

**LEGEND**

- WICK DRAIN/PRE-CONSOLIDATION PHASE 1A AREA
- WICK DRAIN/PRE-CONSOLIDATION PHASE 1B AREA
- SETTLEMENT PLATE
- VIBRATING WIRE PIEZOMETER
- INCLINOMETER

**INCLINOMETER POINTS**

POINT #	NORTHING	EASTING
IM-01	410451.01	1352038.44
IM-02	410812.30	1352421.14
IM-03	409985.88	1351944.79

**SETTLEMENT PLATE POINTS**

POINT #	NORTHING	EASTING
SP-1A-1	410454.39	1352164.17
SP-1A-2	409902.65	1352078.82
SP-1B-1	410775.11	1352370.11
SP-1B-2	410690.60	1352211.10

**VIBRATING WIRE PIEZOMETER POINTS**

POINT #	NORTHING	EASTING
VWP-1A-1	410623.94	1352361.49
VWP-1A-2	410473.00	1352195.92
VWP-1A-3	409877.06	1352100.03
VWP-1A-4	409998.08	1351993.03
VWP-1B-1	410789.91	1352392.68
VWP-1B-2	410710.53	1352225.22
VWP-1B-3	410543.81	1352122.06

**WICK DRAINS AND SURCHARGE LIMITS**

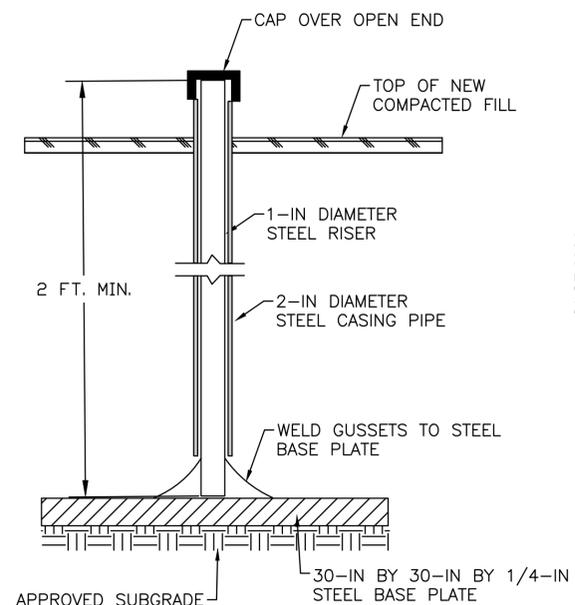
STRUCTURE	SURCHARGE HEIGHT (FT)	ESTIMATED SETTLEMENT (IN)	WICK DRAINS		COMMENTS
			SPACING (FT)	TIP ELEVATION (FT)	
CENTRAL TAXIWAY FILL AREA	FINAL GRADE + 5	13	4	195	APPROXIMATELY 3-4 MONTHS WAITING PERIOD IS REQUIRED AFTER THE SURCHARGE IS PLACED
SOUTHWEST TAXIWAY FILL AREA	FINAL GRADE + 5	21	4	190	APPROXIMATELY 3-4 MONTHS WAITING PERIOD IS REQUIRED AFTER THE SURCHARGE IS PLACED

**NOTES:**

1. MINIMUM 125 PCF MOIST UNIT WEIGHT MATERIAL MUST BE USED AS SURCHARGE FILL.
2. PREFABRICATED WICK DRAINS WITH WIDTH = 0.33 FT, THICKNESS 0.01, PLACED IN TRIANGULAR PATTERN.
3. THE REQUIRED WAITING PERIOD IS MEASURED FROM THE COMPLETION OF SURCHARGE PLACEMENT. SURCHARGE MUST REMAIN IN PLACE FOR THE DURATION OF THE SPECIFIED WAITING PERIOD.
4. SURCHARGE AND WICK DRAINS ARE REQUIRED WITHIN FILL AREAS TO MAINTAIN THE POST-CONSTRUCTION SETTLEMENTS LESS THAN 1-INCH. POST-CONSTRUCTION SETTLEMENTS ARE ESTIMATED TO OCCUR BETWEEN THE END OF THE SPECIFIED WAITING PERIOD AND 100 YEARS.
5. SURCHARGE MATERIAL MUST NOT BE REMOVED UNTIL APPROVAL FROM GEOTECHNICAL ENGINEER IS PROVIDED.
6. REFER TO SHEETS CG-121 TO CG-123 FOR GRADING PLAN.

**GEOTECHNICAL NOTES:**

1. THE SETTLEMENT PLATE SHOULD BE PLACED ON THE SUBGRADE, AND THE BASELINE ELEVATION OF THE PLATE AND THE RISER SHOULD BE RECORDED BEFORE FILL PLACEMENT. AT LEAST TWO SETS OF READINGS SHOULD BE TAKEN TO ESTABLISH THE BASELINE ELEVATIONS.
2. THE RISER AND CASING SHOULD BE EXTENDED TO REMAIN ABOVE THE FILL SURFACE. THE ELEVATION OF THE RISER SHOULD BE RECORDED IMMEDIATELY BEFORE AND AFTER ATTACHING AN EXTENSION. THE ELEVATION ON THE RISER SHOULD BE RECORDED DAILY DURING FILL PLACEMENT AND TWICE PER WEEK AFTER COMPLETION OF THE FILL, UNTIL SETTLEMENT HAS CEASED, OR THE FREQUENCY OF MONITORING REVISED BY THE GEOTECHNICAL ENGINEER.
3. VIBRATING WIRE PIEZOMETERS SHOULD BE INSTALLED AND MADE FUNCTIONAL NOT LESS THAN ONE WEEK BEFORE THE INSTALLATION OF WICK DRAINS. PROVIDE VIBRATING WIRE PIEZOMETERS AS MANUFACTURED BY ROCTEST, INC., GEOKON, INC., GEONOR INC., OR ACCEPTABLE EQUIVALENT. EACH ARRAY SHOULD HAVE A MINIMUM OF THREE PRESSURE SENSORS. FILTER SAND CONFORMING TO ASTM C778, STANDARD SPECIFICATION FOR STANDARD SAND, SHOULD BE USED. BENTONITE DRILLING MUD SHOULD NOT BE USED FOR INSTALLING THE VIBRATING WIRE PIEZOMETERS. AFTER COMPLETION OF INSTALLATION, THE AS-BUILT SURVEY COORDINATES FOR HORIZONTAL POSITION SHOULD BE DETERMINED TO AN ACCURACY OF +/- 0.01 FOOT. A BASELINE READING SHOULD BE ESTABLISHED BASED ON AN AVERAGE OF THREE STABLE READINGS.
4. READINGS FROM VIBRATING WIRE PIEZOMETERS SHOULD BE RECORDED A MINIMUM OF FOUR TIMES PER DAY. ONCE SETTLEMENT CURVES PLATEAU AND GROUNDWATER LEVELS STABILIZE, READING FREQUENCIES ON APPROPRIATE INSTRUMENTATION MAY BE MODIFIED OR STOPPED BASED ON AGREEMENT WITH NAVFAC AND THE GEOTECHNICAL ENGINEER.
5. THREE INCLINOMETERS SHOULD BE INSTALLED AND MADE FUNCTIONAL NOT LESS THAN ONE WEEK BEFORE THE INSTALLATION OF WICK DRAINS. A BASELINE READING SHOULD BE ESTABLISHED BASED ON AN AVERAGE OF THREE STABLE READINGS. READINGS FROM INCLINOMETERS SHOULD BE RECORDED A TWICE PER WEEK DURING EMBANKMENT FILL PLACEMENT, ONCE PER WEEK DURING SURCHARGE PERIOD. BEWEEKLY AFTER THAT DURING THE CONSTRUCTION TILL THE END OF CONSTRUCTION.

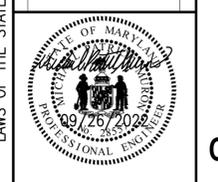


**SETTLEMENT PLATE DETAIL**



PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 53990, EXPIRATION DATE: 02-24-2023.

SYMBOL	DESCRIPTION	DATE	APPROVED
0	ISSUE FOR CONSTRUCTION	09/26/2022	
1	AMENDMENT 0004	04/01/2023	



WileyWilson | BURNS & MCDONNELL  
JOINT VENTURE

APPROVED	DATE
FOR COMMANDER NAVFAC	
ACTIVITY	
SATISFACTORY TO DATE	
DES	DRW
CHK	
BRANCH MANAGER	
CHIEF ENGINEER	
FIRE PROTECTION	

21-SF-0064  
 NAVAL FACILITIES ENGINEERING COMMAND  
 WASHINGTON DC  
 NAVAL FACILITIES ENGINEERING COMMAND - WASHINGTON  
 WASHINGTON DC  
 JOINT BASE ANDREWS NAVAL AIR FACILITY  
 CAMP SPRINGS, MD  
 P-3002 RELOCATE HAZARDOUS CARGO  
 PAD AND EOD PROFICIENCY RANGE  
 GEOTECHNICAL SITE PREPARATION PLAN

SCALE: AS NOTED  
 EPROJCT NO.: 1396650  
 CONSTR. CONTR. NO.: N40080-22-R-8580  
 NAVFAC DRAWING NO.: 13140401  
 SHEET 131 OF 229  
**CG-403**  
 DRAWING REVISION: 06 APRIL 2017