



Public Notice

**U S Army Corps
of Engineers**
Huntington District

In reply refer to Public Notice No.
200301193

Issuance Date: **October 20, 2006**

Stream: **Hocking River**

Closing Date: **December 22, 2006**

Please address all comments and inquiries to:

U.S. Army Corps of Engineers, Huntington District, Ohio Transportation Office

ATTN: CELRH-OR-F-OT Public Notice No. 20031193

3990 East Broad Street

Columbus, Ohio 43218-3990

Phone: (614) 692-4654

PUBLIC NOTICE AND NOTICE OF PUBLIC HEARING: The purpose of this public notice is to inform you of a proposal for work in which you might be interested. It is also to solicit your comments and information to better enable us to make a reasonable decision on factors affecting the public interest. The applicant has requested a public hearing in association with this project. We hope you will participate in this process.

REGULATORY PROGRAM: Since its early history, the U.S. Army Corps of Engineers (Corps) has played an important role in the development of the nation's water resources. Originally, this involved construction of harbor fortifications and coastal defenses. Later duties included the improvement of waterways to provide avenues of commerce. An important part of our mission today is the protection of the nation's waterways through the administration of the Corps Regulatory Program.

SECTION 10: The Corps is directed by Congress under Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) to regulate all work or structures in or affecting the course, condition or capacity of navigable waters of the United States (U.S.). The intent of this law is to protect the navigable capacity of waters important to interstate commerce.

SECTION 404: The Corps is directed by Congress under Section 404 of the Clean Water Act (33 USC 1344) to regulate the discharge of dredged and fill material into all waters of the United States, including wetlands. The intent of the law is to protect the nation's waters from the indiscriminate discharge of material capable of causing pollution and to restore and maintain their chemical, physical and biological integrity.

TO WHOM IT MAY CONCERN: The following application has been submitted for a Department of the Army Permit under the provisions of Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. This notice serves as the Corps of Engineers' request to the Ohio Environmental Protection Agency (OEPA) to act on Section 401 Water Quality Certification for the following application:

APPLICANT: Ohio Department of Transportation
1980 West Broad Street
Columbus, Ohio 43223

LOCATION: The proposed project is located within the Hocking River, Monday Creek, Dorr Run, numerous unnamed tributaries of the Hocking River, Monday Creek and Dorr Run and adjacent wetlands associated with the relocation of State Route 33 on a new alignment in Hocking and Athens Counties, Ohio. The project corridor runs from Haydenville in Hocking County to New Floodwood in Athens County. In addition, Green, Star and Ward Townships in Hocking County and the City of Nelsonville and York Township in Athens County are within the project corridor. Neighboring communities include East Clayton, Doanville, Kimberly, Bessemer and Buchtel.

DESCRIPTION OF THE PROPOSED WORK: The applicant is proposing to make improvements to 9 miles of US 33 on a new alignment in the vicinity of the City of Nelsonville in Athens County, Ohio. The purpose of the project is to upgrade the existing highway segment to a level of service equal to conditions along the remaining length of US 33, allowing for uninterrupted regional traffic flow and a clear separation of local and through traffic. In addition, the project is intended to improve deficiencies including improved lane widths, shoulder widths, travel speeds and access which are expected to result in less traffic congestion and safer traveling conditions.

In southern Hocking County, US 33 is a four-lane, limited access divided highway until it transitions to a three-lane highway at mile marker 17.02 and then to a two-lane highway at mile marker 17.29, approximately 1.9 miles west of Athens County. This two-lane undivided highway parallels the Hocking River until it enters the City of Nelsonville. Within Nelsonville, there are six signalized intersections and 11 un-signalized, at-grade intersections on US 33 and more than 100 at-grade access points. As US 33 continues southeast, leaving Nelsonville, there is an approximately 0.3 mile segment of two-lane undivided highway before US 33 transitions back to a four-lane, limited access, divided highway. As a result of the existing gap in the US 33 corridor, the highway is not providing the level of service expected from a modern highway.

Work associated with the proposal would consist of upgrading US 33 to a four-lane, controlled access divided highway consisting of 12 foot travel lanes, 10 foot outside shoulders, 4 foot inside shoulders, and a 40 foot median. The project also includes several overpasses, two interchanges and local road improvements. From east to west, the new highway would bridge Company Road, a valley containing a natural gas line, Dorr Run Road, SR 278, Pleasant Avenue, existing SR 78, Happy Hollow Road and TR 36. Additionally, new bridges are proposed for the Hocking River at SR 691 and at Monday Creek for the proposed realignment of SR 78 and SR 691. A new interchange would be constructed at Dorr Run and would include the relocation of a portion of Dorr Run Road and the construction of a new connector road between Dorr Run Road and the new interchange. Another interchange would be located at Happy Hollow Road, which would include the relocation of SR 78 and SR 691.

The proposal would result in impacts to 32,730 linear feet of 57 streams and 4.69 acres of 17 wetlands. Approximately 11,696 cubic yards of earthen fill material would be discharged at 59 separate regulated stream locations and 6,146 cubic yards in wetlands throughout the project area in order to bring existing resource locations to grade elevations for construction of the new roadway. Approximately 95 cubic yards of concrete would be permanently discharged in the Hocking River for the construction of two piers for the new bridge crossing. The proposal would also require the placement of temporary fill for access to staging areas and bridge replacements over the Hocking River and Monday Creek. All temporary fill material placed into waters of the United States would be removed immediately upon completion of construction activities and all waters restored to their pre-construction contours.

MITIGATION PLAN: The applicant has submitted a conceptual compensatory mitigation plan to compensate for permanent impacts to waters of the United States regulated by the United States Army Corps of Engineers. As mitigation for the 4.69 acres of wetland impacts associated with US 33 improvements, ODOT proposes to create/enhance wetlands within the 86.96 acre Happy Hollow Mitigation Area and to preserve existing high quality wetlands within this mitigation site. The proposed Happy Hollow Mitigation Area is located near the eastern terminus of the project, northeast of the proposed interchange at US 33 and SR 78 in York Township, Athens County, Ohio. The site currently contains 19.82 acres of existing Category 3 wetlands, 1.07 acres of existing Category 2 wetlands and 58.67 acres of upland buffer that would be preserved in perpetuity. ODOT proposes to construct a minimum of 4.69 acres of palustrine forested, scrub/shrub and emergent wetlands within the mitigation site.

To compensate for 32,730 linear feet of stream impacts associated with the US 33 project, the applicant proposes to mitigate the 49,434 linear feet of required stream mitigation through a variety of proposed stream restoration and preservation projects both on-site and off-site. The applicant requests that mitigation within one mile of the project be considered on-site to offset stream impacts at a 1:1 ratio. The applicant also requests that mitigation exceeding one mile be considered off-site to offset stream impacts at a 1.5:1 ratio. Deed restrictions placed on state-owned property and conservation easements on privately owned property are proposed within the Hocking River, Green Run, Four Mile Creek, Monday Creek, Shade River and Leading Creek watersheds. The easements would be protected through legal instruments recorded in the appropriate counties. In addition to preservation on parcels, ODOT proposes to conduct stream restoration on four parcels along the Hocking River through the expansion of existing riparian zones through the planting of trees.

The applicant has requested that any additional wetland and/or stream mitigation acreage in excess of what is required for this proposal be considered for future ODOT mitigation requirements.

To compensate for a portion of the stream impacts associated with the US 33 project, ODOT proposes to incorporate an acid mine drainage (AMD) treatment system on-site within the wetland mitigation area at Happy Hollow, as well as providing funding to the Ohio Department of Natural Resources, Division of Mineral Resource Management for the implementation of three

off-site AMD remediation projects within the Monday Creek drainage basin at Rock Run, Lost Run, and Big Four Hollow. A brief summary of the proposed AMD treatment for each area is provided below.

- Happy Hollow (Monday Creek River Mile 0.48)
 - Steel Slag Leach Bed
- Big Four Hollow (Monday Creek River Mile 8.02)
 - Steel Slag Leach Bed
 - Aerobic Wetland
- Lost Run-Phase II (Monday Creek River Mile 16.08)
 - Limestone Leach Beds
 - Steel Slag Leach Bed
 - Low Head Dams
 - Open Limestone Channel
- Rock Run (Monday Creek River Mile 23.40)
 - Low Head Dams
 - Open Limestone Channel
 - Aerobic Wetland

Copies of the conceptual mitigation plan are available for review upon request.

ALTERNATIVE ANALYSIS: A total of 4.69 acres of jurisdictional wetlands would be filled as a result of the proposal. The project does not require access to, or siting within wetlands to fulfill its basic purpose and is considered a non-water dependent activity; therefore, the applicant is required to show that other less damaging practicable alternatives are not available that would achieve the applicant's goal. The Section 404(b)(1) Guidelines state that for non-water dependent activities, practicable alternatives that do not involve wetlands are presumed to be available unless clearly demonstrated otherwise. The applicant is required to provide an alternative analysis that must overcome the presumption prior to receiving authorization for the placement of fill material. The applicant has submitted the required alternative analysis and it is currently under review. No permit will be issued until our review of the alternative analysis clearly shows that upland alternatives are not available to achieve the applicant's goal.

WATER QUALITY CERTIFICATION: A section 401 Water Quality Certification is required for this project. It is the applicant's responsibility to obtain the certification from the Ohio Environmental Protection Agency.

HISTORIC AND CULTURAL RESOURCES: The Federal Highways Administration (FHWA) is the lead Federal Agency for this proposal. As such, FHWA is ultimately responsible for compliance with the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act.

By letter dated March 10, 2004, the Ohio Department of Transportation requested State Historic Preservation Office (SHPO) concurrence with their determination of “no historic properties affected” for the subject project, in accordance with 36 CFR Part 800.4(d)(1). The SHPO concurred with the ODOT determination on April 8, 2004.

A copy of this public notice will be furnished to the SHPO for their review and comment.

ENDANGERED/THREATENED SPECIES REVIEW: The project is located within the known or historic range of the following candidate, threatened, or endangered species:

Indiana Bat (E)
American burying beetle (E)
Northern monkshood (T)
Small whorled pogonia (T)
Bald Eagle (T)
Cerulean Warbler (C)

As noted above, FHWA is the lead Federal agency for this project. FHWA is responsible for compliance with the National Environmental Policy Act (NEPA) and Section 7 of the Endangered Species Act. The United State Fish and Wildlife Service (USFWS) received a request for formal consultation by FHWA accompanied by the Biological Assessment for Federally Listed Species for U.S. Route 33 Nelsonville Bypass (HOC/ATH-33-17.00/0.00 PID 14040) Hocking and Athens Counties, Ohio. After submitting additional information the initiation package was completed and formal consultation was initiated on December 3, 2004. Formal consultation was concluded on April 15, 2005 when the USFWS issued a Biological Opinion (BO). The BO concurred with determinations provided in the Biological Assessment. The Biological Assessment concluded that effects to the American burying beetle, bald eagle, and small whorled pogonia may affect, but were not likely to affect these species. The BO also concurred with the no effect determination for the northern monkshood. A species effects determination was not provided for the cerulean warbler by the USFWS because it is not a federally listed species. The Final Environmental Impact Statement indicated that the actions and activities associated with construction and operation of the project may impact individuals by a reduction in habitat and by locally fragmenting the landscape. Regionally, however, habitat continues to be largely available and the project would not cause a trend toward federal listing or a loss of viability for the cerulean warbler in the Wayne National Forest.

However, the project effects to the Indiana bat were determined to warrant a may affect, likely to adversely affect determination. The Biological Opinion indicates that Indiana bats will incur both direct and indirect effects from the proposed project. Direct and indirect effects to Indiana bats are anticipated during clearing, construction, and operational activities and from the removal of habitat and noise disturbance. The direct and indirect effects to Indiana bats would vary greatly ranging from death or injury of some bats to effects which are insignificant and discountable and would differ depending upon the activity, season, home range and condition of individual bats as well as the tolerance of individual bats to noise disturbance. The Service

provided conservation measures to minimize the take of Indiana bats and determined that based on the proposed project outlined in the Biological Assessment and adherence to the conservation measures outlined in the Biological Opinion, the project was not likely to result in jeopardy to the Indiana bat or the destruction or adverse modification of critical habitat.

This public notice serves as a request to the U.S. Fish and Wildlife Service for any additional information they may have on whether any listed or proposed to be listed endangered or threatened species may be present in the area which would be affected by the activity, pursuant to Section 7(c) of the Endangered Species Act of 1972 (as amended).

PUBLIC INTEREST REVIEW AND COMMENT: **There has been a decision to hold a hearing concerning this proposal on December 12, 2006 (See Notice of Public Hearing Attachment).** This application will be reviewed in accordance with 33 CFR 320-331, the Regulatory Program of the U. S. Army Corps of Engineers (USACE), and other pertinent laws, regulations, and executive orders. Our evaluation will also follow the guidelines published by the United States Environmental Protection Agency pursuant to Section 404(b) (1) of the CWA. Interested parties are invited to state any objections they may have to the proposed work. The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits that reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriment. All factors that may be relevant to the proposal will be considered including the cumulative effects thereof; of those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people. Written statements on these factors received in this office on or before the expiration date of this public notice will become a part of the record and will be considered in the final determination. A permit will be granted unless its issuance is found to be contrary to the public interest.

SOLICITATION OF COMMENTS: The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. For accuracy and completeness of the administrative record, all data in support of or in opposition to the proposed work should be submitted in writing setting forth sufficient detail to furnish a clear understanding of the reasons for support or opposition. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act.

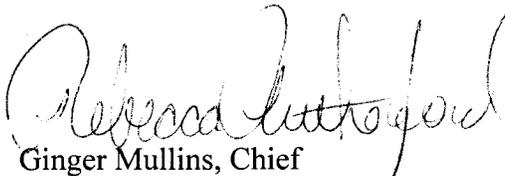
A public hearing will be held December 12, 2006. Public comments will be accepted from the date of this notice through December 22, 2006, 10 days after the December 12, 2006 public hearing.

CLOSE OF COMMENT PERIOD: All comments pertaining to this Public Notice must reach this office on or before the close of the comment period listed above. If no comments are received by that date, it will be considered that there are no objections.

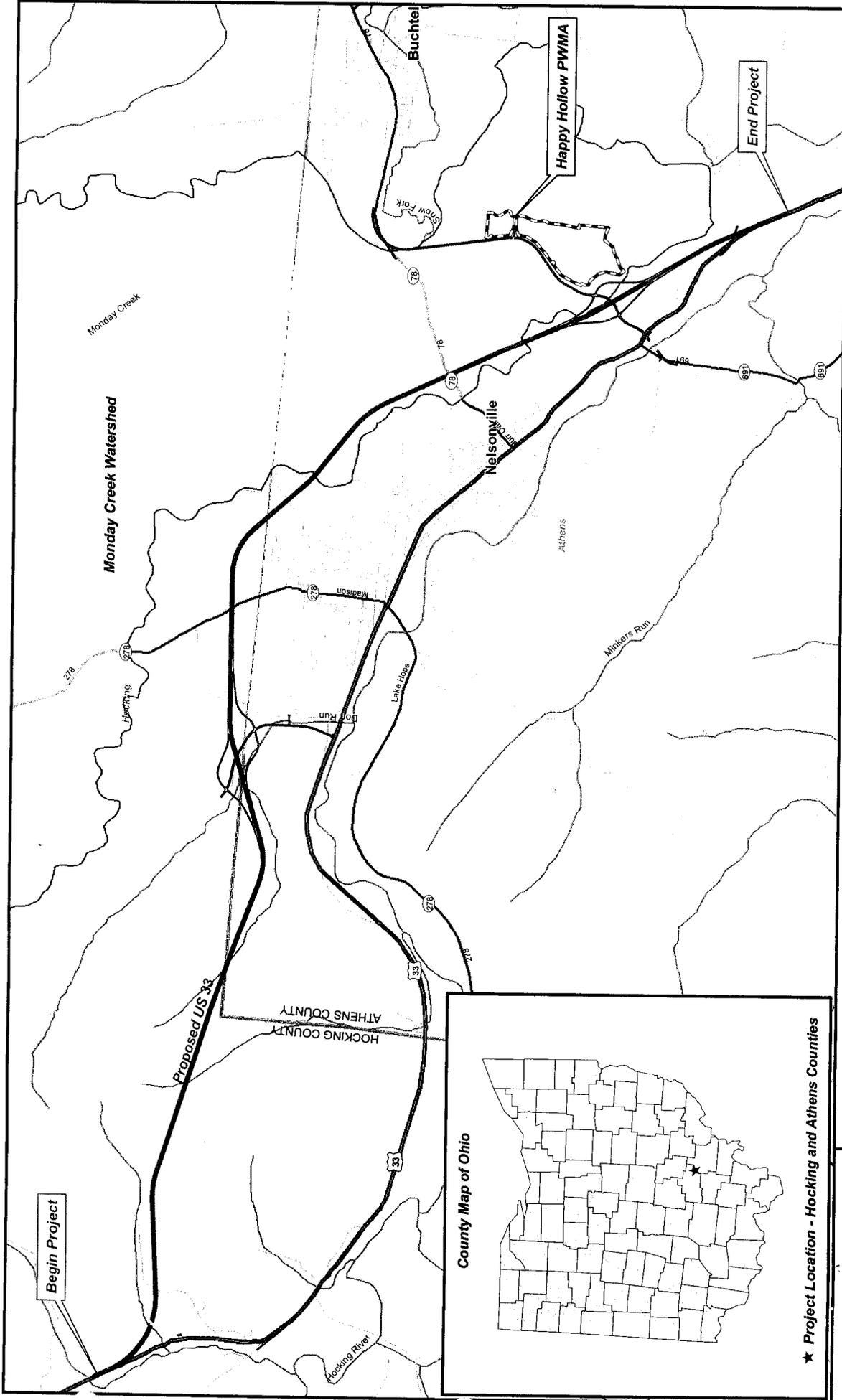
Comments and requests for additional information should be submitted to:

Ms. Deborah L. Wegmann, Transportation Program Manager
North Regulatory Section, Ohio Transportation Office CELRH-OR-FN-OT
U. S. Army Corps of Engineers Huntington District
3990 East Broad Street
Columbus, Ohio 43218

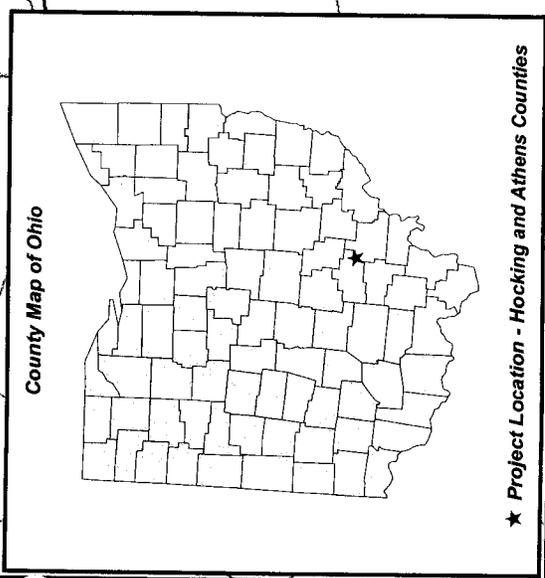
Please note names and addresses of those who submit comments in response to this public notice may be made publicly available. Thank you for your interest in our nation's water resources. If you have any questions concerning this public notice, please contact Ms. Deborah L. Wegmann of the North Regulatory Section, Ohio Transportation Office at (614) 692-4654.


Ginger Mullins, Chief
Regulatory Branch

(O)



**Exhibit 1: Project Location
Nelsonville, Ohio
HOC/ATH-33-17.00/0.00**



★ Project Location - Hocking and Athens Counties



Project # P201B248 September 2006

LEGEND

	WAYNE NATIONAL FOREST
	POSSIBLE MITIGATION SITES
	POSSIBLE STAGING/STORAGE AREAS
	POSSIBLE BORROW/WASTE AREAS
	MINIMUM RIGHT OF WAY TAKE
	PRELIMINARY WORK LIMITS
	USFWS ASSUMED FOOTPRINT
	STREAM IDENTIFICATION NUMBER
	STREAM LOCATION
	WETLAND IDENTIFICATION NUMBER
	EXISTING WETLAND AREA
	WETLAND AREAS



Area 7
Staging Area South
of Company Road

Area 6
Staging Area East
of Company Road

Area 5
Staging Area West
of Company Road

S14D

S12

W4

S9

S8

S4

S11

S5

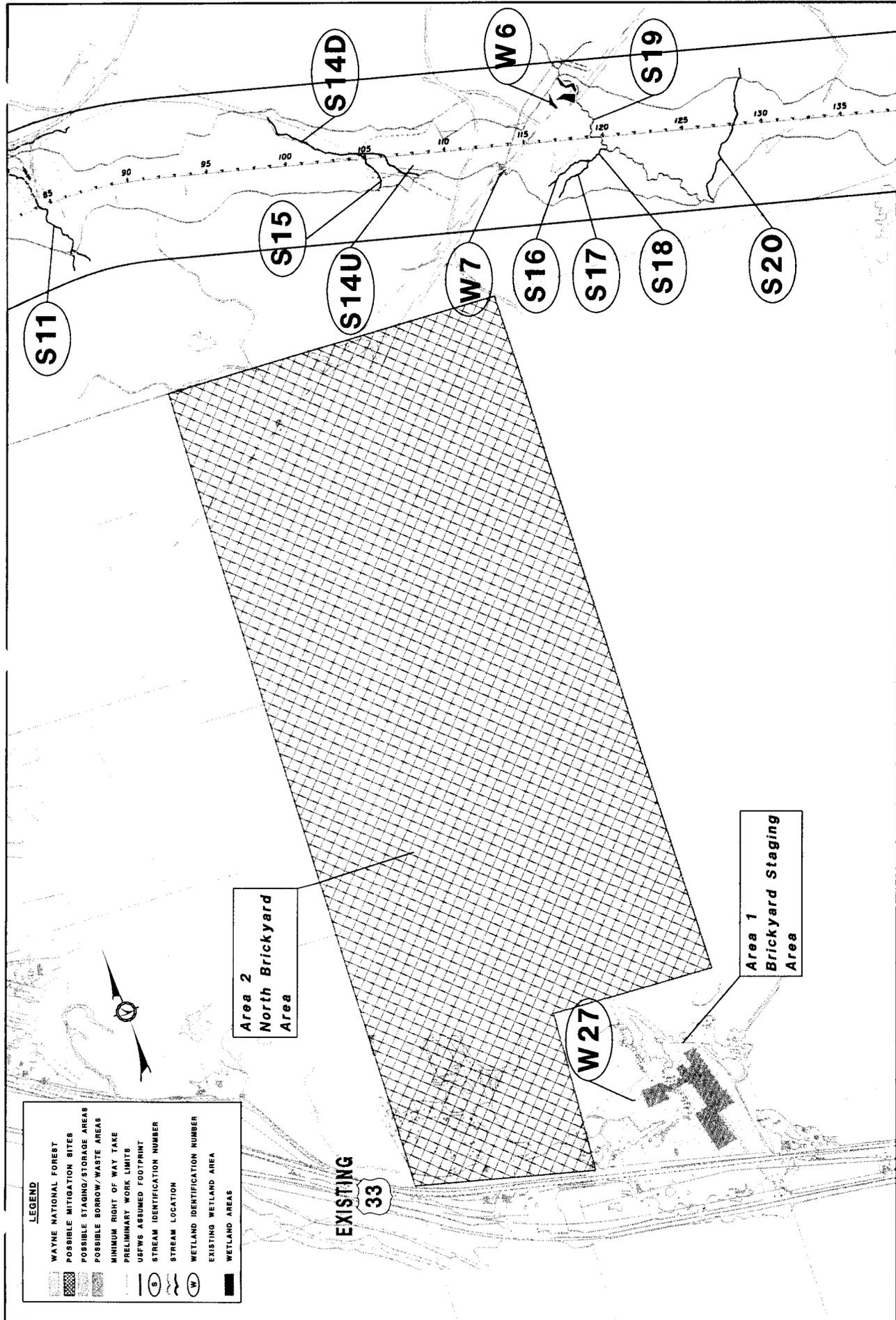
33

HAYDENVILLE

U.S. Army Corps of
Engineers 404 Permit
and OEPA Section 401
Water Quality
Certification
Application
Date: 10-21-2005
Figure 2A

PROJECT LOCATION
US 33 STA. 15+00 TO STA. 100+00
OHIO DEPARTMENT OF TRANSPORTATION
U.S. ROUTE 33 IN HOCKING AND ATHENS COUNTIES
HOC/ATH-33-17.00/0.00 PID 14040





LEGEND

	WAYNE NATIONAL FOREST
	POSSIBLE MITIGATION SITES
	POSSIBLE STAGING/STORAGE AREAS
	POSSIBLE BORROW/WASTE AREAS
	MINIMUM RIGHT OF WAY TAKE
	PRELIMINARY WORK LIMITS
	USFWS ASSUMED FOOTPRINT
	STREAM IDENTIFICATION NUMBER
	STREAM LOCATION
	WETLAND IDENTIFICATION NUMBER
	EXISTING WETLAND AREA
	WETLAND AREAS

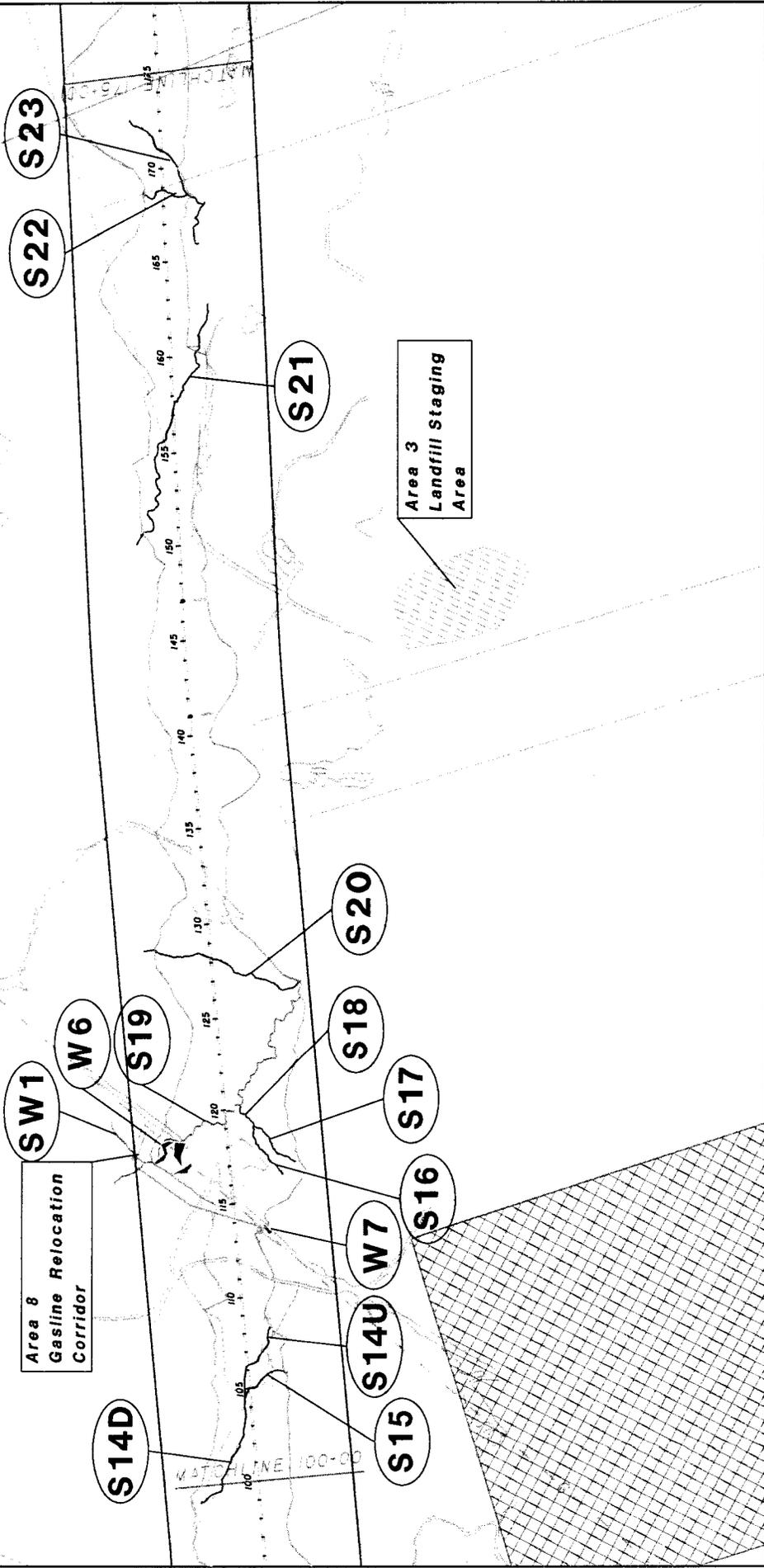
U.S. Army Corps of Engineers 404 Permit and OEPA Section 401 Water Quality Certification Application
 Date: 10-21-2005
 Figure 2B

PROJECT LOCATION
 US 33 STA. 85+00 TO STA. 135+00
 OHIO DEPARTMENT OF TRANSPORTATION
 U.S. ROUTE 33 IN HOCKING AND ATHENS COUNTIES
 HOC/ATH-33-17.00/0.00 P/D 14040



LEGEND

	WAYNE NATIONAL FOREST
	POSSIBLE MITIGATION SITES
	POSSIBLE STAGING/STORAGE AREAS
	POSSIBLE BORROW/WASTE AREAS
	MINIMUM RIGHT OF WAY TAKE
	PRELIMINARY WORK LIMITS
	USFWS ASSUMED FOOTPRINT
	STREAM IDENTIFICATION NUMBER
	STREAM LOCATION
	WETLAND IDENTIFICATION NUMBER
	EXISTING WETLAND AREA
	WETLAND AREAS

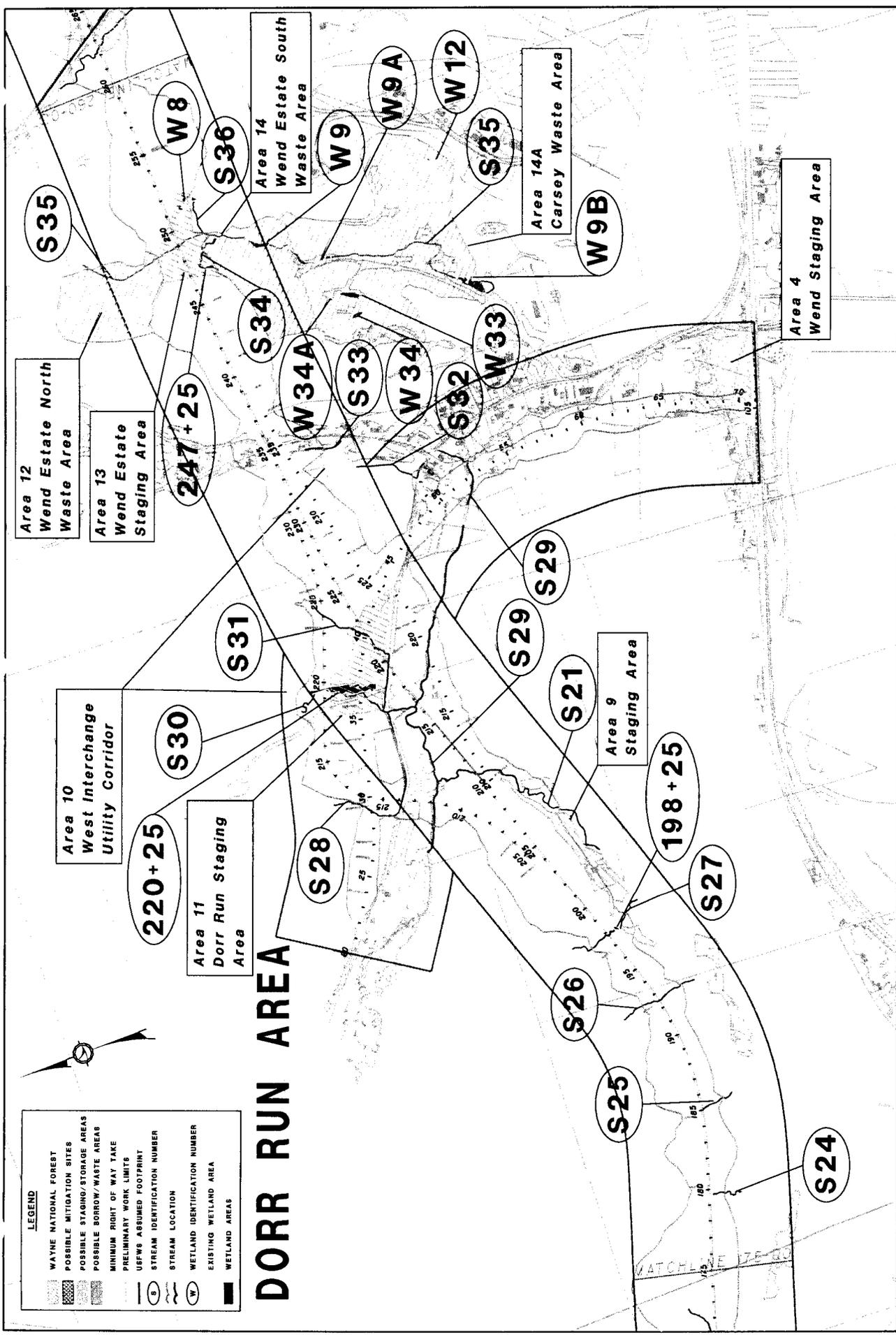


PROJECT LOCATION
 US 33 STA. 100+00 TO STA. 175+00
 OHIO DEPARTMENT OF TRANSPORTATION
 HOC/ATH-33-17.00/0.00 PID 14040

U.S. Army Corps of
 Engineers 404 Permit
 and OEPA Section 401
 Water Quality
 Certification
 Application
 Date: 10-21-2005
 Figure 2C

- LEGEND**
- WAYNE NATIONAL FOREST
 - POSSIBLE MITIGATION SITES
 - POSSIBLE STAGING/STORAGE AREAS
 - POSSIBLE BORROW/WASTE AREAS
 - MINIMUM RIGHT OF WAY TAKE
 - PRELIMINARY WORK LIMITS
 - USFWS ASSUMED FOOTPRINT
 - STREAM IDENTIFICATION NUMBER
 - STREAM LOCATION
 - WETLAND IDENTIFICATION NUMBER
 - EXISTING WETLAND AREA
 - WETLAND AREAS

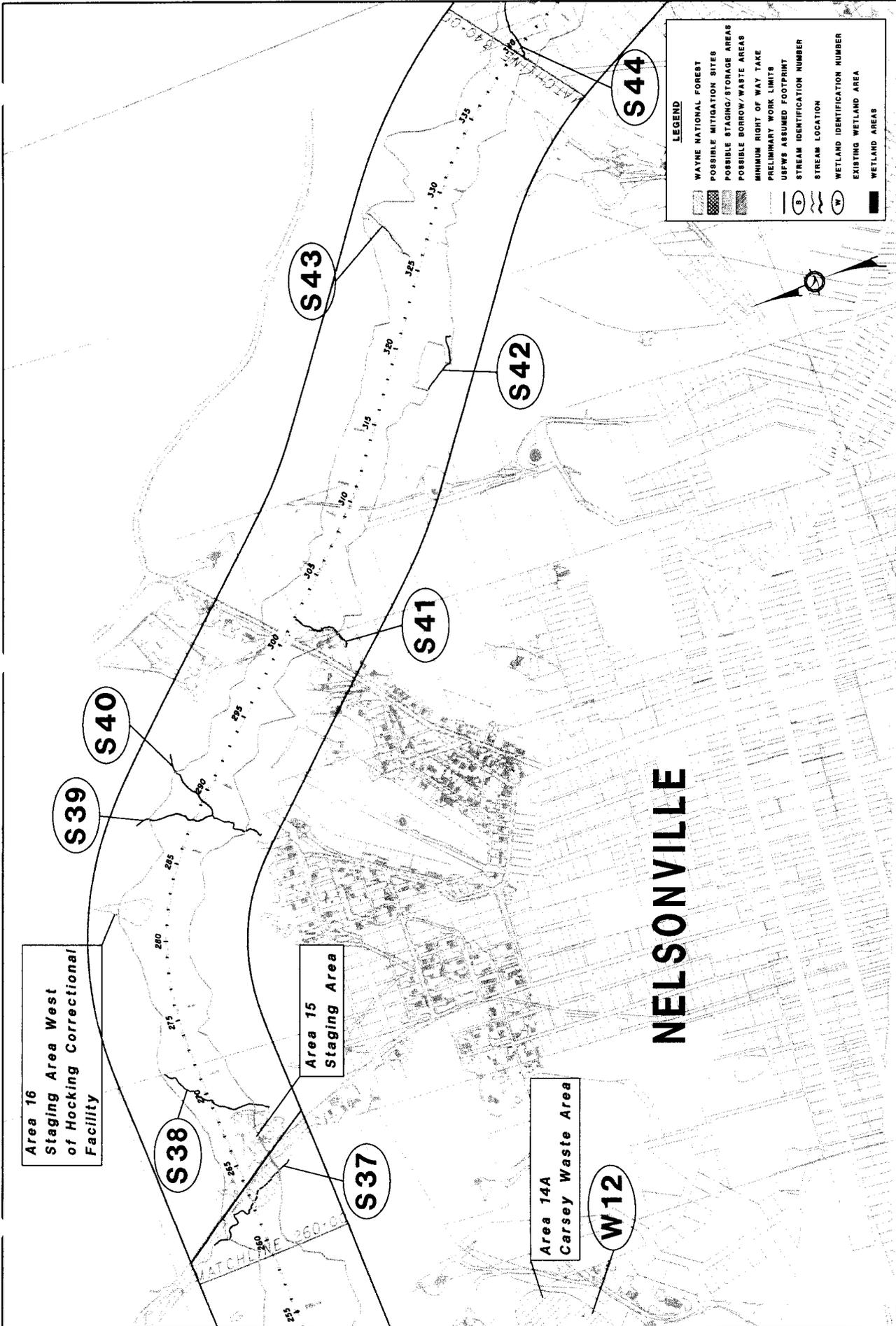
DORR RUN AREA



U.S. Army Corps of Engineers 404 Permit and OEPA Section 401 Water Quality Certification Application
 Date: 10-21-2005
 Figure 2D

PROJECT LOCATION
 US 33 STA. 175+00 TO STA. 260+00
 OHIO DEPARTMENT OF TRANSPORTATION
 U.S. ROUTE 33 IN HOCKING AND ATHENS COUNTIES
 HOC/ATH-33-17.00/0.00 PID 14040



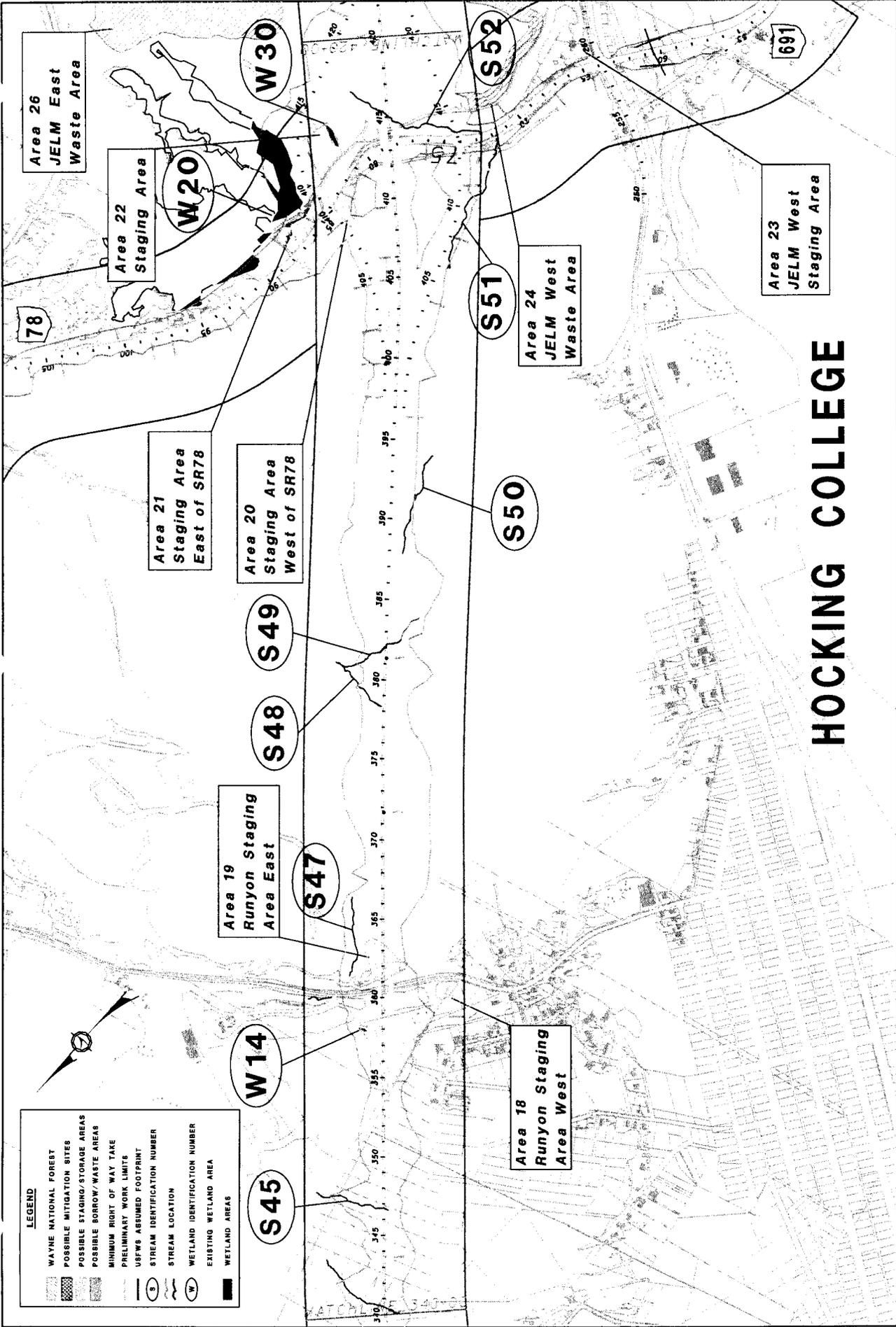


NELSONVILLE

U.S. Army Corps of Engineers 404 Permit and DEPA Section 401 Water Quality Certification Application
 Date: 10-21-2005
 Figure 2E

PROJECT LOCATION
 US 33 STA. 260+00 TO STA. 340+00
 OHIO DEPARTMENT OF TRANSPORTATION
 U.S. ROUTE 33 IN HOCKING AND ATHENS COUNTIES
 HOC/ATH-33-17.00/0.00 PID 14040



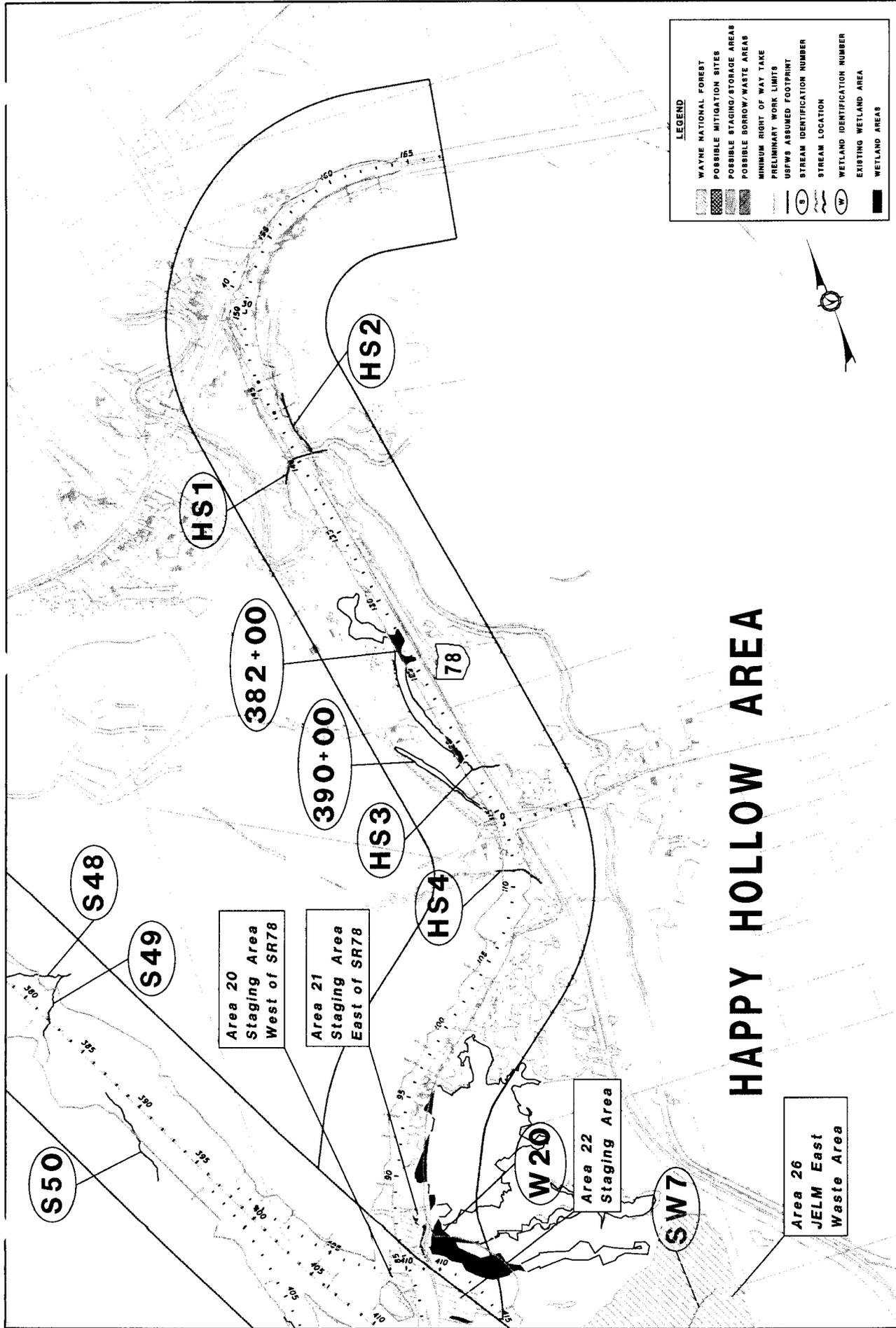


HOCKING COLLEGE

U.S. Army Corps of Engineers 404 Permit and OEPA Section 401 Water Quality Certification Application
 Date: 10-21-2005
 Figure 2F

PROJECT LOCATION
 US 33 STA. 340+00 TO STA. 420+00
 OHIO DEPARTMENT OF TRANSPORTATION
 U.S. ROUTE 33 IN HOCKING AND ATHENS COUNTIES
 HOC/ATH-33-17.00/0.00 PID 14040





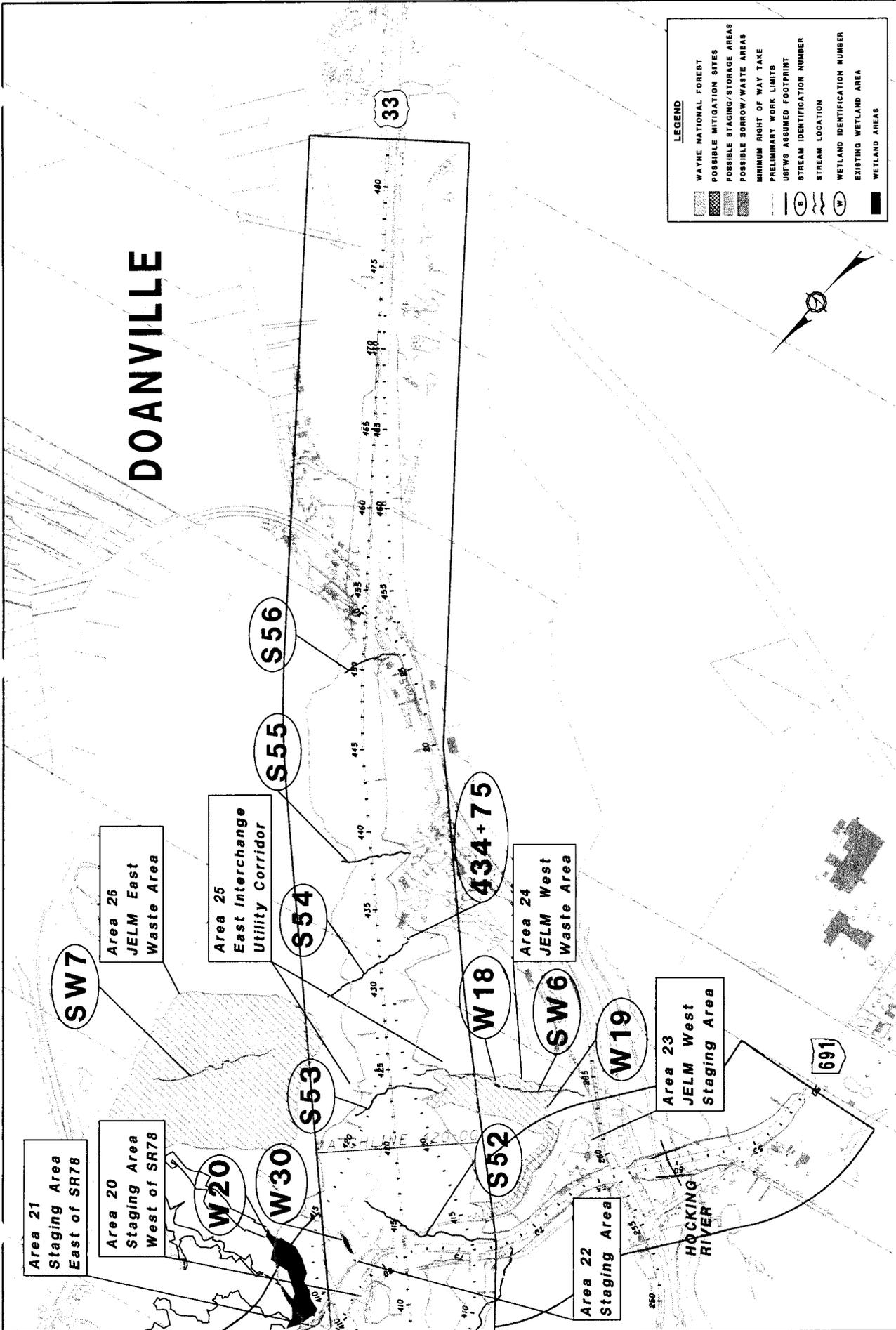
HAPPY HOLLOW AREA

U.S. Army Corps of Engineers 404 Permit and DEPA Section 401 Water Quality Certification Application
 Date: 10-21-2005
 Figure 26

PROJECT LOCATION
 SR 78 STA. 85+00 TO STA. 165+00
 OHIO DEPARTMENT OF TRANSPORTATION
 U.S. ROUTE 33 IN HOCKING AND ATHENS COUNTIES
 HOC/ATH-33-17.00/0.00 PID 14040



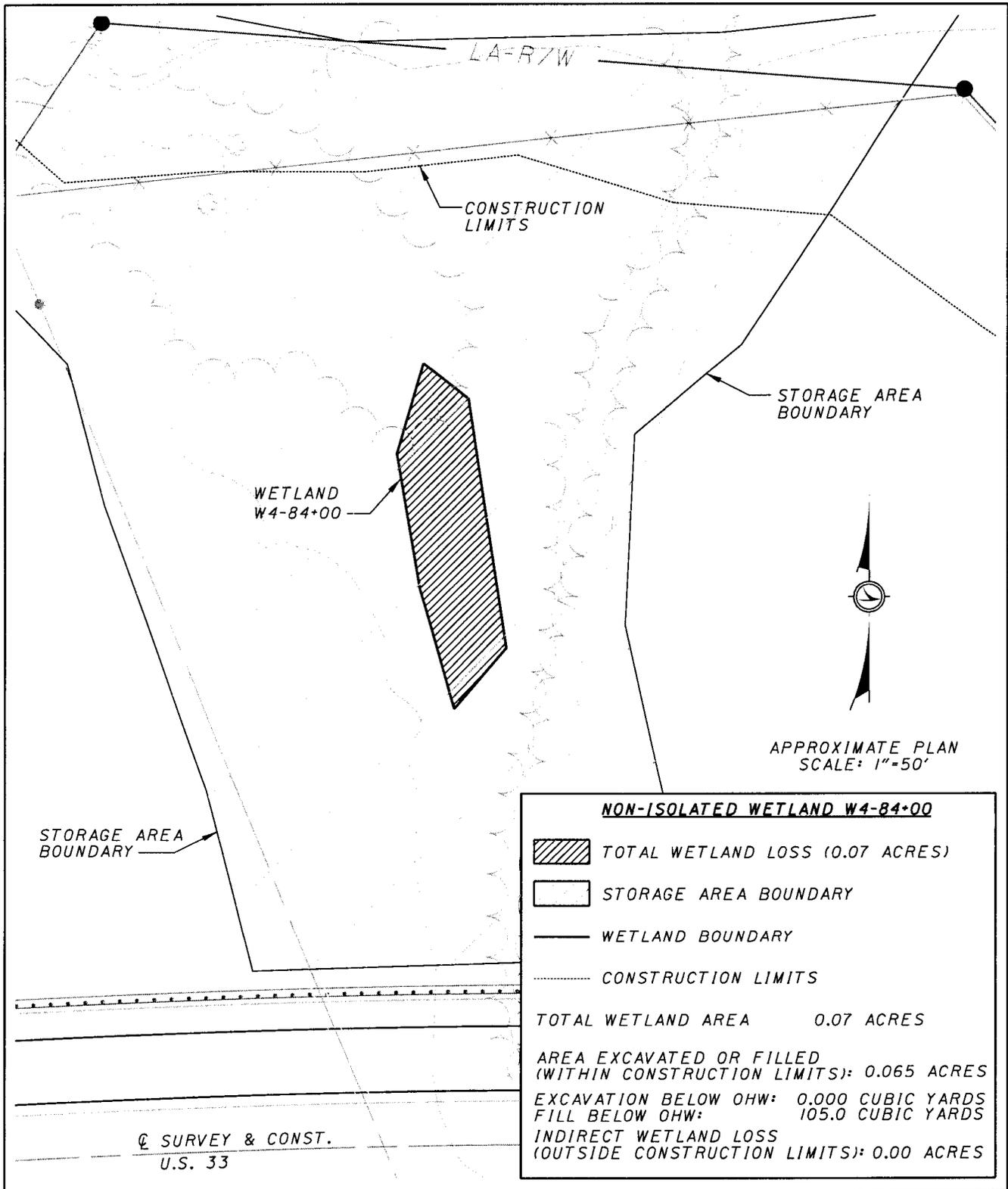
DOANVILLE



U.S. Army Corps of Engineers 404 Permit and OEPA Section 401 Water Quality Certification Application
 Date: 10-21-2005
 Figure 2H

PROJECT LOCATION
 US 33 STA. 420+00 TO STA. 480+00
 OHIO DEPARTMENT OF TRANSPORTATION
 U.S. ROUTE 33 IN HOCKING AND ATHENS COUNTIES
 HOC/ATH-33-17.00/0.00 PID 14040





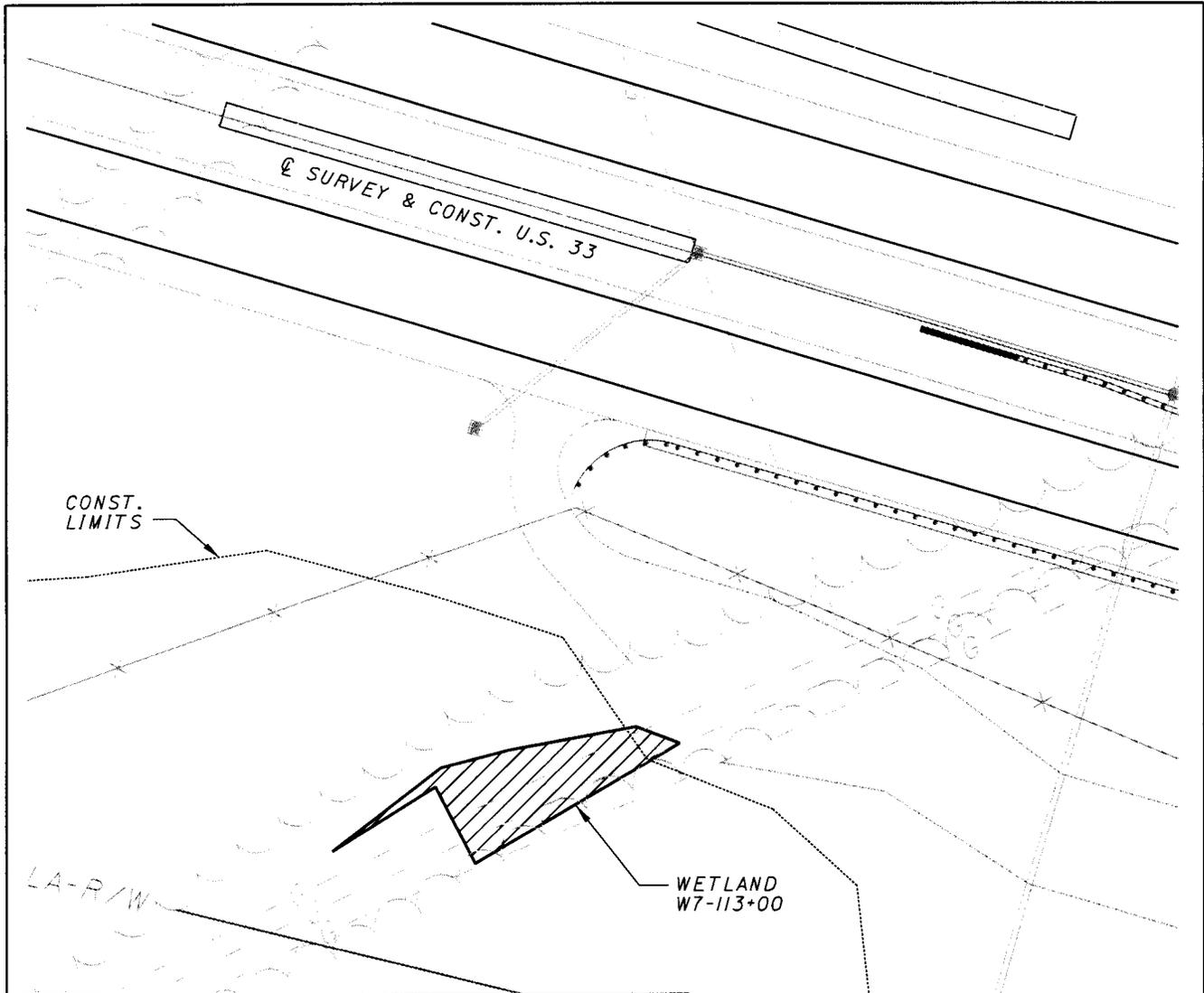
IMPACT TO NON-ISOLATED WETLAND W4 - 84+00

OHIO DEPARTMENT OF TRANSPORTATION
U.S. ROUTE 33 IN
HOCKING AND ATHENS COUNTIES
HOC/ATH-33-17.00/0.00 PID 14040

U.S. Army Corps of Engineers 404 Permit and OEPA Section 401 Water Quality Certification Application

Date: 03-09-2005

Figure 3



<u>NON-ISOLATED WETLAND W7-113+00</u>	
	TOTAL WETLAND LOSS (0.04 ACRES)
	WETLAND BOUNDARY
	CONSTRUCTION LIMITS
TOTAL WETLAND AREA	0.04 ACRES
AREA EXCAVATED OR FILLED (WITHIN CONSTRUCTION LIMITS):	0.007 ACRES
EXCAVATION BELOW OHW:	11.50 CUBIC YARDS
FILL BELOW OHW:	0.000 CUBIC YARDS
INDIRECT WETLAND LOSS (OUTSIDE CONSTRUCTION LIMITS):	0.027 ACRES



IMPACT TO NON-ISOLATED WETLAND W7-113+00

OHIO DEPARTMENT OF TRANSPORTATION
 U.S. ROUTE 33 IN
 HOCKING AND ATHENS COUNTIES
 HOC/ATH-33-17.00/0.00 PID 14040

U.S. Army Corps of Engineers 404 Permit and OEPA Section 401 Water Quality Certification Application

Date: 03-09-2005

Figure 4

NON-ISOLATED WETLAND W6-118+00

 TOTAL WETLAND LOSS (0.30 ACRES)

 WETLAND BOUNDARY

 CONSTRUCTION LIMITS

TOTAL WETLAND AREA 0.30 ACRES

AREA EXCAVATED OR FILLED
(WITHIN CONSTRUCTION LIMITS): 0.296 ACRES

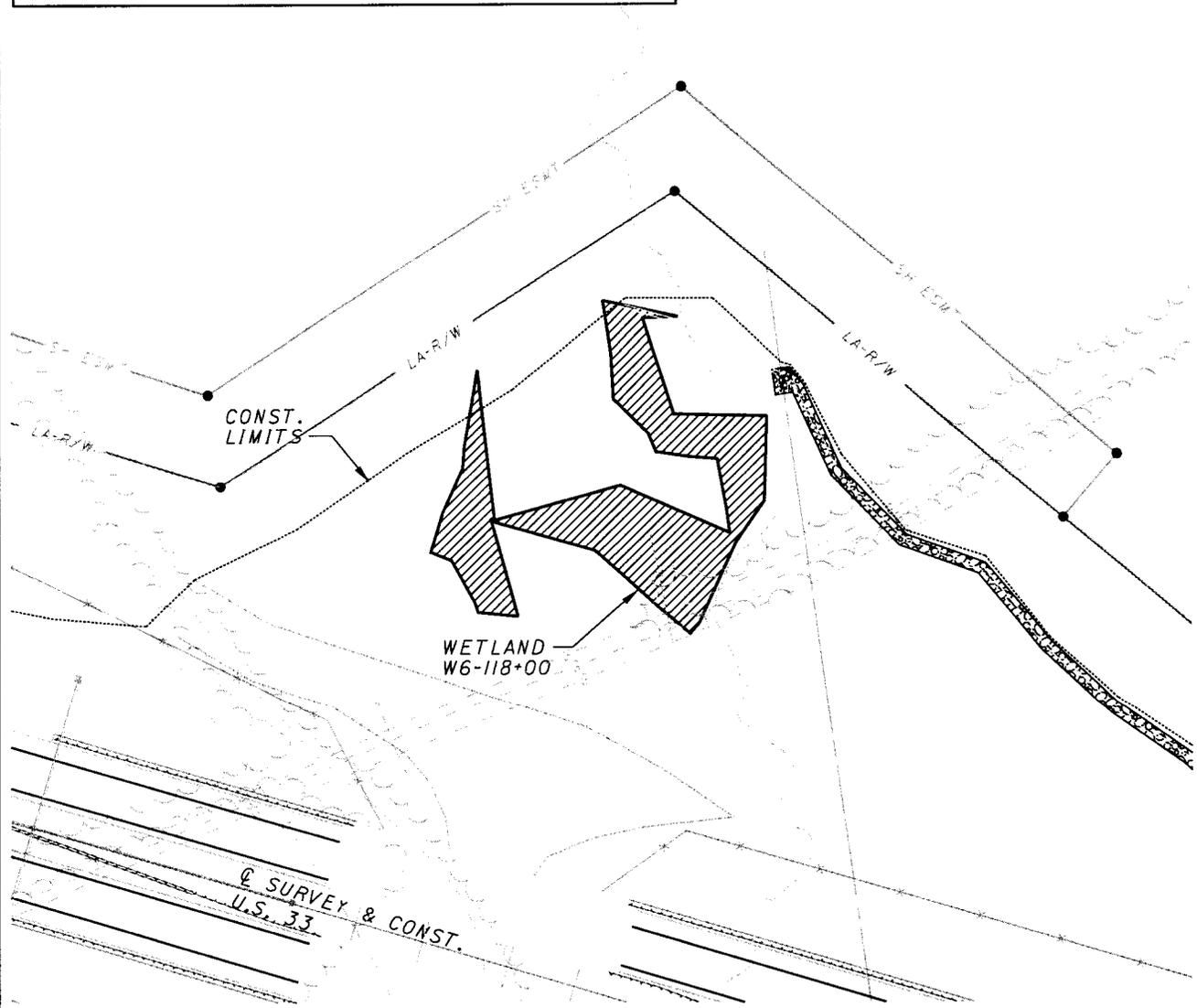
EXCAVATION BELOW OHW: 0.000 CUBIC YARDS

FILL BELOW OHW: 477.0 CUBIC YARDS

INDIRECT WETLAND LOSS
(OUTSIDE CONSTRUCTION LIMITS): 0.004 ACRES



APPROXIMATE PLAN
SCALE: 1"=100'



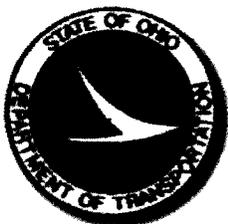
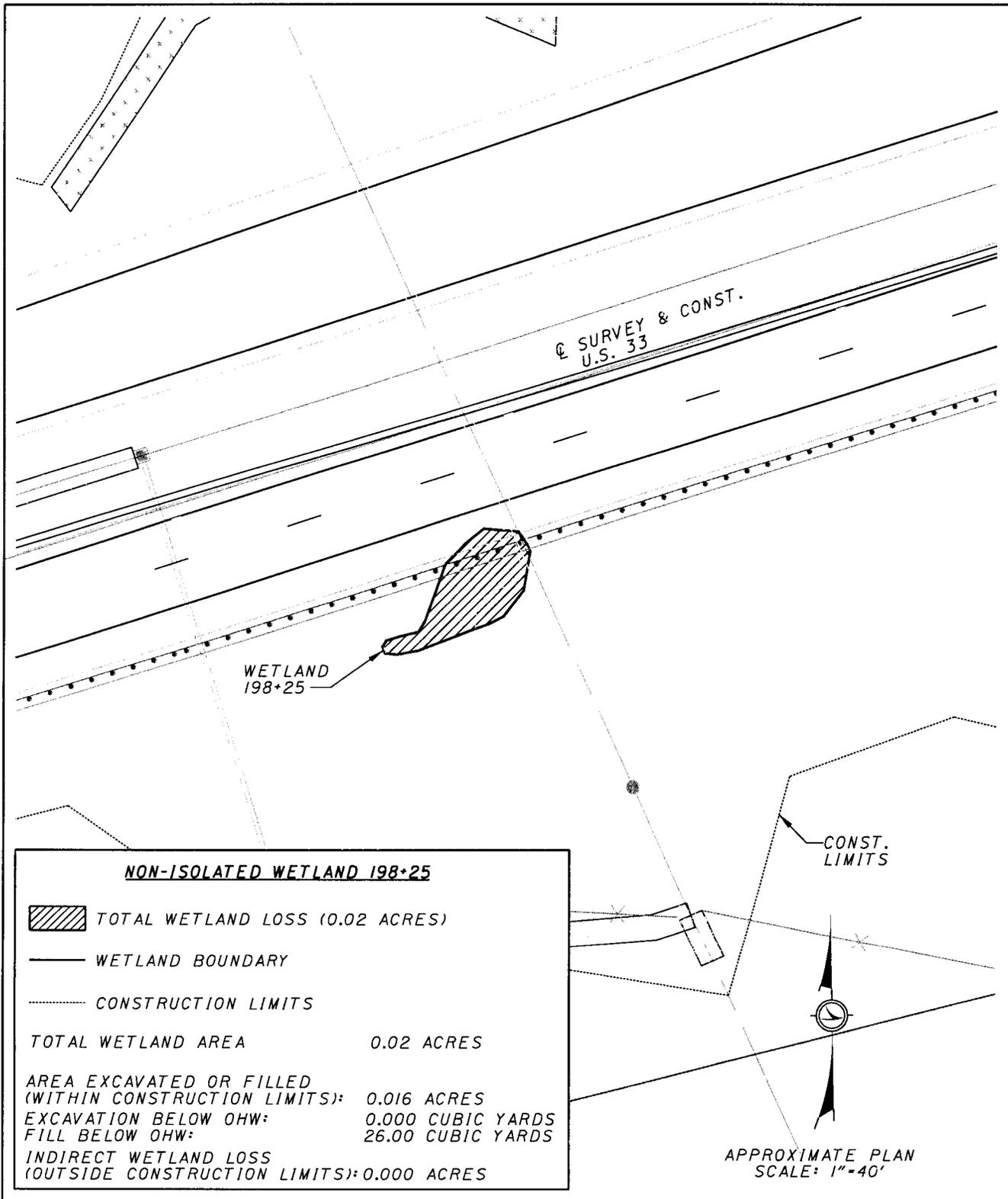
**IMPACT TO NON-ISOLATED
WETLAND W6-118+00**

OHIO DEPARTMENT OF TRANSPORTATION
U.S. ROUTE 33 IN
HOCKING AND ATHENS COUNTIES
HOC/ATH-33-17.00/0.00 PID 14040

U.S. Army Corps of
Engineers 404 Permit
and OEPA Section 401
Water Quality
Certification
Application

Date: 03-09-2005

Figure 5



IMPACT TO NON-ISOLATED WETLAND 198+25

OHIO DEPARTMENT OF TRANSPORTATION
 U.S. ROUTE 33 IN
 HOCKING AND ATHENS COUNTIES
 HOC/ATH-33-17.00/0.00 PID 14040

U.S. Army Corps of
 Engineers 404 Permit
 and OEPA Section 401
 Water Quality
 Certification
 Application

Date: 03-09-2005

Figure 6

NON-ISOLATED WETLAND 220+25

 TOTAL WETLAND LOSS (0.35 ACRES)

 STORAGE AREA BOUNDARY

 WETLAND BOUNDARY

 CONSTRUCTION LIMITS

TOTAL WETLAND AREA 0.35 ACRES

AREA EXCAVATED OR FILLED
(WITHIN CONSTRUCTION LIMITS): 0.345 ACRES

EXCAVATION BELOW OHW: 0.000 CUBIC YARDS

FILL BELOW OHW: 558.0 CUBIC YARDS

INDIRECT WETLAND LOSS
(OUTSIDE CONSTRUCTION LIMITS): 0.000 ACRES

STORAGE
AREA
BOUNDARY



APPROXIMATE PLAN
SCALE: 1"=50'

CONST.
LIMITS

RAMP C

WETLAND
220+25

STORAGE
AREA
BOUNDARY

SURVEY & CONST.
WEST INTERCHANGE ROAD



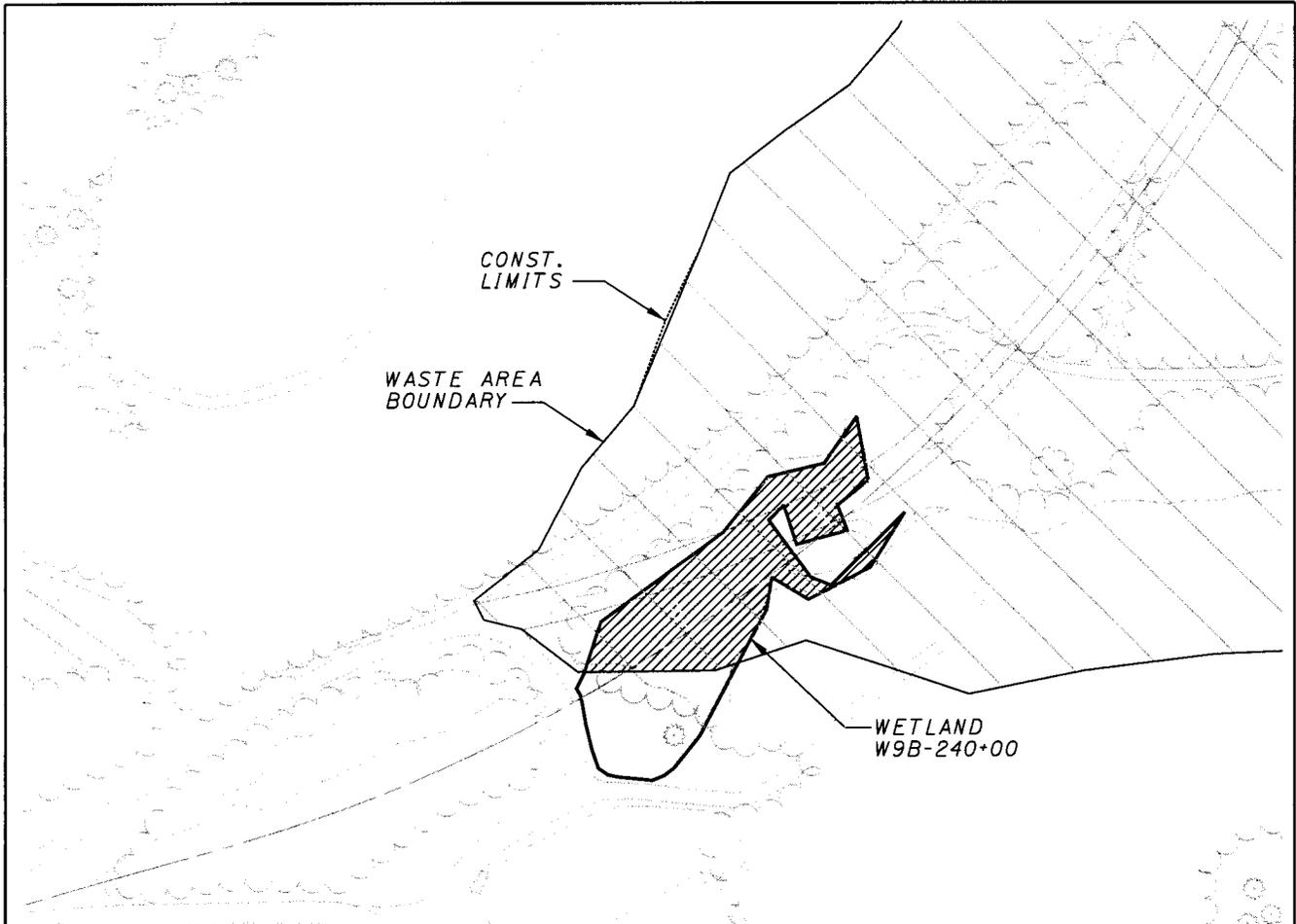
**IMPACT TO NON-ISOLATED
WETLAND 220+25**

OHIO DEPARTMENT OF TRANSPORTATION
U.S. ROUTE 33 IN
HOCKING AND ATHENS COUNTIES
HOC/ATH-33-17.00/0.00 PID 14040

U.S. Army Corps of
Engineers 404 Permit
and OEPA Section 401
Water Quality
Certification
Application

Date: 03-09-2005

Figure 7



NON-ISOLATED WETLAND W9B-240+00

	WETLAND AREA DELINEATED (0.09 ACRES)
	TOTAL WETLAND LOSS (0.20 ACRES)
	WASTE AREA BOUNDARY
	WETLAND BOUNDARY
	CONSTRUCTION LIMITS

TOTAL WETLAND AREA	0.29 ACRES
AREA EXCAVATED OR FILLED (WITHIN CONSTRUCTION LIMITS):	0.200 ACRES
EXCAVATION BELOW OHW:	0.000 CUBIC YARDS
FILL BELOW OHW:	323.0 CUBIC YARDS
INDIRECT WETLAND LOSS (OUTSIDE CONSTRUCTION LIMITS):	0.090 ACRES



APPROXIMATE PLAN
SCALE: 1"=100'



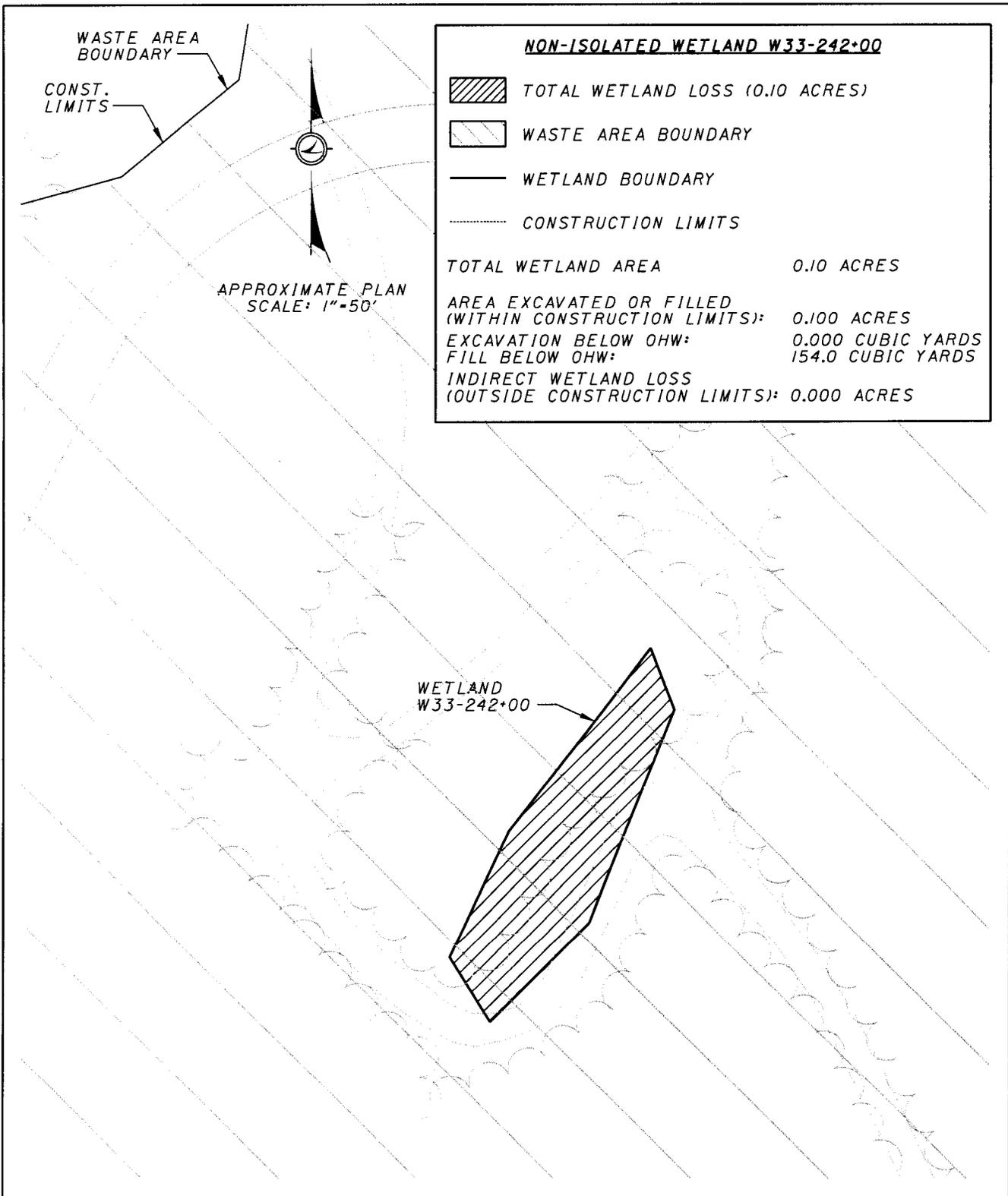
**IMPACT TO NON-ISOLATED
WETLAND W9B-240+00**

OHIO DEPARTMENT OF TRANSPORTATION
U.S. ROUTE 33 IN
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U.S. Army Corps of
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Application

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Figure 8



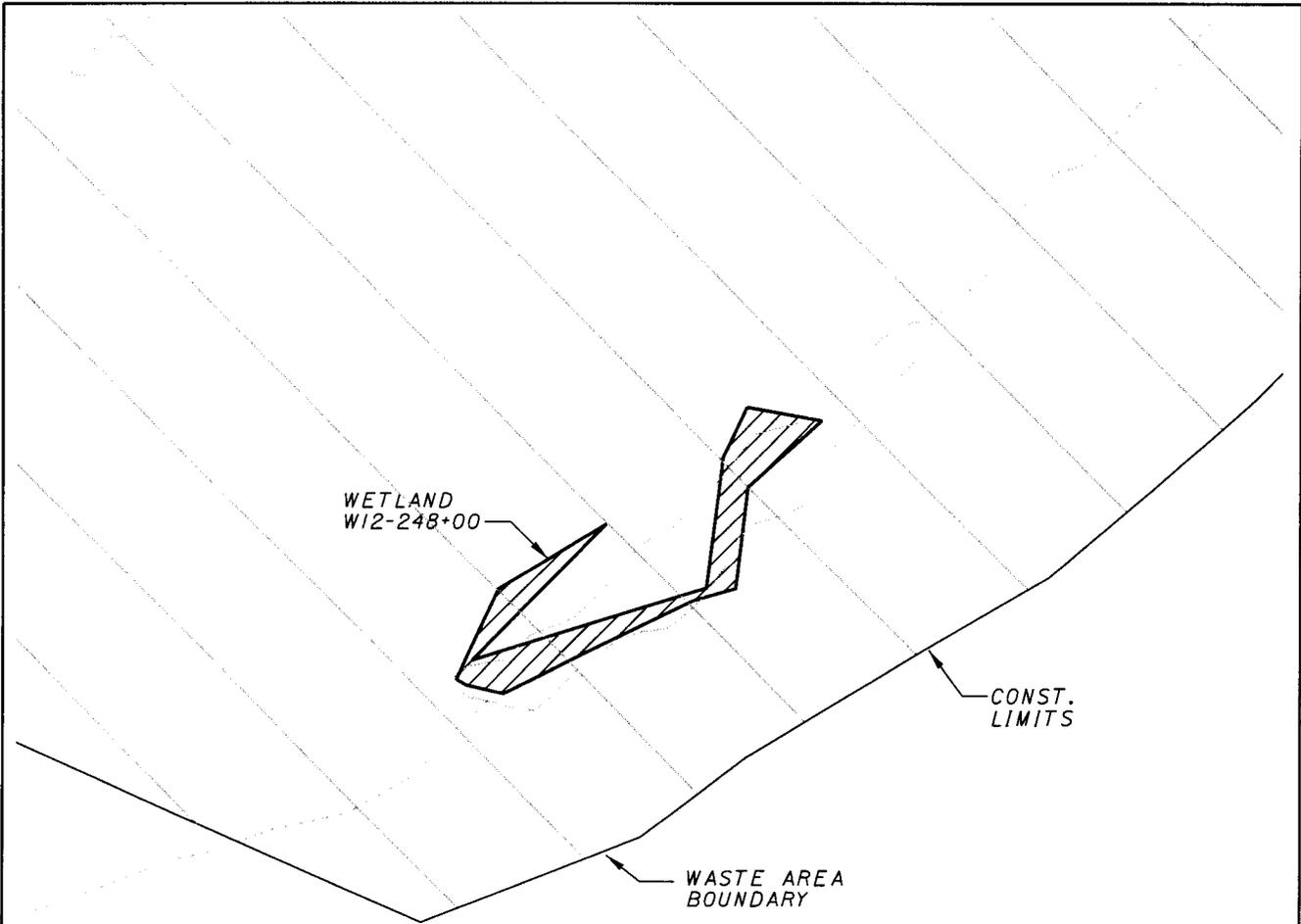
IMPACT TO NON-ISOLATED WETLAND W33-242+00

OHIO DEPARTMENT OF TRANSPORTATION
 U.S. ROUTE 33 IN
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 HOC/ATH-33-17.00/0.00 PID 14040

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Figure 9



WETLAND
W12-248+00

CONST.
LIMITS

WASTE AREA
BOUNDARY

<u>NON-ISOLATED WETLAND W12-248+00</u>	
	TOTAL WETLAND LOSS (0.03 ACRES)
	WASTE AREA BOUNDARY
	WETLAND BOUNDARY
	CONSTRUCTION LIMITS
TOTAL WETLAND AREA	0.03 ACRES
AREA EXCAVATED OR FILLED (WITHIN CONSTRUCTION LIMITS):	0.030 ACRES
EXCAVATION BELOW OHW:	0.000 CUBIC YARDS
FILL BELOW OHW:	49.00 CUBIC YARDS
INDIRECT WETLAND LOSS (OUTSIDE CONSTRUCTION LIMITS):	0.000 ACRES

APPROXIMATE PLAN
SCALE: 1"=50'



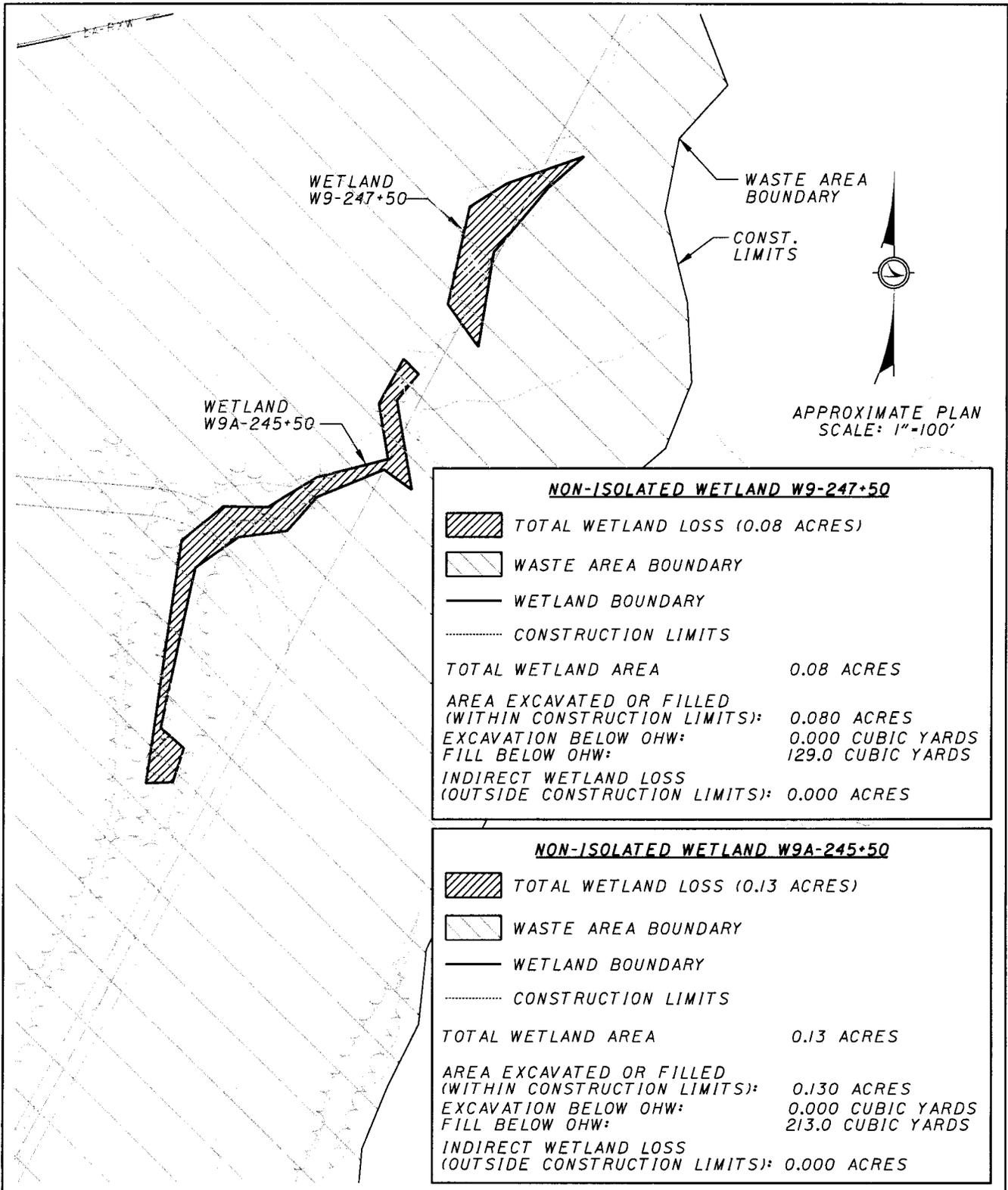
**IMPACT TO NON-ISOLATED
WETLAND W12-248+00**

OHIO DEPARTMENT OF TRANSPORTATION
U.S. ROUTE 33 IN
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Figure 10



IMPACT TO NON-ISOLATED WETLAND W9-247+50 & W9A-245+50

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U.S. Army Corps of Engineers 404 Permit and OEPA Section 401 Water Quality Certification Application

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Figure 11



APPROXIMATE PLAN
SCALE: 1"=50'

STORAGE AREA
BOUNDARY

☉ SURVEY & CONST.
U.S. 33

WETLAND
247+25

CONST.
LIMITS

CONST.
LIMITS

WASTE AREA
BOUNDARY

NON-ISOLATED WETLAND 247+25

 TOTAL WETLAND LOSS (0.07 ACRES)

 STORAGE AREA BOUNDARY

 WASTE AREA BOUNDARY

 WETLAND BOUNDARY

 CONSTRUCTION LIMITS

TOTAL WETLAND AREA 0.07 ACRES

AREA EXCAVATED OR FILLED
(WITHIN CONSTRUCTION LIMITS): 0.063 ACRES

EXCAVATION BELOW OHW: 101.00 CUBIC YARDS

FILL BELOW OHW: 0.000 CUBIC YARDS

INDIRECT WETLAND LOSS
(OUTSIDE CONSTRUCTION LIMITS): 0.006 ACRES



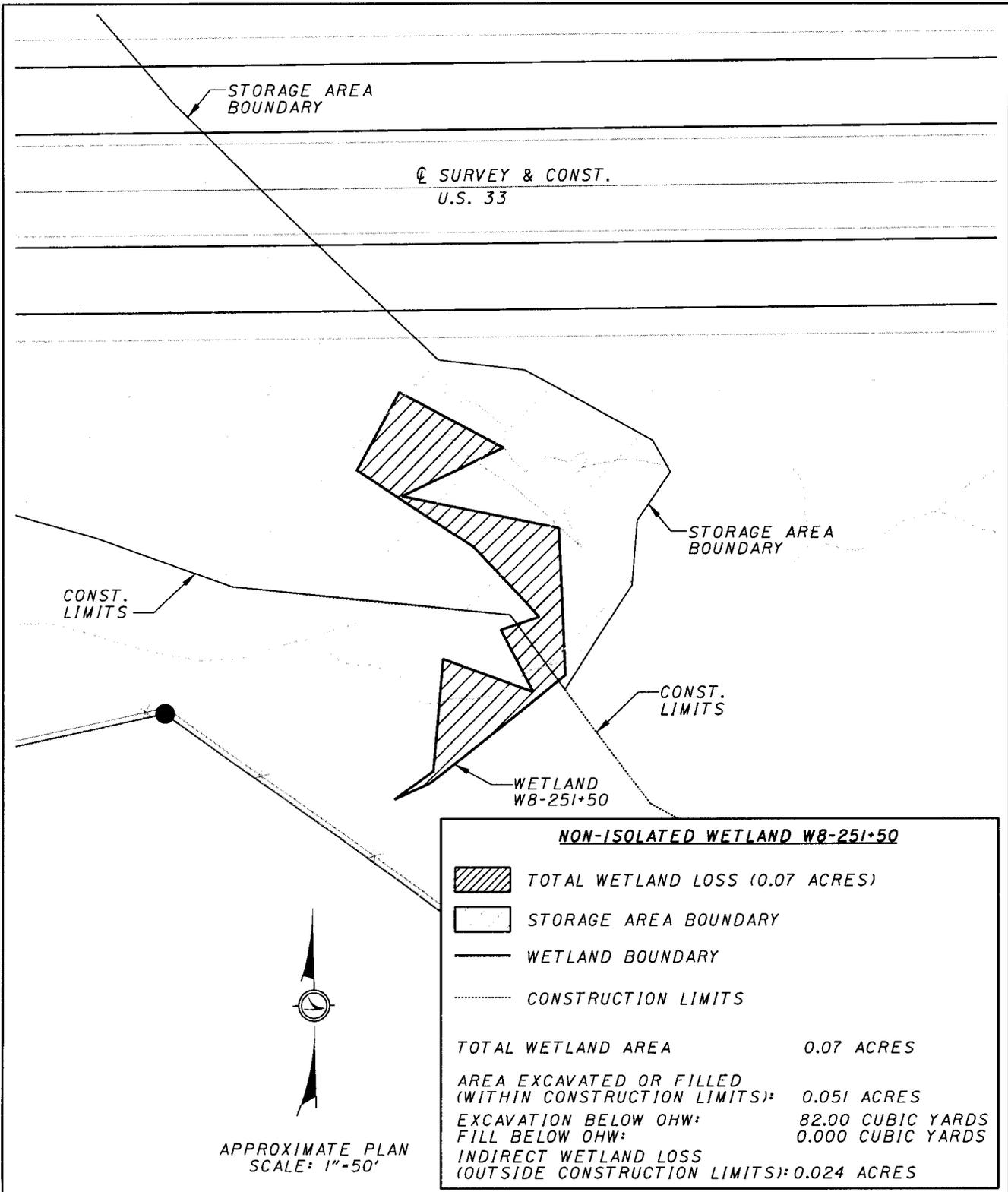
**IMPACT TO NON-ISOLATED
WETLAND 247+25**

OHIO DEPARTMENT OF TRANSPORTATION
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Certification
Application

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Figure 12



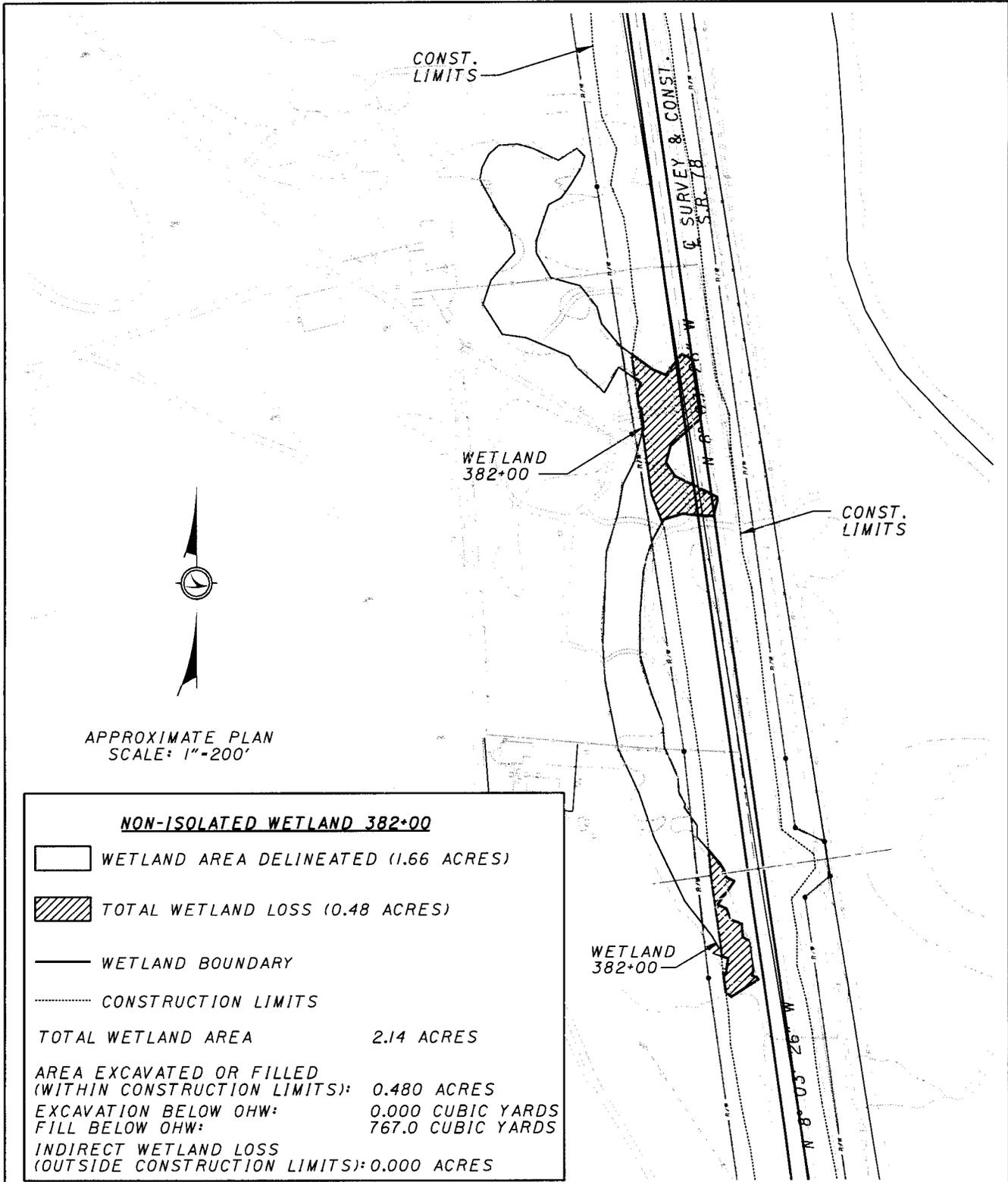
IMPACT TO NON-ISOLATED WETLAND W8-251+50

OHIO DEPARTMENT OF TRANSPORTATION
U.S. ROUTE 33 IN
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Figure 13



APPROXIMATE PLAN
SCALE: 1"=200'

NON-ISOLATED WETLAND 382+00	
	WETLAND AREA DELINEATED (1.66 ACRES)
	TOTAL WETLAND LOSS (0.48 ACRES)
	WETLAND BOUNDARY
	CONSTRUCTION LIMITS
TOTAL WETLAND AREA	2.14 ACRES
AREA EXCAVATED OR FILLED (WITHIN CONSTRUCTION LIMITS):	0.480 ACRES
EXCAVATION BELOW OHW:	0.000 CUBIC YARDS
FILL BELOW OHW:	767.0 CUBIC YARDS
INDIRECT WETLAND LOSS (OUTSIDE CONSTRUCTION LIMITS):	0.000 ACRES



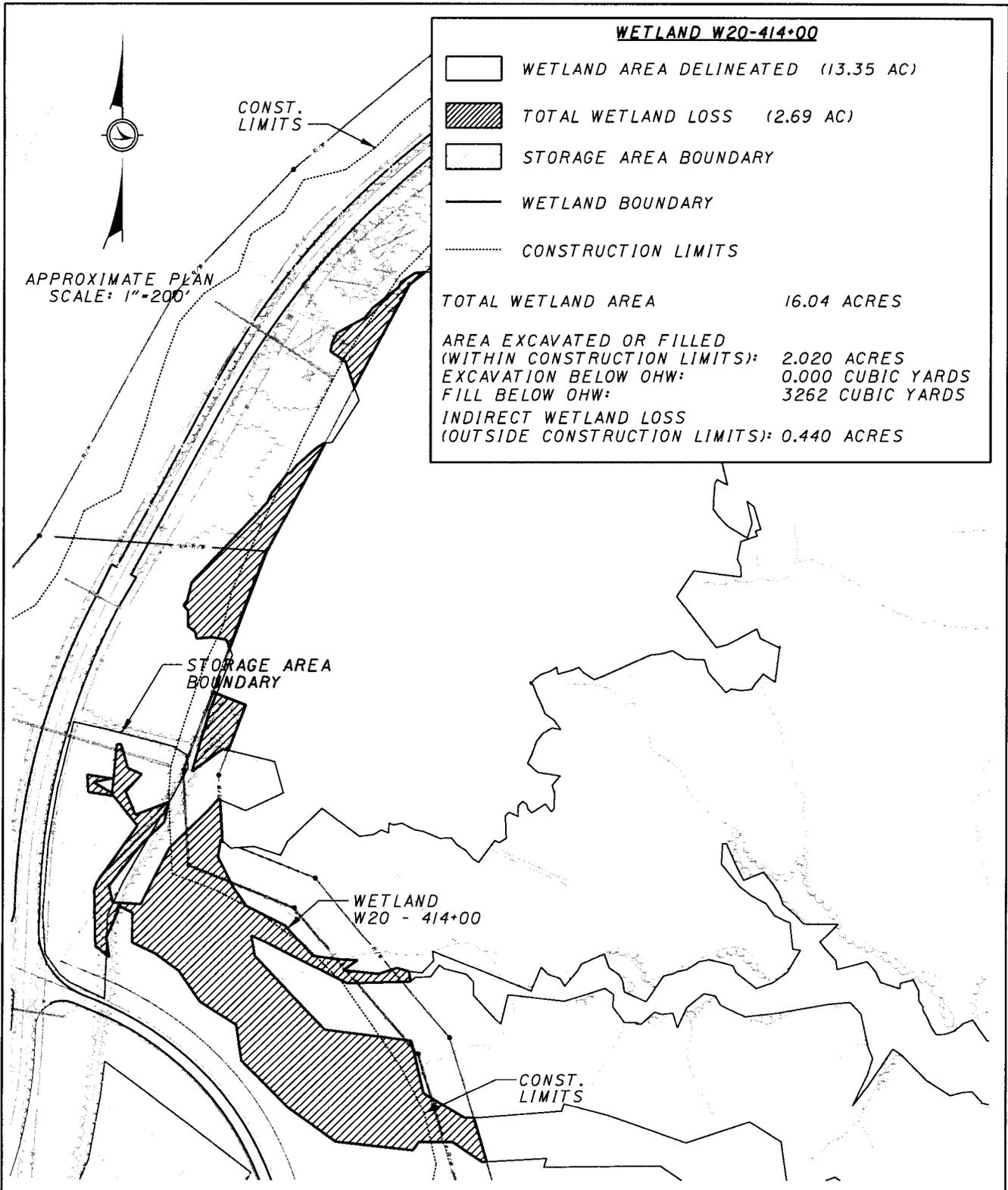
IMPACT TO NON-ISOLATED WETLAND 382+00

OHIO DEPARTMENT OF TRANSPORTATION
U.S. ROUTE 33 IN
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Figure 14



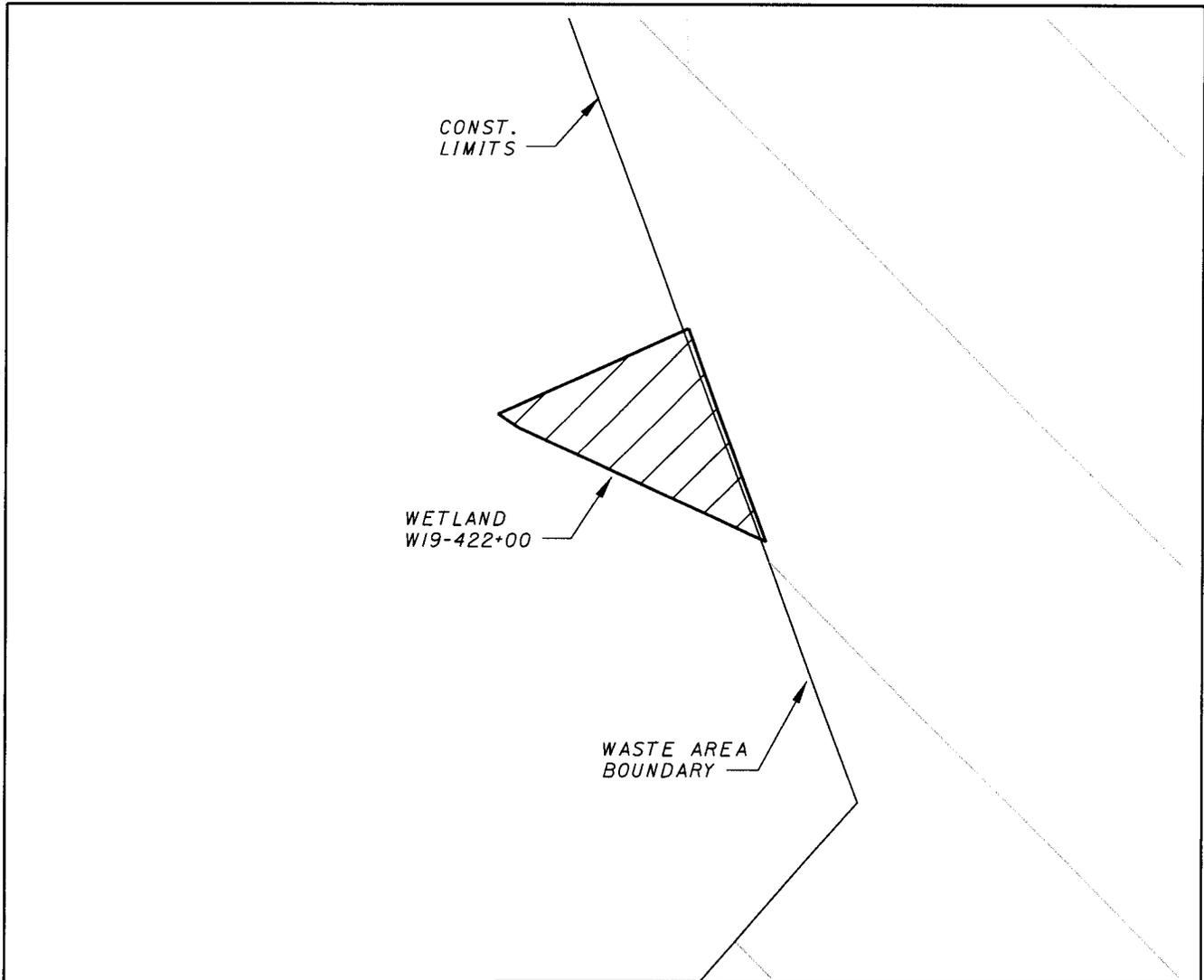
IMPACT TO NON-ISOLATED WETLAND W20 - 414+00

OHIO DEPARTMENT OF TRANSPORTATION
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Figure 15



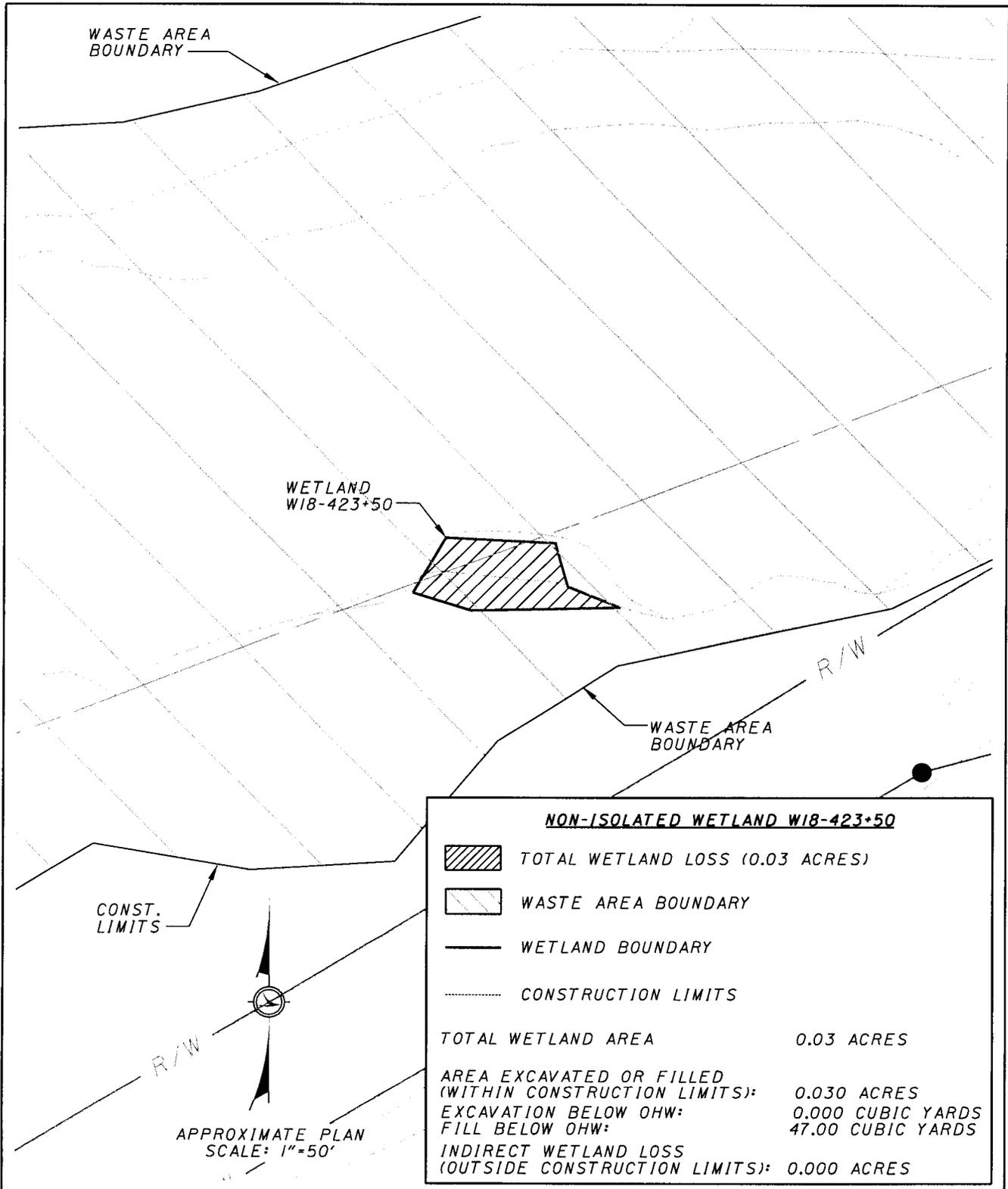
APPROXIMATE PLAN
SCALE: 1"=20'

NON-ISOLATED WETLAND W19-422+00	
	TOTAL WETLAND LOSS (0.01 ACRES)
	WASTE AREA BOUNDARY
	WETLAND BOUNDARY
	CONSTRUCTION LIMITS
TOTAL WETLAND AREA 0.01 ACRES	
AREA EXCAVATED OR FILLED (WITHIN CONSTRUCTION LIMITS): 0.008 ACRES	
EXCAVATION BELOW OHW: 0.000 CUBIC YARDS	
FILL BELOW OHW: 13.00 CUBIC YARDS	
INDIRECT WETLAND LOSS (OUTSIDE CONSTRUCTION LIMITS): 0.000 ACRES	



IMPACT TO NON-ISOLATED WETLAND W19-422+00
 OHIO DEPARTMENT OF TRANSPORTATION
 U.S. ROUTE 33 IN
 HOCKING AND ATHENS COUNTIES
 HOC/ATH-33-17.00/0.00 PID 14040

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 Figure 16



IMPACT TO NON-ISOLATED WETLAND W18-423+50

OHIO DEPARTMENT OF TRANSPORTATION
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Figure 17

NON-ISOLATED WETLAND 434+75

 TOTAL WETLAND LOSS (0.02 ACRES)

 OPEN WATER (0.265 ACRES)

 WETLAND BOUNDARY

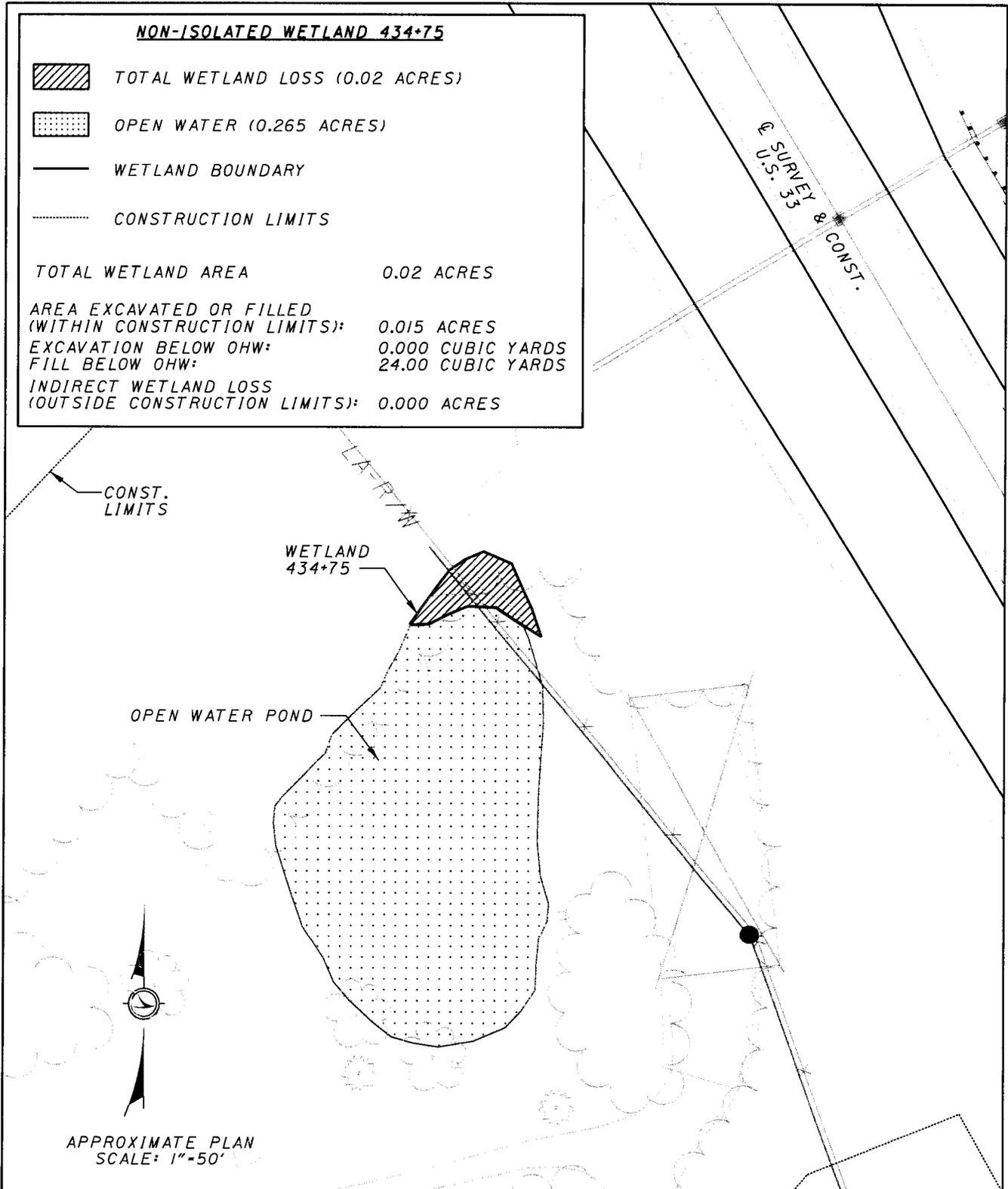
 CONSTRUCTION LIMITS

TOTAL WETLAND AREA 0.02 ACRES

AREA EXCAVATED OR FILLED
(WITHIN CONSTRUCTION LIMITS): 0.015 ACRES

EXCAVATION BELOW OHW: 0.000 CUBIC YARDS
FILL BELOW OHW: 24.00 CUBIC YARDS

INDIRECT WETLAND LOSS
(OUTSIDE CONSTRUCTION LIMITS): 0.000 ACRES



APPROXIMATE PLAN
SCALE: 1"=50'



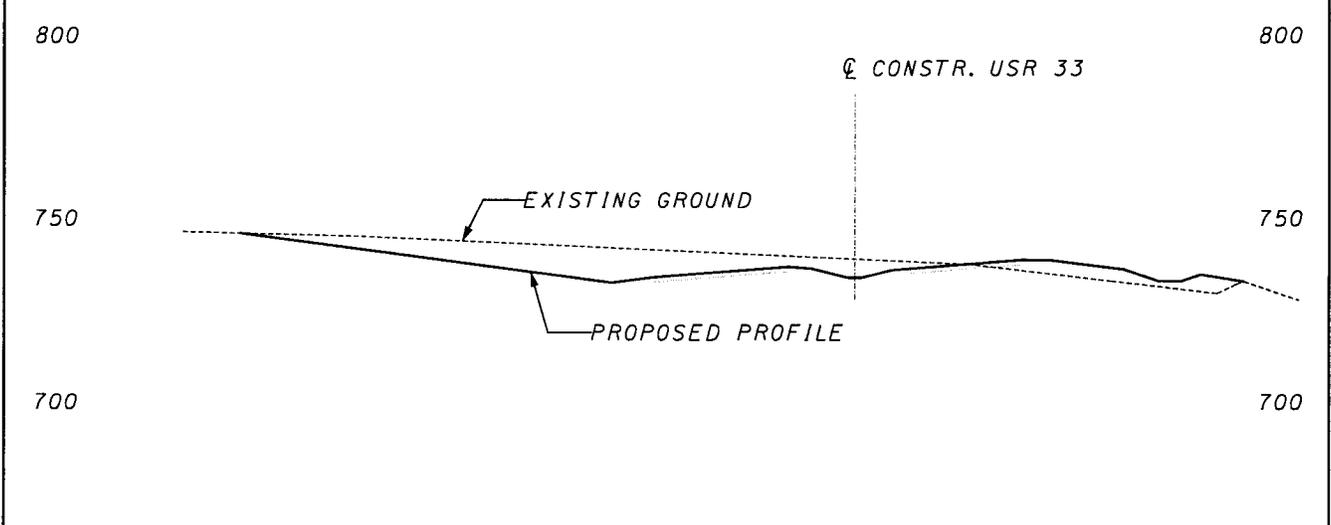
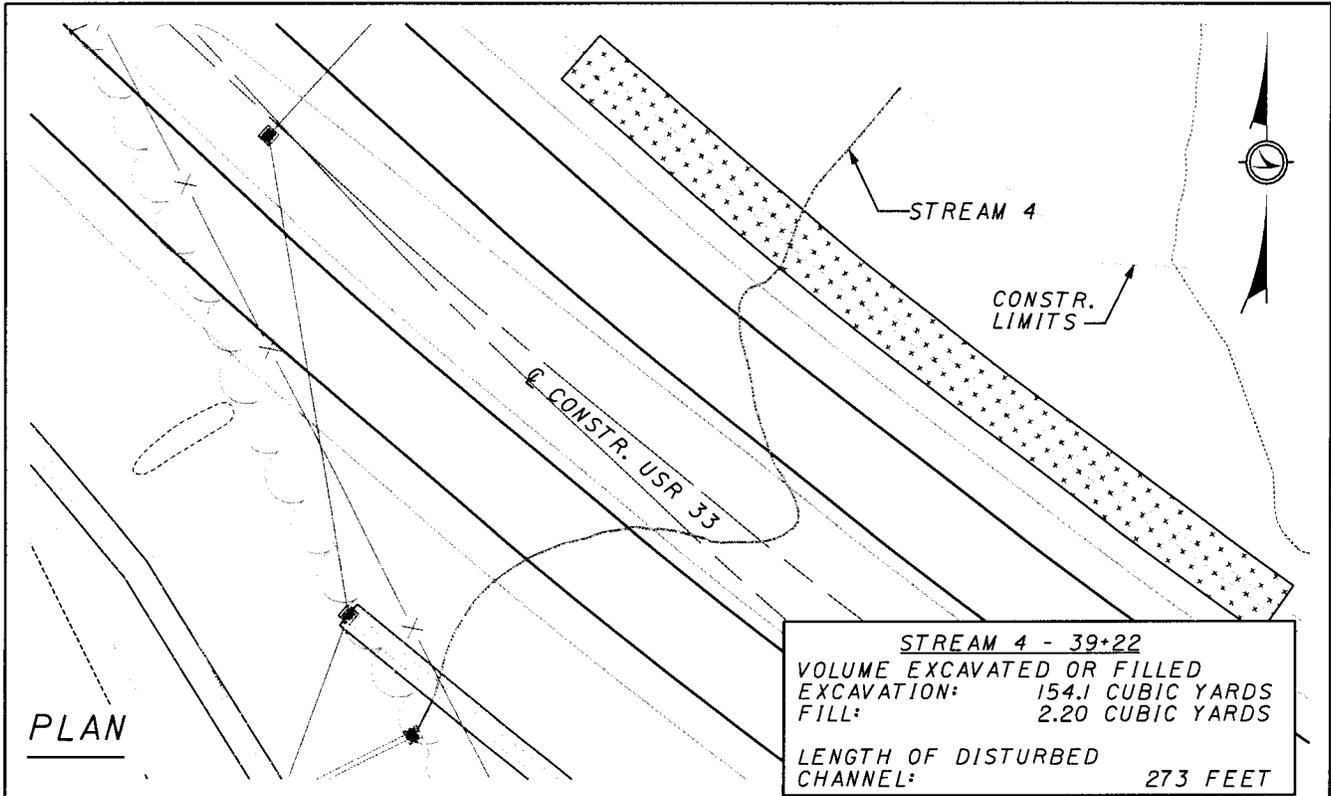
**IMPACT TO NON-ISOLATED
WETLAND 434+75**

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HOCKING AND ATHENS COUNTIES
HOC/ATH-33-17.00/0.00 PID 14040

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Certification
Application

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Figure 18



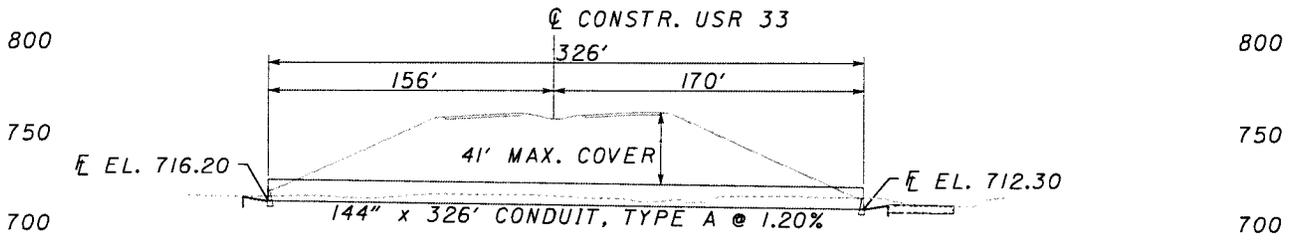
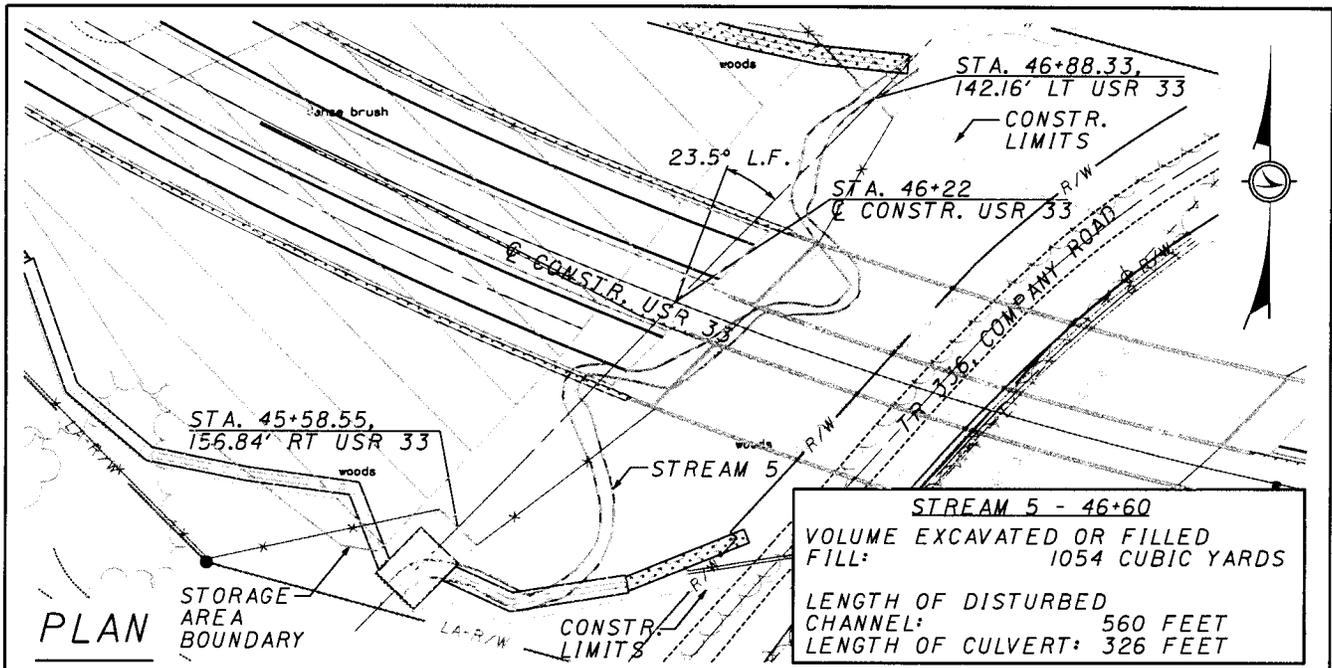
IMPACT TO STREAM
4

OHIO DEPARTMENT OF TRANSPORTATION
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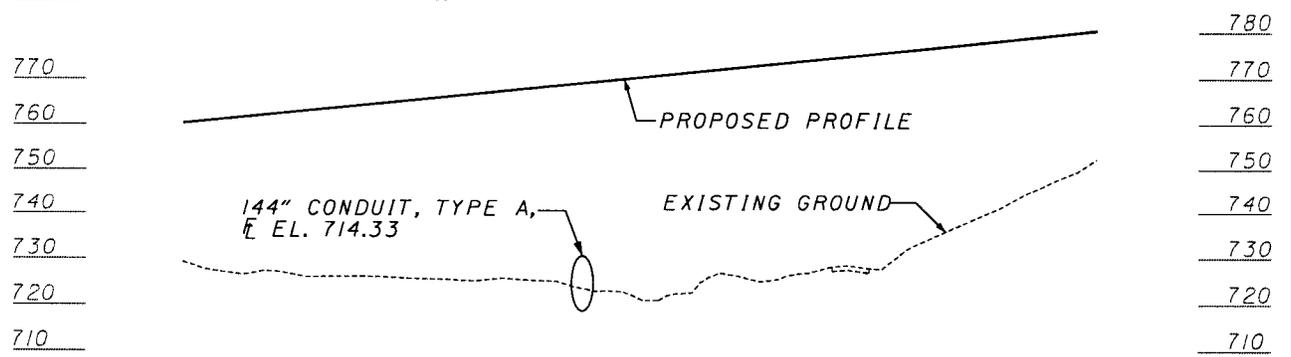
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Date: 03-09-2005

Figure 19



CULVERT PROFILE



APPROXIMATE PLAN SCALE: 1"=100'
 APPROXIMATE PROFILE SCALE: 1"=100' HOR., 1"=100' VER.
 APPROXIMATE CROSS-SECTION SCALE: 1"=100' HOR., 1"=40' VER.



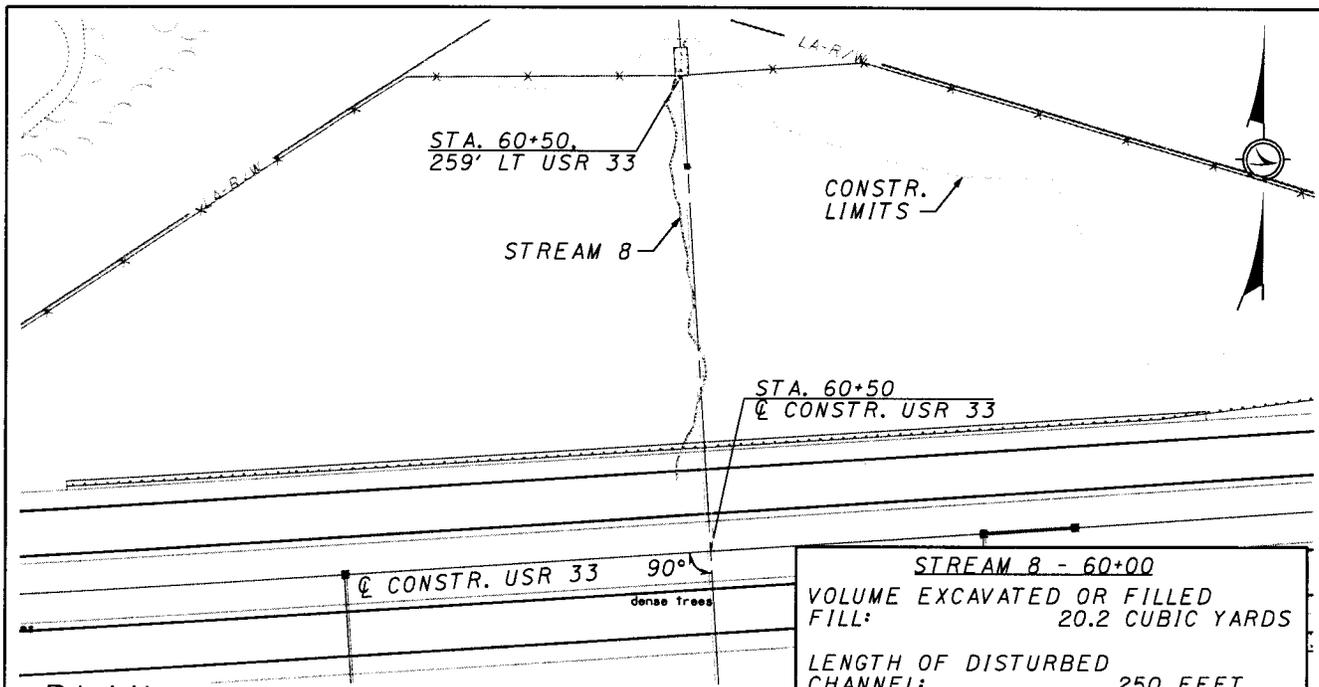
IMPACT TO STREAM 5

OHIO DEPARTMENT OF TRANSPORTATION
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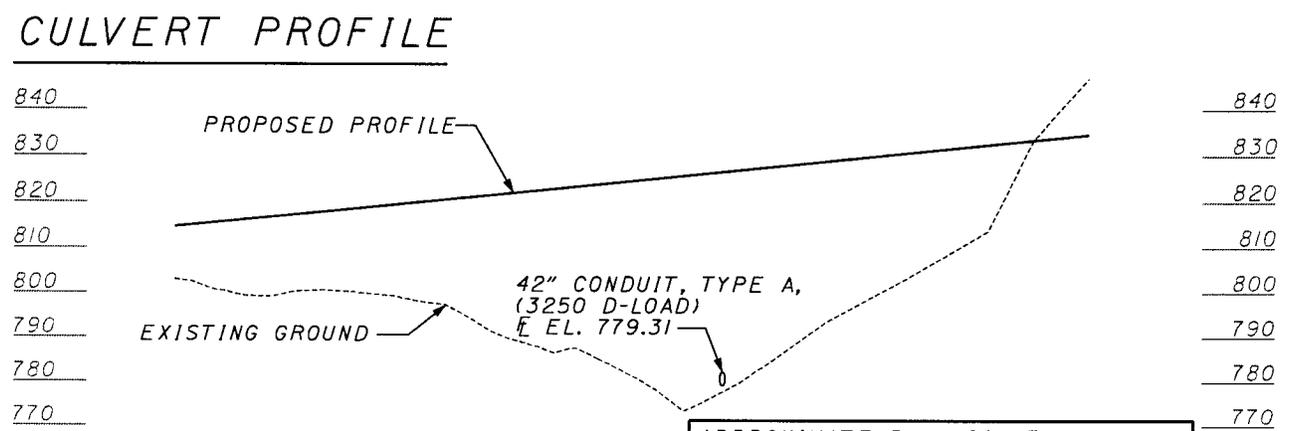
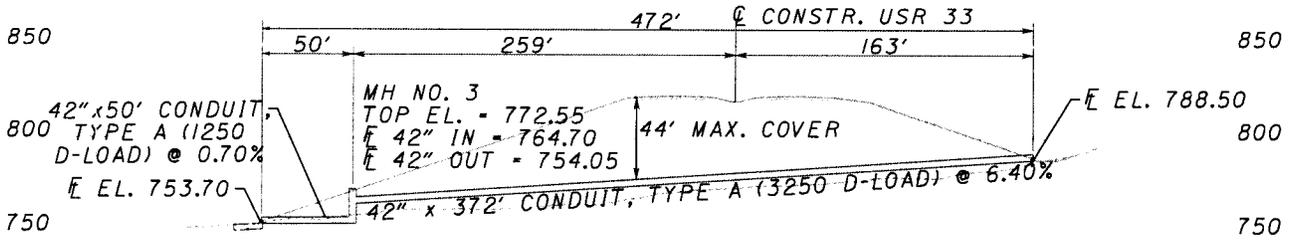
U.S. Army Corps of Engineers 404 Permit and OSPA Section 401 Water Quality Certification Application

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Figure 20



STREAM 8 - 60+00	
VOLUME EXCAVATED OR FILLED FILL:	20.2 CUBIC YARDS
LENGTH OF DISTURBED CHANNEL:	250 FEET
LENGTH OF CULVERT:	472 FEET



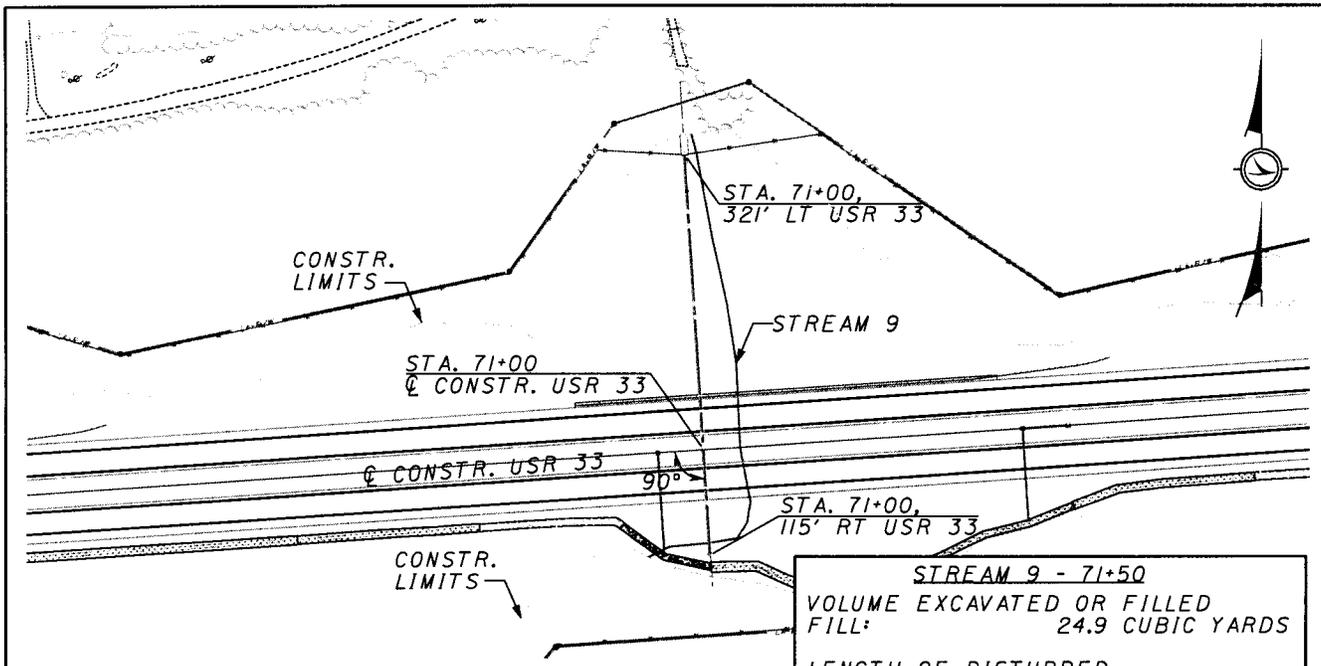
APPROXIMATE PLAN SCALE: 1"=100'
 APPROXIMATE PROFILE SCALE:
 1"=100' HOR., 1"=100' VER.
 APPROXIMATE CROSS-SECTION SCALE:
 1"=100' HOR., 1"=40' VER.



IMPACT TO STREAM
8

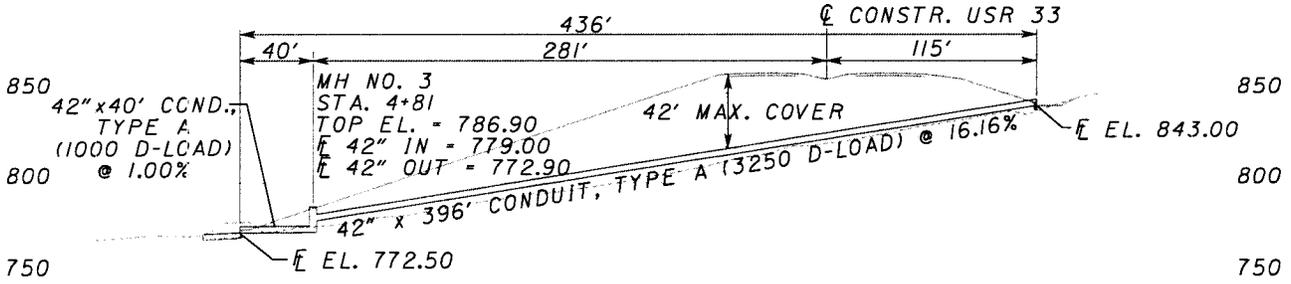
OHIO DEPARTMENT OF TRANSPORTATION
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U.S. Army Corps of Engineers 404 Permit and OSPA Section 401 Water Quality Certification Application
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 Figure 21

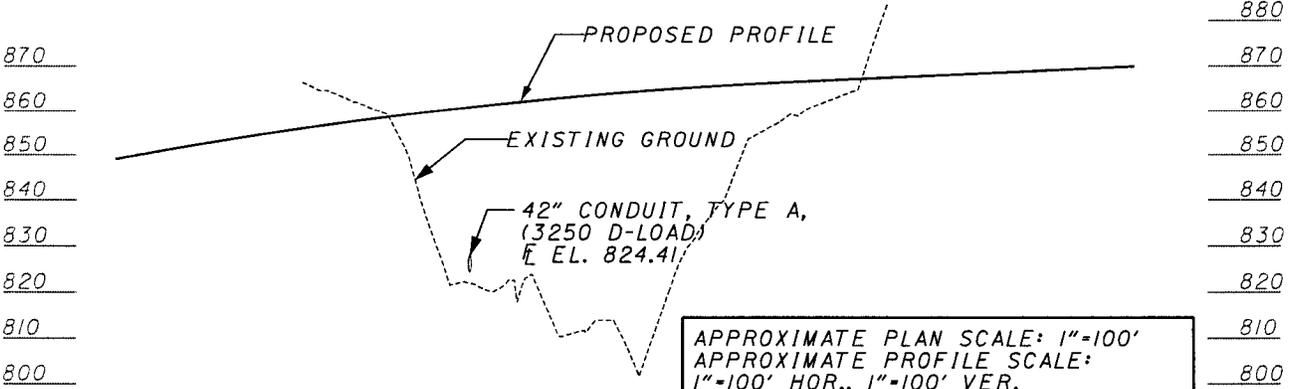


STREAM 9 - 71+50
 VOLUME EXCAVATED OR FILLED
 FILL: 24.9 CUBIC YARDS
 LENGTH OF DISTURBED
 CHANNEL: 550 FEET
 LENGTH OF CULVERT: 436 FEET

PLAN



CULVERT PROFILE



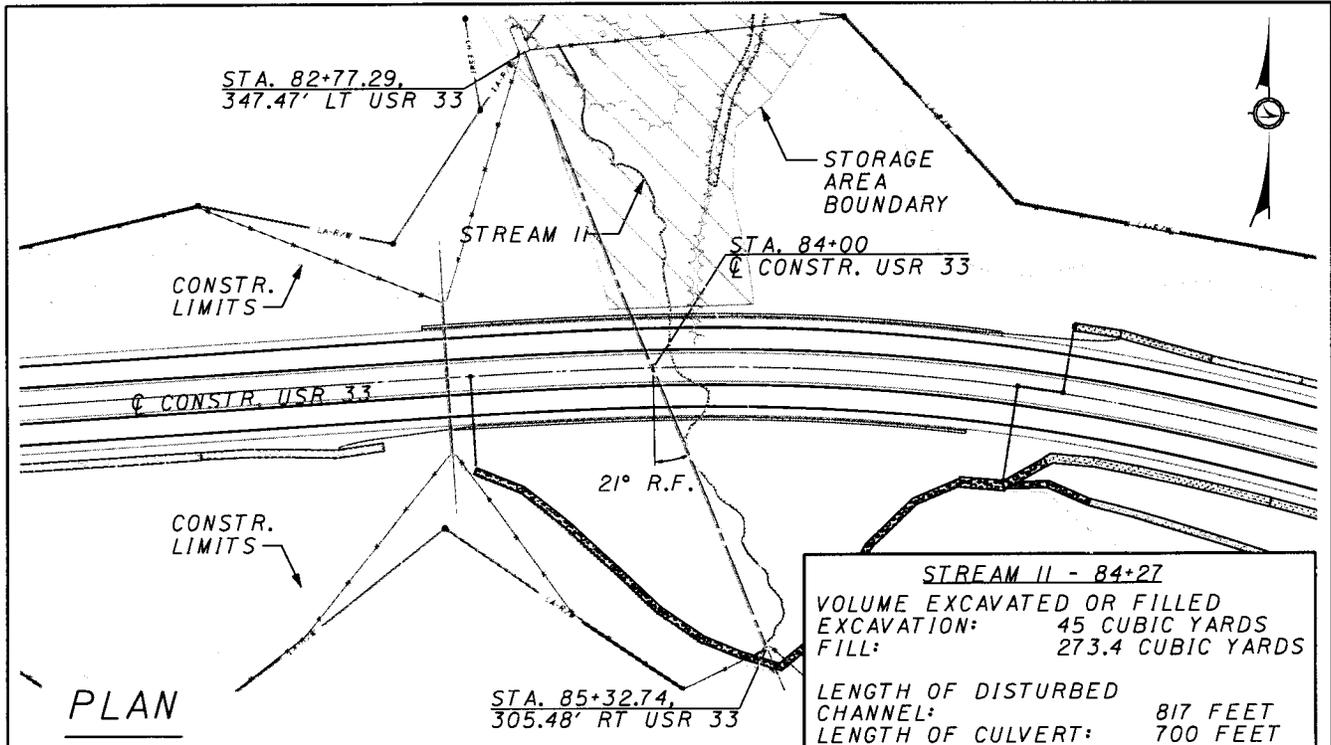
APPROXIMATE PLAN SCALE: 1"=100'
 APPROXIMATE PROFILE SCALE:
 1"=100' HOR., 1"=100' VER.
 APPROXIMATE CROSS-SECTION SCALE:
 1"=100' HOR., 1"=40' VER.

CROSS-SECTION

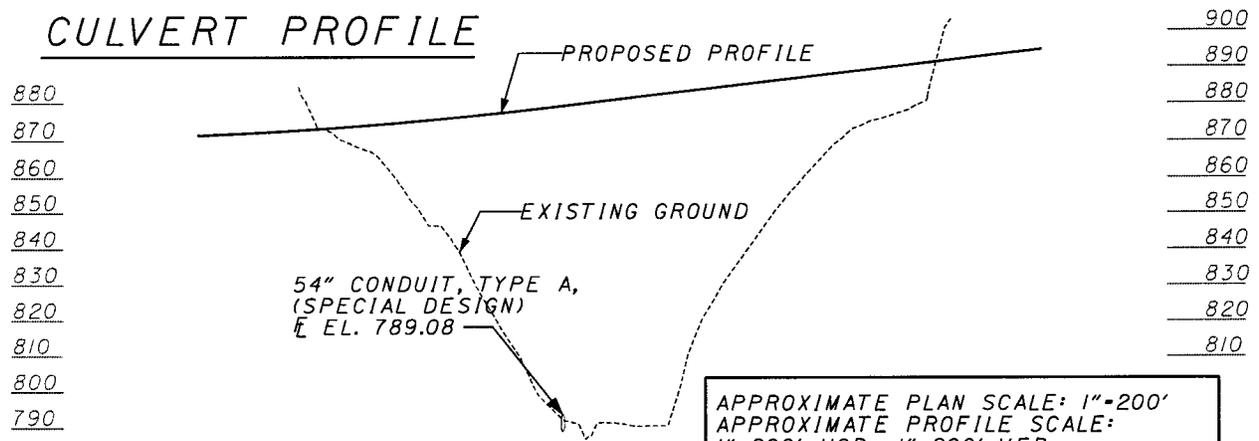
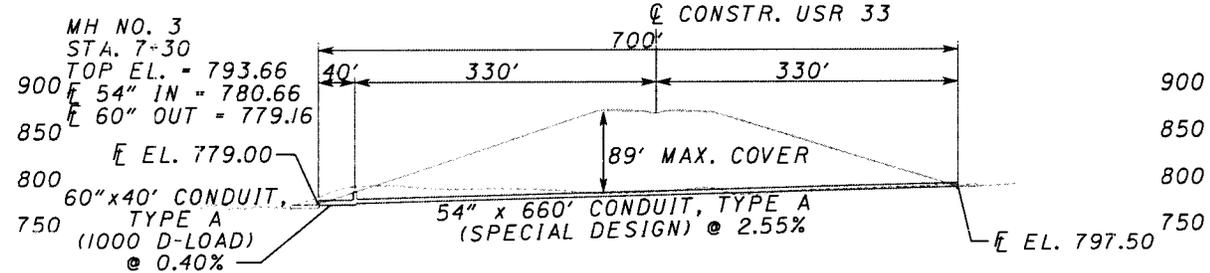


IMPACT TO STREAM
9
 OHIO DEPARTMENT OF TRANSPORTATION
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 Figure 22



STREAM II - 84+27	
VOLUME EXCAVATED OR FILLED	
EXCAVATION:	45 CUBIC YARDS
FILL:	273.4 CUBIC YARDS
LENGTH OF DISTURBED CHANNEL:	817 FEET
LENGTH OF CULVERT:	700 FEET



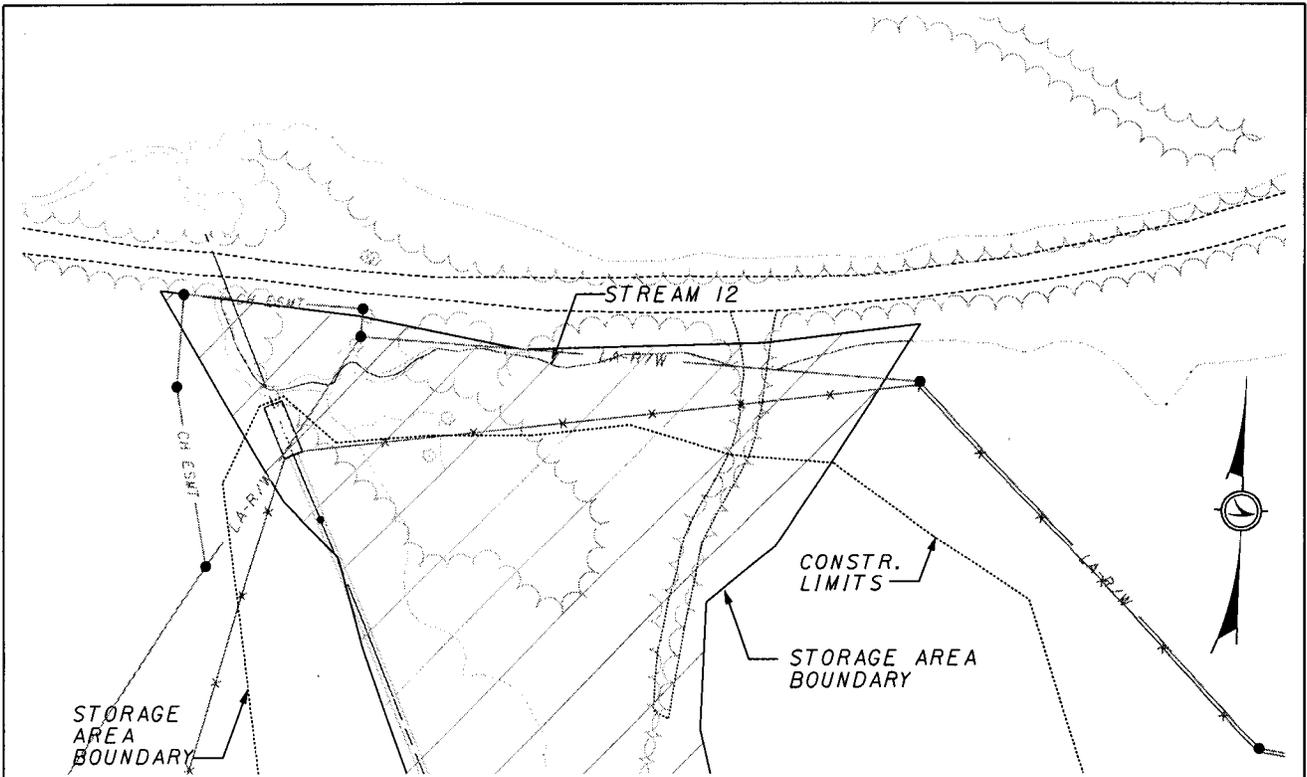
APPROXIMATE PLAN SCALE: 1"=200'
 APPROXIMATE PROFILE SCALE: 1"=200' HOR., 1"=200' VERT.
 APPROXIMATE CROSS SECTION SCALE: 1"=200' HOR., 1"=50' VERT.



IMPACT TO STREAM
11

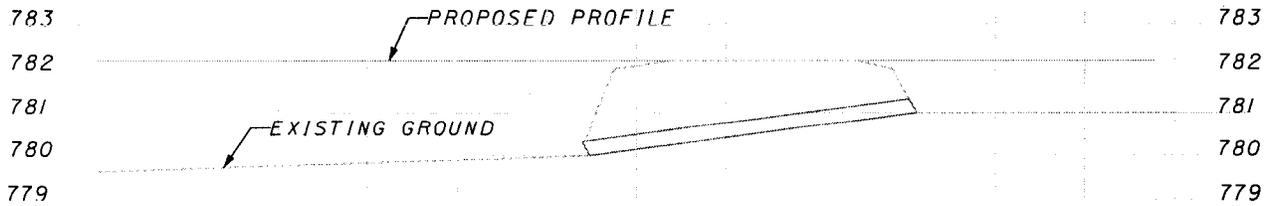
OHIO DEPARTMENT OF TRANSPORTATION
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 Figure 23



PLAN

STREAM 12 - 84+27	
VOLUME EXCAVATED OR FILLED	
FILL:	2.7 CUBIC YARDS
LENGTH OF DISTURBED	
CHANNEL:	25 FEET
LENGTH OF CULVERT:	25 FEET



STREAM PROFILE

APPROXIMATE PLAN SCALE: 1"=100' APPROXIMATE PROFILE SCALE: 1"=50' HOR., 1"=4' VER.
--



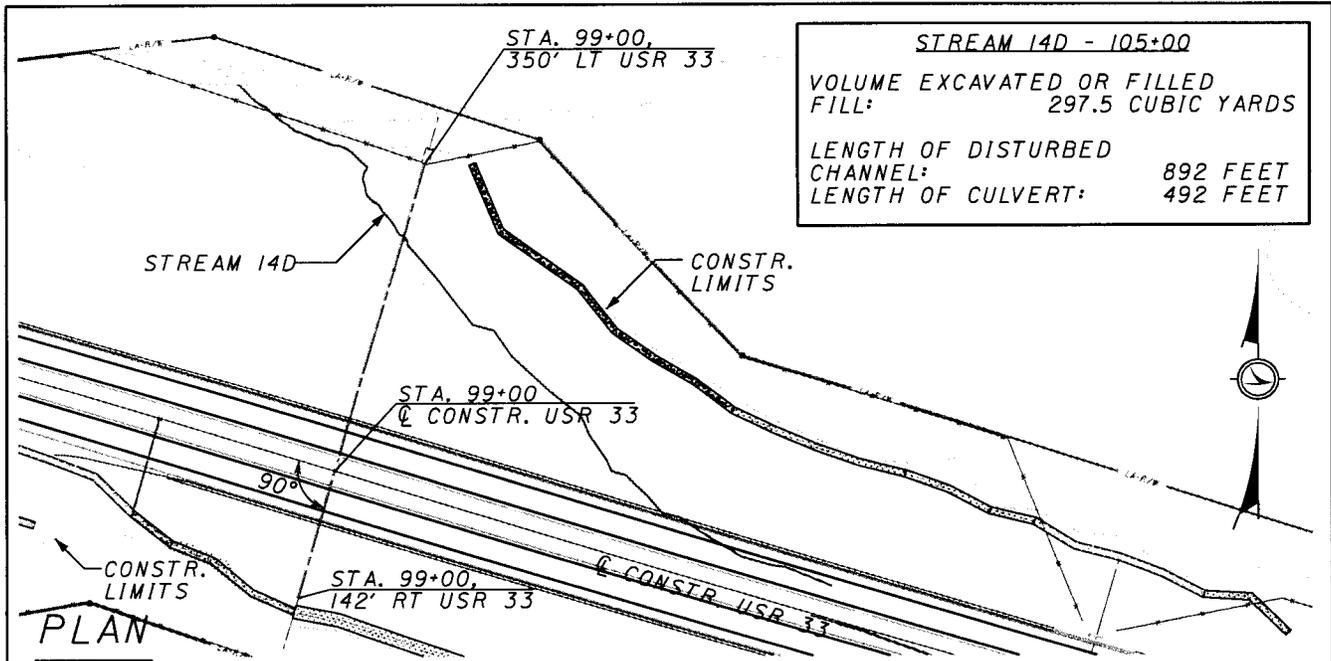
**IMPACT TO STREAM
12**

OHIO DEPARTMENT OF TRANSPORTATION
 U.S. ROUTE 33 IN
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 HOC/ATH-33-17.00/0.00 PID 14040

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Figure 24

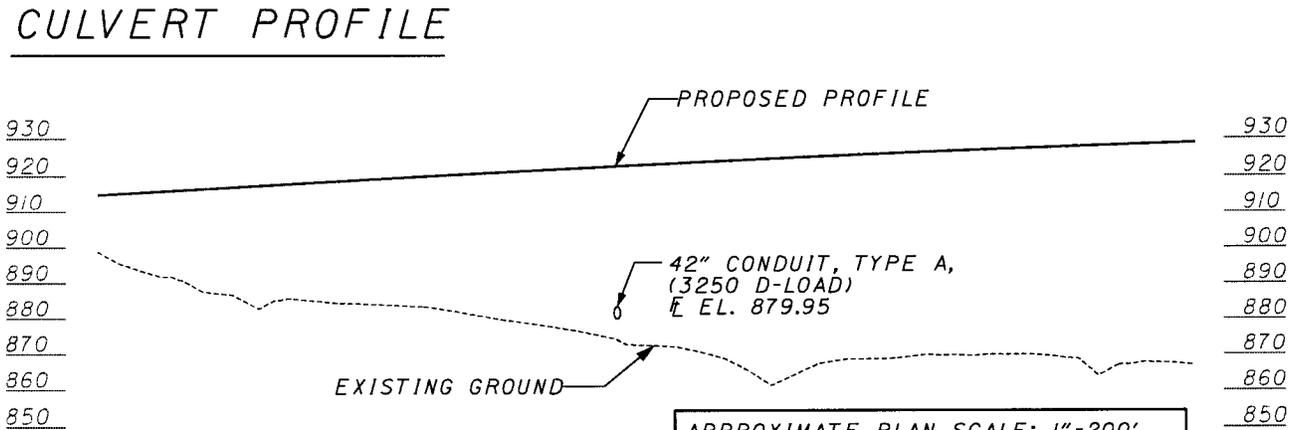
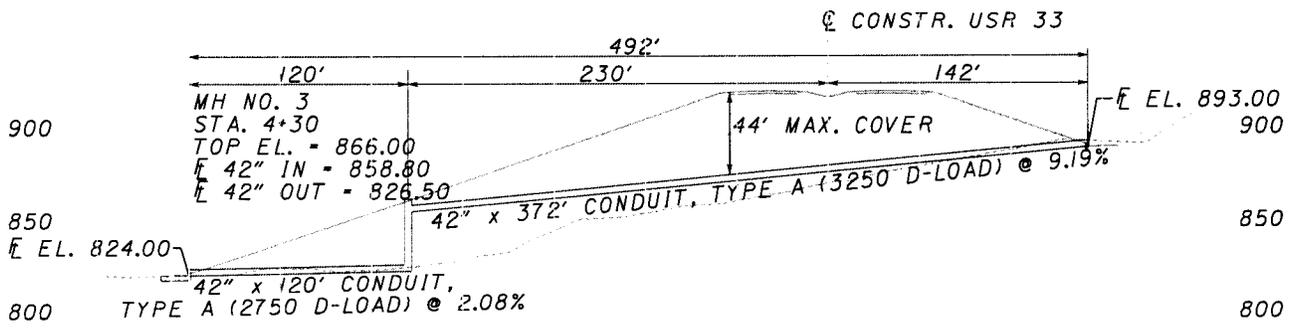


STREAM 14D - 105+00

VOLUME EXCAVATED OR FILLED
FILL: 297.5 CUBIC YARDS

LENGTH OF DISTURBED
CHANNEL: 892 FEET

LENGTH OF CULVERT: 492 FEET



APPROXIMATE PLAN SCALE: 1"=200'
APPROXIMATE PROFILE SCALE:
1"=100' HOR., 1"=100' VER.
APPROXIMATE CROSS-SECTION SCALE:
1"=100' HOR., 1"=50' VER.



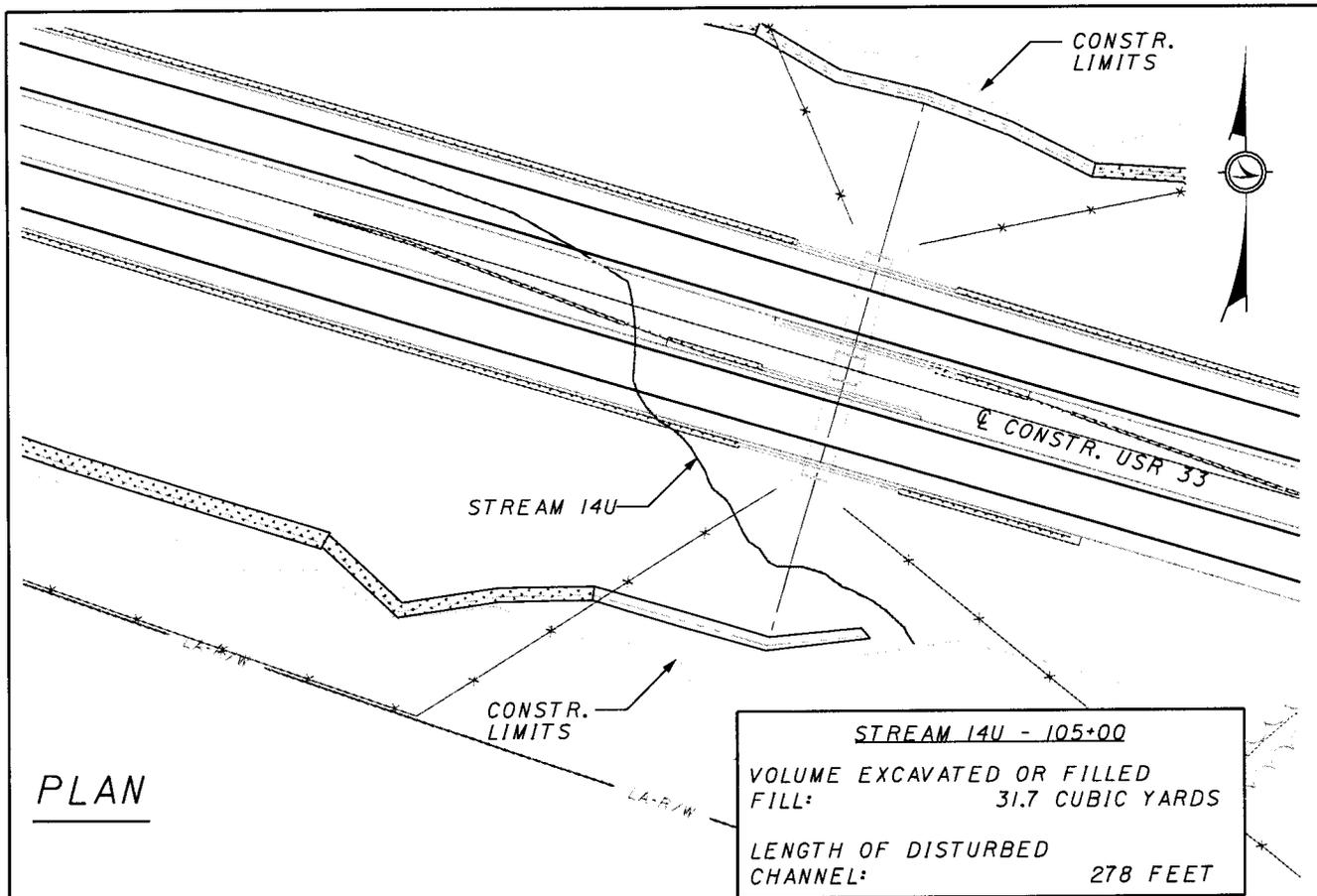
**IMPACT TO STREAM
14D**

OHIO DEPARTMENT OF TRANSPORTATION
U.S. ROUTE 33 IN
HOCKING AND ATHENS COUNTIES
HOC/ATH-33-17.00/0.00 PID 14040

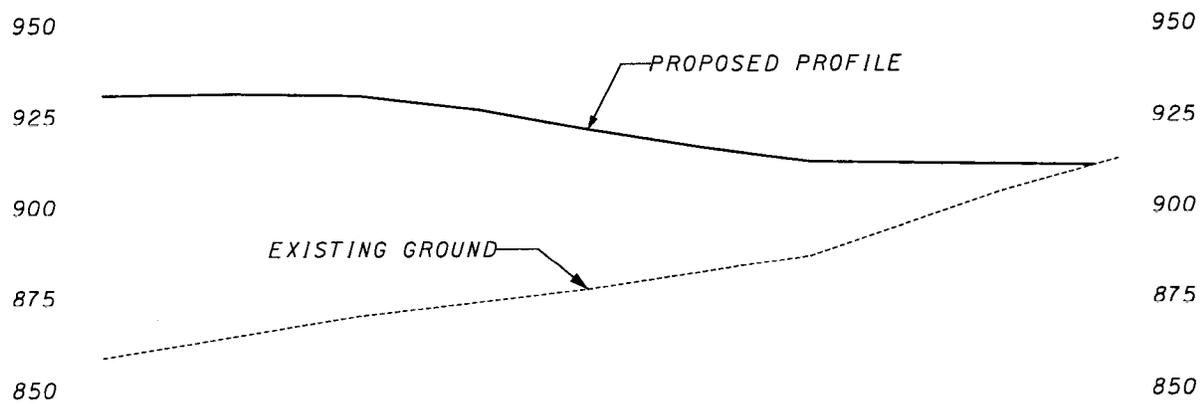
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Figure 25



PLAN



STREAM PROFILE

APPROXIMATE PLAN SCALE: 1"=100' APPROXIMATE PROFILE SCALE: 1"=50' HOR., 1"=50' VER.



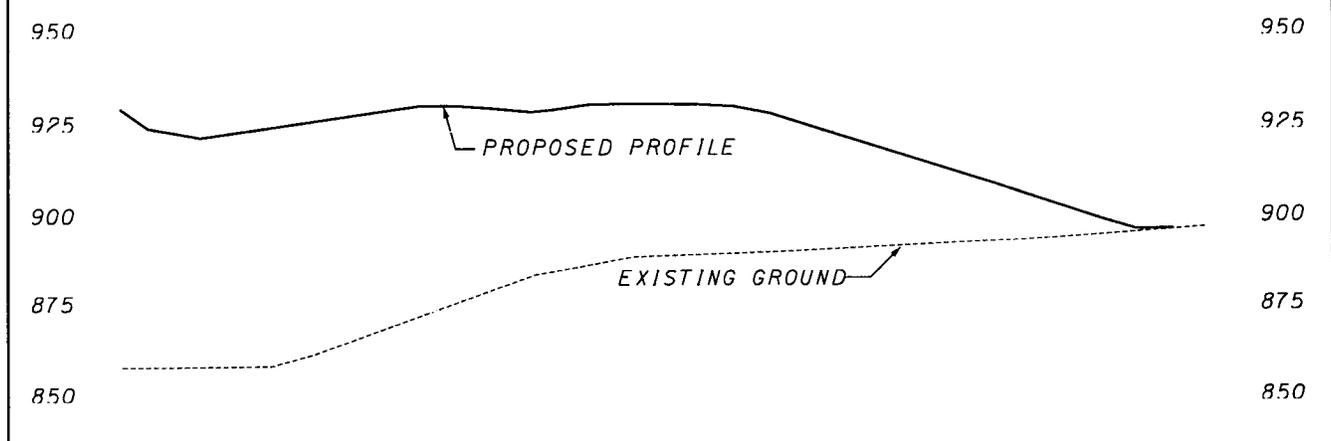
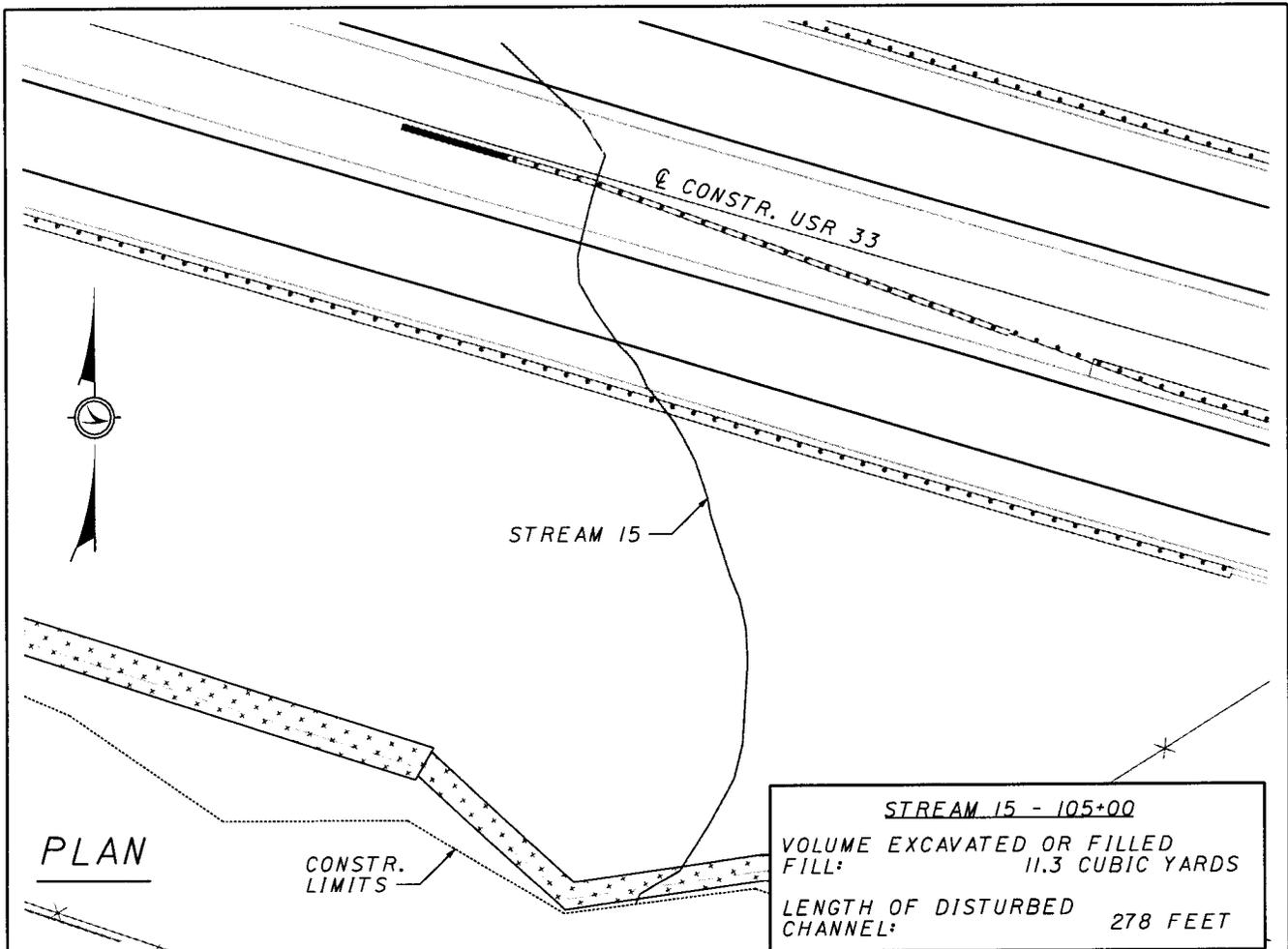
**IMPACT TO STREAM
14U**

OHIO DEPARTMENT OF TRANSPORTATION
 U.S. ROUTE 33 IN
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Figure 26



APPROXIMATE PLAN SCALE: 1"=50'
 APPROXIMATE PROFILE SCALE:
 1"=50' HOR., 1"=50' VER.



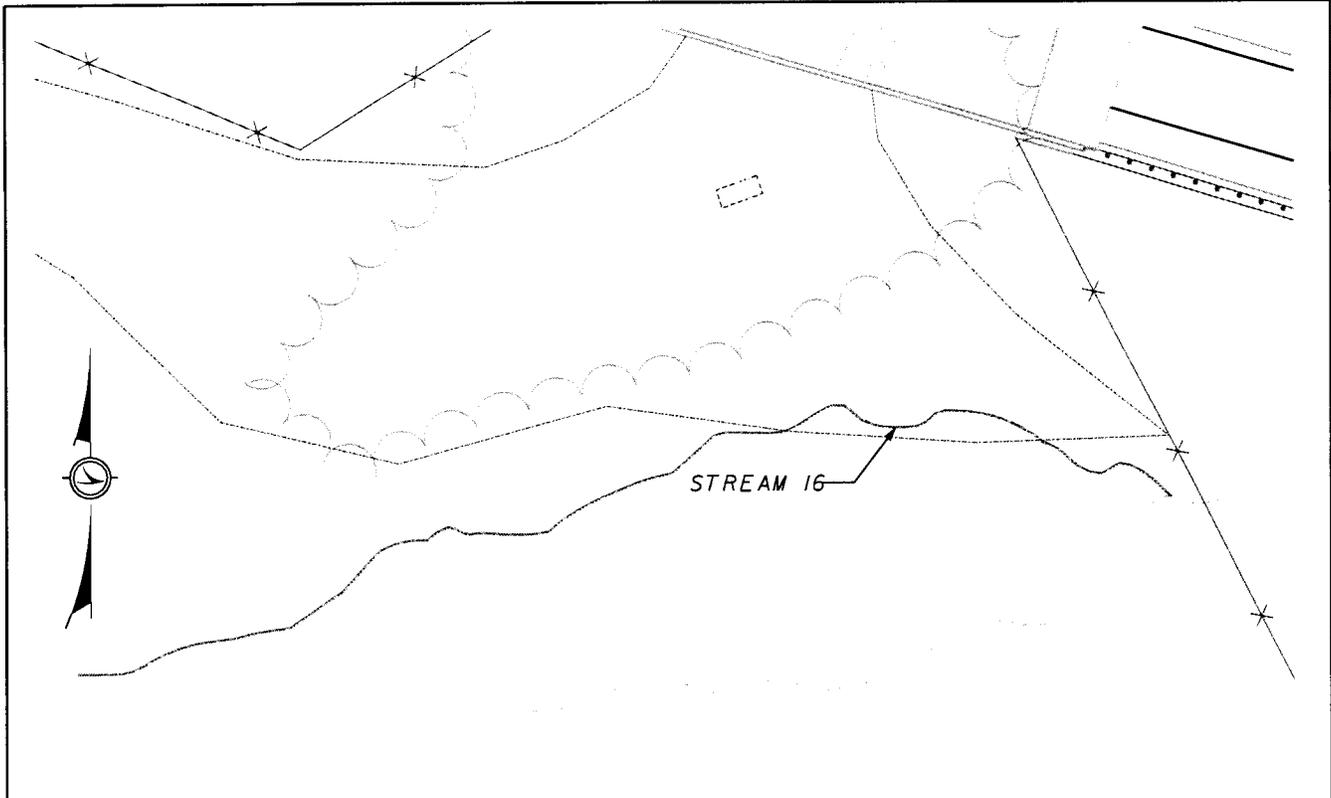
IMPACT TO STREAM
15

OHIO DEPARTMENT OF TRANSPORTATION
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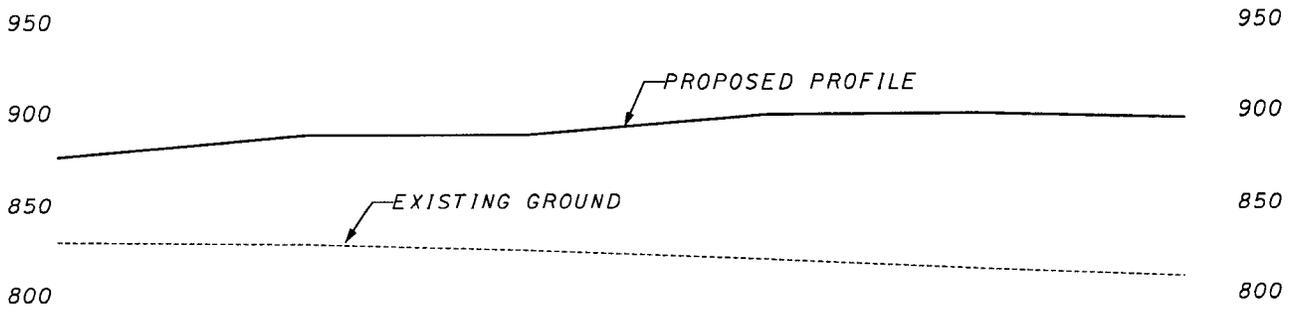
Date: 03-09-2005

Figure 27



PLAN

STREAM 16 - 119+71 TO 128+19
 VOLUME EXCAVATED OR FILLED
 FILL: 25.3 CUBIC YARDS
 LENGTH OF DISTURBED
 CHANNEL: 339 FEET



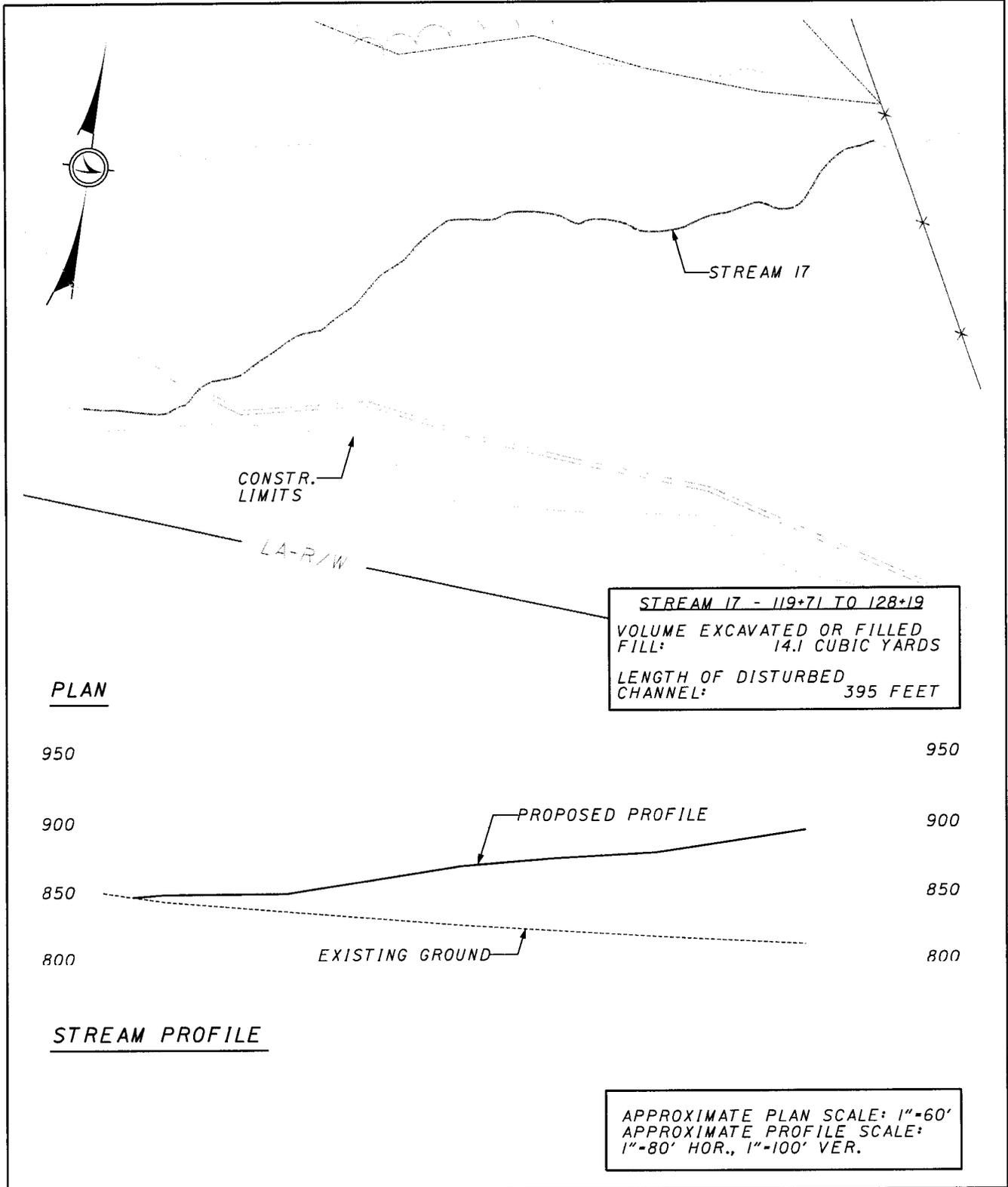
STREAM PROFILE

APPROXIMATE PLAN SCALE: 1"=50'
 APPROXIMATE PROFILE SCALE:
 1"=50' HOR., 1"=100' VER.



**IMPACT TO STREAM
 16**
 OHIO DEPARTMENT OF TRANSPORTATION
 U.S. ROUTE 33 IN
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 HOC/ATH-33-17.00/0.00 PID 14040

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 Figure 28



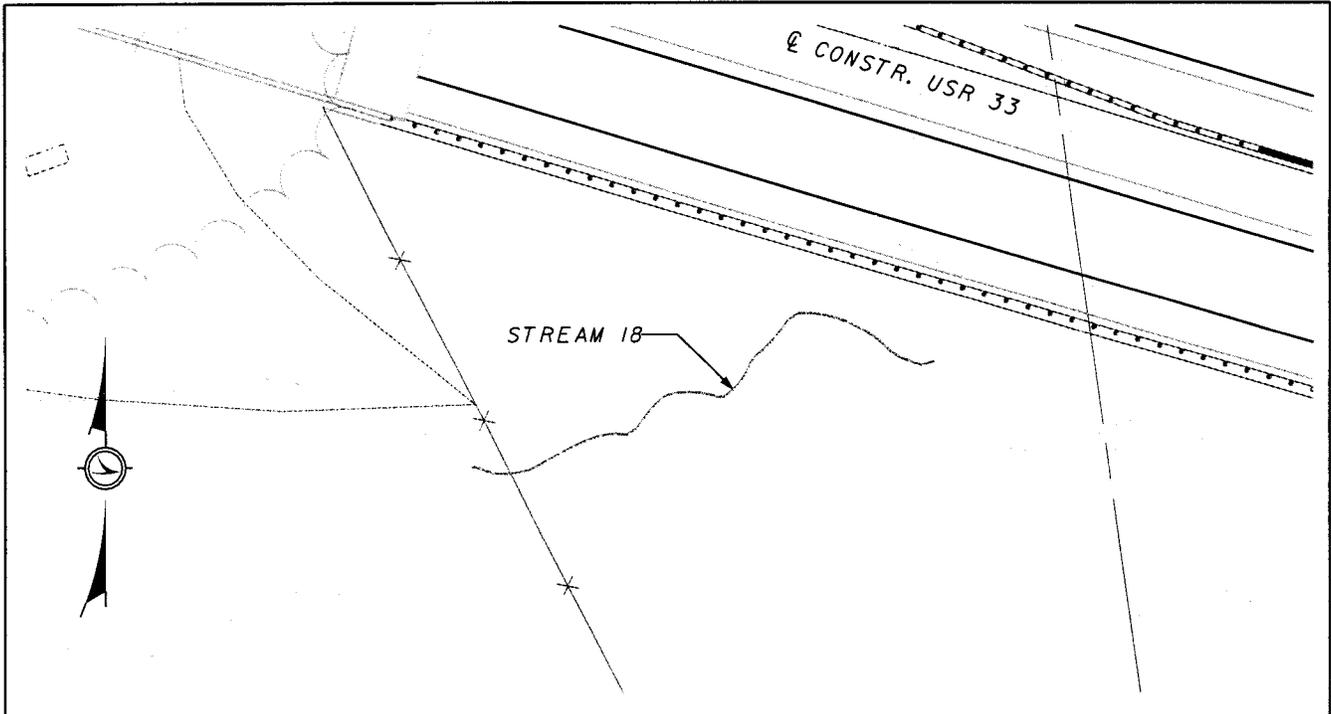
**IMPACT TO STREAM
17**

OHIO DEPARTMENT OF TRANSPORTATION
U.S. ROUTE 33 IN
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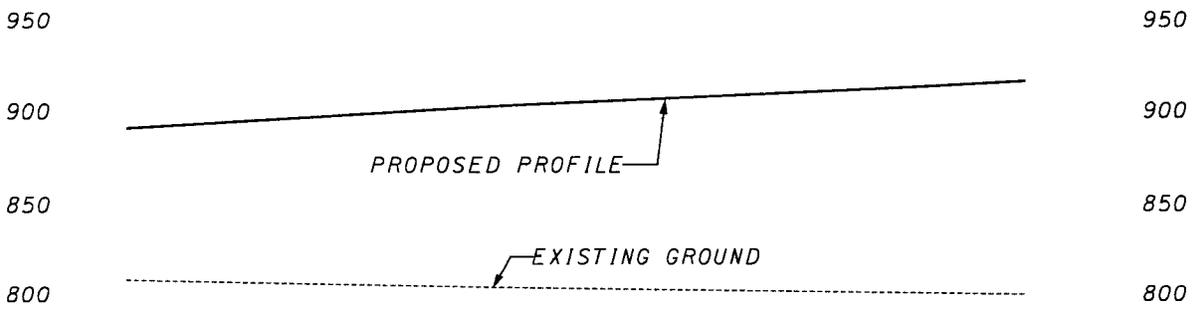
Date: 03-09-2005

Figure 29



PLAN

STREAM 18 - 119+71 TO 128+19
 VOLUME EXCAVATED OR FILLED
 FILL: 22.7 CUBIC YARDS
 LENGTH OF DISTURBED
 CHANNEL: 141 FEET



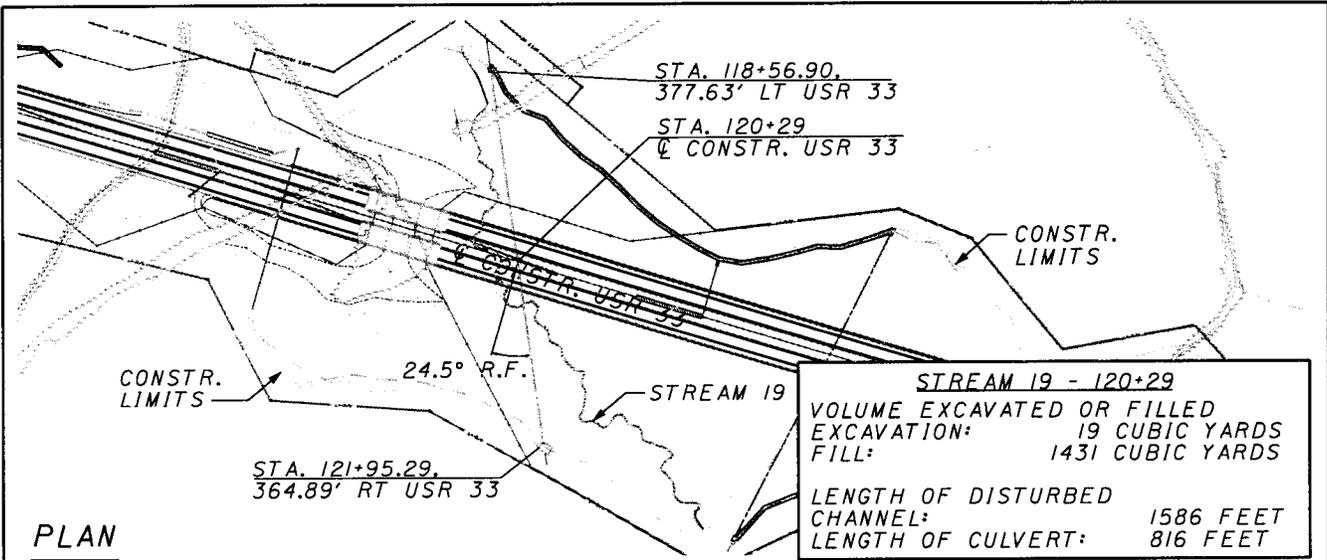
STREAM PROFILE

APPROXIMATE PLAN SCALE: 1"=50'
 APPROXIMATE PROFILE SCALE:
 1"=30' HOR., 1"=100' VER.

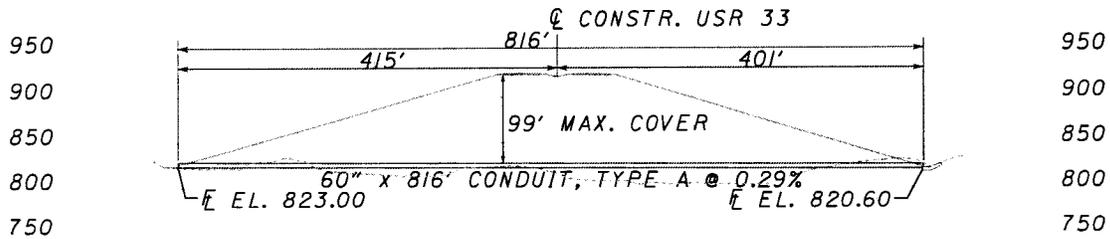


IMPACT TO STREAM
18
 OHIO DEPARTMENT OF TRANSPORTATION
 U.S. ROUTE 33 IN
 HOCKING AND ATHENS COUNTIES
 HOC/ATH-33-17.00/0.00 PID 14040

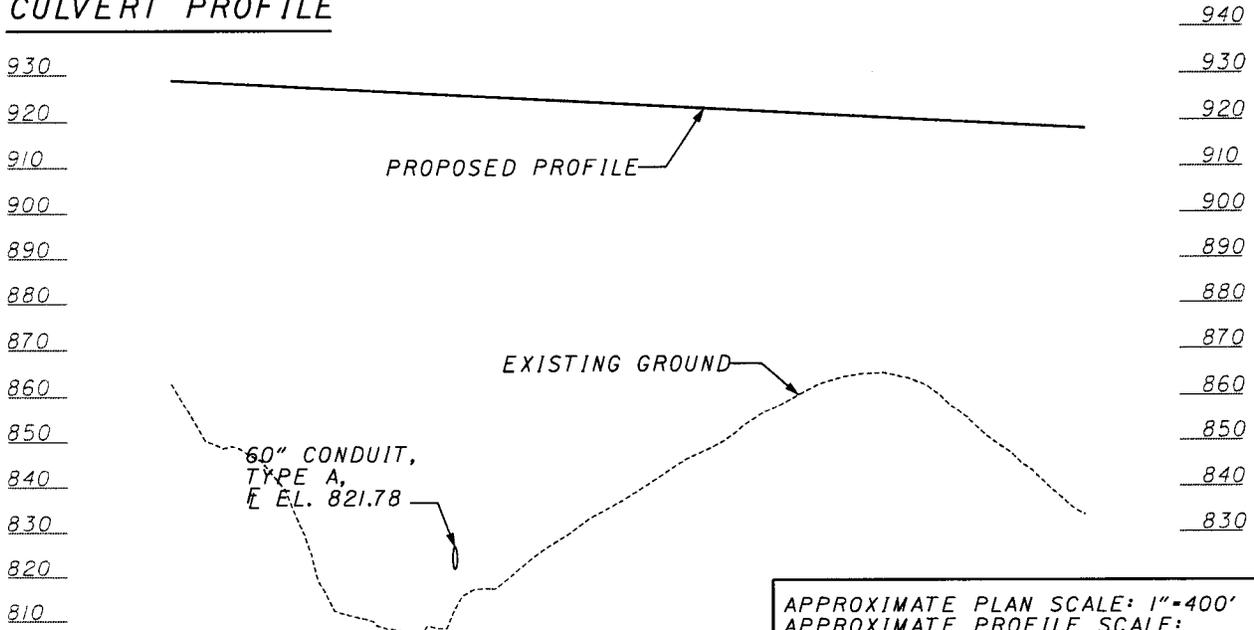
U.S. Army Corps of
 Engineers 404 Permit
 and OEPA Section 401
 Water Quality
 Certification
 Application
 Date: 03-09-2005
 Figure 30



PLAN



CULVERT PROFILE



CROSS-SECTION

APPROXIMATE PLAN SCALE: 1"=400'
 APPROXIMATE PROFILE SCALE:
 1"=400' HOR., 1"=40' VER.
 APPROXIMATE CROSS SECTION SCALE:
 1"=400' HOR., 1"=40' VERT.



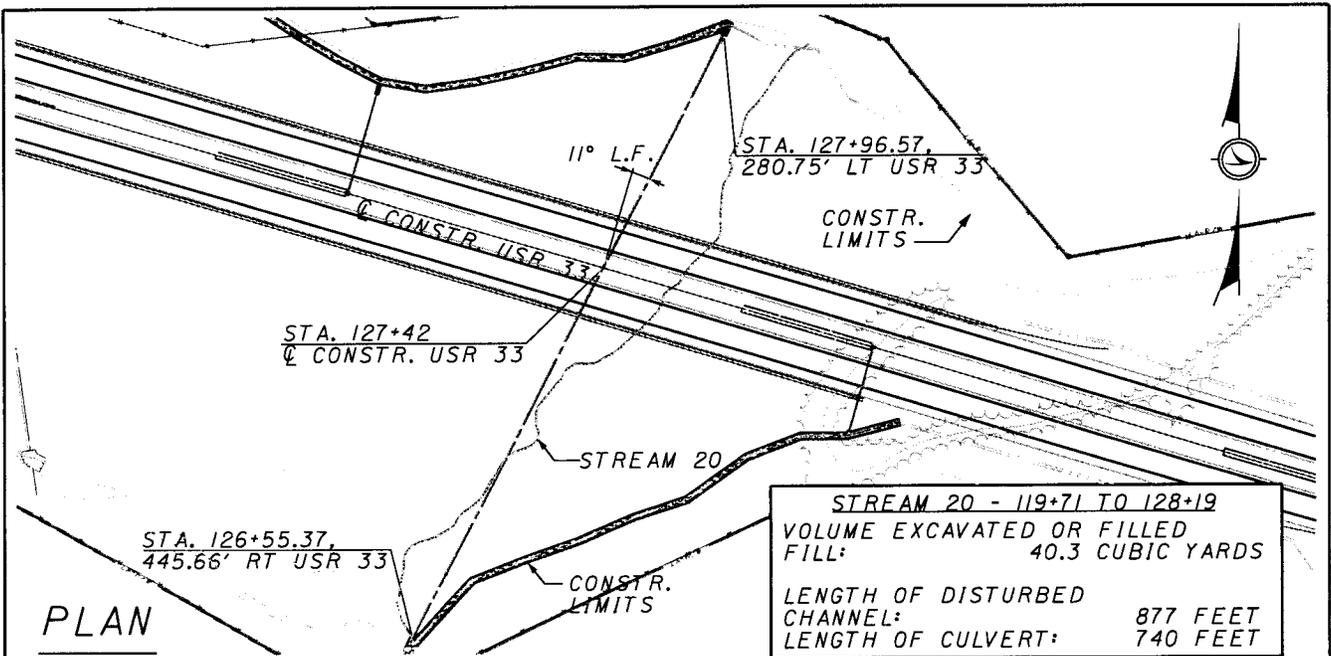
**IMPACT TO STREAM
19**

OHIO DEPARTMENT OF TRANSPORTATION
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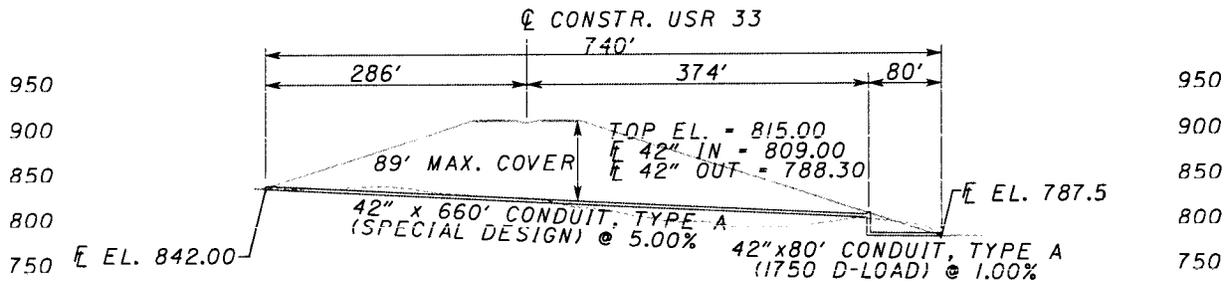
Date: 03-09-2005

Figure 31

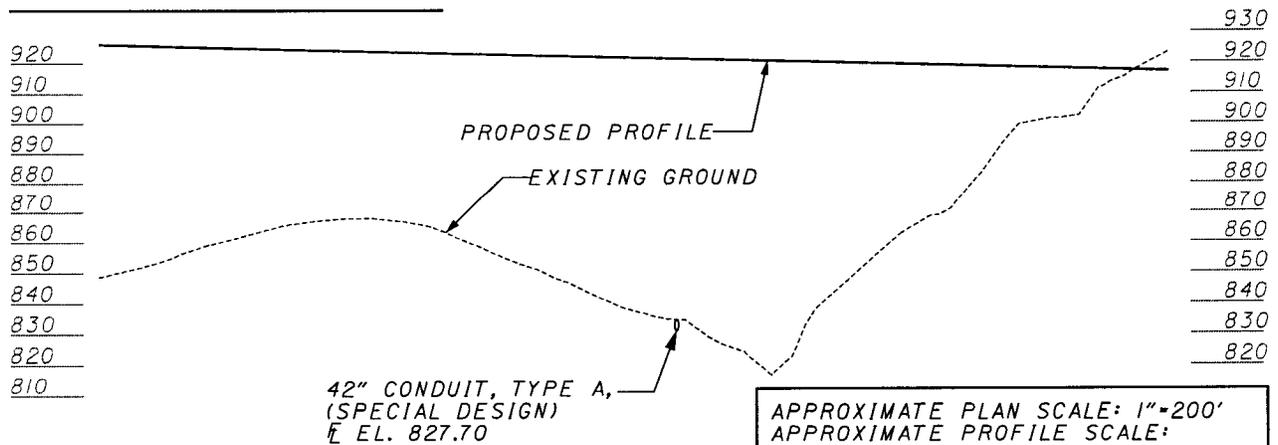


STREAM 20 - 119+71 TO 128+19
 VOLUME EXCAVATED OR FILLED
 FILL: 40.3 CUBIC YARDS
 LENGTH OF DISTURBED
 CHANNEL: 877 FEET
 LENGTH OF CULVERT: 740 FEET

PLAN



CULVERT PROFILE



CROSS-SECTION

APPROXIMATE PLAN SCALE: 1"=200'
 APPROXIMATE PROFILE SCALE:
 1"=200' HOR., 1"=200' VER.
 APPROXIMATE CROSS-SECTION SCALE:
 1"=100' HOR., 1"=60' VER.



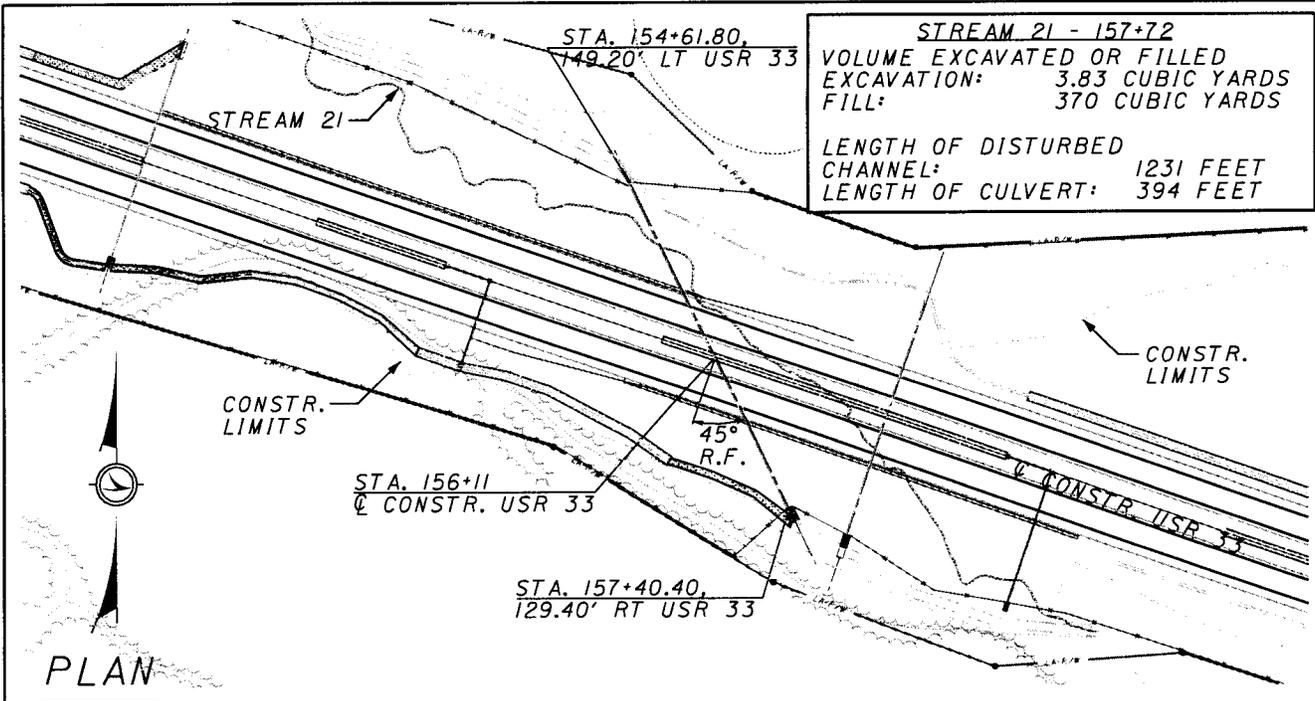
**IMPACT TO STREAM
20**

OHIO DEPARTMENT OF TRANSPORTATION
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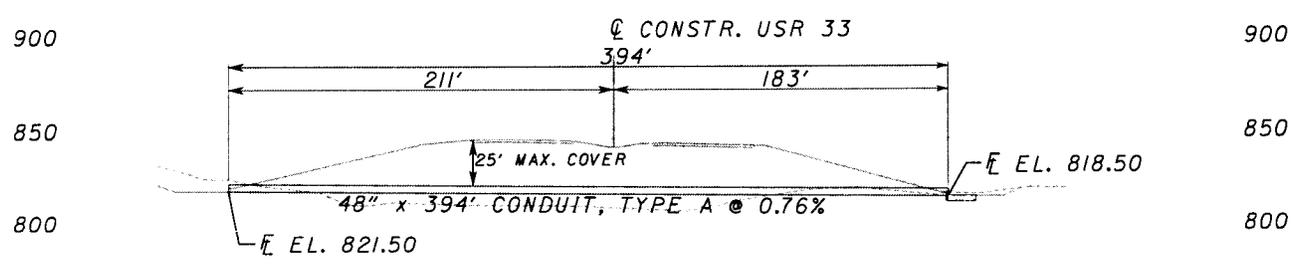
Date: 03-09-2005

Figure 32

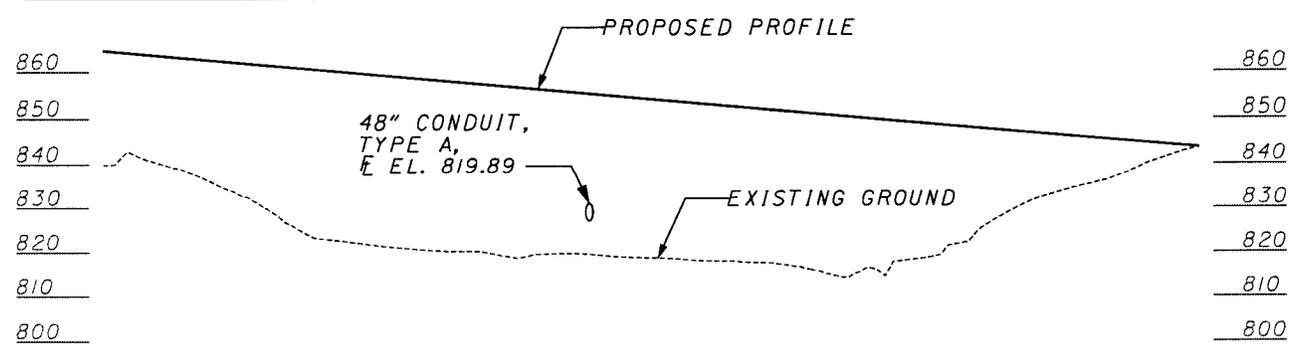


STREAM 21 - 157+72
 VOLUME EXCAVATED OR FILLED
 EXCAVATION: 3.83 CUBIC YARDS
 FILL: 370 CUBIC YARDS
 LENGTH OF DISTURBED CHANNEL: 1231 FEET
 LENGTH OF CULVERT: 394 FEET

PLAN



CULVERT PROFILE



CROSS-SECTION

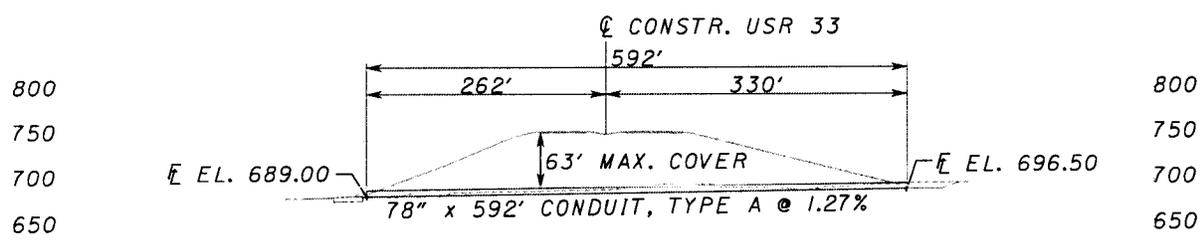
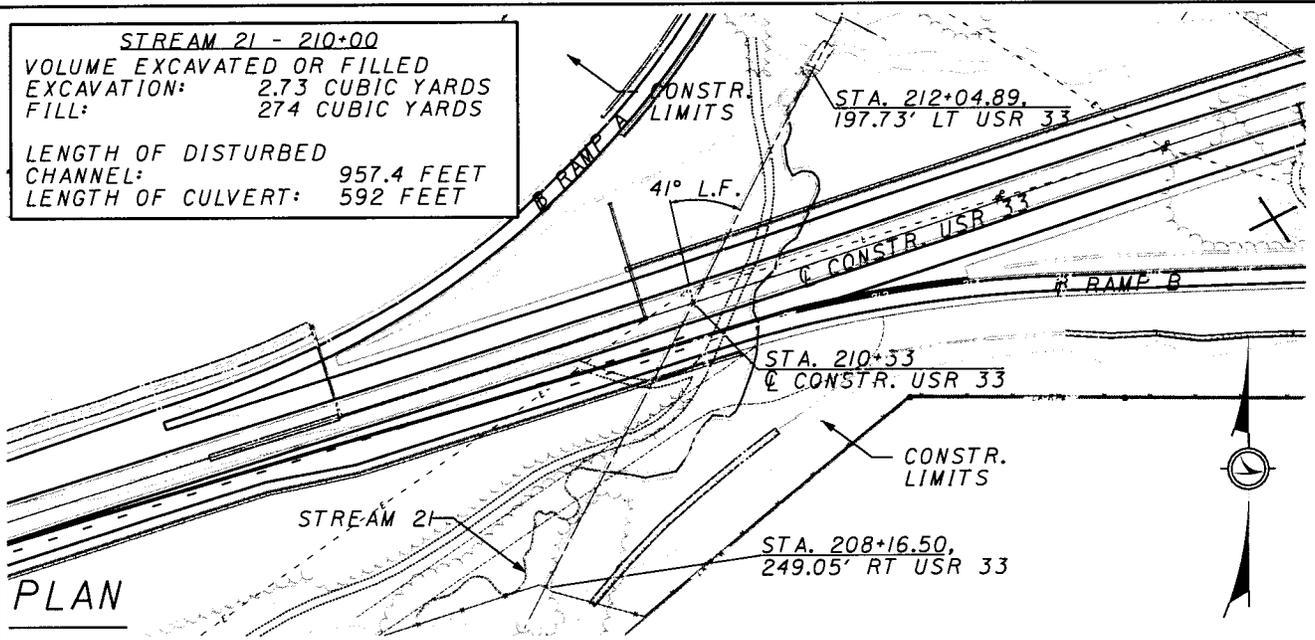
APPROXIMATE PLAN SCALE: 1"=200'
 APPROXIMATE PROFILE SCALE:
 1"=100' HOR., 1"=100' VER.
 APPROXIMATE CROSS-SECTION SCALE:
 1"=100' HOR., 1"=40' VER.



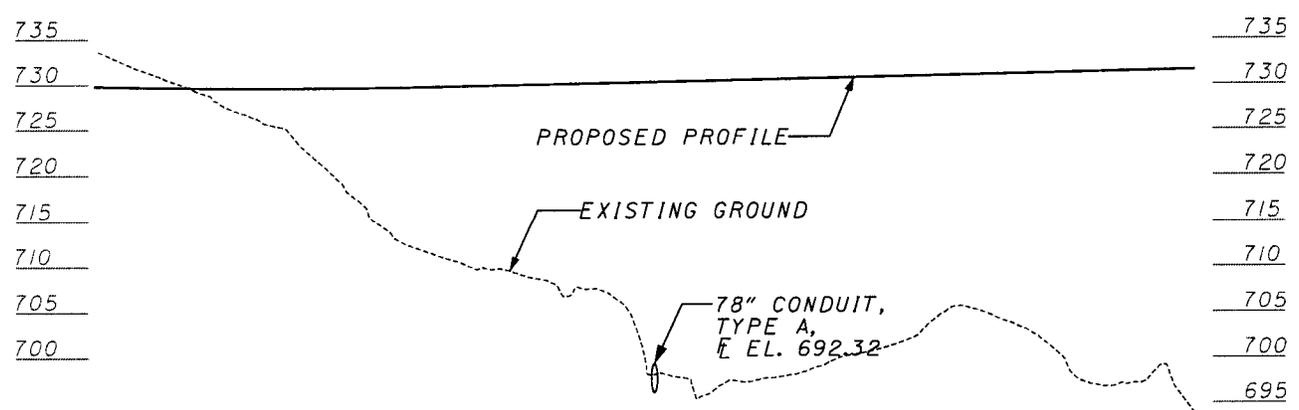
**IMPACT TO STREAM 21
 AT STA. 157+72**
 OHIO DEPARTMENT OF TRANSPORTATION
 U.S. ROUTE 33 IN
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 Figure 33

STREAM 21 - 210+00
 VOLUME EXCAVATED OR FILLED
 EXCAVATION: 2.73 CUBIC YARDS
 FILL: 274 CUBIC YARDS
 LENGTH OF DISTURBED
 CHANNEL: 957.4 FEET
 LENGTH OF CULVERT: 592 FEET



CULVERT PROFILE

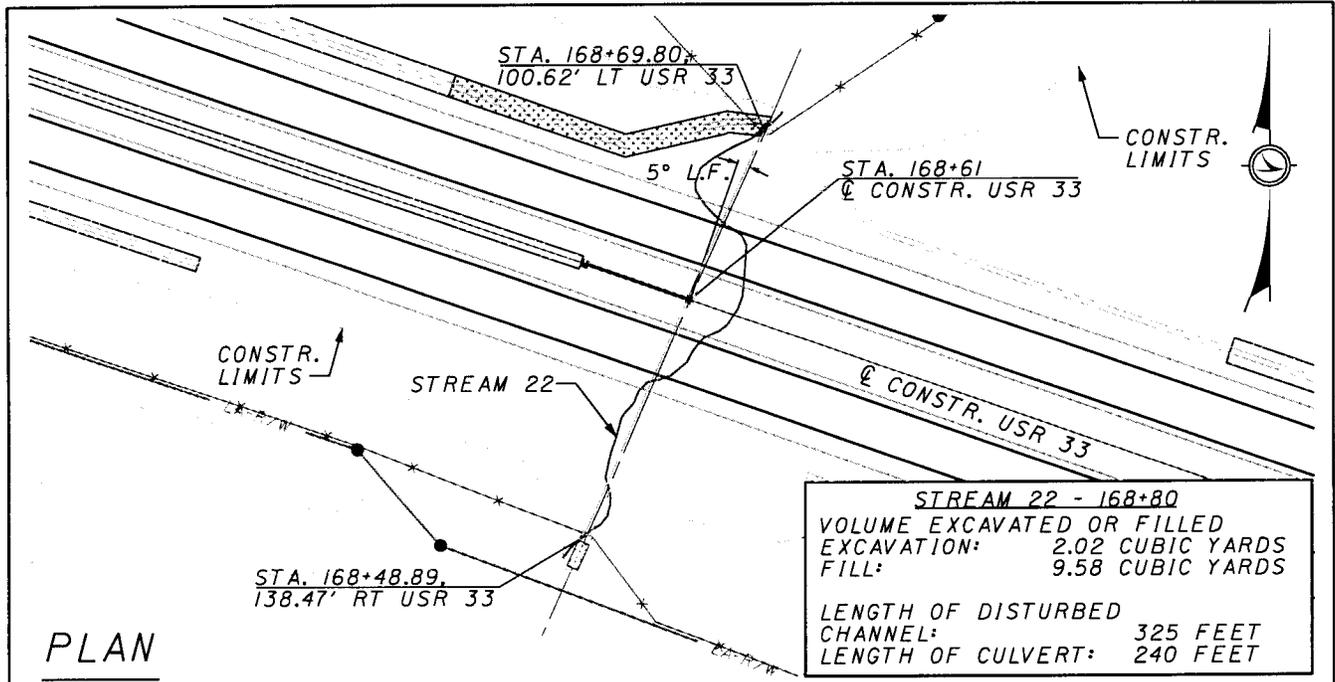


APPROXIMATE PLAN SCALE: 1"=200'
 APPROXIMATE PROFILE SCALE:
 1"=200' HOR., 1"=200' VER.
 APPROXIMATE CROSS-SECTION SCALE:
 1"=200' HOR., 1"=20' VER.



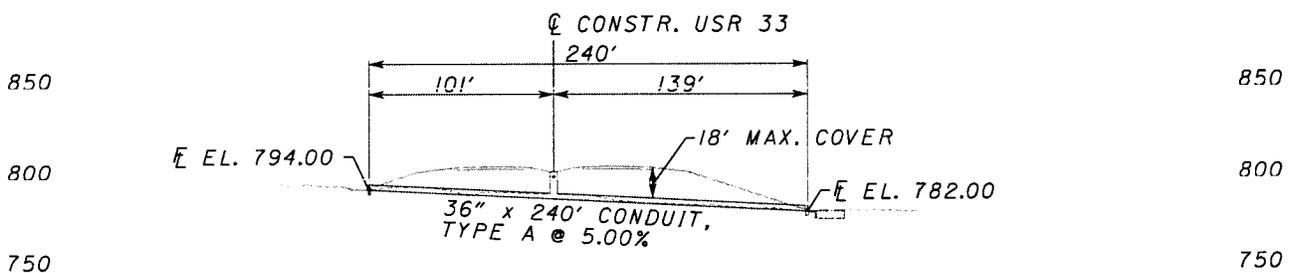
**IMPACT TO STREAM 21
 AT STA. 210+00**
 OHIO DEPARTMENT OF TRANSPORTATION
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 Figure 34

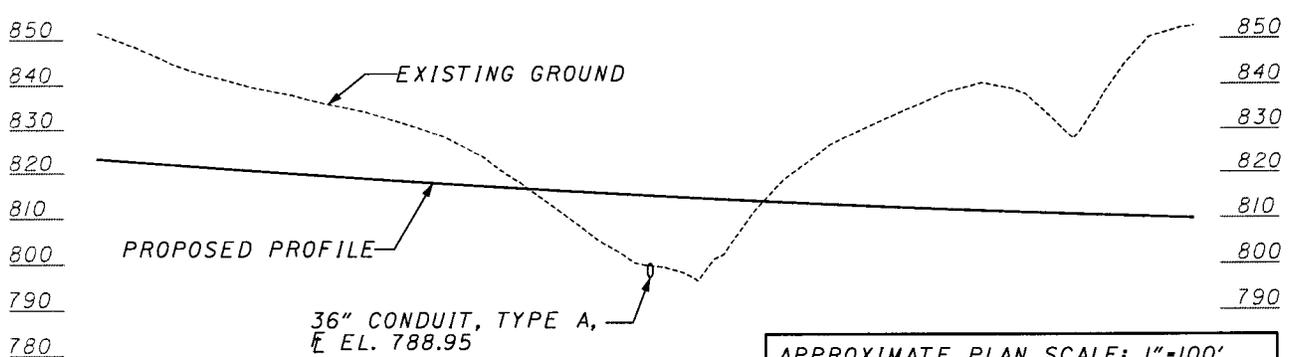


PLAN

STREAM 22 - 168+80	
VOLUME EXCAVATED OR FILLED	
EXCAVATION:	2.02 CUBIC YARDS
FILL:	9.58 CUBIC YARDS
LENGTH OF DISTURBED CHANNEL:	
	325 FEET
LENGTH OF CULVERT:	
	240 FEET



CULVERT PROFILE



CROSS-SECTION

APPROXIMATE PLAN SCALE: 1"=100'
 APPROXIMATE PROFILE SCALE:
 1"=100' HOR., 1"=100' VER.
 APPROXIMATE CROSS-SECTION SCALE:
 1"=100' HOR., 1"=40' VER.



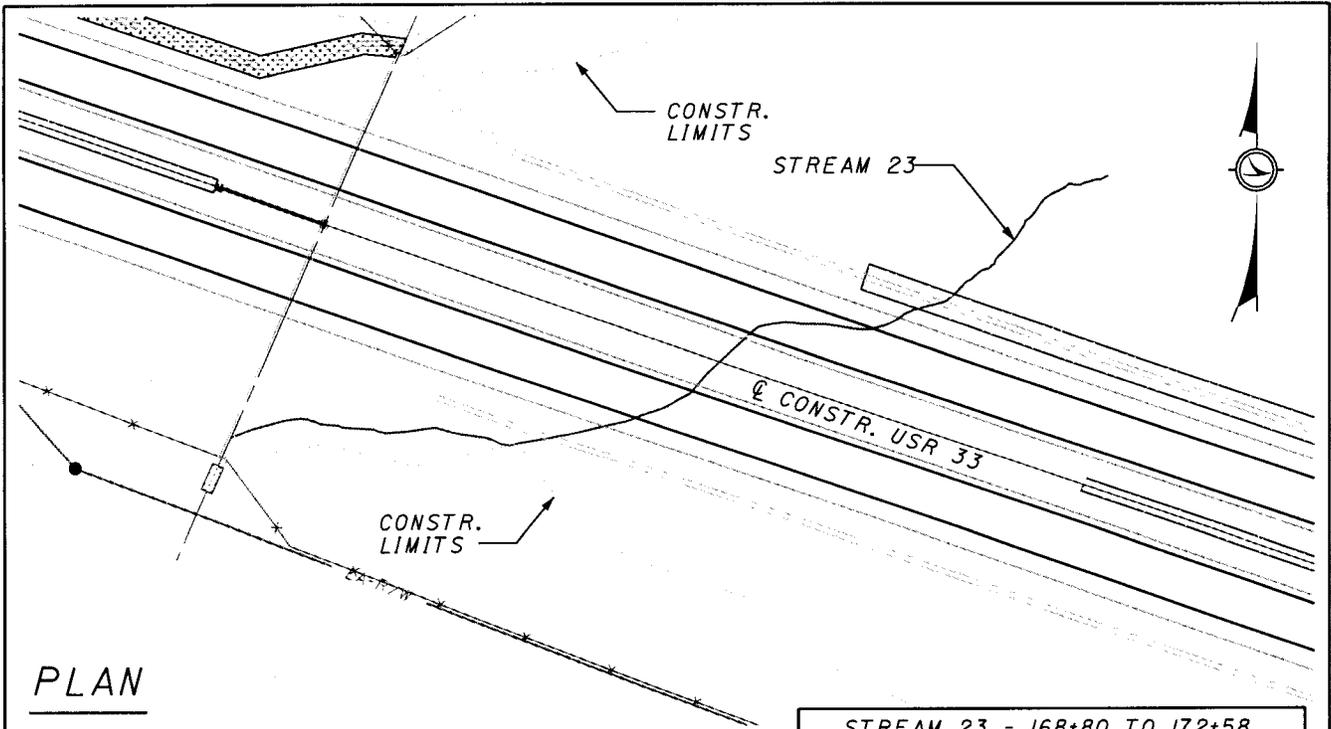
**IMPACT TO STREAM
22**

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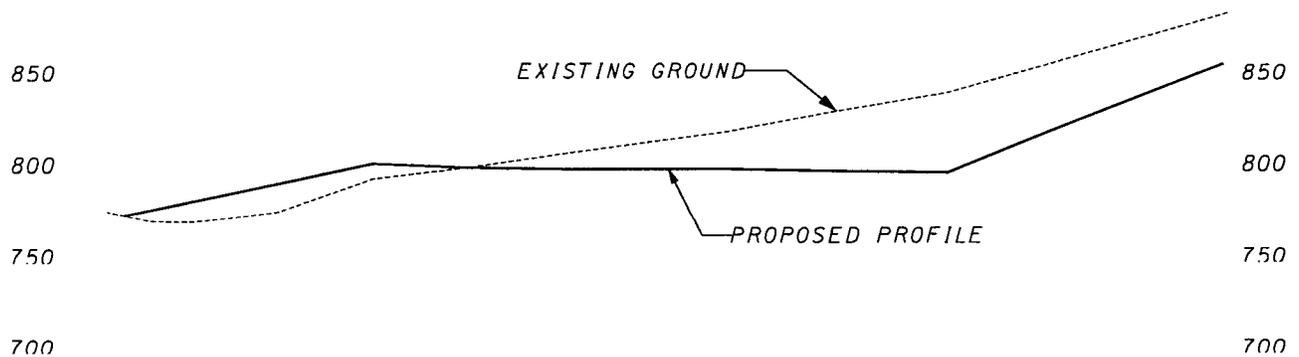
Date: 03-09-2005

Figure 35



PLAN

STREAM 23 - 168+80 TO 172+58	
VOLUME EXCAVATED OR FILLED	
EXCAVATION:	1588 CUBIC YARDS
FILL:	12.20 CUBIC YARDS
LENGTH OF DISTURBED CHANNEL: 531 FEET	



STREAM PROFILE

APPROXIMATE PLAN SCALE: 1"=100'
APPROXIMATE PROFILE SCALE: 1"=100' HOR., 1"=100' VER.



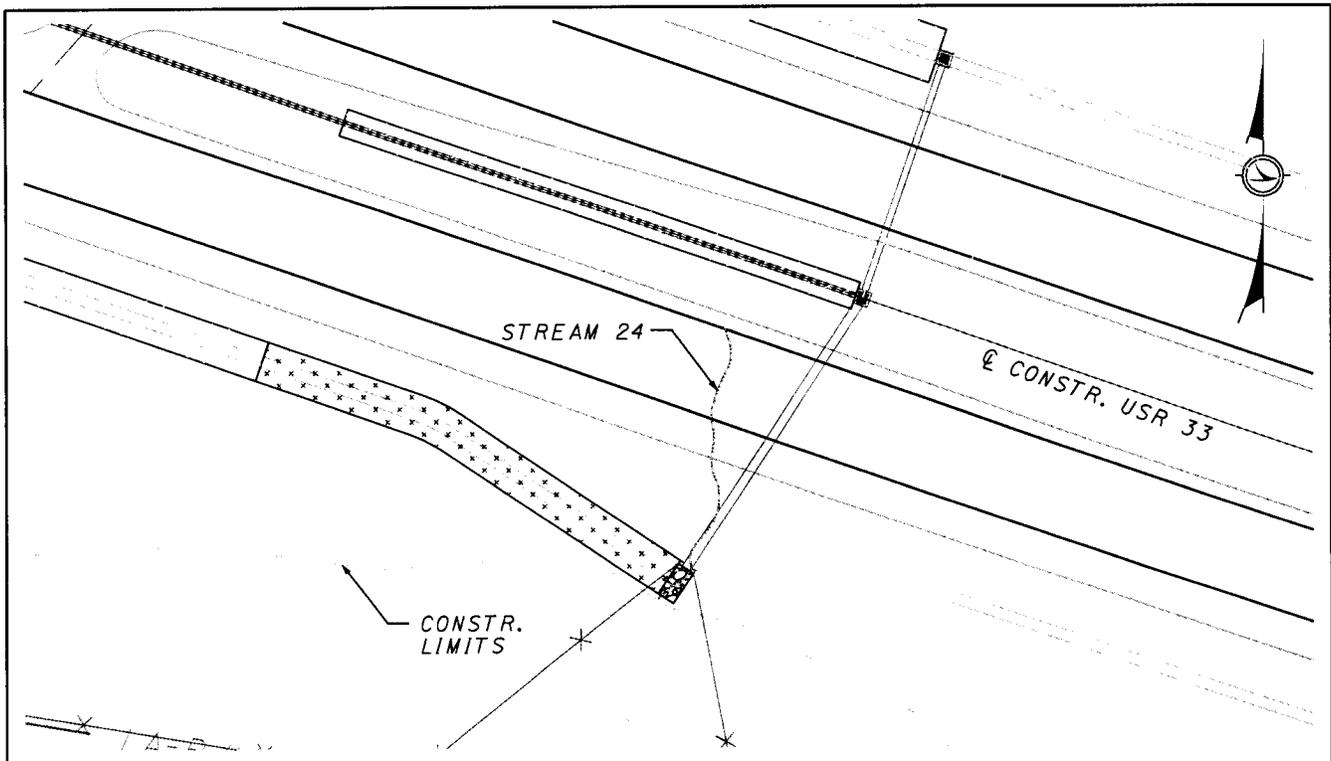
**IMPACT TO STREAM
23**

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Application

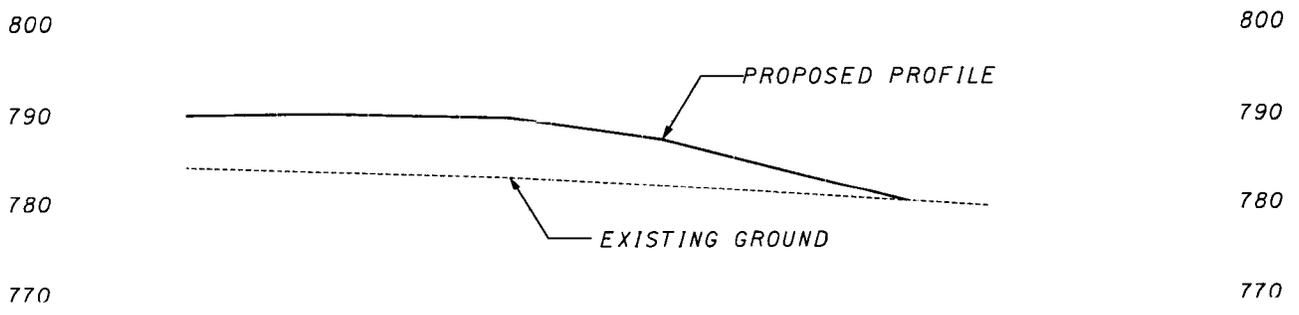
Date: 03-09-2005

Figure 36



PLAN

STREAM 24 - 180+00
 VOLUME EXCAVATED OR FILLED
 FILL: 23.5 CUBIC YARDS
 LENGTH OF DISTURBED
 CHANNEL: 79 FEET



STREAM PROFILE

APPROXIMATE PLAN SCALE: 1"=50'
 APPROXIMATE PROFILE SCALE:
 1"=20' HOR., 1"=20' VER.



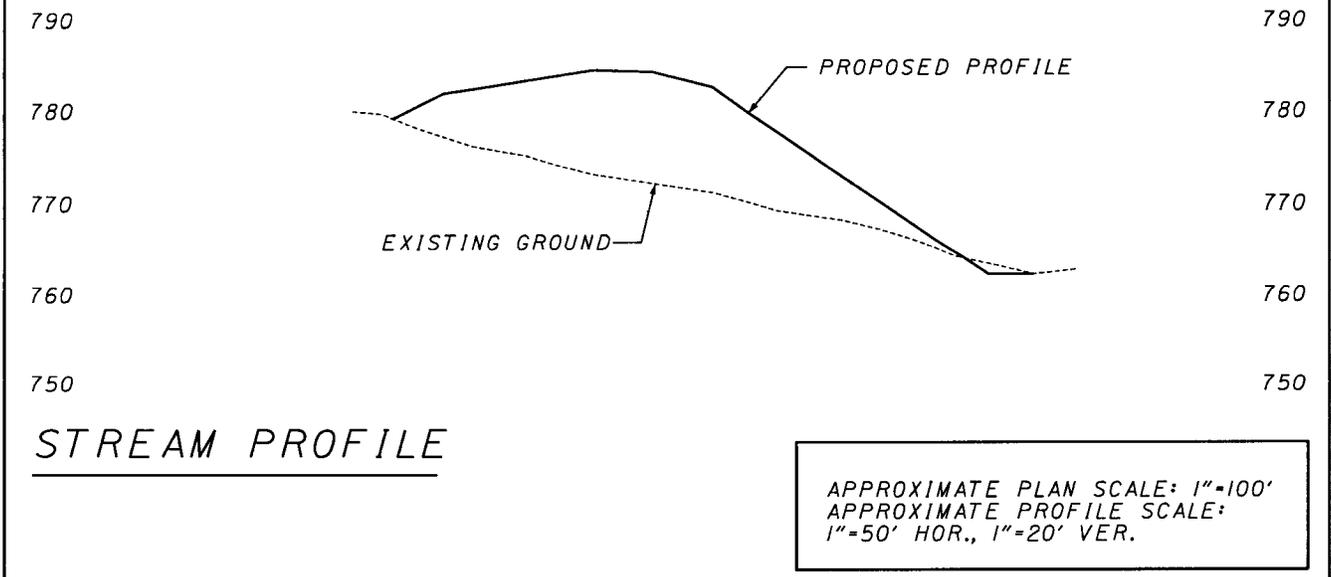
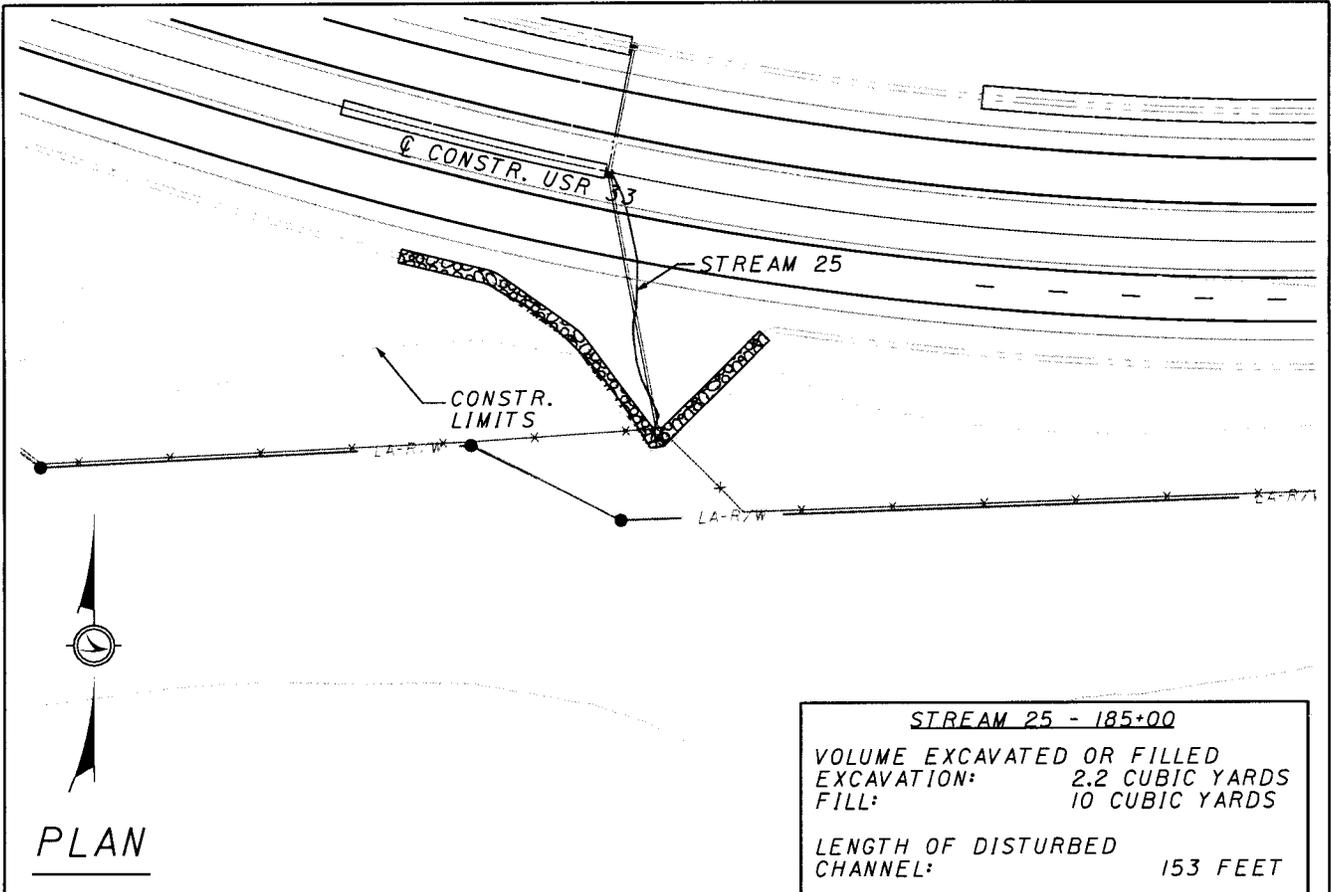
**IMPACT TO STREAM
 24**

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Figure 37



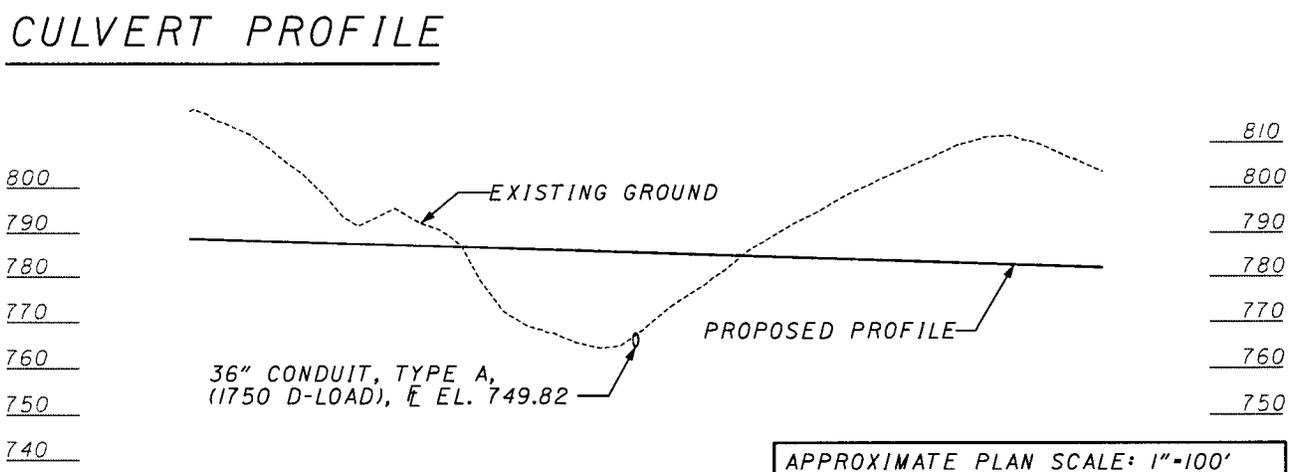
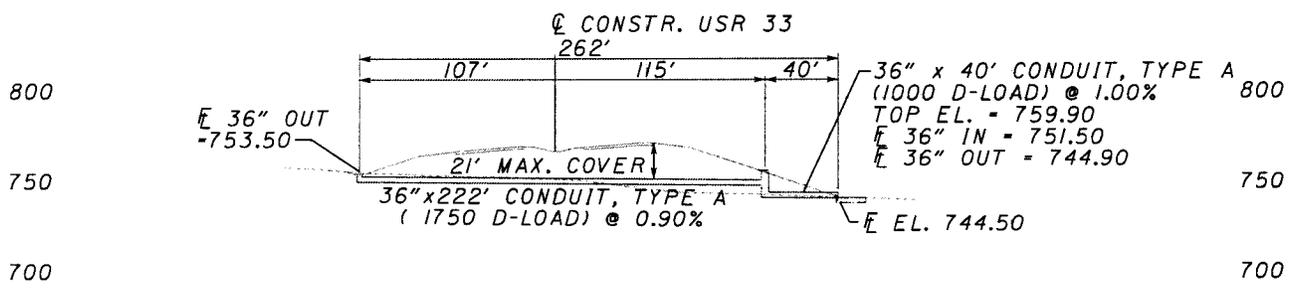
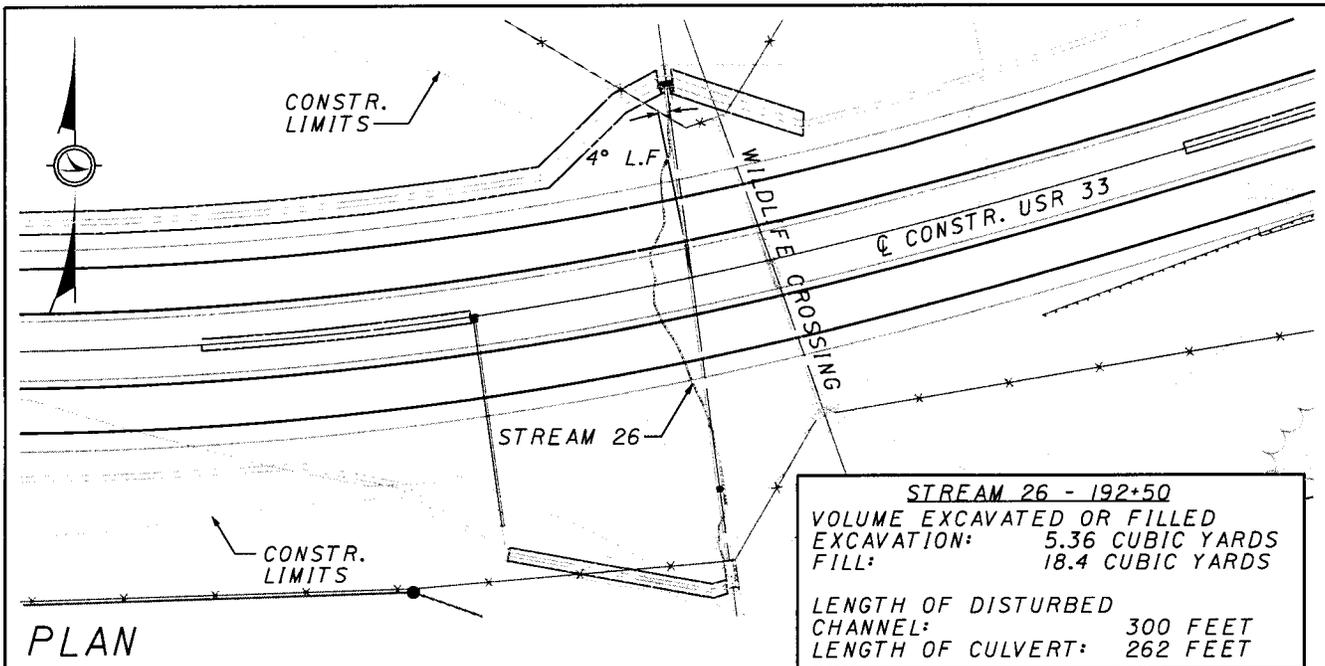
**IMPACT TO STREAM
25**

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Figure 38



APPROXIMATE PLAN SCALE: 1"=100'
 APPROXIMATE PROFILE SCALE: 1"=100' HOR., 1"=100' VER.
 APPROXIMATE CROSS-SECTION SCALE: 1"=100' HOR., 1"=40' VER.



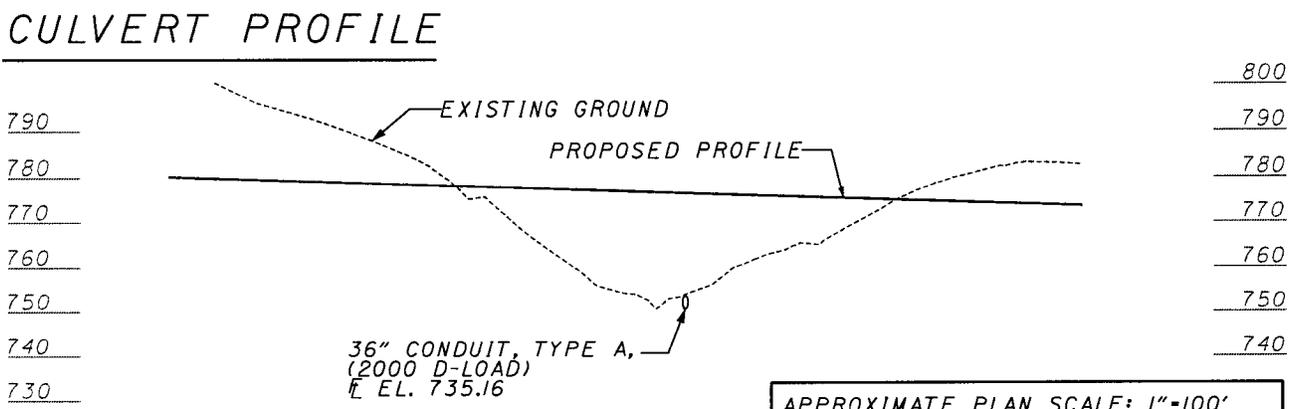
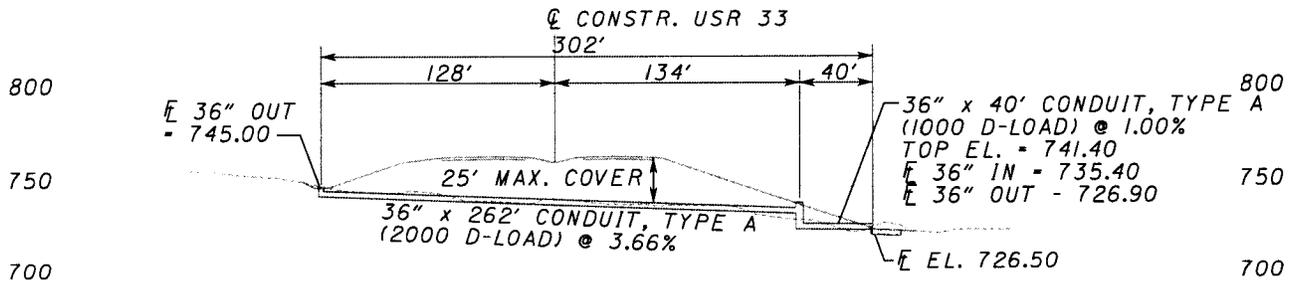
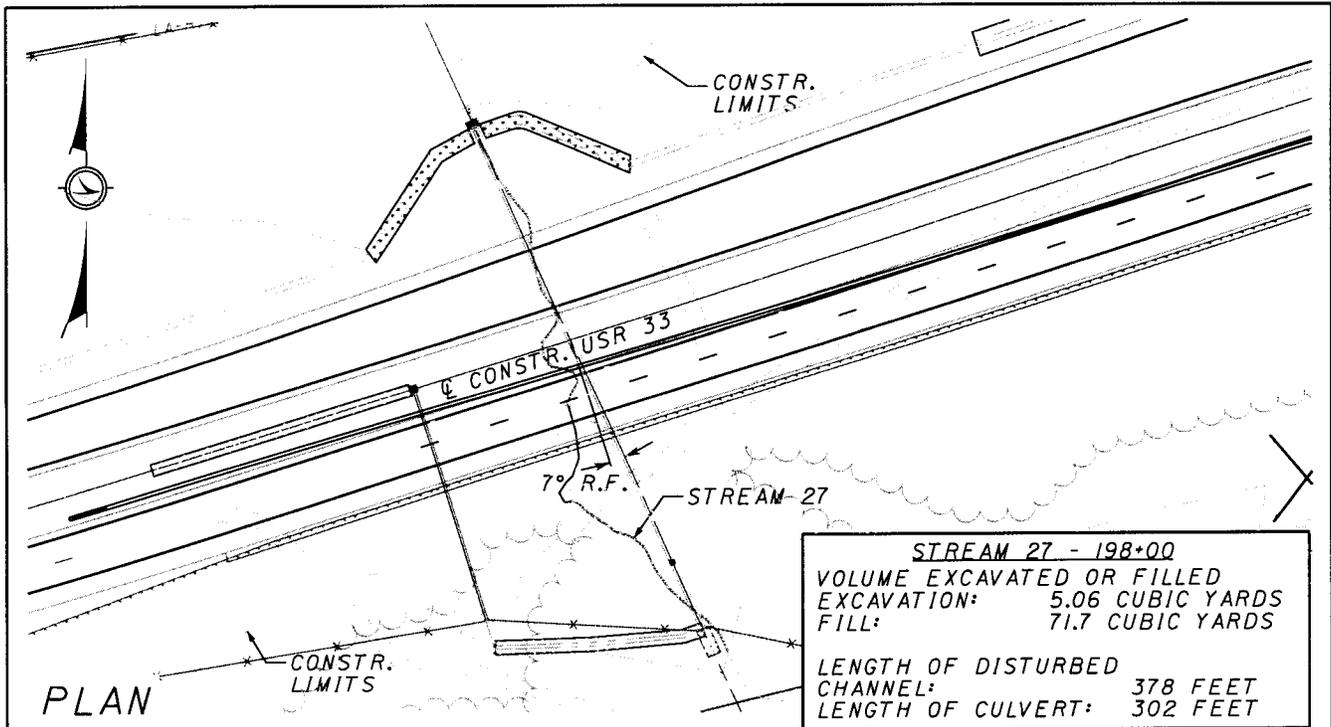
**IMPACT TO STREAM
26**

OHIO DEPARTMENT OF TRANSPORTATION
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Figure 39



APPROXIMATE PLAN SCALE: 1"=100'
 APPROXIMATE PROFILE SCALE:
 1"=100' HOR., 1"=100' VER.
 APPROXIMATE CROSS-SECTION SCALE:
 1"=100' HOR., 1"=40' VER.



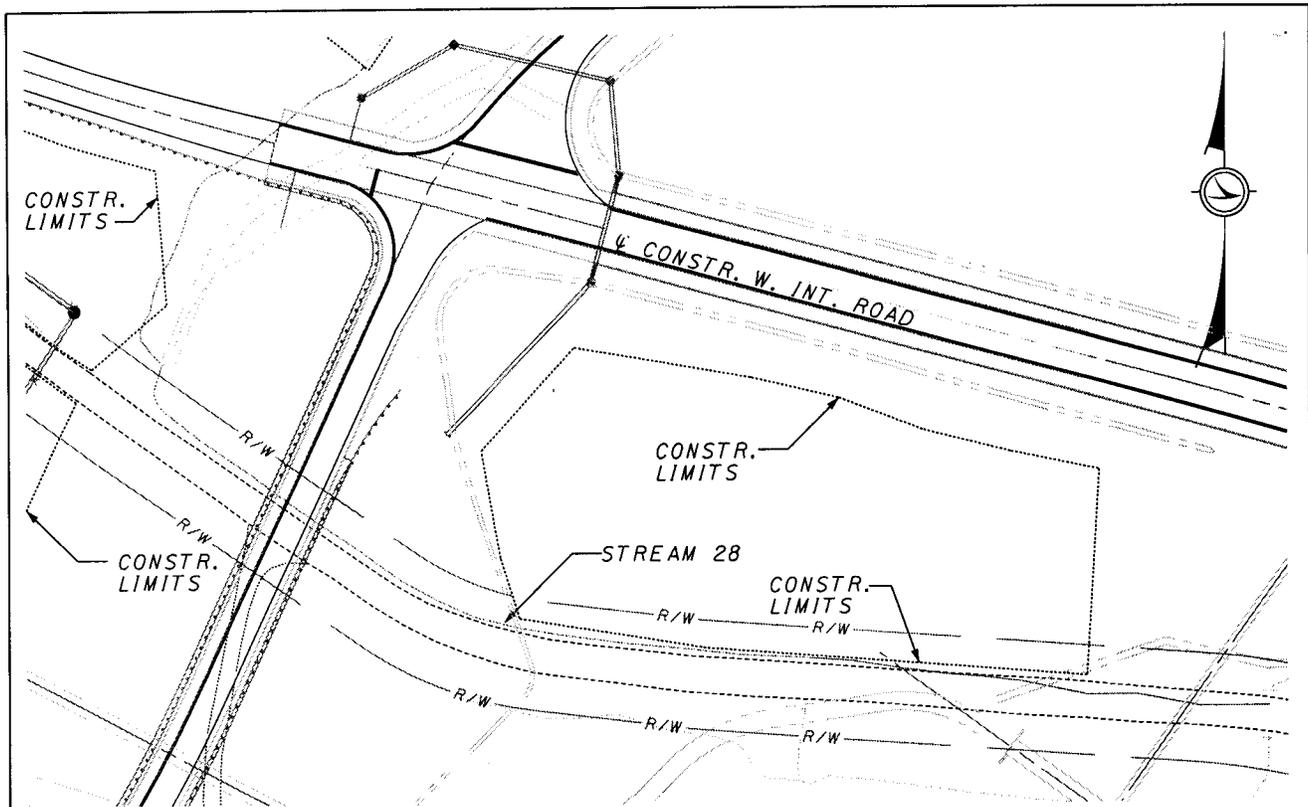
IMPACT TO STREAM
27

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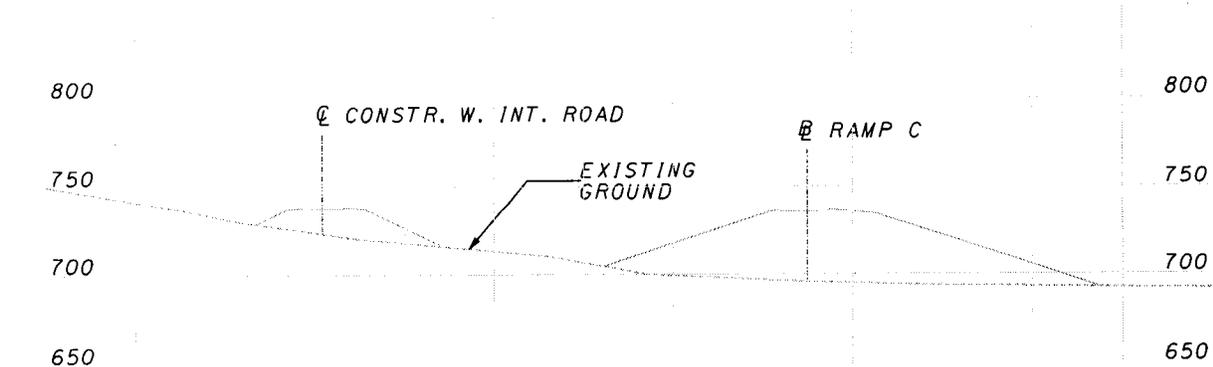
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Figure 40



STREAM 28 - 210+00 TO 235+00
 VOLUME EXCAVATED OR FILLED
 FILL: 61 CUBIC YARDS
 LENGTH OF DISTURBED
 CHANNEL: 905 FEET

PLAN



STREAM PROFILE

APPROXIMATE PLAN SCALE: 1"=100'
 APPROXIMATE PROFILE SCALE:
 1"=100' HOR., 1"=100' VER.



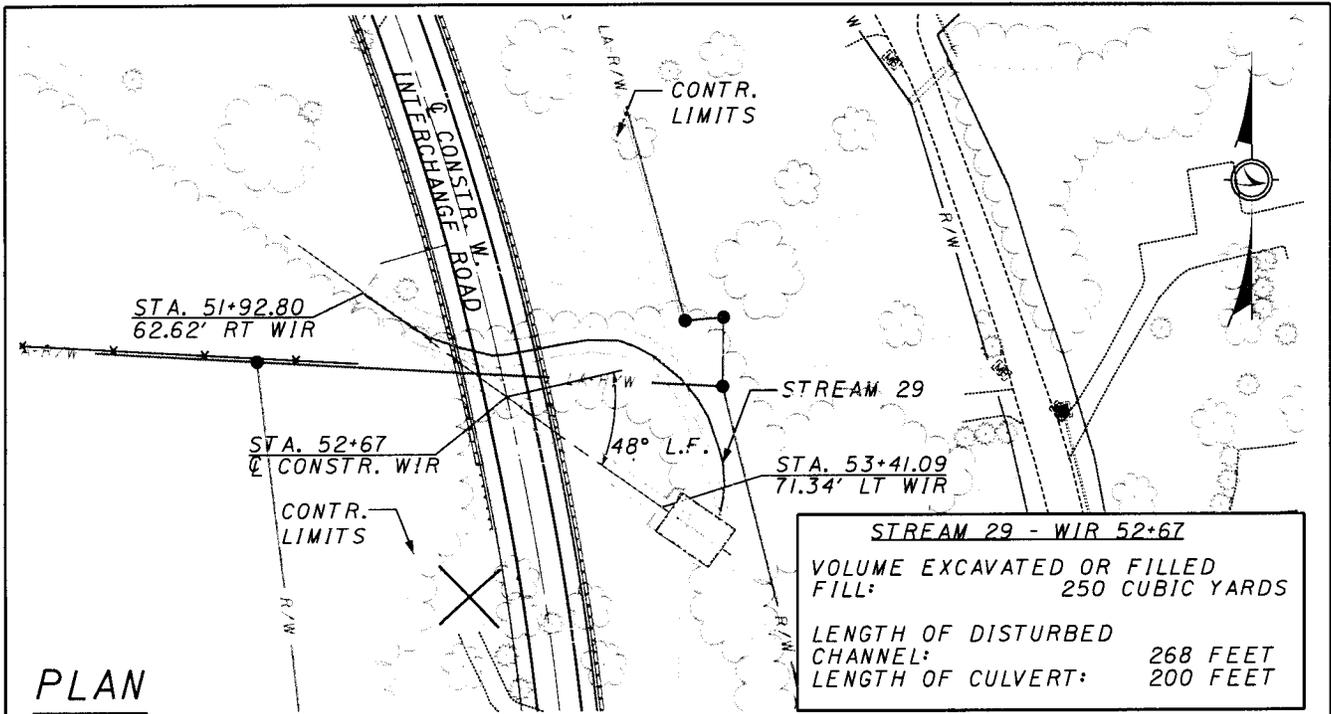
**IMPACT TO STREAM
28**

OHIO DEPARTMENT OF TRANSPORTATION
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 HOC/ATH-33-17.00/0.00 PID 14040

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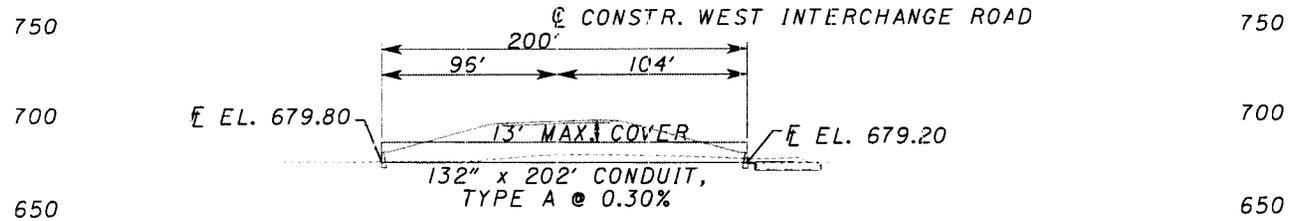
Date: 03-09-2005

Figure 4I

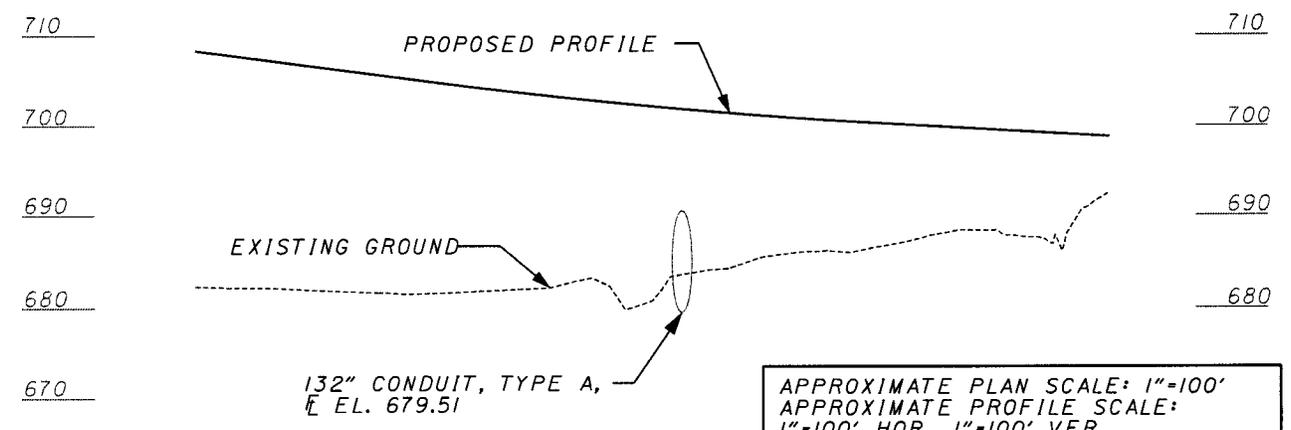


PLAN

STREAM 29 - WIR 52+67	
VOLUME EXCAVATED OR FILLED FILL:	250 CUBIC YARDS
LENGTH OF DISTURBED CHANNEL:	268 FEET
LENGTH OF CULVERT:	200 FEET



CULVERT PROFILE



CROSS-SECTION

APPROXIMATE PLAN SCALE: 1"=100'
 APPROXIMATE PROFILE SCALE:
 1"=100' HOR., 1"=100' VER.
 APPROXIMATE CROSS-SECTION SCALE:
 1"=100' HOR., 1"=20' VER.



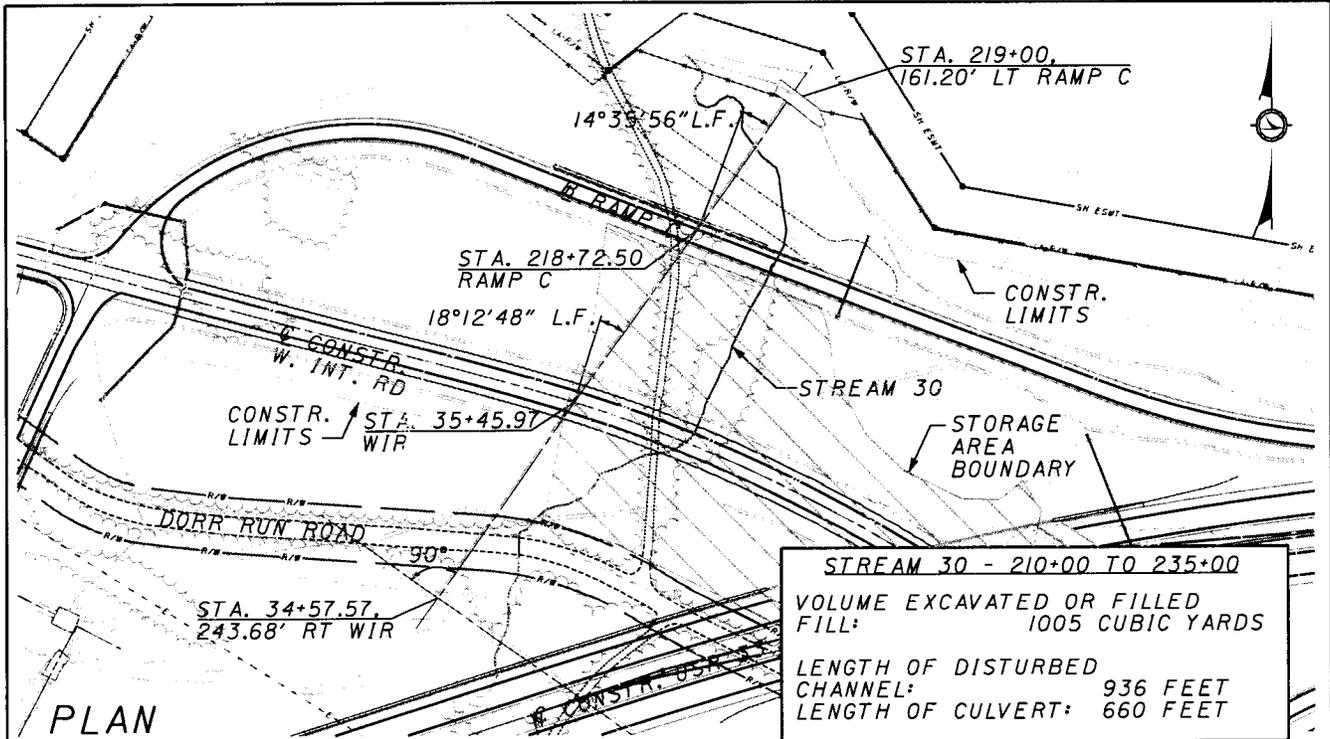
**IMPACT TO STREAM
 29 AT WIR STA. 52+67**

OHIO DEPARTMENT OF TRANSPORTATION
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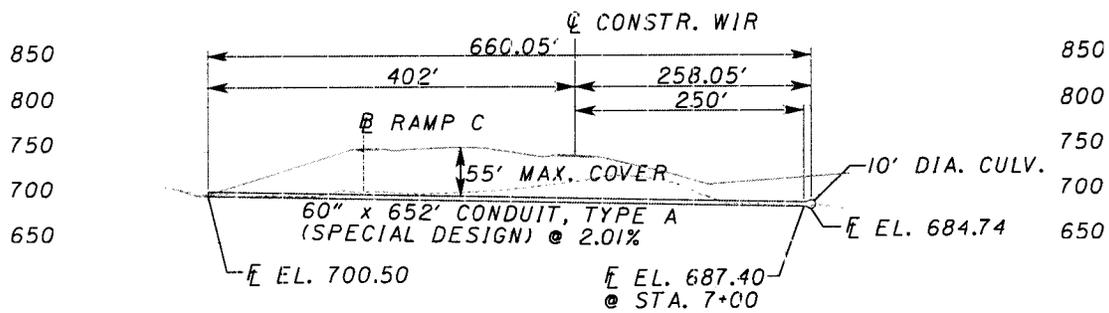
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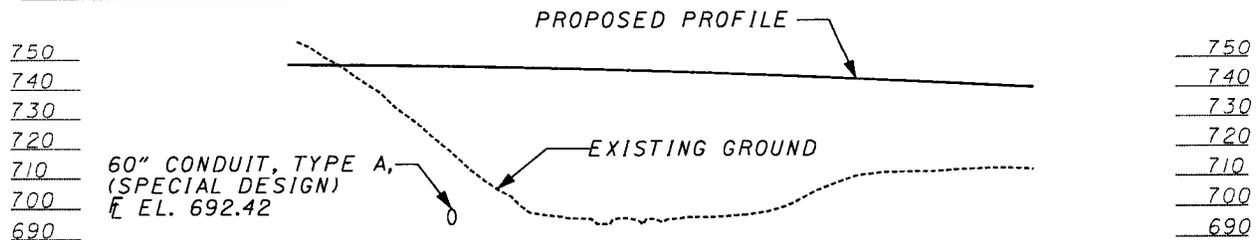
Figure 43



WIR - WEST INTERCHANGE ROAD



CULVERT PROFILE



APPROXIMATE PLAN SCALE: 1"=200'
 APPROXIMATE PROFILE SCALE:
 1"=200' HOR., 1"=200' VER.
 APPROXIMATE CROSS-SECTION SCALE:
 1"=100' HOR., 1"=60' VER.

CROSS-SECTION



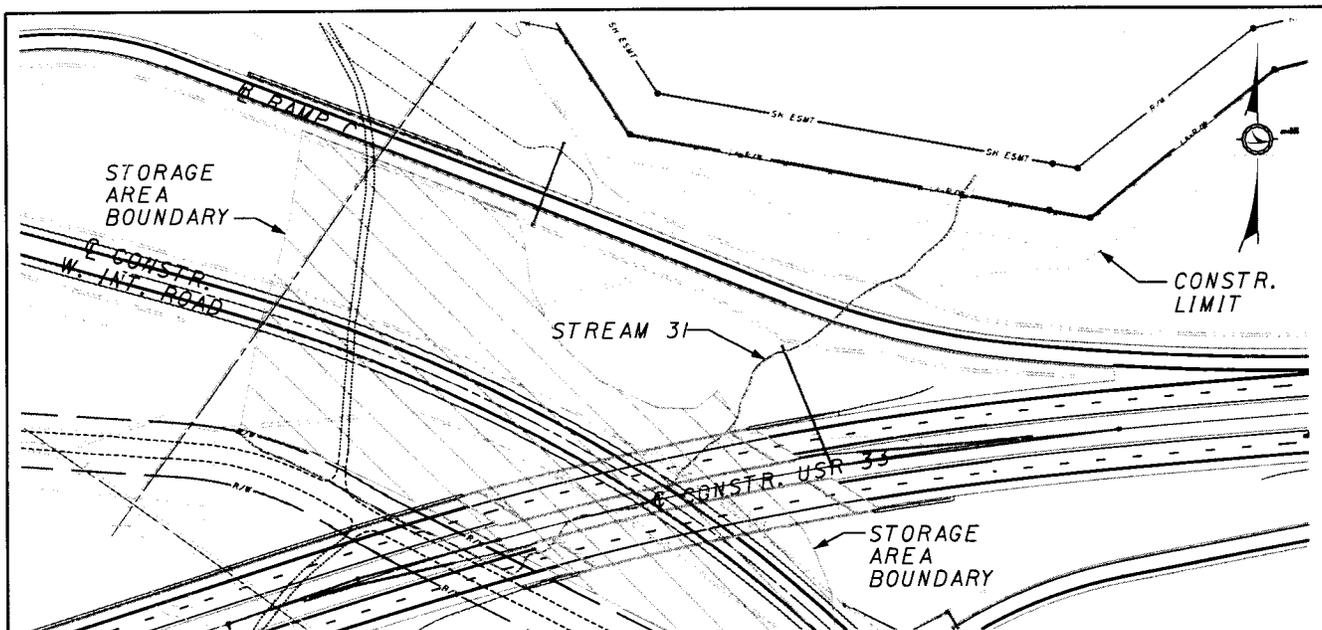
IMPACT TO STREAM 30

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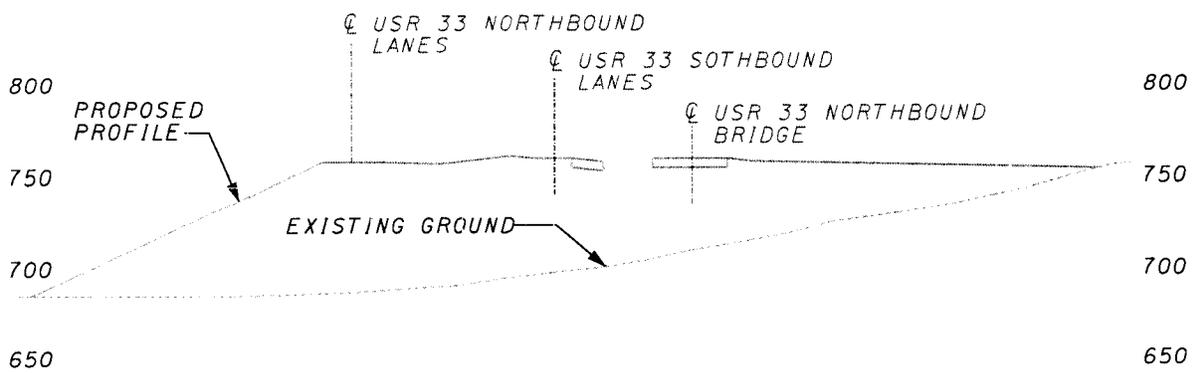
Date: 03-09-2005

Figure 44



PLAN

STREAM 31 - 210+00 TO 235+00	
VOLUME EXCAVATED OR FILLED	
FILL:	179 CUBIC YARDS
LENGTH OF DISTURBED CHANNEL:	1062 FEET



STREAM PROFILE

APPROXIMATE PLAN SCALE: 1"=200'
APPROXIMATE PROFILE SCALE: 1"=200' HOR., 1"=100' VER.



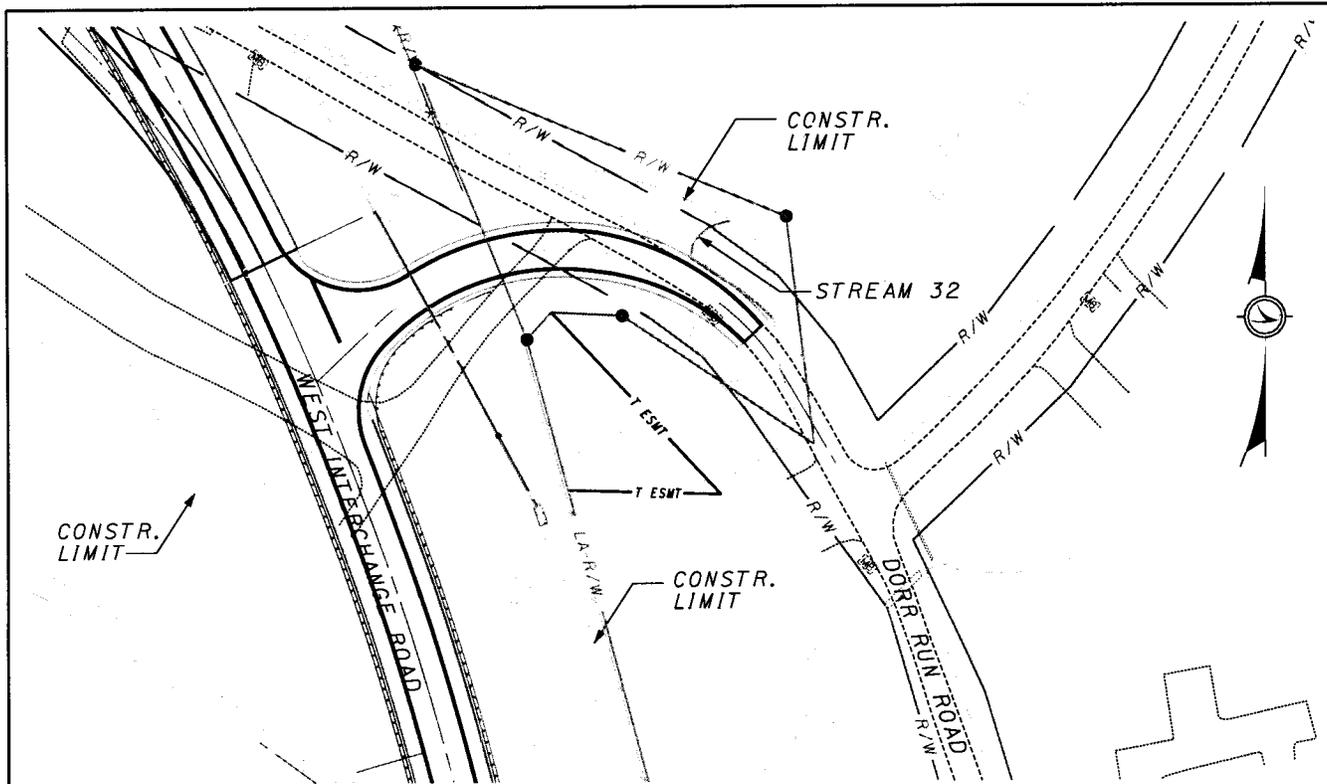
**IMPACT TO STREAM
31**

OHIO DEPARTMENT OF TRANSPORTATION
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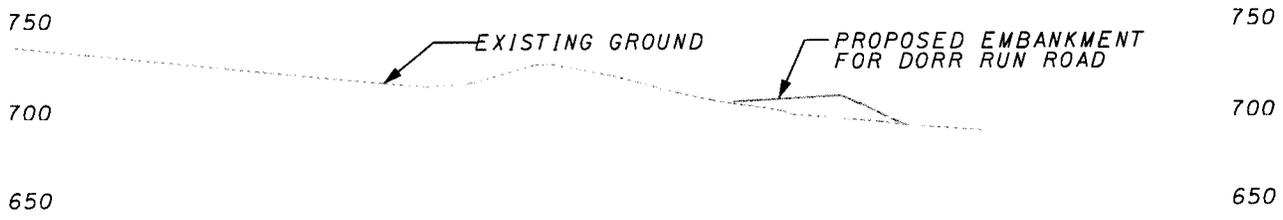
Date: 03-09-2005

Figure 45



PLAN

STREAM 32 - 210+00 TO 235+00
 VOLUME EXCAVATED OR FILLED
 FILL: 52 CUBIC YARDS
 LENGTH OF DISTURBED
 CHANNEL: 90 FEET



STREAM PROFILE

APPROXIMATE PLAN SCALE: 1"=100'
 APPROXIMATE PROFILE SCALE:
 1"=100' HOR., 1"=100' VER.



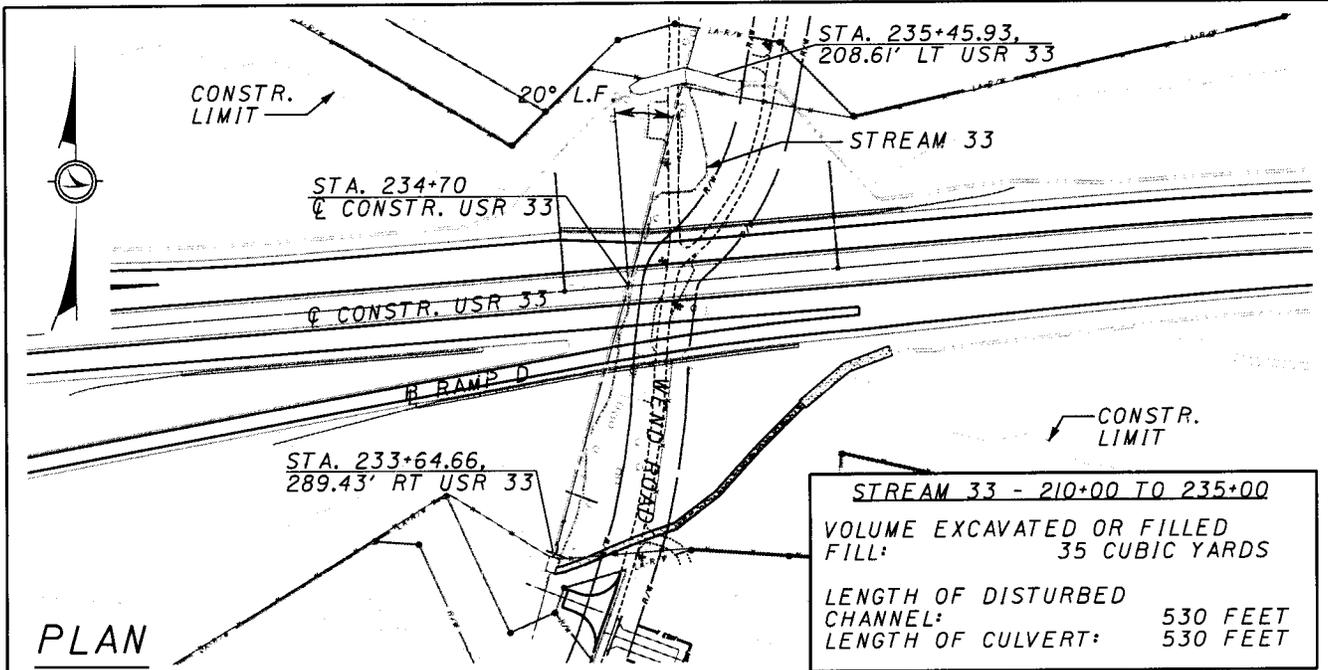
**IMPACT TO STREAM
 32**

OHIO DEPARTMENT OF TRANSPORTATION
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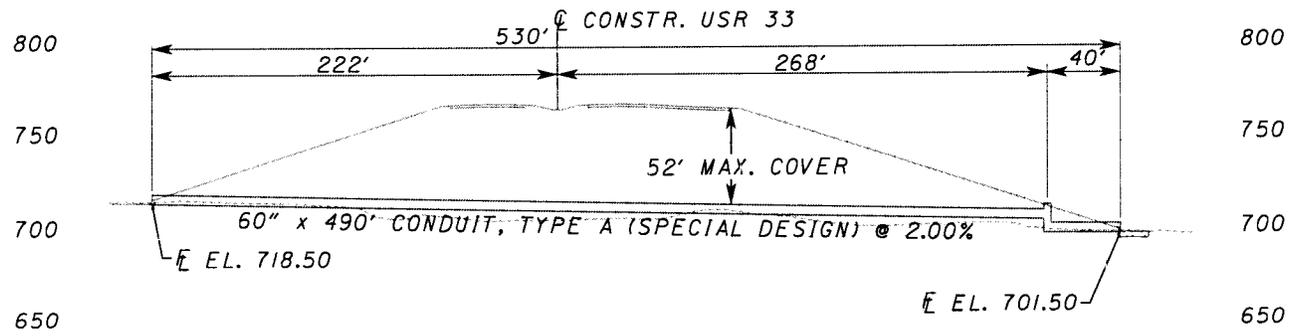
Date: 03-09-2005

Figure 46

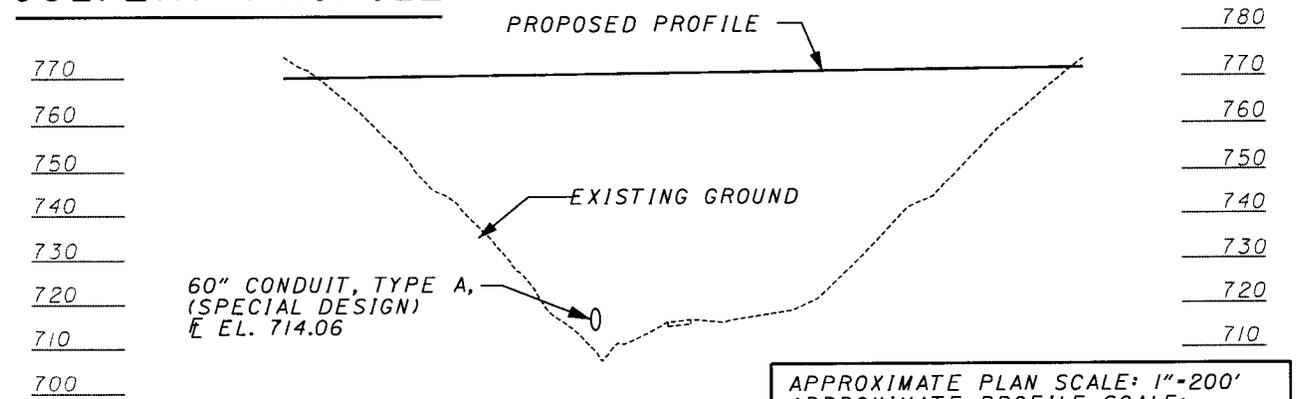


PLAN

STREAM 33 - 210+00 TO 235+00
 VOLUME EXCAVATED OR FILLED
 FILL: 35 CUBIC YARDS
 LENGTH OF DISTURBED
 CHANNEL: 530 FEET
 LENGTH OF CULVERT: 530 FEET



CULVERT PROFILE



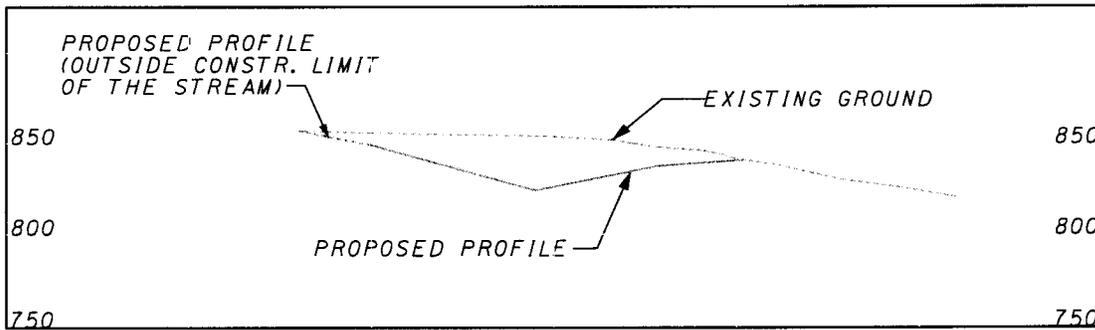
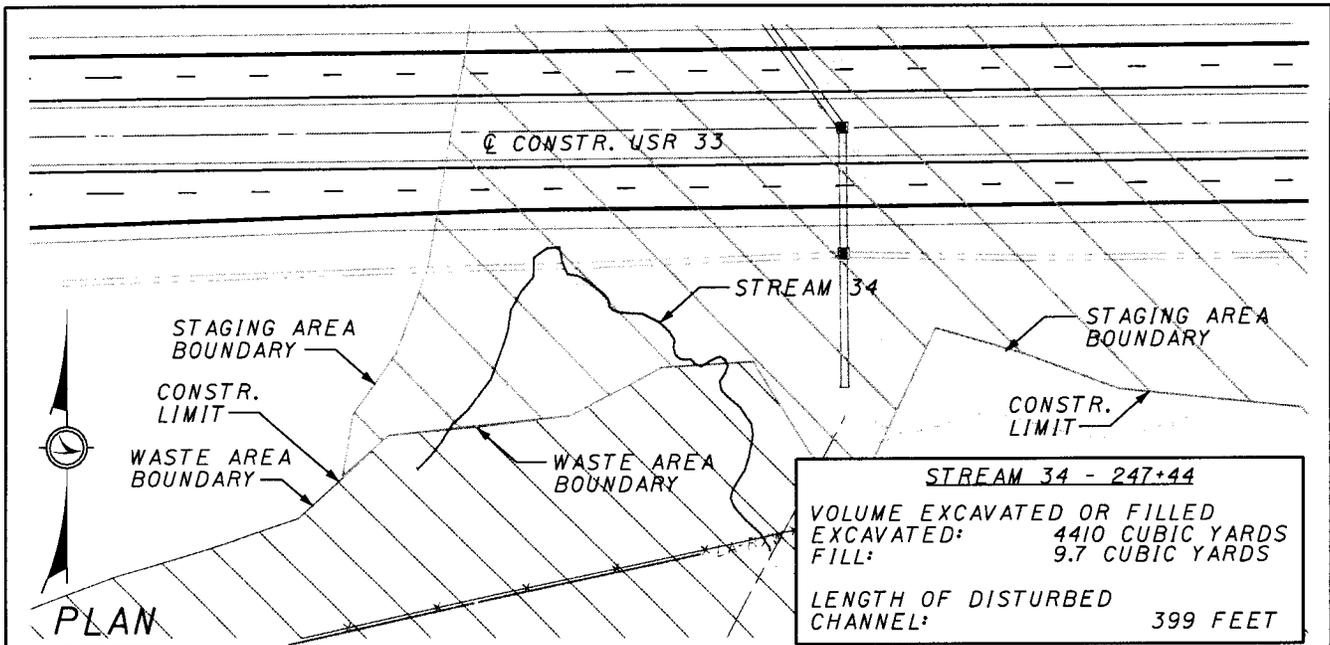
CROSS-SECTION

APPROXIMATE PLAN SCALE: 1"=200'
 APPROXIMATE PROFILE SCALE:
 1"=100' HOR., 1"=100' VER.
 APPROXIMATE CROSS SECTION SCALE:
 1"=100' HOR., 1"=40' VER.

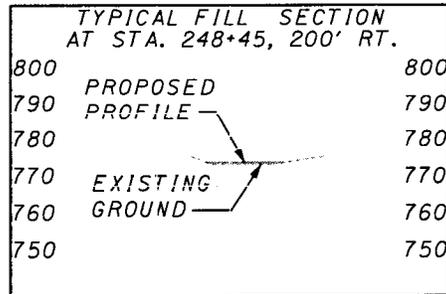
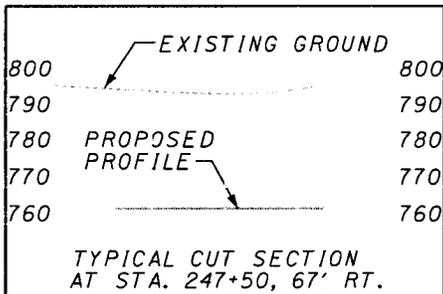


**IMPACT TO STREAM
 33 AT STA. 234+70**
 OHIO DEPARTMENT OF TRANSPORTATION
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 Figure 47



STREAM PROFILE



CROSS-SECTIONS

APPROXIMATE PLAN SCALE: 1"=100'
 APPROXIMATE PROFILE SCALE: 1"=50' HOR., 1"=100' VER.
 APPROXIMATE CROSS-SECTION SCALE: 1"=50' HOR., 1"=50' VER.



IMPACT TO STREAM 34

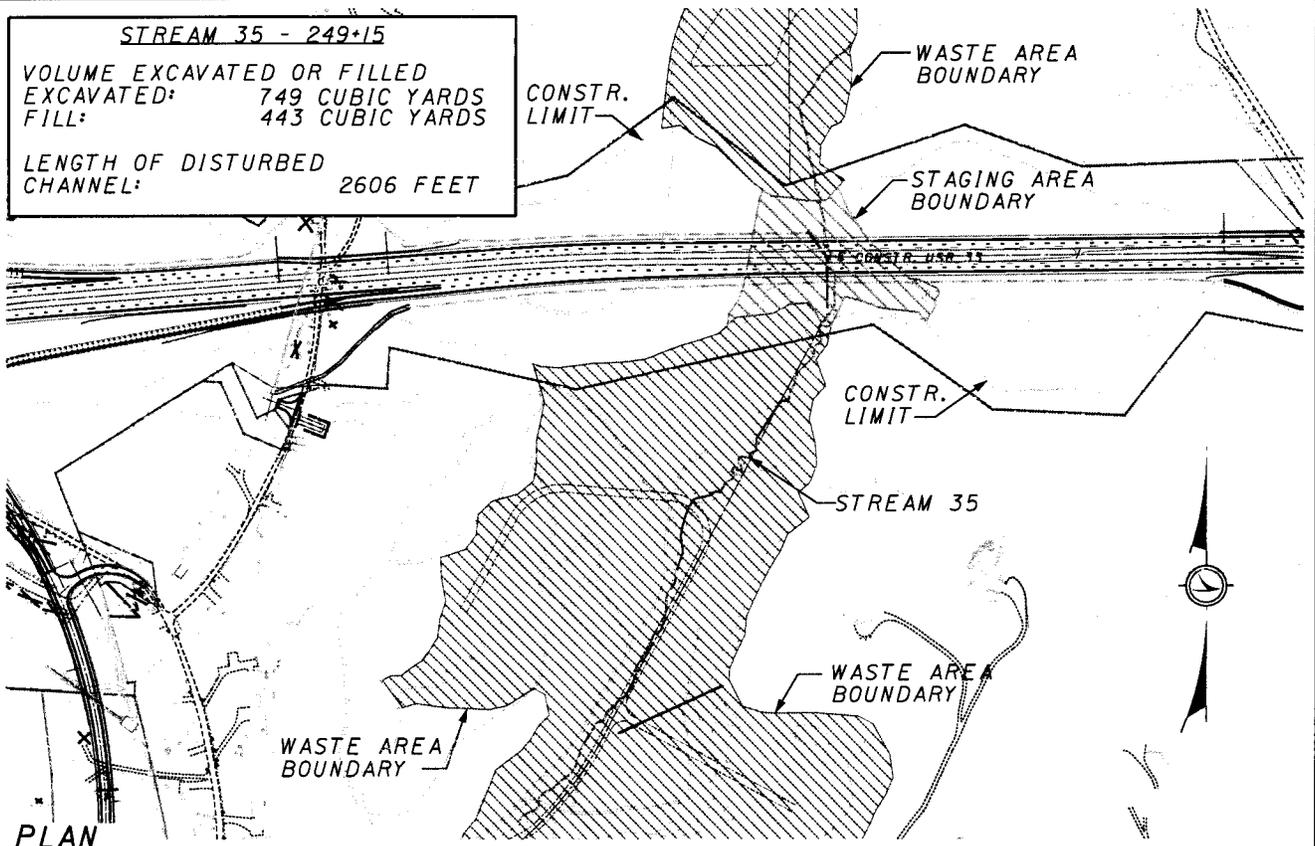
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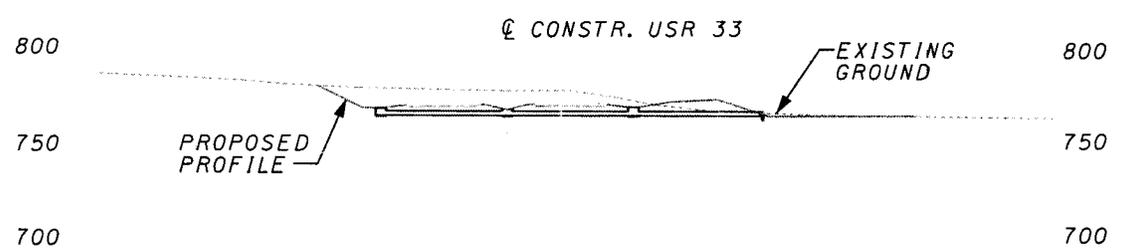
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Figure 48

STREAM 35 - 249+15
 VOLUME EXCAVATED OR FILLED
 EXCAVATED: 749 CUBIC YARDS
 FILL: 443 CUBIC YARDS
 LENGTH OF DISTURBED
 CHANNEL: 2606 FEET



PLAN



STREAM PROFILE

EXISTING GROUND	800
	790
	780
PROPOSED PROFILE	770
	760
	750

CUT CROSS SECTION AT
 STA. 249+00, 67' LT.

EXISTING GROUND	800
	790
	780
PROPOSED PROFILE	770
	760
	750

CUT CROSS SECTION AT
 STA. 249+00, 177' RT.

FILL CROSS SECTION AT
 STA. 245+50, 648' RT.

EXISTING GROUND	770
	760
	750
	740
	730

CROSS SECTIONS

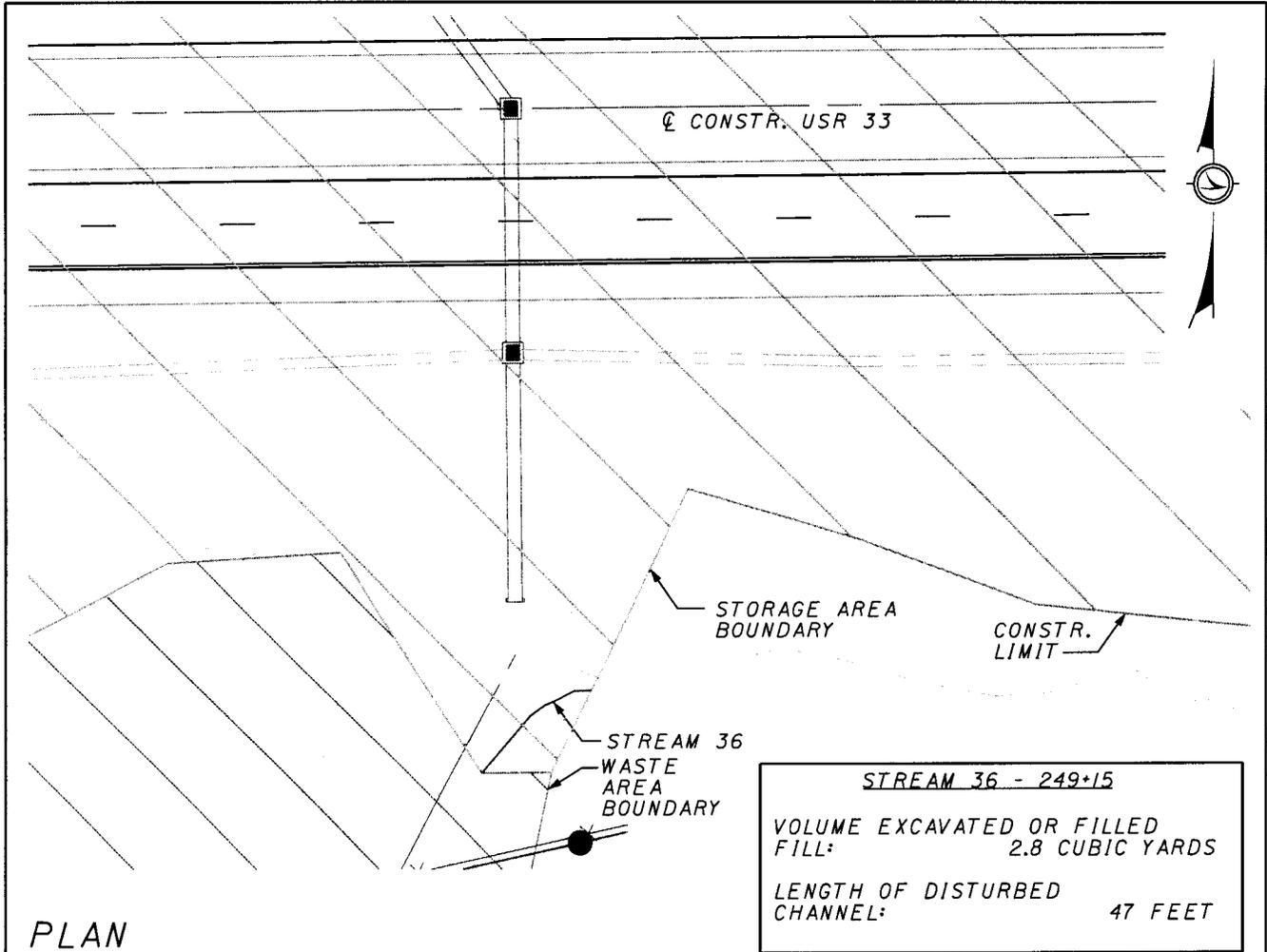
APPROXIMATE PLAN SCALE: 1"=500'
 APPROXIMATE PROFILE SCALE:
 1"=100' HOR., 1"=100' VER.
 APPROXIMATE CROSS-SECTION SCALE:
 1"=50' HOR., 1"=50' VER.



**IMPACT TO STREAM
 35**

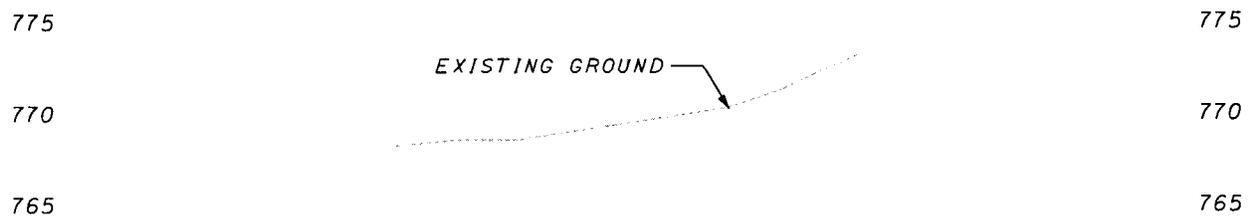
OHIO DEPARTMENT OF TRANSPORTATION
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 Figure 49



PLAN

STREAM 36 - 249+15	
VOLUME EXCAVATED OR FILLED	
FILL:	2.8 CUBIC YARDS
LENGTH OF DISTURBED CHANNEL:	47 FEET



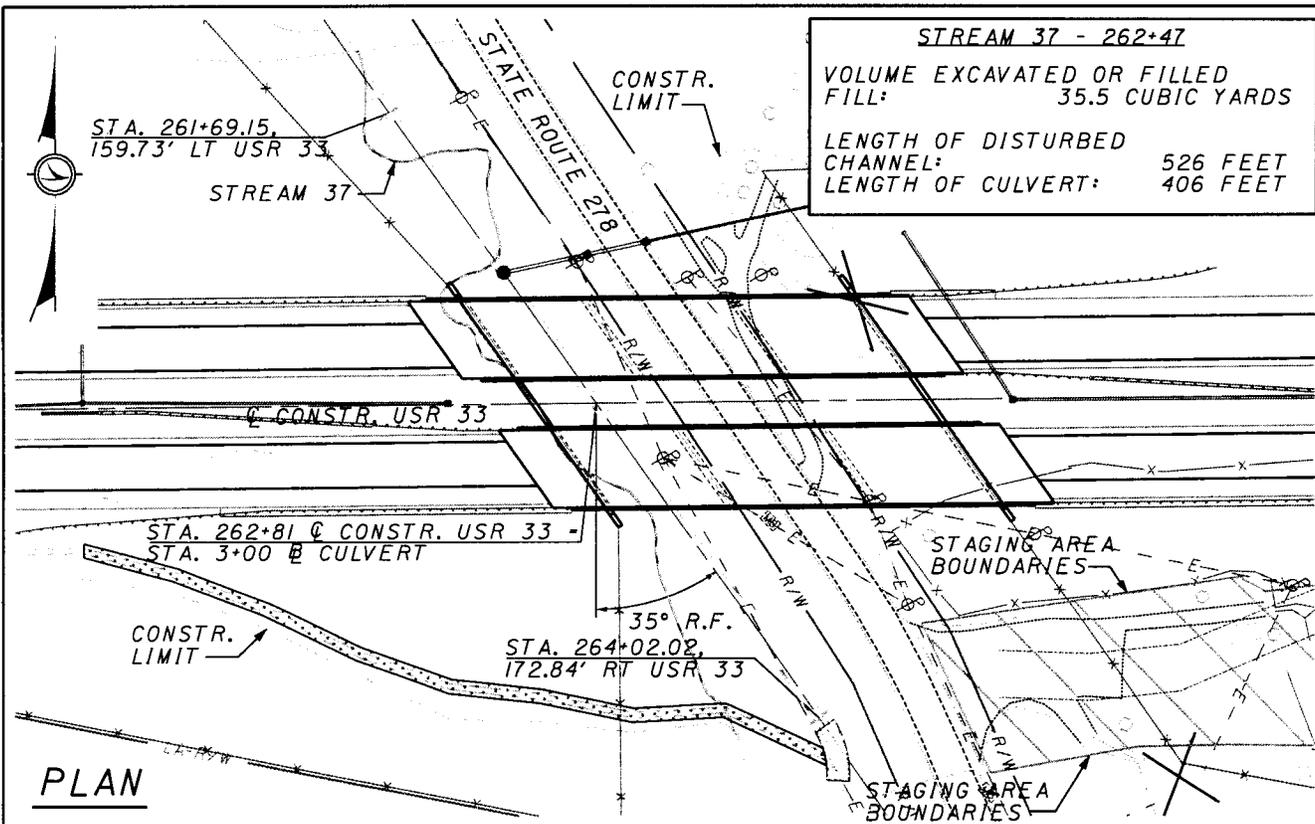
STREAM PROFILE

APPROXIMATE PLAN SCALE: 1"=50'
APPROXIMATE PROFILE SCALE: 1"=20' HOR., 1"=10' VER.

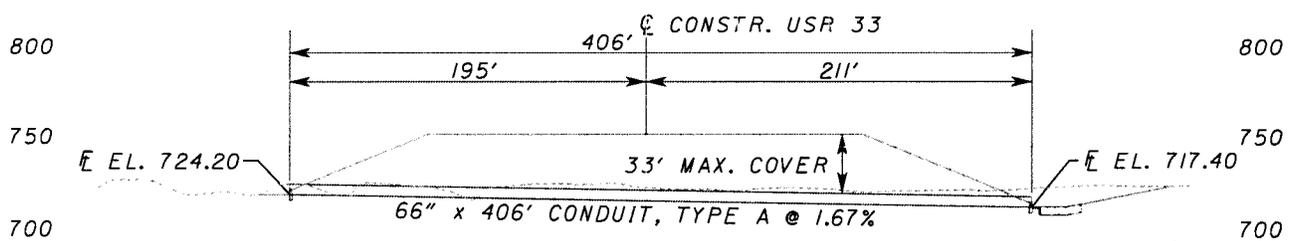


IMPACT TO STREAM
36
 OHIO DEPARTMENT OF TRANSPORTATION
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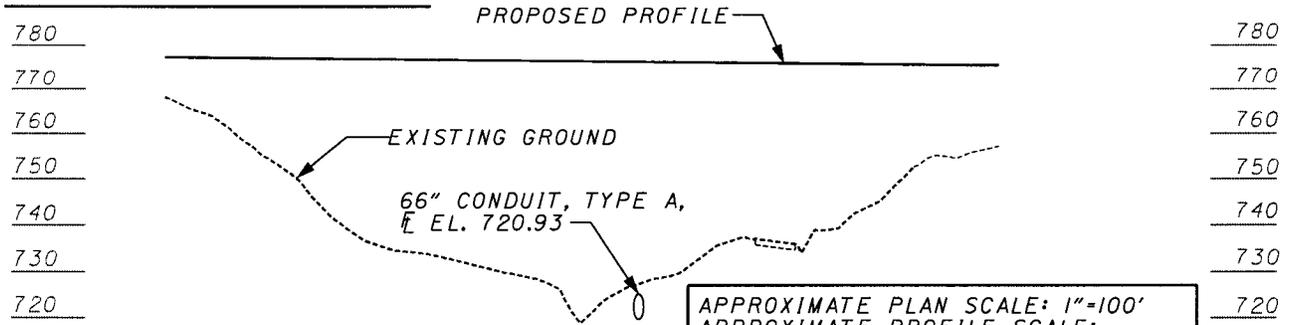
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 Figure 50



PLAN



CULVERT PROFILE



CROSS-SECTION



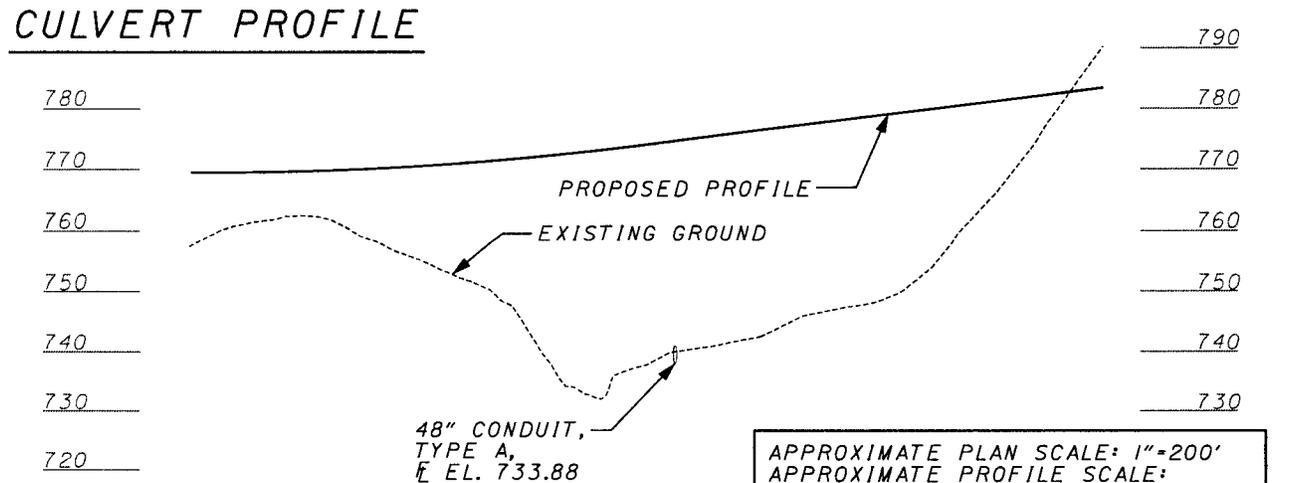
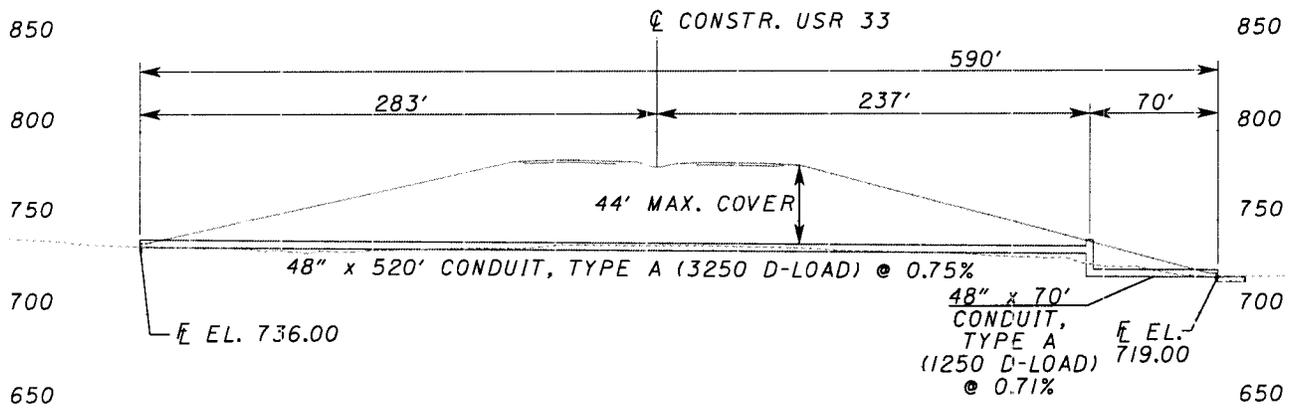
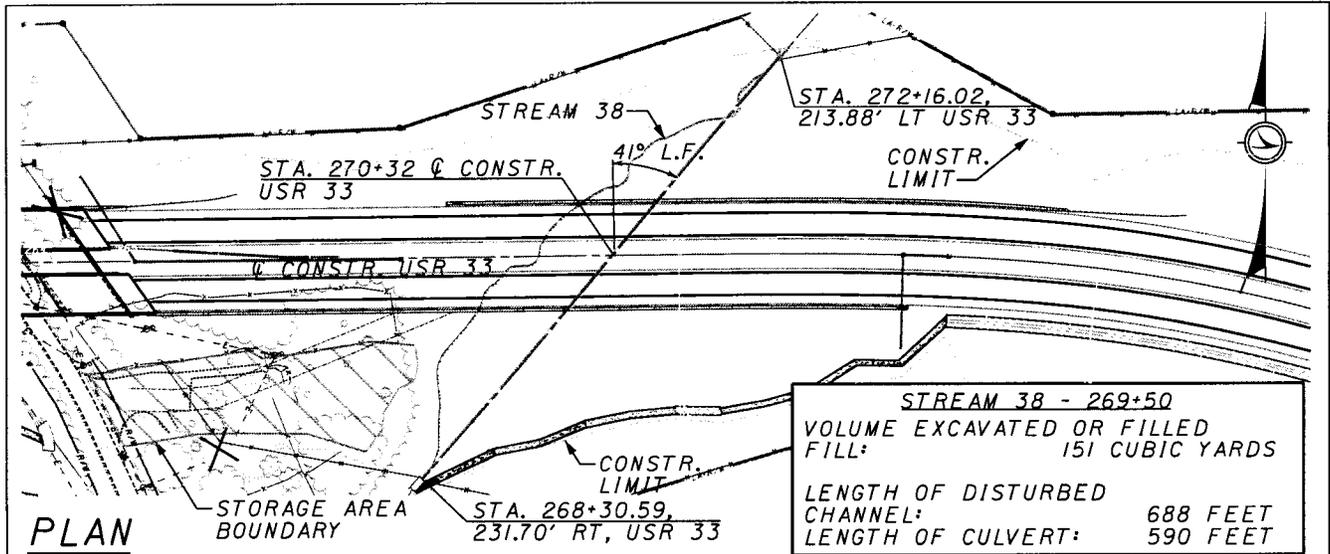
**IMPACT TO STREAM
 37**

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Figure 51



APPROXIMATE PLAN SCALE: 1"=200'
 APPROXIMATE PROFILE SCALE: 1"=100' HOR., 1"=100' VER.
 APPROXIMATE CROSS-SECTION SCALE: 1"=200' HOR., 1"=30' VER.



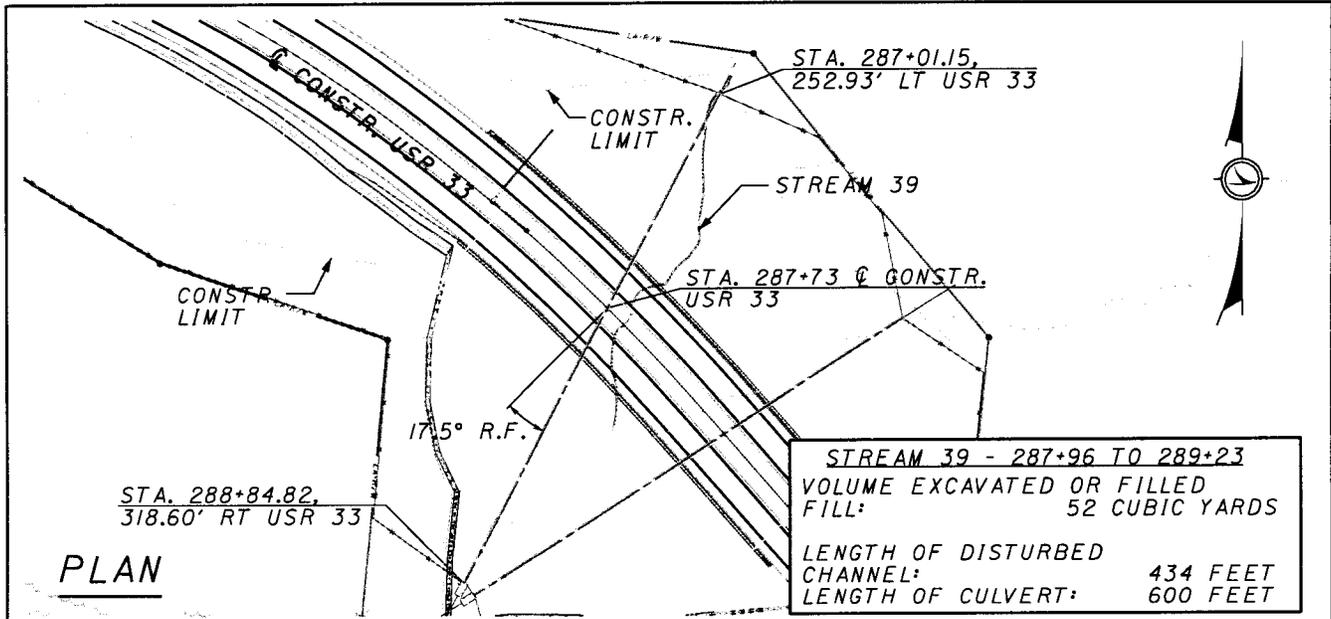
IMPACT TO STREAM 38

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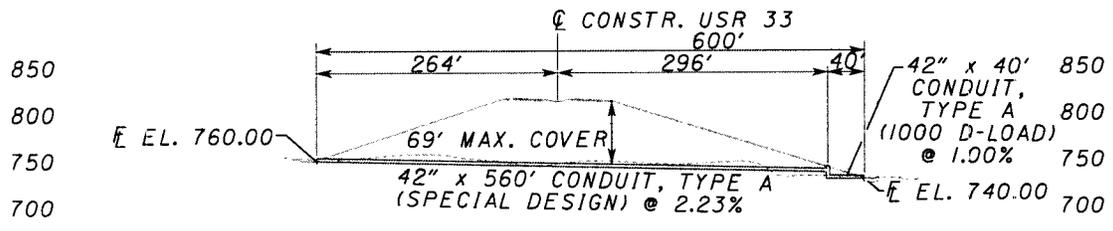
U.S. Army Corps of Engineers 404 Permit and OEPA Section 401 Water Quality Certification Application

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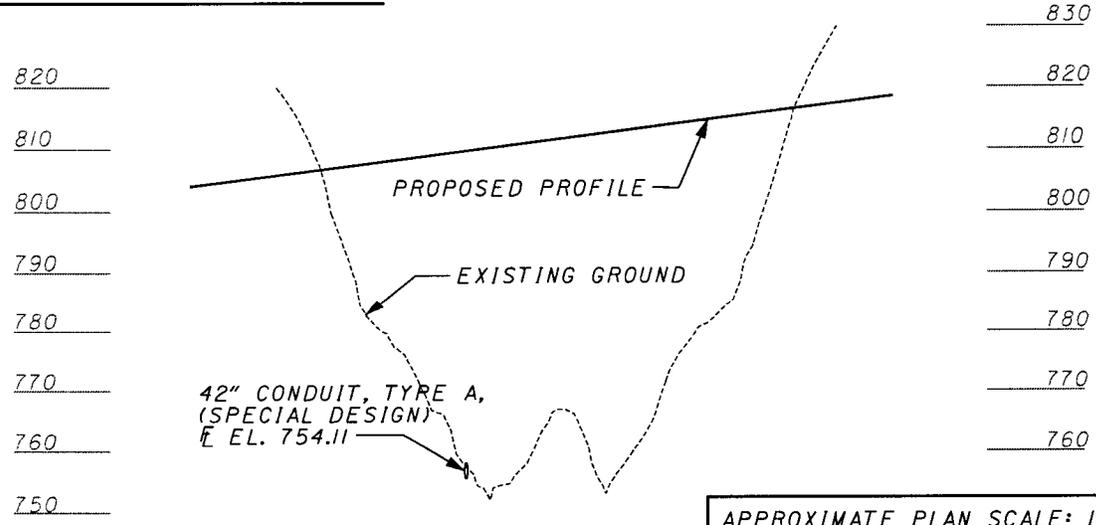
Figure 52



PLAN



CULVERT PROFILE



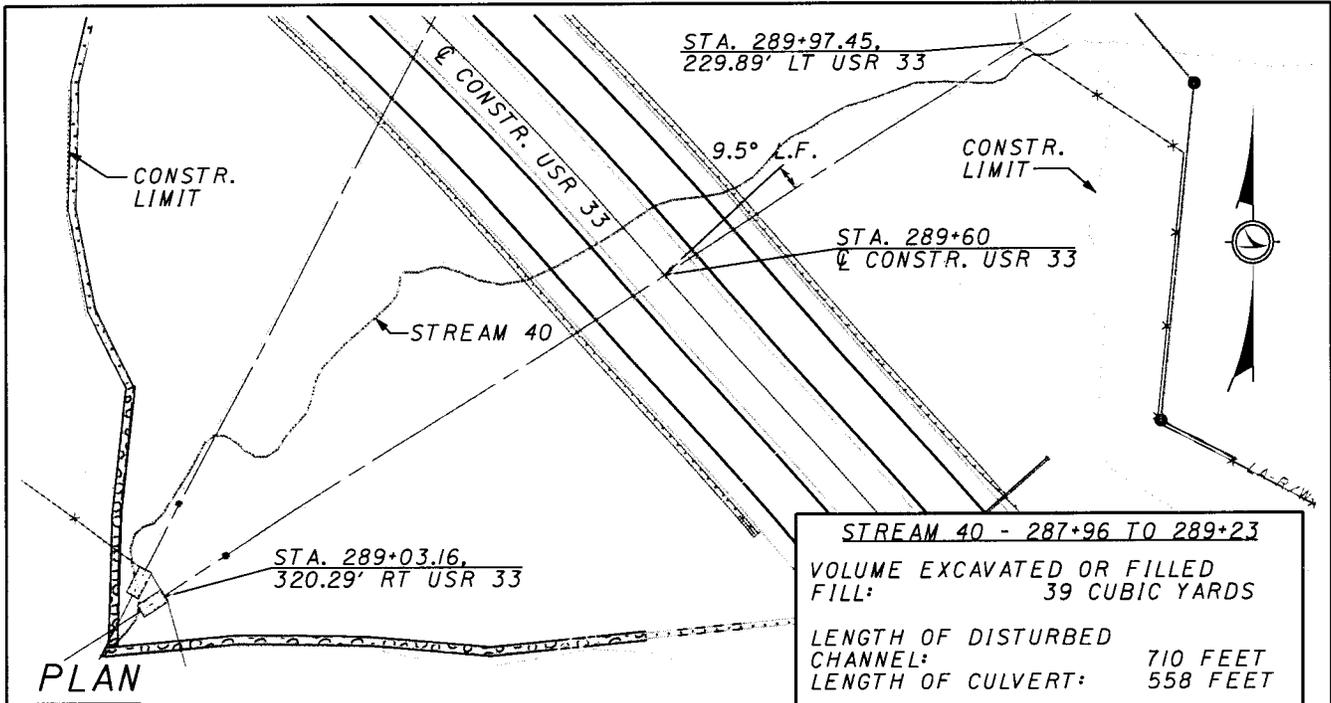
CROSS-SECTION

APPROXIMATE PLAN SCALE: 1"=200'
 APPROXIMATE PROFILE SCALE:
 1"=200' HOR., 1"=200' VER.
 APPROXIMATE CROSS-SECTION SCALE:
 1"=100' HOR., 1"=30' VER.



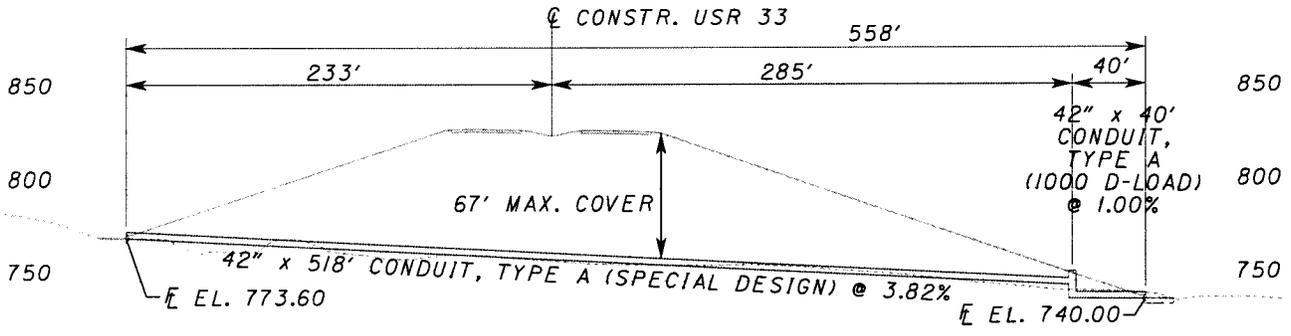
IMPACT TO STREAM
39
 OHIO DEPARTMENT OF TRANSPORTATION
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 Figure 53

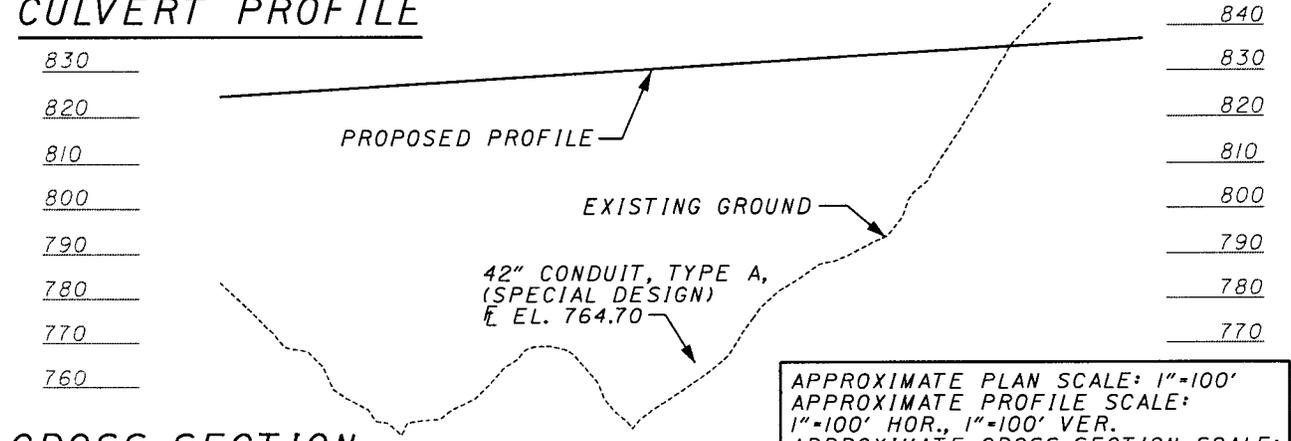


STREAM 40 - 287+96 TO 289+23
 VOLUME EXCAVATED OR FILLED
 FILL: 39 CUBIC YARDS
 LENGTH OF DISTURBED
 CHANNEL: 710 FEET
 LENGTH OF CULVERT: 558 FEET

PLAN



CULVERT PROFILE



CROSS-SECTION

APPROXIMATE PLAN SCALE: 1"=100'
 APPROXIMATE PROFILE SCALE:
 1"=100' HOR., 1"=100' VER.
 APPROXIMATE CROSS-SECTION SCALE:
 1=100' HOR., 1"=40' VER.



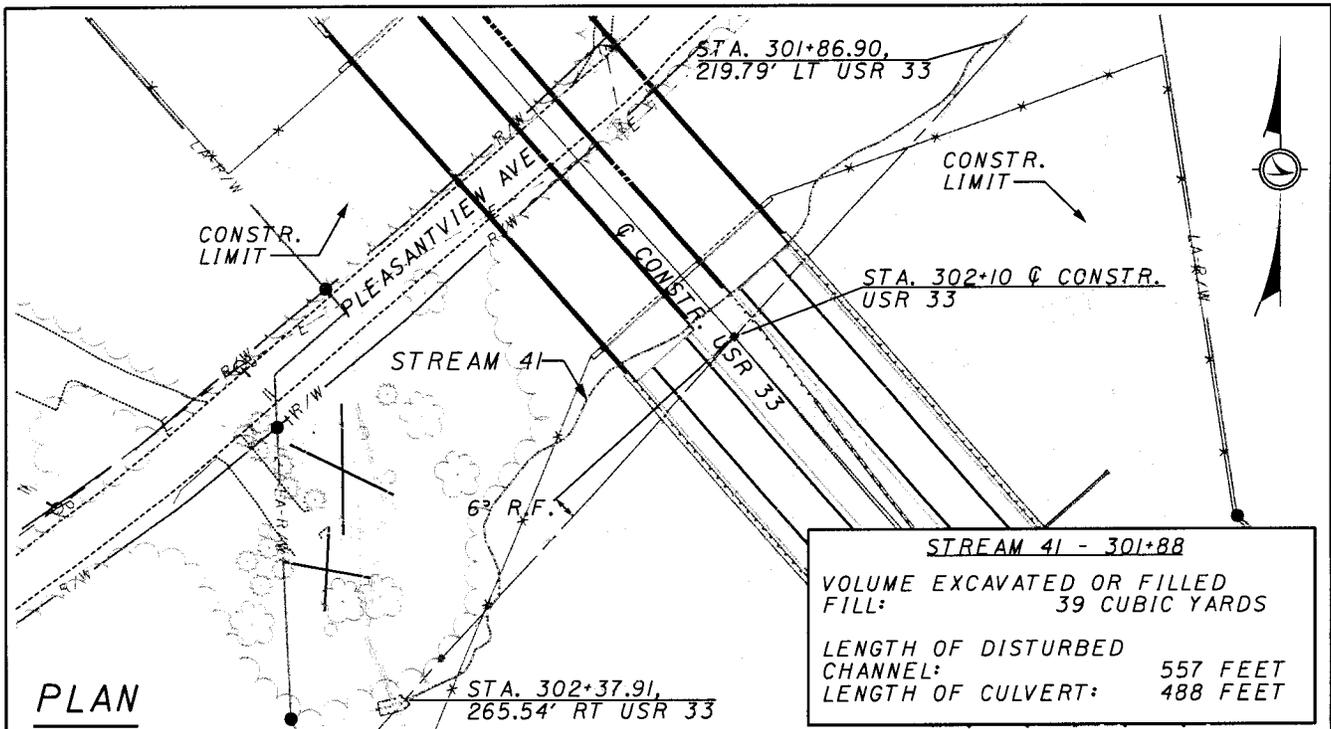
**IMPACT TO STREAM
40**

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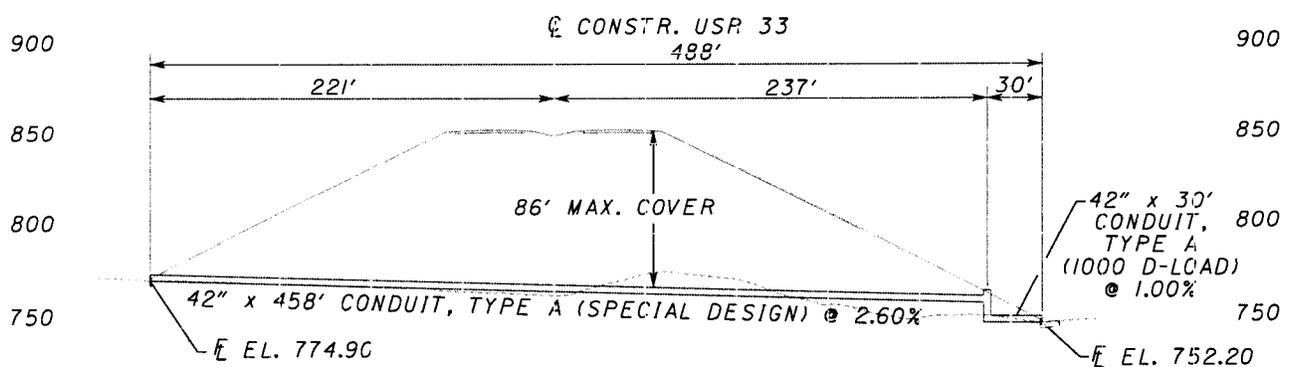
Date: 03-09-2005

Figure 54

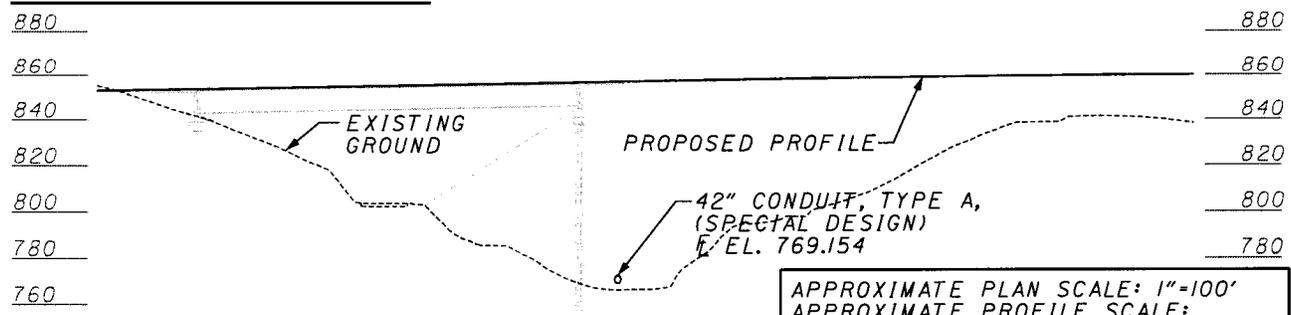


PLAN

STREAM 41 - 301+88
 VOLUME EXCAVATED OR FILLED
 FILL: 39 CUBIC YARDS
 LENGTH OF DISTURBED
 CHANNEL: 557 FEET
 LENGTH OF CULVERT: 488 FEET



CULVERT PROFILE



CROSS-SECTION

APPROXIMATE PLAN SCALE: 1"=100'
 APPROXIMATE PROFILE SCALE:
 1"=100' HOR., 1"=100' VER.
 APPROXIMATE CROSS-SECTION SCALE:
 1"=100' HOR., 1"=80' VER.



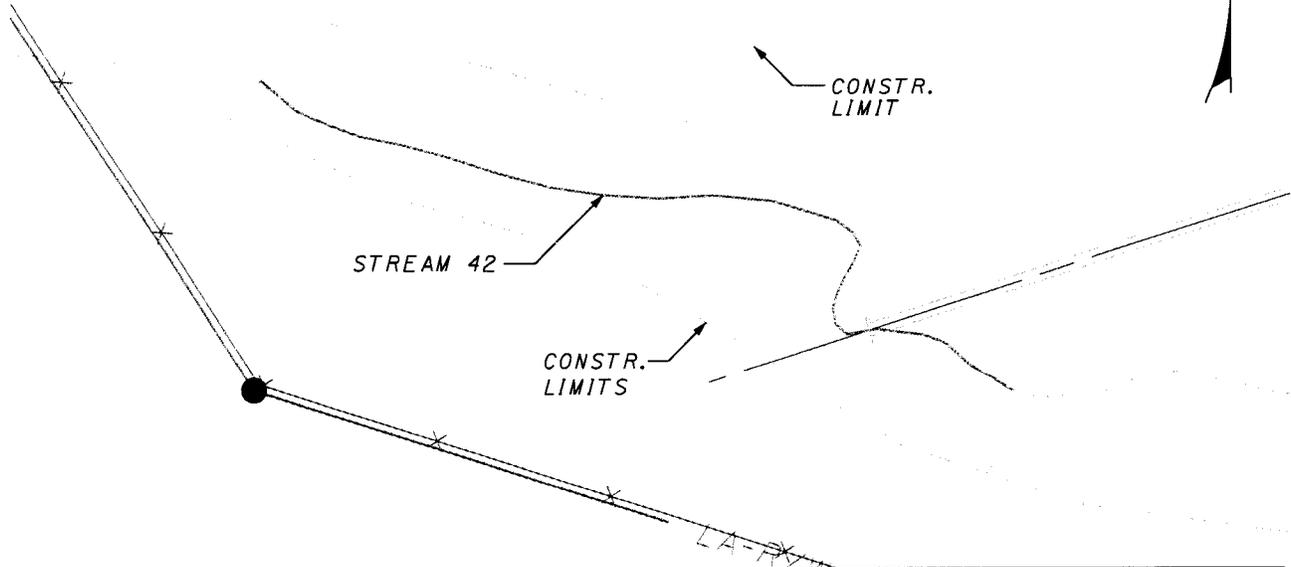
**IMPACT TO STREAM
 41**

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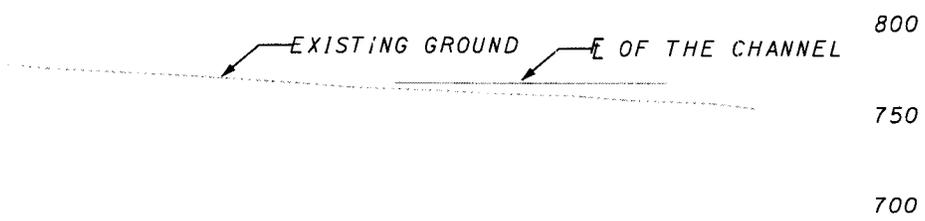
Date: 03-09-2005

Figure 55



PLAN

STREAM 42 - 310+00 TO 325+11	
VOLUME EXCAVATED OR FILLED	
FILL:	8.4 CUBIC YARDS
LENGTH OF DISTURBED	
CHANNEL:	252 FEET



STREAM PROFILE

APPROXIMATE PLAN SCALE: 1"=50'
APPROXIMATE PROFILE SCALE:
1"=100' HOR., 1"=100' VER.



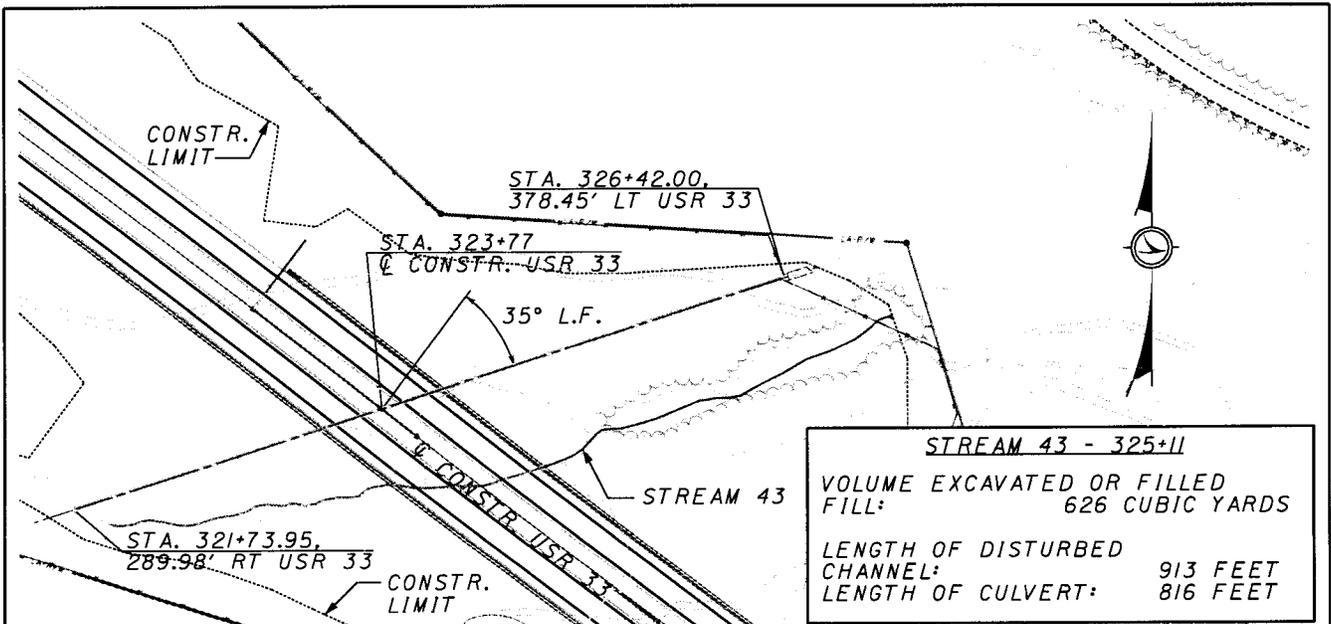
**IMPACT TO STREAM
42**

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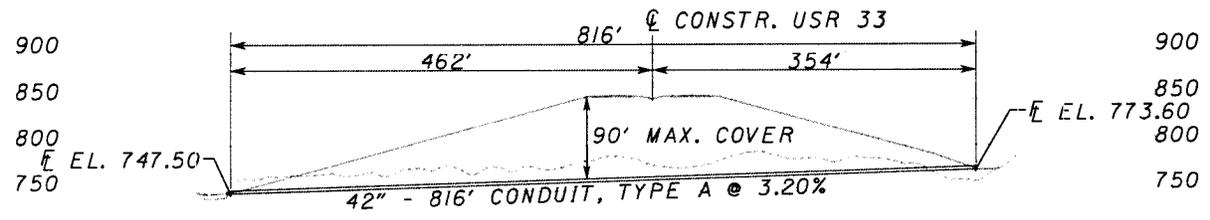
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Figure 56

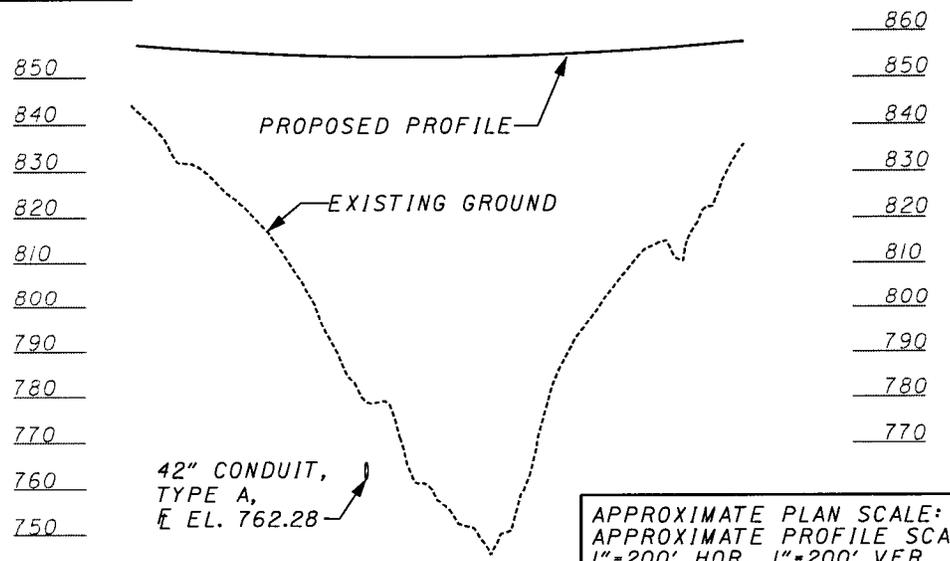


STREAM 43 - 325+11	
VOLUME EXCAVATED OR FILLED FILL:	626 CUBIC YARDS
LENGTH OF DISTURBED CHANNEL:	913 FEET
LENGTH OF CULVERT:	816 FEET

PLAN



CULVERT PROFILE



APPROXIMATE PLAN SCALE: 1"=200'
 APPROXIMATE PROFILE SCALE:
 1"=200' HOR., 1"=200' VER.
 APPROXIMATE CROSS-SECTION SCALE:
 1"=200' HOR., 1"=40' VER.

CROSS-SECTION



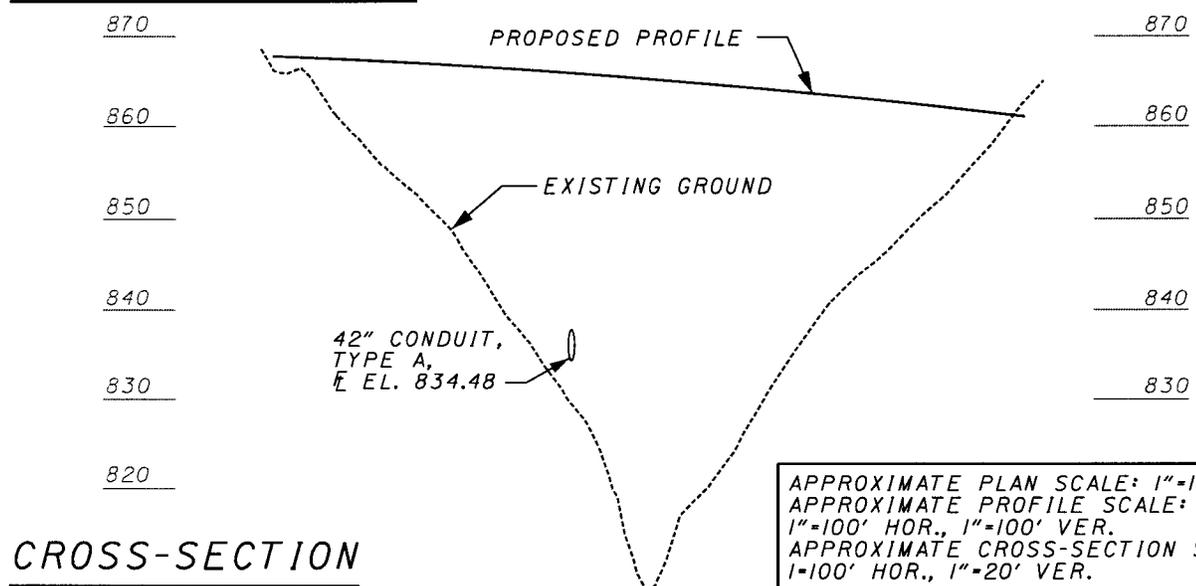
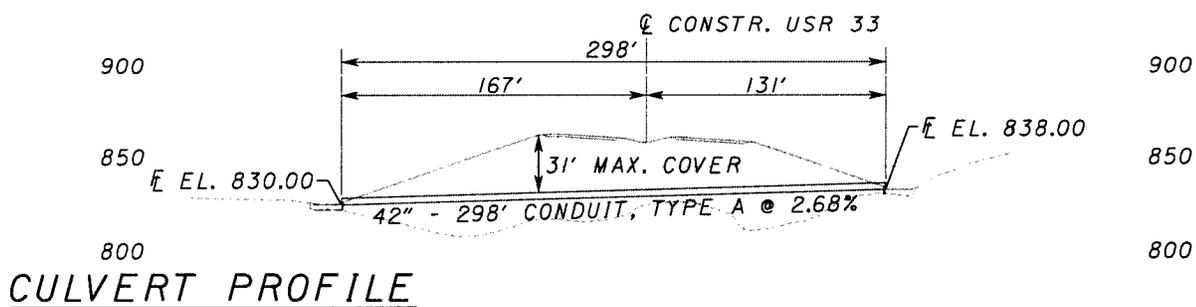
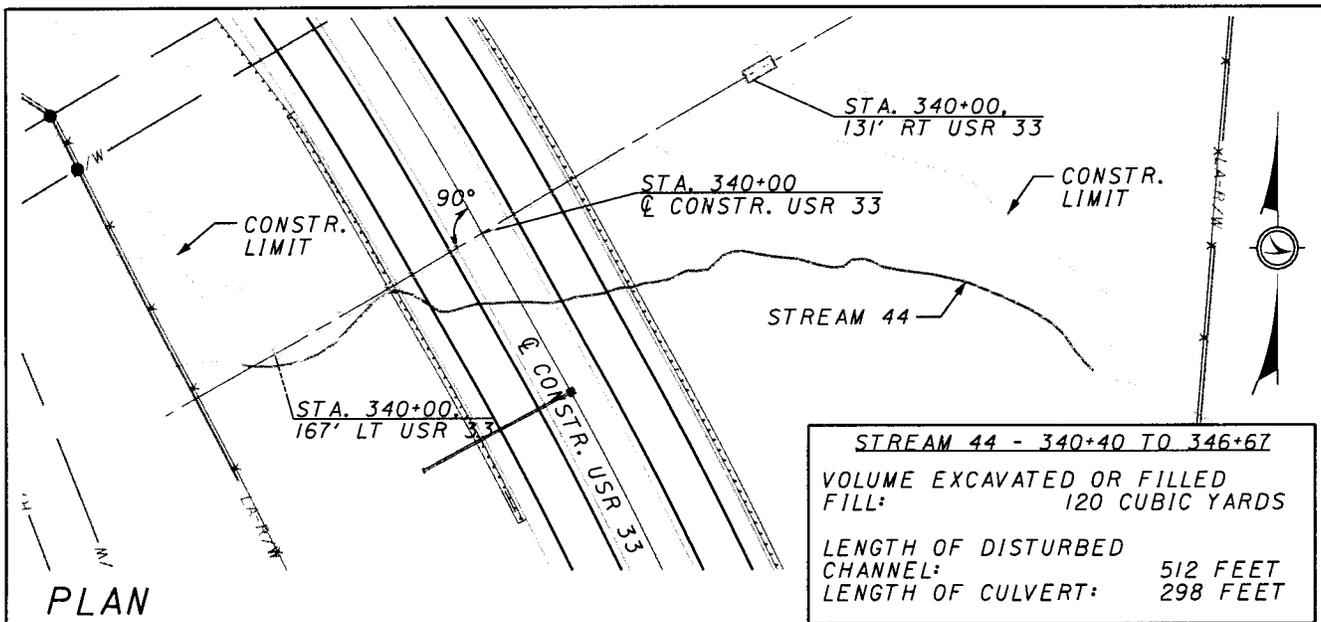
**IMPACT TO STREAM
43**

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Figure 57



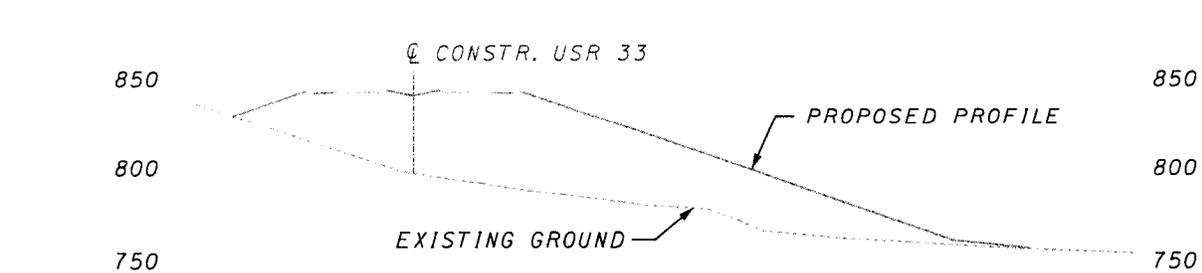
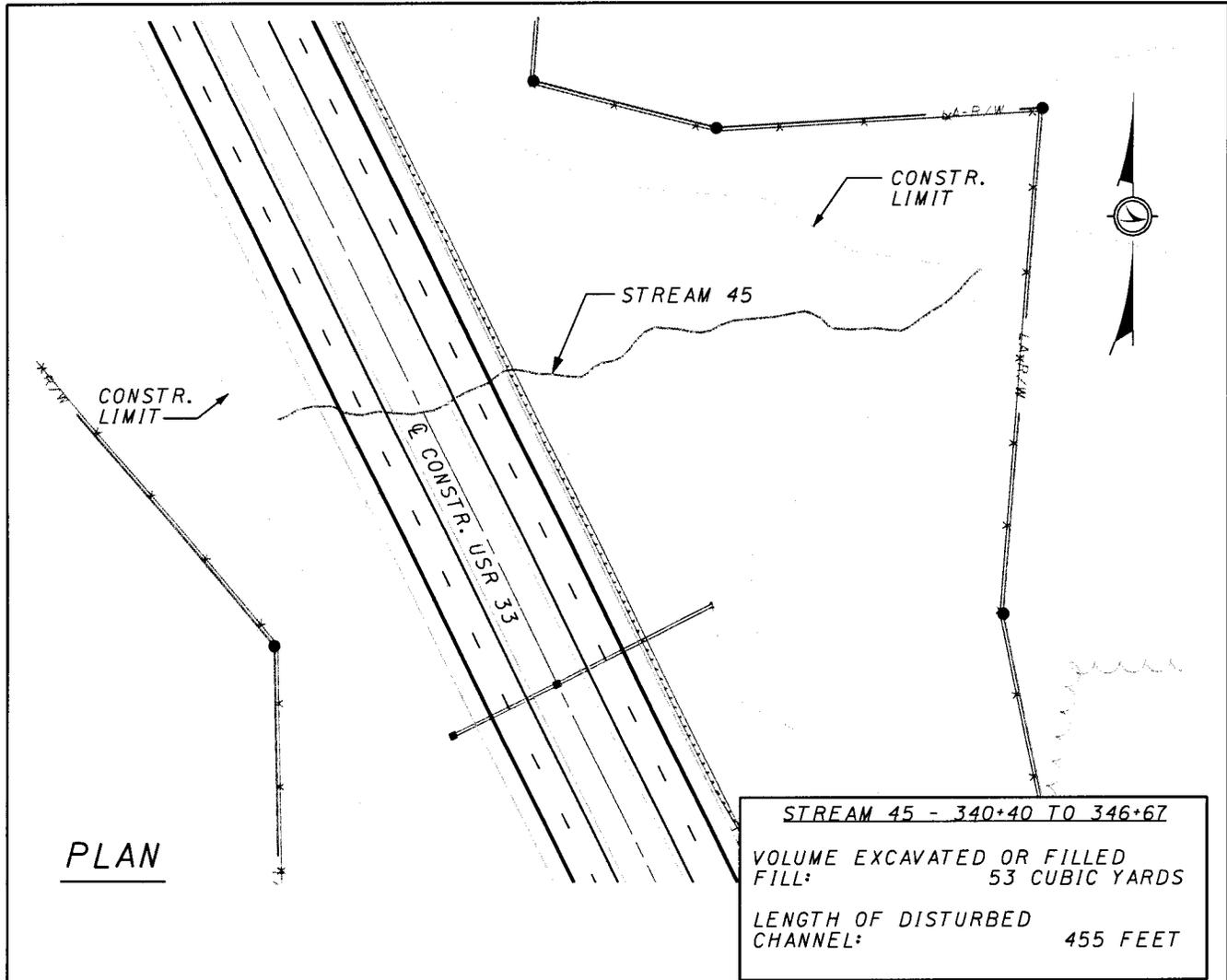
**IMPACT TO STREAM
44**

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Figure 58



APPROXIMATE PLAN SCALE: 1"=100'
 APPROXIMATE PROFILE SCALE:
 1"=100' HOR., 1"=100' VER.



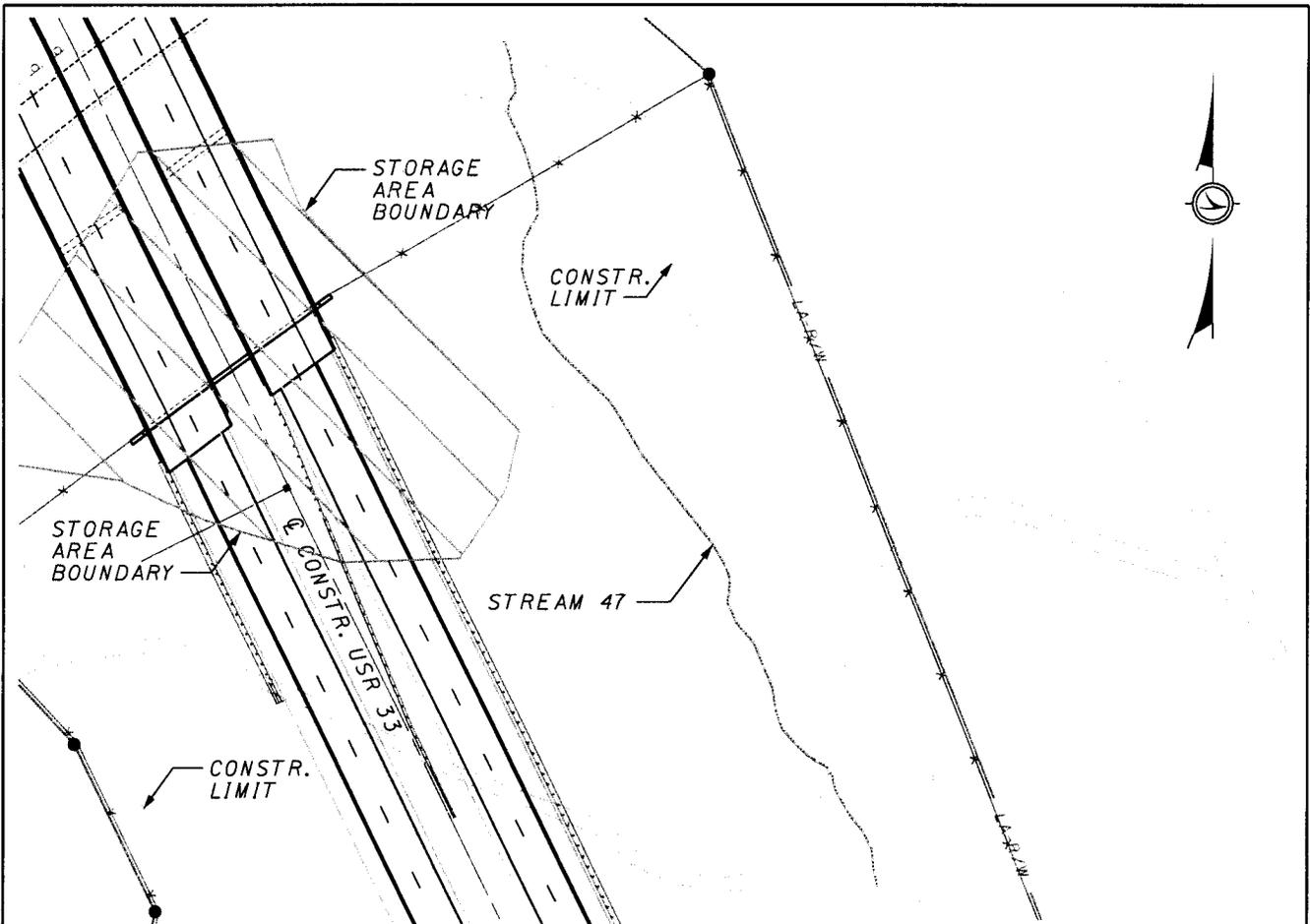
**IMPACT TO STREAM
45**

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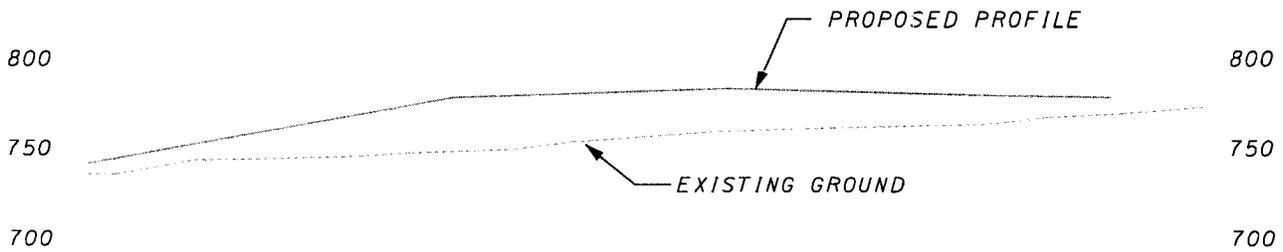
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Figure 59



PLAN

STREAM 47 - 360+00 TO 367+73	
VOLUME EXCAVATED OR FILLED	
FILL:	96 CUBIC YARDS
LENGTH OF DISTURBED CHANNEL:	540 FEET



STREAM PROFILE

APPROXIMATE PLAN SCALE: 1"=100'
 APPROXIMATE PROFILE SCALE:
 1"=100' HOR., 1"=100' VER.



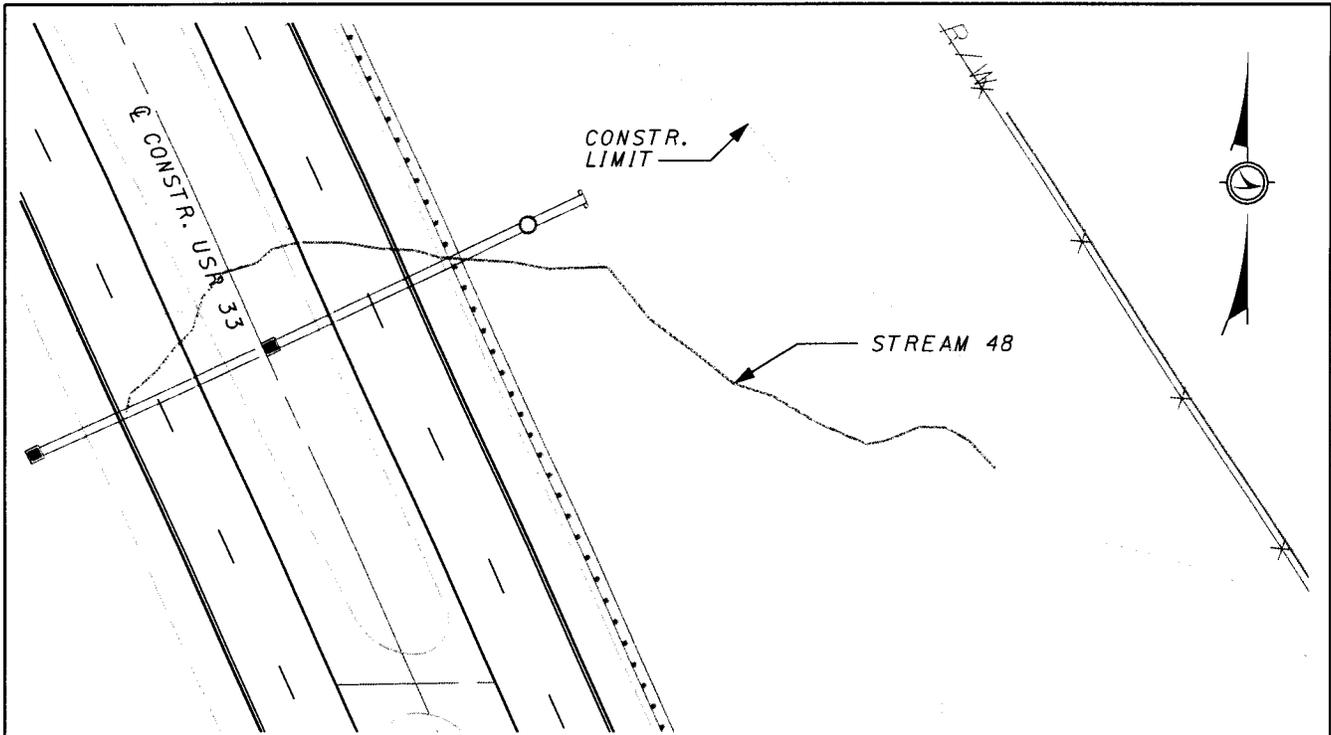
**IMPACT TO STREAM
47**

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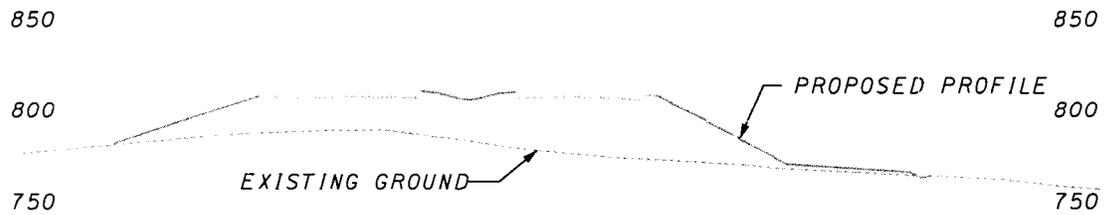
Date: 03-09-2005

Figure 60



PLAN

<i>STREAM 48 - 378+24 TO 382+21</i>	
VOLUME EXCAVATED OR FILLED	
FILL:	36.8 CUBIC YARDS
LENGTH OF DISTURBED	
CHANNEL:	284 FEET



STREAM PROFILE

APPROXIMATE PLAN SCALE: 1"=50' APPROXIMATE PROFILE SCALE: 1"=100' HOR., 1"=100' VER.
--



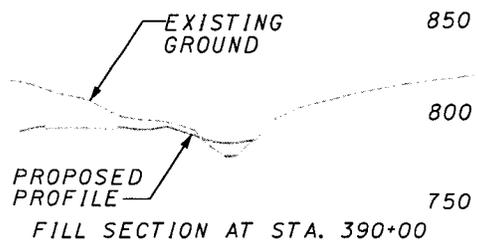
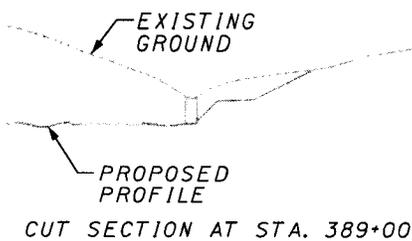
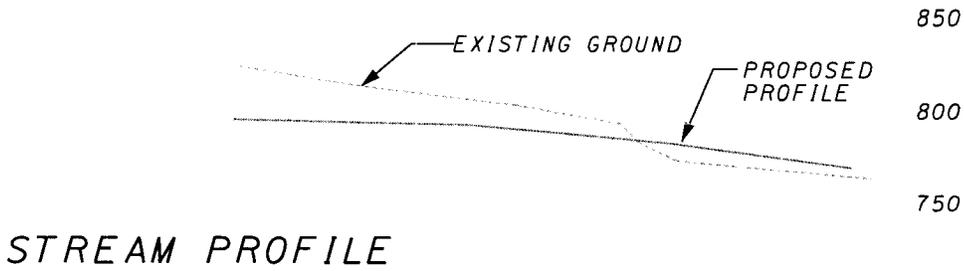
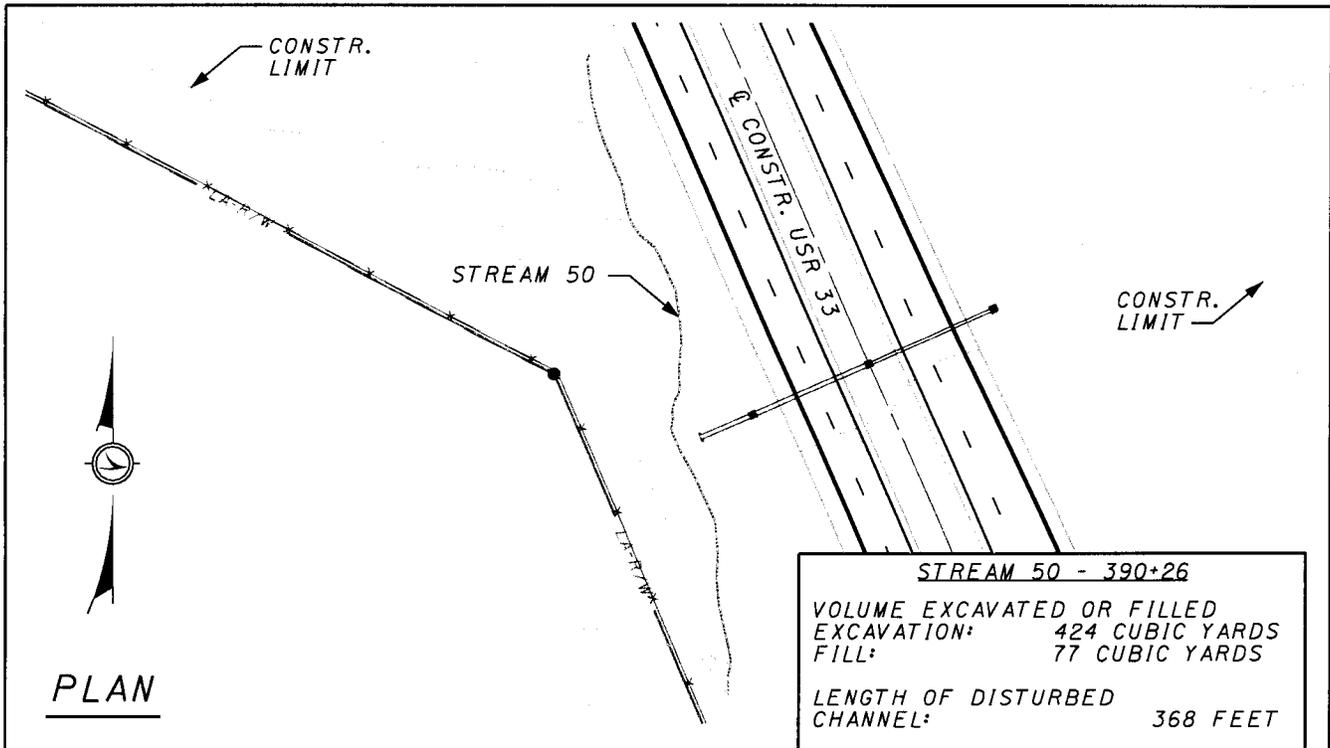
**IMPACT TO STREAM
48**

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Figure 61



CROSS SECTIONS

APPROXIMATE PLAN SCALE: 1"=100'
 APPROXIMATE PROFILE SCALE:
 1"=100' HOR., 1"=100' VER.
 APPROXIMATE CROSS-SECTION SCALE:
 1"=100' HOR., 1"=100' VER.



**IMPACT TO STREAM
50**

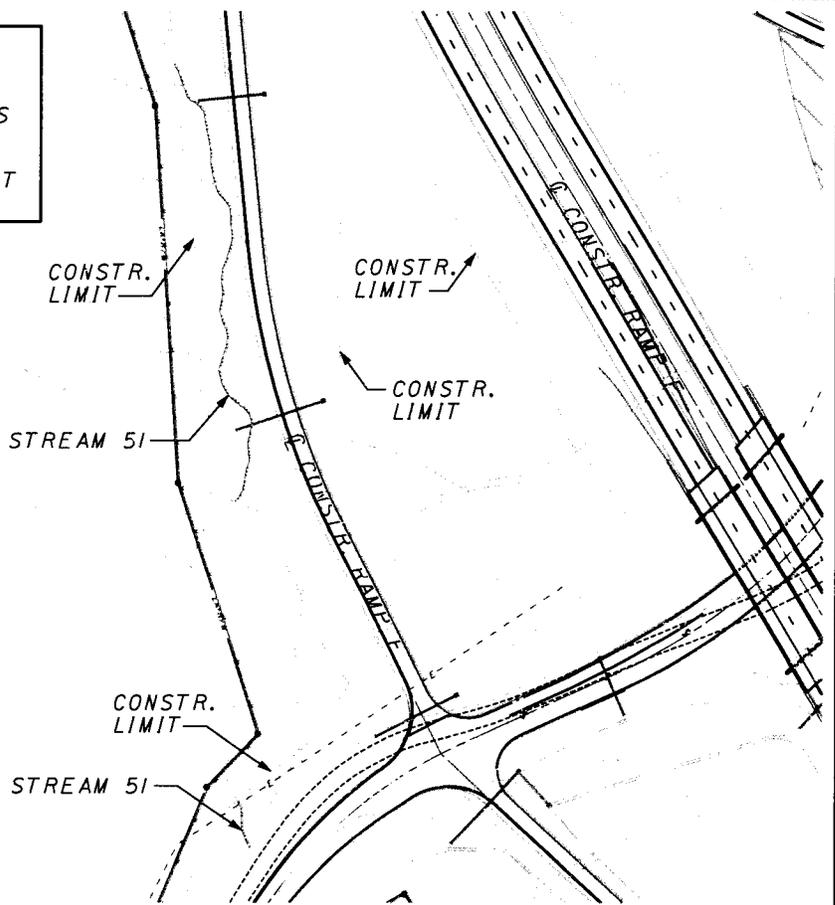
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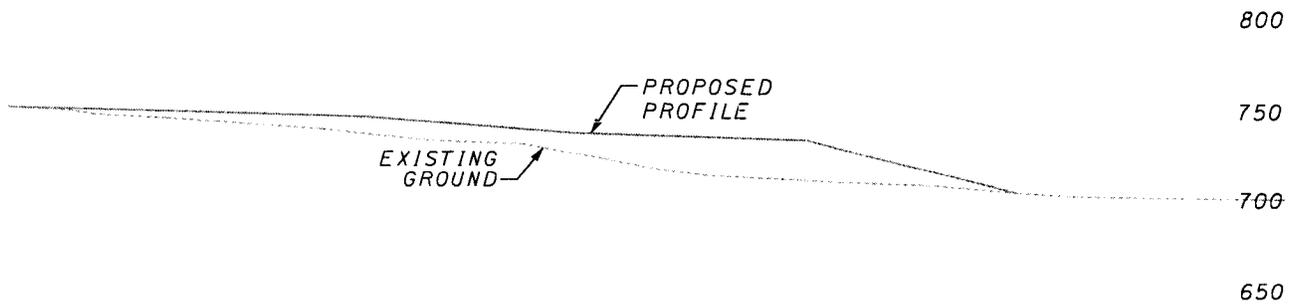
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Figure 63

STREAM 51 - 410+00
 VOLUME EXCAVATED OR FILLED
 FILL: 65 CUBIC YARDS
 LENGTH OF DISTURBED
 CHANNEL: 570 FEET



PLAN



STREAM PROFILE

APPROXIMATE PLAN SCALE: 1"=200'
 APPROXIMATE PROFILE SCALE:
 1"=100' HOR., 1"=100' VER.



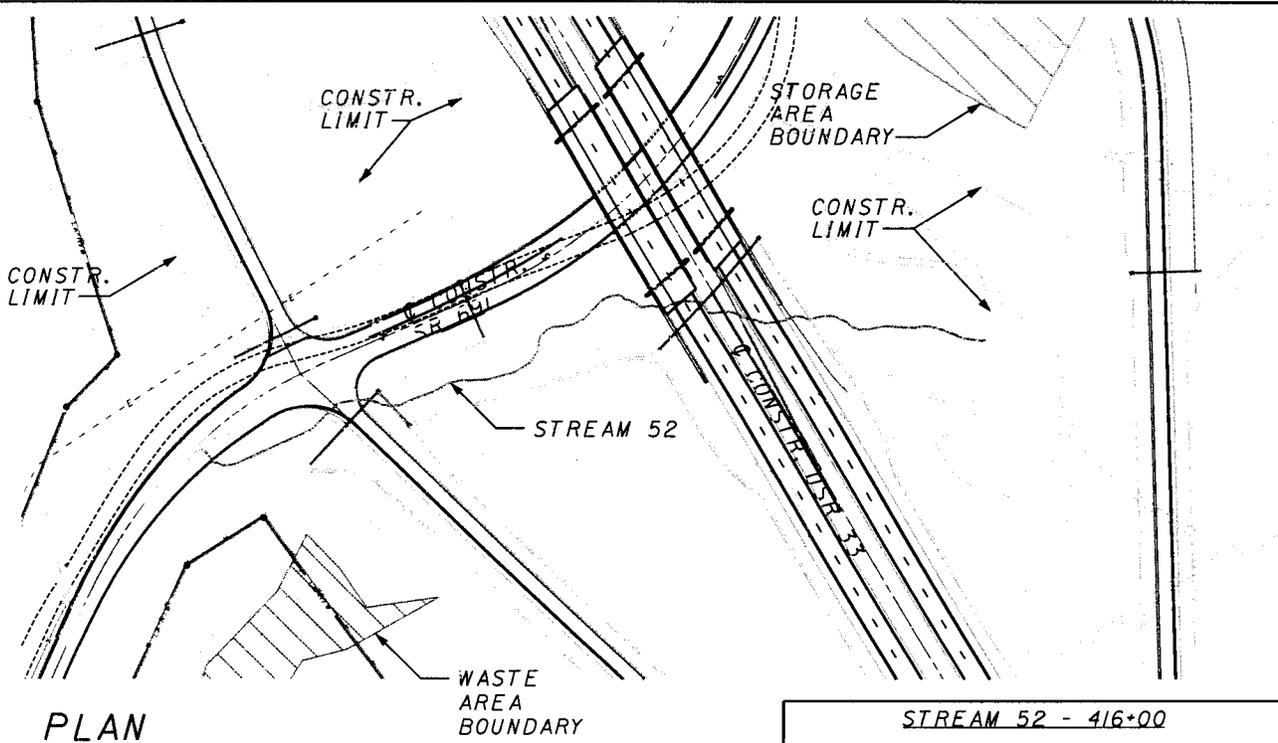
**IMPACT TO STREAM
 51**

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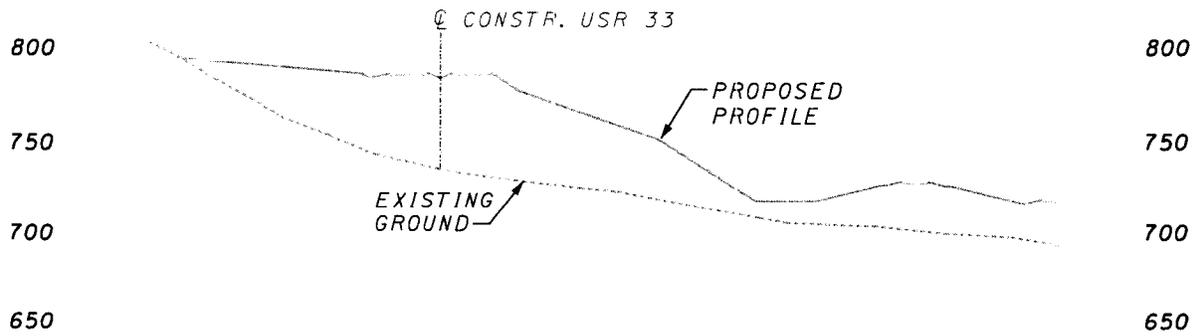
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Figure 64



PLAN

STREAM 52 - 416+00	
VOLUME EXCAVATED OR FILLED FILL:	100 CUBIC YARDS
LENGTH OF DISTURBED CHANNEL:	998 FEET



STREAM PROFILE

APPROXIMATE PLAN SCALE: 1"=200'
 APPROXIMATE PROFILE SCALE:
 1"=100' HOR., 1"=100' VER.



**IMPACT TO STREAM
52**

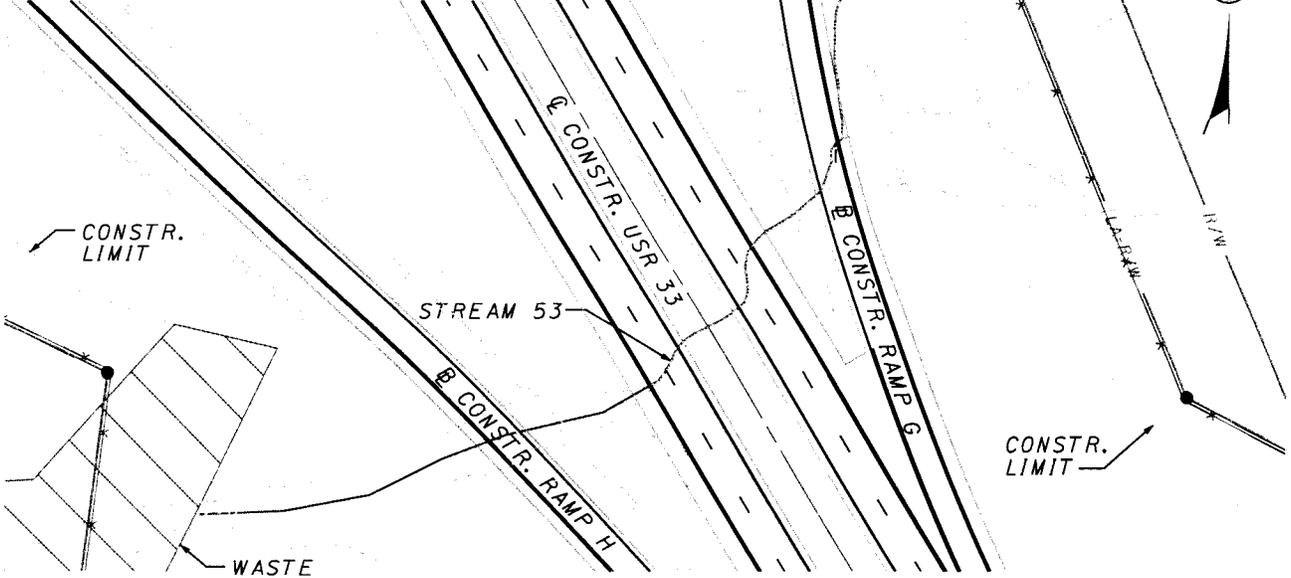
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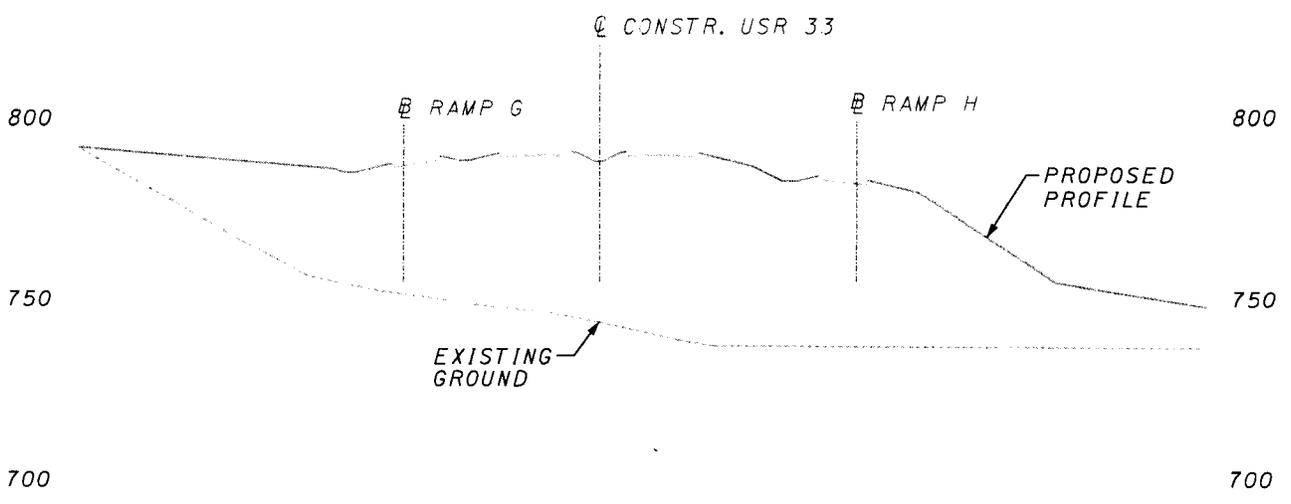
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Figure 65

STREAM 53 - 423+80
 VOLUME EXCAVATED OR FILLED
 FILL: 68 CUBIC YARDS
 LENGTH OF DISTURBED
 CHANNEL: 618 FEET



PLAN



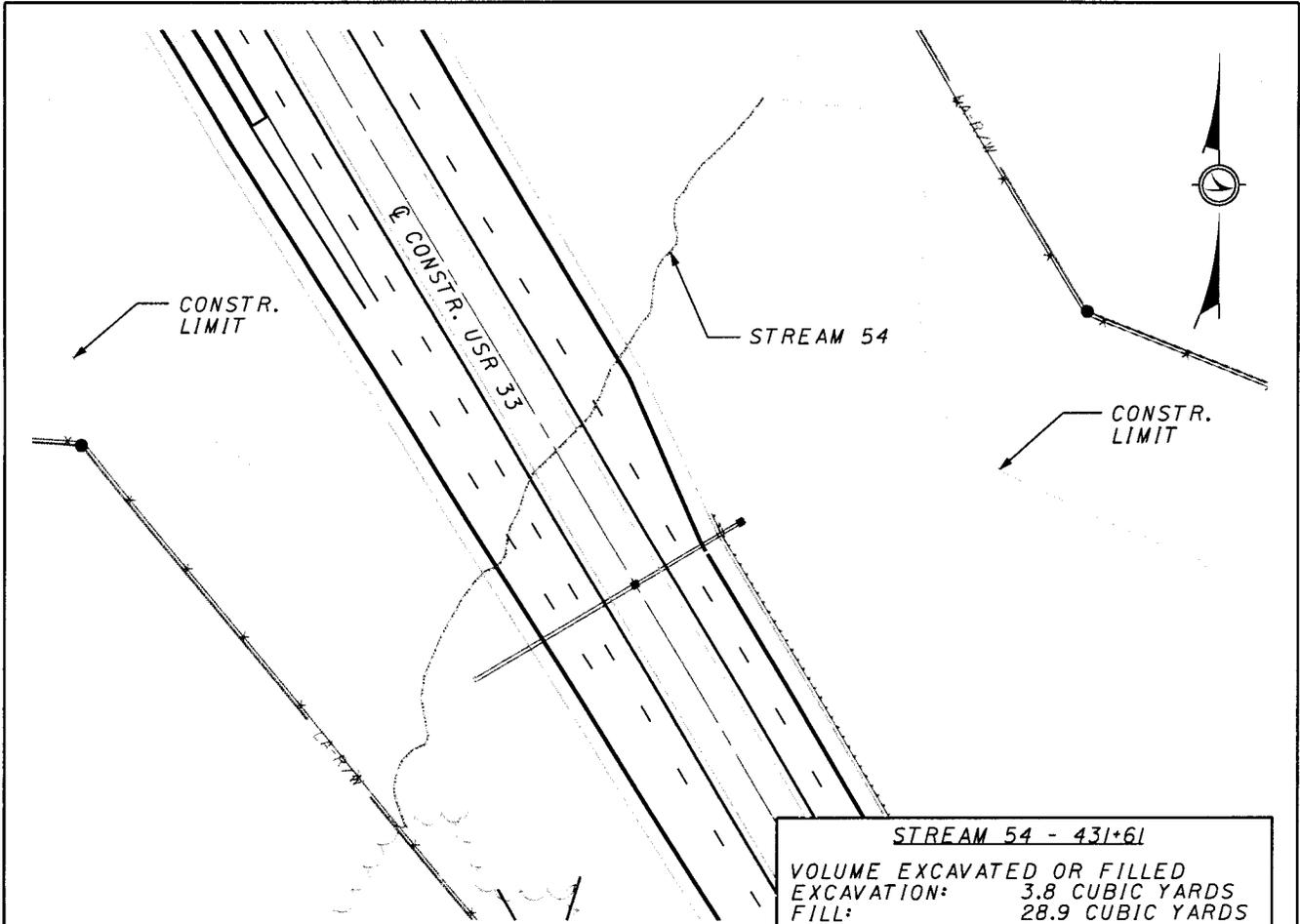
STREAM PROFILE

APPROXIMATE PLAN SCALE: 1"=100'
 APPROXIMATE PROFILE SCALE:
 1"=100' HOR., 1"=50' VER.



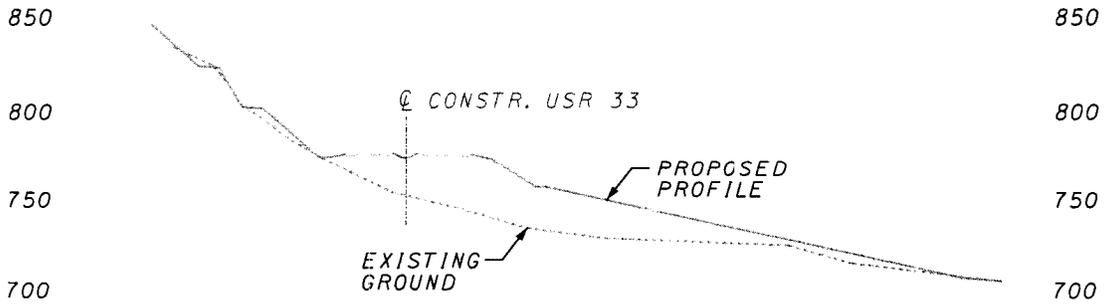
**IMPACT TO STREAM
 53**
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 Figure 66



PLAN

STREAM 54 - 431+61	
VOLUME EXCAVATED OR FILLED	
EXCAVATION:	3.8 CUBIC YARDS
FILL:	28.9 CUBIC YARDS
LENGTH OF DISTURBED CHANNEL: 480 FEET	



STREAM PROFILE

APPROXIMATE PLAN SCALE: 1"=100'
 APPROXIMATE PROFILE SCALE:
 1"=100' HOR., 1"=100' VER.



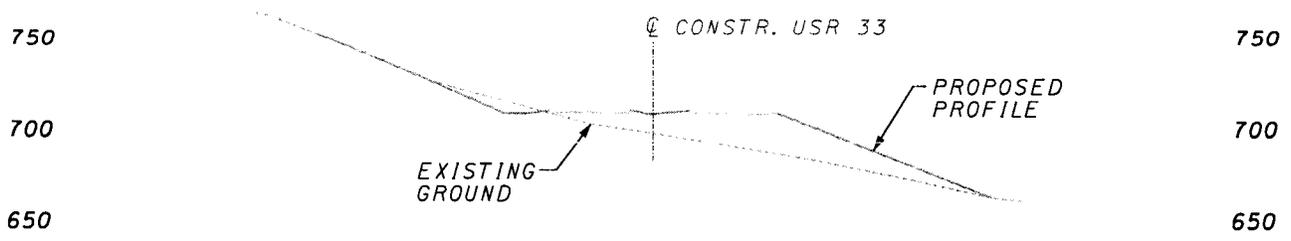
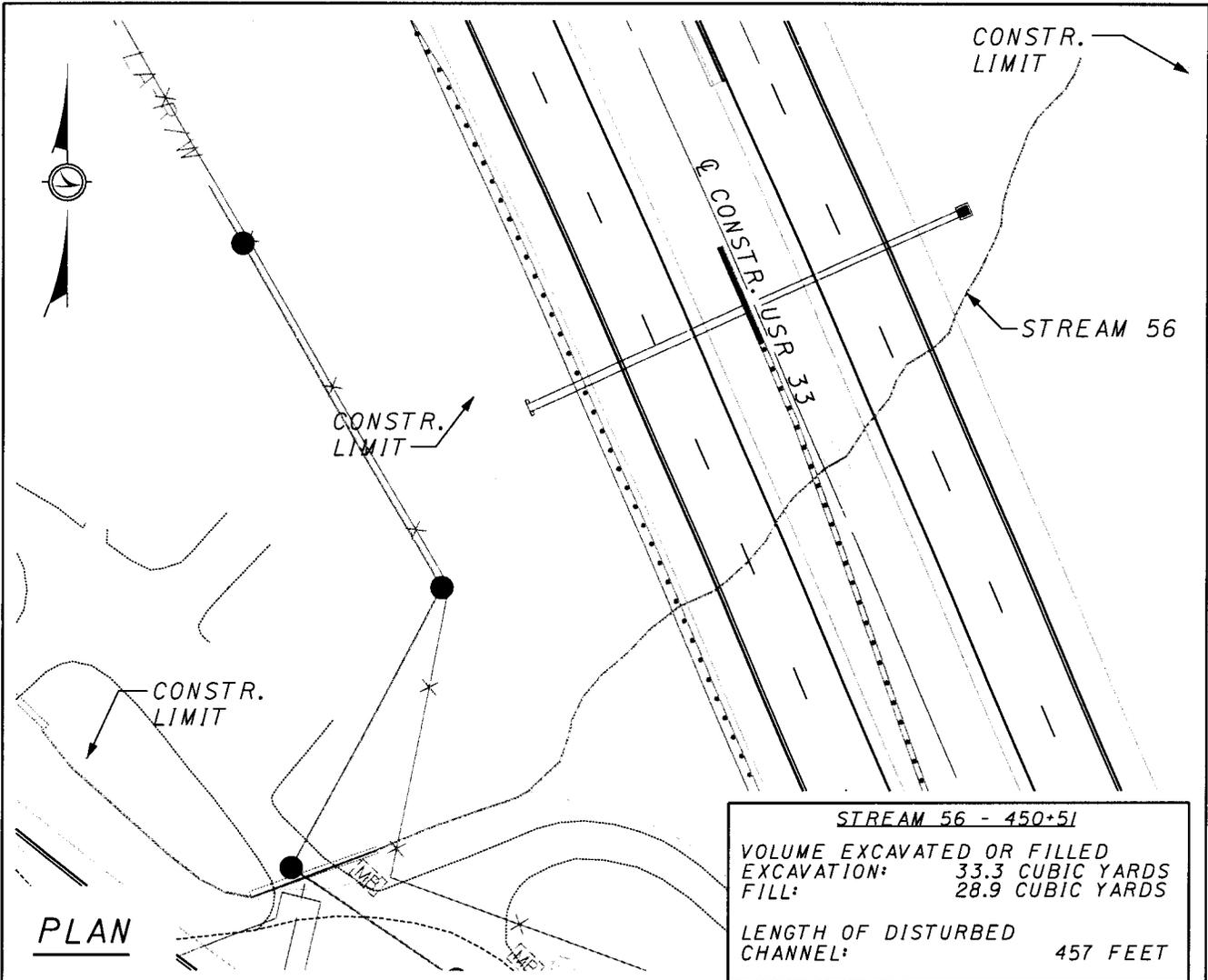
**IMPACT TO STREAM
54**

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Figure 67



APPROXIMATE PLAN SCALE: 1"=50'
 APPROXIMATE PROFILE SCALE:
 1"=100' HOR., 1"=100' VER.



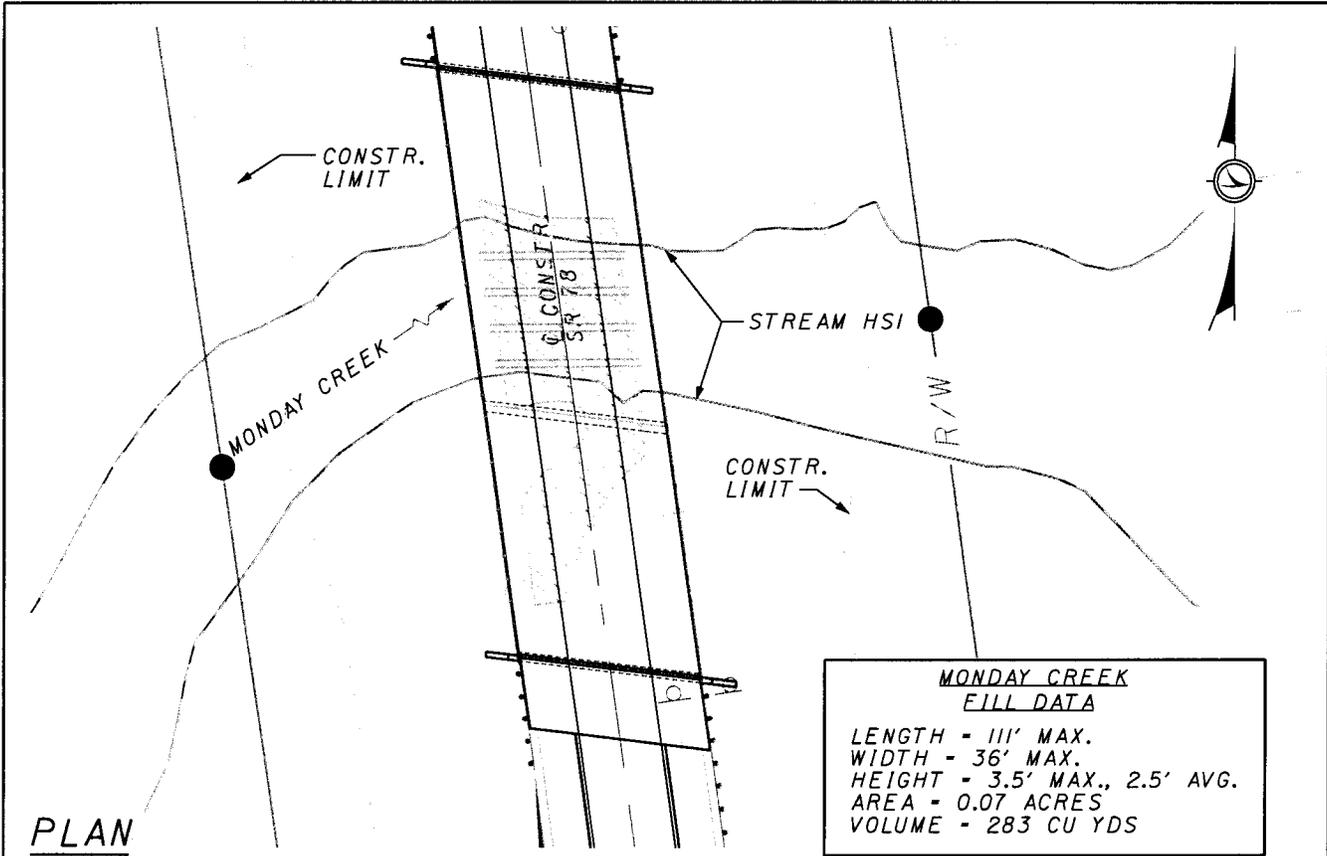
**IMPACT TO STREAM
56**

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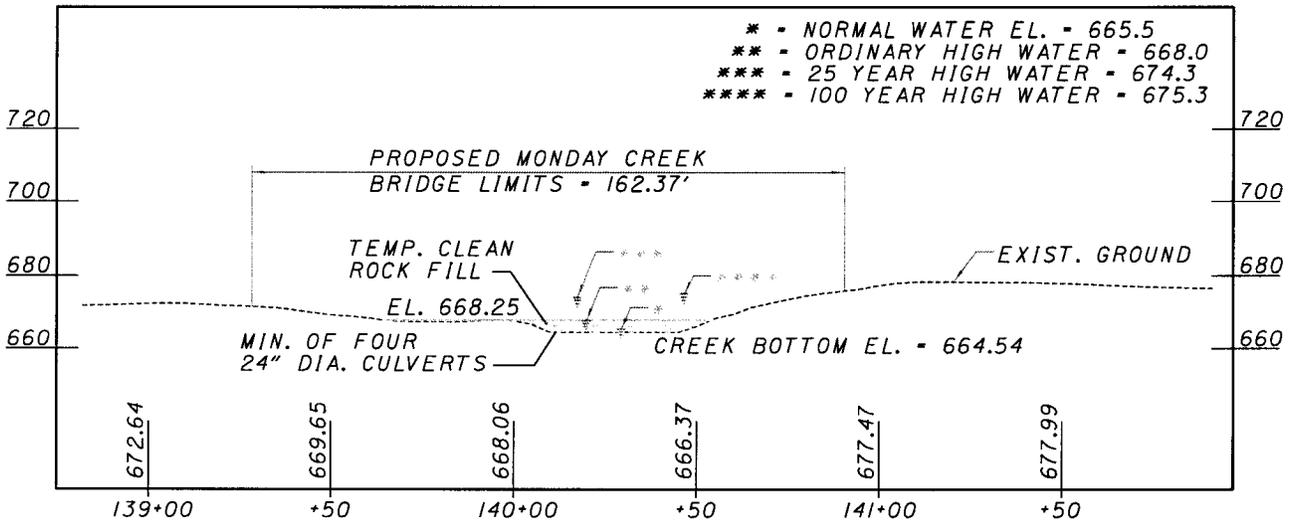
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Figure 69



PLAN



STREAM PROFILE

APPROXIMATE PLAN SCALE: 1"=200'
 APPROXIMATE PROFILE SCALE:
 1"=200' HOR., 1"=50' VER.



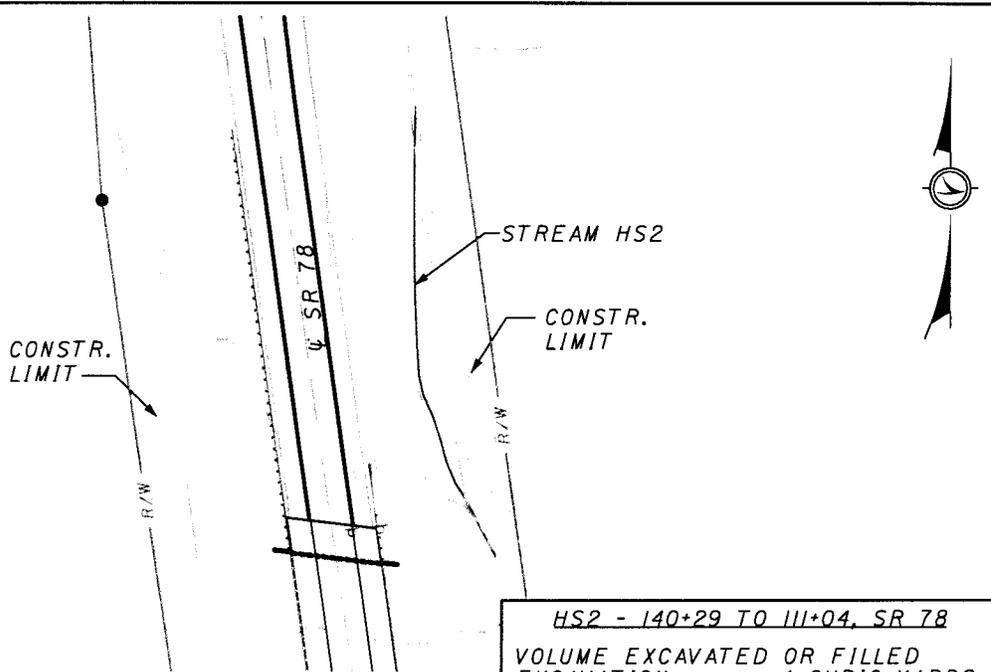
IMPACT TO MONDAY CREEK

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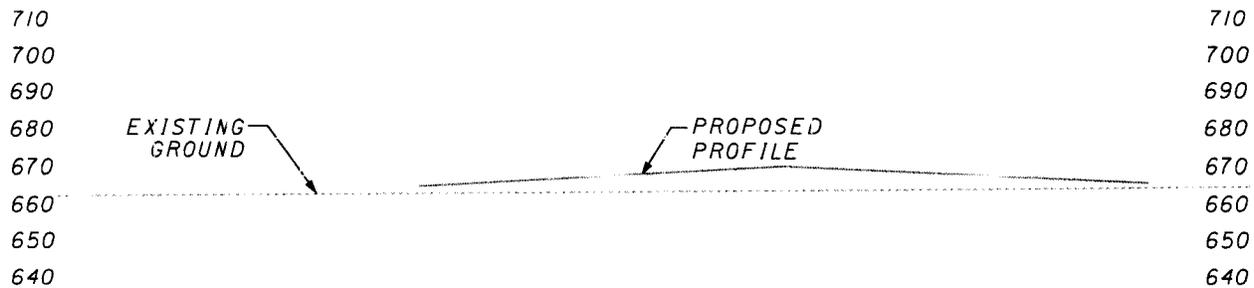
Date: 03-09-2005

Figure 70

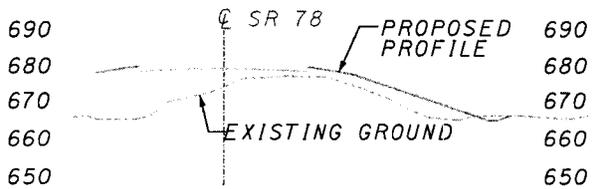


HS2 - 140+29 TO 111+04, SR 78
 VOLUME EXCAVATED OR FILLED
 EXCAVATION: 4 CUBIC YARDS
 FILL: 62 CUBIC YARDS
 LENGTH OF DISTURBED CHANNEL: 255 FEET

PLAN



STREAM PROFILE



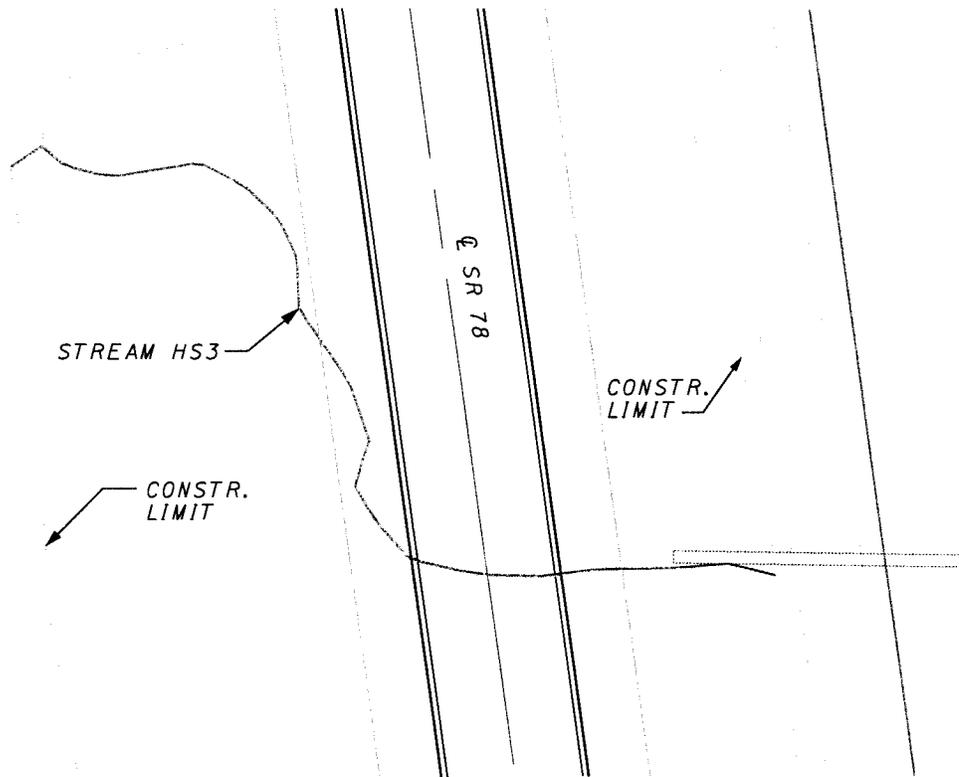
APPROXIMATE PLAN SCALE: 1"=100'
 APPROXIMATE PROFILE SCALE:
 1"=50' HOR., 1"=50' VER.
 APPROXIMATE CROSS SECTION:
 1"=50' HOR., 1"=50' VER.

CROSS SECTION



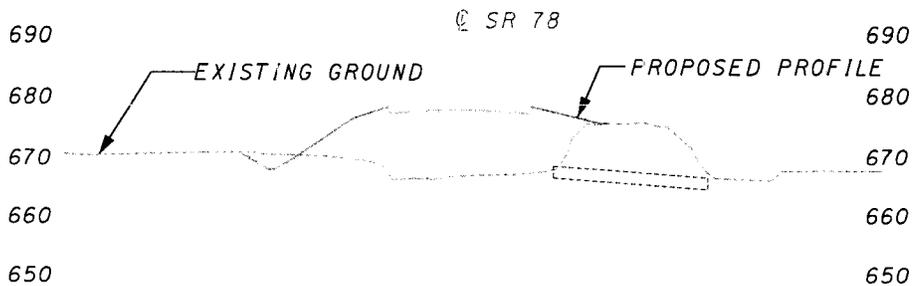
**IMPACT TO STREAM
HS2**
 OHIO DEPARTMENT OF TRANSPORTATION
 U.S. ROUTE 33 IN
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 Figure 71



PLAN

<i>HS3 - 117+97 TO 111+10, SR 78</i>	
VOLUME EXCAVATED OR FILLED	
FILL:	20 CUBIC YARDS
LENGTH OF DISTURBED CHANNEL:	173 FEET



STREAM PROFILE

APPROXIMATE PLAN SCALE: 1"=30'
APPROXIMATE PROFILE SCALE: 1"=30' HOR., 1"=30' VER.



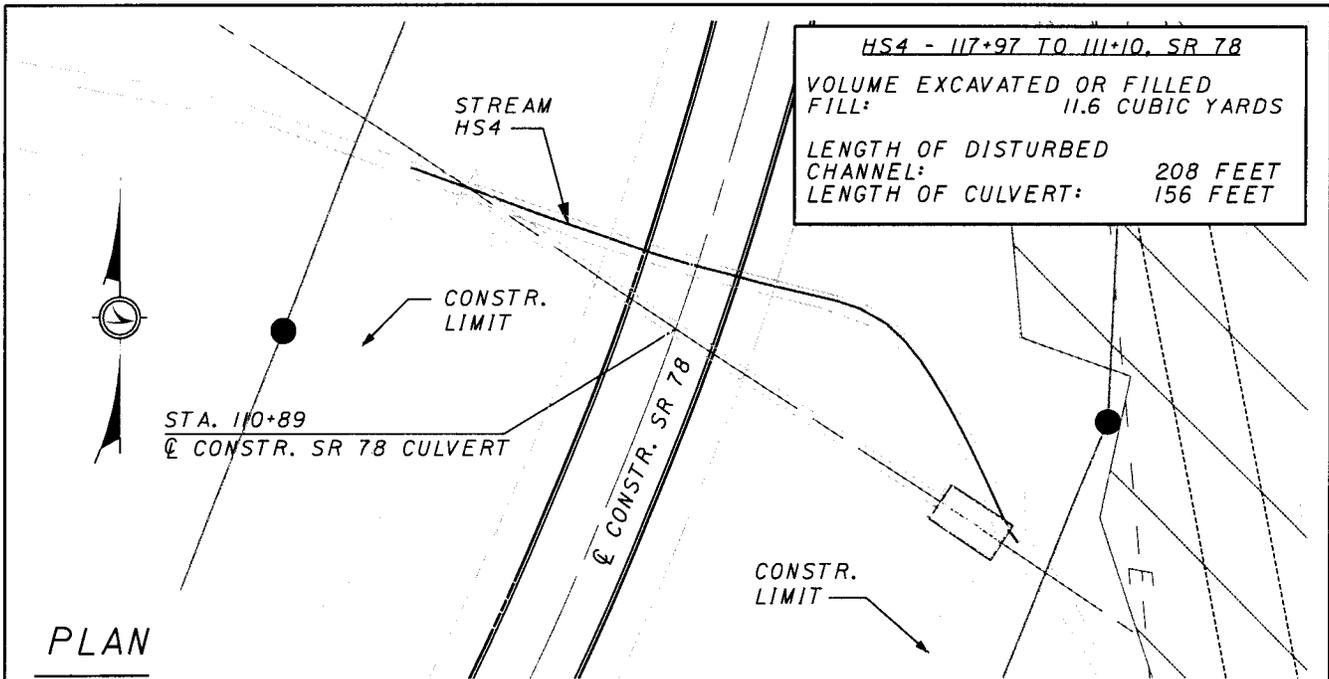
**IMPACT TO STREAM
HS3**

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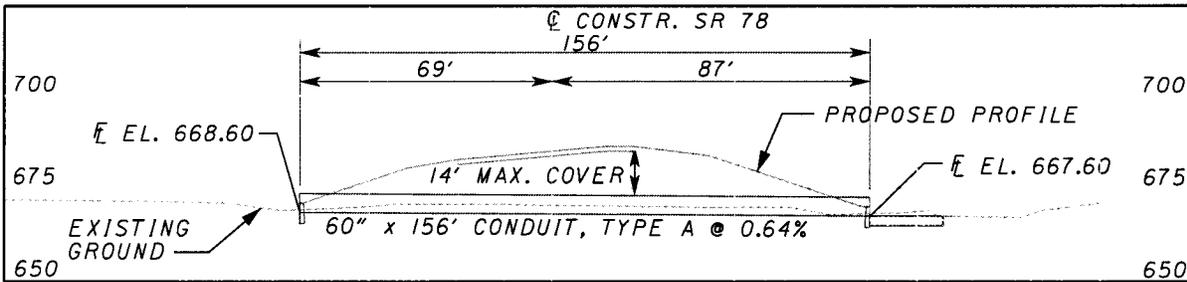
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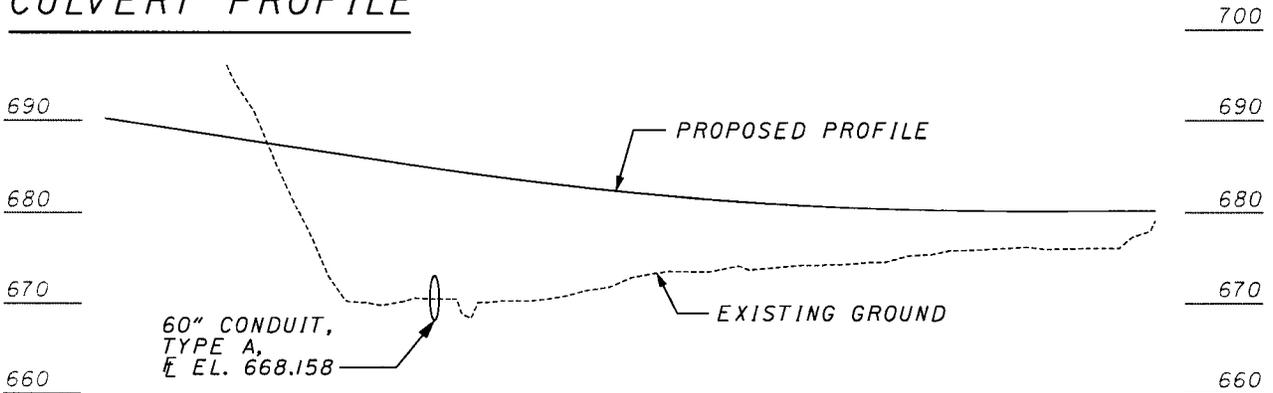
Figure 72



PLAN



CULVERT PROFILE



CROSS-SECTION

APPROXIMATE PLAN SCALE: 1"=50'
 APPROXIMATE PROFILE SCALE:
 1"=50' HOR., 1"=50' VERT.
 APPROXIMATE CROSS SECTION SCALE:
 1"=100' HOR., 1"=20' VERT.



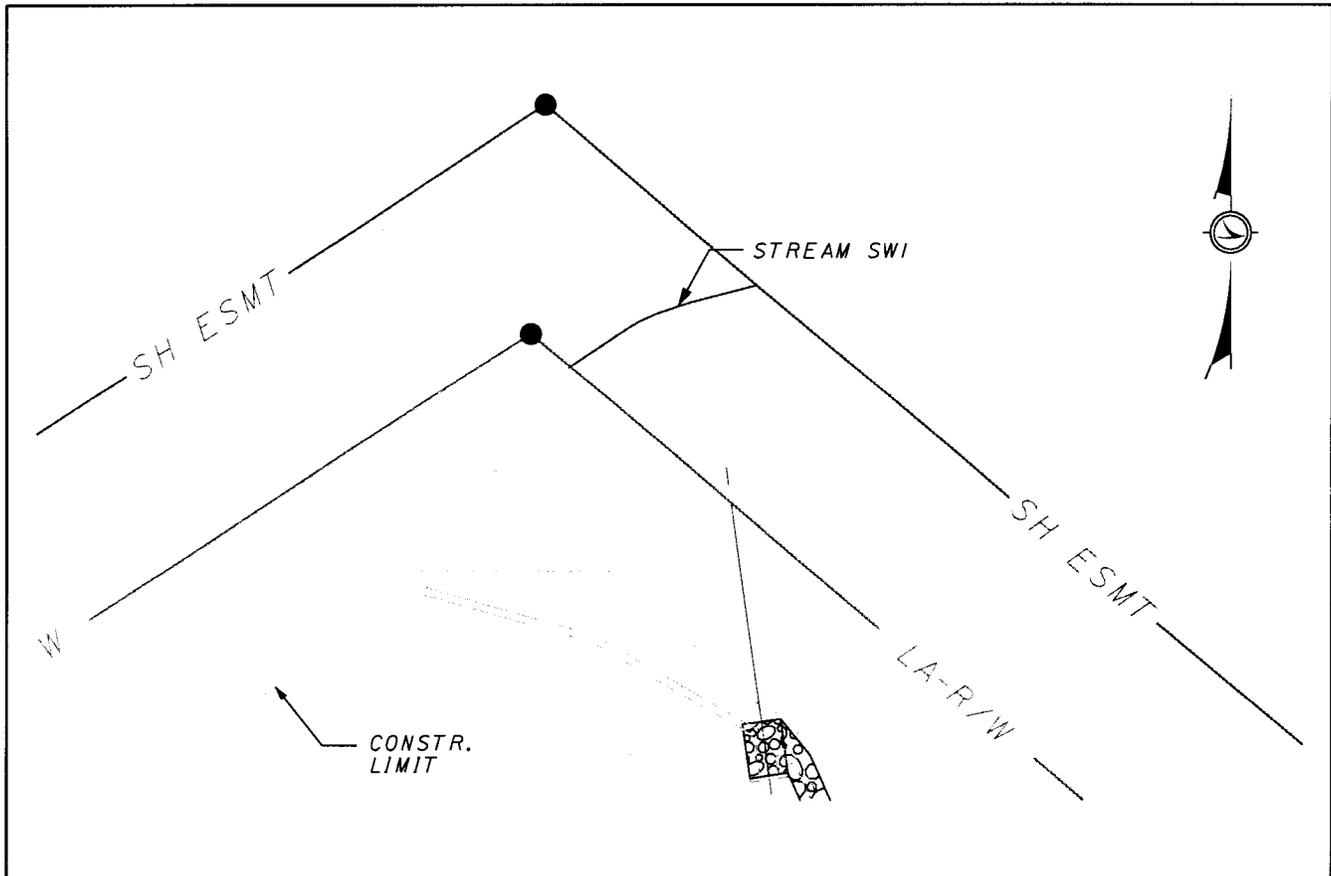
**IMPACT TO STREAM
 HS4**

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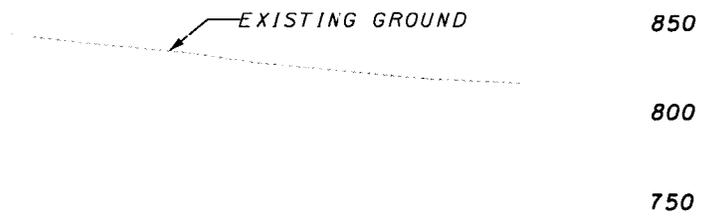
Date: 03-09-2005

Figure 73



PLAN

<u>SW 1 - 118+00</u>	
VOLUME EXCAVATED OR FILLED FILL:	17 CUBIC YARDS
LENGTH OF DISTURBED CHANNEL:	57 FEET



STREAM PROFILE

APPROXIMATE PLAN SCALE: 1"=50'
 APPROXIMATE PROFILE SCALE:
 1"=100' HOR., 1"=100' VER.



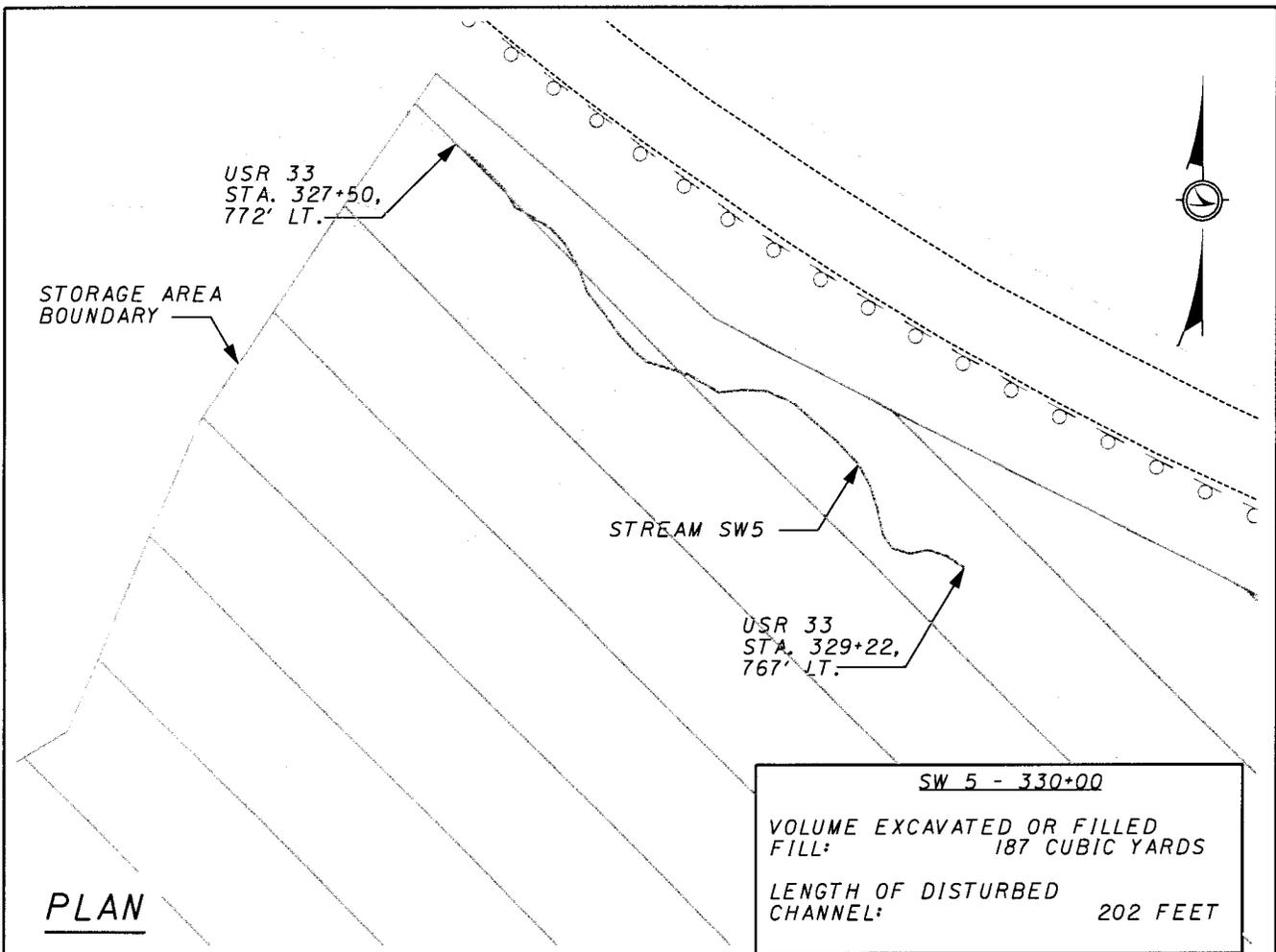
**IMPACT TO STREAM
SW1**

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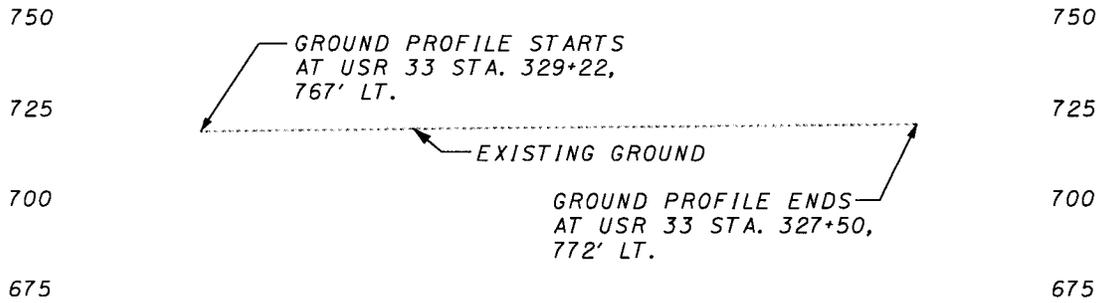
Date: 03-09-2005

Figure 75



PLAN

SW 5 - 330+00	
VOLUME EXCAVATED OR FILLED FILL:	187 CUBIC YARDS
LENGTH OF DISTURBED CHANNEL:	202 FEET



STREAM PROFILE

APPROXIMATE PLAN SCALE: 1"=50' APPROXIMATE PROFILE SCALE: 1"=50' HOR., 1"=50' VER.
--



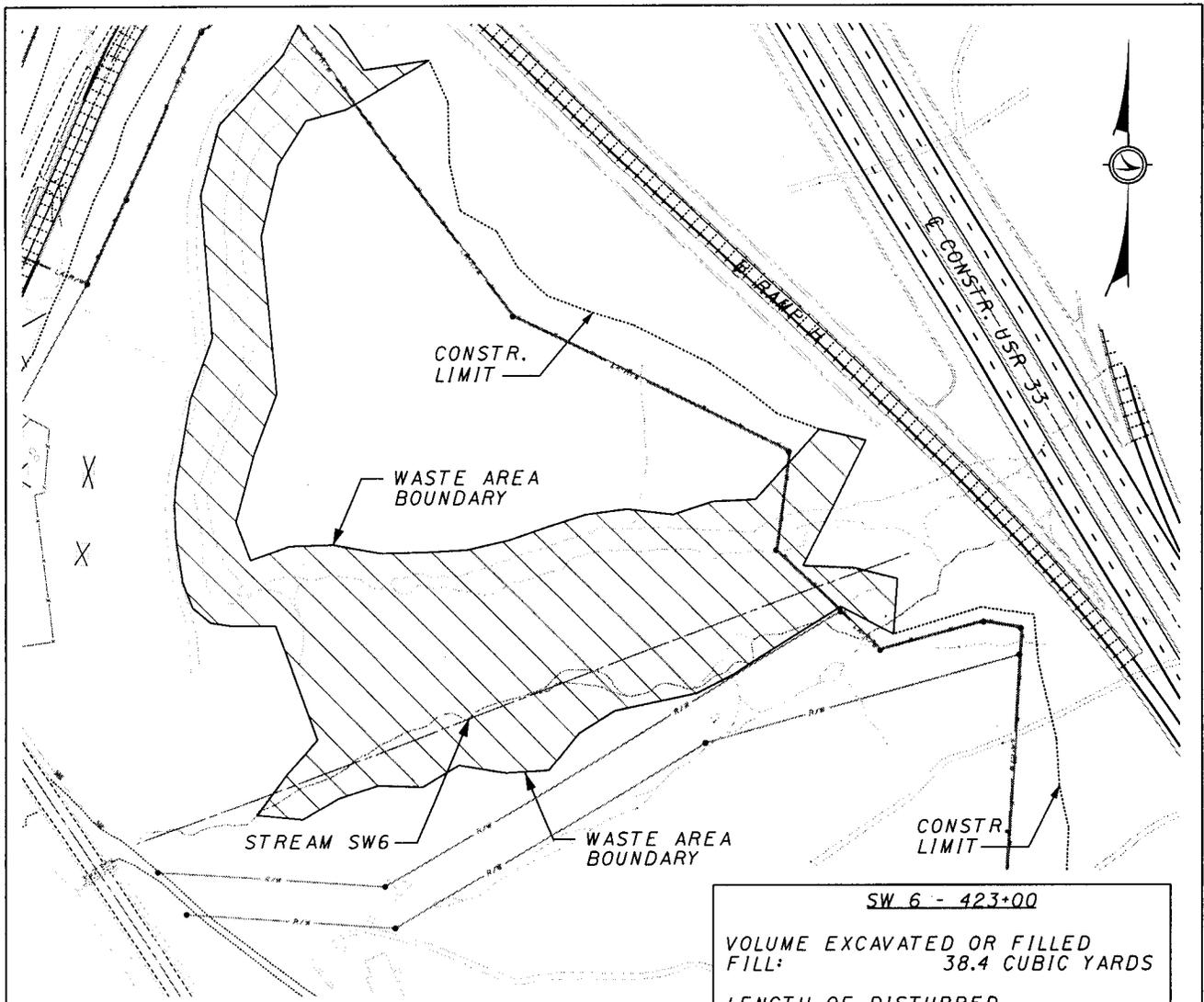
**IMPACT TO STREAM
SW5**

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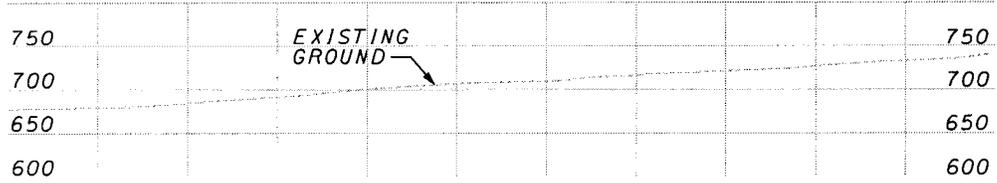
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Figure 76



PLAN

SW 6 - 423+00	
VOLUME EXCAVATED OR FILLED FILL:	38.4 CUBIC YARDS
LENGTH OF DISTURBED CHANNEL:	1049 FEET



STREAM PROFILE

APPROXIMATE PLAN SCALE: 1"=200'
 APPROXIMATE PROFILE SCALE:
 1"=200' HOR., 1"=200' VER.



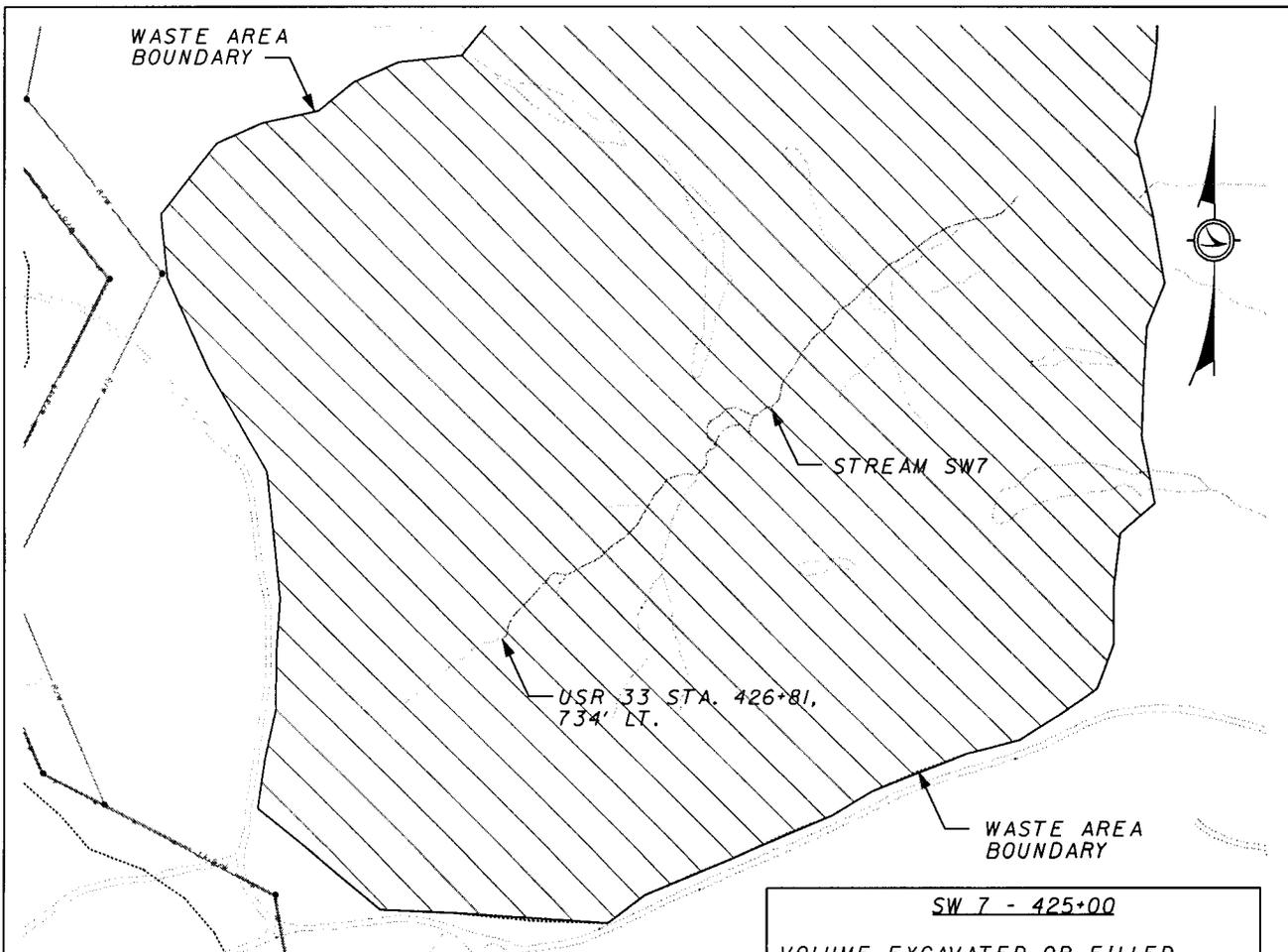
**IMPACT TO STREAM
SW6**

OHIO DEPARTMENT OF TRANSPORTATION
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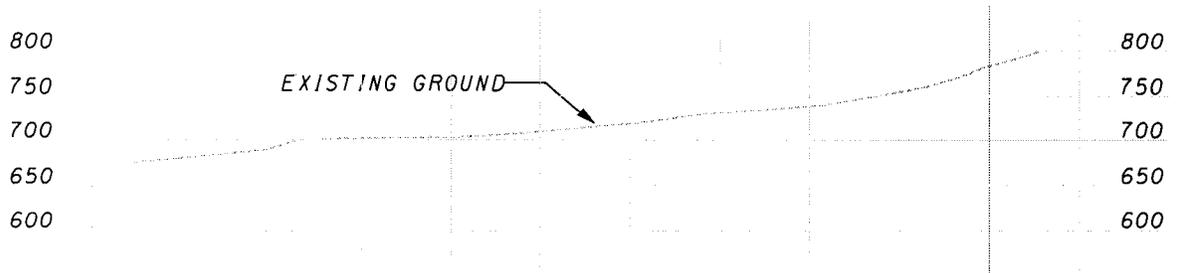
Date: 03-09-2005

Figure 76



PLAN

SW 7 - 425+00	
VOLUME EXCAVATED OR FILLED FILL:	95.4 CUBIC YARDS
LENGTH OF DISTURBED CHANNEL:	837 FEET



STREAM PROFILE

APPROXIMATE PLAN SCALE: 1"=200'
APPROXIMATE PROFILE SCALE: 1"=200' HOR., 1"=200' VER.



IMPACT TO STREAM SW7

OHIO DEPARTMENT OF TRANSPORTATION
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Figure 77