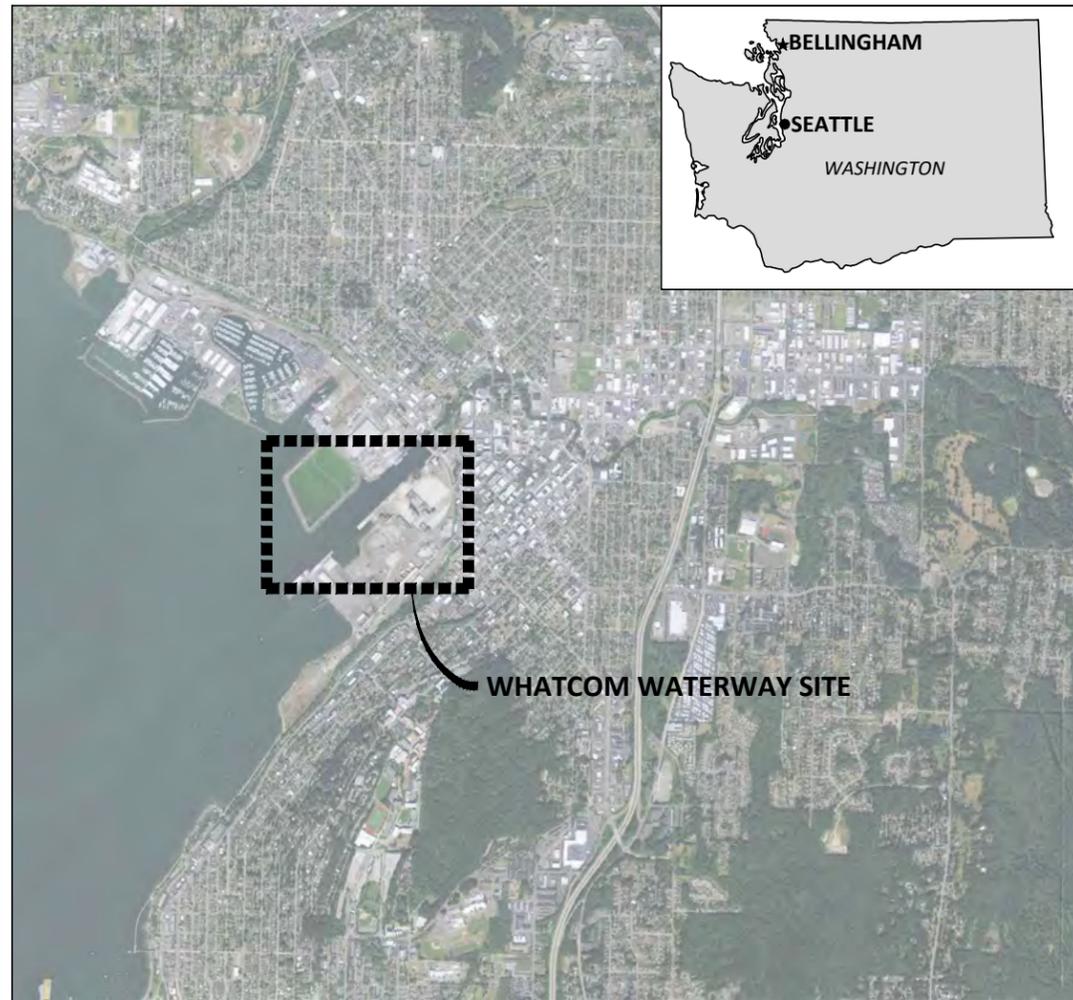


FINAL BID DOCUMENT

WHATCOM WATERWAY PHASE 1 CLEANUP

PORT OF BELLINGHAM

VICINITY MAP



WHATCOM WATERWAY SITE

0 1/3 2/3
SCALE IN MILES

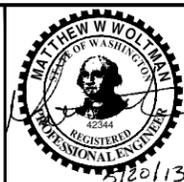


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2	G-2	GENERAL NOTES
3	EC-1	SITE PLAN
4	EC-2	EXISTING CONDITIONS - BST DOCK AREA
5	EC-3	EXISTING CONDITIONS - LOG POND AREA
6	EC-4	EXISTING CONDITIONS - INNER WATERWAY AREA
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9	R3	LOG POND AREA SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL PLAN
10	R4	WEST CENTRAL AREA SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL PLAN
11	R5	MAPLE ST. AREA SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL PLAN
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SHEET SEQUENCE	SHEET NUMBER	SHEET TITLE
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100	S25	MAPLE ST. FENDER SYSTEM - DETAILS 1
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103	S28	MONOPILE DOLPHIN - ELEVATION
104	S29	MONOPILE DOLPHIN - DETAILS

FINAL BID DOCUMENT



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

DESIGNED BY: M. WOLTMAN
 DRAWN BY: D. HOLMER
 CHECKED BY: T. WANG
 APPROVED BY: T. WANG
 SCALE: AS NOTED
 DATE: MAY 2013

WHATCOM WATERWAY PHASE 1 CLEANUP
BELLINGHAM, WASHINGTON

COVER SHEET

G-1

SHEET NO. 1 OF 104

ONE INCH
AT FULL SIZE, IF NOT ONE
INCH SCALE ACCORDINGLY

May 20, 2013 8:27pm dholmer
 \\Tacoma1\Tacoma\CAD\Projects\0007-Port of Bellingham\Whatcom Waterway Cleanup\liner\WAT\Construction Plans\0007-G-1 TO G-2.dwg G-1

May 20, 2013 8:27pm dholmer \\Tacoma1\Tacoma\CAD\Projects\0007-Port of Bellingham\Waterway Cleanup\liner\Wt1\Construction Plans\0007-G-1 TO G-2.dwg G-2

GENERAL NOTES:

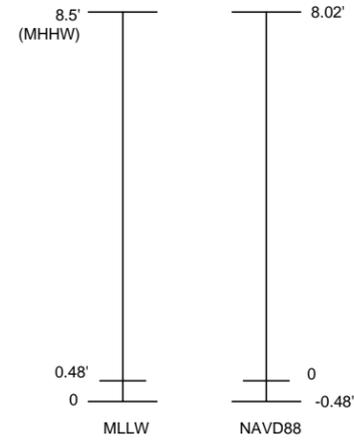
1. DETAILED REQUIREMENTS FOR ACTIVITIES ARE DESCRIBED IN THE SPECIFICATIONS. FOR CONVENIENCE, CERTAIN EXTRACTS ARE REPRODUCED BELOW AND ON FOLLOWING SHEETS.
2. SCALES INDICATED ON DRAWINGS ARE FULL SIZE (22"x34") DRAWINGS
3. BATHYMETRIC SURVEY PROVIDED BY WILSON SURVEY/ENGINEERING. DATED JUNE, 2008.
4. TOPOGRAPHY SURVEY COMPLETED BY DAVID EVANS AND ASSOCIATES IN 2009 FOR UPLAND AREAS TO THE EAST OF THE INNER WATERWAY.
5. PHOTOGRAMMETRIC SURVEY (SPOT ELEVATIONS) AND UPLAND LINework COMPLETED BY WALKER AND ASSOCIATES IN SEPTEMBER 2004 FOR UPLAND AREAS TO THE WEST OF THE INNER WATERWAY, AT LOG POND AND BST.
6. ADDITIONAL UPLAND SURVEY INFORMATION WAS COMPLETED BY WILSON SURVEY/ENGINEERING IN MARCH 2013 FOR LOG POND, SOUTH SHORELINE, AND CENTRAL WATERFRONT AREAS AND PROVIDED IN MLLW.
7. AERIAL IMAGE OBTAINED FROM NAIP 2011 IMAGE DATABASE, AS PROVIDED BY THE USDA.
8. EELGRASS BED LOCATIONS OBTAINED FROM SURVEY COMPLETED BY WILSON SURVEY/ENGINEERING IN SEPTEMBER AND OCTOBER 2009.
9. CONTRACTOR SHALL NOT DAMAGE EELGRASS OUTSIDE THE LIMITS OF WORK SHOWN DURING COMPLETION OF THE WORK.
10. CONTRACTOR SHALL NOT RELY ON AERIAL IMAGE FOR EXACT LOCATION OF STRUCTURES. ALL LOCATIONS OF UPLAND AND IN-WATER STRUCTURES SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD.
11. INFORMATION DISPLAYED, INCLUDING PROPERTY BOUNDARIES, IS BASED ON AVAILABLE RECORDS. THE CONTRACTOR IS TO VERIFY ALL SITE AND UTILITY INFORMATION PRIOR TO DEMOLITION OR CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER PRIOR TO COMMENCING WORK.
12. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO COMMENCING WORK IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.
13. THE CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS AND IN ACCORDANCE WITH PROJECT PERMITS.
14. THE CONTRACTOR SHALL COORDINATE ALL ACTIVITIES WITH THE ENGINEER. LOCATION OF THE CONTRACTOR'S SITE OFFICE AND MATERIAL STORAGE SHALL BE APPROVED BY ENGINEER.
15. PRIOR TO ANY CLEARING, DEMOLITION AND SHORELINE DEBRIS REMOVAL ACTIVITIES, CONTRACTOR SHALL PROVIDE AND INSTALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THESE DRAWINGS, SPECIFICATIONS AND PERMIT REQUIREMENTS.
16. PRIOR TO SITE DEMOLITION, THE CONTRACTOR SHALL MARK ITEMS TO BE PROTECTED WITH TAPE OR MARKING PAINT. SITE DEMOLITION SHALL NOT PROCEED UNTIL MARKING IS REVIEWED AND APPROVED BY THE ENGINEER.
17. UNLESS NOTED OTHERWISE, ALL DEMOLISHED STRUCTURES MATERIAL AND DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF AT AN APPROVED DISPOSAL FACILITY OR RECYCLING FACILITY IN ACCORDANCE WITH APPLICABLE FEDERAL AND STATE LAWS AND REGULATIONS GOVERNING DISPOSAL.
18. IN-WATER WORK IS SUBJECT TO FISHERIES CLOSURE WINDOW - ALLOWABLE IN-WATER WORK DATES ARE PROVIDED IN THE SPECIFICATIONS.
19. CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A DETAILED CONSTRUCTION WORK PLAN PRIOR TO COMMENCING WORK. ADDITIONAL SUBMITTAL REQUIREMENTS ARE PROVIDED IN THE SPECIFICATIONS.
20. PILES SHALL BE REMOVED COMPLETELY UNLESS OTHERWISE NOTED ON THE PLANS. PILES THAT BREAK AND CANNOT BE REMOVED COMPLETELY SHALL BE CUT AT OR NEAR (WITHIN 2 FEET) THE POST-DREDGE MUDLINE.
21. CONTRACTOR SHALL PROTECT IN-PLACE ALL STRUCTURES, UTILITIES, AND OBJECTS NOT CALLED OUT AS BEING DEMOLISHED ON THE PLANS. ANY DAMAGE TO ITEMS NOT BEING DEMOLISHED SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
22. CONTRACTOR SHALL PROTECT ALL EXISTING MONITORING WELLS EXCEPT THOSE IDENTIFIED FOR REMOVAL.
23. EXISTING FLOATS AND GANGWAY RAMPS AT COLONY WHARF AND MERIDIAN PACIFIC TO BE REMOVED BY OTHERS PRIOR TO START OF WORK AND REPLACED BY OTHERS AFTER COMPLETION OF WORK.

DATUM INFORMATION:

1. HORIZONTAL DATUM: WASHINGTON STATE PLANE NORTH, NAD 83, FEET.
2. IN-WATER ELEVATIONS ARE IN FEET MLLW, BASED ON NOAA/NOS BENCHMARK 9449211 (BELLINGHAM, WA)
3. TO CONVERT ELEVATIONS FROM NAVD88 TO MLLW; ADD +0.48 FEET TO NAVD88 ELEVATIONS
4. MEAN HIGHER HIGH WATER IS EQUAL TO 8.5 FT BASED ON MLLW DATUM (8.02 FT BASED ON NAVD88 DATUM)

ACRONYMS:

- ASB AERATED STABILIZATION BASIN
- BST BELLINGHAM SHIPPING TERMINAL
- CDF CONTROLLED DENSITY FILL
- E EASTING
- EL ELEVATION
- FRP FIBERGLASS REINFORCED PIPE
- GP GEORGIA PACIFIC - FORMER SITE NOW OWNED BY PORT OF BELLINGHAM
- IE INVERT ELEVATION
- MLLW MEAN LOWER LOW WATER
- N NORTHING
- NAIP NATIONAL AGRICULTURE IMAGERY PROGRAM
- NTS NOT TO SCALE
- SQ FT SQUARE FEET
- USDA UNITED STATES DEPARTMENT OF AGRICULTURE
- NOS NATIONAL OCEAN SERVICE
- NAD NORTH AMERICAN DATUM
- NAVD NORTH AMERICAN VERTICAL DATUM
- WSDOT WASHINGTON DEPARTMENT OF TRANSPORTATION



DATUM CONVERSION
NOT TO SCALE

LEGEND:

- DETAIL REFERENCE NUMBER 1
DRAWING ON WHICH DETAIL APPEARS "C-1" INDICATES TYPICAL OR ON SAME DRAWING
- DETAIL REFERENCE NUMBER 1
SCALE: 1" = 10'
- A
INDICATES DIRECTION OF CUTTING PLAN
- SECTION "A" IS SHOWN ON DRAWING "C-2"
- SECTION REFERENCE NUMBER A
SCALE: 1" = 10'
- SECTION REFERENCE NUMBER 1
SECTION
- PHOTO REFERENCE NUMBER 1
PHOTO POINT AND DIRECTION
- APPROXIMATE EELGRASS BED LOCATION
- SHORELINE DEBRIS REMOVAL AREA
- CATCH BASIN
- LIGHT POLE
- TIMBER PILE
- EXISTING VEGETATION
- WHATCOM WATERWAY STATIONING
- MANHOLE COVER
- STORMWATER DRAINAGE LINE (EXISTING)
- MONITORING WELL
- WELL POINT

FINAL BID DOCUMENT



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

DESIGNED BY: M. WOLTMAN
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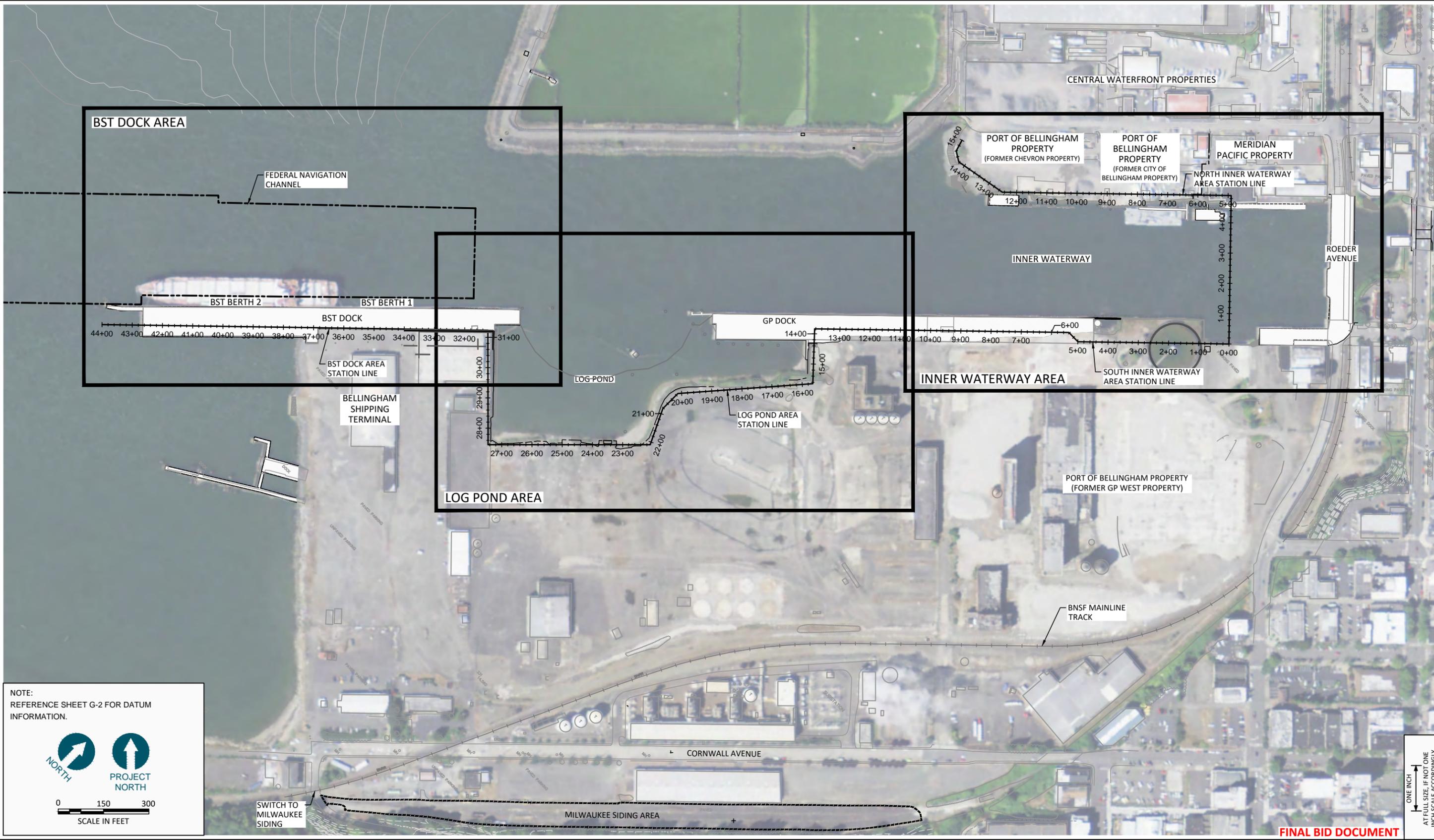
WHATCOM WATERWAY PHASE 1 CLEANUP
BELLINGHAM, WASHINGTON

GENERAL NOTES

G-2
 SHEET NO. **2** OF **104**

ONE INCH
 AT FULL SIZE, IF NOT ONE
 INCH SCALE ACCORDINGLY

May 20, 2013 8:28pm dholmer
 \\Tacoma1\Tacoma\CAD\Projects\0007-Port of Bellingham\Waterway Cleanup\Inner WWT\Construction Plans\0007-EC-1 TO EC-5.dwg EC-1



NOTE:
 REFERENCE SHEET G-2 FOR DATUM
 INFORMATION.

NORTH

PROJECT
NORTH

0 150 300
SCALE IN FEET

FINAL BID DOCUMENT

ONE INCH
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ANCHOR QEA

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101 Stewart Street, Suite 400
 Seattle, Washington 98101
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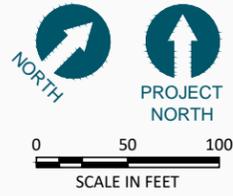
WHATCOM WATERWAY PHASE 1 CLEANUP
 BELLINGHAM, WASHINGTON

SITE PLAN

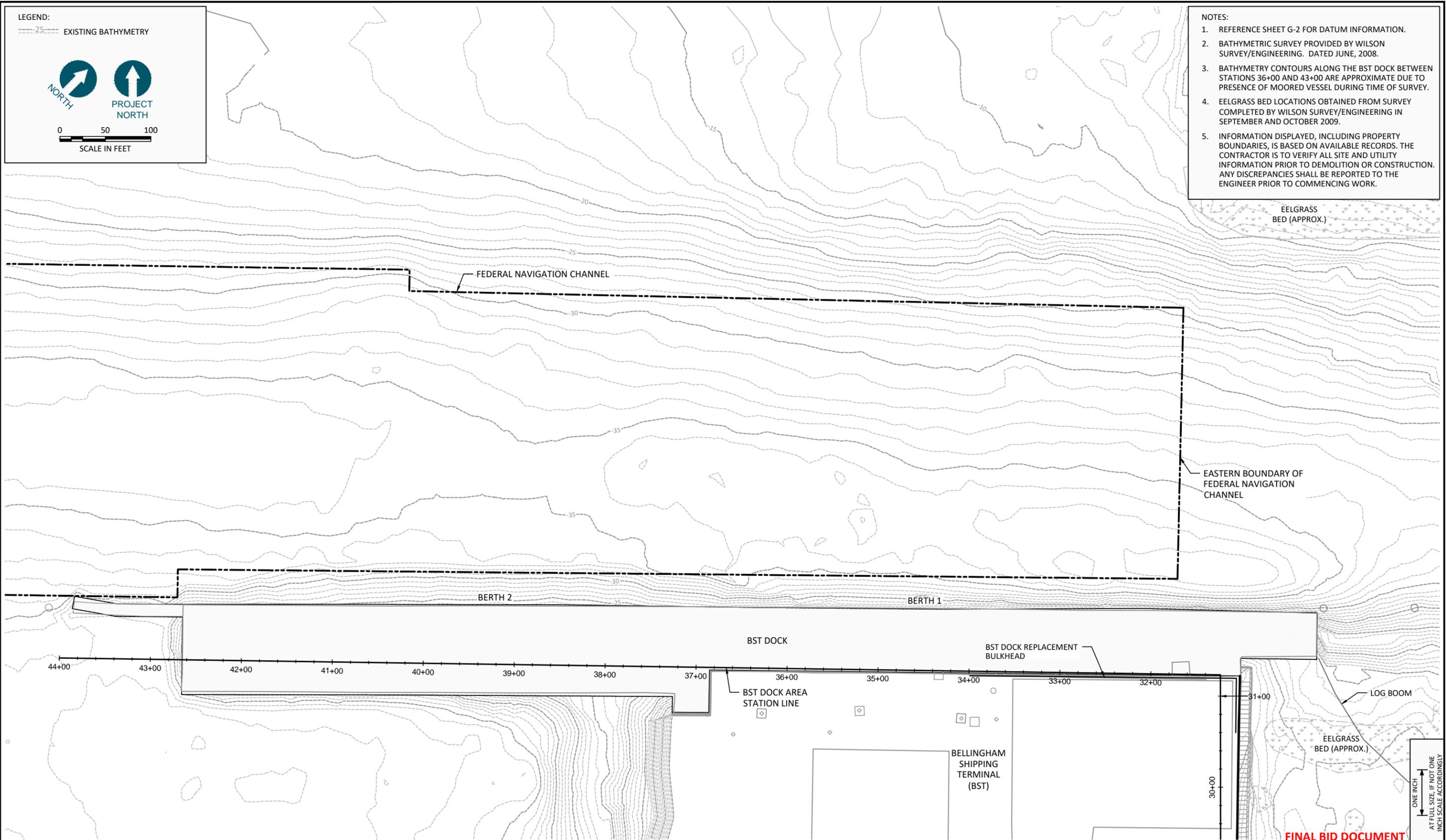
EC-1

SHEET NO. 3 OF 104

LEGEND:
 - - - - -25- - - - - EXISTING BATHYMETRY



- NOTES:
1. REFERENCE SHEET G-2 FOR DATUM INFORMATION.
 2. BATHYMETRIC SURVEY PROVIDED BY WILSON SURVEY/ENGINEERING. DATED JUNE, 2008.
 3. BATHYMETRY CONTOURS ALONG THE BST DOCK BETWEEN STATIONS 36+00 AND 43+00 ARE APPROXIMATE DUE TO PRESENCE OF MOORED VESSEL DURING TIME OF SURVEY.
 4. EELGRASS BED LOCATIONS OBTAINED FROM SURVEY COMPLETED BY WILSON SURVEY/ENGINEERING IN SEPTEMBER AND OCTOBER 2009.
 5. INFORMATION DISPLAYED, INCLUDING PROPERTY BOUNDARIES, IS BASED ON AVAILABLE RECORDS. THE CONTRACTOR IS TO VERIFY ALL SITE AND UTILITY INFORMATION PRIOR TO DEMOLITION OR CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER PRIOR TO COMMENCING WORK.



\\Tacoma1\Tacoma\CAD\Projects\0007-Port of Bellingham\Waterway Cleanup\Line\WAT\Construction Plans\0007-EC-1 TO EC-5.dwg EC-2

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FINAL BID DOCUMENT



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 Seattle, Washington 98101
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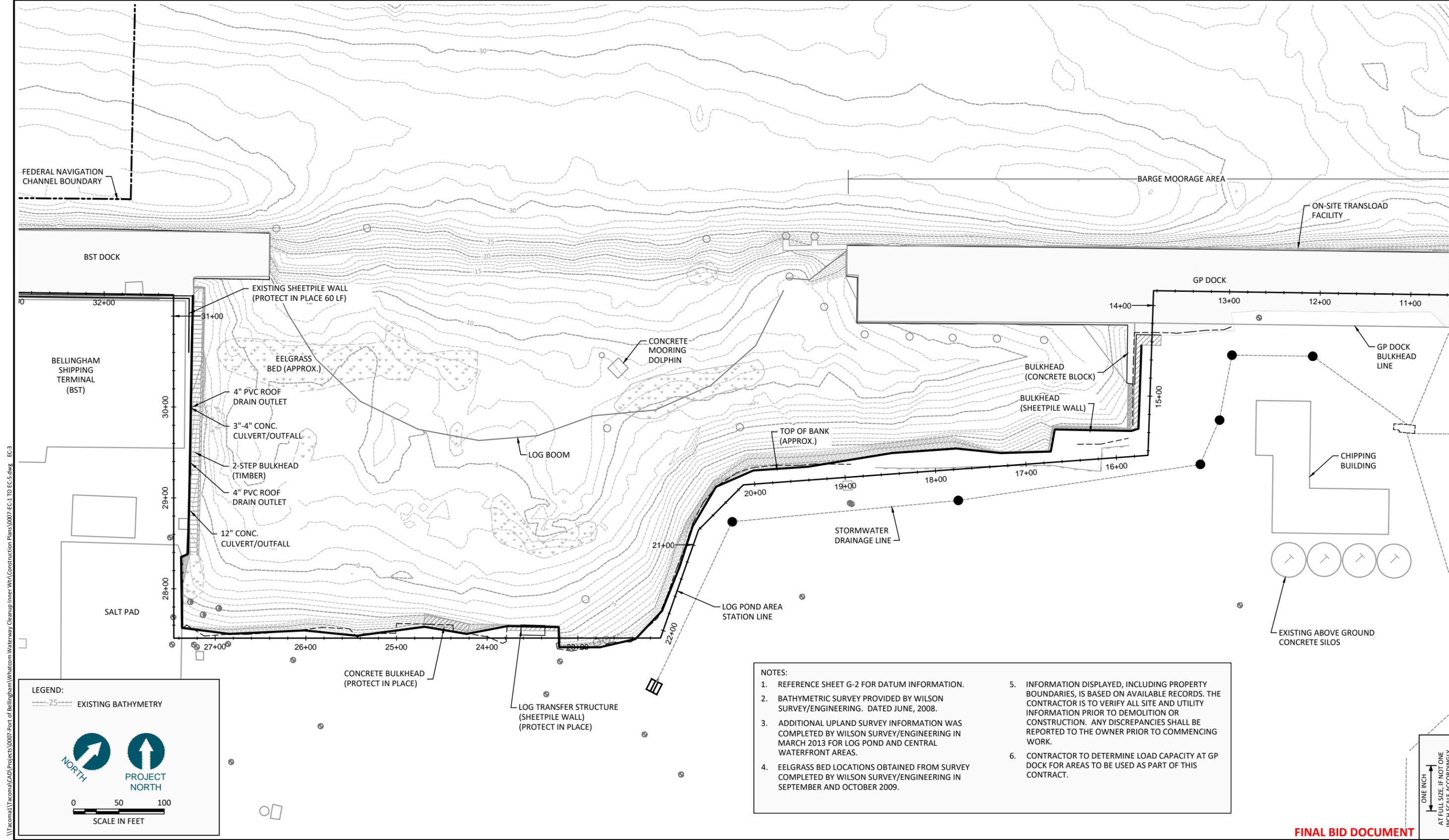
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WHATCOM WATERWAY PHASE 1 CLEANUP
BELLINGHAM, WASHINGTON

EXISTING CONDITIONS - BST DOCK AREA

EC-2
 SHEET NO. **4** OF **104**



LEGEND:

---25--- EXISTING BATHYMETRY

NORTH **PROJECT NORTH**

0 50 100
SCALE IN FEET

- NOTES:**
1. REFERENCE SHEET G-2 FOR DATUM INFORMATION.
 2. BATHYMETRIC SURVEY PROVIDED BY WILSON SURVEY/ENGINEERING. DATED JUNE, 2008.
 3. ADDITIONAL UPLAND SURVEY INFORMATION WAS COMPLETED BY WILSON SURVEY/ENGINEERING IN MARCH 2013 FOR LOG POND AND CENTRAL WATERFRONT AREAS.
 4. EELGRASS BED LOCATIONS OBTAINED FROM SURVEY COMPLETED BY WILSON SURVEY/ENGINEERING IN SEPTEMBER AND OCTOBER 2009.
 5. INFORMATION DISPLAYED, INCLUDING PROPERTY BOUNDARIES, IS BASED ON AVAILABLE RECORDS. THE CONTRACTOR IS TO VERIFY ALL SITE AND UTILITY INFORMATION PRIOR TO DEMOLITION OR CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER PRIOR TO COMMENCING WORK.
 6. CONTRACTOR TO DETERMINE LOAD CAPACITY AT GP DOCK FOR AREAS TO BE USED AS PART OF THIS CONTRACT.

FINAL BID DOCUMENT



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**WHATCOM WATERWAY PHASE 1 CLEANUP
BELLINGHAM, WASHINGTON**

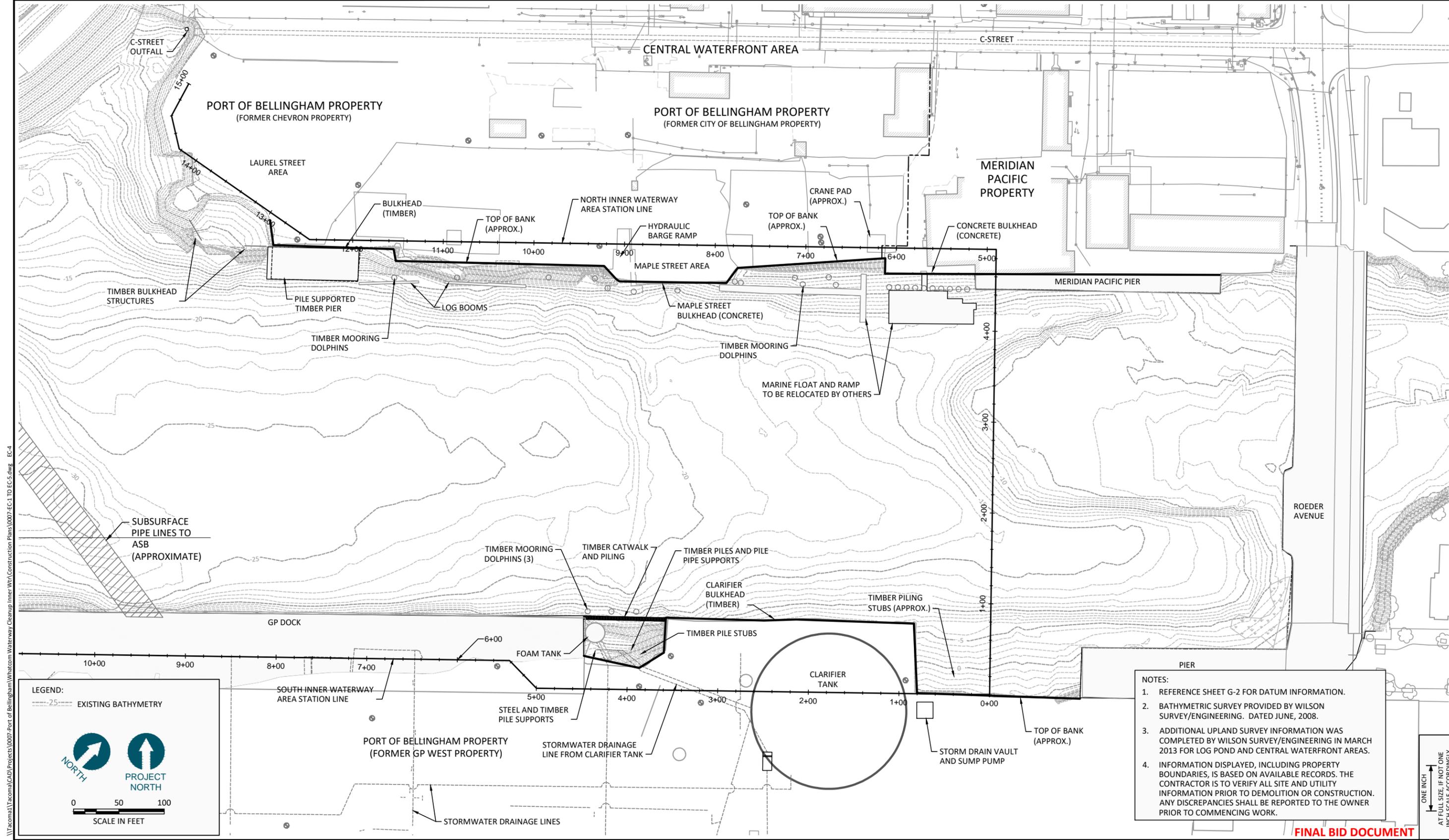
EXISTING CONDITIONS - LOG POND AREA

EC-3

SHEET NO. 5 OF 104

May 20, 2013 8:28pm dholmer
 \\Tacoma1\Tacoma\CAD\Projects\Port of Bellingham\Waterway Cleanup\liner\WAT\Construction Plans\0007-EC-1 TO EC-5.dwg EC-3

ONE INCH
 AT FULL SIZE, IF NOT ONE
 INCH SCALE ACCORDINGLY



LEGEND:

---2.5--- EXISTING BATHYMETRY

NORTH **PROJECT NORTH**

0 50 100
SCALE IN FEET

- NOTES:**
1. REFERENCE SHEET G-2 FOR DATUM INFORMATION.
 2. BATHYMETRIC SURVEY PROVIDED BY WILSON SURVEY/ENGINEERING. DATED JUNE, 2008.
 3. ADDITIONAL UPLAND SURVEY INFORMATION WAS COMPLETED BY WILSON SURVEY/ENGINEERING IN MARCH 2013 FOR LOG POND AND CENTRAL WATERFRONT AREAS.
 4. INFORMATION DISPLAYED, INCLUDING PROPERTY BOUNDARIES, IS BASED ON AVAILABLE RECORDS. THE CONTRACTOR IS TO VERIFY ALL SITE AND UTILITY INFORMATION PRIOR TO DEMOLITION OR CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER PRIOR TO COMMENCING WORK.

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**WHATCOM WATERWAY PHASE 1 CLEANUP
 BELLINGHAM, WASHINGTON**

EXISTING CONDITIONS - INNER WATERWAY AREA

EC-4

SHEET NO. 6 OF 104

SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL NOTES:

1. ALL WORK SHALL CONFORM TO THESE PLANS AND SPECIFICATIONS. ALL SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE PROJECT PERMITS AND ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS PERTAINING TO REMOVAL AND DISPOSAL.
2. CONTRACTOR SHALL PROVIDE THE ENGINEER WITH DETAILED REMOVAL WORK PLANS FOR BOTH THE SHORELINE DEBRIS AND SITE AND STRUCTURE REMOVAL PRIOR TO COMMENCING WORK, SEE SPECIFICATIONS.
3. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS OF EXISTING STRUCTURES AND OTHER FEATURES THAT MAY IMPACT THE WORK AND IMMEDIATELY BRING ANY CONFLICTS TO THE ENGINEER'S ATTENTION.
4. THE CONTRACT DOCUMENTS AND SPECIFICATIONS REPRESENT THE SCOPE OF WORK. UNLESS OTHERWISE SHOWN THEY DO NOT INDICATE THE METHOD OF REMOVAL. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND HE SHALL BE SOLELY RESPONSIBLE FOR ALL REMOVAL MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES.
5. THE CONTRACTOR SHALL KEEP ALL STREETS AND VEHICULAR TRAFFIC AREAS CLEAN.
6. CONTRACTOR IS RESPONSIBLE FOR ANY TRAFFIC CONTROLS REQUIRED DURING THE DURATION OF THIS PROJECT, SEE SPECIFICATIONS.
7. EXISTING SOILS WITHIN THE PROJECT AREA MAY CONTAIN CONTAMINANTS, SEE SPECIFICATIONS FOR EXCAVATION, STOCKPILING, TESTING AND BACKFILLING REQUIREMENTS.
8. THE CONTRACTOR SHALL INSTALL AND MAINTAIN PERIMETER FENCING AS REQUIRED TO MAINTAIN SECURITY OF SITE.
9. CONTRACTOR SHALL PROTECT-IN-PLACE ALL STRUCTURES, UTILITIES AND OBJECTS NOT CALLED OUT AS BEING REMOVED ON THE PLANS. ANY DAMAGE TO ITEMS NOT BEING REMOVED SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
10. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO STRICTLY CONTAIN THE SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL WITHIN THE LIMITS SHOWN ON THE DRAWINGS. ANY DAMAGE TO UTILITIES, OTHER FACILITIES, OR EQUIPMENT DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE PROMPTLY REPAIRED AT HIS EXPENSE. THIS INCLUDES ITEMS OUTSIDE THE WORK AREA THAT ARE DAMAGED BY CONSTRUCTION ACTIVITIES DURING EXECUTION OF THIS CONTRACT.
11. ALL LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN HEREIN HAVE BEEN ESTABLISHED BY FIELD OBSERVATIONS OR OBTAINED FROM REVIEW OF AVAILABLE RECORDS AND SHOULD, THEREFORE, BE CONSIDERED APPROXIMATE ONLY AND NOT NECESSARILY COMPLETE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS SHOWN AND TO FURTHER DISCOVER AND AVOID OTHER UTILITIES NOT SHOWN HEREIN WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN. THE CONTRACTOR SHALL BRING ANY CONFLICTS BETWEEN EXISTING UTILITIES AND NEW WORK TO THE ENGINEERS ATTENTION.
12. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO COMMENCING WORK IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.
13. DOLPHINS AND PILES CALLED OUT ON THE PLANS TO BE REMOVED SHALL BE PULLED COMPLETELY UNLESS OTHERWISE NOTED ON THE PLANS. PILES THAT BREAK AND CANNOT BE PULLED COMPLETELY OR CALLED OUT ON THE PLANS AS BEING CUT SHALL BE CUT AT THE MUDLINE OR AT A MAXIMUM OF 12-INCHES ABOVE THE MUDLINE, SEE SPECIFICATIONS.
14. EXTENT OF DEBRIS REMOVAL AND CLEAR AND GRUB VEGETATION IS APPROXIMATE AND IS TO BE VERIFIED BY THE ENGINEER PRIOR TO COMPLETION OF WORK. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
15. THE INTENT OF THE SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL PLANS AND PHOTOS ARE TO SHOW GENERAL SCOPE OF ITEMS TO BE REMOVED. THE PHOTOS ARE FOR REFERENCE ONLY AND HIGHLIGHT ITEMS IN THE FOREGROUND TO BE REMOVED. ITEMS IN THE BACKGROUND THAT ARE TO BE REMOVED ARE NOT NECESSARILY IDENTIFIED. THE CONTRACTOR SHALL VISIT THE SITE AND SURVEY THE SCOPE OF REMOVAL PRIOR TO SUBMITTING A BID.
16. PRIOR TO SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL, THE CONTRACTOR SHALL MARK ITEMS TO BE PROTECTED WITH TAPE OR MARKING PAINT. SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL SHALL NOT PROCEED UNTIL MARKING IS REVIEWED AND APPROVED BY THE ENGINEER.
17. UNLESS NOTED OTHERWISE, ALL REMOVED STRUCTURES MATERIAL AND DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF AT AN APPROVED DISPOSAL FACILITY OR RECYCLING FACILITY IN ACCORDANCE WITH APPLICABLE FEDERAL AND STATE LAWS AND REGULATIONS GOVERNING DISPOSAL.
18. ALL DIMENSIONS OF DEMOLISHED STRUCTURES ARE APPROXIMATE AND ARE FOR REFERENCE ONLY.
19. PRIOR TO COMMENCING DEMOLITION ACTIVITIES CONTRACTOR SHALL IMPLEMENT TEMPORARY EROSION AND SEDIMENTATION CONTROLS. NO DEMOLITION MATERIALS OR DEBRIS SHALL BE ALLOWED TO ENTER THE WATERWAY, SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
20. SEE ELECTRICAL SHEETS FOR ADDITIONAL DEMOLITION ITEMS.
21. UNLESS SPECIFICALLY NOTED "REMOVE" INCLUDES COMPLETE REMOVAL AND SATISFACTORY RECYCLING OR DISPOSAL.
22. WHERE EXISTING STRUCTURES EXTEND BELOW THE WATERLINE ALONG THE NORTH SHORELINE THE STRUCTURES SHALL BE CUT AT THE EXISTING MUDLINE OR AT A MAXIMUM OF 12-INCHES ABOVE THE MUDLINE.
23. ALONG THE SOUTH SHORELINE EXISTING STRUCTURES AND THEIR ASSOCIATED PILES LOCATED WITHIN THE DREDGE SLOPE SHALL BE CUT AT THE FACE OF THE DREDGE SLOPE UNLESS OTHERWISE NOTED ON THE PLANS. THE PORTION OF STRUCTURE BELOW THE FACE OF THE DREDGE SLOPE WILL REMAIN IN PLACE.
24. UPLAND SITE ITEMS, STRUCTURES AND PILES SHALL BE EITHER REMOVED IN THEIR ENTIRETY, OR, WHERE THEY EXTEND 2-FEET BELOW EXISTING GRADE, SHALL BE CUT 2-FEET BELOW EXISTING GRADE AND REMOVED UNLESS OTHERWISE NOTED ON THE PLANS.
25. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS FOR CLEARING AND GRUBBING AND SITE, STRUCTURAL, AND SHORELINE DEBRIS REMOVAL.

SOILS:

SEE THE GEOTECHNICAL REPORT BY ANCHOR QEA, DATED NOVEMBER, 2012 FOR COMPLETE INFORMATION

SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL LEGEND:

-  DEBRIS REMOVAL AND CLEAR AND GRUB, SEE NOTE 14
-  SITE AND STRUCTURE REMOVAL
-  APPROXIMATE REMOVAL BOUNDARY
NOTE: REMOVAL BOUNDARY ILLUSTRATES APPROXIMATE EXTENTS OF ABOVE WATERLINE REMOVAL ITEMS. ADDITIONAL SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL IS REQUIRED BELOW THE WATERLINE, SEE NOTE 15 AND THE SPECIFICATIONS.

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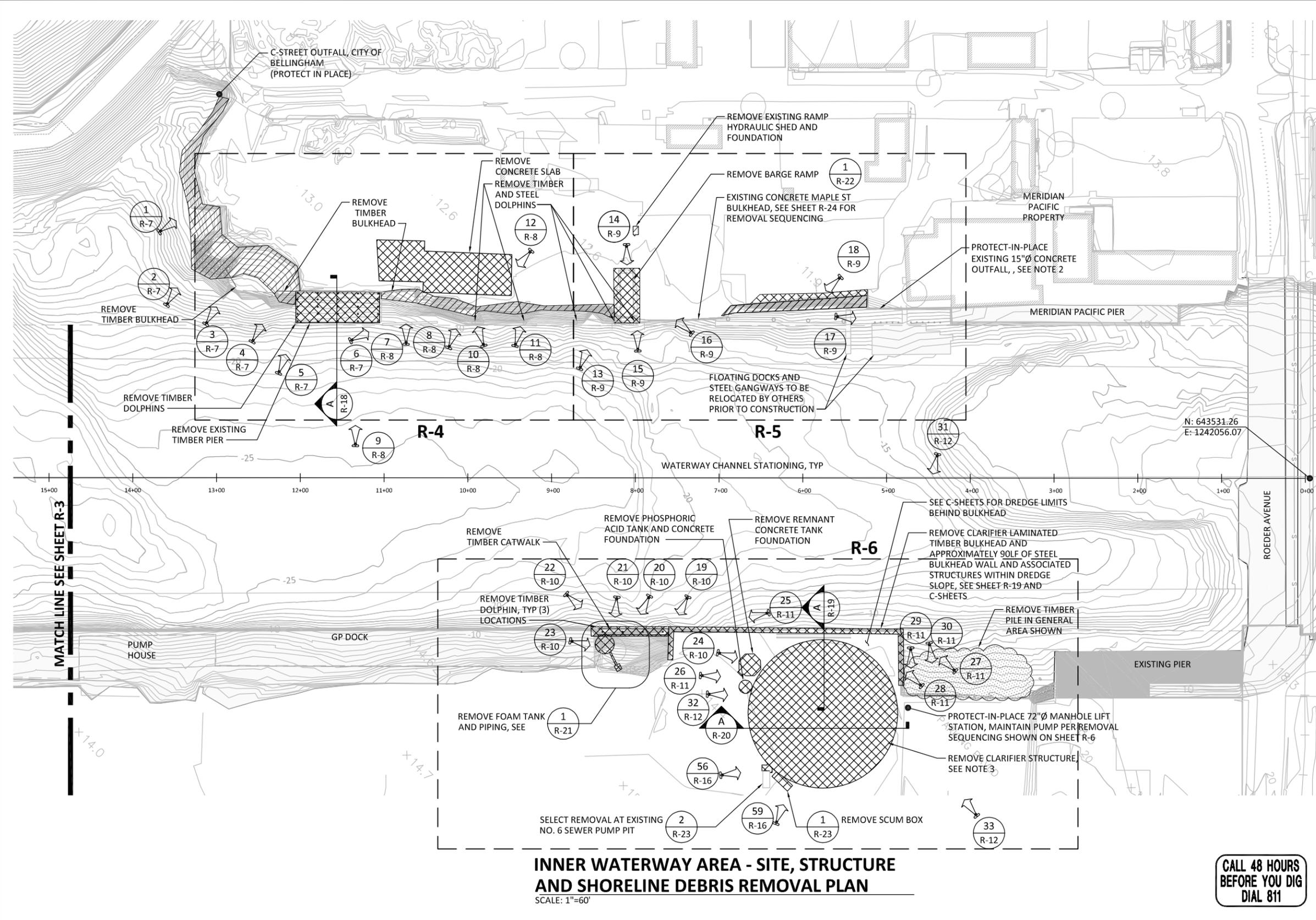
WHATCOM WATERWAY PHASE 1 CLEANUP BELLINGHAM, WASHINGTON

SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL NOTES

R-1

SHEET NO. **7** OF **104**

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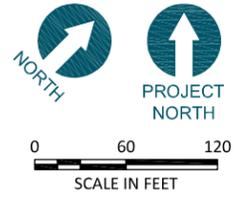


- REMOVAL NOTES:**
- SEE SHEET R-1 FOR SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL AND NOTES.
 - EXTEND OUTFALL PIPE ±5 FEET TO 6 INCHES BEYOND FACE OF CAPPED SLOPE SEE C-SHEETS FOR CAPPED SLOPE. EXTEND USING LIKE MATERIALS.
 - REMOVE ALL PIPING, STRUCTURAL STEEL, MISCELLANEOUS METAL, PUMPS, ELECTRICAL EQUIPMENT, ETC ATTACHED TO OR WITHIN CLARIFIER STRUCTURE. OUTSIDE LIMITS OF DREDGE, REMOVE CLARIFIER CONCRETE STRUCTURE AND PILING TO 2' BELOW EXISTING GRADE, SEE R-20 AND C-SHEETS, FOR REMOVAL WITHIN THE DREDGE SLOPE, SEE R-19.
 - SEE C-SHEETS FOR DREDGE AND SHORELINE EXCAVATION LIMITS.

- LEGEND:**
- PHOTOGRAPH ORIENTATION
 - SITE AND STRUCTURE REMOVAL
 - DEBRIS REMOVAL AND CLEAR AND GRUB, SEE NOTE 14 ON R-1

INNER WATERWAY AREA - SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL PLAN
SCALE: 1"=60'

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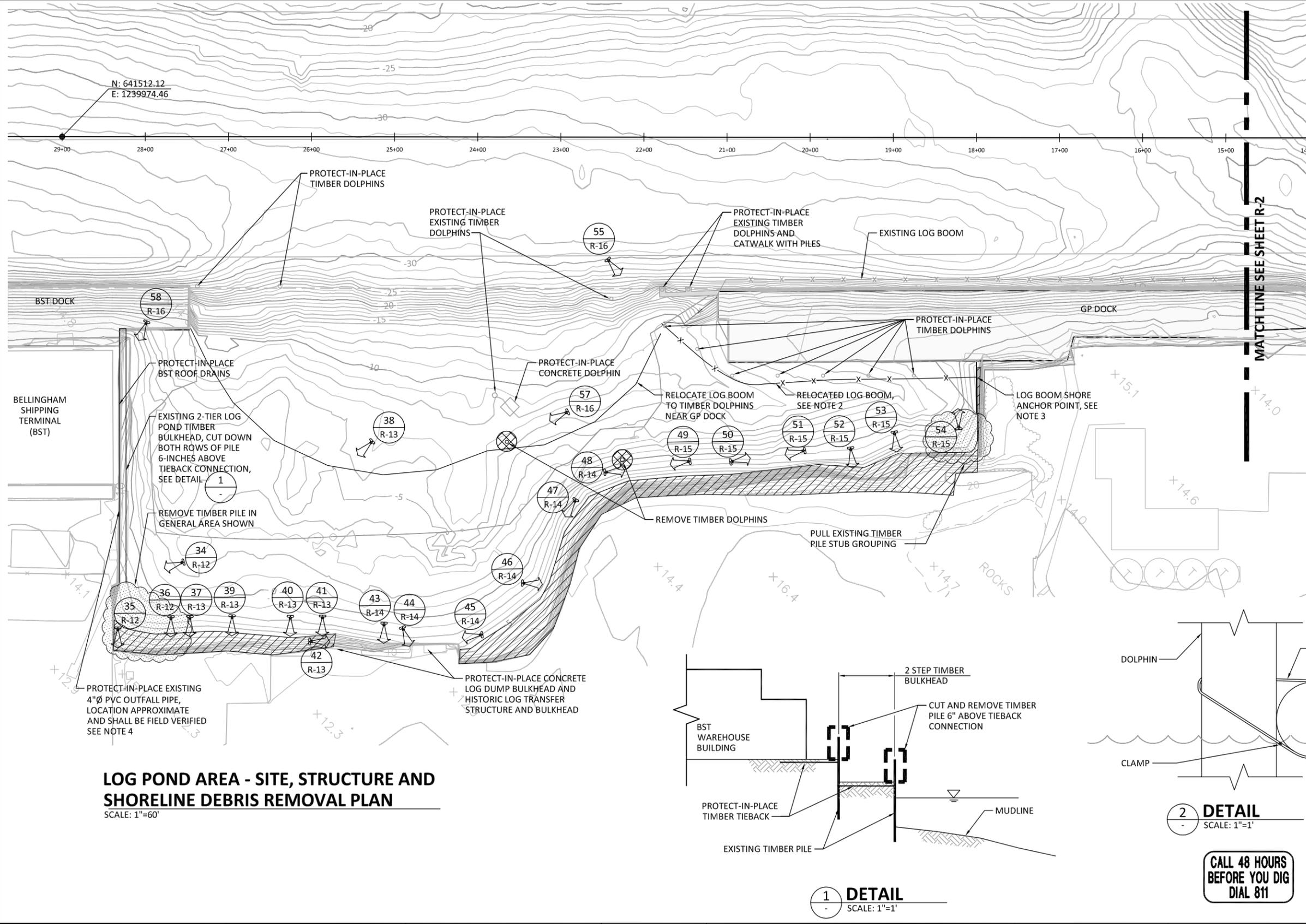
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INNER WATERWAY AREA SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL PLAN

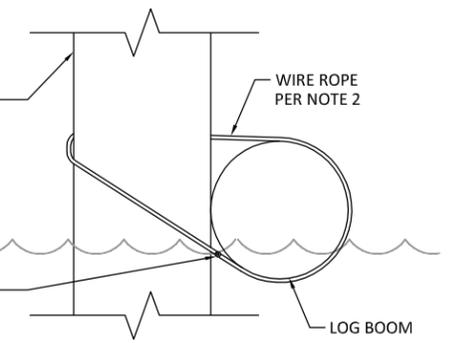
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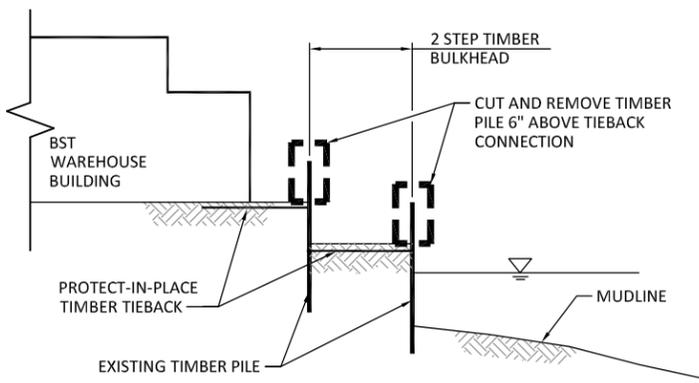


- NOTES:**
- SEE SHEET R-1 FOR SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL NOTES.
 - ATTACH LOG BOOM TO EVERY OTHER DOLPHIN USING 1/4" 1x19 ASTM 316 WIRE ROPE AND CLAMP PLACED LOOSELY TO ALLOW FOR MOVEMENT. SEE DETAIL 2.
 - ATTACH END OF LOG BOOM WITH 1/4" 1x19 ASTM 316 WIRE ROPE AND CLAMP TO CONCRETE ECO BLOCK ON SHORE.
 - EXTEND OUTFALL PIPE ±6 FEET TO 6 INCHES BEYOND THE FACE OF CAPPED SLOPE. EXTEND USING LIKE MATERIALS. SEE C-SHEETS FOR CAPPED SLOPE.

- LEGEND:**
- PHOTOGRAPH ORIENTATION
 - SITE AND STRUCTURE REMOVAL
 - DEBRIS REMOVAL AND CLEAR AND GRUB, SEE NOTE 14 ON R-1



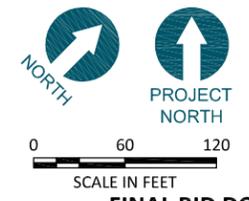
2 **DETAIL**
SCALE: 1"=1'



1 **DETAIL**
SCALE: 1"=1'

LOG POND AREA - SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL PLAN
SCALE: 1"=60'

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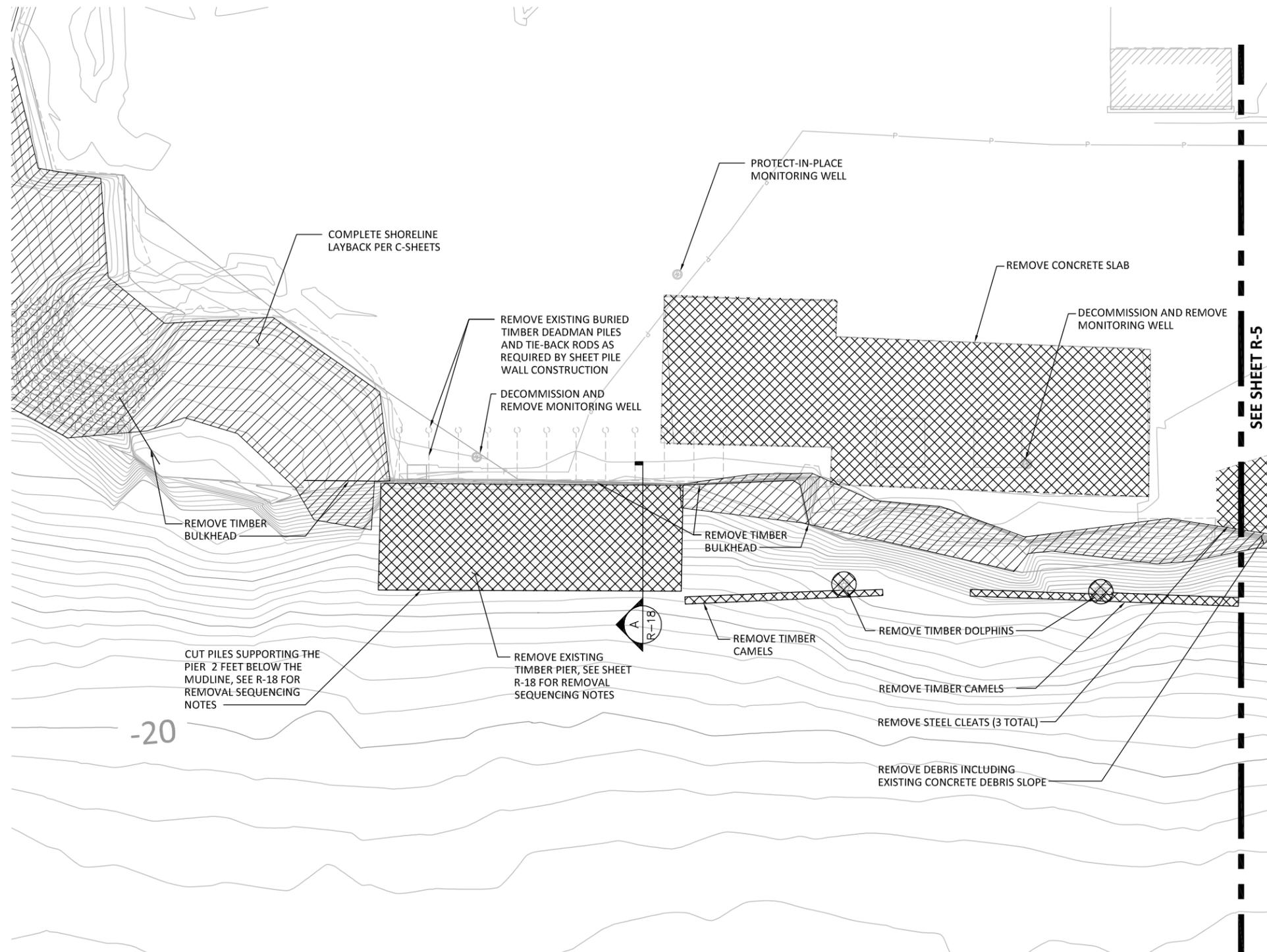


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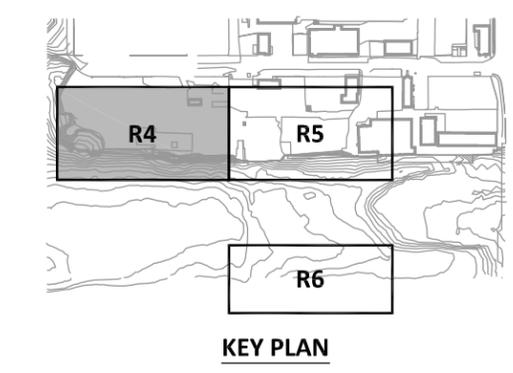
WHATCOM WATERWAY PHASE 1 CLEANUP
BELLINGHAM, WASHINGTON
LOG POND AREA SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL PLAN

R-3
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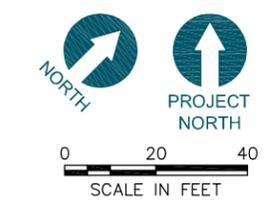
- NOTES:**
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF THE SIZE AND LOCATION OF ALL EXISTING ABOVE AND UNDERGROUND UTILITIES. EXISTING UTILITIES SHOWN HAVE BEEN OBTAINED FROM AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL UTILITY LOCATIONS NOT SHOWN. CARE SHOULD BE TAKEN TO AVOID DAMAGE OR DISTURBANCE TO EXISTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY HIS ACTIVITIES.
 2. SEE SHEET R-1 FOR ADDITIONAL SITE, STRUCTURE, AND SHORELINE DEBRIS REMOVAL NOTES.

- LEGEND:**
- SITE AND STRUCTURE REMOVAL
 - DEBRIS REMOVAL AND CLEAR AND GRUB, SEE NOTE 14 ON R-1
 - EXISTING ELECTRICAL LINE



WEST CENTRAL WALL REMOVAL PLAN
SCALE: 1"=20'

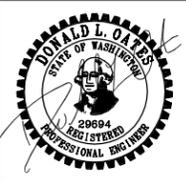
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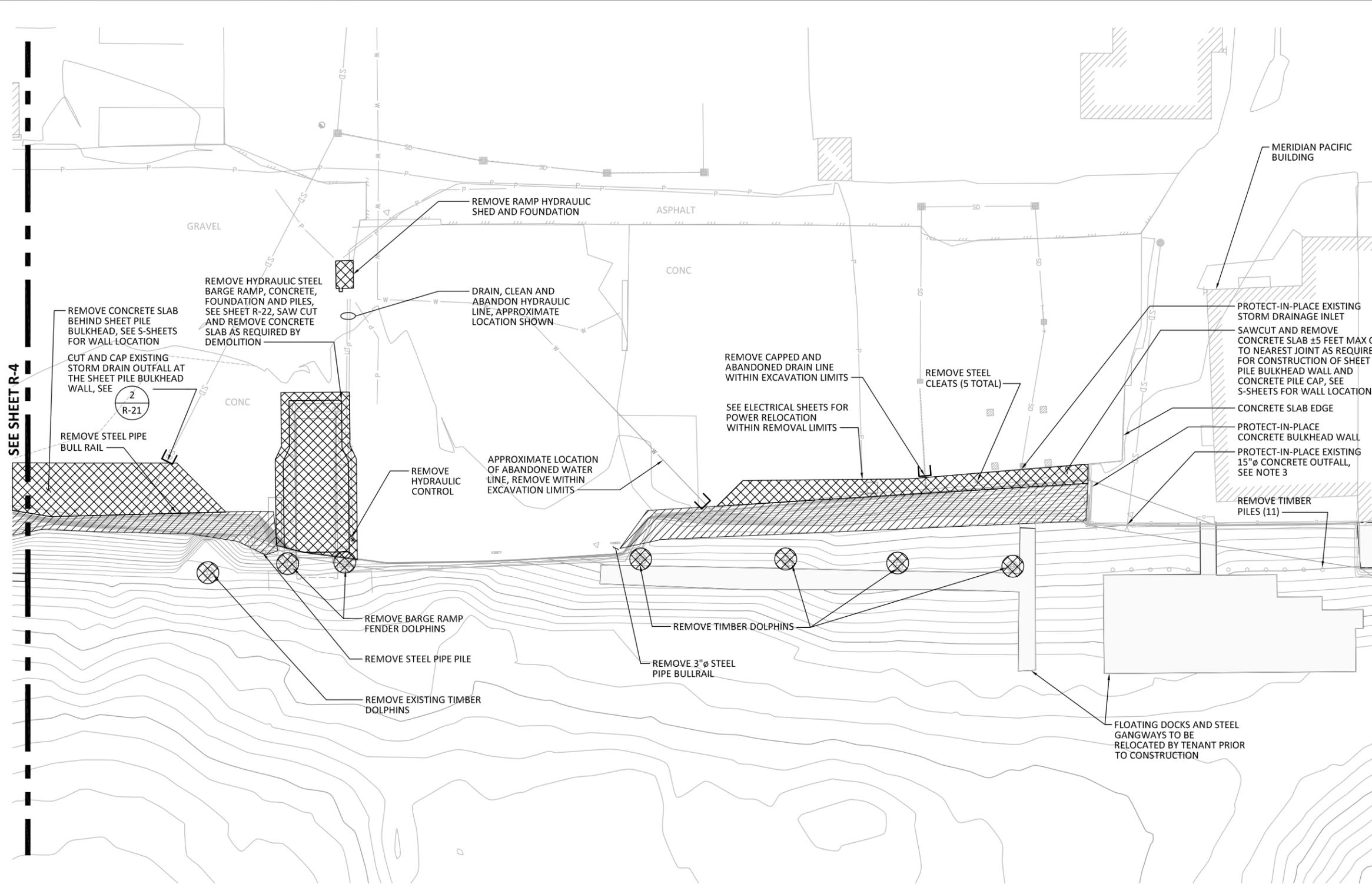
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**WEST CENTRAL AREA SITE, STRUCTURE,
AND SHORELINE DEBRIS REMOVAL**

R-4

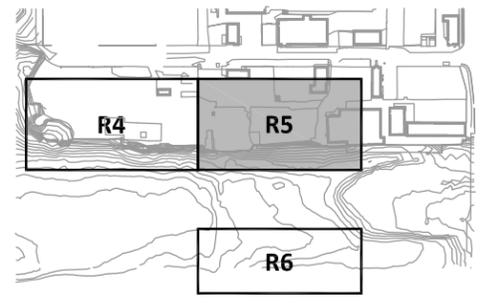
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- NOTES:**
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 2. SEE SHEET R-1 FOR ADDITIONAL SITE, STRUCTURAL, AND SHORELINE DEBRIS REMOVAL NOTES.
 3. EXTEND OUTFALL PIPE AS REQUIRED FOR CAPPED SLOPE, EXTEND USING LIKE MATERIALS. SEE C-SHEETS FOR CAPPED SLOPE.

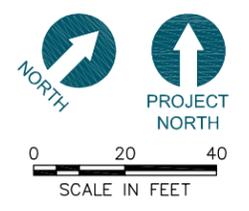
- LEGEND:**
- SITE AND STRUCTURE REMOVAL
 - DEBRIS REMOVAL AND CLEAR AND GRUB, SEE NOTE 14 ON R-1
 - EXISTING DRAIN LINE
 - EXISTING WATER LINE
 - EXISTING ELECTRICAL LINE



KEY PLAN

MAPLE ST. AREA SITE, STRUCTURAL AND SHORELINE DEBRIS REMOVAL PLAN
SCALE: 1"=20'

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MAPLE ST. AREA SITE, STRUCTURAL AND SHORELINE DEBRIS REMOVAL PLAN

R-5

SHEET NO. 11 OF 104

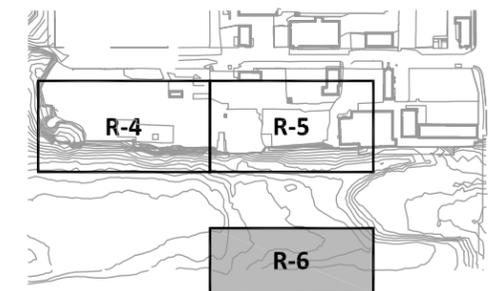
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NOTES:

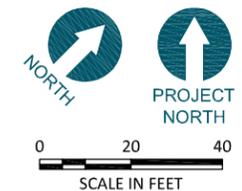
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF THE SIZE AND LOCATION OF ALL EXISTING ABOVE AND UNDERGROUND UTILITIES. EXISTING UTILITIES SHOWN HAVE BEEN OBTAINED FROM AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL UTILITY LOCATIONS NOT SHOWN. CARE SHOULD BE TAKEN TO AVOID DAMAGE OR DISTURBANCE TO EXISTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY HIS ACTIVITIES.
2. SEE SHEET R-1 FOR ADDITIONAL REMOVAL NOTES.
3. SEE C-SHEETS FOR DREDGE AND SHORELINE EXCAVATION LIMITS.

LEGEND:

-  SITE AND STRUCTURE REMOVAL
-  DEBRIS REMOVAL AND CLEAR AND GRUB, SEE NOTE 14 ON R-1
-  DRAIN LINE
-  WATER LINE
-  ELECTRICAL LINE

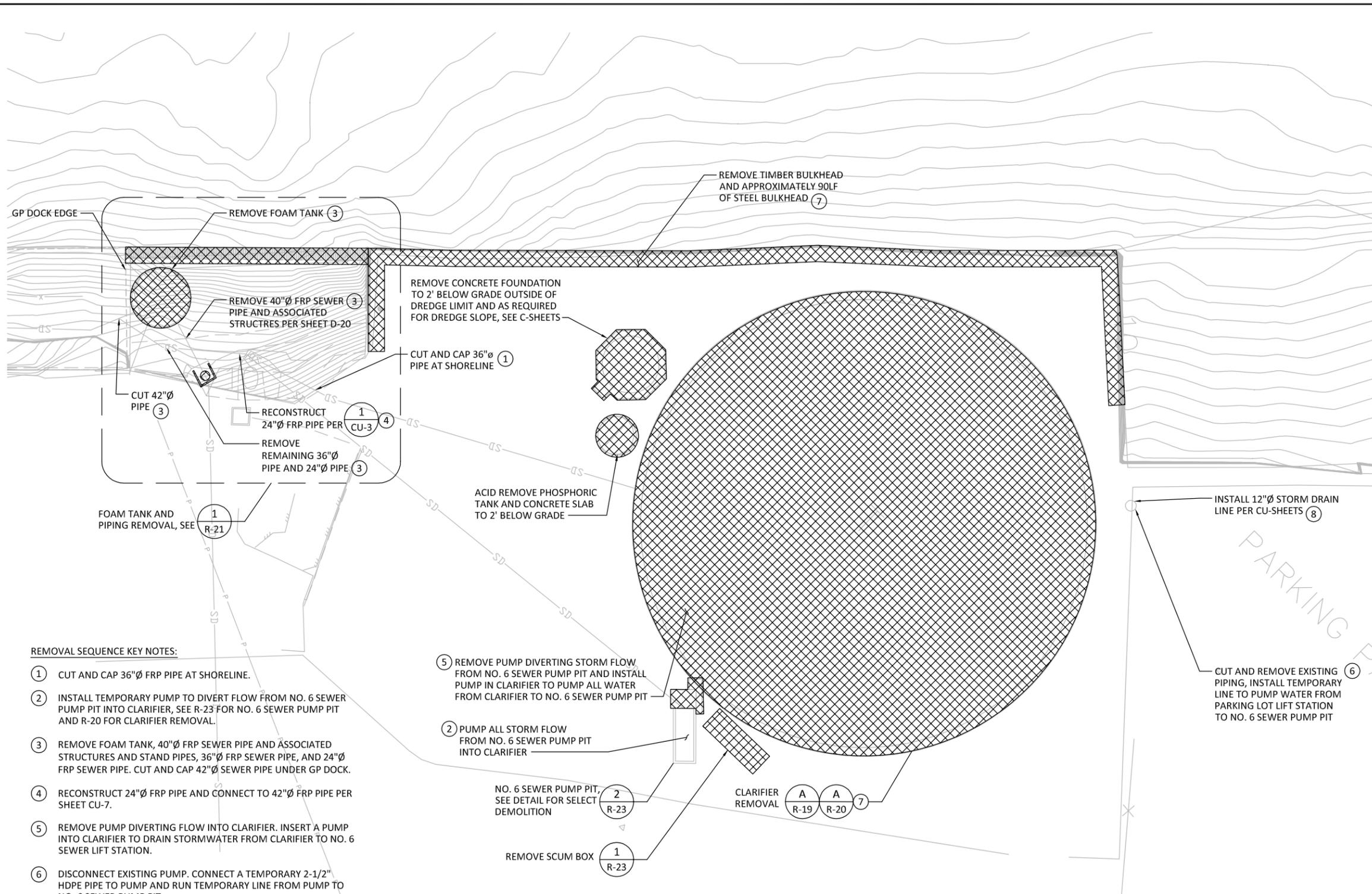


KEY PLAN



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REMOVAL SEQUENCE KEY NOTES:

1. CUT AND CAP 36"Ø FRP PIPE AT SHORELINE.
2. INSTALL TEMPORARY PUMP TO DIVERT FLOW FROM NO. 6 SEWER PUMP PIT INTO CLARIFIER, SEE R-23 FOR NO. 6 SEWER PUMP PIT AND R-20 FOR CLARIFIER REMOVAL.
3. REMOVE FOAM TANK, 40"Ø FRP SEWER PIPE AND ASSOCIATED STRUCTURES AND STAND PIPES, 36"Ø FRP SEWER PIPE, AND 24"Ø FRP SEWER PIPE. CUT AND CAP 42"Ø SEWER PIPE UNDER GP DOCK.
4. RECONSTRUCT 24"Ø FRP PIPE AND CONNECT TO 42"Ø FRP PIPE PER SHEET CU-7.
5. REMOVE PUMP DIVERTING FLOW INTO CLARIFIER. INSERT A PUMP INTO CLARIFIER TO DRAIN STORMWATER FROM CLARIFIER TO NO. 6 SEWER LIFT STATION.
6. DISCONNECT EXISTING PUMP. CONNECT A TEMPORARY 2-1/2" HDPE PIPE TO PUMP AND RUN TEMPORARY LINE FROM PUMP TO NO. 6 SEWER PUMP PIT.
7. REMOVE CLARIFIER AND STEEL AND TIMBER BULKHEAD PER SHEETS R-19 AND R-20.
8. REMOVE EXISTING PUMP FROM 72"Ø MANHOLE AND DELIVER TO THE PORT, INSTALL 12"Ø STORM DRAIN LINE AS SHOWN IN CU-SHEETS.

CLARIFIER AREA REMOVAL PLAN

SCALE: 1"=20'

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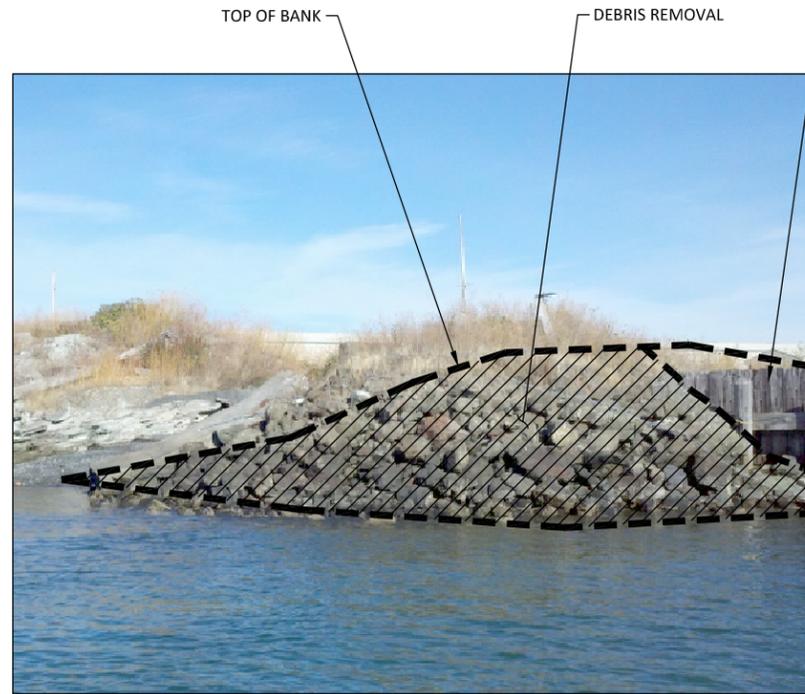
**CLARIFIER AREA SITE, STRUCTURE AND
 SHORELINE DEBRIS REMOVAL PLAN**

R-6

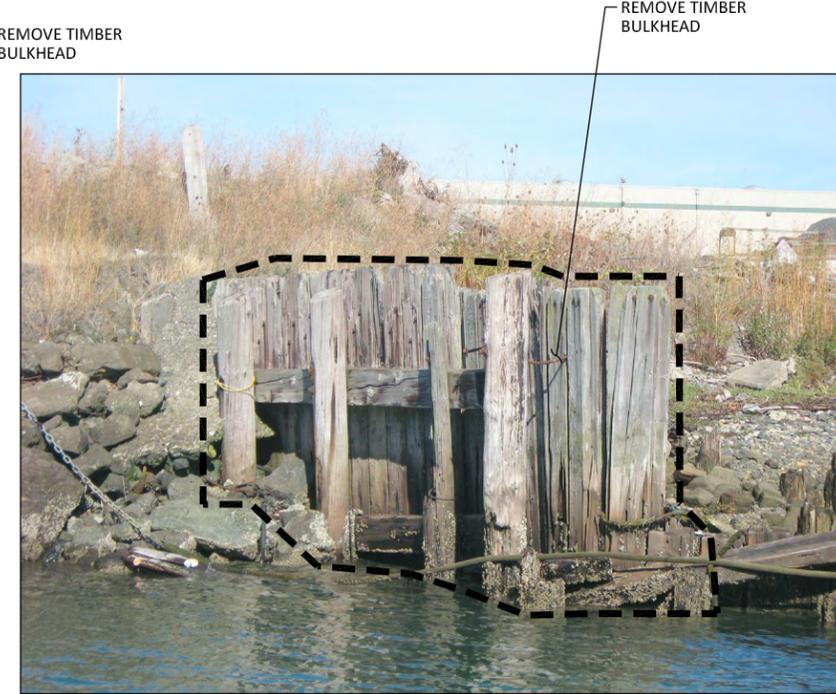
SHEET NO. 12 OF 104



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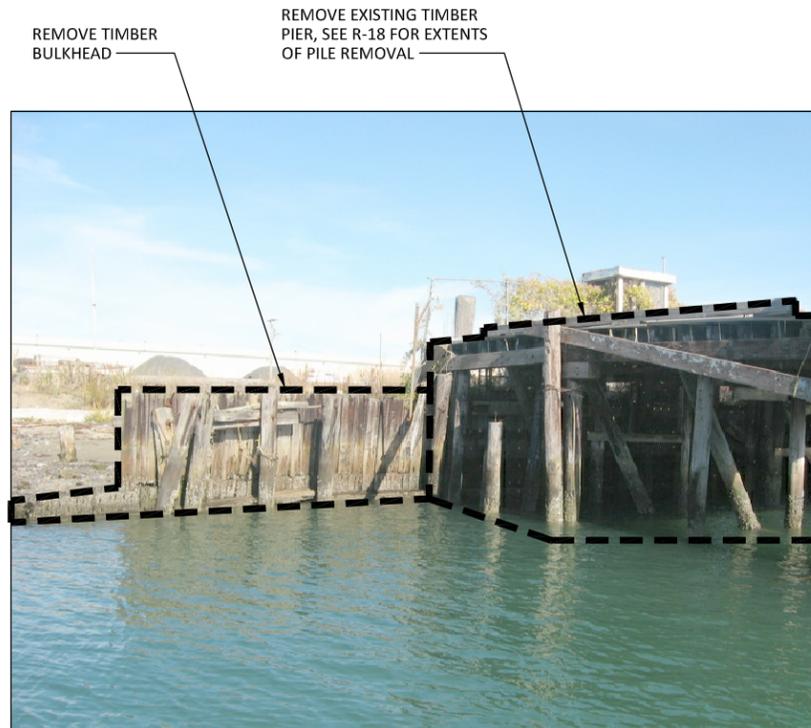


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R-2 SCALE: NTS

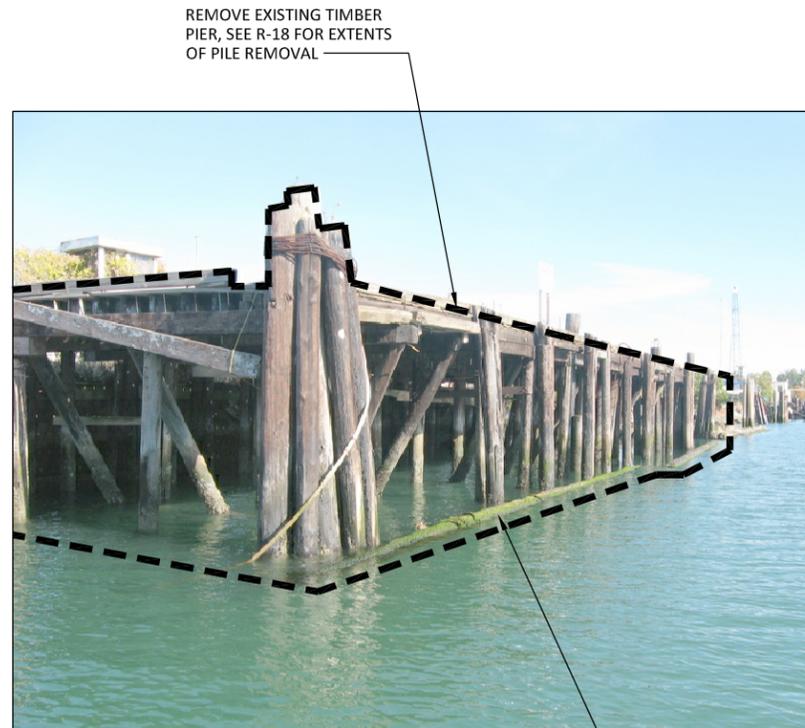


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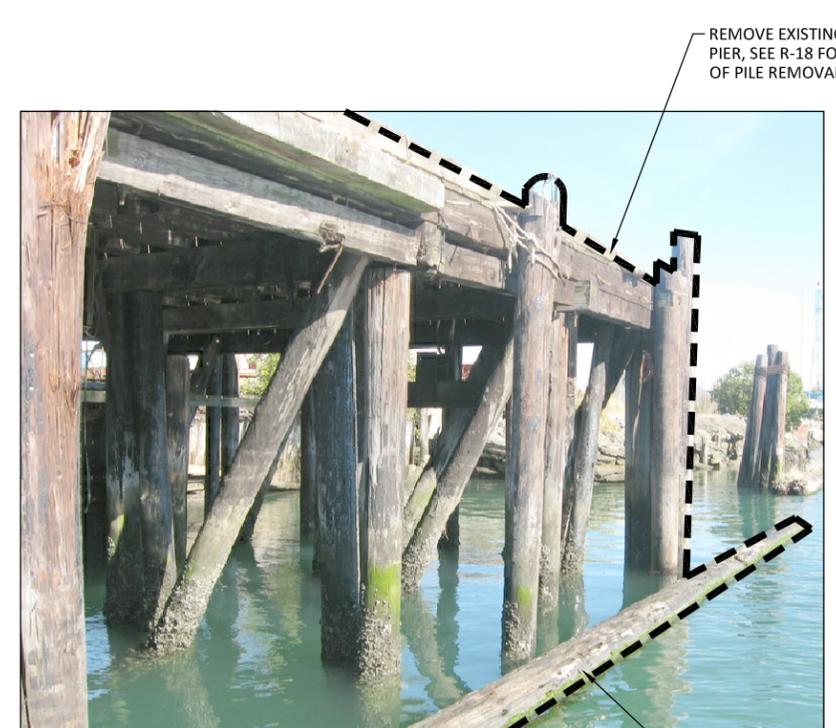
NOTES:
1. SEE SHEET R-1 FOR GENERAL SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL NOTES AND LEGEND.



4 PHOTO
R-2 SCALE: NTS



5 PHOTO
R-2 SCALE: NTS



6 PHOTO
R-2 SCALE: NTS

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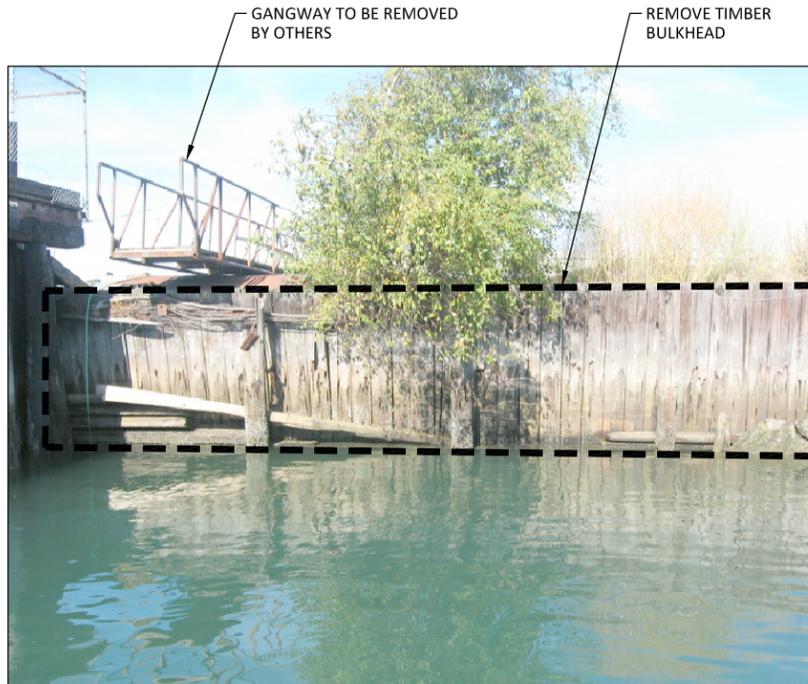
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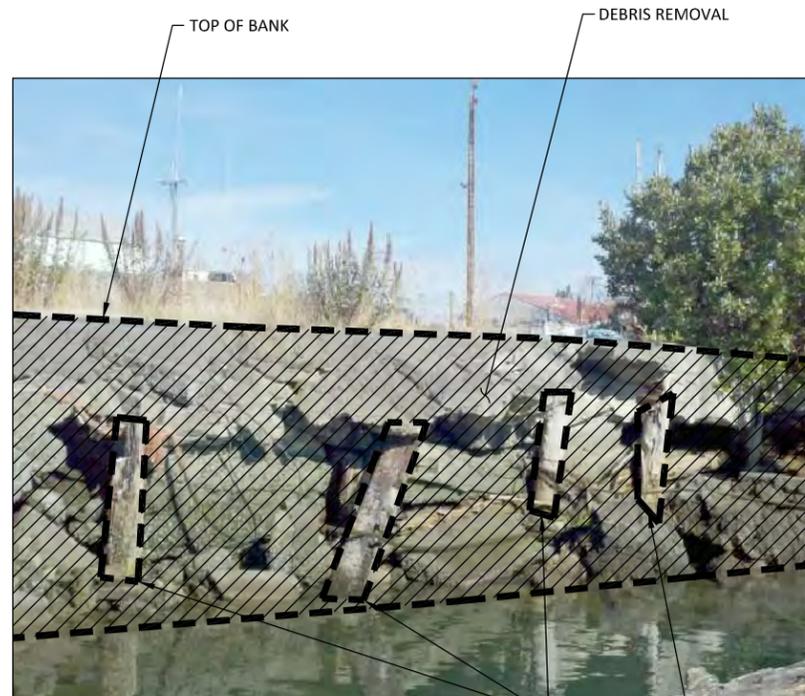
SITE, STRUCTURE AND SHORELINE DEBRIS
REMOVAL PHOTOGRAPHS

R-7

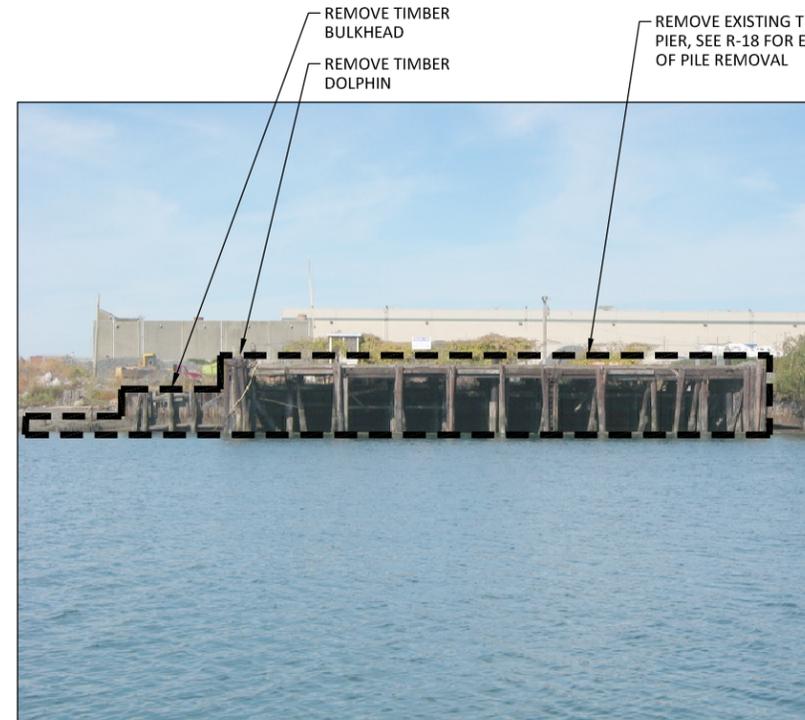
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7 PHOTO
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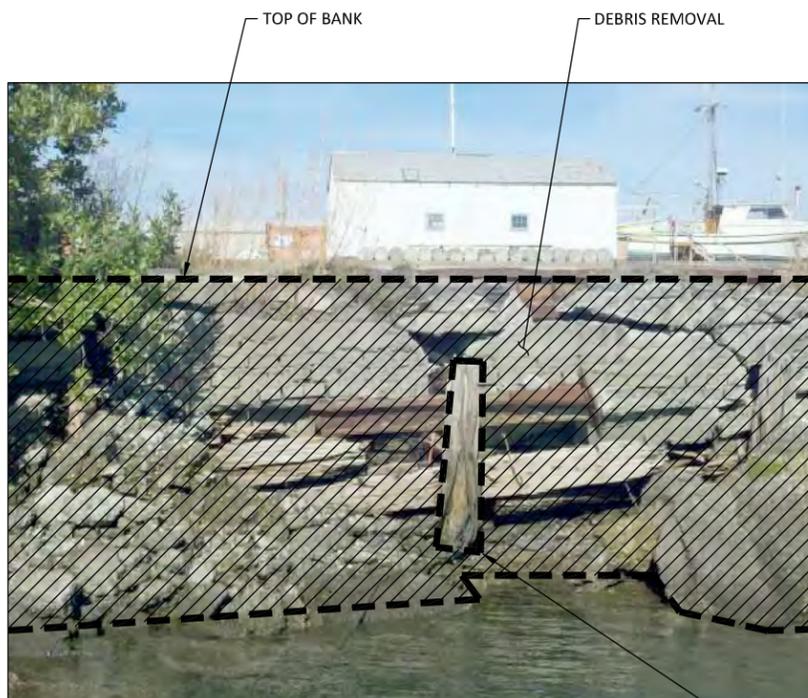
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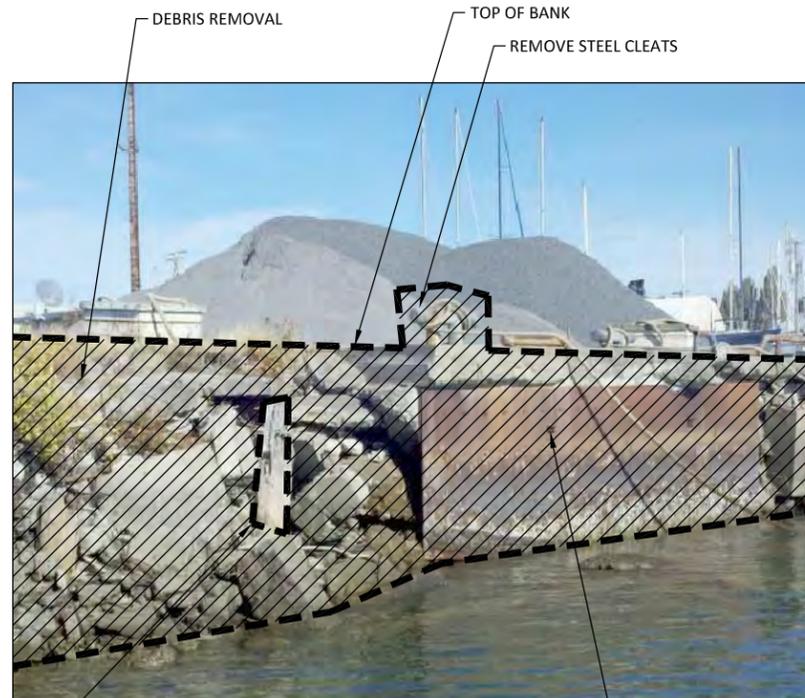
9 PHOTO
R-2 SCALE: NTS

NOTES:

- SEE SHEET R-1 FOR GENERAL SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL NOTES AND LEGEND.



10 PHOTO
R-2 SCALE: NTS



11 PHOTO
R-2 SCALE: NTS



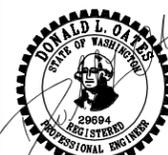
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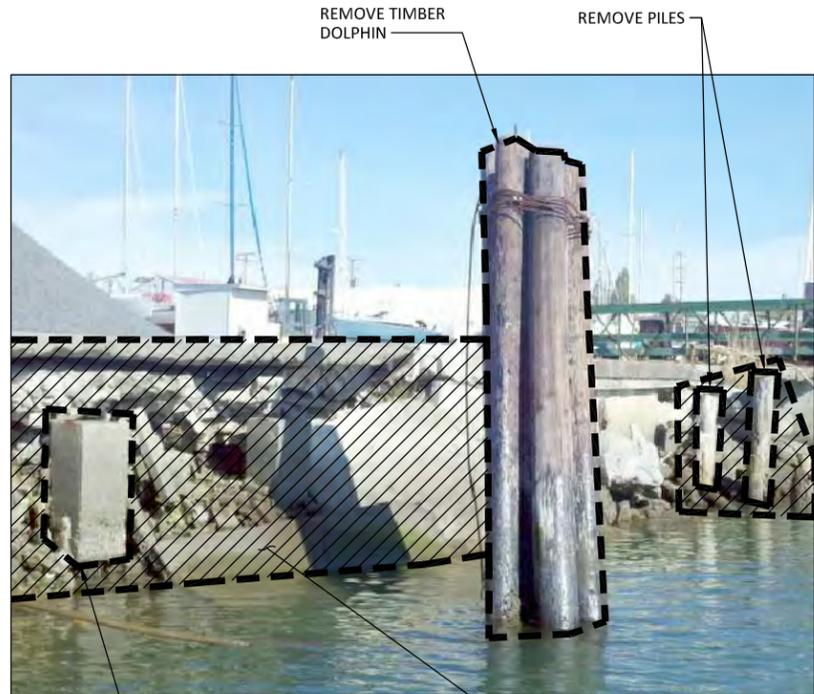
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WHATCOM WATERWAY PHASE 1 CLEANUP
BELLINGHAM, WASHINGTON

SITE, STRUCTURE AND SHORELINE DEBRIS
REMOVAL PHOTOGRAPHS

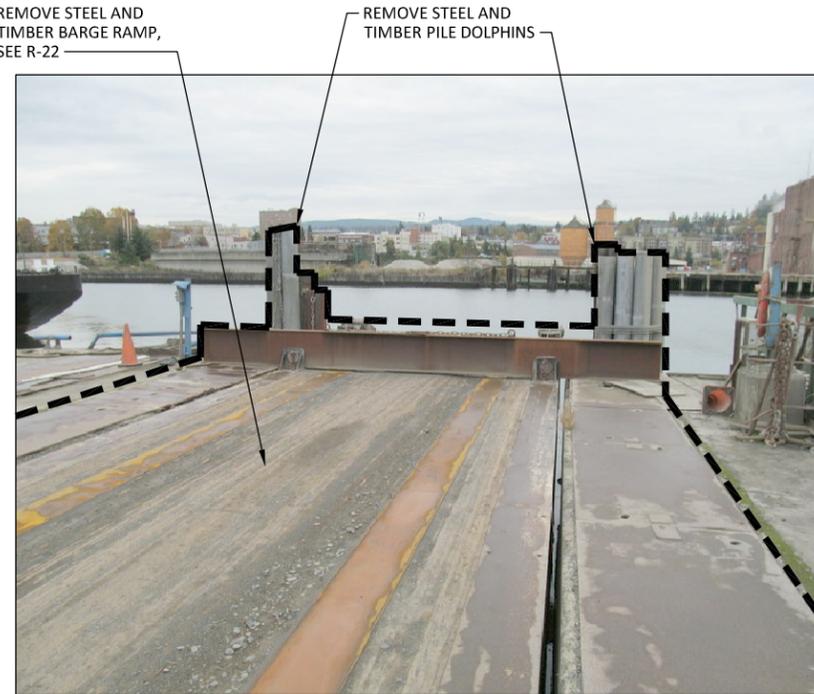
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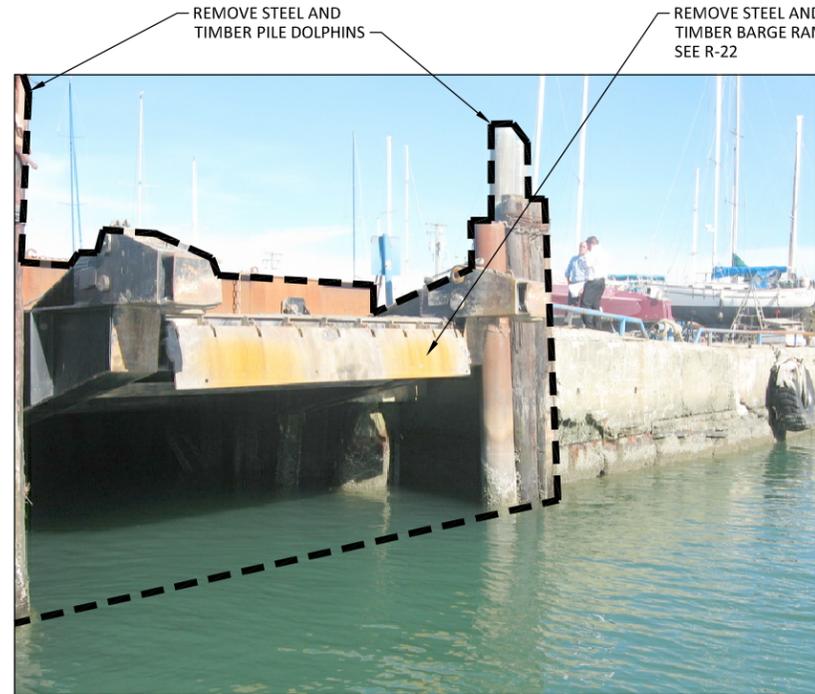


13 PHOTO
R-2 SCALE: NTS
REMOVE CONCRETE DEBRIS

REMOVE CONCRETE PILE, TYP



14 PHOTO
R-2 SCALE: NTS



15 PHOTO
R-2 SCALE: NTS

NOTES:
1. SEE SHEET R-1 FOR GENERAL SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL NOTES AND LEGEND.



16 PHOTO
R-2 SCALE: NTS

REMOVE STEEL AND TIMBER BARGE RAMP AND CONCRETE FOUNDATION, SEE R-22



17 PHOTO
R-2 SCALE: NTS



18 PHOTO
R-2 SCALE: NTS

TOP OF BANK
DEBRIS REMOVAL

EXISTING FLOATING DOCK TO BE RELOCATED BY OTHERS PRIOR TO CONSTRUCTION

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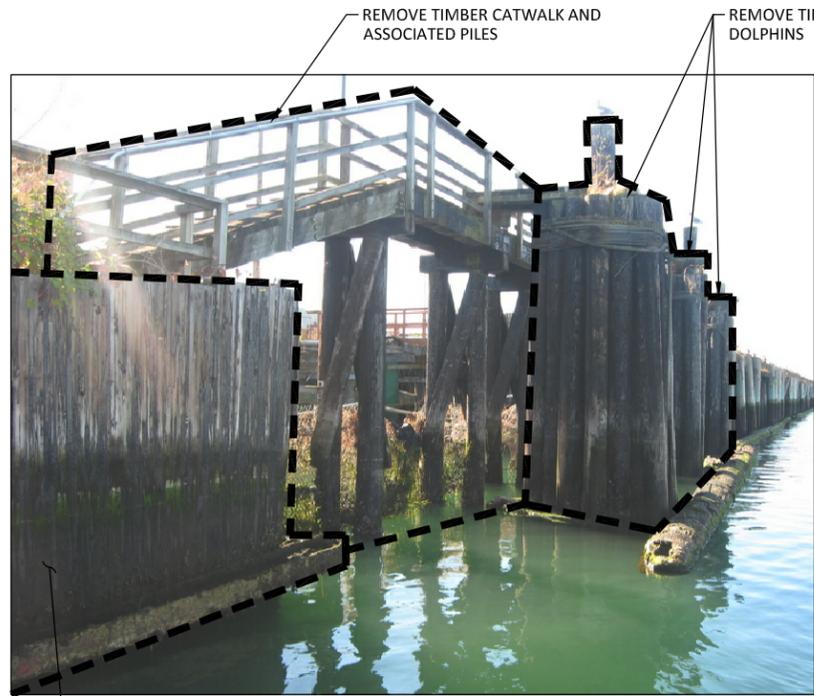
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WHATCOM WATERWAY PHASE 1 CLEANUP
BELLINGHAM, WASHINGTON

SITE, STRUCTURE AND SHORELINE DEBRIS
REMOVAL PHOTOGRAPHS

R-9

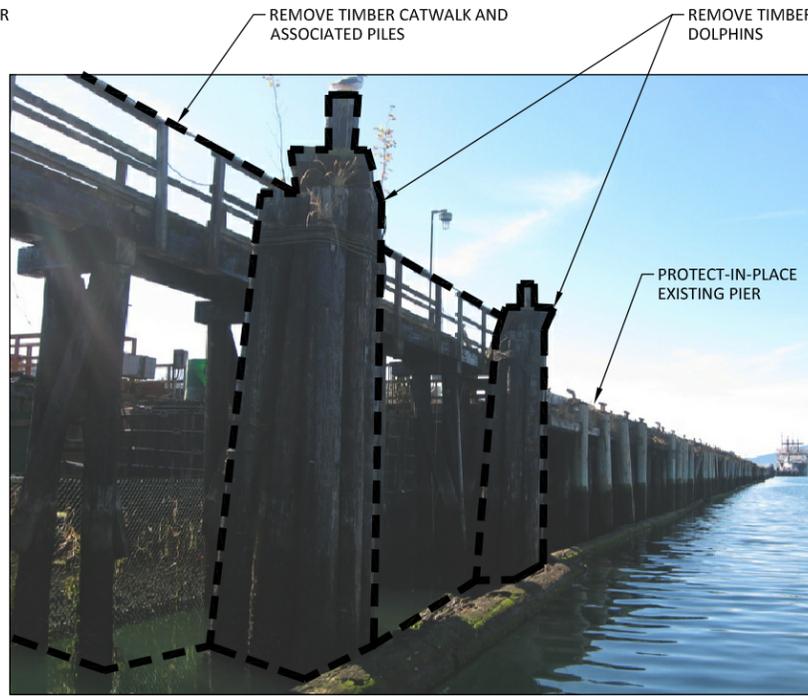
SHEET NO. 15 OF 104



REMOVE TIMBER CATWALK AND ASSOCIATED PILES

REMOVE TIMBER DOLPHINS

19 PHOTO
R-2 SCALE: NTS
REMOVE TIMBER AND STEEL BULKHEAD AND ASSOCIATED STRUCTURES WITHIN DREDGE SLOPE SEE SHEET R-19 AND C-SHEETS

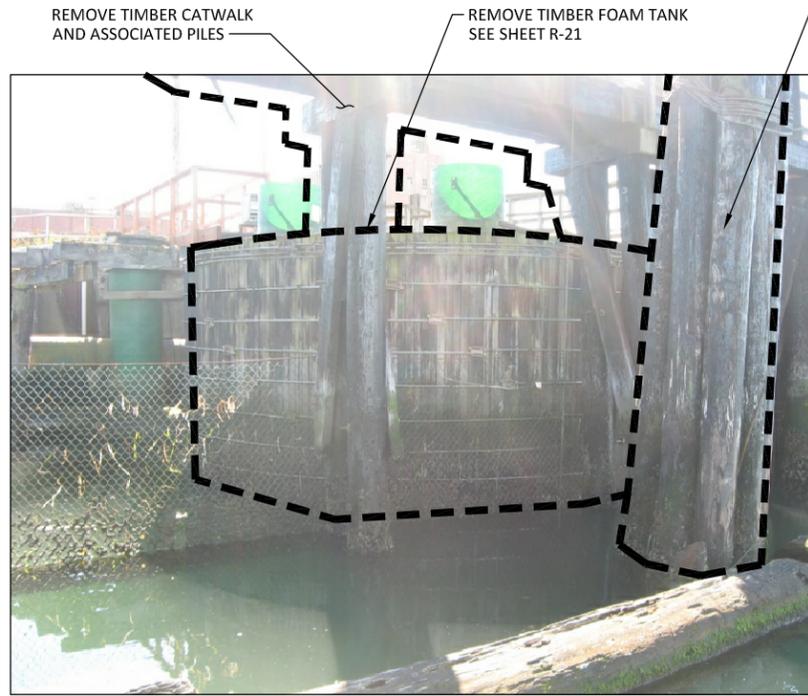


REMOVE TIMBER CATWALK AND ASSOCIATED PILES

REMOVE TIMBER DOLPHINS

PROTECT-IN-PLACE EXISTING PIER

20 PHOTO
R-2 SCALE: NTS



REMOVE TIMBER CATWALK AND ASSOCIATED PILES

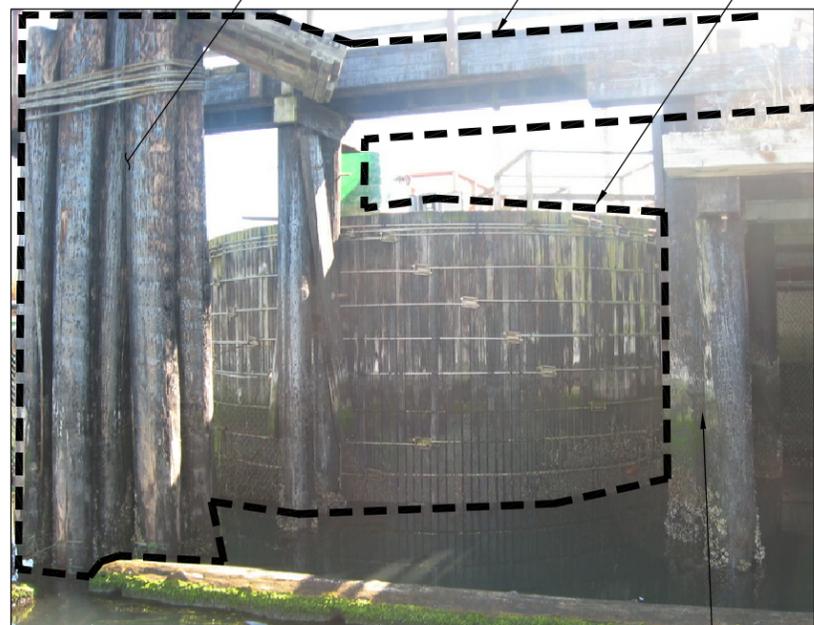
REMOVE TIMBER FOAM TANK SEE SHEET R-21

REMOVE TIMBER DOLPHIN

21 PHOTO
R-2 SCALE: NTS

NOTES:

1. SEE SHEET R-1 FOR GENERAL SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL NOTES AND LEGEND.
2. REMOVE CLARIFIER STRUCTURE TO 2' BELOW GRADE OUTSIDE LIMIT OF DREDGE SLOPE, SEE R-20. FOR REMOVAL WITHIN THE DREDGE SLOPE SEE R-19. SEE C-SHEETS FOR LIMITS OF DREDGE SLOPE.

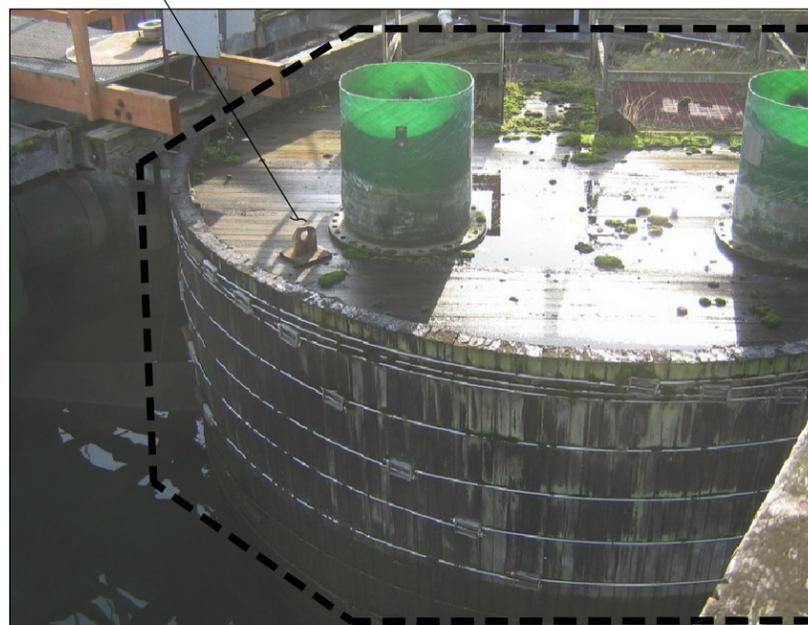


REMOVE TIMBER DOLPHIN

REMOVE TIMBER CATWALK AND ASSOCIATED PILES

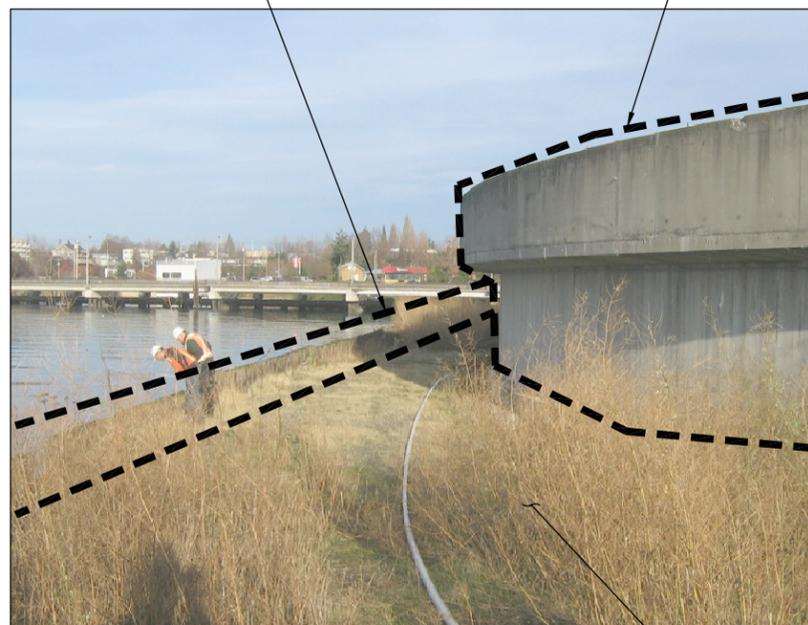
REMOVE TIMBER FOAM TANK AND PIPING, SEE SHEET R-21

22 PHOTO
R-2 SCALE: NTS



PROTECT-IN-PLACE EXISTING PIER AND PILE

23 PHOTO
R-2 SCALE: NTS



REMOVE TIMBER BULKHEAD AND APPROXIMATELY 90LF OF STEEL BULKHEAD AND ASSOCIATED STRUCTURES WITHIN THE DREDGE SLOPE SEE SHEET R-19 AND C-SHEETS

REMOVE CLARIFIER SEE NOTE 2

24 PHOTO
R-2 SCALE: NTS

SEE CIVIL SHEETS FOR DREDGE SLOPE IN CLARIFIER AREA

CALL 48 HOURS BEFORE YOU DIG DIAL 811

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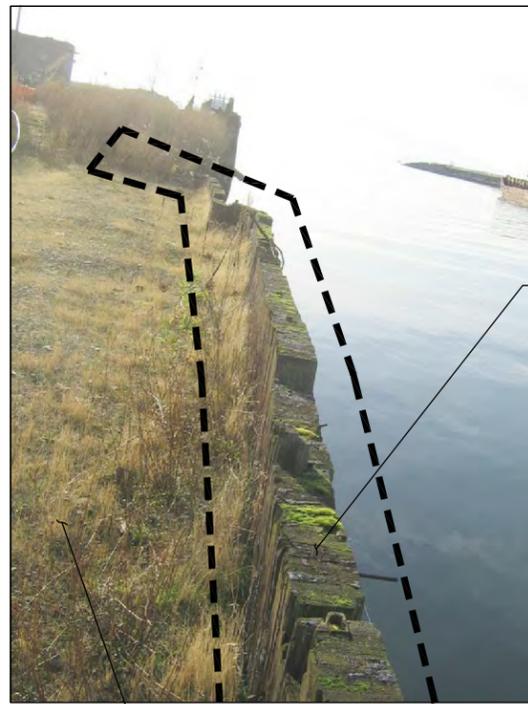
WHATCOM WATERWAY PHASE 1 CLEANUP
BELLINGHAM, WASHINGTON

SITE, STRUCTURE AND SHORELINE DEBRIS
REMOVAL PHOTOGRAPHS

R-10

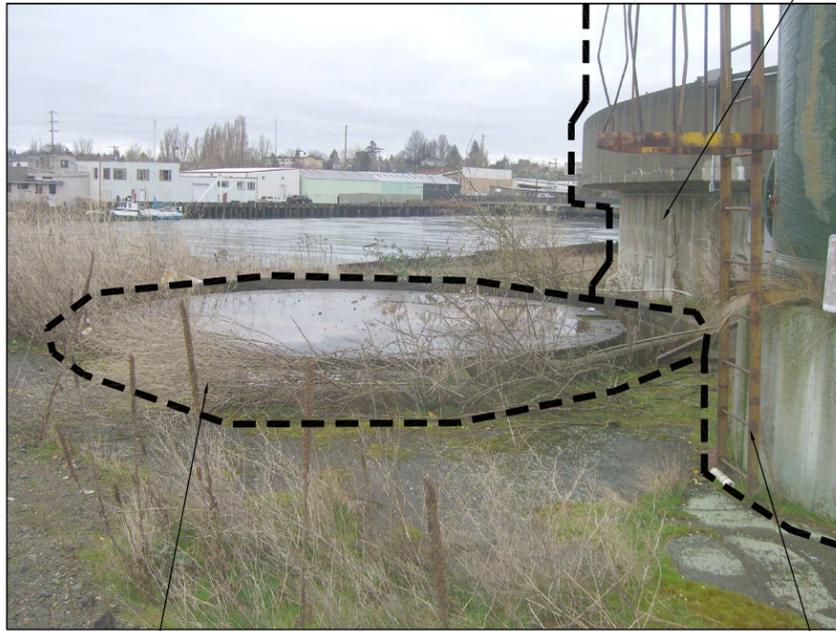
SHEET NO. 16 OF 104

ONE INCH AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY



REMOVE TIMBER BULKHEAD AND APPROXIMATELY 90LF OF STEEL BULKHEAD AND ASSOCIATED STRUCTURES WITHIN DREDGE SLOPE. SEE R-19 AND C-SHEETS

25 PHOTO
R-2 SCALE: NTS



REMOVE REMNANT CONCRETE TANK FOUNDATION, SEE NOTE 2

26 PHOTO
R-2 SCALE: NTS

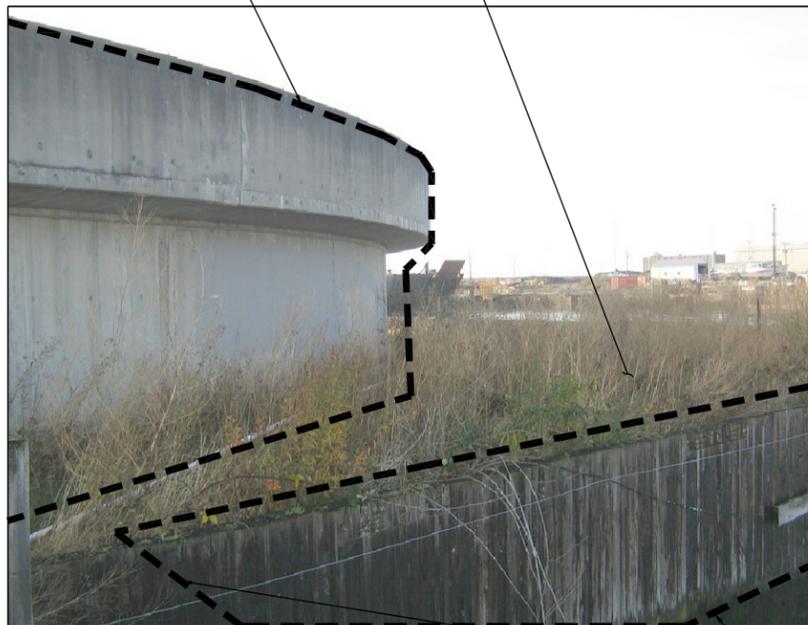


REMOVE PHOSPHORIC ACID TANK AND CONCRETE FOUNDATION

27 PHOTO
R-2 SCALE: NTS

REMOVE TIMBER BULKHEAD AND APPROXIMATELY 90LF OF STEEL BULKHEAD AND RELATED STRUCTURES WITHIN DREDGE SLOPE, SEE R-19, AND C - SHEETS

- NOTES:
- SEE SHEET R-1 FOR GENERAL SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL NOTES AND LEGEND.
 - OUTSIDE OF DREDGE LIMITS REMOVE STRUCTURE AND PILE DOWN 2 FEET BELOW EXISTING GRADE, WHERE LOCATED WITHIN THE DREDGE SLOPE CUT AND REMOVE STRUCTURE AND PILES AT FACE OF DREDGE SLOPE
 - REMOVE CLARIFIER STRUCTURE TO 2' BELOW GRADE OUTSIDE LIMIT OF DREDGE SLOPE, SEE R-20. FOR REMOVAL WITHIN THE DREDGE SLOPE SEE R-19. SEE C-SHEETS FOR LIMITS OF DREDGE SLOPE.



REMOVE CLARIFIER, SEE NOTE 3

SEE CIVIL SHEETS FOR DREDGE SLOPE IN CLARIFIER AREA

28 PHOTO
R-2 SCALE: NTS



DEBRIS REMOVAL

REMOVE PILES WITHIN AREA BELOW BULKHEAD

29 PHOTO
R-2 SCALE: NTS

REMOVE TIMBER BULKHEAD AND APPROXIMATELY 90LF OF STEEL BULKHEAD AND ASSOCIATED STRUCTURES WITHIN DREDGE SLOPE, SEE R-19, AND C - SHEETS



CUT OFF PILES 6-INCHES ABOVE TOP OF BULKHEAD

DEBRIS REMOVAL

REMOVE PILES WITHIN AREA BELOW BULKHEAD

30 PHOTO
R-2 SCALE: NTS

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ONE INCH AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY

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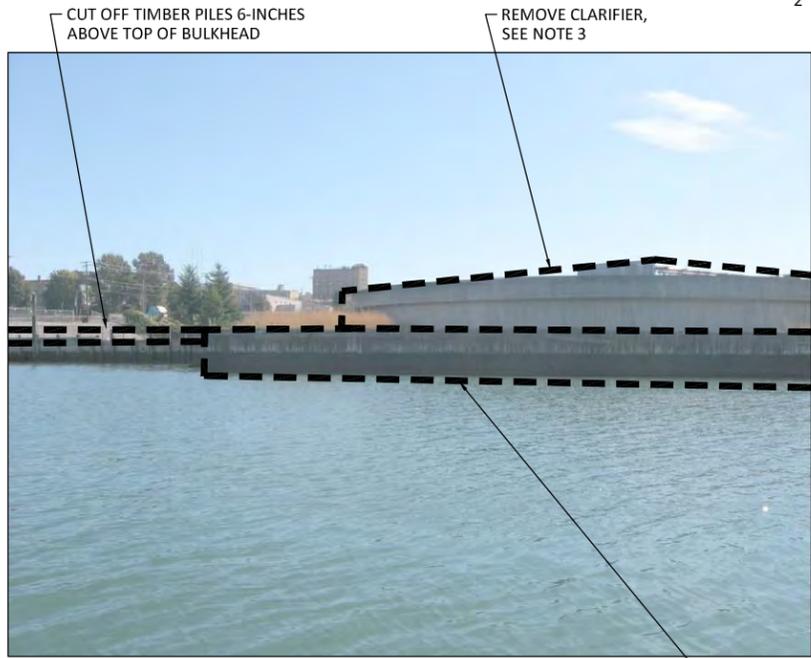
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WHATCOM WATERWAY PHASE 1 CLEANUP
 BELLINGHAM, WASHINGTON

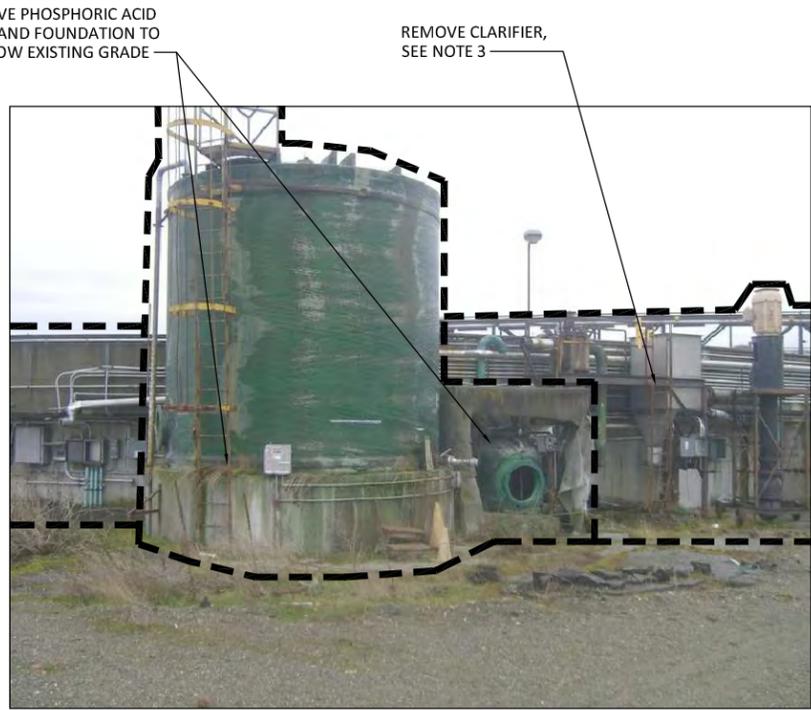
SITE, STRUCTURE AND SHORELINE DEBRIS
 REMOVAL PHOTOGRAPHS

R-11

SHEET NO. 17 OF 104



31 PHOTO
R-2 SCALE: NTS



32 PHOTO
R-2 SCALE: NTS



33 PHOTO
R-2 SCALE: NTS

- NOTES:
- SEE SHEET R-1 FOR GENERAL SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL NOTES AND LEGEND.
 - OUTSIDE OF DREDGE LIMITS REMOVE STRUCTURE AND PILE DOWN 2 FEET BELOW EXISTING GRADE, WHERE LOCATED WITHIN THE DREDGE SLOPE CUT AND REMOVE STRUCTURE AND PILES AT FACE OF DREDGE SLOPE.
 - REMOVE CLARIFIER STRUCTURE TO 2' BELOW GRADE OUTSIDE LIMIT OF DREDGE SLOPE, SEE R-20. FOR REMOVAL WITHIN THE DREDGE SLOPE SEE R-19. SEE C-SHEETS FOR LIMITS OF DREDGE SLOPE

REMOVE CLARIFIER TIMBER AND STEEL BULKHEAD AND ASSOCIATED STRUCTURES WITHIN DREDGE SLOPE, SEE R-19 AND C - SHEETS

PROTECT-IN-PLACE EXIST TIMBER BULKHEAD

REMOVE CLARIFIER SEE NOTE 3

NO 6 SEWER PUMP PIT, SEE SHEET R-23 FOR SELECT REMOVAL

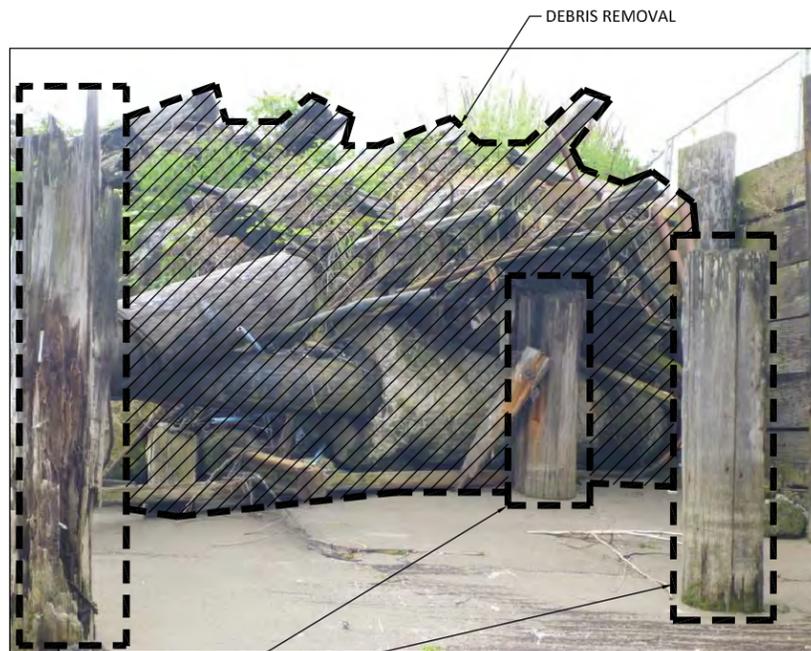
REMOVE SCUM BOX, SEE SHEET R-23



34 PHOTO
R-3 SCALE: NTS

PROTECT-IN-PLACE EXISTING TIMBER BULKHEAD

DEBRIS REMOVAL IN FRONT OF BULKHEAD AND REMOVE PILE



35 PHOTO
R-3 SCALE: NTS

DEBRIS REMOVAL

REMOVE PILE



36 PHOTO
R-3 SCALE: NTS

TOP OF BANK

DEBRIS REMOVAL AND CLEAR AND GRUB VEGETATION

CALL 48 HOURS BEFORE YOU DIG DIAL 811

ONE INCH AT FULL SCALE, IF NOT ONE INCH SCALE ACCORDINGLY

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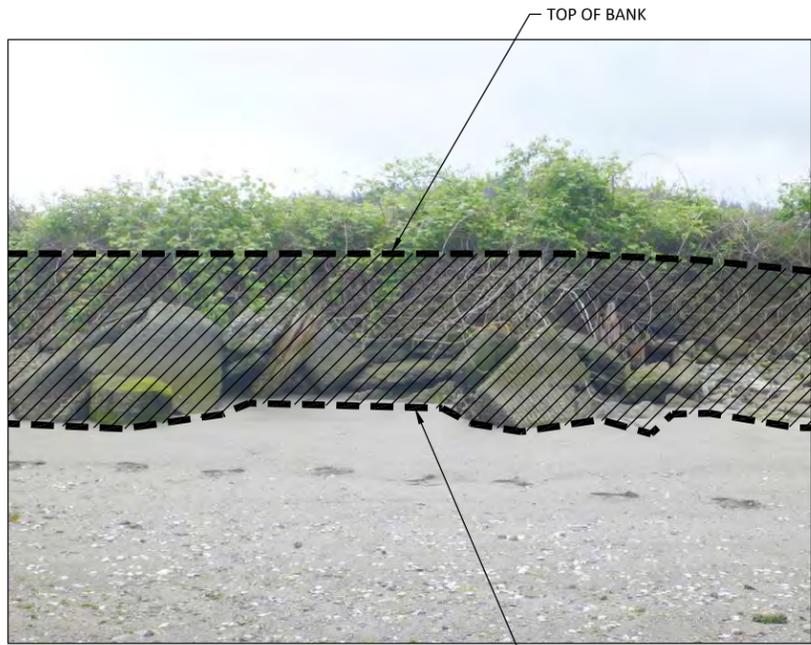
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WHATCOM WATERWAY PHASE 1 CLEANUP
 BELLINGHAM, WASHINGTON

SITE, STRUCTURE AND SHORELINE DEBRIS
 REMOVAL PHOTOGRAPHS

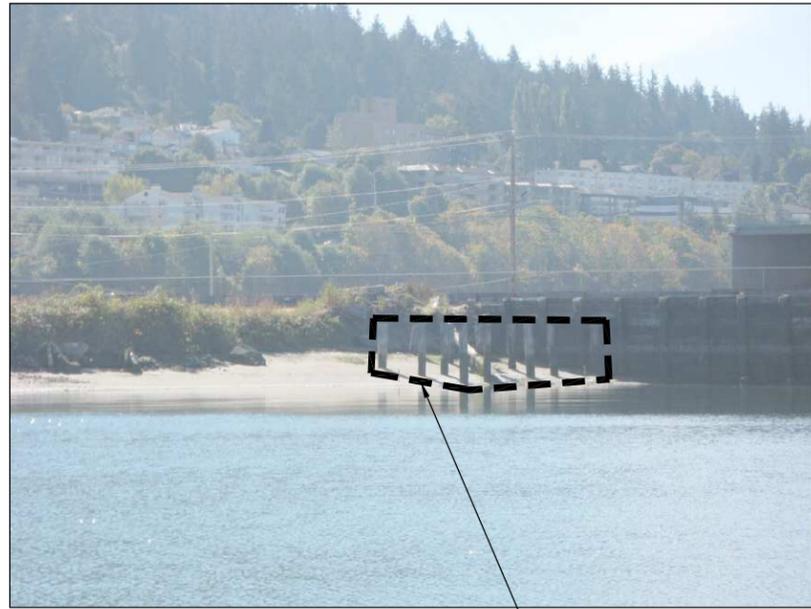
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SHEET NO. 18 OF 104



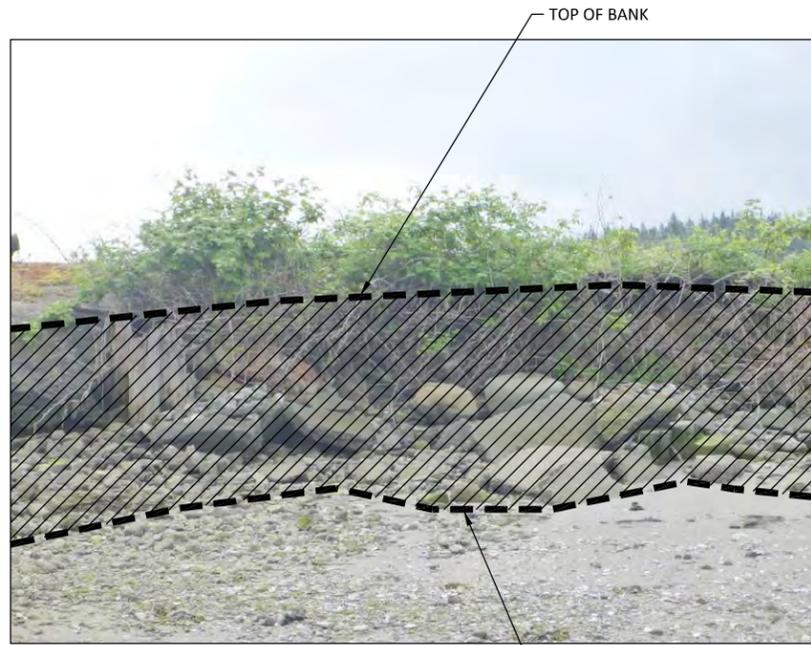
37 PHOTO
R-3 SCALE: NTS

DEBRIS REMOVAL AND CLEAR AND GRUB VEGETATION



38 PHOTO
R-3 SCALE: NTS

REMOVE TIMBER PILE



39 PHOTO
R-3 SCALE: NTS

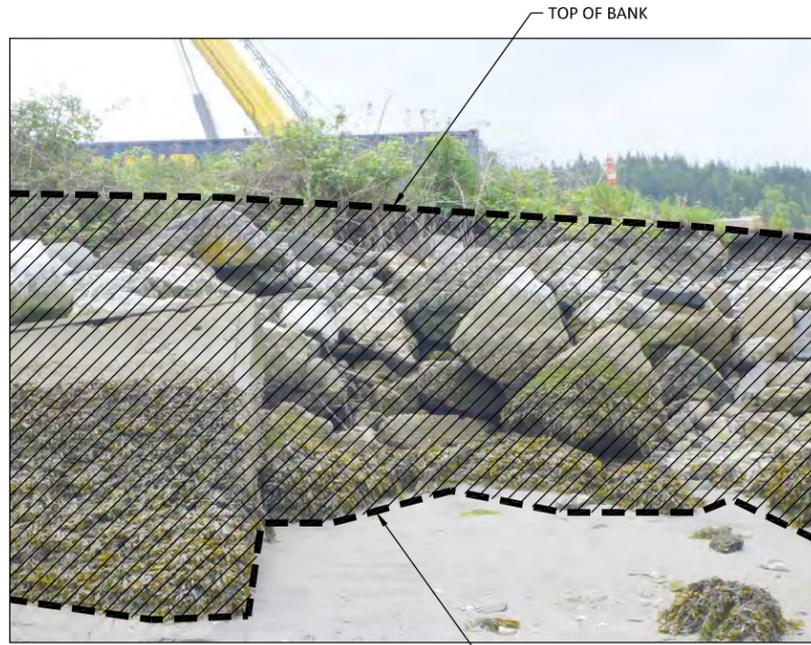
DEBRIS REMOVAL AND CLEAR AND GRUB VEGETATION

NOTES:
1. SEE SHEET R-1 FOR GENERAL SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL NOTES AND LEGEND.



40 PHOTO
R-3 SCALE: NTS

DEBRIS REMOVAL AND CLEAR AND GRUB VEGETATION



41 PHOTO
R-3 SCALE: NTS

DEBRIS REMOVAL AND CLEAR AND GRUB VEGETATION



42 PHOTO
R-3 SCALE: NTS

PROTECT-IN-PLACE CONCRETE LOG DUMP BULKHEAD AND HISTORICAL LOG TRANSFER STRUCTURE AND BULKHEAD

DEBRIS REMOVAL

CALL 48 HOURS BEFORE YOU DIG DIAL 811

ONE INCH AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY

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WHATCOM WATERWAY PHASE 1 CLEANUP
 BELLINGHAM, WASHINGTON
 SITE, STRUCTURE AND SHORELINE DEBRIS
 REMOVAL PHOTOGRAPHS

R-13
 SHEET NO. 19 OF 104



43 PHOTO
R-3 SCALE: NTS

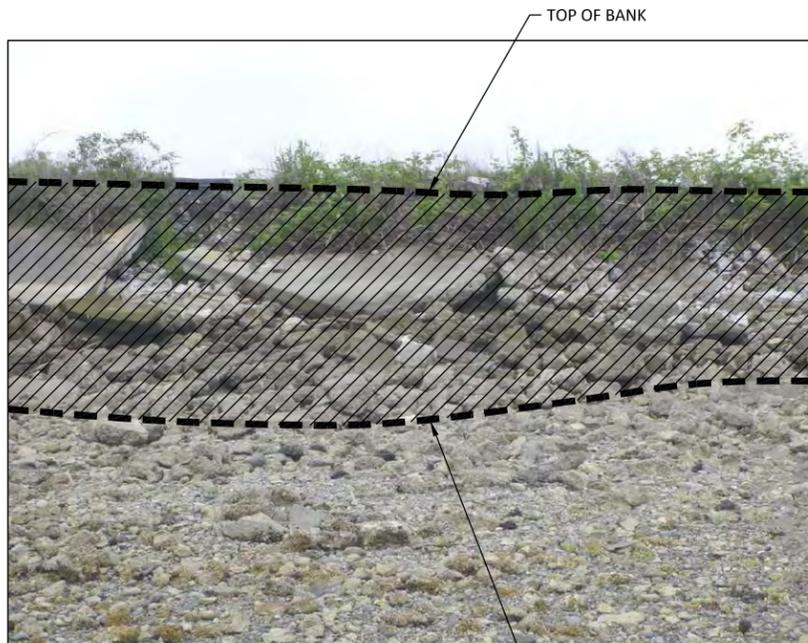


44 PHOTO
R-3 SCALE: NTS



45 PHOTO
R-3 SCALE: NTS

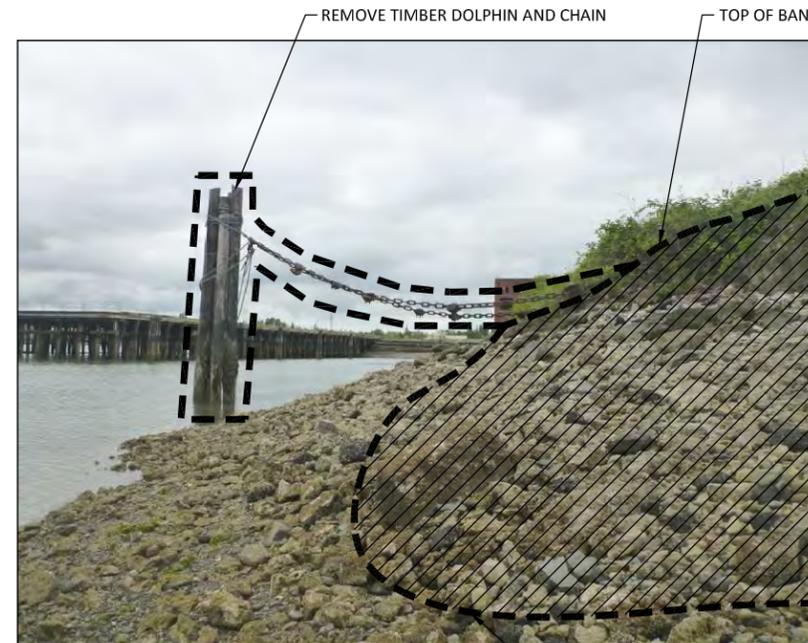
NOTES:
1. SEE SHEET R-1 FOR GENERAL SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL NOTES AND LEGEND.



46 PHOTO
R-3 SCALE: NTS



47 PHOTO
R-3 SCALE: NTS



48 PHOTO
R-3 SCALE: NTS

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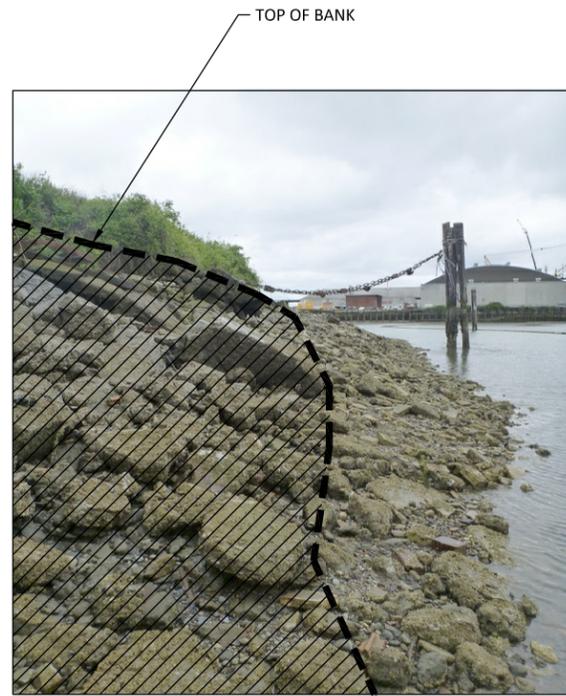
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WHATCOM WATERWAY PHASE 1 CLEANUP
BELLINGHAM, WASHINGTON

SITE, STRUCTURE AND SHORELINE DEBRIS
REMOVAL PHOTOGRAPHS

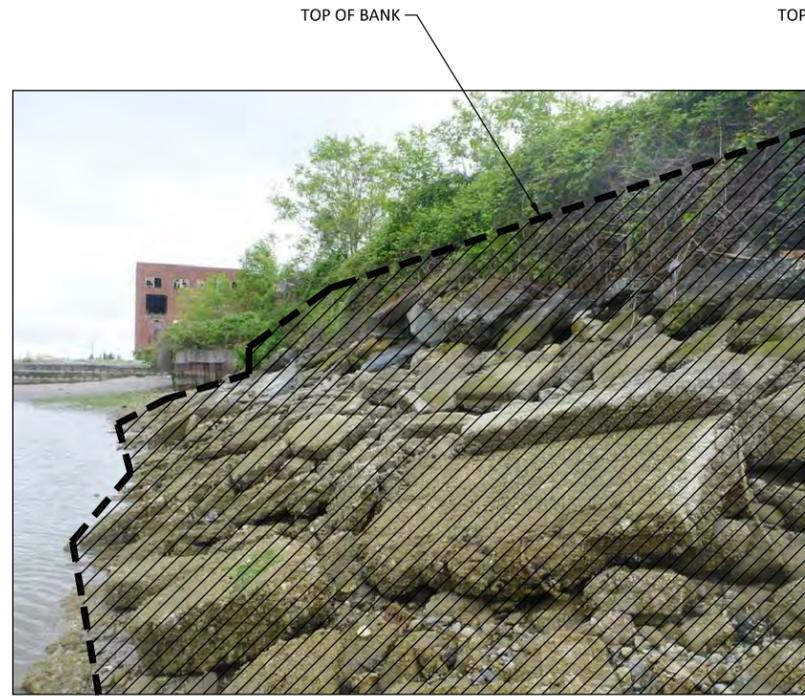
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SHEET NO. 20 OF 104



49 PHOTO
R-3 SCALE: NTS

DEBRIS REMOVAL AND CLEAR AND GRUB VEGETATION



50 PHOTO
R-3 SCALE: NTS

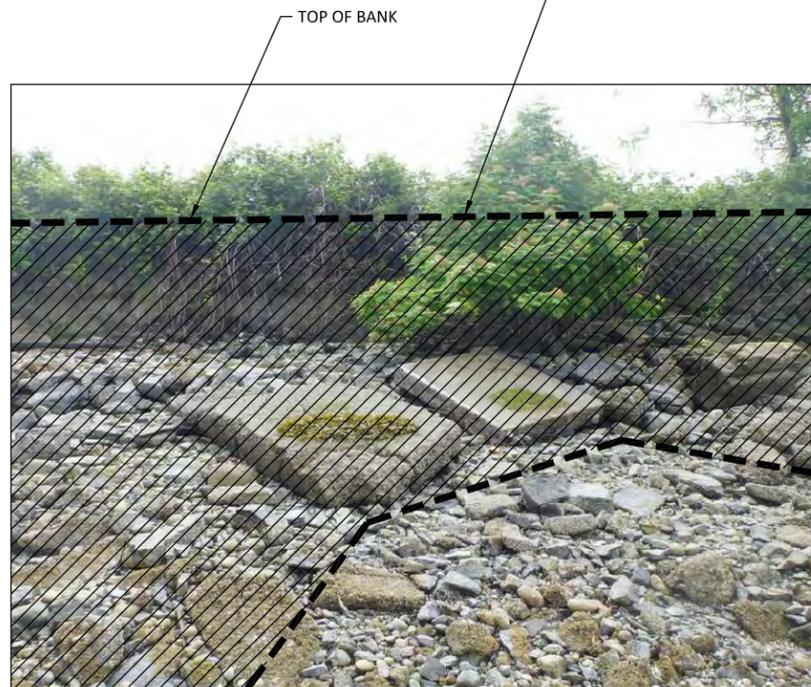
DEBRIS REMOVAL AND CLEAR AND GRUB VEGETATION



51 PHOTO
R-3 SCALE: NTS

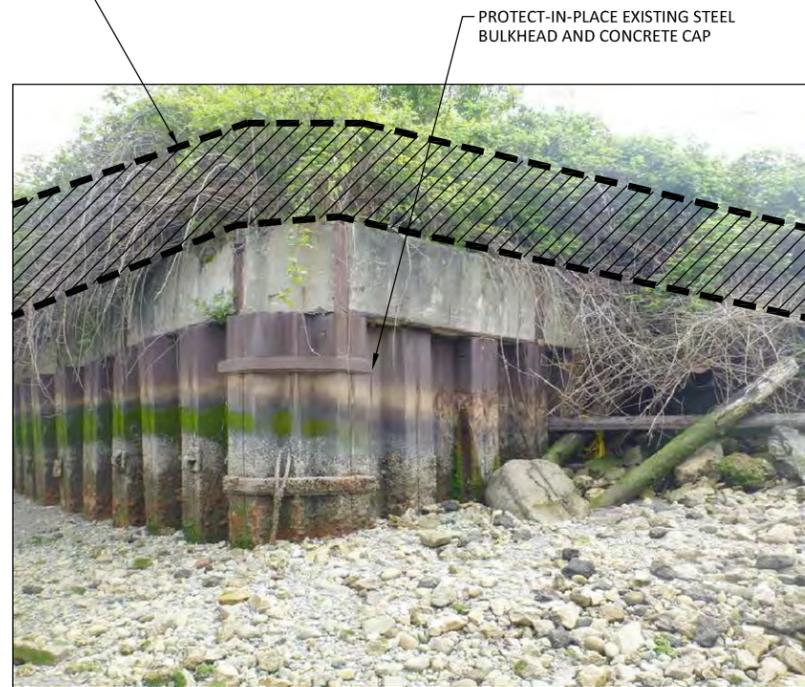
DEBRIS REMOVAL AND CLEAR AND GRUB VEGETATION

- NOTES:
- SEE SHEET R-1 FOR GENERAL SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL NOTES AND LEGEND.



52 PHOTO
R-3 SCALE: NTS

DEBRIS REMOVAL AND CLEAR AND GRUB VEGETATION



53 PHOTO
R-3 SCALE: NTS

PROTECT-IN-PLACE EXISTING BULKHEAD AND CONCRETE CAP



54 PHOTO
R-3 SCALE: NTS

PROTECT-IN-PLACE EXISTING PIER AND PILE

PROTECT-IN-PLACE CONCRETE BLOCK BULKHEAD

DEBRIS REMOVAL

CALL 48 HOURS BEFORE YOU DIG DIAL 811

ONE INCH AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY

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WHATCOM WATERWAY PHASE 1 CLEANUP
 BELLINGHAM, WASHINGTON

SITE, STRUCTURE AND SHORELINE DEBRIS
 REMOVAL PHOTOGRAPHS

R-15

SHEET NO. 21 OF 104

PROTECT-IN-PLACE TIMBER DOLPHINS

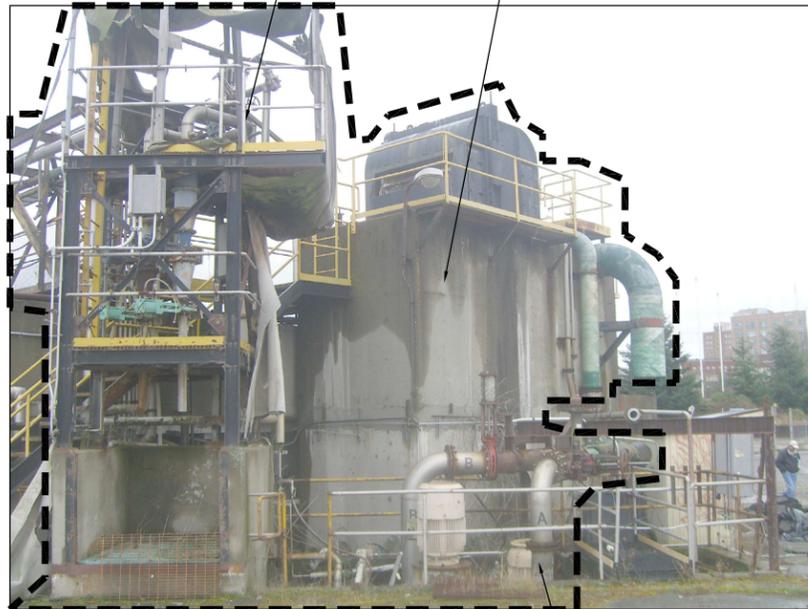
PROTECT-IN-PLACE TIMBER DOLPHINS



55 PHOTO R-3 SCALE: NTS

REMOVE STRUCTURE ASSOCIATED WITH CLARIFIER

REMOVE SCUM BOX, SEE SHEET R-23



56 PHOTO R-2 SCALE: NTS

REMOVE ABOVE GRADE PORTIONS OF NO. 6 SEWER LIFT STATION, SEE SHEET R-23

REMOVE TIMBER DOLPHIN

PROTECT-IN-PLACE CONCRETE AND TIMBER DOLPHINS



57 PHOTO R-3 SCALE: NTS

RELOCATE LOG BOOM PER SHEET R-3

NOTES:

1. SEE SHEET R-1 FOR GENERAL SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL NOTES AND LEGEND.
2. EXTEND 4"Ø PVC STORM DRAIN PIPE ±6 FEET TO 6 INCHES BEYOND THE FACE OF CAPPED SLOPE, EXTEND USING LIKE MATERIALS. SEE C-SHEETS FOR CAPPED SLOPE.
3. REMOVE CLARIFIER STRUCTURE TO 2' BELOW GRADE OUTSIDE LIMIT OF DREDGE SLOPE, SEE R-20. FOR REMOVAL WITHIN THE DREDGE SLOPE SEE R-19. SEE C-SHEETS FOR LIMITS OF DREDGE SLOPE.

PROTECT-IN-PLACE EXISTING 4"Ø PVC STORM DRAIN PIPE AND ROOF DRAIN PIPES, CAP ALL OTHER STORM DRAIN PIPES ALONG EXISTING TIMBER BULKHEAD, SEE NOTE 2

2-TIER LOG POND TIMBER BULKHEAD, CUT DOWN AND REMOVE BOTH ROWS OF PILE 6-INCHES ABOVE TIEBACK CONNECTION, SEE DETAIL

1 R-3



58 PHOTO R-3 SCALE: NTS

REMOVE CLARIFIER, SEE NOTE 3



59 PHOTO R-2 SCALE: NTS

REMOVE SCUM BOX AND ALL ASSOCIATED UTILITIES TO 2' BELOW FINISHED GRADE SEE SHEET R-23

RECONNECT EXISTING HANGER AND STRAP SUPPORT USING A STEEL BOLT PER GENERAL STRUCTURAL NOTES ON S-1

DISCONNECT AND REMOVE EXISTING 42"Ø FRP PIPE EAST OF EXISTING FLANGE



60 PHOTO R-21 SCALE: NTS

CLEAN OR REPLACE EXISTING BOLT TO ENSURE EXISTING BRACE AND PIPE CAN MOVE LATERALLY DURING EXPANSION AND CONTRACTION

PROTECT-IN-PLACE EXISTING FLANGE, EXPANSION JOINT, PIPE AND PIPE SUPPORT WEST OF DISCONNECTION POINT

CALL 48 HOURS BEFORE YOU DIG DIAL 811

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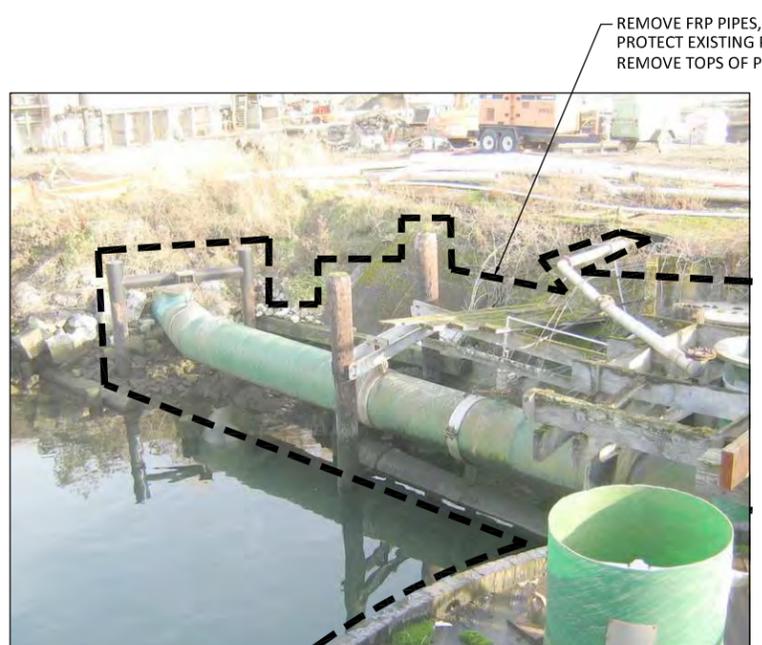


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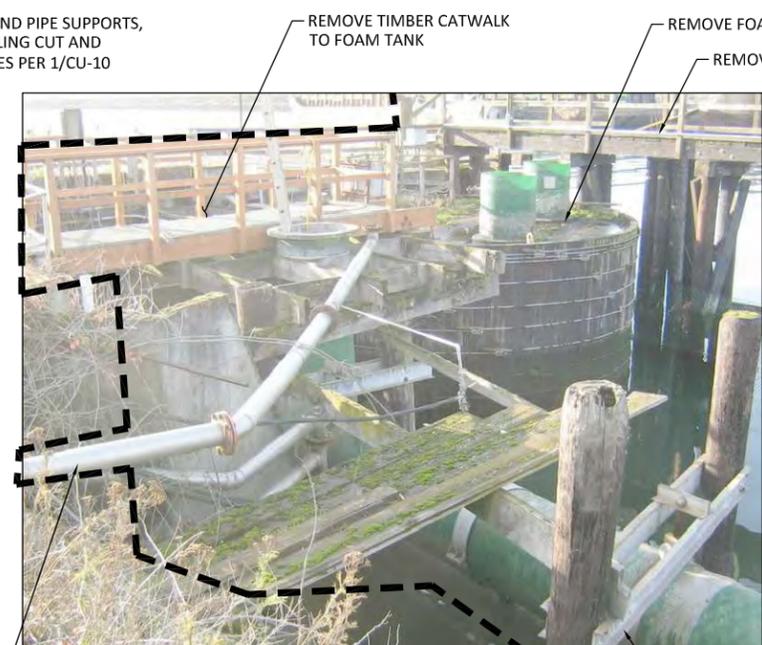
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WHATCOM WATERWAY PHASE 1 CLEANUP BELLINGHAM, WASHINGTON
SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL PHOTOGRAPHS

R-16 SHEET NO. 22 OF 104

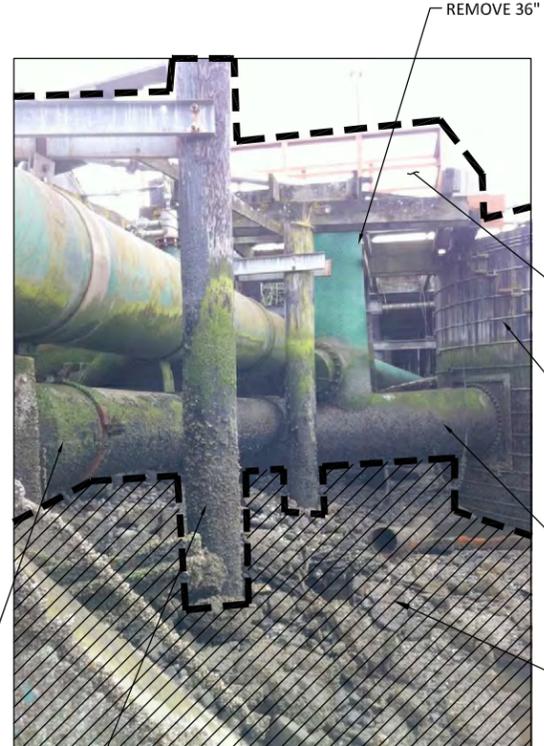


REMOVE FRP PIPES, AND PIPE SUPPORTS, PROTECT EXISTING PILING CUT AND REMOVE TOPS OF PILES PER 1/CU-10



REMOVE TIMBER CATWALK TO FOAM TANK

REMOVE FOAM TANK
REMOVE TIMBER CATWALK



REMOVE 36" Ø FRP PIPE

REMOVE TIMBER CATWALK TO FOAM TANK

REMOVE TIMBER FOAM TANK

REMOVE FRP PIPING

DEBRIS REMOVAL

NOTE:

1. SEE SHEET R-1 FOR GENERAL SITE, STRUCTURE AND SHORELINE DEBRIS REMOVAL NOTES AND LEGEND
2. PHOTOS OF EXISTING FOAM TANK PIPING ARE PROVIDED TO SHOW THE GENERAL AREA OF THE FOAM TANK AND EXISTING PIPING AND ILLUSTRATE THE CONSTRAINTS AND COMPLEXING OF TANK AND PIPING DEMOLITION.

61 PHOTO
R-20 SCALE: NTS

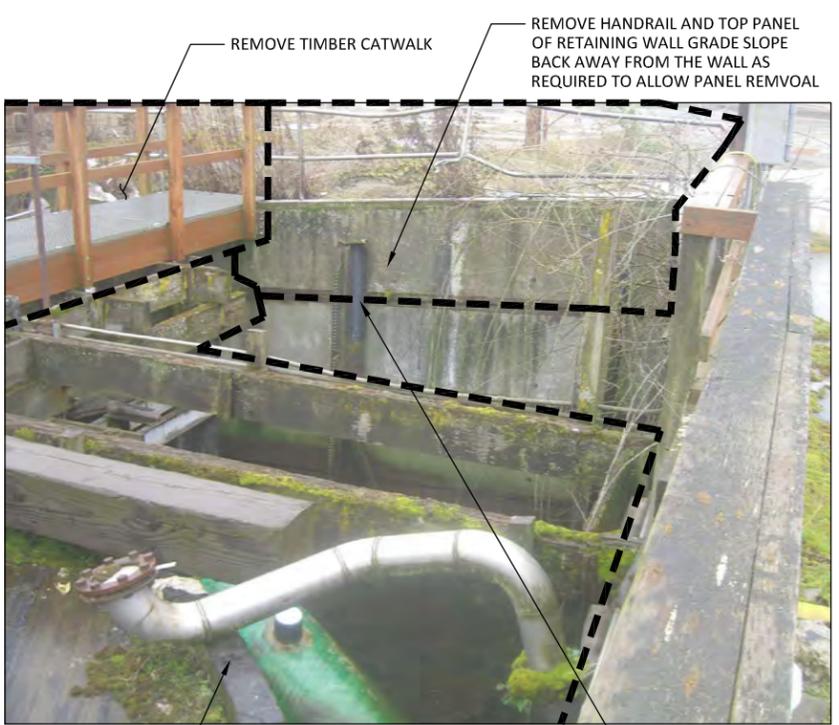
REMOVE EXISTING UTILITY PIPE AND CUT AND CAP AT EXISTING SLOPE

62 PHOTO
R-20 SCALE: NTS

CUT AND CAP 24" Ø FRP PIPE 2 FEET WEST OF CONCRETE BLOCK

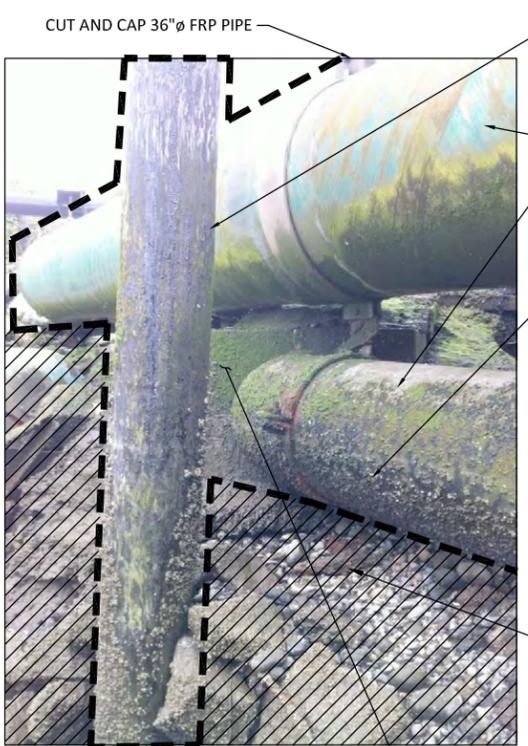
63 PHOTO
R-20 SCALE: NTS

REMOVE EXISTING PIPE AND PIPE SUPPORTS, PROTECT EXISTING PILES CUT AND REMOVE TOPS OF PILES PER 1/CU-10



REMOVE TIMBER CATWALK

REMOVE HANDRAIL AND TOP PANEL OF RETAINING WALL GRADE SLOPE BACK AWAY FROM THE WALL AS REQUIRED TO ALLOW PANEL REMOVAL



CUT AND CAP 36" Ø FRP PIPE

REMOVE FRP PIPING

CUT AND CAP 24" Ø FRP PIPE 2 FEET WEST OF CONCRETE BLOCK

DEBRIS REMOVAL

PROTECT-IN-PLACE EXISTING CONCRETE CONCRETE BLOCK



REMOVE CONCRETE WALL AT 40" Ø FRP PIPE

REMOVE FRP STANDPIPE

64 PHOTO
R-20 SCALE: NTS

REMOVE FOAM TANK AND PIPING, SEE SHEET R-21 FOR EXTENTS AND SEQUENCING

CUT AND REMOVE STEEL PILE AT BOTTOM OF TOP PANEL TO BE REMOVED

65 PHOTO
R-20 SCALE: NTS

66 PHOTO
R-20 SCALE: NTS

CALL 48 HOURS BEFORE YOU DIG DIAL 811

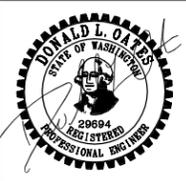
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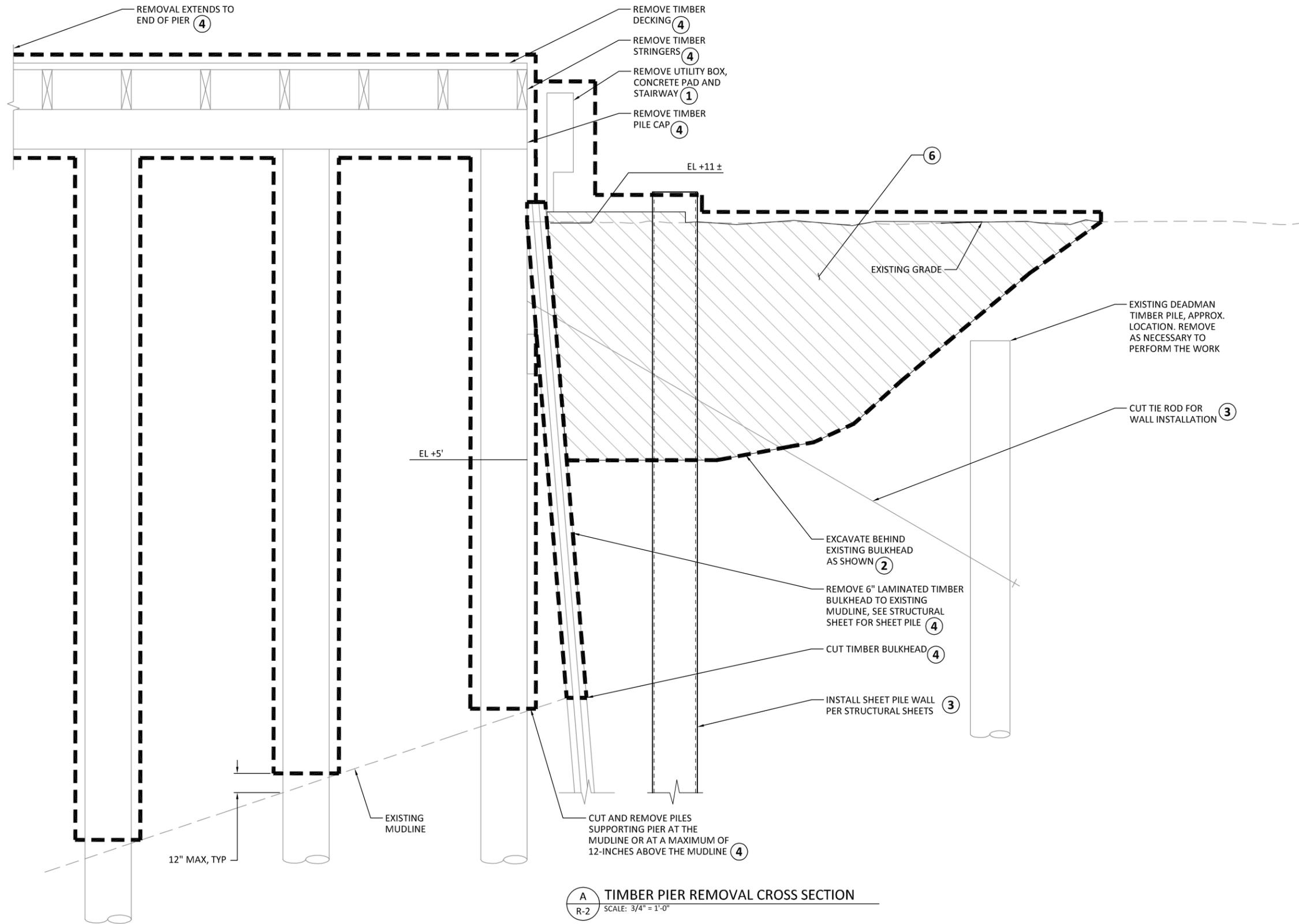
**WHATCOM WATERWAY PHASE 1 CLEANUP
BELLINGHAM, WASHINGTON**

**SITE, STRUCTURE AND SHORELINE DEBRIS
REMOVAL PHOTOGRAPHS**

R-17

SHEET NO. 23 OF 104

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- REMOVAL SEQUENCE KEY NOTES:**
- ① REMOVE UTILITY BOX, CONCRETE PAD, STAIRWAYS, AND OBSTRUCTIONS.
 - ② EXCAVATE DOWN TO AN APPROXIMATE EL+5 BEHIND THE EXISTING TIMBER SHEET PILE WALL AND STEEL SHEET PILE WALL ALIGNMENT.
 - ③ SHEET PILE WALL SHALL BE DRIVEN TO TIP ELEVATION PRIOR TO REMOVAL OF EXISTING TIMBER BULKHEAD, UNLESS NOTED OTHERWISE. TIE-BACKS SHALL BE REMOVED INDIVIDUALLY AND SEQUENTIALLY SO THAT EXISTING WALL STRUCTURAL INTEGRITY IS NOT COMPROMISED. SHEET PILES MUST BE DRIVEN TO AT LEAST TIP ELEVATION -34 BEFORE ADJACENT EXISTING TIE-BACKS MAY BE CUT. REMOVE DEADMAN PILE AS NECESSARY TO PERFORM WORK.
 - ④ ONCE SHEET PILE WALL IS FULLY DRIVEN, EXISTING TIMBER BULKHEAD AND ADJACENT PIER MAY BE REMOVED AND TIMBER PILES CUT AT THE MUDLINE OR AT A MAXIMUM OF 12-INCHES ABOVE THE MUDLINE. ADDITIONAL TIMBER BULKHEAD WAS OBSERVED DURING INTERIM CLEANUP, CONTRACTOR TO NOTIFY THE PORT IF EXISTING CONDITIONS VARY FROM THIS SHEET.
 - ⑤ EXCAVATION DOWN TO AN APPROXIMATE EL+5 MUST BE MAINTAINED BEHIND NEW SHEET PILE WALL DURING DREDGING AND CAPPING. SEE STRUCTURAL SHEETS FOR MAXIMUM UNBALANCED SOIL HEIGHT REQUIREMENTS.
 - ⑥ ONCE CAPPING SLOPE HAS BEEN COMPLETED, BACKFILL BEHIND NEW WALL TO MATCH EXISTING GRADE. SEE CU-SHEETS FOR FINISHED GRADES.

A TIMBER PIER REMOVAL CROSS SECTION
 R-2 SCALE: 3/4" = 1'-0"

CALL 48 HOURS BEFORE YOU DIG DIAL 811

ONE INCH
 AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY

FINAL BID DOCUMENT



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

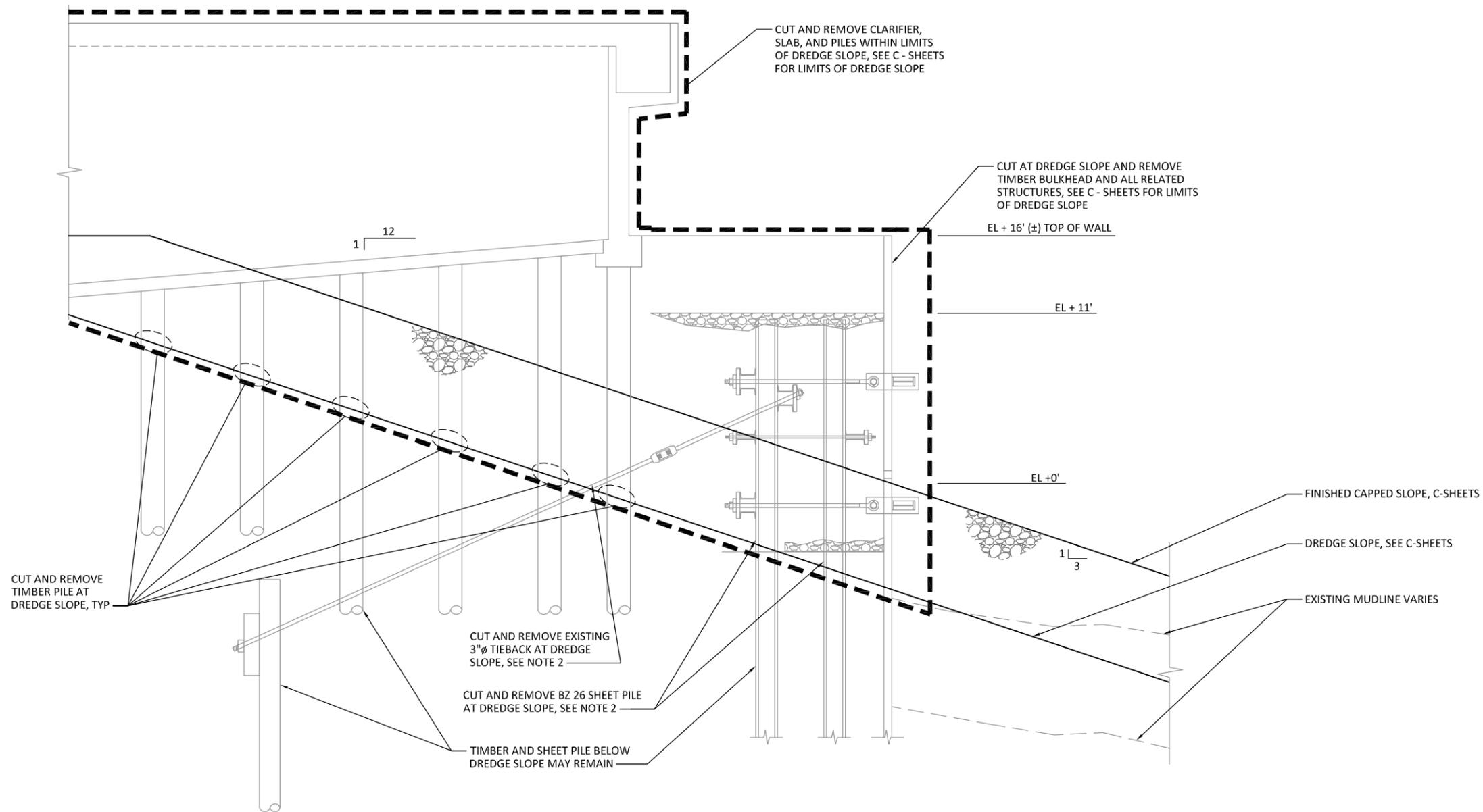
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 CHECKED BY: MDK
 APPROVED BY: DLO
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 DATE: MAY 2013

**WHATCOM WATERWAY PHASE 1 CLEANUP
 BELLINGHAM, WASHINGTON**

TIMBER PIER REMOVAL CROSS SECTION

R-18

SHEET NO. 24 OF 104



A CLARIFIER REMOVAL SECTION WITHIN DREDGE SLOPE
 R-2 SCALE: 1/4" = 1'-0"

NOTES:

1. ALL ELEVATIONS AND PILE LOCATIONS ARE APPROXIMATE AND FOR REFERENCE ONLY.
2. STEEL BULKHEAD IS APPROXIMATELY 90LF AND ONLY OCCURS AT THE EXISTING CLARIFIER.

CALL 48 HOURS BEFORE YOU DIG DIAL 811

ONE INCH
 AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY

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 APPROVED BY: DLO
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 DATE: MAY 2013

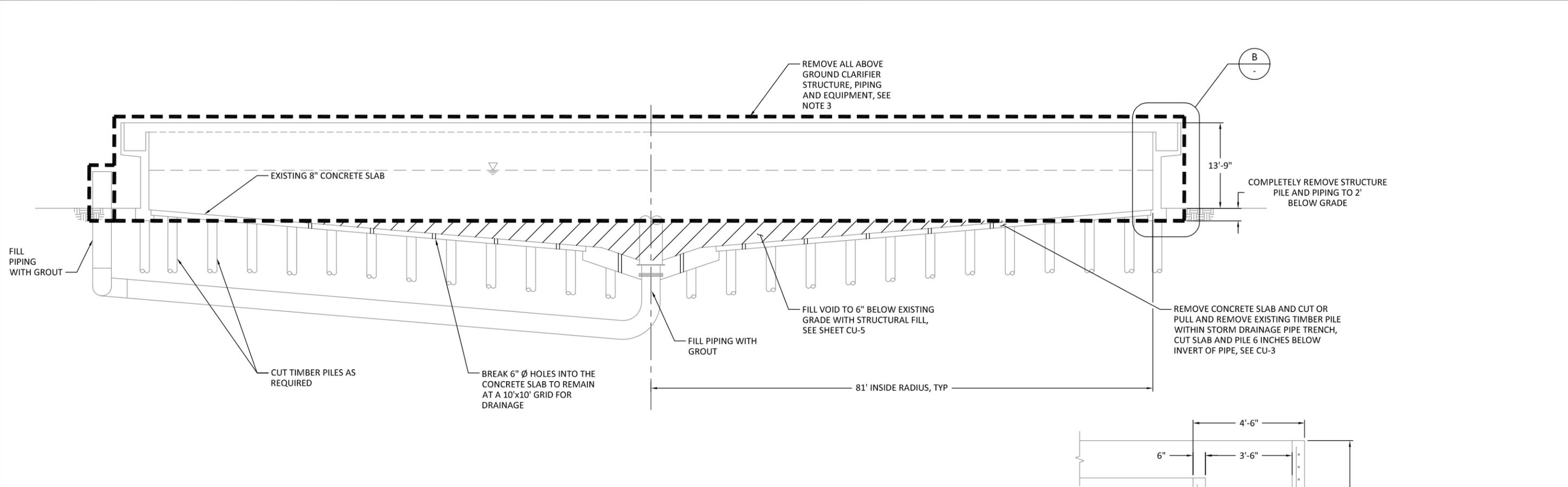
**WHATCOM WATERWAY PHASE 1 CLEANUP
 BELLINGHAM, WASHINGTON**

CLARIFIER REMOVAL CROSS SECTIONS 1

R-19

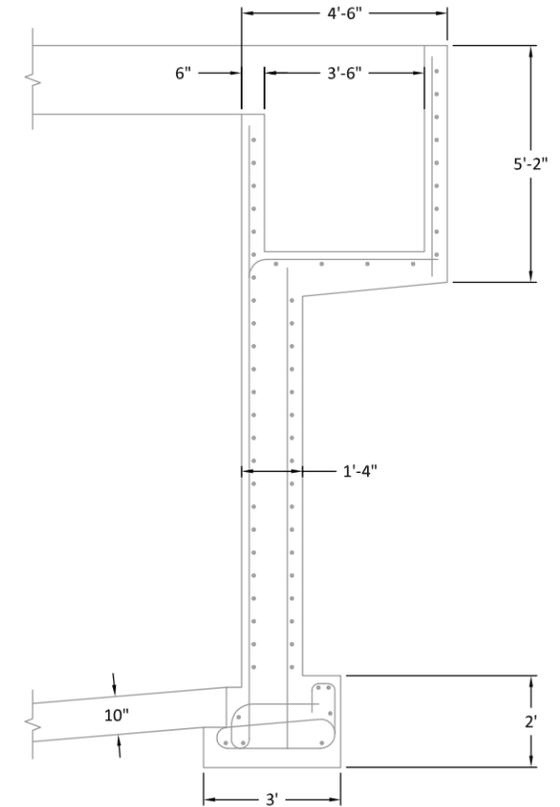
SHEET NO. 25 OF 104

M:\2011\111042 Whatcom Waterway Phase 1 Cleanup Action Drawings\Current\REF\X_2234-TB.dwg Model
May 13, 2013 11:09am gcsury



A
R-2
CLARIFIER REMOVAL SECTION OUTSIDE DREDGE SLOPE
SCALE: 1/8" = 1'-0"

- NOTES:**
1. A PORTION OF THE CLARIFIER STRUCTURE BELOW GROUND SHALL BE REMOVED TO CONSTRUCT DREDGE SLOPE. SEE CIVIL SHEETS FOR DREDGE LIMITS AND SEE SHEET R-19 FOR ADDITIONAL DETAILS.
 2. ALL DIMENSIONS, PILES AND STEEL REINFORCING SHOWN ARE APPROXIMATE AND ARE FOR REFERENCE ONLY.
 3. CLARIFIER TO BE PUMPED AND LIQUIDS REMOVED AFTER THE RECONSTRUCTION OF THE NO. 6 SEWER LINE. SEE SHEET R-6 FOR DEMOLITION SEQUENCING NOTES.



B
WALL SECTION
SCALE: 1/2" = 1'-0"

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SCALE: AS NOTED
DATE: MAY 2013

**WHATCOM WATERWAY PHASE 1 CLEANUP
BELLINGHAM, WASHINGTON**

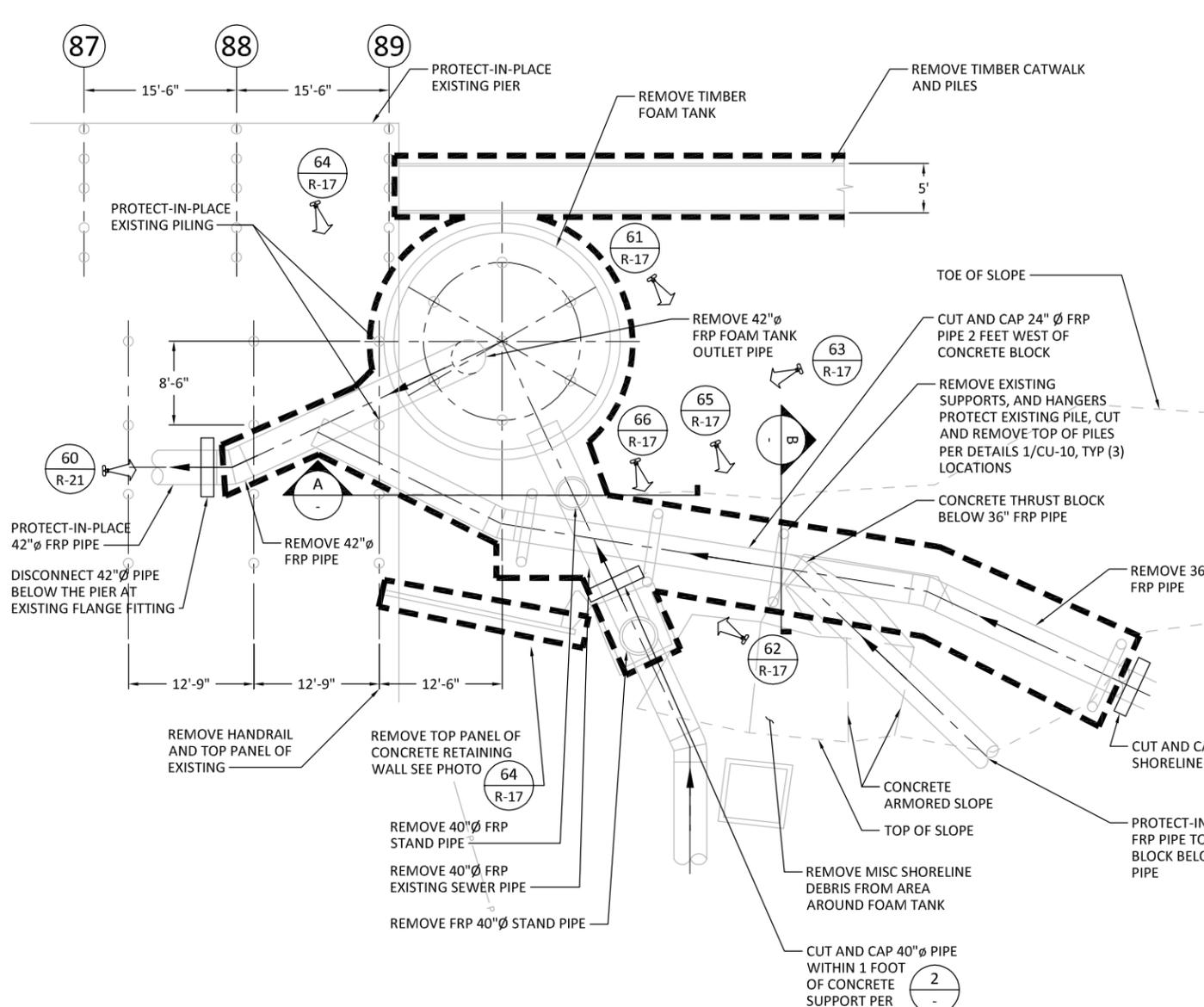
CLARIFIER REMOVAL CROSS SECTIONS 2

R-20

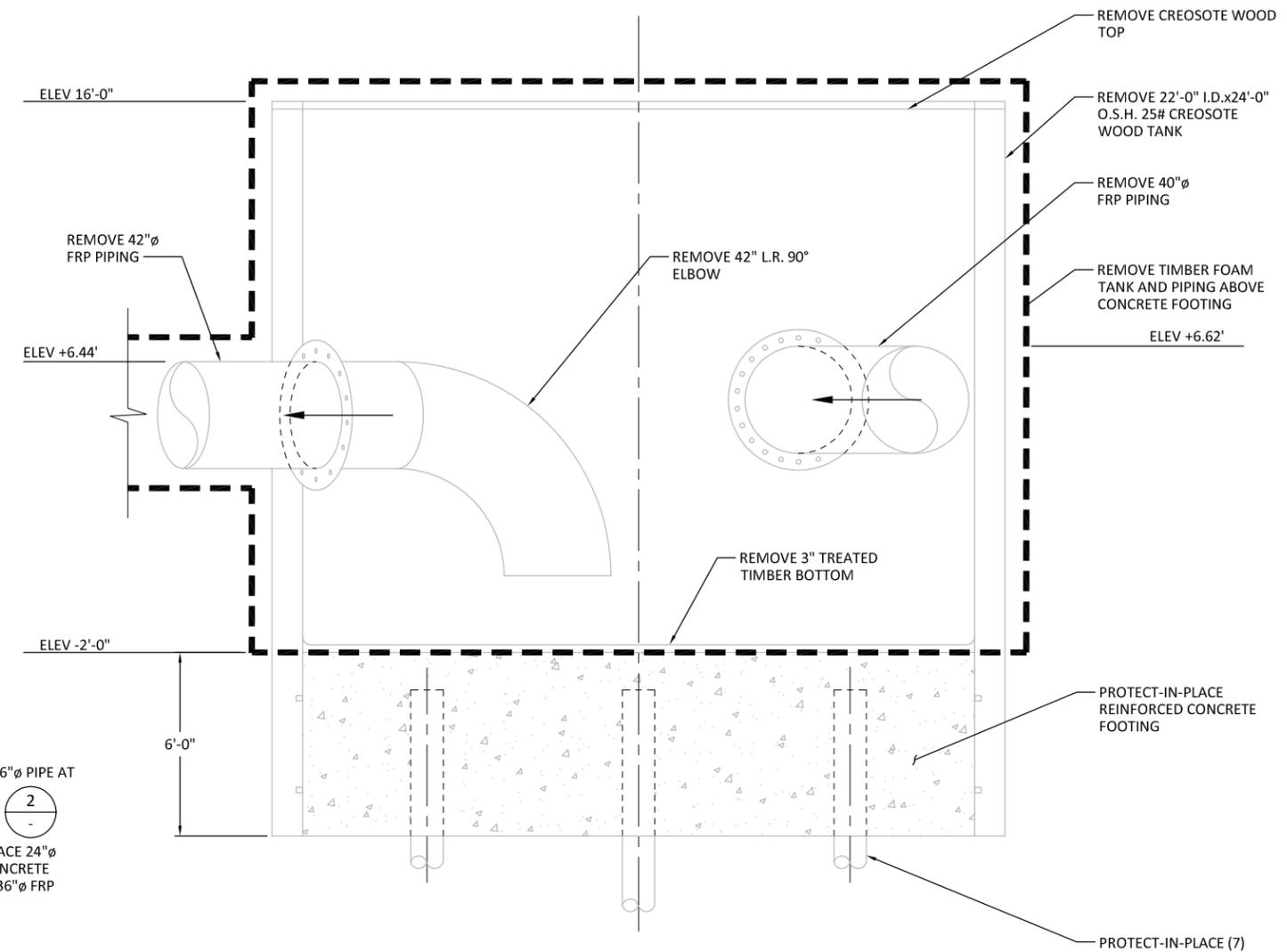
SHEET NO. 26 OF 104

ONE INCH
AT FULL SIZE, IF NOT ONE
INCH SCALE ACCORDINGLY

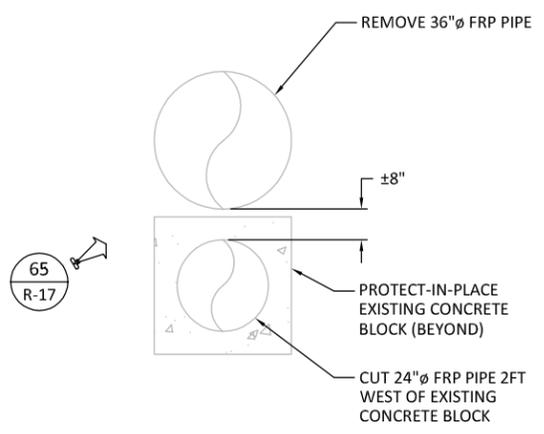
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May 13, 2013 11:09am gcsurey



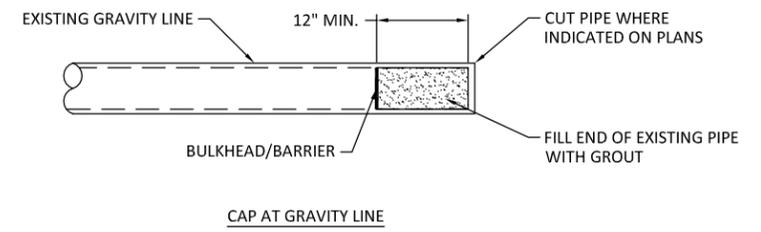
1 FOAM TANK AND PIPING REMOVAL PLAN
R-2 SCALE: 1/8" = 1'-0"



A FOAM TANK REMOVAL SECTION
SCALE: 3/8" = 1'-0"



B PIPING SECTION
SCALE: 1/2" = 1'-0"



2 DETAIL
R-5 SCALE: NTS

- NOTES:**
- ALL DIMENSIONS, PILE AND PIPING LOCATIONS ARE APPROXIMATE AND SHOWN FOR REFERENCE ONLY.
 - SEE SHEET R-6 FOR OVERALL FOAM TANK AND PIPING REMOVAL SEQUENCING NOTES.

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**WHATCOM WATERWAY PHASE 1 CLEANUP
 BELLINGHAM, WASHINGTON**

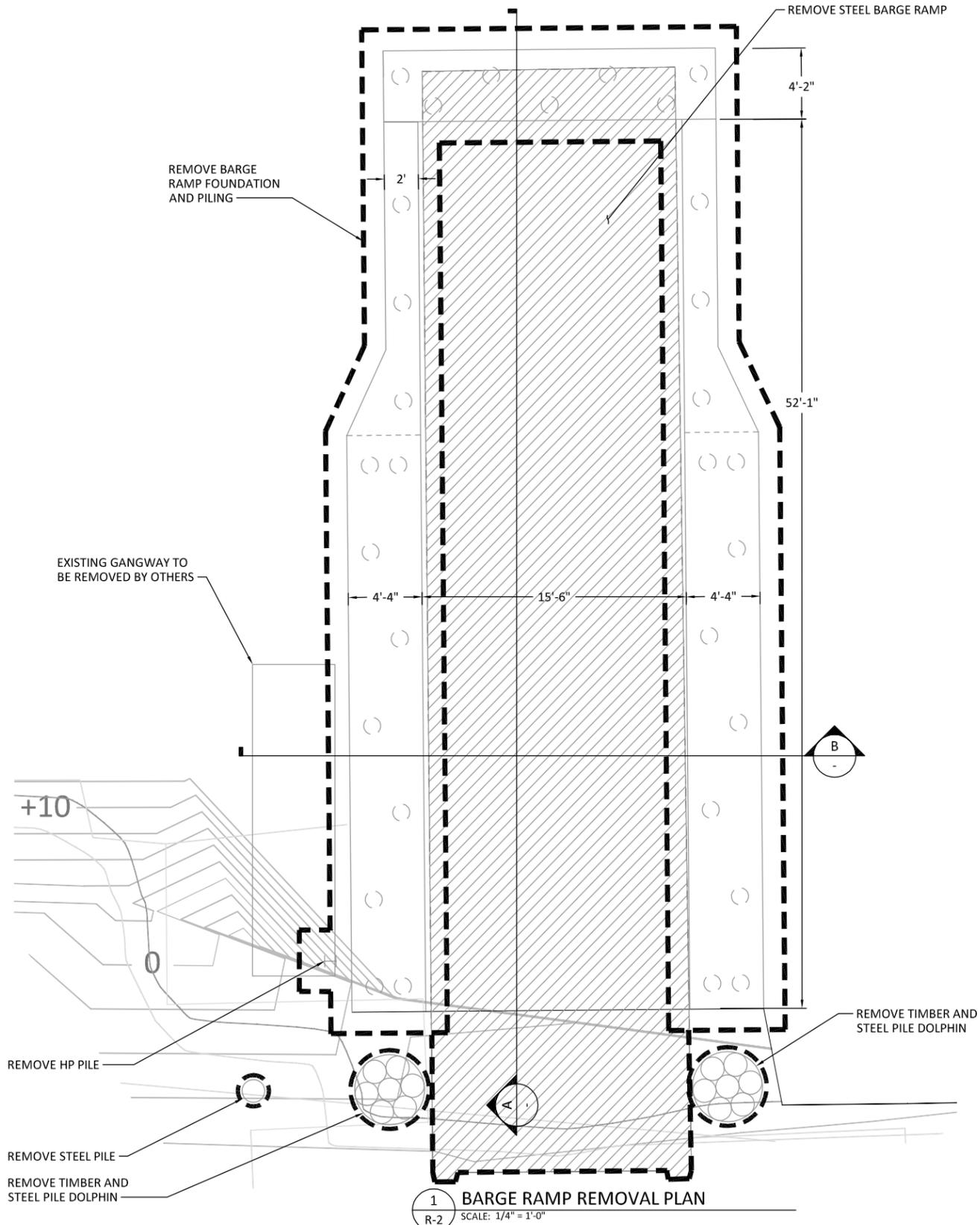
FOAM TANK REMOVAL PLAN AND SECTION

R-21

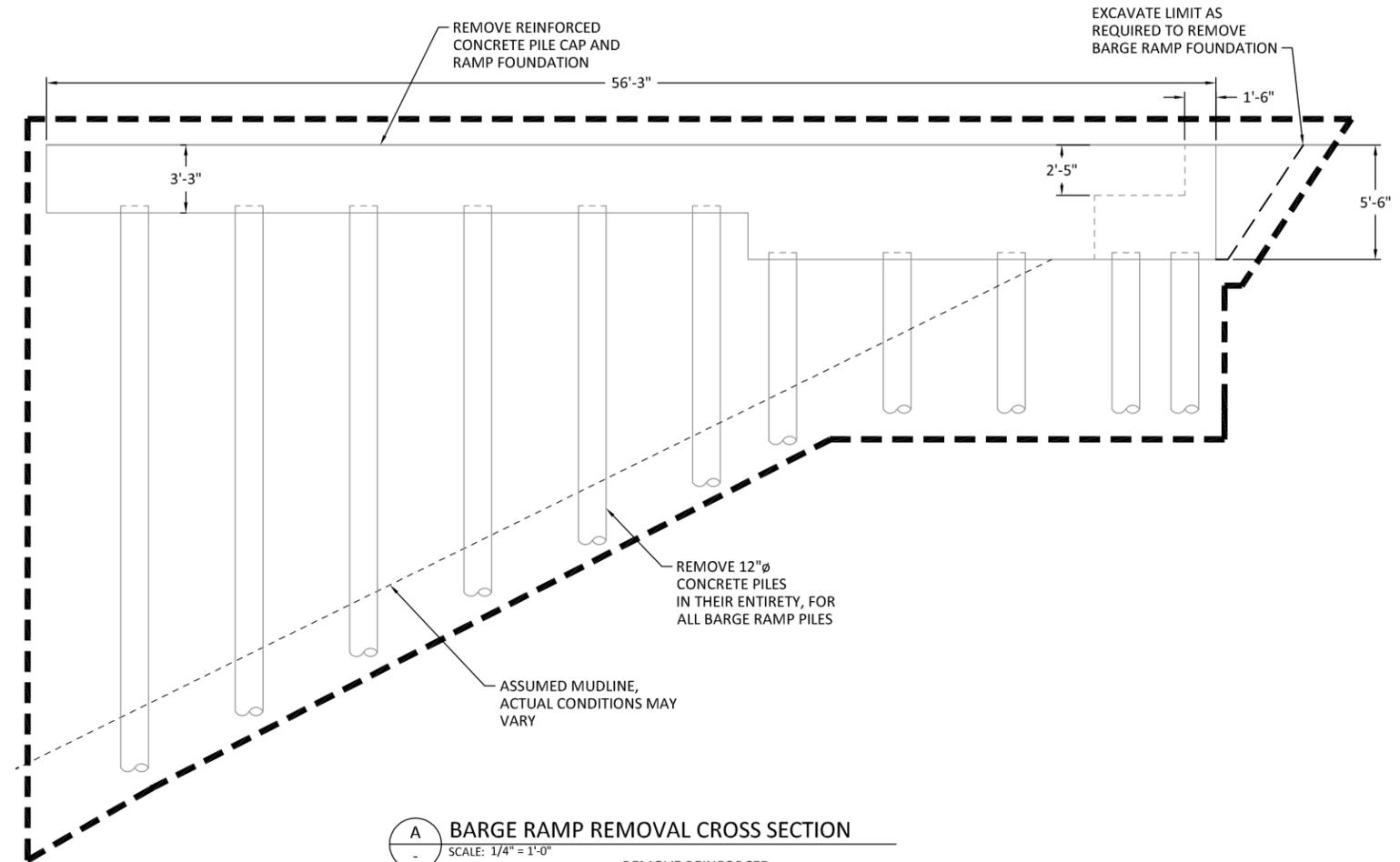
SHEET NO. 27 OF 104

ONE INCH
AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY

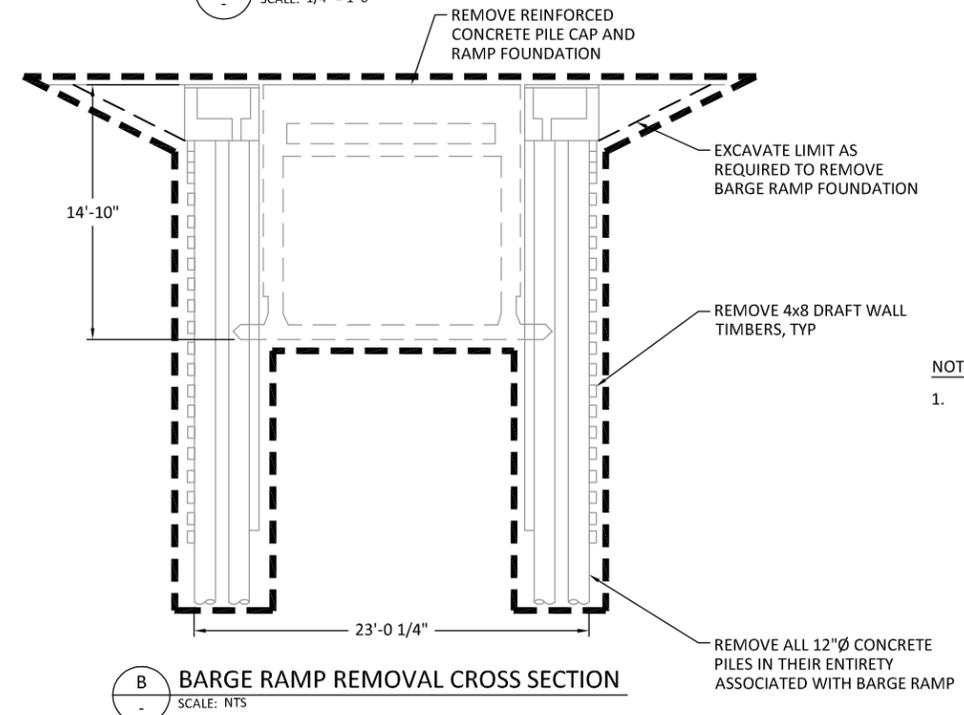
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May 13, 2013 11:09am gcsrey



1 BARGE RAMP REMOVAL PLAN
R-2 SCALE: 1/4" = 1'-0"



A BARGE RAMP REMOVAL CROSS SECTION
SCALE: 1/4" = 1'-0"



B BARGE RAMP REMOVAL CROSS SECTION
SCALE: NTS

- NOTES:**
- ALL DIMENSIONS, PILES, STEEL, CONCRETE AND TIMBER SHOWN ARE APPROXIMATE AND ARE FOR REFERENCE ONLY.

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ONE INCH AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY



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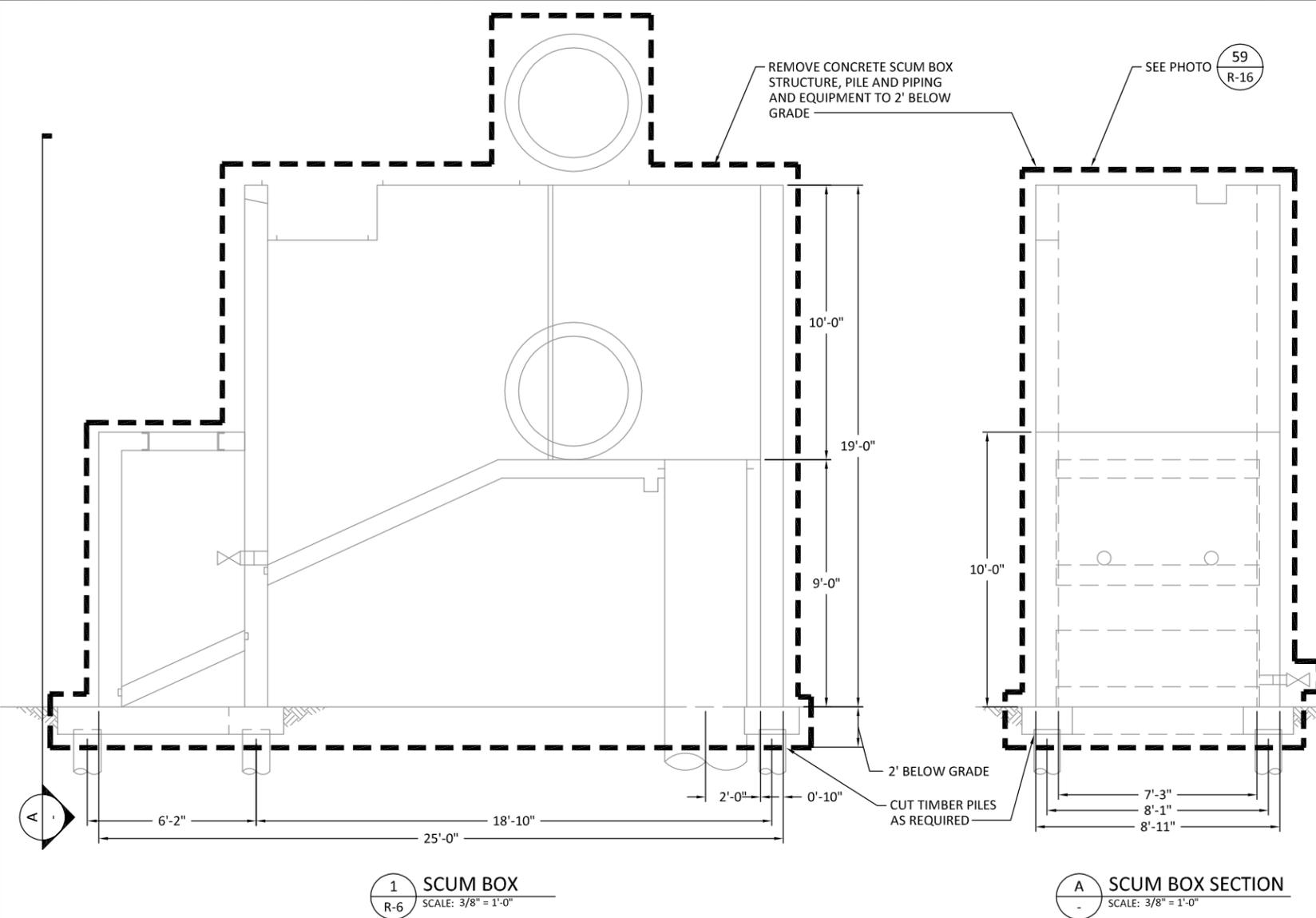
**WHATCOM WATERWAY PHASE 1 CLEANUP
 BELLINGHAM, WASHINGTON**

BARGE RAMP REMOVAL PLAN AND SECTION

R-22

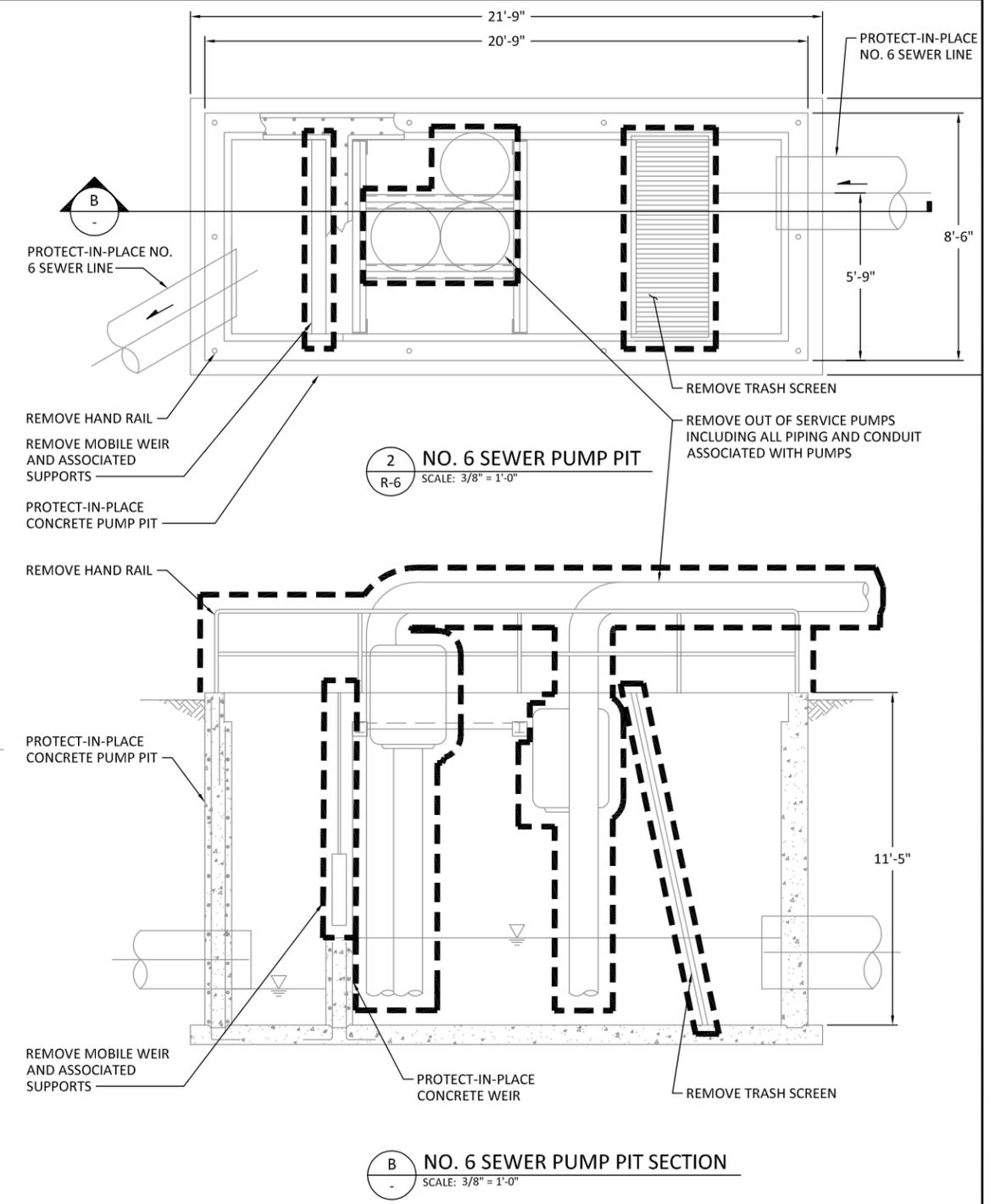
SHEET NO. 28 OF 104

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May 13, 2013 11:09am gcsurey



1 SCUM BOX
SCALE: 3/8" = 1'-0"

A SCUM BOX SECTION
SCALE: 3/8" = 1'-0"



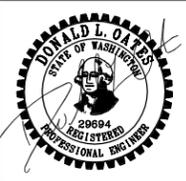
2 NO. 6 SEWER PUMP PIT
SCALE: 3/8" = 1'-0"

B NO. 6 SEWER PUMP PIT SECTION
SCALE: 3/8" = 1'-0"

NOTES:
1. ALL DIMENSIONS SHOWN ARE APPROXIMATE AND ARE FOR REFERENCE ONLY.

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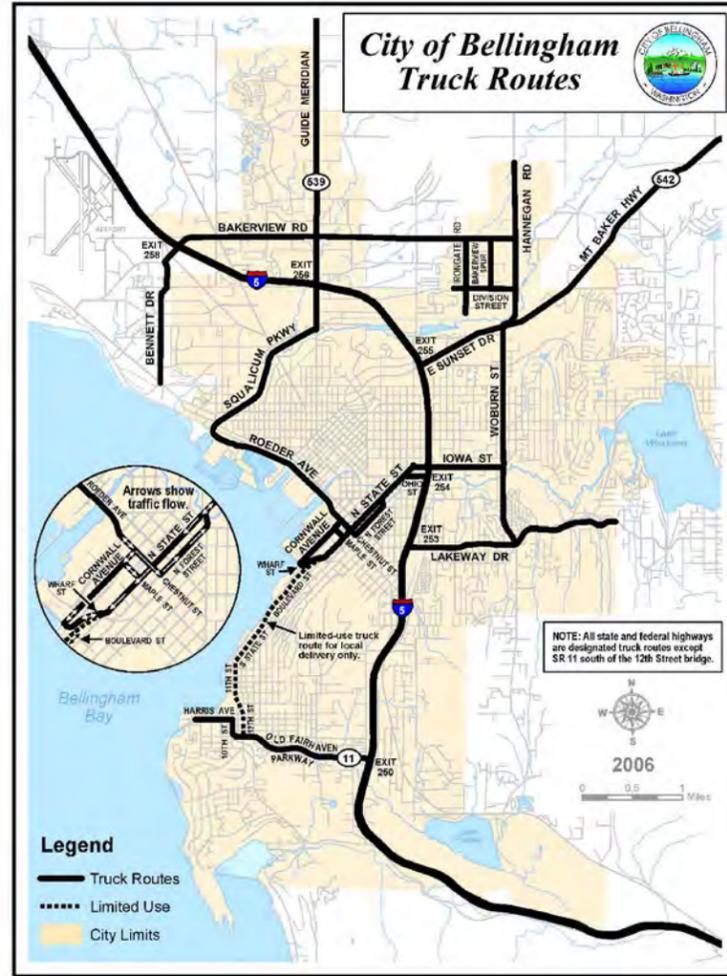
**WHATCOM WATERWAY PHASE 1 CLEANUP
 BELLINGHAM, WASHINGTON**

REMOVAL DETAILS

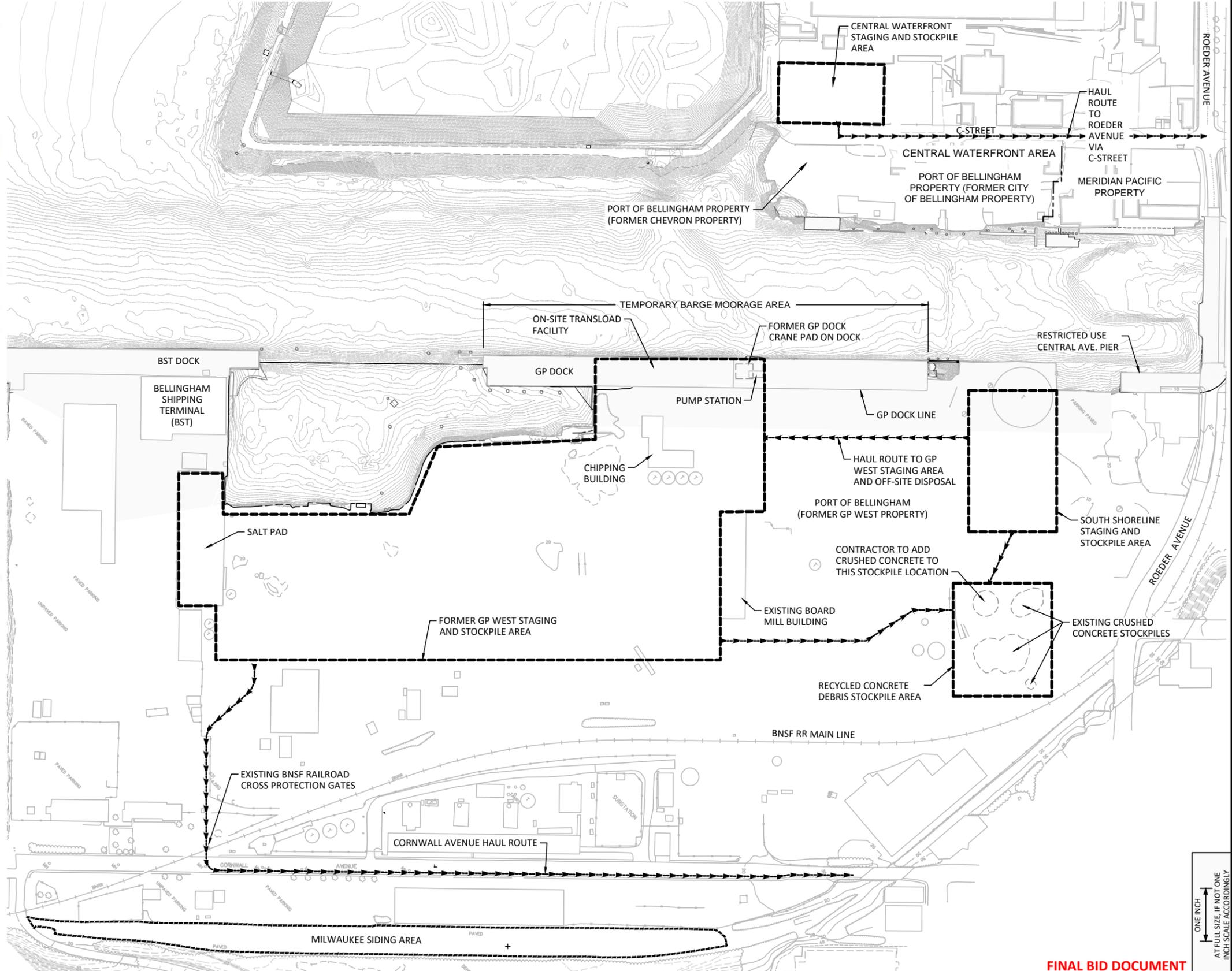
R-23

SHEET NO. 29 OF 104

ONE INCH
AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY



- NOTES:
- REFERENCE SHEET G-2 FOR SURVEY AND DATUM INFORMATION.
 - INFORMATION DISPLAYED, INCLUDING BUILDINGS AND PROPERTY BOUNDARIES, IS BASED ON AVAILABLE RECORDS. THE CONTRACTOR IS TO VERIFY ALL SITE AND UTILITY INFORMATION PRIOR TO DEMOLITION OR CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER PRIOR TO COMMENCING WORK.
 - INTERNAL CONFIGURATION OF THE SOUTH SHORELINE STAGING AND STOCKPILE AREA (INCLUDING CONSTRUCTION WATER COLLECTION AND TREATMENT EQUIPMENT) TO BE DETERMINED BY THE CONTRACTOR.
 - CONTRACTOR TO COORDINATE WITH BNSF RAILROAD FOR ACCESS AND OPERATION AT MILWAUKEE SIDING AREA AS NECESSARY.
 - CONTRACTOR MAY STOCKPILE SOIL AND DEBRIS AT DESIGNATED STOCKPILE AREAS FOR UP TO FOUR MONTHS FOLLOWING COMPLETION OF DREDGING AND/OR UPLAND SOIL EXCAVATION AND SHORELINE DEBRIS REMOVAL ACTIVITIES OR NO LATER THAN JULY 1, 2014.
 - LAYOUT OF THE SOUTH SHORELINE STAGING AND STOCKPILE AREA IS SCHEMATIC AND SHALL BE DESIGNED BY THE CONTRACTOR AND PRESENTED IN THE CONSTRUCTION WORK PLAN FOR REVIEW AND APPROVAL. SEE SHEET C-1.2 FOR SCHEMATIC LAYOUTS AT THE FORMER GP WEST STAGING AND STOCKPILE AREA.
- 0 150 300
SCALE IN FEET
- NORTH
PROJECT NORTH



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DRAWN BY: D. HOLMER
CHECKED BY: T. WANG
APPROVED BY: T. WANG
SCALE: AS NOTED
DATE: MAY 2013

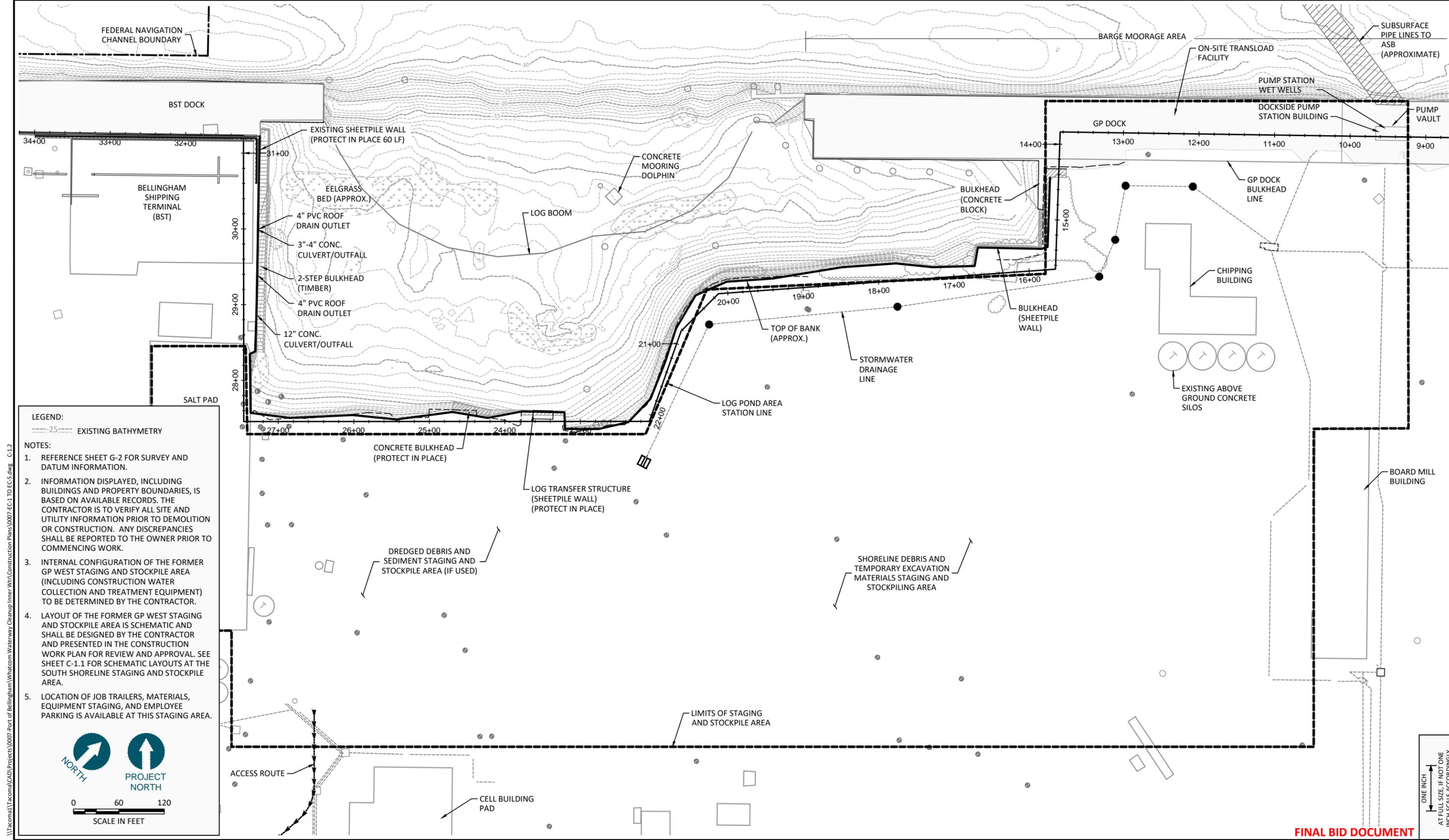
WHATCOM WATERWAY PHASE 1 CLEANUP
BELLINGHAM, WASHINGTON

SITE ACCESS, STAGING AND STOCKPILE PLAN

C-1.1

SHEET NO. 30 OF 104

May 20, 2013 8:28pm dholmer
 \\Tacoma1\Tacoma\CAD\Projects\0007-Port of Bellingham\Whatcom Waterway Cleanup\liner\WAT\Construction Plans\0007-C-1.dwg C-1.1



LEGEND:
 ---25--- EXISTING BATHYMETRY

NOTES:

1. REFERENCE SHEET G-2 FOR SURVEY AND DATUM INFORMATION.
2. INFORMATION DISPLAYED, INCLUDING BUILDINGS AND PROPERTY BOUNDARIES, IS BASED ON AVAILABLE RECORDS. THE CONTRACTOR IS TO VERIFY ALL SITE AND UTILITY INFORMATION PRIOR TO DEMOLITION OR CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER PRIOR TO COMMENCING WORK.
3. INTERNAL CONFIGURATION OF THE FORMER GP WEST STAGING AND STOCKPILE AREA (INCLUDING CONSTRUCTION WATER COLLECTION AND TREATMENT EQUIPMENT) TO BE DETERMINED BY THE CONTRACTOR.
4. LAYOUT OF THE FORMER GP WEST STAGING AND STOCKPILE AREA IS SCHEMATIC AND SHALL BE DESIGNED BY THE CONTRACTOR AND PRESENTED IN THE CONSTRUCTION WORK PLAN FOR REVIEW AND APPROVAL. SEE SHEET C-1.1 FOR SCHEMATIC LAYOUTS AT THE SOUTH SHORELINE STAGING AND STOCKPILE AREA.
5. LOCATION OF JOB TRAILERS, MATERIALS, EQUIPMENT STAGING, AND EMPLOYEE PARKING IS AVAILABLE AT THIS STAGING AREA.

SCALE IN FEET
 0 60 120

NORTH **PROJECT NORTH**

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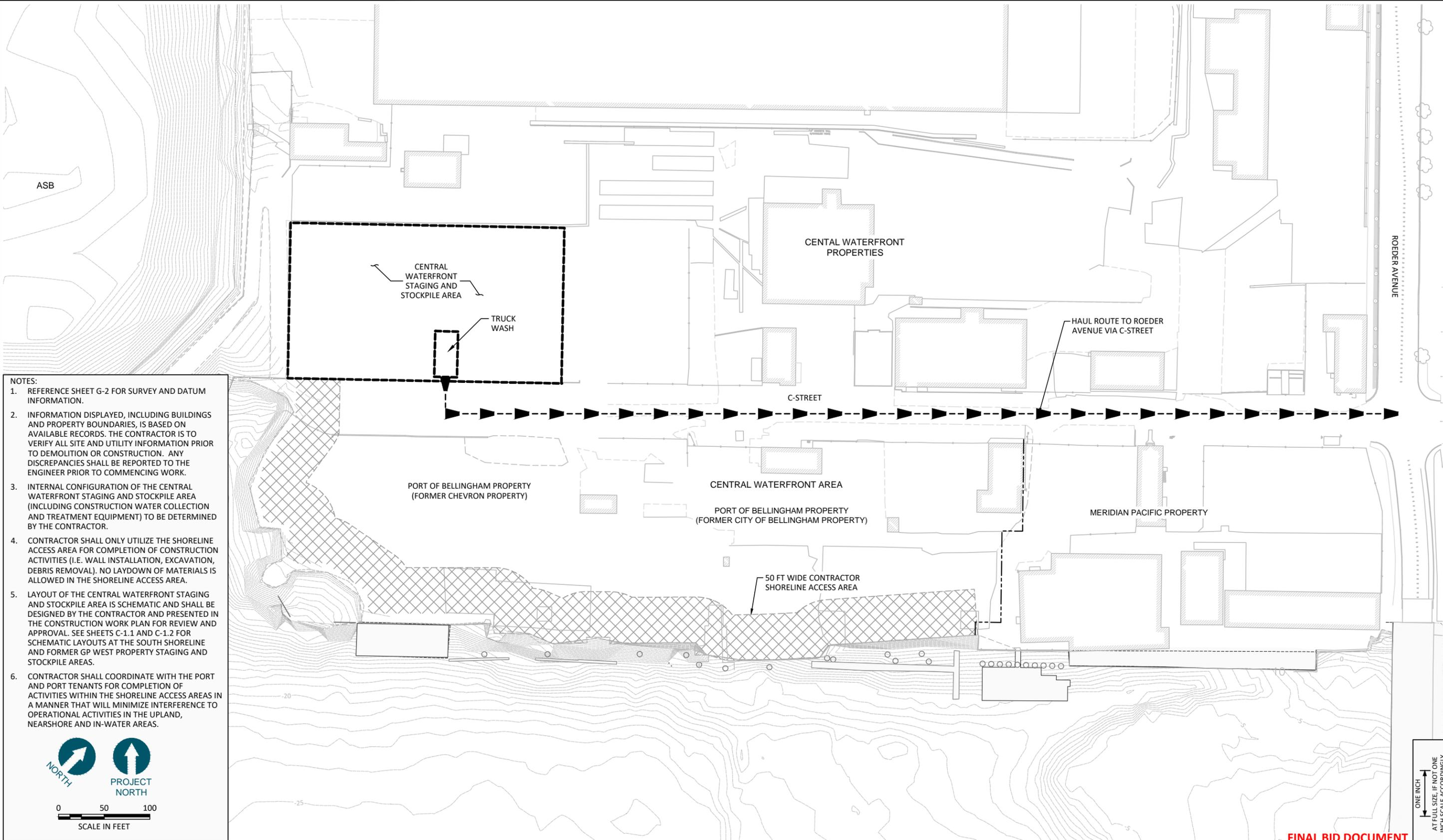
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 DRAWN BY: D. HOLMER
 CHECKED BY: T. WANG
 APPROVED BY: T. WANG
 SCALE: AS NOTED
 DATE: MAY 2013

**WHATCOM WATERWAY PHASE 1 CLEANUP
 BELLINGHAM, WASHINGTON**

**EXISTING CONDITIONS FORMER GP WEST PROPERTY
 - SITE ACCESS, STAGING AND STOCKPILE AREA**

C-1.2
 SHEET NO. 31 OF 104

May 20, 2013 8:29pm dholmer
 \\Tacoma1\Tacoma\CAD\Projects\0007-Port of Bellingham\Whatcom Waterway Cleanup\liner\WAT\Construction Plans\0007-C-1.dwg C-1.3



NOTES:

1. REFERENCE SHEET G-2 FOR SURVEY AND DATUM INFORMATION.
2. INFORMATION DISPLAYED, INCLUDING BUILDINGS AND PROPERTY BOUNDARIES, IS BASED ON AVAILABLE RECORDS. THE CONTRACTOR IS TO VERIFY ALL SITE AND UTILITY INFORMATION PRIOR TO DEMOLITION OR CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER PRIOR TO COMMENCING WORK.
3. INTERNAL CONFIGURATION OF THE CENTRAL WATERFRONT STAGING AND STOCKPILE AREA (INCLUDING CONSTRUCTION WATER COLLECTION AND TREATMENT EQUIPMENT) TO BE DETERMINED BY THE CONTRACTOR.
4. CONTRACTOR SHALL ONLY UTILIZE THE SHORELINE ACCESS AREA FOR COMPLETION OF CONSTRUCTION ACTIVITIES (I.E. WALL INSTALLATION, EXCAVATION, DEBRIS REMOVAL). NO LAYDOWN OF MATERIALS IS ALLOWED IN THE SHORELINE ACCESS AREA.
5. LAYOUT OF THE CENTRAL WATERFRONT STAGING AND STOCKPILE AREA IS SCHEMATIC AND SHALL BE DESIGNED BY THE CONTRACTOR AND PRESENTED IN THE CONSTRUCTION WORK PLAN FOR REVIEW AND APPROVAL. SEE SHEETS C-1.1 AND C-1.2 FOR SCHEMATIC LAYOUTS AT THE SOUTH SHORELINE AND FORMER GW WEST PROPERTY STAGING AND STOCKPILE AREAS.
6. CONTRACTOR SHALL COORDINATE WITH THE PORT AND PORT TENANTS FOR COMPLETION OF ACTIVITIES WITHIN THE SHORELINE ACCESS AREAS IN A MANNER THAT WILL MINIMIZE INTERFERENCE TO OPERATIONAL ACTIVITIES IN THE UPLAND, NEARSHORE AND IN-WATER AREAS.

NORTH

PROJECT NORTH

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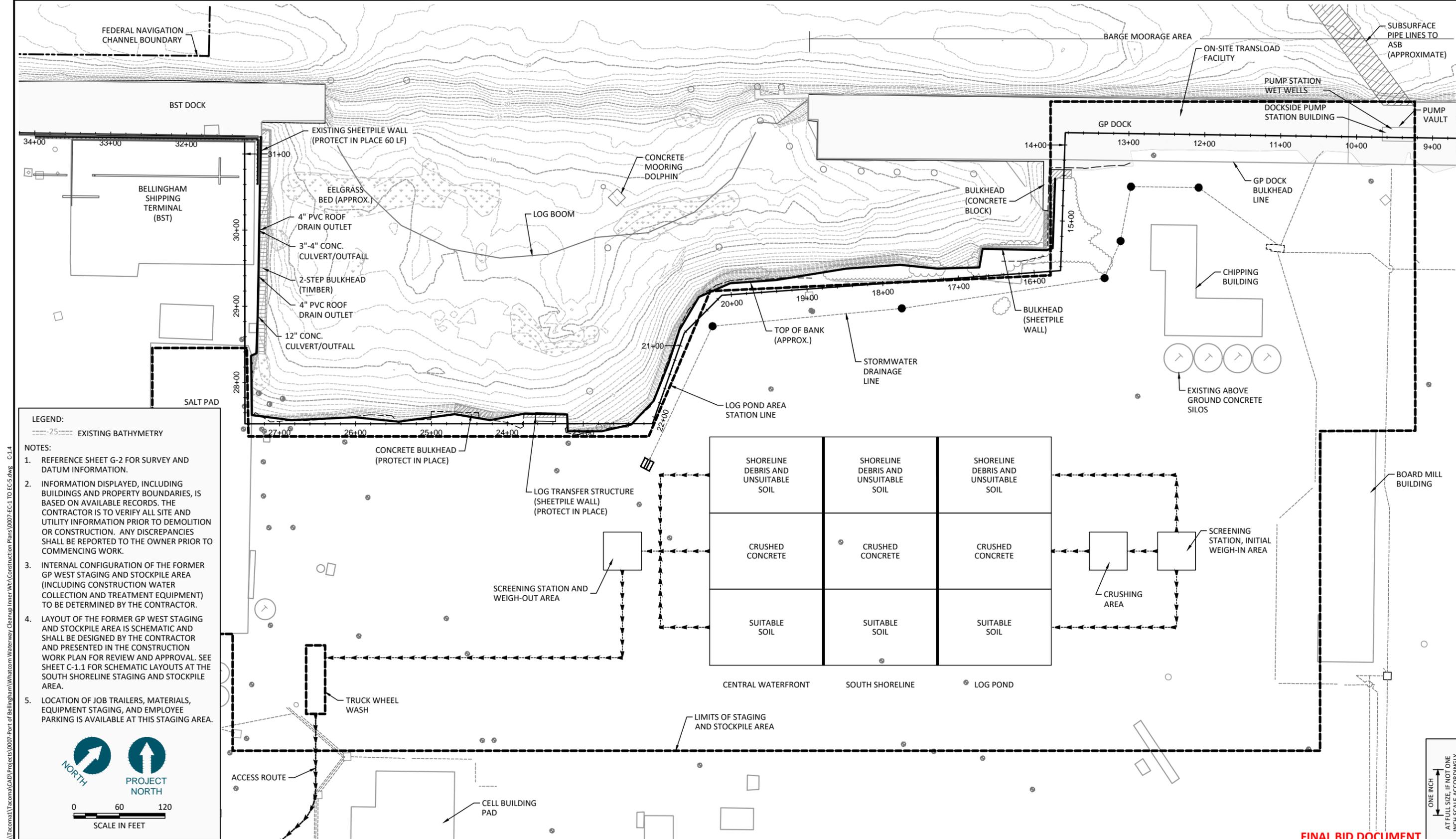
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WHATCOM WATERWAY PHASE 1 CLEANUP
 BELLINGHAM, WASHINGTON

EXISTING CONDITIONS CENTRAL WATERFRONT
 - SITE ACCESS AND STAGING AREA

C-1.3

SHEET NO. 32 OF 104



LEGEND:
 ---25--- EXISTING BATHYMETRY

NOTES:

1. REFERENCE SHEET G-2 FOR SURVEY AND DATUM INFORMATION.
2. INFORMATION DISPLAYED, INCLUDING BUILDINGS AND PROPERTY BOUNDARIES, IS BASED ON AVAILABLE RECORDS. THE CONTRACTOR IS TO VERIFY ALL SITE AND UTILITY INFORMATION PRIOR TO DEMOLITION OR CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER PRIOR TO COMMENCING WORK.
3. INTERNAL CONFIGURATION OF THE FORMER GP WEST STAGING AND STOCKPILE AREA (INCLUDING CONSTRUCTION WATER COLLECTION AND TREATMENT EQUIPMENT) TO BE DETERMINED BY THE CONTRACTOR.
4. LAYOUT OF THE FORMER GP WEST STAGING AND STOCKPILE AREA IS SCHEMATIC AND SHALL BE DESIGNED BY THE CONTRACTOR AND PRESENTED IN THE CONSTRUCTION WORK PLAN FOR REVIEW AND APPROVAL. SEE SHEET C-1.1 FOR SCHEMATIC LAYOUTS AT THE SOUTH SHORELINE STAGING AND STOCKPILE AREA.
5. LOCATION OF JOB TRAILERS, MATERIALS, EQUIPMENT STAGING, AND EMPLOYEE PARKING IS AVAILABLE AT THIS STAGING AREA.

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**WHATCOM WATERWAY PHASE 1 CLEANUP
 BELLINGHAM, WASHINGTON**

**STAGING AND STOCKPILE AREA CONCEPTUAL
 LAYOUT**

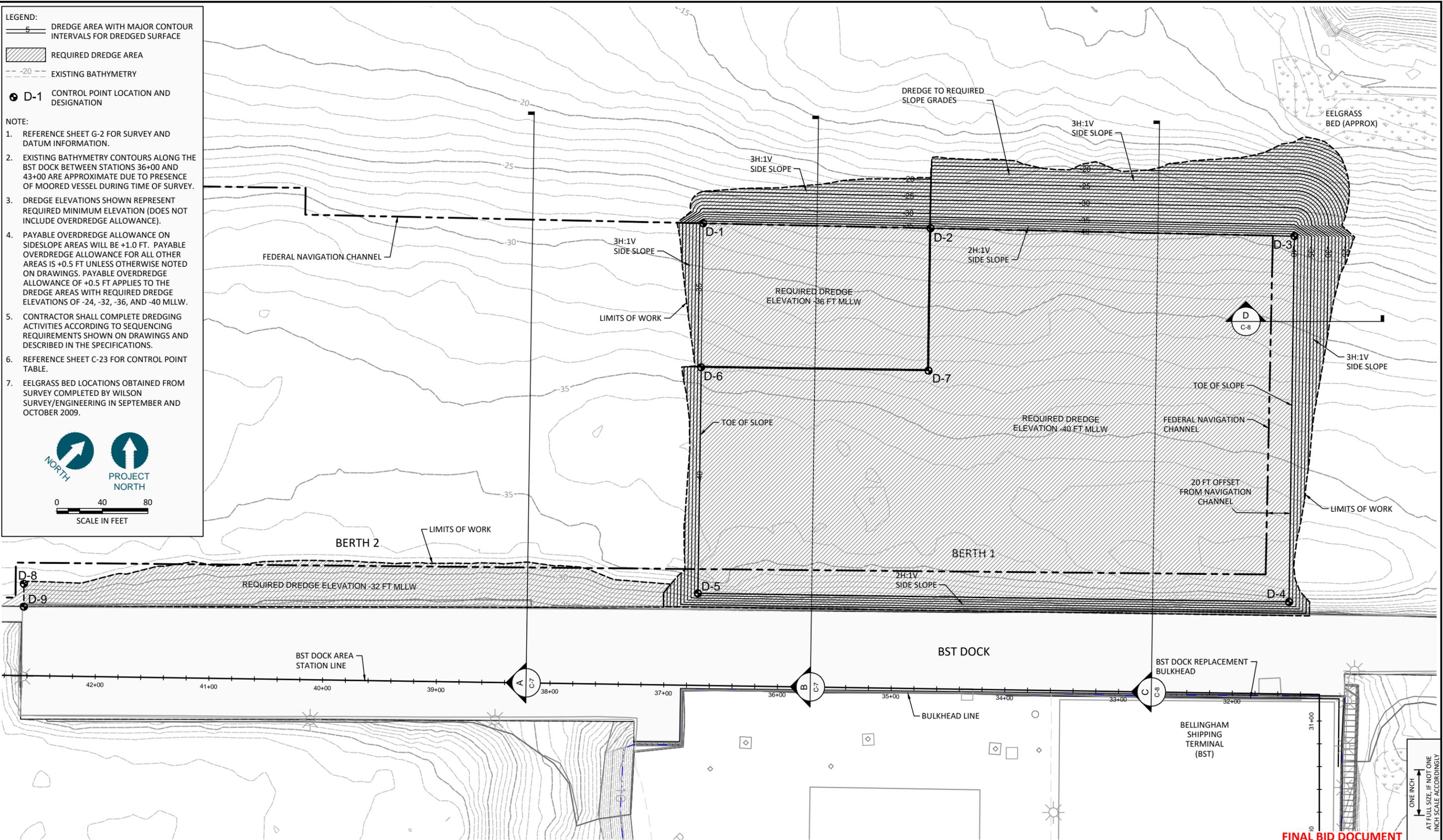
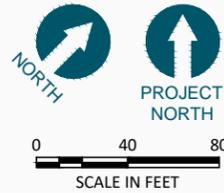
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SHEET NO. 33 OF 104

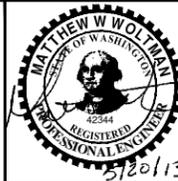
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 \\Tacoma1\Tacoma\CAD\Projects\0007-Port of Bellingham\Whatcom Waterway Cleanup\liner\WAT\Construction Plans\0007-EC-1 TO EC-5.dwg C-1.4

- LEGEND:**
-  DREDGE AREA WITH MAJOR CONTOUR INTERVALS FOR DREDGED SURFACE
 -  REQUIRED DREDGE AREA
 -  EXISTING BATHYMETRY
 -  D-1 CONTROL POINT LOCATION AND DESIGNATION

- NOTE:**
1. REFERENCE SHEET G-2 FOR SURVEY AND DATUM INFORMATION.
 2. EXISTING BATHYMETRY CONTOURS ALONG THE BST DOCK BETWEEN STATIONS 36+00 AND 43+00 ARE APPROXIMATE DUE TO PRESENCE OF MOORED VESSEL DURING TIME OF SURVEY.
 3. DREDGE ELEVATIONS SHOWN REPRESENT REQUIRED MINIMUM ELEVATION (DOES NOT INCLUDE OVERDREDGE ALLOWANCE).
 4. PAYABLE OVERDREDGE ALLOWANCE ON SIDESLOPE AREAS WILL BE +1.0 FT. PAYABLE OVERDREDGE ALLOWANCE FOR ALL OTHER AREAS IS +0.5 FT UNLESS OTHERWISE NOTED ON DRAWINGS. PAYABLE OVERDREDGE ALLOWANCE OF +0.5 FT APPLIES TO THE DREDGE AREAS WITH REQUIRED DREDGE ELEVATIONS OF -24, -32, -36, AND -40 MLLW.
 5. CONTRACTOR SHALL COMPLETE DREDGING ACTIVITIES ACCORDING TO SEQUENCING REQUIREMENTS SHOWN ON DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS.
 6. REFERENCE SHEET C-23 FOR CONTROL POINT TABLE.
 7. EELGRASS BED LOCATIONS OBTAINED FROM SURVEY COMPLETED BY WILSON SURVEY/ENGINEERING IN SEPTEMBER AND OCTOBER 2009.



FINAL BID DOCUMENT



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 DATE: MAY 2013

**WHATCOM WATERWAY PHASE 1 CLEANUP
 BELLINGHAM, WASHINGTON**

BST DREDGING PLAN

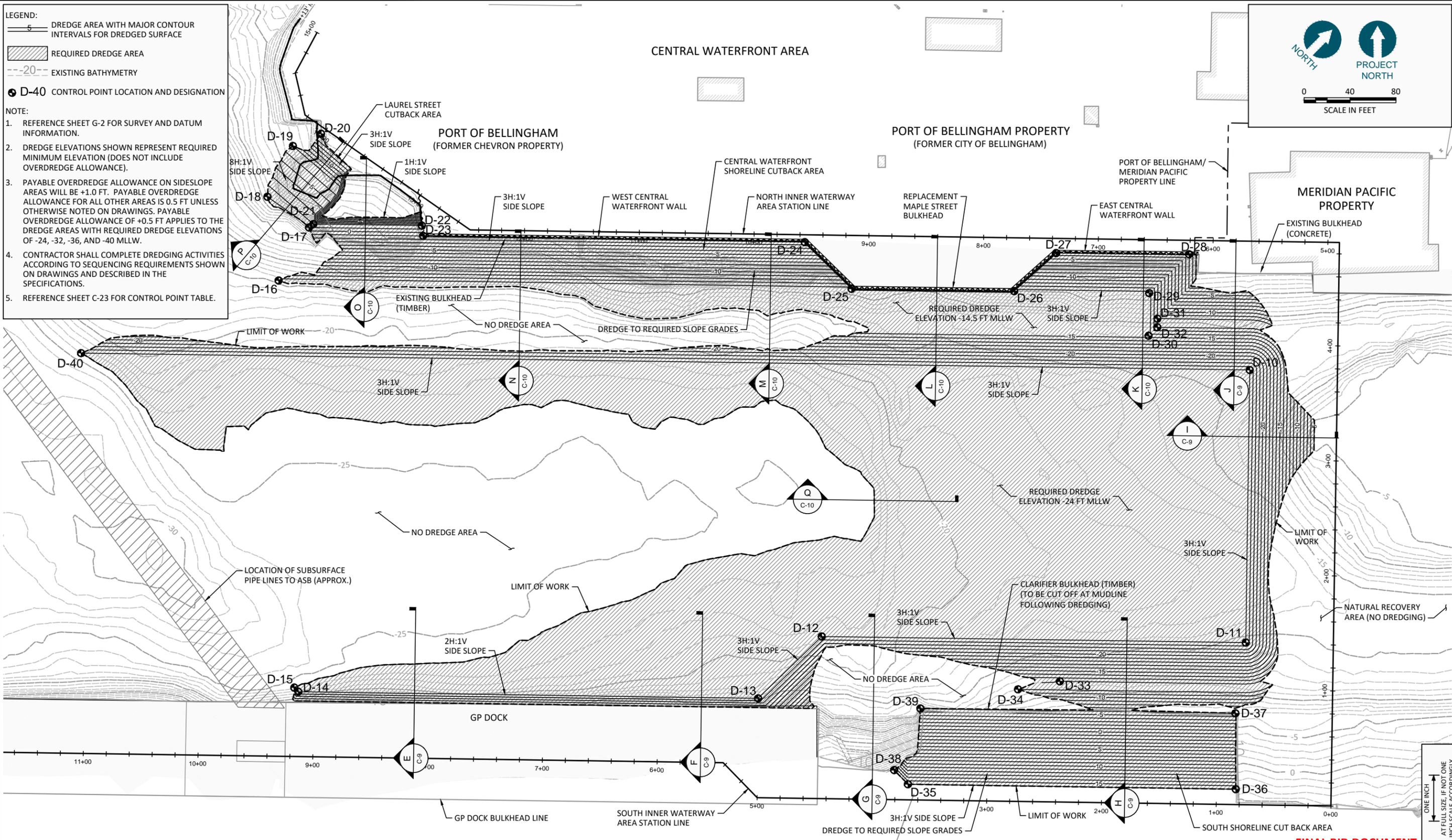
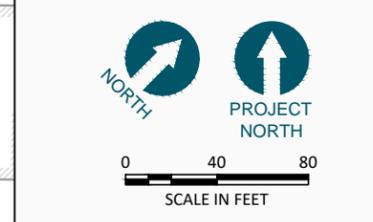
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SHEET NO. 34 OF 104

May 20, 2013 8:29pm dholmer
 \\Tacoma1\Tacoma\CAD\Projects\0007-Port of Bellingham\Whatcom Waterway Cleanup\Line\WAT\Construction Plans\0007-C SHEETS.dwg C-2

LEGEND:
 DREDGE AREA WITH MAJOR CONTOUR INTERVALS FOR DREDGED SURFACE
 REQUIRED DREDGE AREA
 EXISTING BATHYMETRY
 D-40 CONTROL POINT LOCATION AND DESIGNATION

NOTE:
 1. REFERENCE SHEET G-2 FOR SURVEY AND DATUM INFORMATION.
 2. DREDGE ELEVATIONS SHOWN REPRESENT REQUIRED MINIMUM ELEVATION (DOES NOT INCLUDE OVERDREDGE ALLOWANCE).
 3. PAYABLE OVERDREDGE ALLOWANCE ON SIDESLOPE AREAS WILL BE +1.0 FT. PAYABLE OVERDREDGE ALLOWANCE FOR ALL OTHER AREAS IS 0.5 FT UNLESS OTHERWISE NOTED ON DRAWINGS. PAYABLE OVERDREDGE ALLOWANCE OF +0.5 FT APPLIES TO THE DREDGE AREAS WITH REQUIRED DREDGE ELEVATIONS OF -24, -32, -36, AND -40 MLLW.
 4. CONTRACTOR SHALL COMPLETE DREDGING ACTIVITIES ACCORDING TO SEQUENCING REQUIREMENTS SHOWN ON DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS.
 5. REFERENCE SHEET C-23 FOR CONTROL POINT TABLE.



May 20, 2013 8:30pm dholmer
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**WHATCOM WATERWAY PHASE 1 CLEANUP
 BELLINGHAM, WASHINGTON**
INNER WATERWAY DREDGING PLAN

C-3
 SHEET NO. 35 OF 104

LEGEND:

- 10 — TOP OF CAP AREA CONTOURS
- - - - - EXISTING BATHYMETRY
- ▨ RESIDUALS MANAGEMENT COVER AREA
- C-1 CONTROL POINT LOCATION AND DESIGNATION

NOTES:

1. REFERENCE SHEET G-2 FOR SURVEY AND DATUM INFORMATION.
2. CAPPING ELEVATIONS SHOWN REPRESENT MAXIMUM ELEVATION ALLOWED (INCLUDES OVER-PLACEMENT ALLOWANCES).
3. CONTRACTOR SHALL COMPLETE RMC AND CAPPING ACTIVITIES ACCORDING TO SEQUENCING REQUIREMENTS SHOWN ON DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS.
4. REFERENCE SHEET C-24 FOR CONTROL POINT TABLE.
5. EELGRASS BED LOCATIONS OBTAINED FROM SURVEY COMPLETED BY WILSON SURVEY/ENGINEERING IN SEPTEMBER AND OCTOBER 2009.
6. MINIMUM REQUIRED THICKNESS FOR PLACEMENT OF RESIDUALS MANAGEMENT COVER IS 6 INCHES. AN ADDITIONAL RESIDUALS MANAGEMENT COVER MATERIAL MAXIMUM OVERPLACEMENT ALLOWANCE OF 6 INCHES WILL BE PAYABLE FOR RESIDUALS MANAGEMENT COVER MATERIAL PLACED IN THE BST AREA.



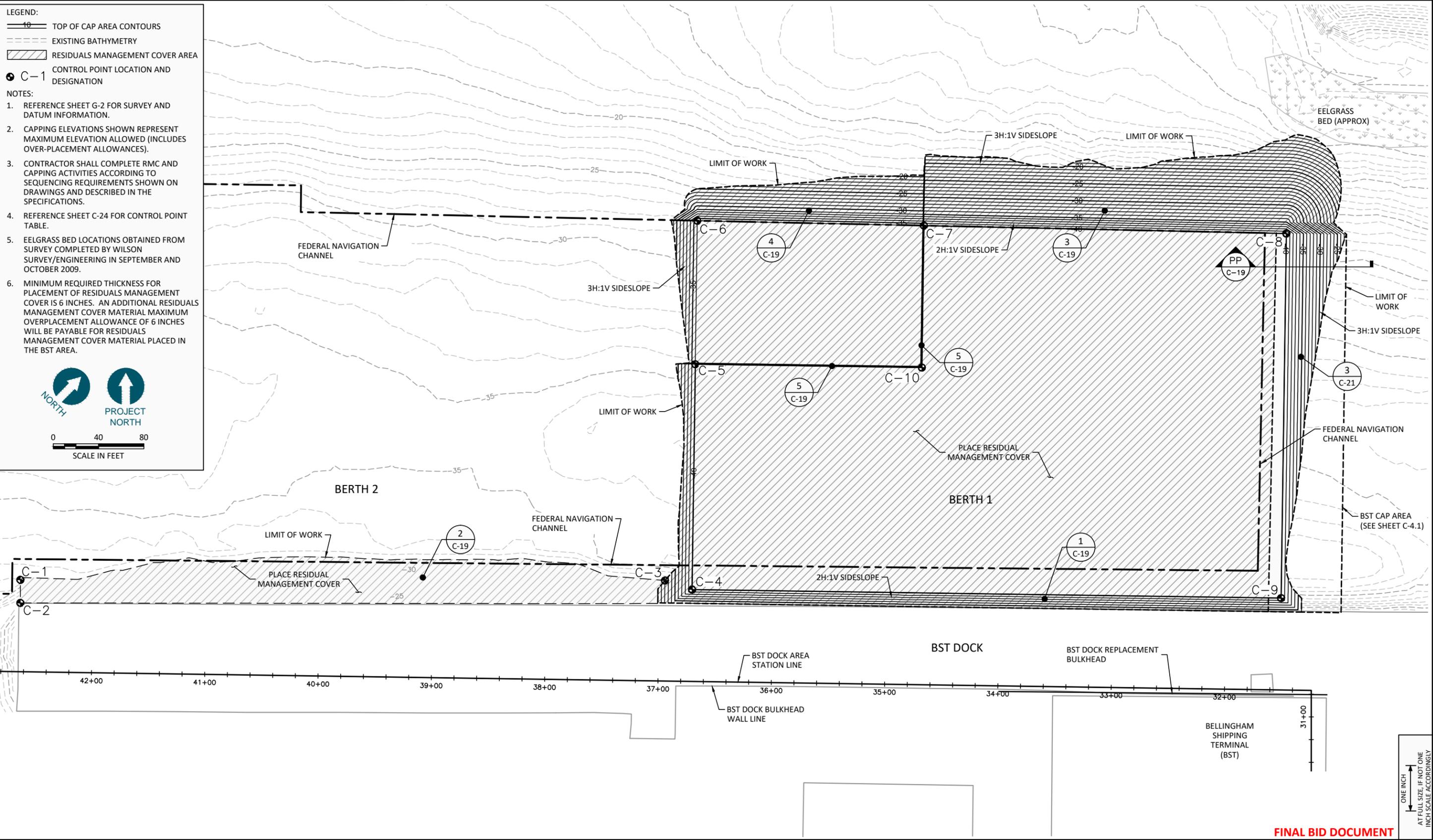
NORTH



PROJECT NORTH



SCALE IN FEET



\\Tacoma1\Tacoma\CAD\Projects\0007-Port of Bellingham\Whatcom Waterway Cleanup\Plan\WAT\Construction Plans\0007-C CAPPING SHEETS.dwg C-4
May 20, 2013 8:30pm dholmer

ONE INCH
AT FULL SIZE, IF NOT ONE
INCH SCALE ACCORDINGLY

FINAL BID DOCUMENT



k p f f Consulting Engineers
101 Stewart Street, Suite 400
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

DESIGNED BY: M. WOLTMAN
 DRAWN BY: D. HOLMER
 CHECKED BY: T. WANG
 APPROVED BY: T. WANG
 SCALE: AS NOTED
 DATE: MAY 2013

**WHATCOM WATERWAY PHASE 1 CLEANUP
 BELLINGHAM, WASHINGTON**

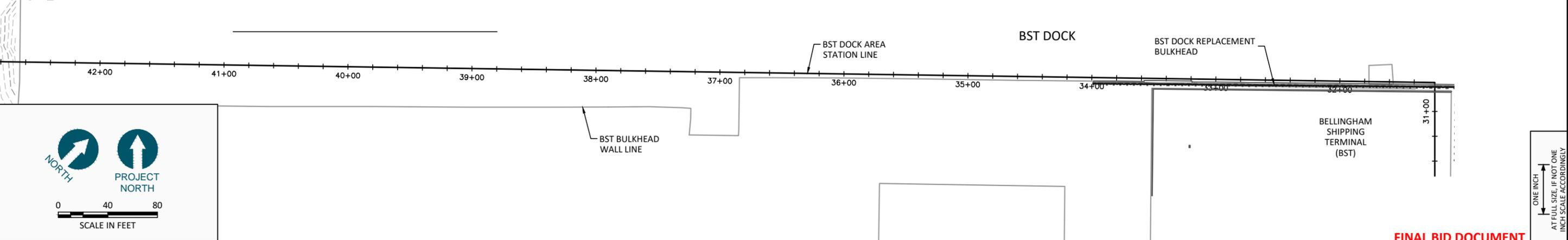
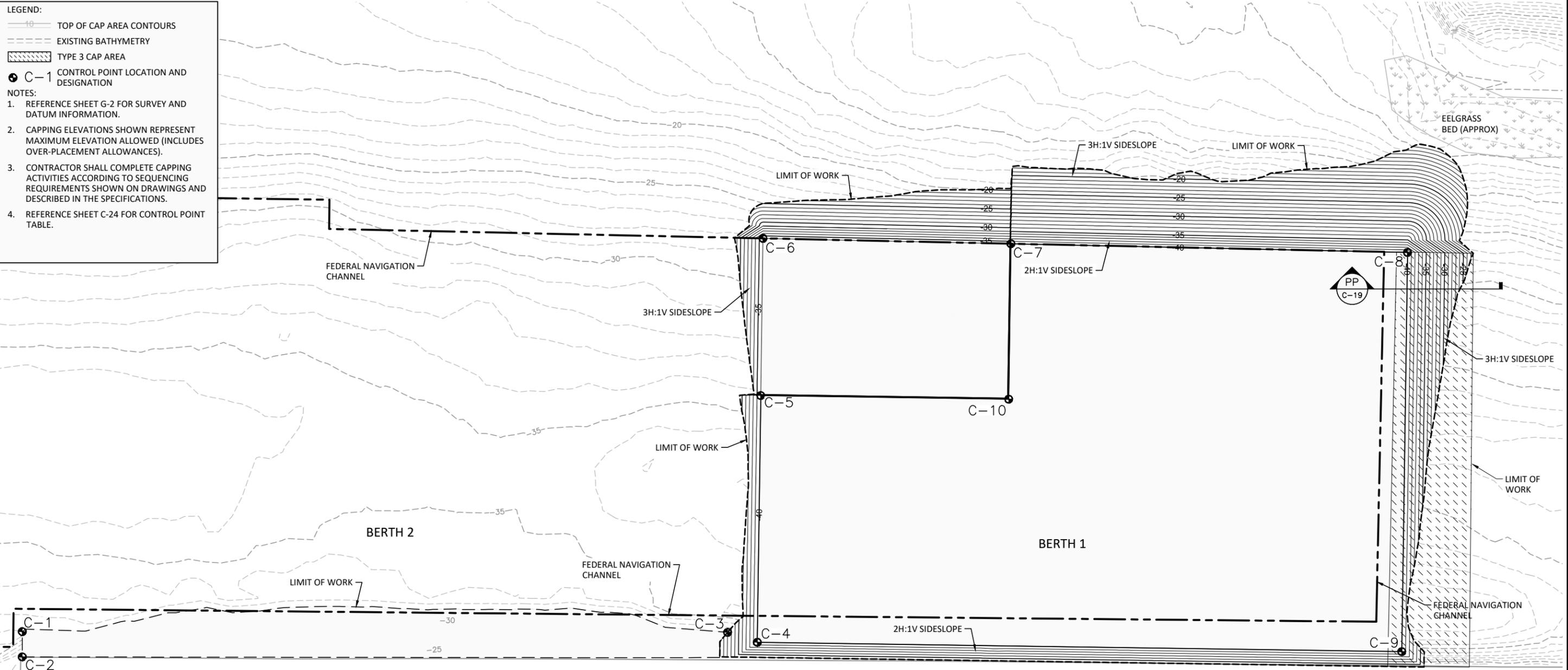
**BST CAPPING AND RESIDUALS MANAGEMENT COVER
 PLAN**

C-4

SHEET NO. 36 OF 104

LEGEND:
 - - - - - TOP OF CAP AREA CONTOURS
 - - - - - EXISTING BATHYMETRY
 [Hatched Box] TYPE 3 CAP AREA
 ⊕ C-1 CONTROL POINT LOCATION AND DESIGNATION

NOTES:
 1. REFERENCE SHEET G-2 FOR SURVEY AND DATUM INFORMATION.
 2. CAPPING ELEVATIONS SHOWN REPRESENT MAXIMUM ELEVATION ALLOWED (INCLUDES OVER-PLACEMENT ALLOWANCES).
 3. CONTRACTOR SHALL COMPLETE CAPPING ACTIVITIES ACCORDING TO SEQUENCING REQUIREMENTS SHOWN ON DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS.
 4. REFERENCE SHEET C-24 FOR CONTROL POINT TABLE.



FINAL BID DOCUMENT



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

DESIGNED BY: M. WOLTMAN
 DRAWN BY: D. HOLMER
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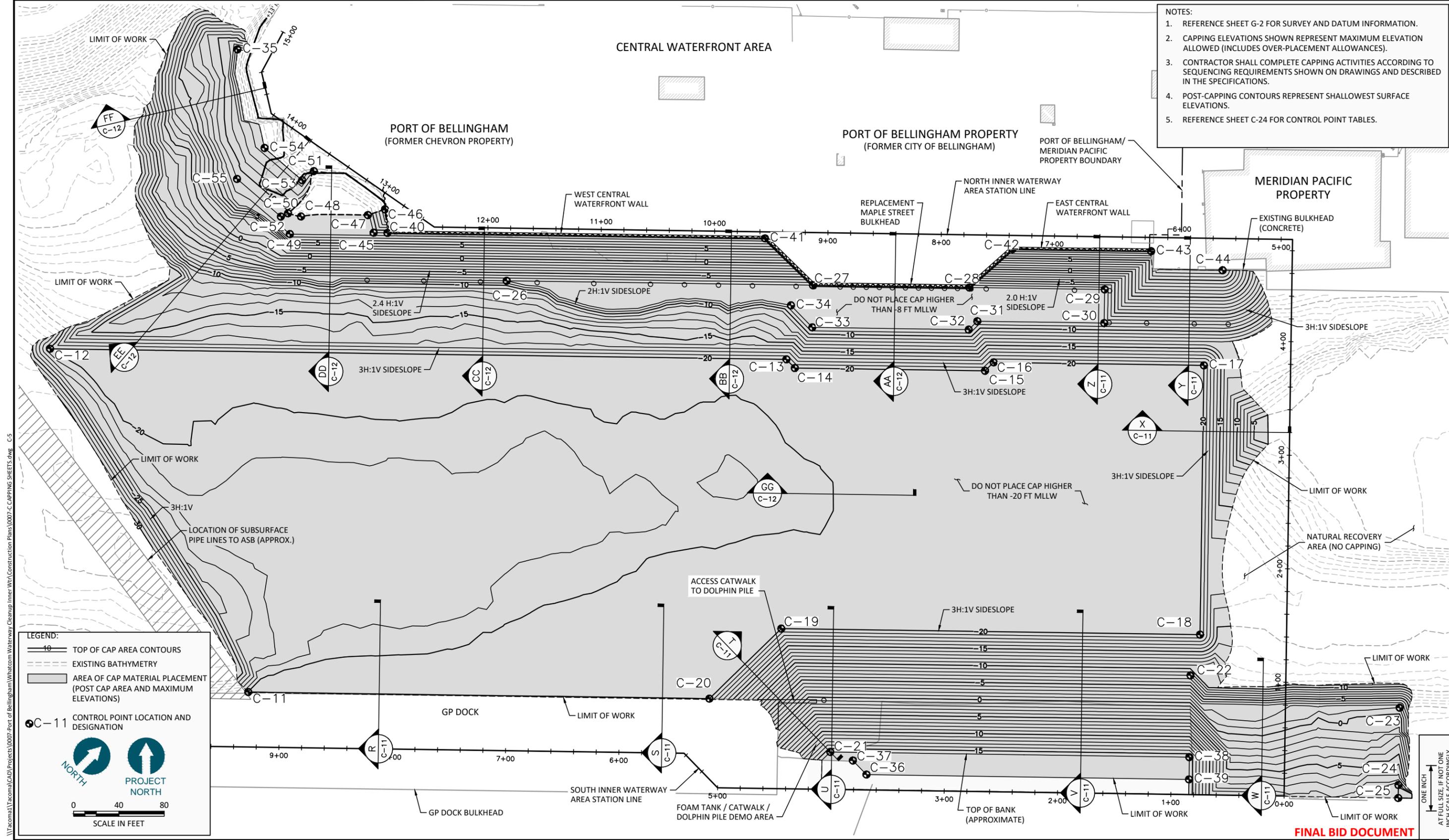
WHATCOM WATERWAY PHASE 1 CLEANUP
BELLINGHAM, WASHINGTON

BST CAP TYPE PLAN

C-4.1

SHEET NO. 37 OF 104

May 20, 2013 8:30pm dholmer
 \\Tacoma1\Tacoma\CAD\Projects\Port of Bellingham\Waterway Cleanup\liner\WTA\Construction Plans\0007-C-CAP TYPE SHEETS.dwg C-4.1



- NOTES:
1. REFERENCE SHEET G-2 FOR SURVEY AND DATUM INFORMATION.
 2. CAPPING ELEVATIONS SHOWN REPRESENT MAXIMUM ELEVATION ALLOWED (INCLUDES OVER-PLACEMENT ALLOWANCES).
 3. CONTRACTOR SHALL COMPLETE CAPPING ACTIVITIES ACCORDING TO SEQUENCING REQUIREMENTS SHOWN ON DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS.
 4. POST-CAPPING CONTOURS REPRESENT SHALLOWEST SURFACE ELEVATIONS.
 5. REFERENCE SHEET C-24 FOR CONTROL POINT TABLES.

LEGEND:

- 10 — TOP OF CAP AREA CONTOURS
- - - - - EXISTING BATHYMETRY
- ▭ AREA OF CAP MATERIAL PLACEMENT (POST CAP AREA AND MAXIMUM ELEVATIONS)
- C-11 CONTROL POINT LOCATION AND DESIGNATION

NORTH
 PROJECT NORTH

0 40 80
SCALE IN FEET

FINAL BID DOCUMENT



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

DESIGNED BY: M. WOLTMAN
 DRAWN BY: D. HOLMER
 CHECKED BY: T. WANG
 APPROVED BY: T. WANG
 SCALE: AS NOTED
 DATE: MAY 2013

**WHATCOM WATERWAY PHASE 1 CLEANUP
BELLINGHAM, WASHINGTON**

INNER WATERWAY CAPPING PLAN

C-5

SHEET NO. 38 OF 104

May 20, 2013 8:30pm dholmer
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