

**ADDENDUM NO. 1**

**Bidding and Contract Documents**

For

Relocate Airfield Lighting Vault  
Quonset State Airport  
North Kingstown, Rhode Island

**RHODE ISLAND AIRPORT CORPORATION**

April 4, 2013

PREPARED BY:  
Parsons Brinckerhoff  
10 Dorrance Street, Suite 700  
Providence, Rhode Island 02903

**NOTICE TO PROSPECTIVE BIDDERS**

**ADDENDUM NO. 1**

**Prospective Bidders and all concerned are hereby notified of the following changes in the Contract Documents for RELOCATE AIRFIELD LIGHTING VAULT at the QUONSET STATE AIRPORT. These changes shall be incorporated in and shall become an integral part of the contract documents. The number (No. 1) and date (4/04/13) of this addendum must be entered into the space provided on Page P-4 of the Proposal Form. These changes will be incorporated into the Conformed Contract Documents to be issued to the successful bidder.**

## BIDDER QUESTIONS

- Q1. Please provide a detail for the reinforced concrete sidewalks called out on sheet A-3.  
A1. Reinforced Concrete Sidewalk detail has been added to Sheet C-9 by this Addendum.
- Q2. The site plan on sheet C-7 seems to show the paved driveway area overlapping with the proposed concrete sidewalk. Please clarify the limits of each.  
A2. The sidewalk will encircle the building. The pavement will meet the sidewalk.
- Q3. Please provide a detail for the "Proposed Vegetated Filter Strips" that are called out on the site plan on sheet C-7  
A3. The "Proposed Vegetated Filter Strips" shall follow the requirements of the item T-905 Topsoil and Seeding.
- Q4. Please clarify which bid item the "Proposed Vegetated Filter Strips" are paid under?  
A4. The "Proposed Vegetated Filter Strips" are paid for under items P-152 Site Grading and T-905 Topsoil and Seeding respectively.
- Q5. #8 5KV Cable Item L-108-1 - should cable be type c not type b?  
A5. Cable should be type B as shown on plans.
- Q6. Is FAA supplying FAA panel, 5kv switches, and 45 kva transformer if not we will need more info on these items.  
A6. FAA panel, 5kV switches and 45kVA transformer are existing equipment located within the existing vault and will be relocated by the Contractor to the new vault as part of this Project. Specification for FAA panel is covered by Section 16470. Specification for 45kVA transformer is covered by Section 16460. Specification for 5kV switches is covered by Section 16471, which is added in this Addendum.

## PROJECT MANUAL TABLE OF CONTENTS

### **ADDENDUM ITEM NO. 1**

In the Table of Contents, **DELETE** pages "Table of Contents-3 and Table of Contents-4" and **REPLACE** with attached pages "Table of Contents-3 and Table of Contents-4".

## DIVISION 0

### **ADDENDUM ITEM NO. 2**

In Proposal Forms, Page 00320-2, **DELETE** page and **REPLACE** with attached page P-2.

In Proposal Forms, Page 00320-3, **DELETE** page and **REPLACE** with attached page P-3.

In Proposal Forms, Page 00320-4, **DELETE** page and **REPLACE** with attached page P-4.

In Proposal Forms, Page 14, **DELETE** page and **REPLACE** with attached page P-14.

**PROJECT MANUAL  
DIVISION 2**

**ADDENDUM ITEM NO. 3**

In Division 2, Section 16599, Paragraph 3.05, **REVISE** “Proposed Steps” for “RW 5/23” from “5” to “3”.

**ADDENDUM ITEM NO. 4**

In Division 2, Section M-401, Page M-401-4, **REMOVE** Paragraph 401.02.5.d.3 in its **ENTIRETY**.

**ADDENDUM ITEM NO. 5**

In Division 2, Section L-110, Page L-110-4, **REPLACE** Paragraph 110-3.5 with the following:

**“110-3.5 - Restoration of Trench in Turf.** The top 4 inches of the trench shall be filled with topsoil. The trench shall be seeded with a fertilizer and grass seed mixture that complies with Item T-905 of these Specifications. All areas disturbed by the trenching, storing of dirt, cable laying, and other work shall be restored to its original condition. The restoration shall include any necessary topsoiling, fertilizing, liming, seeding, sprigging or mulching. The Contractor shall be held responsible for maintaining all disturbed surfaces and replacements until final acceptance. Excess materials shall be disposed of offsite by the contractor. The Topsoil and Seeding shall be paid for under Item T-905.”

**ADDENDUM ITEM NO. 6**

In Division 2, Section L-110, Page L-110-3, Paragraph 110-3.2 after the 2<sup>nd</sup> paragraph **INSERT** the following paragraph:

“Existing utilities that have less than three inches (3”) vertical clearance shall be encased in concrete for ten feet (10’) on both sides of ductbank crossing. Existing utilities that have vertical clearance less than eighteen inches (18”) shall have a concrete cradle per the detail shown in the plans. The concrete encasement of existing utilities and concrete cradle shall be considered incidental to the ductbank item.”

**ADDENDUM ITEM NO. 7**

In Division 2, Section 06820, Page 06820-1 Paragraph 1.02.A.1 **REVISE** last sentence to read:

“Support system shall raise electrical equipment to a minimum elevation of 15.00.”

**ADDENDUM ITEM NO. 8**

In Division 2, **INSERT** attached Specification Section 16471 – 5 kV Switches.

**DESIGN DRAWINGS**

**ADDENDUM ITEM NO. 9**

In the Contract Drawings **REMOVE** and **REPLACE** the sheets indicated below with the corresponding sheets attached to this Addendum. On the drawings, listed within the below table, the following revisions have been made:

<b><u>SHEET</u></b>	<b><u>DRAWING</u></b>	<b><u>REVISION DESCRIPTION</u></b>
1	G-2	Updated Index of Drawings, Quantities and Code Information
2	C-7	Revised Building Finished Floor Elevation and Added stairs to plan view
3	C-8	Revised Building Finished Floor Elevation and Added stairs to plan view
4	C-9	Added Profile Callout, Reinforced Concrete Sidewalk Detail and Note 2
5	C-10	New Sheet Added to plan set
6	A-1	Stairs added to plan view
7	A-2	Revised Building Finished Floor Elevation and Added stairs to elevation view
8	A-3	Revised Building Finished Floor Elevation and Detail moved to added sheet A-3.1
9	A-3.1	New Sheet Added to plan set
10	A-4	Revised Building Finished Floor Elevation in Details 3 and 4
11	S-1	Updated Building Code Information Paragraph 6 with Revised Building Finished Floor Elevation
12	S-3	Revised Building Finished Floor Elevation and Added stairs to plan view
13	S-5	Revised Building Finished Floor Elevation in Details 1 and 2 and Added Detail 6 for Stairs and Railing
14	S-6	Revised Building Finished Floor Elevation in Details
15	S-7	Revised Building Finished Floor Elevation in Detail 1
16	E-7	Added Topsoil Pay Limits to Detail 6

Note that Addendum No. 1 consists of 4 pages of text, Table of Contents attachment consisting of 2 pages, Proposal sheets attachment consisting of 4 pages, one specification attachment consisting of 4 pages, and one attachment of 16 sheets of drawings.

Fully conformed contract documents incorporating the items included in this Addendum will be provided to the successful Contractor upon the award of contract.

APPROVED BY: Date: 4/4/13  
  
RIAC Signature

**END OF ADDENDUM No. 1**

**DIVISION 2 – TECHNICAL SPECIFICATIONS**

<u>Section No.</u>	<u>Title</u>
M-001	..... Supplemental Provisions
M-003	.....Saw and Seal
M-401	..... RIDOT Bituminous Concrete Pavement
M-M03	..... RIDOT Bituminous Pavement Materials
P-152	..... Excavation and Embankment
P-154	..... Subbase Course
P-156	..... Temporary Air and Water Pollution, Soil Erosion and Siltation Control
P-209	.....Crushed Aggregate Base Course
P-603	.....Bituminous Tack Coat
P-610	.....Structural Portland Cement Concrete
P-620	.....Pavement Markings
D-701	.....Pipe for Storm Drains and Culverts
D-751	..... Drainage Structures
L-100	..... Airfield Electrical Work
L-108	..... Underground Cable and Installation of Airfield Cable
L-109	..... Airfield Lighting Vault and Vault Equipment
L-110	.....Installation of Underground Electrical Duct and Conduit
L-127	..... Electrical Handholes
T-905	..... Topsoil and Seeding
02200	..... Excavating, Backfilling and Compacting
03300	..... Cast-in-Place Concrete
03400	.....Precast Architectural Concrete
04200	.....Concrete Masonry Units - Brick
04202	..... Concrete Unit Masonry - Reinforced
05210	..... ..Steel Joist
05300	..... Steel Decking
05500	..... Miscellaneous Metals
06820	..... Fiberglass Reinforced Plastic Products
07200	..... Wall Insulation
07220	..... Roof Insulation
07275	..... Weather Barrier
07530	.....EPDM Roofing System
07620	..... Flashing and Sheet Metal
07900	..... Caulking and Sealants
08100	..... Metal Doors and Frames
08700	.....Door Hardware
08954	.....Flood Vents
09615	..... Concrete Floor Sealant
09900	..... Painting
10520	..... Fire Extinguishers

15100	..... HVAC General Requirements
15500	.....HVAC
16050	.....Basic Electrical Materials and Methods
16060	..... Grounding and Bonding
16070	.....Supporting Devises
16075	..... Electrical Identification
16120	..... Wires and Cables
16130	..... Raceways
16132	.....Boxes and Fittings
16400	..... Wiring Devises
16160	..... Cabinets and Enclosures
16460	.....Dry-Type Transformers
16461	.....Constant Current Regulators
16470	..... Panelboards
16471	..... 5 kV Switches
16490	..... Automatic Transfer Switch
16510	..... Lighting
16599	..... Airfield Lighting Control and Monitoring System
16620	..... Diesel Engine-Generator Set

**CERTIFICATION OF BIDDING REQUIREMENTS**

This signature page is included in this contract document to provide assistance to all bidders in the form of a checklist and to stipulate that if any of the items mentioned below, but not limited to, are incomplete or otherwise incorrect, the Rhode Island Airport Corporation may reject the bid.

**I. REQUIRED FORMS AND SIGNATURE**

A. Certification of Bidding Requirements.....	page P-2
C. Bid Summary Form.....	page P-3
D. Bid Form.....	page P-4
E. Anti-Collusion Certificate (Sworn Affidavit) OR.....	page P-18
F. Anti-Collusion Certificate (Unsworn Affidavit).....	page P-20
G. Disclosure of Lobbying Activities.....	page P-22
H. Certification Regarding Debarment, Suspension, and Other Responsibility Matters...	page P-23
I. Certification of Non-Segregated Facilities.....	page P-24
J. Disadvantaged Business Utilization Plan.....	page P-25
K. Letter of Intent to Perform as a Qualified Disadvantaged Business.....	page P-26
L. DBE Waiver Form (if applicable).....	page P-27
M. Contractor Qualification Form.....	page P-28
N. Bidder's Subcontractor List.....	page P-32
O. Certification of Compliance with Federally Required Contract Requirements.....	page P-33
P. Buy American Certification.....	page P-34
Q. Equal Employment Opportunity Report Statement.....	page P-35
R. Bid Bond.....	page P-36

**II. PROPOSAL SECTION**

Unit Price Bids will be considered to be incomplete if any of the following conditions exist:

- A. Unit price in words is omitted
- B. Unit price in figures is omitted
- C. A zero, N/A, or blank is used as a bid price

**III. MISCELLANEOUS**

- A. All written words and figures shall be in **INK** or **TYPED**
- B. All papers bound with or attached to the proposal form are considered a part thereof, and must not be detached or altered when the proposal is submitted.

**IV. CERTIFICATION SUMMARY**

I hereby certify that I have read all of the above requirements and understand that it affects the acceptability of my bid(s).

\_\_\_\_\_  
Contractor Signature

\_\_\_\_\_  
Date

**BID SUMMARY FORM**

FOR THE PERFORMANCE OF

RHODE ISLAND AIRPORT CORPORATION  
CONSTRUCTION CONTRACT NUMBER **24865**  
AIP No. **3-44-0006-19-2013**

PROJECT: **Relocate Airfield Electrical Vault**

LOCATION: **Quonset State Airport, North Kingstown, Rhode Island**

SUBMITTED BY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

\_\_\_\_\_

NAME OF SURETY: \_\_\_\_\_

TOTAL BID COST IN WORDS \_\_\_\_\_

\_\_\_\_\_

TOTAL BID COST IN FIGURES \$ \_\_\_\_\_

THE BASIS OF AWARD OF CONTRACT WILL BE THE LOWEST RESPONSIVE TOTAL BID BASED ON ALL QUANTITIES IN THE PROPOSAL.

NOTE: IN CASE OF A DISCREPANCY BETWEEN WORDS AND FIGURES, THE SUMS EXPRESSED IN WORDS NOTED ABOVE SHALL GOVERN.

**BID FORM**

To: Rhode Island Airport Corporation  
2000 Post Road  
Warwick, Rhode Island, 02886

Date: \_\_\_\_\_

ATTN: Ms. Laurie Sirois  
Grants and Contracts Administrator

Time: \_\_\_\_\_

For: **RELOCATE AIRFIELD LIGHTING VAULT**  
**Quonset State Airport**  
**North Kingstown, Rhode Island**  
**RIAC Construction Contract No. 24865**  
**AIP No. 3-44-0006-19-2013**

The undersigned, having visited the site of the work and having familiarized themselves with local conditions affecting the cost of the work and with all requirements of the proposed Contract Documents, and duly issued Addenda to said documents, as acknowledged herein, propose to furnish and perform all labor, materials, necessary tools, expendable equipment, and all utility and transportation services necessary to perform and complete in a workmanlike manner all work required by said documents and Addenda.

ADDENDA: Bidder acknowledges receipt of and has examined the Addenda:

Addendum Number \_\_\_\_\_ dated \_\_\_\_\_.

Addendum Number \_\_\_\_\_ dated \_\_\_\_\_.

Acknowledged by \_\_\_\_\_ date \_\_\_\_\_.

BID PROPOSAL: This Proposal shall be filled in by the BIDDER with prices written in both words and numerals and the extensions made by him/her. In case of discrepancy between the words and numerals, the amounts shown in words shall govern.

BIDDER agrees to perform all necessary labor, furnish all materials and do all work described in the Specifications, including allowances, and shown on the Drawings, for the following lump sum prices and/or unit process:

<b>Rhode Island Airport Corporation</b> <b>Relocate Airfield Lighting Vault</b> <b>Quonset State Airport</b> <b>North Kingstown, Rhode Island</b> <b>RIAC Construction Contract No. 24865</b> <b>AIP No. 3-44-0006-19-2013</b> <b>SCHEDULE OF PRICES</b>							
Item No.	Pay Item No.	Estimated Quantity	Item of Work With Unit Prices Written in Words	Figures			
				Unit Bid Price		Bid Amount	
				Dollars	Cents	Dollars	Cents
37	L-127-2	8 EA	<u>Communications Handhole</u>  at _____  _____  Dollars and _____ Cents per each				
38	T-905-1	3,135 SY	<u>Topsoil and Seeding</u>  at _____  _____  Dollars and _____ Cents per square yard				
<b>PLEASE MAKE SURE A BID IS ENTERED FOR EACH ITEM</b>							

**BID PROPOSAL:** Bidder agrees to perform all of the work described in the Contract Documents, including allowances, for the sum of:

**Total Bid:** \_\_\_\_\_ \$ \_\_\_\_\_  
 (words shall govern)

**LIQUIDATED DAMAGES:** Upon execution of the contract, the Contractor shall proceed with the preparation and submittal of shop drawings and his tentative construction schedule and with subsequent ordering and fabricating of materials. The Owner will issue a written "Notice-to-Proceed" which will specify an effective date for the Contractor to begin work at the site. The contract work shall be completed within **one hundred twenty (120) calendar days** from the date of issuance of the Notice to Proceed.

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## SECTION 16471

### 5kV SWITCHES

#### PART 1 - GENERAL

##### 1.00 General Provisions

- A. Attention is directed to the Division 0 and Division 1 of these Contract Documents, which are hereby a part of this Specification Section.

##### 1.01 Description

- A. The work of this Section consists of furnishing, installing and testing 5kV rated fused switches, complete in place where shown on the Contract Drawings.

##### 1.02 General Requirements

- A. The Contract Drawings show facilities diagrammatically and do not show offsets, fittings, and accessories that may be required. Investigate carefully the structural and finish conditions affecting the work, and provide such fittings and accessories as required.
- B. Perform all work by skilled electricians in a manner satisfactory to the Engineer and in accordance with the requirements of NFPA 70 and RI Electrical Code and all local authorities having jurisdiction over this installation. If required, deliver certificates of approval to the Engineer before final acceptance of the work.

##### 1.03 References

- A. The following organizations provide specifications, codes and standards, and are referenced for use on this Contract.
  - 1. American National Standards Institute (ANSI).
  - 2. American Society for Testing and Materials (ASTM).
  - 3. Institute of Electrical and Electronics Engineers (IEEE).
  - 4. National Fire Protection Association (NFPA):
    - a. 70, National Electrical Code (NEC).
  - 5. RI Electrical Code.
  - 6. Underwriters Laboratories, Inc. (UL):

#### **1.04 Submittals**

- A. Refer to Sections 01340 for submittal requirements and procedures.
- B. List of Materials: At least 30 days before beginning the work of this Section, submit a list of materials and equipment proposed for use together with applicable standards. Give name of manufacturer, brand name, and catalog number of each item. Submit the list complete at one time, with items arranged and identified in numerical sequence by Specification section and paragraph number.
- C. Compliance with Applicable Standards:
  - 1. Where equipment or materials are specified to conform to the standards of organizations such as ANSI, ASTM, IEEE, NEMA, and UL, submit evidence of such conformance for review and record purposes.
  - 2. The label or listing of the specified agency will be acceptable evidence.
  - 3. Instead of the label or listing, the Contractor may submit a written certificate from an approved, nationally recognized testing organization, adequately equipped and competent to perform such services, stating that the items have been tested and that the units conform to the specified standard.
- D. Shop Drawings:
  - 1. Submit shop drawings for review showing the exact location and arrangement of panelboards being furnished and installed under these Specifications. Submit such drawings before rough-in work, fabrication, and within ample time to prevent delays in the Work. Include complete electrical wiring diagrams for equipment and equipment installation.
  - 2. Submit catalog cuts and/or assembly drawings for all electrical materials including:
    - a. 5kV Switches
    - b. Fuses

#### **1.05 Delivery, Storage and Handling**

- A. Ship each unit securely packaged and labeled for safe handling in shipment and to avoid damage or distortion.
- B. Mark each unit shall be marked in accordance with applicable reference standard.
- C. Store materials in secure and dry facility and in original packaging in a manner to prevent soiling, physical damage, wetting or corrosion prior to installation.
- D. Where possible, maintain protective coverings until installation is complete and remove as part of final clean-up.

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## PART 2 - PRODUCTS

### 2.01 General Requirements

- A. Furnish materials and equipment of design, sizes, and ratings as indicated. All items shall be of the thicknesses shown on the Contract Drawings and herein specified.
- B. Furnish materials and equipment bearing label or classification listing of a national recognized testing laboratory where UL standards exist and such product labeling or listing is available. Electrical materials shall comply with NFPA 70.
- C. Methods of fabrication, assembly, and installation are optional unless otherwise indicated.
- D. Provide products that are free from defects which may impair performance, durability or appearance, and of the commercial quality best suited for the purpose indicated or specified herein.
- E. Switches shall be as manufactured by Square D Company, General Electric Company, Cutler Hammer/Eaton Corporation, or approved equal.

### 2.02 5kV Switches

- A. Switch Mechanism:
  - 1. Switch shall be rated for 200 amperes at 5.5kV and shall be two-pole or three-pole as indicated on the Drawings.
  - 2. Switch shall utilize knife-type air interrupter construction and shall have a quick-make, quick-break operating mechanism.
  - 3. Switch shall have the provision for installing fuses.
  - 4. The fault closing rating with fuses shall be for a maximum of 63kA symmetrical and the switch shall have a short time rating of 12.5kA for 2 seconds. The basic impulse level (BIL) shall be 60kV.
  - 5. The switch shall be rated 200 amperes for load breaking (100 operations) at 70 to 80% power factor and shall have a mechanical life expectancy of 750 no-load operations.
- B. The enclosure shall be sheet steel, NEMA 3R rated, and shall be provided with a mechanically interlocked fuse access door, a viewing window for visual contact position inspection. The handle shall have provision for padlocking in the open position, and a wind-resistant door stay shall be provided.
- C. Fuses:
  - 1. Fuses shall be rated for 5.5kV and shall be E-rated.

2. Fuse sizes shall be as indicated on the Drawings.

### **PART 3 - EXECUTION**

#### **3.01 Installation - General**

- A. Install electrical materials, equipment, and accessories in locations as indicated, rigid and secure, plumb and level, and in alignment with related and adjoining work to provide a complete and operable system. Do not weld electrical materials for attachment or support.
- B. Provide anchor bolts and anchorage items as required, and field check to ensure proper alignment and location. Provide templates, layout drawings, and supervision at the job site to ensure correct placing of anchorage items in concrete.
- C. Install supporting members, fastenings, framing, hangers, bracing, brackets, straps, bolts, and angles as required to set and connect the work rigidly.
- D. Control erection tolerance requirements so as to not impair the strength, safety, serviceability, or appearance of the installations.

#### **3.02 5kV Switches**

- A. General: Prior to commencing installation:
  1. Verify that all surfaces upon or in which enclosures are to be mounted are properly prepared and that all pre-mounting wire pulling has been completed and properly tagged. Take corrective action if necessary.
  2. Verify that enclosure mounting provisions are suitable for intended mounting. Make corrective adjustments, if necessary.
  3. Verify that fuses are correct rating for the applicable circuit applications as indicated. Take corrective action if necessary.
  4. Adjust straight and plumb and fasten securely in place. Align and securely and independently fasten each section of multi-section enclosures. Mount all switches with the operating handle not more than six feet-six inches and bottom not less than twenty-four inches above finished floor unless otherwise indicated.
- B. Install bonding jumpers from conduits entering cabinets to ground bus.
- C. Make all electrical connections for wiring entering cabinet.

**END OF SECTION 16471**

**INDEX OF DRAWINGS:**

SHEET NUMBER	DRAWING NUMBER	DISCIPLINE: DESCRIPTION
<b>GENERAL:</b>		
1	G-1	COVER SHEET
2	G-2	INDEX OF DRAWINGS, ITEM QUANTITIES & CODE INFORMATION
<b>CIVIL:</b>		
3	C-1	GENERAL PLAN & NOTES
4	C-2	OVERALL PHASING PLAN
5	C-3	SAFETY REQUIREMENTS
6	C-4	SAFETY REQUIREMENTS & PHASING DETAILS
7	C-5	EROSION & SEDIMENT CONTROL PLAN AND DETAILS
8	C-6	OVERALL SITE PLAN
9	C-7	ELECTRICAL VAULT SITE PLAN - BMPS, PAVEMENT DETAILS & BORINGS
10	C-8	ELECTRICAL VAULT SITE PLAN - GRADING AND DRAINAGE PLAN
11	C-9	ELECTRICAL VAULT - DUCTBANK PROFILE MH#1 PLAN & SECTION
12	C-10	ELECTRICAL VAULT - DUCTBANK PROFILE MHC#2 TO MHC#3
<b>ARCHITECTURE:</b>		
13	AS-1	ABBREVIATIONS, SYMBOLS & LEGENDS
14	A-1	ELECTRICAL VAULT - FLOOR & ROOF PLANS
15	A-2	ELECTRICAL VAULT - EXTERIOR ELEVATIONS
16	A-3	ELECTRICAL VAULT - BUILDING LONGITUDINAL SECTION
17	A-3.1	ELECTRICAL VAULT - BUILDING CROSS SECTION
18	A-4	ELECTRICAL VAULT - DETAILS
19	A-5	ELECTRICAL VAULT - SCHEDULES & DETAILS
<b>STRUCTURAL:</b>		
20	S-1	STRUCTURAL NOTES 1 OF 2
21	S-2	STRUCTURAL NOTES 2 OF 2
22	S-3	ELECTRICAL VAULT - FOUNDATION & LEVEL 1 PLANS
23	S-4	ELECTRICAL VAULT - ROOF FRAMING PLAN & STEEL JOIST DETAILS
24	S-5	ELECTRICAL VAULT - SECTIONS & DETAILS
25	S-6	ELECTRICAL VAULT - WALL ELEVATIONS
26	S-7	ELECTRICAL VAULT - FOUNDATION SECTIONS & DETAILS
27	S-8	ELECTRICAL VAULT - CMU WALLS - SECTIONS & DETAILS
<b>ELECTRICAL:</b>		
28	E-1	ELECTRICAL VAULT - POWER PLAN
29	E-2	ELECTRICAL VAULT - LIGHTING & RECEPTACLE PLAN
30	E-3	ELECTRICAL VAULT - INTERIOR ELEVATIONS
31	E-4	ELECTRICAL VAULT - INTERIOR ELEVATIONS & DUCTBANK SECTIONS
32	E-5	ELECTRICAL VAULT - ONE LINE DIAGRAM
33	E-6	ELECTRICAL VAULT - EQUIPMENT REMOVAL FROM EXISTING VAULT
34	E-7	ELECTRICAL VAULT - DETAILS
<b>MECHANICAL:</b>		
35	M-1	ELECTRICAL VAULT - HVAC PLAN
36	M-2	HVAC LEGEND, SCHEDULE, DETAILS

**ITEM QUANTITIES:**

ITEM NO.	SPEC. NO.	ITEM DESCRIPTION	UNITS	QUANTITY
1	M-001-1	RADIOS	ALL	1
2	M-003-1	SAW AND SEAL	LF	100
3	M-401-1	RIDOT BITUMINOUS CONCRETE PAVEMENT	TON	110
4	M-401-2	BITUMINOUS PAVEMENT TRENCH PATCH	SY	350
5	P-152-1	SITE GRADING	LS	1
6	P-152-2	UTILITY TEST PITS	ALL	1
7	P-154-1	SUBBASE COURSE	CY	185
8	P-156-1	DRAIN INLET PROTECTOR	EA	30
9	P-156-2	FIBER ROLLS	LF	500
10	P-156-3	SAND FILTER BED	LS	1
11	P-156-4	CHECK DAM	LS	1
12	P-156-5	SEDIMENT FOREBAY	SF	10
13	P-209-1	CRUSHED AGGREGATE BASE COURSE	CY	100
14	P-603-1	BITUMINOUS TACK COAT	GAL	135
15	P-620-1	PAVEMENT MARKINGS	SF	100
16	D-701-1	15" RCP STORM DRAIN (CLASS III)	LF	125
17	D-701-2	8" STEEL STORM DRAIN (SCH. 80)	LF	8
18	D-751-1	OVERFLOW CATCH BASIN	EA	1
19	D-751-2	TRENCH DRAIN	LF	60
20	L-108-1	1/C NO. 8 AWG 5KV FAA L824 TYPE B CABLE	LF	13,670
21	L-108-2	1/C NO. 6 AWG 5KV FAA L824 TYPE B CABLE	LF	6,920
22	L-108-3	1/C NO. 6 AWG 5KV SHIELDED CABLE	LF	6,230
23	L-108-4	1/C NO. 4 AWG GROUND	LF	1,550
24	L-108-5	1/C NO. 6 AWG GROUND	LF	1,885
25	L-108-6	NO. 6 AWG BARE STRANDED COPPER COUNTERPOISE CABLE	LF	2,020
26	L-108-7	12 PAIR NO. 19 CONTROL CABLE	LF	595
27	L-108-8	25 PAIR NO. 19 CONTROL CABLE	LF	1,805
28	L-108-9	50 PAIR NO. 19 CONTROL CABLE	LF	1,805
29	L-108-10	GROUND RODS	EA	14
30	L-109-1	NEW AIRFIELD ELECTRICAL VAULT	LS	1
31	L-109-2	REMOVE AND DISPOSE OF EXISTING EQUIPMENT	LS	1
32	L-110-1	2 WAY - 2" PVC CONCRETE ENCASED DUCTBANK	LF	100
33	L-110-2	2 WAY - 4" PVC CONCRETE ENCASED DUCTBANK	LF	20
34	L-110-3	4 WAY - 4" PVC CONCRETE ENCASED DUCTBANK	LF	75
35	L-110-4	6 WAY - 4" PVC CONCRETE ENCASED DUCTBANK	LF	1,900
36	L-127-1	ELECTRICAL HANDHOLE	EA	6
37	L-127-2	COMMUNICATIONS HANDHOLE	EA	8
38	T-905-1	TOPSOIL AND SEEDING	SY	3,135

**CODE INFORMATION:**

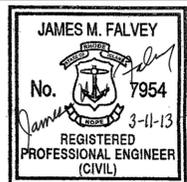
- APPLICABLE CODES:
  - BUILD. CODE - SBC-1-2011
  - PLUMB. CODE - SBC-3-2010
  - MECH. CODE - SBC-4-2010
  - ELEC. CODE - SBC-5-2008
  - ENERGY CODE - SBC-8-2010
  - GAS CODE - SBC-19-2010
  - FIRE CODES - RI-UFC-2004 & RI-LSC 2004
- OCCUPANCY TYPE
  - S-2 STORAGE
- CONSTRUCTION TYPE
  - 2-B (0-0-0)
- FIRE SUPPRESSION SYSTEM
  - N/A
- BUILDING HEIGHT & AREA
 

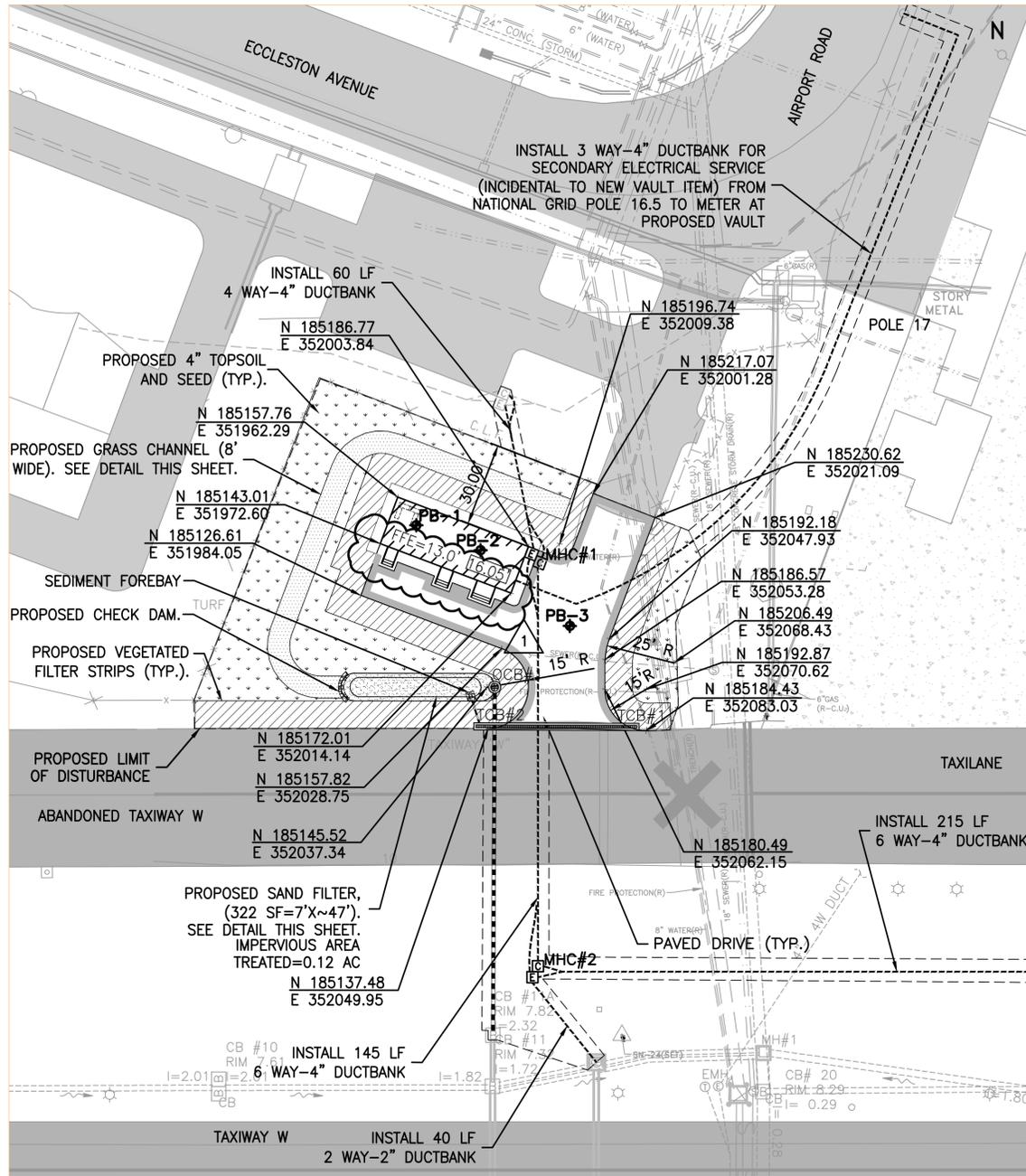
**NEW BUILDING**

  - HEIGHT
    - ACTUAL HEIGHT ABOVE GRADE = 13'-7"
  - AREA
    - 1ST FLOOR = 736 S.F.
- OCCUPANCY LOAD
  - 3
- TRAVEL DISTANCE WITHOUT SPRINKLERS: 300'
- BUILDING LOCATED WITHIN FLOOD ZONE AE, ELEV. 13.0, AS SHOWN ON FEMA FIRM MAP ID# 44009C0108H, DATED 10/19/12.

1  
9. BUILDING STRUCTURE CLASSIFIED AS CATEGORY 1 UNDER ASCE-24. ESSENTIAL EQUIPMENT WITHIN STRUCTURE MEETS REQUIREMENTS FOR ASCE-24 CATEGORY 4.

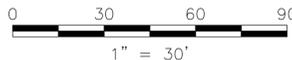
File Path: U:\22595 Quonset Vault Relocation\DESIGN\SHFT-DWG\S02 G-02 Drawing Index.dwg, Layout: 34x22, Thu, Apr 04, 2013 - 9:34 AM, User: Longa

		Rhode Island Airport Corporation <b>QUONSET STATE AIRPORT</b> RIAC CONTRACT NO. 24865 RELOCATE AIRFIELD LIGHTING VAULT			
				SHEET TITLE: GENERAL	
INDEX OF DRAWINGS, ITEM QUANTITIES & CODE INFO.		DESIGNED: CBC	DRAWN: BJD	CHECKED: CBC	APPROVED: JMF
REVISION NUMBER: 1 REVISION DATE: 4-APR-13 DESCRIPTION: ADDENDUM NO. 1		PROJECT NO. 3-44-0006-19-2013 DATE: MARCH 2013 SHEET G-2			
					



**SITE PLAN**

SCALE: 1"=30'



**NOTES:**

- TEST PITS AND CORE SAMPLES WERE PERFORMED BY CARDNO/ATC ON NOVEMBER 30, 2012.
- THE SUBSURFACE INFORMATION SHOWN ON THIS DRAWING WAS OBTAINED FOR DESIGN PURPOSES AND MAY NOT BE AN ADEQUATE REPRESENTATION OF ACTUAL CONDITIONS FOR PROJECT CONSTRUCTION. INFORMATION SHOWN REPRESENTS EXISTING CONDITIONS AT THE SPECIFIC TEST PIT/CORE LOCATIONS AT THE TIME THE SAMPLES WERE TAKEN. ALL RISKS FROM USE OR INTERPRETATION OF THE SUBSURFACE DATA SHALL BE BORNE BY THE CONTRACTOR.
- GROUNDWATER SHOWN IS DEPTH FROM EXISTING GROUND WHERE GROUNDWATER WAS ENCOUNTERED.
- ELEVATIONS SHOWN HAVE BEEN DEVELOPED FROM SURVEY COMPLETED ON NAVD88 DATUM. ELEVATIONS ARE ALSO SHOWN ON PLANS WITH QUONSET VERTICAL DATUM (QVD) CALLOUTS:

XX.XX ELEVATION IN NAVD 1988  
 XX.XX ELEVATION IN QVD

**PB-1**

2.0' DARK BROWN SAND (FILL)
4.0' BROWN SAND
GW @ 7.0'
19.0' LIGHT BROWN/GRAY SAND & SILT

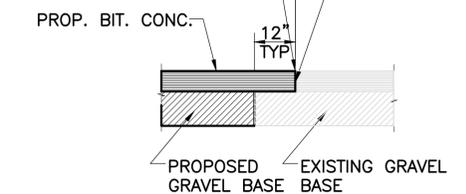
**PB-2**

2.0' DARK BROWN SAND (FILL)
4.0' LIGHT BROWN SAND
GW @ 6.5'
19.0' LIGHT BROWN/GRAY SAND & SILT

**PB-3**

2.0' DARK BROWN SAND & SILT (FILL)
4.0' LIGHT BROWN SAND
GW @ 6.5'
6.0' LIGHT BROWN/GRAY SAND & SILT

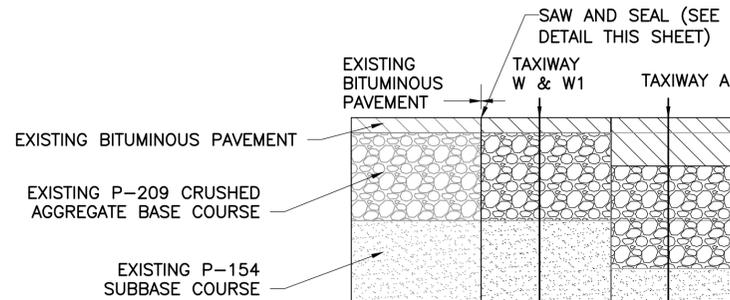
PROP. PAVEMENT  
 EXIST. PAVEMENT  
 SAW AND SEAL IF BUTT JOINT IS AT FINISH GRADE (SEE DETAIL THIS SHEET)  
 SAW CUT EXIST. PAVEMENT (FULL DEPTH). APPLY ALL SAW-CUT EDGES WITH BIT. TACK COAT (P-603)



**BITUMINOUS CONCRETE VERTICAL BUTT JOINT DETAIL**  
 NOT TO SCALE

**PAVED DRIVEWAY TYPICAL SECTION**

NOT TO SCALE



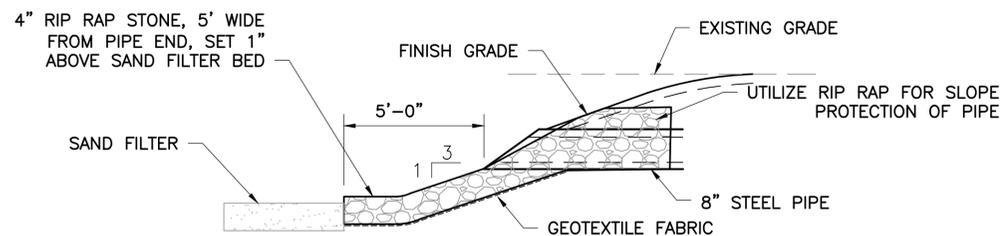
PROP. PAVEMENT SECTION (FROM TOP TO BOTTOM):  
 PROP. 3" M-401 BIT. CONC. SURFACE COURSE (2 LIFTS)  
 PROP. 6" P-209 CRUSHED AGGREGATE BASE COURSE  
 PROP. 12" P-154 SUBBASE COURSE (AS REQUIRED TO TOP OF DUCTBANK)

PROP. PAVEMENT SECTION (FROM TOP TO BOTTOM):  
 PROP. 12" M-401 BIT. CONC. SURFACE COURSE (4 LIFTS)  
 PROP. 6" P-209 CRUSHED AGGREGATE BASE COURSE  
 PROP. 4" P-154 SUBBASE COURSE (AS REQUIRED TO TOP OF DUCTBANK)

NOTE: TEMPORARY PAVEMENT PATCH SHALL BE PLACED AT THE COMPLETION OF THE DUCTBANK INSTALLATION TO OPEN PAVEMENT FOR AIRCRAFT OPERATIONS. TEMPORARY PAVEMENT PATCH SHALL BE REMOVED AND FINAL PAVING COMPLETED PER M-401-2 SPECIFICATIONS AND THIS DETAIL.

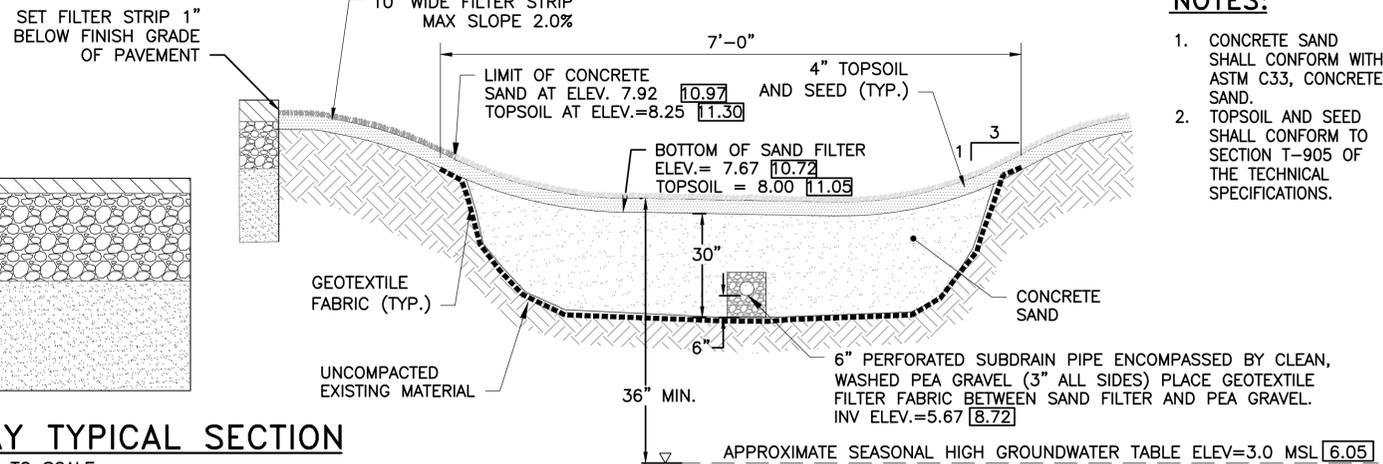
**BITUMINOUS PAVEMENT TRENCH PATCH**

NOT TO SCALE



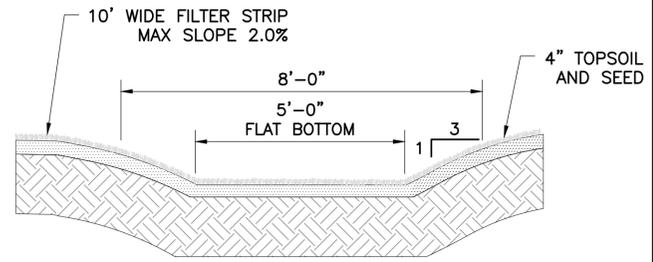
**SEDIMENT FOREBAY @ PIPE END**

NOT TO SCALE



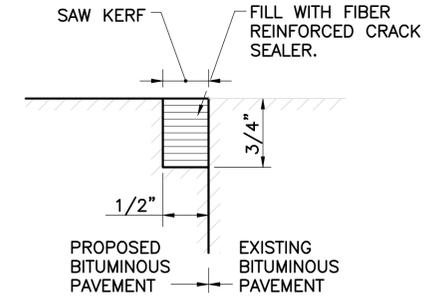
**SAND FILTER**

NOT TO SCALE



**GRASS CHANNEL**

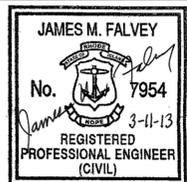
NOT TO SCALE



NOTE: PAVEMENT JOINT SHALL BE SAWCUT BEFORE AND AFTER PROPOSED BITUMINOUS OVERLAY

**SAW AND SEAL DETAIL**

NOT TO SCALE

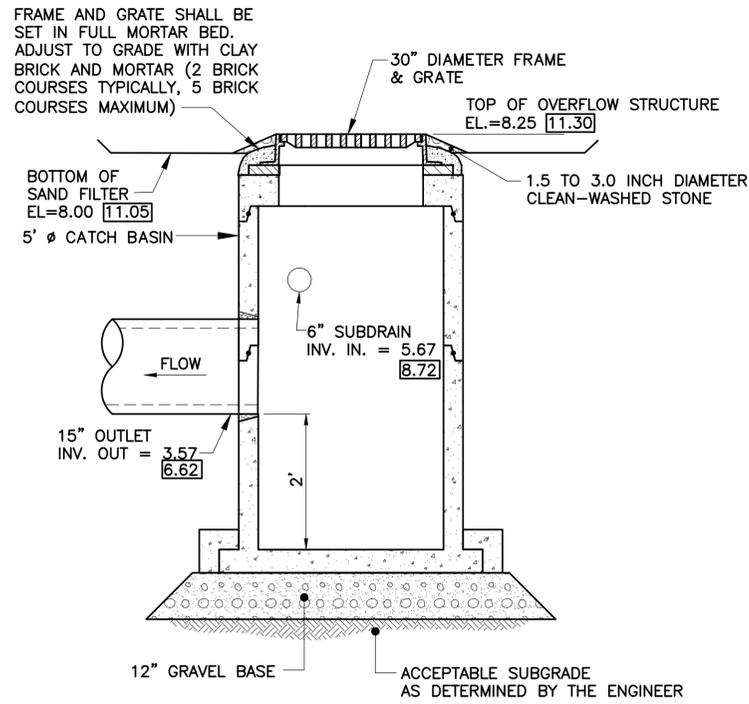


Rhode Island Airport Corporation  
**QUONSET STATE AIRPORT**  
 RIAC CONTRACT NO. 24865  
 RELOCATE AIRFIELD LIGHTING VAULT

SHEET TITLE: CIVIL  
**ELECTRICAL VAULT SITE PLAN - BMPS, PAVEMENT DETAILS, & BORINGS**

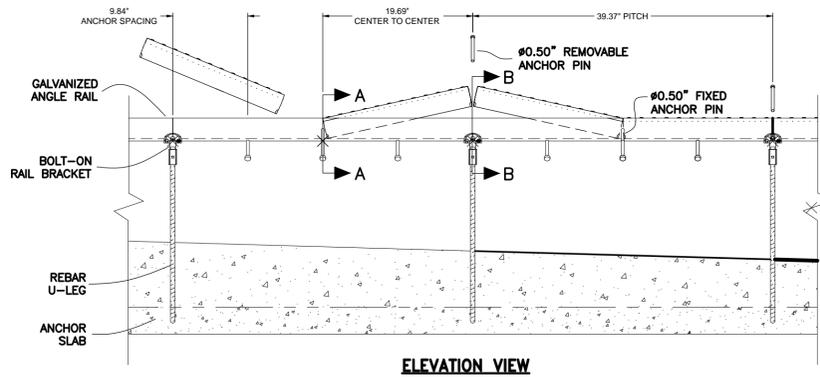
REVISION NUMBER	REVISION DATE	DESCRIPTION
1	4-APR-13	ADDENDUM NO. 1

DESIGNED: CBC	DRAWN: MGL	CHECKED: CBC	APPROVED: JMF
PROJECT NO. 3-44-0006-19-2013		DATE: MARCH 2013	
SHEET C-7		PARSONS BRINCKERHOFF	

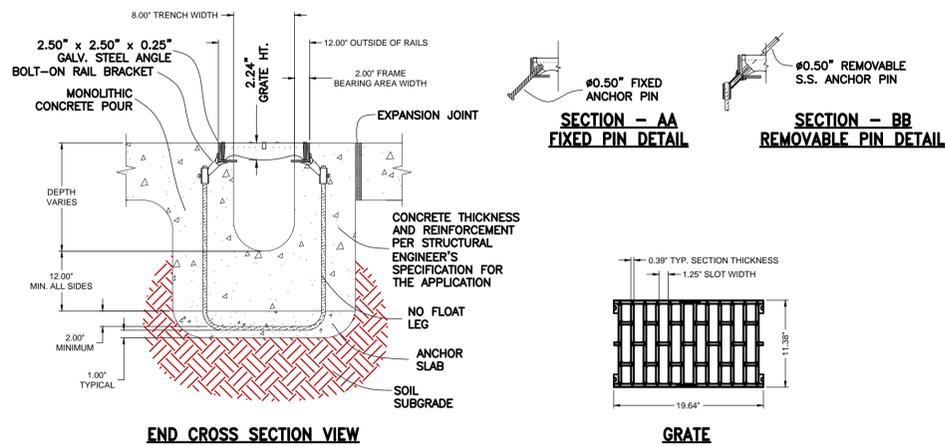


**OVERFLOW CATCH BASIN OCB#1**  
NOT TO SCALE

1. THE DESIGN CONFORMS TO THE FEDERAL AVIATION ADMINISTRATION ADVISORY CIRCULARS, FAA AC 150/5300, 5320, 5360 AND AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1996, 16TH EDITION WITH THE LATEST INTERIMS.
2. ALL DRAINAGE STRUCTURES ARE DESIGNED FOR ALLOWABLE SOIL BEARING PRESSURE OF 2 TSF MINIMUM. THE ENGINEER SHALL BE NOTIFIED IF CONDITIONS ENCOUNTERED OTHERWISE.
3. DRAINAGE AND MANHOLE STRUCTURES ARE DESIGNED TO WITHSTAND GROUNDWATER PRESSURE UNDER FLOOD CONDITION.
4. THE REINFORCING STEEL SHALL CONFORM TO AASHTO M31, GRADE 60. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
5. THE CONCRETE SHALL HAVE AN ULTIMATE STRENGTH,  $f'_c = 4,000$  PSI AT 28 DAYS UNLESS OTHERWISE NOTED.
6. THE MINIMUM CLEAR COVER TO REINFORCING BARS SHALL BE 2" UNLESS OTHERWISE NOTED.
7. SHOULD THE CONTRACTOR OPT TO SUBMIT A CATCH BASIN DETAIL DIFFERENT THAN SHOWN IN THE DETAILS ABOVE, THE STRUCTURE SHALL BE DESIGNED TO WITHSTAND 100,000 LB DUAL WHEEL LOADING, AS DIRECTED/APPROVED BY THE ENGINEER. THE STRUCTURE SHALL ALSO CONFORM TO THE REQUIREMENTS IN NOTES 1 THROUGH 6 ABOVE.
8. REGARDLESS OF THE METHOD OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF EACH INDIVIDUAL STRUCTURE TO THE ENGINEER FOR REVIEW AND APPROVAL. SHOP DRAWINGS SHALL BEAR THE STAMP OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF RHODE ISLAND.
9. AFTER COMPLETION OF CATCH BASIN INSTALLATION, CONTRACTOR SHALL SURVEY FINAL LOCATION OF CASTING AND PROVIDE COORDINATES TO THE ENGINEER. SURVEY SHALL BE CONSIDERED INCIDENTAL TO THE CATCH BASIN PAY ITEM.
10. CATCH BASIN SHALL BE CLEANED UPON PROJECT COMPLETION.

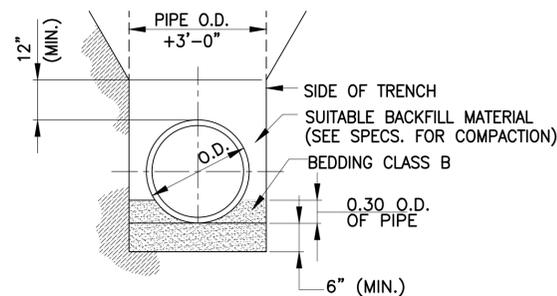


**ELEVATION VIEW**

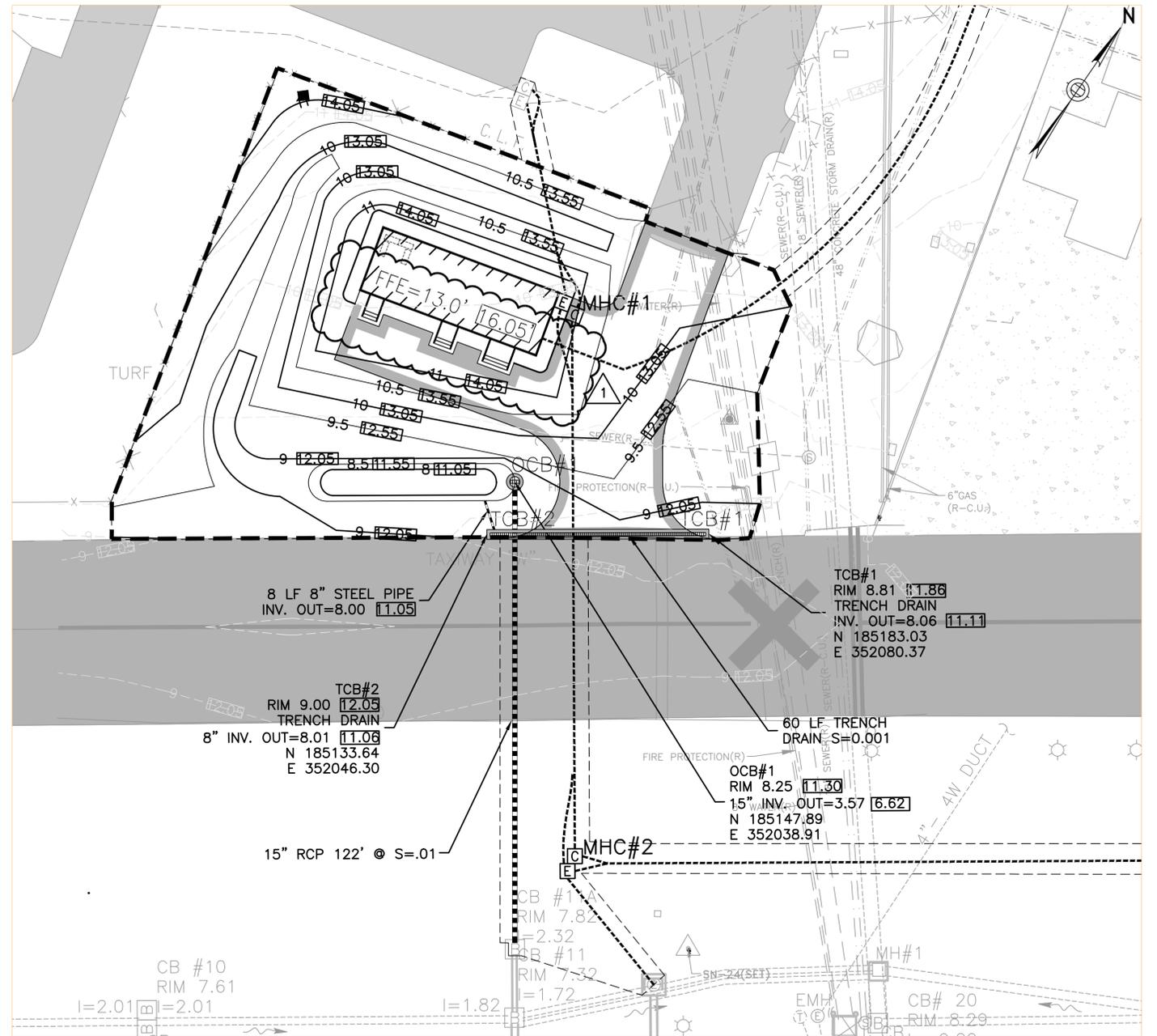


**END CROSS SECTION VIEW**

**TRENCH DRAIN**  
NOT TO SCALE



**STORM DRAIN TRENCH BEDDING DETAIL**  
NOT TO SCALE



**GRADING AND DRAINAGE PLAN**

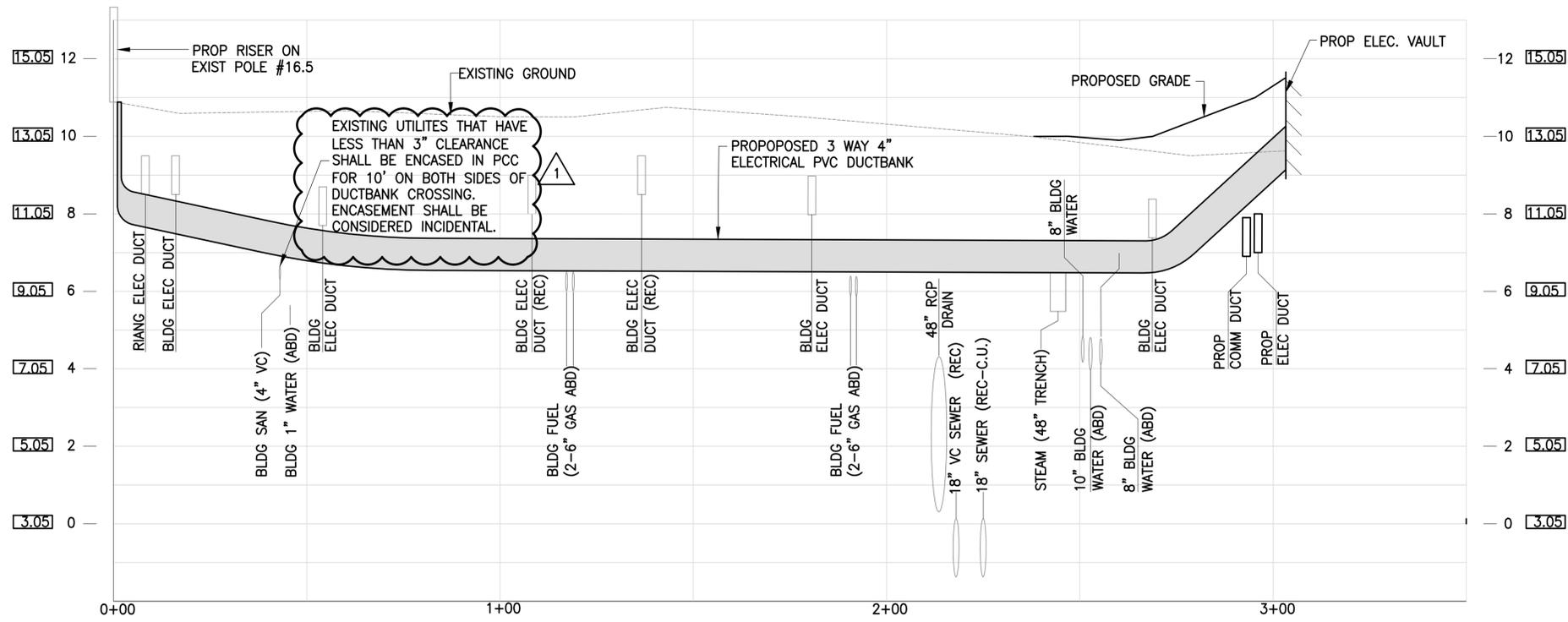
SCALE: 1"=20'

**NOTE:**

1. ELEVATIONS SHOWN HAVE BEEN DEVELOPED FROM SURVEY COMPLETED ON NAVD88 DATUM. ELEVATIONS ARE ALSO SHOWN ON PLANS WITH QUONSET VERTICAL DATUM (QVD) CALLOUTS:

XX.XX ELEVATION IN NAVD 1988  
XX.XX ELEVATION IN QVD

Rhine Island Airport Corporation <b>QUONSET STATE AIRPORT</b> RIAC CONTRACT NO. 24865 RELOCATE AIRFIELD LIGHTING VAULT		SHEET TITLE: CIVIL <b>ELECTRICAL VAULT SITE PLAN - GRADING AND DRAINAGE PLAN</b>	
DESIGNED: CBC	DRAWN: MGL	CHECKED: CBC	APPROVED: JMF
<b>PARSONS BRINCKERHOFF</b>		PROJECT NO. 3-44-0006-19-2013	DATE: MARCH 2013
		SHEET C-8	



**LEGEND:**

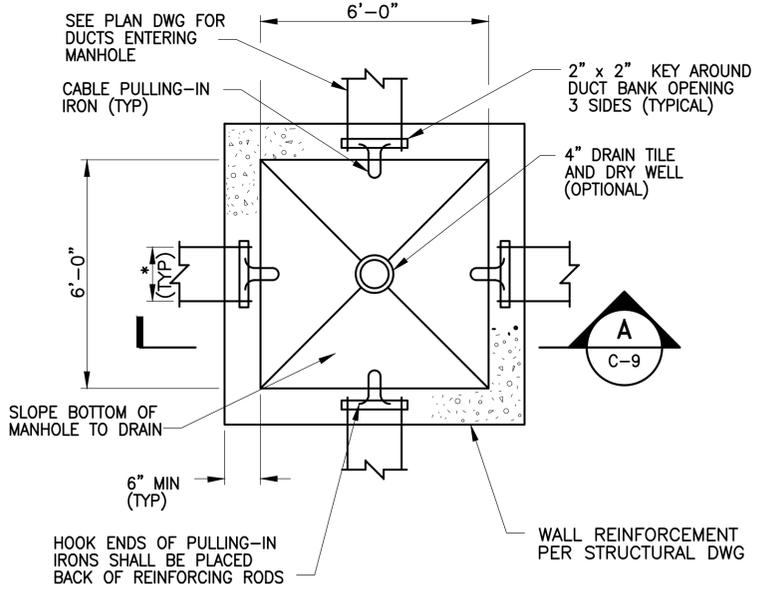
- XX.XX ELEVATION IN NAVD 1988
- XX.XX ELEVATION IN QVD

**NOTE:**

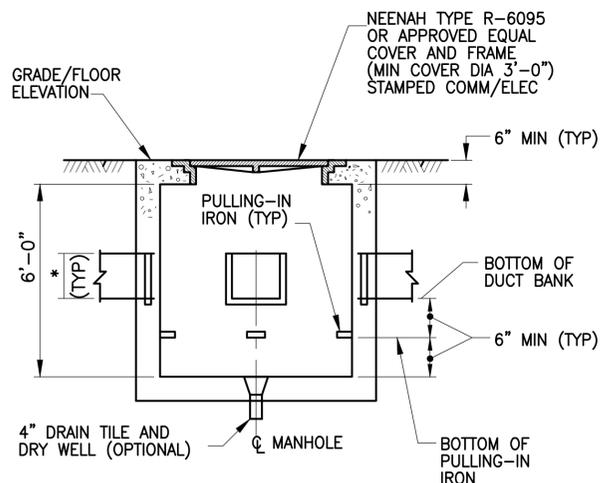
1. ELEVATIONS SHOWN HAVE BEEN DEVELOPED FROM SURVEY COMPLETED ON NAVD88 DATUM. ELEVATIONS ARE ALSO SHOWN ON PLANS WITH QUONSET VERTICAL DATUM (QVD) CALLOUTS:
2. ANY NEW CROSSINGS OF EXISTING PIPES/UTILITIES WHEN VERTICAL CLEARANCE IS LESS THAN 18" MUST BE CRADLED IN CONCRETE PER DETAIL 1, SHEET C-10. CONCRETE CRADLE SHALL BE CONSIDERED INCIDENTAL TO THE NEW CROSSING.

**PROP. 3 WAY-4" DUCTBANK PROFILE  
FROM NATIONAL GRID POLE 16.5 TO METER AT PROP. ELEC. VAULT**

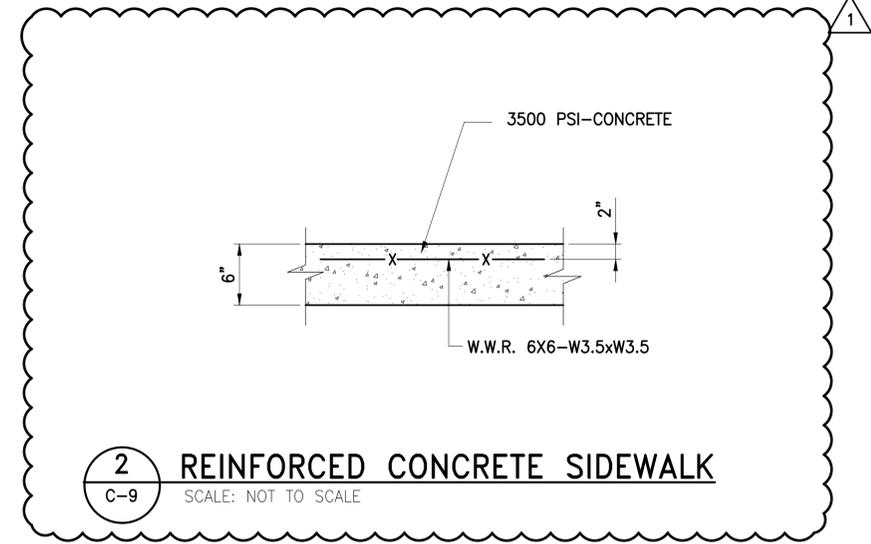
SCALE: HORIZ. 1"=20'-0"  
VERT. 1"=4'-0"



**PLAN**



**A SECTION**

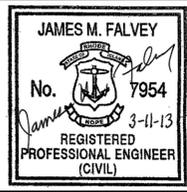


**2 REINFORCED CONCRETE SIDEWALK**  
SCALE: NOT TO SCALE

**NOTES:**

1. 6'-0" - SIZE PER PLAN/DETAIL DWG
2. \* - SIZE PER PLAN/SECTION DWG

**1 ELECTRICAL MH #1 PLAN & SECTION**  
SCALE: NOT TO SCALE



Rhode Island Airport Corporation  
**QUONSET STATE AIRPORT**  
RIAC CONTRACT NO. 24865  
RELOCATE AIRFIELD LIGHTING VAULT

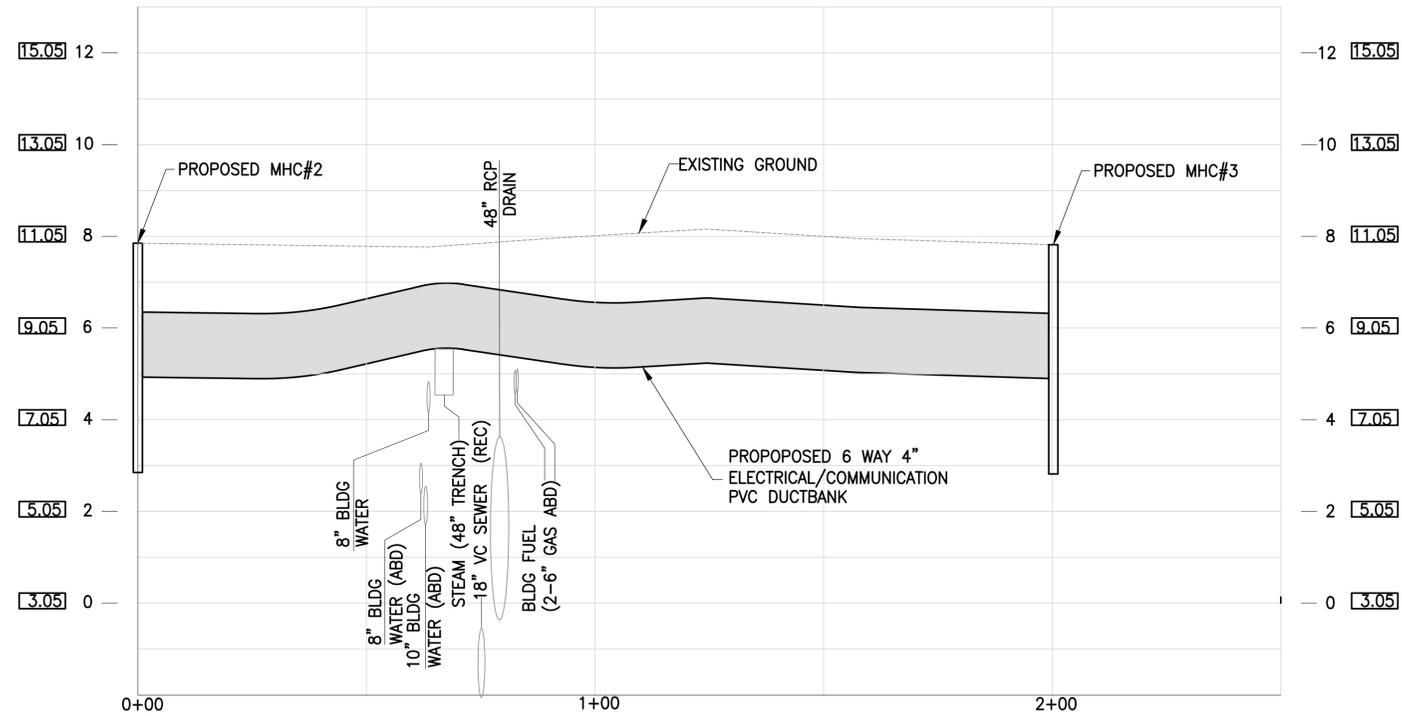
SHEET TITLE: CIVIL  
**ELECTRICAL VAULT-DUCTBANK PROFILE  
MH#1 PLAN AND SECTION**

REVISION NUMBER	REVISION DATE	DESCRIPTION
1	4-APR-13	ADDENDUM NO. 1

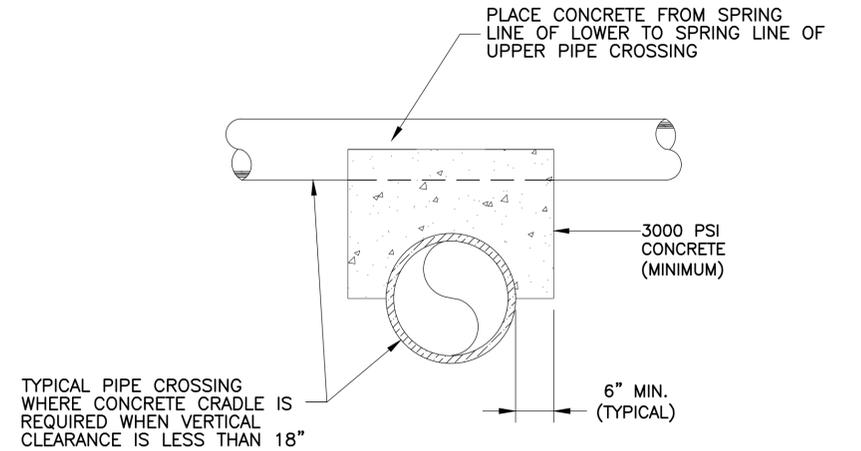
DESIGNED: CBC	DRAWN: MGL	CHECKED: CBC	APPROVED: JMF
PROJECT NO. 3-44-0006-19-2013		DATE: MARCH 2013	
SHEET C-9		PARSONS BRINCKERHOFF	

File Path: U:\252595 Quonset Vault Relocation\DESIGN\SH-T-DWG\11 C-09 Profile.dwg, Thu, Apr 04, 2013 - 9:34 AM User: Longa

File Path: U:\22585 Quonset Vault Relocation\DESIGN\SH-T-DWG\S11a C-10 Profile#2 ODC.dwg, Layout: Profile-MHC2-3 Thu, Apr 04, 2013 - 9:34 AM User: Longa



**PROP. 6 WAY-4" DUCTBANK PROFILE  
FROM MHC#2 TO MHC#3**  
SCALE: HORIZ. 1"=20'-0"  
VERT. 1"=4'-0"



**1 TYPICAL CONCRETE PIPE CRADLE DETAIL**  
C-10 SCALE: NOT TO SCALE

**LEGEND:**

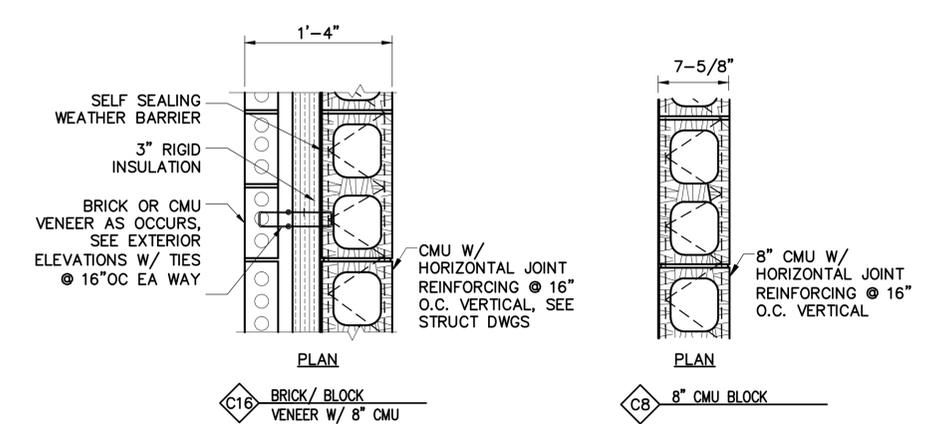
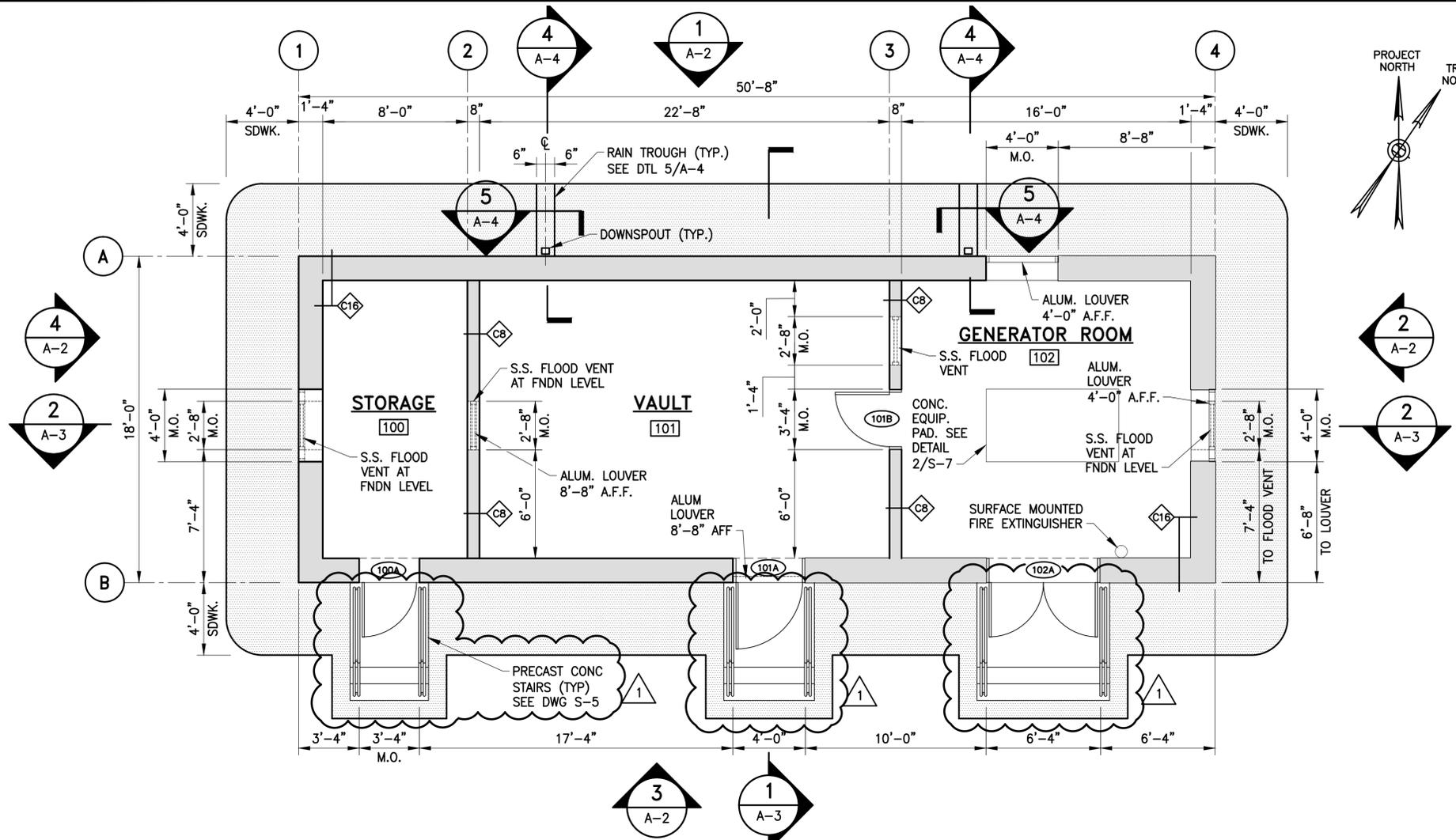
XX.XX ELEVATION IN NAVD 1988

XX.XX ELEVATION IN QVD

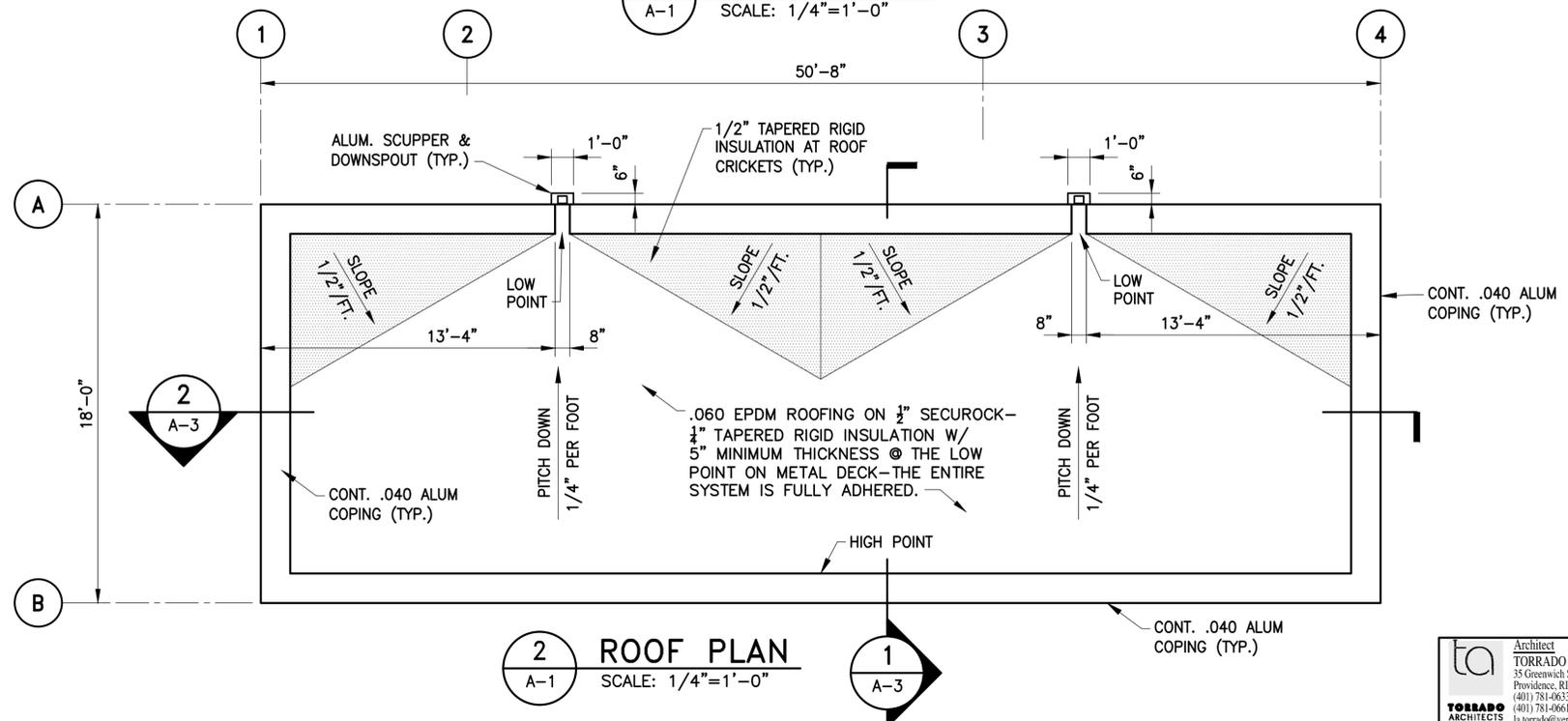
**NOTE:**

- ELEVATIONS SHOWN HAVE BEEN DEVELOPED FROM SURVEY COMPLETED ON NAVD88 DATUM. ELEVATIONS ARE ALSO SHOWN ON PLANS WITH QUONSET VERTICAL DATUM (QVD) CALLOUTS:
- ANY NEW CROSSINGS OF EXISTING PIPES/UTILITIES WHEN VERTICAL CLEARANCE IS LESS THAN 18" MUST BE CRADLED IN CONCRETE PER DETAIL 1, THIS SHEET. CONCRETE CRADLE SHALL BE CONSIDERED INCIDENTAL TO THE DUCTBANK ITEM.

			Rhode Island Airport Corporation <b>QUONSET STATE AIRPORT</b> RIAC CONTRACT NO. 24865 RELOCATE AIRFIELD LIGHTING VAULT			
			SHEET TITLE: CIVIL <b>ELECTRICAL VAULT-DUCTBANK PROFILE MHC#2 TO MHC#3</b>			
REVISION NUMBER	REVISION DATE	DESCRIPTION	DESIGNED: CBC	DRAWN: MGL	CHECKED: CBC	APPROVED: JMF
1	4-APR-13	ADDENDUM NO. 1 - NEW SHEET				
					PROJECT NO.	3-44-0006-19-2013
			DATE:	APRIL 2013	SHEET	C-10



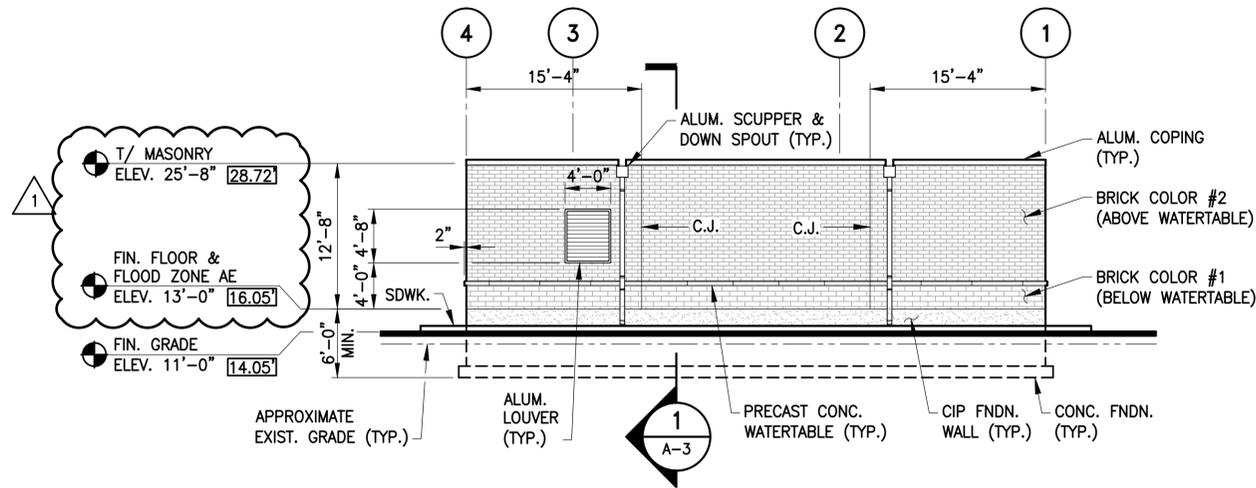
- NOTES:**
1. ALL NON BEARING CMU WALLS TO EXTEND 2" BELOW ROOF DECK; PROVIDE COMPRESSIBLE FILLER, NON COMBUSTIBLE MATERIAL SEE STRUCTURAL DRAWINGS DETAIL 5/S-5.
  2. DIMENSIONS TO MASONRY WALLS ARE TO FACE OF MASONRY



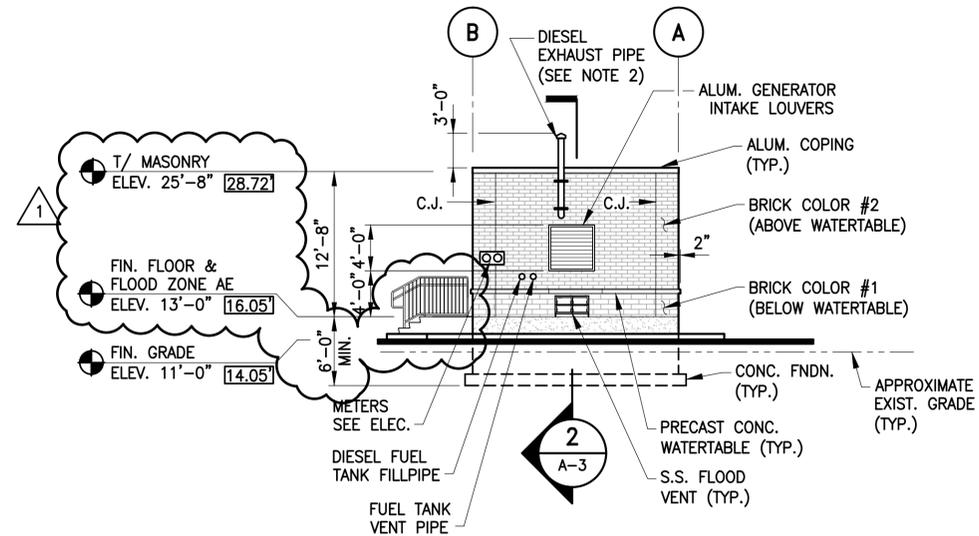
**ta** Architect  
TORRADO ARCHITECTS  
33 Greenwich Street  
Providence, RI 02907  
(401) 781-0633  
(401) 781-0661 FAX  
ta.torrado@verizon.net

REVISION NUMBER 1 REVISION DATE 4-APR-13 DESCRIPTION ADDENDUM NO. 1			Rhode Island Airport Corporation <b>QUONSET STATE AIRPORT</b> RIAC CONTRACT NO. 24865 RELOCATE AIRFIELD LIGHTING VAULT SHEET TITLE: ARCHITECTURE <b>ELECTRIC VAULT - FLOOR &amp; ROOF PLANS &amp; WALL TYPES</b>			
DESIGNED: BO	DRAWN: GD	CHECKED: CON	APPROVED: JMF	PROJECT NO. 3-44-0006-19-2013		
<b>PARSONS BRINCKERHOFF</b>			DATE: MARCH 2013	SHEET A-1		

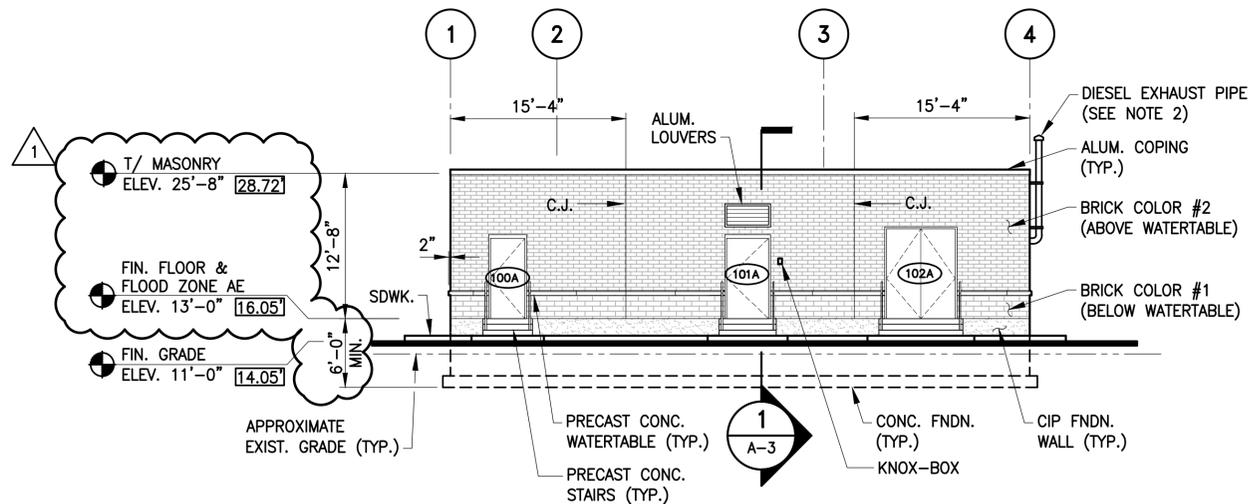
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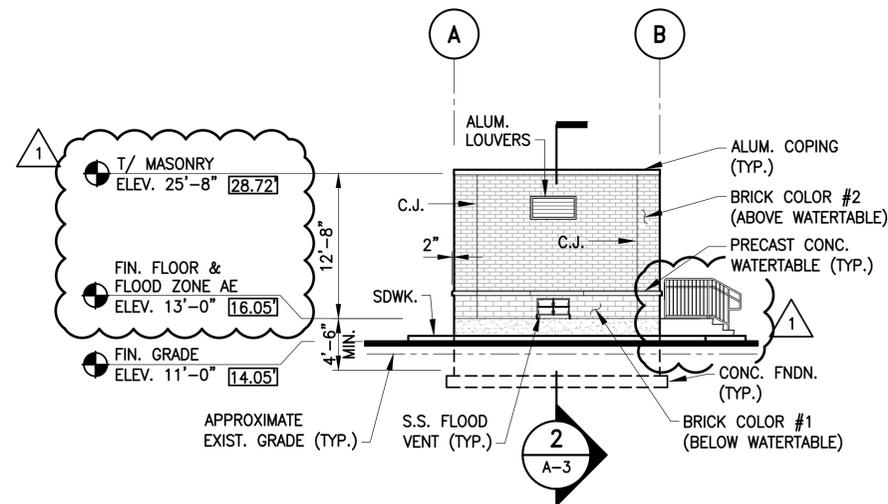
**1 NORTH ELEVATION (REAR)**  
A-2 SCALE: 1/8"=1'-0"



**2 EAST ELEVATION (SIDE)**  
A-2 SCALE: 1/8"=1'-0"



**3 SOUTH ELEVATION (FRONT)**  
A-2 SCALE: 1/8"=1'-0"



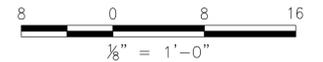
**4 WEST ELEVATION (SIDE)**  
A-2 SCALE: 1/8"=1'-0"

**LEGEND:**

- XX.XX' INDICATES ELEVATION IN QVD
- XX'-X" INDICATES ELEVATION IN NAVD 88

**NOTES:**

1. WHERE "PRECAST CONCRETE WATERTABLE" IS NOTED REFER TO: "ARCHITECTURAL PRECAST CONCRETE" IN PROJECT SPECIFICATIONS.
2. EXHAUST PIPE SUPPORT TO ATTACH TO CMU THROUGH THE BRICK VENEER. INFILL BRICK VENEER AROUND SUPPORT HARDWARE. COORDINATE WITH EQUIPMENT MANUFACTURER & MASONRY CONTRACTOR.



Rhode Island Airport Corporation  
**QUONSET STATE AIRPORT**  
RIAC CONTRACT NO. 24865  
RELOCATE AIRFIELD LIGHTING VAULT

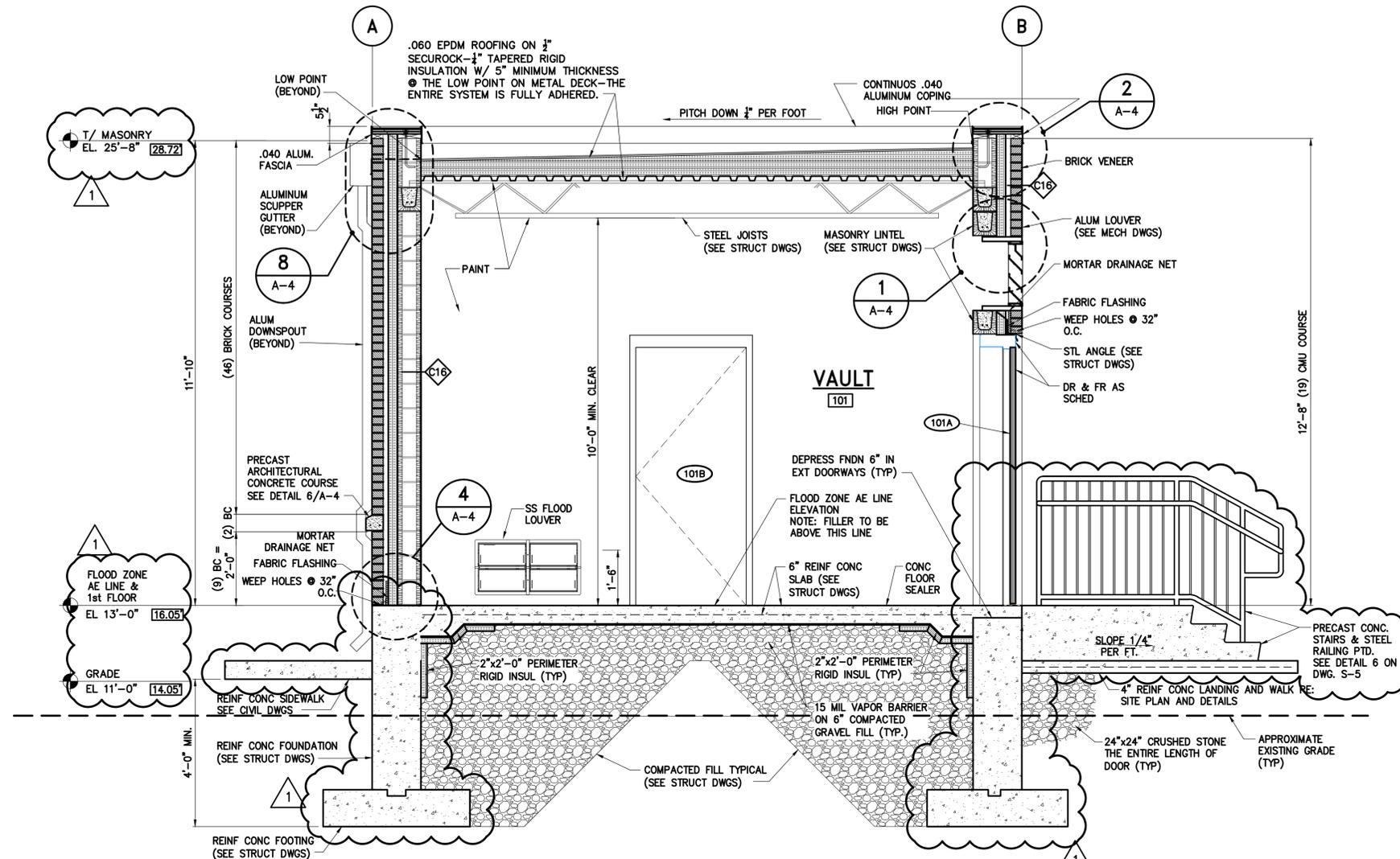
SHEET TITLE: **ARCHITECTURE**  
**ELECTRICAL VAULT**  
**EXTERIOR ELEVATIONS**

DESIGNED: BO	DRAWN: GD	CHECKED:	APPROVED:
<b>PARSONS BRINCKERHOFF</b>		PROJECT NO. 3-44-0006-19-2013	DATE: MARCH 2013
		SHEET A-2	

REVISION NUMBER	REVISION DATE	DESCRIPTION
1	4-APR-13	ADDENDUM NO. 1

**TORRADO ARCHITECTS**  
Architect  
35 Greenwich Street  
Providence, RI 02907  
(401) 781-0633  
(401) 781-0661 FAX  
torrado@torrado.net



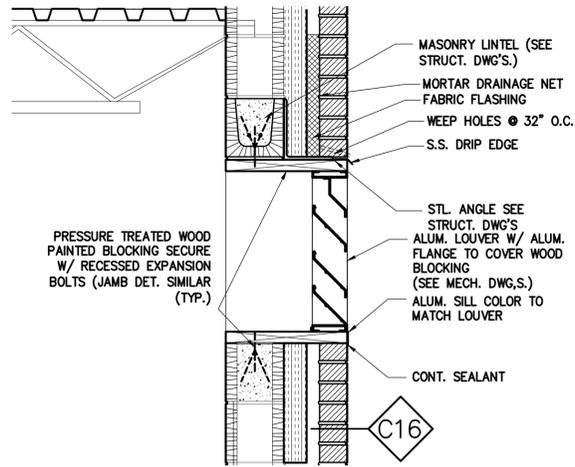


**1** CROSS SECTION  
A-1 SCALE: 1/2"=1'-0"

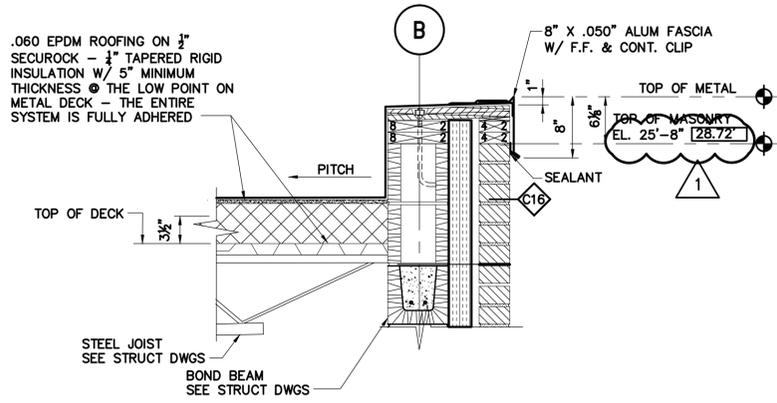
**LEGEND:**  
 XX.XX" INDICATES ELEVATION IN QVD  
 XX'-X" INDICATES ELEVATION IN NAVD 88

File Path: U:\252595 Quonset Vault Relocation\DESIGN\DWGS\15a A-3.1 Bldg Cross Section.dwg, Layout: 34x22 Thu, Apr 04, 2013 - 9:34 AM User: Longa

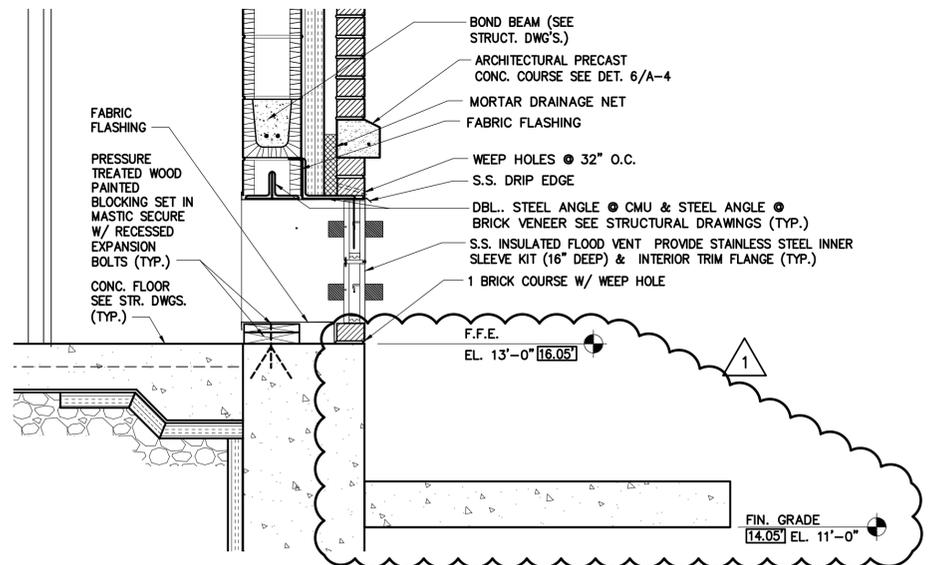
Architect <b>TORRADO ARCHITECTS</b> 33 Greenwich Street Providence, RI 02907 (401) 781-0633 (401) 781-0661 FAX ta.torrado@verizon.net			Rhode Island Airport Corporation <b>QUONSET STATE AIRPORT</b> RIAC CONTRACT NO. 24865 RELOCATE AIRFIELD LIGHTING VAULT			
			SHEET TITLE: <b>ARCHITECTURE</b> <b>ELECTRICAL VAULT</b> <b>BUILDING CROSS SECTION</b>			
REVISION NUMBER	REVISION DATE	DESCRIPTION	DESIGNED: BO	DRAWN: GD	CHECKED: CON	APPROVED: JMF
1	4-APR-13	ADDENDUM NO. 1 - NEW SHEET				
			<b>PARSONS BRINCKERHOFF</b>		PROJECT NO. 3-44-0006-19-2013	
			DATE: APRIL 2013		SHEET A-3.1	



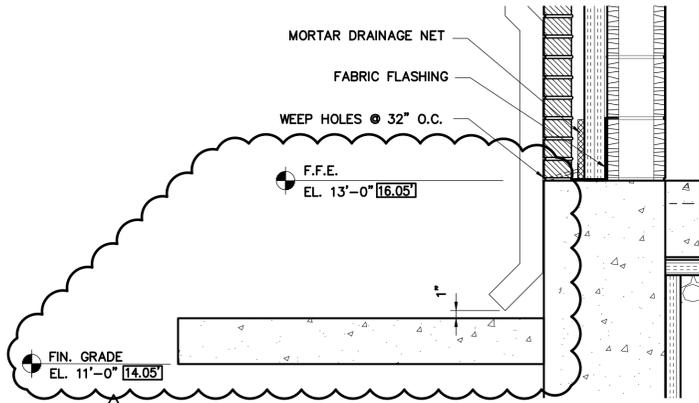
1 DETAIL AT LOUVER  
A-4 SCALE: 1"=1'-0"



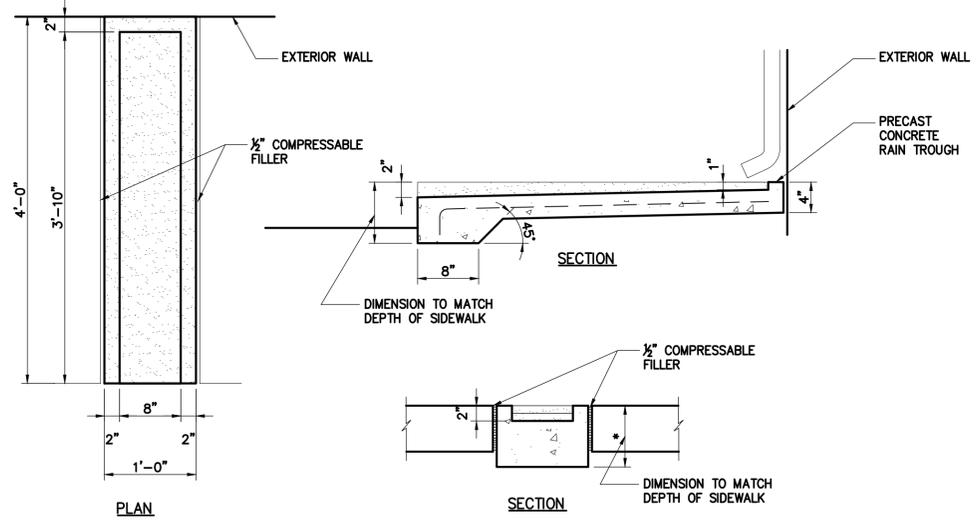
2 SECTION DETAIL  
A-4 SCALE: 1"=1'-0"



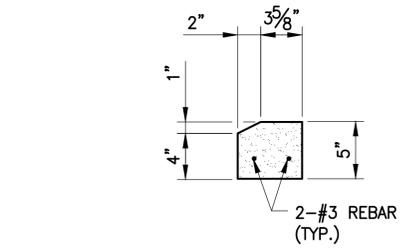
3 DETAIL @ FLOOD VENT  
A-4 SCALE: 1"=1'-0"



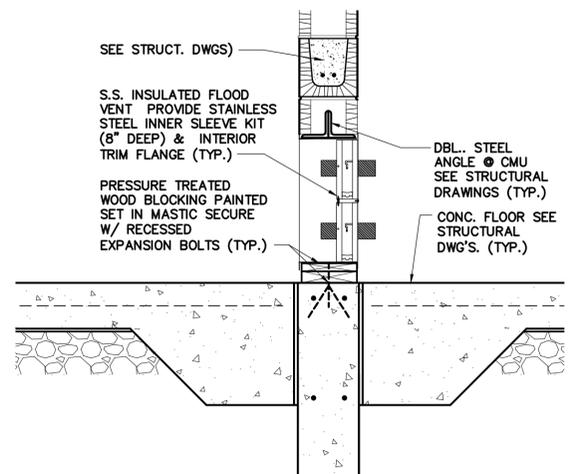
4 SECTION DETAIL  
A-4 SCALE: 1"=1'-0"



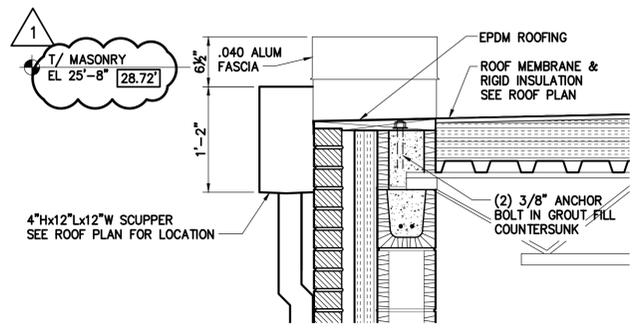
5 RAIN TROUGH DETAILS  
A-4 SCALE: 1"=1'-0"



6 DETAIL @ ARCH. PRECAST CONCRETE COURSE  
A-4 SCALE: 1 1/2"=1'-0"



7 SECTION DETAIL  
A-4 SCALE: 1"=1'-0"



8 DETAIL AT SCUPPER  
A-4 SCALE: 1"=1'-0"

**LEGEND:**  
XX.XX' INDICATES ELEVATION IN QVD  
XX'-X" INDICATES ELEVATION IN NAVD 88

Rhod Island Airport Corporation <b>QUONSET STATE AIRPORT</b> RIAC CONTRACT NO. 24865 RELOCATE AIRFIELD LIGHTING VAULT			SHEET TITLE: <b>ARCHITECTURE</b> <b>ELECTRICAL VAULT</b> <b>DETAILS</b>		
DESIGNED: BO	DRAWN: GD	CHECKED: CON	APPROVED: JMF	PROJECT NO. 3-44-0006-19-2013	
<b>PARSONS BRINCKERHOFF</b>			DATE: MARCH 2013	SHEET A-4	

Architect  
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REVISION NUMBER	REVISION DATE	DESCRIPTION
1	4-APR-13	ADDENDUM NO. 1

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## BUILDING CODES & LOADING:

- UNLESS INDICATED AS EXISTING OR RELOCATED, ALL WORK ELEMENTS TO BE CONSIDERED NEW.
- ALL METHODS OF CONSTRUCTION, DETAILS, NOTES, ETC, INDICATED ON THE DRAWINGS ARE TO BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS.
- DESIGN SHALL BE IN ACCORDANCE WITH THE RHODE ISLAND STATE BUILDING CODE, 10TH EDITION.
- BUILDING CLASSIFICATION: REFER TO ARCHITECTURAL DRAWINGS.
- FIRE RESISTANT REQUIREMENTS: REFER TO DRAWING G-2.
- DESIGN SERVICE LOADS

IN ADDITION TO THE BUILDING DEAD LOADS, THE STRUCTURE IS DESIGNED FOR THE FOLLOWING LOADS:

### LIVE LOADS:

MECHANICAL ROOMS: 150 PSF  
ROOF: 20 PSF

### SNOW LOADS:

GROUND SNOW LOAD: PG = 30 PSF  
FLAT ROOF SNOW LOAD: PF = 30 PSF  
SNOW EXPOSURE FACTOR: CE = 1.0  
SNOW THERMAL FACTOR: CT = 1.1  
SNOW LOAD IMPORTANCE: I = 1.0

### WIND LOADS:

BASIC WIND SPEED: V = 110 MPH  
WIND IMPORTANCE FACTOR: IW = 1.0  
WIND EXPOSURE CATEGORY: C

### SEISMIC LOADS:

SEISMIC USE GROUP: I  
SEISMIC DESIGN CATEGORY: B  
SHORT PERIOD SPECTRAL ACCELERATION: Ss = 0.222  
1-SECOND PERIOD SPECTRAL ACCELERATION: S1 = 0.058  
SHORT PERIOD SPECTRAL RESPONSE: SDs = 0.237  
1-SECOND PERIOD SPECTRAL RESPONSE: SD1 = 0.093  
IMPORTANCE FACTOR: I = 1.0  
SITE CLASS: D

BASIC SEISMIC FORCE RESISTING SYSTEM:  
ORDINARY REINFORCED MASONRY SHEAR WALLS R = 2  
DESIGN BASE SHEAR V = 30 KIP  
SEISMIC RESPONSE COEFFICIENT: Cs = 0.118  
EQUIVALENT LATERAL FORCE PROCEDURE

### FLOOD LOADS:

BASE FLOOD ELEVATION  
LOWEST FLOOR ELEVATION  
NO HIGH VELOCITY WAVE ACTION



## CIVIL & FOUNDATIONS:

- ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM, (NAVD) 1988. COORDINATES ARE BASED ON THE RHODE ISLAND STATE PLANE COORDINATE SYSTEM. ELEVATIONS ARE ALSO REPORTED IN THE QUONSET VERTICAL DATUM (QVD). ELEVATIONS ARE SHOWN IN FEET.
- FOUNDATIONS, RETAINING WALLS, SLABS-ON-GRADE, AND OTHER SUBSURFACE STRUCTURES HAVE BEEN DESIGNED IN ACCORDANCE WITH THE QUONSET STATE AIRPORT LIGHTING ELECTRICAL VAULT RELOCATION GEOTECHNICAL REPORT, PREPARED BY PARSONS BRINCKERHOFF, DATED JANUARY 2013.
- FOUNDATIONS ARE BASED ON SPREAD FOOTINGS WITH A UNIFORM SOIL BEARING CAPACITY OF 4,000 PSF. REFER TO S-5 & S-7 FOR EXCAVATION AND BACKFILL DETAILS.

## CAST-IN-PLACE CONCRETE:

- DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 318-08 & PCI MNL17. REFER TO SPEC SECTION 03300, CAST-IN-PLACE CONCRETE, FOR INFORMATION NOT LISTED HEREIN.

## CAST-IN-PLACE CONCRETE (CONTINUED):

### 2. CAST-IN-PLACE CONCRETE:

DESCRIPTION	F'c PSI (28 DAYS)
MIX	
SPREAD FOOTINGS:	4,000
SLAB-ON-GRADE:	4,000
WALLS	4,000
ISLANDS, MISC PADS:	4,000
ALL OTHER CONCRETE:	4,000

NOTE: ALL NORMAL WEIGHT CONCRETE TO HAVE A DENSITY OF APPROXIMATELY 145 PCF.

- COMPLETE SHOP DRAWINGS AND SCHEDULES OF ALL REINFORCING STEEL SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCEMENT OF THAT PORTION OF THE WORK. ALL ACCESSORIES MUST BE SHOWN ON THE SHOP DRAWINGS.
- ALL SHORING SHALL REMAIN IN PLACE UNTIL CONCRETE HAS ATTAINED 75% OF ITS 28-DAY COMPRESSIVE STRENGTH (SEE SPECIFICATIONS).
- ALL CONSTRUCTION AND CONTROL JOINT LOCATIONS MUST BE SHOWN ON SHOP DRAWINGS AND APPROVED BY THE ENGINEER.
- CONSTRUCTION JOINTS NOT SHOWN ON THE DRAWINGS SHALL BE LOCATED SO AS TO LEAST IMPAIR THE STRENGTH OF THE STRUCTURE AND SHOULD GENERALLY BE LOCATED AT POINTS OF MINIMUM SHEAR.
- ALL EXPOSED EDGES SHALL BE CHAMFERED 3/4" UNLESS NOTED OTHERWISE.
- WHEN CONCRETE IS PLACED AGAINST PREVIOUSLY HARDENED CONCRETE, THE INTERFACE SHALL BE CLEAN, FREE OF LAITANCE AND INTENTIONALLY ROUGHENED TO A FULL AMPLITUDE OF APPROXIMATELY 1/4 INCH.
- ALL KEYS SHALL BE 2"x4" WITH BEVELED SIDES, UNLESS NOTED OTHERWISE.
- REINFORCING BARS SHALL CONFORM TO ASTM A615 OR A706 GRADE 60.
- ALL REINFORCING SHALL BE DETAILED IN ACCORDANCE WITH ACI 315 MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES.
- WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185 AND SHALL BE SUPPLIED IN FLAT SHEETS ONLY. SPLICES OF WWF SHALL BE AT LEAST 12 INCHES.
- THE FOLLOWING MINIMUM CLEAR CONCRETE COVER SHALL BE PROVIDED UNLESS NOTED OTHERWISE ON THE DRAWINGS:

DESCRIPTION	COVER	PROTECTION
SPREAD FOOTINGS	3"	UNCOATED
SLAB TOP REINFORCING	2"	EPOXY COATED
SLAB BOTTOM REINFORCING	1"	EPOXY COATED
SLAB-ON-GRADE (FROM T/SLAB)	2"	UNCOATED
WALLS NOT IN CONTACT WITH EARTH	1-1/2"	UNCOATED
WALLS IN CONTACT WITH EARTH	2"	UNCOATED

- UNLESS NOTED OTHERWISE, BARS SHALL BE CONTINUOUS AND SHALL BE RUN CONTINUOUSLY AROUND CORNERS. BARS SHALL HAVE STANDARD HOOKS AT DISCONTINUOUS ENDS.
- SPLICES SHALL GENERALLY OCCUR AT MID-SPAN FOR TOP AND MIDDLE BARS AND AT SUPPORT FOR BOTTOM BARS AND SHALL BE STAGGERED. ALL MECHANICAL SPLICE CONNECTIONS SHALL CONFORM TO ACI 318 REQUIREMENTS AND DEVELOP IN TENSION AND COMPRESSION AT LEAST 125% OF THE YIELD STRENGTH OF THE BAR.
- BARS SHALL NOT BE CUT OR OMITTED FOR SLEEVE OR DUCT OPENINGS IN FLOORS. BARS MAY BE MOVED Laterally WITHOUT CHANGING THE DISTANCE FROM THE FACE OF CONCRETE. BEND NO BARS IN FIELD WITHOUT APPROVAL OF THE ENGINEER.
- DRILL & GROUT ANCHORS SHALL HAVE ADEQUATE EMBEDMENT TO DEVELOP THE ULTIMATE STRENGTH OF THE BAR.
- UNLESS NOTED OTHERWISE, ALL SLABS ON GRADE SHALL BE REINFORCED WITH MINIMUM #4@6" O.C. ALL BARS SHALL BE EXPOXY COATED.
- ALL REINFORCEMENT SHALL BE CONTINUOUS THROUGH CONSTRUCTION

## CONCRETE MASONRY UNITS:

- CONCRETE MASONRY UNITS (CMU) SHALL MEET THE REQUIREMENTS OF ASTM C90, CLASS 1, TYPE 1, NORMAL WEIGHT, AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI ON THE NET BEDDED AREA.
- MORTAR SHALL MEET THE REQUIREMENTS OF ASTM C270, TYPE S.
- GROUT SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI AT 28 DAYS.
- MINIMUM REINFORCEMENT FOR CONCRETE MASONRY WALLS SHALL CONFORM TO THE FOLLOWING. REFER TO THE DRAWINGS AND SPECIFICATIONS FOR REINFORCING BEYOND THESE MINIMUM REQUIREMENTS.

VERTICAL REINF: 1-#4@32" O.C. HORIZ. (MIN)

HORIZONTAL REINF: 9 GA JOINT REINF. @ 16" O.C. VERT. (MIN.)

BOND BEAMS: 2-#5 CONT MIN. REFER TO BOND BEAM DETAILS ON S-08.

- DOWEL ALL VERTICAL BARS TO FOUNDATION, BEAMS OR SLABS, AND PROVIDE LAP OF 48 BAR DIAMETERS.
- PREFABRICATED TEES AND/OR CORNER SECTIONS SHALL BE USED AT ALL WALL INTERSECTIONS.
- MASONRY WALLS UNDER BEAMS AND OTHER CONCENTRATED LOADS SHALL BE FILLED SOLID FOR THREE COURSES. GROUTED AREA SHALL BE FOUR FEET WIDE AND CENTERED UNDER THE CONCENTRATED LOAD.
- ALL REINFORCING SHALL BE GROUTED SOLID CONTINUOUSLY, IN CELLS OR BOND BEAMS. FILLING MASONRY CELLS AND BOND BEAMS WITH MORTAR IS STRICTLY PROHIBITED.
- ALL MASONRY WALLS SHALL BE BRACED UNTIL THEY ARE PERMANENTLY SUPPORTED BY THE STRUCTURE.
- BOND BEAMS SHALL BE LOCATED AS SHOWN ON THE DRAWINGS. VERTICAL SPACING SHALL NOT EXCEED 4 FEET FOR MASONRY LAID IN A STACK BOND PATTERN, AND SHALL NOT EXCEED 8 FEET FOR MASONRY LAID IN A RUNNING BOND PATTERN. GROUT LIFTS SHALL NOT EXCEED FOUR FEET. REFER TO S-5 AND S-8 FOR TYPICAL DETAILS.
- LINTELS SHALL BE CONSTRUCTED AS SHOWN ON S-8 AND SHALL BEAR A MINIMUM OF 8 INCHES FOR SINGLE COURSE LINTELS AND A MINIMUM OF 16 INCHES FOR TWO COURSE LINTELS.
- ALL REINFORCING, EMBEDDED PLATES, ANCHORS AND HARDWARE IN EXTERIOR CMU WALLS SHALL BE HOT-DIPPED GALVANIZED. BEARING PLATES SHALL BEAR ON SOLID CONCRETE GROUT AND SHALL NOT BEAR ON THE FACE SHELL OF THE BLOCK.

## STRUCTURAL STEEL:

- DESIGN, FABRICATION, AND ERECTION SHALL BE IN ACCORDANCE WITH AISC SPECIFICATION FOR BUILDINGS.
- ALL STRUCTURAL STEEL SHALL BE NEW STEEL CONFORMING TO ASTM STANDARD SPECIFICATIONS "STRUCTURAL STEEL" AS AMENDED TO DATE, UNLESS NOTED OTHERWISE ON THE DRAWINGS.

## STRUCTURAL STEEL (CONTINUED):

### 3. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING:

ALL WIDE FLANGE SHAPES:	ASTM A992 (FY=50 KSI)
STRUCTURAL SHAPES & PLATES:	ASTM A572 OR A588, GR 50
TUBE SECTIONS:	ASTM A500 GR B
PIPE SECTIONS:	ASTM A53 TYPE S
ANCHOR BOLTS:	ASTM A36 OR A307
HIGH-STRENGTH BOLTS:	ASTM A325
HEADED STUDS:	ASTM A108, GR 50

- SHAPES NOTED "GALV" ON DRAWINGS SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A-123. ALL EXPOSED STRUCTURAL AND MISCELLANEOUS STEEL SHALL BE GALVANIZED UNLESS NOTED OTHERWISE. REFER TO ARCHITECTURAL AND RELATED DRAWINGS AND SPECIFICATIONS FOR PAINTING REQUIREMENTS.

- WELDS SHALL BE MADE ONLY BY OPERATORS CERTIFIED BY THE STANDARD QUALIFICATION PROCEDURE OF THE AMERICAN WELDING SOCIETY.

- WELDING: IN ACCORDANCE WITH LATEST EDITION OF AWS D1.1 CODE FOR WELDING IN BUILDING CONSTRUCTION.

- CONNECTIONS NOT DETAILED SHALL BE DESIGNED FOR LOADS SHOWN ON DRAWINGS OR FOR LOADS GIVEN IN STANDARD AISC LOAD TABLES FOR LENGTH, SECTIONS, AND STRENGTH SPECIFIED.

SHOP CONNECTIONS: WELDED OR HIGH STRENGTH BOLTED.  
FIELD CONNECTIONS: HIGH STRENGTH BOLTED, UNLESS OTHERWISE NOTED.

- ALL FILLET WELDS SHALL BE A MINIMUM OF 3/16" UNLESS NOTED OTHERWISE.

- TEMPORARY CONSTRUCTION BRACING OF THE STRUCTURAL STEEL FRAME SHALL REMAIN IN PLACE UNTIL AFTER THE PERMANENT BRACING SYSTEM HAS BEEN COMPLETED.

- ALL STEEL COMPONENTS SHALL BE CLEANED AND THE PRIMER TOUCHED-UP PRIOR TO DECK INSTALLATION.

- ALL STEEL LINTELS, ETC. SHALL BE HOT-DIP GALVANIZED.

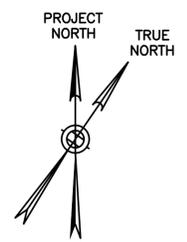
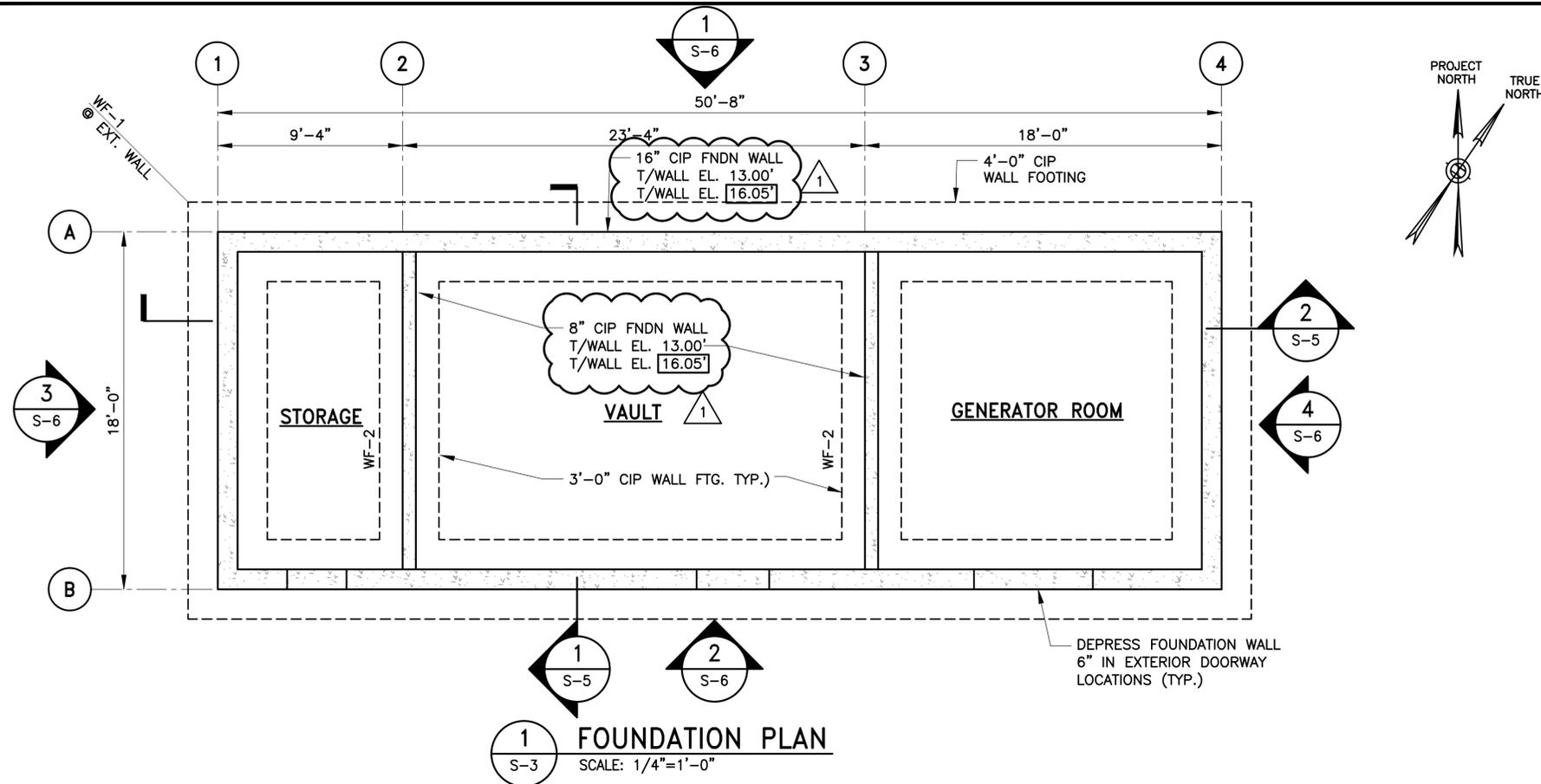
- FOR ALL OPENINGS IN CMU WALLS (EXCEPT BRICK), WHERE OTHER TYPES OF LINTELS ARE NOT CALLED FOR, PROVIDE ONE ANGLE FOR EACH 4" NOMINAL WALL THICKNESS AS FOLLOWS: LINTELS CONSISTING OF MORE THAN ONE ANGLE SHALL BE BOLTED OR PLUG WELDED TOGETHER AT 12" O.C. (LONG LEGS TO BE VERTICAL.)

SPANS UP TO 5'-0"	L4 x 3 1/2 x 3/8	WITH 6" END BEARINGS
SPANS 5'-1" TO 7'-0"	L5 x 3 1/2 x 3/8	WITH 8" END BEARINGS
SPANS 7'-1" TO 8'-0"	L6 x 4 x 3/8	WITH 10" END BEARINGS

- FOR ALL OPENINGS IN BRICK WALLS, WHERE OTHER TYPES OF LINTELS ARE NOT CALLED FOR, PROVIDE ONE ANGLE AS FOLLOWS: (SHORT LEGS TO BE VERTICAL.)

SPANS UP TO 5'-0"	L8 x 4 x 1/2	WITH 6" END BEARINGS
SPANS 5'-0" TO 8'-0"	L8 x 6 x 1/2	WITH 8" END BEARINGS

		Rhode Island Airport Corporation <b>QUONSET STATE AIRPORT</b> RIAC CONTRACT NO. 24865 RELOCATE AIRFIELD LIGHTING VAULT	
REVISION NUMBER: $\Delta$ REVISION DATE: 4-APR-13 DESCRIPTION: ADDENDUM NO. 1		DESIGNED: MBW DRAWN: BJD CHECKED: JPC APPROVED: CHB	
PROJECT NO. 3-44-0006-19-2013 DATE: MARCH 2013		SHEET S-1	
<b>PARSONS BRINCKERHOFF</b>			

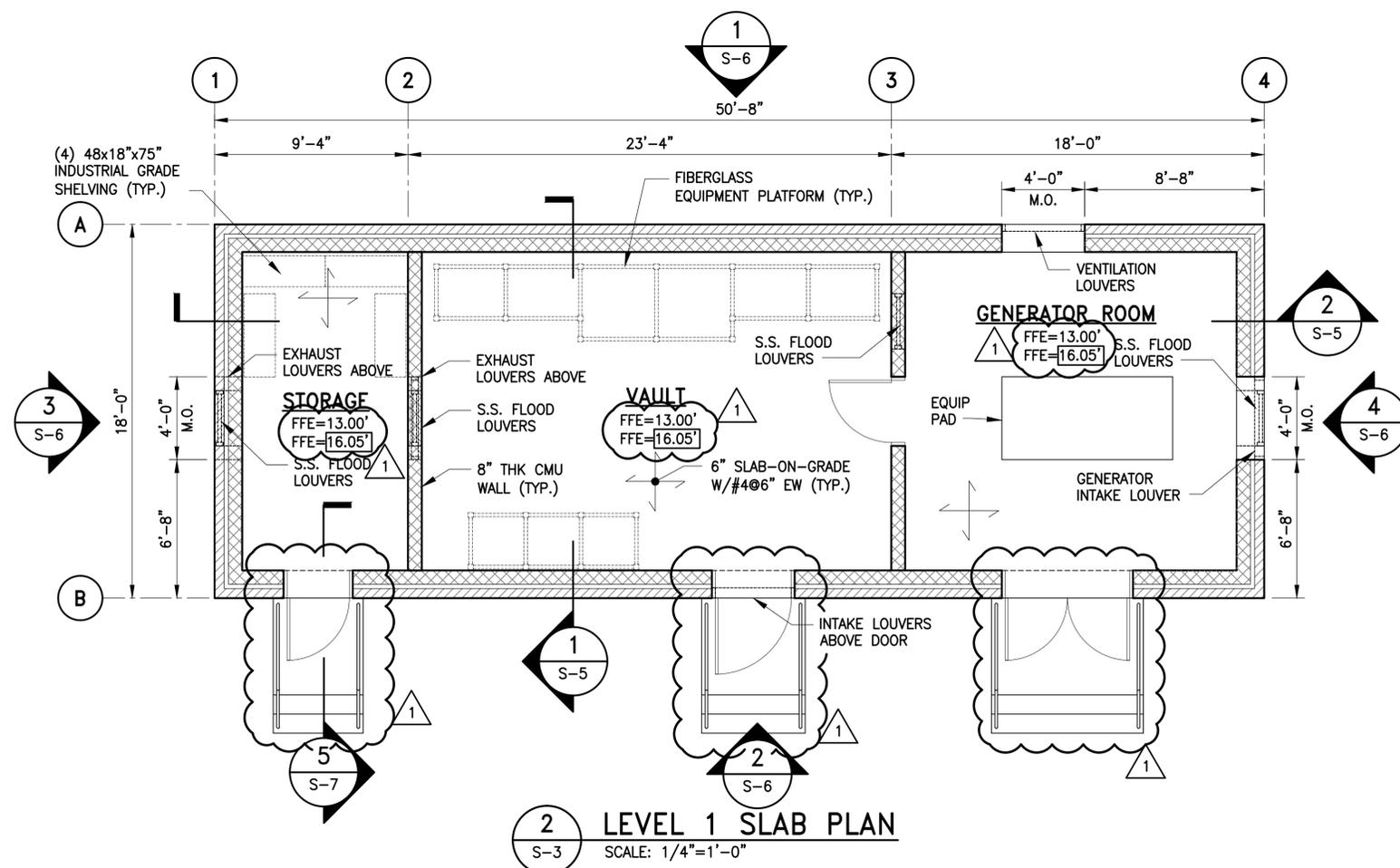
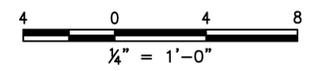


**NOTES:**

- REFER TO GENERAL STRUCTURAL NOTES ON DRAWINGS S-1, S-2 AND AS-1 FOR GENERAL NOTES AND DESIGN CRITERIA, ABBREVIATIONS, AND CONSTRUCTION NOTES.
- REFER TO ARCHITECTURE DRAWINGS FOR DIMENSIONS NOT SHOWN.
- CONTRACTOR SHALL REMOVE ABANDONED UTILITIES & OBSTRUCTIONS CONFLICTING WITH FOUNDATION AS DIRECTED.
- TYPICAL DETAILS ARE SHOWN ON DRAWINGS S-7 & S-8.
- REFER TO DRAWING S-7 FOR FOOTING SCHEDULE AND FOUNDATION DETAILS.
- PATTERN OF ALL CMU WALL SHALL BE COMMON (RUNNING) BOND.
- CONTRACTOR SHALL SUBMIT PLAN W/SAWCUT CONTRACTION JOINTS LOCATION FOR REVIEW.

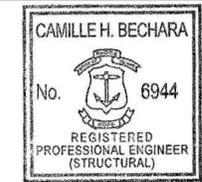
**LEGEND:**

- BRICK VENEER
- CIP CONC. WALL
- CMU WALLS
- INDICATES DIRECTION OF SLAB REINFORCING (#4@6" O.C. TYP.)
- INDICATES ELEVATION IN QVD
- INDICATES ELEVATION IN NAVD 88



**1 FOUNDATION PLAN**  
SCALE: 1/4"=1'-0"

**2 LEVEL 1 SLAB PLAN**  
SCALE: 1/4"=1'-0"



Rhode Island Airport Corporation  
**QUONSET STATE AIRPORT**  
RIAC CONTRACT NO. 24865  
RELOCATE AIRFIELD LIGHTING VAULT

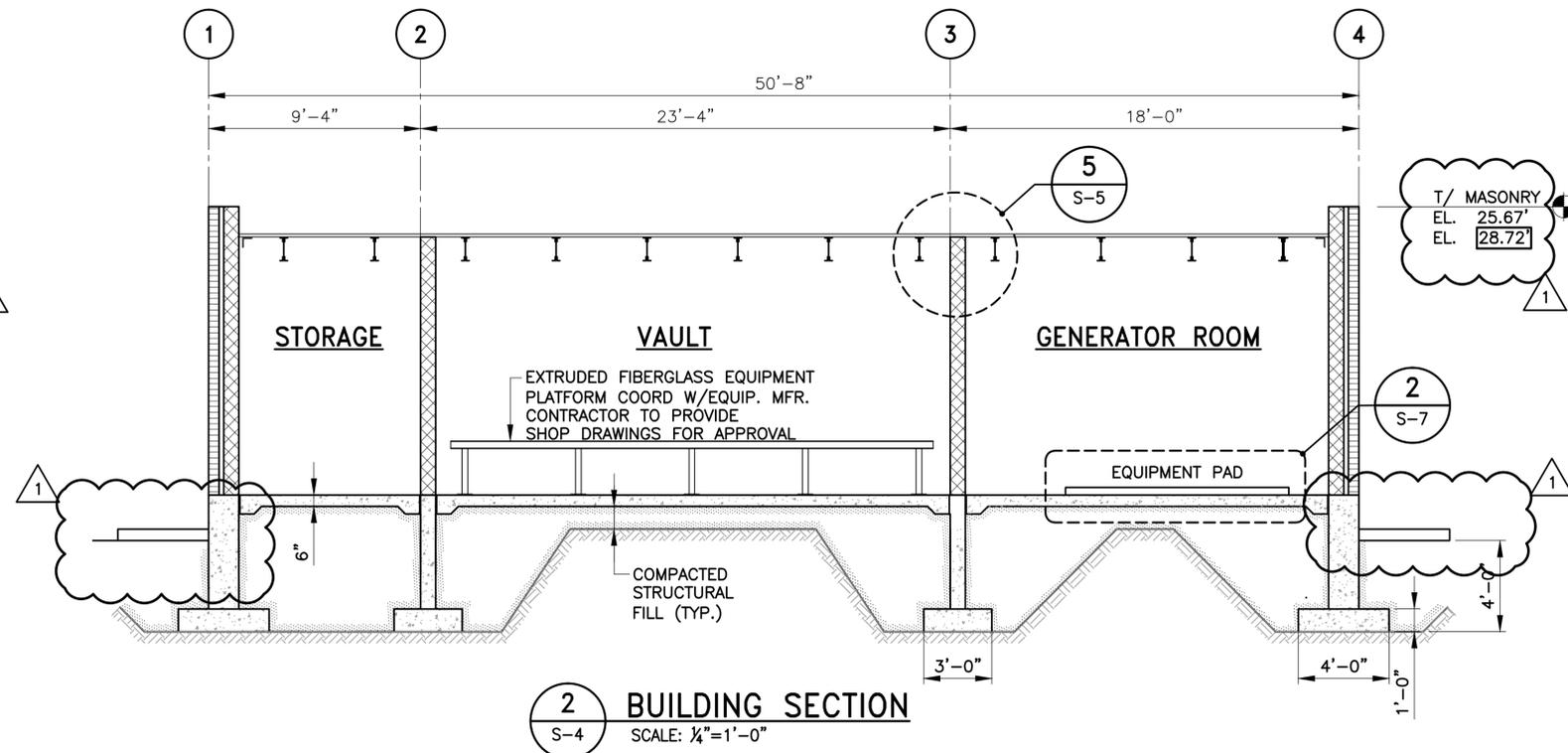
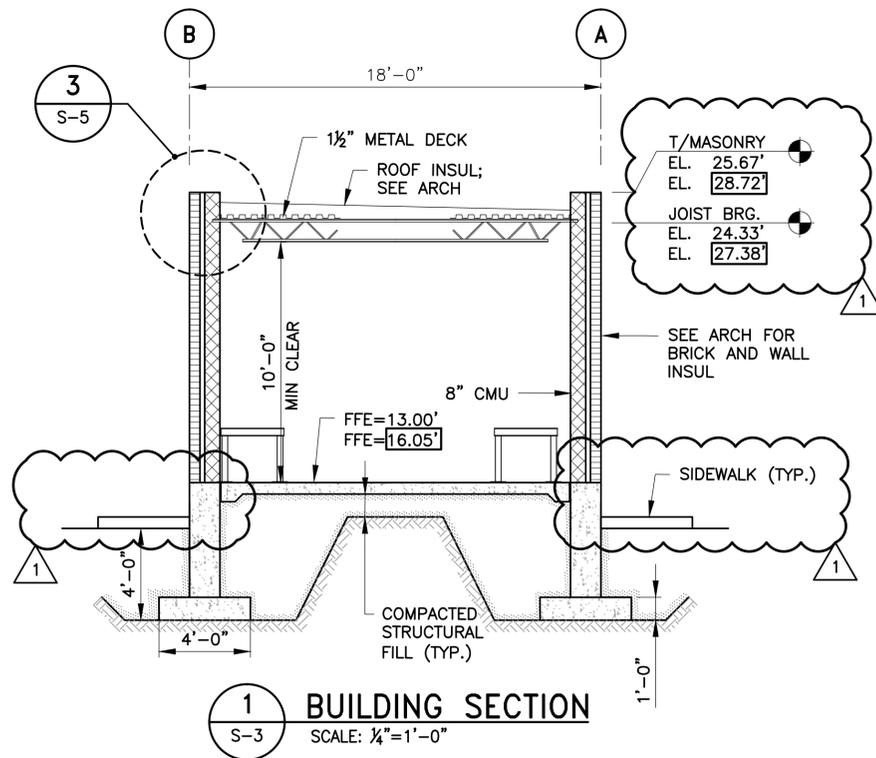
SHEET TITLE: **STRUCTURAL ELECTRICAL VAULT FOUNDATION AND LEVEL 1 PLANS**

REVISION NUMBER	REVISION DATE	DESCRIPTION
1	4-APR-13	ADDENDUM NO. 1

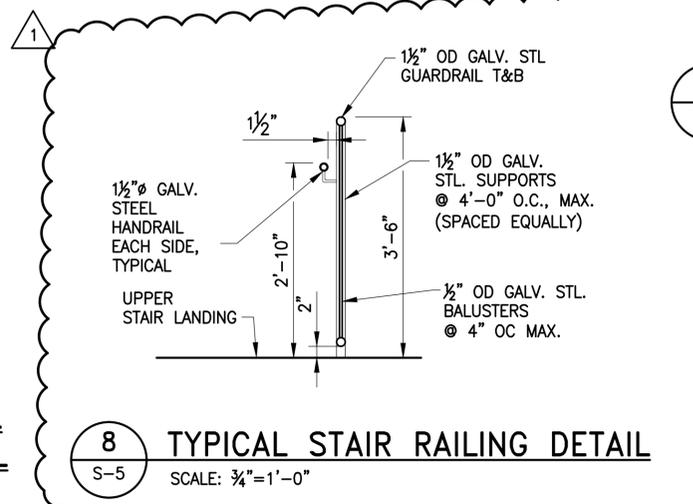
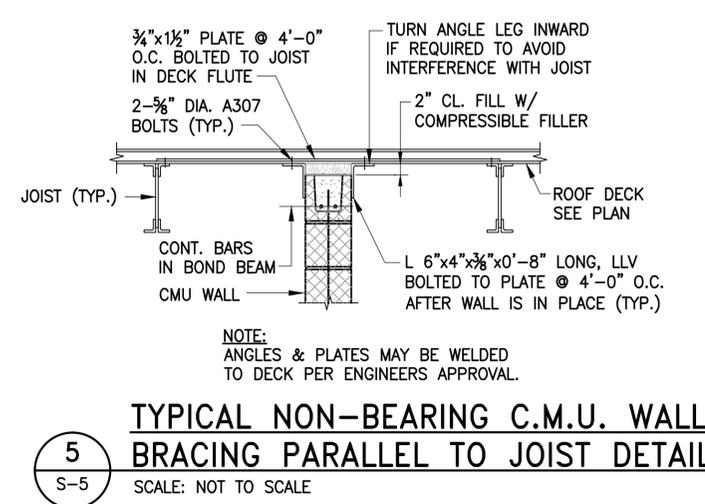
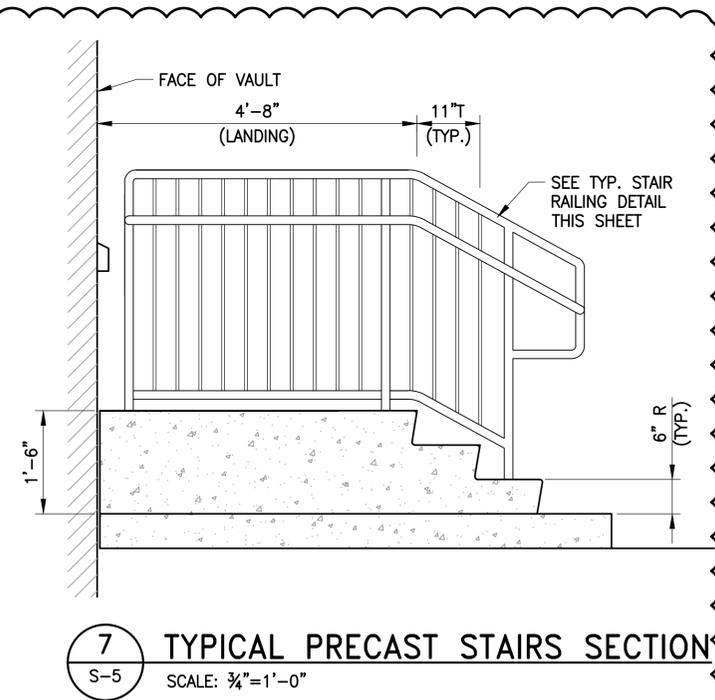
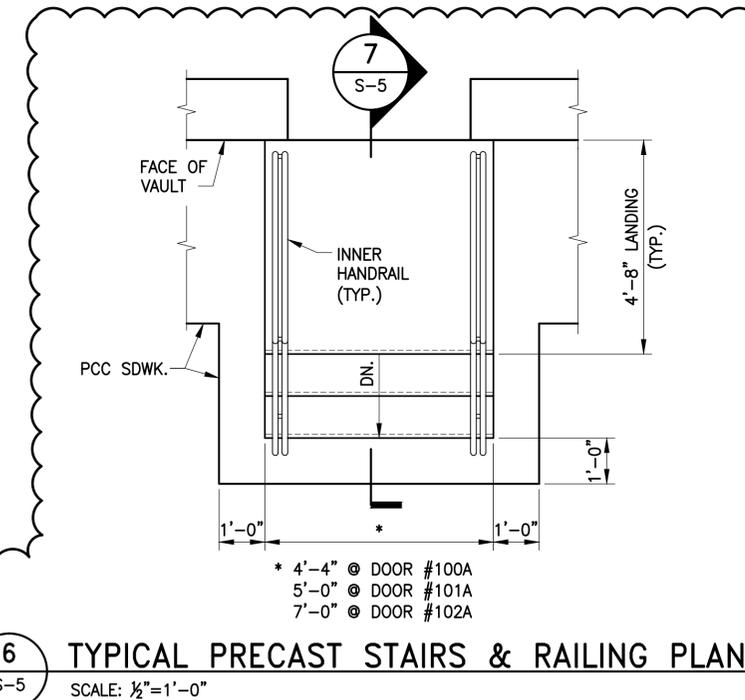
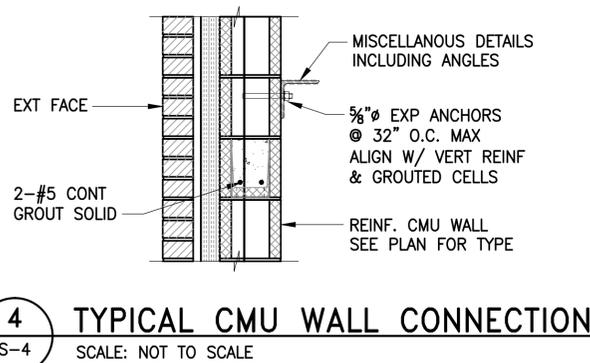
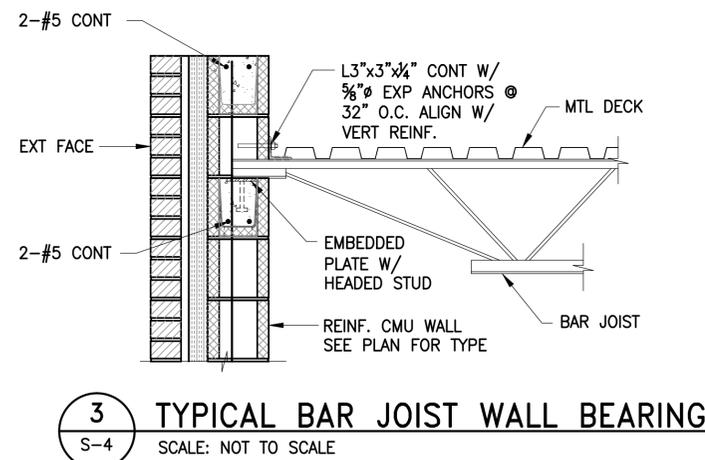
DESIGNED: MBW	DRAWN: BJD	CHECKED: JPC	APPROVED: CHB
PROJECT NO. 3-44-0006-19-2013		DATE: MARCH 2013	
PARSONS BRINCKERHOFF		SHEET S-3	

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**LEGEND:**  
XX.XX' INDICATES ELEVATION IN QVD  
XX'-X" INDICATES ELEVATION IN NAVD 88

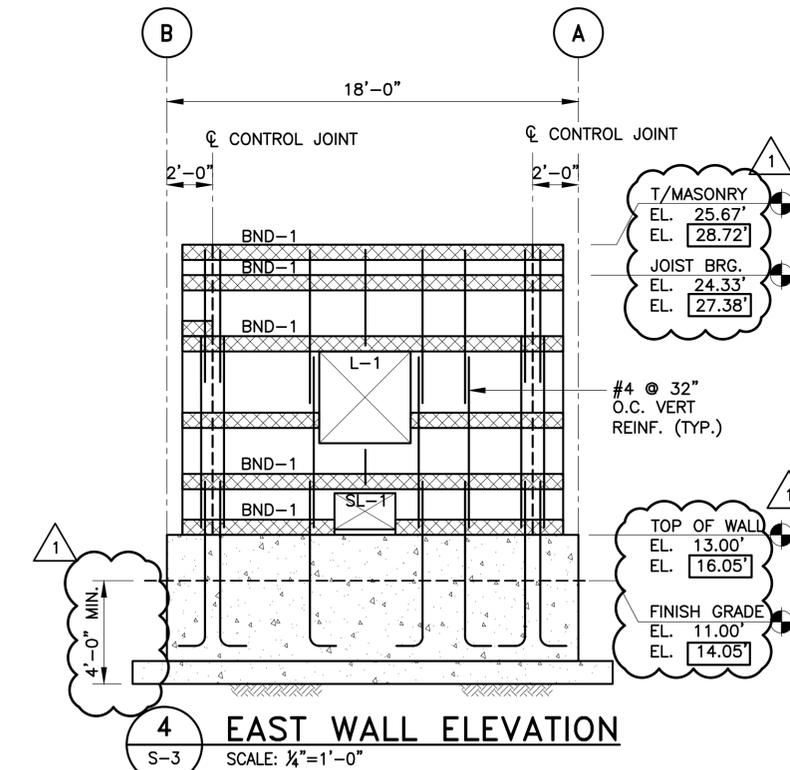
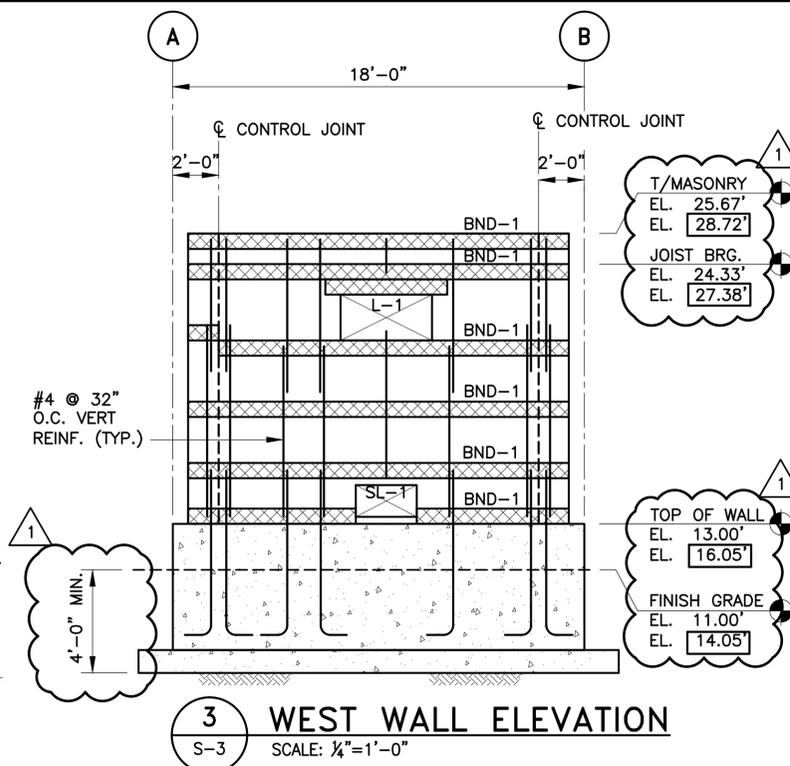
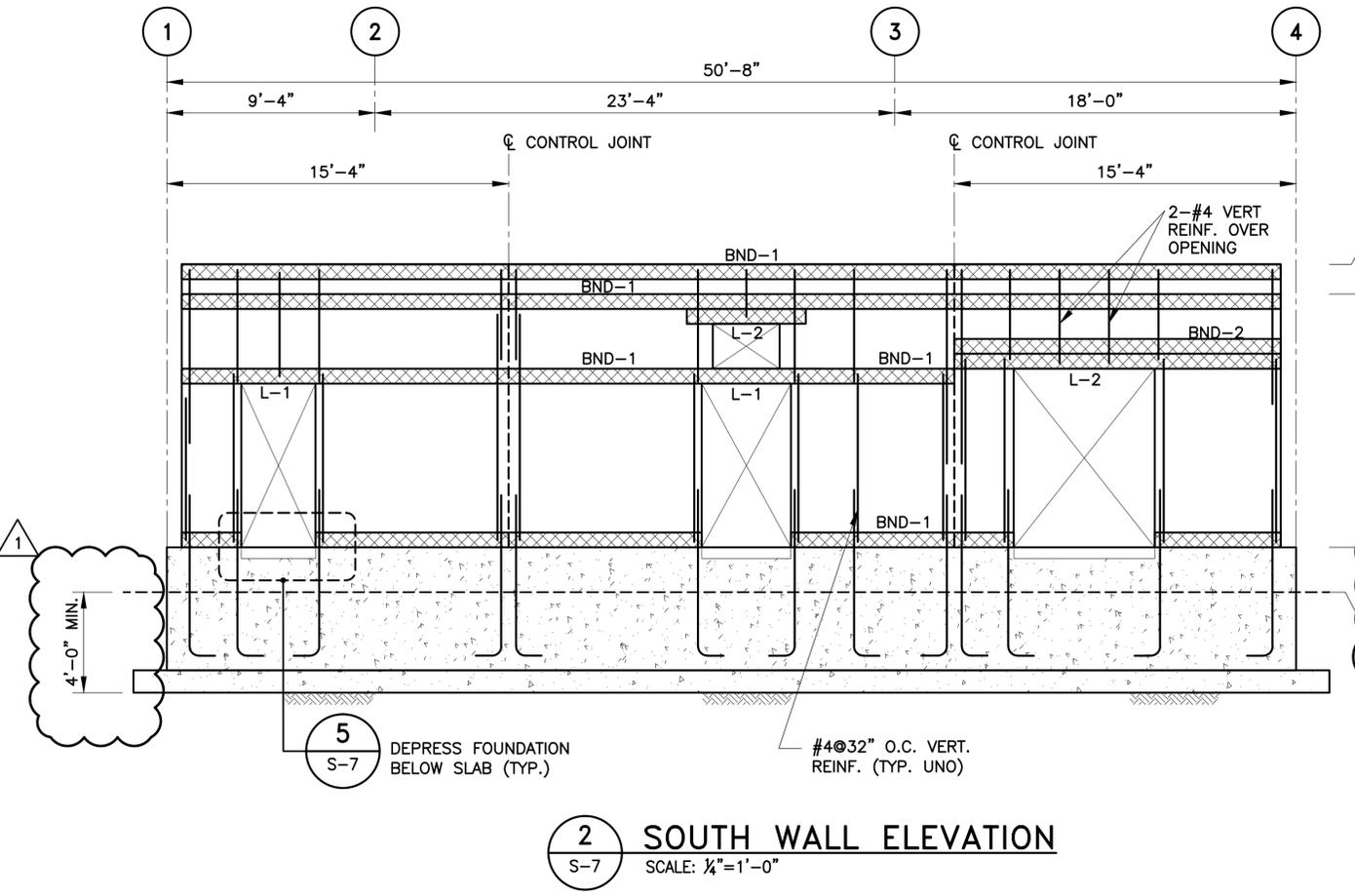
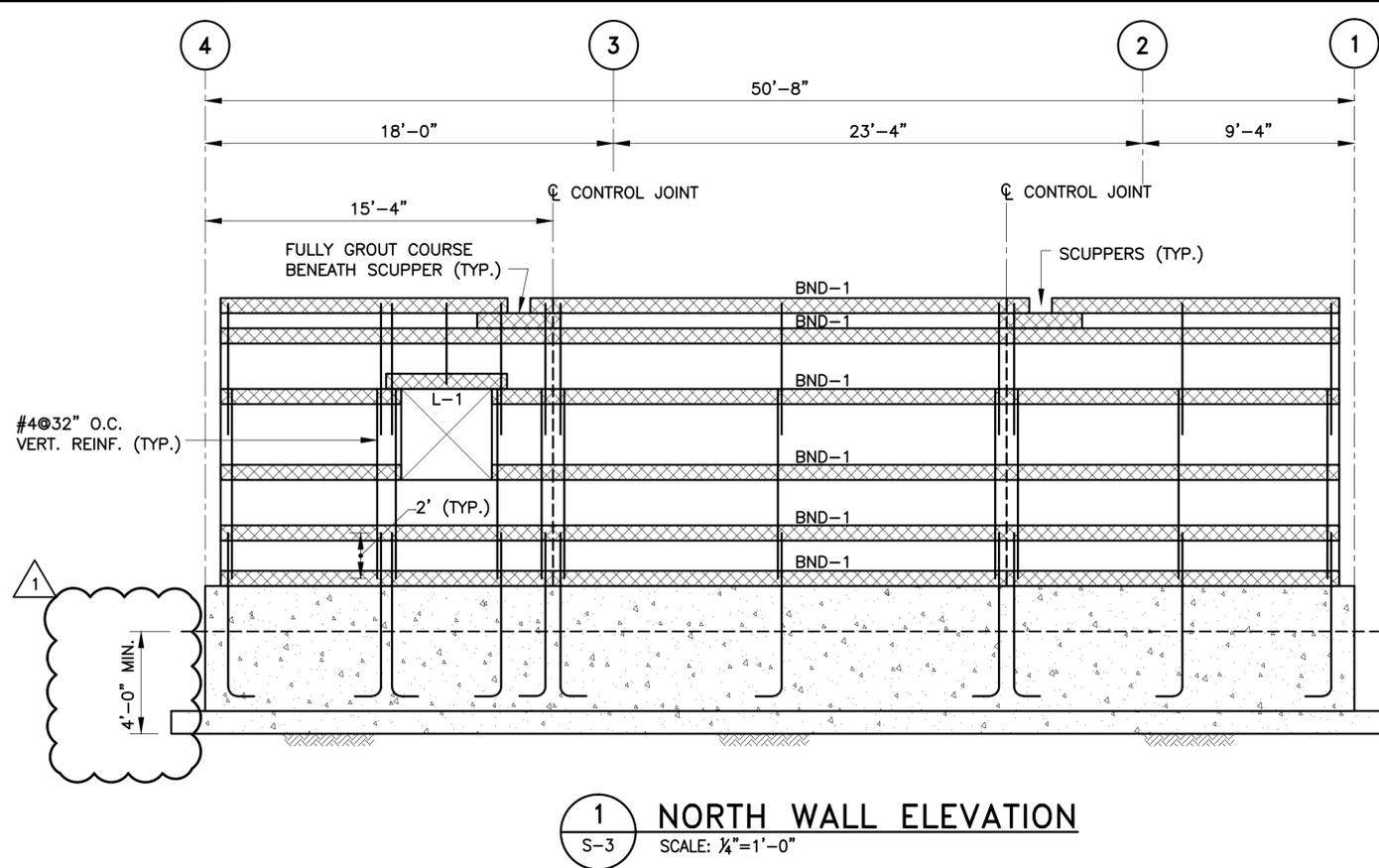


**STAIR NOTES:**

1. PRECAST CONCRETE STAIRS SHALL COMPLY WITH APPLICABLE SECTIONS OF RHODE ISLAND STATE BUILDING CODE.
2. STAIR RAILINGS SHALL COMPLY WITH APPLICABLE SECTIONS OF RHODE ISLAND STATE BUILDING CODE.
3. STAIRS AND RAILINGS SHALL NOT BE MEASURED SEPARATELY BUT RATHER SHALL BE CONSIDERED INCIDENTAL TO ITEM L-109-1.

		Rhode Island Airport Corporation <b>QUONSET STATE AIRPORT</b> RIAC CONTRACT NO. 24865 RELOCATE AIRFIELD LIGHTING VAULT			
SHEET TITLE: <b>STRUCTURAL ELECTRICAL VAULT SECTIONS &amp; DETAILS</b>		DESIGNED: MBW	DRAWN: BJD	CHECKED: JPC	APPROVED: CHB
REVISION NUMBER 1	REVISION DATE 4-APR-13	DESCRIPTION ADDENDUM NO. 1		PROJECT NO. 3-44-0006-19-2013	DATE MARCH 2013
		SHEET S-5		ADDENDUM NO. 1	

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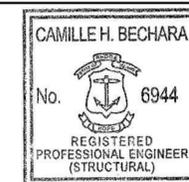


**NOTES:**

- REFER TO GENERAL STRUCTURAL NOTES ON DRAWINGS S-1, S-2 AND AS-1 FOR GENERAL NOTES AND DESIGN CRITERIA, ABBREVIATIONS, AND CONSTRUCTION NOTES.
- REFER TO ARCHITECTURE DRAWINGS FOR DIMENSIONS NOT SHOWN.
- BRICK VENEER NOT SHOWN FOR CLARITY
- TYPICAL DETAILS ARE SHOWN ON DRAWINGS S-4, S-7 & S-8.
- MANSORY DOWELS INTO FOUNDATION WALL TO DEVELOP FULL STRENGTH OF BAR.
- FILL LAST THREE CELLS AT MASONRY OPENINGS SOLID WITH GROUT (24" MIN.).

**LEGEND:**

- CIP CONC. WALL
- BOND BEAM OR LINTEL
- XX.XX' INDICATES ELEVATION IN QVD
- XX'-X" INDICATES ELEVATION IN NAVD 88

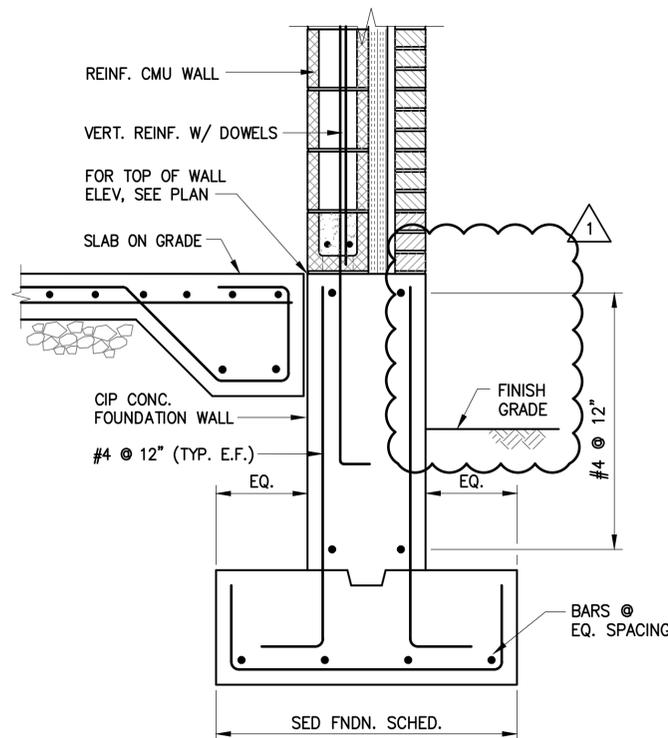


Rhode Island Airport Corporation  
**QUONSET STATE AIRPORT**  
 RIAC CONTRACT NO. 24865  
 RELOCATE AIRFIELD LIGHTING VAULT

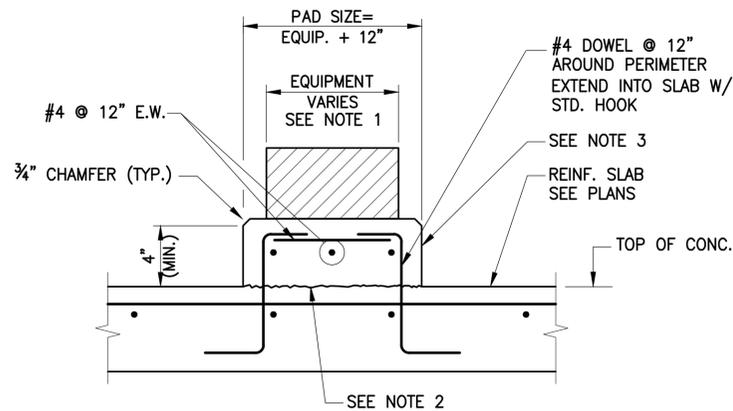
SHEET TITLE: **STRUCTURAL ELECTRICAL VAULT WALL ELEVATIONS**

DESIGNED: MBW	DRAWN: BJD	CHECKED: JPC	APPROVED: CHB
PROJECT NO. 3-44-0006-19-2013		DATE: MARCH 2013	
SHEET S-6		PARSONS BRINCKERHOFF	

REVISION NUMBER	REVISION DATE	DESCRIPTION
1	4-APR-13	ADDENDUM NO. 1

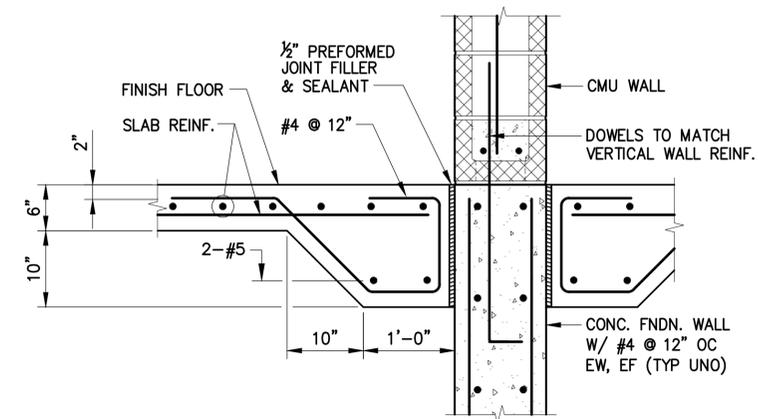


**1** TYPICAL BEARING WALL FOUNDATION  
S-7 NOT TO SCALE

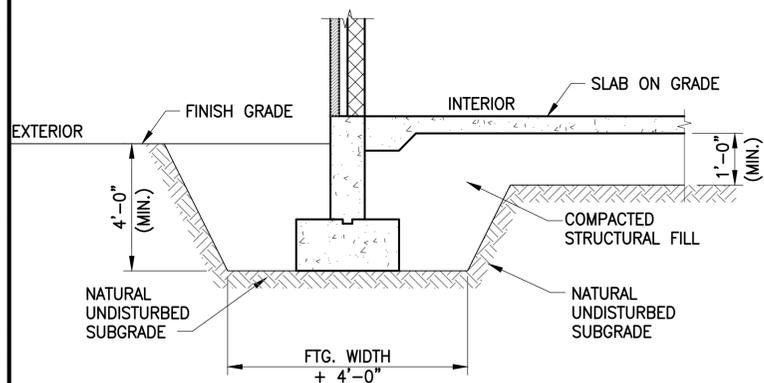


- NOTES:
- SEE MEP DRAWINGS FOR EQUIPMENT SIZES. CONTRACTOR SHALL COORDINATE ALL PADS WITH EQUIPMENT MANUFACTURER'S SPECIFICATIONS FOLLOWING SHOP DRAWING APPROVAL.
  - INTENTIONALLY ROUGHEN TO FULL AMPLITUDE OF APPROXIMATELY 1/4\".
  - COMPRESSIVE STRENGTH IS 4,000 PSI NORMAL WEIGHT CONCRETE.

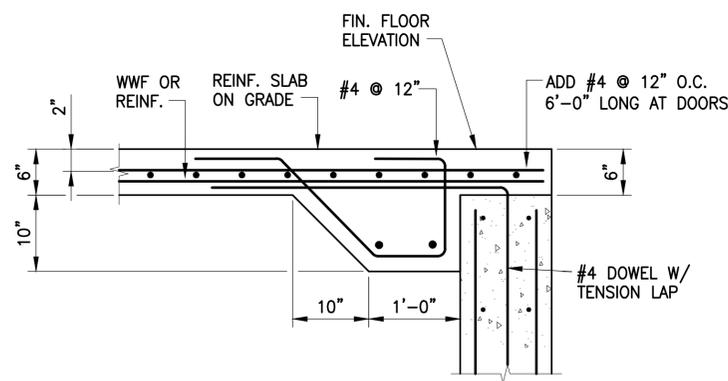
**2** TYPICAL EQUIPMENT PAD  
S-5 NOT TO SCALE



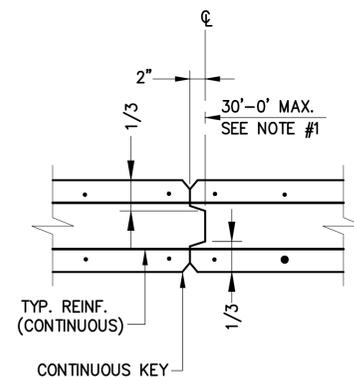
**3** TYPICAL THICKENED SLAB ON GRADE DETAIL  
S-7 NOT TO SCALE



**4** TYPICAL FOUNDATION EXCAVATION  
S-7 NOT TO SCALE



**5** TYPICAL FOUNDATION WALL SECTION AT DOOR  
S-3, S-6 NOT TO SCALE



**6** FOUNDATION WALL CONTROL JOINT  
S-7 SCALE: NOT TO SCALE

**NOTES:**

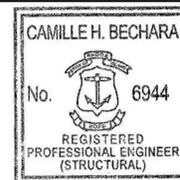
- CONTROL JOINTS IN FOUNDATION AND RETAINING WALLS SHALL BE LOCATED 30'-0" OC MAX.
- CAST SLAB ON GRADE AND WALL PANELS IN ALTERNATING SECTIONS NOT LESS THAN 3 DAYS AFTER PLACEMENT OF ADJACENT SECTIONS.
- PROVIDE CONTROL JOINTS FOR SLAB ON GRADE AS SHOWN ON PLANS.
- SLAB ON GRADE SHALL BE PLACED IN PANELS NOT EXCEEDING 1600 SQ. FT.
- SAWCUT SHALL BE MADE 24 HOURS AFTER THE INITIAL SET OF CONCRETE. SHOW SAWCUT JOINTS ON SHOP DRAWINGS
- VAPOR RETARDER SHALL BE PROVIDED AS SPECIFIED OR NOTED IN ARCHITECTURAL DRAWINGS.
- UNLESS NOTED OTHERWISE, SLAB ON GRADE SHALL BE PLACED ON A 12-INCH LAYER OF STRUCTURAL FILL COMPACTED TO A DENSITY OF 95% MODIFIED PROCTOR. SLABS SHALL BE PLACED IN LONG STRIP PATTERNS IN ACCORDANCE WITH AC1302. ALLOW A MINIMUM OF 3 DAYS CURING BEFORE PLACING ADJACENT STRIPS.

**FOUNDATION SCHEDULE**

MARK NO.	DIMENSIONS			BOTTOM BARS		TOP BARS		NOTES
	LENGTH	WIDTH	DEPTH	LONG WAY	WIDTH	LONG WAY	SHORT WAY	
WF-1	CONT.	4'-0"	1'-0"	4-#5	#4 @ 12"	-	-	CONT. WALL FTG.
WF-2	CONT.	3'-0"	1'-0"	4-#5	#4 @ 12"	-	-	CONT. WALL FTG.

**FOUNDATION NOTES:**

- CONTINUOUS FOOTING REINFORCING SHALL EXTEND THROUGH OR DEVELOP BARS INTO INTERSECTING FOOTINGS.
- REFER TO SECTIONS AND DETAILS FOR HOOKED ENDS WHERE REQUIRED.

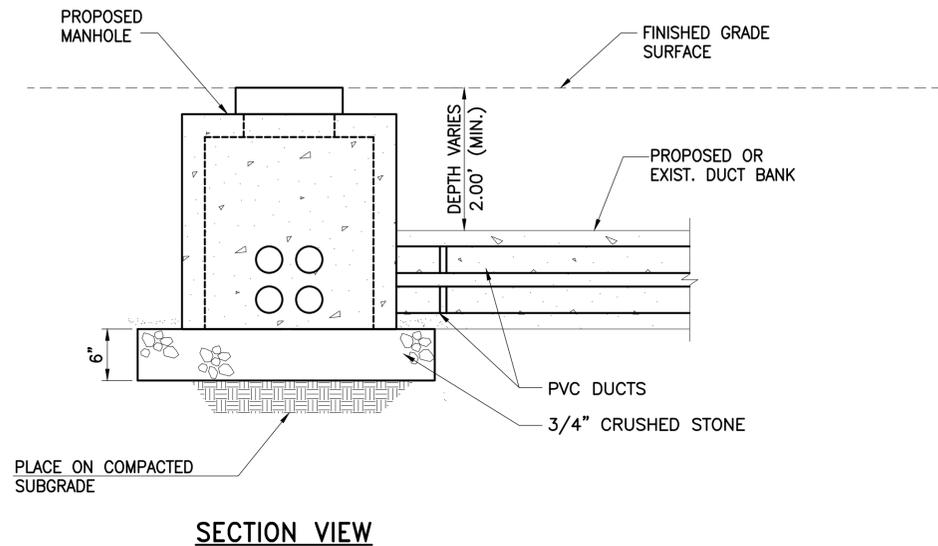
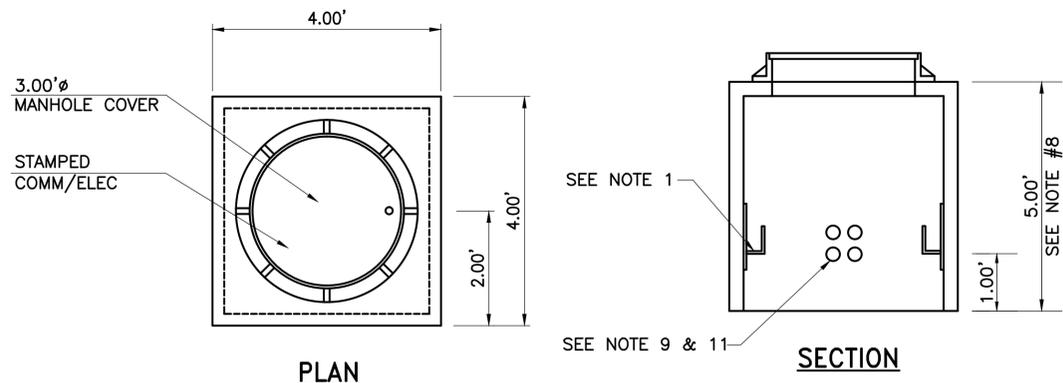


Rhode Island Airport Corporation  
**QUONSET STATE AIRPORT**  
RIAC CONTRACT NO. 24865  
RELOCATE AIRFIELD LIGHTING VAULT

SHEET TITLE: **STRUCTURAL**  
**ELECTRICAL VAULT**  
**FOUNDATION, SECTIONS & DETAILS**

REVISION NUMBER	REVISION DATE	DESCRIPTION	DESIGNED:	DRAWN:	CHECKED:	APPROVED:
1	4-APR-13	ADDENDUM NO. 1	MBW	BJD	JPC	CHB
			PROJECT NO. 3-44-0006-19-2013		DATE: MARCH 2013 SHEET S-7	

**PARSONS BRINCKERHOFF**

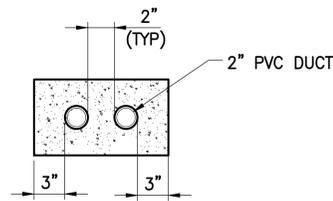


**MANHOLE NOTES**

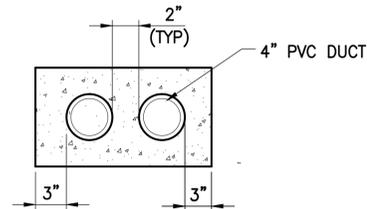
1. PROVIDE & INSTALL UNDERGROUND DEVICES NO. 25R3 SADDLE RACKS ON EACH HANDHOLE WALL.
2. HANDHOLE, FRAME, AND LID SHALL BE DESIGNED TO WITHSTAND DUAL TIRE LOADING OF 60,000 LB AIRCRAFT. PROVIDE DESIGN CALCULATIONS AND STRUCTURAL DRAWINGS OF HANDHOLE, FRAME AND LID SEALED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF RHODE ISLAND.
3. ALL CABLES SHALL BE PROPERLY TAGGED AND LABELED IN HANDHOLE.
4. USE 3500 PSI CONCRETE MINIMUM.
5. PROVIDE & INSTALL BELL ENDS ON EACH DUCT AND GROUT AROUND GAPS.
6. PROVIDE PVC CONDUIT/DUCT PRECAST TYPE KNOCK OUTS ON ALL FOUR SIDES AND PER ORIENTATION AS INDICATED ON PLANS IN SHOP AS REQUIRED. NEATLY GROUT ALL DUCTS IN PLACE WITH AN APPROVED NON-SHRINK GROUT.
7. INSTALL DUCT SEAL IN ALL DIRECT BURIED CONDUITS AROUND ALL CABLES.
8. EXCAVATION, AGGREGATE, HANDHOLE, LID, SADDLE RACKS, BACKFILL AND ALL INCIDENTALS SHALL BE PAYABLE UNDER THE HANDHOLE PAY ITEM.
9. SEE ELECTRICAL PLANS FOR SIZE AND NUMBER OF DUCTS
10. PROVIDE 3/4"x10.00' LONG COPPERCLAD GROUND ROD IN EACH MANHOLE. GROUND ALL NON-CURRENT CARRYING METAL WITHIN MANHOLE.
11. CONTRACT SHALL VERIFY DEPTH OF EXIST. DUCTS TO BE CONNECTED TO PROPOSED EMH. VARY DEPTH OF EMH AS NEEDED TO ACCOMMODATE EXIST. DUCTS.

**1 ELECTRIC MANHOLE DETAILS**  
E-8 NOT TO SCALE

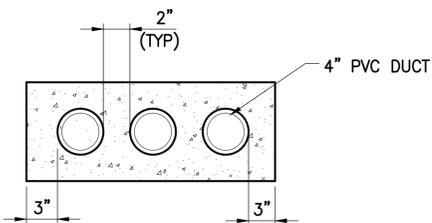
**1 2-WAY 2" PVC DUCTBANK**  
E-8 NOT TO SCALE



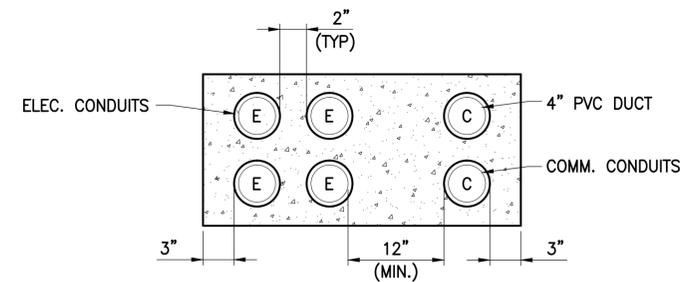
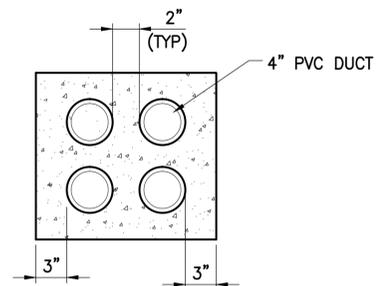
**2 2-WAY 4" PVC DUCTBANK**  
E-8 NOT TO SCALE



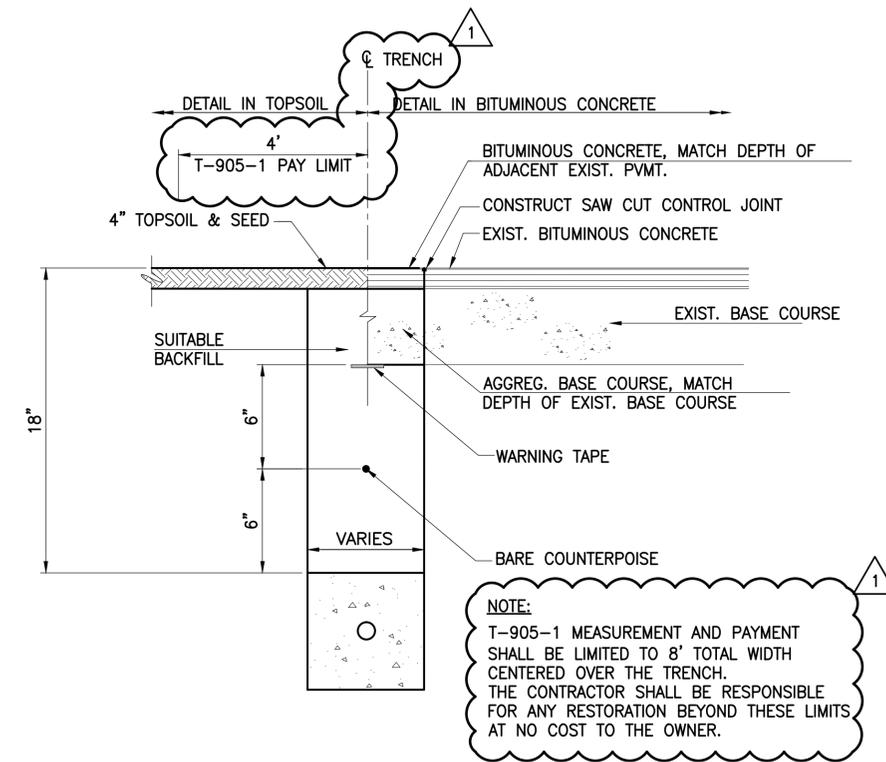
**3 3-WAY 4" PVC DUCTBANK**  
E-8 NOT TO SCALE



**4 4-WAY 4" PVC DUCTBANK**  
E-8 NOT TO SCALE



**5 6-WAY 4" PVC DUCTBANK**  
E-8 NOT TO SCALE



**6 TYPICAL TRENCH DETAIL**  
E-8 NOT TO SCALE

		Rhode Island Airport Corporation <b>QUONSET STATE AIRPORT</b> RIAC CONTRACT NO. 24865 RELOCATE AIRFIELD LIGHTING VAULT								
SHEET TITLE: <b>ELECTRICAL DETAILS</b>		DESIGNED: JPS	DRAWN: STF	CHECKED: KWM	APPROVED: JMF					
<table border="1"> <thead> <tr> <th>REVISION NUMBER</th> <th>REVISION DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>4-APR-13</td> <td>ADDENDUM NO. 1</td> </tr> </tbody> </table>		REVISION NUMBER	REVISION DATE	DESCRIPTION	1	4-APR-13	ADDENDUM NO. 1	PROJECT NO. 3-44-0006-19-2013 DATE: MARCH 2013 SHEET E-7		
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