STATE OF VERMONT
AGENCY OF TRANSPORTATION

INDEX OF SHEETS

1	TITLE SHEET
2	QUANTITY SHEET
3	DRAINAGE SUMMARY SHEET
4	GENERAL PROJECT LAYOUT
5	PHASING PLAN
6	GENERAL CONSTRUCTION & SAFETY NOTES
7-10	TYPICAL SECTIONS & DETAILS
11-14	RUNWAY 17-35 PROFILE
15	RUNWAY 5-23 PROFILE
16	TAXIWAY PROFILES
17-20	PAVING PLANS & GEOMETRIC LAYOUT
21-24	GRADING & DRAINAGE PLANS
25	DRAINAGE DETAILS
26	SEDIMENT & EROSION CONTROL DETAILS
27-28	PAVEMENT MARKING PLAN
29-33	RUNWAY LIGHTING PLANS
34-37	RUNWAY LIGHTING DETAILS
38	VAULT WIRING DIAGRAM
39	VAULT WIRING PLAN
40	ELECTRICAL NOTES
41-43	BORING LOGS
44-80	RUNWAY 17-35 CROSS SECTIONS
81-90	TAXIWAY E CROSS SECTIONS
91-93	RUNWAY 5-23 CROSS SECTIONS
REF DWG	SHEET 7/9 PARTIAL PARALLEL TAXIWAY TO RUNWAY 5-23

VAOT STANDARD DRAWINGS

AP-3	MISCELLANEOUS AIRPORT DETAILS
AP-4	VISUAL APPROACH AIDS
AP-10	RUNWAY MARKING DETAIL
AP-11	TAXIWAY AND APRON MARKING DETAILS
D-1	PRECAST REINFORCED CONCRETE PIPE DROP INLET W/ CI GRATE
D-2	UNDERDRAIN AND CARRIER PIPE CONSTRUCTION DETAILS
D-3	TREATED GUTTERS
D-4	UNDERDRAIN FLUSHING BASIN
D-16	ENERGY DISSIPATOR FOR CULVERTS
E-100	CONSTRUCTION APPROACH SIGNS
E-121	STANDARD SIGN PLACEMENTS
F-4	CHAIN LINK FENCE, TYPE II
T-1	TEMPORARY EROSION CONTROL DETAILS
T-2	TEMPORARY EROSION CONTROL DETAILS

RECORD PLANS

CONTRACTOR: CAPITOL EARTH MOVING, INC. - BARRE, VT

RESIDENT ENGINEER: D. SARGENT

CONSTRUCTION BEGAN: JULY 9, 2001

CONSTRUCTION COMPLETE: JULY 29, 2002

RECORD PLANS BY: L. NOYES & N. GARBACIK

I HEREBY CERTIFY THAT ALL THE CONSTUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.

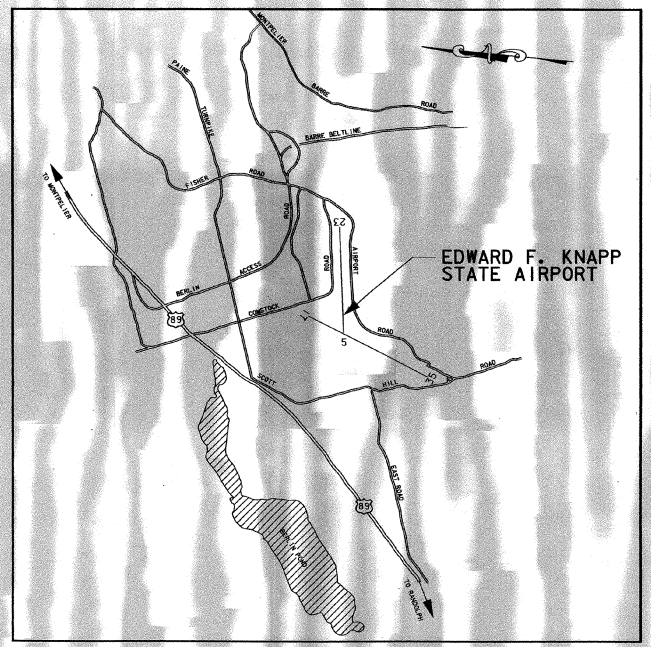
BY David H. Sargent RESIDENT ENGINEER

DATE 12-22-03

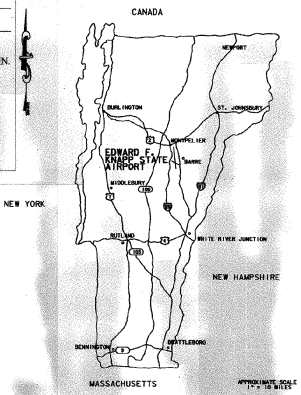
NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found on microfilm in Central Files.

PROPOSED IMPROVEMENTS
EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT
A.I.P. 3-50-0001-06 /AIR 04-3064

DISCRIPTION:
(1) RECONSTRUCT AND MARK RUNWAY 17-35 (100' X 5004')
(2) INSTALL NEW MEDIUM INTENSITY RUNWAY LIGHTS (MIRLS)
(3) RELOCATE REILS RUNWAY 35
(4) INSTALLATION OF NEW VAULT EQUIPMENT
(5) CONSTRUCT PARTIAL PARALLEL TAXIWAY 'E' (35' x 1280' LF)
(6) INSTALL 1000 L.F. 6' CHAIN LINK FENCE



LOCATION MAP
NTS



DESIGN CERTIFICATION

THESE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED IN ACCORDANCE WITH CURRENT FAA STANDARDS IDENTIFIED IN ADVISORY CIRCULAR CHECKLIST, AC 00-2.12, DATED JULY, 1999. DEVIATIONS FROM FAA STANDARDS ARE DISCUSSED IN THE ENGINEERS REPORT, DATED AUGUST, 2000.

URS CORPORATION

30 MARCH, 2001
DATE

STANDARD NOTE

These plans are subject to such engineering changes as may be required by the Federal Aviation Administration or the Director of Maintenance and Aviation.

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 1990, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON MARCH 15, 1990 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

STATE OF VERMONT
APPROVED

Jean C. Owen
AVIATION PROGRAM MANAGER

David C. Dee
DIRECTOR, MAINTENANCE AND AVIATION

4/03/01
DATE

QUANTITY SHEET

SUMMARY OF ESTIMATED QUANTITIES

QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	ROUNDING
45,000	CY	COMMON EXCAVATION	203.15	
500	CY	SOLID ROCK EXCAVATION	203.16	
21,000	CY	EXCAVATION OF SURFACES AND PAVEMENTS	203.28	
50,000	CY	GRANULAR BORROW	203.32	
80,000	SY	FINE GRADING - SUBGRADE	203.40	
8,400	CY	TRENCH EXCAVATION OF EARTH	204.20	
100	CY	TRENCH EXCAVATION OF ROCK	204.21	
200	SY	COLD PLANING - BITUMINOUS PAVEMENT	210.10	
100	CY	EXCAVATION OF PETROLEUM CONTAMINATED	215.20	
		SOILS, CLASS I		
18,000	TON	BIT. CONCRETE PAVEMENT (P-401) (PG 58-34)	406.25 MOD. 1	
1	LU	PRICE ADJUSTMENT ASPHALT CEMENT	406.50	
600	LF	JOINT SEALER, HOT POURED	524.11	
280	LF	12" RCP, CLASS IV	601.0806	
970	LF	15" RCP, CLASS IV	601.0811	
132	LF	18" RCP, CLASS IV	601.0816	
300	LF	24" RCP, CLASS IV	601.0826	
910	LF	15" CPEP	601.0910	
20	LF	18" CPEP	601.0915	
155	LF	24" CPEP	601.0920	
1	EA	24" CEPES	601.7020	
2	EA	15" RCP ES, CLASS III	601.6810	
1	EA	18" RCP ES, CLASS III	601.6815	
4,600	LF	CLEANING CULVERT PIPE IN-PLACE (0-24" DIA	601.995	
		INCLUSIVE)		
9	EA	PRECAST REINFORCED CONCRETE PIPE DROP	604.25	
		INLET W/ CAST IRON FRAME & GRATE		
3	EA	CHANGE ELEVATION OF D.I./C.B.	604.40	
8,800	LF	6" UNDERDRAIN	605.10	
450	LF	6" UNDERDRAIN CARRIER PIPE	605.20	
40	EA	UNDERDRAIN FLUSHING BASINS	605.95	
24	HOUR	ALL PURPOSE EXCAVATOR RENTAL, TYPE I	608.25	
500	MGAL	DUST CONTROL WITH WATER	609.10	
100	CY	STONE FILL, TYPE I	613.10	
180	LF	REMOVE AND RESET CURB	616.40	
400	LF	REMOVE AND RESET FENCE	620.50	
1000	LF	CHAIN LINK FENCE, 6 FEET	620.12	
32	LF	GATE FOR CHAIN LINK FENCE, 6 FEET	620.16	
1	LS	FIELD OFFICE - ENGINEERS	631.10	
1	LS	TESTING EQUIPMENT - CONCRETE	631.16	
1	LS	TESTING EQUIPMENT - BITUMINOUS	631.17	
1	AL	FIELD OFFICE - TELEPHONE	631.25	
1	LS	MOBILIZATION	635.10	
115,000	LF	6" WHITE LINE (P620)	646.214	
10,000	LF	6" YELLOW LINE (P620)	646.215	
250	SF	REMOVAL OF EXISTING PAVEMENT MARKINGS	646.82	
35,000	SY	GEOTEXTILE FOR ROADBED SUBGRADE SEPARATOR	649.11	
11,000	SY	GEOTEXTILE FOR UNDERDRAIN TRENCH LINING	649.41	
5,600	SY	GEOTEXTILE FOR SILT FENCE	649.51	
1,100	LB	SEED	651.15	
8,600	LB	FERTILIZER	651.18	
36	TON	AGRICULTURAL LIMESTONE	651.20	
500	EA	HAY BALES FOR EROSION CONTROL	651.26	
32	TON	HAY MULCH	651.25	
11,500	SY	SODDING	651.30	
7,000	CY	TOPSOIL	651.35	
4,000	SY	EROSION MATTING	654.10	
1	EA	FLASHING BEACON - GROUND MOUNTED (MOD.)	678.16	
		(RELOCATE REILS)		
20,000	LF	2" DIA. PVC ELECTRICAL CONDUIT (L-110)	678.21	
1,100	LF	ELECTRICAL CONDUIT - 2" PVC CONC. ENCASED	678.21 (MOD. 1)	
3,500	GAL	BITUMINOUS PRIME COAT (P-602)	854.01	
3,200	CY	CRUSHED AGGREGATE BASE COURSE (P-209)	854.04	
21	EA	AIRCRAFT TIE DOWN ANCHOR, TYPE A	854.07	
20,000	CY	P-209A, COLD MIXED RECYCLED BASE COURSE	864.01	
20,000	LF	CABLE TRENCH (L-108)	864.04	
24,000	LF	1/C #8, 600 OR 5000V, L-824C (L-108)	864.05	
2,500	LF	1/C #4, 600V, L-824C (L-108)	864.05 MOD. 2	
3,000	LF	1/C #1, 600V, L-824C (L-108)	864.05 MOD. 3	
20,000	LF	#8 OR #6 COUNTERPOISE (L-108)	864.06	
1	LS	INSTALLATION OF AIRPORT TRANSFORMER	864.07	
		VAULT EQUIPMENT (L-109)		
1	LS	INSTALLATION OF AIRPORT TRANSFORMER	864.07	
		VAULT EQUIPMENT (REILS) (MOD.)		
460	LF	2-WAY x 4" DIA. UG ELECTRICAL DUCT (L-110)	864.08	
76	EA	MIRLS, BASE MOUNTED (L-125)	864.10	
2	EA	MIRLS, BASE MOUNTED, IN PAV'T (L-125)	864.10 MOD. 1	
35	EA	MITLS, BASE MOUNTED (L-125)	864.11	
4	EA	TAXIWAY GUIDANCE SIGNS (L-125) RELOCATE	864.14	
		(MOD.)		
10	EA	TAXIWAY GUIDANCE SIGNS (L-125) - NEW	864.14	
26	EA	RETRO-REFLECTIVE TAXIWAY MARKERS (MOD.)	864.15	
1	EA	TEMPORARY THRESHOLD (L-125 & P-620)	864.15 MOD. 1	

EARTH WORK SUMMARY

LOCATION	TOTAL EXCAVATION	TOTAL EMBANKMENT	
RUNWAY 17-35	22,519 CY	6,336 CY	
RUNWAY 5-23	117	212	
TAXIWAYS	21,981	2,574	
TOTALS	44,617	9,122	
ROUNDING	383	-	
FILL FACTOR (15%)	-	1,368	
TOTAL	45,000 CY	10,490 CY	
WASTE	34,510 CY	-	

AIP 3-50-0001-06

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

QUANTITY SUMMARY

Job No. F200001718.01

File No.F20171801d62.dgn

REV. | DATE | DESCRIPTION

Designed by: GMD
Drawn by: MMM
Checked by: BMC
Approved by: GMD

Scale: AS SHOWN

Date: 3/21/01

Sheet - Of -

Sheet No
2

DRAINAGE QUANTITY SHEET

CULVERTS AND STORM DRAINS

LOCATION BEGIN	LOCATION END	SIZE & TYPE	LENGTH	FLOW LINE @ INLET	FLOW LINE OUTLET	TRENCH EXCAVATION CY	REMARKS
230+77	102' RT 232+09	15" RCP	132 LF	1138.58	1137.26	-	STONE FILL, TYPE I @ INLET AND OUTLET
234+64	102' RT 235+96	15" RCP	132 LF	1133.18	1131.18	-	STONE FILL, TYPE I @ INLET AND OUTLET
DI 17B	DI 17C	15" RCP	140 LF	1132.50	1132.00	-	-
DI 17C	DI 24A	15" CPEP	300 LF	1132.00	1126.00	-	-
DI 24A	DI 26A	15" CPEP	255 LF	1126.00	1122.10	-	-
DI 26C	DI 26A	12" RCP	80 LF	1124.00	1122.10	-	-
DI 26A	DI 27A	15" RCP	164 LF	1122.00	1118.00	-	-
DI 27A	DI 27	15" RCP	146 LF	1118.00	1116.75	-	CONNECT TO NEW 24" RCP UNDER RUNWAY
DI 26D	DI 31A	12" RCP	195 LF	1123.00	1117.90	-	-
DI 34A	DI 31A	15" RCP	235 LF	-	1117.90	-	-
DI 31A	DI 36A	15" CPEP	350 LF	1117.8	1107.3	-	-
DI 27	DI 29	24" RCP	250 LF	1116.7	1112.10	-	-
DI 29	DI 38	24" CPEP	95 LF	1112.0	1110.6	-	-
DI 38	230' LT 245+20	24" CPEP	60 LF	1110.6	1108.5	-	24" END SECTION W/ STONE FILL @ OUTLET
DI 36A	DI 36	18" CPEP	18 LF	1107.3	1107.2	-	-

DROP INLETS & STRUCTURES

#I	LOCATION	FLOW LINE @ INLET	FLOW LINE @ OUTLET	TOP GRATE ELEVATION	REMARKS
DI #1	190' RT 223+62	-	-	-	TO REMAIN
CB #2	290' RT 223+62	-	-	1149.6	TO REMAIN
-	-	-	-	-	-
DI #4	200' LT 223+62	-	-	1147.7	TO REMAIN
DI #5	-	-	-	-	TO REMAIN
DI #6	-	-	-	1148.1	TO REMAIN
DI #7	-	-	-	1144.2	TO REMAIN
DI #8	-	-	-	1142.8	TO REMAIN
DI #9	85' LT 228+05	-	-	-	TO BE REMOVED
DI #10	85' RT 228+00	-	-	-	TO BE REMOVED
DI #11	85' RT 230+80	-	-	-	TO BE REMOVED
DI #12	85' LT 230+60	-	-	-	TO BE REMOVED
DI #13	182' LT 230+50	-	-	-	TO REMAIN
DI #14	185' LT 233+20	-	-	-	TO REMAIN
DI #15	85' LT 233+65	-	-	-	TO BE REMOVED
DI #16	85' LT 234+05	-	-	-	TO BE REMOVED
DI #17	155' RT 233+90	-	-	-	TO BE REMOVED
DI #17A	240' RT 232+50	-	-	-	TO REMAIN
DI #17B	240' RT 234+65	1132.6	1132.50	-	OUTLET 15" RCP TO DI 17C
DI #17C	42' RT 736+00	1132.00	1131.90	1136.68	NEW PRECAST DI WITH NEW FRAME & GRATE
DI #18	85' RT 237+10	-	-	-	TO BE REMOVED
DI #19	85' LT 236+60	-	-	-	TO BR REMOVED
DI #20	185' LT 236+45	-	-	1128.2	TO REMAIN
DI #21	185' 239+55	-	-	1123.3	TO REMAIN
DI #22	85' LT 239+12	-	-	-	TO BE REMOVED
DI #23	85' RT 240+10	-	-	-	TO BE REMOVED
DI #24	15' RT 739+25	-	-	-	TO BE REMOVED
DI #24A	44' RT 739+00	1126.05	1126.00	1130.37	NEW PRECAST DI W/ NEW FRAME & GRATE
DI #25	15' RT 740+75	-	-	-	TO BE REMOVED
DI #26	402+40	-	-	-	TO BE REMOVED
DI #26A	44' RT 741+55	1112.1	1122.00	1126.08	NEW PRECAST DI W/ NEW FRAME & GRATE
DI #26B	125' RT 740+75	-	1125.5	1129.0	TO REMAIN
DI #26C	-	-	1124.0	1128.0	TO REMAIN
DI #26D	-	-	1123.0	1127.0	TO REMAIN
DI #27A	104' RT 241+67	1118.10	1118.00	1123.24	NEW PRECAST DI W/ NEW FRAME & GRATE
DI #27	85' RT 243+23	1116.75	1116.70	1121.81	REMOVE EXIST; INSTALL NEW PRECAST DI
DI #28	85' RT 242+50	-	-	-	TO REMAIN
DI #29	118' LT 244+50	1112.1	1112.0	1117.7	REMOVE EXISTING; REPLACE W/ NEW PRECAST DI
DI #30	85' RT 244+50	-	-	-	TO BE REMOVED
DI #31	744+50 CL	1117.9	1117.8	-	TO BE REMOVED
DI #31A	40' LT 744+18				NEW PRECAST DI W/ NEW FRAME & GRATE
DI #32	-	-	-	-	TO REMAIN
DI #33	118' RT 244+75	-	-	-	TO REMAIN
DI #34	140' RT 245+70	-	-	-	TO REMAIN
DI #34A	118' RT 245+50	-	-	-	TO REMAIN
DI #35	-	-	-	-	TO REMAIN
DI #36	85' RT 247+50	1107.0	1107.0	1115.36	TO REMAIN, ADJUST FRAME & GRATE ELEVATION
DI #36A	102' RT 247+50	1107.3	1107.2	1115.22	NEW PRECAST DI W/ NEW FRAME & GRATE
DI #37	78' LT 247+50	-	-	1115.62	TO REMAIN, ADJUST FRAME & GRATE ELEVATION
DI #38	200' LT 245+00	1110.6	1110.5	1115.5	REMOVE EXISTING; REPLACE W/ NEW PRECAST DI
DI #39	90' LT 146+30	-	-	-	TO REMAIN
DI #40	65' LT 146+30	-	1108.5	1113.5	TO REMAIN
DI #41	55' RT 146+30	-	-	-	TO REMAIN - CONNECT NEW 6" UNDERDRAIN
DI #42	85' RT 252+50	-	-	-	TO REMAIN
DI #49	85' LT 256+00	-	-	-	TO BE REMOVED
DI #50	85' RT 256+00	-	-	-	TO BE REMOVED
DI #52	85' LT 259+00	-	-	-	TO BE REMOVED
DI #53	85' RT 259+00	-	-	-	TO BE REMOVED
DI #54	125' RT 258+75	-	-	-	TO REMAIN
DI #55	185' LT 262+50	-	-	-	TO REMAIN
DI #56	85' LT 262+00	-	-	-	TO BE REMOVED

6" UNDERDRAIN - RUNWAY 17-35

LOCATION	SIZE & TYPE	LENGTH	FLOW LINE @ INLET	FLOW LINE @ OUTLET	TRENCH EXCAVATION CY	REMARKS
103.5 RT 215+00	6" UNDERDRAIN	-	-	-		FB1
53.5' RT 217+50	6" UNDERDRAIN	260LF	-	-		FB3
53.5' RT 220+00	6" UNDERDRAIN	250LF	-	-		FB5
53.5' RT 222+50	6" UNDERDRAIN	250LF	-	-		FB7
53.5' RT 225+00	6" UNDERDRAIN	250LF	-	-		FB9
53.5' RT 227+50	6" UNDERDRAIN	250LF	-	-		FB11
53.5' RT 230+00	6" UNDERDRAIN	250LF	-	-		FB13
53.5' RT 232+50	6" UNDERDRAIN	250LF	-	-		FB15
53.5' RT 234+50	6" UNDERDRAIN	200LF	-	-		FB17
53.5' RT 237+00	6" UNDERDRAIN	250LF	-	-		FB19
53.5' RT 239+50	6" UNDERDRAIN	250LF	-	-		FB21
53.5' RT 241+00	6" UNDERDRAIN	150LF	-	-		FB23
53.5' RT 243+00	6" UNDERDRAIN	200LF	-	-		FB25
53.5' RT 245+50	6" UNDERDRAIN	250LF	-	-		FB27
85' RT 247+50	6" UNDERDRAIN	210LF	-	-		DI #36
55' RT 146+35	6" UNDERDRAIN	-	1108.15	-		DI #41
53.5' RT 253+00	6" UNDERDRAIN	355LF	-	-		FB 31
53.5' RT 255+50	6" UNDERDRAIN	250LF	-	-		FB33
79' RT 258+00	6" UNDERDRAIN	260LF	1096.0	-		CONNECT TO EXISTING UNDERDRAIN
79' RT 263+66	6" UNDERDRAIN	-	-	1088.0		FB35 - CONNECT TO EXISTING UNDERDRAIN
103' RT 265+50	6" UNDERDRAIN	-	-	1084.0		FB36 - END UNDERDRAIN
103' RT 268+25	CARRIER PIPE	275LF	-	1082.0		CONNECT TO NEW UNDERDRAIN W/ 6" WYE
-	-	-	-	-		
85' RT 228+00	-	-	-	-		REMOVE DI #10, INSTALL 6" ELBOW
53.5' RT 228+25	CARRIER PIPE	45LF	1140.0	1139.0		6" UNDERDRAIN CARRIER PIPE
-	-	-	-	-		
-	-	-	-	-		
53.5' LT 215+00	6" UNDERDRAIN	-	1159.63	-		FB2
53.5' LT 217+50	6" UNDERDRAIN	250LF	-	-		FB4
53.5' LT 220+00	6" UNDERDRAIN	250LF	-	-		FB6
53.5' LT 225+50	6" UNDERDRAIN	250LF	-	-		FB8
53.5' LT 225+00	6" UNDERDRAIN	250LF	-	-		FB10
53.5' LT 226+14	6" UNDERDRAIN	114LF	-	-		FB12
53.5' LT 228+64	6" UNDERDRAIN	250LF	-	-		FB14
53.5' LT 231+14	6" UNDERDRAIN	250LF	-	-		FB16
53.5' LT 233+64	6" UNDERDRAIN	250LF	-	-		FB18
53.5' LT 236+14	6" UNDERDRAIN	250LF	-	-		FB20
53.5' LT 238+64	6" UNDERDRAIN	250LF	-	-		FB22
53.5' LT 241+14	6" UNDERDRAIN	250LF	-	-		FB24 (NOTE THERE IS NO FB 26)
53.5' LT 244+00	6" UNDERDRAIN	286LF	-	-		FB28
53.5' LT 246+50	6" UNDERDRAIN	250LF	-	-		FB30
78' LT 247+50	6" UNDERDRAIN	110LF	-	1110.78		DI #37
-	-	-	-	-		
78' LT 225+90	-	-	-	-		
78' LT 227+50	6" CARRIER PIPE	190LF	-	-		DI #8
	6" UNDERDRAIN - TAXIWAY					
22.5' LT 736+05	6" UNDERDRAIN	-	-	-		FB100
53.5' RT 236+00	6" UNDERDRAIN	160LF	-	-		6"x6"x6" WYE CONNECTOR
-	-	-	-	-		
22.5' LT 739+50	6" UNDERDRAIN	-	-	-		FB101
22.5' LT 741+58	6" UNDERDRAIN	208LF	-	-		CONNECT TO 15" RCP
-	-	-	-	-		
22.5' LT 743+00	6" UNDERDRAIN	-	-	-		FB104
20' LT 745+50	6" UNDERDRAIN	250LF	-	-		FB105
27.5' 612+25	6" UNDERDRAIN	275LF	-	-		FB106
85' RT 247+50	6" UNDERDRAIN	145LF	-	-		DI #36
-	-	-	-	-		
20' RT 736+00	6" UNDERDRAIN	-	-	-		FB100A
44' RT 739+00	6" UNDERDRAIN	300LF	1126.00	-		END UNDERDRAIN @ DI #24A
20' RT 739+50	6" UNDERDRAIN	-	-	-		FB101A
44' RT 741+55	6" UNDERDRAIN	220LF	1122.10	-		END UNDERDRAIN @ DI #26A

NOTE:

ALL NEW PRECAST CATCH BASINS AND DROP INLETS TO BE FITTED WITH FRAMES AND GRATES CAPABLE OF SUPPORTING AIRCRAFT WITH GROSS WEIGHTS TO 60,000 POUNDS (MIN.), SUCH AS MODEL LV-2226-4, AS MANUFACTURED BY LEBARON FOUNDRY CO. OR EQUAL.

AIP 3-50-0001-06

STATE OF VERMONT · ENGINEER · LICENSED PROFESSIONAL

REV. | DATE | DESCRIPTION

Job No. P200001718.01 | File No. P200001718.01 dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

DRAINAGE SUMMARY

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

Designed by: GMD | Drawn by: MMM | Checked by: BMC | Approved by: GMD

Scale: NTS

Date: 3/21/01

Sheet - Of -

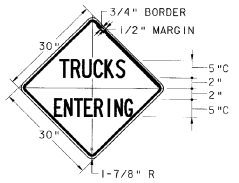
Sheet No 3

PROJECT DESCRIPTION

1. RECONSTRUCT RUNWAY 17-35 (100' x 5004')
2. RECONSTRUCT TAXIWAY 'AA' (35' x 150')
3. RECONSTRUCT TAXIWAY 'A' (40' x 240')
4. RECONSTRUCT TAXIWAY 'B' (50' x 290')
5. RECONSTRUCT TAXIWAY 'C' (50' x 230')
6. RECONSTRUCT RUNWAY 5-23 (100' x 799')
7. CONSTRUCT PARTIAL PARALLEL TAXIWAY 'E' (35' x 128')
8. INSTALL NEW MEDIUM INTENSITY RUNWAY LIGHTS ON RUNWAY 17-35
9. INSTALL NEW MEDIUM INTENSITY TAXIWAY LIGHTS (MITLS) ALONG RUNWAY 5-23.
10. RELOCATE REILS, RUNWAY 35
11. CONSTRUCT NEW ELECTRICAL VAULT
12. MODIFICATIONS TO MALSR, RUNWAY 17
13. INSTALLATION OF NEW DRAINAGE

NOTES

1. BENCHMARK #1 N.I.P. ELEV. 1091.522
   N. 622, 047.54
   E. 1,622, 642.62
2. BENCHMARK #2 N.I.P. ELEV. 1164.544
   N. 617, 643.15
   E. 1,625, 011.04
3. SEE PROJECT PHASING PLAN - SHEET 5.
4. TWO (2) TRUCK ENTERING SIGNS TO BE PLACED APPROXIMATELY 150' AND 75' (EACH DIRECTION) FROM CONTRACTOR'S PROJECT ACCESS POINTS ON BOTH AIRPORT ROAD AND COMSTOCK ROAD.

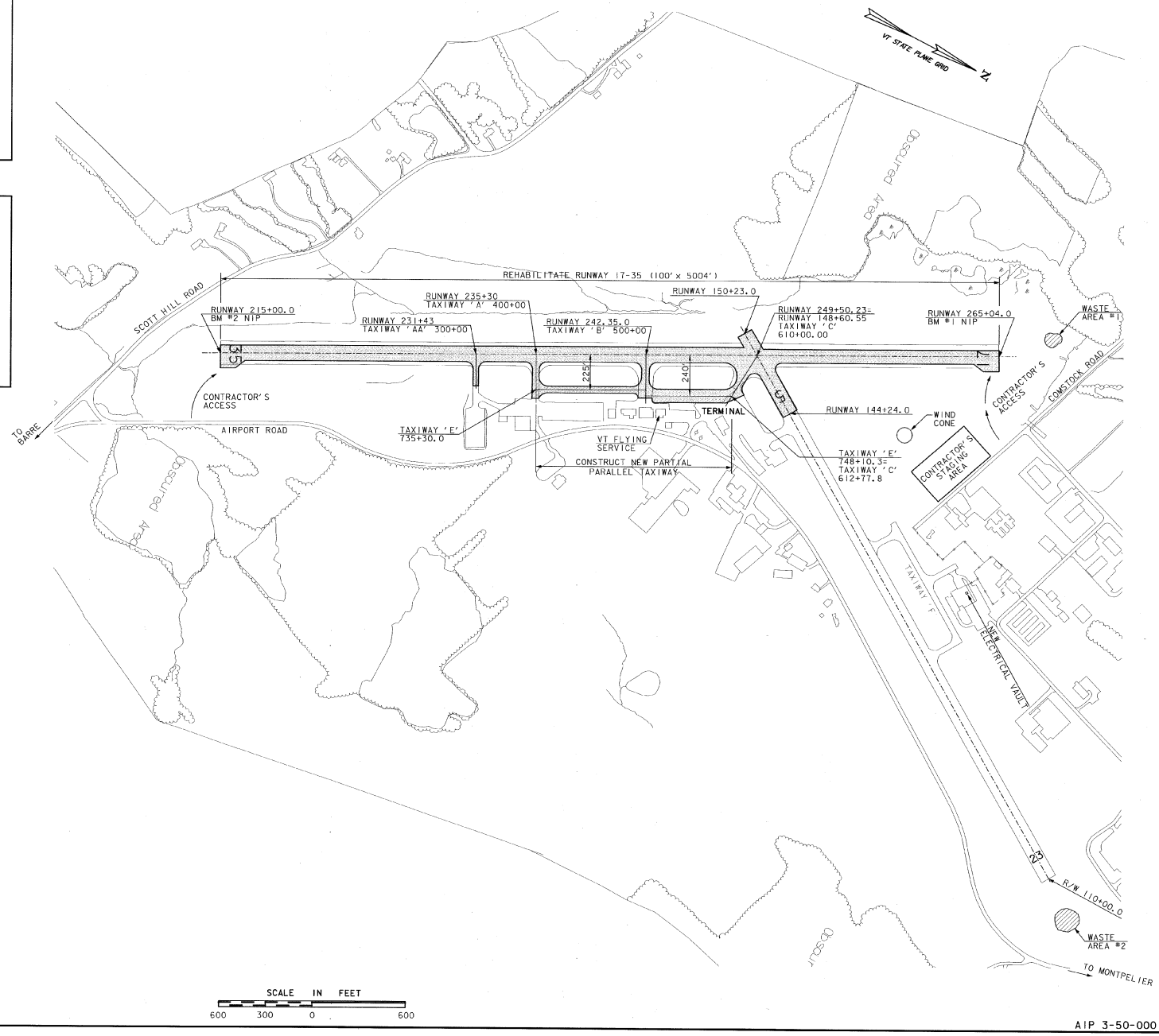


COLORS

TEXT & BORDER - BLACK (NON-REFLECT.)
BACKGROUND - YELLOW (REFLECT.)

E-121 STANDARD SIGN PLACEMENT
E-100 CONSTRUCTION APPROACH SIGNS

TRUCKS ENTERING WARNING SIGN



AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. 72000118.01 | File No. f2078blde4.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RECONSTRUCTION OF RUNWAY 17-35
GENERAL PROJECT LAYOUT

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

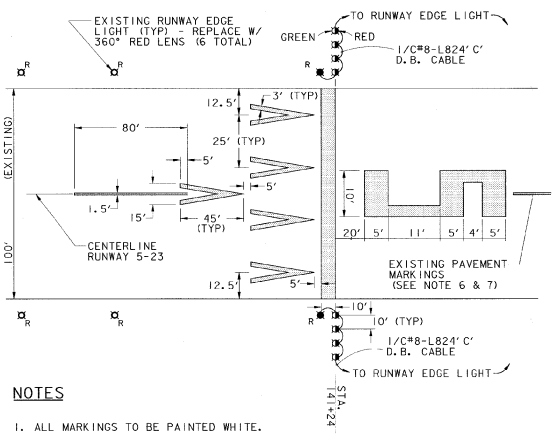
Designed by: GMD	Drawn by: AMB	Checked by: BMC	Approved by: GMD

Scale: 1" = 300'

Date: 3/21/01

Sheet - Of -

Sheet No **4**



NOTES

1. ALL MARKINGS TO BE PAINTED WHITE.
2. EIGHT (8) TEMPORARY MEDIUM INTENSITY RUNWAY THRESHOLD LIGHTS (CONFORMING TO FAA SPECIFICATIONS L-861E) TO BE INSTALLED AS SHOWN - SEE SHEET 34. (ALL LENSES TO BE 180° GREEN/180° RED).
3. TEMPORARY THRESHOLD LIGHTS TO BE STAKE OR CAN MOUNTED AT CONTRACTOR'S OPTION. EXISTING THRESHOLD LIGHTS MAY BE USED AT RELOCATED THRESHOLD AT CONTRACTOR'S OPTION. (DISCONNECT ALL RUNWAY LIGHTS WEST OF TEMPORARY THRESHOLD).
4. WHILE PREPARING TEMPORARY THRESHOLD, CLOSED RUNWAY MARKERS TO BE IN PLACE OVER NUMERAL "5" AND "23". RUNWAY 17-35 TO BE OPEN.
5. REMOVE EXISTING PAINT WHICH CONTRASTS WITH TEMPORARY PLAN BY SANDBLAST OR WATERBLAST TO THE SATISFACTION OF THE ENGINEER (ITEM 646.82).
6. THE REMAINDER OF RUNWAY 5-23 MARKINGS TO BE PAID FOR UNDER ITEM 646.214.
7. TEMPORARY RELOCATED THRESHOLD WILL BE USED WHEN A TEMPORARY DISPLACED THRESHOLD IS NECESSARY, AS DETERMINED BY THE ENGINEER. THE TEMPORARY RELOCATED THRESHOLD WILL BE PAID FOR UNDER ITEM 864.15 THRESHOLD LIGHTS (L-125).
8. RUNWAY NUMERAL "23 AND CENTERLINE TO BE PAINTED WHITE BEFORE CLOSING RUNWAY 17-35.

TEMPORARY RELOCATED THRESHOLD DETAIL (ITEM L-125)

SCALE: N.T.S.

PHASING NOTES

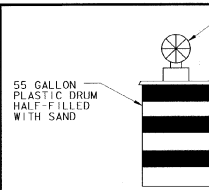
1. ALL WORK ON THE RUNWAY RECONSTRUCTION PROJECT WILL BE ACCOMPLISHED DURING EITHER PHASE 1, 2 OR 3.
2. RUNWAY 17-35 WILL BE CLOSED TO AIR TRAFFIC DURING PHASE 3. THE RUNWAY CAN BE CLOSED FOR UP TO 75 CALENDAR DAYS. RUNWAY 5-23 IS TO BE OPEN AT ALL TIMES DURING PHASE 3 WORK.
3. WORK WITHIN THE SAFETY AREAS ON RUNWAY 17-35 WILL REQUIRE THE CLOSURE OF THE LOCALIZER AND GLIDE SLOPE. CONTRACTOR TO COORDINATE SHUT DOWN WITH FAA/FACILITIES, CONTACT FSC, 802-951-6703.
4. WHENEVER WORK IS SCHEDULED WITHIN THE RUNWAY 17-35 SAFETY AREA, THIS RUNWAY MUST BE CLOSED. AT LEAST 24 HOURS NOTICE IS REQUIRED PRIOR TO CLOSING RUNWAY 17-35. CLOSE COORDINATION WITH THE AIRPORT MANAGER IS NECESSARY WHENEVER THIS RUNWAY IS SCHEDULED TO BE CLOSED.
5. ALL WORK MUST COMPLY WITH THE REQUIREMENTS OF A.C. 150/5370-2C, OPERATIONAL SAFETY DURING CONSTRUCTION, (SEE CONSTRUCTION AND SAFETY NOTES).
6. THE CONTRACTOR MUST SUBMIT A SCHEDULE TO THE ENGINEER PRIOR TO COMMENCING WORK ON THE AIRPORT. THIS SCHEDULE IS TO BE UPDATED WEEKLY. NO WORK WILL BE ALLOWED OUTSIDE THE AREAS INCLUDED IN THE APPROVED SCHEDULE.
7. PRIOR TO OPENING THE RUNWAYS TO AIR TRAFFIC, THE RUNWAYS WILL BE INSPECTED BY THE CONTRACTOR AND ENGINEER.

CONSTRUCTION PHASING

PHASE 1 — RUNWAY 17-35 AND RUNWAY 5-23 TO REMAIN OPEN AT ALL TIMES. ACCESS TO TAXIWAY 'A AND B' AND HANGERS TO BE MAINTAINED. NO EQUIPMENT ALLOWED WITHIN RUNWAY SAFETY AREAS.

PHASE 2 — RUNWAY 17-35 AND RUNWAY 5-23 TO REMAIN OPEN AT ALL TIMES. CONTRACTOR TO COORDINATE WITH FBO, VERMONT FLYING SERVICE AND RESIDENT ENGINEER TO MINIMIZE DISRUPTIONS TO FBO OPERATIONS. NO EQUIPMENT ALLOWED WITHIN RUNWAY SAFETY AREAS.

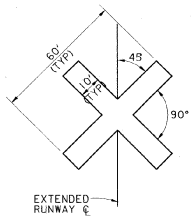
PHASE 3 — RUNWAY 17-35 TO BE CLOSED. R/W 5 THRESHOLD TO BE DISPLACED TO STA. 141+24. ALLCONTRACTOR'S MEN AND EQUIPMENT TO REMAIN CLEAR OF RUNWAY 5 SAFETY AREA. WHENEVER CONTRACTOR/EQUIPMENT ARE WORKING OR CROSSING R/W 5 BETWEEN STATION 141+24 AND 150+50 THE CONTRACTOR SHALL PROVIDE A COMPETENT FLAG PERSON WHO IS EQUIPPED WITH AN AERONAUTICAL RADIO - SEE GENERAL NOTES - SHEET 6.



TO BE PLACED WHERE DIRECTED BY THE ENGINEER. NOT A SEPARATE PAY ITEM.

BUCKET-TYPE CONSTRUCTION BARRICADE

SCALE: N.T.S.



CLOSED RUNWAY MARKER

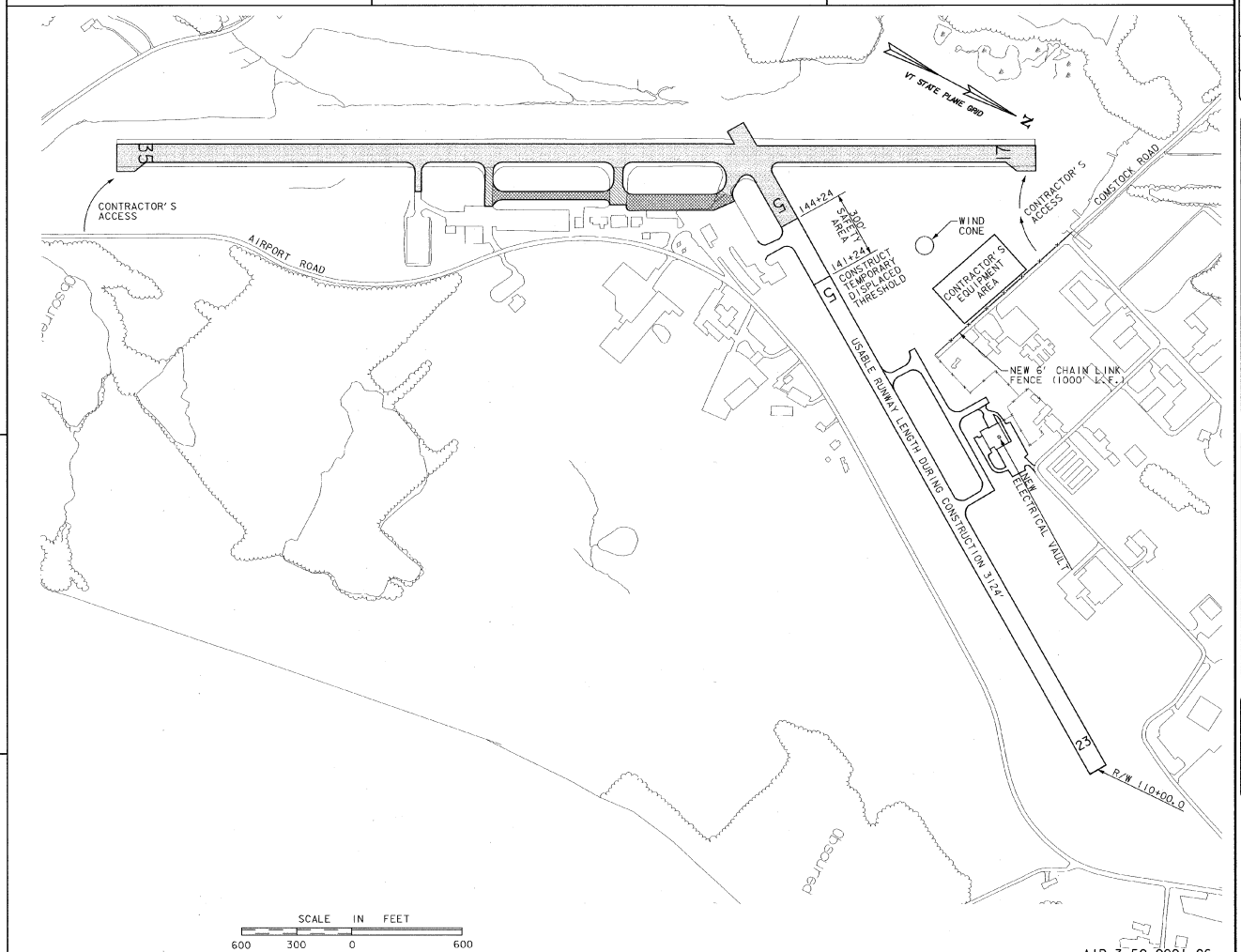
SCALE: N.T.S.

MARKER NOTES

1. CLOSED RUNWAY MARKERS TO BE IN PLACE DURING CONSTRUCTION PERIOD AS DIRECTED BY ENGINEER.
2. CLOSED RUNWAY MARKER TO BE DURABLE YELLOW VINYL COATED WINDSCREEN MATERIAL. RE-USEABLE TEMPORARY "X" MARKERS ARE AVAILABLE FROM NACCI-877-NAC-ARPT/WWW.AIRPORTNAC.COM. SECURELY FASTENED IN PLACE.
3. COST OF PLACING AND MAINTAINING THE CLOSED RUNWAY MARKER IS CONSIDERED NECESSARY AND INCIDENTAL TO CONSTRUCTION AND IS NOT A SEPARATE PAY ITEM.
4. CLOSED RUNWAY MARKER TO BE PLACED OVER NUMERALS, OR IN R/W OVERRUN AREA, JUST OFF THRESHOLD, AS DIRECTED BY THE ENGINEER.
5. AT COMPLETION OF CONTRACT, THE TEMPORARY X-MARKERS WILL BECOME THE PROPERT OF THE AIRPORT.

GENERAL NOTES

1. CONTRACTOR'S MAIN ACCESS TO SITE TO BE FROM COMSTOCK ROAD.
2. CONTRACTOR TO PROVIDE FLAG PERSON AT HAUL / ACCESS ROUTE CROSSING OF RUNWAY 5 SAFETY AREA, WHEN DIRECTED BY THE ENGINEER.
3. FLAGPERSON TO CONTROL ACCESS WITHIN RUNWAY SAFETY AREAS, NO GROUND VEHICLE TRAFFIC WILL BE ALLOWED TO ENTER RUNWAY SAFETY AREAS WHEN AIRCRAFT ARE APPROACHING OR DEPARTING RUNWAY 5.
4. FLAGPERSON IS TO HAVE AN AERONAUTICAL RADIO CAPABLE OF TRANMITTING AND RECIEVING ON UNICOM FREQUENCY 122.8 MHZ.
5. HAUL ROUTE TO BE GRADED AND RETURNED TO TURF UPON COMPLETION OF PROJECT.
6. WASTE AREAS TO BE GRADED & SEEDED. PROVIDE EROSION CONTROL AS DIRECTED BY THE ENGINEER. NO WASTE MATERIALS TO BE PLACED IN WETLANDS - SEE DELINEATION LIMITS ON PAVING PLAN SHEETS.
7. REFER TO SHEET 6 FOR ADDITIONAL INFO.



AIP 3-50-0001-06

REV. | DATE | DESCRIPTION

Job No. P200001T18.01 | File No. P200T18Odes.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

PHASING PLAN

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

Designed by: GWD | Drawn by: AMB | Checked by: BMC | Approved by: GWD

Scale: 1" = 300'

Date: 3/21/01

Sheet - Of -

Sheet No. **5**

GENERAL CONSTRUCTION AND SAFETY NOTES

GENERAL NOTES

1. THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT PLANS AND SPECIFICATIONS AND ANY RULES, REGULATIONS, STANDARDS OR SPECIFICATIONS REFERENCED THEREIN. THE PROJECT IS SUBJECT TO INSPECTION BY REPRESENTATIVES OF THE VERMONT AGENCY OF TRANSPORTATION (VAOT), AND THE FEDERAL AVIATION ADMINISTRATION (FAA).

2. THE PROJECT IS TO BE COMPLETED IN CONFORMANCE WITH THE "CONSTRUCTION PHASING PLANS AND NOTES," AS CONTAINED IN THE PLANS, AND SHALL BE CONSTRUCTED IN A TIMELY MANNER IN ACCORDANCE WITH THE CONTRACTOR'S APPROVED PROJECT SCHEDULE. THE SCHEDULE SHALL PROVIDE FOR COMPLETION OF THE PHASES AS SHOWN ON THE PLANS AND DESCRIBED IN THE CONTRACT SPECIFICATIONS.

3. THE CONTRACTOR IS EXPECTED TO MEET COMPLETION OF CRITICAL PORTIONS OF THE PROJECT AND OPEN THOSE SEGMENTS TO TRAFFIC BY THE SPECIFIED TIMES AND TO COMPLETE THE ENTIRE PROJECT ON TIME.

4. EDWARD F. KNAPP STATE AIRPORT WILL BE IN OPERATION DURING THE CONSTRUCTION OF THIS PROJECT. COORDINATION OF ALL WORK WITH THE AIRPORT MANAGER & THE PROJECT RESIDENT ENGINEER IS MANDATORY TO MINIMIZE IMPACTS ON AIRPORT OPERATIONS.

5. CONSTRUCTION AND MAINTENANCE OPERATIONS BY OTHERS MAY OCCUR CONCURRENTLY AND AT TIMES IN THE VICINITY OF CONSTRUCTION ASSOCIATED WITH THIS PROJECT. THE CONTRACTOR SHALL COORDINATE HIS OPERATIONS AND COOPERATE WITH MAINTENANCE CREWS AND OTHER CONTRACTORS WORKING ON THE AIRPORT.

6. ACCESS TO THE SITE - THE CONTRACTOR'S ACCESS POINTS TO THE SITE ARE SHOWN ON THE GENERAL PROJECT LAYOUT PLAN - SEE SHEET 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL VEHICLES AND PERSONNEL WHO ENTER THROUGH THESE ACCESS POINTS. THE CONTRACTOR SHALL MAINTAIN A SECURITY GUARD AT EACH GATE BEING USED AT ALL TIMES WHILE CONSTRUCTION IS UNDERWAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL ACCESS POINTS BEING USED AT THE END OF EACH CONSTRUCTION DAY OR WHEN ACCESS POINTS ARE UNATTENDED.

7. HAUL ROUTES - APPROXIMATE LOCATION OF HAUL ROUTES ON THE AIRPORT SITE ARE SHOWN ON THE PHASING PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE OFF-SITE HAUL ROUTES (STATE OR TOWN HIGHWAYS) WITH THE APPROPRIATE OWNER WHO HAS JURISDICTION OVER THE AFFECTED ROUTE. ON-SITE HAUL ROUTES SHALL BE MAINTAINED BY THE CONTRACTOR AND SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE TO THEIR ORIGINAL CONDITION UPON COMPLETION OF BEING USED AS A HAUL ROUTE. THE BEFORE AND AFTER CONDITION OF ON-SITE HAUL ROUTES SHALL BE INSPECTED AND DETERMINED BY THE CONTRACTOR AND THE ENGINEER. FENCING, DRAINAGE, GRADING AND OTHER MISCELLANEOUS CONSTRUCTION REQUIRED TO CONSTRUCT TEMPORARY HAUL ROUTES OR ACCESS POINTS ON THE AIRPORT WILL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO COMMENCING THE WORK. EXISTING ACCESS ROADS TO AIRPORT FACILITIES SHALL REMAIN OPEN AND MAINTAINED AT ALL TIMES.

8. CONTRACTOR'S STAGING AREAS - AN AREA WILL BE MADE AVAILABLE FOR CONTRACTOR'S MOBILIZATION AND STORAGE. THIS AREA IS SHOWN ON THE GENERAL PROJECT LAYOUT. THE CONTRACTOR'S STAGING AREA SHALL BE GRADED, TOPSOILED, SEEDED, AND MULCHED UPON COMPLETION OF USE, AT THE CONTRACTOR'S EXPENSE.

9. DISPOSAL AREA - WASTE AREAS WILL BE MADE AVAILABLE FOR THE DISPOSAL OF THE CONTRACTOR'S SPOIL MATERIALS. THE MANNER IN WHICH MATERIALS ARE PLACED IN EMBANKMENTS SHALL BE AS SPECIFIED AND APPROVED BY THE ENGINEER. WASTE MATERIALS INCLUDE THOSE ITEMS WHICH ARE A DIRECT RESULT OF CONSTRUCTION. TRASH (i.e. CUPS, CANS, ETC.) SHALL BE DISPOSED OF THROUGH PROPER SANITARY METHODS.

10. SAFETY - THE CONTRACTOR SHALL CONDUCT HIS ACTIVITIES IN A SAFE MANNER AS SPECIFIED IN THE SECTION TITLED, "SAFETY REQUIREMENTS DURING CONSTRUCTION" ON THIS SHEET.

11. PROTECTION OF AND REPAIR OF DAMAGE TO EXISTING CABLES - LOCATION OF KNOWN EXISTING AIRPORT UNDERGROUND CABLES ARE SHOWN ON THE PLANS AND MUST BE VERIFIED BY THE CONTRACTOR. REPAIR OF CABLES DAMAGED DUE TO CONTRACTOR'S OPERATIONS MUST BE STARTED IMMEDIATELY AND CONTINUED UNTIL COMPLETED. ALL SUCH REPAIRS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND SHALL BE AT THE CONTRACTOR'S EXPENSE. WHEN FAA CABLES ARE DAMAGED, REPAIRS SHALL BE DONE IN ACCORDANCE WITH FAA REQUIREMENTS AND IN THE PRESENCE OF AN FAA REPRESENTATIVE. THE FAA MAY ELECT TO HAVE THE REPAIR PERFORMED BY OTHERS IN WHICH CASE THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING THE INCURRED COSTS OF REPAIRS.

12. EXISTING AIRFIELD LIGHTING SYSTEMS - INTERRUPTION OF EXISTING AIRFIELD LIGHTING SYSTEMS NOT INCLUDED IN THIS PROJECT SHALL NOT BE PERMITTED. ALL AIRFIELD LIGHTING CIRCUITS AFFECTED BY THIS PROJECT SHALL BE MAINTAINED BY THE CONTRACTOR DURING OPERATIONAL PERIODS IN ACCORDANCE WITH THE SPECIFICATIONS AND/OR AS DIRECTED BY THE ENGINEER.

13. CONSTRUCTION LIMITS - ALL CONTRACTOR VEHICLES AND TRAFFIC (UNLESS OTHERWISE AUTHORIZED) SHALL REMAIN WITHIN THE DESIGNATED CONSTRUCTION LIMITS OR HAUL ROUTES. CONSTRUCTION, STORAGE AND STOCKPILING LIMITS ARE FURTHER DEFINED IN THE SECTION TITLED, "SAFETY REQUIREMENTS DURING CONSTRUCTION" ON THIS SHEET.

14. PORTABLE FLOODLIGHTING - THE CONTRACTOR SHALL PROVIDE PORTABLE FLOODLIGHTING WHEN REQUIRED FOR CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL PROVIDE SUFFICIENT UNITS SO THAT ALL WORK AREAS ARE ILLUMINATED TO A LEVEL OF 5 HORIZONTAL FOOT CANDLES. THE LIGHTING LEVELS SHALL BE CALCULATED AND MEASURED IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE ILLUMINATION ENGINEERING SOCIETY.

15. THE CONTRACTOR SHALL OBTAIN ALL THE PERMITS AND LICENSES REQUIRED FOR THE PROJECT WORK AT HIS OWN EXPENSE.

16. EXISTING TOPOGRAPHIC FIELD SURVEYS FOR THIS PROJECT AREA WERE PERFORMED BY LITTLE RIVER SURVEY CO. IN 1998.

17. THE HORIZONTAL CONTROL ON THIS PROJECT IS TIED TO THE 1983 AND 1988 NATIONAL GEODETIC HORIZONTAL AND VERTICAL DATUM, RESPECTIVELY.

SAFETY REQUIREMENTS DURING CONSTRUCTION

(A) FEDERAL AVIATION ADMINISTRATION (FAA) ADVISORY CIRCULARS (AC), ORDERS AND FEDERAL AVIATION REGULATIONS (FAR).

THE FOLLOWING PUBLICATIONS CONTAIN DEFINITIONS/DESCRIPTIONS OF CRITICAL AIRPORT OPERATING AREAS. THE AREAS DEFINED BELOW PERTAIN TO AIRFIELD SAFETY REQUIREMENTS AND ARE REFERENCED THROUGHOUT THE CONTRACT DOCUMENTS. COPIES OF THESE PUBLICATIONS ARE AVAILABLE THROUGH THE FAA OR CAN BE ORDERED BY MAIL FROM:

U.S. DEPARTMENT OF TRANSPORTATION
SUBSEQUENT DISTRIBUTION OFFICE
ARDMORE EAST BUSINESS CENTER
3341 Q 75TH AVE.
LANDOVER, MD. 20785

AND CAN BE REVIEWED AT THE OFFICES OF THE VERMONT AGENCY OF TRANSPORTATION.

(1) AC 150/5370-2, "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION", CURRENT EDITION.

(2) FAR PART 77 "OBJECTS AFFECTING NAVIGABLE AIRSPACE, CURRENT EDITION"

(3) AC 150/5300-13, "AIRPORT DESIGN", CURRENT EDITION, ESTABLISHES DESIGN, OPERATIONAL, AND MAINTENANCE STANDARDS FOR AIRPORTS. STANDARD TERMS USED IN THE CONTRACT PLANS AND SPECIFICATIONS ARE DEFINED BELOW:

(a) OBSTACLE FREE ZONE (OFZ) - A VOLUME OF SPACE WHICH IS FREE OF ALL FIXED OBJECTS AND CLEAR OF VEHICLES IN THE PROXIMITY OF AN AIRPLANE CONDUCTING AN APPROACH, MISSED APPROACH, LANDING, TAKEOFF, OR DEPARTURE. AN OFZ TYPICAL SECTION IS SHOWN ON THE GENERAL PROJECT LAYOUT PLAN.

(b) RUNWAY PROTECTION ZONE (RPZ): A TRAPEZOIDAL AREA CENTERED ON THE RUNWAY BEGINNING AT A POINT 200 FEET BEYOND THE END OF THE AREA USEABLE FOR TAKEOFF OR LANDING.

(c) OBJECT FREE AREA (OFA): A TWO DIMENSIONAL GROUND AREA SURROUNDING RUNWAYS, TAXIWAYS, AND TAXILANES WHICH IS CLEAR OF OBJECTS EXCEPT FOR OBJECTS WHOSE LOCATION IS FIXED BY FUNCTION.

(d) SAFETY AREA - THE SURFACE ADJACENT TO RUNWAYS, TAXIWAYS, AND TAXILANES OVER WHICH AIRCRAFT SHOULD, IN DRY WEATHER, BE ABLE TO CROSS AT NORMAL SPEEDS WITHOUT INCURRING SIGNIFICANT DAMAGE. A SAFETY AREA IS GRADED, DRAINED AND COMPACTED. IT IS FREE OF ANY HOLES, TRENCHES, BUMPS OR OTHER SIGNIFICANT SURFACE VARIATIONS OR OBJECTS OTHER THAN THOSE WHICH MUST BE THERE BECAUSE OF THEIR ESSENTIAL AERONAUTICAL FUNCTION. THE SAFETY AREA REQUIRES THE CAPABILITY OF SUPPORTING MAINTENANCE VEHICLES AND AIRCRAFT RESCUE AND FIRE FIGHTING VEHICLES UNDER NORMAL (DRY) CONDITIONS.

(B) GENERAL SAFETY REQUIREMENTS

(1) THE CONTRACTOR SHALL ACQUAINT HIS SUPERVISORS AND EMPLOYEES WITH THE AIRPORT ACTIVITY AND OPERATIONS THAT ARE INHERENT TO EDWARD F. KNAPP STATE AIRPORT AND SHALL CONDUCT HIS CONSTRUCTION ACTIVITIES TO CONFORM TO ALL ROUTINE AND EMERGENCY AIR TRAFFIC REQUIREMENTS AND GUIDELINES FOR SAFETY SPECIFIED HEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL SAFETY DEVICES AS REQUIRED FOR THE PROTECTION OF HIS PERSONNEL.

(2) PROTECTION OF ALL PERSONS SHALL BE PROVIDED THROUGHOUT THE PROGRESS OF THE WORK. THE WORK SHALL PROCEED IN SUCH A MANNER AS TO PROVIDE SAFE CONDITIONS FOR ALL WORKERS AND AGENCY PERSONNEL. THE SEQUENCE OF OPERATION SHALL BE SUCH THAT MAXIMUM PROTECTION IS AFFORDED TO INSURE THAT PERSONNEL AND WORKERS IN THE WORK AREA ARE NOT SUBJECT TO ANY DANGEROUS CONDITIONS.

(3) DURING PERFORMANCE OF THIS CONTRACT, THE AIRPORT RUNWAYS, TAXIWAYS, AND AIRCRAFT PARKING APRONS SHALL REMAIN IN USE BY AIRCRAFT TO THE MAXIMUM EXTENT POSSIBLE. ALL AIRCRAFT TRAFFIC ON THESE AREAS SHALL HAVE PRIORITY OVER CONTRACTOR'S TRAFFIC. THE OWNER RESERVES THE RIGHT TO ORDER THE CONTRACTOR AT ANY TIME TO VACATE ANY AREA NECESSARY TO MAINTAIN SAFE AIRCRAFT OPERATIONS. USE OF AREAS NEAR THE CONTRACTOR'S WORK WILL BE CONTROLLED TO MINIMIZE DISTURBANCE TO THE CONTRACTOR'S OPERATION. THE CONTRACTOR SHALL NOT ALLOW EMPLOYEES, SUBCONTRACTORS, SUPPLIERS, OR ANY OTHER UNAUTHORIZED PERSON TO ENTER OR REMAIN IN ANY AIRPORT AREA WHICH WOULD BE HAZARDOUS TO PERSONS OR TO AIRCRAFT OPERATIONS.

(4) ALL WORK TO BE PERFORMED WHICH IS CLOSE TO AN ACTIVE RUNWAY, TAXIWAY OR APRON SHALL BE PERFORMED WHEN THE RUNWAY, TAXIWAY OR APRON IS NOT IN USE. SUCH WORK SHALL BE ACCOMPLISHED ONLY WHEN PRIOR PERMISSION FROM THE ENGINEER AND AIRPORT MANAGER. REQUESTED CLOSINGS SHALL BE DIRECTED TO THE ENGINEER AT LEAST 48 HOURS IN ADVANCE.

(C) CONSTRUCTION AND FACILITIES MAINTENANCE

(1) THE FOLLOWING ARE CONSIDERED SAFETY PROBLEMS AND/OR HAZARDS:

(a) TRENCHES, HOLES, OR EXCAVATION ON OR ADJACENT TO ANY ACTIVE RUNWAY, TAXIWAY, APRON OR IN SAFETY AREA.

(b) UNMARKED/UNLIGHTED HOLES OR EXCAVATION IN ANY APRON, OPEN TAXIWAY, OPEN TAXILANE, OR RELATED SAFETY AREA.

(c) MOUNDS OR PILES OF EARTH, CONSTRUCTION MATERIALS, TEMPORARY STRUCTURES, OR OTHER OBJECTS IN THE VICINITY OF AN OPEN RUNWAY, TAXIWAY, TAXILANE, OR IN ANY RELATED SAFETY, APPROACH, OR DEPARTURE AREA.

(d) VEHICLES OR EQUIPMENT, WHETHER OPERATING OR IDLE, ON ANY OPEN RUNWAY, TAXIWAY, TAXILANE, OR IN ANY RELATED SAFETY, APPROACH, OR DEPARTURE AREA.

(e) VEHICLES, EQUIPMENT, EXCAVATION, STOCKPILES, OR OTHER MATERIALS WHICH COULD INTERFERE WITH ELECTRONIC SIGNALS FROM RADIOS OR ELECTRONIC NAVIGATIONAL AIDS (NAVAIDS).

(f) PAVEMENT DROP-OFFS - LIPS (EITHER PERMANENT OR TEMPORARY, WHICH COULD CAUSE DAMAGE TO AIRCRAFT IF CROSSED AT NORMAL OPERATING SPEEDS. THE NORMAL MAXIMUM DROP-OFF OR LIP IS 1-1/2 INCHES.

(g) UNMARKED UTILITY, NAVAID, WEATHER SERVICE, RUNWAY LIGHTING, OR OTHER POWER OR SIGNAL CABLES THAT COULD BE DAMAGED DURING CONSTRUCTION.

(h) OBJECTS, WHETHER OR NOT MARKED OR FLAGGED, OR ACTIVITIES WHICH ARE IN THE VICINITY OF THE AIRPORT WHICH COULD BE DISTRACTING, CONFUSING, OR ALARMING TO PILOTS DURING AIRCRAFT OPERATIONS.

(i) UNFLAGGED/UNLIGHTED LOW VISIBILITY ITEMS SUCH AS TALL CRANES, DRILLS, AND THE LIKE ANYWHERE IN THE VICINITY OF ACTIVE RUNWAYS, OR IN ANY APPROACH OR DEPARTURE AREA.

(j) MISLEADING OR MALFUNCTIONING OBSTRUCTION LIGHTS OR UNLIGHTED/UNMARKED OBSTRUCTIONS IN THE APPROACH TO ANY ACTIVE RUNWAY.

(k) WATER, SNOW, DIRT, DEBRIS, OR OTHER TRANSIENT ACCUMULATION WHICH TEMPORARILY OBSCURES PAVEMENT MARKINGS OR PAVEMENT EDGES, OR DEROGATES VISIBILITY OF RUNWAY/TAXIWAY MARKINGS OR LIGHTING.

(l) INADEQUATE OR IMPROPER METHODS OF MARKING, BARRICADING, AND LIGHTING OF TEMPORARILY CLOSED PORTIONS OF THE AIRPORT OPERATIONS AREA.

(m) TRASH OR OTHER MATERIALS WITH FOREIGN OBJECT DAMAGE (FOD) POTENTIAL: WHETHER ON RUNWAYS, TAXIWAYS, OR APRONS OR IN RELATED SAFETY AREAS.

(n) INADEQUATE BARRICADING OR OTHER MARKING WHICH IS PLACED TO SEPARATE CONSTRUCTION OR MAINTENANCE AREAS FROM OPEN AIRCRAFT OPERATING AREAS.

(o) FAILURE TO CONTROL UNAUTHORIZED VEHICLE AND HUMAN ACCESS TO ACTIVE AIRCRAFT OPERATING AREAS.

(p) FAILURE TO MAINTAIN RADIO COMMUNICATION BETWEEN CONSTRUCTION/MAINTENANCE VEHICLES AND RUTLAND UNICOM.

(q) CONSTRUCTION/MAINTENANCE ACTIVITIES OR MATERIALS WHICH COULD HAMPER THE RESPONSE OF AIRCRAFT RESCUE AND FIRE FIGHTING (ARFF) EQUIPMENT FROM REACHING ALL AIRCRAFT OR ANY PART OF THE RUNWAY/TAXIWAY SYSTEM, RUNWAY APPROACH AND DEPARTURE AREAS AND AIRCRAFT PARKING LOCATIONS.

(r) BIRD ATTRACTANTS ON AIRPORT SUCH AS: EDIBLES (FOOD SCRAPS, ETC.), MISCELLANEOUS TRASH, OR PONDED WATER.

(2) THE CONTRACTOR SHALL CONDUCT ACTIVITIES SO AS NOT TO VIOLATE ANY SAFETY STANDARDS CONTAINED HEREIN. THE CONTRACTOR SHALL INSPECT ALL CONSTRUCTION AND STORAGE AREAS AS OFTEN AS NECESSARY AND PROMPTLY TAKE ALL STEPS NECESSARY TO PREVENT/REMEDY ANY UNSAFE OR POTENTIALLY UNSAFE CONDITIONS OR ACTIVITIES DISCOVERED.

(3) THE VAOT WILL BE RESPONSIBLE FOR ISSUING APPROPRIATE NOTICE TO AIRMEN (NOTAM) CONCERNING CONSTRUCTION ACTIVITY ON THE AIRFIELD.

(D) MOTORIZED VEHICLES

THIS PROJECT INCLUDES WORK WITHIN THE AIRCRAFT OPERATIONS AREA (AOA).
ALL PERMITTED VEHICLES SHALL BE EQUIPPED WITH A FLASHING AMBER (YELLOW) DOME-TYPE LIGHT, MOUNTED ON TOP OF THE VEHICLE AND OF SUCH INTENSITY TO CONFORM TO LOCAL CODES FOR MAINTENANCE AND EMERGENCY VEHICLES.
ALL VEHICLES OPERATING WITHIN THE AIRFIELD BOUNDARY SHALL BE IDENTIFIED WITH A SIGN ON EACH SIDE OF THE VEHICLE BEARING THE CONTRACTOR'S NAME IN 12-INCH MINIMUM LETTER HEIGHT.

VEHICLES MAKING ONLY OCCASIONAL VISITS TO THE JOB SITE ARE EXEMPT FROM THE IDENTIFICATION REQUIREMENTS CONTAINED HEREIN ABOVE PROVIDED THAT THEY ARE ESCORTED INTO, THROUGH, AND OUT OF THE AIRPORT AREA BY A PROPERLY IDENTIFIED VEHICLE.

(E) RADIO COMMUNICATIONS

RADIO COMMUNICATIONS ARE REQUIRED BETWEEN THE CONTRACTOR'S REPRESENTATIVE AND MONTPELIER UNICOM. RADIO CONTACT IS REQUIRED AT ALL TIMES WHILE THE CONTRACTOR HAS PERSONNEL AND EQUIPMENT ON THE PROJECT SITE AND WHILE THEY ARE IN AN ACTIVE AIR OPERATIONS AREA (AOA) OF THE AIRPORT. RADIOS SHALL BE FURNISHED BY THE CONTRACTOR AND SHALL BE CAPABLE OF TRANSMITTING AND RECEIVING AT A GROUND CONTROL FREQUENCY OF 122.8 MHZ. THIS FREQUENCY IS TO BE UTILIZED WHEN CROSSING ACTIVE FACILITIES. SUFFICIENT RADIOS SHALL BE ON SITE AND OPERATING AT ALL TIMES SO THAT INSTRUCTIONS OR COMMUNICATIONS MAY BE DISPATCHED TO ALL CREWS AND/OR EQUIPMENT WORKING IN AN ACTIVE AOA. THE CONTRACTOR WILL SUPPLY THE RESIDENT ENGINEER WITH TWO (2) AERONAUTICAL RADIOS AT THE START OF THE PROJECT. THESE RADIOS WILL BECOME PROPERTY OF THE VT. AGENCY OF TRANSPORTATION.

(F) DEBRIS

DEBRIS, WASTE, AND LOOSE MATERIAL (INCLUDING DUST AND DIRT) CAPABLE OF CAUSING DAMAGE TO AIRCRAFT LANDING GEAR OR PROPELLERS, OR BEING INGESTED IN JET ENGINES, SHALL NOT BE ALLOWED ON ACTIVE AIRCRAFT MOVEMENT AREAS OR ADJACENT GRASSED AREAS. MATERIALS OBSERVED TO BE WITHIN THESE AREAS SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR. THE CONTRACTOR SHALL BE REQUIRED TO HAVE A SWEEPING MACHINE AND OPERATOR ON SITE AND READY AT ALL TIMES DURING CONSTRUCTION ACTIVITY. WHERE TRAVEL ON OR ACROSS RUNWAYS, RAMP AREAS, TAXIWAYS, OR AIRCRAFT APRONS IS REQUIRED, THE CONTRACTOR SHALL PROVIDE ADEQUATE PERSONNEL AND EQUIPMENT TO KEEP SUCH SURFACES CLEAR OF DEBRIS.

(G) FLAGMEN

IN ACCORDANCE WITH THE SPECIFICATIONS, THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, FURNISH FLAGMEN AS NECESSARY TO CONTROL HIS TRAFFIC (UNLESS OTHERWISE DIRECTED BY THE ENGINEER).

ALL CONTRACTOR VEHICLES THAT ARE REQUIRED TO CROSS ACTIVE RUNWAYS, RUNWAY SAFETY AREAS, TAXIWAYS AND APRONS SHALL DO SO UNDER THE DIRECT CONTROL OF A COMPETENT FLAGMAN WHO IS IN DIRECT RADIO CONTACT WITH GROUND CONTROL. ALL AIRCRAFT TRAFFIC ON RUNWAYS, TAXIWAYS, AND APRONS SHALL HAVE PRIORITY OVER CONTRACTOR'S TRAFFIC. AT NO TIME SHALL THE CONTRACTOR'S VEHICLES OR PERSONNEL BE ALLOWED TO ENTER OR CROSS ACTIVE RUNWAYS OR CLEAR ZONES WITHOUT PROPER AUTHORIZATION.

(H) MISCELLANEOUS

(1) OPEN FLAME, WELDING OR TORCH CUTTING OPERATIONS ARE PROHIBITED UNLESS ADEQUATE FIRE AND SAFETY PRECAUTIONS HAVE BEEN TAKEN AND THE PROCEDURE PREVIOUSLY APPROVED BY THE ENGINEER.

(2) EQUIPMENT AND STOCKPILED MATERIAL SHALL BE CONSTRAINED IN A MANNER TO PREVENT MOVEMENT RESULTING FROM AIRCRAFT JET BLAST OR WIND CONDITIONS IN EXCESS OF 10 KNOTS.

(3) THE CONTRACTOR SHALL PROVIDE BUCKET TYPE CONSTRUCTION BARRICADES WITH FLASHING YELLOW LIGHTS AS SHOWN ON THE DRAWINGS TO DELINEATE THE WORK AREAS WHEN CLOSED TO AIRPORT TRAFFIC. OPEN TRENCHES, EXCAVATIONS AND STOCKPILED MATERIAL LOCATED IN THE AOA SHALL BE PROMINENTLY MARKED WITH ORANGE FLAGS AND LIGHTED BY APPROVED LIGHT UNITS DURING HOURS OF LIMITED VISIBILITY AND DARKNESS.

(4) ALL MATERIALS AND EQUIPMENT WHEN NOT IN USE SHALL BE PLACED IN APPROVED AREAS WHERE THEY WILL NOT CONSTITUTE A HAZARD TO AIRCRAFT OPERATIONS AND NOT PENETRATE CLEARANCE SURFACES. EQUIPMENT SHALL BE PARKED AT THE STAGING AREA WHEN NOT IN USE.

(5) MAXIMUM EQUIPMENT HEIGHT SHALL NOT EXCEED 15 FEET UNLESS PRIOR APPROVAL IS OBTAINED FROM THE ENGINEER.

(6) UPON COMPLETION OF ANY STAGE/PHASE OF WORK, THE ENGINEER WILL ARRANGE A PHYSICAL INSPECTION OF THE AREA WITH AIRPORT OPERATIONS PERSONNEL PRIOR TO OPENING ANY PORTION OF A RUNWAY, RAMP AREA OR AIRPORT ROADWAY THAT HAS BEEN CLOSED FOR WORK OR USED FOR A CROSSING POINT OR HAUL ROUTE BY THE CONTRACTOR.

(7) ENTRANCE TO THE AIRFIELD IS SUBJECT TO SECURITY REGULATIONS.

(8) THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A CURRENT LIST OF ALL EMPLOYEES WORKING ON THE AIRPORT. THE LIST SHALL BE MAINTAINED CURRENT BY THE CONTRACTOR AND APPLIES TO ALL SUBCONTRACTORS.

(9) EXCEPT FOR EMERGENCIES, ALL CONTACT WITH AIRPORT PERSONNEL SHALL BE MADE THROUGH THE RESIDENT ENGINEER. FOR EMERGENCIES INVOLVING SAFETY (INJURIES, FIRES, SECURITY BREACHES, ETC.) THE CONTRACTOR SHALL MAKE DIRECT CONTACT WITH AIRPORT OPERATIONS FOLLOWED BY NOTIFICATION TO THE RESIDENT ENGINEER AS SOON AS POSSIBLE.

(10) THE CONTRACTOR SHALL PROVIDE THE PHONE NUMBERS OF THREE PERSONNEL, INCLUDING THE PROJECT **SUPERINTENDENT, WHO MAY BE CONTACTED IN AN** EMERGENCY. PERSONNEL SHALL BE ON CALL 24 HOURS PER DAY FOR MAINTAINING AIRPORT HAZARD LIGHTING AND BARRICADES.

(11) IN ACCORDANCE WITH THE SPECIFICATIONS, FEDERAL WAGE RATES SHALL BE POSTED OUTSIDE THE SITE FIELD OFFICE IN A WEATHERPROOF ENCLOSURE.

(I) UTILITIES

(1) UNDERGROUND UTILITIES: THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE CONSIDERED TO BE ONLY ESTIMATED LOCATIONS. ALL UTILITY LOCATIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING CONSTRUCTION. IN THE EVENT ANY UTILITY IS DAMAGED THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING FOR INCURRED COSTS OF REPAIRS.

(2) UTILITIES NOTIFICATION: AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN AN AREA WHICH MAY INVOLVE UNDERGROUND UTILITY FACILITIES, THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER, AND THE OWNER OF EACH UNDERGROUND UTILITY FACILITY AFFECTED.

(3) THE FOLLOWING IS A LIST OF COMPANIES WITH POSSIBLE UTILITIES WITHIN THE CONSTRUCTION LIMITS.

UTILITY

DIGSAFE 1-800-225-4977

GMP 1-802-223-5235

AIP 3-50-0001-06

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

GENERAL CONSTRUCTION & SAFETY NOTES

REV.	DATE	DESCRIPTION

Job No. F20001718.01 File No.F20718D666.dgn

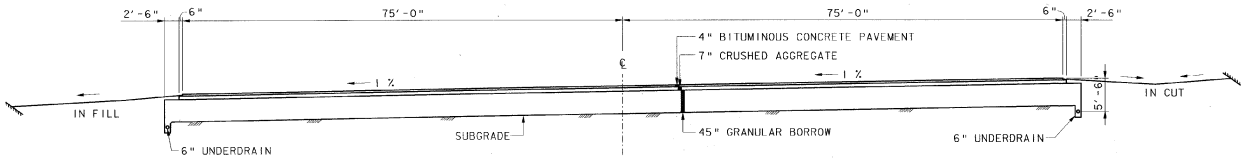
Designed by GWD | Drawn by: AMB | Checked by: BWC | Approved by: GWD

Scale: NTS

Date: 3/21/01

Sheet - Of -

Sheet No 6

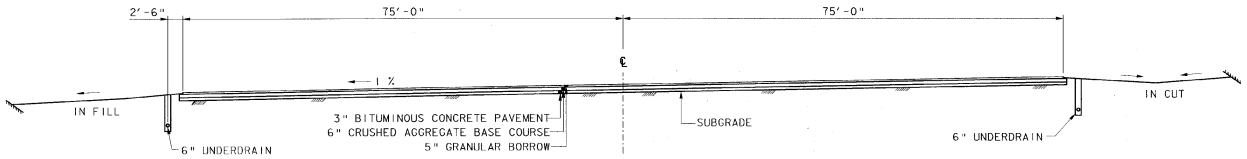


NOTE:
UNDERDRAIN MAY NOT BE CONTINUOUS ON EACH SIDE.

(REFER TO ADAP 6-50-0001-04 & -06)

RUNWAY 17-35 EXISTING SECTION

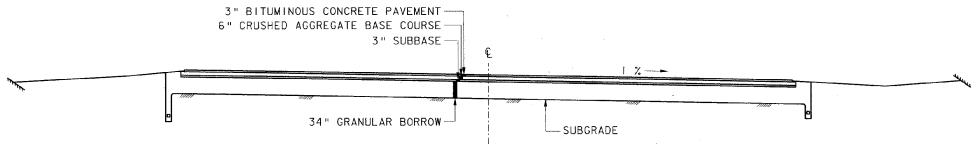
STA. 215+00 TO 231+50
STA. 247+75 TO 265+01



(REFER TO FAAP 9-43-005-7007)

RUNWAY 17-35 EXISTING SECTION

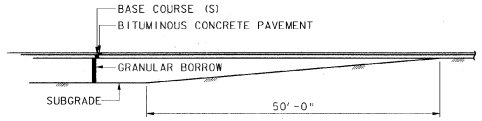
STA. 232+00 TO 248+25



(REFER TO ADAP 6-50-0001-05)

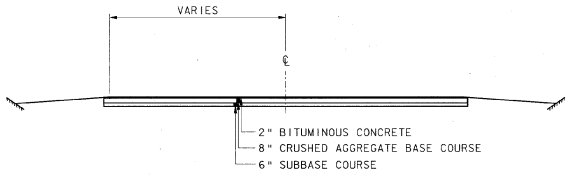
RUNWAY 5-23 EXISTING SECTION

STA. 139+00 TO 146+00



EXISTING SUBGRADE TRANSITION

STA. 247+25 TO 247+50
STA. 231+50 TO 232+00



EXISTING TAXIWAYS

AIP 3-50-0001-06

STATE OF VERMONT · WILLIAM M. MANN · REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION

Job No. F20000171B.01
File No. F20171B01a7.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

TYPICAL SECTIONS - EXISTING
RUNWAYS 17-35 & 5-23

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

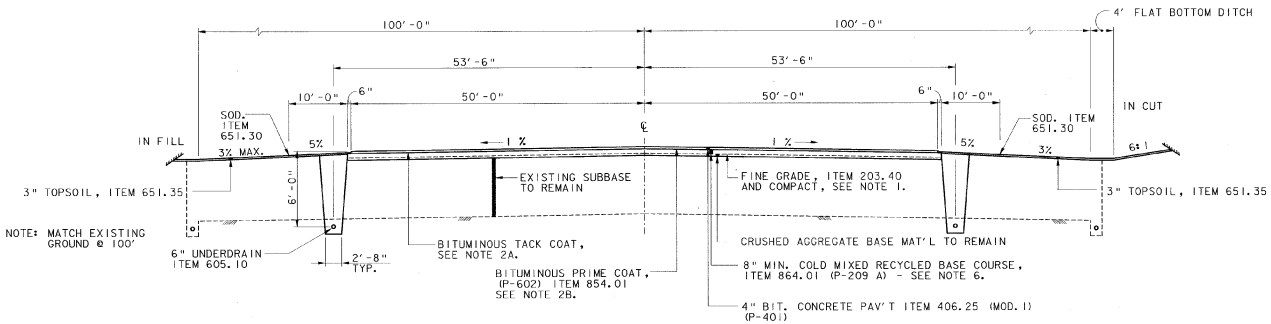
Designed by: GMD
Drawn by: MMM
Checked by: BMC
Approved by: GMD

Scale: 1" = 5' VERT.
1" = 10' HOR.

Date: 3/21/01

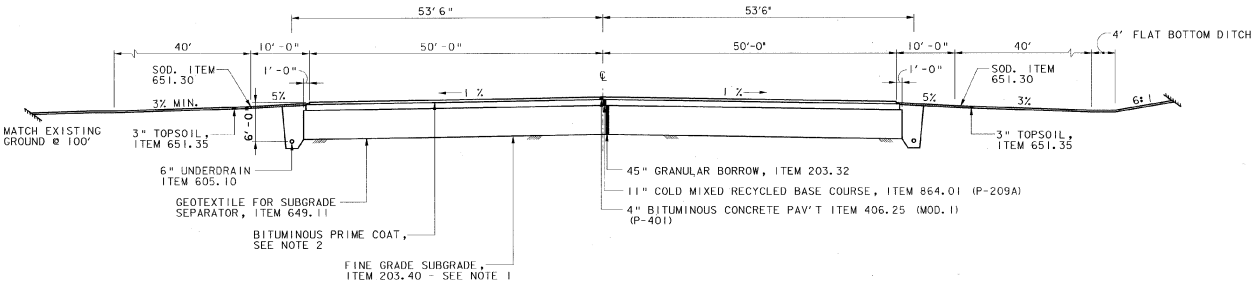
Sheet 0f

Sheet No.
7



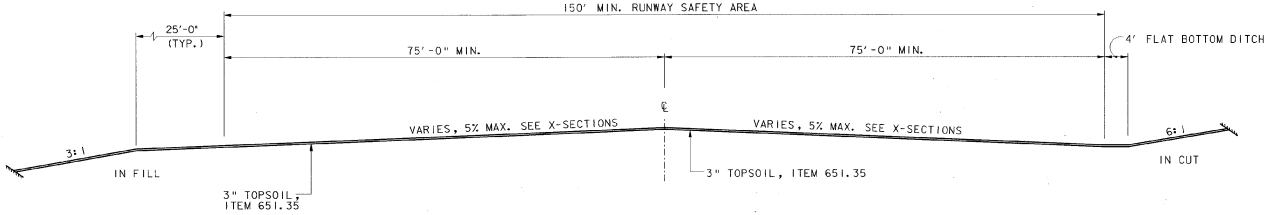
NEW TYPICAL SECTION

STA. 215+00 TO 231+00
STA. 247+75 TO 265+04



NEW TYPICAL SECTION

STA. 231+00 TO 247+75



RUNWAY SAFETY AREA BEYOND RUNWAY THRESHOLD - TYPICAL SECTIONS

STA. 212+00 TO 215+00±
STA. 265+01 TO 268+01±

GENERAL NOTES

1. SUBGRADE UNDER AREAS TO BE PAVED TO BE COMPACTED TO 100% DENSITY. P-209A TO BE COMPACTED TO 98% DENSITY AS PER AASHTO T-180.

2A. BITUMINOUS TACK COAT (EMULSIFIED ASPHALT, MS-1) TO BE APPLIED BETWEEN LIFTS OF BITUMINOUS CONCRETE PAVEMENT AT A RATE OF 0.01 TO 0.03 GAL/SY WHEN DIRECTED BY THE ENGINEER. (NOT A SEPARATE PAY ITEM).

2B. BITUMINOUS PRIME COAT, ITEM 854.01 (MS-1) TO BE APPLIED AT A RATE OF 0.05 GAL/SY BETWEEN COLD MIX RECYCLED BASE COURSE AND NEW BITUMINOUS CONCRETE PAV'T AND AT A RATE OF 0.15 GALLON/SY BETWEEN CRUSHED AGGREGATE BASE COURSE AND NEW BITUMINOUS CONCRETE PAV'T.

3. REMOVAL OF EXISTING MANHOLES AND DROP INLETS, TO BE PAID UNDER ITEM 203.16 SOLID ROCK EXCAVATION. (3 CY PER EACH UNIT REMOVED). EXISTING DRAINAGE LINES TO BE ABANDONED IN PLACE; PIPES TO BE PLUGGED EACH END WITH CONCRETE BEFORE BACKFILLING. PAYMENT TO BE SUBSIDIARY TO REMOVAL OF MANHOLES AND DROP INLETS.

4. EXISTING BITUMINOUS PAVEMENT WITHIN RUNWAY CONSTRUCTION AREA TO BE REMOVED TO A DEPTH OF 8". PAYMENT TO BE MADE UNDER ITEM 203.28, EXCAVATION OF SURFACES AND PAVEMENTS.

5. ALL OTHER EXCAVATION TO BE PAID FOR UNDER ITEM 203.15, COMMON EXCAVATION OR 203.16 SOLID ROCK EXCAVATION.

6. EXISTING BIT. CONCRETE PAV'T AND 4" OF EXISTING CRUSHED AGGREGATE BASE TO BE COMBINED USING EITHER A HAMMERMILL PROCESS OR A CRUSHER TO PREPARE A UNIFORM COLD MIXED RECYCLED BASE P209A (REFER TO ITEM 864.01).

7. SEED, ITEM 651.15 TO BE APPLIED AS DIRECTED BY ENGINEER. THE SEED MIXTURE, SHALL CONFORM TO:

% WT	LBS / A		PUR %	GERM
20	14	TALL FESCUE (K-31)	95	85
10	7	PERIENIAL RYE GRASS	95	85
1	1	MEDIUM RED CLOVER	95	85
2	2	EMPIRE BIRDS FOOT TREFOIL	98	85
22	15	CLIMAX TIMOTHY	95	85
25	17	CREEPING RED FESCUE	98	85
10	7	ANNUAL RYE	95	85
10	7	ORCHARD GRASS	95	85
100	70			

THE SEED MIXTURE SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS WEED SEED.

8. FERTILIZER, ITEM 651.18, FORMULA 10-20-10 TO BE USED WITH SEED. ITEM 651.15, APPLIED AT THE RATE OF 500 LBS / ACRE.

AGRICULTURAL LIMESTONE, ITEM 651.20, TO BE APPLIED AT RATE OF 2 TONS/ACRE OR AS DIRECTED BY ENGINEER.

HAY MULCH, ITEM 651.25, TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE.

TOPSOIL, ITEM 651.35, TO BE USED WITH SEED, ITEM 651.15, AS DIRECTED BY THE ENGINEER.

9. EROSION CONTROL MATTING, ITEM 654.10, TO BE PLACED ON SLOPES OVER 5% WHEN DIRECTED BY THE ENGINEER.

10. ALONG SIDE RUNWAY (FROM E.P. TO 10' OFF PAVEMENT) TO BE SODDED, ITEM 651.30.

11. ALLOWABLE THICKNESS TOLERANCES:

SUBGRADE	± 1"
CONTROLLED MATERIAL	± 1/2"
PAVEMENT	± 3/16"
BASE COURSE	± 1/2"

12. PAY LIMITS FOR SEED, LIME, FERTILIZER & MULCH ARE EQUAL TO THE APPROVED CONSTRUCTION LIMITS.

13. GRANULAR BORROW, ITEM 203.32, LIMIT % PASSING .02MM TO 3 % (NON FROST SUSCEPTIBLE).

AIP 3-50-0001-06

REV. | DATE | DESCRIPTION

Job No. P200001.18.01 | File No. P20018dce8.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

TYPICAL SECTION - PROPOSED RUNWAY 17-35

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

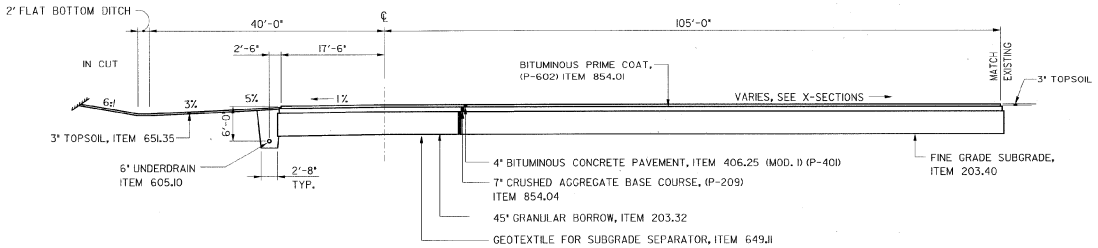
Designed by: GWD | Drawn by: MMM | Checked by: BMC | Approved by: GWD

Scale: 1" = 10'

Date: 3/21/01

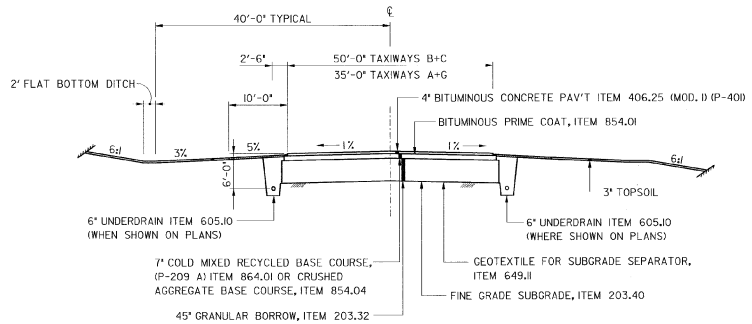
Sheet - Of -

Sheet No. 8



TAXIWAY E - TYPICAL

STA. 742+35 TO 748+06



TAXIWAY TYPICALS
TAXIWAYS A,B,C & E

STA. 735+30 TO STA. 742+35

AIP 3-50-0001-06

STATE OF VERMONT * REGISTERED * ENGINEER * No. 13018 * PROFESSIONAL

REV.	DATE	DESCRIPTION

Job No. 25000171.01

File No. F2617801de3.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

TAXIWAY TYPICALS

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

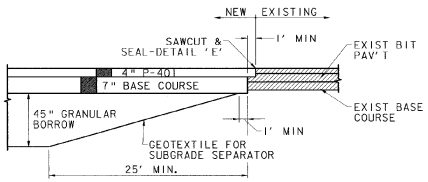
Designed by: GMD
Drawn by: MMM
Checked by: BMC
Approved by: GMD

Scale: 1" = 10'

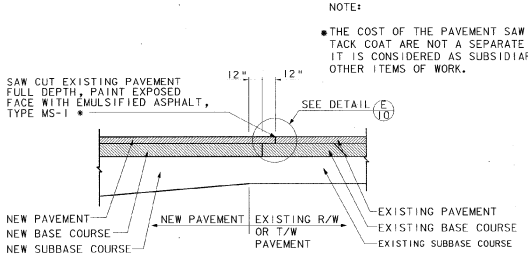
Date: 3/21/01

Sheet - Of -

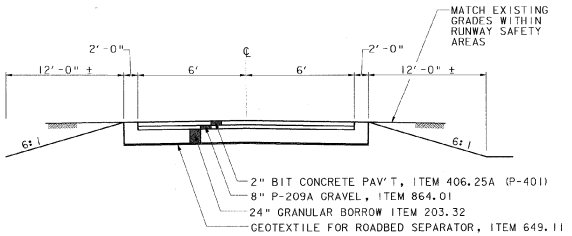
Sheet No
9



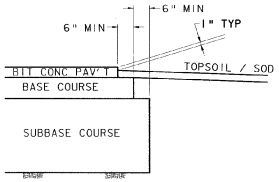
A/10 PROPOSED SUBGRADE TRANSITION TAXIWAYS
SCALE: NONE



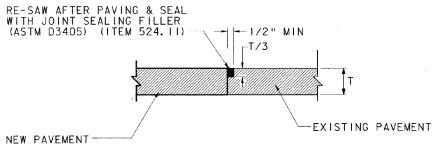
B/10 BUTT JOINT DETAIL
SCALE: NONE



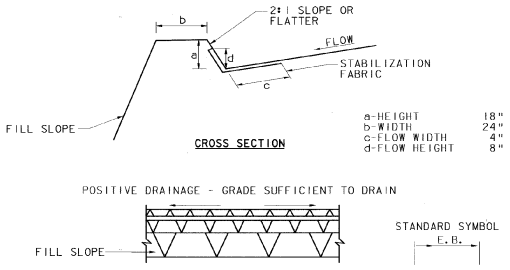
C/10 TYPICAL DRIVEWAY SECTION
SCALE: NONE



D/10 PAVEMENT SECTION EDGE
SCALE: NONE



E/10 SAWCUT DETAIL
SCALE: NONE



1. BERMS SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
2. TOP MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER.
3. BERMS TO BE CONSTRUCTED ALONG TOP OF SLOPE OUTSIDE RUNWAY SAFETY AREA OVERRUNS, WHERE DIRECTED BY THE ENGINEER.

F/10 EARTH BERM
SCALE: NONE

AIP 3-50-0001-06

REV. | DATE | DESCRIPTION
File No. 72078060HO.dgn
Job No. 72000117.8.01

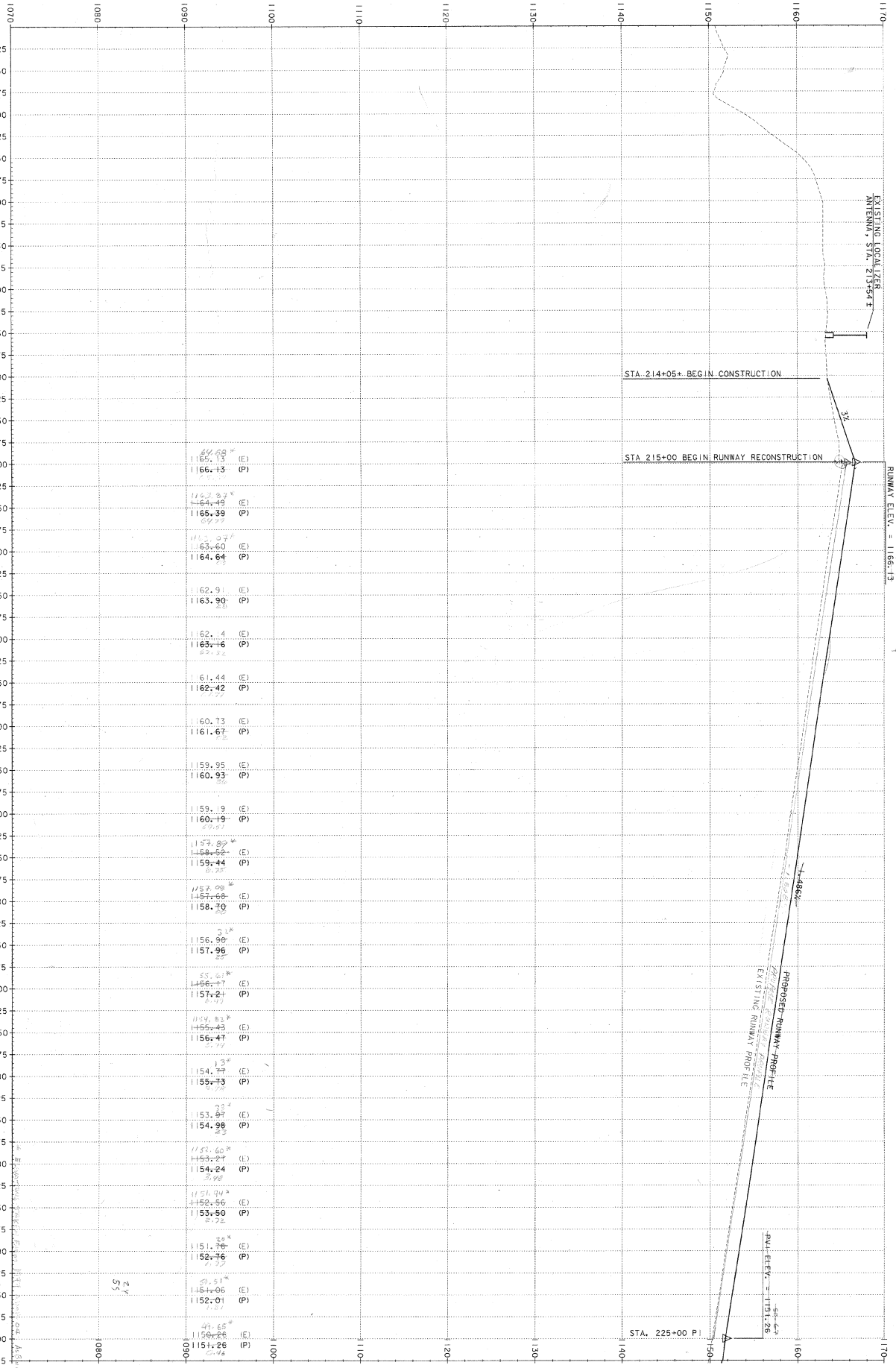
EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

TYPICAL SECTIONS & DETAILS

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

Designed by: GWD
Drawn by: MMM
Checked by: BWC
Approved by: GWD

Scale: NONE
Date: 3/21/01
Sheet - Of -
Sheet No 10



AIP 3-50-0001-96

Sheet No. 11	Sheet - Of -	Date: 3/21/01	Scale: HOR. 1"=50' VERT. 1"=5'	Designed by: GWD	Drawn by: MMM	Checked by: BWC

Approved by: GWD

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

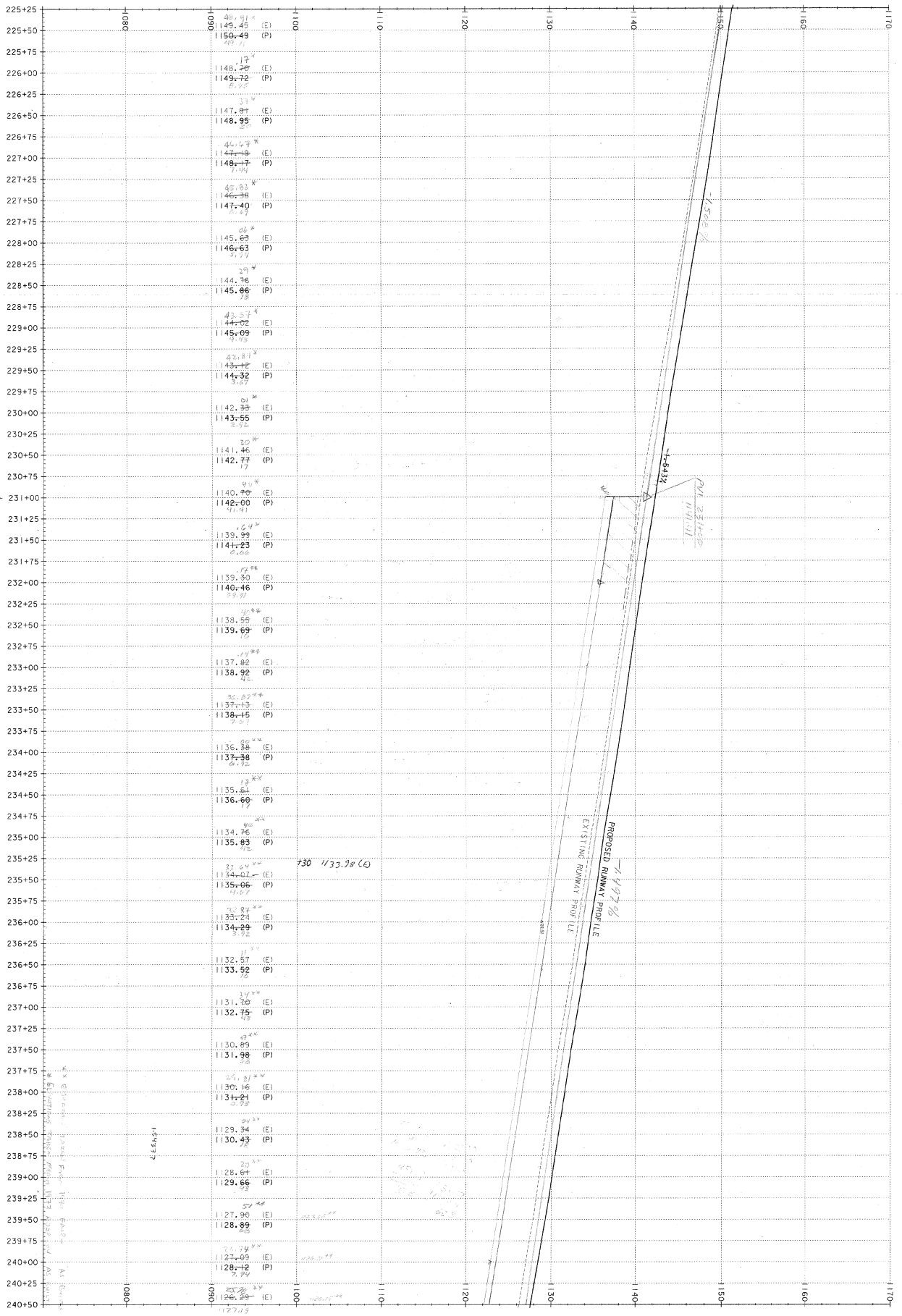
EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 PROFILE

REV.	DATE	DESCRIPTION

Job No. F200001718.01 | File No. f2017180ixsall.dgn

STATE OF VERMONT — BRIAN W. WHITE — No. 10,975 — REGISTERED PROFESSIONAL ENGINEER



AIP 3-50-0001-06

Sheet No 12	Sheet - Of -	Date 3/21/01	Scale HORZ 1"=50' VERT 1"=5'	Designed by GWD	Drawn by MMM	Checked by BWC	Approved by GWD

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

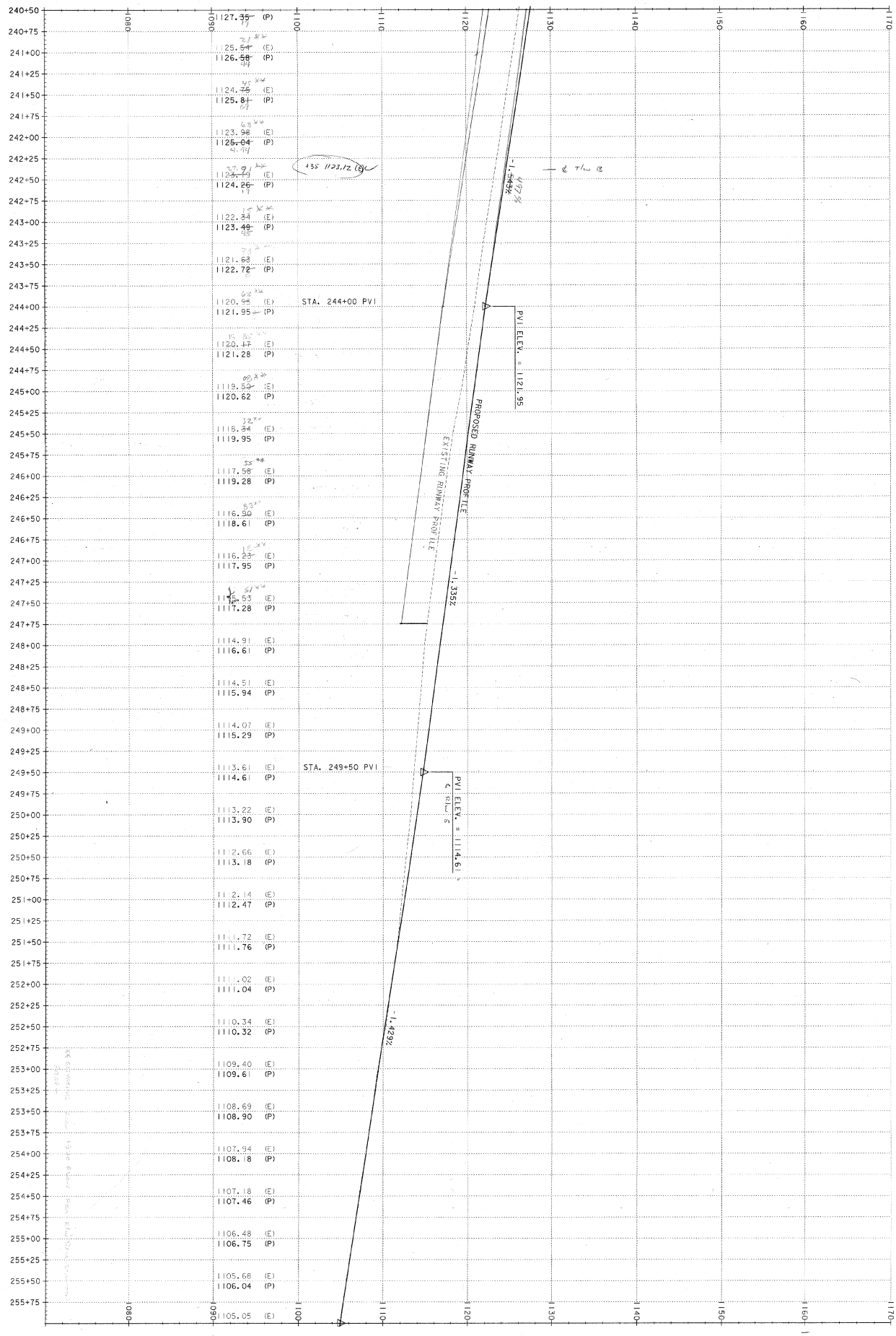
EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 PROFILE

REV.	DATE	DESCRIPTION

Job No. F200001718.01 | File No.f2017180lxsal2.dgn

STATE OF VERMONT — GERALD W. GWIN — No. 8073 — REGISTERED PROFESSIONAL ENGINEER



AIP 3-50-0001-96

Sheet No. 13 | Sheet - Of - | Date: 3/21/01 | Scale: HOR. 1"=50' VERT. 1"=5'

Designed by: GWD
Drawn by: MMM
Checked by: BWC
Approved by: GWD

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

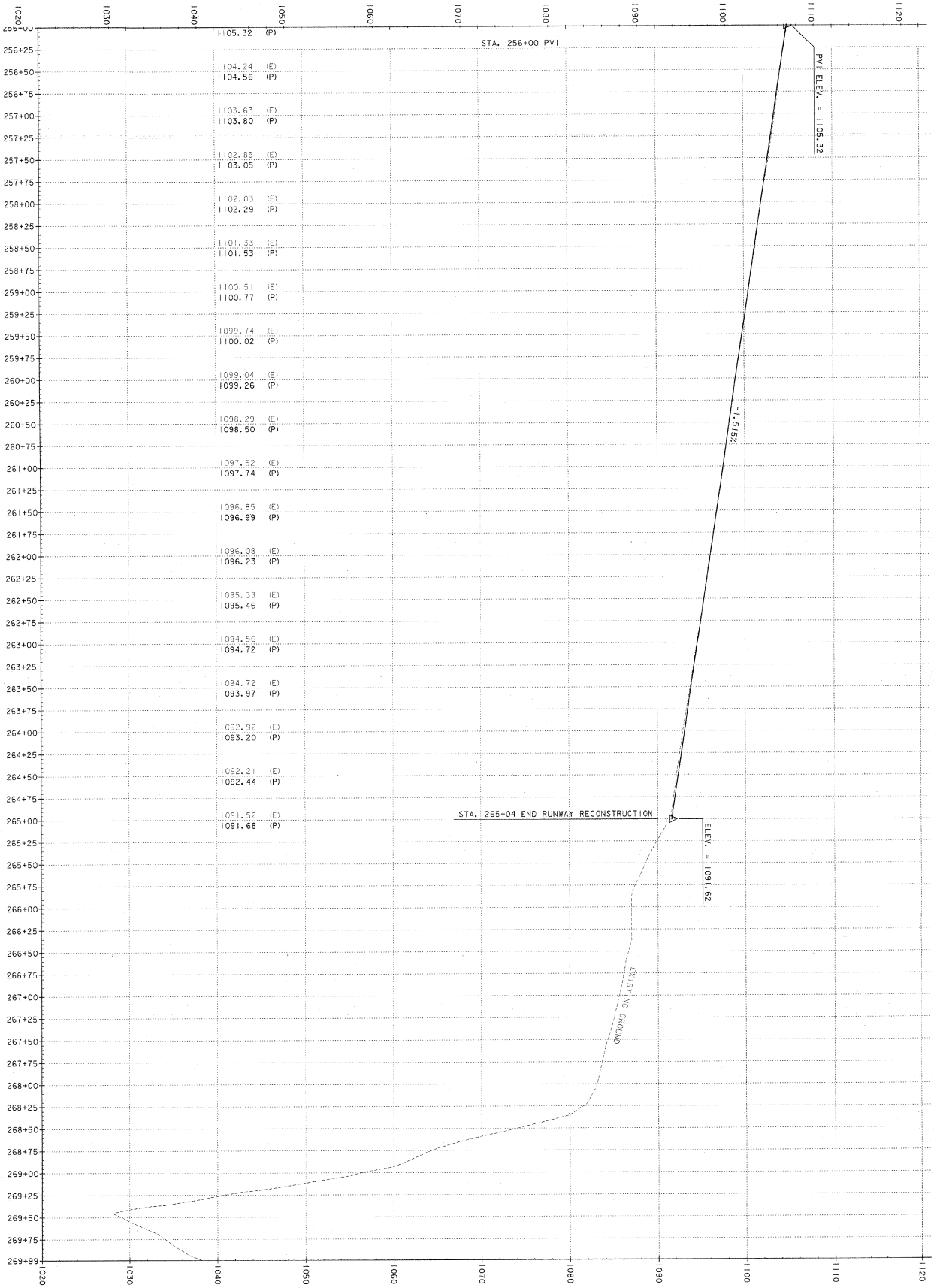
EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 PROFILE

REV.	DATE	DESCRIPTION

Job No. F200001718.01 | File No.f20017180lxsal3.dgn

STATE OF VERMONT — BRIAN C. NADEAU — No. 9999 — REGISTERED PROFESSIONAL ENGINEER



AIP 3-50-0001-06

Sheet No 14	Sheet - Of -	Date 3/2/01	Scale HORIZ. 1"=50' VERT. 1"=5'	Designed by: GWD	Drawn by: MMM	Checked by: BWC

Approved by: GWD

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

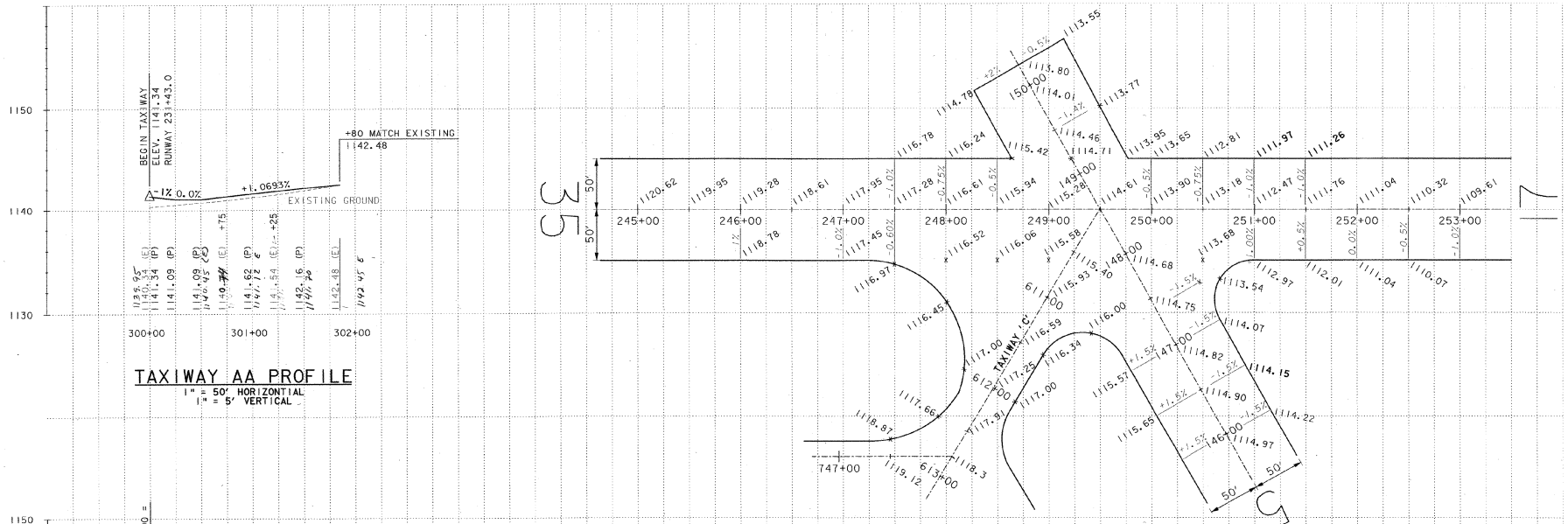
RUNWAY 17-35 PROFILE

REV.	DATE	DESCRIPTION

Job No. F200001718.01

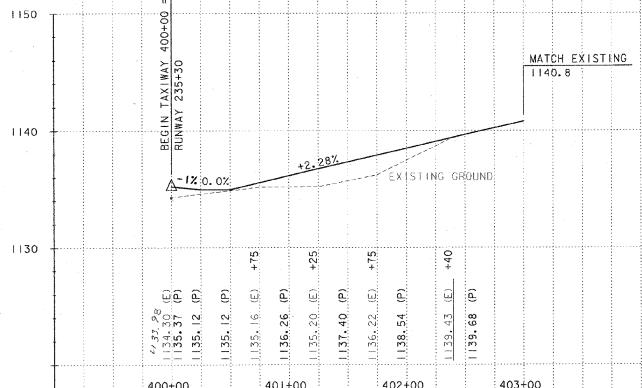
File No. f2017801xsal4.dgn

STATE OF VERMONT
GERALD W. DAVIS
No. 9874
REGISTERED
PROFESSIONAL ENGINEER



TAXIWAY AA PROFILE

1" = 50' HORIZONTIAL
1" = 5' VERTICAL

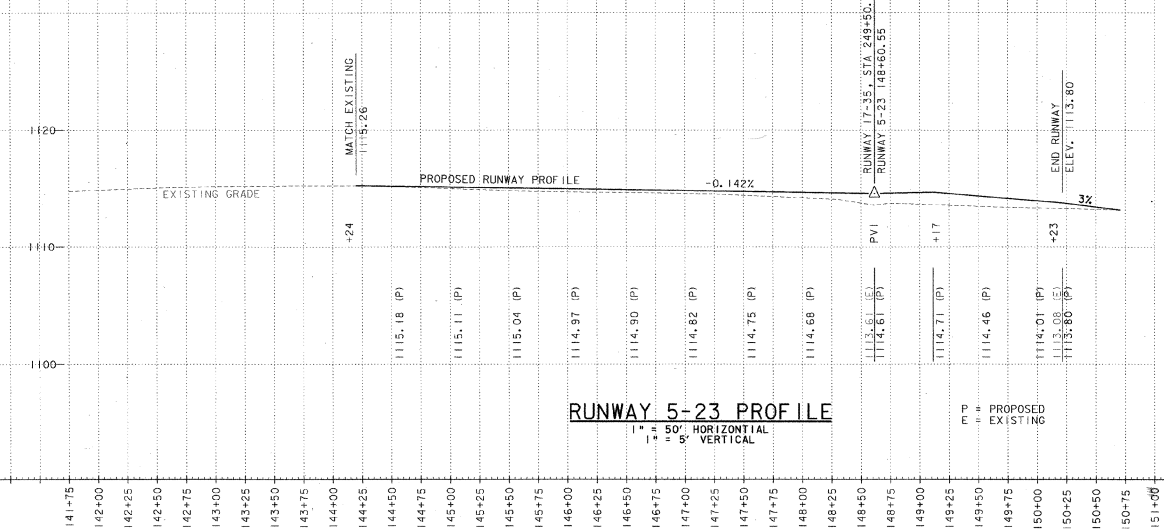


TAXIWAY A PROFILE

1" = 50' HORIZONTIAL
1" = 5' VERTICAL

RUNWAY INTERSECTION FINISHED GRADING PLAN

SCALE: 1" = 50'



RUNWAY 5-23 PROFILE

1" = 50' HORIZONTIAL
1" = 5' VERTICAL

P = PROPOSED
E = EXISTING

AIP 3-50-0001-06

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 5-23 PROFILE

REV.	DATE	DESCRIPTION

Job No. F20001718.01
File No. F20718DXe05.dgn

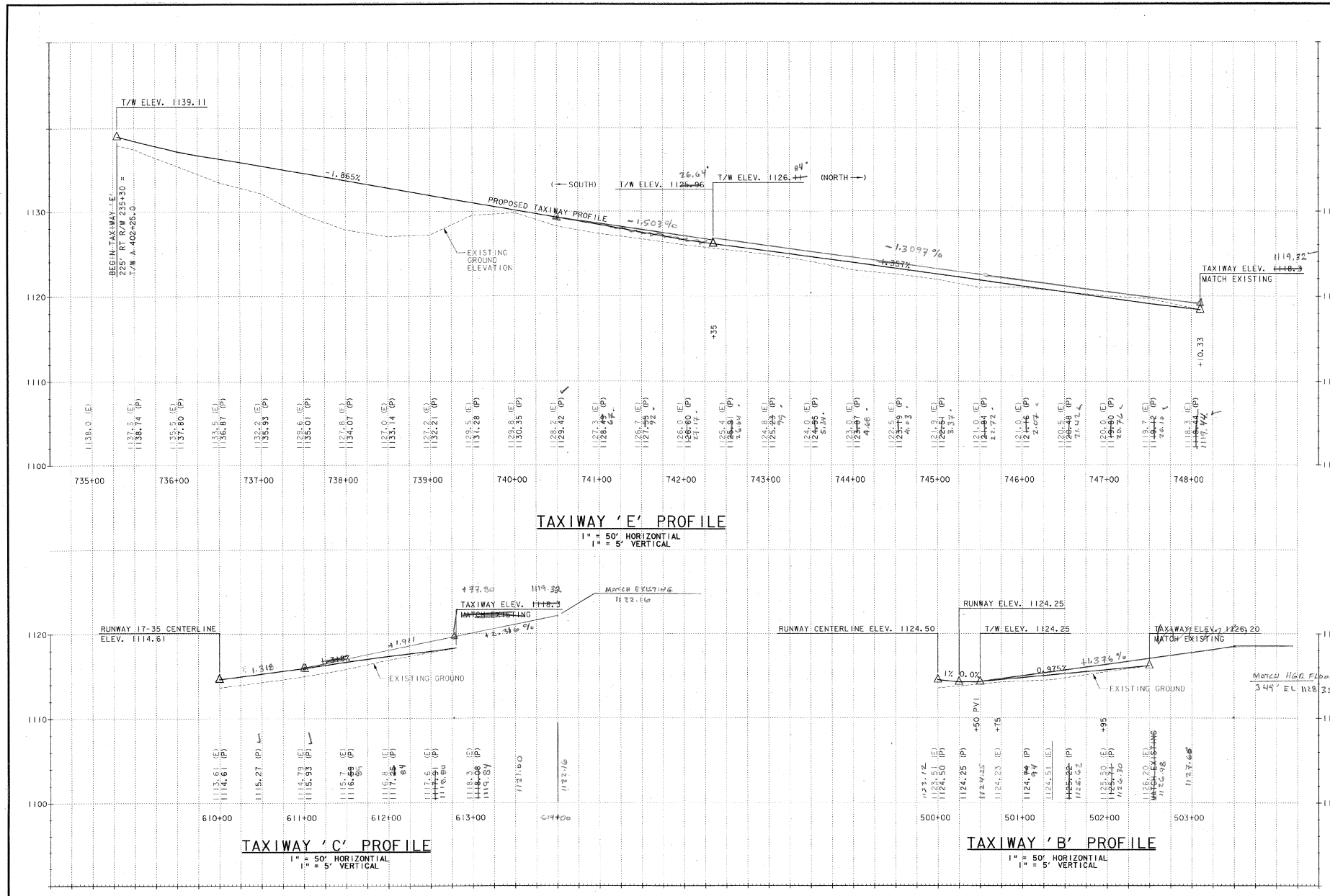
Designed by GWD
Drawn by MMM
Checked by BMC
Approved by GWD

Scale: HORz 1"=50'
VERTz 1"=5'

Date: 3/21/01

Sheet - Of -

Sheet No
15



FINISHED GRADES REVISED 8/16/01

AIP 3-50-0001-06

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

TAXIWAY PROFILES

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

REV.	DATE	DESCRIPTION

Job No. F20001718.01

File No.f20718taxie6.dgn

Designed by: GWD
Drawn by: MMM
Checked by: BMC
Approved by: GWD

Scale: HOR: 1"=50' VERT: 1"=5'

Date: 3/21/01

Sheet - Of -

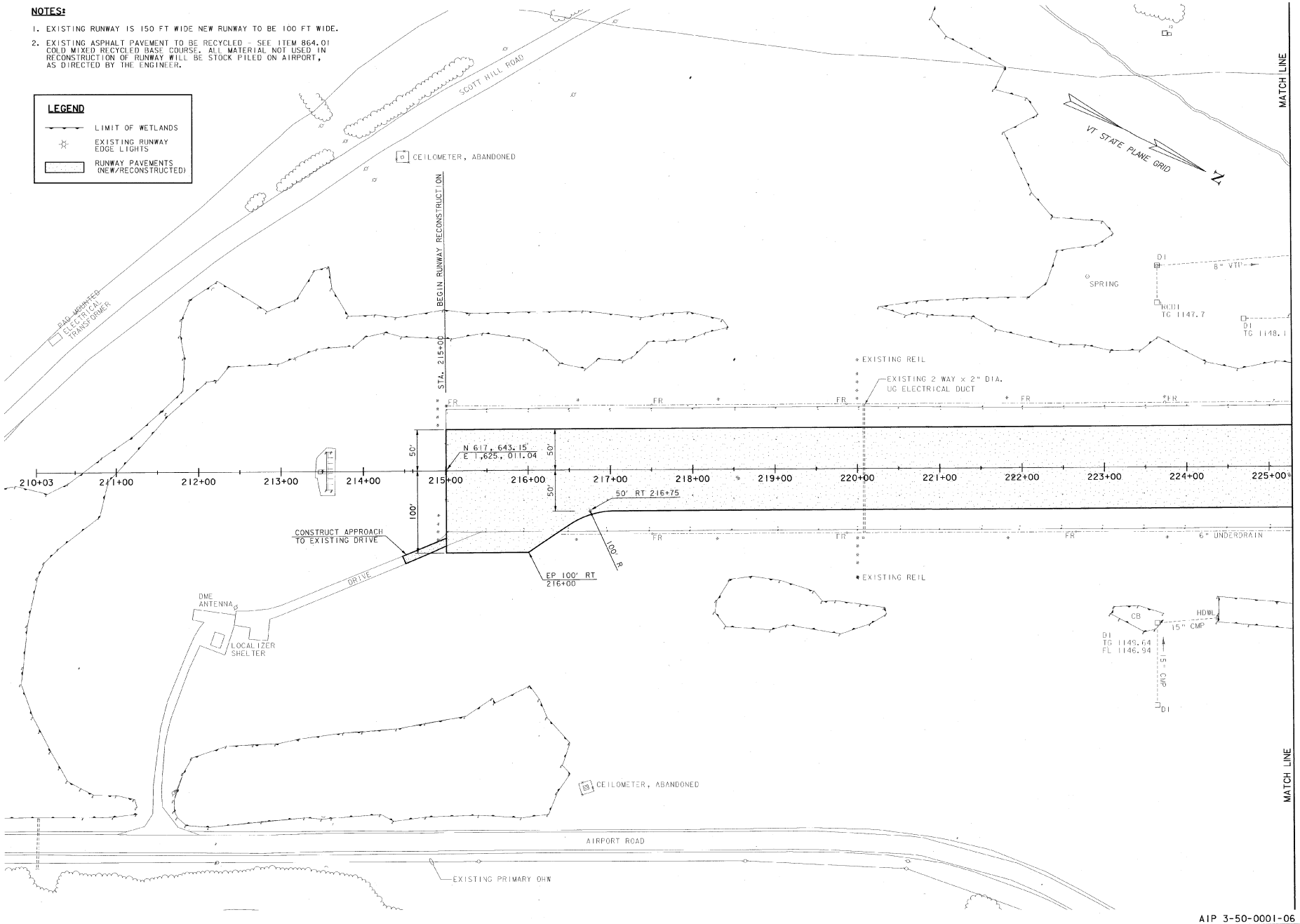
Sheet No
16

NOTES:

1. EXISTING RUNWAY IS 150 FT WIDE NEW RUNWAY TO BE 100 FT WIDE.
2. EXISTING ASPHALT PAVEMENT TO BE RECYCLED - SEE ITEM 864.01 COLD MIXED RECYCLED BASE COURSE. ALL MATERIAL NOT USED IN RECONSTRUCTION OF RUNWAY WILL BE STOCK PILED ON AIRPORT, AS DIRECTED BY THE ENGINEER.

LEGEND

- LIMIT OF WETLANDS
- EXISTING RUNWAY EDGE LIGHTS
- RUNWAY PAVEMENTS (NEW/RECONSTRUCTED)



AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. 20000118.01

File No. 20078nuf.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RECONSTRUCTION OF RUNWAY 17-35
PAVING PLANS AND GEOMETRIC LAYOUT

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

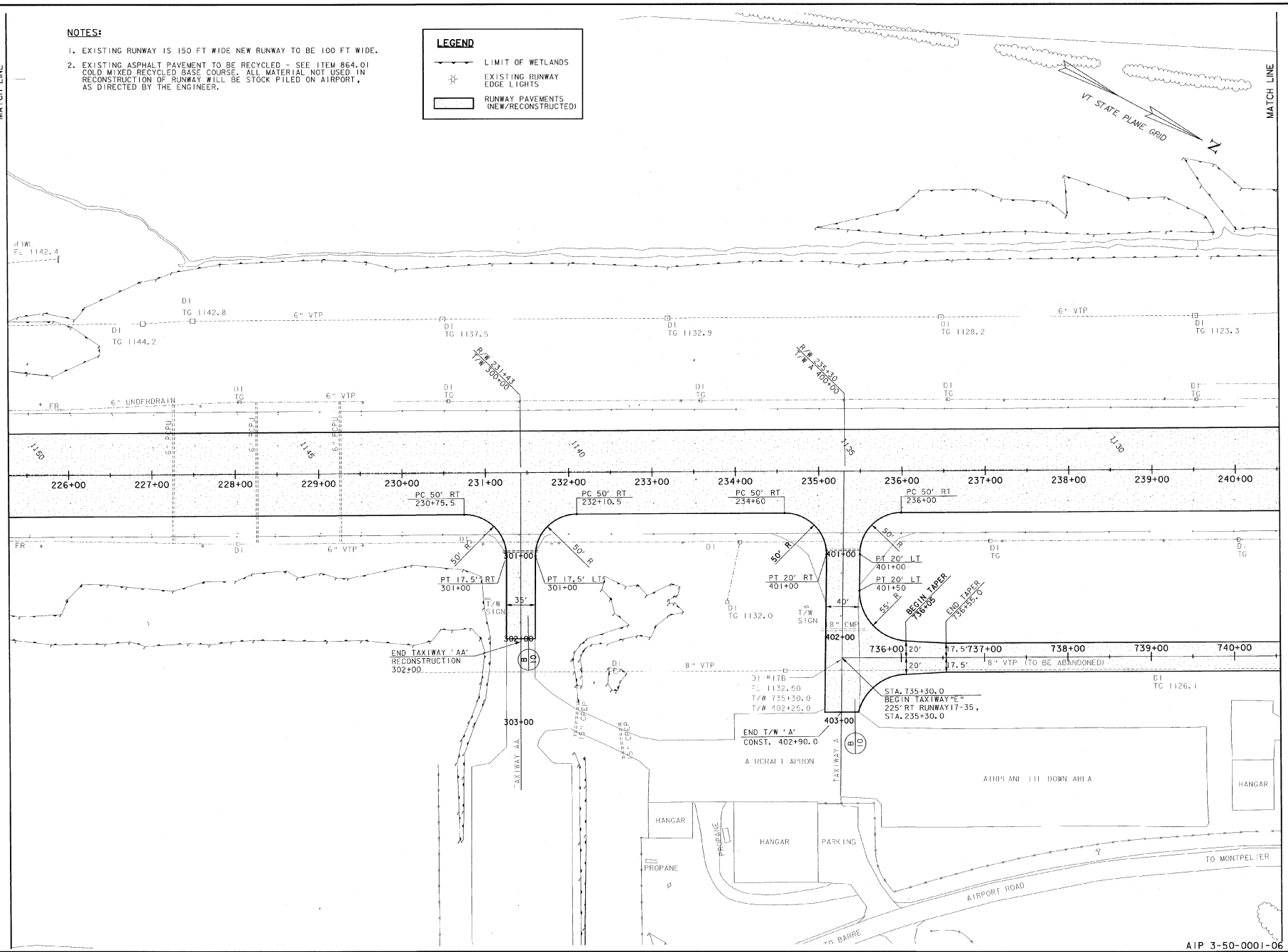
Designed by: GMD
Drawn by: MMM
Checked by: BMC
Approved by: GMD

Scale: 1" = 50'

Date: 3/21/01

Sheet - Of -

Sheet No
17



STATE OF VERMONT REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION

Job No. T20000118.01

File No. T20118Shut8.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RECONSTRUCTION OF RUNWAY 17-35
PAVING PLANS AND GEOMETRIC LAYOUT

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

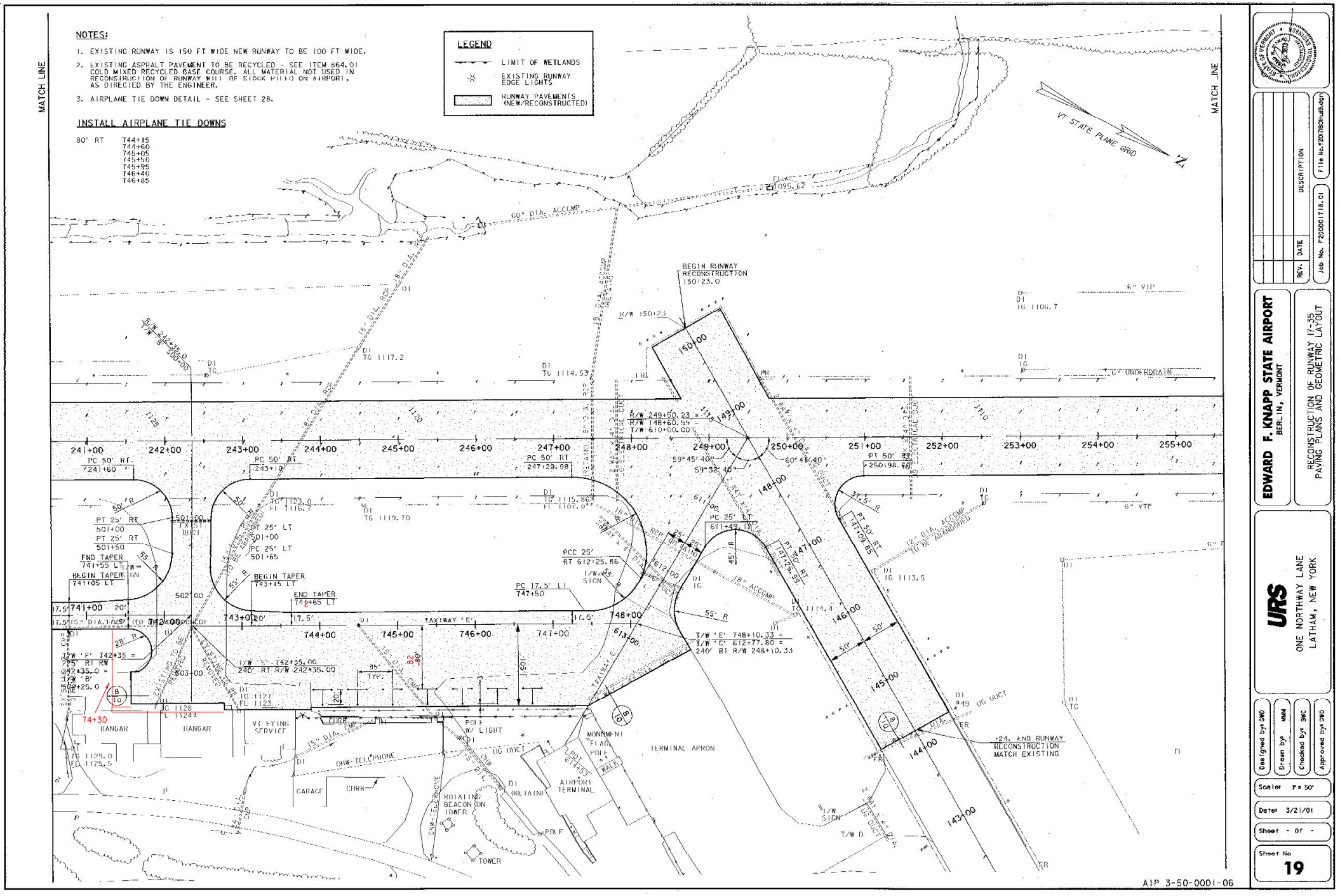
Designed by GWD
Drawn by MMM
Checked by GWD
Approved by GWD

Scale 1" = 50'

Date 3/21/01

Sheet - Of -

Sheet No
18



EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RECONSTRUCTION OF RUNWAY 17-35
PAVING PLANS AND GEOMETRIC LAYOUT

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

REV.	DATE	DESCRIPTION

Job No. F200001T18.01
File No.=2007180rwl9.dgn

Designed by CMD
Drawn by MWM
Checked by BMC
Approved by CMD

Scale: 1" = 50'
Date: 3/21/01
Sheet - Of -
Sheet No 19

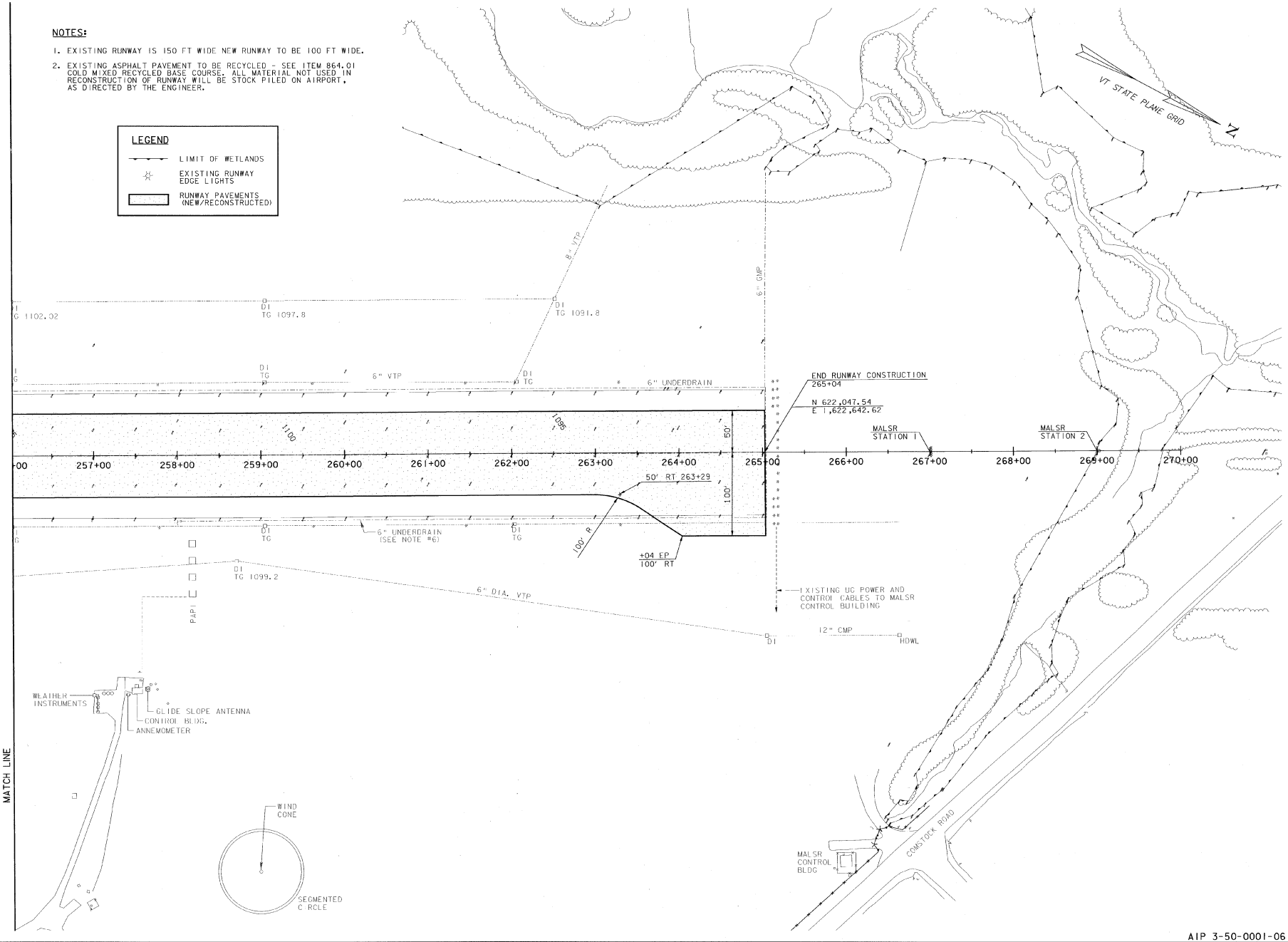
AIP 3-50-0001-06

NOTES:

1. EXISTING RUNWAY IS 150 FT WIDE NEW RUNWAY TO BE 100 FT WIDE.
2. EXISTING ASPHALT PAVEMENT TO BE RECYCLED - SEE ITEM 864.01 COLD MIXED RECYCLED BASE COURSE. ALL MATERIAL NOT USED IN RECONSTRUCTION OF RUNWAY WILL BE STOCK PILED ON AIRPORT, AS DIRECTED BY THE ENGINEER.

LEGEND

- LIMIT OF WETLANDS
- EXISTING RUNWAY EDGE LIGHTS
- RUNWAY PAVEMENTS (NEW/RECONSTRUCTED)



AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F200001718.01

File No.F20018GNL20.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RECONSTRUCTION OF RUNWAY 17-35
PAVING PLANS AND GEOMETRIC LAYOUT

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

Designed by: GMD
Drawn by: MMM
Checked by: BMC
Approved by: GMD

Scale: 1" = 50'

Date: 3/21/01

Sheet - Of -

Sheet No
20

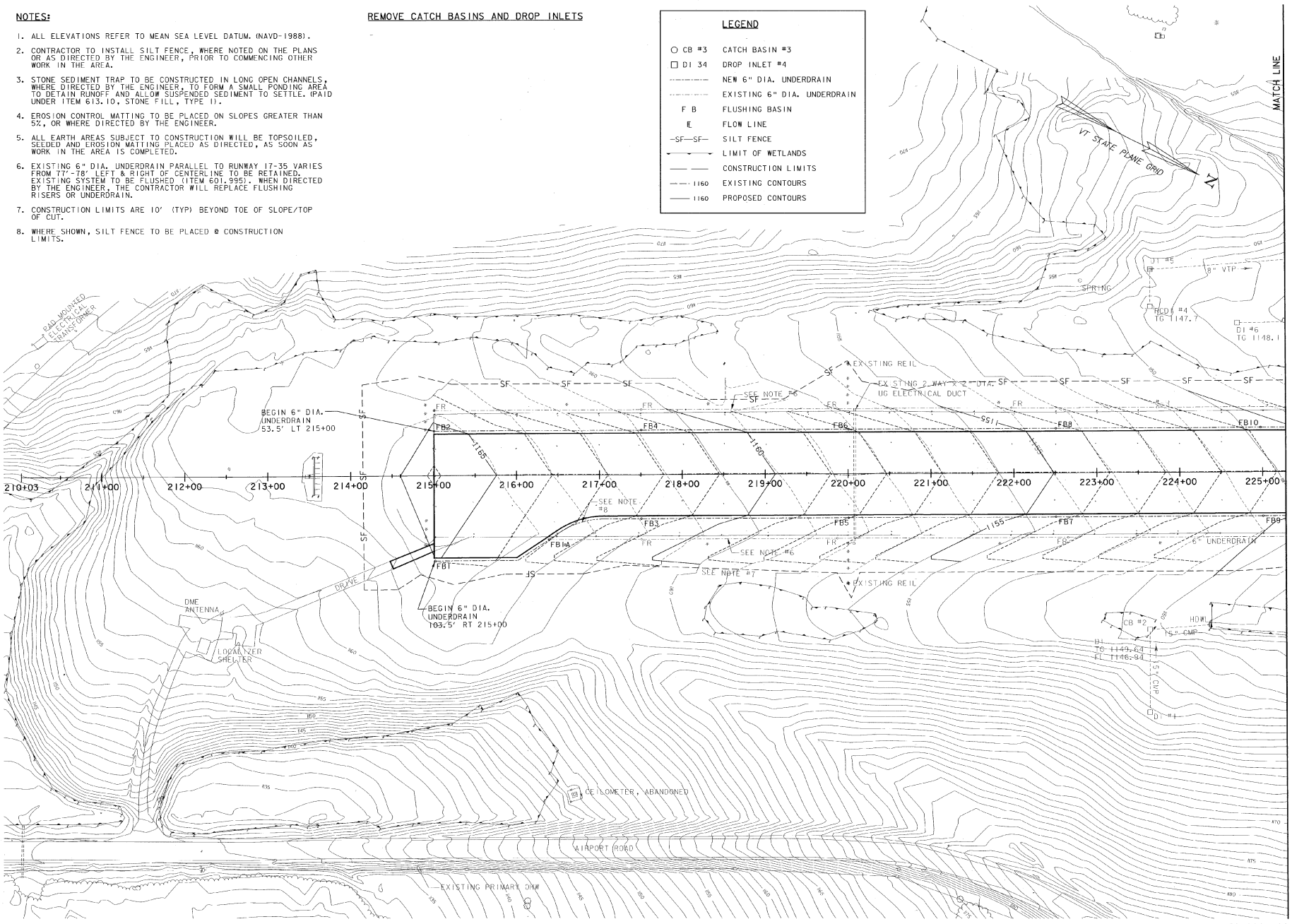
NOTES:

1. ALL ELEVATIONS REFER TO MEAN SEA LEVEL DATUM. (NAVD-1988).
2. CONTRACTOR TO INSTALL SILT FENCE, WHERE NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER, PRIOR TO COMMENCING OTHER WORK IN THE AREA.
3. STONE SEDIMENT TRAP TO BE CONSTRUCTED IN LONG OPEN CHANNELS, WHERE DIRECTED BY THE ENGINEER, TO FORM A SMALL PONDING AREA TO DETAIN RUNOFF AND ALLOW SUSPENDED SEDIMENT TO SETTLE. (PAID UNDER ITEM 613.10, STONE FILL, TYPE I).
4. EROSION CONTROL MATTING TO BE PLACED ON SLOPES GREATER THAN 5%, OR WHERE DIRECTED BY THE ENGINEER.
5. ALL EARTH AREAS SUBJECT TO CONSTRUCTION WILL BE TOPSOILED, SEEDED AND EROSION MATTING PLACED AS DIRECTED, AS SOON AS WORK IN THE AREA IS COMPLETED.
6. EXISTING 6" DIA. UNDERDRAIN PARALLEL TO RUNWAY 17-35 VARIES FROM 17'-78' LEFT & RIGHT OF CENTERLINE TO BE RETAINED. EXISTING SYSTEM TO BE FLUSHED (ITEM 601.995). WHEN DIRECTED BY THE ENGINEER, THE CONTRACTOR WILL REPLACE FLUSHING RISERS OR UNDERDRAIN.
7. CONSTRUCTION LIMITS ARE 10' (TYP) BEYOND TOE OF SLOPE/TOP OF CUT.
8. WHERE SHOWN, SILT FENCE TO BE PLACED @ CONSTRUCTION LIMITS.

REMOVE CATCH BASINS AND DROP INLETS

LEGEND

○ CB #3	CATCH BASIN #3
□ DI 34	DROP INLET #4
	NEW 6" DIA. UNDERDRAIN
	EXISTING 6" DIA. UNDERDRAIN
F B	FLUSHING BASIN
E	FLOW LINE
-SF-SF-	SILT FENCE
	LIMIT OF WETLANDS
	CONSTRUCTION LIMITS
1160	EXISTING CONTOURS
1160	PROPOSED CONTOURS



AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F200001718.01

File No.F20718001u2d.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RECONSTRUCTION OF RUNWAY 17-35
DRAINAGE AND GRADING PLAN

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

Designed by GMD
Drawn by MMM
Checked by BMC
Approved by GMD

Scale 1" = 50'

Date 3/21/01

Sheet - Of -

Sheet No
21

NOTES:

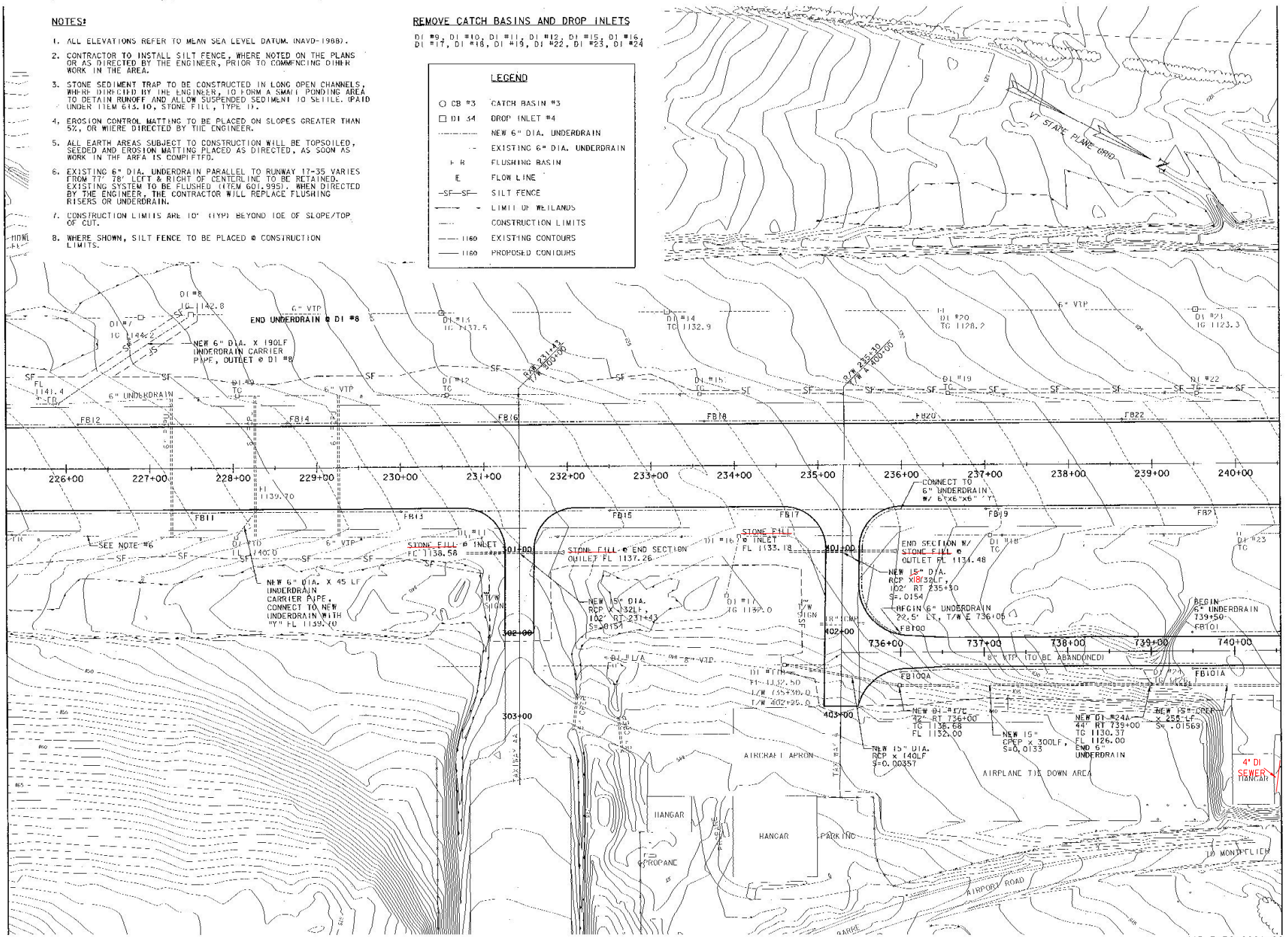
1. ALL ELEVATIONS REFER TO MEAN SEA LEVEL DATUM. (NAVD-1988).
2. CONTRACTOR TO INSTALL SILT FENCE, WHERE NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER, PRIOR TO COMMENCING OTHER WORK IN THE AREA.
3. STONE SEDIMENT TRAP TO BE CONSTRUCTED IN LONG OPEN CHANNELS, WHERE DIRECTED BY THE ENGINEER, TO FORM A SMALL PONDING AREA TO DETAIN RUNOFF AND ALLOW SUSPENDED SEDIMENT TO SETTLE. (PAID UNDER ITEM 613.10, STONE FILL, TYPE I).
4. EROSION CONTROL MATTING TO BE PLACED ON SLOPES GREATER THAN 5%, OR WHERE DIRECTED BY THE ENGINEER.
5. ALL EARTH AREAS SUBJECT TO CONSTRUCTION WILL BE TOPSOILED, SEEDED AND EROSION MATTING PLACED AS DIRECTED, AS SOON AS WORK IN THE AREA IS COMPLETED.
6. EXISTING 6" DIA. UNDERDRAIN PARALLEL TO RUNWAY 17-35 VARIES FROM 77' 78' LEFT & RIGHT OF CENTERLINE TO BE RETAINED. EXISTING SYSTEM TO BE FLUSHED (ITEM 601.995), WHEN DIRECTED BY THE ENGINEER, THE CONTRACTOR WILL REPLACE FLUSHING RISERS OR UNDERDRAIN.
7. CONSTRUCTION LIMITS ARE 10' (TYP) BEYOND TOE OF SLOPE/TOP OF CUT.
8. WHERE SHOWN, SILT FENCE TO BE PLACED @ CONSTRUCTION LIMITS.

REMOVE CATCH BASINS AND DROP INLETS

DI #9, DI #10, DI #11, DI #12, DI #15, DI #16, DI #17, DI #18, DI #19, DI #22, DI #23, DI #24

LEGEND

○ CB #3	CATCH BASIN #3
□ DI #4	DROP INLET #4
———	NEW 6" DIA. UNDERDRAIN
- - -	EXISTING 6" DIA. UNDERDRAIN
F B	FLUSHING BASIN
E	FLOW LINE
-SF-SF-	SILT FENCE
———	LIMIT OF WETLANDS
———	CONSTRUCTION LIMITS
—— 1160	EXISTING CONTOURS
—— 1160	PROPOSED CONTOURS



AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F200001718.01

File No.=200\1801ru22.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RECONSTRUCTION OF RUNWAY 17-35 DRAINAGE AND GRADING PLAN

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

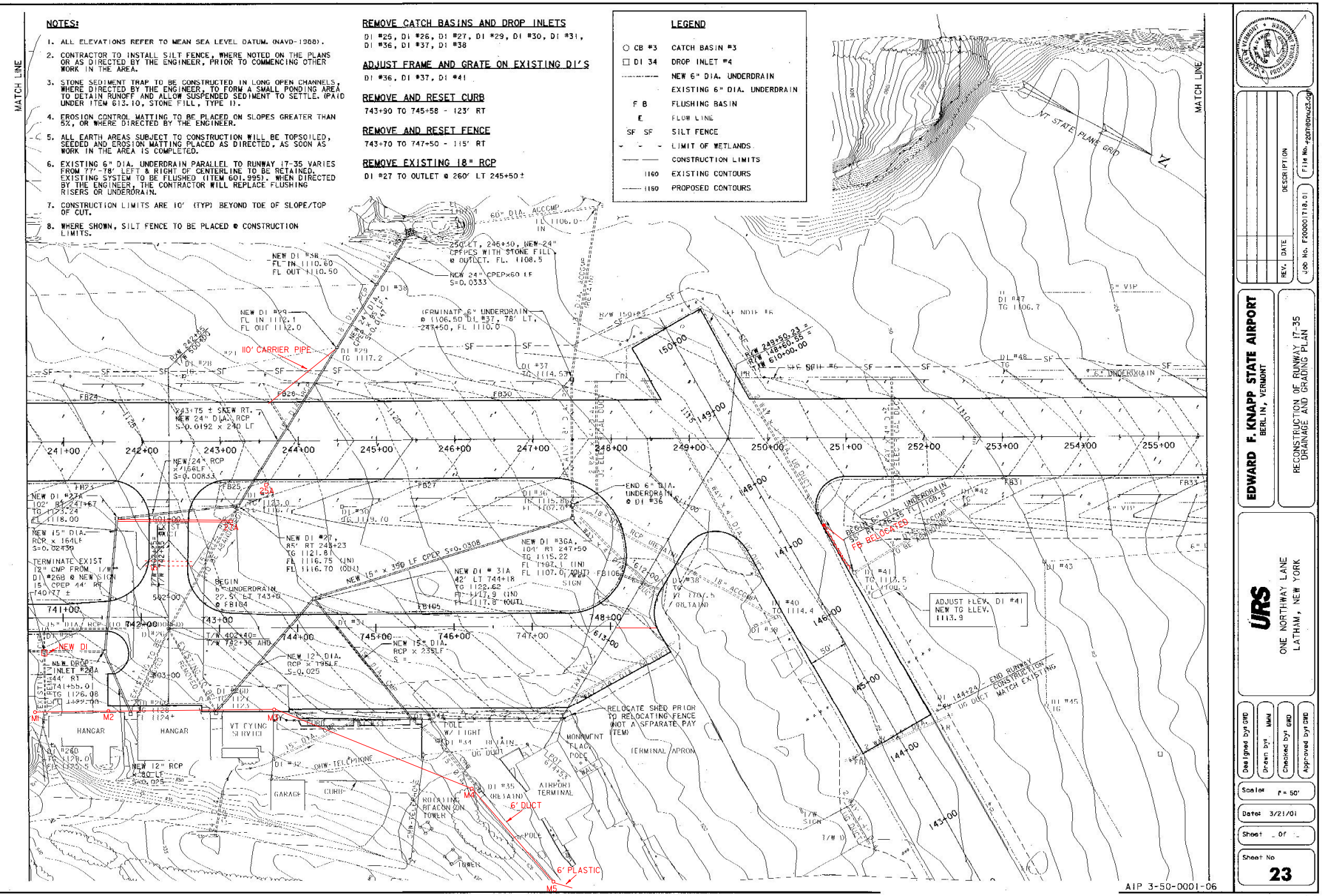
Designed by: GWD	Drawn by: MWH	Checked by: BWC	Approved by: GWD

Scale: 1" = 50'

Date: 3/21/01

Sheet - Of -

Sheet No 22



EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RECONSTRUCTION OF RUNWAY 17-35
DRAINAGE AND GRADING PLAN

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

REV.	DATE	DESCRIPTION

Job No. F200001718.01
File No. f200001718u23.dgn

Designed by GMD
Drawn by MMM
Checked by GMD
Approved by GMD

Scale: 1" = 50'
Date: 3/21/01
Sheet _ Of _
Sheet No 23

MATCH LINE

NOTES:

1. ALL ELEVATIONS REFER TO MEAN SEA LEVEL DATUM, (NAVD-1988).
2. CONTRACTOR TO INSTALL SILT FENCE, WHERE NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER, PRIOR TO COMMENCING OTHER WORK IN THE AREA.
3. STONE SEDIMENT TRAP TO BE CONSTRUCTED IN LONG OPEN CHANNELS, WHERE DIRECTED BY THE ENGINEER, TO FORM A SMALL PONDING AREA TO DETAIN RUNOFF AND ALLOW SUSPENDED SEDIMENT TO SETTLE. (PAID UNDER ITEM 613.10, STONE FILL, TYPE I).
4. EROSION CONTROL MATTING TO BE PLACED ON SLOPES GREATER THAN 5%, OR WHERE DIRECTED BY THE ENGINEER.
5. ALL EARTH AREAS SUBJECT TO CONSTRUCTION WILL BE TOPSOILED, SEEDED AND EROSION MATTING PLACED AS DIRECTED, AS SOON AS WORK IN THE AREA IS COMPLETED.
6. EXISTING 6" DIA. UNDERDRAIN PARALLEL TO RUNWAY 17-35 VARIES FROM 77'-78' LEFT & RIGHT OF CENTERLINE TO BE RETAINED. EXISTING SYSTEM TO BE FLUSHED (ITEM 601.995). WHEN DIRECTED BY THE ENGINEER, THE CONTRACTOR WILL REPLACE FLUSHING RISERS OR UNDERDRAIN.
7. CONSTRUCTION LIMITS ARE 10' (TYP) BEYOND TOE OF SLOPE/TOP OF CUT.
8. WHERE SHOWN, SILT FENCE TO BE PLACED @ CONSTRUCTION LIMITS.

LEGEND

○ CB #3	CATCH BASIN #3
□ DI 34	DROP INLET #4
----------	NEW 6" DIA. UNDERDRAIN
----------	EXISTING 6" DIA. UNDERDRAIN
F B	FLUSHING BASIN
℄	FLOW LINE
-SF-SF-	SILT FENCE
- - -	LIMIT OF WETLANDS
———	CONSTRUCTION LIMITS
——— 1160	EXISTING CONTOURS
------ 1160	PROPOSED CONTOURS

INSTALL NEW 6' CHAIN LINK FENCE

ALONG CONSTOCK ROAD - (SEE SHEET 5).

INSTALL NEW 6'x16' CHAIN LINK DRIVE GATES

MALSR CONTROL BUILDING - 455' RT 266+40
460' RT 266+30

REMOVE CATCH BASINS AND DROP INLETS

DI #49, DI #50, DI #52, DI #53, DI #56, DI #57,

DI #48
IG 1102.02

DI #51
IG 1097.8

DI #55
IG 1091.8

DI #49
TG

DI #52
TG

DI #56
IG

DI #50
TG

DI #53
IG

DI #57
IG

DI #54
IG 1099.6

SFT NOTE #6

6" UNDERDRAIN

SEE NOTE #6

6" UNDERDRAIN
(SFT NOTE #6)

SEE NOTE #5

FB35

FB36

6" CARRIER PIPE

END NEW 6" DIA. UNDERDRAIN
CARRIER PIPE 103' RT 265+50
EL 1082.0, PLACE STONE FILL
@ OUTLET

END 6" DIA. UNDERDRAIN
103' RT 265+50, FL 1084.12
BEGIN 6" DIA. UNDERDRAIN
CARRIER PIPE
EXISTING POWER AND
CONTROL CABLES TO MALSR
CONTROL BUILDING

6" CARRIER PIPE

BEGIN NEW 6" DIA. UNDERDRAIN
79' RT 263+66, CONNECT TO
EXISTING, APPROX. FL 1088.0

END 6" DIA. UNDERDRAIN
79' RT 258+00, FL 1096.0
CONNECT TO EXISTING
6" DIA. UNDERDRAIN

12" CMP

DI #58

TIDWL

WEATHER
INSTRUMENTS

GLIDE-SLOPE ANTENNA

CONTROL BLDG.

ANNEMOMETER

WIND
CONE

SEGMENTED
CIRCLE

MALSR
CONTROL
BLDG

CONSTOCK ROAD

VT STATE PLANE GRID N

256+00 257+00 258+00 259+00 260+00 261+00 262+00 263+00 264+00 265+00 266+00 267+00 268+00 269+00 270+00

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F20000718.01 | File No.F20718dlnd24.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RECONSTRUCTION OF RUNWAY 17-35
DRAINAGE AND GRADING PLAN

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

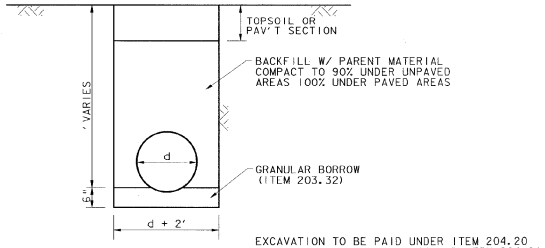
Designed by GWD | Drawn by MAM | Checked by BWC | Approved by GWD

Scale: 1" = 50'

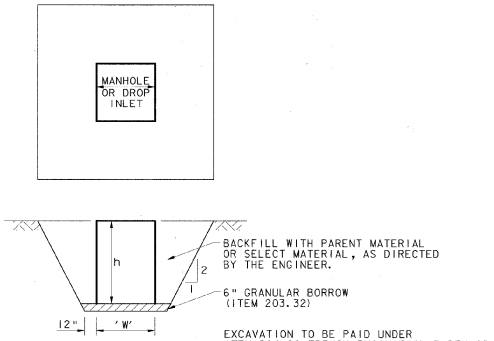
Date: 3/21/01

Sheet - Of -

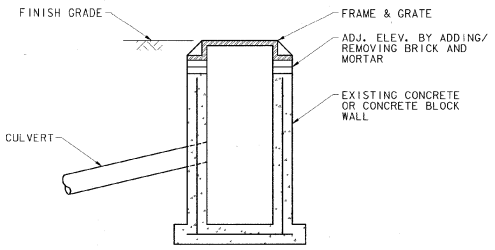
Sheet No
24



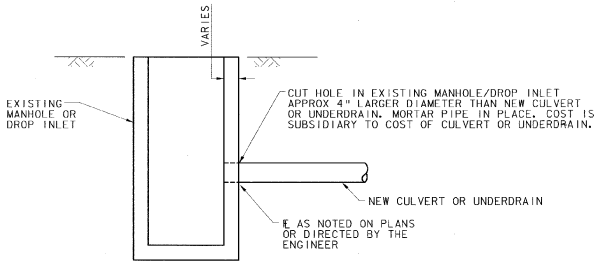
A 25 CULVERT IN TRENCH - TYPICAL
SCALE: NONE



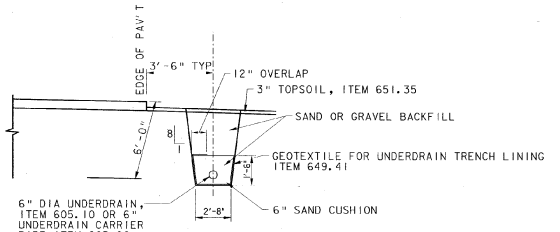
B 25 DROP INLET/MANHOLE PLACEMENT (TYPICAL)
SCALE: NONE



C 25 CHANGE ELEVATION OF MANHOLE OR DROP INLET
SCALE: NONE



D 25 CULVERT AND UNDERDRAIN IN INSTALLATION IN EXISTING MANHOLE OR DROP INLET
SCALE: NONE



NOTE: SAND CUSHION AND GEOTEXTILE FOR ROADBED SEPARATOR NOT REQUIRED FOR UNDERDRAIN CARRIER PIPE.

E 25 6" DIA. UNDERDRAIN AND 6" UNDERDRAIN CARRIER PIPE
SCALE: NONE

AIP 3-50-0001-06

STATE OF VERMONT · REGISTERED · STEVEN W. JENKINS · PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION

File No.F20180de25.dgn

Job No. F20000178.01

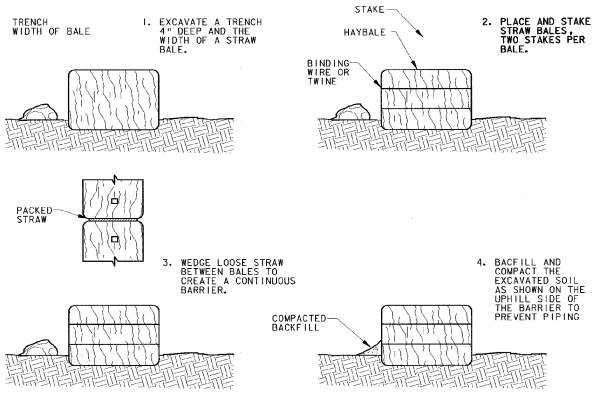
EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

DRAINAGE DETAILS

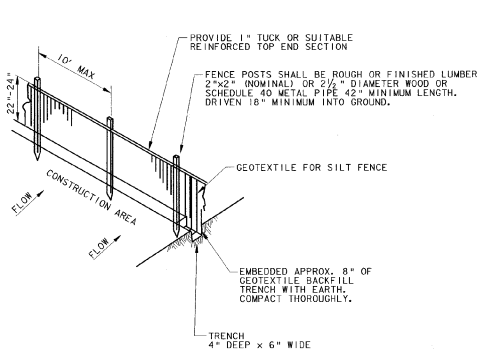
URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

Designed by: GMD
Drawn by: AMB
Checked by: BMC
Approved by: GMD

Scale: AS SHOWN
Date: 3/21/01
Sheet - Of -
Sheet No 25



SEDIMENTATION BARRIER - HAYBALE
ITEM 651.26
NOT TO SCALE



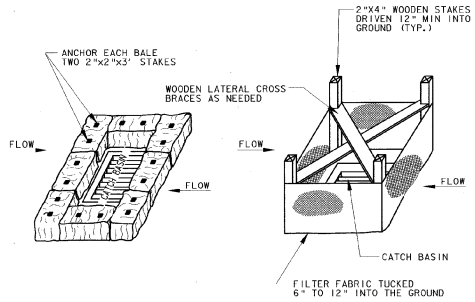
NOTE:

1. GEOTEXTILE FABRIC TO BE FASTENED SECURELY TO FENCE POST BY USE OF WIRE TIES. 3 FASTENERS PER POST.
2. ENDS OF INDIVIDUAL ROLLS OF GEOTEXTILE SHALL BE SECURELY FASTENED TO A COMMON POST OR OVERLAPPED 3' (MIN).
3. TO BE PLACED AT LOCATIONS SHOWN ON PLANS OR AS ORDERED BY THE ENGINEER.

PLAN VIEW SYMBOL

—— SF —— SF ——

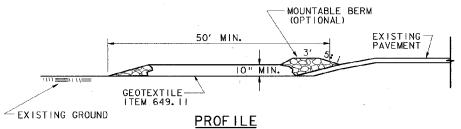
SILT FENCE
NOT TO SCALE



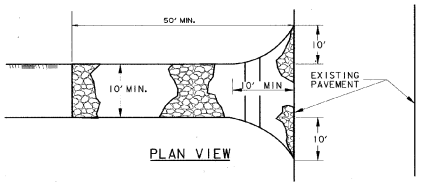
HAY BALE INSTALLATION
ITEM 651.26

SILT FENCE INSTALLATION
ITEM 649.51

SEDIMENTATION CONTROL
INLET PROTECTION
NOT TO SCALE



PROFILE



PLAN VIEW

CONSTRUCTION SPECIFICATIONS

1. STONE - SUBBASE OF CRUSHED AGGREGATE, COURSE GRADED.
2. LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET.
3. THICKNESS - NOT LESS THAN TEN (10) INCHES.
4. WIDTH - TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. GEOTEXTILE - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED UNDER THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AFTER HEAVY USE AND/OR RAIN.
9. THIS ENTRANCE WILL BE CONSTRUCTED AT LOCATIONS SHOWN ON THE PLANS AND/OR WHERE ORDERED BY THE ENGINEER.
10. THE LOCATION AND NUMBERS OF STABILIZED CONSTRUCTION ENTRANCES WILL BE APPROVED BY THE ENGINEER.

STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE

EROSION AND SEDIMENT CONTROL NOTES

1. THE CONTRACTOR SHALL CONSTRUCT ALL EROSION AND SEDIMENT CONTROL MEASURES PER THE APPROVED PLAN AND CONSTRUCTION SEQUENCE AND SHALL HAVE THEM INSPECTED BY THE ENGINEER PRIOR TO BEGINNING ANY OTHER LAND DISTURBANCES. MINOR SEDIMENT CONTROL DEVICE LOCATION ADJUSTMENTS MAY BE MADE IN THE FIELD WITH THE APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL ENSURE THAT ALL RUNOFF FROM DISTURBED AREAS IS DIRECTED TO THE SEDIMENT CONTROL DEVICES, AND SHALL NOT REMOVE ANY EROSION OR SEDIMENT CONTROL MEASURE WITHOUT PRIOR PERMISSION FROM THE ENGINEER. THE CONTRACTOR MUST OBTAIN PRIOR APPROVAL FOR CHANGES TO THE SEDIMENT CONTROL PLAN AND/OR SEQUENCE OF CONSTRUCTION.
2. THE CONTRACTOR SHALL MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL THEY ARE REMOVED.
3. THE CONTRACTOR SHALL APPLY SEED AND MULCH, OR OTHER APPROVED STABILIZATION MEASURES TO ALL DISTURBED AREAS AND STOCKPILES WITHIN FOURTEEN (14) CALENDAR DAYS AFTER STRIPPING AND GRADING ACTIVITIES HAVE CEASED IN THE AREA. MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION. PERMANENT SOIL STABILIZATION SHALL BE PROVIDED WITHIN SEVEN (7) DAYS OF ESTABLISHMENT OF FINAL GRADE.
4. THIS EROSION CONTROL PLAN SHALL BE IMPLEMENTED ON ALL DISTURED AREAS WITHIN THE CONSTRUCTION SITE. ALL MEASURES INVOLVING EROSION CONTROL PRACTICES SHALL BE INSTALLED IN CONFORMANCE WITH "THE VERMONT HANDBOOK FOR SOIL EROSION AND SEDIMENT CONTROL ON CONSTRUCTION SITES" AS PUBLISHED BY THE VT. GEOLOGICAL SURVEY.
5. DURING THE PERIOD OF CONSTRUCTION ACTIVITY, ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR. AT THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE THE TRANSFER OF MAINTENANCE RESPONSIBILITIES, IF REQUIRED, TO THE VT AGENCY OF TRANSPORTATION.
6. ALL TEMPORARY EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE REMOVED AND DISPOSED OF WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY PRACTICES ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE STABILIZED OR REMOVED TO PREVENT FURTHER EROSION.
7. EROSION CONTROL DEVICES REMOVED DURING GRADING OPERATIONS SHALL BE PUT BACK IN PLACE AT THE END OF THE DAY OR DURING INCLEMENT WEATHER AS DIRECTED BY THE ENGINEER.
8. STREAMS INCLUDING BED AND BANKS SHALL BE RESTABILIZED IMMEDIATELY AFTER CHANNEL WORK IS COMPLETED, INTERRUPTED, OR STOPPED.
9. NO SOIL, ROCK, DEBRIS, OR ANY OTHER MATERIAL SHALL BE DUMPED OR PLACED INTO A WATER COURSE OR INTO SUCH PROXIMITY THAT IT MAY READILY SLOUGH, SLIP, OR ERODE INTO A WATER COURSE UNLESS SUCH DUMPING OR PLACING IS AUTHORIZED BY THE ENGINEER AND, WHEN APPLICABLE, THE U.S. ARMY CORPS OF ENGINEERS, FOR SUCH PURPOSES AS, BUT NOT LIMITED TO, CONSTRUCTION OF BRIDGES, CULVERTS, AND EROSION CONTROL STRUCTURES.
10. PERMANENT SEEDING SHALL BE DONE BETWEEN APRIL 30 AND SEPTEMBER 15. IF SEEDING IS DONE AT OTHER TIMES, IT SHALL BE CLASSIFIED AS "TEMPORARY SEEDING." PERMANENT SEED SHALL CONFORM TO THE SEEDING MIXTURE STATED ON SHEET 8. TEMPORARY AND PERMANENT SEEDING SHALL CONSIST OF FERTILIZING, WATERING AND SEEDING PLACED AT RATES IN ACCORDANCE WITH THE SPECIFICATIONS. PERMANENT SEEDING AND MULCHING SHALL BE PAID FOR UNDER 651.15 AND 651.25 RESPECTIVELY. TEMPORARY SEED, MULCH, AND FERTILIZER FOR EROSION AND SEDIMENT CONTROL SHALL BE PLACED IN ACCORDANCE WITH THE SPECIFICATIONS. NO PAYMENT WILL BE MADE FOR TEMPORARY SEEDING OR MULCHING.
11. SURFACE DRAINAGE FLOWS OVER UNSTABILIZED CUT AND FILL SLOPES SHALL BE CONTROLLED BY EITHER PREVENTING DRAINAGE FLOWS TRAVERSING THE SLOPES OR BY INSTALLING PROTECTIVE DEVICES TO LOWER THE WATER DOWNSLOPE WITHOUT CAUSING EROSION. DIKES SHALL BE INSTALLED AND MAINTAINED AT THE TOP OF CUT OR FILL SLOPES UNTIL THE SLOPE AND DRAINAGE AREA TO IT ARE FULLY STABILIZED, AT WHICH TIME THEY MUST BE REMOVED AND FINAL GRADING DONE TO PROMOTE SHEET FLOW DRAINAGE. PROTECTIVE METHODS MUST BE PROVIDED AT POINTS OF CONCENTRATED FLOW WHERE EROSION IS LIKELY TO OCCUR.
12. ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS IN UNPAVED AREAS SHALL BE STABILIZED AND PROTECTED TO PREVENT TRACKING OF MUD ONTO PUBLIC OR PRIVATE ROADWAYS. (SUBSIDIARY TO ITEM 203.15)
13. IF ROADWAYS ACCUMULATE DEBRIS, THE CONTRACTOR SHALL USE A POWER BROOM TO REMOVE THE SEDIMENT TO THE SATISFACTION OF THE ENGINEER. (SUBSIDIARY TO ITEM 203.15)
14. TOPSOIL (TO BE STOCKPILED ON SITE) WILL BE PLACED ON WELL DRAINED LAND AWAY FROM STREAMS IN ACCORDANCE WITH APPROVED EROSION AND SEDIMENT CONTROL MEASURES. IT SHALL BE PLACED IN NEAT PILES. THE CONTRACTOR WILL PROVIDE AN ADEQUATE QUANTITY OF SILT FENCE TO CONTROL THE PERIMETER OF THE STOCKPILE. THE CONTRACTOR, WITH THE APPROVAL OF THE ENGINEER, MAY CONSTRUCT AN EARTH DIKE IN LIEU OF SILT FENCE.

SITE DATA

PROJECT DESCRIPTION:
AIRPORT DEVELOPMENT TO INCLUDE PAVING, CLEARING AND GRUBBING, EARTHWORK, STORM DRAINAGE, AND UTILITIES.

TOTAL SITE AREA:
AREA WITHIN LIMITS OF WORK APPROX. 56 ACRES.

EXISTING SOIL TYPES:
-BROWN SILTY LOAM
-APPROXIMATELY 3" OF TOPSOIL
-INFORMATION OBTAINED FROM BORINGS DATED OCT, 1998

AIP 3-50-0001-06

REV. | DATE | DESCRIPTION

File No:720178Odet25.dgn

Job No. F200001718.01

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

SEDIMENTATION / EROSION CONTROL DETAILS

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

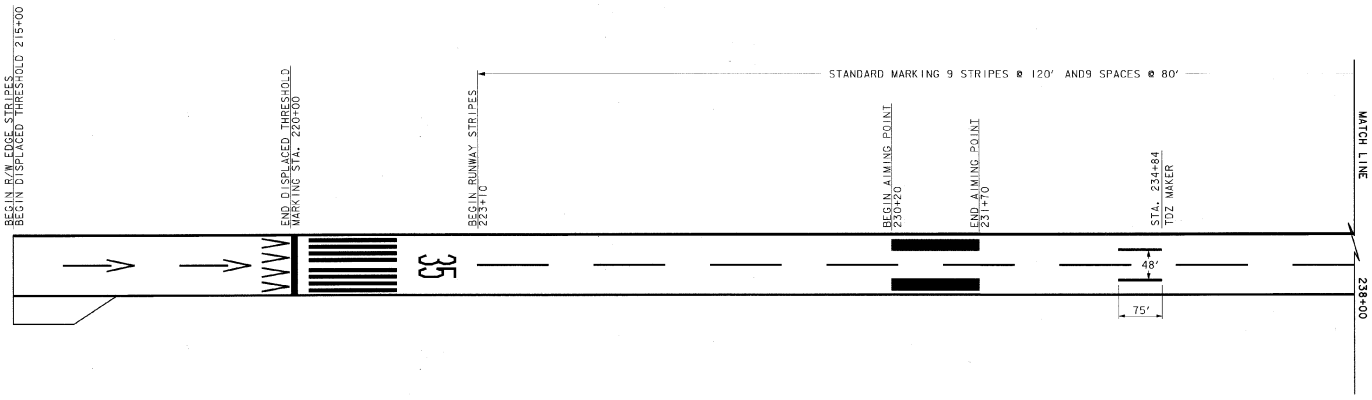
Designed by: GWD
Drawn by: AMB
Checked by: BWC
Approved by: GWD

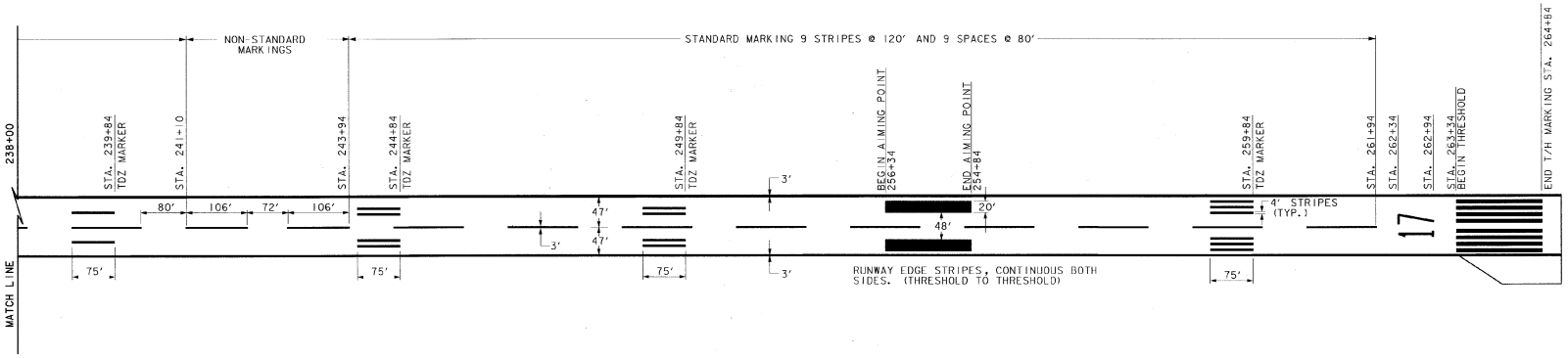
Scale: NTS

Date: 3/21/01

Sheet - Of -

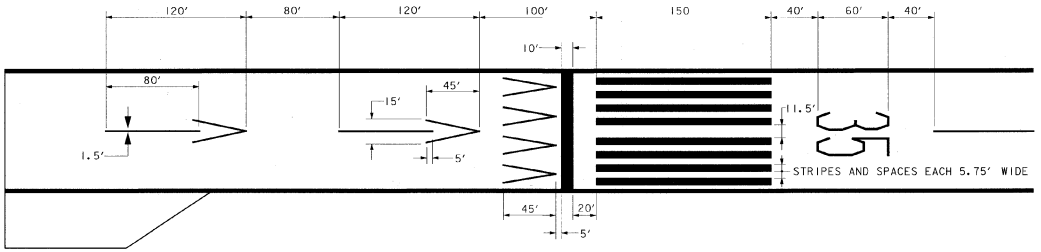
Sheet No
26





NOTES:

1. REFER TO VT STANDARD DRAWINGS AP-10 AND AP-11 RUNWAY AND TAXIWAY MARKING DETAILS FOR ADDITIONAL INFORMATION.
2. RUNWAY AND TAXIWAY MARKINGS TO CONFORM TO A.C. 150/5340-1H, STANDARDS FOR AIRPORT MARKINGS.
3. RUNWAY TOUCH DOWN ZONE, CENTERLINE, NUMERALS, EDGE STRIPING, DISPLACED THRESHOLD MARKINGS AND DISTANCE MARKERS TO BE WHITE. ALL PAVEMENT MARKING TO BE REFLECTIVE, USING GLASS BEADS.
4. ALL TAXIWAY CENTERLINE AND HOLD LINES TO BE YELLOW (6" WIDE) TAXIWAY HOLD LINES TO BE PLACED 200' FROM RUNWAY CENTERLINE. TAXIWAY MARKING TO BE REFLECTIVE, USING GLASS BEADS.
5. ALL MARKINGS TO BE STRIATED (ALTERNATE 6" PAINT / 6" UNPAINTED) DIMENSIONS SHOWN ARE NOMINAL. TYPICAL ADD 6" TO WIDTH. STRIATED MARKINGS TO BE PARALLEL TO RUNWAY CENTERLINE.
6. RUNWAY THRESHOLD MARKINGS CONFORM TO CONFIGURATION B (AC 150/5340 - 1H).



AIP 3-50-0001-06

STATE OF VERMONT
DEPARTMENT OF AIRPORTS
PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION

Job No. F20000171801 | File No.

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

PAVEMENT MARKING PLANS

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

Designed by GWD | Drawn by AMB | Checked by BWC | Approved by GWD

Scale: 1" = 100'

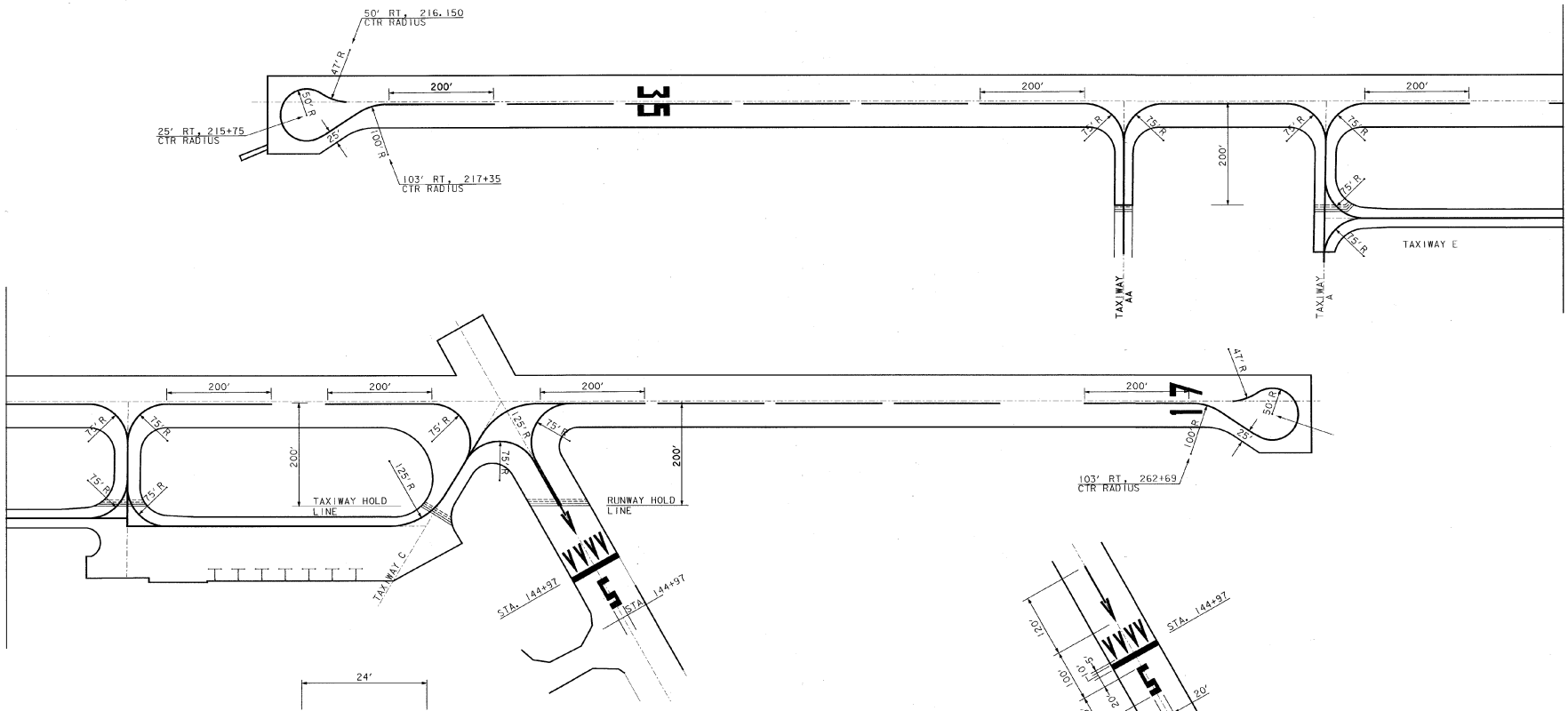
Date: 3/21/01

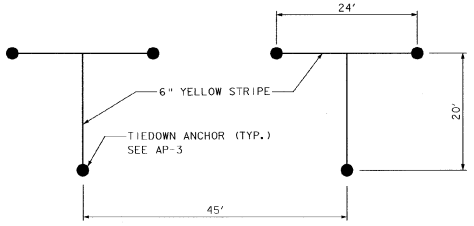
Sheet - Of -

Sheet No
27

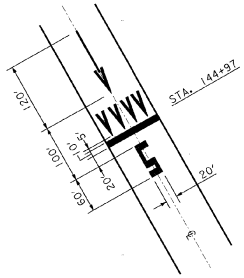
NOTES:

1. SEE SHEET 27 FOR R/W 17-35 MARKING DIAGRAM.
2. TAXIWAY HOLDLINES @ 200' (TYPICAL) OFF RUNWAY 17-35 CENTERLINE.
3. SEE MARKING NOTES SHEET 27.
4. SEE VT STANDARD DRAWINGS AP-10 & AP-11 FOR PAVEMENT MARKING DETAILS.
5. TAXIWAY LEAD-IN LINES ARE THREE (3) FEET OFF RUNWAY CENTERLINE, SEE DETAIL AP-11.





AIRPLANE TIE DOWNS - TYPICAL



DETAILS RUNWAY 5 THRESHOLD

AIP 3-50-0001-06

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

PAVEMENT MARKING PLANS

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

REV.	DATE	DESCRIPTION

Job No. F200001718.01

File No:F20171801Pmu28.dgn

Designed by: GWD
Drawn by: MMM
Checked by: BWC
Approved by: GWD

Scale: 1" = 100'

Date: 3/21/01

Sheet - Of -

Sheet No
28

NOTES:

1. EDGE LIGHTS ALONG RUNWAY 17-35 TO BE MEDIUM INTENSITY (MIRLS) 6.6 AMP, L-861. SEE DETAIL ON SHEET 34.
2. EXISTING EDGE LIGHTS TO BE REMOVED AND STORED ON THE AIRPORT, WHERE DIRECTED BY THE ENGINEER. (NOT A SEPARATE PAY ITEM.)
3. RUNWAY LIGHTS AND CABLES TO BE PLACED 60' OFF RUNWAY 17-35 CENTERLINE. TAXIWAY, THRESHOLD LIGHTS, AND CABLES TO BE PLACED 10' OFF EDGE OF PAVEMENT.
4. PLACE MULTIPLE CONDUCTOR RUNS IN SAME CONDUIT AND/OR TRENCH WHERE POSSIBLE.
5. ENCASE 2" DIA. PVC IN CONCRETE WHENEVER IT IS PLACED DIRECTLY UNDER PAVEMENT (ITEM 678.21, MOD. 1)
6. PLACE RUNWAY/TAXIWAY SIGNS, 20 FEET (NEAR EDGE) OFF PAVEMENT.
7. INSTALL "QUAZITE" HANDHOLE ON REILS CABLES @ 300' SPACING.
8. CONTRACTOR TO VERIFY CONDITION OF EXISTING UNDERGROUND ELECTRICAL DUCT DURING TAXIWAY /RUNWAY RECONSTRUCTION.

LEGEND

- LIMIT OF WETLANDS
- EXISTING RUNWAY EDGE LIGHTS. SEE NOTE 2
- $C\ \Phi_{R\#}$ NEW RUNWAY EDGE LIGHTS. SEE NOTE 1. (LETTERS ABOVE INDICATE COLORS) (RUNWAY LIGHT NUMBER INDICATED BELOW)
- C = CLEAR LENS; A = AMBER LENS; G = GREEN LENS; R = RED FILTER; B = BLUE FILTER (TAXIWAY LIGHTS); O = OBSCURED
- $G\ \Phi_{TH\#}$ NEW THRESHOLD LIGHTS (LETTERS ABOVE INDICATE COLORS) (THRESHOLD LIGHT NUMBER INDICATED BELOW)
- $B\ \Phi_{T\#}$ TAXIWAY LIGHTS (LETTERS ABOVE INDICATE COLORS) (TAXIWAY LIGHT NUMBER INDICATED BELOW)
- TG3 RUNWAY OR TAXIWAY SIGN. SEE NOTE 6 AND DETAILS ON SHEET 34.
- GROUND ROD - 5/8" DIA. x 8' COPPER CLAD
- REILS
- RETROREFLECTIVE TAXIWAY MARKERS

SCOTT HILL ROAD

CEILOMETER, ABANDONED

PAD MOUNTED ELECTRICAL TRANSFORMER

VT STATE PLANE GRID

MATCH LINE

SPRING

D1 9" VTP

RCD1 TG 1147.7

D1 TG 1148.1

2 I/C #4, 600V, L-824 (POWER) & 2 I/C #8, L-824 (CONTROL) TO MASTER REILS

* EXISTING RELOCATE EXISTING SLAVE REIL

EXISTING 2 WAY x 2' DIA. UG ELECTRICAL DUCT

NEW 2 WAY X 4" DIA. PVC x 160LF CONCRETE ENCASED DUCT FOR REILS POWER & CONTROL CABLES. SEE NOTE 9

TH14 G00 TH15 G00 TH12 G00 TH11 G00 — 10' 10' 10' 10'

TH8 R0R TH7 R0R TH6 R0R TH5 R0R

TH4 R0R TH3 R0R TH2 R0R TH1 R0R

TH76 G0A TH75 G0O TH74 G0O TH73 G0O — 10' 10' 10' 10'

60'

R9 R10 R15 R16 R78 R77 R72 R71

RA FR CA

1165 +75.0 +37.5 1160 +00.0 +58.2

+90.0

210+03 211+00 212+00 213+00 214+00 215+00 216+00 217+00 218+00 219+00 220+00 221+00 222+00 223+00 224+00 225+00

DRIVE

DME ANTENNA

LOCALIZER SHELTER

POINT A

ELECTRICAL EQUIPMENT MOUNTING BOARD. REFER TO DETAIL A/37 & B/37

2" DIA. PVC, CONCRETE ENCASED NOTE 5

2 I/C #4, 600V, L-824 'C' IN 2" DIA PVC & #8 BARE COPPER COUNTER POISE. SEE NOTE 7 (REILS POWER CABLES)

* EXISTING RELOCATE MASTER REIL

2 I/C #4, 600V, L-824 & 2 I/C #8, L-824 TO SLAVE REIL (THRU DUCT @ STA. 220+00)

NEW I/C #8, 5KV, L-824 'C' IN 2" DIA. & #8 BARE COPPER COUNTERPOISE. SEE TRENCH DETAIL ON SHEET 35 (TYP.)

6" UNDERDRAIN

CB HDWL 15" CMP

D1 TG 1149.64 FL 1146.94

15" CMP

D1

EXISTING POLE GMP 66/01

NEW 3-I/C #1/0 THWN IN 3" PVC & #6 BASE COPPER COUNTERPOISE

EXISTING OVERHEAD TRIPLEX CABLE

ELECTRIC SERVICE DROP SEE DETAIL C/37.

CEILOMETER, ABANDONED

AIRPORT ROAD

EXISTING POLE GMP 66

EXISTING PRIMARY OHW

AIP 3-50-0001-06

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RECONSTRUCTION OF RUNWAY 17-35
RUNWAY LIGHTING PLAN

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

REV.	DATE	DESCRIPTION

Job No. F200001T16.01

File No.F20TI80nu29.dgn

Designed by: GMD
Drawn by: MMM
Checked by: BMC
Approved by: GMD

Scale: 1" = 50'

Date: 3/21/01

Sheet - Of -

Sheet No. 29

NOTES:

1. EDGE LIGHTS ALONG RUNWAY 17-35 TO BE MEDIUM INTENSITY (MIRLS) 6.6 AMP, L-861. SEE DETAIL ON SHEET 34.
2. EXISTING EDGE LIGHTS TO BE REMOVED AND STORED ON THE AIRPORT, WHERE DIRECTED BY THE ENGINEER. (NOT A SEPARATE PAY ITEM.)
3. ALL RUNWAY, THRESHOLD AND TAXIWAY LIGHTS AND CABLES TO BE PLACED 10' OFF EDGE OF PAVEMENT.
4. PLACE MULTIPLE CONDUCTOR RUNS IN SAME CONDUIT AND/OR TRENCH WHERE POSSIBLE.
5. ENCASE 2" DIA. PVC IN CONCRETE WHENEVER IT IS PLACED DIRECTLY UNDER PAVEMENT.
6. PLACE RUNWAY/TAXIWAY SIGNS, 20 FEET (NEAR EDGE) OFF PAVEMENT.
7. CONTRACTOR TO VERIFY CONDITION OF EXISTING UNDERGROUND ELECTRICAL DUCT DURING TAXIWAY /RUNWAY RELOCATION. REFER TO DETAIL ON DRAWING 35.
8. RETROREFLECTIVE TAXIWAY MARKERS (L-853), CONFORMING TO FAA AC 150/5345-39B, TO BE PLACED 10' OFF TAXIWAY EDGE OF PAVEMENT.

SIGN SCHEDULE NOTES:

(1) ALL NEW SIGNS TO BE SIZE I (18" PANEL WITH 12" LEGEND), STYLE 2, CLASS 2.

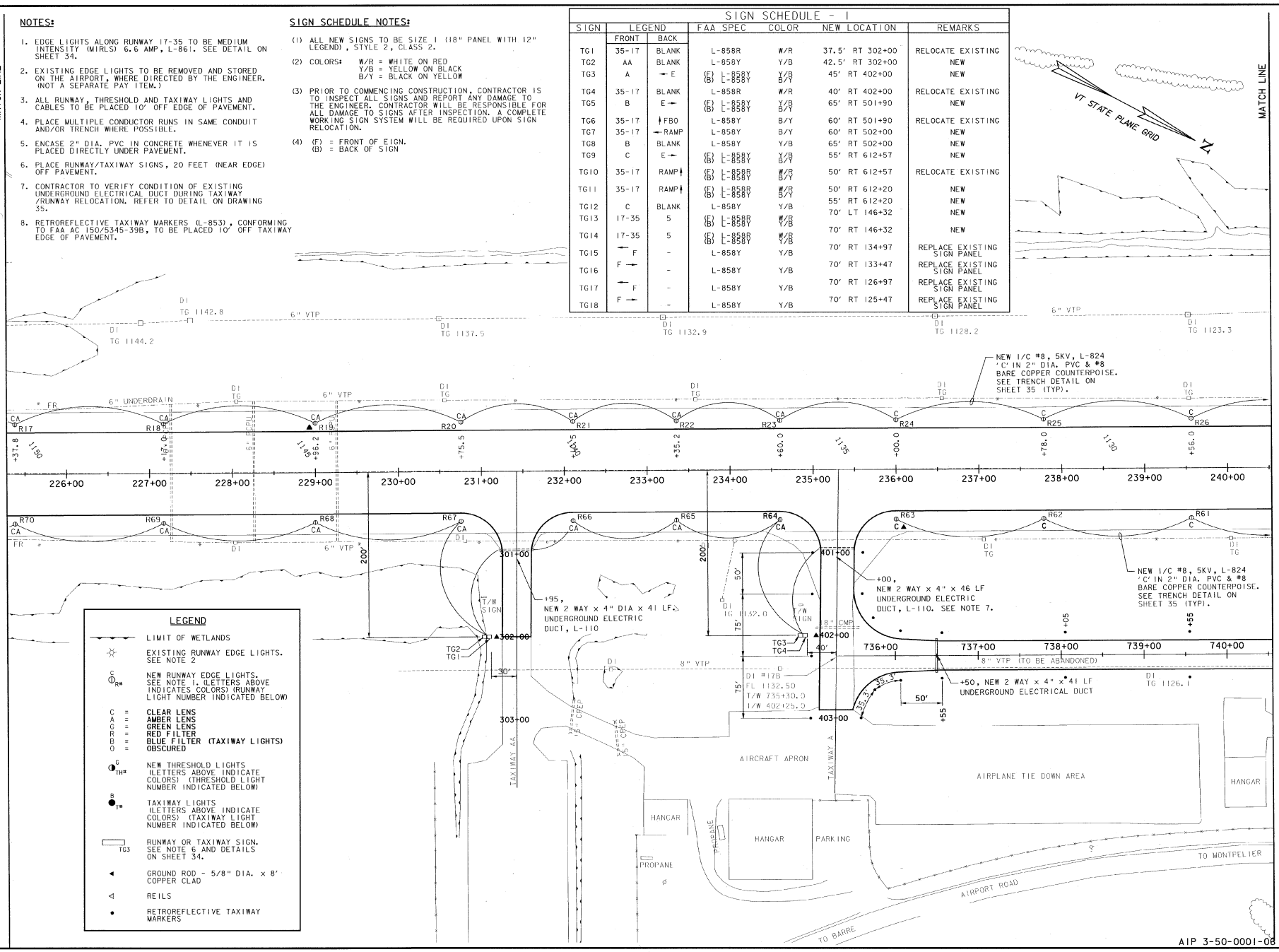
(2) COLORS: W/R = WHITE ON RED
Y/B = YELLOW ON BLACK
B/Y = BLACK ON YELLOW

(3) PRIOR TO COMMENCING CONSTRUCTION, CONTRACTOR IS TO INSPECT ALL SIGNS AND REPORT ANY DAMAGE TO THE ENGINEER. CONTRACTOR WILL BE RESPONSIBLE FOR ALL DAMAGE TO SIGNS AFTER INSPECTION. A COMPLETE WORKING SIGN SYSTEM WILL BE REQUIRED UPON SIGN RELOCATION.

(4) (F) = FRONT OF SIGN
(B) = BACK OF SIGN

SIGN SCHEDULE - I

SIGN	LEGEND FRONT	LEGEND BACK	FAA SPEC	COLOR	NEW LOCATION	REMARKS
TG1	35-17	BLANK	L-858R	W/R	37.5' RT 302+00	RELOCATE EXISTING
TG2	AA	BLANK	L-858Y	Y/B	42.5' RT 302+00	NEW
TG3	A	→ E	(F) L-858Y (B) L-858Y	Y/B B/Y	45' RT 402+00	NEW
TG4	35-17	BLANK	L-858R	W/R	40' RT 402+00	RELOCATE EXISTING
TG5	B	E ←	(F) L-858Y (B) L-858Y	Y/B B/Y	65' RT 501+90	NEW
TG6	35-17	↓ FBO	L-858Y	B/Y	60' RT 501+90	RELOCATE EXISTING
TG7	35-17	← RAMP	L-858Y	B/Y	60' RT 502+00	NEW
TG8	B	BLANK	L-858Y	Y/B	65' RT 502+00	NEW
TG9	C	E ←	(F) L-858Y (B) L-858Y	Y/B B/Y	55' RT 612+57	NEW
TG10	35-17	RAMP ↓	(F) L-858R (B) L-858Y	W/R B/Y	50' RT 612+57	RELOCATE EXISTING
TG11	35-17	RAMP ↓	(F) L-858R (B) L-858Y	W/R B/Y	50' RT 612+20 55' RT 612+20	NEW NEW
TG12	C	BLANK	L-858Y	Y/B	70' LT 146+32	NEW
TG13	17-35	5	(F) L-858R (B) L-858Y	W/R Y/B	70' RT 146+32	NEW
TG14	17-35	5	(F) L-858R (B) L-858Y	W/R Y/B	70' RT 134+97	REPLACE EXISTING SIGN PANEL
TG15	← F	-	L-858Y	Y/B	70' RT 133+47	REPLACE EXISTING SIGN PANEL
TG16	F →	-	L-858Y	Y/B	70' RT 126+97	REPLACE EXISTING SIGN PANEL
TG17	← F	-	L-858Y	Y/B	70' RT 125+47	REPLACE EXISTING SIGN PANEL
TG18	F →	-	L-858Y	Y/B		



LEGEND

- LIMIT OF WETLANDS
- EXISTING RUNWAY EDGE LIGHTS. SEE NOTE 2
- NEW RUNWAY EDGE LIGHTS. SEE NOTE 1. (LETTERS ABOVE INDICATES COLORS) (RUNWAY LIGHT NUMBER INDICATED BELOW)
- C = CLEAR LENS
- A = AMBER LENS
- G = GREEN LENS
- R = RED LIGHT
- B = BLUE FILTER (TAXIWAY LIGHTS)
- O = OBSCURED
- NEW THRESHOLD LIGHTS (LETTERS ABOVE INDICATE COLORS) (THRESHOLD LIGHT NUMBER INDICATED BELOW)
- TAXIWAY LIGHTS (LETTERS ABOVE INDICATE COLORS) (TAXIWAY LIGHT NUMBER INDICATED BELOW)
- RUNWAY OR TAXIWAY SIGN. SEE NOTE 6 AND DETAILS ON SHEET 34.
- GROUND ROD - 5/8" DIA. x 8' COPPER CLAD
- REILS
- RETROREFLECTIVE TAXIWAY MARKERS

AIP 3-50-0001-08

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RECONSTRUCTION OF RUNWAY 17-35
RUNWAY LIGHTING PLAN

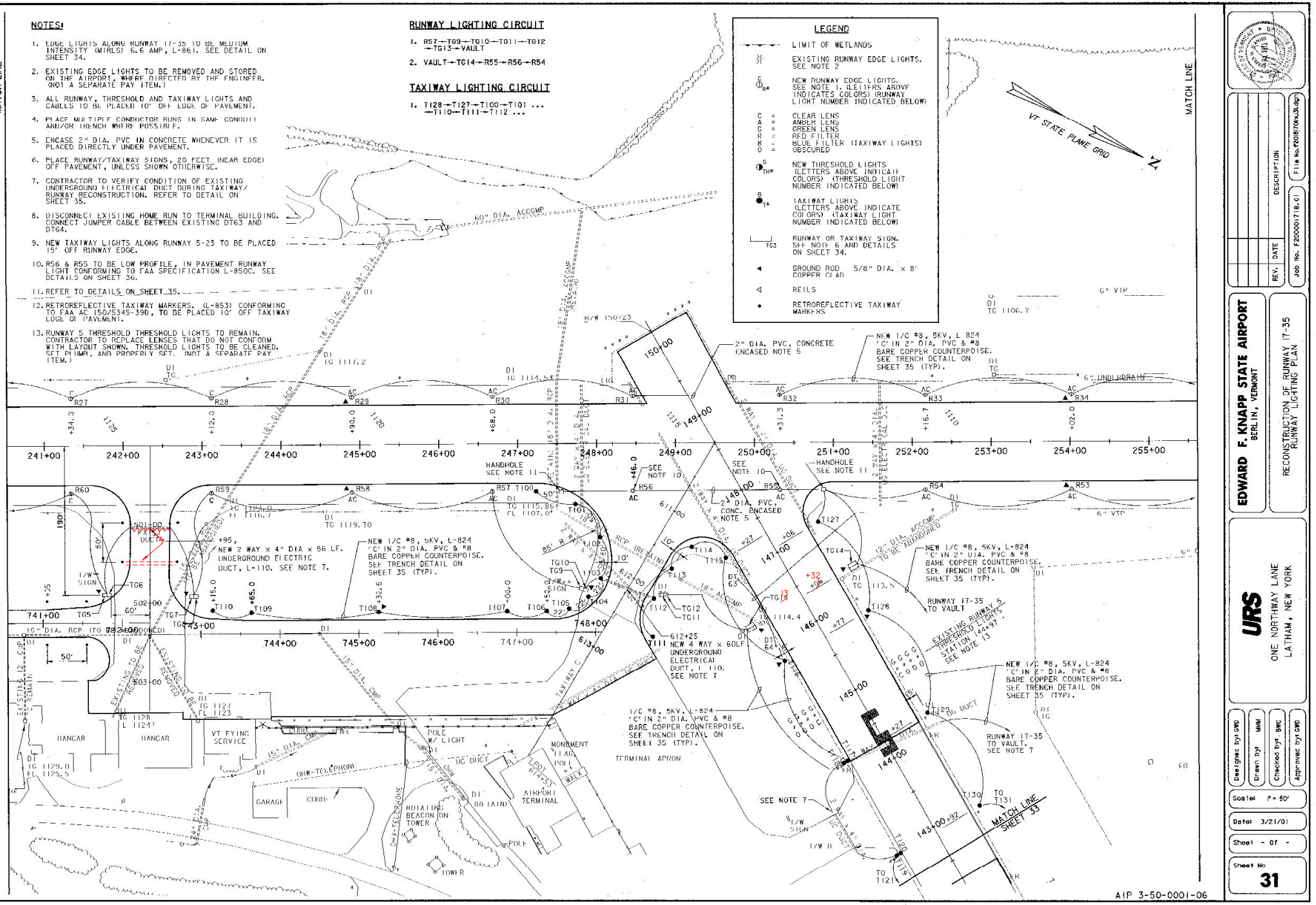
URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

REV.	DATE	DESCRIPTION

Job No. F200001T18.01
File No:F20TRBDnu30.dgn

Designed by: GMD
Drawn by: MMM
Checked by: BMC
Approved by: GMD

Scale: 1" = 50'
Date: 3/21/01
Sheet - Of -
Sheet No. 30



EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RECONSTRUCTION OF RUNWAY 17-35
RUNWAY LIGHTING PLAN

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

REV.	DATE	DESCRIPTION

Job No. P200001(18.01) File No. P200001(18.01)

Designed by GMD | Drawn by MMM | Checked by BMC | Approved by GMD

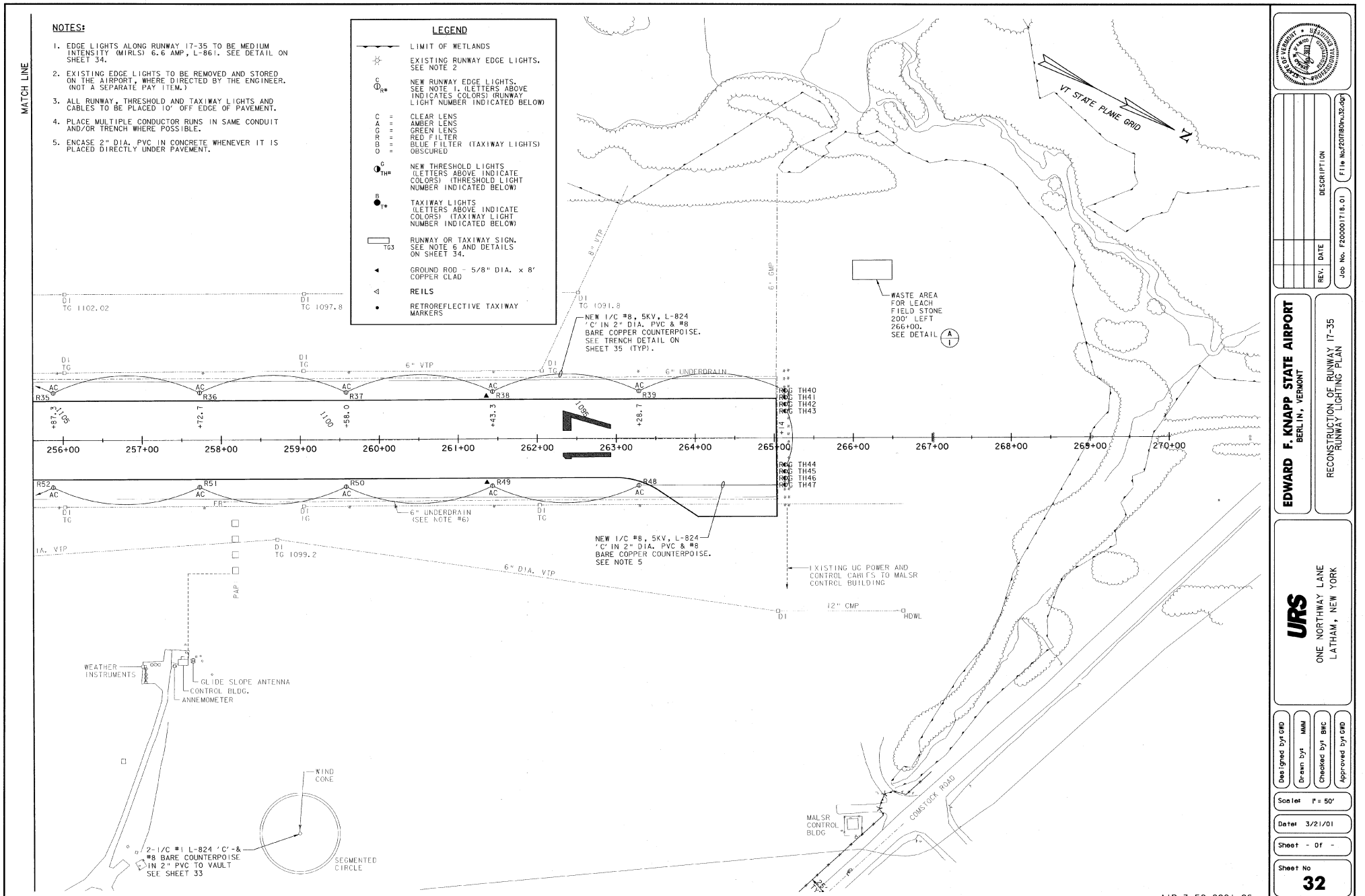
Scale: 1" = 50'

Date: 3/21/01

Sheet - Of -

Sheet No 31

AIP 3-50-0001-06


NOTES:
1. EDGE LIGHTS ALONG RUNWAY 17-35 TO BE MEDIUM INTENSITY (MIRLS) 6.6 AMP, L-861. SEE DETAIL ON SHEET 34.
2. EXISTING EDGE LIGHTS TO BE REMOVED AND STORED ON THE AIRPORT, WHERE DIRECTED BY THE ENGINEER. (NOT A SEPARATE PAY ITEM.)
3. ALL RUNWAY, THRESHOLD AND TAXIWAY LIGHTS AND CABLES TO BE PLACED 10' OFF EDGE OF PAVEMENT.
4. PLACE MULTIPLE CONDUCTOR RUNS IN SAME CONDUIT AND/OR TRENCH WHERE POSSIBLE.
5. ENCASE 2" DIA. PVC IN CONCRETE WHENEVER IT IS PLACED DIRECTLY UNDER PAVEMENT.
LEGEND
LIMIT OF WETLANDS
EXISTING RUNWAY EDGE LIGHTS. SEE NOTE 2
NEW RUNWAY EDGE LIGHTS. SEE NOTE 1. (LETTERS ABOVE INDICATES COLORS) (RUNWAY LIGHT NUMBER INDICATED BELOW)
C = CLEAR LENS
A = AMBER LENS
G = GREEN LENS
R = RED FILTER
B = BLUE FILTER (TAXIWAY LIGHTS)
O = OBSCURED
NEW THRESHOLD LIGHTS (LETTERS ABOVE INDICATE COLORS) (THRESHOLD LIGHT NUMBER INDICATED BELOW)
TAXIWAY LIGHTS (LETTERS ABOVE INDICATE COLORS) (TAXIWAY LIGHT NUMBER INDICATED BELOW)
TG3 RUNWAY OR TAXIWAY SIGN. SEE NOTE 6 AND DETAILS ON SHEET 34.
GROUND ROD - 5/8" DIA. x 8' COPPER CLAD
REILS
RETROREFLECTIVE TAXIWAY MARKERS
MATCH LINE
VT STATE PLANE GRID
N
DI TG 1102.02
DI TG 1097.8
DI TG 1091.8
8" VTP
6" CMP
WASTE AREA FOR LEACH FIELD STONE 200' LEFT 266+00. SEE DETAIL A/I
NEW I/C #8, 5KV, L-824 'C' IN 2" DIA. PVC & #8 BARE COPPER COUNTERPOISE. SEE TRENCH DETAIL ON SHEET 35 (TYP).
6" VTP
6" UNDERDRAIN
R35 R36 R37 R38 R39
TH40 TH41 TH42 TH43
+87.3 1105 +72.7 1100 +58.0 +43.3 1095 +28.7 +14
256+00 257+00 258+00 259+00 260+00 261+00 262+00 263+00 264+00 265+00 266+00 267+00 268+00 269+00 270+00
R52 R51 R50 R49 R48
TH44 TH45 TH46 TH47
6" UNDERDRAIN (SEE NOTE #6)
NEW I/C #8, 5KV, L-824 'C' IN 2" DIA. PVC & #8 BARE COPPER COUNTERPOISE. SEE NOTE 5
EXISTING UG POWER AND CONTROL CABLES TO MALSR CONTROL BUILDING
18" VTP
DI TG 1099.2
6" DIA. VTP
12" CMP
HDWL
PAP
WEATHER INSTRUMENTS
GLIDE SLOPE ANTENNA
CONTROL BLDG.
ANNEMOMETER
WIND CONE
2-I/C #1 L-824 'C'-& #8 BARE COUNTERPOISE IN 2" PVC TO VAULT SEE SHEET 33
SEGMENTED CIRCLE
MALSR CONTROL BLDG
COMSTOCK ROAD
AIP 3-50-0001-06
STATE OF VERMONT
REGISTERED PROFESSIONAL ENGINEER
REV. DATE DESCRIPTION
Job No. P20000171&.01
File No.P20171B0nu32.dgn
EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT
RECONSTRUCTION OF RUNWAY 17-35
RUNWAY LIGHTING PLAN
URS
ONE NORTHWAY LANE
LATHAM, NEW YORK
Designed by GMD
Drawn by MMM
Checked by BMC
Approved by GMD
Scale: 1" = 50'
Date: 3/21/01
Sheet - Of -
Sheet No 32

NOTES:

1. ALL TAXIWAY LIGHTS TO BE MEDIUM INTENSITY L-861 T.
2. EXISTING MITLS NOT SHOWN ON TAXIWAY F. (REFER TO SHEET 7/19 OF PLANS "PARTIAL PARALLEL TAXIWAY TO RUNWAY 5-23" BY DUFRESNE HENRY, APRIL, 1994 FOR ADDITIONAL DETAILS.
3. PLACE MULTIPLE CONDUCTOR RUNS IN SAME TRENCH OR CONDUIT WHERE FEASIBLE.
4. NEW TAXIWAY LIGHTS ALONG RUNWAY 5-23 TO BE PLACED 15' OFF RUNWAY EDGE.
5. CONTRACTOR TO VERIFY CONDITION OF EXISTING UNDERGROUND ELECTRICAL DUCT DURING TAXIWAY/RUNWAY RECONSTRUCTION. REFER TO DETAIL ON SHEET 35.

NEW RUNWAY 5-23 CIRCUIT

NEW REGULATOR → L-10 → L-39 → L-38 ... ... L-43 → L-42 → L-41 → NEW REGULATOR

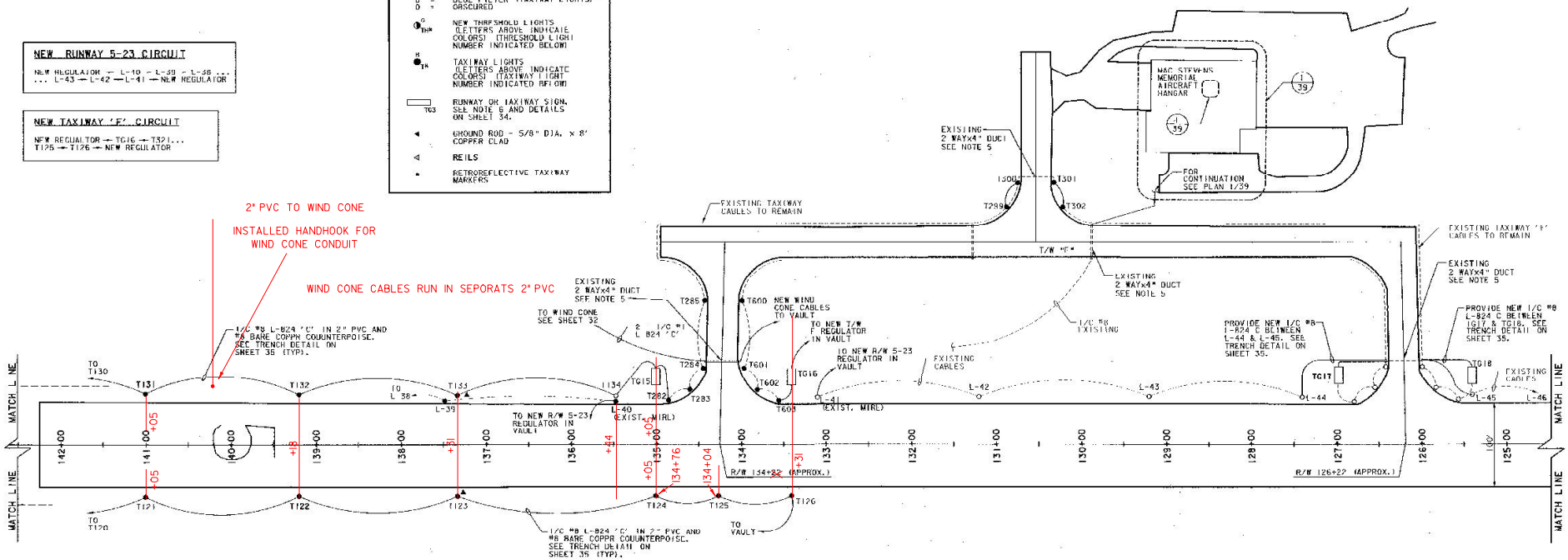
NEW TAXIWAY 'F' CIRCUIT

NEW REGULATOR → TG16 → T321... T125 → T126 → NEW REGULATOR

LEGEND

- LIMIT OF WETLANDS
- EXISTING RUNWAY EDGE LIGHTS. SEE NOTE 2
- NEW RUNWAY EDGE LIGHTS. SEE NOTE 1. (LETTERS ABOVE INDICATES COLORS) (RUNWAY LIGHT NUMBER INDICATED BELOW)
- C = CLEAR LENS
- A = AMBER LENS
- G = GREEN LENS
- R = RED FILTER
- B = BLUE FILTER (TAXIWAY LIGHTS)
- O = OBSCURED
- NEW THRESHOLD LIGHTS (LETTERS ABOVE INDICATE COLORS) (THRESHOLD LIGHT NUMBER INDICATED BELOW)
- TAXIWAY LIGHTS (LETTERS ABOVE INDICATE COLORS) (TAXIWAY LIGHT NUMBER INDICATED BELOW)
- TG3 RUNWAY OR TAXIWAY SIGN. SEE NOTE 6 AND DETAILS ON SHEET 34.
- GROUND ROD - 5/8" DIA. x 8' COPPER CLAD
- REILS
- RETROREFLECTIVE TAXIWAY MARKERS

VT STATE PLANE GRID



AIP 3-50-0001-06

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RECONSTRUCTION OF RUNWAY 5-23
RUNWAY LIGHTING PLAN

REV. | DATE | DESCRIPTION

Job No. P2000017.01

File No.P2000017H01-01.dgn

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

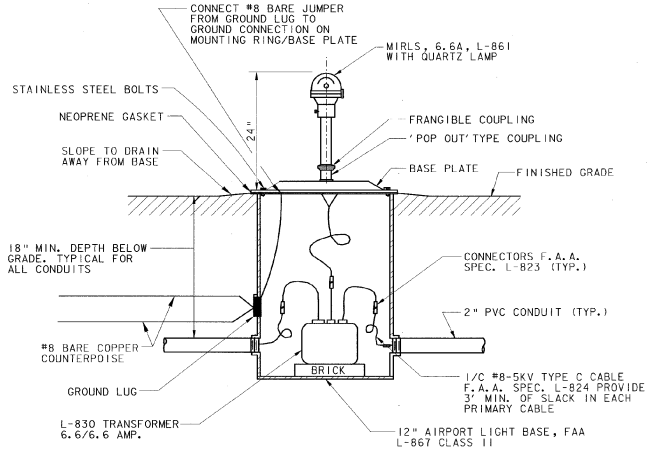
Designed by: GMD
Drawn by: MAM
Checked by: BMC
Approved by: GMD

Scale: 1" = 60'

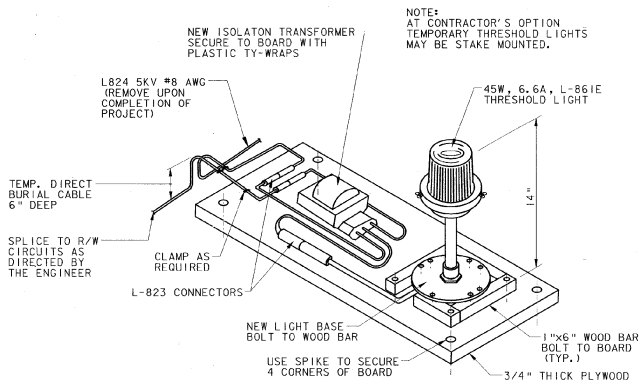
Date: 3/21/01

Sheet - Of -

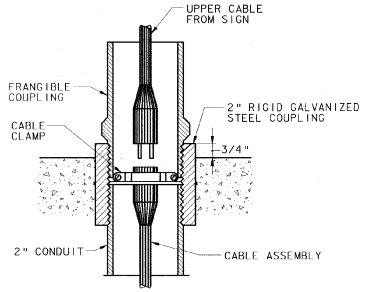
Sheet No.
33



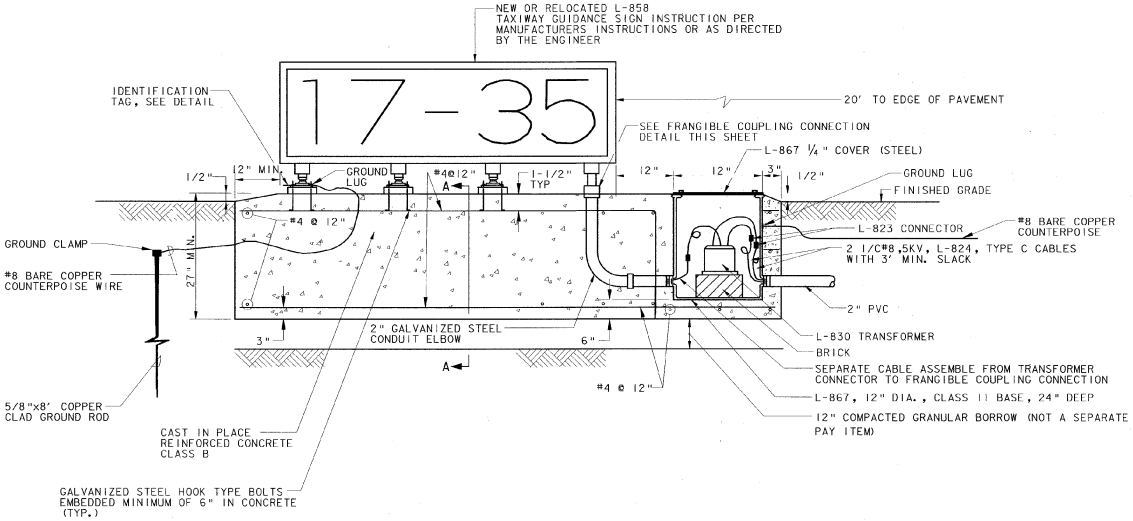
TYPICAL ELEVATED EDGE LIGHT
NOT TO SCALE



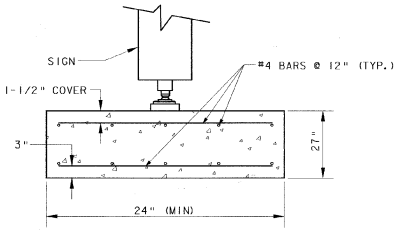
TEMPORARY THRESHOLD LIGHT
NOT TO SCALE



FRANGIBLE COUPLING CONNECTION DETAIL
NOT TO SCALE



L-858 TAXIWAY GUIDANCE SIGN
NOT TO SCALE



TAXIWAY GUIDANCE SIGN SECTION A-A
NOT TO SCALE

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION
		File No.P2001780c634.dgn
		Job No. P2300017 18.01

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY LIGHTING DETAILS

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

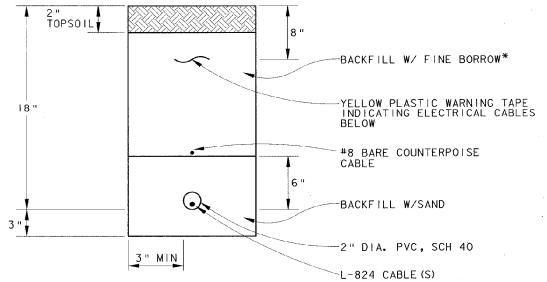
Designed by: GMD | Drawn by: AMB | Checked by: BMC | Approved by: GMD

Scale: NTS

Date: 3/21/01

Sheet - Of -

Sheet No. 34



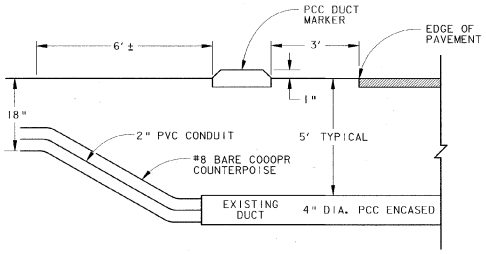
NOTE:
ADDITIONAL CONDUITS MAY BE PLACED IN SAME TRENCH @ 3" SPACING. MAX. NUMBER OF CABLES / CONDUIT PER N.E.C.

*FINE BORROW-MATERIAL REASONABLY FREE FROM LOAM, CLAY OR ORGANIC MATERIAL, MAXIMUM SIZE = 1/2 "

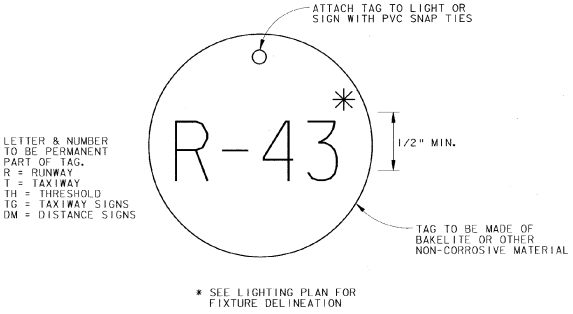
A/35 CONDUIT TRENCH DETAIL (TYP)
SCALE: NONE

NOTE:

1. PLACE 2" PVC CONDUIT & COUNTERPOISE IN EXISTING 4" PCC ENCASED DUCT. FULL LENGTH. USE EXISTING SPARE (EMPTY) DUCT IF AVAILABLE.
2. HAND EXCAVATE AROUND EXISTING DUCT. EXISTING CABLES MAY BE DIRECT BURIAL.
3. REPLACE EXISTING PCC DUCT MARKERS, AS SHOWN.
4. SEE VAOT STANDARD DRAWING AP-3 FOR ELECTRICAL DUCT DETAIL.

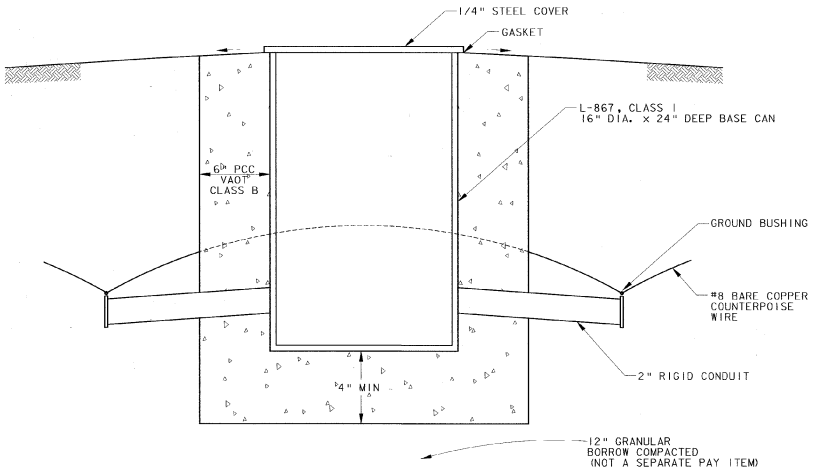


B/35 CONDUIT DUCT DETAIL (TYP)
SCALE: NONE



* SEE LIGHTING PLAN FOR FIXTURE DELINEATION

C/35 FIXTURE IDENTIFICATION TAG (TYP)
SCALE: NONE



ELECTRICAL HANDHOLES TO BE PLACED AS DIRECTED BY THE ENGINEER. COST OF HANDHOLES ARE TO ARE TO BE SUBIDIARY TO THE PRICE OF ITEM 678.21, 2" PVC CONDUIT.

D/35 ELECTRICAL HANDHOLE (TYP)
SCALE: NONE

AIP 3-50-0001-06

REV. | DATE | DESCRIPTION
File No:F20170806635.dgn
Job No. F200001718.01

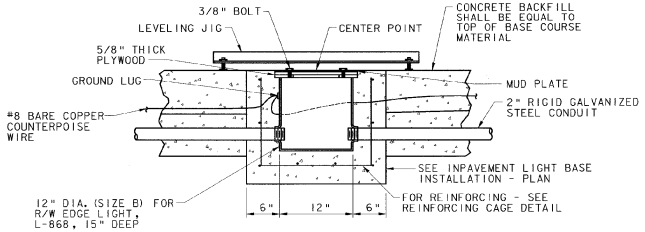
EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY LIGHTING DETAILS

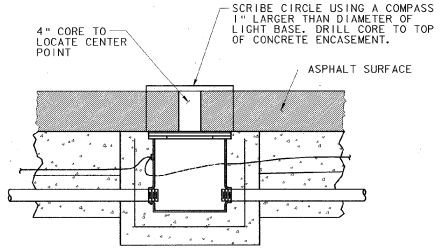
URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

Designed by: GMD
Drawn by: AMB
Checked by: BMC
Approved by: GMD

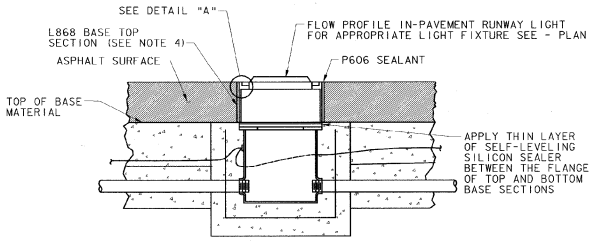
Scale: AS SHOWN
Date: 3/21/01
Sheet - Of -
Sheet No 35



STEP 1
SCALE: NONE



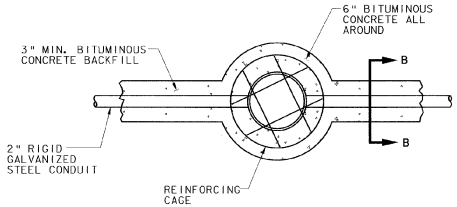
STEP 2
SCALE: NONE



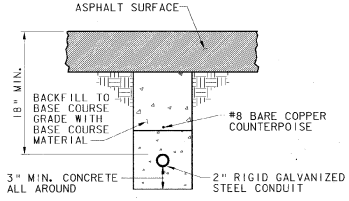
STEP 3
SCALE: NONE

GENERAL NOTES:

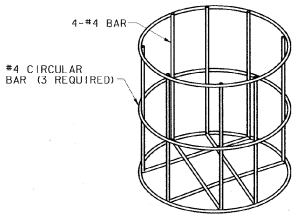
1. CONCRETE TO CONFIRM VAOT SPECIFICATIONS SECTION 501, CLASS B, 3/4" MAX SIZE AGGREGATE.
2. PRIOR TO ASPHALT PAVING, COVER MUD PLATE WITH A SHINGLE OR ANOTHER THIN ARTICLE WHEN TACK COAT IS APPLIED PRIOR TO PAVING. BEFORE PAVING COMMENCES, REMOVE SHINGLE AND LIGHTLY WIPE DOWN MUD PLATE WITH VEGETABLE OIL.
3. TIGHTEN ALL BOLTS TO THE TORQUE SPECIFIED BY THE MANUFACTURER. DO NOT REUSE SHIPPING BOLTS TO INSTALL COVERS.
4. RUNWAY EDGE IN PAVEMENT LIGHTS (R55, R56) TO CONFORM TO L-850 C, LOW PROFILE LIGHTS, AS MANUFACTURED BY HONEYWELL.



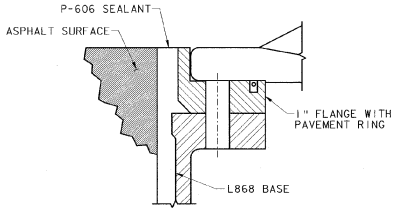
IN-PAVEMENT LIGHT BASE INSTALLATION - PLAN
SCALE: NONE



SECTION B-B
SCALE: NONE



REINFORCING CAGE DETAIL
SCALE: NONE



DETAIL "A"
SCALE: NONE

INSTALLATION OF IN-PAVEMENT LIGHT IN NEW PAVEMENT
LOW PROFILE - L850 C

ITEM 864.10. MOD. 1

AIP 3-50-0001-06

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY LIGHTING DETAILS

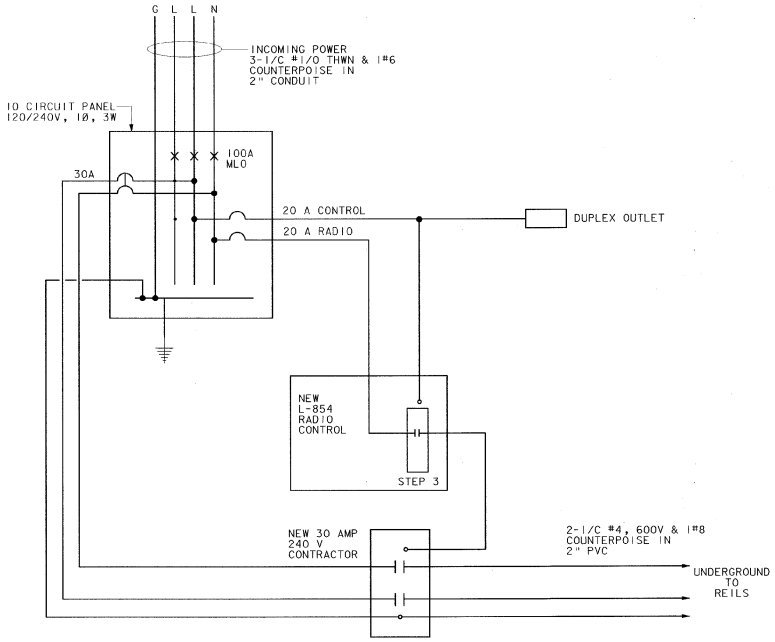
REV.	DATE	DESCRIPTION

File No:F20718006e36.dgn

Job No. F200001718.01

Designed by: GMD
Drawn by: AMB
Checked by: BMC
Approved by: GMD

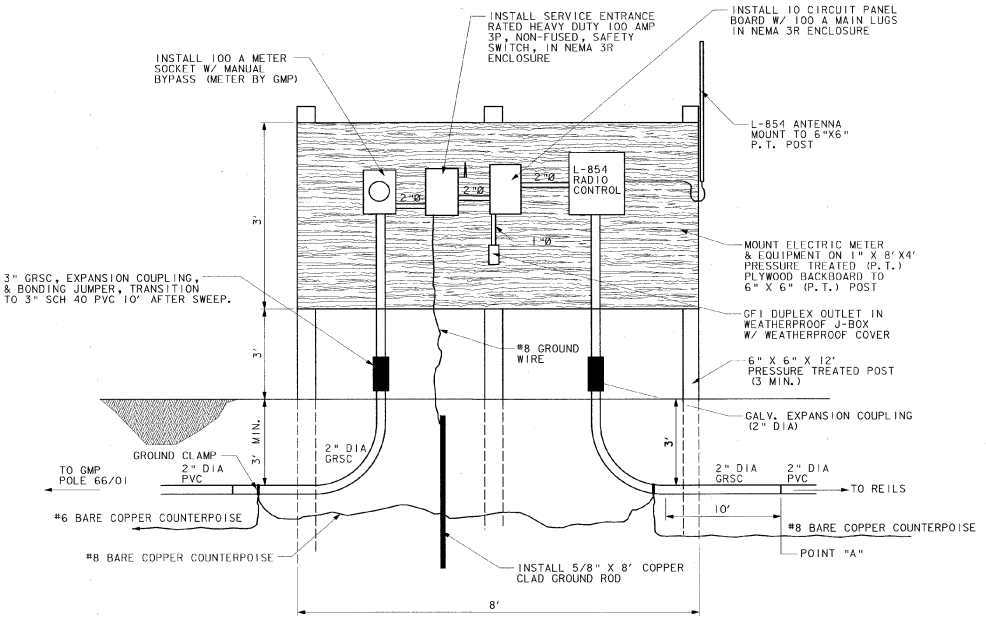
Scale: NTS
Date: 3/21/01
Sheet - Of -
Sheet No. 36



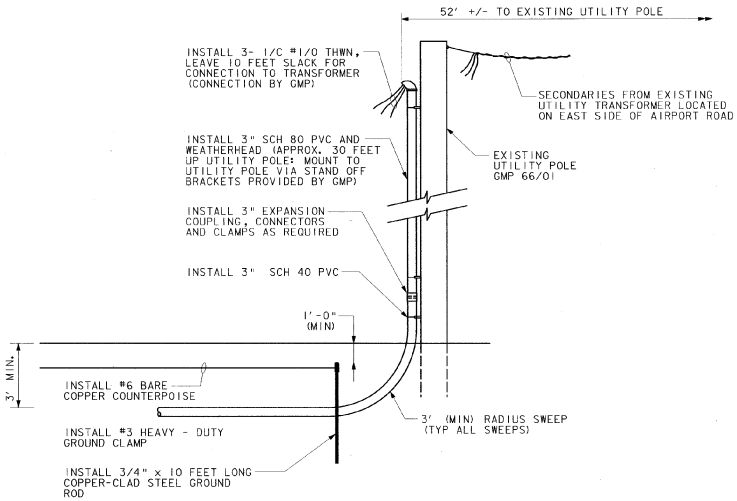
NOTES:

1. REILS TO BE ACTIVATED ON CIRCUIT #3 (7 CLICKS) ONLY. REILS TO SHUT OFF ON STEP #1 (3 REILS) AND STEP #2 (5 CLICKS). COORDINATE WITH VAULT WIRING SEE SHEET 38.
2. L-854, RADIO CONTROL FREQUENCY IS 122.8 MHZ.
3. REILS ELECTRICAL EQUIPMENT INCLUDES MOUNTING BOARD, POST, METER, DISCONNECT, CIRCUIT PANEL, CONTRACTOR RADIO CONTROLLER, WIRING, FITTINGS AND CONNECTIONS TO EXISTING TRANSFORMER. (ALL EQUIPMENT AND MATERIALS SOUTH OF POINT A PAYMENT TO BE MADE UNDER ITEM 864.07 (MOD.) (L-109) INSTALLATION OF AIRPORT TRANSFORMER VAULT EQUIPMENT).
4. COORDINATE REILS POWER INSTALLATION W/ GREEN MOUNTAIN POWER, 229-7933. (STARR PARNIGONI)

A / 37 REILS WIRING DIAGRAM
SCALE: NONE



B / 37 REILS ELECTRICAL EQUIPMENT
SCALE: NONE ITEM 864.07A



C / 37 REILS POWER INSTALLATION
SCALE: NONE ITEM 864.07A

AIP 3-50-0001-06

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

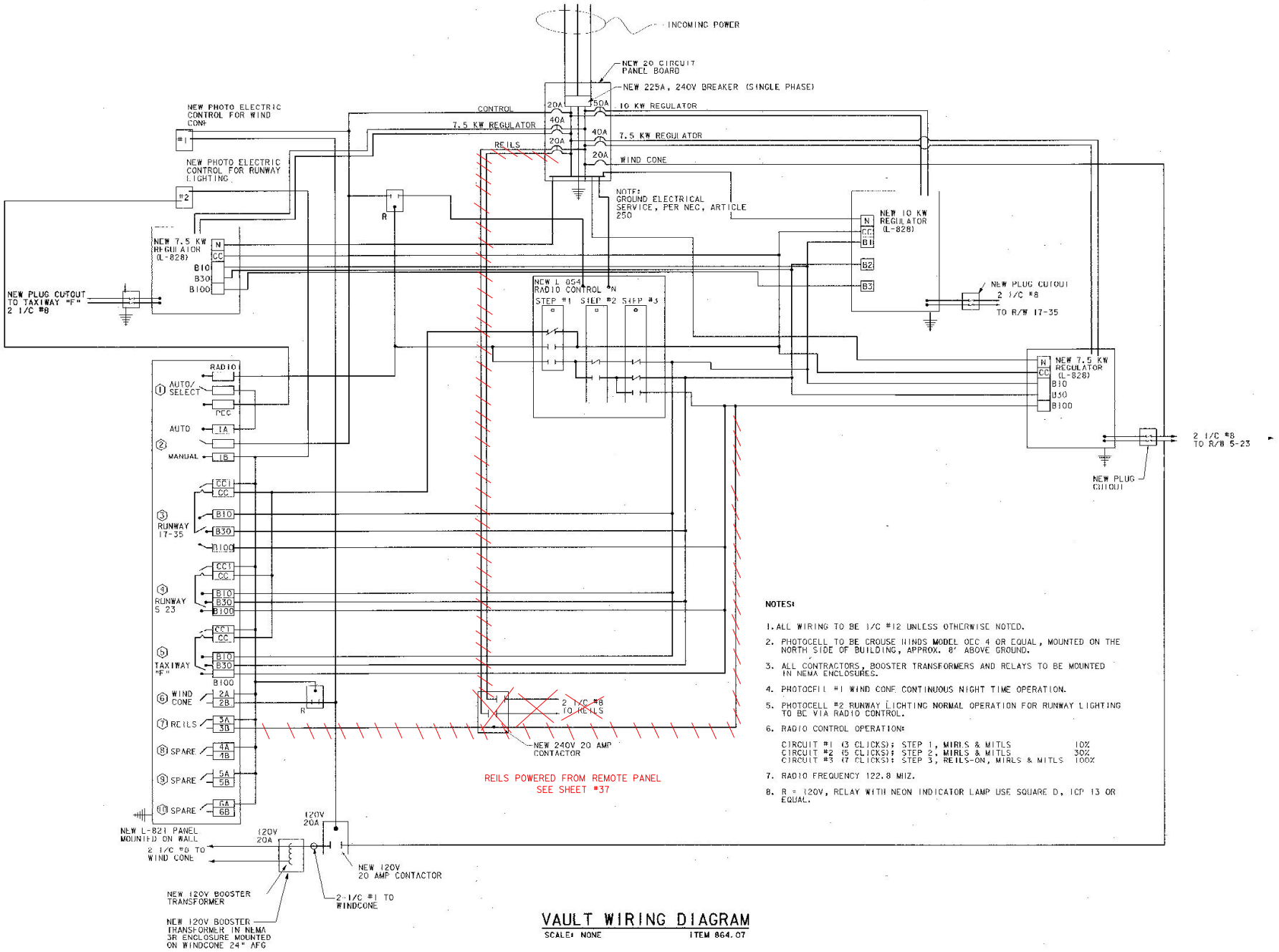
REILS POWER DETAILS

REV.	DATE	DESCRIPTION

Job No. F200001718.01
File No.F201780de37.dgn

Designed by: GMD
Drawn by: MMM
Checked by: LMM
Approved by: GMD

Scale: NTS
Date: 3/21/01
Sheet - Of -
Sheet No 37



NOTES:

1. ALL WIRING TO BE 1/C #12 UNLESS OTHERWISE NOTED.
2. PHOTOCELL TO BE CROUSE HINDS MODEL CEC 4 OR EQUAL, MOUNTED ON THE NORTH SIDE OF BUILDING, APPROX. 8' ABOVE GROUND.
3. ALL CONTRACTORS, BOOSTER TRANSFORMERS AND RELAYS TO BE MOUNTED IN NEMA ENCLOSURES.
4. PHOTOCELL #1 WIND CONE CONTINUOUS NIGHT TIME OPERATION.
5. PHOTOCELL #2 RUNWAY LIGHTING NORMAL OPERATION FOR RUNWAY LIGHTING TO BE VIA RADIO CONTROL.
6. RADIO CONTROL OPERATION:

   CIRCUIT #1 (3 CLICKS); STEP 1, MIRLS & MITLS 10%
   CIRCUIT #2 (5 CLICKS); STEP 2, MIRLS & MITLS 30%
   CIRCUIT #3 (7 CLICKS); STEP 3, REILS-ON, MIRLS & MITLS 100%

7. RADIO FREQUENCY 122.8 MHZ.
8. R = 120V, RELAY WITH NEON INDICATOR LAMP USE SQUARE D, ICP 13 OR EQUAL.

VAULT WIRING DIAGRAM

SCALE: NONE ITEM 864.07

AIP 3-50-0001-06

DESCRIPTION | REV. | DATE

File No:F20071801de53B.dgn

Job No. F20000171B.01

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

VAULT WIRING DIAGRAM

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

Designed by GMD | Drawn by MMM | Checked by | Approved by GMD

Scale: NTS

Date: 3/21/01

Sheet - OF

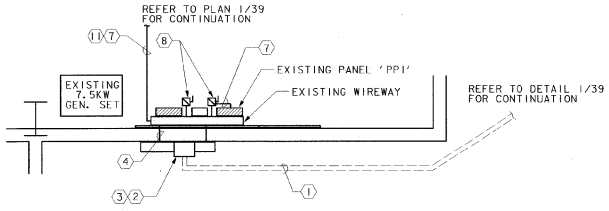
Sheet No 38

NOTES:

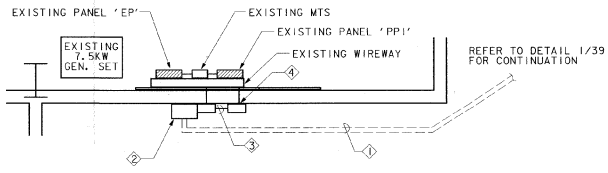
1. REFER TO SHEET 40 FOR SYMBOLS AND DEMOLITION & CONSTRUCTION NOTES.
2. VAULT WALL CONSTRUCTION (EXIST.): 5/8" TYPE X GPYSUM WALL BOARD MTD ON 6" METAL STUDS.
3. VAULT CEILING CONSTRUCTION: 5/8" FIRE RETARDANT TREATED PLYWOOD OVER 8" STEEL JOISTS @ 16" O.C. 5/8" TYPE X GYPSUM BOARD BELOW.
4. VAULT CEILING, APPROX 8' AFF.
5. FLOOR IS PCC.
6. DOOR: EXISTING 4'-0"x6'-8" FLUSH STEEL 45 MIN. FIRE RATING.
7. COORDINATE ACCESS TO VAULT WITH DISTRICT SUPERINTENDENT.
8. INSTALL ALL WALL MOUNTED EQUIPMENT, IN VAULT ON 1/2" AC INTERIOR PLYWOOD, PAINTED GRAY.
9. ANTENNA FOR NEW RADIO CONTROLLER TO BE MOUNTED ON ROOF OF HANGAR.
10. CONTRACTOR TO COORDINATE ACCESS TO VAULT AREA WITH DISTRICT TRANSPORTATION ADMINISTRATION - ERNEST ENGELHARDT @ 828-2691.

EQUIPMENT SCHEDULE: ⊛

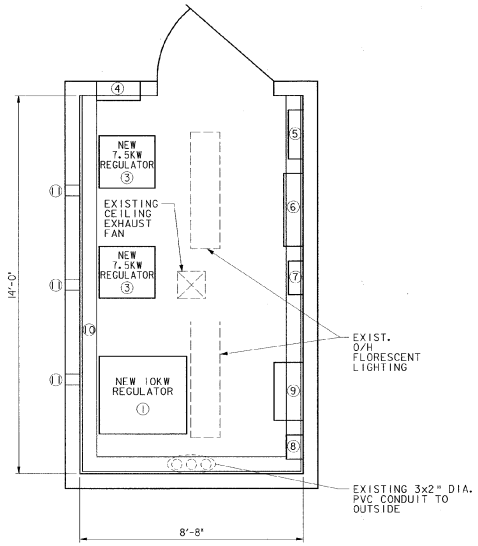
1. NEW L828 7.5KW REGULATOR (R/W 17-35) 240V, 1 PHASE, 3 STEP 6.6 AMP OUTPUT.
2. NEW L828 7.5KW REGULATOR (R/W 5-23) 240V, 1 PHASE, 3 STEP 6.6 AMP OUTPUT.
3. NEW L828 7.5KW REGULATOR (TAXIWAY 'F'), 240V, 1 PHASE, 3 STEP
4. NEW WALL FAN.
5. NEW L821 CONTROL PANEL.
6. NEW L-854 REMOTE RADIO CONTROLLER.
7. NEW 20 CIRCUIT PANEL BOARD - SERVICE ENTRANCE 120/240 V WITH 200 AMP MAIN BREAKER.
8. NEW BOOSTER TRANSFORMER 120V - WIND CONE.
9. NEW NEMA-12 ENCLOSURE WITH HINGE COVER & LATCH HANDLE (APPROX. 24"x30").
10. NEW WIREWAY 6"x6" CONTINUOUS AROUND ROOM. NEMA-1 W/ HINGED COVER, APPROX. 3' AFF.
11. NEW SERIES PLUG CUT OUT. TYPE S-1 CROUSE HINDS CAT #30775, OR EQUAL.



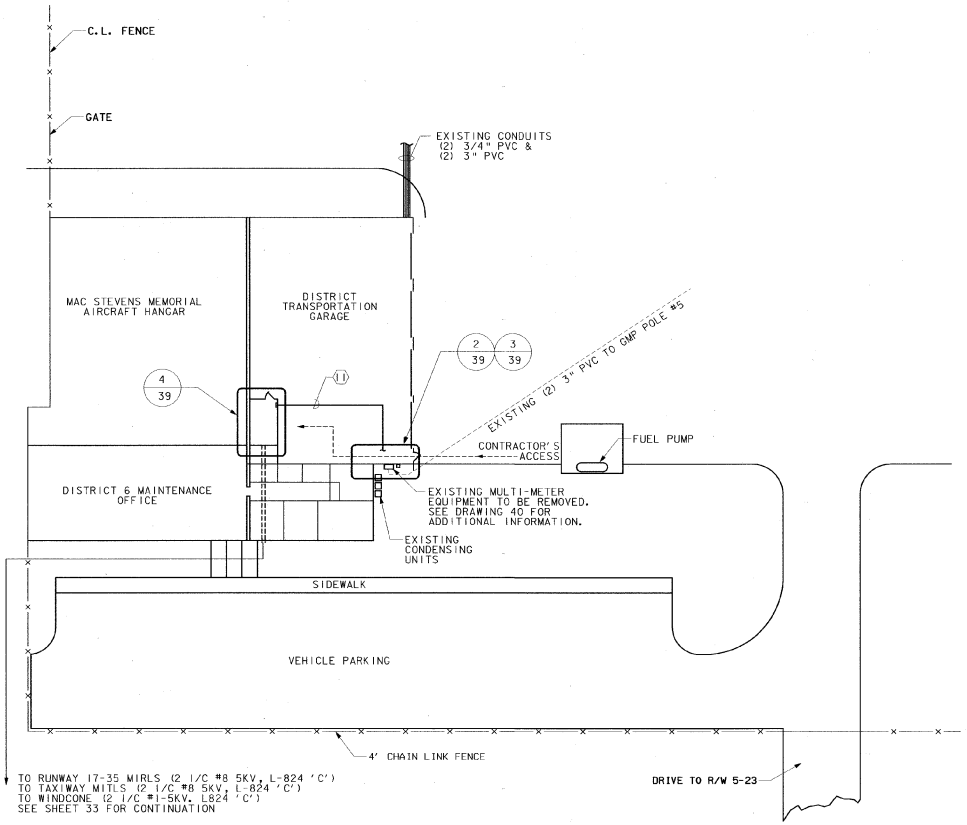
3/39 ENLARGED PLAN - SERVICE ENTRANCE EQUIPMENT (PROPOSED)
SCALE: 1/4" = 1'-0"



2/39 ENLARGED PLAN - SERVICE ENTRANCE EQUIPMENT (DEMOLITION)
SCALE: 1/4" = 1'-0"



4/39 NEW VAULT LAYOUT
SCALE: 1/2" = 1'-0"



1/39 PARTIAL SITE PLAN
SCALE: 1" = 20'-0"

AIP 3-50-0001-06

STATE OF VERMONT · DAVID M. DUNN · NO. 3073 · REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION

Job No. F20001718.01
File No:F20001718dae35.dgn

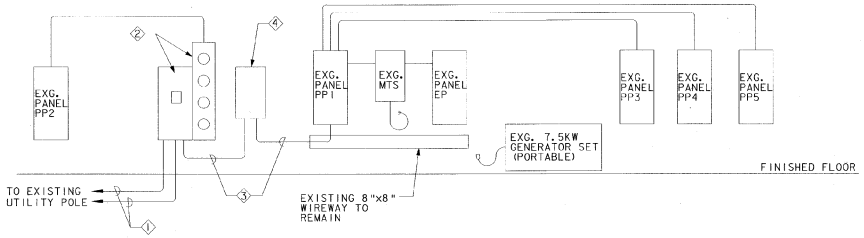
EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

VAULT WIRING PLAN

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

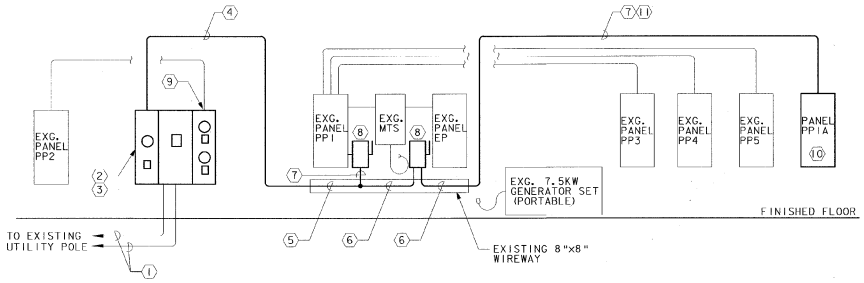
Designed by: RMA
Drawn by: MMM
Checked by: LMM
Approved by: GMD

Scale: AS SHOWN
Date: 3/21/01
Sheet - Of -
Sheet No 39



ONE-LINE POWER RISER DIAGRAM (DEMOLITION)

SCALE: NOT TO SCALE



ONE-LINE POWER RISER DIAGRAM (PROPOSED)

SCALE: NOT TO SCALE

GENERAL NOTES:

1. UNLESS OTHERWISE NOTED, ALL EQUIPMENT SHOWN ON RISER DIAGRAMS AS EXISTING IS TO REMAIN.
2. CONRACTOR SHALL COORDINATE SHUTDOWN AND RE-ACTIVATION TO EXISTING ELECTRICAL SERVICES WITH OWNER AND UTILITY COMPANY TO MINIMIZE OUTAGES.

DEMOLITION NOTES:

1. REMOVE EXISTING 3/0 AWG WIRES FROM EXISTING 3" CONDUIT. PROVIDE 1/4" DRAGLINE FOR INSTALLATION OF PROPOSED FEEDERS AS CALLED FOR IN CONSTRUCTION NOTES.
2. REMOVE EXISTING 400A, 120/240V, 1Ø, 3W MODULAR METER CENTER AND PREPARE EXISTING FEEDER CABLES TO PANEL PP2 FOR RECONNECTION TO PROPOSED METER CENTER.
3. REMOVE EXISTING CONDUIT AND CABLES, PLUG OPENINGS IN WALL AS REQUIRED.
4. REMOVE EXISTING 150A, ENCLOSED CIRCUIT BREAKER AND ASSOCIATED MOUNTING HARDWARE.

CONSTRUCTION NOTES:

1. PROVIDE 3-350MCM IN EXISTING 3" CONDUIT.
2. PROVIDE AN OUTDOOR (NEMA 3R) MODULAR MULTI-METER CENTER, 120/240V, 1Ø, 3W, WITH THE FOLLOWING COMPONENTS:
   - SERVICE ENTRANCE MODULE WITH 600A CIRCUIT BREAKER (SIEMEN'S #WMC6U/BOTTOM FEED - QUANTITY = 1)
   - RINGLESS 400A METER SOCKET AND 400A CIRCUIT BREAKER (SIEMEN'S #WIMM1400 - QUANTITY = 1)
   - RINGLESS 400A METER SOCKET AND 400A CIRCUIT BREAKER (SIEMEN'S #WIMM1400 - QUANTITY = 1)
3. INSTALL UNIT ON EXISTING MOUNTING STRUTS AND PROVIDE ADDITIONAL HARDWARE AS REQUIRED.
4. PROVIDE 3-500MCM & 1#3G IN 4" GRC.
5. PROVIDE 3-500MCM & 1#3G IN EXISTING WIREWAY.
6. PROVIDE 3#3/0 & 1#6G IN EXISTING WIREWAY.
7. PROVIDE 3#3/0 & 1#6G IN 2" GRC.
8. PROVIDE A 200A-2P, FUSED DISCONNECT SWITCH WITH 200A FUSES.
9. RECONNECT EXISTING FEEDERS FROM EXISTING PANELBOARD PP2 TO THE INDICATED 200A METER AND LABEL ASSOCIATED CIRCUIT BREAKER.
10. PROVIDE A 200A, 120/240V, 1Ø, 3W PANELBOARD WITH TWELVE (12) 20A-1P CIRCUIT BREAKERS AND SIX (6) 20A-2P CIRCUIT BREAKERS. SEE DETAIL 4/39 FOR PANEL LOCATION.
11. ROUTE CONDUIT ABOVE EXISTING CEILINGS. COORDINATE ROUTE AND HANGER LOCATIONS WITH EXISTING OBSTRUCTIONS. RESTORE CEILINGS TO PRE-CONSTRUCTION CONDITION.

SYMBOLS

SYMBOL	DESCRIPTION
	BUILDING OUTLINE
S	SINGLE POLE WALL SWITCH
	DUPLEX RECEPTACLE (18" AFF, UNLESS OTHERWISE NOTED).
GFI	GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE (18" AFF, UNLESS OTHERWISE NOTED).
	SURFACE MOUNTED FLUORESCENT LUMINAIRE. FIXTURE TYPE DENOTED.
	PANELBOARD
	FUSED DISCONNECT SWITCH
	BRANCH CIRCUIT WIRING, 2#12 & 1#12G IN 3/4" C UNLESS OTHERWISE NOTED
LP2B-5	ELECTRICAL HOMERUN. 2#12 & 1#12G IN 3/4"C UNLESS OTHERWISE NOTED. PANELBOARD AND CIRCUIT NO. INDICATED

ABBREVIATIONS

ABBREVIATION	EXTENSION
A	AMPERE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMPERE INTERUPTING CAPACITY
AWG	AMERICAN WIRE GAGE
C	CONDUIT
C/B	CIRCUIT BREAKER
DIA.	DIAMETER
ER	EXISTING TO REMAIN
EXG	EXISTING
EXIST.	EXISTING
G	GROUND
GRC	GALVANIZED RIGID CONDUIT
K	KELVIN OR THOUSAND
KV	KILO-VOLT
KVA	KILO-VOLT-AMPERE
KW	KILO-WATT
MCB	MAIN CIRCUIT BREAKER
MLO	MAIN LUG ONLY
MTS	MANUAL TRANSFER SWITCH
P	POLE
PP	POWER PANEL
PVC	POLYVINYL CHLORIDE
T, TX	TRANSFORMER
UON	UNLESS OTHERWISE NOTED
V	VOLTS
VA	VOLT-AMPERE
W	WATT OR WIRE
WP	WEATHERPROOF

AIP 3-50-0001-06

REV. | DATE | DESCRIPTION

File No:F20070d4e40.dgn

Job No. F2000171801

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

ELECTRICAL NOTES, SYMBOLS, ABBREVIATIONS, & RISER DIAGRAMS

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

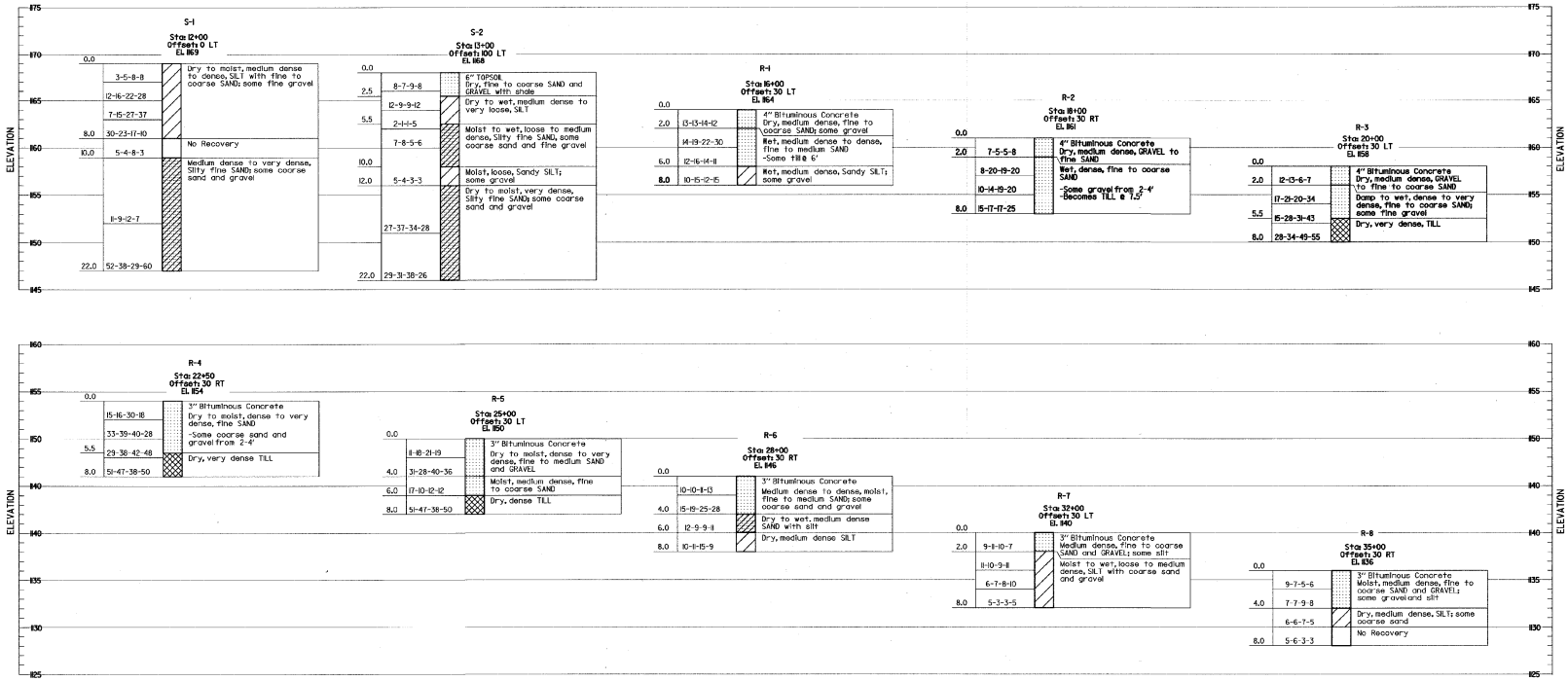
Designed by: GMD | Drawn by: MMM | Checked by: LMM | Approved by: GMD

Scale: AS SHOWN

Date: 3/21/01

Sheet - Of -

Sheet No
40



SYMBOLS:

- SAND; SAND AND GRAVEL
- SILTY SAND; SILT AND SAND
- SILT
- TILL

NOTES:

1. BORINGS DRILLED BY GREEN MOUNTAIN BORING, OCTOBER 1998.
2. DRILLING AND SAMPLING CONFORMS TO AASHTO DESIGNATION T-206.
3. BORING ELEVATIONS WERE SCALED FROM PLAN SHEETS AND SHOULD ONLY BE CONSIDERED APPROXIMATE.

LEGEND:

D N V

PAVEMENT AND SOIL DESCRIPTION

N - BLOWS PER 6-INCH INCREMENTS OF PENETRATION OF SAMPLING SPOON OR PENETRATION IN INCHES FOR THE INDICATED BLOWS OF A 140 LB. HAMMER FALLING 30".

V - SYMBOLS INDICATE EXTENT OF SOIL LAYERS

D - DEPTHS

AIP 3-50-0001-06

REV. | DATE | DESCRIPTION

File No.F20078Boring4.dgn

Job No. F20001718.01

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

BORING LOGS

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

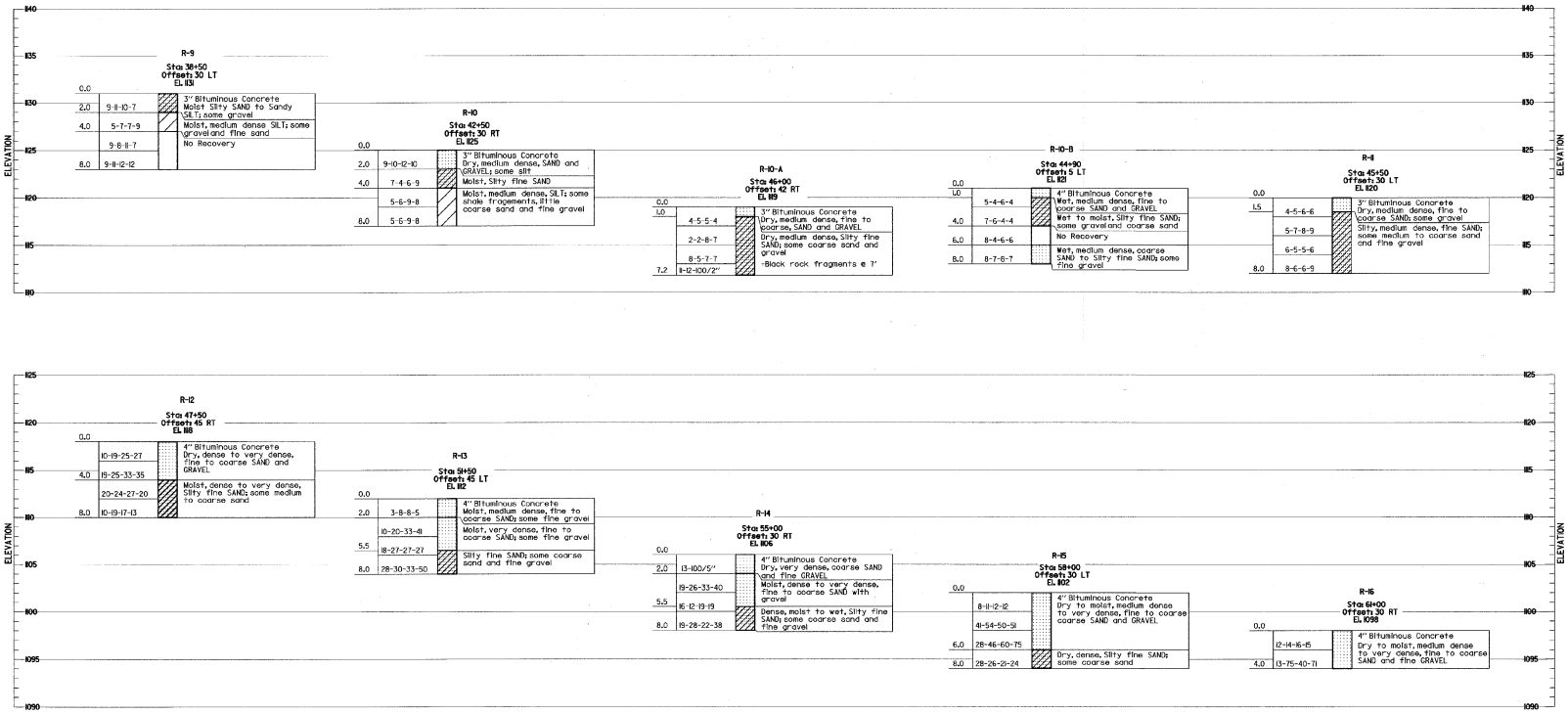
Designed by: KLL
Drawn by:
Checked by:
Approved by: GMD

Scale: 1" = 5'

Date: 3/21/01

Sheet - Of -

Sheet No.
41



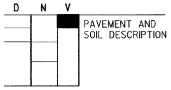
SYMBOLS:

- SAND; SAND AND GRAVEL
- SILTY SAND; SILT AND SAND
- SILT
- TILL

NOTES:

1. BORINGS DRILLED BY GREEN MOUNTAIN BORING, OCTOBER 1998.
2. DRILLING AND SAMPLING CONFORMS TO AASHTO DESIGNATION T-206.
3. BORING ELEVATIONS WERE SCALED FROM PLAN SHEETS AND SHOULD ONLY BE CONSIDERED APPROXIMATE.

LEGEND:



N - BLOWS PER 6-INCH INCREMENTS OF PENETRATION OF SAMPLING SPOON OR PENETRATION IN INCHES FOR THE INDICATED BLOWS OF A 140 LB. HAMMER FALLING 30".

V - SYMBOLS INDICATE EXTENT OF SOIL LAYERS

D - DEPTHS

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

File No.F20017801bor42.dgn

Job No. F20000171&.01

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

BORING LOGS

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

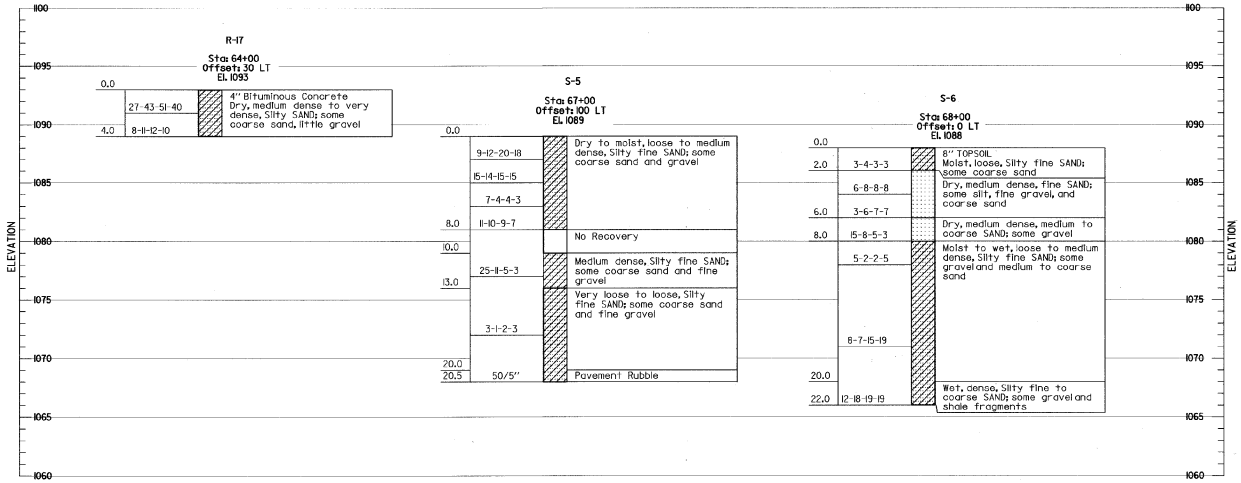
Designed by: KLL
Drawn by:
Checked by:
Approved by: CMD

Scale: 1" = 5'

Date: 3/21/01

Sheet - Of -

Sheet No
42



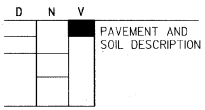
SYMBOLS:

- SAND; SAND AND GRAVEL
- SILTY SAND; SILT AND SAND
- SILT
- TILL

NOTES:

1. BORINGS DRILLED BY GREEN MOUNTAIN BORING, OCTOBER 1998.
2. DRILLING AND SAMPLING CONFORMS TO AASHTO DESIGNATION T-206.
3. BORING ELEVATIONS WERE SCALED FROM PLAN SHEETS AND SHOULD ONLY BE CONSIDERED APPROXIMATE.

LEGEND:



N - BLOWS PER 6-INCH INCREMENTS OF PENETRATION OF SAMPLING SPOON OR PENETRATION IN INCHES FOR THE INDICATED BLOWS OF A 140 LB. HAMMER FALLING 30".

V - SYMBOLS INDICATE EXTENT OF SOIL LAYERS

D - DEPTHS

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. 42000178.01

File No. f20178dbor43.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

BORING LOGS

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

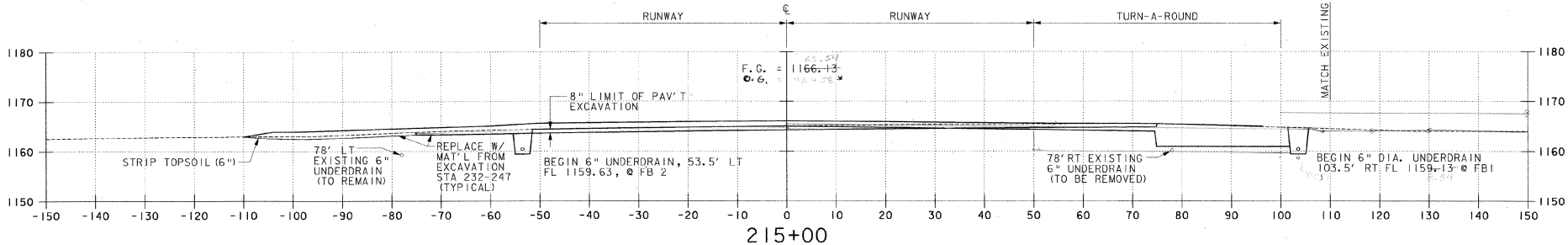
Designed by: K.L.L.
Drawn by:
Checked by:
Approved by: GMD

Scale: 1" = 5'

Date: 3/21/01

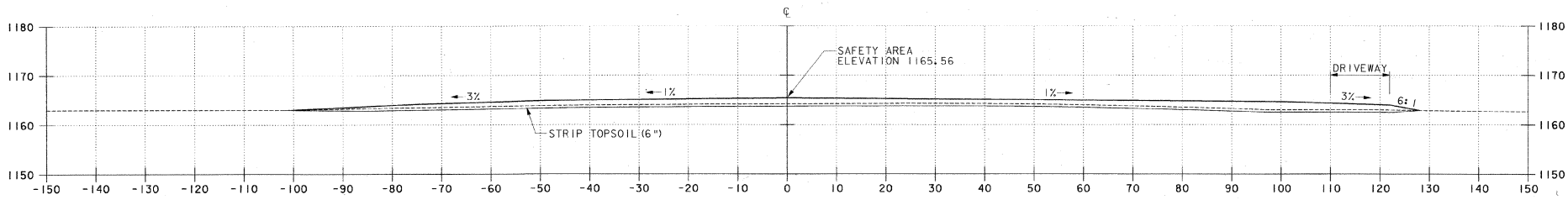
Sheet - Of -

Sheet No.
43

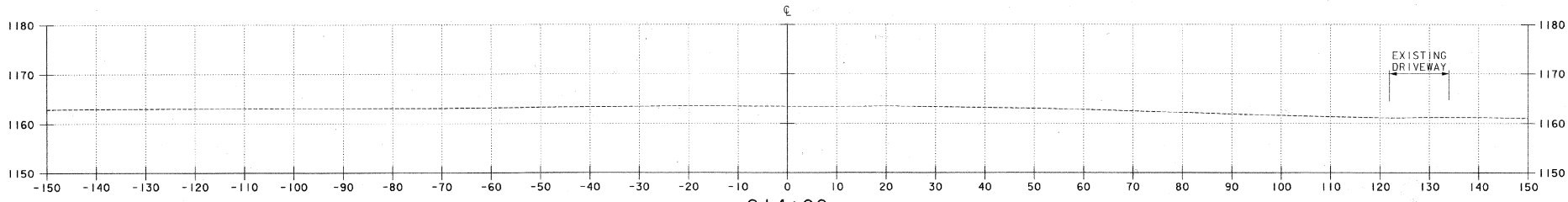


215+00

BEGIN RUNWAY RECONSTRUCTION



214+50



214+00

BEGIN CONSTRUCTION +25

* ORIGINAL GROUND BASED ON AS BUILT F.G. & DAP-04, CORRECTED TO NAVD 88

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F20000117.8.01

File No. f2017801xs4.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

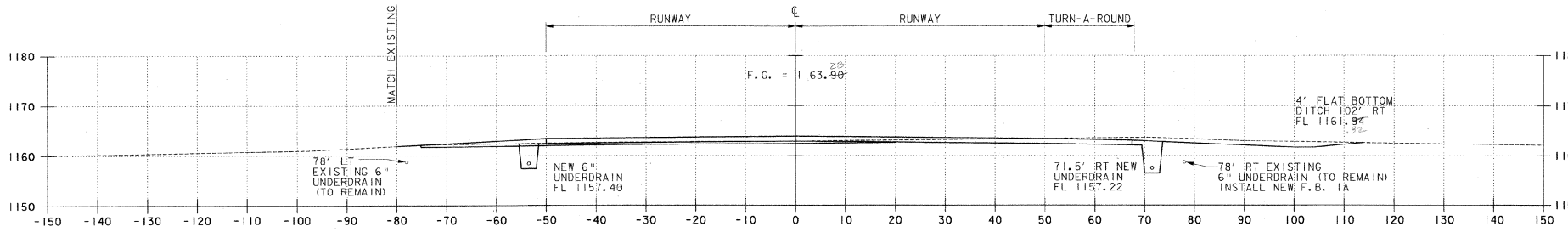
Designed by: GWD | Drawn by: MMM | Checked by: BMC | Approved by: GWD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

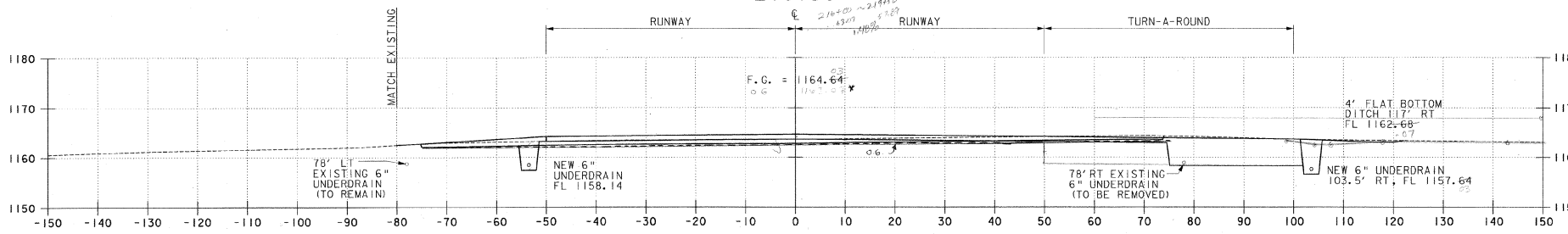
Date: 3/21/01

Sheet - Of -

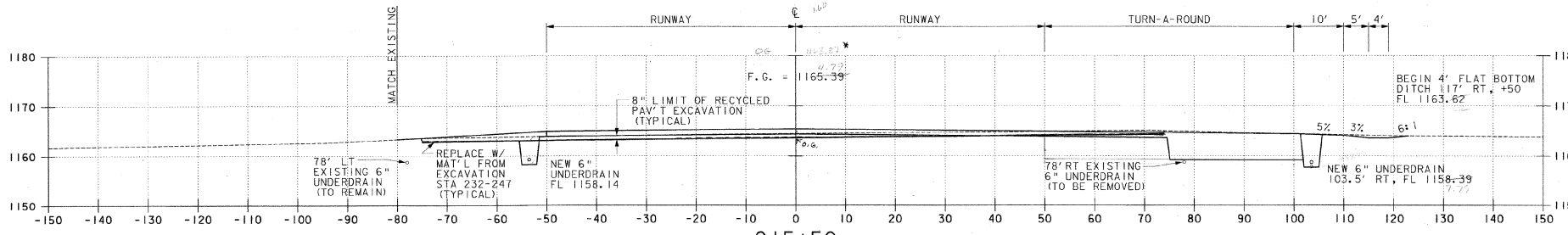
Sheet No
44



216+50



216+00



215+50

* ORIGINAL GROUND BASED ON AS-BUILT PE, ANAP-04 CORRECTED TO NAVD-88

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. P200001718.01

File No.P20718Oxs5.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

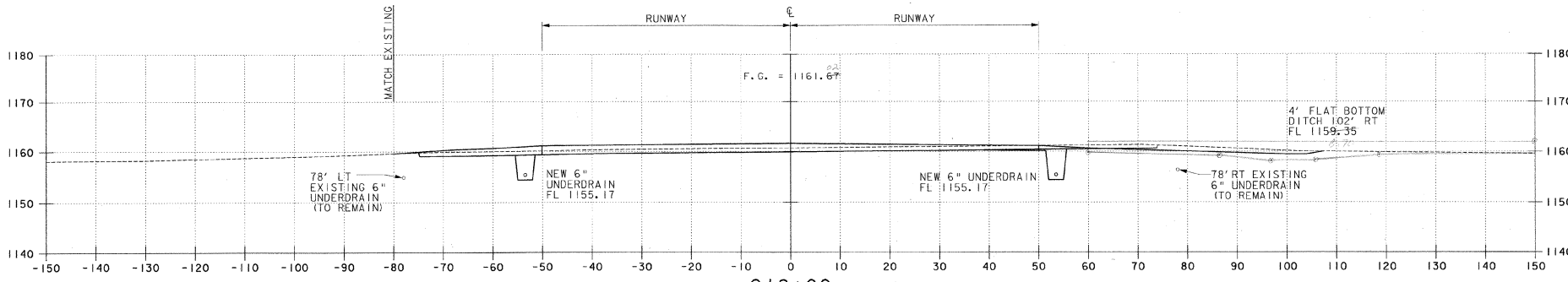
Designed by GMD	Drawn by MMM	Checked by BMC	Approved by GMD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

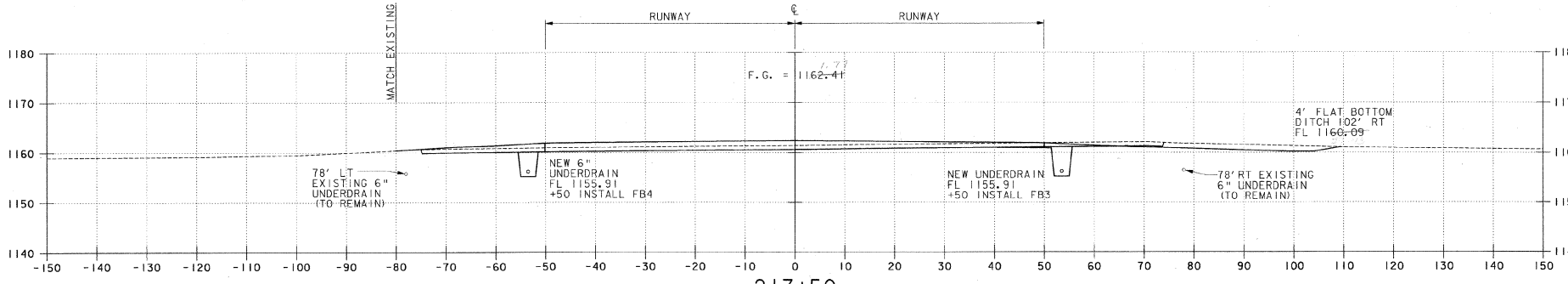
Date: 3/21/01

Sheet - Of -

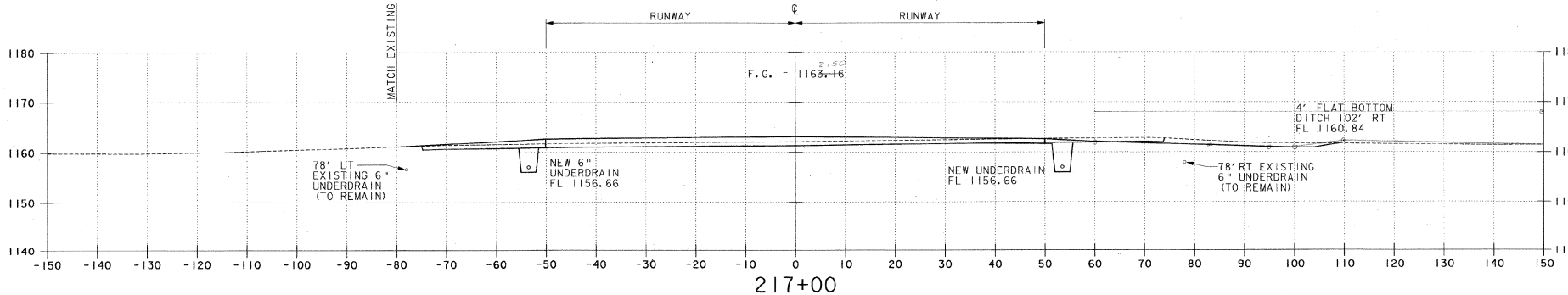
Sheet No
45



218+00



217+50



217+00

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F20001718.01

File No. f20718l0ks6.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

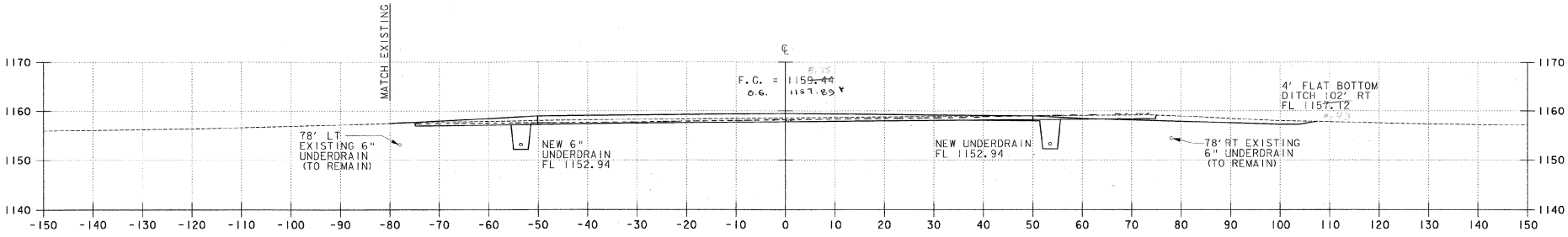
Designed by: GMD | Drawn by: MMM | Checked by: BMC | Approved by: GMD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

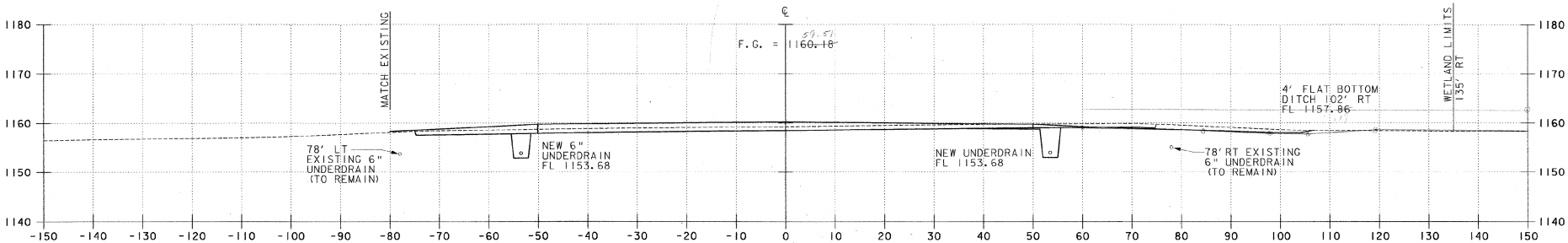
Date: 3/21/01

Sheet - Of -

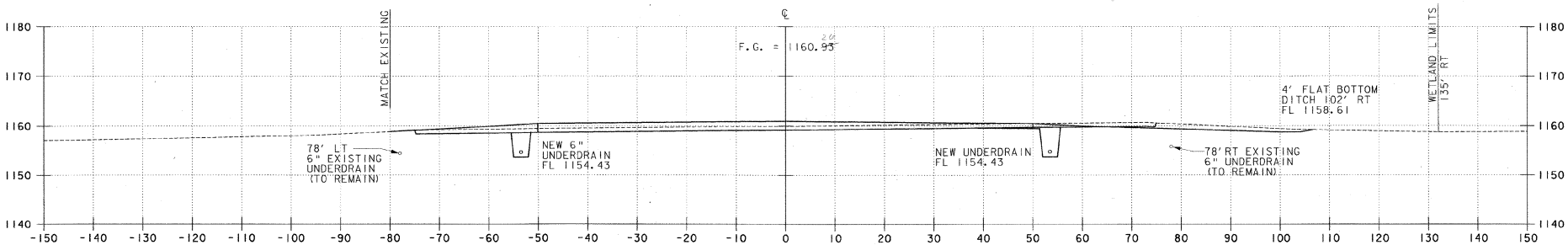
Sheet No
46



219+50



219+00



218+50

* 06 BASED ON AS BUILT EG: A900-04, GRADING TO MAY-88

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F200001118.01

File No. f200118018x37.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

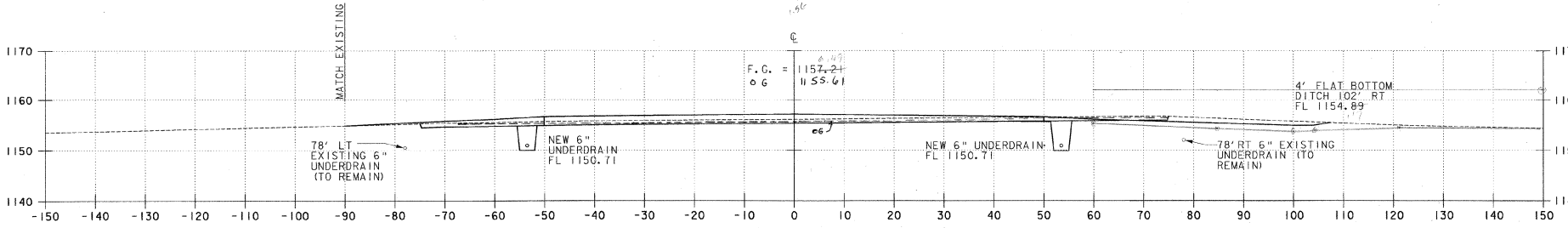
Designed by: CMD
Drawn by: MMM
Checked by: BMC
Approved by: CMD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

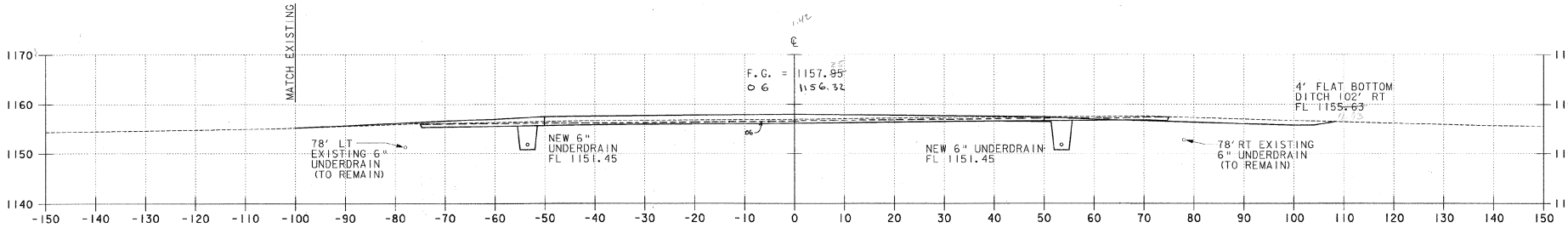
Date: 3/21/01

Sheet - Of -

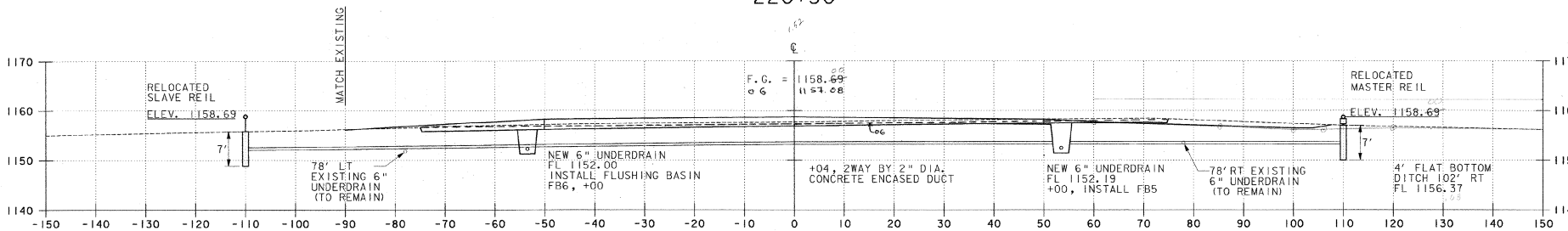
Sheet No
47



221+00



220+50



220+00

* OG BASED ON AS BUILT EG A0A0-04, CORRECTED TO NAVD-88

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F200001718.01

File No.f207180xs8.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

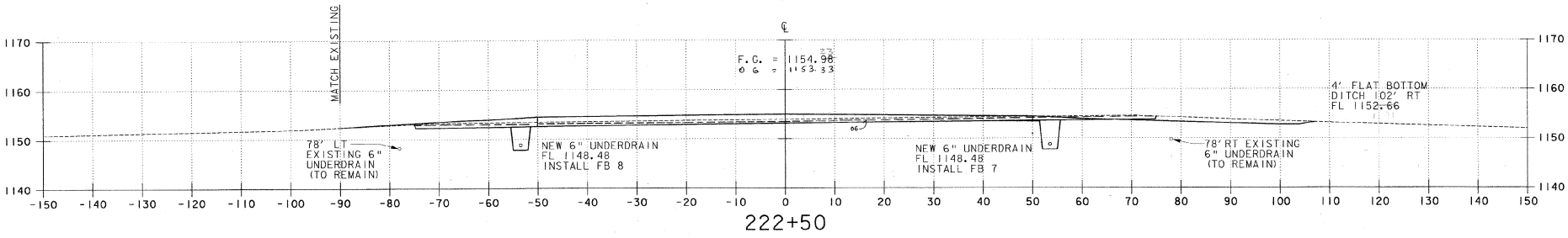
Designed by GWD	Drawn by MMM	Checked by BWC	Approved by GWD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

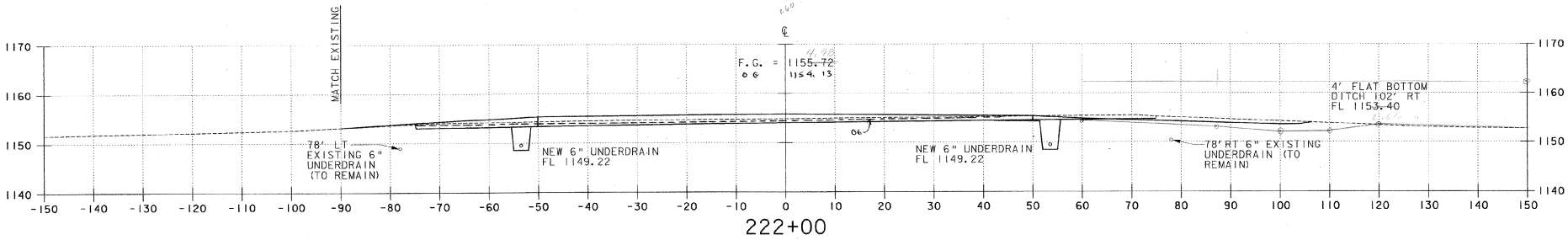
Date: 3/21/01

Sheet - Of

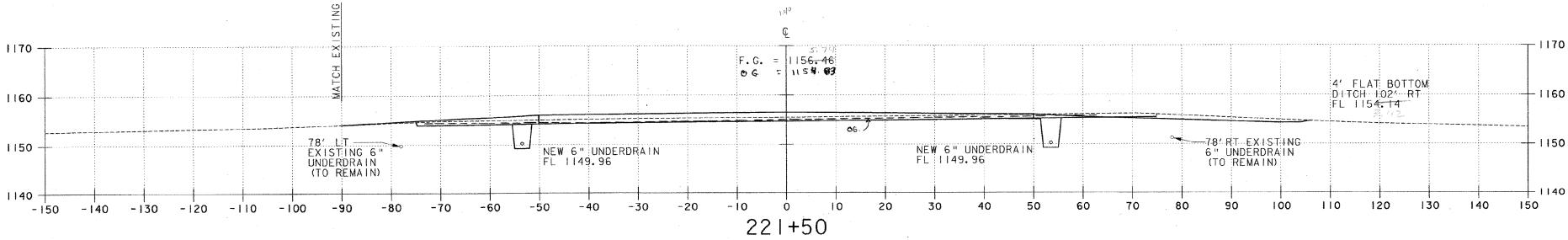
Sheet No
48



222+50



222+00



221+50

DS BASED ON AS BUILT FG, ADAC-04, CORRECTED TO NAVD-88

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. P200001718.01

File No. f200718001x83.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

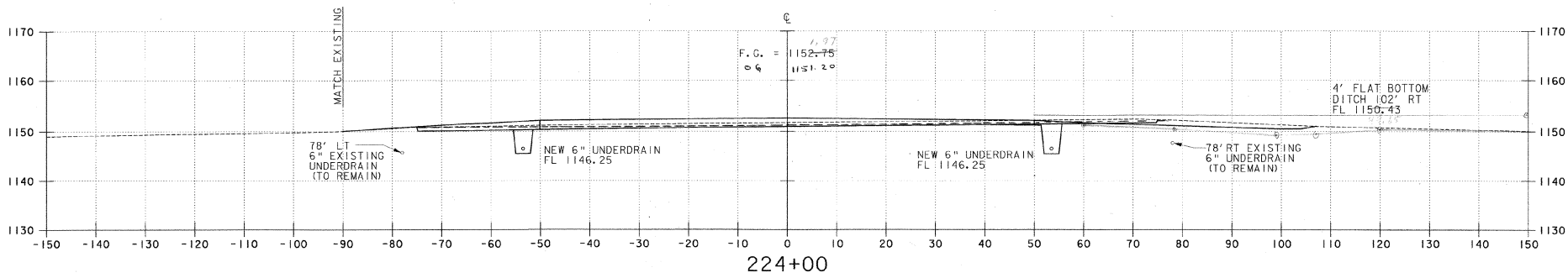
Designed by GMD | Drawn by MMM | Checked by BMC | Approved by GMD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

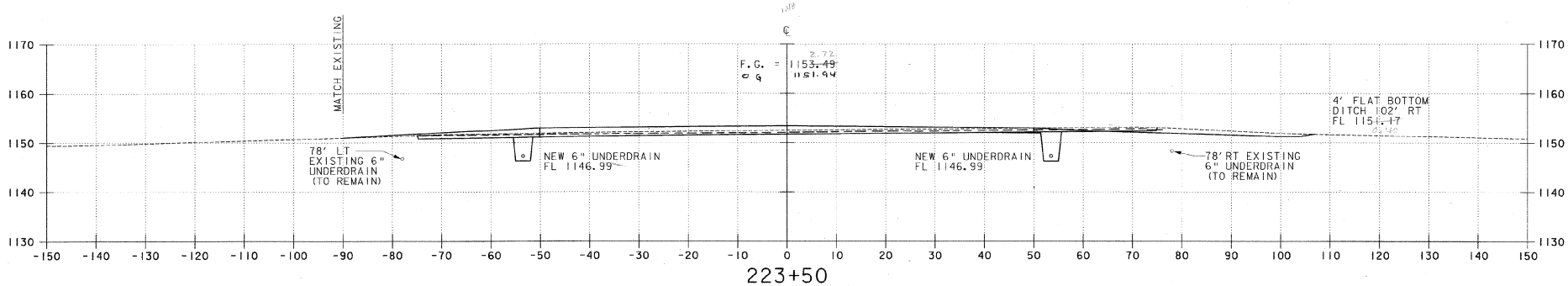
Date: 3/21/01

Sheet - Of

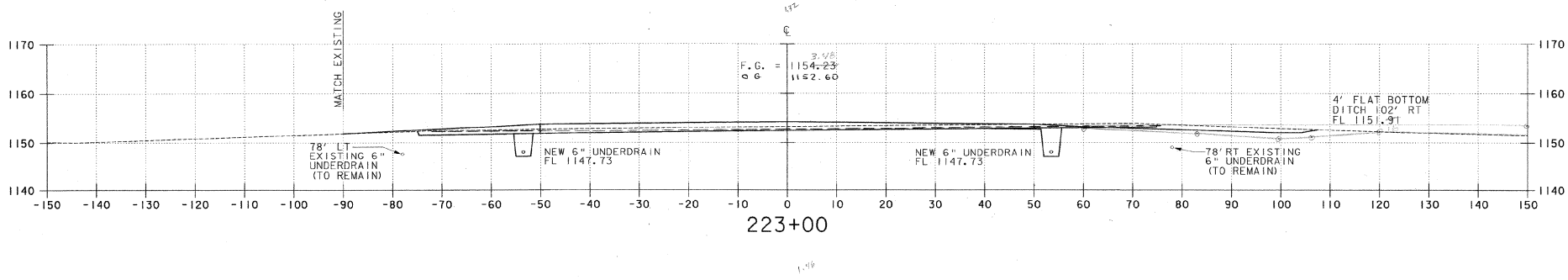
Sheet No
49



224+00



223+50



223+00

OG BASED ON AS BUILT EG, APR-04, CORRECTED TO NOVD-88

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F200001718.01

File No.f20718Oxs60.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

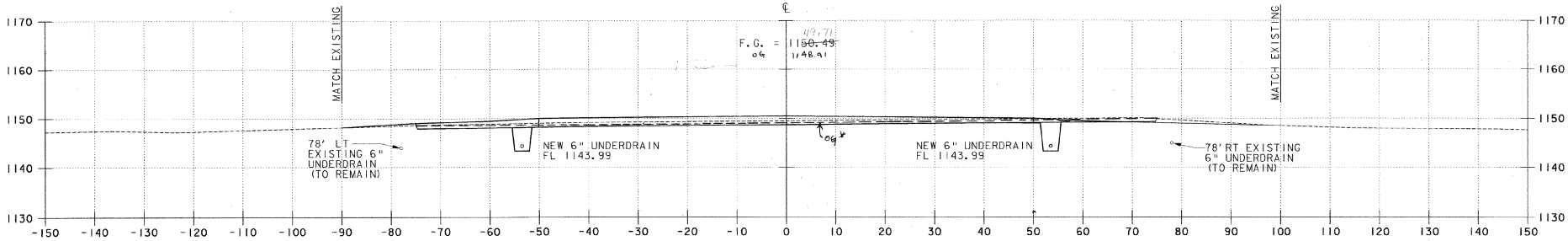
Designed by GMD | Drawn by MAM | Checked by BMC | Approved by GMD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

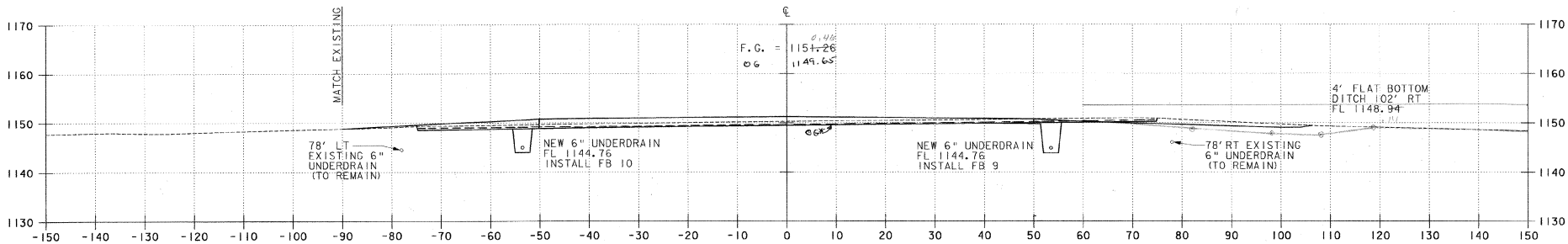
Date: 3/21/01

Sheet - Of

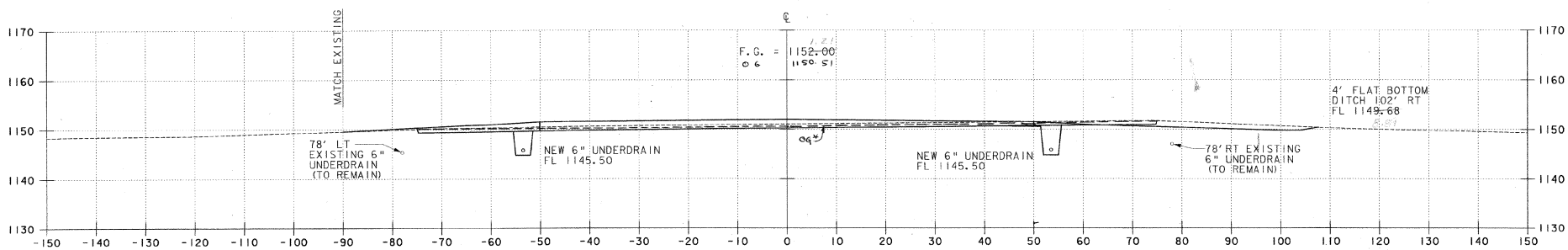
Sheet No
50



225+50



225+00



224+50

*OG BASED ON AS BUILT FG-ADAP-04, ADJUSTED TO NAVD-88

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F20001718.01 | File No. f20718cskall.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

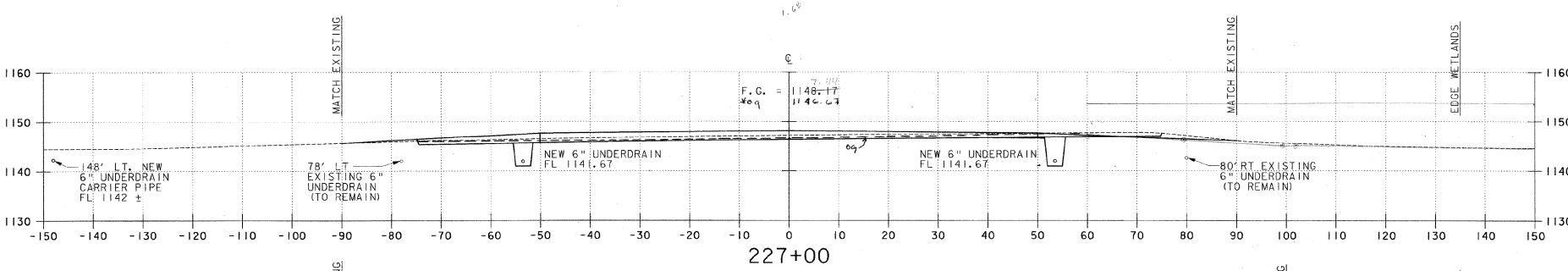
Designed by: GMD | Drawn by: MMM | Checked by: BMC | Approved by: GMD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

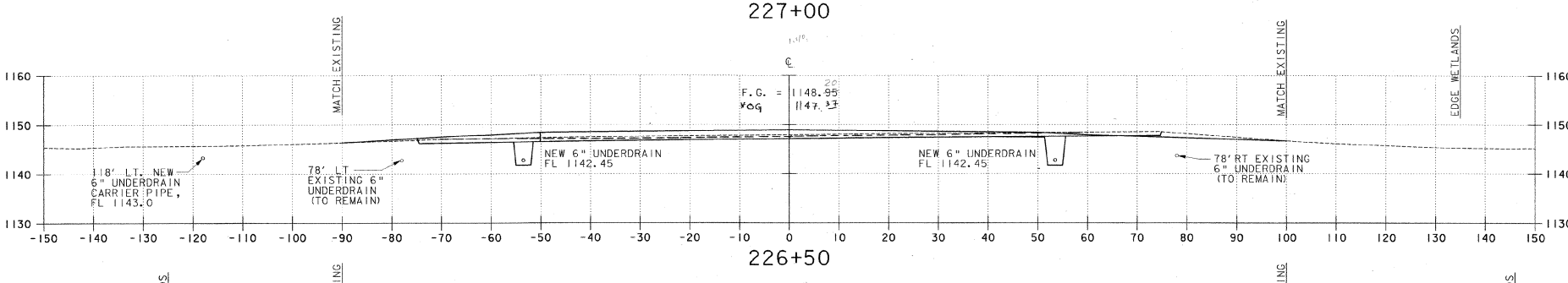
Date: 3/21/01

Sheet - Of

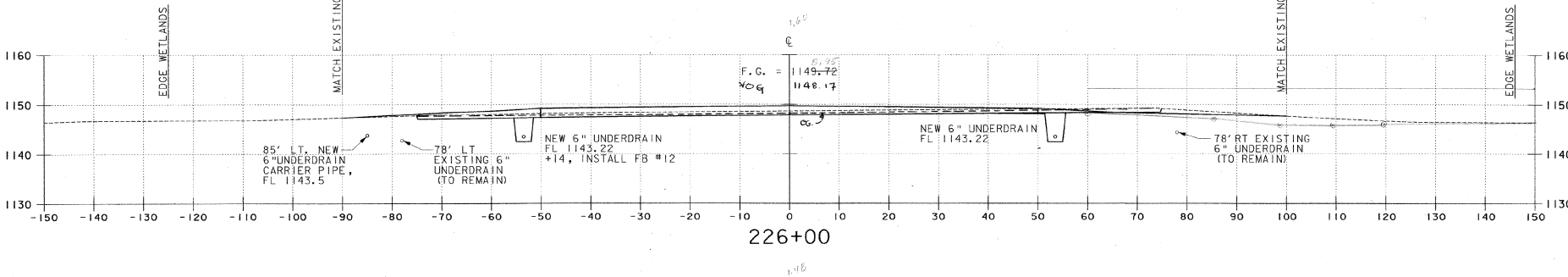
Sheet No
51



227+00



226+50



226+00

* 06 BASED ON AS BUILT FB. APP-14, CONNECTED TO NAVD 88

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F200001718.01

File No.F20718Oxsit2.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

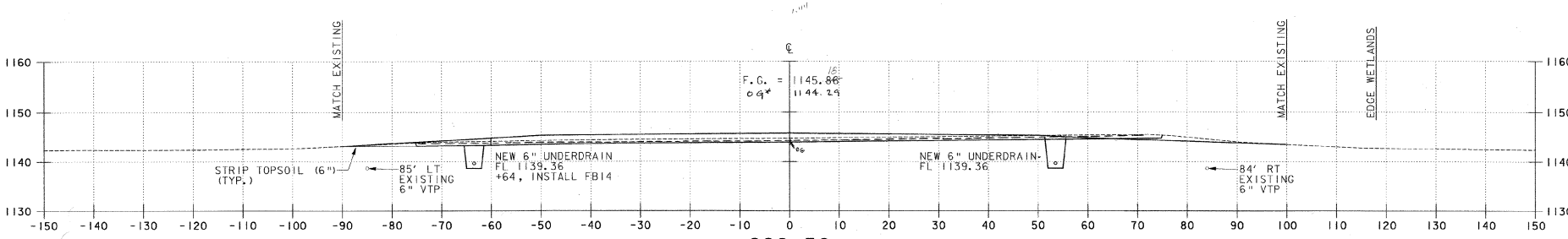
Designed by GMD	Drawn by MAM	Checked by BMC	Approved by GMD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

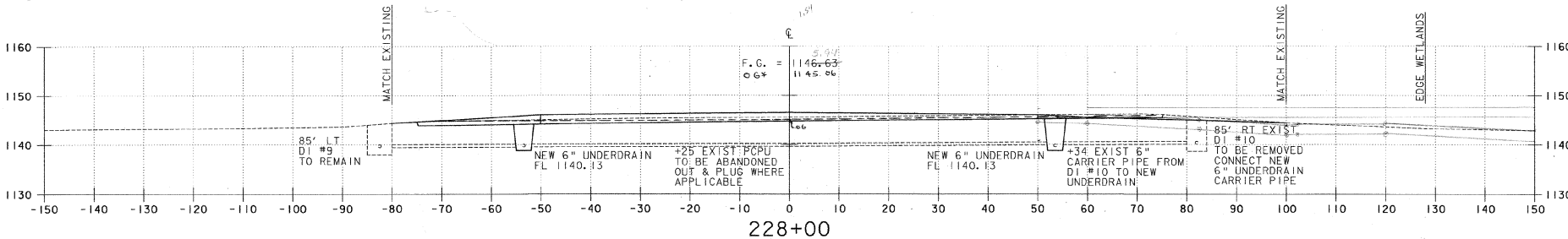
Date: 3/21/01

Sheet - Of

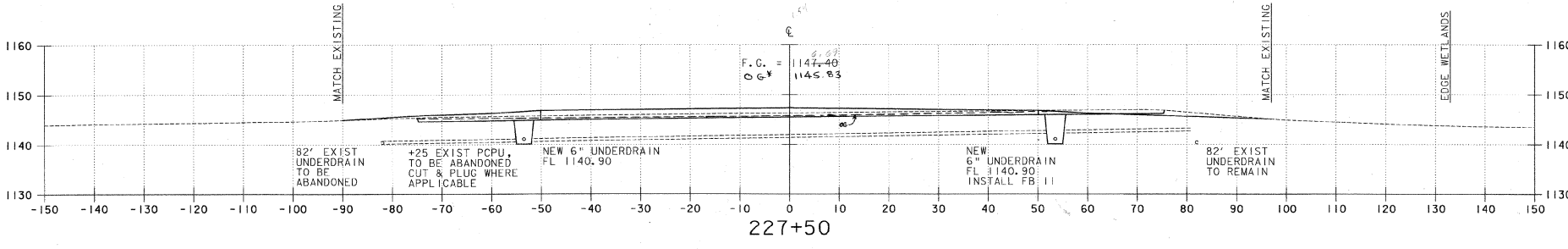
Sheet No
52



228+50



228+00



227+50

* PG PASSED ON AS BUILT EG, ADAP-04, CONNECTED TO NAVD-88

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F200001718.01

File No.f207180xs13.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

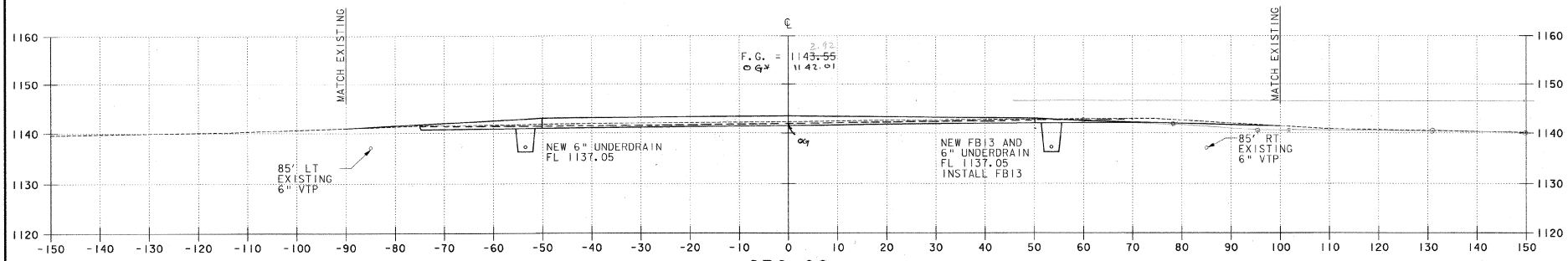
Designed by: GWD	Drawn by: MMM	Checked by: BWC	Approved by: GWD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

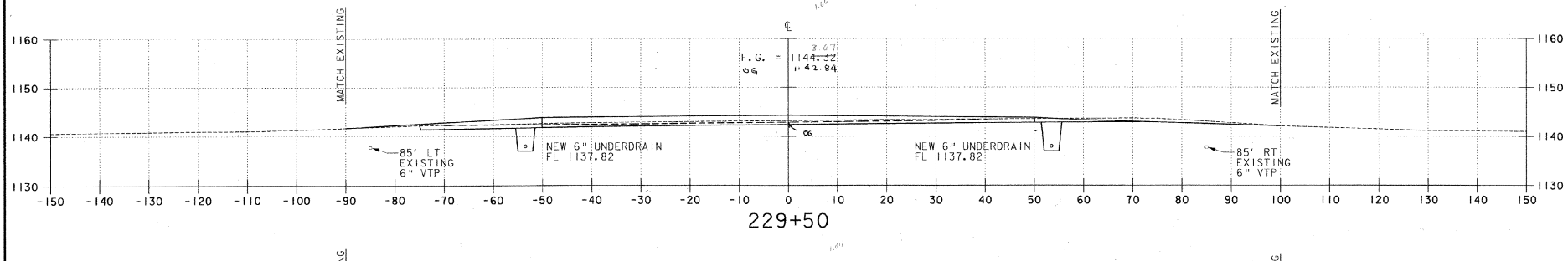
Date: 3/21/01

Sheet - Of

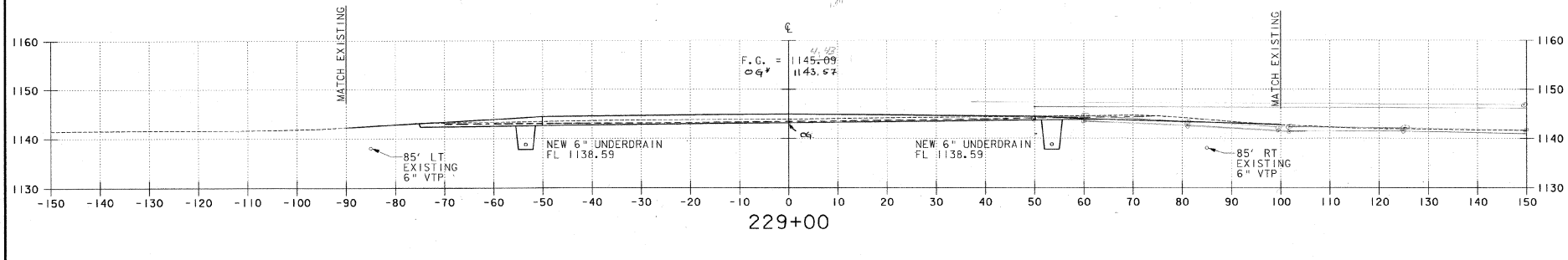
Sheet No
53



230+00



229+50



229+00

DESIGN GROUND BASED ON AS BUILT EG, ADAT-DA, CONNECTED TO NAVD-88

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F200001718.01

File No.f20f180xs4-dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

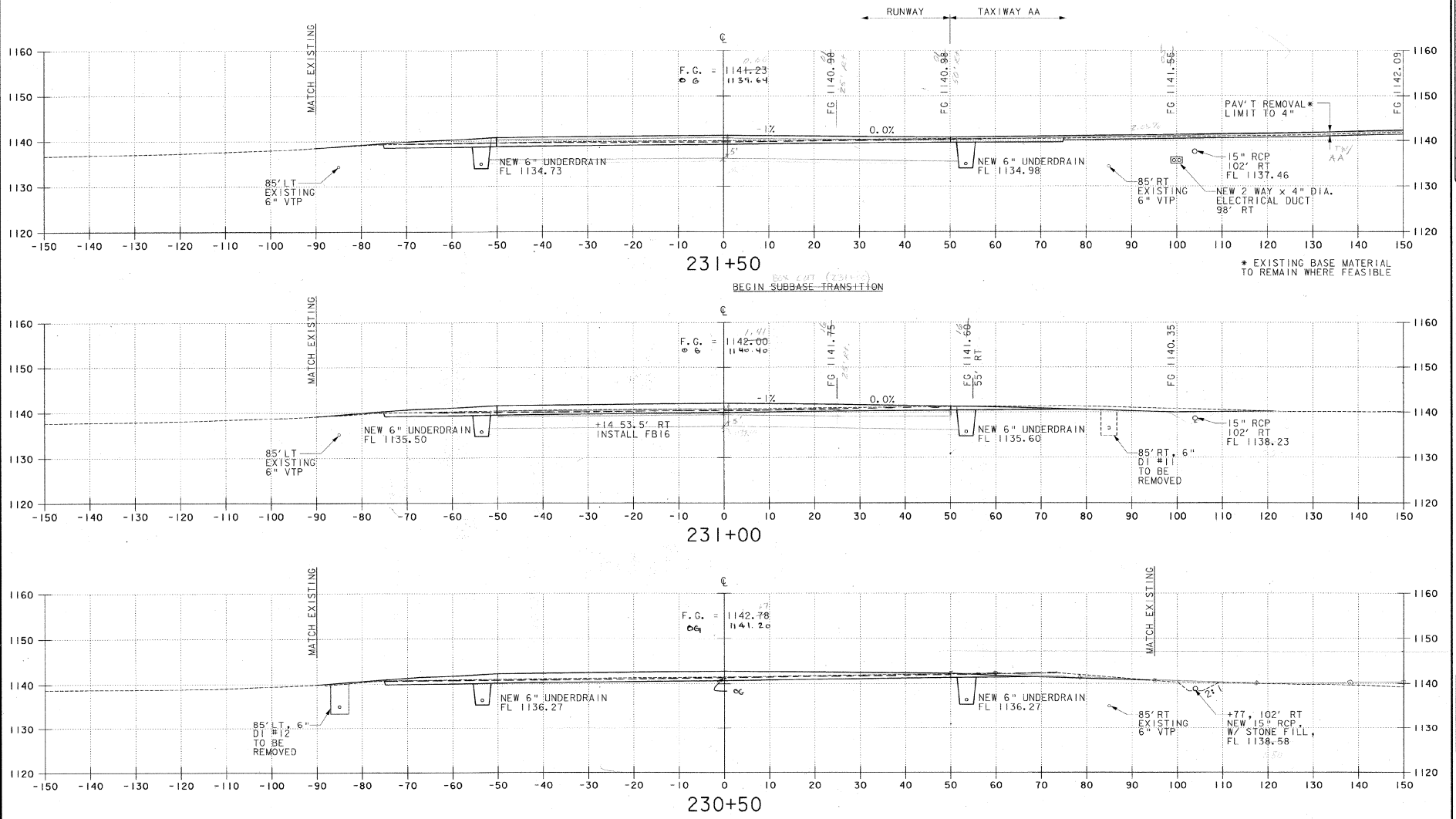
Designed by: GMD
Drawn by: MMM
Checked by: BMC
Approved by: GMD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

Date: 3/21/01

Sheet - Of

Sheet No
54



ADAP-04

OG BASED ON AS BUILT F.G. ADJUSTED TO NAVD-88

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F20000117.18.01

File No. f20071801xsl5.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

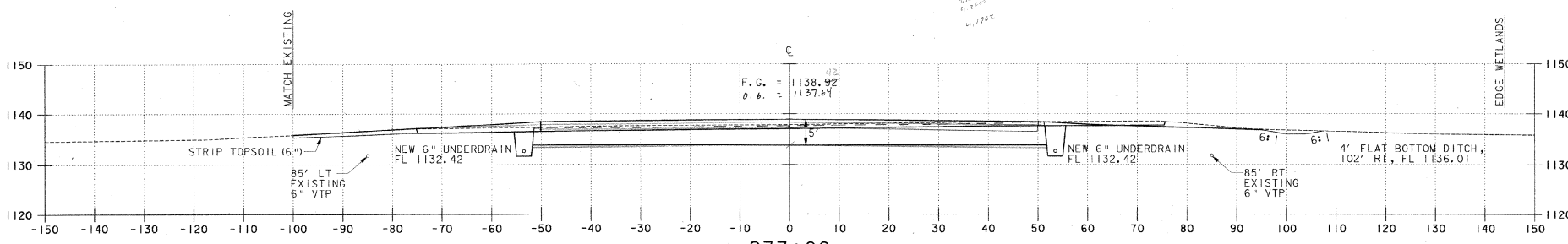
Designed by: GMD	Drawn by: MMM	Checked by: BMC	Approved by: GMD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

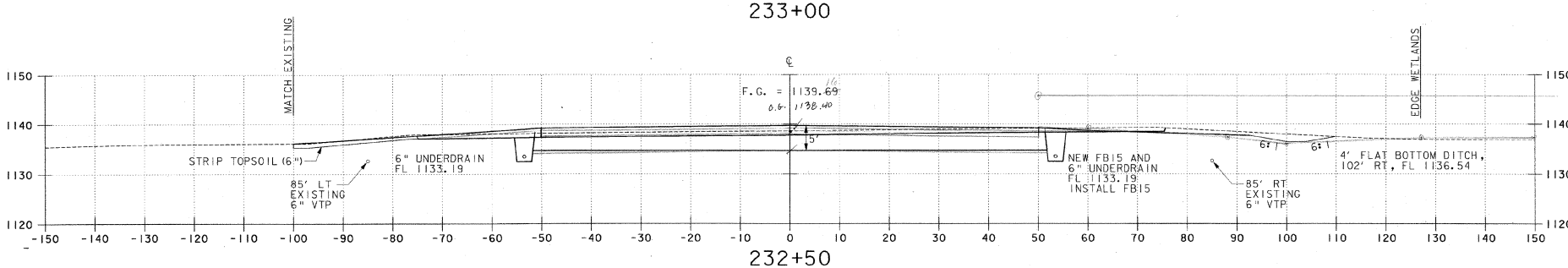
Date: 3/21/01

Sheet - Of

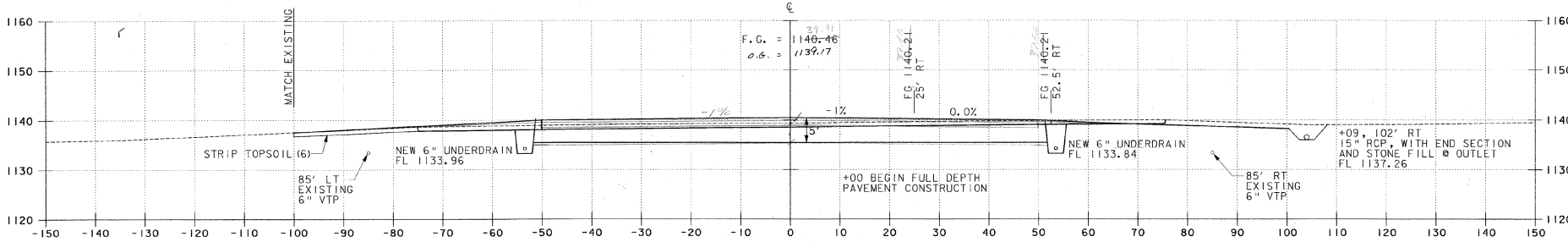
Sheet No
55



233+00



232+50



232+00

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. P200001718.01

File No.f2007180cs35.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

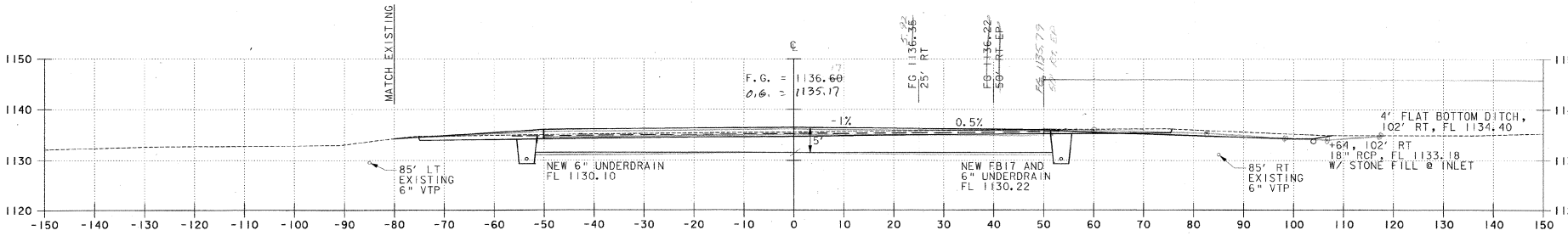
Designed by: GWD
Drawn by: MMM
Checked by: BWC
Approved by: GWD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

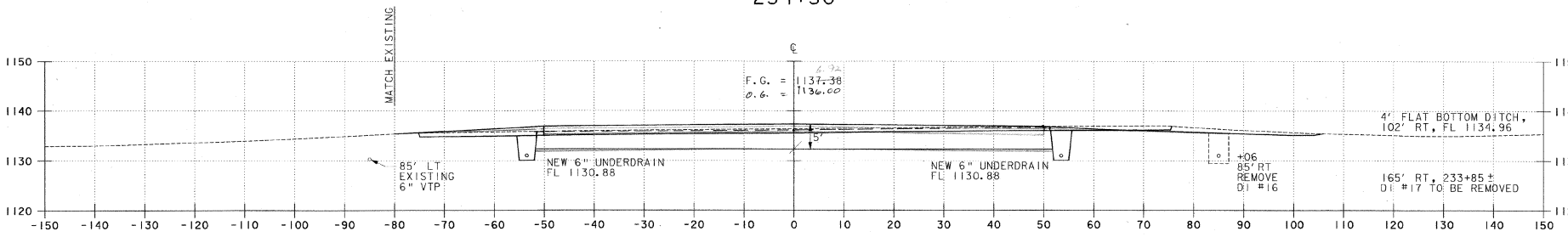
Date: 3/21/01

Sheet - Of

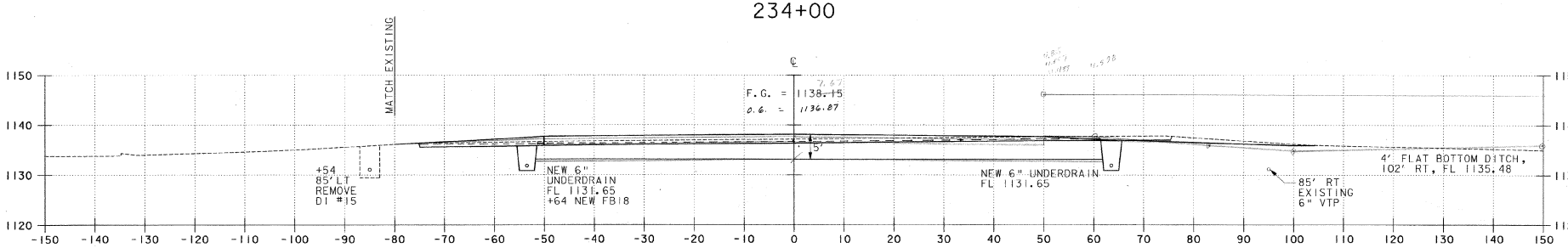
Sheet No
56



234+50



234+00



233+50

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. P200001718.01

File No.f20718Oxsit.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

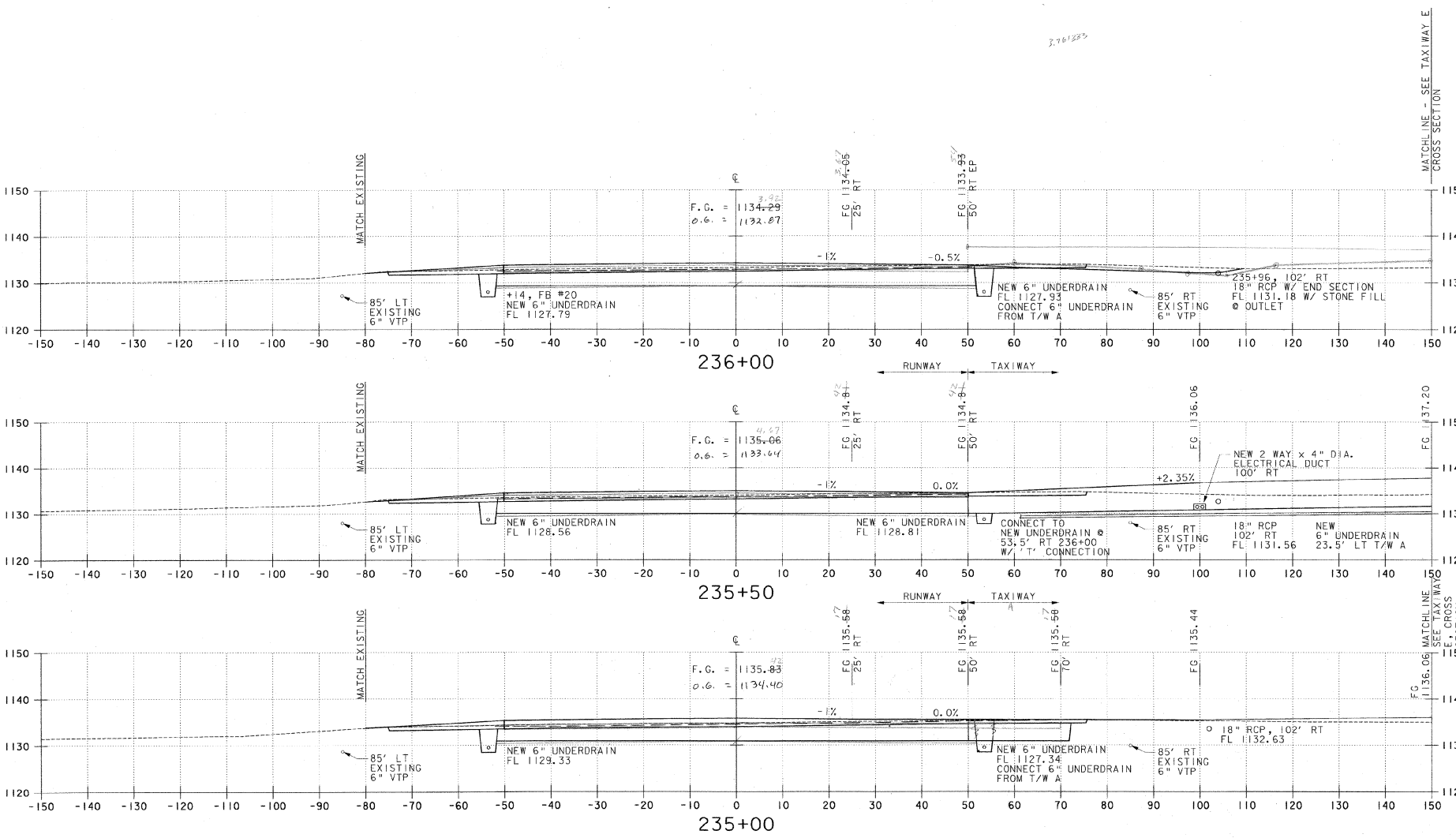
Designed by GWD | Drawn by MMM | Checked by BWC | Approved by GWD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

Date: 3/21/01

Sheet - Of

Sheet No.
57



AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F200001718.01

File No. F20718Oxs8.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

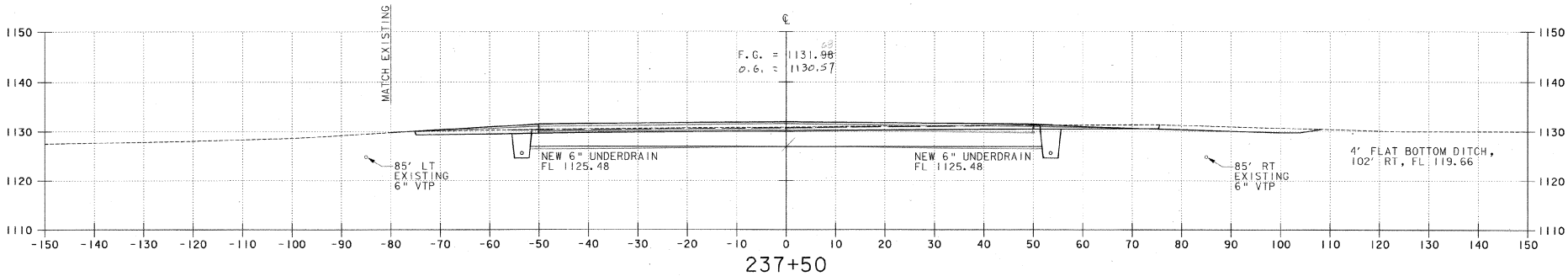
Designed by GMD | Drawn by MMM | Checked by BMC | Approved by GMD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

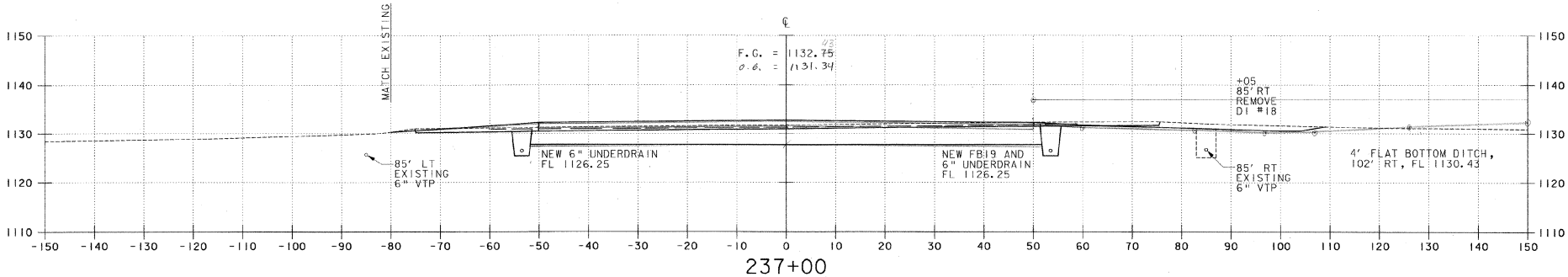
Date: 3/21/01

Sheet - Of

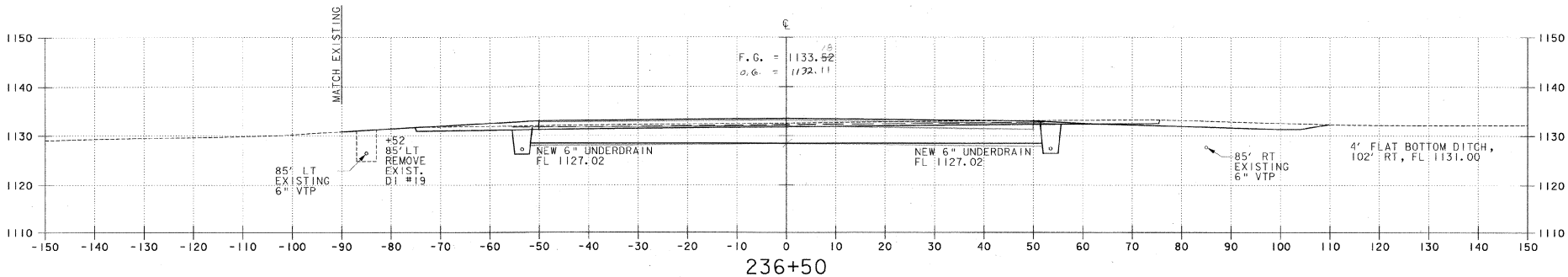
Sheet No
58



237+50



237+00



236+50

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. P200001718.01

File No.f20f180ixs5.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

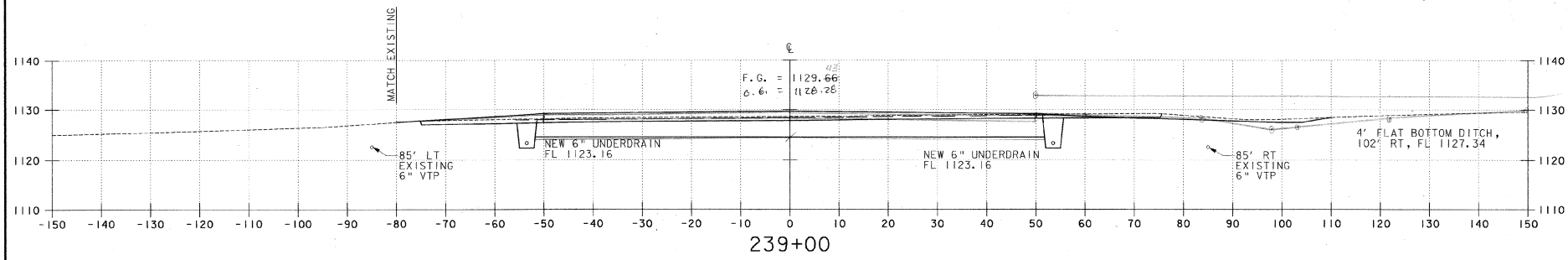
Designed by: GWD
Drawn by: MMM
Checked by: BWC
Approved by: GWD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

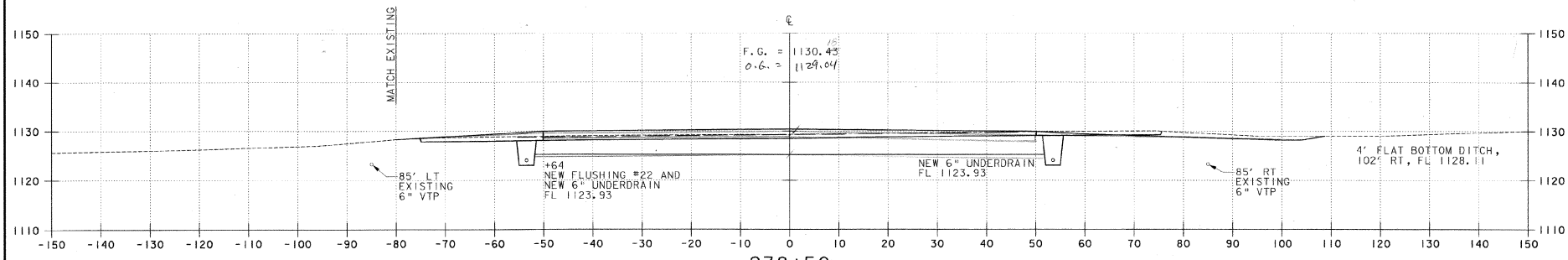
Date: 3/21/01

Sheet - Of

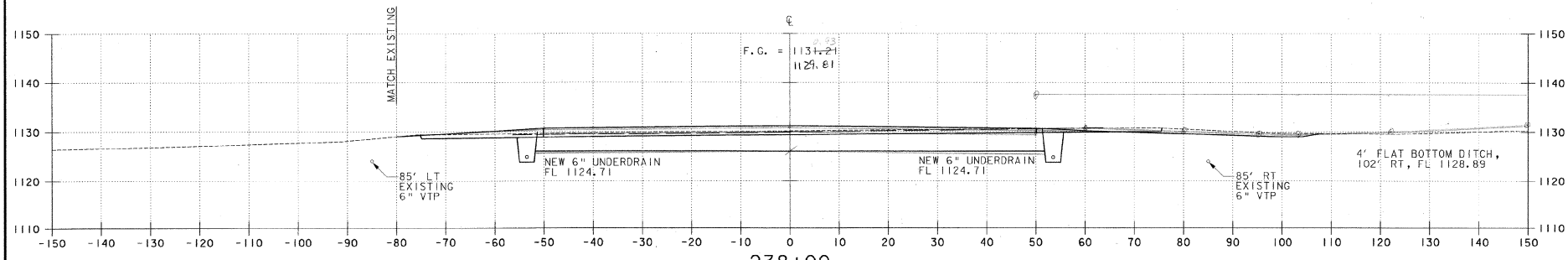
Sheet No
59



239+00



238+50



238+00

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. P200001718.01

File No.f20718001xs20.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

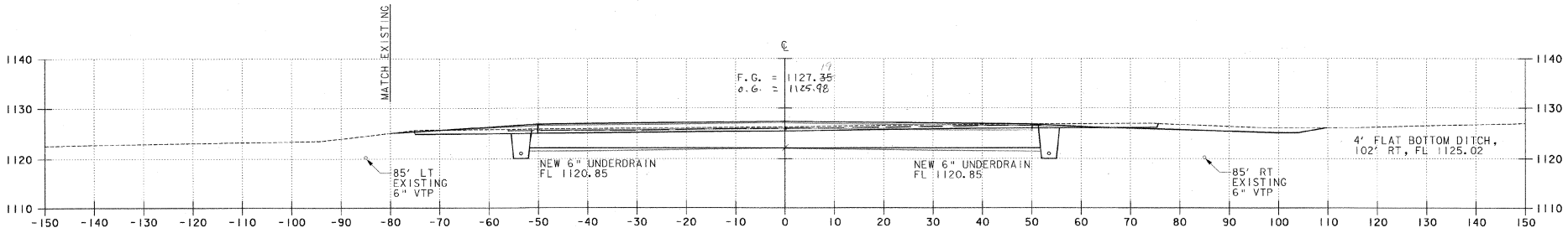
Designed by CMD | Drawn by MMM | Checked by BMC | Approved by CMD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

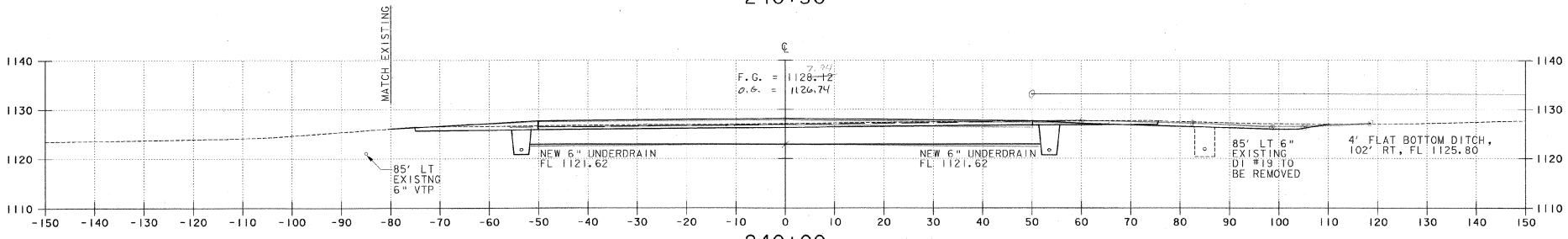
Date: 3/21/01

Sheet ~ Of

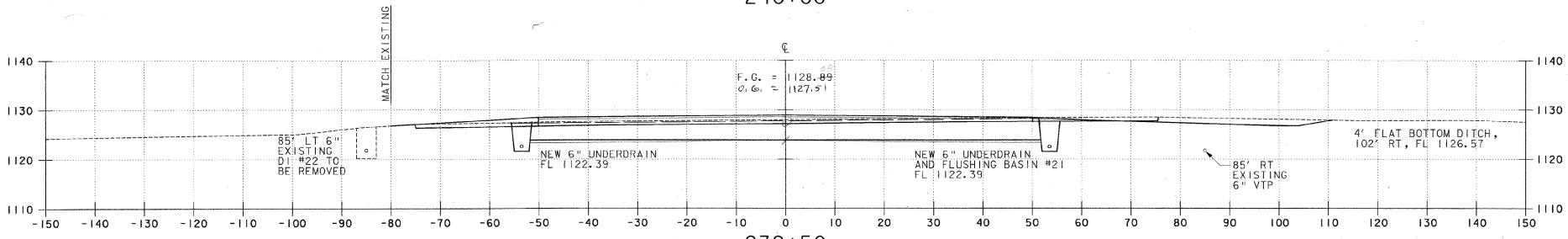
Sheet No
60



240+50



240+00



239+50

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. P200001718.01

File No.f207180lxs2l.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

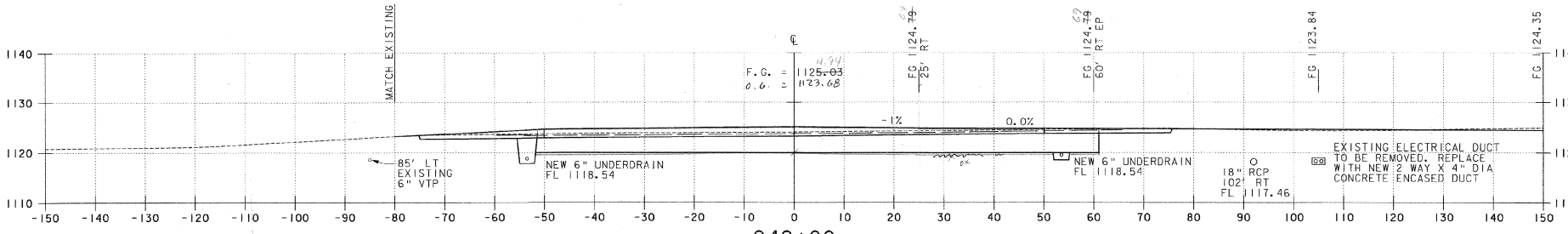
Designed by: CMD | Drawn by: MMM | Checked by: BMC | Approved by: CMD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

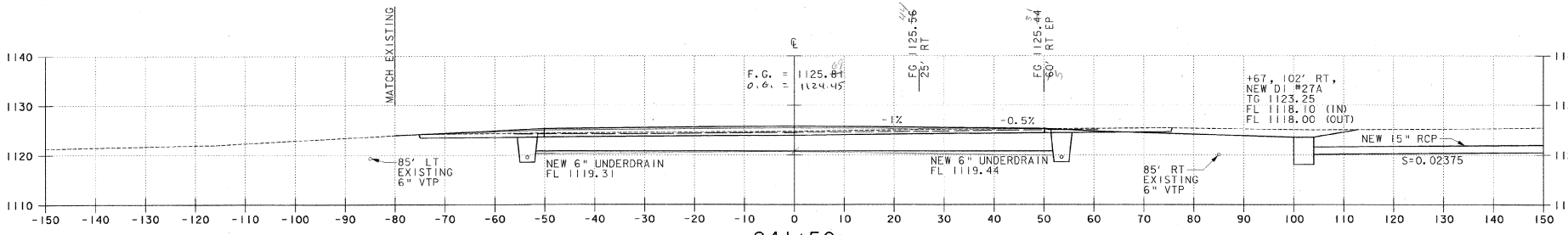
Date: 3/21/01

Sheet - Of

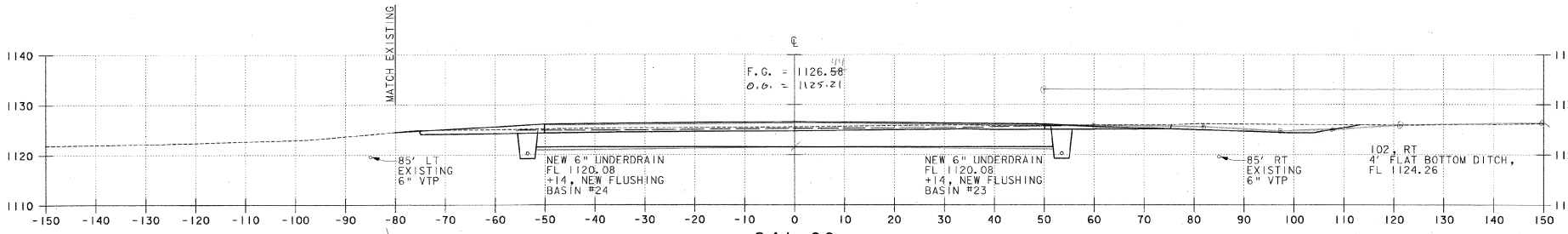
Sheet No
61



242+00



241+50



241+00

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F200001.18.01

File No.f20718Blxs22.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

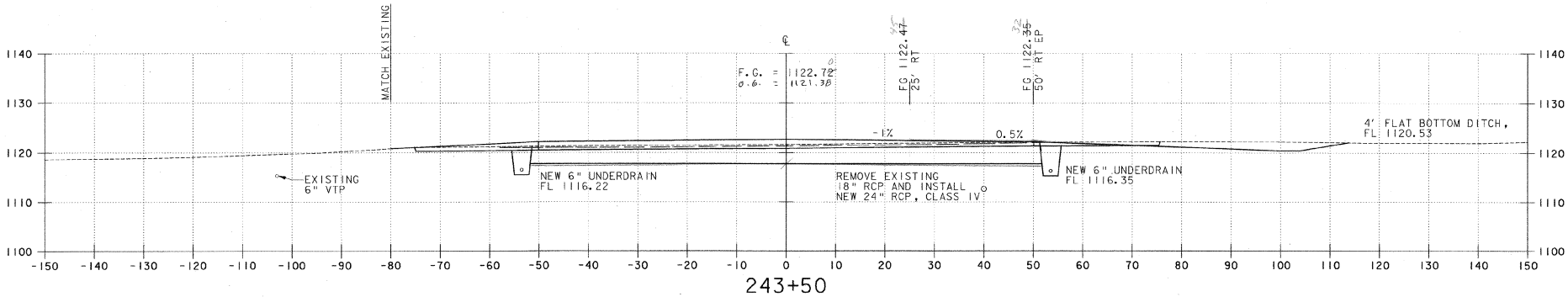
Designed by: GMD
Drawn by: MMM
Checked by: BMC
Approved by: GMD

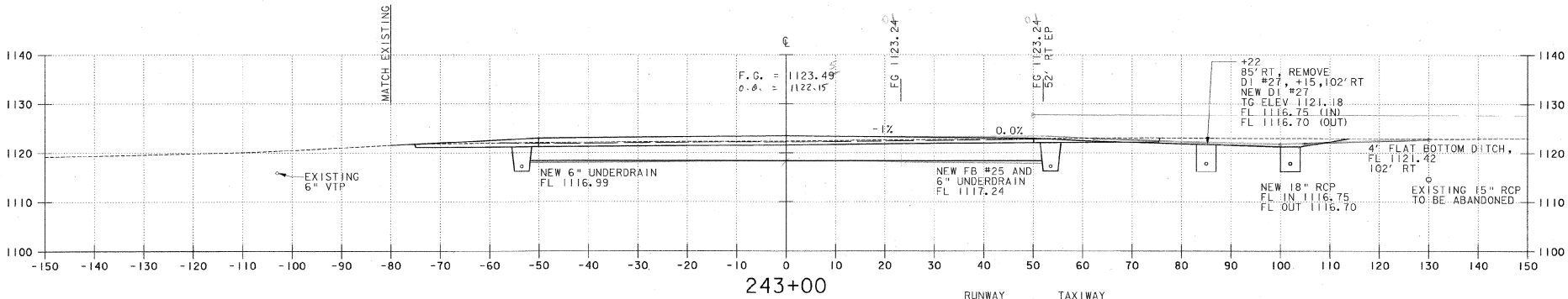
Scale: HORZ. 1" = 10'
VERT. 1" = 10'

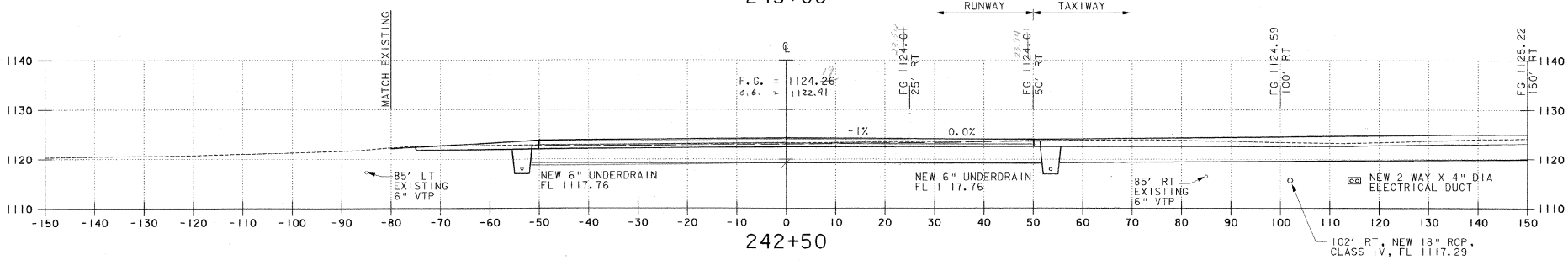
Date: 3/21/01

Sheet - Of

Sheet No
62







AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F200001718.01

File No. f20718001xs23.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

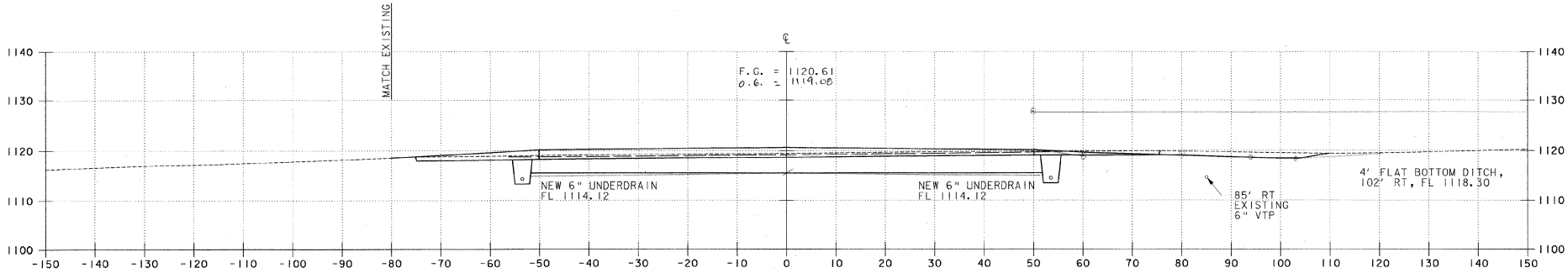
Designed by GWD	Drawn by MMM	Checked by BWC	Approved by BMB

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

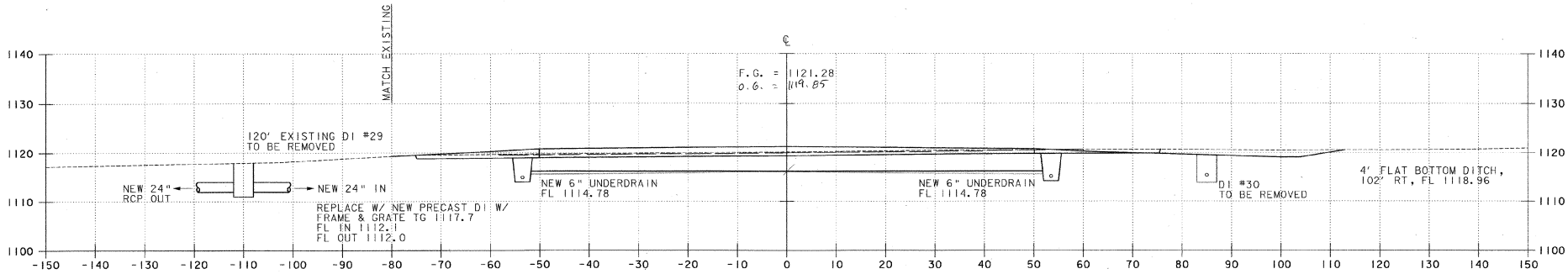
Date: 3/21/01

Sheet - Of

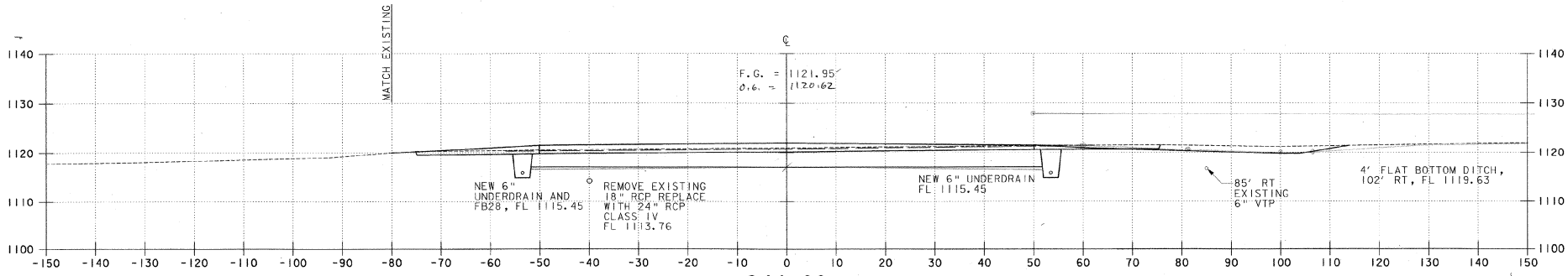
Sheet No
63



245+00



244+50



244+00

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F200001718.01

File No.f2071801ltx24.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

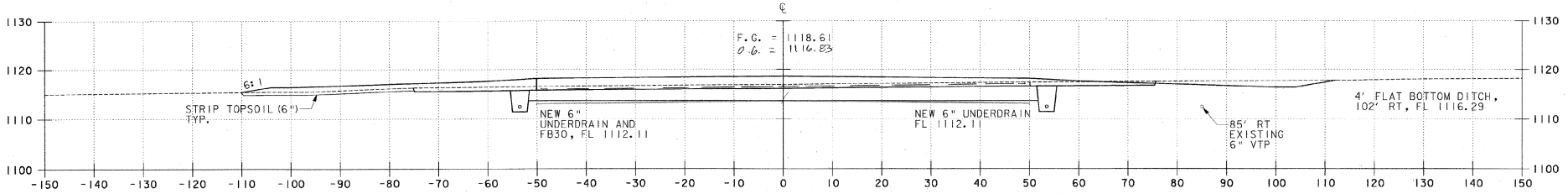
Designed by GMD	Drawn by MMM	Checked by BMC	Approved by GMD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

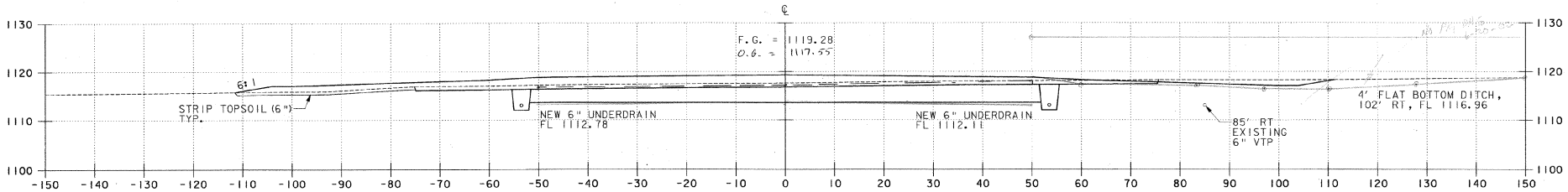
Date: 3/21/01

Sheet - Of

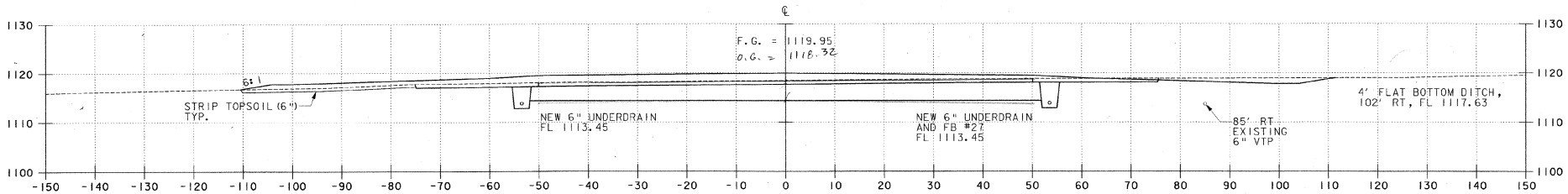
Sheet No
64



246+50



246+00



245+50

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F200001718.01

File No.f20171801xs25.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

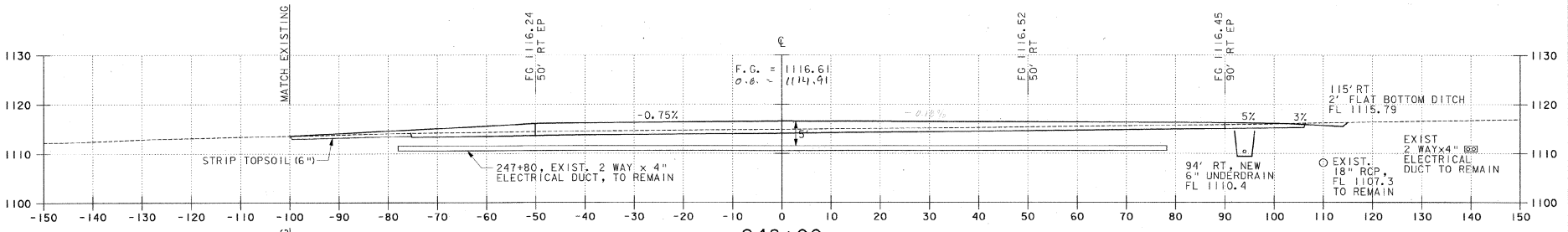
Designed by: GWD
Drawn by: MMM
Checked by: BWC
Approved by: GWD

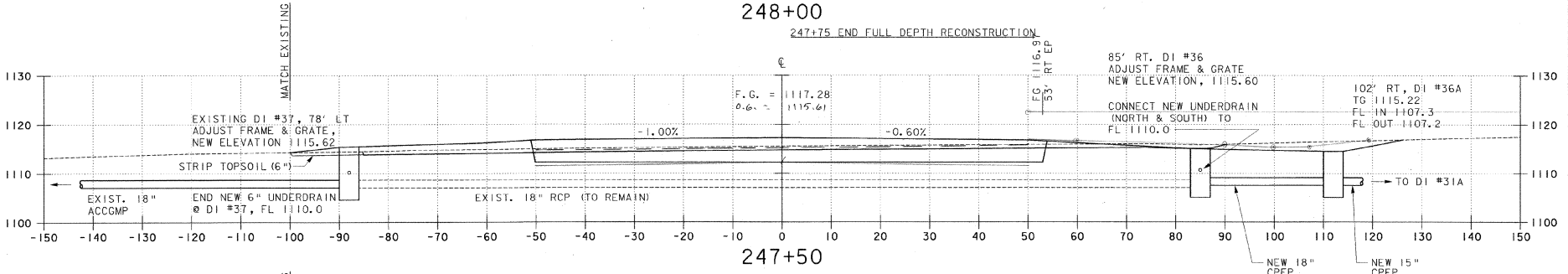
Scale: HORZ. 1" = 10'
VERT. 1" = 10'

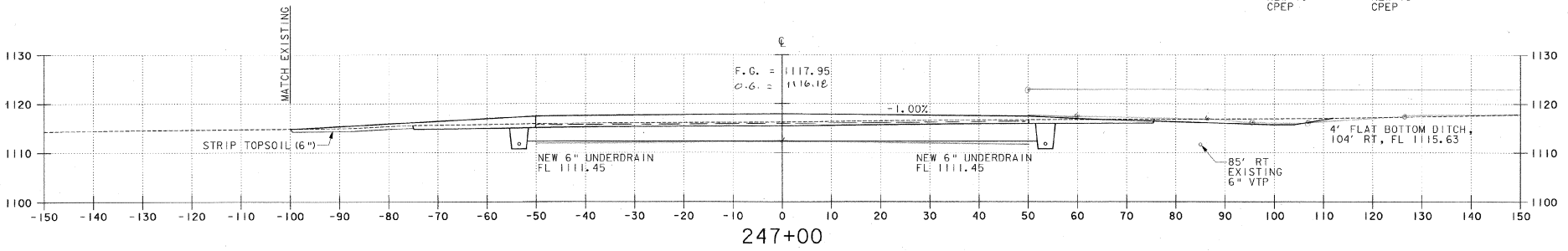
Date: 3/21/01

Sheet - Of

Sheet No
65







AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F200001718.01

File No.f207180xs26.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

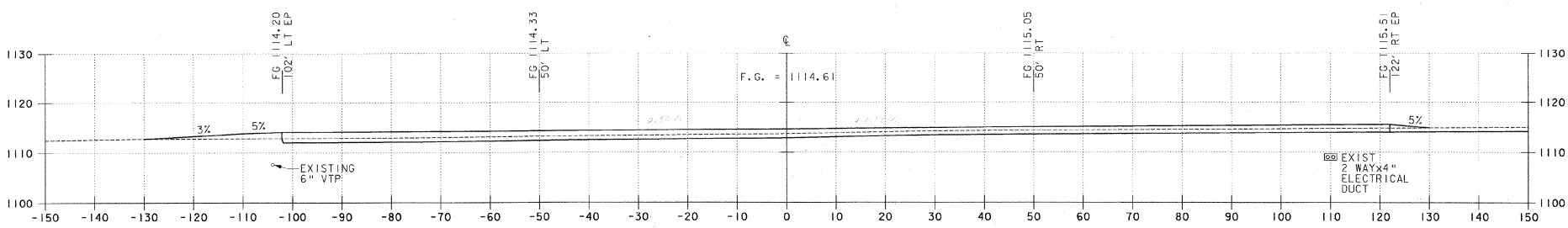
Designed by: CMD
Drawn by: MMM
Checked by: BMC
Approved by: CMD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

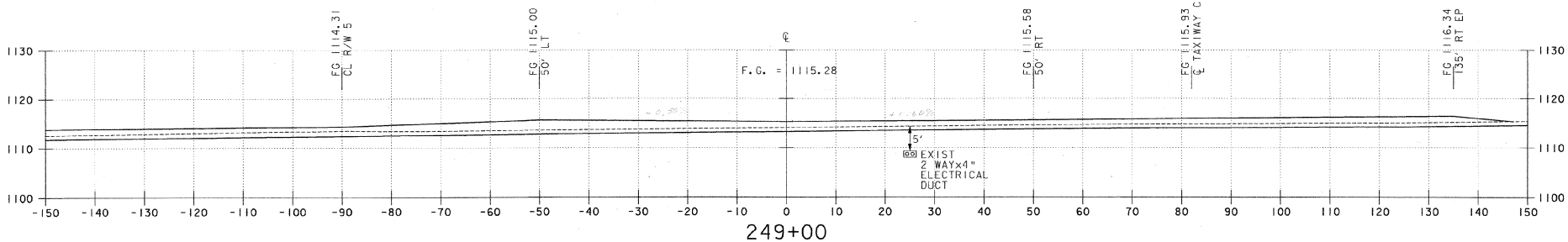
Date: 3/21/01

Sheet - Of

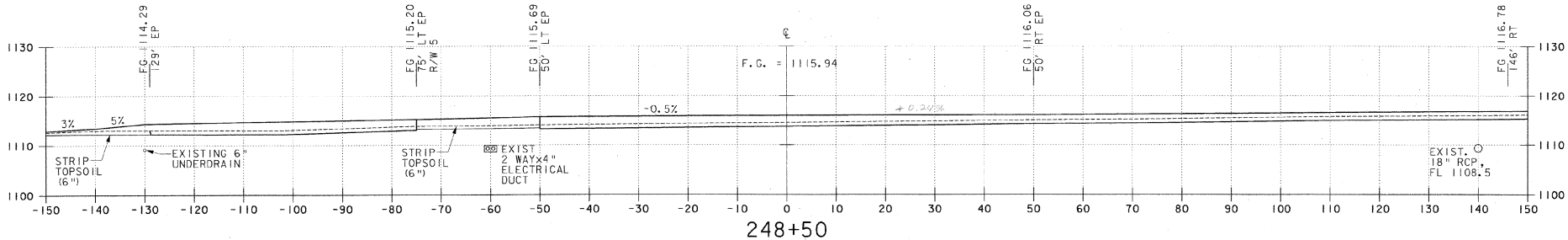
Sheet No
66



249+50



249+00



248+50

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. P200001718.01

File No.f2071805xs27.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

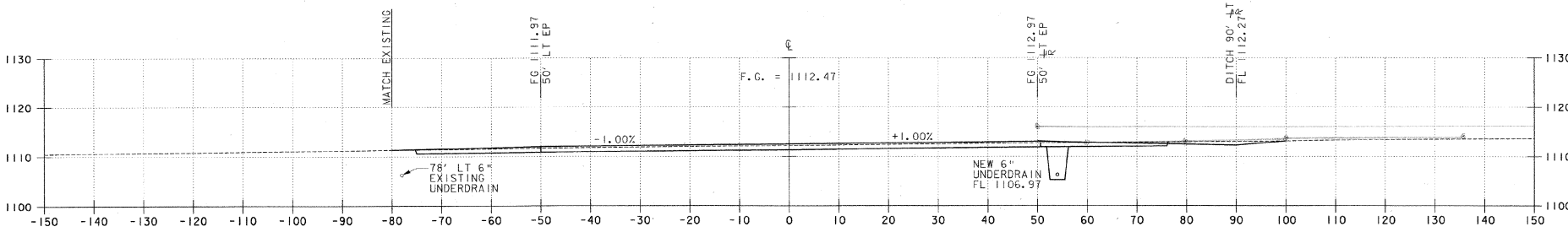
Designed by: GWD
Drawn by: MMM
Checked by: BWC
Approved by: GWD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

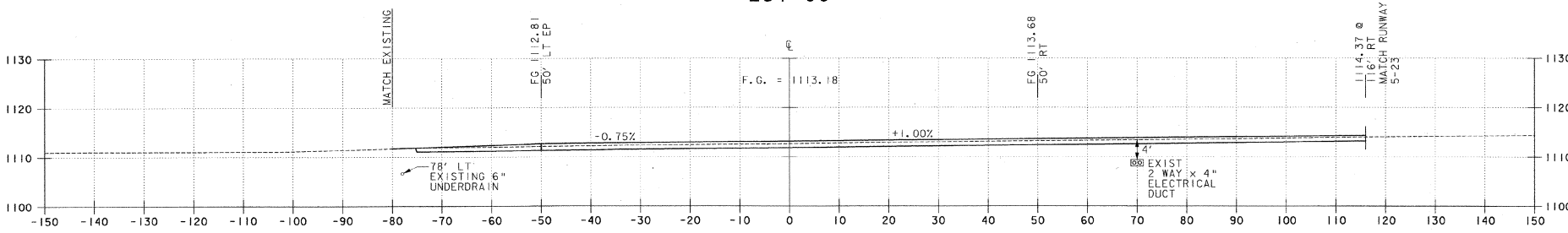
Date: 3/21/01

Sheet - Of

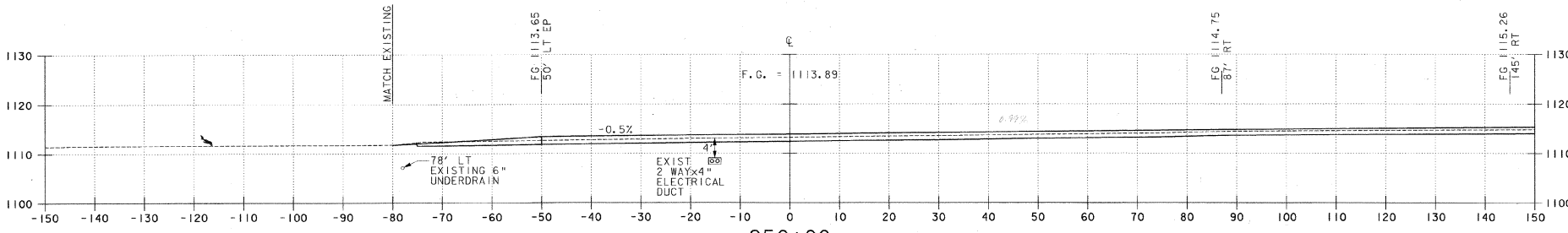
Sheet No
67



251+00



250+50



250+00

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F200001716.01

File No.f200718Oxs28.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

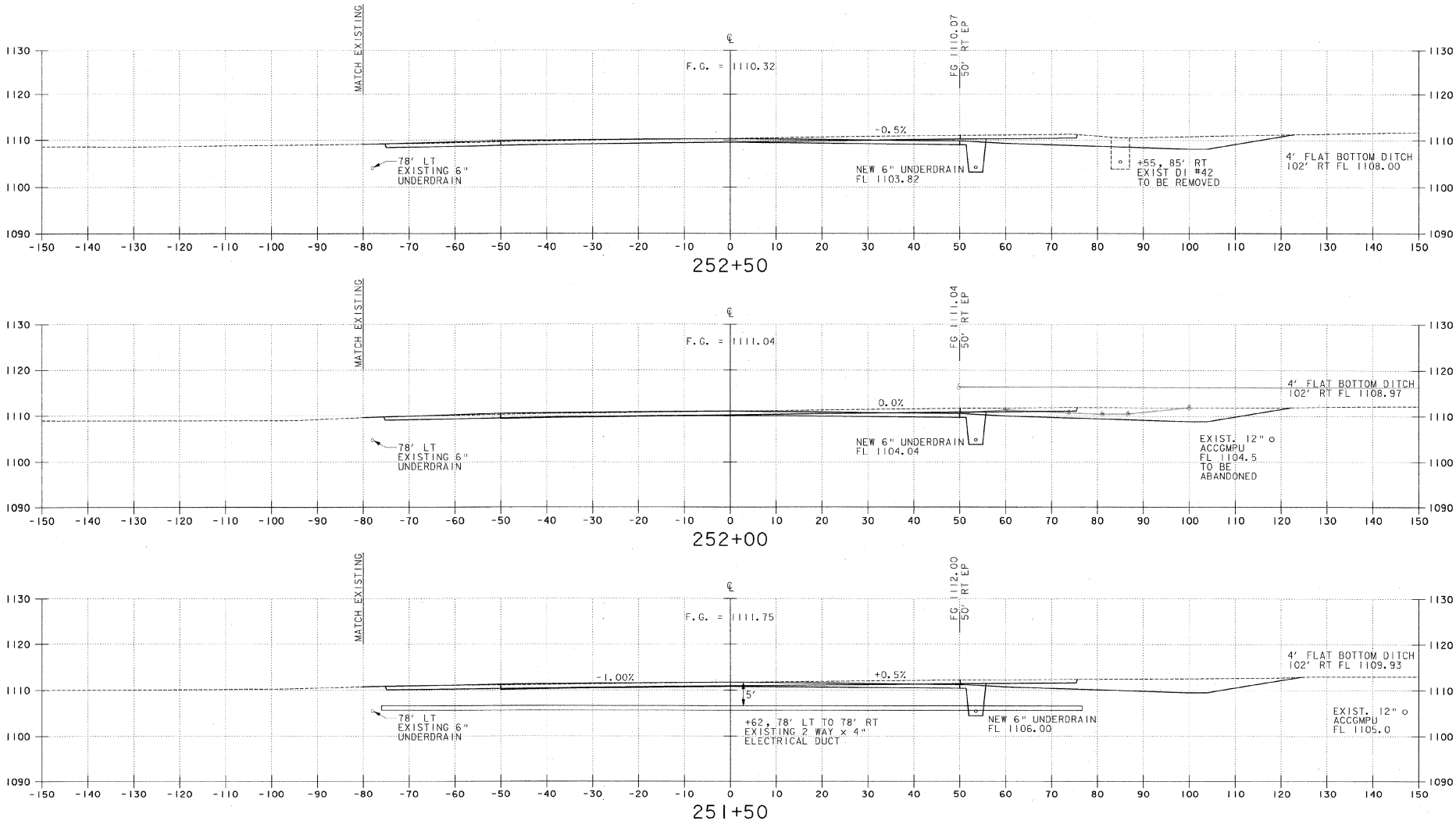
Designed by GMD
Drawn by MMM
Checked by BMC
Approved by GMD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

Date: 3/21/01

Sheet - Of

Sheet No
68



AIP 3-50-0001-06

REV. | DATE | DESCRIPTION

File No:F207180\xs23.dgn

Job No. F200001718.01

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

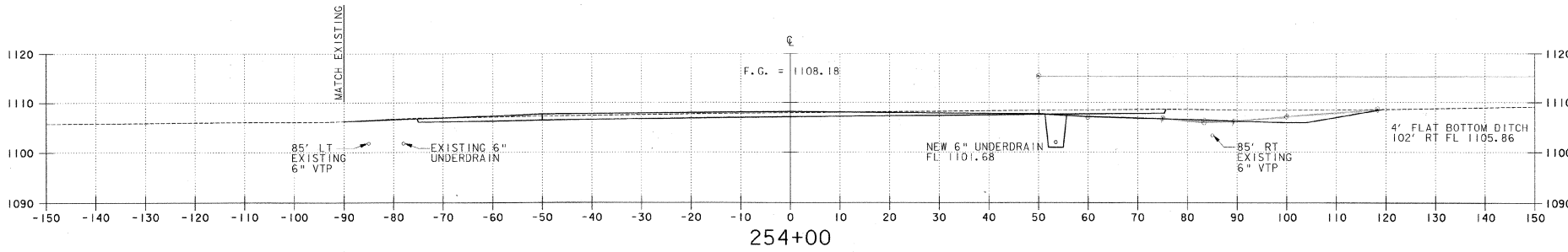
Designed by GWD	Drawn by: MMM	Checked by: BWC	Approved by GWD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

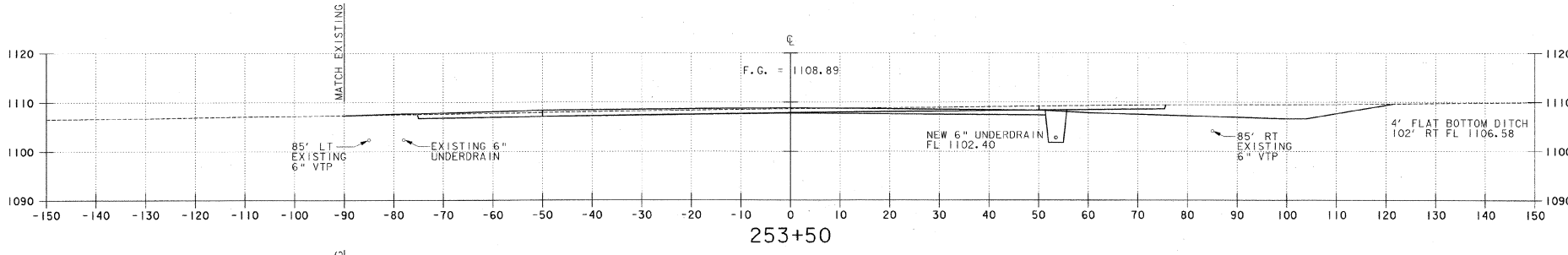
Date: 3/21/01

Sheet - Of

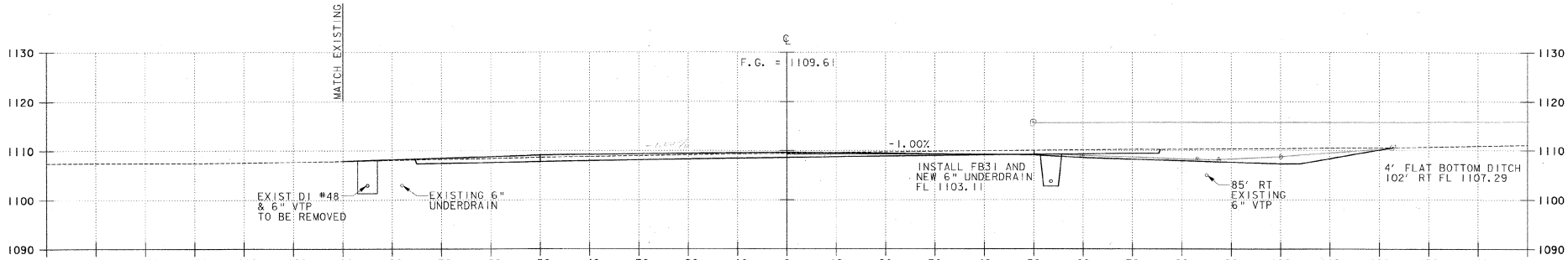
Sheet No
69



254+00



253+50



253+00

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F2000017.18.01

File No.f2017180x830.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

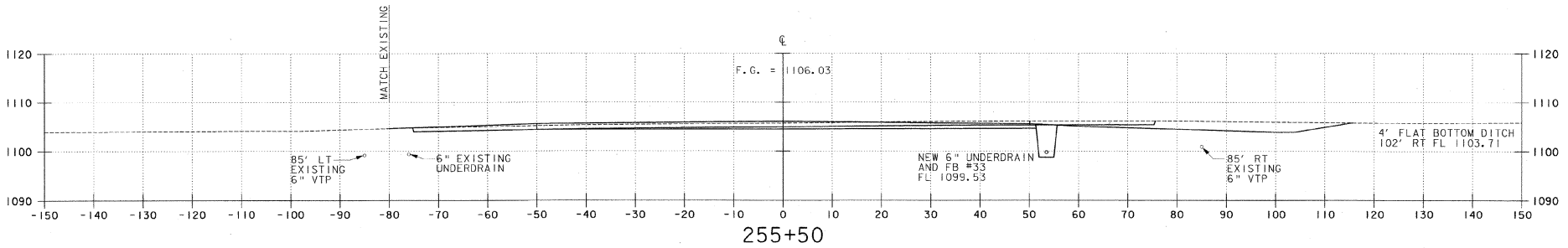
Designed by: GMD
Drawn by: MMM
Checked by: BMC
Approved by: GMD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

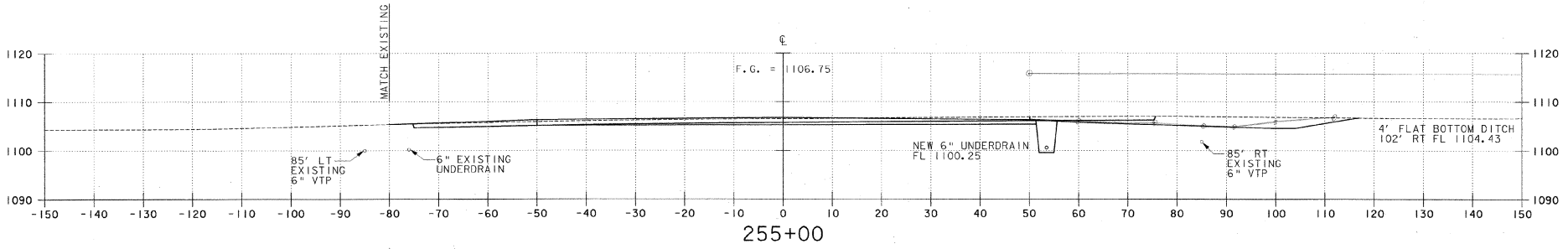
Date: 3/21/01

Sheet - Of

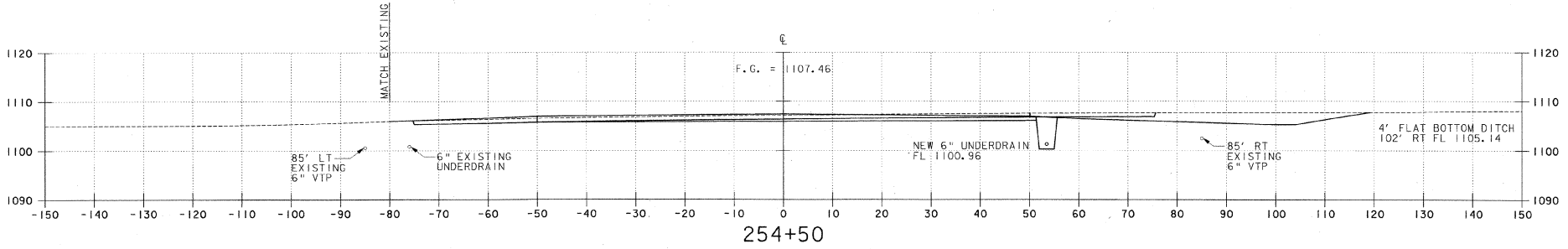
Sheet No
70



255+50



255+00



254+50

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F200001718.01

File No.f200718Oxs3i.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

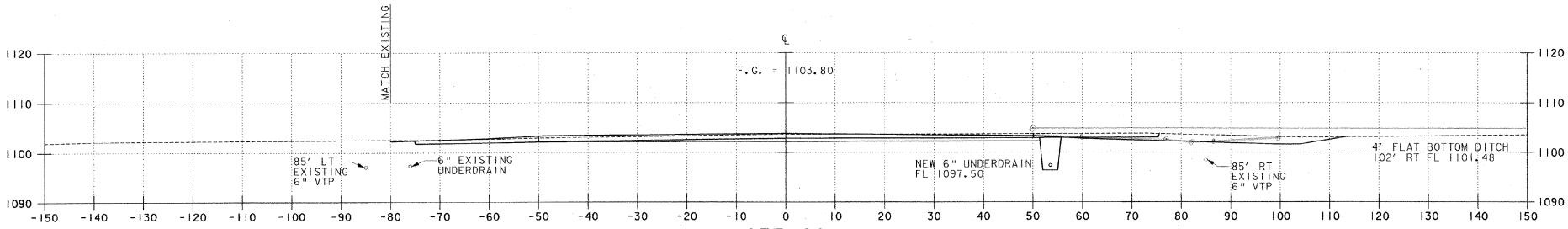
Designed by: GMD
Drawn by: MMM
Checked by: BWC
Approved by: GMD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

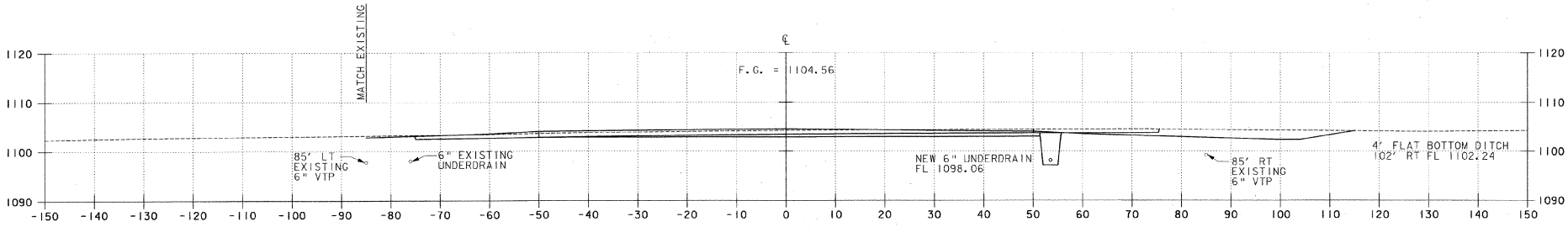
Date: 3/21/01

Sheet - Of

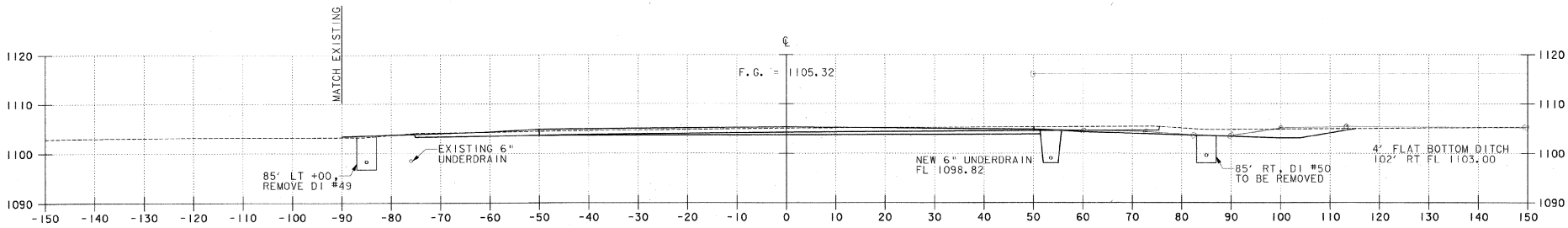
Sheet No
71



257+00



256+50



256+00

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F200001718.01

File No:F20718Oxe32.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

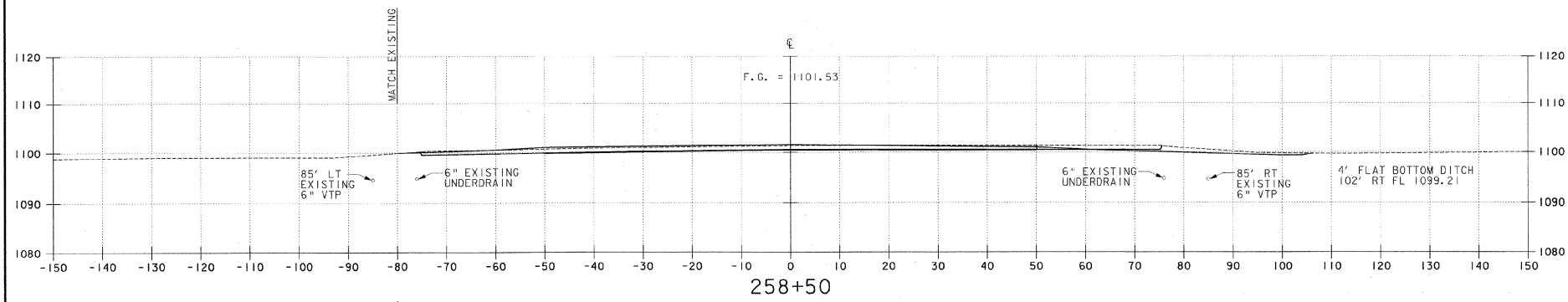
Designed by: GWD	Drawn by: MMM	Checked by: BMC	Approved by: GWD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

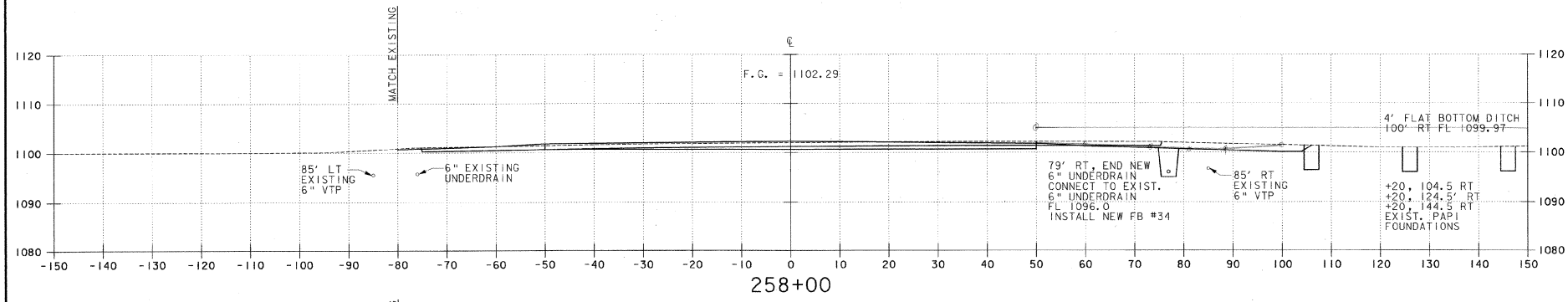
Date: 3/21/01

Sheet - Of

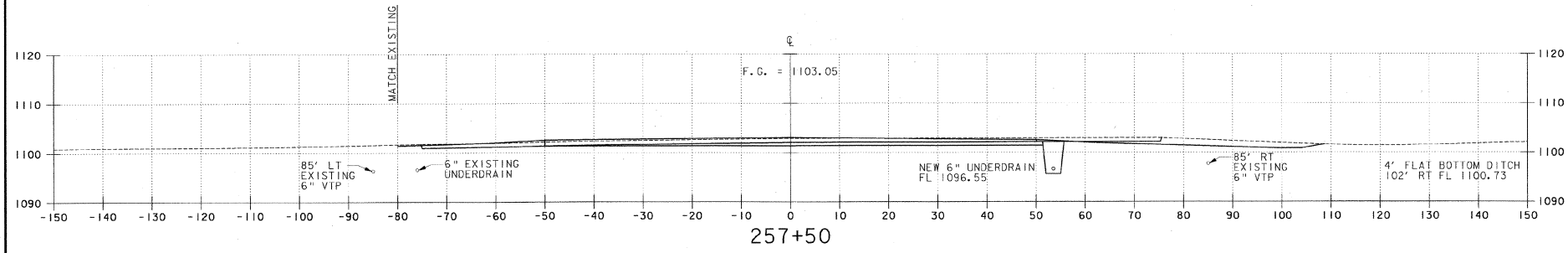
Sheet No
72



258+50



258+00



257+50

AIP 3-50-0001-06

REV. | DATE | DESCRIPTION

Job No. F2000011718.01

File No.F20011780ex33.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

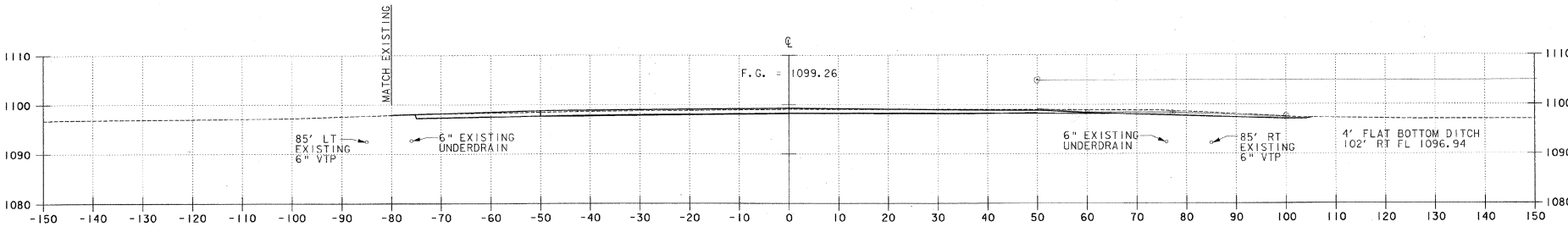
Designed by: GWD
Drawn by: MMM
Checked by: BWC
Approved by: GWD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

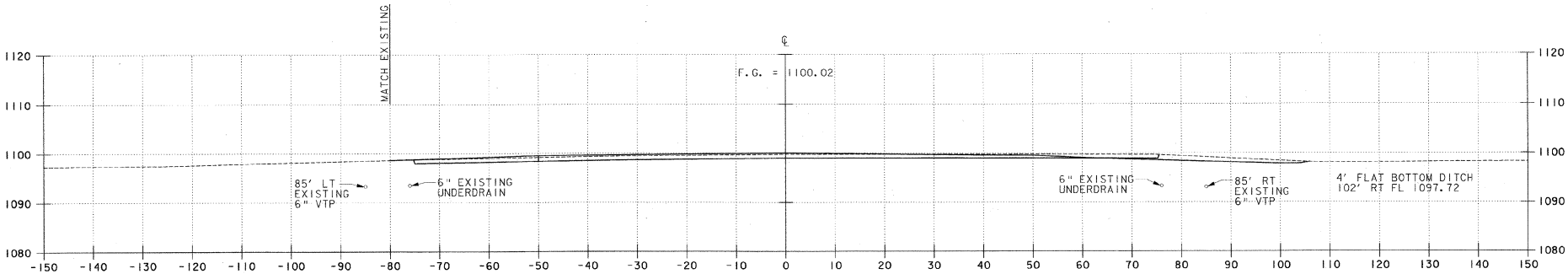
Date: 3/21/01

Sheet - Of

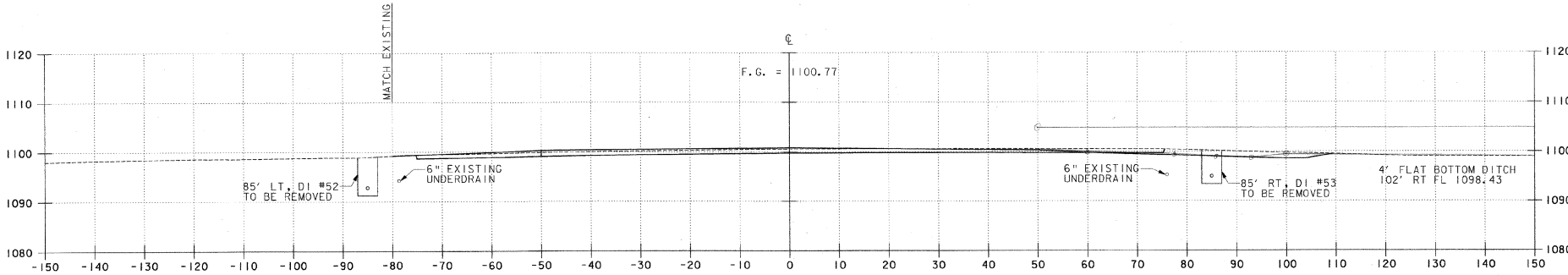
Sheet No
73



260+00



259+50



259+00

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. P200001718.01

File No.P200718Dxs34.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

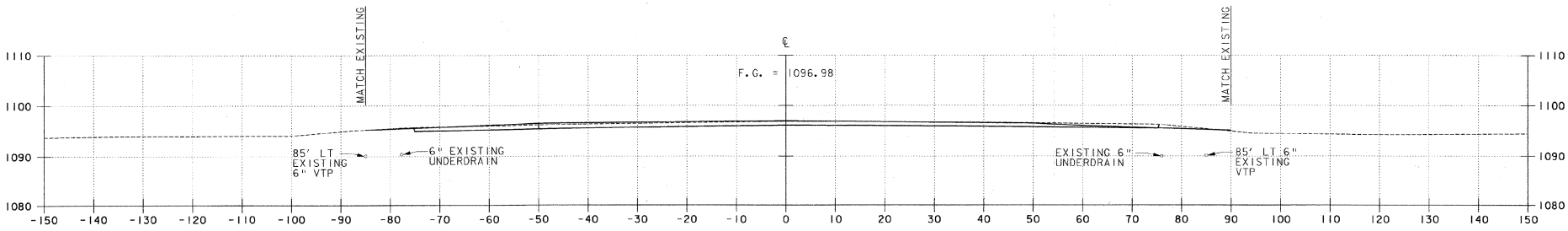
Designed by: GWD
Drawn by: MMM
Checked by: BWC
Approved by: BWG

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

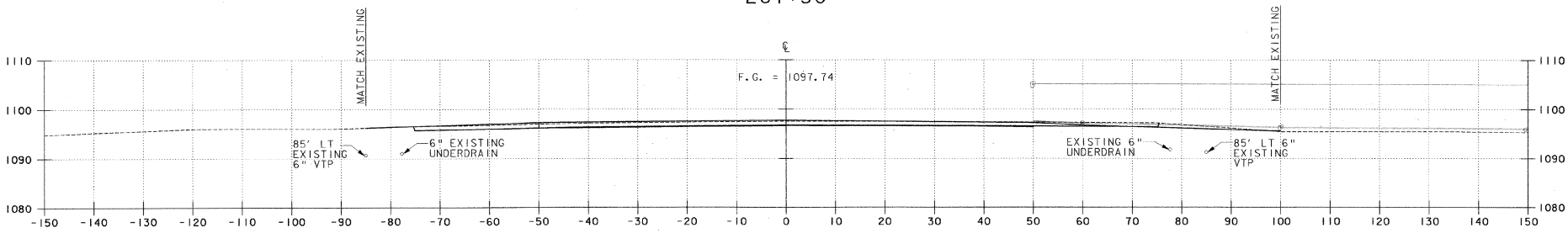
Date: 3/21/01

Sheet - Of

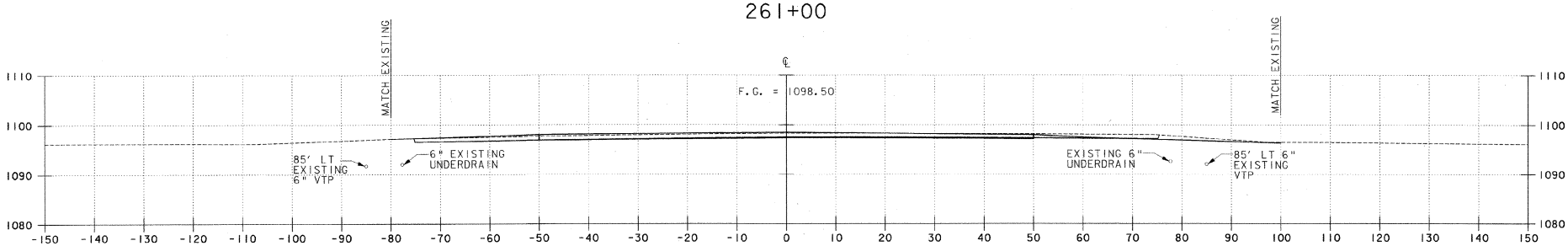
Sheet No
74



261+50



261+00



260+50

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F200001718.01

File No.F207180ax35.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

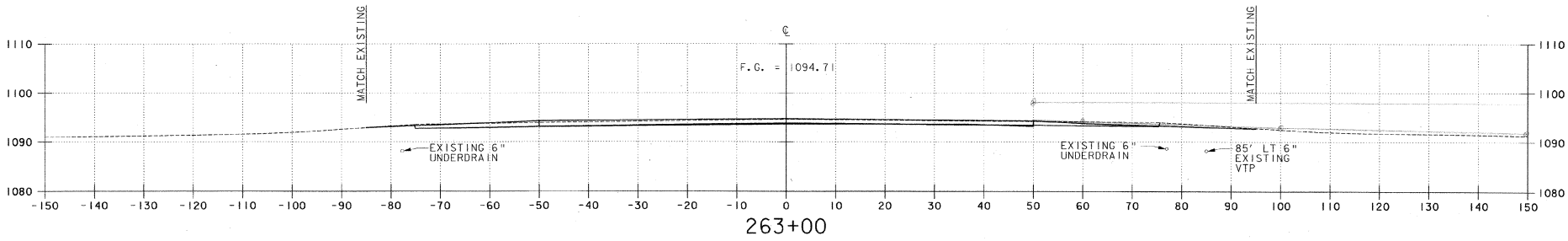
Designed by GWD | Drawn by MMM | Checked by BWC | Approved by GWD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

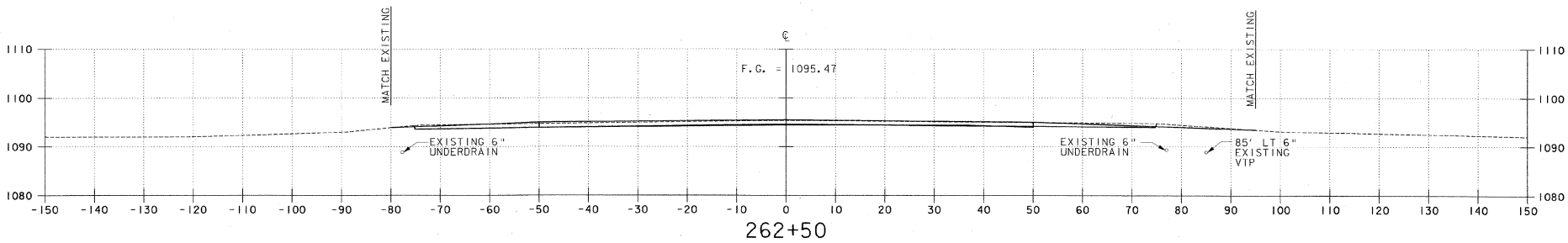
Date: 3/21/01

Sheet - Of

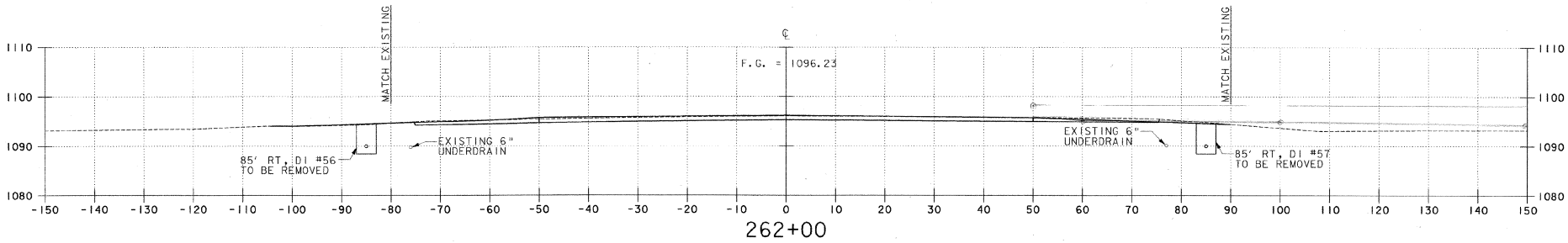
Sheet No
75



263+00



262+50



262+00

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F200001718.01

File No.f207180lxs36.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

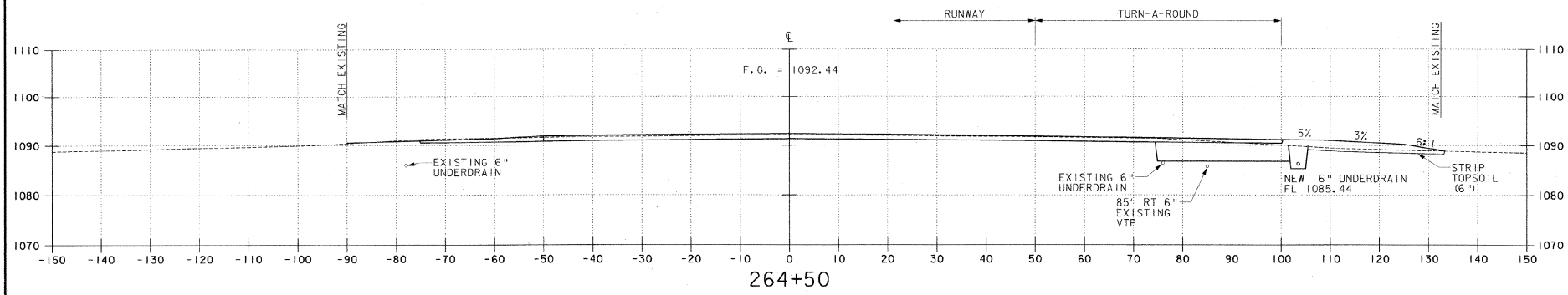
Designed by: GWD
Drawn by: MAM
Checked by: BWC
Approved by: GWD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

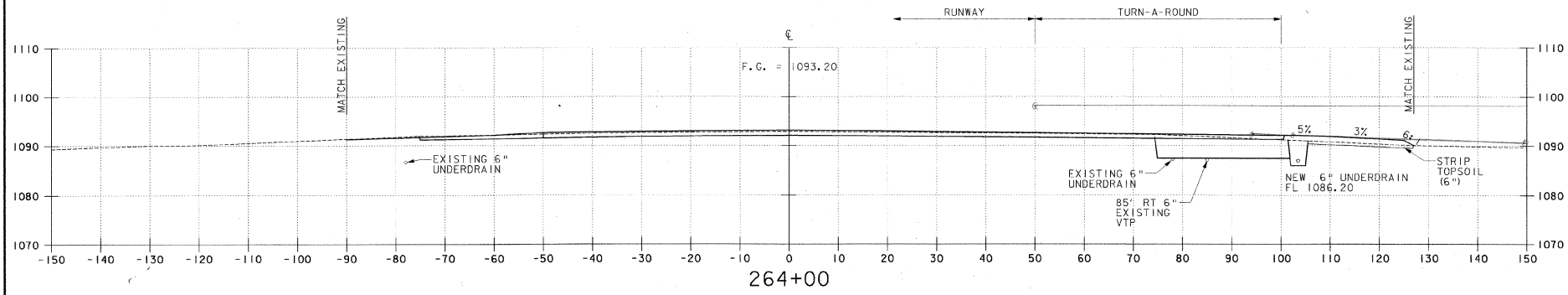
Date: 3/21/01

Sheet - Of

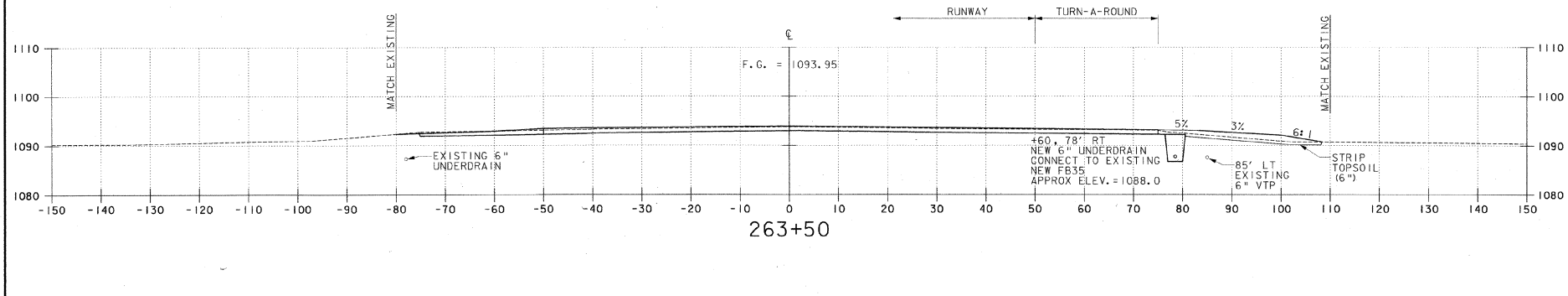
Sheet No
76



264+50



264+00



263+50

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F200001718.01

File No:f200718001x37.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

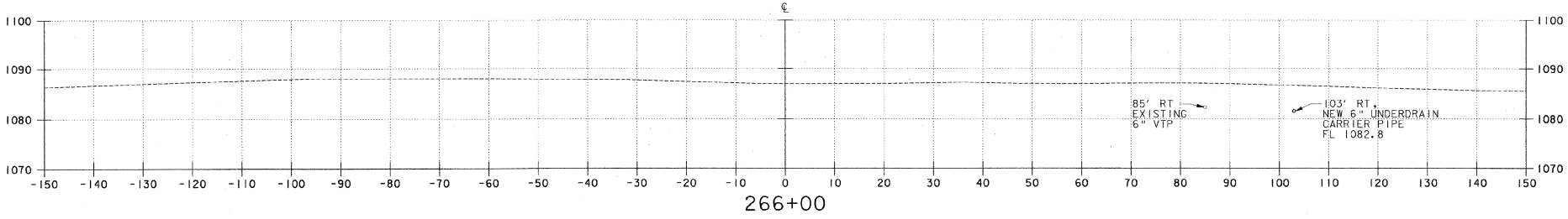
Designed by: GWD	Drawn by: MMM	Checked by:	Approved by: GWD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

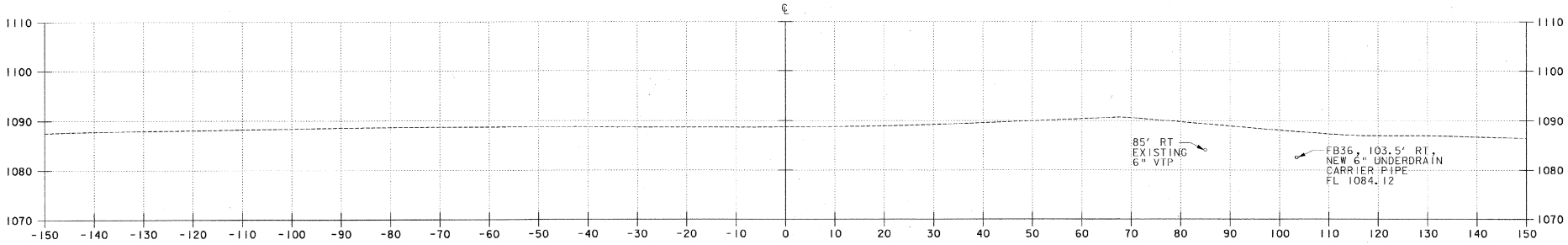
Date: 3/21/01

Sheet - Of

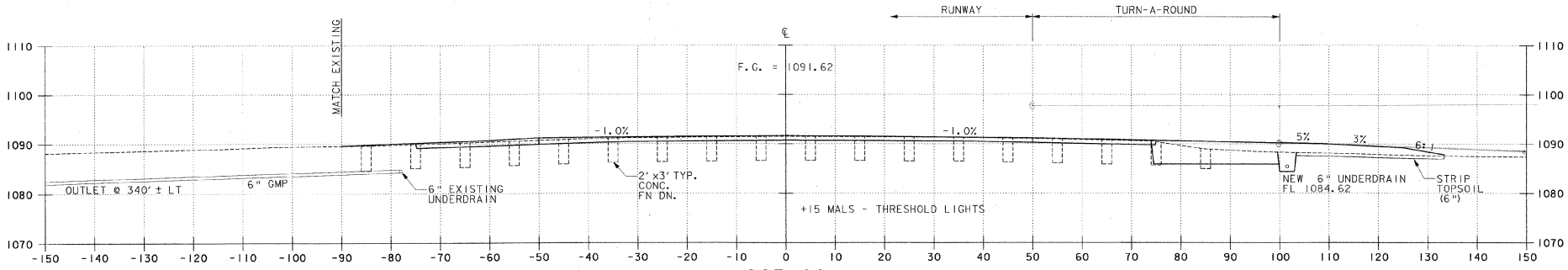
Sheet No
77



266+00



265+50



265+00

END RUNWAY CONSTRUCTION
265+04

AIP 3-50-0001-06

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

Designed by: GWD
Drawn by: MMM
Checked by: BWC
Approved by: GWD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

Date: 3/21/01

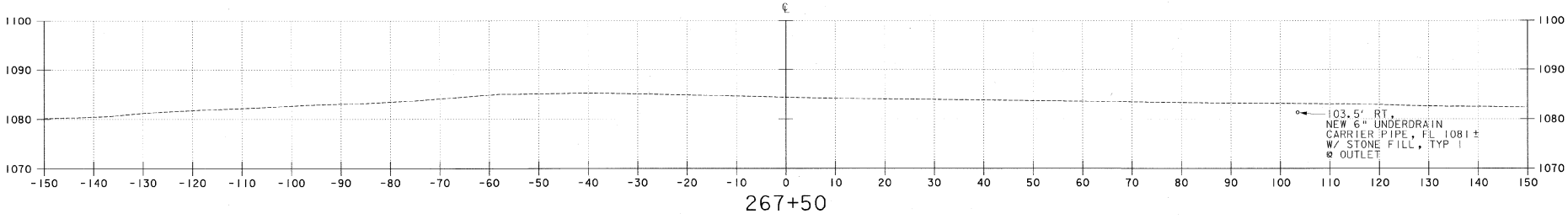
Sheet - Of

Sheet No
78

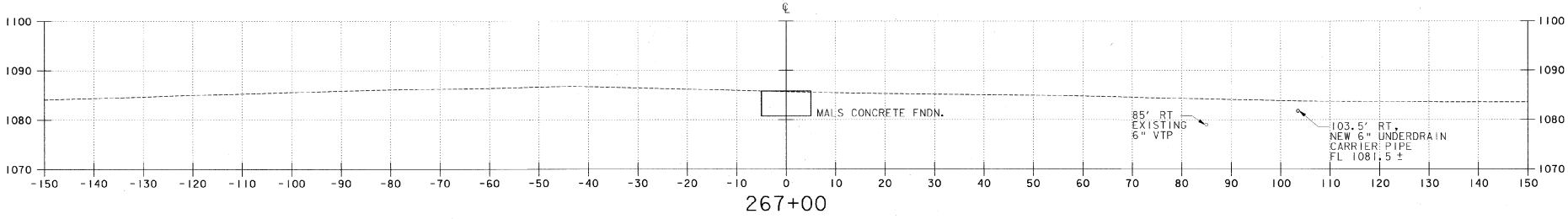
Job No. F200001718.01

File No:f200718001x38.dgn

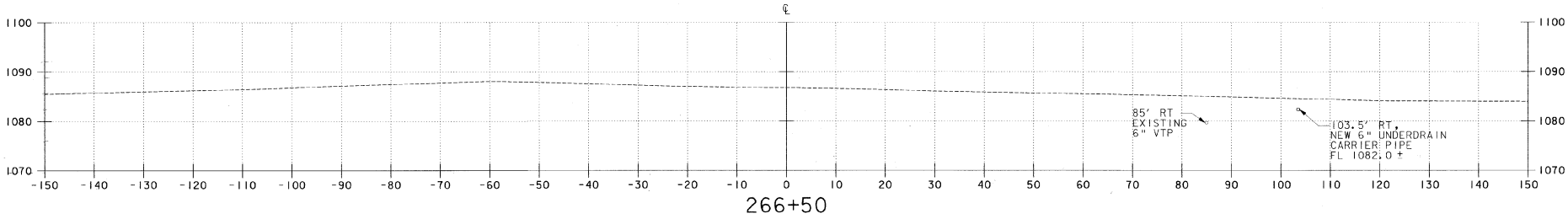
REV. | DATE | DESCRIPTION



267+50



267+00



266+50

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. P200001718.01

File No.f207180ex39.dgf

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

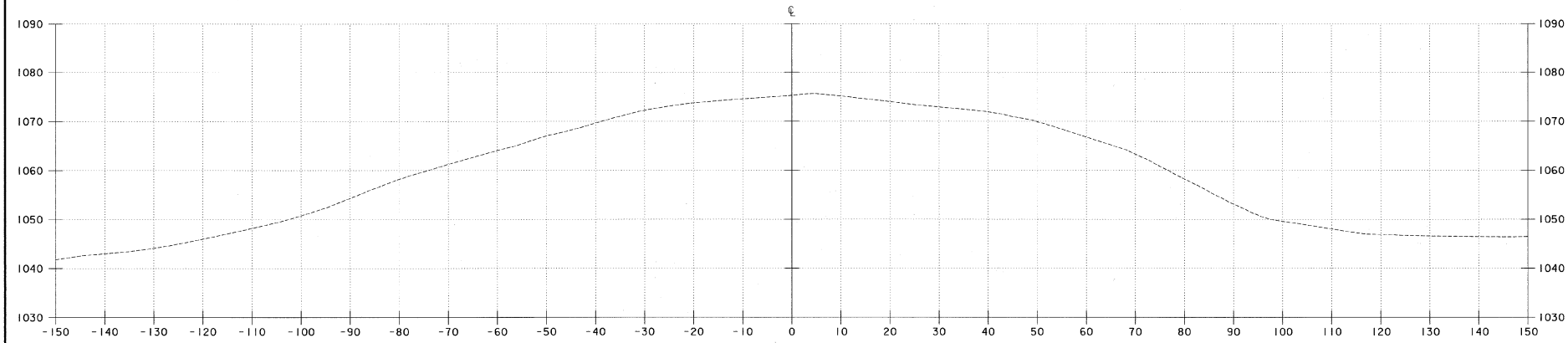
Designed by: GMD
Drawn by: MMM
Checked by: BWC
Approved by: GMD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

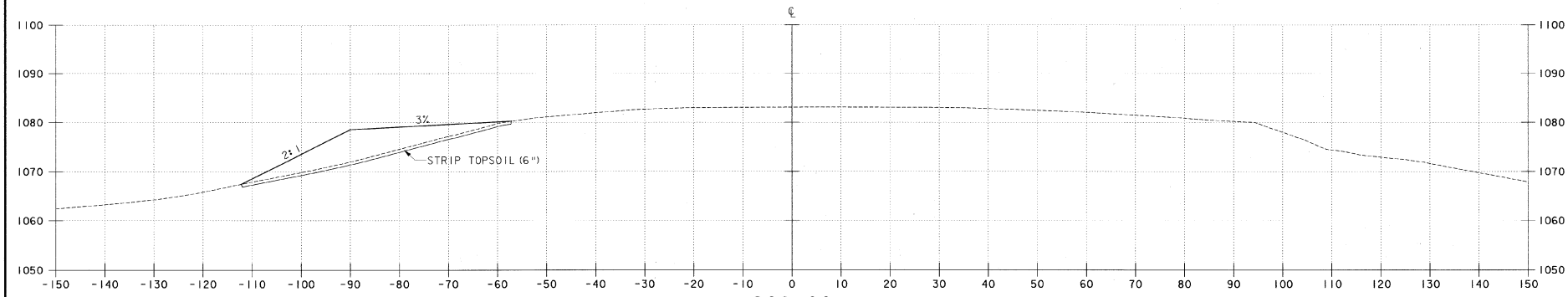
Date: 3/21/01

Sheet - Of

Sheet No.
79



268+50



268+00

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F20000171B.01

File No.F20171B0Bcs40.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

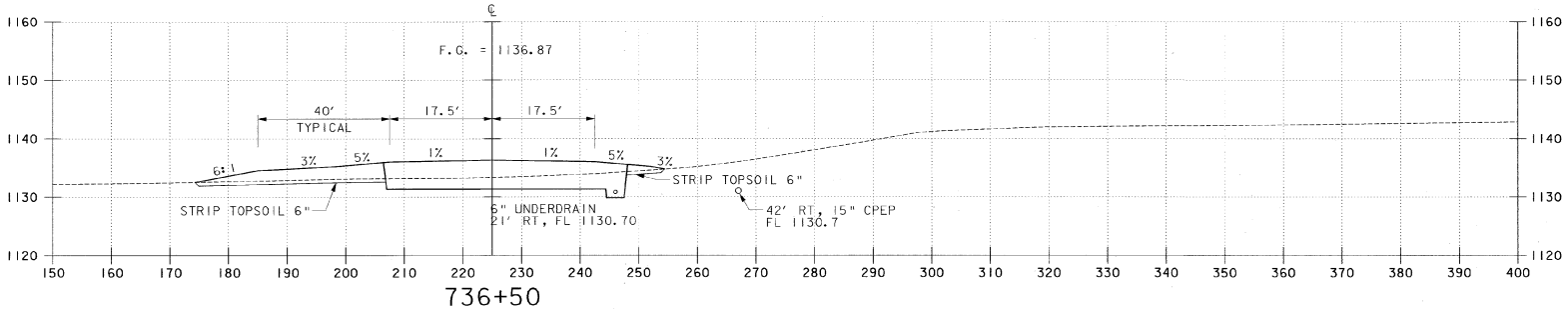
Designed by: GWD
Drawn by: MMM
Checked by: BWC
Approved by: GWD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

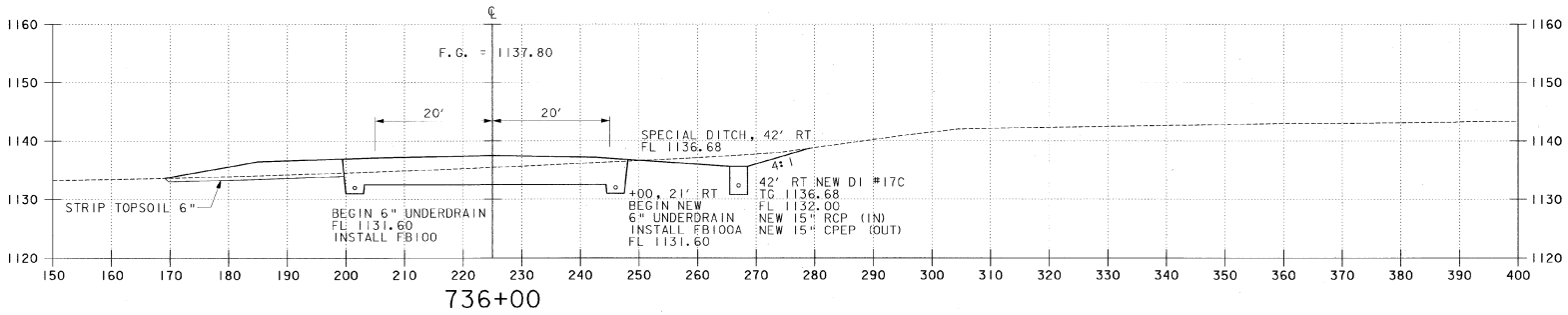
Date: 3/21/01

Sheet - Of

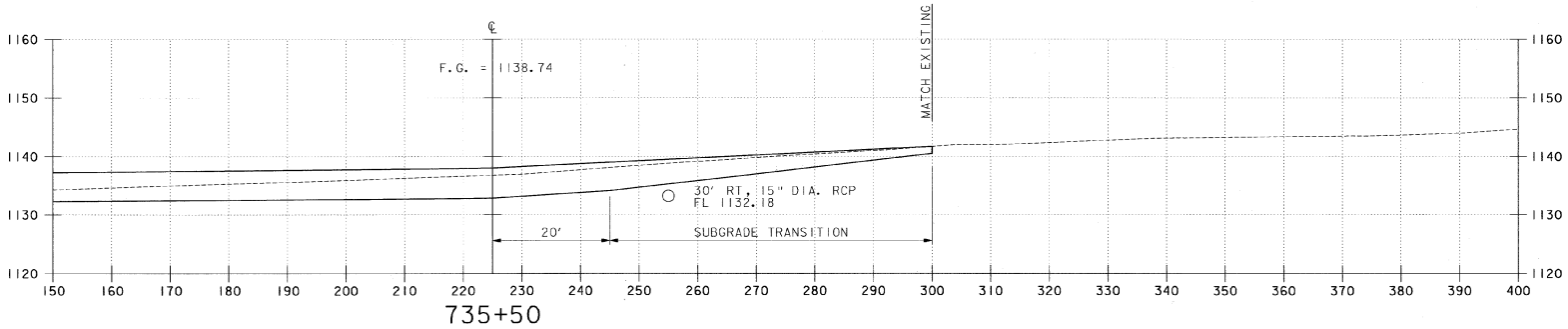
Sheet No.
80



736+50



736+00



735+50

20' LT T/W A 225+00
BEGIN T/W E CONSTRUCTION

NOTE: OFFSET DISTANCES SHOWN ARE RIGHT OF RUNWAY 17-35 CENTERLINE

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. 72000017.01

File No.72017800ksa4l.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

TAXIWAY E CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

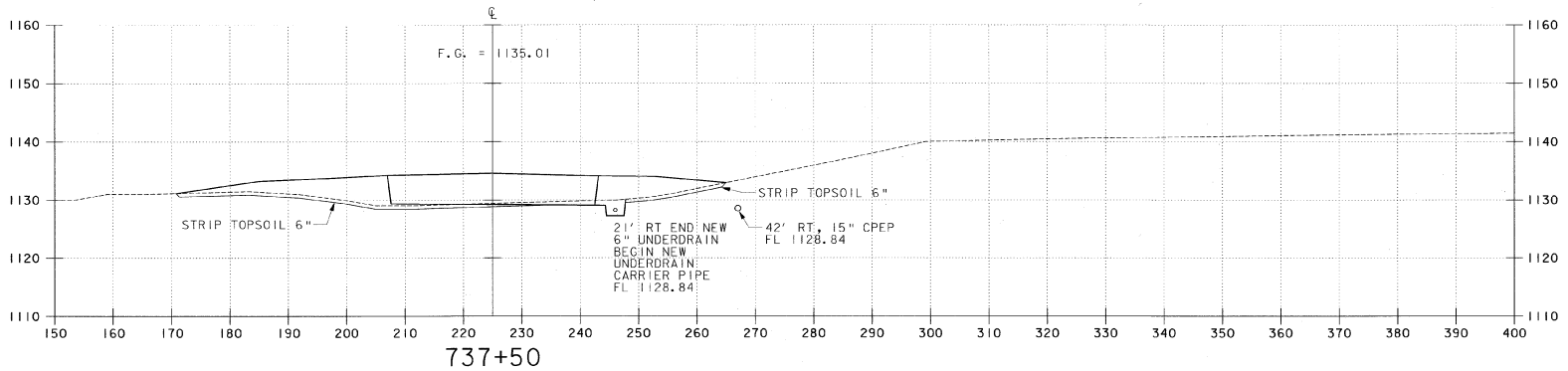
Designed by GWD
Drawn by MMM
Checked by BWC
Approved by GWD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

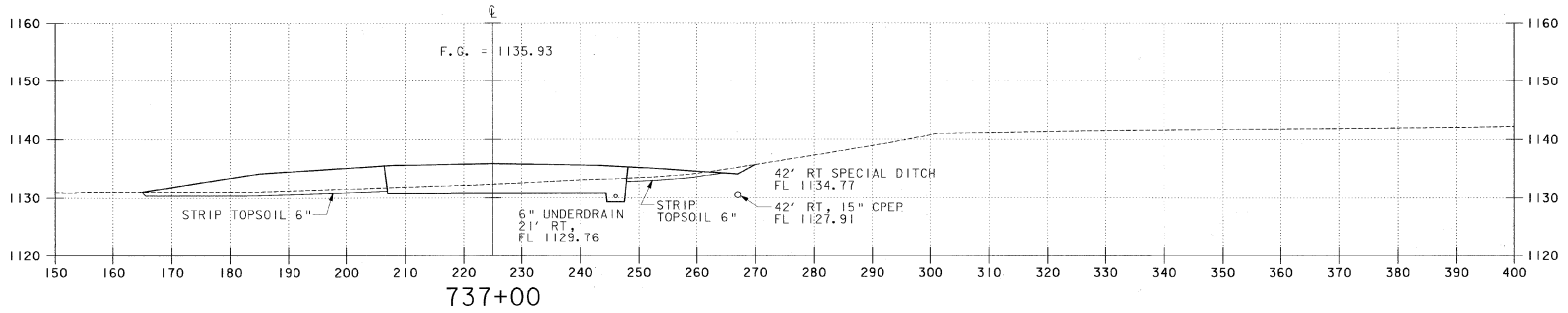
Date: 3/21/01

Sheet - Of

Sheet No.
81



737+50



737+00

NOTE: OFFSET DISTANCES SHOWN ARE RIGHT OF RUNWAY 17-35 CENTERLINE

AIP 3-50-0001-06

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

TAXIWAY E CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

REV.	DATE	DESCRIPTION

Job No. F2000017.01

File No:F2017180bx42.dgn

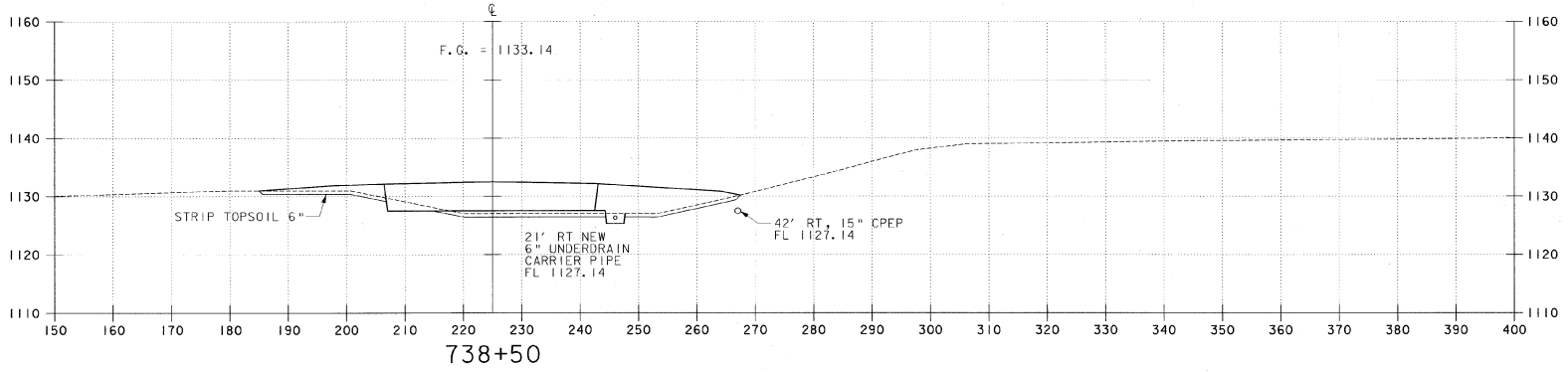
Designed by: GMD
Drawn by: MMM
Checked by: BMC
Approved by: GMD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

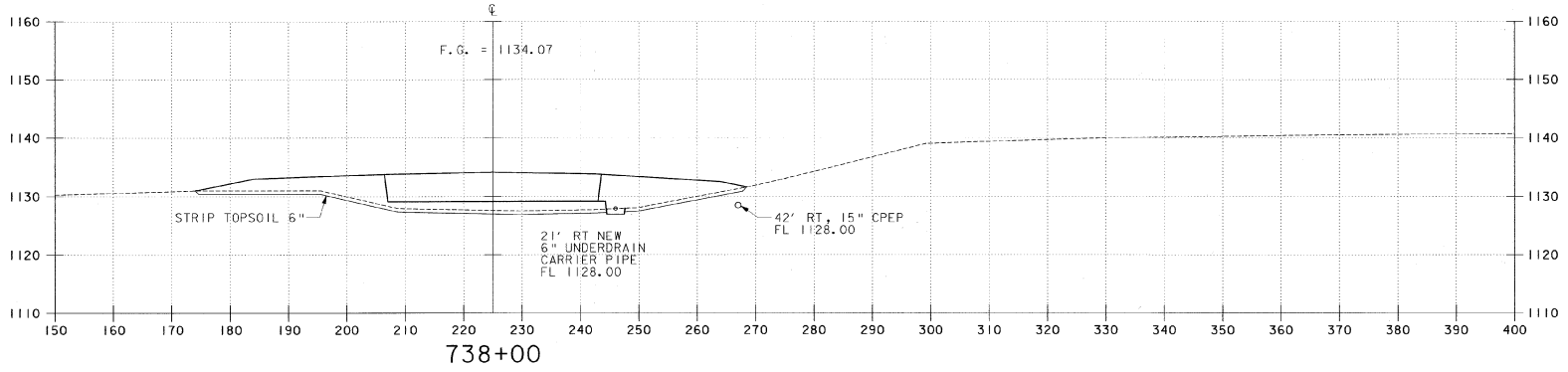
Date: 3/21/01

Sheet - Of

Sheet No.
82



738+50



738+00

NOTE: OFFSET DISTANCES SHOWN ARE RIGHT OF RUNWAY 17-35 CENTERLINE

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. 72000017/8.01

File No:P2071860x43.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

TAXIWAY E CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

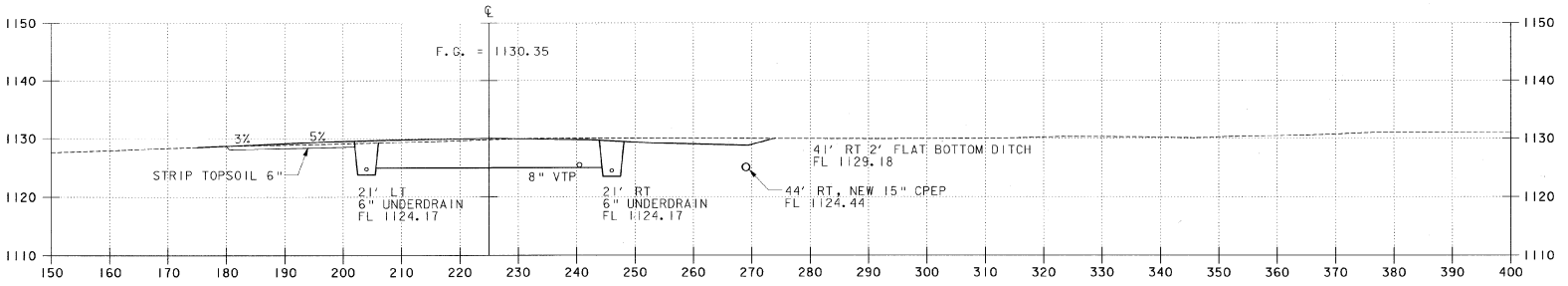
Designed by: GMD
Drawn by: MMM
Checked by: BMC
Approved by: GMD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

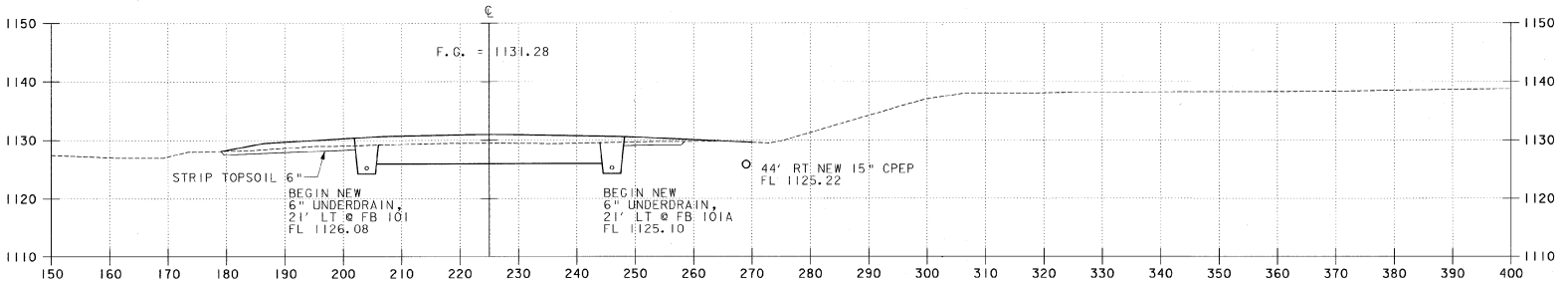
Date: 3/21/01

Sheet - Of

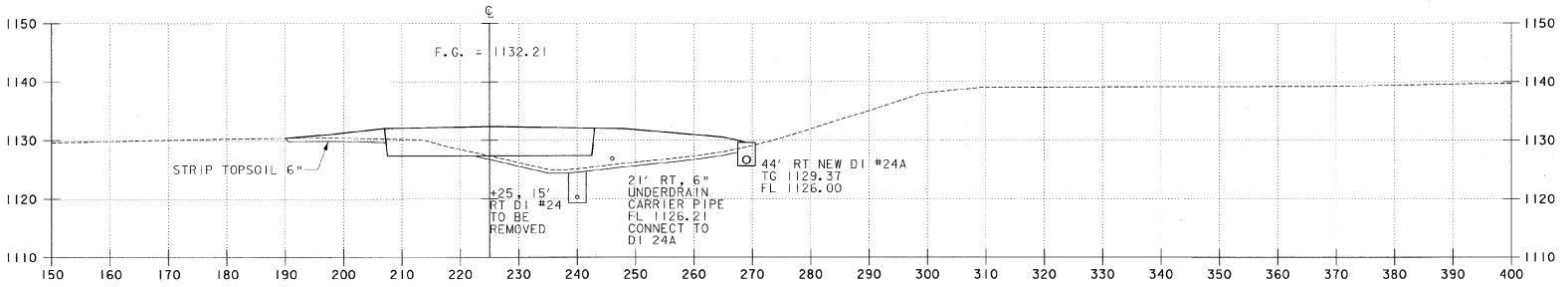
Sheet No
83



740+00



739+50



739+00

NOTE: OFFSET DISTANCES
SHOWN ARE RIGHT OF
RUNWAY 17-35 CENTERLINE

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

File No:f20017801x44.dgn

Job No. f20000171B.01

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

TAXIWAY E CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

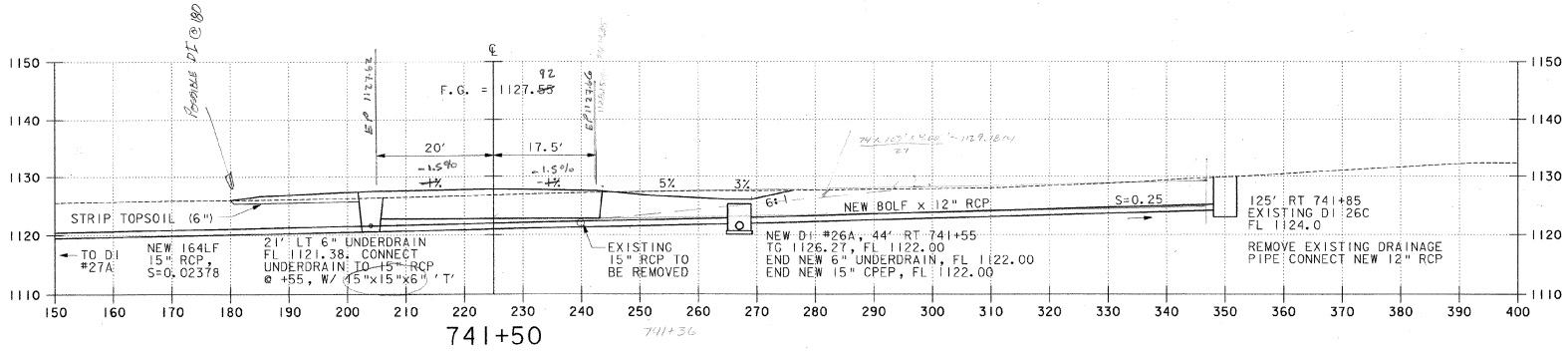
Designed by GWD | Drawn by MMM | Checked by BMC | Approved by GWD

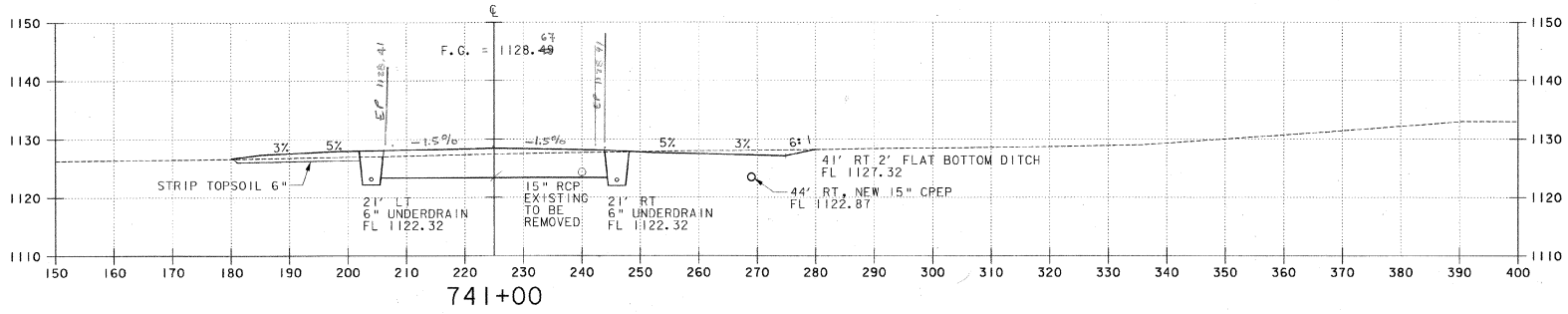
Scale: HORZ. 1" = 10'
VERT. 1" = 10'

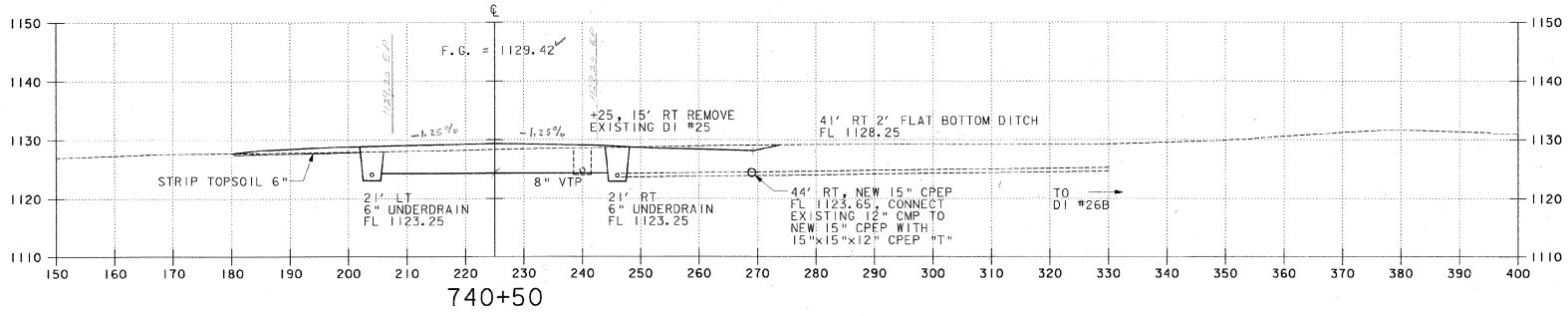
Date: 3/21/01

Sheet - Of

Sheet No
84







NOTE: OFFSET DISTANCES SHOWN ARE RIGHT OF RUNWAY 17-35 CENTERLINE

FINISHED GRADES REVISED 6/14/01

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F20000171 8.01

File No. f20718001k45.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

TAXIWAY E CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

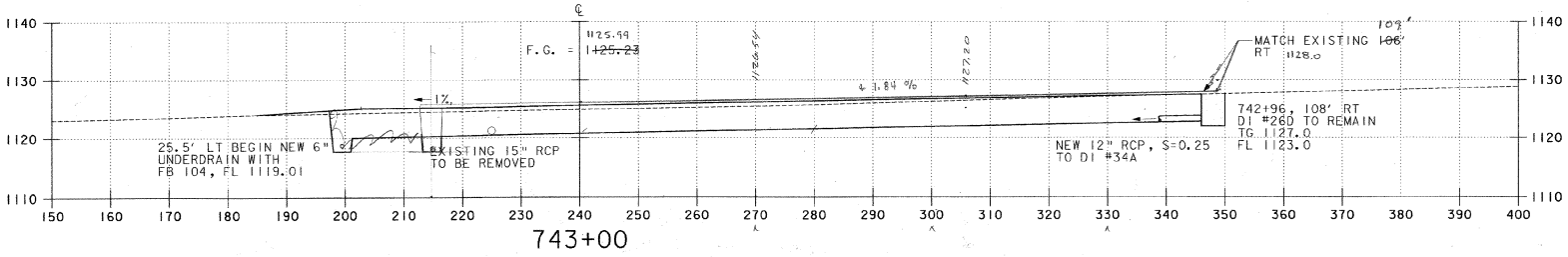
Designed by: CWD
Drawn by: MMM
Checked by: BWC
Approved by: BWB

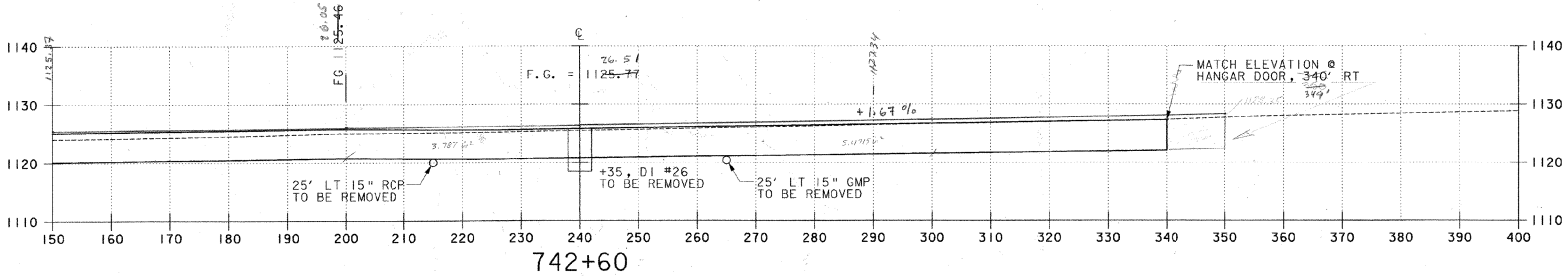
Scale: HORZ. 1" = 10'
VERT. 1" = 10'

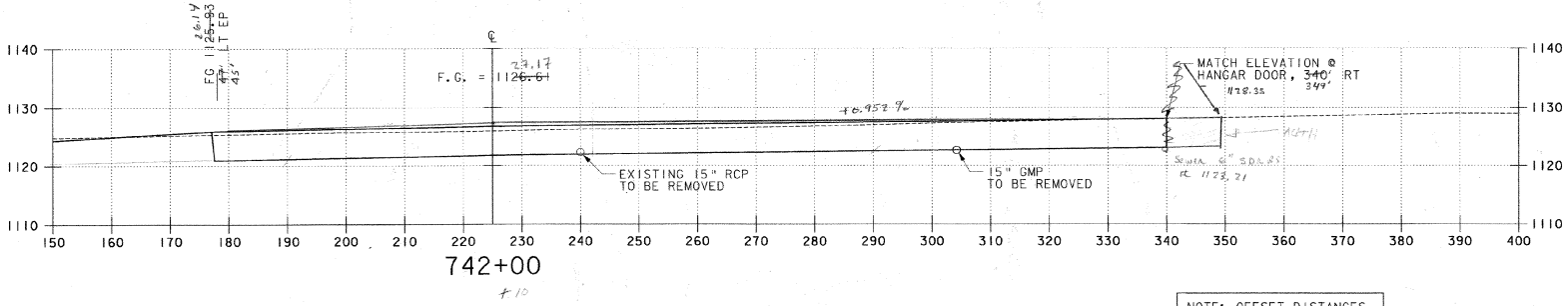
Date: 3/21/01

Sheet - Of

Sheet No
85







NOTE: OFFSET DISTANCES SHOWN ARE RIGHT OF RUNWAY 17-35 CENTERLINE

FINISHED GRADES REVISED 8/10/01

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

File No.f2007180dx46.dgn

Job No. F200001718.01

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

TAXIWAY E CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

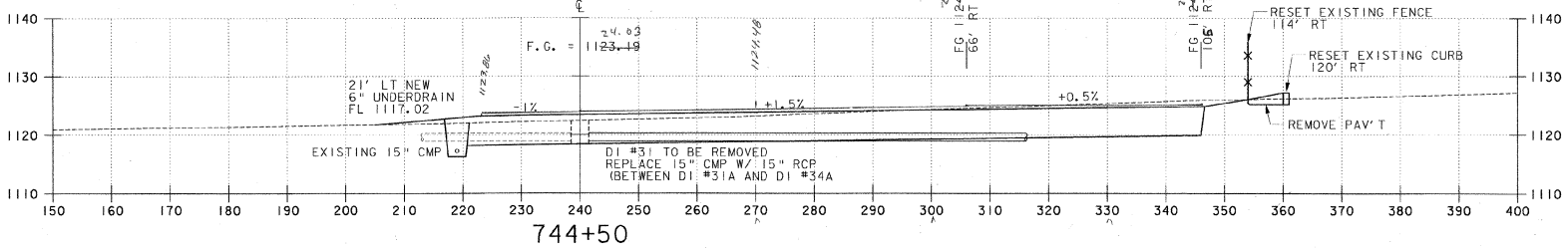
Designed by: GMD
Drawn by: MMM
Checked by: BMC
Approved by: GMD

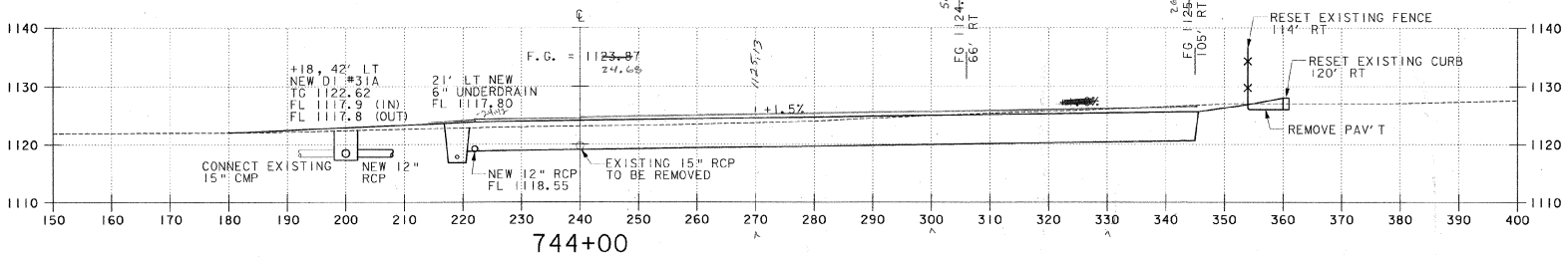
Scale: HORZ. 1" = 10'
VERT. 1" = 10'

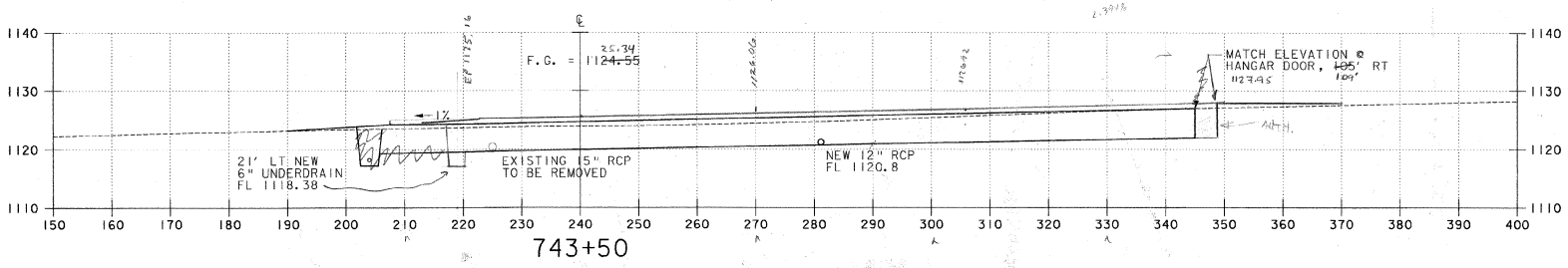
Date: 3/21/01

Sheet - Of

Sheet No
86







NOTE: OFFSET DISTANCES SHOWN ARE RIGHT OF RUNWAY 17-35 CENTERLINE

finished grades revised 8/16/01 Stud

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F200001718.01 | File No.F2071800xs47.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

TAXIWAY E CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

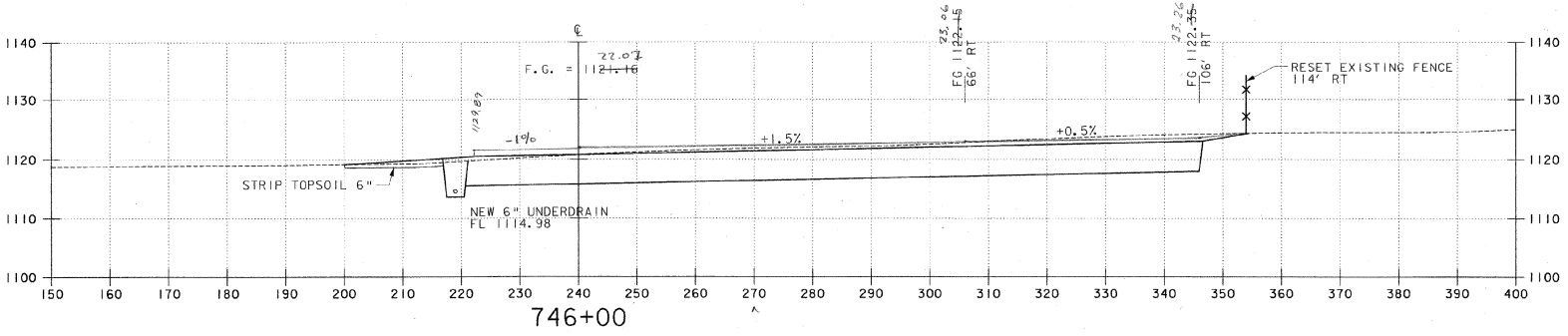
Designed by GMD | Drawn by MMM | Checked by BMC | Approved by GMD

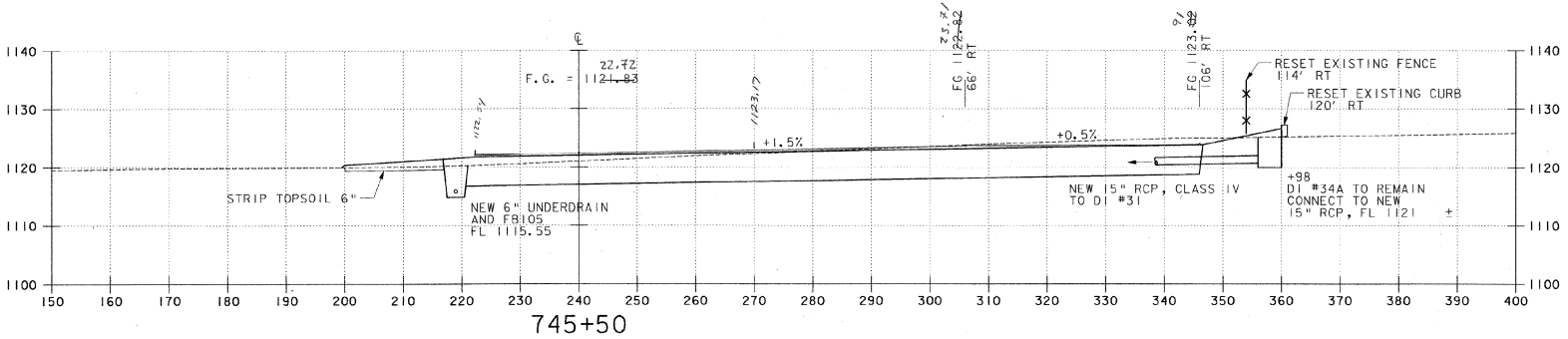
Scale: HORZ. 1" = 10'
VERT. 1" = 10'

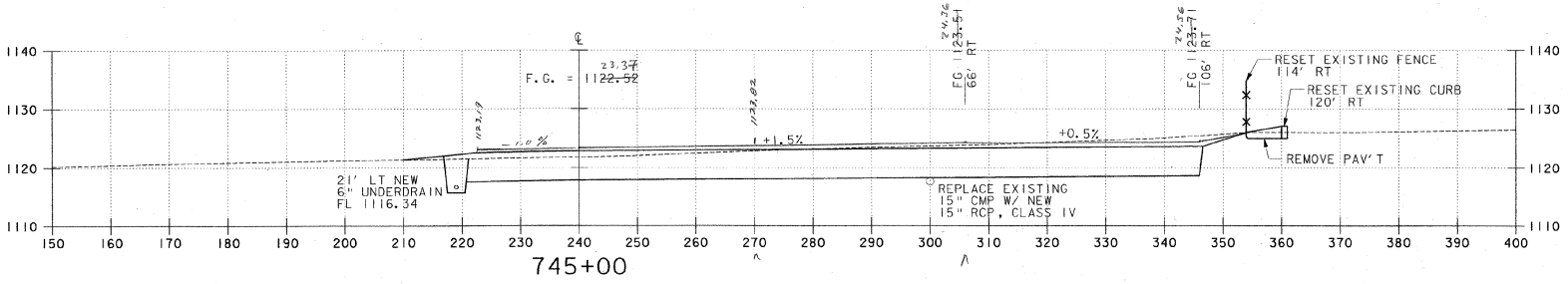
Date: 3/21/01

Sheet - Of

Sheet No
87







NOTE: OFFSET DISTANCES SHOWN ARE RIGHT OF RUNWAY 17-35 CENTERLINE

finish grades revised 8/10/01

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F200001718.01

File No.F20718Oxs48.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

TAXIWAY E CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

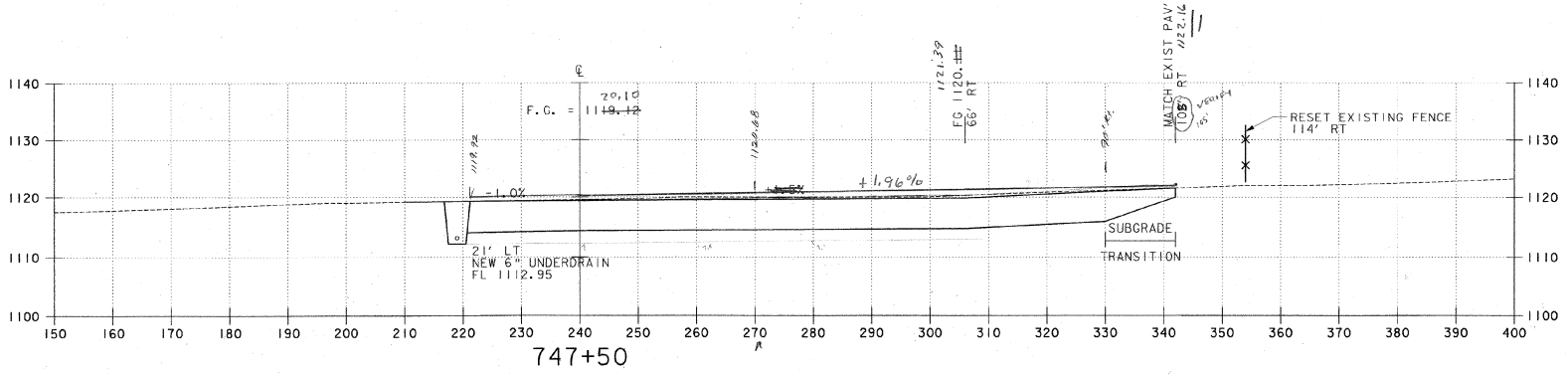
Designed by GMD | Drawn by MMM | Checked by BMC | Approved by GMD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

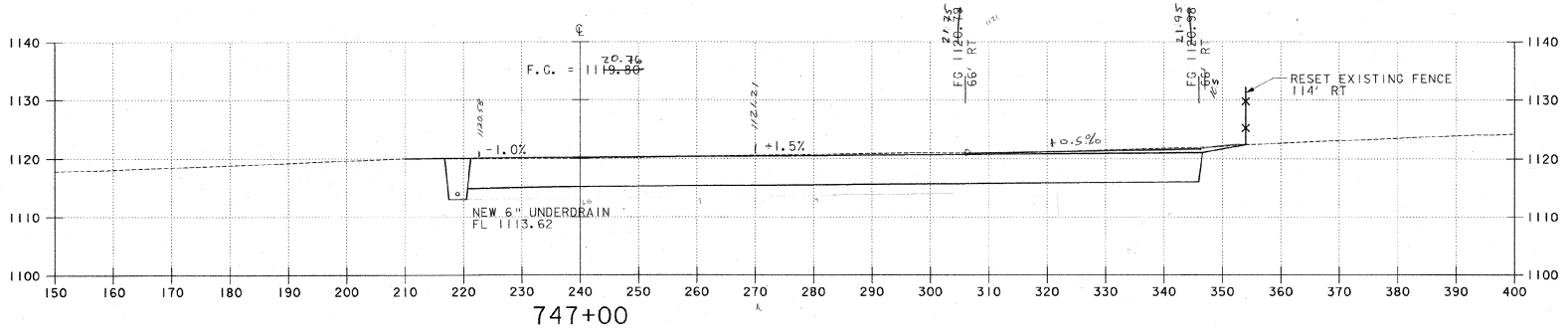
Date: 3/21/01

Sheet - Of

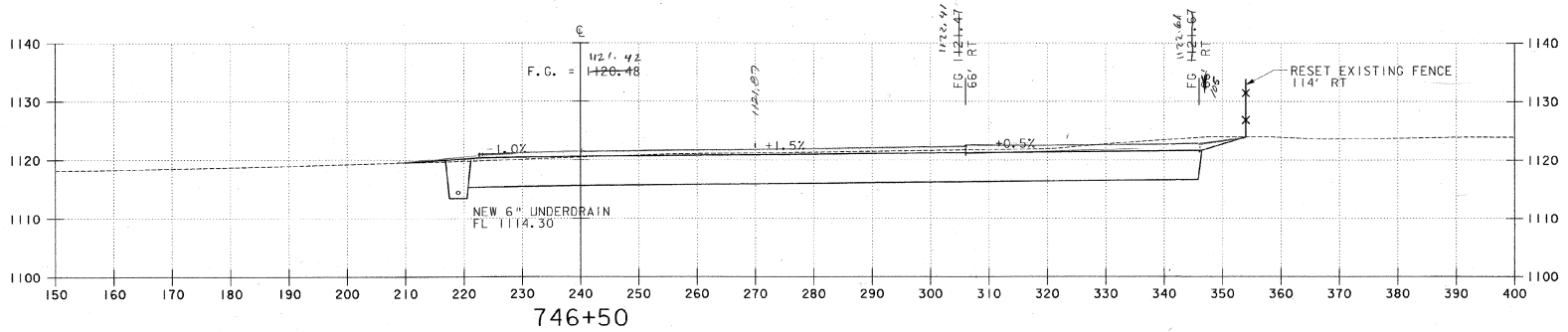
Sheet No
88



747+50



747+00



746+50

NOTE: OFFSET DISTANCES SHOWN ARE RIGHT OF RUNWAY 17-35 CENTERLINE

Finishes Grades Revised 8/10/01 GWD

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F20000117B.01

File No.F20718Dksht9.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

TAXIWAY E CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

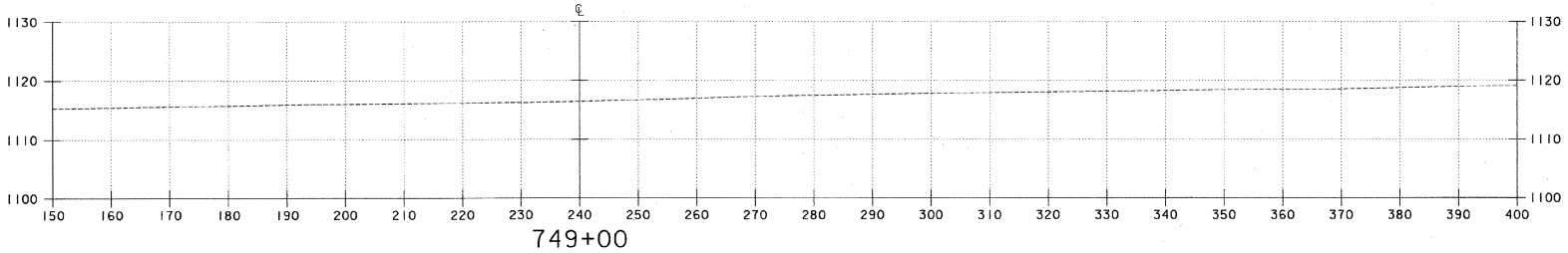
Designed by GWD | Drawn by MMM | Checked by BMC | Approved by GWD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

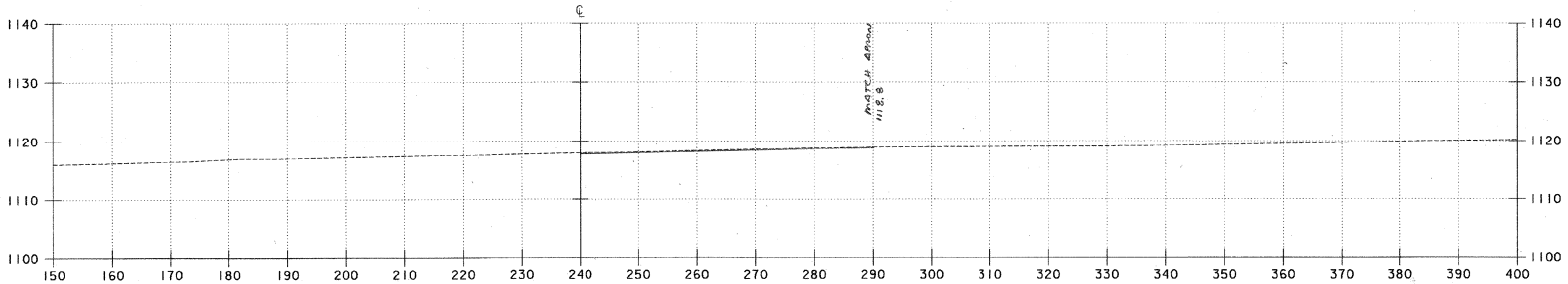
Date: 3/21/01

Sheet - Of

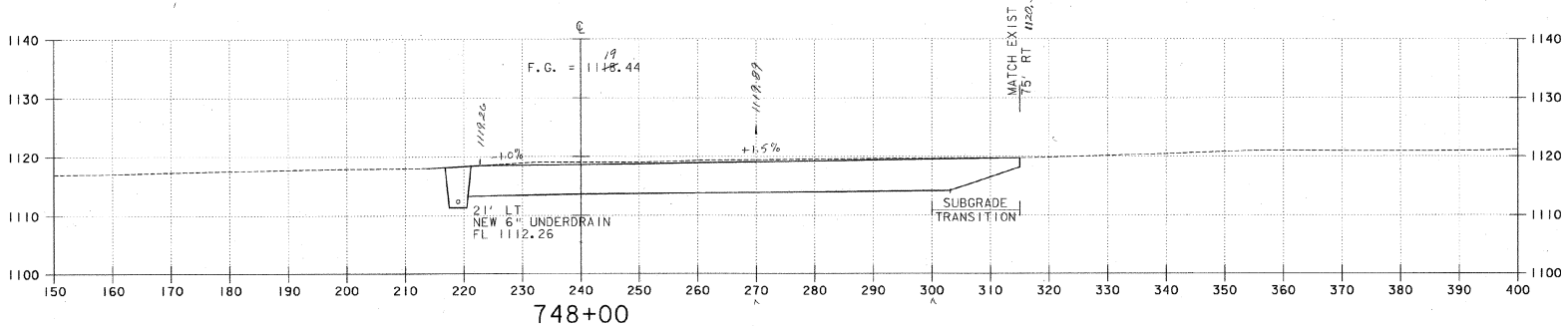
Sheet No
89



749+00



748+50



748+00

748+10.3
END TAXIWAY 'E'
MATCH TAXIWAY 'C'

NOTE: OFFSET DISTANCES SHOWN ARE RIGHT OF RUNWAY 17-35 CENTERLINE

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F200001718.01

File No.f200718l0xs50.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

TAXIWAY E CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

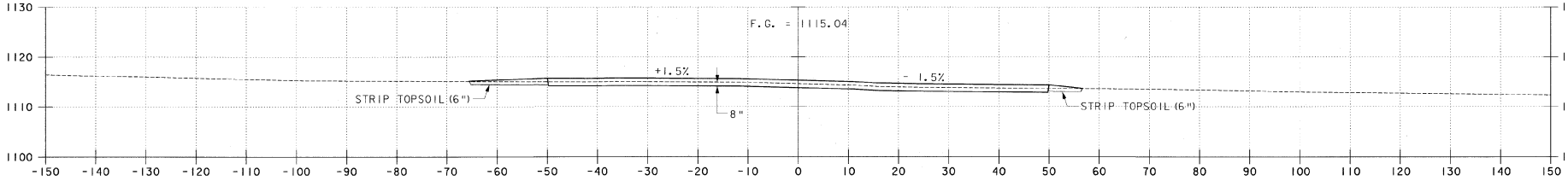
Designed by GWD
Drawn by MMM
Checked by GWD
Approved by GWD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

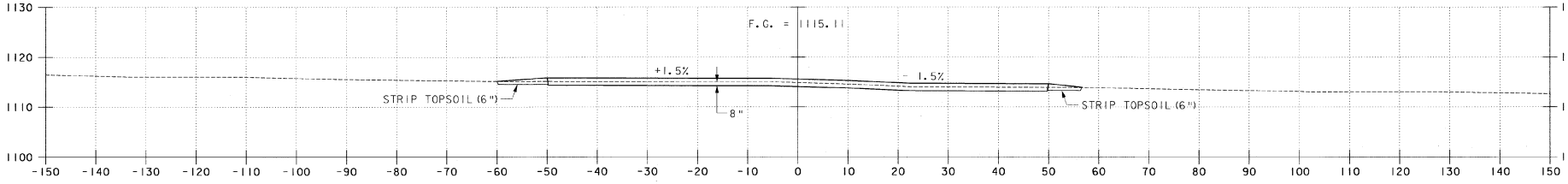
Date: 3/21/01

Sheet - Of

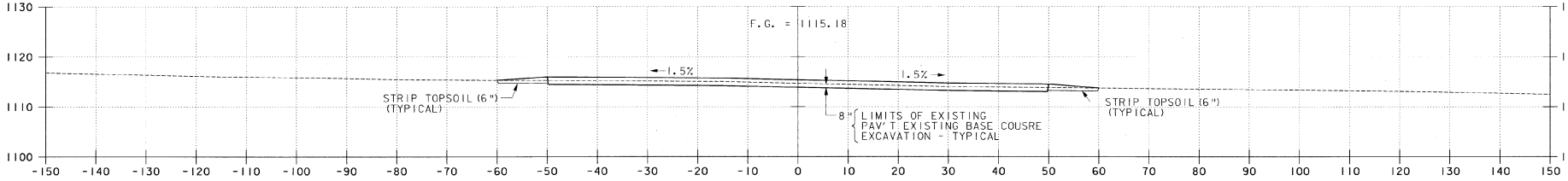
Sheet No
90



145+50



145+00



144+50

BEGIN CONSTRUCTION +24
MATCH EXISTING

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. P200017/8.01

File No.f20718Oxs53.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

TAXIWAY 5-23 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

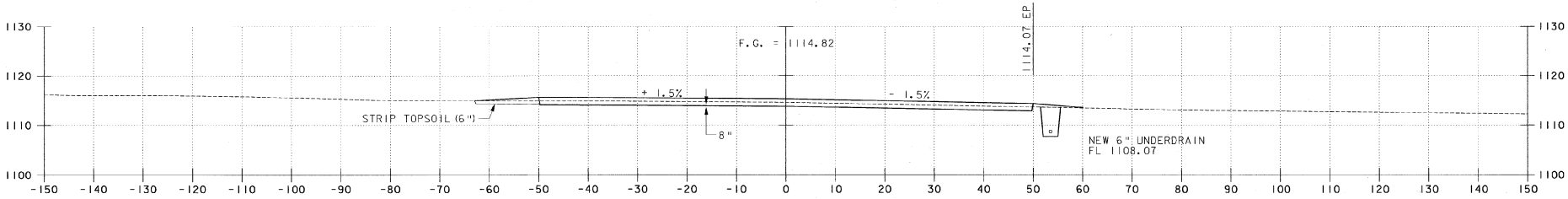
Designed by: GWD
Drawn by: MMM
Checked by: BWC
Approved by: GWD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

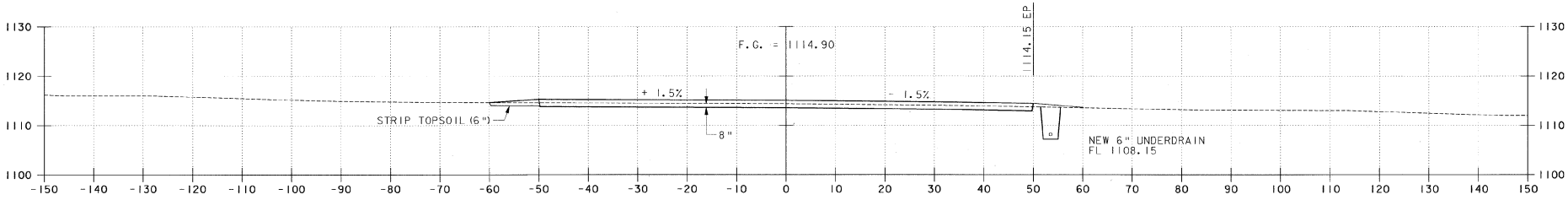
Date: 3/21/01

Sheet - Of

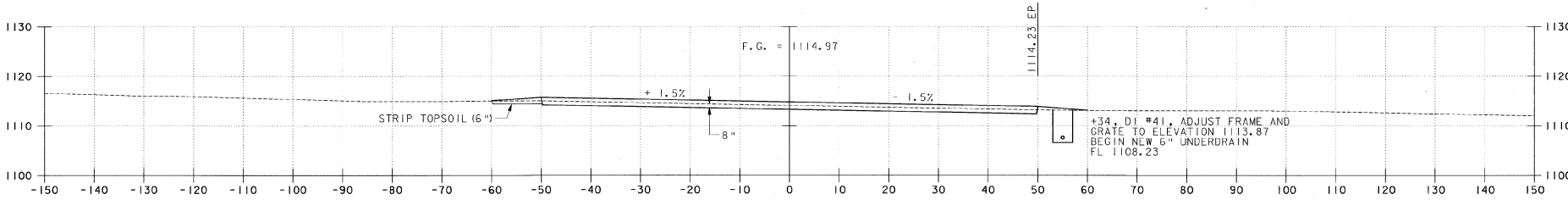
Sheet No
91



147+00



146+50



146+00

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. 72000017.01

File No.72017800ds54.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

TAXIWAY 5-23 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

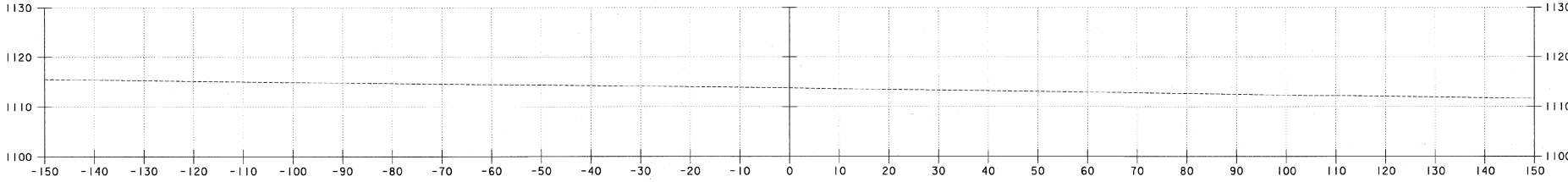
Designed by: GMD
Drawn by: MMM
Checked by: BMC
Approved by: GMD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

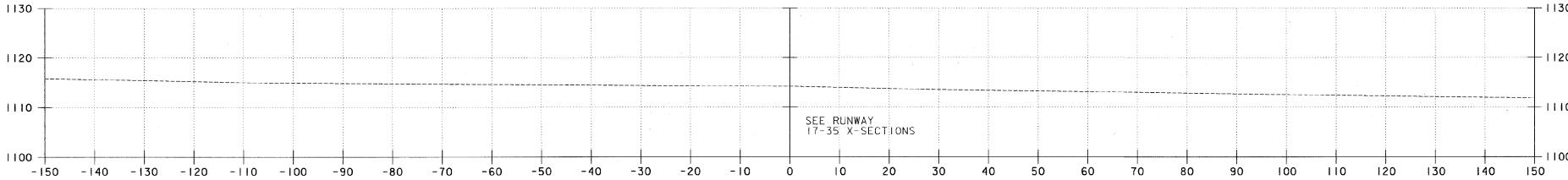
Date: 3/21/01

Sheet - Of

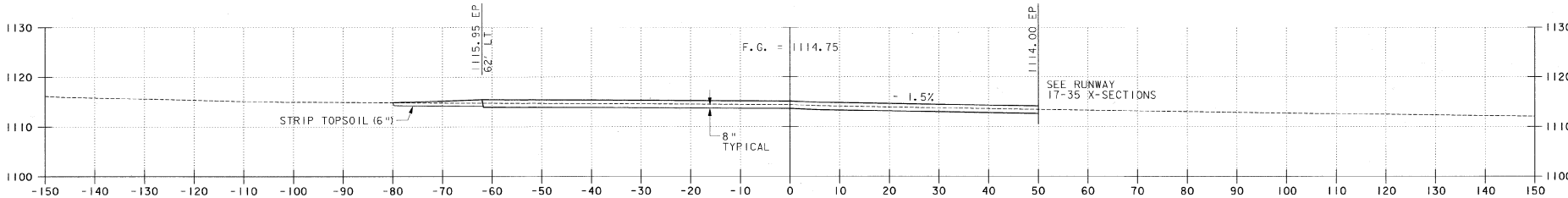
Sheet No
92



148+50



148+00



147+50

AIP 3-50-0001-06

REV.	DATE	DESCRIPTION

Job No. F200001718.01

File No.f20718Oksc55.dgn

EDWARD F. KNAPP STATE AIRPORT
BERLIN, VERMONT

TAXIWAY 5-23 CROSS SECTION

URS
ONE NORTHWAY LANE
LATHAM, NEW YORK

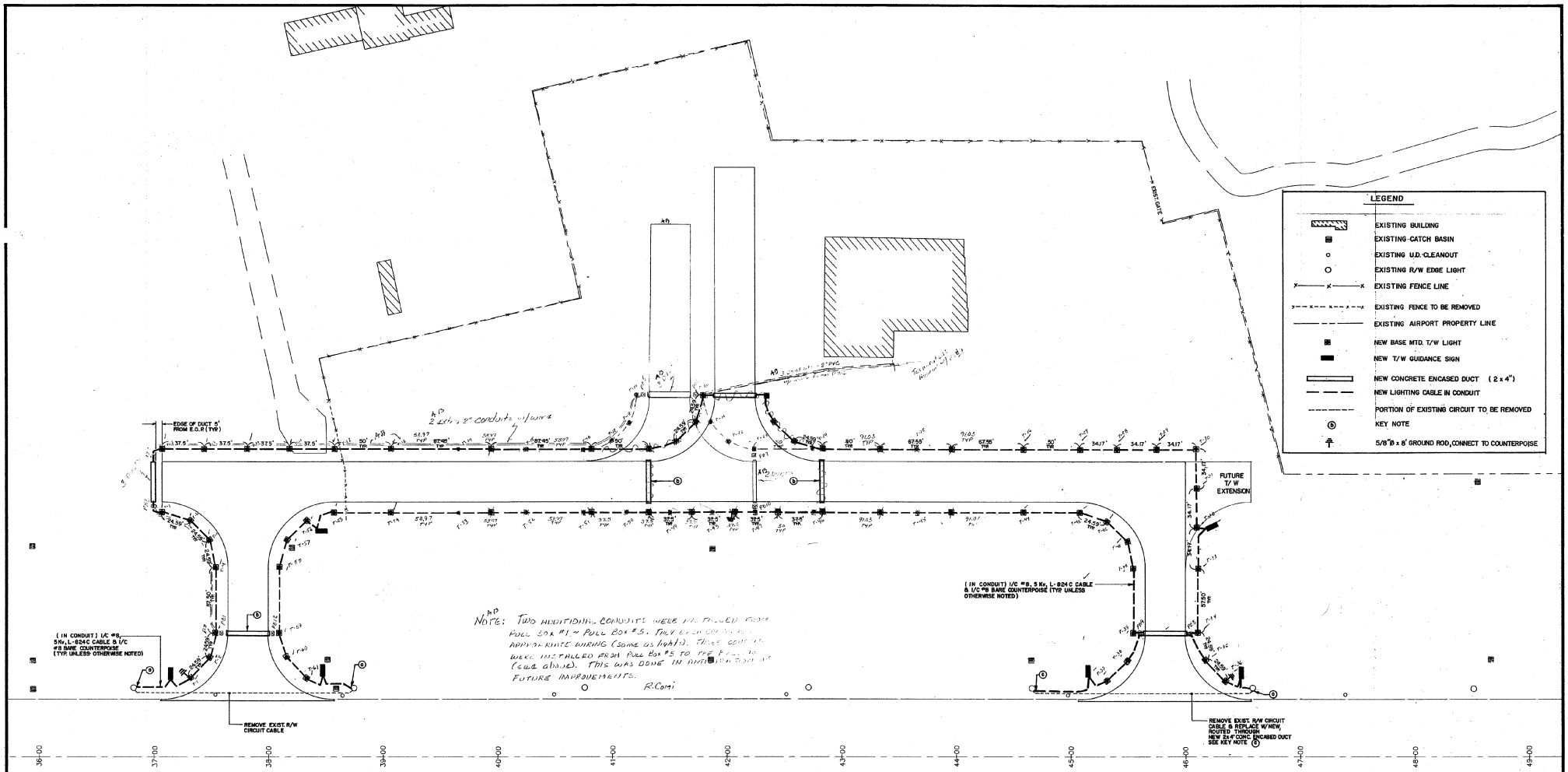
Designed by: GWD	Drawn by: MMM	Checked by: BWC	Approved by: GWD

Scale: HORZ. 1" = 10'
VERT. 1" = 10'

Date: 3/21/01

Sheet - Of

Sheet No
93



KEY NOTES

(a.) CONNECT NEW T/W LIGHTING CIRCUIT TO EXISTING R/W LIGHT TRANSFORMER WITH L-823 CONNECTOR.

(b.) NEW 2 X 4" CONCRETE ENCASED DUCT FOR FUTURE USE, ENDS CAPPED.

(c.) RECONNECT R/W LIGHTING CIRCUIT WITH NEW CABLE AT EXISTING LIGHT USING L-823 CONNECTOR.

T/W LIGHTING PLAN
1" = 40'

NOTES:

1. AIRPORT MANAGER WILL PROVIDE THE CONTRACTOR WITH A LIGHTING SYSTEM NUMBERING NOMENCLATURE AT THE PRECONSTRUCTION CONFERENCE. THE CONTRACTOR SHALL TAG ALL LIGHTS INSTALLED OR RELOCATED ON THE PROJECT WITH THE APPROPRIATE NUMBER.
2. LIGHTS SHALL BE PLACED 10' FROM EDGE OF PAVEMENT UNLESS OTHERWISE NOTED. SIGNS SHALL BE PLACED 20' FROM EDGE OF PAVEMENT. EXACT LOCATIONS FOR SIGNS SHALL BE DETERMINED BY THE ENGINEER.

REFERENCE DRAWING

Rev.	Description	By	Date

EDWARD F. KNAPP STATE AIRPORT

T/W LIGHTING PLAN

BERLIN — AIR 04-3077 — VERMONT

DufresneHenry
400 Southborough Drive
So. Portland, ME 04106

Client No.	812017
Proj. Manager	DCD
Proj. Designer	PJM
Drawn By	TVS
Checked By	DCD
Scale	1" = 40'
Approved	LJC
Date	DEC. 1993

STATE OF VERMONT — REGISTERED PROFESSIONAL ENGINEER — No. 3339

Sheet 7 of 19
D

ITEM DETAIL AND DRAINAGE SHEET

STATE OF VERMONT
AGENCY OF TRANSPORTATION

DRAINAGE STRUCTURES

STA.	STA.	POSITION	ASKEW	TYPE IN/OUT	DITCH IN	DITCH OUT	PIPE ARCH S IN	PIPE ARCH R IN	PIPE ARCH L FT	PIPE D IN	PIPE L FT	ALLOWABLE OPTIONS PCCSP TH	CAAP TH	RCP CL	CSP TH	CPEP SL	PCCSP FL TH	PIPE ELBOW NO-DEG	ES EA	CB	FRAME	DEPTH DI	PRC 604.25 Pipe Drop Inlet with cast iron frame EA	PRC 604.25 Pipe Drop Inlet with cast iron frame 37A	CHAN ELEV	CRM CY	TR EXCAV EARTH CY	TR EXCAV ROCK CY	COMM EXC CY	UNC CHAN EXC CY	STRUC EXCAV CY	GRAN BKF STRUC CY	GRAN BORR CY	EROS MATT SY	STONE FILL CY	STONE FILL TYPE	MRKR POSTS LT	MRKR POSTS RT	REMARKS
230+77	232+09	102' RT	TANGENT	RCPES/RCPES	SF	SF				15"	132			IV					2																			Sheet 1 of 7
234+64	235+96	102' RT	TANGENT	RCPES/RCPES	SF	SF				18"	132			IV					2								14.82												Sheet 1 of 7
DI 17B	DI 17C			DI/DI						15"	145			IV													97.97						40.5					Sheet 2 of 7
DI 17C	DI 24A			DI/DI						15"	296					✓						6.28	1	17C			100.28						77.78					Sheet 2 of 7
DI 24A	DI 26A			DI/DI						15"	247					✓							1	24A			152.88						57.3					Sheet 3 of 7
																							1	24A-1														
DI 26C	DI 26A			DI/DI						12"	76			IV													15.3						5.8					Sheet 6 of 7
DI 26A	DI 27A			DI/DI						15"	160			IV									1	26A			111.12						45.14					Sheet 4 of 7
DI 27A	DI 27			DI/DI						24"	138			IV									1	27A			168.15						114.3					Sheet 5 of 7
DI 26D	DI 31A			DI/DI						12"	192			IV									1	26D			12.78	3					5.04					Sheet 6 of 7
DI 34A	DI 31A			DI/DI						15"	209			IV													23.08						11					Sheet 6 of 7
DI 31A	DI 36A			DI/DI						15"	343					✓							1	31A			303	14.9					96.7					Sheet 3 of 7
DI 27	DI 29			DI/DI						24"	259			IV									1	27			178.8	9					107.5					Sheet 7 of 7
DI 29	DI 38			DI/DI						24"	91					✓							1	29			72.67	3					37.21					Sheet 7 of 7
DI 38	245+20	230' LT		DI/RCPES						24"	58					✓			1				1	38			47.32	3					20.5	40.3	I			Sheet 7 of 7
DI 36A	DI 36			DI/EX						18"	12					✓							1	36A			111.7						4.4					Sheet 3 of 7
																									Sub Total		1332.94						664.78					
												15" RCPES		2	Item	601.6810									"	"		26.9										
												18" RCPES		2	Item	601.6815																						
															RCP																						
															12" =	268	Item	601.0806																				
															15" =	646	"	601.0811																				
															18" =	132	"	601.0816																				
															24" =	376	"	601.6826																				
																	CPEP																				
																15" =	886	Item	601.0910																			
																24" =	149	"	601.0920																			
																12" =	13	"	601.0915																			
																24"	SPEPES	1	"	601.7000																			
TOTALS																							11															

DI Removal

STA.	STA.	LT.	RT.		
DI #				Solid Rock	
				203.16	
9	228+05	85'			Remains
10	228+00		85'	3	
11	230+80		85'		"
12	230+60	85'			"
15	233+65	85'			"
16	234+05		85'	3	
17	239+90		155'	3	
18	237+10		95'	3	
19	236+60	85'			"
22	239+10	85'			"
23	240+10		85'	3	
24	739+25		15'	3	
25	740+75		15'	3	
26	502+90			3 10"/15"	
30	244+50		85'	3	
31	744+50	8'		5 18"/15"	Remains
49	256+10	85'			48" Pipe Remains
50	256+40		85'		Adjust Pipe Elev.
45	257+50		85'		Adjust Elev.
52	259+40	85'			Remains
53	259+40		85'		Adjust Elev.
56	262+06	85'			Remains
26D	743+40		105'	3 24"/H	
27	248+23		85'	3	
29	244+50	118'		3	
38	245+00	200'		3	
				42 SY	
TOTALS					

UNDERDRAIN

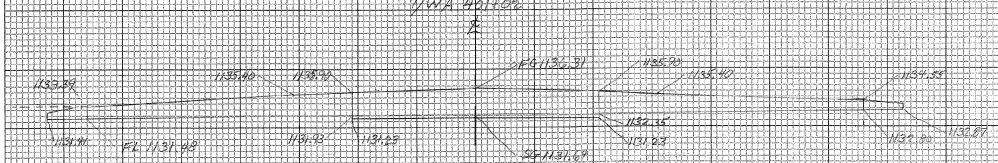
STA.	STA.	TYPE	POS.	D	L	TRENCH E	TRENCH R	GRAN BKF	FB	MRKR PST
TOTALS										

PROJECT NAME: Berlin Air
PROJECT NUMBER: 04-3064
FILE NAME: Drainage Summary
PROJECT LEADER: D. Sargent
DESIGNED BY: RCP
PLOT DATE: 24-SEP-2001
DRAWN BY: RCP
CHECKED BY:
SHEET ____ OF ____

2344+64 To 2357+96 102° Rt.

New 48" 18" RCP x 132" w/ End Section @ Outlet

TjwA 4011+02



Sta	W x H	End A	Dist	Vol
2356+08.8	3.2' X 1.9A	7.7c		
2357+61	"	9.5'	51.8	650.08
2357+09	"	5.5'	15.48 Base 13.8'	
2344+57.8	"	6.5'	51.8	523.3%

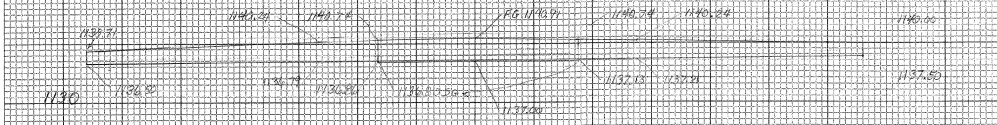
Total $\frac{1129.7\%}{27}$ = 41.82 CY

Grav. Barrier: 61.8 (2 x 3.9 x 8.4') ÷ 27 = 35.91 CY

2304+77 to 2321+09 102° Rt.

New 15" RCP x 132" w/ End Section @ Outlet

TjwAA 3014+02



Sta	W x H	End A	Dist	Vol
2301+77	3.4 X 2.2'	7.7%		
2304+45.3	X 2.46'	12.45	90.5	372.82
2304+95.5	X 2.88'	15.97	50	194.35
2311+93	X 3.11'	13.56	13.5	239.14
2314+82.5	X 3.12'	13.66	17.3	253.65
2316+00	X 3.12'	13.66	118	1216.55
2317+00.5	X 3.03'	10.97	100	Pipe was Tested Due to water in Drop Grate Box
2321+09	X 2.75'	9.00	408.5	Pass Tested

Grav. Barrier: 2.1 x 2.4 x 132' = 793.2 cy = 29.4 CY

Total $\frac{1821.88}{27}$ = 67.14 CY + 118.5 CY

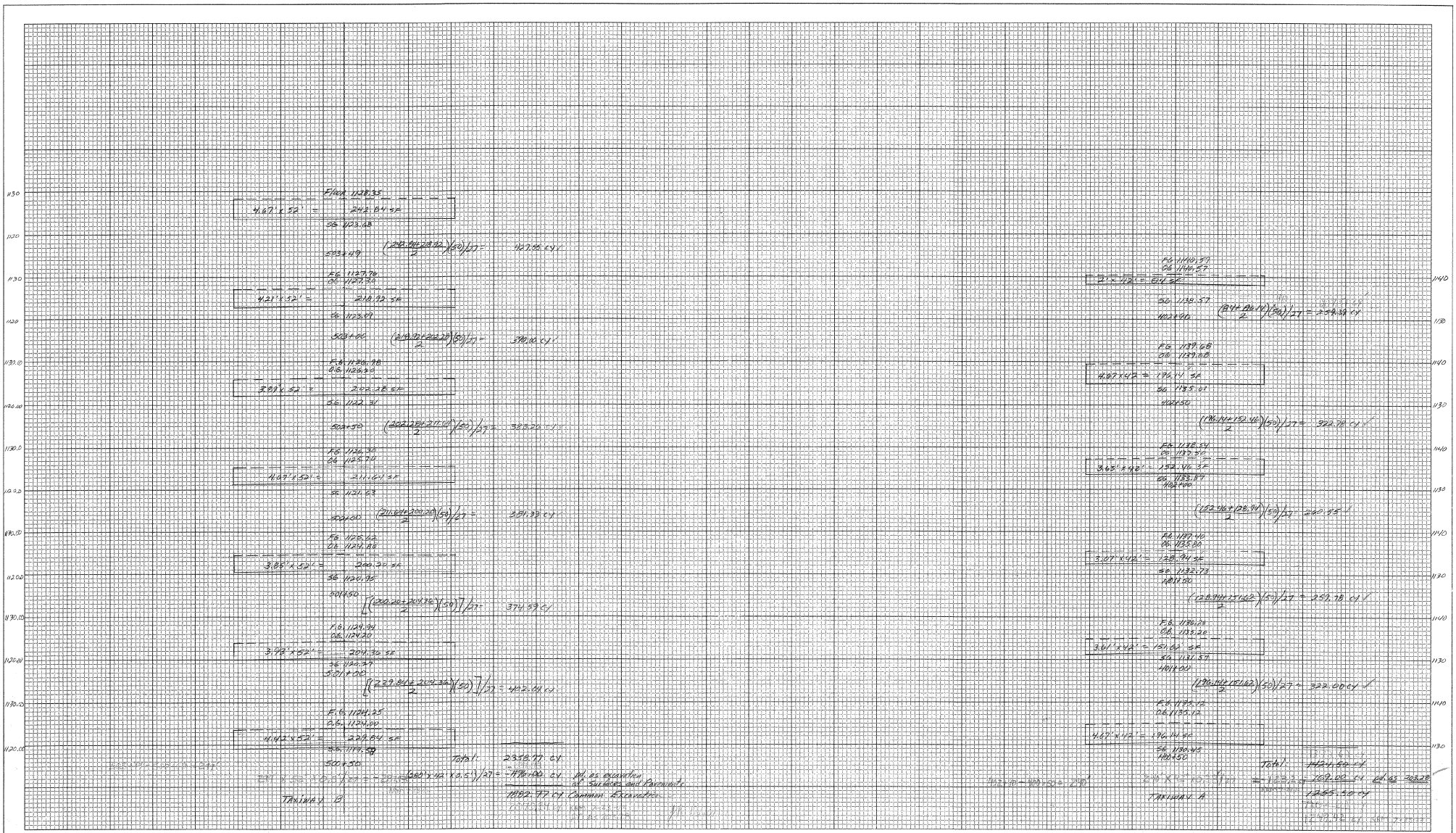
CROSS SECTION SHEET

PROJECT NAME: Berlin Air 04-3064

PROJECT NUMBER: 234764 To 235446 102 Rt
230477 To 232109 102 Rt

FILE NAME: Drainage
PROJECT LEADER:
DESIGNED BY:
const: g:/common/cadd/e-xsection.dgn

PLOT DATE: 05-JUN-2000 09
DRAWN BY: RCPeters
CHECKED BY:
SHEET 1 OF 7



CROSS SECTION SHEET

PROJECT NAME: _____

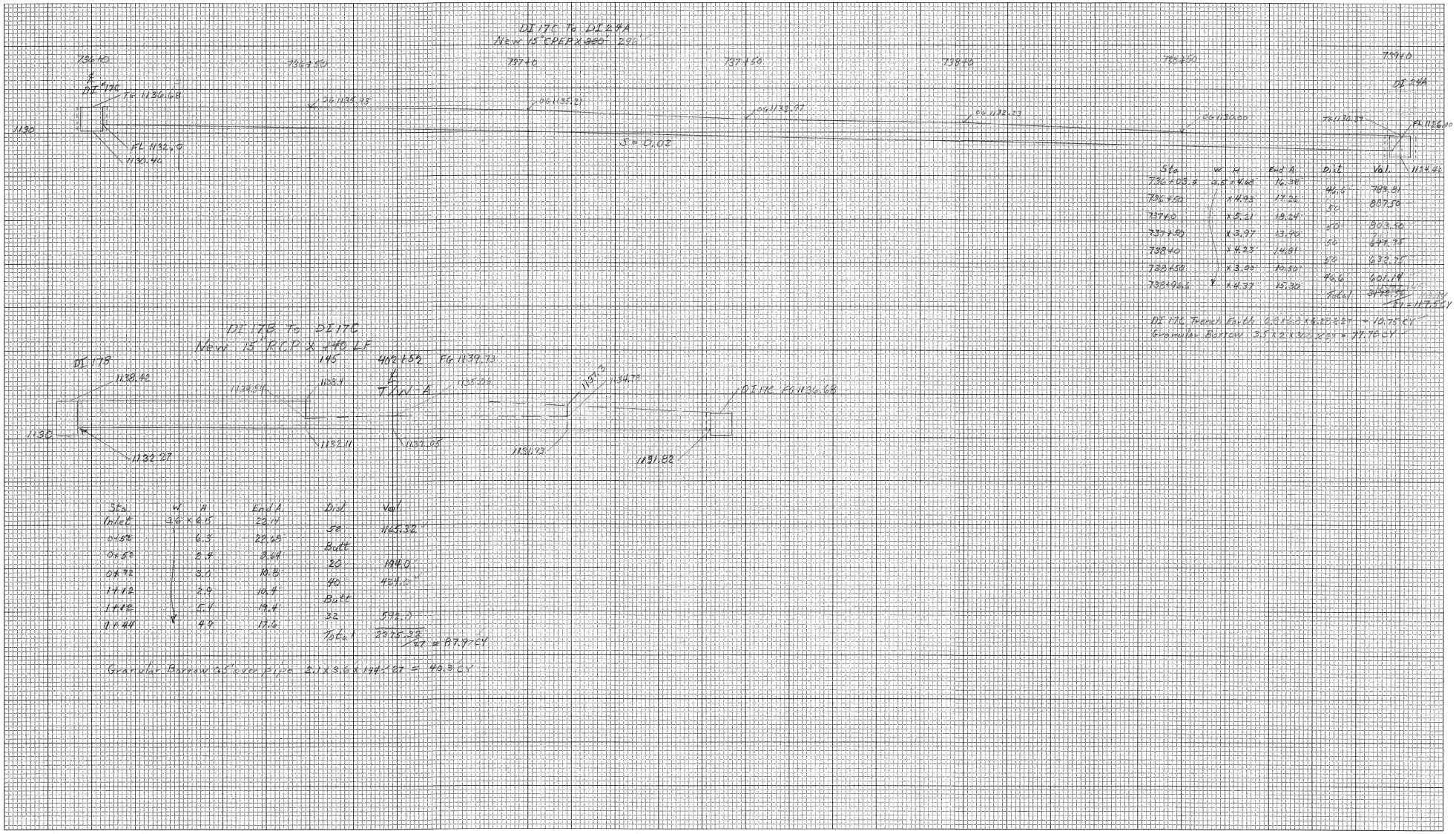
PROJECT NUMBER: _____

FILE NAME: _____ PLOT DATE: 05-JUN-2000 09

PROJECT LEADER: _____ DRAWN BY: _____

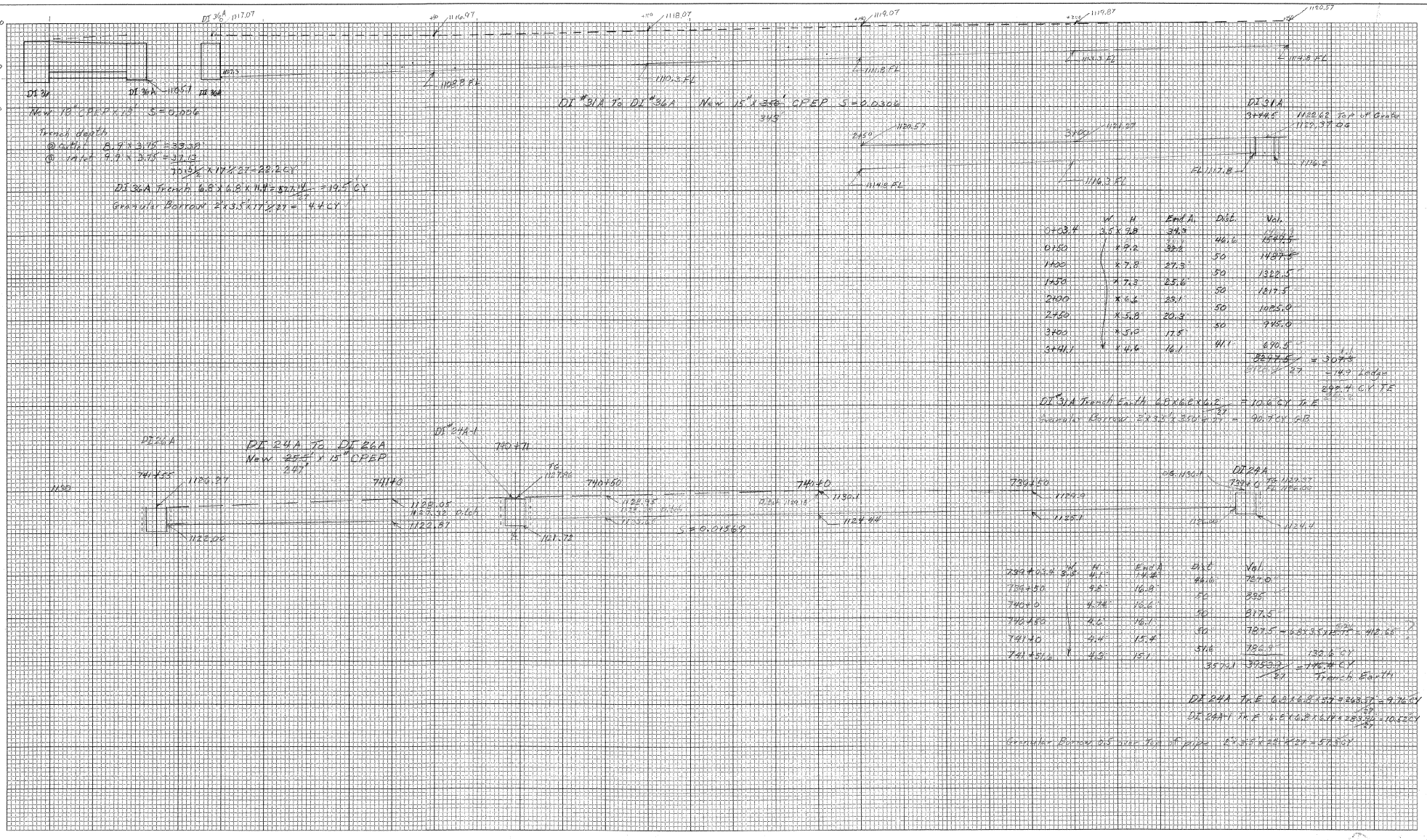
DESIGNED BY: _____ CHECKED BY: _____

const: g:/common/cadd/e-xsection.dgn SHEET ____ OF ____



CROSS SECTION SHEET

PROJECT NAME: Berlin Air OH-3064
PROJECT NUMBER: DI 17C To DI 24A And DI 17B To DI 17C
FILE NAME: Drainage
PROJECT LEADER:
DESIGNED BY:
const: g:/common/cadd/e-xsection.dgn
PLOT DATE: 05-JUN-2000 09
DRAWN BY: RCP
CHECKED BY:
SHEET 2 OF 7



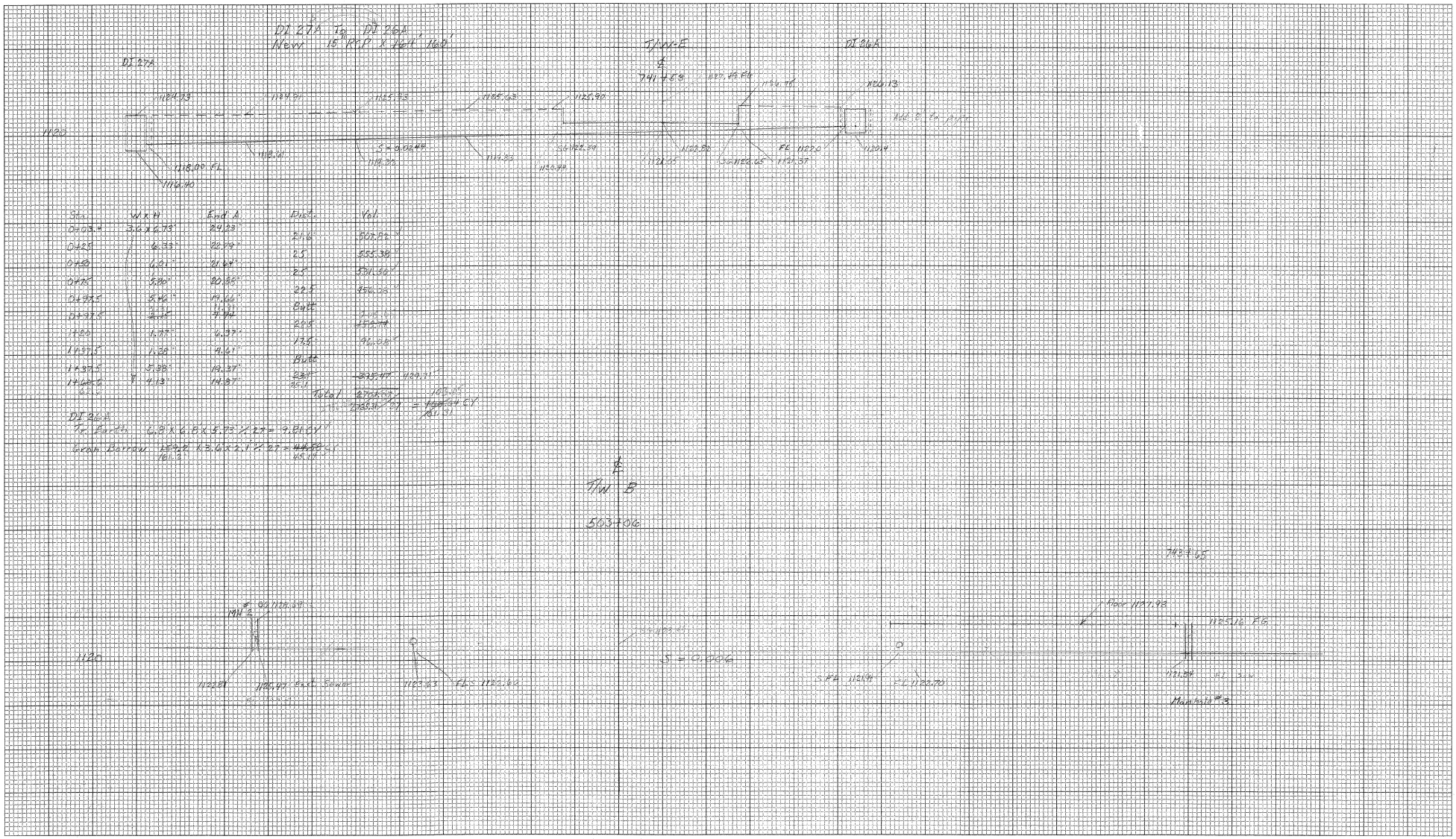
	W	H	End A.	Dist.	Vol.
0+03.7	3.5	9.8	34.3		
0150		9.2	32.2	46.3	1542.5
1+00		7.8	27.3	50	1487.5
1+50		7.3	25.6	50	1322.5
2+00		6.5	23.1	50	1817.5
2+50		5.8	20.3	50	1025.0
3+00		5.0	17.5	50	945.0
3+41.1		4.6	16.1	41.1	690.5
					8277.5 = 306.5 cy
					-14.0 Ledge
					292.4 C.Y T.E

DI 31A Trench Earth 6.8 x 6.8 x 41.2 = 106.6 CY T.E
Granular Bottom 2'x3.5' x 350'-0" = 90.7 CY G.B

	W	H	End A.	Dist.	Vol.
739+03.8	8.8	11.1	114.8		
739+50		9.8	16.8	46.2	792.6
740+00		9.7	15.6	50	895
740+50		9.6	16.1	50	817.5
741+00		9.4	15.4	50	787.5 = 6.8 x 5 x 16.75 = 412.65
741+50.6		9.5	15.1	50.6	786.3 = 132.6 CY
				350.1	3053.9 = 113.1 CY
					Trench Earth

CROSS SECTION SHEET

PROJECT NAME: Berlin Air 04-3064
PROJECT NUMBER: DI 36 To DI 36A - DI 36A To DI 24A And DI 24A To DI 26A
FILE NAME:
PROJECT LEADER:
DESIGNED BY:
const: g:/common/cadd/e-xsection.dgn
PLOT DATE: 05-JUN-2000 09
DRAWN BY:
CHECKED BY:
SHEET 3 OF 7



Sta.	W x H	End A	Dia.	Vol.
0+03.4	3.0 x 2.79'	24.23'		
0+25	6.33'	82.79'		
0+50	6.91'	91.64'		
0+75	5.80'	80.85'		
1+00	5.46'	69.66'		
1+37.5	4.15'	9.71'		
1+50	4.77'	6.32'		
1+75	4.58'	9.61'		
1+87.5	5.38'	19.37'		
1+96.2	4.13'	14.53'		

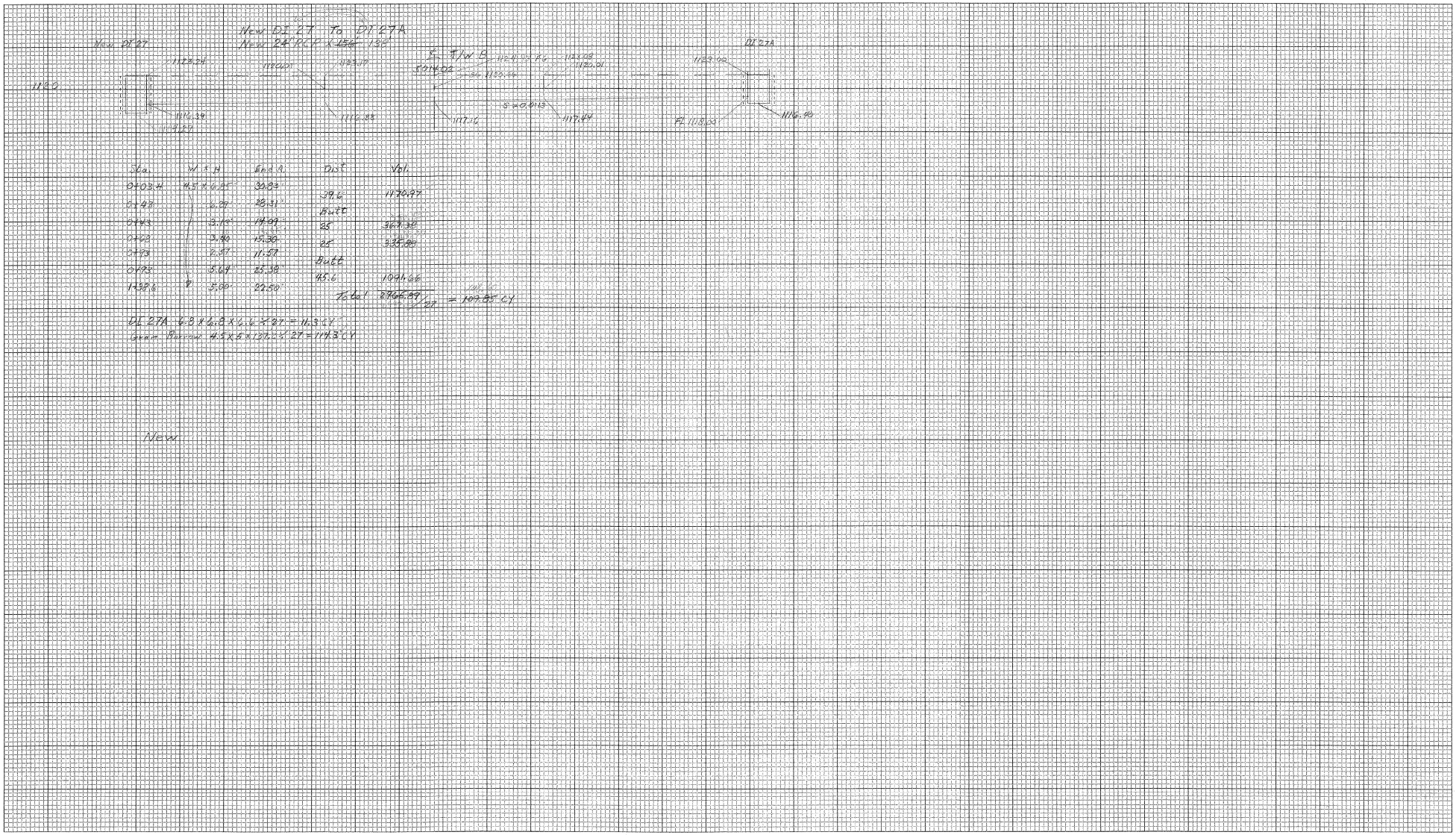
DI 26A
Vol. Sta. 2+00 x 6.5 x 6.75' x 27 = 2,847 CY
Trash Barrow 15'-2" x 3.6 x 2.1' x 27 = 445.82 CY

CROSS SECTION SHEET

PROJECT NAME: Berlin Air 04-3064 ✓DFH 3/17/00
PROJECT NUMBER: Pipe 27A To 26A and Sewer

FILE NAME: Drainage
PROJECT LEADER: ✓
DESIGNED BY:
const: g:/common/cadd/e-xsection.dgn

PLOT DATE: 05-JUN-2000 09
DRAWN BY: RCP
CHECKED BY:
SHEET 4 OF 7



Sta.	W x H	End A	Dist	Vol.
0+03.4	4.5 x 6.22	34.82		
0+47	" x 6.97	28.31	39.6	1170.27
0+93	" 13.15	19.89	Butt	
1+43	" 3.99	15.36	85	967.38
1+93	2.97	11.27	85	535.86
2+05	5.04	25.38	Butt	
1+97.6	5.80	22.50	45.6	1091.66

Total 3764.97 / 27 = 107.85 CY

DI 27A 4.8 x 6.8 x 6.8 x 1/2 x 27 = 416.3 CY

Grand Total 4.5 x 2.8 x 1/2 x 27 = 174.3 CY

New

CROSS SECTION SHEET

PROJECT NAME: Berlin Air 04-3064 V DRN 5/12

PROJECT NUMBER: 27 To 27A And

FILE NAME: Drainage

PROJECT LEADER:

DESIGNED BY:

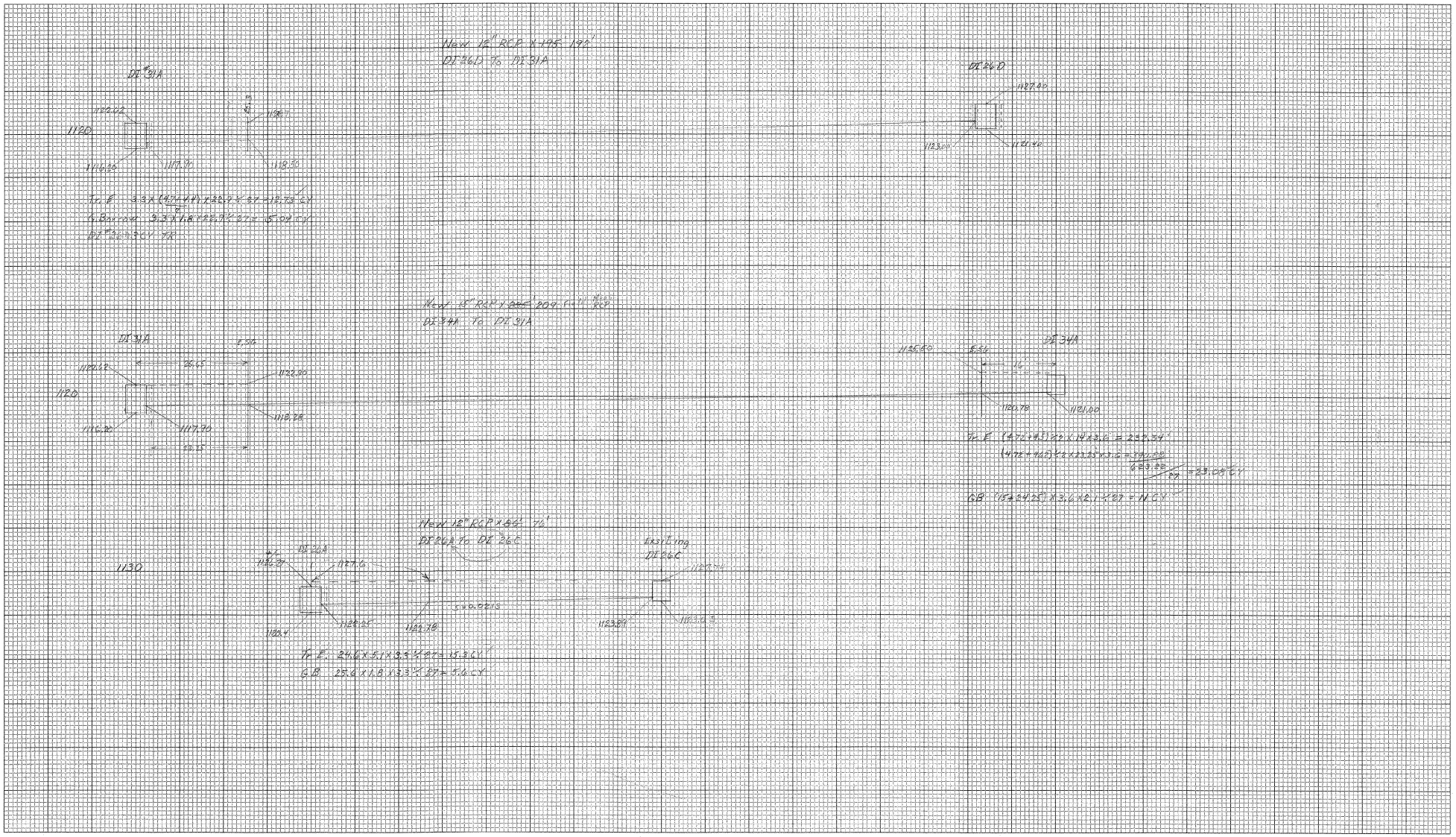
const: g:/common/cadd/e-xsection.dgn

PLOT DATE: 05-JUN-2000 09

DRAWN BY: RCP

CHECKED BY:

SHEET 5 OF 7



CROSS SECTION SHEET

PROJECT NAME: Berlin Air 04-3064

PROJECT NUMBER: 26D To 31A, DI 31A To DI 31A and 26A To 26C

FILE NAME: Drainage

PROJECT LEADER:

DESIGNED BY:

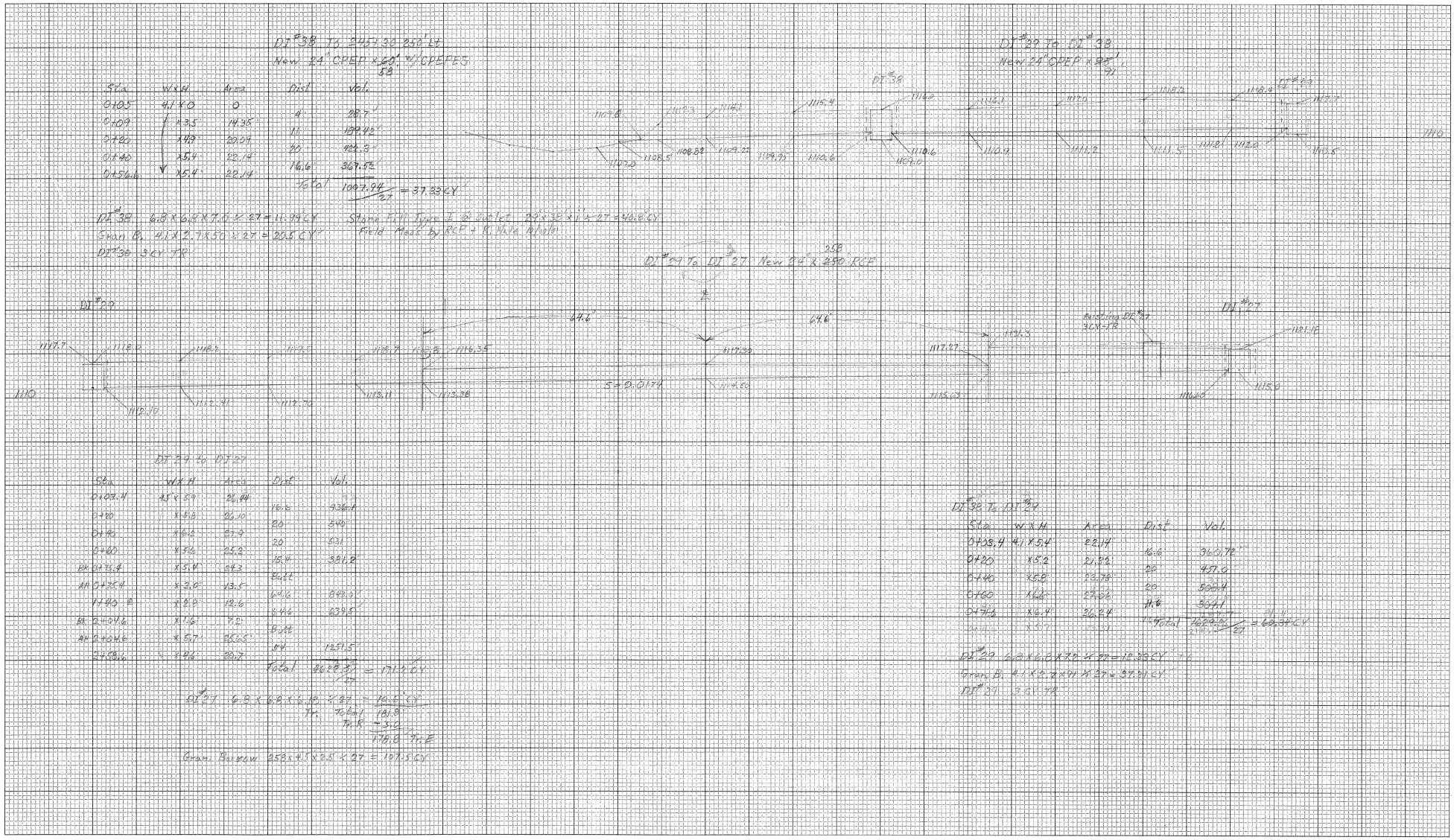
const: g:/common/cadd/e-xsection.dgn

PLOT DATE: 05-JUN-2000 09

DRAWN BY:

CHECKED BY:

SHEET 6 OF 7



CROSS SECTION SHEET

PROJECT NAME: Berlin Air 04-3064

PROJECT NUMBER: (DI 38-3+45+38.25 LT) (DI 38 To DI 29) (DI 29 To DI 27)

FILE NAME: Drainage

PROJECT LEADER:

DESIGNED BY:

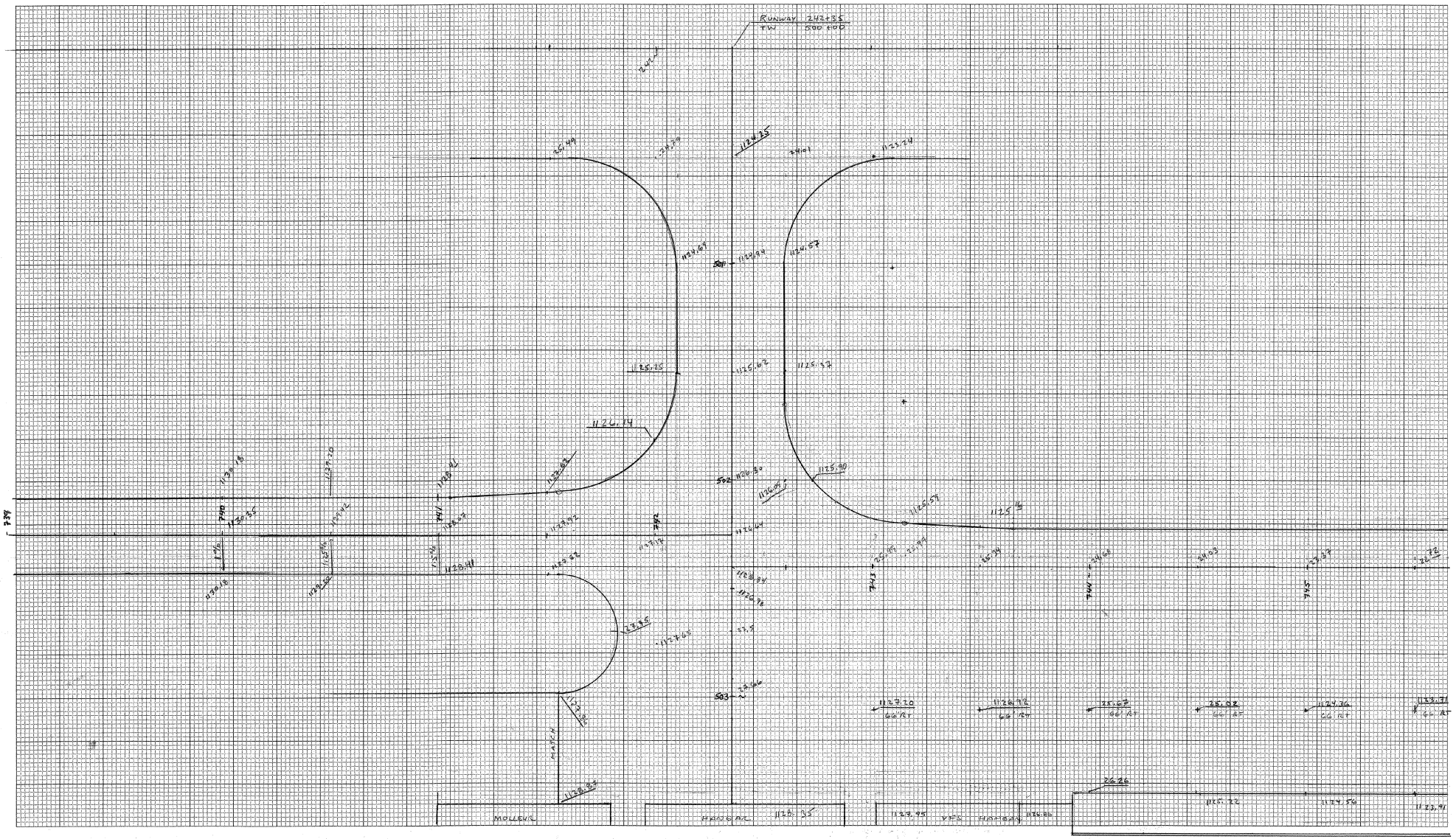
const: g:/common/cadd/e-xsection.dgn

PLOT DATE: 05-JUN-2000 09

DRAWN BY: RCP

CHECKED BY:

SHEET 7 OF 7

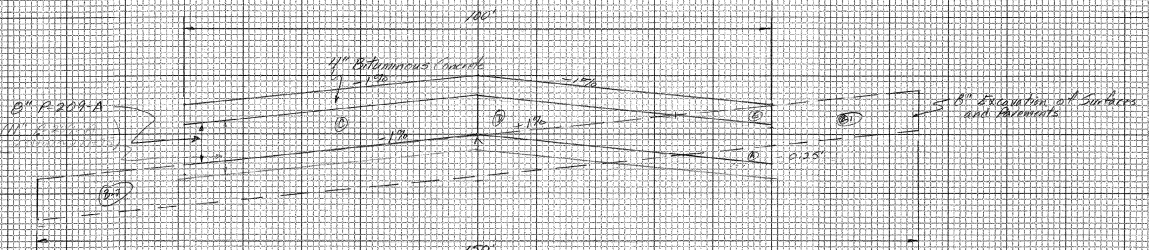


CROSS SECTION SHEET

1" = 20'

2.3945

PROJECT NAME:	
PROJECT NUMBER:	
FILE NAME:	PLOT DATE: 05-JUN-2000 09
PROJECT LEADER:	DRAWN BY:
DESIGNED BY:	CHECKED BY:
const: g:/common/cadd/e-xsection.dgn	SHEET ____ OF ____



Ⓐ = @ 10.25'-15" = 1.875 sf
(1600' x 1.875 sf)/27 = 111.1 cy Excavation

Ⓑ to Ⓔ =
Ⓑ 2((100' x 0.67' x 25')/27 = 1985 cy
Ⓒ (100' x 0.67' x 50')/27 = 1985 cy
Ⓓ -[(12' x 0.67' x 34') x 100']/27 = 675 cy
Ⓔ -[(12' x 2.4' x 11.5') x 100']/27 = 130 cy

Common Ex = (4" - 50' / x 1600')/27 = 1482 cy
P-209A = (0.67' x 50' x 1600')/27 = 1985 cy

CROSS SECTION SHEET

PROJECT NAME: BERLIN AIR
PROJECT NUMBER: 04-3064

FILE NAME:
PROJECT LEADER:
DESIGNED BY:
const: g:/common/cadd/e-xsection.dgn

PLOT DATE: 05-JUN-2000 09
DRAWN BY:
CHECKED BY:
SHEET ____ OF ____