

For Index of Sheets
See Sheet 3

Dated: OCT 26 1993

Pike Industries, Inc.

Contractor

Signature

Vice President

Title

Transportation Secretary's Signature

STATE OF VERMONT AGENCY OF TRANSPORTATION

RUTLAND STATE AIRPORT TAXIWAY 'E'

CONSTRUCTION OF A PARALLEL TAXIWAY TO SERVE RUNWAY 1-19
INCLUDING DRAINAGE, TAXIWAY LIGHTING AND ASSOCIATED PAVEMENT MARKINGS

FAA PROJECT NO. 04-3083-3084 -
VAOT PROJECT NOS. AIR 04-3083/3084

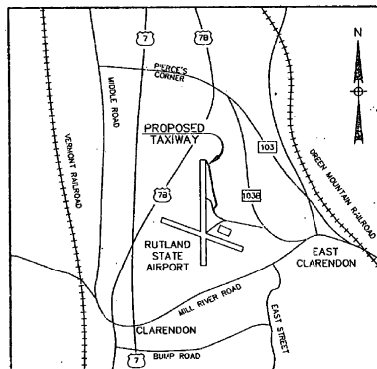
CONTRACT PLANS

THESE PLANS DO NOT REFLECT
CHANGES MADE ON THE PROJECT.

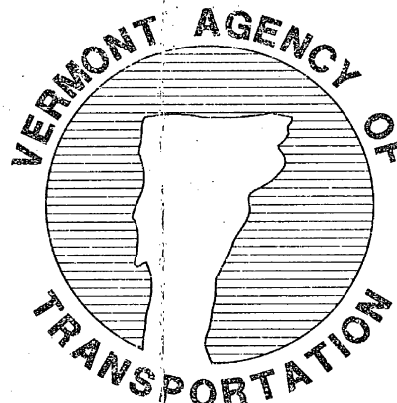
DESIGNERS STATEMENT REGARDING COMPLIANCE

These plans and specifications have been prepared to the best of my knowledge and belief in accordance with the list of current FAA Advisory Circulars for all projects provided by the FAA, in a list dated February 28, 1992, known deviations from FAA standards were approved by FAA letters dated February 8, 1993 and are discussed in the Project Engineering Report and/or other official project documents.

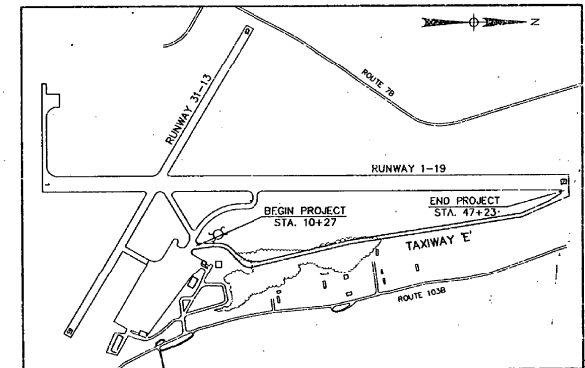
BY: Heal J. Forschner DATE: 8/24/93
NEAL J. FORSCHNER, P.E.



LOCATION PLAN



AUGUST 23, 1993



SITE PLAN

ENVIRODYNE ENGINEERS, INC.
CONSULTING ENGINEERS
NEW YORK, NEW YORK

ENVIRODYNE ENGINEERS, INC.

Signature of Neal J. Forschner
NEAL J. FORSCHNER
STATE OF VERMONT P.E. NO. 6446

VERMONT AGENCY OF TRANSPORTATION
APPROVED: W. S. Sullivan DATE: 8/23/93
DIRECTOR OF TRANSPORTATION

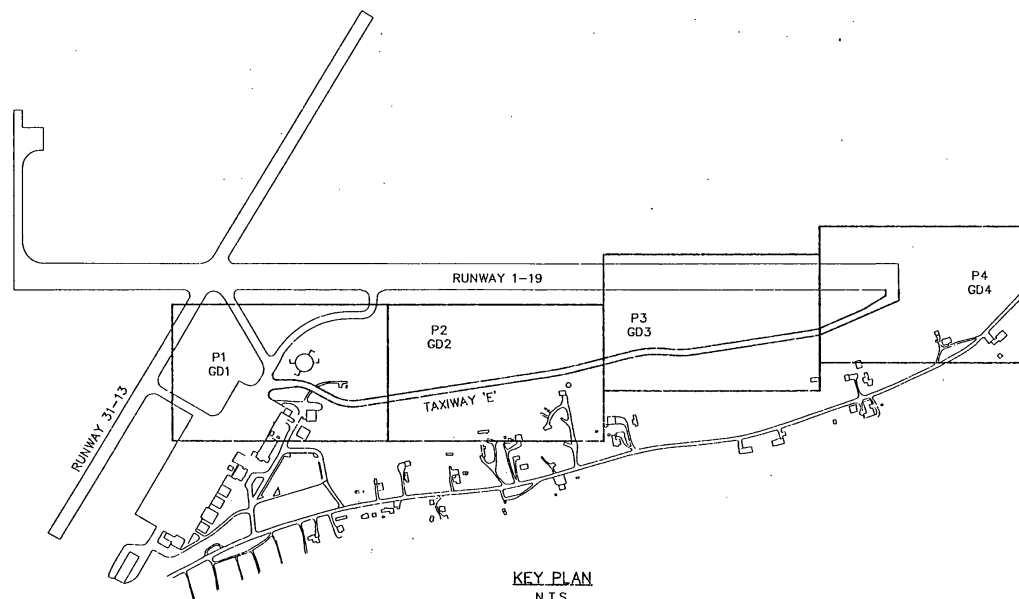
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
APPROVED: W. S. Sullivan DATE: 8/23/93
AIRPORT DIVISION

Sheet 1 of 41

LEGEND		
EXISTING	PROPOSED	DESCRIPTION
		BORING
		TOP OF CUT
		TOP OF FILL
		CHAIN LINK FENCE
		WATER LINE
		BUILDING
		CONTOUR (1 FT.)
		CONTOUR (5 FT.)
		PROPERTY LINE
		NORTH ARROW
		MANHOLE
		CATCH BASIN
		TAXIWAY LIGHT
		UTILITY POLE
		PIPE
		END SECTION
		DRAINAGE FLOW
		PVC UNDERDRAINS
		UNDERDRAIN CLEANOUT
		UNDERDRAIN END CAP
		OBJECT FREE AREA
		SAFETY AREA

GENERAL NOTES

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE AIRPORT MANAGER 48 HOURS PRIOR TO ACTUAL WORK.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES WITHIN THE CONSTRUCTION SITE.
3. ALL UNSUITABLE EXCAVATED MATERIAL SHALL BE DISPOSED OF AT THE SELECTED ON SITE LOCATION OR WHERE DIRECTED BY THE ENGINEER.
4. WHERE CONNECTIONS TO EXISTING DRAINAGE STRUCTURES ARE TO BE MADE, THE CONTRACTOR SHALL BREAK INTO THE EXISTING STRUCTURE (MAX. SIZE OF OPENING TO BE 1.0-1.3"). CONNECT NEW PIPE AND SEAL AROUND PIPE WITH CEMENT MORTAR.
5. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN WORKING ADJACENT TO POWER AND COMMUNICATION LINES TO PREVENT DAMAGE TO THESE LINES. THE CONTRACTOR SHALL HAND EXCAVATE TO EXPOSE THOSE LINES PRIOR TO PERFORMING ANY OTHER EXCAVATION WORK IN THE AREA. THE CONTRACTOR SHALL REPAIR ANY POWER OR COMMUNICATION INTERRUPTION IMMEDIATELY.
6. THE CONTRACTOR SHALL PROVIDE ADEQUATE SUPPORT, APPROVED BY THE ENGINEER FOR ALL UTILITIES THAT ARE EXPOSED DURING CONSTRUCTION TO INSURE AGAINST DAMAGE.
7. SEE ELECTRICAL DRAWINGS FOR COMPLETE LAYOUT OF EXISTING AND PROPOSED ELECTRICAL AND COMMUNICATION DUCTS AND CONDUIT SYSTEMS.
8. WHERE INTERFERENCES WITH OTHER UTILITIES OR CONSTRUCTION ARE ENCOUNTERED IN ANY SANITARY OR DRAINAGE SYSTEM, THE CONTRACTOR MAY ADJUST THE ALIGNMENT OR INVERT ELEVATIONS OF THAT SYSTEM ONLY AT THE DIRECTION OF THE ENGINEER.
9. WHERE CONSTRUCTION CROSSES, OR IS ADJACENT TO EXISTING UTILITY LINES (FUEL, WATER, TELEPHONE, GAS, ELECTRIC, COMMUNICATION), THE CONTRACTOR SHALL NOTIFY THE UTILITY INVOLVED PRIOR TO PROCEEDING, UPON NOTICE TO PROCEED THE CONTRACTOR SHALL CAREFULLY HAND EXCAVATE, SO AS TO LOCATE, MARK, PROTECT THE UTILITY LINES AGAINST DISTURBANCE OR DAMAGE.
10. DURING THE COURSE OF CONSTRUCTION, EROSION CONTROL WILL BE PRACTICED. SEE DETAILS ON DRAWING NOS. W01-W04 AND D02.
11. CONTRACTOR TO COORDINATE HIS/HER WORK WITH FAA PERSONNEL RESPONSIBLE FOR THE MAINTENANCE OF THE LOCALIZER.



KEY PLAN
N.T.S.

		DATE 11/1/83
PROJECT NO. 7804		DATE 11/1/83
Envirodyne Engineers, Inc. 41 East 42nd St., Suite 1015 New York, NY 10017		DATE 11/1/83
RUTLAND STATE AIRPORT CLARENDON, VERMONT TAXIWAY E		DATE 11/1/83
LEGEND, NOTES AND KEY PLAN		DATE 11/1/83
DRAWING NO. G1		DATE 11/1/83
SHEET 2 OF 4		DATE 11/1/83

INDEX OF DRAWINGS

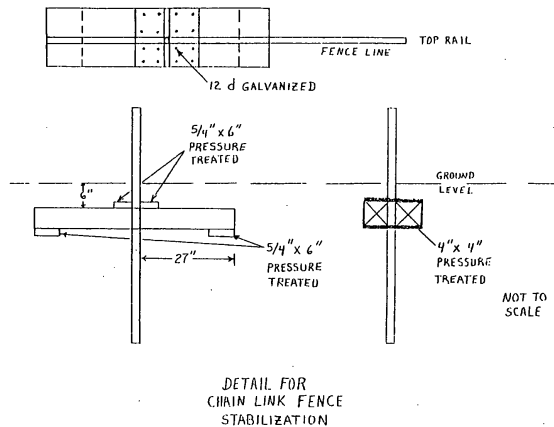
SHEET NO.	DRAWING NO.	DRAWING TITLE
1		TITLE SHEET
2	G1	LEGEND, GENERAL NOTES, AND KEY PLAN
3	G2	INDEX AND STANDARD DRAWINGS
3A & 3B		QUANTITY SHEETS
3C & 3D		BORING LOGS
4	SP1	SAFETY PLAN
5	C1	HORIZONTAL AND VERTICAL CONTROL
6	T&I	TYPICAL SECTION
7-10	P1-4	SITE PLANS
11-15	DD1-5	GRADING AND DRAINAGE PLANS
16	PR1	TAXIWAY PROFILE
17-20	LI-4	LIGHTING PLANS AND DETAILS
21-22	SI-2	SIGNING AND STRIPING PLANS
23-26	WE1-4	WETLAND MITIGATION AND EROSION CONTROL PLANS AND DETAILS
27-28	DD1-2	DRAINAGE DETAILS
29	HR1	HAUL ROAD AND SPOIL AREA PLAN
30	BF1	BLAST FENCE
31-41		CROSS SECTIONS

THE FOLLOWING DRAWINGS ARE TO BE REFERENCED AND APPLIED WHEN APPLICABLE:

V.A.O.T. STANDARD AP-2	LIGHTING & ELECTRIC DETAILS
V.A.O.T. STANDARD AP-3	MISCELLANEOUS AIRPORT DETAILS
V.A.O.T. STANDARD AP-9	TRANSPORTATION VAULT DETAILS
V.A.O.T. STANDARD AP-10	RUNWAY MARKING DETAILS
V.A.O.T. STANDARD AP-11	TAXIWAY AND APRON MARKING DETAILS
V.A.O.T. STANDARD AP-12	SGN SYSTEMS
V.A.O.T. STANDARD D-11	FLUSHING BASINS
V.A.O.T. STANDARD E-113	REGULATORY SIGNS
V.A.O.T. STANDARD F-2	CHAIN LINK FENCE

THE FOLLOWING FAA ADVISORY CIRCULARS ARE TO BE REFERRED TO AND APPLIED WHEN APPLICABLE:

F.A.A. AC150/5370-2C	OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION
F.A.A. AC150/5370-10A	STANDARDS FOR SPECIFYING CONSTRUCTION OF AIRPORTS
F.A.A. AC150/5345-44E	SPECIFICATIONS FOR TAXIWAY AND RUNWAY SIGNS



SEAL

PROJECT NO.
7804

Envirodyne Engineers, Inc.
41 East 42nd St. Suite 1015
New York, NY 10017



RUTLAND STATE AIRPORT
CLARENDON, VERMONT

TAXIWAY E

INDEX AND STANDARD DRAWINGS

DRAWING NO.
G2

REVISED 9-15-93 PJD

SHEET 3 OF 41

STATE OF VERMONT
AGENCY OF TRANSPORTATION[illegible][illegible]

QUANTITY SHEET

STATE OF VERMONT
AGENCY OF TRANSPORTATION

APPROXIMATE SUMMARY OF QUANTITIES

							QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	ROUNDING
							8200	LF	ELECTRICAL CONDUIT, (MOD.)	678.21	-
							2000	SF	P-620 RUNWAY AND TAXI-WAY PAINTING	864.03	-
							8200	LF	CABLE TRENCH L-108	864.04	-
							8200	LF	L-108, 1/C #8, L-824. TYPE C 5KV	864.05	-
							8200	LF	L-108, #8 COUNTERPOISE WIRE	864.06	-
							1	LS	L-109, INSTALLATION OF AIRPORT TRANSFORMER VAULT EQUIPMENT (MOD.)	864.07	-
							60	LF	L-110, 2 WAY X 4" DIA. U.G. ELEC. DUCT	864.08	-
							300	LF	L-110, 4 WAY X 4" DIA. U.G. ELEC. DUCT	864.09	-
							78	EA	MEDIUM INTENSITY TAXIWAY LIGHTS BASE MOUNTED	864.11	-
							5	EA	TAXI-WAY GUIDANCE SIGNS, 5 PANEL, SIZE 1, STYLE 2, CLASS 2	864.14	-
							4	EA	TAXI-WAY GUIDANCE SIGNS, 5 PANEL, SIZE 1, STYLE 2, CLASS 2 (MOD.)	864.14	-

DETAILED SUMMARY OF QUANTITIES

[illegible]

DETAILED SUMMARY OF QUANTITIES

[illegible][illegible]

GENERAL NOTES

1. This report was prepared by the U.S. Army Corps of Engineers, Waterways Experiment Station, Vicksburg, Mississippi 39180.

2. The data were obtained from the following sources:

a. Standard of Penetration, blow count and soil sample data were obtained from the following sources:

b. Standard of Penetration, blow count and soil sample data were obtained from the following sources:

c. Standard of Penetration, blow count and soil sample data were obtained from the following sources:

d. Standard of Penetration, blow count and soil sample data were obtained from the following sources:

e. Standard of Penetration, blow count and soil sample data were obtained from the following sources:

f. Standard of Penetration, blow count and soil sample data were obtained from the following sources:

g. Standard of Penetration, blow count and soil sample data were obtained from the following sources:

h. Standard of Penetration, blow count and soil sample data were obtained from the following sources:

i. Standard of Penetration, blow count and soil sample data were obtained from the following sources:

j. Standard of Penetration, blow count and soil sample data were obtained from the following sources:

k. Standard of Penetration, blow count and soil sample data were obtained from the following sources:

l. Standard of Penetration, blow count and soil sample data were obtained from the following sources:

m. Standard of Penetration, blow count and soil sample data were obtained from the following sources:

n. Standard of Penetration, blow count and soil sample data were obtained from the following sources:

o. Standard of Penetration, blow count and soil sample data were obtained from the following sources:

p. Standard of Penetration, blow count and soil sample data were obtained from the following sources:

q. Standard of Penetration, blow count and soil sample data were obtained from the following sources:

r. Standard of Penetration, blow count and soil sample data were obtained from the following sources:

BOREHOLE NO. B-1

DEPTH	BLOWS ON CASING	STANDARD PENETRATION	SAMPLE NUMBER	MOISTURE	COLOR	LABORATORY CLASSIFICATION OF SOIL
0						
10						
20						
30						
40						
50						
60						

BOREHOLE NO. B-2

DEPTH	BLOWS ON CASING	STANDARD PENETRATION	SAMPLE NUMBER	MOISTURE	COLOR	LABORATORY CLASSIFICATION OF SOIL
0						
10						
20						
30						
40						
50						
60						

BOREHOLE NO. B-3

DEPTH	BLOWS ON CASING	STANDARD PENETRATION	SAMPLE NUMBER	MOISTURE	COLOR	LABORATORY CLASSIFICATION OF SOIL
0						
10						
20						
30						
40						
50						
60						

BOREHOLE NO. B-4

DEPTH	BLOWS ON CASING	STANDARD PENETRATION	SAMPLE NUMBER	MOISTURE	COLOR	LABORATORY CLASSIFICATION OF SOIL
0						
10						
20						
30						
40						
50						
60						

BORING NO. B-5									
ELEV.	DEPTH	BLOWS ON STANDARD PENETRATION SAMPLE NUMBER	MOISTURE	COLOR	LABORATORY CLASSIFICATION OF SOIL				
					0'-9" Top Soil 9" 31" clay, silt, loam 31"-36" silt loam w/ 20% GRAVEL INCREASING Gravel content with depth Hole terminated At 36" water at 35"				
	10								
	20								
	30								
	40								
	50								
	60								

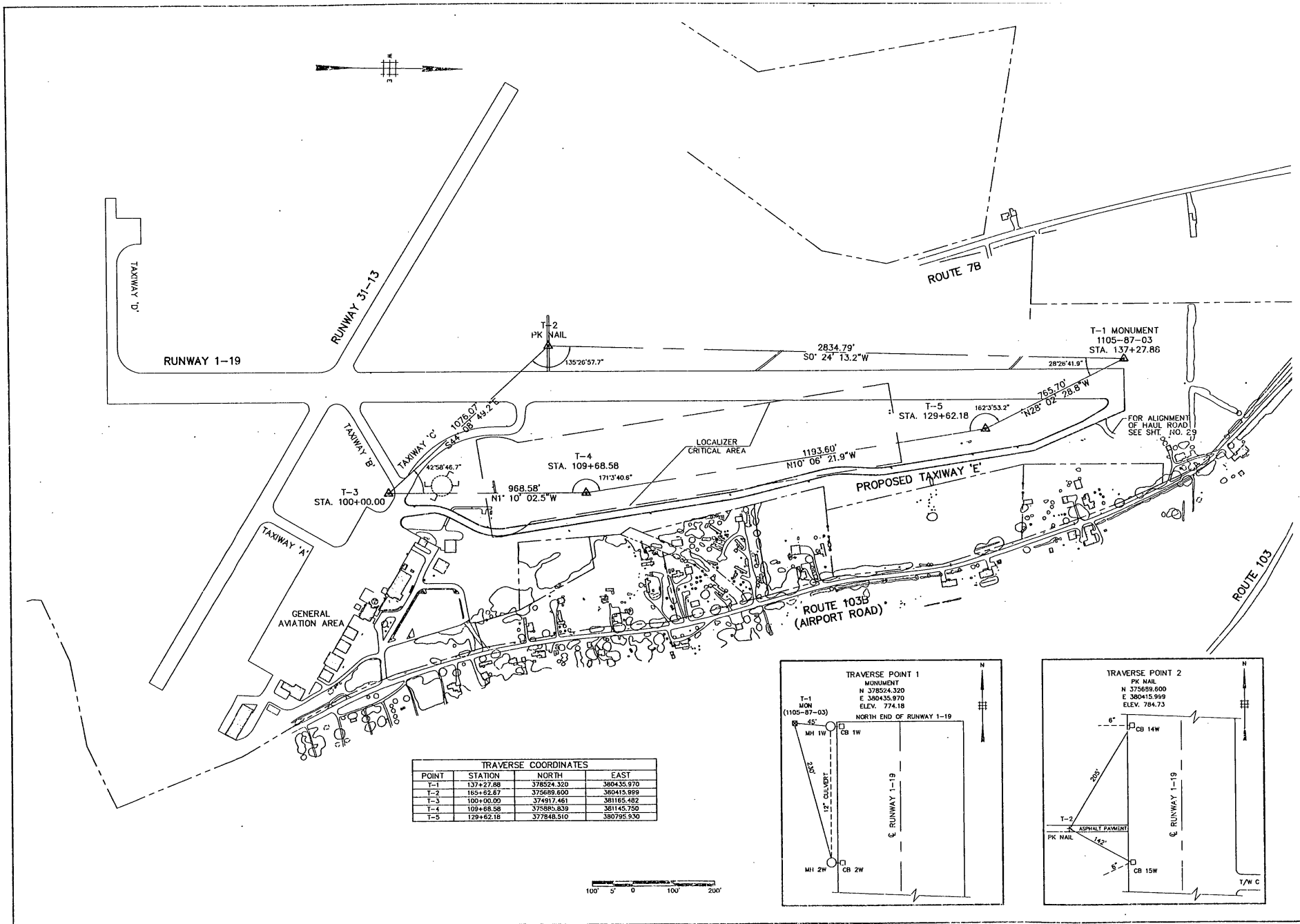
BORING NO. B-6									
ELEV.	DEPTH	BLOWS ON STANDARD PENETRATION SAMPLE NUMBER	MOISTURE	COLOR	LABORATORY CLASSIFICATION OF SOIL				
					NO INFORMATION AVAILABLE				
	10								
	20								
	30								
	40								
	50								
	60								

BORING NO. B-7									
ELEV.	DEPTH	BLOWS ON STANDARD PENETRATION SAMPLE NUMBER	MOISTURE	COLOR	LABORATORY CLASSIFICATION OF SOIL				
	5	55-1		BR	Moist sand silt 0" - 9"				
	22	55-2		BR	9" - 2' 4" moist fine to coarse sandy silt 2' 4" to 4' moist, very dense lt. brown fine sandy silt with gravel 4' to 4' 7" wet very dense fine sand, trace of gravel, rock fragments. Hole terminated at 4' 7"				
	50	55-3			Ground water level recorded at 1'-0" after 30 minutes				
	10								
	20								
	30								
	40								
	50								
	60								

BORING NO. B-8									
ELEV.	DEPTH	BLOWS ON STANDARD PENETRATION SAMPLE NUMBER	MOISTURE	COLOR	LABORATORY CLASSIFICATION OF SOIL				
	5	55-4		BR	Moist sand silt 11" to 2'-0"				
		55-5		BR	wet fine sand silt trace of coarse sand				
	19	55-2		BR	2'-4' wet dense sand trace of silt				
	22	55-3		BR	4'-6' wet dense sand trace of silt				
	3	55-4			6'-8' wet dense sand trace of silt				
	62			BR	8'-10' wet dense sand trace of silt fragmented rock grey Hole terminated at 10' Groundwater level recorded at 2'-2" after 30 minutes.				
	10								
	20								
	30								
	40								
	50								
	60								

BORING NO. B-9									
ELEV.	DEPTH	BLOWS ON STANDARD PENETRATION SAMPLE NUMBER	MOISTURE	COLOR	LABORATORY CLASSIFICATION OF SOIL				
	7	55-6		BR	Moist sand silt				
		55-7		BR	9' - 2' moist compact fine sand silt fractured rock				
	22	55-2		BR	2'-4' dense sand silt fractured rock				
	32	55-3		BR	Very dense fine sand silt fractured rock 4'-6'				
	26	55-4		BR	6'-8' very dense fine sand silt fractured rock				
	50	55-5		OR	8'-8' 3" moist very dense fine sand silt fractured rock Hole terminated at 9'-0" Groundwater level recorded at 7'-0" after 30 minutes				
	10								
	20								
	30								
	40								
	50								
	60								

SURVEYED BY _____ DATE _____
 DRAWN BY _____ DATE _____
 SQUAD LEADER _____
 DESIGN FILE NO. _____
 I/PARM FILE _____ DATE PLOTTED _____
 PROJ. NAME Rutland Airport
 PROJ. NO. _____
 SHEET 30 OF 41 SHEETS



PROJECT NO. 7804

Envirotyne Engineers, Inc.
41 East 42nd St. Suite 1015
New York, NY 10017

DATE: AUG. 23, 1993
SCALE: 1" = 200'

DATE: [Signature]

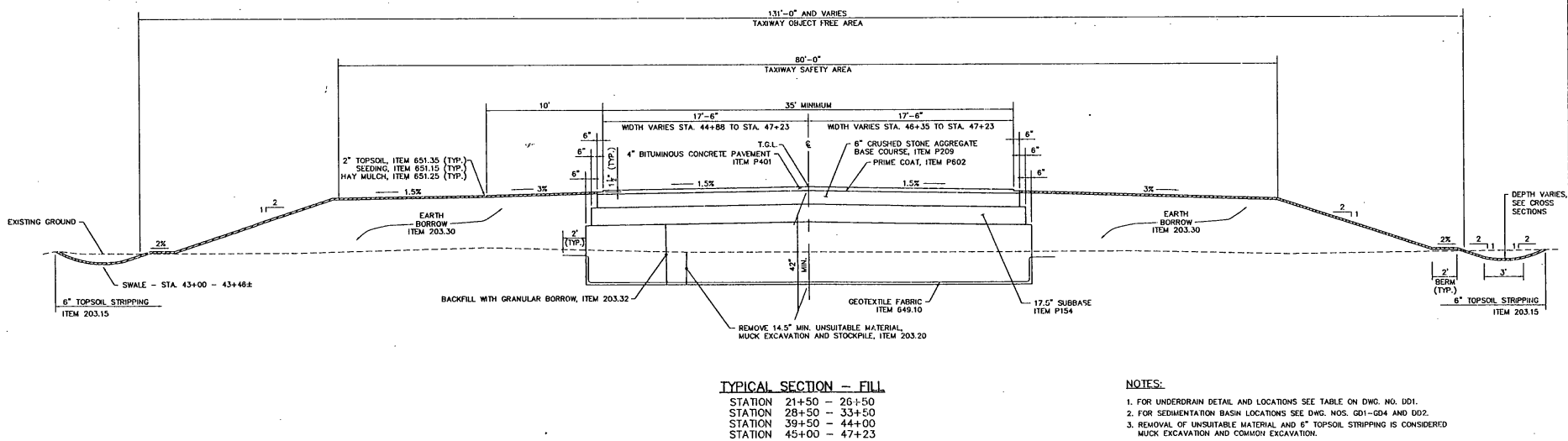
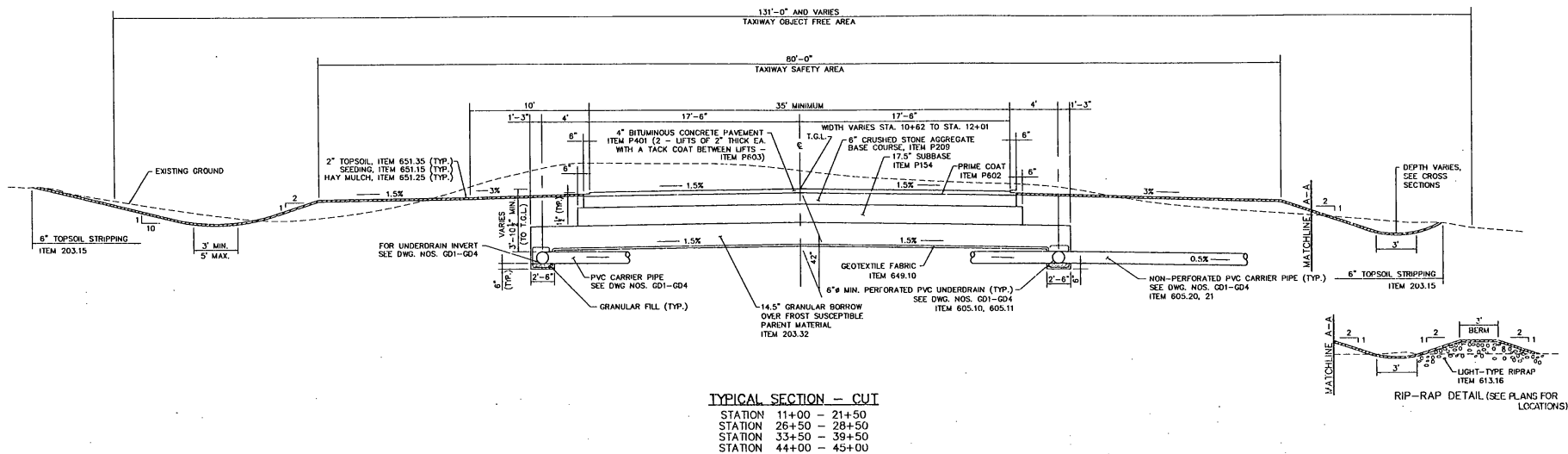
DESIGNED BY: F.S.
CHECKED BY: D.W.
DRAWN BY: L.C.

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

TAXIWAY E
HORIZONTAL AND
VERTICAL CONTROL

DRAWING NO. **C1**

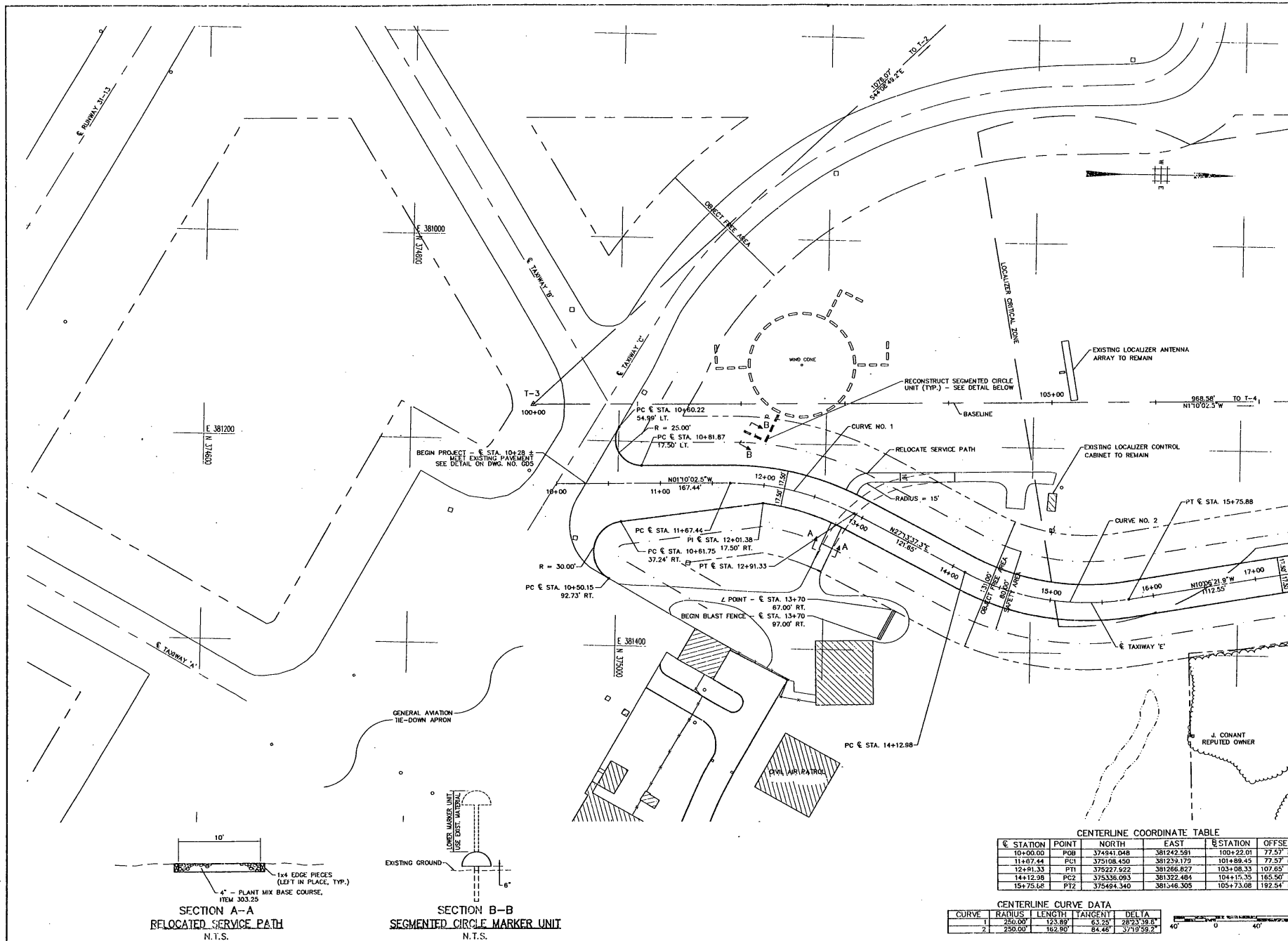
SHEET 5 OF 41



NOTES:

1. FOR UNDERDRAIN DETAIL AND LOCATIONS SEE TABLE ON DWG. NO. D01.
2. FOR SEDIMENTATION BASIN LOCATIONS SEE DWG. NOS. D01-G04 AND D02.
3. REMOVAL OF UNSUITABLE MATERIAL AND 6" TOPSOIL STRIPPING IS CONSIDERED MUCK EXCAVATION AND COMMON EXCAVATION.
4. FOR DEVIATIONS FROM THE TYPICAL SECTIONS, SEE CROSS SECTIONS.
5. ALL EXCAVATED MATERIAL TO BE STOCK PILED ACCORDING TO HYDRIC SOIL AND TOP SOIL OR AS DIRECTED BY ENGINEER.

PROJECT NO. 7804		PROJECT DESCRIPTION RUTLAND STATE AIRPORT CLARENDON, VERMONT	
DESIGNED BY F.S.	CHECKED BY A.T.B.	DATE AUG. 23, 1993	NOT TO SCALE
Envirotech Engineers, Inc. 41 East 42nd St., Suite 1015 New York, NY 10017		TAXIWAY E TYPICAL SECTION	
DRAWING NO. TS1		SHEET 6 OF 77	



MATCHLINE - SEE DRAWING NO. P2

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

TAXIWAY E

SITE PLAN

PROJECT NO.
7804

Envirodyno Engineers, Inc.
41 East 42nd St. Suite 1015
New York, NY 10017

DATE: AUG. 23, 1983
SCALE: 1" = 40'

DESIGNED BY: F.S.
CHECKED BY: L.G.
DRAWN BY: D.W.

REVISION

DESCRIPTION

DATE

BY

DATE

BY

SEAL

[Signature]

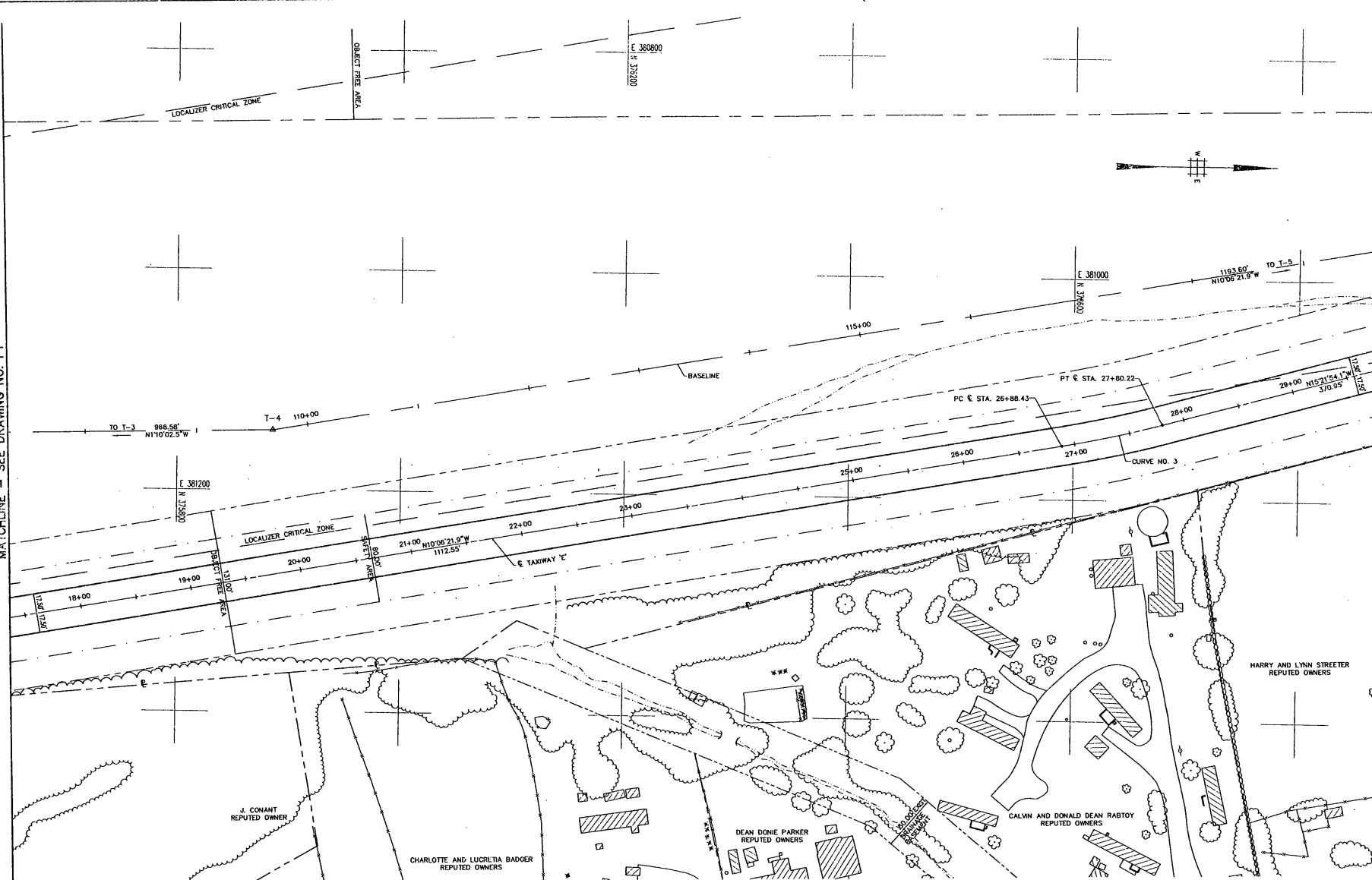
DRAWING NO.

P1

SHEET 7 OF 77

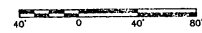
MATCHLINE - SEE DRAWING NO. P1

MATCHLINE - SEE DRAWING NO. P3



CURVE	RADIUS	LENGTH	TANGENT	DELTA
3	1000.00'	91.79'	45.84'	05°15'32.2"

CURVE	STATION	POINT	NORTH	EAST	STATION	OFFSET
3	26+88.43	PC3	375589.635	38151.083	116+60.52	126.75' RT.
3	27+80.22	PT3	375579.131	38130.656	117+52.18	124.54' RT.



RUTLAND STATE AIRPORT
CLARENDON, VERMONT

TAXIWAY E

SITE PLAN

DRAWING NO. **P2**

SHEET 8 OF 11

PROJECT NO. 7804

Envirowdyne Engineers, Inc.
41 East 42nd St. Suite 1015
New York, NY 10017

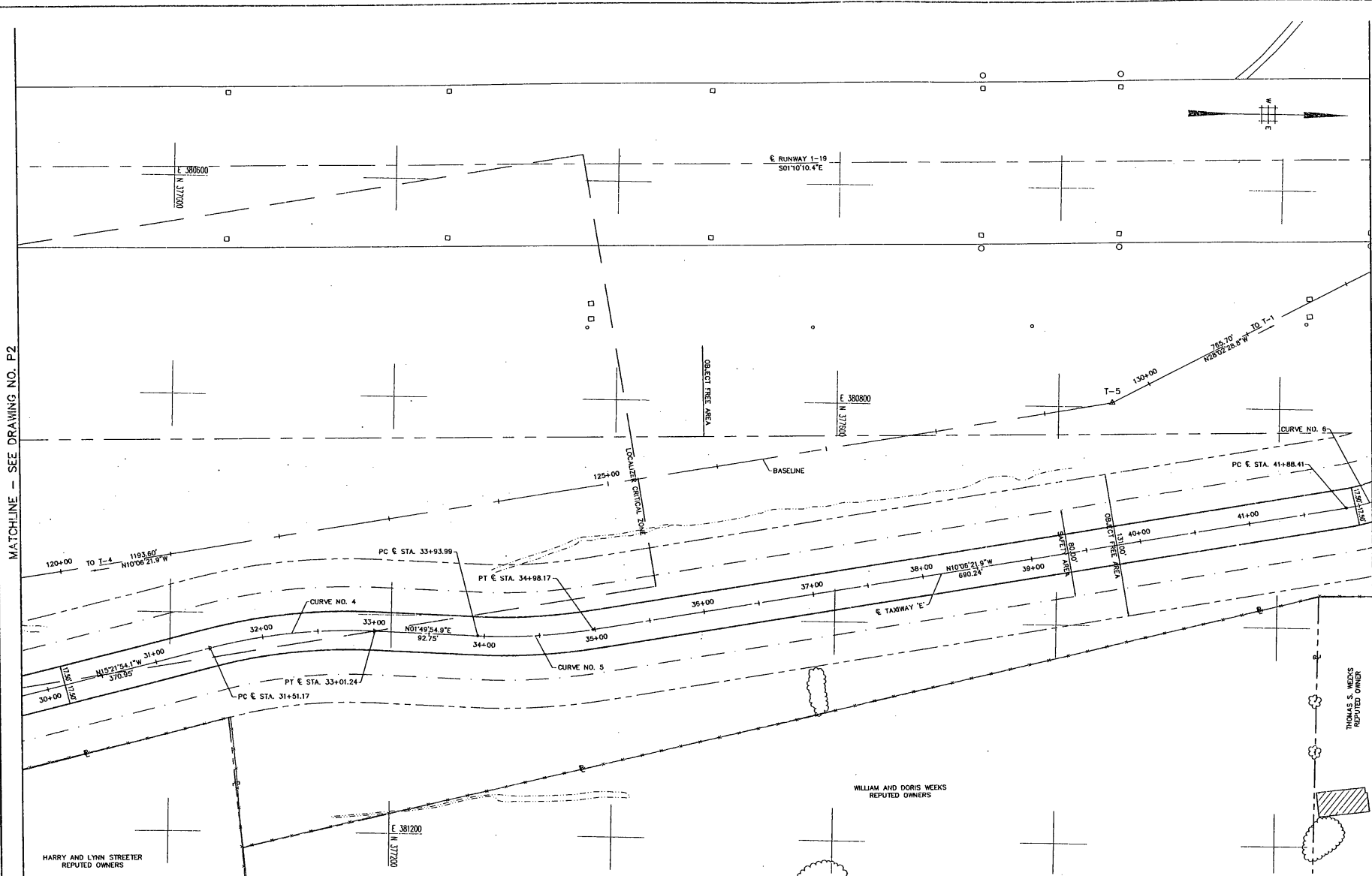
DATE: AUG. 23, 1993
SCALE: 1" = 40'

DESIGNED BY: F.S.
DRAWN BY: D.W.
CHECKED BY: L.C.

SEAL

MATCHLINE - SEE DRAWING NO. P2

MATCHLINE - SEE DRAWING NO. P4

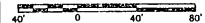


CENTERLINE CURVE DATA

CURVE	RADIUS	LENGTH	TANGENT	DELTA
4	500.00'	150.07'	75.80'	171°14.9"
5	500.00'	104.18'	52.28'	113°56'18.8"
6	150.00'	38.71'	19.40'	144°07'06.2"

CENTERLINE COORDINATE TABLE

CURVE	STATION	POINT	NORTH	EAST	STATION	OFFSET
4	31+51.17	PC4	377836.829	381032.347	121+21.56	20.54' RT.
	33+01.24	PT4	377185.287	381014.931	122+70.82	99.25' RT.
5	33+93.89	PCS	377277.992	381017.916	123+61.56	118.43' RT.
	34+98.17	PTS	377381.711	381010.414	124+64.99	129.25' RT.
6	41+88.41	PC6	377061.244	380860.297	131+05.05	182.41' RT.



RUTLAND STATE AIRPORT
CLARENDON, VERMONT

TAXIWAY E

SITE PLAN

PROJECT NO.
7804

ENVIRODYNE ENGINEERS, INC.
41 East 42nd St. Suite 1015
New York, NY 10017

DATE: AUG. 23, 1993
SCALE: 1" = 40'

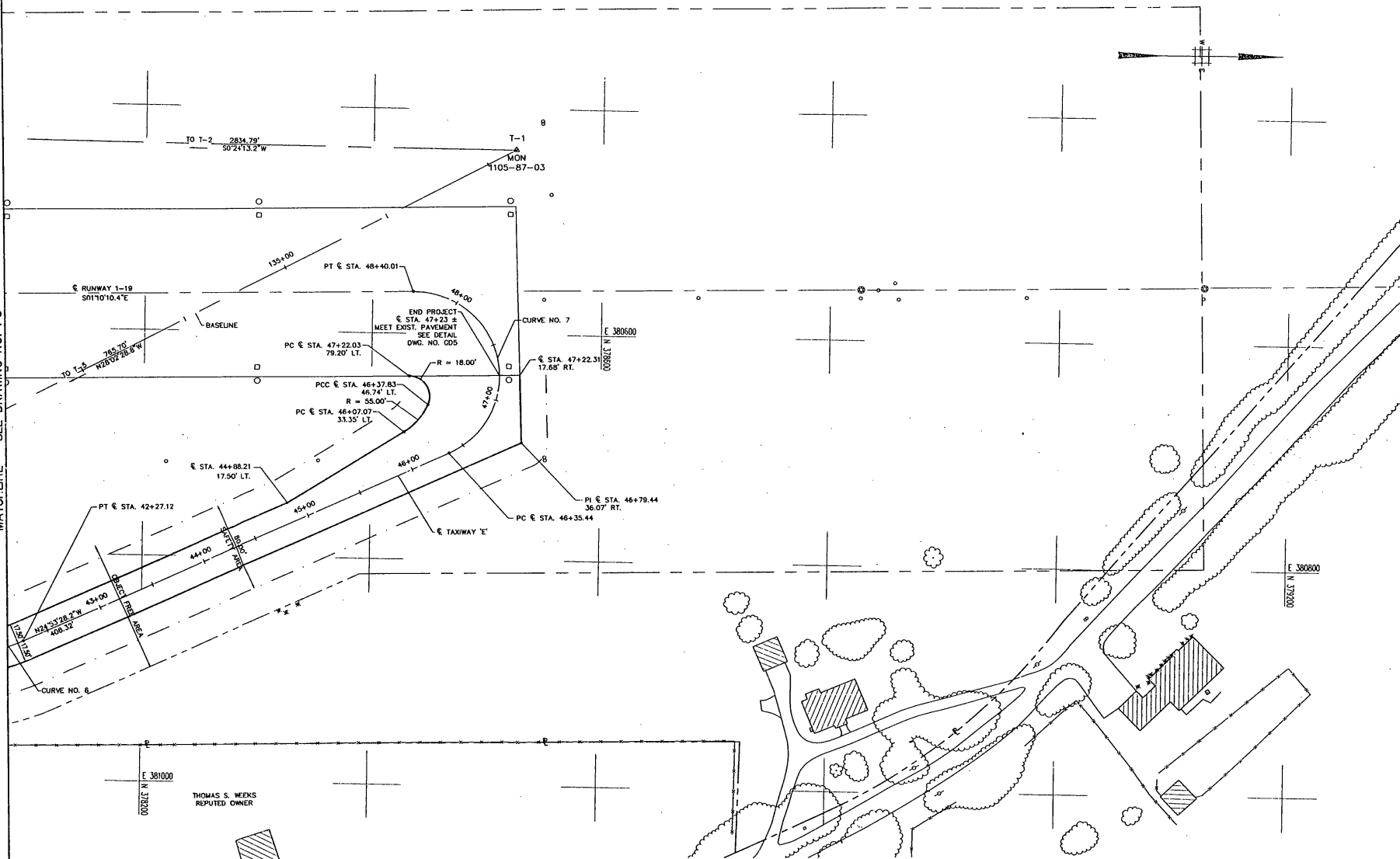
DRAWING NO.
P3

SHEET 9 OF 77

REVISIONS

NO.	DATE	BY	DESCRIPTION

MATCHLINE - SEE DRAWING NO. P3



CENTERLINE CURVE DATA				
CURVE	RADIUS	LENGTH	TANGENT	DELTA
6	150.00'	38.71'	19.46'	14°47'06.2"
7	75.00'	204.57'	357.11'	156°16'42.2"

CENTERLINE COORDINATE TABLE						
CURVE	STATION	POINT	NORTH	EAST	STATION	OFFSET
6	42+27.12	PT6	378098.057	380877.690	134+44.00	189.48' RT.
7	46+35.44	PC7	378468.448	380705.830	135+51.70	211.92' RT.
	48+40.01	PT7	378435.350	380762.812	135+58.72	70.13' RT.

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

TAXIWAY E
SITE PLAN

PROJECT NO.
7804

Envirodyne Engineers, Inc.
41 East 42nd St. Suite 1015
New York, NY 10017

DATE: AUG. 23, 1993
SCALE: 1" = 40'

DRAWN BY: D.W.
CHECKED BY: F.S.
DESIGNED BY: F.S.

SEAL

[Signature]

DATE

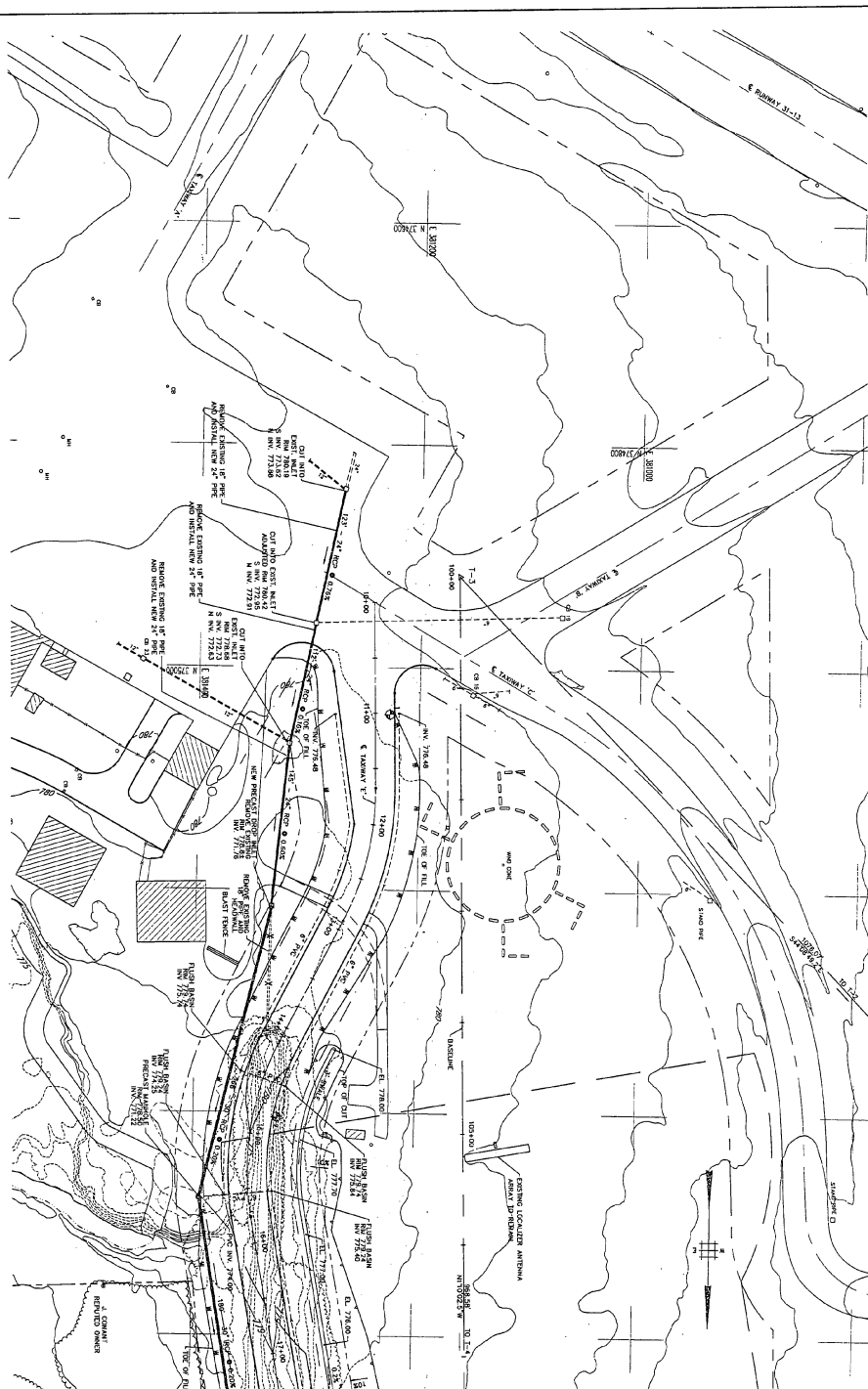
BY

APP.

REV.

DRAWING NO.
P4

SHEET 10 OF 22



MATCHLINE - SEE DRAWING NO. GD2

- NOTE:
1. ALL P.C. UNDERBRAYS ARE REINFORCED EXCEPT FOR TRANSVERSE CORNER P.C.
 2. FOR TABLE OF DIMENSIONS, SEE DWG. NO. 500, 501.
 3. FOR PROPOSED ELEVATIONS, SEE DWG. NO. 500, 501.
 4. FOR PROPOSED PAVEMENT ELEVATIONS FROM STA. 10+20 TO STA. 12+50, SEE DWG. NO. 502.

SHEET 11 OF 22

GD1

RUTLAND STATE AIRPORT
CLARENDON, VERMONT
TAXIWAY E
GRADING AND DRAINAGE PLAN



Envirodyne Engineers, Inc.
41 East 42nd St. Suite 1015
New York, NY 10017

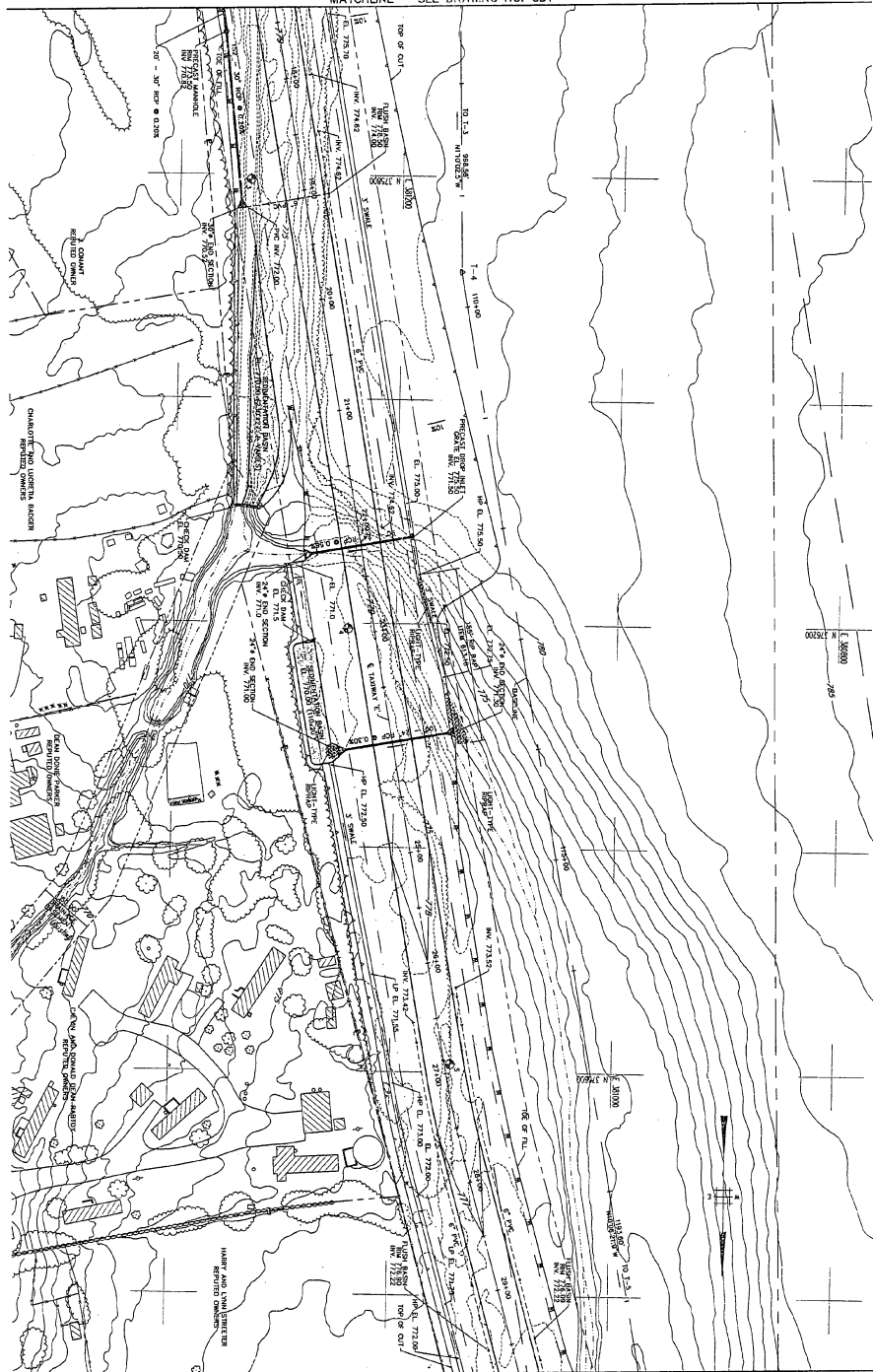
SCALE: 1" = 40' DATE: AUG. 23, 1993 DESIGNED BY: F.S. DRAWN BY: D.W. CHECKED BY: L.G.

PROJECT NO.
7804

REVISION DESCRIPTION DATE

Handwritten signature

MATCHLINE - SEE DRAWING NO. GD1



MATCHLINE - SEE DRAWING NO. GD3

- NOTES:
1. ALL PAV UNDERGRASS ARE RECONSTRUCTED EXCEPT FOR TRANSVERSE CURBING PAVES.
 2. FOR TABLE OF UNDERGRASS, SEE SPEC. NO. 501.
 3. FOR DRAINAGE STRUCTURE DETAILS, SEE SPEC. NO. 501.

0' 20' 40'

DRAWING NO.
GD2
SHEET 17 OF 17

RUTLAND STATE AIRPORT
CLARENDON, VERMONT
TAXIWAY E
GRADING AND DRAINAGE PLAN



Envirodyne Engineers, Inc.
41 East 42nd St. Suite 1015
New York, NY 10017

SCALE: 1" = 40' DATE: AUG. 23, 1993 DESIGNED BY: F.S. DRAWN BY: D.W. CHECKED BY: L.G.

PROJECT NO.
7804

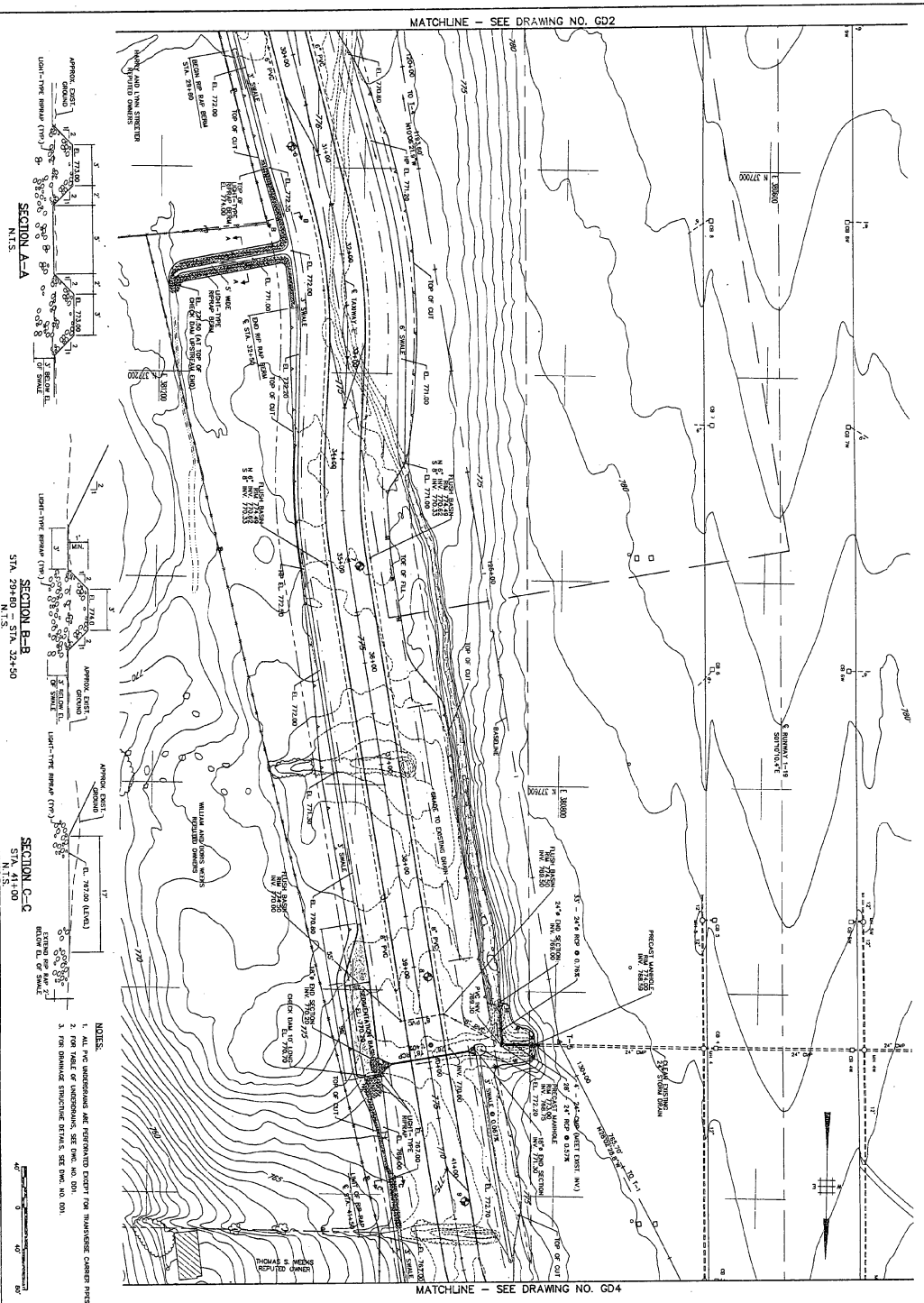
REVISION	DESCRIPTION

DATE	BY	CHKD	APP'D

504

MATCHLINE - SEE DRAWING NO. GD2

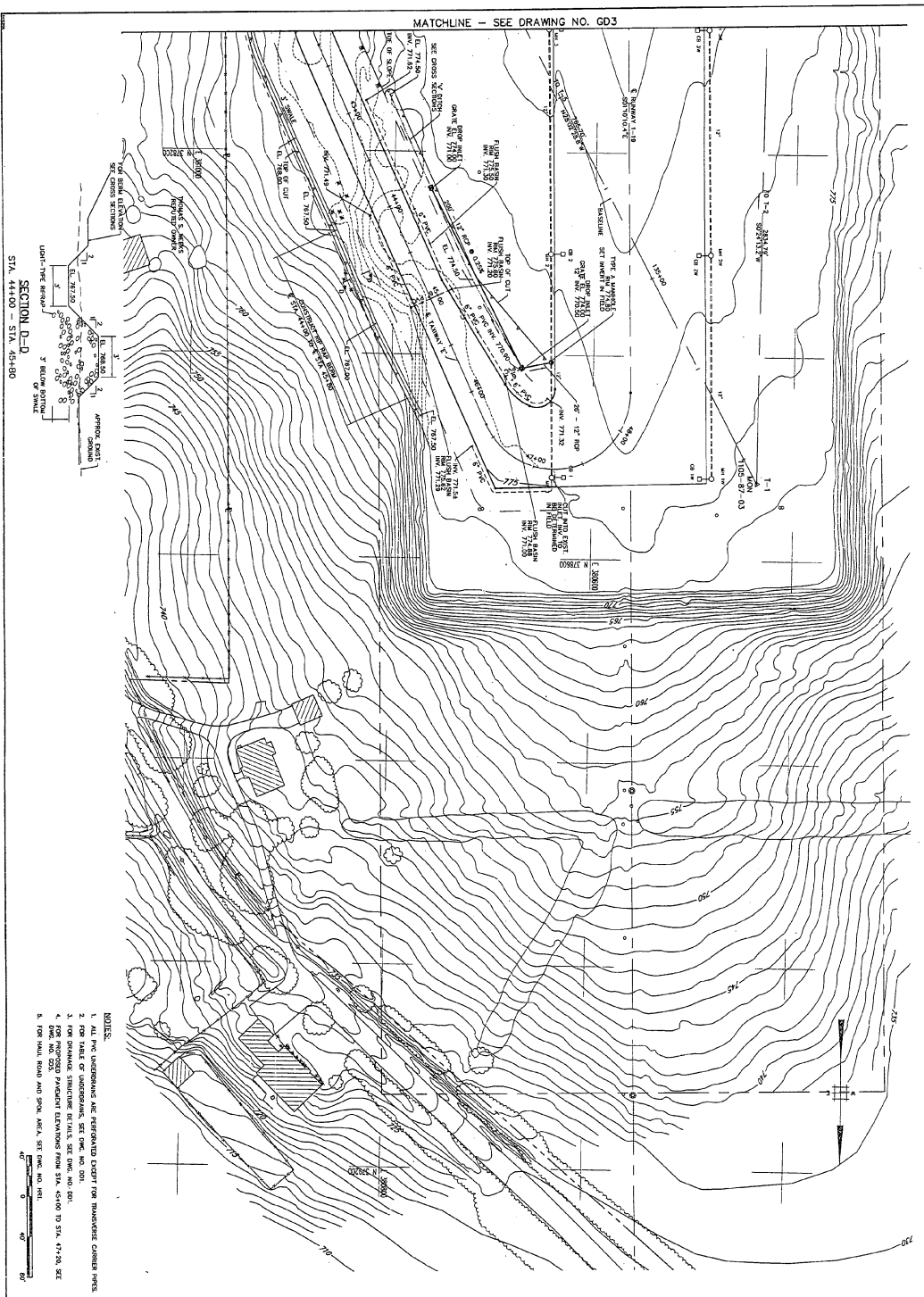
MATCHLINE - SEE DRAWING NO. GD4



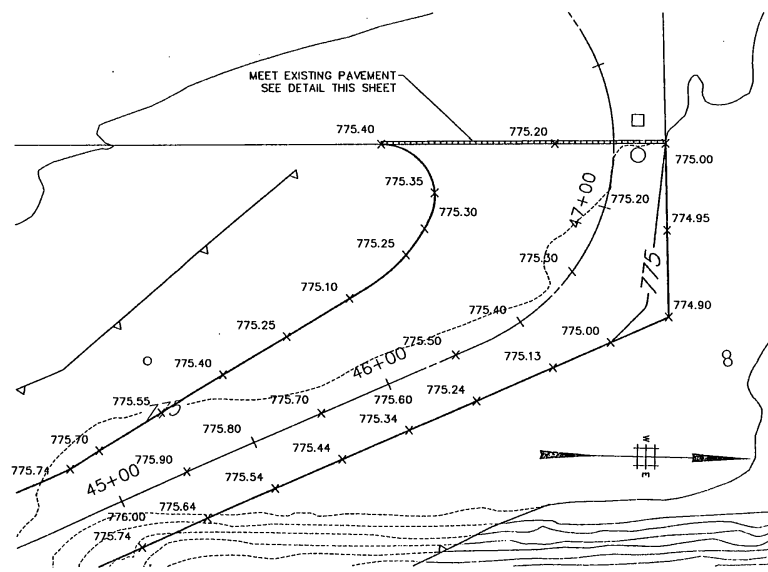
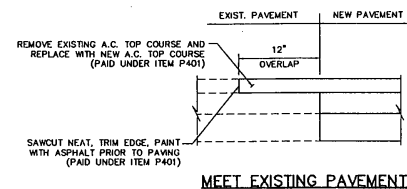
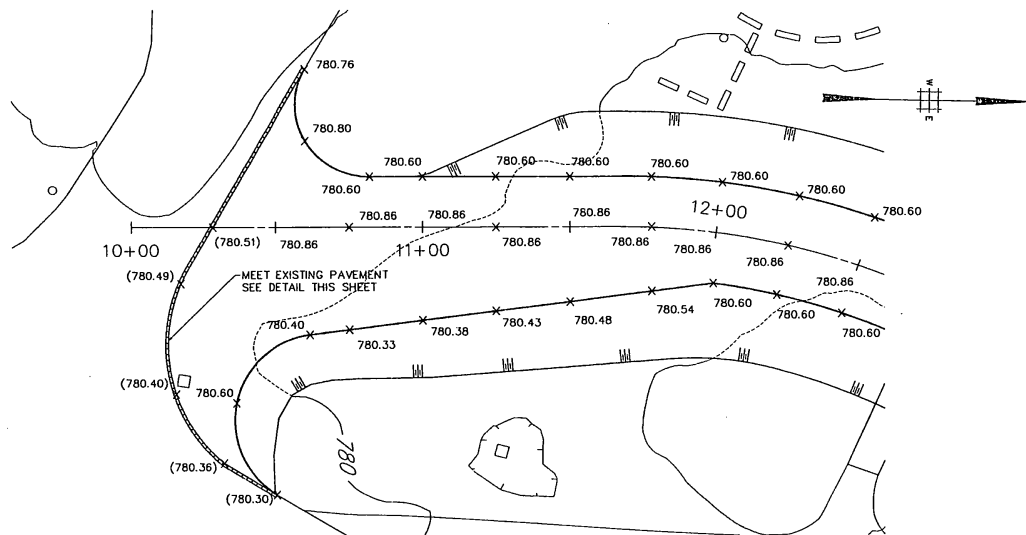
NOTES:
 1. ALL PROPOSED GRADING AND DRAINAGE SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE V.T. ENGINEERING DESIGN MANUAL.
 2. FOR DRAINAGE PROPOSALS, SEE DRAWING NO. GD1.

	RUTLAND STATE AIRPORT CLARENDON, VERMONT		PROJECT NO. 7804
	TAXIWAY E GRADING AND DRAINAGE PLAN		Envirodyne Engineers, Inc. 41 East 42nd St. Suite 1015 New York, NY 10017
SCALE: 1" = 40' DATE: AUG 23, 1992		DESIGNED BY: F.S.	CHECKED BY: L.G.
		DRAWN BY: D.W.	DATE:
		REVISION:	DESCRIPTION:

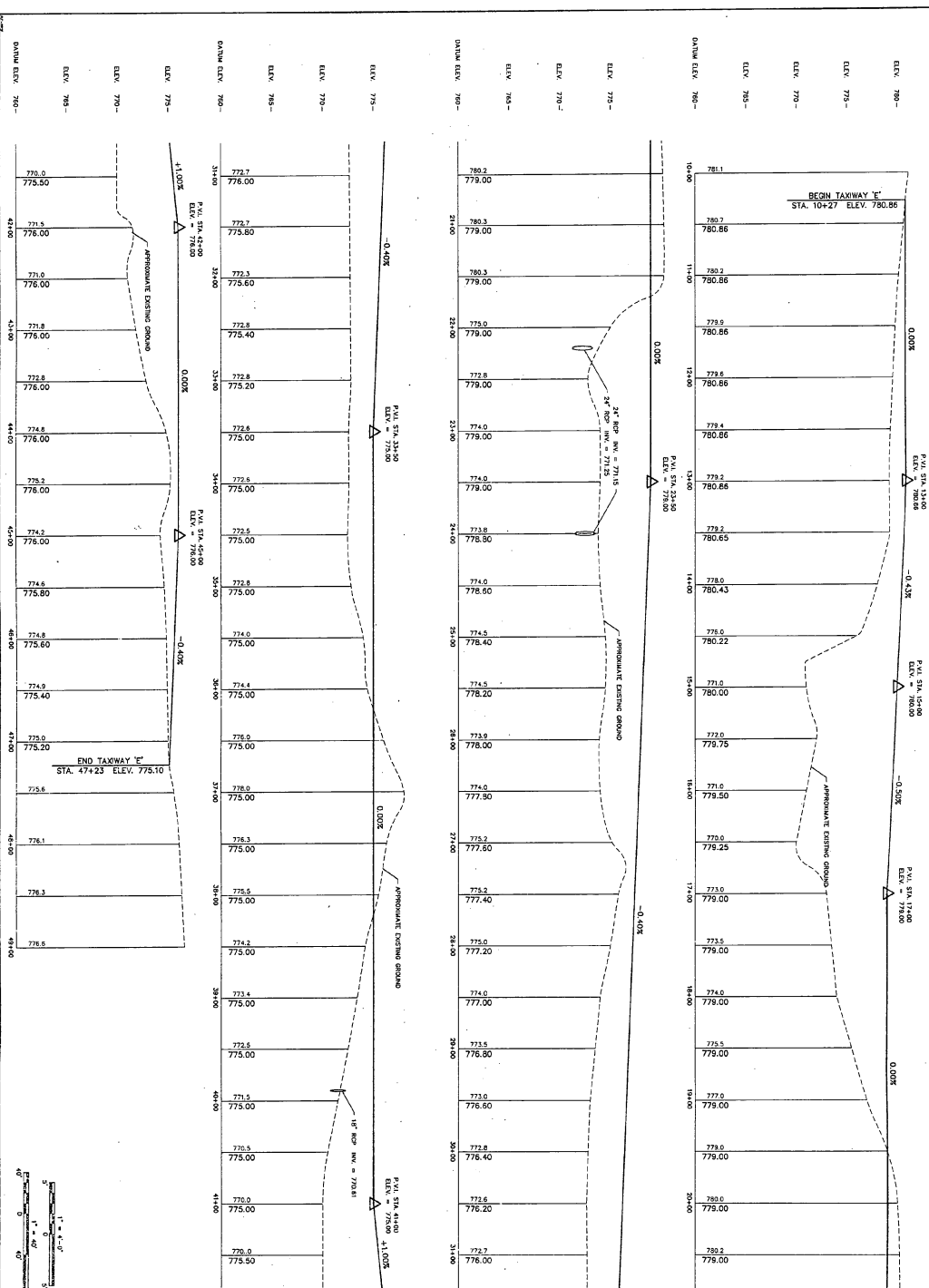
07-10-1993 10:10:10 07-10-1993 10:10:10 07-10-1993 10:10:10



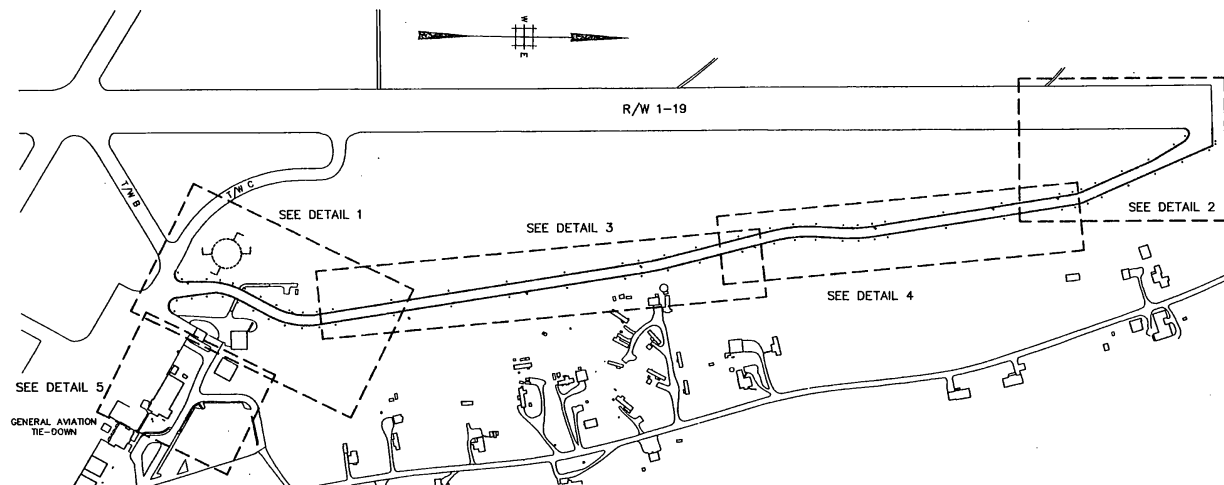
SHEET 1 OF 77	DRAWING NO. GD4	RUTLAND STATE AIRPORT CLARENDON, VERMONT	TAXIWAY E	GRADING AND DRAINAGE PLAN	Envirotech Engineers, Inc. 41 East 42nd St. Suite 1015 New York, NY 10017	PROJECT NO. 7804	SCALE: 1" = 40'		DATE: AUG. 23, 1993		DESIGNED BY: F.S.		DRAWN BY: D.W.		CHECKED BY: L.G.		REVISION		CONSTRUCTION		DATE	
							1" = 40'		AUG. 23, 1993		F.S.		D.W.		L.G.							



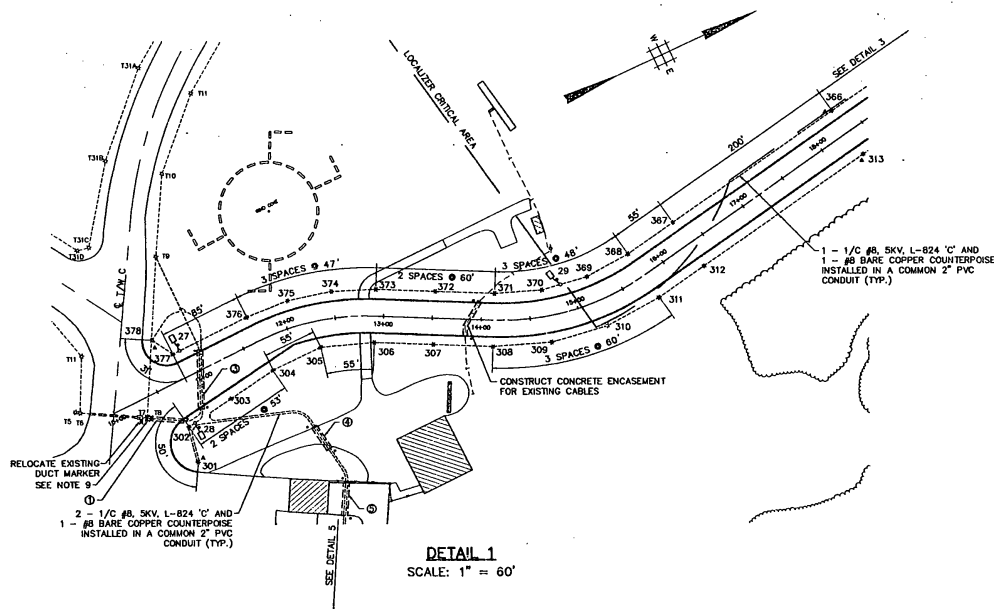
	Envirodyne Engineers, Inc. 41 East 42nd St. Suite 1015 New York, NY 10017	PROJECT NO. 7804	SHEET NO. 15 OF 41
		DATE: AUG. 23, 1993	SCALE: 1" = 20'
ROUTLAND STATE AIRPORT CLARENDON, VERMONT		TAXIWAY E	
GRADING DETAILS		DRAWING NO. GD5	



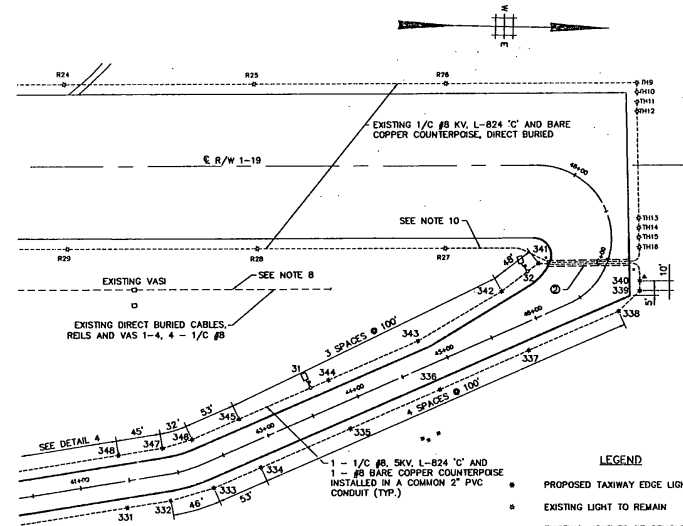
SHEET 15 OF 17 PR1	RUTLAND STATE AIRPORT CLARENDON, VERMONT TAXIWAY C PROPOSED C PROFILE	Envirodyne Engineers, Inc. 41 East 42nd St. Suite 1015 New York, NY 10017	PROJECT NO. 7804	REVISION DESCRIPTION	DRAWN BY D.W.	CHECKED BY L.C.	DATE AUG 23, 1993
	SCALE: 1" = 40' HORIZ 1" = 4' VERT	RECORD BY D.W.	DATE AUG 23, 1993	SIGN DATE	SIGN DATE	SIGN DATE	SIGN DATE



GENERAL LIGHTING PLAN
SCALE: 1" = 200'



DETAIL 1
SCALE: 1" = 60'



DETAIL 2
SCALE: 1" = 60'

GENERAL NOTES

1. T/W EDGE LIGHTS TO BE BASE MOUNTED UNITS. 24" IN HEIGHT, BLUE FIXTURE.
2. LAMP FIXTURE TO BE BLUE AND OF MEDIUM INTENSITY (6.6A, 30W).
3. ELECTRIC CIRCUITRY TO BE IN SERIES.
4. REFER TO VAOT STANDARD DRAWING AP-2 FOR BASE MOUNTED UNIT DETAILS, AND, CABLE AND SPLICE MARKERS. REFER TO VAOT STANDARD DRAWING AP-3 FOR DUCT BANK DETAILS.
5. REFER TO DRAWING L3 FOR TRENCH DETAILS.
6. MAXIMUM SPACING OF LIGHTS TO BE 200' O.C. DISTANCE FROM TAXIWAY PAVEMENT EDGE TO LIGHTS, 10'-0".
7. EXISTING R/W EDGE LIGHTS AND VASI TO REMAIN.
8. EXISTING RELS CABLES TO BE INSTALLED IN A NEW 4-WAY DUCT UNDER TAXIWAY AS DIRECTED BY THE ENGINEER.
9. REMOVE EXISTING TAXIWAY LIGHTS T7 AND T8. REMOVE EXISTING WIRING FROM TAXIWAY LIGHT T6 TO LIGHT T7 AND ABANDON EXISTING WIRING FROM LIGHT T8 TO LIGHT T9. PROVIDE NEW 1/C #8, 5KV, L824 'C' CABLE AND #8 BARE COUNTERPOISE FROM LIGHT T6 TO LIGHT T9 VIA DUCT BANKS 1 AND 3, AND SPLICE AT LIGHTS T6 AND T9. CONNECT NEW TAXIWAY LIGHTS 301 THRU 378 CONSECUTIVELY IN SERIES.
10. ABANDON EXISTING WIRING FROM RUNWAY LIGHTS R27 TO THRESHOLD LIGHT TH16. PROVIDE NEW 1/C #8, 5KV, L824 'C' CABLE AND #8 BARE COUNTERPOISE FROM LIGHT R27 TO THRESHOLD LIGHT TH16 VIA A NEW 4-WAY DUCTBANK AND SPLICE AT LIGHTS R27 AND TH16.
11. EXACT LOCATIONS OF ALL DUCT BANKS AND CABLE CONDUITS MUST BE APPROVED IN ADVANCE BY THE VAOT ELECTRICIAN CONTRACTOR/TOCONTACT RESIDENT ENGINEER.

LEGEND

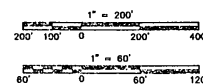
- * PROPOSED TAXIWAY EDGE LIGHT
- * EXISTING LIGHT TO REMAIN
- * EXISTING LIGHT TO BE REMOVED OR RELOCATED
- * EXISTING DUCT MARKER TO REMAIN
- * EXISTING DUCT MARKER TO BE REMOVED OR RELOCATED
- ✕ TAXIWAY SIGN AND LIGHTING CONNECTION
- ▲ PROPOSED 5/8" x 6" COPPERCLAD GROUND ROD
- PROPOSED DUCT WITH CONDUIT AND MARKERS
- ① DUCT DESIGNATION - SEE DUCT SCHEDULE

CROSS REFERENCES

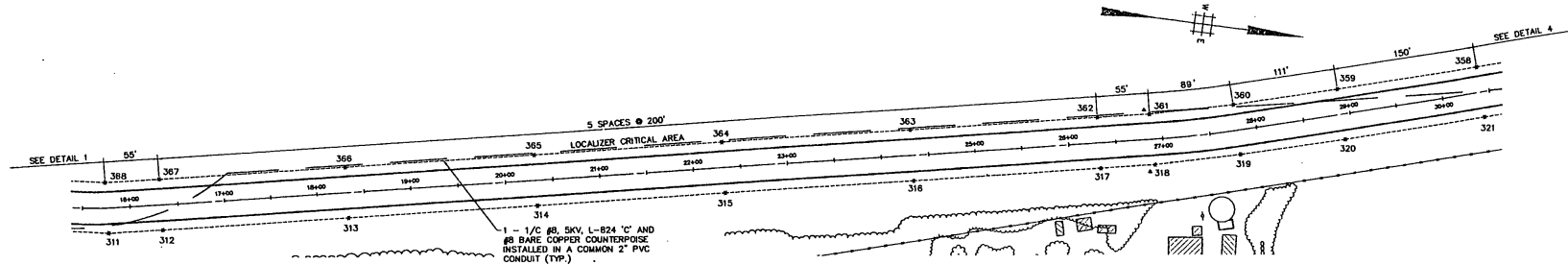
DETAILS 3, 4, 5 DRAWING NO. L2
SIGN PLANS DRAWING NOS. S1, S2

DUCT SCHEDULE

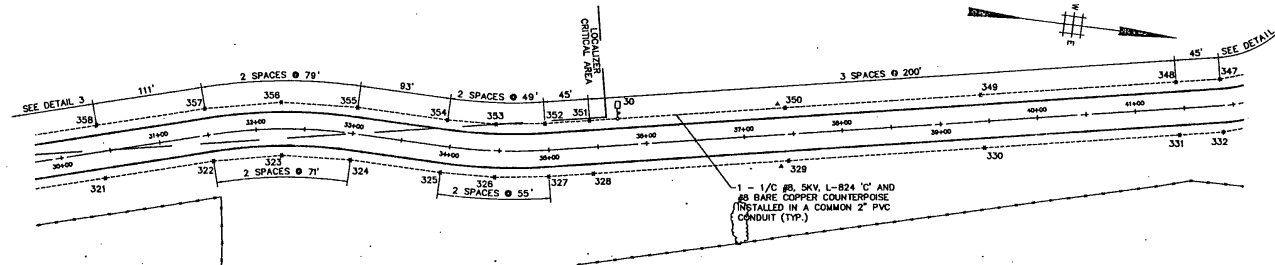
- ① 2 WAY 4" CONCRETE ENCASED 48 L.F. EXTENSION
- ② 4 WAY 4" CONCRETE ENCASED, 78 L.F.
- ③ 4 WAY 4" CONCRETE ENCASED, 61 L.F.
- ④ 4 WAY 4" CONCRETE ENCASED, 28 L.F.
- ⑤ 4 WAY 4" CONCRETE ENCASED, 35 L.F.
- ⑥ 4 WAY 4" CONCRETE ENCASED, 24 L.F.



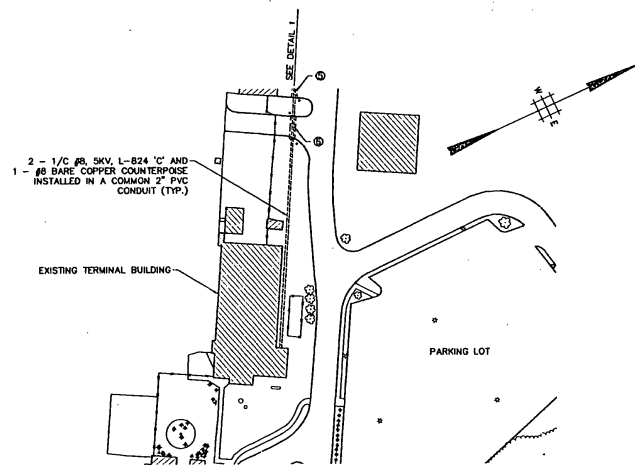
SEAL	
PROJECT NO.	7904
DATE	AUG. 23, 1983
DESIGNED BY	F.S.
DRAWN BY	D.W.
CHECKED BY	L.C.
Envirodyne Engineers, Inc. 41 East 42nd St. Suite 1015 New York, NY 10017	
RUTLAND STATE AIRPORT CLARENDON, VERMONT	
TAXIWAY E	
LIGHTING PLAN AND DETAILS	
DRAWING NO. L1	
SHEET 17 OF 27	



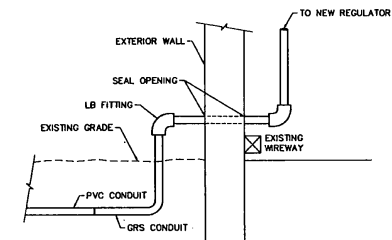
DETAIL 3
SCALE: 1" = 60'



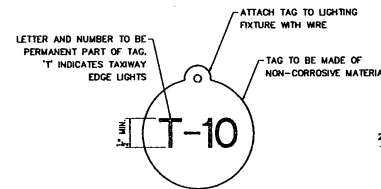
DETAIL 4
SCALE: 1" = 60'



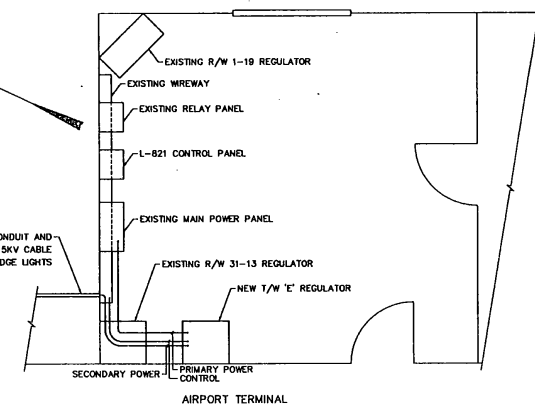
DETAIL 5
SCALE: 1" = 60'



ELECTRICAL ROOM CONDUIT ENTRANCE
N.T.S.



LIGHT IDENTIFICATION TAG
N.T.S.



ELECTRICAL ROOM LAYOUT
N.T.S.

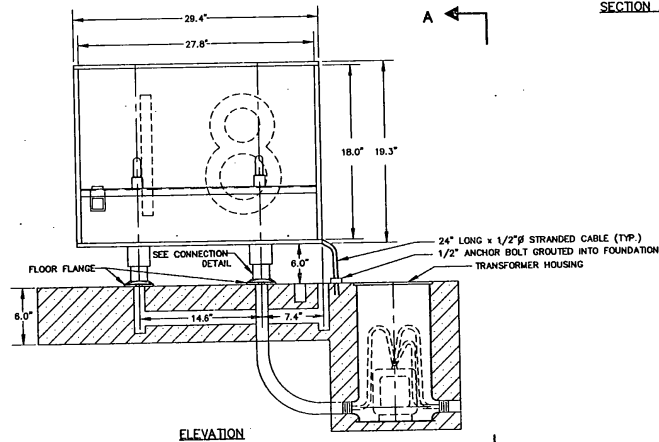
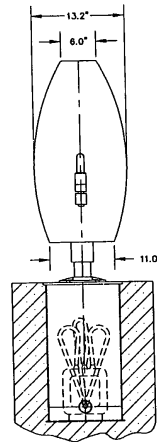
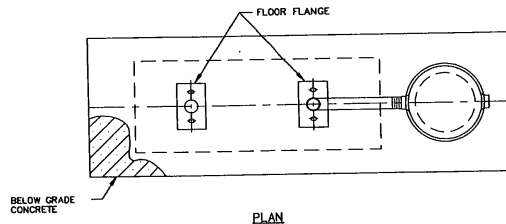
- DUCT SCHEDULE
- ④ 4 WAY 4"Ø CONCRETE ENCASED, 35 L.F.
 - ④ 4 WAY 4"Ø CONCRETE ENCASED, 24 L.F.

CROSS REFERENCES

GENERAL LIGHTING PLAN
DETAILS 1, 2 AND 3
LIGHTING NOTES AND LEGEND
SIGN PLANS

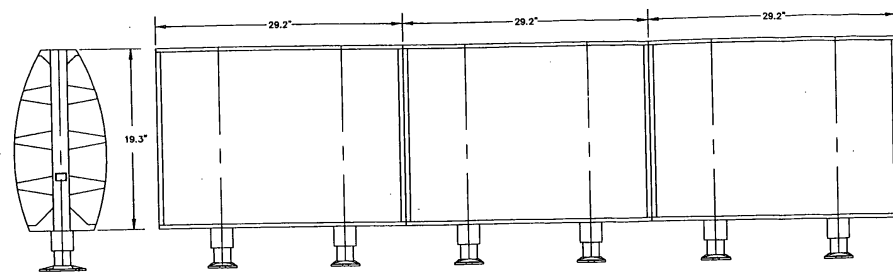
60' 0 60' 120'

PROJECT NO. 7804		DRAWN BY D.W.		CHECKED BY F.S.		DATE AUG. 23, 1983	
SEAL		REVISION		DESCRIPTION		DATE	
Envirodyne Engineers, Inc. 41 East 42nd St. Suite 1015 New York, NY 10017		RUTLAND STATE AIRPORT CLARENDON, VERMONT		TAXIWAY E		LIGHTING DETAILS	
DRAWING NO. L2		SHEET 18 OF 47					

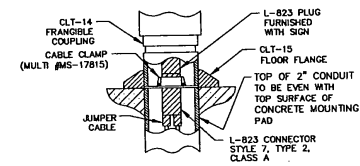


SINGLE PANEL TAXIWAY SIGN
N.T.S.

NOTE:
ALL TAXIWAY SIGNS ARE LUMACURVE TAXIWAY GUIDANCE
SIGNS OR APPROVED EQUAL.



N.T.S.



N.T.S.

RUTLAND STATE AIRPORT CLARENDON, VERMONT		DRAWING NO. L4		SHEET 20 OF 77	
TAXIWAY E		ELECTRICAL DETAILS		DATE: AUG. 23, 1993	
Envirosyne Engineers, Inc. 41 East 42nd St. Suite 1015 New York, NY 10017		PROJECT NO. 7804		DRAWN BY D.W.	
CHECKED BY F.S.		CREATED BY L.G.		DATE: AUG. 23, 1993	
NOT TO SCALE		DESCRIPTION		REVISION	
SEAL		DATE		DATE	

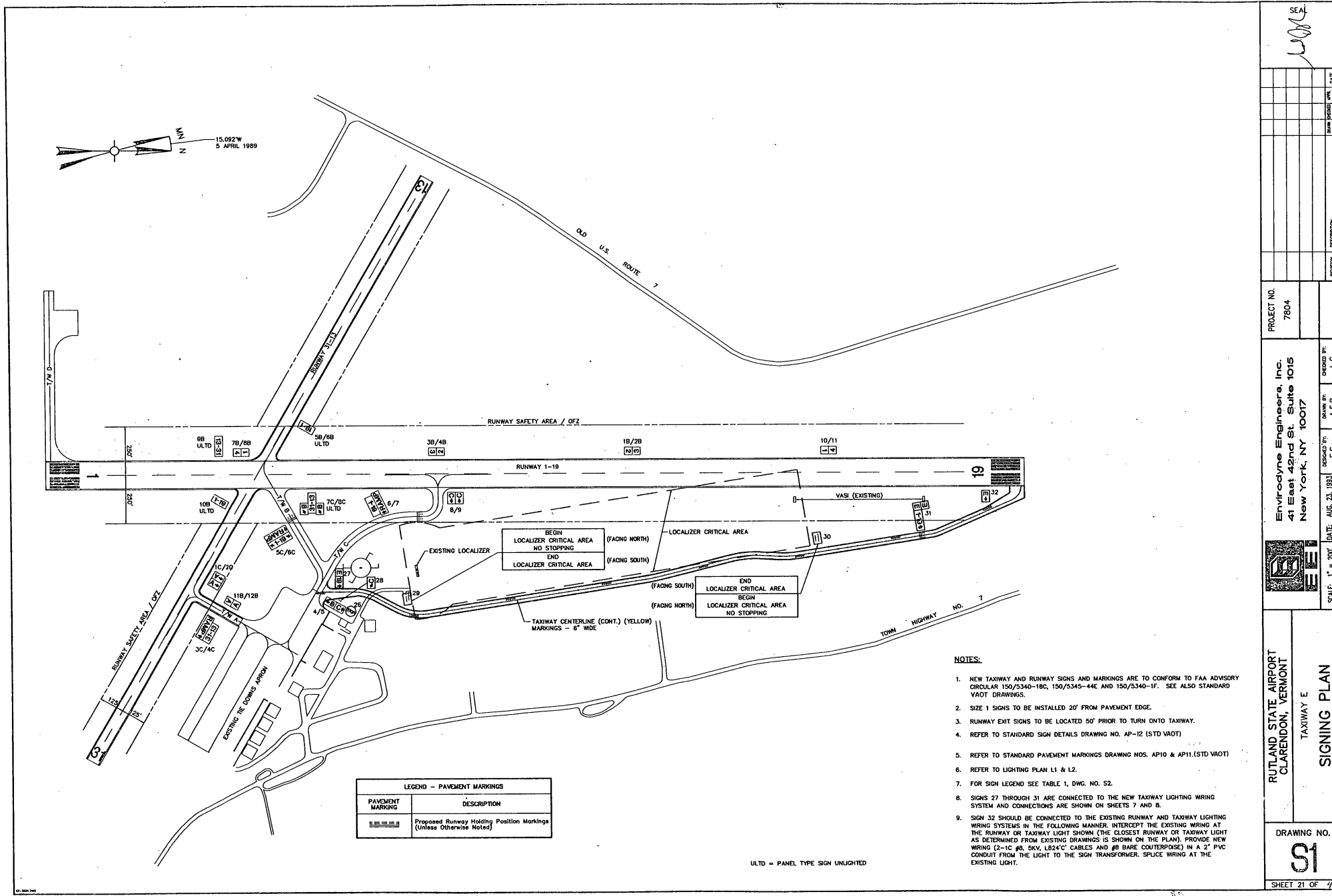
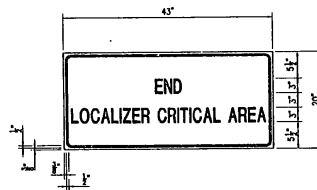
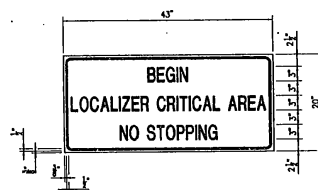


TABLE 1							
SIGN TYPE	ABBREVIATION	NAME	COLOR	INSCRIPTION	BACKGROUND	SYMBOL	POWERED BY
MANDATORY INSTRUCTION SIGN	HP	HOLD POSITION SIGN	WHITE	RED	1-19	L-85BR	1 240 VA
	ST	STOP	WHITE	RED	STOP	-	18"
	IS	INSTRUCTION SIGN	BLACK	YELLOW	TEXT		
LOCATION SIGN							
	TL	TAXIWAY LOCATION	YELLOW	BLACK	A	L-85BL	1 240 VA
DIRECTION SIGN	RE	EXIT	BLACK	YELLOW	-A	L-85BY	1 241 VA
	TD	TAXIWAY DIRECTION	BLACK	YELLOW	-B	L-85BY	1 241 VA

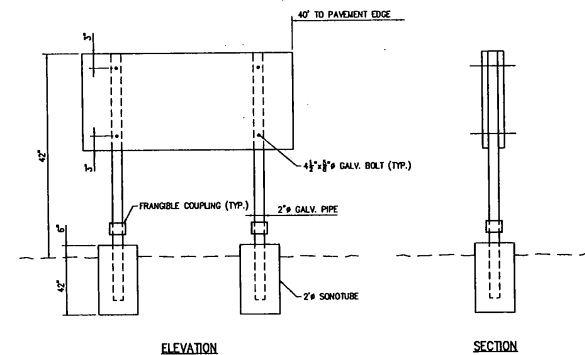
TABLE 2							
SIGN NO.	TYPE	STATION	LOCATION	TEXT	# PROPOSED MODULES	# EXISTING MODULES	TOTAL # MODULES
26	ST			STOP	-	-	-
27	TL, TD			E - 19	2	0	2
28	TD			- C	1	0	1
29	IS			"TEXT"	1	0	1
30	IS			"TEXT"	1	0	1
31	TL, HP			E 1-19	2	0	2
32	RE			EXIT	1	0	1



LETTER WIDTH DIMENSIONS (ALL LETTERS 3" HIGH)

A,B,C = 1 1/4"
D,E,G,H,I,J,K,L,M,N,P,R = 1 1/4"
1 = 1"
LETTER SPACING = 1/2"
WORD SPACING = 1 1/2"

NOTE:
REFER TO SPECIAL PROVISIONS IN SPECIFICATION
FOR SIGNS 29 AND 30.

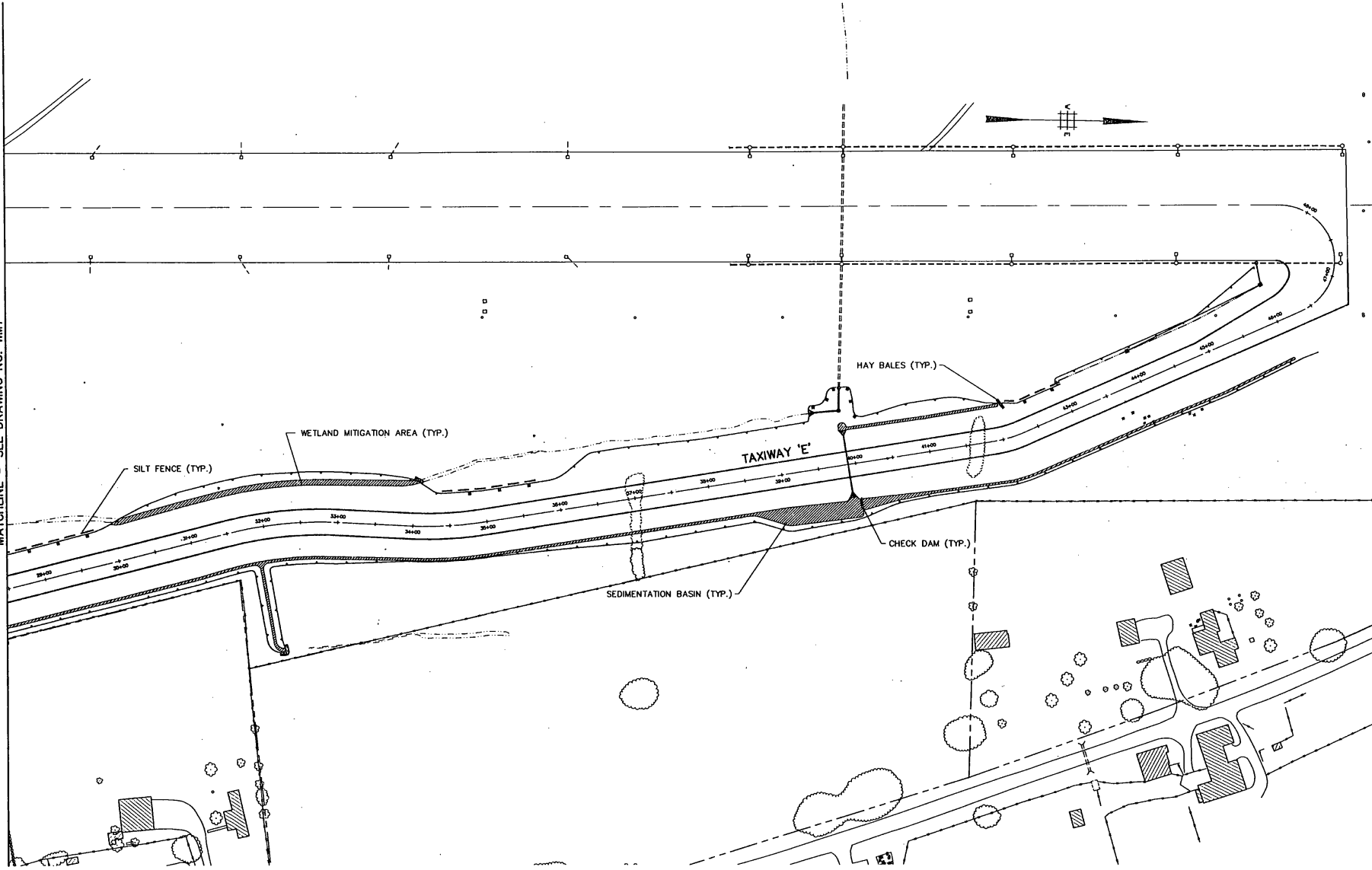


SEAL

[Signature]

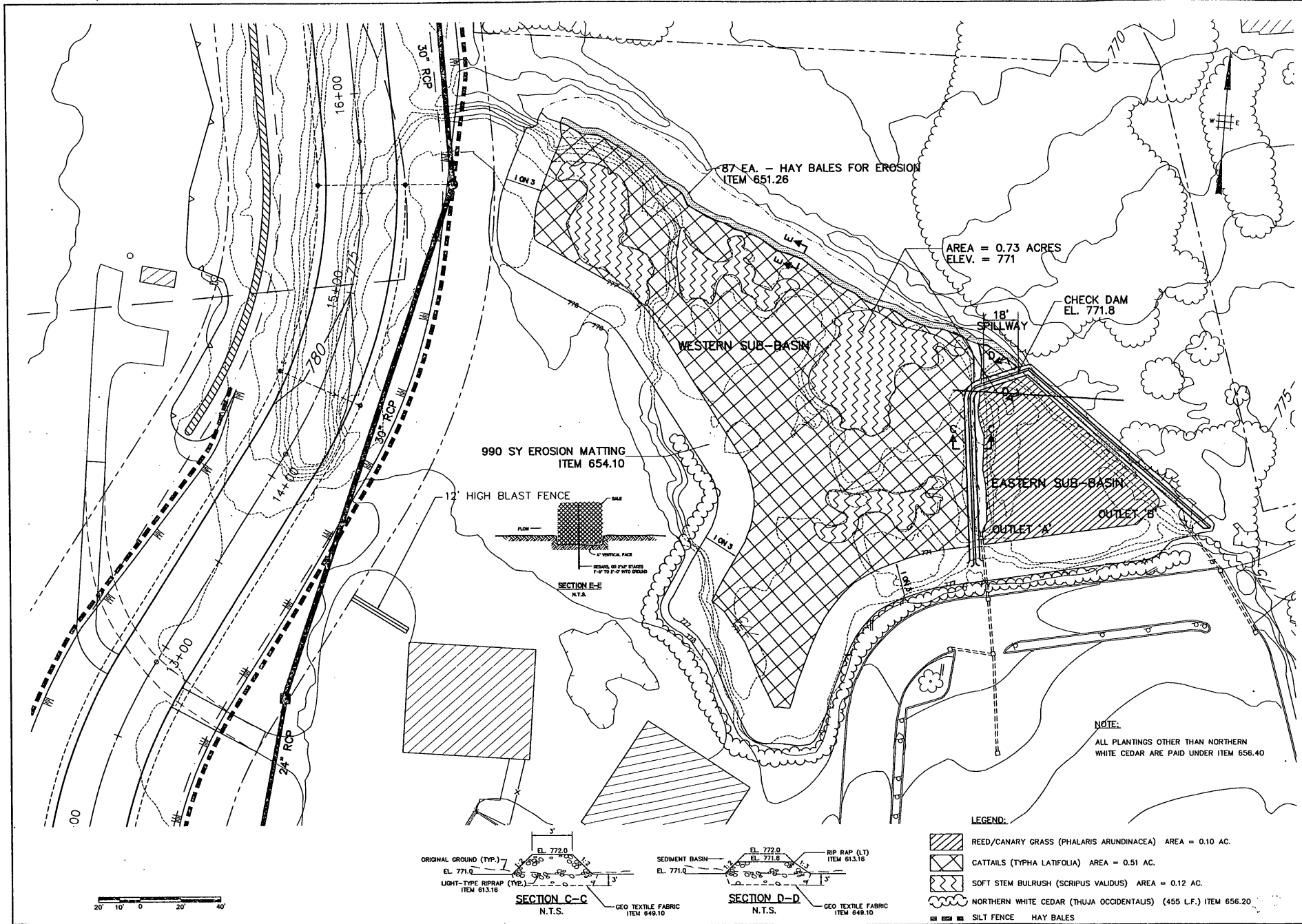
PROJECT NO.	7804	DRAWN BY:	A.F.B.	CHECKED BY:	L.C.
Envirotech Engineers, Inc. 41 East 42nd St. Suite 1015 New York, NY 10017		DESIGNED BY:	F.S.	DATE:	AUG 23, 1993
RUTLAND STATE AIRPORT CLARENDON, VERMONT		SCALE:	N.T.S.		
SIGN TABLES AND DETAILS					
TAXIWAY E					
DRAWING NO.					
52					
SHEET 22 OF 44					

MATCHLINE - SEE DRAWING NO. WM1

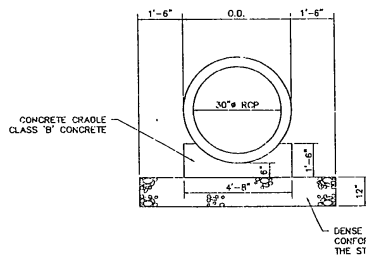


- LEGEND:**
- REED/CANARY GRASS (PHALARIS ARUNDINACEA)
 - SILT FENCE (ITEM 649.10)
 - HAY BALES (ITEM 651.26)
 - LIMIT OF EXISTING BRUSH REMOVAL

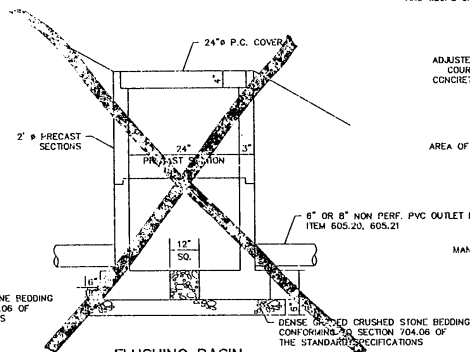
		PROJECT NO. 7804		SEAL 	
Envirodyne Engineers, Inc. 41 East 42nd St. Suite 1015 New York, NY 10017		DATE: AUG. 23, 1983		SCALE: 1" = 80'	
RUTLAND STATE AIRPORT CLARENDON, VERMONT		WETLAND MITIGATION PLAN TAXIWAY E AREA 1		DRAWING NO. WM2	
DATE: AUG. 23, 1983		SCALE: 1" = 80'		SHEET 24 OF 47	



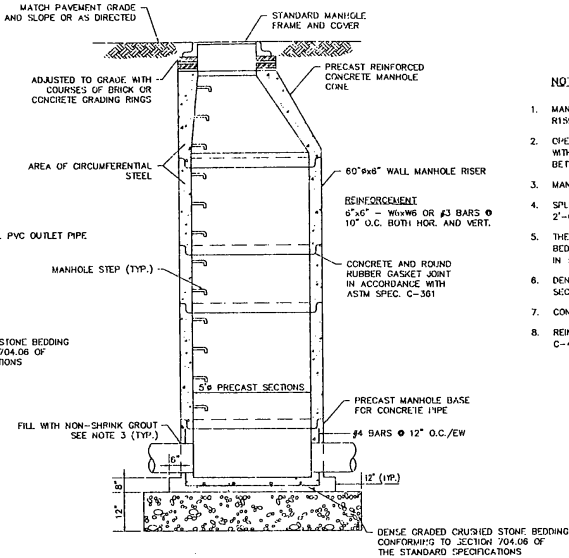
PROJECT NO. 7804		Envirotech Engineers, Inc. 41 East 42nd St. Suite 1015 New York, NY 10017	
DATE: AUG. 23, 1993	DESIGNED BY: F.S.	DRAWN BY: D.W.	CHECKED BY: L.G.
SCALE: 1" = 20'		SHEET 25 OF 27	
RUTLAND STATE AIRPORT CLARENDON, VERMONT		WETLAND MITIGATION PLAN - AREA 2	
TAXIWAY E		DRAWING NO. WM3	



CULVERT CRADLE AND STORM SEWER BEDDING
ITEM 601.0801
N.T.S.



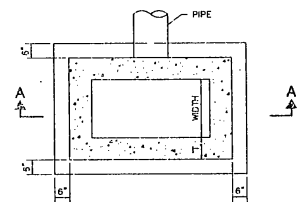
**FLUSHING BASIN
FOR 6" OR 8" UNDERDRAIN**
ITEM 605.95
N.T.S.



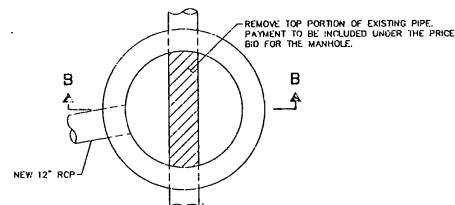
PRECAST MANHOLE
ITEM 604.21
N.T.S.

NOTES:

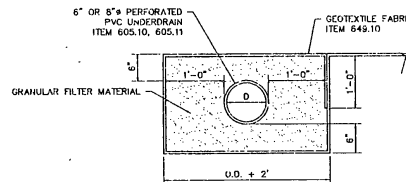
- MANHOLE FRAME AND COVER AT STA. 46+00 SHALL BE NEEHAY FOUNDRY CO. R1590 OR APPROVED EQUAL.
- OPENINGS IN WALLS FOR PIPE SHALL BE CAST-IN-PLACE OR CUT CLEANLY AND WITHOUT PERCUSSION TO A MAXIMUM DIAMETER OF O.D. + 3". THE SPACE BETWEEN PIPE AND WALL SHALL THEN BE FILLED WITH NON-SHRINK GROUT.
- MANHOLE RUNS SHALL BE NEENAH NO. R-1581-N DUCTILE IRON PIPE.
- SPLICE LENGTHS REQUIRED FOR REINFORCING BARS: #4 BAR, 1'-4"; #6 BAR, 2'-0"; AND #8 BAR, 3'-5".
- THERE WILL BE NO SEPARATE PAYMENT FOR DENSE GRADED CRUSHED STONE BEDDING, AS SHOWN UNDER THE DRAINAGE STRUCTURES, BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE SPECIFIC DRAINAGE STRUCTURE.
- DENSE GRADED CRUSHED STONE BEDDING SHALL MEET THE REQUIREMENTS OF SECTION 704.06 OF THE STANDARD SPECIFICATIONS.
- CONCRETE FOR MANHOLES AND INLET STRUCTURES TO BE 4000 PSI AIR-ENTRAINED.
- REINFORCED PRECAST PRODUCTS TO BE IN ACCORDANCE WITH ASTM SPECIFICATIONS C-478.



PRE-CAST DROP INLET
ITEM 604.25
N.T.S.



**MANHOLE TYPE A
NEW MANHOLE AT EXISTING 12" PIPE**
STA. 46+00, 100' ± LEFT
ITEM 604.31
N.T.S.



UNDERDRAIN DETAIL
N.T.S.

LOCATION STA. - STA.	OFFSET		UNDERDRAINS				COMMENTS
	EAST SIDE	WEST SIDE	6" PER FOR. LENGTH	6" NONPERF. LENGTH	6" PERFOR. LENGTH	6" NONPERF. LENGTH	
11+00 - 14+50	-	22'	350'	-	-	-	
11+00 - 14+50	22'	-	350'	-	-	-	
14+50 - 15+55	22'	-	110'	-	-	-	
14+50 - 15+55	22'	22'	-	44'	-	-	CARRIER PIPE CROSSOVER
15+55 - 17+35	44'	22'	-	56'	-	-	CARRIER PIPE CROSSOVER
17+35 - 17+35	-	22'	275'	-	-	-	
17+35 - 18+00	-	22'	60'	-	-	-	
18+50 - 22+10	-	22'	330'	-	-	-	
19+10 - 19+10	46'	22'	-	68'	-	-	CARRIER PIPE CROSSOVER, OUTLET TO HEADWALL
19+10 - 22+10	-	22'	300'	-	-	-	
26+25 - 29+50	-	22'	325'	-	-	-	
26+50 - 29+50	22'	-	300'	-	-	-	
29+50 - 35+00	-	22'	545'	-	-	-	
29+50 - 35+00	22'	-	545'	-	-	-	
35+00 - 39+50	22'	-	-	45'	-	-	
35+00 - 39+50	-	22'	-	45'	-	-	
39+50 - 39+50	-	-	-	-	44'	-	CARRIER PIPE CROSSOVER
39+50 - 39+50	-	-	-	-	68'	-	CARRIER PIPE CROSSOVER, OUTLET TO MANHOLE
39+50 - 39+50	-	22'	35'	-	-	-	
43+00 - 44+50	-	22'	150'	-	-	-	
44+00 - 45+00	22'	-	100'	44'	-	-	CARRIER PIPE CROSSOVER
44+50 - 45+00	-	22'	50'	-	-	-	
45+00 - 46+00	-	22'	100'	40'	-	-	CARRIER PIPE CROSSOVER, OUTLET TO EXISTING DROP INLET
46+50 - 47+15	22'	-	110'	-	-	-	
47+00 - 46+00	-	VARIES	100'	20'	-	-	CARRIER PIPE CROSSOVER
TOTAL			4185 L.F.	282 L.F.	910 L.F.	112 L.F.	

DRAINAGE INLETS						
N.O.	LOCATION	LENGTH FT.	WIDTH IN.	WALL THICKNESS IN.	DEPTH FT.	FRAME AND GRATE
1	13+10, 65' RT.	3'-0"	2'-0"	6"	7"	R-3475
2	22+20, 45' LT.	3'-4"	1'-11"	6"	4"	R-3362
3	46+00, 60' LT.	2'-5"	2'-5"	6"	3.5"	R-3350
4	44+00, 44' LT.	2'-5"	2'-5"	6"	3.0"	R-3350

* NEENAH FOUNDRY COMPANY OR APPROVED EQUAL.
** DOES NOT INCLUDE WALL THICKNESS

SEAL

PROJECT NO. 7304

Envirodyne Engineers, Inc.
41 East 42nd St. Suite 1015
New York, NY 10017

DRAWN BY: E.M.
CHECKED BY: L.O.
DESIGNED BY: P.S.
DATE: AUG. 23, 1993
SCALE: AS SHOWN

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

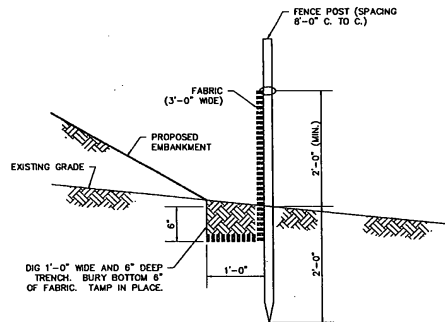
TAXWAY E

DRAINAGE STRUCTURE DETAILS

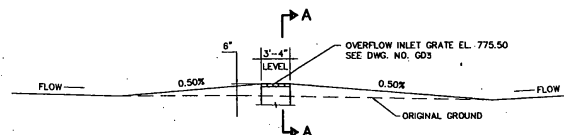
DRAWING NO. DD1

SHEET 27 OF 47

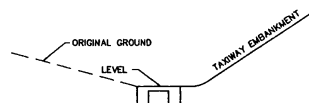
REVISED 9-15-93 P.D



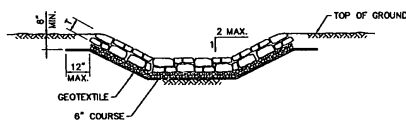
SILT FENCE DETAIL
ITEM 649.20
N.T.S.



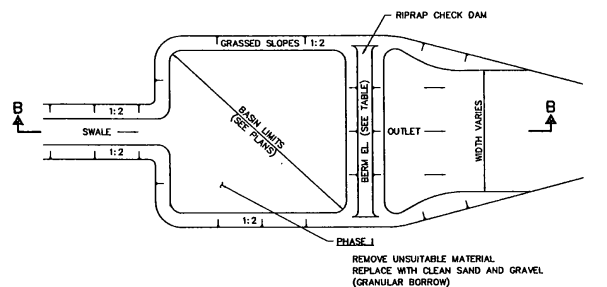
CHECK DAM AND DROP INLET
STA. 22+20.45' LEFT
N.T.S.



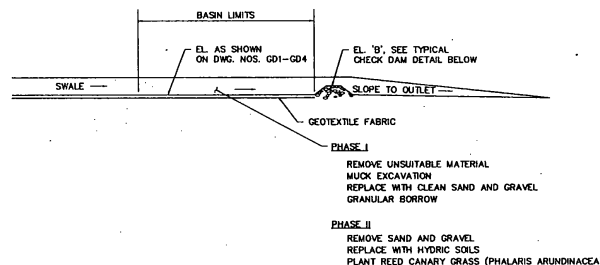
SECTION A-A
N.T.S.



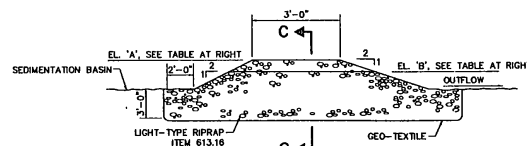
RIP-RAP @ SWALES
ITEM 613.16
N.T.S.



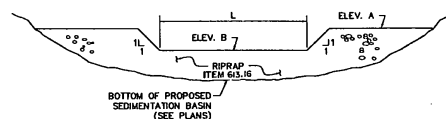
SEDIMENTATION BASIN / WETLAND POOL
N.T.S.



SECTION B-B
N.T.S.



TYPICAL CHECK DAM DETAIL
N.T.S.



SECTION C-C
N.T.S.

REQUIREMENTS FOR SEDIMENT BARRIER DESIGN CRITERIA

- ALL TYPES OF SEDIMENT BARRIERS:
 - THE BARRIER SHALL BE CONSTRUCTED SO WATER CANNOT BYPASS THE BARRIER AROUND THE ENDS.
 - INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
 - THE BARRIER SHALL BE REMOVED WHEN IT HAS SERVED ITS USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE. APPROVAL FROM RESIDENT ENGINEER REQUIRED.
- REQUIREMENTS FOR BALE BARRIER (E.G., STRAW, HAY OR OTHER ACCEPTABLE VEGETATIVE MATERIAL):
 - BALES TO BE PLACED AT LOCATIONS NOTED ON THE PLANS.
 - ALL BALES SHALL BE SECURELY TIED AND STAKED ON THE CONTOUR. SEE SHEET 23 FOR DETAILS.
 - BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
 - EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4 INCHES.
 - BALES SHALL BE SECURELY ANCHORED IN PLACE BY TWO STAKES OR RE-BARS DRIVEN THROUGH EACH BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
- REQUIREMENTS FOR SILT FENCE (SEE DETAIL ON THIS SHEET):
 - SILT FENCES TO BE PLACED AT LOCATIONS NOTED ON THE PLANS.
 - FENCE POSTS SHALL BE SPACED 8 FEET CENTER TO CENTER OR CLOSER. THEY SHALL EXTEND AT LEAST 2 FEET INTO THE GROUND. THEY SHALL EXTEND AT LEAST 2 FEET ABOVE GROUND.
 - A FILTER FABRIC, RECOMMENDED FOR SUCH USE BY THE MANUFACTURER, SHALL BE BURIED AT LEAST 6 INCHES DEEP IN THE GROUND. THE FILTER FABRIC SHALL EXTEND AT LEAST 2 FEET ABOVE THE GROUND. FILTER FABRIC MAY BE FASTENED IN PLACE BY STAKE OR OTHER MEANS ACCEPTED BY THE RESIDENT ENGINEER.

SEDIMENTATION BASIN / WETLAND POOL NOTES

- CONTRACTOR TO CONSTRUCT SEDIMENTATION BASINS AS HIS FIRST OPERATION.
- CONTRACTOR TO REMOVE ACCUMULATED SEDIMENT AS NECESSARY DURING CONSTRUCTION OF TAXIWAY FOR EFFICIENT BASIN OPERATION.
- UPON COMPLETION OF THE PROJECT, ESTABLISHMENT OF GRASSED SIDESLOPES AND UPON THE FINAL CLEANING OF THE BASIN OF SILT, THE CONTRACTOR MAY THEN COMPLETE THE FINAL PHASE OF BASIN CONSTRUCTION BY PLACING THE REQUIRED SOILS IN THE BASIN AND PLANTING THE RECOMMENDED VEGETATION (SEE DETAIL, PHASE II).

SEDIMENTATION BASINS					
LOCATION	OFFSET	DW L	ELEV. A	ELEV. B	
STA. 21+80	100' RT.	13.0	771.00	770.50	SEE DWG. NO. G02
STA. 23+00	60' RT.	10.0	772.00	771.50	SEE DWG. NO. G02
STA. 40+00	60' RT.	10.0	771.20	770.70	SEE DWG. NO. G03

SEAL

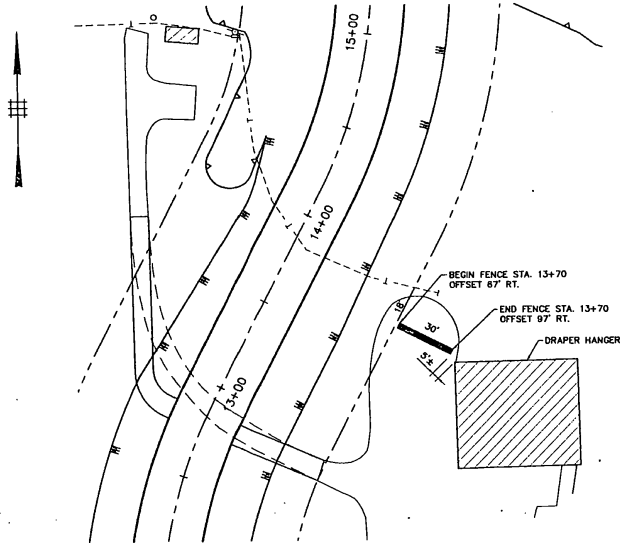
PROJECT NO.
7804

Envirodyne Engineers, Inc.
41 East 42nd St. Suite 1015
New York, NY 10017

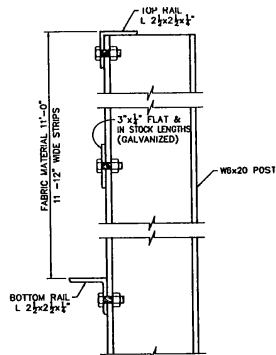


RUTLAND STATE AIRPORT
CLARENDON, VERMONT

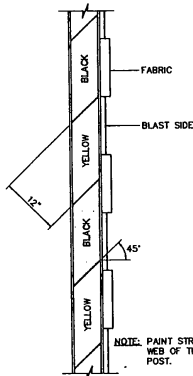
DRAWING NO.
DD2
SHEET 28 OF 71



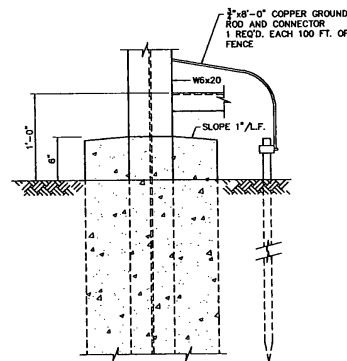
PLAN
N.T.S.



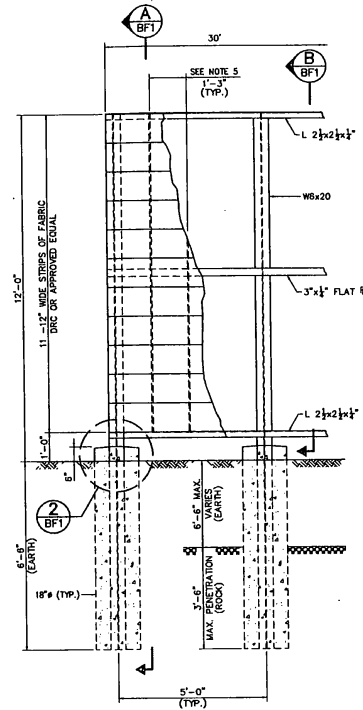
SECTION B-BF1
Scale: 3"=1'-0"



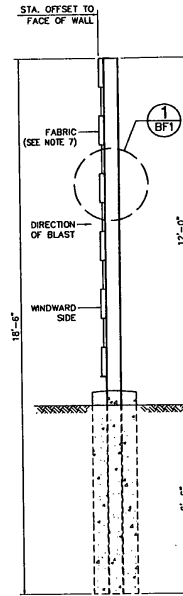
DETAIL 1-BF1
Scale: 1"=1'-0"



DETAIL 2-BF1
Scale: 3"=1'-0"



ELEVATION
Scale: 1/2"=1'-0"

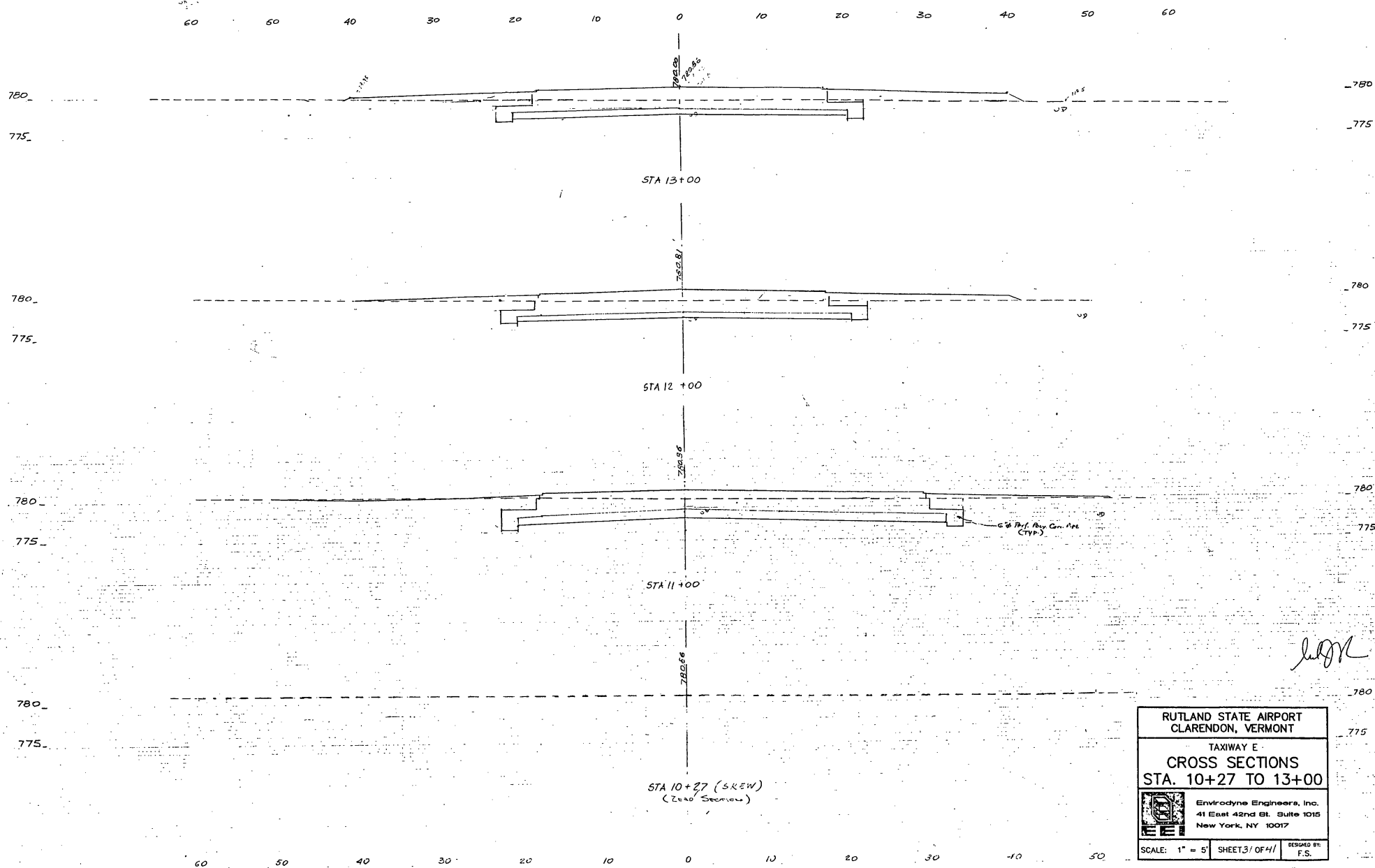


SECTION A-A
Scale: 1/2"=1'-0"

INSTALLATION PROCEDURE

1. INSTALL 18'-6" LONG - 6" WIDE FLANGE BEAM POSTS AT 5'-0" CENTERS IN 18" DIA. CONCRETE FOOTINGS.
2. FASTEN TOP AND BOTTOM RAILS TO "WF" BEAM POSTS WITH 3/8" X 16 UNC TYPE "FA" NUTS AND 3/8" X 16 X 1/2 HEX. HEAD BOLTS S.A.E. GRADE 2.
3. FASTEN FIRST ROLL OF 24 GAUGE FABRIC, MATERIAL 12" WIDE BY SPECIFIED LENGTH AT END POST - WIDE HANGERS TO HOLD TO TOP RAIL.
4. USE A 1/2" X 1 1/2" FOOT PIPE THRU THE END OF THE FABRIC MATERIAL AND USE A STANDARD CYCLOPE OR CHAIN LINK FENCE STRETCHER TO LAST POST - WHEN TIGHT FASTEN WITH TENS (12-24 X 7/8 HEX. WASHER HEAD WITH TWIN SEAL WASHER - ILLINOIS TOOL WORKS - BULDEX DIV).
5. INSERT A 11 FOOT X 1/2" DIA. GALVANIZED PIPE WOVEN THRU FABRIC AT 1'-3" INTERVALS FOR ADDITIONAL STRENGTH - NO CONCRETE IS NECESSARY FOR THESE POSTS.
6. INSTALL SUCCESSIVE FABRIC MATERIAL IN THE SAME MANNER.
7. FABRIC MUST BE INSTALLED ON WINDWARD SIDE OF BARRIER. FABRIC TO BE AS MANUFACTURED BY D.R.C. FABRICATED PRODUCTS, DIVISION OF LANGENAU MFG. CO. OR APPROVED EQUAL.
8. FIRST AND LAST POST TO BE PAINTED ALTERNATE BLACK AND YELLOW DIAGONAL STRIPES (SEE DETAIL 1).

PROJECT NO. 7804		PROJECT RUTLAND STATE AIRPORT CLARENDON, VERMONT		TAXIWAY E BLAST FENCE	
PROJECT Envirodyne Engineers, Inc. 41 East 42nd St. Suite 1015 New York, NY 10017		DATE AUG. 23, 1993		DRAWN BY F.S.	
REVISION L.C.		CHECKED BY E.M.		SCALE AS SHOWN	
DRAWN BY F.S.		CHECKED BY E.M.		SCALE AS SHOWN	
DATE AUG. 23, 1993		DRAWN BY F.S.		CHECKED BY E.M.	
PROJECT RUTLAND STATE AIRPORT CLARENDON, VERMONT		TAXIWAY E BLAST FENCE		DRAWING NO. BF1	
SHEET 30 OF 44					

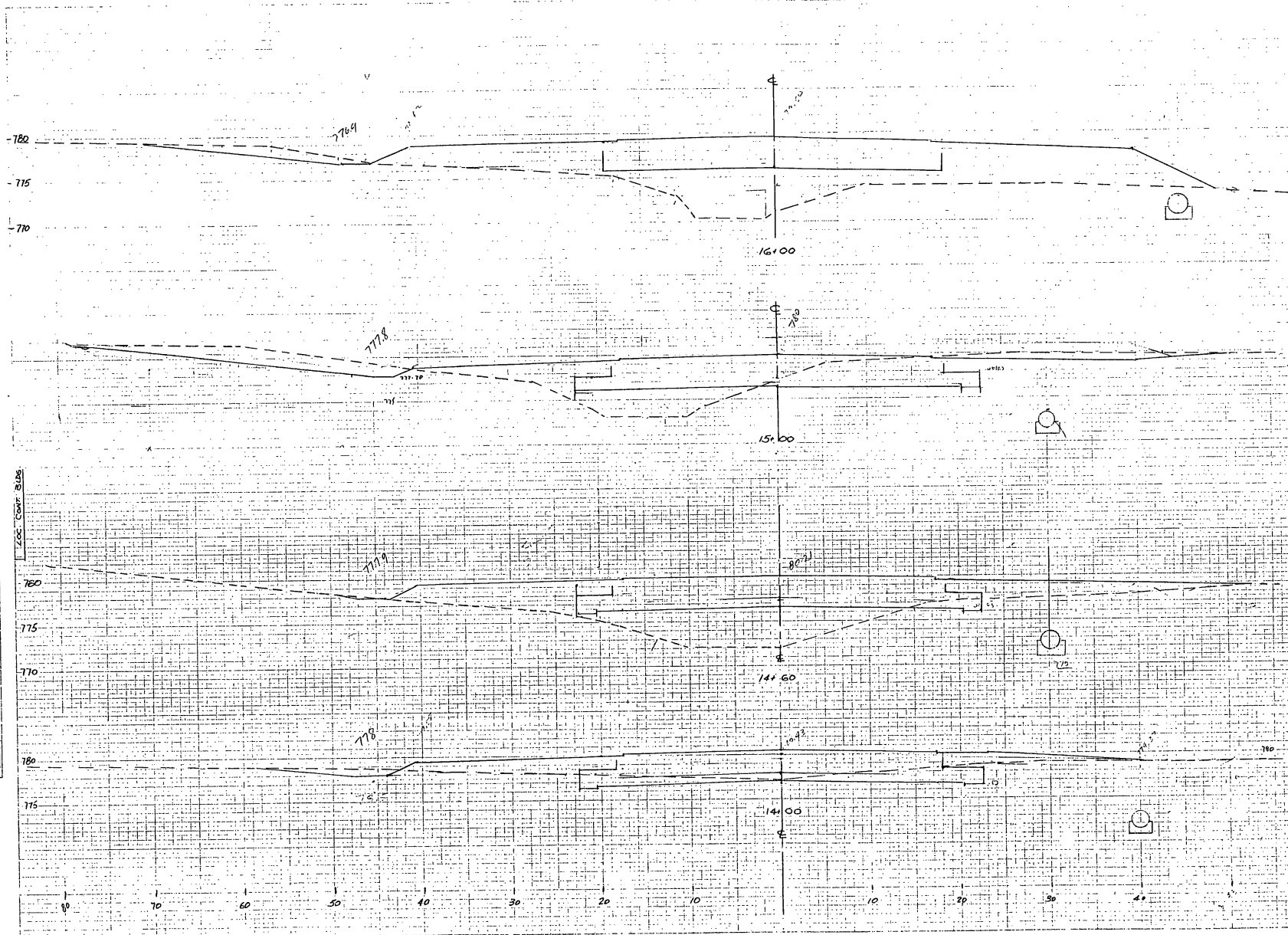


**RUTLAND STATE AIRPORT
CLARENDON, VERMONT**

**TAXIWAY E
CROSS SECTIONS
STA. 10+27 TO 13+00**

Envirodyne Engineers, Inc.
41 East 42nd St. Suite 1015
New York, NY 10017

SCALE: 1" = 5' **SHEET 3 OF 4** **DESIGNED BY: F.S.**

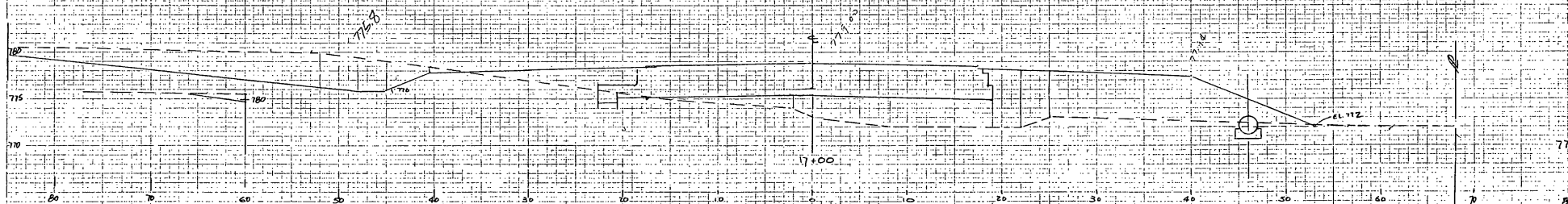
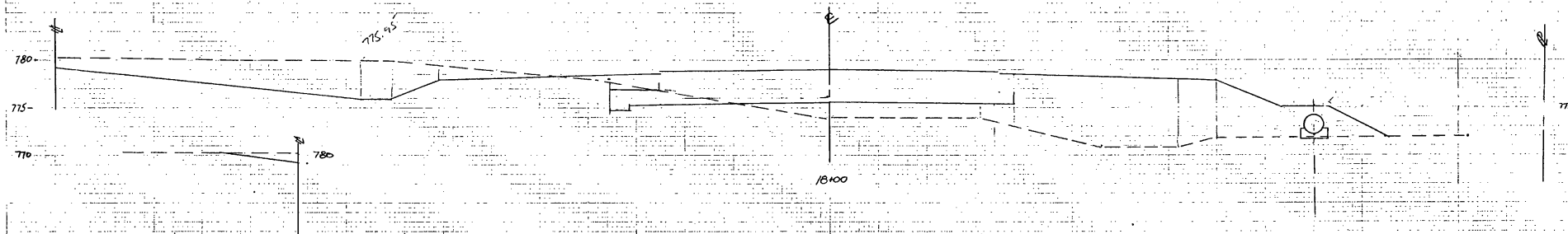


**RUTLAND STATE AIRPORT
CLARENDON, VERMONT**

**TAXIWAY E
CROSS SECTIONS
STA. 14+00 TO 16+00**

Envirodyne Engineers, Inc.
41 East 42nd St. Suite 1015
New York, NY 10017

SCALE: 1" = 5' SHEET 32 OF 41 DESIGNED BY: F.S.

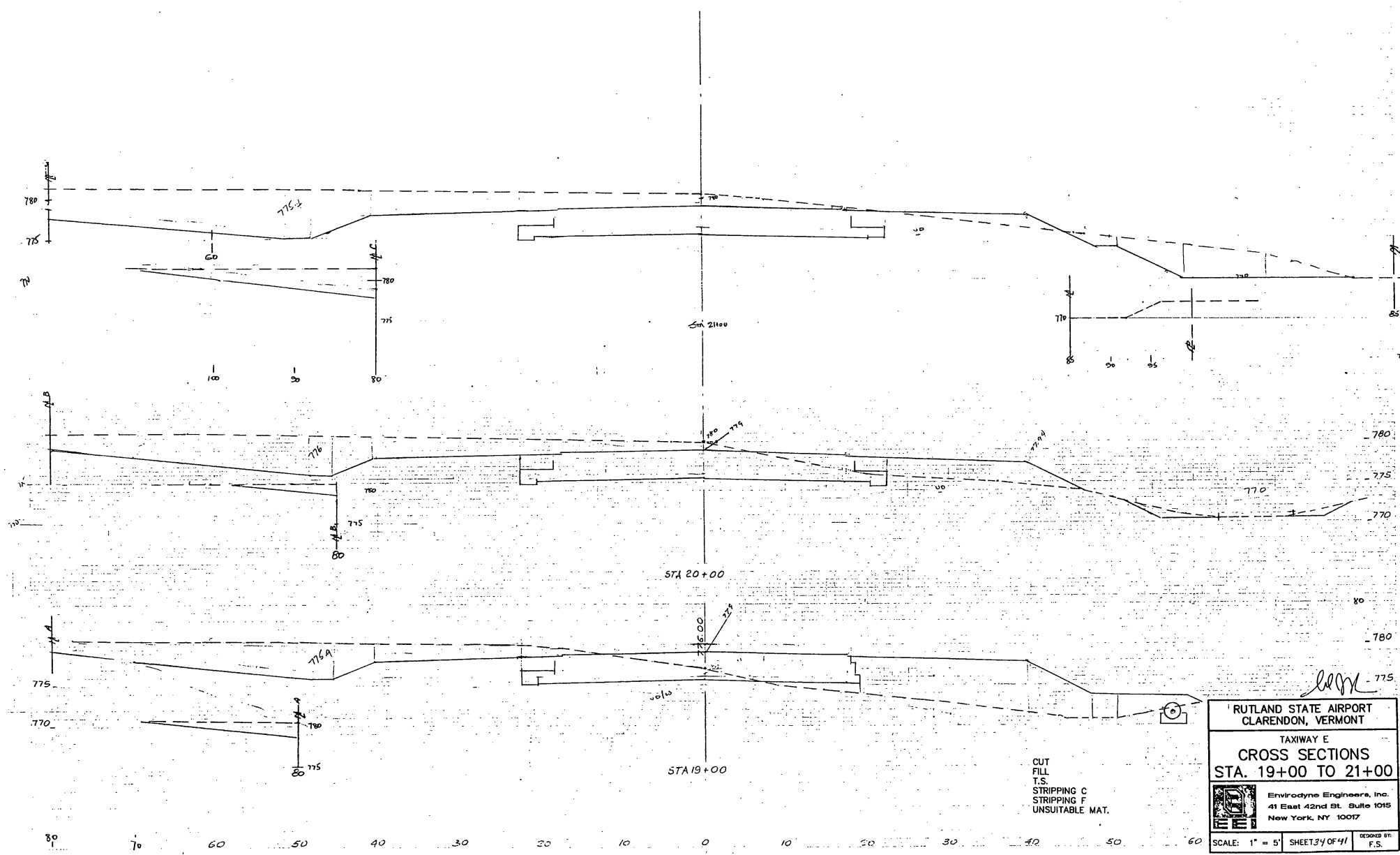


**RUTLAND STATE AIRPORT
CLARENDON, VERMONT**

**TAXIWAY E
CROSS SECTIONS
STA. 17+00 TO 18+00**

Envirodyne Engineers, Inc.
41 East 42nd St. Suite 1015
New York, NY 10017

SCALE: 1" = 5' SHEET 33 OF 44 DESIGNED BY: F.S.

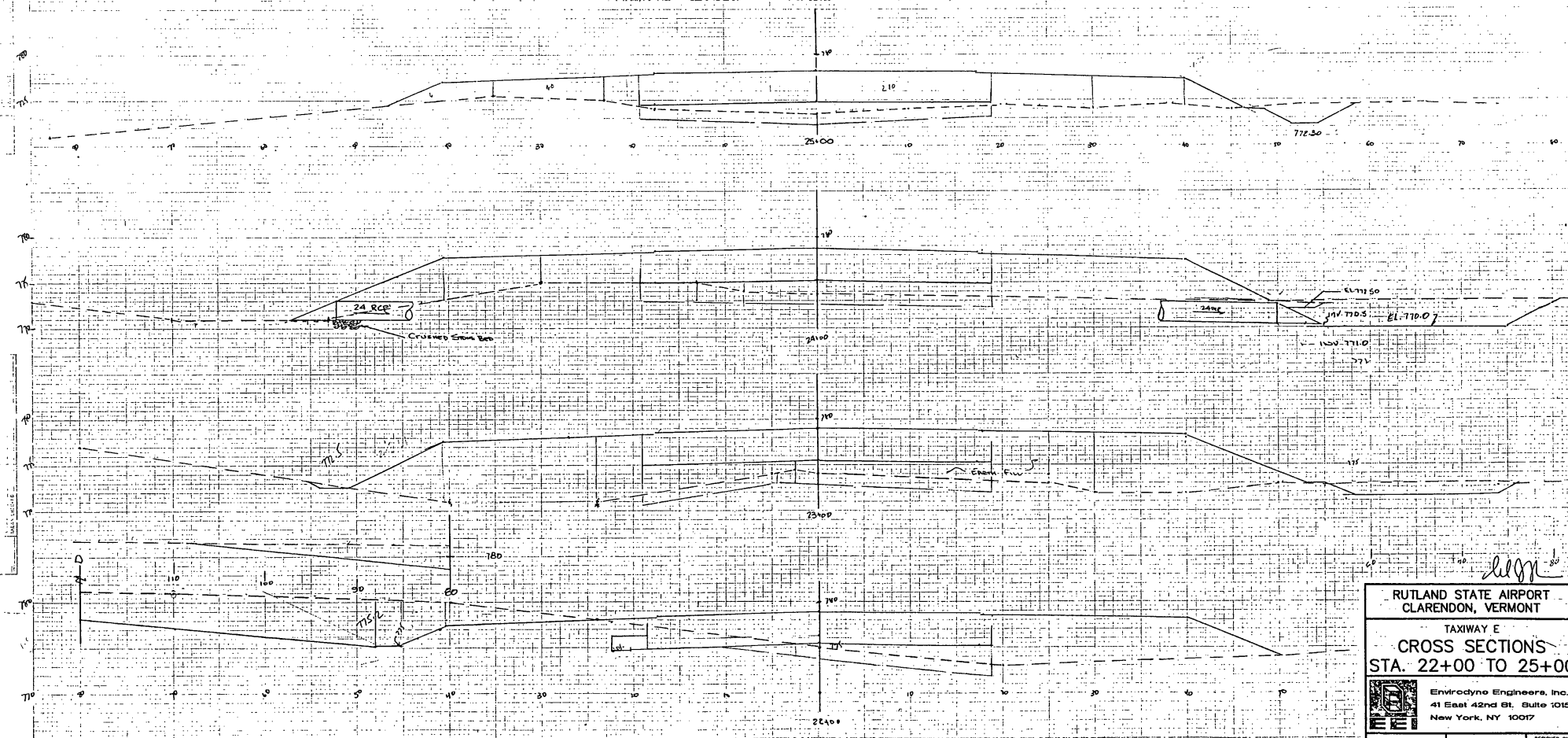


**RUTLAND STATE AIRPORT
CLARENDON, VERMONT**

**TAXIWAY E
CROSS SECTIONS
STA. 19+00 TO 21+00**

Envirodyne Engineers, Inc.
41 East 42nd St. Suite 1015
New York, NY 10017

SCALE: 1" = 5' **SHEET 34 OF 41** **DESIGNED BY: F.S.**

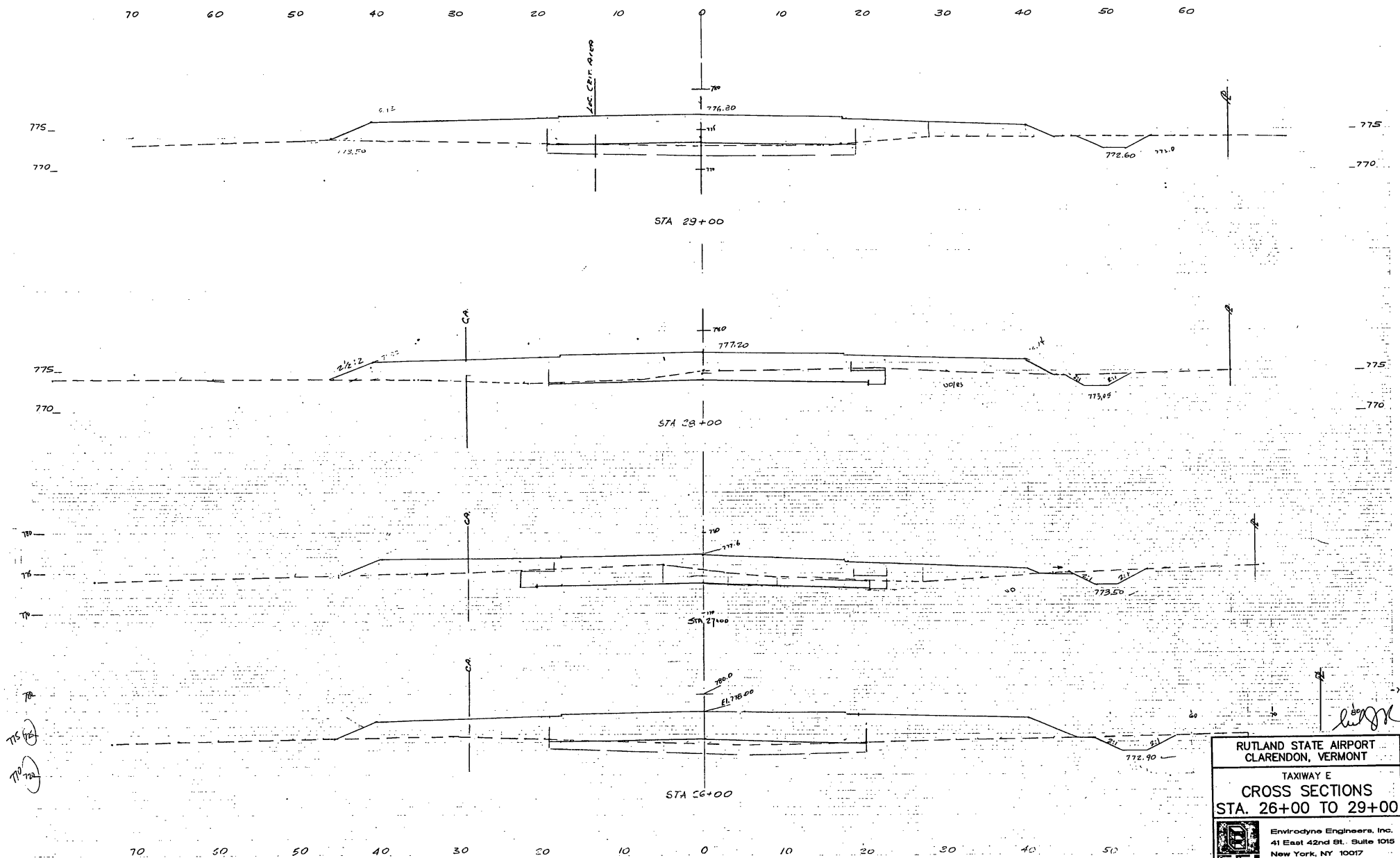


**RUTLAND STATE AIRPORT
CLARENDON, VERMONT**

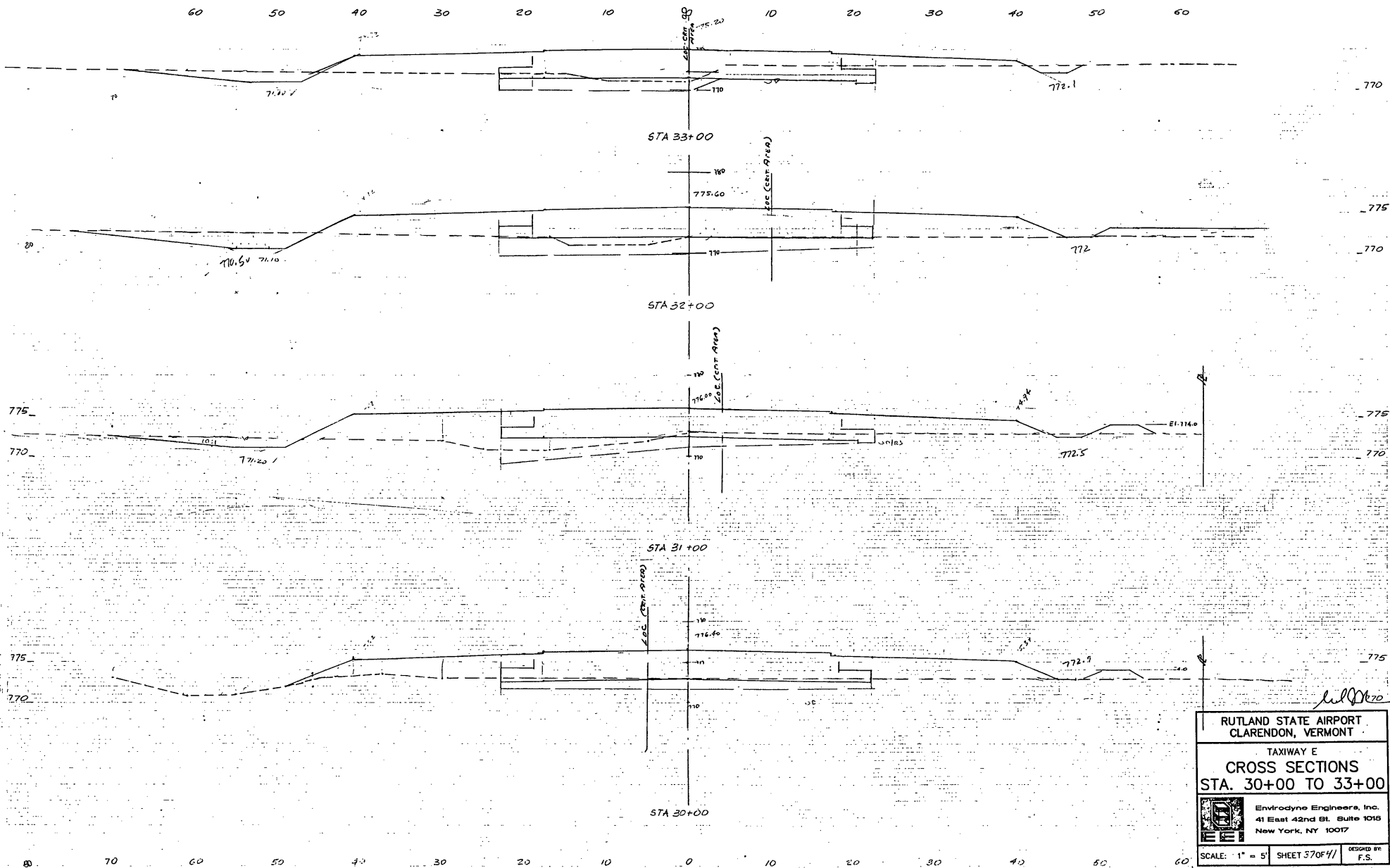
**TAXIWAY E
CROSS SECTIONS
STA. 22+00 TO 25+00**

Envirodyne Engineers, Inc.
41 East 42nd St. Suite 1015
New York, NY 10017

SCALE: 1" = 5' **SHEET 35 OF 41** **DESIGNED BY: F.S.**



RUTLAND STATE AIRPORT CLARENDON, VERMONT	
TAXIWAY E CROSS SECTIONS STA. 26+00 TO 29+00	
	Envirodyne Engineers, Inc. 41 East 42nd St. Suite 1015 New York, NY 10017
SCALE: 1" = 5'	SHEET 36 OF 41 DESIGNED BY F.S.

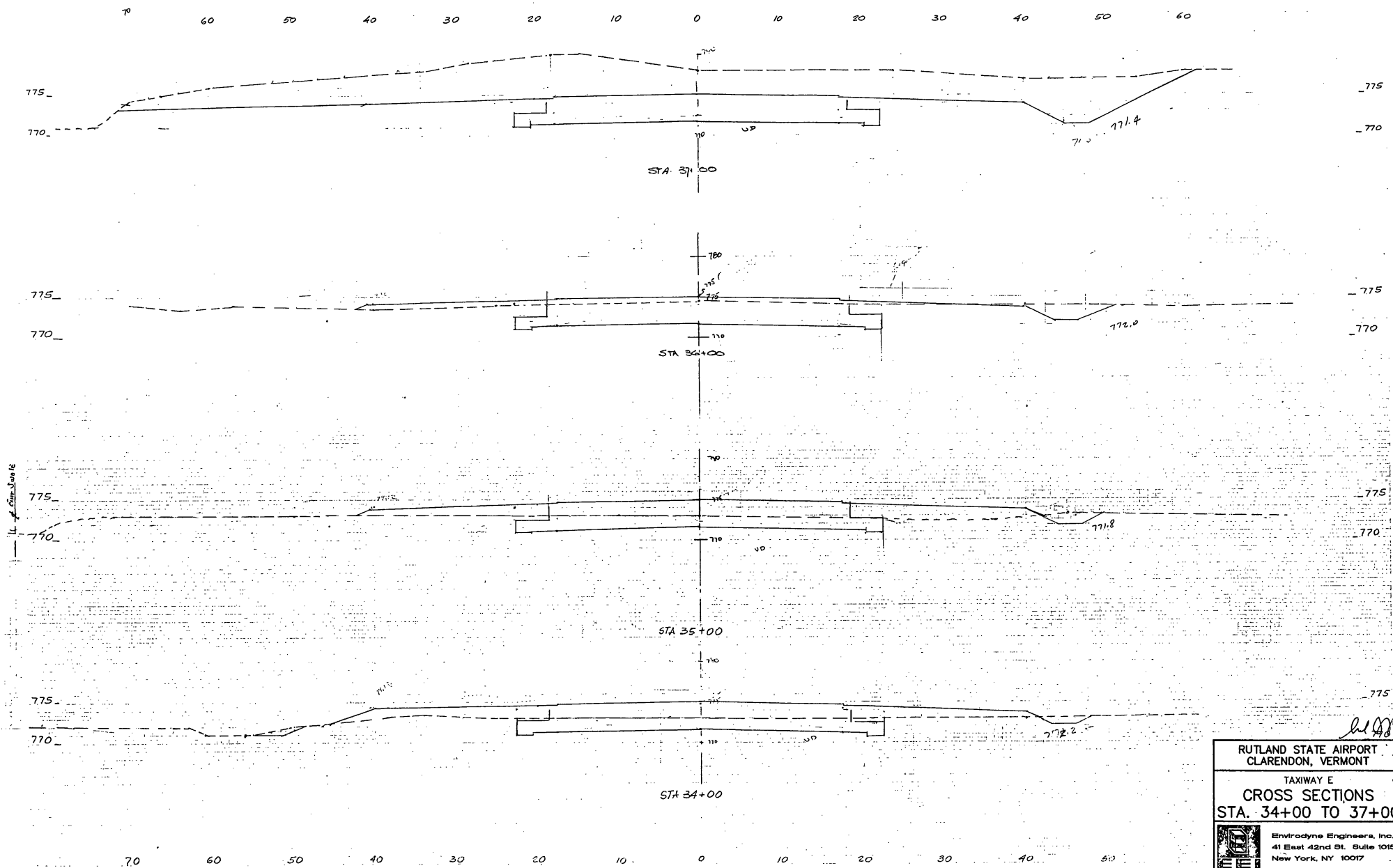


**RUTLAND STATE AIRPORT
CLARENDON, VERMONT**

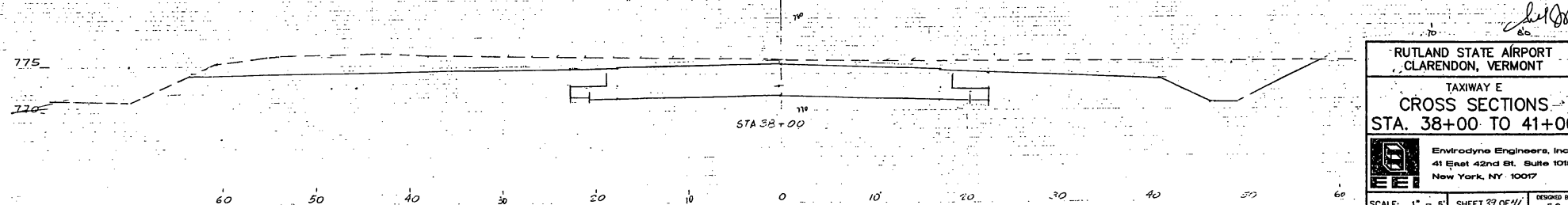
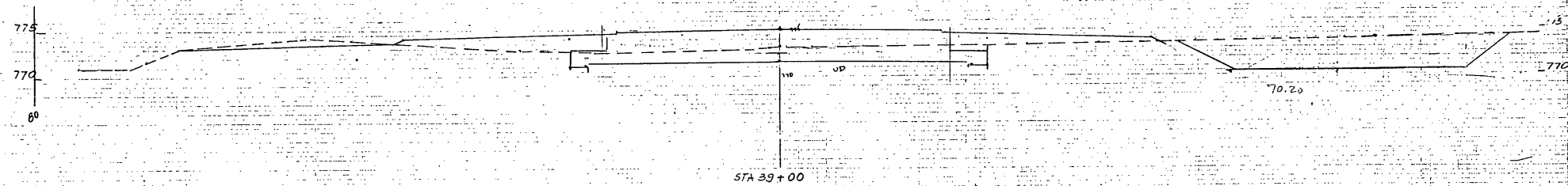
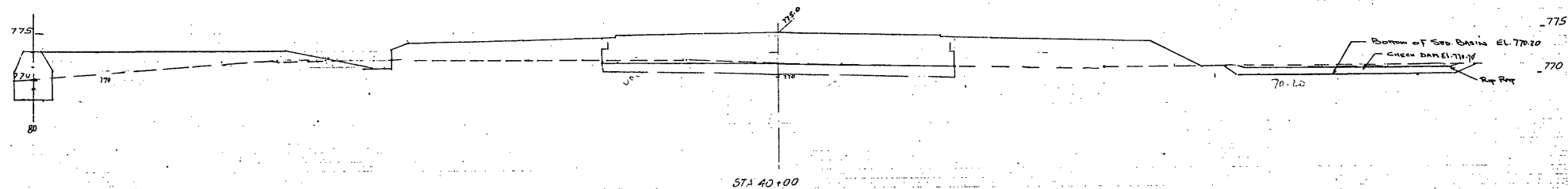
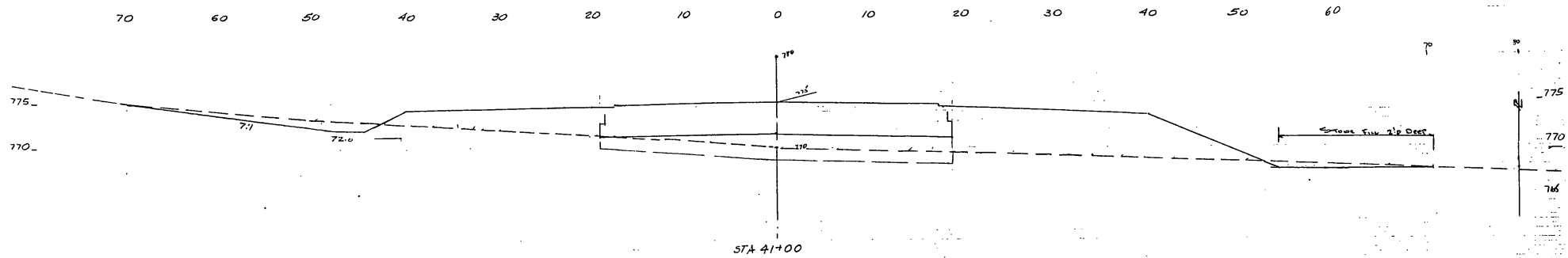
**TAXIWAY E
CROSS SECTIONS
STA. 30+00 TO 33+00**

Envirodyne Engineers, Inc.
41 East 42nd St. Suite 1015
New York, NY 10017

SCALE: 1" = 5' **SHEET 570F4/1** **DESIGNED BY: F.S.**



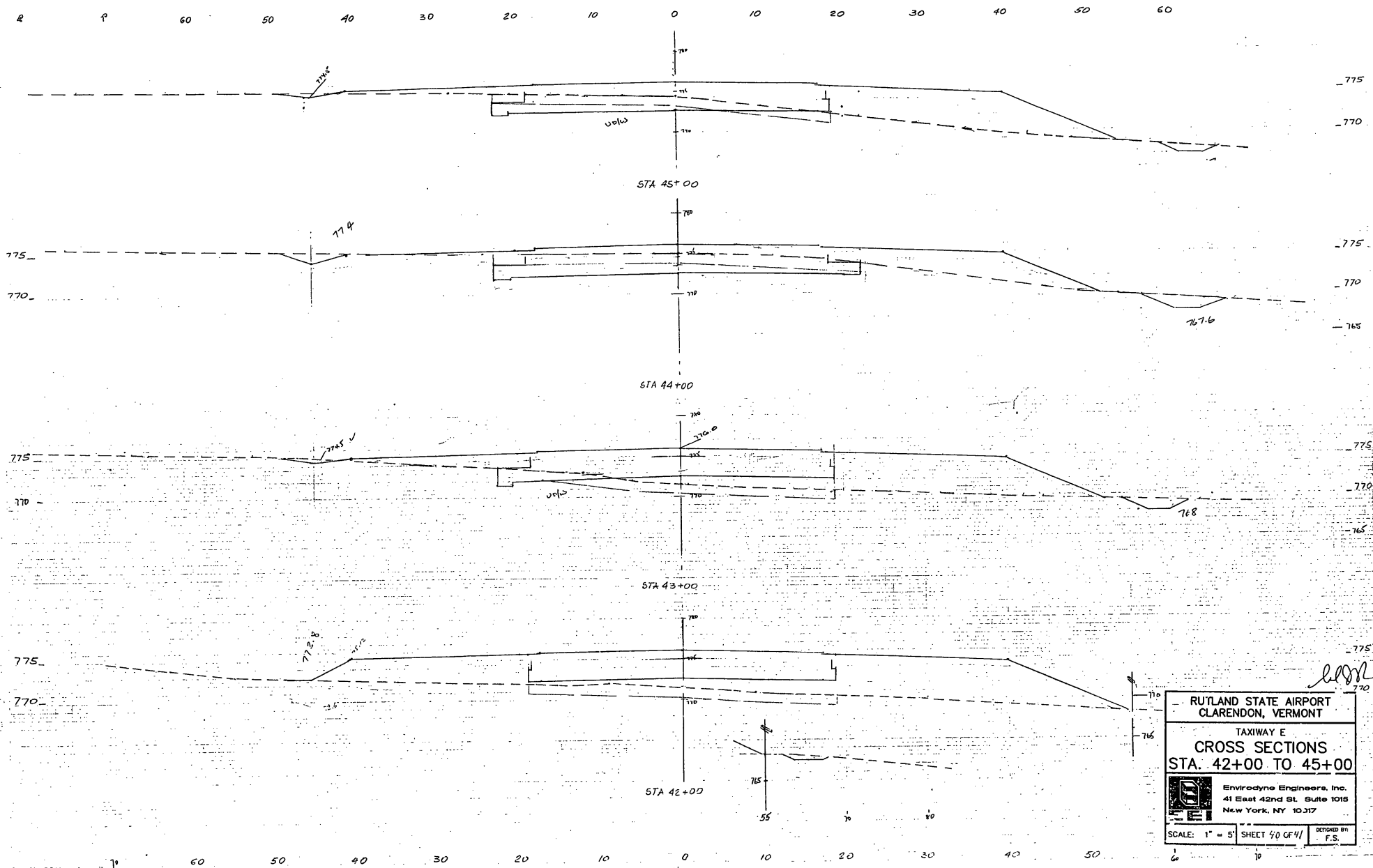
RUTLAND STATE AIRPORT CLARENDON, VERMONT	
TAXIWAY E	
CROSS SECTIONS	
STA. 34+00 TO 37+00	
	Envirodyne Engineers, Inc.
	41 East 42nd St. Suite 1015 New York, NY 10017
SCALE: 1" = 5'	SHEET 39 OF 41
DESIGNED BY: F.S.	



RUTLAND STATE AIRPORT
CLARENDON, VERMONT
TAXIWAY E
CROSS SECTIONS
STA. 38+00 TO 41+00

Envirotech Engineers, Inc.
 41 East 42nd St. Suite 1015
 New York, NY 10017

SCALE: 1" = 5' SHEET 39 OF 41 DESIGNED BY: F.S.

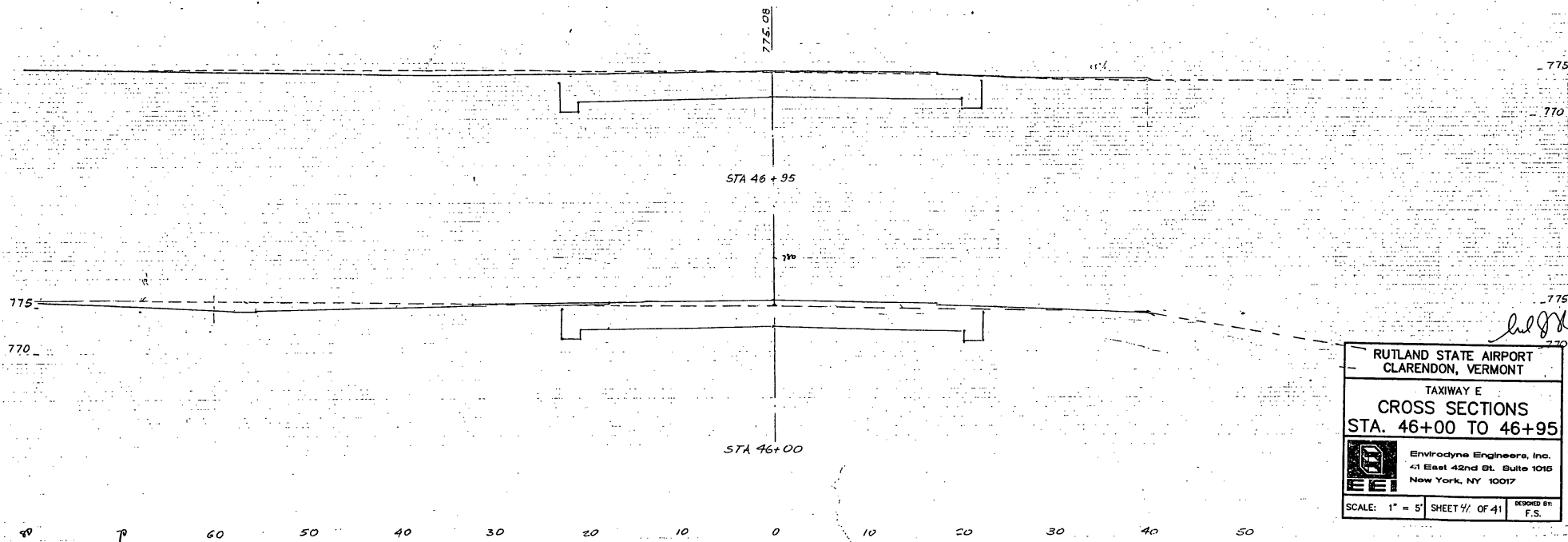


**RUTLAND STATE AIRPORT
CLARENDON, VERMONT**

**TAXIWAY E
CROSS SECTIONS
STA. 42+00 TO 45+00**

Envirodyne Engineers, Inc.
41 East 42nd St. Suite 1015
New York, NY 10017

SCALE: 1" = 5' **SHEET 40 OF 41** **DESIGNED BY: F.S.**

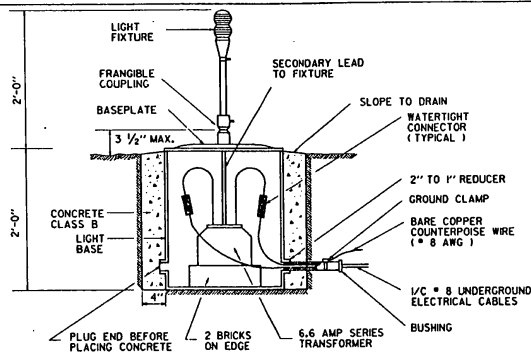


**RUTLAND STATE AIRPORT
CLARENDON, VERMONT**

**TAXIWAY E
CROSS SECTIONS
STA. 46+00 TO 46+95**

EEI Envirodyne Engineers, Inc.
41 East 42nd St, Suite 1016
New York, NY 10017

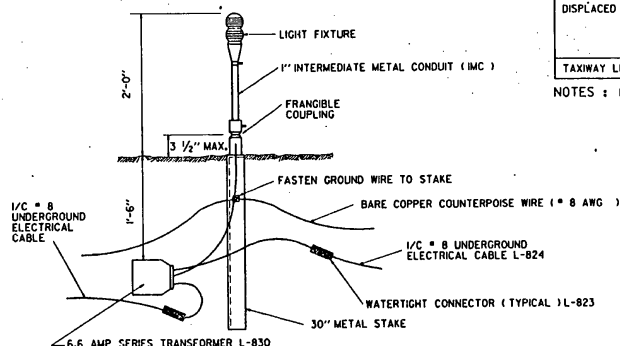
SCALE: 1" = 5' SHEET 41 OF 41 DESIGNED BY: F.S.



- NOTES :
1. PROVIDE 3 FEET OF SLACK IN CABLES AT TRANSFORMER.
 2. SEAL END OF CONDUIT (DUCT SEAL)
 3. PROVIDE 1/2" PER FT. PITCH ON ALL CONDUITS

BASE MOUNTED UNIT

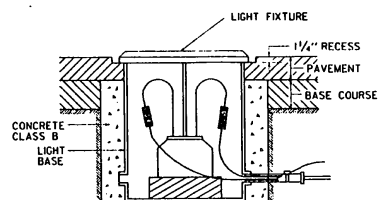
ELEVATED LIGHT
NO SCALE



- NOTES :
1. PROVIDE 3 FEET OF SLACK IN CABLES AT TRANSFORMER.
 2. 30" METAL STAKE SHALL BE MADE OF GALVANIZED STEEL ANGLE 2" x 2" x 1/4" WITH A SUITABLE TAPPED FITTING BOLTED AT THE TOP TO RECEIVE THE FRANGIBLE COUPLING.

STAKE MOUNTED UNIT

ELEVATED LIGHT
NO SCALE



NOTE : FOR ALL OTHER DETAILS, SEE
BASE MOUNTED UNIT FOR
ELEVATED LIGHT.

BASE MOUNTED UNIT

SEMI-FLUSH LIGHT
NO SCALE

LIGHT LOCATION	LAMP		LENS
	MEDIUM INTENSITY	HIGH INTENSITY	
RUNWAY EDGE LIGHT	6.6A, 30W	6.6A, 15-120W	360° CLEAR/180° YELLOW
RUNWAY THRESHOLD LIGHT	6.6A, 45W	6.6A, 15-120W	180° RED/180° GREEN
DISPLACED THRESHOLD LIGHT	6.6A, 30/45W	6.6A, 15-120W	360° RED
			180° RED/180° CLEAR
TAXIWAY LIGHT	6.6A, 30W		180° OBSCURED/180° GREEN
			180° CLEAR/180° GREEN
			360° BLUE

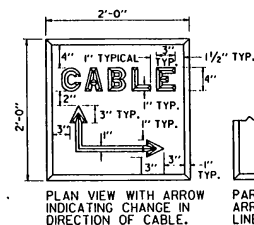
NOTES : 1. SEE PLAN SHEET FOR LENS/LIGHT TYPE.

NOTE : AIRPORT LIGHT BASES SHOULD BE CONSTRUCTED TO FAA SPECIFICATIONS. SEE CURRENT ADVISORY CIRCULAR.

NOTES

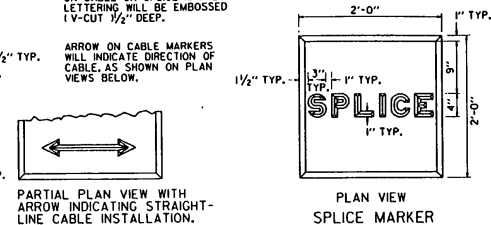
HAND LETTERING NOT ALLOWED ON CABLE OR SPLICE MARKERS. LETTERING WILL BE EMBOSSED (1/2" CUT 1/2" DEEP).

ARROW ON CABLE MARKERS WILL INDICATE DIRECTION OF CABLE, AS SHOWN ON PLAN VIEWS BELOW.



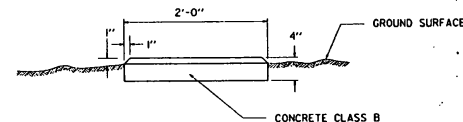
PLAN VIEW WITH ARROW INDICATING DIRECTION OF CABLE.

CABLE MARKER

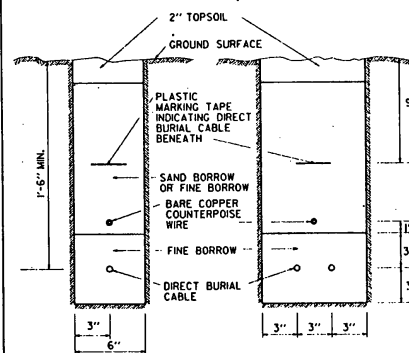


PLAN VIEW
SPLICE MARKER

NOTE : SEE STANDARD AP-3 FOR UNDERGROUND ELECTRICAL DUCT DETAILS.



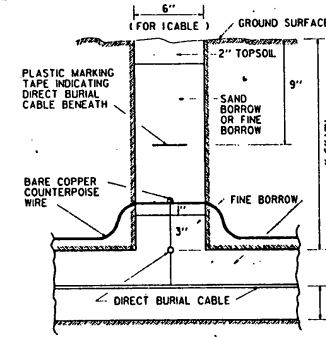
ELEVATION VIEW (TYPICAL FOR CABLE AND SPLICE MARKERS)
CABLE AND SPLICE MARKERS
NO SCALE



SINGLE CABLE INSTALLATION

TWO CABLE INSTALLATION

NOTE : FOR MULTIPLE-CABLE INSTALLATIONS, PROVIDE 3" ADDITIONAL TRENCH WIDTH FOR EACH ADDITIONAL CABLE.



CABLE TRENCH WITH CABLE CROSSING

NOTE : UNDERGROUND ELECTRICAL CABLE SHOULD BE CONSTRUCTED TO FAA SPECIFICATION. SEE CURRENT ADVISORY CIRCULAR.

UNDERGROUND ELECTRICAL CABLE INSTALLATION
TRENCH DETAILS
(IN EARTH OR ROCK)
NO SCALE

REVISIONS AND CORRECTIONS
SHEET UPDATED MARCH 1, 1990

APPROVED

March 2, 1990
DATE

Director, Planning and
Construction
Director, Design Division

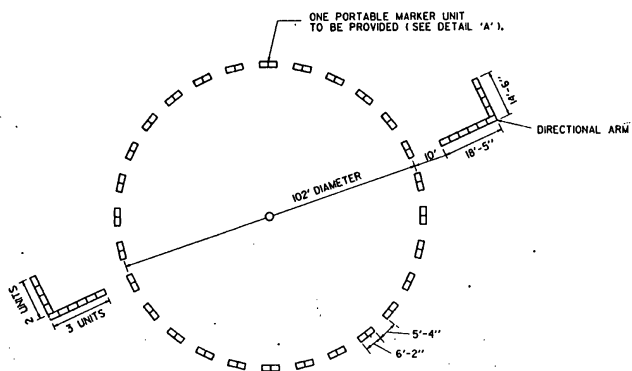
LIGHTING & ELECTRICAL DETAILS



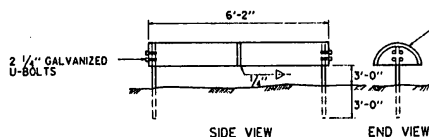
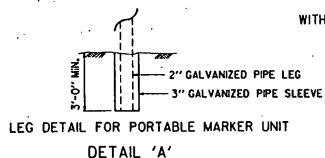
STANDARD
AP-2

NOTES

1. THE LOCATION OF THE PORTABLE MARKER UNIT SHALL BE AS ORDERED BY THE ENGINEER.
2. DIRECTIONAL ARMS ARE INSTALLED ONLY ON AIRPORTS WITH A NON-STANDARD TRAFFIC PATTERN (RIGHT-HAND PATTERN). WHEN INSTALLED, DIRECTIONAL ARMS WILL BE MAGNETICALLY ORIENTED TO THE RUNWAY AND WILL SHOW TRAFFIC PATTERN ON EACH RUNWAY.



SEGMENTED CIRCLE LAYOUT
WITH DIRECTIONAL ARMS

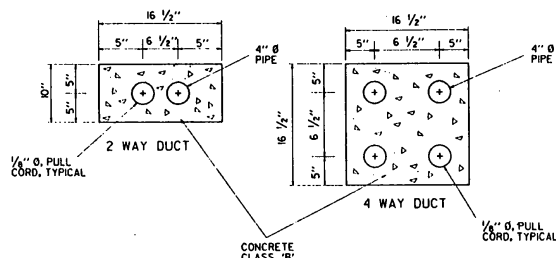


SEGMENTED CIRCLE MARKER UNIT

MARKER UNIT — STANDARD 55 GALLON METAL DRUM, CUT IN HALF AND WELDED END TO END. MARKER UNITS TO BE PAINTED AVIATION ORANGE.

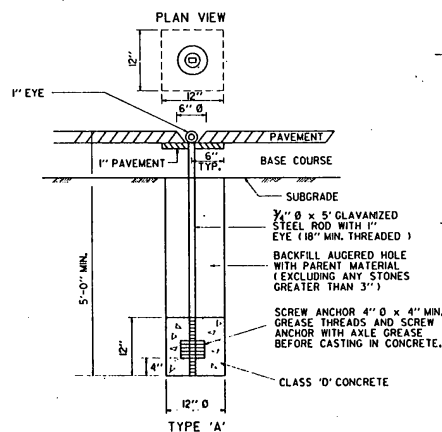
PORTABLE UNIT HAS LEGS OF 2" Ø GALVANIZED PIPE. STATIONARY UNITS HAVE LEGS OF 2" Ø GALVANIZED PIPE OR 1 1/2" x 3/8" L GALV. L.

SECTION A-A

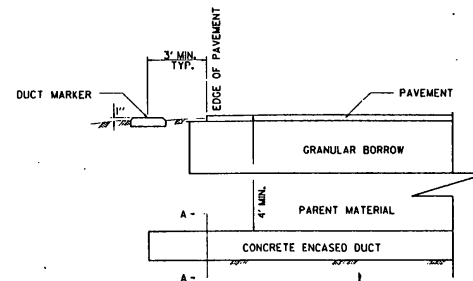


ALL DUCTS, EXCEPT STEEL CONDUIT, INSTALLED UNDER RUNWAYS, TAXIWAYS, APRONS, AND OTHER PAVED AREAS SHALL BE ENCASED IN A CONCRETE ENVELOPE

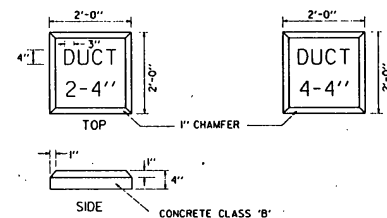
SEE STANDARD AP-2 FOR DIRECT BURIAL CABLE DETAILS.



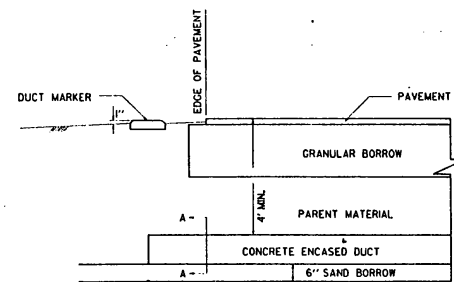
AIRCRAFT TIE DOWN ANCHOR



AIRPORT UNDERGROUND ELECTRICAL DUCT
(IN EARTH)



1. LETTERING ON DUCT MARKERS TO BE EMBOSSED, 1/4" CUT, 1/2" DEEP.
2. HAND LETTERING NOT ALLOWED



AIRPORT UNDERGROUND ELECTRICAL DUCT
(IN ROCK)

REVISIONS AND CORRECTIONS
SHEET UPDATED MARCH 5, 1990

APPROVED

March 18, 1990
DATE

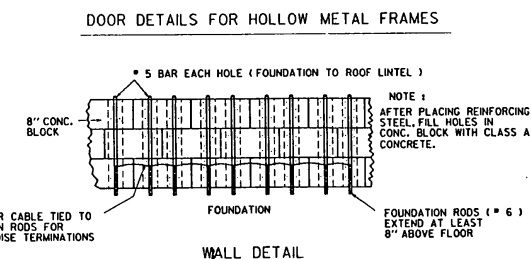
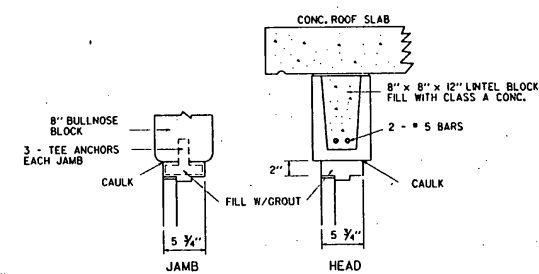
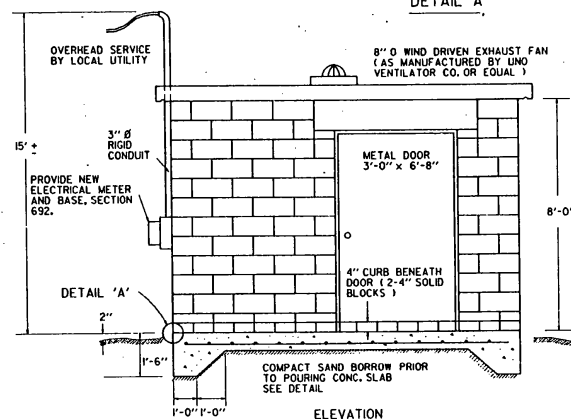
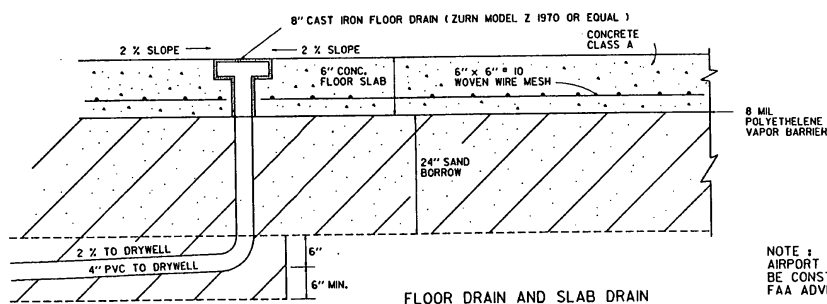
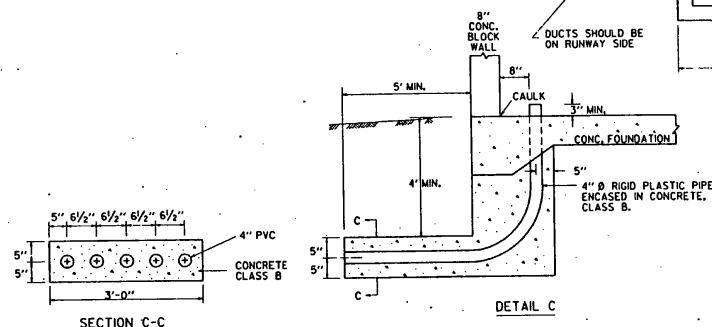
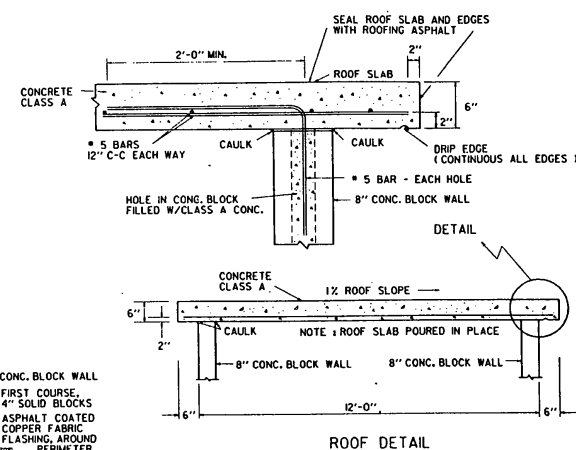
Stephen D. McArthur
DIRECTOR, PLANNING AND
PRECONSTRUCTION
Director, DESIGN DIVISION

MISCELLANEOUS AIRPORT DETAILS



STANDARD
AP-3

- 1 MOUNT CONTACTORS, BOOSTER TRANSFORMERS AND MISC. HARDWARE ON SAME WALL AS NEW 12 CIRCUIT PANEL BOX.
- 2 PROVIDE GROUND BUS BENEATH 12 CIRCUIT PANEL BOX.
- 3 INSTALL ELECTRIC PANEL ON 3/4" PLYWOOD, SET OFF FROM WALL ON 2" x 4" b. ALL WOOD TO BE PAINTED.
- 4 PROVIDE AT LEAST 1% ROOF SLOPE (TO EAST).
- 5 FOUNDATION FLOOR TO SLOPE TO CENTER OF VAULT.
- 6 FIRST COURSE OF BLOCKS ON FOUNDATION TO BE TWO 4" SOLID BLOCKS WITH COPPER FABRIC FLASHING BETWEEN - SEE DETAIL A.
- 7 PROVIDE ALUMINUM BIRD AND INSECT SCREEN AT AIR INTAKE ON LOUVER AND EXHAUST VENT.
- 8 CAULK AT ALL METAL TO CONCRETE INTERFACES.
- 9 PROVIDE DOOR BUMPER ON WALL AND STRIKE SIDE OF JAMB.
- 10 ELECTRICAL PANEL BOARD AND METER INCLUDED IN , AIRPORT TRANSFORMER VAIL LOUP.
- 11 CONCRETE BLOCK WALLS AND CONCRETE CEILING SHALL BE SEALED WITH TWO COATS OF APPROVED SEALER. A FINAL COAT OF WHITE PAINT SHALL BE APPLIED OVER THE SEALER.
- 12 ALL CAULKING SHALL BE ASPHALTIC JOINT COMPOUND.



NOTE :
AIRPORT TRANSFORMER HOUSING TO
BE CONSTRUCTED AS PER CURRENT
FAA ADVISORY CIRCULAR.

AIRPORT TRANSFORMER VAULT

4.0 COPPER CABLE TIED TO FOUNDATION RODS FOR COUNTERPOISE TERMINATIONS

WALL DETAIL

APPROVED

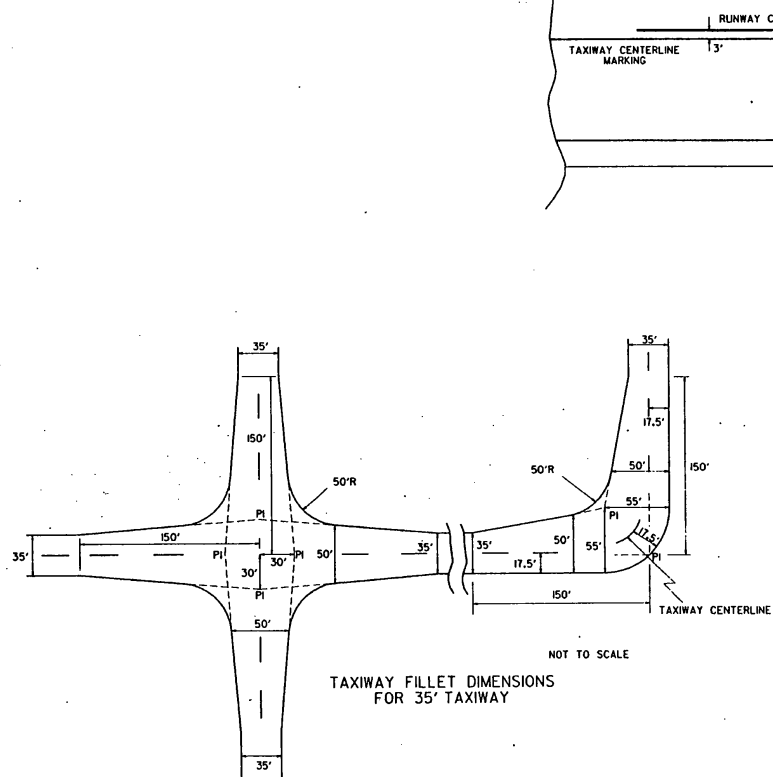
MARCH 15 1990
DATE

Charles S. MacArthur
DIRECTOR, PLANNING AND
PRECONSTRUCTION
Charles S. MacArthur
DIRECTOR, DESIGN DIVISION

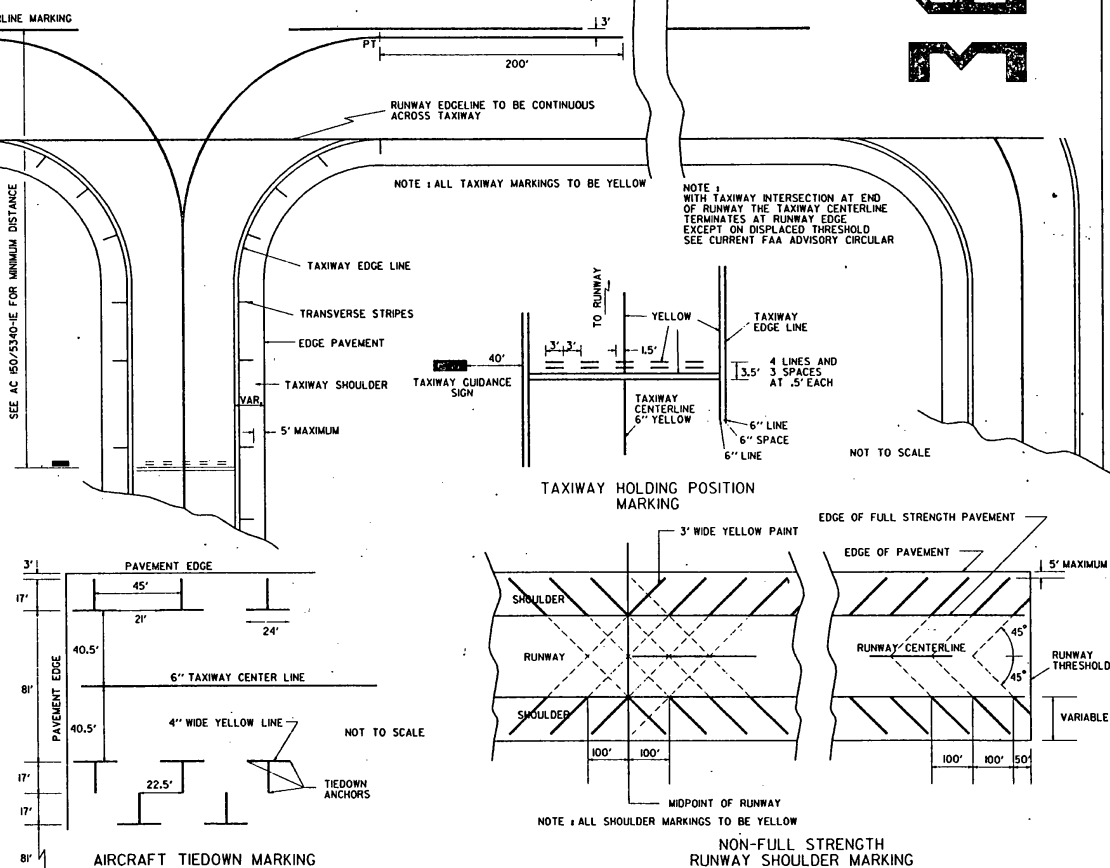
STANDARD
AP-9

NOTE :
ON LIGHT COLORED PAVEMENTS THE CONTRAST OF THE MARKINGS IS
TO BE INCREASED BY OUTLINING ALL MARKINGS WITH A 6" BLACK BORDER.

SEE STANDARD AP-10 FOR RUNWAY MARKING DETAILS



TAXIWAY FILLET DIMENSIONS
FOR 35' TAXIWAY



REVISIONS AND CORRECTIONS
SHEET UPDATED MARCH 1, 1990

APPROVED

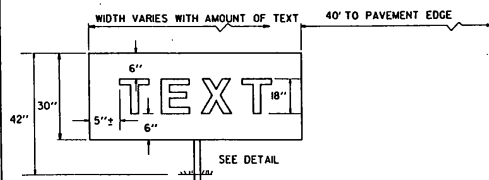
MARCH 15TH 1990
DATE

Gordon B. MacArthur
DIRECTOR, PLANNING AND
PRECONSTRUCTION
Robert M. Marbury
DIRECTOR, DESIGN DIVISION

TAXIWAY AND APRON MARKING DETAILS

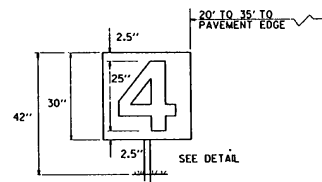
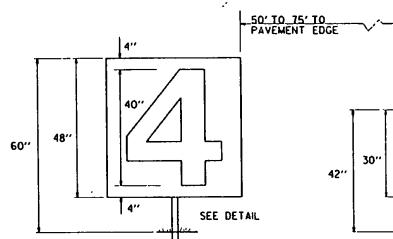


STANDARD
AP-11



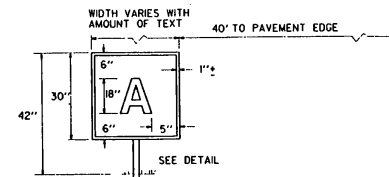
MANDATORY SIGNS

- MANDATORY SIGNS HAVE WHITE INSCRIPTIONS ON A RED BACKGROUND
- SIGNS TO BE LIGHTED WHEN USED ON CERTIFICATED AIRPORTS OR OTHER AIRPORTS HAVING INSTRUMENT OPERATIONS.
- UNLIGHTED, RETROREFLECTIVE SIGNS MAY BE USED AT GENERAL AVIATION AIRPORTS HAVING ONLY VISUAL FLIGHT (VFR) OPERATIONS.



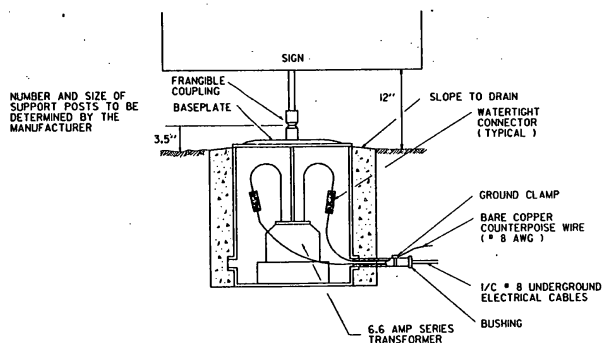
RUNWAY DISTANCE REMAINING SIGNS

- SIGNS HAVE WHITE INSCRIPTIONS ON A BLACK BACKGROUND.
- LARGE SIGNS USED IF PLACED 50 TO 75 FEET FROM PAVEMENT EDGE.
- SMALL SIGNS USED IF PLACED 20 TO 35 FEET FROM PAVEMENT EDGE.
- SIGN SIZE SHOULD BE CONSISTANT ALONG LENGTH OF EACH RUNWAY.
- ONLY LIGHTED SIGNS ARE USED FOR RUNWAY DISTANCE REMAINING SIGNS.
- SIGNS TO BE DOUBLE-SIDED, PREFERABLY LOCATED ON THE LEFT SIDE OF RUNWAY AS VIEWED FROM THE MOST OFTEN USED DIRECTION.

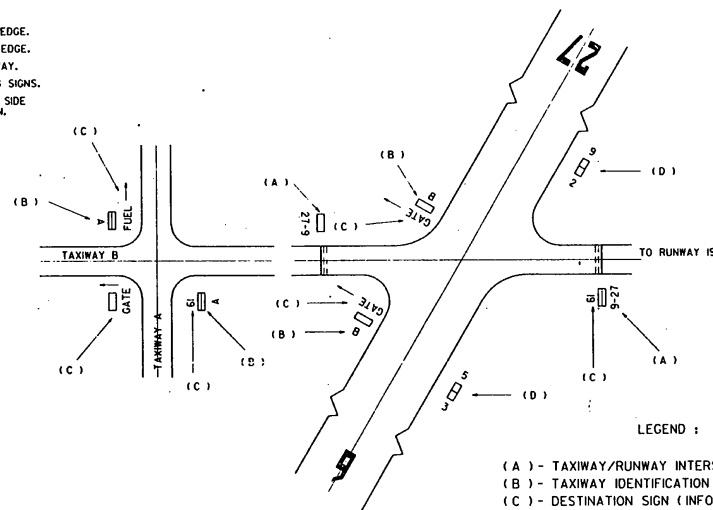


INFORMATION SIGNS

- INFORMATION SIGNS HAVE BLACK INSCRIPTIONS ON A YELLOW BACKGROUND, AND HAVE A BLACK BORDER.



BASE FOR LIGHTED SIGNS
DETAIL



LEGEND :

- (A) - TAXIWAY/RUNWAY INTERSECTION SIGN (MANDATORY TYPE)
- (B) - TAXIWAY IDENTIFICATION SIGN (INFORMATION TYPE)
- (C) - DESTINATION SIGN (INFORMATION TYPE)
- (D) - RUNWAY DISTANCE REMAINING SIGN

TYPICAL SIGN APPLICATIONS

REFER TO CURRENT FAA ADVISORY CIRCULAR .

REVISIONS AND CORRECTIONS
SHEET UPDATED MARCH 1, 1990

APPROVED

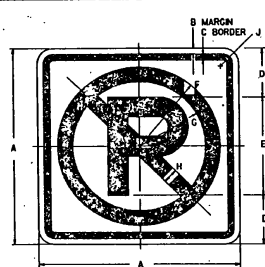
March 1, 1990
DATE

Stephen R. MacArthur
DIRECTOR, PLANNING AND
PRECONSTRUCTION
Robert M. Murphy
DIRECTOR, DESIGN DIVISION

SIGN SYSTEMS

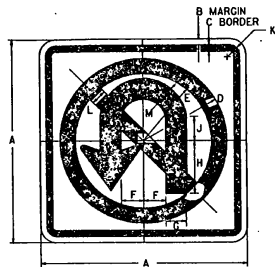


STANDARD
AP-12



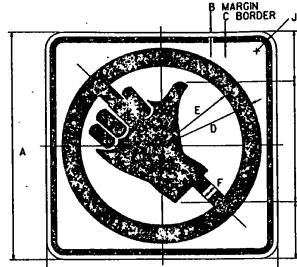
CIRCLE AND DIAGONAL - RED (REFL.)
SYMBOL AND BORDER - BLACK (NON - REFL.)
BACKGROUND - WHITE (REFL. - RURAL)

SIGN	A	B	C	D	E	F	G	H	J
URBAN MIN. AND STD.	12	3/4	3/4	3	6 1/2	4 3/4	3 1/2	1	1/2
RURAL MIN. AND STD.	24	3/4	3/4	6	12 1/2	10 1/4	8 1/2	2	1 1/2
EXPWY.	36	3/4	3/4	9	18 1/2	15 3/4	12 3/4	3	2 1/4
FWY.	48	3/4	3/4	12	24 1/2	21	17	4	3



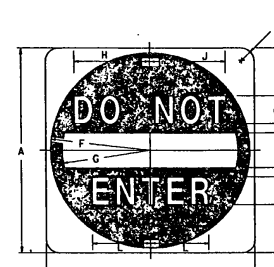
CIRCLE AND DIAGONAL - RED (REFL.)
ARROW AND BORDER - BLACK (NON - REFL.)
BACKGROUND - WHITE (REFL.)

SIGN	A	B	C	D	E	F	G	H	J	K	L	M
MIN. AND STD.	24	3/4	3/4	10 1/4	8 1/2	2 1/2	2 1/2	6	2 1/4	1 1/2	2	5
SPECIAL	30	1/2	3/4	13 1/4	10 3/4	3 3/4	7 1/2	2 3/4	1 1/2	2 1/4	6 1/4	
EXPWY.	36	3/4	3/4	15 3/4	12 3/4	3 3/4	9	3 3/4	2 1/4	3	7 1/4	
SPECIAL	48	3/4	3/4	21	17	5	12	4 1/2	3	4	10	



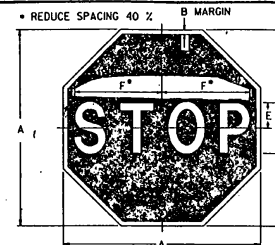
CIRCLE AND DIAGONAL - RED (REFL.)
SYMBOL AND BORDER - BLACK (NON - REFL.)
BACKGROUND - WHITE (REFL.)

SIGN	A	B	C	D	E	F	G	H	J
MIN.	18	3/4	3/4	7 1/4	6 3/4	1 1/2	3 3/4	10 1/2	1 1/2
STD.	24	3/4	3/4	10 1/4	8 1/2	2	5	14	1 1/2



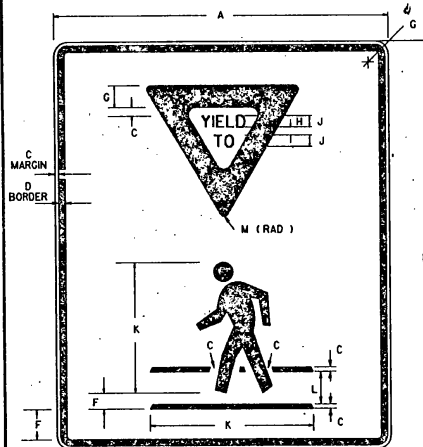
CIRCLE AND DIAGONAL - RED (REFL.)
SYMBOL AND BORDER - BLACK (NON - REFL.)
BACKGROUND - WHITE (REFL.)

SIGN	A	B	C	D	E	F	G	H	J	K	L
MIN. AND STD.	30	6 1/4	4D	2	5	14 1/2	12 1/2	9 3/4	10	1 1/2	1 1/2
EXPWY.	36	7 1/2	5D	2 1/2	6	17 1/2	15	12	12 1/2	2 1/4	2 3/4
SPECIAL	48	11	6D	3	8	23 1/2	20	14 1/2	15	3	3 1/4



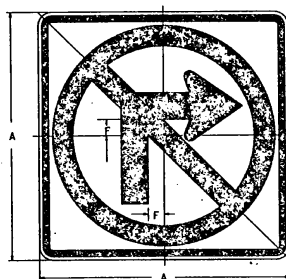
CIRCLE AND DIAGONAL - RED (REFL.)
SYMBOL AND BORDER - BLACK (NON - REFL.)
BACKGROUND - WHITE (REFL.)

SIGN	A	B	C	D	E	F
BIKE	18	3/4	6	6C	3	7 1/4
MIN.	24	3/4	8	8C	4	10
STD.	30	3/4	10	10C	5	12 1/2
EXPWY.	36	3/4	12	12C	6	15
SPECIAL	48	3/4	16	16C	8	20



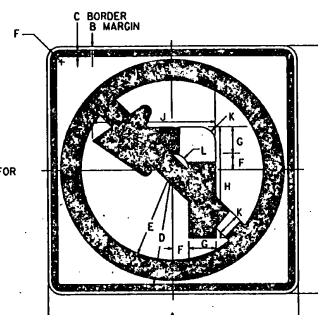
CIRCLE AND DIAGONAL - RED (REFL.)
SYMBOL AND BORDER - BLACK (NON - REFL.)
BACKGROUND - WHITE (REFL.)

SIGN	A	B	C	D	E	F	G	H	J	K	L	M
SMALL	18	24	3/4	3/4	11	3/4	1/4	3/4	9	1 1/4	1 1/4	
LARGE	24	30	1 1/4	1 1/4	13 1/4	1 1/4	1 1/4	2	12	1 1/4	2 3/4	



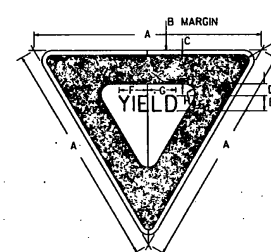
CIRCLE AND DIAGONAL - RED (REFL.)
SYMBOL AND BORDER - BLACK (NON - REFL.)
BACKGROUND - WHITE (REFL.)

SIGN	A	B	C	D	E	F	G	H	J
MIN.	30	18	3/4	3	5D	2	8 1/4	6 1/4	1 1/2
STD.	36	24	1 1/4	4	6D	3	10 1/4	8 1/4	1 1/2
SPECIAL	48	30	1 3/4	5	8D	4	12 1/4	10 1/4	1 3/4



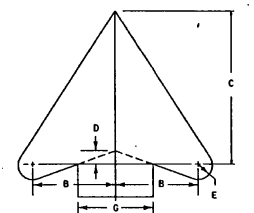
CIRCLE AND DIAGONAL - RED (REFL.)
ARROW AND BORDER - BLACK (NON - REFL.)
BACKGROUND - WHITE (REFL.)

SIGN	A	B	C	D	E	F	G	H	J	K	L
MIN. AND STD.	24	3/4	3/4	10 1/4	8 1/2	2 1/2	2 1/2	6	2 1/4	1 1/2	2 1/2
SPECIAL	30	1/2	3/4	13 1/4	10 3/4	3 3/4	7 1/2	2 3/4	1 1/2	2 1/4	6 1/4
EXPWY.	36	3/4	3/4	15 3/4	12 3/4	3 3/4	9	3 3/4	2 1/4	3	7 1/4
SPECIAL	48	3/4	3/4	21	17	5	12	4 1/2	3	4	10



CIRCLE AND DIAGONAL - RED (REFL.)
SYMBOL AND BORDER - BLACK (NON - REFL.)
BACKGROUND - WHITE (REFL.)

SIGN	A	B	C	D	E	F	G	H	J
BIKE	24	3/4	3/4	10 1/4	8 1/2	2 1/2	2 1/2	6	2 1/4
MIN.	30	3/4	3/4	13 1/4	10 3/4	3 3/4	7 1/2	2 3/4	1 1/2
STD.	36	3/4	3/4	15 3/4	12 3/4	3 3/4	9	3 3/4	2 1/4
EXPWY.	48	1	6	2 1/4	4C	6 1/4	5 1/4	2	3
SPECIAL	60	1 1/2	8	3 1/4	5C	7 1/4	6 1/4	2 1/4	4



ARROW HEAD	SIZE	B	C	D	E
MIN. AND STD.	24x24	2 1/4	5 1/4	3/4	1 1/2
SPECIAL	30x30	3 1/4	6 3/4	1 1/4	2 1/4
EXPWY.	36x36	4 1/4	8 1/4	1 3/4	3 1/4
SPECIAL	48x48	5 3/4	10 3/4	2 1/4	4

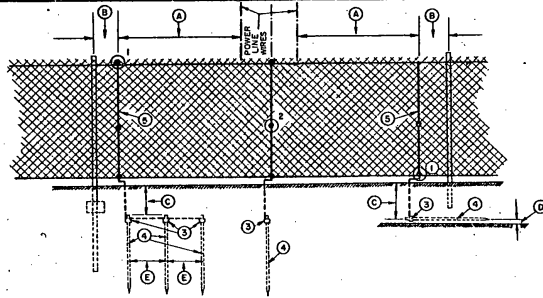
COLORS:

THE REGULATORY SIGNS SHOWN ON THIS SHEET SHALL BE AS DETAILED FOR EACH SIGN. THE COLORS SHALL CONFORM WITH THE COLORS ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS AND APPROVED BY THE DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.

MATERIALS:

THE SIGN BASE MATERIALS USED FOR THE REGULATORY SIGNS SHOWN ON THIS SHEET MAY BE ANY FOLLOWING OF THE MINIMUM THICKNESS NOTED.

24" x 24"	36" x 24"
30" x 30"	36" x 36"
36" x 36"	48" x 48"
48" x 48"	60" x 60"
60" x 60"	72" x 72"
72" x 72"	84" x 84"
84" x 84"	96" x 96"
96" x 96"	108" x 108"
108" x 108"	120" x 120"
120" x 120"	132" x 132"
132" x 132"	144" x 144"
144" x 144"	156" x 156"
156" x 156"	168" x 168"
168" x 168"	180" x 180"
180" x 180"	192" x 192"
192" x 192"	204" x 204"
204" x 204"	216" x 216"
216" x 216"	228" x 228"
228" x 228"	240" x 240"
240" x 240"	252" x 252"
252" x 252"	264" x 264"
264" x 264"	276" x 276"
276" x 276"	288" x 288"
288" x 288"	300" x 300"
300" x 300"	312" x 312"
312" x 312"	324" x 324"
324" x 324"	336" x 336"
336" x 336"	348" x 348"
348" x 348"	360" x 360"
360" x 360"	372" x 372"
372" x 372"	384" x 384"
384" x 384"	396" x 396"
396" x 396"	408" x 408"
408" x 408"	420" x 420"
420" x 420"	432" x 432"
432" x 432"	444" x 444"
444" x 444"	456" x 456"
456" x 456"	468" x 468"
468" x 468"	480" x 480"
480" x 480"	492" x 492"
492" x 492"	504" x 504"
504" x 504"	516" x 516"
516" x 516"	528" x 528"
528" x 528"	540" x 540"
540" x 540"	552" x 552"
552" x 552"	564" x 564"
564" x 564"	576" x 576"
576" x 576"	588" x 588"
588" x 588"	600" x 600"
600" x 600"	612" x 612"
612" x 612"	624" x 624"
624" x 624"	636" x 636"
636" x 636"	648" x 648"
648" x 648"	660" x 660"
660" x 660"	672" x 672"
672" x 672"	684" x 684"
684" x 684"	696" x 696"
696" x 696"	708" x 708"
708" x 708"	720" x 720"
720" x 720"	732" x 732"
732" x 732"	744" x 744"
744" x 744"	756" x 756"
756" x 756"	768" x 768"
768" x 768"	780" x 780"
780" x 780"	792" x 792"
792" x 792"	804" x 804"
804" x 804"	816" x 816"
816" x 816"	828" x 828"
828" x 828"	840" x 840"
840" x 840"	852" x 852"
852" x 852"	864" x 864"
864" x 864"	876" x 876"
876" x 876"	888" x 888"
888" x 888"	900" x 900"
900" x 900"	912" x 912"
912" x 912"	924" x 924"
924" x 924"	936" x 936"
936" x 936"	948" x 948"
948" x 948"	960" x 960"
960" x 960"	972" x 972"
972" x 972"	984" x 984"
984" x 984"	996" x 996"
996" x 996"	1008" x 1008"
1008" x 1008"	1020" x 1020"
1020" x 1020"	1032" x 1032"
1032" x 1032"	1044" x 1044"
1044" x 1044"	1056" x 1056"
1056" x 1056"	1068" x 1068"
1068" x 1068"	1080" x 1080"
1080" x 1080"	1092" x 1092"
1092" x 1092"	1104" x 1104"
1104" x 1104"	1116" x 1116"
1116" x 1116"	1128" x 1128"
1128" x 1128"	1140" x 1140"
1140" x 1140"	1152" x 1152"
1152" x 1152"	1164" x 1164"
1164" x 1164"	1176" x 1176"
1176" x 1176"	1188" x 1188"
1188" x 1188"	1200" x 1200"
1200" x 1200"	1212" x 1212"
1212" x 1212"	1224" x 1224"
1224" x 1224"	1236" x 1236"
1236" x 1236"	1248" x 1248"
1248" x 1248"	1260" x 1260"
1260" x 1260"	1272" x 1272"
1272" x 1272"	1284" x 1284"
1284" x 1284"	1296" x 1296"
1296" x 1296"	1308" x 1308"
1308" x 1308"	1320" x 1320"
1320" x 1320"	1332" x 1332"
1332" x 1332"	1344" x 1344"
1344" x 1344"	1356" x 1356"
1356" x 1356"	1368" x 1368"
1368" x 1368"	1380" x 1380"
1380" x 1380"	1392" x 1392"
1392" x 1392"	1404" x 1404"
1404" x 1404"	1416" x 1416"
1416" x 1416"	1428" x 1428"
1428" x 1428"	1440" x 1440"
1440" x 1440"	1452" x 1452"
1452" x 1452"	1464" x 1464"
1464" x 1464"	1476" x 1476"
1476" x 1476"	1488" x 1488"
1488" x 1488"	1500" x 1500"
1500" x 1500"	1512" x 1512"
1512" x 1512"	1524" x 1524"
1524" x 1524"	1536" x 1536"
1536" x 1536"	1548" x 1548"
1548" x 1548"	1560" x 1560"
1560" x 1560"	1572" x 1572"
1572" x 1572"	1584" x 1584"
1584" x 1584"	1596" x 1596"
1596" x 1596"	1608" x 1608"
1608" x 1608"	1620" x 1620"
1620" x 1620"	1632" x 1632"
1632" x 1632"	1644" x 1644"
1644" x 1644"	1656" x 1656"
1656" x 1656"	1668" x 1668"
1668" x 1668"	1680" x 1680"
1680" x 1680"	1692" x 1692"
1692" x 1692"	1704" x 1704"
1704" x 1704"	1716" x 1716"
1716" x 1716"	1728" x 1728"
1728" x 1728"	1740" x 1740"
1740" x 1740"	1752" x 1752"
1752" x 1752"	1764" x 1764"
1764" x 1764"	1776" x 1776"
1776" x 1776"	1788" x 1788"
1788" x 1788"	1800" x 1800"
1800" x 1800"	1812" x 1812"
1812" x 1812"	1824" x 1824"
1824" x 1824"	1836" x 1836"
1836" x 1836"	1848" x 1848"
1848" x 1848"	1860" x 1860"
1860" x 1860"	1872" x 1872"
1872" x 1872"	1884" x 1884"
1884" x 1884"	1896" x 1896"
1896" x 1896"	1908" x 1908"
1908" x 1908"	1920" x 1920"
1920" x 1920"	1932" x 1932"
1932" x 1932"	1944" x 1944"
1944" x 1944"	1956" x 1956"
1956" x 1956"	1968" x 1968"
1968" x 1968"	1980" x 1980"
1980" x 1980"	1992" x 1992"
1992" x 1992"	2004" x 2004"
2004" x 2004"	2016" x 2016"
2016" x 2016"	2028" x 2028"
2028" x 2028"	2040" x 2040"
2040" x 2040"	2052" x 2052"
2052" x 2052"	2064" x 2064"



- (A) 25'-0" OR TO 10' ± 0.5' FROM NEAREST FENCE POST (AT RIGHT ANGLE TO POWER LINE)
 (B) MAXIMUM DISTANCE 10' (± 0.5')
 (C) MINIMUM DISTANCE 10' (± 1.0')
 (D) 2'-0" (± 0.5')
 (E) MINIMUM DISTANCE 6'-0"
 (F) CONNECTOR, SUITABLE FOR WIRE GAUGES UTILIZED AND FOR DISSIMILAR METALS
 (G) GROUND ROD CLAMP
 (H) COPPER CLAD STEEL CORE GROUND ROD 5/8" X 6'-0"
 (I) CONDUCTOR NO. 6 AWG COPPER SOFT DRAWN OR NO. 4 AWG ALUMINUM

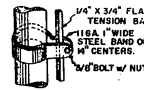
INSTALLATION METHOD OF PROTECTIVE GROUNDING AT POWER LINE CROSSINGS



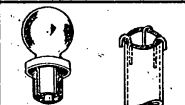
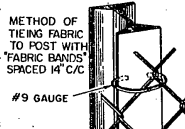
END CLAMP



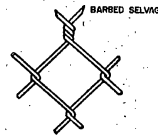
CORNER CLAMP (ADJUSTABLE)



TENSION BAR BAND

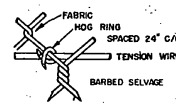


BALL TOP

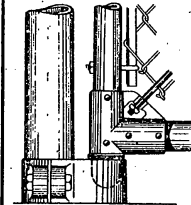


CHAIN LINK FABRIC

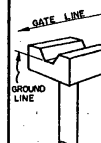
#9 GAUGE STEEL WIRE 2' MESH



HOG RING FASTENER



BOTTOM CORNER & HINGE FOR DRIVE GATE



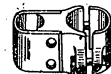
CENTER STOP FOR TWO PANEL GATES



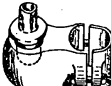
FORK LATCH



HOLDBACK TO HOLD A DRIVE GATE OPEN



TOP HINGE



WALK GATE BOTTOM HINGE

GENERAL NOTES (ZINC-COATED STEEL FABRIC ALUMINUM-COATED STEEL FABRIC VINYL COATED FABRIC)

HEIGHT... AS NOTED ON PLANS.
 FABRIC... CHAIN LINK, #9 GAUGE WIRE, WOVEN IN A 2' MESH. TOP AND BOTTOM SELVAGES TO BE BARBED. THE BOTTOM SELVAGE TO BE 2" ABOVE THE GROUND LINE, THE TOP SELVAGE TO BE 1" ABOVE THE TENSION WIRE. WHERE FENCE IS 4 FT. THE TOP EDGE SHALL BE KNUCKLED.
 LINE POSTS... 2" X 2 1/4" H" COLUMN, WEIGHT 4.1 LBS. PER FOOT OR 2 3/8" O.D. PIPE, WEIGHT 3.65 LBS. PER FOOT OR APPROVED EQUAL FOR FENCE 6'-0" AND OVER IN HEIGHT. FOR FENCE LESS THAN 6'-0" IN HEIGHT, 1 1/2" COLUMNS WEIGHING 2.70 LBS. PER FOOT SHALL BE USED.
 TERMINAL POSTS... END, CORNER AND PULL POSTS, SHALL BE 2 3/8" O.D. PIPE, WEIGHING 5.79 LBS. PER FOOT FOR FENCE 6'-0" AND OVER IN HEIGHT. FOR FENCE LESS THAN 6'-0" IN HEIGHT, 2 3/8" O.D. PIPE, WEIGHING 3.65 LBS. PER FOOT, SHALL BE USED.
 POST SPACING... POSTS SHALL BE SPACED EQUIDISTANT ON A MAXIMUM OF 10 FEET CENTER TO CENTER EXCEPT GATE POSTS, WHICH SHALL BE SPACED ACCORDING TO THE REQUIRED GATE OPENING.
 POST FOOTINGS... ALL POSTS SHALL BE SET TO A DEPTH OF 2 FEET 10 INCHES IN A 10" DIAMETER CYLINDRICAL SHAPED HOLE 8'-6" DEEP, FILLED WITH CONCRETE.
 ALL FITTINGS AND HARDWARE SHALL BE AS SHOWN ON THIS SHEET OR EQUAL.

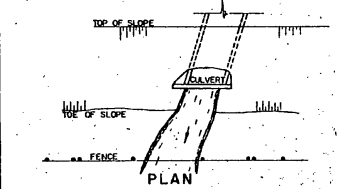
THE EXPOSED SURFACE OF ALL TOPS OF FOOTINGS TO BE SLOPED TO SHED WATER AND PROVIDE A NEAT APPEARANCE WHEN COMPLETED.

FABRIC TIES... FABRIC TO BE FASTENED TO POSTS AND GATE FRAMES WITH #9 GAUGE WIRE.
 TRUSS RODS... SHALL BE 3/8" DIAMETER DIAGONAL BARS WITH TURNBUCKLE.
 BRACE RODS... SHALL BE 1/2" O.D. PIPE.
 TENSION BARS... SHALL BE FLAT 1/4" X 3/4" BARS WITH SQUARE EDGES.
 TENSION WIRE... SHALL BE #9 GAUGE WIRE ATTACHED 1" BELOW TOP SELVAGE AND 2" ABOVE BOTTOM SELVAGE OF FABRIC BY MEANS OF HOG RINGS ON 24" CENTERS.

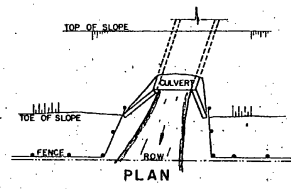
GATES... GATE FRAMES SHALL BE 1 1/2" O.D. PIPE ASSEMBLED BY WELDING, RIVETING OR BOLTING AND TO BE FURNISHED WITH ALL THE NECESSARY FITTINGS OVER 6'-0".
 GATE FRAMES SHALL BE 1 1/2" O.D. PIPE ASSEMBLED BY WELDING, RIVETING OR BOLTING AND TO BE FURNISHED WITH ALL THE NECESSARY FITTINGS 6'-0" AND LESS.

END SECTION ASSEMBLY... TO BE ERRECTED ON A MAXIMUM OF 200 FEET CENTER TO CENTER.

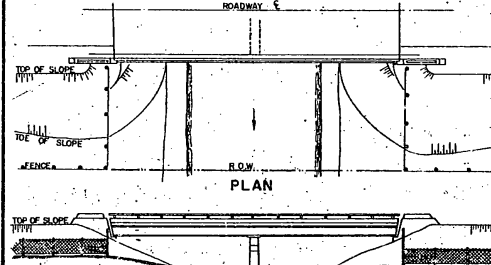
THE WEIGHT TOLERANCE IS 5 PER CENT ABOVE AND 5 PER CENT BELOW. THE TUBULAR SIZES ARE NOMINAL.



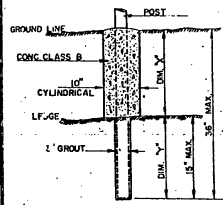
CROSSING AT STREAMS



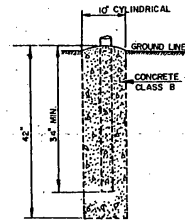
ELEVATION AT CULVERT



ELEVATION AT BRIDGE WITH PARAPET WALLS

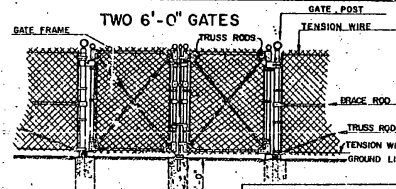


POST FOOTING

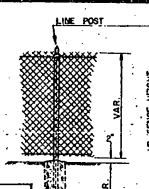


POST FOOTING

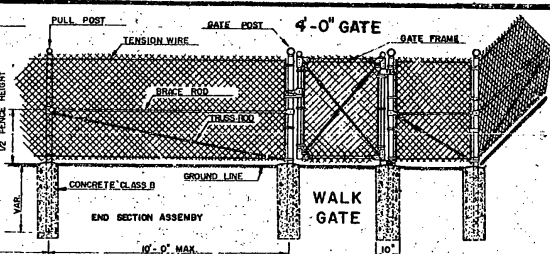
WHERE FENCE LINE HAS A CHANGE IN DIRECTION OF 15 DEGREES OR MORE, CORNER POSTS WITH BRACING SHALL BE ERRECTED.
 WHERE ANGLE IN FENCE LINE IS LESS THAN 15 DEGREES AND EXISTING CONDITIONS REQUIRE TERMINAL POSTS, THEY SHALL BE ERRECTED AS DIRECTED BY THE ENGINEER.



DRIVE GATE



4'-0" GATE



END SECTION ASSEMBLY

WALK GATE

REVISIONS AND CORRECTIONS
 JULY 28, 1975 - VINYL COATED FABRIC ADDED
 FEBRUARY 1, 1979 - CHANGE TOP RAIL TO TENSION WIRE.

APPROVED DATE Dec. 6, 1971

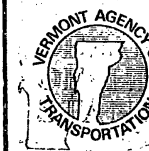
R.H. Cinnell
 CHIEF ENGINEER

E.H. Stinchey
 ASST. CHIEF ENGINEER

G.M. Lane
 HIGHWAY ENGINEER

DRAWN BY AJA
 TRACED BY AJA

CHAIN-LINK FENCE (TYPE I)
 DRIVE GATE FOR CHAIN-LINK FENCE (TYPE I)
 WALK GATE FOR CHAIN-LINK FENCE (TYPE I)



STANDARD

F-2