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# NEW BEDFORD MARINE COMMERCE TERMINAL DRAINAGE AND GRADING MAINTENANCE PROJECT MACEC-FY24-01

4 WRIGHT STREET, NEW BEDFORD, MA



SITE LOCUS  
N.T.S.



PROJECT PROPONENT:  
MASSACHUSETTS CLEAN ENERGY  
CENTER  
4 WRIGHT STREET  
NEW BEDFORD, MA

PREPARED BY:  
MCALLISTER MARINE ENGINEERING, LLC  
16 HOXIE AVENUE  
CHARLESTOWN, RI 02813  
WWW.MCALLISTER-ENG.COM

- LIST OF SHEETS:
- 0 COVER
  - EL-1 EXISTING LAYOUT
  - PG-1 PROPOSED DRAINAGE AND GRADING MAINTENANCE
  - PG-2 PROPOSED DRAINAGE AND GRADING MAINTENANCE
  - PG-3 PROPOSED DRAINAGE AND GRADING MAINTENANCE
  - XC-1 PROPOSED GRADING IMPROVEMENTS SECTION AND DETAILS
  - D-1 PROPOSED GRADING IMPROVEMENTS DETAILS



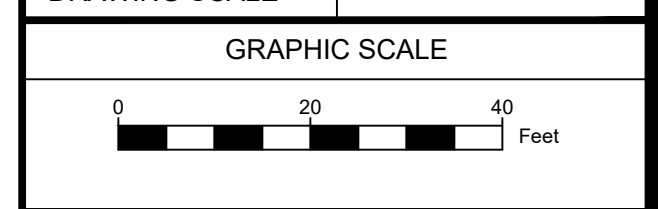
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PROJECT	NEW BEDFORD MARINE COMMERCE TERMINAL DRAINAGE AND GRADING MAINTENANCE MACEC-FY24-01
OWNER	MASSACHUSETTS CLEAN ENERGY CENTER 4 WRIGHT STREET, NEW BEDFORD

NO.	DATE	DESCRIPTION	BY
2	5.21.24	CONST. ENTRANCE	JBM
1	5.17.24	WEST TRENCHES	JBM

PROJECT NO.	GE-NB-24-01
CADD FILE	
DESIGNED BY	JBM
DRAWN BY	JBM
CHECKED BY	
DATE	APR 2024
DRAWING SCALE	

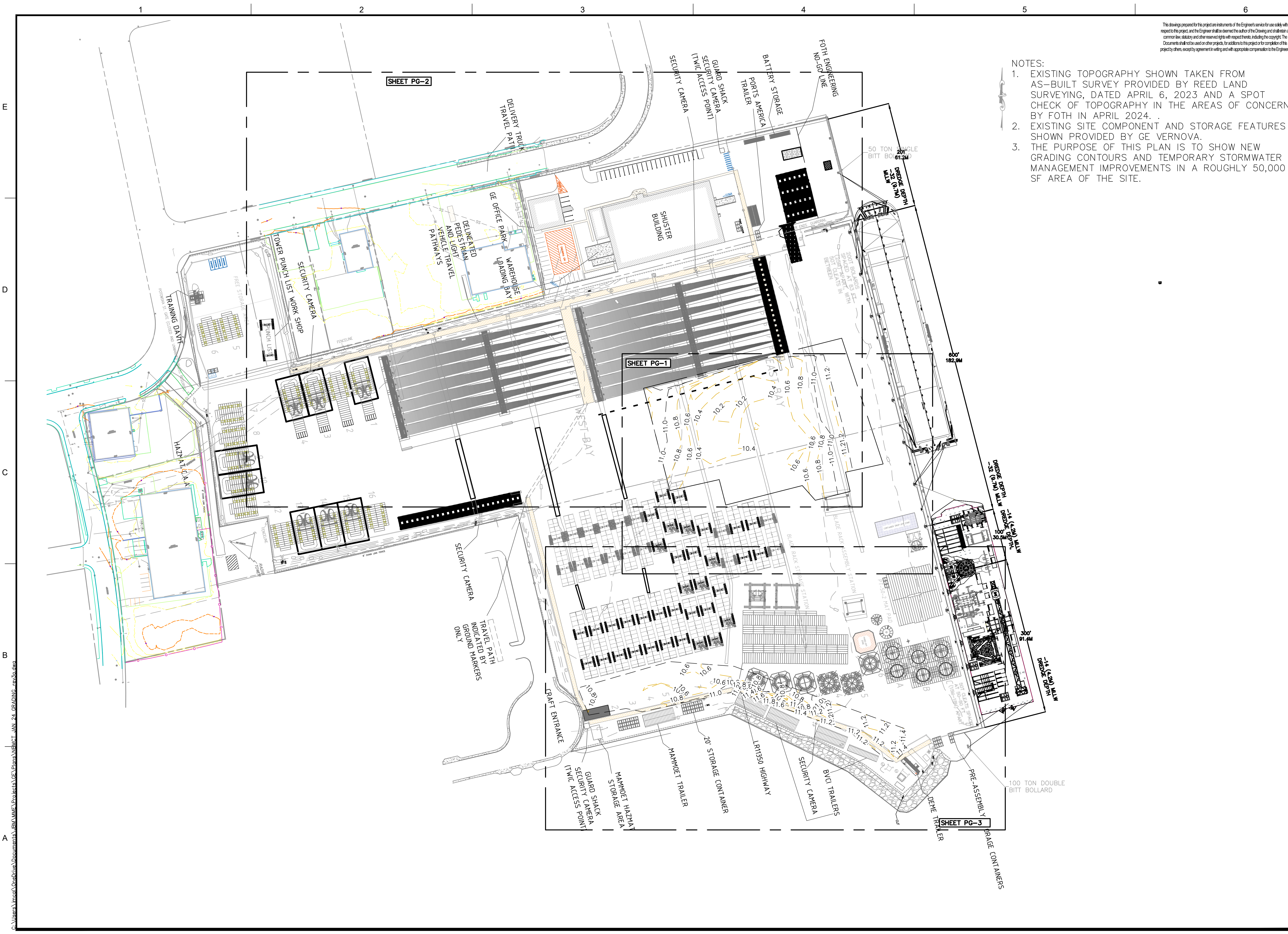


SHEET TITLE  
**PROPOSED DRAINAGE AND GRADING MAINTENANCE**

DRAWING NO.  
**C**

E  
D  
C  
B  
A

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- NOTES:
- EXISTING TOPOGRAPHY SHOWN TAKEN FROM AS-BUILT SURVEY PROVIDED BY REED LAND SURVEYING, DATED APRIL 6, 2023 AND A SPOT CHECK OF TOPOGRAPHY IN THE AREAS OF CONCERN BY FOTH IN APRIL 2024.
  - EXISTING SITE COMPONENT AND STORAGE FEATURES SHOWN PROVIDED BY GE VERNOVA.
  - THE PURPOSE OF THIS PLAN IS TO SHOW NEW GRADING CONTOURS AND TEMPORARY STORMWATER MANAGEMENT IMPROVEMENTS IN A ROUGHLY 50,000 SF AREA OF THE SITE.



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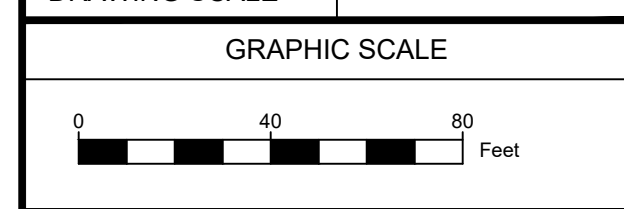


PROJECT  
**NEW BEDFORD MARINE COMMERCE  
 TERMINAL DRAINAGE AND  
 GRADING MAINTENANCE  
 MACEC-FY24-01**

OWNER  
 MASSACHUSETTS  
 CLEAN ENERGY CENTER  
 4 WRIGHT STREET, NEW BEDFORD

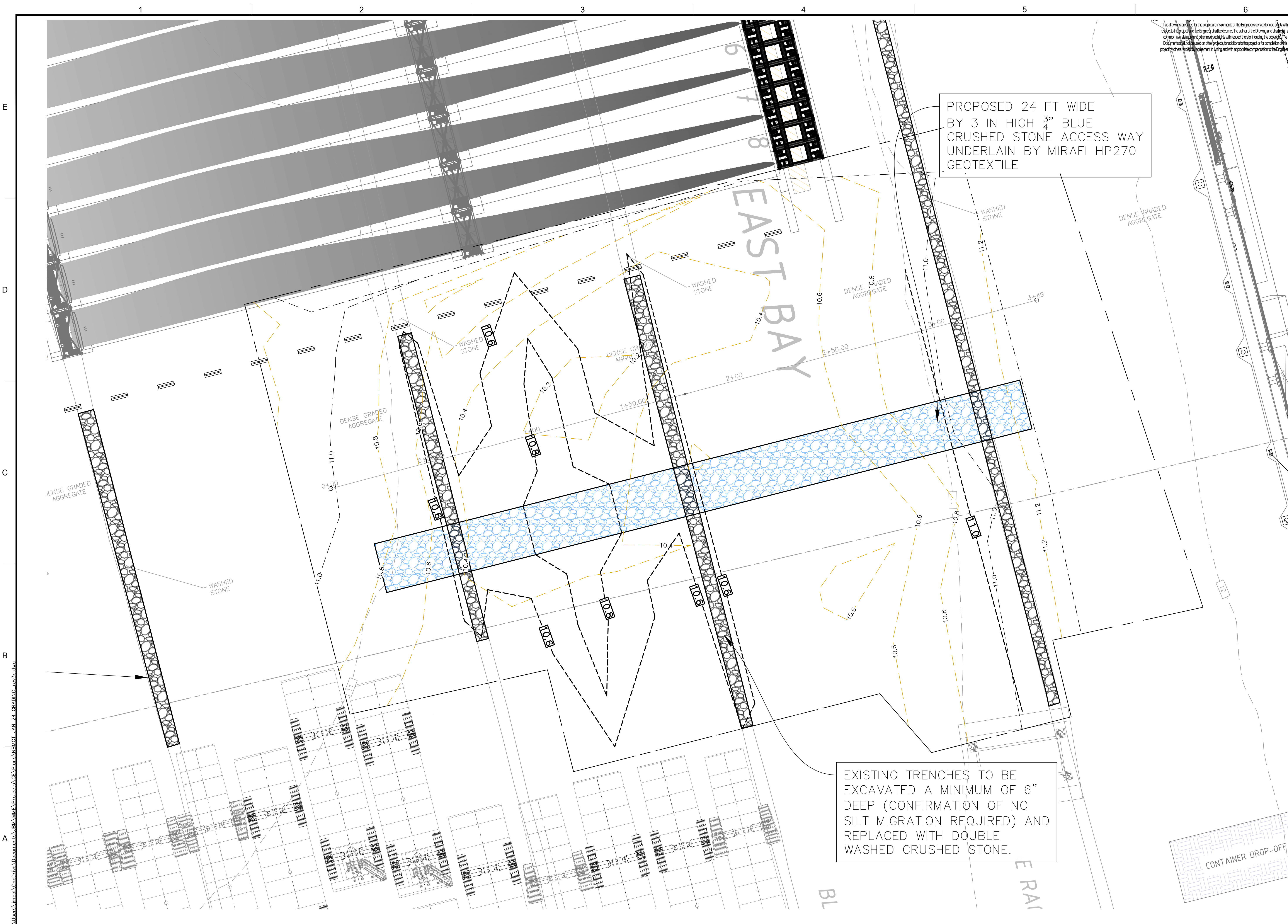
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DRAWING SCALE	



SHEET TITLE  
**PROPOSED  
 GRADING  
 IMPROVEMENTS  
 EXISTING  
 LAYOUT**

DRAWING NO.  
**EL-1**



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**PROJECT**  
 NEW BEDFORD MARINE COMMERCE  
 TERMINAL DRAINAGE AND  
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 MACE-FY24-01

**OWNER**  
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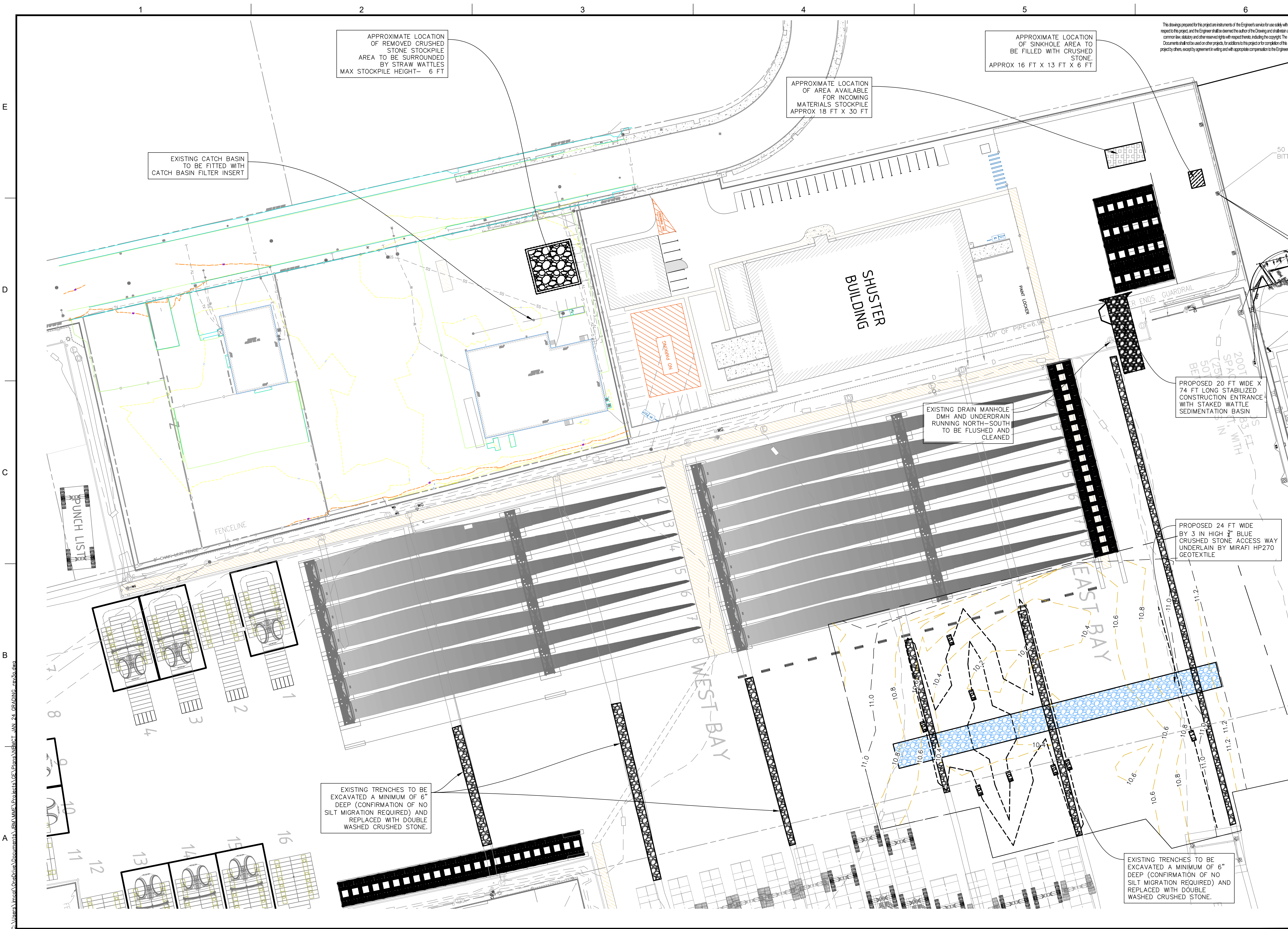
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 CADD FILE  
 DESIGNED BY JBM  
 DRAWN BY JBM  
 CHECKED BY  
 DATE APR 2024  
 DRAWING SCALE



SHEET TITLE  
**PROPOSED  
 DRAINAGE AND  
 GRADING  
 MAINTENANCE**

DRAWING NO.  
**PG-1**

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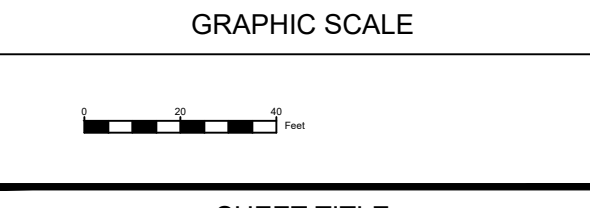
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DRAWN BY JBM

CHECKED BY

DATE APR 2024

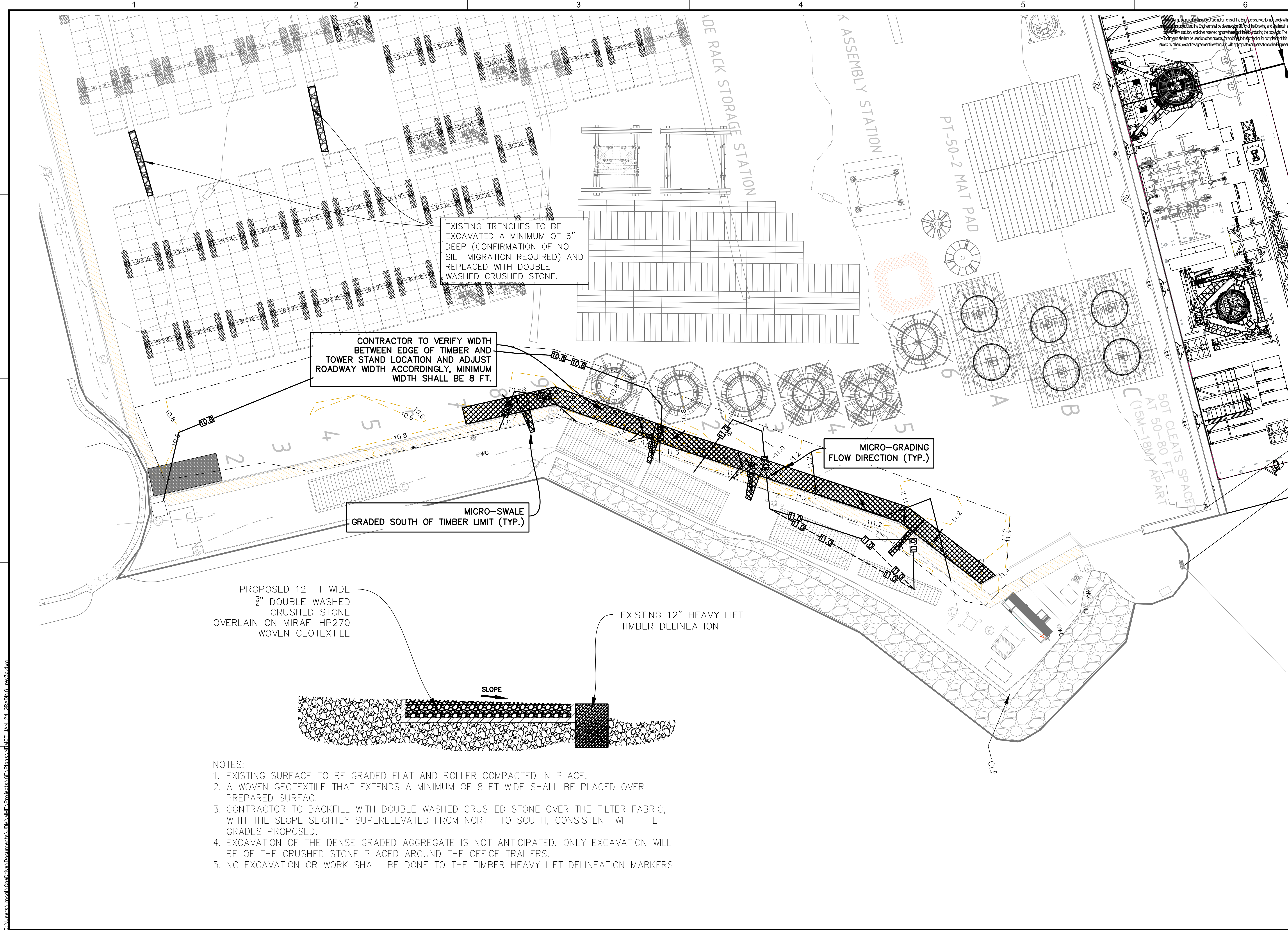
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SHEET TITLE  
**PROPOSED DRAINAGE AND GRADING MAINTENANCE**

DRAWING NO.  
**PG-2**

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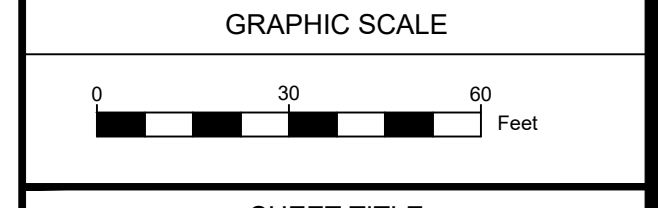


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 MACE-FY24-01

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 DRAWING SCALE



SHEET TITLE

**PROPOSED  
 DRAINAGE AND  
 GRADING  
 MAINTENANCE**

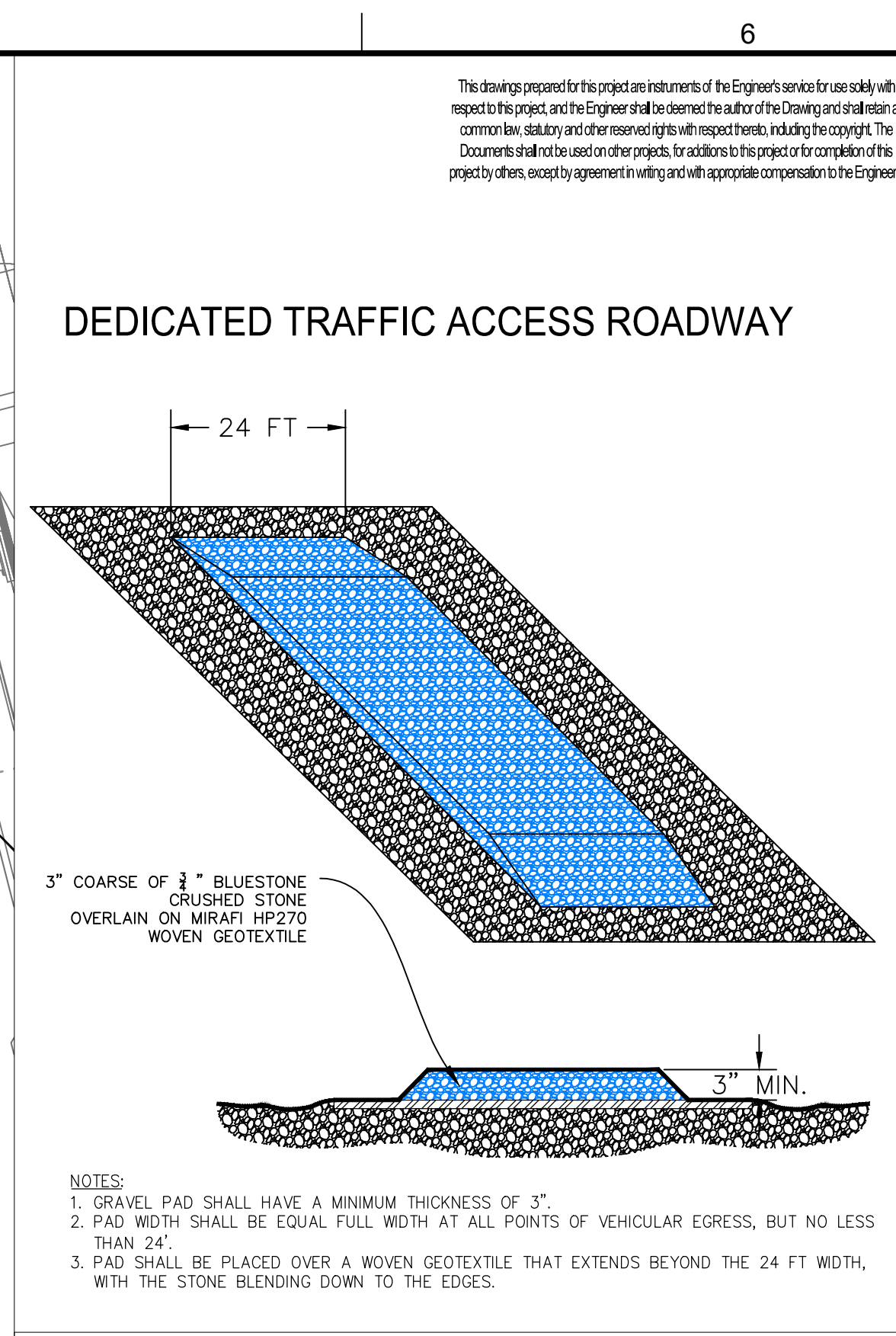
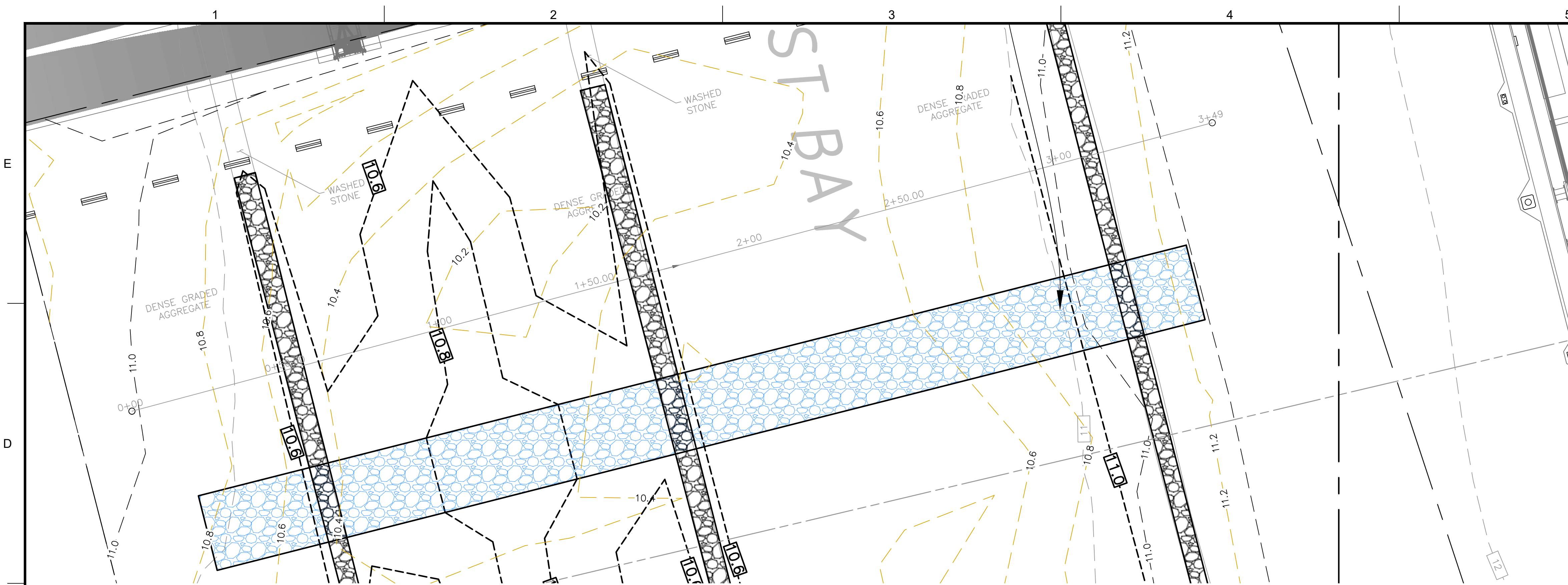
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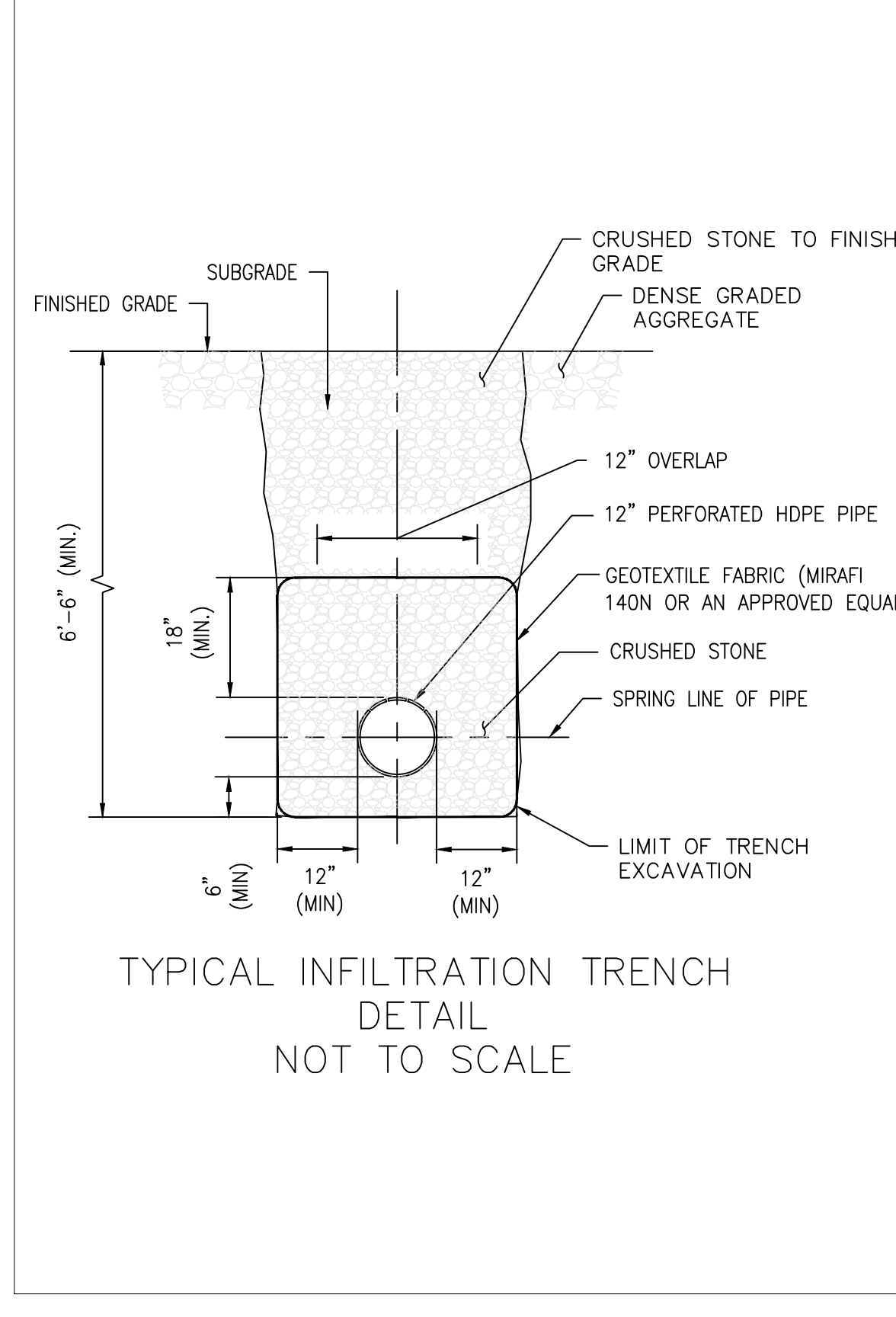
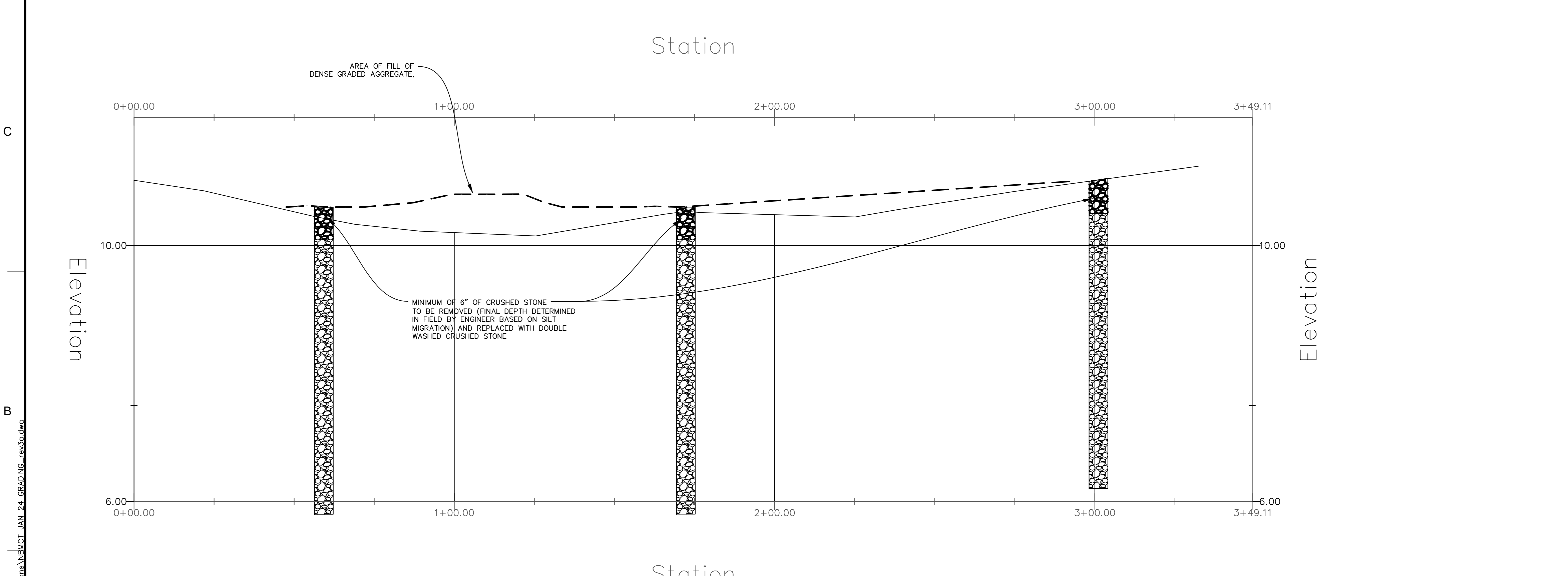
4 OF 6

- NOTES:**
- EXISTING SURFACE TO BE GRADED FLAT AND ROLLER COMPACTED IN PLACE.
  - A WOVEN GEOTEXTILE THAT EXTENDS A MINIMUM OF 8 FT WIDE SHALL BE PLACED OVER PREPARED SURFAC.
  - CONTRACTOR TO BACKFILL WITH DOUBLE WASHED CRUSHED STONE OVER THE FILTER FABRIC, WITH THE SLOPE SLIGHTLY SUPERELEVATED FROM NORTH TO SOUTH, CONSISTENT WITH THE GRADES PROPOSED.
  - EXCAVATION OF THE DENSE GRADED AGGREGATE IS NOT ANTICIPATED, ONLY EXCAVATION WILL BE OF THE CRUSHED STONE PLACED AROUND THE OFFICE TRAILERS.
  - NO EXCAVATION OR WORK SHALL BE DONE TO THE TIMBER HEAVY LIFT DELINEATION MARKERS.

PLOT SCALE 1/16"=1'-0"



- NOTES:
- GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 3".
  - PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 24".
  - PAD SHALL BE PLACED OVER A WOVEN GEOTEXTILE THAT EXTENDS BEYOND THE 24 FT WIDTH, WITH THE STONE BLENDING DOWN TO THE EDGES.



TYPICAL INFILTRATION TRENCH  
DETAIL  
NOT TO SCALE

- EARTHWORK NOTES:
- FILL MATERIAL TO MEET PROPOSED GRADES SHALL BE ACCOMPLISHED THROUGH THE USE OF DENSE GRADED AGGREGATE, MEETING THE MATERIAL SPECIFICATIONS M2.01.7 FROM MASSDOT. THE LARGEST AGGREGATE SIZE SHALL BE 1 1/2 INCHES AND THERE SHALL BE LESS THAN 10% OF MATERIAL PASSING A #200 SIEVE.
  - FILL MATERIAL SHALL BE PLACED IN SIX INCH LIFTS FOR COMPACTION.
  - SURFACE COMPACTION SHALL BE PERFORMED WITH A MINIMUM 10 TON DRUM WEIGHT, USING VIBRATORY COMPACTION, WITH A MINIMUM OF 10 PASSES. MATERIAL TO BE COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY PER ASTM D1557, MODIFIED PROCTOR.
  - CRUSHED STONE SHALL BE DOUBLE WASHED 1 1/2" MINUS, WITH NOT MORE THAN 1% MATERIAL PASSING A #200 SIEVE.
  - WORK AREA SHALL BE DRY AND FREE OF FROST PRIOR TO COMMENCING FILLING ACTIVITIES. CONTRACTOR SHALL SCARIFY THE EXISTING SURFACE PRIOR TO ADDING DGA FILL.
  - CONTRACTOR TO COORDINATE WITH GE VERNOVA AND MASSCEC ON THE ULTIMATE DISPOSAL LOCATION OF THE CRUSHED STONE EXCAVATED FROM THE INFILTRATION TRENCHES, CURRENTLY ANTICIPATED TO BE FIRST WITHIN THE SINKHOLE AT THE SHUSTER BULKHEAD AND THEN STOCKPILED ON 18 WRIGHT STREET, AS SHOWN ON SHEET PG-2.

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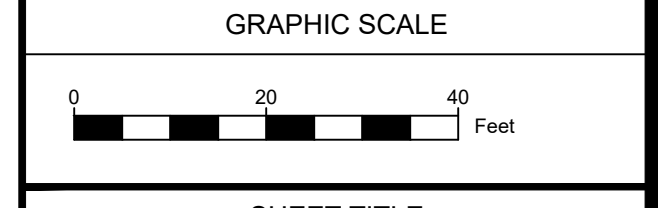


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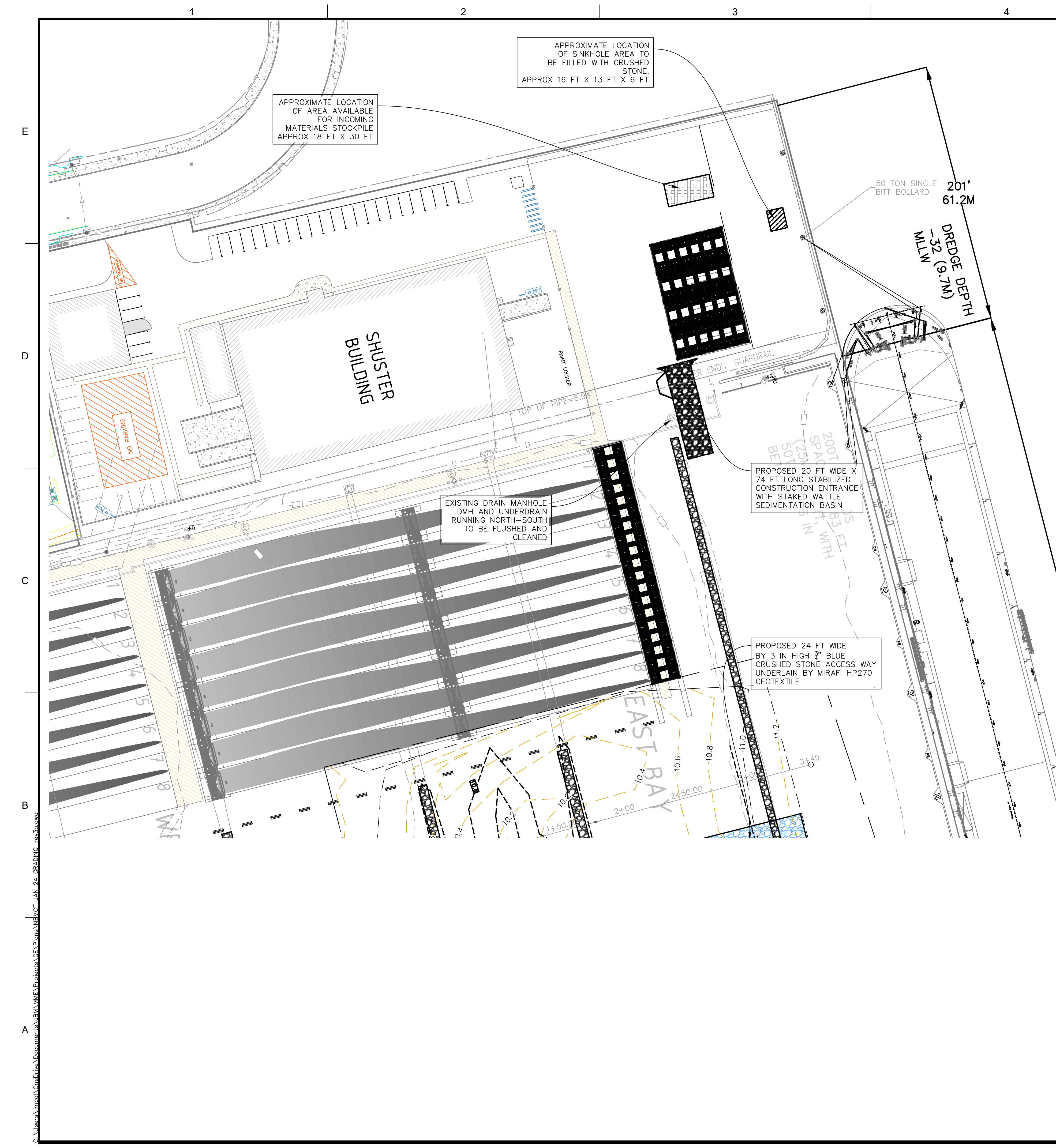
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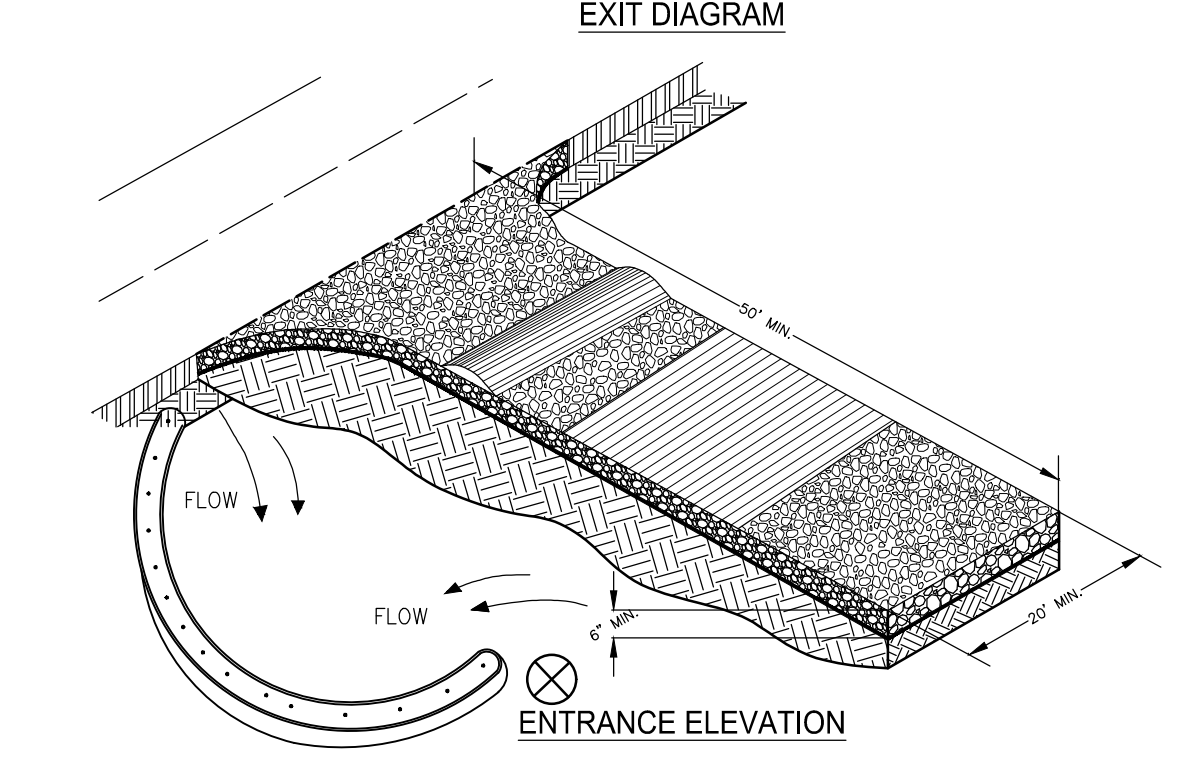


SHEET TITLE  
**PROPOSED  
GRADING  
IMPROVEMENTS  
SECTION AND  
DETAILS**

DRAWING NO.  
**XC-1**



**CRUSHED STONE CONSTRUCTION EXIT**



- NOTES:
1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
  2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
  3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).
  4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6".
  5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.
  6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%.
  7. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.
  8. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE).
  9. WASHRACKS AND/OR THE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL SUITABLE FOR TRUCK TRAFFIC THAT REMOVE MUD AND DIRT.
  10. MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

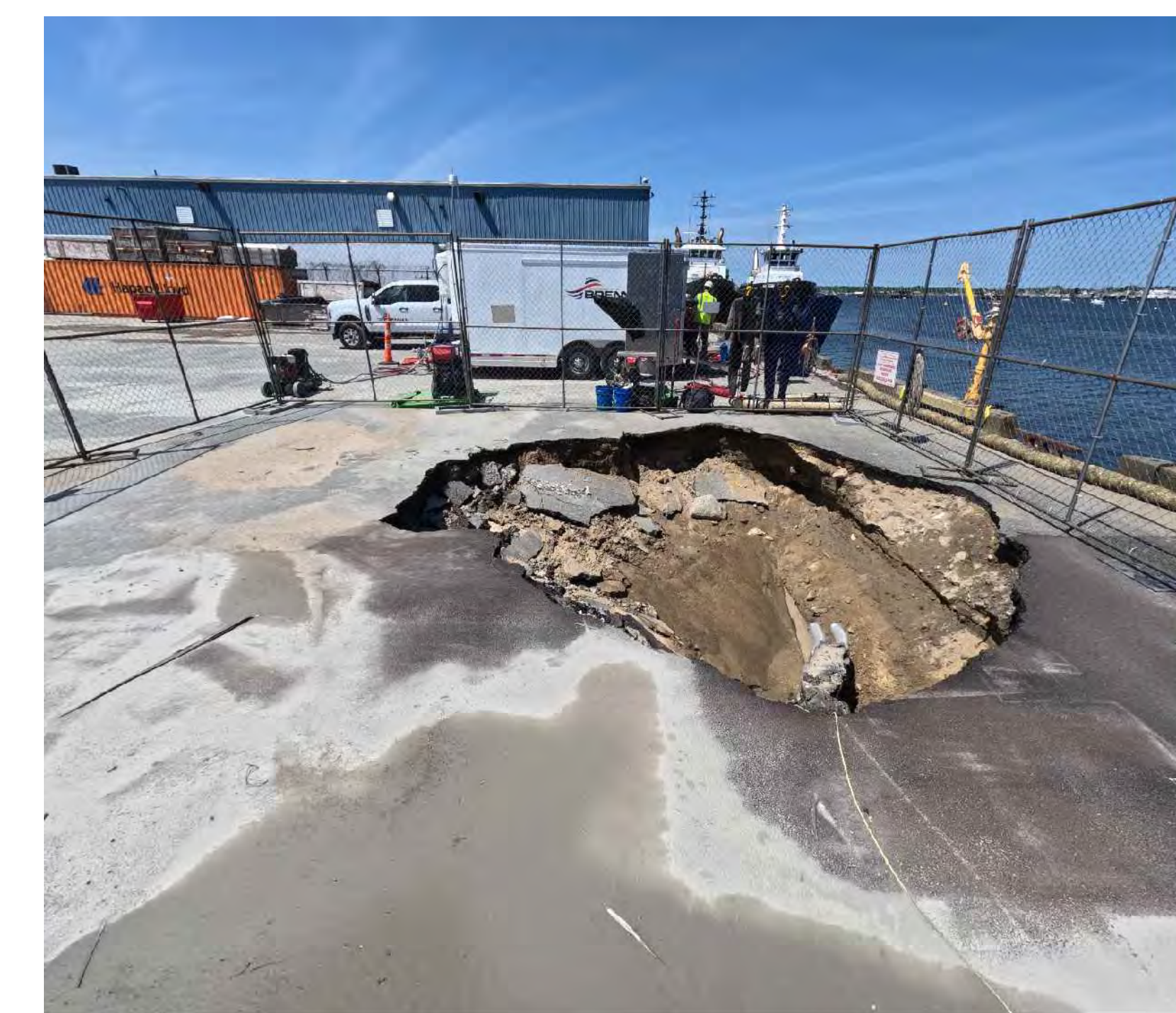


PHOTO OF SINKHOLE AREA TO BE FILLED AS OF 5/21/24



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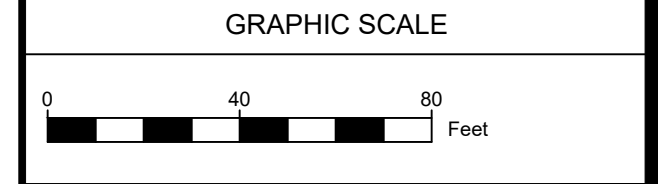


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