







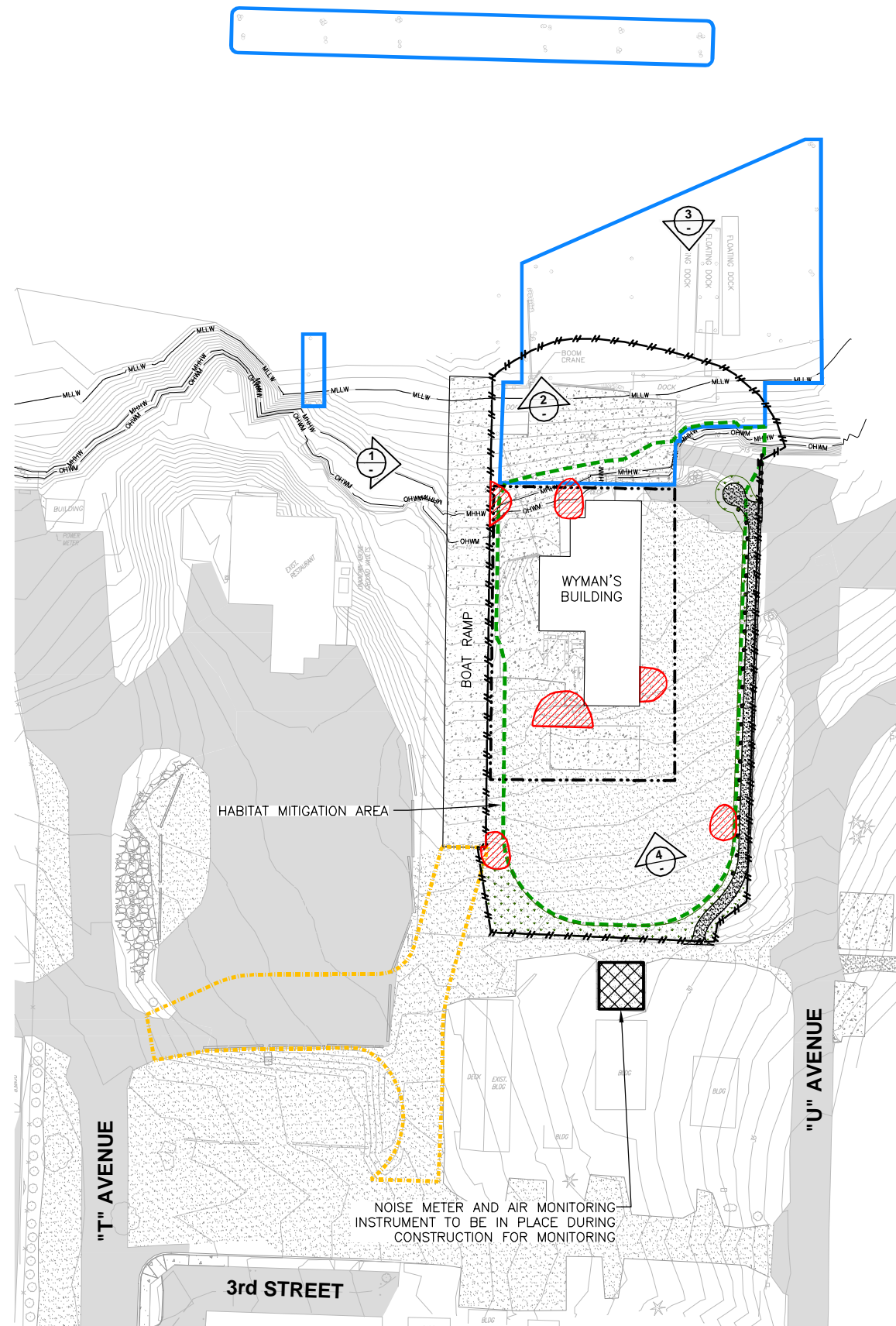


APPENDIX D
Contract Design Drawings

P:\15\147019\05\CAD\90% DESIGN\SHEETS\SH2.0 PROJECT OVERVIEW.DWG(TAB:LAYOUT) MODIFIED BY TMICHAUD ON JUL 30, 2013 - 10:32

PROJECT SUMMARY

-  PLACE ENVIRONMENTAL PROTECTIONS AND CONTROLS
-  REMOVE AND DISPOSE UPLAND STRUCTURES
-  EXCAVATE SHALLOW CONTAMINATED SOIL
-  EXCAVATE REMAINING SOIL AND PLACE FILL AND SLOPE PROTECTION TO CREATE HABITAT MITIGATION
-  REMOVE AND DISPOSE OFFSHORE STRUCTURES AND REMOVE MATERIAL DEBRIS FROM SHORELINE
-  UPLAND LANDSCAPE AREA
-  PEDESTRIAN ACCESS AREA
-  TRUCK TRAFFIC ACCESS ROUTE



PROJECT OVERVIEW

SCALE: 1"=40'

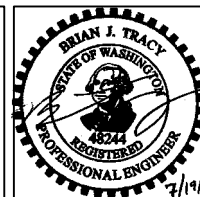


GRAPHIC SCALE



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WYMAN'S HABITAT MITIGATION SITE (PROJECT PIER 1)

PROJECT




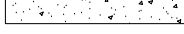
PROJECT OVERVIEW

DRAWN: TJM	PROJECT NO.: 514700719
DESIGN: BJT	SCALE: AS NOTED
CHECKED: JMH	DATE: 7/19/13
SHEET NO.	

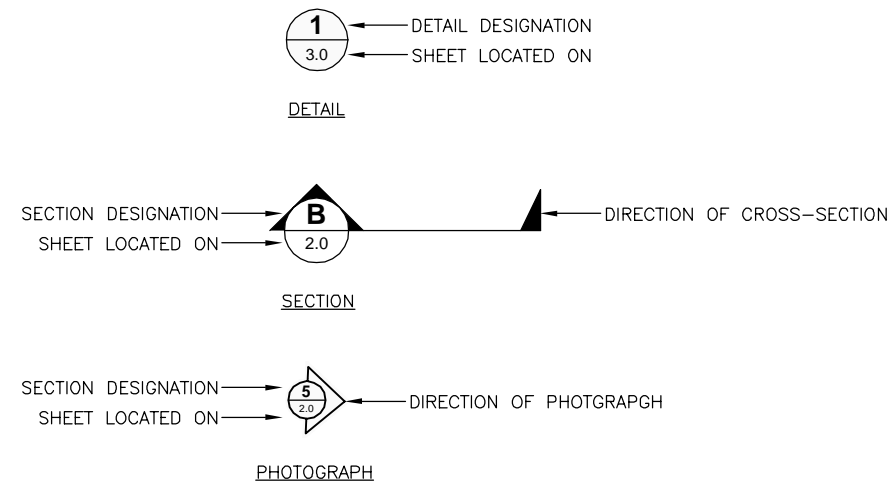
2.0

P:\15\147019\05\CAD\90% DESIGN\SHEETS\SH 3.0 LEGEND_SURVEY CONTROLS.DWG\TAB: LAYOUTI MODIFIED BY THICHAUD ON JUL 30, 2013 - 10:33

LEGEND

- EXISTING 1' CONTOUR (MLLW)
- 15**----- EXISTING 5' CONTOUR (MLLW)
- SD — SD — □ EXISTING STORM DRAIN W/ CATCH BASIN
- SS — SS — EXISTING SANITARY SEWER LINE
- W — W — EXISTING WATERLINE
- OHP — EXISTING OVERHEAD POWERLINE
- E — E — EXISTING ELECTRICAL LINE
- G — G — EXISTING GASLINE
- X — EXISTING FENCE LINE
-  EXISTING TREES
-  EXISTING GRAVEL SURFACE
-  EXISTING ASPHALT SURFACE
-  EXISTING CONCRETE SURFACE
- OHWM — ORDINARY HIGH WATER MARK (OHWM)
- MLLW — MEAN LOWER LOW WATER (MLLW)
- MHHW — MEAN HIGHER HIGH WATER (MHHW)
- o — o — o — PROPOSED TYPE 3 GALVANIZED CHAINLINK FENCE
- x — x — x — PROPOSED TYPE 4 COATED CHAINLINK FENCE
- PROPOSED TYPE 3 FENCE END POST
- PROPOSED REMOVABLE BALLARD
- PROPOSED 2 MAN BARRIER ROCK
- PROPOSED WATER METER
- N PROPOSED DOUBLE CHECK VALVE ASSEMBLY

SHEET SYMBOLS



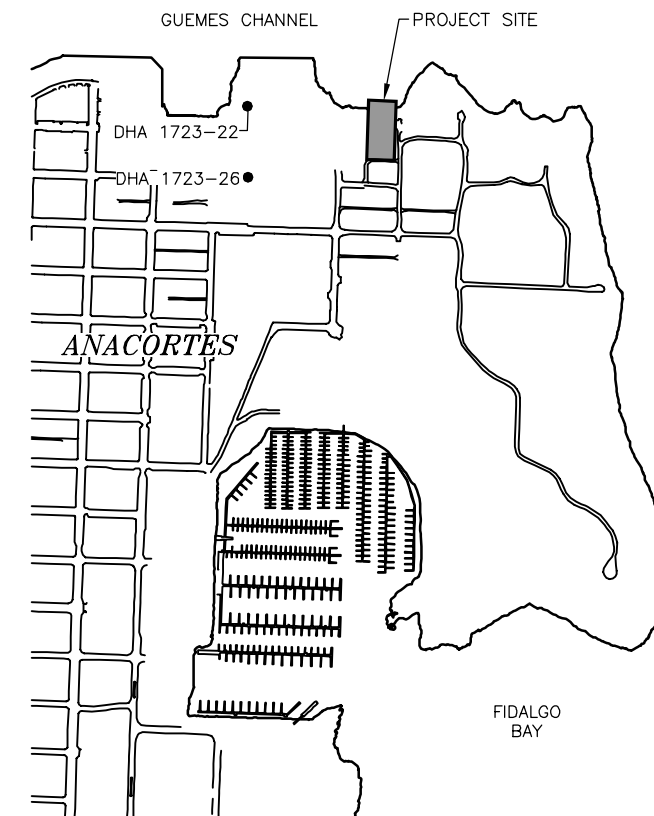
SURVEY CONTROL

1. THIS TOPOGRAPHIC MAP WAS DEVELOPED BY COMBINING SKAGIT SURVEYORS AND ENGINEERS SURVEY OF WYMAN'S PROPERTY DATED MAY 2012, TOPOGRAPHY OF SURROUNDING AREAS AVAILABLE FROM LEONARD, BOUDINOT & SKODJE INC. DESIGN DRAWINGS FOR WYMAN'S RAMP REHABILITATION PROJECT, AND TOPOGRAPHIC/BATHYMETRIC CONTOURS AVAILABLE FROM MAPPING BASED ON AERIAL PHOTOS AVAILABLE FROM THE PORT OF ANACORTES.
2. HORIZONTAL DATUM: WASHINGTON STATE PLANE NORTH - FEET NAD83
3. VERTICAL DATUM: MEAN LOWER LOW WATER (MLLW) ON NOAA TIDAL DATUM EPOCH 1941-1959, BASED ON PORT OF ANACORTES SURVEY CONTROL MONUMENT "JETTY-2".
4. UNITS: U.S. FEET.
5. CONTOUR INTERVAL: 1 FOOT.

ALL SURVEYS SHALL BE MADE BY CONTRACTOR RELATIVE TO PORT OF ANACORTES CONTROL POINTS SURVEY CONTROL AS PROVIDED BY THE PORT OF ANACORTES:

DHA 1723-22
PK NAIL
N: 559404.80
E: 1210236.68
Z: 14.97 (MLLW)

DHA 1723-26
PK NAIL
N: 559841.84
E: 1210232.19
Z: 15.44 (MLLW)



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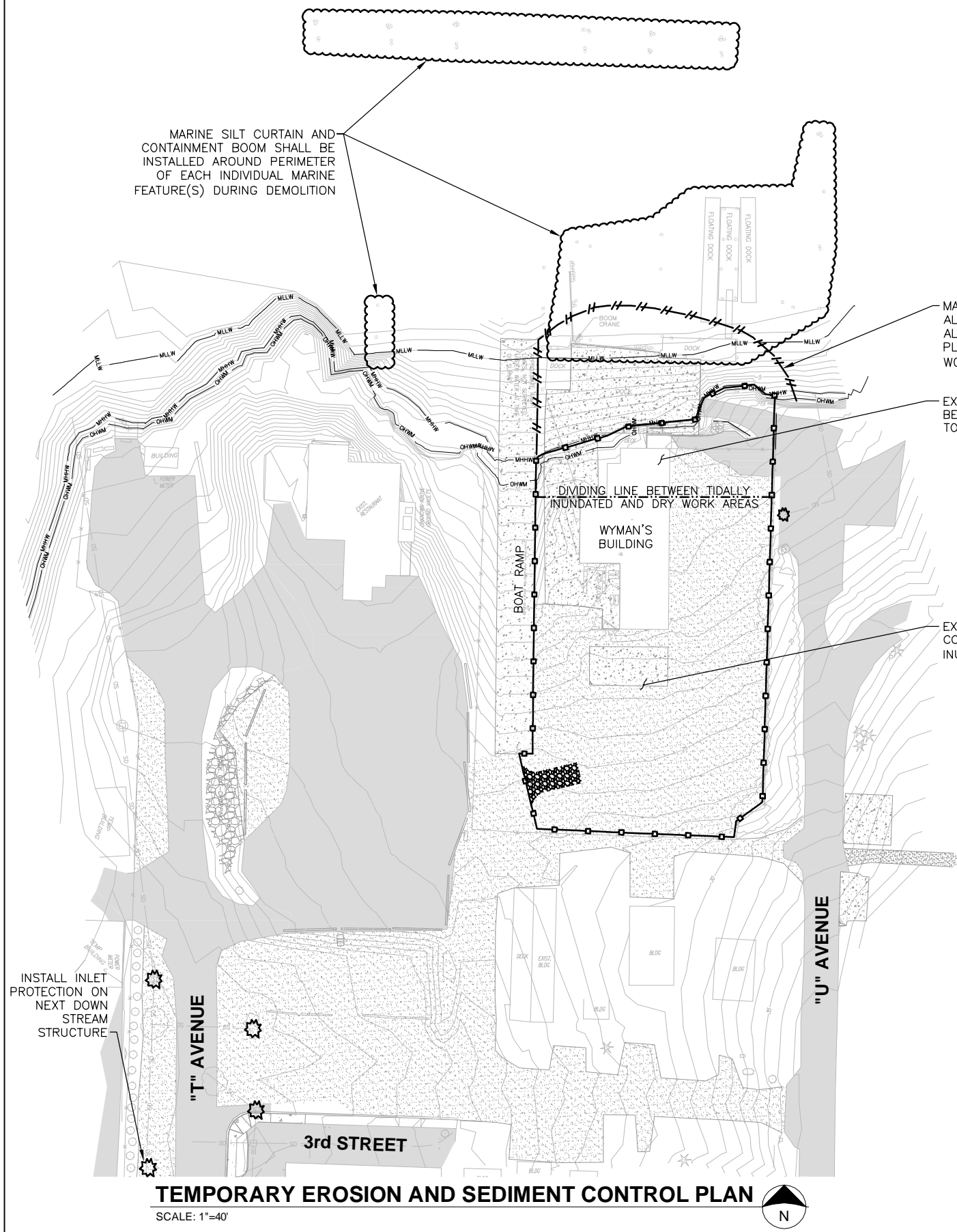
WYMAN'S HABITAT MITIGATION SITE (PROJECT PIER 1)
PROJECT

LEGEND AND SURVEY CONTROLS

DRAWN: TJM	PROJECT NO.: 5147019
DESIGN: BJT	SCALE: AS NOTED
CHECKED: JMH	DATE: 7/19/13
SHEET NO.	

3.0

P:\15\147019\05\CAD\190% DESIGN\SHEETS\5.0 TESC PLAN.DWG\TAB.5.0 MODIFIED BY TMICHAUD ON JUL 30, 2013 - 10:34


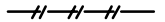




TEMPORARY EROSION AND SEDIMENT CONTROL PLAN

SCALE: 1"=40'



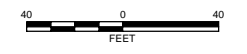
LEGEND

-  SILT FENCE
-  MARINE SILT CURTAIN
-  INLET PROTECTION
-  CONSTRUCTION ENTRANCE

GENERAL NOTES FOR EROSION AND SEDIMENT CONTROL

- 1) AS PER THE REQUIREMENTS OF PROJECT PERMITS, EXCAVATION, GRADING AND FILL PLACEMENT LANDWARD OF MEAN HIGHER HIGH WATER (MHHW) LINE AND THE LINE DIVIDING WORK AREAS SHALL BE COMPLETED IN ISOLATION FROM THE GUEMES CHANNEL TO THE MAXIMUM EXTENT PRACTICABLE. EXCAVATION, GRADING AND FILL PLACEMENT IN THE AREAS WATERWARD OF MHHW AND THE LINE DIVIDING WORK AREAS SHALL OCCUR DURING LOW TIDE HOURS (TIDE LOWER THAN +4 FEET MLLW) TO THE EXTENT PRACTICABLE.
- 2) THE CONTRACTOR SHALL CONDUCT ANY AND ALL DEWATERING ACTIVITIES IN COMPLIANCE WITH ALL APPLICABLE PERMITS FOR THE SITE. THE CONTRACTOR SHALL PROVIDE A DEWATERING PLAN FOR PORT APPROVAL PRIOR TO IMPLEMENTING THE WORK.
- 3) SILT CURTAIN AND CONTAINMENT BOOM SHALL BE INSTALLED ALONG THE SHORELINE OF THE SITE AT ALL TIMES WHILE PERFORMING CONSTRUCTION ACTIVITY INCLUDING EXCAVATION, GRADING AND FILL PLACEMENT ALONG THE SHORELINE.
- 4) WHILE PERFORMING DEMOLITION/CONSTRUCTION ACTIVITIES ALONG THE SHORELINE AND OFFSHORE AREAS OF THE SITE, THE CONTRACTOR SHALL MAINTAIN A SILT CURTAIN AND CONTAINMENT BOOM AROUND THE PERIMETER OF THE WORK AREA AT ALL TIMES TO AID IN MAINTAINING WATER QUALITY AS REQUIRED BY PROJECT PERMITS.
- 5) CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION AND MAINTENANCE OF ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AS REQUIRED BY APPLICABLE PERMIT DOCUMENTS. CONTRACTOR SHALL PREPARE A PROJECT SPECIFIC STORMWATER POLLUTION PREVENTION PLAN (SWPPP). CONTRACTOR SHALL IMPLEMENT ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES REQUIRED DURING ALL CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES WITHIN 30 DAYS AFTER THE FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY CONTROLS ARE NO LONGER NEEDED. DISTURBED SOIL RESULTING FROM REMOVAL OF TEMPORARY CONTROLS OR VEGETATION WILL BE PERMANENTLY STABILIZED.
- 6) INLET PROTECTION SHALL BE WSDOT STANDARD PLAN 1-40.20-00. THE CONTRACTOR SHALL INSTALL ADDITIONAL INLET PROTECTION AS REQUIRED BY CONSTRUCTION ACTIVITIES AS NEEDED TO COMPLY WITH ALL STATE, FEDERAL AND LOCAL REQUIREMENTS.
- 7) THE CONTRACTOR SHALL CONSTRUCT THEIR CONSTRUCTION ENTRANCE AS TO NOT IMPACT COMMERCIAL BOAT RAMP ACCESS. THE CONTRACTOR MAY UTILIZE A MOVABLE CONSTRUCTION ENTRANCE AS LONG AS IT COMPLIES WITH ALL STATE, FEDERAL, AND LOCAL REQUIREMENTS.

GRAPHIC SCALE



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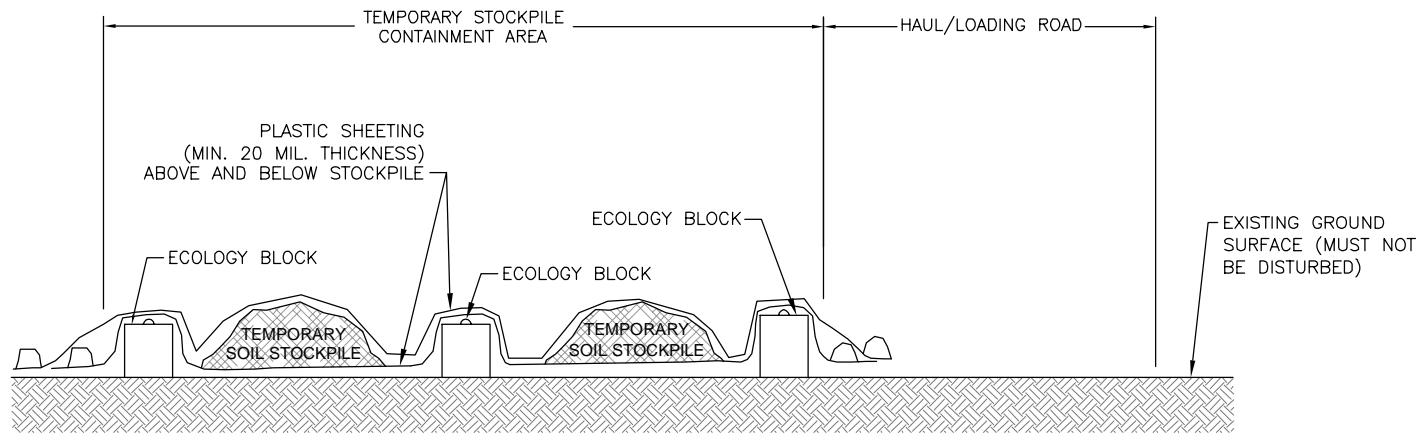
WYMAN'S HABITAT MITIGATION SITE (PROJECT PIER 1)

PROJECT

TEMPORARY EROSION AND SEDIMENT CONTROL PLAN

DRAWN: TJM	PROJECT NO.: 514700719
DESIGN: BJT	SCALE: AS NOTED
CHECKED: JMH	DATE: 7/19/13
SHEET NO.	
5.0	

P:\15\147019\05\CAD\90% DESIGN\SHEETS\5.0 TESC PLAN.DWG\TAB-5.1 MODIFIED BY THICHAUD ON JUL 30, 2013 - 10:37



CROSS-SECTION

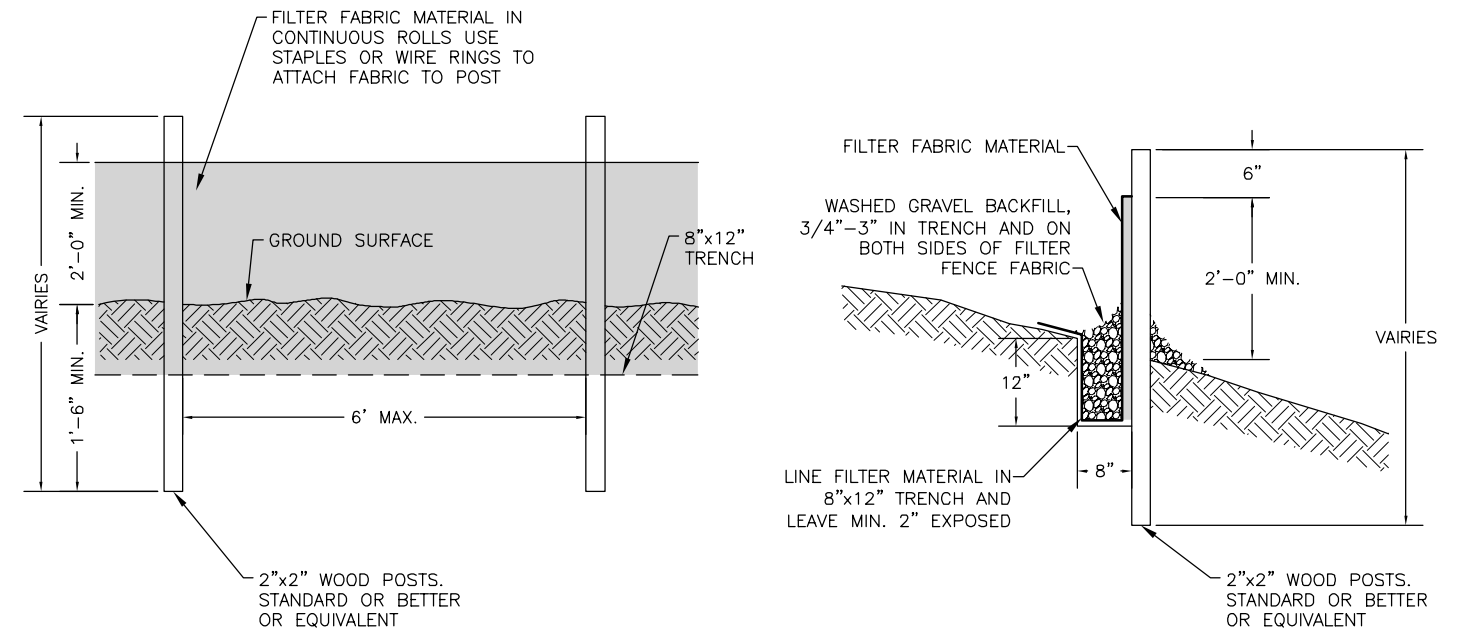
NOTES:

1. STOCKPILED SOIL WILL BE COVERED AND SECURED AT ALL TIMES EXCEPT DURING ACTIVE SOIL LOADING AND UNLOADING.
2. EROSION CONTROL MEASURES SHALL BE IN PLACE AT ALL TIMES DURING USE OF STOCKPILE AREAS.
3. WATER COLLECTED WITHIN THE STOCKPILE AREAS MUST BE CONTAINED AND NO RELEASE OF WATER FROM THE STOCKPILE AREAS SHALL BE PERMITTED. CONTRACTOR SHALL REMOVE WATER WITHIN THE STOCKPILE AREAS BY PUMPING TO A CONTAINMENT VESSEL FOR ANALYSIS TO DETERMINE PROPER DISPOSAL. CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL OF COLLECTED WATER IN THE STOCKPILE AREA.

TEMPORARY STOCKPILE CONTAINMENT AREA DETAIL

NOT TO SCALE

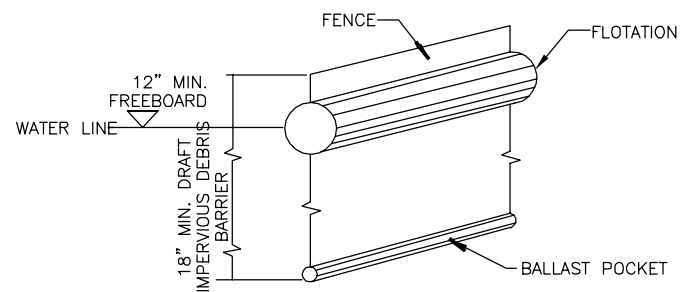
1
5.1



SILT FENCE DETAIL

NOT TO SCALE

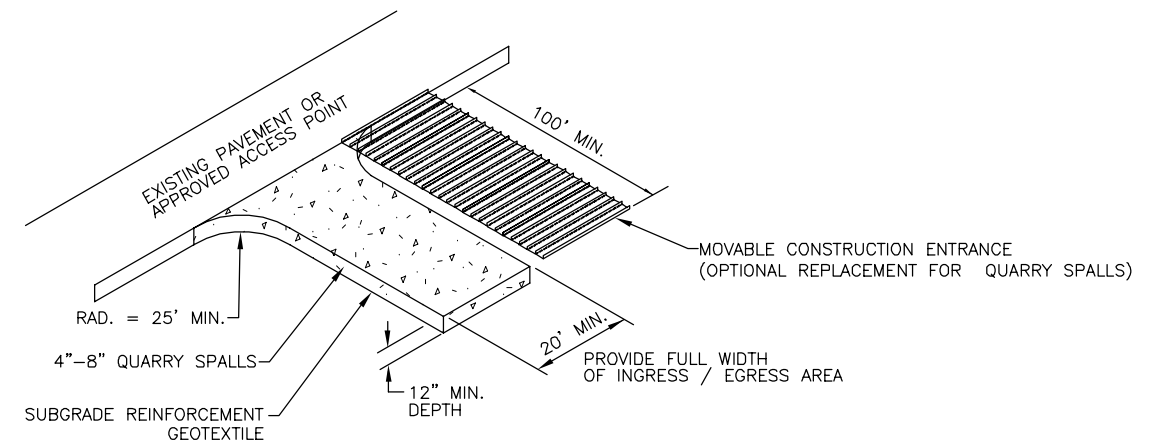
2
5.1



MARINE SILT CURTAIN

NTS

3
5.1



TEMPORARY CONSTRUCTION ENTRANCE

NTS

4
5.1



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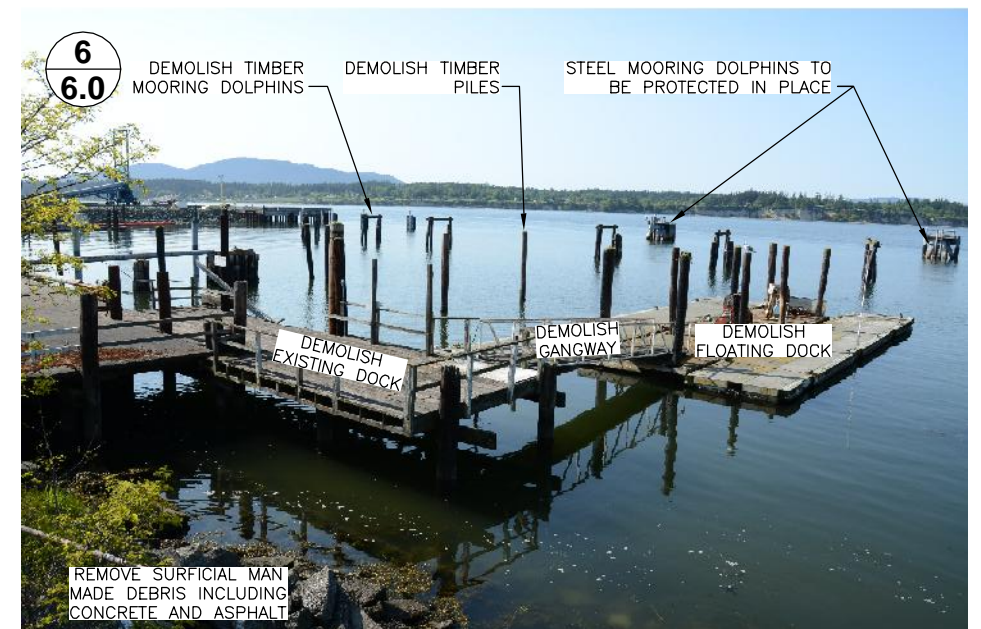
PROJECT

TEMPORARY EROSION AND SEDIMENT CONTROL
DETAILS

DRAWN: TJM	PROJECT NO.: 514700719
DESIGN: BJT	SCALE: AS NOTED
CHECKED: JMH	DATE: 7/19/13
SHEET NO.	

5.1

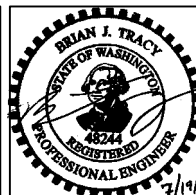
P:\15\147019\05\CAD\90% DESIGN\SHEETS\SH7 7.0 DEMOLITION DETAILS.DWG(TAB LAYOUT) MODIFIED BY THICHAUD ON JUL 30, 2013 - 10:38



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WYMAN'S HABITAT MITIGATION SITE (PROJECT PIER 1)

PROJECT



DEMOLITION DETAILS

DRAWN: TJM PROJECT NO.: 5147019
DESIGN: BJT SCALE: AS NOTED
CHECKED: JMH DATE: 7/19/13
SHEET NO.

7.0

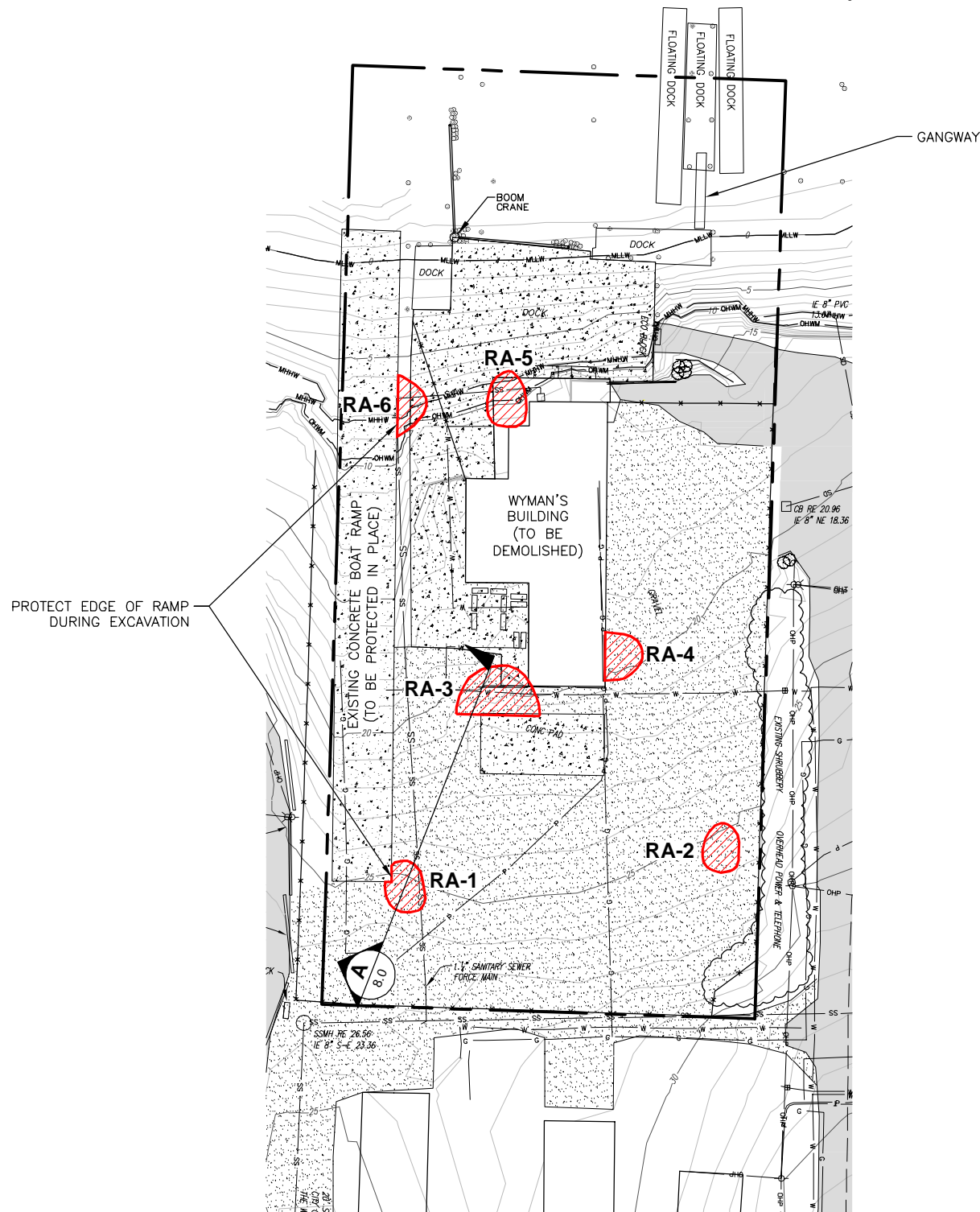
P:\15\147019\05\CAD\90% DESIGN\SHEETS\8.0 CONTAMINATED SOIL REMOVAL PLAN.DWG\TAB:LAYOUT MODIFIED BY TMICHAUD ON JUL 30, 2013 - 10:40

LEGEND

- WYMAN'S PROPERTY BOUNDARY
- RA-1  CONTAMINATED SOIL REMOVAL AREA (RA)
- X --- EXISTING FENCE
-  CROSS-SECTION

NOTES

1. CONTRACTOR SHALL PERFORM UTILITY LOCATE AT THE SITE PRIOR TO CONDUCTING EARTH DISTURBING ACTIVITIES.
2. EACH CONTAMINATED SOIL AREA IDENTIFIED WILL BE EXCAVATED TO A DEPTH OF APPROXIMATELY 1.5 FEET BELOW GROUND SURFACE.
3. CONTAMINATED SOIL IDENTIFIED FOR EXCAVATION AND OFF-SITE DISPOSAL IS DESIGNATED AS STATE-ONLY DANGEROUS WASTE AND SHALL BE HANDLED, MANAGED AND TRANSPORTED IN ACCORDANCE WITH CHAPTER 173-303 WAC AND OTHER APPLICABLE STATE AND FEDERAL REGULATIONS.
4. CONTAMINATED SOIL SHALL BE REMOVED FROM THE CONTAMINATED SOIL REMOVAL AREAS PRIOR TO COMMENCING EXCAVATION ACTIVITIES FOR THE HABITAT MITIGATION AREA.

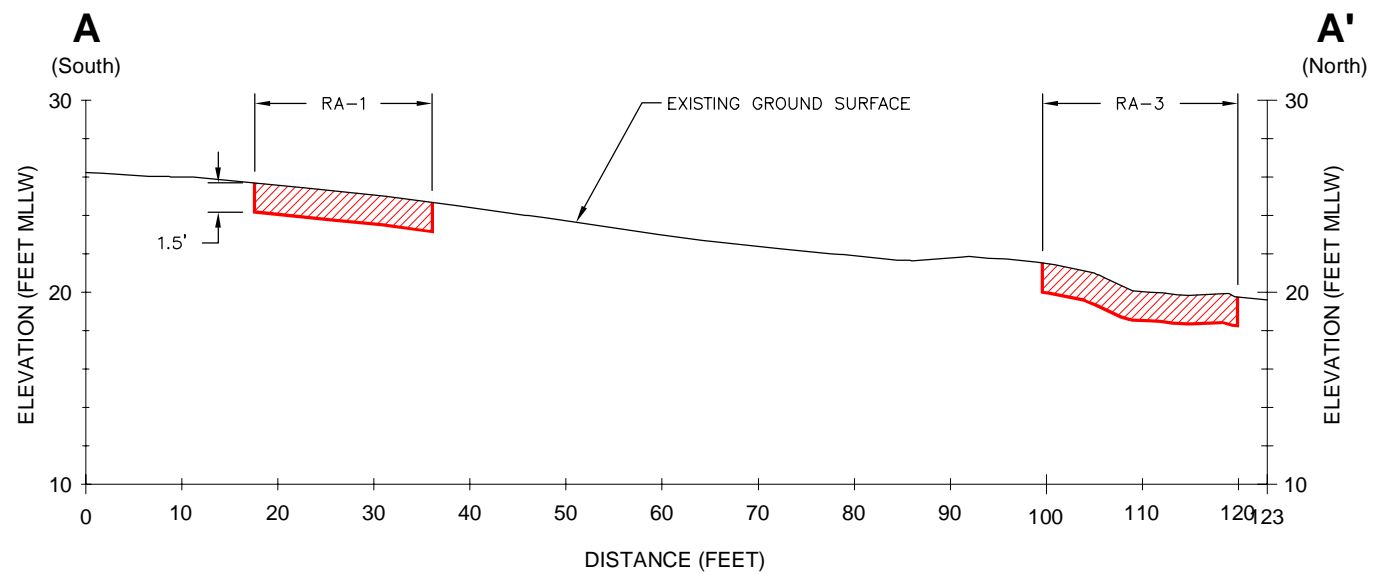


PROTECT EDGE OF RAMP DURING EXCAVATION

CONTAMINATED SOIL REMOVAL PLAN

SCALE: 1"=30'

GRAPHIC SCALE



TYPICAL CONTAMINATED SOIL REMOVAL SECTION A

HORIZONTAL SCALE: 1"=10'
VERTICAL SCALE: 1"=5'
VERTICAL EXAGGERATION = 2X

A
8.0



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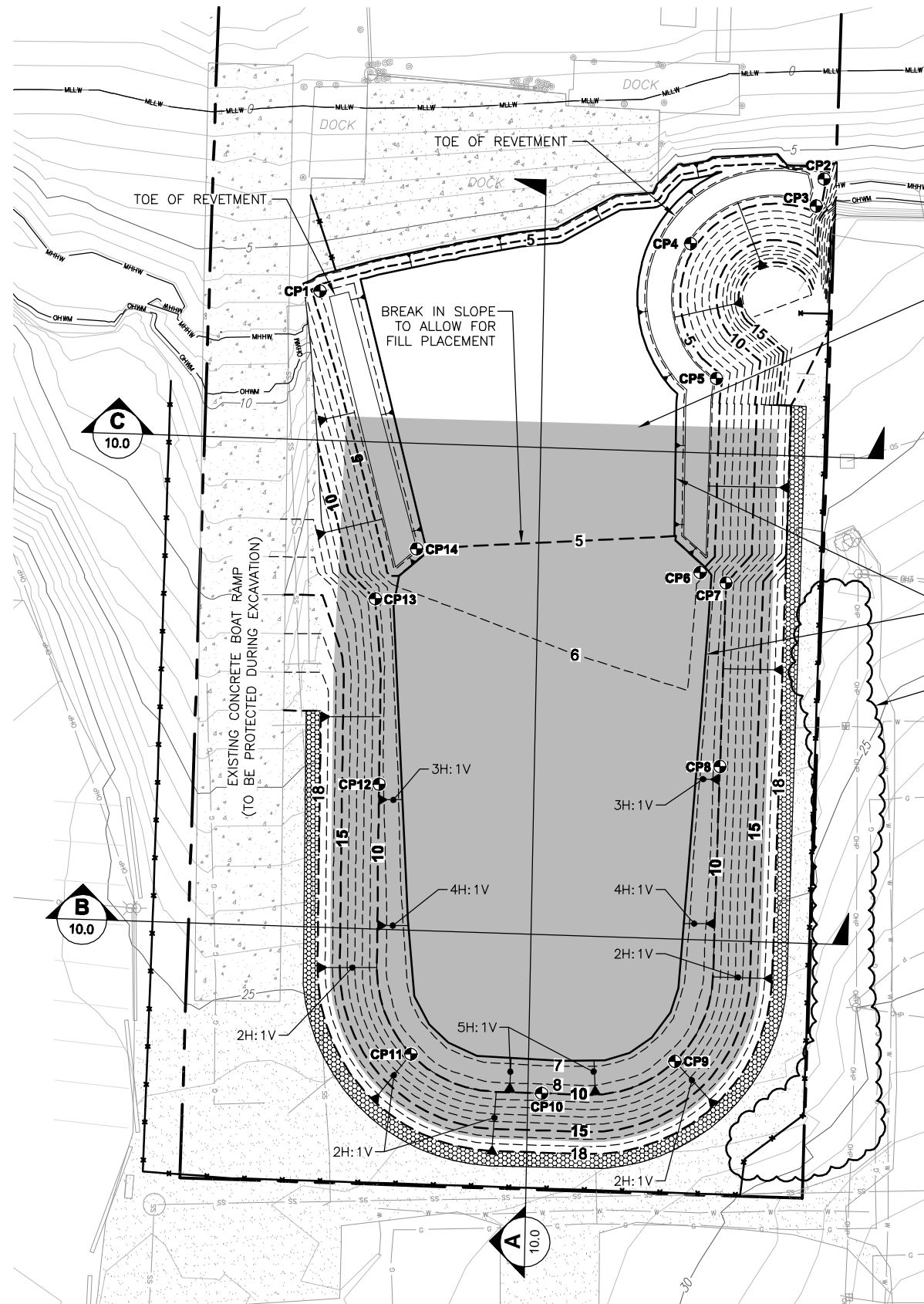
WYMAN'S HABITAT MITIGATION SITE (PROJECT PIER 1)
PROJECT

CONTAMINATED SOIL REMOVAL PLAN AND DETAILS

DRAWN: TJM	PROJECT NO.: 5147019
DESIGN: BJT	SCALE: AS NOTED
CHECKED: JMH	DATE: 7/19/13
SHEET NO.	

8.0

P:\15\147019\05\CAD\90% DESIGN\SHEETS\9.0 - 10.0 EXCAVATION PLAN REV 95PERCENT.DWG\TAB\PLAN MODIFIED BY THICHAUD ON JUL 30, 2013 - 10:41



- LEGEND**
- WYMAN'S PROPERTY BOUNDARY
 - x-x- EXISTING FENCE
 - 20--- EXISTING TOPOGRAPHIC CONTOUR (FEET MLLW)
 - - -20- - - EXCAVATION GRADE CONTOUR (FEET MLLW)
 - APPROXIMATE AREA WHERE BEDROCK MAY BE ENCOUNTERED WITHIN EXCAVATED LIMITS
 - CP1 EXCAVATION CONTROL POINT
 - ROCK WALL TO BE CONSTRUCTED (SEE SHEET 13.0 FOR DETAIL)

- NOTES**
- ELEVATIONS ARE REFERENCED TO MEAN LOWER LOW WATER (MLLW).
 - APPROXIMATE AREA IN WHICH BEDROCK MAY BE ENCOUNTERED WITHIN EXCAVATION LIMITS IS SHOWN IN THE DRAWING BASED ON EXISTING SOIL EXPLORATIONS (SEE REFERENCE MATERIALS). THE AREA OF BEDROCK COULD BE GREATER THAN OR LESS THAN THE SHOWN EXTENT.
 - BEDROCK MAY BE ENCOUNTERED IN EXCAVATION LIMITS AND REMOVAL OF SUCH BEDROCK TO SPECIFIED ELEVATIONS AND GRADES IS INCLUDED IN PAY ITEM.
 - AT LOCATIONS WITHIN THE EXCAVATION AREA WHERE BEDROCK IS ENCOUNTERED LANDWARD OF DESIGN FINISH GRADE +10 FEET (MLLW) THE REMOVAL OF BEDROCK MAY BE MODIFIED AS DIRECTED BY THE PORT OF ANACORTES. TOP SOIL MAY BE PLACED ON EXPOSED BEDROCK SURFACES AS DIRECTED BY THE PORT OF ANACORTES. EXCAVATION ELEVATIONS AND GRADES WATERWARD OF DESIGN FINISH GRADE +10 FEET (MLLW) MUST BE ACHIEVED IN ACCORDANCE WITH CONTRACT DRAWINGS AND SPECIFICATIONS.
 - ARCHEOLOGICAL MONITORING IS REQUIRED FOR EXCAVATION OF ALL FILL MATERIAL WITHIN THE EXCAVATION LIMITS AS DESCRIBED IN CONTRACT SPECIFICATIONS.
 - THE CONTRACTOR SHALL CONDUCT ANY AND ALL DEWATERING ACTIVITIES IN COMPLIANCE WITH ALL APPLICABLE PERMITS FOR THE PROJECT. THE CONTRACTOR SHALL PROVIDE A DEWATERING PLAN FOR PORT APPROVAL PRIOR TO IMPLEMENTING THE WORK.
 - CONTRACTOR SHALL PROTECT EXISTING CONCRETE BOAT RAMP DURING ALL EXCAVATION ACTIVITIES.

EXCAVATION CONTROL POINT COORDINATES			
CONTROL POINT #	NORTHING	EASTING	EXCAVATION ELEVATION (MLLW)
CP-1	559752.5085	1211004.0237	4.20
CP-2	559782.6914	1211140.1078	4.20
CP-3	559775.4003	1211137.9771	4.20
CP-4	559765.3005	1211104.0190	4.20
CP-5	559728.8789	1211111.0532	4.20
CP-6	559676.5186	1211106.6214	5.00
CP-7	559673.6690	1211113.6043	8.35
CP-8	559624.1440	1211111.9681	8.40
CP-9	559544.5659	1211099.8034	8.47
CP-10	559535.9482	1211063.8478	8.47
CP-11	559546.5207	1211028.5445	8.47
CP-12	559619.3893	1211019.9762	8.40
CP-13	559669.1795	1211018.9453	8.40
CP-14	559682.9025	1211030.1043	3.75

HORIZONTAL DATUM: WASHINGTON STATE PLANE NORTH - FEET
 VERTICAL DATUM: MEAN LOWER LOW WATER (MLLW)

GRAPHIC SCALE

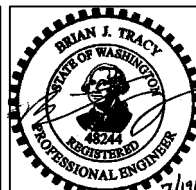


EXCAVATION PLAN

SCALE: 1"=20'



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WYMAN'S HABITAT MITIGATION SITE (PROJECT PIER 1)

PROJECT




EXCAVATION PLAN

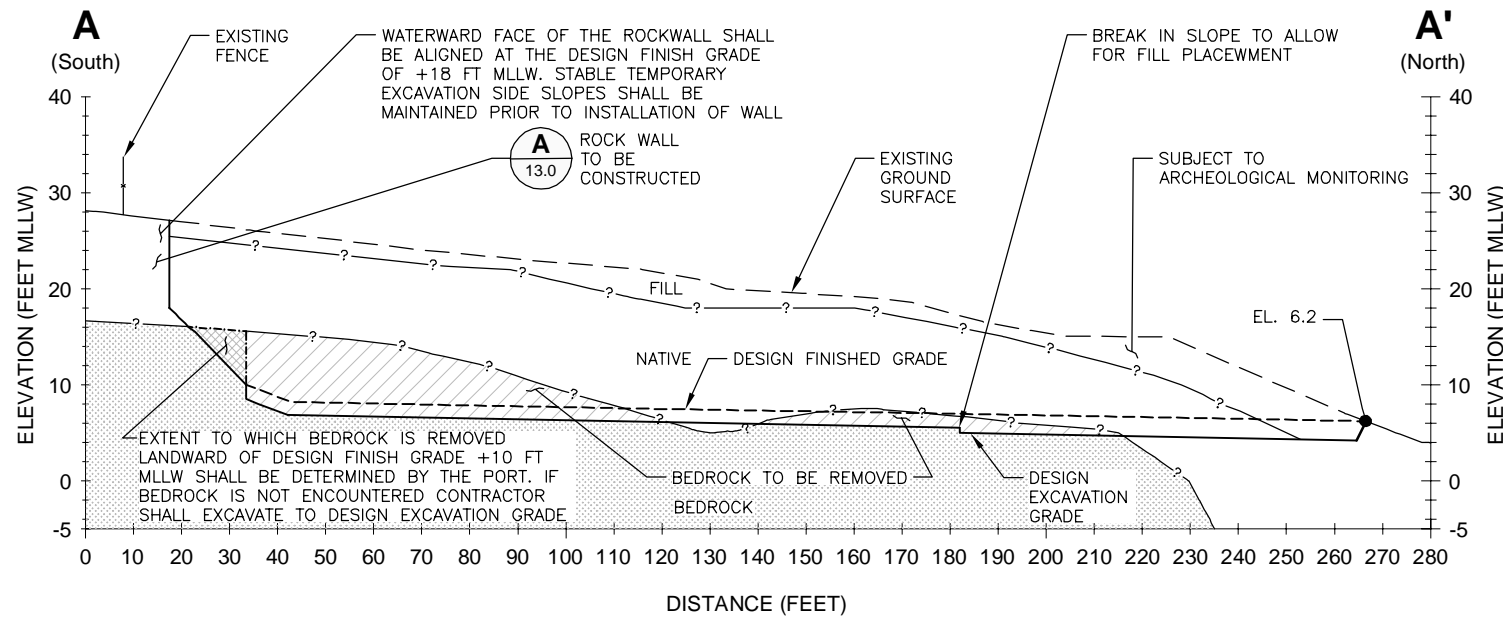
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DESIGN: BJT	SCALE: AS NOTED
CHECKED: JMH	DATE: 7/19/13
SHEET NO.	

9.0

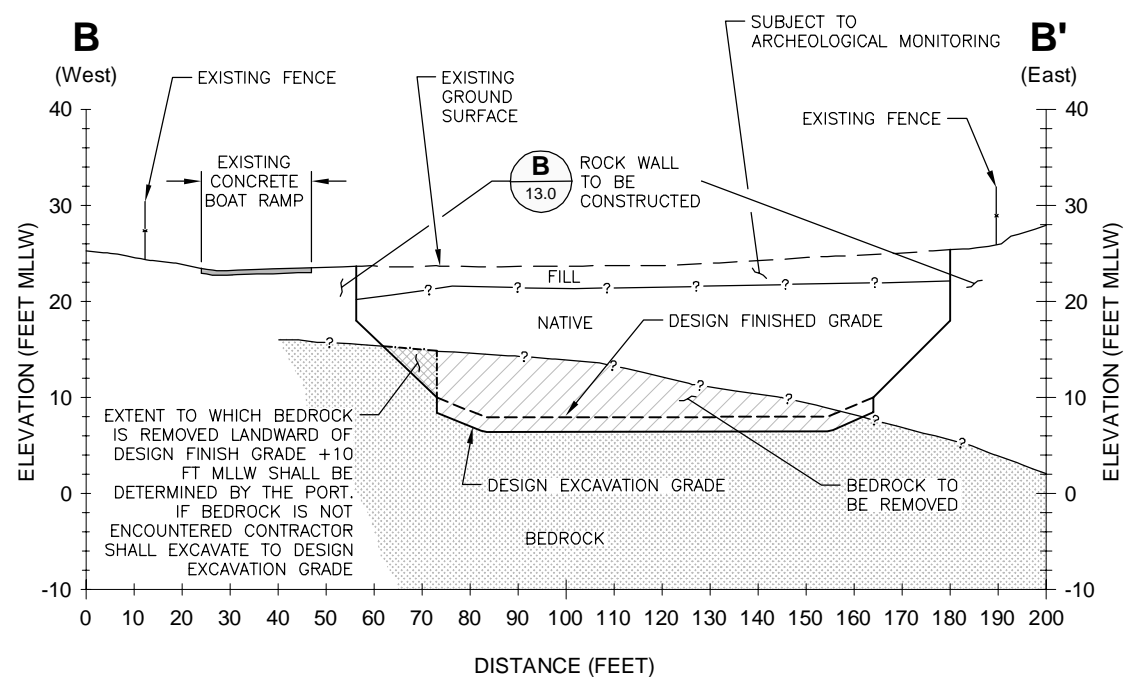
P:\15\147019\05\CAD\190% DESIGN\SHEETS\SH 9.0 - 10.0 EXCAVATION PLAN REV 95PERCENT.DWG\TAB:SECTIONS MODIFIED BY THICHAUD ON JUL 30, 2013 - 10:41

LEGEND

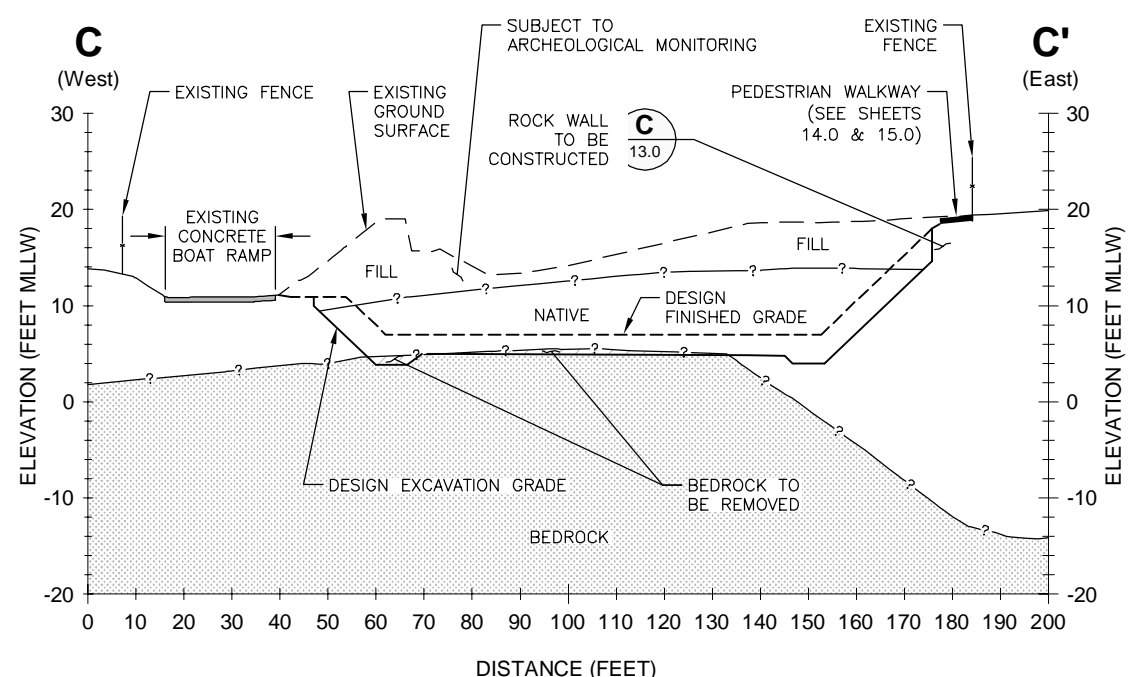
-  BEDROCK TO REMAIN
-  APPROXIMATE AREA OF BEDROCK TO BE REMOVED TO MEET EXCAVATION GRADES
-  EXTENT TO WHICH BEDROCK IS REMOVED ABOVE +10 FT MLLW SHALL BE DETERMINED BY THE PORT. IF BEDROCK IS NOT ENCOUNTERED CONTRACTOR SHALL EXCAVATE TO DESIGN EXCAVATION GRADE



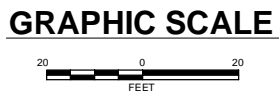
EXCAVATION SECTION **A**
9.0
 HORIZONTAL SCALE: 1"=20'
 VERTICAL SCALE: 1"=10'
 VERTICAL EXAGGERATION = 2X



EXCAVATION SECTION **B**
9.0
 HORIZONTAL SCALE: 1"=20'
 VERTICAL SCALE: 1"=10'
 VERTICAL EXAGGERATION = 2X



EXCAVATION SECTION **C**
9.0
 HORIZONTAL SCALE: 1"=20'
 VERTICAL SCALE: 1"=10'
 VERTICAL EXAGGERATION = 2X



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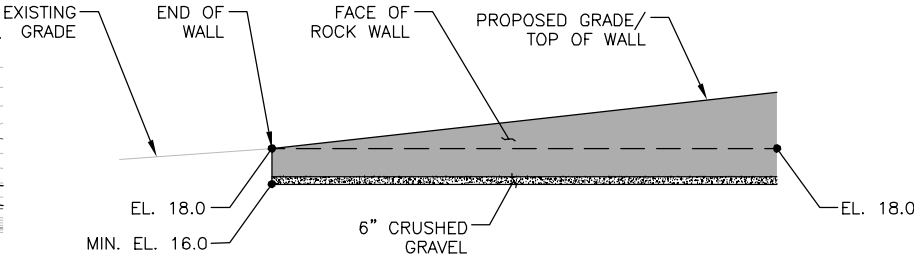
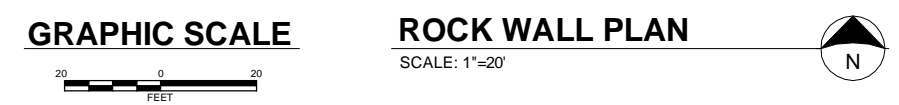
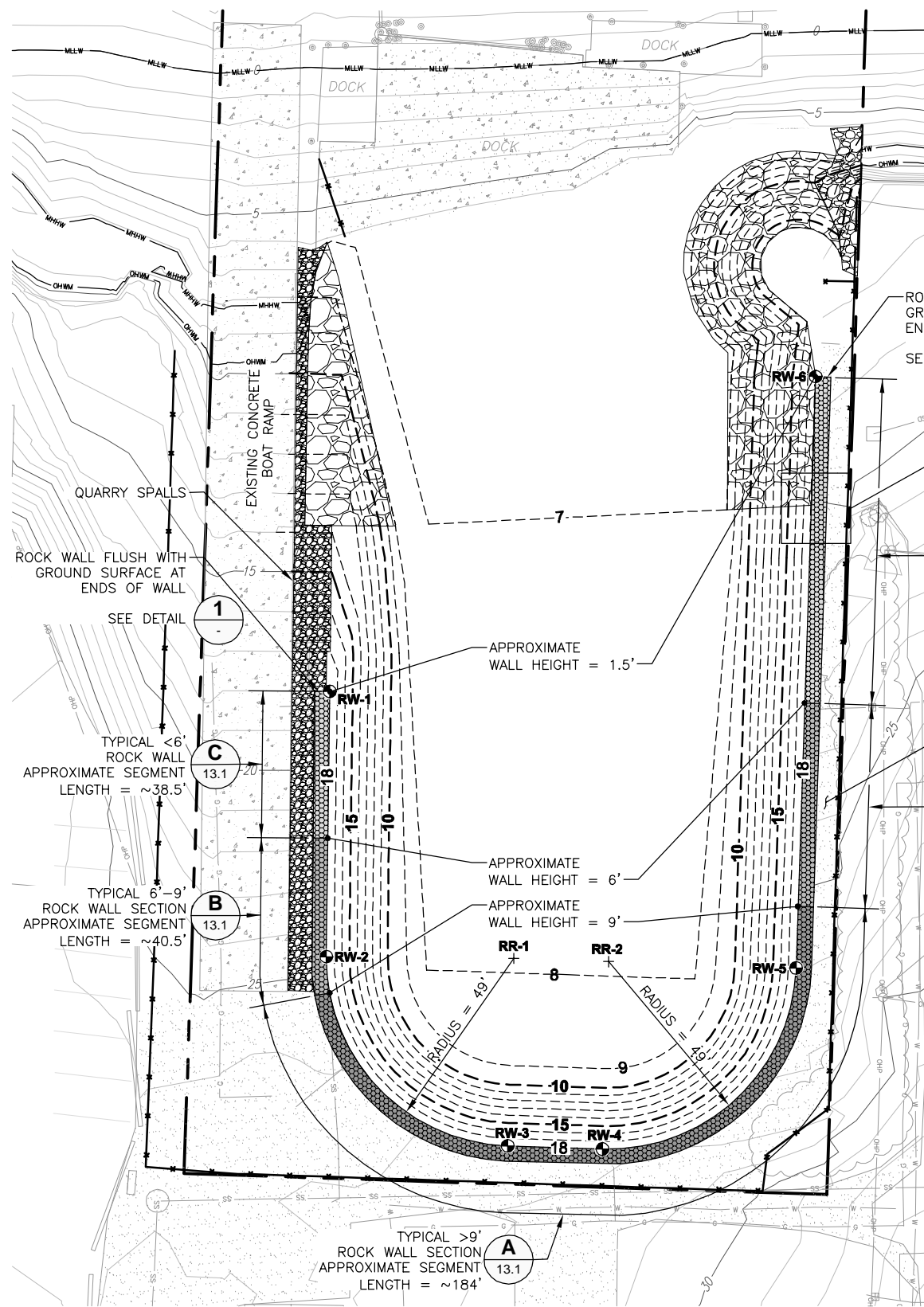
NO.	DATE	BY	REVISION



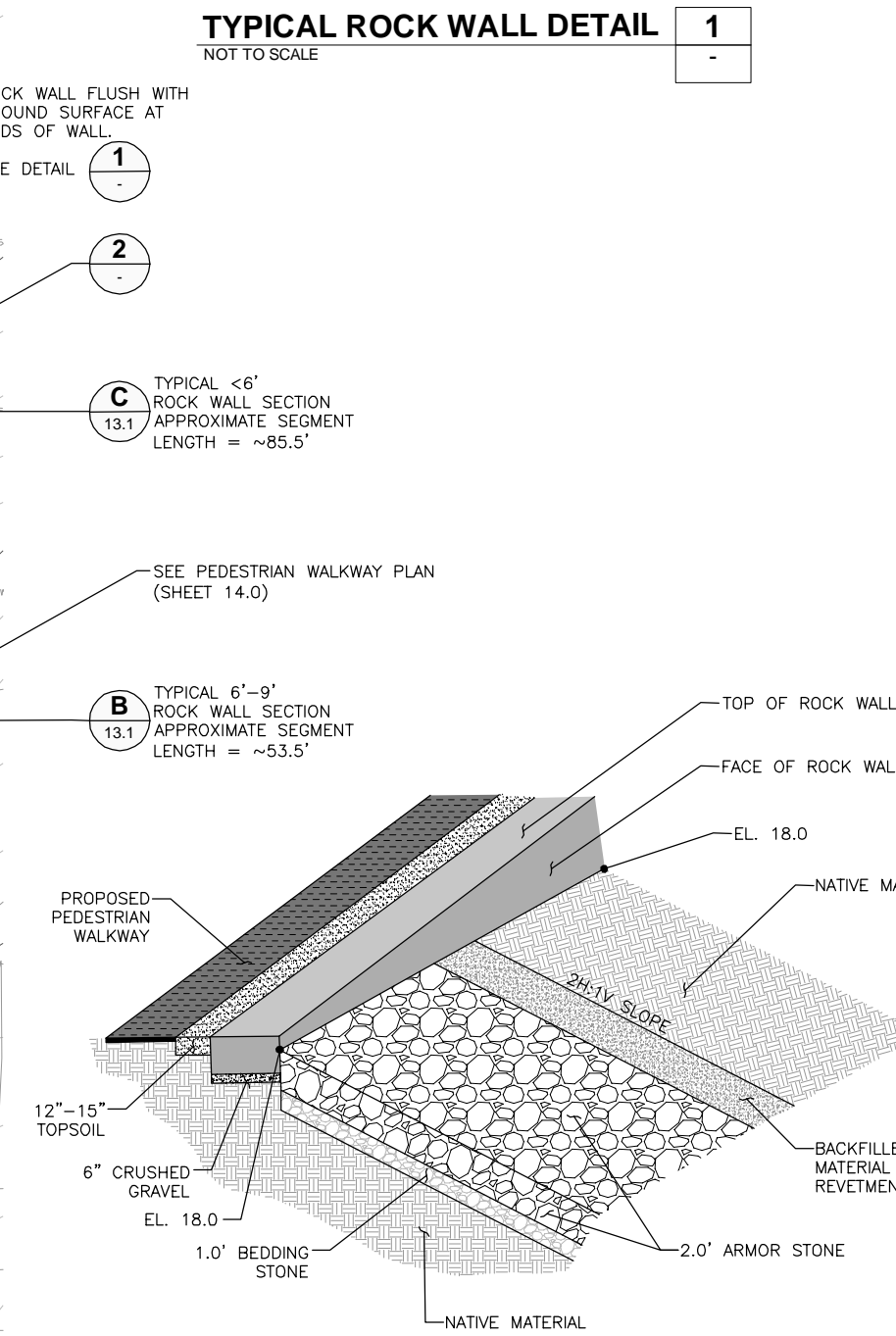
WYMAN'S HABITAT MITIGATION SITE (PROJECT PIER 1)
 PROJECT
 EXCAVATION SECTIONS

DRAWN: TJM	PROJECT NO.: 5147019
DESIGN: BJT	SCALE: AS NOTED
CHECKED: JMH	DATE: 7/19/13
SHEET NO.	10.0

P:\15\147019\05\CAD\90% DESIGN\SHEETS\13.0 ROCK WALL PLAN.DWG\TAB.PLAN MODIFIED BY TMICHAUD ON JUL 30, 2013 - 10:42



TYPICAL ROCK WALL DETAIL 1
NOT TO SCALE



TYPICAL ROCK WALL DETAIL 2
NOT TO SCALE

LEGEND

- WYMAN'S PROPERTY BOUNDARY
- X --- EXISTING FENCE
- 20- EXISTING TOPOGRAPHIC CONTOUR (FEET MLLW)
- - -20- - - FINISH GRADE CONTOUR (FEET MLLW)
- RW-1 ● ROCK WALL CONTROL POINT
- RR-1 + CURVE RADIUS REFERENCE POINT
- [Pattern] ROCK WALL TO BE CONSTRUCTED (SEE SHEET 13.1 FOR DETAIL)
- [Pattern] ARMOR STONE
- [Pattern] GRAVEL/COBBLE

- NOTES**
- ROCK WALL SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ASSOCIATION OF ROCKERY CONTRACTORS (ARC) STANDARD ROCK WALL CONSTRUCTION GUIDELINES. THE INDIVIDUAL CONSTRUCTING THE ROCK WALL SHALL BE AN EXPERIENCED AND SKILLFUL CRAFTSMAN IN ROCK WALL CONSTRUCTION.
 - ROCK WALL SHALL BE CONSTRUCTED TO THE ALIGNMENT SHOWN IN THE DRAWING AND ACCORDING TO THE SPECIFIED CONTROL POINTS AND CURVES. THERE SHALL BE NO TOLERANCE FOR THE ROCK WALL TO BE CONSTRUCTED WATERWARD OF THE +18FT (MLLW) CONTOUR AS SHOWN IN THE DRAWING.
 - SEE SHEET 13.1 AND CONTRACT DOCUMENTS FOR ROCK WALL CONSTRUCTION DETAILS AND SPECIFICATIONS. DRAWING SHOWS THE APPROXIMATE ROCK WALL HEIGHT AT LOCATIONS THAT CORRESPOND TO TYPICAL SECTIONS IN SHEET 13.1.
 - IN AREAS WHERE THE ROCK WALL IS ADJACENT TO ARMORED SLOPES, THE ROCK WALL SHALL BE CONSTRUCTED BEFORE PLACING THE ARMOR MATERIAL.

CURVE RADIUS REFERENCE POINT COORDINATES

CONTROL POINT #	NORTHING	EASTING
RR-1	559569.3440	1211052.3793
RR-2	559568.5269	1211077.1126

HORIZONTAL DATUM: WASHINGTON STATE PLANE NORTH - FEET

ROCK WALL ALIGNMENT CONTROL POINT COORDINATES

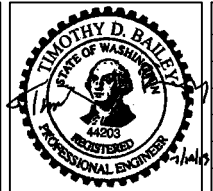
CONTROL POINT #	NORTHING	EASTING	ROCK WALL CONTROL POINT ELEVATION (MLLW)
RW-1	559639.1928	1211004.2575	18.0
RW-2	559569.8497	1211003.3819	18.0
RW-3	559520.3707	1211050.7613	18.0
RW-4	559519.5536	1211075.4946	18.0
RW-5	559566.9089	1211126.0859	18.0
RW-6	559721.5384	1211131.1945	18.0

HORIZONTAL DATUM: WASHINGTON STATE PLANE NORTH - FEET
VERTICAL DATUM: MEAN LOWER LOW WATER (MLLW)

GEOENGINEERS

Plaza 600 Building
600 Stewart Street, Suite 1700
Seattle WA 98101

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F: 206-728-2731



NO.	DATE	BY	REVISION



WYMAN'S HABITAT MITIGATION SITE (PROJECT PIER 1)

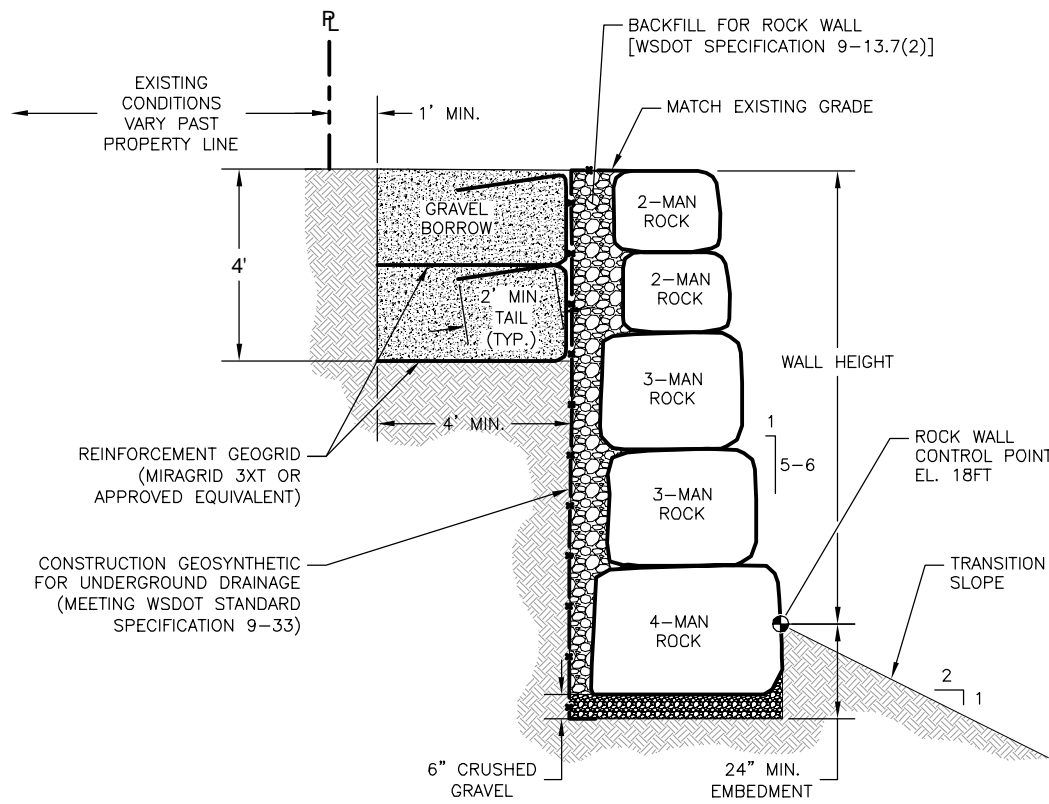
PROJECT

ROCK RETAINING WALL PLAN

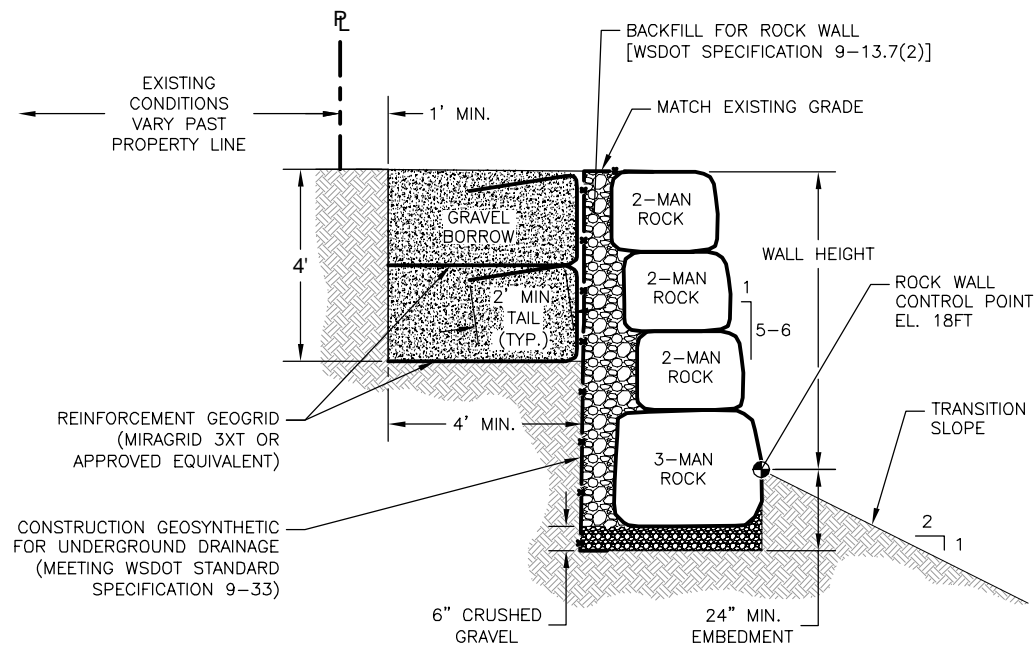
DRAWN: TJM	PROJECT NO.: 5147019
DESIGN: TDB	SCALE: AS NOTED
CHECKED: JMH	DATE: 7/19/13
SHEET NO.	

13.0

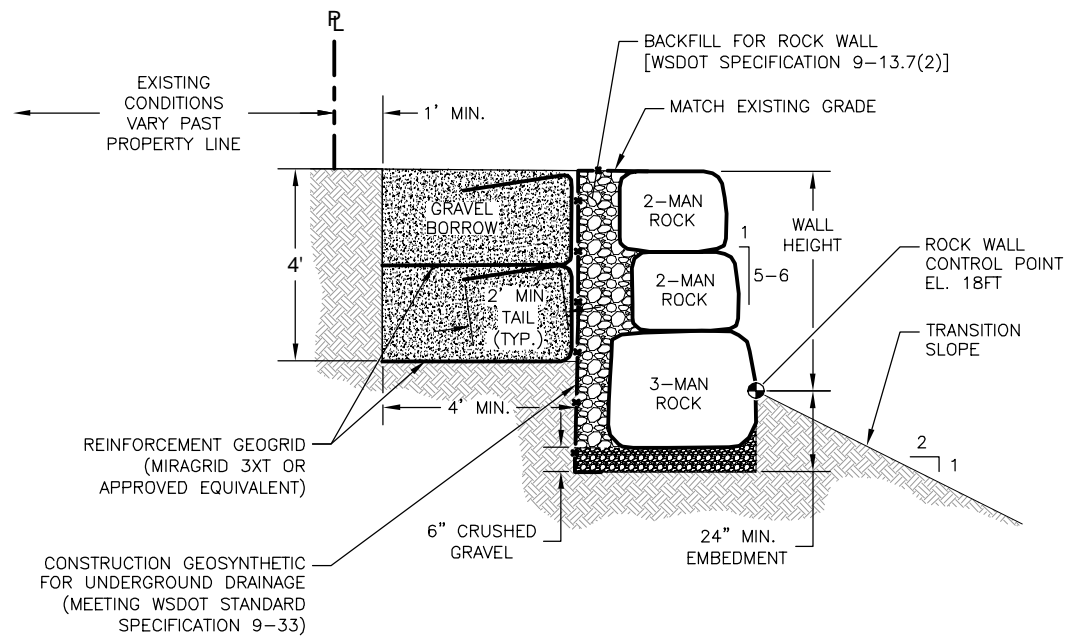
P:\15\147019\05\CAD\90% DESIGN\SHEETS\13.1 ROCK WALL SECTION AND NOTES.DWG\TAB-LAYOUT\MODIFIED BY THICHAUD ON JUL 30, 2013 - 10:43



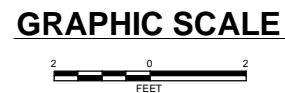
TYPICAL >9' ROCK WALL SECTION **A**
NOT TO SCALE **13.1**



TYPICAL 6-9' ROCK WALL SECTION **B**
NOT TO SCALE **13.1**

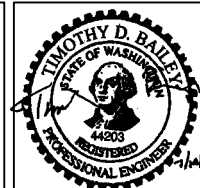
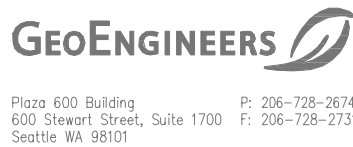


TYPICAL <6' ROCK WALL SECTION **C**
NOT TO SCALE **13.1**



NOTES

- ROCK WALL SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ASSOCIATION OF ROCKERY CONTRACTORS (ARC) STANDARD ROCK WALL CONSTRUCTION GUIDELINES. THE INDIVIDUAL CONSTRUCTING THE ROCK WALL SHALL BE AN EXPERIENCED AND SKILLFUL CRAFTSMAN IN ROCK WALL CONSTRUCTION.
- ROCK SHALL BE FROM A PORT-APPROVED SOURCE. THE ROCK SHALL BE FREE OF FRACTURES, CLAY SEAMS AND EVIDENCE OF WEATHERING.
- THE ROCK SIZES SHALL BE AS NOTED ON THE PLANS, WITH A WEIGHT OF 200-700 POUNDS FOR 2-MAN, 700-2,000 POUNDS FOR 3-MAN, AND 2,000-4,000 POUNDS FOR 4-MAN ROCK.
- THE ROCK WALL FACE SHALL SLOPE AT NO STEEPER THAN 1H:6V (HORIZONTAL:VERTICAL) BUT NO FLATTER THAN 1H:5V.
- BACKFILL FOR ROCK WALL SHALL BE PLACED BEHIND ROCK WALL TO FILL GAPS AND TO PROVIDE DRAINAGE, AS SHOWN ON THE PLANS. BACKFILL FOR ROCK WALL SHALL MEET THE REQUIREMENTS OF WSDOT STANDARD SPECIFICATION 9-13.7(2).
- CONSTRUCTION GEOSYNTHETIC MEETING THE REQUIREMENTS OF WSDOT STANDARD SPECIFICATION 9-33 FOR "UNDERGROUND DRAINAGE, MODERATE SURVIVABILITY, CLASS A" SHALL BE PLACED BETWEEN BACKFILL FOR ROCK WALL AND RETAINED SOIL, AS SHOWN ON THE PLANS.
- GRAVEL BORROW SHALL MEET THE REQUIREMENTS OF WSDOT STANDARD SPECIFICATION 9-03.14(1) AND EACH LIFT SHALL BE COMPACTED TO 90 PERCENT OF THE MAXIMUM DENSITY, PER ASTM D-1557.
- THE CONTRACTOR SHALL NOT BEGIN CONSTRUCTION OF THE GEOGRID-REINFORCED SOIL UNTIL THE ROCK WALL CONSTRUCTION HAS REACHED THE BASE OF THE GEOGRID-REINFORCED SOIL.



NO.	DATE	BY	REVISION



WYMAN'S HABITAT MITIGATION SITE (PROJECT PIER 1)
PROJECT
ROCK RETAINING WALL SECTIONS

DRAWN: TJM	PROJECT NO.: 5147019
DESIGN: TDB	SCALE: AS NOTED
CHECKED: JMH	DATE: 7/19/13
SHEET NO.	

13.1