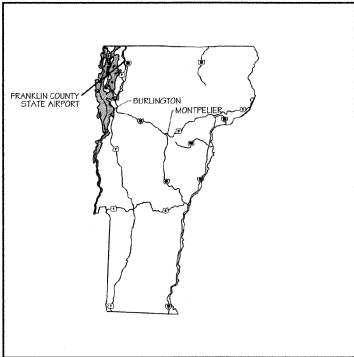


**FRANKLIN COUNTY STATE AIRPORT
HIGHGATE, VERMONT**

**PROPOSED IMPROVEMENTS TO INCLUDE
INSTALLATION OF AUTOMATED WEATHER OBSERVATION STATIONS
(AWOS)**

FRANKLIN AIR 04-3144 C/1

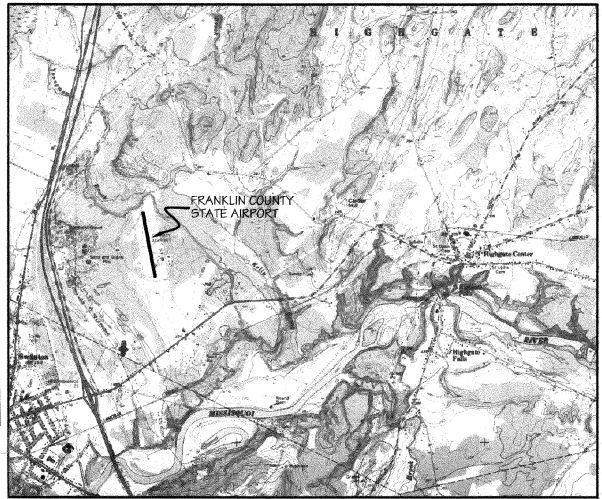


LOCATION MAP

SHEET	TITLE
1	TITLE SHEET
2	QUANTITIES, PHASING NOTES, MISC DETAILS
3	CONSTRUCTION AND SAFETY NOTES
4	AWOS SITE PLAN
5	SITE LAYOUT PLAN
6	ELECTRICAL DETAILS
7	FOUNDATION LAYOUT PLAN
8	MAIN SENSOR SUITE FOUNDATION
9	10-METER WIND TOWER FOUNDATION
10	10-METER WIND TOWER WITH WIND SENSOR INSTALLATION
11	CENTRAL DATA PROCESSING STATION
VAOT STANDARD DRAWINGS	
1	EROSION CONTROL DETAILS T-1
2	EROSION CONTROL DETAILS T-2
3	DRIVE GATE FOR WOVEN WIRE FENCE F-1
4	CHAIN LINK FENCE (TYPE I) F-2
5	CHAIN LINK FENCE (TYPE II) F-3
6	CHAIN LINK FENCE (TYPE III) F-4

INDEX OF SHEETS

RECORD PLANS	
CONTRACTOR:	NECCO INC. WAITSFIELD, VT.
RESIDENT ENGINEER:	D. WARNER
CONSTRUCTION BEGAN:	
CONSTRUCTION COMPLETE:	NOVEMBER 5, 2001
RECORD PLANS BY:	R. RICHERT
I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.	
BY: <i>[Signature]</i> RESIDENT ENGINEER	
DATE: <i>5/17/01</i>	
NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found on microfilm in Central Files.	



FRANKLIN COUNTY STATE AIRPORT LOCATION MAP

BUILT AS DESIGNED

THESE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED IN ACCORDANCE WITH CURRENT FAA STANDARDS IDENTIFIED IN F.A.R. PART 152.

DESIGN ENGINEER: *[Signature]* DATE: *5/17/01*

DUFRESNE-HENRY, INC.
SUBMITTED BY: *[Signature]* SENIOR PROJECT MANAGER
DATE: *5/17/01*

VERMONT AGENCY OF TRANSPORTATION
APPROVED BY: *[Signature]* DIRECTOR, MAINTENANCE & AVIATION DIVISION
DATE: *5/17/01*

- | | | | | |
|---|---|---|--|---|
| OFFICES:
No. Springfield, Vermont
Montpelier, Vermont
So. Burlington, Vermont
Wilmington, Vermont
Cantonville, New Hampshire
Manchester, New Hampshire
Prague Lake, Maine
Needham, Massachusetts
Greenfield, Massachusetts
Boston, Massachusetts
Fort Charlotte, Florida
Sarasota, Florida | NEWBOROUGH, NEW YORK
Roseland, New York
Romester, New York
Saratoga Springs, New York | ENGINEERING DISCIPLINES
Civil
Electrical
Environmental
Mechanical
Soils
Structural
Transportation | ASSOCIATED DISCIPLINES
Construction Management
Site Assessment
Surveying
Weathering Contract Operations | LANDSCAPE ARCHITECTURE
Public Involvement Strategies
Market & Feasibility Studies
Masterplan Master Planning
Urban Planning & Design
Project Management Training
Local, State and Federal Permitting |
| APPLIED SCIENCES
Geologic
Hydrologic
Water Quality | | | | |



Dufresne-Henry
Saratoga Springs, NY 12866
Tel. (518) 587-3415 | FAX (518) 581-1284
<http://www.dufresne-henry.com>



Rev	By	Date	Description

AWOS INSTALLATION
FRANKLIN AIR 04-3144 C/1
FRANKLIN COUNTY STATE AIRPORT
AWOS INSTALLATION



Project No.	010006
Prog. Manager	JCT
Field Manager	CHT
Checked By	MTS
Scale	N/A
Approved	MC
Date	04-25-01

Item	Description	Unit	Quantity
201.0	Clearing and Grubbing	Lump Sum	1
201.10	Clearing and Grubbing (Mod.)	Lump Sum	1
203.15	Common Excavation	Cu Yd	18
203.19	Solid Rock Excavation	Cu Yd	5
203.17	Unclassified Excavation	Cu Yd	5
203.32	Granular Borrow	Cu Yd	15
204.30	Granular Backfill for Structures	Cu Yd	5
301.35	Surfage of Dense Graded Stone	Cu Yd	5
501.30	Concrete, Class C	Cu Yd	10
507.15	Reinforcing Steel	LB	350
609.10	Dust Control with Water	Cu Yd	20
616.35	Treated Timber Curb	Lin Ft	24
620.11	Chain Link Fence 4 feet high	Lin Ft	29
620.12	Chain Link Fence 6 feet high	Lin Ft	72
620.15	Gate for Chain Link Fence 4 feet high	Lin Ft	3
620.16	Gate for Chain Link Fence 6 feet high	Lin Ft	8
620.20	Bracing Assembly for Chain Link Fence	Ea	6
620.21	Bracing Assembly for Chain Link Fence	Ea	6
631.16	Testing Equipment - Concrete	Lump Sum	1
635.10	Mobilization	Lump Sum	1
636.15	Utility System (Mod.)	Lump Sum	1
649.31	Geotextile under Stone Fill	Sq Yd	45
651.15	Seed	LB	25
651.18	Fertilizer	LB	250
651.20	Agricultural Limestone	Ton	0.5
651.25	Mulch	Ton	0.5
651.26	Hay Bales for Erosion Control	Ea	15
651.35	Topsoil	Cu Yd	5
654.10	Erosion Matting	Sq Yd	50

QUANTITIES

EROSION AND SEDIMENT CONTROL NOTES:

- THE CONTRACTOR SHALL CONSTRUCT ALL EROSION AND SEDIMENT CONTROL MEASURES PER THE APPROVED PLAN AND CONSTRUCTION SEQUENCE, AND SHALL HAVE THEM INSPECTED BY THE ENGINEER PRIOR TO BEGINNING ANY OTHER LAND DISTURBANCES. MINOR SEDIMENT CONTROL DEVICE LOCATION ADJUSTMENTS MAY BE MADE IN THE FIELD WITH THE APPROVAL OF THE ENGINEER. THE CONTRACTOR MUST OBTAIN PRIOR APPROVAL FOR CHANGES TO THE SEDIMENT CONTROL PLAN AND/OR SEQUENCE OF CONSTRUCTION.
- THE CONTRACTOR SHALL MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIMES AS THEY ARE REMOVED.
- THE CONTRACTOR SHALL APPLY SEED AND MULCH, OR OTHER APPROVED STABILIZATION MEASURES TO ALL DISTURBED AREAS AND STOCKPILES WITHIN FORTY EIGHT (48) HOURS OF FINAL DISTURBANCE.
- THIS EROSION CONTROL PLAN SHALL BE IMPLEMENTED ON ALL DISTURBED AREAS WITHIN THE CONSTRUCTION SITE. ALL MEASURES INVOLVING EROSION CONTROL PRACTICES SHALL BE INSTALLED IN CONFORMANCE WITH "THE VERMONT HANDBOOK FOR SOIL EROSION AND SEDIMENT CONTROL ON CONSTRUCTION SITES" AS PUBLISHED BY THE VERMONT GEOLOGICAL SURVEY.
- DURING THE PERIOD OF CONSTRUCTION ACTIVITY, ALL EROSION MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR. AT THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE THE TRANSFER OF MAINTENANCE RESPONSIBILITIES, IF REQUIRED, TO THE VERMONT AGENCY OF TRANSPORTATION (VADOT).
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE REMOVED AND DISPOSED OF WITHIN THIRTY (30) CALENDAR DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY PRACTICES ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE STABILIZED OR REMOVED TO PREVENT FURTHER EROSION.
- EROSION CONTROL DEVICES REMOVED DURING GRADING OPERATIONS SHALL BE PUT BACK IN PLACE AT THE END OF THE DAY OR DURING INCLEMENT WEATHER AS DIRECTED BY THE ENGINEER.
- IF APPLICABLE, STREAMS INCLUDING BED AND BANKS SHALL BE STABILIZED IMMEDIATELY AFTER CHANNEL WORK IS COMPLETED, INTERRUPTED, OR STOPPED.
- NO SOIL, ROCK DEBRIS, OR ANY OTHER MATERIAL SHALL BE DUMPED OR PLACED INTO A WATER RESOURCE, OR INTO SUCH PROXIMITY THAT IT MAY RESULT IN SLOUGH, SWAMP, OR EROSION INTO A WATER RESOURCE UNLESS SUCH DUMPING OR PLACING IS AUTHORIZED BY THE ENGINEER AND, WHEN APPLICABLE, BY THE U.S. ARMY CORPS OF ENGINEERS FOR SUCH PURPOSES AS, BUT NOT LIMITED TO, CONSTRUCTION OF BRIDGES, CULVERTS, AND EROSION CONTROL STRUCTURES.
- PERMANENT SEEDING SHALL BE DONE BETWEEN APRIL 30 AND SEPTEMBER 15. IF SEEDING IS DONE AT OTHER TIMES, IT SHALL BE CLASSIFIED AS "TEMPORARY SEEDING". PERMANENT SEED SHALL CONFORM TO THE SEEDING MIXTURE STATED IN THE SPECIFICATIONS. TEMPORARY AND PERMANENT SEEDING SHALL CONSIST OF FERTILIZING, WATERING AND SEEDING PLACED AT RATES IN ACCORDANCE WITH THE SPECIFICATIONS. PERMANENT SEEDING AND MULCHING SHALL BE PAID FOR UNDER 651.15 AND 651.25 RESPECTIVELY. TEMPORARY SEED, MULCH, AND FERTILIZER FOR EROSION AND SEDIMENT CONTROL SHALL BE PLACED IN ACCORDANCE WITH THE SPECIFICATIONS. NO PAYMENT WILL BE MADE FOR TEMPORARY SEEDING OR MULCHING.
- SURFACE DRAINAGE FLOWS OVER UNSTABILIZED CUT AND FILL SLOPES SHALL BE CONTROLLED BY EITHER PREVENTING DRAINAGE FLOWS TRAVERING SLOPES OR BY INSTALLING PROTECTIVE DEVICES TO LOWER THE WATER DOWN THE SLOPE WITHOUT CAUSING EROSION. DIKES SHALL BE INSTALLED AND MAINTAINED AT THE TOP OF CUT OR FILL SLOPES UNTIL THE SLOPE AND DRAINAGE AREA TO IT ARE FULLY STABILIZED. IF WHEN REMOVED THEY MUST BE REMOVED AND FINAL GRADING DONE TO PROMOTE SHEET FLOW DRAINAGE. PROTECTIVE METHODS MUST BE PROVIDED AT POINTS OF CONCENTRATED FLOW WHERE EROSION IS LIKELY TO OCCUR.
- ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS IN UNPAVED AREAS SHALL BE STABILIZED AND PROTECTED TO PREVENT TRACKING OF MUD ONTO PUBLIC OR PRIVATE ROADWAYS.
- IF PUBLIC OR PRIVATE ROADWAYS DO ACCUMULATE DEBRIS, THE CONTRACTOR SHALL USE A POWER BROOM TO REMOVE THE SEDIMENT TO THE SATISFACTION OF THE ENGINEER.
- SALVAGED TOPSOIL WILL BE PLACED ON WELL DRAINED LAND AWAY FROM STREAMS IN ACCORDANCE WITH APPROVED EROSION AND SEDIMENT CONTROL MEASURES. IT SHALL BE PLACED IN NEAT PILES. THE CONTRACTOR WILL PROVIDE AN ADEQUATE QUANTITY OF SILT FENCE TO CONTROL THE PERIMETER OF THE STOCKPILE. THE CONTRACTOR, WITH THE APPROVAL OF THE ENGINEER, MAY CONSTRUCT AN EARTH DIKE IN LIEU OF SILT FENCE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST RISING FROM CONSTRUCTION OPERATIONS. DUST CONTROL, USING WATER, 609.10 WILL BE APPLIED WHENEVER DUST IS A PROBLEM OR WHEN ORDERED BY THE ENGINEER.

PHASING NOTES:

GENERAL

All work to be completed within Phase I, and II.

All work must comply with the requirements of FAA AC 150/5370-20, Operational Safety During Construction. See General Construction and Safety Notes for additional information.

The contractor must submit a schedule to the Engineer prior to commencing work on the airport. This schedule is to be upgraded weekly. No work will be allowed outside the areas included in the approved schedule.

PHASE I

All work on Phase I to be completed with 45 calendar days of notice to proceed.

Runway 1-19 is to be opened at all times during the project except as required to install underground utilities. No work shall be allowed within the Runway 1-19 primary surface without authorization from the Engineer. Work within the Runway 1-19 primary surface will require that the runway be closed. At least 48 hours notice is required prior to closing the runway.

CONSTRUCTION INCLUDES:

Installation of underground utilities to provide 30A 120V/240V power for the AWOS, improve and expand existing farm road to the AWOS, clear and grub in areas shown and clear only in areas shown, construct concrete structures to support 30' AWOS wind sensor tower and AWOS components, install AWOS system and opportunences, install AWOS data link from sensor site to terminal/hangar building using UHF radio link. Install central data platform and VHF antenna at terminal/hangar building.

PHASE II

All work on Phase II to be completed with 30 calendar days of notice to proceed.

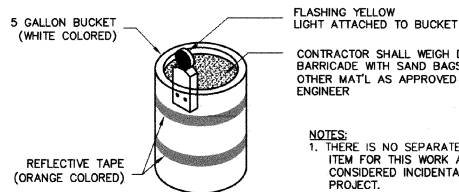
Runway 1-19 is to be opened at all times during the project. No work shall be allowed within the Runway 1-19 primary surface without authorization from the Engineer.

CONSTRUCTION INCLUDES:

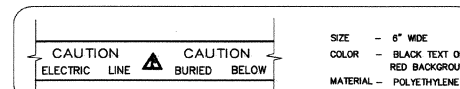
Testing, calibration, and certification of the AWOS system.

SPECIAL NOTE:

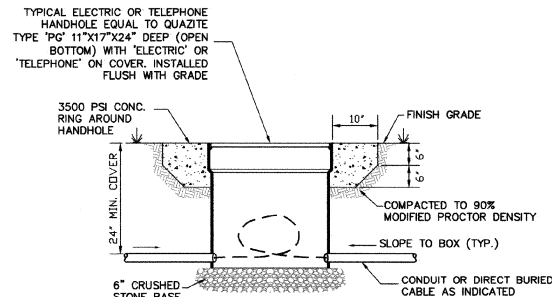
The Contractor's attention is drawn to the single and double hatched areas within the inner AWOS Critical Area depicted on Sheet 4. Prior to any earth disturbance, the contractor shall mark flag or fence the outer limit of the area to be cut and stumped (single hatching). No removal of stumps is to take place in the area which is double hatched; trees are to be clear cut only in this area. No clearing or any type of disturbance may occur immediately north of the double hatched area as this area is archeologically sensitive.



A TYPICAL SAFETY BARRICADE
NOT TO SCALE



B TYPICAL CONDUIT TRENCH SECTION
NOT TO SCALE



C TYPICAL HAND-HOLE DETAIL
NOT TO SCALE



Rev.	Description	By	Date

VERMONT
 FRANKLIN COUNTY STATE AIRPORT
 QUANTITIES, PHASING NOTES, MISC. DETAILS
 HIGHLIGHT



Project No.	610006
Proj. Manager	AMT
Proj. Designer	AMT
Checked By	MS
Scale	N/A
Approved	MS
Date	06-27-07

LEGEND	EXISTING
GROUND CONTOUR	---
AIRPORT PROPERTY	---
OBSTACLE FREE AREA (OFA)	---
TREE LINE	---
SECURITY FENCE	---
SWALE/DITCH	---
R/W END IDENTIFIER LIGHTS (REL)	---
WETLAND BOUNDARY	---
UNIMPROVED ROADWAYS	---
PAVEMENT	---

EXISTING	BUILDINGS
①	T-Hanger 10 Units
②	48' x 48' Hanger (Under Construction)
③	Hanger 3 Units Each
④	T-Hangers
⑤	GA Hanger
⑥	Hanger 3 Units
⑦	Hanger
⑧	Prestige Paint Shop Hanger
⑨	Storage Building
⑩	Terminal / Hanger
⑪	T-Hanger
⑫	T-Hangers

EXISTING	TERMINAL AREA PAVEMENT
⑬	Main Apron
⑭	Fuel Apron
⑮	South Apron
⑯	Auto Parking

AWOS TOWER
COORDINATES
NORTH 890379.76
EAST 1485135.50

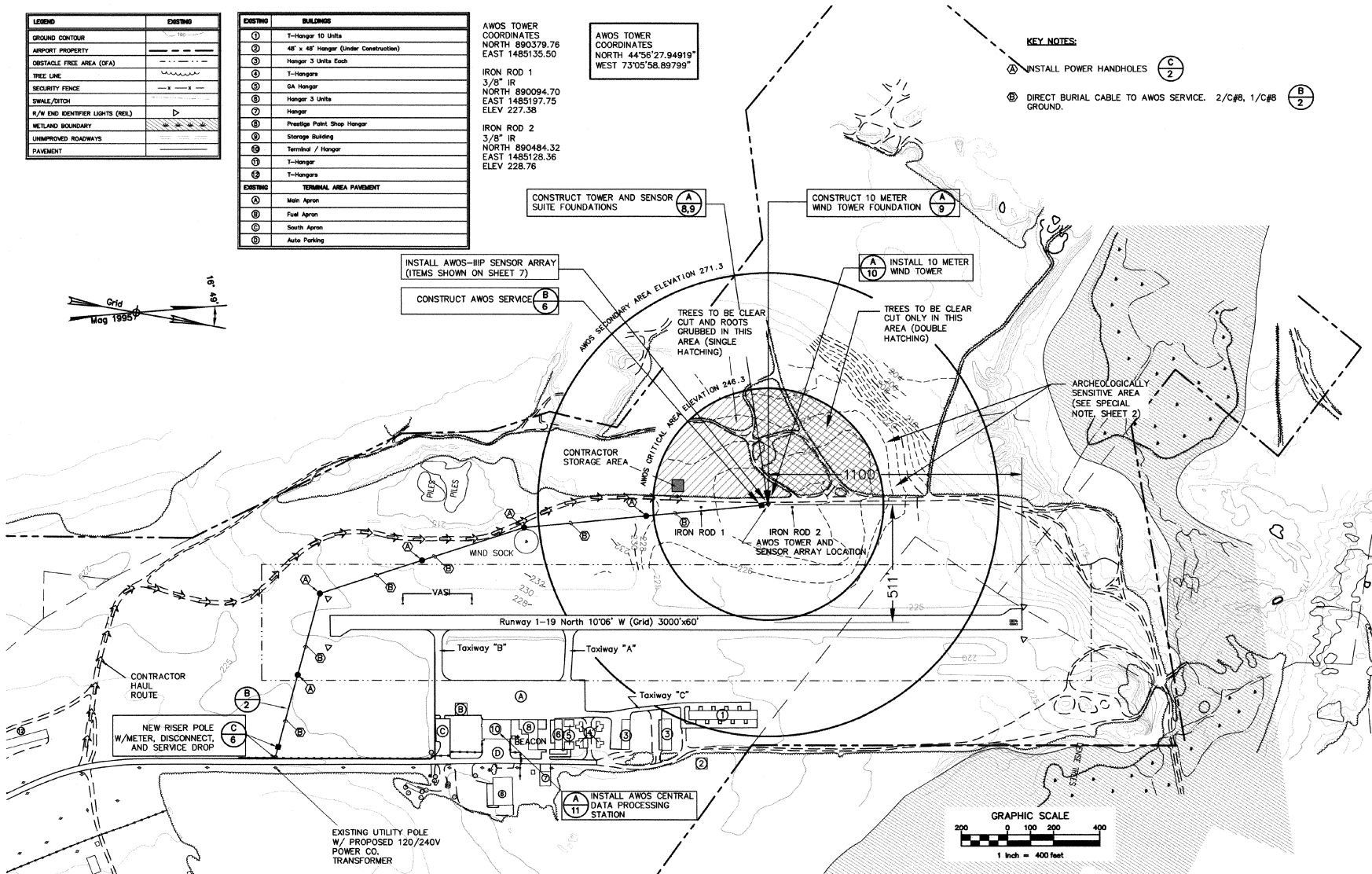
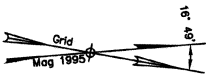
AWOS TOWER
COORDINATES
NORTH 44°56'27.94919"
WEST 73°05'58.89799"

IRON ROD 1
3/8" IR
NORTH 890094.70
EAST 1485197.75
ELEV 227.38

IRON ROD 2
3/8" IR
NORTH 890484.32
EAST 1485128.36
ELEV 228.76

KEY NOTES:

- Ⓐ INSTALL POWER HANDHOLES
- Ⓑ DIRECT BURIAL CABLE TO AWOS SERVICE. 2/C#5, 1/C#8 GROUND.
- Ⓒ
- Ⓓ
- Ⓔ



NOTES:

1. Horizontal Datum NAD 83 (1986) International Feet.
2. Vertical Datum NAVD 88 International Feet.
3. Existing easement & property lines based on "Airport Property Map" prepared for VAOT by Clough Harbour Associates March 1999.



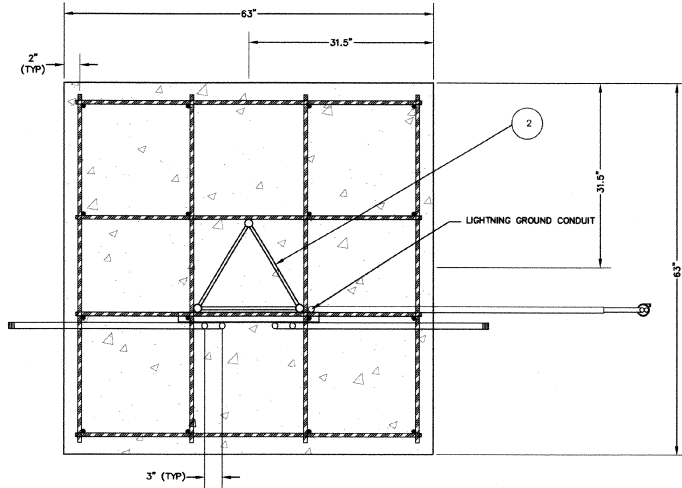
Rev.	Description	Date

VERMONT
FRANKLIN COUNTY STATE AIRPORT
AWOS SITE PLAN



Project No.	619006
Proj. Manager	JMT
Proj. Designer	JMT
Checked By	USF
Scale	AS SHOWN
State	VT
Approved	
Date	05-27-07

NORTH

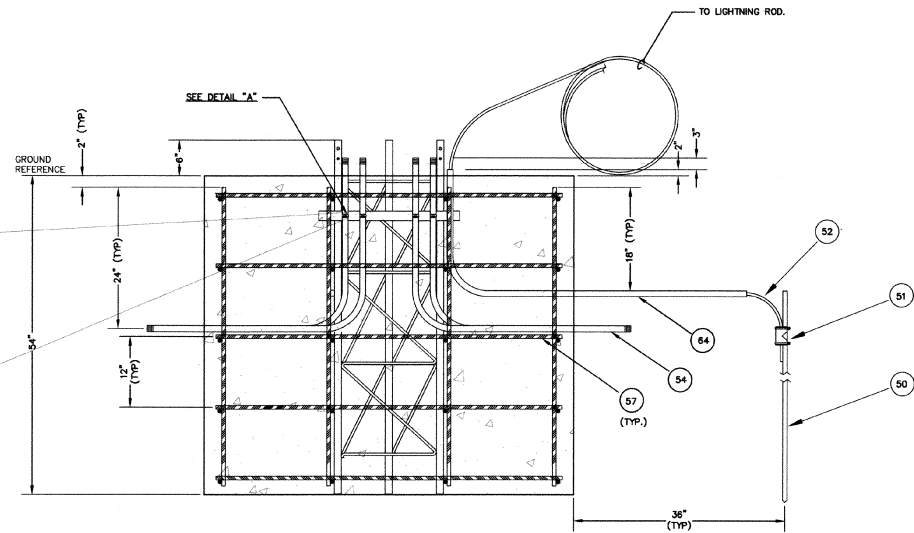


PLAN VIEW

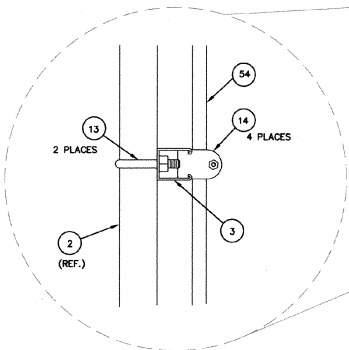
- NOTES
1. ALL DIMENSIONS IN ENGLISH (INCHES) UNLESS SPECIFIED OTHERWISE.
 2. PULL STRINGS SHALL BE PLACED IN ALL CONDUIT.
 3. FOUNDATION SIZE AND DEPTH BASED ON SOIL CONDITION OF A CBR 4.0.
 4. CONCRETE SHALL BE MINIMUM OF 3000 PSI @ 28 DAYS.
 5. CONDUIT SHALL EXIT FOUNDATION IN DIRECTION REQUIRED PER SITE.
 6. FOUNDATION SHALL BE LEVEL AND PLUMB.
 7. TOWER AND CONDUIT SHALL BE PLUMB.
 8. SEAL TOWER AND CONDUIT ENDS TO PREVENT WATER ENTRY UNTIL SYSTEM INSTALLATION.
 9. TOLERANCE = +/- 0.38".

Items To Be Supplied by Contractor			
Item	Description	Recommended Manufacturer Name and Part Number	Quantity Required
50	Ground Rod, 3/4" DIA	Robbins #9710	2 EA
51	Ground Clamp	Robbins #93B	2 EA
52	Ground Wire, 2/0 Copper	Robn #CW 2/0ST	40 Ft
54	Rigid Galv. St. Conduit, 3/4" DIA	Allied #RIGID 3/4"	As Required
57	Reinforced Steel Bar 15M	Parker Steel International #4	258 Ft.
64	Nonmetallic Tubing 3/4"	Carlflex #15107	10 Ft.

Items Supplied by Valsala Inc., Artals Division			
Item	Part No.	Description	QTY/U/M
2	72-21957	Tower Base Short 5' (18')	1 EA
3	51-22371	Strut, 24" Cut	1 EA
13	45-21271	U-Bolt, 1"x3.75" Overall Length SS	2 EA
14	45-21378	Clamp, Pipe 3/4 GRC and IMC	4 EA



FRONT ELEVATION



DETAIL "A"

A
9 10 METER WIND TOWER FOUNDATION
NOT TO SCALE



Rev.	Description	By	Date

AWOS INSTALLATION
FRANKLIN AIR 043144 C1
FRANKLIN COUNTY STATE AIRPORT
10-METER WIND TOWER FOUNDATION
HIGHGATE VERMONT



Project No.	878006
Proj. Manager	ART
Proj. Designer	ART
Drawn By	DMF
Checked By	MC
Approved	MS
Date	06/20/09

