



US Army Corps  
of Engineers  
St Paul District

APPLICANT: City of Bemidji MN

# Public Notice

ISSUED: 06 November 2013

EXPIRES: 09 December 2013

REFER TO: 2013-01617-WAB

SECTION:404 - Clean Water Act

1. APPLICATION FOR PERMIT TO construct a temporary water barrier cofferdam in Lake Bemidji and to remove debris and contaminated sediment from the lakebed for restoration and development of a swimming beach.

2. SPECIFIC INFORMATION.

APPLICANT'S ADDRESS: City of Bemidji  
1351 5<sup>th</sup> Street NW  
Bemidji, MN 56601

AGENT: Landmark Environmental, LLC  
2042 West 98<sup>th</sup> Street  
Bloomington, MN 55431

PROJECT LOCATION: The project site is located in NE ¼, Sec. 15, T. 146 N., R. 33 W., Beltrami County, Minnesota. The approximate center coordinates of the site are -94.862189/47.464170 Decimal Degrees.

DESCRIPTION OF PROJECT: The project purpose is to remove wood debris and contaminated sediment from the lake and restore the lake bottom for aquatic life and for eventual use of a portion of the lake as a swimming beach. The proposed action and restoration of the South Shore of Lake Bemidji includes construction of a temporary water barrier cofferdam and dewatering approximately 5.5 acres of lake to remove wood debris from the lake to restore the lake from historical sawmill and lumber activities, remove a contaminated sediment area, and construct a public swimming beach. A 400-foot wide public beach and swimming area would be constructed after the completion of the Response Action and Restoration project, likely in 2015. The dewatered area would be approximately 1,440 feet long and extending 200 feet into the lake.

The site has been in use for over 100 years for lumber, rail and other commercial activities. These operations included lumber mills with structures built over the lake, and railroad and power generation facilities. A deposit of woody debris is present on the lake bed ranging in size from sawdust to planks of lumber, with occasional logs present. The woody material is widespread and ranges in thickness of single boards to twenty-two inches of sawdust and wood chips. Extensive soil, sediment and groundwater investigations have been completed, and the property is enrolled in the Minnesota Pollution Control Agency (MPCA) Voluntary Investigation and Cleanup Program. For the proposed property use of recreational use as a park and swimming beach, two areas of contamination were identified, one soil contaminated area on uplands next to an existing swimming beach house with polynuclear aromatic hydrocarbon contamination, and one sediment contaminated area with arsenic

**Operations - Regulatory (2013-01617-WAB)**  
**SUBJECT: Notice of Application for Permit**

contamination in the lake in the area to have wood debris removed. Low levels of formaldehyde and other contaminants less than application cleanup goals were observed in the debris and sediments, but the Response Action and Restoration project was deemed protective of human health and the environment.

A temporary water barrier cofferdam (Aquabarrier, Portadam, or approved equivalent) would be constructed. The area would then be dewatered and standard excavation equipment used to remove the wood debris and the contaminated sediment area. Dewatering would be completed in accordance with MPCA and Minnesota Department of Natural Resources (MDNR) best management practices, and as required by other permitting requirements. Excavation and removal of the woody debris in the lake and shoreline would be completed. The wood debris in the lake is surficial and only the debris will be removed from the lake bottom. No additional excavation is required except to remove the one sediment contaminated area.

**QUANTITY, TYPE, AND AREA OF FILL:** Approximately 240,000 square feet of area within the lake will be dewatered to remove the woody debris, beginning at the public boat landing on the western end and extending east approximately 1,440 feet. The work area will extend approximately 200 feet into the lake. An average of 1 foot of debris in the lake and along the shoreline is estimated to generate approximately 8,400 cubic yards of wood debris and sediments. The work would likely be performed in the fall, when lake levels are at their lowest. Maximum water depth is projected to be 3.5 feet. Standard construction methods would be used for excavation and mechanical screening onshore. Larger woody debris greater than four inches in length will be available for beneficial reuse locally by a wood mulch company, wood planks could be salvaged, and smaller woody debris between 2-4 inches may be recycled as mulch by a nursery. The remaining wood waste will be buried in an onsite borrow and spoil area. Clean sand from the borrow area will be mechanically screened to remove rocks and any debris and used as backfill in the lake to replace removed material. Engineering oversight of excavation and grading activities would be provided to monitor and screen removed soils for possible contamination.

**VEGETATION IN AFFECTED AREA:** The work is occurring in the lake where little to no submerged vegetation is present.

**SOURCE OF FILL MATERIAL:** The excavation and debris removal activities within the dewatered part of the lake would result in a redistribution of lakebed sediment and debris, although the ultimate intent is to remove the woody debris. After wood debris material removal is completed, clean sand obtained from an onshore borrow site will be placed back in the lake at current or slightly lower contours. Grading will be completed onshore for the beach area, with imported clean sand placed in the beach area and along the shoreline.

**SURROUNDING LAND USE:** Land used in the surrounding area is a mix of commercial hotels and restaurants, public recreational trails and lake access facilities, and a regional event center complex.

**DESCRIPTION OF DREDGING OR EXCAVATION:** Standard construction methods will be used for excavation and the removed material would be mechanically screened onshore in an upland area. Screened woody material will be collected and available for reuse.

**Operations - Regulatory (2013-01617-WAB)**  
**SUBJECT: Notice of Application for Permit**

THE FOLLOWING POTENTIALLY TOXIC MATERIALS COULD BE USED AT THE PROJECT SITE: The applicant has indicated that only clean fill material would be used to replace removed lakebed sediment. It is anticipated that any potentially toxic materials used at the site are consistent with materials found at other general construction sites, and associated with the maintenance and operation of heavy equipment. The project purpose actually involves the removal and proper disposal of contaminated sediment, one of those sites being located in the lake.

THE FOLLOWING PRECAUTIONS TO PROTECT WATER QUALITY HAVE BEEN DESCRIBED BY THE APPLICANT: The applicant has proposed to dewater the area in an effort to protect water quality, by eliminating work within water and allowing more controlled and efficient work conditions. The applicant will utilize a number of best management practices to protect water quality of the lake, during excavation, screening, and replacement of clean sand. The project is a water quality restoration project, with a goal of improving the lake for recreation purposes and aquatic life.

MITIGATION: The applicant has not proposed compensatory mitigation. The project will not result in a loss of waters of the United States or functional losses.

PROJECT ALTERNATIVES THAT WERE CONSIDERED: The applicant considered several alternatives, including the no-action alternative. The no-action alternative was not chosen because it would not meet the project purpose and need, the woody debris and contaminated sediment would still remain in place, and the lake would not be restored. A mechanical dredging method was considered but not selected because it was determined to disturb lake sediments and the water column, and it was impractical to work up to 200 feet from shore with a backhoe. A hydraulic dredging alternative was considered but not selected because the wood debris varies in size, making it difficult to pump, sort and screen.

### 3. REPLIES/COMMENTS.

Interested parties are invited to submit to this office written facts, arguments, or objections within 30 days of the date of this notice. These statements should bear upon the suitability of the location and the adequacy of the project and should, if appropriate, suggest any changes believed to be desirable. Comments received may be forwarded to the applicant.

Replies may be addressed to Regulatory Branch, St. Paul District, Corps of Engineers, 180 Fifth Street East, Suite 700, Saint Paul, MN 55101-1678.

Or, IF YOU HAVE QUESTIONS ABOUT THE PROJECT, call Bill Baer at the Bemidji Regulatory field office of the Corps, telephone number (651) 290 - 5338.

To receive Public Notices by e-mail, go to: [http://mvp-extstp.mvp.usace.army.mil/list\\_server/](http://mvp-extstp.mvp.usace.army.mil/list_server/) and add your information in the New Registration Box.

### 4. FEDERALLY-LISTED THREATENED OR ENDANGERED WILDLIFE OR PLANTS OR THEIR CRITICAL HABITAT.

**Operations - Regulatory (2013-01617-WAB)**  
**SUBJECT: Notice of Application for Permit**

None were identified by the applicant or are known to exist in the permit area. However, Beltrami County is within the known or historic range of the following Federally-listed threatened (T) and endangered (E) species:

<u>Species</u>	<u>Habitat</u>
Canada lynx (T) ( <i>Lynx canadensis</i> )	Northern forested areas

This application is being coordinated with the U.S. Fish and Wildlife Service. Any comments it may have concerning Federally-listed threatened or endangered wildlife or plants or their critical habitat will be considered in our final assessment of the described work.

**5. JURISDICTION.**

This application is being reviewed in accordance with the practices for documenting Corps jurisdiction under Sections 9 & 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act identified in Regulatory Guidance Letter 08-02. We have made an initial determination that the aquatic resources that would be impacted by the proposed project are regulated by the Corps of Engineers under Section 404 of the Clean Water Act and/or Section(s) 9 & 10 of the Rivers and Harbors Act. The Corps will prepare an approved or preliminary jurisdictional determination prior to making a permit decision. Approved jurisdictional determinations are posted on the St. Paul District web page at <http://www.mvp.usace.army.mil/Missions/Regulatory.aspx>.

THE APPLICANT HAS STATED THAT THE FOLLOWING STATE, COUNTY, AND/OR LOCAL PERMITS HAVE BEEN APPLIED FOR/ISSUED:

- MDNR Public Waters Work Permit
- MDNR Water Appropriations Permit GP97-0005 for Dewatering
- Environmental Review Need Determination by the Local Governmental Unit
- MPCA Beneficial Reuse Determination for wood debris
- MPCA NPDES/SDS Stormwater Permit for Construction Activities
- MDNR Bike Trail and Easement Access and Temporary Trail Closure
- Minnesota Department of Health Septic Tank Abandonment Permit
- MPCA VIC Program Construction Contingency Plan and Development Response Action Plan

Addendum

**6. STATE SECTION 401 WATER QUALITY CERTIFICATION.**

Valid Section 404 permits cannot be issued for any activity unless state water quality certification for the activity is granted or waived pursuant to Section 401 of the Clean Water Act. The State Section 401 authority in Minnesota is the Minnesota Pollution Control Agency (MPCA). The St. Paul District has provided this public notice and a copy of the applicant's Section 404 permit application form to the MPCA. If MPCA needs any additional information in order for the Section 401 application to be considered complete by MPCA, the MPCA has indicated that it will request such information from the applicant. It is the permit applicant's responsibility to ensure that the MPCA has received a valid, complete application for state Section 401 certification and to obtain a final Section 401 action from the MPCA.

**Operations - Regulatory (2013-01617-WAB)**  
**SUBJECT: Notice of Application for Permit**

The MPCA has indicated that this public notice serves as its public notice of the application for Section 401 water quality certification under Minnesota Rules Part 7001. The MPCA has also indicated that the Section 401 process shall begin to commence upon the issuance date of this public notice unless the MPCA notifies both the St. Paul District and the permit applicant to the contrary, in writing, before the expiration date of this public notice.

Any comments relative to MPCA's Section 401 Certification for the activity proposed in this public notice may be sent to:

Minnesota Pollution Control Agency, Resource Management and Assistance Division,  
Attention: 401 Certification, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

**7. HISTORICAL/ARCHAEOLOGICAL.**

This public notice is being sent to the National Park Service and the State Archaeologist for their comments. The Corps will review information on known cultural resources and/or historic properties within and adjacent to the project area. The Corps will also consider the potential effects of the project on any properties that have yet to be identified. The results of this review and the Corps' determination of effect will be coordinated with the State Historic Preservation Officer independent of this public notice. Any adverse effects on historic properties will be resolved prior to the Corps authorization, or approval, of the work in connection with this project.

**8. PUBLIC HEARING REQUESTS.**

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, in detail, the reasons for holding a public hearing. A request may be denied if substantive reasons for holding a hearing are not provided or if there is otherwise no valid interest to be served.

**9. PUBLIC INTEREST REVIEW.**

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 benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, 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 and, in general, the needs and welfare of the people. Environmental and other documents will be available for review in the St. Paul District Office.

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. 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,

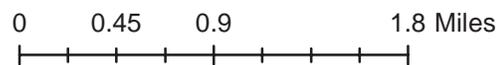
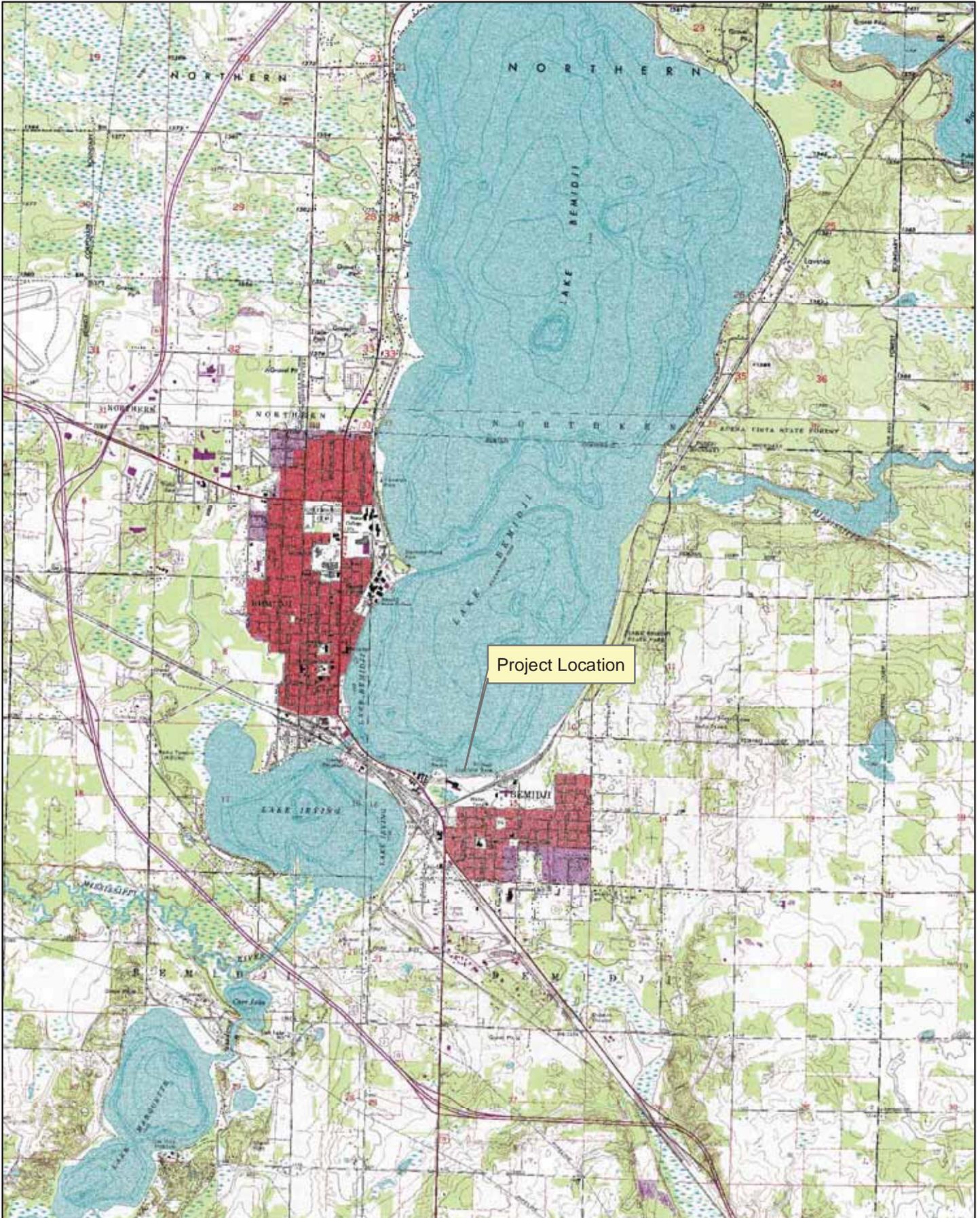
**Operations - Regulatory (2013-01617-WAB)**  
**SUBJECT: Notice of Application for Permit**

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. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

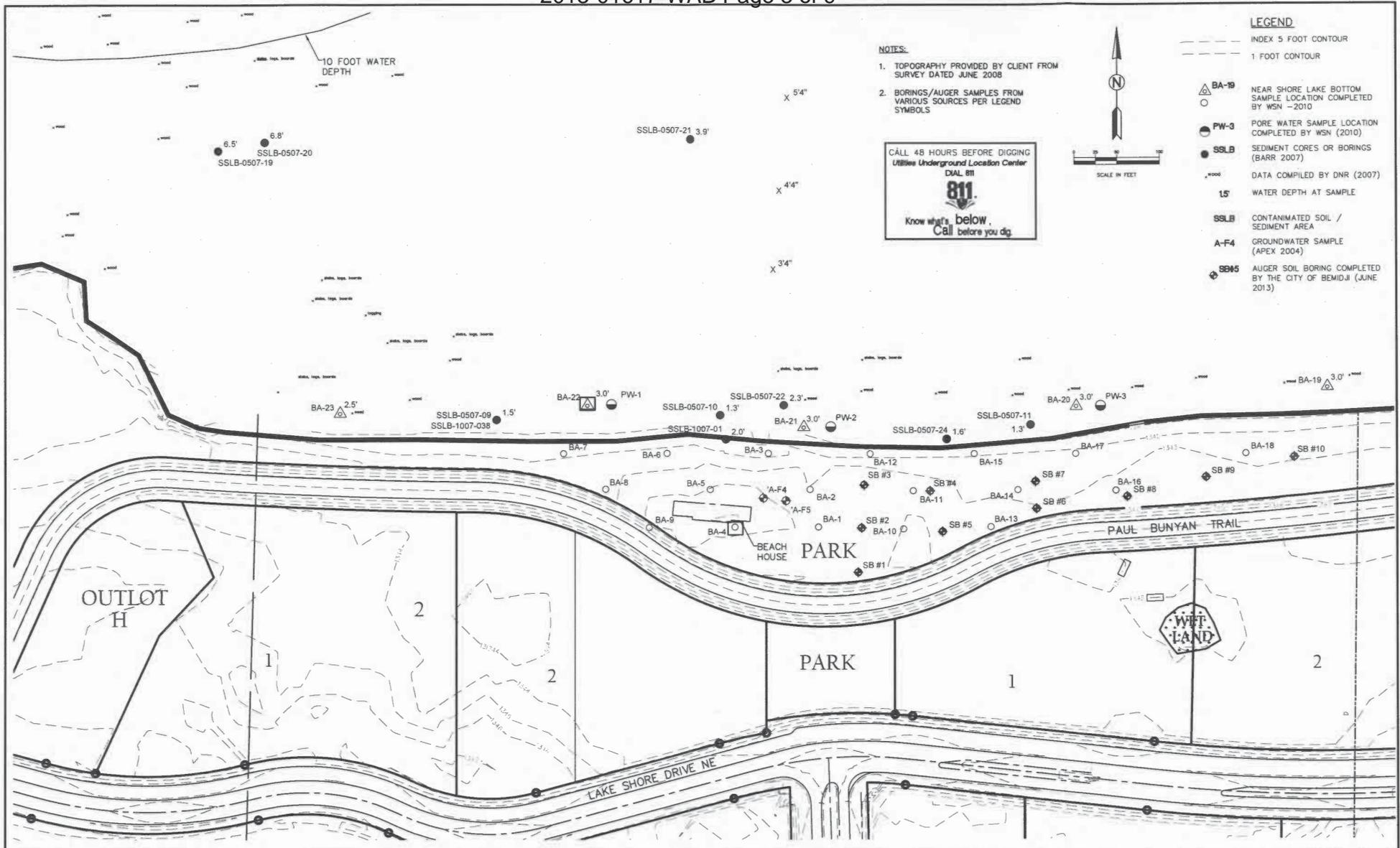
Jeffrey Olson  
Chief, Northwest Section

Enclosures

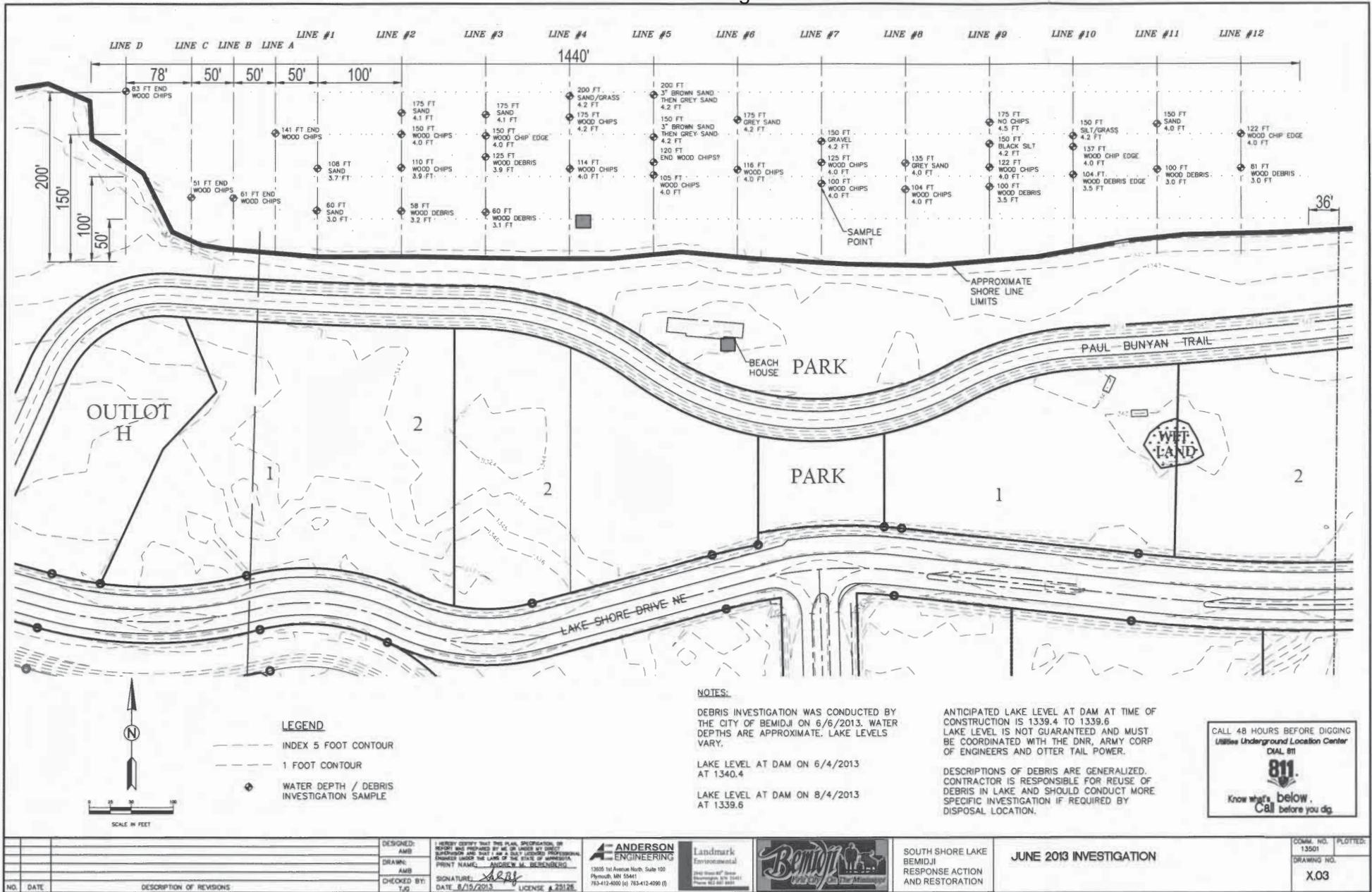
NOTICE TO EDITORS: This public notice is provided as background information and is not a request or contract for publication.



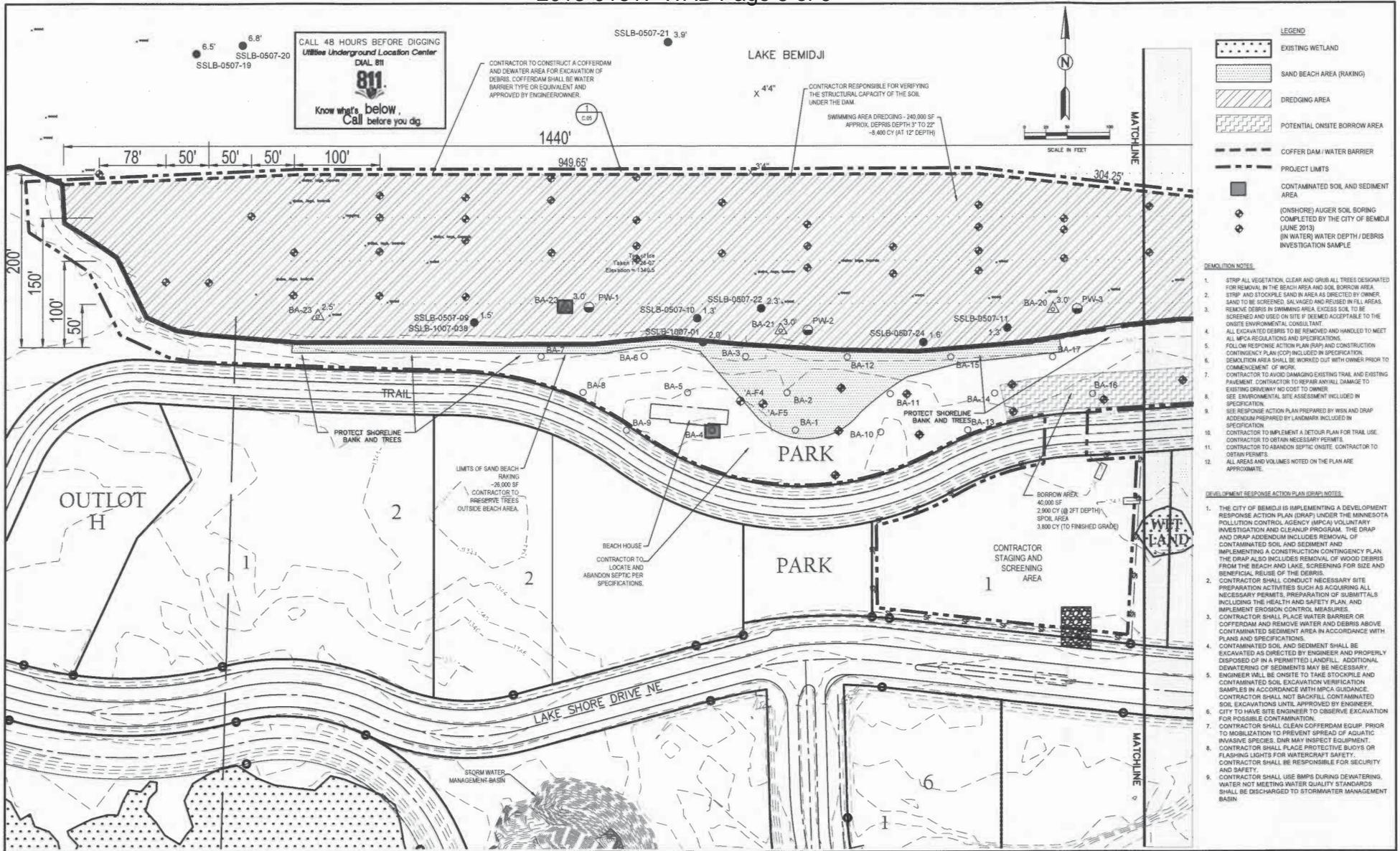




NO.	DATE	DESCRIPTION OF REVISIONS	DESIGNED: AMB	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. PRINT NAME: ANDREW M. BERENBERG	<b>ANDERSON ENGINEERING</b> 12605 1st Avenue North, Suite 100 Plymouth, MN 55441 763-412-4000 (o) 763-412-4006 (f)	Landmark Environmental 2242 West 95 <sup>th</sup> Street Shannonville, MN 55441 Phone 952-887-8801	SOUTH SHORE LAKE BEMIDJI RESPONSE ACTION AND RESTORATION	EXISTING CONDITIONS PLAN	COMM. NO. 13501 PLOTTED: DRAWING NO. X.02
			CHECKED BY: TJC	SIGNATURE: <i>AMB</i> DATE: 8/15/2013 LICENSE # 23126					



NO. DATE DESCRIPTION OF REVISIONS		DESIGNED: AMB DRAWN: AMB CHECKED BY: TAP DATE: 8/15/2013	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. PRINT NAME: ANDREW M. BECKENBACH SIGNATURE: <i>AMB</i> DATE: 8/15/2013 LICENSE # 28126	<b>ANDERSON ENGINEERING</b> 13025 1st Avenue North, Suite 100 Plymouth, MN 55441 763-412-4000 (w) 763-412-4099 (f)	<b>Landmark Environmental</b> 200 West 4th Street Bemidji, MN 56601 Phone: 818-8111 Fax: 818-8111	<b>Bemidji</b> The City of Our Tomorrow	SOUTH SHORE LAKE BEMIDJI RESPONSE ACTION AND RESTORATION	JUNE 2013 INVESTIGATION	COMM. NO. 13501 PLOTTED 13501 DRAWING NO. X.03
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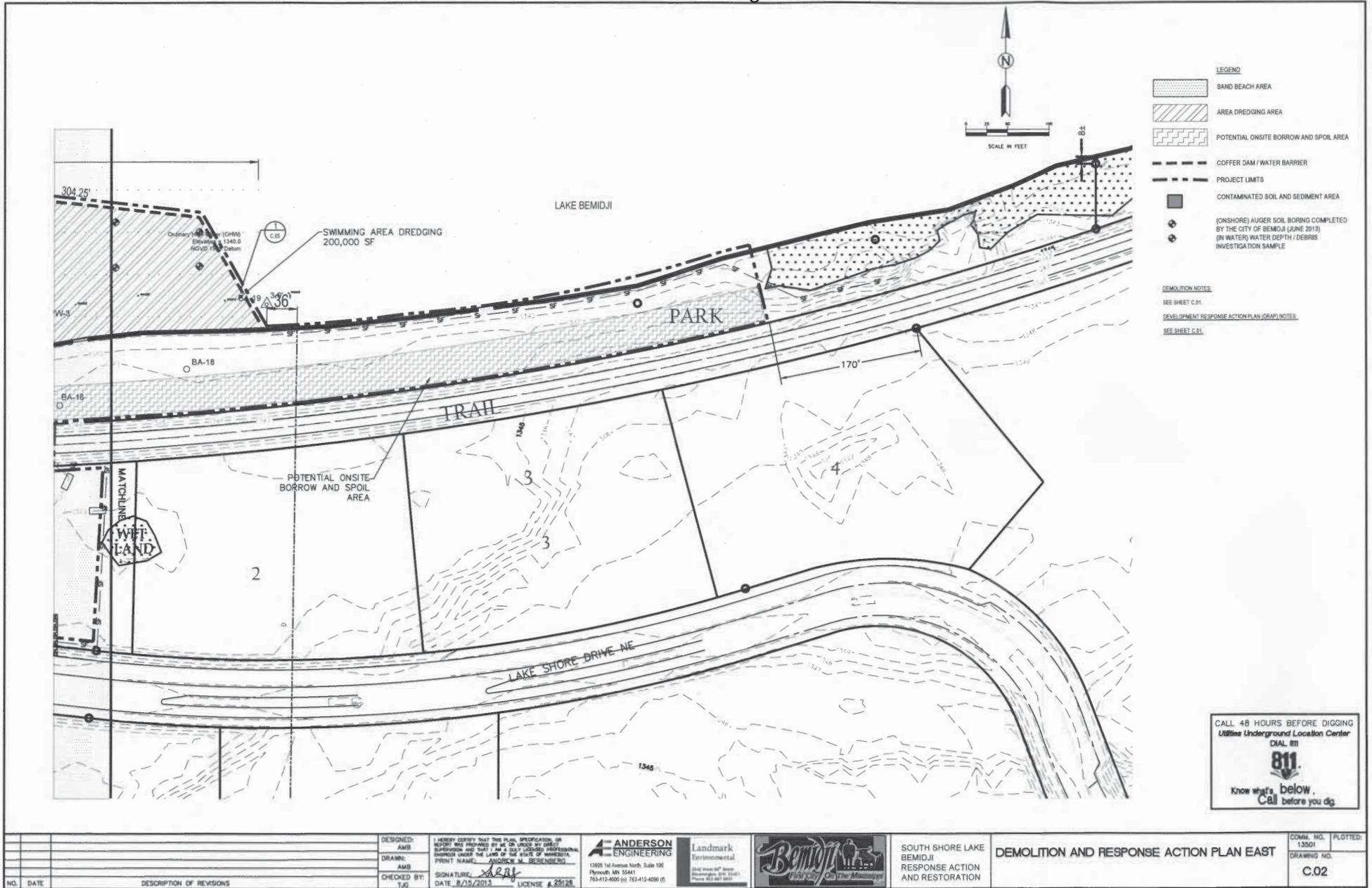
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 Utilize Underground Location Center  
 DIAL 811  
**811**  
 Know what's below,  
 Call before you dig

- LEGEND**
- [Dotted pattern] EXISTING WETLAND
  - [Diagonal lines] SAND BEACH AREA (RAKING)
  - [Horizontal lines] DREDGING AREA
  - [Cross-hatch pattern] POTENTIAL ONSITE BORROW AREA
  - [Dashed line] COFFER DAM / WATER BARRIER
  - [Solid line] PROJECT LIMITS
  - [Square with 'X'] CONTAMINATED SOIL AND SEDIMENT AREA
  - [Circle with 'X'] (ONSHORE) AUGER SOIL BORING COMPLETED BY THE CITY OF BEMIDJI (JUNE 2013) (IN WATER) WATER DEPTH / DEBRIS INVESTIGATION SAMPLE

- DEMOLITION NOTES**
1. STRIP ALL VEGETATION, CLEAR AND GRUB ALL TREES DESIGNATED FOR REMOVAL IN THE BEACH AREA AND BORROW AREA. STRIP AND STOCKPILE SAND IN AREA AS DIRECTED BY OWNER. SAND TO BE SCREENED, SALVAGED AND REUSED IN FILL AREAS. REMOVE DEBRIS IN SWIMMING AREA SOIL TO BE SCREENED AND USED ON SITE IF REEMED ACCEPTABLE TO THE ONSITE ENVIRONMENTAL CONSULTANT.
  2. ALL EXCAVATED DEBRIS TO BE REMOVED AND HANDLED TO MEET ALL MPC REGULATIONS AND SPECIFICATIONS.
  3. FOLLOW RESPONSE ACTION PLAN (RAP) AND CONSTRUCTION CONTINGENCY PLAN (CCP) INCLUDED IN SPECIFICATION. DEMOLITION AREA SHALL BE WORKED OUT WITH OWNER PRIOR TO COMMENCEMENT OF WORK.
  4. CONTRACTOR TO AVOID DAMAGING EXISTING TRAIL AND EXISTING PAVEMENT. CONTRACTOR TO REPAIR ANIMAL DAMAGE TO EXISTING DRIVEWAY NO COST TO OWNER.
  5. SEE ENVIRONMENTAL SITE ASSESSMENT INCLUDED IN SPECIFICATION.
  6. SEE RESPONSE ACTION PLAN PREPARED BY WSN AND DRAP ADDENDUM PREPARED BY LANDMARK INCLUDED IN SPECIFICATION.
  7. CONTRACTOR TO IMPLEMENT A DETOUR PLAN FOR TRAIL USE. CONTRACTOR TO OBTAIN NECESSARY PERMITS.
  8. CONTRACTOR TO ABANDON SEPTIC ONSITE. CONTRACTOR TO OBTAIN PERMITS.
  9. ALL AREAS AND VOLUMES NOTED ON THE PLAN ARE APPROXIMATE.

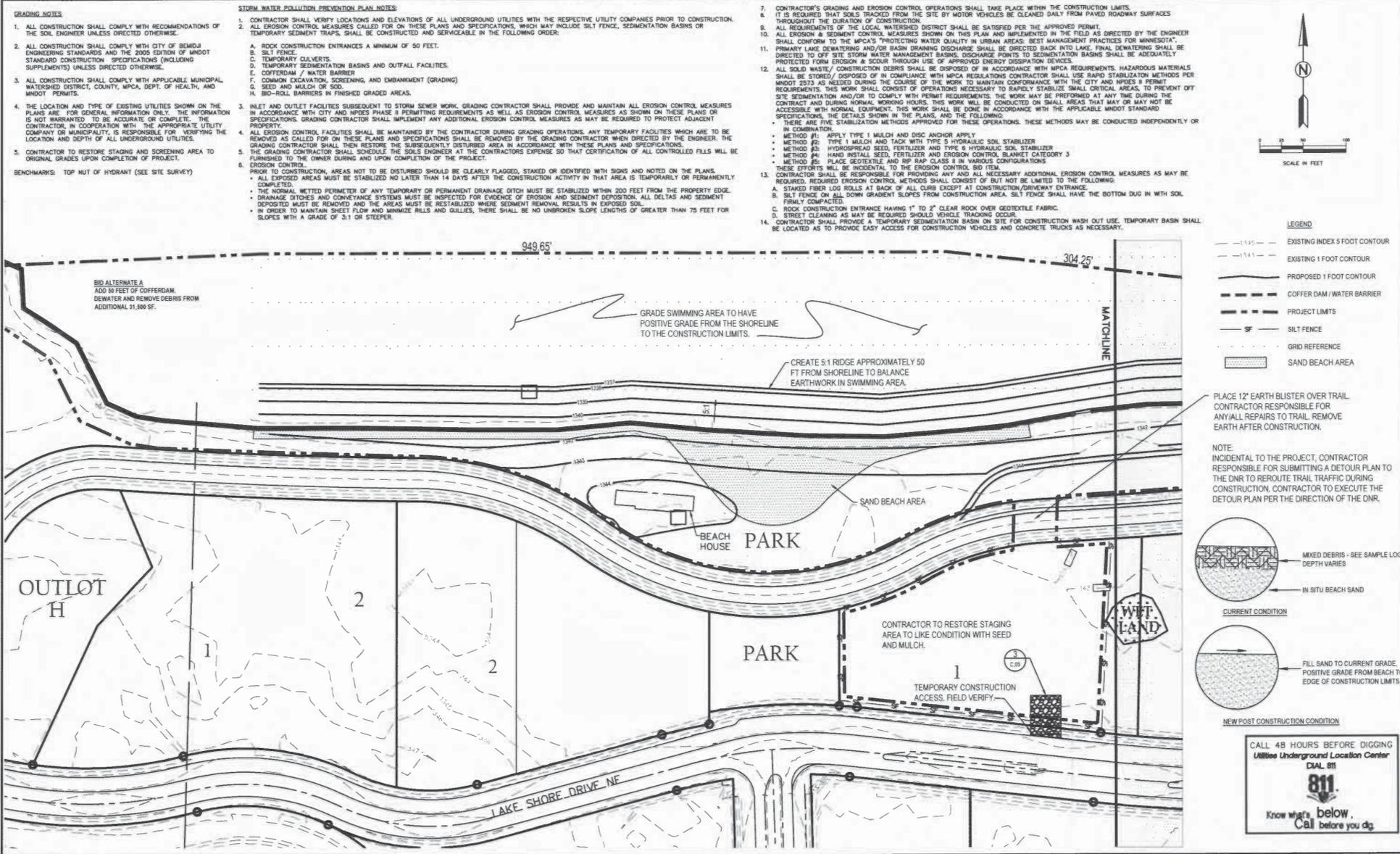
- DEVELOPMENT RESPONSE ACTION PLAN (DRAP) NOTES:**
1. THE CITY OF BEMIDJI IS IMPLEMENTING A DEVELOPMENT RESPONSE ACTION PLAN (DRAP) UNDER THE MINNESOTA POLLUTION CONTROL AGENCY (MPCA) VOLUNTARY INVESTIGATION AND CLEANUP PROGRAM. THE DRAP AND DRAP ADDENDUM INCLUDES REMOVAL OF CONTAMINATED SOIL AND SEDIMENT AND IMPLEMENTING A CONSTRUCTION CONTINGENCY PLAN. THE DRAP ALSO INCLUDES REMOVAL OF WOOD DEBRIS FROM THE BEACH AND LAKE. SCREENING FOR SIZE AND BENEFICIAL REUSE OF THE DEBRIS.
  2. CONTRACTOR SHALL CONDUCT NECESSARY SITE PREPARATION ACTIVITIES SUCH AS ACQUIRING ALL NECESSARY PERMITS, PREPARATION OF SUBMITTALS INCLUDING THE HEALTH AND SAFETY PLAN, AND IMPLEMENT EROSION CONTROL MEASURES.
  3. CONTRACTOR SHALL PLACE WATER BARRIER OR COFFERDAM AND REMOVE WATER AND DEBRIS ABOVE CONTAMINATED SEDIMENT AREA IN ACCORDANCE WITH PLANS AND SPECIFICATIONS.
  4. CONTAMINATED SOIL AND SEDIMENT SHALL BE EXCAVATED AS DIRECTED BY ENGINEER AND PROPERLY DISPOSED OF IN A PERMITTED LANDFILL. ADDITIONAL DEWATERING OF SEDIMENTS MAY BE NECESSARY.
  5. ENGINEER WILL BE ONSITE TO TAKE STOCKPILE AND CONTAMINATED SOIL EXCAVATION VERIFICATION SAMPLES IN ACCORDANCE WITH MPCA GUIDANCE. CONTRACTOR SHALL NOT BACKFILL CONTAMINATED SOIL EXCAVATIONS UNTIL APPROVED BY ENGINEER. CITY TO HAVE SITE ENGINEER TO OBSERVE EXCAVATION FOR POSSIBLE CONTAMINATION.
  6. CONTRACTOR SHALL CLEAN COFFERDAM EQUIP. PRIOR TO MOBILIZATION TO PREVENT SPREAD OF AQUATIC INVASIVE SPECIES. DNR MAY INSPECT EQUIPMENT.
  7. CONTRACTOR SHALL PLACE PROTECTIVE BUIYS OR FLASHING LIGHTS FOR WATERBENT SAFETY. CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY AND SAFETY.
  8. CONTRACTOR SHALL USE BMPs DURING DEWATERING. WATER NOT MEETING WATER QUALITY STANDARDS SHALL BE DISCHARGED TO STORMWATER MANAGEMENT BASIN.

NO.	DATE	DESCRIPTION OF REVISIONS	DESIGNED: AMB	CHECKED BY: TJC	<p>I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A duly LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.</p> <p>PRINT NAME: ANDREW M. BEBERBERG</p> <p>SIGNATURE: <i>AMB</i></p> <p>DATE: 8/15/2013 LICENSE # 25126</p>	<p><b>ANDERSON ENGINEERING</b></p> <p>13005 1st Street North, Suite 100          Plymouth, MN 55441          763-412-4000 (p) 763-412-4090 (f)</p>	<p><b>Landmark Environmental</b></p> <p>2540 Winesap Drive          Bloomington, MN 55431          Phone 652-897-8001</p>	<p>SOUTH SHORE LAKE BEMIDJI          RESPONSE ACTION AND RESTORATION</p>	<p>COMM. NO. 13501          PLOTTED: DRAWING NO. C.01</p>
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DRAWN: AMB						DRAWING NO.	
CHECKED BY: TJC						C.03	
NO. DATE DESCRIPTION OF REVISIONS							

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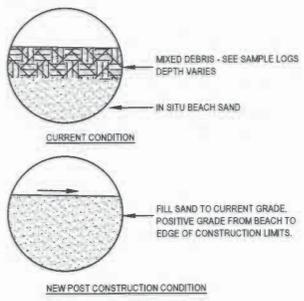
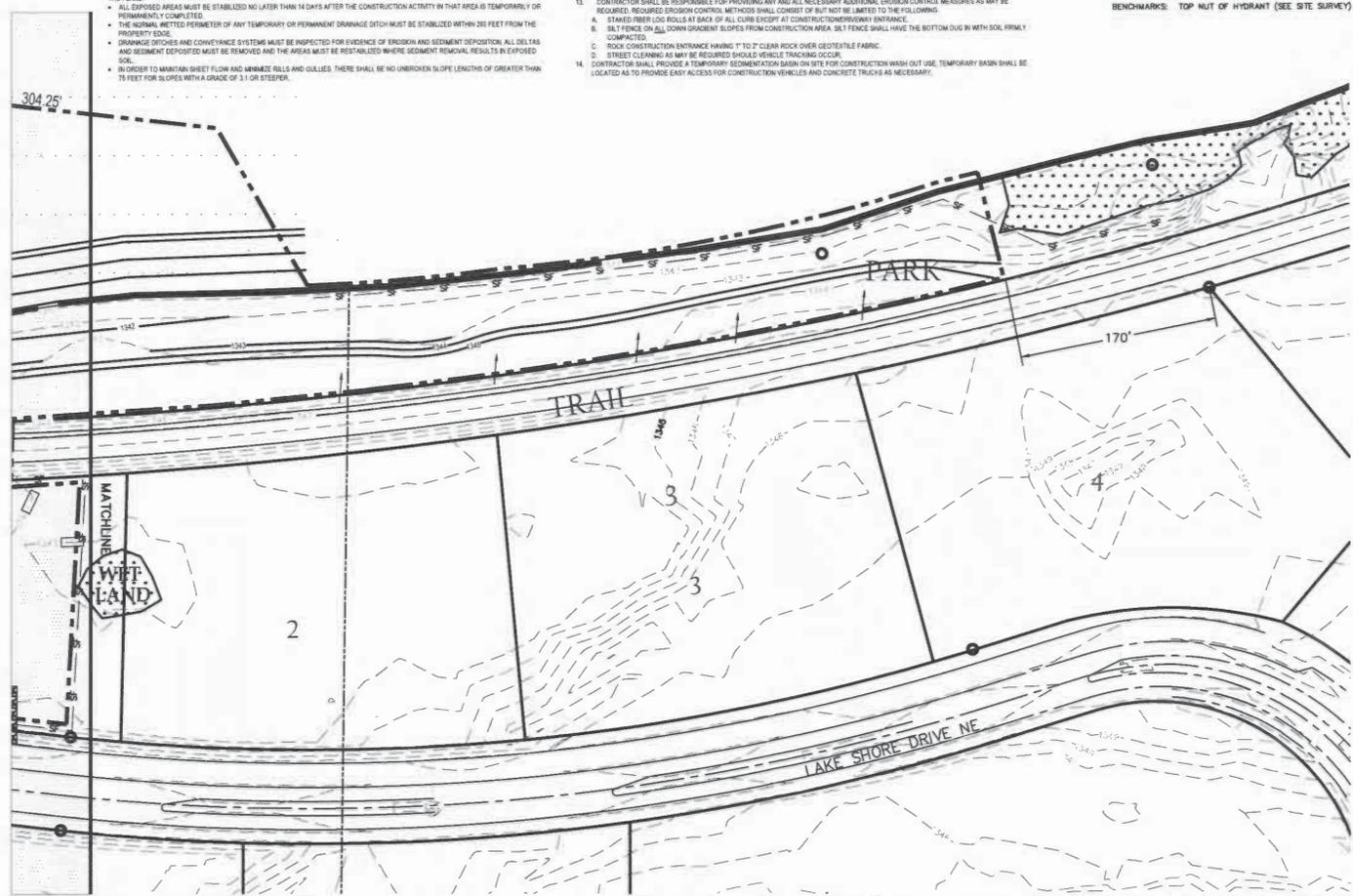
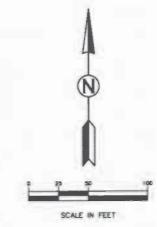
**STORM WATER POLLUTION PREVENTION PLAN NOTES**

1. CONTRACTOR SHALL VERIFY LOCATIONS AND ELEVATIONS OF ALL UNDERGROUND UTILITIES WITH THE RESPECTIVE UTILITY COMPANIES PRIOR TO CONSTRUCTION.
2. ALL EROSION CONTROL MEASURES CALLED FOR ON THESE PLANS AND SPECIFICATIONS, WHICH MAY INCLUDE SILT FENCE, SEDIMENTATION BASINS OR TEMPORARY SEDIMENT TRAPS, SHALL BE CONSTRUCTED AND SERVICEABLE IN THE FOLLOWING ORDER:
  - A. ROCK CONSTRUCTION ENTRANCES A MINIMUM OF 50 FEET.
  - B. SILT FENCE.
  - C. TEMPORARY CULVERTS.
  - D. TEMPORARY SEDIMENTATION BASINS AND CULVERT FACILITIES.
  - E. COMMON EROSION, SCREENING, AND SEDIMENTATION (DRAWING).
  - F. SEED AND MULCH OR SOG.
  - G. INSTALL BARRIERS IN FINISHED GRADED AREAS.
3. INLET AND OUTLET FACILITIES SUBSEQUENT TO STORM SEWER WORK: GRADING CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL EROSION CONTROL MEASURES IN ACCORDANCE WITH CITY AND INDUS PHASE PERMITTING REQUIREMENTS AS WELL AS EROSION CONTROL MEASURES AS SHOWN ON THESE PLANS OR SPECIFICATIONS. GRADING CONTRACTOR SHALL IMPLEMENT ANY ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED TO PROTECT ADJACENT PROPERTY.
4. ALL EROSION CONTROL FACILITIES SHALL BE MAINTAINED BY THE CONTRACTOR DURING GRADING OPERATIONS. ANY TEMPORARY FACILITIES WHICH ARE TO BE REMOVED AS CALLED FOR ON THESE PLANS AND SPECIFICATIONS SHALL BE REMOVED BY THE GRADING CONTRACTOR WHEN DIRECTED BY THE ENGINEER. THE GRADING CONTRACTOR SHALL THEN RESTORE THE SUBSEQUENTLY DISTURBED AREA IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS.
5. THE GRADING CONTRACTOR SHALL SCHEDULE THE SOILS ENGINEER AT THE CONTRACTORS EXPENSE SO THAT CERTIFICATION OF ALL CONTROLLED FILL WILL BE FURNISHED TO THE OWNER DURING AND UPON COMPLETION OF THE PROJECT.
6. EROSION CONTROL:
  - PRIOR TO CONSTRUCTION, AREAS NOT TO BE DISTURBED SHOULD BE CLEARLY FLAGGED, STAKED OR IDENTIFIED WITH SIGNS AND NOTED ON THE PLANS.
  - ALL EXPOSED AREAS MUST BE STABILIZED NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA IS TEMPORARILY OR PERMANENTLY COMPLETED.
  - THE NORMAL, NETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH MUST BE STABILIZED WITHIN 300 FEET FROM THE PROPERTY EDGE.
  - DRAINAGE DITCHES AND CONVEYANCE SYSTEMS MUST BE INSPECTED FOR EVIDENCE OF EROSION AND SEDIMENT DEPOSITION. ALL DELTAS AND SEDIMENT DEPOSITORS MUST BE REMOVED AND THE AREAS MUST BE RE-STABILIZED WHERE SEDIMENT REMOVAL RESULTS IN EXPOSED SOIL.
  - IN ORDER TO MAINTAIN SHEET FLOW AND MINIMIZE RILLS AND GULLIES, THERE SHALL BE NO UNBROKEN SLOPE LENGTHS OF GREATER THAN 75 FEET FOR SLOPES WITH A GRADE OF 3:1 OR STEEPER.

7. CONTRACTOR'S GRADING AND EROSION CONTROL OPERATIONS SHALL TAKE PLACE WITHIN THE CONSTRUCTION LIMITS.
8. IT IS REQUIRED THAT SOILS TRACKED FROM THE SITE BY MOTOR VEHICLES BE CLEANED DAILY FROM PAVED ROADWAY SURFACES THROUGHOUT THE DURATION OF CONSTRUCTION.
9. ALL REQUIREMENTS OF THE LOCAL WATERSHED DISTRICT SHALL BE SATISFIED PER THE APPROVED PERMIT.
10. ALL EROSION & SEDIMENT CONTROL MEASURES SHOWN ON THIS PLAN AND IMPLEMENTED IN THE FIELD AS DIRECTED BY THE ENGINEER SHALL CONFORM TO THE BEST PRACTICES FOR PROTECTING WATER QUALITY IN URBAN AREAS BEST MANAGEMENT PRACTICES FOR MINNESOTA.
11. PRIMARY LAKE OVERFLOWING AND/OR BASIN DRAINING DISCHARGE SHALL BE DIRECTED BACK INTO LAKE. FINAL DRAINING SHALL BE DIRECTED TO OFF SITE STORM WATER MANAGEMENT BASINS. DISCHARGE POINTS TO SEDIMENTATION BASINS SHALL BE ADEQUATELY PROTECTED FROM EROSION & SCOUR THROUGH USE OF APPROVED ENERGY DISSIPATION DEVICES.
12. ALL SOLID WASTE CONSTRUCTION DEBRIS SHALL BE DISPOSED OF IN ACCORDANCE WITH MPCA REQUIREMENTS. HAZARDOUS MATERIALS SHALL BE STORED/DISPOSED OF IN COMPLIANCE WITH MPCA REGULATIONS. CONTRACTOR SHALL USE RAPID STABILIZATION METHODS PER MNDOT 2013 AS NEEDED DURING THE COURSE OF THE WORK TO MAINTAIN COMPLIANCE WITH THE CITY AND INDUS PERMIT REQUIREMENTS. THIS WORK SHALL CONSIST OF OPERATIONS NECESSARY TO IMPROVE STABILIZATION, SHALL CRITICAL AREAS, TO PREVENT OFF SITE SEDIMENTATION AND/OR TO COMPLY WITH PERMIT REQUIREMENTS. THE WORK MAY BE PERFORMED AT ANY TIME DURING THE CONTRACT AND DURING NORMAL WORKING HOURS. THIS WORK SHALL BE CONDUCTED ON SMALL AREAS THAT MAY OR MAY NOT BE ACCESSIBLE WITH NORMAL EQUIPMENT. THIS WORK SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE MNDOT STANDARD SPECIFICATIONS. THE DETAILS SHOWN IN THE PLANS AND THE FOLLOWING:
  - THERE ARE FIVE STABILIZATION METHODS APPROVED FOR THESE OPERATIONS. THESE METHODS MAY BE CONDUCTED INDEPENDENTLY OR IN COMBINATION.
  - METHOD #1: APPLY TYPE 1 MULCH AND DISC ANCHOR APPLY
  - METHOD #2: TYPE 1 MULCH AND TACK WITH TYPE 5 HYDRAULIC SOIL STABILIZER
  - METHOD #3: HYDROSEED SEED, FERTILIZER AND TYPE 5 HYDRAULIC SOIL STABILIZER
  - METHOD #4: HAND INSTALL SEED, FERTILIZER AND EROSION CONTROL SLAMMET CATEGORY 3
  - METHOD #5: PLANT GEOTEXTILE AND TOP SOIL CLASS B IN VARIOUS COMBINATIONS
 THESE EFFORTS WILL BE INCIDENTAL TO THE EROSION CONTROL, BID ITEM.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL NECESSARY ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED. REQUIRED EROSION CONTROL METHODS SHALL CONSIST OF BUT NOT BE LIMITED TO THE FOLLOWING:
  - A. STAKED FIBER LOG BOLS AT BACK OF ALL CURVE EXCEPT AT CONSTRUCTION/ROADWAY ENTRANCE.
  - B. SILT FENCE ON ALL DOWN GRADIENT SLOPES FROM CONSTRUCTION AREA. SILT FENCE SHALL HAVE THE BOTTOM DUG IN WITH SOIL FIRMLY COMPACTED.
  - C. ROCK CONSTRUCTION ENTRANCE MATING 12" TO 2" CLEAR ROCK OVER GEOTEXTILE FABRIC.
  - D. STREET CLEANING AS MAY BE REQUIRED SHOULD VEHICLE TRACKING OCCUR.
14. CONTRACTOR SHALL PROVIDE A TEMPORARY SEDIMENTATION BASIN ON SITE FOR CONSTRUCTION WASH OUT USE. TEMPORARY BASIN SHALL BE LOCATED AS TO PROVIDE EASY ACCESS FOR CONSTRUCTION VEHICLES AND CONCRETE TRUCKS AS NECESSARY.

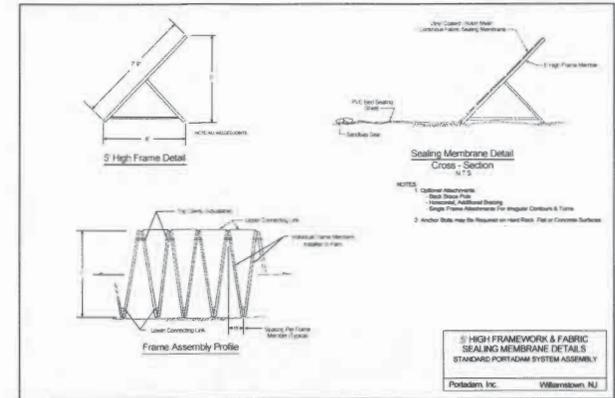
**GRADING NOTES**

1. ALL CONSTRUCTION SHALL COMPLY WITH RECOMMENDATIONS OF THE SOIL ENGINEER UNLESS DIRECTED OTHERWISE.
  2. ALL CONSTRUCTION SHALL COMPLY WITH CITY OF BEMIDJI ENGINEERING STANDARDS AND THE 2005 EDITION OF MNDOT STANDARD CONSTRUCTION SPECIFICATIONS (INCLUDING SUPPLEMENTS) UNLESS DIRECTED OTHERWISE.
  3. ALL CONSTRUCTION SHALL COMPLY WITH APPLICABLE MUNICIPAL, WATERSHED DISTRICT, COUNTY, MPCA, DEPT. OF HEALTH, AND MNDOT PERMITS.
  4. THE LOCATION AND TYPE OF EXISTING UTILITIES SHOWN ON THE PLANS ARE FOR GENERAL INFORMATION ONLY. THE INFORMATION IS NOT WARRANTED TO BE ACCURATE OR COMPLETE. THE CONTRACTOR, IN COOPERATION WITH THE APPROPRIATE UTILITY COMPANY OR MUNICIPALITY, IS RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES.
  5. CONTRACTOR TO RESTORE STAGING AND SCREENING AREA TO ORIGINAL GRADES UPON COMPLETION OF PROJECT.
- BENCHMARKS: TOP NUT OF HYDRANT (SEE SITE SURVEY)

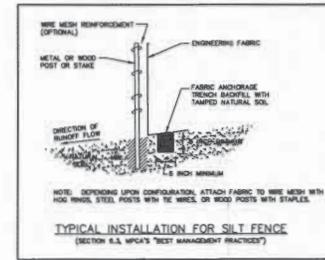


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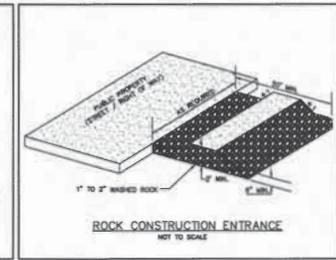
NO.	DATE	DESCRIPTION OF REVISIONS	DESIGNED: AMB	I HEREBY CERTIFY THAT THE PLAN, SPECIFICATIONS, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A QUALIFIED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. PRINT NAME: ANDREW M. BEISENBERG	ANDERSON ENGINEERING 13055 1st Avenue North, Suite 100 Plymouth, MN 55441 763-412-4000 (t) 763-412-4000 (f)	Landmark Environmental 2410 Grand St. #200 Minneapolis, MN 55411 Phone 612-337-8811	Bemidji City of Bemidji 2010 1st St. NE Bemidji, MN 56501	SOUTH SHORE LAKE BEMIDJI RESPONSE ACTION AND RESTORATION	SWPPP, GRADING AND STAGING PLAN EAST	COMM. NO. 13501	PLOTTED:
			CHECKED BY: TJB							SIGNATURE: <i>AMB</i>	DATE: 8/15/2013



1 TEMPORARY COFFERDAM  
C.05 NOT TO SCALE



2 STANDARD DUTY SILT FENCE  
C.05 NOT TO SCALE



3 ROCK CONSTRUCTION ENTRANCE  
C.06 NOT TO SCALE

NOTE:  
SEE SPECIFICATION FOR SEEDING AND RESTORATION

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NO.	DATE	DESCRIPTION OF REVISIONS							