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

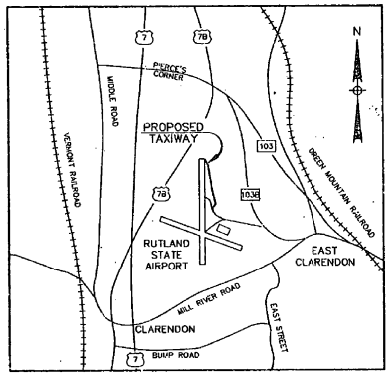
CONTRACT PLANS

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 AIP projects provided by the FAA in a list dated February 26, 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.

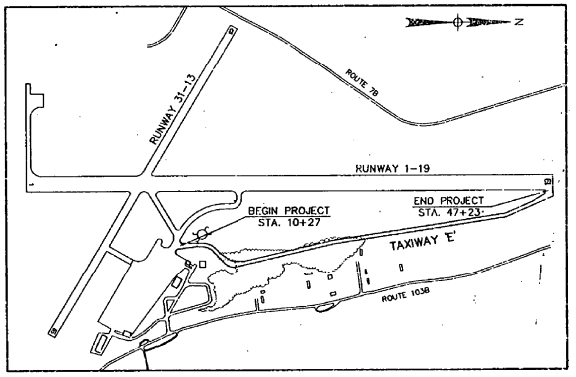
BY: _____ DATE: 8/24/93
NEAL J. FORSHNER, P.E.



LOCATION PLAN

VERMONT AGENCY OF TRANSPORTATION

AUGUST 23, 1993



SITE PLAN

ENVIRODYNE ENGINEERS, INC.

NEAL J. FORSHNER
STATE OF VERMONT P.E. NO. 6446

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

VERMONT AGENCY OF TRANSPORTATION
APPROVED _____ DATE 8/27/93
DIRECTOR OF PROJ.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
APPROVED _____ DATE _____
GNEF
AIRPORTS DIVISION

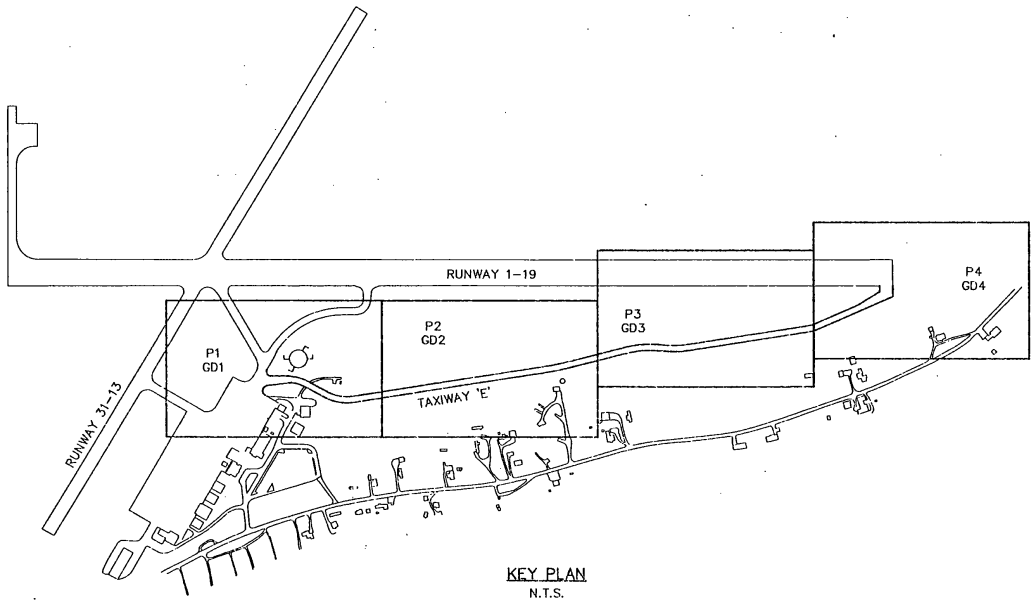
Sheet 1 of 41

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 I.D.+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. WM1-WM4 AND DD2.
11. CONTRACTOR TO COORDINATE HIS/HER WORK WITH FAA PERSONNEL RESPONSIBLE FOR THE MAINTENANCE OF THE LOCALIZER.



KEY PLAN
N.T.S.

SEAL

REVISION	DESCRIPTION	DATE

PROJECT NO. 7804

Envirocyne Engineers, inc.
41 East 42nd St. Suite 1015
New York, NY 10017

DRAWN BY: D.W. | CHECKED BY: L.G.
DESIGNED BY: F.S. | DATE: JUNE 14, 1993 | NOT TO SCALE

RUTLAND STATE AIRPORT
CLARENDON, VERMONT
TAXIWAY E

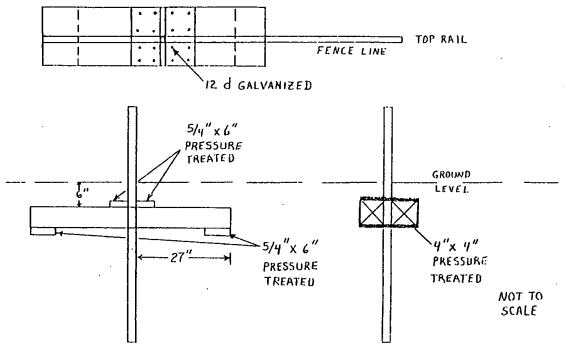
LEGEND, NOTES AND KEY PLAN

DRAWING NO. G1

SHEET 2 OF 4

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
3D & 3C		BORING LOGS
4	SP1	SAFETY PLAN
5	C1	HORIZONTAL AND VERTICAL CONTROL
6	TS1	TYPICAL SECTION
7-10	P1-4	SITE PLANS
11-15	GD1-5	GRADING AND DRAINAGE PLANS
16	PR1	TAXIWAY PROFILE
17-20	L1-4	LIGHTING PLANS AND DETAILS
21-22	S1-2	SIGNING AND STRIPING PLANS
23-26	WM1-4	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



DETAIL FOR CHAIN LINK FENCE STABILIZATION

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	SIGN SYSTEMS
V.A.O.T. STANDARD D-4	FLUSHING BASINS
V.A.O.T. STANDARD E-143	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

REVISED 9-15-93 PLD

SEAL

NO.	REVISION	DRAWN BY	CHECKED BY	APPR. BY	DATE

PROJECT NO. 7804

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

DESIGNED BY: F.S. | DRAWN BY: D.N. | CHECKED BY: L.G.
DATE: AUG. 22, 1993
NOT TO SCALE

RUTLAND STATE AIRPORT
CLARENDON, VERMONT
TAXIWAY E

INDEX AND STANDARD DRAWINGS

DRAWING NO. G2

SHEET 3 OF 41

QUANTITY SHEET

STATE OF VERMONT
AGENCY OF TRANSPORTATION

APPROXIMATE SUMMARY OF QUANTITIES

QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	ROUNDING
11	LS	CLEARING AND GRUBBING	201.10	EST.
22000	CY	COMMON EXCAVATION	203.15	-
100	CY	SOLID ROCK EXCAVATION	203.16	-
11500	CY	MUCK EXCAVATION	203.20	-
9500	CY	EARTH BORROW	203.30	-
6500	CY	GRANULAR BORROW	203.32	-
14800	SY	FINE GRADING-SUBGRADE	203.40	-
1400	CY	TRENCH EXCAVATION OF EARTH	204.20	-
7400	CY	SUBBASE OF GRAVEL (MOD.)	301.15	-
3700	CY	SUBBASE DENSE GRADED CRUSHED STONE(MOD)	301.35	-
40	TON	PLANT MIXED BASE COURSE	303.25	-
800	CWT	EMULSIFIED ASPHALT	404.65	-
3200	TON	BITUMINOUS CONCRETE PAVEMENT (MOD.)	406.25	-
125	CY	CONCRETE, CLASS D	501.31	-
226	LF	12'' RCP CLASS IV	601.0806	-
140	LF	18'' RCP CLASS IV	601.0816	-
570	LF	24'' RCP CLASS IV	601.0826	-
620	LF	30'' RCP CLASS IV	601.0836	-
4	EA	12'' CSPES (2-2/3 X1/2)	601.6005	-
2	EA	18'' RCPES CLASS III	601.6815	-
3	EA	24'' RCPES CLASS III	601.6825	-
1	EA	30'' RCPES CLASS III	601.6835	-
25	LF	RELAYING PIPE CULVERTS	601.99	-
900	LF	CLEANING PIPE IN PLACE	601.995	-
3	EA	PRECAST REINFORCED CONC. MANHOLE W/CAST IRON COVER	604.21	-
1	EA	SANITARY SEWER MANHOLE (MOD.)	604.24	-
4	EA	PRE-CAST PIPE DI W/ CAST IRON GRATE	604.25	-
3737	LF	6'' UNDERDRAIN	605.10	EST.
910	LF	8'' UNDERDRAIN	605.11	EST.
258	LF	6'' UNDERDRAIN CARRIER PIPE	605.20	EST.
112	LF	8'' UNDERDRAIN CARRIER PIPE	605.21	EST.
12	EA	UNDERDRAIN FLUSHING BASIN	605.95	EST.
1000	CY	STONE FILL, TYPE I	613.10	-
5	EA	REMOVING & RESETTING PROPERTY MARKERS (MOD.)	619.20	-
2000	LF	CHAIN LINK FENCE, 4 FEET (MOD.)	620.11	-
12	LF	GATE FOR CHAIN LINK FENCE, 4 FEET	620.15	-
50	LF	WOVEN WIRE FENCE W/STEEL POSTS	620.25	-
30	LF	SNOW FENCE (MOD.)	620.70	-
1	LS	MOBILIZATION	635.10	EST.
18000	SY	GEOTEXTILE FOR ROADBED SUBGRADE SEPARATOR	649.11	EST.
3000	SY	GEOTEXTILE UNDER STONE FILL	649.31	EST.
1500	SY	GEOTEXTILE FOR SILT FENCE	649.51	EST.
1400	LB	SEED	651.15	EST.
11700	LB	FERTILIZER	651.18	EST.
50	TON	AGRICULTURAL LIMESTONE	651.20	EST.
50	TON	HAY MULCH	651.25	EST.
200	EA	HAY BALES FOR EROSION CONTROL	651.26	EST.
2000	CY	TOPSOIL	651.35	EST.
1000	SY	EROSION MATTING	654.10	EST.
91	EA	EVERGREEN TREES (THUJA OCCIDENTALIS) NORTHERN WHITE CEDAR (10'-12' HT., B&B)	656.20	-
6000	EA	GROUND COVERS & VINES (PHALARIS ARUNDINACEA) REED CANARY GRASS(2'' PEAT POTS)	656.40	EST.
7000	EA	GROUND COVERS & VINES (THPHA LATIFOLIA) BROADLEAF CATTAIL (LARGE TUBER)	656.40	EST.
1750	EA	GROUND COVERS & VINES (SCIRPUS VALIDUS) SOFTSTEM BULRUSH (LARGE BARE ROOT)	656.40	EST.

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

STATIONS FROM	STATIONS TO	PAVEMENT WIDTHS			EQUATIONS +	EQUATIONS -	FEET	MILES	REMARKS
TOTALS									

REVISED 9-15-93 PLD

PROJECT NAME RUTLAND TAXI-WAY PROJECT
PROJECT NUMBER 01-3083

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

QUANTITIES	UNIT	ITEMS

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

STATIONS		PAVEMENT WIDTHS			EQUATIONS		FEET	MILES	REMARKS
FROM	TO				+	-			
TOTALS									

REVISED 9-15-93 P.D.

PROJECT NAME RUTLAND TAXI-WAY PROJECT
PROJECT NUMBER 04-3083

GENERAL NOTES

SAMPLE IDENTIFICATION

The Unified Soil Classification System is used to identify the soil unless otherwise noted.

SOIL PROPERTY SYMBOLS

- N: Standard "N" penetration: Blows per foot of a 140 pound hammer falling 30 inches on a 2 inch O.D. split-spoon.
- Qu: Unconfined compressive strength, TSF.
- Qp: Penetrometer value, unconfined compressive strength, TSF.
- Mc: Water content, %.
- LL: Liquid limit, %.
- PI: Plasticity index, %.
- γd: Natural dry density, PCF.
- ▽ Apparent groundwater level at time noted after completion.

DRILLING AND SAMPLING SYMBOLS

- SS: Split Spoon - 1 3/8" I.D., 2" O.D., except where noted.
- ST: Shelby Tube - 3" O.D., except where noted.
- AU: Auger Sample.
- DB: Diamond Bit.
- CB: Carbide Bit.
- WS: Washed Sample.

RELATIVE DENSITY AND CONSISTENCY CLASSIFICATION

TERM (NON-COHESIVE SOILS)	STANDARD PENETRATION RESISTANCE
Very Loose	0 - 2
Loose	2 - 4
Slightly Compact	4 - 8
Medium Dense	8 - 15
Dense	15 - 30
Very Dense	Over 30

TERM (COHESIVE SOILS)	Qu - (TSF)
Very Soft	0 - 0.25
Soft	0.25 - 0.50
Firm (Medium)	0.50 - 1.00
Stiff	1.00 - 2.00
Very Stiff	2.00 - 4.00
Hard	4.00+

PARTICLE SIZE

Boulders	8 in.+	Coarse Sand	5mm-2.0mm	Silt	0.074mm-0.005mm	
Cobbles	8 in.-3 in.	Medium Sand	0.84mm-0.5mm	Clay	0.005mm	
Gravel	3 in.-5mm	Fine Sand	0.2mm-0.074mm			

BORING NO. B-1

ELEV.	DEPTH	BLOWS ON CASING	STANDARD PENETRATION	SAMPLE NUMBER	MOISTURE	COLOR	LABORATORY CLASSIFICATION OF SOIL
				AU-1		BR	Moist, Sandy Loam
				SS-1		BR	Moist, Fine, Sand, Soft Rock
	4'						Boring 1 Terminated
							Boring 1-A, offset 4' north, terminated at 4'0" Rock Refusal
							Boring 1-B, offset 30' North, Terminated at 2'2" Rock Refusal
	10						
	20						
	30						
	40						
	50						
	60						

BORING NO. B-2

ELEV.	DEPTH	BLOWS ON CASING	STANDARD PENETRATION	SAMPLE NUMBER	MOISTURE	COLOR	LABORATORY CLASSIFICATION OF SOIL
				AU-1		BR.	Moist, Sandy Loam
				AU-2		GR.	Sand, Silt
				AU-3			
				SS-1			0'-7'2" Fill
							8'3" Soft Rock
				SS-2			WET, Fine Sand & SILT
							Boring Terminated At 12'-6"
							Ground water level recorded At 5'-6" After 15 minutes.
	10						
	20						
	30						
	40						
	50						
	60						

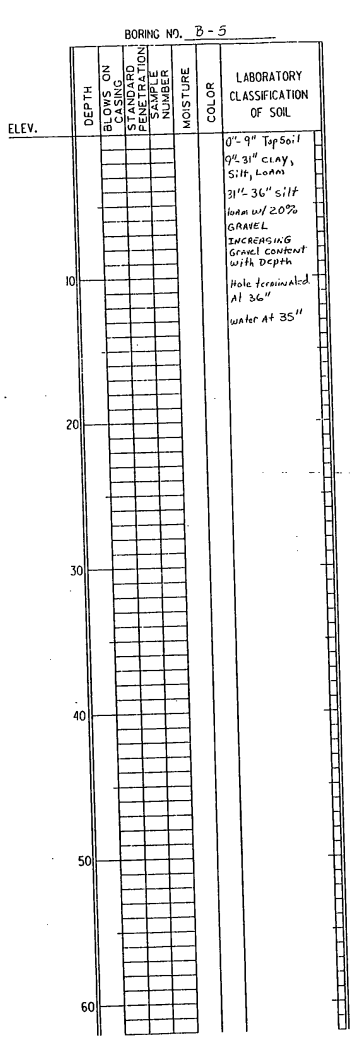
BORING NO. B-3

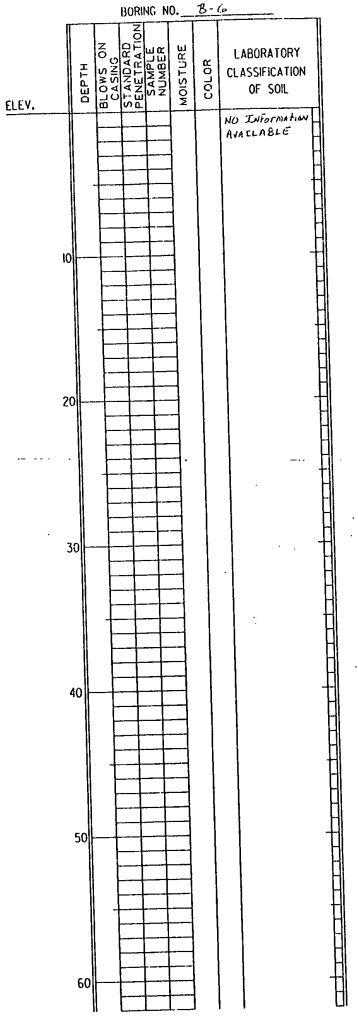
ELEV.	DEPTH	BLOWS ON CASING	STANDARD PENETRATION	SAMPLE NUMBER	MOISTURE	COLOR	LABORATORY CLASSIFICATION OF SOIL
				S-1		BR.	Topsoil 3"-19"
						BR.	19"-53" med. SAND
							53"-60" Clayey SILT w/TRACE of SAND
							Standing water at 19"
							Terminated at 60"
	10						
	20						
	30						
	40						
	50						
	60						

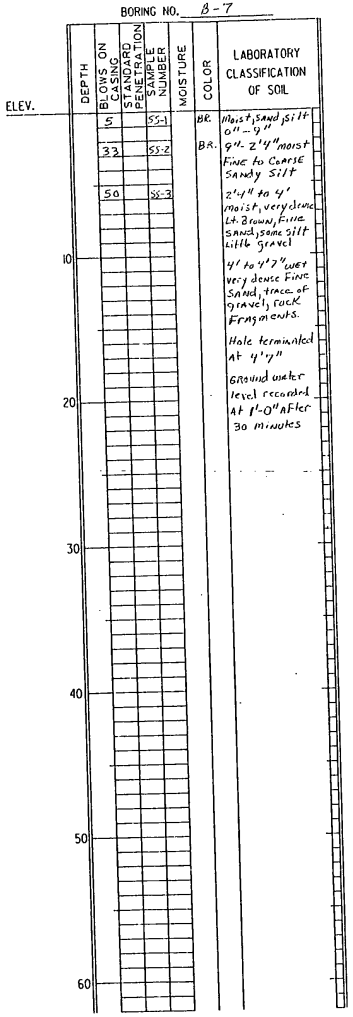
BORING NO. B-4

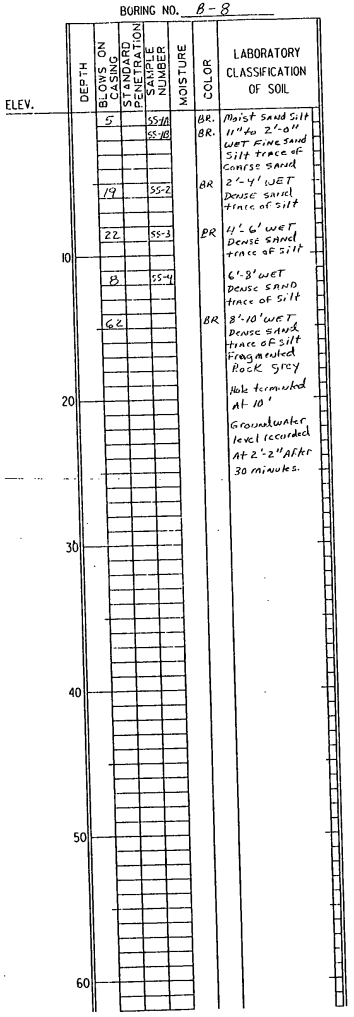
ELEV.	DEPTH	BLOWS ON CASING	STANDARD PENETRATION	SAMPLE NUMBER	MOISTURE	COLOR	LABORATORY CLASSIFICATION OF SOIL
							0"-13" Topsoil
							13"-32" Clay Silt Loam Firm - Wet
							32"-45" Silty clay w/ 20% Coarse Agg. etc. Increasing Gravel content with depth
							Terminated at 45"
	10						
	20						
	30						
	40						
	50						
	60						

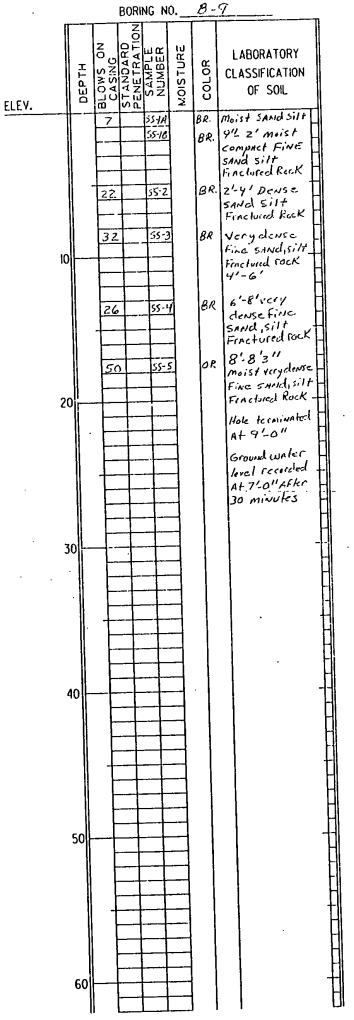
SURVEYED BY _____ DATE _____
DRAWN BY _____ DATE _____
SQUAD LEADER _____
DESIGN FILE NO. _____
IPARM FILE _____ DATE PLOTTED _____
PROJ. NAME Rutland Airport
PROJ. NO.
SHEET 3C OF 41 SHEETS



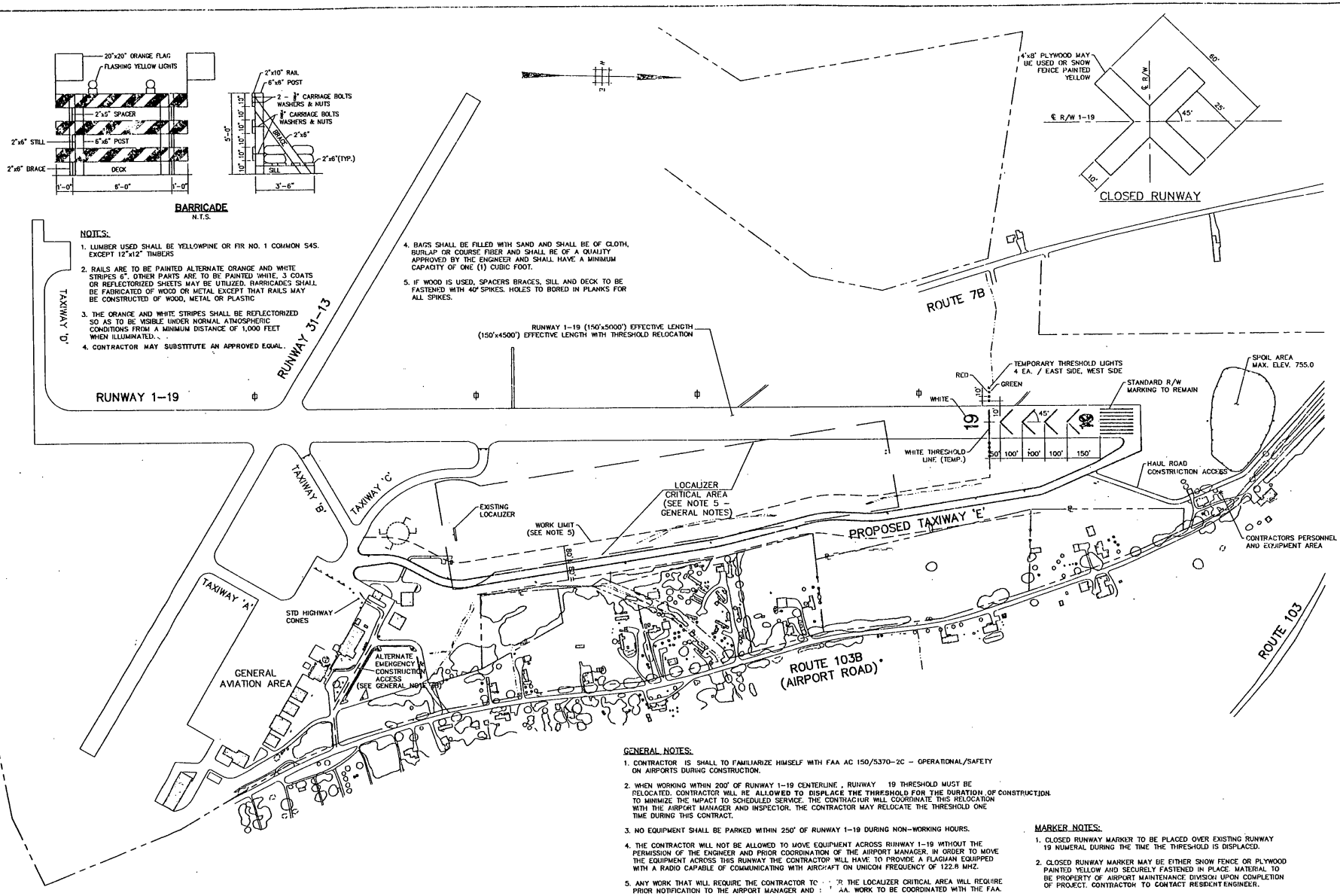








SURVEYED BY _____ DATE _____
DRAWN BY _____ DATE _____
SQUAD LEADER _____
DESIGN FILE NO. _____
IPARM FILE _____ DATE PLOTTED _____
PROJ. NAME Rutland Airport
PROJ. NO.
SHEET 30 OF 41 SHEETS



NOTES

1. EIGHT TEMPORARY THRESHOLD LIGHTS ARE TO BE INSTALLED AS SHOWN.
2. EACH LIGHT TO BE BATTERY OPERATED, STEADY BURNING W/180° RED/GREEN LENS AS MANUFACTURED. BY WHELAN ENGINEERING (DEEP RIVER, CT.) OR EQUAL.
3. THE CONTRACTOR SHALL FURNISH ALL BATTERIES TO BE USED DURING THE CONSTRUCTION PERIOD.
4. THE CARE AND MAINTENANCE OF THE TEMPORARY LIGHTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
5. THE MAINTENANCE DIVISION OF THE VAOT SHALL RETAIN POSSESSION OF THE LIGHTS AFTER COMPLETION OF CONSTRUCTION CONTACT RESIDENT ENGINEER.
6. THE COST OF THE TEMPORARY LIGHTS AND BATTERIES IS NOT INCLUDED AS A SEPARATE PAY ITEM. THIS WORK IS NECESSARY AND INCIDENTAL TO THE COST OF THE PROJECT.
7. THE CONTRACTOR MAY AT HIS OPTION, INSTALL 8 MEDIUM INTENSITY THRESHOLD LIGHTS. CONFORMING TO FAA SPEC. L-861E IN LIEU OF BATTERY OPERATED LIGHTS.
8. LIGHTS FOR SIGNS AND OR TAXIWAYS AT T/W B AND C SHALL BE DISENGAGED FOR THE DURATION OF THE TIME THESE TAXIWAYS ARE CLOSED TO AIR TRAFFIC. LIGHTS AT THE DISPLACED THRESHOLD AREA ARE TO BE DISENGAGED.
9. ALL MARKINGS IN THE RELOCATED THRESHOLD AREA ARE YELLOW EXCEPT THE THRESHOLD BAR WHICH IS WHITE.

GENERAL NOTES:

1. CONTRACTOR IS SHALL TO FAMILIARIZE HIMSELF WITH FAA AC 150/5370-2C - OPERATIONAL/SAFETY ON AIRPORTS DURING CONSTRUCTION.
2. WHEN WORKING WITHIN 200' OF RUNWAY 1-19 CENTERLINE , RUNWAY 19 THRESHOLD MUST BE RELOCATED. CONTRACTOR WILL BE **ALLOWED TO DISPLACE THE THRESHOLD FOR THE DURATION** OF CONSTRUCTION TO MINIMIZE THE IMPACT TO SCHEDULED SERVICE. THE CONTRACTOR WILL COORDINATE THIS RELOCATION WITH THE AIRPORT MANAGER AND INSPECTOR. THE CONTRACTOR MAY RELOCATE THE THRESHOLD ONE TIME DURING THIS CONTRACT.
3. NO EQUIPMENT SHALL BE PARKED WITHIN 250' OF RUNWAY 1-19 DURING NON-WORKING HOURS.
4. THE CONTRACTOR WILL NOT BE ALLOWED TO MOVE EQUIPMENT ACROSS RUNWAY 1-19 WITHOUT THE PERMISSION OF THE ENGINEER AND PRIOR COORDINATION OF THE AIRPORT MANAGER. IN ORDER TO MOVE THE EQUIPMENT ACROSS THIS RUNWAY THE CONTRACTOR WILL HAVE TO PROVIDE A FLAGMAN EQUIPPED WITH A RADIO CAPABLE OF COMMUNICATING WITH AIRCRAFT ON UNICOM FREQUENCY OF 122.8 MHZ.
5. ANY WORK THAT WILL REQUIRE THE CONTRACTOR TO [illegible]R THE LOCALIZER CRITICAL AREA WILL REQUIRE PRIOR NOTIFICATION TO THE AIRPORT MANAGER AND [illegible]AA. WORK TO BE COORDINATED WITH THE FAA.
6. DISTANCE REMAINING SIGNS ARE TO BE SUFFICIENTLY [illegible]LOCKED OUT SO AS NOT TO CONVEY TO PILOTS WRONG INFORMATION DURING THE DURATION THAT THE DISPLACED THRESHOLD IS IN USC.
7. THE CONTRACTOR IS REQUIRED TO MAINTAIN ALL ROADS ON SITE WHICH HE MAY USE DURING CONSTRUCTION.
8. CONTRACTOR TO MEET WITH THE AIRPORT MANAGER TO DEVELOP A CONSTRUCTION VEHICLE TRAFFIC PLAN PRIOR TO BEGINNING PROJECT.
9. CONTRACTOR WILL SUBMIT TO THE VAOT & THE AIRPORT MANAGER A LISTING OF ALL CONSTRUCTION EQUIPMENT TO BE USED ON THE SITE. INCLUDED WILL BE THE HEIGHT OF EACH PIECE OF EQUIPMENT.

MARKER NOTES:

1. CLOSED RUNWAY MARKER TO BE PLACED OVER EXISTING RUNWAY 19 NUMERAL DURING THE TIME THE THRESHOLD IS DISPLACED.
2. CLOSED RUNWAY MARKER MAY BE EITHER SNOW FENCE OR PLYWOOD PAINTED YELLOW AND SECURELY FASTENED IN PLACE. MATERIAL TO BE PROPERTY OF AIRPORT MAINTENANCE DIVISION UPON COMPLETION OF PROJECT. **CONTRACTOR TO CONTACT RESIDENT ENGINEER.**
3. COST OF PLACING AND MAINTAINING THE CLOSED RUNWAY MARKER IS CONSIDERED NECESSARY AND INCIDENTAL TO CONSTRUCTION AND IS NOT A SEPARATE PAY ITEM.

LEGEND:

ϕ EXISTING DISTANCE REMAINING SIGN

LIGHTED BARRICADE IN ACCORDANCE WITH AC 150/5340-1F CHG 1

SEAL

REVISION	DESCRIPTION	DRAWN BY	CHECKED BY	APPR. BY	DATE

PROJECT NO. 7804

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

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

DATE: AUG. 23, 1993

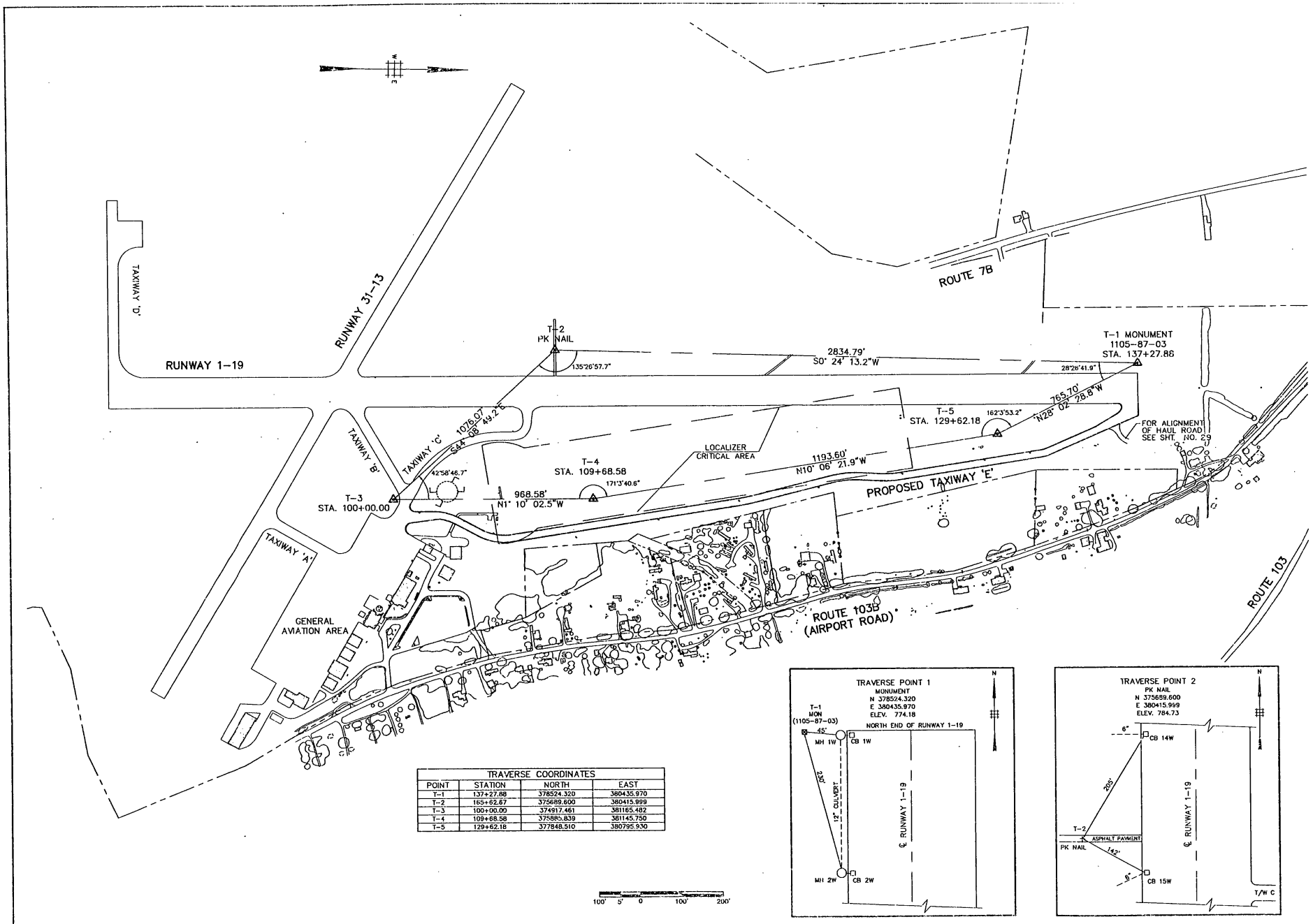
SCALE: 1" = 200'

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

TAXIWAY E
SAFETY PLAN

DRAWING NO.
SP1

SHEET 4 OF 11



TRAVERSE COORDINATES			
POINT	STATION	NORTH	EAST
T-1	137+27.88	378524.320	380435.970
T-2	165+62.67	375689.600	380415.999
T-3	100+00.00	374917.461	381165.482
T-4	109+68.58	375880.839	381145.750
T-5	129+62.18	377848.510	380795.930

SEAL

REVISION	DESCRIPTION	DRWN BY	CHKD BY	APPR BY	DATE

PROJECT NO. 7804

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

SCALE: 1" = 200' | DATE: AUG. 23, 1993 | DESIGNED BY: F.S. | DRAWN BY: D.N. | CHECKED BY: L.G.

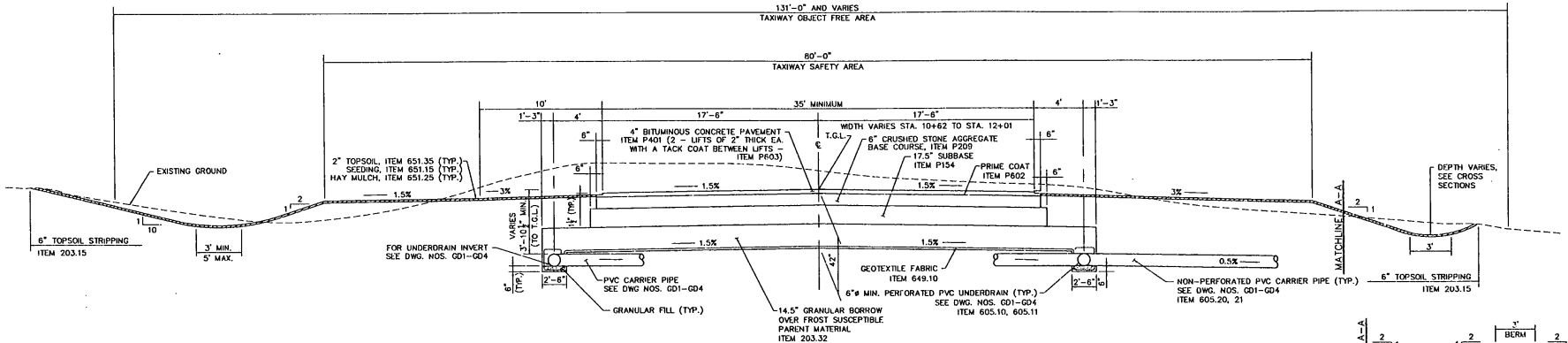
RUTLAND STATE AIRPORT
CLARENDON, VERMONT

TAXIWAY E

HORIZONTAL AND VERTICAL CONTROL

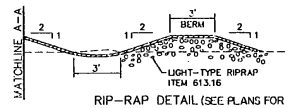
DRAWING NO.
C1

SHEET 5 OF 41

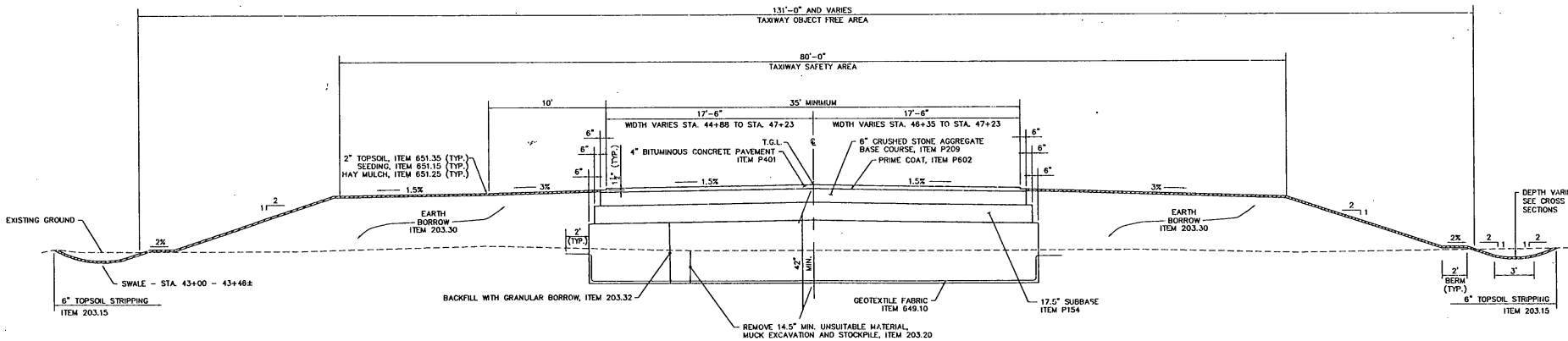


TYPICAL SECTION - CUT

STATION 11+00 - 21+50
STATION 26+50 - 28+50
STATION 33+50 - 39+50
STATION 44+00 - 45+00



RIP-RAP DETAIL (SEE PLANS FOR LOCATIONS)



TYPICAL SECTION - FILL

STATION 21+50 - 26+50
STATION 28+50 - 33+50
STATION 39+50 - 44+00
STATION 45+00 - 47+23

NOTES:

1. FOR UNDERDRAIN DETAIL AND LOCATIONS SEE TABLE ON DWG. NO. DD1.
2. FOR SEDIMENTATION BASIN LOCATIONS SEE DWG. NOS. GD1-GD4 AND DD2.
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.

SEAL

REVISION	DESCRIPTION	DRAWN (DECIDED) BY	DATE

PROJECT NO. 7804

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

DESIGNED BY: F.S. | DRAWN BY: A.F.B. | CHECKED BY: L.G.

DATE: AUG. 23, 1993

NOT TO SCALE

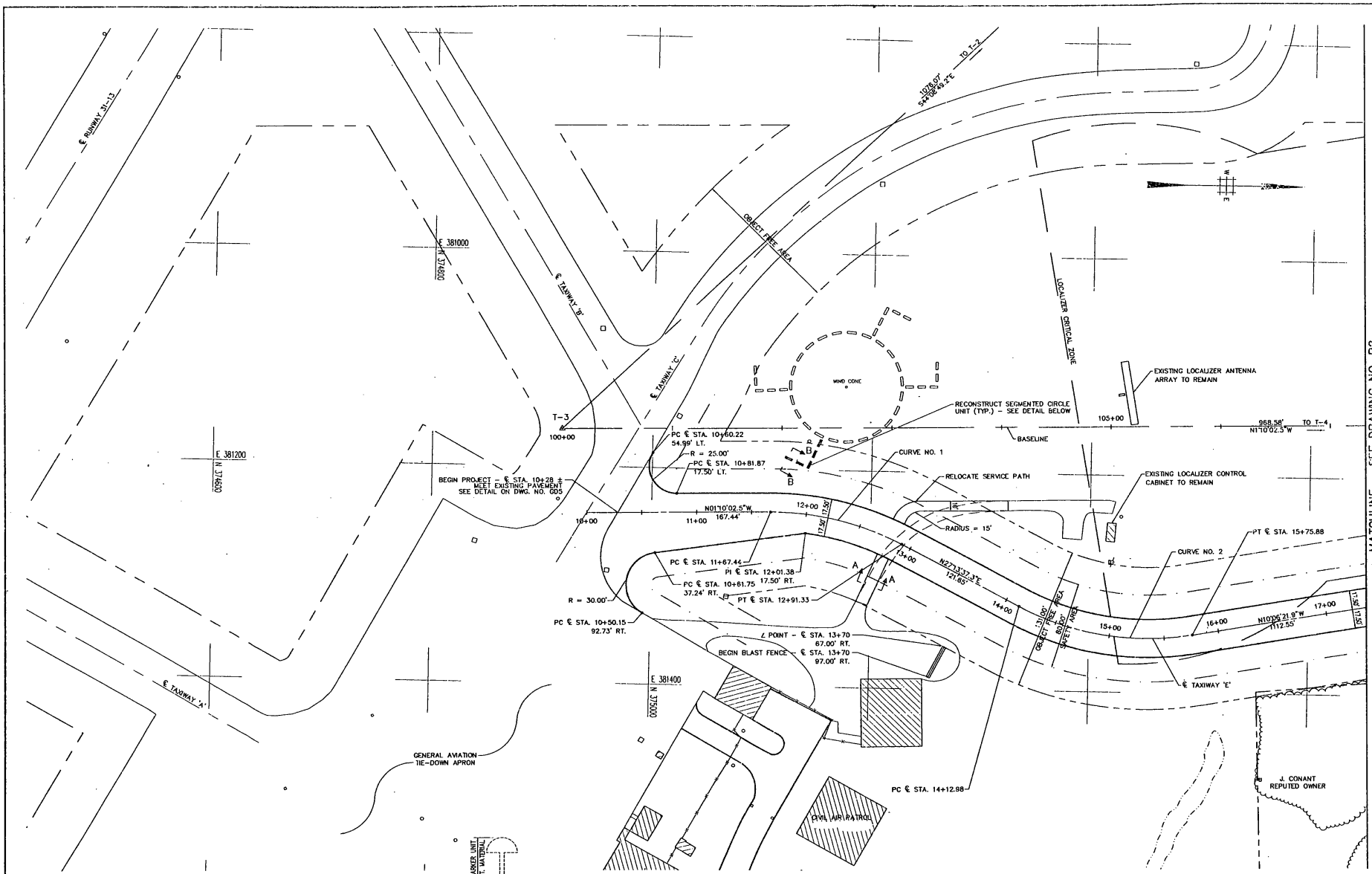
RUTLAND STATE AIRPORT
CLARENDON, VERMONT

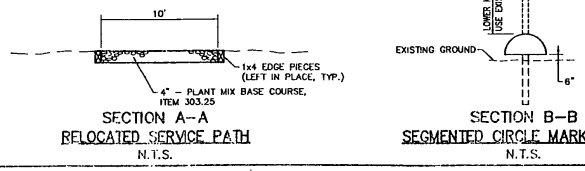
TAXIWAY E

TYPICAL SECTION

DRAWING NO.
TS1

SHEET 6 OF 41





SECTION A-A
RELOCATED SERVICE PATH
N.T.S.

SECTION B-B
SEGMENTED CIRCLE MARKER UNIT
N.T.S.

CENTERLINE COORDINATE TABLE

℄ STATION	POINT	NORTH	EAST	℄ STATION	OFFSET
10+00.00	POB	374941.048	381242.591	100+22.01	77.57' RT.
11+67.44	PC1	375198.450	381239.179	101+89.45	77.57' RT.
12+91.33	PT1	375227.922	381266.827	103+08.33	107.65' RT.
14+12.98	PC2	375336.093	381322.484	104+15.35	165.50' RT.
15+75.68	PT2	375494.340	381346.305	105+73.08	192.54' RT.

CENTERLINE CURVE DATA

CURVE	RADIUS	LENGTH	TANGENT	DELTA
1	250.00'	123.89'	63.25'	28°23'38.5"
2	250.00'	162.90'	84.46'	37°19'59.2"

40' 0 40' 80'

SEAL

REVISION	DESCRIPTION	DRAWN (INITIALS) BY:	DATE

PROJECT NO. 7804

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

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

DATE: AUG. 23, 1993

SCALE: 1" = 40'

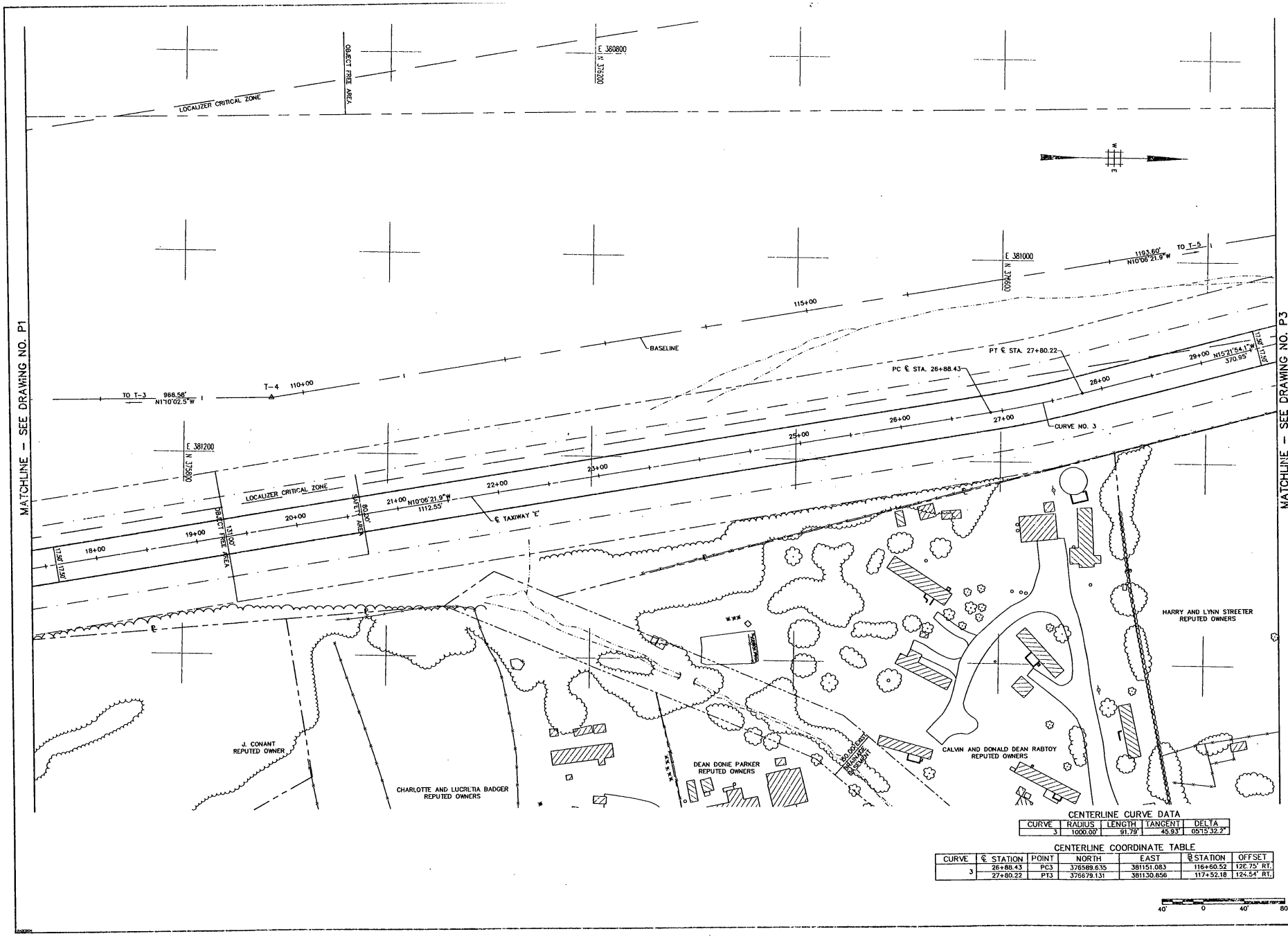
RUTLAND STATE AIRPORT
CLARENDON, VERMONT

TAXIWAY E

SITE PLAN

DRAWING NO. P1

SHEET 7 OF 11



CENTERLINE CURVE DATA

CURVE	RADIUS	LENGTH	TANGENT	DELTA
3	1000.00'	91.79'	45.93'	05°15'32.2"

CENTERLINE COORDINATE TABLE

CURVE	℄ STATION	POINT	NORTH	EAST	℄ STATION	OFFSET
3	26+88.43	PC3	376589.635	381151.083	116+60.52	126.75' RT.
	27+80.22	PT3	376679.131	381130.656	117+52.18	124.54' RT.

SEAL

NO.	DESCRIPTION	APPR. BY	DRAWN BY	DATE

PROJECT NO. 7804

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

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

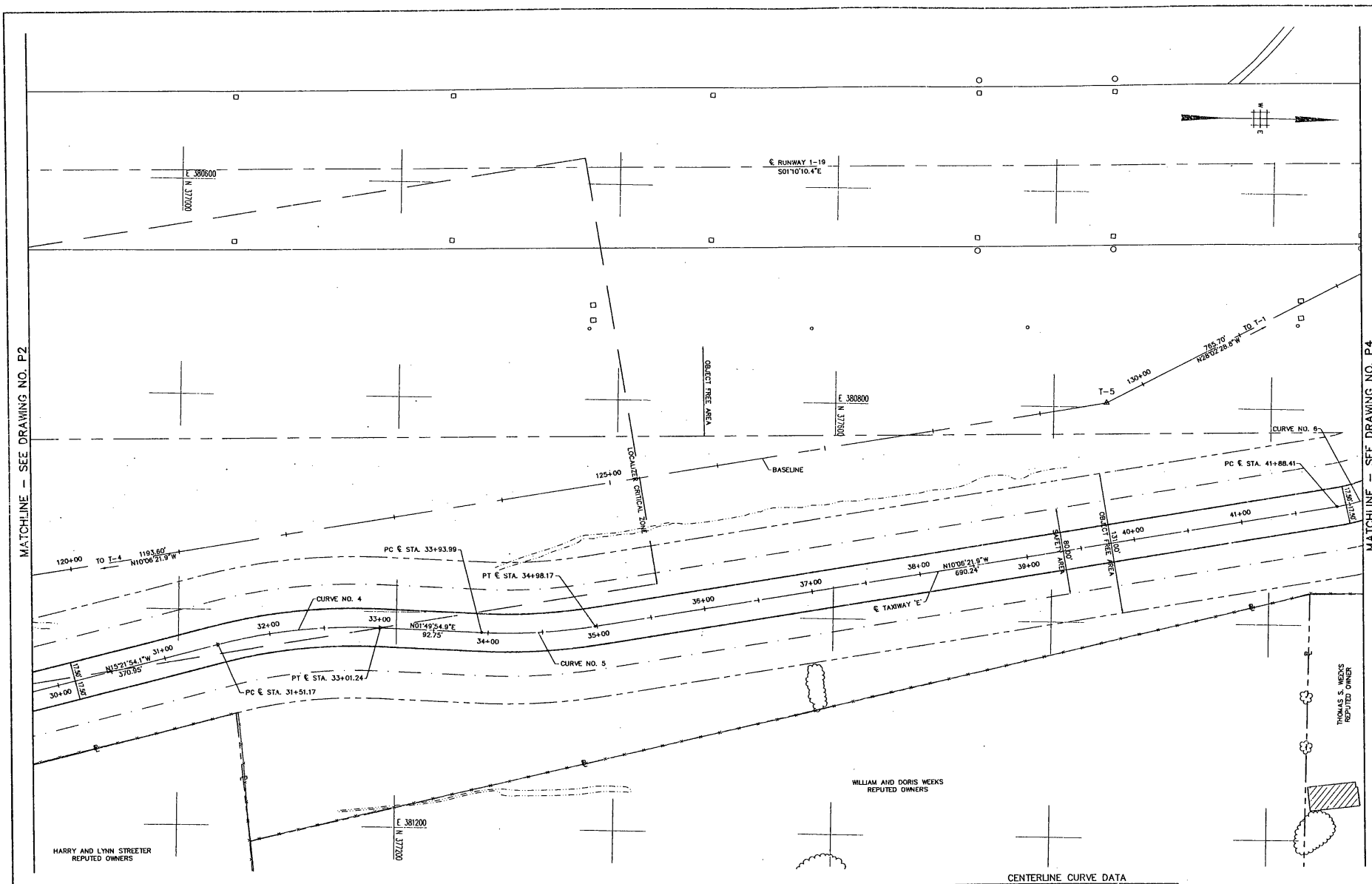
RUTLAND STATE AIRPORT
CLARENDON, VERMONT

TAXIWAY E

SITE PLAN

DRAWING NO. P2

SHEET 8 OF 11



CENTERLINE CURVE DATA

CURVE	RADIUS	LENGTH	TANGENT	DELTA
4	500.00'	150.07'	75.60'	17°11'49.0"
5	500.00'	104.18'	52.28'	11°56'16.8"
6	150.00'	38.71'	19.46'	14°47'06.2"

CENTERLINE COORDINATE TABLE

CURVE	℄ STATION	POINT	NORTH	EAST	℄ STATION	OFFSET
4	31+51.17	PC4	377036.820	381032.567	121+21.56	30.54' RT.
	33+01.24	PT4	377185.287	381014.951	122+70.82	99.25' RT.
5	33+93.99	PC5	377277.992	381017.916	123+61.56	118.43' RT.
	34+98.17	PT5	377381.711	381010.414	124+64.99	129.25' RT.
6	41+88.41	PC6	37H081.244	380889.287	131+05.05	182.41' RT.

40' 0 40' 80'

SEAL

REVISION	DESCRIPTION	DRAWN BY	CHECKED BY	APPR. BY	DATE

PROJECT NO. 7804

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

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

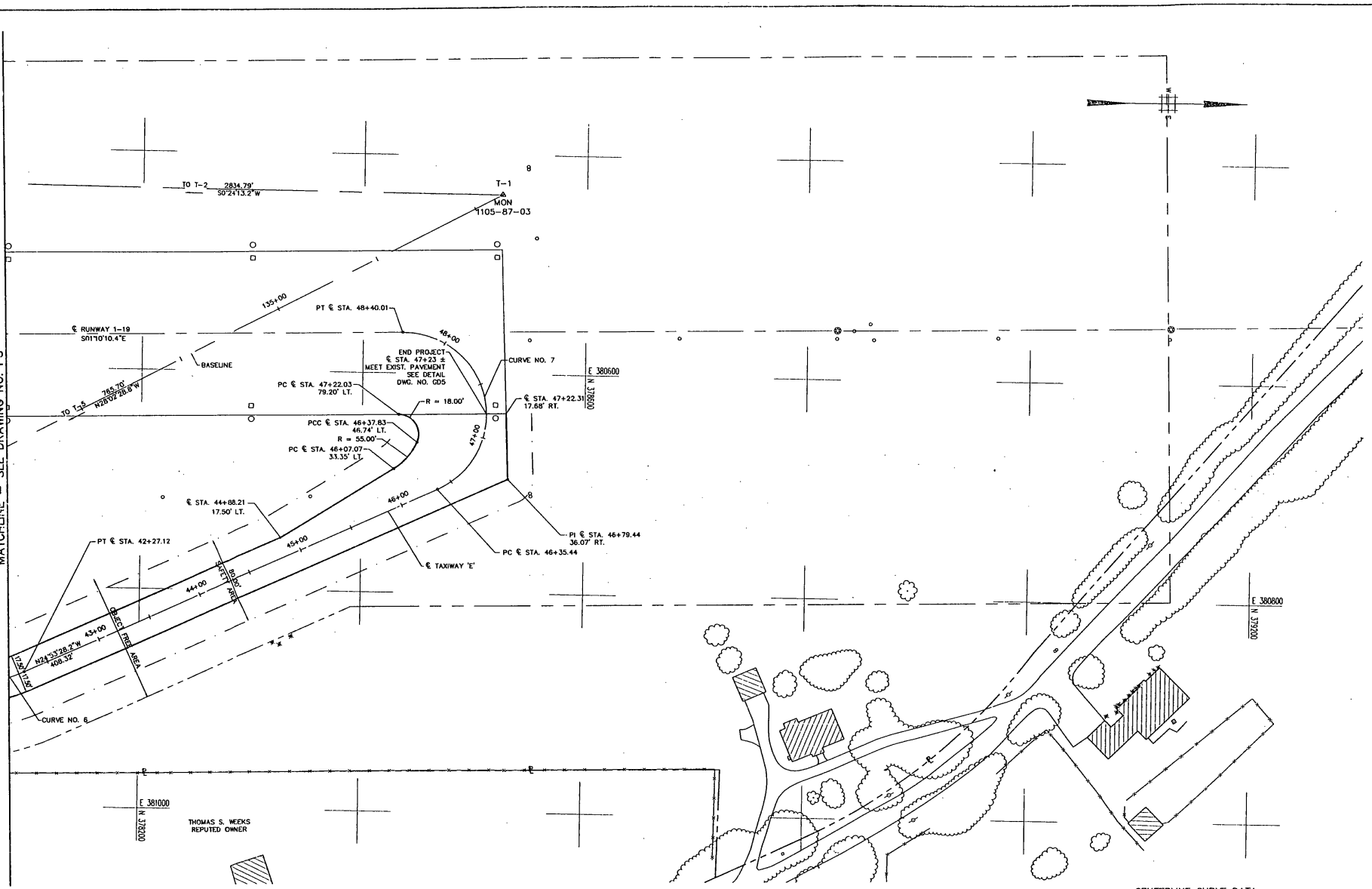
RUTLAND STATE AIRPORT
CLARENDON, VERMONT

TAXIWAY E

SITE PLAN

DRAWING NO.
P3

SHEET 9 OF 11



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+44.90	189.48' RT.
	46+35.44	PC7	378468.448	380705.830	135+51.70	211.92' RT.
7	48+40.01	PT7	378435.350	380562.812	135+89.72	70.13' RT.

40' 0 40' 80'

SEAL

REVISION	DESCRIPTION	DRAWN CHECKED BY	APPR. BY	DATE

PROJECT NO. 7804

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

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

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

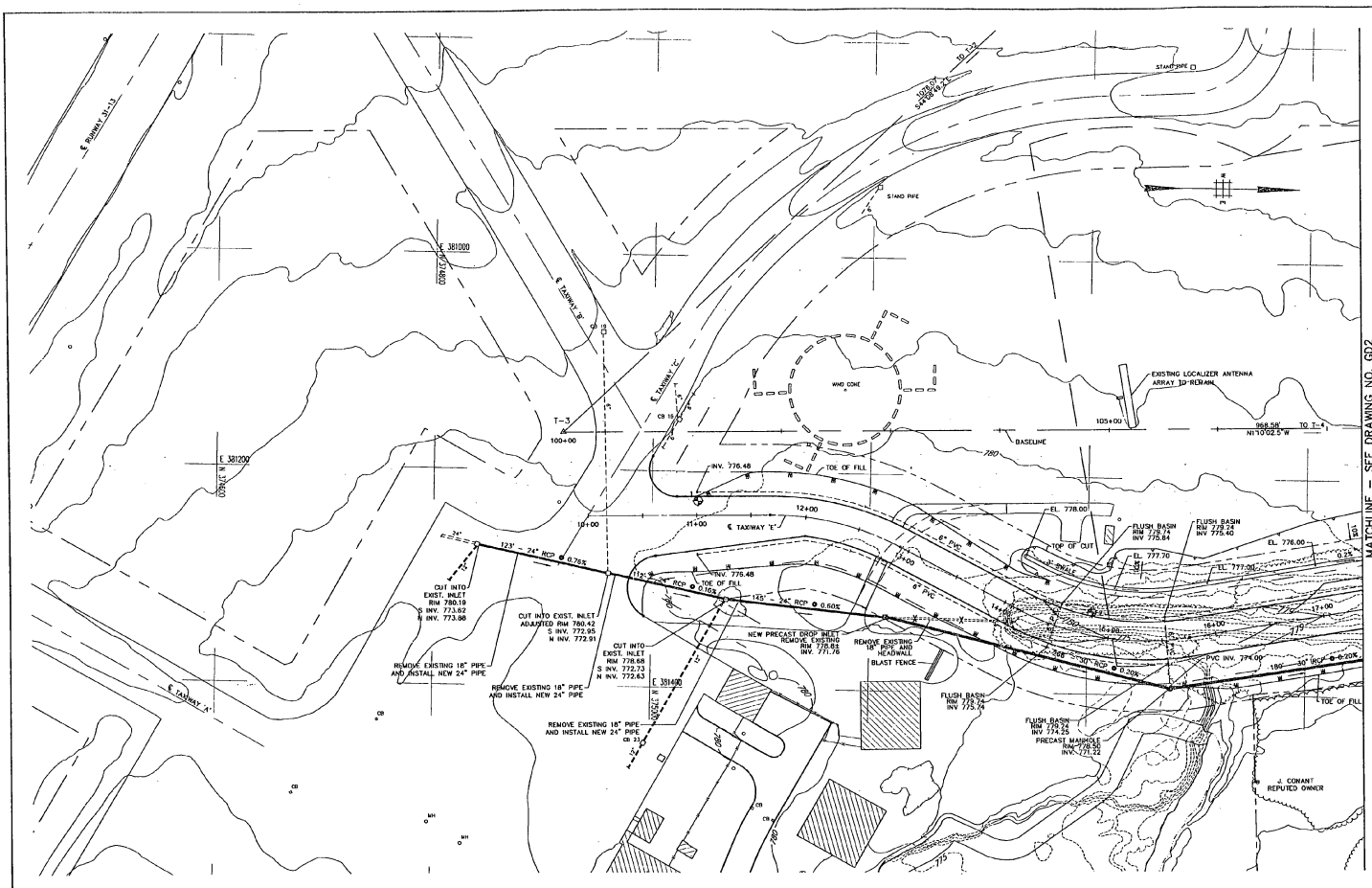
RUTLAND STATE AIRPORT
CLARENDON, VERMONT

TAXIWAY E

SITE PLAN

DRAWING NO. P4

SHEET 10 OF 11



NOTES:

1. ALL PVC UNDERDRAINS ARE PERFORATED EXCEPT FOR TRANSVERSE CARRIER PIPES.
2. FOR TABLE OF UNDERDRAINS, SEE DWG. NO. GD1.
3. FOR DRAINAGE STRUCTURE DETAILS, SEE DWG. NO. DD1.
4. FOR PROPOSED PAVEMENT ELEVATIONS FROM STA. 101+28 TO STA. 124+50, SEE DWG. NO. GD5.

SEAL

NO.	DESCRIPTION	APVD. BY	DATE
		DRWN. BY	

PROJECT NO. 7804

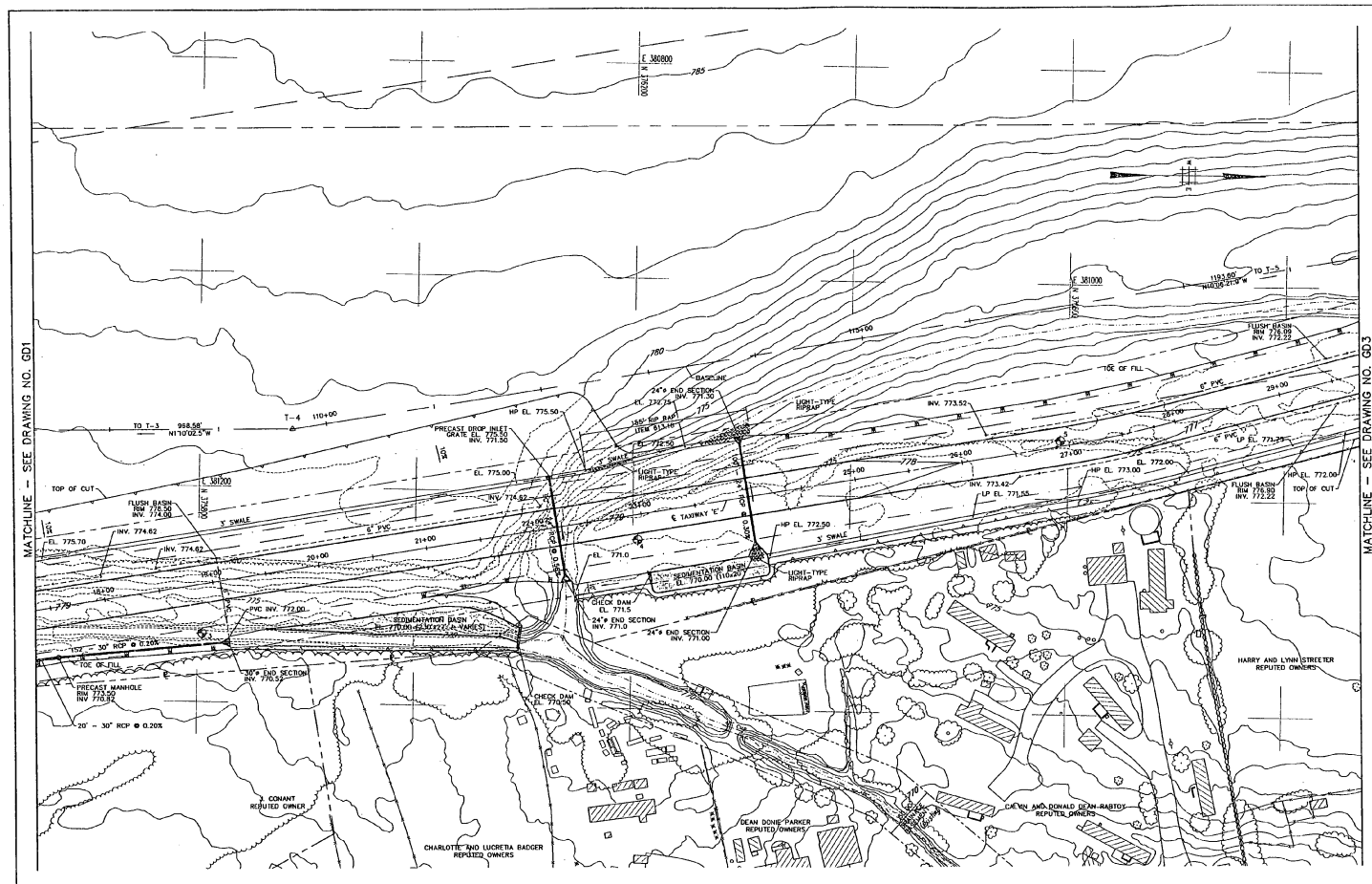
Envirodyne Engineers, Inc.
41 East 42nd St. Suite 1015
New York, NY 10017

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

RUTLAND STATE AIRPORT
CLARENDON, VERMONT
TAXIWAY E

GRADING AND DRAINAGE PLAN

DRAWING NO.
GD1
SHEET 11 OF 17



NOTES:

1. ALL PVC UNDERDRAINS ARE PERFORATED EXCEPT FOR TRANSVERSE CARRIER PIPES.
2. FOR TABLE OF UNDERDRAINS, SEE DWG. NO. GD1.
3. FOR DRAINAGE STRUCTURE DETAILS, SEE DWG. NO. GD1.

SEAL

NO.	DESCRIPTION	DRAWN BY	CHECKED BY	APPR. BY	DATE

PROJECT NO. 7804

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

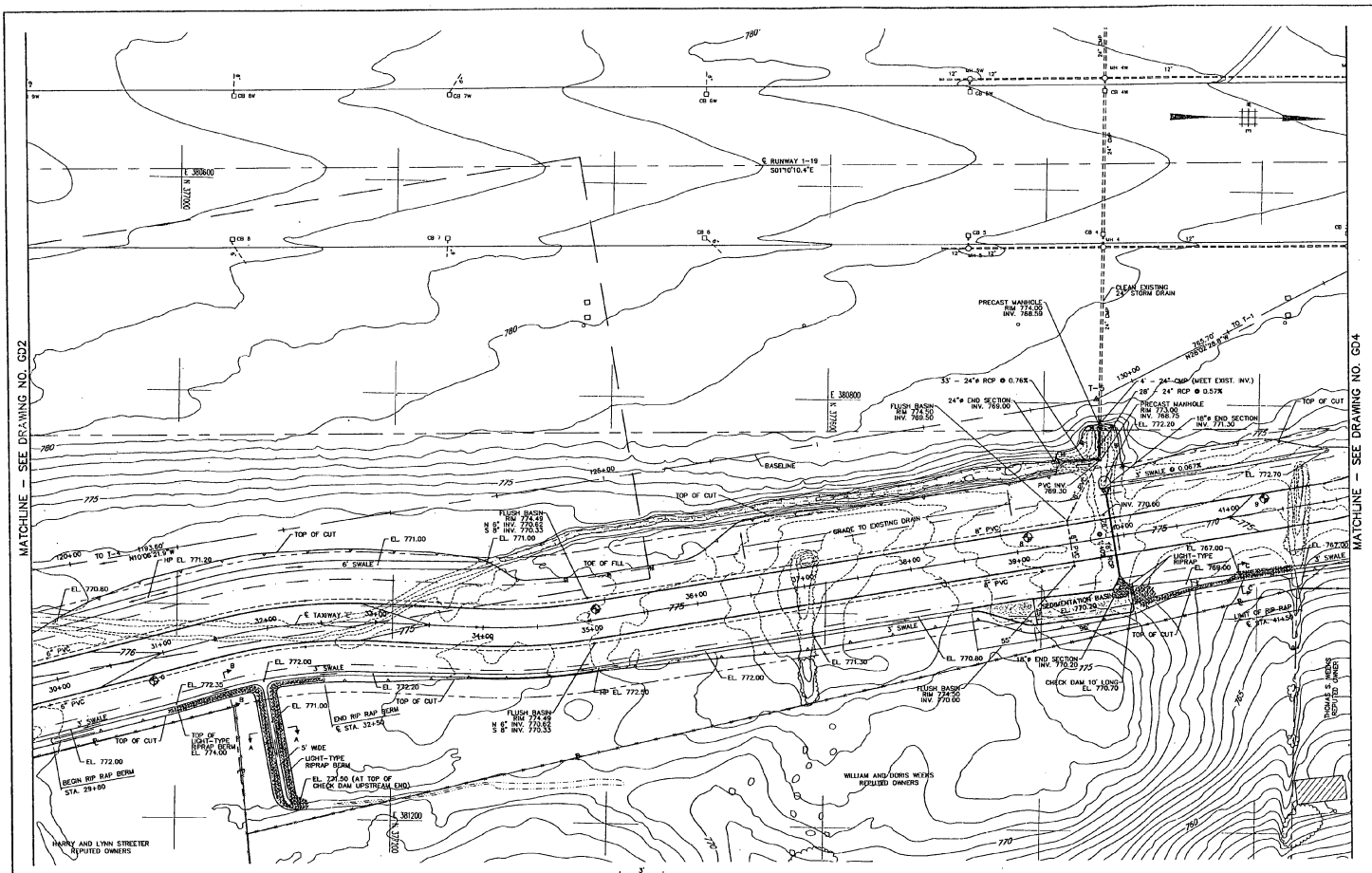
DRAWN BY: C.W.L.
CHECKED BY: L.G.
DESIGNED BY: T.S.
DATE: AUG. 23, 1993
SCALE: 1" = 40'

RUTLAND STATE AIRPORT
CLARENDON, VERMONT
TAXIWAY E

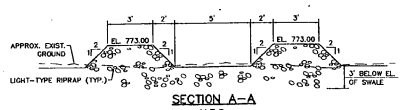
GRADING AND DRAINAGE PLAN

DRAWING NO. GD2

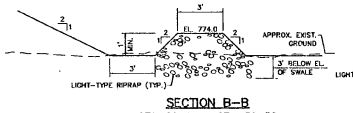
SHEET 12 OF 57



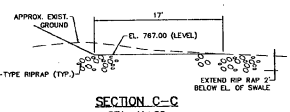
SECTION A–A
N.T.S.



SECTION B–B
STA. 29+80 – STA. 32+50
N.T.S.



SECTION C–C
STA. 41+00
N.T.S.



NOTES:

1. ALL PVC UNDERDRAINS ARE PERFORATED EXCEPT FOR TRANSVERSE CARRIER PIPES.
2. FOR TABLE OF UNDERDRAINS, SEE DWG. NO. DD1.
3. FOR DRAINAGE STRUCTURE DETAILS, SEE DWG. NO. DD1.

40' 0 40' 80'

SEAL

REVISION	DESCRIPTION	DRAWN BY	CHECKED BY	DATE

PROJECT NO. 7804

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

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

DATE: AUG. 23, 1993

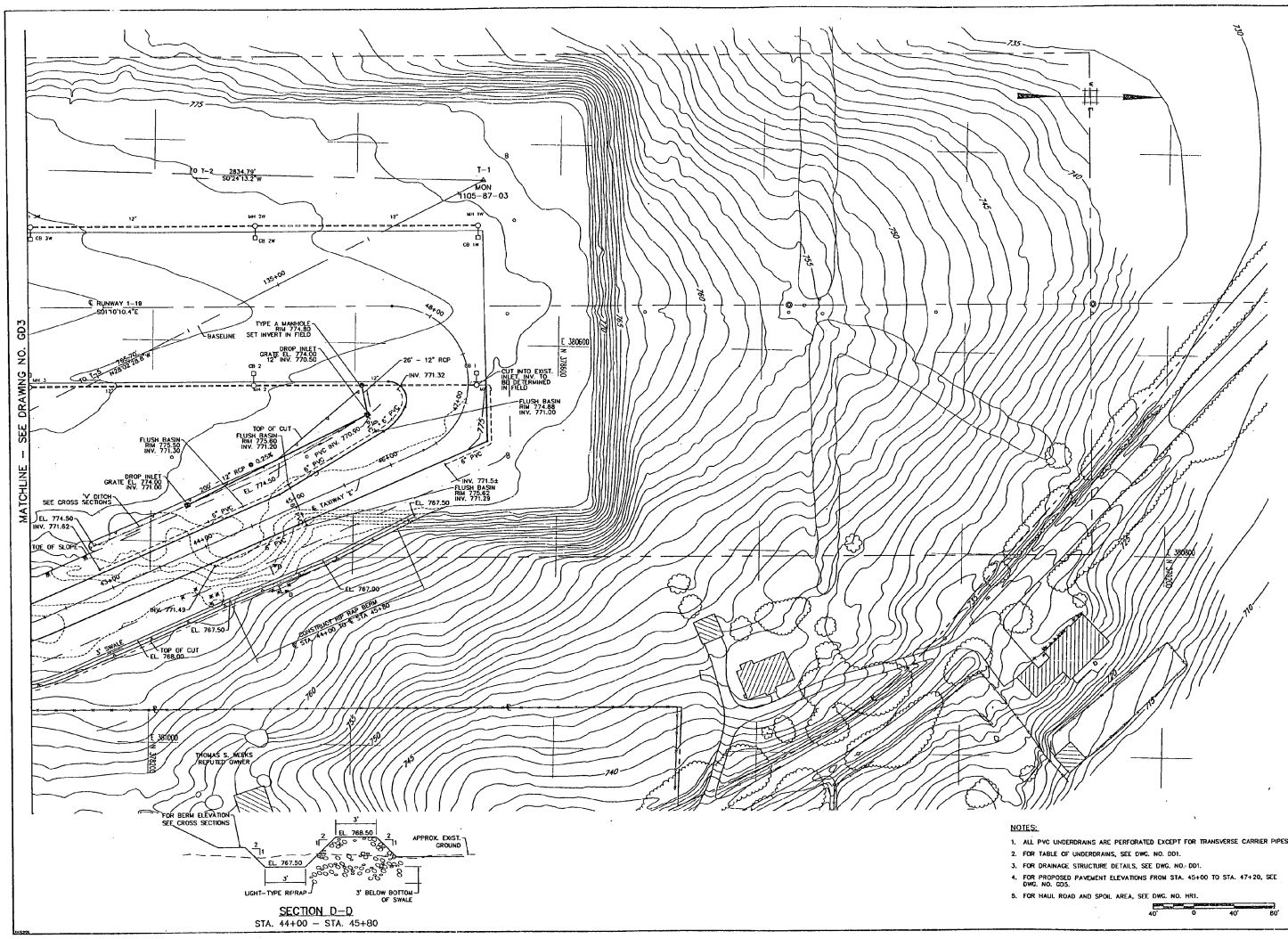
SCALE: 1" = 40'

RUTLAND STATE AIRPORT
CLARENDON, VERMONT
TAXIWAY E

GRADING AND DRAINAGE PLAN

DRAWING NO. GD3

SHEET 13 OF 17



SECTION D–D
STA. 44+00 – STA. 45+80

NOTES:

1. ALL PVC UNDERDRAINS ARE PERFORATED EXCEPT FOR TRANSVERSE CARRIER PIPES.
2. FOR TABLE OF UNDERDRAINS, SEE DWG. NO. DD1.
3. FOR DRAINAGE STRUCTURE DETAILS, SEE DWG. NO. DD1.
4. FOR PROPOSED PAVEMENT ELEVATIONS FROM STA. 45+00 TO STA. 47+20, SEE DWG. NO. GD5.
5. FOR HAUL ROAD AND SPOIL AREA, SEE DWG. NO. HR1.

40' 0 40' 80'

SEAL

NO.	DESCRIPTION	DATE
	REVISED AS BUILT	APR. 87

PROJECT NO. 7804

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

DESIGNED BY: I.S. | DRAWN BY: D.M. | CHECKED BY: L.G.

DATE: AUG. 23, 1983

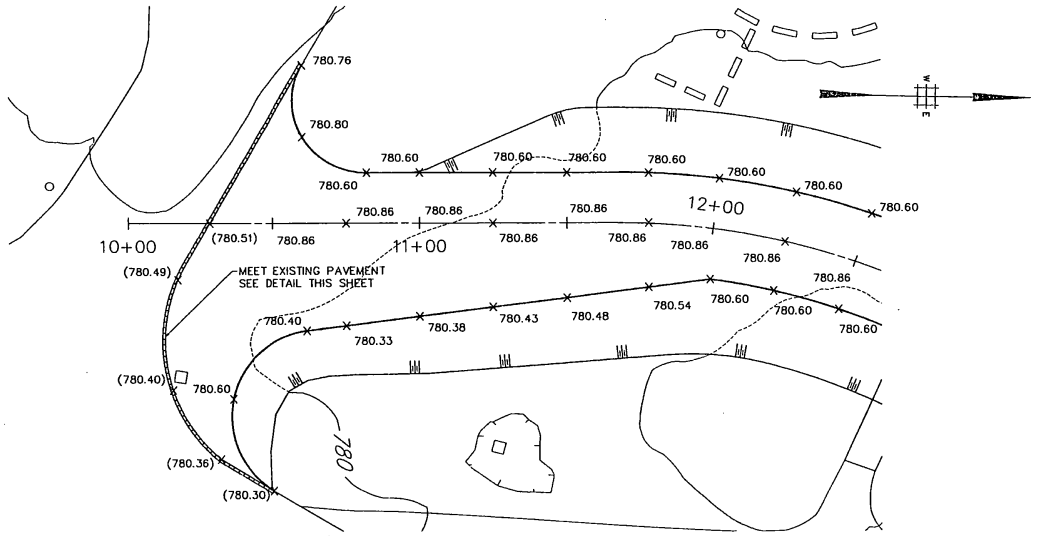
SCALE: 1" = 40'

RUTLAND STATE AIRPORT
CLARENDON, VERMONT
TAXIWAY E

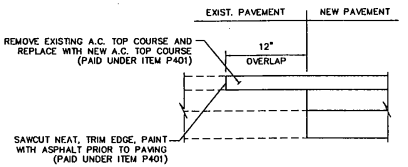
GRADING AND DRAINAGE PLAN

DRAWING NO.
GD4

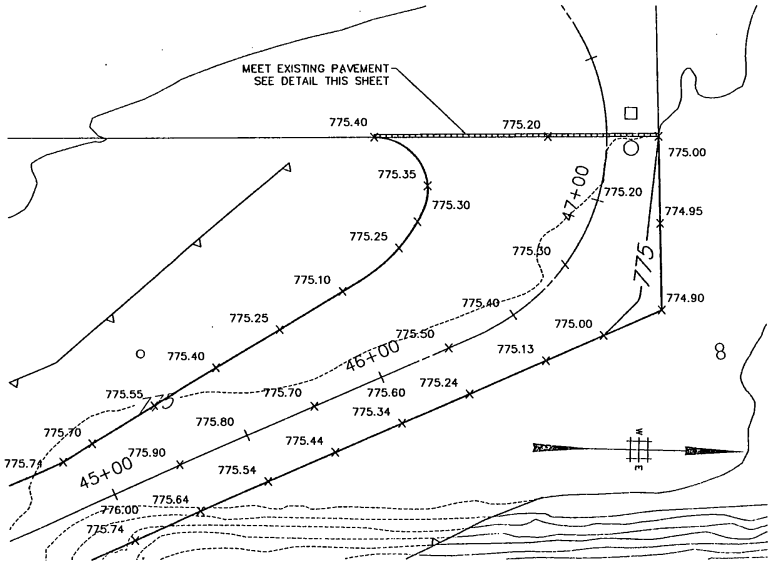
SHEET 14 OF 17



PROPOSED FINISHED PAVEMENT ELEVATIONS AT INTERSECTION OF T/W 'E' AND T/W 'C'



MEET EXISTING PAVEMENT



PROPOSED FINISHED PAVEMENT ELEVATIONS AT INTERSECTION OF T/W 'E' AND R/W 1-19

20' 10' 0 20' 40'

SEAL

REVISION	DESCRIPTION	DRAWN BY	CHECKED BY	APPR. BY	DATE

PROJECT NO. 7804

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

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

DATE: AUG. 23, 1993

SCALE: 1" = 20'

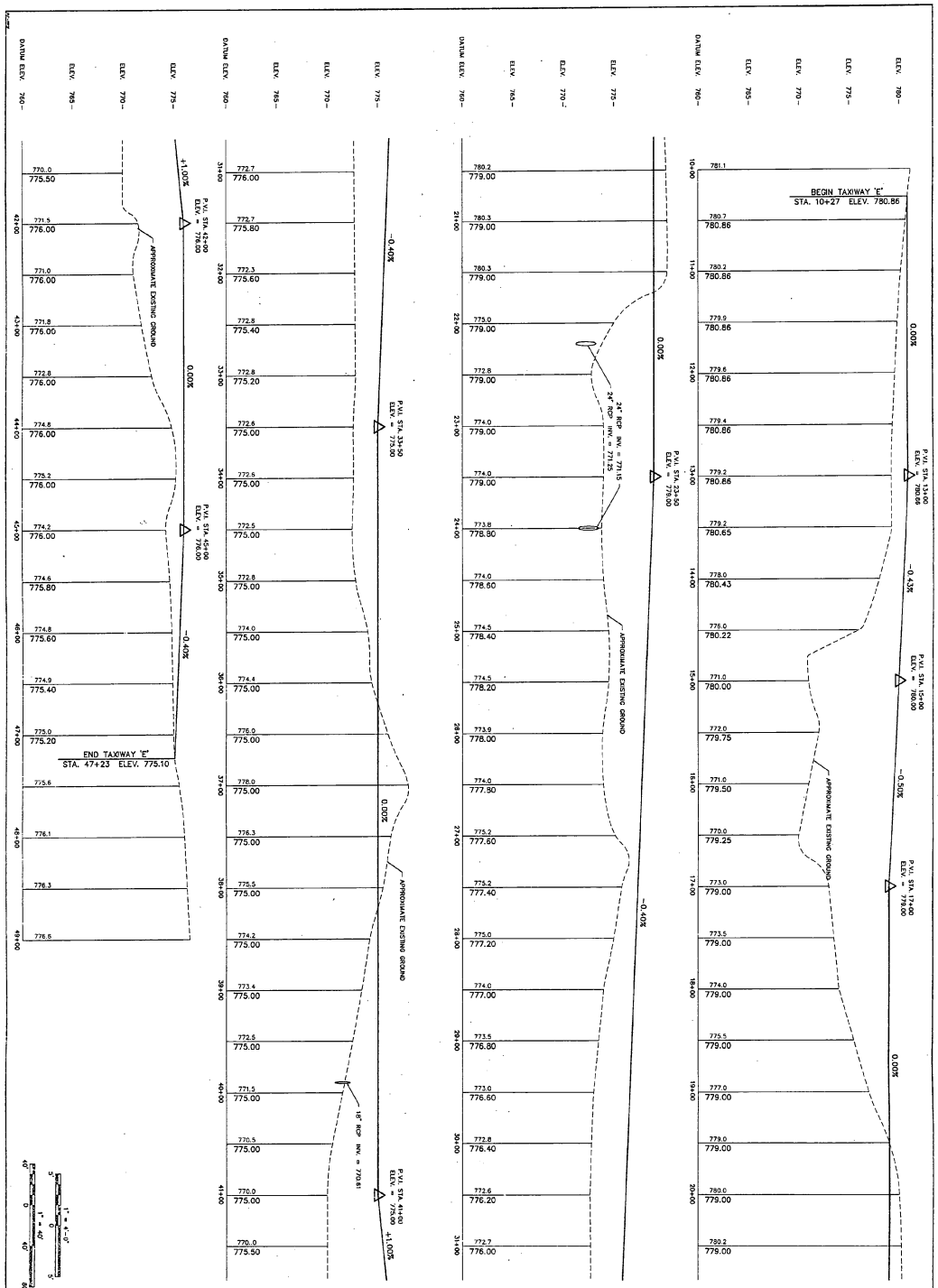
RUTLAND STATE AIRPORT
CLARENDON, VERMONT

TAXIWAY E

GRADING DETAILS

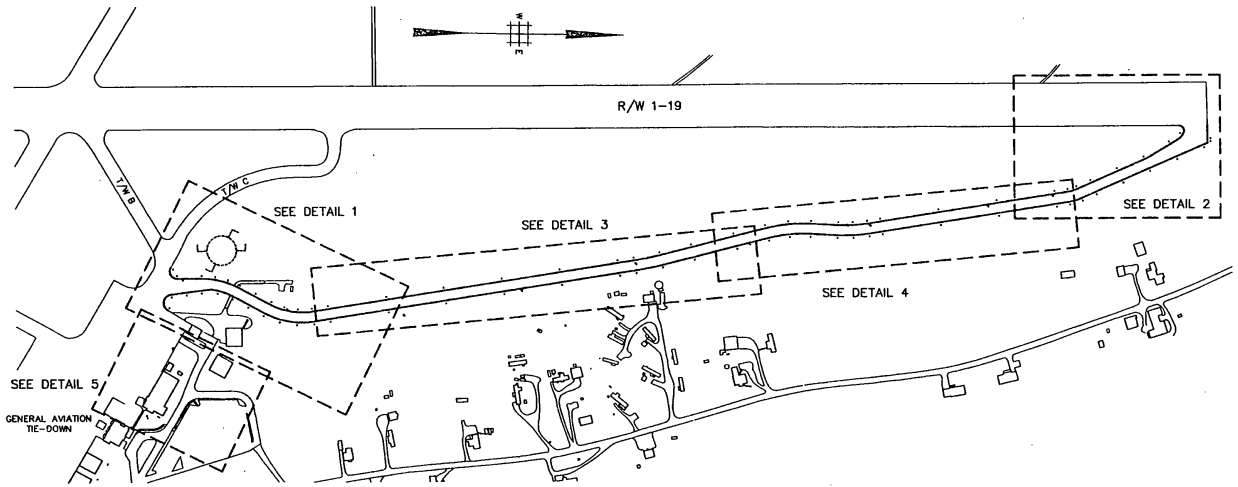
DRAWING NO.
GD5

SHEET 15 OF 41



SHEET 16 OF 22	DRAWING NO. PR1	RUTLAND STATE AIRPORT CLARENDON, VERMONT TAXIWAY E PROPOSED ℄ PROFILE	Envirodyne Engineers, Inc. 41 East 42nd St. Suite 1015 New York, NY 10017	PROJECT NO. 7804	REVISION	DESCRIPTION	DRAWN BY / DESIGNED BY / APPR. BY / DATE

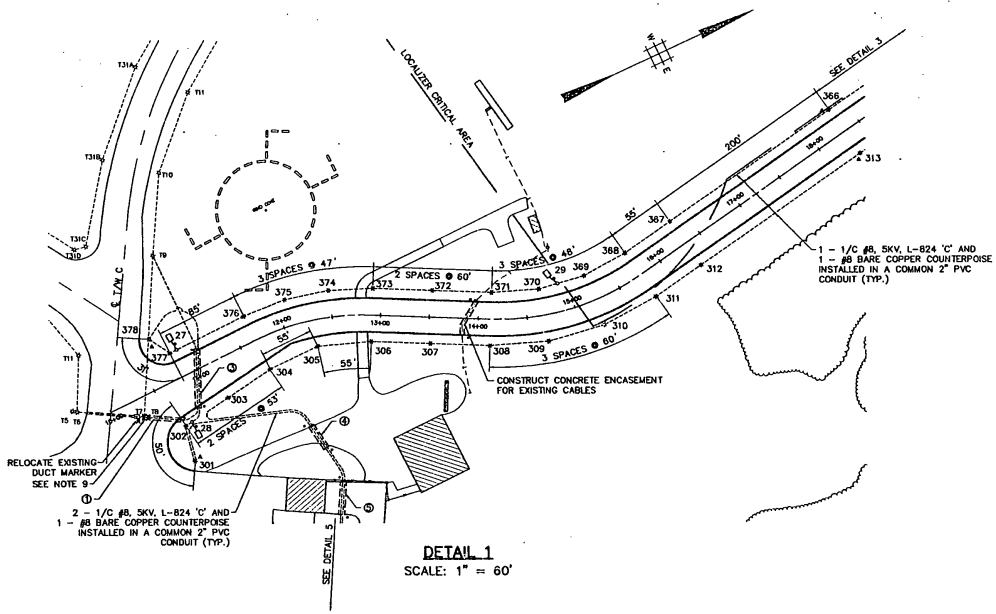
SCALE: 1" = 40' HOR. 1" = 4' VERT. | DATE: AUG. 23, 1994 | DESIGNED BY: F.S. | DRAWN BY: D.W. | CHECKED BY: L.C.



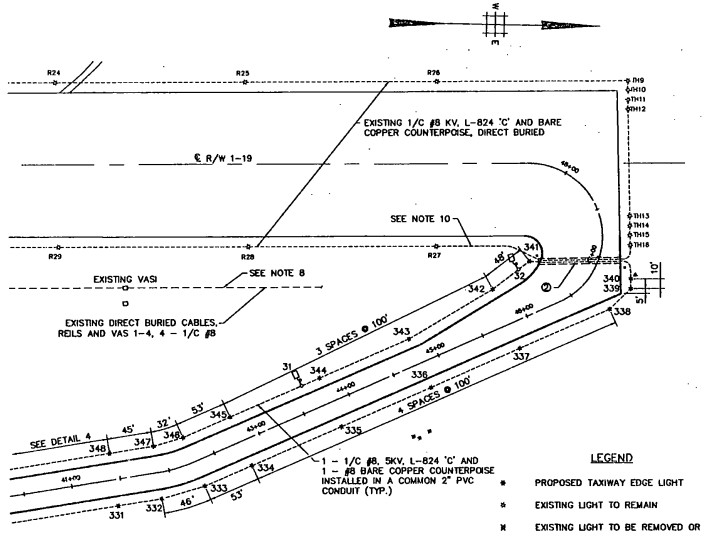
GENERAL LIGHTING PLAN
SCALE: 1" = 200'

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 REILS 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 T8 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 TO CONTACT RESIDENT ENGINEER.



DETAIL 1
SCALE: 1" = 60'



DETAIL 2
SCALE: 1" = 60'

1" = 200'
200' 100' 0 200' 400'

1" = 60'
60' 0 60' 120'

DUCT SCHEDULE

① 2 WAY 4"ø CONCRETE ENCASED 48 L.F. EXTENSION
② 4 WAY 4"ø CONCRETE ENCASED, 76 L.F.
③ 4 WAY 4"ø CONCRETE ENCASED, 61 L.F.
④ 4 WAY 4"ø CONCRETE ENCASED, 28 L.F.
⑤ 4 WAY 4"ø CONCRETE ENCASED, 35 L.F.
⑥ 4 WAY 4"ø CONCRETE ENCASED, 24 L.F.

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"ø x 8' COPPERCLAD GROUND ROD
- PROPOSED DUCT WITH CONDUIT AND MARKERS
- ① DUCT DESIGNATION - SEE DUCT SCHEDULE

CROSS REFERENCES

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

SEAL

REVISION	DESCRIPTION	DRAWN DECKED BY	APPR BY	DATE

PROJECT NO. 7904

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

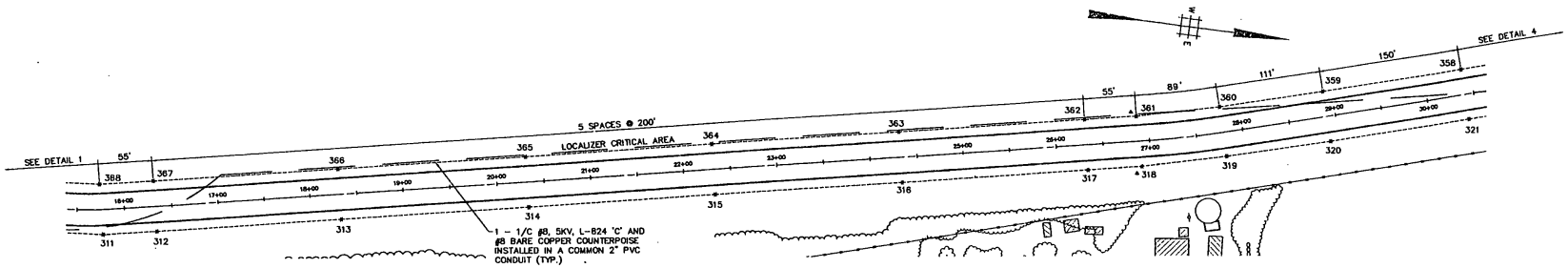
DESIGNED BY: L.G.
DRAWN BY: D.W.
CHECKED BY: P.S.
DATE: AUG. 23, 1993
SCALE: AS SHOWN

RUTLAND STATE AIRPORT
CLARENDON, VERMONT
TAXIWAY E

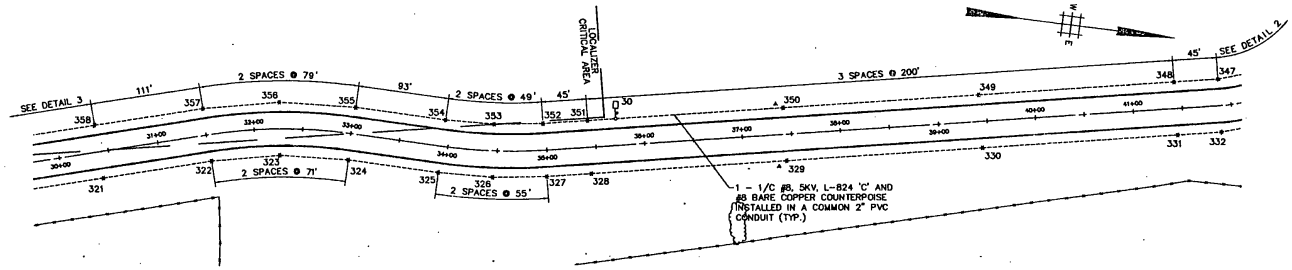
LIGHTING PLAN AND DETAILS

DRAWING NO. L1

SHEET 17 OF 47



DETAIL 3
SCALE: 1" = 60'



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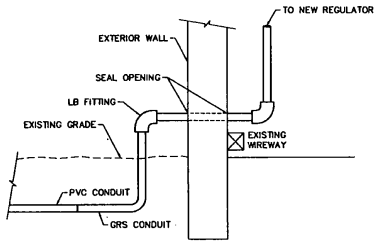
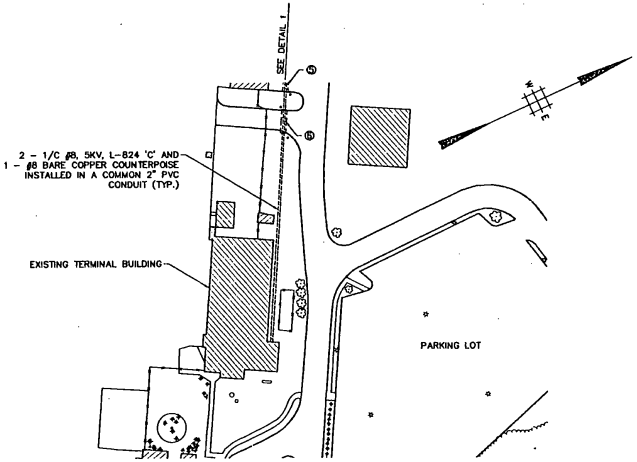
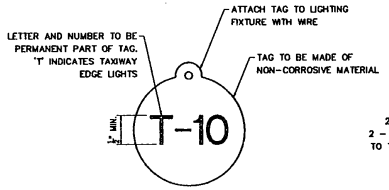
SCALE: 1" = 60'



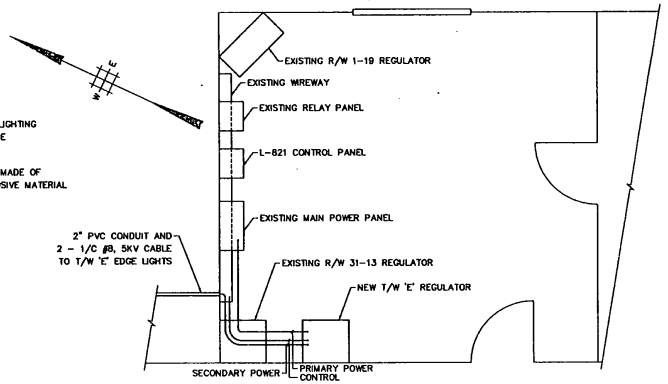
ELECTRICAL ROOM CONDUIT ENTRANCE
N.T.S.



DETAIL 5
SCALE: 1" = 60'



LIGHT IDENTIFICATION TAG
N.T.S.



ELECTRICAL ROOM LAYOUT
N.T.S.

DUCT SCHEDULE

⑤	4 WAY 4"ø CONCRETE ENCASED, 35 L.F.	
⑥	4 WAY 4"ø CONCRETE ENCASED, 24 L.F.	

CROSS REFERENCES

GENERAL LIGHTING PLAN	DRAWING NO. L1
DETAILS 1, 2 AND 3	DRAWING NO. L1
LIGHTING NOTES AND LEGEND	DRAWING NO. L1
SIGN PLANS	DRAWING NOS. S1, S2

60' 0 60' 120'

SEAL

NO.	DESCRIPTION	DRAWN BY	CHECKED BY	APPR. BY	DATE

PROJECT NO. 7804

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

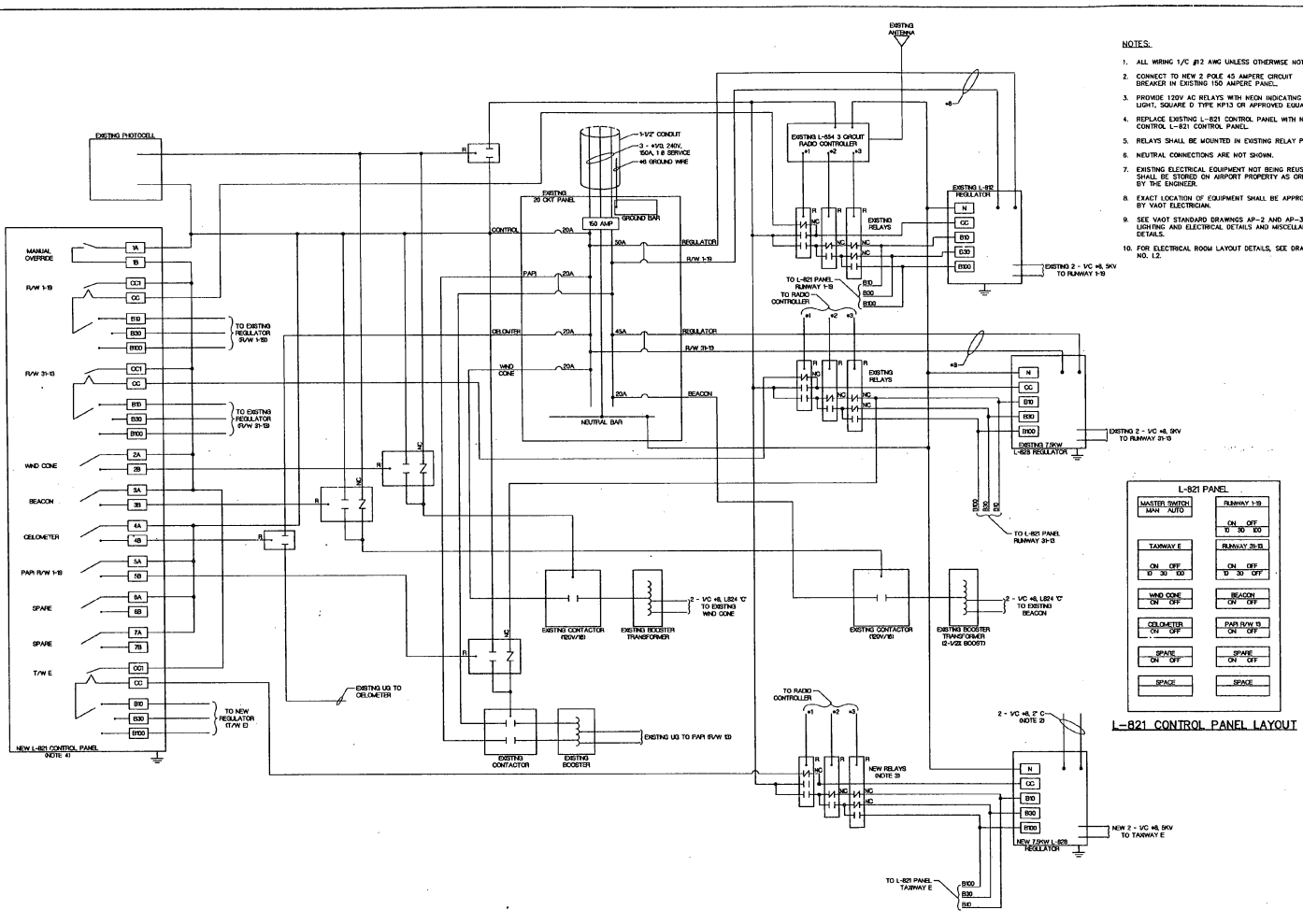
SCALE: AS SHOWN | DATE: AUG. 23, 1993 | DESIGNED BY: F.S. | DRAWN BY: D.W. | CHECKED BY: L.G.

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

TAXIWAY E

LIGHTING DETAILS

DRAWING NO. L2



NOTES:

1. ALL WIRING 1/C #12 AWG UNLESS OTHERWISE NOTED.
2. CONNECT TO NEW 2 POLE 45 AMPERE CIRCUIT BREAKER IN EXISTING 150 AMPERE PANEL.
3. PROVIDE 120V AC RELAYS WITH NEON INDICATING LIGHT, SQUARE D TYPE KP13 OR APPROVED EQUAL.
4. REPLACE EXISTING L-821 CONTROL PANEL WITH NEW CONTROL L-821 CONTROL PANEL.
5. RELAYS SHALL BE MOUNTED IN EXISTING RELAY PANEL.
6. NEUTRAL CONNECTIONS ARE NOT SHOWN.
7. EXISTING ELECTRICAL EQUIPMENT NOT BEING REUSED SHALL BE STORED ON AIRPORT PROPERTY AS ORDERED BY THE ENGINEER.
8. EXACT LOCATION OF EQUIPMENT SHALL BE APPROVED BY VAOT ELECTRICIAN.
9. SEE VAOT STANDARD DRAWINGS AP-2 AND AP-3 FOR LIGHTING AND ELECTRICAL DETAILS AND MISCELLANEOUS DETAILS.
10. FOR ELECTRICAL ROOM LAYOUT DETAILS, SEE DRAWING NO. L2.

SEAL

REVISION	DESCRIPTION	DRAWN BY	APP'D BY	DATE

PROJECT NO. 7804

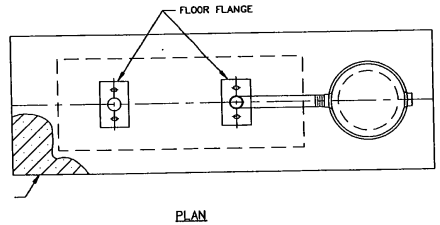
Envirodyne Engineers, Inc.
41 East 42nd St. Suite 1015
New York, NY 10017

DESIGNED BY: L.S.
DRAWN BY: D.W.
CHECKED BY: F.S.
DATE: AUG. 23, 1993
NOT TO SCALE

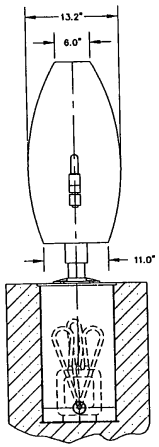
RUTLAND STATE AIRPORT
CLARENDON, VERMONT
TAXIWAY E

ELECTRICAL DETAILS

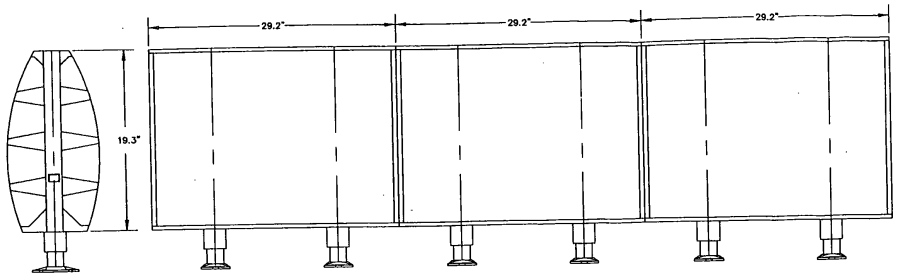
DRAWING NO.
L3
SHEET 19 OF ///



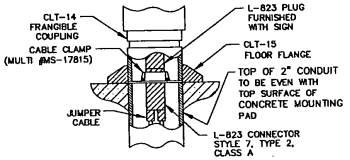
PLAN



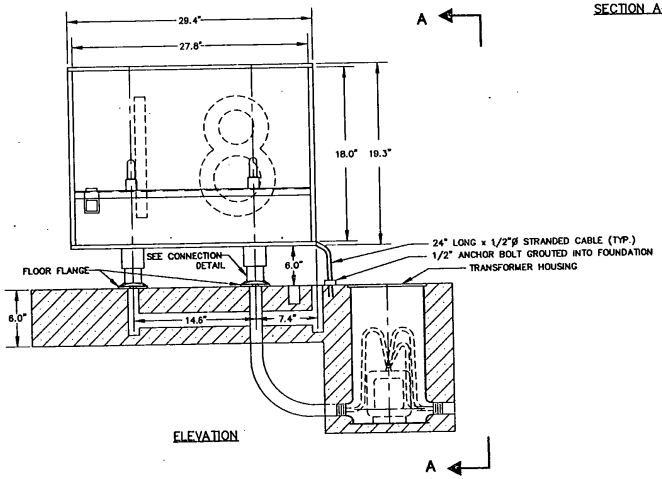
SECTION A–A



MULTIPLE PANEL TAXIWAY SIGN
N.T.S.



ELECTRICAL CONNECTION DETAIL
N.T.S.



ELEVATION

SINGLE PANEL TAXIWAY SIGN
N.T.S.

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

SEAL

REVISION	DESCRIPTION	DRAWN CHECKED BY	APPR. BY	DATE

PROJECT NO. 7804

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

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

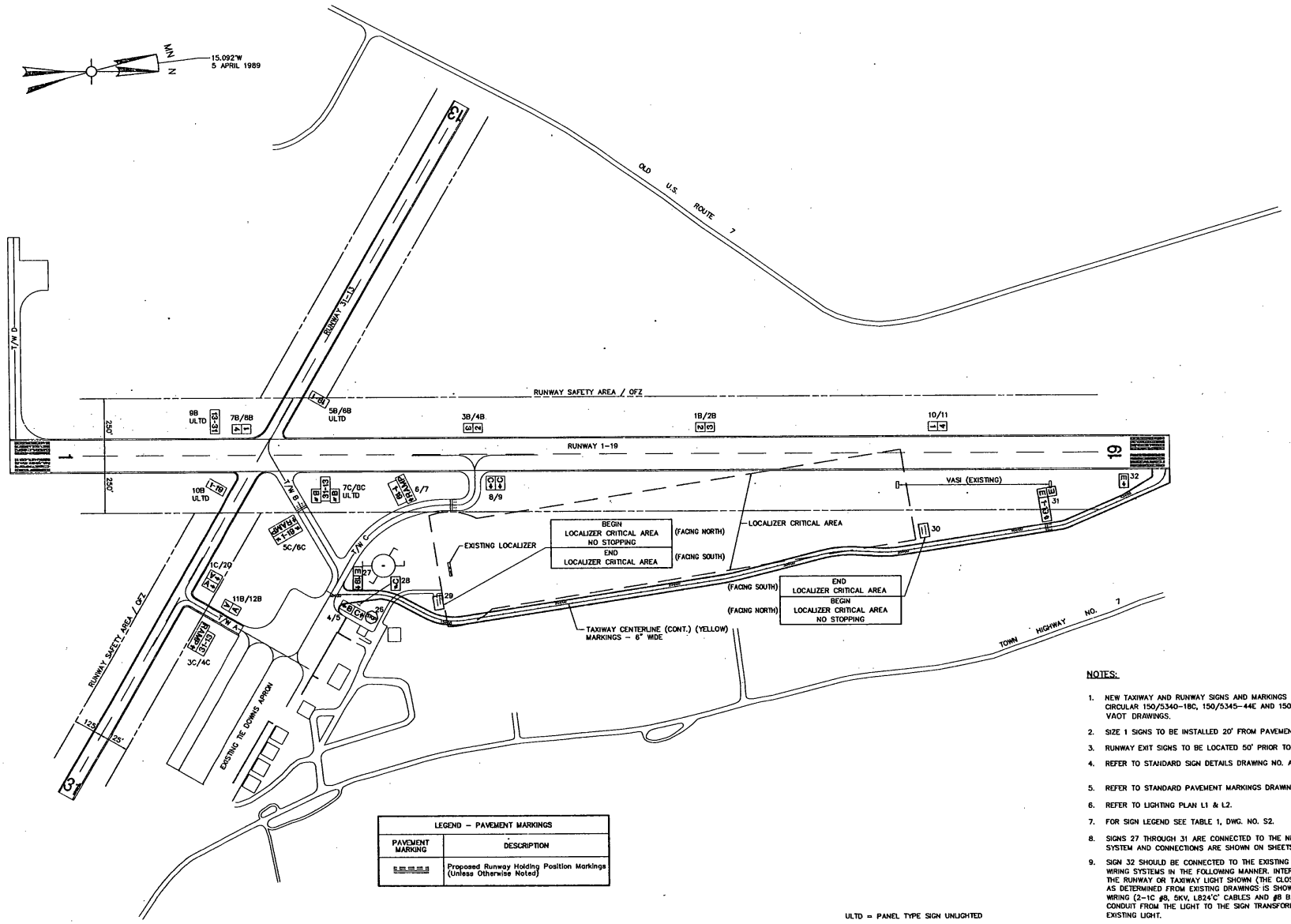
DATE: AUG. 23, 1993 | NOT TO SCALE

RUTLAND STATE AIRPORT
CLARENDON, VERMONT
TAXIWAY E

ELECTRICAL DETAILS

DRAWING NO.
L4

SHEET 20 OF 41



LEGEND - PAVEMENT MARKINGS	
PAVEMENT MARKING	DESCRIPTION
	Proposed Runway Holding Position Markings (Unless Otherwise Noted)

ULTD = PANEL TYPE SIGN UNLIGHTED

NOTES:

1. NEW TAXIWAY AND RUNWAY SIGNS AND MARKINGS ARE TO CONFORM TO FAA ADVISORY CIRCULAR 150/5340-18C, 150/5345-44E AND 150/5340-1F. SEE ALSO STANDARD VAOT DRAWINGS.
2. SIZE 1 SIGNS TO BE INSTALLED 20' FROM PAVEMENT EDGE.
3. RUNWAY EXIT SIGNS TO BE LOCATED 50' PRIOR TO TURN ONTO TAXIWAY.
4. REFER TO STANDARD SIGN DETAILS DRAWING NO. AP-12 (STD VAOT)
5. REFER TO STANDARD PAVEMENT MARKINGS DRAWING NOS. AP10 & AP11.(STD VAOT)
6. REFER TO LIGHTING PLAN L1 & L2.
7. FOR SIGN LEGEND SEE TABLE 1, DWG. NO. S2.
8. SIGNS 27 THROUGH 31 ARE CONNECTED TO THE NEW TAXIWAY LIGHTING WIRING SYSTEM AND CONNECTIONS ARE SHOWN ON SHEETS 7 AND 8.
9. SIGN 32 SHOULD BE CONNECTED TO THE EXISTING RUNWAY AND TAXIWAY LIGHTING WIRING SYSTEMS IN THE FOLLOWING MANNER. INTERCEPT THE EXISTING WIRING AT THE RUNWAY OR TAXIWAY LIGHT SHOWN (THE CLOSEST RUNWAY OR TAXIWAY LIGHT AS DETERMINED FROM EXISTING DRAWINGS IS SHOWN ON THE PLAN). PROVIDE NEW WIRING (2-1C #8, 5KV, L824'C' CABLES AND #8 BARE COUTERPOISE) IN A 2" PVC CONDUIT FROM THE LIGHT TO THE SIGN TRANSFORMER. SPLICE WIRING AT THE EXISTING LIGHT.

SEAL

REVISION	DESCRIPTION	DRWN (CHECKED) APPR. BY	DATE

PROJECT NO. 7804

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

DESIGNED BY: F.S. | DRAWN BY: A.F.B. | CHECKED BY: L.G.

DATE: AUG. 23, 1993

SCALE: 1" = 200'

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

TAXIWAY E

SIGNING PLAN

DRAWING NO. S1

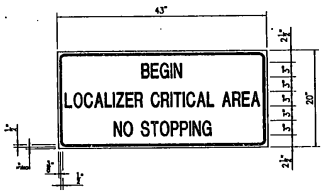
SHEET 21 OF 41

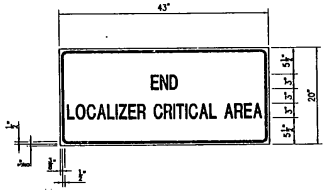
TABLE 1

SIGN TYPE	ABBREVIATION	NAME	COLOR: INSCRIPTION	COLOR: BACKGROUND	SYMBOL	FAA SPEC	SIZE	POWERED BY
MANDITORY INSTRUCTION SIGN	HP	HOLD POSITION SIGN	WHITE	RED	1-19	L-858R	1	240 VA
	ST	STOP	WHITE	RED	STOP	–	18"	–
	IS	INSTRUCTION SIGN	BLACK	YELLOW	TEXT			
LOCATION SIGN								
	TL	TAXIWAY LOCATION	YELLOW	BLACK	A	L-858L	1	240 VA
DIRECTION SIGN	RE	EXIT	BLACK	YELLOW	— A	L-858Y	1	241 VA
	TD	TAXIWAY DIRECTION	BLACK	YELLOW	— B	L-858Y	1	241 VA

TABLE 2

SIGN NO.	TYPE	LOCATION: STATION	LOCATION: OFFSET	TEXT	# PROPOSED MODULES	# EXISTING MODULES	TOTAL # MODULES	INSTRUCTIONS
26	ST			STOP	–	–	–	INSTALL (1) STOP SIGN PANEL (TRAFFIC TYPE) PER VAOT E-143
27	TL, TD			E - 19 |	2	0	2	INSTALL (1) LOCATION SIGN
28	TD			— C	1	0	1	INSTALL (1) TAXIWAY DIRECTION SIGN
29	IS			"TEXT"	1	0	1	INSTALL NEW INSTRUCTION SIGN "BEGIN LOCALIZER CRITICAL AREA NO STOPPING"
30	IS			"TEXT"	1	0	1	INSTALL NEW INSTRUCTION SIGN "END LOCALIZER CRITICAL AREA"
31	TL, HP			E 1-19	2	0	2	INSTALL LOCATION SIGN AND (1) HOLD POSITION SIGN
32	RE			EXIT	1	0	1	RUNWAY EXIT SIGN

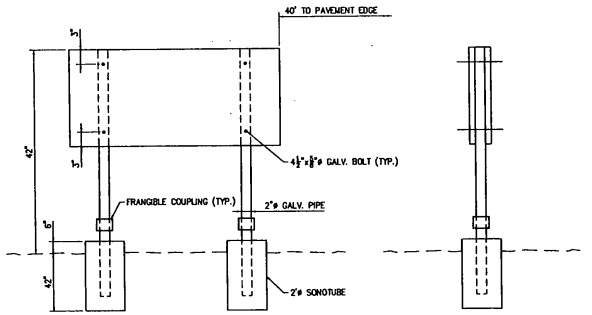




LETTER WIDTH DIMENSIONS
(ALL LETTERS 3" HIGH)

A,B,C	=	1¾"
C,D,E,G,L,N,P,R	=	1½"
I	=	¾"
LETTER SPACING	=	¾"
WORD SPACING	=	1½"

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



ELEVATION

SECTION

SEAL

REVISION	DESCRIPTION	DRAWN BY	CHECKED BY	APPR. BY	DATE

PROJECT NO. 7804

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

DESIGNED BY: F.S. | DRAWN BY: A.F.B. | CHECKED BY: L.G.

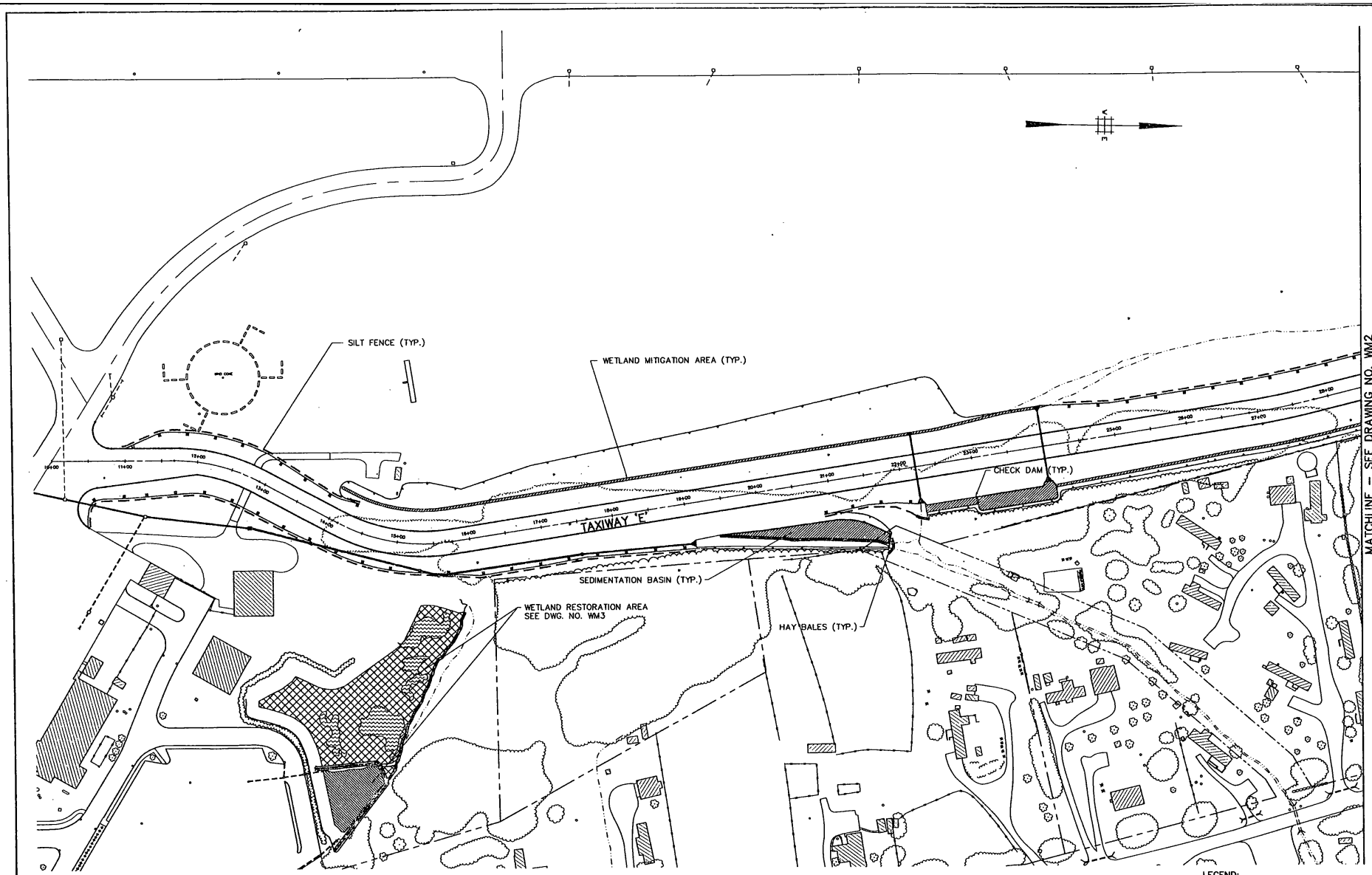
DATE: AUG. 23, 1993 | SCALE: N.T.S.

RUTLAND STATE AIRPORT
CLARENDON, VERMONT
TAXIWAY E

SIGN TABLES AND DETAILS

DRAWING NO.
S2

SHEET 22 OF 41



SEAL

REVISION	DESCRIPTION	DRAWN CHECKED BY	APPR. BY	DATE

PROJECT NO. 7804

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

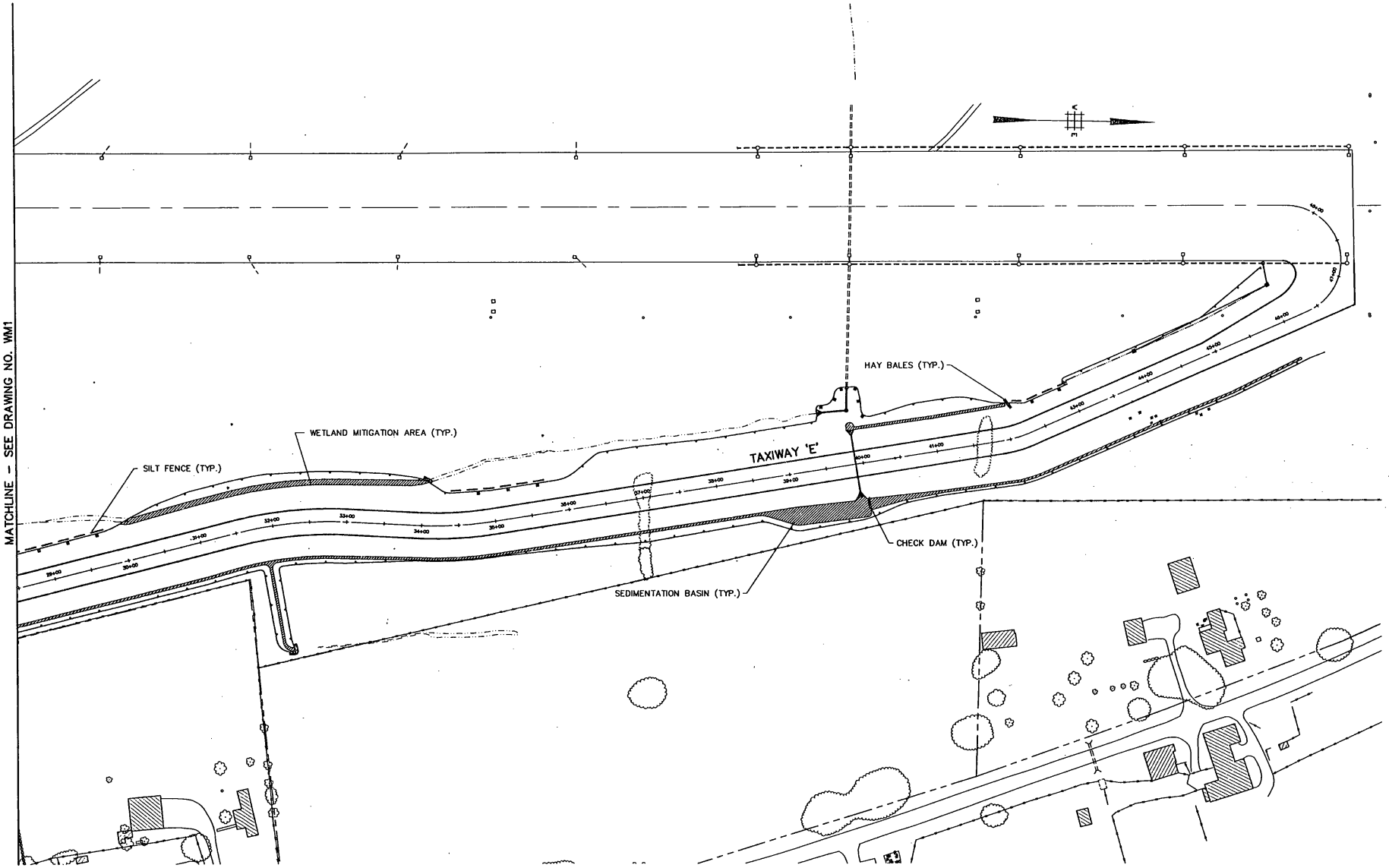
DESIGNED BY: L.G.
DRAWN BY: D.W.
CHECKED BY: F.S.
DATE: AUG. 23, 1993
SCALE: 1" = 60'

RUTLAND STATE AIRPORT
CLARENDON, VERMONT
TAXIWAY E

WETLAND MITIGATION PLAN AREA I

DRAWING NO.
WM1

SHEET 23 OF 41



SEAL

REVISION	DESCRIPTION	DRAWN BY	CHECKED BY	APPR. BY	DATE

PROJECT NO. 7804

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

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

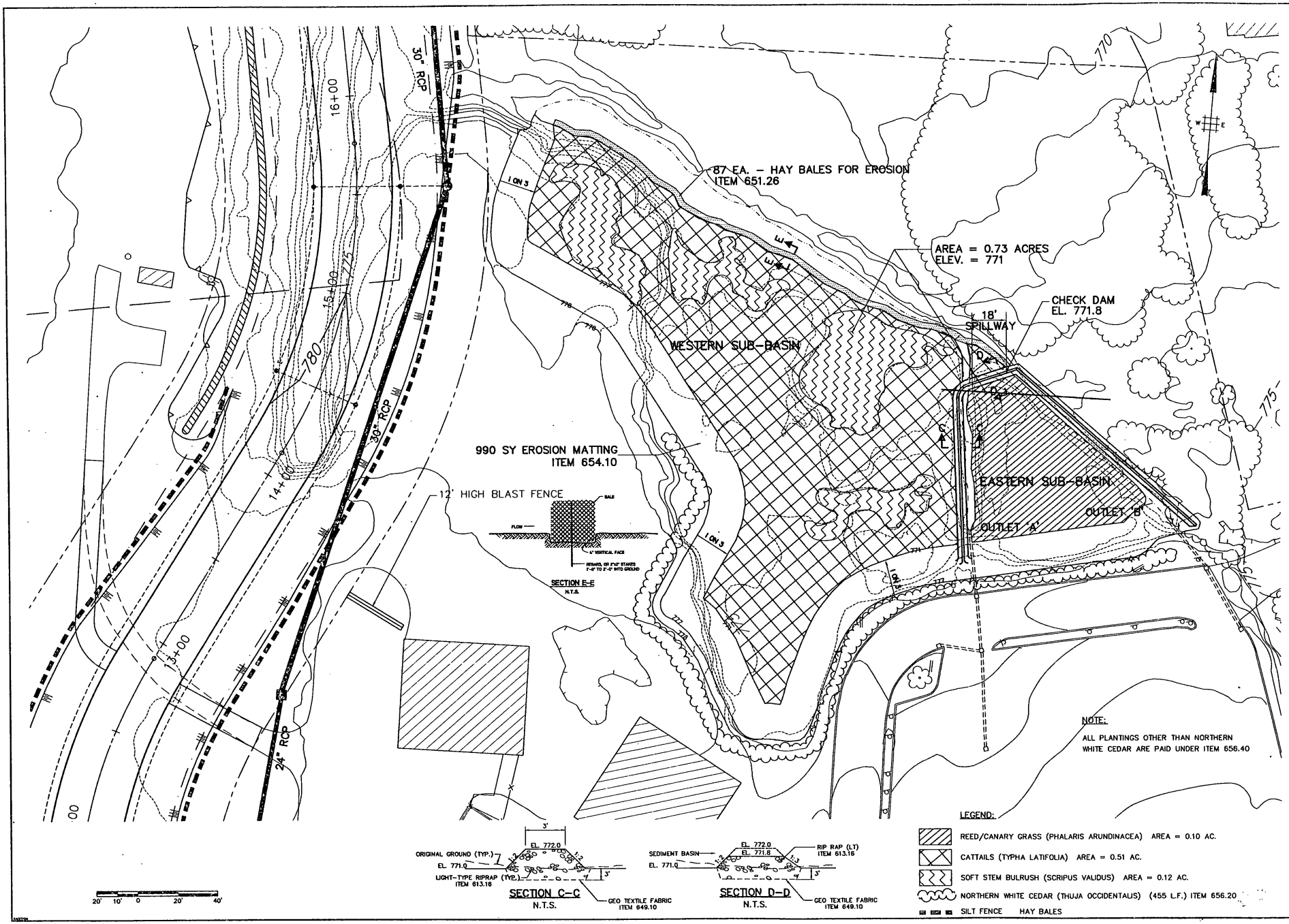
SCALE: 1" = 60' | DATE: AUG. 23, 1993

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

TAXIWAY E
WETLAND MITIGATION PLAN AREA 1

DRAWING NO.
WM2

SHEET 24 OF 41



SEAL

NO.	REVISION	DESCRIPTION	DRAWN BY	CHECKED APPR. BY	DATE

PROJECT NO. 7804

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

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

DATE: AUG. 23, 1993

SCALE: 1" = 20'

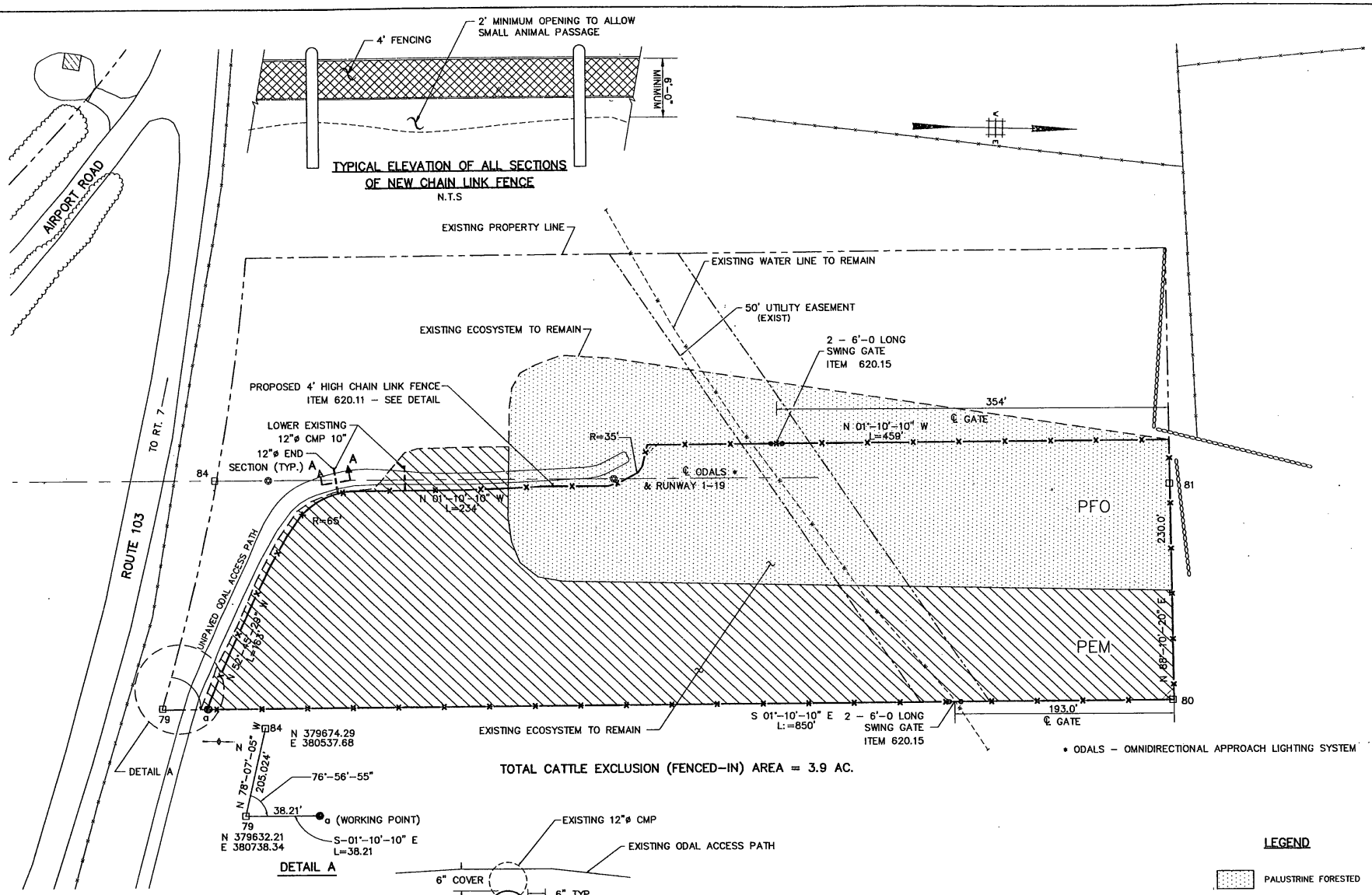
RUTLAND STATE AIRPORT
CLARENDON, VERMONT

TAXIWAY E

WETLAND MITIGATION PLAN – AREA 2

DRAWING NO.
WM3

SHEET 25 OF 44



PT	COORDINATES N	E
79	379632.21	380738.34
84	379674.29	380537..68
81	380513.63	380520.63
80	380519.99	380720.42

SEAL

REVISION	DESCRIPTION	DRAWN BY	CHECKED BY	APPR BY	DATE

PROJECT NO. 7804

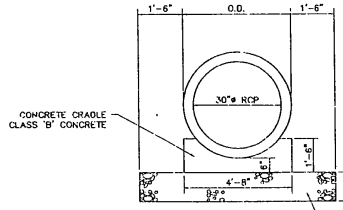
Envirodyne Engineers, Inc.
41 East 42nd St. Suite 1015
New York, NY 10017

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

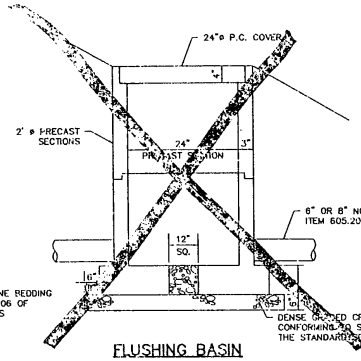
RUTLAND STATE AIRPORT
CLARENDON, VERMONT
TAXIWAY E
WETLAND MITIGATION PLAN
AREA 3

DRAWING NO.
WM4

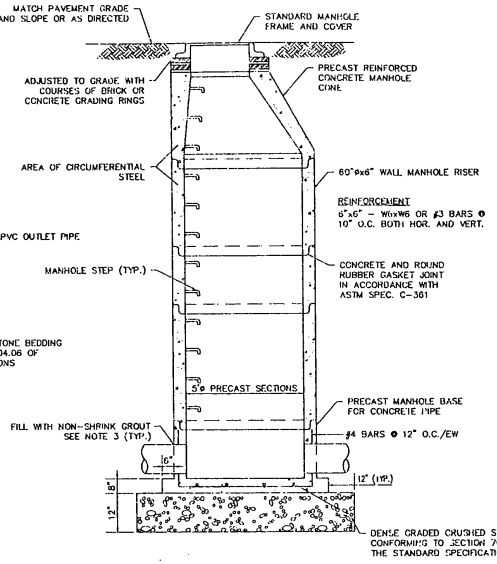
SHEET 26 OF 44



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



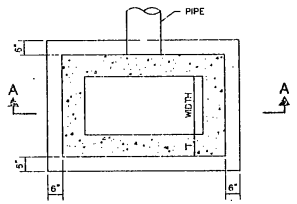
FLUSHING BASIN
FOR 6" OR 8" UNDERDRAIN
ITEM 605.95
N.T.S.



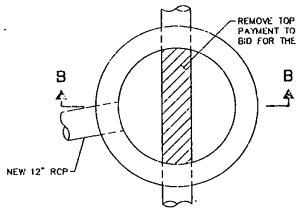
PRECAST MANHOLE
ITEM 604.21
N.T.S.

NOTES:

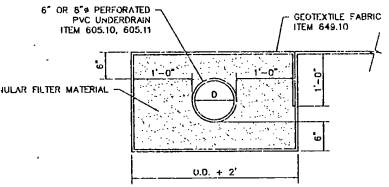
1. MANHOLE FRAME AND COVER AT STA. 46+00 SHALL BE NEENAH FOUNDRY CO. R1590 OR APROVED EQUAL.
2. OPENINGS IN WALLS FOR PIPE SHALL BE CAST-IN-PLACE OR CUT CLEANLY AND WITHOUT PERCUSSION TO A MAXIMUM DIAMETER OF O.D. + 3". THE SPACE BETWEEN PIPE AND WALL SHALL THEN BE FILLED WITH NON-SHRINK GROUT.
3. MANHOLE RUNGS SHALL BE NFENAH NO. R-1981-N DUCTILE IRON PIPE.
4. SPLICE LENGTHS REQUIRED FOR REINFORCING BARS: #4 BAR, 1'-4"; #6 BAR, 2'-0"; AND #8 BAR, 3'-5".
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.
6. DENSE GRADED CRUSHED STONE BEDDING SHALL MEET THE REQUIREMENTS OF SECTION 704.06 OF THE STANDARD SPECIFICATIONS.
7. CONCRETE FOR MANHOLES AND INLET STRUCTURES TO BE 4000 PSI AIR-ENTRAINED.
8. REINFORCED PRECAST PRODUCTS TO BE IN ACCORDANCE WITH ASTM SPECIFICATIONS C-478.



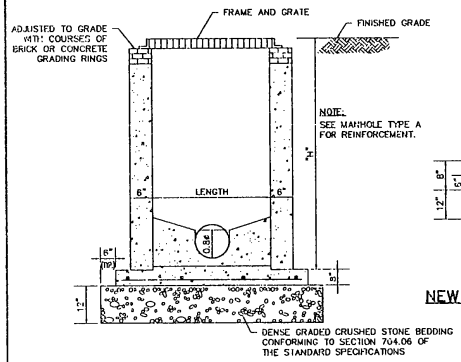
PLAN



PLAN

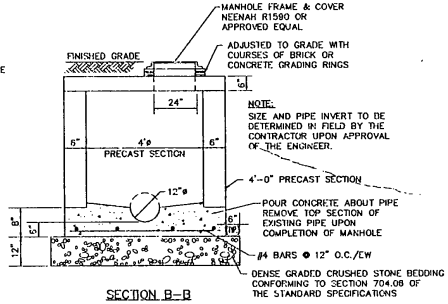


UNDERDRAIN DETAIL
N.T.S.



SECTION A-A

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



SECTION B-B

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

REINFORCEMENT
6"x6" - W6xW6 OR #3 BARS @ 10" O.C. BOTH HOR. AND VERT.

UNDERDRAINS							
LOCATION STA. - STA.	OFFSET EAST SIDE	OFFSET WEST SIDE	6" PERFOR. LENGTH	6" NONPERF. LENGTH	6" PERFOR. LENGTH	8" NONPERF. LENGTH	COMMENTS
11+00 - 14+50	-	22'	350'	-	-	-	
	-	-	-	-	-		
11+00 - 14+50	22'	-	350'	-	-	-	
14+50 - 15+55	22'	-	110'	-	-	-	
14+50	22'	22'	-	44'	-	-	CARRIER PIPE CROSSOVER
15+55	44'	22'	-	66'	-	-	CARRIER PIPE CROSSOVER
14+53 - 17+35	-	22'	275'	-	-	-	
17+35 - 18+00	-	22'	60'	-	-	-	
18+50 - 22+10	-	22'	330'	-	-	-	
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'	-	-	-	455'	-	
35+00 - 39+50	-	22'	-	-	455'	-	
39+50	-	-	-	-	-	44'	CARRIER PIPE CROSSOVER
39+50	-	-	-	-	-	68'	CARRIER PIPE CROSSOVER, OUTLET TO MANHOLE
39+85 - 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							
NO.	LOCATION	LENGTH **	WIDTH **	WALL THICKNESS "	DEPTH 'H'	FRAME AND GRATE*	REMARKS
1	13+10, 65' RT.	3'-0½"	2'-0½"	6"	7'	R-3475	
2	22+20, 45' LT.	3'-4"	1'-11½"	6"	4'	R-3362	
3	46+00, 60' LT.	2'-5"	2'-5"	6"	3.5'±	R-3350	
4	44+00, 46' LT.	2'-5"	2'-5"	6"	3.0'	R-3350	

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

SEAL

NO.	REVISION	DESCRIPTION	DRAWN RECORD SET	TYPE	DATE

PROJECT NO. 7304

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

DESIGNED BY: F.S. | DRAWN BY: E.M. | CHECKED BY: L.G.
DATE: AUG. 23, 1993
SCALE: AS SHOWN

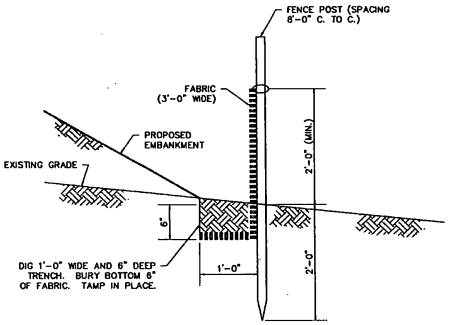
RUTLAND STATE AIRPORT
CLARENDON, VERMONT
TAXIWAY E

DRAINAGE STRUCTURE DETAILS

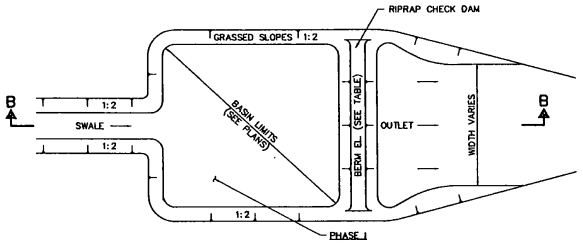
DRAWING NO.
DD1

SHEET 27 OF 41

REVISED 9-15-93 RLD



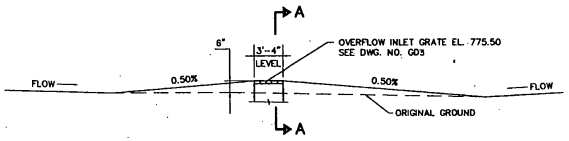
SILT FENCE DETAIL
ITEM 649.20
N.T.S.



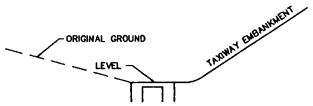
PHASE I
REMOVE UNSUITABLE MATERIAL
REPLACE WITH CLEAN SAND AND GRAVEL
(GRANULAR BORROW)

PHASE II
REMOVE SAND AND GRAVEL
REPLACE WITH HYDRIC SOILS
PLANT REED CANARY GRASS (PHALARIS ARUNDINACEA)

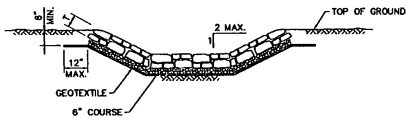
SEDIMENTATION BASIN / WETLAND POOL
N.T.S.



CHECK DAM AND DROP INLET STA. 22+20, 45' LEFT
N.T.S.



SECTION A-A
N.T.S.

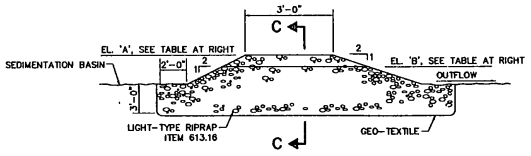


RIP-RAP @ SWALES
ITEM 613.16
N.T.S.

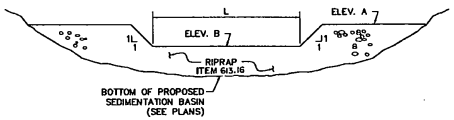
PHASE I
REMOVE UNSUITABLE MATERIAL
MUCK EXCAVATION
REPLACE WITH CLEAN SAND AND GRAVEL
GRANULAR BORROW

PHASE II
REMOVE SAND AND GRAVEL
REPLACE WITH HYDRIC SOILS
PLANT REED CANARY GRASS (PHALARIS ARUNDINACEA)

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

A. ALL TYPES OF SEDIMENT BARRIERS:
   1. THE BARRIER SHALL BE CONSTRUCTED SO WATER CANNOT BYPASS THE BARRIER AROUND THE ENDS.
   2. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
   3. 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.

B. REQUIREMENTS FOR BALE BARRIER (E.G., STRAW, HAY OR OTHER ACCEPTABLE VEGETATIVE MATERIAL):
   1. BALES TO BE PLACED AT LOCATIONS NOTED ON THE PLANS.
   2. ALL BALES SHALL BE SECURELY TIED AND STAKED ON THE CONTOUR. SEE SHEET 23 FOR DETAILS.
   3. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
   4. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4 INCHES.
   5. 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.

C. REQUIREMENTS FOR SILT FENCE (SEE DETAIL ON THIS SHEET):
   1. SILT FENCES TO BE PLACED AT LOCATIONS NOTED ON THE PLANS.
   2. 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.
   3. 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

1. CONTRACTOR TO CONSTRUCT SEDIMENTATION BASINS AS HIS FIRST OPERATION.
2. CONTRACTOR TO REMOVE ACCUMULATED SEDIMENT AS NECESSARY DURING CONSTRUCTION OF TAXIWAY FOR EFFICIENT BASIN OPERATION.
3. 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	DIM L	ELEV. A	ELEV. B	
STA. 21+80	100' RT.	13.0	771.00	770.50	SEE DWG. NO. GD2
STA. 23+00	60' RT.	10.0	772.00	771.50	SEE DWG. NO. GD2
STA. 40+00	60' RT.	10.0	771.20	770.70	SEE DWG. NO. GD3

SEAL

NO.	REVISION	DESCRIPTION	DRAWN BY	CHECKED BY	APPR. BY	DATE

PROJECT NO. 7804

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

DESIGNED BY: F.S. | DRAWN BY: E.M. | CHECKED BY: L.G.
SCALE: AS SHOWN | DATE: AUG. 23, 1993

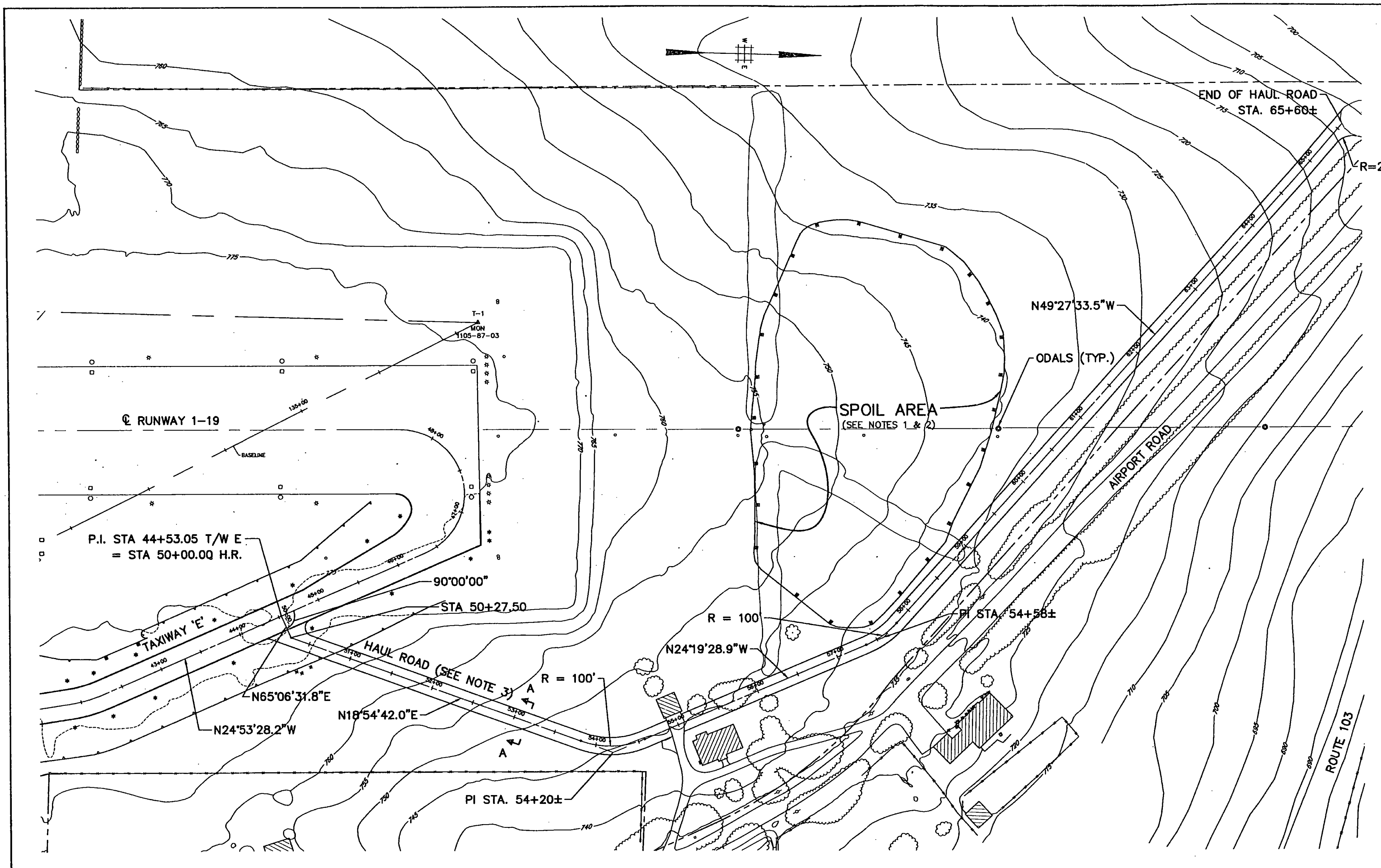
RUTLAND STATE AIRPORT
CLARENDON, VERMONT

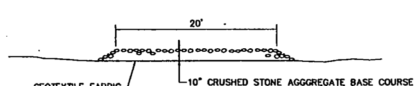
TAXIWAY E
EROSION CONTROL AND WETLAND MITIGATION DETAILS

DRAWING NO.
DD2

SHEET 28 OF 41

C:\USR\PROJECTS\RUTLAND\EC-DD1 Mon Aug 23 15:48:53 1993





HAUL ROAD

SECTION A-A

N.T.S.

NOTE:

1. EXCAVATED MATERIAL FROM THE CONSTRUCTION OF THE TAXIWAY SHOULD BE STOCKPILED IN THE DESIGNATED SPOIL AREA ACCORDING TO THEIR DESCRIPTION AND FUTURE USE (AS DIRECTED BY THE ENGINEER). NO SEPARATE PAYMENT WILL BE MADE BUT SHALL BE INCLUDED IN THE CUBIC YARD PRICE BID IN THE CONTRACT FOR EXCAVATION ITEM 203.15.

2. MAXIMUM ELEVATION OF STOCKPILED MATERIAL TO BE 755.00. STOCKPILE SLOPES TO BE 1:3. SURFACE TO BE SEEDED UPON COMPLETION. NO SEPARATE PAYMENT TO BE MADE. BUT SHALL BE INCLUDED IN THE CUBIC YARD BID IN THE CONTRACT FOR ITEM 203.15 EXCAVATION.

3. CONTRACTOR IS FREE TO ALTER THE ALIGNMENT OF THE HAUL ROAD WHEN NECESSARY, BUT ONLY UPON PRIOR APPROVAL FROM THE RESIDENT ENGINEER AND THE AIRPORT MANAGER.

50' 0 50' 100'

SEAL

REVISION	DESCRIPTION	DRAWN BY	CHECKED BY	APPR. BY	DATE

PROJECT NO. 7804

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

SCALE: 1" = 50' | DATE: AUG. 23, 1993 | DESIGNED BY: F.S. | DRAWN BY: D.W. | CHECKED BY: L.G.

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

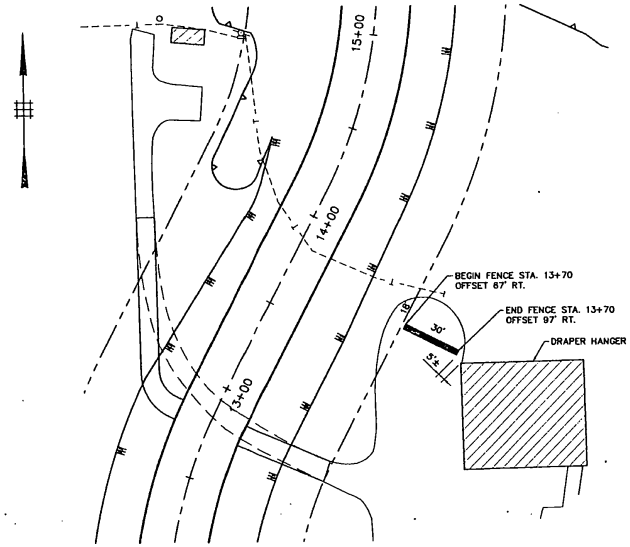
TAXIWAY E

HAUL ROAD AND SPOIL AREA PLAN

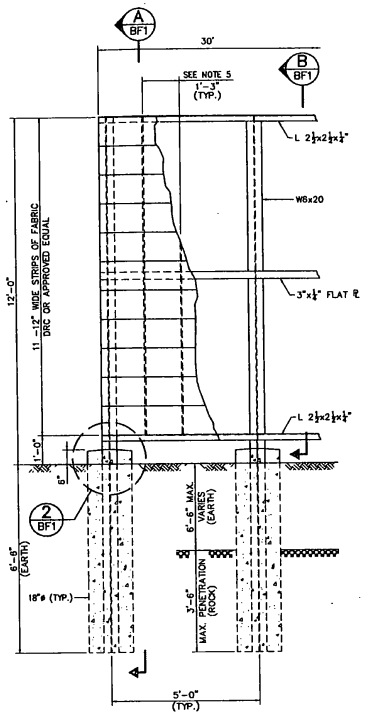
DRAWING NO.

HR1

SHEET 29 OF 41



PLAN
N.T.S.



ELEVATION
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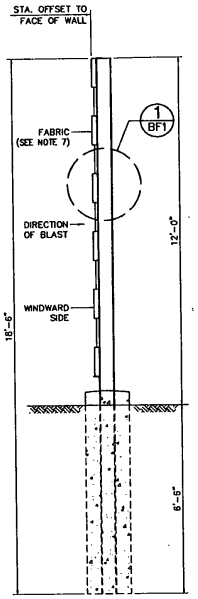

SECTION A BF1
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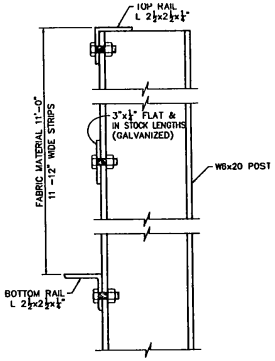

SECTION B BF1
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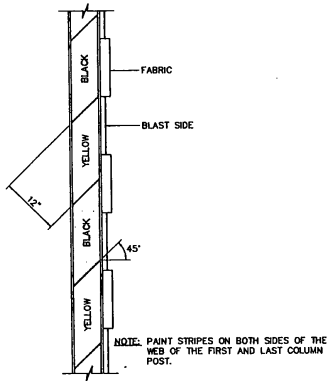
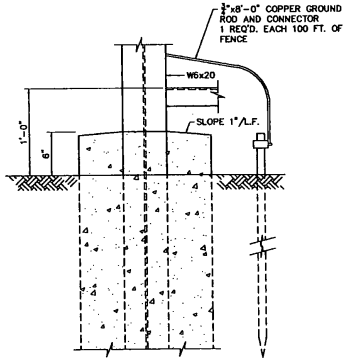


DETAIL 1 BF1
Scale: 1"=1'-0"



DETAIL 2 BF1
Scale: 3"=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 GUAGE 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 CYCLONE OR CHAIN LINK FENCE STRETCHER TO LAST POST – WHEN TIGHT FASTEN WITH TEKS (12-24 X 7/8 HEX. WASHER HEAD WITH TWIN SEAL WASHER – ILLINOIS TOOL WORKS – BUILDEX 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 SUCESSIVE 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).

SEAL

REVISION	DESCRIPTION	DRAWN CHECKED BY	APPR. BY	DATE

PROJECT NO. 7804

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

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

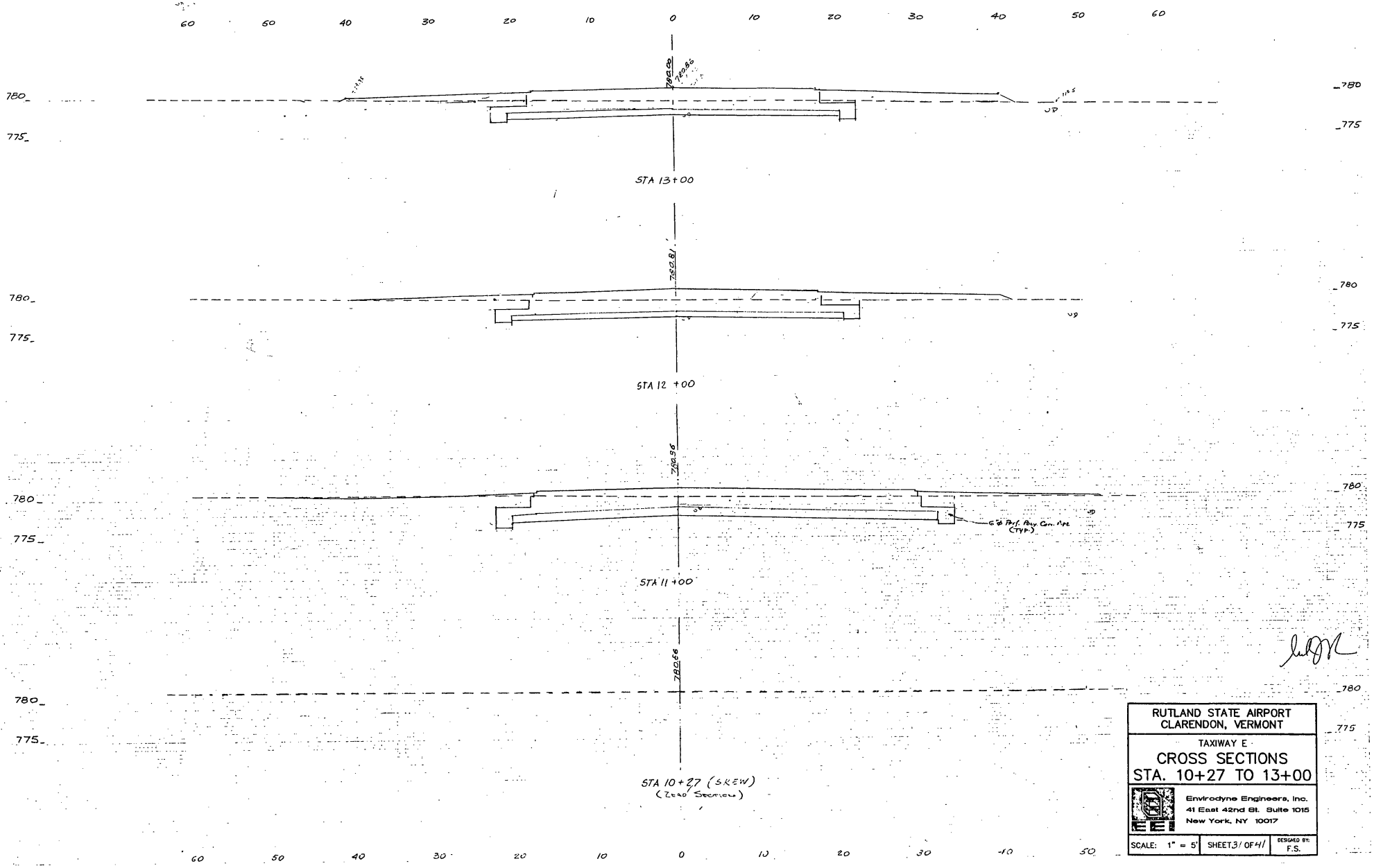
RUTLAND STATE AIRPORT
CLARENDON, VERMONT
TAXIWAY E

BLAST FENCE

DRAWING NO.
BF1

SHEET 30 OF 44

BLAS-FEN.DWG



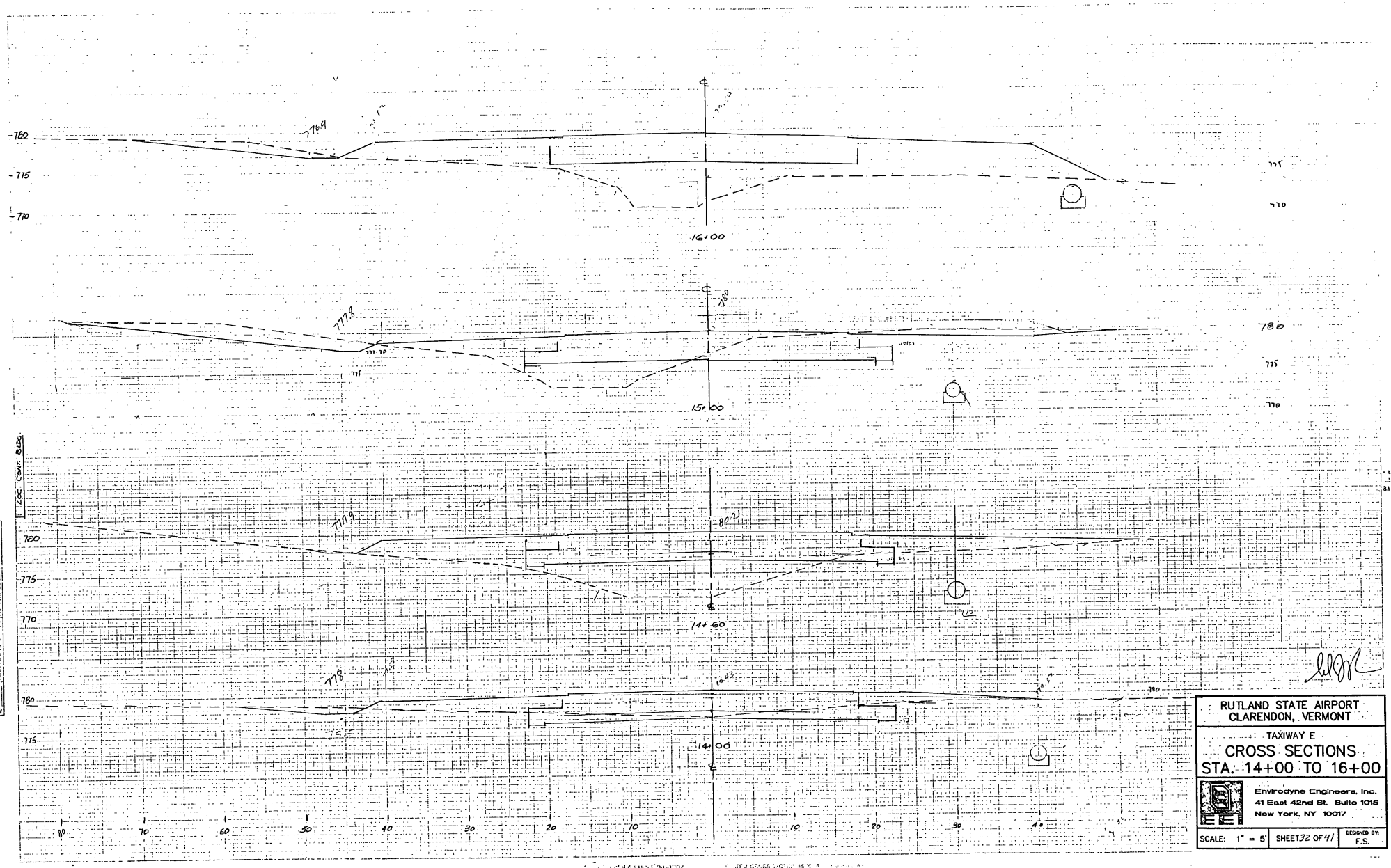
RUTLAND STATE AIRPORT
CLARENDON, VERMONT

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 41 | DESIGNED BY: F.S.



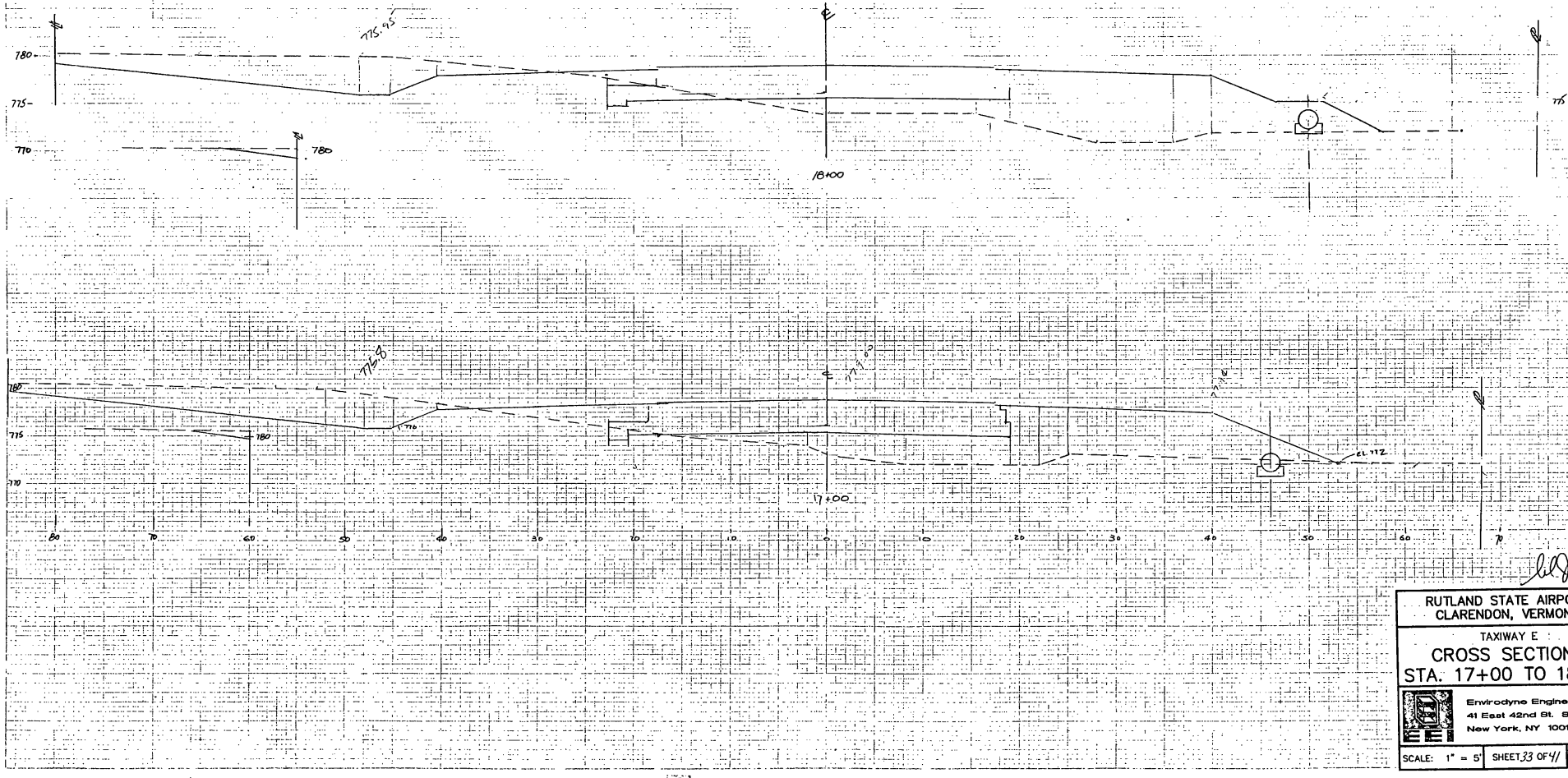
RUTLAND STATE AIRPORT
CLARENDON, VERMONT

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.



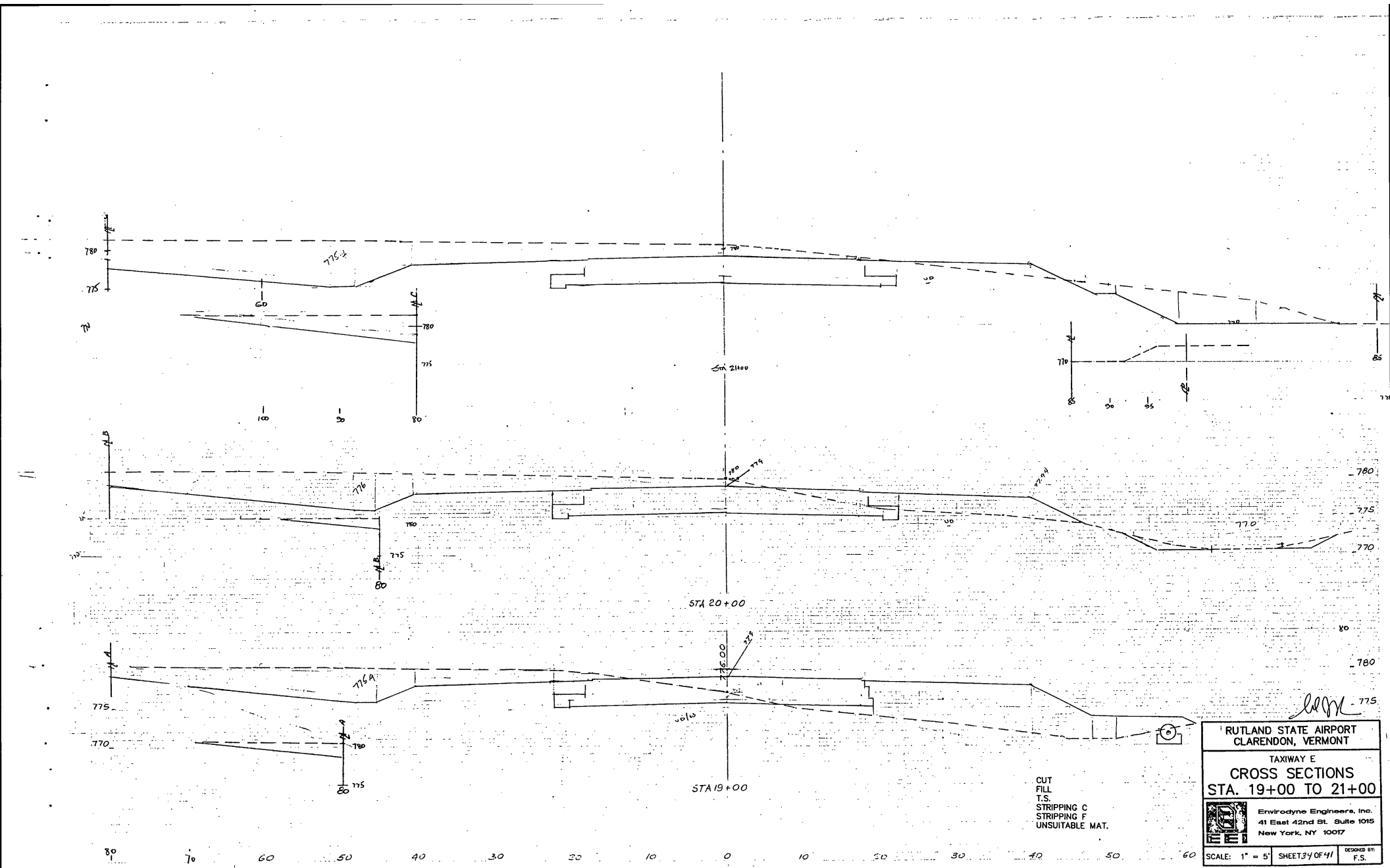
RUTLAND STATE AIRPORT
CLARENDON, VERMONT

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 41	DESIGNED BY: F.S.



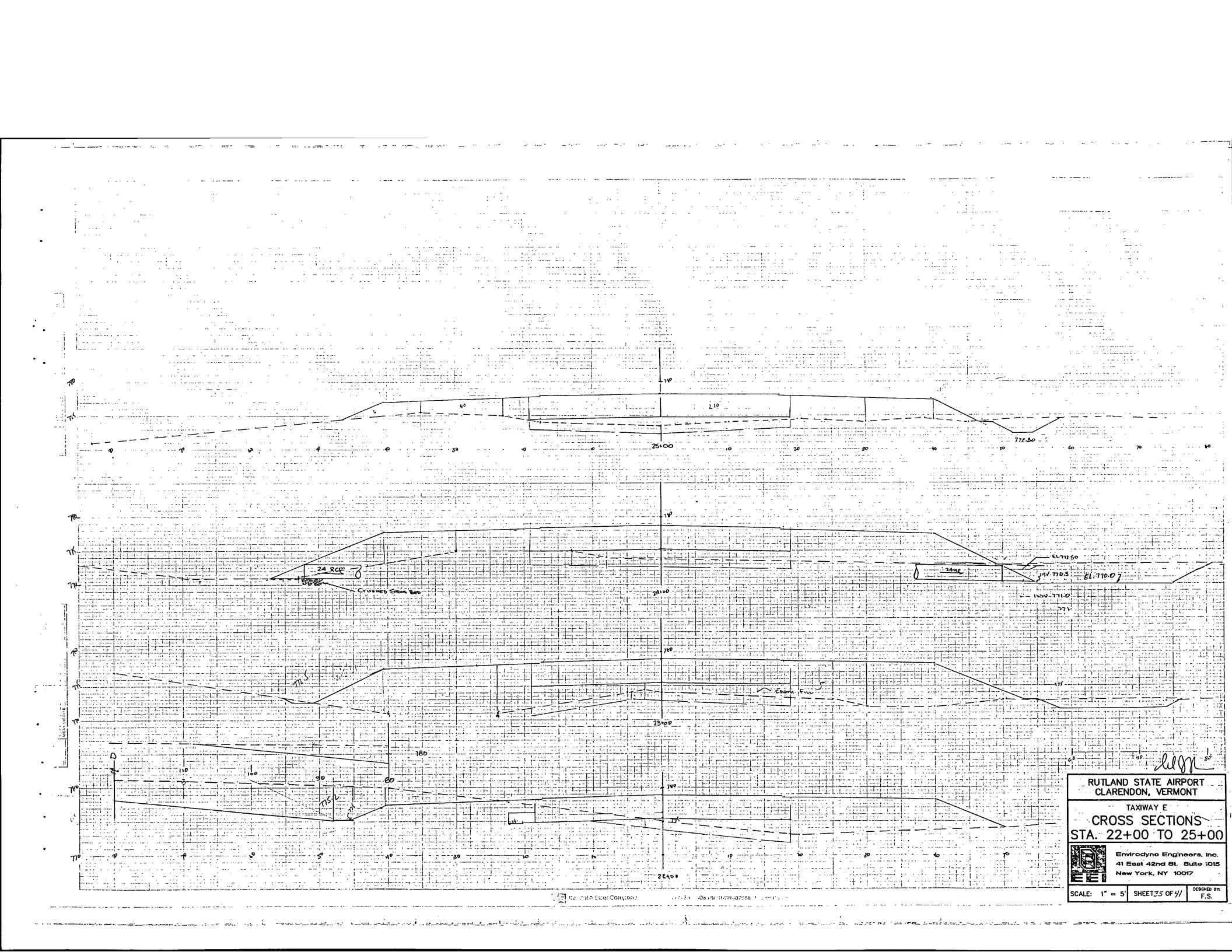
RUTLAND STATE AIRPORT
CLARENDON, VERMONT

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.



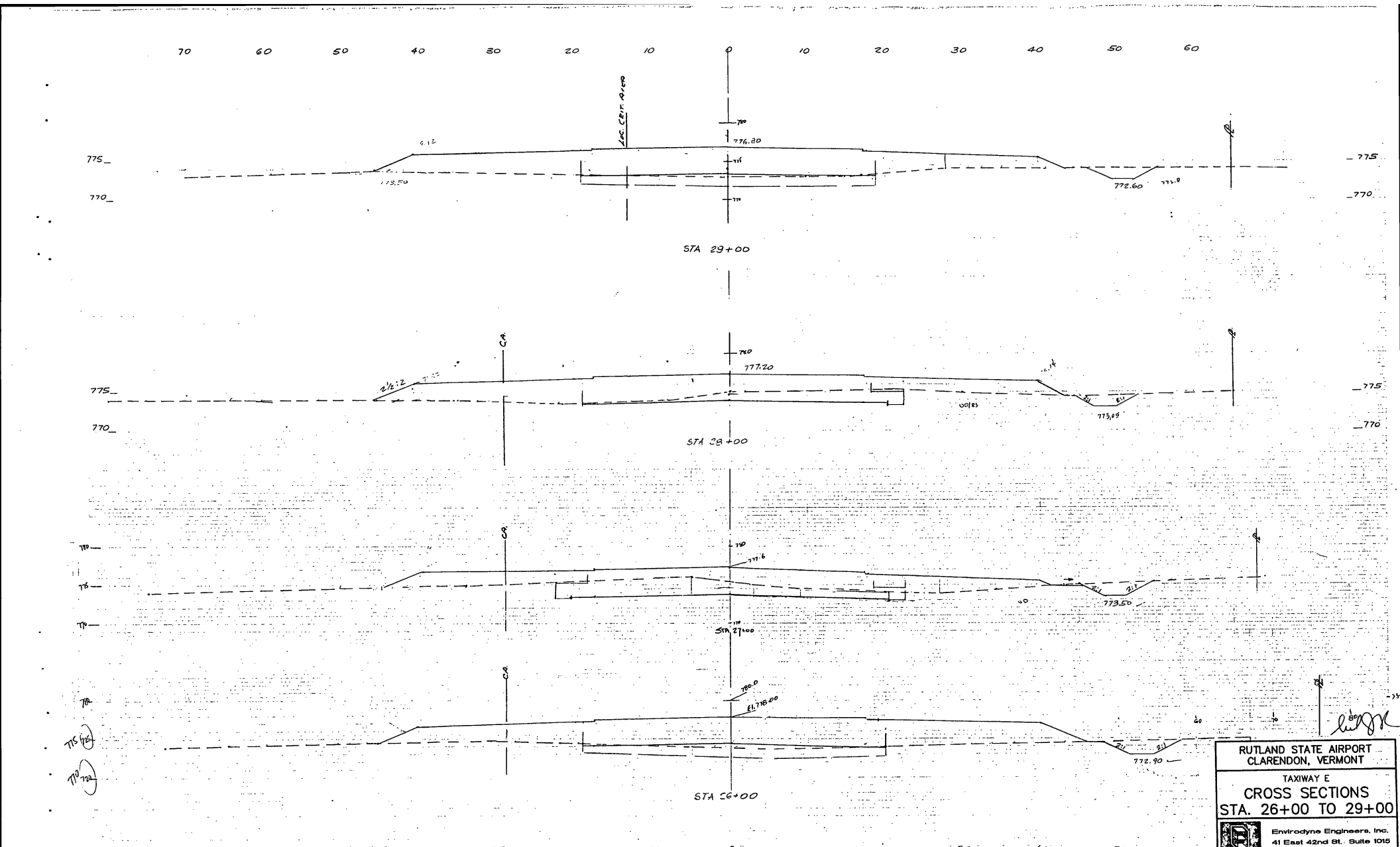
RUTLAND STATE AIRPORT
CLARENDON, VERMONT

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.



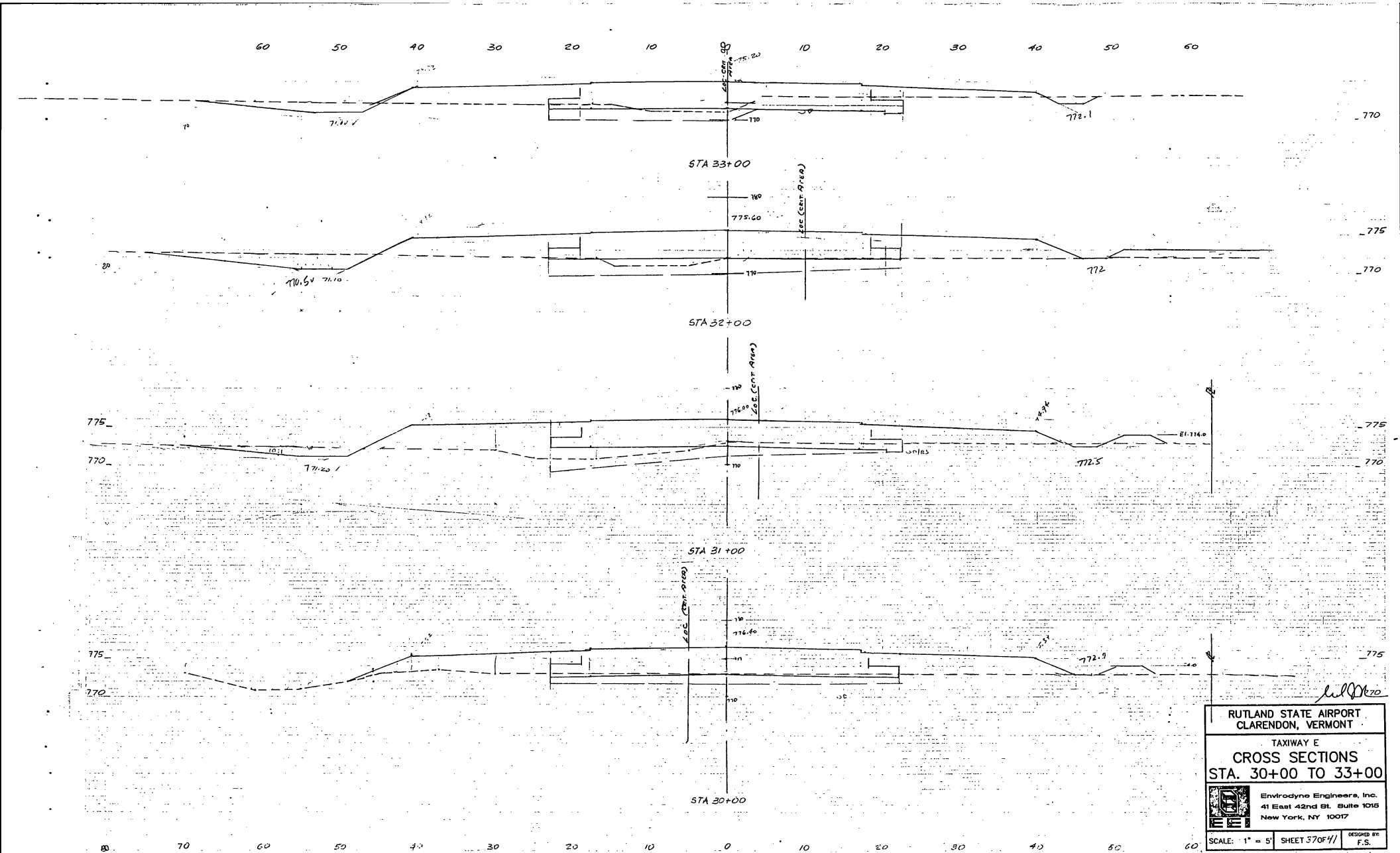
RUTLAND STATE AIRPORT
CLARENDON, VERMONT

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.



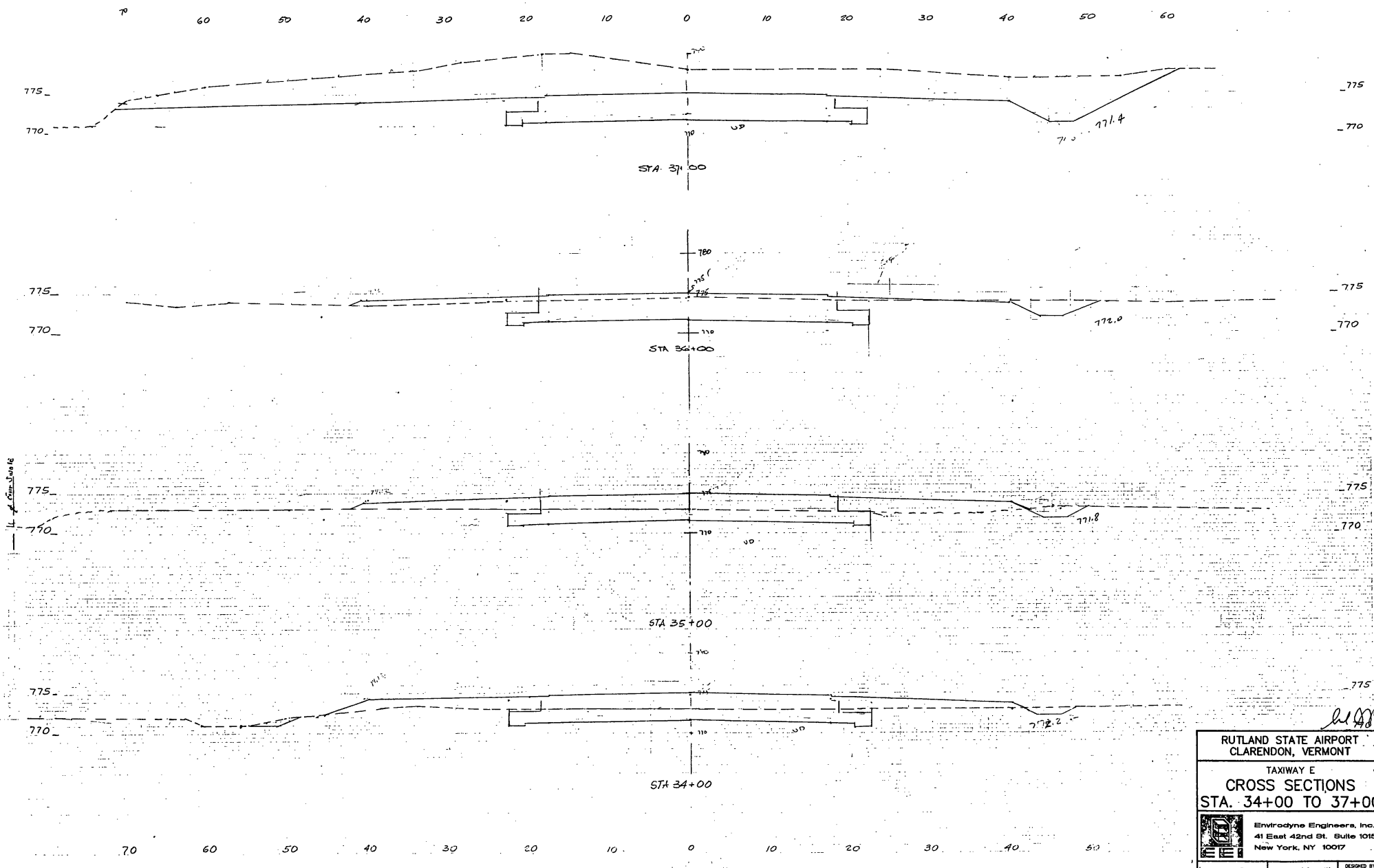
RUTLAND STATE AIRPORT
CLARENDON, VERMONT

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 3 OF 41 | DESIGNED BY: F.S.



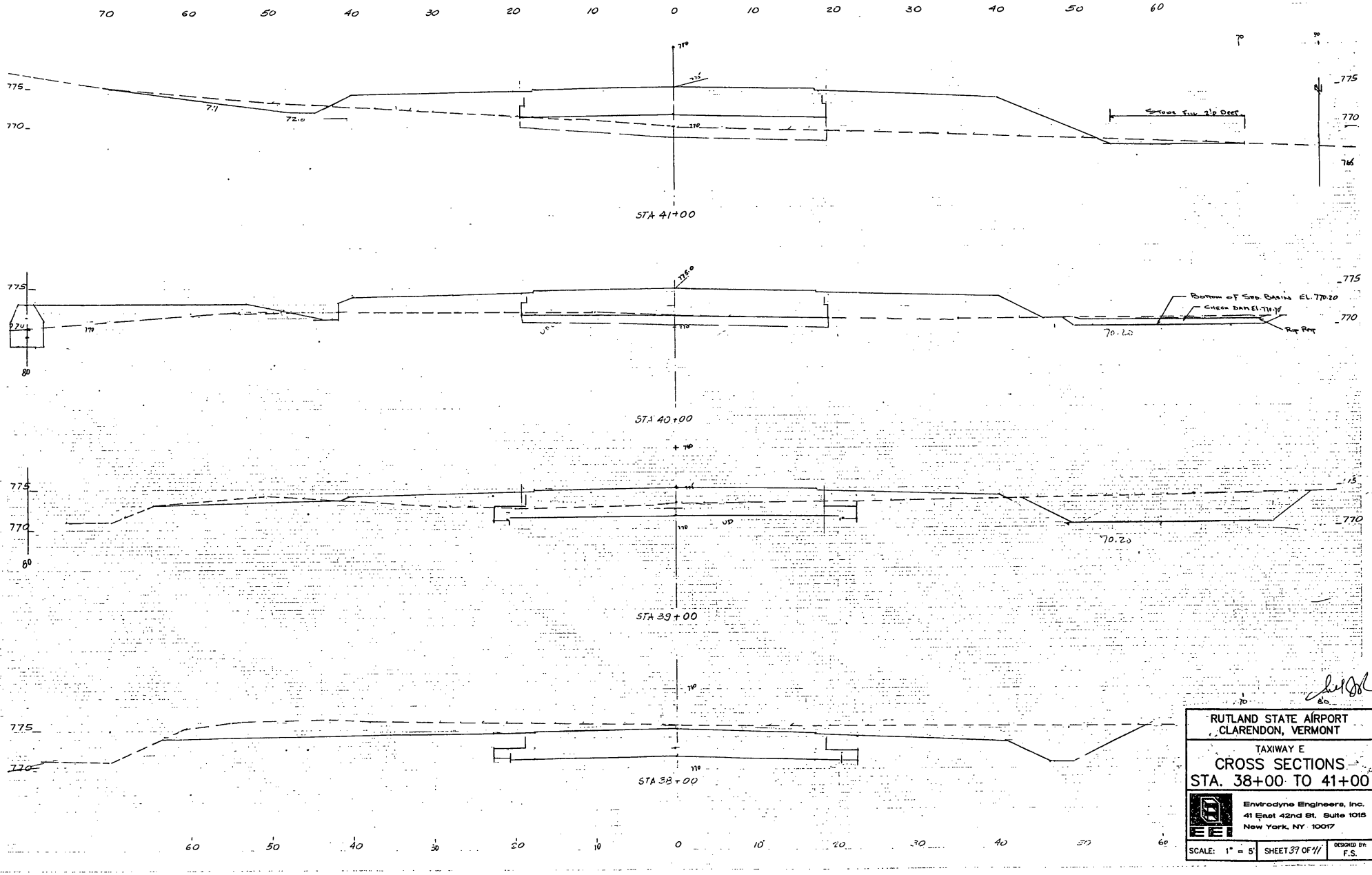
RUTLAND STATE AIRPORT
CLARENDON, VERMONT

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 38 OF 41	DESIGNED BY: F.S.

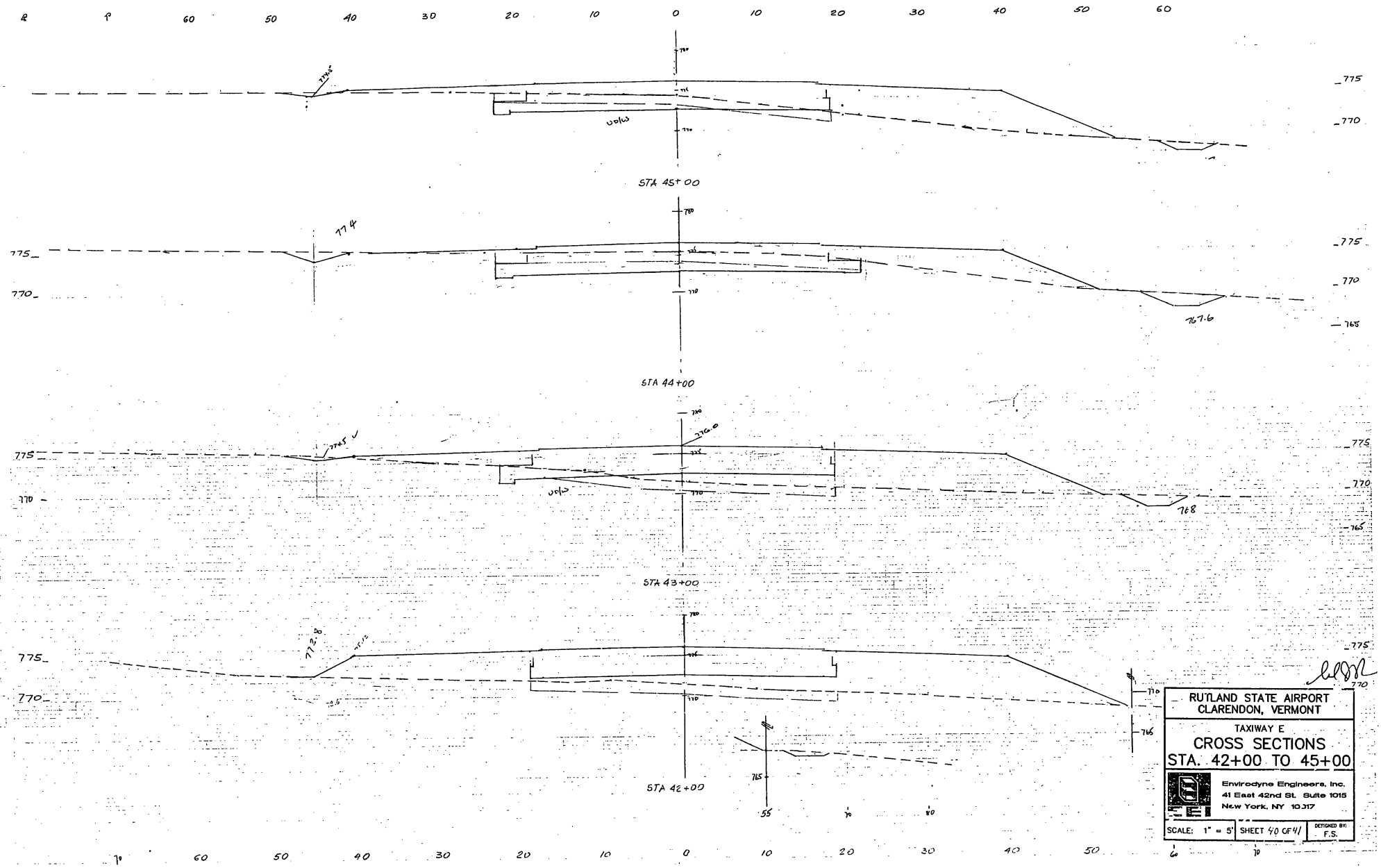


RUTLAND STATE AIRPORT
CLARENDON, VERMONT

TAXIWAY E
CROSS SECTIONS
STA. 38+00 TO 41+00

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

SCALE: 1" = 5' | SHEET 37 OF 11 | DESIGNED BY: F.S.



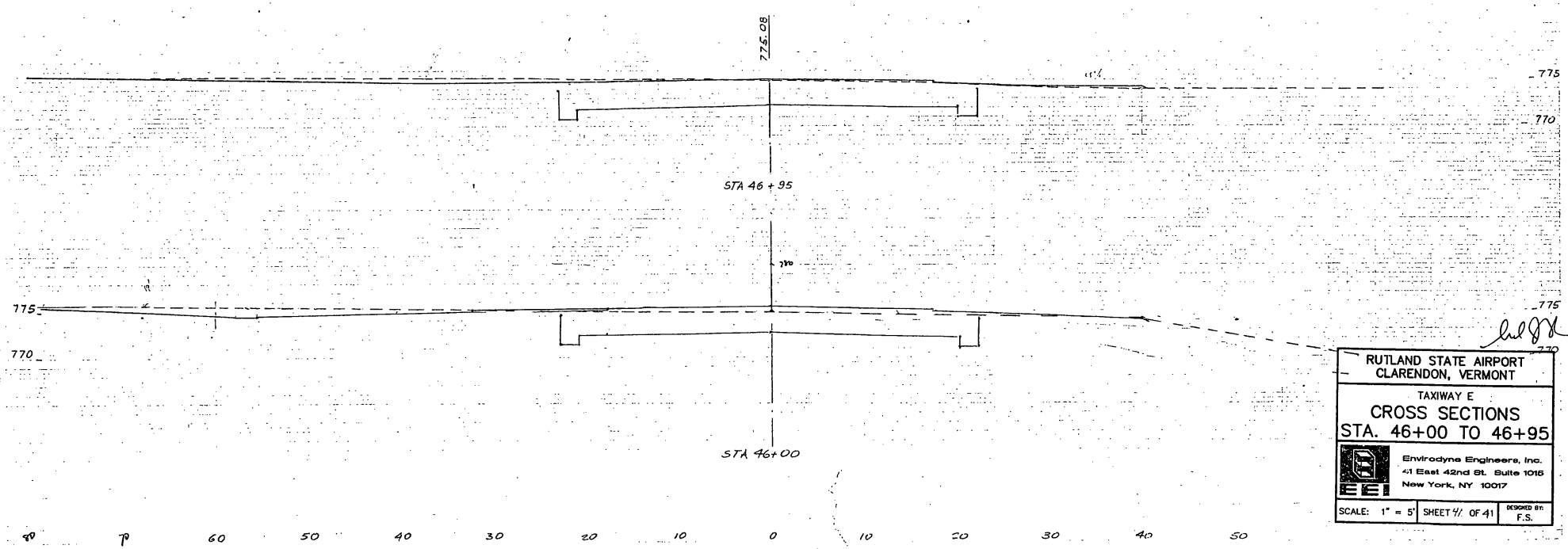
RUTLAND STATE AIRPORT
CLARENDON, VERMONT

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.



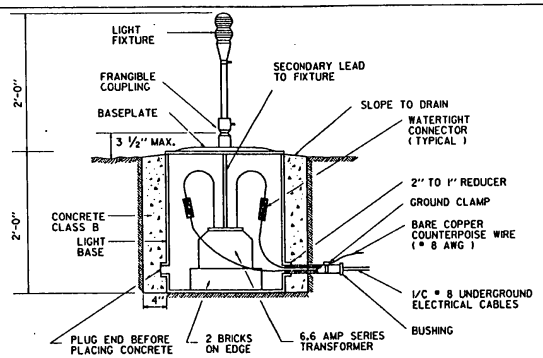
RUTLAND STATE AIRPORT
CLARENDON, VERMONT

TAXIWAY E

CROSS SECTIONS
STA. 46+00 TO 46+95

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

SCALE: 1" = 5'	SHEET 4/ OF 41	DESIGNED BY: F.S.

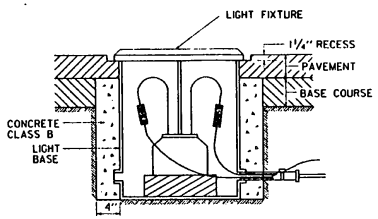


NOTES :

1. PROVIDE 3 FEET OF SLACK IN CABLES AT TRANSFORMER.
2. SEAL END OF CONDUIT (DUCT SEAL)
3. PROVIDE ½" PER FT. PITCH ON ALL CONDUITS

BASE MOUNTED UNIT

ELEVATED LIGHT
NO SCALE



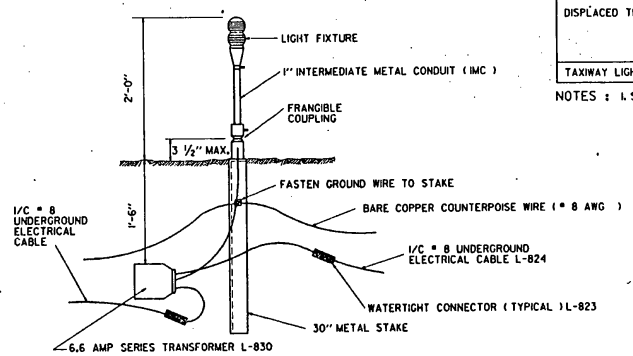
NOTE : FOR ALL OTHER DETAILS, SEE BASE MOUNTED UNIT FOR ELEVATED LIGHT.

BASE MOUNTED UNIT

SEMI-FLUSH LIGHT
NO SCALE

LENS AND LAMP SELECTION TABLE			
LIGHT LOCATION	LAMP		LENS
	MEDIUM INTENSITY	HIGH INTENSITY	
RUNWAY EDGE LIGHT	6.6A, 30W	6.6A, 15-120W	360° CLEAR 180° 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
			180° OBSCURED/180° GREEN
			180° CLEAR/180° GREEN
TAXIWAY LIGHT	6.6A, 30W		360° BLUE

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



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 ⅛" WITH A SUITABLE TAPPED FITTING BOLTED AT THE TOP TO RECEIVE THE FRANGIBLE COUPLING.

STAKE MOUNTED UNIT

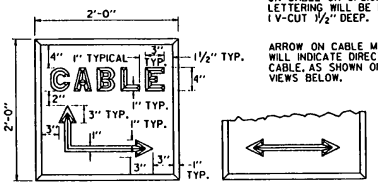
ELEVATED LIGHT
NO SCALE

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

NOTES

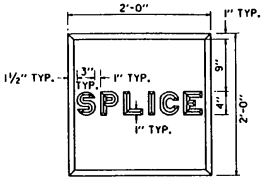
HAND LETTERING NOT ALLOWED ON CABLE OR SPLICE MARKERS. LETTERING WILL BE EMBOSSED (V-CUT ½" DEEP.

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



PLAN VIEW WITH ARROW INDICATING CHANGE IN DIRECTION OF CABLE.

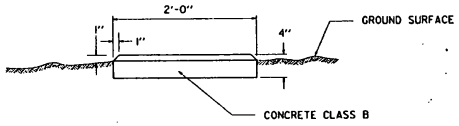
PARTIAL PLAN VIEW WITH ARROW INDICATING STRAIGHT-LINE CABLE INSTALLATION.



PLAN VIEW
SPLICE MARKER

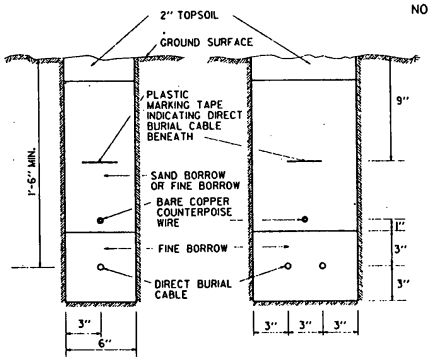
CABLE MARKER

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



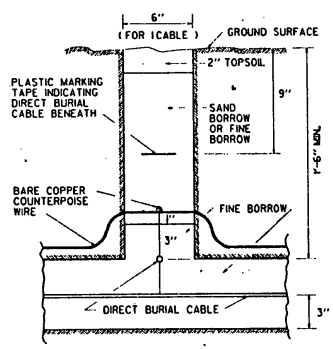
ELEVATION VIEW (TYPICAL FOR CABLE AND SPLICE MARKERS)

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 13 1990
DATE

Gordon R. MacArthur
DIRECTOR, PLANNING AND RECONSTRUCTION

DIRECTOR, DESIGN DIVISION

LIGHTING & ELECTRICAL DETAILS

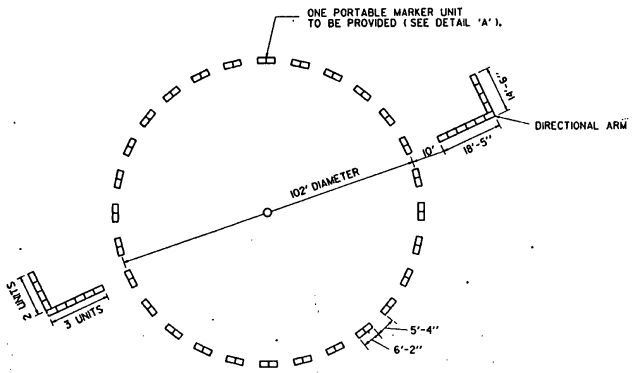
VERMONT AGENCY OF TRANSPORTATION

STANDARD
AP-2

NOTES

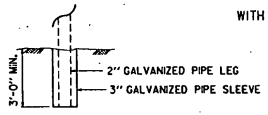
1. THE LOCATION OF THE PORTABLE MARKER UNIT SHALL BE AS ORDERED BY THE ENGINEER.

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.



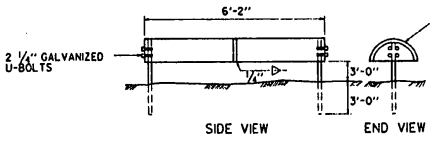
SEGMENTED CIRCLE LAYOUT

WITH DIRECTIONAL ARMS



LEG DETAIL FOR PORTABLE MARKER UNIT

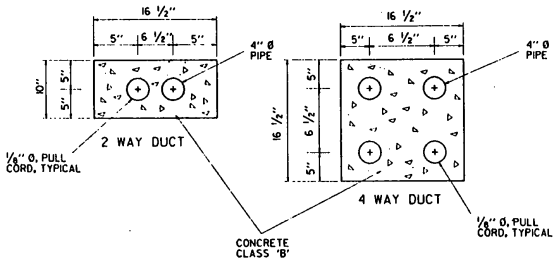
DETAIL 'A'



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.).

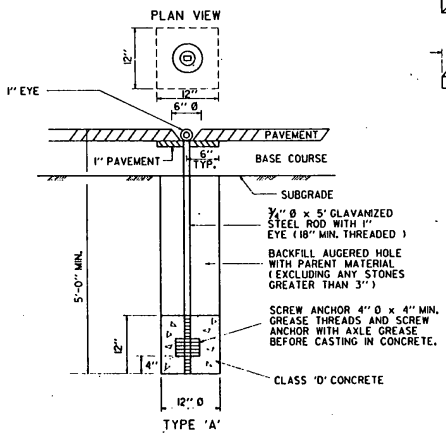
SEGMENTED CIRCLE MARKER UNIT

SECTION A-A

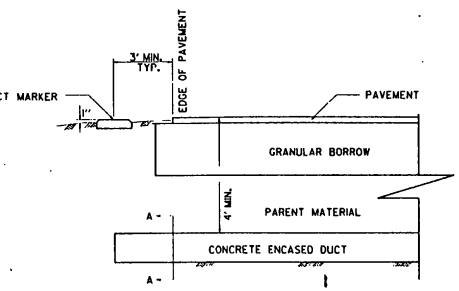


ALL DUCTS, EXCEPT STEEL CONDUIT, INSTALLED UNDER RUNWAYS, TAXIWAYS, APRONS, AND OTHER PAVED AREAS SHALL BE ENCASED IN A CONCRETE ENVELOPE

SEE STANDARD AP-2 FOR DIRECT BURIAL CABLE DETAILS.

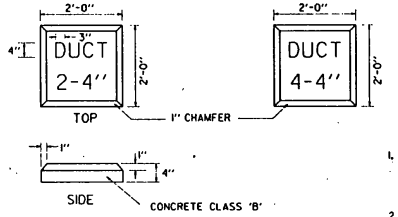


AIRCRAFT TIE DOWN ANCHOR



AIRPORT UNDERGROUND ELECTRICAL DUCT

(IN EARTH)

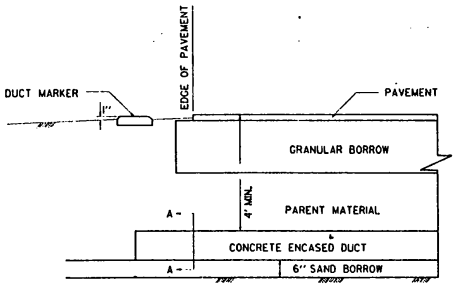


DUCT MARKERS

NOTES

1. LETTERING ON DUCT MARKERS TO BE EMBOSSED, 'V' 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 28 1990
DATE

Gordon H. MacArthur
DIRECTOR, PLANNING AND RECONSTRUCTION

Clifton Murphy
DIRECTOR, DESIGN DIVISION

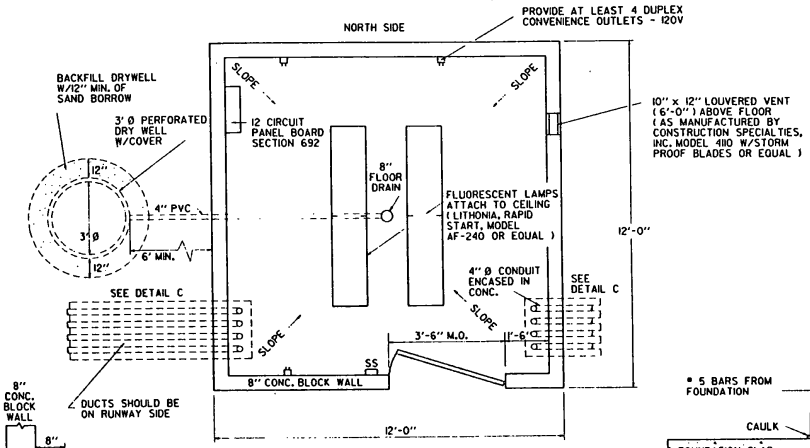
MISCELLANEOUS AIRPORT DETAILS

VERMONT AGENCY OF TRANSPORTATION

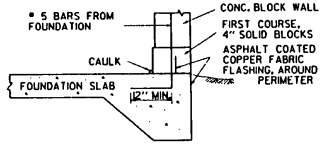
STANDARD AP-3

NOTES

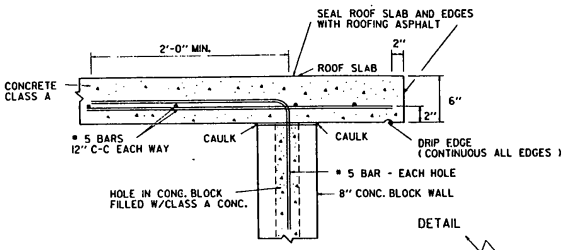
1. MOUNT CONTACTORS, BOOSTER TRANSFORMERS AND MISC. HARDWARE ON SAME WALL AS NEW 12 CIRCUIT PANEL BOX.
2. PROVIDE GROUND BUS BENEATH 12 CIRCUIT PANEL BOX.
3. INSTALL ELECTRIC PANEL ON ¾" PLYWOOD, SET OFF FROM WALL ON 2" x 4" 's. ALL WOOD TO BE PAINTED .
4. PROVIDE AT LEAST 1% ROOF SLOPE (TO EAST).
5. 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 VAULT EQUIP.
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.



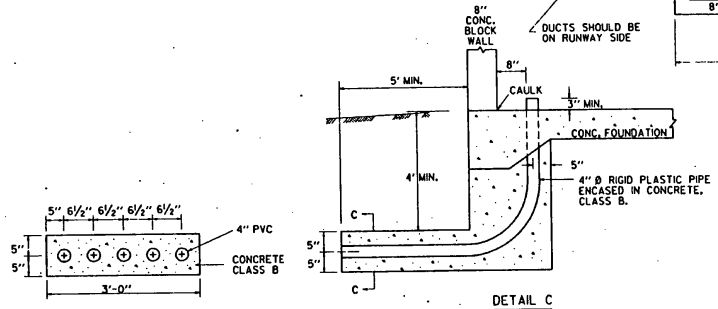
PLAN



DETAIL A

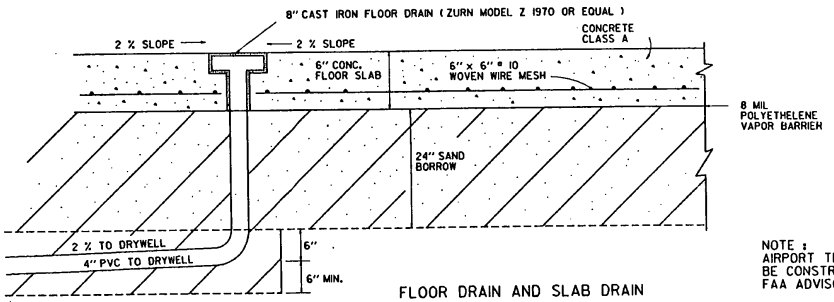


ROOF DETAIL

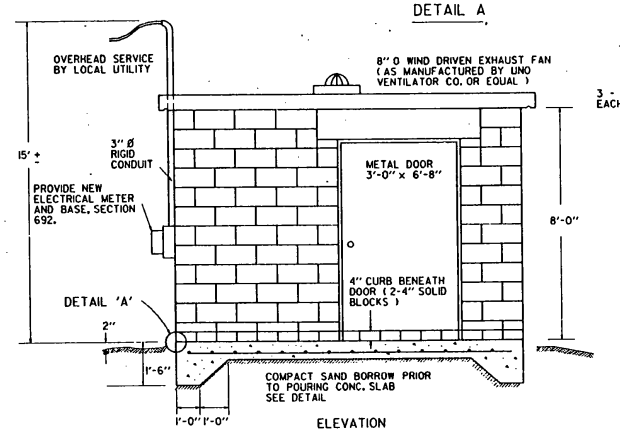


DETAIL C

SECTION C-C



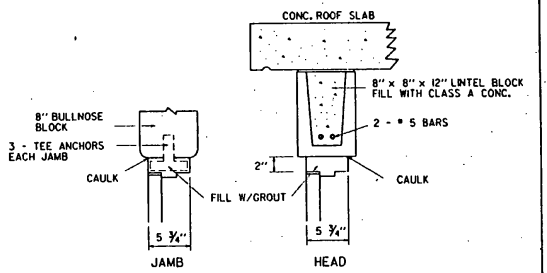
FLOOR DRAIN AND SLAB DRAIN



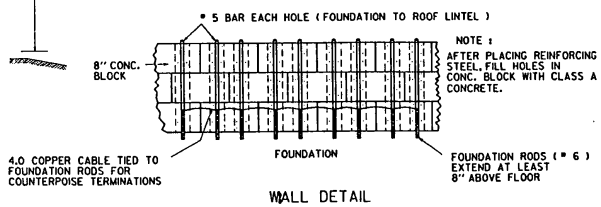
ELEVATION

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

AIRPORT TRANSFORMER VAULT .



DOOR DETAILS FOR HOLLOW METAL FRAMES



WALL DETAIL

REVISIONS AND CORRECTIONS
SHEET UPDATED MARCH 1,1990

APPROVED March 15, 1990
DATE

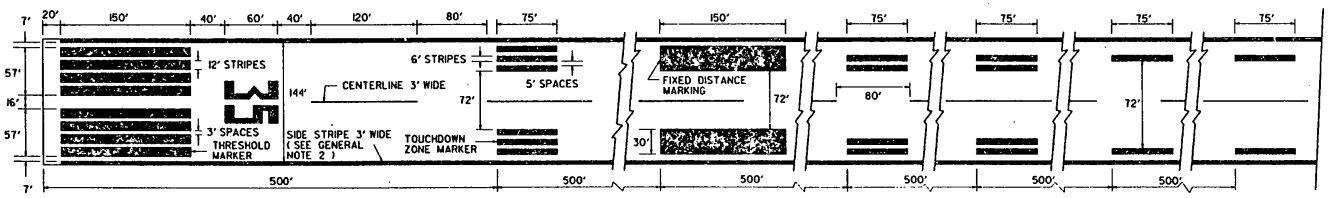
Gordon S. MacAllaster
DIRECTOR, PLANNING AND PRECONSTRUCTION

DIRECTOR, DESIGN DIVISION

TRANSFORMER VAULT DETAILS

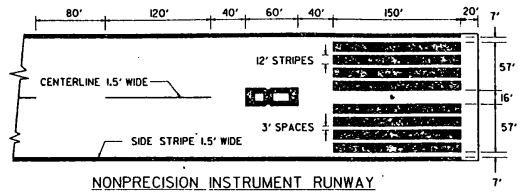
VERMONT AGENCY OF TRANSPORTATION

STANDARD
AP-9



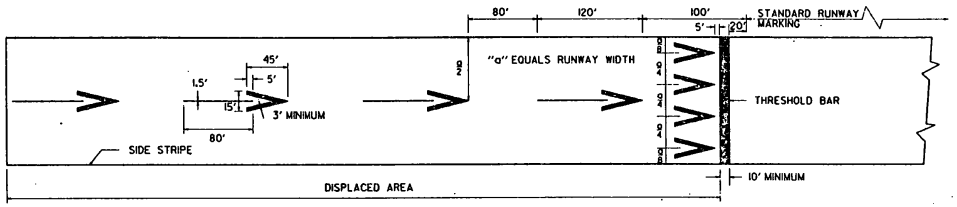
PRECISION INSTRUMENT RUNWAY

NOT TO SCALE



NONPRECISION INSTRUMENT RUNWAY

NOT TO SCALE

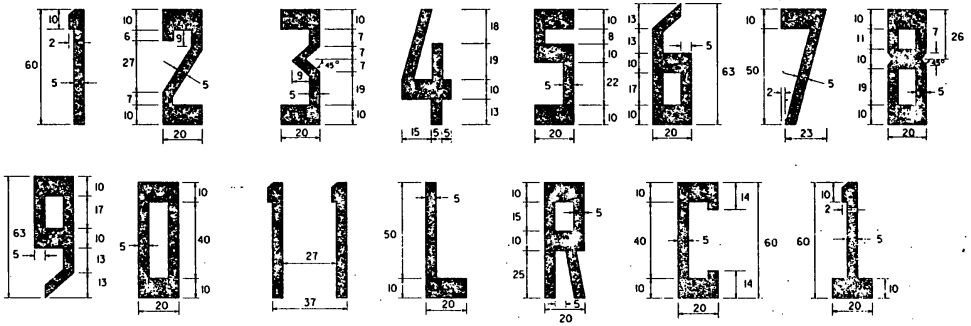


DISPLACED THRESHOLD MARKINGS

NOT TO SCALE

NOTES

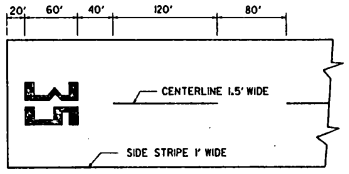
1. FOUR ARROWHEADS ARE PLACED SYMMETRICALLY ACROSS RUNWAY WITH UNIFORM LATERAL SPACING AS INDICATED.
2. ALL MARKINGS IN THE DISPLACED AREA ARE YELLOW EXCEPT THE THRESHOLD BAR WHICH IS WHITE.
3. RUNWAY SIDE STRIPES, WHEN USED ON THE RUNWAY, EXTEND INTO THE DISPLACED AREA.



RUNWAY NUMERALS AND LETTERS

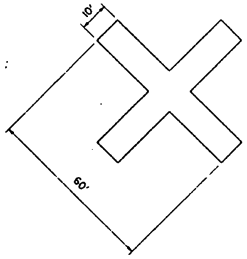
NOTES

1. ALL LETTERS AND NUMERALS, EXCEPT THE NUMBER ELEVEN AS SHOWN, ARE HORIZONTALLY SPACED 15 FEET APART.
2. DIMENSIONS ARE EXPRESSSED IN FEET.
3. THE NUMERAL ONE, WHEN USED ALONE, CONTAINS A HORIZONTAL BAR TO DIFFERENTIATE IT FROM THE RUNWAY CENTERLINE MARKING.



VISUAL RUNWAY

NOT TO SCALE



TEMPORARY CLOSED RUNWAY MARKER

TEMPORARY CLOSED RUNWAY MARKER NOTES :

1. MARKERS TO BE YELLOW PLYWOOD OR SNOW FENCE.
2. MARKERS TO BE SUBSIDIARY TO OTHER PAY ITEMS.
3. MARKERS TO BE PLACED OVER RUNWAY NUMERALS OR OFF THE RUNWAY ENDS AS APPLICABLE.
4. MARKERS TO BE ANCHORED TO THE SATISFACTION OF THE ENGINEER.

GENERAL NOTES

1. ALL RUNWAY MARKINGS ARE WHITE EXCEPT IN THE DISPLACED THRESHOLD AREA AND NON FULL STRENGTH SHOULDER MARKINGS.
2. FOR RUNWAYS LESS THAN 150' IN WIDTH, THE WIDTH OF THE MARKINGS, SPACES BETWEEN MARKINGS, AND DISTANCE OF MARKINGS FROM THE RUNWAY EDGE ARE CHANGED PROPORTIONALLY.
3. ADJUSTMENTS TO THE LENGTH OF THE CENTERLINE STRIPES AND GAPS, WHERE NECESSARY TO ACCOMMODATE THE RUNWAY LENGTH, ARE MADE NEAR THE RUNWAY MIDPOINT.
4. ALL RUNWAY MARKINGS ARE TO BE STRIATED WITH ALL STRIPES AND SPACES EQUAL IN WIDTH (4" TO 6").

NOTE :
MARKING OF RUNWAY SHOULD BE BASED ON FAA SPECIFICATIONS. SEE CURRENT FAA ADVISORY CIRCULAR.

REVISIONS AND CORRECTIONS
SHEET UPDATED MARCH 5,1990

APPROVED March 13, 1990
DATE

Signature
DIRECTOR, PLANNING AND RECONSTRUCTION

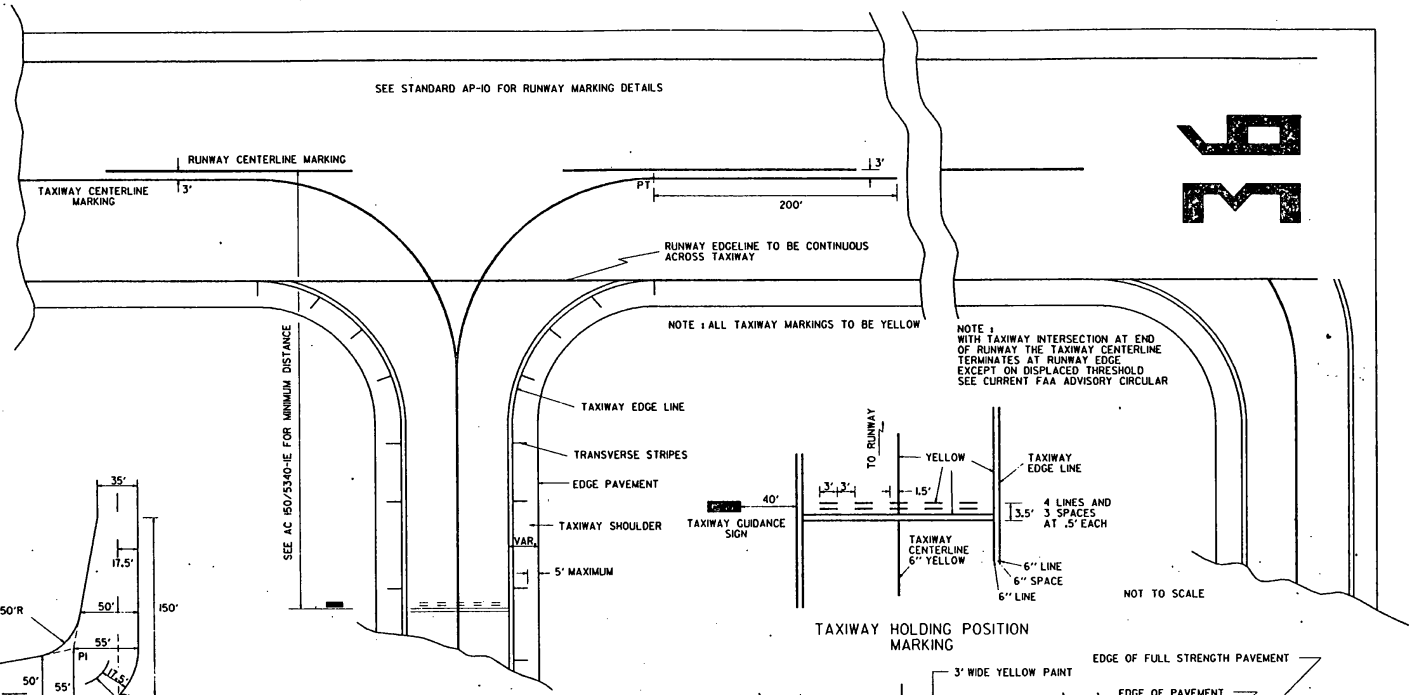
Signature
DIRECTOR, DESIGN DIVISION

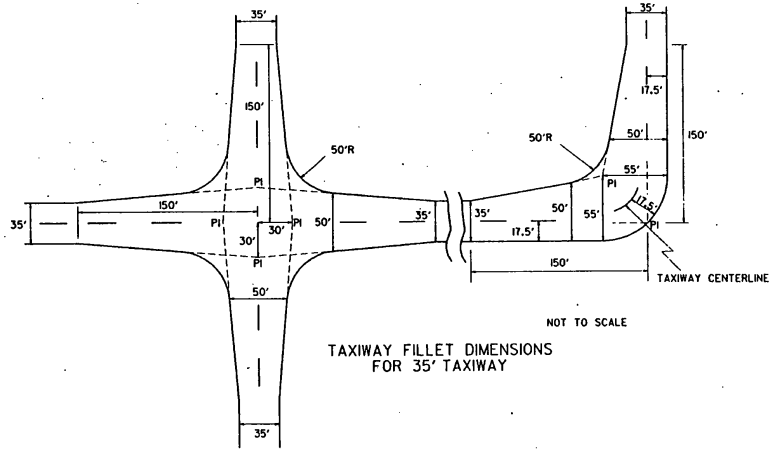
RUNWAY MARKING DETAILS

VERMONT AGENCY OF TRANSPORTATION

STANDARD
AP-10

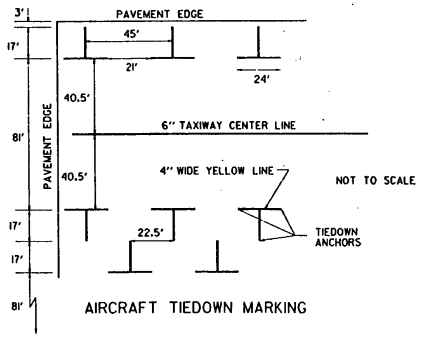
NOTE :
ON LIGHT COLORED PAVEMENTS THE CONTRAST OF THE MARKINGS IS TO BE INCREASED BY OUTLINING ALL MARKINGS WITH A 6" BLACK BORDER.



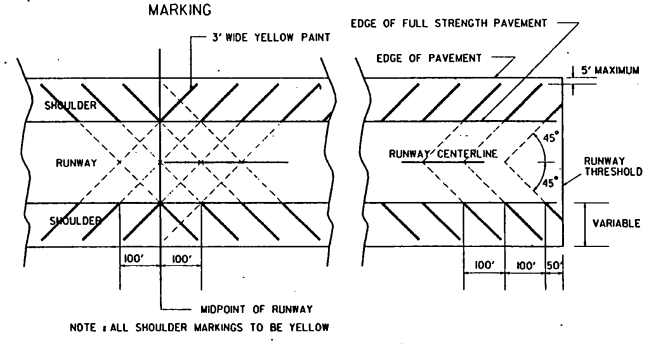


TAXIWAY FILLET DIMENSIONS FOR 35' TAXIWAY

TAXIWAY HOLDING POSITION MARKING



AIRCRAFT TIEDOWN MARKING



NOTE : ALL SHOULDER MARKINGS TO BE YELLOW

NON-FULL STRENGTH RUNWAY SHOULDER MARKING

REVISIONS AND CORRECTIONS
SHEET UPDATED MARCH 1,1990

APPROVED March 30th 1990
DATE

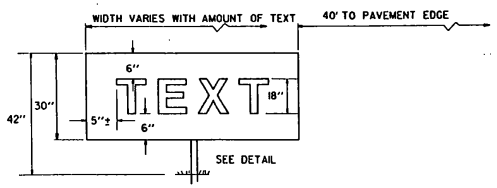
Gordon R. MacArthur
DIRECTOR, PLANNING AND PRECONSTRUCTION

DIRECTOR, DESIGN DIVISION

TAXIWAY AND APRON MARKING DETAILS

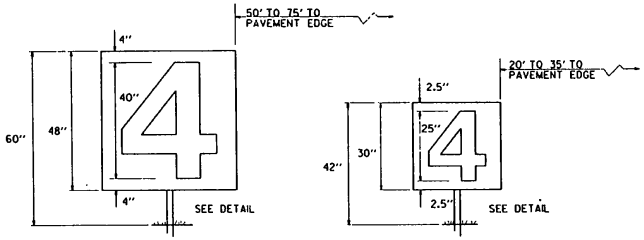
VERMONT AGENCY OF TRANSPORTATION

STANDARD
AP-11



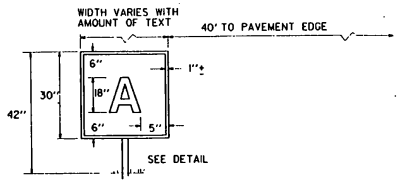
MANDATORY SIGNS

- 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.



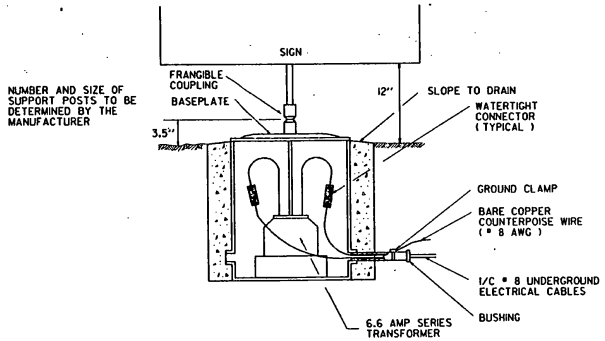
RUNWAY DISTANCE REMAINING SIGNS

- 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.

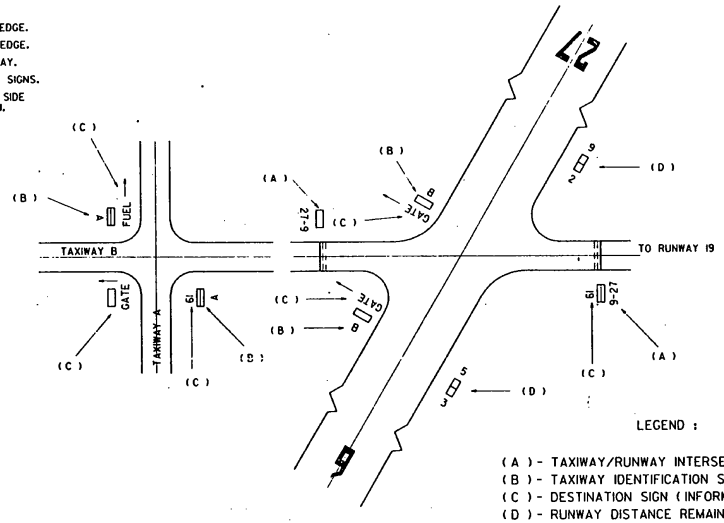


INFORMATION SIGNS

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



BASE FOR LIGHTED SIGNS
DETAIL



TYPICAL SIGN APPLICATIONS

LEGEND :

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

REFER TO CURRENT FAA ADVISORY CIRCULAR .

REVISIONS AND CORRECTIONS
SHEET UPDATED MARCH 1,1990

APPROVED March 7th 1990
DATE

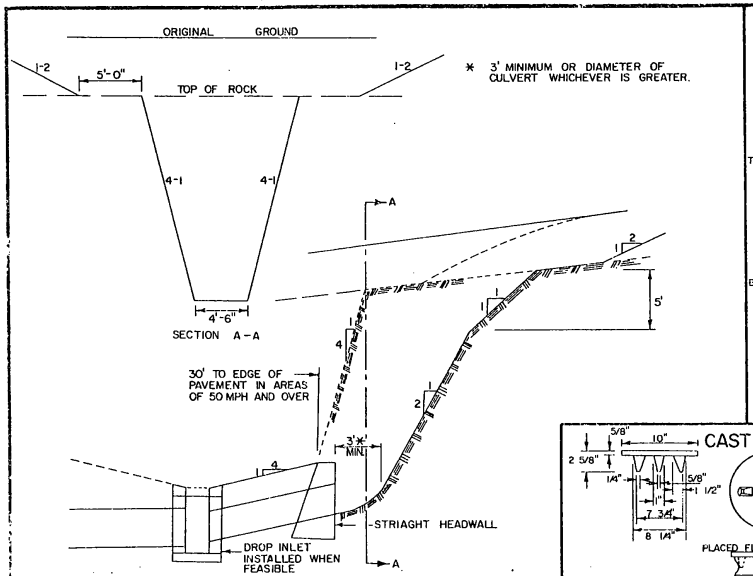
Gordon R. MacArthur
DIRECTOR, PLANNING AND RECONSTRUCTION

DIRECTOR, DESIGN DIVISION

SIGN · SYSTEMS

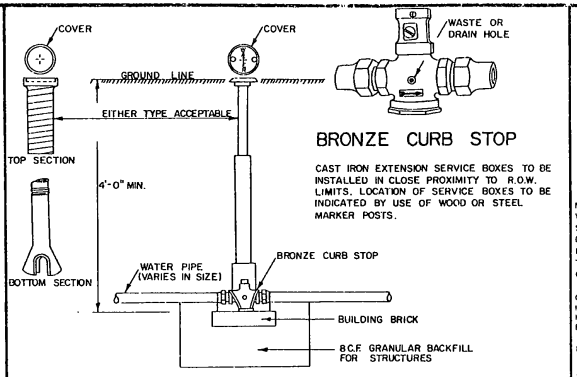
VERMONT AGENCY OF TRANSPORTATION

STANDARD
AP-12



* 3' MINIMUM OR DIAMETER OF CULVERT WHICHEVER IS GREATER.

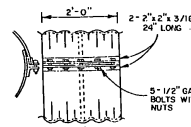
TYPICAL WATERFALL FOR CULVERTS UP TO AND INCLUDING 48" DIAMETER



BRONZE CURB STOP

CAST IRON EXTENSION SERVICE BOXES TO BE INSTALLED IN CLOSE PROXIMITY TO R.O.W. LIMITS. LOCATION OF SERVICE BOXES TO BE INDICATED BY USE OF WOOD OR STEEL MARKER POSTS.

EXTENSION SERVICE BOX AND CURB STOP

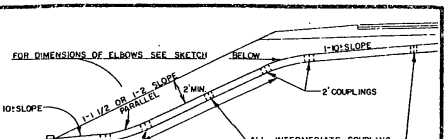


DETAILS FOR COUPLING BAND

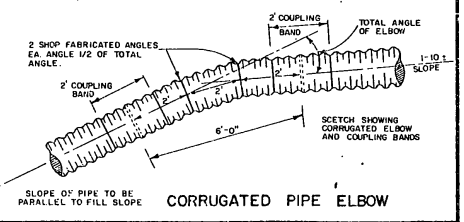
NOTE:
WHERE DESIGN FOR SLOPE PIPE AND ELBOWS START AT A CONCRETE JUNCTION BOX OR DROP INLET, DESIGN TO BE SUCH AS TO PERMIT A 2' LONG SECTION OF PIPE THRU THE STRUCTURE WALL TO WHICH THE CORRUGATED ELBOW WILL BE ATTACHED.

COUPLING BANDS 1'-9" LONG MAY BE USED IN CONJUNCTION WITH PIPE FABRICATED WITH HELICAL CORRUGATIONS IN PLACE OF CIRCUMFERENTIAL CORRUGATED BANDS 2'-0" LONG.

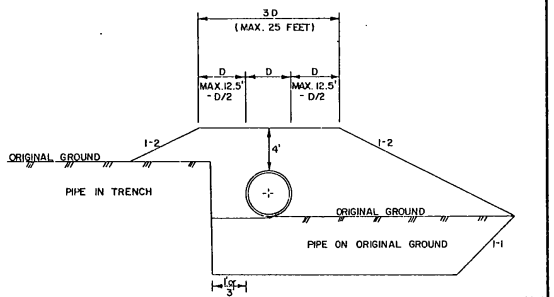
BANDS CONFORMING TO SECTION 711 AND EQUIPPED WITH SILO RODS OR CABLES FOR POSITIVE ATTACHMENT MAY ALSO BE USED IN LIEU OF THE COUPLING BAND SHOWN.



TYPICAL APPLICATION OF CORRUGATED ELBOW ON HIGH FILL

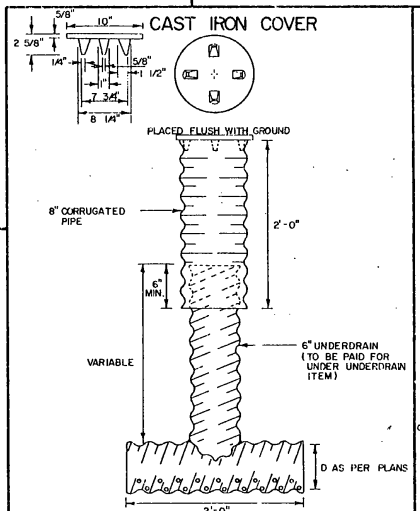


CORRUGATED PIPE ELBOW



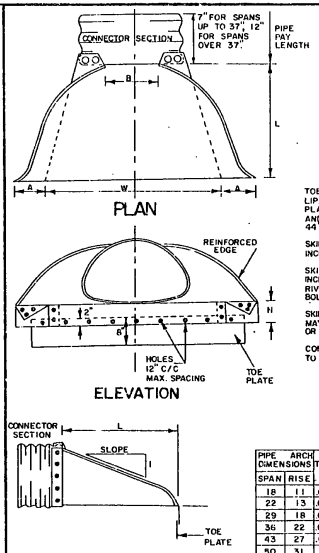
EXCAVATE POOR MATERIAL AND REPLACE WITH GRANULAR BACKFILL FOR STRUCTURES, OR SAND BORROW AS DIRECTED BY THE ENGINEER.

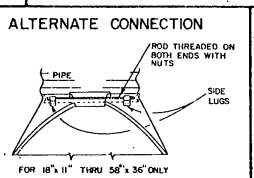
GRANULAR MATERIAL AT CULVERT LOCATIONS



FLUSHING BASINS AT BEGINNING OF LINE SHALL HAVE A 90° ELBOW RATHER THAN A T AS SHOWN ABOVE. (ELBOW TO BE PAID FOR UNDER UNDERDRAIN ITEM)

UNDERDRAIN FLUSHING BASIN





TOE PLATE TO BE PUNCHED TO MATCH HOLES IN SKIRT LIP. 3/8"GALV. BOLTS TO BE FURNISHED. LENGTH OF TOE PLATE W+10" FOR PIPE-ARCHES WITH RISE 11" TO 27" INCL AND W+16" MIN. FOR PIPE-ARCHES WITH RISE OF 31" TO 44" INCL.

SKIRT SECTION FOR PIPE-ARCHES WITH RISE OF 11" TO 27" INCL. TO BE MADE IN ONE PIECE.

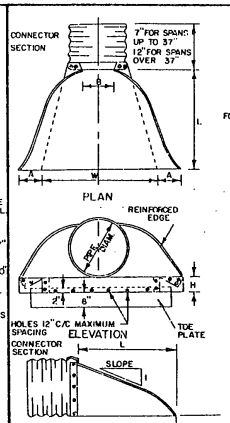
SKIRT SECTION FOR PIPE-ARCHES WITH RISE OF 31" TO 40" INCL. MAY BE MADE FROM TWO SHEETS JOINED BY RIVETING OR BOLTING ON CENTERLINE WITH 3/8" GALV. BOLTS OR RIVETS.

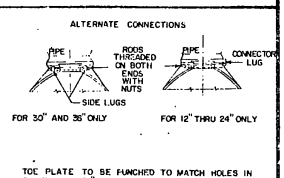
SKIRT SECTIONS FOR PIPE-ARCHES WITH RISE OF 44 INCHES MAY BE MADE FROM THREE SHEETS JOINED BY RIVETING OR BOLTING AT EQUAL DISTANCES FROM CENTERLINE.

CONNECTOR SECTION, CORNER PLATE, AND TOE PLATE TO BE SAME GAGE AS SKIRT.

PIPE ARCH DIMENSIONS		THICK	DIMENSIONS					APPROX SLOPE	BODY
SPAN	RISE		A (1"±)	B (MAX)	H (1"±)	L (1 1/2"±)	W (2"±)		
18	11	.064	7	9	6	19	30	2 1/2	1 Pc
22	13	.064	7	10	6	23	36	2 1/2	1 Pc
29	18	.064	9	14	6	32	48	2 1/2	1 Pc
36	22	.079	10	16	6	39	60	2 1/2	1 Pc
43	27	.079	12	18	8	46	75	2 1/2	1 Pc
50	31	.109	13	21	9	53	85	2 1/2	2 Pc
58	36	.109	18	26	12	63	90	2 1/2	2 Pc
65	40	.109	18	30	12	70	102	2 1/4	2 Pc
72	44	.109	18	33	12	77	114	2 1/4	3 Pc

CORRUGATED STEEL PIPE ARCH END SECTION





TOE PLATE TO BE PUNCHED TO MATCH HOLES IN SKIRT LIP. 3/8" GALVANIZED BOLTS TO BE FURNISHED. LENGTH OF TOE PLATE IS W+10" FOR 12" TO 32" DIAM. PIPE INCL. AND W+22" FOR 36" TO 48" DIAMETER PIPE INCL.

SKIRT SECTION FOR 12" TO 24" DIAMETER PIPE INCL. TO BE MADE IN ONE PIECE.

SKIRT SECTION FOR 30" TO 48" DIAMETER PIPE INCL. MAY BE MADE FROM TWO SHEETS JOINED BY RIVETING OR BOLTING ON CENTER LINE WITH 3/8" GALVANIZED RIVETS OR BOLTS.

CONNECTOR SECTION, CORNER PLATE, AND TOE PLATE TO BE SAME GAGE AS SKIRT.

PIPE DIAM.	THICK	DIMENSIONS						APPROX SLOPE	BODY
		A (1"±)	B (MAX)	H (1"±)	L (1 1/2"±)	W (2"±)			
12	.064	6	6	6	21	24	2 1/2	1 Pc	
15	.064	7	8	6	26	30	2 1/2	1 Pc	
18	.064	8	10	6	31	36	2 1/2	1 Pc	
21	.064	9	12	6	36	42	2 1/2	1 Pc	
24	.064	10	13	6	41	48	2 1/2	1 Pc	
30	.079	12	16	8	51	60	2 1/2	1 Pc	
36	.079	14	19	9	60	72	2 1/2	2 Pc	
42	.109	16	22	11	69	84	2 1/2	2 Pc	
48	.109	18	27	12	78	90	2 1/4	2 Pc	

CORRUGATED STEEL PIPE END SECTION

REVISIONS AND CORRECTIONS

JULY 17, 1972 HELICAL CORRUGATED COUPLING BAND NOTE ADDED.
JULY 24, 1975 GRANULAR MATERIAL AT CULVERT LOCATIONS CORRECTED.
OCT 30, 1985 REVISED TO CONFORM WITH 1986 SPECIFICATIONS.

APPROVED:

DATE: Dec 6, 1971

R H Crandall
CHIEF ENGINEER

E H Stickney
ASST CHIEF ENGINEER

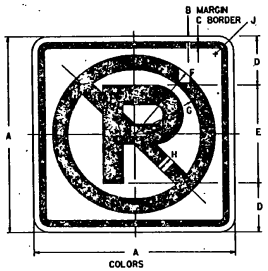
D M Lane
HIGHWAY ENGINEER

TYPICAL WATERFALL FOR CULVERTS UP TO AND INCLUDING 48" DIAMETER
EXTENSION SERVICE BOX AND CURB STOP
CORRUGATED PIPE ELBOW
GRANULAR BORROW AT CULVERT LOCATIONS
UNDERDRAIN FLUSHING BASIN
CORRUGATED STEEL PIPE END SECTION
CORRUGATED STEEL PIPE ARCH END SECTION

VERMONT AGENCY OF TRANSPORTATION

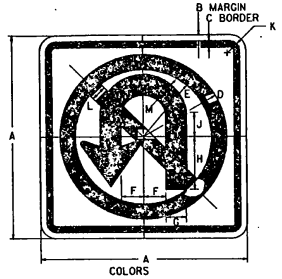
STANDARD

D-4



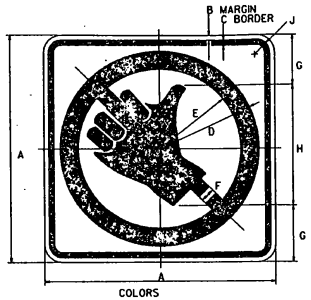
COLORS
CIRCLE AND DIAGONAL - RED (REFL - RURAL)
SYMBOL AND BORDER - BLACK (NON - REFL)
BACKGROUND - WHITE (REFL - RURAL)

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



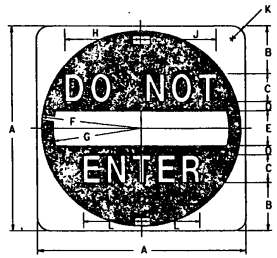
COLORS
CIRCLE AND DIAGONAL - RED (REFL)
ARROW AND BORDER - BLACK (NON - REFL)
BACKGROUND - WHITE (REFL)

SIGN	DIMENSIONS (INCHES)											
	A	B	C	D	E	F	G	H	J	K	L	M
MIN. AND STD.	24	3/8	3/8	10 1/2	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 1/2	10 5/8	3 1/4	3 1/4	7 1/2	2 3/16	1 5/8	2 1/2	6 1/4
EXPWY.	36	5/8	7/8	15 3/4	12 3/4	3 3/4	3 3/4	9	3 3/8	2 1/4	3	7 1/2
SPECIAL	48	3/4	1 1/4	21	17	5	5	12	4 1/2	3	4	10



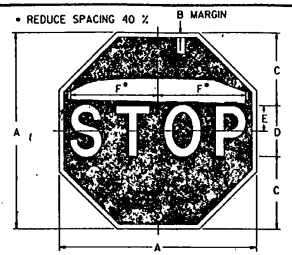
COLORS
CIRCLE AND DIAGONAL - RED (REFL)
SYMBOL AND BORDER - BLACK (NON - REFL)
BACKGROUND - WHITE (REFL)

SIGN	DIMENSIONS (INCHES)								
	A	B	C	D	E	F	G	H	J
MIN.	18	3/8	5/8	7 1/8	6 3/8	1 1/2	3 3/4	10 1/2	11/2
STD.	24	3/8	5/8	10 1/2	8 1/2	2	5	14	11/2



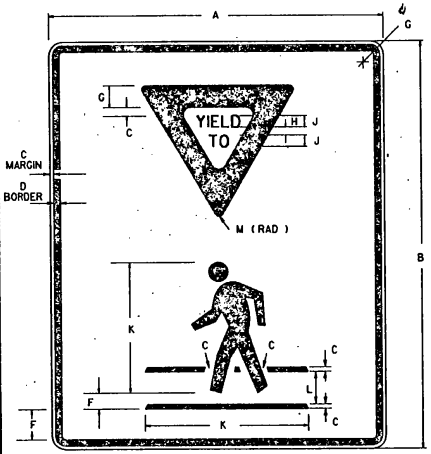
COLORS
SYMBOL - RED (REFL)
LEGEND AND BACKGROUND - WHITE (REFL)
ENCAPSULATED LENS

SIGN	DIMENSIONS (INCHES)										
	A	B	C	D	E	F	G	H	J	K	L
MIN. AND STD.	30	6 1/2	4D	2	5	14 1/2	12 1/2	9 3/4	10	1 1/8	7 1/8
EXPWY.	36	7 1/2	5D	2 1/2	6	17 1/2	15	12	12 3/8	2 1/4	9 15/16
SPECIAL	48	11	6D	3	8	23 1/2	20	14 1/2	15	3	11 3/4



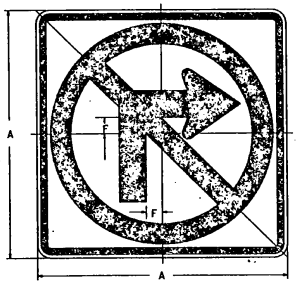
COLORS
LEGEND - WHITE (REFL)
BACKGROUND - RED (REFL)
ENCAPSULATED LENS

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



COLORS
LEGEND, SYMBOL, BORDER - BLACK
BACKGROUND - WHITE (REFL)
TRIANGLE - RED (REFL)

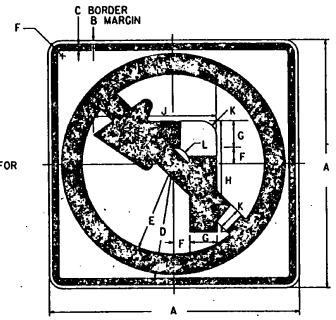
SIGN	DIMENSIONS (INCHES)											
	A	B	C	D	E	F	G	H	J	K	L	M
SMALL	18	24	3/8	3/8	11	3/4	1/8	5/8	11/2C	9	1 3/4	1/4
LARGE	24	30	1/2	13/16	13 3/4	15/16	1/2	3/4	2 C	11/4	2 5/16	5/16



COLORS
LEGEND - WHITE (REFL)
BACKGROUND - RED (REFL)
ENCAPSULATED LENS

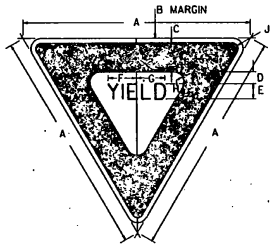
SIGN	DIMENSIONS (INCHES)								
	A	B	C	D	E	F	G	H	J
MIN.	30	18	5/8	3	5D	2	11/16	6 11/16	11/2
STD.	36	24	3/4	4 1/4	6D	3	13/16	8 1/16	1/2
SPECIAL	42	30	1/8	5	8D	4	17 3/4	10 1/4	1 1/8

DETAILS SAME FOR EACH SIGN



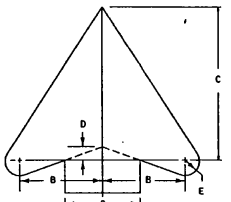
COLORS
CIRCLE AND DIAGONAL - RED (REFL)
ARROW AND BORDER - BLACK (NON - REFL)
BACKGROUND - WHITE (REFL)

SIGN	DIMENSIONS (INCHES)										
	A	B	C	D	E	F	G	H	J	K	L
MIN. AND STD.	24	3/8	5/8	10 1/2	8 1/2	1 1/2	2 1/2	10 1/2	11 1/2	2	1/2
SPECIAL	30	1/2	3/4	13 1/8	10 5/8	1 7/8	3 1/8	13 1/8	14 1/2	2 1/2	5/8
EXPWY.	36	5/8	7/8	15 3/4	12 3/4	2 1/4	3 3/4	15 3/4	17 1/4	3	3/4
SPECIAL	48	3/4	1 1/4	21	17	3	5	21	23	4	1



COLORS
LEGEND AND BORDER - RED (REFL)
BACKGROUND - WHITE (REFL)
ENCAPSULATED LENS

SIGN	DIMENSIONS (INCHES)								
	A	B	C	D	E	F	G	H	J
BIKE	24	3/8	3	1 7/8	2C	3 1/4	3	1/8	1 1/2
MIN.	30	5/8	4	1 3/4	2 1/2C	3 15/16	3 5/8	1/8	1 1/2
STD.	36	3/4	5	2	3C	4 11/16	4 3/8	1/4	2
EXPWY.	48	1	6	2 3/4	4C	6 1/4	5 5/8	2	3
SPECIAL	60	1 1/2	8	3 1/2	5C	7 1/8	7 1/4	2 1/2	4



ARROW HEAD	DIMENSIONS (INCHES)				
	SIZE	B	C	D	E
MIN. AND STD.	24x24	2 1/8	5/16	1/8	1/2
SPECIAL	30x30	3 5/8	6 3/8	1/2	5/8
EXPWY.	36x36	4 5/16	7 5/8	5/16	3/4
SPECIAL	48x48	5 3/4	10 1/8	3/4	1

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" ▽ 24" × 30"	36" ▽ 36" × 24"	
	30" ▽ 18" × 18"	36" × 36"	48" ▽ 60" ▽
	30" × 30"	48" × 48"	
FLAT SHEET ALUMINUM	0.050"	0.080"	0.125"
HIGH DENSITY OVERLAID PLYWOOD	1/2"	3/4"	1"
GALVANIZED FLAT SHEET STEEL	18 GAGE	16 GAGE	14 GAGE	12 GAGE

ENCAPSULATED LENS REFLECTIVE SHEETING SHALL BE USED FOR THE SIGN BACKGROUND WHERE NOTED.

THE BLACK PORTIONS OF THE SIGNS MAY BE LETTERING FILM, SILK SCREENING OR HAND PAINTED. WHEN HAND PAINTED, POOR WORKMANSHIP SHALL BE CAUSE FOR REJECTION.

SPECIFICATIONS:
REGULATORY SIGNS SHALL MEET THE VERMONT STANDARD SPECIFICATIONS FOR "TRAFFIC SIGNS".

TEXT DESIGN:
LETTERS, DIGITS, ARROW, SPACINGS AND TEXT DIMENSIONS SHALL CONFORM WITH THE STANDARD ALPHABETS AND DESIGNS PRESCRIBED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

REVISIONS AND CORRECTIONS

APPROVED

OCT. 30, 1987
DATE

David B Kelley
CHIEF ENGINEER

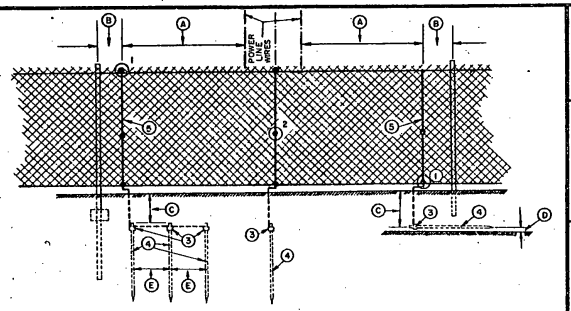
Arthur Gross
DIRECTOR OF PLANNING AND PRE-CONSTRUCTION

Gordon R. MacArthur
TRAFFIC AND SAFETY ENGINEER

REGULATORY SIGN DETAILS

VERMONT AGENCY OF TRANSPORTATION

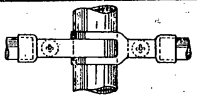
STANDARD
E-143



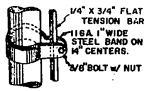
(A) 25'-0" OR TO 1.0' ± 0.5' FROM NEAREST FENCE POST (AT RIGHT ANGLE TO POWER LINE)
(B) MAXIMUM DISTANCE 1.0' (± 0.5')
(C) MINIMUM DISTANCE 1.0' (± 1.0')
(D) 2.0' (± 0.5')
(E) MINIMUM DISTANCE 6.0
(1) CONNECTOR, SUITABLE FOR WIRE GAUGES UTILIZED AND FOR DISSIMILAR METALS
(2) CONNECTOR,
(3) GROUND ROD CLAMP,
(4) COPPER CLAD STEEL CORE GROUND ROD 5/8" X 8'-0"
(5) CONDUCTOR NO. 6 AWG COPPER SOFT DRAWN OR NO 4 AWG ALUMINUM

INSTALLATION METHOD OF PROTECTIVE GROUNDING AT POWER LINE CROSSINGS

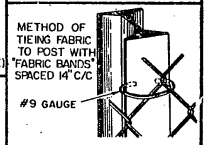
END CLAMP

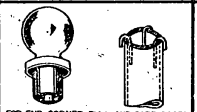


CORNER CLAMP (ADJUSTABLE)



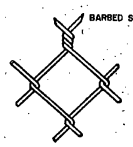
TENSION BAR BAND



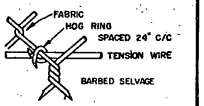


FOR END, CORNER, PULL AND GATE POSTS

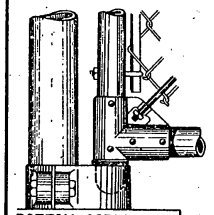
BALL TOP



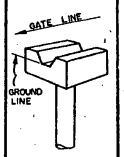
CHAIN LINK FABRIC
9 GAUGE STEEL WIRE
2" MESH



HOG RING FASTENER



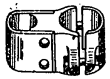
BOTTOM CORNER & HINGE FOR DRIVE GATE



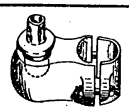
CENTER STOP FOR TWO PANEL GATES

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, "H" COLUMNS WEIGHING 2.70 LBS PER FOOT SHALL BE USED.

TERMINAL POSTS... END, CORNER AND PULL POSTS, SHALL BE 2 7/8" OD. 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 3'-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 5/8" O.D. PIPE.

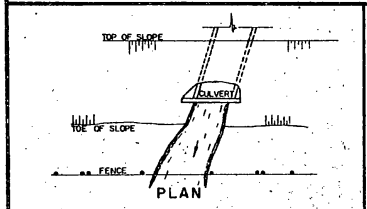
TENSION BARS... SHALL BE FLAT 1/4" X 3/4" BARS WITH SQUARE EDGES.

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.

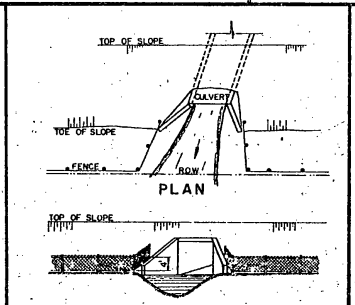
GATES... GATE FRAMES SHALL BE 1.90" O.D. PIPE ASSEMBLED BY WELDING, RIVETING OR BOLTING AND TO BE FURNISHED WITH ALL THE NECESSARY FITTINGS OVER 6'-0"
GATE FRAMES SHALL BE 1.66" O.D. PIPE ASSEMBLED BY WELDING, RIVETING OR BOLTING AND TO BE FURNISED WITH ALL THE NECESSARY FITTINGS 6'-0" AND LESS.

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

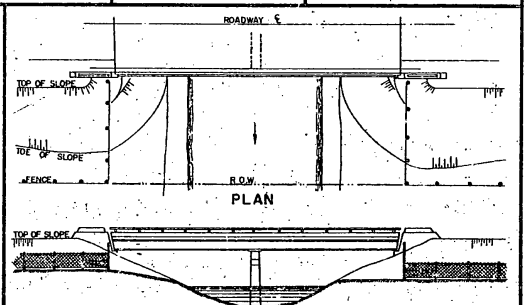
THE WEIGHT TOLERANCE IS 5 PER CENT ABOVE AND 5 PER CENT BELOW. THE TUBULAR SIZES ARE NOMINAL.



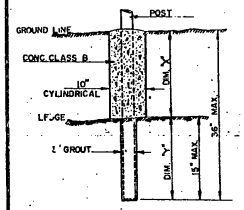
CROSSING AT STREAMS



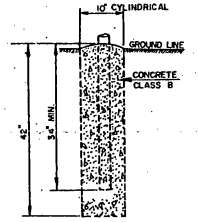
ELEVATION AT CULVERT



ELEVATION AT BRIDGE WITH PARAPET WALLS

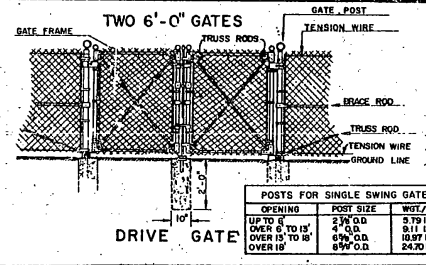


DIM. "Y" = 15" WHEN DIM. "X" VARIES BETWEEN 0" AND 24". WHEN DIM "X" EXCEEDS 24", DIM. "Y" DECREASES ACCORDINGLY.

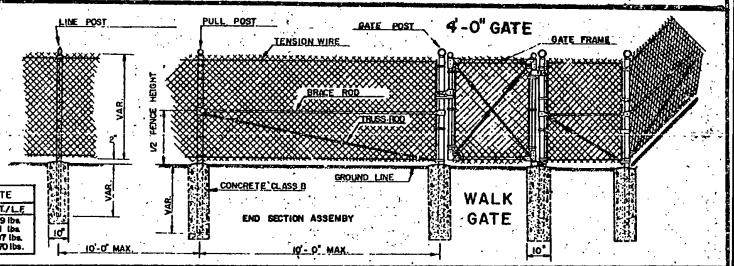


POST FOOTING

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



POSTS FOR SINGLE SWING GATE		
OPENING	POST SIZE	WGT./L.F.
UP TO 6'	2 7/8" O.D.	5.79 lbs
OVER 6' TO 13'	4" O.D.	9.11 lbs.
OVER 13' TO 18'	6 5/8" O.D.	10.97 lbs.
OVER 18'	8 5/8" O.D.	24.70 lbs.



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

APPROVED DATE Dec. 6, 1971

P. N. Crisold
CHIEF ENGINEER

E. H. Hutchney
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)

VERMONT AGENCY OF TRANSPORTATION

STANDARD

F-2