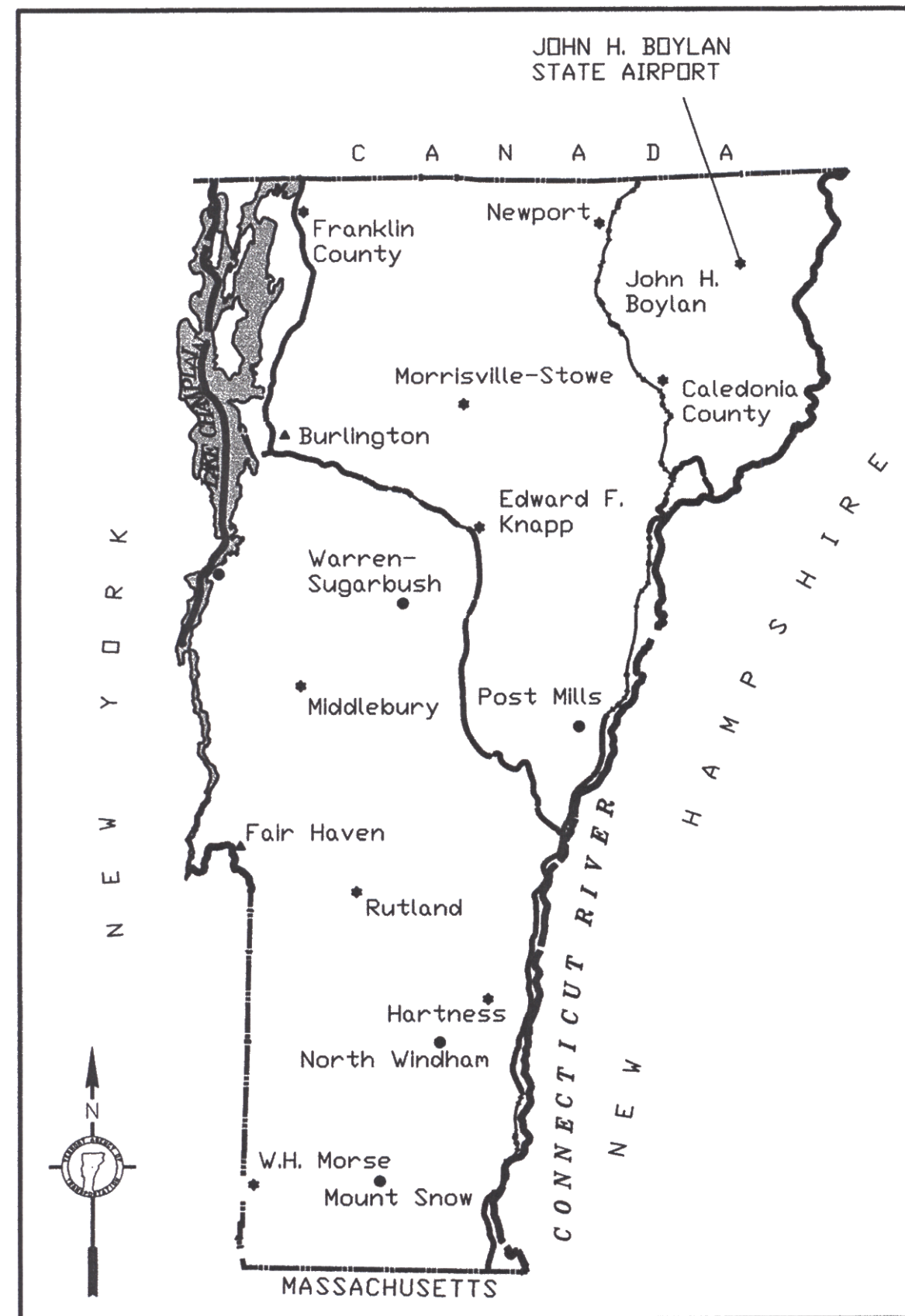
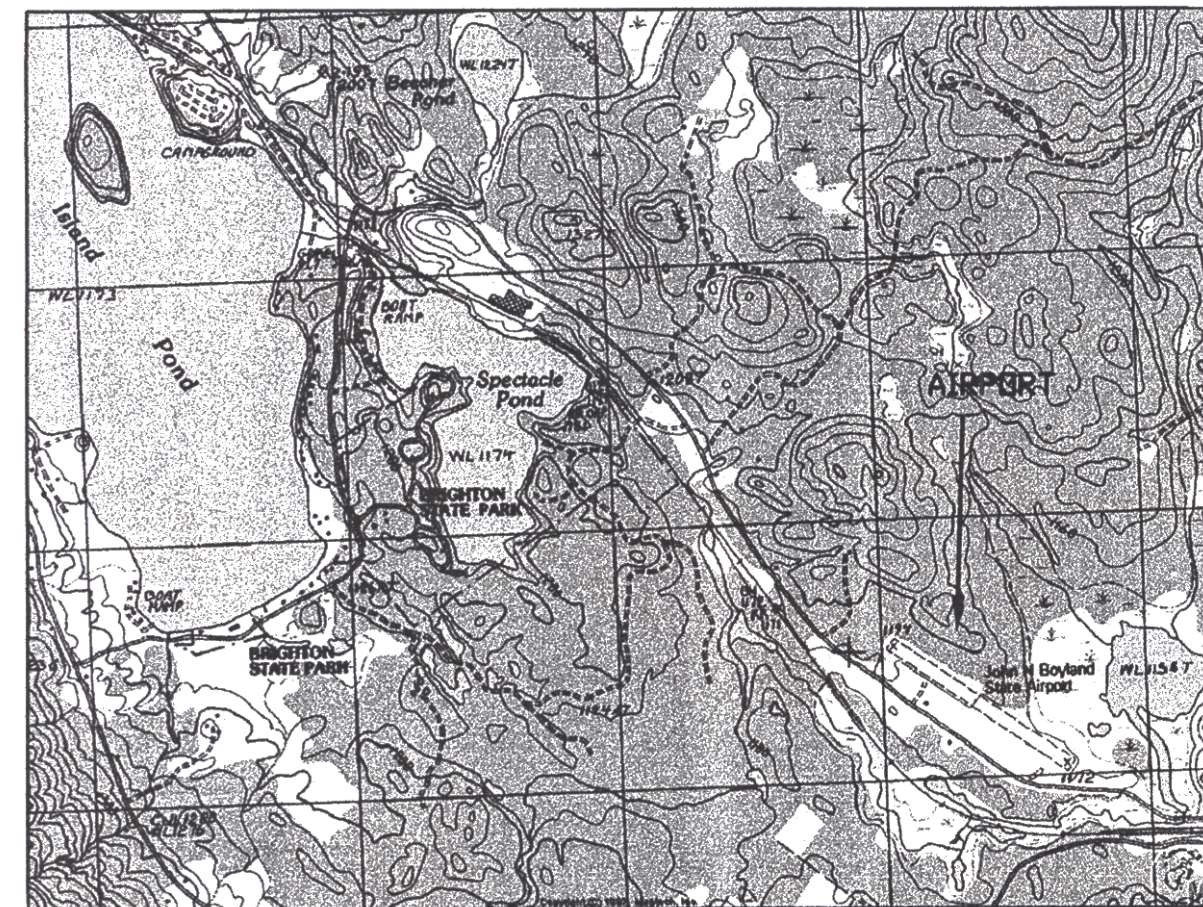


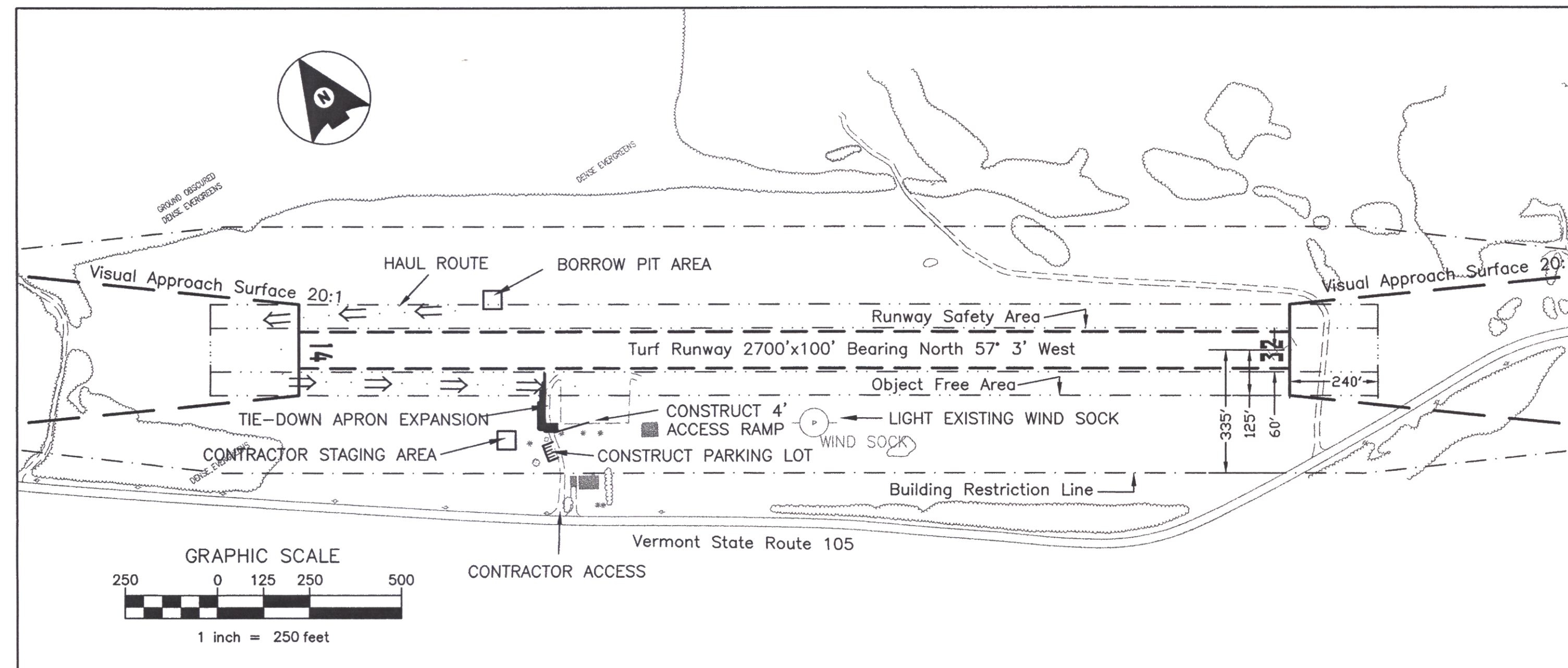
JOHN H. BOYLAN STATE AIRPORT VAOT CONTRACT #0284038 AIRPORT IMPROVEMENTS TO INCLUDE: EXPANSION OF EXISTING TIEDOWN APRON, CONSTRUCTION OF AUTO PARKING AREA, AND LIGHTED WIND SOCK



LOCATION MAP



VICINITY MAP



ITEM/DESCRIPTION	ESTIMATE QUANTITY
203.15 COMMON EXCAVATION	200 CY
203.16 SOLID ROCK EXCAVATION	10 CY
203.31 SAND BORROW	635 CY
301.26 SUBBASE OF CRUSHED GRAVEL, FINE GRADED	170 CY
609.10 DUST CONTROL WITH WATER	1 MGAL
635.10 MOBILIZATION	1 EA
651.15 SEED	25 LBS
651.18 FERTILIZER	200 LBS
651.20 AGRICULTURAL LIMESTONE	0.7 TON
651.25 HAY MULCH	0.7 TON
651.26 HAY BALES	10 EA
651.35 TOPSOIL	125 CY
649.20 GEOTEXTILE FABRIC FOR SILT FENCE	180 SY
658** ACCESS RAMP	1 EA
854.07 AIRCRAFT TIE DOWN ANCHOR	15 EA
864** ILLUMINATED WIND CONE	1 EA

QUANTITIES

TOWN OF BRIGHTON
ESSEX COUNTY
VERMONT

MARCH 2000



Dufresne-Henry

SOUTH BURLINGTON, VT 05407

Tel. (802) 864-0223 • FAX (802) 864-0165 • www.d-hinc.com

SHEET	TITLE
1	TITLE SHEET
2	SITE PLAN
3	DETAILS
4	GENERAL NOTES
5	ELECTRICAL DETAILS
6	ACCESS RAMP DETAILS

VAOT STANDARD DRAWINGS

1	GENERAL MOTORIST SERVICES SIGN DETAILS, E-132
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INDEX OF SHEETS

OFFICES:

No. Springfield, Vermont
Montpelier, Vermont
So. Burlington, Vermont
Williston, Vermont
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Manchester, New Hampshire
Portland, Maine
Westford, Massachusetts
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Boston, Massachusetts
Port Charlotte, Florida
Sarasota, Florida

ENGINEERING DISCIPLINES

Civil
Electrical
Environmental
Industrial
Mechanical
Solid Waste
Structural
Transportation

ASSOCIATED DISCIPLINES

Construction Management
Site Assessments
Surveying
Wastewater Contract Operations

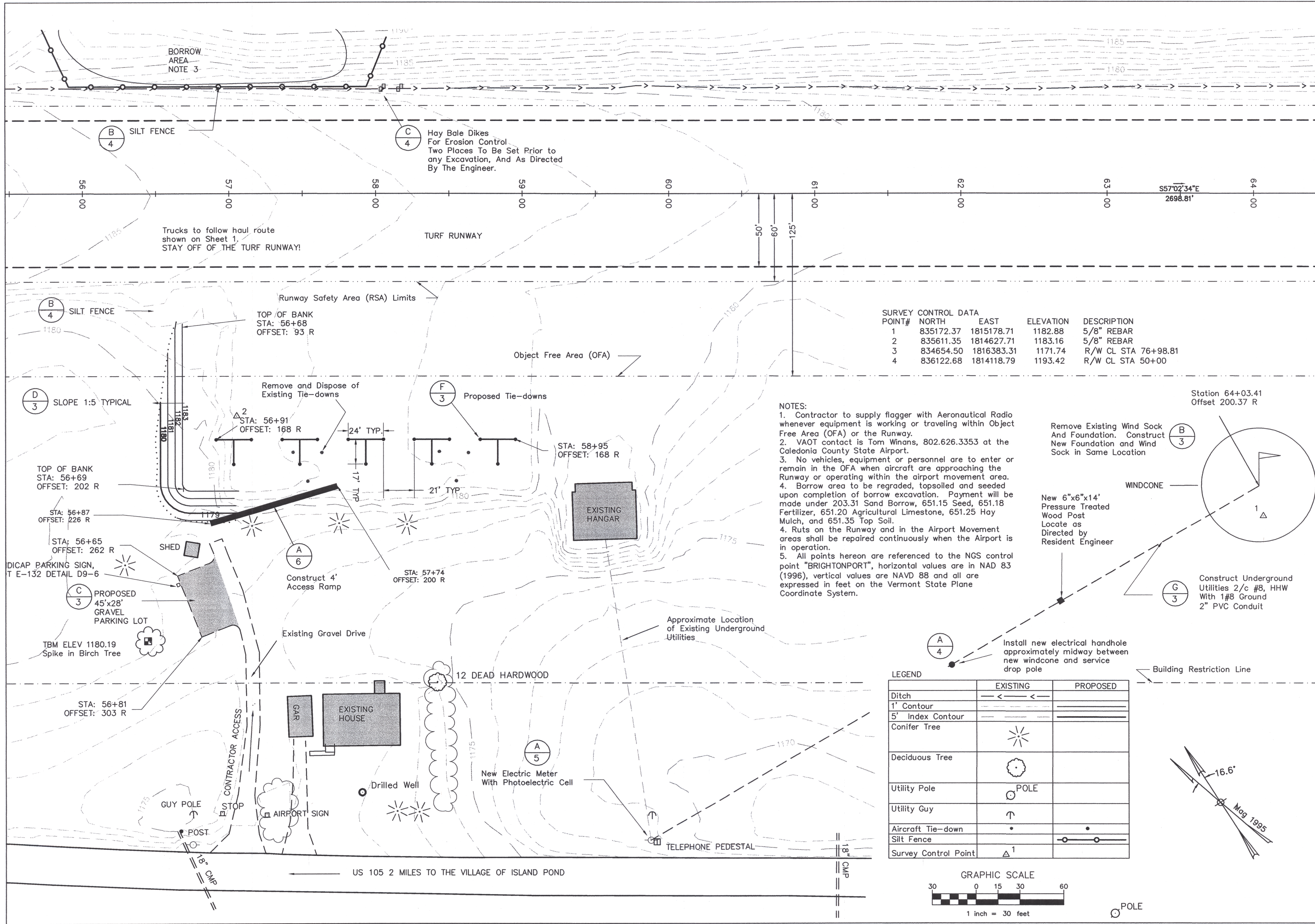
LANDSCAPE ARCHITECTURE

Public Involvement Strategies
Market & Fiscal Impact Analysis
Waterfront Master Planning
Urban Planning & Design
Harbor Management Planning
Local, State and Federal Permitting

APPLIED SCIENCES

Geologic
Hydrologic
Water Quality

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 HP DesignJet 1050C Hewlett-Packard HP-GL/2 devices, ADI 4.3 (v4.1) - Jul 22 1998



SURVEY CONTROL DATA

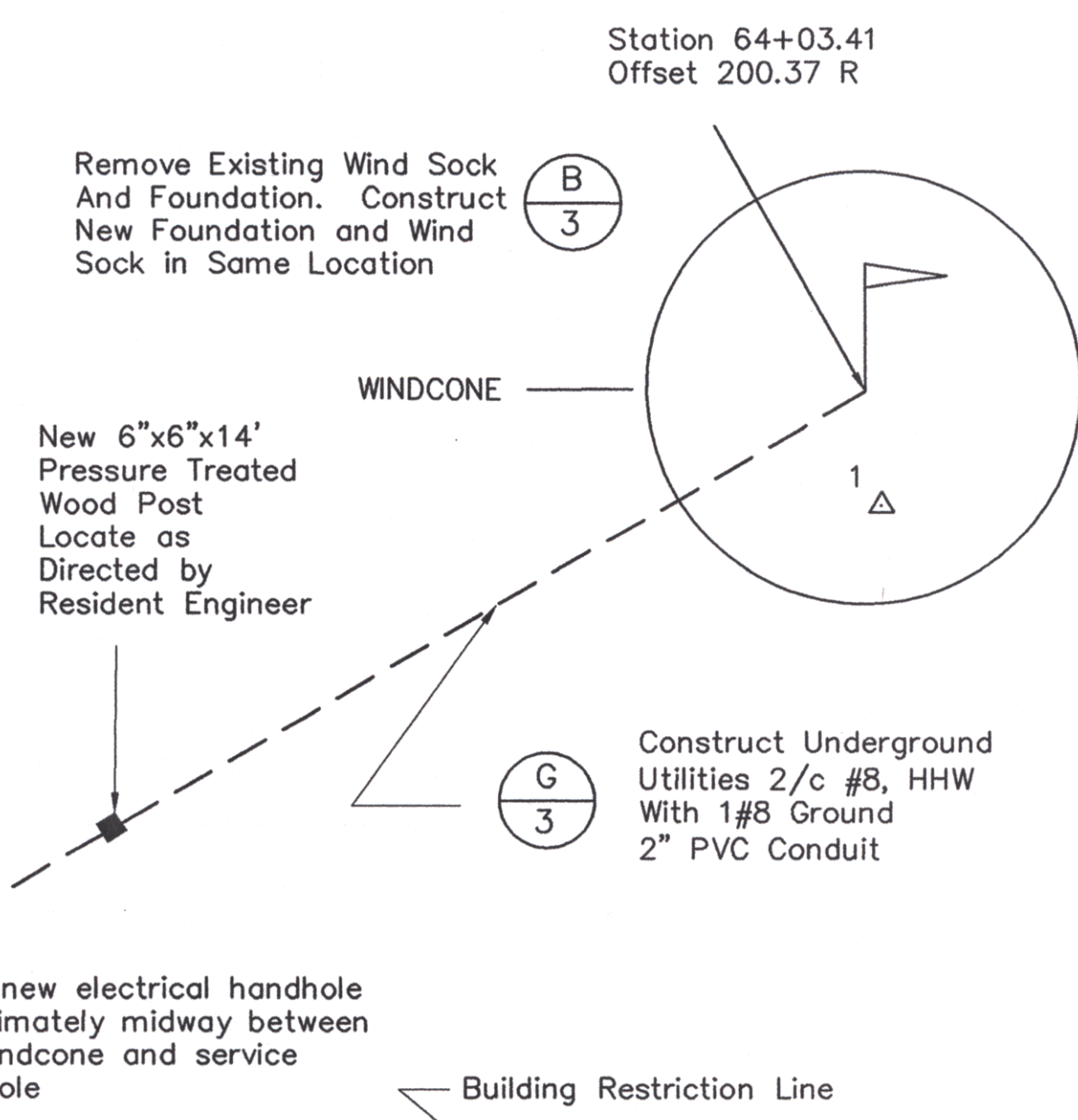
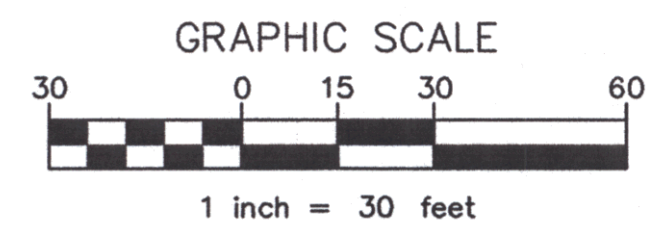
POINT#	NORTH	EAST	ELEVATION	DESCRIPTION
1	835172.37	1815178.71	1182.88	5/8" REBAR
2	835611.35	1814627.71	1183.16	5/8" REBAR
3	834654.50	1816383.31	1171.74	R/W CL STA 76+98.81
4	836122.68	1814118.79	1193.42	R/W CL STA 50+00

NOTES:

- Contractor to supply flagger with Aeronautical Radio whenever equipment is working or traveling within Object Free Area (OFA) or the Runway.
- VAOT contact is Tom Winans, 802.626.3353 at the Caledonia County State Airport.
- No vehicles, equipment or personnel are to enter or remain in the OFA when aircraft are approaching the Runway or operating within the airport movement area.
- Borrow area to be regraded, topped and seeded upon completion of borrow excavation. Payment will be made under 203.31 Sand Borrow, 651.15 Seed, 651.18 Fertilizer, 651.20 Agricultural Limestone, 651.25 Hay Mulch, and 651.35 Top Soil.
- Ruts on the Runway and in the Airport Movement areas shall be repaired continuously when the Airport is in operation.
- All points hereon are referenced to the NGS control point "BRIGHTONPORT", horizontal values are in NAD 83 (1996), vertical values are NAVD 88 and all are expressed in feet on the Vermont State Plane Coordinate System.

LEGEND

	EXISTING	PROPOSED
Ditch	—<—<	—>>—>
1' Contour	—	—
5' Index Contour	—	—
Conifer Tree	☼	
Deciduous Tree	☼	
Utility Pole	⊙	
Utility Guy	↑	
Aircraft Tie-down	•	•
Silt Fence	—	—
Survey Control Point	△	△



Date	By	Description	Rev.

John H. Boylan State Airport
 Contract #0284038

SITE PLAN

Brighton, Vermont

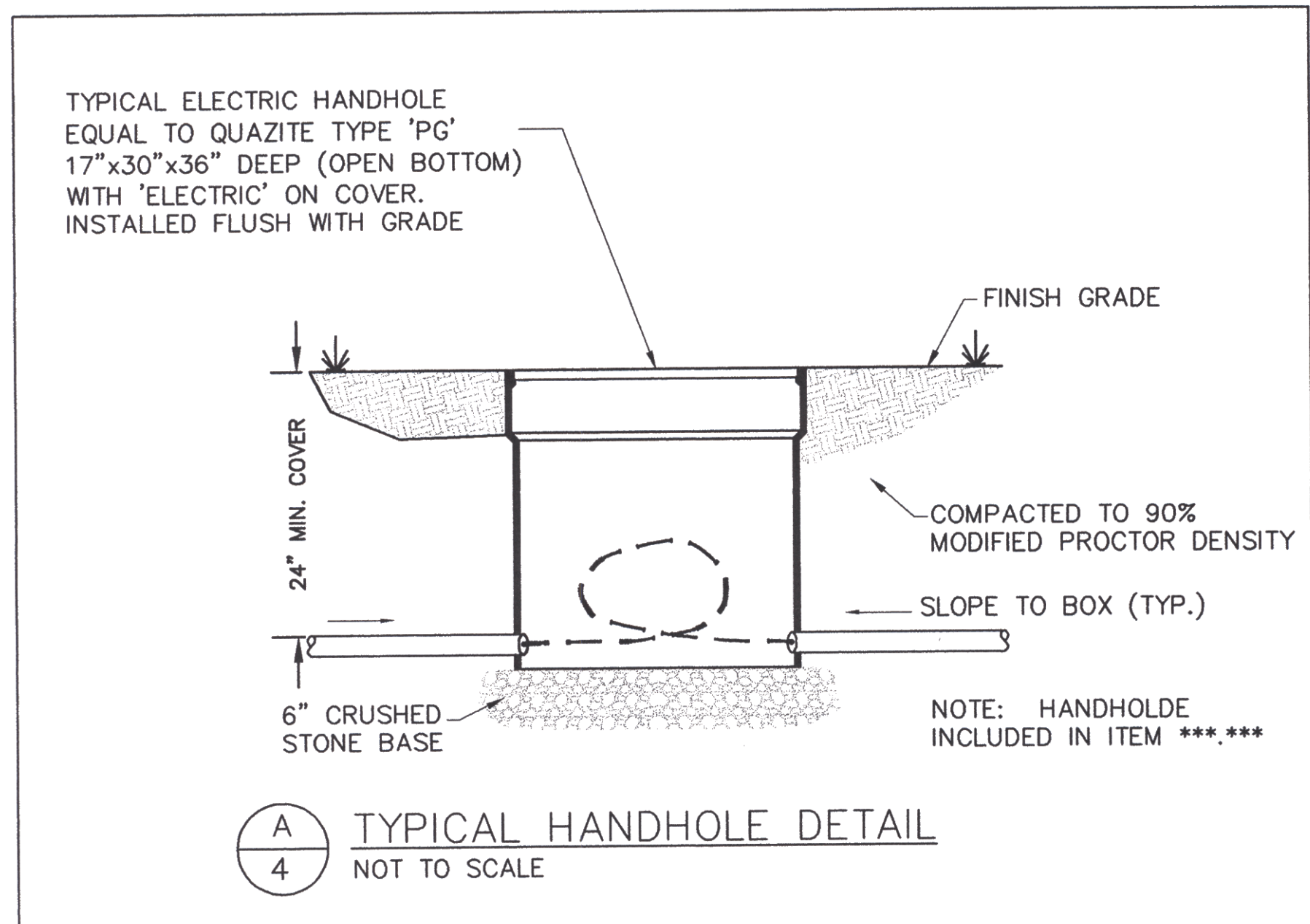
Project No.	8180066
Prof. Manager	mc
Proj. Designer	gr
Drawn By	gr
Checked By	gd
Scale	1"=30'
Approved	mc
Date	January 2000

2

Sheet 2 of 6

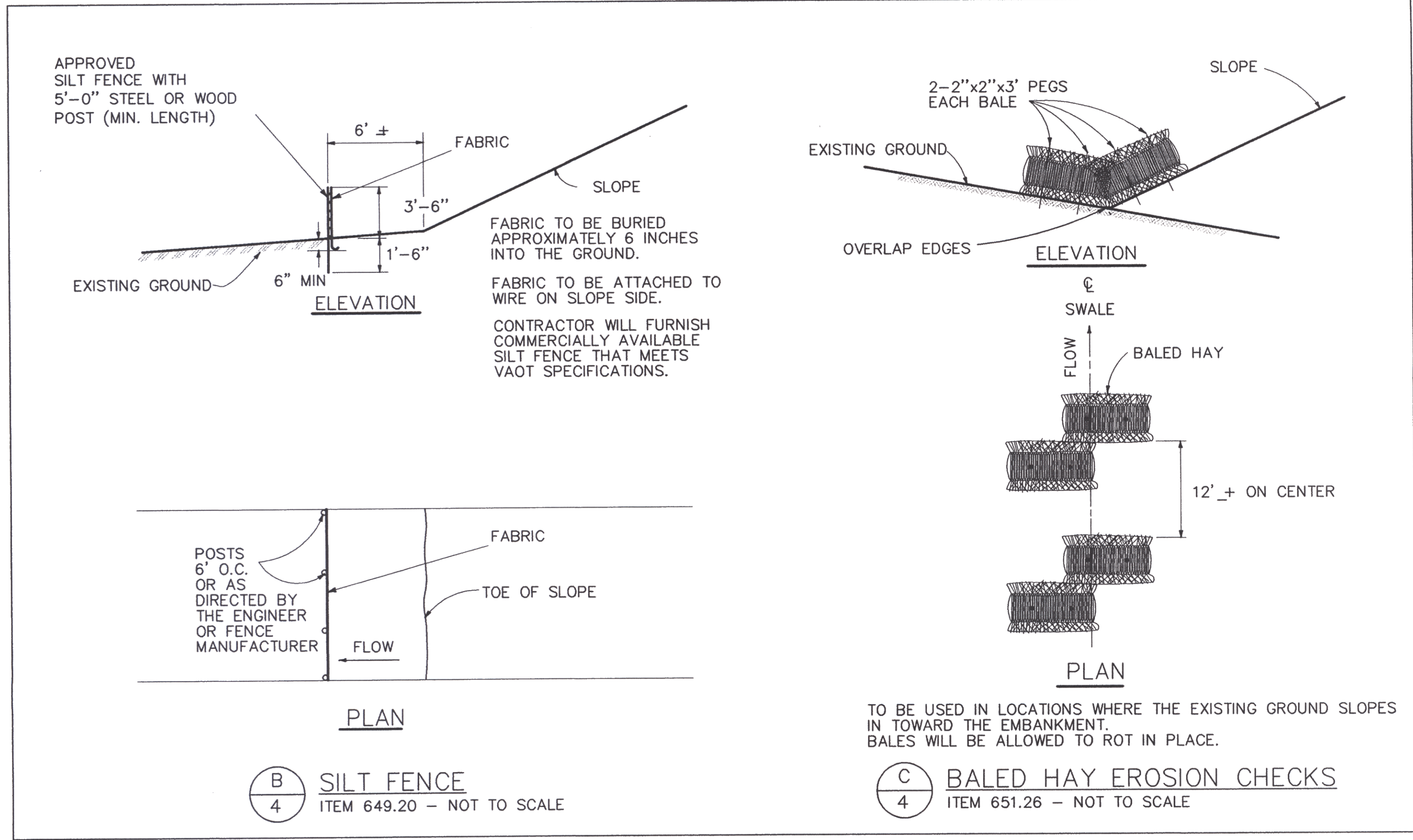
Erosion and Sediment Control Notes

- 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 fourteen (14) calendar day after stripping and grading activities have ceased in the area. Permanent soil stabilization shall be provided within seven (7) calendar days of final grade establishment.
- 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 control 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 (VAOT).
- 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 readily slough, slip, or erode into a water resource unless such dumping or placing is authorized by the Engineer and, when applicable, 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 on Sheet 3 of 5. 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 traversing the slopes or by installing protective devices to lower the water down 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 or fully stabilized, at which time 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, item 609.10 will be applied whenever dust is a problem or when ordered by the Engineer.



General Construction and Safety Notes

- This project shall be constructed in accordance with the contract plans and specifications and any rules, regulations, standards or specifications referenced therein. The project is subject to inspection by representatives of the Vermont Agency of Transportation (VAOT).
- The John H. Boylan State Airport will be in operation during the construction of this project. Coordination of all work with the Airport Manager and the Project Engineer is mandatory so as to minimize impacts on airport operations. VAOT contact is Tom Winans, (802) 626-3353; Project Engineer is Gordon Reynolds of Dufresne-Henry, (802)864-0223.
- Construction and maintenance operations by others may occur concurrently and at times in the vicinity of construction associated with this project. The contractor shall coordinate his operations and cooperate with maintenance crews and other contractors working on the airport.
- Access to the site - the Contractor's access points to the site are shown on the General Project Layout Plan. The Contractor shall be responsible for all vehicles and personnel who enter through the access points.
- Haul routes - approximate location of haul routes on the airport site are shown on the General Project Layout Plan. It shall be the Contractor's responsibility to coordinate off-site haul routes (State or Town Highways) with the appropriate owner who has jurisdiction over the affected routes. On-site haul routes shall be maintained by the Contractor and shall be restored at the Contractor's expense to their original condition upon completion of work. The before and after condition of on-site haul routes shall be jointly inspected and determined by the Contractor and the engineer. Fencing, drainage, grading and other miscellaneous construction required to construct temporary haul routes or access points on the airport will be the Contractor's responsibility and shall be approved by the engineer prior to commencing the work. Existing access roads to airport facilities shall remain open and maintained at all times.
- Contractor's staging areas: area will be made available for the Contractor's mobilization and storage. This area is shown on the General Project Layout. The Contractor's staging areas shall be graded, top soiled, seeded, and mulched upon completion of use, at the Contractor's expense
- Disposal area: a waste area will be made available for the disposal of the Contractor's spoil materials. The manner in which materials are placed in embankments shall be as specified and approved by the engineer. Waste material include those items which are a direct result of construction. Trash (i.e. cups, cans etc.) shall be disposed of through proper sanitary methods.
- During performance of this contract, the airport runways, taxiways, and parking aprons shall remain in use by aircraft to the maximum extent possible. All aircraft traffic on these areas shall have priority over Contractor's traffic. The owner reserves the right to order the Contractor at any time to vacate any area necessary to maintain safe aircraft operations. Use of areas near the Contractor's work will be controlled to minimize disturbance to the Aircraft Movement Area. The Contractor shall not allow employees, subcontractors, suppliers, or any other unauthorized person to enter or remain in any airport area which would be hazardous to persons or to aircraft operations.
- All work to be performed which is close to an active Aircraft Movement Area shall be accomplished only with prior permission from the engineer and airport manager. Requests for closings shall be directed to the engineer at least 48 hours in advance.
- Equipment and stockpiled material shall be constrained in a manner to prevent movement resulting from aircraft jet or propeller blast or wind conditions in excess of 10 knots.
- The Contractor shall provide bucket type construction barricades with flashing yellow lights as shown on the drawings to delineate the work areas which are closed to airport traffic. Open trenches, excavations and stockpiled material located in the Object Free Area shall be prominently marked with orange flags and lighted by approved light units during hours of limited visibility and darkness.
- All materials and equipment when not in use shall be placed in approved areas where they will not constitute a hazard to aircraft operations and not penetrate clearance surfaces. Equipment shall be parked at the staging area when not in use.



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Rev.	Description	By	Date

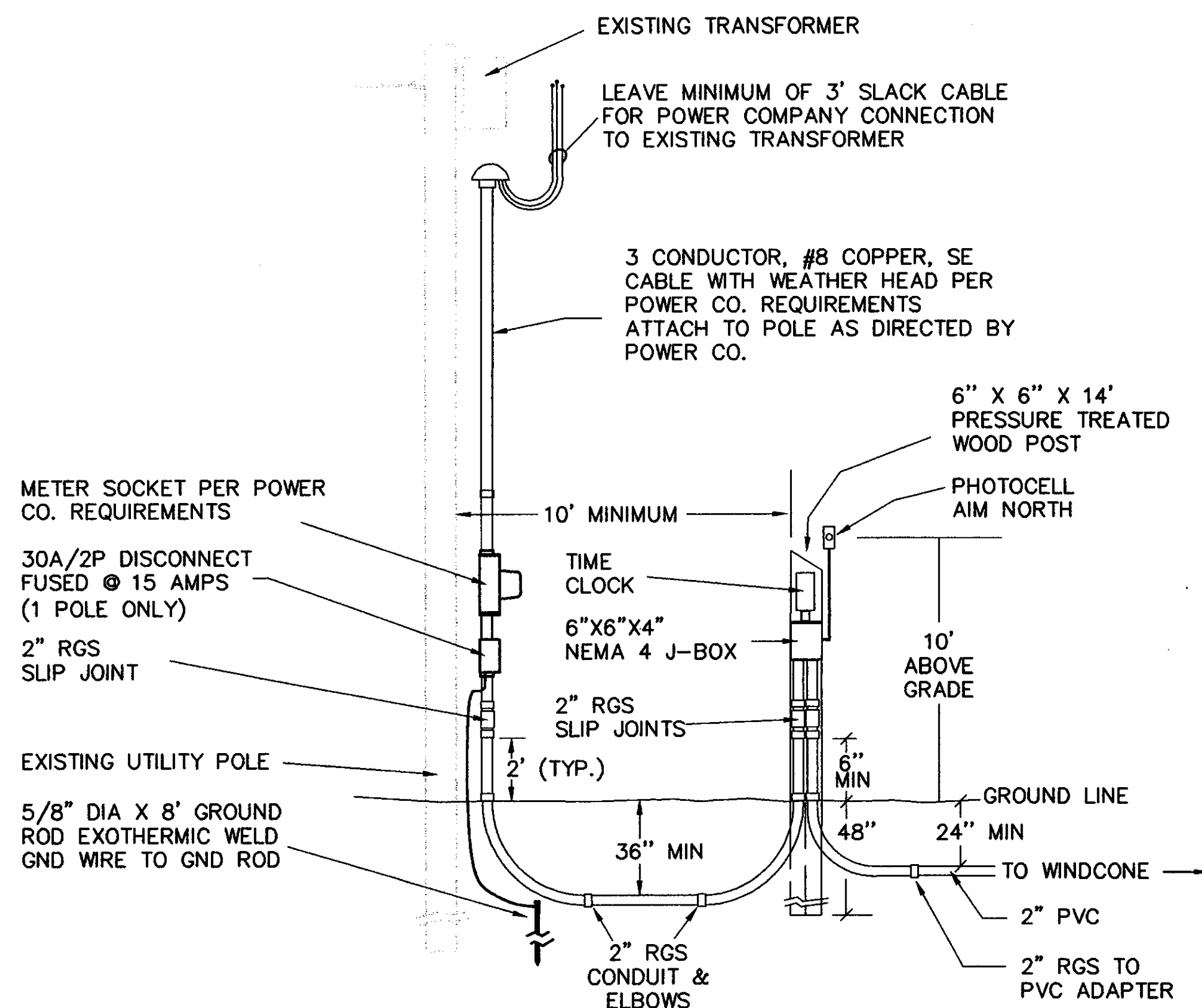
John H. Boylan State Airport Contract #0284038

GENERAL NOTES
EROSION CONTROL DETAILS

Vermont
Brighton

Project No.	8190066
Proj. Manager	mc
Proj. Designer	gd
Drawn By	gr
Checked By	mc
Scale	As Shown
Approved	
Date	January 2000

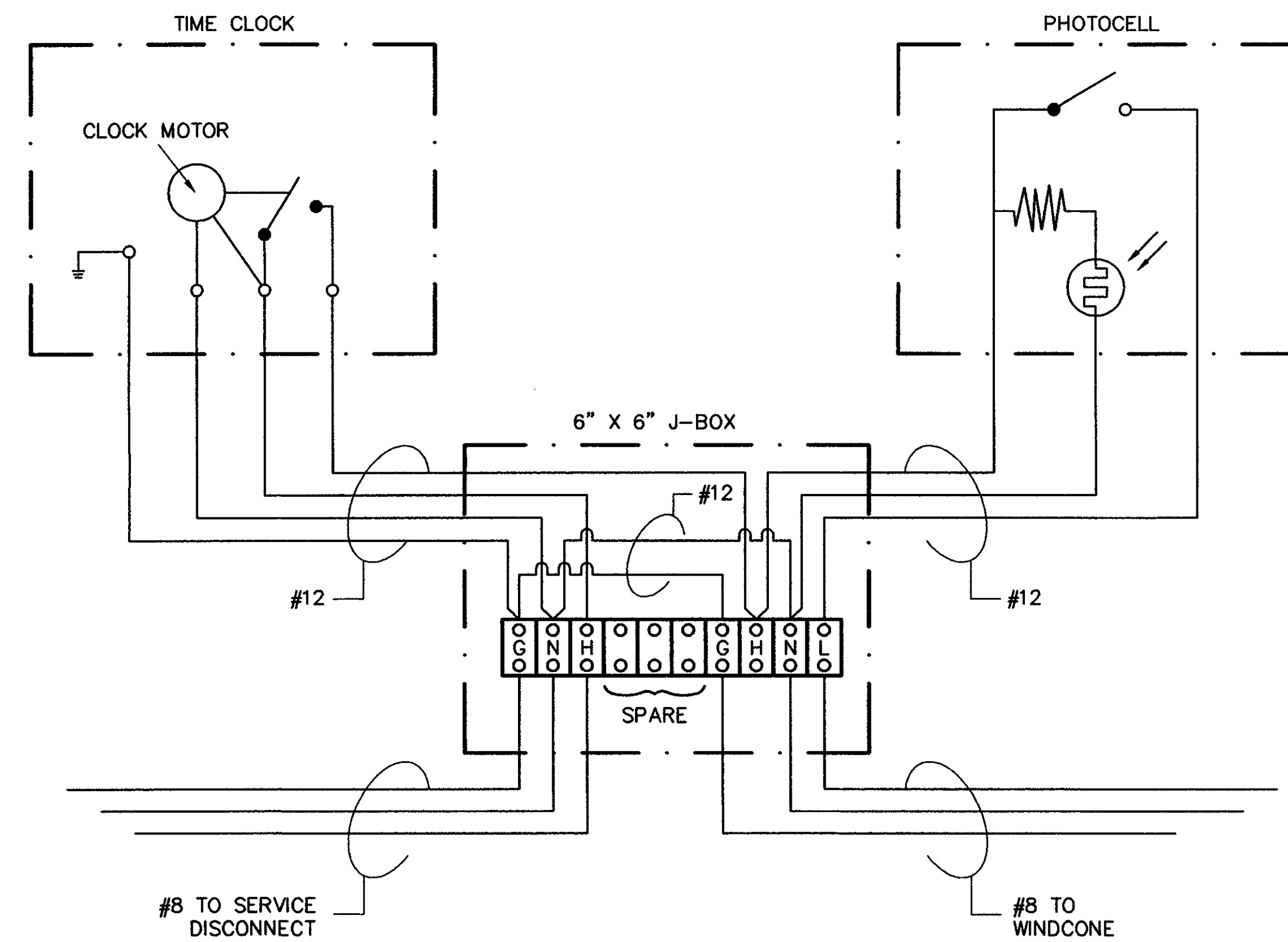
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HP Designer: JSDC Hewlett-Packard HP-GL/2 devices, ADI 4.3 (v4.1) - Jul 22 1998



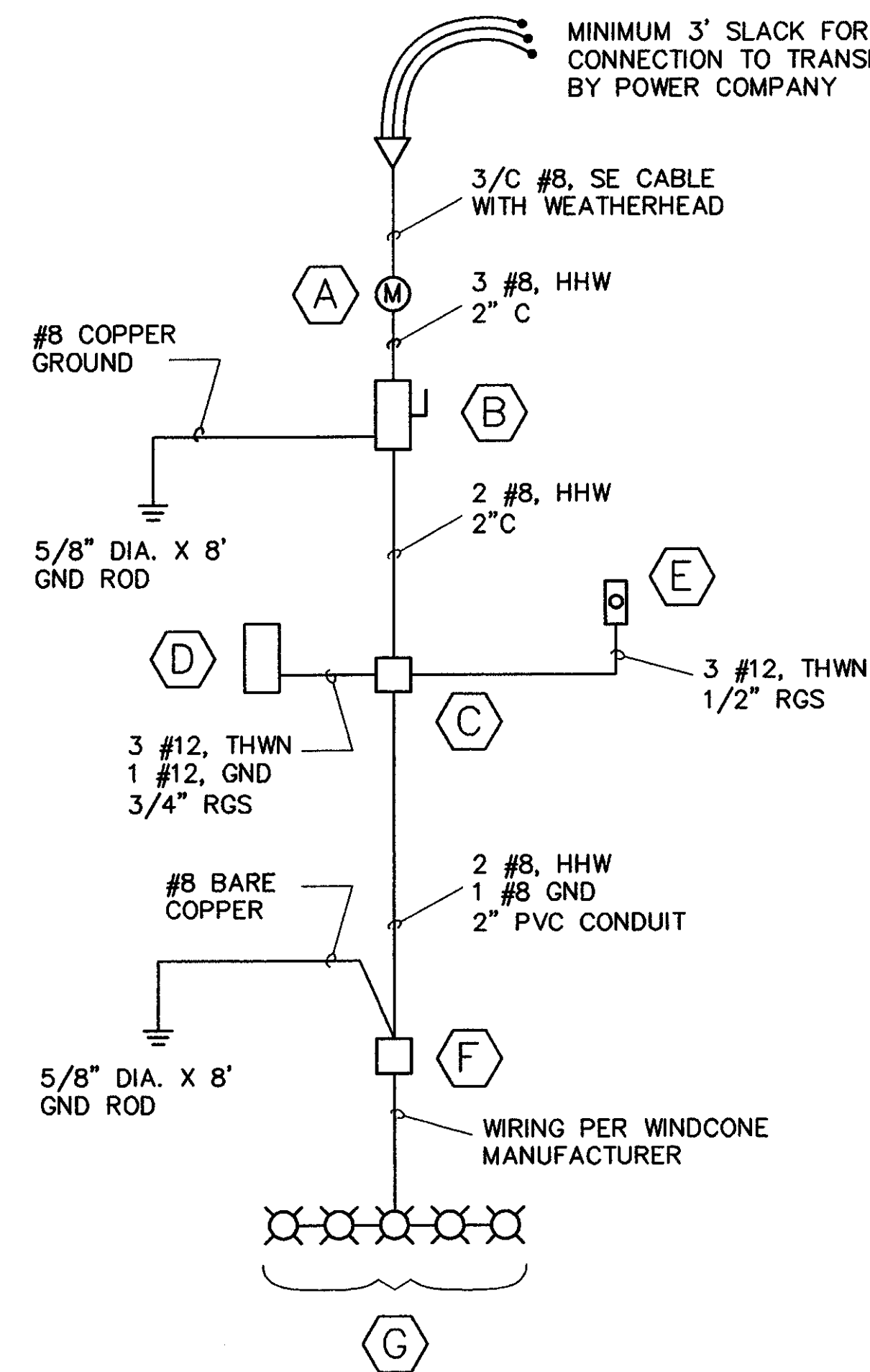
- GENERAL NOTES:
1. INSTALLATION SHALL BE PER 1999 NEC AND MANUFACTURERS REQUIREMENTS.
 2. EQUIPMENT SHALL BE UL LISTED OR FAA APPROVED.
 3. ALL CONDUCTORS SHALL BE COPPER WITH INSULATION AND SIZE AS INDICATED
 4. ALL WIRING SHALL BE IN CONDUIT AS INDICATED.

- NOTES:
1. REFER TO ONE-LINE DIAGRAM FOR CONDUCTOR SIZES
 2. INSTALL SLIPJOINTS TWO THIRDS OPEN

(A) WINDCONE SERVICE ELEVATION
ITEM *** - NOT TO SCALE



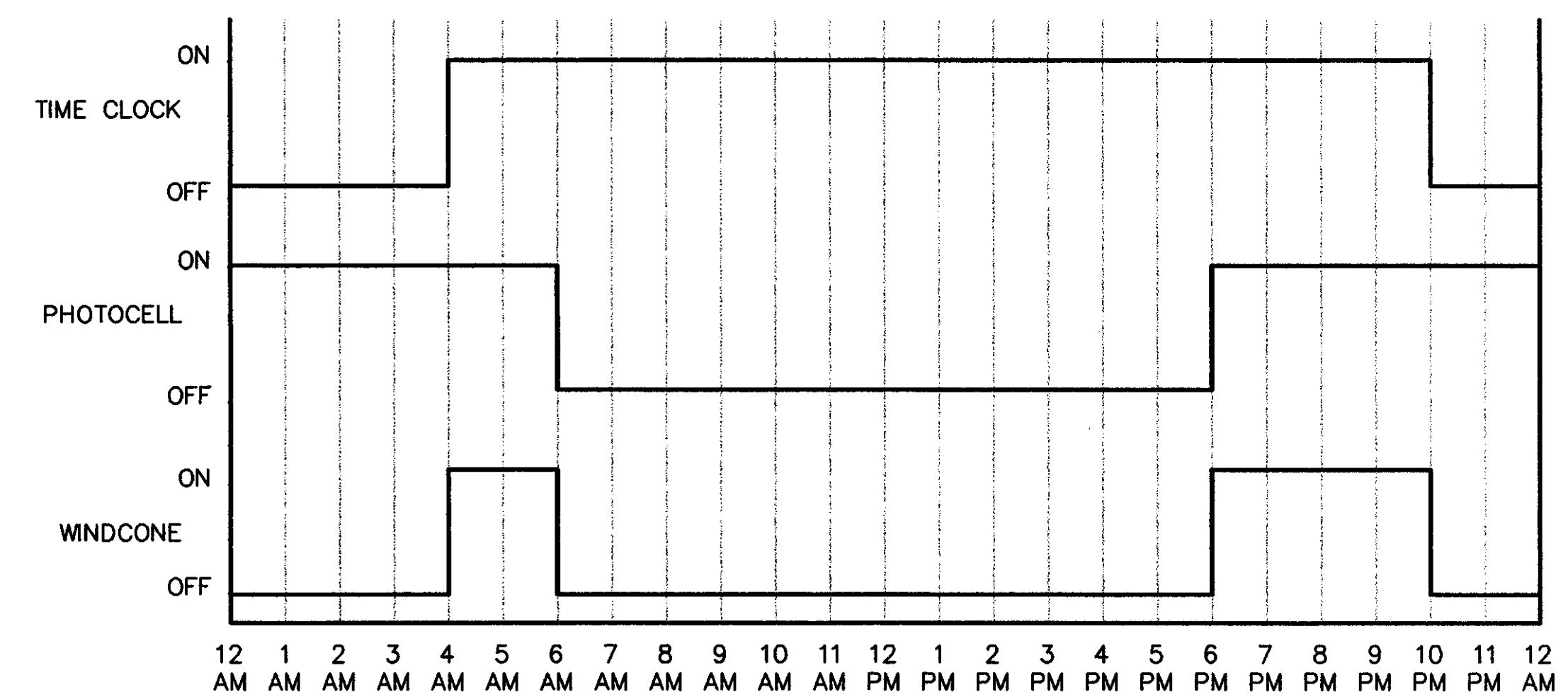
(C) CONTROL WIRING DIAGRAM
NOT TO SCALE



NOTE:
INSTALLATION SHALL BE IN STRICT COMPLIANCE WITH POWER COMPANY REQUIREMENTS WHETHER INDICATED OR NOT

- KEYNOTES
- (A) 120/240V-1 PHASE-3W METER SOCKET PER POWER COMPANY REQUIREMENTS
 - (B) 30A/2P DISCONNECT SWITCH WITH SOLID NEUTRAL AND GROUND LUG FUSE ONE POLE ONLY @ 15 AMPS. NEMA 3R, HEAVY DUTY, UL LISTED AS SERVICE DISCONNECT
 - (C) 6" X 6" X 4" NEMA 4 JUNCTION BOX W/ 10 POLE TERMINAL STRIP AND 5" MOUNTING RAIL
TERMINALS - SQUARE D CLASS 9080 TYPE GR6
RAIL - SQUARE D CLASS 9080 TYPE GH105
TERMINALS TO BE BOX LUG TYPE AND ACCEPT #22 TO #8 AWG WIRE
 - (D) 24 HOUR TIME CLOCK W/ 2 SETS OF ON/OFF TRIPPERS, SPST, SPRING WOUND CARRY OVER, NEMA 3R ENCLOSURE. INTERMATIC CATALOG #T171CR
 - (E) PHOTOCELL WITH ADJUSTABLE SLIDER, THERMAL TYPE, 120 VOLT. INTERMATIC CATALOG #K4121
 - (F) JUNCTION BOX FURNISHED WITH WINDCONE
 - (G) 120V WINDCONE ASSEMBLY W/ (4) 150 W (MAXIMUM) FLOODLIGHTS (1) 116W OBSTRUCTION LIGHT

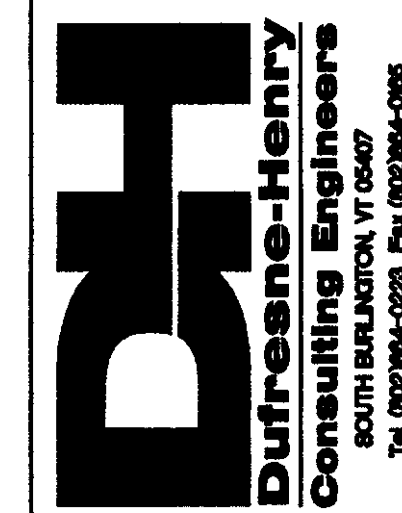
(B) ONE-LINE DIAGRAM
NOT TO SCALE



(D) LOGIC DIAGRAM (TYPICAL EXAMPLE)
NOT TO SCALE

OPERATION SEQUENCE (EXAMPLE)

1. TIMECLOCK IS SET TO OPERATE BETWEEN 4AM-10PM.
2. PHOTOCELL TURNS ON WHEN AMBIENT LIGHT LEVEL DROPS BELOW SET POINT AT 6PM (SUNSET) AND TURN OFF WHEN AMBIENT LIGHT LEVEL RISES ABOVE SET POINT AT 6AM (SUNRISE).
3. WINDCONE IS ENERGIZED BETWEEN 4AM-6AM AND 6PM-10PM.



Rev.	Description	By	Date

John H. Boylan State Airport
Contract #0284038

ELECTRICAL DETAILS

Brighton

Project No.	8180086
Proj. Manager	mc
Proj. Designer	gd
Drawn By	gr
Checked By	mc
Scale	As Shown
Approved	
Date	January 2000

