

LAKE WAWASEE

Dillon Creek Sediment Control Project

FINAL REPORT

Kosciusko County, Indiana

November, 2005



Prepared for:

Wawasee Area Conservancy Foundation

PO Box 548

Syracuse, IN 46567

Prepared by:



708 Roosevelt Road
Walkerton, Indiana 46574
574-586-3400



Figure 2. Dillon Creek channel north of Honeycomb Lane before project construction.

2.0 STATEMENT OF THE PROBLEM

Dillon Creek is an agricultural drainage extending approximately 3 miles from Lake Wawasee in Kosciusko County into Noble County. The headwaters in Noble County are ditched with adjacent farming of the floodplains and former wetlands. The central third of Dillon Creek has a forested buffer surrounded by agricultural land. The final one-half mile of Dillon Creek and floodplain was excavated and filled to create residential subdivisions on excavated channels. These channels have been filling with silt from the watershed as well as streambed and bank erosion. Farming practices in the watershed have improved, and more recently, check dams were installed in the Noble County portion to capture sediment and eliminate channel incision. As the creek flows into Kosciusko County it is entirely wooded until it reaches Enchanted Hills.

Upstream of 1100 North Road, on WACF property, Dillon Creek has been impacted by the constriction of the floodway into a culvert under 1100 North Road. This is evidenced by a completely evulsed channel, where water flows overland throughout the floodplain after every

rain event. While this makes a nice sediment trap and wetland filter, it is not a healthy stream. The regulatory community tightly regulates wooded streamside wetlands, and therefore, work that was originally designed to trap additional watershed sediments on the WACF property was not authorized by the state agency having jurisdiction.

The section of Dillon Creek between 1100 North Road and Honeycomb Lane is actively incising and increasing its meander lengths (Figure 3). The result is a tremendous amount of erosion from the stream banks and the stream bottom. This erosion will continue until the stream forms a new floodplain within the lowered channel. The original work planned for this project involved constructing grade controls in this section of the stream to reverse the affects of incision. However, the grade controls would have increased flooding, thus creating wetlands in the floodplain. The property owners were not willing to allow this project to occur.



Figure 3. Facing upstream (South) of Culvert at Honeycomb Lane.

A third option for addressing the sediment coming from the watershed and the eroding stream was to collect the sediment at the outfall in a sediment trap. While this does not directly address the problem, it will result in the goal of reducing suspended sediment in the lake. The sediment trap will need to be cleaned on a periodic basis, and hopefully, with other improvements in the watershed may eventually become unnecessary.

3.0 DESIGN RATIONALE

JFNew surveyed the proposed sediment trap location between Honeycomb Lane and Doswell Boulevard during the spring of 2005. The survey consisted of relative cross sections of the channel every 100 feet using a laser level. The cross sectional data included the height and steepness of the embankments, the existing and original channel bottom, and the existing water level. The cross section locations were then transferred to an aerial photograph in GPS format. This information was used to develop sediment removal estimates and begin the search for a

method to remove the accumulated material. As much as six feet of accumulated sand and organic matter had accumulated in an area almost three hundred feet long. The total volume of accumulated sediment was estimated at approximately 1,200 cubic yards.

Physical, social, and regulatory concerns were of paramount importance in the decision process of how to remove the material from this channel. The original channel bottom ranged from 14 to 20 feet below the top of banks. The channel banks had at best a 1:1 (horizontal to vertical) slope and were fully vegetated with mature trees. Channel access lots had been plotted in 15-foot wide increments along both sides of the channel for the entire length resulting in 118 lots. All of these owners were notified during the IDNR permit application process. The regulatory concerns included timing of dredging, method of dredging, and maintenance of vegetation on the banks.

There are no proven calculations to determine how big a sediment trap should be for a given waterway. Generally, the larger you make a sediment trap, especially when creating an area wider than the existing waterway, the more sediment will drop out of suspension. The heavy particles (sand) tend to fall out in the first portion of the basin while finer particles (clay) may stay in suspension no matter how large you make the basin. However, the longer and wider the trap is the more likely the fine clay particles will settle. JFNew considered constructing a circular trap just at the outfall, however, most of the deposited sand was more than 100 feet downstream of the culvert due to the scouring action as the water falls out of the culvert into the channel (a 5-foot drop). After discussions with the Enchanted Hills Homeowners Association and the permit agencies, it was decided that the entire channel between Honeycomb and Doswell would serve as a better sediment trap in the long term, with the culvert at Doswell acting as the downstream check dam to help recirculate the water flow.

The construction methods considered included using a long reach excavator, a dragline, or hydraulic dredging. Using either the long reach excavator or the dragline would have resulted in the removal of the majority of woody vegetation on the slopes to facilitate the excavation. Excavation with land-based equipment also requires stockpiling of the material, drying time, and then removal of the material to a final disposal site. The two-step process became cost prohibitive. Additional concerns with land-based excavation equipment included the objectionable removal of the trees and additional sedimentation of the water column during construction. Hydraulic dredging was favored because of limited disturbance to the channel side slopes and adjacent lots.

Hydraulic excavation of the sediment trap became the only realistic solution once a spoils basin location could be identified. The Wawasee Area Conservancy Foundation offered the spoils basin site for the sediment trap after an exhaustive search of other potential sites was conducted with negative results.

4.0 DESIGN AND CONSTRUCTION SPECIFICS

4.1 Sediment trap

The sediment trap is 900-feet long and 40 feet wide. It is designed to extend at least to the original bottom and width of the channel with a minimum depth of 6-feet. It will be excavated

to a depth of 8-feet in the vicinity of the existing culvert outlet for approximately 75-feet from the culvert northward. The sediment trap will be hydraulically dredged and the spoils pumped approximately 1500 feet to a spoils basin located on the WACF property at the southeast corner of 1100 North Road and Turkey Creek Road. Return water will be gravity fed back into Dillon Creek on WACF property. See Project Plans (Appendix A).

4.2 Embankment stabilization

The construction of the sediment trap to previous channel bottom grades should not affect the integrity of the well-vegetated embankments. However, in the vicinity of the culvert under Honeycomb Lane, the embankments are steep (1:1) and have riprap or failing timber protection on the banks. The pilings supporting the timbers remain solid, however, the timbers themselves have collapsed or are nearing collapse. The riprap is on a steep slope at the edge of an open public right-of-way, which is at the bottom of a long sloping section of road. The WACF requested that we construct embankment stabilization at this end of the channel to reduce the slope and provide a safer and more aesthetically appealing end of channel treatment.

The timbers and pilings will be removed and hauled off-site. The riprap at the south end will be removed from the upper 2/3 of the slope and used to backfill the low wet area to the west of the culvert outlet (permit obtained). This riprap pad will be level graded to support an excavator and allow for the installation of sheet pile. PVC or fiberglass sheet pile will be installed for a distance of 75-feet along each embankment toe-of-slope beginning at the ends of the existing steel sheet pile wall (east-west wall under the culvert) and extending northward. The sheet pile wall will be capped with an aluminum or PVC cap to match. The wall will be driven to a minimum depth of 10-feet below grade and extend approximately 2-feet above the water line to match the existing wall height.

Following the installation of the sheet pile wall, the embankment above and adjacent to the culvert will be regraded to a 3:1 slope. All earthen material obtained in this regrading will be used to backfill over the riprap shelf behind the new sheet pile. The slope will be compacted in lifts of less than 12-inches and the final grade will approximate a 4:1 slope. The entire slope will then be seeded with a low-profile prairie mix (Table 1). The seeded slope will then be blanketed with erosion control blankets appropriate to the season.

Table 1:

Botanical Name	Common Name
<i>Permanent Grasses</i>	
<i>Andropogon scoparius</i>	Little Blue Stem
<i>Bouteloua curtipendula</i>	Side Oats Grama
<i>Elymus canadensis</i>	Prairie Wild Rye
<i>Panicum virgatum</i>	Prairie Switch Grass
<i>Temporary Cover</i>	
<i>Avena sativa</i>	Seed Oats
<i>Lolium multiflorum</i>	Annual Rye
<i>Phleum pretense</i>	Timothy

Botanical Name	Common Name
<i>Forbs</i>	
<i>Asclepias tuberosa</i>	Butterfly Weed
<i>Aster novae-angliae</i>	New England Aster
<i>Cassia Fasciculata</i>	Partridge Pea
<i>Coreopsis lanceolata</i>	Sand Coreopsis
<i>Echinacea purpurea</i>	Purple Coneflower
<i>Heliopsis helianthoides</i>	False Sunflower
<i>Liatris aspera</i>	Rough Blazing Star
<i>Lupinus perennis</i>	Wild Lupine
<i>Ratibida pinnata</i>	Yellow Coneflower
<i>Rudbeckia hirta</i>	Black-eyed Susan

4.3 Basin site selection

JFNew wrote to every property owner within 2000 feet of the basin who had vacant land totaling at least one-acre and to groups of owners who had adjacent vacant lots totaling at least one-acre. Two positive responses were received, one from an owner who requested \$10,000 rental, and another from a person who owned two of four lots necessary and wanted a permanent guarantee of no future financial impacts to the property caused by the project. Neither offer was practical. WACF agreed to allow the use of their property within a limited area with the promise of tree relocation prior to construction and tree replacement planting post-construction. The basin was sited near the northern boundary of the WACF property approximately 50 feet from the edge of the cemetery. The basin area extends approximately 200 feet southward. The east side of the basin is at the edge of the existing tree line and the west edge is approximately 200 feet west (Appendix A).

4.4 Landowner Agreement

The sediment trap project was designed within a public waterway and thus no specific owner permission was required for the project to proceed. The staging areas are located on property owned by the Enchanted Hills Property Owners Association (Association). The Enchanted Hills Property Owners are co-sponsoring the project. The spoils basin for the hydraulic dredge spoils is located on WACF property, the lead project sponsor. Therefore, property owner agreements were deemed not necessary for this project.

4.5 Permitting

Permit applications were submitted to the U.S. Army Corps of Engineers, Indiana Department of Environmental Management, and the Indiana Department of Natural Resources. Permits were obtained and can be found in Appendix B.

4.6 Related Project Activities and Logistics

This project was funded by a LARE grant to WACF for a project to reduce sediment loads from Dillon Creek to Lake Wawasee. JFNew was awarded the lump-sum contract for installation of grade controls in Dillon Creek on the stream reach between Enchanted Hills and 1100 North Road. The sediment trap project will cost more than the initial fee contracted. The Enchanted

Hills Property Owners voted to assist financially by paying the 25 percent cost share required on the grant directly from their Association account to the dredging operator. In return the association requested that JFNew obtain permits for additional channel dredging work and an agreement for an additional basin to accomplish that dredging. JFNew obtained the necessary permit, and negotiated with a landowner off Turkey Creek Drive for the additional spoils basin. In addition, the WACF and the Association requested that a berm be constructed around an existing sewage pump station to protect it from annual flooding.

4.7 Cost Estimates

Description of Work Item	Unit of Measure	# of Units	Unit Cost	Total
Project Mngmt., design and permitting	Each	1	16,000	16,000
Earth work for basin construction	Cubic yards	2,500	6	15,000
Landscaping associated with basin	Each	1	2,000	2,000
Dredging	Each	1	25,000	25,000
Sheet pile	Lineal foot	150	50	7,500
Bank clearing and shaping	Lineal foot	250	20	5,000
Bank landscaping	Lineal foot	250	20	5,000
Berm construction around lift station	Cubic yards	960	6	5,760
Total				81,260

5.0 CONSTRUCTION SCHEDULE

The project was proposed to proceed in November 2005. However, the subcontracted dredging firm was not available at the time; therefore, construction will likely proceed between February and March of 2006.

6.0 MONITORING AND MAINTENANCE ACTIVITY

The project site should be monitored next spring for growth of vegetation on the reconstructed embankments. Monitoring of the sediment trap should be conducted every two to three years to determine maintenance cleaning needs. This can be determined by measuring the depth of the sediment trap based on the depths shown in the construction drawings. The reconstructed slope can be mowed or left to grow. Prairie development on the slopes will take five years after seeding and can be mown or burned annually to reduce herbaceous weeds, shrubs, and trees.

7.0 PROJECT SUMMARY

Sediment flowing to Lake Wawasee from Dillon Creek is derived from upper watershed surface erosion and from the stream channel between Enchanted Hills and 1100 North Road. This project originally targeted the sediment from the severely eroding channel in the wooded floodplain between Honeycomb Lane and 1100 North Road. The landowner would not allow the project to proceed. JFNew was approached by the Enchanted Hills Property Owners Association to consider a sediment trap within the Dillon Creek channel on Enchanted Hills' property. The WACF and the LARE staff agreed to allow the sediment trap project to proceed. The sediment trap was designed to be approximately 0.8 acres. Hydraulic dredging was selected as the most environmentally and physically feasible way to construct the sediment trap. A sediment basin was then designed for the WACF property at the southeast corner of 1100 North Road and Turkey Creek Road. Stabilization of the culvert outfall area will be accomplished by removal of debris, regrading the slope, and planting with native prairie vegetation.

Appendix A

Plan Drawings

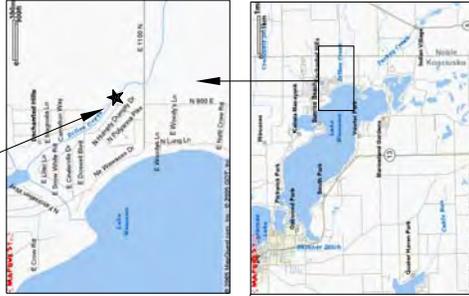
REVISIONS	

WAWASEE AREA CONSERVANCY FOUNDATION

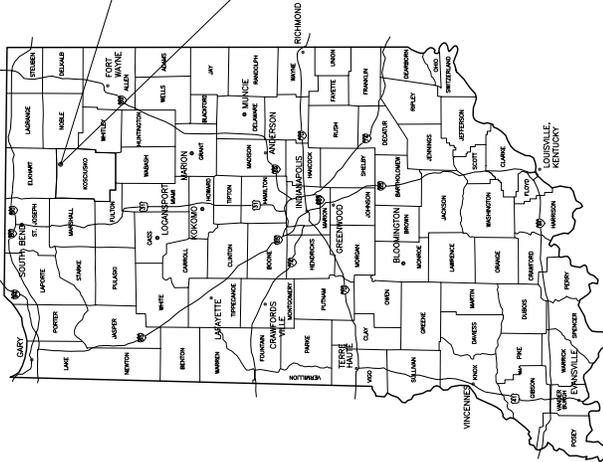
KOSCIUSKO COUNTY
SYRACUSE, INDIANA

DILLON CREEK SEDIMENT TRAP NOVEMBER 2005

APPROXIMATE PROJECT LOCATION



VICINITY MAP



Our mission is to provide the highest quality environmental services to our clients while positively impacting the conservation of natural resources and the through prosperity and stewardship.



WAWASEE AREA
CONSERVANCY FOUNDATION
DILLON CREEK
SEDIMENT TRAP CONSTRUCTION
COVER SHEET - VICINITY MAP

DRAWN BY: SUP
DESIGNED BY: WS
CHECKED BY: JBR
DATE: NOV 2005
JOB NO: 000772-00
SCALE: AS NOTED

ON COVER SHEET
DRAWING NO.
1
OF 5



Corporate Office
700 Roosevelt Road
Westfield, IN 46084
574-592-3400 fax 574-595-3466

Indiana Office
6940 Paradise Plaza, Suite S
Carmel, IN 46032
317-592-1962 fax 317-389-1898

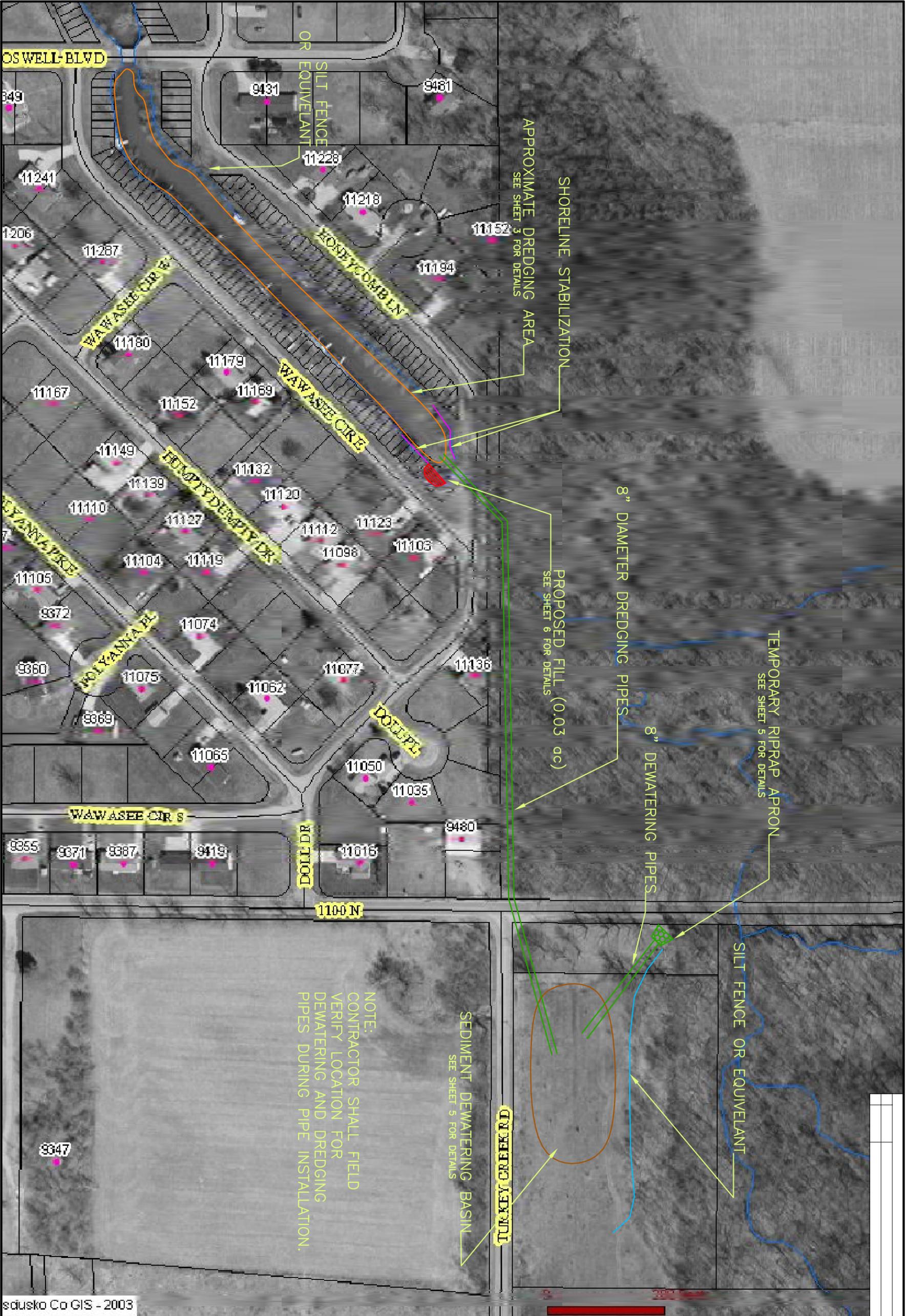
Chicago Office
8000 Belmont Center Dr., Suite 228
West Chicago, IL 60491
513-582-3446 fax 513-542-3447

Michigan Office
690 South Beacon
Grand Rapids, MI 49503
616-847-1680 fax 616-847-5970

Illinois Office
722 West Exchange, Suite 4
Normal, IL 62556
708-367-1130 fax 708-367-1132

INDEX OF DRAWINGS

SHEET	SHEET DESCRIPTION
1	COVER SHEET - VICINITY MAP
2	PLAN VIEW
3	SEDIMENT TRAP DETAILS
4	CHANNEL CROSS SECTIONS
5	SEDIMENT DEWATERING BASIN DETAILS
6	BANK STABILIZATION DETAILS

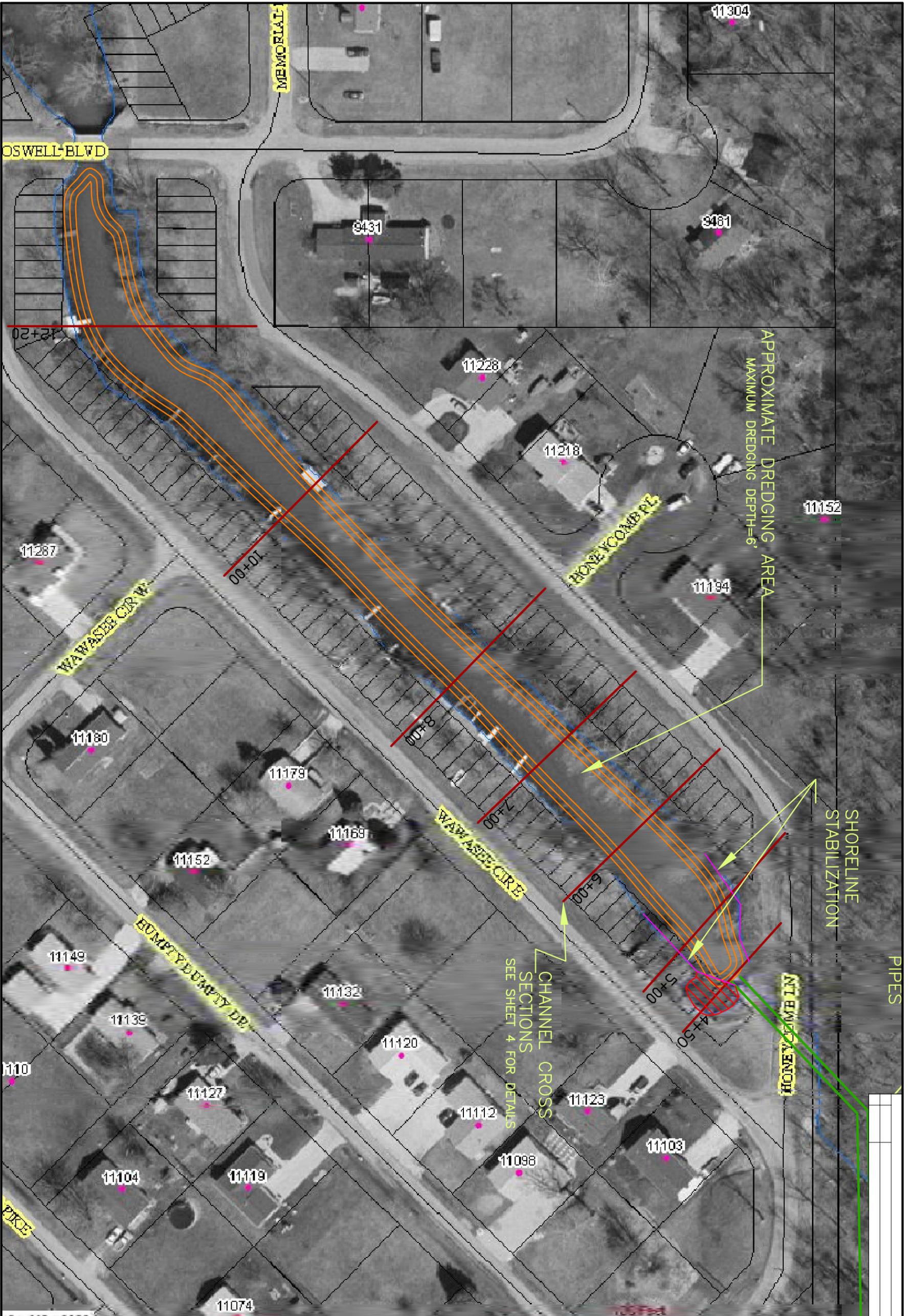


NOTE:
 CONTRACTOR SHALL FIELD
 VERIFY LOCATION FOR
 DEWATERING AND DREDGING
 PIPES DURING PIPE INSTALLATION.

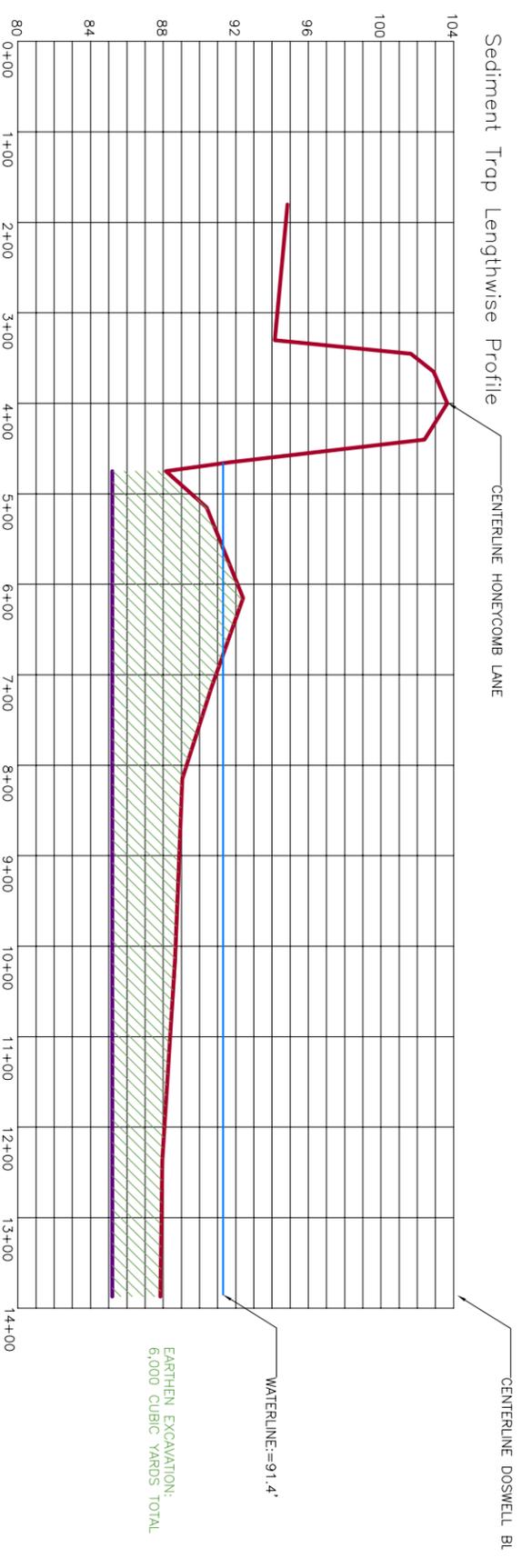
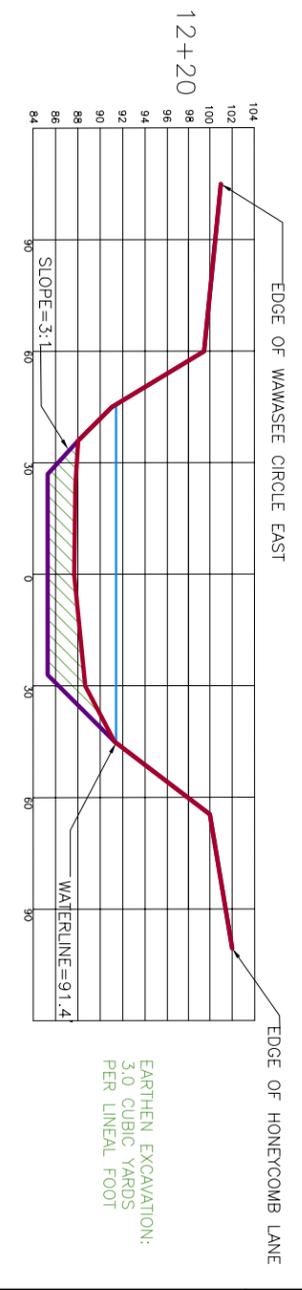
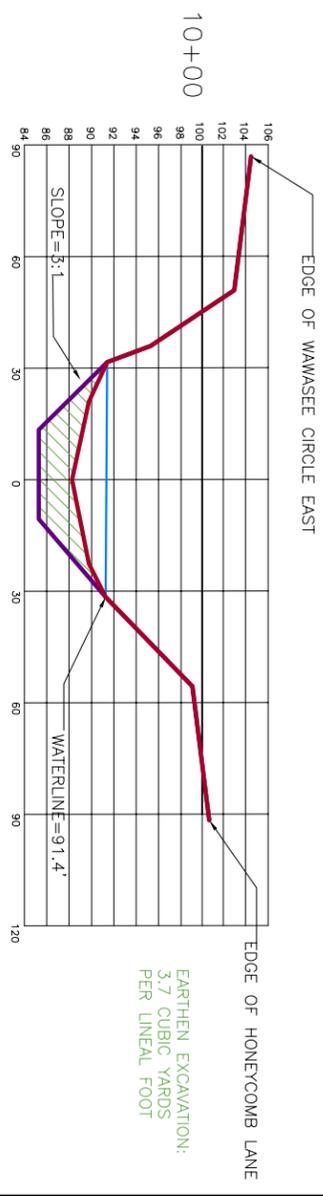
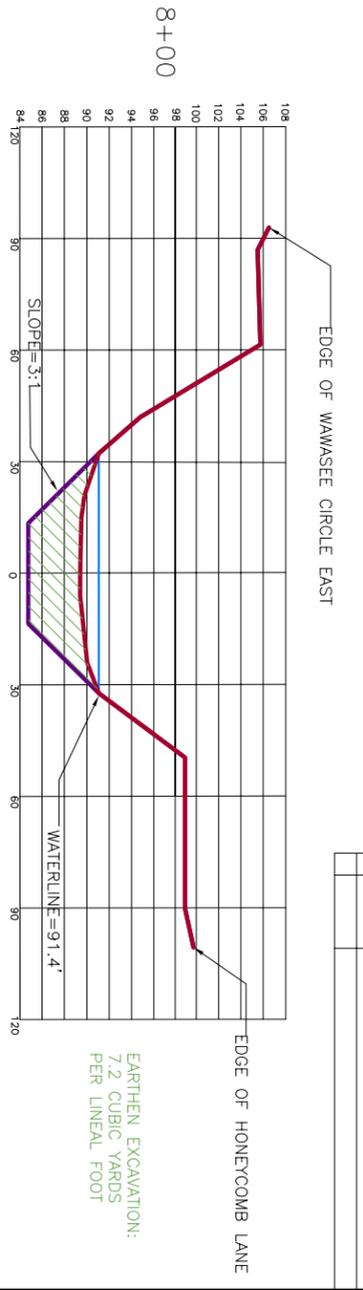
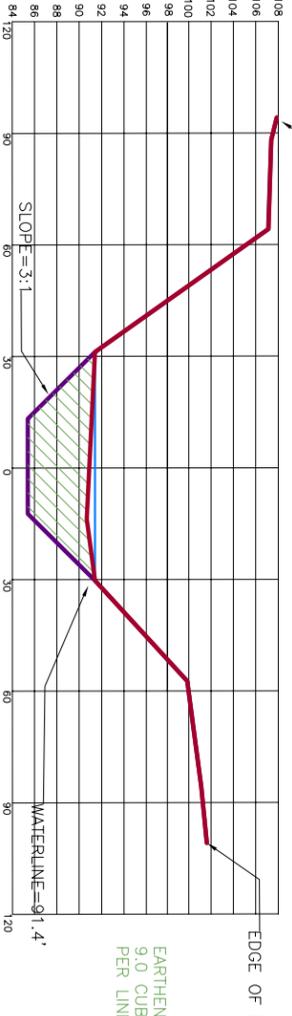
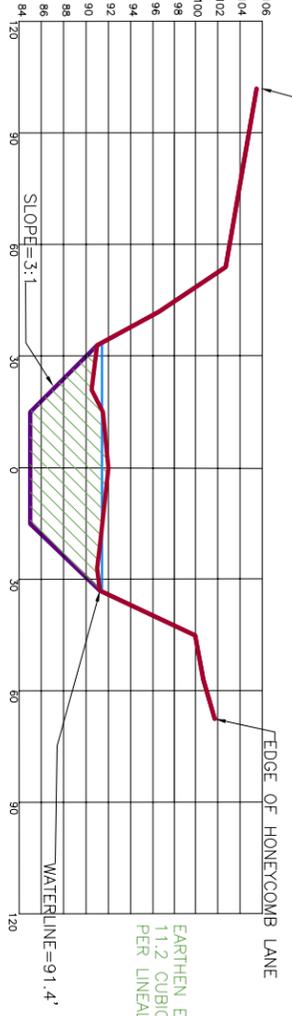
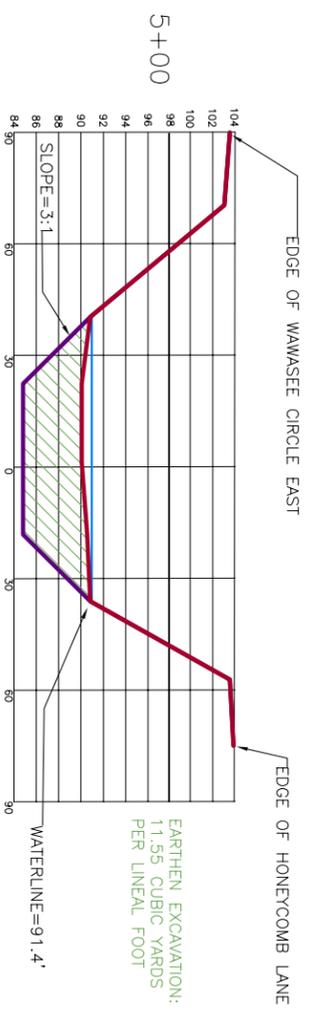
SEDIMENT DEWATERING BASIN
 SEE SHEET 5 FOR DETAILS

sdusko Co GIS - 2003

02-PLANVIEW.DWG DRAWING NO. 2 OF 5	DATE: NOV 2005 JOB NO.: 030737.00 SCALE: AS NOTED	CHECKED BY: JBR DESIGNED BY: VJS DRAWN BY: SJP	WAWASEE AREA CONSERVANCY FOUNDATION DILLON CREEK SEDIMENT TRAP CONSTRUCTION			SCALE: 1"=80' SCALE IN FEET 0 80' NORTH ARROW	This drawing is a computer-generated drawing. It is not to be used for construction without the original drawing.
			PLAN VIEW				



<p>03-SEDIMENT TRAP DWG</p> <p>DRAWING NO.</p> <p style="font-size: 24pt; font-weight: bold;">3</p> <p>OF 5</p>	<p>WAWASEE AREA CONSERVANCY FOUNDATION</p> <p>DILLON CREEK</p> <p>SEDIMENT TRAP CONSTRUCTION</p>		<p>Corporate Office 7000 Westpark Blvd Waukesha, WI 53186 920-330-4400</p> <p>Central Office 9000 Westpark Blvd West Chester, OH 43081 513-834-4447</p> <p>Local Office 12211 Oaklawn Blvd Columbus, OH 43240 614-891-1100</p> <p>Regional Office 1440 International Center Hartford, CT 06183 860-234-1100</p> <p>Mobile Office Grand Haven, Michigan 49427 616-842-1100</p>
	<p>PLAN VIEW</p>		
<p>DRAWN BY: SJP</p> <p>DESIGNED BY: VJS</p> <p>CHECKED BY: JBR</p> <p>DATE: NOV 2005</p> <p>JOB NO.: 030737.00</p> <p>SCALE: AS NOTED</p>			<p>This has been printed on 24" x 36" or larger paper. If printed on smaller paper, the scale will be reduced. The scale shown on this drawing is for reference only. The scale of the original drawing shall govern.</p> <p>SCALE: 1" = 50'</p> <p>SCALE IN FEET</p> <p>0 50'</p> <p>N</p>



SCALE: AS SHOWN

SCALE VERIFICATION:
 1/4" = 1' Vertical Scale
 1 1/4" = 100' Horizontal Scale

CONVOY OFFICE
 700 Riverbank Road
 514-286-4300 fax: 514-286-4346

Channel Office
 6800 Boulevard Centre Dr., Suite 206
 514-282-4444 fax: 514-282-4447

Ilbasi Office
 722 West Exchange, Suite 4
 781-337-7133 fax: 781-337-1132

Indianapolis Office
 6840 Pineville Pike, Suite 8
 317-288-1182 fax: 317-288-1888

Madison Office
 400 South Belmont
 Grand Central Station
 616-427-1100 fax: 616-427-2070



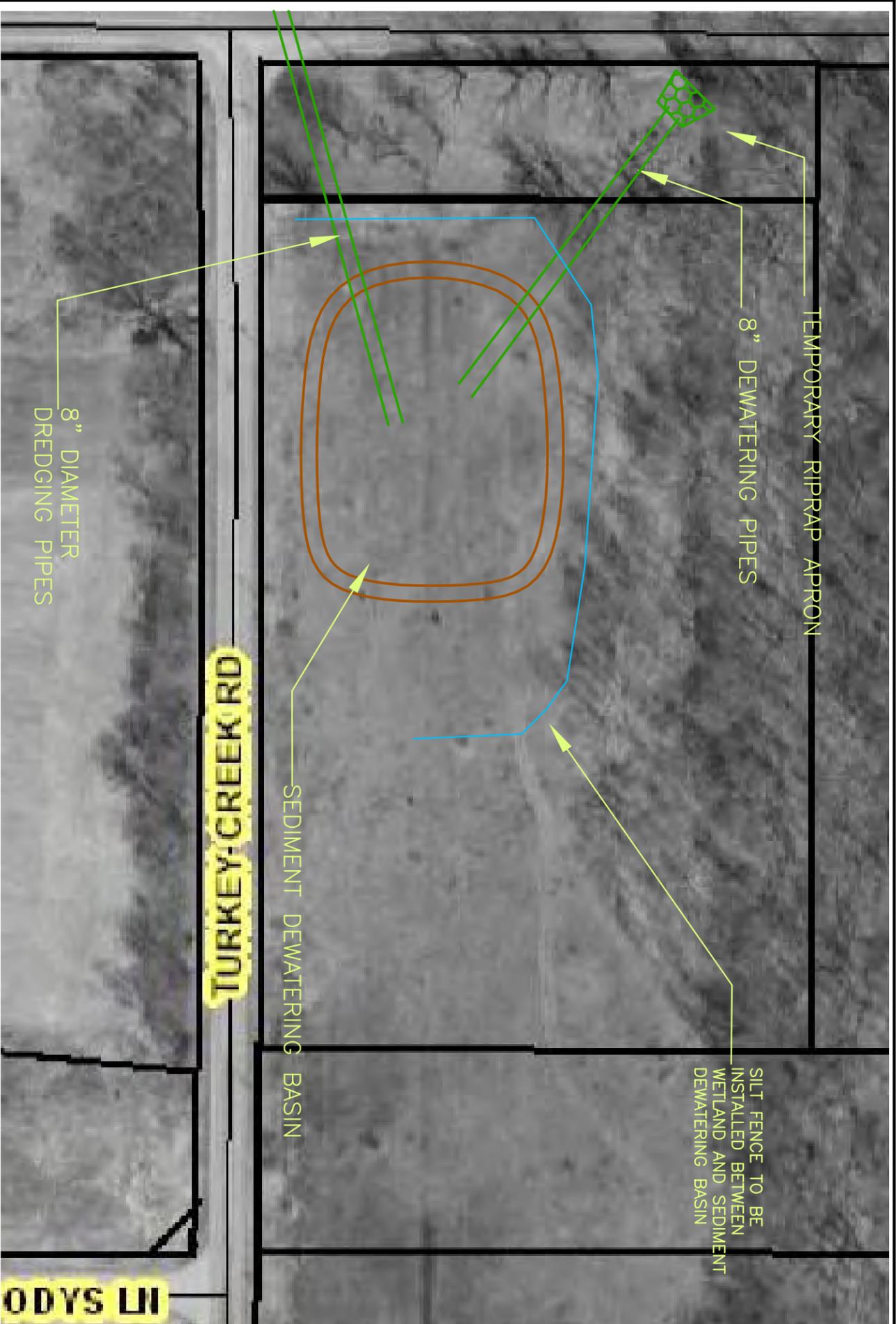
WAWASEE AREA
 CONSERVANCY FOUNDATION
 DILLON CREEK

SEDIMENT TRAP CONSTRUCTION

CHANNEL CROSS SECTIONS

DRAWN BY: SJP
 DESIGNED BY: WIS
 CHECKED BY: JBR
 DATE: NOV 2005
 JOB NO: 030737-00
 SCALE: AS NOTED

04-CROSS SECTIONS DWG
DRAWING NO.



SILT FENCE TO BE
INSTALLED BETWEEN
WETLAND AND SEDIMENT
DEWATERING BASIN

TEMPORARY RIPRAP APRON
8" DEWATERING PIPES

SEDIMENT DEWATERING BASIN

8" DIAMETER
DREDGING PIPES

TURKEY-CREEK RD

ODYSSEY LN

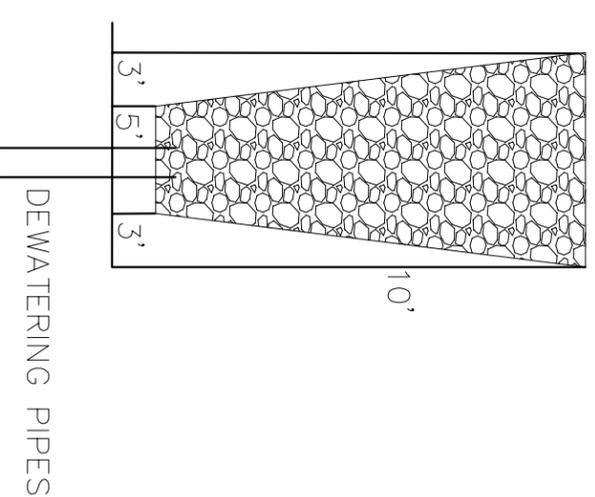


0 40'
SCALE IN FEET

SCALE VERIFICATION
This set contains 1"=30' SCALE or 1/2"=1'
SCALE. All other scales are as noted.

Customer Order
705 Rosewell Road
514-888-8870 fax 514-888-8446
Customer Order
8880 Boulevard Dr., Suite 228
514-888-8446 fax 514-888-8447
JFN Office
7229 West Exchange, Suite 4
708-387-1110 fax 708-387-1132
Indusport, Ocala
6840 Parkway Place, Suite B
317-589-9926 fax 317-589-9986
Nashua Office
600 South Boston
603-888-4447
603-888-4447 fax 603-888-4470

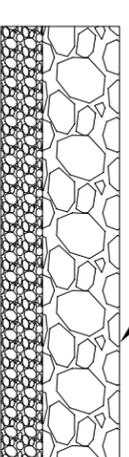
TEMPORARY RIPRAP
APRON TO BE REMOVED
AFTER DEWATERING.



DEWATERING PIPES

TYPICAL RIPRAP APRON CROSS SECTION

ANGULAR RIPRAP 6-12"
DIA., 18" DEPTH



#53 STONE,
6" DEPTH
NOT TO SCALE

- NOTES:
1. BERM SHALL BE CONSTRUCTED FROM AVAILABLE BORROW IN DEWATERING BASIN AREA. EXCAVATION SHALL OCCUR TO A DEPTH OF 3' BELOW EXISTING GROUND LEVEL.
 2. TOP ELEVATION SHALL BE APPROX. 6' ABOVE EXISTING GROUND LEVEL.
 3. BERM SHALL BE CONSTRUCTED WITH 2:1 SIDE SLOPES AND A MINIMUM OF 6' WIDTH ACROSS BERM TOP.
 4. SEDIMENT DEWATERING BASIN IS TEMPORARY AND SHALL BE LEVELED TO MEET EXISTING GRADE APPROXIMATELY 6 MONTHS AFTER DREDGING IS COMPLETE.

WAWASEE AREA
CONSERVANCY FOUNDATION
DILLON CREEK

SEDIMENT TRAP CONSTRUCTION

SEDIMENT DEWATERING BASIN DETAILS

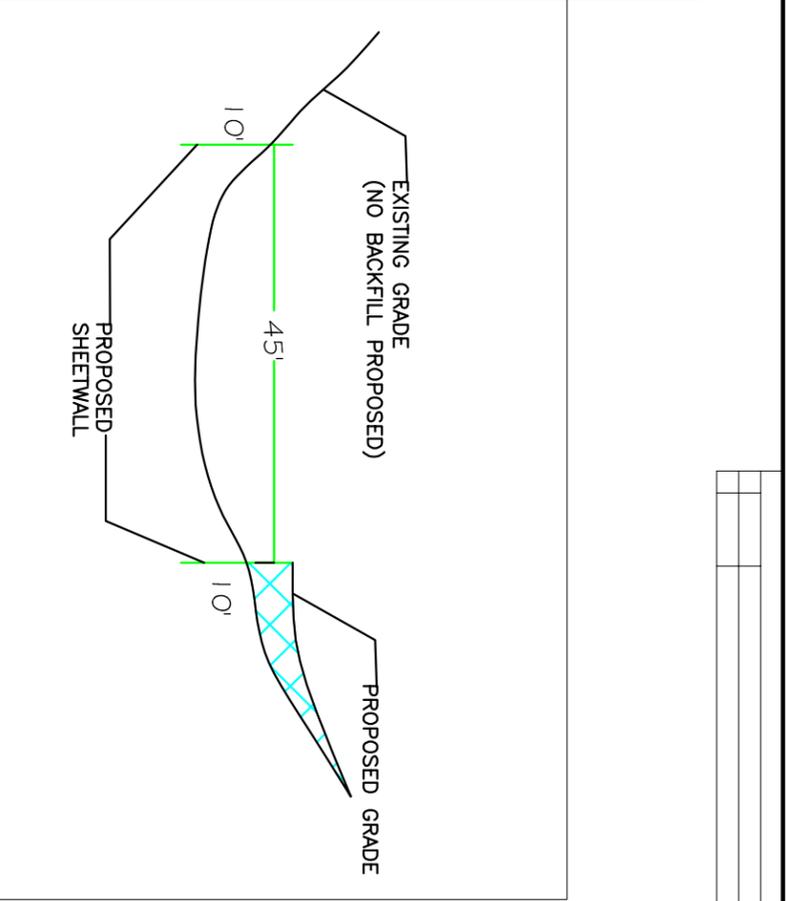
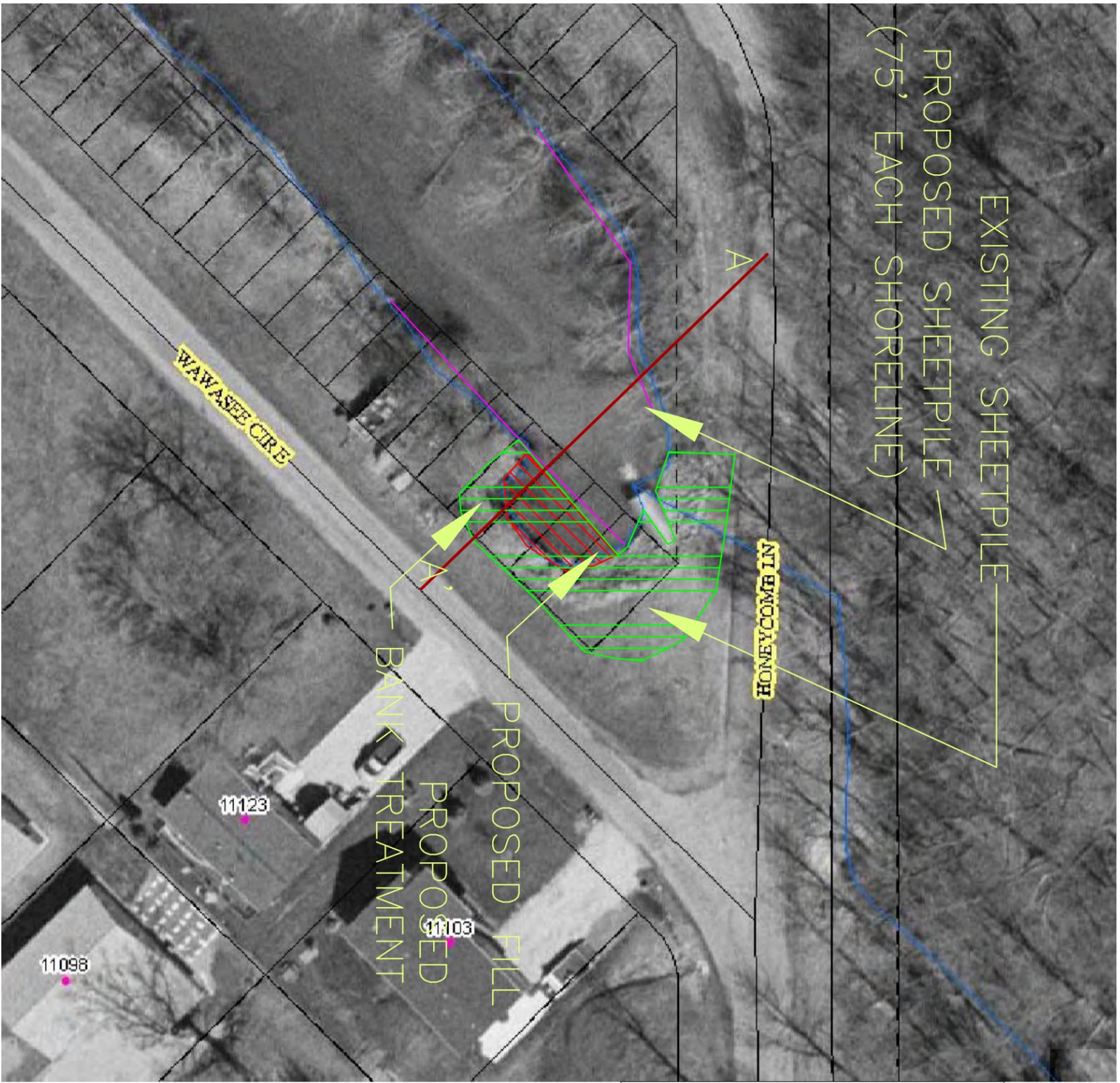


DRAWN BY: SJP
DESIGNED BY: WS
CHECKED BY: JBR
DATE: NOV 2005
JOB NO.: 030737-00
SCALE: AS NOTED

05-DEWATERING BASIN.DWG
DRAWING NO.

5

OF 5



Note: Bank treatment includes removing existing riprap above OHWM, respiling embankment to 4:1 slope, planting with low-profile prairie mix, and blanketing with erosion control mats.



SCALE VERIFICATION
This has been verified to be accurate to within 1/8" on a 1" scale.

Corporate Office
100 Riverway Road
514-253-3000 fax 514-253-3446

Grand Rapids Office
6000 Grand Central Dr., Suite 208
514-253-3446 fax 514-253-3447

Illinois Office
727 West Exchange Street, 4th
708-267-1120 fax 708-267-1122

Indianapolis Office
6660 Parkside Place, Suite 5
317-256-1822 fax 317-256-1885

Michigan Office
402 South Main
Grand Rapids, MI 49503
616-441-1800 fax 616-441-0970



WAWASEE AREA
CONSERVANCY FOUNDATION
DILLON CREEK

SEDIMENT TRAP CONSTRUCTION

SHORELINE STABILIZATION DETAILS

DRAWN BY: SJP
DESIGNED BY: WS
CHECKED BY: JBR
DATE: NOV 2005
JOB NO.: 030737.00
SCALE: AS NOTED

06-SHEETPILE.DWG
DRAWING NO.

6

OF 6

Appendix B

Permits

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

MAILED SEP 16 2005

CERTIFICATE OF APPROVAL
CONSTRUCTION IN A FLOODWAY

APPLICATION # : FW-23399

STREAM : Dillon Creek

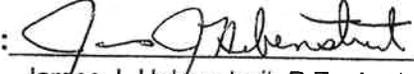
APPLICANT : Wawasee Area Conservancy Foundation
Heather Harwood, ASLA
PO Box 548
Syracuse, IN 46567-0548

AGENT : J F New & Associates, Inc
John Richardson
708 Roosevelt Road
Walkerton, IN 46574-1220

AUTHORITY : IC 14-28-1 with 312 IAC 10

DESCRIPTION : Approximately 4,600 cubic yards of sediment will be hydraulically dredged from the channel and a sediment trap with a maximum 6' depth will be created. Dredged materials will either be disposed of in an area between the channel and Honeycomb Lane or at a disposal area located on the southeast side of the intersection of County Road 1100 North and Turkey Creek Road. For the location between the channel and Honeycomb Lane, dredged spoils will be centrifuged, applied, graded and seeded, or hauled off-site. Silt fencing or an equivalent will be placed down slope of the spoils. For the location on the southeast side of the intersection of County Road 1100 North and Turkey Creek Road, dredged spoils will be pumped to a temporary sediment dewatering basin constructed on an upland location of the site. Silt fencing or an equivalent will be placed between the basin and the Dillon Creek floodplain. Return water from the basin will be piped back to Dillon Creek's floodplain located at the base of an embankment to the northeast of the basin. The return water will be filtered through a temporary riprap apron placed on the slope before exiting into the floodplain. Upon drying, the riprap apron will be removed and the sediment basin will be leveled, graded to match the existing landscape, and seeded. In addition, approximately 100' of vinyl seawall will be installed along each side of the existing 6' diameter corrugated metal pipe and steel sheet piling seawall. The vinyl seawall will replace an existing failed, wooden seawall and will stabilize the shoreline. During construction of the seawall, approximately 0.03 acres of the channel will be filled with clean earthen fill to repair an existing washout located to the west of the culvert. Details of the project are contained in information received electronically at the Division of Water on June 15, 2005, and in plans and information received at the Division of Water June 27, 2005, July 26, 2005, and August 25, 2005.

LOCATION : **DOWNSTREAM:** the channel between the East Doswell Boulevard crossing and the Honeycomb Lane crossing near Wawasee, Turkey Creek Township, Kosciusko County
NE $\frac{1}{4}$, SE $\frac{1}{4}$, SW $\frac{1}{4}$, Section 13, T 34N, R 7E, Lake Wawasee Quadrangle
UTM Coordinates: Downstream 4583651 North, 611550 East
UPSTREAM:
UTM Coordinates: Upstream 4583452 North, 611747 East

APPROVED BY : 
James J. Hebenstreit, P.E., Assistant Director
Division of Water

APPROVED ON : September 16, 2005

Attachments: Notice Of Right To Administrative Review

- General Conditions
- Special Conditions
- Service List

**STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES**

SPECIAL CONDITIONS

APPLICATION #: FW- 23399

PERMIT VALIDITY : This permit is valid for 24 months from the "Approved On" date shown on the first page. If work has not been initiated by September 16, 2007 the permit will become void and a new permit will be required in order to continue work on the project.

This permit becomes effective 18 days after the "MAILED" date shown on the first page. If both a petition for review and a petition for a stay of effectiveness are filed before this permit becomes effective, any part of the permit that is within the scope of the petition for stay is stayed for an additional 15 days.

CONFORMANCE : Other than those measures necessary to satisfy the "General Conditions" and "Special Conditions", the project must conform to the information received by the Department of Natural Resources on: June 15, 2005, June 27, 2005, July 26, 2005 and August 25, 2005. Any deviation from the information must receive the prior written approval of the Department.

Number	Special Condition
(1)	revegetate all bare and disturbed areas with a mixture of grasses (excluding all varieties of tall fescue) and legumes as soon as possible upon completion; low endophyte tall fescue may be used in the ditch bottom and side slopes only
(2)	appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized
(3)	do not work in the waterway from January 1 through June 30 without the prior written approval of the Division of Fish and Wildlife
(4)	except for the material used as fill as shown on the above referenced project plans on file at the Division of Water, place all excavated material landward of the floodway *
(5)	all work must conform with the existing bank at the upstream and downstream limits of the project site
(6)	do not leave felled trees, brush, or other debris in the floodway *
(7)	upon completion of the project, remove all construction debris from the floodway *
(8)	* Note: for regulatory purposes, the floodway is defined as the area inundated by the 100-year frequency flood as shown on Panel 35 of the County of Kosciusko Flood Insurance Rate Map dated February 4, 2005

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

GENERAL CONDITIONS

APPLICATION #: FW- 23399

- (1) If any archaeological artifacts or human remains are uncovered during construction, federal law and regulations (16 USC 470, et seq.; 36 CFR 800.11, et al) and State Law (IC 14-21-1) require that work must stop and that the discovery must be reported to the Division of Historic Preservation and Archaeology within 2 business days.

Division of Historic Preservation and Archaeology
Room W274
402 West Washington Street
Indianapolis, IN 46204

Telephone: (317) 232-1646, FAX: (317) 232-8036

- (2) This permit must be posted and maintained at the project site until the project is completed.
- (3) This permit does not relieve the permittee of the responsibility for obtaining additional permits, approvals, easements, etc. as required by other federal, state, or local regulatory agencies. These agencies include, but are not limited to:

Agency	Telephone Number
*US Army Corps of Engineers, Louisville District	(502) 315-6733
Kosciusko County Drainage Board	(574) 372-2367
St. Joseph River Basin Commission	(574) 287-1829
Indiana Department of Environmental Management	(317) 233-8488 or (800) 451-6027
Local city or county planning or zoning commission	

- (4) This permit must not be construed as a waiver of any local ordinance or other state or federal law.
- (5) This permit does not relieve the permittee of any liability for the effects which the project may have upon the safety of the life or property of others.
- (6) This permit may be revoked by the Department of Natural Resources for violation of any condition, limitation or applicable statute or rule.
- (7) This permit shall not be assignable or transferable without the prior written approval of the Department of Natural Resources. To initiate a transfer contact:

Mr. Michael W. Neyer, PE, Director
Division of Water
Room W264
402 West Washington Street
Indianapolis, IN 46204

Telephone: (317) 232-4160, Toll Free: (877) 928-3755
FAX: (317) 233-4579

- (8) The Department of Natural Resources shall have the right to enter upon the site of the permitted activity for the purpose of inspecting the authorized work.
- (9) The receipt and acceptance of this permit by the applicant or authorized agent shall be considered as acceptance of the conditions and limitations stated on the pages entitled "General Conditions" and "Special Conditions".

**STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES**

SERVICE LIST

APPLICATION #: FW- 23399

Wawasee Area Conservancy Foundation
Heather Harwood, ASLA
PO Box 548
Syracuse, IN 46567-0548

J F New & Associates, Inc
John Richardson
708 Roosevelt Road
Walkerton, IN 46574-1220

*US Army Corps of Engineers, Louisville District
Jim Townsend
Regulatory Functions Branch
PO Box 59
Louisville, KY 40201-0059

Kosciusko County Drainage Board
County Surveyor
Courthouse, Room 103
100 West Center Street
Warsaw, IN 46580-2872

St. Joseph River Basin Commission
Karen M Mackowiak
227 West Jefferson Boulevard - #1120
South Bend, IN 46601-1830

*Indiana Department of Natural Resources
North Region Headquarters Dist 1
Division of Law Enforcement
1124 North Mexico Road
Peru, IN 46970

Kosciusko County Soil and Water Conservation
District
217 Bell Drive
Warsaw, IN 46580-9362

Mr. Matt Sandy
Courthouse
100 West Center Street
Warsaw, IN 46580

Staff Assignment:

Administrative : R. Tony Scott
Technical : R. Tony Scott
Environmental : Christie L. Kiefer

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

NOTICE OF RIGHT TO ADMINISTRATIVE REVIEW

APPLICATION #: FW- 23399

This signed document constitutes the issuance of a permit by the Department of Natural Resources, subject to the conditions and limitations stated on the pages entitled "General Conditions" and "Special Conditions".

The permit or any of the conditions or limitations which it contains may be appealed by applying for administrative review. Such review is governed by the Administrative Orders and Procedures Act, IC 4-21.5, and the Department's rules pertaining to adjudicative proceedings, 312 IAC 3-1.

In order to obtain a review, a written petition must be filed with the Division of Hearings within 18 days of the mailing date of this notice. The petition should be addressed to:

Mr. Stephen L. Lucas, Director
Division of Hearings
Room W272
402 West Washington Street
Indianapolis, Indiana 46204

The petition must contain specific reasons for the appeal and indicate the portion or portions of the permit to which the appeal pertains.

If an appeal is filed, the final agency determination will be made by the Natural Resources Commission following a legal proceeding conducted before an Administrative Law Judge. The Department of Natural Resources will be represented by legal counsel.



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

October 14, 2005

VIA CERTIFIED MAIL 7002-0510 0002 5827 8038

Ms. Heather Harwood
Wawasee Area Conservation Foundation
P.O. Box 548
Syracuse, IN 46567

Dear Ms. Harwood:

Re: Section 401 Water Quality Certification
Project: Dillon Creek Sediment Trap Project
IDEM No.: 2005-321-43-EME-A
COE No.: 05-143-017-0
County: Kosciusko

Office of Water Quality staff has reviewed your application for Section 401 Water Quality Certification dated June 18, 2005, and received June 28, 2005. According to the application, you propose to hydraulically dredge approximately 4,600 cubic yards of sediment from the artificial channel located along Dillon Creek to create a sediment trap. The sediment trap will be excavated to a depth of 6 feet. Dredged materials are proposed to be pumped to WACF property located at the southeast corner of CR 1100 North and Turkey Creek Road; dredge spoils will be pumped to a temporary sediment dewatering basin constructed on an upland location on the site. Silt fencing is proposed to be placed between the basin and the Dillon Creek floodplain. Return water from the basin would be piped back to Dillon Creek's floodplain located at the base of an embankment to the northeast of the basin. The return water is proposed to be filtered through a temporary riprap apron placed on the slope before exiting into the floodplain. Upon drying, the sediment basin is proposed to be leveled, graded, and seeded, and the riprap apron will be removed

In addition to the construction of the sediment trap, you propose to install approximately 100' of vinyl seawall along both sides of the existing 6-foot diameter corrugated metal pipe and sheet pile seawall located at the end of the channel. During seawall construction, you also propose to fill approximately 0.03 acre of the channel with clean earthen fill to repair an existing washout located to the west of the existing culvert pipe. The project is bordered by Doswell Boulevard to the north, Honeycomb Lane to the east, and Wawasee Circle East to the west (Section 13, Township 34 North, Range 7 East) near Cromwell, Kosciusko County.

Based on available information, it is the judgment of this office that the proposed project will comply with the applicable provisions of 327 IAC 2 and Sections 301, 302, 303, 306, and 307 of the Clean Water Act if the recipient of the certification complies with the conditions set forth below. Therefore, subject to the following conditions, the Indiana Department of Environmental Management (IDEM) hereby grants Section 401 Water Quality Certification for the project described in your application received June 28, 2005. Any changes in project design or scope not detailed in the application described above or modified by the conditions below are not authorized by this certification.

GENERAL CONDITIONS:

The recipient of the certification shall:

1. Deposit any dredged material in a contained upland disposal area to prevent sediment runoff to any waterbody. Dispose of all dredged and excavated material according to the requirements of 329 IAC 10, governing Solid Waste Land Disposal Facilities. Your project information may be forwarded to the IDEM Office of Land Quality, Industrial Waste Section for review. Sampling may be required to determine if the dredged sediment is contaminated. Failure to properly dispose of contaminated sediment may result in enforcement action against you.
2. Install erosion control methods prior to any soil disturbance to prevent soil from leaving the construction site. Appropriate erosion control methods include, but are not limited to, straw bale barriers, silt fencing, erosion control blankets, phased construction sequencing, and earthen berms. Monitor and maintain erosion control structures and devices regularly, especially after rain events, until all soils disturbed by construction activities have been permanently stabilized.
3. Clearly mark the construction limits at the project site during construction.
4. Allow the commissioner or an authorized representative of the commissioner (including an authorized contractor), upon the presentation of credentials:
 - a. to enter the property of the recipient of the certification;
 - b. to have access to and copy at reasonable times any records that must be kept under the conditions of this certification;
 - c. to inspect, at reasonable times, any monitoring or operational equipment or method; collection, treatment, pollution management or discharge facility or device; practices required by this certification; and any mitigation wetland site;
 - d. to sample or monitor any discharge of pollutants or any mitigation wetland site.
5. Complete all approved discharges no later than two (2) years of the date of issuance of this Section 401 Water Quality Certification. The applicant may

request a one (1) year extension to the Section 401 Water Quality Certification by submitting a written request ninety (90) days prior to the deadline stated above. The written request shall contain an account of which discharges and mitigation have been completed and list the reasons an extension is requested.

PROJECT SPECIFIC CONDITIONS:

The recipient of the certification shall:

1. Implement the dredging plan and sediment containment plan [Dillon Creek Sediment Trap – March 2005] as described in the application received June 28, 2005.
2. Remove any temporary causeway or other structures used to facilitate construction or access upon completion of construction activities.
3. Install silt fence or other erosion control measures around the perimeter of any wetlands and/or other waterbodies to remain undisturbed at the project site.
4. Allow no construction equipment, temporary run-arounds, coffer dams, causeways, or other such structures to enter or be constructed within the stream or channel, unless specifically stated, depicted, or detailed in the aforementioned correspondence and project plans. A modification of this Section 401 Water Quality Certification is required from this office if any of the aforementioned items are needed for project construction.

This certification does not relieve the recipient of the responsibility of obtaining any other permits or authorizations that may be required for this project or related activities from IDEM or any other agency or person. You may wish to contact the Indiana Department of Natural Resources at 317-232-4160 (toll free at 877-928-3755) concerning the possible requirement of natural freshwater lake or floodway permits. In addition, you may wish to contact IDEM's Stormwater Permits Section at 317-233-1864 concerning the possible need for a 327 IAC 15-5 (Rule 5) permit if you plan to disturb greater than one (1) acre of soil during construction.

This certification does not:

- (1) authorize impacts or activities outside the scope of this certification;
- (2) authorize any injury to persons or private property or invasion of other private rights, or any infringement of federal, state or local laws or regulations;
- (3) convey any property rights of any sort, or any exclusive privileges;
- (4) preempt any duty to obtain federal, state or local permits or authorizations required by law for the execution of the project or related activities; or
- (5) authorize changes in the plan design detailed in the application.

Failure to comply with the terms and conditions of this Section 401 Water Quality Certification may result in enforcement action against the recipient of the certification. If an enforcement action is pursued, the recipient of the certification could be assessed up to \$25,000 per day in civil penalties. The recipient of the certification may also be subject to criminal liability if it is determined that the Section 401 Water Quality Certification was violated willfully or negligently.

This certification is effective eighteen (18) days from the mailing of this notice unless a petition for review and a petition for stay of effectiveness are filed within this 18-day period. If a petition for review and a petition for stay of effectiveness are filed within this period, any part of the certification within the scope of the petition for stay is stayed for fifteen (15) days, unless or until an Environmental Law Judge further stays the certification in whole or in part.

This decision may be appealed in accordance with IC 4-21.5, the Administrative Orders and Procedures Act. The steps that must be followed to qualify for review are:

1. You must petition for review in writing that states facts demonstrating that you are either the person to whom this decision is directed, a person who is aggrieved or adversely affected by the decision, or a person entitled to review under any law.
2. You must file the petition for review with the Office of Environmental Adjudication (OEA) at the following address:

Office of Environmental Adjudication
100 North Senate Avenue
IGCN Room N1049
Indianapolis, IN 46204

3. You must file the petition within eighteen (18) days of the mailing date of this decision. If the eighteenth day falls on a Saturday, Sunday, legal holiday, or other day that the OEA offices are closed during regular business hours, you may file the petition the next day that the OEA offices are open during regular business hours. The petition is deemed filed on the earliest of the following dates: the date it is personally delivered to OEA; the date that the envelope containing the petition is postmarked if it is mailed by United States mail; or, the date it is shown to have been deposited with a private carrier on the private carrier's receipt, if sent by private carrier.

Identifying the certification, decision, or other order for which you seek review by number, name of the applicant, location, or date of this notice will expedite review of the petition.

Note that if a petition for review is granted pursuant to IC 4-21.5-3-7, the petitioner will, and any other person may, obtain notice of any prehearing conferences, preliminary hearings,

hearings, stays, and any orders disposing of the proceedings by requesting copies of such notices from OEA.

If you have procedural questions regarding filing a petition for review you may contact the Office of Environmental Adjudication at 317-232-8591.

If you have any questions about this certification, please contact Ms. Liz Elverson, Project Manager, of my staff at 317-233-2482, or you may contact the Office of Water Quality through the IDEM Environmental Helpline (1-800-451-6027).

Sincerely,



Martha Clark Mettler, Chief
Watershed Planning Branch
Office of Water Quality

cc: Kerrie Kuhne, USACE-Detroit
Liz McCloskey, USFWS
Keith Poole, IDNR
John Richardson, JF New-Walkerton



DEPARTMENT OF THE ARMY

DETROIT DISTRICT, CORPS OF ENGINEERS

BOX 1027

DETROIT, MICHIGAN 48231-1027

January 4, 2006

IN REPLY REFER TO

Engineering & Technical Services
Regulatory Office
File No. 05-143-017-0

John Richardson
J.F. New and Associates, Inc.
708 Roosevelt Road
P.O. Box 243
Walkerton, Indiana 46574

Dear Mr. Richardson:

Reference your application, on behalf of the Wawasee Area Conservancy Foundation, for a Department of the Army permit to discharge return water from hydraulic dredging and install a vinyl seawall with backfill in Dillon Creek, near Cromwell, Indiana.

We have verified that the project is authorized by nationwide permit NW16 as published in the Federal Register, and Regional Permit No. 99-100-003-1 issued on December 15, 2004 under authority of Section 404 of the 1977 Clean Water Act.

As indicated on the enclosed plans prepared June 18, 2005, the following work is authorized:

Discharge return water associated with hydraulic dredging of up to 4,600 cubic yards of sediment from a 75,000 square foot area (1.72 acres) within an existing artificial channel; dredging will extend to a depth of 6 feet. Dispose of the dredge material in an upland sediment dewatering basin, approximately 230' by 170' in size, located to the southeast of the dredge site. Silt fencing will be installed between the dewatering basin and the surrounding area for erosion control. Return water will flow northeast from the basin's northeast corner, into the floodplain of Dillon Creek, through 8-inch dewatering pipes. The return water will exit the pipes and pass over a temporary riprap apron before it enters the floodplain. Also install up to 100' of vinyl seawall along each side of the existing 6' metal outfall pipe at the south end of the channel (total of 200'). Approximately 125 cubic yards of backfill will be placed in a 1,300 square foot area (0.03 acres) behind the west half of the seawall, to repair a washout.

This authorization is contingent upon compliance with the following terms and conditions:

a. The enclosed nationwide permit, nationwide general conditions, and the regional permit conditions.

b. The following special conditions:

1. The bulkhead shall be in place prior to the deposition of any fill material behind the bulkhead.
2. The conditions as stated in the attached letter, dated October 14, 2005, from the Indiana Department of Environmental Management are binding and must be incorporated into this project.

Any construction activity other than that shown on the plans may not qualify for the authorization. To our knowledge, your proposed activity complies. If that is not the case, you must contact this office for further instructions. If you contemplate any changes or additional activities from those depicted on the plans, please submit them to this office for authorization review prior to any construction. Upon completion of the work, fill in and return the enclosed COMPLETION REPORT.

This verification is invalid until appropriate state permit/certification or waiver thereof has been obtained. We suggest that you contact the Indiana Department of Natural Resources in Indianapolis, Indiana at 317-232-4163 prior to commencement of work.

This verification is valid until the Regional or NWP is modified, reissued, or revoked. All existing NWPs are scheduled to be modified, reissued, or revoked prior to March 18, 2007. It is incumbent on you to remain informed of changes to the NWPs. We will issue a public notice when the NWPs are reissued. If you commence or are under contract to commence this activity before the date that the relevant nationwide permit is modified or revoked, you will have twelve (12) months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this NWP. If you have any questions on this matter, contact me at (313) 226-5381 and refer to File Number: 05-143-017-0.

Sincerely,



Kerrie E. Kuhne
Project Manager
Permit Evaluation Branch A

Enclosures

Copy Furnished

South Bend Field Office
Wawasee Area Conservancy Foundation
IDEM, Liz Elverson
IDNR, Division of Water

NATIONWIDE PERMIT

Nationwide Permit No. 16. Return Water From Upland Contained Disposal Areas. Return water from upland, contained dredged material disposal area. The dredging itself may require a Section 404 permit (33 CFR 323.2(d)), but will require a Section 10 permit if located in navigable waters of the US. The return water from a contained disposal area is administratively defined as a discharge of dredged material by 33 CFR 323.2(d), even though the disposal itself occurs on the upland and does not require a Section 404 permit. This NWP satisfies the technical requirement for a Section 404 permit for the return water where the quality of the return water is controlled by the state through the Section 401 certification procedures. (Section 404)

Nationwide Permit General Conditions

The following general conditions must be followed in order for any authorization by an NWP to be valid:

1. Navigation. No activity may cause more than a minimal adverse effect on navigation.
2. Proper Maintenance. Any structure or fill authorized shall be properly maintained, including maintenance to ensure public safety.
3. 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.
4. Aquatic Life Movements. No activity may substantially disrupt the movement of those species of aquatic life indigenous to the waterbody, including those species which normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.
5. Equipment. Heavy equipment working in wetlands must be placed on mats, or other measures must be taken to minimize soil disturbance.
6. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions which 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 or tribe in its Section 401 water quality certification and Coastal Zone Management Act consistency determination.
7. Wild and Scenic Rivers. No 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 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. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).
8. 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.
9. Water Quality. (a) In certain States and tribal lands an individual 401 water quality certification must be obtained or waived (See 33 CFR 330.4(c)).

(b) For NWPs 12, 14, 17, 18, 32, 39, 40, 42, 43, and 44, where the State or tribal 401 certification (either generically or individually) does not require or approve a water quality management plan, the permittee must include design criteria and techniques that will ensure that the authorized work does not result in more than minimal degradation of water quality. An important component of a water quality management plan includes stormwater management that minimizes degradation of the downstream aquatic system, including water quality. Refer to General Condition 21 for stormwater management requirements. Another important component of a water quality management plan is the establishment and maintenance of vegetated buffers next to open waters, including streams. Refer to General Condition 19 for vegetated buffer requirements for the NWPs.

10. Coastal Zone Management. In certain states, an individual state coastal zone management consistency concurrence must be obtained or waived (see Section 330.4(d)).

11. Endangered Species. (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act, or which will destroy or adversely modify the critical habitat of such species. Non-federal permittees shall notify the District Engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or is located in the designated critical habitat and shall not begin work on the activity until notified by the District Engineer that the requirements of the Endangered Species Act have been satisfied and that the activity is authorized. For activities that may affect Federally-listed endangered or threatened species or designated critical habitat, the notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. As a result of formal or informal consultation with the FWS or NMFS, the District Engineer may add species-specific regional endangered species conditions to the NWPs.

(b) Authorization of an activity by a nationwide permit does not authorize the "take" of a threatened or endangered species as defined under the Federal Endangered Species Act. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. Fish and Wildlife Service or the National Marine Fisheries Service, both lethal and non-lethal "takes" of protected species are in violation of the Endangered Species Act. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. Fish and Wildlife Service and National Marine Fisheries Service or their world wide web pages at <http://www.fws.gov/r9endspp/endspp.html> and http://www.nfms.gov/prot_res/esahome.html, respectively.

12. Historic Properties. No activity which may affect historic properties listed, or eligible for listing, in the National Register of Historic Places is authorized, until the DE has complied with the provisions of 33 CFR part 325, Appendix C. The prospective permittee must notify the District Engineer if the authorized activity may affect any historic properties listed, determined to be eligible, or which the prospective permittee has reason to believe may be eligible for listing on the National Register of Historic Places, and shall not begin the activity until notified by the District Engineer that the requirements of the National Historic Preservation Act have been satisfied and that the activity is authorized. Information on the location and existence of historic resources can be obtained from the State Historic Preservation Office and the National Register of Historic Places (see 33 CFR 330.4(g)). For activities that may affect historic properties listed in, or eligible for listing in, the

National Register of Historic Places, the notification must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property.

13. Notification. (a) Timing: Where required by the terms of the NWP, the prospective permittee must notify the District Engineer with a preconstruction notification (PCN) as early as possible. The District Engineer must determine if the PCN is complete within 30 days of the date of receipt and can request the 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:

(1) Until 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) If notified in writing by the District or Division Engineer that an individual permit is required; or

(3) Unless 45 days have passed from the District Engineer's receipt of the complete notification and the prospective permittee has not received written notice from the District or Division Engineer. 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 Notification: The notification must be in writing and include the following information:

(1) Name, address, and telephone numbers of the prospective permittee;

(2) Location of the proposed project;

(3) Brief description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; 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; and

(4) For NWPs 7, 12, 14, 18, 21, 34, 38, 39, 40, 41, 42, and 43, the PCN must also include a delineation of affected special aquatic sites, including wetlands, vegetated shallows (e.g., submerged aquatic vegetation, seagrass beds), and riffle and pool complexes (see paragraph 13(f));

(5) For NWP 7, Outfall Structures and Maintenance, the PCN must include information regarding the original design capacities and configurations of those areas of the facility where maintenance dredging or excavation is proposed.

(6) For NWP 14, Linear Transportation Crossings, the PCN must include a compensatory mitigation proposal to offset permanent losses of waters of the United States and a statement describing how temporary losses of waters of the United States will be minimized to the maximum extent practicable.

(7) For NWP 21, Surface Coal Mining Activities, the PCN must include an Office of Surface Mining (OSM) or state-approved mitigation plan.

(8) For NWP 27, Stream and Wetland Restoration, the PCN must include documentation of the prior condition of the site that will be reverted by the permittee.

(9) For NWP 29, Single-Family Housing, the PCN must also include:

(i) Any past use of this NWP by the individual permittee and/or the permittee's spouse;

(ii) A statement that the single-family housing activity is for a personal residence of the permittee;

(iii) A description of the entire parcel, including its size, and a delineation of wetlands. For the purpose of this NWP, parcels of land measuring 1/4 acre or less will not require a

formal on-site delineation. However, the applicant shall provide an indication of where the wetlands are and the amount of wetlands that exists on the property. For parcels greater than 1/4 acre in size, a formal wetland delineation must be prepared in accordance with the current method required by the Corps. (See paragraph 13(f));

(iv) A written description of all land (including, if available, legal descriptions) owned by the prospective permittee and/or the prospective permittee's spouse, within a one mile radius of the parcel, in any form of ownership (including any land owned as a partner, corporation, joint tenant, co-tenant, or as a tenant-by-the-entirety) and any land on which a purchase and sale agreement or other contract for sale or purchase has been executed;

(10) For NWP 31, Maintenance of Existing Flood Control Projects, the prospective permittee must either notify the District Engineer with a PCN prior to each maintenance activity or submit a five year (or less) maintenance plan. In addition, the PCN must include all of the following:

(i) Sufficient baseline information so as to identify the approved channel depths and configurations and existing facilities. Minor deviations are authorized, provided the approved flood control protection or drainage is not increased;

(ii) A delineation of any affected special aquatic sites, including wetlands; and,

(iii) Location of the dredged material disposal site.

(11) For NWP 33, Temporary Construction, Access, and Dewatering, the PCN must also include a restoration plan of reasonable measures to avoid and minimize adverse effects to aquatic resources.

(12) For NWPs 39, 43, and 44, the PCN must also include a written statement to the District Engineer explaining how avoidance and minimization of losses of waters of the United States were achieved on the project site.

(13) For NWP 39, Residential, Commercial, and Institutional Developments, and NWP 42, Recreational Facilities, the PCN must include a compensatory mitigation proposal that offsets unavoidable losses of waters of the United States or justification explaining why compensatory mitigation should not be required.

(14) For NWP 40, Agricultural Activities, the PCN must include a compensatory mitigation proposal to offset losses of waters of the United States.

(15) For NWP 43, Stormwater Management Facilities, the PCN must include, for the construction of new stormwater management facilities, a maintenance plan (in accordance with State and local requirements, if applicable) and a compensatory mitigation proposal to offset losses of waters of the United States.

(16) For NWP 44, Mining Activities, the PCN must include a description of all waters of the United States adversely affected by the project, a description of measures taken to minimize adverse effects to waters of the United States, a description of measures taken to comply with the criteria of the NWP, and a reclamation plan (for aggregate mining activities in isolated waters and non-tidal wetlands adjacent to headwaters and any hard rock/mineral mining activities).

(17) For activities that may adversely affect Federally-listed endangered or threatened species, the PCN must include the name(s) of those endangered or threatened species that may be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work.

(18) For activities that may affect historic properties listed in, or eligible for listing in, the National Register of Historic Places, the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property.

(19) For NWPs 12 and 14 where the proposed work involves discharges of dredged or fill material into waters of the United States resulting in permanent, above-grade fills

17. Shellfish Beds. No activity, including structures and work in navigable waters of the United States or discharges of dredged or fill material, may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4.

18. Suitable Material. No activity, including structures and work in navigable waters of the United States or discharges of dredged or fill material, may consist of unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.) and material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

19. Mitigation. The project must be designed and constructed to avoid and minimize adverse effects to waters of the United States to the maximum extent practicable at the project site (i.e., on site). Mitigation will be required when necessary to ensure that the adverse effects to the aquatic environment are minimal. The District Engineer will consider the factors discussed below when determining the acceptability of appropriate and practicable mitigation necessary to offset adverse effects on the aquatic environment that are more than minimal.

(a) Compensatory mitigation at a minimum 1:1 ratio will be required for all wetland impacts requiring a PCN. Consistent with National policy, the District Engineer will establish a preference for restoration of wetlands to meet the minimum compensatory mitigation ratio, with preservation used only in exceptional circumstances.

(b) To be practicable, the mitigation must be available and capable of being done considering costs, existing technology, and logistics in light of the overall project purposes. Examples of mitigation that may be appropriate and practicable include, but are not limited to: reducing the size of the project; establishing and maintaining wetland or upland vegetated buffers to protect open waters such as streams; and replacing losses of aquatic resource functions and values by creating, restoring, enhancing, or preserving similar functions and values, preferably in the same watershed;

(c) The District Engineer will require restoration, creation, enhancement, or preservation of other aquatic resources in order to offset the authorized impacts to the extent necessary to ensure that the adverse effects on the aquatic environment are minimal. An important element of any compensatory mitigation plan for projects in or near streams or other open waters is the establishment and maintenance, to the maximum extent practicable, of vegetated buffers next to open waters on the project site. The vegetated buffer should consist of native species. The District Engineer will determine the appropriate width of the vegetated buffer and in which cases it will be required. Normally, the vegetated buffer will be 25 to 50 feet wide on each side of the stream, but the District Engineer may require wider vegetated buffers to address documented water quality concerns. If there are open waters on the project site and the District Engineer requires compensatory mitigation for wetland impacts to ensure that the net adverse effects on the aquatic environment are minimal, any vegetated buffer will comprise no more than 1/3 of the remaining compensatory mitigation acreage after the permanently filled wetlands have been replaced on a one-to-one acreage basis. In addition, compensatory mitigation must address adverse effects on wetland functions and values and cannot be used to offset the acreage of wetland losses that would occur in order to meet the acreage limits of some of the NWPs (e.g., for NWP 39, 1/4 acre of wetlands cannot be created to change a 1/2 acre loss of wetlands to a 1/4 acre loss; however, 1/2 acre of created wetlands can be used to reduce the impacts of a 1/3 acre loss of wetlands). If the prospective permittee is required to submit a compensatory mitigation proposal with the PCN, the proposal may be either conceptual or detailed.

(d) To the extent appropriate, permittees should consider mitigation banking and other appropriate forms of compensatory mitigation. If the District Engineer determines that compensatory mitigation is necessary to offset losses of waters of the United States and ensure that the net adverse effects of the authorized work on the aquatic environment are minimal, consolidated mitigation approaches, such as mitigation banks, will be the preferred method of providing compensatory mitigation, unless the District Engineer determines that activity-specific compensatory mitigation is more appropriate, based on which is best for the aquatic environment. These types of mitigation are preferred because they involve larger blocks of protected aquatic environment, are more likely to meet the mitigation goals, and are more easily checked for compliance. If a mitigation bank or other consolidated mitigation approach is not available in the watershed, the District Engineer will consider other appropriate forms of compensatory mitigation to offset the losses of waters of the United States to ensure that the net adverse effects of the authorized work on the aquatic environment are minimal.

20. Spawning Areas. Activities, including structures and work in navigable waters of the United States or discharges of dredged or fill material, in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., excavate, fill, or smother downstream by substantial turbidity) of an important spawning area are not authorized.

21. Management of Water Flows. To the maximum extent practicable, the activity must be designed to maintain preconstruction downstream flow conditions (e.g., location, capacity, and flow rates). Furthermore, the activity must not permanently restrict or impede the passage of normal or expected high flows (unless the primary purpose of the fill is to impound waters) and the structure or discharge of dredged or fill material must withstand expected high flows. The activity must, to the maximum extent practicable, provide for retaining excess flows from the site, provide for maintaining surface flow rates from the site similar to preconstruction conditions, and must not increase water flows from the project site, relocate water, or redirect water flow beyond preconstruction conditions. In addition, the activity must, to the maximum extent practicable, reduce adverse effects such as flooding or erosion downstream and upstream of the project site, unless the activity is part of a larger system designed to manage water flows.

22. Adverse Effects From Impoundments. If the activity, including structures and work in navigable waters of the United States or discharge of dredged or fill material, creates an impoundment of water, adverse effects on the aquatic system caused by the accelerated passage of water and/or the restriction of its flow shall be minimized to the maximum extent practicable.

23. Waterfowl Breeding Areas. Activities, including structures and work in navigable waters of the United States or discharges of dredged or fill material, into breeding areas for migratory waterfowl must be avoided to the maximum extent practicable.

24. Removal of Temporary Fills. Any temporary fills must be removed in their entirety and the affected areas returned to their preexisting elevation.

25. Designated Critical Resource Waters. Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, National Wild and Scenic Rivers, critical habitat for Federally listed threatened and endangered species, coral reefs, State natural heritage sites, and outstanding national resource waters or other waters officially designated by a State as having particular environmental or ecological significance and identified by the District Engineer after notice and opportunity for public

within 100-year floodplains (as identified on FEMA's Flood Insurance Rate Maps or FEMA-approved local floodplain maps), and for NWP 29, 39, 40, 42, 43, and 44, where the proposed work involves discharges of dredged or fill material into waters of the United States resulting in permanent, above-grade fills within the flood fringe of 100-year floodplains of headwater streams, the notification must include documentation demonstrating that the proposed work complies with the appropriate FEMA or FEMA-approved local floodplain construction requirements.

(c) Form of Notification: The standard individual permit application form (Form ENG 4345) may be used as the notification but must clearly indicate that it is a PCN and must include all of the information required in (b) (1)-(19) of General Condition 13. A letter containing the requisite information may also be used.

(d) District Engineer's Decision: 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. The prospective permittee may, optionally, submit a proposed mitigation plan with the PCN to expedite the process and the District Engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. If the District Engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, the District Engineer will notify the permittee and include any conditions the District Engineer deems necessary.

Any compensatory mitigation proposal must be approved by the District Engineer prior to commencing work. If the prospective permittee is required to submit a compensatory mitigation proposal with the PCN, the proposal may be either conceptual or detailed. 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 plan within 45 days of receiving a complete PCN and determine whether the conceptual or specific proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the District Engineer to be minimal, the District Engineer will provide a timely written response to the applicant stating that the project can proceed under the terms and conditions of the nationwide permit.

If the District Engineer determines that the adverse effects of the proposed work are more than minimal, then he will notify the applicant either: (1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation proposal that would reduce the adverse effects on the aquatic environment to the minimal level; or (3) that the project is authorized under the NWP with specific modifications or conditions. Where the District Engineer determines that mitigation is required in order to ensure no more than minimal adverse effects on the aquatic environment, the activity will be authorized within the 45-day PCN period, including the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation proposal that would reduce the adverse effects on the aquatic environment to the minimal level. When conceptual mitigation is included, or a mitigation plan is required under item (2) above, no work in

waters of the United States will occur until the District Engineer has approved a specific mitigation plan.

(e) 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 NWP and the need for mitigation to reduce the project's adverse effects on the aquatic environment to a minimal level.

For activities requiring notification to the District Engineer that result in the loss of greater than 1/2 acre of waters of the United States, the District Engineer will, upon receipt of a notification, provide immediately (e.g., via facsimile transmission, overnight mail, or other expeditious manner), a copy to the appropriate offices of the Fish and Wildlife Service, State natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO), and, if appropriate, the National Marine Fisheries Service. With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the District Engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the District Engineer will wait an additional 15 calendar days before making a decision on the notification. The District Engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The District Engineer will indicate in the administrative record associated with each notification that the resource agencies' concerns were considered. As required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act, the District Engineer will provide a response to National Marine Fisheries Service within 30 days of receipt of any Essential Fish Habitat conservation recommendations. Applicants are encouraged to provide the Corps multiple copies of notifications to expedite agency notification.

(f) Wetlands Delineations: Wetland delineations must be prepared in accordance with the current method required by the Corps. For NWP 29 see paragraph (b)(9)(iii) for parcels less than 1/4 acre in size. The permittee may ask the Corps to delineate the special aquatic site. There may be some delay if the Corps does the delineation. Furthermore, the 45-day period will not start until the wetland delineation has been completed and submitted to the Corps, where appropriate.

14. Compliance Certification. Every permittee who has received a Nationwide permit verification from the Corps will submit a signed certification regarding the completed work and any required mitigation. The certification will be forwarded by the Corps with the authorization letter. The certification will include: (a) A statement that the authorized work was done in accordance with the Corps authorization, including any general or specific conditions; (b) A statement that any required mitigation was completed in accordance with the permit conditions; and (c) The signature of the permittee certifying the completion of the work and mitigation.

15. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWP does not 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.

16. Water Supply Intakes. No activity, including structures and work in navigable waters of the United States or discharges of dredged or fill material, may occur in the proximity of a public water supply intake except where the activity is for repair of the public water supply intake structures or adjacent bank stabilization.

comment. The District Engineer may also designate additional critical resource waters after notice and opportunity for comment.

(a) Except as noted below, discharges of dredged or fill material into waters of the United States are not authorized by NWP 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, and 44 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters. Discharges of dredged or fill materials into waters of the United States may be authorized by the above NWPs in National Wild and Scenic Rivers if the activity complies with General Condition 7. Further, such discharges may be authorized in designated critical habitat for Federally listed threatened or endangered species if the activity complies with General Condition 11 and the U.S. Fish and Wildlife Service or the National Marine Fisheries Service has concurred in a determination of compliance with this condition.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with General Condition 13, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The District Engineer may authorize activities under these NWPs only after he determines that the impacts to the critical resource waters will be no more than minimal.

26. Fills Within 100-Year Floodplains. For purposes of this general condition, 100-year floodplains will be identified through the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps or FEMA-approved local floodplain maps.

(a) Discharges Below Headwaters. Discharges of dredged or fill material into waters of the United States resulting in permanent, above-grade fills within the 100-year floodplain at or below the point on a stream where the average annual flow is five cubic feet per second (i.e., below headwaters) are not authorized by NWPs 29, 39, 40, 42, 43, and 44. For NWPs 12 and 14, the prospective permittee must notify the District Engineer in accordance with General Condition 13 and the notification must include documentation that any permanent, above-grade fills in waters of the United States within the 100-year floodplain below headwaters comply with FEMA or FEMA-approved local floodplain construction requirements.

(b) Discharges in Headwaters (i.e., above the point on a stream where the average annual flow is five cubic feet per second).

(1) Flood Fringe. Discharges of dredged or fill material into waters of the United States resulting in permanent, above-grade fills within the flood fringe of the 100-year floodplain of headwaters are not authorized by NWPs 12, 14, 29, 39, 40, 42, 43, and 44, unless the prospective permittee notifies the District Engineer in accordance with General Condition 13. The notification must include documentation that such discharges comply with FEMA or FEMA-approved local floodplain construction requirements.

(2) Floodway. Discharges of dredged or fill material into waters of the United States resulting in permanent, above-grade fills within the floodway of the 100-year floodplain of headwaters are not authorized by NWPs 29, 39, 40, 42, 43, and 44. For NWPs 12 and 14, the permittee must notify the District Engineer in accordance with General Condition 13 and the notification must include documentation that any permanent, above grade fills proposed in the floodway comply with FEMA or FEMA-approved local floodplain construction requirements.

D. 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.

REGIONAL PERMIT

General Conditions

1. Discharges of dredged or fill material into waters of the United States must be minimized or avoided to the maximum extent practicable at the project site (i.e. on-site). The permittee shall provide a mitigation/monitoring plan for any activity where the adverse impact on special aquatic sites exceeds 0.10 acre (4,356 sq. ft.) or is determined to be more than minimal impact. In determining the minimal impact threshold, the Districts will consider the direct and secondary impacts of the fill or work and any mitigation measures. A wetland delineation report is also required. NOTE: An important element of any mitigation plan for projects in or near streams, other open waters and wetlands is the requirement for vegetated buffers. Therefore, all mitigation plans should include a minimum 50-foot wide buffer between the edge of the project site and the waters and/or wetlands to be affected unless a lesser distance has been specifically approved under the RGP.

2. The permittee shall, if mitigation is required, develop the mitigation site concurrently with site construction. This will assure that aquatic functions are not lost for long periods of time which could adversely affect water quality and wildlife.

3. The permittee shall ensure that sedimentation and soil erosion control measures are in place prior to any construction activity. This shall include the installation of straw bale barriers, silt fencing and/or other approved methods to control sedimentation and erosion.

4. The permittee shall ensure that areas disturbed by any construction activity, including channel banks, are immediately stabilized and revegetated with a combination of grasses, legumes and shrubs compatible to the affected area.

5. The permittee shall ensure that all in-stream construction activity is not performed during periods of high stream flow or during the fish spawning season between April 1 through June 30 without first contacting the IDNR, Division of Fish and Wildlife for their expertise on impacts to the fishery resource. Additionally, the discharge of dredged and/or fill material in known waterfowl breeding areas must be avoided to the maximum extent practicable.

6. The permittee will ensure that the activity authorized will not disrupt movement of those aquatic species indigenous to the waterbody, including those species which normally migrate through the area unless the activity's specific purpose is to impound water.

7. The permittee shall ensure that all construction equipment is refueled and maintained on an upland site away from existing streams, drainageways and wetland areas. Heavy equipment working in wetlands must be placed on mats, or other measures taken to minimize soil disturbance.

8. The permittee must provide a copy of the site specific State Section 401 WQC before the Corps will authorize a project under the RGP.

9. The permittee must comply with any case specific special conditions added by the Corps or by the State Section 401 WQC. The conditions imposed in the State Section 401 WQC are also conditions of this RGP.

10. The permittee shall assure that no activity authorized by the RGP may cause more than a minimal adverse effect on navigation.

11. The permittee shall ensure proper maintenance of any structure or fill authorized by this RGP, including maintenance to ensure public safety.

12. The permittee shall not perform any work within any Wild and Scenic Rivers or in any river officially designated as a "study river" for possible inclusion in the system, unless the appropriate Federal agency, with direct management responsibility for such river, has determined in writing that the proposed activity authorized by the RGP will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal Land Management agency in the area (e.g. U.S. Forest Service, Bureau of Land Management or the U.S. Fish and Wildlife Service).

13. The permittee shall not perform any work under the RGP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act, or which is likely to destroy or adversely modify the critical habitat of such species. The permittee shall notify the District Engineer if any listed species or critical habitat might be affected or is in the vicinity of the project, and shall not begin work under the RGP until notified by the District Engineer that the requirements of the Endangered Species Act have been satisfied and that the activity is authorized. Authorization of an activity under the RGP does not authorize the "take" of a threatened or endangered species as defined under the Federal Endangered Species Act. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. Fish and Wildlife Service or the National Marine Fisheries Service, both lethal and non-lethal "takes" of protected species are in violation of the Endangered Species Act.

14. The permittee shall not perform any activity under the RGP which may affect historic properties listed, or eligible for listing, in the National Register of Historic Places until the District Engineer has complied with the provisions of 33 CFR Part 325, Appendix C. The permittee must notify the District Engineer if the activity authorized by the RGP may affect any historic properties listed, determined to be eligible or which the permittee has reason to believe may be eligible for listing on the National Register of Historic Places, and shall not begin construction until notified by the District Engineer that

the requirements of the National Historic Preservation Act have been satisfied and that the activity is authorized. Information on the location and existence of historic resources can be obtained from the Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology.

Further Information:

1. Congressional Authorities: You have been so authorized to undertake the activity described above pursuant to:

() Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

2. Limits of this authorization.

a. The Regional permit does not obviate the need to obtain Federal, state, or local authorizations required by law.

b. The Regional permit does not grant any property rights or exclusive privileges.

c. The Regional permit does not authorize any injury to the property or rights of others.

d. The Regional permit does not authorize interference with any existing or proposed Federal project.

e. The Regional Permit authorizing the activity expires on May 14, 2007 unless it is reissued without modification or the activity complies with any subsequent modification of the Regional. If the Regional permit is not reissued for the activity in question, activities which have commenced construction or are under contract to commence in reliance upon the Regional Permit will remain authorized provided the activity is completed by May 14, 2008.

3. Limits of Federal Liability. In issuing the Regional permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by the Regional permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modifications, suspension, or revocation of the Regional permit.

4. Reliance on Applicant's Data: The verification by this office that the project conforms with the Regional permit was made in reliance of the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this project at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of the Regional permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision and/or our verification that the activity complies with the Regional permit.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of the Regional permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. The Regional Permit does not apply to:

a. Activities which would impact historical, cultural, or archaeological sites or practices as provided in the National Historic Preservation Act of 1966 and the Archaeological and Historic Preservation Act of 1974.

b. Sites included in the National Registry of Natural Landmarks.

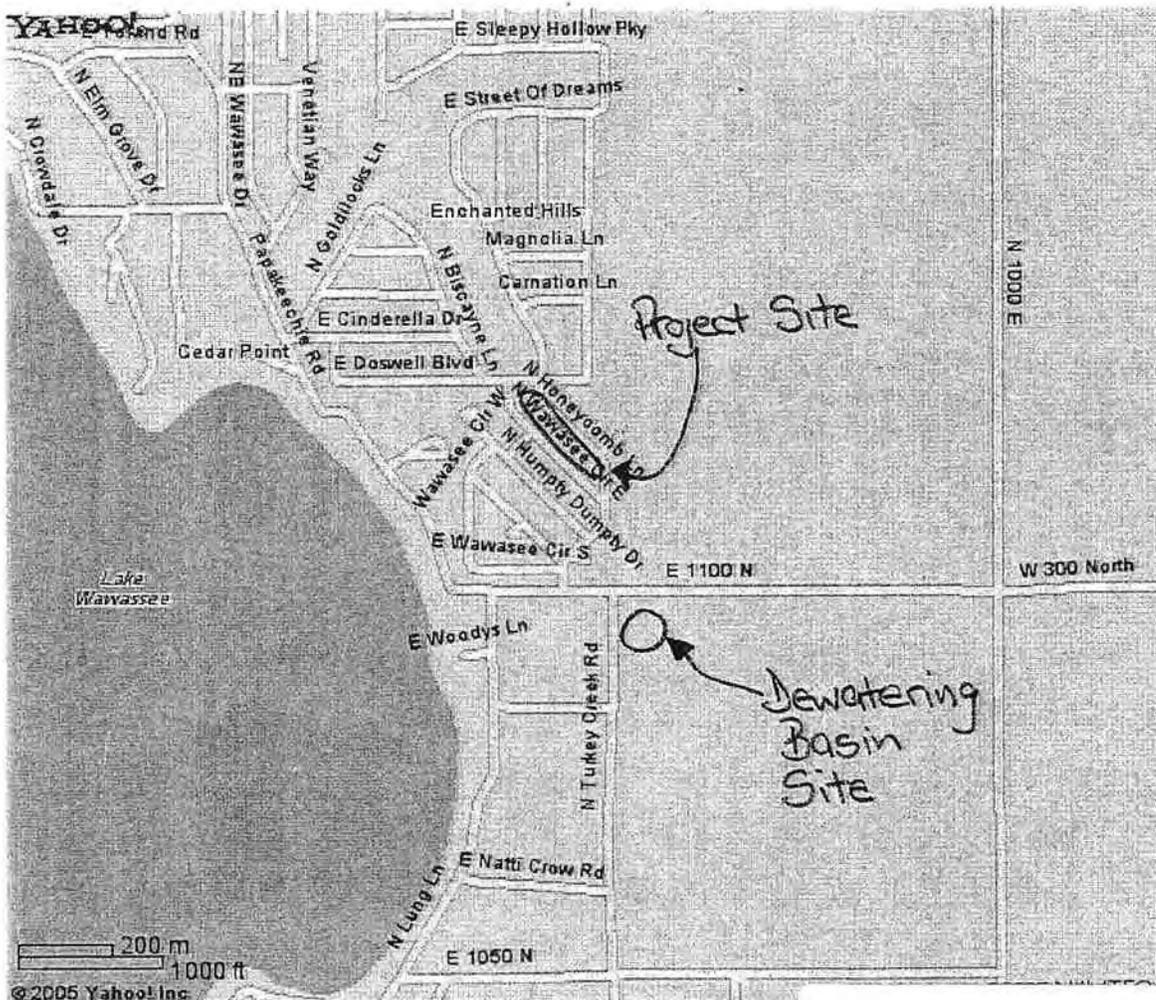
c. Areas where Federally-listed endangered, threatened, or proposed species occur.

d. Any other areas named in Acts of Congress or Presidential Proclamations as National Wildlife Refuges, National Rivers, components of the National Wild and Scenic River System, National Wilderness Areas, National Recreation Areas, National Lakeshores, National Parks, National Monuments, and such areas as may be established under Federal Law for similar and related purposes.??

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★ **Cromwell, IN**

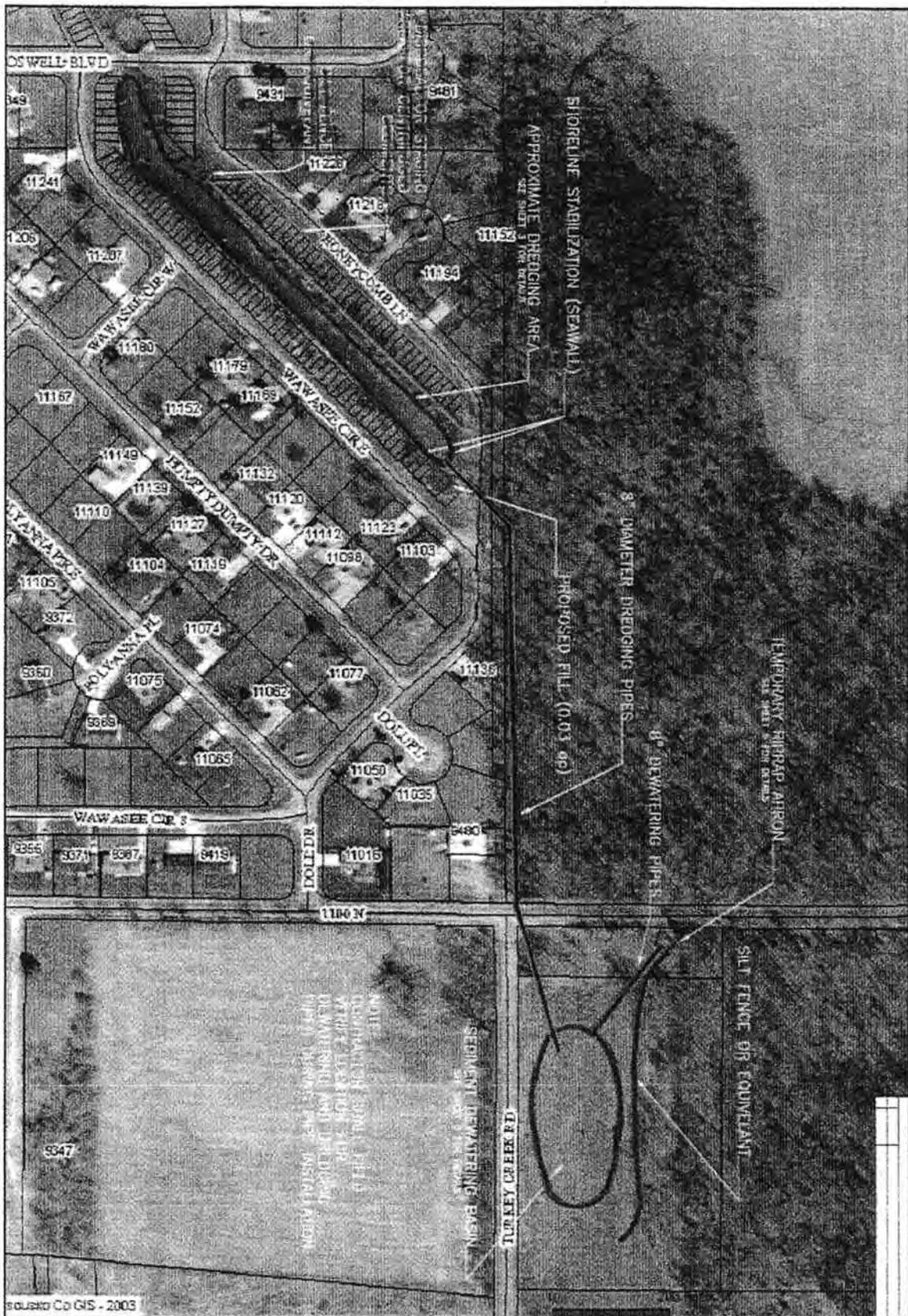


NUMBER: 05-143-017-0
 WACF--Hyd. Dredging, Seawall, Backfill
 BY: Wawasee Area Conservancy Foun.
 Dillon Creek, Cromwell
 KOSCIUSKO County, INDIANA
 SHEET 1 OF 6

When using any driving directions or map, it's a good idea to do a reality check exists, watch out for construction, and follow all traffic safety precautions. T planning.

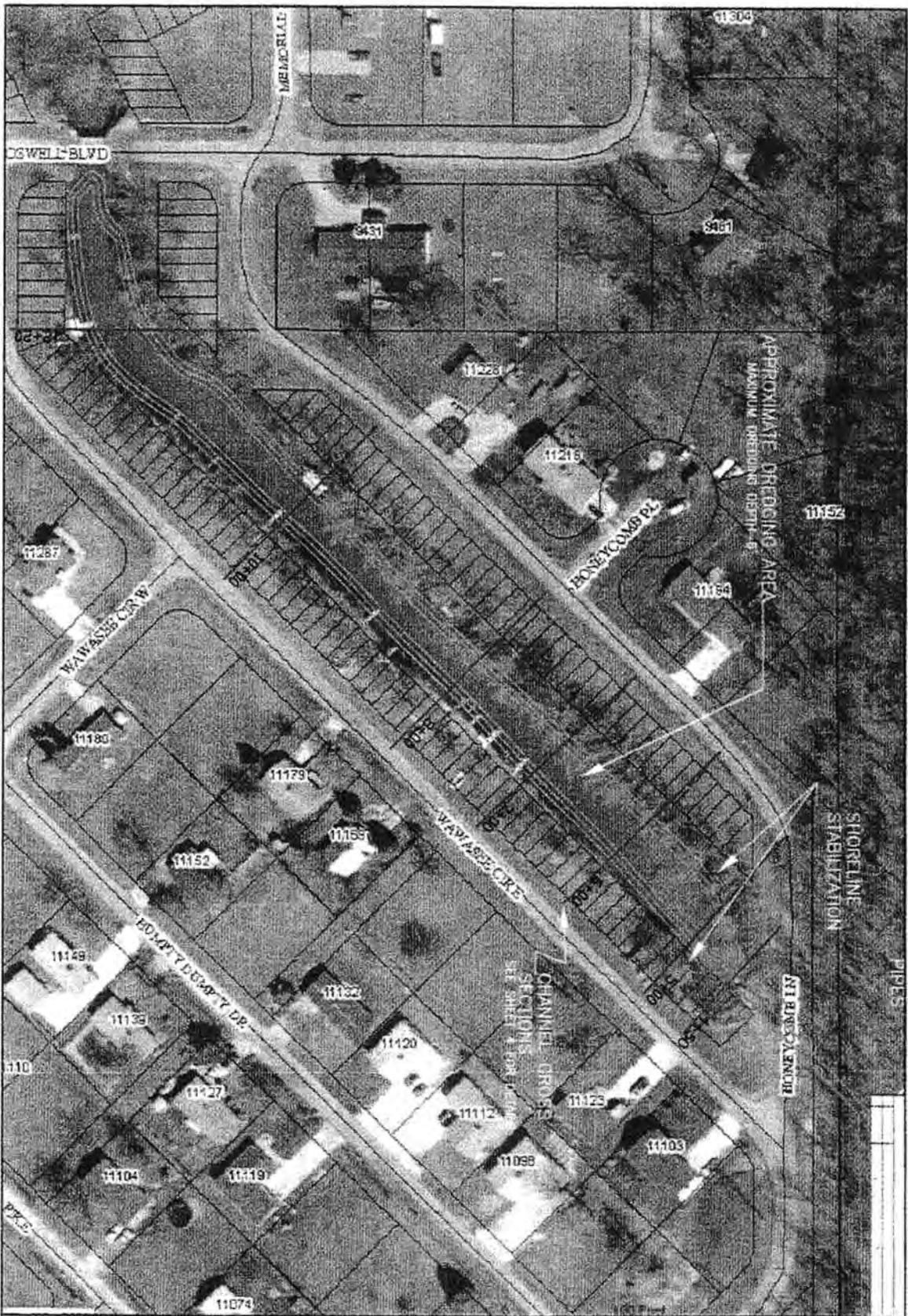
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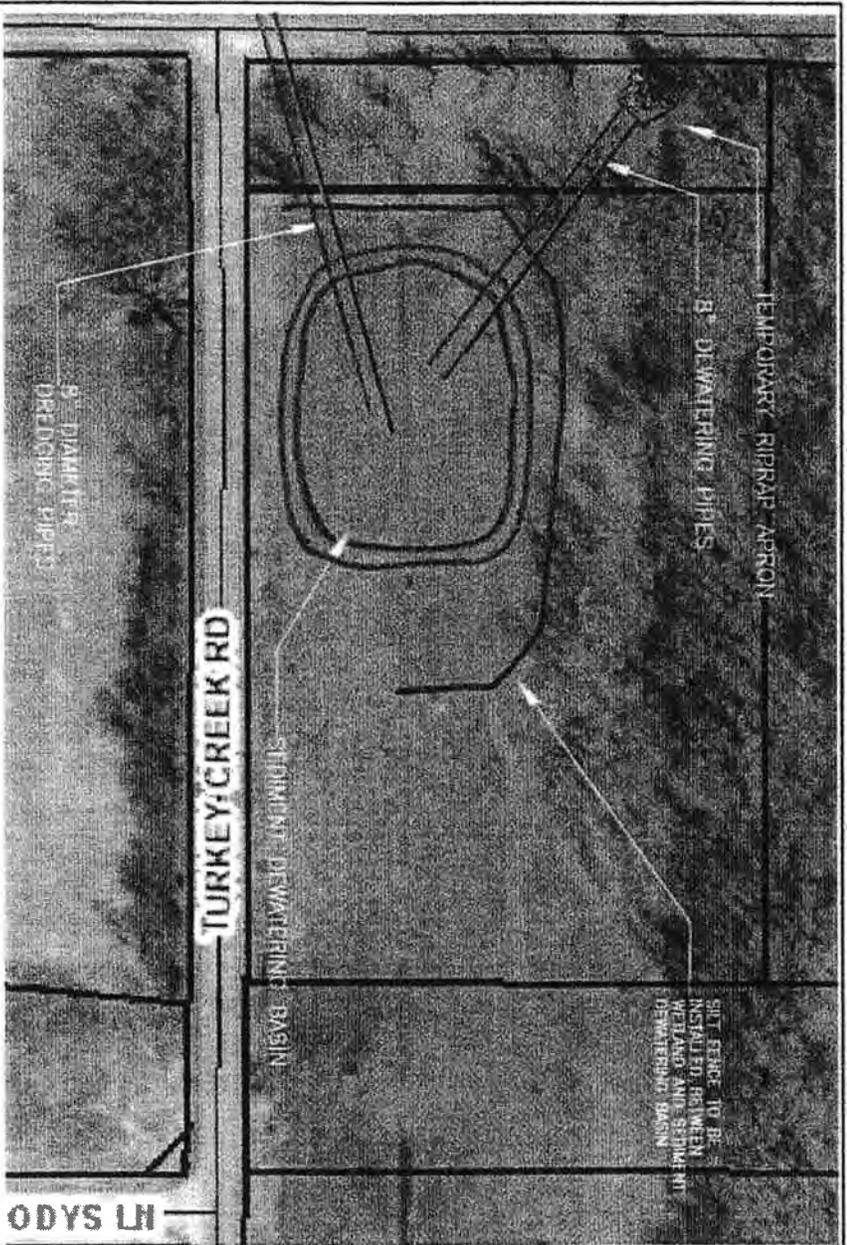
		<p>WAWASEE AREA CONSERVANCY FOUNDATION DILLON CREEK</p>
		<p>SEDIMENT TRAP CONSTRUCTION</p>
<p>PLAN VIEW</p>		<p>DATE: 05/14/03 DRAWN BY: JF CHECKED BY: JF SCALE: AS SHOWN JOB NO.: 05-143-017-0 SHEET NO.: 2 OF 6</p>

NUMBER: 05-143-017-0
 WACF--Hyd. Dredging, Seawall, Backfill
 BY: Wawasee Area Conservancy Foun
 Dillon Creek, Cromwell
 KOSCIUSKO County, INDIANA
 SHEET 2 OF 6



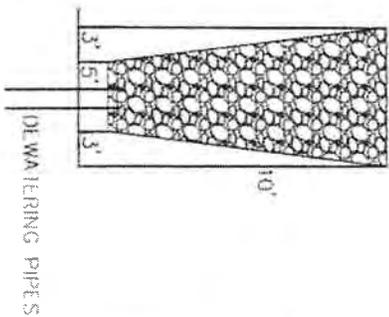
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NUMBER 05-143-017-0
 WACF-Hyd Dredging, Seawall, Backfill
 BY: Wawasee Area Conservancy Foundation
 Dillon Creek, Cronwell
 KOSCIUSKO County, INDIANA
 SHEET 3 OF 0

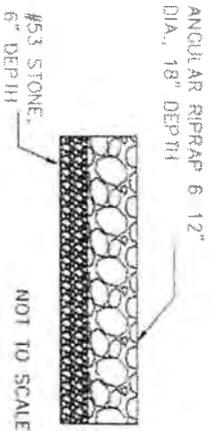


SILT FENCE TO BE INSTALLED BETWEEN WETLAND AND SEDIMENT DEWATERING BASIN

TEMPORARY RIPRAP APRON TO BE REMOVED AFTER DEWATERING.



TYPICAL RIPRAP APRON CROSS SECTION



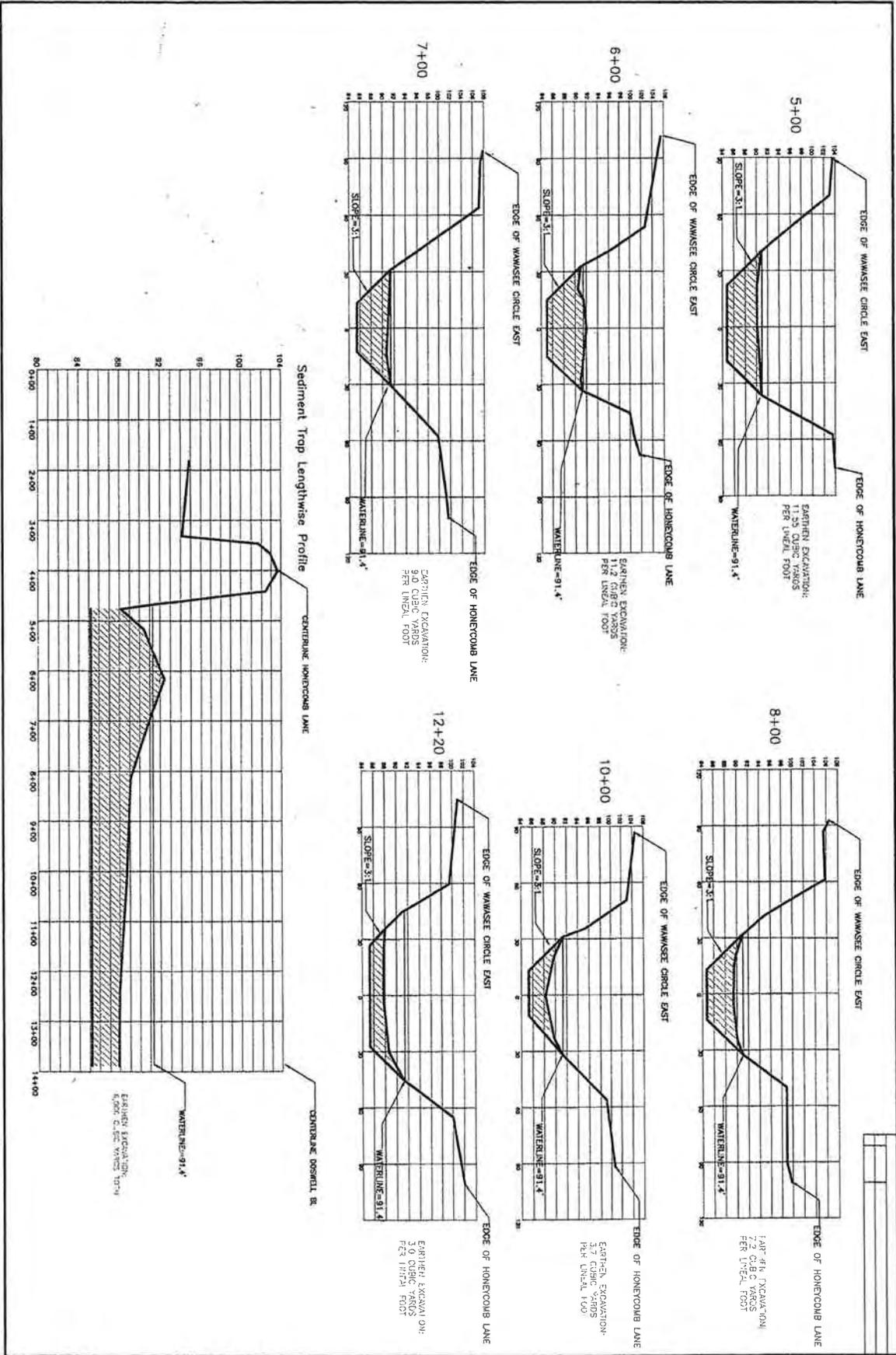
NOT TO SCALE

- NOTES:
1. BERM SHALL BE CONSTRUCTED FROM AVAILABLE BORROW IN DEWATERING BASIN AREA. EXCAVATION SHALL OCCUR TO A DEPTH OF 3' BELOW EXISTING GROUND LEVEL.
 2. TOP ELEVATION SHALL BE APPROX 6' ABOVE EXISTING GROUND LEVEL.
 3. BERM SHALL BE CONSTRUCTED WITH 2:1 SIDE SLOPES AND A MINIMUM OF 6' WIDTH ACROSS BERM TOP.
 4. SEDIMENT DEWATERING BASIN IS TEMPORARY AND SHALL BE LEVELLED TO MEET EXISTING GRADE APPROXIMATELY 6 MONTHS AFTER DREDGING IS COMPLETE.

NUMBER: 05-143-017-0

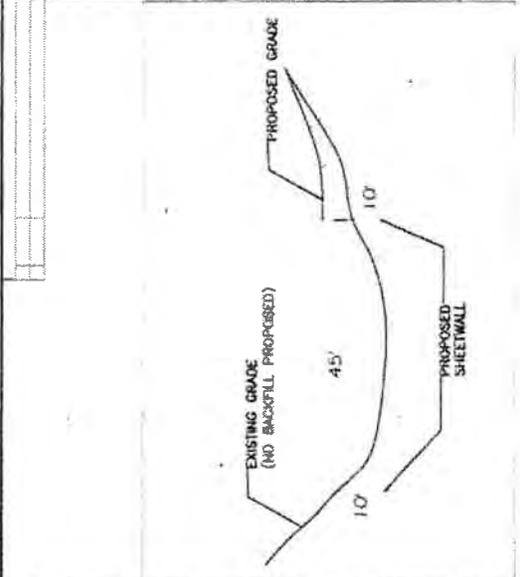
WACF-Hyd Dredging, Seawall, Backfill
 BY: Wawasee Area Conservancy Foun.
 Dillon Creek, Cromwell
 KOSCIUSKO County, INDIANA
 SHEET 5 OF 6

		WAWASEE AREA CONSERVANCY FOUNDATION DILLON CREEK
		SEDIMENT TRAP CONSTRUCTION
		SEDIMENT DEWATERING BASIN DETAILS
DRAWN BY: J.F. NEW CHECKED BY: J.F. NEW DATE: NOV 2005 JOB NO.: 05-143-017-0 SCALE: AS SHOWN	DRAWING NO. 5 OF 6	



<p>SCALE AS SHOWN</p> <p>WAWASEE AREA CONSERVANCY FOUNDATION DILLON CREEK</p> <p>SEDIMENT TRAP CONSTRUCTION</p> <p>CHANNEL CROSS SECTIONS</p>		<p>DRAWN BY: SLP</p> <p>DESIGNED BY: WMS</p> <p>CHECKED BY: JMR</p> <p>DATE: NOV 2005</p> <p>CON NO: 00027100</p> <p>SCALE: AS SHOWN</p>
		<p>4</p> <p>OF 5</p>

NUMBER: 05-143-017-0
 WACF--Hyd. Dredging, Seawall, Backfill
 BY: Wawasee Area Conservancy Foun.
 Dillon Creek, Cromwell
 KOSCIUSKO County, INDIANA
 SHEET 4 OF 6



Note: Bank treatment includes removing existing riprap above OIWM, restloping embankment to 4:1 slope, planting with low profile prairie mix, and blanketing with erosion control mats.



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 SHEET 6 OF 6