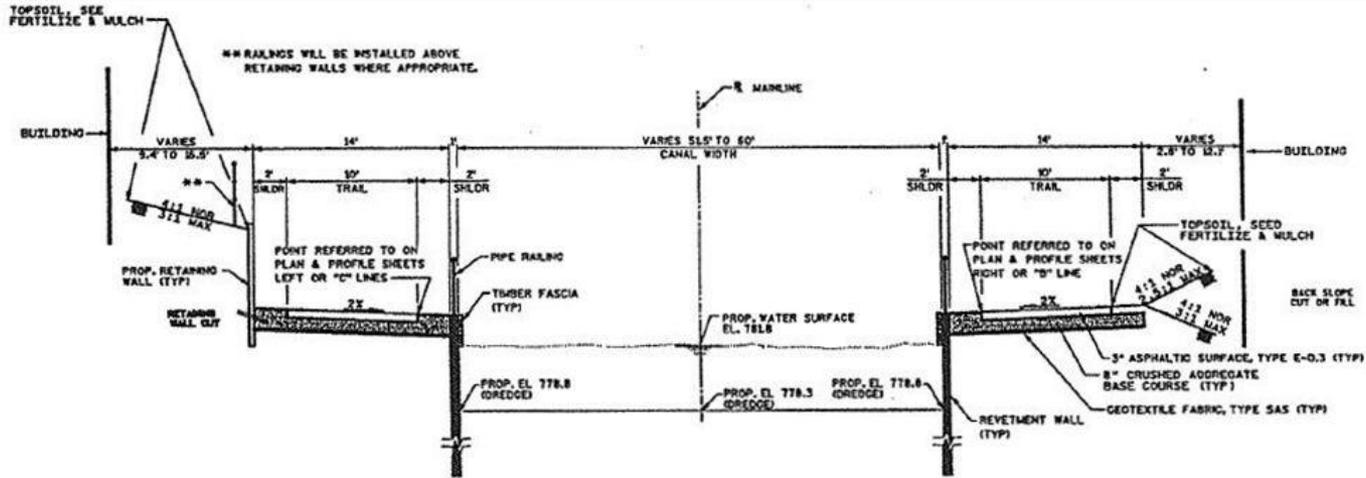


PORTAGE CANAL

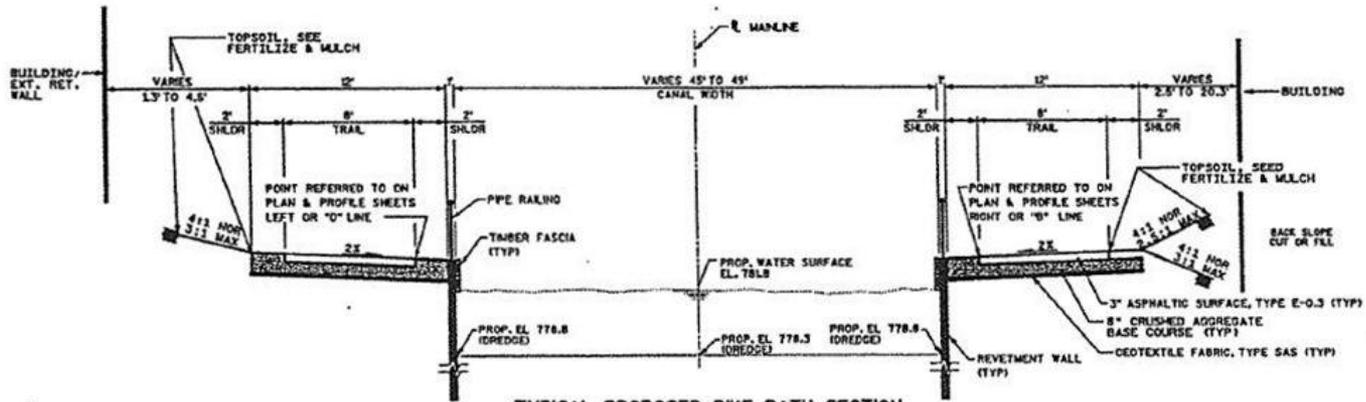
• TYPICAL SECTION



TYPICAL PROPOSED BIKE PATH SECTION

(LOOKING EAST)

WISCONSIN RIVER LOCK TO WISCONSIN STREET
STA. 8+78 TO STA. 11+00
STA. 13+50 R TO STA. 14+50 R
STA. 13+50 L TO STA. 15+00 L



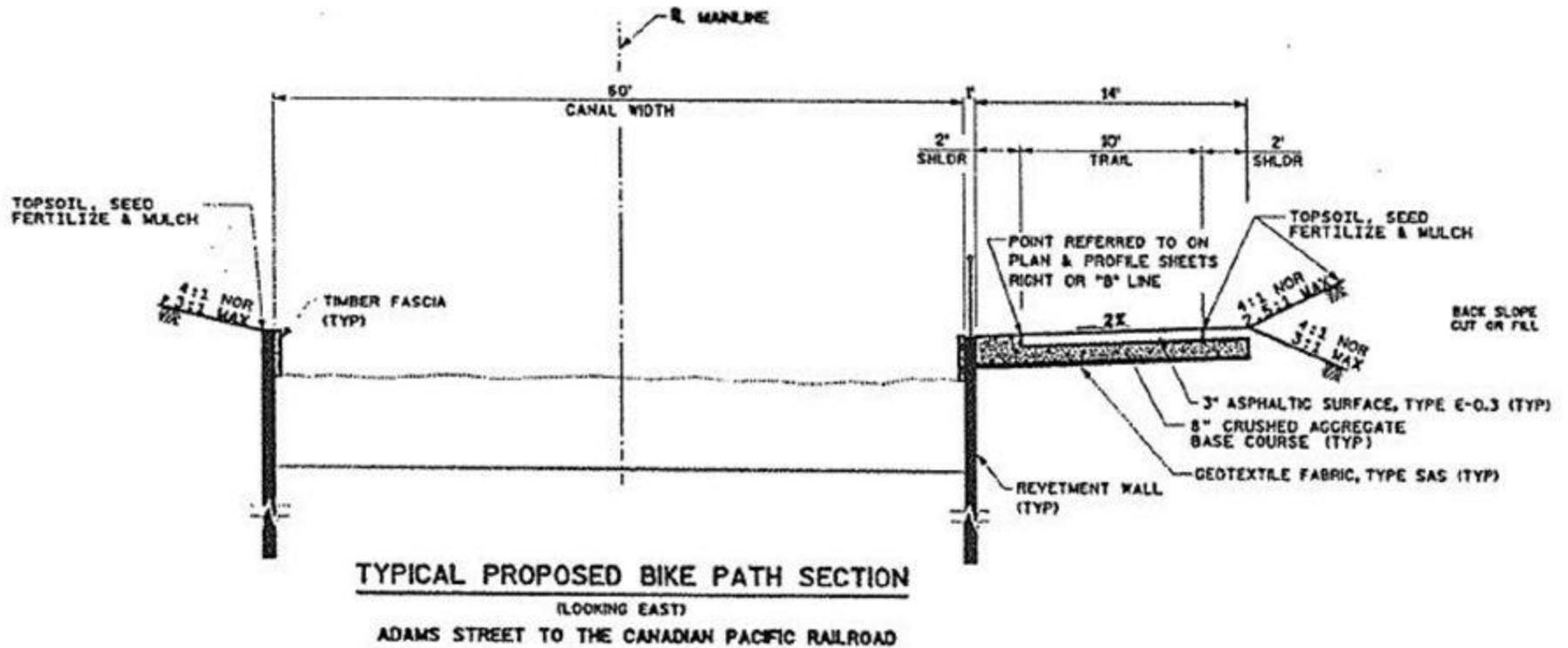
TYPICAL PROPOSED BIKE PATH SECTION

(LOOKING EAST)

WISCONSIN STREET TO ADAMS STREET
STA. 11+50 TO STA. 13+00
STA. 18°0'+66.51 TO STA. 24°0'+00
STA. 19°E'+63.25 TO STA. 21°E'+50

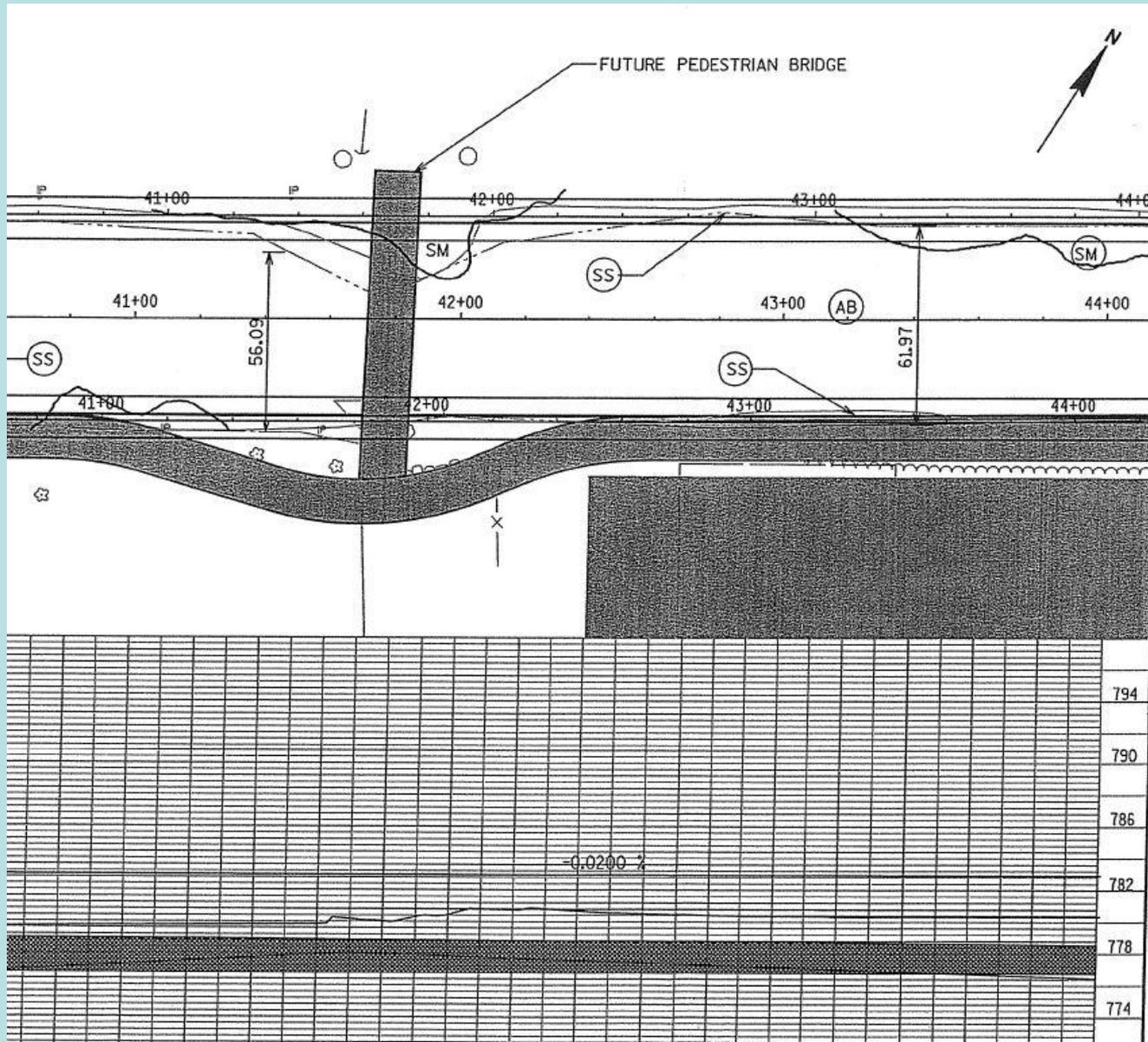
PORTAGE CANAL

- TYPICAL SECTION



PORTAGE CANAL

- PLAN & PROFILE



- CONCLUSION

4. Conclusion

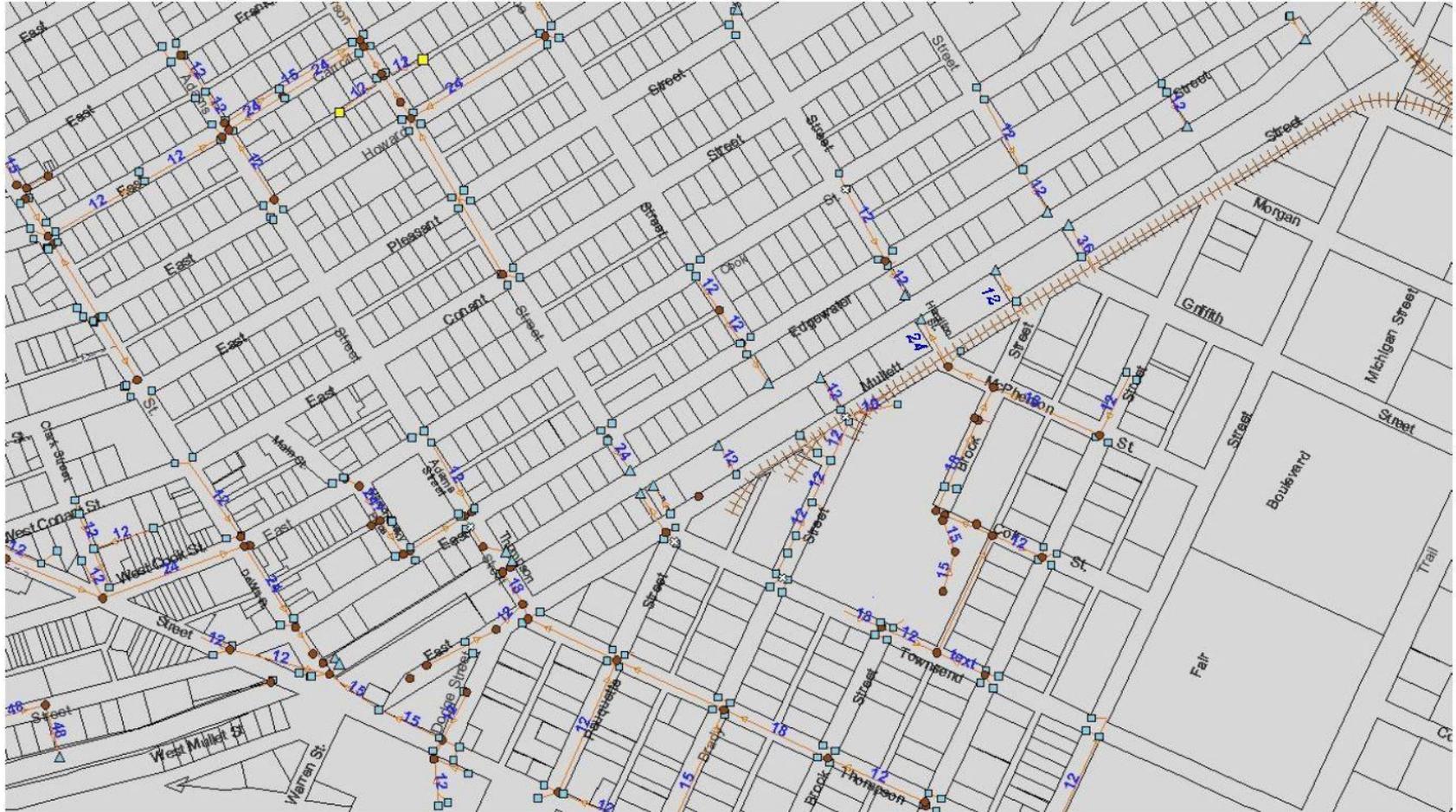
Below the elevation of the 782-foot contour (USGS), the Portage Canal is a jurisdictional wetland. Vegetation below this elevation includes silver maple, river birch, red osier dogwood, sedges, reed canary grass, cattails, pondweeds, and waterlily. Wet meadows directly adjacent to the hiking trail were also delineated between the Canadian Pacific Railroad and STH 33. Any fills, grade changes, road construction or utility crossings within these wetlands may require a Section 404 Clean Water Act permit from the USACE. A separate state of Wisconsin Section 401 Certification of any 404 permit may also be needed, depending on the type and scale of the activity in the wetlands. Local government approvals or changes to wetland mapping may also be necessary under the applicable shoreland/wetland, floodplain or other zoning ordinances.

Final authority over the project rests with the above-referenced federal, state, and local permitting agencies.



NTS

CANAL STORM WATER OUTFALLS SEGMENTS 1 & 2



• MEMO

CITY OF PORTAGE

115 West Pleasant Street
Portage, Wisconsin 53901
Telephone: (608) 742-2176 • Fax: (608) 742-8623



MEMORANDUM

To: Canal Ad Hoc Committee
From: Bob Redelings, City Engineer
Subject: Consultant Scope of Services
Date: February 24, 2014

Attached to this memo are several documents which describe the scope of services in Segment 1 and the results of the initial engineering effort.

I'm prefacing this memo with a discussion of goals, so this project proceeds with a united vision for Segment 2. Hopefully, we'll benefit from the misunderstandings realized in Segment 1.

Goals:

- Identify desired project elements (include in scope of services)
- Expedite the project
- Be fiscally conscious/responsible
- Work in concert with the DNR on clean-up efforts
- Gain Public & Council Support
- Implement Improvements by 2016
- Obtain additional funding (optional)

• MEMO

Desired Elements:

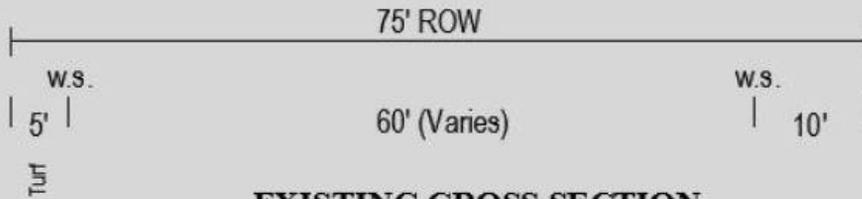
- See attached Special Provisions (11 pages)
These pages describe the scope of services for the initial engineering effort. The design reports and environmental documentation have been done for segment 2.
- The following design elements remain, but must be accompanied by the same level of public involvement:
 - Revetment Walls; maintain structural integrity and appearance (materials may change).
 - Pathway; maintain 10' paved paths w/ 2' gravel shoulders.
 - Railing system; provide 5' clearance between paved trail and revetment wall to eliminate the need for railings (See X-Section).
 - Right of Way (ROW) acquisition; Attempt to keep to a minimum (see X-Section) provide where needed for Stormwater Management.
 - Pedestrian bridges; Bridge at C.P. railroad tracks to be located within bridge abutments-free standing if necessary. Bridge at Hamilton Street to be located within street right of way. Bridge at Riverwood Apartments to be relocated over Wisconsin River Locks, resembling historic structure.
 - Stormwater Management; Provide as much turf area as possible along Canal. Provide Sediment removal Structures at all Stormwater outfalls greater than 12" diameter. The structures will trap 90% of sediment and are generally located in public right of way, not requiring additional easements.

Attachments

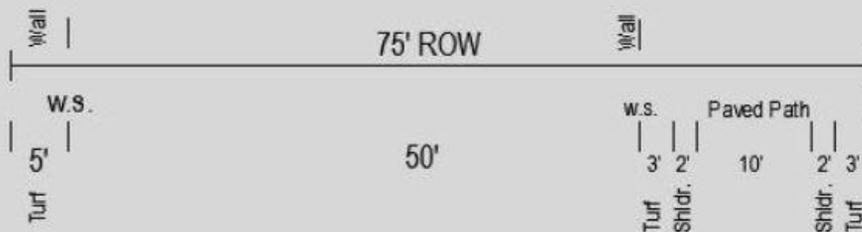
• PROPOSED X-SECTIONS

February 24, 2014

Canal X-Sections for Segment 2

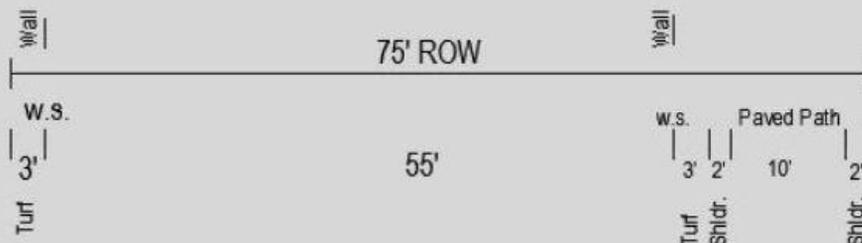


EXISTING CROSS SECTION



PROPOSED CROSS SECTION

*Requires 10' x 3,500' = 35,000 sq.ft = 0.80 Acres of Wetland Mitigation or banking



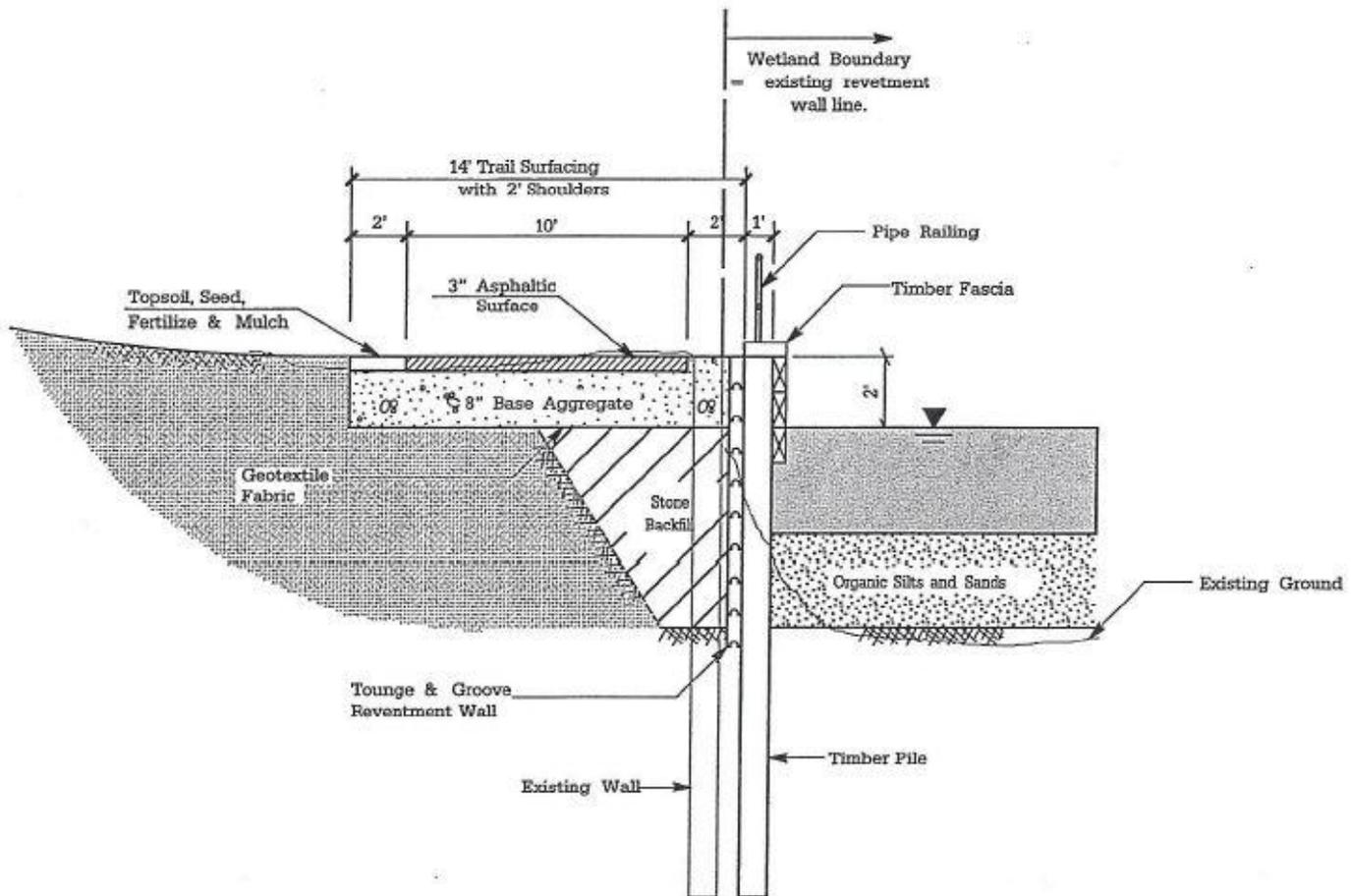
MARGINAL/ACCEPTABLE CROSS SECTION

*Requires 0.60 Acres of Wetland Mitigation or banking



PORTAGE CANAL

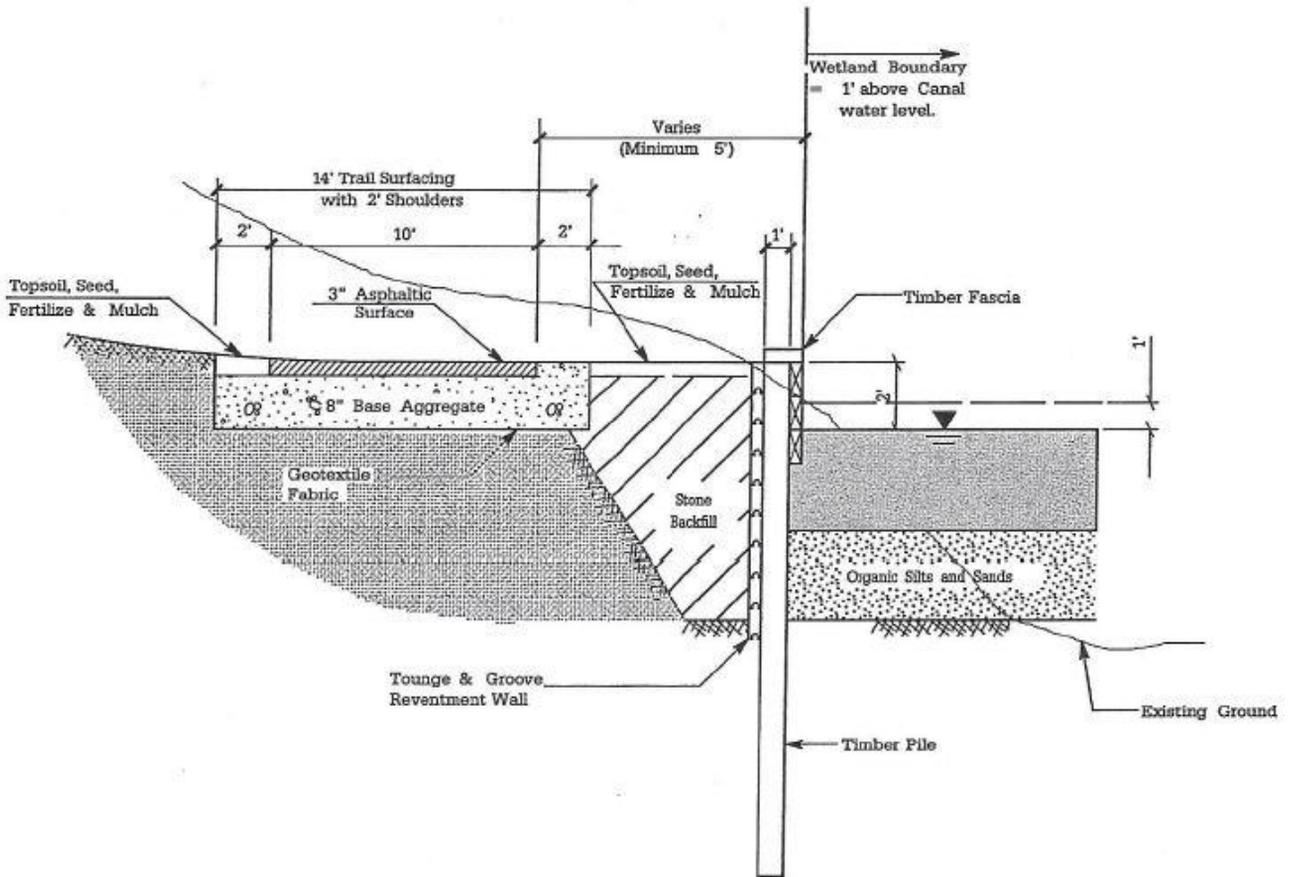
• PROPOSED REVETMENT WALL SECTIONS



Wisconsin River Lock
To
Railroad Bridge

PORTAGE CANAL

- PROPOSED REVETMENT WALL SECTIONS



Railroad Bridge
To
Fox River

PORTAGE CANAL

• SCOPE OF SERVICES

VI. SPECIAL PROVISIONS

Sections III.A.(4), IV.A.(1) and (4) of the STANDARD PROVISIONS are amended to substitute the DEPARTMENT for the MUNICIPALITY. Copies of the invoices and progress reports shall be provided to the MUNICIPALITY at the same time they are provided to the DEPARTMENT.

PROJECT "Segments" along the Portage Canal are defined as follows:

- Segment 1: Wisconsin River Locks – Adams Street
- Segment 2: Adams Street – Railroad Trestle
- Segment 3: Railroad Trestle – STH 33 Bridge
- Segment 4: STH 33 Bridge – Fox River

SCOPE OF SERVICES

A. DESIGN REPORTS

(1) Design Study Reports

Section II.B.(2) of the STANDARD PROVISIONS is amended to indicate the CONSULTANT shall prepare one Design Study Report encompassing Segment 1 and Segment 2. Three (3) copies of the Report shall be submitted to the DEPARTMENT for review.

(2) Pavement Type Selection Report

Section II.B.(3) of the STANDARD PROVISIONS is deleted and replaced with the following:

The CONSULTANT shall use a flexible pavement design for the pedestrian and bicycle facility and document the selected pavement structure in the Design Study Report.

(3) Design Concept Canal Report

The CONSULTANT shall prepare a Design Concept Canal Report in conjunction with the Design Concept Canal Plans for all four segments of the PROJECT for review by the MUNICIPALITY. The Report shall include cost estimates and provide information regarding potential revenue sources.

B. ENVIRONMENTAL DOCUMENTATION

By its execution of this CONTRACT, the CONSULTANT does hereby specify in accordance with the disclosure statement requirements of 40 CFR 1506.5(c) and 23 CFR 771.123(d) that CONSULTANT has no financial or other interest in the outcome of this PROJECT.

The CONSULTANT shall prepare an Environmental Report (2-ER) for all four segments of the PROJECT as specified in the MANUAL and Chapter TRANS

PORTAGE CANAL

• SCOPE OF SERVICES

400, Wisconsin Administrative Code. The appropriate number of copies shall be furnished to the MUNICIPALITY and DEPARTMENT for approval.

If review of the environmental documentation by the MUNICIPALITY, DEPARTMENT, and FHWA indicates that changes to this document are necessary, all such changes shall be made by the CONSULTANT.

The CONSULTANT shall comply with the requirements specified in the MANUAL as well as in Chapter TRANS 400, Wisconsin Administrative Code. In the event of any unresolvable conflict between the MANUAL and Chapter TRANS 400, Wisconsin Administrative Code, the administrative rule controls.

(1) Historical and Archaeological Surveys and Studies

This CONTRACT is written recognizing that the Portage Canal is listed on the National Register of Historic Places and that there are adjacent properties also on or eligible for the National Register of Historic Places. Also recognized is the MUNICIPALITY'S goal to restore the canal to multiple periods of historic significance. The CONSULTANT shall conduct all services, except as noted below, as are necessary so that the Design Concept Canal Plans are in compliance with Section 106 of the Historic Preservation Act and meet the MUNICIPALITY'S goal to restore the canal to multiple periods of historic significance. The CONSULTANT shall follow the procedures set forth in the MANUAL for the Section 106 process for this approval.

- (a) The CONSULTANT shall follow the procedures set forth in the MANUAL for the Section 106 process, Step 2 Identification, to locate historic buildings and structures and archeological sites that could be affected by the PROJECT.
- (b) The CONSULTANT shall prepare the Section 106 Review Form, identifying the Area of Potential Effect for the PROJECT, notifying interested parties, completing an archeological survey and historical surveys as may be necessary.
- (c) If properties potentially eligible for the National Register of Historic Places require the Section 106 process Step 3 Evaluation, this would be "Extra Services". This would include Determinations of Eligibility for either historical or archeological properties as identified in the Section 106 process, Step 2 Identification.
- (d) The CONSULTANT shall follow the procedures set forth in the MANUAL for the Section 106 Process, Step 4, Assess Effects, to determine the effect the PROJECT will have on the eligible properties.
- (e) The CONSULTANT shall follow the procedures set forth in the MANUAL for the Section 106 Process, Step 5, Consultation.
- (f) The CONSULTANT shall prepare Canal Plans as defined in Section VI.H. for Segments 1 and 2 in accordance with the Section 106 Process, Step 6, Implementation. Step 6 Implementation efforts beyond the treatments approved by the MUNICIPALITY in

PORTAGE CANAL

• SCOPE OF SERVICES

the Design Concept Canal Report shall be considered "Extra Services".

(2) Section 4(f) Evaluation

The CONSULTANT shall describe the impact of this PROJECT upon lands protected under Section 4(f) of the Federal-Aid Highway Act of 1968, as amended, following the memorandum "Interim Guidance on Applying Section 4(f) on Transportation Enhancement Projects and National Recreational Trails Projects dated August 22, 1994", and shall report its findings to the MUNICIPALITY, DEPARTMENT and the FHWA.

(3) Section 6(f) Evaluation

Section 6(f) Evaluation is not part of this CONTRACT and shall be considered "Extra Services" if later determined to be necessary.

(4) Hazardous Materials/Contamination Assessments

(a) The CONSULTANT shall conduct a Hazardous Materials Assessment for the PROJECT in accordance with the MANUAL.

(b) If authorized by written notice from the MUNICIPALITY, the CONSULTANT shall conduct Environmental Subsurface Investigations in accordance with the MANUAL as follows: A maximum of fourteen (14) borings at seven (7) sites shall be taken to determine the existence of hazardous materials.

(c) The MUNICIPALITY acknowledges that the CONSULTANT is not, by virtue of this CONTRACT, the owner or generator of any waste materials generated as a result of the Hazardous Materials/Contamination Assessments services performed by the CONSULTANT under this CONTRACT.

(5) Wetland Investigations

(a) The CONSULTANT shall identify wetland impacts for all four segments of the PROJECT, following the procedures in the MANUAL and in the "Wisconsin Department of Transportation Wetland Mitigation Banking Technical Guideline updated January 1997". A site reconnaissance will be conducted with the Department of Natural Resources to assess, classify and locate wetland impacts. The assessment of the wetlands shall be in accordance with state federal regulations and guidelines, including the 1987 United States Army Corps of Engineers (USACE) wetland delineation manual. It is anticipated that the unavoidable loss of wetlands will be mitigated at a statewide mitigation bank site.

(b) The CONSULTANT shall prepare a report documenting the findings and conclusions. The format of the report will be a memo and the one page wetland determination form (Data Form 1) in the 1987 USACE manual referenced above. The report will include copies of the county soils map and wetland maps from the

PORTAGE CANAL

• SCOPE OF SERVICES

Wisconsin Department of Natural Resources and Natural Resources Conservation Services.

- (c) Wetland Mitigation Plans for the PROJECT shall be considered "Extra Services".

(6) Water Quality

Studies to determine if a particular species are present in the PROJECT area, including the Fox River and the Wisconsin River, if required, shall be considered "Extra Services".

C. AGENCY COORDINATION

(1) Section 404 Permits

The CONSULTANT shall evaluate the potential for discharge of fill materials into the waters of the United States, in accordance with the provisions of the Clean Water Act and Chapter TRANS 400, Wisconsin Administrative Code and the procedures as set forth in the MANUAL, and shall prepare the necessary permit application.

(2) Recreational and Boating Facilities Program Permits

Section II.D.(2)(b) of the STANDARD PROVISIONS is amended as follows:

The CONSULTANT shall prepare the application on the behalf of the MUNICIPALITY for approval of the Canal Restoration and Renovation Plans from the Wisconsin Department of Natural Resources.

D. UTILITY INVOLVEMENTS

- (1) The CONSULTANT shall follow the procedures of the WisDOT Guide to Utility Coordination for non-TRANS 220 projects.

E. PUBLIC INVOLVEMENT

(1) Informational Meetings

- (a) The CONSULTANT shall conduct four (4) informational meetings to acquaint the public with the concepts and probable impacts of this PROJECT.

- (b) The CONSULTANT shall prepare exhibits and documentary handout material and provide the equipment necessary to conduct the public informational meetings.

- (c) The CONSULTANT shall prepare a summary report after each public informational meeting.

- (d) The CONSULTANT shall consult with the MUNICIPALITY and DEPARTMENT after each public informational meeting to discuss the comments received and shall recommend as to the possible disposition of these comments and suggestions.

PORTAGE CANAL

• SCOPE OF SERVICES

- (e) The CONSULTANT shall make the necessary arrangements for scheduling the meetings and provide notices and press releases for the MUNICIPALITY'S use. The CONSULTANT shall notify adjacent and affected property owners.
- (f) The CONSULTANT shall provide the MUNICIPALITY and DEPARTMENT with copies of public involvement correspondence and file notes.
- (g) The CONSULTANT shall coordinate meeting schedules with the DEPARTMENT and the MUNICIPALITY.

(2) Web Site and Cable Access Television Station

The CONSULTANT shall provide PROJECT updates in a ready for use format to the MUNICIPALITY for their use on the local cable access television station and web site. It is anticipated that four updates shall be provided during the length of the CONTRACT.

(3) Media Contacts

The CONSULTANT shall forward all requests for media information to the MUNICIPALITY for processing. The CONSULTANT shall not discuss the PROJECT with media representatives without prior approval of the MUNICIPALITY.

(4) Individual Contacts

The CONSULTANT shall conduct meetings with individual or small groups of property owners as requested by the MUNICIPALITY to discuss plan concepts.

F. SURVEYS

- (1) The surveys shall provide information necessary for the preparation of plats and acquisition of rights of way and property.
- (2) Surveys shall include ties to section corners, quarter section corners, and to street lines or block corners in platted areas. These ties shall be in sufficient detail to permit the preparation of proper legal descriptions of the lands acquired.
- (3) The MUNICIPALITY will provide digital ortho mapping for use in developing the Design Concept Canal Plans. The CONSULTANT shall supplement this information with field surveys for Segments 1 and 2.
- (4) Section II.G.(3) of the STANDARD PROVISIONS is deleted and replaced with the following:

Surveys shall be tied to the County Coordinate System.

• SCOPE OF SERVICES

G. SOILS AND SUBSURFACE INVESTIGATIONS

- (1) The CONSULTANT shall perform up to a total of four (4) borings to a depth of five (5) feet along the proposed alignment of the trail in Segments 1 and 2. The CONSULTANT shall perform a total of sixteen (16) marsh probes to a depth of four (4) feet along the proposed alignment of the trail in Segment 3. The CONSULTANT shall perform limited laboratory testing on the soil samples retained to aid in determining the classification and engineering properties of the subsurface materials encountered. The CONSULTANT shall prepare an engineering report as outlined in the DEPARTMENT'S Geotechnical Bulletin No. 1.
- (2) Investigation of subsurface soils conditions for structural retaining walls for Segments 2, 3 and 4, if required, shall be considered "Extra Services".
- (3) The CONSULTANT shall perform a total of two (2) structure borings at a depth of fifty (50) feet for investigation of subsurface conditions for foundations for one (1) bridge structure, a total of six (6) structure borings at a depth of twenty-five (25) feet for foundations for structural retaining walls in Segment 1, and a total of one (1) boring at a depth of thirty (30) feet for modifications to the Corps of Engineers' minimum flow intake structure.

Foundation borings shall be performed to yield sufficient detailed data to enable an engineering design of the structure and its foundation per DEPARTMENT standards in Section II.H(1) of the STANDARD PROVISIONS and applicable Wisconsin Department of Natural Resources and U.S. Army Corps of Engineers standards for civil works.

Foundation investigations shall be coordinated with the MUNICIPALITY and DEPARTMENT, with a minimum of three working days prior notice, to enable the MUNICIPALITY and DEPARTMENT to make provisions for on-site observations and to evaluate conditions during drilling.

When borings have reached the depth of 50 feet for the bridge structure borings without providing necessary data, the driller is authorized to continue drilling until depths reach 120 percent of the planned depths. When necessary data is obtained for any individual boring, prior to borings reaching the planned depth, the drilling for that individual boring shall be terminated.

When completion of drilling to 120 percent of the depth of any individual boring as set forth above is not sufficient to adequately assess subsurface conditions, or otherwise determine all the required foundation information, the CONSULTANT shall recommend revised boring depths or a revised boring program for verbal authorization by the MUNICIPALITY and DEPARTMENT. The extent of all subsurface foundation investigation performed shall be fully justified in the Soils Report for the PROJECT.

- (4) The CONSULTANT shall perform a maximum of twenty-four (24) sediment samples of the canal bed at locations to be determined in consultation with the Department of Natural Resources.

PORTAGE CANAL

SCOPE OF SERVICES

- (5) All boreholes and monitoring wells shall be backfilled as per the April 20, 1992, guidelines titled "Wisconsin Department of Transportation Geotechnical Section - Drilled Borehole and Monitoring Well Abandonment Procedures."
- (6) The word "roadway" in Section II.H. of the STANDARD PROVISIONS shall be replaced with words "pedestrian and bicycle facility".

H. ROAD PLANS

- (1) The words "Road Plans" in Section II.I. of the STANDARD PROVISIONS shall be considered synonymous with the term "Canal Plans".
- (2) Section II.I (5) of the STANDARD PROVISIONS is modified to say "Plans for Minor Retaining Walls as defined in the MANUAL and pipe type structures in this CONTACT shall be considered as special construction details of the Road Plans and not as Structure Plans".
- (3) The CONSULTANT shall prepare Canal Plans for the PROJECT. Design Concept Canal Plans shall be prepared for all four segments. Upon approval of the Environmental Report, Final Canal Plans shall be prepared for Segments 1 and 2.
- (4) The CONSULTANT shall work with the MUNICIPALITY to consider alternatives for the Design Concept Canal Plans. Special consideration shall be given to cost-effective long-term maintenance efforts, to the historical aspects of the canal, and to accommodations of multiple modes of transportation for maximum utilization of the facility. The CONSULTANT shall review past studies and proposals for canal restoration and incorporate as appropriate. Key alternatives to investigate include, but are not limited to, ones that provide for an adequate water supply to the canal; maintain historical integrity; analyze dredging options; analyze bank stabilization options, including revetment walls; analyze improvements to the Wisconsin River and Fox River locks; provide lighting; provide landscaping and other amenities; provide small watercraft access under Adams Street, Wisconsin Street, the railroad trestle and STH 33; provide small watercraft access to Edgewater Street, Adams Street and STH 33; provide pedestrian and bicycle trail design adjacent to the canal with access connections; and allow for a segmented approach to the entire PROJECT. Based on the alternative analysis and consultation with the MUNICIPALITY, one alternative will be selected and presented in the final Design Concept Canal Plans, which are expected to consist of the following:
 - (a) Title Sheet
 - (b) Typical Sections
 - (c) Cross Sections at critical locations
 - (d) Plan and Profile Sheets on aerial mapping
 - (e) Preliminary Right of Way Plat

PORTAGE CANAL

SCOPE OF SERVICES

- (f) Minimal design details to illustrate the preferred alternative, including water supply, bank stabilization, dredging, Wisconsin River lock modifications and Fox River Lock improvements.
- (5) The Plan and Profile sheets for the Final Canal Plans will be developed to a 1"=40' scale in the urban area and 1"=100' scale in the rural area on the reduced size sheets. Cross Sections for the Final Canal Plans will be at every 50 feet.
- (6) The CONSULTANT shall prepare Traffic Control Plans for impacted streets in Segments 1 and 2.
- (7) Section II.1.(2) of the STANDARD PROVISIONS is amended to include the following plans:
 - 12. Water Management Plans
 - 13. Canal Repair and Restoration Plans
 - 14. Wisconsin River Lock Modification Plans
 - 15. Pedestrian and Bicycle Facility Plans
 - 16. Storm Sewer Plans
 - 17. Landscaping and Amenities Plans
 - 18. Project Overview - Single Sheet Schematic Drawing
- (8) The Water Management Plans, the Canal and Restoration Plans, and the Wisconsin River Lock Modification Plans must meet the requirements of the Recreational Boating and Facilities Program for approval by the Wisconsin Department of Natural Resources.
- (9) The CONSULTANT shall prepare Water Management Plans to provide for an adequate water supply for the canal. Services shall include determining the minimum flow and depth requirements of the canal to provide for improved water quality and navigation by small watercraft; hydraulic sizing of all required water conveyance structures; design of modifications to the existing U.S. Army Corps of Engineers minimum flow structure and intake system or design of a new minimum flow system; and discussions with the Wisconsin Department of Natural Resources and U.S. Army Corps of Engineers regarding design restrictions and permitting requirements for transferring surface water from the Wisconsin River to the Fox River watershed. If it is determined that water flow from deep wells or diverting water from beyond the PROJECT limits is required, this would be considered "Extra Services".
- (10) The CONSULTANT shall prepare Canal Repair and Restoration Plans for Segments 1 and 2. Services shall include the interpretation of the geotechnical data and development of geotechnical design parameters; analysis of structural retaining walls for Segment 1; evaluation and design of slope stabilization for Segment 2; evaluation of the canal sediment sampling; and design of excavation and grading plans for Segments 1 and 2 including construction access, staging, canal dewatering, sediment

PORTAGE CANAL

• SCOPE OF SERVICES

dewatering, containment and disposal. If dewatering of the canal is necessary for construction, it will be done by utilizing the outflow structure in Segment 4 to drain the water from the canal to the Fox River. If work on the remains of the Fort Winnebago lock is necessary, this would be considered "Extra Services".

- (11) The CONSULTANT shall prepare Wisconsin River Lock Modification Plans. This will include repairs to preserve the lock and gates and provide for new fencing and other amenities.
- (12) The CONSULTANT shall prepare Pedestrian and Bicycle Facility Plans for Segments 1 and 2 to meet requirements for the federal Statewide Multi-Modal Improvement Program (Local Transportation Enhancements). Consideration for access to adjacent public areas shall be given.
- (13) The CONSULTANT shall prepare Storm Sewer Plans for facilities in conflict with the Canal Plans for Segments 1 and 2. This also includes accommodations for private drainage.
- (14) The CONSULTANT shall prepare Landscaping and Amenities Plans for Segments 1 and 2. Special consideration shall be given to low maintenance items and the area adjacent to the Wisconsin River lock.
- (15) The CONSULTANT shall submit twenty-five (25) sets of Design Concept Canal Plans and Final Canal Plans.
- (16) The CONSULTANT shall provide to the MUNICIPALITY, in Autocad format, electronic files required for the plans.

I. STRUCTURE PLANS

The Canal Plans shall include two (2) bridge crossings of the canal. One bridge structure shall connect Point Park and the Top O' Levee trail with an access point to Lock Street, and one bridge structure shall be provided in Segment 2. It is anticipated that these bridge structures will be pre-fabricated structures. If design for structures other than prefabricated bridges is required, it shall be considered "Extra Services". The bridge structure in Segment 1 is expected to be supported by the walls of the Wisconsin River lock. The bridge structure in Segment 2 will be supported by concrete abutments.

The Canal Plans shall include structural retaining walls for Segment 1 for approximately 4,100 feet.

If structural retaining walls are required in Segments 2, 3 or 4, this shall be considered "Extra Services".

- (1) In the design and development of the Structure Plans for each bridge structure and the structural retaining walls, the CONSULTANT shall develop a maximum of three (3) alternative structure types or other geometric configurations to enable selection of the design that provides the best balance between practical construction considerations, right of way requirements, aesthetics, and cost considerations.
- (2) A Structure Survey Report/Hydraulic Report, which includes a discussion of structure sizing, shall be prepared for each bridge structure by the

PORTAGE CANAL

• SCOPE OF SERVICES

dewatering, containment and disposal. If dewatering of the canal is necessary for construction, it will be done by utilizing the outflow structure in Segment 4 to drain the water from the canal to the Fox River. If work on the remains of the Fort Winnebago lock is necessary, this would be considered "Extra Services".

- (11) The CONSULTANT shall prepare Wisconsin River Lock Modification Plans. This will include repairs to preserve the lock and gates and provide for new fencing and other amenities.
- (12) The CONSULTANT shall prepare Pedestrian and Bicycle Facility Plans for Segments 1 and 2 to meet requirements for the federal Statewide Multi-Modal Improvement Program (Local Transportation Enhancements). Consideration for access to adjacent public areas shall be given.
- (13) The CONSULTANT shall prepare Storm Sewer Plans for facilities in conflict with the Canal Plans for Segments 1 and 2. This also includes accommodations for private drainage.
- (14) The CONSULTANT shall prepare Landscaping and Amenities Plans for Segments 1 and 2. Special consideration shall be given to low maintenance items and the area adjacent to the Wisconsin River lock.
- (15) The CONSULTANT shall submit twenty-five (25) sets of Design Concept Canal Plans and Final Canal Plans.
- (16) The CONSULTANT shall provide to the MUNICIPALITY, in Autocad format, electronic files required for the plans.

I. STRUCTURE PLANS

The Canal Plans shall include two (2) bridge crossings of the canal. One bridge structure shall connect Point Park and the Top O' Levee trail with an access point to Lock Street, and one bridge structure shall be provided in Segment 2. It is anticipated that these bridge structures will be pre-fabricated structures. If design for structures other than prefabricated bridges is required, it shall be considered "Extra Services". The bridge structure in Segment 1 is expected to be supported by the walls of the Wisconsin River lock. The bridge structure in Segment 2 will be supported by concrete abutments.

The Canal Plans shall include structural retaining walls for Segment 1 for approximately 4,100 feet.

If structural retaining walls are required in Segments 2, 3 or 4, this shall be considered "Extra Services".

- (1) In the design and development of the Structure Plans for each bridge structure and the structural retaining walls, the CONSULTANT shall develop a maximum of three (3) alternative structure types or other geometric configurations to enable selection of the design that provides the best balance between practical construction considerations, right of way requirements, aesthetics, and cost considerations.
- (2) A Structure Survey Report/Hydraulic Report, which includes a discussion of structure sizing, shall be prepared for each bridge structure by the

PORTAGE CANAL

• SCOPE OF SERVICES

CONSULTANT in accordance with the procedures set forth in the MANUAL. A Separation Structure Survey Report shall be prepared for the structural retaining walls by the CONSULTANT in accordance with the procedures set forth in the MANUAL. The completed preliminary plans shall show the structure plan, elevation, and typical cross section, and all pertinent data shall appear on the first sheets of the completed structure plans.

- (3) Plans for Structures shall be fully dimensioned besides showing controlling elevations. The plans shall be prepared with such precision and detail to allow for the convenient layout in the field with customary degree of accuracy, and to allow for the production of an accurate estimate of quantities for pertinent items of work to be performed in the PROJECT.
- (4) Plans for Structures shall include schedules for bar steel reinforcement. Such schedules shall provide the necessary detail required for the fabrication of the reinforcement without the necessity of making separate shop drawings for that purpose.
- (5) When the plans for a structure have been completed the CONSULTANT shall furnish the DEPARTMENT with plans for review and examination. The CONSULTANT shall also provide twenty-five (25) sets of plans to the MUNICIPALITY.
- (6) The CONSULTANT shall submit for review and examination, specifications for items of work in the Structure Plans which are not covered by the STANDARD SPECIFICATIONS and such amendments to or revisions of the STANDARD SPECIFICATIONS as may be required to properly cover the work contemplated by the plans.
- (7) Plans will be subject to review and examination by the MUNICIPALITY and the DEPARTMENT. Such review and examination may be made on the site of the PROJECT.
- (8) Along with the plans for structures the CONSULTANT shall submit one copy or reproduction of the design computations for the DEPARTMENT'S review and permanent file.
- (9) The CONSULTANT shall furnish such other pertinent information and data with respect to the plans and design as the MUNICIPALITY or DEPARTMENT may request.

J. PLATS

- (1) The CONSULTANT shall research available information and prepare a Preliminary Right of Way Plat for all four segments of the PROJECT. The Preliminary Right of Way Plat shall include owners of record, property information and adequate information to determine which areas will require acquisition. This information shall be incorporated in the Design Concept Canal Plans and Report. Preparation of Final Right of Way Plats and Descriptions shall be considered "Extra Services".
- (2) Title searches shall be made of the titles to all properties or premises adjacent to the PROJECT. The Title Search shall extend over and cover a

PORTAGE CANAL

• SCOPE OF SERVICES

minimum period of sixty (60) years or to the last conveyance of record if more than sixty (60) years, and shall include a certificate to the MUNICIPALITY of all entries of record affecting the titles of the said properties or premises during such period. A copy of the last deed of record shall be included as part of the title report. Easements of record on purchased property shall be identified. Liens, mortgages, and tax records shall be identified. Up to one hundred twenty (120) title searches are included in this CONTRACT.

K. MEETINGS

- (1) The CONSULTANT shall hold an Operational Planning meeting to discuss the organization and processing of the services under this CONTRACT.
- (2) Progress meetings shall be held monthly with the Portage Canal Ad Hoc Committee. Approximately twelve (12) meetings are anticipated. The CONSULTANT shall involve the DEPARTMENT in the meetings.
- (3) Meetings to discuss PROJECT concepts shall be held with the Portage Common Council. Approximately four (4) meetings are anticipated. The CONSULTANT shall involve the DEPARTMENT in the meetings.
- (4) A Final Plan Review Meeting with the MUNICIPALITY and DEPARTMENT shall be held prior to the P.S.&E. submittal date.
- (5) The CONSULTANT shall attend the pre-bid meeting as scheduled by the DEPARTMENT.
- (6) The CONSULTANT shall attend the pre-construction conference as scheduled by the DEPARTMENT.
- (7) The CONSULTANT shall coordinate the meeting schedules with the MUNICIPALITY and the DEPARTMENT.

L. PLANS, SPECIFICATIONS & ESTIMATES (P.S.&E.)

- (1) The CONSULTANT shall submit one P.S.&E. encompassing Segments 1 and 2.
- (2) Section II. K. (2) of the STANDARD PROVISIONS is amended as follows:

The CONSULTANT shall submit the Plan Letter, Sample Proposal with the Highway Work Proposal and Special Provisions, Recommendation to Governor for Contract and Bond Approval Form, Utility Status Report, Certificate of Right of Way, News Release, and Notes to Construction portion of the P.S.&E. on a diskette using the word processing software specified in the MANUAL.