOSES OF CLARITY AND LEGIBILITY, DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND ALTHOUGH SIZE AND LOCATION OF EQUIPMENT ARE DRAWN TO SCALE WHEREVER POSSIBLE, CONTRACTOR SHALL VERIFY THIS INFORMATION AT THE BUILDING SITE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED PERMITS, ROUGH-IN/FINAL INSPECTION, ETC.
- ALL MATERIALS AND EQUIPMENT SHALL BE NEW, OF THE BEST GRADE, AND INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- WORKMANSHIP AND MATERIALS TO BE GUARANTEED FOR ONE YEAR FROM DATE OF FINAL ACCEPTANCE.
- ALL CONDUITS TO CONTAIN A GROUND WIRE SIZED PER TABLE 250-122.
- MINIMUM CONDUIT SIZE SHALL BE 3/4" FOR EMT OR PVC U.N.O. ALL WIRING SHALL BE INSTALLED IN POLYVINYL CHLORIDE (PVC) OR ELECTRIC METALLIC TUBING (EMT) CONDUIT. MC CABLE MAY BE USED FOR BRANCH CIRCUIT WIRING WHERE CONCEALED IN ACCORDANCE WITH NEC, BUT ALL HOMERUNS SHALL BE IN CONDUIT.
- EXTEND RACEWAYS PARALLEL AND PERPENDICULAR TO STRUCTURAL MEMBERS AND SURFACE CONTOURS AS MUCH AS IS PRACTICAL.
- ALL WIRING TO BE A MINIMUM OF #12 AWG COPPER CONDUCTOR FOR POWER AND LIGHTING CIRCUITS UNLESS NOTED OTHERWISE. ALL WIRING TO BE COPPER TYPE THHN, XHHW, OR THWN, 600-V (75°C). ALUMINUM CONDUCTORS MAY BE USED FOR FEEDERS #1 SIZE AND LARGER.
- MINIMUM 14 AWG CONDUCTOR FOR CONTROL CIRCUITS.
- MINIMUM 10 AWG FOR HOME RUN CONDUCTORS AND 20 AMP 120-V BRANCH CIRCUITS LONGER THAN 150 FEET.
- PULL ALL CONDUCTORS INTO RACEWAY AT SAME TIME.
- IDENTIFICATION TAGGING IS REQUIRED ON ALL PANELBOARD, JUNCTION BOXES, RELAYS, DISCONNECT SWITCHES, STARTERS, CONTROL PANELS, PUSHBUTTONS, AND MISC. ELECTRICAL DEVICES INSTALLED BY CONTRACTOR. USE ENGRAVED LAMACOID LABEL, 1" WIDE BY 2" LONG MINIMUM, BLACK WITH WHITE LETTERS, MINIMUM 3/4" HIGH.
- CONTRACTOR SHALL COORDINATE THE PROPER INSTALLATION OF ALL POWER WIRING AND TEMPERATURE CONTROL WIRING (INCLUDING INTERLOCKS AND STARTERS) WITH PROPER SUBCONTRACTORS AS REQUIRED FOR A COMPLETE WORKING SYSTEM.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING A PROPERLY-RATED LOCAL DISCONNECT SWITCH ON ALL ITEMS OF ELECTRICAL EQUIPMENT WHICH DO NOT HAVE AN INTEGRAL LOCAL DISCONNECTING MEANS, WHETHER OR NOT SPECIFICALLY SHOWN ON THE DRAWINGS, WHERE REQUIRED BY N.E.C. LOCAL DISCONNECT SHALL BE FUSIBLE OR HACR-RATED.
- PANEL AND ELECTRICAL EQUIPMENT LOCATIONS SHALL BE COORDINATED WITH ALL CONTRACTORS PRIOR TO INSTALLATION TO INSURE THE INSTALLATION IS IN STRICT ACCORDANCE WITH ALL WORKING SPACE & DEDICATED ELECTRICAL SPACE REQUIREMENTS PER N.E.C. ART. 110.
- EC SHALL SEAL AROUND ALL ELECTRICAL PENETRATIONS THROUGH FIRE RATED FLOORS AND WALLS.
- CONNECT ALL BATTERY-POWER EXIT AND EMERGENCY LIGHTS AHEAD OF SWITCH ON LIGHTING CIRCUIT IN AREA LOCATED.
- EC TO PROVIDE 1/2EMT CONDUIT FOR ALL OVERHEAD DOOR'S LOW VOLTAGE DEVICES AS DIRECTED BY OVERHEAD DOOR SUPPLIER. EC TO PROVIDE 1/2EMT EACH OVERHEAD DOOR LOW VOLTAGE DEVICE TO 10'-0" AFF AS DIRECTED BY OVERHEAD DOOR SUPPLIER. TERMINATE EACH END WITH PLASTIC BUSHINGS.
- ALL FIRE ALARM SYSTEM WORK AND DESIGN, IF REQUIRED, TO BE DONE BY OWNER'S FIRE ALARM SYSTEM CONTRACTOR.
- ALL TELEPHONE/DATA/CATV SYSTEM WORK AND DESIGN TO BE DONE BY OWNER'S TECHNOLOGY SYSTEM CONTRACTOR.
- ALL SECURITY, CCTV, & ACCESS CONTROL SYSTEM WORK AND DESIGN TO BE DONE BY OWNER'S SECURITY SYSTEM CONTRACTOR.
- ALL PUBLIC ADDRESS SYSTEM WORK AND DESIGN TO BE DONE BY OWNER'S PUBLIC ADDRESS SYSTEM CONTRACTOR.

MARK	DATE	DESCRIPTION
SD		SCHEMATIC DESIGN
DD		DESIGN DEVELOPMENT
CD		CONSTRUCTION DOCUMENTS

PROJECT NO: 23-123
CAD DWG FILE: 23-121 MWWT
DRAWN BY: JDP
CHECKED BY: PO

E1.1

