CONNEAUT TOWNSHIP PARK SANITARY SEWER IMPROVEMENTS



ASHTABULA 480 LAKE RD. **CONNEAUT TOWNSHIP ASHTABULA COUNTY, OHIO 44030**

MARCH 2025



NOT TO SCALE



JEFFERY MYERS - VICE PRESIDENT MICHAEL J. SMITH - PRESIDENT

MICHELLE TAYLOR - FISCAL OFFICER **KEVIN A. LEMMO - SUPERINTENDENT**

ENGINEER:

VERDANTAS, LLC, 908-2 SAHARA TRAIL YOUNGSTOWN, OHIO 44514 746-1200 746-1400 FAX CHRIS KOGELNIK. P.E.



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OHIO 811 DESIGN SERIAL NUMBER & UTILITY LIST:

#A425702351-00A AND ##A425702355-00A

- ENBRIDGE GAS OHIO (GAS)
- 2. OHIO EDISON (ELECTRIC)
- CITY OF CONNEAUT (SANITARY SEWER) 3
- CITY OF CONNEAUT (WATER) 4
- CITY OF CONNEAUT (STORM SEWER) 5.
- 1. UNDERGROUND BUILDING SERVICE UTILITY LINES ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, MAINTAINING AND REPLACING AS NECESSARY TO ENSURE CONTINUAL SERVICE TO BUILDINGS.
- 2. THE CONTRACTOR IS RESPONSIBLE TO CALL OHIO UTILITIES PROTECTION SERVICE @ 1-800-362-2764, THREE WORKING DAYS PRIOR TO CONSTRUCTION.

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BOARD OF COMMISSIONERS:

DANIEL A. SULLIVAN, JR - COMMISSIONER

ADMINISTRATION:

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	DATE					
	REVISION					
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	REVIEW	03/28/2025	AS NOTED	LIMMA	LIMMA	CMK
	ISSUED FOR:	ISSUE DATE:	SCALE:	DESIGNED BY:	DRAWN BY:	CHECKED BY:
	CONNEAUT TOWNSHIP	CONNEAUT TOWNSHIP PARK	SANITARY SEWER IMPROVEMENTS	CONNEAUT TOWNSHIP ASHTABULA COUNTY, OHIO	GENERAL - 00 SERIES	COVER SHEET
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P.E. - 70964

(<u>G</u> 1.	ENERAL NOT	ES: DE ALL LABOR, MATERIAL AND EQUIPMENT NECESSARY TO INSTALL ALL SANITARY SEWERS, MANHOLES, ETC. RAWINGS AND PROVIDE A COMPLETE OPERATIVE SYSTEM TO THE SATISFACTION OF THE OWNER.	S 1.	THE CON MAINTAIN				
2.	EROSION AND SEDIMENTATION CO	AND LANDSCAPING IN A PROFESSIONAL MANNER SHALL BE INCLUDED IN THE PAY ITEMS FOR THE PROJECT.	2.	THE CON SANITAR				
3.	CONTRACTOR MUST BE LICENSED) TO INSTALL SANITARY SEWER PLUMBING IN ASHTABULA COUNTY, OHIO.	3					
4.	CONTRACTORS MUST OBTAIN PER	RMITS TO WORK IN OR THROUGH RIGHT-OF WAYS.	5.	UTILITY, T				
5.	ALL WORK COMPLETED UNDER TH HEALTH ACT AS WELL AS LOCAL R	HIS CONTRACT SHALL COMPLY WITH THE U.S. DEPARTMENT OF LABOR AND OCCUPATIONAL SAFETY AND REGULATIONS.	А					
6.	CONSTRUCTION MEANS AND METHODS AS WELL AS THE SAFETY AND PROTECTION OF PROPERTY, WORKERS, AND THE PUBLIC IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THROUGH THE USE OF PLATING, CONSTRUCTION FENCE, AND OTHER MEANS, THE CONTRACTOR SHALL SECURE THE CONSTRUCTION SITE.							
7.	THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING AND FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING HIS WORK. NO EXTRAS WILL BE PERMITTED FOR LACK OF KNOWLEDGE OF EXISTING CONDITIONS.							
8.	DAILY CLEAN-UP AND FINAL CLEAN	N-UP SHALL BE PERFORMED BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNER.	7.	NO CONS				
9.	ALL DISTURBED SIGNS, GUARDRAIL, MAIL AND/OR PAPER BOXES, DRIVES AND DRIVE CULVERTS SHALL BE REPAIRED AND/OR REPLACED AS DIRECTED.							
10.	ALL DISTURBED AND/OR DAMAGEI REPAIRED AS DIRECTED.	D UTILITIES, STORM SEWER PIPES & APPURTENANCES, PAVEMENT, BERMS AND DITCHES SHALL BE	9. 10.	EXCAVAT				
11.	PRESERVATION OF EXISTING VEG NECESSARY TO COMPLETE CONS	ETATION SHALL TAKE PRECEDENCE OVER REMOVAL. REMOVE ONLY THOSE TREES AND SHRUBS TRUCTION.	11	SYSTEM.				
12.	ALL ROAD SURFACES, LAWNS, API IMPROVEMENT ARE TO BE RESTO	RONS, SHOULDERS, DRIVES, OR LANDSCAPING DISTURBED BY CONSTRUCTION OF ANY PART OF THIS RED COMPLETELY TO PRE-CONSTRUCTION CONDITIONS OR BETTER BEFORE ACCEPTANCE OF WORK BY	11.					
13.	THE OWNER. NO MORE THAN 50 FEET OF OPEN PILED ON THE UPHILL SIDE OF THE	-CUT TRENCHING SHALL REMAIN OPEN AT ONE TIME. MATERIALS EXCAVATED DURING TRENCHING SHALL BE TRENCH AND OUT OF THE WAY OF TRAFFIC	12.	REPRESE BEEN INS EITHER A				
14.	TRENCHES WITHIN AND ADJACEN SEE DETAILS AND PLAN NOTES.	T TO THE ROADWAY OR WITHIN THE DRIVEWAYS SHALL BE BACKFILLED WITH COMPACTED GRANULAR FILL.		PIPE FAIL RESTORA				
15.	THE CONTRACTOR SHALL MAINTA PONDING OF WATER.	IN POSITIVE DRAINAGE AT ALL TIMES AND SHALL BACKFILL AND/OR GRADE AREAS TO ELIMINATE THE	13.	ALL SANI				
16.	THE CONTRACTOR SHALL INSTALL	LINLET PROTECTION, SILT FENCE AND OTHER STORM WATER PROTECTION MEASURES TO KEEP SILT AND		BE				
17.	ALL ELEVATIONS AND DISTANCES OF ALL INFORMATION SHOWN ON	ARE BELIEVED TO BE ACCURATE. HOWEVER, THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION THE DRAWINGS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL STAKE AND ESTABLISH CONTROL FOR	14. 15.	SANITAR'				
10	SANITARY SEWER LOCATIONS, AN BROUGHT TO THE ATTENTION OF	ID SHALL INCLUDE THESE COSTS IN HIS BID. ANY DISCREPANCIES OR POSSIBLE CONFLICTS SHOULD BE THE ENGINEER AS SOON AS THEY ARE DISCOVERED.	16.	SANITAR				
18.	. ALL UTILITIES ENCOUNTERED DURING CONSTRUCTION ARE TO BE PROTECTED AND/OR HELD IN PLACE. IF DAMAGED, THE UTILITIES ARE TO BE COMPLETELY RESTORED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR WILL BE EXPECTED TO COORDINATE THIS EFFORT.							
19.	THE EXISTING UNDERGROUND UT RESPONSIBLE FOR DETERMINING OCCUR BY HIS FAILURE TO LOCAT IMMEDIATELY IF FIELD LOCATED U	ILITIES SHOWN HEREON ARE BASED UPON AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE THE EXACT LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK AND FOR ANY DAMAGES WHICH E OR PRESERVE THESE UNDERGROUND UTILITIES. THE CONTRACTOR SHALL CONTACT THE OWNER ITILITIES AFFECT THE ABILITY TO CONSTRUCT THE PROJECT PER THE PLANS.		EXCEED				
20.	THE CONTRACTOR MUST ALERT T NON-MEMBER UTILITIES MUST BE FIELD REPRESENTATIVE AND TAKI	HE UTILITIES PROTECTION SERVICE AT 1-800-362-2764 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION. CONTACTED DIRECTLY. AS THE CONTRACTOR ENCOUNTERS UTILITIES HE SHALL IMMEDIATELY NOTIFY THE E THE NECESSARY AND PROPER STEPS TO PROTECT THE FACILITY AND ASSURE/RESTORE THE	18.	TESTING				
21.	THE LOCATION OF THE UNDERGRO	OUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION	19.	PAVEMEN				
	THE FOLLOWING UTILITIES ARE F	KNOWN TO EXIST WITHIN THE LIMITS OF CONSTRUCTION:	20.	FROM TH				
	DOMINION EAST OHIO 320 SPRINGSIDE DR, SUITE 32 AKRON, OHIO 44333 (330) 664-2678	CITY OF CONNEAUT WATER DEPARTMENTCITY OF CONNEAUT WASTEWATER DEPARTMENT513 CLARK STREET1206 BROAD ST. EXT.CONNEAUT, OH 44030CONNEAUT, OHIO 44030(440) 593-7435(440) 593-7434	21.	REPLACE GRANULA				
		CALEB RZESZUTEK - WATER DISTRIBUTION MANAGER WATERDIST@CONNEAUTOH.ORG WW1@CONNEAUTOH.ORG	22.	TOP ELE PURPOSE CONTRAC				
	OHIO EDISON COMPANY 730 SOUTH AVENUE YOUNGSTOWN, OH 44502 (330) 740-7625	CITY OF CONNEAUT PUBLIC WORKS DEPARTMENT 1200 INNOVATION WAY CONNEAUT, OHIO 44030 440-593-7430 JOE DIBELL - MANAGER		AS-BUILT GRADE R DEPTHS. OTHERW				
22.	THE CONTRACTOR SHALL BE RES	PWD3@CONNEAUTOH.ORG PONSIBLE FOR SECURING A SITE FOR DISPOSAL OF ALL EXCAVATED MATERIAL THAT IS UNSUITABLE FOR	23.	INLET AN CONNEC BETWEEN				
	USE AS BACKFILL AND ALLOVER E DISPOSAL SITE AND WRITTEN PER THE DISPOSAL SITE SHALL BE INC	XCAVATED MATERIALS. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH THE LOCATION OF THE RMISSION FOR USE OF THE SITE FROM THE PROPERTY OWNER. THE COST FOR SECURING AND MAINTAINING LUDED IN THE UNIT PRICES STIPULATED FOR THE VARIOUS ITEMS IN THE BID PROPOSAL.	24.	LATERAL				
23.	THE CONTRACTOR SHALL WORK W CONDUCTING THIS PROJECT UNLE DISTURBANCE WITHIN SAID RIGHT	WITHIN DESIGNATED STREET RIGHT-OF-WAYS, UTILITY EASEMENTS, AND CONSTRUCTION EASEMENTS WHILE ESS OTHERWISE DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL MINIMIZE LAND AND PROPERTY -OF-WAYS AND EASEMENTS.	25.	LATERAL				
24.	THE CONTRACTOR SHALL NOT CO MINIMUM OF 48 HOURS IN ADVANC	MMENCE WITH ANY FOR OF CONSTRUCTION WITHOUT CONTACTING CT CONSULTANTS, INC. (330) 746-1200 A CE OF CONSTRUCTION ACTIVITY TO ARRANGE FOR OBSERVATION. IF ANY CHANGE IN WORK SCHEDULE	26.	UNLESS (WITH A W CONSTRI				
	OBSERVATION COSTS. IF NO NOTI THE TIME INCURRED.	FICATION IS MADE IN REGARDS TO CANCELLATION OF WORK, THE CONTRACTOR WILL BE CHARGED FOR	27.					
25.	ALL CONSTRUCTION ACTIVITIES S APPROVED BY THE OWNER AND T	HALL BE PERFORMED FROM 7:00 AM TO 7:00 PM MONDAY THROUGH FRIDAY, UNLESS OTHERWISE HE ENGINEER.	28.	SHALL CO				
26.	THE CONTRACTOR SHALL PRESER THE CONTRACTOR SHALL HAVE A DESTROYED OR DISTURBED LAND HAVE BEEN RESTORED.	RVE ALL CORNERSTONES, IRON PINS, CONCRETE MONUMENTS, OR ANY OTHER TYPE OF LAND MONUMENT. LL MONUMENTS IN THE PROXIMITY OF THE WORK REFERENCED. THE CONTRACTOR SHALL REPLACE MONUMENTS AND SHALL FURNISH A CERTIFICATION BY A REGISTERED SURVEYOR THAT THE MONUMENTS						
27.	THE CONTRACTOR SHALL BE RES OR REPLACE ALL DAMAGES AT HIS	PONSIBLE FOR DAMAGES TO EXISTING STRUCTURES, SUBGRADE PIPING, OR PROPERTY, AND SHALL REPAIR S OWN EXPENSE.	1.	MAINTAIN				
28.	NO BACKFILLING OF ANY TRENCHI OR PUDDLING OF BACKFILL WILL N	ES OR EXCAVATIONS WILL BE PERMITTED WITHOUT TAMPING EQUIPMENT BEING USED. FLOODING JETTING, NOT BE PERMITTED.	2					
29.	SLAG PRODUCTS WILL NOT BE PE	RMITTED FOR USE AS PIPE BEDDING OR BACKFILL MATERIAL.	<u></u>	PEDESTR				
30.	ALL EXCAVATION SHALL BE CONS OR SHALE EXCAVATION.	IDERED UNCLASSIFIED. NO ADDITIONAL COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR ROCK		PAVEMEN DURING ("MANUAL PROJECT				
			3.	THE CON DUST CO				

C:\USERS\MATHEWS\DESKTOP\DAILY WORK\3 - MARCH\3-31-25\CONNEAUT TOWNSHIP PARK\DWG\SHEETS\G_242421 - GENERAL NOTES & SYMBOLOGY.DWG - 02 GENERAL NOTES - 12/5/2024 9:25:56 AM - LIAM MATHEWS

ARY SEWER & FORCEMAIN NOTES:

ITRACTOR SHALL CONDUCT HIS OPERATIONS SO THAT THE FLOW OF ALL EXISTING SEWERS AND LATERALS WILL BE NED AT ALL TIMES.

ITRACTOR SHALL PROVIDE THE ENGINEER A SET OF AS-BUILT DRAWINGS WITH THE LOCATIONS AND ELEVATIONS OF ALL Y SEWER, GAS SERVICES, STORM SEWERS/DRAINS, WATER SERVICES AND ALL OTHER UNDERGROUND UTILITIES TERED FOR THE ENTIRE PROJECT.

THE PLANS PROVIDE FOR THE PROPOSED SEWER TO BE CONNECTED TO OR CROSS EITHER OVER OR UNDER AN EXISTING THE CONTRACTOR SHALL LOCATE THE EXISTING UTILITY, BOTH LINE AND GRADE BEFORE HE STARTS TO LAY THE ED CONDUIT. THERE WILL BE NO EXTRA PAYMENT FOR THE ABOVE WORK. COORDINATE ANY FIELD ADJUSTMENTS WITH THE ER PRIOR TO COMMENCEMENT OF THE CHANGE.

ITARY SEWER MATERIALS AND CONSTRUCTION ITEMS (MANHOLES, MAINLINES, JOINTS AND LATERALS) SHALL BE NEW AND IN ANCE WITH THE STATE OF OHIO EPA REGULATIONS AND THE ASHTABULA COUNTY SANITARY ENGINEER'S STANDARDS.

RAWINGS OF ALL MATERIALS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL, PRIOR TO PURCHASE.

THE ENGINEER'S OFFICE SEVENTY TWO (72) HOURS PRIOR TO STARTING CONSTRUCTION.

STRUCTION IS PERMITTED UNTIL WRITTEN AUTHORIZATION HAS BEEN RECEIVED FROM THE OHIO E.P.A.

ITRACTOR SHALL SCHEDULE INSPECTION WITH REGULATORY AGENCIES SUCH THAT WORK PROGRESS IS NOT AFFECTED BY ION REQUIREMENTS.

TION OUTSIDE NORMAL WORK LIMITS SHALL NOT BE COMMENCED WITHOUT APPROVAL OF THE ENGINEER.

RAINS, FOUNDATION DRAINS, AND ANY OTHER CLEAR-WATER DRAINS SHALL NOT BE CONNECTED TO THE SANITARY SEWER

AVITY SANITARY SEWER SHALL BE SDR 35 (LESS THAN 15' BURY). PVC PIPE AND FITTINGS SHALL COMPLY WITH ASTM D3034 TM D3212 JOINTS. PVC SANITARY SEWER SHALL BE INSTALLED WITH BEDDING CLASS 1 PER ASTM D-2321.

KIBLE PIPE GRAVITY SEWERS SHALL BE SUBJECTED TO A PIPE DEFLECTION TEST. THE TEST SHALL BE WITNESSED BY A ENTATIVE OF THE ENGINEER'S OFFICE AND SHALL NOT OCCUR UNTIL AT LEAST 30 DAYS AFTER THE SOIL/PIPE SYSTEM HAS STALLED. THE TEST SHALL CONSIST OF HAND PULLING A MANDREL DEVICE THROUGH THE SEWER. THE MANDREL SHALL BE VFULL CIRCLE OR 9-ARM TYPE WHICH HAS OUTSIDE DIMENSIONS WHICH ARE 95% OF THE I.D. OF THE PIPE BEING TESTED. LING THE MANDREL TEST SHALL BE REPLACED AT NO COST TO THE ENGINEER (INCLUDING EXCAVATION, SITE ATION, RE-TESTING ETC). TESTS SHALL BE IN ACCORDANCE WITH GLUMRB 33.85.

ITARY SEWER FORCEMAIN SHALL BE HDPE DR-9 (UNLESS OTHERWISE NOTED).

IATERIAL SPECIFICATION: ASTM D-2239, D-2737, D-3035, D-3350, AND F-714 EDDING SPECIFICATION: ASTM D-2321

S AND CONTRACTORS MUST HOLD TO THE GRADES AND ELEVATIONS ESTABLISHED BY THE ENGINEER.

Y SEWER MUST BE 10 FEET HORIZONTALLY (MEASURED EDGE TO EDGE) FROM WATER LINES, AND MUST MAINTAIN A 18 INCH VERTICAL CLEARANCE AT ANY WATERLINE CROSSING.

Y SEWER MUST BE 4 FEET HORIZONTALLY FROM STORM SEWERS AND MUST MAINTAIN A MINIMUM 1' VERTICAL CLEARANCE STORM SEWER CROSSINGS.

CTORS MUST CONDUCT INFILTRATION OR EXFILTRATION TESTS IN ACCORDANCE WITH OHIO EPA REGULATIONS AND IN THE CE OF A DESIGNATED REPRESENTATIVE OF THE ENGINEER. CONTRACTOR IS TO CHOOSE THE METHOD OF CONDUCTING THE TESTS AND MUST RECEIVE APPROVAL PRIOR TO STARTING CONSTRUCTION. EXFILTRATION OR INFILTRATION SHALL NOT THE OHIO EPA LIMIT OF 100 GALLONS PER INCH OF PIPE DIAMETER PER MILE OF SEWER PER DAY.

OVED BY THE ENGINEER, AIR TESTING MAY BE PERFORMED ON SANITARY PIPE (INSTEAD OF EXFILTRATION/INFILTRATION . AIR TESTING SHALL COMPLY WITH ASTM F1417 FOR PLASTIC PIPE. CONCRETE PIPE SHALL NOT BE SUBJECTED TO AIR

AR BACKFILL (SEE ITEM 130) SHALL BE USED OVER MAINS AND LATERALS WITHIN PAVEMENT LIMITS, WITHIN 5 FEET OF INT EDGE OR WITHIN THE 1:1 ZONE OF INFLUENCE OF PAVEMENT.

MATERIAL EXTENDING MORE THAN SIX (6) INCHES ABOVE THE LEVEL OF THE SIDES OF THE TRENCH, MUST BE REMOVED HE JOB SITE, ANY PAVEMENT CUT, DAMAGED OR UNDERMINED BY EXCAVATION, SHALL BE REMOVED AND REPLACED. ARY PAVEMENT REPLACEMENTS SHALL BE MAINTAINED IN GOOD CONDITION BY THE CONTRACTOR. PERMANENT EMENT MUST BE COMPLETED AS SOON AS PRACTICAL.

AR BEDDING SHALL BE USED PER SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER

VATIONS OF MANHOLES, AS INDICATED ON THE PLAN AND PROFILE ARE APPROXIMATE AND SHOULD BE USED FOR BIDDING ES ONLY. ACTUAL TOP ELEVATIONS SHALL BE MEASURED BY THE CONTRACTOR AT THE TIME OF CONSTRUCTION. THE CTOR SHOULD NOTE THAT NO EXTRAS WILL BE AWARDED NOR SHALL ANY DEDUCTION BE MADE FOR MANHOLES WHOSE DEPTHS MAY VARY FROM THOSE SHOWN ON PLANS. ADJUSTMENT OF THE CASTING HEIGHT MAY BE MADE WITH CONCRETE RINGS, MAXIMUM ADJUSTMENT IS 9". NO CHANGE IN PAYMENT WILL OCCUR DUE TO AS-BUILT DEPTHS VARYING FROM PLAN MANHOLE LIDS SHALL BE 0.5" ABOVE PAVED SURFACES AND TWO (2) INCHES ABOVE UNPAVED GROUND (UNLESS /ISE NOTED IN THE PLANS). NO EXTRAS WILL BE PROVIDED FOR FIELD ADJUSTMENT OF MANHOLES.

ND OUTLET PIPES SHALL BE JOINED TO THE MANHOLE WITH A FLEXIBLE. WATERTIGHT GASKET. OR ANY WATERTIGHT CTION ARRANGEMENT THAT COMPLIES WITH ASTM C-923 AND ALLOWS FOR DIFFERENTIAL SETTLEMENT TO TAKE PLACE N THE PIPE AND THE MANHOLE WALL.

LS SHALL BE INSTALLED AT A MINIMUM 2.0% GRADE (1/4 IN/FT) PER COUNTY STANDARDS. MINIMUM LATERAL PIPE SIZE SHALL H DIAMETER.

SEWER PIPE MUST HAVE A BELL OR SPIGOT AT THE END AND MARKED WITH A WITNESS STAKE.

OTHERWISE INDICATED ON THE PLANS, ALL LATERALS MUST BE EXTENDED TO STREET RIGHT-OF-WAY LINE AND SEALED WATERTIGHT CAP. EXACT LOCATION OF LATERAL MUST BE FIELD VERIFIED WITH THE HOME OWNER PRIOR TO RUCTION.

ON AND LENGTHS OF ALL LATERALS SHALL BE GIVEN ON ALL CUT SHEETS AND AS-BUILT DRAWINGS.

TATIC PRESSURE TESTING OF THE SANITARY FORCEMAIN WILL BE REQUIRED. HYDROSTATIC TEST FOR PVC FORCEMAINS ONFORM TO AWWA C605. MINIMUM TEST DURATION SHALL BE 2-HOURS AT 125% OPERATING PRESSURE.

TENANCE OF TRAFFIC NOTES:

NING TRAFFIC/TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH ODOT ITEM 614 "THE OHIO MANUAL OF UNIFORM TRAFFIC DEVICES". AS A MINIMUM THE CONTRACTOR SHALL SUBMIT A CONTROL PLAN FOR REVIEW AND ACCEPTANCE BY THE ER PRIOR TO BEGINNING WORK.

BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN TWO-WAY TRAFFIC, SAFE LOCAL ACCESS, VEHICULAR AND RIAN, INCLUDING PERSONS WITH DISABILITIES, TO ALL PROPERTIES WITHIN THE PROJECT LIMITS. THE CONTRACTOR WILL MAINTAIN AND SUBSEQUENTLY REMOVE ALL NECESSARY SAFEGUARDS SUCH AS BARRICADES, BARRIERS, TEMPORARY INT, LIGHTING, FLAGGERS, SIGNING AND OTHER TRAFFIC CONTROLS TO ENSURE THE SAFETY OF PERSONS AND VEHICLES. CONSTRUCTION WITHIN THE PROJECT LIMITS AS DEEMED NECESSARY BY THE ENGINEER AND IN ACCORDANCE WITH THE ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD). SUCH TIME AS THE AREA IS COMPLETELY BACKFILLED AND/OR THE IS SUBSTANTIALLY COMPLETE.

NTRACTOR WILL FURNISH AND INSTALL TRAFFIC COMPACTED SURFACE WITH ODOT 304 INCLUDING NECESSARY WATER FOR ONTROL. THE COST FOR MAINTAINING TRAFFIC, TRAFFIC COMPACTED SURFACE AND DUST CONTROL SHALL BE INCLUDED IN PRICES STIPULATED FOR THE VARIOUS ITEMS IN THE BID PROPOSAL.

- FOLLOWING NOTES FOR REQUIRED SEED MIX.

- EROSION CONTROL BEST MANAGEMENT PRACTICES (BMP'S).
- ENGINEER.
- DISCHARGING/RELEASING DEWATERING FLOWS.
- FACILITIES APPROVED FOR THAT MATERIAL.

OFF-SITE TRACKING:

THE OWNER OR ENGINEER.

PROHIBITED CONSTRUCTION ACTIVITIES:

THE CONTRACTOR SHALL NOT USE CONSTRUCTION METHODS. ACTIVITIES, OR OPERATIONS THAT MAY NEGATIVELY IMPACT THE NATURAL ENVIRONMENT OR THE PUBLIC HEALTH AND SAFETY. PROHIBITED CONSTRUCTION METHODS, ACTIVITIES, OR OPERATIONS INCLUDE BUT ARE NOT LIMITED TO:

- THE PROPERTY OWNER.
- SURFACE WATERS, OR OUTSIDE THE EASEMENT LIMITS.
- CORRIDORS, ANY WETLANDS, OR STORM SEWERS.
- THERETO.
- PERMANENT OR UNSPECIFIED ALTERATION OF THE FLOW LINE OF A STREAM.
- UNSPECIFIED LOCATIONS.
- PRIVATE, NOT PREVIOUSLY SPECIFIED BY THE ENGINEER FOR SAID PURPOSES.

CONTAMINATED SOILS

- ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- 2. OPEN BURNING IS NOT ALLOWED.
- EROSION/SEDIMENT/DUST CONTROL PRACTICES:
- BACKFILLED.

SPILL CONTROL AND CLEANUP:

- WILL BE CHARACTERIZED AND DISPOSED OF ACCORDINGLY.

TEMPORARY SEEDING:

- LAND DEVELOPMENT MANUAL.
- OF THE SITE.
- THAT WILL REMAIN INACTIVE FOR FOURTEEN (14) DAYS OR LONGER.

RESTORATION NOTES:

- ON PRIVATE PROPERTY AND/OR ON AN UNAPPROVED LANDFILL IS NOT ACCEPTABLE.
- MEANS (SETTLING BASINS, FILTERS, ETC.).

EROSION & SEDIMENTATION CONTROL NOTES:

CONTRACTOR SHALL RESTORE ANY DISTURBED AREAS CAUSED FROM CONSTRUCTION TO PRE-CONSTRUCTION CONDITIONS OR BETTER. FOR DISTURBED LAWN AREAS, THE CONTRACTOR SHALL INSTALL COMPACTED, SCREENED, IMPORTED TOPSOIL TO PROVIDE A SMOOTH TRANSITION FROM THE ROAD SURFACE TO THE NON-PAVED SURFACE. SEE STANDARD DETAILS AND THE

1.1. ALL GRASS AREAS ARE TO BE RESTORED UNLESS OTHERWISE SHOWN ON THE CONTRACT DRAWINGS.

1.2. THE COMPOSITION OF SEED MIXTURE SHALL CONFORM TO THE PROJECT SPECIFICATIONS FOR SEEDING.

EROSION CONTROL SHALL CONSIST OF TEMPORARY CONTROL MEASURES AS DETAILED ON THE PLANS OR ORDERED BY THE GOVERNING AGENCY DURING THE LIFE OF THE CONTRACT TO CONTROL SOIL EROSION AND SEDIMENTATION THROUGH USE OF

TEMPORARY EROSION AND SEDIMENT CONTROL ITEMS SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF ANY CLEARING OR EARTHWORK OPERATIONS. CONDITIONS THAT DEVELOP DURING CONSTRUCTION THAT WERE NOT FORESEEN DURING DESIGN STAGE THAT REQUIRE ADDITIONAL OR MODIFIED TEMPORARY OR PERMANENT BMP'S SHALL BE APPROVED BY THE

TRENCH DEWATERING OR DEWATERING GROUND WATER WHICH CONTAINS SEDIMENT SHALL PASS THROUGH AN EFFECTIVE SEDIMENT CONTROL DEVICE. THIS MAY INCLUDE DEWATERING INTO SUMP PIT, FILTER BAG, OR EXISTING VEGETATED UPSLOPE AREA. SEDIMENT LADEN WATER SHALL NOT BE DISCHARGED TO STREAMS OR THE STORM SEWER SYSTEM. SEE ENVIRONMENTAL GUIDELINES AND REQUIREMENTS FOR ADDITIONAL STORAGE, TESTING, AND DISPOSAL REQUIREMENTS PRIOR TO

CONTAINERS SHALL BE PROVIDED FOR COLLECTION OF ALL WASTE MATERIAL INCLUDING CONSTRUCTION DEBRIS, TRASH, PETROLEUM PRODUCTS AND ANY HAZARDOUS MATERIALS TO BE USED ON-SITE. ALL WASTE MATERIAL SHALL BE DISPOSED OF AT

THESE NOTES AND DRAWINGS ARE INTENDED TO SERVE AS BASIC GUIDELINES. ALL EROSION CONTROL PRACTICES SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE ODNR RAINWATER AND LAND DEVELOPMENT MANUAL

ADDITIONAL EROSION CONTROL BMP'S MAY BE MANDATED BY THE GOVERNING AGENCY AT ANY TIME DURING THIS PROJECT AS UNFORESEEN SITUATIONS MAY ARISE THAT WARRANT FURTHER EROSION AND SEDIMENT CONTROL PRACTICES.

CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT ALL INGRESS AND EGRESS LOCATIONS TO ELIMINATE OFF-SITE VEHICLE TRACKING OF SEDIMENTS. SEDIMENTS SHALL BE REMOVED FROM ROADWAYS AT LEAST DAILY, OR MORE OFTEN IF REQUESTED BY

DISPOSING OF EXCESS OR UNSUITABLE EXCAVATED MATERIAL IN WETLANDS OR FLOOD PLAINS, EVEN WITH THE PERMISSION OF

INDISCRIMINATE, ARBITRARY, OR CAPRICIOUS OPERATION OF EQUIPMENT IN ANY STREAM CORRIDORS, ANY WETLANDS, ANY

PUMPING OF SEDIMENT-LADEN WATER FROM TRENCHES OR OTHER EXCAVATIONS INTO ANY SURFACE WATERS, ANY STREAM

DISCHARGING POLLUTANTS SUCH AS CHEMICALS, FUELS, LUBRICANTS, BITUMINOUS MATERIALS, RAW SEWAGE AND OTHER HARMFUL WASTE INTO OR ALONGSIDE RIVERS, STREAMS, IMPOUNDMENTS OR INTO NATURAL OR MAN-MADE CHANNELS LEADING

6. REMOVAL OF TREES AND BUSHES, OR DAMAGING VEGETATION OUTSIDE THE LIMITS OF THE CONSTRUCTION AREA.

DISPOSAL OF TREES, BRUSH AND OTHER DEBRIS IN ANY STREAM CORRIDORS, ANY WETLANDS, ANY SURFACE WATERS, OR AT

STORING CONSTRUCTION EQUIPMENT AND VEHICLES AND/OR STOCKPILING CONSTRUCTION MATERIALS ON PROPERTY, PUBLIC OR

IF SUBSTANCES SUCH AS OIL, DIESEL FUEL, HYDRAULIC FLUID, ANTIFREEZE, ETC. ARE SPILLED, LEAKED, OR RELEASED ONTO THE SOIL. THE SOIL SHOULD BE DUG UP AND DISPOSED OF AT LICENSED SANITARY LAND FILL OR OTHER APPROVED PETROLEUM CONTAMINATED SOIL REMEDIATION FACILITY, (NOT A CONTRUCTION/DEMOLITION DEBRIS LANDFILL), NOTE THAT STORM WATER RUN OFF ASSOCIATED WITH CONTAMINATED SOILS ARE NOT AUTHORIZED UNDER OHIO EPA'S GENERAL STORM WATER PERMIT

DISTURBED LAND SHALL BE TEMPORARILY STABILIZED BY SEEDING AND/OR MULCHING.

BACKFILL TRENCHES IMMEDIATELY AFTER EXCAVATION. SEED AND MULCH TRENCHES WITHIN TWO WEEKS AFTER TRENCHES ARE

ON-SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS THAT ARE CLEARLY LABELED. PREFERABLY, THE CONTAINERS WILL BE STORED IN A COVERED TRUCK OR TRAILER THAT PROVIDES SECONDARY CONTAINMENT FOR THE PRODUCTS.

BULK STORAGE TANKS HAVING A CAPACITY OF GREATER THAN 55 GALLONS WILL BE PROVIDED WITH SECONDARY CONTAINMENT.

PERSONNEL ON-SITE WILL BE MADE AWARE OF CLEANUP PROCEDURES AND THE LOCATION OF SPILL CLEANUP EQUIPMENT

4. ALL SPILLS WILL BE CLEANED UP USING APPROPRIATE ABSORBENT MATERIALS AND EXCAVATION AS NECESSARY. CLEANUP WASTE

SEDIMENT CONTROL SHALL BE ACCOMPLISHED BY SEEDING AND STRAW MULCHING ALL DISTURBED AREAS IMMEDIATELY UPON COMPLETION OF EXCAVATION OR FILL AND FINISH GRADING IN ACCORDANCE WITH SPECIFICATIONS OF THE ODNR RAINWATER AND

DISTURBED AREAS THAT WILL REMAIN INACTIVE FOR A PERIOD OF TWENTY-ONE (21) DAYS OR LONGER SHALL BE STABILIZED WITH SEEDING AND STRAW MULCHING, OR OTHER APPROPRIATE MEANS, WITHIN SEVEN (7) DAYS AFTER EARTH MOVING CEASES. PERMANENT SOILS STABILIZATION SHALL BE INSTALLED WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION

STABILIZE AREAS WITHIN FIFTY (50) FEET OF ANY STREAM OR WETLAND WITHIN TWO (2) DAYS ON ALL INACTIVE DISTURBED AREAS

SEEDED AREAS SHALL BE INSPECTED AND WHERE THE SEED HAS NOT PRODUCED 80% COVER SHALL BE RESEEDED AS NECESSARY BY THE CONTRACTOR. AREAS SHALL BE STABILIZED WITH STRAW MULCH WHEN SUB-CONDITIONS PROHIBIT SEEDING.

1. ALL MATERIALS DISPOSED OF OFF-SITE MUST BE DISPOSED OF IN AN ENVIRONMENTALLY SOUND FASHION. DISPOSING OF DEBRIS

2. ALL DEWATERING FLOWS ARE TO BE KEPT FREE OF SILT, SEDIMENT, DEBRIS AND OTHER POLLUTANTS THROUGH APPROPRIATE



GENERAL ABBREVIATIONS:

AR	AIR RELEASE VALVE
AV	AIR & VACUUM VALVE
BA	BALL VALVE
BFV	BUTTERFLY VALVE
BK	BACKPRESSURE VALVE
BM	BENCH MARK
BP	BACKFLOW PREVENTER
СВ	CATCH BASIN
CL	CENTER LINE
CO	CONE VALVE
CPP	CORRUGATED PLASTIC PIPE
CV	CHECK VALVE
DIP	DUCTILE IRON PIPE
E	EASTING
EG	EXISTING GRADE
EL	ELEVATION
EX	EXISTING
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLANGED
FRP	FIBERGLASS REINFORCED PLASTIC
FTG	FITTING
GL	GLOBE VALVE
GS	GALVANIZED STEEL
GV	GATE VALVE
HDPE	HIGH-DENSITY POLYETHYLENE PIPE
KG	KNIFE GATE VALVE
KN	KNIFE VALVE
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT

SITE SYMBOL LEGEND:

<u>PR:</u>

<u>EX:</u>

MUD VALVE
NORTHING
OVERHEAD
PLUG DRAIN VALVE
PRESSURE RELIEF
PRESSURE REGULATOR
PINCH VALVE
PROPOSED
PRESSURE REDUCING VALVE
PRESSURE TEMPERATURE RELIEF
PLUG VALVE
POLYVINYL CHLORIDE PIPE
RIGHT OF WAY
RESTRAINED JOINT
SANITARY
SCHEDULE
SOIL BORING
STANDARD DIAMETER RATIO
STAINLESS STEEL
STATION
STEEL PIPE
STORM
SURGE VALVE
SOLENOID VALVE
IYPCIAL
UNDERGROUND
WATER VALVE

Sheet Numb 1 2 3 5 7 8 9 10 11 12 13 14

SITE LINE LEGEND:

<u>EX:</u>

ΜV

OH

PD

PR

PT

ΡV PVC R/W

R.I SAN SCH

SB

SS

SDR

STA

STL

STM

SU

SV

TYP

UG

VB WAT

WV

EX. RW RIGHT-OF-WAY POST, MAILBOX MB PROPERTY LINE POST, SIGN ---- CONTOURS - MAJOR POST, SIGN - DOUBLE 0 -----648-----CONTOURS - MINOR _____ SLOPE LINE 00 POST, SIGN - DUAL SLOPE - BREAKLINE GEOTECH - SOIL BORING -SLOPE - TOP ______ SLOPE - TOE BUSH - ----- WATER CENTERLINE TREE, DECIDUOUS 603 WATER EDGE _____ EDGE OF ROAD TREE, EVERGREEN — X — — X — — X — X — X — FENCE - GENERAL TREE, STUMP — o — o — o — o — o — o — FENCE - CHAIN LINK NAIL - MAG PIN - IRON – ELEC — ELEC ELECTRIC LINE ELEC-OH ELEC-OH ELEC-OH ELECTRIC LINE - OH PIPE - IRON 0 _____ ELEC-UG ______ ELEC-UG _____ ELECTRIC LINE - UG SPIKE - 🔺 -_____ GAS _____ GAS _____ GAS _____ GAS LINE GM GAS METER _____ GS _____ GS _____ GS _____ GS _____ GAS SERVICE GM _____ SAN _____ SAN _____ SAN _____ SAN _____ SAN ITARY LINE GAS VALVE ______ STM ______ STM ______ STORM LINE _____ WAT _____ WAT _____ WAT _____ WATER LINE GAS VENT \odot Þ POLE - ELECTRIC (POWER) <u>PR:</u> UTIL-OH UTIL-OH UTILITY LINE - OH POLE - GENERAL UTIL-UG UTIL-UG UTIL-UG UTILITY LINE - UG POLE - GUY US UTILITY SERVICE ----- US-OH ------- US-OH ------ US-OH ----- UTILITY SERVICE - OH POLE - GUY ANCHOR ----- US-UG ------- US-UG ------ US-UG ----- UTILITY SERVICE - UG TEL-OH TEL-OH TEL-OH TEL-OH POLE - LIGHT C TEL-UG TEL-UG TEL-UG TEL-UG SANITARY CLEAN-OUT 0 ELEC-OH ELEC-OH ELEC-OH ELECTRIC LINE - OH ELEC-UG ELEC-UG ELEC-UG ELECTRIC LINE - UG SANITARY MANHOLE - 48" (\mathbb{S}) GAS GAS GAS GAS LINE \odot SANITARY VENT GS GAS SERVICE SANITARY LINE CATCH BASIN - 2X2 E CURB INLET - 2X3 STORM LINE WAT WAT WAT • STORM CLEAN-OUT STORM DRAIN * UTILITY WITH CASING PIPE \bigcirc ______ - _____ CENTERLINE STORM MANHOLE - 48" ------ DRIVE CENTERLINE WATER HYDRANT, FDC **O** ----- PAVEMENT SAWCUT WATER HYDRANT, FIRE WATER VALVE W/TEXT ----- o ----- o ----- o ----- o ----- FENCE - CHAIN LINK CUT AND CAP EXISTING LINE AND FILL WITH CONCRETE APPROXIMATELY 3-LF

_____ - ____ - ____ - ____ - ____ CENTERLINE ---- PERMANENT CONSTRUCTION EASEMENT LINE (PCE) TEMPORARY CONSTRUCTION EASEMENT LINE (TCE)

STORM CULVERT LINE EDGE OF PAVEMENT

	Sheet List Table						
ber	Sheet Title	Sheet Description					
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OUTSIDE OF WET WELL \mathbf{i} COLLAR SST FLOAT BRACKET -----DUPLEX JUNCTION BOX-STRUCT. PLASTIC

PIPE BOLLARDS (TYP 4) 🔨 OFFSET 2' FROM

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8–1–18	ADDED HVH/HVS TO PRINT	COMPANY CONFIDENTIAL: IN WRM	Pentair Pump Group		P	ROJEC	CT NO).).	•
03-13-08 DATE ESS OTHE MENSIONS	NEW DRAWING REVISION DESCRIPTION ERWISE SPECIFIED: ARE IN INCHES SCA	WRM BY NOT VF	ATION-TYPICAL TLPRO w/J-BOX		s 2		NAMI -02	₌ 2	
AL ● ± .010" (± .005")• 30'	● FRACTIONAL ● SUA UP TO 12" ± 1/32" 12" & UP ± 1/16" PLOT S ANGLES ± 2* 1−	VING WRAWN BY DATE VING WRAM 03-13- SCALE PART NUMBER	CHECKED BY 1 SHEET 1 -08 DRAWING NUMBER REV. 15181_002_M B	5	бнеет 9	-		₀ 14	

- SUBSOILING SHALL OCCUR WHEN SOIL MOISTURE IS LOW ENOUGH TO 1 ALLOW THE SOIL TO CRACK OR FRACTURE. SUBSOILING IS NOT PERMITTED ON SLIP-PRONE AREAS.
- THE SEED BED SHALL BE PREPARED BY APPLYING AGRICULTURAL 2. GROUND LIMESTONE OR FERTILIZER AS RECOMMENDED BY A SOIL TEST. IN LIEU OF A SOIL TEST, APPLY LIME AT 2 TONS/AC. OR FERTILIZER AT 500 LB/AC. OF 10-10-10 OR 12-12-12 ANALYSIS. LIME AND FERTILIZER SHALL BE WORKED INTO THE SOIL TO A DEPTH OF 3".
- APPLY SEED UNIFORMLY ON FIRM, MOIST SEED BED BETWEEN MARCH 1 AND MAY 31 OR AUGUST 1 AND SEPTEMBER 30. TILLAGE FOR SEEDBED PREPARATION SHALL OCCUR WHEN THE SOIL IS DRY ENOUGH TO CRUMBLE AND NOT FORM RIBBONS WHEN COMPRESSED BY HAND. SEEDING SHOULD NOT BE APPLIED BETWEEN OCTOBER 1 AND NOVEMBER 20 BECAUSE SEEDS MAY GERMINATE, BUT WILL NOT SURVIVE THE WINTER. IF SEEDING MUST OCCUR, INCREASE THE SEEDING RATE BY 50% AND ANCHOR. APPLY ADDITIONAL MULCH AND IRRIGATION AS REQUIRED TO ENSURE GERMINATION.
- MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING. 4
- SEEDING SHALL INCLUDE IRRIGATION TO ESTABLISH VEGETATION DURING DRY OR HOT WEATHER OR ON ADVERSE SITE CONDITIONS.
- SEEDING SHALL NOT BE CONSIDERED ESTABLISHED FOR AT LEAST 1 FULL YEAR FROM THE TIME OF SEEDING. DURING THIS PERIOD INSPECT FOR SOIL EROSION OR VEGETATION LOSS AND REPAIR BARE OR SPARSE AREAS, FILL GULLIES, RE-FERTILIZE, RE-SEED AND RE-MULCH AS NEEDED.
- ADEQUATE PERMANENT VEGETATION SHALL BE GROUND COVER DENSE ENOUGH TO COVER 80% OF THE SOIL SURFACE BASED ON VISUAL INSPECTION.

PERMANENT SEEDING FERTILIZATION AND MOWING CHART							
MIXTURE	FORMULA	LB/ AC.	TIME	MOW			
CREEPING RED FESCUE DOMESTIC RYEGRASS KENTUCKY BLUEGRASS	10-10-10	500	FALL, YEARLY, OR AS NEEDED	<u>></u> 3"			
TALL FESCUE	10-10-10	500					
TURF-TYPE FESCUE	10-10-10	500		<u>~</u> 4~			
CROWN VETCH FESCUE	0-20-20	400	SPRING, AND	DO			
FLAT PEA FESCUE	0-20-20	400	ESTABLISHED	MOW			

PERMANENT SEEDING SPECIES SELECTION								
SEED MIX	SEED RATE LB/AC.	NOTES:						
	GENERAL USE							
CREEPING RED FESCUE DOMESTIC RYEGRASS KENTUCKY BLUEGRASS	20 - 40 10 - 20 20 - 40	FOR CLOSE MOWING AND WATERWAYS WITH <2.0 FT./SEC. VELOCITY						
TALL FESCUE	40 - 50							
TURF-TYPE FESCUE	90							
STEEP I	BANKS OR CUT	SLOPES						
TALL FESCUE	40 - 50							
CROWN VETCH TALL FESCUE	10 - 20 20 - 30	DO NOT SEED LATER THAN AUGUST						
FLAT PEA TALL FESCUE	20 - 25 20 - 30	DO NOT SEED LATER THAN AUGUST						
ROAD	DITCHES AND S	WALES						
TALL FESCUE	40 - 50							
TURF-TYPE FESCUE KENTUCKY BLUEGRASS	90 5							
	LAWN							
KENTUCKY BLUEGRASS PERENNIAL RYEGRASS	100 - 120 100 - 120							
KENTUCKY BLUEGRASS CREEPING RED FESCUE	100 - 120 100 - 120	FOR SHADED AREAS						

PERMANENT SEEDING NOTES

SEEDING CHARTS

- 1. THE SEED BED SHALL BE PULVERIZED AND LOOSE TO ENSURE THE SUCCESS OF ESTABLISHING VEGETATION.
- ANALYSIS
- AND LIGHTLY TAMPING INTO PLACE.
- MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING
- AREAS, FILL GULLIES, RE-FERTILIZE, RE-SEED AND RE-MULCH AS NEEDED.

- 1. MAXIMUM DRAINAGE AREA =1/2 ACRE.
- BERMS REQUIRED FOR ALL INSTALLATIONS
- 4. TO REMAIN PERMANENTLY.

NOTES:

- THAN 150 MICRONS.
- PLACE BAGS ON SLOPES GREATER THAN 5%.
- MANUFACTURER AND SECURELY CLAMPED.
- AND DO NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

NOT TO SCALE

1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS. WHERE POSSIBLE, SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE. 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 WHICH MAY CARRY SOIL AMENDMENTS MAY BE REQUIRED TO ESTABLISH VEGETATION. PERFORM SOIL SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH. TESTS TO PREDICT THE NEED FOR LIME OR FERTILIZER. IN LIEU OF A SOIL TEST, APPLY LIME AT 2 TONS/AC. OR FERTILIZER AT 500 LB/AC. OF 10-10-10 OR 12-12-12 3. TO PREVENT WATER PONDED BY THE SILT FENCE FROM FLOWING AROUND THE ENDS, EACH END SHALL BE CONSTRUCTED UPSLOPE SO THAT THE ENDS ARE AT A HIGHER ELEVATION. 3. APPLY SEED UNIFORMLY. COVER BROADCASTED SEED BY RAKING OR DRAGGING, 4. 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. INSPECT FOR SOIL EROSION OR VEGETATION LOSS AND REPAIR BARE OR SPARSE 5. SILT FENCE HEIGHT SHALL BE A MINIMUM OF 16 INCHES ABOVE THE ORIGINAL GROUND SURFACE. 6. THE SILT FENCE SHALL BE PLACED IN A TRENCH CUT A MINIMUM OF 6 INCHES DEEP. THE TRENCH SHALL BE CUT WITH A TRENCHER, CABLE LAYING MACHINE, OR OTHER SUITABLE DEVICE WHICH WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH. LB/1,000 SF LB/AC. 128 7. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE AND SO THAT 8 40 INCHES OF CLOTH ARE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 40 6-INCH-DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED. 40 8. SEAMS BETWEEN SECTION OF SILT FENCE SHALL BE OVERLAPPED WITH THE END STAKES OF EACH SECTION 40 WRAPPED TOGETHER BEFORE DRIVING INTO THE GROUND. 112 9. SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF 40 OVERTOPS THE SILT FENCE, FLOWS UNDER OR AROUND THE ENDS, OR IN ANY OTHER WAY BECOMES A 40 CONCENTRATED FLOW, ONE OF THE FOLLOWING SHALL BE PERFORMED, AS APPROPRIATE: A. THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED, 120 B. ACCUMULATED SEDIMENT SHALL BE REMOVED, OR 40 C. OTHER PRACTICES SHALL BE INSTALLED. 40 40 40 10. 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 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. 1 MIN. 11. CRITERIA FOR SILT FENCE MATERIALS: A. FENCE POSTS - THE LENGTH SHALL BE A MINIMUM OF 32 INCHES LONG. WOOD POSTS WILL 2 MIN. 2 MIN. BE 2 X 2 INCH HARDWOOD OF SOUND QUALITY. THEY SHALL BE FREE OF KNOTS, SPLITS AND OTHER VISIBLE IMPERFECTIONS THAT WEAKEN THE POSTS. THE MAXIMUM SPACING **EXPANSION** -BETWEEN POSTS SHALL BE 10 FEET. POSTS SHALL BE DRIVEN A MINIMUM OF 16 INCHES INTO **RESTRAINT 1/4**" THE GROUND WHERE POSSIBLE. IF NOT POSSIBLE. THE POSTS SHALL BE ADEQUATELY NYLON ROPE SECURED TO PREVENT OVERTURNING OF THE FENCE DUE TO SEDIMENT/WATER LOADING. B. SILT FENCE FABRIC - SEE CHART TO THE RIGHT: -2"X2"X3/4" RUBBER BLOCK **FABRIC SILT FENCE DETAIL** NOT TO SCALE COMPOST FILTER SOCK -BERM Ф FLOW FLOW STAKES AT 5' -FLOW LINEAL SPACING -Ф PLAN VIEW - AS CHECK DAM PLAN VIEW -AS EDGE RESTRAINT UNDISTURBED 2"X2" WOODEN NOTES: AREA STAKE UNDISTURBED 2. INLET PROTECTION IS NOT REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. AREA COMPOST FILTER SOCK . ب WORK AREA EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR BLOWN/PLACED LOTS). 12" (MIN.) FILTER MEDIA - COMPOS 2"X2" WOOD STAKES @ 10' FILTER UNDISTURBED SOCK 0.C ARFA USE. SILTSACK DETAIL PLAN VIEW - AS SILT BARRIER SECTION - COMPOST FILTER SOCK NOT TO SCALE NOTES THIS PROJECT REQUIRES THE USE OF 8" DIA. COMPOST FILTER SOCK. SOCK FABRIC, COMPOST, USAGE, AND MAINTENANCE SHALL MEET AND FOLLOW THE STANDARDS OF THE LATEST VERSION OF THE OHIO RAINWATER AND LAND DEVELOPMENT MANUAL. TRAFFIC SHALL NOT BE 1. USE FILTER BAGS MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH PERMITTED TO CROSS FILTER SOCK. STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS, CAPABLE OF TRAPPING PARTICLES LARGER COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8' UP SLOPE AT 45° TO THE MAIN SOCK ALIGNMENT. 2. A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL MAXIMUM SLOPE LENGTH ABOVE ANY SOCK SHALL NOT EXCEED THAT SHOWN IN THE OHIO PURPOSES MUST BE PROVIDED. REPLACE FILTER BAGS WHEN THEY BECOME ½ FULL. KEEP RAINWATER AND LAND DEVELOPMENT MANUAL SPARE BAGS AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES ½ THE ABOVE GROUND HEIGHT OF THE SOCK 3. PLACE BAGS IN WELL-VEGETATED (GRASSY) AREAS, AND DISCHARGE ONTO STABLE, EROSION AND DISPOSED IN THE MANNER DESCRIBED IN THE OHIO RAINWATER AND LAND DEVELOPMENT RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, PROVIDE A GEOTEXTILE FLOW PATH. DO NOT MANUAL. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION. 4. INSERT PUMP DISCHARGE HOSE INTO THE BAGS IN THE MANNER SPECIFIED BY THE BIODEGRADABLE FILTER SOCK SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. THE PUMPING RATE SHOULD BE NO GREATER THAN 750 GPM OR ½ THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH INSPECT FILTER BAGS DAILY. IF ANY PROBLEM IS DETECTED, CEASE PUMPING IMMEDIATELY SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT AREAS.

FABRIC-SILT FENCE NOTES:

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NOT TO SCALE

COMPOST FILTER SOCK

ELEC	TRIC	AL SYMBOLS - PLAN:	SINC DIAC	<u>GLE LINE, ELE</u> GRAMS (ONLY)	MENT	<u>ARY, & II</u> BOLOGY	<u>NTE</u> :	RCON	NECTION	
\frown	HOME I	RUN TO PANEL					-			
\bigcirc	MOTOF	R	30A %	DISCONNECT SWITCH - AMP RATING	000	N.O. LIMIT			CONTACT - NORMALLY OPEN	
\boxtimes	MOTOF	RCONTROLLER	°. Q		• •	SWITCH				
ď	FUSIBL	E SAFETY SWITCH	30A 3P	FUSE - AMP RATING		N.O. FLOW		И	CONTACT - NORMALLY CLOS	
C	NON-FL	JSIBLE DISCONNECT SWITCH	 			NO				
Φ	SIMPLE	EX RECEPTACLE, EXPLOSION PROOF	30 ~) [\sim	LEVEL SWITCH		᠂᠕᠊ᡐ	SOLENOID COIL	
ı س	DUPLE	X RECEPTACI E	200 °,	CIRCUIT BREAKER - AMP RATING	0	N.O.		\mathbf{M}	PILOT LIGHT -	
マ マ 日			^{30A} o ^y		Å	PRESSURE SWITCH		•(G) +••∕·(PUSH TO TEST (COLOR)	
Y V				MOTOR W /		N.O.				
$\mathbf{\nabla}$	DATAP			HORSEPOWER INDICATED	<u>ک</u> را	SWITCH		-	GROUND	
	SPECIA	-POLE SWITCH, "3" INDICATES 3-WAY	AM	AMMETER		N.O. TIME DELAY AFTER			CAPACITOR	
\$₃	"OS" IN	DICATES OCCUPANCY SENSING	VM	VOLT METER	\mathbf{x}	ENERGIZATION				
K	DRY-TY	PE TRANSFORMER		POWER FACTOR	070	N.C. TIME DELAY AFTER		X0	2 POSITION	
•	PUSHB	UTTON STATION		METER	\wedge	ENERGIZATION			SELECTOR SWIT	
4	LOUVE	R OPERATOR	GF	GROUND FAULT RELAY	0,0	N.C. TIME DELAY AFTER		OX		
JB	JUNCTI	ON BOX		TRANSFORMER	\mathbf{v}		JN		3 POSITION	
SV	SOLEN	OID VALVE			°°	DELAY AFTER	NC		SELECTOR SWIT	
ZS	LIMIT S	WITCH			V			ŎŎX		
(FS)(FE)(FIT)	FLOW:	SWITCH, SENSOR, TRANSMITTER W / DISPLAY		COIL	0-0	(GENERAL)			FIELD TERMINAL	
	LEVEL:	SWITCH, SENSOR, TRANSMITTER W / DISPLAY	MS	MOTOR STARTER COIL		START PUSHBU	ΓΤΟΝ		LOCAL PANEL /	
(PS (PE (PIT)	PRESS	URE: SWITCH, SENSOR, TRANSMITTER W / DISPLAY	ETM	ELAPSED TIME	0 0	NORMALLY OPE	N		WIRING	
TSTETIT	TEMPE	RATURE: SWITCH, SENSOR, TRANSMITTER W / DISPLAY			0 0	STOP PUSHBUT	TON		EXTERNAL / FIE	
AEAIT	OTHER	SENSOR / INDICATING TRANSMITTER AS NOTED	G	BUS		NORMALLY CLO	SED		WIRING	
	HAZAR	DOUS AREA LIGHT FIXTURE	SPD	TRANSIENT VOLTAGE SURGE SUPPRESSOR						
	OUTDO	OR CANOPY LIGHT FIXTURE								
ے ۳	EXTER	IOR WALL-PACK LIGHT FIXTURE								
C C	HIGH B	AY LIGHT FIXTURE	ABB	REVIATIONS:						
	LINEAR	LED LIGHT FIXTURE	x-CSC	x-CONDUCTOR SHIELDED	CABLE		IAW		DANCE WITH	
E	EXIT SI	GN	A AF	AMPS AMPERE FRAME			IPP	INSTRUME	ENT POWER PANEL	
\triangle	EMERG	ENCY REMOTE HEAD	AI AL	ANALOG INPUT (PLC) ALUMINUM			JBC JBC	JUNCTION	BOX BOX-CONTROL	
₹_₽	EMERG		AM AO	AMMETER ANALOG OUTPUT (PLC)			JBM JBP	JUNCTION JUNCTION	BOX-METERING BOX-POWER	
с п A A		ADM DULL STATION STROPE HODN STROPE	AP				kCM	KILO (1000) CIRCULAR MILL	
			AWG	AMERICAN WIRE GAUGE			kVAR	KILOVOLT	AMPERES-REACT	
(SD)	FIRE AL	ARM AREA SMOKE DETECTOR	C CAP	CONDUIT CAPACITOR			kW LA	KILOWATT LIGHTING	ARRESTOR	
ELECTRIC SYMBOLS - UTILITIES:		CB CJB	CIRCUIT BREAKER CONTROL JUNCTION BOX			lgt Lor	LIGHT LOCAL/OF	LIGHT LOCAL/OFF/REMOTE SELEC		
<u>EX:</u>	PR:		CP	CONTROL PANEL			LP	LIGHTING	PANEL	
AC	AC	AIR CONDITIONING UNIT	CR	CORROSION RESISTANT			MCC	MOTOR CO		
СВ	СВ	ELECTRIC CONTROL BOX	CS CT	CONTROL STATION CURRENT TRANSFORMER			MCP MDP	MOTOR CI MAIN DIST	REUTI PROTECTO RIBUTION PANEL	
JB	JB	ELECTRIC JUNCTION BOX	CU DB	COPPER DUCT BANK			MJB NEC	METERING NATIONAL	JUNCTION BOX ELECTRICAL COD	
PB	PB	ELECTRIC PULL BOX	DI				NEMA NEU	NATIONAL NEUTRAI	ELECTRICAL MFR	
RI	RI	ELECTRIC RISER BOX	EAG	ELECTRICALLY ACTIVATED) GATE		NFDS	NON-FUSE	D DISCONNECT S	
VLT	VLT	ELECTRIC VAULT BOX	EAV EF	ELECTRICALLY ACTIVATED VALVE EXHAUST FAN			OCSS	OPEN/CLOSE SELECTOR SW OVERLOAD		
©; ⊢	о́с	ELECTRIC LIGHT - GROUND	ESPB ETT	EMERGENCY STOP PUSHBUTTON (MAINTAINED) ELAPSED TIME TOTALIZER			OOSS OS	ON/OFF SELECTOR SWITCH OCCUPANCY SENSING		
-뗵- <u>Ĕ</u>	-뗵- Ĕ	ELECTRIC LIGHT - POST	EWD				OT P	OVER TORQUE SWITCH		
⊙ <i>[EM</i>]	o Em	ELECTRIC METER	FLA	FUEL LOAD AMPERES			PB	PUSHBUTTON		
		ELECTRIC MANHOLE - 48"	FS FVC	FLOW SWITCH FULL VOLTAGE CONTACTO	DR		РВС РВМ	PULLBOX-	METERING	
Ø	Y	ELECTRIC MANHOLE - 48" - ADJUST	FVNR-1 GFI	FULL VOLTAGE NON-REVE GROUND FAULT INTERRUF	RSING ST/ PTER	ARTER SIZE 1	PBP PC	PULLBOX- PHOTO CO	POWER ONTROL	
Ē	©	ELECTRIC MANHOLE - LID	GND				PF PH	POWER FA	ACTOR	
×		ELECTRIC PAINT MARK	HOA	HAND/OFF/AUTO SELECTO	R SWITCH	I		PROGRAM		
EP	EP	ELECTRIC PEDESTAL	HP HT	HURSEPOWER HIGH TORQUE SWITCH			Pb ⊾ìr	POWER JU	ANEL	
TR	TR	ELECTRIC TRANSFORMER	HTR Hz	HEATER HERTZ			PRI PS	PRIMARY PRESSURI	E SWITCH	

C:\USERS\MATHEWS\DESKTOP\DAILY WORK\3 - MARCH\3-31-25\CONNEAUT TOWNSHIP PARK\DWG\SHEETS\E_242421 - ELECTRICAL LEGEND, SPECIFICATIONS & DETAILS.DWG - LEGEND - 1/23/2025 2:56:14 PM - LIAM MATHEWS

- FUCHS, OR APPROVED EQUAL

PRESSURE SWITCH POTENTIAL TRANSFORMER

PROGRAMMABLE LOGIC CONTROLLER

TOR

TR

TSP

TSTAT

TVSS

UH

UNO

UPS

UTP

VC

VFD

VM

XP

WP

ZS

XFMR

V

THERMAL OVERLOAD RELAY

UNLESS NOTED OTHERWISE

UNSHIELDED TWISTED PAIR

VARIABLE FREQUENCY DRIVE

UNINTERRUPTIBLE POWER SUPPLY

TRANSIENT VOLTAGE SURGE SUPPRESSOR

TWISTED SHIELDED PAIR

TIMING RELAY

THERMOSTAT

UNIT HEATER

VOLUME CONTROL

EXPLOSION PROOF

VOLT METER

TRANSFORMER

WATERPROOF

LIMIT SWITCH

VOLTS

ELECTRICAL SPECIFICATIONS THE ELECTRICAL CONTRACTOR SHALL APPLY FOR AND SECURE ALL COSTS AND CHARGES FOR PERMITS, CONSTRUCTION, AND MISCELLANEOUS WORK ASSOCIATED WITH AND REQUIRED FOR THE COMPLETION OF 2. THE ELECTRICAL CONTRACTOR SHALL ARRANGE FOR ALL INSPECTIONS OF ELECTRICAL WORK BY ALL INSPECTION AUTHORITIES HAVING JURISDICTION. COPIES OF INSPECTION REPORTS SHALL BE MADE AVAILABLE TO THE OWNER UPON REQUEST, AND THREE (3) COPIES OF THE APPROVED FINAL INSPECTION REPORT SHALL ACCOMPANY THE REQUEST FOR FINAL PAYMENT. ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL U CODE, OHIO BUILDING CODE, LOCAL CODES AND ORDINANCES WHERE APPLICABLE, AND REQUIREMENTS OF () ALL MATERIALS AND EQUIPMENT FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR SHALL BE NEW, U.L. LISTED OR LABELED, AND CONFORM TO NEMA AND ANSI STANDARD WHERE APPLICABLE. 5. THE CONTRACTOR SHALL VISIT THE SITE AND FULLY FAMILIARIZE HIMSELF WITH ALL CONDITIONS WHICH AFFECT HIS WORK PRIOR TO BID. COORDINATE AND SCHEDULE WORK WITH OTHER TRADES TO ENSURE SATISFACTORY PERFORMANCE, AVOID DELAYS AND DUPLICATIONS AND MEET THE OWNER'S COMPLETION D SCHEDULE FOR THE USE OF THE BUILDING. 6. ALL WORK SHALL BE INSTALLED BY WORKMEN FULLY SKILLED IN THE WORK TO BE PERFORMED. REPAIR OR REPLACE EXISTING EQUIPMENT OR PROPERTY OF THE OWNER DAMAGED BY ELECTRICAL TRADES 7. THE ELECTRICAL CONTRACTOR SHALL GUARANTEE MATERIALS AND WORKMANSHIP PROVIDED BY HIM FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF OWNER'S FINAL ACCEPTANCE. REPAIR OR REPLACE ANY DEFECTIVE MATERIALS OR EQUIPMENT AT NO ADDITIONAL COST TO THE OWNER WITHIN THE GUARANTEE ALL ELECTRICAL WIRING SHALL BE INSTALLED IN CONDUIT. CONDUIT SHALL BE EMT, INTERMEDIATE, OR RIGID GALVANIZED IN ACCORDANCE WITH AND AS PERMITTED BY THE NATIONAL ELECTRICAL CODE OR LOCAL/STATE CODES AS APPLICABLE. UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC, 1" MINIMUM. FURNISH AND INSTALL PULL BOXES, JUNCTION, AND DEVICE BOXES OF SUITABLE CODE GAUGE AND SIZE. ALL TERMINATIONS IN IN-GROUND PULL BOXES SHALL BE LIQUID-TIGHT. 10. ELECTRICAL WIRES SHALL BE MINIMUM #12 AWG, COPPER, 600 V RATED. #14 AWG COPPER SHALL BE PERMISSIBLE FOR CONTROL CIRCUITRY. AMPACITY RATINGS SHALL BE BASED UPON 75°C RATINGS. A. #14, #12, AND #10 AWG CONDUCTORS SHALL BE "THHN/THWN". B. #8 AND LARGER SHALL BE STRANDED "THHN/THWN". 11. FLEXIBLE METAL CONDUIT INCLUDING LIQUIDTIGHT SHALL BE PERMITTED WHERE IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE AND LOCAL CODE PROVISIONS. FLEXIBLE METAL CONDUIT SHALL CONTAIN A SEPARATE GROUNDING CONDUCTOR AND BE TERMINATED WITH APPROPRIATE FITTINGS. 12. THE DRAWINGS ARE DIAGRAMMATIC AND INTENDED TO DESCRIBE THE WORK REQUIRED. THE ELECTRICAL CONTRACTOR SHALL ACCURATELY FIELD MEASURE AND LAY OUT HIS WORK TO EFFECTIVELY ACHIEVE A STRUCTURALLY COORDINATED INSTALLATION WITH THE BUILDING LAYOUT AND OTHER TRADES. 13. COORDINATE ALL SERVICE ENTRANCE REQUIREMENTS WITH THE LOCAL ELECTRIC UTILITY COMPANY TO ENSURE COMPLIANCE TO UTILITY COMPANY REQUIREMENTS. PROVIDE A COMPLETE GROUNDING SYSTEM. 14. DISCONNECTION, RECONNECTION, AND RELOCATION OF EQUIPMENT SHALL BE COORDINATED SO AS TO 15. RECEPTACLES SHALL BE 20A, 125 VAC RATED, HUBBELL #5362, LEVITON, PASS & SEYMOUR, OR APPROVED 16. SWITCHES SHALL BE 20A, 120/277 VAC RATED, SINGLE, DOUBLE POLE, THREE OR FOUR WAY AS INDICATED ON THE PLANS; HUBBELL SERIES 1220, LEVITON, PASS & SEYMOUR, OR APPROVED EQUAL. 17. DEVICE COVER PLATES SHALL BE STAINLESS STEEL OF A TYPE TO SUIT DEVICE. MULTIPLE GANGED PLATES SHALL BE USED WHERE DEVICES ARE ADJACENT TO EACH OTHER. WEATHERPROOF RECEPTACLES SHALL BE EQUIPPED WITH SPRING TYPE CAP COVER PLATES. 18. ELECTRICAL DISTRIBUTION PANELS SHALL BE SURFACE MOUNTED DEAD FRONT, WITH CODE GAUGE BACKBOX, LOCKABLE HINGED DOOR, U.L. LISTED AND CONFORMING TO NEMA STANDARDS, SUITABLE FOR 8 | 8 | 8 | 8 | 5 | 5 USE AS SERVICE ENTRANCE EQUIPMENT. PANEL SHALL BE EQUIPPED WITH SINGLE POLE OR DOUBLE POLE BOLTED BRANCH CIRCUIT BREAKERS AS INDICATED. CIRCUIT BREAKERS SHALL BE RATED 10,000 A.I.C. SYMMETRICAL. PANELBOARDS SHALL BE BY SQUARE-D OR APPROVED EQUAL. MULTI-POLE CIRCUIT BREAKERS SHALL BE COMMON TRIP. PROVIDE MOTOR FEEDER BREAKERS WITH LOCK-OUT PROVISIONS. 19. PROVIDE TYPEWRITTEN PANELBOARD CIRCUIT DIRECTORY IN PANELBOARD DOOR IDENTIFYING ALL ACTIVE CIRCUITS AND SPARES. ACTIVE CIRCUITS SHALL DESIGNATE EQUIPMENT SERVED. 20. IDENTIFY PANELBOARDS AND USAGE OF PANELBOARD CIRCUIT BREAKERS WITH PLASTIC LAMICOID NAMEPLATES, NAMEPLATES SHALL INDICATE PANEL DESIGNATION, VOLTAGE, AND USE. L S ΞΣ ГШ HIP NO A. THE LEVEL DETECTING DEVICES SHALL BE AT LEAST 5-1/2 INCH IN DIAMETER OR BETTER, PVC OR | } POLYPROPYLENE FLOAT THAT DOES NOT USE A MERCURY SWITCH INSIDE AND FLEXIBLY SUPPORTED BY A PVC JACKETED HEAVY-DUTY CABLE. S L 0 ŽΣ B. THE FLOAT SWITCH SHALL HAVE A 20 AMP RATING AT 120 VAC. THE FLOAT SWITCH SHALL CLOSE ON RISING LEVEL. EACH FLOAT SWITCH SHALL HAVE A NORMALLY OPEN AND NORMALLY CLOSED CONTACT. 5 2 C. CABLE SHALL BE LONG ENOUGH TO TERMINATE IN A FIELD-MOUNTED JUNCTION BOX WITH TERMINAL STRIPS PROVIDED FOR POWER AND FLOAT SWITCH CONNECTIONS. **7** (0) D. THE FLOATS SHALL BE MOUNTED ON TWO (2) INCH STAINLESS STEEL PIPE USING 316 STAINLESS STEEL CLAMPS OR PLASTIC ZIP TIES. THE PIPE SHALL BE CLAMPED TO THE WALL USING 316 STAINLESS STEEL Ζ CLAMPS. THE LENGTH OF THE PIPE AND FLOAT CABLE SHALL BE SIZED BY THE CONTRACTOR. Z٩ E. THE FLOATS SHALL BE MANUFACTURED BY ANCHOR SCIENTIFIC COMPANY, DRYDEN AQUA, PEPPERL + 0

8 B

PROJECT NO.

CTC.0024242100

DISCIPLINE

ELECTRICAL

SHEET NAME

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OF 14

SHEET

11

PANEL TYPE NEMA TYPE VOLTAGE OCPD		EVISTING									
NEMA TYPE VOLTAGE OCPD		EVISING	PANEL TYPE EXISTING								
VOLTAGE		NEMA TYPE NEMA 1 VOLTAGE 240V/120V			-						
OCPD					PHASE	1					
	OCPD 100A			WIRE	3						
		SURFACE			BUSS		100A				
LOAD DESCRIPTION	l	LOAD	BKR.	CKT. NO.	PHASE	CKT. NO.	BKR.	LOAD	LOAD DESCRIPTION		
			00/0	1	A	2	20/1	180	SHELTER RECEPTACLE		
SURGE PROTECTION DEVIC	ue, <u>spd</u>	U	30/2	3	В	4	20/1	125	SHELTER LIGHTS		
				5	A	6	20/1	200	PUMP CONTROL POWER		
				7	В	8	70/2	12000			
				9	A	10	1 /0/2	12880			
				11	В	12					
				13	A	14					
				15	В	16					
				17	A	18					
				19	В	20					
							13385 14995 62.48	VA VA A @ 240/1	CONNECTED DEMAND I20V, 1P, 3W		

HIGH PUMP TEMP ALARM RELAY

PUMP LEAK ALARM RELAY

120 VAC

(N)

 \sim

LOW WATER LEVEL, PUMPS OFF RELAY

LEAD MODE ENABLED RELAY

LAG MODE ENABLED RELAY

HIGH WATER ALARM RELAY

ALARM SILECE RELAY

120 VAC (N)

GENERAL NOTES:

1. PUMP CONTROL PANEL INCLUDES DIAGRAM SHOWS ONLY THOSE N

		verdantas					
	DATE						
	REVISION						
	ON	10					
		03/28/2025	AS NOTED	JPB	JPB	JPB	
	ISSUED FOR:	ISSUE DATE:	SCALE:	DESIGNED BY:	DRAWN BY:	СНЕСКЕД ВҮ:	
	CONNEAUT TOWNSHIP	CONNEAUT TOWNSHIP PARK	SANITARY SEWER IMPROVEMENTS	CONNEAUT TOWNSHIP ASHTABULA COUNTY, OHIO	ELECTRICAL - E-SERIES	MOTOR CONTROL DIAGRAM & PANEL SCHEDULE	
CONTROL DEVICES COMMON TO BOTH PUMPS. MOTOR CONTROL	C	ELE	002 DISCII	424 PLINE RIC	210 AL	0	
GHTING PANEL SCHEDULE ARE EXISTING. NORMAL TEXT INDICATES		E-04 SHEET OF					
		14			14	J	

2. ALL ITEMS SHOW IN *ITALICS* ON LI MODIFICATIONS MADE BY CONTRA