

# **DEPARTMENT OF THE ARMY**

U.S. ARMY CORPS OF ENGINEERS BUFFALO DISTRICT
478 MAIN STREET
BUFFALO. NY 14202-3278

June 28, 2024

Regulatory Branch

SUBJECT: Department of the Army Permit No. LRB-2024-00221, Nationwide Permit No. 58 as Published in the Federal Register, Volume 86, No. 8 on Jan. 13, 2021, and No. 245 on Dec. 27, 2021.

Mr. Jeremy Shaffer Village of Geneva-on-the-Lake 4929 South Warner Drive Geneva-on-the-Lake, OH 44041

Dear Mr. Shaffer:

This pertains to your application for a Department of the Army permit to install an approximately 5,100 linear-foot sanitary trunk line sewer pipe in Geneva-on-the-Lake, Asthtabula County, Ohio. The proposed project corridor extends from approximately 0.1 mile south of the intersection of Lake Road and North Broadway (lat.: 41.856216°, long.: -80.963487°) to approximately 150 feet south of Breen Drive and Katheryn Drive (lat.: 41.858374°, long.: -80.944906°). The proposed project would result in permanent impact to approximately 247 linear feet (0.017 acre) of unnamed tributaries to Crowles Creek (S-2, S-3, S-4, S-5, S-6, S-7, S-8, S-9, S-10). In addition, it would result in temporary impacts to approximately 138 linear feet (0.007 acre) of unnamed tributaries to Crowles Creek (S-9 and S-11) and 1.283 acre of wetland (W-A, W-C, and W-D. Lastly, 0.488 acre of forested wetland would be converted due to tree clearing.

I have evaluated the impacts associated with your proposal and have concluded that they are authorized by the enclosed Nationwide Permit (NWP) provided that the attached conditions are satisfied.

Verification of the applicability of this NWP is valid until March 14, 2026, unless the NWP is modified, suspended, revoked, or the activity complies with any subsequent permit modification. Please note in accordance with 33 CFR part 330.6(b), that if you commence or are under contract to commence an activity in reliance of the permit prior to the date this Nationwide permit expires, is suspended or revoked, or is modified such that the activity no longer complies with the terms and conditions, you have twelve months from the date of permit modification, expiration, or revocation to complete the activity under the present terms and conditions of the permit, unless the permit has been subject to the provisions of discretionary authority.

It is your responsibility to remain informed of changes to the NWP program. A public notice announcing any changes will be issued when they occur and will be available for viewing at our

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website: http://www.lrb.usace.army.mil/Missions/Regulatory.aspx. Finally, note that if your activity is not undertaken within the defined period or the project specifications have changed, you must immediately notify this office to determine the need for further approval or reverification.

In addition to the general conditions attached to the NWP, your attention is directed to the following Special Conditions which are also appended at the end of the NWP General Conditions:

- 1. At the request of an authorized representative of the Buffalo District, U.S. Army Corps of Engineers, the permittee must allow access to the project site to determine compliance with the conditions of this permit.
- 2. The permittee must provide a copy of the permit to all contractors, subcontractors, and/or workers performing the work authorized by the permit and ensure they have knowledge of the terms and conditions of the permit, including all General and Special Conditions. Prior to commencing work authorized by this permit, a copy of the permit and drawings must be visibly posted at the construction site.
- **3.** Disturbance to unnamed tributaries to Crowles Creek and wetlands is limited to the areas shown on the attached figures and project plans.
- **4.** This permit does not authorize sidecasting or any other temporary or permanent disposal of dredged or fill material in wetland and stream located outside of the work right of way, or any other water of the United States.
- 5. The permittee must notify the Regulatory Branch, in writing, at least one day prior to the date the activities authorized in Waters of the United States, including wetlands, are scheduled to begin. Notification shall either be by: 1) e-mail sent to david.w.leput2@usace.army.mil AND LRB.Regulatory.PermitCompliance@usace.army.mil; or 2) mailed to the following address: Mr. David Leput, U.S. Army Corps of Engineers, Buffalo District, 1776 Niagara Street, Buffalo New York 14207-3199.

This affirmation is limited to the attached NWP and associated Water Quality Certification and does not obviate the need to obtain any other project specific Federal, state, or local authorization.

A copy of this letter has been sent to the Ohio Environmental Protection Agency.

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Questions pertaining to this matter should be directed to me at 502-315-6669 by writing to the following address: U.S. Army Corps of Engineers Regulatory Branch, 240 West Lake Street, Unit D, Oak Harbor, OH 43449-1064, or by e-mail at: cory.d.shumate@usace.army.mil

Sincerely,

Cory D. Shumate Regulatory Specialist

Enclosures

# COMPLETION FORM / COMPLIANCE CERTIFICATION

Each permittee who receives a Nationwide Permit (NWP) verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and any compensatory mitigation.

APPLICANT: POINT OF CONTACT: File No.: LRB-2024-00221 Mr. Jeremy Shaffer Mr. Jeremy Shaffer File Closed: June 24, 2024

Village of Geneva-on-the-Lake Village of Geneva-on-the-Lake NWP No.: 58 4929 South Warner Drive 4929 South Warner Drive

Geneva-on-the-Lake, OH
Geneva-on-the-Lake, OH

44041 44041

Upon completion of the activity authorized by this permit and any required compensatory mitigation sign this certification and return it to the address listed below within 30 days of project completion.

Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, revocation, and/or assessment of administrative penalties.

The permittee shall certify the completion of the authorized work and mitigation:

- a. The authorized work was done in accordance with the NWP authorization, including any general, regional, or activity specific conditions.
- b. The implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, this certification must include the documentation required by 33 CFR 332.3(1)(3) to confirm that the permittee secured the appropriate number and resource type of credits.

Mr. Jeremy Shaffer	Date
Permittee Telephone Number: <u>440-466-8197</u>	
Project location: Geneva-on-the-Lake, Ashtabula County,	Ohio
Project Description: Utility Line	
Authorized Impacts (Waters of the U.S. Impacted by Projection (1.746 ac.)	ect): Permanent: 247 LF stream; Temporary: 138 LF

Waterway and/or Project Setting: Eleven unnamed tributaries to Crowles Creek, four forested wetlands, and one emergent wetland.

Return completed form to: <u>LRB.Regulatory.PermitCompliance@usace.army.mil</u> (Preferred)

Or Mail to: Compliance Coordinator Regulatory Branch U.S. Army Corps of Engineers 478 Main Street Buffalo, NY 14202

# SANITARY SEWER TRUNK LINE REPLACEMENT

ASHTABULA COUNTY, OHIO

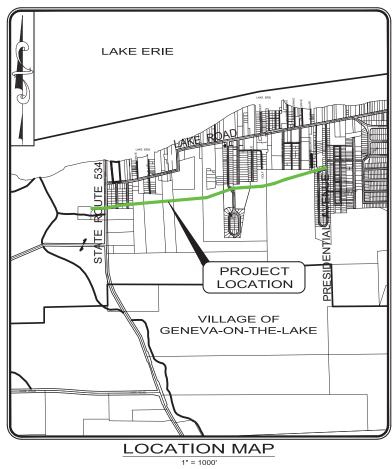








- THE SURVEY SHOWN ON THESE PLANS WAS OBSERVED IN THE FIELD FOR CONSTRUCTION PURPOSES ONLY AND MAY NOT BE SUITABLE FOR PROPERTY LINE SURVEYS OR ANY OTHER PURPOSE.
- UNDERGROUND BUILDING SERVICE UTILITY LINES ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, MAINTAINING AND REPLACING AS NECESSARY TO ENSURE CONTINUAL SERVICE TO BUILDINGS.
- 3. THE CONTRACTOR IS RESPONSIBLE TO CALL OHIO UTILITIES PROTECTION SERVICE @ 1-800-362-2764, THREE WORKING DAYS PRIOR TO CONSTRUCTION.



# **OFFICIALS**

DWAYNE M. BENNETT, Sr	
JEREMY SHAFFER	VILLAGE ADMINISTRATOR
CHRISTOPHER M. NEWCOMB	VILLAGE SOLICITOR
TAMMY CAYA	FISCAL OFFICER

# GENEVA-ON-THE-LAKE COUNCIL

MATT CAUDILL	ESIDENT
BJ McMULLAN	MEMBER
DON WOODWARD	MEMBER.
PJ MACCHIA	MEMBER.
GARY HIMES	MEMBER
CINDEE DUDECK	MEMBER



ENGINEER'S PROJECT No. 231183

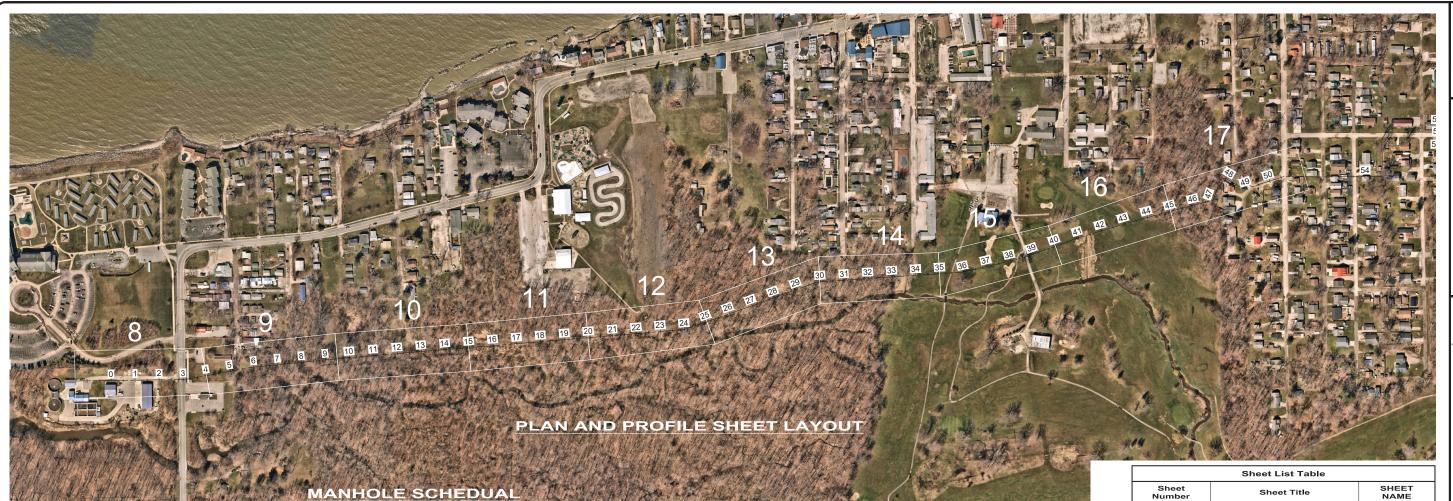


P.E. No. 58308

DATE



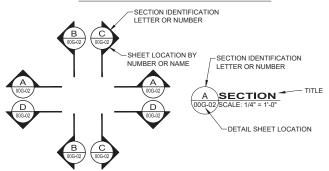
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AS NOTED		3/18/24	- Va Cancidad	RLIM	RLM		CHECKED BY: RLM
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VILLAGE OF GENEVA-ON-THE-LAKE	, i	SANIJARY SEWER IRONK LINE REPLACEMENT	ASHTABULA COUNTY OHIO		PLAN AND PROFILES - 01 SERIES		
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4		Distance from		INFARENTAL STATE OF COLUMN	2 months and 100 months and 100 months	Marie Committee			CONTRACTOR ACTIONS	and the state of t	
Structure No.	. Station	previous manhole	Diameter	Top of Rim Elevation	Invert Elevation	Height of Manhole	Shallow Manhole?	Water Tight Cover?	Anchored Cover?	Notes	
44		(E+)									
San MH #1	2+65	265	48-in	583.88	571.71	12.17					
MH #2	3+10.78	45.78	60-in	583.82	571.29	12.53					
San MH #3	5+85.75	274.97	48-in	580.37	572.28	8.09		X	X	in wetlands	
San MH #4	9+68.06	382.31	. 48-in	577	572.99	4.01	X	X	X	shallow + in wetlands	
San MH #5	12+89.21	321.15	48-in	578.85	573.56	5.29	X	X	X	Should be shallow? In	n wetalnds
San MH #6	16+08.83	319.62	48-in	580.05	574.14	5.91	X	X	X	shallow? In wetlands	
San MH #7	19+07.51	298.68	48-in	581.91	574.67	7.24				Shallow? close to wet	tlands not in tho
San MH #8	21+96.14	288.63	48-in	581.21	575.19	6.02	X	X	X	in wetlands	
San MH #9	24+01.6	205.46	48-in	580.79	575.57	5.22	X	X	X	Shallow, in wetlands	
San MH #10	26+85.2	283.6	48-in	580.64	576.08	4.56	X			not in wetlands but s	urrounded - watertight?
San MH #11	28+56.46	171.26	48-in	581.37	576.4	4.97	X	X	X	shallow & in wetlands	
San MH #12	29+85.67	129.21	60-in	587.25	576.63	10.62		X	X	in wetlands	
San MH #13	30+80.72	95.05	60-in	588.81	576.81	12		X	X	in wetlands	
San MH #14	33+92.72	312	48-in	581.85	577.38	4.47	X	X	X	in wetlands, shallow	
San MH #15	35+96.5	203.78	48-in	582.01	577.77	4.24	X	X	X	in wetlands, shallow	
San MH #16	38+54.52	258.02	48-in	584.85	578.26	6.59		X	X	in wetlands	
San MH #17	40+94.92	240.4	60-in	583.62	578.72	4.9	X	X	X	in wetlands, shallow	
San MH #18	43+84.15	289.23	48-in	584.66	579.27	5.39	X	X	X	shallow? In wetlands	
San MH #19	46+82.93	298.78	48-in	594.04	579.83	14.21					
San MH #20	47+78.5	95.57	48-in	595.11	580.02	15.09					
San MH #21	47+99.5	21	. 48-in	596.3	580.06	16.24				drop manhole?	
San MH #22	48+84.85	85.35	48-in	596.33	580.22	16.11					

anchored and bolted in PTI state that they will include gaskets and anchored cover for no additional cost

# **SECTION CUT CONVENTIONS:**



# **PIPE LABELS IN PROFILES** 181'~18"@-0.18% - 156'~18"@-0.16% 285'~24"@-0.19% NOTE: PIPE LABEL LEADERS POINT TO INVERT LINE OF PIPE. VERTICAL LETTERING INDICATES PROPOSED. SLANT TEXT AND SHADED OBJECTS INDICATE EXISTING. MAGENTA COLOR INDICATES PREVIOUSLY ABANDONED SEWER.

# **ABBREVIATIONS**

ADD'L AGG ALUM. BOT BTWN C/L CLR = ADDITIONAL = ADDITIONAL = AGGREGATE = ALUMINUM = BOTTOM = BETWEEN = CENTERLINE = CLEAR = CLEAR
= CONCRETE
= CONTINUOUS
= DOWEL(S)
= EACH FACE
= ELEVATION
= EMBEDMENT
= EACH WAY

CONC
CONT
DWL
EF
EL.
EMBED
EW
FF
FND
HORIZ
HP
LP
MAX
MFR
MIN
OC
REF
REINF
STRC = FINISH FLOOR = FOUNDATION = HORIZONTAL = HIGH POINT = LOW POINT = MAXIMUM

= MAXIMUM
= MANUFACTURER
= MINIMUM
= ON CENTER
= REFERENCE
= REINFORCING
= STRUCTURE
= TOP OF
= TYPICAL
= UNLESS NOTED OTHERWISE
= VERTICAL

# REFERENCE DIMENSION:

**DRAWING SERIES** 

GENERAL - 00 SERIES PLAN AND PROFILES - 01 SERIES JUNCTION CHAMBER - 10 SERIES STANDARD DETAILS - 50 SERIES SWPPP - SW SERIES

REFERENCE DIMENSIONS ARE GIVEN AS INFORMATION OF EXPECTED DESIGN. THEY ARE CALCULATED DIMENSIONS THAT MAY VARY AND ARE INTENDED TO BE FIELD VERIFIED.

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11	STA. 15+00 TO STA. 20+00	PP-04
12	STA. 20+00 TP STA. 25+00	PP-05
13	STA. 25+00 TO STA. 30+00	PP-06
14	STA. 30+00 TO STA. 35+00	PP-07
15	STA. 35+00 TO STA. 40+00	PP-08
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SCALE: AS NOTED	<b>DATE:</b> 3/18/24	Ye CHINCHES OF		DRAWN BY: RLM	OHEOKED BY: RLM
VILLAGE OF GENEVA-ON-THE-LAKE	SANITARY SEWER TRONK LINE REPLACEMENT	OHIO YTM		GENERAL - 00 SERIES	SHEEL INDEX AND LEGENDS
VILLAGE OF G	SANITARY SEWER TR	ASHTABULA COUNTY		GENERAI	SHEEL INDE
	SANITARY SEWER TH	TE TE ASHTABULA COU	18	S S CENERAL	SHEEL INDEX

## GENERAL NOTES:

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE RULES AND REGULATIONS
  OF GENEVA-ON-THE-LAKE, THE OHIO DEPARTMENT OF TRANSPORTATION (ODOT)
  CONSTRUCTION AND MATERIAL SPECIFICATIONS. WHEN IN CONFLICT THE MORE
  STRINGENT REQUIREMENTS SHALL APPLY.
- . UNLESS OTHERWISE SPECIFIED, ALL MATERIALS SHALL BE NEW AND BOTH WORKMANSHIP AND MATERIALS SHALL BE OF PREMIUM QUALITY, PROPER AND SUFFICIENT FOR THE PURPOSE CONTEMPLATED. THE CONTRACTOR SHALL FURNISH, IF SO REQUIRED, SATISFACTORY EVIDENCE AS TO TYPE AND QUALITY OF MATERIALS AND WORKMANSHIP.
- 3. ALL ITEMS OF EQUIPMENT AND/OR MATERIAL PROPOSED BY THE CONTRACTOR FOR SUBSTITUTIONS MUST BE APPROVED BY THE ENGINEER IN WRITING AND SHALL BE EQUAL OR SUPERIOR TO THE ITEMS SPECIFIED IN THE CONTRACT DOCUMENTS. IF SAID SUBSTITUTION PROPOSED BY THE CONTRACTOR FOR A SPECIFIED ITEM REQUIRES ENGINEERING REVISIONS, THE TOTAL EXPENSE OF SAID REVISIONS SHALL BE PAID BY THE CONTRACTOR
- THE CONTRACTOR SHALL OBTAIN ALL PERMITS AND PAY ALL CHARGES AND FEES AS MAY BE NECESSARY AND REQUIRED BY THE VILLAGE OR STATE.
- 5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM THEIR WORK IN SUCH A MANNER AS NOT TO DAMAGE OR DESTROY ANY EXISTING FEATURE, (I.E. EXISTING INLETS, CONDUITS, ETC.) WHICH IS NOT MARKED FOR REPLACEMENT OR REMOVAL. IF ANY SUCH DAMAGE DOES OCCUR DUE TO THE OPERATIONS OF THE CONTRACTOR, THEY SHALL REPLACE THE DAMAGED PORTION AT HIS EXPENSE.
- THE CONTRACTOR SHALL EXERCISE DUE CARE DURING CONSTRUCTION SO AS NOT TO DESTROY ANY TREES, PLANTS, SHRUBS OR STRUCTURES OUTSIDE OF THE INDICATED WORK LIMITS AND THOSE NOT SPECIFICALLY MARKED FOR REMOVAL OR RELOCATION WITHIN THE WORK LIMITS.
- IN SOME INSTANCES, THE CONTRACTOR WILL BE REQUIRED TO EXCAVATE UNDER AND AROUND THE EXISTING UTILITIES. EXTREME CARE SHOULD BE USED NOT TO DAMAGE THE UTILITY DURING THIS OPERATION.
- 8. ALL EXISTING PAVEMENT SHALL BE SAW CUT WITH A DIAMOND TIPPED BLADE BEFORE REMOVAL TO OBTAIN UNIFORM EDGE.
- 9. DIMENSIONS ARE TO THE EDGE OF PAVEMENT OR SIDEWALK UNLESS OTHERWISE
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING A MAINTENANCE OF TRAFFIC PLAN AND SCHEDULE FOR APPROVAL WITH THE ENGINEER.
- 11. EXISTING CONDITIONS ARE BASED ON A COMBINATION OF FIELD WORK OBTAINED BY CT CONSULTANTS, UTILITY PROVIDED RECORD DRAWINGS, AVAILABLE GIS DATA, AND PRELIMINARY DESIGN INFORMATION.
- 12. THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS HAVE BEEN OBTAINED BY DILIGENT FIELD CHECKS AND SEARCHES OF AVAILABLE RECORDS. IT IS BELIEVED THAT THEY ARE ESSENTIALLY CORRECT, BUT THE GENEVA ON THE LAKE DEPARTMENT OF UTILITIES DOES NOT GUARANTEE THEIR ACCURACY OR COMPLETENESS AND THE CONTRACTOR IS ULTIMATELY RESPONSIBLE TO CONFIRM THE PRESENCE AND LOCATION OF ANY AND ALL EXISTING UTILITIES.
- 13. WHERE EXISTING POWER OR TELEPHONE POLES ARE IN CLOSE PROXIMITY TO WORK, THE CONTRACTOR SHALL COORDINATE THEIR WORK EFFORTS WITH THOSE OF THE UTILITY COMPANIES SUCH THAT THEIR EXISTING FACILITIES CAN BE MAINTAINED AND PROTECTED DURING THE TIME WORK IS GOING ON ADJACENT TO THE POLE. THE COST FOR ANY REQUIRED PROTECTION OR RELOCATION OF EXISTING POWER OR TELEPHONE POLES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NOT BE THE RESPONSIBILITY OF THE GENEVA ON THE LAKE DEPARTMENT OF UTILITIES.
- 14. DELAYS TO THE CONTRACTOR AS A RESULT OF TIMING OF POLE RELOCATION OR PROTECTION SHALL NOT BE CONSIDERED COMPENSABLE DELAYS, AS IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE HIS WORK WITH THE UTILITY COMPANY'S SCHEDULE.
- 15. CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL THE EXISTING GAS, WATER, ELECTRIC, CABLE, TELEPHONE, OR OTHER UNDERGROUND UTILITIES PRIOR TO THE INSTALLATION OF ANY PROPOSED IMPROVEMENT INDICATED ON THE PLANS. SHOULD A CONFLICT EXIST AT A UTILITY CROSSING, THE PROJECT ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
- 16. 48 HOURS PRIOR TO ANY EXCAVATION NOTIFY OHIO ONE CALL @ 811.
- 17. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA): IT SHALL BE THE FULL AND COMPLETE RESPONSIBILITY OF THE CONTRACTOR TO MEET AND COMPLY WITH SAFETY REQUIREMENTS AND REGULATIONS AS ESTABLISHED BY OSHA OR ANY OTHER REGULATORY BODY.
- 18. ALL MATERIALS TO BE REMOVED FROM THE SITE SHALL BE DISPOSED AT A LICENSED 2. FACILITY PER ALL APPLICABLE STATE, FEDERAL AND LOCAL REGULATIONS.
- 19. TRENCH BACKFILL SHALL BE COMPACTION TESTED FOR EVERY 1' OF FILL PLACED WITHIN LIMITS OF A DRIVEWAY OR PROVIDE FLOWABLE FILL BACKFILL.
- 20. DEWATERING WILL BE REQUIRED ON THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN WATER LEVELS IN OPEN TRENCHES AND DISCHARGE IN ACCORDANCE WITH ASHTABULA COUNTY SOIL AND WATER CONSERVATION DISTRICT. NO ADDITIONAL PAYMENT WILL BE MADE FOR DEWATERING.
- 21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY SOIL EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH ODO'T ITEM 207 AND AS REQUIRED BY THE ASHTABULA COUNTY SOIL AND WATER CONSERVATION DISTRICT.
- 22. THE CONTRACTOR SHALL SUPPLY ALL LABOR, MATERIAL AND EQUIPMENT

NECESSARY, SUCH AS CALCIUM CHLORIDE, WATER OR A MOTORIZED DUST-FREE STREET SWEEPING DEVICE, AS DIRECTED BY THE ENGINEER, TO MAINTAIN ALL ROADWAYS BEING USED ALONG THE CONSTRUCTION SITE. PAYMENT FOR ALL SOIL EROSION, SEDIMENT AND DUST CONTROL MEASURES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR OTHER VARIOUS ITEMS.

- 23. PROPERTY PINS AND MONUMENTS NEAR THE IMPROVEMENT, WHICH MAY BE DISTURBED BY THE CONTRACTOR, SHALL BE REFERENCED BY A PROFESSIONAL SURVEYOR, SO THEY CAN BE REPLACED IN THE EVENT THAT THEY ARE DISTURBED DURING CONSTRUCTION. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT ALL PINS, MONUMENTS AND REFERENCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF LOCATING AND REFERENCING AND REPLACING THE PROPERTY PINS AND MONUMENTS AS DIRECTED BY THE ENGINEERS.
- 24. THE CONTRACTOR SHALL CLEAN UP ALL DEBRIS AND MATERIALS RESULTING FROM THEIR OPERATION AND RESTORE ALL SURFACES, STRUCTURES, DITCHES AND PROPERTY TO ITS ORIGINAL CONDITION TO THE SATISFACTION OF THE ENGINEER. ANY DITCHES DISTURBED DURING CONSTRUCTION SHALL BE REGRADED BY THE END OF THE SAME WORK DAY. THE COST FOR THIS WORK SHALL BE COVERED UNDER THE COST PER LINEAL FOOT OF SEWER.
- 25. ALL EXISTING STORM AND SANITARY SEWER FACILITIES, INCLUDING TILE, DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED, REPLACED OR RECONNECTED TO THE EXISTING OR PROPOSED SYSTEM AS DIRECTED BY THE ENGINEER.
- 26. RESTORATION SHALL INCLUDE SEEDING AND MULCHING OF DISTURBED AREAS, RESTORATION OF EXISTING DRIVES AND FINAL CLEAN UP
- 27. THE CONTRACTOR SHALL CAREFULLY PRESERVE ALL BENCH MARKS, PROPERTY LINE REFERENCES (E.G., PINS, PIPES, MONUMENTS), REFERENCE POINTS, STAKES AND ANY OTHER SURVEY REFERENCE. IN CASE OF DISTURBANCE, THE CONTRACTOR SHALL ENGAGE A REGISTERED SURVEYOR TO REPLACE THEM AT THE CONTRACTOR'S EXPENSE AND SHALL BE RESPONSIBLE FOR ANY ERRORS THAT MAY BE CAUSED BY THEIR LOSS OR DISTURBANCE. ALL NOTES AND CALCULATIONS USED IN RESETTING OR REPLACEMENT OF PROPERTY PINS, MONUMENTS, REFERENCE POINTS, AND ANY OTHER SURVEY REFERENCE SHALL BE STAMPED, SIGNED AND DATED BY THE REGISTERED SURVEYOR AND COPIES PROVIDED TO THE OWNER.
- 28. SURVEY AND STREET ALIGNMENTS SHOWN ON THESE PLANS WERE OBSERVED IN THE FIELD FOR CONSTRUCTION PURPOSES ONLY AND MAY NOT BE SUITABLE FOR PROPERTY LINE SURVEYS OR OTHER PURPOSES.

# SANITARY SEWER NOTES

- . SANITARY SEWERS SHALL MAINTAIN A MINIMUM OF 18" VERTICAL AND 10' HORIZONTAL FROM ANY WATER MAIN.
- SANITARY SEWER MUST BE A MINIMUM OF 4' HORIZONTALLY, MEASURED EDGE-TO-EDGE, FROM STORM SEWERS AND GAS LINES AND MUST MAINTAIN A MINIMUM 18" VERTICAL CLEARANCE AT ANY UTILITY LIB
- 3. SANITARY SEWER AND MANHOLE TESTING REQUIREMENTS.
- 3.1. LEAKAGE TESTING SHALL BE HYDROSTATICALLY TESTED IN ACCORDANCE WITH SPECIFICATION SECTION 013319 AND RSEW 33.93 AND 33.94
- 3.2. DEFLECTION TESTING SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 013319 AND RSFW 33.85.
- 3.3. MANHOLES SHALL BE VACUUM TESTED IN ACCORDANCE WITH SPECIFICATION SECTION 013319 AND RSFW 34.7.
- 4. TRENCHING, BEDDING, AND BACKFILL SPECIFICATIONS SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 333100 AND CONSTRUCTION DETAILS.
- SANITARY SEWER FOR OPEN CUT SHALL BE PVC SDR 26, ASTM D3034, JOINT SPEC ASTM D3212 OR APPROVED EQUIVALENT
- CONTRACTOR SHALL INSTALL DROP STRUCTURES IF INVERTS ARE MODIFIED AND PIPE INLET INVERT ABOVE THE MANHOLE INVERT IS 24" OR GREATER.
- WHEN EMPTY DURING CONSTRUCTION, THE STRUCTURES MAY BECOME BUOYANT. IN THE EVENT THAT THE EXCAVATIONS BECOME FLOODED, THE STRUCTURES MUST BE FILLED WITH WATER TO PREVENT FLOTATION OR THE EXCAVATION IS TO BE KEPT DEWATERED.

# MAINTENANCE OF TRAFFIC

- IT IS THE CONTRACTORS RESPONSIBILITY TO MAINTAIN PEDESTRIAN AND LOCAL ROADWAY ACCESS AT ALL TIMES. THE CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY STONE DRIVES WITH A MATERIAL WHICH IS APPROVED IN WRITING BY THE ENGINEER. THE CONTRACTOR SHALL INSTALL TEMPORARY TRENCH TOPPING (SEE DETAIL) IN ALL ROADS AS PART OF THE BACKFILLING OPERATION. THE TEMPORARY PAVEMENT AND STONE DRIVES SHALL BE MAINTAINED TO THE SATISFACTION OF THE ENGINEER. COST FOR ALL MATERIALS, LABOR AND EQUIPMENT FOR CONSTRUCTION MAINTENANCE AND SUBSEQUENT REMOVAL SHALL BE INCLUDED IN THE UNIT PRICES FOR ALL ITEMS OF THE PROPOSAL.
- ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES". AS A MINIMUM THE CONTRACTOR SHALL SUBMIT A PROPOSED TRAFFIC CONTROL PLAN FOR REVIEW AND ACCEPTANCE BY THE ENGINEER PRIOR TO BEGINNING WORK.
- 3. ACCESS MUST BE MAINTAINED FOR RESIDENCES, EMERGENCY VEHICLES AND PEDESTRIANS, INCLUDING PERSONS WITH DISABILITIES, AT ALL TIMES.
- 4. AT ALL EXCAVATION LOCATIONS THE CONTRACTOR SHALL PROVIDE SUITABLE FLASHERS, BARRICADES, AND TRAFFIC CONTROL DEVICES AS DEEMED NECESSARY BY THE ENGINEER AND IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- 5. THE CONTRACTOR SHALL PHASE CONSTRUCTION SUCH THAT AT A MINIMUM, ONE ACCESS LANE IS AVAILABLE FOR LOCAL VEHICULAR TRAFFIC. THE PAVEMENT SURFACE SHALL HAVE A UNIFORM SURFACE TO THE SATISFACTION OF

GENEVA-ON-THE-LAKE. THE SAME ACCESS SHALL BE MAINTAINED TO ALL DRIVEWAYS. ALL OTHER AREAS SHALL BE CLOSED TO TRAFFIC WITH SIGNS AND BARRICADES TO ODOT STANDARDS. THE SURFACES SHALL CONSIST OF THE FOLLOWING MATERIALS:

- 5.1. EXISTING PAVEMENT SURFACE.
- 5.2. ODOT 304 LIMESTONE TEMPORARY TRENCH TOPPING

# PROHIBITED CONSTRUCTION ACTIVITIES

- 1. THE USE OF EXPLOSIVES, UNLESS A PERMIT IS ISSUED BY THE OWNER.
- PUMPING OF SEDIMENT-LADEN WATER FROM TRENCHES OR OTHER EXCAVATIONS DIRECTLY INTO ANY SURFACE WATERS, STREAM CORRIDORS, OR STORM SEWERS; ALL SUCH WATER WILL BE PROPERLY FILTERED OR SETTLED TO REMOVE SILT PRIOR TO REI FASE
- DISCHARGING POLLUTANTS SUCH AS CHEMICALS, FUELS, LUBRICANTS, BITUMINOUS MATERIALS, RAW SEWAGE, OR ANY OTHER HARMFUL WASTE INTO OR ALONGSIDE OF RIVERS, STREAMS, IMPOUNDMENTS OR INTO NATURAL OR MAN-MADE CHANNELS I FADING THERETO.
- 4. STORING CONSTRUCTION EQUIPMENT AND VEHICLES AND/OR STOCKPILING CONSTRUCTION MATERIALS ON PROPERTY, PUBLIC OR PRIVATE, NOT PREVIOUSLY SPECIFIED ON THE PLANS BY THE ENGINEER FOR SUCH PURPOSES.
- RUNNING WELL POINT OR PUMP DISCHARGE LINES THROUGH PRIVATE OR PUBLIC PROPERTY AND RIGHTS-OF-WAY WITHOUT PERMISSION OF THE PROPERTY OWNER AND THE CONSENT OF THE ENGINEER.
- OPERATION ENTAILING THE USE OF VIBRATORY HAMMERS OR COMPACTORS
  OUTSIDE THE HOURS OF 8:00 AM AND 5:00 PM OR OUTSIDE THE HOURS ALLOWED BY
  LOCAL ORDINANCES OR REGULATIONS.
- CLOSING OFF CLEAR ACCESS TO ANY PUBLIC ALLEY, STREET, ROAD, AVENUE OR BOULEVARD WITHOUT THE PRIOR CONSENT OF MUNICIPAL OFFICIALS AND THE ENGINEER AND CLOSING CLEAR ACCESS:
- 7.1. BY FIRE PROTECTION EQUIPMENT AND EMERGENCY VEHICLES;
- 7.2. BY THE PUBLIC TO ANY COMMERCIAL OR PROFESSIONAL PLACE OF BUSINESS, QUASI-PUBLIC OR PUBLIC ESTABLISHMENT, OR PLACE OF RESIDENCE; OR
- 7.3. BY VEHICLES TO DRIVEWAYS WITHOUT THE PROVISION OF ALTERNATIVE MEANS OF BUILDING INGRESS AND EGRESS.
- DISPOSING OF EXCESS OR UNSUITABLE EXCAVATED MATERIAL IN WETLANDS OR FLOODPLAINS, EVEN WITH THE PERMISSION OF THE PROPERTY OWNER.
- LOCATING STOCKPILE STORAGE AREAS IN ENVIRONMENTALLY SENSITIVE AREAS.
   II. INDISCRIMINATE. ARBITRARY. OR CAPRICIOUS OPERATION OF EQUIPMENT IN ANY
- STREAM CORRIDORS, ANY WETLANDS, ANY SURFACE WATERS, OR OUTSIDE THE EASEMENT LIMITS.
- 12. PERMANENT OR UNSPECIFIED ALTERATION OF THE FLOW LINE OF ANY STREAM.
- 13. DAMAGING VEGETATION OUTSIDE OF THE CONSTRUCTION AREA
- DISPOSAL OF TREES, BRUSH, AND OTHER DEBRIS IN ANY STREAM CORRIDORS, ANY WETLANDS, ANY SURFACE WATERS, OR AT UNSPECIFIED LOCATIONS.
- 15. DISCHARGING INJURIOUS SILICA DUST CONCENTRATIONS INTO THE ATMOSPHERE RESULTING FROM BREAKING, CUTTING, CHIPPING, RILLING, BUFFING, GRINDING, POLISHING, SHAPING OR SURFACING CLOSER THAN 200 FEET TO PLACES OF RESIDENCES OR COMMERCIAL, PROFESSIONAL, QUASI-PUBLIC OR PUBLIC PLACES OF HUMAN OCCUPATION.

# AIR POLLUTION AND NOISE CONTROL PRACTICES

- CONSTRUCTION ACTIVITIES WILL BE LIMITED TO WEEKDAY DAYTIME HOURS, UNLESS APPROVED IN ADVANCE BY THE OWNER.
- CONSTRUCTION EQUIPMENT WILL BE PROVIDED WITH INTAKE SILENCERS AND MUFFLERS, AS REQUIRED BY SAFETY STANDARDS.
- PERIODICALLY CHECK EQUIPMENT AND MACHINERY FOR PROPER TUNING TO MINIMIZE EXHAUST EMISSIONS AND NOISE.
- ALL CONSTRUCTION VEHICLES SHOULD BE EQUIPPED WITH PROPER EMISSIONS CONTROL EQUIPMENT.
- 5. UNPAVED AREAS WILL BE WET DOWN (AS NECESSARY) DURING CONSTRUCTION TO MINIMIZE DUST GENERATION

# EROSION AND SEDIMENT CONTROL

- 1. ALL MATERIALS TO BE DISPOSED OF OFF-SITE MUST BE DISPOSED OF IN AN ENVIRONMENTALLY SOUND MANNER IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS AT A SITE APPROVED BY THE ENGINEER. NO EXCESS MATERIALS ARE TO BE DISPOSED OF NAY WETLAND, FLOODPLAIN, SURFACE WATER, OR OTHER ENVIRONMENTALLY SENSITIVE AREAS. EROSION CONTROL MEASURES AT THE DISPOSAL SITE MUST BE INSTALLED AND MAINTAINED UNTIL DISPOSAL IS COMPLETE AND THE DISPOSAL SITE IS PERMANENTLY STABILIZED. GIVING EXCAVATED SOIL AWAY DOES NOT RELIEVE THE CONTRACTOR OR ENGINEER OF THIS RESPONSIBILITY.
- PROPERLY INSTALL EROSION CONTROLS (E.G., SILT FENCES, STRAW BALES, ETC.) ON SLOPES, ALONG STREAMS AND DRAINAGE WAYS, AROUND DRAINAGE STRUCTURES, WETLANDS AND ANYWHERE ELSE THAT EXPOSED SOIL COULD RUN OFF. ALL SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR TO STARTING CONSTRUCTION.
- NO MORE THAN 200 FEET OF TRENCH SHALL BE OPEN AT ANY GIVEN TIME. TRENCH OPENING, PIPE LAYING, AND BACKFILLING SHOULD OCCUR SO AS TO MINIMIZE THE AMOUNT OF DISTURBED AREA.

# ARCHAEOLOGICAL / HISTORICAL RESOURCES:

1. CONTRACTORS AND SUBCONTRACTORS ARE REQUIRED UNDER OHIO REVISED CODE (O.R.C.) SECTION 149.53, TO NOTIFY OHIO'S STATE HISTORIC PRESERVATION OFFICE (SHPO), AND TO COOPERATE WITH THAT OFFICE IN ARCHAEOLOGICAL AND HISTORIC SURVEYS AND MITIGATION EFFORTS IF SUCH DISCOVERIES ARE UNCOVERED WITHIN THE PROJECT AREA.





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# SURVEYOR'S NOTES

1) HORIZONTAL DATUM IS NAD 1983 (2011 ADJ.), OHIO NORTH ZONE, ESTABLISHED BY UTILIZING THE OHIO DEPARTMENT OF TRANSPORTATION'S VIRTUAL REFERENCE SYSTEM.

2) VERTICAL DATUM= NORTH AMERICAN VERTICAL DATUM GEOID 18 AS ESTABLISHED BY UTILIZING THE OHIO DEPARTMENT OF TRANSPORTATION'S VIRTUAL REFERENCE SYSTEM.

3)THE UTILITIES SHOWN HEREON HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND/OR EXISTING RECORDS. THE SURVEYOR MAKES NO GUARANTE ETHAT THE UTILITIES LOCATED HERE ON COMPRISE OF ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UTILITIES LOCATED ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION MADE AVAILABLE.

# OUPS TICKET NUMBERS:

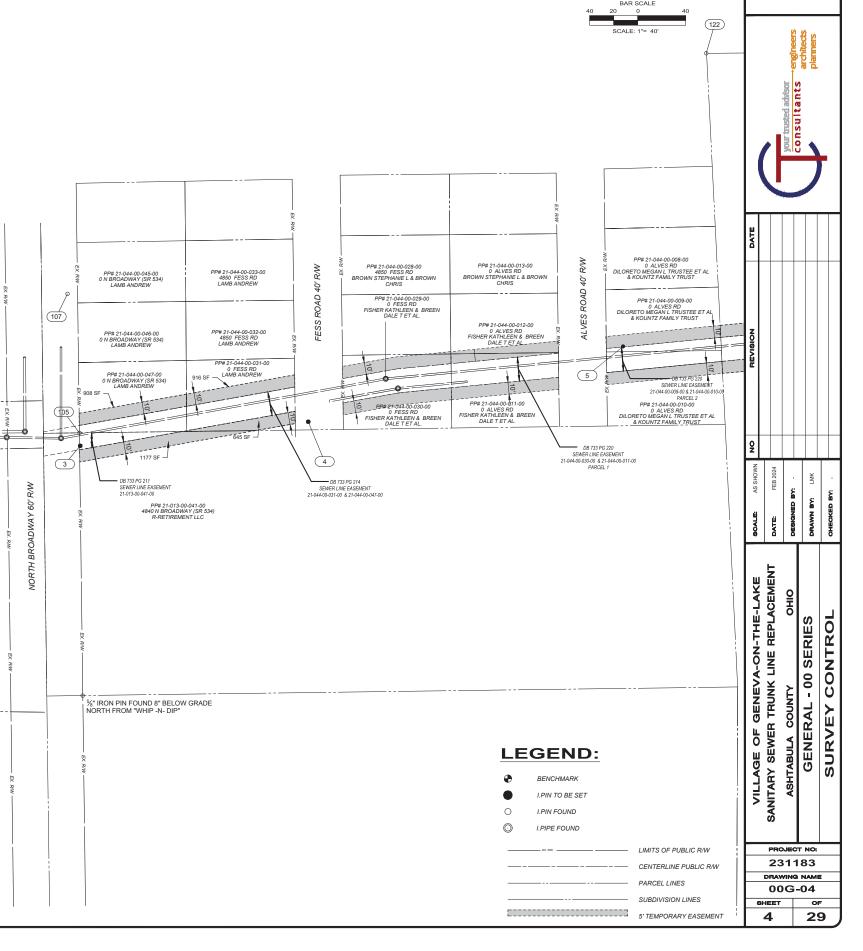
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4) FIELD WORK WAS PERFORMED DURING THE MONTHS OF JUNE AND JULY, 2023

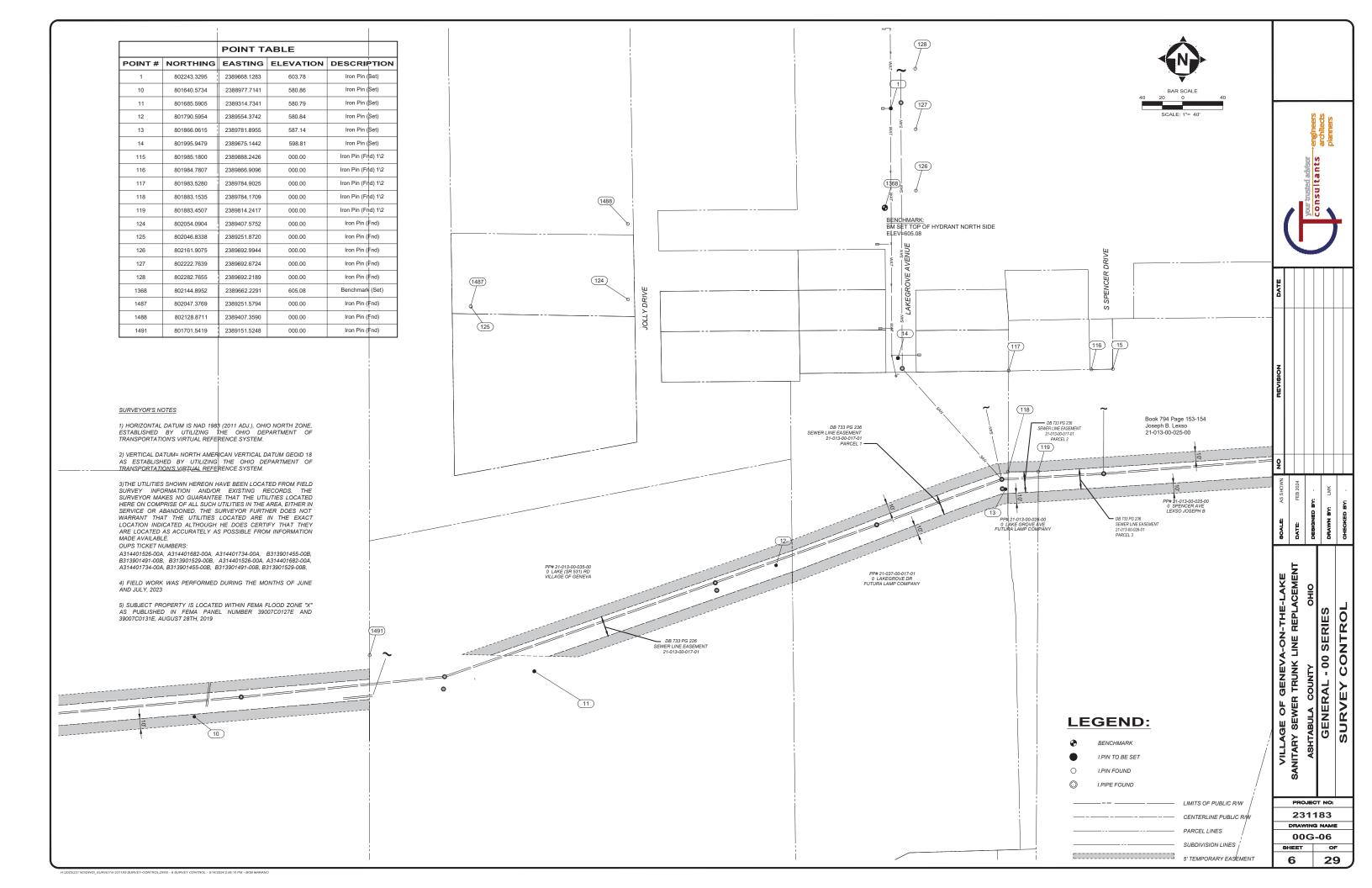


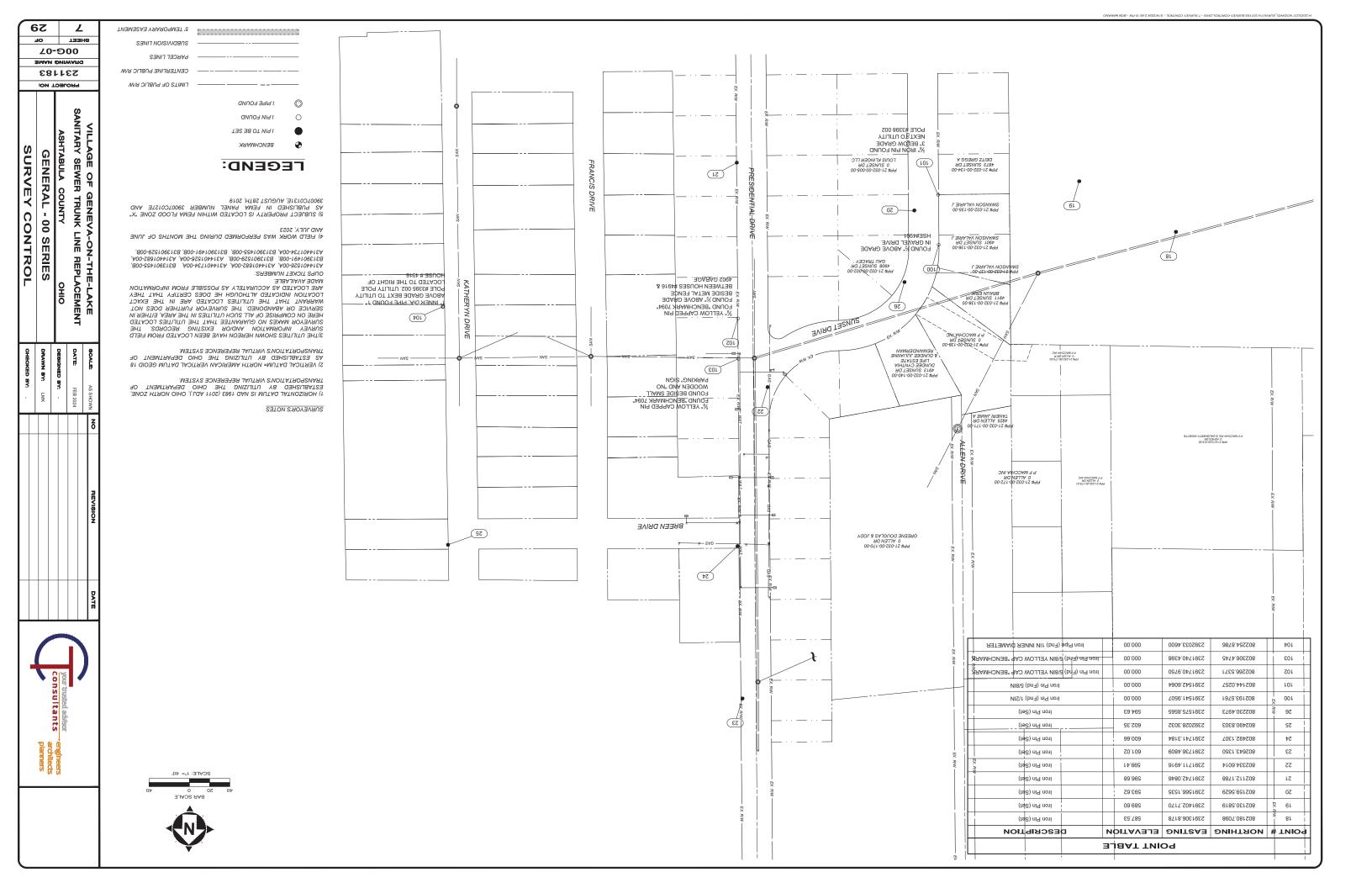
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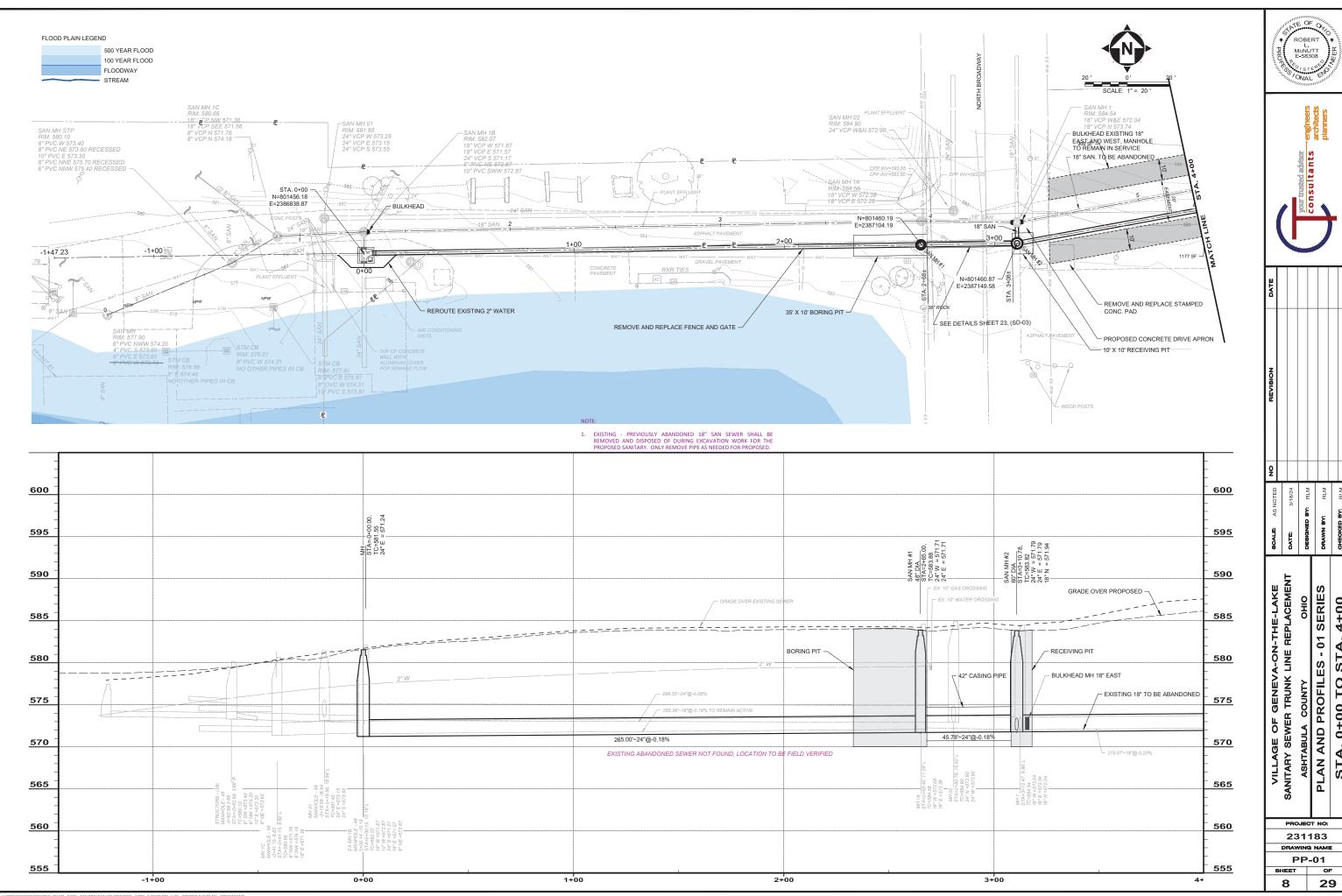
PP# 21-011-00-011-01 4835 N BROADWAY (SR 534) VILLAGE OF GENEVA & THE PNT# 105 %" IRON PIN FOUND 1" BELOW GRADE 10' N FROM CONTROL POINT #3



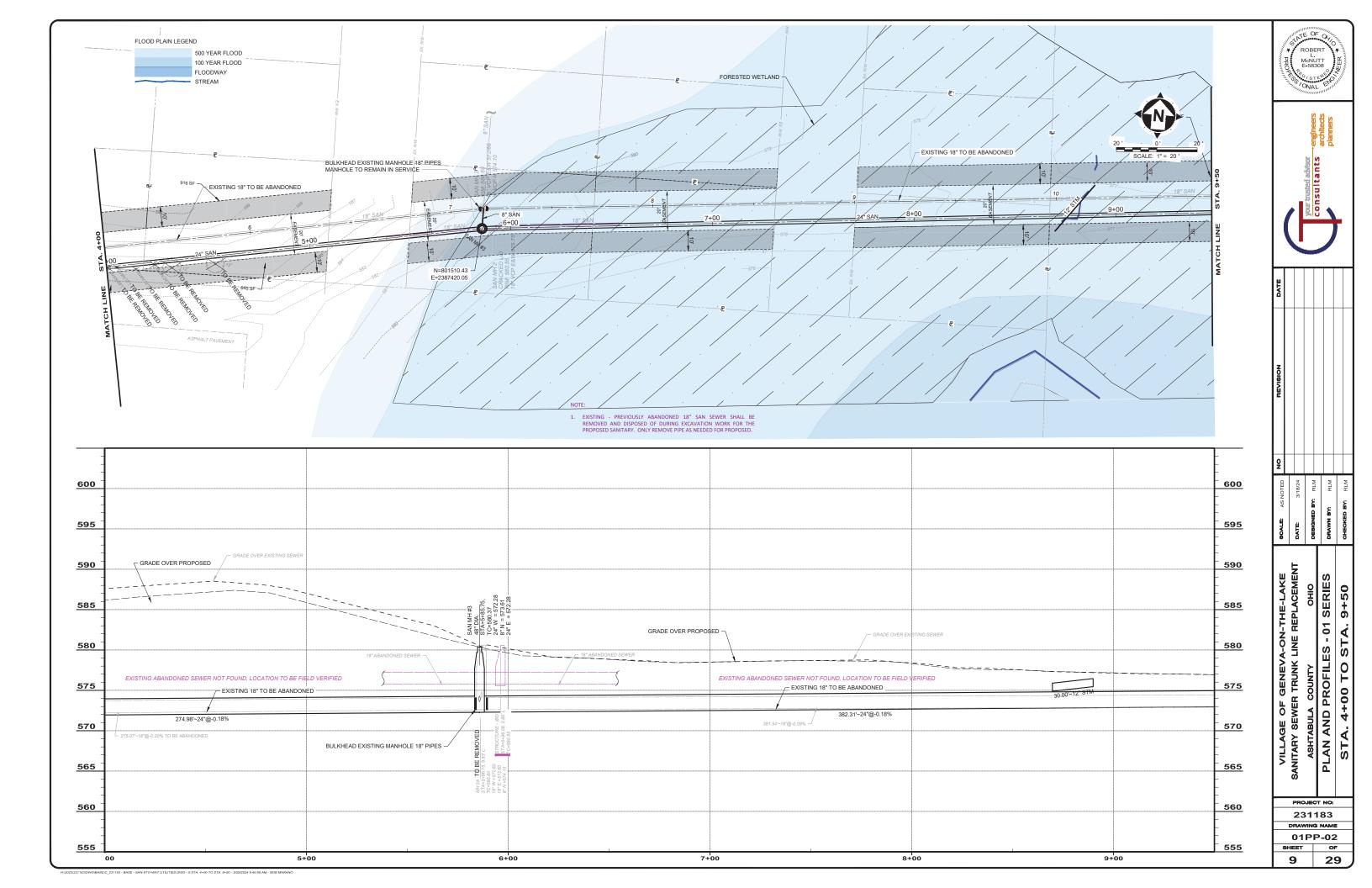
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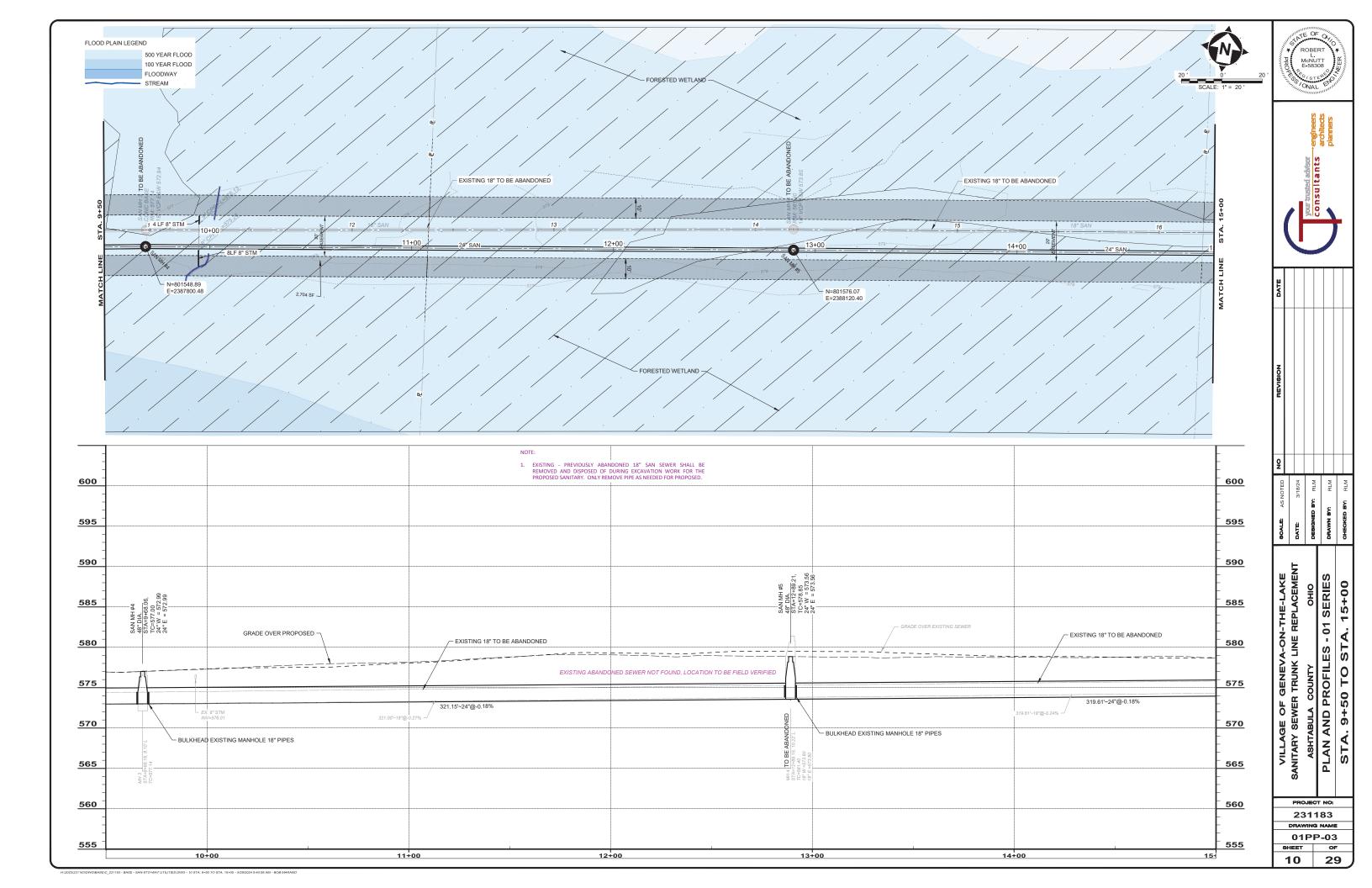


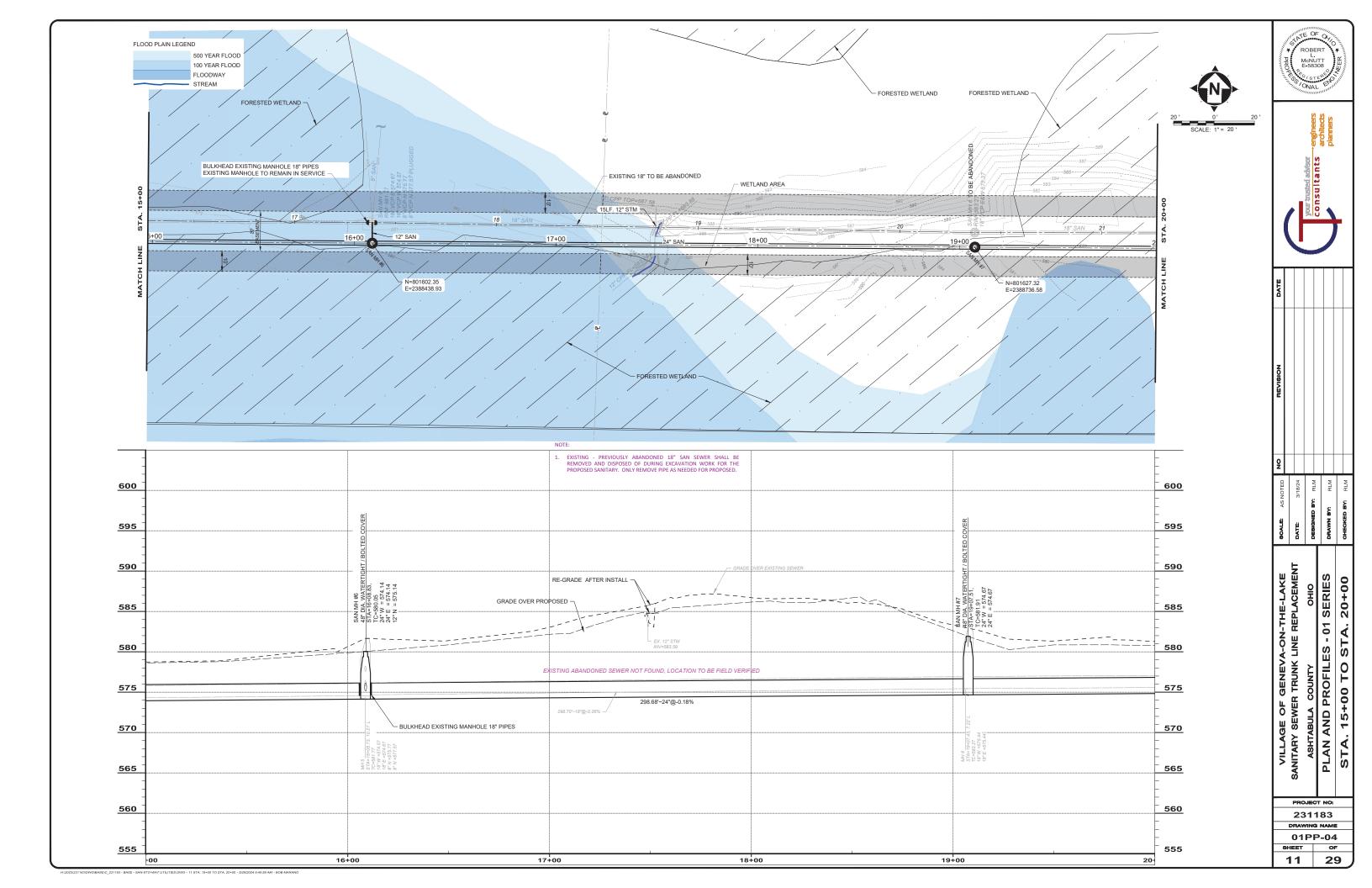


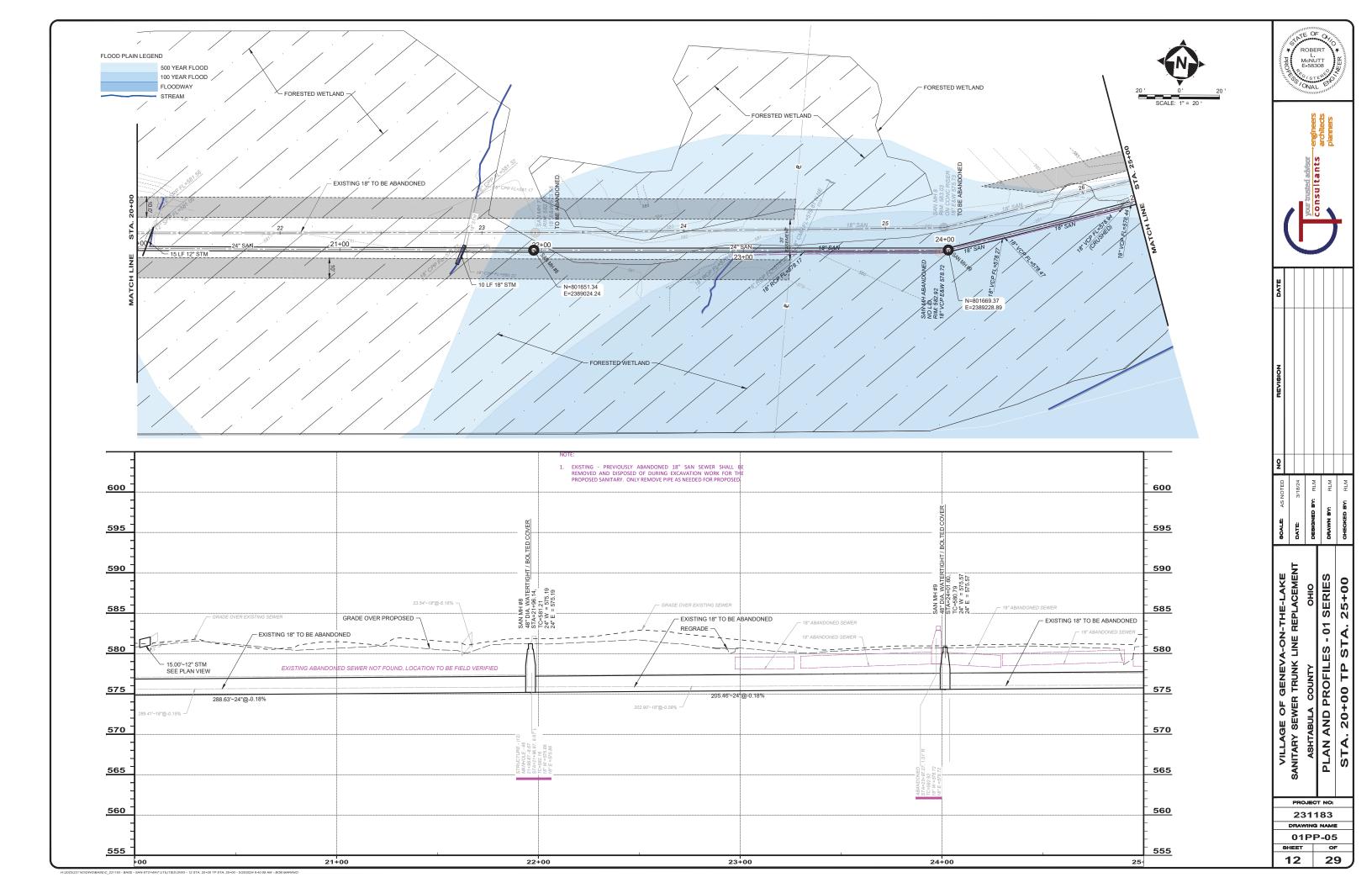


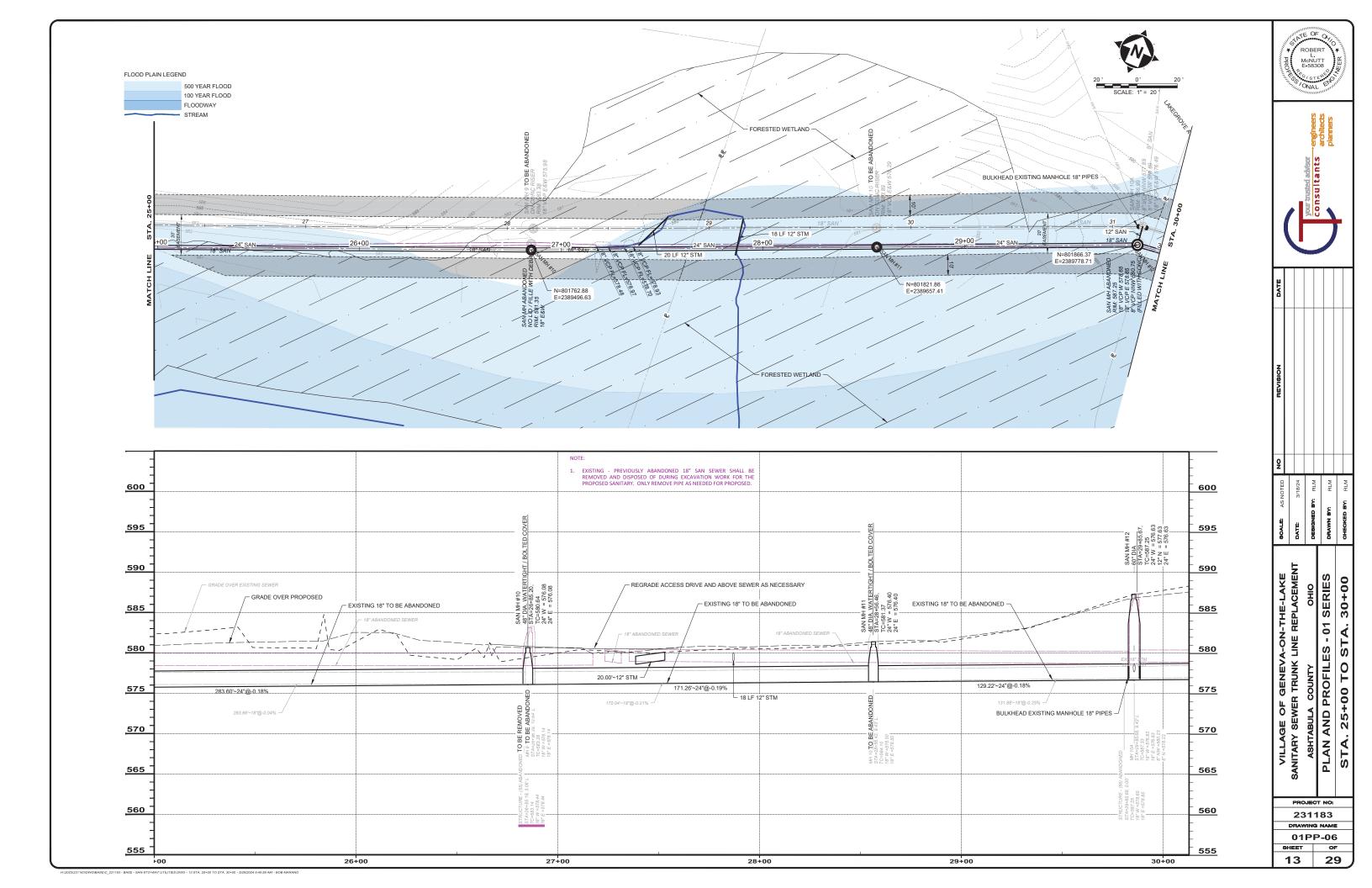
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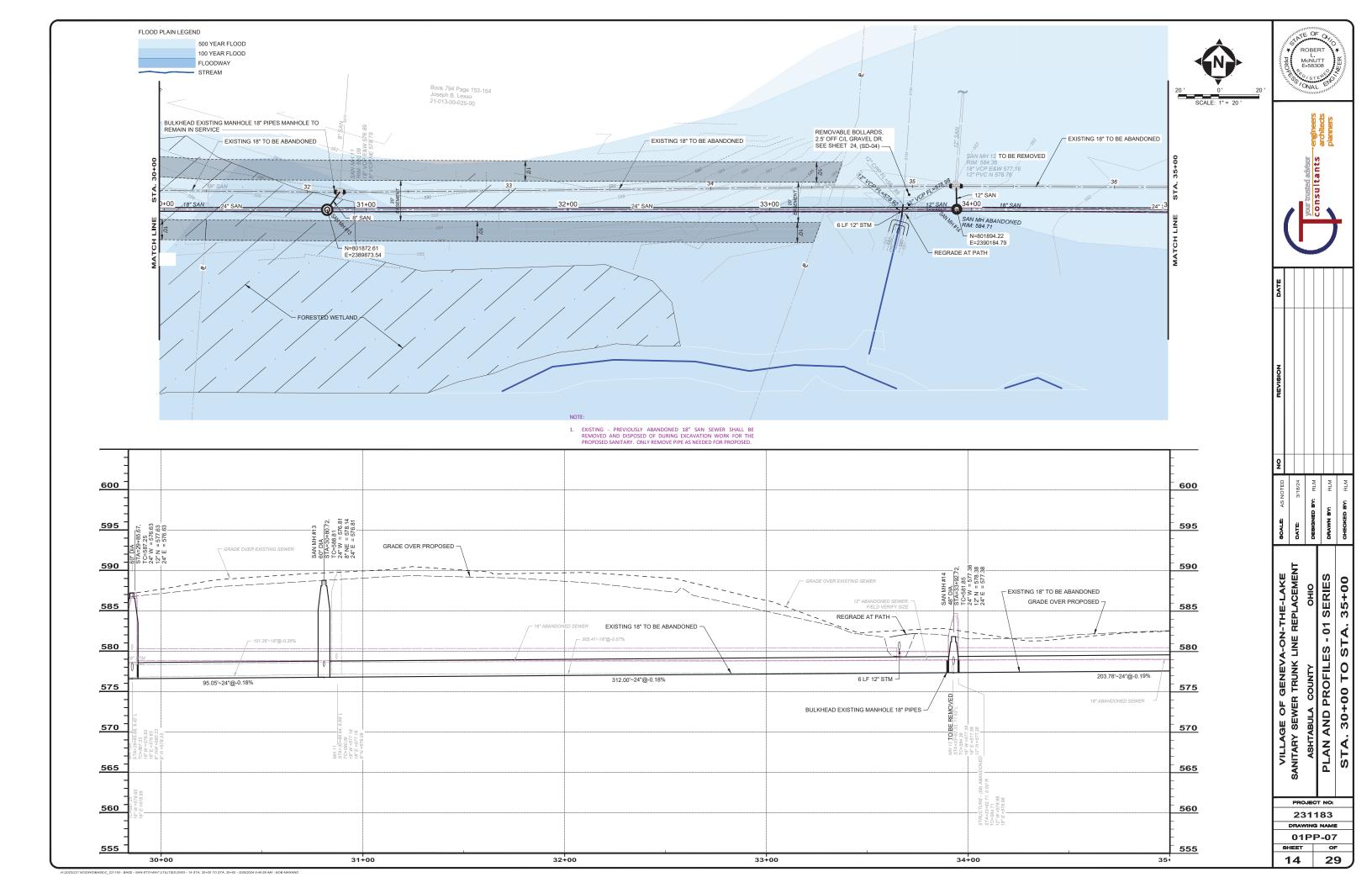


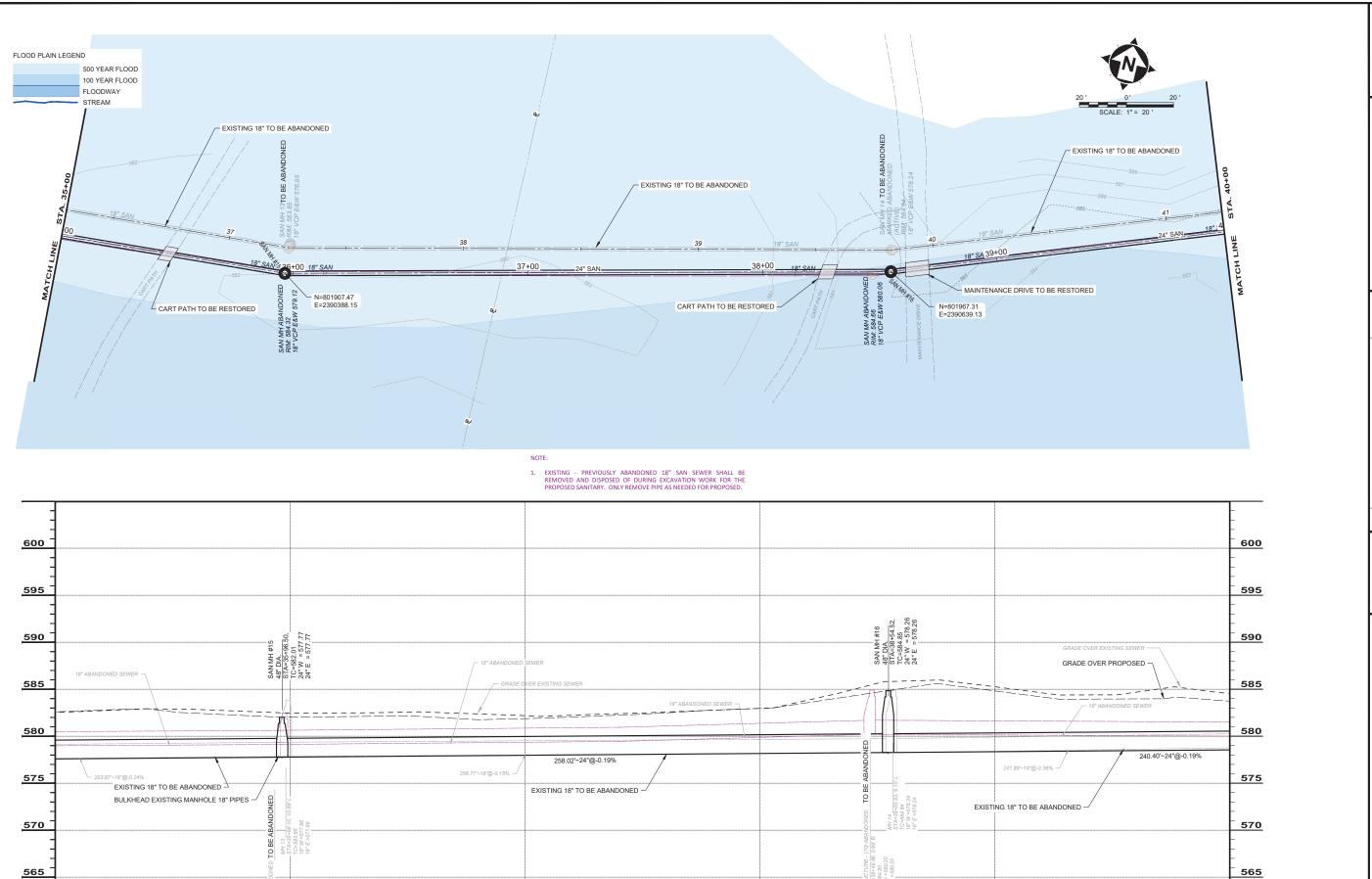












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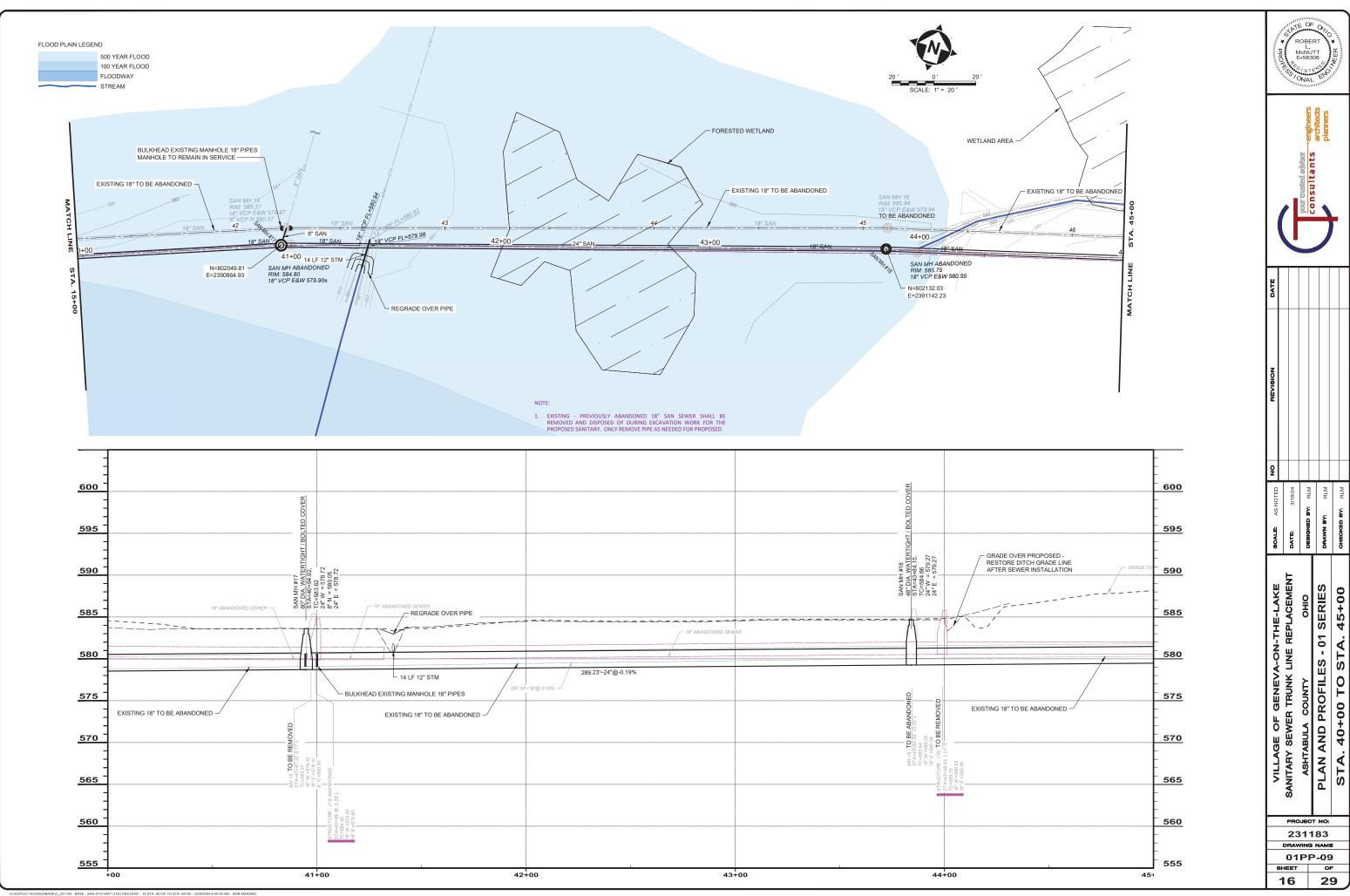
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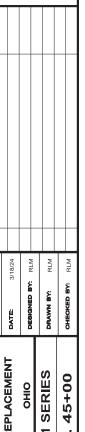
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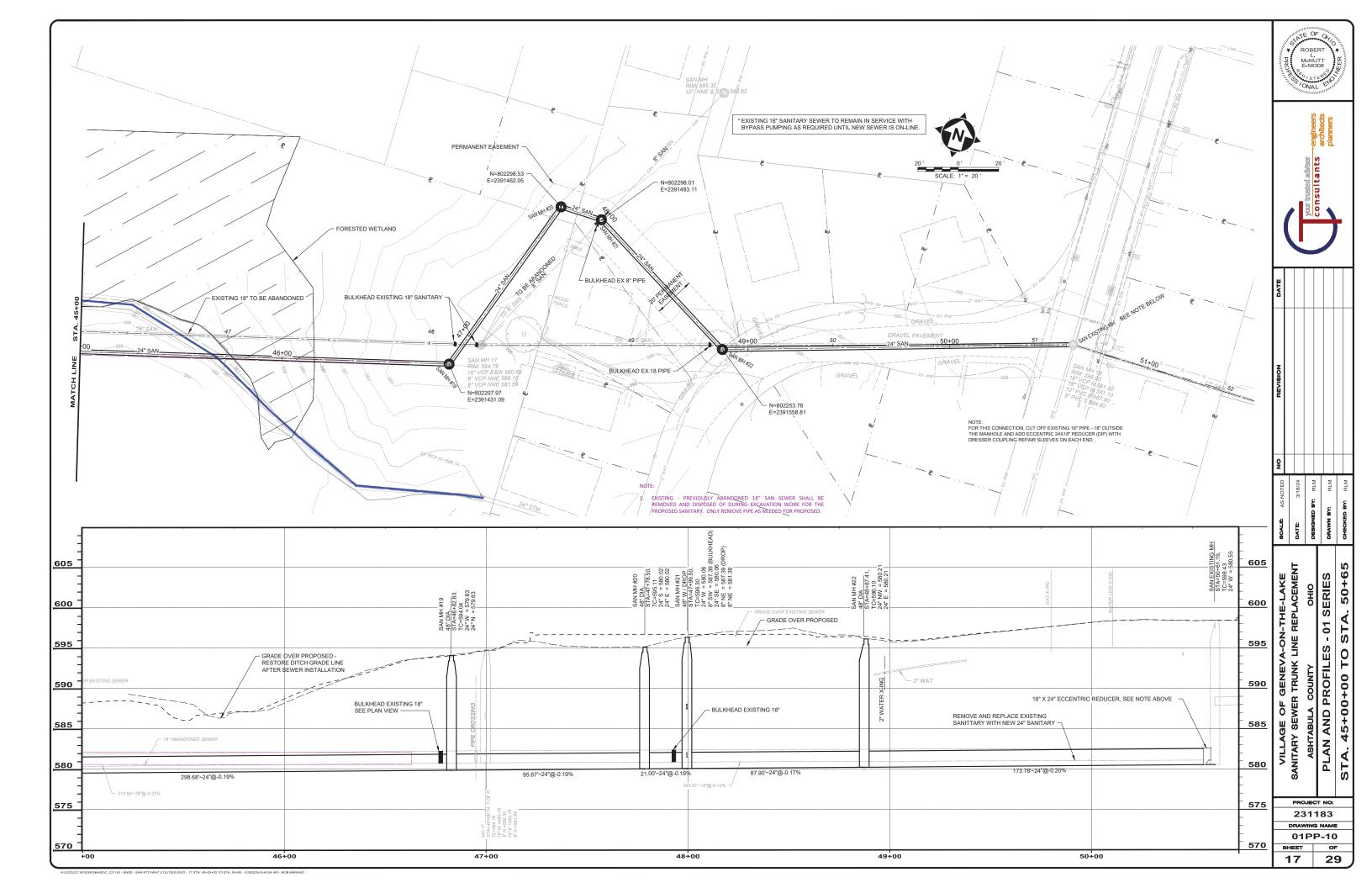
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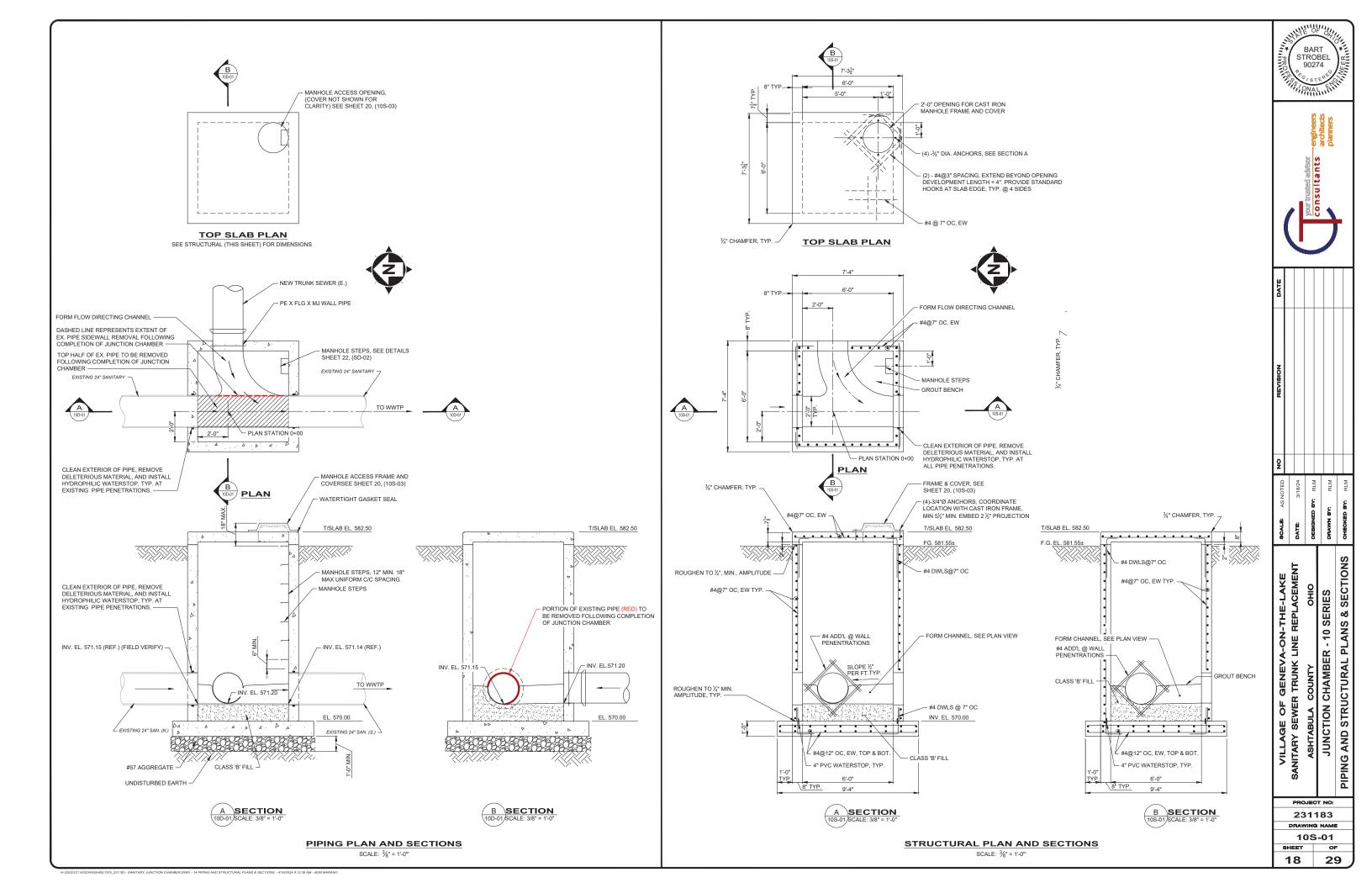
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- THE GENERAL NOTES AND TYPICAL DETAILS ARE GENERAL AND APPLY TO THE ENTIRE PROJECT EXCEPT THE GENERAL NOTES AND TYPICAL DETAILS ARE GENERAL AND APPLY TO THE ENTIRE PROJECT EXCEPT WHERE THERE ARE SPECIFIC INDICATIONS TO THE CONTRARY. THE WORK SHALL BE IN ACCORDANCE WITH THE CONSTRUCTION DRAWINGS, CONSTRUCTION SPECIFICATIONS AND THE LATEST EDITION OF THE APPLICABLE LOCAL AND STATE BUILDING CODES.

  a. WHERE CONFLICT IS FOUND TO EXIST BETWEEN THE SPECIFICATIONS AND THESE NOTES, THE REQUIREMENTS OF THE SPECIFICATIONS SHALL GOVERN.

  b. ALL WORK SHALL CONFORM TO THE MINIMUM REQUIREMENTS OF THE OHIO BUILDING CODE (LATEST
- EDITION) OR THESE DOCUMENTS WHICHEVER IS MORE STRINGENT.
- EDITION) OR THESE DUCUMENTS WHICHEVER IS MORE STRINGENT.
  ALL CONTRACTORS SHALL CONFORM TO THE SAFETY REQUIREMENTS OF THE OWNER, AIA DOCUMENTS A201,
  OSHA SAFETY AND HEALTH STANDARDS, AND ANY OTHER LOCAL AUTHORITY IN CONNECTION WITH THE
- THE CONTRACTOR SHALL PROVIDE ADEQUATE BRACING AND OTHERWISE PROTECT ALL WORK IN PROGRESS
- UNTIL CONSTRUCTION IS COMPLETED.
  MEANS, METHODS & CONSTRUCTION LOADS CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. CONTRACTOR IS RESPONSIBLE FOR MEANS, METHODS AND SEQUENCE OF CONSTRUCTION, AND SHALL MAKE ADEQUATE PROVISION TO MAINTAIN THE INTEGRITY OF ALL STRUCTURES
- CONSTRUCTION, AND SHALL MAKE ADEQUATE PROVISION TO MAINTAIN THE INTEGRITY OF ALL STRUCTURES AT ALL STAGES OF CONSTRUCTION. DETERMINATION OF AND PROVISIONS FOR CONSTRUCTION LOADING SHALL BE PROVIDED BY THE CONTRACTOR.

  CONTRACTOR SHALL TAKE ADEQUATE PRECAUTIONS TO ENSURE THE SAFETY OF WORKERS AND VISITORS TO THE SITE, INCLUDING BUT NOT LIMITED TO SHORING, BRACING AND ACCESS RESTRICTION. COMPLY WITH ALL FEDERAL, STATE AND LOCAL SAFETY CODES AND STANDARDS. ALL EXCAVATIONS SHALL BE PROPERLY SHORED IN ACCORDANCE WITH O.S.H.A. STANDARDS AND REQUIREMENTS.
- SLOPE DRAINAGE SURFACES UNIFORMLY TO DRAIN. SLOPE SHALL BE 1/8" TO 1/4" PER FOOT EXCEPT WHERE
- SLOPE DRAINAGE SURFACES UNIFORMLY TO DRAIN. SLOPE SHALL BE 1/8" TO 1/4" PER FOOT EXCEPT WHERE NOTED OTHERWISE ON THE PLANS.

  ADDITIONAL CONTRACTOR RESPONSIBILITIES

  a. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND PROVIDING THE MATERIALS FOR SUPPORTING THE SANITARY SEWER DURING CONSTRUCTION. SANITARY SEWER SHALL REMAIN IN SERVICE DURING CONSTRUCTION UNTIL TIE IN OF THE SEWER LINE. BYPASS PUMPING SHALL BE KEPT TO THE MINIMUM. DESIGN SHALL BE BASED A FULL PIPE
- b. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND PROVIDING THE MATERIALS FOR THE
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND PROVIDING THE MATERIALS FOR THE EXCAVATION SHORRING.
   CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE GEOTECHNICAL SUPPORT DURING CONSTRUCTION.
   FIELD VERIFY ALL DIMENSIONS. STRUCTURAL DIMENSIONS CONTROLLED BY EXISTING CONSTRUCTION SHALL.
- FIELD VERIFY ALL DIMENSIONS. STRUCTURAL DIMENSIONS CONTROLLED BY EXISTING CONSTRUCTION SHAL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. STRUCTURAL DIMENSIONS CONTROLLED BY OR RELATED TO THE MECHANICAL OR ELECTRICAL EQUIPMENT SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL CONSTRUCTION DIMENSIONS AND NOTIFYING CONSTRUCTION MANAGER OF DISCREPANCIES IN A TIMELY FASHION. DO NOT SCALE DRAWINGS. IF DIMENSIONS ARE IN QUESTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CLARIFICATION FROM THE ENGINEER BEFORE CONTINUING WITH CONSTRUCTION. CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. CONTRACTOR IS RESPONSIBLE FOR MEANS, METHODS AND SEQUENCE OF CONSTRUCTION, AND SHALL MAKE ADEQUATE PROVISIONAL DAMAINATIAL THE INTERPRITY OF ALL STRUCTURES AT ALL STAGES OF CONSTRUCTION.
- PROVISION TO MAINTAIN THE INTEGRITY OF ALL STRUCTURES AT ALL STAGES OF CONSTRUCTION. DETERMINATION OF AND PROVISIONS FOR CONSTRUCTION LOADING SHALL BE PROVIDED BY THE CONTRACTOR. NO SUBSTITUTIONS OF MATERIAL WILL BE ALLOWED WITHOUT WRITTEN PERMISSION FROM
- CONTRACTOR: NO SUBSTITUTIONS OF MATERIAL WILL BE ALLOWED WITHOUT WRITTE PERMISSION FROM THE ENGINEER.

  10. REFERENCE TO STANDARDS OR SPECIFICATIONS OF TECHNICAL SOCIETIES, ORGANIZATIONS, OR ASSOCIATIONS, OR TO CODES OF LOCALISTATE AUTHORITIES, MEANS THE LATEST STANDARD, SPECIFICATION, OR CODE ADOPTED BY THE DATE SHOWN ON THE DRAWNINGS, UNLESS SPECIFICALLY NOTED
- 11. MATERIAL, WORKMANSHIP, AND DESIGN SHALL CONFORM TO THE REFERENCED BUILDING CODE

- S AND STANDARDS
  THE FOLLOWING CODES AND STANDARDS SHALL BE UTILIZED BY THE CONTRACTOR TO ESTABLISH MINIMUM LEVELS OF QUALITY AND CONSTRUCTION TECHNIQUES.
- a. OHIO BUILDING CODE (OBC) AND THE INTERNATIONAL BUILDING CODE. (IBC) 2015 EDITION LOCALLY AMENDED. THE ABOVE SHALL GOVERN EXCEPT WHERE OTHER APPLICABLE CODES OR CONTRACT PROVISIONS ARE MORE RESTRICTIVE.
- PROVISIONS ARE INCREASED INCLUSE.
  AMERICAN SOCIETY OF CIVIL ENGINEERS, "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" (ASCE 7-10).
- CONCRETE
- a. AMERICAN CONCRETE INSTITUTE, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI
- b. AMERICAN CONCRETE INSTITUTE, "CODE REQUIREMENTS FOR ENVIRONMENTAL ENGINEERING CONCRETE
- STRUCTURES", ACI 350
  c. AMERICAN CONCRETE INSTITUTE, "SEISMIC DESIGN OF LIQUID-CONTAINING CONCRETE STRUCTURES", ACI
- d. AMERICAN CONCRETE INSTITUTE, "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS", (ACI
- e. AMERICAN CONCRETE INSTITUTE. "GUIDE TO FORMWORK FOR CONCRETE". ACI 347

- f. AMERICAN CONCRETE INSTITUTE, "HOT WEATHER CONCRETING", ACI-305R
  g. AMERICAN CONCRETE INSTITUTE, "COLD WEATHER CONCRETING", ACI-306R
  h. PORTLAND CEMENT ASSOCIATION, "DESIGN AND CONTROL OF CONCRETE MIXTURES"
  i. CONCRETE REINFORCING STEEL INSTITUTE, "MANUAL OF STANDARD PRACTICE", MSP-2

# DESIGN CRITERIA

CODE SERVICE DESIGN LIVE LOADS ARE AS FOLLOWS: SURCHARGE LOAD = 300 PSF

- DATIONS
  FOUNDATION DESIGN IS BASED ON AN ALLOWABLE BEARING CAPACITY OF 2000 PSF AND A MODULUS OF SUBGRADE OF 50 PSI. CONTRACTOR SHALL VERIFY BEARING CAPACITY WITH GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF CONCRETE.
- PROVIDE A MINIMUM FROST DEPTH 3'-6". ALL EXTERIOR FOOTINGS SHALL BEAR ON FIRM AND STABLE
- PROVIDE A MINIMUM PROST DEPTH 3-6". ALEX HERIOR POOL INGS SHALL BEAR ON FIRM AND STABLE NATURAL SOLIS OR COMPACTED FILL AND BACK FILL SHALL BE PERT HE GETCECHNICAL ENGINEER PROVIDED BY THE CONTRACTOR. EXTERIOR FOOTINGS SHALL BEAR AT FROST DEPTH, 3"-6" MINIMUM BELOW GRADE, OR DOWN TO ACCEPTABLE SOLIS, WHICHEVER IS DEEPER. REMOVE ALL EXISTING PAVEMENT, STRUCTURES, FOUNDATIONS, UNSUITABLE FILLS, ORGANIC SOLIS AND/OR OTHER DELETERIOUS MATERIALS DURING SIFE PREPARATION AND/OR ENCOUNTERED WITHIN OR BELOW THE AREA TO BE OCCUPIED BY SLABS ON GRADE, EQUIPMENT PADS, AND FOUNDATIONS. THESE MATERIALS SENDED AND ADDITIONS THESE MATERIALS SENDED AND ADDITIONS THESE MATERIALS. SHALL NOT BE USED FOR FILL WITHIN OR ADJACENT TO THE STRUCTURE. AFTER EXCAVATING THE EXPOSED NATURAL SOIL SHALL BE THOROUGHLY COMPACTED PRIOR TO PLACEMENT OF FILL OR AS DIRECTED BY TH
- NATIONAL SOIL SHALL BE THOUGHEY CONDUCTED PRIOR TO PLACEMENT OF FILL OR AS DIRECTED BY THE CONTRACTORS GEOTECHNICAL ENGINEER.

  BACKFILL SHALL BE CLEAN, CRUSHED STONE (#57 STONE) OR SELECT ENGINEERED FILL APPROVED BY THE GEOTECHNICAL ENGINEER. ALL BACKFILL SHALL BE PLACED IN MAXIMUM 8" LIFTS AND COMPACT AS PER THE
- EXCAVATIONS FOR FOUNDATIONS SHOULD BE OBSERVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF REINFORCING STEEL AND CONCRETE. UNDERCUT UNSUITABLE SOILS AND BACKFILL AS DIRECTED BY THE GEOTECHNICAL ENGINEER.
- FOUNDATION MAT/BASE SLAB SHALL BEAR ON A 12" BASE OF COMPACTED CLEAN, CRUSHED STONE (#57
- FOUNDATION MATIBASE SLAS SHALL BEAR ON A 12 BASE OF COMPACTED CLEAN, CRUSHED STONE, (1957)
  STONE).
  CONTRACTOR SHALL KEEP ALL FREE-STANDING WATER OUT OF EXCAVATIONS. CONTRACTOR SHALL PROVIDE DEWATERING MEASURES AS NECESSARY PRIOR TO PLACING CONCRETE. WATER SHOULD BE REMOVED FROM THE FOUNDATION BOTTOMS BEFORE CONCRETE OR REINFORCING STEEL IS PLACE.
  CONTRACTOR IS RESPONSIBLE FOR AND SHALL PROVIDE TEMPORARY SHORING, BRACING, UNDERPINNING, AND OTHER MEASURES NECESSARY TO ENSURE STABILITY AND SAFETY DURING ERECTION AND
- CONSTRUCTION AND TO PREVENT MOVEMENT OF SOIL THAT COULD DAMAGE EXISTING STRUCTURES.
- PAVEMENT, UTILITIES, ETC.

  9. UNLESS NOTED OTHERWISE ON THE CIVIL/SITE DRAWINGS, PROVIDE A MINIMUM 2% GRADE WITHIN 10-FEET OF THE PERIMETER OF THE FOUNDATION SYSTEM TO ALLOW SURFACE WATER TO DRAIN AWAY.

  10. DO NOT PLACE FILL OR CONCRETE ON FROZEN GROUND.

# REINFORCED CONCRETE

APPLICABLE CODE AND MIX DESIGN - CONCRETE CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF THE ACI BUILDING CODE(ACI 318 BUILDINGS AND ACI 350 LIQUID RETAINING). MIX DESIGNS SUBMITTED

- REINFORCED CONCRETE

  1. APPLICABLE CODE AND MIX DESIGN CONCRETE CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION
  OF THE ACI BUILDING CODE(ACI 318 BUILDINGS AND ACI 350 LIQUID RETAINING). MIX DESIGNS SUBMITTED
  FOR REVIEW SHALL BEAR THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE
- REINFORCING STEEL DETAILS ALL DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS, UNLESS OTHERWISE NOTED SHALL BE IN ACCORDANCE WITH MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES (ACI-315), LATEST EDITION. CONCRETE SHALL MEET THE FOLLOWING REQUIREMENTS:

# CLA

ASS	f'c (MIN.)	W/C RATIO (MAX)	ENTRAINED AIR	SLUMP (MAX)
A	4000psi	0.42	6%± 1.5%	3'-4" (WATER)
				8" (PLASTICIZED

- 8" (PLASTICI.

  CLASS "A" CONCRETE SHALL BE USED FOR STRUCTURAL APPLICATIONS.

  COARSE AGGREGATE IN CLASS A CONCRETE SHALL CONFORM TO ASTM /AASHTO COARSE AGGREGATE
  GRADATION 467 OR 57.

  PROVIDE 20 TO 26 PERCENT POZZOLAN, BY WEIGHT OF CEMENTITIOUS MATERIALS.
  REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60 (DEFORMED)

  CONCRETE MIX AND MATERIALS

- 2. DORTLAND CEMENT SHALL BE ASTM C150. TYPE II OR TYPE V. LOW ALKALI. CONTAINING LESS THAN 0.60 PERCENT ALKALIS. PORTLAND-POZZOLAN CEMENT SHALL BE ASTM C595, TYPE IP(MS), INTERGROUND, LOW
- ALVALI.

  b. FINE AND COARSE AGGREGATES SHALL CONFORM TO ASTM C33. FINE AND COARSE AGGREGATES SHALL

  BE REGARDED AS SEPARATE INGREDIENTS. AGGREGATES SHALL BE NON-REACTIVE AND SHALL BE

  WASHED BEFORE USE. TESTS FOR SIZE AND GRADING OF FINE AND COARSE AGGREGATES SHALL BE IN

  ACCORDANCE WITH ASTM C136. COMBINED AGGREGATES SHALL BE WELL AND UNIFORMLY GRADED FROM COARSE TO FINE SIZES TO PRODUCE A CONCRETE THAT HAS OPTIMUM WORKARILITY AND CONSOLIDATION CHARACTERISTICS. THE FINAL COMBINED AGGREGATE GRADATION SHALL BE ESTABLISHED DURING THE
- DESIGN MIX.

  c. FINE AGGREGATE: FINE AGGREGATE SHALL BE HARD, DENSE, DURABLE PARTICLES OF EITHER SAND OR CRUSHED STONE REGULARLY GRADED FROM COARSE TO FINE. GRADATION SHALL CONFORM TO ASTM
- d. COARSE AGGREGATE: COARSE AGGREGATE SHALL BE HARD, ANGULAR (NOT RIVER WASHED), DENSE AND DURABLE GRAVEL OR CRUSHED ROCK FREE FROM INJURIOUS AMOUNTS OF SOFT AND FRIABLE PARTICLES. BUNDALE GRAVEL OR CRUSHED ROOK FREE FROM INJURIOUS SUBSTANCES SHALL NOT EXCEED THE LIMITS
  LISTED IN ASTM C33, TABLE 3. GRADATION OF EACH COARSE AGGREGATE SIZE SHALL CONFORM TO ASTM
  C33, TABLE 2.

  e. POZZOLAN SHALL BE CLASS N, NATURAL POZZOLAN, OR CLASS F, FLY ASH, CONFORMING TO ASTM C618.
- 8. POZZOLAN SHALL BE CLASS N, INTURAL PUZZOLAN, OR CLASS F, FLY ASH, CONFORMING TO AST MC OTS.
  FLY ASH POZZOLAN SHALL CONTAIN LESS THAN 1 PERCENT BY WEIGHT CARRON AND LESS THAN 3
  PERCENT BY WEIGHT SULFUR TRIOXIDE. POZZOLAN SUPPLIED DURING THE LIFE OF THE PROJECT SHALL
  HAVE BEEN FORMED AT THE SAME SINGLE SOURCE. THE POZZOLAN COLOR SHALL NOT SUBSTANTIALLY
  ALTER THE RESULTING CONCRETE FROM THE NORMAL GRAY COLOR AND APPEARANCE.

  1. ADMIXTURES SHALL BE COMPATIBLE WITH THE CONCRETE AND WITH EACH OTHER. CALCIUM CHLORIDE
  OR ADMIXTURES CONTAINING CALCIUM CHLORIDE ARE NOT ACCEPTABLE. ADMIXTURES SHALL BE USED IN
  ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND SHALL BE ADDED SEPARATELY TO
- a. WATER REDUCING ADMIXTURES AND RETARDERS: WATER REDUCING RETARDERS SHALL CONFORM TO
- WATER REDUCING ADMIXTURES AND RETARDERS: WATER REDUCING RETARDERS SHALL CONFORM 10 ASTM C494, TYPE D. CANDIDATE MANUFACTURERS INCLUDE DEGUSSA ADMIXTURE SYSTEMS, POZZOLITH 300R; SIKA CHEMICAL CORP., PLASTIMENT; EUCLID CHEMICAL CO., EUCON RETARDER 75; OR EQUAL. WATER REDUCING ADMIXTURES SHALL CONFORM TO ASTM C494, TYPE A. CANDIDATE MANUFACTURERS INCLUDE DEGUSSA ADMIXTURE SYSTEMS, POZZOLITH 322N; SIKA CHEMICAL CORP., PLASTOCRETE 161; EUCLID CHEMICAL CO., EUCON WR89; OR EQUAL. THE WATER REDUCING RETARDERS AND ADMIXTURES SHALL REDUCE THE WATER REQUIRED BY AT LEAST ADMIXTURE PROPERTY AND SUMPLY AND SUMPLY RESERVED.
- 11 PERCENT FOR A GIVEN CONCRETE CONSISTENCY AND SHALL COMPLY WITH THE WATER/CEMENT RATIO STANDARDS OF ACI 211.1 AIR ENTRAINING AGENT: AIR ENTRAINING AGENT SHALL CONFORM TO ASTM C260. CANDIDATE
- MANUFACTURERS INCLUDE DEGUSSA ADMIXTURE SYSTEMS, MB-AE 90; SIKA CHEMICAL CORP., AEA-15; EUCLID CHEMICAL CO., AEA-92 OR EQUAL. THE AIR ENTRAINING AGENT ADDED SHALL PRODUCE, IN
- k. WATER FOR WASHING AGGREGATE, FOR MIXING AND FOR CURING SHALL BE POTABLE AND FREE FROM OIL WATER FOR WASHING AGGREGATE, FOR MIXING AND FOR CURING SHALL BE POTABLE AND FREE FROM OIL AND DELETERIOUS AMOUNTS OF ACIDS, ALKALIS, AND ORGANIC WATERIALS, SHALL NOT CONTAIN MORE THAN 1,000 MG/L OF CHLORIDES AS CL, NOR MORE THAN 1300 MG/L OF SULFATES AS SO4; AND SHALL NOT CONTAIN AN AMOUNT OF IMPURITIES THAT MAY CAUSE A CHANGE OF MORE THAN 25 PERCHIN IN THE SETTING TIME OF THE CEMENT NOR A REDUCTION OF MORE THAN 5 PERCENT IN THE COMPRESSIVE STRENGTH OF THE COMCRETE AT 14 DAYS WHEN COMPARED WITH THE RESULT OBTAINED WHITE STRENGTH OF THE CONCRETE AT 14 DAYS WHEN COMPARED WITH THE RESULT OBTAINED WHITE STRENGTH OR STRENGTH OF MORE STRENGTH OF MORE STRENGTH OF MORE STRENGTH OF MORE STRENGTH OF MORE STRENGTH OF MORE STRENGTH OF MORE STRENGTH OF MORE STRENGTH OF MORE STRENGTH OF MORE STRENGTH OF MORE STRENGTH OF MORE STRENGTH. SUFFICIENT TO DISCOLOR THE CONCRETE.
- MISCELLANEOUS MATERIALS: a. ADHESIVE ANCHORS FOR POST-INSTALLED ANCHORS AND DOWELS - HILTI, HIT-RE 500 - SP, SIKDUR - 31
- a. ADHESIVE ANCHORS FOR POST-INSTALLED ANCHORS AND DOWELS HILTI, HIT-RE 500 SP, SIKDUR 31 HI-MOD GEL, OR DAYTON SUPERIOR, SURE ANCHOR I JS1.
  b. BONDING COMPOUNDS EPOXY RESIN BONDING COMPOUNDS SHALL CONFORM TO ASTM C881 TYPES I OR II, CLASS A, B, OR C DEPENDING ON TEMPERATURE AT USE. ACCEPTABLE PRODUCTS INCLUDE: SIKA CHEMICAL CORPORATION "SIKADUR HI-MOD OR ARMATEC 110 EPOCEM.
  C. CURING AND SEALING COMPOUNDS ACCEPTABLE PRODUCTS INCLUDE: SPEC CHEM "E-CURE"; DAYTON SUPERIOR "CLEAR CURE VOC J7WB", CONFORMING TO ASTM C399 AND ASTM C1315
- SUBMIT FOR APPROVAL CONCRETE MIX DESIGN AND CERTIFICATION OF CONCRETE MATERIALS CONFORMING

OLLOWING EXPOSURE CATEGORIES:	
CATEGORY	CLA
FREEZE AND THAWING	F1
SULFATE	S1
IN CONTACT WITH WATER	W1

- CORROSION PROTECTION CORROSION PROTECTION

  C1
  DETAILING, FABRICATION AND ERECTION OF REINFORCING STEEL, UNLESS OTHERWISE NOTED, SHALL
  CONFORM TO ACI 315, "DETAILS AND DETAILING OF REINFORCED CONCRETE STRUCTURES" AND THE CRSI,
  "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES."

  11. CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH "SPECIFICATIONS FOR STRUCTURAL CONCRETE
- FOR BUILDINGS", (ACI 301).

  12. CONCRETE SHALL BE PROPORTIONED, BATCHED, MIXED, PLACED, CONSOLIDATED, AND CURED IN
- ACCORDANCE WITH ACI 301, 304, 308, 309, AND 318.
- REINEDROING BAR HOOKS SHOWN ON THE DRAWINGS SHALL BE ACLSTANDARD ON DEGREE HOOKS. HOOKS REINFORCING BAR HOOKS SHOWN ON THE DRAWINGS SHALL BE ACI STANDARD 90 DEGREE HOOKS. HOOKS DO NOT HAVE TO BE ORIGINATED AS SHOWN IN DRAWINGS. DO NOT LAP OR ATTACH STANDARD 90 DEGREE HOOKS TO ADJACENT BARS.
  HOOK TOP REINFORCING OF BARS AT DISCONTINUOUS EDGES OF SLABS.
  REINFORCING STEEL SHALL NOT BE HEATED OR WELDED AND MUST BE DRY AND FREE OF CONTAMINANTS SUCH AS RUST, DIRT, GREASE, AND PROTECTIVE COATINGS.
  ALL BAR SPLICES SHALL BE ACI CLASS "S" TENSION LAP SPLICES.
  CONCRETE PROTECTION (CLEAR COVER) FOR REINFORCING BARS SHALL BE AS FOLLOWS UNLESS NOTED DITTERWING

- OTHERWISE.

  a. FOOTINGS:

  3. INCHES, BOTTOM AND UNFORMED EDGES

  2. INCHES, FORMED EDGES

  2. INCHES, EXPOSED TO EARTH, WATER OR WEATHER
- 2 INCHES, BOTTOM, ON CONCRETE MUDMAT
- D. SLABS, WALLS:

   2 INCHES TO REINFORCEMENT

  CONTRACTOR SHALL PROVIDE BONDING AGENT TO ALL SURFACES BETWEEN EXISTING AND FRESH

  CONCRETE. BONDING AGENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURERS
- PRIOR TO APPLICATION OF BONDING AGENT, THE EXISTING CONCRETE BASE SURFACE SHALL BE THOROUGHLY CLEANED TO REMOVE ANY GREASE, OIL OR OTHER CONTAMINANTS THAT MAY PREVENT ADEQUATE BOND TO THE EXISTING CONCRETE. REMOVE WEAK OR DETERIORATED PROVIDE 34 INCH CHAMFER ON ALL EXPOSED CORNERS OF SLABS AND WALLS UNLESS OTHERWISE INDICATED. MINIMUM CLEARANCES FOR REINFORCING STEEL SHALL BE MAINTAINED. EXTEND CHAMFER 2.0°,
- WELDING REINFORCING BARS IF APPROVED BY THE CONSTRUCTION MANAGER, REINFORCING MAY BE WELDED IN ACCORDANCE WITH WITH AWS SPECIFICATION D1.4. ALL REINFORCING TO BE WELDED SHALL CONFORM TO ASTM A706. STANDARD HOOKS - BARS ENDING IN RIGHT ANGLE BENDS OR HOOKS SHALL CONFORM TO THE
- STANDARD HOOKS BARS ENDING IN RIGHT ANGLE BENDS OR HOOKS SHALL CONFORM TO THE
  REQUIREMENTS OF PARAGRAPH 11, ACL-318. PROVIDE STANDARD HOOK IN BARS WHICH TERMINATE AT
  WALL OR SLAB INTERSECTIONS THAT PROVIDE LESS THAN THE SPECIFIED DEVELOPMENT LENGTH.
   SHORE STRUCTURAL SLABS FOR A MINIMUM OF 21-DAYS OR UNTIL CONCRETE STRENGTH IS AT LEAST 0.75fc.
   DO NOT BACKFILL STRUCTURE UNTIL CONCRETE STRENGTH IS AT LEAST 6.
   CURE ALL CONCRETE FOR A MINIMUM 7-DAYS. APPLY CURING COMPOUND AT THE MAXIMUM COVERAGE
- RATE OF 300 SQUARE FEET PER GALLON LISE PRODUCT IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. SEE SPECIFICATIONS

# POST-INSTALLED FASTENERS/REBAR/DOWELS

- INSTALLED FASTENERS/REBARDOWELS

  POST-INSTALLED ANCHORS SHALL BE USED ONLY WHERE SPECIFIED ON THE STRUCTURAL DRAWINGS.

  ACICRSI ADHESIVE ANCHOR INSTALLER CERTIFICATION IS REQUIRED FOR ALL INSTALLERS OF ADHESIVE ANCHORS IN HORIZONTAL OR UPWARDLY INCLINED ORIENTATION. THIS CERTIFICATION CAN BE OBTAINED

# POST-INSTALLED FASTENERS/REBAR/DOWELS

- POST-INSTALLED ANCHORS SHALL BE USED ONLY WHERE SPECIFIED ON THE STRUCTURAL DRAWINGS. ACI/CRSI ADHESIVE ANCHOR INSTALLER CERTIFICATION IS REQUIRED FOR ALL INSTALLERS OF ADHESIVE
- ACJICRSI ADHESIVE ANCHOR INSTALLER CERTIFICATION IS REQUIRED FOR ALL INSTALLERS OF ADHESIVE ANCHORS IN HORIZONTAL OR UPWARDLY INCLINED ORIENTATION. THIS CERTIFICATION CAN EO BATAINED THROUGH ACJ OR APPROVED EQUIVALENT. FASTENERS AND OR REBAR SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS, AS INCLUDED IN THE ANCHOR PACKAGING IN COORDINATION WITH INFORMATION HEREIN. THE STRUCTURE INSTALLATION HEREIN THE STRUCTURE INSTALLATION INSTRUCTIONS AND THE REQUIREMENTS HEREIN.
- EXISTING REINFORCEMENT STEEL SHALL NOT BE CUT. PRIOR TO DRILLING THE CONCRETE, THE CONTRACTOR SHALL LOCATE REINFORCEMENT STEEL WITH A MAGNETIC BAR LOCATOR. POST-INSTALLED BOLTS, DOWELS, AND FASTENERS SHALL BE INSTALLED TO MISS REINFORCEMENT STEEL IN CONCRETE. EXISTING REINFORCING BARS IN THE CONCRETE STRUCTURE MAY CONFLICT WITH SPECIFIC ANCHOR
- DRILL HOLES USING ROTARY PERCUSSION DRILL WITH A DEPTH GAGE. DO NOT DRILL THROUGH FULL THICKNESS OF CONCRETE, USE OF A DIAMOND CORE BIT WITH ROUGHENING TOOL FOR ANCHOR HOLES MUST BE APPROVED BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO DRILLING LINESS OTHERWIS MUST BE APPROVED BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO DRILLING. UNLESS OTHERWISE SHOWN IN THE DRAWINGS, ALL HOLES SHALL BE DRILLED PERPENDICULAR TO THE CONCRETE SURFACE. CLEAN HOLES IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS. IF CONCRETE IS DAMP, BLOW DRY HOLE WITH OIL-FREE COMPRESSED AIR. CLEAN HOLE WITH WATER ONLY IF RECOMMENDED BY MANUFACTURER. ADHESIVE ANCHORS MAY NOT BE SET IF WATER IS SEEPING INTO HOLE AND THE STRUCTURAL ENGINEER. OF RECORD SHALL BE NOTIFIED.



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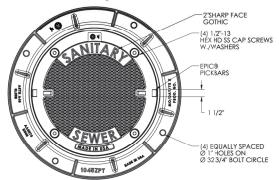
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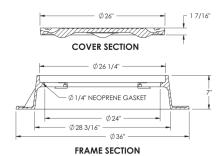
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# 1040APT 1045ZPT Assembly





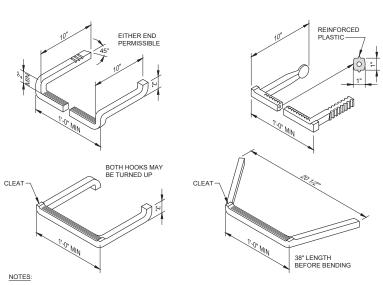
MANHOLE FRAME AND COVER



# esign Features

Vaterials Cover Gray Iron (CL35B) Frame Gray Iron (CL35B)

-Country of Origin: USA

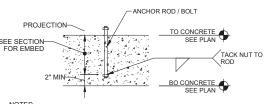


PROVIDE STEPS THAT CONFORM TO THE MATERIAL REQUIREMENTS PER THE FOLLOWING STANDARDS AND HAVE A DEPRESSED TREAD OR 1/2" MINIMUM CLEAR HEIGHT AT ENDS.
 FURNISH DUCTILE IRON CASTING ACCORDING TO ASTM A536.
 COAT STEEL RODS, GRADE 60 ACCORDING TO ASTM A934/A.
 PROVIDE DEFORMED AND PLAIN BILLET STEEL BARS, GRADE 60 FOR CONCRETE REINFORCEMENT ACCORDING TO ASTM A615.

2. EMBED STEPS INSTALLED IN FRESH CONCRETE AT LEAST 4" DEEP.

3. THE ENGINEER MAY REQUIRE THE CONTRACTOR TO TEST LOAD A MAXIMUM OF ONE STEP PER MANHOLE TO A PROOF LOAD OF 400 LB, IN DIRECT PULL. MEET THE APPROVAL OF THE ENGINEER WITH THE EQUIPMENT AND METHOD USED. IF THE SELECTED STEP FALLS THE PULL-OUT TEST, ALSO TEST THE REMAINING STEPS IN THAT MANHOLE. REMOVE ALL STEPS NOT PASSING THE PULL-OUT TEST AND INSTALL AND TEXT A NEW STEP TO THE SATISFACTION OF THE ENGINEER. COST OF TESTING IS INCIDENTAL TO THE UNIT PRICE BID FOR THE MANHOLE.

TYPICAL MANHOLE STEP DETAIL



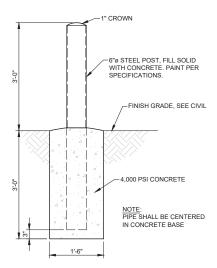
 $\frac{\text{NOTES:}}{\text{USE HEAVY HEAD BOLTS OR TACK WELD NUT AS SHOWN}}$ 

COORDINATE PROJECTION WITH MANHOLE CASTING SUPPLIER UNLESS NOTED OTHERWISE.

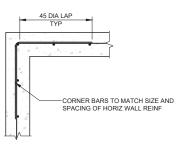
DO NOT USE 'J' BOLTS. 'J' BOLTS ARE NOT ACCEPTABLE.

ANCHOR BOLTS AND ASSOCIATED HARDWARE TO BE GALVANIZED A307 OR GALVANIZED F1554 36 GRADE THREADED ROD.

TYPICAL ANCHOR BOLT DETAIL



TYPICAL MEDIUM DUTY GUARD POST DETAIL



TYPICAL CONCRETE WALL CORNER DETAIL

	<del>-</del>										
LAF	TAE	BLE (f	" <sub>c</sub> = 4	,000 F	PSI)						
BAR	LAP		UNCOAT	ED BARS	3						
SIZE	CLASS	TOP	BARS	OTHER	R BARS						
		CASE 1	CASE 2	CASE 1	CASE 2						
#3	Α	19	28	15	22						
#3	В	24	36	19	28						
#4	Α	25	37	19	29						
#4	В	32	48	25	37						
#5	Α	31	47	24	36						
#5	В	40	60	31	47						
#6	Α	37	56	29	43						
#0	B	48	72	37	56						

NOTES:

1. TABULATED VALUES ARE BASED ON A MINIMUM YIELD STRENGTH OF 60,000 PSI. LENGTHS ARE IN INCHES.

2. CASES 1 AND 2, WHICH DEPEND ON THE TYPE OF STRUCTURAL MEMBER, CONCRETE COVER, AND OC SPACING OF THE BARS ARE DEFINED AS:

BEAMS AND COLUMNS

• CASE 1: CONCRETE COVER AT LEAST 1.0d<sub>b</sub>
AND OC SPACING AT LEAST 2.0 d<sub>b</sub>
CASE 2: CONCRETE COVER LESS THAN 1.0d<sub>b</sub>
OR OC SPACING LESS THAN 2.0 d<sub>b</sub>
OTHER BARS

• CASE 1: CONCRETE COVER AT LEAST 1.0d<sub>b</sub>
AND OC SPACING LESS THAN 3.0 d<sub>b</sub>
OR OC SPACING AT LEAST 3.0 d<sub>b</sub>
CASE 2: CONCRETE COVER LESS THAN 1.0d<sub>b</sub>
OR OC SPACING LESS THAN 3.0 d<sub>b</sub>
3. TENSION LAP SPLICES OF #14 OR #18 BARS ARE NOT PERMITTED. THE TABLE VALUES FOR THOSE BAR SIZES ARE TENSION DEVELOP LENGTHS.

4. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST BELOW THE BARS.

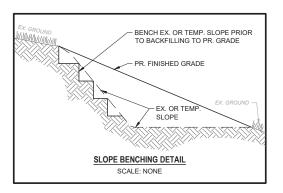
LAP SPLICE TABLE

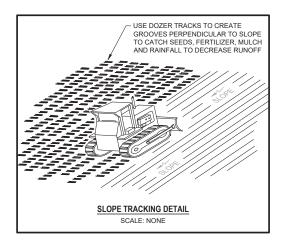
VILLAGE OF GENEVA-ON-THE-LAKE SANITARY SEWER TRUNK LINE REPLACEMENT ASHTABULA COUNTY OHIO DEBIGNED BY: RS JUNCTION CHAMBER - 10 SERIES OHEOKED BY: RS OHEOKED BY: RS OHEOKED BY: RS	GENEVA-ON-THE-LAKE         SCALE:         AS NOTED         NO           TRUNK LINE REPLACEMENT         DATE:         3/18/24         DATE:         3/18/24           OUNTY         OHIO         DEBAGNED BY:         BS         BS           HAMBER - 10 SERIES         DRAWN BY:         RLM         BS	DATE	(		your trusted	Consult			
TRUNK LINE REPLACEMENT OUNTY OHIO DESIGNED BY: BS HAMBER - 10 SERIES OHIOWANN BY: RLM URAL DETAILS OHIOWANN BY: RLM	SANIE OF GENEVA-ON-THE-LAKE SANIERY SEWER TRUNK LINE REPLACEMENT SANITARY SEWER TRUNK LINE REPLACEMENT SANIE 3/18/24 ASHTABULA COUNTY OHIO DESIGNED BY: BS OHECKED BY: RLM STRUCTURAL DETAILS OHECKED BY: BS								
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GENEVA-ON-THE-LAKE TRUNK LINE REPLACEMENT OUNTY OHIO HAMBER - 10 SERIES URAL DETAILS	SANITARY SEWER TRUNK LINE REPLACEMENT  SANITARY SEWER TRUNK LINE REPLACEMENT  ASHTABULA COUNTY  OHIO  JUNCTION CHAMBER - 10 SERIES  STRUCTURAL DETAILS	AS NOTE		3/18	1				
GENEVA-ON-THE-LAKE TRUNK LINE REPLACEMENT OUNTY OHIO HAMBER - 10 SERIES URAL DETAILS	SANITARY SEWER TRUNK LINE REPLACEMENT  SANITARY SEWER TRUNK LINE REPLACEMENT  ASHTABULA COUNTY  OHIO  JUNCTION CHAMBER - 10 SERIES  STRUCTURAL DETAILS	SCALE		DATE	DEBLANE		DRAWN B		CHECKE
				SANIJARY SEWER IRONK LINE REPLACEMENT			JUNCTION CHAMBER - 10 SERIES		SIRUCIURAL DEI AILS

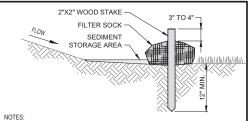
10S-03 SHEET

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OF





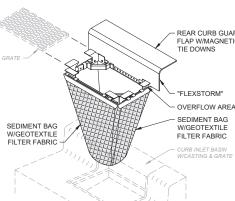


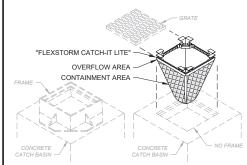
- FILTER SOCKS SHALL BE 3 OR 5 MIL CONTINUOUS, TUBULAR, HDPE 3/8" KNITTED MESH NETTING MATERIAL, FILLED WITH COMPOST
- COMPOST SHALL BE WEED, PATHOGEN AND INSECT FREE, FREE OF ANY COMPOST STALLS WEED, PATIONS OF THER MATERIALS TOXIC TO PLANT GROWTH, BE DERIVED FROM A WELL-DECOMPOSED SOURCE OF ORGANIC MATTER, AND CONSIST OF PARTICLES RANGING FROM 3/8" TO 2".
- FILTER SOCKS SHALL BE PLACED ON A LEVEL LINE ACROSS SLOPES PARALLEL TO THE BASE OF THE SLOPE. ON SLOPES APPROACHING 2:1. ADDITIONAL SOCKS SHALL BE PROVIDED AT THE TOP AND MID-SLOPE.
- FILTER SOCKS SHALL BE PLACED AT LEAST 5' FROM THE TOE OF SLOPE FOR SEDIMENT DEPOSIT BUILT UP SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED 1/3 THE
- FILTER SOCK HEIGHT
- WHEN A FILTER SOCK IS NO LONGER REQUIRED, IT SHALL BE DISPERSED
- THE MAXIMUM DRAINAGE AREA PER 100 FEET OF FILTER SOCK IS 1/2 ACRE AND IS DEPENDENT ON THE SLOPE FOLLOWING THE GUIDANCE CHART BELOW

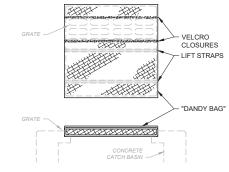
MA	MAX. SLOPE LENGTH ABOVE FILTER SOCK									
SLOPE	RATIO (H:V)	8"	12"	18"	24"					
0% - 2%	0 - 50:1	125'	250'	300'	350'					
2% - 10%	50:1 - 10:1	100'	125'	200'	250'					
10% - 20%	10:1 - 5:1	75'	100'	150'	200'					
20% - 50%	5:1 - 2:1	N/A	50'	75'	100'					
<u>&gt;</u> 50%	≥ 2:1	N/A	25'	50'	75'					

FILTER SOCK DETAIL



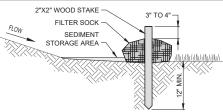






- ALL NEW AND EXISTING STORM INLET BASINS WITHIN THE WORK LIMITS SHALL HAVE INLET PROTECTION INSTALLED.
- INLET PROTECTION SHALL BE INSTALLED AS EACH STORM INLET IS
- NOT ALL ITEMS SHOWN MAY APPLY OR DIFFERENT TYPES OR CONFIGURATIONS MAY BE REQUIRED. THE CONTRACTOR SHALL MEASURE EACH INLET TO CONFIGURE AND ASSEMBLE CUSTOMIZED INLET FILTERS.

**INLET PROTECTION DETAIL** 



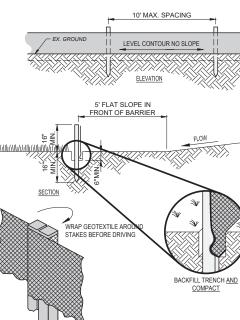
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- BUILT UP SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED 1/3 THE FILTER SOCK HEIGHT
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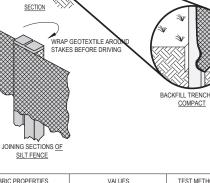
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SLOPE	RATIO (H:V)	12"	18"	24"					
0% - 2%	0 - 50:1	125'	250'	300'	350'				
2% - 10%	50:1 - 10:1	100'	125'	200'	250'				
10% - 20%	10:1 - 5:1	75'	100'	150'	200'				
20% - 50%	5:1 - 2:1	N/A	50'	75'	100'				
≥ 50%	<u>≥</u> 2:1	N/A	25'	50'	75'				

FILTER SOCK DETAIL SCALE: NONE

# RESTORATION/SEDIMENTATION AND EROSION CONTROL

- ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES AND OTHER AREAS AS SHOWN ON PLANS SHALL BE PROPERLY RESTORED WITH 4" OF TOPSOIL, SEEDING AND MULCHING PER THE SPECIFICATIONS.
- IN ALL DISTURBED AREAS THE CONTOURS WILL BE RESTORED IN A MANNER THAT MAINTAINS EXISTING DRAINAGE PATTERNS. FOLLOWED BY SEEDING AND MULCHING. IF, DUE TO WEATHER, FINAL GRADING CANNOT BE ACCOMPLISHED IMMEDIATELY. TEMPORARY SEEDING & MULCHING, WITHIN SEVEN DAYS, WILL BE USED UNTIL FINAL RESTORATION CAN OCCUR.
- SILT FENCING SHALL BE EXTRA STRENGTH SYNTHETIC FILTER FABRIC HAVING A MINIMUM FLOW RATE OF 0.3 GA/SQ.FT/MINUTE AND SHALL CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0°F. TO 120°F. SEE STANDARD DETAIL.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING INSPECTIONS OF ALL EROSION CONTROL DEVICES ON A WEEKLY BASIS AND AFTER ALL STORMS THAT PRODUCE MORE THAN ONE-HALF (1/2") INCH TOTAL RAINFALL. ANY NEEDED REPAIRS SHALL BE PERFORMED IMMEDIATELY. THE CONTRACTOR SHALL DOCUMENT ALL INSPECTIONS AND ANY REPAIRS THAT ARE DONE TO MAINTAIN **FFFICIENCY**
- CONTRACTOR SHALL REMOVE DAILY ALL MUD, SOIL AND DEBRIS THAT MAY BE TRACKED ONTO EXISTING STREETS, DRIVES OR WALKS BY HIS EQUIPMENT OR THAT OF SUBCONTRACTORS OR SUPPLIERS.
- THE INSTALLED EROSION CONTROL FEATURES MUST NOT ACT IN A MANNER THAT CAUSES THE AREA TO
- THE CONTRACTOR IS TO PLUG ANY OPEN ENDS OF INSTALLED SEWER AND ALL OTHER CONNECTING PIPES NOT PROTECTED BY EROSION CONTROLS, SUCH THAT AGGREGATES DO NOT CLOG THE NEW SEWER SYSTEM OR ENTER THE NEW PUMP STATION.

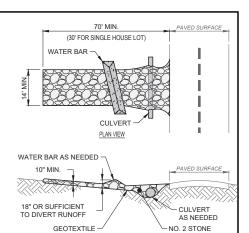




FABRIC PROPERTIES	VALUES	TEST METHOD
GRAB TENSILE STRENGTH	90 LB. MIN	ASTM D-1682
MULLEN BURST STRENGTH	190 PSI MIN	ASTM D-3786
SLURRY FLOW RATE	0.3 GAL./MIN./S.F. MAX.	
EQUIVALENT OPENING SIZE	40-80 L	IS STD. SIEVE CW-0221
ULTRAVIOLET RADIATION STABILITY	90% MIN	ASTM-G-26

- PRESERVE VEGETATION FOR 5 FEET OR AS MUCH AS POSSIBLE UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE RF-ESTABLISHED WITHIN 7 DAYS FROM SILT FENCE INSTALLATION
- THE MAXIMUM DRAINAGE AREA PER 100 FEET OF SILT FENCE IS DEPENDENT ON THE SLOPE, BUT NO MORE THAN 1/2 ACRE. SILT FENCE CANNOT BE USED FOR DRAINAGE AREAS WITH SLOPES GREATER THAN 50%.
- SILT FENCE MAY ONLY PASS RUNOFF AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER OR AROUND THE ENDS, OR IN ANY OTHER WAY BECOMES A CONCENTRATED FLOW, THEN CHANGE THE LAYOUT OF THE SILT FENCE, REMOVE ACCUMULATED SEDIMENT OR INSTALL OTHER PRACTICES.
- SILT FENCE SHALL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, VERIFICATION FABRIC IS SECURELY ATTACHED TO FENCE POSTS, AND VERIFICATION FENCE POSTS ARE FIRMLY IN THE GROUND. BUILT UP SEDIMENT SHALL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED 1/3

SILT FENCE



GEOTEXTILE SHALL BE COMPOSED OF STRONG ROT-PROOF POLYMERIC

TENSILE STRENGTH	200 LB
PUNCTURE STRENGTH	80 PSI
TEAR STRENGTH	50 LB
BURST STRENGTH	320 PSI
ELONGATION	20%
EQUIVALENT OPENING SIZE	< 0.6 MM
PERMITTIVITY	0.001 CM/SEC.

- INSTALL WATER BAR, AS NEEDED, TO PREVENT SURFACE RUNOFF FROM FLOWING OUT ONTO PAVEMENT
- APPLY ADDITIONAL STONE AS CONDITIONS DEMAND, REPLENISH STONE WHEN THE DEPTH IS LESS THAN 6", AND REPLACE IF STONES BECOMES
- IMMEDIATELY REMOVE MUD DROPPED, WASHED OR TRACKED ONTO ROADS OR ANY SURFACE WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROLS BY SCRAPING OR SWEEPING. CONSTRUCTION ENTRANCE SHALL NOT BE RELIED UPON TO REMOVE MUD
- FROM VEHICLES OR PREVENT OFF-SITE TRACKING. VEHICLES THAT ENTER AND LEAVE THE SITE SHALL BE RESTRICTED FROM MUDDY AREAS.
- CONSTRUCTION ENTRANCE SHALL REMAIN UNTIL THE DISTURBED AREA IS STABILIZED OR REPLACED WITH A PERMANENT ROADWAY.

# CONSTRUCTION ENTRANCE SCALE: NONE

- THE SEED BED SHALL BE PULVERIZED AND LOOSE TO ENSURE THE SUCCESS OF ESTABLISHING VEGETATION.
- SOIL AMENDMENTS MAY BE REQUIRED TO ESTABLISH VEGETATION. PERFORM SOIL 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 ANALYSIS
- APPLY SEED UNIFORMLY. COVER BROADCASTED SEED BY RAKING OR DRAGGING, AND LIGHTLY TAMPING INTO PLACE.
- MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING
- INSPECT FOR SOIL EROSION OR VEGETATION LOSS AND REPAIR BARE OR SPARSE AREAS, FILL GULLIES, RE-FERTILIZE, RE-SEED AND RE-MULCH AS

TEMPORARY SEEDING SPECIES SELECTION							
DATES	SPECIES	LB/1,000 SF	LB/AC.				
MARCH 1 - AUGUST 15	OATS TALL FESCUE PERENNIAL RYEGRASS	3 1 1	128 40 40				
	PERENNIAL RYEGRASS TALL FESCUE	2 1	40 40				
AUGUST 16 - OCTOBER 31	RYE TALL FESCUE PERENNIAL RYEGRASS	3 1 1	112 40 40				
	WHEAT TALL FESCUE PERENNIAL RYEGRASS	3 1 1	120 40 40				
	PERENNIAL RYEGRASS TALL FESCUE	2 1	40 40				
NOVEMBER 1 - FEBRUARY 28	ONLY MULCH OR DORMANT S	SEEDING.					

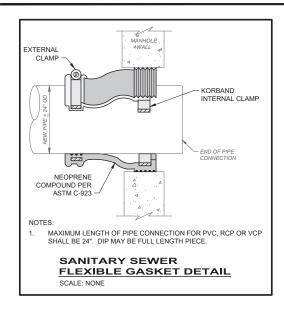
TEMPORARY SEEDING DETAIL

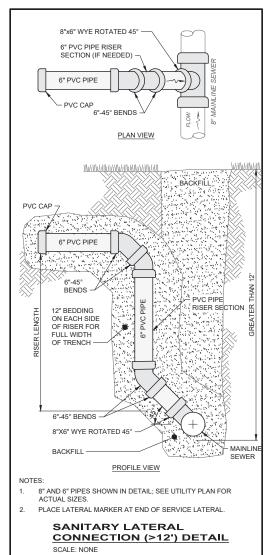


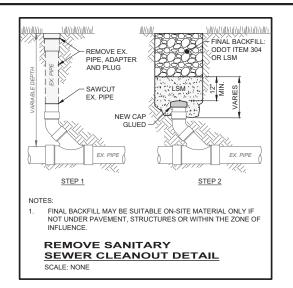


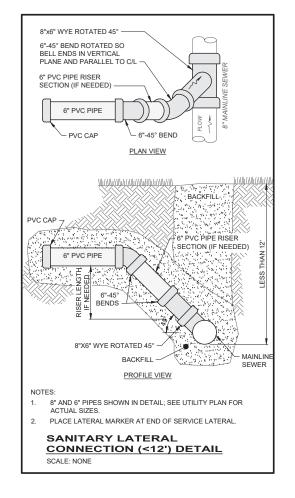
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NO REVISION								
SCALE: AS NOTED		<b>DATE:</b> 3/18/24	- Xa Cancigan	W. W.	DRAWN BY:			OHEOKED BY: RLM
VILLAGE OF GENEVA-ON-THE-LAKE		SANIJAKY SEWEK IKUNK LINE KEPLACEMENI	ASHTABULA COUNTY OHIO		STANDARD DETAILS - SD SERIES			CONSTRUCTION DETAILS
		23 RAV	1	18	83	3	!	
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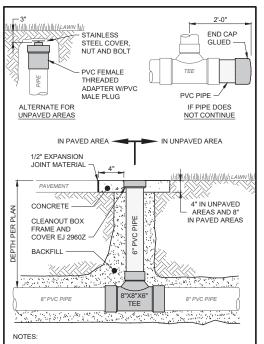
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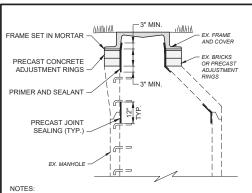






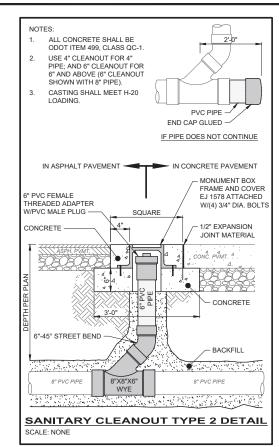
- ALL CONCRETE SHALL BE ODOT ITEM 499, CLASS QC-1.
- USE 4" CLEANOUT FOR 4" PIPE; AND 6" CLEANOUT FOR 6" AND ABOVE (6" CLEANOUT SHOWN WITH 8" PIPE).
- CASTING SHALL MEET H-20 LOADING.

# SANITARY CLEANOUT TYPE 1 DETAIL



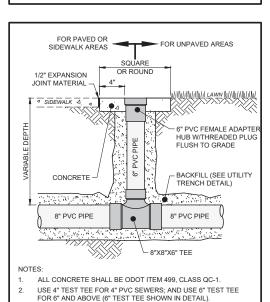
- REMOVE FRAME AND CASTING
- CLEAN SURFACES OF FRAME, CASTING AND PRECAST MANHOLE. REMOVE RUST, DEBRIS AND LOOSE MORTAR.
- CLEAN SURFACES OF ADJUSTMENT RINGS OR BRICKS. REMOVE LOOSE BRICK AND MORTAR IF EXCESSIVE BRICK DAMAGE, REPLACE WITH NEW ADJUSTMENT RINGS.
- STOP ALL ACTIVE INTERNAL LEAKS WITH WATER PLUG.
- FILL ALL VOIDS WITH CEMENTITOUS GROUT. IF SURFACE IS ROUGH, IRREGULAR OR CONTAINS EXCESSIVE VOIDS THAT PREVENTS AN EFFECTIVE SEAL, APPLY PATCHING MIX TO PROVIDE A SMOOTH LINIFORM SURFACE, DRY INTERIOR SURFACES PER MANUFACTURER'S RECOMMENDATION
- APPLY PRIMER AND SEALANT (I.E. FLEX-SEAL) TO MANHOLE ADJUSTMENT RINGS. THICKNESSES SHALL BE PER MANUFACTURER'S RECOMMENDATION APPLY TO ENTIRE SURFACE OF ADJUSTMENT RINGS, AS WELL AS MANHOLE STRUCTURE AND CASTING AT LEAST 3" ABOVE AND BELOW ADJUSTMENT RINGS. ALLOW PRIMER TO CURE PRIOR TO APPLYING SEALANT

**ADJUST SANITARY MANHOLE CASTING AND REHABILITATE** ADJUSTMENT RING DETAIL SCALE: NONE

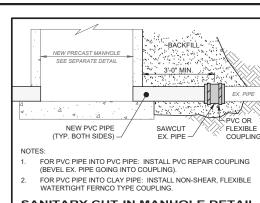


(SIZE PER PLAN) -STAINLESS STEEL FLOW NOTES: SANITARY MAIN SHALL BE CORED PRIOR TO SETTING THE SADDLE IN PLACE. SADDLE WYE SHALL BE PLACED AT AN ANGLE OF 45° TO THE SEWER FLOW LINE SANITARY SADDLE DETAIL

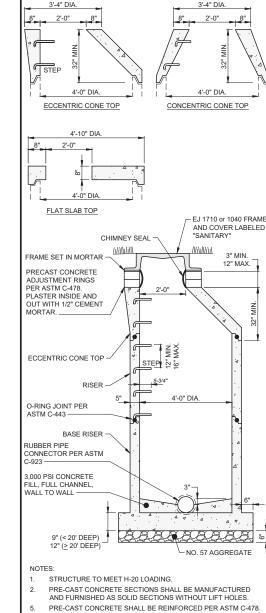
SCALE: NONE



SANITARY TEST TEE DETAIL



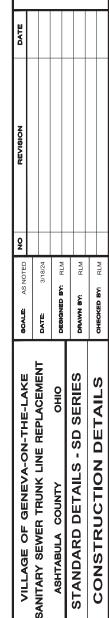
**SANITARY CUT-IN MANHOLE DETAIL** SCALE: NONE









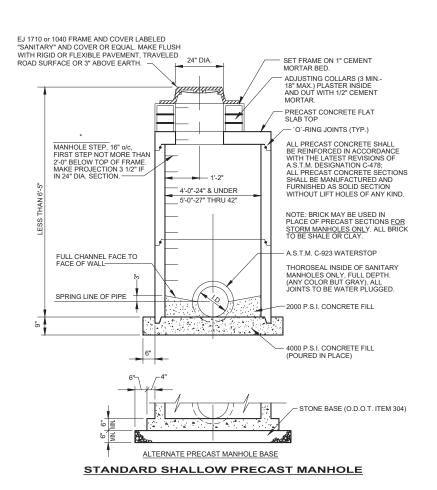


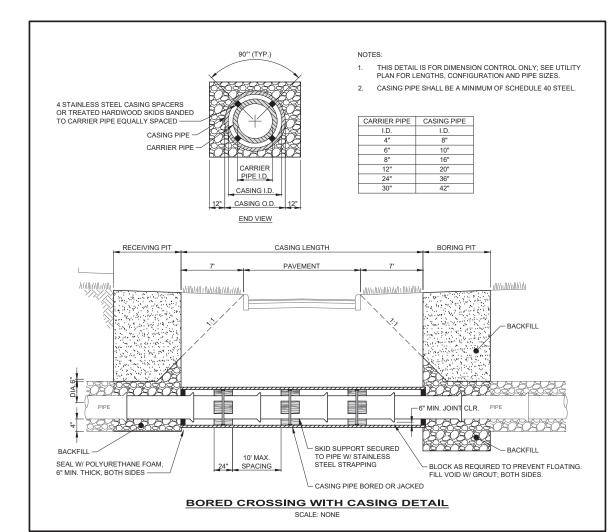
- TOP, TRANSITION AND REDUCER SECTIONS MAY BE ECCENTRIC
- CONE, CONCENTRIC CONE OR FLAT SLAB
- MANHOLE BASE MUST BE PRECAST WITH BASE RISER (I.E. MONOLITHIC).
- USE REINFORCED PLASTIC MANHOLE STEPS.
- FIRST STEP SHALL NOT BE MORE THAN 2'-0" BELOW TOP OF FRAME. MAKE PROJECTION 3-1/2" IF IN 24" DIA. SECTION.

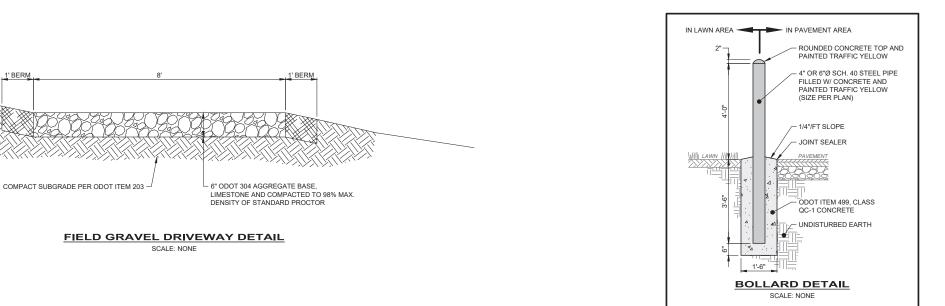
**PRE-CAST CONCRETE** MANHOLE (SANITARY) DETAIL SCALE: NONE

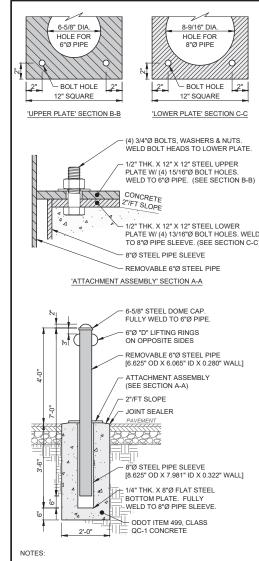
PROJECT NO: 231183 SD-02 SHEET OF 22 29

STANDARD DETAILS CONSTRUCTION I









- PIPES SHALL BE SMOOTH, WATER TIGHT, AND FREE OF BURRS AND SHARP PROJECTIONS FABRICATED FROM SCH. 40 STEEL PIPE PER ASTM A-53.
- ENTIRE REMOVABLE BOLLARD ASSEMBLY SHALL BE PAINTED. COLOR CHOSEN BY OWNER OR ARCHITECT.
- ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED ZINC COATED GALVANIZED STEEL PER ASTM A653.

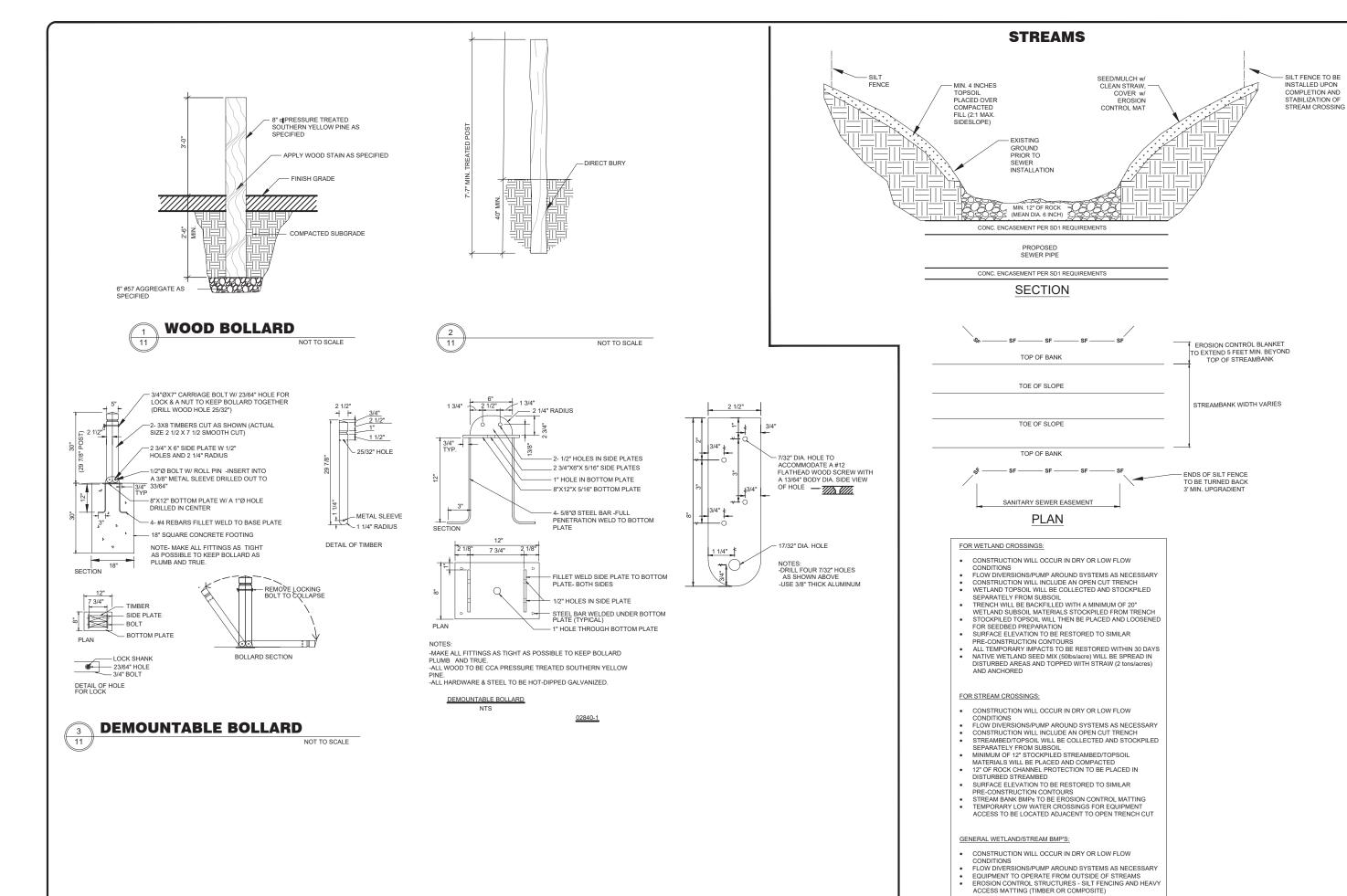
# **REMOVABLE BOLLARD DETAIL**

SCALE: NONE





) Z							
SCALE: AS NOTED		<b>DATE:</b> 3/18/24	MIN ->= CENCRETO		DRAWN BY: RLM		CHECKED BY: RLM
VILLAGE OF GENEVA-ON-THE-LAKE		SANIJARY SEWER IRONK LINE KEPLACEMENI	ASHTABULA COUNTY OHIO		STANDARD DETAILS - SD SERIES	O HATEL MOITOLIGEOROS	CONSTRUCTION DELAILS
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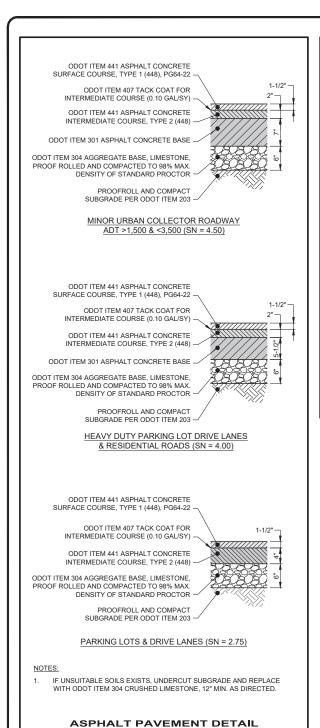
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U					
j.	OHEOKED BY: RLM	Z Z			

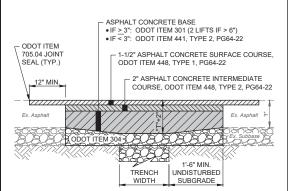
OHIO
- SD SERIE
- DETAILS

VILLAGE OF GENEVA-ON-THE-LAI SANITARY SEWER TRUNK LINE REPLACEN STANDARD DETAILS - SCONSTRUCTION E

PROJECT NO: 231183 SD-03

SHEET OF 24 29



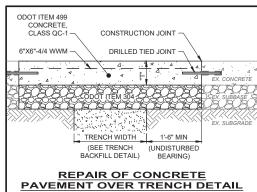


# NOTES:

- ASPHALT PAVEMENT TO BE REMOVED SHALL BE SAW CUT IN A NEAT AND STRAIGHT LINE. ADDITIONAL SAW CUTS MAY BE DESIRED TO FACILITATE REMOVAL, BUT THERE WILL BE NO EXTRA PAYMENT.
- PAVEMENT SHALL BE REMOVED WITHOUT DAMAGING OR UNDERMINING THE PAVEMENT TO REMAIN. IF ADJACENT PAVEMENT IS DAMAGED, THE CONTRACTOR SHALL MAKE ADDITIONAL SAW CUTS, REMOVE THE DAMAGED AREAS AND REPAIR AS NECESSARY WITH NO ADDITIONAL
- TACK COAT SHALL BE APPLIED TO THE EXPOSED EX. ASPHALT BASE COURSE AND ALL SIDES OF PATCH.
- ODOT ITEM 705.04 JOINT SEALANT SHALL BE APPLIED AROUND THE

# **ASPHALT PAVEMENT REPAIR** OVER TRENCH DETAIL

SCALE: NONE



SCALE: NONE - SURFACE AND WEARING COURSES (MATCH EX. SECTIONS) EX. ASPHALT OVERLAY ODOT ITEM 452 CONSTRUCTION NON-REINFORCED SAW CUT DRILLED TIED CLASS QC1 (MATCH EX. MIN.

TRENCH WIDTH

BACKFILL DETAIL)

TACK COAT SHALL BE APPLIED TO THE EXPOSED EX. CONCRETE BASE AND ALL SIDES OF EACH PATCH.

2. A SEALANT SHALL BE APPLIED AROUND THE EDGE OF PATCH. REPAIR OF CONCRETE

**PAVEMENT OVER TRENCH DETAIL** 

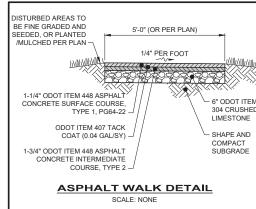
SCALE: NONE

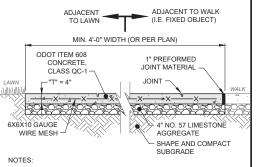
1'-6" MIN

(SEE TRENCH (UNDISTURBED

SUBGRADE -

NOTES:

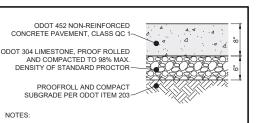




- SEE LAYOUT PLAN FOR JOINT LOCATIONS. IF JOINTS ARE NOT PROVIDED. THEN THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL JOINTS. DIVIDE JOINTS INTO EQUALLY SPACED RECTANGULAR BLOCKS.
- SAW CUT OR HAND TOOL JOINT 1/8" WIDE BY 1/4 OF "T" DEEP.
- ROUND ALL EDGES AND JOINTS WITH A 1/4" RADIUS.
- INSTALL PREFORMED JOINT MATERIAL EVERY 30', OR BETWEEN SIDEWALK AND FIXED OBJECT (I.E. MANHOLE, WALK, BUILDING). WALK SHOWN FOR REFERENCE ONLY
- LIGHTLY BROOM THE FINISH PERPENDICULAR TO THE WALKING PATH OR PER PLAN. IF HAND TOOLED JOINTS AND EDGES ARE SPECIFIED, FINISH AFTER PANEL INTERIOR TEXTURE HAS BEEN APPLIED (LE WINDOW PANE EFFECT).
- APPLY LIQUID-MEMBRANE CURING COMPOUND (200 S.F./GAL.)

# **CONCRETE WALK DETAIL**

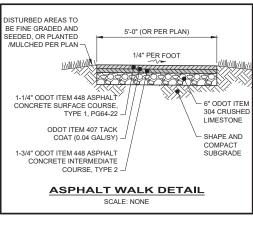
SCALE: NONE

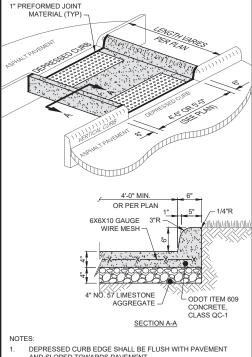


- SEE LAYOUT PLAN FOR JOINT LOCATIONS. IF JOINTS ARE NOT SHOWN, THEN THE CONTRACTOR SHALL DETERMINE THE

# NON-REINFORCED

SCALE: NONE





- AND SLOPED TOWARDS PAVEMENT
- INSTALL DETECTABLE WARNINGS ONLY IF SHOWN ON THE

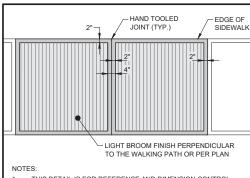
# SEE CONCRETE SIDEWALK DETAIL FOR SPECIFICATIONS.

SIDEWALK CUT-THROUGH DETAIL SCALE: NONE



GRAVEL STREET **AND CART PATH** 

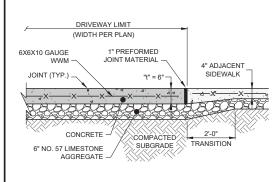
SCALE: NONE



- THIS DETAIL IS FOR REFERENCE AND DIMENSION CONTROL ONLY: SEE LAYOUT PLAN FOR LOCATIONS.
- HAND TOOLED JOINTS AND EDGES SHALL BE APPLIED AFTER PANEL INTERIOR TEXTURE HAS BEEN APPLIED TO CREATE A WINDOW PANE" EFFECT AROUND EACH PANEL.
- TOOLED EDGE SHALL BE 2" WIDTH EACH SIDE OF JOINT

# **CONCRETE SIDEWALK** JOINT AND FINISH DETAIL

SCALE: NONE



# NOTES:

- CONCRETE SHALL BE ODOT ITEM 499, CLASS QC-1 EXCEPT AT ACTIVE DRIVE APRONS WHICH SHALL BE CLASS QC MS.
- THIS DETAIL SHOWS A 6" SIDEWALK AND AGGREGATE FOR REFERENCE ONLY, BUT "t" SHALL ALWAYS BE THE SAME THICKNESS AS THE DRIVE APRON. SEE LAYOUT PLAN FOR ACTUAL THICKNESSES.

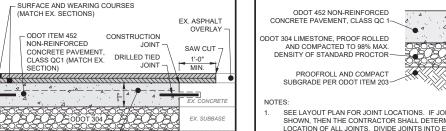
# **CONCRETE WALK THROUGH DRIVEWAY DETAIL**



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SCALE	DATE:	DESIGNED BY:	DRAWN BY:	CHECKED BY:
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	IT DATE:	DESIGN	DRAWN	CHECKE
VILLAGE OF GENEVA-ON-THE-LAKE	SANITARY SEWER TRUNK LINE REPLACEMENT	ОНЮ	STANDARD DETAILS - SD SERIES	CONSTRUCTION DETAILS
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231183 SD-05 SHEET OF 25 29



LOCATION OF ALL JOINTS. DIVIDE JOINTS INTO EQUALLY SPACED RECTANGULAR BLOCKS.

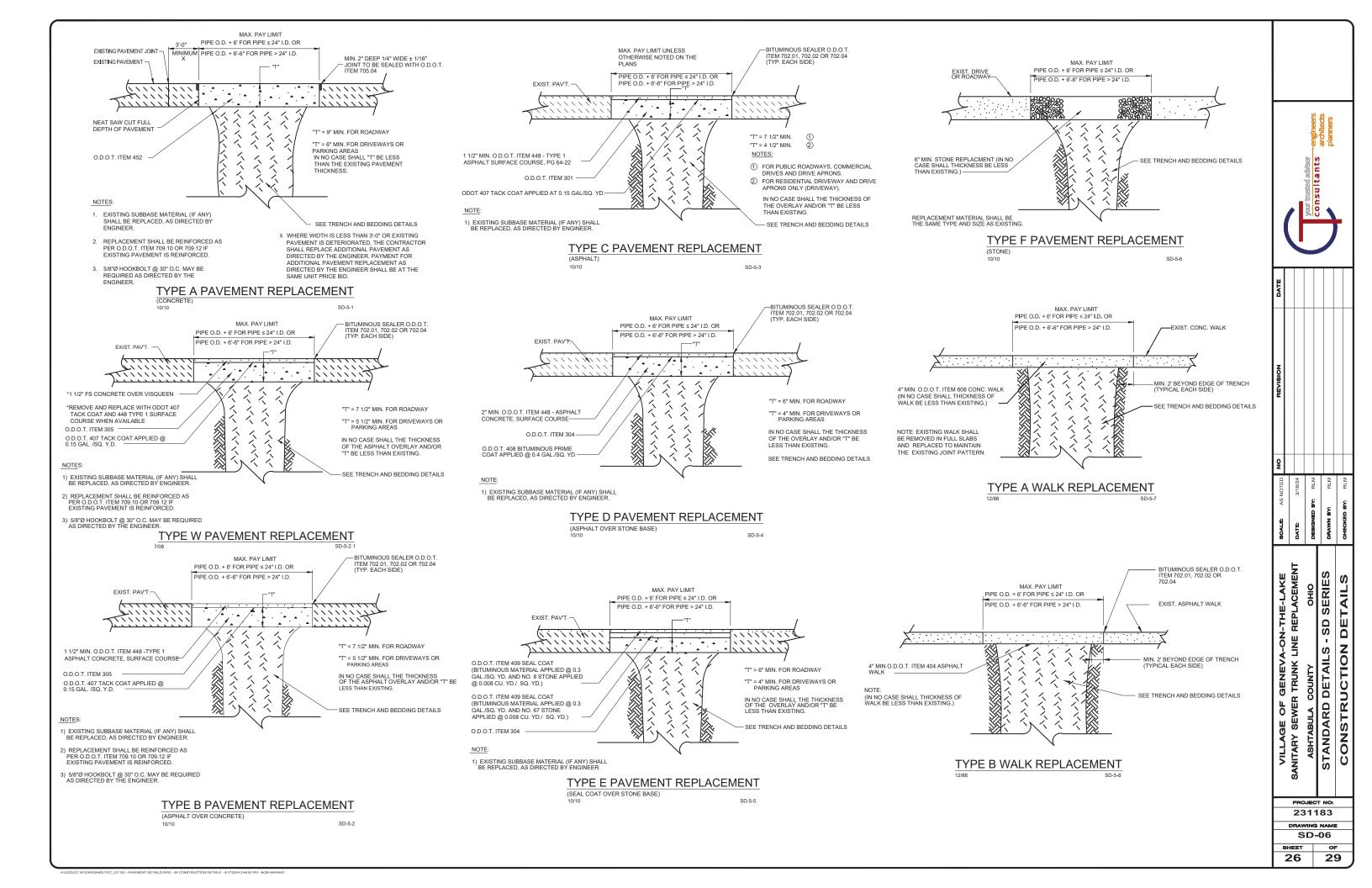
IF UNSUITABLE SOILS EXIST, UNDERCUT SUBGRADE, REMOVE AND REPLACE WITH ODOT ITEM 304 CRUSHED LIMESTONE, 12" MIN. OR PER GEOTECHNICAL ENGINEER.

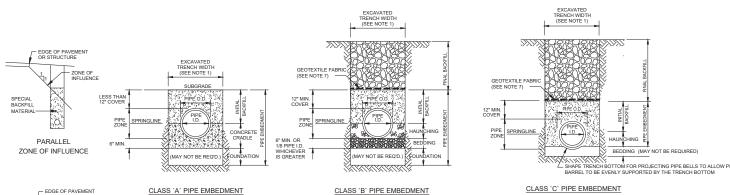
APPLY LIQUID-MEMBRANE CURING COMPOUND (200 S.F./GAL.).

CONCRETE PAVEMENT DETAIL

**BASE / ASPHALT OVERLAY** 

SCALE: NONE





EDGE OF PAVEMENT OR STRUCTURE

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TRANSVERSE ZONE OF INFLUENCE

- 1. MAXIMUM EXCAVATED TRENCH WIDTH: THE MAXIMUM EXCAVATED TRENCH WIDTH FROM THE BOTTOM OF THE TRENCH TO 12" OVER THE TOP OF THE PIPE (WITHIN PIPE EMBEDMENT) SHALL BE O.D. + 24" FOR ALL PIPES UP TO AND INCLUDING 24" I.D. + 30" FOR PIPE FROM 24" I.D. TO 54" I.D. AND O.D. + 48" FOR PIPES SIZES 60" I.D. AND OVER.
- 2. FOUNDATION: WHERE AN UNSTABLE TRENCH BOTTOM CONDITION IS ENCOUNTERED, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH MATERIAL AS DIRECTED BY THE ENGINEER.
- PIPE EMBEDMENT

NOTES:

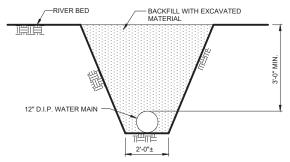
CLASS A: CLASS A PIPE EMBEDMENT SHALL BE USED FOR ALL PIPING UNDER PAVEMENT OR STRUCTURES WITH LESS THAN 12 INCHES OF PIPE COVER TO THE SUBGRADE. THE CONCRETE CRADLE SHALL BE IN ACCORDANCE WITH ODOT ITEM 499, CLASS "C". THE INITIAL BACKFILL SHALL BE ASSHTO NO. 57 OR NO. 67 GRANULAR PIPE EMBEDMENT.

CLASS B: CLASS B PIPE EMBEDMENT SHALL BE USED FOR ALL PIPING UNLESS OTHERWISE NOTED ON THE PLANS OR AUTHORIZED BY THE ENGINEER. THE BEDDING AND HAUNCHING SHALL BE AASHTO NO. 57 OR NO. 67 GRANULAR PIPE EMBEDMENT. IN ALL AREAS UNDER PAVEMENT, STRUCTURES OR WITHIN THE ZONE OF INFLUENCE, THE INITIAL BACKFILL SHALL BE AASHTO NO. 57 TONG GRANULAR PIPE EMBEDMENT. IN ALL AREAS OUTSIDE OF PAVEMENT, STRUCTURES OR THE ZONE OF INFLUENCE, THE INITIAL BACKFILL SHALL BE AUSTABLE ON-SITE MATERIAL APPROVED BY THE ENGINEER FOR ONLY REINFORCED CONCRETE PIPE AND DUCTILE IRON PIPE. THE INITIAL BACKFILL FOR ALL OTHER PIPES SHALL BE AASHTO NO. 57 OR NO. 67 GRANULAR PIPE EMBEDMENT.

CLASS C: CLASS C PIPE EMBEDMENT SHALL ONLY BE USED FOR DUCTILE IRON WATER MAIN, DUCTILE IRON FORCE MAINS OR AS AUTHORIZED BY THE ENGINEER. THE PIPE EMBEDMENT SHALL BE AASHTO NO. 57 OR NO. 67 GRANULAR PIPE EMBEDMENT IN ALL AREAS UNDER PAVEMENT, STRUCTURES OR WITHIN THE ZONE OF INFLUENCE. THE PIPE EMBEDMENT SHALL BE SUITABLE ON-SITE MATERIAL APPROVED BY THE ENGINEER IN ALL AREAS OUTSIDE OF PAVEMENT, STRUCTURES OR THE ZONE OF INFLUENCE. WHERE ROCK OR SHALE IS ENCOUNTERED, A MINIMUM 6-INCHES OF AASHTO NO. 57 OR NO. 67 GRANULAR PIPE BEDDING OR SAND BEDDING SHALL BE PLACED BY THE ENGINEER.

- 4. FINAL BACKFILL: IN ALL AREAS UNDER PAVEMENT, STRUCTURES OR WITHIN THE ZONE OF INFLUENCE THE FINAL BACKFILL SHALL BE SPECIAL BACKFILL MATERIAL. IN ALL AREAS OUTSIDE OF PAVEMENT, STRUCTURES OR THE ZONE OF INFLUENCE, THE FINAL BACKFILL SHALL BE SUITABLE ON-SITE MATERIAL APPROVED BY THE ENGINEER.
- SPECIFICATIONS: ALL TRENCHING, PIPE EMBEDMENT AND BACKFILL MATERIALS SHALL BE IN ACCORDANCE WITH SPECIFICATION 02300CT-EARTHWORK.
- 6. CLAY TRENCH DAMS: CLAY TRENCH DAMS SHALL BE REQUIRED AS SHOWN ON PLANS OR WHEN AND WHERE NECESSARY AS DIRECTED BY THE ENGINEER.
- GEOTEXTILE FABRIC: INSTALL A GEOTEXTILE FABRIC IN ACCORDANCE WITH ODOT 712.09, TYPE A, AFTER ALL INITIAL BACKFILL CONSISTING OF AASHTO NO. 57 OR NO. 67 GRANUI AR PIPE FMBEDMENT
- DETECTOR TAPE: IF REQUIRED IN THE SPECIFICATIONS, INSTALL DETECTABLE WARNING TAPE ABOVE UTILITIES, 12" BELOW FINISHED GRADE, EXCEPT 6 INCHES BELOW SUBGRADE UNDER PAVEMENT AND SLABS.

# TRENCHING, EMBEDMENT AND BACKFILL DETAIL 800-1-1



# CREEK CROSSING NOTES

CONSTRUCTION OF PIPE CROSSING OF CREEK SHALL BE DONE DURING LOW FLOW PERIODS AS DIRECTED BY THE U.S. ARMY CORPS OF ENGINEERS.

TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL FOR THE CREEK CROSSING AREA SHALL CONFORM TO APPLICABLE PORTIONS OF O.D.O.T. ITEM 207.

TYPICAL CREEK CROSSING DETAIL
9/02 SD-1-7

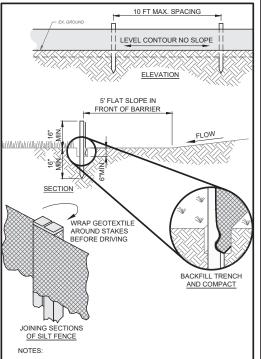
VILLAGE OF GENEVA-ON-THE-LAKE SANITARY SEWER TRUNK LINE REPLACEMENT OHIO SERIES TAILS SD DE STANDARD DETAILS - S
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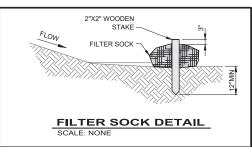
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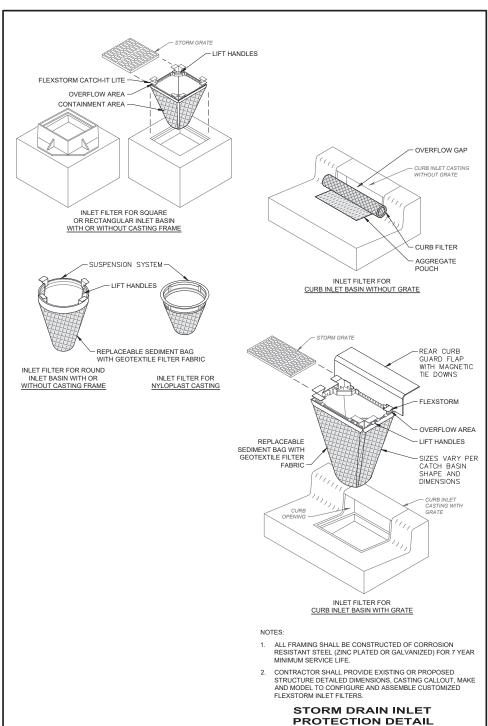


- 1. PRESERVE VEGETATION FOR 5 FEET, OR AS MUCH AS POSSIBLE UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE RE-ESTABLISHED WITHIN 7 DAYS FROM SILT FENCE INSTALLATION.
- SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. PERFORM ONE OF THE FOLLOWING IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER OR AROUND THE ENDS, OR IN ANY OTHER WAY BECOMES A CONCENTRATED FLOW:
  - CHANGE THE LAYOUT OF THE SILT FENCE.
- REMOVE ACCUMULATED SEDIMENT INSTALL OTHER PRACTICES.

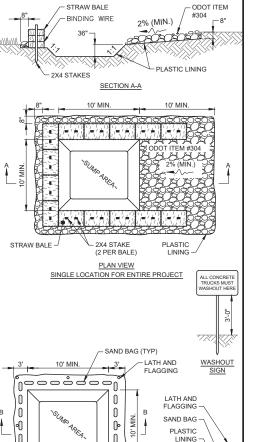
FABRIC PROPERTIES	VALUES	TEST METHOD
GRAB TENSILE STRENG	TH 90 LB. MIN	ASTM D-1682
MULLEN BURST STRENGTH	190 PSI MIN	ASTM D-3786
SLURRY FLOW RATE	0.3 GAL./MIN./S.F. MAX.	
EQUIVALENT OPENING SIZE	40-80	US STD. SIEVE CW-02215
ULTRAVIOLET RADIATION STABILITY	90% MIN	ASTM-G-26

SILT FENCE





SCALE: NON



# NOTES:

PLASTIC LINING

WASHOUT PIT SHALL BE LOCATED 100' MINIMUM FROM INLETS, STREAMS, WETLANDS AND ANY OTHER SURFACE WATERS.

TEMPORARY LOCATION FOR MULTIPLE PHASE PROJECT

SECTION B-B

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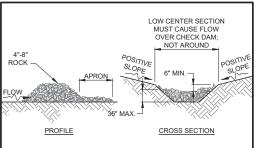
PLAN VIEW

- ALL EXCESS CONCRETE AND CONCRETE WASHOUT, INCLUDING FROM HAND MIXERS AND LIGHT EQUIPMENT, SHALL BE DISPOSED OF IN THE CONCRETE WASHOUT AREA. DISPOSAL OF EXCESS CONCRETE OR CONCRETE WASHOUT ON THE GROUND. OR IN STORM DRAINS, DITCHES OR WATER BODIES, IS
- CONCRETE WASHOUT AREA SHALL BE SUFFICIENT SIZE TO CONTAIN CONCRETE WASTE GENERATED. FOR LARGER SITES. MULTIPLE CONCRETE WASHOUT AREAS MAY BE REQUIRED.
- IF CONCRETE WASHOUT AREA IS LOCATED AWAY FROM A PAVED SURFACE, CONSTRUCT A GRAVEL ACCESS ROUTE EQUAL IN COMPOSITION TO THE CONSTRUCTION ENTRANCE.
- PLASTIC LINING SHALL BE DOUBLE-LINED, CONTINUOUS 10-ML POLYETHYLENE SHEETING FREE OF HOLES, TEARS OR OTHER DEFECTS, AND INSTALLED ON A SMOOTH, LEVEL SURFACE, FREE OF ROCKS OR DEBRIS.
- CONCRETE WASHOUT SIGNAGE SHALL BE CLEARLY VISIBLE AND LOCATED WITHIN 30 FEET OF EACH WASHOUT AREA.
- CONCRETE WASHOUT AREAS SHALL BE COVERED DURING
- INCLEMENT WEATHER TO PREVENT OVERFLOWS PREFABRICATED, PORTABLE AND RE-USABLE CONCRETE WASHOUT CONTAINERS ARE ACCEPTABLE, BUT MUST BE SPECIFICALLY DESIGNED FOR CONCRETE WASHOUT USE
- CONCRETE WASHOUT AREA SHALL BE INSPECTED DAILY TO CONCRETE WASHOUT AREA SHALL BE INSPECTED DAILY TO CHECK FOR DAMAGE AND TO DETERMINE IF IT NEEDS CLEANED OR REPLACED. ANY DAMAGE TO THE SIDEWALLS OR POLYETHYLENE SHEETING SHALL BE REPAIRED IMMEDIATELY. THE CONCRETE WASHOUT AREA SHALL BE CLEANED OR REPLACED WHEN IT IS 75% FULL. THE POLYETHYLENE

SHEETING SHALL BE REPLACED AFTER EACH CLEANING.

10. SAW CUT CONCRETE, RESIDUE FROM SAW CUT, AND GRINDINGS SHALL BE DISPOSED OF IN THE WASHOUT PIT

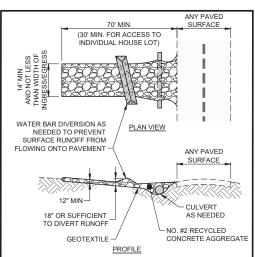
CONCRETE WASHOUT DETAIL



- THE CHECK DAM SHALL BE CONSTRUCTED OF 4" TO 8"
  DIAMETER STONE, PLACED SO THAT IT COMPLETELY COVERS THE WIDTH OF THE CHANNEL.
- THE TOP OF THE CHECK DAM SHALL BE CONSTRUCTED SO THE CENTER IS APPROXIMATELY 6" LOWER THAN THE OUTER EDGES; SO WATER WILL FLOW ACROSS THE CENTER AND NOT AROUND THE ENDS.
- THE MAXIMUM HEIGHT OF THE CHECK DAM AT THE CENTER OF THE WEIR SHALL NOT EXCEED 36".
- SPACING BETWEEN DAMS SHALL BE AS SHOWN IN THE CONSTRUCTION PLANS OR BY THE FOLLOWING TABLE:

	CH	IECK DAM SPA	CING	
DAM		CHANNE	L SLOPE	
HEIGHT	< 5%	5% - 10%	10% - 15%	15% - 20%
1 FT.	65 FT.	30 FT.	20 FT.	15 FT.
2 FT.	130 FT.	65 FT.	40 FT.	30 FT.
3 FT.	200 FT.	100 FT.	65 FT.	50 FT.

# CHECK DAM DETAIL



1. PLACE GEOTEXTILE OVER THE ENTIRE AREA PRIOR TO PLACING

STO	ONE MEETING THE MIN. SPECIF	FICATIONS:
A.	TENSILE STRENGTH	= 200 LBS.
В.	PUNCTURE STRENGTH	= 80 PSI
C.	TEAR STRENGTH	= 50 LBS.
D.	BURST STRENGTH	= 320 PSI
E.	ELONGATION	= 20%
F.	EQUIVALENT OPENING SIZE	≤ 0.6 MM
G.	PERMITTIVITY	= 0.001 CM/SEC

- 2. APPLY ADDITIONAL STONE AS CONDITIONS DEMAND AND REPLENISH STONE WHEN THE DEPTH IS LESS THAN 6". REMOVE AND REPLACE IF STONES BECOMES MUD-LADEN.
- 3. IMMEDIATELY REMOVE MUD DROPPED, WASHED OR TRACKED ONTO ROADS OR ANY SURFACE WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROLS BY SCRAPING OR SWEEPING
- CONSTRUCTION ENTRANCES SHALL NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES OR TO PREVENT OFF-SITE TRACKING. VEHICLES THAT ENTER AND LEAVE THE CONSTRUCTION SITE SHALL BE RESTRICTED FROM MUDDY

# **CONSTRUCTION ENTRANCE**





NO REVISION DATE		4					
SCALE: AS NOTED NO		<b>DATE:</b> 3/18/24	DEBIGNED BY: BIM		DHAWN BY: RLM		CHECKED BY: RLM
VILLAGE OF GENEVA-ON-THE-LAKE		SANITART SEWER IRONN LINE REPLACEMENT	ASHTABULA COUNTY OHIO	SWPPP SW SFRIES			SWPPP DELAILS & NOTES
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# STORM WATER POLLUTION PREVENTION PLAN NOTES

- THE EROSION CONTROL MEASURES INCLUDED IN THIS PLAN SHALL BE INSTALLED PRIOR TO INITIAL LAND DISTURBANCE ACTIVITIES OR AS SOON AS PRACTICAL. SEDIMENT SHALL BE PREVENTED FROM DISCHARGING FROM THE PROJECT SITE BY INSTALLING AND MAINTAINING SILT FENCE, SEDIMENT BASINS, ETC. AS SHOWN ON THIS PLAN. STRUCTURAL PRACTICES SHALL BE USED TO CONTROL EROSION FROM ALL SITES REMAINING DISTURBED FOR MORE THAN 14 DAYS.
- THE CONTRACTOR SHALL CONTROL WASTES, GARBAGE, DEBRIS, WASTEWATER, AND OTHER SUBSTANCES ON THE SITE IN SUCH A WAY THAT THEY SHALL NOT BE TRANSPORTED FROM THE SITE BY THE ACTION OF WINDS, STORM WATER RUNOFF, OR OTHER FORCES. PROPER DISPOSAL OR MANAGEMENT OF ALL WASTES AND UNUSED BUILDING MATERIALS, APPROPRIATE TO THE NATURE OF THE WASTE OR MATERIAL, IS REQUIRED, COMPLIANCE IS REQUIRED WITH ALL STATE OR LOCAL REGULATIONS REGARDING WASTE DISPOSAL, SANITARY SEWER, OR SEPTIC SYSTEMS.
- PUBLIC OR PRIVATE ROADWAYS SHALL BE KEPT CLEARED OF ACCUMULATED SEDIMENT. OFF-SITE VEHICLE TRACKING SEDIMENT SHALL BE MINIMIZED. CONSTRUCTION VEHICLES ARE LIMITED TO THE CONSTRUCTION ACCESS ROAD NOTED ON PLAN. BULK CLEARING OF ACCUMULATED SEDIMENT SHALL NOT INCLUDE FLUSHING THE AREA WITH WATER. CLEARED SEDIMENT SHALL BE RETURNED TO THE POINT OF LIKELY ORIGIN OR OTHER SUITABLE LOCATION
- EXCEPT AS PREVENTED BY INCLEMENT WEATHER CONDITIONS, ALL DISTURBED AREAS OVER 50 FEET AWAY FROM THE STREAM BED TO REMAIN INACTIVE FOR MORE THAN 14 DAYS SHALL BE STABILIZED BY SEEDING AND MULICHING COVERING OR BY OTHER FOLIVALENT EROSION CONTROL MEASURES WITHIN SEVEN (7) DAYS OF THE MOST RECENT DISTURBANCE AND PRIOR TO THE ONSET OF WINTER WEATHER. PERMANENT SOIL STABILIZATION SHALL BE PROVIDED WITHIN 7 DAYS AFTER FINAL GRADE IS ESTABLISHED.
- EXCEPT AS PREVENTED BY INCLEMENT WEATHER CONDITIONS, ALL DISTURBED AREAS WITHIN 50 FEET OF THE STREAM BED TO REMAIN INACTIVE FOR MORE THAN 14 DAYS SHALL BE STABILIZED BY SEEDING AND MULCHING, COVERING, OR BY OTHER EQUIVALENT EROSION CONTROL MEASURES WITHIN TWO (2) DAYS OF THE MOST RECENT DISTURBANCE AND PRIOR TO THE ONSET OF WINTER WEATHER. PERMANENT SOIL STABILIZATION SHALL BE PROVIDED WITHIN 2 DAYS AFTER FINAL GRADE IS ESTABLISHED.
- DISTURBED AREAS WHICH WILL REMAIN IDLE DURING THE WINTER MONTHS SHALL BE STABILIZED USING SEEDING AND MULCHING. SUCH STABILIZATION MEASURES MUST BE INSTALLED NO LATER THAN NOVEMBER
- THIS EROSION CONTROL PLAN SHALL BE IMPLEMENTED ON ALL DISTURBED AREAS WITHIN THE CONSTRUCTION SITE. ALL MEASURES INVOLVING EROSION CONTROL PRACTICES SHALL BE INSTALLED UNDER THE GUIDANCE OF QUALIFIED PERSONNEL EXPERIENCED IN EROSION CONTROL, AND FOLLOWING THE PLANS AND SPECIFICATION INCLUDED HEREIN. OTHER EROSION AND SEDIMENT CONTROL ITEMS MAY BE NECESSARY DUE TO ENVIRONMENTAL CONDITIONS.
- DURING THE PERIOD OF CONSTRUCTION ACTIVITY ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR. AT THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE THE TRANSFER OF MAINTENANCE RESPONSIBILITIES, IF REQUIRED, WITH THE OWNER. MAINTENANCE SHALL BE IN ACCORDANCE WITH THE "OHIO RAINWATER AND LAND DEVELOPMENT HANDBOOK (2006)"
- ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE "OHIO RAINWATER AND LAND DEVELOPMENT HANDBOOK (2006)," AND THE THE OHIO DEPARTMENT OF TRANSPORTATION (O.D.O.T.) STANDARD CONSTRUCTION DRAWING MC-11
- POST CONSTRUCTION STORM WATER MANAGEMENT: ALL DISTURBED AREAS SHALL HAVE ADEQUATE VEGETATION TO FILTER POLLUTANTS AS MUCH AS PRACTICAL, LOCAL LAWS REGARDING THE DISCHARGING OF OIL AND OTHER POLITITANTS INTO DRAINAGE-WAYS SHALL APPLY
- ALL EROSION AND SEDIMENT CONTROLS SHALL BE INSPECTED IN ACCORDANCE WITH THE CONDITIONS OF
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE REMOVED AND DISPOSED OF 12. WITHIN THIRTY DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY PRACTICES. ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER
- THIS EROSION CONTROL PLAN MUST BE RETAINED ON-SITE AT ALL TIMES DURING THE PERIOD OF
- 14. FIELD ADJUSTMENTS FOR LOCATION AND DIMENSION OF SEDIMENT CONTROL DEVICES MAY BE MADE BY THE
- 15. EROSION CONTROL DEVICES REMOVED DURING GRADING OPERATIONS SHALL BE PUT BACK IN PLACE AT THE END OF THE DAY OR DURING INCLEMENT WEATHER.
- NO SOIL, ROCK, DEBRIS, OR OTHER MATERIAL SHALL BE DUMPED OR PLACED INTO A WATER RESOURCE OR INTO SUCH PROXIMITY THAT IT MAY READILY SLOUGH, SUP, OR ERODE INTO A WATER RESOURCE UNLESS DUMPING OR PLACING IS AUTHORIZED BY THE ENGINEER AND, WHEN APPLICABLE, THE U.S. ARMY CORPS OF ENGINEERS, FOR SUCH PURPOSES AS, BUT NOT LIMITED TO, CONSTRUCTION BRIDGES, CULVERTS, AND EROSION CONTROL STRUCTURES.
- THE CONTRACTOR IS RESPONSIBLE TO CONFORM TO ALL REGULATORY REQUIREMENTS FOR DISCHARGING WATER RELATED TO DE-WATERING ACTIVITIES. ALL COSTS ASSOCIATED WITH THIS WORK SHALL BE INCLUDED IN THE COST OF ITEM 503 - COFFERDAMS, CRIBS AND SHEETING
- SEDIMENT PONDS/TRAPS AND PERIMETER CONTROLS SHALL BE IMPLEMENTED AS A FIRST STEP OF GRADING AND WITHIN 7 DAYS FROM THE START OF GRUBBING AND SHALL CONTINUE TO FUNCTION UNTIL UPLAND AREAS ARE STABILIZED
- FROSION CONTROL BLANKETS WITH MATTING WILL BE USED ON DITCHES GREATER THAN 1.5% AND ALL OTHER SLOPES GREATER THAN 6% GRADE.
- REGULAR INSPECTION AND MAINTENANCE WILL BE PROVIDED FOR ALL EROSION AND SEDIMENT CONTROL 20. PRACTICES, PERMANENT RECORDS OF MAINTENANCE AND INSPECTIONS MUST BE KEPT THROUGHOUT THE CONSTRUCTION PERIOD. INSPECTIONS MUST BE MADE A MINIMUM OF ONCE EVERY 7 DAYS AND IMMEDIATELY AFTER STORM EVENTS GREATER THAN 0.5 INCHES OF RAIN IN A 24 HOUR PERIOD. PROVIDE NAME OF INSPECTOR, MAJOR OBSERVATIONS, DATE OF INSPECTION AND CORRECTIVE MEASURES TAKEN.
- MARK LIMITS OF CLEARING AND GRUBBING FOR APPROVAL PRIOR TO CONSTRUCTION. AFTER CLEARING, BUT BEFORE GRUBBING, INSTALL ALL INITIAL EROSION CONTROL ITEMS. AFTER GRUBBING, BUT BEFORE TOPSOIL STRIPPING AND GRADING INSTALL CONSTRUCTION FENCING AT THE CLEARING LIMIT LINE
- PROTECT UNDISTURBED AREAS THROUGHOUT CONSTRUCTION. DO NOT STORE EQUIPMENT, VEHICLES OR MATERIALS IN THE PROTECTED AREA BEYOND THE CONSTRUCTION FENCE.

- 23. OFF-SITE VEHICLES TRACKING SEDIMENT SHALL BE MINIMIZED. CONSTRUCTION VEHICLES ARE LIMITED TO THE CONSTRUCTION ACCESS ROAD(S) NOTED ON THE PLAN.
- OTHER EROSION AND SEDIMENT CONTROL ITEMS MAY BE NECESSARY DUE TO ENVIRONMENTAL CONDITIONS.
- 25. THE CONTRACTOR SHALL MAINTAIN AN SWPPP INSPECTION LOG IN THE FIELD
- ALL CONSTRUCTION AND DEMOLITION DEBRIS SHALL BE DISPOSED OF IN AN OHIO EPA APPROVED C&DD LANDFILL, AS REQUIRED BY OHIO REVISED CODE (ORC) 3714
- 27. NO TURBID STORM WATER MAY BE DISCHARGED OFF SITE.
- THE CONTRACTOR SHALL CREATE A SIGN THAT WILL BE DISPLAYED ON SITE LABELING THE STEPS FOR SMALL AND LARGE OIL SPILL PROCEDURES. A SPILL RESPONSE KIT SHALL BE MAINTAINED ON THE SITE. THE SIGNAGE SHALL IDENTIFY WHERE THE KIT IS LOCATED.
- (SMALL RELEASE) ANY DISCHARGE OF PETROLEUM OR PETROLEUM PRODUCTS OF LESS THAN 25 GALLONS ONTO A PERVIOUS SURFACE SHALL BE LEGALLY REMOVED AND PROPERLY TREATED OR PROPERLY DISPOSED OF, OR OTHERWISE REMEDIATED, SO THAT NO CONTAMINATIONS FROM THE DISCHARGE REMAINS ON-SITE. THE CONTRACTOR SHALL FOLLOW THE STEPS PROVIDED BELOW
  - A SPILLS LESS THAN 25 GALLONS THAT REMAINS ON SITE DOES NOT NEED TO BE REPORTED
  - ALL SPILLS SHALL BE CONTAINED USING STRAW TO ABSORB THE LIQUID, A COMMERCIAL MATERIAL THAT IS CAPABLE OF ABSORBING OIL IN SOILS, MECHANICAL REMOVAL OR A VACUUM PUMP.
  - C. ONCE THE SPILL HAS BEEN CONTAINED. THE AFFECTED SOIL, MATERIAL AND/OR LIQUID SHALL BE LEGALLY DISPOSED OF IN A MUNICIPAL SOLID WASTE LANDFILL PERMITTED BY THE OHIO EPA.
- 30. (LARGE RELEASE) IN THE EVENT OF A LARGE RELEASE (25 OR MORE GALLONS) OF PETROLEUM WASTE. THE CONTRACTOR MUST CONTACT HE OHIO EP A EARSE RELEASE (23 ON MORE GALLONS) OF PERIODE WASTE, THE LOCAL FIRE DEPARTMENT, AND THE LOCAL EMERGENCY PLANNING COMMITTEE (LEPC) WITHIN 30 MINUTES OF A SPILL OF 25 OR MORE GALLONS. THE CONTRACTOR SHALL FOLLOW THE STEPS PROVIDED BELOW:
  - ALL SPILLS GREATER THAN 25 GALLONS NEEDS TO BE REPORTED
  - ALL SPILLS SHALL BE CONTAINED USING STRAW TO ABSORB THE LIQUID, A COMMERCIAL MATERIAL THAT IS CAPABLE OF ABSORBING OIL IN SOILS, MECHANICAL REMOVAL OR A VACUUM PUMP. IF THE SPILL IS HEADING TOWARD SURFACE OR GROUND WATER, THE CONTRACTOR SHALL SET BOOMS AS CLOSE TO THE WATER ENTRY POINT OF THE SPILL AS POSSIBLE.

    C. ONCE THE SPILL HAS BEEN CONTAINED, THE AFFECTED SOIL, MATERIAL AND/OR LIQUID SHALL BE
  - LEGALLY DISPOSED OF IN A MUNICIPAL SOILD WASTE LANDELL PERMITTED BY THE OHIO
- APPLY MULCH OR OTHER APPROPRIATE VEGETATIVE PRACTICES TO DISTURBED AREAS WITHIN 7 DAYS OF GRADING IF THE AREA IS TO REMAIN DORMANT FOR MORE THAN 45 DAYS OR ON AREAS OF THE SITE WHICH CAN BE BROUGHT TO FINAL GRADE.
- 2 MULCH SHALL CONSIST OF ONE OF THE FOLLOWING:
- UNROTTED SMALL-GRAIN STRAW APPLIED AT A RATE OF 2 TONS/AC, OR 90 LB/1,000 S.F. (2 TO 3 BALES) AND SPREAD UNIFORMLY BY HAND OR MECHANICALLY.
- WOOD-CELLULOSE FIBER APPLIED AT A RATE OF 2,000 LB/AC. OR 46 LB/1 000 S F
- MULCH MATTING.
- WOOD CHIPS APPLIED AT 6 TONS/AC.
- . ANCHOR MULCH IMMEDIATELY TO MINIMIZE LOSS BY WIND OR RUNOFF. ACCEPTABLE ANCHORING METHODS ARE:
- PUNCH OR ANCHOR THE MULCH MATERIAL INTO THE SOIL USING A DISK, CRIMPER OR SIMILAR TOOL. DO NOT FINELY CHOP STRAW TO BE MECHANICALLY ANCHORED, BUT LEAVE LONGER THAN 6 INCHES.
- USE NETTING PER THE MANUFACTURER RECOMMENDATIONS. NETTING MAY BE NECESSARY TO HOLD MULICH IN PLACE IN AREAS OF CONCENTRATED RUNOFF OR ON CRITICAL SLOPES.
- SYNTHETIC BINDERS MAY BE USED AT RATES RECOMMENDED. BY THE MANUFACTURER
- WOOD-CELLULOSE FIRER BINDER AT A NET DRY WEIGHT OF 750 LB/AC. WOOD CELLULOSE FIBER IS TO BE MIXED WITH WATER AND THE MIXTURE IS TO CONTAIN 50 LB/100 GAL. MAX. OF WOOD CELLULOSE FIBER.

# **MULCHING DETAIL** SCALE: NONE

- TEMPORARY SEED TO BE APPLIED BETWEEN CONSTRUCTION OPERATIONS ON SOIL THAT WILL NOT BE GRADED OR REWORKED FOR 21 DAYS OR MORE. THESE IDLE AREAS SHOULD BE SEEDED AS SOON AS POSSIBLE AFTER GRADING OR BE SEEDED WITHIN 7 DAYS. SEVERAL APPLICATIONS OF TEMPORARY SEEDING ARE NECESSARY ON TYPICAL CONSTRUCTION PROJECTS.
- 2. THE SEED BED IS TO BE PULVERIZED AND LOOSE TO ENSURE THE SUCCESS OF ESTABLISHING VEGETATION.
- 3. SOIL AMENDMENTS MAY BE REQUIRED TO ESTABLISH ADEQUATE STANDS OF VEGETATION. PERFORM SOIL TESTS ON THE SITE TO PREDICT THE NEED FOR LIME AND FERTILIZER.
- 4. APPLY SEED UNIFORMLY WITH CYCLONE SEEDER, CULTIPACKER SEEDER OR HYDROSEEDER. COVER BROADCASTED SEED BY RAKING OR DRAGGING AND THEN LIGHTLY TAMPING INTO PLACE USING A ROLLER OR CULTIPACKER. IF HYDROSEEDING IS USED. MIX THE SEED AND FERTILIZER ON SITE AND IMMEDIATELY USE

# MULCHING TEMPORARY SEEDING

SEEDING DATES | SPECIES

- APPLY MULCH MATERIAL IMMEDIATELY AFTER SEEDING SEEDING MADE DURING OPTIMUM SEEDING DATES ON FLAT AREAS WITH FAVORABLE SOIL CONDITIONS MAY NOT NEED MULCH TO ACHIEVE STABILIZATION. DORMANT SEEDING IS TO BE
- 2. SEE MULCHING FOR MATERIALS AND ANCHORING METHODS.

TEMPORARY SEEDING SPECIES SELECTION

LB/1.000 S.F.

PER AC.

## Oats Tall Fescue March 1 to August 40 lb. Perennial Ryegrass 40 lb Perennial Ryegras 40 lb Tall Fescue 40 lb. 2 bushe ugust 16 to Tall Fescue 40 lb Perennial Ryegrass 40 lb 2 bushel Wheat Tall Fescue Perennial Ryegrass 40 lb. 40 lb. 40 lb Perennial Ryegrass Tall Fescue 40 lb

Jovember 1 to Use mulch only, sodding practices or dormant seeding. pring Seeding

# **TEMPORARY SEEDING DETAIL**

SCALE: NONE

# SPECIFICATIONS FOR PERMANENT SEEDING SITE PREPARATION:

- A SUBSOILER, PLOW OR OTHER IMPLEMENT TO BE USED TO REDUCE SOIL COMPACTION AND ALLOW MAXIMUM INFILTRATION SUBSOILING TO BE DONE WHEN SOIL MOISTURE IS LOW ENOUGH TO ALLOW THE SOIL TO CRACK OR FRACTURE. SUBSOILING IS NOT TO BE DONE ON SLIP-PRONE AREAS.
- GRADE THE SITE AS NEEDED TO PERMIT USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION AND SEEDING.
- 3. APPLY RESOIL WHERE NEEDED TO ESTABLISH VEGETATION.

# SEEDBED PREPARATION

- APPLY AGRICULTURAL GROUND LIMESTONE TO ACIDIC SOIL AS RECOMMENDED BY A SOIL TEST. IN LIEU OF A SOIL TEST, APPLY AT RATE OF 100 LB/1,000 S.E. OR 2 TONS/AC.
- APPLY FERTILIZER AS RECOMMENDED BY A SOIL TEST. IN LIEU OF A SOIL TEST, APPLY AT A RATE OF 12 LB/1,000 S.F. OR 500 LB/AC, OF 10-10-10 OR 12-12-12 ANALYSIS.
- 3. LIME AND FERTILIZER TO BE WORKED INTO THE SOIL WITH A DIS HARROW, SPRING-TOOTH HARROW, OR OTHER SUITABLE FIELD IMPLEMENT TO A DEPTH OF 3".

# SEEDING DATES AND SOIL CONDITIONS:

THESE ARE IDEAL SEEDING DATES, BUT SEEDING MAY BE MADE ANY TIME THROUGHOUT THE GROWING SEASON WITH THE USE OF ADDITIONAL MULCH AND IRRIGATION. TILL AGE/SEED BED. PREPARATION TO BE DONE WHEN THE SOIL IS DRY ENOUGH TO CRUMBLE AND NOT FORM RIBBONS WHEN COMPRESSED BY HAND. SEE THE FOLLOWING SECTION ON DORMANT SEEDING

SEED MADCH 1 TO MAY 31 OR ALIGHST 1 TO SEPTEMBER 30

# DORMANT SEEDINGS

- . DO NOT PLANT SEEDINGS FROM OCTOBER 1 TO NOVEMBER 20. SEEDS ARE LIKELY TO GERMINATE DURING THIS PERIOD, BUT PROBABLY WILL NOT SURVIVE THE WINTER.
- THE FOLLOWING METHODS MAY BE USED:
- FROM OCTOBER 1 TO NOVEMBER 20 PREPARE THE SEED. BED, ADD THE REQUIRED AMOUNTS OF LIME AND FERTILIZER, THEN MULCH AND ANCHOR. AFTER NOVEMBER 20 AND BEFORE MARCH 15, INCREASE THE SEEDING RATES BY 50% AND BROADCAST THE SEED MIXTURE
- FROM NOVEMBER 20 THROUGH MARCH 15 WHEN SOIL CONDITIONS PERMIT, PREPARE THE SEED BED, LIME AND FERTILIZER, APPLY THE SEED MIXTURE, MULCH AND ANCHOR INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE OF
- APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL CULTIPACKER SEEDER, OR HYDRO-SEEDED (SLURRY MAY INCLUDE SEED AND FERTILIZER) ON FIRM, MOIST SEED BED.
- WHERE FEASIRIE EXCEPT WHEN A CUILTIPACKER TYPE SEEDER IS USED, THE SEED BED IS TO BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A CULTIPACKER, ROLLER, OR LIGHT DRAG.

- PERMANENT SEEDING TO INCLUDE IRRIGATION TO ESTABLISH VEGETATION DURING DRY OR HOT WEATHER OR ON ADVERSE SITE CONDITIONS AS NEEDED FOR ADEQUATE MOISTURE FOR SEED GERMINATION AND PLANT GROWTH
- EXCESSIVE IRRIGATION RATES TO BE AVOIDED AND IRRIGATION MONITORED TO PREVENT EROSION AND DAMAGE FROM RUNOFF

# MULCHING:

APPLY MULCH MATERIAL IMMEDIATELY AFTER SEEDING SEEDING MADE DURING OPTIMUM SEEDING DATES ON FLAT AREAS WITH FAVORABLE SOIL CONDITIONS MAY NOT NEED MULCH TO ACHIEVE STABILIZATION. DORMANT SEEDING IS TO BE

# SPECIFICATIONS FOR MAINTENANCE OF PERMANENT SEEDING:

- 1. PERMANENT SEEDING TO NOT BE CONSIDERED ESTABLISHED FOR AT LEAST 1 FULL YEAR FROM THE TIME OF PLANTING. SEEDED AREAS TO BE INSPECTED FOR FAILURE AND VEGETATION REESTABLISHED AS NEEDED. DEPENDING ON SITE CONDITIONS, IT MAY BE NECESSARY TO IRRIGATE, FERTILIZE, OVERSEED, OR REESTABLISH PLANTINGS IN ORDER TO PROVIDE PERMANENT VEGETATION FOR ADEQUATE EROSION CONTROL
- 2. ESTABLISH MAINTENANCE FERTILIZATION RATES BY SOIL TEST RECOMMENDATIONS OR USING THE FOLLOWING RATES

SK		SEE	DING RATE	
)	SEED MIX	LB./AC.	LB./1,000 S.F.	NOTES:
		GENE	ERAL USE	
E E	Creeping Red Fescue Domestic Ryegrass Kentucky Bluegrass	20-40 10-20 10-20	1/2 TO 1 1/4 TO 1/2 1/4 TO 1/2	
	Tall Fescue	40	1	
)	Dwarf Fescue	40	1	
		=======================================		

	STEEP BANKS	OR CUT SLOPE	S
Tall Fescue	40	1	
Crown Vetch Tall Fescue	10 20	1/4 1/2	Do not seed later that August
Flat Pea Tall Fescue	20 20	1/2 1/2	Do not seed later that August
	ROAD DITCH	ES AND SWALES	3

	ROAD DITCHES AND SWALES					
,	Tall Fescue	40	1			
	Dwarf Fescue Kentucky Bluegrass	90 5	2-1/4	Do not seed later than August		
			•			
₹.	LAWN					
	Kentucky Bluegrass Perennial Ryegrass	60 60	1-1/2 1-1/2			
	Kentucky Bluegrass Creeping Red Fescue	60 60	1-1/2 1-1/2	For shaded areas		

Note: Other approved seed species may be substituted

	NANCE FOR PER ERTILIZATION A			
MIXTURE	FORMULA	LB./ AC.		MOWING
Creeping Red Fescue Domestic Ryegrass Kentucky Bluegrass	10-10-10	500		<u>≥</u> 3"
Tall Fescue	10-10-10	500	Fall, yearly or as needed	<u>&gt;</u> 4"
Dwarf Fescue	10-10-10			<u>&gt;</u> 2"
Crown Vetch Fescue	0-20-20		Spring, yearly following	Do not
Flat Pea Fescue	0-20-20	400	establishment, then every 4-7 years	mow
Note: Following soil test re above.	ecommendations	is prefer	red to the fertilizer ra	ates

**PERMANENT SEEDING DETAIL** 



PROJECT NO: 231183 SW-02 SHEET

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OF

# NATIONWIDE PERMITS FOR THE STATE OF OHIO

U.S. ARMY CORPS OF ENGINEERS (CORPS) REGULATORY PROGRAM
REISSUANCE AND MODIFICATION OF NATIONWIDE PERMITS
WITH OHIO DEPARTMENT OF NATURAL RESOURCES CONSISTENCY
DETERMINATION UNDER THE COASTAL ZONE MANAGEMENT ACT AND
WAIVED OHIO EPA 401 WATER QUALITY CERTIFICATION

# **NWP 58**

**NWP 58.** *Utility Line Activities for Water and Other Substances.* Activities required for the construction, maintenance, repair, and removal of utility lines for water and other substances, excluding oil, natural gas, products derived from oil or natural gas, and electricity. Oil or natural gas pipeline activities or electric utility line and telecommunications activities may be authorized by NWPs 12 or 57, respectively. This NWP also authorizes associated utility line facilities in waters of the United States, provided the activity does not result in the loss of greater than 1/2-acre of waters of the United States for each single and complete project.

<u>Utility lines</u>: This NWP authorizes discharges of dredged or fill material into waters of the United States and structures or work in navigable waters for crossings of those waters associated with the construction, maintenance, or repair of utility lines for water and other substances, including outfall and intake structures. There must be no change in pre-construction contours of waters of the United States. A "utility line" is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose that is not oil, natural gas, or petrochemicals. Examples of activities authorized by this NWP include utility lines that convey water, sewage, stormwater, wastewater, brine, irrigation water, and industrial products that are not petrochemicals. The term "utility line" does not include activities that drain a water of the United States, such as drainage tile or french drains, but it does apply to pipes conveying drainage from another area.

Material resulting from trench excavation may be temporarily sidecast into waters of the United States for no more than three months, provided the material is not placed in such a manner that it is dispersed by currents or other forces. The district engineer may extend the period of temporary side casting for no more than a total of 180 days, where appropriate. In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench. The trench cannot be constructed or backfilled in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers, creating a french drain effect). Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody.

<u>Utility line substations</u>: This NWP authorizes the construction, maintenance, or expansion of substation facilities associated with a utility line in non-tidal waters of the United States, provided the activity, in combination with all other activities included in

one single and complete project, does not result in the loss of greater than 1/2-acre of waters of the United States. This NWP does not authorize discharges of dredged or fill material into non-tidal wetlands adjacent to tidal waters of the United States to construct, maintain, or expand substation facilities.

<u>Foundations for above-ground utility lines</u>: This NWP authorizes the construction or maintenance of foundations for above-ground utility lines in all waters of the United States, provided the foundations are the minimum size necessary.

Access roads: This NWP authorizes the construction of access roads for the construction and maintenance of utility lines, including utility line substations, in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not cause the loss of greater than 1/2-acre of non-tidal waters of the United States.

This NWP does not authorize discharges of dredged or fill material into non-tidal wetlands adjacent to tidal waters for access roads. Access roads must be the minimum width necessary (see Note 2, below). Access roads must be constructed so that the length of the road minimizes any adverse effects on waters of the United States and must be as near as possible to pre-construction contours and elevations (e.g., at grade corduroy roads or geotextile/gravel roads). Access roads constructed above pre-construction contours and elevations in waters of the United States must be properly bridged or culverted to maintain surface flows.

This NWP may authorize utility lines in or affecting navigable waters of the United States even if there is no associated discharge of dredged or fill material (see 33 CFR part 322). Overhead utility lines constructed over section 10 waters and utility lines that are routed in or under section 10 waters without a discharge of dredged or fill material require a section 10 permit.

This NWP authorizes, to the extent that Department of the Army authorization is required, temporary structures, fills, and work necessary for the remediation of inadvertent returns of drilling fluids to waters of the United States through sub-soil fissures or fractures that might occur during horizontal directional drilling activities conducted for the purpose of installing or replacing utility lines. These remediation activities must be done as soon as practicable, to restore the affected waterbody. District engineers may add special conditions to this NWP to require a remediation plan for addressing inadvertent returns of drilling fluids to waters of the United States during horizontal directional drilling activities conducted for the purpose of installing or replacing utility lines.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to conduct the utility line activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges of

dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites.

Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. After construction, temporary fills must be removed in their entirety and the affected areas returned to preconstruction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

**Notification:** The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) A section 10 permit is required; or (2) the discharge will result in the loss of greater than 1/10-acre of waters of the United States. (See general condition 32.) (Authorities: Sections 10 and 404)

**Note 1:** Where the utility line is constructed, installed, or maintained in navigable waters of the United States (i.e., section 10 waters) within the coastal United States, the Great Lakes, and United States territories, a copy of the NWP verification will be sent by the Corps to the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), for charting the utility line to protect navigation.

**Note 2:** For utility line activities crossing a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. Utility line activities must comply with 33 CFR 330.6(d).

**Note 3:** Access roads used for both construction and maintenance may be authorized, provided they meet the terms and conditions of this NWP. Access roads used solely for construction of the utility line must be removed upon completion of the work, in accordance with the requirements for temporary fills.

**Note 4:** Pipes or pipelines used to transport gaseous, liquid, liquescent, or slurry substances over navigable waters of the United States are considered to be bridges, not utility lines, and may require a permit from the U.S. Coast Guard pursuant to the General Bridge Act of 1946. However, any discharges of dredged or fill material into waters of the United States associated with such pipelines will require a section 404 permit (see NWP 15).

**Note 5:** This NWP authorizes utility line maintenance and repair activities that do not qualify for the Clean Water Act section 404(f) exemption for maintenance of currently serviceable fills or fill structures.

**Note 6:** For activities that require preconstruction notification, the PCN must include any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings that require Department of the Army authorization but do not require preconstruction notification (see paragraph (b)(4) of general condition 32). The district engineer will evaluate the PCN in accordance with Section D, "District

Engineer's Decision." The district engineer may require mitigation to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see general condition 23).

#### **Corps NWP 58 Specific Regional Conditions:**

- PCN in accordance with NWP General Condition 32 and Regional General Condition 6 is required for all permanent conversion of scrub/shrub and forested wetlands of greater than 1/10 of an acre per each single and complete project. Use of conversion in this regional condition relates to the change of a scrub/shrub and forested wetlands to a herbaceous state, but it would not result in a loss of waters of the United States as the wetland would continue to exist in the landscape.
- This NWP does not authorize the placement of manholes in wetlands.

## Ohio Department of Natural Resources CZMA Federal Consistency Determination Condition:

 For all activities located within or along the shore of Ohio's portion of Lake Erie, including Maumee Bay and Sandusky Bay, all applicable authorizations under the Ohio Coastal Management Program must be obtained.

## Nationwide Permit General Conditions

**Note:** To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

#### 1. Navigation.

- a. No activity may cause more than a minimal adverse effect on navigation.
- b. Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

- c. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
- 2. **Aquatic Life Movements.** No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.
- 3. **Spawning Areas.** Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
- 4. **Migratory Bird Breeding Areas.** Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
- 5. **Shellfish Beds.** No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.
- 6. **Suitable Material.** No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).
- 7. **Water Supply Intakes.** No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.
- 8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. **Management of Water Flows.** To the maximum extent practicable, the preconstruction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below.

The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the preconstruction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

- 10. **Fills Within 100-Year Floodplains.** The activity must comply with applicable FEMA-approved state or local floodplain management requirements.
- 11. **Equipment.** Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
- 12. **Soil Erosion and Sediment Controls.** Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.
- 13. **Removal of Temporary Structures and Fills.** Temporary structures must be removed, to the maximum extent practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to preconstruction elevations. The affected areas must be revegetated, as appropriate.
- 14. **Proper Maintenance.** Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.
- 15. **Single and Complete Project.** The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

#### 16. Wild and Scenic Rivers.

- a. No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study
- b. river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that

- the proposed activity will not adversely affect the Wild and Scenic River designation or study status.
- c. If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. Permittees shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.
- d. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: http://www.rivers.gov/.
- 17. **Tribal Rights.** No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

## 18. Endangered Species.

- No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a
- b. species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of "effects of the action" for the purposes of ESA section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA section 7 regarding "activities that are reasonably certain to occur" and "consequences caused by the proposed action."
- c. Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA

- section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.
- d. Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat or critical habitat proposed for such designation, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federallylisted endangered or threatened species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation), the pre-construction notification must include the name(s) of the endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or that utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. For activities where the non-Federal applicant has identified listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have "no effect" on listed species (or species proposed for listing or designated critical habitat (or critical habitat proposed for such designation), or until ESA section 7 consultation or conference has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.
- e. As a result of formal or informal consultation or conference with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.
- f. Authorization of an activity by an NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation

- where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.
- g. If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP
- h. activity or whether additional ESA section 7 consultation is required.
- Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at http://www.fws.gov/ or <a href="http://www.fws.gov/ipac">http://www.fws.gov/ipac</a> and <a href="http://www.nmfs.noaa.gov/pr/species/esa/respectively">http://www.fws.gov/ipac</a> and <a href="http://www.nmfs.noaa.gov/pr/species/esa/respectively">http://www.nmfs.noaa.gov/pr/species/esa/respectively</a>.
- 19. **Migratory Birds and Bald and Golden Eagles.** The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

## 20. Historic Properties.

- a. No activity is authorized under any NWP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.
- b. Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)(1)). If preconstruction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those

- requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.
- c. Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the preconstruction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing preconstruction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: No historic properties affected, no adverse effect, or adverse effect.
- d. Where the non-Federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and has so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed. For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete preconstruction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard

- back from the Corps within 45 days, the applicant must still wait for notification from the Corps.
- e. Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.
- 21. **Discovery of Previously Unknown Remains and Artifacts.** Permittees that discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by an NWP, they must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
- 22. **Designated Critical Resource Waters.** Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.
  - (a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 58 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.
  - (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize

activities under these NWPs only after she or he determines that the impacts to the critical resource waters will be no more than minimal.

- 23. **Mitigation.** The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:
  - a. The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).
  - b. Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.
  - c. Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require preconstruction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require preconstruction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.
  - d. Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 3/100-acre and require preconstruction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require preconstruction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult to-replace resources (see 33 CFR 332.3(e)(3)).
  - e. Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the required

riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

- f. Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.
  - 1. The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the
  - 2. district engineer may approve the use of permittee-responsible mitigation.
  - 3. The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)
  - 4. Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option
  - 5. considered for permittee-responsible mitigation.
  - 6. If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure

- timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). If permittee responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency holds an easement, the district engineer will coordinate with that federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.
- 7. If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided (see 33 CFR 332.4(c)(1)(ii)).
- 8. Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).
- g. Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.
- h. (h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.
- i. Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. **Safety of Impoundment Structures.** To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state or federal, dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

## 25. Water Quality.

- a. Where the certifying authority (state, authorized tribe, or EPA, as appropriate) has not previously certified compliance of an NWP with CWA section 401, a CWA section 401 water quality certification for the proposed discharge must be obtained or waived (see 33 CFR 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed discharge in order for the activity to be authorized by an NWP.
- b. If the NWP activity requires preconstruction notification and the certifying authority has not previously certified compliance of an NWP with CWA section 401, the proposed discharge is not authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge, the permittee must submit a copy of the certification to the district engineer. The discharge is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied by the issuance of a water quality certification or a waiver.
- c. The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.
- 26. **Coastal Zone Management**. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). If the permittee cannot comply with all of the conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual coastal zone management consistency concurrence or presumption of concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.
- 27. **Regional and Case-By-Case Conditions.** The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its CWA section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

- 28. **Use of Multiple Nationwide Permits.** The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:
  - a. If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States cannot exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.
  - b. If one or more of the NWPs used to authorize the single and complete project has specified acreage limits, the acreage loss of waters of the United States authorized by those NWPs cannot exceed their respective specified acreage limits. For example, if a commercial development is constructed under NWP 39, and the single and complete project includes the filling of an upland ditch authorized by NWP 46, the maximum acreage loss of waters of the United States for the commercial development under NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States due to the NWP 39 and 46 activities cannot exceed 1 acre.
- 29. **Transfer of Nationwide Permit Verifications.** If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)			_
(Date)			_

30. **Compliance Certification.** Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer.

The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

- A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;
- b. A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(I)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and
- c. The signature of the permittee certifying the completion of the activity and mitigation. The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.
- 31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission and/or review is not authorized by an NWP until the appropriate Corps office issues the section 408 permission or completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

#### 32. Pre-Construction Notification.

a. **Timing.** Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

- He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
- 2. 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).
- b. **Contents of Pre-Construction Notification:** The PCN must be in writing and include the following information:
  - 1. Name, address and telephone numbers of the prospective permittee;
  - 2. Location of the proposed activity;
  - 3. Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

4.

i. A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any

- proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.
- ii. For linear projects where one or more single and complete crossings require pre-construction notification, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters (including those single and complete crossings authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project, and does not change those non-PCN NWP activities into NWP PCNs.
- iii. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker
- iv. decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);
- 5. The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial and intermittent streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;
- 6. If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.
- 7. For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the name(s) of

- those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;
- 8. For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;
- 9. For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the "study river" (see general condition 16); and
- 10. For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project.
- c. Form of Pre-Construction Notification: The nationwide permit preconstruction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

#### d. Agency Coordination:

- The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.
- 2. Agency coordination is required for:
  - i. All NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States;

- NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and
- iii. NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.
- 3. When agency coordination is required, the district engineer will immediately provide (e.g., via email, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or email that they intend to provide substantive. site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the preconstruction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.
- 4. In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.
- Applicants are encouraged to provide the Corps with either electronic files or multiple copies of preconstruction notifications to expedite agency coordination.

#### **District Engineer's Decision**

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal

individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the single and complete crossings of waters of the United States that require PCNs to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings of waters of the United States authorized by an NWP. If an applicant requests a waiver of an applicable limit, as provided for in NWPs 13, 36, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and cumulative adverse environmental effects.

- 2. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by an NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.
- 3. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters. The district engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines

that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and include any activityspecific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure that the NWP activity results in no more than minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

4. If the district engineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either: (a) That the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN period (unless additional time is required to comply with general conditions 18, 20, and/or 31), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

#### **Further Information**

- 1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
- 2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
- 3. NWPs do not grant any property rights or exclusive privileges.
- 4. NWPs do not authorize any injury to the property or rights of others.
- 5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).

#### **Nationwide Permit Definitions**

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural. Compensatory mitigation: The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

**Currently serviceable:** Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

**Direct effects:** Effects that are caused by the activity and occur at the same time and place.

**Discharge:** The term "discharge" means any discharge of dredged or fill material into waters of the United States.

**Ecological reference:** A model used to plan and design an aquatic habitat and riparian area restoration, enhancement, or establishment activity under NWP 27. An ecological reference may be based on the structure, functions, and dynamics of an aquatic habitat type or a riparian area type that currently exists in the region where the proposed NWP 27 activity is located. Alternatively, an ecological reference may be based on a conceptual model for the aquatic habitat type or riparian area type to be restored, enhanced, or established as a result of the proposed NWP 27 activity. An ecological reference takes into account the range of variation of the aquatic habitat type or riparian area type in the region.

**Enhancement:** The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s),

but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

**Establishment (creation):** The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

**High Tide Line:** The line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

**Historic Property:** Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

**Independent utility:** A test to determine what constitutes a single and complete non-linear project in the Corps Regulatory Program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

**Indirect effects:** Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. The loss of stream bed includes the acres of stream bed that are permanently adversely affected by filling or excavation because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters or wetlands for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after

considering compensatory mitigation that may be used to offset losses of aquatic functions and services. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities that do not require Department of the Army authorization, such as activities eligible for exemptions under section 404(f) of the Clean Water Act, are not considered when calculating the loss of waters of the United States.

**Navigable waters:** Waters subject to section 10 of the Rivers and Harbors Act of 1899. These waters are defined at 33 CFR part 329.

**Non-tidal wetland:** A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. Nontidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

**Open water:** For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of flowing or standing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of "open waters" include rivers, streams, lakes, and ponds.

**Ordinary High Water Mark:** The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

**Perennial stream:** A perennial stream has surface water flowing continuously year-round during a typical year.

**Practicable:** Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

**Pre-construction notification:** A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Preconstruction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where preconstruction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

**Preservation:** The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities

commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

**Re-establishment:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Reestablishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

**Rehabilitation:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

**Restoration:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: Reestablishment and rehabilitation.

**Riffle and pool complex:** Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a course substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

**Riparian areas:** Riparian areas are lands next to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

**Shellfish seeding:** The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

**Single and complete linear project:** A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term "single and complete project" is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of

the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

**Single and complete non-linear project:** For non-linear projects, the term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of "independent utility"). Single and complete non-linear projects may not be "piecemealed" to avoid the limits in an NWP authorization.

**Stormwater management:** Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

**Stormwater management facilities:** Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

**Stream bed:** The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

**Stream channelization:** The manipulation of a stream's course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized jurisdictional stream remains a water of the United States.

**Structure:** An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

**Tidal wetland:** A tidal wetland is a jurisdictional wetland that is inundated by tidal waters. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line.

**Tribal lands:** Any lands title to which is either: (1) Held in trust by the United States for the benefit of any Indian tribe or individual; or (2) held by any Indian tribe or individual subject to restrictions by the United States against alienation.

**Tribal rights:** Those rights legally accruing to a tribe or tribes by virtue of inherent sovereign authority, unextinguished aboriginal title, treaty, statute, judicial decisions, executive order or agreement, and that give rise to legally enforceable remedies.

**Vegetated shallows:** Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

**Waterbody:** For purposes of the NWPs, a waterbody is a "water of the United States." If a wetland is adjacent to a waterbody determined to be a water of the United States, that waterbody and any adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)).

## **Further Information**

- 1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
- 2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
- 3. NWPs do not grant any property rights or exclusive privileges.
- 4. NWPs do not authorize any injury to the property or rights of others.
- 5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).

# <u>Nationwide Permits Regional General Conditions For the State of Ohio</u>

- 1. NWPs shall not authorize any regulated activity which negatively impacts bogs and/or fens.
- 2. NWPs shall not authorize any regulated activity in Lake Erie which would result in diversion of water from the Great Lakes.
- 3. NWPs shall not authorize any regulated activity which has an adverse impact on littoral transport within Lake Erie.

4. **In-Water Work Exclusion Dates:** Any work associated with a regulated activity under a nationwide permit cannot take place during the restricted period of the following Ohio Department of Natural Resources (ODNR), Division of Wildlife (DOW) In-Water Work Restrictions, unless the applicant receives advanced written approval from the DOW, notifies the District Engineer in accordance with Nationwide Permit General Condition 32 and Regional General Condition 6, and receives written approval from the Corps:

Statewide In-Water Work Restriction Periods and Locations

1. Salmonid Locations Restriction Period: September 15 – June 30

Arcola Creek (entire reach)

Ashtabula Harbor

Ashtabula River (Hadlock Rd. to mouth)

Aurora Branch (Chagrin River (RM 0.38 to mouth))

Big Creek (Grand River (Girdled Road to mouth))

Black River (entire reach)

Chagrin River (Chagrin Falls to mouth)

Cold Creek (entire reach)

Conneaut Creek (entire reach)

Conneaut Harbor

Corporation Creek (Chagrin River (entire reach))

Cowles Creek (entire reach)

Ellison Creek (Grand River (entire reach))

Euclid Creek (entire reach)

Fairport Harbor

Grand River (Dam at Harpersfield Covered Bridge Park to mouth)

Gulley Brook (Chagrin River (entire reach))

Huron River (East Branch-West Branch confluence to mouth)

Indian Creek (entire reach)

Kellogg Creek (Grand River (entire reach))

Mill Creek (Grand River (entire reach))

Paine Creek (Grand River (Paine Falls to mouth))

Rocky River (East Branch-West Branch confluence to mouth)

Smokey Run (Conneaut Creek (entire reach))

Turkey Creek (entire reach)

Vermilion River (dam at Wakeman upstream of the US 20/SR 60 bridge to mouth)

Ward Creek (Chagrin River (entire reach))

Wheeler Creek (entire reach)

Whitman Creek (entire reach)

2. Other Locations Restriction Period: March 15 – June 30

All other perennial streams not listed above as salmonid.

Also includes Lake Erie and bays not listed above as salmonid.

Note: This condition does not apply to Ohio Department of Transportation projects that are covered under the "Memorandum of Agreement Between The Ohio Department of Transportation, The Ohio Department of Natural Resources, and The United States Fish and Wildlife Service For Interagency Coordination For Projects Which Require Consultation Under the Endangered Species Act, Impact State Listed Species, and/or Modify Jurisdictional Waters 2016 Agreement Number: 19394" or subsequent amendments to this Ohio Department of Transportation memorandum of agreement.

- 5. **Waters of Special Concern**: PCN in accordance with NWP General Condition 32 and Regional General Condition 6 is required for regulated activities in the following resources:
  - a. Threatened and Endangered Species: Due to the potential presence of federally threatened or endangered species or their habitats, PCN in accordance with NWP General Conditions 18 and 32 and Regional General Condition 6 is required for any regulated activity under the NWPs in Ohio that includes:
    - i. The removal of trees ≥ three (3) inches diameter at breast height. These trees may provide suitable roosting, foraging, or traveling habitat for the federally listed endangered Indiana bat and the federally-listed threatened northern long-eared bat; and/or
    - ii. Regulated activities that impact a sand, gravel, and/or cobble beach (landform between the low and high water marks affected by waves) and/or mud flat (areas affected by natural seiche effect) on the Lake Erie shoreline; and/or
    - iii. Regulated activities in the waterway or township of the corresponding counties listed in Appendix 1.

**Note 1**: Applicants must ensure they are referencing the latest version of Appendix 1 by contacting their nearest U.S. Army Corps of Engineers district office and visiting the online resources identified in General Condition 18(f) of these NWPs, since federally listed species are continuously listed, proposed for listing, and/or de-listed.

**Note 2:** As mentioned in General Condition 18, federal applicants should follow their own procedures for complying with the requirements of the Endangered Species Act (ESA). Federal applicants, including applicants that have received federal funding, must provide the District Engineer with the appropriate documentation to demonstrate compliance with ESA requirements.

#### b. Critical Resource Waters:

 In Ohio, two (2) areas have been designated critical habitat for the piping plover (<u>Charadrius melodus</u>) and are defined as lands 0.62 mile inland from normal high water line. Unit OH-1 extends from the mouth of Sawmill

- Creek to the western property boundary of Sheldon Marsh State Natural Area, Erie County, encompassing approximately two (2) miles. Unit OH-2 extends from the eastern boundary line of Headland Dunes Nature Preserve to the western boundary of the Nature Preserve and Headland Dunes State Park, Lake County, encompassing approximately 0.5 mile.
- ii. In Ohio three (3) areas have been designated critical habitat for the rabbitsfoot mussel (*Quadrula cylindrica cylindrica*). Unit RF26 includes 17.5 river kilometers (rkm) (10.9 river miles [rimi]) of the Walhonding River from the convergence of the Kokosing and Mohican Rivers downstream to Ohio Highway 60 near Warsaw, Coshocton County, Ohio. Unit RF27 includes 33.3 rkm (20.7 rmi) of Little Darby Creek from Ohio Highway 161 near Chuckery, Union County, Ohio, downstream to U.S. Highway 40 near West Jefferson, Madison County, Ohio. Unit RF29 includes 7.7 rkm (4.8 rmi) of Fish Creek from the Indiana and Ohio State line northwest of Edgerton, Ohio, downstream to its confluence with the St. Joseph's River north of Edgerton, Williams County, Ohio.
- iii. Old Woman Creek National Estuarine Research Preserve.
- c. Oak Openings: Wetland activities conducted in the Oak Openings Region of Northwest Ohio located in Lucas, Henry and Fulton Counties. For a map of the Oak Openings Region, visit <a href="https://www.google.com/maps/d/viewer?mid=1JADupaZXJzO6AUDvnUaV18GViG7yfBim&usp=sharing">https://www.google.com/maps/d/viewer?mid=1JADupaZXJzO6AUDvnUaV18GViG7yfBim&usp=sharing</a>
- d. **Category 3 Wetlands:** As determined through use of the latest approved version of the Ohio Environmental Protection Agency's Ohio Rapid Assessment Method wetland evaluation form.
- e. **Ohio Stream Designations:** Exceptional Warmwater Habitat, Cold Water Habitat, Seasonal Salmonid, or any equivalent designation; or water bodies with an antidegradation category of Superior High Quality Water, Outstanding National Resource Water, or Outstanding State Waters as determined by the Ohio Environmental Protection Agency except for NWP 1, 2, 3, 9, 10, 11, 27, 28, 32, and 35 or maintenance activities covered under NWPs 7 and 12. The current list of these rivers and tributaries can be found on the Ohio Environmental Protection Agency web-site at: <a href="https://epa.ohio.gov/static/Portals/35/rules/01-05.pdf">https://epa.ohio.gov/static/Portals/35/rules/01-05.pdf</a>. These designations can be found under the aquatic life use of the rivers and tributaries within its basin and under the "Anti-deg Rule #05."
- 6. **PCN Submittals**: In addition to the information required under NWP General Condition 32, the following information must be provided with the PCN:
  - a. **Threatened and Endangered Species:** Section 7(a)(2) of the Endangered Species Act (ESA) states that each federal agency shall, in consultation with the Secretary, insure that any action they authorize, fund, or carry out is not

likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. Section 7 of the ESA, called "Interagency Cooperation," is the mechanism by which federal agencies ensure the actions they take, including those they fund or authorize, do not jeopardize the continued existence of any federally or proposed federally listed species. Consistent with NWP General Condition 18, information for federally threatened and endangered species must be provided in the PCN to determine the proposed activity's compliance with NWP General Condition 18 and to facilitate project-specific coordination with the USFWS. All relevant information obtained from the USFWS must be submitted with the PCN.

- b. **Cultural Resources**: Under the National Historic Preservation Act (NHPA), the Corps must ensure no federal undertaking, including a Corps permit action, which may affect historic resources, is commenced before the impacts of such action are considered and the Advisory Council on Historic Preservation and the State Historic Preservation Office (SHPO) are provided an opportunity to comment as required by the NHPA, 36 CFR 800, and 33 CFR 325, Appendix C. Consistent with NWP General Condition 20, historic properties information must be provided in the PCN if the proposed undertaking might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. All relevant information obtained from the SHPO must be submitted with the PCN.
- c. **National Wild and Scenic Rivers**: The following waterways are components of the National Wild and Scenic River System and require PCN to the Corps:

#### **Big and Little Darby Creeks**

- Big Darby Creek from Champaign-Union County line downstream to the Conrail railroad trestle and from the confluence with the Little Darby Creek downstream to the Scioto River;
- Little Darby Creek from the Lafayette-Plain City Road bridge downstream to within 0.8 mile from the confluence with Big Darby Creek; and
- Total designation is approximately 82 miles.

#### **Little Beaver Creek**

- Little Beaver Creek main stem, from the confluence of West Fork with Middle Fork near Williamsport to mouth;
- North Fork from confluence of Brush Run and North Fork to confluence of North Fork with main stem at Fredericktown;
- Middle Fork from vicinity of Co. Rd. 901 (Elkton Road) bridge crossing to confluence of Middle Fork with West Fork near Williamsport;

- West Fork from vicinity of Co. Rd. 914 (Y-Camp Road) bridge crossing east to confluence of West Fork with Middle Fork near Williamsport; and
- Total designation is 33 miles.

#### **Little Miami River**

- Little Miami River St. Rt. 72 at Clifton to the Ohio River;
- Caesar Creek lower two (2) miles of Caesars Creek; and
- Total designation is 94 miles.
- d. Temporary Fills or Structures: When a PCN is required for temporary fills or structures, the PCN must specify how long the temporary fills or structures will remain and include a restoration plan showing how all temporary fills and structures will be removed and the area restored to pre-construction contours and elevations. Native, non-invasive vegetation must be used unless otherwise authorized by a Corps NWP verification.
- 7. **Invasive Species:** No area for which grading has been completed will be unseeded or unmulched for longer than 14 days. All disturbed areas will be seeded and/or revegetated with native species and approved seed mixes (where practicable) after completion of construction activities for stabilization and to help preclude the establishment of non-native invasive species.

APPENDIX 1 TO REGIONAL GENERAL CONDITION 5 (a)				
County	Waterway	Township		
Adams	Ohio River, Scioto Brush Creek, South Fork Scioto Brush Creek			
Ashtabula	Grand River, Pymatuning Creek	Andover, Austinburg, Cherry Valley, Colebrook, Dorset, Hartsgrove, Harpersfield, Morgan, New Lyme, Orwell, Richmond, Rome, Trumbull, Wayne, Williamsfield, Windsor		
Athens	Ohio River			
Brown	East Fork Little Miami River, Ohio River			
Butler	Great Miami River	Lemon, Liberty		
Champaign		Mad River, Union, Urbana		
Clark	Little Miami River	Bethel, Moorfield, Pleasant, Springfield		
Clermont	East Fork Little Miami River, Little Miami River, Ohio River			
Clinton		Chester, Richland, Wayne		
Columbiana		Butler, Fairfield, Hanover, Knox, Unity		

APPENDIX 1 TO REGIONAL GENERAL CONDITION 5 (a)				
County	Waterway	Township		
Coshocton	Killbuck Creek, Muskingum River, Walhonding River			
Crawford		Auburn, Bucyrus, Cranberry, Dallas, Holmes, Whetstone		
Darke	Stillwater River			
Defiance	St. Joseph River	Milford		
Delaware	Mill Creek, Olentangy River			
Erie		Margaretta		
Fairfield		Walnut		
Fayette		Concord, Green, Jasper, Union		
Franklin	Big Darby Creek, Little Darby Creek, Scioto River			
Fulton	Swan Creek			
Gallia	Ohio River			
Greene	Little Miami River	Bath, Beaver Creek, Spring Valley, Sugar Creek		
Hamilton	Great Miami River, Little Miami River, Ohio River			
Hancock	Blanchard River			
Hardin	Blanchard River	Blanchard, Dudley, Hale, Jackson, McDonald, Roundhead		
Hocking		Benton, Laurel		
Holmes		All townships		
Huron		New Haven, Richmond		
Lake	Grand River	Madison		
Lawrence	Ohio River			
Licking		Licking, Union		
Logan	Great Miami River	Perry, Richland, Stokes, Washington, Zane		
Lucas	Swan Creek	All townships		
Madison	Big Darby Creek, Little Darby Creek			
Mahoning		Beaver, Boardman, Canfield, Green, Poland, Springfield		
Marion	Tymochtee Creek	Big Island, Bowling Green, Grand, Green Camp, Montgomery, Salt Rock		
Meigs	Ohio River			
Miami	Great Miami River, Stillwater River			
Montgomery	Great Miami River,	Mad River, Wayne		

APPENDIX 1 TO REGIONAL GENERAL CONDITION 5 (a)				
County	Waterway	Township		
•	Stillwater River	•		
Morgan	Muskingum River			
Muskingum	Muskingum River			
Ottawa		All townships		
Perry		Thorn		
Pickaway	Big Darby Creek, Scioto River			
Pike	Scioto River			
Portage		Aurora, Atwater, Charlestown, Deerfield, Edinburg, Franklin, Freedom, Mantua, Nelson, Palmyra, Paris, Randolph, Ravenna, Rootstown, Streetsboro		
Preble		Dixon, Gasper, Israel, Jackson, Lanier, Monroe, Somers, Twin, Washington		
Richland		Plymouth		
Ross	Salt Creek, Scioto River			
Sandusky		All townships		
Scioto	Ohio River, Scioto Brush Creek, Scioto River, South Fork Scioto Brush Creek	Nile, Rush, Union		
Shelby	Great Miami River			
Stark		Lexington, Marlboro		
Summit		Hudson, Tallmadge, Twinsburg		
Trumbull	Pymatuning Creek	All townships		
Union	Big Darby Creek, Little Darby Creek, Mill Creek, Treacle Creek	Allen, Darby, Washington		
Warren	Great Miami River, Little Miami River	Clear Creek, Deerfield, Massie, Turtle Creek, Union, Washington, Wayne		
Washington	Muskingum River, Ohio River			
Wayne		All townships		
Williams	Fish Creek, St. Joseph River	Bridgewater, Center, Florence, Jefferson, Madison, Northwest, St. Joseph, Superior		
Wyandot	Tymochtee Creek	Antrim, Marseilles, Mifflin, Pitt		

# HELPFUL INFORMATION FOR COMPLIANCE WITH THE NWP GENERAL CONDITIONS:

DISCLAIMER: The below information is intended to provide helpful contact information

and other submittal recommendations. Contact the appropriate local, state, or federal agency for the most updated links to ensure compliance with the NWP General Conditions.

## **General Condition 1 (Navigation)**

## List of Section 10 Navigable Waters of the U.S.:

Buffalo District -

https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll9/id/2710

Huntington District – <a href="https://www.lrh.usace.army.mil/Missions/Regulatory/Section-10-Streams/">https://www.lrh.usace.army.mil/Missions/Regulatory/Section-10-Streams/</a>

Louisville District -

https://www.lrl.usace.army.mil/Portals/64/docs/Regulatory/Public%20Notices/Limits%20 of%20Jurisdiction%20Public%20Notice-revised.pdf?ver=2013-02-13-120705-203

#### Pittsburgh District -

https://www.lrp.usace.army.mil/Portals/72/docs/regulatory/RegulatoryBoundaries/PN12-2.pdf

## **Navigation Charts:**

Buffalo District – https://www.lrb.usace.army.mil/Library/Maps-and-Charts/

Huntington District – <a href="https://www.lrh.usace.army.mil/Missions/Regulatory/Section-10-Streams/">https://www.lrh.usace.army.mil/Missions/Regulatory/Section-10-Streams/</a>

Louisville District -

https://www.lrl.usace.army.mil/Portals/64/docs/Ops/Navigation/Charts/Ohio/OhioRiverCharts102-122.pdf

Pittsburgh District – <a href="https://www.lrp.usace.army.mil/Missions/Navigation/Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Navigation-Naviga

#### Locks and Dams:

Buffalo District – <a href="https://www.lrb.usace.army.mil/Library/Maps-and-Charts/">https://www.lrb.usace.army.mil/Library/Maps-and-Charts/</a>

Huntington District – <a href="https://www.lrh.usace.army.mil/Missions/Civil-Works/Locks-and-Dams/">https://www.lrh.usace.army.mil/Missions/Civil-Works/Locks-and-Dams/</a>

Louisville District – <a href="https://www.lrl.usae.army.mil/Missions/Civil-Works/Navigation/Locks-and-Dams/">https://www.lrl.usae.army.mil/Missions/Civil-Works/Navigation/Locks-and-Dams/</a>

#### Pittsburgh District -

https://www.lrp.usace.army.mil/Missions/Navigation/Locks-and-Dams/#:~:text=Locks%20and%20Dams%20%20%20Allegheny%20River%20,Locks%20%26%20Dam%20%205%20more%20rows%20

#### Notice to Navigation Interests Request Sheets:

#### Huntington District -

https://www.lrh.usace.army.mil/Portals/38/docs/navigation/Notice%20Info%20sheet.pdf

#### Louisville -

https://www.lrl.usace.army.mil/Portals/64/docs/Regulatory/Forms/Notice%20to%20Navigation%20Interests%20Data%20Form%202019.pdf?ver=2019-07-22-101251-297

#### Pittsburgh District -

https://www.lrp.usace.army.mil/Portals/72/docs/regulatory/NavNoticeRequestForm.pdf

## **General Condition 5 (Shellfish Beds)**

Shellfish beds in Ohio include concentrations of freshwater mussels. All native mussels are protected in the State of Ohio (Section 1533.324 of the Ohio Revised Code). In addition, 10 federally listed species occur in the state and are protected by the ESA (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.). All rivers and tributaries that contain mussels or potential mussel habitat must be surveyed prior to any proposed streambed disturbance. Currently accepted protocol and supporting materials can be found on the Ohio Department of Natural Resources' website:

https://ohiodnr.gov/wps/portal/gov/odnr/buy-and-apply/special-use-permits/collecting-research/ohio-mussel-surveyor

#### **General Condition 7 (Water Supply Intakes)**

Locations of drinking water source protection areas associated with public water supply intakes, including the name of the public water supply, can be found at the following link:

https://oepa.maps.arcgis.com/apps/webappviewer/index.html?id=3b39e11ba7fc43c3b4 1801e3580e6d21

Contact information for public water suppliers can be obtained from Ohio EPA by contacting the Division of Drinking and Ground Waters at whp@epa.ohio.gov or 614-644-2752.

#### **General Condition 10 (Fills Within 100-year Floodplains)**

The following website provides a statewide listing of Floodplain Managers in Ohio:

https://ohiodnr.gov/wps/portal/gov/odnr/discover-and-learn/safety-conservation/about-ODNR/water-resources/floodplains/

#### **General Condition 16 (Wild and Scenic Rivers)**

Prior to submitting a PCN for work in a National Wild and Scenic River System, it is recommended that the applicant contact the National Park Service Regional Wild and Scenic Rivers Specialist, at the Midwest Regional Office, 601 Riverfront Drive, Omaha, Nebraska 68102, for assistance in complying with NWP General Condition 16. Any determination provided by the National Park Service should be submitted with the PCN. The following website provides information on National Wild and Scenic Rivers within Ohio:

https://www.rivers.gov/ohio.php

#### **General Condition 18 (Endangered Species)**

To obtain the most up to date information on federally threatened and endangered species applicants are encouraged to utilize the USFWS's Information for Planning and Consultation System (IPaC) found at <a href="https://ecos.fws.gov/ipac/">https://ecos.fws.gov/ipac/</a>

Prior to the submittal of a PCN, applicants may also contact the USFWS, Ohio Ecological Services Field Office at:

Address: 4625 Morse Road, Suite 104

Columbus. Ohio 43230

Email: ohio@fws.gov

Phone: (614) 416-8993

The Ohio Mussel Survey Protocol may be found at the following link:

https://ohiodnr.gov/wps/portal/gov/odnr/buy-and-apply/special-use-permits/collecting-research/ohio-mussel-surveyor

## General Condition 4 (Migratory Bird Breeding Areas) and General Condition 19 (Migratory Birds and Bald and Golden Eagles)

Prior to the submittal of a PCN, information to assist in complying with NWP General Conditions 4 and 19 may be obtained from the USFWS, Ohio Ecological Services Field Office at:

Address: 4625 Morse Road, Suite 104

Columbus, Ohio 43230

Email: <a href="mailto:ohio@fws.gov">ohio@fws.gov</a>

Phone: (614) 416-8993

The Ohio Division of Natural Resources Division of Wildlife may be contacted at (800) 945-3543.

## **General Condition 20 (Historic Properties)**

The Ohio National Register of Historic Places can be found at the following link: <a href="https://www.ohiohistory.org/preserve/state-historic-preservation-office/nationalregister">https://www.ohiohistory.org/preserve/state-historic-preservation-office/nationalregister</a>

When reviewing a PCN, the Corps will scope appropriate historic property identification efforts and, if applicable, work with the applicant to take into account the effect of the proposed activity on historic properties. In these instances, information and coordination may include:

 Requesting comments directly from the Ohio History Connection SHPO on the effect the proposed regulated activity may have on historic properties. The Ohio History Connection SHPO may be contacted at:

Address: Ohio History Center

800 E. 17th Ave., Columbus, Ohio 43211

Phone: (614) 297-2300 Email: info@ohiohistory.org

- To identify potential historic properties that may be affected by a proposed project, the following information may be reviewed and/or provided with the PCN when applicable:
  - A detailed description of the project site in its current condition (i.e. prior to construction activities) including information on the terrain and topography of the site, the acreage of the site, the proximity of the site to major waterways, and any known disturbances within the site.
  - A detailed description of past land uses in the project site.
  - Photographs and mapping showing the site conditions and all buildings or structures within the project site and on adjacent parcels are useful.
     Photographs and maps supporting past land uses should be provided as available.
  - Information regarding any past cultural resource studies or coordination pertinent to the project area, if available.
  - U.S. Geological Survey (USGS) 7.5' series topographic maps;
  - Ohio History Connection SHPO files including:
    - Ohio Archaeological Inventory (OAI) files;
    - Ohio Historic Inventory files (OHI);
    - Ohio SHPO Cultural Resources Management (CRM)/contract archaeology files;

- NRHP files including Historic Districts; and
- County atlases, histories and historic USGS 15' series topographic map(s).
- When needed to evaluate effects to historic properties, the applicant is encouraged to consult with professionals meeting the Professional Qualification Standards as set forth in the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (48 FR 44716) during this data gathering process. These professionals can assist with compiling the project information discussed above and should provide recommendations as to whether the proposal has the potential to affect historic properties and if further effort is needed to identify or assess potential effects to historic properties. These professionals can also compile preliminary review information to submit to the District Engineer as part of the PCN.

## **General Condition 23 (Mitigation)**

Information pertaining to mitigation can be found at the following link: <a href="https://www.lrh.usace.army.mil/Missions/Regulatory/Mitigation.aspx">https://www.lrh.usace.army.mil/Missions/Regulatory/Mitigation.aspx</a>

## **General Condition 25 (Water Quality)**

The Ohio Environmental Protection Agency may be contacted at:

Address: Lazarus Government Center

50 W Town St. Suite 700 Columbus, Ohio 43215

Phone: (614) 644-2001

Information pertaining to the Ohio Environmental Protection Agency water quality certification (WQC) program, including the Section 401 Clean Water Act WQC application form, can be obtained at the following link:

https://epa.ohio.gov/divisions-and-offices/surface-water/permitting/water-quality-certification-and-isolated-wetland-permits

## **General Condition 32 (Pre-Construction Notification)**

The nationwide permit pre-construction notification form (Form ENG 6082) may be obtained at the following link:

https://www.publications.usace.army.mil/Portals/76/Users/182/86/2486/ Eng Form 6082 2022Sep.pdf

A checklist of information that must be provided in a pre-construction notification can be

#### obtained at the following link:

https://www.lrh.usace.army.mil/Missions/Regulatory/How-to-Apply-for-a-Permit/Nationwide-Permits/

#### **Electronic Submittal:**

 PCNs should be saved as a PDF document, and then submitted as an attachment in an email to the appropriate Regulatory Office:

Buffalo District – LRB.Ohio.RegActions@usace.army.mil
Huntington District – LRH.permits@usace.army.mil
Louisville District – CELRL.Door.To.The.Corps@usace.army.mil
Pittsburgh District – Regulatory.Permits@usace.army.mil

- Electronic documents must have sufficient resolution to show project details. The PCN and supporting documents submitted electronically must not exceed 10 megabytes (10MB) per email. Multiple emails may be required to transmit documents to ensure the 10MB limit is not exceeded. Alternatively, use of the Department of Defense Secure Access File Exchange (DoD SAFE) service to transfer large files may be requested in your email.
- For tracking and processing purposes, the email should include the following:
  - Email Subject Line: include the name of the applicant, type of PCN request, and location (County and State). Example: RE: Doe, John, PCN and Section 401 WQC Request, Summit County, Ohio;
  - Email Body: 1) Brief description of the proposed project, 2) contact information (phone number, mailing address, and email address) for the applicant and/or their agent, and 3) the project location: Address and Latitude/Longitude in decimal degrees (e.g. 42.92788° N, 88.36257° W).
- If you do not have internet access, information may be submitted through the U.S. Postal Service to the appropriate Regulatory Office:

U.S. Army Corps of Engineers, Buffalo District ATTN: Regulatory Branch 478 Main Street Buffalo, New York 14202 Phone: (716) 879-4330

Fax: (716) 879-4310

U.S. Army Corps of Engineers, Huntington District ATTN: Regulatory Division 502 Eighth Street Huntington, West Virginia 25701-2070 Phone: (304) 399-5210 Fax: (304) 399-5805

U.S. Army Corps of Engineers, Pittsburgh District ATTN: Regulatory Division William S. Moorhead Federal Building 1000 Liberty Avenue Pittsburgh, Pennsylvania 15222-4186

Phone: (412) 395-7155 Fax: (412) 644-4211

U.S. Army Corps of Engineers, Louisville District ATTN: CELRL-RD, Room 752 600 Dr. Martin Luther King Jr. Place Louisville, Kentucky 40202-0059

Phone: (502) 315-6733 Fax: (502) 315-6677