NOTES

1. TIMBER BREAKWATER TO BE DEMOLISHED. PILES TO BE FULLY EXTRACTED OR BROKE OFF MINIMUM 2' BELOW THE LAKE BED. TIMBER TO BE STORED ON-SITE PER PERMANENT STORAGE LOCATION EMERGENCY EXTRACTING STRUCTURE.

2. PRIMARY ACCESS TO LAKE BED WILL BE LOT 10 ONLY. LOT 8 WILL BE FOR EQUIPMENT STORAGE AND PARKING ONLY.

SURVEY NOTES

1. BATHYMETRY SOURCE: MAY 2017 MOTT MACDONALD DATA COLLECTION.

2. HORIZONTAL DATUM: NAD83 IDAHO STATE PLANE WEST ZONE, FEET

3. VERTICAL DATUM: CONVERSION PRELIMINARY. TO BE CONFIRMED PRIOR TO CONSTRUCTION.

4. UNIT AND VERTICAL DATUM: LAKE DATUM FEET REFERENCED TO USGS GAGE 1383590, DATUM OF USGS GAGE 2.03.46 FEET ABOVE NGVD29.

5. AERIAL SOURCE: GOOGLE EARTH, IMAGERY DATE JULY 11, 2014

LEGEND

1. SITE PHOTOS

2. NAVIGATION AID BUOYS

3. FLOW DIRECTION

4. TEMPORARY BENCHMARK

SITE PLAN

EXISTING CONDITIONS

1. SITE PHOTOS

2. NAVIGATION AID BUOYS

3. FLOW DIRECTION

4. TEMPORARY BENCHMARK

PROJECT SITE LIMITS

EXISTING NAVIGATION AID BUOYS (LOCATION Varies, TYP.

EXISTING TIMBER BREAKWATER (APPROXIMATELY 125 FT) TO BE REMOVED - AREA A

EXISTING TIMBER BREAKWATER (APPROXIMATELY 125 FT) TO BE REMOVED - AREA A

BAR LINE

DISTANCE

SCALE IN FEET

COPIES OF THIS SHEET TO BE MADE AVAILABLE TO BID PROPOSAL PANELS DURING MEETINGS.

PIRIEST LAKE

Priest Lake Water Management Project
Thorofare Navigation Improvements
Overall Site Plan

FOR BID
**SITE ACCESS**

1. ACCESS TO THE PROJECT SITE WORK AREA IS PROVIDED BY THE OWNER THROUGH EASEMENT FOR USE OF UNIMPROVED WINDS HEAD AND LOT 10. SHALL DRAFT VESSEL, ACCESS IS 4 ACRES AREA FROM LICONS ROAD BOAT RAMP. EASEMENT FOR USE OF LONGHORN BOAT RAMP FOR CONSTRUCTION EQUIPMENT IS NOT AVAILABLE FROM THE OWNER. CONTRACTOR WILL BE REQUIRED TO OBTAIN EASEMENT FROM IDAHO STATE PARKS IF PROPOSED FOR FLOATING CONSTRUCTION 

**SUGGESTED CONSTRUCTION SEQUENCE**

1. PRE-CONSTRUCTION SUBMITTAL APPROVALS
2. SITE CONSTRUCTION
3. ACCESS ROAD PROTECTORS
4. SITE PREPARATION AND TSC
5. FLOOD DIVERSION PHASE 1
6. DEMO DIVERSION PHASE 2
7. REMOVAL OF EXISTING TIMBER BREAKWATER
8. DREDGING AND DIRECTED MATERIAL PLACEMENT
9. FLOOD DIVERSION PHASE 3
10. SPLIT RECONSTRUCTION EAST END STABILIZATION
11. BREAKWATER CONSTRUCTION AND BEACH NOURISHMENT
12. ROAD RECONSTRUCTION
13. DEMOBILIZATION

**WATER LEVEL SUMMARY**

1. WATER LEVELS WITHIN THE PROJECT AREA LIMITS VARY BASED ON THE DISCHARGE IN THE THOROFARE AND WATER LEVEL IN THE LAKE. WATER LEVELS CAN BE HIGHER OR LOWER THAN THE ESTIMATED WATER LEVEL WHEN THOROFARE DISCHARGE IS AT ITS LOW WATER LEVEL. LAKE WATER LEVELS WITHIN THE PROJECT AREA LIMITS VARY BASED ON THE DISCHARGE IN THE LAKE.

**THOROFARKE FLOW DISCHARGE**

1. THOROFARKE DISCHARGE VARY DEPEND ON UPPER THOROFARE EASTWARD HYDROLOGY AND SUBJECT TO CONSTANT CHANGE BASED PRECIPITATION AND TEMPERATURE. THE ESTIMATED 2-YR, 5-YR, AND 10-YR DISCHARGE FOR THE THOROFARE ARE AS FOLLOWS:
   - 2-YR: 264 CFS
   - 5-YR: 846 CFS
   - 10-YR: 1,276 CFS
   - DECEMBER 15 TO MARCH 15: 557 CFS
   - NOVEMBER 1 TO DECEMBER 14: 820 CFS

**SITE PLAN BASE MAP SURVEY NOTES**

1. BATHYMETRY SOURCE MAY 2020 MOTT MACDONALD DATA COLLECTION.
2. HORIZONTAL DATUM NAVD, IDAHO STATE PLANE WEST ZONE, FEET.
3. VERTICAL DATUM CONVERSION PRELIMINARY, TO BE VERIFIED PRIOR TO CONSTRUCTION.
4. UNIT AND VERTICAL DATUM LAKES DATUM, FEET. REFERENCED TO USGS GAGE 12393000.
5. AIR AND PHOTOGRAPHIC COORDINATE SYSTEM.

**REFERENCE BENCHMARKS (USGS GAGE)**

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<th>POINT ID</th>
<th>NORTHING</th>
<th>EASTING</th>
<th>ELEVATION (NIKON90, FT)</th>
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**ABBREVIATIONS**

AVG. AVG.
BM BENCHMARK
B.O. BOTTOM OF
H.D. CENTERLINE
O DIAMETER
EA EXCH
FT FEET
GAL GALVANIZED
ID IDENTIFICATION
LOC LIMIT OF CONSTRUCTION
MIN MINIMUM
MAX MAXIMUM
OHW ORANGE HILIGHT WH PLATE
PLI SIMILAR
SST STAINLESS STEEL
T & B TOP AND BOTTOM
STD STANDARD
TESC TEMPROARY EROSION & SEDIMENT CONTROL
T.O.C. TEMPORARY OR WHERE CONNOTED
TOP TO
UNIT AND VERTICAL DATUM LAKE, REFERENCED TO USGS GAGE 12393000.
WPL WORKING POINT
MP WORKING POINT
- SECONDS OR INCHES
@ AT
CONSTRUCTION NOTES (SHEETS 4 & 5)

1. **Thorofare Flow Diversion**
   - The contractor shall have a professional engineer prepare a construction plan for specifying the Thorofare Flow Diversion.
   - The design of Thorofare Flow Diversion with respect to the work shall be designed by the contractor (see technical specifications for requirements). Thorofare Flow Diversion is recommended to occur in the following order:
     - Phase 1: Thorofare Flow Diversion (South)
     - Phase 2: Thorofare Flow Diversion (East)
   - Phase 1 Flow Diversion consists of diverting Thorofare Flow to facilitate land-based equipment access. Flow diversion systems will consist of a super sack or geobags with an impermeable liner or equivalent system. Diversion shall be designed by the contractor to facilitate access for future construction and demolition of the existing breakwater, see specifications.
   - Phase 2 Flow Diversion consists of diverting Thorofare Flow through the dredged channel, diversion and access across the dredged channel shall be designed by the contractor to minimize disturbance to the new stone breakwater, west end stabilization, and beach nourishment work areas, see specifications.

CIVIL NOTES (SHEETS 4 & 5)

1. **Site Access and Phase 1 Flow Diversion Plan**
   - Construction Notes: See sheets 1 & 2.
   - Contractor shall maintain and allow emergency access into and along Sandpiper Shore's Road at all times.
   - Vegetation shall not be disturbed unless required for construction work and is within the Project Site Limits.

TESC NOTES:

1. For TESC Notes, see sheets 6 & 7.
2. Contractor shall maintain and allow emergency access into and along Sandpiper Shore's Road at all times.
3. Vegetation shall not be disturbed unless required for construction work and is within the Project Site Limits.

**Drawing Title**: Flow Diversion Plan

**Drawing Number**: 376997

**Project Number**: 2.000065

**Total**: 9

**Status**: Approved

**Client**: Priest Lake Water Management Project

**Owner**: Thorofare Navigation Improvements

**Status**: Approved

**Date**: 5/11/20

**Revision**: 0

**Scale**: 1" = 100'

**Legend**

- PROPERTY BOUNDARY (APPROXIMATE)
- ACCESS ROAD
- ORDINARY HIGH WATER LEVEL
- PROJECT SITE LIMITS
- STAGING AREA
- WATER LINE
- CHANNEL TO BE DREDGED
- IMPERVIOUS LINER
- EL TSB BY CONSTRUCTION
- EL TSB BY NAVIGATION
- TEMPORARY DIVISION BERM

**Site Plan 1**

- Channel to be dredged
- Temporary access road
- Temporary diversion berm
- Temporary flow diversion
- Existing property boundary

**For BID**

 Priest Lake Water Management Project

Thorofare Navigation Improvements

Site Access and Phase 1 Flow Diversion Plan
NOTE

1. GROUND PHOTOS ARE FOR INFORMATION ONLY AND MAY NOT BE REPRESENTATIVE OF CONDITIONS DURING CONSTRUCTION.
2. GROUND PHOTOS 8 AND 4 TAKEN DURING NON-RECREATIONAL PERIOD (NOVEMBER TO MARCH TIMEFRAME). ALL OTHER PHOTOGRAPHS ARE TAKEN DURING RECREATIONAL SEASON WITH LAKE LEVEL NEAR GAGE 12393000 LEVEL 3.0' OR NGVD 29 2,437.64'.

Note: Trailerable boat access only.
1. GROUND PHOTOS ARE FOR INFORMATION ONLY AND MAY NOT BE REPRESENTATIVE OF CONDITIONS DURING CONSTRUCTION.
2. GROUND PHOTOS 13, 16 AND 17 TAKEN DURING NON-RECREATIONAL PERIOD (NOVEMBER TO MARCH TIMEFRAME), ALL OTHER PHOTOS ARE TAKEN DURING RECREATIONAL SEASON WITH LAKE LEVEL NEAR CASE 12/0000 LEVEL 3.0' OR NGVD 29 2,437.64'.
CONSTRUCTION NOTES

1. SILT FENCING TO BE INSTALLED AROUND ALL TEMPORARY CONSTRUCTION ENTRANCE AREAS AND ANY ACTIVE UPLAND CONSTRUCTION, REHANDLING, DREDGE/WAY WORK AREAS, REFER TO SHEETS 4 AND 10.

2. CONSTRUCTION SAFETY FENCING SHALL BE INSTALLED ALONG ACCESS CORRIDOR FROM SANDPAPER SHORE ROAD LOT TO OHW LINE. SEE SHEET 10 FOR DETAILS.

3. PROVIDE TEMPORARY CONSTRUCTION ENTRANCE. SEE SHEET 9.

4. WATER QUALITY SHALL BE MONITORED IN ACCORDANCE WITH REGULATORY PERMIT REQUIREMENTS DURING INSTALLATION AND REMOVAL OF ANY TEMPORARY CONSTRUCTION ENTRANCE AREAS. CONTRACTOR SHALL DEPLOY BARRICADE CURTAIN AS REQUIRED TO MEET WATER QUALITY CRITERIA STIPULATED IN THE PERMITS.

5. TEMPORARY CONSTRUCTION ENTRANCE AREAS SHALL NOT BE USED FOR MATERIAL HANDLING ACTIVITIES UNLESS PRIOR APPROVAL IS GRANTED BY THE OWNER.

NOTES

1. JOIN TSC-NOTES SEE SHEET 9
2. TEMPORARY CONSTRUCTION FENCING SHALL BE INSTALLED AROUND THE PERIMETER OF TEMPORARY CONSTRUCTION ENTRANCE AREAS (ABOVE OWN), WHERE TEMPORARY SILT FENCING OR HIGH VISIBILITY SAFETY FENCING HAS NOT BEEN INSTALLED, SEE SHEET 10 FOR DETAILS.

3. PROVIDE EMERGENCY ACCESS INTO AND AROUND PROJECT SITE LIMITS.

4. VEGETATION SHALL NOT BE DISTURBED UNLESS APPROVED BY THE OWNER.
1. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES (BMPs) AND INSTALL EROSION CONTROL MEASURES PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES AS WELL AS MAINTENANCE AND REPAIR OF NEW AND EXISTING EROSION CONTROL MEASURES.

   A. SILT FENCING AND OTHER EROSION/SEDIMENT CONTROL SYSTEMS SHALL BE INSTALLED DOWNSTREAM OF ACTIVE EARTH DISTURBANCE AREAS.


3. THE TESC FACILITIES SHOWN ON SHEET 9 AND 10 MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL SITE PREPARATION,REWIND GEOMETRY, EROSION, AND DREDGING, AND IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DOES NOT ENTER ADJACENT WATER BODIES, OR VIOLATE APPLICABLE REGULATORY PERMIT REQUIREMENTS.

4. THE TESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR.

   A. ALL TEMPORARY EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs) SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. ALL MAINTENANCE AND REPAIR SHALL BE CONDUCTED IN ACCORDANCE WITH ALL APPLICABLE STATE TEMPORARY EROSION CONTROL MANAGEMENT AND REGULATIONS.

5. IF SEDIMENT IS TRANSFERRED ONTO A FIXED SURFACE, THE STRIP OF PAYMENT SHALL BE CLEANED THROUGHOUT AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM PAVED AREAS BY A METHOD AS APPROVED BY THE OWNER AND BE TRANSPORTED TO A DISPOSAL AREA APPROVED FOR DISPOSAL OF THE MATERIAL. REMOVED, PAYMENT WASHERING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.

6. ALL TEMPORARY EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE REMOVED IMMEDIATELY AFTER THE FINAL SITE STABILIZATION IS ACHIEVED OR AT THE TEMPORARY CONTROLS AND NO LONGER NEEDED, WHICHEVER IS LATER. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. TESC FACILITIES SHALL BE COMPLETELY REMOVED AT THE COMPLETION OF THE WORK.

7. THE TESC FACILITIES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS DURING THE CONSTRUCTION PERIOD. THESE TESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNDIRECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS (E. G. ADDITIONAL SUMP PUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.)

8. THE TESC FACILITIES SHALL BE INSPECTED DAILY AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTION. WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE TESC FACILITIES.

9. THE TESC REQUIREMENTS FOR INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN FORTY-EIGHT (48) HOURS FOLLOWING A STORM EVENT.

10. THE CONTRACTOR SHALL MAINTAIN AND REPAIR THE FENCE THROUGHOUT DURATION OF ALL CONSTRUCTION ACTIVITY. SECURITY FENCING, TEMPORARY CHAINLINK FENCING, AND TEMPORARY CONSTRUCTION SLOPES SHALL BE PROTECTED THROUGH ROUGHENING WITH ACCESS GATE.

   A. TEMPORARY CONSTRUCTION SLOPES SHALL BE PROTECTED THROUGH ROUGHENING WITH ACCESS GATE.

   B. TEMPORARY CONSTRUCTION SLOPES SHALL BE PROTECTED THROUGH ROUGHENING WITH ACCESS GATE.

   C. TEMPORARY CONSTRUCTION SLOPES SHALL BE PROTECTED THROUGH ROUGHENING WITH ACCESS GATE.

   D. TEMPORARY CONSTRUCTION SLOPES SHALL BE PROTECTED THROUGH ROUGHENING WITH ACCESS GATE.

   E. TEMPORARY CONSTRUCTION SLOPES SHALL BE PROTECTED THROUGH ROUGHENING WITH ACCESS GATE.

   F. TEMPORARY CONSTRUCTION SLOPES SHALL BE PROTECTED THROUGH ROUGHENING WITH ACCESS GATE.

   G. TEMPORARY CONSTRUCTION SLOPES SHALL BE PROTECTED THROUGH ROUGHENING WITH ACCESS GATE.

11. THE TESC FACILITIES SHOWN ON SHEET 9 AND 10 MUST BE COMPLETELY REMOVED AT THE COMPLETION OF THE WORK.

   A. THE TESC FACILITIES SHOWN ON SHEET 9 AND 10 MUST BE COMPLETELY REMOVED AT THE COMPLETION OF THE WORK.

   B. THE TESC FACILITIES SHOWN ON SHEET 9 AND 10 MUST BE COMPLETELY REMOVED AT THE COMPLETION OF THE WORK.

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   E. THE TESC FACILITIES SHOWN ON SHEET 9 AND 10 MUST BE COMPLETELY REMOVED AT THE COMPLETION OF THE WORK.

   F. THE TESC FACILITIES SHOWN ON SHEET 9 AND 10 MUST BE COMPLETELY REMOVED AT THE COMPLETION OF THE WORK.

   G. THE TESC FACILITIES SHOWN ON SHEET 9 AND 10 MUST BE COMPLETELY REMOVED AT THE COMPLETION OF THE WORK.

12. THE CONTRACTOR SHALL CONDUCT ANY DERIVATIVE WORK SUCH THAT REGULATORY PERMIT REQUIREMENTS ARE MET.

13. SILT FENCING REQUIREMENTS ARE MET.

14. MATERIAL SILL

15. Silt silts that colour during infilling and transfer shall drain within the contained upland area.

16. Floating debris removals to prevent.

17. Site above.

18. Contractor shall maintain the fence throughout duration of all construction access area activities.

19. Material, silts that colour during infilling and transfer shall drain within the contained upland area.

20. Floating debris removals to prevent.

21. Site above.

22. Contractor shall maintain the fence throughout duration of all construction access area activities.

23. Material, silts that colour during infilling and transfer shall drain within the contained upland area.

24. Floating debris removals to prevent.

25. Site above.
TEMPORARY CONSTRUCTION ENTRANCE

N.T.S.

CONTRACTOR MAY PRESERVE EXISTING GRAVEL ROAD APRONS.
DIMENSIONS VARY, SEE SHEET 8 OR AS DESIGNATED IN THE FIELD BY THE OWNER'S REPRESENTATIVE.

4" x 8" QUARRY SPALLS

WIDTH VARIES, SEE SHEET 8 OR AS DESIGNATED IN THE FIELD BY THE OWNER'S REPRESENTATIVE, TYP.

EXISTING ROAD

CONTRACTOR MAY PRESERVE EXISTING GRAVEL ROAD APRONS.
DIMENSIONS VARY, SEE SHEET 8 OR AS DESIGNATED IN THE FIELD BY THE OWNER'S REPRESENTATIVE.

4" x 8" QUARRY SPALLS

Width varies, see sheet 8 or as designated in the field by the owner's representative, typ.

EXISTING ROAD

CONTRACTOR MAY PRESERVE EXISTING GRAVEL ROAD APRONS.
DIMENSIONS VARY, SEE SHEET 8 OR AS DESIGNATED IN THE FIELD BY THE OWNER'S REPRESENTATIVE.

4" x 8" QUARRY SPALLS

Width varies, see sheet 8 or as designated in the field by the owner's representative, typ.

EXISTING ROAD

CONTRACTOR MAY PRESERVE EXISTING GRAVEL ROAD APRONS.
DIMENSIONS VARY, SEE SHEET 8 OR AS DESIGNATED IN THE FIELD BY THE OWNER'S REPRESENTATIVE.

4" x 8" QUARRY SPALLS

Width varies, see sheet 8 or as designated in the field by the owner's representative, typ.

EXISTING ROAD

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DIMENSIONS VARY, SEE SHEET 8 OR AS DESIGNATED IN THE FIELD BY THE OWNER'S REPRESENTATIVE.

4" x 8" QUARRY SPALLS

Width varies, see sheet 8 or as designated in the field by the owner's representative, typ.

EXISTING ROAD

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DIMENSIONS VARY, SEE SHEET 8 OR AS DESIGNATED IN THE FIELD BY THE OWNER'S REPRESENTATIVE.

4" x 8" QUARRY SPALLS

Width varies, see sheet 8 or as designated in the field by the owner's representative, typ.

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Width varies, see sheet 8 or as designated in the field by the owner's representative, typ.

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Width varies, see sheet 8 or as designated in the field by the owner's representative, typ.

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Width varies, see sheet 8 or as designated in the field by the owner's representative, typ.

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DIMENSIONS VARY, SEE SHEET 8 OR AS DESIGNATED IN THE FIELD BY THE OWNER'S REPRESENTATIVE.

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Width varies, see sheet 8 or as designated in the field by the owner's representative, typ.

EXISTING ROAD

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DIMENSIONS VARY, SEE SHEET 8 OR AS DESIGNATED IN THE FIELD BY THE OWNER'S REPRESENTATIVE.

4" x 8" QUARRY SPALLS

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DIMENSIONS VARY, SEE SHEET 8 OR AS DESIGNATED IN THE FIELD BY THE OWNER'S REPRESENTATIVE.

4" x 8" QUARRY SPALLS

Width varies, see sheet 8 or as designated in the field by the owner's representative, typ.
### FOR BID

**Priest Lake Water Management Project**

Thorofare Navigation Improvements

**Overall Site Plan - Proposed Work**

#### LEGEND

- Property Boundary (Approximate)
- Access Road
- Ordinary High Water Area
- Project Site Limits
- Sober Line
- Safety Fencing
- Existing Contours
- Staging Area
- Stone Breakwater
- Fill Zone Placement Area
- Dredge Area
- Navigation Aid/Buoys (By Others)

#### NOTES

1. SURVEY BASE MAP: SEE SHEETS 2 AND 3 FOR SURVEY INFORMATION. ALL ELEVATIONS ARE IN FT RELATIVE TO NAV DSS.
2. DREDGING AND BREAKWATER CENTERLINE LOCATION POINTS SHOWN IN TABLES 1 AND 2.
3. FILL REMNANT CHANNEL DEPRESSIONS (GREATER THAN 2 FT) IN DEPTH TO MATCH ADJACENT LAND BED GRADES TO PROVIDE A UNIFORM AND LEVEL BOTTOM SURFACE.
4. UPSTREAM LIMIT OF DREDGING TO BE verified AND ADJUSTED BASED ON RESULTS OF PRECONSTRUCTION SURVEY.
5. STATION 15+17 OF BREAKWATER REPRESENTS THE END OF BREAKWATER CREST.

#### TABLE 1: DREDGING WORKING POINTS

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#### TABLE 2: BREAKWATER WORKING POINTS

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### GENERAL PLAN

**Scale:** 1:2000

**Location:** Priest Lake, Idaho

**Drawn:** S. Phillips

**Checked:** T. Morrison

**Rev:** 1

**Title:** Priest Lake Water Management Project - Thorofare Navigation Improvements

**Status:** FOR BID

**Date:** May 11, 2020

**Scale at ANSI D**

**Design:** Forbid

**For:**

**Remarks:**

- **Sandpiper Shores Access Road**
- **Beach Nourishment**
- **Zone 4 Fill Placement Area**
- **Zone 2 Fill Placement Area**
- **Existing Timber Breakwater**
- **Navigation Aid/Buoys (By Others)**
- **Staging Area**
- **Access Road**
- **Filling Channel**
- **Zone 2 Fill Placement Area**
- **Zone 3 Fill Placement Area**
- **Breakwater**
- **Existing Contours**
- **Existing Timber Breakwater**
- **Access Route**
- **Changing Elevation**
- **Changing Direction**
- **Property Boundary**
- **Shoreline**
- **Water**
- **Silt Fencing**
- **Current Direction**
- **Location**

**Contact:**

**Phone:** (208) 287-6700

**Fax:** (208) 287-4800

**IDAHO DEPARTMENT OF WATER RESOURCES**

801 West Boulevard, Suite 402
P.O. Box 25200
Boise, Idaho 83725

**Phone:** (208) 334-7070

**Fax:** (208) 334-7075
NOTES
1. DREDGE ELEVATION VARIES FROM -2.0' TO -4.0' (SEE SHEET 11). DREDGED MATERIAL SHALL BE PLACED AS FILL WITHIN ZONE 3 - BEACH NOURISHMENT.
   WATER LEVELS SUBJECT TO DAILY CHANGE BASED ON DRAINAGE BASIN HYDROLOGY CONDITIONS. SEE APPENDICES AND LAKE WATER LEVEL INFORMATION ON SHEET 2.
2. EXISTING LAKE BED LEVEL VARIES, SEE SHEET 11. FINAL QUANTITIES TO BE BASED ON PRE-CONSTRUCTION SURVEY.
3. WATER LEVELS IN THOROFARE MAY BE HIGHER THAN ADJACENT LAKE DEPENDING ON DISCHARGE FLOW CONDITIONS IN THOROFARE.

LEGEND
[Diagram with sections and dimensions labeled]
1. Fill remaining channel depressions (greater than 2 ft in depth) up to match adjacent lake bed grades to provide a uniform and level bottom surface within 60 ft of the breakwater and within those areas shown hatched as a fill zone placement area.

2. Dredging and breakwater centerline location points shown in table on Sheet 11.

3. Survey base map—see sheets 2 and 3 for survey information. All elevations are in feet relative to lake datum.

4. Blend rock to be a smooth transition from stone breakwater to west end stabilization on utilizing armor stone type I.

5. Compaction of fill used for beach nourishment is not required.

6. Compaction within zone 1 includes the beneficial reuse of excavated material placed within the footprint of the new stone breakwater.

7. Compaction within zone 2 includes the beneficial reuse of excavated and/or dredged material placed within the breakwater channels indicated on sheet 11. Fill for breakwater channels shall be placed within 100 feet of the footprint of the new stone breakwater.

8. Within zone 3 includes dredged material placed as beach nourishment and excess structure excavation material on the southside of the west end stabilization and new stone breakwater as shown on sheet 11. Compaction of fill used for beach nourishment is not required.

9. Fill existing channel, see note 1.

10. 8.0' beach nourishment crest width.

11. 10.0' beach nourishment crest width.

12. 12.0' beach nourishment crest width.

13. 15.0' beach nourishment crest width.

14. 15.0' beach nourishment crest width.

15. 8.0' beach nourishment crest width.
NOTES
1. FILL REMNANT CHANNEL DEPRESSIONS GREATER THAN 2 FT IN DEPTH UP TO MATCH ADJACENT LAKE BED GRADES TO PROVIDE A UNIFORM AND LEVEL BOTTOM SURFACE WITHIN 100 FT OF THE BREAKWATER OR THOSE AREAS SHOWN HATCHED.
2. FILL EXISTING CHANNEL, SEE NOTE 1
3. END OF BREAKWATER TO BE FIELD LOCATED BASED ON RESULTS OF PRE-CONSTRUCTION SURVEY TO ENSURE A MIN 10' OFFSET FROM TOP OF LAKE SLOPE TO E.O. STONE.
4. SURVEY BASE MAP. SEE SHEETS 2 AND 3 FOR SURVEY INFORMATION. ALL ELEVATIONS ARE IN FEET RELATIVE TO LAKE DATUM.

GENERAL PLAN

ZONE 2 FILL PLACEMENT AREA, SEE NOTE 1
ZONED FILL PLACEMENT AREA, SEE NOTE 1
BEDDING LAYER 10H:1V
1.5H:1V SLOPE, TYP (ALL SLOPES ON THE THOROFARE SIDE OF BREAKWATER)

BEACH NOURISHMENT ZONE 3 FILL PLACEMENT AREA
BEACH NOURISHMENT ZONE 3 FILL PLACEMENT AREA, SEE NOTE 1

TOP OF SLOPE OFFSET, SEE NOTE 3
ZONE 2 FILL PLACEMENT AREA, SEE NOTE 1
DREDGING AREA L
DREDGING AREA

BEACH NOURISHMENT (PLACED ON SOUTH SIDE OF BREAKWATER)

BEACH NOURISHMENT (PLACED ON SOUTH SIDE OF BREAKWATER)

REFERENCE LINES

NAVIGATION AID BUOYS, TYP. (BY OTHERS)

REFERENCE LINES

NAVIGATION AID BUOYS, TYP. (BY OTHERS)

REFERENCES LINES

NAVIGATION AID BUOYS, TYP. (BY OTHERS)

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NAVIGATION AID BUOYS, TYP. (BY OTHERS)

REFERENCES LINES

NAVIGATION AID BUOYS, TYP. (BY OTHERS)
Breakwater Sections 1

**Construction Notes**

1. Area and quantity of Zone 1 fill will vary based on the dynamic conditions of the site. Placement volume shall be confirmed with preconstruction survey.
2. Backfill with excavated materials against template of installed structures is considered Zone 4 fill.
3. Water levels are subject to daily change based on drainage basin hydrologic conditions. See appendices and lake water level information on Sheet 3.
4. Existing timber breakwater demolition includes two lines of piles full length and three lines of piles in area B, see Sheet 3.

**Legend**

- Beach nourishment (zones 1, 2, and 3)
- Armor stone Type I
- Armor stone Type II
- Bedding stone
- Geotextile

**FOR BID**

Priest Lake Water Management Project
Thorofare Navigation Improvements
Breakwater Sections 1
CONSTRUCTION NOTES
1. AREA AND QTY OF ZONE 1 FILL WILL VARY BASED ON THE DYNAMIC CONDITIONS OF THE SITE. PLACEMENT VOLUME SHALL BE CONFIRMED WITH PRECONSTRUCTION SURVEY.
2. BACKFILL WITH EXCAVATED MATERIALS AGAINST TEMPLATE OF INSTALLED STRUCTURES IS CONSIDERED ZONE 3 FILL.
3. CONSTRUCTION OF ARMOR STONE PLACEMENT & BREAKWATER CONSTRUCTION SHALL BE COMPLETED AND ACCEPTED BY OWNER PRIOR TO BACKFILLING WITH BEACH NOURISHMENT.
4. INTERSTITIAL FILL SHALL BE INSTALLED AFTER OWNER ACCEPTANCE OF COMPLETED STONE BREAKWATER SECTION. INTERSTITIAL FILL FROM STA 15+00 TO STA 15+17.
5. WATER LEVELS SUBJECT TO DAILY CHANGE BASED ON DRAINAGE BASIN HYDROLOGIC CONDITIONS. SEE APPENDICES AND LAKE WATER LEVEL INFORMATION ON SHEET 3.

LEGEND
BEACH NOURISHMENT (ZONE 2)
ARMOR STONE TYPE I
INTERSTITIAL STONE
SEEDING STONE
NEW BEDDING LAYER
GEOTEXTILE

NOTES
1. BEACH NOURISHMENT PLACEMENT IN ACCORDANCE WITH ZONE 3 REQUIREMENTS.

DISTANCE, FT
SECTION
STONE BREAKWATER
STA 15+00 TO 15+17
SCALE 1"=50' FT

FOR BID
Priest Lake Water Management Project
Thorofare Navigation Improvements
Breakwater Sections 2
GENERAL NOTES

1. BEACON STAND ASSEMBLY AND NAVIGATION AID FABRICATIONS SHALL BE FABRICATED FROM A36 STEEL, UNLESS NOTED OTHERWISE; HOT DIP GALVANIZE AFTER FABRICATION IN ACCORDANCE WITH ASTM A123.

2. ALL HARDWARE (NUTS, BOLT, AND WASHERS) FOR DAYBOARD SHALL BE STAINLESS STEEL TYPE 316.

3. ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AWS D1.1.

4. DAYBOARD SHALL BE FABRICATED WITH MARINE GRADE 5052 ALUMINUM, SEE TECHNICAL SPECIFICATION.

5/8" Ø HOLES TYP. FOR BRACKET

10" 5" THREAD

3/4" HOLES TYP. FOR BRACKET

6" BLACK LETTERS

2" ORANGE RETROREFLECTIVE BORDER (R)

3" BLACK LETTERS

WHITE RETROREFLECTIVE DAYBOARD FILM

Priest Lake Water Management Project
Thorofare Navigation Improvements
Dayboard Details