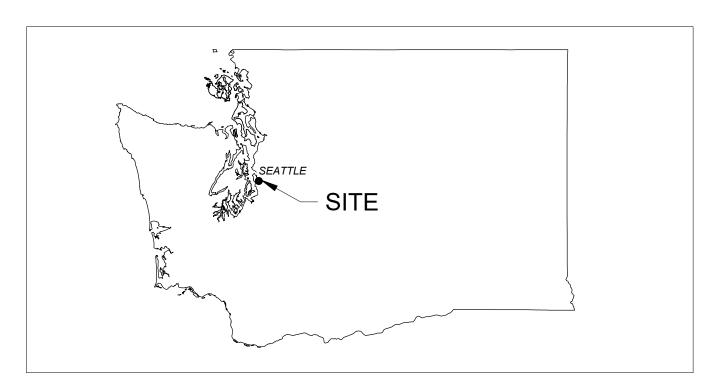
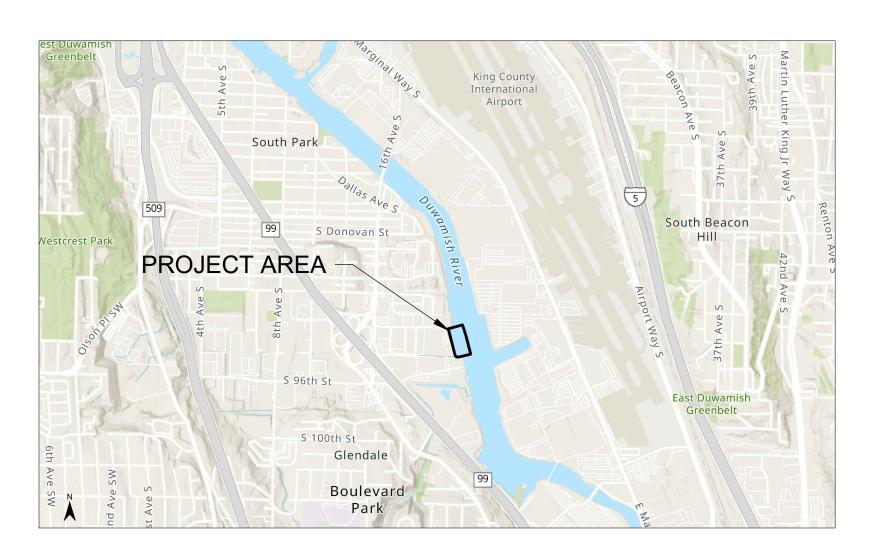
DUWAMISH YACHT CLUB MAINTENANCE DREDGING PRE-FINAL DREDGE PLAN



WASHINGTON STATE MAP



VICINITY MAP

PROJECT OWNER:

DUWAMISH YACHT CLUB 1801 S 93RD ST SEATTLE, WA 98108

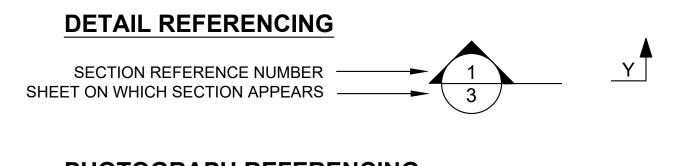
PROJECT ENGINEER: H. DONALD LAFORD P.E.

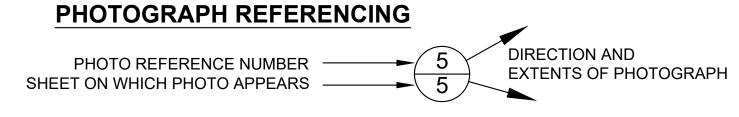
PROJECT DESIGNER: INTEGRAL CONSULTING INC. 508 YALE AVE N, SUITE 204 SEATTLE, WA 98109

LIST OF DRAWINGS				
SHEET	TITLE			
01	TITLE SHEET, DRAWING INDEX, AND GENERAL NOTES			
02	DREDGE PLAN			
03	DREDGE CROSS-SECTIONS			
04	2011 BATHYMETRIC SURVEY			
05	DOCK STORAGE AREA DRAWING AND DETAIL PHOTOGRAPHS OF DOCK STRUCTURES			
06	UPLAND SITE WORK AREA AND SAND STOCKPILE AREA			

ABBREVIATIONS

FT FEET
MLLW MINIMUM
MIN MEAN LOWER LOW WATER
TYP TYPICAL





PROJECT LOCATION:

THE SITE IS LOCATED AT 47° 31' 10" NORTH LATITUDE AND 122° 18' 27" WEST LONGITUDE IN TUKWILA, KING COUNTY, WASHINGTON.

THESE GENERAL NOTES SHALL APPLY TO ALL SITE ACTIVITIES. ANY CONFLICTS BETWEEN THE GENERAL NOTES, SPECIFIC NOTES IN DRAWINGS, AND/OR CONSTRUCTION OR MATERIAL SPECIFICATIONS WITHIN DRAWINGS AND CONTRACT DOCUMENTS, SHALL BE RESOLVED WITH A REQUEST FOR INFORMATION (RFI) FROM THE CONTRACTOR TO THE OWNER'S REPRESENTATIVE.

ALL NON-CONFORMANCE ISSUES SHALL BE TIMELY REPORTED TO DYC OWNERS REPRESENTATIVE.

PROJECT NAME: DUWAMISH YACHT CLUB DREDGE MAINTENANCE

CONSTRUCTION QUALITY ASSURANCE (CQA) REPRESENTATIVE: TBD

CONTRACTOR: TBD

BATHYMETRIC SURVEY BY: AKS ENGINEERING (APRIL 2023)

SURVEY DATUMS:

- HORIZONTAL DATUM: WASHINGTON STATE PLANE NORTH AMERICAN DATUM OF 1983 (NAD 83)
- VERTICAL DÁTUM: MLLW

DREDGE ELEVATION TOLERANCE IS +/- 1 FT.

IT HAS BEEN ESTIMATED THAT THE AVERAGE SEDIMENT ACCUMULATION RATE AT THE SITE IS 3 INCHES PER YEAR. ESTIMATED DREDGE VOLUMES PRESENTED IN THIS DRAWING SET INCLUDE A CONTINGENCY FACTOR REPRESENTING AN ADDITIONAL 3 INCHES OF SEDIMENT PER YEAR ACCUMULATING FROM THE DATE OF THE 2023 SURVEY.

REV DATE DESCRIPTION

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DUWAMISH YACHT CLUB

DUWAMISH YACHT CLUB MAINTENANCE DREDGING PRE-FINAL DREDGE PLAN

 TUKWILA
 W

 DRN
 DATE

 EB
 7-19-2024

 DES
 DATE

 CHK
 T-19-2024

 DL
 T-19-2024

TITLE SHEET, DRAWING INDEX, AND GENERAL NOTES

SHEET

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IN-WATER DISPOSAL VOLUME: 28,300 CY UPLAND DISPOSAL VOLUME: 11,350 CY TOTAL DREDGED VOLUME: 39,650 CY

DREDGE ZONE 1:

 REQUIRED DREDGE ELEVATION OF -7 FT MLLW, WITH 1 FOOT OF ALLOWABLE OVERDEPTH DREDGING FOR A MAXIMUM DREDGE ELEVATION OF -8 FT MLLW. SEDIMENT WILL BE DISPOSED IN WATER AT THE APPROVED DREDGED MATERIAL PLACEMENT SITE. IF CONFIRMATION SURVEYS SHOW FINAL SURFACE IS DEEPER THAN -8 FT MLLW AT ANY AREA WITHIN DREDGE ZONE 1, THE CONTRACTOR SHALL PLACE A CLEAN SAND COVER TO RESTORE THE ELEVATION TO -8 FT MLLW AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL PAY FOR CHEMICAL TESTING REQUIRED BY AGENCIES THAT IS TRIGGERED BY A FINAL DREDGE SURFACE BELOW -8 FT MLLW.

DREDGE ZONE 2:

• REQUIRED DREDGE ELEVATION OF -8 FT MLLW, WITH 1 FOOT OF ALLOWABLE OVERDEPTH DREDGING FOR A MAXIMUM DREDGE ELEVATION OF -9 FT MLLW. CONTACTOR SHALL PLACE 1 FT SAND COVER AFTER DREDGING. SEDIMENT WILL BE DISPOSED UPLAND AT APPROVED DREDGED MATERIAL PLACEMENT SITE.

DREDGE ZONE 3:

- REQUIRED DREDGE ELEVATION OF -7 FT MLLW, WITH 1 FOOT OF ALLOWABLE OVERDEPTH DREDGING FOR A MAXIMUM DREDGE ELEVATION OF -8 FT MLLW. SEDIMENT LOCATED IN ZONE 3 ABOVE THE 2011 MUDLINE ELEVATIONS (WITHIN +/- 0.25 FT) SHALL BE DISPOSED UPLAND AT AN APPROVED DREDGED MATERIAL PLACEMENT SITE. SEE SHEET 4 FOR MUDLINE ELEVATIONS. THE REMAINING SEDIMENT WITHIN DREDGE ZONE 3 WILL BE DISPOSED IN WATER AT AN APPROVED DREDGED MATERIAL PLACEMENT SITE.
- DREDGE ZONE 4:
 REQUIRED DREDGE ELEVATION OF -7 FT MLLW, WITH 1 FOOT OF ALLOWABLE OVERDEPTH DREDGING FOR A MAXIMUM DREDGE ELEVATION OF -8 FT MLLW. DISPOSE OF SEDIMENT IN WATER AT THE APPROVED DREDGED MATERIAL PLACEMENT SITE.
 DREDGE ZONE 5:
- REQUIRED DREDGE ELEVATION OF -7 FT, WITH 1 FOOT OF ALLOWABLE OVERDEPTH DREDGING FOR A MAXIMUM DREDGE ELEVATION OF -8 FT MLLW. DISPOSE OF SEDIMENT IN WATER AT APPROVED DREDGED MATERIAL PLACEMENT SITE.

 DREDGE ZONE 6:
- REQUIRED DREDGE ELEVATION OF -7 FT, WITH 1 FOOT OF ALLOWABLE OVERDEPTH DREDGING FOR A MAXIMUM DREDGE ELEVATION OF -8 FT MLLW. DISPOSE OF SEDIMENT IN WATER AT APPROVED DREDGED MATERIAL PLACEMENT SITE. THE PURPOSE OF DREDGE ZONE 6 IS TO CREATE A PATHWAY FOR THE DREDGING BARGES TO REACH DREDGE ZONES 3 AND 4. INITIAL DREDGE DEPTH WILL BE KEPT TO A MINIMUM NEEDED TO ACCOMMODATE CONTRACTOR BARGE DRAFT.

NOTES:

- DREDGE AND DISPOSE OF MATERIALS IN THE FOLLOWING SEQUENCE. DREDGE ZONES 1 AND 4 SHALL BE DREDGED AND DISPOSED BEFORE DREDGE ZONE 5.
- 2. THE CONTRACTOR SHALL PROPOSE ALL DREDGE SEQUENCING IN THE CONTRACTOR DREDGE PLAN FOR OWNER APPROVAL.
- 3. THE CONTRACTOR SHALL PLACE THE SAND COVER OVER DREDGE ZONE 2 IMMEDIATELY
- AFTER DREDGE ZONE 2 IS DREDGED. SAND COVER THICKNESS TOLERANCE IS +/- 3 INCHES.

 4. DREDGING BELOW THE MAXIMUM ALLOWABLE DREDGE ELEVATION WILL NOT BE PAID.
- 5. OUTER DREDGE AREA BOUNDARY IS APPROXIMATE AND PROVIDED FOR GENERAL REFERENCE ONLY. DREDGING SHALL NOT OCCUR OUTSIDE OF THIS BOUNDARY.
- CONTRACTOR SHALL FIELD VERIFY THE LOCATION AND EXTENT OF EXISTING STRUCTURES ALONG THE SHORELINE (E.G., RIPRAP, SEAWALLS). CONTRACTOR SHALL TAKE MEASURES TO NOT DISTURB OR UNDERMINE EXISTING SHORELINE ARMORING.
- 7. MAINTENANCE DREDGING ACTIVITIES ARE LIMITED TO ONLY REMOVING SEDIMENT THAT HAS ACCUMULATED ABOVE SHORELINE SLOPES. SHOULD SLOPE/SHORELINE FAILURES OCCUR DUE TO EXCESSIVE DREDGING BEYOND MAINTENANCE LIMITS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRS TO THE SATISFACTION OF THE OWNER.

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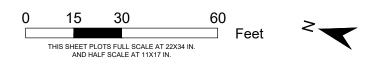
DUWAMISH YACHT CLUB MAINTENANCE DREDGING PRE-FINAL DREDGE PLAN

TUKWILA	WA
EB	7-19-2024
DES	DATE
OH	7-19-2024
CHK	DATE
DL	7-19-2024

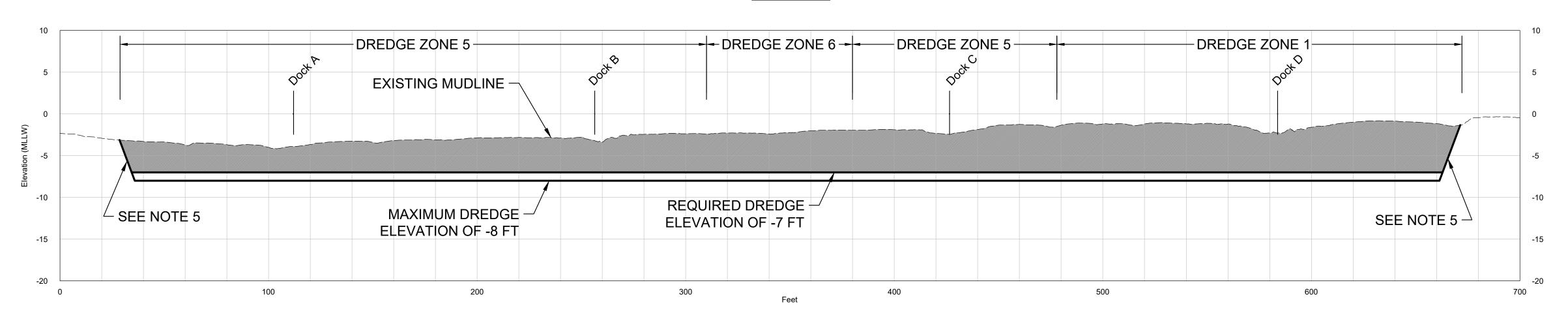
DREDGE PLAN

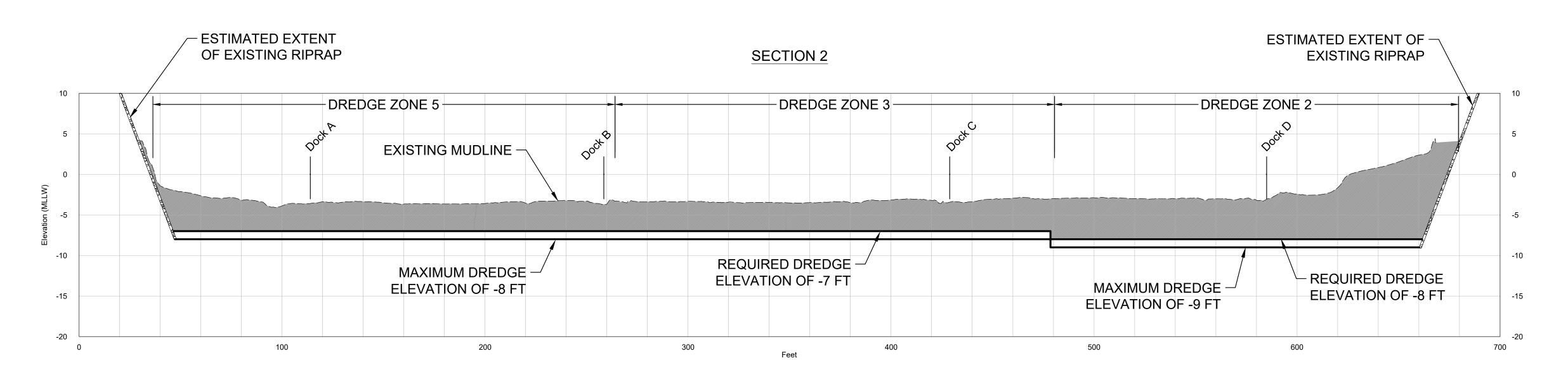
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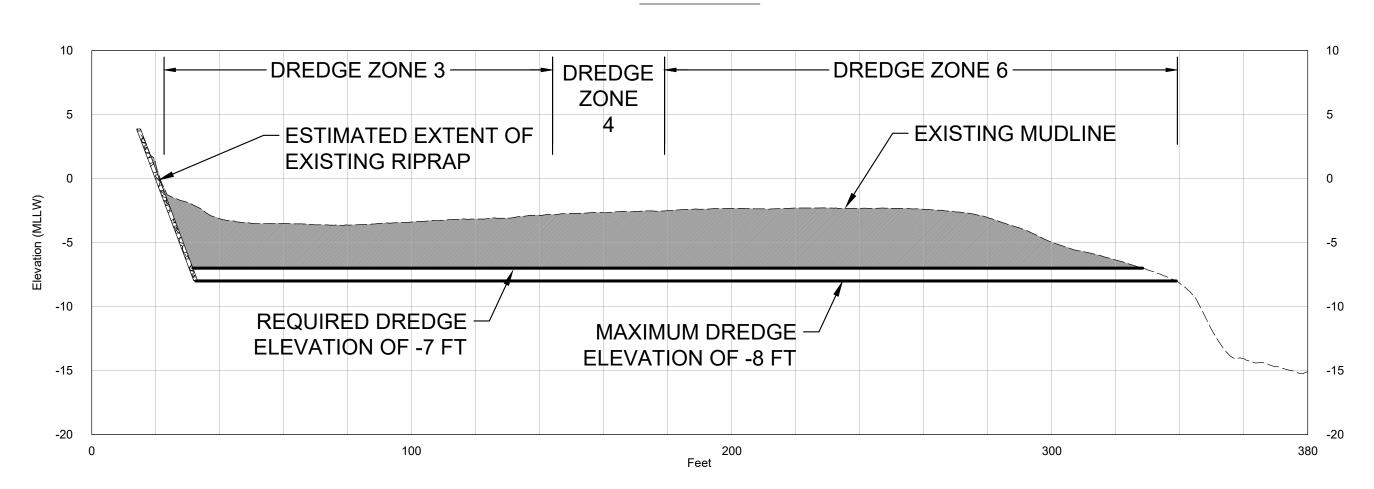


SECTION 1





SECTION 3



NOTES:

- 1. FLOATING DOCKS, GUIDE PILES, AND DOCK ROOFING STRUCTURES ARE NOT SHOWN. CONTRACTOR SHALL FAMILIARIZE THEMSELF WITH SITE CONDITIONS AND PROPOSE AN APPROACH TO ACHIEVE PROJECT REQUIREMENTS IN CONTRACTOR WORK PLAN.
- 2. GUIDE PILES SHALL NOT BE REMOVED OR DISTURBED.
- 3. CONTRACTOR SHALL FIELD VERIFY THE LOCATION AND EXTENT OF EXISTING STRUCTURES ALONG THE SHORELINE (E.G., RIPRAP, SEAWALLS). CONTRACTOR SHALL TAKE MEASURES TO NOT DISTURB OR UNDERMINE EXISTING SHORELINE ARMORING.
- 4. MAINTENANCE DREDGING ACTIVITIES ARE LIMITED TO ONLY REMOVING SEDIMENT THAT HAS ACCUMULATED ABOVE SHORELINE SLOPES. SHOULD SLOPE/SHORELINE FAILURES OCCUR DUE TO EXCESSIVE DREDGING BEYOND MAINTENANCE LIMITS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRS TO THE SATISFACTION OF THE OWNER.
- 5. FINAL MAXIMUM EMBANKMENT SLOPE IS APPROXIMATELY 2 HORIZONTAL: 1 VERTICAL.

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DUWAMISH YACHT CLUB MAINTENANCE DREDGING PRE-FINAL DREDGE PLAN

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DREDGE CROSS-SECTIONS

SHEET

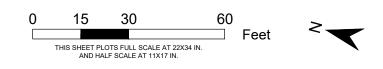
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THIS SHEET PLOTS FULL SCALE AT 22X34 IN. AND HALF SCALE AT 11X17 IN.

☐ Feet 4X VERTICAL EXAGGERATION



NOTE:

 THE BATHYMETRIC SURVEY SHOWN ON THIS SHEET WAS COLLECTED ON JUNE 7, 2011 AND IS PROVIDED FOR REFERENCE REGARDING DREDGING ACTIVITIES IN DREDGE ZONE 3. SEDIMENT LOCATED IN ZONE 3 ABOVE THE 2011 MUDLINE ELEVATIONS (WITHIN +/- 0.25 FT) SHALL BE DISPOSED UPLAND AT AN APPROVED DREDGED MATERIAL PLACEMENT SITE.

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2011 BATHYMETRIC SURVEY

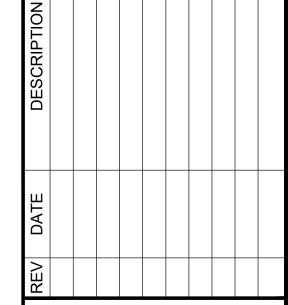
SHEET

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NOTES:

1. CONTRACTOR SHALL SUBMIT A WORKPLAN DETAILING PROPOSED MEANS AND METHODS OF TEMPORARY DOCK REMOVAL, TRANSPORT, AND STORAGE TO FACILITATE DREDGING OPERATIONS. WORKPLAN SHALL DESCRIBE METHODS FOR ENSURING DOCKS ARE SECURED IN PLACE AT THE TEMPORARY DOCK STORAGE AREA.



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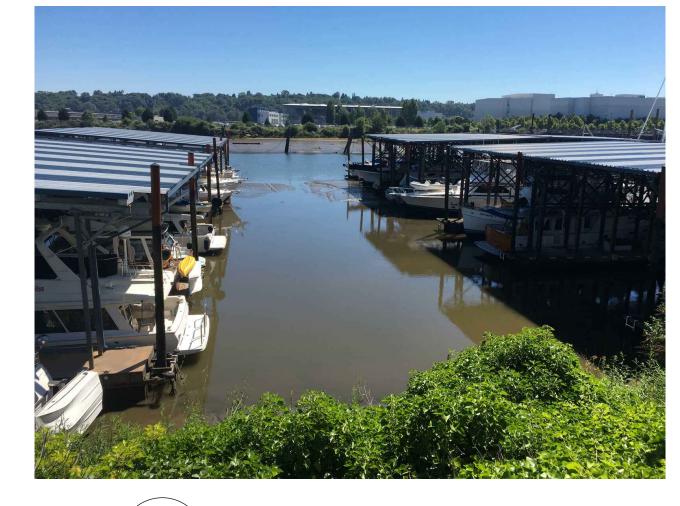
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DOCK A NORTH CAUSEWAY



2 DOCK A-B CAUSEWAY



3 DOCK B-C CAUSEWAY



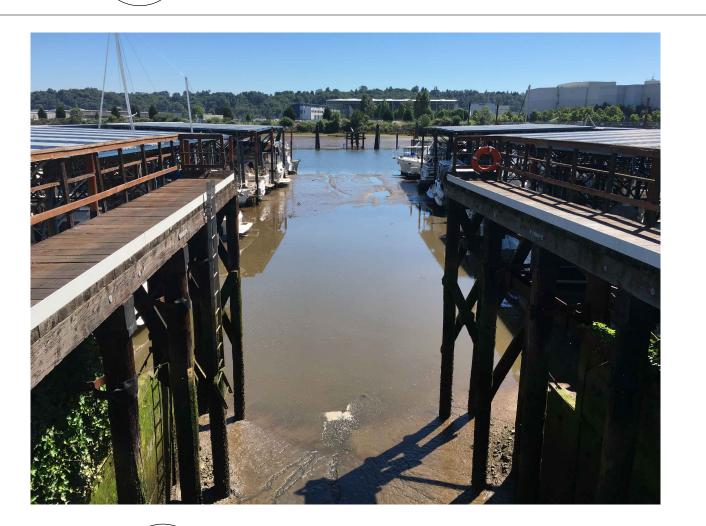
DOCK C-D CAUSEWAY ENTRANCE LOOKING SOUTH

DRAWING AND DETAIL PHOTOGRAPHS OF DOCK STRUCTURES

DOCK STORAGE AREA

SHEET

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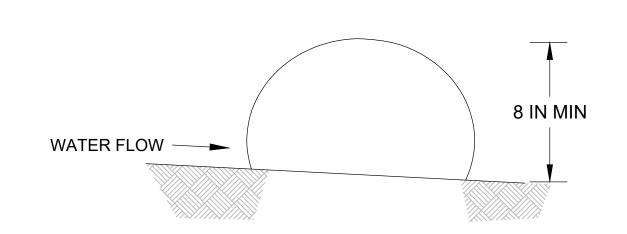
DOCK C-D CAUSEWAY



DOCK D SOUTH CAUSEWAY

NOTES:

- 1. CONTRACTOR SHALL NOT USE DYC PROPERTY OUTSIDE OF THE WORK AREA SHOWN ON THIS DRAWING FOR CONSTRUCTION-RELATED ACTIVITIES WITHOUT APPROVAL FROM THE OWNER.
- 2. CONTRACTOR SHALL RETURN THE UPLAND SITE TO ITS ORIGINAL CONDITION TO THE SATISFACTION OF THE OWNER WITHIN TWO WEEKS OF PROJECT COMPLETION.
- 3. CONTRACTOR SHALL USE THE HAUL ROUTE SHOWN ON THIS DRAWING FOR EQUIPMENT, PERSONNEL, AND MATERIALS ENTERING OR LEAVING THE WORK AREA.



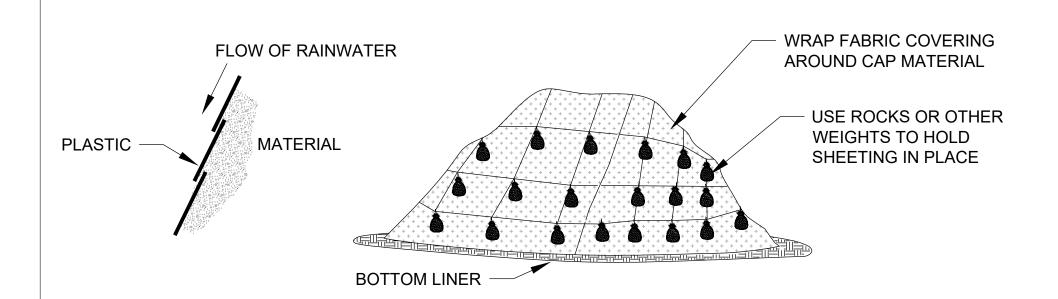
NOTES:

- COMPOST SOCK, SIZED TO SUIT CONDITIONS (8" MIN TYPICAL).
- 2. ALL MATERIAL TO MEET COMPOST SOCK SPECIFICATIONS.
- 3. THE CONTRACTOR SHALL MAINTAIN THE COMPOST FILTER SOCKS IN A FUNCTIONAL CONDITION AT ALL
- TIMES AND THEY SHALL BE ROUTINELY INSPECTED.

 4. WHERE THE SOCKS REQUIRE REPAIR, THEY SHALL BE
- ROUTINELY REPAIRED.
 5. THE SOCKS SHALL BE DISPOSED OF OFFSITE WHEN NO
- LONGER REQUIRED, AS DETERMINED BY THE ENGINEER.

 6. STAGGER OVERLAPPING JOINTS AND MAINTAIN A
- MINIMUM OF 12 INCHES OVERLAP AT ALL JOINTS.
- 7. TURN LIPS UPWARD AT ENDS A MINIMUM OF 30 DEGREES FOR 2 FT TO PREVENT FLOW AROUND ENDS.





NOTES:

- 1. CAP MATERIAL STAGING SHALL BE ALLOWED ONLY IN AREAS SHOWN ON THE DRAWINGS UNLESS OTHERWISE APPROVED BY THE OWNER.
- 2. CAP MATERIAL STAGING BOTTOM LINERS SHALL BE POLYETHYLENE, SHALL HAVE A MINIMUM THICKNESS OF 10 MILS, AND SHALL BE RESISTANT TO WEATHERING AND DEGRADATION FOR THE DURATION OF THE PROJECT WORK AND SUITABLE FOR THE INTENDED USE OF THE STOCKPILE AREA.
- 3. PREPARE THE AREA TO RECEIVE THE BOTTOM LINER TO PROVIDE A SMOOTH, FIRM SUBGRADE THAT SHALL BE FREE OF PROTRUSIONS AND SUITABLE TO PROTECT THE LINER DURING USE.
- 4. CAP MATERIAL COVERS SHALL BE 6-MIL (MIN) BLACK OR CLEAR REINFORCED POLYETHYLENE OR FABRIC SHEETING. THE COVER SHEETS SHALL BE OF SUFFICIENT LENGTH AND WIDTH TO COMPLETELY AND FULLY COVER ALL OF EACH MATERIAL PILE.
- CAP MATERIAL COVERS AND LINERS SHALL BE FREE OF HOLES OR TEARS. DEFECTIVE
 MATERIAL SHALL BE IMMEDIATELY REPAIRED OR REPLACED.
 FURNISH SAND BAGS OR OTHER DEVICES OF SUFFICIENT QUANTITY AND WEIGHT AND WEIGHT
- 6. FURNISH SAND BAGS OR OTHER DEVICES OF SUFFICIENT QUANTITY AND WEIGHT AND WITH SUFFICIENTLY CLOSE SPACING TO COMPLETELY AND FULLY HOLD CAP MATERIAL COVER IN POSITION
- 7. PROVIDE STORMWATER RUN-ON CONTROL, MANAGE ALL DRAINAGE FROM MATERIAL STAGING AREAS.



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UPLAND SITE WORK AREA AND SAND STOCKPILE AREA

SHEET

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