



# PUBLIC NOTICE

US Army Corps  
of Engineers  
New York District  
Jacob K. Javits Federal Building  
New York, N.Y. 10278-0090  
ATTN: Regulatory Branch

**In replying refer to:**  
Public Notice Number: **NAN-2016-01325-WCA**  
Issue Date: **October 25, 2016**  
Expiration Date: **November 23, 2016**

## To Whom It May Concern:

The New York District, Corps of Engineers has received an application for a Department of the Army permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403), and Section 404 of the Clean Water Act (33 U.S.C. 1344).

**APPLICANT:** Port Authority of New York and New Jersey  
4 World Trade Center  
150 Greenwich Street, 20<sup>th</sup> Floor  
New York, New York 10007

**ACTIVITY:** Discharge fill material into waters of the United States to facilitate the construction and installation of a new airport taxiway and associated gravel access road, and the removal of an existing airport taxiway.

**WATERWAY:** East Riser Ditch (Hackensack River Watershed)

**LOCATION:** Borough of Teterboro, Bergen County, New Jersey.

A detailed description and plans of the applicant's activity are enclosed to assist in your review.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

**ALL COMMENTS REGARDING THE PERMIT APPLICATION MUST BE PREPARED IN WRITING AND MAILED TO REACH THIS OFFICE BEFORE THE EXPIRATION DATE OF THIS NOTICE,** otherwise, it will be presumed that there are no objections to the activity.

**CENAN-OP-RW  
PUBLIC NOTICE NO. NAN-2016-01325-WCA**

Comments submitted in response to this notice will be fully considered during the public interest review for this permit application. Comments provided will become part of the public record for this permit application. All written comments, including contact information, will be made a part of the administrative record, available to the public under the Freedom of Information Act. The Administrative Record, or portions thereof, may also be posted on a Corps of Engineers internet web site. Due to resource limitations, this office will normally not acknowledge the receipt of comments or respond to individual letters of comment.

Any person may request, in writing, before this public notice expires, that a public hearing be held to collect information necessary to consider this application. Requests for public hearings shall state, with particularity, the reasons why a public hearing should be held. It should be noted that information submitted by mail is considered just as carefully in the permit decision process and bears the same weight as that furnished at a public hearing.

Our preliminary determination is that the activity for which authorization is sought herein is not likely to affect any Federally endangered or threatened species or their critical habitat. However, pursuant to Section 7 of the Endangered Species Act (16 U.S.C. 1531), the District Engineer is consulting with the appropriate Federal agency to determine the presence of and potential impacts to listed species in the project area or their critical habitat.

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act (Public Law 104-267), requires all Federal agencies to consult with the National Oceanic and Atmospheric Administration Fisheries Service (NOAA/FS) on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). It appears that the proposed activities within the project area would not impact EFH for any of the aquatic species or their life stages. Further consultation with NOAA-FS regarding EFH impacts and conservation recommendations is being conducted and will be concluded prior to a final decision on the permit modification.

Based upon a review of the latest published version of the National Register of Historic Places, there are no known sites eligible for, or included in, the Register within the permit area. Presently unknown archeological, scientific, prehistorical, or historical data may be lost by work accomplished under the required permit.

Reviews of activities pursuant to Section 404 of the Clean Water Act will include application of the guidelines promulgated by the Administrator, U.S. Environmental Protection Agency, under authority of Section 404 (b) of the Clean Water Act and the applicant will obtain a water quality certificate or waiver from the appropriate state agency in accordance with Section 401 of the Clean Water Act prior to a permit decision.

Pursuant to Section 307 (c) of the Coastal Zone Management Act of 1972 as amended [16 U.S.C. 1456 (c)], for activities under consideration that are located within the coastal zone of a state which has a federally approved coastal zone management program, the applicant has certified in the permit application that the activity complies with, and will be conducted in a manner that is consistent with, the approved state coastal zone management program. By this public notice, we are requesting the state's concurrence with, objection to, or waiver of the applicant's certification. No permit decision will be made until one of these actions occurs. For activities within the coastal zone of New Jersey State, the applicant's certification and accompanying information is available from the New Jersey Department of Environmental Protection, Coastal Management Program, P.O. Box 418, 401 E. State Street, Trenton, NJ, 08625, Telephone (609) 633-2201. Comments regarding the applicant's certification, and copies of any letters to this office commenting upon this proposal, should be so addressed.

**CENAN-OP-RW  
PUBLIC NOTICE NO. NAN-2016-01325-WCA**

In addition to any required water quality certificate and coastal zone management program concurrence, the applicant has obtained or requested the following governmental authorization for the activity under consideration:

- (New Jersey Department of Environmental Protection Flood Hazard Individual Permit)

It is requested that you communicate the foregoing information concerning the activity to any persons known by you to be interested and who did not receive a copy of this notice. If you have any questions concerning this application, you may contact this office at (917) 790-8412 and ask for Jim Cannon.

In order for us to better serve you, please complete our Customer Service Survey located at <http://www.nan.usace.army.mil/Missions/Regulatory/CustomerSurvey.aspx>.

For more information on New York District Corps of Engineers programs, visit our website at <http://www.nan.usace.army.mil>.

  
**For and In behalf of**  
Stephan A. Ryba  
Chief, Regulatory Branch

Enclosures

### WORK DESCRIPTION

The applicant, the Port Authority of New York and New Jersey, has requested Department of the Army authorization to discharge fill material into waters of the United States to facilitate the construction and installation of a new aircraft taxiway ("V") and an associated gravel access road within the Teterboro Airport. Additional activities would include the removal of the existing aircraft taxiway ("B"), which would be replaced by the proposed new taxiway. The project site is situated within the Teterboro Airport, in the Borough of Teterboro, Bergen County, New Jersey.

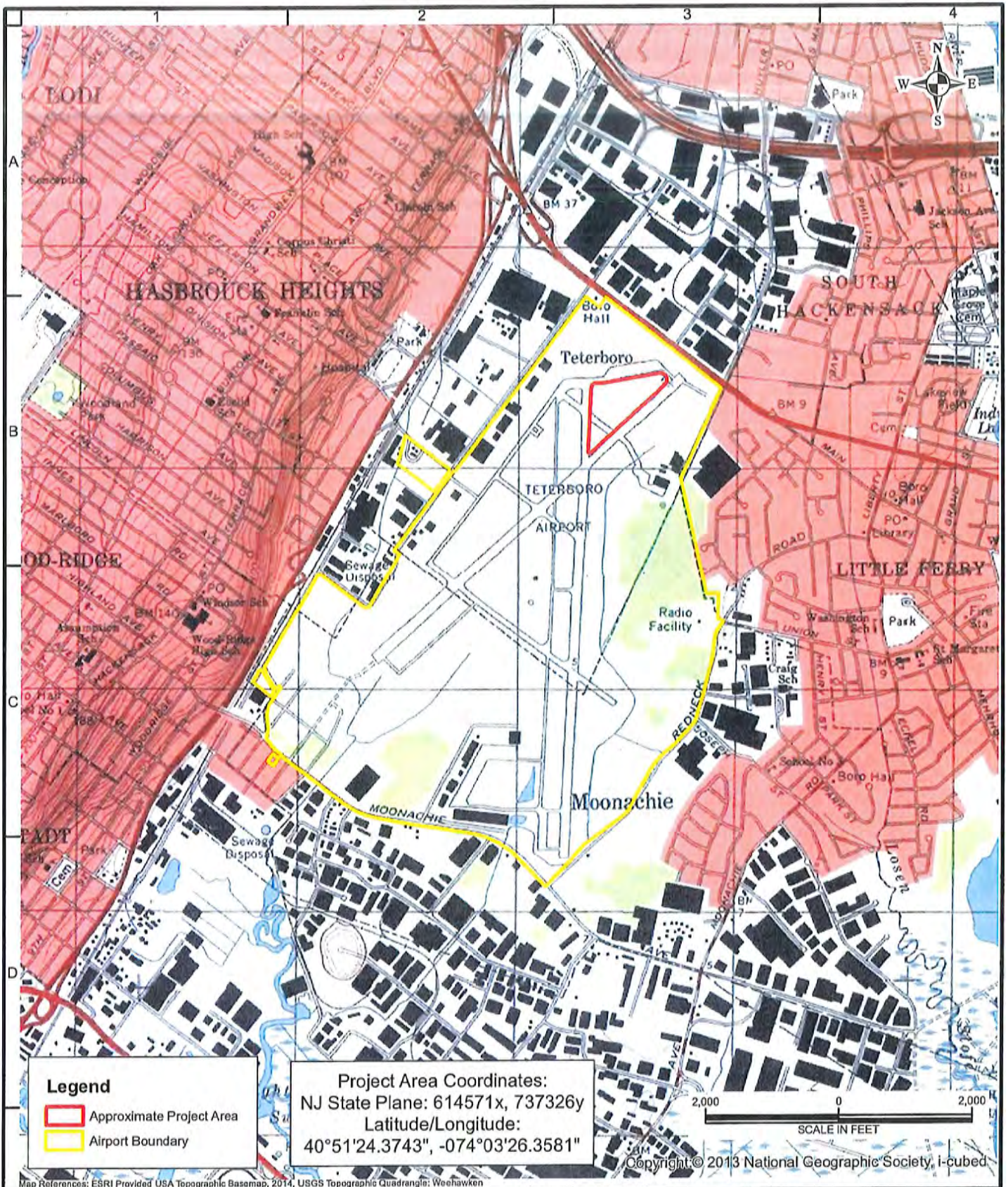
New Aircraft Taxiway "V" and Associated Gravel Access Road: The applicant proposes to discharge approximately 1,000 cubic yards of fill material into approximately 3.28 acres of waters of the United States to facilitate the construction and installation of a new 700-foot long by 60-foot wide paved aircraft taxiway known as Taxiway "V", and an associated at-grade 600-foot long by 12-foot wide gravel access road, which would extend to an existing wind sock station currently situated adjacent to the new taxiway alignment. The new Taxiway "V" alignment would be graded to elevation of 6.0 feet and would be approximately 2.5 feet higher than the surrounding grade. The design and grade of the proposed new taxiway would be in accordance with the Federal Aviation Administration (FAA) regulations. For the purposes of storm water management, a 450-foot long by 3.5-foot wide rock riprap open storm water swale would be installed on each side of the new taxiway and would discharge to the existing on-site storm water management system. No temporary wetland impacts are anticipated as part of the taxiway and access road installation activities. The wetlands impacted by the proposed new taxiway and access road installation activities consist of palustrine emergent grasses and sedges that are mowed and maintained as part of the ongoing airport operations.

Removal of Existing Aircraft Taxiway "B": The applicant proposes to remove the existing 440-foot long by 50-foot wide paved aircraft taxiway known as Taxiway "B". Once the taxiway is removed, the area would be regraded, and seeded with non-bird-attractant vegetative grass species. All materials associated with the removal of Taxiway "B" would be disposed of at a state approved upland site.

To compensate for the 3.28 acres of permanent impacts to waters of the United States associated with the proposed project, the applicant proposes to purchase 3.28 mitigation credits from a federally approved wetland mitigation bank located within the Hackensack Meadowlands District.

The applicant's stated purpose of the project is to eliminate a "double hold short" condition that currently exists on the existing Taxiway "B", and which was identified by the Federal Aviation Administration. A "double hold short" condition occurs when an aircraft has to taxi from one runway to another. This condition presents an aircraft circulation hardship, and a runway safety hazard. Construction of the new taxiway would provide direct access from Runway 6-24 to existing Taxiway "A" without crossing into Runway 1-19. Direct access from the runway to the Taxiway "A" would alleviate safety concerns and improve aircraft circulation.

The applicant has stated that the preferred alternative, as described above, was designed to avoid and minimize impacts to waters of the United States while still achieving the project purpose and compliance with the Federal Aviation Administration taxiway and safety area construction regulations.



**LANGAN**  
 300 Kimball Drive  
 Parsippany, NJ 07054  
 T: 973.560.4900 F: 973.560.4801 www.langan.com

Langan Engineering & Environmental Services, Inc.  
 Langan Engineering, Environmental, Surveying and  
 Landscape Architecture, D.P.C.  
 Langan International LLC  
 Collectively known as Langan

NJ CERTIFICATE OF AUTHORIZATION No. 24GA2796400

Project **REMOVAL OF TAXIWAY B AND INSTALLATION OF NEW TAXIWAY V**  
 PORTION OF BLOCK 203 LOT 1  
 BOROUGH OF TETERBORO  
 BERGEN COUNTY NEW JERSEY

Drawing Title  
**USGS SITE LOCATION MAP**

Project No. 170369701  
 Date 06/26/2015  
 Scale 1"=2,000'  
 Drawn By ARL

Figure 1

**LEGEND (FOR CIVIL DRAWINGS ONLY)**

EXISTING	REMOVAL	NEW	DESCRIPTION
			TARWAY PAVEMENT
			GRADE, SHAPE, ADD 2" DEPTH COMPOST, SEED AND APPLY HIGH PERFORMANCE FLEXIBLE GROWTH MEDIUM
			TYPE I PAVEMENT
			OVERLAY TO FINISHED GRADE WITH ASPHALT CONCRETE, MIX 3 (PG 76-22)
			RP-RAP SHALE (42" WIDE)
			REMOVE EXISTING ASPHALT PAVEMENT TO DOABC
			MILL EXISTING ASPHALT CONCRETE TO 3" BELOW EXISTING GRADE
			DRAINAGE MANHOLE
			CATCH BASIN
			DRAINAGE PIPE
			FLOW DIRECTION
			ADJUST EXISTING MH
			ELECTRICAL LINE
			COMMUNICATIONS LINE
			CONTOURS
			TARWAY SIGNS
			ELECTRICAL LIGHTS
			ELECTRICAL/COMMUNICATIONS MANHOLE
			CURVE NUMBER DESIGNATION
			SECTION DENOTES SECTION SECTION NUMBER INDICATES DWG. NUMBER ON WHICH SECTION IS SHOWN

**NOTES:(FOR CIVIL DRAWINGS ONLY)**

1. AT THE PRE-CONSTRUCTION MEETING, SUBMIT DETAILS OF THE PAVING EQUIPMENT TO BE USED TO THE ENGINEER FOR APPROVAL. THE SUBMISSION SHALL INCLUDE THE MANUFACTURER, MODEL NUMBER & YEAR OF MANUFACTURE OF PAYER AND COMPACTION EQUIPMENT, AS WELL AS THE TYPE & MODEL NUMBER OF AUTOMATIC GRADE CONTROL EQUIPMENT.
2. MATERIAL TRANSFER VEHICLES SHALL BE USED TO FEED ASPHALT CONCRETE INTO EACH PAVING MACHINE WHEN PAVING TARWAY PAVEMENT. THE MATERIAL TRANSFER VEHICLE SHALL BE EQUIPPED WITH AUGERS WHICH BENEATH THE ASPHALT CONCRETE.
3. PRIOR TO STARTING ANY PAVING OR MILLING OPERATIONS, SUPPLY A STAINDY PAPER, ROLLER, MILLING MACHINE, MECHANICAL SWEEPERS AND VACUUM BROOM. IN ADDITION, DURING PAVING OR MILLING OPERATIONS, PROVIDE EQUIPMENT CAPABLE OF REMOVING DISABLED PAVING OR MILLING EQUIPMENT FROM THE AREA OF WORK.
4. PAVE THE CENTER 60 FEET OF THE TARWAY USING TWO PAVERS OPERATING IN ECHOLON WITH EACH SETUP FOR A 12.5 FOOT MINIMUM WIDTH.
5. CORING FOR LIGHT EXTENSIONS WILL NOT BE PERMITTED UNTIL 24 HOURS AFTER COMPLETION OF ASPHALT PAVING.
6. ON PAVED SURFACES, SET THE TOP ELEVATION OF ALL CASTINGS, EXCEPT CATCH BASIN CASTINGS, FLUSH WITH FINISHED GRADE. IN UNPAVED AREAS, SET CASTINGS, EXCEPT CATCH BASIN CASTINGS, 2" ABOVE FINISHED GRADE.
7. UNLESS OTHERWISE SHOWN, ALL CONCRETE SHALL CATEGORY VI HAVE A 28-DAY DESIGN COMPRESSIVE STRENGTH OF 4000 PSI.
8. CIVIL CONTRACT DRAWINGS SHOW EXISTING ELECTRICAL LIGHTS, SIGNS, EDGE LIGHT BOX, ELECTRICAL MANHOLES, ELECTRICAL MANHOLES AND ELECTRICAL BOXES. FOR ADJUSTMENT, REMOVAL AND REPLACEMENT WORK, LOCATION AND QUANTITIES OF ELECTRICAL EQUIPMENT, SEE ELECTRICAL DRAWINGS.

**ABBREVIATIONS (FOR CIVIL DRAWINGS ONLY)**

A.B.C.	AGGREGATE BASE COURSE	PAV'T.	PAVEMENT
A.C.	ASPHALT CONCRETE	PC	POINT OF CURVATURE
APPROX.	APPROXIMATELY	PCO	PORTLAND CEMENT CONCRETE
B	BASILINE	POL	PROFILE GUIDE LINE
BUILDG.	BUILDING	PI	POINT OF INTERSECTION
BP	BEGIN BASELINE	P.M.M.	PLANT MIX MACADAM
CB	CATCH BASIN	PSI	POUNDS PER SQUARE INCH
CC	CENTER OF CURVATURE	PT	POINT OF TANGENCY
C.C.	CENTER TO CENTER	PVC	POLYVINYL CHLORIDE PLASTIC
C.L.P.	CAST-IN-PLACE	PM	POINT OF VERTICAL INTERSECTION
C	CENTERLINE	PVT	POINT OF VERTICAL TANGENCY
CL	CLEARANCE	RCP	REINFORCED CONCRETE PIPE
C.L.F.	ALUMINUM COATED CHAIN LINK FENCE	REQ'D	REQUIRED
CONC.	CONCRETE	S	SANITARY, OR SOUTH
DOABC	DENSE GRADED AGGREGATE BASE COURSE	SB	SANITARY MANHOLE
D.I.P.	DUCTILE IRON PIPE	SMH	STATION
D.M.	DRAINAGE MANHOLE	TC	TOP OF CASTING
DWG./DWGS.	CONTRACT DRAWING/DRAWINGS	TEMP.	TEMPORARY
E	ELECTRO OR EAST	TR	TO BE RELOCATED
EA	EACH	T.O.P.	TOP OF PIPE
EB	EASTBOUND	TY	TYPICAL
EL	ELEVATION	UP	UTILITY POLE
EM	ELECTRICAL MANHOLE	V.A.	VERT. PIPE
EP	END OF BASELINE	VERT.	VERTICAL
EXIST. OR EX.	EXISTING	W	WESTER, OR WEST
FI	FEET	WB	WESTBOUND
HORIZ.	HORIZONTAL	WV	WATER VALVE
HW	HOIST	WH	WITH
LF	LINEAR FEET	WVF	WELDED WIRE FACING
LT	LEFT	Ø	AT
MAX.	MAXIMUM		
MH	MANHOLE		
MIL.	MILIMETER		
N	NORTH		
NB	NORTHBOUND		
NO. OR #	NUMBER		
N.T.S.	NOT TO SCALE		

Figure 2 of 18

Sheet \_\_\_\_\_ of \_\_\_\_\_

**THE PORT AUTHORITY OF NY & NJ**

CIVIL ENGINEER

*[Signature]*

GUY W. ZUANO  
N.J. Professional Engineer # 240E035000

No.	Date	Revision	Approved
ENGINEERING DEPARTMENT			
TETERBORO AIRPORT			
CIVIL			
Title			
REMOVAL OF TAWWAY B AND INSTALLATION OF TAWWAY V			
LEGEND, CIVIL NOTES AND ABBREVIATIONS			

The design engineer is responsible for the design and construction of the project. The design engineer shall be a duly licensed professional engineer in the State of New Jersey. The design engineer shall be a member of the American Society of Civil Engineers (ASCE) and shall maintain his or her license in good standing. The design engineer shall be a member of the American Society of Professional Engineers (ASPE) and shall maintain his or her license in good standing. The design engineer shall be a member of the American Society of Mechanical Engineers (ASME) and shall maintain his or her license in good standing. The design engineer shall be a member of the American Society of Surveying Engineers (ASSE) and shall maintain his or her license in good standing. The design engineer shall be a member of the American Society of Professional Surveyors (ASPS) and shall maintain his or her license in good standing. The design engineer shall be a member of the American Society of Professional Engineers (ASPE) and shall maintain his or her license in good standing. The design engineer shall be a member of the American Society of Mechanical Engineers (ASME) and shall maintain his or her license in good standing. The design engineer shall be a member of the American Society of Surveying Engineers (ASSE) and shall maintain his or her license in good standing. The design engineer shall be a member of the American Society of Professional Surveyors (ASPS) and shall maintain his or her license in good standing.

Designed by P. H.J.  
Drawn by P. H.A. G. KWAN  
Checked by B. MCLAUGHLIN  
Date 4/18/2018

Contract Number TEB-144.046

Drawing Number C001  
REV 1/14/2000







MATCH LINE SEE DRAWING NO. C003

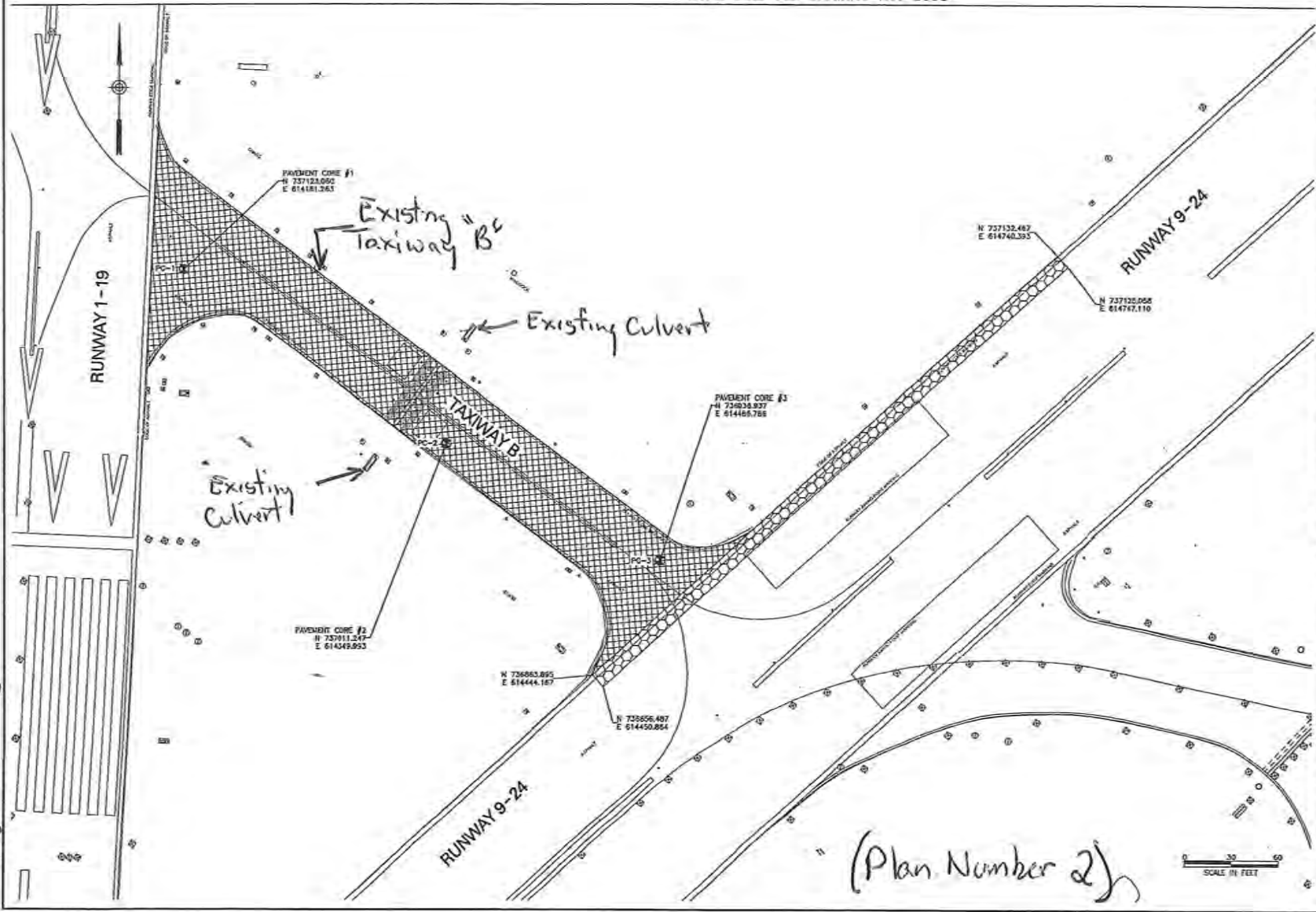


Figure 5 of 18

(Plan Number 2)

Sheet SHEET\_NO1

**THE PORT AUTHORITY  
OF NY & NJ**

CHIEF CIVIL ENGINEER

*[Signature]*

GEN W. ZUMBAO  
N.J. Professional Engineer # 24059003300

No.	Date	Revision	Approved

ENGINEERING DEPARTMENT

TETERBORO  
AIRPORT

DATE

TITLE  
REMOVAL OF TAXIWAY B AND  
INSTALLATION OF TAXIWAY V

REMOVAL PLAN  
-2-

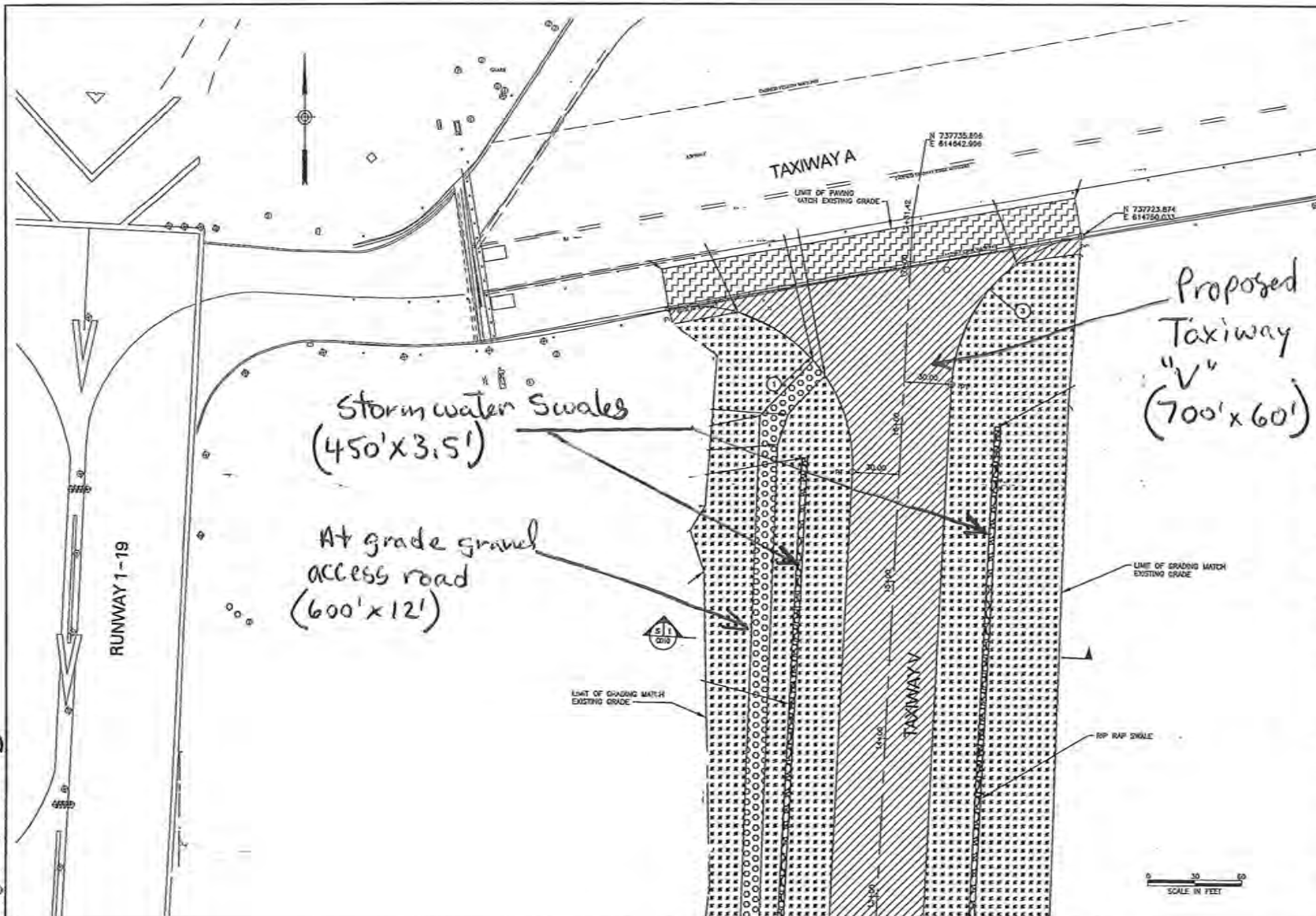
This drawing is a contract document. It is not to be used for any other purpose without the express written consent of the Port Authority of New York and New Jersey. It is the responsibility of the user to ensure that the drawing is used in accordance with the applicable laws, regulations, and standards. The user shall be responsible for any errors or omissions in the drawing. The user shall be responsible for any damage or injury resulting from the use of this drawing. The user shall be responsible for any cost incurred in the use of this drawing. The user shall be responsible for any liability resulting from the use of this drawing. The user shall be responsible for any other matter relating to the use of this drawing.

Designed by P. H. J.  
Drawn by P. H. J. G. REIN  
Checked by B. MICHAELSON  
Date 4/19/2018

Contract Number TEB-144.046

Drawing Number C004  
PDF 11341000

Figure 6 of 18



MATCH LINE SEE DRAWING NO. C006

Sheet of

**THE PORT AUTHORITY OF NY & NJ**

CHIEF CIVIL ENGINEER

*[Signature]*

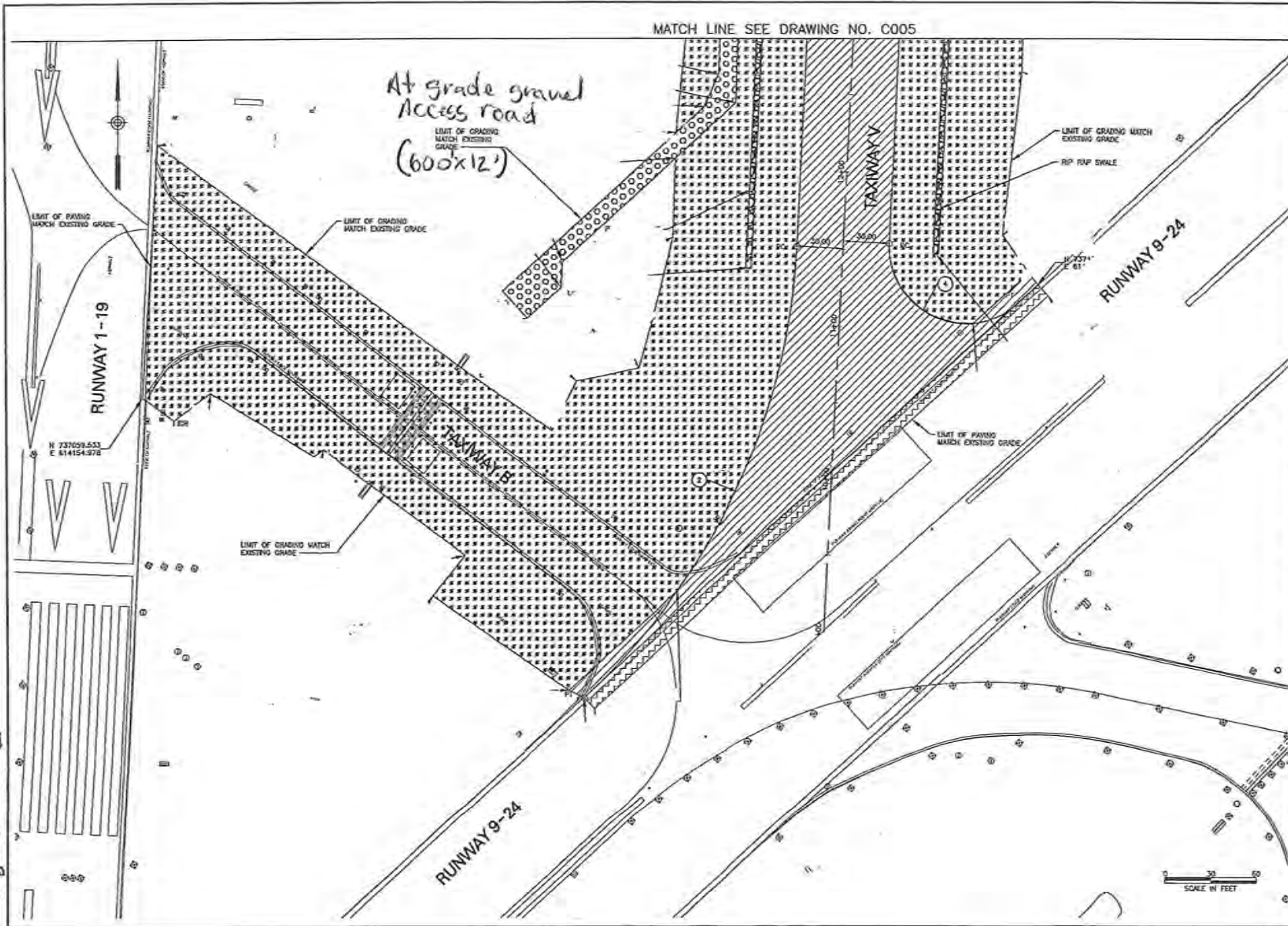
GUY W. ZIEGLER  
N.J. Professional Engineer # 2462032600

No.	Date	Revision	Approved
ENGINEERING DEPARTMENT			
TETERBORO AIRPORT			
CIVIL			
Title			
REMOVAL OF TAXIWAY B AND INSTALLATION OF TAXIWAY V			
ALIGNMENT AND PAVING PLAN			
-1-			

The drawings herein are prepared by the Port Authority of New York and New Jersey, and are subject to the approval of the Federal Aviation Administration. The drawings are prepared by the Port Authority of New York and New Jersey, and are subject to the approval of the Federal Aviation Administration. The drawings are prepared by the Port Authority of New York and New Jersey, and are subject to the approval of the Federal Aviation Administration.

Designed by F. HUI, G. KWAN  
 Created by F. HUI, G. KWAN  
 Checked by B. MCLAUGHLIN  
 Date 4/15/2016  
 Contract Number TEB-144.046  
 Drawing Number C005  
 Pkg 11341000

MATCH LINE SEE DRAWING NO. C005



Sheet/NO.

THE PORT AUTHORITY  
OF NY & NJ

CHIEF CIVIL ENGINEER

GUY W. ZURINO  
N.E. Professional Engineer # 240503005000

No.	Date	Revision	Approved

ENGINEERING DEPARTMENT

TETERBORO  
AIRPORT

CIVIL

REMOVAL OF TAXIWAY 3 AND  
INSTALLATION OF TAXIWAY V

ALIGNMENT AND PAVING  
PLAN  
-2-

This drawing is the property of the Port Authority of New York and New Jersey. It is to be used only for the project and location specified. It is not to be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of the Port Authority of New York and New Jersey. The Port Authority of New York and New Jersey shall not be liable for any errors or omissions in this drawing, or for any consequences arising from the use of this drawing. The user of this drawing shall be responsible for obtaining all necessary permits and approvals from the appropriate authorities. The Port Authority of New York and New Jersey shall not be liable for any damages, including consequential damages, arising from the use of this drawing.

Designed by F. H. A. G. KIVANI  
Drawn by F. H. A. G. KIVANI  
Checked by R. H. JACOBSON

Date 4/15/2018

Contract Number TEB-144.046

Drawing Number C006  
PIES 11341000

**THE PORT AUTHORITY  
OF NY & NJ**

SECON ENGINEER OF DESIGN AND SEDIMENT CONTROL, ADESP/CD

DESIGNED BY JEFFREY STOICESCU, N.J. PROFESSIONAL ENGINEER  
E.C. NO. 245200440  
LUNGAN ENGINEERING AND ENVIRONMENTAL SERVICES  
C.O.A. NO. 2452795640

No.	Date	Revision	Approved
ENGINEERING DEPARTMENT			
TETERBORO AIRPORT			

**ENVIRONMENTAL**

Title: **REMOVAL OF TAXIWAY B AND  
INSTALLATION OF TAXIWAY V**

**SOIL EROSION AND  
SEDIMENT CONTROL  
PLAN REFERENCE**

The drawings herein constitute a contract. All work shall be done in accordance with the specifications and standards of the Port Authority of New York and New Jersey. The contractor shall be responsible for obtaining all necessary permits and approvals from the appropriate agencies. The contractor shall also be responsible for obtaining all necessary insurance and bonds. The contractor shall be responsible for the safety of all workers and the public. The contractor shall be responsible for the protection of the environment. The contractor shall be responsible for the removal of all debris and materials from the site. The contractor shall be responsible for the restoration of the site to its original condition. The contractor shall be responsible for the maintenance of the site for a period of one year after the completion of the work. The contractor shall be responsible for the payment of all taxes and fees. The contractor shall be responsible for the payment of all costs incurred in the performance of the work. The contractor shall be responsible for the payment of all costs incurred in the prosecution of the work. The contractor shall be responsible for the payment of all costs incurred in the defense of the work. The contractor shall be responsible for the payment of all costs incurred in the settlement of the work. The contractor shall be responsible for the payment of all costs incurred in the liquidation of the work. The contractor shall be responsible for the payment of all costs incurred in the dissolution of the work. The contractor shall be responsible for the payment of all costs incurred in the termination of the work. The contractor shall be responsible for the payment of all costs incurred in the expiration of the work. The contractor shall be responsible for the payment of all costs incurred in the annulment of the work. The contractor shall be responsible for the payment of all costs incurred in the rescission of the work. The contractor shall be responsible for the payment of all costs incurred in the voiding of the work. The contractor shall be responsible for the payment of all costs incurred in the discharge of the work. The contractor shall be responsible for the payment of all costs incurred in the release of the work. The contractor shall be responsible for the payment of all costs incurred in the discharge of the work. The contractor shall be responsible for the payment of all costs incurred in the release of the work.

Designed by: J. STOICESCU  
 Drawn by: A. GARDNER  
 Checked by: J. STOICESCU  
 Date: 05/25/2016  
 Contract Number: **TEB-144.046**  
 Drawing Number: **N100**  
 P&R 11341000

**PLAN REFERENCE TABLE FOR  
ENVIRONMENTAL DRAWINGS ONLY**

PLAN NUMBER	DRAWING NUMBER
	SOIL EROSION AND SEDIMENT CONTROL PLAN
PLAN-1-	N101
PLAN-2-	N102

**LEGEND (THIS DRAWING ONLY)**

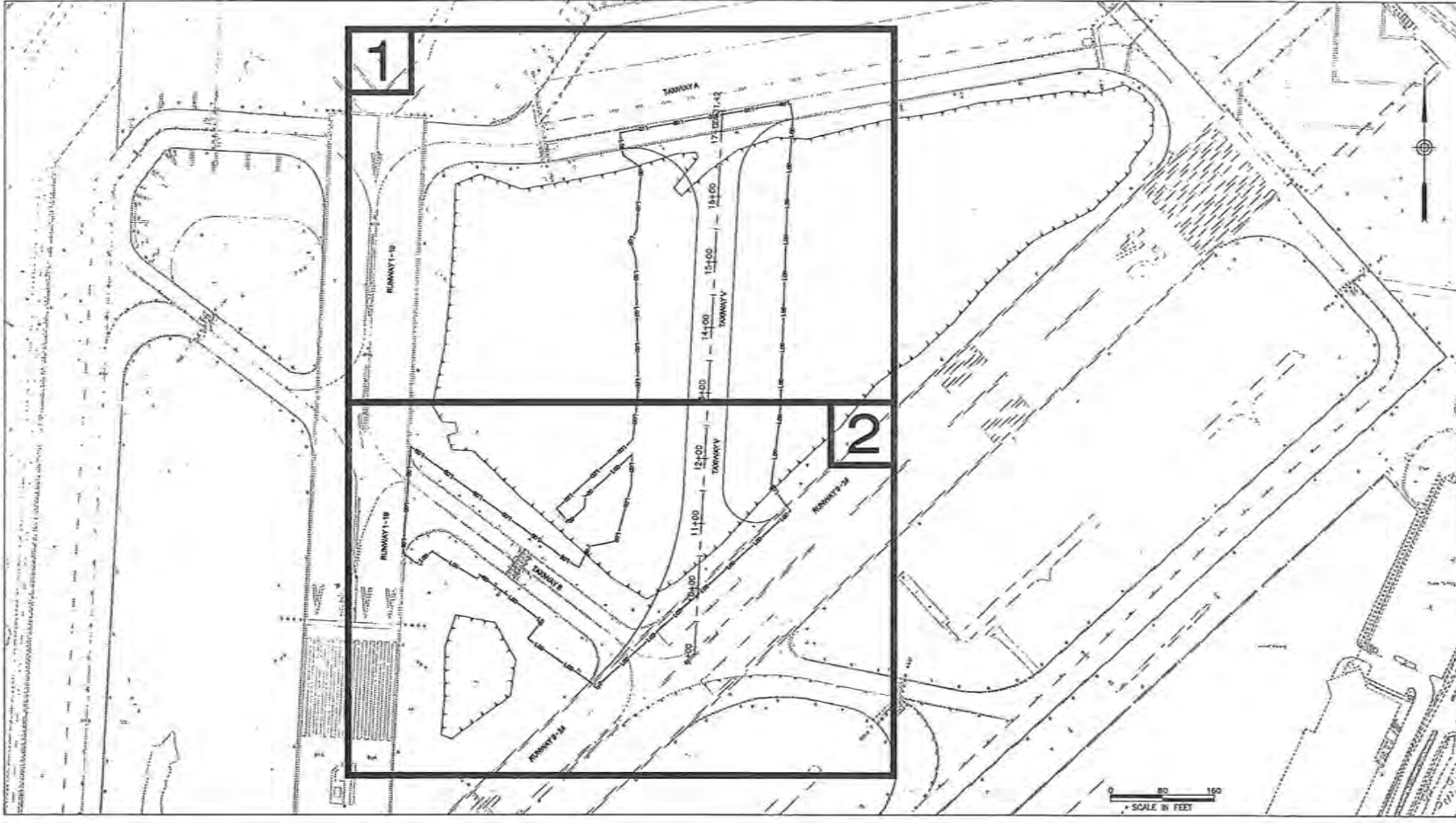
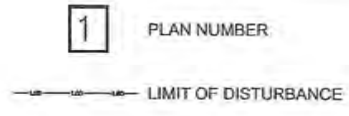


Figure 8 of 18

**GENERAL NOTES:**

- BACKGROUND FILES USED FOR REFERENCE INCLUDE: SURVEY (RECEIVED ELECTRONICALLY FROM THE PORT AUTHORITY ON 11/04/2015), EXISTING CONTOURS (RECEIVED ELECTRONICALLY FROM THE PORT AUTHORITY ON 01/08/2016), EXISTING AND PROPOSED UTILITIES (RECEIVED ELECTRONICALLY FROM THE PORT AUTHORITY ON 05/02/2016), AND REMAINING PROPOSED WORK (RECEIVED ELECTRONICALLY FROM THE PORT AUTHORITY ON 04/20/2016).
- WETLANDS WERE DELINEATED BY LANGAN ENGINEERING & ENVIRONMENTAL SERVICES INC. WETLAND SCIENTISTS IN JUNE 2015. WETLAND FLAG LOCATIONS SHOWN HEREON HAVE BEEN OBTAINED USING FIELD PROCEDURES THAT INCLUDE CODE-ONLY GPS/CROSS COMPATIBLE UNITS WITH EXTERNAL ANTENNAS AND OFFICE PROCEDURES THAT INCLUDE POST-PROCESSING OF THE COLLECTED FIELD DATA.

LEGEND	
	WETLAND IMPACTS (3.28 AC)
	WETLANDS
	PROJECT STUDY AREA
	LIMIT OF DISTURBANCE

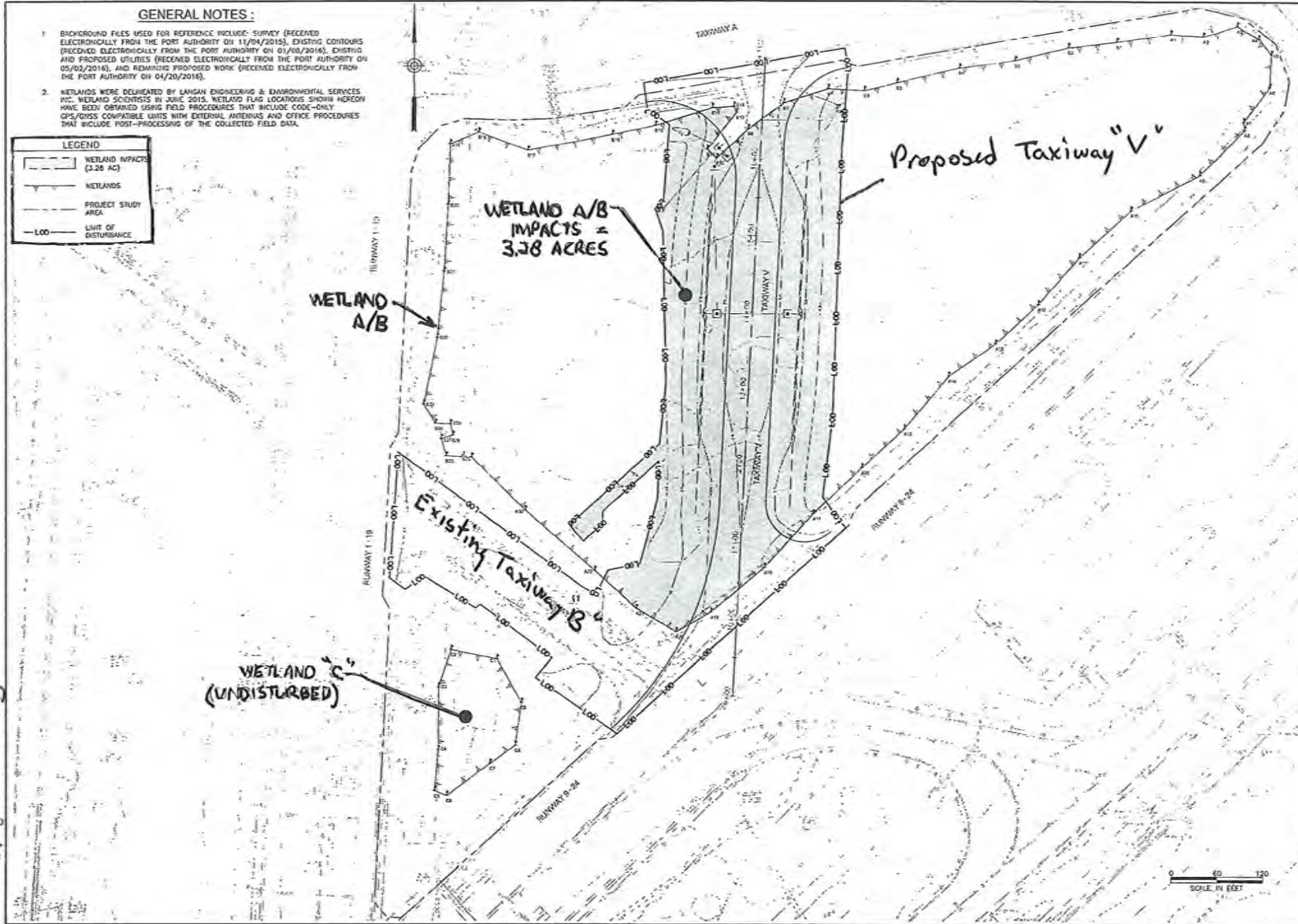


Fig 9 of 18

**THE PORT AUTHORITY OF NY & NJ**

DESIGN DIVISION BY WETLAND IMPACT EVALUATIONS

DESIGNED BY JEFFREY STOICESCU, P.E., PROFESSIONAL ENGINEER  
 NO. 252823040  
 LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES  
 C/O A.E. 24027026400

No.	Date	Revision	Approved
ENGINEERING DEPARTMENT			
TETERBORO AIRPORT			

**ENVIRONMENTAL**

Title: REMOVAL OF TAXIWAY B AND INSTALLATION OF NEW TAXIWAY V

**WETLAND IMPACT PLAN**

This drawing is intended to provide a visual representation of the wetland impacts and is not intended to be used for any other purpose. It is the responsibility of the user to verify the accuracy of the information provided. The user is advised that this drawing is not a substitute for a field visit and should not be used to make any decisions regarding the project. The user is advised that this drawing is not a substitute for a field visit and should not be used to make any decisions regarding the project.

Designed by	J. STOICESCU
Drawn by	A. GARDNER
Checked by	J. SECARAS
Date	05/20/2016
Contract Number	TEB-144.046
Drawing Number	N301
	PID# 11341000

SOIL EROSION AND SEDIMENT CONTROL NOTES :

1. SEDIMENT AND EROSION CONTROL MEASURES SHOWN ON DRAWINGS N101, N102, AND N104 TO BE INSTALLED AS NECESSARY. FPA ADVISORY CIRCULAR NO. 16/15000-12A PARAGRAPH 207, RUNWAY SAFETY AREA (RSA) PRECLUDES THE USE OF NON-ESSENTIAL EQUIPMENT WITHIN THE RUNWAY SAFETY AREA. IF THIS LIMITATION PRECLUDES THE USE OF CERTAIN SOIL EROSION CONTROL MEASURES SHOWN ON THESE PLANS, THE FORMAL AND BIDDING WILL COORDINATE DURING CONSTRUCTION AS TO THE APPROPRIATE MEASURES USED.
2. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSTALLED IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY (NJ STANDARDS), AND WILL BE INSTALLED IN PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT STABILIZATION IS ESTABLISHED.
3. ANY DISTURBED AREA THAT WILL BE LEFT EXPOSED FOR MORE THAN THIRTY (30) DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. ALL SEEDING OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH PORT AUTHORITY SPECIFICATION SECTIONS "SOIL TESTING", "SEEDING", "HYDRULICALLY-APPLIED EROSION CONTROL - HIGH PERFORMANCE FLEXIBLE GROWTH MEDIUM", AND "ADDING COMPOST."
4. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION WILL RECEIVE A TEMPORARY SEEDING.
5. ALL SEEDING OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH PORT AUTHORITY SPECIFICATION SECTIONS "SOIL TESTING", "SEEDING", "HYDRULICALLY-APPLIED EROSION CONTROL - HIGH PERFORMANCE FLEXIBLE GROWTH MEDIUM", AND "ADDING COMPOST."
6. THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORMWATER RUNOFF IS DIRECTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES.
7. SOIL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSPECTED AND MAINTAINED ON A REGULAR BASIS. FOLLOWING AFTER EVERY STORM EVENT, REPAIR ALL DAMAGE CAUSED BY SOIL EROSION AT NO COST TO THE AUTHORITY.
8. STOCKPILES ARE NOT TO BE LOCATED WITHIN 50' OF A WETLAND, SLOPE, ROADWAY OR DRAINAGE FACILITY. THE BASE OF ALL STOCKPILES SHALL BE CONTAINED BY A SEDIMENT BARRIER OR SILT FENCE. SEE DRAWING N104 FOR DETAILS.
9. THE LAYDOWN/STOCKPILE AREA WILL BE PLACED WITHIN CURRENTLY DEVELOPED AND/OR DISTURBED AREAS WITHIN TETERBORO AIRPORT THAT PORT AUTHORITY HAS OBTAINED APPROVAL FOR PRIOR LAND DISTURBANCE.
10. A CRUSHED STONE, WHEEL-CLEANING BLANKET WILL BE INSTALLED WHEREVER A CONSTRUCTION ACCESS ROAD INTERSECTS ANY PAVED ROADWAY. SAID BLANKET WILL BE COMPOSED OF 1" - 2" CRUSHED STONE, 6" THICK, WILL BE AT LEAST 30' X 100' AND SHOULD BE UNDERLAIN WITH A SUITABLE SYNTHETIC SEDIMENT FILTER FABRIC AND MAINTAINED. SEE DRAWING N104 FOR DETAILS.
11. MAXIMUM SIDE SLOPES OF ALL EXPOSED SURFACES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL UNLESS OTHERWISE APPROVED BY THE DISTRICT.
12. DRIVEWAYS MUST BE STABILIZED WITH 1" - 2" CRUSHED STONE OR SUBBASE PRIOR TO INDIVIDUAL LOT CONSTRUCTION.
13. ALL SOIL WASHED, DROPPED, SPILLED OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR OUTSIDE PUBLIC RIGHT-OF-WAYS WILL BE REMOVED IMMEDIATELY. ASKED IF PAVED ROADWAYS, TAXWAYS, AND RUNWAYS MUST BE KEPT CLEAN AT ALL TIMES.
14. CATCH BASIN INLETS WILL BE PROTECTED WITH AN INLET FILTER DESIGNED IN ACCORDANCE WITH SECTION 78 - 1 OF THE NJ STANDARDS, SEE DRAWING N104 FOR DETAILS.
15. STORM DRAINAGE OUTLETS WILL BE STABILIZED, AS REQUIRED, BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.
16. DEWATERING OPERATIONS MUST DISCHARGE DIRECTLY INTO A SEDIMENT CONTROL BAG OR OTHER APPROVED FILTER IN ACCORDANCE WITH SECTION 16-1 OF THE NJ STANDARDS.
17. DUST SHALL BE CONTROLLED VIA THE APPLICATION OF WATER, CALCIUM CHLORIDE OR OTHER APPROVED METHOD IN ACCORDANCE WITH SECTION 16-1 OF THE NJ STANDARDS.
18. IF APPLICABLE, TREES TO REMAIN AFTER CONSTRUCTION ARE TO BE PROTECTED WITH A SUITABLE FENCE INSTALLED AT THE TRIP LINE OR BEYOND IN ACCORDANCE WITH SECTION 9-1 OF THE NJ STANDARDS.
19. THE CONTRACTOR SHALL BE RESPONSIBLE, AT NO ADDITIONAL COST TO THE AUTHORITY, FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR DOWNSTREAM OF STORMWATER OUTFALLS OR OFF-SITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.
20. ANY REVISION TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN MUST BE SUBMITTED TO THE DISTRICT FOR REVIEW AND APPROVAL PRIOR TO IMPLEMENTATION IN THE FIELD.
21. A COPY OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE THROUGHOUT CONSTRUCTION.
22. THE BERGEN COUNTY SOIL CONSERVATION DISTRICT MUST BE NOTIFIED, IN WRITING, AT LEAST 48 HOURS PRIOR TO ANY LAND DISTURBANCE. BERGEN COUNTY SO, 700 ROSENKRANZ ROAD, SUITE 106, ORADELL, NJ 07046. TEL: 201-261-4400; FAX: 201-291-7572.
23. THE BERGEN COUNTY SOIL CONSERVATION DISTRICT MAY REQUEST ADDITIONAL MEASURES TO MINIMIZE ON OR OFF-SITE EROSION PROBLEMS DURING CONSTRUCTION.
24. THE OWNER MUST OBTAIN A DISTRICT ISSUED REPORT OF COMPLIANCE PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY. THE DISTRICT REQUIRES AT LEAST ONE WEEK'S NOTICE TO FACILITATE THE SCHEDULING OF ALL REPORT OF COMPLIANCE INSPECTIONS. ALL SITE WORK MUST BE COMPLETED, INCLUDING TEMPORARY/PERMANENT STABILIZATION OF ALL EXPOSED AREAS, PRIOR TO THE ISSUANCE OF A REPORT OF COMPLIANCE BY THE DISTRICT.

GENERAL NOTES :

1. BACKGROUND FILES USED FOR REFERENCE INCLUDING SURVEY (RECEIVED ELECTRONICALLY FROM THE PORT AUTHORITY ON 11/04/2015), EXISTING CONDITIONS (RECEIVED ELECTRONICALLY FROM THE PORT AUTHORITY ON 01/08/2016), EXISTING AND PROPOSED UTILITIES (RECEIVED ELECTRONICALLY FROM THE PORT AUTHORITY ON 05/02/2016), AND REMAINING PROPOSED WORK (RECEIVED ELECTRONICALLY FROM THE PORT AUTHORITY ON 04/29/2016).
2. THE CONTRACTOR SHALL ASSESS CONDITIONS, AND THE TIME, QUANTITY AND QUANTITY OF WORK REQUIRED, NO GUARANTEE IS MADE IN REGARD TO THE ACCURACY OF ANY AVAILABLE INFORMATION WHICH WAS OBTAINED DURING INVESTIGATIONS. THE CONTRACTOR SHALL MAKE A THOROUGH SITE INSPECTION IN ORDER TO FIELD CHECK EXISTING SITE CONDITIONS, CORRELATE CONDITIONS WITH THE DRAWINGS AND RESOLVE ANY POSSIBLE CONSTRUCTION COMPLAINTS PRIOR TO COMMENCEMENT OF WORK. ANY CONDITIONS THAT DIFFER FROM THE INFORMATION SHOWN ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE START OF WORK.
3. THERE ARE ADDITIONAL NOTES, SPECIFICATIONS AND REQUIREMENTS CONTAINED THROUGHOUT THE PLAN SET AS WELL AS REFERENCES TO SPECIFICATIONS FROM APPLICABLE GOVERNING AUTHORITIES AND INDUSTRY STANDARDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN, REVIEW AND ADHERE TO ALL THESE DOCUMENTS.
4. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SEDIMENT FROM LEAVING THE SITE OR INTO ADJACENT TAXWAYS AND RUNWAYS. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED AS DEEMED NECESSARY BY SITE INSPECTIONS. CONSTRUCTION SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
5. ALL REFERENCES TO "ENGINEER" REFER TO THE ENGINEER OF RECORD UNLESS SPECIFICALLY IDENTIFIED OTHERWISE.

SEQUENCE OF CONSTRUCTION:

1. FIELD VERIFY LIMIT OF DISTURBANCE.
2. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
3. INSTALL SEDIMENT AND EROSION CONTROL MEASURES SHOWN ON DRAWINGS N101, N102, AND N104 AS NECESSARY, SEE SOIL EROSION AND SEDIMENT CONTROL, NOTE 1 ABOVE.
4. FIELD VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES TO REMAIN FOR CONSTRUCTION.
5. LOCATE LAYDOWN/STOCKPILE AREAS, WHICH WILL BE PLACED WITHIN CURRENTLY DEVELOPED AND/OR DISTURBED AREAS WITHIN TETERBORO AIRPORT THAT PORT AUTHORITY HAS OBTAINED APPROVAL FOR PRIOR LAND DISTURBANCE. STOCKPILES ARE ALSO NOT TO BE LOCATED WITHIN 50' OF A WETLAND, SLOPE, ROADWAY OR DRAINAGE FACILITY.
6. BEGIN REMOVING EXISTING TAXWAY AND PERFORM ROUGH GRADING AS SHOWN ON GRADING AND UTILITY PLANS.
7. INSTALL PROPOSED UTILITIES.
8. BEGIN BUILDING PROPOSED TAXWAY V AND PERFORM ROUGH GRADING AS SHOWN ON GRADING AND UTILITY PLANS.
9. FINE GRADE THE AREAS WITHIN THE LIMIT OF DISTURBANCE.
10. COMPLETE CONSTRUCTION OF PROPOSED TAXWAY V INCLUDING REVEGETATION OF IMPACTED AREAS.
11. ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS PERMANENTLY STABILIZED, REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES.

THE PORT AUTHORITY OF NY & NJ

SECTION DIVISION OF EROSION AND SEDIMENT CONTROL MEASURES

DESIGNED BY JERRY GIOVANNI, A.J. PROFESSIONAL ENGINEER, LICENSE ENGINEERING AND ENVIRONMENTAL SERVICES, C.O.# 246293040

No.	Date	Revision	Approved
ENGINEERING DEPARTMENT			
TETERBORO			
AIRPORT			

ENVIRONMENTAL  
Title  
REMOVAL OF TAXWAY B AND INSTALLATION OF TAXWAY V

SOIL EROSION AND SEDIMENT CONTROL NOTES

Reviewed by: J. STOJESCU  
 Drawn by: A. GARDNER  
 Checked by: J. STOJESCU  
 Date: 05/25/2016  
 Contract Number: TEB-144.046

Drawing Number N103  
REF: 11341000

Figure 10 of 18

**THE PORT AUTHORITY  
OF NY & NJ**

DESIGN DIVISION OF EROSION AND SEDIMENT CONTROL, NEWARK

DESIGN BY JERRY STEVENS, P.E., PROFESSIONAL ENGINEER  
C.E. NO. 12893-002  
LANDSCAPE ARCHITECT AND ENVIRONMENTAL SERVICES  
C.O.G.A. NO. 24627916405

No.	Date	Revision	Approved
ENGINEERING DEPARTMENT			
TETERBORO AIRPORT			
ENVIRONMENTAL			

Title  
**REMOVAL OF TAXIWAY B AND  
INSTALLATION OF TAXIWAY V**

**SOIL EROSION AND  
SEDIMENT CONTROL  
DETAILS**

The design shown on this drawing is intended to be used as a guide only. It is not intended to be a substitute for the professional judgment of the designer. The designer shall be responsible for the proper application of the design to the specific project. The designer shall be responsible for the proper application of the design to the specific project. The designer shall be responsible for the proper application of the design to the specific project.

Designed by J. STORCESCU  
Drawn by A. GARDINER  
Checked by J. STORCESCU  
Date 05/25/2016

Contract Number **TEB-144.046**

Drawing Number **N104**  
PDS 11341000

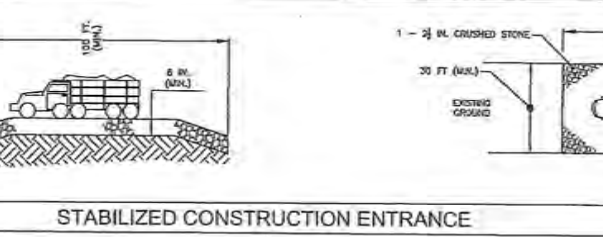
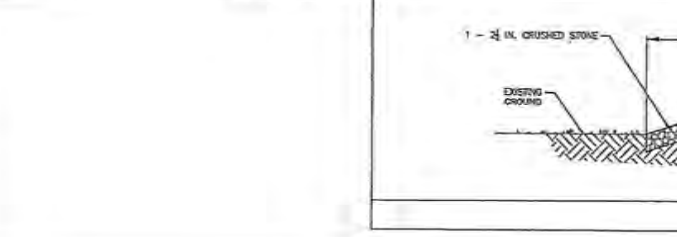
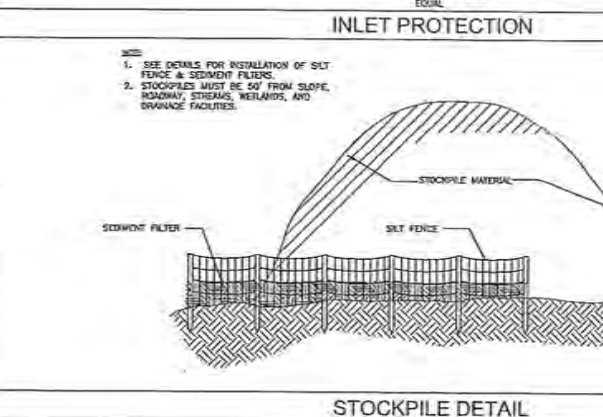
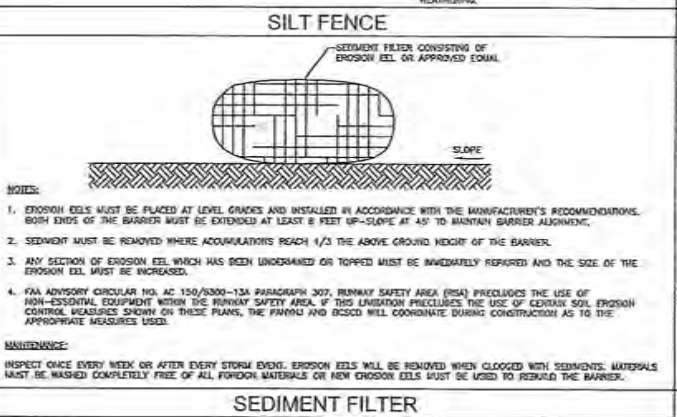
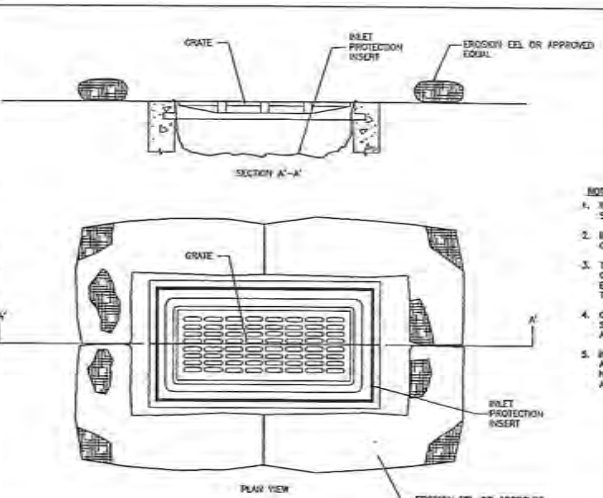
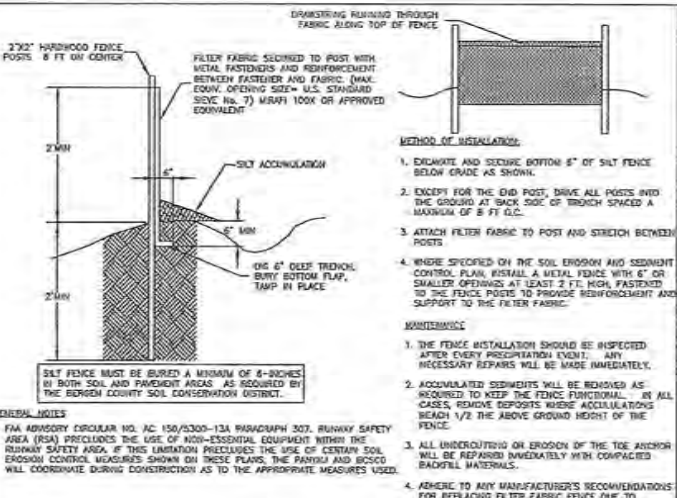
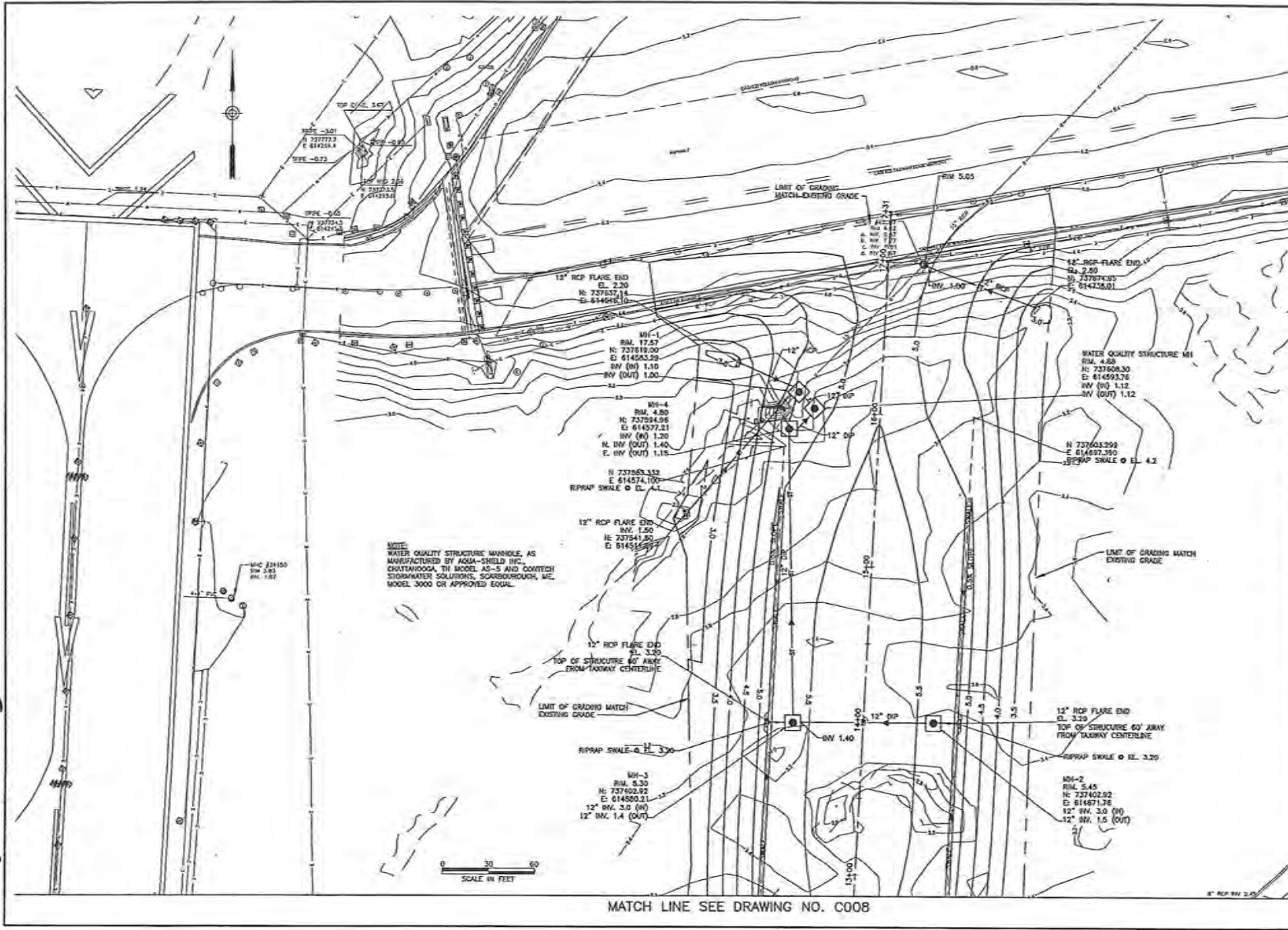


Figure 11 of 18

FIG. NO. 12 OF 18



Sheet \_\_\_\_\_ of \_\_\_\_\_

**THE PORT AUTHORITY  
OF NY & NJ**

CHIEF CIVIL ENGINEER

*[Signature]*

GUY W. ZORNHO  
N.J. Professional Engineer # 24520303000

No.	Date	Revision	Approved

ENGINEERING DEPARTMENT

**TETERBORO  
AIRPORT**

CIVIL

Title

**REMOVAL OF TAXIWAY B AND  
INSTALLATION OF TAXIWAY V**

**GRADING AND UTILITY  
PLAN**

-1-

The Party hereby certifies that this is a true and correct copy of the original drawing as shown on the face hereof. It is a condition of use that the user of this drawing shall be responsible for its proper use and shall not be held liable for any errors or omissions. The user of this drawing shall be responsible for its proper use and shall not be held liable for any errors or omissions. The user of this drawing shall be responsible for its proper use and shall not be held liable for any errors or omissions.

Designed by P. H. G. KWAN  
 Drawn by P. H. G. KWAN  
 Checked by B. MCLAUGHLIN  
 Date 4/15/2018

Contract Number **TEB-144.046**

Drawing Number **C007**  
POR 11341005



MATCH LINE SEE DRAWING NO. C007

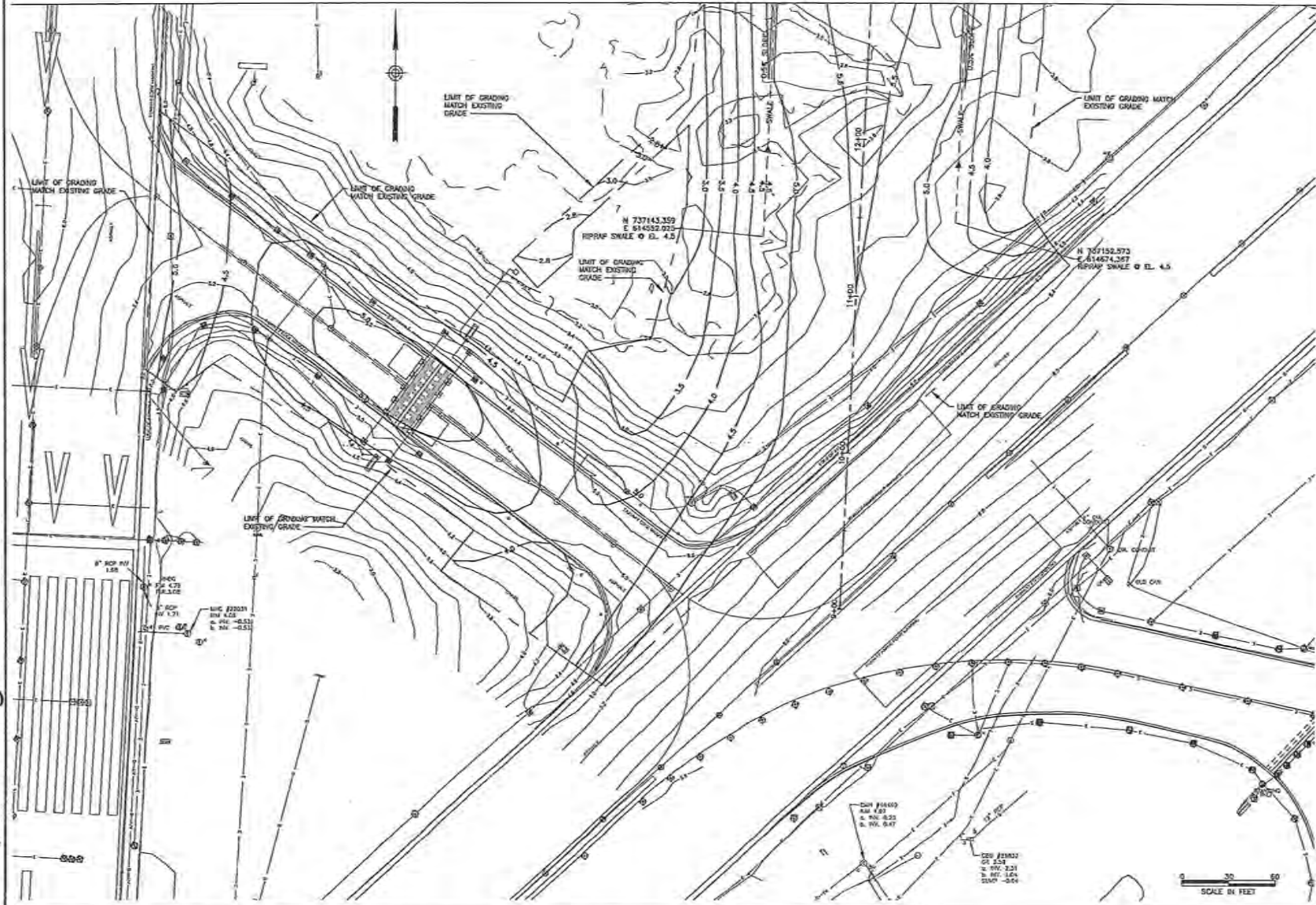


Figure 13 of 18

Sheet SHEET\_NO

**THE PORT AUTHORITY  
OF NY & NJ**

CIVIL ENGINEER

GUY W. ZILUMBO  
N.Y. Professional Engineer # 21082025500

No.	Date	Revised	Approved

ENGINEERING DEPARTMENT

TETERBORO  
AIRPORT

CIVIL

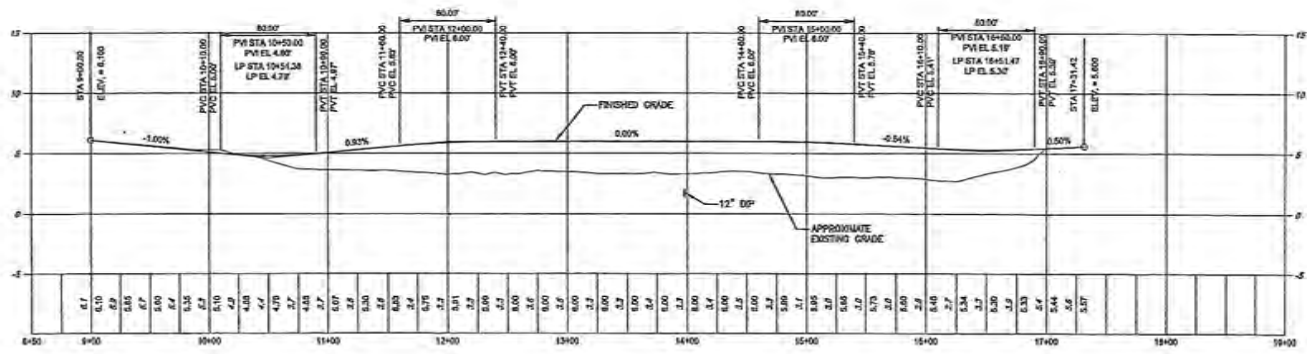
Title  
REMOVAL OF TAXIWAY B AND  
INSTALLATION OF TAXIWAY V

GRADING AND UTILITY  
PLAN  
-2-

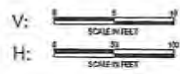
The Engineer warrants a certain degree of accuracy, but does not warrant that the drawings are complete and correct. The drawings are prepared for the use of the contractor and are not to be used for any other purpose. The contractor is responsible for the accuracy of the data furnished to the Engineer and for the accuracy of the drawings. The Engineer is not responsible for the accuracy of the data furnished to the contractor or for the accuracy of the drawings prepared by the contractor. The Engineer is not responsible for the accuracy of the data furnished to the contractor or for the accuracy of the drawings prepared by the contractor. The Engineer is not responsible for the accuracy of the data furnished to the contractor or for the accuracy of the drawings prepared by the contractor.

Designed by P. HUI G. KWAN  
 Drawn by P. HUI G. KWAN  
 Checked by B. MCARDLE  
 Date 4/15/2016  
 Contract Number TEB-144.046  
 Drawing Number C008  
 PDF 11341000

Figure 14 of 18



TAXIWAY V PROFILE



Sheet \_\_\_\_\_ of \_\_\_\_\_

**THE PORT AUTHORITY OF NY & NJ**

CHIEF CIVIL ENGINEER

*[Signature]*

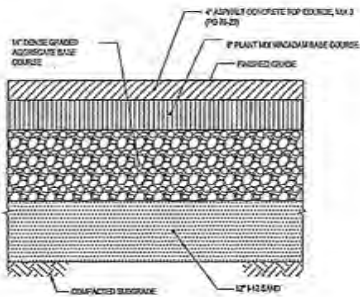
GUY W. ZARNO  
N.J. Professional Engineer # 246520312000

No.	Date	Revision	Approved
ENGINEERING DEPARTMENT			
TETERBORO AIRPORT			
CIVIL			
Title			
REMOVAL OF TAXIWAY B AND RESTORATION OF TAXIWAY V			
PROFILE TAXIWAY V			

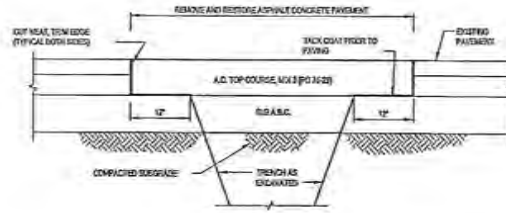
The Port Authority of New York and New Jersey, its Board of Directors, its officers and employees, its agents and independent contractors, its contractors, subcontractors, consultants, and other personnel shall be held harmless by the Port Authority of New York and New Jersey for any and all claims, damages, losses, and expenses, including reasonable attorneys' fees, that may be asserted against or incurred by the Port Authority of New York and New Jersey, its Board of Directors, its officers and employees, its agents and independent contractors, its contractors, subcontractors, consultants, and other personnel in connection with the performance of the services described herein, whether or not such claims, damages, losses, and expenses result from or are caused in whole or in part by the negligence, active or passive, of the Port Authority of New York and New Jersey, its Board of Directors, its officers and employees, its agents and independent contractors, its contractors, subcontractors, consultants, and other personnel. This release shall not apply to claims for personal injury or death, or to claims for punitive damages, or to claims for damages caused by the negligence of the Port Authority of New York and New Jersey, its Board of Directors, its officers and employees, its agents and independent contractors, its contractors, subcontractors, consultants, and other personnel in connection with the performance of the services described herein, whether or not such claims, damages, losses, and expenses result from or are caused in whole or in part by the negligence, active or passive, of the Port Authority of New York and New Jersey, its Board of Directors, its officers and employees, its agents and independent contractors, its contractors, subcontractors, consultants, and other personnel.

Designed by P. HUI  
Drawn by P. HUI  
Checked by B. MCLAUGHLIN  
Date 4/15/2016  
Contract Number TEB-144.046  
Drawing Number C009  
PID# 11341000

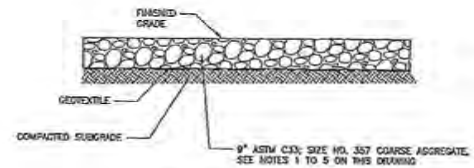




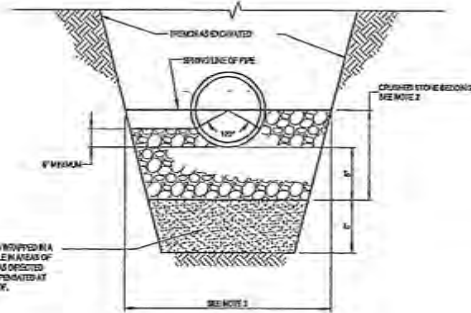
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NOT TO SCALE



**FLEXIBLE PAVEMENT RESTORATION**  
NOT TO SCALE



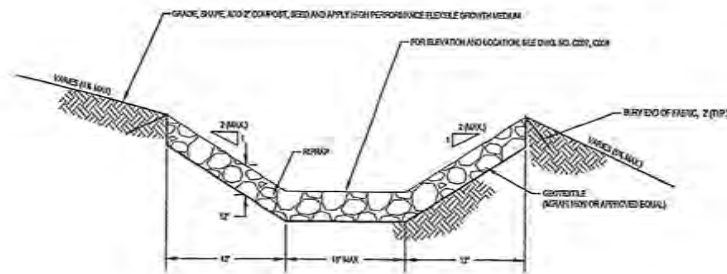
**TYPE I PAVEMENT**  
NOT TO SCALE



ADDITIONAL 1\"/>

- NOTES:**
- TRENCH SHALL BE BACKFILLED TO THE SURROUNDING EXISTING GROUND ELEVATION OR PAVEMENT SUBGRADE, WHATEVER IS LOWER.
  - FOR FLEXIBLE PIPE USING CRUSHED STONE TO SPRING LINE OF PIPE.
  - PIPE OUTSIDE DIAMETER = 2\"/>

**BEDDING DETAIL**  
NOT TO SCALE



**RIPRAP SWALE**  
NOT TO SCALE

**NOTES:**

- SUBMIT TO THE CHIEF OF MATERIALS ENGINEERING, MATERIALS ENGINEERING DIVISION, ENGINEERING MATERIALS LABORATORY, PORT AUTHORITY TECHNICAL CENTER, 241 EISENBERG STREET, JERSEY CITY, NJ 07310-1397, PROPOSED MATERIAL SUPPLIERS AND SOURCES FOR THE ASTM C33, SIZE NO. 357 COARSE AGGREGATE TO BE USED UNDER THIS CONTRACT. THE SUBMITTAL DOCUMENT MUST CONTAIN AS MINIMUM INFORMATION: THE CONTRACT LOCATION, TITLE AND NUMBER, SOURCE AND SUPPLIER OF MATERIAL BEING SUBMITTED, SAMPLE SUBMITTAL PAPER WORK MUST BE RECEIVED BY THE CHIEF OF MATERIALS ENGINEERING AT LEAST THREE WEEKS PRIOR TO DELIVERY OF MATERIAL TO SITE. DO NOT DELIVER ANY MATERIAL UNTIL THE ENGINEER HAS CHECKED AND APPROVED MATERIAL SUPPLIER AND SOURCE. CONFORMANCE TO GRADATION WILL BE DETERMINED IN ACCORDANCE WITH ASTM D422.
- REMOVE EXISTING VEGETATION AND SUBGRADE TO THE REQUIRED DEPTH PROFFROLL THE SUBGRADE WITH TWO PASSES OF A PNEUMATIC-TIRED ROLLER IN THE PRESENCE OF THE ENGINEER.
- FURNISH AND INSTALL THE GEOTEXTILE IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
- AFTER PLACING THE GEOTEXTILE, PLACE AND SPREAD ASTM C33, SIZE NO. 357 COARSE AGGREGATE WITHOUT SEGREGATION OF AGGREGATE SIZES AND DAMAGE TO THE GEOTEXTILE.
- AFTER THE ASTM C33, SIZE NO. 357 COARSE AGGREGATE IS PLACED AND SPREAD, PROFFROLL THE ASTM C33, SIZE NO. 357 COARSE AGGREGATE WITH TWO PASSES OF A PNEUMATIC-TIRED ROLLER IN THE PRESENCE OF THE ENGINEER.

Sheet of

**THE PORT AUTHORITY OF NY & NJ**

CHIEF CIVIL ENGINEER

*[Signature]*

OLY W. KRANZ  
N.J.A. Professional Engineer # 146820020000

No.	Date	Revision	Approved
ENGINEERING DEPARTMENT			
TETERBORO AIRPORT			
CIVIL			
Title			
REMOVAL OF TAXIWAY B AND INSTALLATION OF TAXIWAY Y			
DETAILS			
-1-			

The Engineer's seal and signature are required on all sheets of drawings. The seal and signature are required on all sheets of drawings and are required on all sheets of drawings. The seal and signature are required on all sheets of drawings. The seal and signature are required on all sheets of drawings.

Designed by: P. H.A. G. KRANZ  
 Drawn by: P. H.A. G. KRANZ  
 Checked by: B. McLAUGHLIN  
 Date: 4/16/2018  
 Contract Number: TEB-144.046  
 Drawing Number: **C011**  
 Page: 1134/1000

Figure 16 of 18

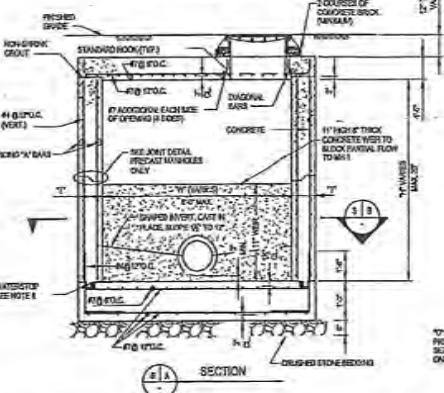
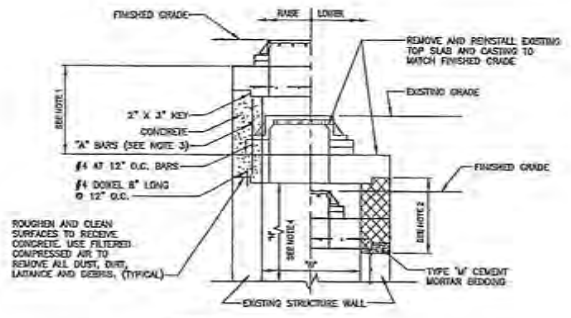
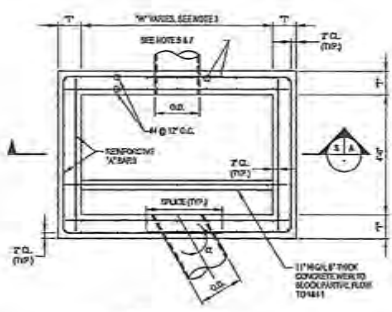
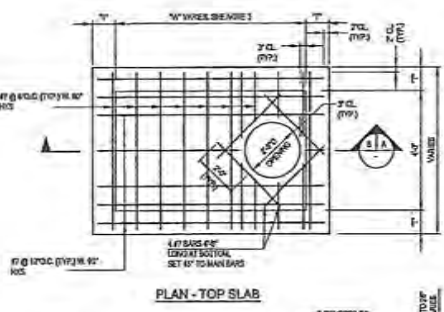
CHIEF CIVIL ENGINEER  
  
 GUY W. ZUMBRO  
 N.J. Professional Engineer # 24595035900

No.	Date	Revision	Approved
ENGINEERING DEPARTMENT			
TETERBORO AIRPORT			

CONTRACT  
 REMOVAL OF TOWERWAY 8 AND  
 INSTALLATION OF TOWERWAY 9

DETAILS  
 -2-

Designed by P. H.A. G. KIVATY  
 Drawn by P. H.A. G. KIVATY  
 Checked by E. ENDAUGRENT  
 Date 4/16/2018  
 Contract Number TEB-144.046  
 Drawing Number C012  
 PDR 11341200



NOTES

1. ALL FRAME WITH ALL COVER SHALL BE COMPRISED NO. 1111 OR LARGER JERMAN IRON REINFORCING BARS OR APPROX. EQUIV. FOR SHAVING/ MANHOLE PURPOSES INVERTED COVER AND CAST ALUMINUM SLIT BRACKET.
2. ALL MANHOLE COVERS SHALL BE WELDED TO THE FRAME FOR MANHOLE COVER. SHOWN SIZE DETAIL ON DWG NO. 0311.
3. MINIMUM INSIDE WALL DIMENSION "W" SHALL BE DETERMINED BY THE FORMULA  $W = 1.2 \sqrt{D}$  BUT IN NO CASE SHALL THE DIMENSION "W" BE LESS THAN 4 FEET NOR MORE THAN 10 FEET. IN THE CASE OF RECTANGULAR MANHOLES, THE DIMENSION "W" SHALL BE USED FOR THE PURPOSE OF DETERMINING THE REINFORCING STEEL ACCORDING TO THE ACCOMPANYING TABLE.
4. OPENINGS IN THE WALLS FOR PIPE SHALL BE CAST IN GROUT CLEANLY WITHOUT PERMISSON TO A MINIMUM DIAMETER OF 6.0 IN. THE SPACE BETWEEN PIPE AND WALL SHALL THEN BE FILLED WITH HIGH STRENGTH GROUT, MORTAR OR APPROVED JOINT FIBER ASSEMBLY.
5. WHERE A PIPE PASSES THROUGH A WALL, 3 ADDITIONAL "A" BARS SHALL BE PLACED ABOVE, BELOW AND TO EACH SIDE OF THE OPENING. VERTICAL "A" BARS SHALL EXTEND A MINIMUM OF 2'-0" ABOVE AND BELOW THE EDGES OF THE OPENING. THE ADDITIONAL REINFORCING SHALL BE PLACED AT BOTH THE INSIDE AND OUTSIDE LAYER OF REINFORCEMENT.
6. WHEN LIFTING THE PRECAST MANHOLE, A BAR SHALL BE PLACED APPROXIMATELY THROUGH THE LIFTING HOLES, PROVIDED AT THE TIME OF MANUFACTURE. THE LIFTING MENDES SHALL BE PLACED ONLY ON THAT BAR. THE BARS AND HOLES SHALL BE AS PROVIDED BY THE ENGINEER. THE LIFTING HOLES SHALL BE FILLED WITH NON-FRANK GROUT OR MORTAR AFTER THE MANHOLE IS IN POSITION.
7. SPACE THICKNESS REQUIRED FOR NON-FRANK BARS: #4 BAR, 1-4"; #5 BAR, 1-4"; #6 BAR, 2-0"; #7 BAR, 2-6".
8. JOINT AND WATERSTOP ARE AN OPTION FOR CAST-IN PLACE MANHOLES BUT PRECAST MANHOLES SHALL NOT BE JOINTED AT THIS LOCATION.
9. REINFORCING SHALL CONFORM TO ASTM A631, GRADE 60.

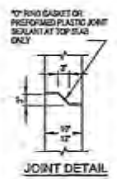
NOTES

1. BUILD UP EXISTING WALLS WITH CONCRETE AS REQUIRED AND RESET FINISH OF THE EXTERIOR OF CONCRETE (GROUT AND MORTAR AS NECESSARY).
2. REMOVE EXISTING WALL AS REQUIRED, CLEAN CONCRETE SURFACE, AND SET TOP SLAB ON MORTAR BEDDING.
3. FOR SUSTAINED LOADS, WELDED REINFORCING "W" BARS SHALL BE AS SHOWN IN THE REINFORCEMENT TABLE FOR ALL OTHER SIZES. "W" BARS SHALL BE SET AT 6" BELOW COVER.
4. H = DEPTH TO INTERIOR BOTTOM OF MANHOLE.

DIMENSION "W"	DIMENSION "H"	"A" BARS
4' TO 6'	12' TO 12'	#4 @ 12"
4' TO 6'	12' TO 12'	#4 @ 12"
4' TO 6'	12' TO 12'	#4 @ 12"
4' TO 6'	12' TO 12'	#4 @ 12"
4' TO 6'	12' TO 12'	#4 @ 12"
4' TO 6'	12' TO 12'	#4 @ 12"
4' TO 6'	12' TO 12'	#4 @ 12"
4' TO 6'	12' TO 12'	#4 @ 12"
4' TO 6'	12' TO 12'	#4 @ 12"
4' TO 6'	12' TO 12'	#4 @ 12"
4' TO 6'	12' TO 12'	#4 @ 12"

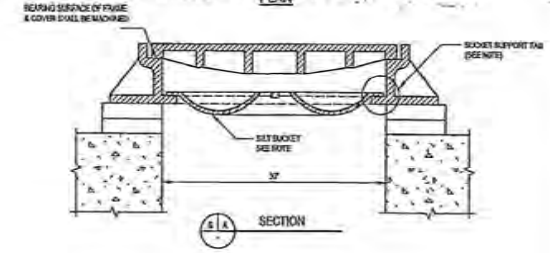
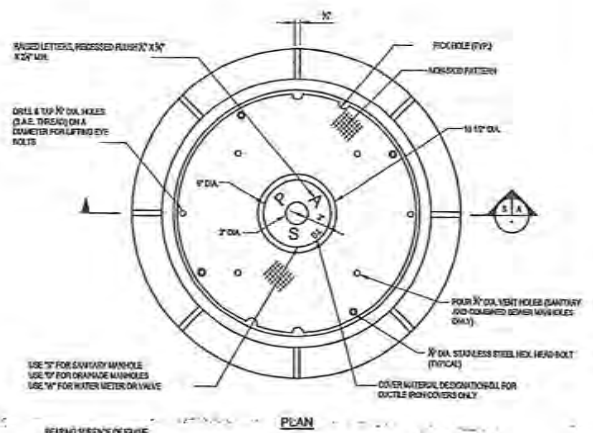
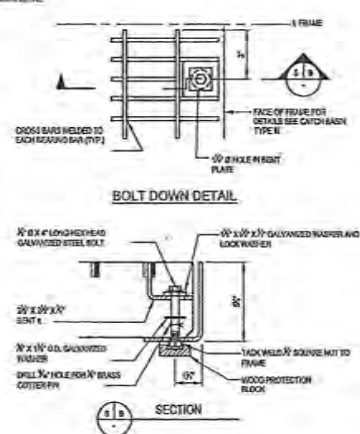
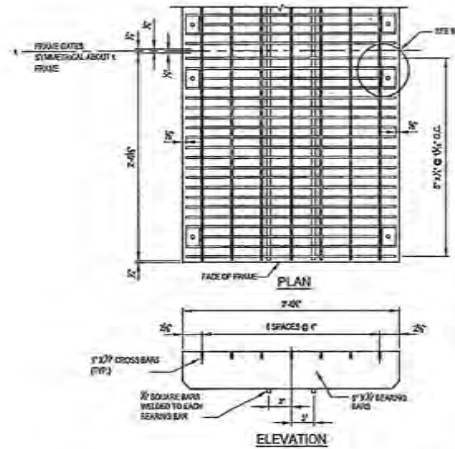
ADJUSTMENT OF MANHOLE 6" OR MORE  
 NOT TO SCALE

DIMENSION "W"	REINFORCING "A" BARS			WALL THICKNESS "H"	
	4' TO 6'	6' TO 7'	7' TO 8'	PRECAST CONCRETE	CAST-IN PLACE
12' TO 12'	#4 @ 12"	#4 @ 12"	#4 @ 12"	12"	12"
12' TO 12'	#4 @ 12"	#4 @ 12"	#4 @ 12"	12"	12"
12' TO 12'	#4 @ 12"	#4 @ 12"	#4 @ 12"	12"	12"



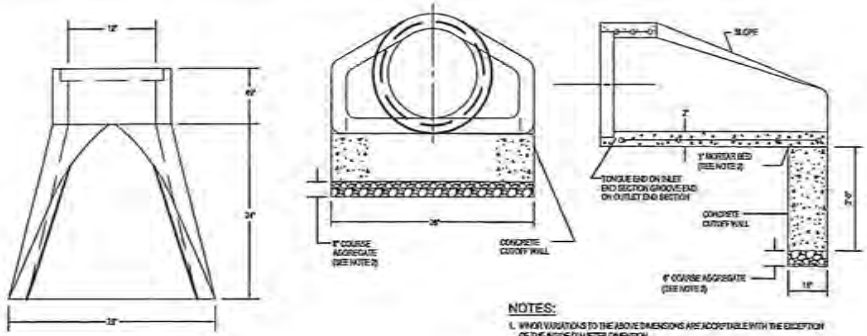
MANHOLE-AIRCRAFT  
 NOT TO SCALE

FIGURE 17 OF 18



- NOTES:**
1. TWO COVERS ARE REQUIRED PER FRAME.
  2. FRAME AND GRATES SHALL BE WELDED OR BURNED ON A HIGH SPEED, CHANCELL FOUNDRY COMPANY PATENT NUMBER 824 OR EAST JORDAN BRAY WIPING NO. 855222, FABRICATED OF A 30 STEEL.
  3. FRAME AND GRATES SHALL BE WELDED CONSTRUCTION AND 25 OUNCES PER SQUARE FOOT HOT DIP GALVANIZED THROUGHOUT AFTER FABRICATION.
  4. CONTRACTOR SHALL PREPARE DETAILED SHOP DRAWINGS AND SUBMIT FOR THE ENGINEER'S APPROVAL PRIOR TO FABRICATION.

**HEAVY DUTY GRATING FOR RUNWAYS, TAXIWAYS, SAFETY AREAS AND APRONS**  
NOT TO SCALE



- NOTES:**
1. MINOR VARIATIONS TO THE ABOVE DIMENSIONS ARE ACCEPTABLE WITH THE EXCEPTION OF THE NOMINAL DIAMETER DIMENSION.
  2. A 1 INCH THICK WORN IN BED AND A 6 INCH DEEP LAYER OF COARSE AGGREGATE ARE REQUIRED WHEN A PRECAST CONCRETE CUTOFF WALL IS USED.
  3. THE WIDTH OF THE CONCRETE CUTOFF WALL SHALL BE EQUAL TO THE NOMINAL WIDTH OF THE END SECTION AS INDICATED ON THE DETAIL BY DIMENSION 'C'. HOWEVER, IF THE ACTUAL NOMINAL WIDTH EXCEEDS THE COVER VALUE OF 'C', THE WIDTH OF THE CONCRETE CUTOFF WALL SHALL EQUAL THE ACTUAL NOMINAL WIDTH OF THE END SECTION.

**FLARED END SECTION FOR CONCRETE PIPE**  
A.T.A.

**MANHOLE FRAME AND COVER-AIRCRAFT TYPE**  
NOT TO SCALE

- NOTE:**  
FOR SANITARY AND COMBUSTIBLE COVER MANHOLES PURCHASE CAST ALUMINUM SILET BUCKETS AND PROVIDE BUCKET SUPPORT TALL INFRAME.

Sheet \_\_\_\_\_ of \_\_\_\_\_

**THE PORT AUTHORITY OF NY & NJ**

CHIEF CIVIL ENGINEER

*[Signature]*

GUY W. ZUBIAO  
N.J. Professional Engineer # 245223032800

No.	Date	Revision	Approved
ENGINEERING DEPARTMENT			
TETERBORO AIRPORT			
CIVIL			
Title: REMOVAL OF TAXIWAY B AND INSTALLATION OF TAXIWAY			
DETAILS -3-			

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Designed by: P. PAUL G. KIVIAH  
 Drawn by: P. PAUL G. KIVIAH  
 Checked by: S. MCKLAUGH  
 Date: 4/15/2018  
 Contract Number: TEB-144.046  
 Drawing Number: C013  
 PDR 11341000

Figure 18 of 18