ATTACHMENT 3

FUNCTIONAL ASSESSMENT

Summary

The proposed project wetland impacts include a very typical river system tidal area and typical forested wetland areas. At this time the applicant has not completed an extensive functional assessment since the areas disturbed do not have any special or unique functions or values. The applicant is also proposing compensation under the "in-Lieu" fee program with set compensation based on area disturbed and not associated with identified functions and values.

ATTACHMENT 4

COMPENSATION

ATTACHMENT 4

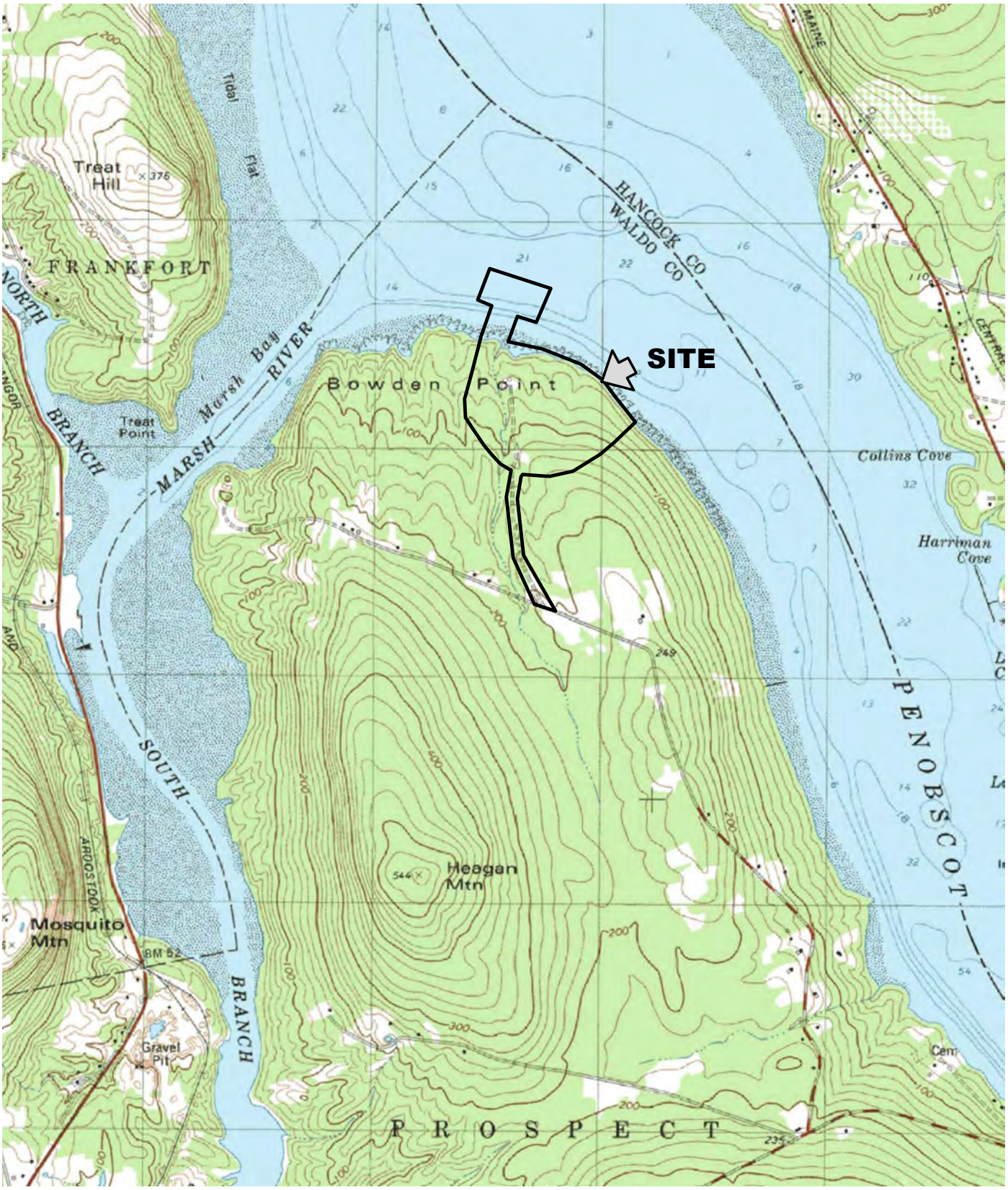
COMPENSATION

Summary

The Applicant is proposing to provide compensation for project impacts under the "I-Lieu" fee program. We anticipate that this fee will be set once the project has been through department review.

ATTACHMENT 5

SITE LOCATION MAP



SOURCE:
U.S.G.S. TOPOGRAPHIC QUADRANGLE
BUCKSPORT
@ 1:24,000

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING

BOWDEN POINT PROPERTIES, LLC
PROSPECT, MAINE
LOCATION MAP

2021-12-20
12617.001

ATTACHMENT 6

SITE PHOTOGRAPHS

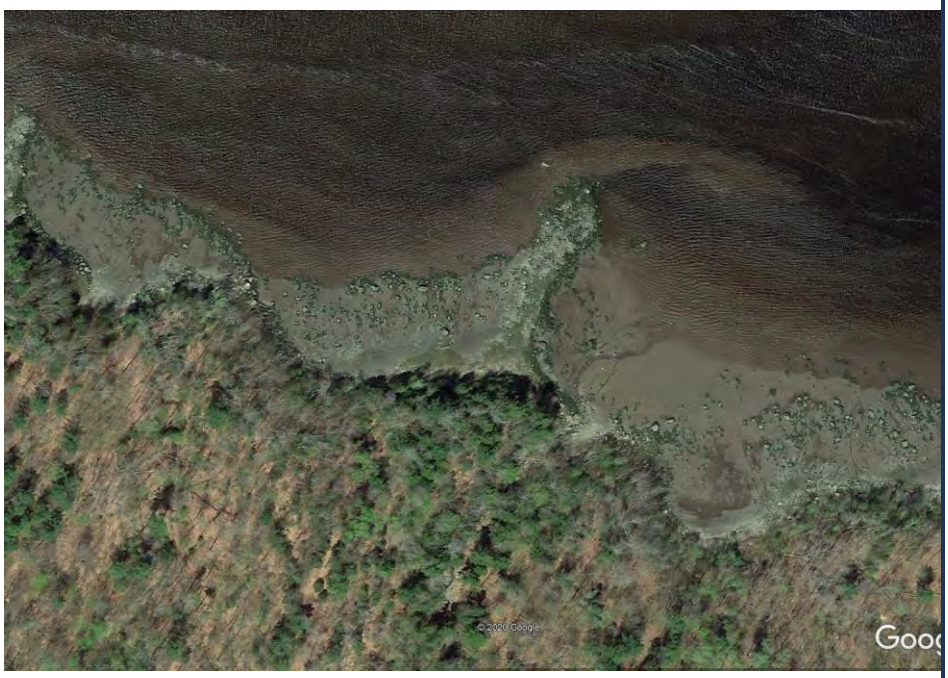
Photo No. 1	
Photo Date: 05/10/2018	
Site Location: Bowden Point, Prospect, Maine	
Description: Aerial view of project location.	
Photo By: Earth – Imagery Date 5/10/2018	

Photo No. 2	
Photo Date: 12/08/2020	
Site Location: Bowden Point, Prospect, Maine	
Description: Existing Fill. Seen from shoreline. Assumed to be location of Historic Pier.	
Photo By: DJO	

Photo No. 3 Photo Date: 12/08/2020 Site Location: Bowden Point, Prospect, Maine Description: Existing Fill, seen from shoreline. Assumed to be location of Historic Pier. Photo By: DJO	

Photo No. 4 Photo Date: 12/08/2020 Site Location: Bowden Point, Prospect, Maine Description: Existing fill, seen from shoreline. Assumed to be location of Historic Pier. Photo By: DJO	

Photo No. 5 Photo Date: 12/08/2020 Site Location: Bowden Point, Prospect, Maine Description: Downriver of proposed pier location. Seen from proposed pier location. Photo By: DJO	

Photo No. 6 Photo Date: 12/08/2020 Site Location: Bowden Point, Prospect, Maine Description: Upriver of proposed pier location. Seen from end of existing fill. Photo By: DJO	

Photo No. 7 Photo Date: 12/08/2020 Site Location: Bowden Point, Prospect, Maine Description: End of existing fill. Assumed to be location of Historic Pier. Photo By: DJO	

Photo No. 8 Photo Date: 12/08/2020 Site Location: Bowden Point, Prospect, Maine Description: Existing shoreline, looking east from proposed pier location. Photo By: DJO	

Photo No. 9 Photo Date: 12/08/2020 Site Location: Bowden Point, Prospect, Maine Description: Existing shoreline, looking west from proposed pier location. Photo By: DJO	

Photo No. 10 Photo Date: 12/08/2020 Site Location: Bowden Point, Prospect, Maine Description: Existing stream that drains into Penobscot River. Proposed pier site seen at left edge of photo. Photo By: DJO	

Photo No. 11 Photo Date: 12/08/2020 Site Location: Bowden Point, Prospect, Maine Description: Existing peninsula. Seen from end of fill, looking south. Photo By: DJO	

Photo No. 12 Photo Date: 12/08/2020 Site Location: Prospect, ME Description: Forested wetland Photo By: DJO	

Photo No. 13 Photo Date: 12/08/2020 Site Location: Prospect, ME Description: Forested wetland Photo By: DJO	

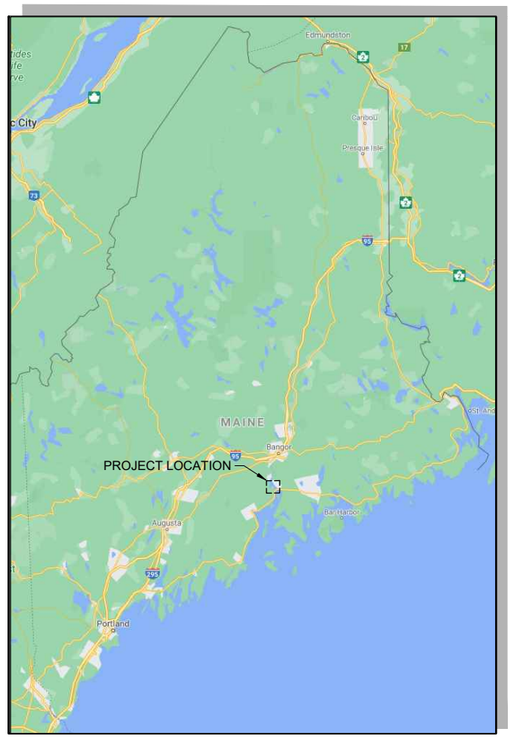
Photo No. 14 Photo Date: 12/08/2020 Site Location: Prospect, ME Description: Forested wetland Photo By: DJO	

ATTACHMENT 7

DRAWINGS

PROSPECT PIER

BOWDEN POINT TERMINAL DEVELOPMENT



VICINITY MAP
SCALE: NTS

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2	G-002	GENERAL NOTES - SHEET 1 OF 2
3	G-003	GENERAL NOTES - SHEET 2 OF 2
4	G-101	GENERAL ARRANGEMENT PLAN
5	C-001	EROSION & SEDIMENT CONTROL NOTES - SHEET 1 OF 3
6	C-002	EROSION & SEDIMENT CONTROL NOTES - SHEET 2 OF 3
7	C-003	EROSION & SEDIMENT CONTROL NOTES - SHEET 3 OF 3
8	C-101	EROSION & SEDIMENT CONTROL PLAN
9	C-102	E&S ENLARGED PLAN - SHEET 1 OF3
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11	C-104	E&S ENLARGED PLAN - SHEET 3 OF3
12	CS-101	EXISTING TOPO AND HYDRO
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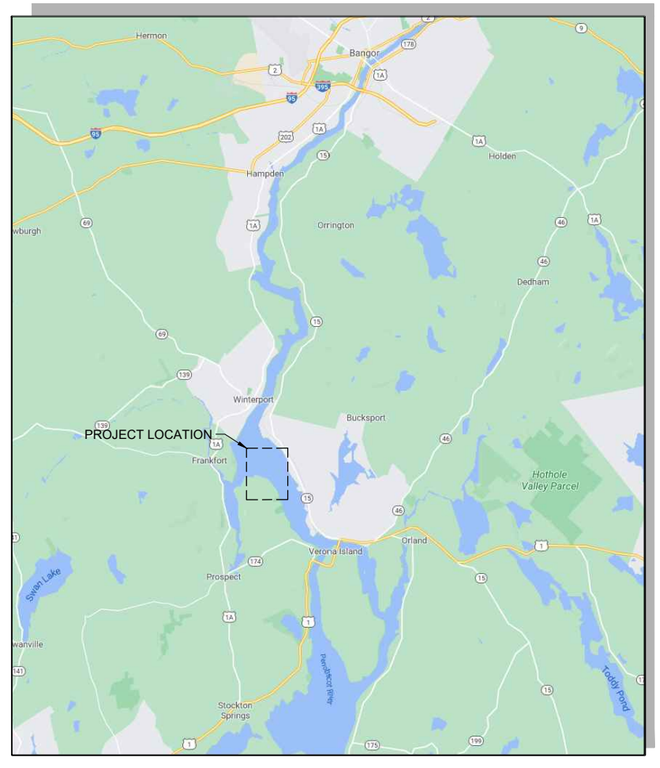
16	S-102	COFFERDAM ENLARGED PLAN - SHEET 2 OF 2
17	S-301	PIER SECTION
18	S-302	MOORING DOLPHIN DETAIL
19	S-303	UPLAND FILL SECTION
20	S-304	COFFERDAM DETAIL



LOCATION PLAN
SCALE: NTS

PERMIT DRAWINGS
ISSUED: 2021-04-20
NOT TO BE USED FOR CONSTRUCTION

Mark | Description | Date | Appd

PERMIT DRAWINGS FOR PROSPECT PIER

TITLE SHEET

Rev. ----
Date: 2/25/2021
M&N Project No. 11120-01
Drawing code:
Drawing Scale:
Plot scale: 1:1 (D SHEET)
Designed by: MSM
Drwn by: MSM
Chd by: SBJ
Reviewed by: SBJ
Submitted by: SUBMITTER'S NAME MOFFATT & NICHOL

MOFFATT & NICHOL
101 W. MAIN ST, SUITE 3000
NORFOLK, VA 23510

SALMONS, INC.
781 PRINCESS ANNE RD
VIRGINIA BEACH, VA 23457

SEAL

Sheet Reference No.
G-001
INDEX: 1 OF 20

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DRAWING SCALES SHOWN BASED ON 22"x34" DRAWING

GENERAL NOTES

1. ALL FEDERAL, STATE, AND LOCAL SAFETY REGULATIONS ARE TO BE STRICTLY FOLLOWED.

2. THE CONTRACTOR SHALL ABIDE BY ALL APPLICABLE FEDERAL, STATE, AND LOCAL ENVIRONMENTAL PROTECTION STANDARDS, LAWS AND REGULATIONS.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE CONSTRUCTION SITE AND THE AREAS OF WORK WHILE PERFORMING THE WORK OF THIS CONTRACT. CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE CONSTRUCTION SITE ON A DAILY BASIS. NO BURNING OF DEBRIS SHALL BE PERMITTED.

4. DURING ALL PHASES OF THE WORK ALL PRECAUTIONS SHALL BE TAKEN AS NECESSARY OR AS REQUIRED TO PERMANENTLY PREVENT CONTAMINATED WATER, VEHICLE FLUIDS, CONSTRUCTION DEBRIS, AND ANY OTHER CONTAMINANT FROM ENTERING THE WATERWAY.

5. CONTRACTOR SHALL INSTALL A FLOATING BOOM SYSTEM THAT FULLY ENCLOSES THE WORK AREA. THIS BOOM SHALL BE ANCHORED IN PLACE OR ATTACHED TO A FIXED STRUCTURE. THIS BOOM SHALL BE CAPABLE OF COLLECTING ANY FLOATING DEBRIS GENERATED DURING CONSTRUCTION ACTIVITIES. DEBRIS SHALL BE COLLECTED AND DISPOSED OF FROM THIS BOOM ON A DAILY BASIS.

TURBIDITY CURTAIN:

1. A FLOATING TURBIDITY BARRIER MAY BE DEPLOYED AROUND AND/OR IMMEDIATELY ADJACENT TO ANY WORK AREA THAT IS EXPECTED TO PRODUCE DEBRIS AND/OR SEDIMENT IN 600 FOOT (MAX) LENGTHS. THE CONTRACTOR IS RESPONSIBLE FOR STAYING UNDER THE TURBIDITY LIMIT SET BY THE STATE. DURING ALL PHASES OF WORK, THE CONTRACTOR MAY PROPOSE AN ALTERNATIVE METHODOLOGY AND SUBMIT TO THE STATE FOR APPROVAL.

2. TURBIDITY CURTAIN WILL BE AVAILABLE ON-SITE FOR USE AS WARRANTED BASED ON MONITORING OF TURBIDITY TO MAINTAIN COMPLIANCE WITH PERMIT CONDITIONS.

EROSION AND SEDIMENT CONTROL NOTES

GENERAL EROSION CONTROL NOTES

1. SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN CONFORMANCE WITH THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION "EROSION AND SEDIMENT CONTROL BMPS" , LATEST REVISION.

2. INSTALL ALL EROSION CONTROL MEASURES SHOWN, SPECIFIED OR REQUIRED BY THE ENGINEER PRIOR TO ANY CONSTRUCTION MEASURES UNTIL FINAL SURFACE TREATMENTS ARE IN PLACE AND/OR UNTIL ALL PERMANENT VEGETATION IS ESTABLISHED.

3. MARK WORK LIMIT LINE(S) PRIOR TO STARTING WORK. DO NOT DISTURB VEGETATION OR TOPSOIL BEYOND THE PROPOSED LIMIT LINE. COORDINATE WITH THE ENGINEER FOR THE LOCATIONS FOR THE TEMPORARY STOCKPILING OF TOPSOIL DURING CONSTRUCTION.

4. FINE GRADE AND IMMEDIATELY SEED ALL SIDE SLOPES, SHOULDER AREAS, AND DISTURBED VEGETATED AREAS. ALL GRADING TO BE A MAXIMUM SLOPE OF 2:1, COMPACTED, AND STABILIZED. SLOPES GREATER THAN 2:1 TO RECEIVE EROSION CONTROL BLANKET.

4. REMOVE ALL SEDIMENT TRACKED ON PUBLIC RIGHT-OF-WAYS AT THE END OF EACH DAY.

5. LAND DISTURBANCE SHALL BE KEPT TO A MINIMUM NECESSARY FOR CONSTRUCTION.

6. ALL CATCH BASINS SHALL BE PROTECTED WITH SILT SACKS, HAY BALE RINGS, OR SILT FENCE THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL ALL DISTURBED AREAS ARE THOROUGHLY STABILIZED.

7. WHENEVER POSSIBLE, EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION, ADDITIONAL CONTROL MEASURES SHALL BE INSTALLED DURING CONSTRUCTION.

8. THE CONTRACTOR SHALL USE APPROVED METHODS/MATERIALS FOR PREVENTING THE BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES ONTO ADJACENT PROPERTIES AND SITE AREAS.

9. MINIMIZING WIND EROSION AND CONTROLLING DUST WILL BE ACCOMPLISHED BY ONE OR MORE OF THE FOLLOWING METHODS:

   A. COVERING 30% OR MORE OF THE SOIL SURFACE WITH NON-ERODIBLE MATERIAL.

   B. ROUGHENING THE SOIL TO PRODUCE RIDGES PERPENDICULAR TO THE PREVAILING WIND.

   C. FREQUENT WATERING OF EXCAVATION AND FILL AREAS.

12. THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACK OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1-3" OF STONE, AS CONDITIONS DEMAND. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED IMMEDIATELY.

13. CONTRACTOR SHALL INSPECT CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.

14. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE AS DIRECTED BY THE ON SITE INSPECTOR OR THE CIVIL ENGINEER.

15. FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE APPROVED EROSION CONTROL PLANS.

16. THE SITE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF ALL EROSION CONTROL MEASURES INCLUDING REPLACING OR REPAIRING ANY DAMAGED DEVICES DUE TO ANY CONSTRUCTION ACTIVITY BY OTHERS.

17. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.

18. SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED.

INITIAL PHASE EROSION CONTROL NOTES

1. PRIOR TO THE LAND DISTURBING CONSTRUCTION, THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE OWNER.

2. A COPY OF THE APPROVED LAND DISTURBANCE PLAN SHALL BE PRESENT ON THE SITE AT ALL TIMES.

3. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND-DISTURBING ACTIVITIES.

4. PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE ACTIVITY SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. NO LAND DISTURBANCE SHALL OCCUR OUTSIDE THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS.

5. PRIOR TO ANY OTHER CONSTRUCTION, A CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY TO OR EXIT FROM THE SITE OR ONTO ANY PUBLIC ROADWAY.

6. THE FOLLOWING INITIAL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY.

   A. THE CONSTRUCTION ENTRANCE, CONSISTING OF A MINIMUM PAD SIZE OF 12 FT BY 50 FT WITH A MINIMUM OF 6" THICK STONE. THE STONE SIZE SHOULD CONSIST OF COURSE AGGREGATE BETWEEN 1-1/2" & 3-1/2" IN DIAMETER AND OVERLAID ON A GEOTEXTILE UNDERLINER. THE GEOTEXTILE UNDERLINER SHALL MEET THE REQUIREMENTS OF AASHTO M288-96, SECTION 7.3 SEPARATION REQUIREMENTS. (ROCK INSTALLATION TO COINCIDE WITH DEMOLITION)

   B. IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCE, ALL PERIMETER EROSION CONTROL AND STORM WATER MANAGEMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE INITIAL EROSION CONTROL PLAN.

   C. GEOTEXTILE SILT FENCE SHOULD BE INSTALLED AT THE PERIMETER OF THE DISTURBED AREA IF CONDITIONS WARRANT INSTALLATION OR SHOWN ON THE PLANS. THE GEOTEXTILE SILT FENCE SHOULD BE PLACED IN ACCORDANCE WITH THE CONNECTICUT EROSION & SEDIMENTATION CONTROL GUIDELINES. THE GEOTEXTILE SILT FENCE SHOULD BE KEPT ERECT AT ALL TIMES AND REPAIRED WHEN REQUESTED BY THE SITE INSPECTOR OR THE PROJECT DESIGN PROFESSIONAL OF RECORD. SILT SHOULD BE REMOVED WHEN ACCUMULATION REACHES 1/2 HEIGHT OF THE BARRIER. THE PERIMETER SILT FENCE SHOULD BE INSPECTED DAILY FOR ANY FAILURES. ANY FAILURES OF SAID FENCING SHOULD BE REPAIRED IMMEDIATELY.

8. AFTER INSTALLATION OF INITIAL EROSION CONTROL MEASURES THE SITE CONTRACTOR SHALL SCHEDULE AN INSPECTION BY THE PROJECT RESIDENT ENGINEER. NO OTHER CONSTRUCTION ACTIVITIES SHALL OCCUR UNTIL THE PROJECT RESIDENT ENGINEER APPROVES THE INSTALLATION OF SAID EROSION CONTROL MEASURES. IF UNFORESEEN CONDITIONS EXIST IN THE FIELD THAT WARRANT ADDITIONAL EROSION CONTROL MEASURES, THE CONTRACTOR MUST CONSTRUCT ANY ADDITIONAL EROSION CONTROL DEVICES DEEMED NECESSARY BY THE SITE INSPECTION.

9. AFTER APPROVAL OF THE INITIAL EROSION CONTROL INSTALLATION, THE CONTRACTOR MAY PROCEED WITH CONSTRUCTION, CLEARING AND GRUBBING ACTIVITIES.

10. NO BURN OR BURY PITS SHALL BE PERMITTED ON THE CONSTRUCTION SITE.

GRADING AND FINAL PHASE EROSION CONTROL NOTES

1. DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO ENSURE THAT LAND STRIPPED OF ITS NATURAL GROUND COVER IS EXPOSED ONLY IN SMALL QUANTITIES AND THEREFORE LIMITED DURATIONS, BEFORE PERMANENT EROSION PROTECTION IS ESTABLISHED.

2. EROSION CONTROL DEVICES SHALL BE INSTALLED IMMEDIATELY AFTER GROUND DISTURBANCE OCCURS. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE DESIGN PROFESSIONAL IMMEDIATELY.

3. CUT AND FILL SLOPES ARE TO BE AS SHOWN ON PLAN BUT SHALL NOT EXCEED "2H:1V"

4. UPON COMPLETION OF THE PROJECT AND RECEIPT OF CERTIFICATE OF OCCUPANCY, THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND DISPOSE OF THEM UNLESS NOTED ON PLANS.

PERMIT DRAWINGS
ISSUED: 2021-04-20
NOT TO BE USED FOR CONSTRUCTION

Mark	Description	Date	Appr

PERMIT DRAWINGS FOR PROSPECT PIER

GENERAL NOTES - SHEET 1 OF 2

MOFFATT & NICHOL
101 W. MAIN ST, SUITE 3000
NORFOLK, VA 23510
moffatt & nichol

SALMONS, INC.
781 PRINCESS ANNE RD
VIRGINIA BEACH, VA 23457

Designed by:	MSM
Drawn by:	MSM
Cad by:	SBJ
Reviewed by:	SBJ
Submitted by:	SUBMITTER'S NAME MOFFATT & NICHOL
Date:	2/25/2021
M&N Project No.	111120-01
Drawing code:	
Drawing Scale	
Plot scale:	1:1 (D SHEET)
Rev.	-----

SEAL

Sheet Reference No.
G-002
INDEX: 2 OF 20

File: Q:\NOR\111120\cadd_Active_Concept\111120-G-002 - Plotted: 8/31/2021 5:28 PM by MIRANDA, MATHEUS - Saved: 4/20/2021 12:19 AM by MMIRANDA

DRAWING SCALES SHOWN BASED ON 22"x34" DRAWING

EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN (ESPC)

EROSION AND SEDIMENT CONTROLS

1. ALL PERIMETER GEOTEXTILE SILT FENCES AND CONSTRUCTION EXITS SHALL BE IN PLACE PRIOR TO ANY LAND DISTURBING ACTIVITIES.
2. WHEN CONSTRUCTION ACTIVITIES HAVE CEASED IN AN AREA, THAT AREA SHALL BE STABILIZED WITHIN 14 DAYS.

OTHER CONTROLS

1. NO WASTE WILL BE DISPOSED OF INTO STORMWATER INLETS OR WATERS OF THE STATE.

WASTE MATERIALS

1. ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL SOLID WASTE MANAGEMENT REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER WILL BE EMPTIED A MINIMUM OF ONCE PER WEEK OR MORE OFTEN IF NECESSARY AND TRASH WILL BE HAULED AS REQUIRED BY LOCAL REGULATIONS. NO CONSTRUCTION WASTE WILL BE BURIED ON-SITE.
2. ALL PERSONNEL WILL BE INSTRUCTED ON PROPER PROCEDURES FOR WASTE DISPOSAL. A NOTICE STATING THESE PRACTICES WILL BE POSTED AT THE JOBSITE AND THE CONTRACTOR WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

HAZARDOUS WASTE

1. ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL STATE, AND/OR FEDERAL REGULATIONS AND BY THE MANUFACTURER OF SUCH PRODUCTS. THE JOB SITE SUPERINTENDENT, WHO WILL ALSO BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED, WILL INSTRUCT SITE PERSONNEL IN THESE PRACTICES. MATERIAL SAFETY DATA SHEETS (MSDS'S) FOR EACH SUBSTANCE WITH HAZARDOUS PROPERTIES THAT IS USED ON THE JOB SITE WILL BE OBTAINED AND USED FOR THE PROPER MANAGEMENT OF POTENTIAL WASTES THAT MAY RESULT FROM THESE PRODUCTS. AN MSDS WILL BE POSTED IN THE IMMEDIATE AREA WHERE SUCH PRODUCT IS STORED AND/OR USED AND ANOTHER COPY OF EACH MSDS WILL BE MAINTAINED IN THE ESPCP FILE AT THE JOB SITE CONSTRUCTION TRAILER OFFICE. EACH EMPLOYEE WHO MUST HANDLE A SUBSTANCE WITH HAZARDOUS PROPERTIES WILL BE INSTRUCTED ON THE USE OF MSDS SHEETS AND THE SPECIFIC INFORMATION IN THE APPLICABLE MSDS FOR THE PRODUCT HE/SHE IS USING, PARTICULARLY REGARDING SPILL CONTROL TECHNIQUES.
2. THE CONTRACTOR WILL IMPLEMENT THE SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC) PLAN FOUND WITHIN THE ESPCP AND WILL TRAIN ALL PERSONNEL IN THE PROPER CLEANUP AND HANDLING OF SPILLED MATERIALS. NO SPILLED HAZARDOUS MATERIALS OR HAZARDOUS WASTES WILL BE ALLOWED TO COME IN CONTACT WITH STORMWATER DISCHARGES. IF SUCH CONTACT OCCURS, THE STORMWATER DISCHARGE WILL BE CONTAINED ON SITE UNTIL APPROPRIATE MEASURES IN COMPLIANCE WITH STATE AND FEDERAL REGULATIONS ARE TAKEN TO DISPOSE OF SUCH CONTAMINATED STORMWATER. IT SHALL BE THE RESPONSIBILITY OF THE JOB SITE SUPERINTENDENT TO PROPERLY TRAIN ALL PERSONNEL IN THE USE OF THE SPCC PLAN.

SANITARY WASTES

1. A MINIMUM OF ONE PORTABLE SANITARY UNIT WILL BE PROVIDED FOR EVERY TEN (10) WORKERS ON THE SITE. ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE SANITARY UNITS A MINIMUM OF ONE TIME PER WEEK BY A LICENSED PORTABLE FACILITY PROVIDER IN COMPLETE COMPLIANCE WITH LOCAL AND STATE REGULATIONS.
2. ALL SANITARY WASTE UNITS WILL BE LOCATED IN AN AREA WHERE THE LIKELIHOOD OF THE UNIT CONTRIBUTING TO STORMWATER DISCHARGE IS NEGLIGIBLE. ADDITIONAL CONTAINMENT BMPs MUST BE IMPLEMENTED, SUCH AS GRAVEL BAGS OR SPECIALLY DESIGNED PLASTIC SKID CONTAINERS AROUND THE BASE, TO PREVENT WASTES FROM CONTRIBUTING TO STORMWATER DISCHARGES. THE LOCATION OF THE SANITARY WASTES UNITS MUST BE IDENTIFIED ON THE EROSION CONTROL PLAN GRADING PHASE BY THE CONTRACTOR ONCE THE LOCATIONS HAVE BEEN DETERMINED.

OFFSITE VEHICLE TRACKING

1. A STABILIZED CONSTRUCTION ENTRANCE IS TO BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENT. SEE SHEET 4 FOR CONSTRUCTION ENTRANCE DETAILS. THE PAVED STREET ADJACENT TO THE SITE EXIT WILL BE INSPECTED DAILY FOR TRACKING OF MUD, DIRT OR ROCK. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARPAULIN.

INVENTORY FOR POLLUTION PREVENTION PLAN

1. THE FOLLOWING MATERIALS ARE EXPECTED ON-SITE DURING CONSTRUCTION: CONCRETE PRODUCTS, ASPHALT, PETROLEUM BASED FUELS AND LUBRICANTS FOR EQUIPMENT, TAR, METAL REINFORCING, PAINTS/FINISHES, PAINT SOLVENTS, LUMBER, CRUSHED STONE, PLASTIC, METAL, AND CONCRETE PIPES.

SPILL PREVENTION

1. PRACTICES SUCH AS GOOD HOUSEKEEPING, PROPER HANDLING OF HAZARDOUS PRODUCTS AND PROPER SPILL CONTROL PRACTICES WILL BE FOLLOWED TO REDUCE THE RISK OF SPILLS AND SPILLS FROM DISCHARGING INTO STORMWATER RUNOFF.

GOOD HOUSEKEEPING

1. QUANTITIES OF PRODUCTS STORED ON-SITE WILL BE LIMITED TO THE AMOUNT NEEDED FOR THE JOB.
2. PRODUCTS AND MATERIALS WILL BE STORED IN A NEAT, ORDERLY MANNER IN APPROPRIATE CONTAINERS PROTECTED FROM RAINFALL, WHERE POSSIBLE.
3. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH MANUFACTURER LABELS LEGIBLE AND VISIBLE.
4. PRODUCTS MIXING, DISPOSAL AND DISPOSAL OF PRODUCT CONTAINERS WILL BE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
5. THE CONTRACTOR WILL INSPECT SUCH MATERIALS TO ENSURE PROPER USE, STORAGE AND DISPOSAL.

PRODUCT SPECIFIC PRACTICES

1. PETROLEUM BASED PRODUCTS - CONTAINERS FOR PRODUCTS SUCH AS FUELS, LUBRICANTS AND TARS WILL BE INSPECTED DAILY FOR LEAKS AND SPILLS. THIS INCLUDES ON-SITE VEHICLE AND MACHINERY DAILY INSPECTION AND REGULAR PREVENTIVE MAINTENANCE OF SUCH EQUIPMENT. EQUIPMENT MAINTENANCE AREAS WILL BE LOCATED AWAY FROM STATE WATER, NATURAL DRAINS AND STORMWATER DRAINAGE INLETS. IN ADDITION, TEMPORARY FUELING TANKS SHALL HAVE A SECONDARY CONTAINMENT LINER TO PREVENT/MINIMIZE SITE CONTAMINATION. DISCHARGE OF OILS, FUELS AND LUBRICANTS IS PROHIBITED. PROPER DISPOSAL METHODS WILL INCLUDE COLLECTION IN A SUITABLE CONTAINER AND DISPOSAL AS REQUIRED BY LOCAL AND STATE REGULATIONS.
2. PAINTS/FINISHES/SOLVENTS - ALL PRODUCTS WILL BE STORED IN TIGHTLY SEALED ORIGINAL CONTAINERS WHEN NOT IN USE. EXCESS PRODUCT WILL NOT BE DISCHARGED TO THE STORMWATER COLLECTION SYSTEM. EXCESS PRODUCT, MATERIALS USED WITH THESE PRODUCTS AND PRODUCT CONTAINERS WILL BE DISPOSED OF ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
3. CONCRETE TRUCK WASHING - NO CONCRETE TRUCKS WILL BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE OWNER'S PROPERTY.
4. FERTILIZER/HERBICIDES - THESE PRODUCTS WILL BE APPLIED AT RATES THAT DO NOT EXCEED THAT MANUFACTURER'S SPECIFICATIONS OR ABOVE THE GUIDELINES SET FORTH IN THE CROP .
5. BUILDING MATERIALS/FORMWORK - NO BUILDING OR CONSTRUCTION MATERIALS WILL BE BURIED OR DISPOSED OF ON-SITE. ALL SUCH MATERIAL WILL BE DISPOSED OF IN PROPER WASTE DISPOSAL PROCEDURES.

SPILL CLEANUP AND CONTROL PRACTICES

1. LOCAL, STATE AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND PROCEDURES WILL BE MADE AVAILABLE TO SITE PERSONNEL.
2. MATERIAL AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREAS. TYPICAL MATERIALS AND EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO, BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, CAT LITTER, SAND, SAWDUST AND PROPERLY LABELED PLASTIC AND METAL WASTE CONTAINERS.
3. SPILL PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY TO PREVENT FUTURE SPILLS.
4. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY UPON DISCOVERY. ALL SPILLS WILL BE REPORTS AS REQUIRED BY LOCAL, STAT, AND FEDERAL REGULATIONS.
5. FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-426-2675.
6. FOR SPILLS OF UNKNOWN AMOUNT, THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-426-2675.
7. FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE SPILL WILL BE CLEANED UP AND LOCAL AGENCIES WILL BE CONTACTED AS REQUIRED.

INSPECTIONS

1. EACH DAY WHEN ANY TYPE OF CONSTRUCTION ACTIVITY HAS TAKEN PLACE AT THE CONTRACTOR'S SITE, QUALIFIED PERSONNEL PROVIDED BY THE CONTRACTOR SHALL INSPECT: (A) ALL AREAS AT THE CONTRACTOR'S SITE WHERE PETROLEUM PRODUCTS ARE STORED, USED, OR HANDLED FOR SPILLS AND LEAKS FROM VEHICLES AND EQUIPMENT; (B) ALL LOCATIONS AT THE CONTRACTOR'S SITE WHERE VEHICLES ENTER OF EXIT THE SITE FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING; AND (C) MEASURE RAINFALL ONCE EACH TWENTY-FOUR HOUR PERIOD AT THE SITE. THESE INSPECTIONS MUST BE CONDUCTED UNTIL PROJECT COMPLETION.
2. QUALIFIED PERSONNEL (PROVIDED BY THE CONTRACTOR) SHALL INSPECT AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES OR GREATER THE FOLLOWING: (A) DISTURBED AREAS OF THE CONTRACTOR'S CONSTRUCTION SITE THAT HAVE NOT UNDERGONE FINAL STABILIZATION; (B) AREAS USED BY THE CONTRACTOR FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION THAT HAVE NOT UNDERGONE FINAL STABILIZATION; AND (C) STRUCTURAL CONTROL MEASURES. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN APPLICABLE TO THE CONTRACTOR'S SITE SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S).
3. QUALIFIED PERSONNEL (PROVIDED BY THE CONTRACTOR) SHALL INSPECT AT LEAST ONCE PER MONTH UNTIL PROJECT COMPLETION THE AREAS OF THE SITE THAT HAVE UNDERGONE FINAL STABILIZATION. THESE AREAS SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM AND THE RECEIVING WATER(S). EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S).
4. BASED ON THE RESULTS OF EACH INSPECTION, THE SITE DESCRIPTION AND THE POLLUTION PREVENTION AND CONTROL MEASURES IDENTIFIED IN THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, THE PLAN SHALL BE REVISED AS APPROPRIATE NOT LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION. IMPLEMENTATION OF SUCH CHANGES SHALL BE MADE AS SOON AS PRACTICAL BUT IN NO CASE LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION.
5. A REPORT SUMMARIZING THE SCOPE OF EACH INSPECTION AND THE NAME(S) OF PERSONNEL MAKING EACH INSPECTION, THE DATE(S) OF EACH INSPECTION, MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN AND ACTIONS TAKEN SHALL BE MADE AND RETAINED AT THE SITE OR BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION UNTIL THE ENTIRE SITE OR THAT PORTION OF A CONSTRUCTION PROJECT THAT HAS BEEN PHASED HAS UNDERGONE FINAL STABILIZATION. SUCH REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE. WHERE THE REPORT DOES NOT IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE, THE REPORT SHALL CONTAIN A CERTIFICATION THAT THE FACILITY IS IN COMPLIANCE WITH THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN.

COFFERDAM IMPACT AREA		
COFFERDAM AREA (SF)	NUMBER OF COFFERDAMS	TOTAL IMPACT AREA (SF)
2,000	12	24,000

COFFERDAM CONNECTORS IMPACT AREA
COFFERDAM CONNECTOR AREA (SF)
1,700

FILL QUANTITY ESTIMATE		
LOCATION	FOOTPRINT (SF)	FILL VOLUME (CY)
UPLAND FILL	30,000	10,000
RIPRAP	800	350

PROJECT VERTICAL DATUM	
WINTERPORT, MAINE STATION ID 8414781	ELEVATONS (NAVD88)
100 YEAR BASE FLOOD	+14.0
HIGHEST ASTRONOMICAL	+9.06
MHHW	+6.73
MHW	+6.28
NAVD88	0.00
MLW	-5.48
MLLW	-5.83

PERMIT DRAWINGS
ISSUED: 2021-04-20
NOT TO BE USED FOR CONSTRUCTION

Mark	Description	Date	Appd

PERMIT DRAWINGS FOR PROSPECT PIER

GENERAL NOTES - SHEET 2 OF 2

MOFFATT & NICHOL
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moffatt & nichol

SALMONS, INC.
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VIRGINIA BEACH, VA 23457

Designed by:	Drawn by:	Reviewed by:	Submitted by:	Date:	M&N Project No.	Drawing code:	Drawing Scale	Rev.
MSM	MSM	SBJ	SUBMITTER'S NAME MOFFATT & NICHOL	2/25/2021	11120-01		Plot scale: 1:1 (D SHEET)	REVNO

SEAL

Sheet Reference No.
G-003
INDEX: 3 OF 20

DRAWING SCALES SHOWN BASED ON 22"x34" DRAWING

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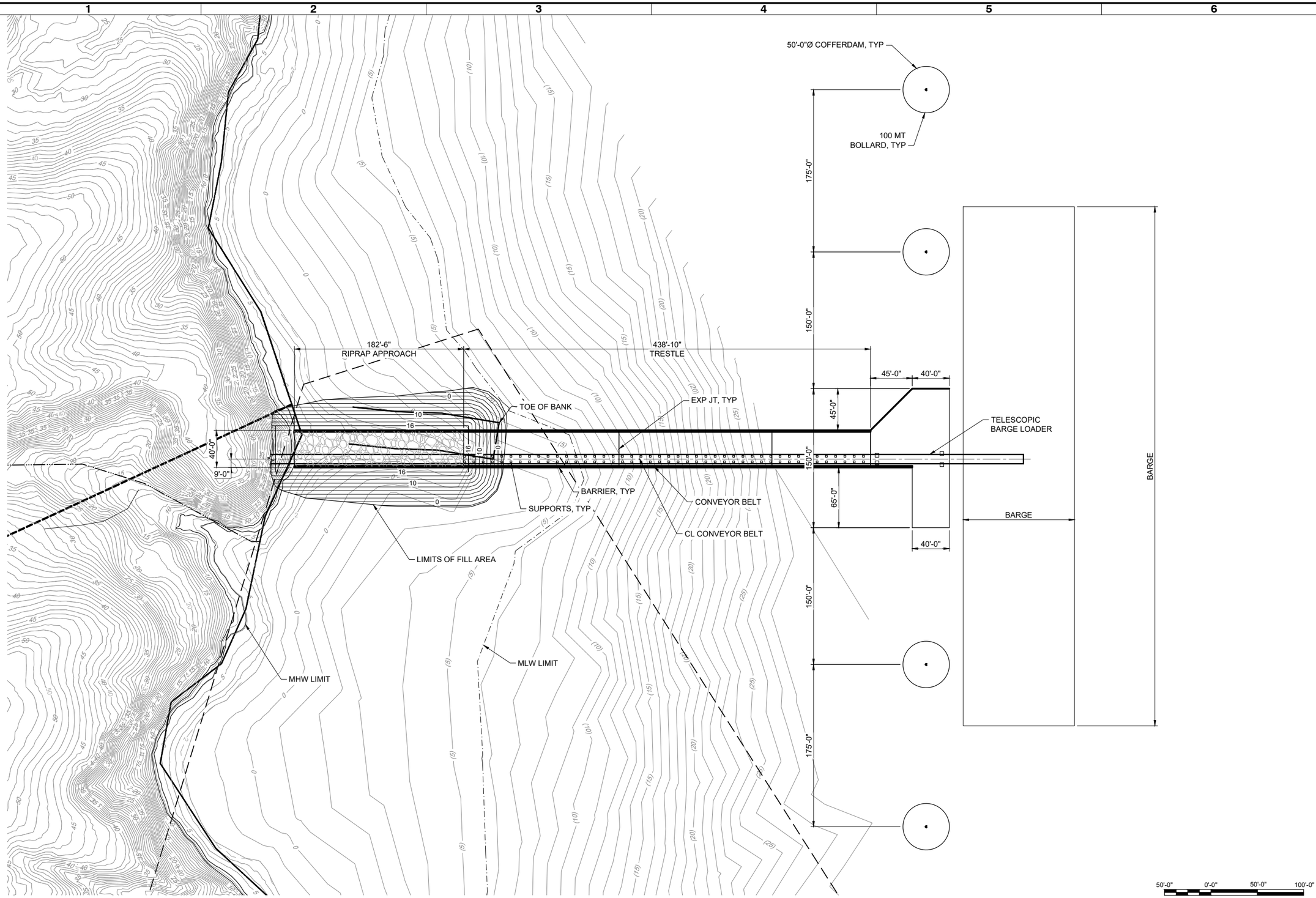

GENERAL ARRANGEMENT PLAN
SCALE: 1"=50'-0"

50'-0" 0'-0" 50'-0" 100'-0"
SCALE: 1"=50'

PERMIT DRAWINGS
ISSUED: 2021-04-20
NOT TO BE USED FOR CONSTRUCTION

DRAWING SCALES SHOWN BASED ON 22"x34" DRAWING

Mark	Description	Date	Appd

PERMIT DRAWINGS FOR PROSPECT PIER

GENERAL ARRANGEMENT PLAN

Designed by: MSM	Date: 2/25/2021
Drawn by: MSM	Chkd by: SBJ
Reviewed by: SBJ	Drawing code:
Submitted by: SUBMITTER'S NAME MOFFATT & NICHOL	Drawing Scale: Plot scale: 1:1 (D SHEET)
	M&N Project No. 11120-01
	Rev: -----

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SEAL

Sheet
Reference No.
G-101
INDEX: 4 OF 20

File: Q:\NOR\11120\cadd_Active_Concept\11120-G-101 ; Plotted: 8/31/2021 5:28 PM by MIRANDA, MATHEUS ; Saved: 8/31/2021 5:26 PM by MMIRANDA

SEDIMENT FENCE (Sd1)

DEFINITION

A TEMPORARY SEDIMENT BARRIER CONSISTING OF A FILTER FABRIC STRETCHED ACROSS AND ATTACHED TO SUPPORTING POSTS AND ENTRENCHED. THE SEDIMENT FENCE IS CONSTRUCTED OF STAKES AND SYNTHETIC FILTER FABRIC WITH A RIGID WIRE FENCE BACKING WHERE NECESSARY FOR SUPPORT. SEDIMENT FENCE CAN BE PURCHASED WITH POCKETS PRESEWN TO ACCEPT USE OF STEEL FENCE POSTS.

PURPOSE

A SEDIMENT FENCE INTERCEPTS AND DETAINS SMALL AMOUNTS OF SEDIMENT FROM DISTURBED AREAS DURING CONSTRUCTION OPERATIONS AND REDUCES RUNOFF VELOCITY DOWN A SLOPE. SEDIMENT FENCES MAY ALSO BE USED TO CATCH WIND-BLOWN SAND AND TO CREATE AN ANCHOR FOR SAND DUNE CREATION.

DESIGN RECOMMENDATIONS

DEPTH OF IMPOUNDED WATER SHOULD NOT EXCEED 1.5 FEET AT ANY POINT ALONG THE FENCE.
DRAINAGE AREA LIMITED TO ¼ ACRE PER 100 FT OF FENCE, AND NO MORE THAN 1.5 ACRES IN TOTAL; OR IN COMBINATION WITH A SEDIMENT BASIN ON A LARGER SITE. AREA IS FURTHER RESTRICTED BY SLOPE STEEPNESS AS SHOWN IN THE FOLLOWING TABLE.

MAXIMUM SLOPE	
LAND SLOPE (%)	DISTANCE ABOVE FENCE (FEET)
2	250
5	180
10	100
20	50
30	30

MATERIALS AND USE

FILTER FABRIC
THE FILTER FABRIC USED IN A SEDIMENT FENCE MUST HAVE SUFFICIENT STRENGTH TO WITHSTAND VARIOUS STRESS CONDITIONS. IT ALSO MUST HAVE THE ABILITY TO ALLOW PASSAGE OF WATER WHILE RETAINING SOIL PARTICLES. FILTER FABRIC FOR A SEDIMENT FENCE IS AVAILABLE COMMERCIALLY.

SUPPORT POSTS
FOUR-INCH DIAMETER PINE, 1.33 LB./LINEAR FT. STEEL, OR SOUND QUALITY HARDWOOD WITH A MINIMUM CROSS SECTIONAL AREA OF 3.0 SQUARE INCHES. STEEL POSTS SHOULD HAVE PROJECTIONS FOR FASTENING FABRIC. DRIVE POSTS SECURELY, AT LEAST 16 INCHES INTO THE GROUND, ON THE DOWNSLOPE SIDE OF THE TRENCH. SPACE POSTS A MAXIMUM OF 8 FEET IF FENCE IS SUPPORTED BY WIRE, 6 FEET IF EXTRA-STRENGTH FABRIC IS USED WITHOUT SUPPORT WIRE. ADJUST SPACING TO PLACE POSTS AT LOW POINTS ALONG THE FENCE LINE.

SUPPORT WIRE
WIRE FENCE (14 GAUGE WITH 6-INCH MESH) IS REQUIRED TO SUPPORT STANDARD STRENGTH FABRIC.

REINFORCED, STABILIZED OUTLETS
ANY OUTLET WHERE STORM FLOW BYPASS OCCURS MUST BE STABILIZED AGAINST EROSION. SET OUTLET ELEVATION SO THAT WATER DEPTH CANNOT EXCEED 1.5 FEET AT THE LOWEST POINT ALONG THE FENCE LINE.

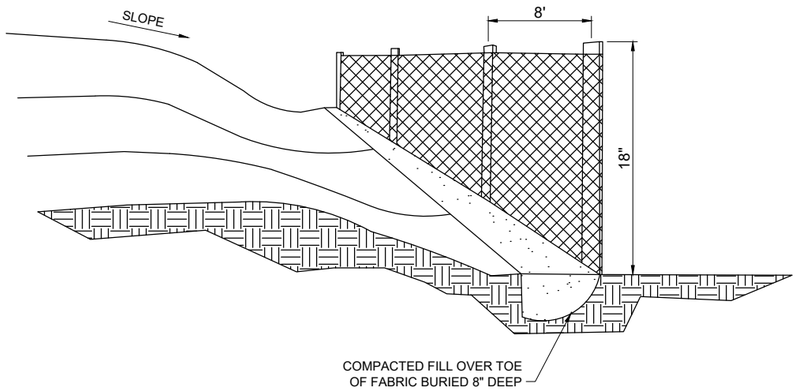
SET FABRIC HEIGHT AT 1 FOOT MAXIMUM BETWEEN SUPPORT POSTS SPACED NO MORE THAN 4 FEET APART. INSTALL A HORIZONTAL BRACE BETWEEN THE SUPPORT POSTS TO SERVE AS AN OVERFLOW WEIR AND TO SUPPORT TOP OF FABRIC. PROVIDE A RIPRAP SPLASH PAD A MINIMUM 5 FEET WIDE, 1 FOOT DEEP, AND 5 FEET LONG ON LEVEL GRADE. THE FINISHED SURFACE OF THE RIPRAP SHOULD BLEND WITH SURROUNDING AREA, ALLOWING NO OVERFALL. THE AREA AROUND THE PAD MUST BE STABLE.

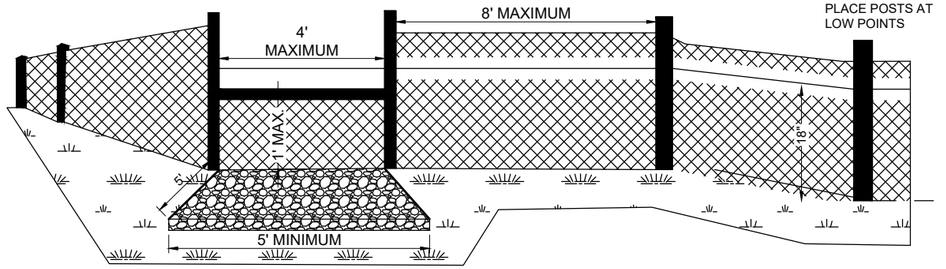
CONSTRUCTION RECOMMENDATIONS

DIG A TRENCH APPROXIMATELY 8 INCHES DEEP AND 4 INCHES WIDE, OR A V-TRENCH; ALONG THE LINE OF THE FENCE, UPSLOPE SIDE.
FASTEN SUPPORT WIRE FENCE SECURELY TO THE UPSLOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES. WIRE SHOULD EXTEND 6 INCHES INTO THE TRENCH.
ATTACH CONTINUOUS LENGTH OF FABRIC TO UPSLOPE SIDE OF FENCE POSTS. AVOID JOINTS, PARTICULARLY AT LOW POINTS IN THE FENCE LINE. WHERE JOINTS ARE NECESSARY, FASTEN FABRIC SECURELY TO SUPPORT POSTS AND OVERLAP TO THE NEXT POST.
PLACE THE BOTTOM ONE FOOT OF FABRIC IN THE TRENCH. BACKFILL WITH COMPACTED EARTH OR GRAVEL.
FILTER CLOTH SHALL BE FASTENED SECURELY TO THE WOVEN WIRE FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP, MID-SECTION, AND BOTTOM.
TO REDUCE MAINTENANCE, A SHALLOW SEDIMENT STORAGE AREA MAY BE EXCAVATED ON THE UPSLOPE SIDE OF FENCE WHERE SEDIMENTATION IS EXPECTED.
PROVIDE GOOD ACCESS TO DEPOSITION AREAS FOR CLEANOUT AND MAINTENANCE.
SEDIMENT FENCES SHOULD BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED. RETAINED SEDIMENT MUST BE REMOVED AND PROPERLY DISPOSED OF, OR MULCHED AND SEEDED.

MAINTENANCE

A SEDIMENT FENCE REQUIRES A GREAT DEAL OF MAINTENANCE. SILT FENCES SHOULD BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. REPAIR AS NECESSARY.
REMOVE SEDIMENT DEPOSITS PROMPTLY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON FENCE. TAKE CARE TO AVOID UNDERMINING FENCE DURING CLEANOUT.
IF THE FABRIC TEARS, DECOMPOSES, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE IT IMMEDIATELY.
REPLACE BURLAP USED IN SEDIMENT FENCES AFTER NO MORE THAN 60 DAYS.
REMOVE ALL FENCING MATERIALS AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED. SEDIMENT DEPOSITS REMAINING AFTER THE FABRIC HAS BEEN REMOVED SHOULD BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.





CONSTRUCTION ENTRANCE (Co)

DEFINITION

A TEMPORARY
STONE-STABILIZED PAD
LOCATED AT POINTS OF
VEHICULAR INGRESS AND
EGRESS ON A CONSTRUCTION
SITE.

PURPOSE

TO PROVIDE A STABLE
ENTRANCE AND EXIT FROM A
CONSTRUCTION SITE AND KEEP
MUD AND SEDIMENT OFF PUBLIC
ROADS.

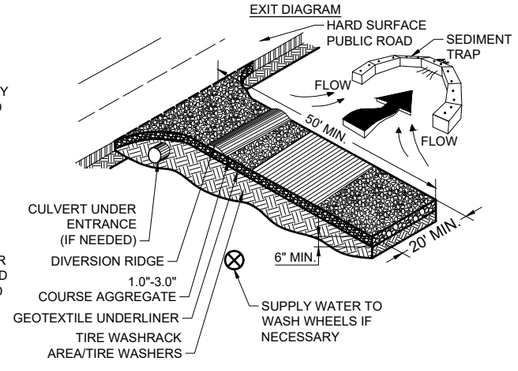
DESIGN RECOMMENDATIONS

REMOVE ALL VEGETATION AND
OTHER OBJECTIONABLE
MATERIAL FROM THE
FOUNDATION AREA. GRADE AND
CROWN FOUNDATION FOR
POSITIVE DRAINAGE.
STONE FOR A STABILIZED
CONSTRUCTION ENTRANCE
SHALL BE 1 TO 3-INCH STONE,
RECLAIMED STONE, OR
RECYCLED CONCRETE
EQUIVALENT PLACED ON A
STABLE FOUNDATION AS
SPECIFIED IN THE PLAN.
PAD DIMENSIONS: THE MINIMUM
LENGTH OF THE GRAVEL PAD
SHOULD BE 50 FEET, EXCEPT
FOR A SINGLE RESIDENTIAL LOT
WHERE A 30 FOOT MINIMUM
LENGTH MAY BE USED. LONGER
ENTRANCES WILL PROVIDE
BETTER CLEANING ACTION. THE
PAD SHOULD EXTEND THE FULL
WIDTH OF THE CONSTRUCTION
ACCESS ROAD OR 10 FEET
WHICHEVER IS GREATER. THE
AGGREGATE SHOULD BE
PLACED AT LEAST SIX INCHES
THICK.
A GEOTEXTILE FILTER FABRIC
SHALL BE PLACED BETWEEN
THE STONE FILL AND THE EARTH
SURFACE BELOW THE PAD TO
REDUCE THE MIGRATION OF
SOIL PARTICLES FROM THE
UNDERLYING SOIL INTO THE
STONE AND VICE VERSA. FILTER
CLOTH IS NOT REQUIRED FOR A
SINGLE FAMILY RESIDENCE LOT.
IF THE SLOPE TOWARD THE
ROAD EXCEEDS 2%,
CONSTRUCT A RIDGE, 6 TO 8
INCHES HIGH WITH 3:1 SIDE
SLOPES, ACROSS THE
FOUNDATION APPROXIMATELY
15 FT FROM THE ENTRANCE TO
DIVERT RUNOFF AWAY FROM
THE PUBLIC ROAD.
ALL SURFACE WATER THAT IS
FLOWING TO OR DIVERTED
TOWARD THE CONSTRUCTION
ENTRANCE SHOULD BE PIPED
BENEATH THE ENTRANCE. IF
PIPING IS IMPRACTICAL, A BERM
WITH 5:1 SLOPES THAT CAN BE
CROSSED BY VEHICLES MAY BE
SUBSTITUTED FOR THE PIPE.
WASHING: IF THE SITE
CONDITIONS ARE SUCH THAT
THE MAJORITY OF MUD IS NOT
REMOVED FROM THE VEHICLE
TIRES BY THE GRAVEL PAD,
THEN THE TIRES SHOULD BE
WASHED BEFORE THE VEHICLE
ENTERS THE ROAD OR STREET.
THE WASH AREA SHOULD BE A
LEVEL AREA WITH 3-INCH
WASHED STONE MINIMUM, OR A
COMMERCIAL RACK.
WASH WATER SHOULD BE
DIRECTED INTO A SEDIMENT
TRAP, A VEGETATED FILTER
STRIP, OR OTHER APPROVED
SEDIMENT TRAPPING DEVICE.
SEDIMENT SHOULD BE
PREVENTED FROM ENTERING
ANY WATERCOURSES.
A FILTER FABRIC FENCE
SHOULD BE INSTALLED
DOWN-GRADIENT FROM THE
CONSTRUCTION ENTRANCE IN
ORDER TO CONTAIN ANY
SEDIMENT-LADEN RUNOFF
FROM THE ENTRANCE.

MAINTENANCE

THE ENTRANCE SHOULD BE
MAINTAINED IN A CONDITION
THAT WILL PREVENT TRACKING
OR FLOWING OF SEDIMENT
ONTO PUBLIC RIGHTS-OF-WAY.
THIS MAY REQUIRE PERIODIC
TOPDRESSING WITH
ADDITIONAL STONE.
INSPECT ENTRANCE/EXIT PAD
AND SEDIMENT DISPOSAL AREA
WEEKLY AND AFTER HEAVY
RAINS OR HEAVY USE.
REMOVE MUD AND SEDIMENT
TRACKED OR WASHED ONTO
PUBLIC ROAD IMMEDIATELY.
MUD AND SOIL PARTICLES WILL
EVENTUALLY CLOG THE VOIDS
IN THE GRAVEL AND THE
EFFECTIVENESS OF THE
GRAVEL PAD WILL NOT BE
SATISFACTORY. WHEN THIS
OCCURS, THE PAD SHOULD BE
TOP-DRESSED WITH NEW
STONE. COMPLETE
REPLACEMENT OF THE PAD MAY
BE NECESSARY WHEN THE PAD
BECOMES COMPLETELY
CLOGGED.
IF WASHING FACILITIES ARE
USED, THE SEDIMENT TRAPS
SHOULD BE CLEANED OUT AS
OFTEN AS NECESSARY TO
ASSURE THAT ADEQUATE
TRAPPING EFFICIENCY AND
STORAGE VOLUME IS
AVAILABLE. VEGETATIVE FILTER
STRIPS SHOULD BE MAINTAINED
TO INSURE A VIGOROUS STAND
OF VEGETATION AT ALL TIMES.
RESHAPE PAD AS NEEDED FOR
DRAINAGE AND RUNOFF
CONTROL.
REPAIR ANY BROKEN ROAD
PAVEMENT IMMEDIATELY.
ALL TEMPORARY EROSION AND
SEDIMENT CONTROL MEASURES
SHALL BE REMOVED WITHIN 30
DAYS AFTER FINAL SITE
STABILIZATION IS ACHIEVED OR
AFTER THE TEMPORARY
PRACTICES ARE NO LONGER
NEEDED. TRAPPED SEDIMENT
SHALL BE REMOVED OR
STABILIZED ON SITE. DISTURBED
SOIL AREAS RESULTING FROM
REMOVAL SHALL BE
PERMANENTLY STABILIZED.

CRUSHED STONE CONSTRUCTION EXIT



DUST CONTROL ON DISTURBED AREAS (Du)

DEFINITION

CONTROLLING SURFACE AND AIR MOVEMENT OF DUST ON CONSTRUCTION SITES, ROADS, AND DEMOLITION SITES.

PURPOSE

TO PREVENT SURFACE AND AIR MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES.

TO REDUCE THE PRESENCE OF AIRBORNE SUBSTANCES THAT MAY BE HARMFUL OR INJURIOUS TO HUMAN HEALTH, WELFARE, OR SAFETY, OR TO ANIMALS OR PLANT LIFE.

CONDITIONS

THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO SURFACE AND AIR MOVEMENT OF DUST WHERE ON AND OFF-SITE DAMAGE MAY OCCUR WITHOUT TREATMENT.

METHOD AND MATERIALS

VEGETATIVE COVER. SEE SPECIFICATION DS2 - DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING).

TILLAGE
THIS PRACTICE IS DESIGNED TO ROUGHEN AND BRING CLODS TO THE SURFACE. IT IS AN EMERGENCY MEASURE THAT SHOULD BE USED BEFORE WIND EROSION STARTS. BEGIN PLOWING ON WINDWARD SIDE OF CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT THAT MAY PRODUCE THE DESIRED EFFECT.

IRRIGATION
THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS WET. REPEAT AS NEEDED.

BARRIERS
SOLID BOARD FENCES, SNOWFENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 15 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING WIND EROSION.

CALCIUM CHLORIDE
APPLY AT RATE THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

PERMANENT VEGETATION
SEE SPECIFICATION DS3-DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION). EXISTING TREES AND LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE.

PERMIT DRAWINGS
ISSUED: 2021-04-20
NOT TO BE USED FOR CONSTRUCTION

Rev.	Date	Description	Appr.
----	2/25/2021		

PERMIT DRAWINGS FOR PROSPECT PIER

EROSION & SEDIMENT CONTROL NOTES - SHEET 1 OF 3

Designed by: MSM
Drawn by: MSM
Checked by: SBJ
Reviewed by: SBJ
M&N Project No. 11120-01
Drawing code:
Drawing Scale:
Plot scale: 1:1 (D SHEET)

Submitted by: SUBMITTER'S NAME
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SEAL

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INDEX: 5 OF 20

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DRAWING SCALES SHOWN BASED ON 22"x34" DRAWING

RIPRAP (St)

DEFINITION

A PERMANENT, EROSION-RESISTANT GROUND COVER OF LARGE, LOOSE, ANGULAR STONE.

PURPOSE

TO PROTECT SLOPES, STREAMBANKS, CHANNELS, OR AREAS SUBJECT TO EROSION BY WAVE ACTION.

ROCK RIPRAP PROTECTS SOIL FROM EROSION DUE TO CONCENTRATED RUNOFF. IT IS USED TO STABILIZE SLOPES THAT ARE UNSTABLE DUE TO SEEPAGE. IT IS ALSO USED TO SLOW THE VELOCITY OF CONCENTRATED RUNOFF WHICH IN TURN INCREASES THE POTENTIAL FOR INFILTRATION.

CONSTRUCTION RECOMMENDATIONS

SUBGRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC OR RIPRAP SHOULD BE CLEARED AND GRUBBED TO REMOVE ALL ROOTS, VEGETATION, AND DEBRIS AND PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.

EXCAVATE DEEP ENOUGH FOR BOTH FILTER AND RIPRAP. COMPACT ANY FILL MATERIAL TO THE DENSITY OF SURROUNDING UNDISTURBED SOIL.

EXCAVATE A KEYWAY IN STABLE MATERIAL AT BASE OF SLOPE TO REINFORCE THE TOE. KEYWAY DEPTH SHOULD BE 1.5 TIMES THE DESIGN THICKNESS OF RIPRAP AND SHOULD "EXTEND A HORIZONTAL DISTANCE EQUAL TO THE DESIGN THICKNESS.

ROCK AND/OR GRAVEL USED FOR FILTER AND RIPRAP SHALL CONFORM TO THE SPECIFIED GRADATION. VOIDS IN THE ROCK RIPRAP SHOULD BE FILLED WITH SPALLS AND SMALLER ROCKS.

FILTER

INSTALL SYNTHETIC FILTER FABRIC OR A SAND/GRAVEL FILTER ON SUBGRADE.

SYNTHETIC FILTER FABRIC

PLACE FILTER FABRIC ON A SMOOTH FOUNDATION. OVERLAP EDGES AT LEAST 12 INCHES, WITH ANCHOR PINS SPACED EVERY 3 FT ALONG OVERLAP. FOR LARGE STONES, A 4-INCH LAYER OF SAND MAY BE NEEDED TO PROTECT FILTERCLOTH.

GEOTEXTILE FABRICS SHOULD BE PROTECTED FROM PUNCTURE OR TEARING DURING PLACEMENT OF THE ROCK RIPRAP BY PLACING A CUSHION OF SAND AND GRAVEL OVER THE FABRIC. DAMAGED AREAS IN THE FABRIC SHOULD BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO PIECES OF FABRIC SHOULD BE A MINIMUM OF 12 INCHES.

SAND/GRAVEL FILTER

SPREAD WELL-GRADED AGGREGATE IN A UNIFORM LAYER TO THE REQUIRED THICKNESS (6 INCHES MINIMUM). IF TWO OR MORE LAYERS ARE SPECIFIED, PLACE THE LAYER OF SMALLER STONES FIRST AND AVOID MIXING THE LAYERS.

STONE PLACEMENT

PLACE RIPRAP IMMEDIATELY AFTER INSTALLING FILTER.

INSTALL RIPRAP TO FULL THICKNESS IN ONE OPERATION. DO NOT DUMP THROUGH CHUTES OR USE ANY METHOD THAT CAUSES SEGREGATION OF STONE SIZES. AVOID DISLODGING OR DAMAGING UNDERLYING FILTER MATERIAL WHEN PLACING STONE.

IF FABRIC IS DAMAGED, REMOVE RIPRAP AND REPAIR FABRIC BY ADDING ANOTHER LAYER, OVERLAPPING THE DAMAGED AREA BY 12 INCHES.

PLACE SMALLER STONES IN VOIDS TO FORM A DENSE, UNIFORM, WELL-GRADED MASS SELECTIVE LOADING AT THE QUARRY AND SOME HAND PLACEMENT MAY BE NECESSARY TO OBTAIN AN EVEN DISTRIBUTION OF STONE SIZES.

BLEND THE STONE SURFACE SMOOTHLY WITH THE SURROUNDING AREA ALLOWING NO PROTRUSIONS OR OVERFALL.

SINCE RIPRAP IS USED WHERE EROSION POTENTIAL IS HIGH, CONSTRUCTION MUST BE SEQUENCED SO THAT THE RIPRAP IS PUT IN PLACE WITH THE MINIMUM POSSIBLE DELAY. DISTURBANCE OF AREAS WHERE RIPRAP IS TO BE PLACED SHOULD BE UNDERTAKEN ONLY WHEN FINAL PREPARATION AND PLACEMENT OFTHE RIPRAP CAN FOLLOW IMMEDIATELY BEHIND THE INITIAL DISTURBANCE.

WHERE RIPRAP IS USED FOR OUTLET PROTECTION, THE RIPRAP SHOULD BE PLACED BEFORE OR IN CONJUNCTION WITH THE CONSTRUCTION OF THE PIPE OR CHANNEL

MAINTENANCE

RIPRAP SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR STORM FOR DISPLACED STONES, SLUMPING, AND EROSION AT EDGES, ESPECIALLY DOWNSTREAM OR DOWNSLOPE. IF THE RIPRAP HAS BEEN DAMAGED, IT SHOULD BE REPAIRED IMMEDIATELY BEFORE FURTHER DAMAGE CAN TAKE PLACE.

WOODY VEGETATION SHOULD BE REMOVED FROM THE ROCK RIPRAP ANNUALLY BECAUSE TREE ROOTS WILL EVENTUALLY DISLODGE THE RIPRAP.

IF THE RIPRAP IS ON A CHANNEL BANK, THE STREAM SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, DEBRIS, AND SEDIMENT BARS THAT MAY CHANGE FLOW PATTERNS WHICH COULD DAMAGE OR DISPLACE THE RIPRAP.

PERMIT DRAWINGS
ISSUED: 2021-04-20
NOT TO BE USED FOR CONSTRUCTION

Mark	Description	Date	Appr

PERMIT DRAWINGS FOR PROSPECT PIER

EROSION & SEDIMENT CONTROL NOTES - SHEET 2 OF 3

Rev: ----
Date: 2/25/2021
M&N Project No. 11120-01
Drawing code:
Drawing Scale: Plot scale: 1:1 (D SHEET)

Designed by: MSM
Drawn by: MSM
Cad by: SBJ
Reviewed by: SBJ
Submitted by: SUBMITTER'S NAME MOFFATT & NICHOL

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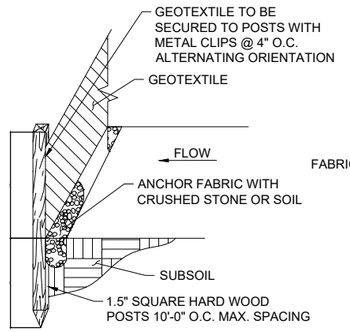
SEAL

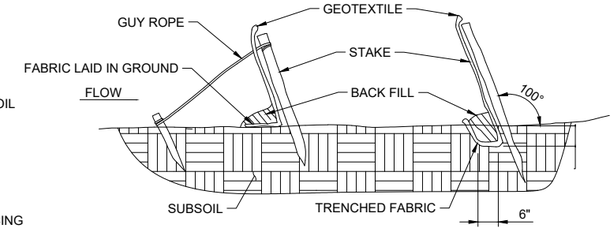
Sheet Reference No.
C-002
INDEX: 6 OF 20

File: Q:\NOR\11120\cadd_Active_Concept\11120-C-002 - Plotted: 8/31/2021 5:28 PM by MIRANDA, MATHEUS - Saved: 4/20/2021 12:39 AM by MMIRANDA

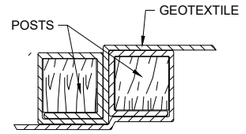
DRAWING SCALES SHOWN BASED ON 22"x34" DRAWING



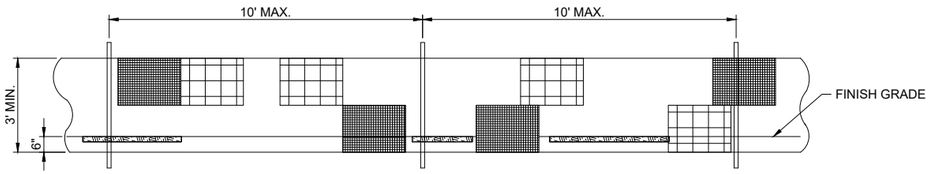
SILT FENCE



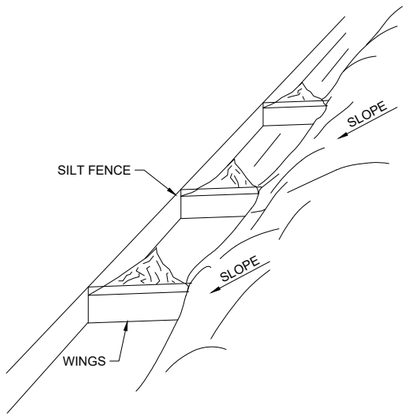
BACK FILL OR TRENCH FABRIC TOE



FENCE JOINT PLAN VIEW



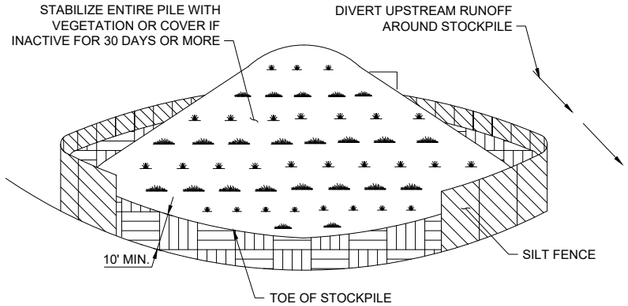
ELEVATION VIEW



SILT FENCE SYSTEM PLACEMENT ON TOE OF SLOPE

GEOTEXTILE SILT FENCE NOTES:

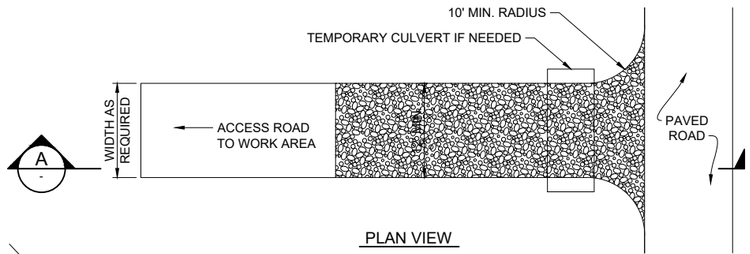
1. GEOTEXTILE FENCE SHOULD BE PLACED SO THE FENCE LEANS TOWARD THE SOURCE OF SEDIMENT.
2. MAXIMUM SPACING FOR WOODEN STAKES OR STEEL POSTS IS 10'-0".
3. WOOD STAKES SHALL HAVE A MINIMUM CROSS-SECTION SIZE OF 1.5"x1.5" AND A MINIMUM LENGTH OF 3'-6". SILT FENCE SUBJECT TO HEAVY LOADS SHALL BE REINFORCED WITH STEEL POSTS AT LEAST 0.5 LB. PER FOOT WITH A MINIMUM LENGTH OF 4 FT.
4. WOODEN STAKES OR STEEL POSTS SHALL BE DRIVEN TO A MINIMUM OF 12" INTO THE GROUND.
5. 6" OF GEOTEXTILE SHALL BE BURIED BY BACK FILLING OR TRENCHING AND AT LEAST 30" IN HEIGHT OF GEOTEXTILE SHALL BE EXPOSED.
6. FABRIC SHALL BE JOINED ONLY AT A SUPPORT POST WITH A MINIMUM OF 6" OVERLAP AND SECURELY SEALED.
7. UPON REESTABLISHMENT OF GROUND COVER IN DISTURBED AREAS AND WHEN DIRECTED BE YHE ENGINEER OR UPON FINAL INSPECTION, FENCE AND ANY SEDIMENT SHALL BE REMOVED. AT NO TIME WILL THE FENCE REMAIN IN PLACE AFTER PROJECT COMPLETION.
8. GEOTEXTILE FENCE SHALL NOT BE USED IN A WATER COURSE.
9. ONLY GEOTEXTILE FROM THE DEPARTMENTS APPROVED PRODUCT LIST SHALL BE USED.
10. BACK FILLING OF GEOTEXTILE SHALL ONLY BE USED WHEN GROUND IS FROZEN OR WHERE OTHER OBSTRUCTIONS ARE ENCOUNTERED THAT PROHIBIT TRENCHING; E.G., STUMPS OR ROCKS.
11. CLEAN OUT ACCUMULATED SEDIMENT WHEN ONE-HALF OF THE ORIGINAL HEIGHT OF THE GE3OTEZTILE FENCE BECOMES FILLED WITH SEDIMENT OR AS DIRECTED BY THE ENGINEER.
12. POSITION POSTS TO OVERLAP MAKING CERTAIN THAT FABRIC FOLDS AROUND EACH POST ONE FULL TURN.
13. DRIVE POSTS TIGHTLY TOGETHER AND SECURE TOPS OF POSTS BY TYING OFF WITH CORD OR WIRE TO PREVENT FLOW-THROUGH OF BUILT-UP SEDIMENT AT JOINTS.
14. WHEN USING SILT FENCE ALONG TOE OF SLOPE, ADD WINGS TO PREVENT SEDIMENT FROM MOVING ALONG THE FENCE AND OFF THE SITE.



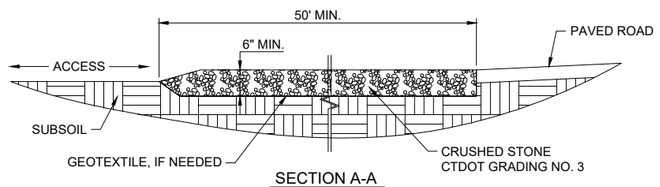
TEMPORARY SOIL STOCKPILING NOTES:

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2H:1V.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR HAY BALES, THEN STABILIZED WITH VEGETATION OR COVERED WITH POLYETHYLENE SHEETING AND SANDBAGS.
4. A POLYETHYLENE MEMBRANE UNDERLAYMENT MAY BE REQUIRED PER ENGINEER REQUESTS.

TEMPORARY SOIL STOCKPILING



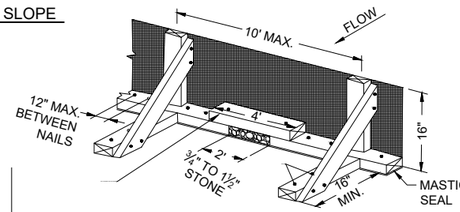
PLAN VIEW



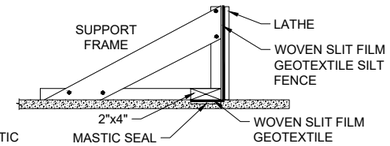
SECTION A-A

CONSTRUCTION ENTRANCE NOTES:

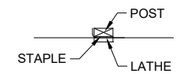
1. TOPSOIL AND ORGANICS SHOULD BE REMOVED PRIOR TO INSTALLATION.
2. CONSTRUCTION ENTRANCE TO BE LOCATED WHERE ACCESS ROAD MEETS PAVED ACCESS/DRIVEWAY.
3. AFTER CONSTRUCTION, ANY DEBRIS SHOULD BE CLEARED FROM THE TRACKING PAD, THE PAD RE-LEVELED AND 2'-4" OF 3/4" CRUSHED GRAVEL SHOULD BE ADDED TO FILL VOIDS AND CREATE A SMOOTH SURFACE WITH A 2% CROWN OR CROSS-SLOPE.



ISOMETRIC VIEW



SECTION A-A



JOINING ADJACENT SECTIONS OF GEOTEXTILE

SILT FENCE ON PAVEMENT

CONSTRUCTION SPECIFICATIONS

1. USE NOMINAL 2 INCH X 4 INCH LUMBER.
2. USE WOVEN SLIT FILM GEOTEXTILE, SUCH AS POLYPROPYLENE, NYLON, POLYESTER, ETHYLENE, OR APPROVED SIMILAR MATERIAL.
3. PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS.
4. SPACE UPRIGHT SUPPORTS NO MORE THAN 10 FEET APART.
5. PROVIDE A TWO FOOT OPENING BETWEEN EVERY SET OF SUPPORTS AND PLACE STONE IN THE OPENING OVER GEOTEXTILE.
6. KEEP SILT FENCE TAUT AND SECURELY STAPLE TO THE UPSLOPE SIDE OF UPRIGHT SUPPORTS. EXTEND GEOTEXTILE UNDER 2x4.
7. WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, FOLD, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL. ATTACH LATHE.
8. PROVIDE A MASTIC SEAL BETWEEN PAVEMENT, GEOTEXTILE, AND 2x4 TO PREVENT SEDIMENT-LADEN WATER FROM ESCAPING BENEATH SILT FENCE INSTALLATION.
9. SECURE BOARDS TO PAVEMENT WITH 40D 5 INCH MINIMUM LENGTH NAILS.
10. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. MAINTAIN WATER TIGHT SEAL ALONG BOTTOM. REPLACE STONE IF DISPLACED.

PERMIT DRAWINGS
ISSUED: 2021-04-20
NOT TO BE USED FOR CONSTRUCTION

Mark	Description	Date	Appr

PERMIT DRAWINGS FOR PROSPECT PIER

EROSION & SEDIMENT CONTROL NOTES - SHEET 3 OF 3

Rev: ----
Date: 2/26/2021
M&M Project No: 11120-01
Drawing code:
Drawing Scale:
Plot scale: 1:1 (0 SHEET)

Designed by: MSM
Drawn by: MSM
Cad by: SBJ
Reviewed by: SBJ
Submitted by: SUBMITTER'S NAME MOFFATT & NICHOL

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SEAL

Sheet Reference No.
C-003
INDEX: 7 OF 20

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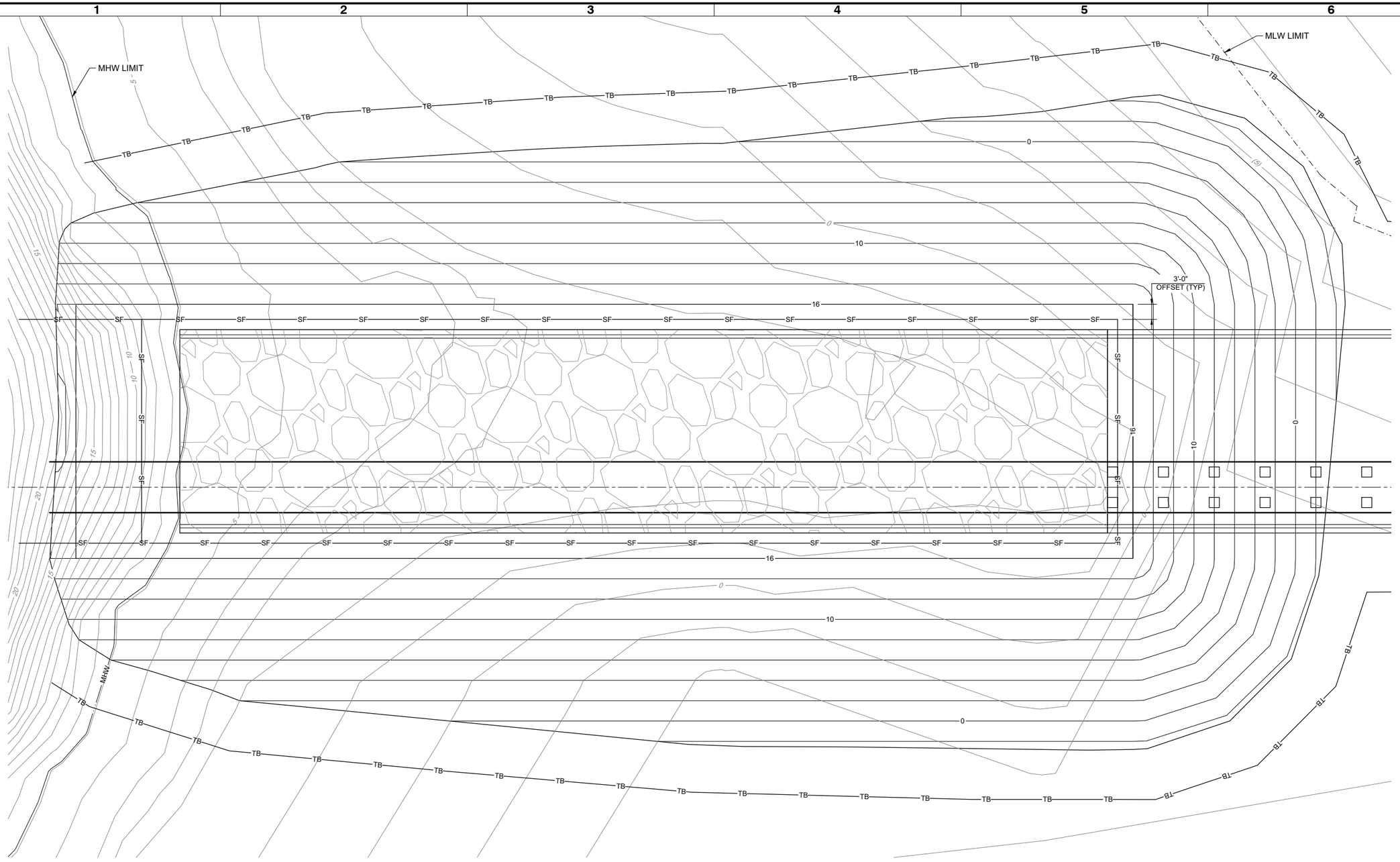

EROSION & SEDIMENT CONTROL PLAN
SCALE: 1"=10'-0"

10'-0" 0'-0" 10'-0" 20'-0"
SCALE: 1"=10'

PERMIT DRAWINGS
ISSUED: 2021-04-20
NOT TO BE USED FOR CONSTRUCTION

Mark	Description	Date	Appr.

PERMIT DRAWINGS FOR PROSPECT PIER

EROSION & SEDIMENT CONTROL PLAN

Rev. ---
Date: 2/25/2021
M&N Project No. 11120-01
Drawing code:
Designed by: MSM
Drawn by: MSM
Ckd by: SBJ
Reviewed by: SBJ
Drawing Scale:
Plot scale: 1:1 (D SHEET)
Submitted by: SUBMITTER'S NAME MOFFATT & NICHOL

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SEAL

Sheet Reference No.
C-101
INDEX: 8 OF 20

File: Q:\NOR\11120\cadd_Active_Concept\11120-C-101 ; Plotted: 8/31/2021 5:29 PM by MIRANDA.MATHEUS ; Saved: 8/31/2021 5:26 PM by MMIRANDA

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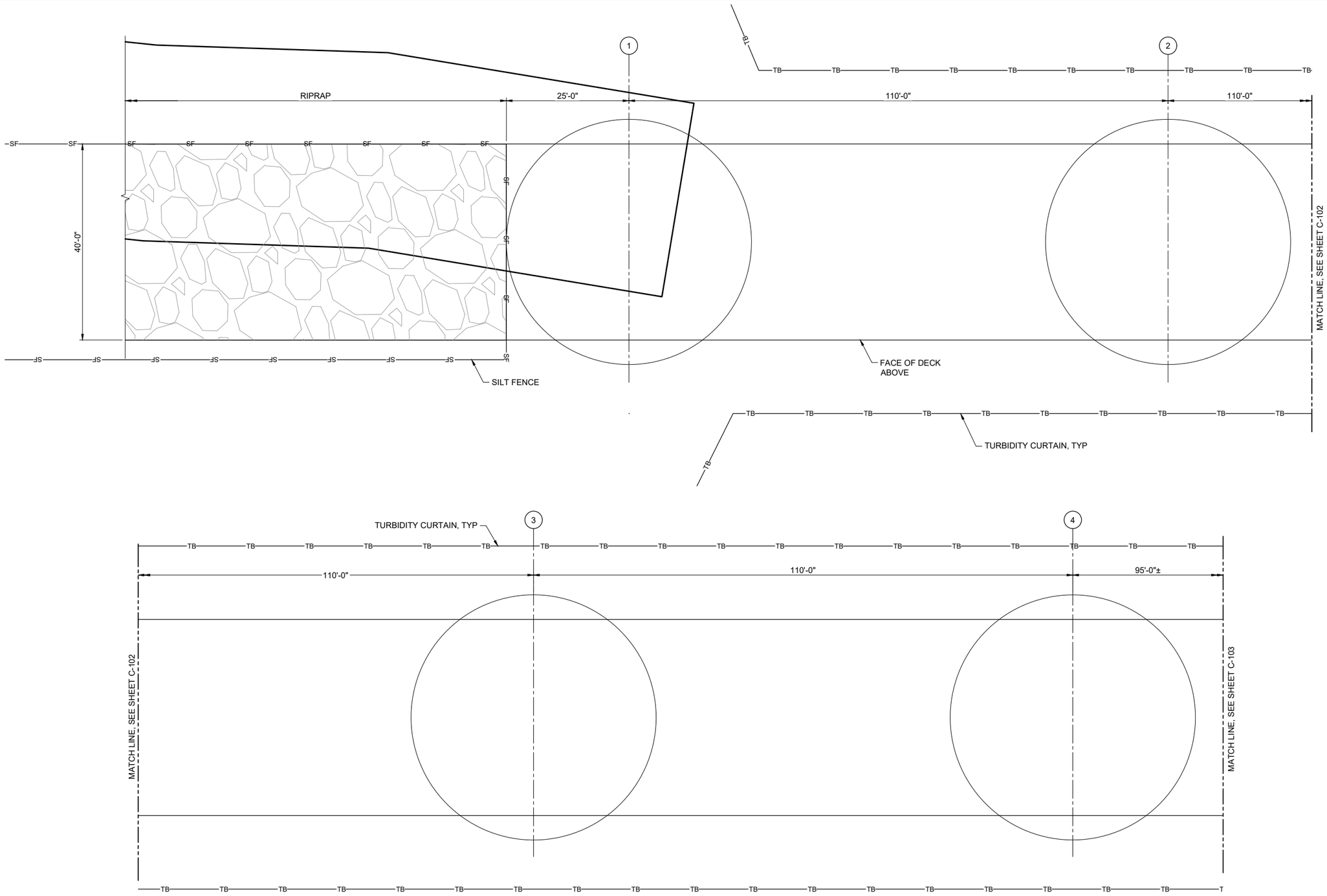

E&S ENLARGED PLAN - 1 OF 3

SCALE: 1"=10'-0"

10'-0" 0'-0" 10'-0" 20'-0"

SCALE: 1"=10'

PERMIT DRAWINGS
ISSUED: 2021-04-20
NOT TO BE USED FOR CONSTRUCTION

PERMIT DRAWINGS FOR PROSPECT PIER

E&S ENLARGED 1 OF 3

Mark	Description	Date	Appr.

Rev.	Date	Drawing Scale
REVNO	2/25/2021	Plot scale: 1:1 (D SHEET)

Designed by:	Drawn by:	Cad by:	M&N Project No.	Drawing code:
MSM	MSM	SBJ	11120-01	

Reviewed by:	Submitted by:
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SEAL

Sheet Reference No.

C-102

INDEX: 9 OF 20

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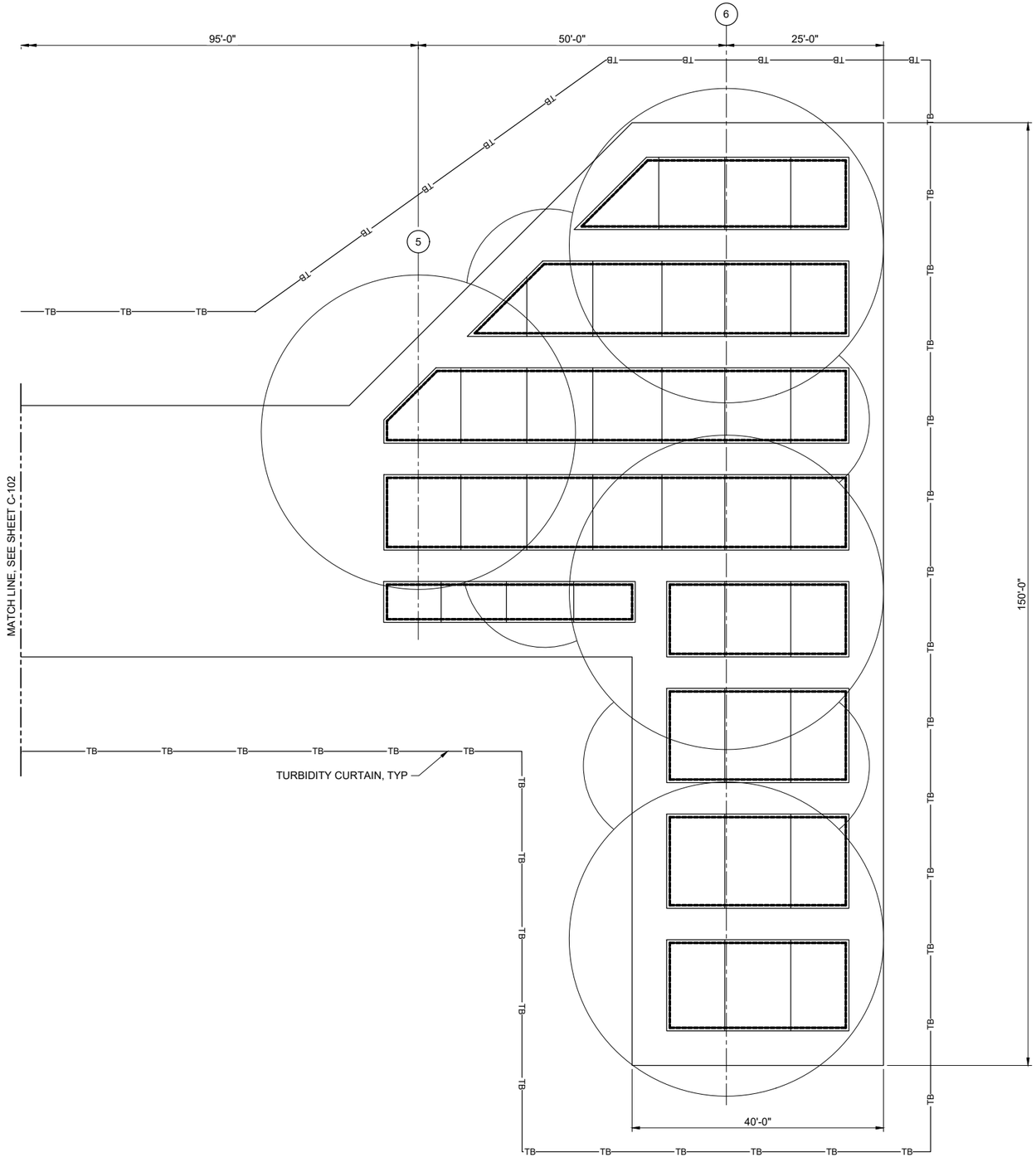

E&S ENLARGED PLAN
SCALE: 1"=10'-0"

10'-0" 0'-0" 10'-0" 20'-0"
SCALE: 1"=10'

PERMIT DRAWINGS
ISSUED: 2021-04-20
NOT TO BE USED FOR CONSTRUCTION

Mark	Description	Date	Appr.

PERMIT DRAWINGS FOR PROSPECT PIER

E&S ENLARGED 2 OF 3

Rev.	Date:	M&N Project No.	Drawing scale:	Drawing Scale:
REVNO	2/25/2021	11120-01		1:1 (0 SHEET)

Designed by:	Dwn by:	Chd by:	Reviewed by:	Submitted by:	Plot scale:
MSM	MSM	SBJ	SBJ	SUBMITTERS NAME MOFFATT & NICHOL	

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Sheet Reference No.
C-103
INDEX: 10 OF 20

File: Q:\WOR\11120\cadd_Active_Concept\11120-C-102 ; Plotted: 8/31/2021 5:29 PM by MIRANDA, MATHEUS ; Saved: 8/31/2021 5:25 PM by MIRANDA

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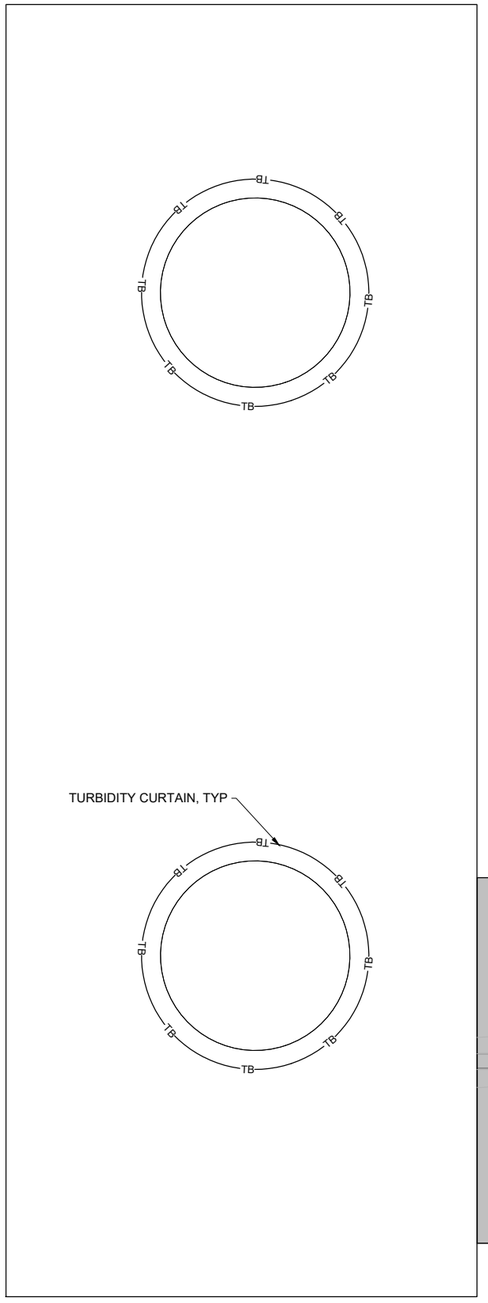
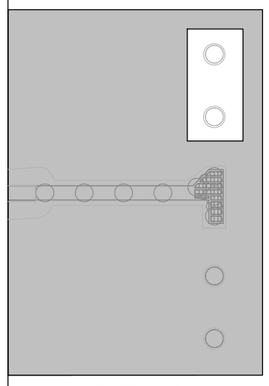
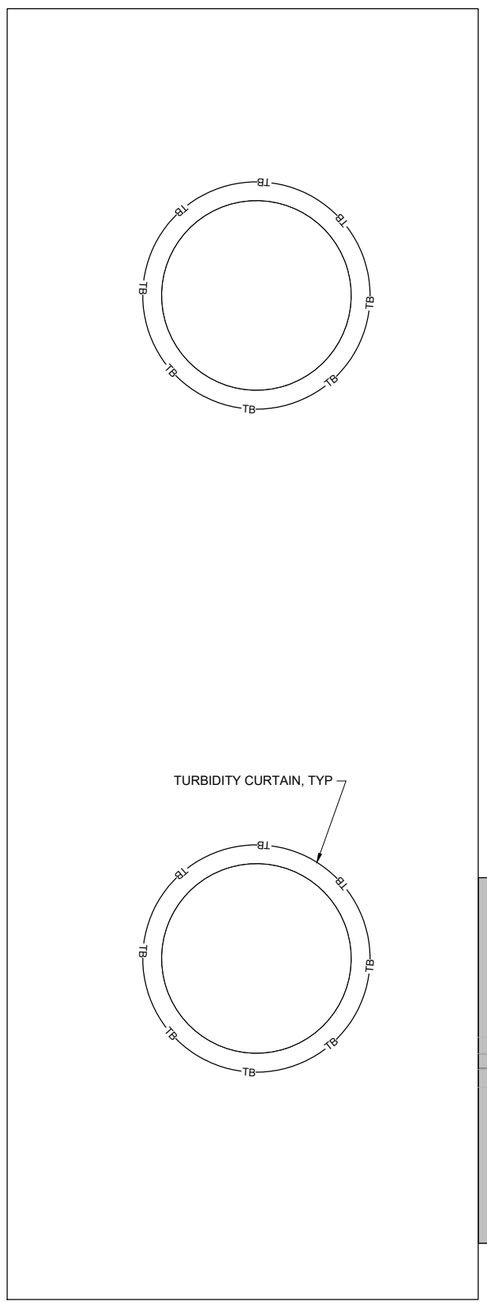


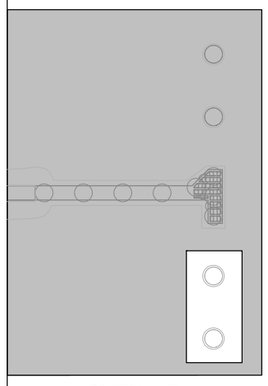


LOCATION MAP

E&S ENLARGED PLAN - MOORING CELLS NW

SCALE: 1"=20'-0"





LOCATION MAP

E&S ENLARGED PLAN - MOORING CELLS SW

SCALE: 1"=20'-0"

20'-0" 0'-0" 20'-0" 40'-0"

SCALE: 1"=20'

PERMIT DRAWINGS
ISSUED: 2021-04-20
NOT TO BE USED FOR CONSTRUCTION

Mark	Description	Date	Appr.

PERMIT DRAWINGS FOR PROSPECT PIER

E&S ENLARGED 3 OF 3

Rev: REVNO

Date: 2/25/2021

M&N Project No. 11120-01

Drawing code:

Drawing Scale: Plot scale: 1:1 (D SHEET)

Designed by: MSM

Dwn by: MSM

Ckd by: SBJ

Reviewed by: SBJ

Submitted by: SUBMITTER'S NAME MOFFATT & NICHOL

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SEAL

Sheet Reference No.

C-104

INDEX: 11 OF 20

File: Q:\NOR\11120\cadd_Active_Concept\11120-C-102 - Plotted: 8/31/2021 5:29 PM by MIRANDA, MATHEUS - Saved: 8/31/2021 5:29 PM by MIRANDA

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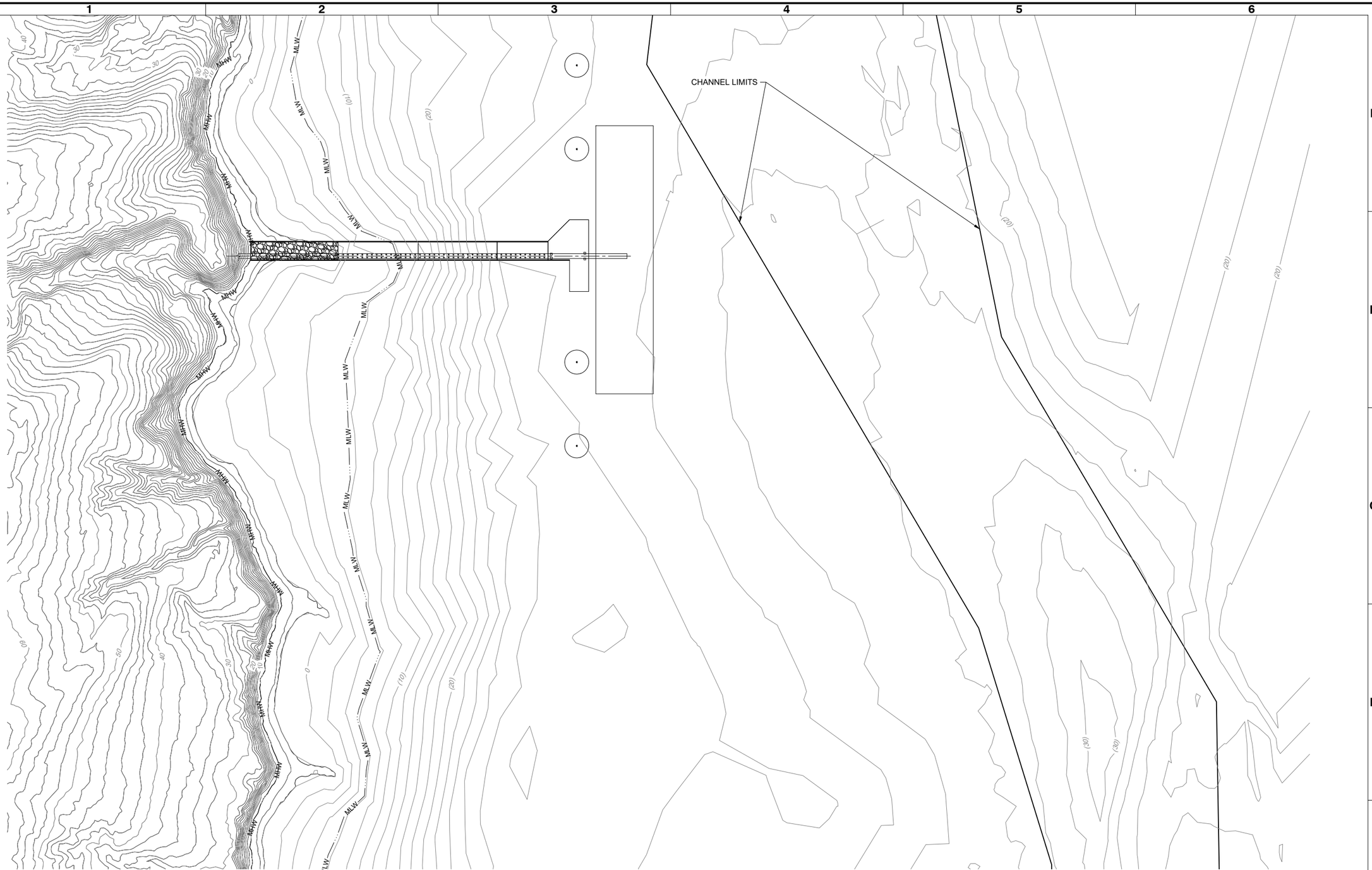

EXISTING TOPO AND HYDRO
SCALE: 1"=100'-0"

100'-0" 0'-0" 100'-0" 200'-0"
SCALE: 1"=100'

PERMIT DRAWINGS
ISSUED: 2021-04-20
NOT TO BE USED FOR CONSTRUCTION

DRAWING SCALES SHOWN BASED ON 22"x34" DRAWING

Mark	Description	Date	Appd

PERMIT DRAWINGS FOR PROSPECT PIER

EXISTING TOPO AND HYDRO

Rev: -----
Date: 2/25/2021
M&N Project No. 11120-01
Drawing code:
Drawing Scale:
Plot scale: 1:1 (0 SHEET)

Designed by: MSM
Drawn by: MSM
Cad by: SBJ
Reviewed by: SBJ
Submitted by: SUBMITTER'S NAME MOFFATT & NICHOL

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Sheet Reference No.
CS-101
INDEX: 12 OF 20

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GENERAL NOTES:

1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, LOCATIONS AND ELEVATIONS SHOWN ON CONTRACT DRAWINGS.
2. FOR NOTES PERTAINING TO INDIVIDUAL STRUCTURES, SEE DRAWINGS FOR THOSE STRUCTURES.
3. COORDINATE ALL ACTIVITIES, INCLUDING THOSE OF SUBCONTRACTORS, WITH THE OWNER'S ACTIVITIES.
4. FOR SPECIAL INSPECTION REQUIREMENTS, SEE SPECIFICATION SECTION 01 45 35 'SPECIAL INSPECTIONS'.

CODES AND STANDARDS:

1. AASHTO, AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 2014
2. ACI 318, AMERICAN CONCRETE INSTITUTE, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND COMMENTARY, 2014 EDITION
3. ACI 301, AMERICAN CONCRETE INSTITUTE, SPECIFICATIONS FOR STRUCTURAL CONCRETE, 2016 EDITION
4. ACI 224R-01, AMERICAN CONCRETE INSTITUTE, CONTROL OF CRACKING IN CONCRETE STRUCTURES
5. AISC 341, AMERICAN INSTITUTE FOR STEEL CONSTRUCTION, SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS, 2010 EDITION
6. AISC 360, AMERICAN INSTITUTE FOR STEEL CONSTRUCTION, SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, 2010 EDITION
7. ASCE 7, AMERICAN SOCIETY OF CIVIL ENGINEERS, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, 2016 EDITION
8. ASCE 61, AMERICAN SOCIETY OF CIVIL ENGINEERS, SEISMIC DESIGN OF PIERS AND WHARVES, 2014 EDITION
9. ASCE, AMERICAN SOCIETY OF CIVIL ENGINEERS, WATERFRONT FACILITIES INSPECTION AND ASSESSMENT, 2015
10. AWS D1.1, AMERICAN WELDING SOCIETY, STRUCTURAL WELDING CODE - STEEL, 2018 EDITION
11. AWS D1.4, AMERICAN WELDING SOCIETY, STRUCTURAL WELDING CODE - REINFORCING STEEL, 2018 EDITION
12. IBS, INTERNATIONAL CODE COUNCIL, INTERNATIONAL BUILDING CODE, 2018 EDITION
13. MAINE DEPARTMENT OF PUBLIC SAFETY, MAINE UNIFORM BUILDING AND ENERGY CODE, 2018
14. MAINEDOT, MAINE DEPARTMENT OF TRANSPORTATION, CONSTRUCTION MANUAL, 2003
15. MAINEDOT, MAINE DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS, 2020
16. MAINE EMERGENCY MANAGEMENT AGENCY, MAINE STATE HAZARD MITIGATION PLAN, 2019
17. PIANC WG 33, PERMANENT INTERNATIONAL ASSOCIATION OF NAVIGATION CONGRESSES, GUIDELINES FOR THE DESIGN OF FENDERS SYSTEMS, 2002
18. PIANC WG 34, PERMANENT INTERNATIONAL ASSOCIATION OF NAVIGATION CONGRESSES, SEISMIC DESIGN GUIDELINES FOR PORT STRUCTURES, 2001
19. UFC 4-152-01, UNIFIED FACILITIES CRITERIA, PIER AND WHARVES, 2017

DESIGN LOADS:

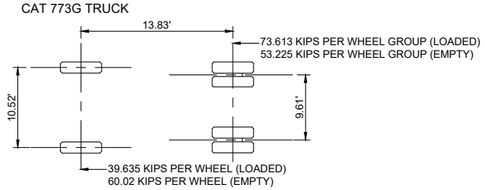
1. DEAD LOADS

DEAD LOADS INCLUDE SELF WEIGHT OF STRUCTURE, WEIGHT OF SUPPORTED EQUIPMENT, AND VERTICAL OR LATERAL EARTH PRESSURE

A. REINFORCED CONCRETE..... 150 PCF
B. PLAIN CONCRETE..... 144 PCF
C. STEEL..... 490 PCF

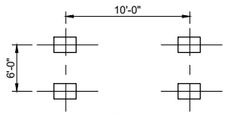
2. LIVE LOADS

A. UNIFORM..... 100 PSF
B. STOCKPILE..... 800 PSF
C. CAT 773G TRUCK



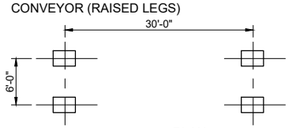
PLAN

D. CONVEYOR (SHORT LEGS)



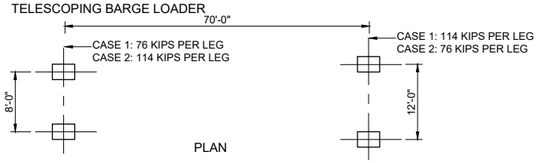
PLAN
650 PLF PER EACH 10'-0" LONG SECTION

E. CONVEYOR (RAISED LEGS)



PLAN
850 PLF PER EACH 30'-0" LONG SECTION

F. TELESCOPING BARGE LOADER



PLAN

G. WIND
DESIGN WIND SPEED = 115 MPH (3 SECOND GUST AT 33 FT ABOVE GROUND)
WIND SPEED DURING ICE CONDITIONS = 50 MPH (3 SEC GUST AT 33 FT ABOVE GROUND)
OPERATING WIND SPEED DURING BERTHING = 40 MPH (3 SEC GUST)

H. SEISMIC
S_S = 0.289g I = 1.0
S_1 = 0.074g SITE CLASS E
PGA = 0.173g

3. LIVE LOAD IMPACT FACTORS

CAT 773G TRUCK - 33%

CONCRETE AND REINFORCING STEEL:

1. ALL CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT ACI 301, UNLESS OTHERWISE NOTED.
2. ALL CONCRETE SHALL BE NORMAL WEIGHT, UNLESS OTHERWISE NOTED.
3. ALL DETAILING, FABRICATION, AND ERECTION OF REINFORCING STEEL SHALL CONFORM TO THE ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES, ACI 315.
4. ALL GROUT IS TO BE NON-METALLIC AND NONSHRINK (UON).
5. CHAMFER ALL EXPOSED EXTERNAL CORNERS OF CONCRETE WITH 3/4", 45° CHAMFERS UNLESS OTHERWISE NOTED.
6. MINIMUM CONCRETE COVER FOR REINFORCING SHALL BE 3" UON.
7. ALL HORIZONTAL AND VERTICAL CONSTRUCTION JOINTS SHALL BE KEYED. ROUGHEN SURFACES OF HORIZONTAL CONSTRUCTION JOINTS TO 1/4" AMPLITUDE.
8. MATERIALS SHALL CONFORM TO THE FOLLOWING, UNLESS OTHERWISE NOTED:

A. CONCRETE STRENGTH 28 DAY
1. CAST-IN-PLACE.....4,000 PSI
2. GROUT.....8,000 PSI
3. PRECAST.....4,000 PSI

B. REINFORCING STEEL
1. ALL MILD STEEL REINFORCING STEEL FOR CAST-IN-PLACE AND PRECAST CONCRETE SHALL CONFORM TO ASTM A706 GRADE 60 AND SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.
2. GALVANIZING REINFORCING STEEL SHALL COMPLY WITH ASTM A767/A767M, CLASS 1 COATING.
3. ALL REINFORCING BAR SPLICES SHALL BE CLASS "B" TENSION LAP SPLICES, IN ACCORDANCE WITH ACI 318

STRUCTURAL AND MISCELLANEOUS STEEL:

1. ALL STEEL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT AISC SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.
2. ALL WELDING SHALL CONFORM TO THE REQUIREMENTS OF CURRENT AWS D1.1
3. STEEL MATERIALS SHALL CONFORM TO THE FOLLOWING, UNLESS OTHERWISE NOTED:
   A. MISC PLATES, BARS, AND SHAPES.....ASTM A36
   B. BOLTS.....ASTM A307
   C. ANCHOR BOLTS/RODS.....ASTM F1554, GRADE 105
   D. HSS MEMBERS.....ASTM A500, GRADE B
   E. H-PILE.....ASTM A572, GRADE 50
4. ALL CARBON STEEL SHAPES, PLATES, FASTENERS AND ALL OTHER STEEL HARDWARE SHALL BE HOT DIP GALVANIZED AFTER ASSEMBLY, UNLESS OTHERWISE NOTED.
5. ALL WELDING ASSEMBLIES SHALL BE SHOP FABRICATED.
6. ALL STEEL SHAPES, AND OTHER FABRICATIONS SHALL BE GALVANIZED BY THE HOT-DIP PROCESS IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A123 AND/OR A153 AS APPLICABLE, AFTER FABRICATION, UNLESS OTHERWISE INDICATED.
7. FIELD TREAT DAMAGED GALVANIZED STEEL FINISH WITH TWO COATS OF HIGH ZINC DUST OXIDE PAINT, COLD GALVANIZED COMPOUNDS, OR APPROVED EQUAL, CONFORMING TO THE REQUIREMENTS OF ASTM A780. IN ADDITION, ALL EXPOSED THREADED SURFACES SHALL BE PAINTED WITH TWO COATS OF HIGH ZINC DUST OXIDE PAIN AFTER INSTALLATION OF THE NUT.
8. ALL BOLTED CONNECTIONS SHALL HAVE HEAVY HEX NUTS AND WASHERS UNLESS OTHERWISE NOTED.

PERMIT DRAWINGS
ISSUED: 2021-04-20
NOT TO BE USED FOR CONSTRUCTION

Mark	Description	Date	Appr

PERMIT DRAWINGS FOR PROSPECT PIER

STRUCTURAL NOTES

Designed by: IM	Dwn by: MSM	Chd by: BA	Reviewed by: SBJ
Date: 2/25/2021	M&N Project No. 11120-01	Drawing code:	Drawing Scale: Plot scale: 1:1 (D SHEET)
Rev: ----			
Submitted by: SUBMITTER'S NAME MOFFATT & NICHOL			

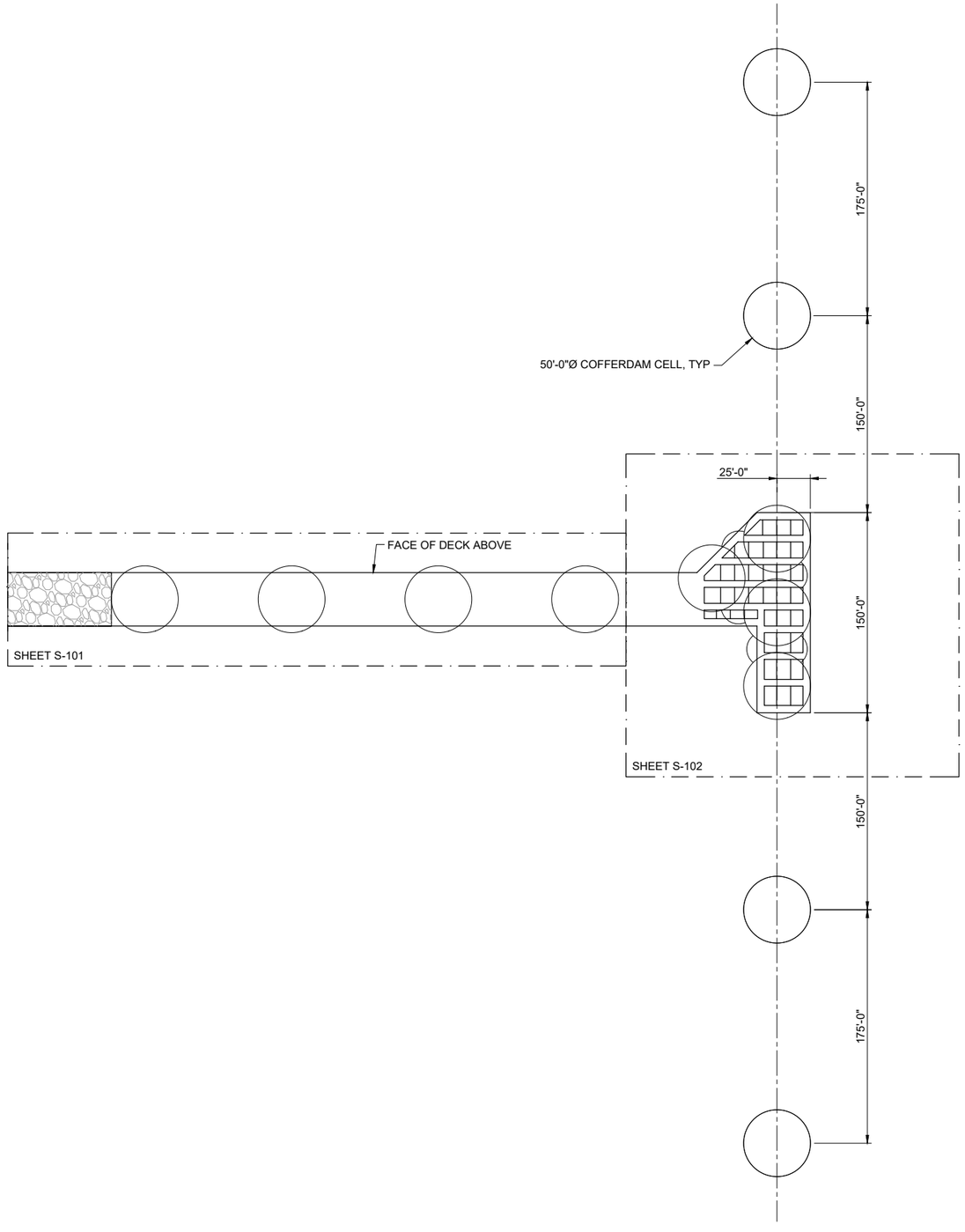
MOFFATT & NICHOL
101 W. MAIN ST, SUITE 3000
NORFOLK, VA 23510

SALMONS, INC.
781 PRINCESS ANNE RD
VIRGINIA BEACH, VA 23457

SEAL

Sheet Reference No.
S-001
INDEX: 13 OF 20

DRAWING SCALES SHOWN BASED ON 22"x34" DRAWING



COFFERDAM GENERAL PLAN
SCALE: 1"=50'-0"

50'-0" 0'-0" 50'-0" 100'-0"
SCALE: 1"=50'

PERMIT DRAWINGS
ISSUED: 2021-04-20
NOT TO BE USED FOR CONSTRUCTION

DRAWING SCALES SHOWN BASED ON 22"x34" DRAWING

Mark	Description	Date	Appr

PERMIT DRAWINGS FOR PROSPECT PIER

COFFERDAM GENERAL PLAN

Designed by: MSM	Dwn by: MSM	Ckd by: SBJ	Date: 2/25/2021
Reviewed by: SBJ	Submitted by: SUBMITTER'S NAME MOFFATT & NICHOL	Drawing Scale: Plot scale: 1:1 (D SHEET)	Rev. REVNO

MOFFATT & NICHOL
101 W. MAIN ST., SUITE 3000
NORFOLK, VA 23510

SALMONS, INC.
781 PRINCESS ANNE RD
VIRGINIA BEACH, VA 23457

M&N Project No. 11120-01

Drawing circle:

SEAL

Sheet Reference No.
S-100
INDEX: 14 OF 20

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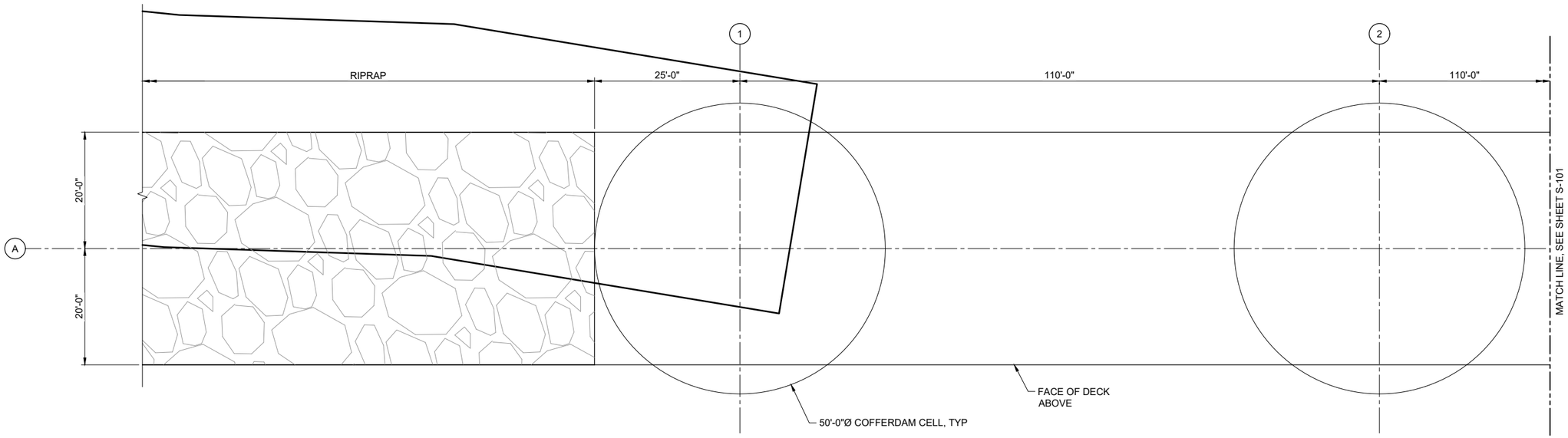

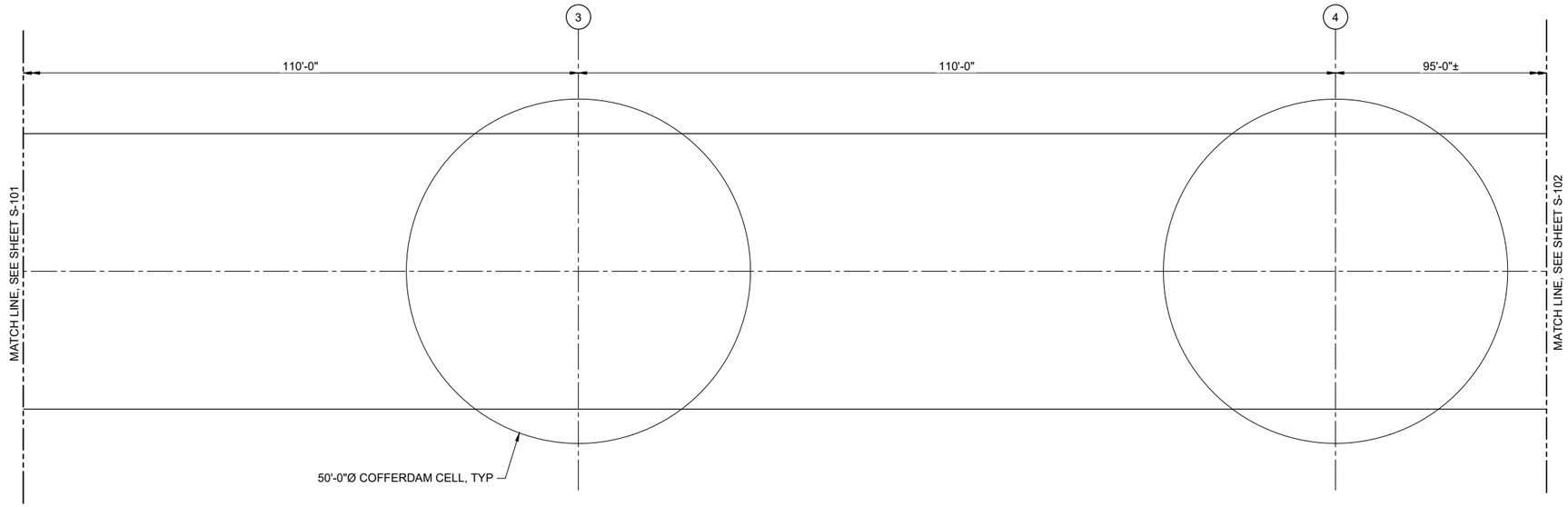

COFFERDAM ENLARGED PLAN - 1 OF 2

SCALE: 1"=10'-0"

10'-0" 0'-0" 10'-0" 20'-0"

SCALE: 1"=10'

PERMIT DRAWINGS
ISSUED: 2021-04-20
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Mark	Description	Date	Appd

PERMIT DRAWINGS FOR PROSPECT PIER

COFFERDAM ENLARGED PLAN - SHEET 1 OF 2

Rev: ----
Date: 2/25/2021
M&N Project No. 11120-01
Drawing code:
Drawing Scale:
Plot scale: 1:1 (D SHEET)
Designed by: BS
Drawn by: MSM
Cad by: SBJ
Reviewed by: SBJ
Submitted by: SUBMITTER'S NAME MOFFATT & NICHOL

MOFFATT & NICHOL
101 W. MAIN ST, SUITE 3000
NORFOLK, VA 23510

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781 PRINCESS ANNE RD
VIRGINIA BEACH, VA 23457

SEAL

Sheet Reference No.
S-101
INDEX: 15 OF 20

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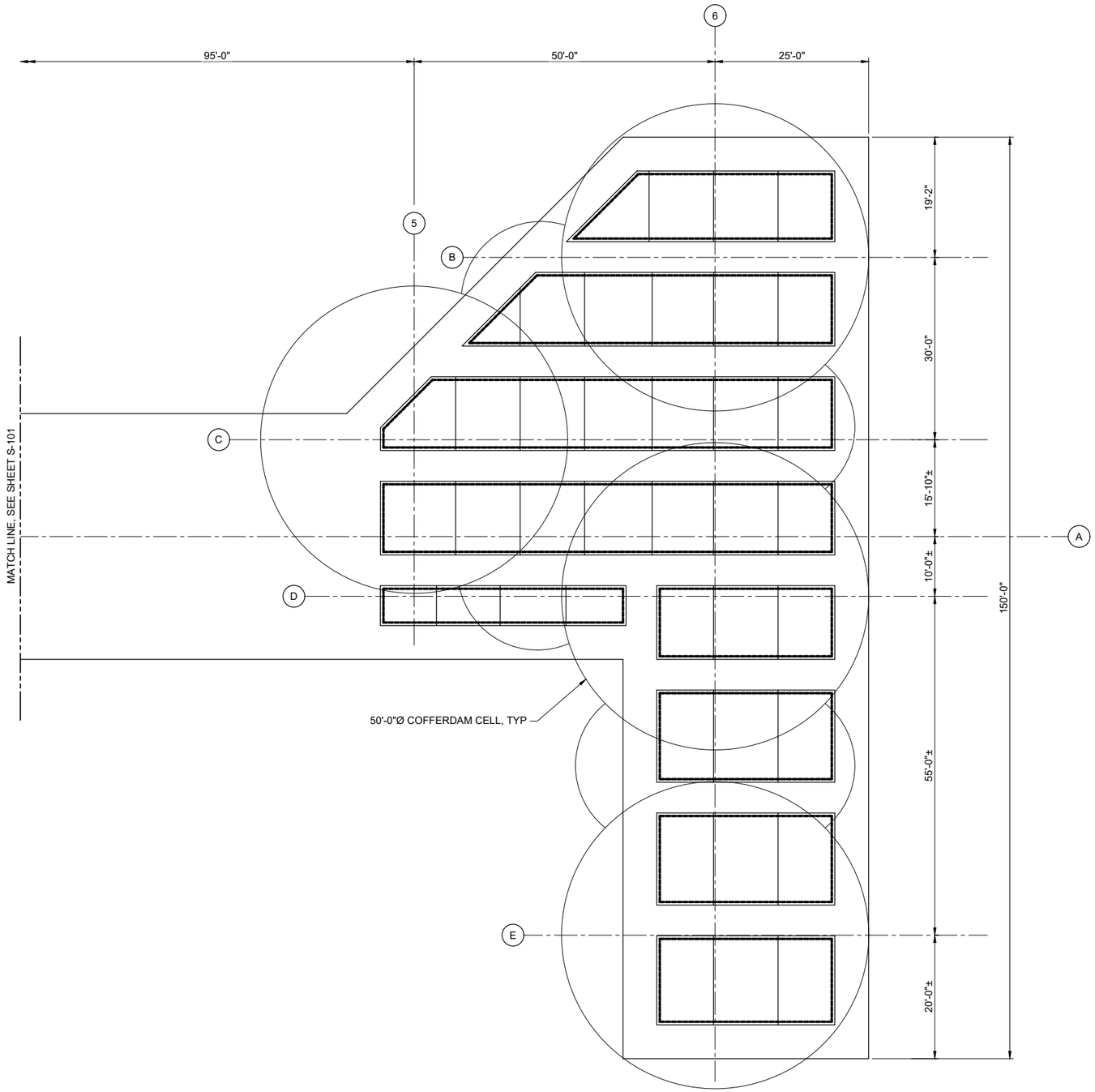

COFFERDAM ENLARGED PLAN - 2 OF 2

SCALE: 1"=10'-0"

10'-0" 0'-0" 10'-0" 20'-0"

SCALE: 1"=10'

PERMIT DRAWINGS
ISSUED: 2021-04-20
NOT TO BE USED FOR CONSTRUCTION

DRAWING SCALES SHOWN BASED ON 22"x34" DRAWING

PERMIT DRAWINGS FOR PROSPECT PIER

COFFERDAM ENLARGED PLAN - SHEET 2 OF 2

Mark	Description	Date	Appr.

Date:	2/25/2021
Rev.	-----
Designed by:	BS
Dwn by:	MSM
Cad by:	SBJ
M&N Project No.	11120-01
Reviewed by:	SBJ
Drawing code:	
Submitted by:	SUBMITTER'S NAME MOFFATT & NICHOL
Drawing Scale:	
Plot scale:	1:1 (D SHEET)

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101 W. MAIN ST, SUITE 3000
NORFOLK, VA 23510

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781 PRINCESS ANNE RD
VIRGINIA BEACH, VA 23457

SEAL

Sheet Reference No.

S-102

INDEX: 16 OF 20

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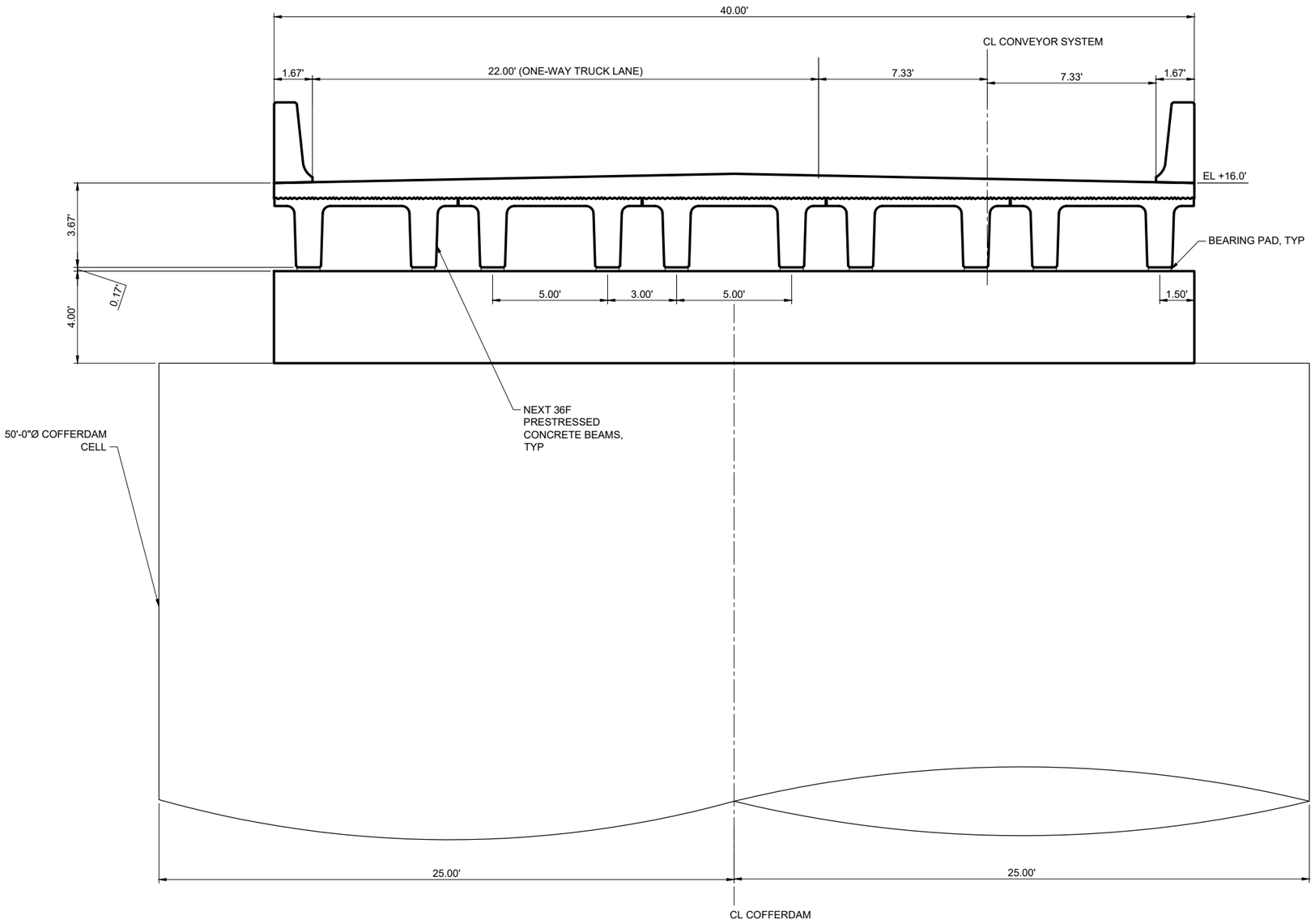

PIER SECTION
SCALE: 3/8"=1'-0"

4' 0'-0" 2' 4'
SCALE: 3/8"=1'-0"

PERMIT DRAWINGS
ISSUED: 2021-04-20
NOT TO BE USED FOR CONSTRUCTION

DRAWING SCALES SHOWN BASED ON 22"x34" DRAWING

Mark	Description	Date	Appd

PERMIT DRAWINGS FOR PROSPECT PIER

PIER SECTION

Rev: ----
Date: 2/25/2021
M&N Project No. 11120-01
Drawing code:
Drawing Scale:
Plot scale: 1:1 (D SHEET)
Designed by: IM
Dwn by: MSM
Ckd by: BA
Reviewed by: SBJ
Submitted by: SUBMITTER'S NAME MOFFATT & NICHOL

MOFFATT & NICHOL
101 W. MAIN ST, SUITE 3000
NORFOLK, VA 23510
moffatt & nichol

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781 PRINCESS ANNE RD
VIRGINIA BEACH, VA 23457

SEAL

Sheet Reference No.
S-301
INDEX: 17 OF 20

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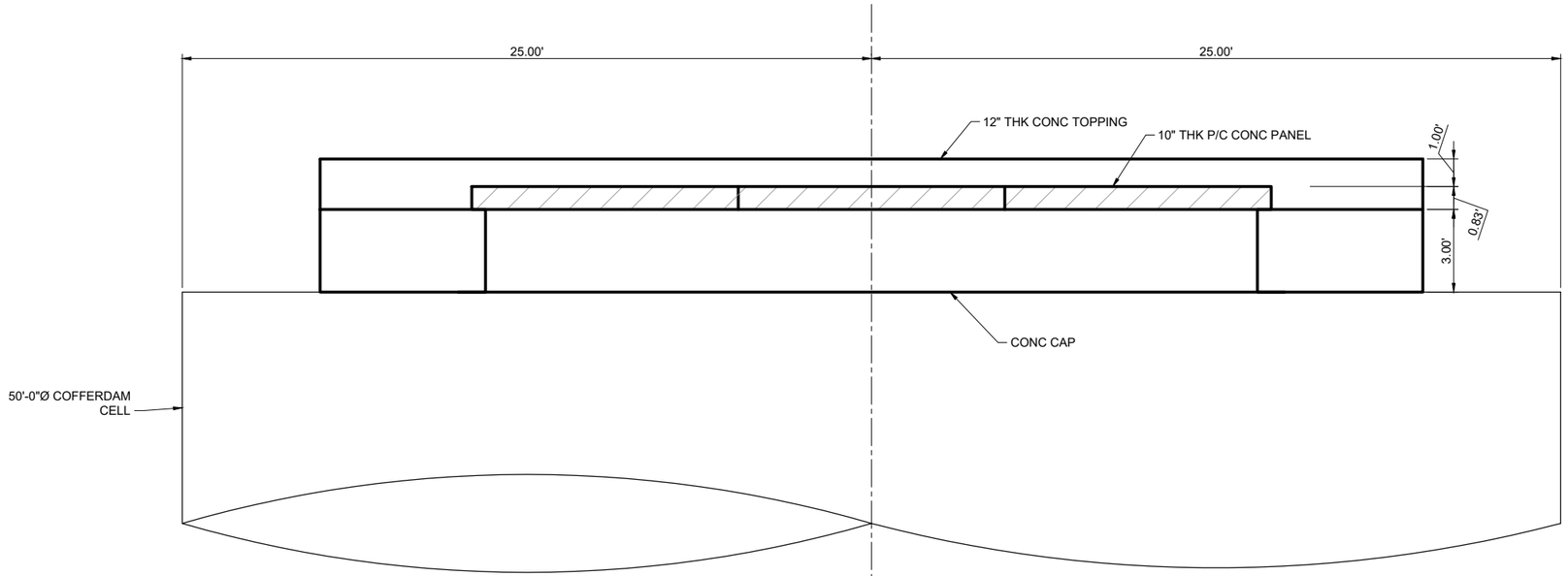

MOORING DOLPHIN SECTION
SCALE: 3/8"=1'-0"

4' 0'-0" 2' 4'
SCALE: 3/8"=1'-0"

PERMIT DRAWINGS
ISSUED: 2021-04-20
NOT TO BE USED FOR CONSTRUCTION

Mark	Description	Date	Appr

PERMIT DRAWINGS FOR PROSPECT PIER

MOORING DOLPHIN DETAIL

Rev: ----
Date: 2/25/2021
M&N Project No. 11120-01
Drawing code:
Drawing Scale: Plot scale: 1:1 (D SHEET)
Designed by: IM
Drawn by: MSM
Cad by: BA
Reviewed by: SBJ
Submitted by: SUBMITTER'S NAME MOFFATT & NICHOL

MOFFATT & NICHOL
101 W. MAIN ST, SUITE 3000
NORFOLK, VA 23510
moffatt & nichol

SALMONS, INC.
781 PRINCESS ANNE RD
VIRGINIA BEACH, VA 23457

SEAL

Sheet Reference No.
S-302
INDEX: 18 OF 20

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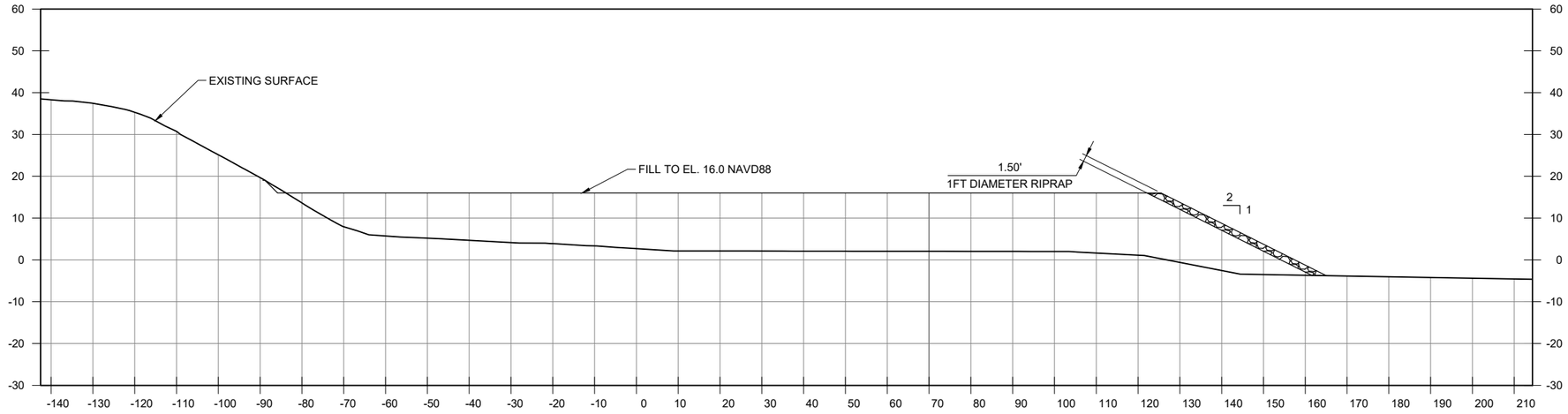
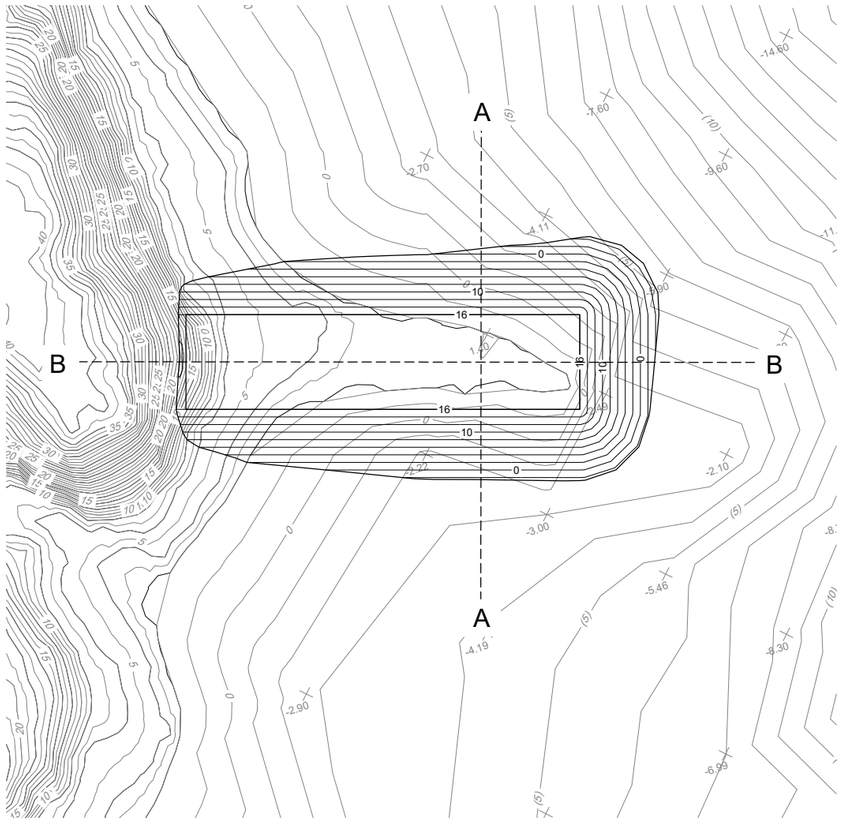
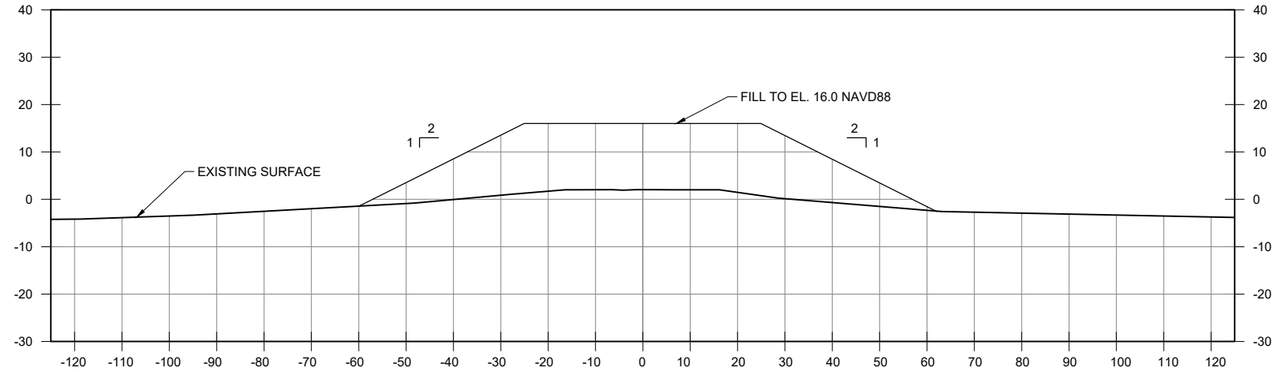


SECTION B - UPLAND FILL
SCALE: 1"=16'-0"



PLAN - UPLAND FILL
SCALE: 1"=40'-0"



SECTION A - UPLAND FILL
SCALE: 1"=16'-0"

PERMIT DRAWINGS
ISSUED: 2021-04-20
NOT TO BE USED FOR CONSTRUCTION

PERMIT DRAWINGS FOR PROSPECT PIER

UPLAND FILL SECTION

Mark	Description	Date	Appd

Designed by:	MSM
Drawn by:	MSM
Cad by:	SBJ
Reviewed by:	SBJ
Submitted by:	SUBMITTER'S NAME MOFFATT & NICHOL
Date:	2/25/2021
M&N Project No.	11120-01
Drawing code:	
Drawing Scale:	
Plot scale:	1:1 (D SHEET)
Rev.	-----

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SEAL

Sheet
Reference No.
S-303
INDEX: 19 OF 20

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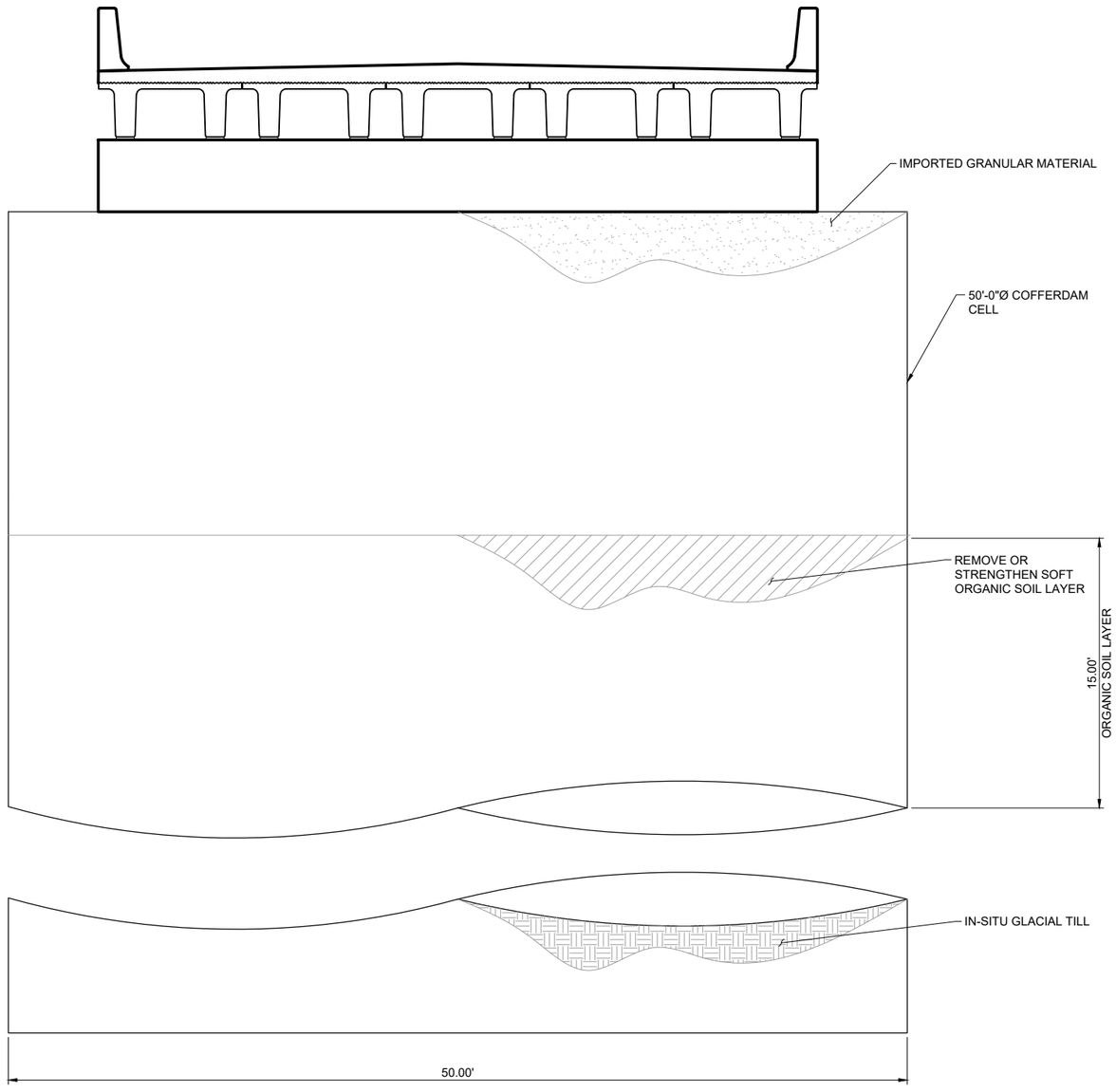
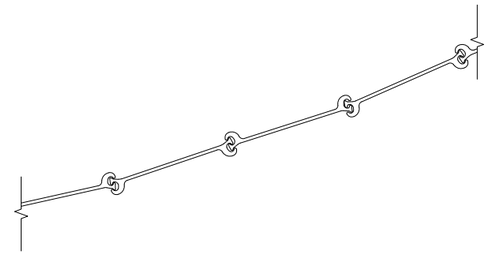


COFFERDAM TYPICAL SECTION
SCALE: 1/4"=1'-0"



COFFERDAM ARC DETAIL
SCALE: 1/4"=1'-0"

4' 0'-0" 2' 4'
SCALE: 1/4"=1'-0"

PERMIT DRAWINGS
ISSUED: 2021-04-20
NOT TO BE USED FOR CONSTRUCTION

Mark	Description	Date	Appd

PERMIT DRAWINGS FOR PROSPECT PIER

COFFERDAM DETAIL

MOFFATT & NICHOL
101 W. MAIN ST, SUITE 3000
NORFOLK, VA 23510

SALMONS, INC.
781 PRINCESS ANNE RD
VIRGINIA BEACH, VA 23457

Designed by: BS	Cad by: SBJ	Reviewed by: SBJ	Date: 2/25/2021
Dwn by: MSM		Submitted by: SUBMITTER'S NAME MOFFATT & NICHOL	M&N Project No. 11120-01
			Drawing code:
		Plot scale: 1:1 (D SHEET)	Drawing Scale:

SEAL

Sheet Reference No.
S-304
INDEX: 20 OF 20

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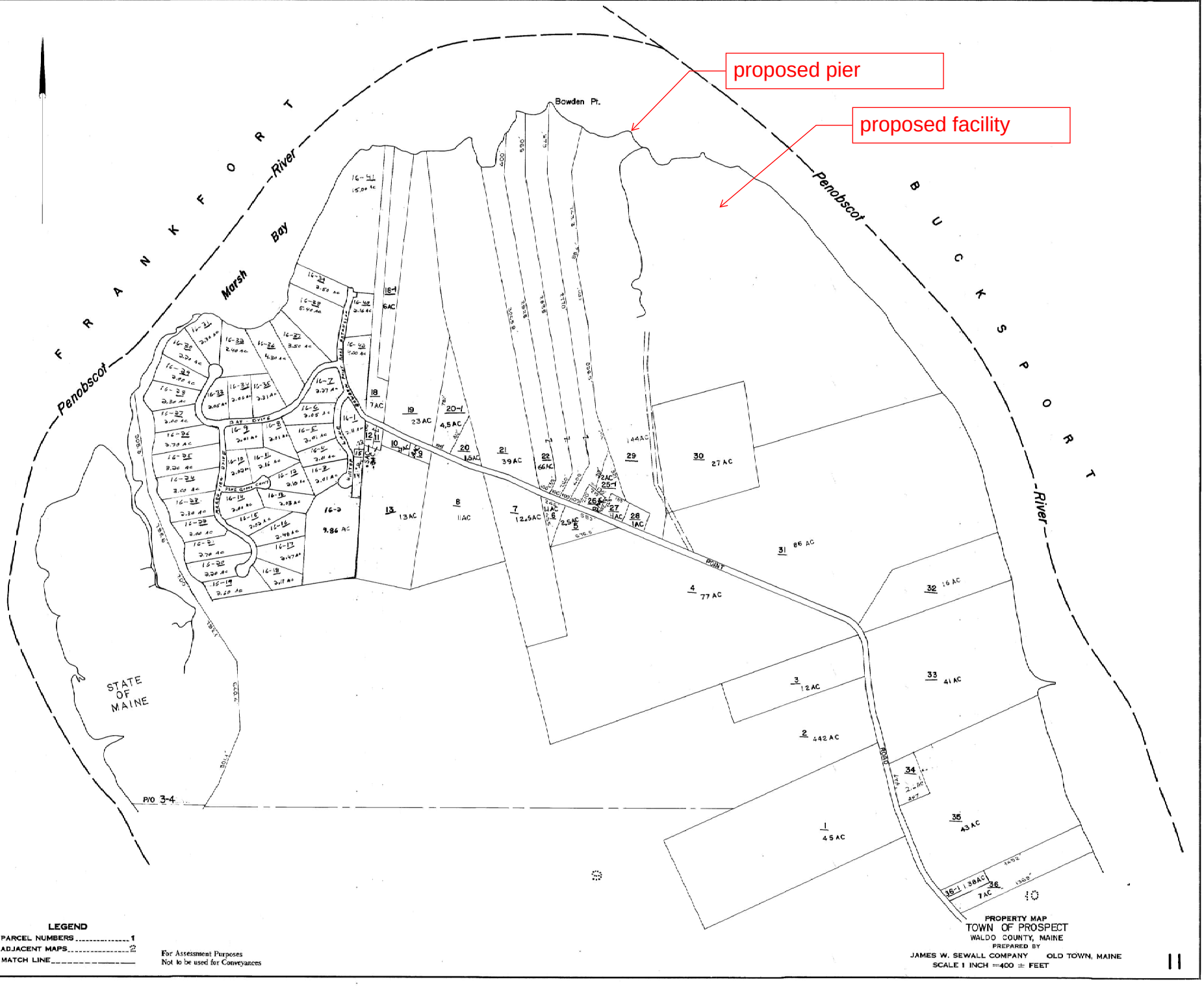
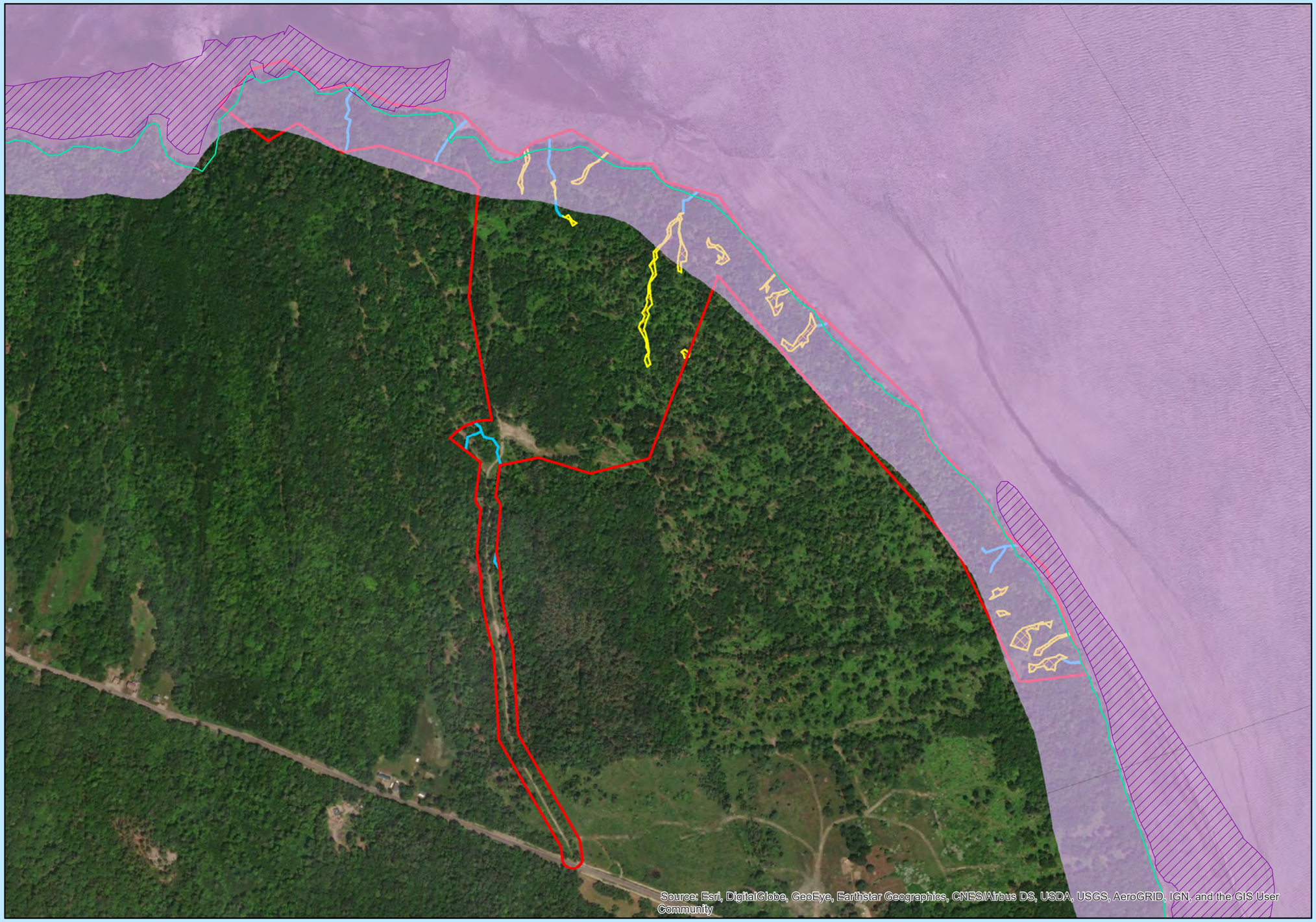

proposed pier
proposed facility
Bowden Pt.
FRANKFORT
Penobscot River
Marsh Bay
BUCKSPORT
Penobscot River
STATE OF MAINE
P/O 3-4
LEGEND
PARCEL NUMBERS 1
ADJACENT MAPS 2
MATCH LINE
For Assessment Purposes
Not to be used for Conveyances
PROPERTY MAP
TOWN OF PROSPECT
WALDO COUNTY, MAINE
PREPARED BY
JAMES W. SEWALL COMPANY OLD TOWN, MAINE
SCALE 1 INCH =400 ± FEET
11

ATTACHMENT 8

ADDITIONAL PLANS
Natural Resource Map

Natural Resource Plan - Levy Parcel - Prospect



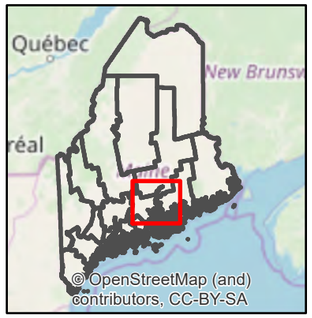
N
W E
S

500 250 0 500
Feet

Legend

- Natural Resource Survey Area
- Wetland Area CES
- Streams CES
- Tidal Waterfowl and Wading Bird Habitat
- Highest Annual Tide (2015)
- FEMA Flood Zones

MAINE



Project Title: Salmon's Inc.
Description:
Natural Resource Plan

Project No.: 12617.001
By: NAI
Date: 6/13/19
Updated: 10/24/2019
By: [jszillery]

MAP NOTES:

1. WETLANDS SHOWN HEREON WERE DELINEATED IN JULY 2019. WETLANDS WERE FIELD DELINEATED IN ACCORDANCE WITH U.S. ARMY CORPS OF ENGINEERS STANDARDS BY CES, INC.

2. FEATURES DEPICTED ON THIS PLAN WERE LOCATED USING A MAPPING GRADE SUB-METER CAPABLE GPS/GNSS RECIEVER.

3. MAP IS PROJECTED USING UTM ZONE19 COORDINATES, AND REFERENCES THE NORTH AMERICAN DATUM OF 1983 (NAD83).

4. NORTH ARROW IS ORIENTED TO GRID NORTH IN ALL MAP EXTENTS DEPICTED HEREIN.

5. AERIAL PHOTO BASE MAP FROM IMAGERY IS 1-M 2013 NAIP IMAGERY BY USDA, FSA, TOPOGRAPHIC QUAD FROM ESRI, 2015.

CES INC
Engineers • Environmental Scientists • Surveyors

ATTACHMENT 9

CONSTRUCTION PLAN

ATTACHMENT 9

CONSTRUCTION PLAN

Please see the Construction Plan in this section which outlines the various construction activities related to the proposed pier.

Operations in Wetlands and Protected Resource Areas:

Construction and associated operations in and near the protected resources on-site, namely wetlands and the intermittent stream, will be controlled to avoid unnecessary impacts and minimize disturbance. By careful planning, site preparation, timing, access route utilization, and construction implementation, project construction can be accomplished with the least amount of impact to the protected resources on Site.

General Principals:

- Avoid operating in wet weather
- Minimize trips and machine operations
- Employ the appropriate BMPs
- Install and maintain erosion control devices
- Concentrate traffic and access within uplands and along established roads/corridors

Access Routes:

The project will be accessed from Bowden Point Road. One access drive will be constructed off of Bowden Point Road for internal access to the Site.

ATTACHMENT 10

EROSION CONTROL PLAN

ATTACHMENT 10

EROSION CONTROL PLAN

A. Narrative. The proposed construction will require the implementation of temporary and permanent erosion control measures. These measures will be implemented in accordance with the Maine Erosion and Sediment Control Best Management Practices (BMPs) Manual, prior to removal of any on-site vegetation or disturbance of any on-site soil. The general erosion and sediment control specifications and details, as provided within this section, are intended to describe measures to be used by contractors working on the site to maintain compliance with the standards established in the BMPs. These standards include information on temporary and permanent erosion control measures, rates of seeding and applied mulch, slope and soil stabilization, effect of construction schedule, and other details.

The proposed location and use of erosion control measures on-site are shown on the **Proposed Site Plan**. Erosion control devices are described in detail in this report, on the Construction Drawings, and in the **Construction Plan** (Attachment 7.) There are no known existing erosion control concerns with the site. Implementation of proper erosion control measures will be required by site contractors to confine sediment and debris within the limit of soil disturbance. Proper use and maintenance of erosion control measures will provide protection against off-site transport of sediment and discharge of sediment to undisturbed areas of the development.

Additional Erosion Control information is shown on sheets C001, C002, and C003 of the attached project plans.

B. Completion Date. Fall 2023

C. Site Features. For site features please refer to the enclosed plan.

D. Temporary and Permanent Erosion Control Measures. For temporary and permanent erosion control measures please refer to the enclosed plan.

E. Limits of Disturbed Areas. Areas of disturbance will be limited to the proposed work shown on the enclosed plan.

F. Design Drawings and Specifications. For design drawings please refer to the enclosed plan. The following specifications will be utilized by the site contractor during construction of the project.

APPENDIX A

EROSION CONTROL PLAN SPECIFICATIONS

A. General

1. All work and measures will be as per the Maine Erosion and Sediment Control BMPs manual.

2. The following specifications will be employed.

B. Prior to Construction

1. Prior to beginning of construction, erosion and sedimentation controls shall be in place.

C. During Construction

1. Exposed soil surfaces will be treated immediately if they are to remain ungraded more than 30 days, or if they are at final grades.

2. Drainage ways, either designed or incidental, will have filter barriers installed.

3. All work and materials necessary to minimize sediment loss from the site will be provided.

4. All erosion control measures will be inspected and repaired after every rainfall greater than ½-inch and at least daily during rain events lasting longer than 24 hours.

D. Post Construction

1. Erosion control measures will be maintained until permanent soil stabilization has been achieved with a growth of vegetation greater than 90%.

SOIL PROTECTION AND EROSION CONTROL

PART 1 - GENERAL

1.01 Description of Work

A. Provide and maintain devices to control erosion, siltation, sedimentation, and dust that occur during construction operations. Undertake every reasonable precaution and do whatever is necessary to avoid erosion of soil and to prevent silting of wetland areas and drainage ditches.

B. Provide measures to control dust caused whether on or off the project site.

C. Deficiencies in erosion control measures indicated by failures or erosion will be corrected as soon as reasonably possible by providing additional measures or different techniques to correct the situation and prevent subsequent erosion.

D. Exposure of soils on embankments, excavations, and graded areas will be kept as short as possible. Initiate seeding and other erosion control practices as soon as reasonably possible.

1.02 Quality Assurance

A. Conform to all requirements of applicable Federal, State and local permits and conform to the recommendations of the Maine Erosion and Sediment Control BMPs (see Part B below) whether the measures are specifically noted herein, or not.

B. Standards: Maine Erosion and Sediment Control BMPs Manual, hereinafter called Erosion Control Handbook.

PART 2 - PRODUCTS

2.01 Materials: Use the following materials to implement and construct erosion control measures.

A. Hay Bale: Rectangular shaped bales of hay or straw weighting at least 40 pounds per bale; free from noxious weed seeds and rough or woody materials.

B. Mulch: Type and use as specified by the Erosion Control Handbook
   1. Long fibered hay or straw in dry condition and which are relatively free of weeds and foreign matter detrimental to plant life.

   2. Mulch netting: Plastic or nylon mesh netting with approximate openings of ¼-inch to 1-inch.

C. Permanent Seeding: Cut and fill slopes and disturbed areas will be stabilized as follows:

1. Four inches of loam will be spread over disturbed areas and smoothed to a uniform surface.

2. In lieu of tests, agricultural limestone will be spread at the rate of three tons per acre. 10-20-20 fertilizer will follow at the rate of 800 lbs. per acre. These two soil additives will be incorporated into the soil prior to seeding.

3. Following seed bed preparation, back slopes will be seeded to a mixture of 83% creeping red fescue, and 17% rye grass. Seeding rate is 3 lbs. per 1,000 square feet. Lawn quality sod may be substituted for seed.

4. Hay mulch at the rate of 90 lbs. per 1,000 square feet of a hydro-application of asphalt, wood, or paper fiber will be applied following seeding. A suitable binder such as curason or terrtack will be used on hay mulch for wind control.

5. If final seeding of the disturbed areas is not completed by September 15th of the year of the construction, then on that date these areas will be graded and a cover crop of rye at the rate of 112 lbs/acre or 3 lbs/1,000 sq. ft. will be applied. The rye seeding will be preceded by an application of 3 tons of lime and 800 lbs. of 10-20-20 fertilizer or its equivalent and covered by a layer of jute mat to aide in stabilization.

PART 3 - EXECUTION

3.01 Construction

A. Silt Fence

1. Install as directed by Erosion Control Handbook.

B. Hay Bales:

1. Install as directed by Erosion Control Handbook, and stake with required stakes.

C. Mulch:

1. Undertake after each area has been properly prepared.

2. When seed for erosion control is sown prior to placing the mulch, place mulch on the seeded areas within 48 hours after seeding.

3. Blowing chopped mulch will be permitted.

4. Hay mulch should cover the ground enough to shade it, but the mulch should not be so thick that a person standing cannot see the ground through the mulch.

5. Remove matted mulch or bunches.

D. Temporary Erosion Control Matting (where necessary):

1. Surface Preparation:
   a. Conform to grades for slopes and ditches shown of the drawings.
   b. Finish to a smooth and even condition with all debris, roots, stones, and lumps raked out and removed.
   c. Loosen soil surface to permit bedding of the matting.
   d. Unless otherwise directed, apply seed prior to placement.

2. Installation:
   a. Place strips lengthwise in the direction of the flow of water.
   b. Where strips are laid parallel or meet as in a tee, overlap at least four inches.
   c. Overlap ends at least six inches in a shingle fashion.
   d. The up-slope end of each strip of the matting will be turned down and buried to a depth of not less than six inches with the soil firmly tamped against it.
   e. Build check slots at right angles to the direction of the flow of water. Space so that one check slot or one end occurs within each 50 feet of slope length. Construct by placing a tight fold of the matting at least six inches vertically into the ground and tamp the same as up-slope ends.
   f. Bury edges of matting around the edges of the catch basins and other structures.
   g. Where determined by the Engineers, additional seed will be spread over matting, particularly at those locations disturbed by building the slots. Matting will then be pressed onto the ground with a light lawn roller or by other satisfactory means.

h. Drive staples vertically into the ground flush with the surface.
i. On slopes flatter than 4:1, space staples not more than three feet and one row, alternately spaced, down the center.
j. On grades 4:1 or steeper, place in the same three rows, but spaced two feet apart.
k. On all overlapping or butting edges, double the number of staples, with the spacing halved; all ends of the matting and all required check slots will likewise have staples spaced every foot.

E. Permanent Seeding:

1. Seed with appropriate seeds and application rates as noted in Section 2.01C.

2. Mulch areas where seeding has been applied. Do not mulch seeded areas where matting will be immediately installed.

F. Topsoil Storage:

1. Topsoil which is stockpiled on the site for use in loam applications will be placed out of natural drainages, in piles that have side slopes of 2:1 to 1.5:1.

2. A trench (depth as required) will be constructed around the base of the pile to prevent eroding soil from washing into drainages.

G. Dust Control: Utilize the application of sprinkled water to reduce the emission of airborne soil particulates from the Project site.

H. Temporary Berms: Construct temporary barriers along the toe of embankments using side drains as necessary.

I. In-Water Work

Refer to the Erosion Control Handbook, Section III:95. Control devices include:

1. Floating Turbidity Curtain
2. Cofferdams
3. Dewatering
4. Temporary Sediment Basin
5. Geotextile Filter Bags

H. Temporary Basins: Construct temporary sedimentation basins adequate to avoid siltation of surface water bodies.

I. Other Temporary Measures:

1. Type and use will be as specified in the Erosion Control Handbook.

J. Winter Stabilization Notes

1. At this time, it is expected that soil disturbance will occur during winter months. If construction is performed during these times, the following construction practices will be followed.
   a. All disturbed areas not stabilized with stone or other measures will have approved erosion control matting installed and be dormant seeded.
   b. No frozen soil material or material containing significant snow or ice will be used for fill material.
   c. All material stockpiles will have silt fence and/or hay bales installed downgradient of piles.
   d. Follow general erosion control notes described previously wherever possible and as conditions permit.

3.02 Maintenance

A. Inspect erosion control practices immediately after each rainfall greater than ½-inch and at least daily during rainfall lasting longer than 24 hours or snowmelt for damage. Provide maintenance and make appropriate repairs or replacement.

B. Remove silt from around hay bales when it has reached one foot above grade or prior to expected heavy runoff or siltation.

C. Repair matting if any staples become loosened or raised, or if any matting becomes loose, torn, or undermined, make satisfactory repairs immediately.

3.03 Removal of Temporary Erosion Control

A. Remove temporary materials and devices when permanent soil stabilization has been substantially achieved. For vegetated areas, substantially complete means 95% vegetated cover has been established.

B. Level and grade to the extent required to present a sightly appearance and to prevent any obstruction of the flow of water or any other interference with the operation of or access to the permanent works.

C. Remove unsuitable materials from site and dispose of in a lawful manner.

APPENDIX B

INSPECTION AND MAINTENANCE

The following Maintenance Plan will be employed for this Site. Bowden Point Properties will be responsible for all maintenance. Erosion control measures for this site were designed by:

Chip Haskell, P.E.
Haley Ward, Inc.
One Merchants Plaza, 7th Floor
Bangor, Maine 04412
(207) 989-4824
chaskell@haleyward.com

A Pre- and Post-Construction Maintenance Plan for the stormwater management system and erosion control measures are included in this section.

MAINTENANCE PLAN

The MDEP's Stormwater Management for Maine: Best Management Practices (2006), and the MDEP's Chapter 500: Stormwater Management were used as guidelines in the development of this Maintenance Plan. General maintenance requirements are listed below.

A. DURING CONSTRUCTION

The general contractor will be responsible for the inspection and maintenance of all stormwater management system components during construction.

Inspection: Inspection of disturbed and impervious areas, erosion control measures, materials' storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site will be performed at least once a week as well as before and after a storm event, and prior to completing permanent stabilization measures. Inspections shall be conducted by a person with knowledge of erosion and stormwater control, including the standards and conditions in the permit.

Maintenance: All erosion control measures will be kept in effective operating condition until areas are permanently stabilized. If BMPs need to be maintained or modified, additional BMPs are necessary, or other corrective action is needed, implementation will be completed within 7 calendar days and prior to any rainfall event.

Documentation: A log shall be kept summarizing the inspections and any corrective action taken. A copy of the log is provided at the end of this section, and is titled, Construction Inspection Log.

B. POST-CONSTRUCTION

The Owner or their assigns will be responsible for the inspection and maintenance of all stormwater management system components.

Inspection and Corrective Action

1. ***Vegetated Areas:*** Inspections and maintenance of vegetated areas will be performed early in the growing season or after significant rainfall to identify any erosion problems. Areas where erosion is evident will be covered with an appropriate lining, or erosive flows will be diverted to an area able to handle the flows. Any bare areas or areas with sparse growth will be replanted.

2. *In-Water Work*

Turbidity Curtains: Check for proper function when sedimentation is occurring. Sediment should be fully contained by the floating turbidity curtain. Signs of leakage or bypass should be assessed and addressed immediately. Inspect the floating turbidity curtain weekly, on windy days, and before, during, and after storm events. Ensure that the connections between curtain sections and the connections to the anchor lines are secure. Keep any debris that might damage the fabric clear from the curtain. If the curtain is damaged while construction is ongoing, it should be repaired in-place in order to maintain its function. After each use, the curtain should be spread out on a flat surface, cleaned thoroughly by brushing with water and detergent, rinsed and allowed to dry. Patch tears and abrasions using special cements and fabric obtainable from the manufacturer.

Stream Diversions:
Preparations may include obtaining and readying additional pumps, raising the cofferdam height, stabilizing the work area, and removing debris from the diversion pipe. Remove the diversion immediately upon completion of in-water work.

Cofferdams:

Inspect daily throughout use. Repair and reposition any damaged or displaced cofferdam components. Repair washouts or other damage as needed. Sandbags should be removed by hand to prevent breakage and unnecessary disturbance of the streambed. When using an upstream and downstream dam, remove the downstream dam first.

Dewatering:

Cofferdam Integrity – Observe any increases in seepage rate. If changes are observed, locate and repair leaks. Water Quality – Observe any clean water discharges to the resource, to ensure that they remain clean. If they are not, redistribute discharges as appropriate and correct any deficiencies. Temporary Sedimentation Devices – Verify proper function of the temporary sedimentation devices. Conduct cleaning and/or installation of additional capacity as necessary.

3. *Inspection:* shall be performed by an individual with experience and/or training on the maintenance and functions of these devices.

Documentation: A log will be kept summarizing the inspections, maintenance, and any corrective action taken. A copy of the log is provided at the end of this section, and is titled, BMP Inspection Log.

4. ***Recertification Requirement***: Within three months of the expiration of each five-year interval from the date of issuance of the permit, the permittee shall certify the following to the department.

    a. All areas of the project site have been inspected for areas of erosion, and appropriate steps have been taken to permanently stabilize these areas.

    b. All aspects of the stormwater control system have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the facilities.

    c. The erosion and stormwater maintenance plan for the site is being implemented as written, or modifications to the plan have been submitted to and approved by the department, and the maintenance log is being maintained.

APPENDIX C

HOUSEKEEPING

1. Spill Prevention - During construction, controls will be used to prevent pollutants from being discharged from materials on site, including storage practices to minimize exposure of the materials to stormwater, and appropriate spill prevention, containment, and response planning and implementation.

2. Groundwater Protection - During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater will not be stored or handled in areas of the site draining to an infiltration area. Dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater may be used to isolate portions of the site for the purposes of storage and handling of these materials.

3. Fugitive Sediment and Dust - Actions will be taken to ensure that activities do not result in noticeable erosion of soils or fugitive dust emissions during or after construction. Oil will not be used for dust control. Water will be used for dust control during construction.

   Operations during wet months that cause mud to be tracked off the site onto public roads will provide sweeping of the road areas at least once per week and prior to significant storm events.

4. Debris and Other Materials - Litter, construction debris, and chemicals exposed to stormwater will be prevented from becoming a pollutant source. The nature of this development will not cause problems related to debris and other materials.

5. Trench or Foundation De-Watering - If de-watering is necessary, the collected water will be removed from the ponded area and spread through natural wooded buffers or discharged into a construction sedimentation basin. The water will not be allowed to flow over disturbed areas to the site.

PROSPECT QUARRY
CONSTRUCTION INSPECTION LOG

Inspection Date	Inspector (Name and Qualifications)	Major Observations	Work Performed

Notes

1) Major Observations include the operation and maintenance of erosion and sedimentation controls, materials storage areas, and vehicle access points to the parcel. Major Observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations(s) where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken.

2) Work Performed will include a description of the corrective action taken, the date the corrective action was taken, and the name and qualifications of the person taking the corrective actions

3) The log must be made accessible to MDEP staff and a copy must be provided upon request.
The permittee shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.

SALMONS INCORPORATED

BMP INSPECTION LOG

Date	Inspector (Name and Qualifications)	ID Number	BMP Structure	Work Performed	Comments

Notes

1) If a maintenance task requires the clean-out of any sediments or debris, indicate where the sediment and debris was disposed after removal.
2) BMP structures shall be numbered sequentially and located on attached site map.
3) The log must be made accessible to MDEP staff and a copy must be provided upon request.
4) The permittee shall retain a copy of the log for a period of at least five years from the completion of permanent stabilization.

INSPECTION AND MAINTENANCE PLAN FOR STORMWATER MANAGEMENT STRUCTURES (BMPS)		
	INSPECTION SCHEDULE	CORRECTIVE ACTIONS
VEGETATED AREAS	Annually early spring and after heavy rains	Inspect all slopes and embankments and replant areas of bare soil or with sparse growth
		Armor rill erosion areas with riprap or divert the runoff to a stable area
		Inspect and repair down-slope of all spreaders and turn-outs for erosion
		Mow vegetation as specified for the area
DITCHES, SWALES AND OPEN STORMWATER CHANNELS	Annually spring and late fall and after heavy rains	Remove obstructions, sediments or debris from ditches, swales and other open channels
		Repair any erosion of the ditch lining
		Mow vegetated ditches
		Remove woody vegetation growing through riprap
		Repair any slumping side slopes
		Repair riprap where underlying filter fabric or gravel is showing or if stones have dislodged
CULVERTS	Spring and late fall and after heavy rains	Remove accumulated sediments and debris at the inlet, outlet, or within the conduit
		Remove any obstruction to flow
		Repair any erosion damage at the culvert's inlet and outlet
CATCHBASINS	Annually in the spring	Remove sediments and debris from the bottom of the basin and inlet grates
		Remove floating debris and oils (using oil absorptive pads) from any trap
ROADWAYS AND PARKING AREAS	Annually in the spring or as needed	Clear and remove accumulated winter sand in parking lots and along roadways
		Sweep pavement to remove sediment
		Grade road shoulders and remove accumulated winter sand
		Grade gravel roads and gravel shoulders
		Clean-out the sediment within water bars or open-top culverts
		Ensure that stormwater runoff is not impeded by false ditches of sediment in the shoulder
RESOURCE AND TREATEMENT BUFFERS	Annually in the spring	Inspect buffers for evidence of erosion, concentrated flow, or encroachment by development
		Manage the buffer's vegetation with the requirements in any deed restrictions
		Repair any sign of erosion within a buffer
		Inspect and repair down-slope of all spreaders and turn-outs for erosion
		Install more level spreaders, or ditch turn-outs if needed for a better distribution of flow
		Clean-out any accumulation of sediment within the spreader bays or turnout pools
		Mow non-wooded buffers no shorter than six inches and less than three times per year
WETPONDS AND DETENTION BASINS	Annually in fall and after heavy rains	Inspect the embankments for settlement, slope erosion, piping, and slumping
		Mow the embankment to control woody vegetation
		Inspect the outlet structure for broken seals, obstructed orifices, and plugged trash racks
		Remove and dispose of sediments and debris within the control structure
		Repair any damage to trash racks or debris guards
		Replace any dislodged stone in riprap spillways
		Remove and dispose of accumulated sediments within the impoundment and forebay
FILTRATION AND INFILTRATION BASINS	Annually in the spring and late fall	Clean the basin of debris, sediment and hydrocarbons
		Provide for the removal and disposal of accumulated sediments within the basin
		Renew the basin media if it fails to drain within 72 hours after a one inch rainfall event
		Till, seed and mulch the basin if vegetation is sparse
		Repair riprap where underlying filter fabric or gravel is showing or where stones have dislodged
PROPRIETARY DEVICES	As specified by manufacturer	Contract with a third-party for inspection and maintenance
		Follow the manufacturer's plan for cleaning of devices
OTHER PRACTICES	As specified for devices	Contact the department for appropriate inspection and maintenance requirements for other drainage control and runoff treatment measures.

ATTACHMENT 11

SITE CONDITIONS REPORT

ATTACHMENT 11

SITE CONDITIONS REPORT

EXISTING CONDITIONS PLAN

See Project Plans for the existing site conditions which show resources boundaries and components of the proposed construction activities.

SITE CONDITIONS DESCRIPTION

The proposed pier will extend into the Penobscot River from the northern shore of Bowden Point. The pier will be located on what is currently a small peninsula composed of rocks and fill material. The feature is approximately 95 feet wide and extends approximately 300 feet into the river at low tide. There is a stream that drains into the Penobscot river approximately 130 to the southeast of the project area.

The inland area along the shoreline is heavily wooded, consisting mainly of pine trees. The shoreline is described as a boulder/cobble beach, being dominated by boulders of varying size and loose rounded rocks. The beach transitions into mudflats closer to the channel. The existing peninsula is covered in rockweed and marsh grasses. Patches of rockweed are also found throughout the mud flat areas attached to boulders.

Information and Planning Consultation through the US Fish and Wildlife Service identified two endangered species habitats in the project area: Northern Long-eared Bat and Atlantic Salmon.

Both upriver and downriver of the project area, the shoreline is considered moderately stable. The beach areas consists mainly of boulders and smaller rocks, and is exposed to tidal activity.

The proposed development is within a mapped flood Zone (Zone VE), as shown on the attached FEMA map. The pier will be installed with adequate supports to ensure that the structure will remain stable and undamaged in the event of flooding and storm surges.

The Penobscot River channel is approximately 5,150 feet wide at the location of the development. There will be no fill added to the navigable channel, and material removal will only include what is required to install the cofferdam supports.

National Flood Hazard Layer FIRMette

68°50'48"W 44°36'18"N

68°50'11"W 44°35'53"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 12/9/2020 at 2:00 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Maine Ecological Services Field Office
P. O. Box A
East Orland, ME 04431
Phone: (207) 469-7300 Fax: (207) 902-1588
http://www.fws.gov/mainefieldoffice/index.html

In Reply Refer To: November 04, 2020
Consultation Code: 05E1ME00-2021-SLI-0143
Event Code: 05E1ME00-2021-E-00393
Project Name: salmons Quarry

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies the threatened, endangered, candidate, and proposed species and designated or proposed critical habitat that may occur within the boundary of your proposed project or may be affected by your proposed project. This species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC Web site at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the Endangered Species Consultation Handbook at: http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

This species list also identifies candidate species under review for listing and those species that the Service considers species of concern. Candidate species have no protection under the Act but are included for consideration because they could be listed prior to completion of your project. Species of concern are those taxa whose conservation status is of concern to the Service (i.e., species previously known as Category 2 candidates), but for which further information is needed.

If a proposed project may affect only candidate species or species of concern, you are not required to prepare a Biological Assessment or biological evaluation or to consult with the Service. However, the Service recommends minimizing effects to these species to prevent future conflicts. Therefore, if early evaluation indicates that a project will affect a candidate species or species of concern, you may wish to request technical assistance from this office to identify appropriate minimization measures.

Please be aware that bald and golden eagles are not protected under the Endangered Species Act but are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.). Projects affecting these species may require development of an eagle conservation plan: http://www.fws.gov/windenergy/eagle_guidance.html Information on the location of bald eagle nests in Maine can be found on the Maine Field Office Web site: http://www.fws.gov/mainefieldoffice/Project%20review4.html

Additionally, wind energy projects should follow the wind energy guidelines: http://www.fws.gov/windenergy/ for minimizing impacts to migratory birds and bats. Projects may require development of an avian and bat protection plan.

Migratory birds are also a Service trust resource. Under the Migratory Bird Treaty Act, construction activities in grassland, wetland, stream, woodland, and other habitats that would result in the take of migratory birds, eggs, young, or active nests should be avoided. Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g.,

cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm and at: http://www.towerkill.com; and at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Maine Ecological Services Field Office
P. O. Box A
East Orland, ME 04431
(207) 469-7300

Project Summary

Consultation Code: 05E1ME00-2021-SLI-0143

Event Code: 05E1ME00-2021-E-00393

Project Name: salmons Quarry

Project Type: DEVELOPMENT

Project Description: Pier

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/44.60144167112942N68.84220440404027W

Counties: Waldo, ME

Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Fishes

NAME	STATUS
Atlantic Salmon *Salmo salar* Population: Gulf of Maine DPS There is **final** critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2097	Endangered

Critical habitats

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Atlantic Salmon *Salmo salar* https://ecos.fws.gov/ecp/species/2097#crithab	Final

ATTACHMENT 12

NOTICES
Notice of Intent
Abutters List
Certified Mail List and Receipts

FORM B

PUBLIC NOTICE:
NOTICE OF INTENT TO FILE AND
NOTICE OF PUBLIC INFORMATIONAL MEETING

Please take notice that Salmons Incorporated, P.O Box 57008, Virginia Beach, VA 23457, 757-409-0246 is intending to file a Permit Application with the Maine Department of Environmental Protection pursuant to the Site Location of Development Act permit application under the provisions of 38 M.R.S.A. §§ 481 thru 490, as well as a Natural Resources Protection Act permit application pursuant to provisions of 38 M.R.S.A §§ 480-A thru 480-BB on or about December 20, 2021. The application is for the permitting of an approximately 50-acre mineral processing facility and associated pier, located off the Bowden Point Road in Prospect, Maine.

A virtual Public Informational Meeting will be held at 11:00 AM on December 13, 2021. To obtain the necessary call information please contact Haley Ward at 207-989-4824 before 5:00 PM on December 12, 2021. The purpose of this meeting is to provide information about this project to any interested parties.

A request for a public hearing or a request that the Board of Environmental Protection assume jurisdiction over this application must be received by the Department in writing, no later than 20 days after the application is found by the Department to be complete and is accepted for processing. A public hearing may or may not be held at the discretion of the Commissioner or Board of Environmental Protection. Public comment on the application will be accepted throughout the processing of the application.

Applications will be filed for public inspection at the Department of Environmental Protection's office in Bangor during normal working hours. A copy of the application may also be seen at the municipal offices in Prospect, Maine.

Written public comments on the Applications may be sent to the Department's regional office in Augusta where the applications are filed for public inspection: MDEP, Eastern Maine Regional Office, 106 Hogan Road, Bangor, ME 04401.

BOWDEN POINT PROPERTIES, LLC
PROSPECT QUARRY PROCESSING FACILTIY, PROSPECT, MAINE
ABUTTER LIST as of NOVEMBER 30, 2021

MAP	LOT	NAME AND MAILING ADDRESS
11	4	BOWDEN POINT PROPERTIES PO BOX 54008, VIRGINIA BEACH, VA 23457
11	22	HANSON, TODD H. 44 MIDDLE ST. UNIT 412 BUCKSPORT ME 04416
11	25-1	PERRY, MIRIAM & PERRY, EDWARD F. & REGINA 144 FORT KNOX ROAD PROSPECT ME 04981
11	27	PERRY, MIRIAM & PERRY, EDWARD F. & REGINA 144 FORT KNOX ROAD PROSPECT ME 04981
11	28	PERRY, MIRIAM & PERRY, EDWARD F. & REGINA 144 FORT KNOX ROAD PROSPECT ME 04981
11	29	BOWDEN POINT PROPERTIES PO BOX 54008, VIRGINIA BEACH, VA 23457
11	30	PERRY, MIRIAM & PERRY, EDWARD F. & REGINA 144 FORT KNOX ROAD PROSPECT ME 04981
11	31	BOWDEN POINT PROPERTIES PO BOX 54008, VIRGINIA BEACH, VA 23457

BOWDEN POINT PROPERTIES
PROSPECT, MAINE

CERTIFIED MAIL LIST & RECEIPTS
Mailed: Tuesday, November 30, 2021

Town of Prospect
958 Bangor Road
Prospect, Maine 04981

Bowden Point Properties
PO Box 54008
Virginia Beach, VA 23457

Todd H. Hanson
44 Middle Street, Unit 412
Bucksport, Maine 04416

Edward & Reginia & Miriam Perry
144 Fort Knox Road
Prospect, Maine 04981

JN: 12617.001

SLODA

ATTACHMENT 13

MHPC CONSULATATION
Tribal Letters

JANET T. MILLS
GOVERNOR

STATE OF MAINE
DEPARTMENT OF
INLAND FISHERIES & WILDLIFE
284 STATE STREET
41 STATE HOUSE STATION
AUGUSTA ME 04333-0041

JUDITH CAMUSO
COMMISSIONER

February 18, 2021

Alfred Haskell
Haley Ward
One Merchants Plaza, Suite 701
Bangor, ME 04401

RE: Information Request – Salmons Quarry Project, Prospect

Dear Alfred:

Per your request received on January 08, 2021, we have reviewed current Maine Department of Inland Fisheries and Wildlife (MDIFW) information for known locations of Endangered, Threatened, and Special Concern species; designated Essential and Significant Wildlife Habitats; and inland fisheries habitat concerns within the vicinity of the *Salmons Quarry* project in Prospect.

Our Department has not mapped any Essential Habitats that would be directly affected by your project.

Endangered, Threatened, and Special Concern Species

Bat Species – Of the eight species of bats that occur in Maine, the three *Myotis* species are protected under Maine's Endangered Species Act (MESA) and are afforded special protection under 12 M.R.S §12801 - §12810. The three *Myotis* species include little brown bat (State Endangered), northern long-eared bat (State Endangered), and eastern small-footed bat (State Threatened). The five remaining bat species are listed as Special Concern: big brown bat, red bat, hoary bat, silver-haired bat, and tri-colored bat. While a comprehensive statewide inventory for bats has not been completed, based on historical evidence it is likely that several of these species occur within the project area during migration and/or the breeding season. However, our Agency does not anticipate significant impacts to any of the bat species as a result of this project.

Significant Wildlife Habitat

Significant Vernal Pools - At this time, MDIFW Significant Wildlife Habitat maps indicate no known presence of Significant Vernal Pools in the project search area; however, a comprehensive statewide inventory for Significant Vernal Pools has not been completed. Therefore, we recommend that surveys for vernal pools be conducted within the project boundary by qualified wetland scientists prior to final project design to determine whether there are Significant Vernal Pools present in the area. These surveys should extend up to 250 feet beyond the anticipated project footprint because of potential performance standard requirements for off-site Significant Vernal Pools, assuming such pools are located on land owned or controlled by the applicant. Once surveys are completed, survey forms should be submitted to our Agency for review well before to the submission of any necessary permits. Our Department will need to review and verify any vernal pool data prior to final determination of significance.

Tidal Waterfowl Wading Bird Habitat (TWWH) – This search area includes TWWH, a Significant Wildlife Habitat under Maine's Natural Resources Protection Act. TWWHs provide important feeding

and/or breeding habitat for diverse waterfowl and wading bird species. Birds utilize intertidal mudflats, eelgrass, and mussel beds to forage for aquatic invertebrates, a primary food source, and maintaining natural tidal flow is essential to maintaining healthy intertidal areas and food sources to support waterfowl and wading bird species. Based on the location of the search area in relation to this habitat, we recommend that you design your project to provide as much undisturbed buffer as possible to protect this habitat.

Fisheries Habitat

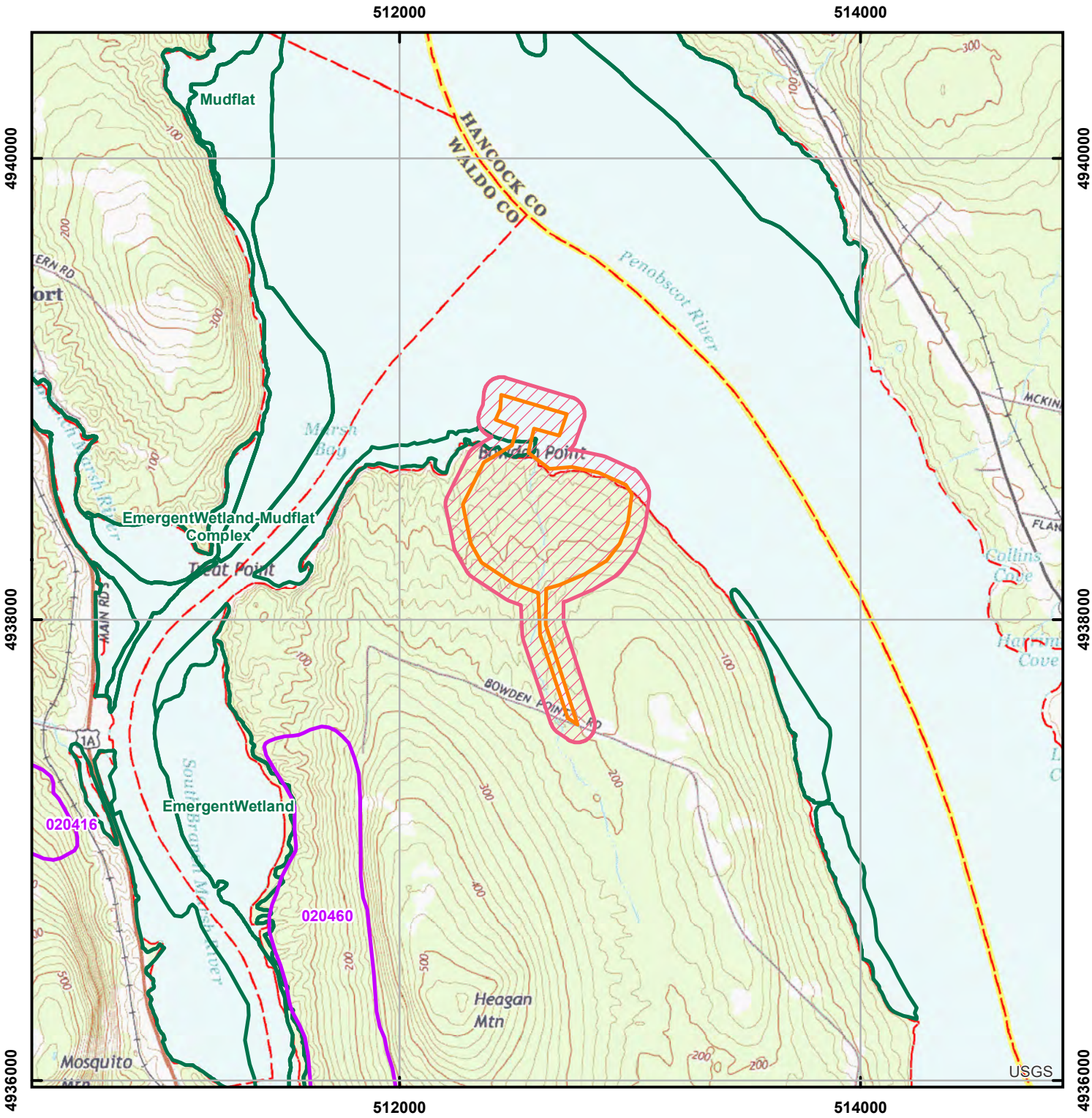
We recommend that 100-foot undisturbed vegetated buffers be maintained along streams. Buffers should be measured from the edge of stream or associated fringe and floodplain wetlands. Maintaining and enhancing buffers along streams that support coldwater fisheries is critical to the protection of water temperatures, water quality, natural inputs of coarse woody debris, and various forms of aquatic life necessary to support conditions required by many fish species. Stream crossings should be avoided, but if a stream crossing is necessary, or an existing crossing needs to be modified, it should be designed to provide full fish passage. Small streams, including intermittent streams, can provide crucial rearing habitat, cold water for thermal refugia, and abundant food for juvenile salmonids on a seasonal basis and undersized crossings may inhibit these functions. Generally, MDIFW recommends that all new, modified, and replacement stream crossings be sized to span at least 1.2 times the bankfull width of the stream. In addition, we generally recommend that stream crossings be open bottomed (i.e. natural bottom), although embedded structures which are backfilled with representative streambed material have been shown to be effective in not only providing habitat connectivity for fish but also for other aquatic organisms. Construction Best Management Practices should be closely followed to avoid erosion, sedimentation, alteration of stream flow, and other impacts as eroding soils from construction activities can travel significant distances as well as transport other pollutants resulting in direct impacts to fish and fisheries habitat. In addition, we recommend that any necessary instream work occur between July 15 and October 1.

This consultation review has been conducted specifically for known MDIFW jurisdictional features and should not be interpreted as a comprehensive review for the presence of other regulated features that may occur in this area. Prior to the start of any future site disturbance we recommend additional consultation with the municipality, and other state resource agencies including the Maine Natural Areas Program, Maine Department of Marine Resources, and Maine Department of Environmental Protection in order to avoid unintended protected resource disturbance.

Please feel free to contact my office if you have any questions regarding this information, or if I can be of any further assistance.

Best regards,

Becca Settele
Wildlife Biologist



Environmental Review of Fish and Wildlife Observations and Priority Habitats

Project Name: Salmons Quarry, Prospect (Version 2)

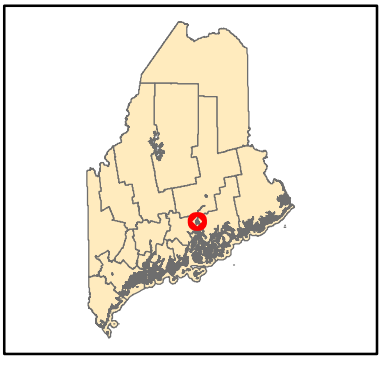
Maine Department of Inland Fisheries and Wildlife

0 0.125 0.25 0.5 0.75 1 Miles

Projection: UTM, NAD83, Zone 19N

Date: 1/12/2021

- ProjectPoints
- ProjectLines
- ProjectPolys
- ProjectSearchAreas
- Maine Cliff and Talus Areas
- Deer Winter Area
- LUPC p-fw
- Cooperative DWAs
- Seabird Nesting Islands
- Shorebird Areas
- Inland Waterfowl and Wading Bird
- 2008 Iwwh - Shoreland Zoning
- Tidal Waterfowl and Wading Bird
- Significant Vernal Pools
- Environmental Review Polygons
- Roseate Tern
- Piping Plover and Least Tern
- Aquatic ETSc - 2.5 mi review
- Rare Mussels - 5 mi review
- Maine Heritage Fish Waters
- Arctic Charr Habitat
- Redfin Pickerel and Swamp Darter Habitats - buffer100ft
- Special Concern occupied habitats - 100ft buffer
- Wild Lake Trout Habitats



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Maine Ecological Services Field Office
P. O. Box A
East Orland, ME 04431
Phone: (207) 469-7300 Fax: (207) 902-1588
http://www.fws.gov/mainefieldoffice/index.html

In Reply Refer To: September 21, 2021
Consultation Code: 05E1ME00-2021-SLI-1777
Event Code: 05E1ME00-2021-E-05540
Project Name: Salmons Quarry

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies the threatened, endangered, candidate, and proposed species and designated or proposed critical habitat that may occur within the boundary of your proposed project or may be affected by your proposed project. This species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC Web site at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the Endangered Species Consultation Handbook at: http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

This species list also identifies candidate species under review for listing and those species that the Service considers species of concern. Candidate species have no protection under the Act but are included for consideration because they could be listed prior to completion of your project. Species of concern are those taxa whose conservation status is of concern to the Service (i.e., species previously known as Category 2 candidates), but for which further information is needed.

If a proposed project may affect only candidate species or species of concern, you are not required to prepare a Biological Assessment or biological evaluation or to consult with the Service. However, the Service recommends minimizing effects to these species to prevent future conflicts. Therefore, if early evaluation indicates that a project will affect a candidate species or species of concern, you may wish to request technical assistance from this office to identify appropriate minimization measures.

Please be aware that bald and golden eagles are not protected under the Endangered Species Act but are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.). Projects affecting these species may require development of an eagle conservation plan: http://www.fws.gov/windenergy/eagle_guidance.html Information on the location of bald eagle nests in Maine can be found on the Maine Field Office Web site: http://www.fws.gov/mainefieldoffice/Project%20review4.html

Additionally, wind energy projects should follow the wind energy guidelines: http://www.fws.gov/windenergy/ for minimizing impacts to migratory birds and bats. Projects may require development of an avian and bat protection plan.

Migratory birds are also a Service trust resource. Under the Migratory Bird Treaty Act, construction activities in grassland, wetland, stream, woodland, and other habitats that would result in the take of migratory birds, eggs, young, or active nests should be avoided. Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm and at:

http://www.towerkill.com; and at:
http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Maine Ecological Services Field Office
P. O. Box A
East Orland, ME 04431
(207) 469-7300

Project Summary

Consultation Code: 05E1ME00-2021-SLI-1777
Event Code: Some(05E1ME00-2021-E-05540)
Project Name: Salmons Quarry
Project Type: MINING
Project Description: Quarry and Processing Facility
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@44.59874875,-68.83792091288339,14z

Counties: Waldo County, Maine

Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Fishes

NAME	STATUS
Atlantic Salmon *Salmo salar* Population: Gulf of Maine DPS There is **final** critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2097	Endangered

Critical habitats

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Atlantic Salmon *Salmo salar* https://ecos.fws.gov/ecp/species/2097#crithab	Final

STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
177 STATE HOUSE STATION
AUGUSTA, MAINE 04333

JANET T. MILLS
GOVERNOR

AMANDA E. BEAL
COMMISSIONER

January 21, 2021

Alfred Haskell
Haley Ward
One Merchants Plaza, Suite 701
Bangor, ME 04401

Via email: chaskell@haleywoard.com

Re: Rare and exemplary botanical features in proximity to: #12617.001, Salmons Quarry, Prospect, Maine

Dear Mr. Haskell:

I have searched the Maine Natural Areas Program's Biological and Conservation Data System files in response to your request received January 8, 2021 for information on the presence of rare or unique botanical features documented from the vicinity of the project in Prospect, Maine. Rare and unique botanical features include the habitat of rare, threatened, or endangered plant species and unique or exemplary natural communities. Our review involves examining maps, manual and computerized records, other sources of information such as scientific articles or published references, and the personal knowledge of staff or cooperating experts.

Our official response covers only botanical features. For authoritative information and official response for zoological features you must make a similar request to the Maine Department of Inland Fisheries and Wildlife, 284 State Street, Augusta, Maine 04333.

According to the information currently in our Biological and Conservation Data System files, there are no rare botanical features documented specifically within the project area. This lack of data may indicate minimal survey efforts rather than confirm the absence of rare botanical features. You may want to have the site inventoried by a qualified field biologist to ensure that no undocumented rare features are inadvertently harmed.

If a field survey of the project area is conducted, please refer to the enclosed supplemental information regarding rare and exemplary botanical features documented to occur in the vicinity of the project site. The list may include information on features that have been known to occur historically in the area as well as recently field-verified information. While historic records have not been documented in several years, they may persist in the area if suitable habitat exists. The enclosed list identifies features with potential to occur in the area, and it should be considered if you choose to conduct field surveys.

This finding is available and appropriate for preparation and review of environmental assessments, but it is not a substitute for on-site surveys. Comprehensive field surveys do not exist for all natural areas in Maine, and in the absence of a specific field investigation, the Maine Natural Areas Program cannot provide a definitive statement on the presence or absence of unusual natural features at this site.

MOLLY DOCHERTY, DIRECTOR
MAINE NATURAL AREAS PROGRAM
BLOSSOM LANE, DEERING BUILDING

DEPARTMENT OF Agriculture Conservation & Forestry

PHONE: (207) 287-804490
WWW.MAINE.GOV/DACF/MNAP

The Maine Natural Areas Program (MNAP) is continuously working to achieve a more comprehensive database of exemplary natural features in Maine. We would appreciate the contribution of any information obtained should you decide to do field work. MNAP welcomes coordination with individuals or organizations proposing environmental alteration or conducting environmental assessments. If, however, data provided by MNAP are to be published in any form, the Program should be informed at the outset and credited as the source.

The Maine Natural Areas Program has instituted a fee structure of $75.00 an hour to recover the actual cost of processing your request for information. You will receive an invoice for $150.00 for two hours of our services.

Thank you for using MNAP in the environmental review process. Please do not hesitate to contact me if you have further questions about the Natural Areas Program or about rare or unique botanical features on this site.

Sincerely,

Lisa St. Hilaire

Lisa St. Hilaire | Information Manager | Maine Natural Areas Program
207-287-8044 | lisa.st.hilaire@maine.gov

Rare and Exemplary Botanical Features within 4 miles of
Project: #12617.001, Salmons Quarry, Prospect, Maine

Common Name	State Status	State Rank	Global Rank	Date Last Observed	Occurrence Number	Habitat
Brackish Tidal Marsh						
	<null>	S3	GNR	2009	10	Tidal wetland (non-forested, wetland)
Estuary Bur-marigold						
	SC	S3	G4	2005-08-19	31	Tidal wetland (non-forested, wetland)
Marsh Bulrush						
	E	S1	G5	1973-08-31	5	Tidal wetland (non-forested, wetland)
Orono Sedge						
	T	S3	G3	1916-07-21	7	Old field/roadside (non-forested, wetland or upland)
Pale Green Orchis						
	SC	S2	G4?T4Q	1916-07-21	16	Non-tidal rivershore (non-forested, seasonally wet),Open wetland, not coastal nor rivershore (non-forested, wetland)
Spongy-leaved Arrowhead						
	SC	S3	G5T4	2008-07-23	43	Tidal wetland (non-forested, wetland)

STATE RARITY RANKS

S1 Critically imperiled in Maine because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extirpation from the State of Maine.
S2 Imperiled in Maine because of rarity (6-20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.
S3 Rare in Maine (20-100 occurrences).
S4 Apparently secure in Maine.
S5 Demonstrably secure in Maine.
SU Under consideration for assigning rarity status; more information needed on threats or distribution.
SNR Not yet ranked.
SNA Rank not applicable.
S#? Current occurrence data suggests assigned rank, but lack of survey effort along with amount of potential habitat create uncertainty (e.g. S3?).

Note: **State Rarity Ranks** are determined by the Maine Natural Areas Program for rare plants and rare and exemplary natural communities and ecosystems. The Maine Department of Inland Fisheries and Wildlife determines State Rarity Ranks for animals.

GLOBAL RARITY RANKS

G1 Critically imperiled globally because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extinction.
G2 Globally imperiled because of rarity (6-20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.
G3 Globally rare (20-100 occurrences).
G4 Apparently secure globally.
G5 Demonstrably secure globally.
GNR Not yet ranked.

Note: **Global Ranks** are determined by NatureServe.

STATE LEGAL STATUS

Note: State legal status is according to 5 M.R.S.A. § 13076-13079, which mandates the Department of Conservation to produce and biennially update the official list of Maine's **Endangered** and **Threatened** plants. The list is derived by a technical advisory committee of botanists who use data in the Natural Areas Program's database to recommend status changes to the Department of Conservation.

E ENDANGERED; Rare and in danger of being lost from the state in the foreseeable future; or federally listed as Endangered.
T THREATENED; Rare and, with further decline, could become endangered; or federally listed as Threatened.

NON-LEGAL STATUS

SC SPECIAL CONCERN; Rare in Maine, based on available information, but not sufficiently rare to be considered Threatened or Endangered.
PE Potentially Extirpated; Species has not been documented in Maine in past 20 years or loss of last known occurrence has been documented.

ELEMENT OCCURRENCE RANKS - EO RANKS

Element Occurrence ranks are used to describe the quality of a rare plant population or natural community based on three factors:

- **Size**: Size of community or population relative to other known examples in Maine. Community or population's viability, capability to maintain itself.
- **Condition**: For communities, condition includes presence of representative species, maturity of species, and evidence of human-caused disturbance. For plants, factors include species vigor and evidence of human-caused disturbance.
- **Landscape context**: Land uses and/or condition of natural communities surrounding the observed area. Ability of the observed community or population to be protected from effects of adjacent land uses.

These three factors are combined into an overall ranking of the feature of **A**, **B**, **C**, or **D**, where **A** indicates an **excellent** example of the community or population and **D** indicates a **poor** example of the community or population. A rank of **E** indicates that the community or population is **extant** but there is not enough data to assign a quality rank. The Maine Natural Areas Program tracks all occurrences of rare (S1-S3) plants and natural communities as well as A and B ranked common (S4-S5) natural communities.

Note: **Element Occurrence Ranks** are determined by the Maine Natural Areas Program for rare plants and rare and exemplary natural communities and ecosystems. The Maine Department of Inland Fisheries and Wildlife determines Element Occurrence ranks for animals.

Visit our website for more information on rare, threatened, and endangered species!
http://www.maine.gov/dacf/mnap

MAINE HISTORIC PRESERVATION COMMISSION
55 CAPITOL STREET
65 STATE HOUSE STATION
AUGUSTA, MAINE
04333

JANET T. MILLS
GOVERNOR

KIRK F. MOHNEY
DIRECTOR

February 10, 2021

Mr. Alfred C. Haskell
Haley Ward
One Merchants Plaza
Suite 701
Bangor, ME 04401

Project: MHPC #0177-21 Salmons Inc; Off Bowdoin Point Road
Salmons Quarry Operations

Town: Prospect, ME

Dear Mr. Haskell:

In response to your recent request, I have reviewed the information received January 28, 2021 to initiate consultation on the above referenced project in accordance with the requirements of the Maine Department of Environmental Protection.

This a portion of this quarry processing plant and pier project is located on landscape that meets our predictive model for likely presence of prehistoric archaeological sites because of, nearness to water (Penobscot River) AND/OR other archaeological sites in the vicinity but not on this project. (The project land has not previously been surveyed for archaeological sites.) A Phase I prehistoric archaeological survey is necessary for all areas of the property/project less than 60 foot elevation above the high tide line. This equates to approximately 200 m from the shore, but the distance is variable depending on slope.

A historic archaeological survey is recommended for the parcel due to the potential presence of three historic properties in 1859 consisting of T. Stinson, J. Crockett and R. Bowden for whom the point is named. Please see enclosed map.

A list of qualified prehistoric archaeologists has been enclosed and can be found on our website: https://www.maine.gov/mhpc/programs/survey/approved-consultants/prehistoric

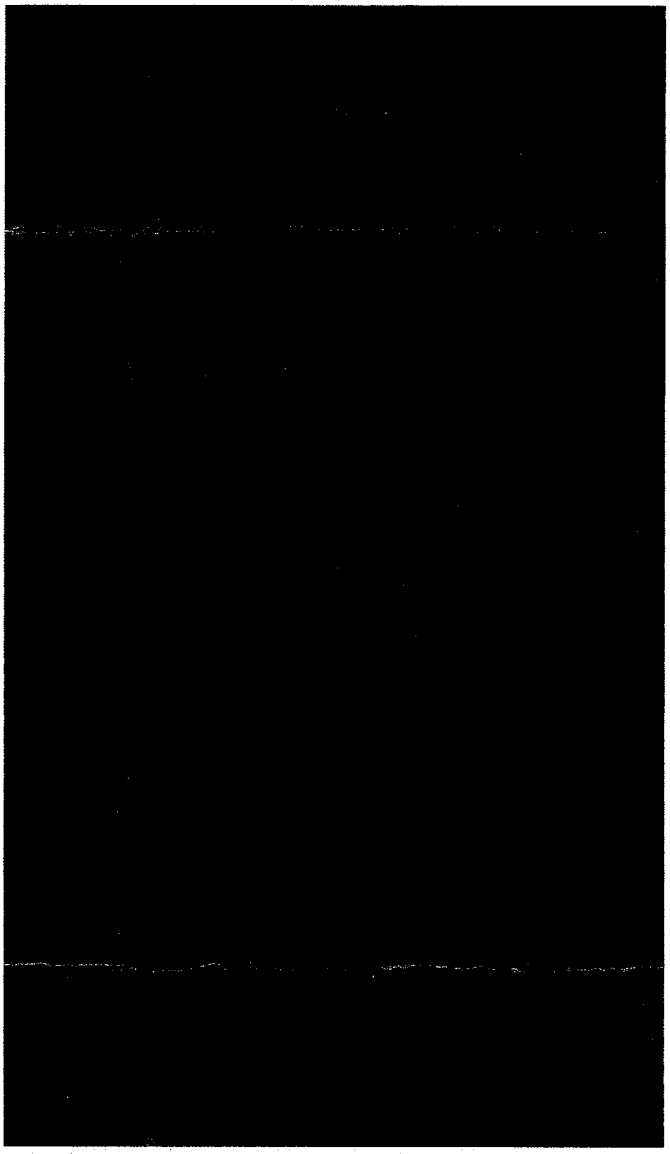
No architectural resources will be affected by this undertaking.

If you have any questions regarding archaeology, please contact Dr. Arthur Spiess of this office at Arthur.Spiess@maine.gov

If you have any questions regarding above ground properties, please contact Megan Rideout of this office at megan.m.rideout@maine.gov.

Sincerely,

Kirk F. Mohney
State Historic Preservation Officer



MAINE HISTORIC PRESERVATION COMMISSION
55 CAPITOL STREET
65 STATE HOUSE STATION
AUGUSTA, MAINE
04333

JANET T. MILLS
GOVERNOR

KIRK F. MOHNEY
DIRECTOR

Prehistoric Archaeologists Approved List: Review and Compliance Consulting/Contracting (Active) LEVEL 2 (Phase I, II, III, date recovery, all phases of survey) LEVEL 2

Stefan Claesson, Ph.D.*
Nearview, LLC
36 Maplewood Ave
Portsmouth, NH 03801
207-200-7879
stefan@nearview.net

Mr. Jacob A. Freedman
SEARCH, INC.
P.O. Box 1080
Portsmouth, NH 03802
P-603-319-6939
Jacob@searchinc.com

Dr. Nathan Hamilton
Dept. of Geography & Anthropology
University of Southern Maine
Gorham, ME 04038
P-207-780-5324
casco@usm.maine.edu

Dr. Dianna Doucette
Public Archaeology Laboratory
26 Main Street
Pawtucket, RI 02860
ddoucette@palinc.com

Dr. Gemma-Jayne Hudgell
Northeast Archaeology Research Center
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hudgell@nearchaeology.com

Mr. Jacob Tumelaire
Independent Archaeological Consulting
34 Dover Point Road, Suite 300
Dover, NH 03820
jtumelair@iac-llc.net

Dr. Christopher Donta
SWCA Environmental Consultants
15 Research Drive
Amherst, MA 01002
P-413-256-0202
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May 28, 2021

RE: Archaeological Phase I Survey of the Proposed Salmons Quarry Operations Project, Bowden Point Road, Prospect, Waldo County, Maine (MHPC # 0177-24)

Dear Chip:

We write to inform you of the completion of the archaeological phase I survey of the proposed Salmons Quarry Operations Project, Bowden Point Road, Prospect, Waldo County, Maine (MHPC # 0177-24). The work was conducted by the Northeast Archaeology Research Center, Inc. (NEARC) on behalf of Haley Ward and their client Salmons Inc. The project area is located off Bowden Point Road on Bowden Point, which is formed by the confluence of the Marsh River and Penobscot River (Figures 1 and 2). The project includes an approximately 50-acre parcel of land proposed for the development of a quarry processing plant, pier and other related infrastructure (Figure 3). The actual quarrying activity will occur on a separate parcel.

The project area has never received archaeological survey but was determined to be archaeologically sensitive by the Maine Historic Preservation Commission (MHPC) during their initial project review (see MHPC review letter dated 2/10/2021). The MHPC indicated that the Salmons Quarry Operations Project parcel has a high probability for containing a Native American archaeological site(s) given the location near the confluence of the Marsh River and the Penobscot River as well as the presence of other known previously recorded sites in the vicinity, but not within the Project. Specifically, the MHPC requested survey of all areas of the property/project less than 60 ft in elevation above the high tide line, which equates to approximately 200 m from the shore depending on slope (Figure 4). Additionally, the MHPC requested that a post-contact archaeological survey be conducted as well due to the potential presence of three historic structures/dwellings that are mapped near the project vicinity in 1859, including the T. Stinson, J. Crockett and R. Bowden households, for whom the point is named.

The goal of the archaeological phase I survey was to determine if archaeological sites of potential significance are present within the proposed project area or to establish that it is unlikely that sites of potential significance are present. Significant sites are those that meet eligibility criteria for the National Register of Historic Places. The archaeological work adhered to standards and guidelines as determined by the Maine Historic Preservation Commission (MHPC) for archaeological studies in Maine.

As detailed below three newly recorded post-contact archaeological sites likely representing nineteenth and twentieth century residential households/farmsteads were identified during the phase I survey (MHPC site numbers pending). The sites are all located along the western boundary line of the project and the majority of the site components extend outside the project area. Given the location of the sites along the project edge, it is recommended that 25-ft construction free buffer zones be established around the historic resources (see Figure 2). If buffer zones are not feasible, then phase II testing is recommended to determine NRHP eligibility at any site(s) where construction impacts cannot be avoided. In addition to the three post-contact sites, a single pre-contact Native American site (MHPC site number pending) was newly identified on the basis of six weathered rhyolite flakes eroding from the shoreline of the Penobscot River. The Native American site falls approximately 40 m (130 ft) outside the project boundary and will not be impacted by project construction, therefore no further work is recommended for this site. Aside from the three post-contact sites, no additional buffer zones or archaeological work is recommended prior to project construction.

Project Description

The Project is situated on a point of land in Prospect known as Bowden Point that is formed by the confluence of the Marsh River on the west and the Penobscot River on the east. Heagan Mountain is the most dominate feature of the overall landscape and rises 166 m (545 ft) above sea level approximately 1.7 km (1.1 mi) to the southwest of the project. In general Bowden Point is characterized by rock and slope with a few scattered residential homes along Bowden Point Road, which travels along the top of the landform and offers views of the Penobscot River. The project area is on the northern tip of the point on the downslope side of Bowden Point Road where the land begins to descend steeply towards the Penobscot River.

The overall project area is wooded with signs of previous logging, but no other major prior disturbances are readily visible. Vegetation is mixed woodland and includes mature softwoods with an underbrush of both coniferous and deciduous growth. Tree species include birch, pine, aspen, spruce, fir, maple, and beech. Several logging roads and old farm roads crisscross the project, particularly on the north end. One of these established roads will be utilized as southern access for the project as it heads north from its intersection with Bowden Point Road.

No named streams are mapped within the project area, but several small seasonal drainages are present within the landscape and a flowing unnamed stream runs generally north-south just outside the northwest corner of the project, emptying into the Penobscot River near the proposed pier location. While there are no named drainages, much of the project area is dominated by rocky wetlands and bog. This is particularly true closer to the Penobscot River where the land is excessively rocky and dissected with little soil development.

As previously described, the project area is generally sloped to the north and east and elevations range from 203 ft at the southern point of access to 29 ft where the proposed pier is to be constructed. The slope is most severe on the southern end of the project and while still steep in some areas on the northern end, there are a few more level landforms in this portion of the project, which is the area where the phase I testing was primarily focused.

Archaeological Phase I Survey

Archaeological phase I survey was performed over four days from May 10 through May 13, 2021 and included the excavation of a total of 47 0.5 m x 0.5 m test pits situated at 5.0 and 10.0 m intervals along testing transects positioned to best sample archaeologically sensitive landforms (see Figure 4). As previously mentioned, in regard to pre-contact Native American sensitivity, the MHPC requested survey of all areas of the property/project less than 60 ft in elevation above the high tide line, which equates to approximately 200 m from the shore depending on slope (as indicated in Figures 2 and 4). The survey for post-contact archeology encompassed a broader area and included a walkover survey to determine the presence or absence of cellar holes or other evidence of historic residential or industrial occupations.

Results Pre-contact Native American Archaeological Testing

A total of 42 test pits were excavated along landforms sensitive for Native American archaeology. As depicted in Figures 5 and 6, the test pits were concentrated in two areas in the northern half of the project; one area is located where the pier/access road is proposed, and one area is to the east of the pier along the northern side of the proposed processing area.

The test pits (n= 18) at the proposed pier/access road were placed along eight sampling transects positioned to best test the landform and excavated to depths of 26 to 61 cm below ground surface (cmbs) with an average depth of 53 cmbs (Figure 7; Appendix I). Stratigraphy was generally consistent and included an uppermost 'Ao' organic horizon of black silty loam measuring 6 to 26 cm in thickness, overlying a developed 'B' soil horizon of yellow brown silty loam measuring 7 to 16 cm in thickness. Occasionally, the 'B' horizon was absent. All excavations were terminated within sterile, basal 'C' horizon soils characterized by 9 to 22 cm of light olive brown silty clay on top of a pale olive clay. These soils corroborate the NRCS soil classification for the area as Boothbay silt loam, which form from glaciolacustrine deposits and/or fine-silty marine deposits (USDA 2021).

The test pits (n=24) excavated along the north side of the proposed processing station to the east of the pier were placed along 10 sampling transects. The transects were positioned along the most level areas of the landscape, including a small, forested knoll that rises above the Penobscot as well as along a few smaller surrounding knolls separated by wetlands and rocky bog (Figure 8; Appendix 1). As previously mentioned, much of the area is sloped, but a few testable landforms are present. Stratigraphy was variable depending on the landform. Shallow, wet soils were encountered in some locations, primarily consisting of a black or dark grey brown silty loam 'Ao' or 'Ap' plow zone horizon overlying a light brownish grey silty loam 'C' horizon with occasional pebbles and cobbles and frequently saturated. In other areas, in particular transects 11, 14 and 15, more developed 'A', 'B', 'C' soil horizons were encountered and included an uppermost 'Ao' organic horizon of black silty loam measuring 12 to 28 cm in thickness, overlying a developed 'B' soil horizon of yellow brown silty loam measuring 7 to 15 cm in thickness, on top of a 'C' soil horizon characterized as a light brownish grey silty loam or clay with pebble and cobble inclusions and wet. All excavations were terminated within sterile, basal 'C' horizon soils or upon encountering water. These soils corroborate the NRCS soil classification for the area as Eldridge fine sandy loam, which form on outwash plains from a parent material of loamy lacustrine, marine, or sandy outwash deposits (USDA 2021).

No pre-contact Native American artifacts or features were identified within either of the tested areas during the phase I survey. As previously stated, one pre-contact Native American site was recorded along the shore of the Penobscot River represented by six pieces of weathered Rhyolite debitage that were found on the surface at low tide. The site is approximately 40 m (130 ft) outside the project boundary and will not be impacted by project construction.

Results of the Walkover Survey and Testing for Post-contact Archaeology

The walkover portion of the phase I survey for post-contact archaeology was performed by NEARC archaeologist Sarah Loftus on May 12th and 13th, 2021. During the survey historic maps were utilized in the field to try to identify any cellar holes or remnant features or artifacts associated with three 19th century households that appear near or within the project area in 1858 (Figure 9) (Chase 1858). Given the sloped and rocky nature of the landscape any long-term settlement/occupation would likely have been limited to the northern half of the project, which is where the historic structures are mapped. Two cellar holes (Historic Sites 1 and 3) were identified in this area as well as one site that includes a series of rock walls and a rock cluster (Historic Site 2). The three sites are briefly detailed individually below and will be further defined in the final report.

Historic Site 1

Historic Site 1 is located along the western project boundary on the west side of a cleared two-track road. The site consists of a stoned lined cellar hole and a dug, stone lined well (Figures 10 - 12). A surface survey of scattered artifacts and architectural materials at the site revealed late-nineteenth and early twentieth century artifacts, however it is possible an earlier mid-nineteenth century element is present. Two shovel tests were excavated and included 6 wire nails and 9 small fragments of redware.

Based on georeferencing, it appears likely that Historic Site 1 is in the location of the former residence of J. Crockett in 1858 (see Figure 9) (Chase 1858). A structure also appears in this general location on USGS topographic maps from the 1940s and the dwelling may have been occupied through that time period (Figure 13).

Historic Site 2

Based on the 1858 map, Historic Site 2 may represent remnant elements of the former household of D. Glidden (see Figure 9). No structures appear in this area on the 1940s USGS topographic maps and no definitive cellar hole was identified during the survey, but rock walls, a rock cluster and several old roadbeds fork in this location (Figures 14 and 15). As with Historic Site 1, the site is along the edge of the western project boundary. There is a level, grassy knoll to the southwest of the rock walls outside the project area that looks like the best place to build a structure if one was historically located in this area. Given the location of the knoll outside the project, this area was not tested, but two test pits were excavated near the stone wall alignments (see Figure 14). Both test pits were negative for cultural materials, but it is possible the stone walls are part of a larger farmstead that is mostly outside the project area to the west.

Historic Site 3

Historic Site 3 is on the very northern tip of the project on a gently sloped terrace above the Penobscot River at the end of the same dirt road that passes by Historic Site 1 (Figure 16). The site includes a cellar hole and a collapsed wooden outbuilding (Figure 17). The structure does not appear on the 1858 historic map but is present on 1940s USGS topographic maps (see Figures 9 and 13). Based on the construction materials, which include a poured concrete foundation walls on top of stone and a collapsed roof built with wire nails and asphalt shingles, it appears likely the dwelling was built or significantly modified during the early to mid- twentieth century. It is possible that earlier material underlies these later elements at the site, but this seems unlikely. The area surrounding the cellar hole is characterized by extremely thick bamboo and disturbed soils. A single shovel test excavated near the southeastern corner of the cellar hole within the project area was negative for cultural material, but further testing could reveal intact deposits.

Conclusions and Recommendations

Archaeological phase I survey has been completed for the proposed Salmons Quarry Operations Project, Bowden Point Road, Prospect, Waldo County, Maine (MHPC # 0177-24) as part of the Section 106 review process for the project. Three newly recorded post-contact archaeological sites representing nineteenth and twentieth century residential households/farmsteads were identified during the phase I survey (MHPC site numbers pending).

The sites are all located along the western boundary of the project and the majority of the site components extend outside the project area (see Figure 2). Given the location of the sites along the project edge, it is recommended that 25-ft construction free buffer zones be established around the historic resources (see Figure 2). If buffer zones are not feasible, then phase II testing is recommended to determine NRHP eligibility at any site(s) where construction impacts cannot be avoided. In addition to the three post-contact sites, a single pre-contact Native American site (MHPC site number pending) was newly identified on the basis of six weathered Rhyolite flakes eroding from the shoreline of the Penobscot River. The Native American site falls approximately 40 m (130 ft) outside the project boundary and will not be impacted by project construction, therefore no further work is recommended for this site. Aside from the three post-contact sites, no additional buffer zones or archaeological work is recommended prior to project construction.

The full technical report detailing the results of the study will be submitted in the upcoming months. Please let us know if you have any questions and thank you for the opportunity to conduct this study.

Sincerely,

Sarah Loftus, PhD
Project Director, NE ARC, Inc.

Robert N. Bartone, M.A., RPA
Director, NE ARC, Inc.

References

Chase, W. H
1858 *A Topographical Map of Waldo County, Maine*. J. Chace., Jr. Philadelphia.

APPENDIX I: SELECT TEST PIT SEDIMENT PROFILES

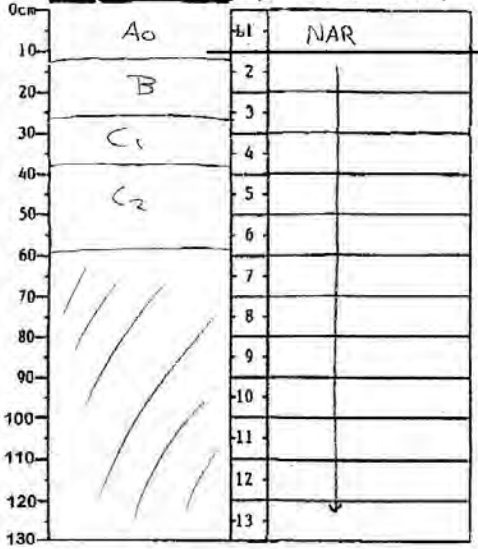
Northeast Archaeology Research Center - Test Pit Profile Form

Project Salmons Quarry I State Site # — Test Pit T1 P1

Area/Locus — PN Area 1-100 PROV# 1 Feature #(s) —

Supervisor SRW Exc. Team MFN, CLB Recorder MFN Date 5/10/21

PN's / Artifacts, by level (see reverse for codes)



Soil Descriptions

Ao 0 - 13 cm
2.5Y 2.5/1 Blk
SiLo

B 13 - 26 cm
10YR 5/4 YlBn
SiLo

C1 26 - 38 cm
2.5Y 5/4 Lt OlBn
SiClay

C2 38 - 59 cm
5Y 6/3 Pale Olive
Clay
Compact

Comments* NCM

Number of bags: 0

* Provide comments on Artifacts, Soils, Disturbances, Context, etc.

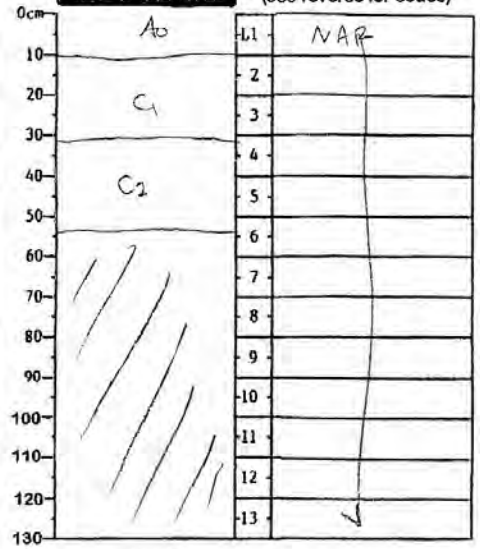
Northeast Archaeology Research Center - Test Pit Profile Form

Project Salmons Quarry I State Site # — Test Pit T2 P1

Area/Locus — PN Area 1-100 PROV# 2 Feature #(s) —

Supervisor SRW Exc. Team MFN CLB Recorder MFN Date 5/10/21

PN's / Artifacts, by level (see reverse for codes)



Soil Descriptions

Ao 0 - 10cm
2.5Y 2.5/1 Black
SiLo

C1 10 - 31 cm
2.5Y 5/4 Lt OlBn
Si Clay

C2 31 - 54cm
5Y 6/3 Pale Ol
Compact Clay

Comments* NCM

Number of bags: 0

* Provide comments on Artifacts, Soils, Disturbances, Context, etc.

Northeast Archaeology Research Center - Test Pit Profile Form

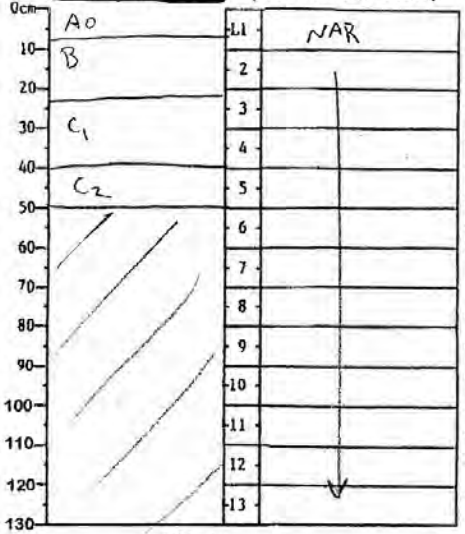
Project Salmons Quarry I State Site # — Test Pit T5 P1

Area/Locus — PN Area 1-100 PROV# 6 Feature #(s) —

Supervisor SRW Exc. Team CLB, MFN Recorder CLB Date 5/10/21

PN's / Artifacts, by level (see reverse for codes)

Soil Descriptions



A0 = 0 - 7 cm
2.5Y 2.5/1 Blk
SiLo

B = 7 - 23 cm
10YR 5/4 Y-Bn
SiLo

C1 = 23 - 40 cm
2.5Y 5/4 LtOlBn
SiClγ

C2 = 40 - 50 cm
5Y 6/3 PlOl
Clay
Compact

Comments* NCM

Number of bags: 0

* Provide comments on Artifacts, Soils, Disturbances, Context, etc.

Northeast Archaeology Research Center - Test Pit Profile Form

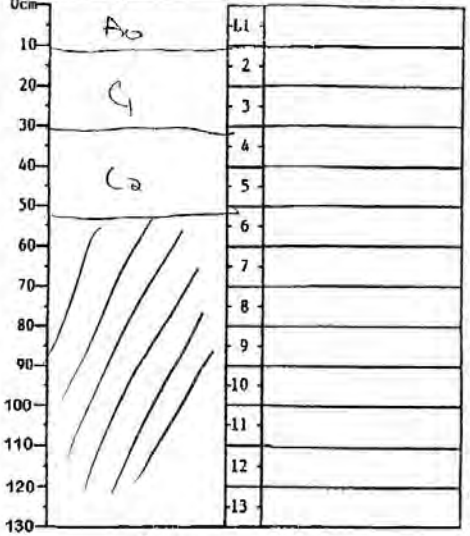
Project Salmons Quarry I State Site # — Test Pit T6 P3

Area/Locus — PN Area 101-200 PROV# 107 Feature #(s) —

Supervisor SRW Exc. Team NSG, JPA Recorder JPA Date 05/10/2021

PN's / Artifacts, by level (see reverse for codes)

Soil Descriptions



A0 0-11cm
2.5Y 2.5/1 blk
SiLo

C1 11-31cm
2.5Y 5/3 Yw br
SiLo

C2 31-53cm
5Y 5/3 Pale olv
Clay

Comments* None

Number of bags: 0

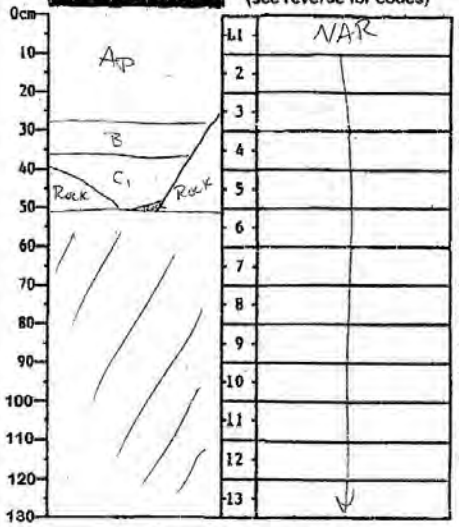
* Provide comments on Artifacts, Soils, Disturbances, Context, etc.

Northeast Archaeology Research Center - Test Pit Profile Form

Project Salmon's Quarry I State Site # — Test Pit T11 P2

Area/Locus — PN Area 1-100 PROV# 11 Feature #(s) —

Supervisor SRW Exc. Team MFN Recorder MFN Date 5/12/21



PN's / Artifacts, by level (see reverse for codes)

Soil Descriptions

Ap 0 - 28 cm
2.5Y 2.5/1 Black
Silo w/ P+K

B 28 - 36 cm
10YR 5/4 YwBn
Silo w/ P+K

C1 36 - 51 cm
2.5Y 5/4 Lt Olbn
Si Clay w/ P+K

Comments* NCM; terminated on rock impass

Number of bags: 0

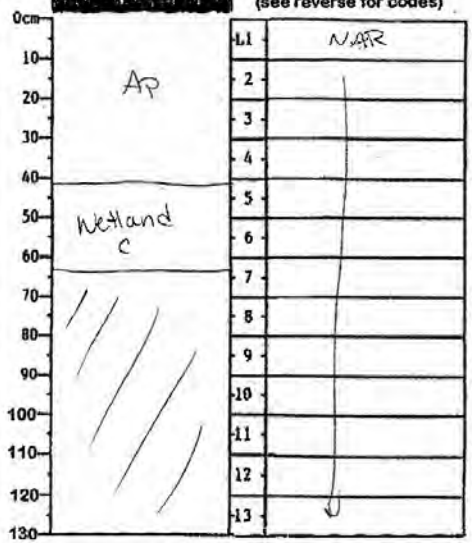
* Provide comments on Artifacts, Soils, Disturbances, Context, etc.

Northeast Archaeology Research Center - Test Pit Profile Form

Project Salmon's Quarry I State Site # — Test Pit T12 P2

Area/Locus — PN Area 1-100 PROV# 14 Feature #(s) —

Supervisor SRW Exc. Team MFN Recorder MFN Date 5/12/21



PN's / Artifacts, by level (see reverse for codes)

Soil Descriptions

Ap 0 - 41 cm
2.5Y 4/2 DK Gy Bn
Wet Silo w/ P+K

Wetland C 41 - 63 cm
2.5Y 6/2 Lt Bn Gy
Wet Silo w/ P+K

Comments* NCM; Pooling water

Number of bags: 0

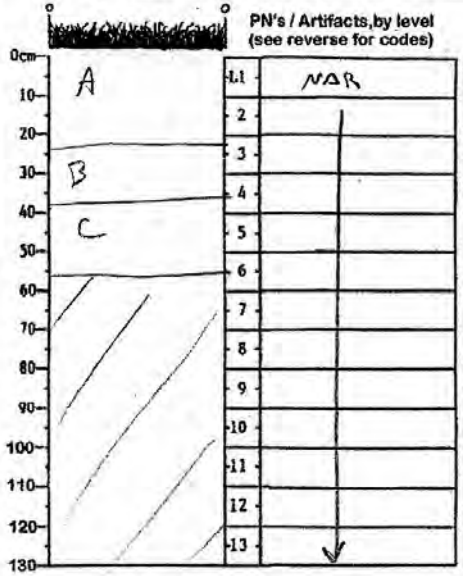
* Provide comments on Artifacts, Soils, Disturbances, Context, etc.

Northeast Archaeology Research Center - Test Pit Profile Form

Project Salmon Quarry I State Site # — Test Pit T15P1

Area/Locus — PN Area 201-300 PROV# 202 Feature #(s) —

Supervisor SRW Exc. Team CLB Recorder CLB Date 5/12/21



PN's / Artifacts, by level (see reverse for codes)

Soil Descriptions

A 0 - 24 cm
2.5Y 2.5/1 BlK
SiLo w/ PtK

B 24 - 39 cm
10YR 3/4 YwBn
SiLo w/PtK

C 39 - 56 cm
2.5Y 6/2 LtBnGy
SiLo w/PtK

Comments* NCM

Number of bags: 0

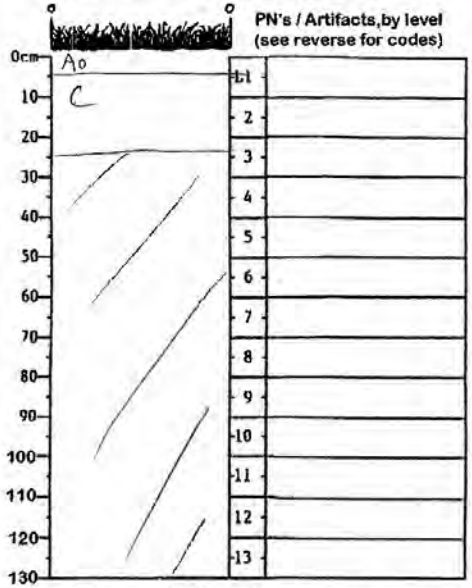
* Provide comments on Artifacts, Soils, Disturbances, Context, etc.

Northeast Archaeology Research Center - Test Pit Profile Form

Project Salmon Quarry I State Site # — Test Pit T16P1

Area/Locus — PN Area 201-300 PROV# 204 Feature #(s) —

Supervisor SRW Exc. Team CLB Recorder CLB Date 5/12/21



PN's / Artifacts, by level (see reverse for codes)

Soil Descriptions

Ao = 0-5 cm
2.5Y 2.5/1 BlK
SiLo
Wet

C = 5-25 cm
2.5Y 6/2 LtBnGy
SiLo
Wet

Comments* STP term on peatys water

Number of bags: —

* Provide comments on Artifacts, Soils, Disturbances, Context, etc.

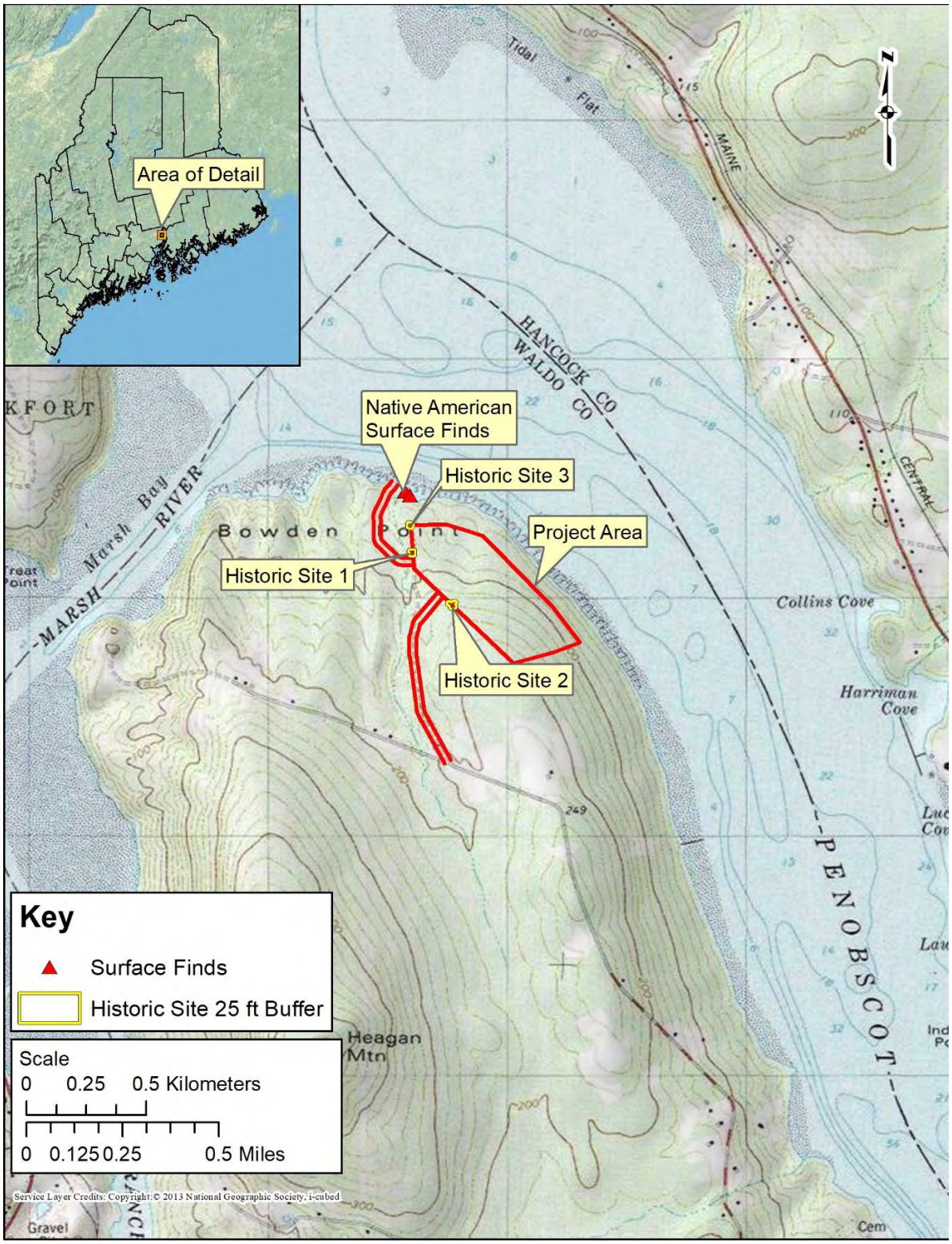


Figure 1. Topographic map showing the location of the proposed Salmons Quarry Operations Project, Bowden Point Road, Prospect, Waldo County, Maine (MHPC # 0177-24. Note Historic Sites 1-3 and the Native American surface artifacts outside the project (MHPC site numbers pending).

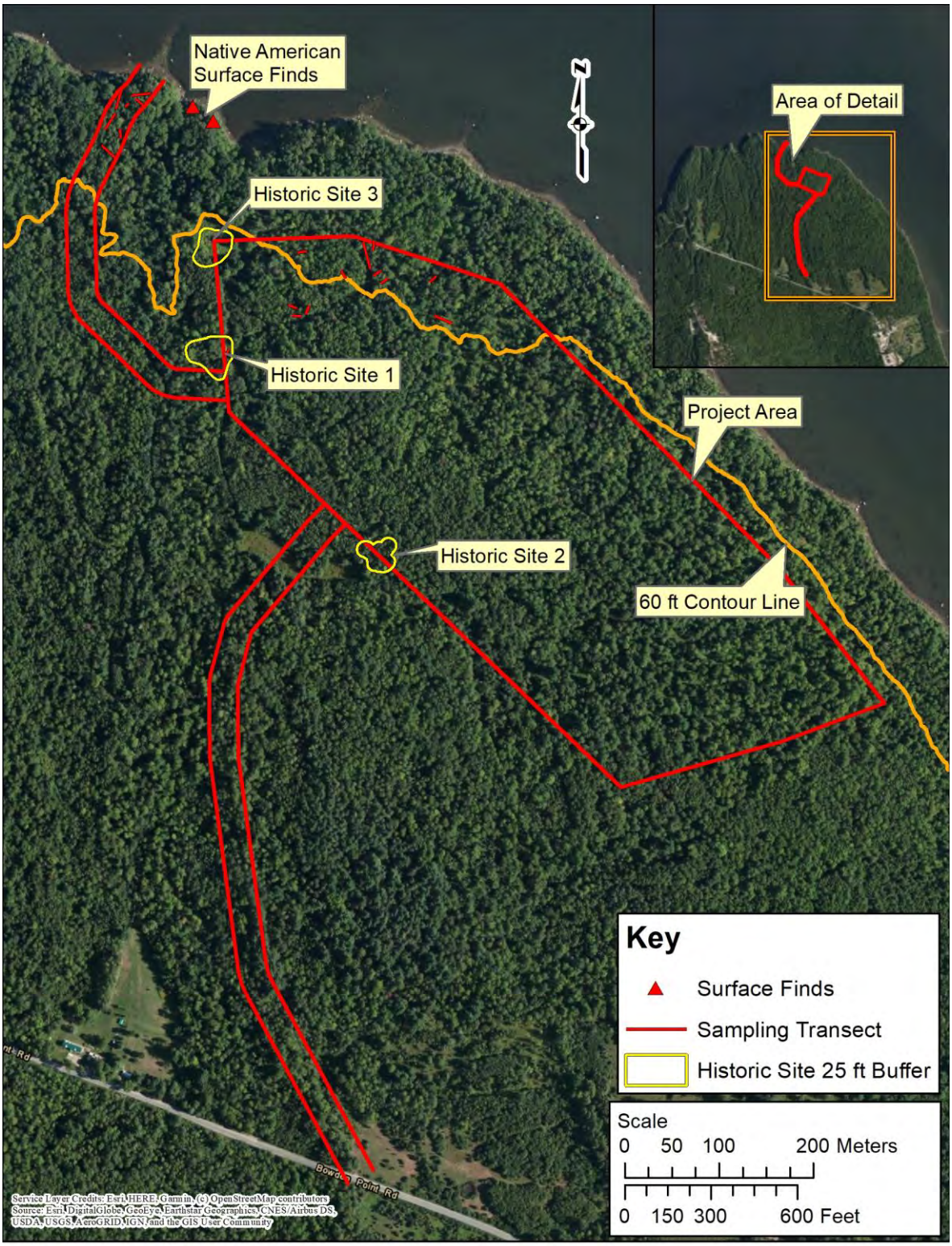


Figure 2. Aerial photograph showing the location of the proposed Salmons Quarry Operations Project, Bowden Point Road, Prospect, Waldo County, Maine (MHPC # 0177-24). Note Historic Sites 1-3 and the Native American surface artifacts outside the project (MHPC site numbers pending).

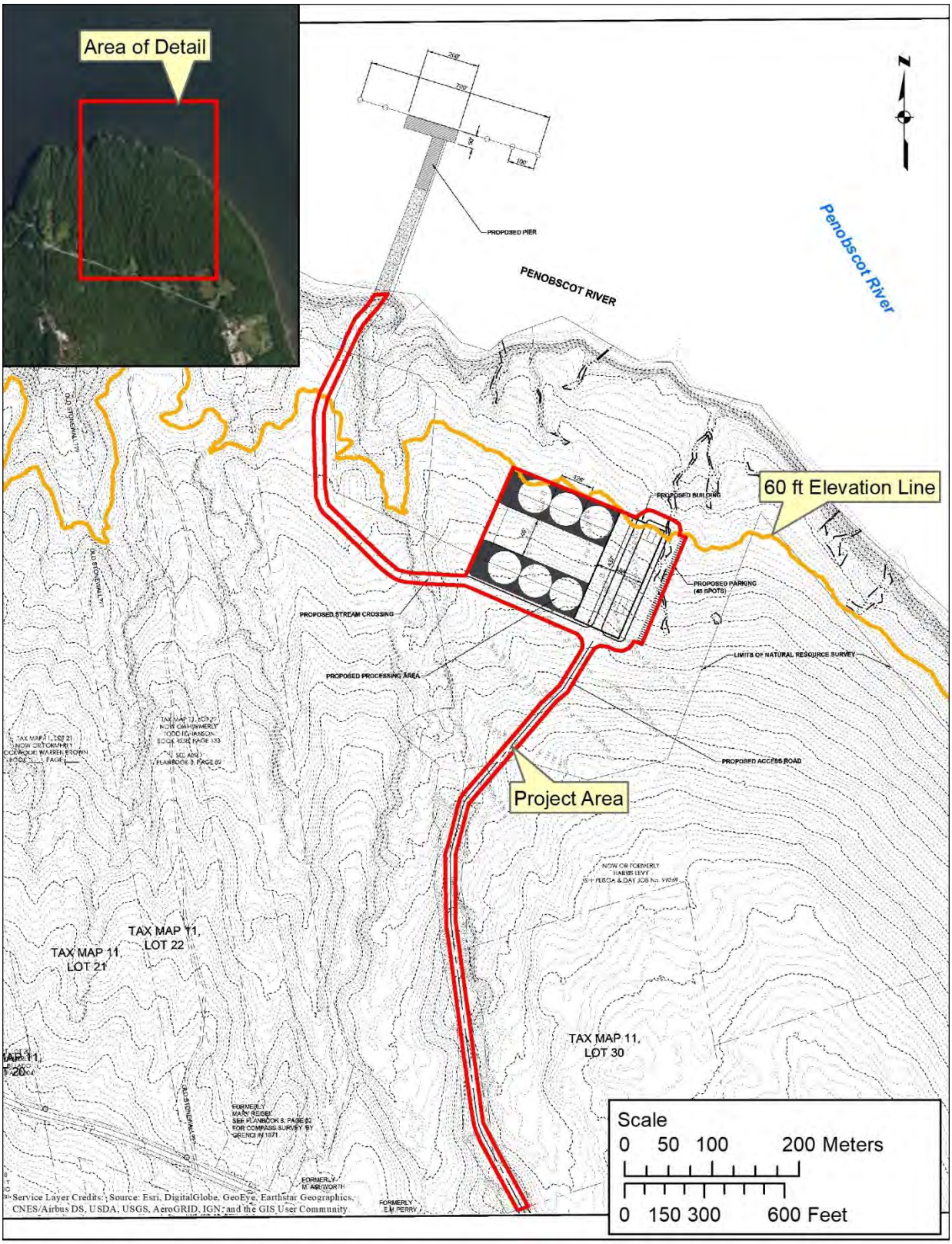


Figure 3. Project plans showing the location of the proposed Salmons Quarry Operations Project, Bowden Point Road, Prospect, Waldo County, Maine (MHPC # 0177-24).

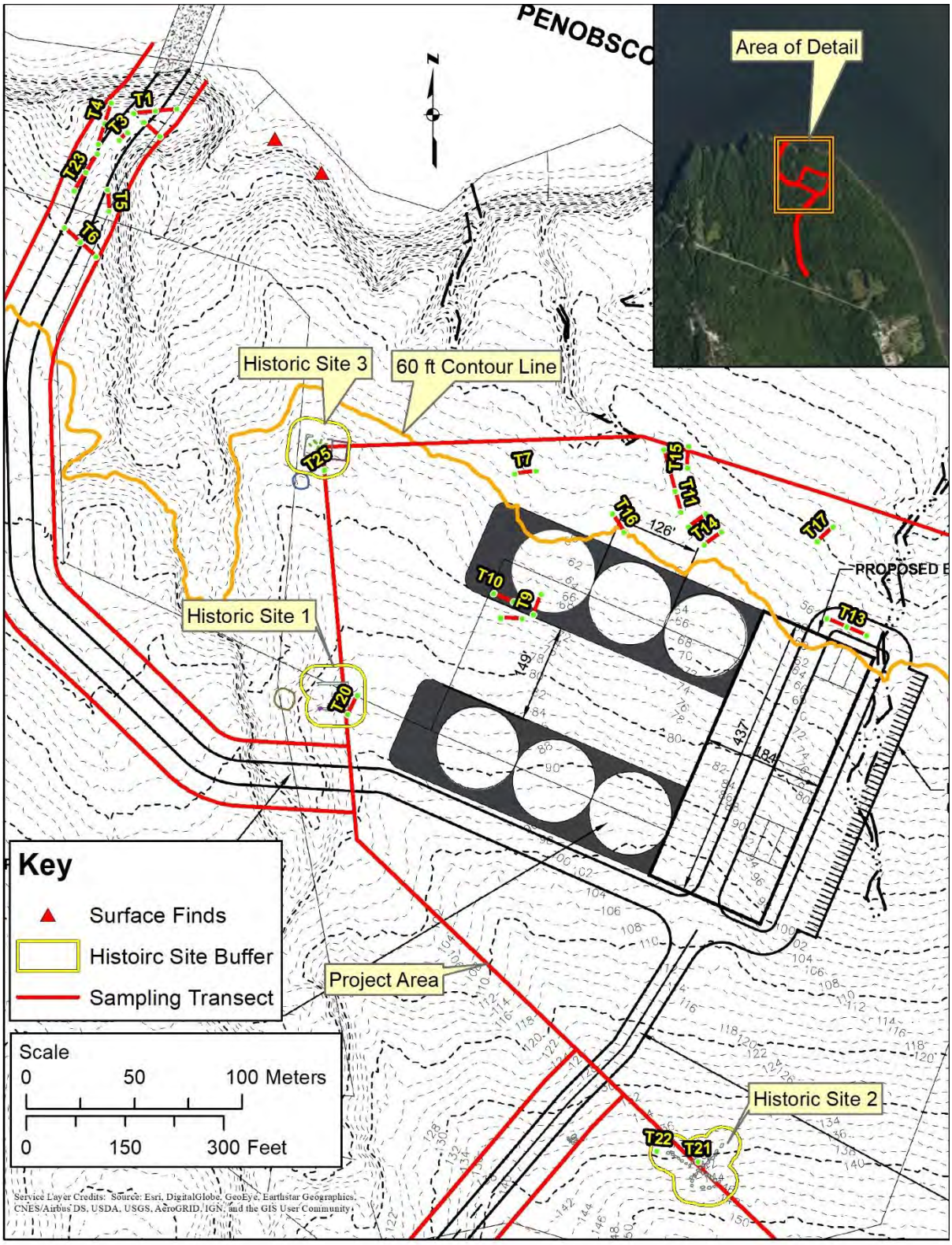


Figure 4. Project plans showing the location of phase I testing and newly identified archaeological sites located within the proposed Salmons Quarry Operations Project, Bowden Point Road, Prospect, Waldo County, Maine (MHPC # 0177-24).

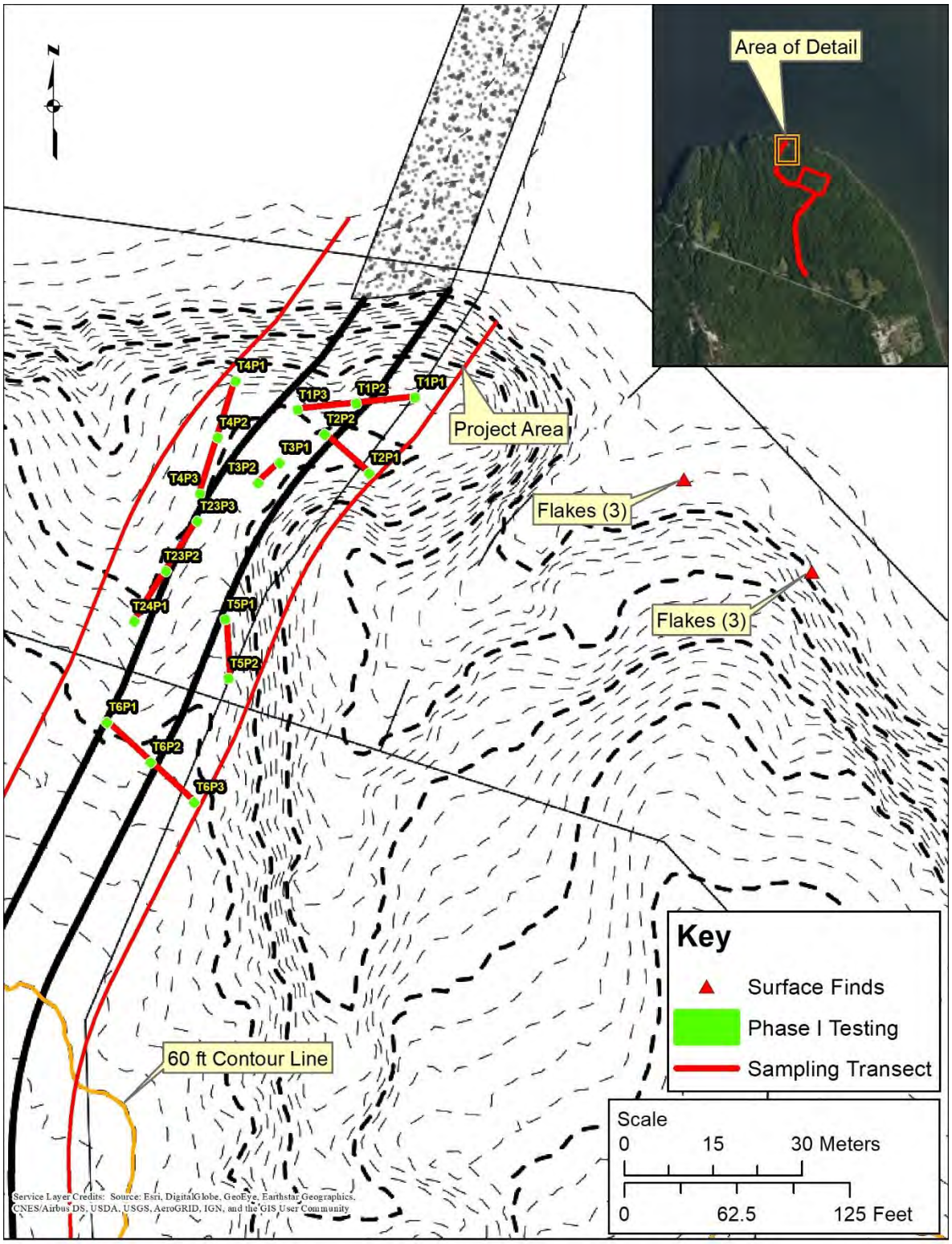


Figure 5. Project plans showing the location of phase I testing near the proposed pier/access road within the Salmons Quarry Operations Project, Bowden Point Road, Prospect, Waldo County, Maine (MHPC # 0177-24). Note the location of the Native American lithic debitage (flakes) found on the shoreline outside the project area.

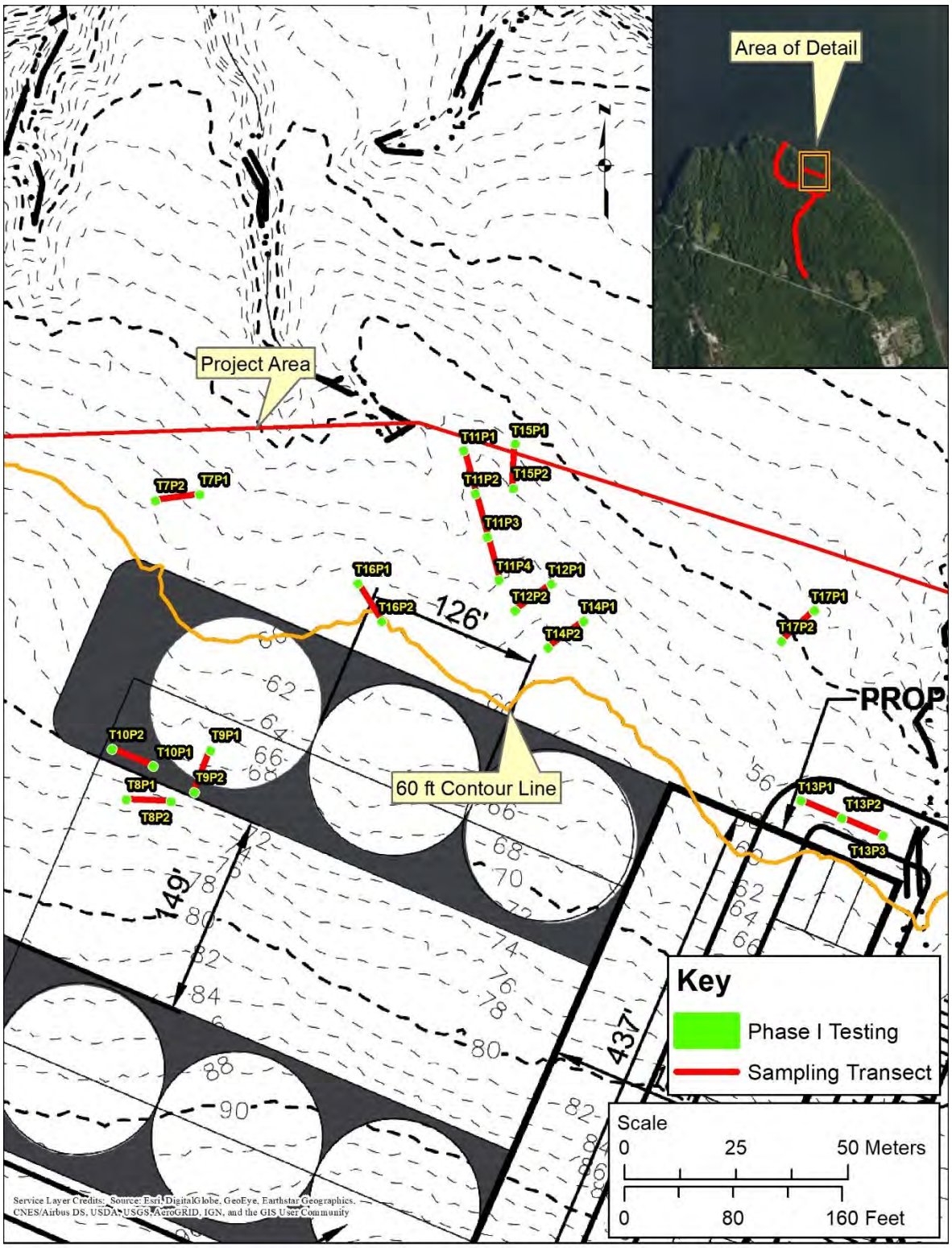


Figure 6. Project plans showing the location of phase I testing on the north side of the proposed processing area within the Salmons Quarry Operations Project, Bowden Point Road, Prospect, Waldo County, Maine (MHPC # 0177-24).

Figure 7. View west of archaeological phase I testing along Transect 1 near the proposed pier/access road within the Salmons Quarry Operations Project, Bowden Point Road, Prospect, Waldo County, Maine (MHPC # 0177-24).

Figure 8. View west of archaeological phase I testing along Transect 9 on the north side of the proposed processing station within the Salmons Quarry Operations Project, Bowden Point Road, Prospect, Waldo County, Maine (MHPC # 0177-24).

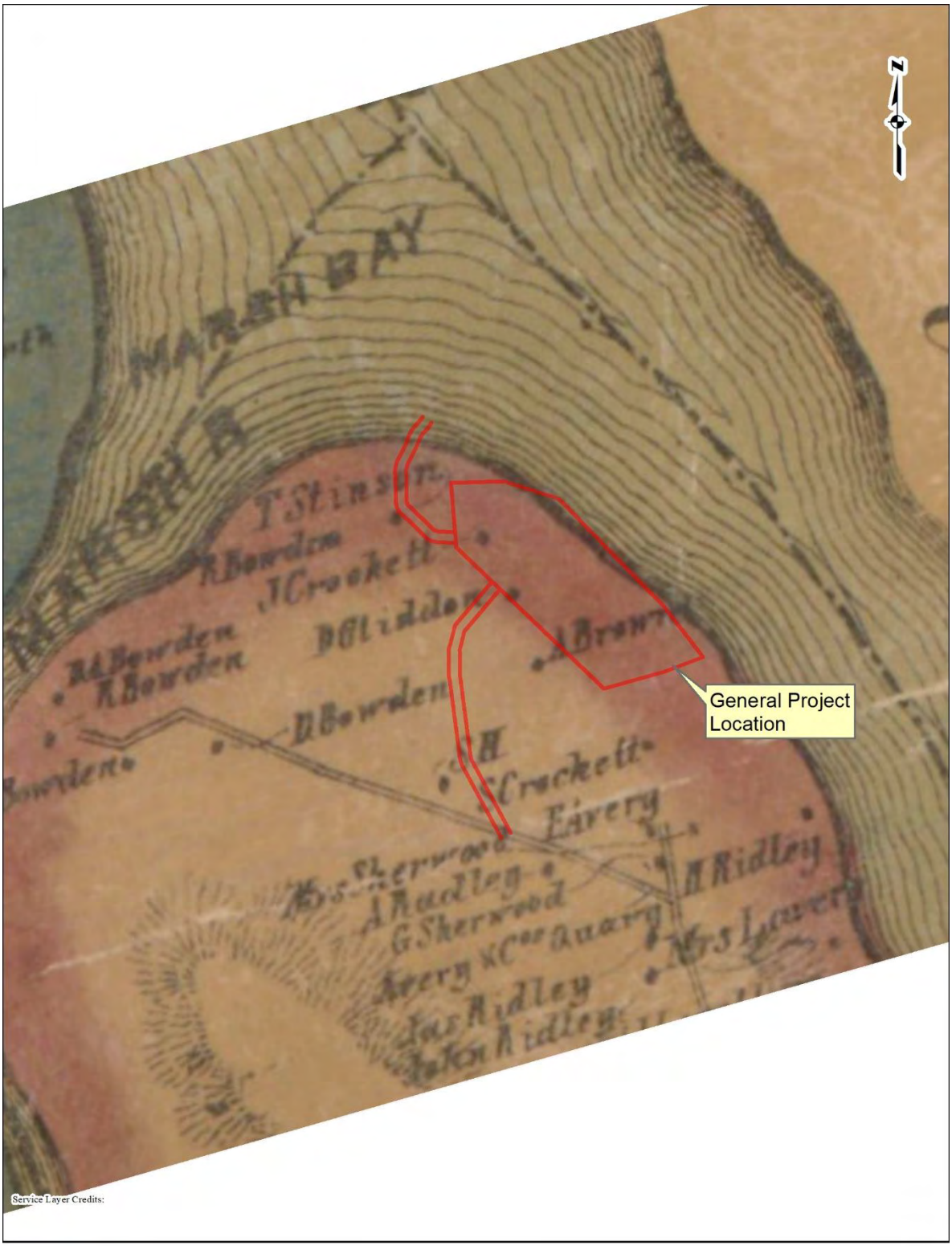


Figure 9. Section of the 1858 Waldo County map showing the general location of the proposed Salmons Quarry Operations Project, Bowden Point Road, Prospect, Waldo County, Maine (MHPC # 0177-24). Note the residences of J. Crockett and D. Glidden fall within the project area.

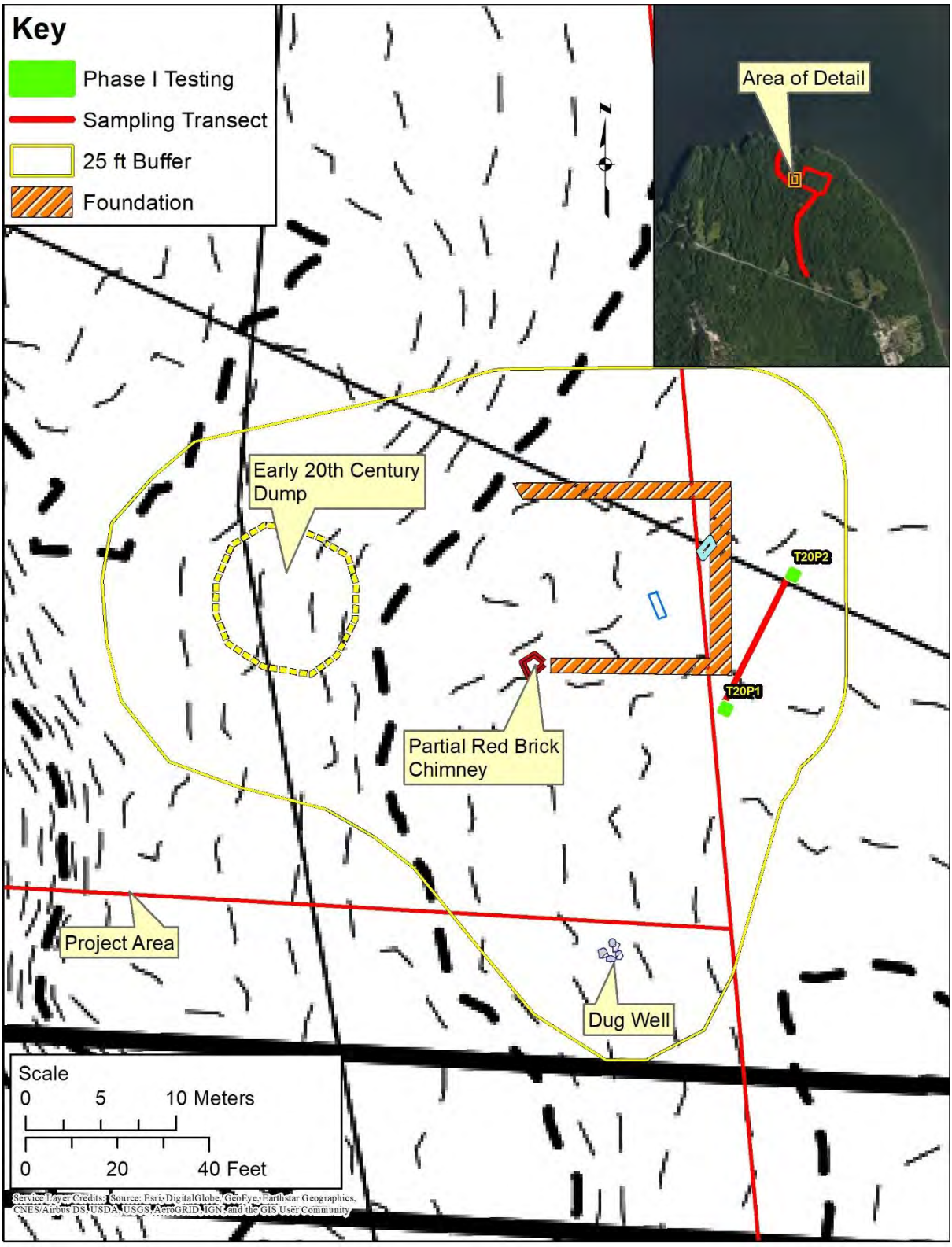


Figure 10. Project plans showing the location of Historic Site 1 and phase I testing within the Salmons Quarry Operations Project, Bowden Point Road, Prospect, Waldo County, Maine (MHPC # 0177-24). Note the 25-ft buffer.

Figure 11. View of the cellar hole at Historic Site 1 within the Salmons Quarry Operations Project, Bowden Point Road, Prospect, Waldo County, Maine (MHPC # 0177-24).

Figure 12. View of the stone lined well at Historic Site 1 within the Salmons Quarry Operations Project, Bowden Point Road, Prospect, Waldo County, Maine (MHPC # 0177-24).

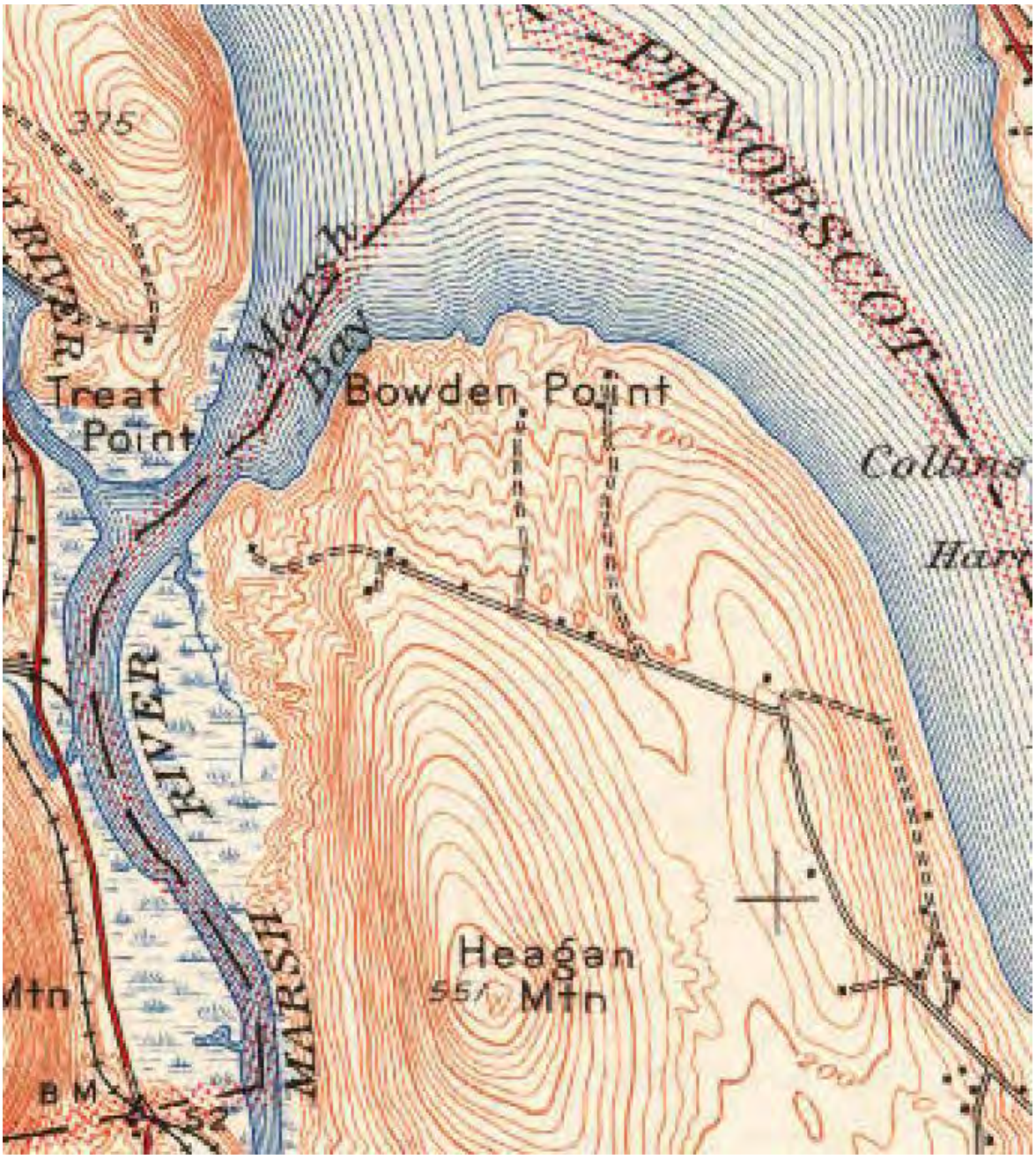


Figure 13. Section of the 1948 USGS topographic map showing the general location of the proposed Salmons Quarry Operations Project, Bowden Point Road, Prospect, Waldo County, Maine (MHPC # 0177-24). Note the unpaved road and two structures that likely represent Historic Sites 1 and 3.

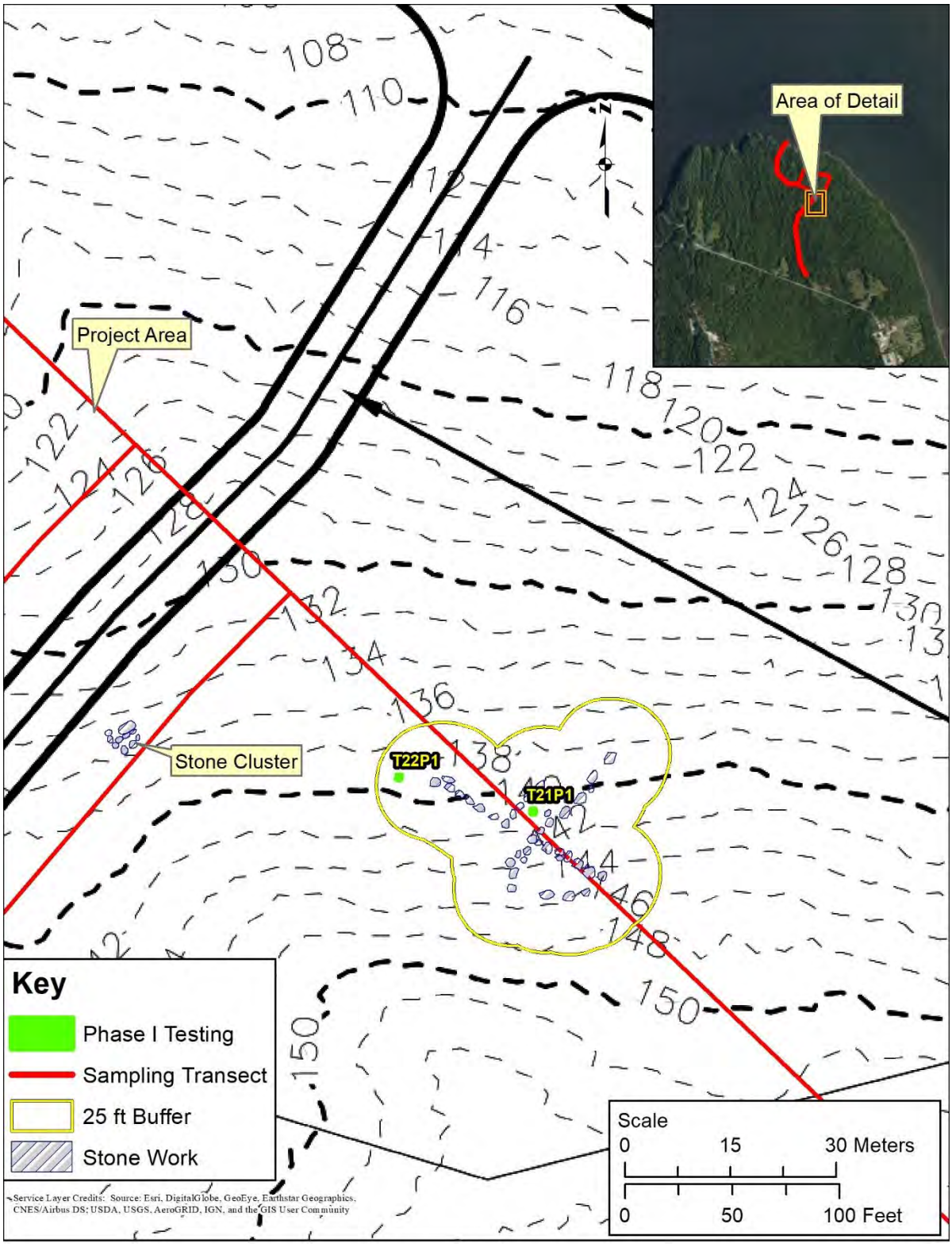


Figure 14. Project plans showing the location of Historic Site 2 and phase I testing within the Salmons Quarry Operations Project, Bowden Point Road, Prospect, Waldo County, Maine (MHPC # 0177-24). Note the 25-ft buffer around the stone walls.

Figure 15. View of the stone walls and excavation test pit T21 P1 at Historic Site 1 within the Salmons Quarry Operations Project, Bowden Point Road, Prospect, Waldo County, Maine (MHPC # 0177-24).

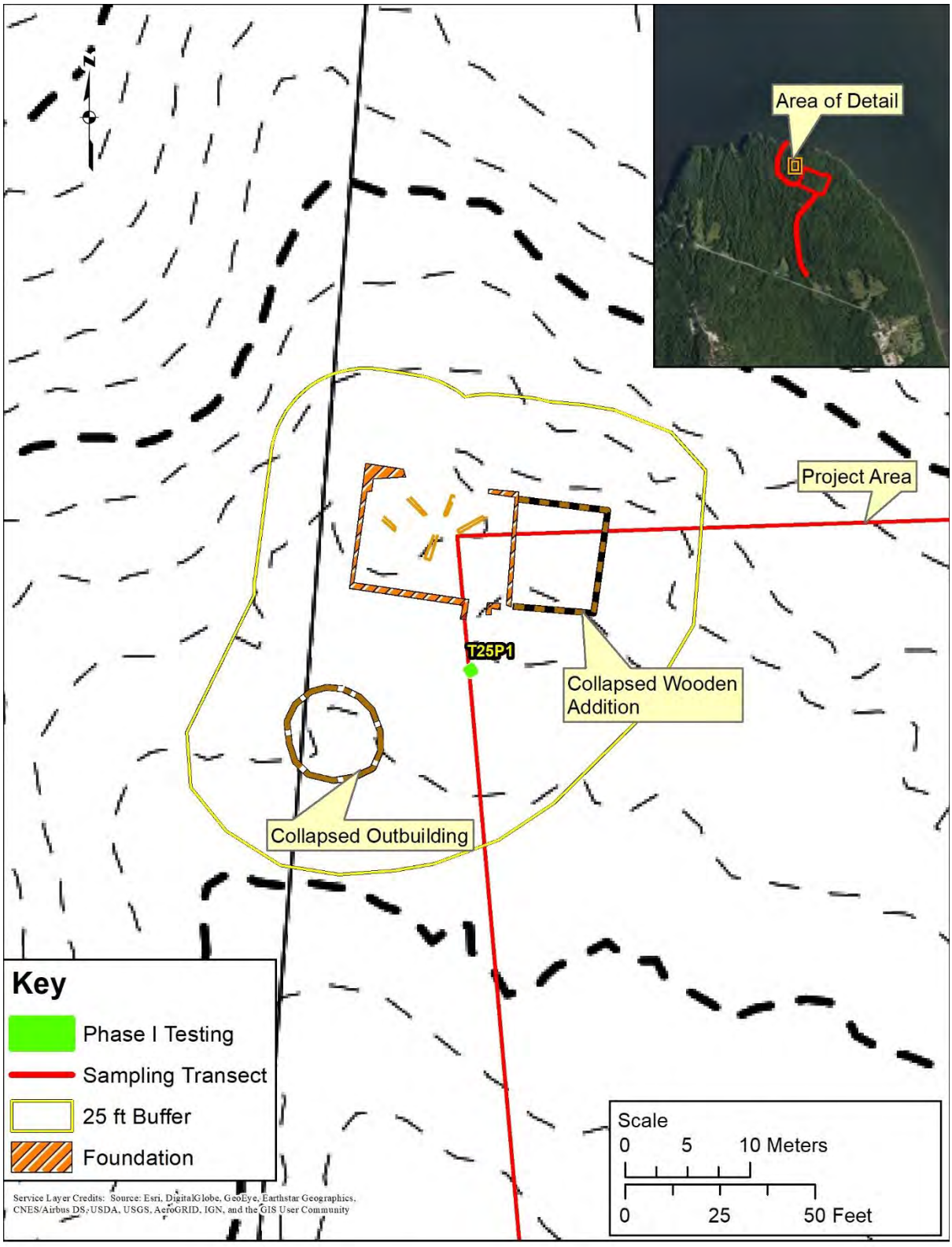


Figure 16. Project plans showing the location of Historic Site 3 and phase I testing within the Salmons Quarry Operations Project, Bowden Point Road, Prospect, Waldo County, Maine (MHPC # 0177-24). Note the 25-ft buffer around the cellar hole and outbuilding.

Figure 17. View northwest of the cellar hole at Historic Site 3 within the Salmons Quarry Operations Project, Bowden Point Road, Prospect, Waldo County, Maine (MHPC # 0177-24).

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
FORMERLY: CES INC

January 8, 2021

Aroostook Band of Micmacs
Attn: Jennifer Pictou, Tribal Historic Preservation Officer
7 Northern Road
Presque Isle, Maine 04769
jpictou@micmac-nsn.gov

Re: Salmons Incorporated | Salmons Quarry Operations | Prospect, Maine

Dear Ms. Pictou:

Haley Ward, Inc. is assisting Salmons Quarry with the design and permitting of a pier to be used in support of mineral extraction activities on Bowden Point in Prospect, Maine. The Applicant proposes to construct a 525-foot-long pier off the northern shore of Bowden Point onto the Penobscot River.

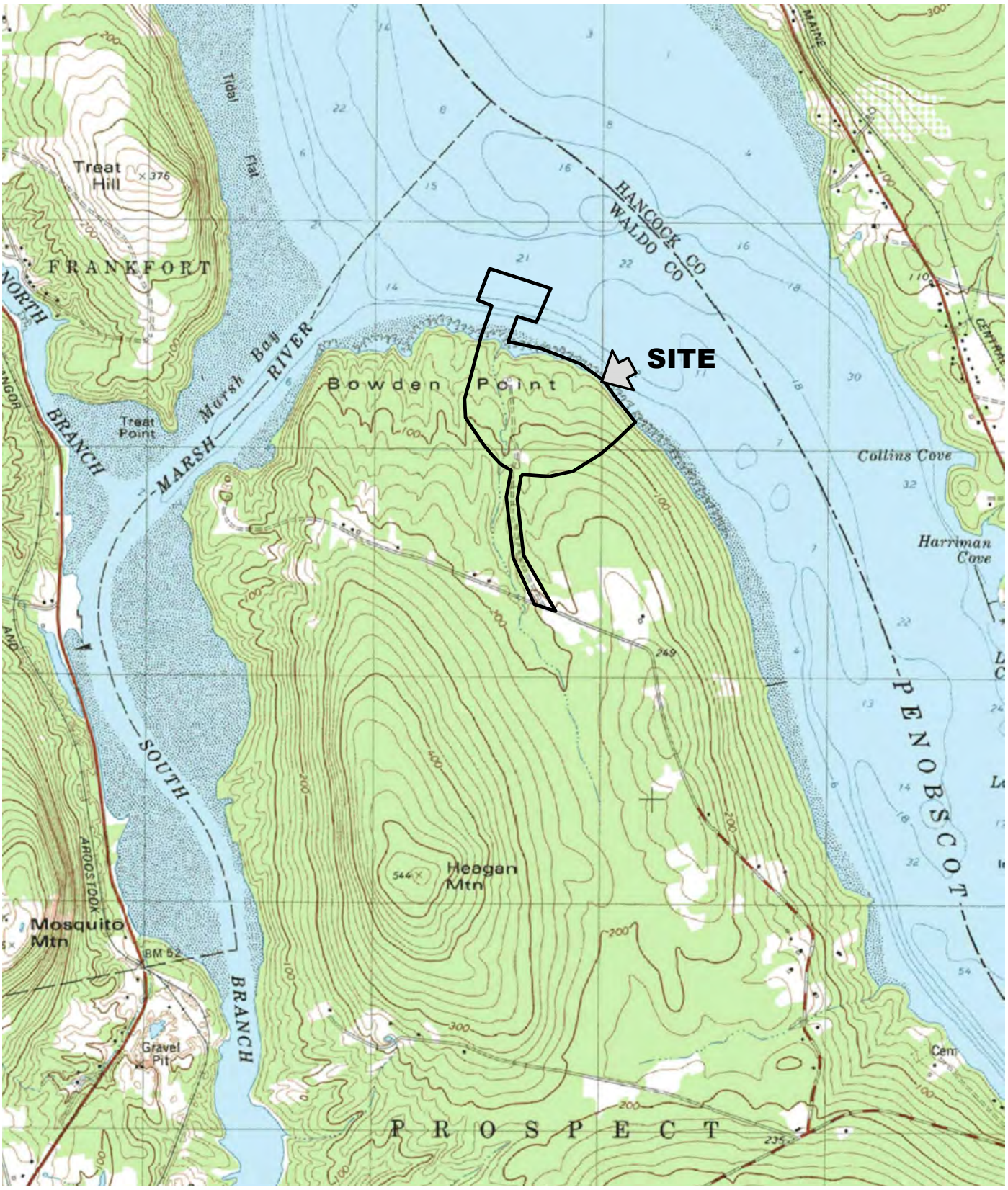
For your reference, the site location is indicated on the attached location map. For additional information on the proposed project, including the permit application materials, please contact us at 207-989-4824, or at chaskell@haleyward.com. These materials are sent for your review as part of the Natural Resources Protection Act and US Army Corps of Engineers permitting requirements.

Sincerely,
Haley Ward, Inc.

Chip Haskell
Project Manager

ACH/alf/cmc
Enc.
Location Map

120 Main Street, Suite 132, Saco, ME 04072
T: 207.283.9151 | HALEYWARD.COM



SOURCE:
U.S.G.S. TOPOGRAPHIC QUADRANGLE
BUCKSPORT
@ 1:24,000

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING

SALMONS INCORPORATED
PROSPECT, MAINE
LOCATION MAP

2021-01-04
12617.001

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
FORMERLY: CES INC

January 8, 2021

Houlton Band of Maliseet Indians
Attn: THPO & Environmental Planner
88 Bell Road
Littleton, Maine 04730
envplanner@maliseets.com
ogs1@maliseets.com

Re: Salmons Incorporated | Salmons Quarry Operations | Prospect, Maine

To whom it may concern:

Haley Ward, Inc. is assisting Salmons Quarry with the design and permitting of a pier to be used in support of mineral extraction activities on Bowden Point in Prospect, Maine. The Applicant proposes to construct a 525-foot-long pier off the northern shore of Bowden Point onto the Penobscot River.

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Sincerely,
Haley Ward, Inc.

Chip Haskell
Project Manager

ACH/cmc
Enc. Location Map

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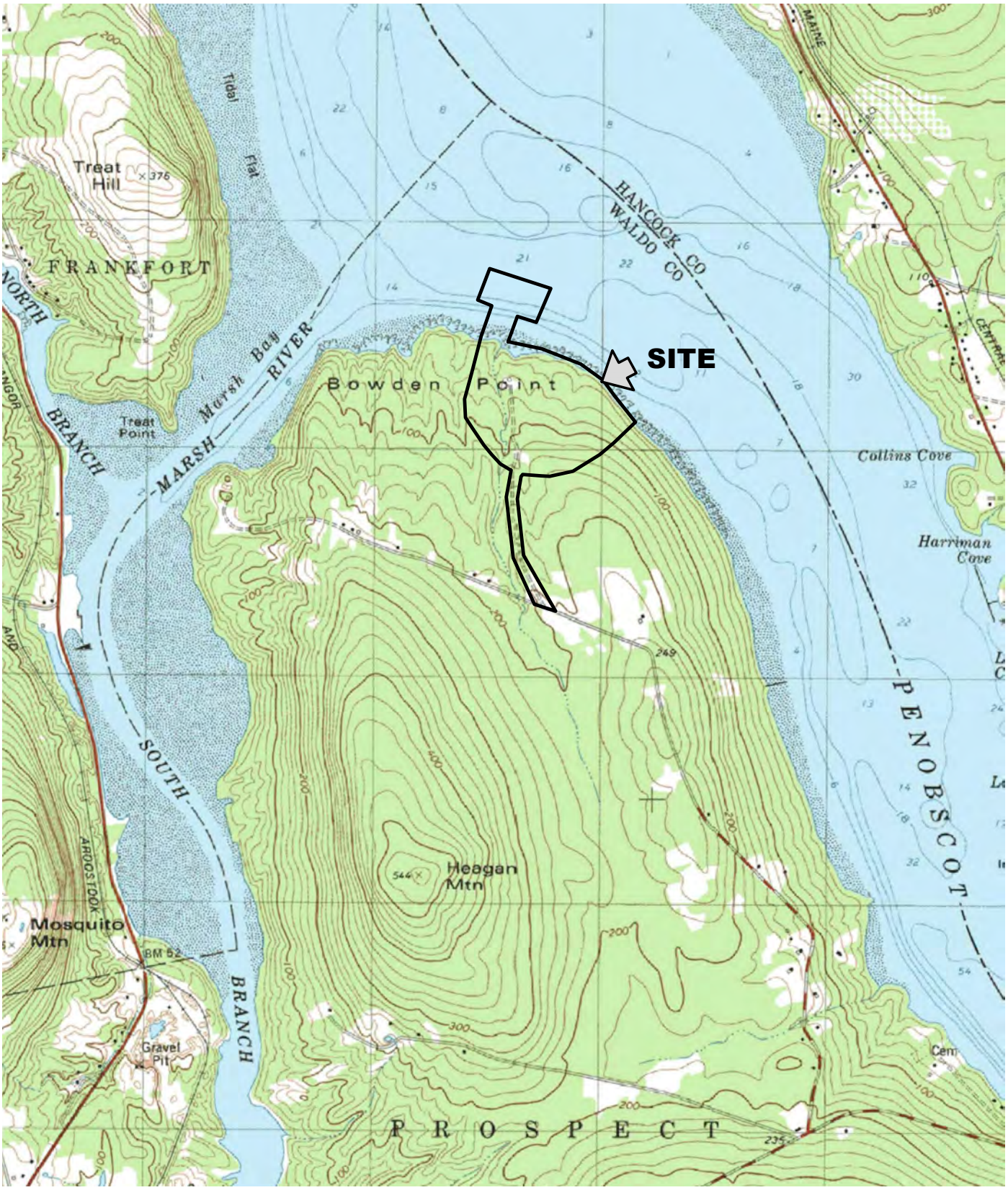

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HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING

SALMONS INCORPORATED
PROSPECT, MAINE
LOCATION MAP

2021-01-04
12617.001

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
FORMERLY: CES INC

January 8, 2021

Passamaquoddy Tribe of Indians
Pleasant Point Reservation
Attn: Donald Soctomah, Tribal Historic Preservation Officer
P.O. Box 343
Perry, Maine 04667
soctomah@gmail.com

Re: Salmons Incorporated | Salmons Quarry Operations | Prospect, Maine

Dear Mr. Soctomah:

Haley Ward, Inc. is assisting Salmons Quarry with the design and permitting of a pier to be used in support of mineral extraction activities on Bowden Point in Prospect, Maine. The Applicant proposes to construct a 525-foot-long pier off the northern shore of Bowden Point onto the Penobscot River.

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Sincerely,
Haley Ward, Inc.

Chip Haskell
Project Manager

ACH/cmc
Enc.
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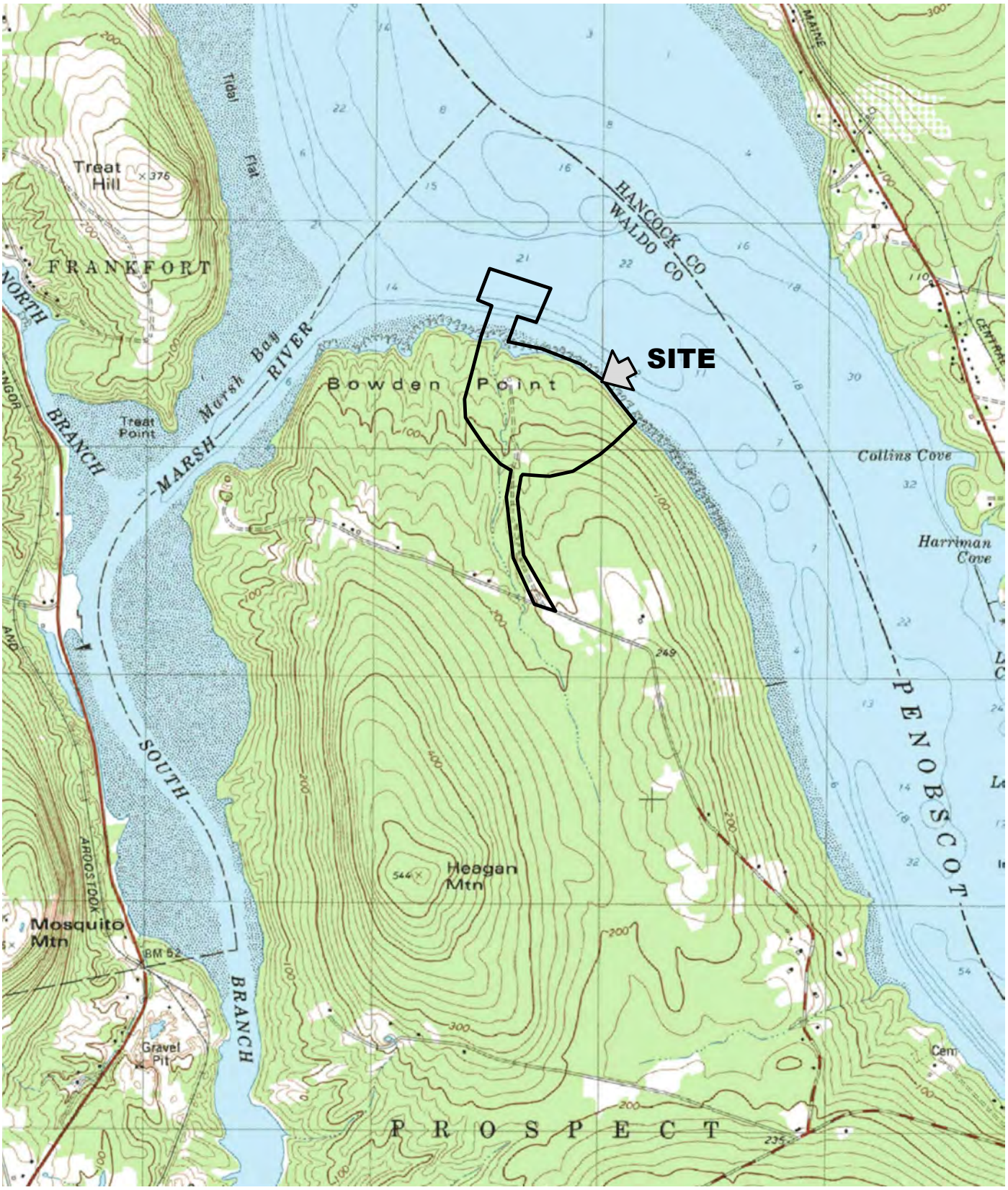
T: 207.283.9151 | HALEYWARD.COM



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HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING

SALMONS INCORPORATED
PROSPECT, MAINE
LOCATION MAP

2021-01-04
12617.001

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
FORMERLY: CES INC

January 8, 2021

Passamaquoddy Tribe of Indians
Indian Township Reservation
Attn: Donald Soctomah, Tribal Historic Preservation Officer
P.O. Box 301
Princeton, Maine 04668
soctomah@gmail.com

Re: Salmons Incorporated | Salmons Quarry Operations | Prospect, Maine

Dear Mr. Soctomah:

Haley Ward, Inc. is assisting Salmons Quarry with the design and permitting of a pier to be used in support of mineral extraction activities on Bowden Point in Prospect, Maine. The Applicant proposes to construct a 525-foot-long pier off the northern shore of Bowden Point onto the Penobscot River.

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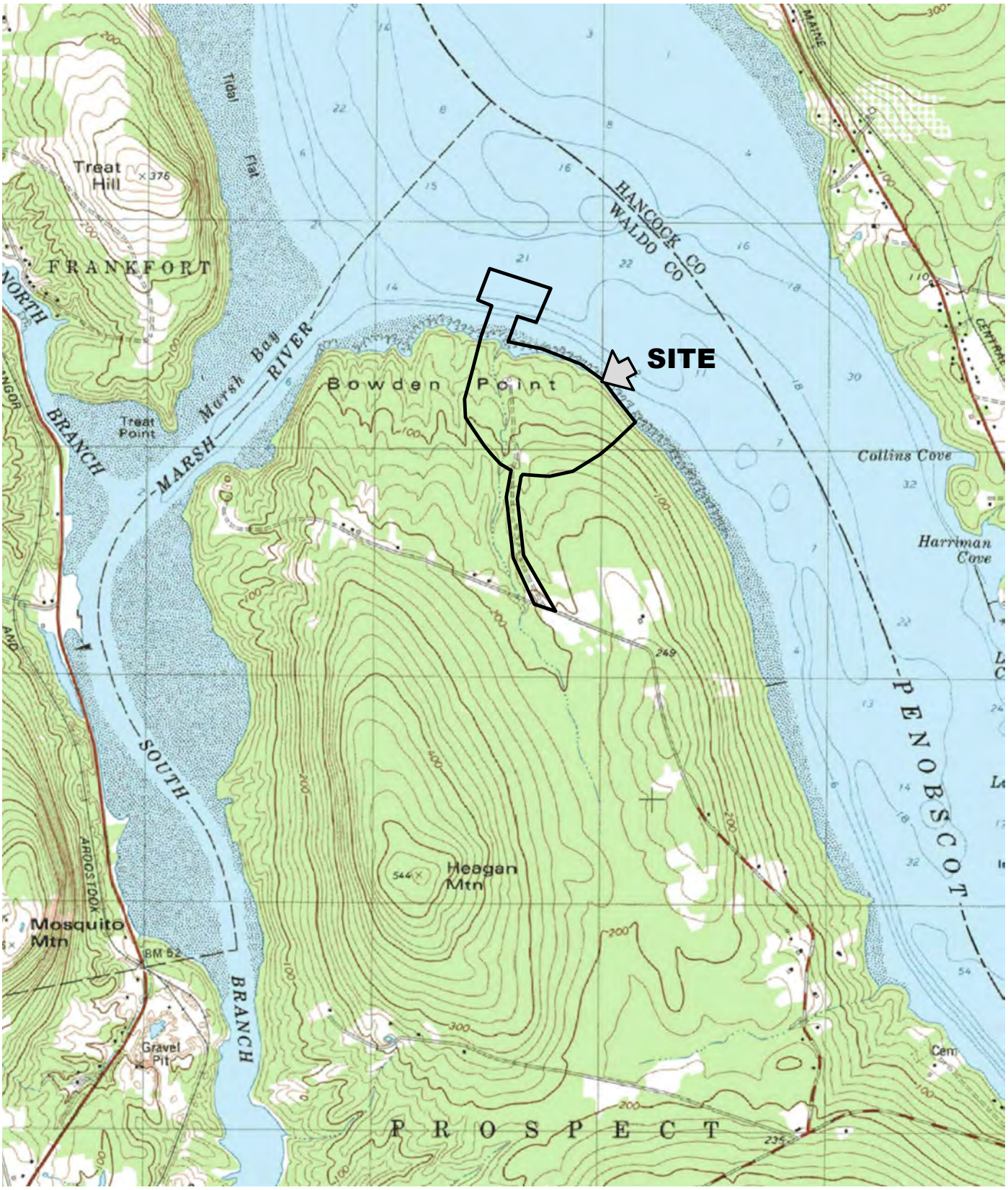

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PROSPECT, MAINE
LOCATION MAP

2021-01-04
12617.001

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
FORMERLY: CES INC

January 8, 2021

Penobscot Nation
Cultural and Historic Preservation Department
Attn: Chris Sockalexis, Tribal Historic Preservation Officer
12 Wabanaki Way
Indian Island, Maine 04468
Chris.sockalexis@penobscotnation.org

Re: Salmons Incorporated | Salmons Quarry Operations | Prospect, Maine

Dear Mr. Sockalexis:

Haley Ward, Inc. is assisting Salmons Quarry with the design and permitting of a pier to be used in support of mineral extraction activities on Bowden Point in Prospect, Maine. The Applicant proposes to construct a 525-foot-long pier off the northern shore of Bowden Point onto the Penobscot River.

For your reference, the site location is indicated on the attached location map. For additional information on the proposed project, including the permit application materials, please contact us at 207-989-4824, or at chaskell@Haleyward.com. These materials are sent for your review as part of the Natural Resources Protection Act and US Army Corps of Engineers permitting requirements.

Sincerely,
Haley Ward, Inc.

Chip Haskell
Project Manager

ACH/cmc
Enc.
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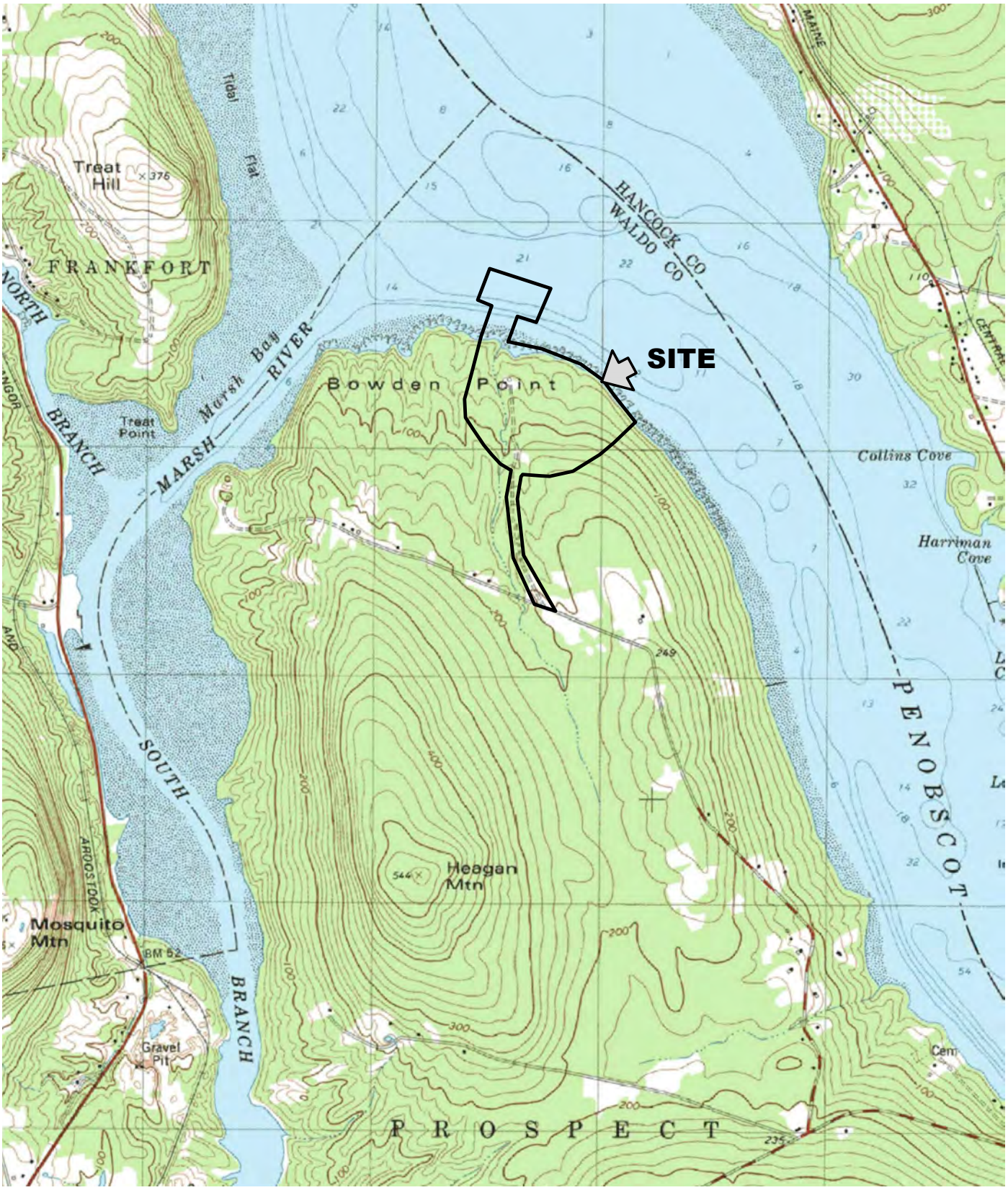
T: 207.283.9151 | HALEYWARD.COM



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HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING

SALMONS INCORPORATED
PROSPECT, MAINE
LOCATION MAP

2021-01-04
12617.001

APPENDIX A

MDEP VISUAL EVALUATION SURVEY

APPENDIX A - MDEP VISUAL EVALUATION
FIELD SURVEY CHECKLIST
(Natural Resources Protection Act, 38 M.R.S. §§ 480 A - Z)

Name of applicant: BOWDEN POINT PROPERTIES Phone: 757-409-0246

Application Type: NRPA TIER III

Activity Type: (brief activity description) PIER

Activity Location: Town: PROSPECT County: WALDO

GIS Coordinates, if known: 44.60171 -68.841444

Date of Survey: 12.8.2020 Observer: DREW OLEHOWSKI Phone: 207-989-4824

	Distance Between the Proposed Visibility Activity and Resource (in Miles)			
1. Would the activity be visible from:	0-¼	¼-1	1+	
A. A National Natural Landmark or other outstanding natural feature?	☐	☐	☐	N/A
B. A State or National Wildlife Refuge, Sanctuary, or Preserve or a State Game Refuge?	☐	☐	☐	N/A
C. A state or federal trail?	☐	☐	☐	N/A
D. A public site or structure listed on the National Register of Historic Places?	☐	☐	☐	N/A
E. A National or State Park?	☐	☐	☐	N/A
F. 1) A municipal park or public open space?	☐	☐	☐	N/A
2) A publicly owned land visited, in part, for the use, observation, enjoyment and appreciation of natural or man-made visual qualities?	☐	☐	☐	N/A
3) A public resource, such as the Atlantic Ocean, a great pond or a navigable river?	X	☐	☐	
2. What is the closest estimated distance to a similar activity?	☐	☐	X	
3. What is the closest distance to a public facility intended for a similar use?	☐	☐	☐	N/A

4. Is the visibility of the activity seasonal? ☐Yes X No
(i.e., screened by summer foliage, but visible during other seasons)

5. Are any of the resources checked in question 1 used by the public during the time of year during which the activity will be visible? X Yes ☐No

(blue)

APPENDIX B

MDEP COASTAL WETLAND CHARACTERIZATION; INTERTIDAL & SHALLOW SUBTIDAL FIELD SURVEY CHECKLIST

APPENDIX B: MDEP COASTAL WETLAND CHARACTERIZATION: INTERTIDAL & SHALLOW SUBTIDAL FIELD SURVEY CHECKLIST

NAME OF APPLICANT: BOWDEN POINT PROPERTIES PHONE: 757-409-0246
APPLICATION TYPE: NRPA TIER III
ACTIVITY LOCATION: TOWN: PROSPECT COUNTY: WALDO

ACTIVITY DESCRIPTION: ☐ fill ☒ pier ☐ lobster pound ☐ shoreline stabilization
☐ dredge ☐ other: _____

DATE OF SURVEY: 12.08.2020 OBSERVER: DREW OLEHOWSKI

TIME OF SURVEY: 10:00 AM TO 12:00 PM TIDE AT SURVEY: LOW

SIZE OF DIRECT IMPACT OR FOOTPRINT (square feet):
Intertidal area: _____ Subtidal area: _____

SIZE OF INDIRECT IMPACT, if known (square feet): _____
Intertidal area: _____ Subtidal area: _____

HABITAT TYPES PRESENT (check all that apply):
☐ sand beach ☒ boulder/cobble beach ☐ sand flat ☐ mixed coarse & fines ☐ salt marsh
☐ ledge ☐ rocky shore ☒ mudflat (sediment depth, if known:____)

ENERGY: ☐ protected ☐ semi-protected ☐ partially exposed ☒ exposed

DRAINAGE: ☐ drains completely ☐ standing water ☒ pools ☒ stream or channel

SLOPE: ☐ >20% ☒ 10-20% ☐ 5-10% ☐ 0-5% ☐ variable

SHORELINE CHARACTER:
☐ bluff/bank (height from spring high tide:____) ☐ beach ☒ rocky ☒ vegetated

FRESHWATER SOURCES: ☒ stream ☐ river ☐ wetland ☒ stormwater

MARINE ORGANISMS PRESENT:

	absent	occasional	common	abundant
mussels	☒	☐	☐	☐
clams	☒	☐	☐	☐
marine worms	☒	☐	☐	☐
rockweed	☐	☐	☒	☐
eelgrass	☐	☐	☒	☐
lobsters	☒	☐	☐	☐
other	☐	☐	☐	☐

SIGNS OF SHORELINE OR INTERTIDAL EROSION? ☐ yes ☒ no

PREVIOUS ALTERATIONS? ☒ yes ☐ no

CURRENT USE OF SITE AND ADJACENT UPLAND:
☒ undeveloped ☐ residential ☐ commercial ☐ degraded ☐ recreational

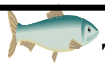
PLEASE SUBMIT THE FOLLOWING:
☒ Photographs ☒ Overhead drawing (pink)

APPENDIX C

MDEP PROJECT DESCRIPTION WORKSHEET FOR A DOCK, PIER, OR WHARF APPLICATION

Natural Resource Protection Act Application
APPENDIX D: Project Description Worksheet for a Dock, Pier or Wharf Application.

Help us process your application more efficiently by completing this worksheet, which is supplemental to a NRPA application for a dock, pier or wharf. A completed Appendix D may be substituted for Block 14 of the application page.



THIS IS AN APPLICATION FOR A.....

☐ Commercial wharf
If yes, indicate type of commercial activity: _____
License number: _____
Number of fishermen using this wharf: _____

☐ Public pier, dock or wharf

☐ Common or shared recreational pier, dock or wharf

☐ Private recreational pier, dock or wharf

☐ Expansion or modification of an existing structure

☒ Other, please indicate: *Commercial wharf for transportation and shipping of quarry product materials.*

TELL US ABOUT YOUR BOAT....

My boat(s) requires a draft of *25* feet.
My boat(s) is *560* feet long.

TELL US ABOUT YOUR PROJECT SITE.... For coastal piers and wharves, please complete Appendix B of the NRPA application. For freshwater docks, please describe the substrate and any vegetation: **See Appendix B**

SCENIC CONSIDERATIONS... Please complete Appendix A of the NRPA application.

WHAT FACILITIES ARE NEARBY?

The nearest public boat launch is located in **Frankfort** (town) approximately **1.4** (distance) miles from the project location.

The nearest public, commercial, or private marina is located in **Bucksport** (town) approximately **3.5** (distance) miles from the project location.

N/A

☐ I have inquired about slip or mooring availability at the nearest marina or public facility.

☐ Yes, a slip or mooring is available. ☐ No, a slip or mooring is not available.
Approximate expected time on waiting list: _____

☐ I have contacted the local Harbor Master.

Name: _____ Phone:_____

I currently use the following for my boat: ☐ Mooring ☐ Marina N/A

TELL US ABOUT YOUR PROPOSED PIER, DOCK OR WHARF…

MATERIALS:

☐ The structure will be supported by pilings.
_____ pilings of _____ inches in diameter

☐ The structure will be supported by stacked, flow-through granite cribs.
_____ blocks, measuring _____ feet by _____ feet

☐ The structure will be supported by solid fill.
_____ square feet of solid fill

☒ Other: *50' Diameter, granular filled coffer dams*

DIMENSIONS:

Length of fixed section: 705 feet
Width of fixed section: 40 feet
Length of ramp: N/A feet
Dimensions of float: N/A feet wide by ___ feet long
Distance the structure will extend below mean low water (MLW): 400 feet
Depth of water at the fixed end of the structure: 30 feet
Depth of water at the float at low tide: N/A feet
Depth of water at the float at high tide: N/A feet
Dimensions of any proposed buildings (e.g. bait shed):
N/A feet high by ___ feet wide by ___ feet long

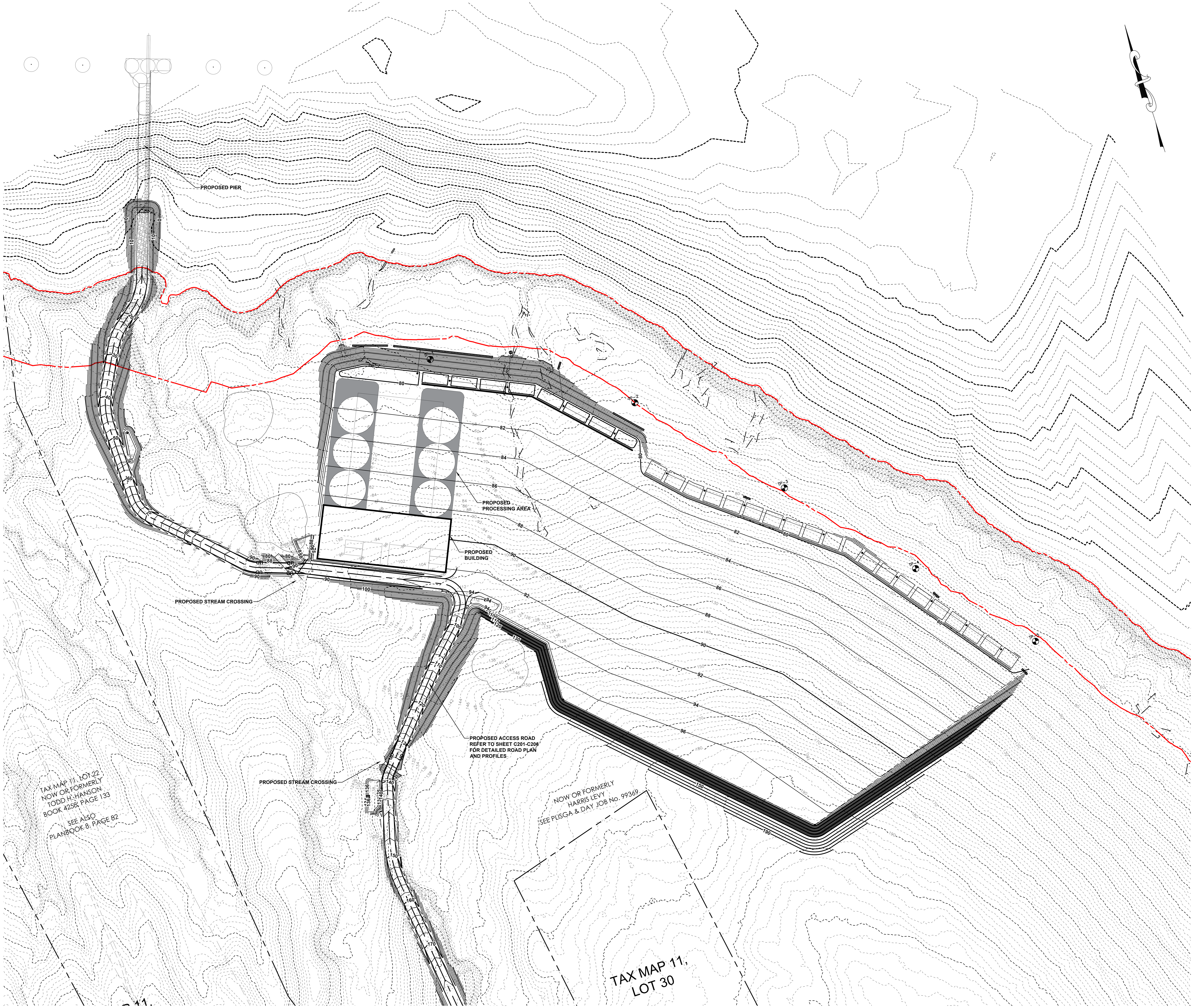
ACCESS:

During construction, my project site will be accessed via:

☒ Land

☐ Beach/intertidal area

☒ Water/barge



LOCATION MAP: USGS QUADRANGLE: BUCKSPORT
SCALE: 1"=4000'
MAPTECH® USGS TOPOGRAPHIC SERIES™,
©MAPTECH®, INC. 978-933-3000
WWW.MAPTECH.COM/TOPO

LEGEND:

DESCRIPTION	EXISTING	PROPOSED
PROPERTY LINE	— — —	
EDGE OF PAVEMENT		———
MAJOR FOOT CONTOUR	---- 100 ----	—— 100 ——
MINOR FOOT CONTOUR	---- 98 ----	—— 98 ——
SILT FENCE		—— SF ——

PLAN REFERENCE:
INFORMATION BASED ON LIDAR TOPOGRAPHY FROM MEGIS SITE AND A NATURAL RESOURCE SURVEY BY CES, INC.

GRAPHIC SCALE
150 0 75 150 300 450
(IN FEET)
1 inch = 150 ft.

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS
NOT FOR CONSTRUCTION

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
One Merchants Plaza, Suite 701
Bangor, Maine 04401
207.989.4824
WWW.HALEYWARD.COM

PROJECT
BOWDEN POINT PROPERTIES, LLC
PROSPECT, MAINE

TITLE
PROSPECT QUARRY PROCESSING AREA
PROPOSED SITE PLAN

STATE OF MAINE
ALFRED HASKELL, III
13314
12/21/2021
LICENSED
PROFESSIONAL ENGINEER

DATE	SCALE
2021.09.28	1"=150'

DRAWN BY	DESIGNED BY	CHECKED BY
WAB	DJO	DSB

PROJECT No. 12617.001

DRAWING No. **C101** REV.

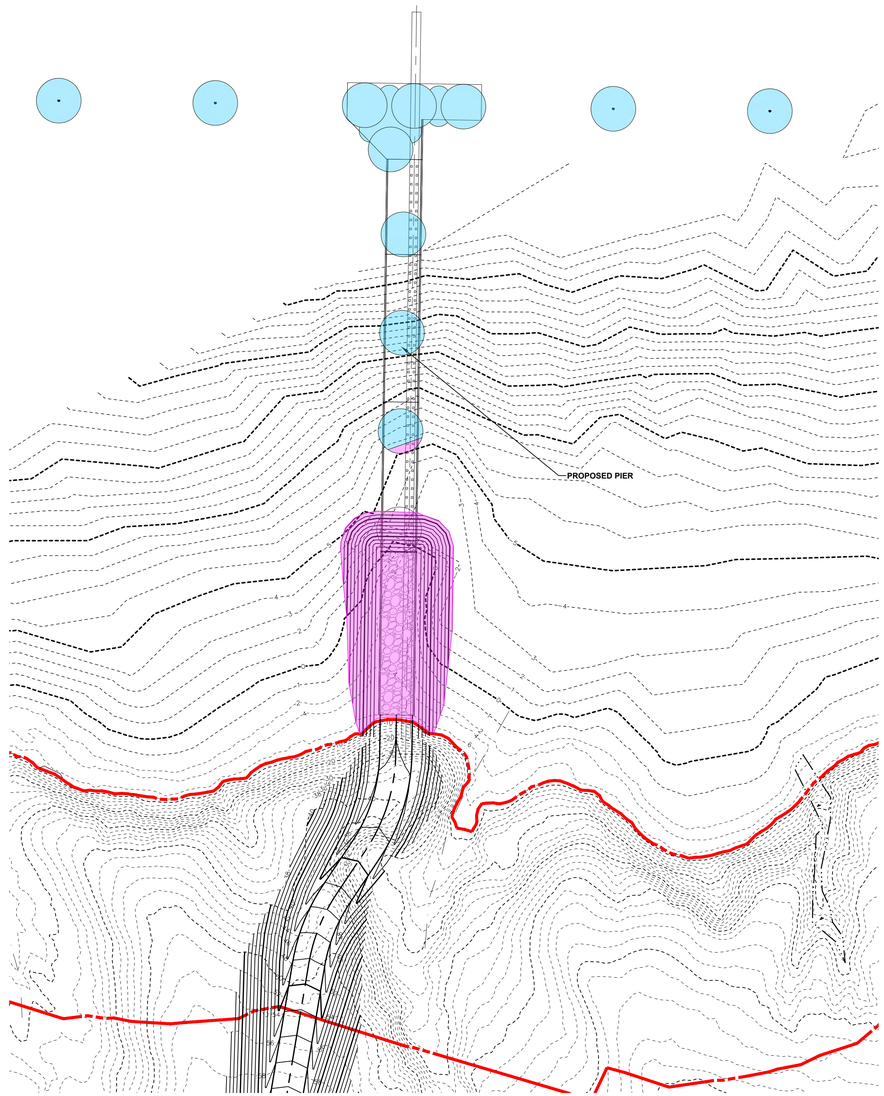
IMPACTS:

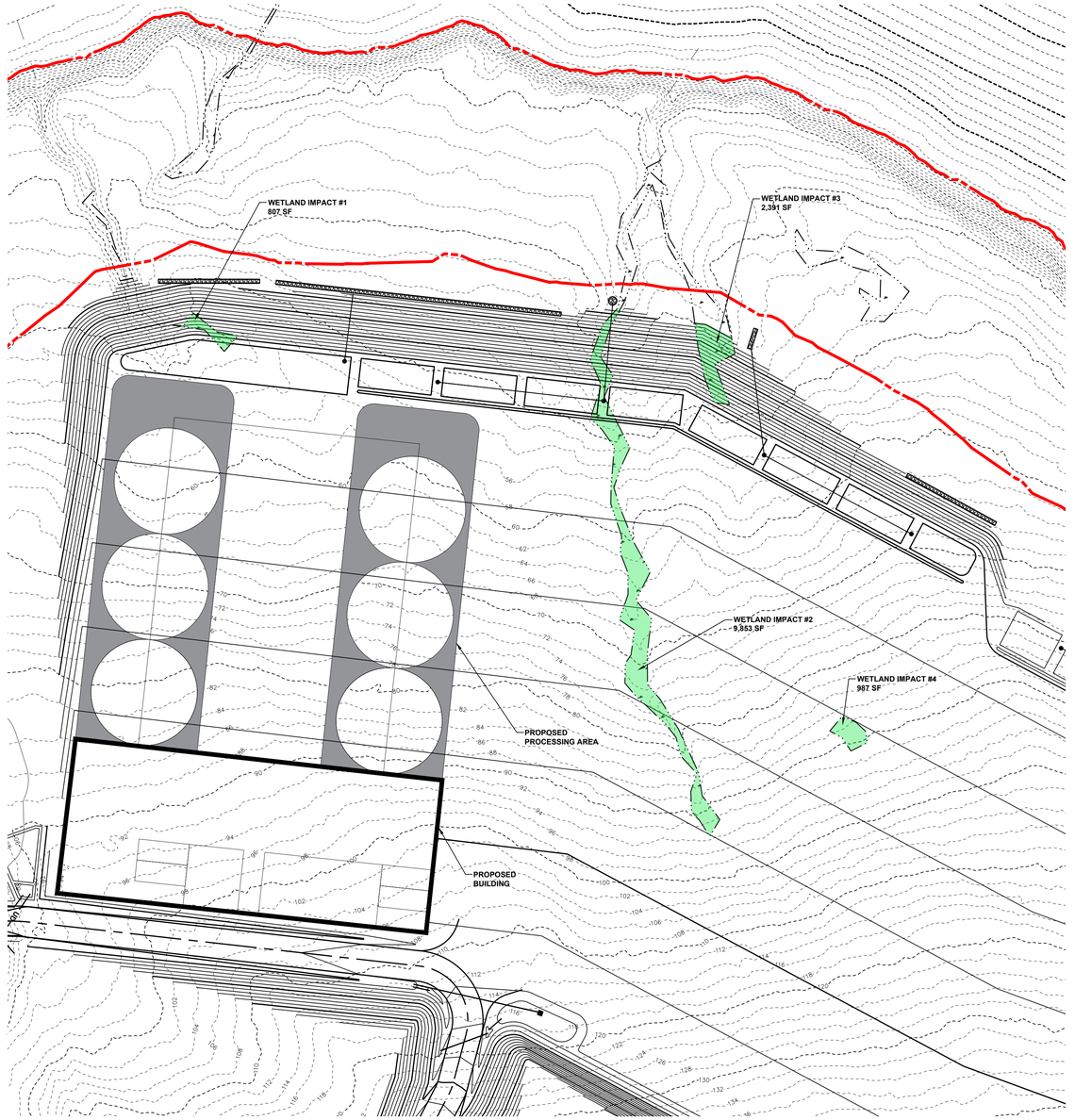
INTERTIDAL DISTURBANCE AREA: 26,660 SF

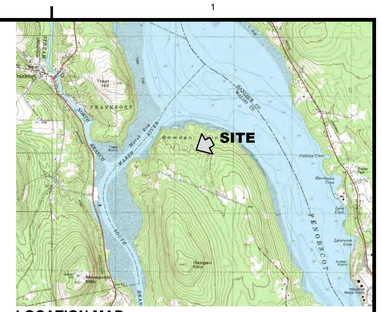
RIVER DISTURBANCE AREA: 22,961 SF

IMPACT:

TOTAL WETLAND IMPACT: 14,038 SF







LOCATION MAP: USGS QUADRANGLE: BUCKSPORT
SCALE: 1"=4000'
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LEGEND:

DESCRIPTION	EXISTING	PROPOSED
PROPERTY LINE		
EDGE OF PAVEMENT		
MAJOR FOOT CONTOUR	100	100
MINOR FOOT CONTOUR	98	98
SILT FENCE		SF

PLAN REFERENCE:

INFORMATION BASED ON LIDAR TOPOGRAPHY FROM MEGIS
SITE AND A NATURAL RESOURCE SURVEY BY CES, INC.

GRAPHIC SCALE

80 0 40 80 160 240

(IN FEET)
1 inch = 80 ft.

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

NOT FOR CONSTRUCTION

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
One Merchants Plaza, Suite 701
Bangor, Maine 04401
207.989.4824
WWW.HALEYWARD.COM

PROJECT

BOWDEN POINT PROPERTIES, LLC
PROSPECT, MAINE

TITLE

PROSPECT QUARRY PROCESSING AREA
PROPOSED IMPACT PLAN

STATE OF MAINE
ALFRED HASKELL III
5146
10/21/2021
LICENSED
PROFESSIONAL ENGINEER

DATE	SCALE
2021.09.28	1"=80'

DRAWN BY	DESIGNED BY	CHECKED BY
WAB	DJO	DSB

PROJECT No. 12617.001

DRAWING No. **C102**

REV.

FILE LOCATION: P:\12617.5\ALWORKS_INC\001-PROSPECT ME QUARRY-ADH\02-CAD_DRAWINGS\CIVIL\DESIGN_DWGS\12617.001-1-C-SP.DWG, 2021.12.20, 7:54 AM