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## VAOT STANDARD DRAWINGS

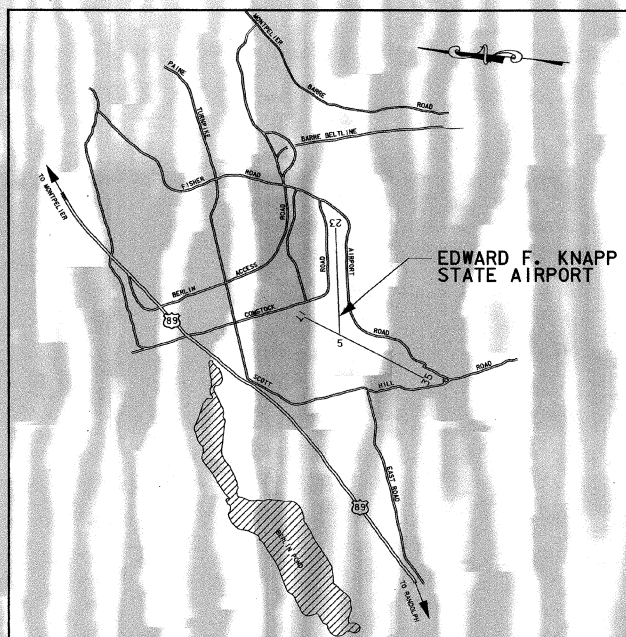
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# STATE OF VERMONT AGENCY OF TRANSPORTATION



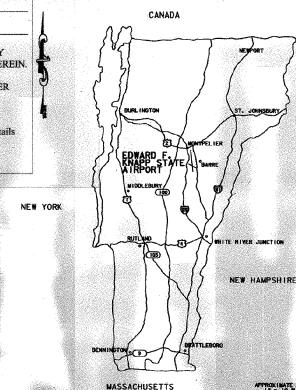
## PROPOSED IMPROVEMENTS EDWARD F. KNAPP STATE AIRPORT BERLIN, VERMONT A.I.P. 3-50-0001-06 /AIR 04-3064

- 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

| 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 CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.                                    |                                           |
| BY                                                                                                                                                        | <i>David A. Sargent</i> 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 microfiche in Central Files. |                                           |



## 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.

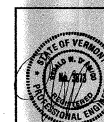
*David A. Sargent*  
URS CORPORATION

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  
*David A. Sargent*  
AVIATION PROGRAM MANAGER  
*David A. Sargent*  
DIRECTOR, MAINTENANCE AND AVIATION  
4/03/01  
DATE

# QUANTITY SHEET

| SUMMARY OF ESTIMATED QUANTITIES |      |                                                                        |                 |          |
|---------------------------------|------|------------------------------------------------------------------------|-----------------|----------|
| QUANTITIES                      | 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 SOILS, CLASS I                    | 215.20          |          |
| 18,000                          | TON  | BIT. CONCRETE PAVEMENT (P-401) (PG 58-34)                              | 406.25 MOD. I   |          |
| 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 INCLUSIVE)                   | 601.995         |          |
| 9                               | EA   | PRECAST REINFORCED CONCRETE PIPE DROP INLET W/ CAST IRON FRAME & GRATE | 604.25          |          |
| 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                              | HR   | 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.) (RELOCATE REILS)               | 678.16          |          |
| 20,000                          | LF   | 2" DIA. PVC ELECTRICAL CONDUIT (L-110)                                 | 678.21          |          |
| 1,100                           | LF   | ELECTRICAL CONDUIT - 2" PVC CONC. ENCASED                              | 678.21 (MOD. I) |          |
| 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. I |  |
| 35     | EA | MIRLS, BASE MOUNTED (L-125)                    | 864.11        |  |
| 4      | EA | TAXIWAY GUIDANCE SIGNS (L-125) RELOCATE (MOD.) | 864.14        |  |
| 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. I |  |

| 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        | -                |  |



|             |      |             |                        |
|-------------|------|-------------|------------------------|
| DESIGNED BY | DATE | DESCRIPTION | FILE NO. F20780462.dgn |
| DRAWN BY    |      |             |                        |
| CHECKED BY  |      |             |                        |
| APPROVED BY |      |             |                        |

|                                                  |                  |
|--------------------------------------------------|------------------|
| EDWARD F. KNAPP STATE AIRPORT<br>BERLIN, VERMONT | QUANTITY SUMMARY |
|--------------------------------------------------|------------------|

|                                              |
|----------------------------------------------|
| URS<br>ONE NORTHWAY LANE<br>LATHAM, NEW YORK |
|----------------------------------------------|

|             |          |            |             |
|-------------|----------|------------|-------------|
| DESIGNED BY | DRAWN BY | CHECKED BY | APPROVED BY |
| SCALE       | AS SHOWN | DATE       | 3/21/01     |
| SHEET       | OF       |            |             |
| SHEET NO.   | 2        |            |             |



# DRAINAGE QUANTITY SHEET

## CULVERTS AND STORM DRAINS

| LOCATION |                | SIZE & TYPE | LENGTH | FLOW LINE |         | TRENCH EXCAVATION CY | REMARKS                                |
|----------|----------------|-------------|--------|-----------|---------|----------------------|----------------------------------------|
| BEGIN    | END            |             |        | INLET     | OUTLET  |                      |                                        |
| 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  |
| D1 17B   | D1 17C         | 15" RCP     | 140 LF | 1132.50   | 1132.00 | -                    | -                                      |
| D1 17C   | D1 24A         | 15" CPEP    | 300 LF | 1132.00   | 1126.00 | -                    | -                                      |
| D1 24A   | D1 26A         | 15" CPEP    | 235 LF | 1126.00   | 1122.10 | -                    | -                                      |
| D1 26C   | D1 26A         | 12" RCP     | 80 LF  | 1124.00   | 1122.10 | -                    | -                                      |
| D1 26A   | D1 27A         | 15" RCP     | 164 LF | 1122.00   | 1118.00 | -                    | -                                      |
| D1 27A   | D1 27          | 15" RCP     | 146 LF | 1118.00   | 1116.75 | -                    | CONNECT TO NEW 24" RCP UNDER RUNWAY    |
| D1 26D   | D1 31A         | 12" RCP     | 195 LF | 1123.00   | 1117.90 | -                    | -                                      |
| D1 34A   | D1 31A         | 15" RCP     | 235 LF | 1117.90   | 1117.30 | -                    | -                                      |
| D1 31A   | D1 36A         | 15" CPEP    | 350 LF | 1117.8    | 1107.3  | -                    | -                                      |
| D1 27    | D1 29          | 24" RCP     | 250 LF | 1116.7    | 1112.10 | -                    | -                                      |
| D1 29    | D1 38          | 24" CPEP    | 95 LF  | 1112.0    | 1110.6  | -                    | -                                      |
| D1 38    | 230' LT 245+20 | 24" CPEP    | 60 LF  | 1110.6    | 1108.5  | -                    | 24" END SECTION W/ STONE FILL @ OUTLET |
| D1 36A   | D1 36          | 18" CPEP    | 18 LF  | 1107.3    | 1107.2  | -                    | -                                      |

## DROP INLETS & STRUCTURES

| #1      | LOCATION       | FLOW LINE |         | TOP GRATE ELEVATION | REMARKS                                   |
|---------|----------------|-----------|---------|---------------------|-------------------------------------------|
|         |                | INLET     | OUTLET  |                     |                                           |
| D1 #1   | 190' RT 223+62 | -         | -       | -                   | TO REMAIN                                 |
| CB #2   | 290' RT 223+62 | -         | -       | 1149.6              | TO REMAIN                                 |
| D1 #4   | 200' LT 223+62 | -         | -       | 1147.7              | TO REMAIN                                 |
| D1 #5   | -              | -         | -       | -                   | TO REMAIN                                 |
| D1 #6   | -              | -         | -       | 1148.1              | TO REMAIN                                 |
| D1 #7   | -              | -         | -       | 1144.2              | TO REMAIN                                 |
| D1 #8   | -              | -         | -       | 1142.8              | TO REMAIN                                 |
| D1 #9   | 85' LT 228+05  | -         | -       | -                   | TO BE REMOVED                             |
| D1 #10  | 85' RT 228+00  | -         | -       | -                   | TO BE REMOVED                             |
| D1 #11  | 85' RT 230+80  | -         | -       | -                   | TO BE REMOVED                             |
| D1 #12  | 85' LT 230+60  | -         | -       | -                   | TO BE REMOVED                             |
| D1 #13  | 182' LT 230+50 | -         | -       | -                   | TO REMAIN                                 |
| D1 #14  | 185' LT 233+20 | -         | -       | -                   | TO REMAIN                                 |
| D1 #15  | 85' LT 233+65  | -         | -       | -                   | TO BE REMOVED                             |
| D1 #16  | 85' LT 234+05  | -         | -       | -                   | TO BE REMOVED                             |
| D1 #17  | 155' RT 233+90 | -         | -       | -                   | TO BE REMOVED                             |
| D1 #17A | 240' RT 232+50 | -         | -       | -                   | TO REMAIN                                 |
| D1 #17B | 240' RT 234+65 | 1132.6    | 1132.50 | -                   | OUTLET 15" RCP TO D1 17C                  |
| D1 #17C | 42' RT 136+00  | 1132.00   | 1131.90 | 1136.68             | NEW PRECAST DI WITH NEW FRAME & GRATE     |
| D1 #18  | 85' RT 237+10  | -         | -       | -                   | TO BE REMOVED                             |
| D1 #19  | 85' LT 236+60  | -         | -       | -                   | TO BE REMOVED                             |
| D1 #20  | 185' LT 236+45 | -         | -       | 1128.2              | TO REMAIN                                 |
| D1 #21  | 185' 239+55    | -         | -       | 1123.3              | TO REMAIN                                 |
| D1 #22  | 85' LT 239+12  | -         | -       | -                   | TO BE REMOVED                             |
| D1 #23  | 85' RT 240+10  | -         | -       | -                   | TO BE REMOVED                             |
| D1 #24  | 15' RT 739+25  | -         | -       | -                   | TO BE REMOVED                             |
| D1 #24A | 44' RT 739+00  | 1126.05   | 1126.00 | 1130.37             | NEW PRECAST DI W/ NEW FRAME & GRATE       |
| D1 #25  | 15' RT 740+75  | -         | -       | -                   | TO BE REMOVED                             |
| D1 #26  | 65' 402+40     | -         | -       | -                   | TO BE REMOVED                             |
| D1 #26A | 44' RT 741+55  | 1112.1    | 1122.00 | 1126.08             | NEW PRECAST DI W/ NEW FRAME & GRATE       |
| D1 #26B | 125' RT 740+75 | -         | 1125.5  | 1129.0              | TO REMAIN                                 |
| D1 #26C | -              | -         | 1124.0  | 1128.0              | TO REMAIN                                 |
| D1 #26D | -              | -         | 1123.0  | 1127.0              | TO REMAIN                                 |
| D1 #27A | 104' RT 241+67 | 1118.10   | 1118.00 | 1123.24             | NEW PRECAST DI W/ NEW FRAME & GRATE       |
| D1 #27  | 85' RT 243+23  | 1116.75   | 1116.70 | 1121.81             | REMOVE EXISTING INSTALL NEW PRECAST DI    |
| D1 #28  | 85' RT 242+50  | -         | -       | -                   | TO REMAIN                                 |
| D1 #29  | 118' LT 244+50 | 1112.1    | 1112.0  | 1117.7              | REMOVE EXISTING REPLACE W/ NEW PRECAST DI |
| D1 #30  | 85' RT 244+50  | -         | -       | -                   | TO BE REMOVED                             |
| D1 #31  | 744+50 CL      | 1117.9    | 1117.8  | -                   | TO BE REMOVED                             |
| D1 #31A | 40' LT 744+18  | -         | -       | -                   | NEW PRECAST DI W/ NEW FRAME & GRATE       |
| D1 #32  | -              | -         | -       | -                   | TO REMAIN                                 |
| D1 #33  | 118' RT 244+75 | -         | -       | -                   | TO REMAIN                                 |
| D1 #34  | 140' RT 245+70 | -         | -       | -                   | TO REMAIN                                 |
| D1 #34A | 118' RT 245+50 | -         | -       | -                   | TO REMAIN                                 |
| D1 #35  | -              | -         | -       | -                   | TO REMAIN                                 |
| D1 #36  | 85' RT 247+50  | 1107.0    | 1107.0  | 1115.36             | TO REMAIN, ADJUST FRAME & GRATE ELEVATION |
| D1 #36A | 102' RT 247+50 | 1107.3    | 1107.2  | 1115.22             | NEW PRECAST DI W/ NEW FRAME & GRATE       |
| D1 #37  | 78' LT 247+50  | -         | -       | 1115.62             | TO REMAIN, ADJUST FRAME & GRATE ELEVATION |
| D1 #38  | 200' LT 245+00 | 1110.6    | 1110.5  | 1115.5              | REMOVE EXISTING REPLACE W/ NEW PRECAST DI |
| D1 #39  | 90' LT 146+30  | -         | -       | -                   | TO REMAIN                                 |
| D1 #40  | 85' LT 146+30  | -         | 1108.5  | 1113.5              | TO REMAIN                                 |
| D1 #41  | 55' RT 146+30  | -         | -       | -                   | TO REMAIN - CONNECT NEW 6" UNDERDRAIN     |
| D1 #42  | 85' RT 252+50  | -         | -       | -                   | TO REMAIN                                 |
| D1 #43  | 85' LT 256+00  | -         | -       | -                   | TO BE REMOVED                             |
| D1 #50  | 85' RT 256+00  | -         | -       | -                   | TO BE REMOVED                             |
| D1 #52  | 85' LT 259+00  | -         | -       | -                   | TO BE REMOVED                             |
| D1 #53  | 85' RT 259+00  | -         | -       | -                   | TO BE REMOVED                             |
| D1 #54  | 125' RT 258+75 | -         | -       | -                   | TO REMAIN                                 |
| D1 #55  | 185' LT 262+50 | -         | -       | -                   | TO REMAIN                                 |
| D1 #56  | 85' LT 262+00  | -         | -       | -                   | TO BE REMOVED                             |

## 6" UNDERDRAIN - RUNWAY 17-35

| LOCATION         | SIZE & TYPE     | LENGTH | FLOW LINE |         | TRENCH EXCAVATION CY | REMARKS                               |
|------------------|-----------------|--------|-----------|---------|----------------------|---------------------------------------|
|                  |                 |        | INLET     | OUTLET  |                      |                                       |
| 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  | -         | -       | -                    | D1 #36                                |
| 55' RT 146+35    | 6" UNDERDRAIN   | -      | 1108.15   | -       | -                    | D1 #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  | -                    | FB35 - END UNDERDRAIN                 |
| 103' RT 268+25   | CARRIER PIPE    | 275LF  | -         | 1082.0  | -                    | CONNECT TO NEW UNDERDRAIN W/ 6" WYE   |
| 85' RT 228+00    | -               | -      | -         | -       | -                    | REMOVE D1 #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 | -                    | D1 #37                                |
| 78' LT 225+90    | -               | -      | -         | -       | -                    | -                                     |
| 78' LT 227+50    | 6" CARRIER PIPE | 190LF  | -         | -       | -                    | D1 #8                                 |
| 22.5' LT 736+05  | 6" UNDERDRAIN   | -      | -         | -       | -                    | FB100                                 |
| 53.5' LT 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  | -         | -       | -                    | D1 #36                                |
| 20' RT 736+00    | 6" UNDERDRAIN   | -      | -         | -       | -                    | FB100A                                |
| 44' RT 739+00    | 6" UNDERDRAIN   | 300LF  | 1126.00   | -       | -                    | END UNDERDRAIN @ D1 #24A              |
| 20' RT 735+50    | 6" UNDERDRAIN   | -      | -         | -       | -                    | FB101A                                |
| 44' RT 741+55    | 6" UNDERDRAIN   | 220LF  | 1122.10   | -       | -                    | END UNDERDRAIN @ D1 #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.



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| REV. | DATE | DESCRIPTION |
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Job No. F20000.718.01 File No. F20780003.dgn

**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

Drainage Summary

Designed by: dno  
Drawn by: mmu  
Checked by: BNC  
Approved by: dno

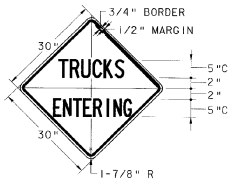
Scale: NTS  
Date: 3/21/01  
Sheet: - 01 -  
Sheet No: **3**

# 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 250')
5. RECONSTRUCT TAXIWAY 'C' (50' x 250')
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 (MILS) 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.

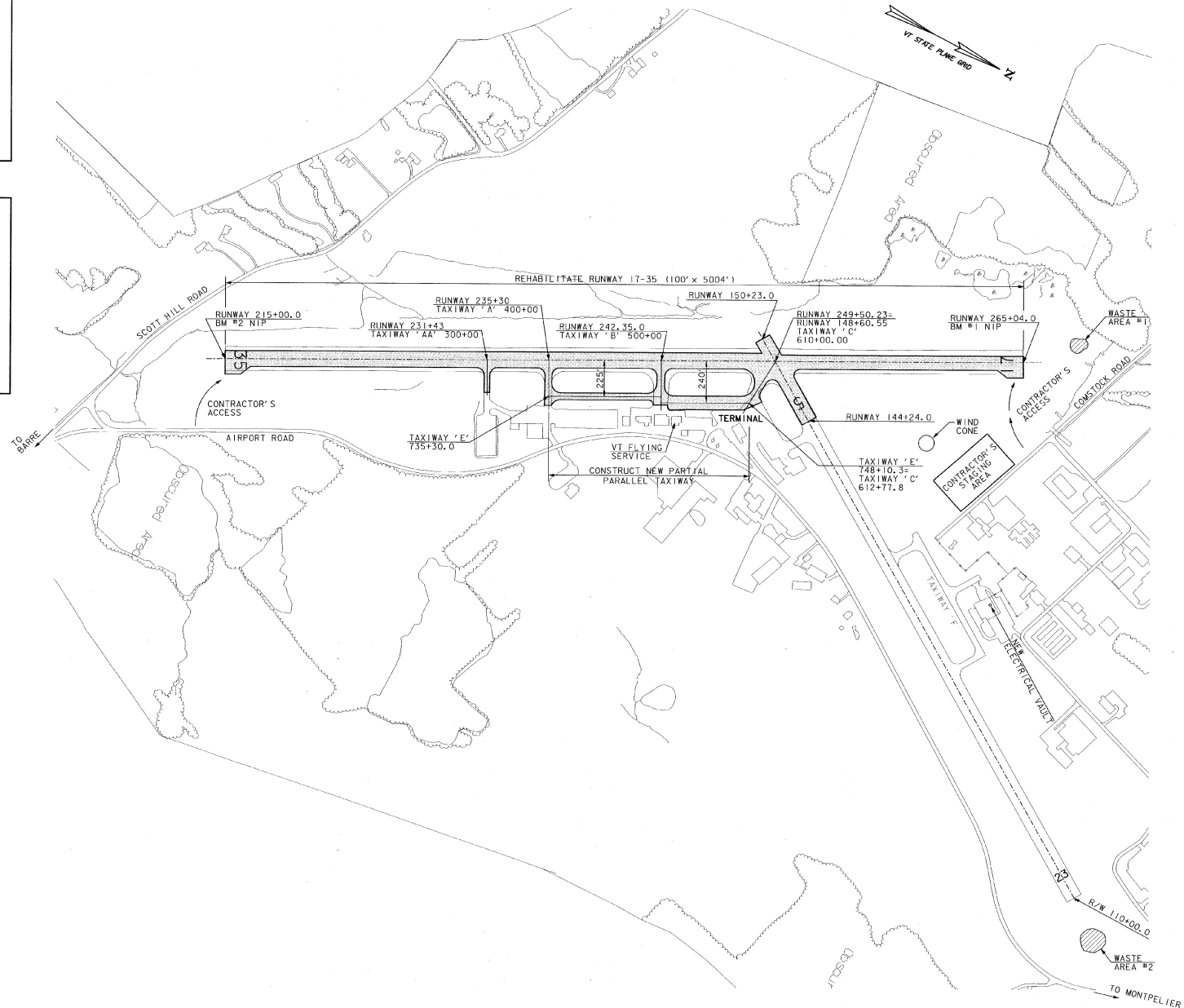


## COLORS

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

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

## TRUCKS ENTERING WARNING SIGN



SCALE IN FEET  
600 300 0 600



| REV. | DATE | DESCRIPTION |
|------|------|-------------|
|      |      |             |
|      |      |             |
|      |      |             |

**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

RECONSTRUCTION OF RUNWAY 17-35  
GENERAL PROJECT LAYOUT

**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

|                  |               |                 |                  |
|------------------|---------------|-----------------|------------------|
| Designed by: CND | Drawn by: AAB | Checked by: BNC | Approved by: CND |
| Scale: P = 300'  | Date: 3/21/01 | Sheet: - 01 -   | Sheet No: 4      |



# GENERAL CONSTRUCTION AND SAFETY NOTES

## GENERAL NOTES

- THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT PLANS AND SPECIFICATIONS AND ANY RULES, REGULATIONS, STANDARDS OR SPECIFICATIONS REFERENCED THEREIN. THE PROJECT IS SUBJECT TO INSPECTION BY REPRESENTATIVES OF THE VERMONT AGENCY OF TRANSPORTATION (AVOT), AND THE FEDERAL AVIATION ADMINISTRATION (FAA).
- 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.
- 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.
- 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.
- CONSTRUCTION AND MAINTENANCE OPERATIONS BY OTHERS MAY OCCUR CONCURRENTLY AND AT TIMES IN THE VICINITY OF CONSTRUCTION ASSOCIATED WITH THIS PROJECT. THE CONTRACTOR SHALL COORDINATE HIS OPERATIONS AND COOPERATE WITH MAINTENANCE CREWS AND OTHER CONTRACTORS WORKING ON THE AIRPORT.
- ACCESS TO THE SITE - THE CONTRACTOR'S ACCESS POINTS TO THE SITE ARE SHOWN ON THE GENERAL PROJECT LAYOUT PLAN - SEE SHEET A. THE CONTRACTOR SHALL MAINTAIN ACCESS FOR ALL VEHICLES AND PERSONNEL WHO ENTER THROUGH THESE ACCESS POINTS. THE CONTRACTOR SHALL MAINTAIN A SECURITY GUARD POST 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.
- 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 ROAD. 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.
- 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, SEED, AND MULCHED UPON COMPLETION OF USE, AT THE CONTRACTOR'S EXPENSE.
- 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 INCLUDING THOSE ITEMS WHICH ARE A DIRECT RESULT OF CONSTRUCTION (TRASH, CANS, ETC.) SHALL BE DISPOSED OF THROUGH PROPER SANITARY METHODS.
- SAFETY - THE CONTRACTOR SHALL CONDUCT HIS ACTIVITIES IN A SAFE MANNER AS SPECIFIED IN SECTION 10, "SAFETY REQUIREMENTS DURING CONSTRUCTION" ON THIS SHEET.
- 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 THE CABLES ARE FULLY REPAIRED. 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 THE 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.
- 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.
- 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.

- 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.
- THE CONTRACTOR SHALL OBTAIN ALL THE PERMITS AND LICENSES REQUIRED FOR THE PROJECT WORK AT HIS OWN EXPENSE.
- EXISTING TOPOGRAPHIC FIELD SURVEYS FOR THIS PROJECT AREA WERE PERFORMED BY LITTLE RIVER SURVEY CO. IN 1998.
- THE HORIZONTAL CONTROL ON THIS PROJECT IS TIED TO THE 1983 AND 1988 NATIONAL GEODETIC HORIZONTAL AND VERTICAL DATUM, RESPECTIVELY.

### SAFETY REQUIREMENTS DURING CONSTRUCTION

#### FAA FEDERAL AVIATION ADMINISTRATION, FAO ADVISORY CIRCULARS

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  
SURGEON GENERAL DISTRIBUTION OFFICE  
AIRPORT EAST BUSINESS CENTER  
3341 D ST NW  
LANDOVER, MD 20785

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

- FAA 150/5370-2, "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION", CURRENT EDITION.
- FAR PART 77 "OBJECTS AFFECTING NAVIGABLE AIRSPACE", CURRENT EDITION.
- FAA 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:
- OBSTACLE FREE ZONE (OFZ) - A VOLUME OF SPACE WHICH IS FREE OF ALL FIXED OBJECTS AND CLEAR OF VEHICLES IN THE VICINITY OF AN AIRPLANE CONDUCTING AN APPROACH, MISSED APPROACH, LANDING, TAKEOFF, OR DEPARTURE. AN OFZ TYPICAL SECTION IS SHOWN ON THE GENERAL PROJECT LAYOUT PLAN.
- RUNWAY PROTECTION ZONE (RPZ) - A TRIANGULAR AREA CENTERED ON THE RUNWAY BEGINNING AT A POINT 200 FEET BEYOND THE END OF THE AREA USABLE FOR TAKEOFF OR LANDING.
- OBJECT FREE AREA (OFA) - A TWO DIMENSIONAL GROUND AREA SURROUNDING RUNWAYS, TAXIWAYS, AND TAXILANES WHICH IS CLEAR OF OBJECTS EXCEPT FOR OBJECTS WHERE LOCATION IS FIXED BY FUNCTION.
- 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 THE ESSENTIAL AERONAUTICAL FUNCTION. THE SAFETY AREA REQUIRES THE CAPABILITY OF SUPPORTING MAINTENANCE VEHICLES AND AIRCRAFT RESCUE AND FIRE FIGHTING VEHICLES UNDER NORMAL EMERGENCY CONDITIONS.

#### GENERAL SAFETY REQUIREMENTS

- THE CONTRACTOR SHALL ACQUAINT HIS SUPERVISORS AND EMPLOYEES WITH THE AIRPORT ACTIVITY AND OPERATIONS THAT ARE INHERENT TO EDWARD F. KNAPP STATE AIRPORT. THE CONTRACTOR SHALL CONDUCT HIS CONSTRUCTION ACTIVITIES TO CONFORM TO ALL ROUTINE AND EMERGENCY AIR TRAFFIC REQUIREMENTS AND GUIDELINES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF HIS PERSONNEL.
- 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 CONSTRUCTION OPERATION SHALL BE SUCH THAT MAXIMUM PROTECTION IS MAINTAINED. THE CONTRACTOR SHALL MAINTAIN THE WORK AREA FREE OF DANGEROUS CONDITIONS.

- DURING PERFORMANCE OF THIS CONTRACT, THE AIRPORT RUNWAYS, TAXIWAYS, AND AIRPORT PARKING AREAS 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 PERSONS OR TO AIRCRAFT OPERATIONS.
- ALL WORK TO BE PERFORMED WHICH IS CLOSE TO AN ACTIVE RUNWAY, TAXIWAY OR APRON SHALL BE ACCOMPLISHED ONLY WITH PRIOR PERMISSION FROM THE ENGINEER AND AIRPORT MANAGER. REQUESTED CLOSINGS SHALL BE DIRECTED TO THE ENGINEER AT LEAST 48 HOURS IN ADVANCE.

#### CONSTRUCTION AND FACILITIES MAINTENANCE

- THE FOLLOWING ARE CONSIDERED SAFETY PROBLEMS AND/OR HAZARDS:
- TRENCHES, HOLES, OR EXCAVATION ON OR ADJACENT TO ANY ACTIVE RUNWAY, TAXIWAY, APRON OR IN SAFETY AREA.
- UNMARKED/UNLIGHTED HOLES OR EXCAVATION IN ANY APRON, OPEN TAXIWAY, OPEN TAXILANE, OR RELATED SAFETY AREA.
- MOUNDS OR PILES OF EARTH, CONSTRUCTION MATERIALS, OR TEMPORARY STRUCTURES IN THE VICINITY OF ANY OPEN RUNWAY, TAXIWAY, TAXILANE, OR IN ANY RELATED SAFETY, APPROACH, OR DEPARTURE AREA.
- VEHICLES OR EQUIPMENT, WHETHER OPERATING OR IDLE, ON ANY OPEN RUNWAY, TAXIWAY, TAXILANE, OR IN ANY RELATED SAFETY, APPROACH, OR DEPARTURE AREA.
- VEHICLES, EQUIPMENT, EXCAVATION, STOCKPILES, OR OTHER MATERIALS WHICH COULD INTERFERE WITH ELECTRONIC SIGNALS FROM RADIOS OR ELECTRONIC NAVIGATIONAL AIDS (NAV AIDS).
- 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.
- UNMARKED UTILITY, NAV AID, WEATHER SERVICE, RUNWAY LIGHTING, OR OTHER POWER OR SIGNAL CABLES THAT COULD BE DAMAGED DURING CONSTRUCTION.
- OBJECTS, WHETHER OR NOT MARKED OR FLAGGED, OR ACTIVITIES ANYWHERE ON OR IN THE VICINITY OF THE AIRPORT WHICH COULD BE DISTRACTING, CONFUSING, OR ALARMING TO PILOTS DURING AIRCRAFT OPERATIONS.
- UNLADGED/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.
- MISLEADING OR MALFUNCTIONING OBSTRUCTION LIGHTS OR UNLIGHTED/UNMARKED OBSTRUCTIONS IN THE APPROACH TO ANY ACTIVE RUNWAY.
- WATER, SNOW, DIRT, DEBRIS, OR OTHER TRANSIENT ACCUMULATION WHICH TEMPORARILY OBSCURES PAVEMENT MARKINGS OR PAVEMENT EDGES, OR DEGRADES VISIBILITY OF RUNWAY/TAXIWAY MARKINGS OR LIGHTING.
- INADEQUATE OR IMPROPER METHODS OF MARKING, BARRICADEING, AND LIGHTING OF TEMPORARILY CLOSED PORTIONS OF THE AIRPORT OPERATIONS AREA.
- TRASH OR OTHER MATERIALS WITH FOREIGN OBJECT DAMAGE (FOD) POTENTIAL WHETHER ON RUNWAYS, TAXIWAYS, OR APRONS OR IN RELATED SAFETY AREAS.
- INADEQUATE BARRICADEING OR OTHER MARKING WHICH IS PLACED TO SEPARATE CONSTRUCTION OR MAINTENANCE AREAS FROM OPEN AIRCRAFT OPERATING AREAS.
- FAILURE TO CONTROL UNAUTHORIZED VEHICLE AND HUMAN ACCESS TO ACTIVE AIRCRAFT OPERATING AREAS.
- FAILURE TO MAINTAIN RADIO COMMUNICATION BETWEEN CONSTRUCTION/MAINTENANCE VEHICLES AND RUNWAY UNIFORM.
- CONSTRUCTION/MAINTENANCE ACTIVITIES OR MATERIALS WHICH COULD HINDER 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.
- BIRD ATTRACTANTS ON AIRPORT SUCH AS EDIBLES (FOOD SCRAPES, ETC.), MISCELLANEOUS TRASH, OR FENCED WATER.

- 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/REMOVE ANY UNSAFE OR POTENTIALLY UNSAFE CONDITIONS OR ACTIVITIES DISCOVERED.
- THE YARD WILL BE RESPONSIBLE FOR ISSUING APPROPRIATE NOTICE TO AIRMEN INSTANT CONCERNING CONSTRUCTION ACTIVITY ON THE AIRFIELD.

#### MOTORIZED VEHICLES

THIS PROJECT INCLUDES WORK WITHIN THE AIRPORT 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 AOA SHALL BE IDENTIFIED BY 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.

#### RADIO COMMUNICATIONS

RADIO COMMUNICATIONS ARE REQUIRED BETWEEN THE CONTRACTOR'S REPRESENTATIVE AND MONTEPELIER UNIFORM. 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 AIRCRAFT OPERATING AREA (AOA) OF THE AIRPORT, RADIOS SHALL BE FURNISHED BY THE CONTRACTOR AND SHALL BE CAPABLE OF TRANSMITTING AND RECEIVING AT A 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) ADDITIONAL RADIOS AT THE START OF THE PROJECT. THESE RADIOS WILL BECOME PROPERTY OF THE VT. AGENCY OF TRANSPORTATION.

#### DEBRIS

DEBRIS, WASTE, AND LOOSE MATERIAL (INCLUDING DUST AND DIRT) CAPABLE OF CAUSING DAMAGE TO AIRCRAFT LANDING GEAR OR PROPELLERS, OR BEING INJECTED IN jet ENGINES, SHALL NOT BE ALLOWED ON ACTIVE AIRCRAFT MOVEMENT AREAS OR ADJACENT GRADED 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. WIDE TRAVEL ON ACROSS RUNWAYS, RAMP AREAS, TAXIWAYS, AND AIRCRAFT APRONS IS REQUIRED. THE CONTRACTOR SHALL PROVIDE ADEQUATE PERSONNEL AND EQUIPMENT TO KEEP SUCH SURFACES CLEAR OF DEBRIS.

#### 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 FLAGMAN. THE FLAGMAN WHO IS IN DIRECT RADIO CONTACT WITH GROUND CONTROL, ALL AIRCRAFT TRAFFIC ON RUNWAYS, TAXIWAYS, AND APRONS, AND ALL OTHER CONTRACTOR VEHICLES OR PERSONNEL, AT NO TIME SHALL THE CONTRACTOR'S VEHICLES OR PERSONNEL BE ALLOWED TO ENTER OR CROSS ACTIVE RUNWAYS OR CLEAR ZONES WITHOUT PROPER AUTHORIZATION.

#### MISCELLANEOUS

- 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.
- 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.
- 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 AIRCRAFT 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.
- 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.
- MAXIMUM EQUIPMENT HEIGHT SHALL NOT EXCEED 15 FEET UNLESS PRIOR APPROVAL IS OBTAINED FROM THE ENGINEER.
- 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 A 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.
- ENTRANCE TO THE AIRFIELD IS SUBJECT TO SECURITY REGULATIONS.
- 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.
- 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.
- 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.
- IN ACCORDANCE WITH THE SPECIFICATIONS, FEDERAL WAGE RATES SHALL BE POSTED OUTSIDE THE SITE FIELD OFFICE IN A WEATHERPROOF ENCLOSURE.

#### UTILITIES

- UNDERGROUND UTILITIES - THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE 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 THE INCURRED COSTS OF REPAIRS.
- 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.
- THE FOLLOWING IS A LIST OF COMPANIES WITH POSSIBLE UTILITIES WITHIN THE CONSTRUCTION LIMITS.

UTILITY  
DISCASH 1-800-225-4577  
GMP 1-802-223-5235

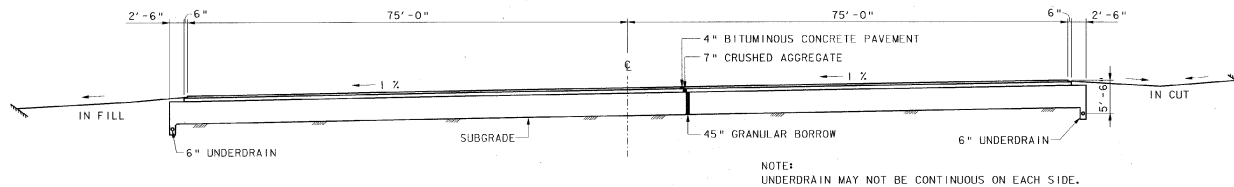


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| DRWN BY     |      |      |      |             |
| CHECKED BY  |      |      |      |             |
| APPROVED BY |      |      |      |             |

EDWARD F. KNAPP STATE AIRPORT  
BERLIN, VERMONT

URS  
ONE NORTHWAY LAKE  
LATHAM, NEW YORK

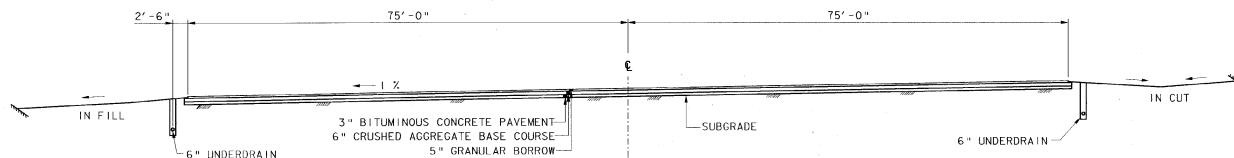
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| Sheet No | 6       |



NOTE:  
UNDERDRAIN MAY NOT BE CONTINUOUS ON EACH SIDE.

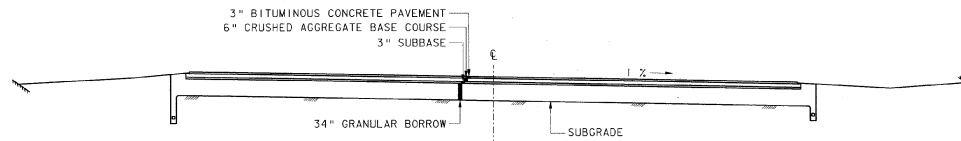
(REFER TO ADAP 6-50-0001-04 & -06)

**RUNWAY 17-35 EXISTING SECTION**  
STA. 215+00 TO 231+50  
STA. 247+75 TO 265+01



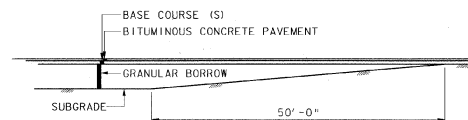
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**RUNWAY 17-35 EXISTING SECTION**  
STA. 232+00 TO 248+25

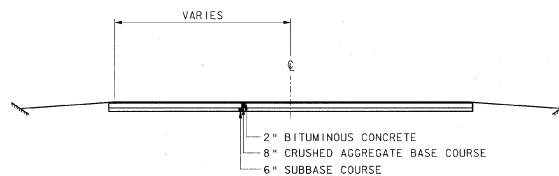


(REFER TO ADAP 6-50-0001-05)

**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**



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Job No. F200001718.01 File No. F200001718.01

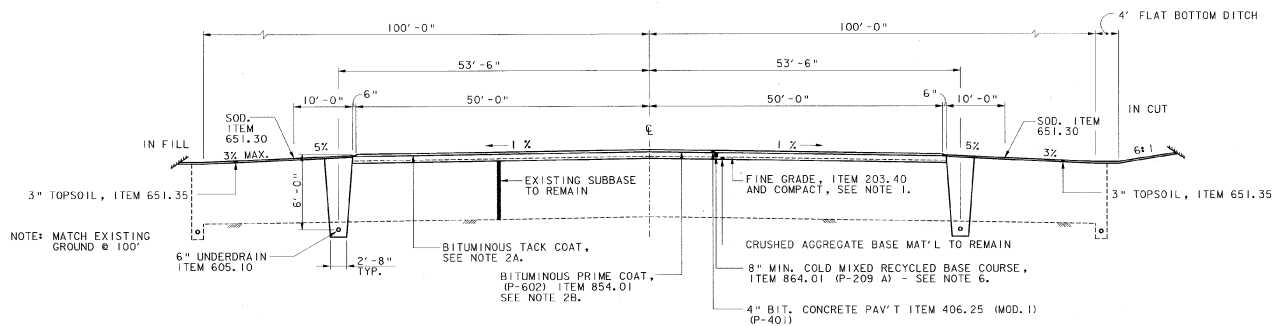
**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

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

**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

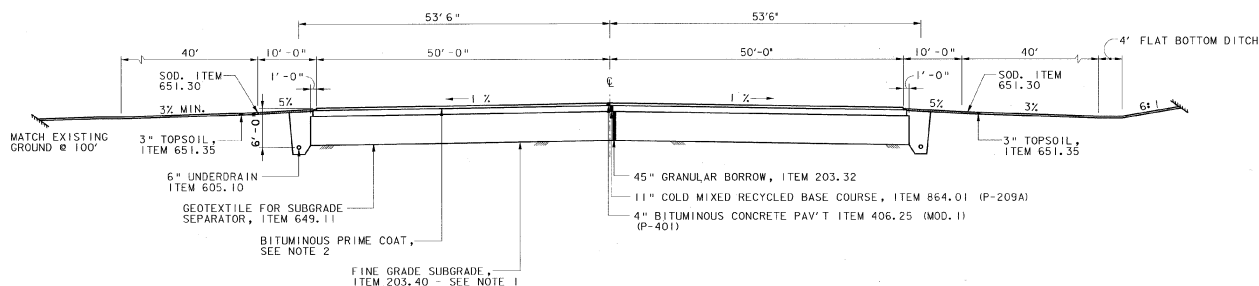
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| Drawn by: MMU    | Date: 3/21/01                         |
| Checked by: BNC  | Sheet: 01                             |
| Approved by: CND | Sheet No: <b>7</b>                    |





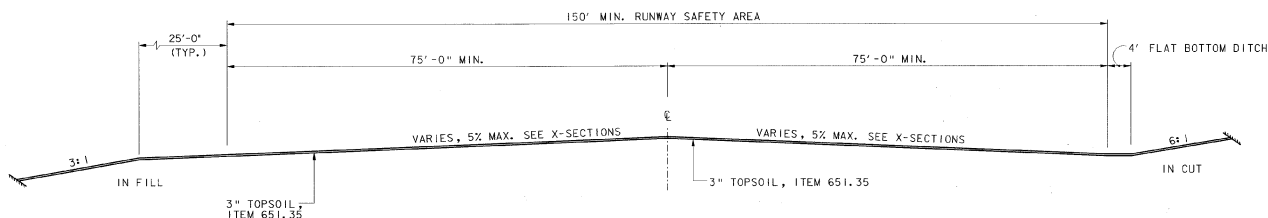
### NEW TYPICAL SECTION

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

- 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.
- 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).
- 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.
- 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.
- 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.
- ALL OTHER EXCAVATION TO BE PAID FOR UNDER ITEM 203.15, COMMON EXCAVATION OR 203.16 SOLID ROCK EXCAVATION.
- 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).
- 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       | PERENNIAL 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.

- 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.

- EROSION CONTROL MATTING, ITEM 654.10, TO BE PLACED ON SLOPES OVER 5% WHEN DIRECTED BY THE ENGINEER.
- ALONG SIDE RUNWAY (FROM E.P. TO 10' OFF PAVEMENT) TO BE SODDED, ITEM 651.30.
- ALLOWABLE THICKNESS TOLERANCES:  
SUBGRADE ± 1"  
CONTROLLED MATERIAL ± 1/2"  
PAVEMENT ± 3/16"  
BASE COURSE ± 1/2"
- PAY LIMITS FOR SEED, LIME, FERTILIZER & MULCH ARE EQUAL TO THE APPROVED CONSTRUCTION LIMITS.
- GRANULAR BORROW, ITEM 203.32, LIMIT % PASSING .02MM TO 3% (NON FROST SUSCEPTIBLE).



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EDWARD F. KNAPP STATE AIRPORT  
BERLIN, VERMONT

TYPICAL SECTION - PROPOSED  
RUNWAY 17-35

URS  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

|                 |             |                |                 |
|-----------------|-------------|----------------|-----------------|
| Designed by GMD | Drawn by MM | Checked by BFC | Approved by GMD |
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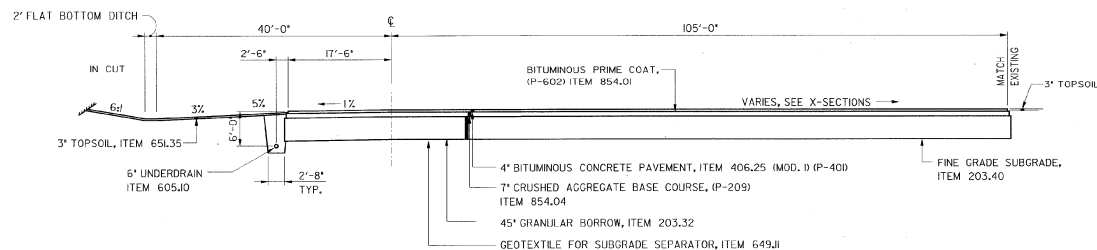
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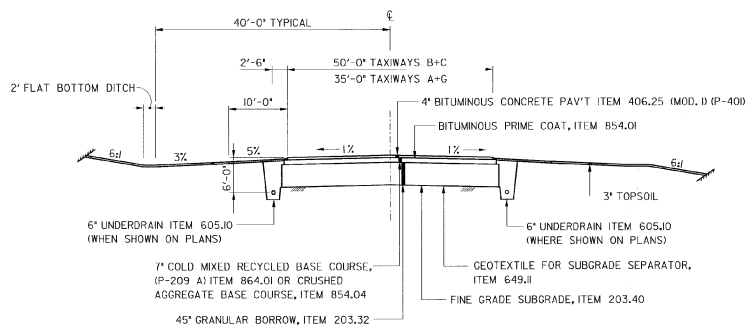
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8



**TAXIWAY E - TYPICAL**  
STA. 742+35 TO 748+06



**TAXIWAY TYPICALS**  
**TAXIWAYS A, B, C & E**  
STA. 735+30 TO STA. 742+35



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Job No. F200001118.01 File No. F20180108.dgn

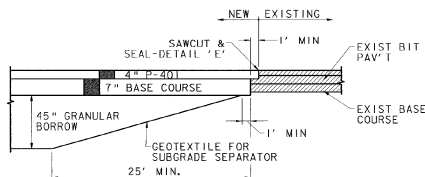
**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

TAXIWAY TYPICALS

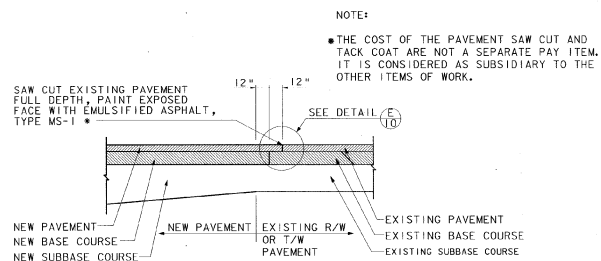
**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

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| Checked by: BFC  | Approved by: GND |

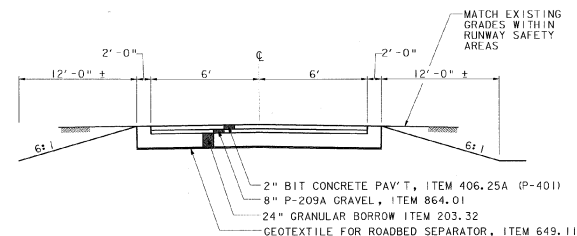
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| Sheet No: 9     |



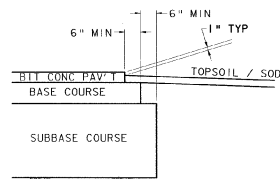
**A**  
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**PROPOSED SUBGRADE TRANSITION TAXIWAYS**  
SCALE: NONE



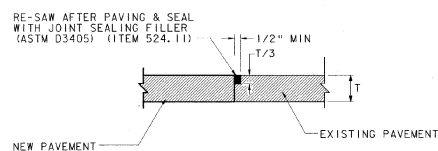
**B**  
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**BUTT JOINT DETAIL**  
SCALE: NONE



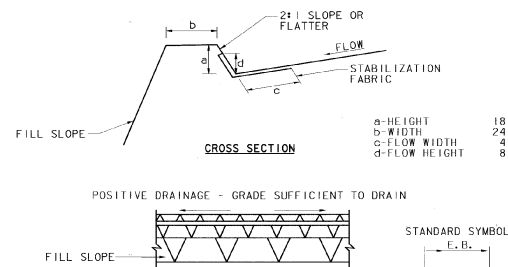
**C**  
10  
**TYPICAL DRIVEWAY SECTION**  
SCALE: NONE



**D**  
10  
**PAVEMENT SECTION EDGE**  
SCALE: NONE



**E**  
10  
**SAWCUT DETAIL**  
SCALE: NONE



**F**  
10  
**EARTH BERM**  
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.



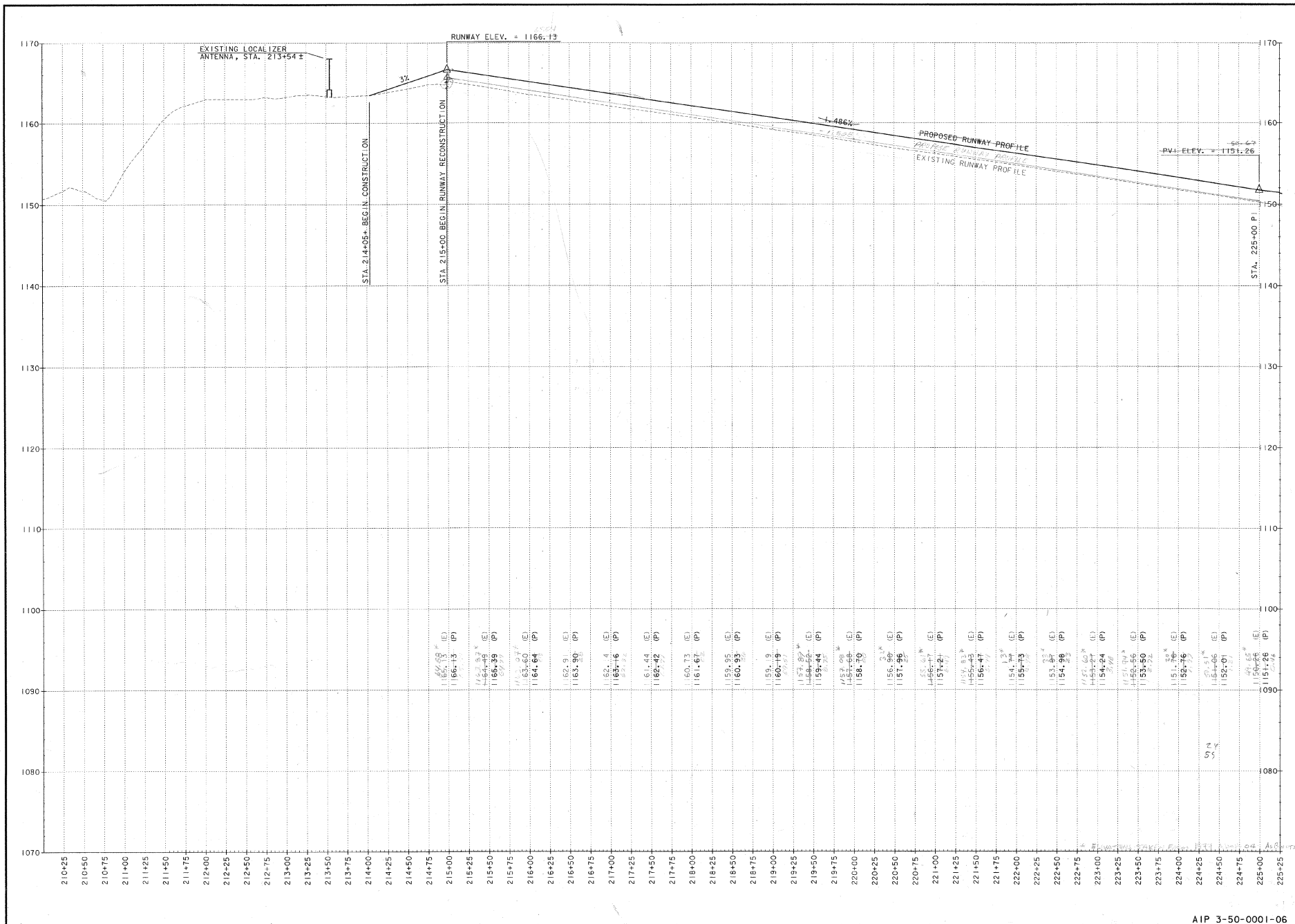
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**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

|                  |               |                 |                  |
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| Designed by: GMD | Drawn by: MAM | Checked by: BNC | Approved by: GMD |
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**URS**

ONE NORTHWAY LANE  
LATHAM, NEW YORK

**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

RUNWAY 17-35 PROFILE

Designed by: **DM**

Drawn by: **MM**

Checked by: **BMC**

Approved by: **DM**

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

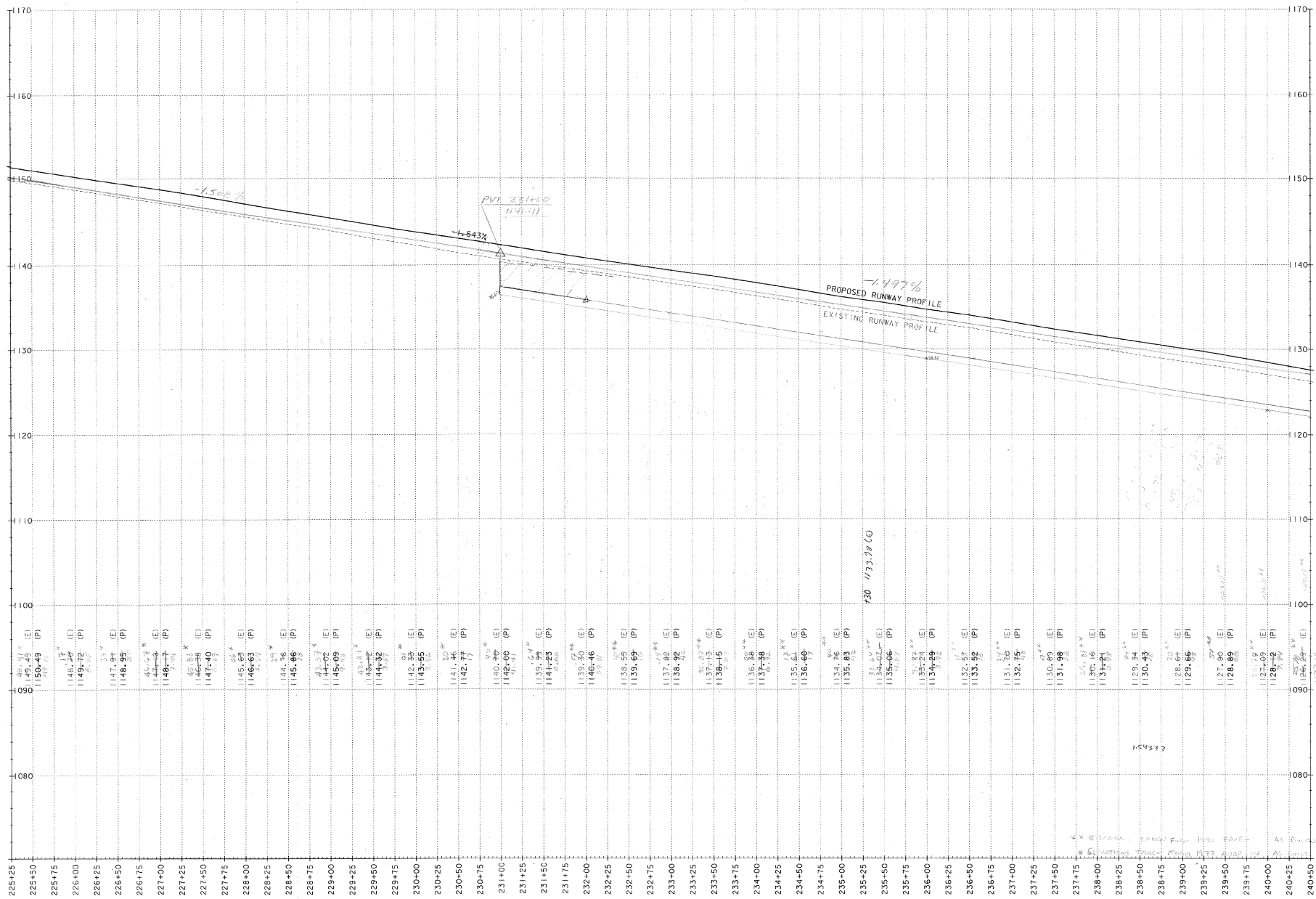
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Job No. **F200001718.01**

File No. **200180xall.dwg**



**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

RUNWAY 17-35 PROFILE

Designed by: **END**

Drawn by: **MM**

Checked by: **BMC**

Approved by: **END**

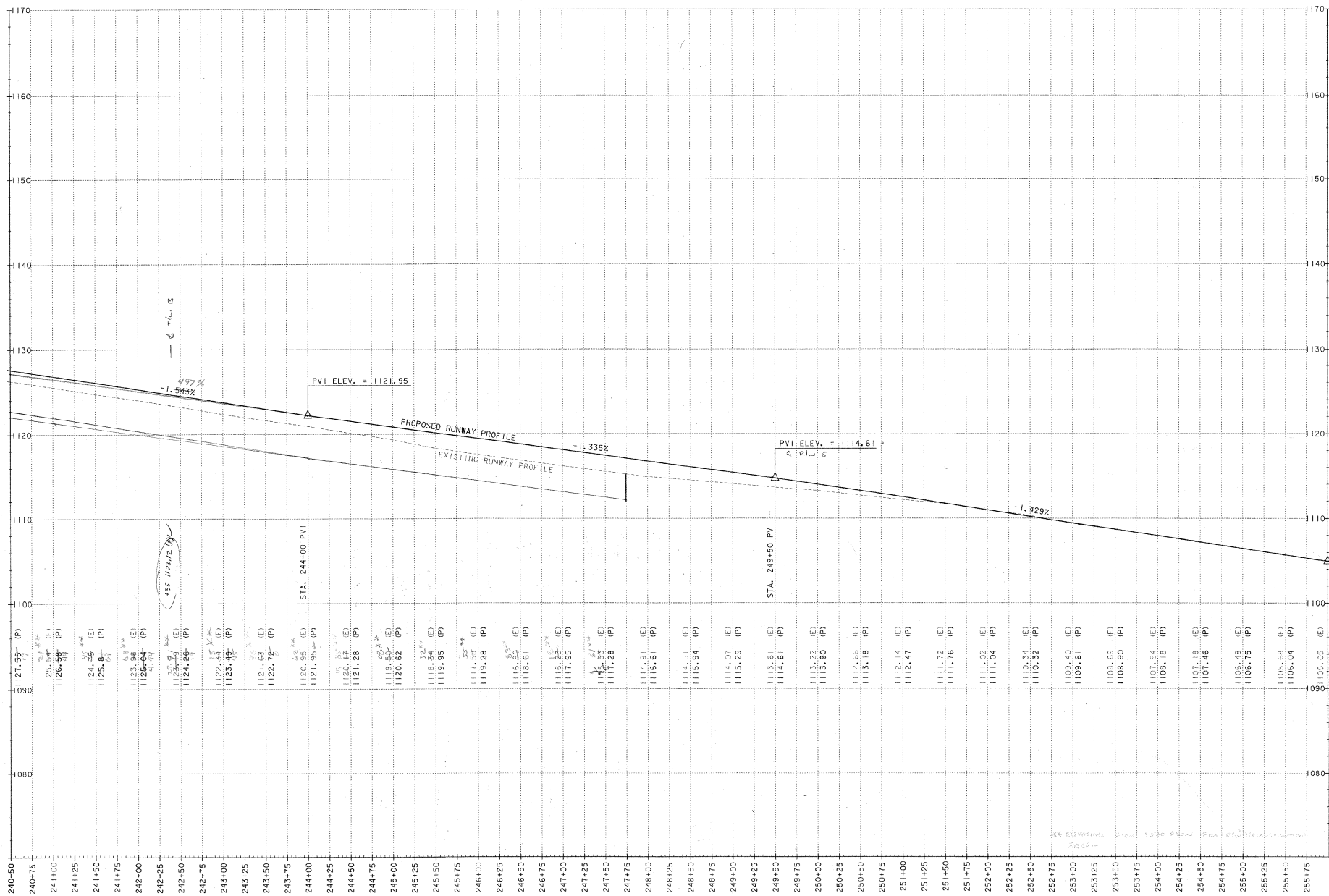
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**VERT P=5'**

Date: **3/21/01**

Sheet: **12** of **12**

Job No. **F20000.718.01**

File No. **F20180602.00**



**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

RUNWAY 17-35 PROFILE

Designed by: **MD**  
Drawn by: **MD**  
Checked by: **BIC**  
Approved by: **MD**

Scale: **HORIZ=50'**  
**VERT=1"=5'**

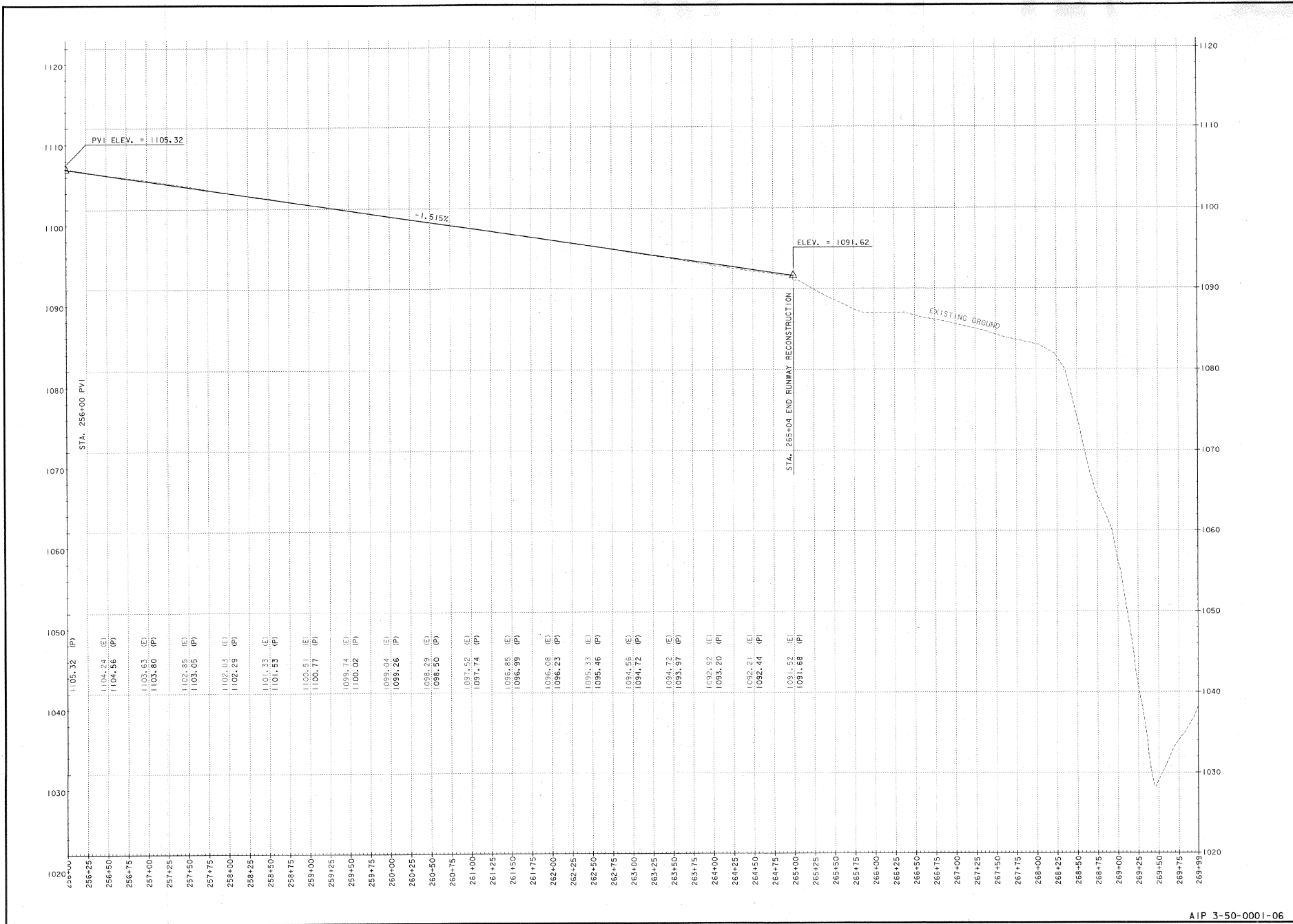
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REV. DATE DESCRIPTION

Job No. **F200001718.01** File No. **F207806x03.00**

AIP 3-50-0001-06



**URS**

ONE NORTHWAY LANE  
LATHAM, NEW YORK

**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

**RUNWAY 17-35 PROFILE**

Designed by: GPD

Drawn by: MAM

Checked by: BNC

Approved by: GPD

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

Date: 3/21/01

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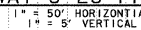
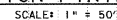
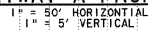
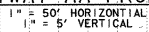
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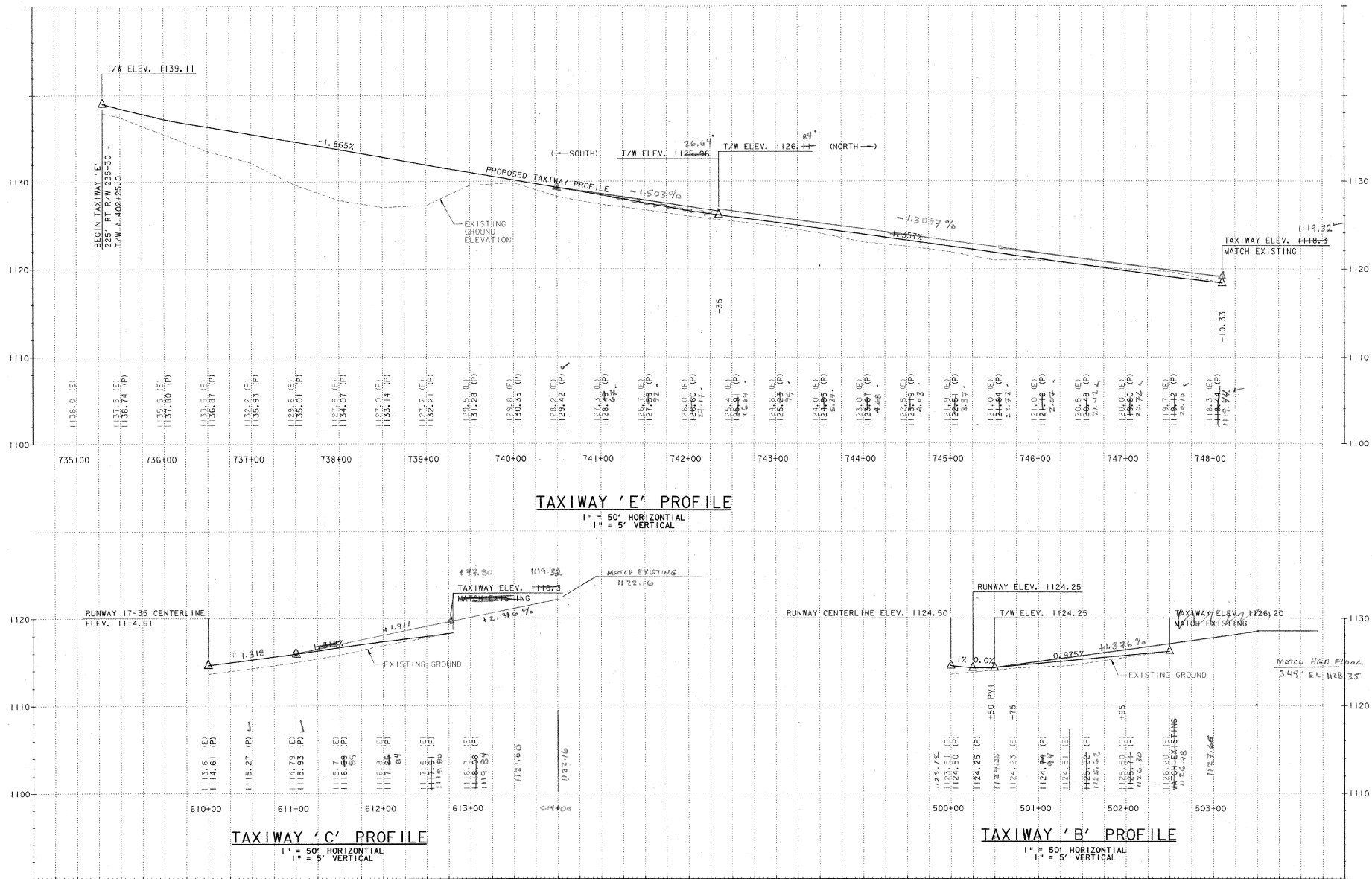
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P = PROPOSED  
E = EXISTING



FINISHED GRADES  
 REVISION 8/16/11



**URS**  
 ONE NORTHWAY LANE  
 LATHAM, NEW YORK

**EDWARD F. KNAPP STATE AIRPORT**  
 BERLIN, VERMONT

**TAXIWAY PROFILES**

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Designed by: **gmp**

Drawn by: **mm**

Checked by: **BRC**

Approved by: **gmp**

Scale: 1" = 50' HORIZONTAL  
 1" = 5' VERTICAL

Date: 3/21/01

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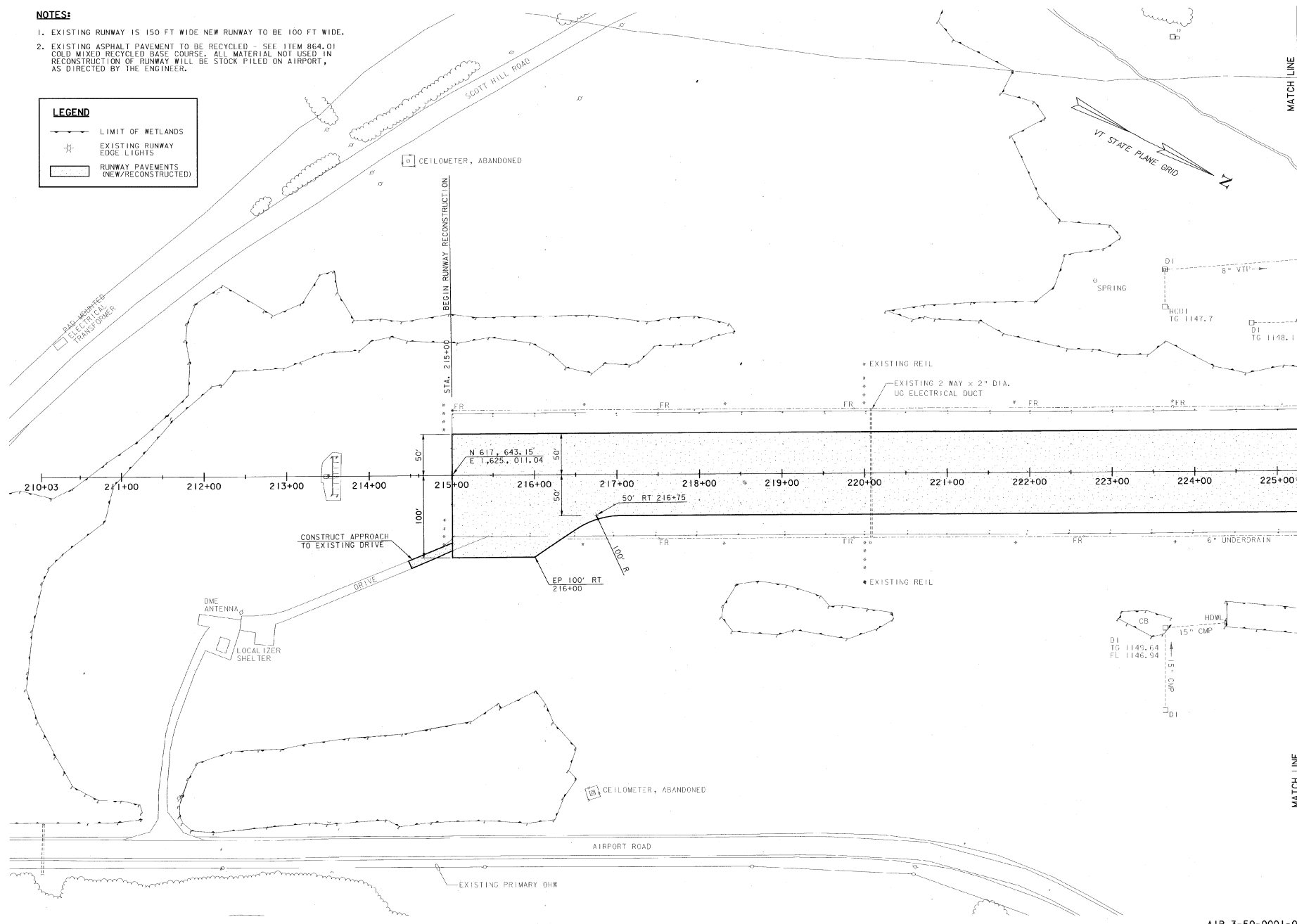
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# NOTES:

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)



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**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

RECONSTRUCTION OF RUNWAY 17-35  
PAVING PLANS AND GEOMETRIC LAYOUT

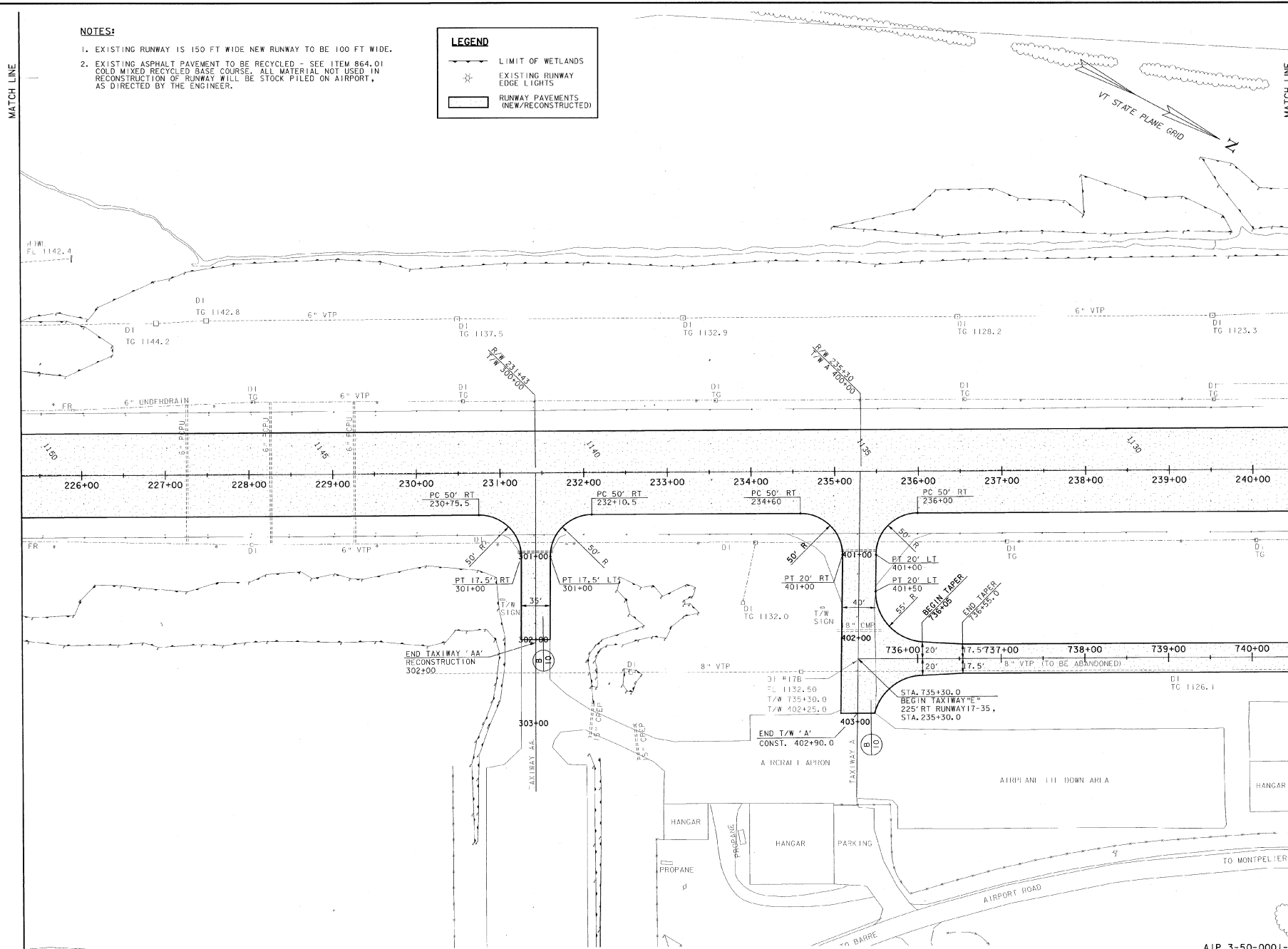
**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

|                  |                  |
|------------------|------------------|
| Designed by: CND | Drawn by: MM     |
| Checked by: BFC  | Approved by: CND |

Scale: 1" = 50'  
Date: 3/21/01  
Sheet - 01 -  
Sheet No. **17**

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.

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

[illegible]

**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

RECONSTRUCTION OF RUNWAY 17-35

**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

|                  |               |                 |
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| Designed by: GWD | Drawn by: MAM | Checked by: GWD |
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Scale: 1" = 50'

Date: 3/21/01

Sheet - Of -

Sheet No  
**18**

MATCH LINE

## NOTES:

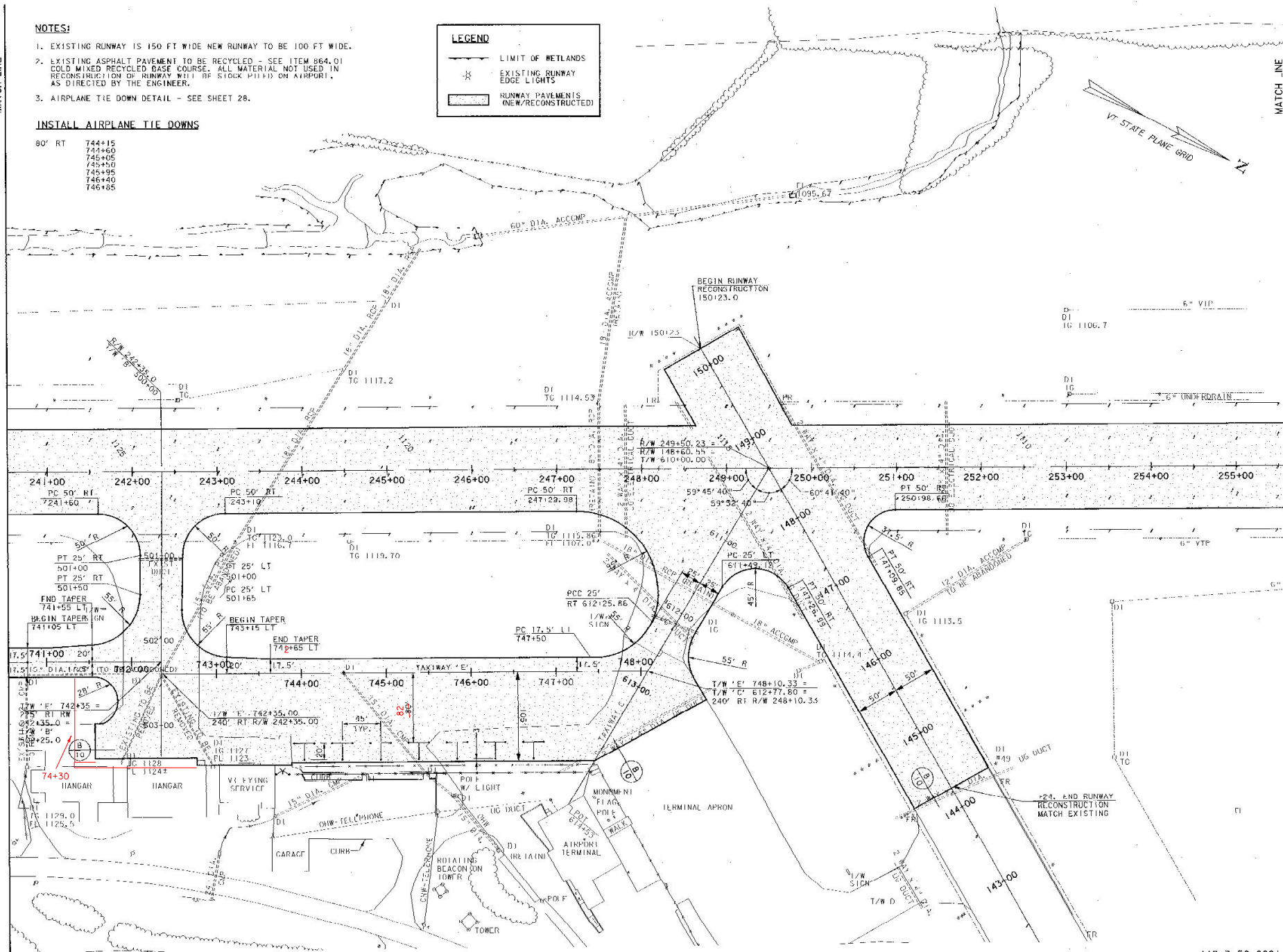
- EXISTING RUNWAY IS 150 FT WIDE NEW RUNWAY TO BE 100 FT WIDE.
- EXISTING ASPHALT PAVEMENT TO BE RECYCLED - SEE ITEM 864.01  
COLD MIXED RECYCLED BASE COURSE. ALL MATERIAL NOT USED IN  
RECONSTRUCTION OF RUNWAY WILL BE STOCK PILED ON AIRPORT,  
AS DIRECTED BY THE ENGINEER.
- AIRPLANE TIE DOWN DETAIL - SEE SHEET 28.

## INSTALL AIRPLANE TIE DOWNS

80' RT 744+15  
744+60  
745+00  
745+50  
745+95  
746+40  
746+85

## LEGEND

- LIMIT OF WETLANDS  
\* EXISTING RUNWAY  
— EDGE LIGHTS  
— RUNWAY PAVEMENT (NEW/RECONSTRUCTED)



MATCH LINE



| REV. | DATE | DESCRIPTION |
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**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 | MM  |
| Drawn by    | MM  |
| Checked by  | BEC |
| Approved by | MM  |

Scale: 1" = 50'

Date: 3/21/01

Sheet - 01 -

Sheet No.

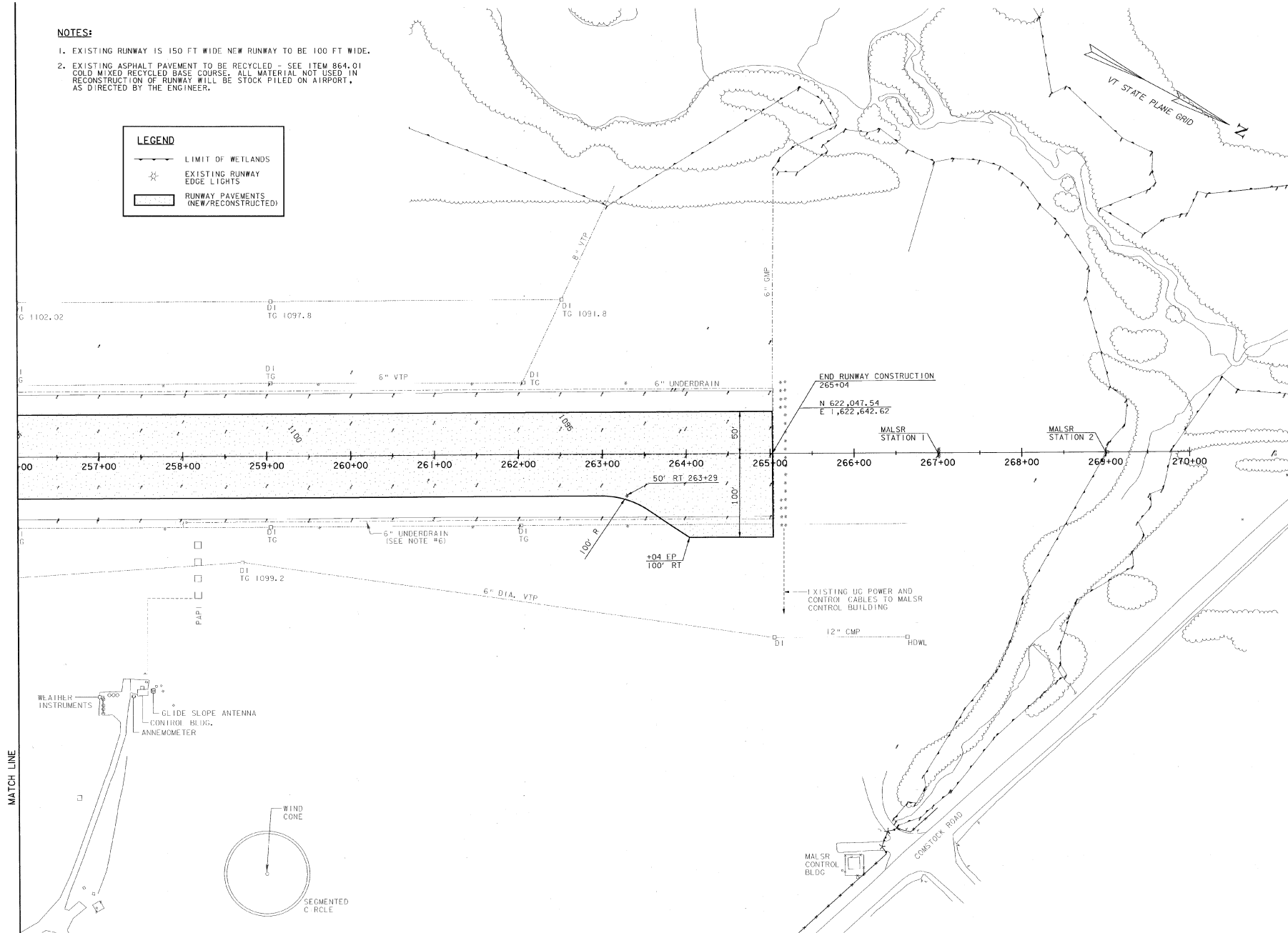
19

# **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)



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**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: GND | Drawn by: MAM | Checked by: BNC | Approved by: GND |
| Scale: 1" = 50'  | Date: 3/21/01 | Sheet: 01       | Sheet No: 20     |

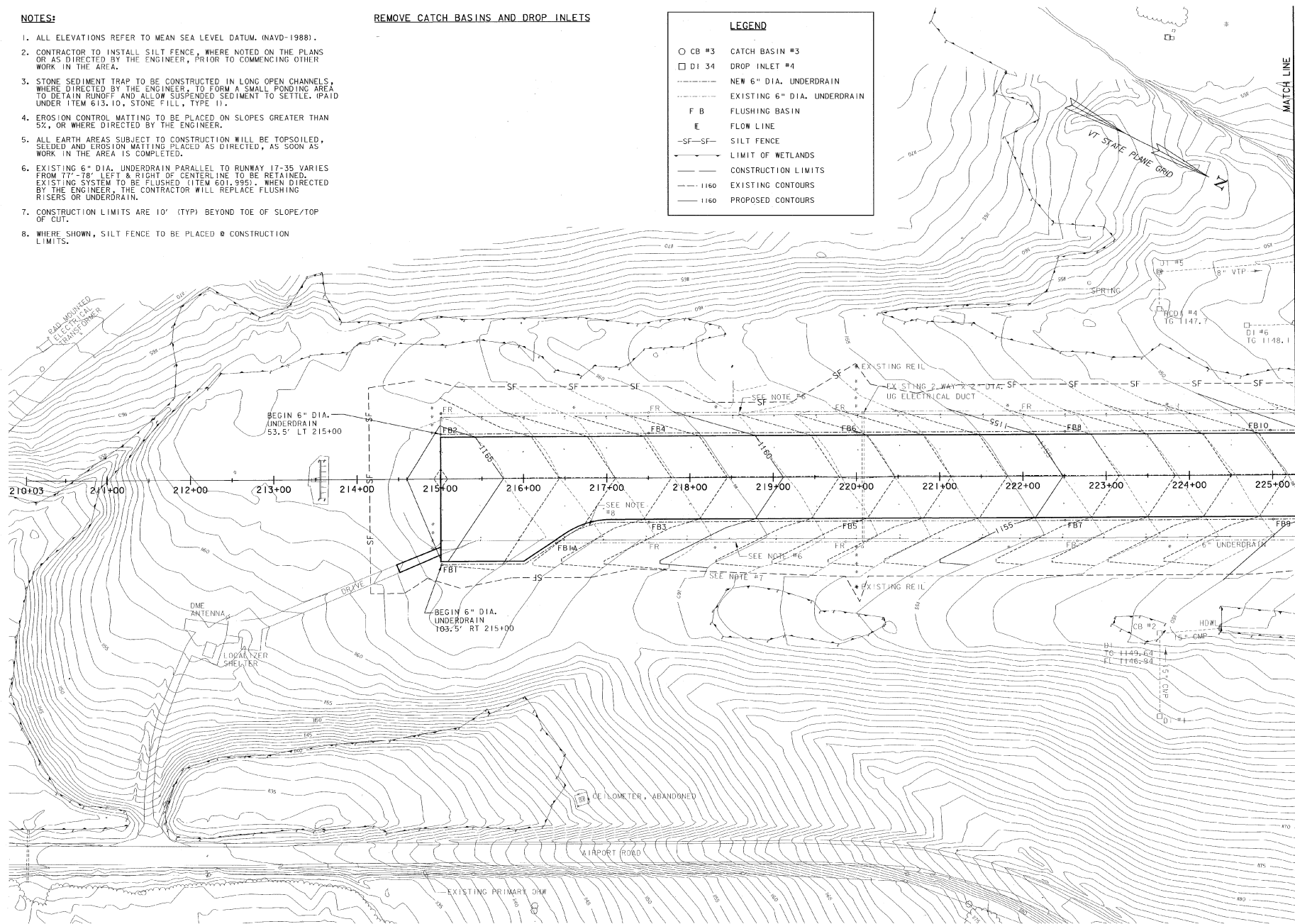
# NOTES:

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 II).
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' TO 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



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**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: MMU | Checked by: BNC | Approved by: GMD |
| Scale: 1" = 50'  |               |                 |                  |
| Date: 3/21/01    |               |                 |                  |
| Sheet: 01        |               |                 |                  |
| Sheet No: 21     |               |                 |                  |



# NOTES:

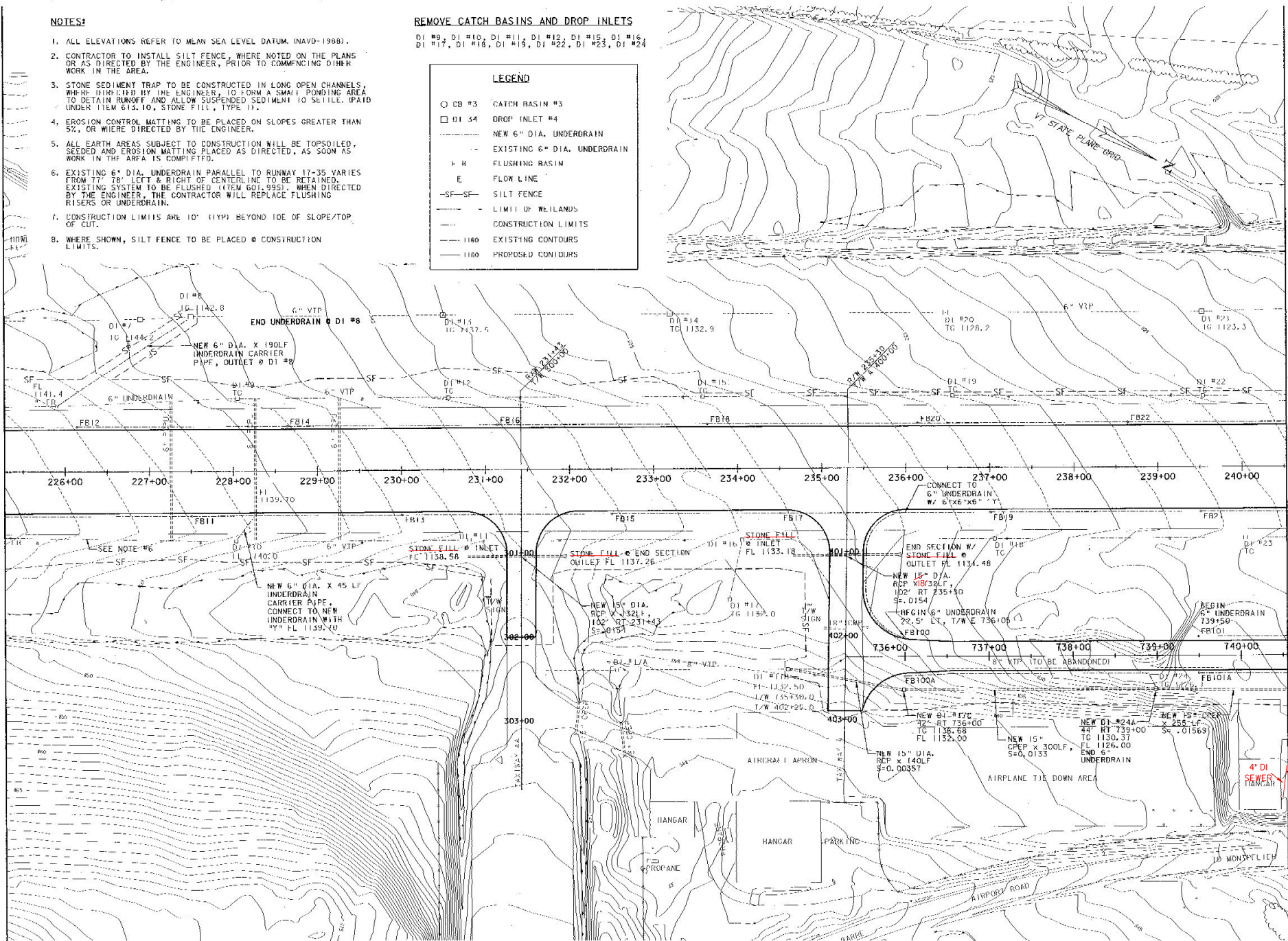
1. ALL ELEVATIONS REFER TO MEAN SEA LEVEL DATUM (NAD-1983).
2. CONTRACTOR TO INSTALL SILT FENCE, WHERE NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER, PRIOR TO COMMENCING OTHER WORK IN THE AREA.
3. STONE SEDIMENT TRAP TO BE CONSTRUCTED IN LONG OPEN CHANNELS, WHERE DIRECTED BY THE ENGINEER, TO FORM A SMALL PONDING AREA TO DETAIN RUNOFF AND ALLOW SUSPENDED SEDIMENT TO SETTLE. (PAID UNDER ITEM 615.10, STONE FILL, TYPE II).
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 10% 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
- + R FLUSHING BASIN
- EL FLOW LINE
- SF-SF SILT FENCE
- - - LIMIT OF WETLANDS
- - - CONSTRUCTION LIMITS
- - - 1160 EXISTING CONTOURS
- - - 1160 PROPOSED CONTOURS



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**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: GPO  
Drawn by: MAM  
Checked by: BRC  
Approved by: GPO

Scale: 1" = 50'  
Date: 3/21/01  
Sheet - Of -  
Sheet No:  
**22**



# NOTES:

- ALL ELEVATIONS REFER TO MEAN SEA LEVEL DATUM, (NAVD=1980).
- CONTRACTOR TO INSTALL SILT FENCE, WHERE NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER, PRIOR TO COMMENCING OTHER WORK IN THE AREA.
- 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 II).
- EROSION CONTROL MATTING TO BE PLACED ON SLOPES GREATER THAN 5%, OR WHERE DIRECTED BY THE ENGINEER.
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- 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.
- CONSTRUCTION LIMITS ARE 10' (TYP) BEYOND TOE OF SLOPE/TOP OF CUT.
- WHERE SHOWN, SILT FENCE TO BE PLACED @ CONSTRUCTION LIMITS.

## REMOVE CATCH BASINS AND DROP INLETS

D1 #25, D1 #26, D1 #27, D1 #29, D1 #30, D1 #31, D1 #36, D1 #37, D1 #38

## ADJUST FRAME AND GRATE ON EXISTING DI'S

D1 #36, D1 #37, D1 #41

## REMOVE AND RESET CURB

743+90 TO 745+58 - 123' RT

## REMOVE AND RESET FENCE

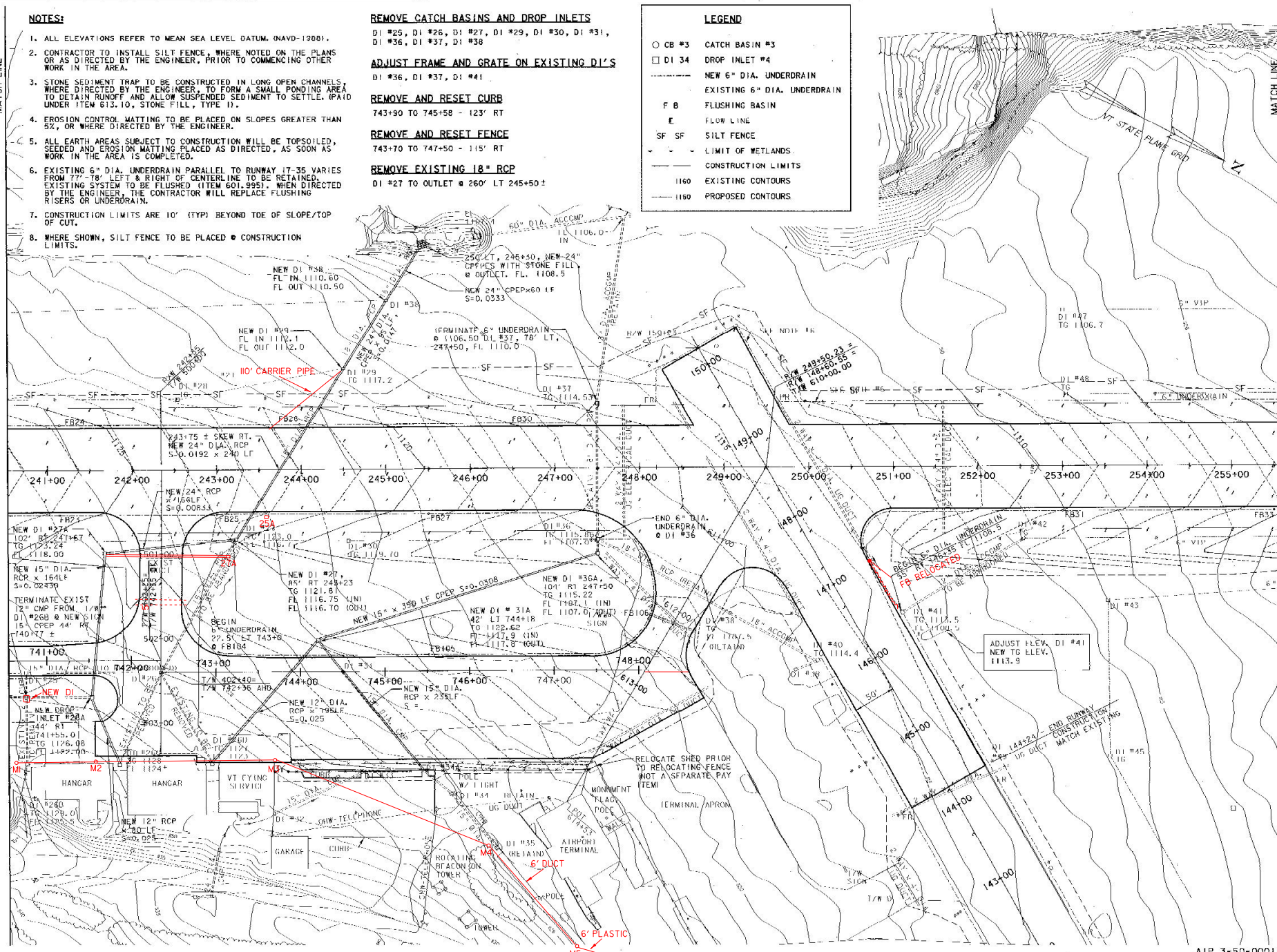
743+70 TO 747+50 - 115' RT

## REMOVE EXISTING 18" RCP

D1 #27 TO OUTLET @ 260' LT 245+50 ±

## 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



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**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 | Scale: 1" = 50' |
| Drawn by: MMD    | Date: 3/21/01   |
| Checked by: GMD  | Sheet: 01       |
| Approved by: GMD | Sheet No: 23    |



# 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 1).
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 601.998). WHEN DITCHED BY THE ENGINEER, THE CONTRACTOR WILL REPLACE FLUSHING RISERS OR UNDERDRAIN.
7. CONSTRUCTION LIMITS ARE 10' (11P) BEYOND TOE OF SLOPE/TOP OF CUT.
8. WHERE SHOWN, SILT FENCE TO BE PLACED @ CONSTRUCTION LIMITS.

## REMOVE CATCH BASINS AND DROP INLETS

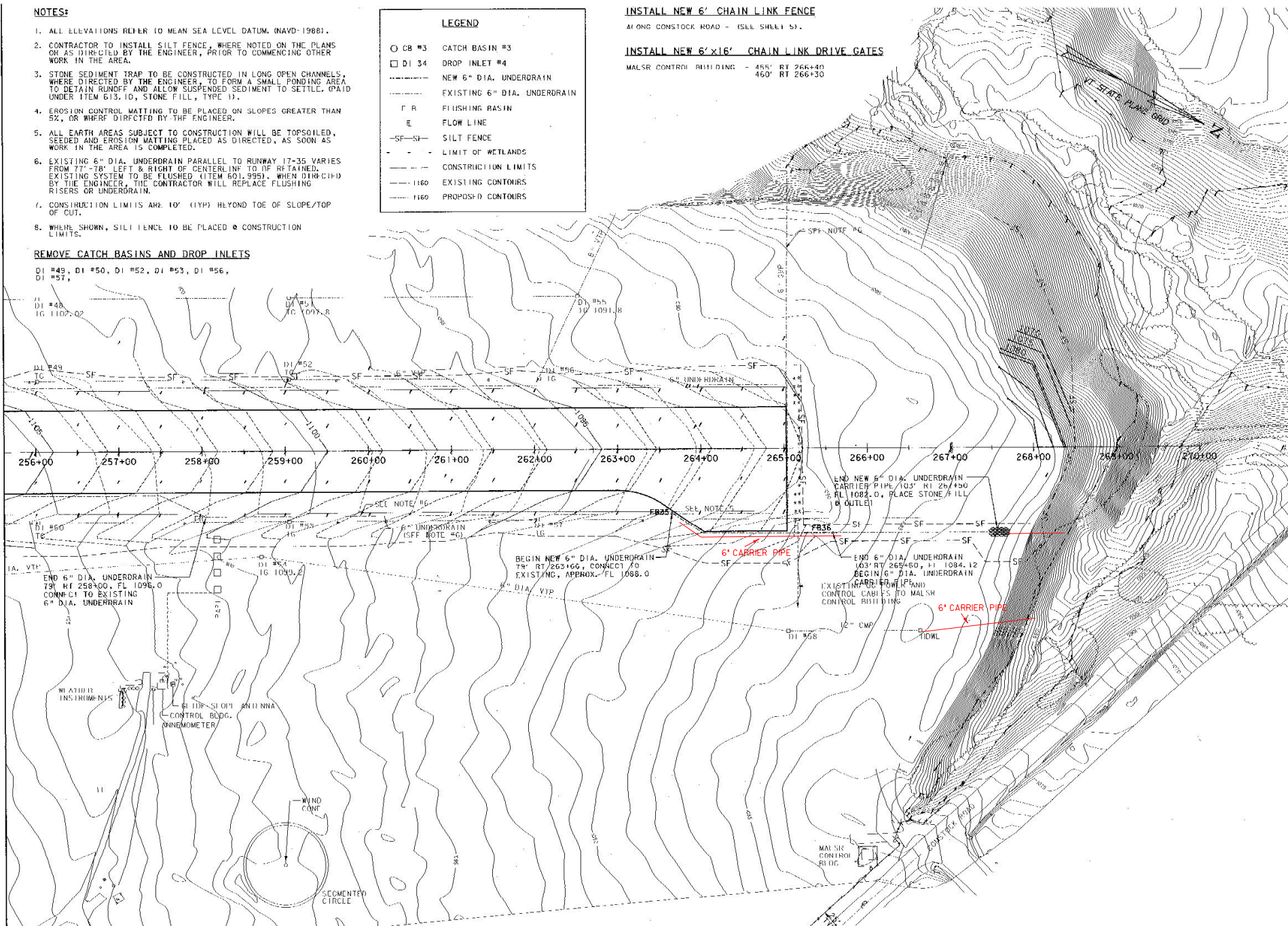
D1 #49, D1 #50, D1 #52, D1 #53, D1 #56,  
D1 #57,

## LEGEND

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

INSTALL NEW 6' CHAIN LINK FENCE  
ALONG CONSTACK ROAD - (SEE SHEET 5).

INSTALL NEW 6'x16' CHAIN LINK DRIVE GATES  
MALSR CONTROL BUILDING - 455' RT 266+40  
460' RT 266+30





**URS**

ONE NORTHWAY LANE  
LATHAM, NEW YORK

**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

RECONSTRUCTION OF RUNWAY 17-35  
DRAINAGE AND GRADING PLAN

Designed by: **ABC**

Drawn by: **MM**

Checked by: **BNC**

Approved by: **ABC**

Scale: **1" = 50'**

Date: **3/21/01**

Sheet: **01**

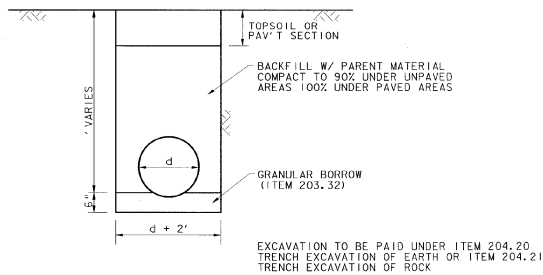
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Job No. **720001118.01**

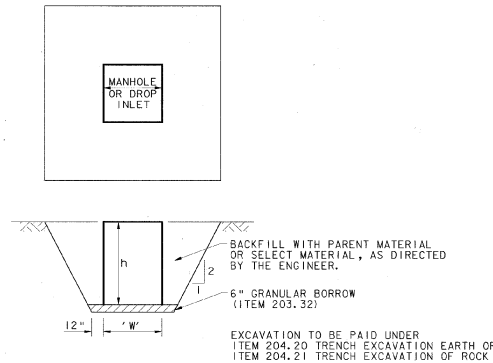
Rev. **DATE**

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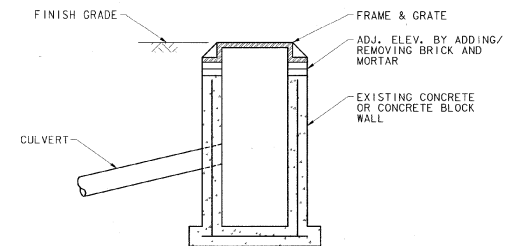
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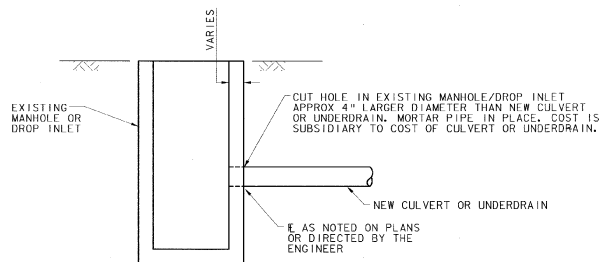
**A** CULVERT IN TRENCH - TYPICAL  
SCALE: NONE



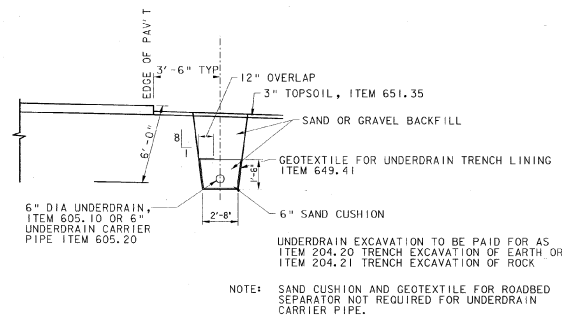
**B** DROP INLET/MANHOLE PLACEMENT (TYPICAL)  
SCALE: NONE



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



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



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



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**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

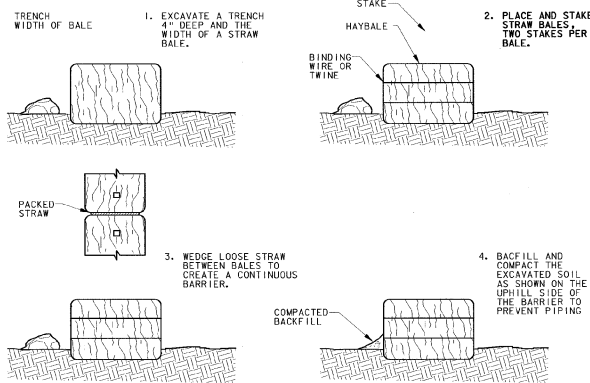
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| Designed by: CND | Drawn by: AMB | Checked by: BWC | Approved by: CND |
|------------------|---------------|-----------------|------------------|

Scale: AS SHOWN

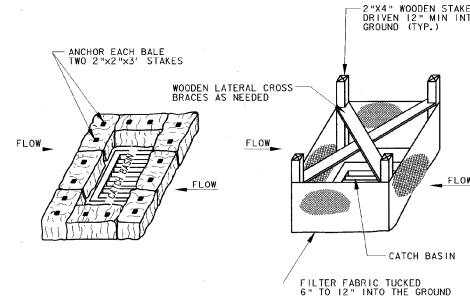
Date: 3/21/01

Sheet - 01 -

Sheet No. **25**

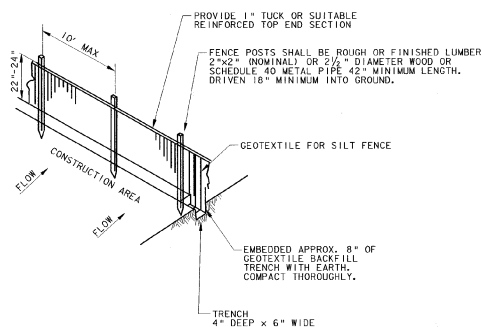


**SEDIMENTATION BARRIER - HAYBALE**  
ITEM 651.26  
NOT TO SCALE



**HAY BALE INSTALLATION**  
ITEM 651.26

**SEDIMENTATION CONTROL INLET PROTECTION**  
NOT TO SCALE



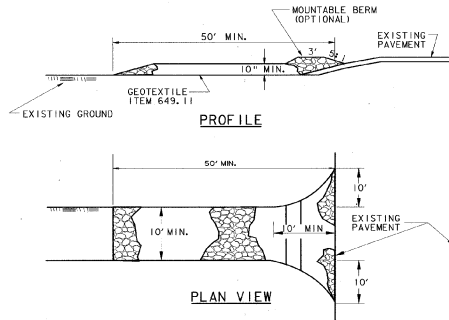
**NOTES:**

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



**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 DISTURBED AREAS WITHIN THE CONSTRUCTION SITE. ALL MEASURES INVOLVING EROSION CONTROL PRACTICES SHALL BE INSTALLED IN CONFORMANCE WITH "THE VERMONT HANDBOOK FOR SOIL EROSION AND SEDIMENT CONTROL ON CONSTRUCTION SITES" AS PUBLISHED BY THE 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 RED 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



| REV. | DATE | DESCRIPTION |
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**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

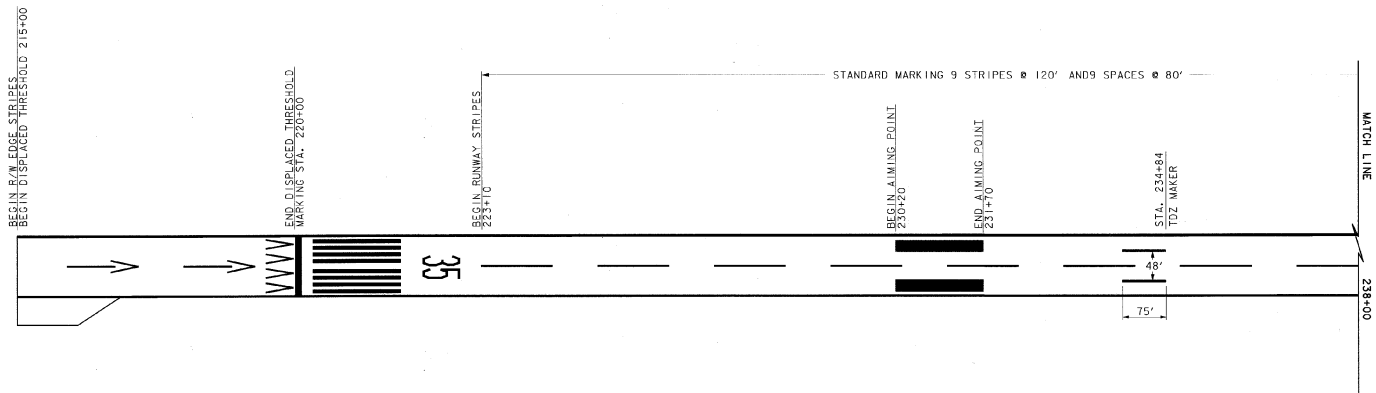
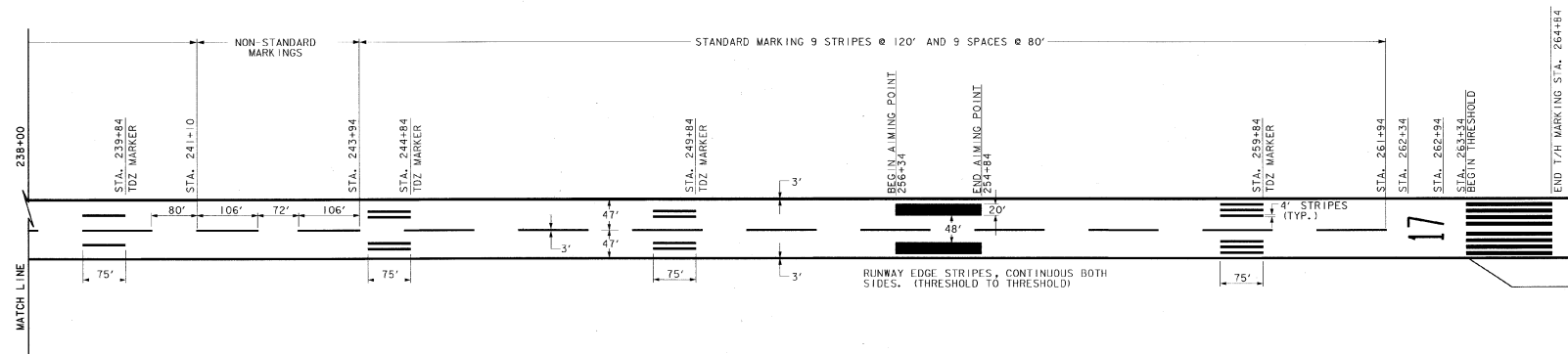
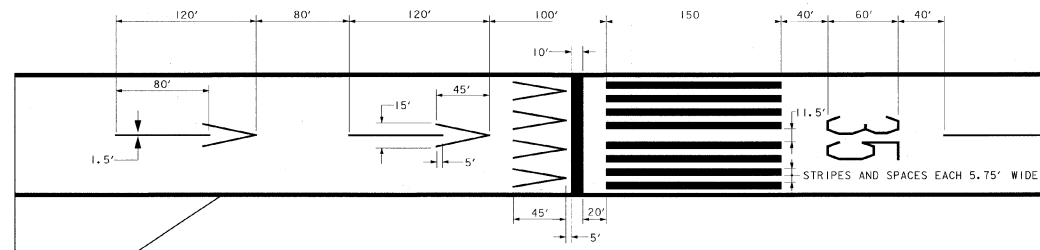
**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

|                  |               |                 |                  |
|------------------|---------------|-----------------|------------------|
| Designed by: GMD | Drawn by: AMS | Checked by: BFC | Approved by: GMD |
|------------------|---------------|-----------------|------------------|

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| Scale: 1" = 20' | 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).



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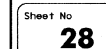
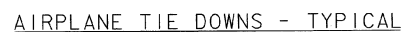
**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

PAVEMENT MARKING PLANS

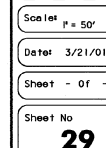
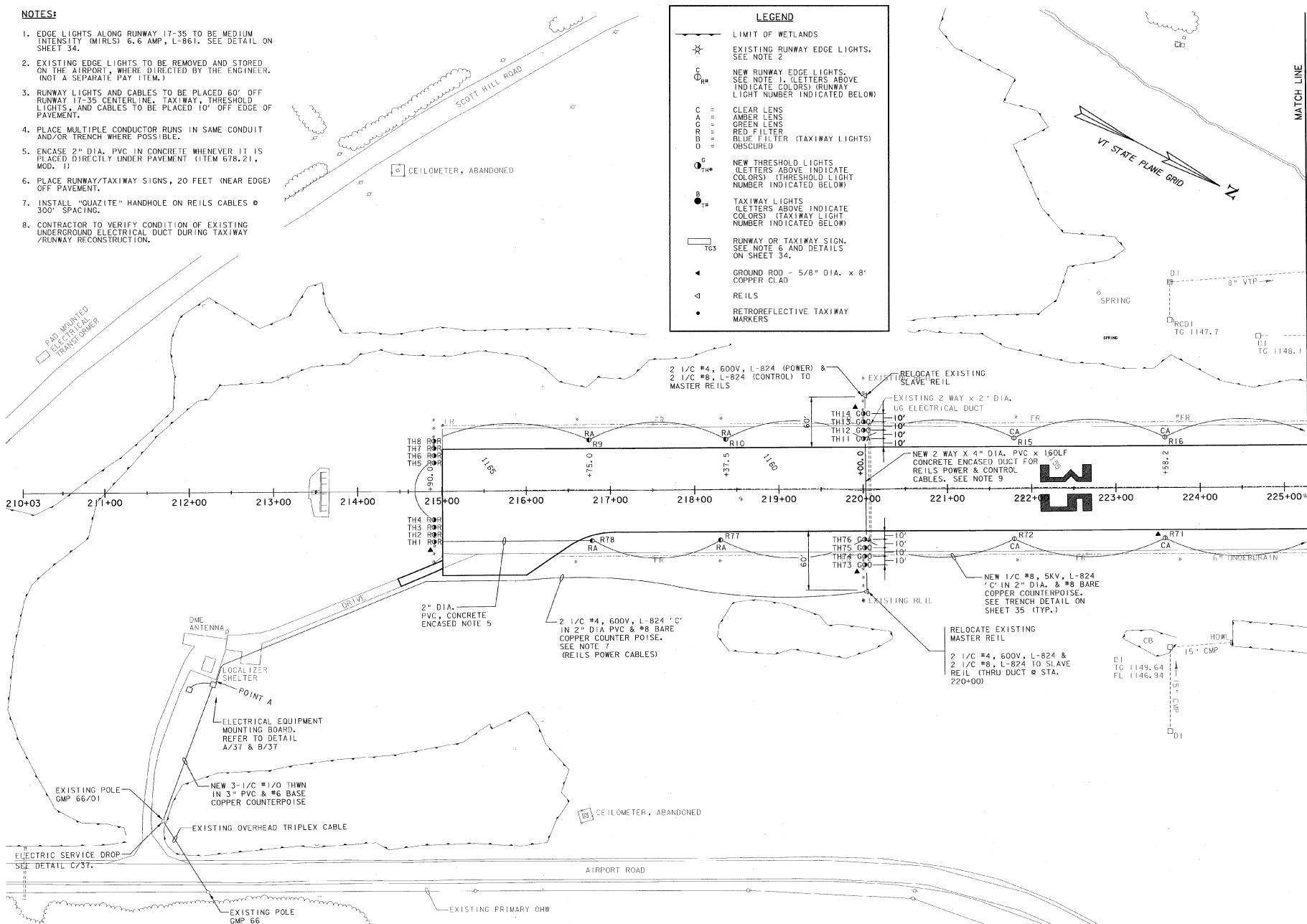
**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

|                         |                      |                        |                        |
|-------------------------|----------------------|------------------------|------------------------|
| Designed by: <b>AM</b>  | Drawn by: <b>AM</b>  | Checked by: <b>BRC</b> | Approved by: <b>AM</b> |
| Scale: <b>1" = 100'</b> | Date: <b>3/21/01</b> | Sheet: <b>01</b>       | Sheet No: <b>27</b>    |

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.



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 CENTER LINE. 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 REELS CABLES @ 300' SPACING.
8. CONTRACTOR TO VERIFY CONDITION OF EXISTING UNDERGROUND ELECTRICAL DUCT DURING TAXIWAY RUNWAY RECONSTRUCT.





# NOTES:

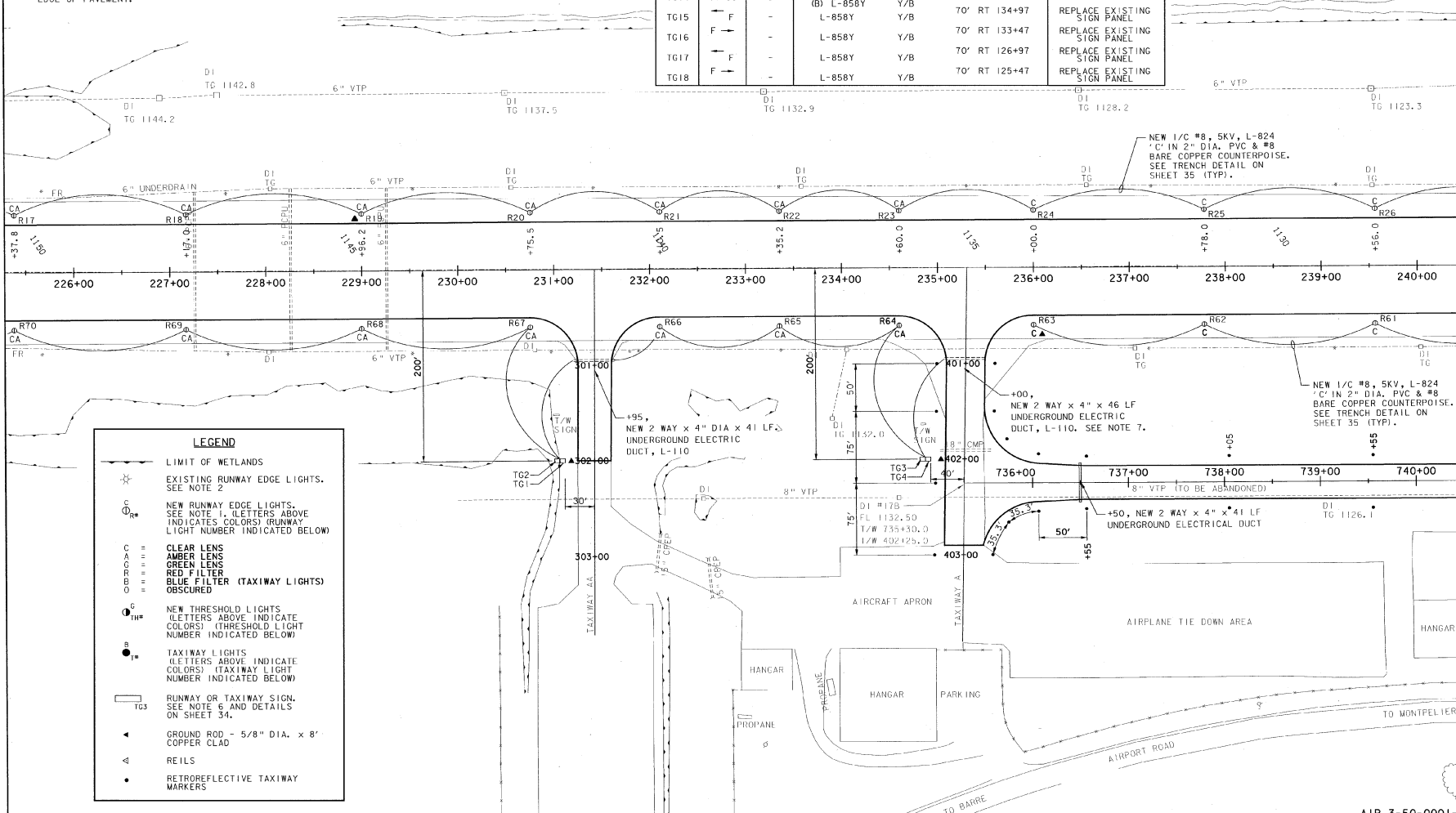
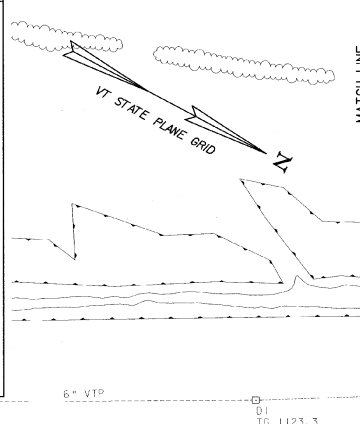
- EDGE LIGHTS ALONG RUNWAY 17-35 TO BE MEDIUM INTENSITY (MIRLS) 6.6 AMP, L-861. SEE DETAIL ON SHEET 34.
- EXISTING EDGE LIGHTS TO BE REMOVED AND STORED ON THE AIRPORT, WHERE DIRECTED BY THE ENGINEER. (NOT A SEPARATE PAY ITEM.)
- ALL RUNWAY, THRESHOLD AND TAXIWAY LIGHTS AND CABLES TO BE PLACED 10' OFF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

# SIGN SCHEDULE NOTES:

- ALL NEW SIGNS TO BE SIZE 1 (18" PANEL WITH 12" LEGEND), STYLE 2, CLASS 2.
- COLORS: W/R = WHITE ON RED  
Y/B = YELLOW ON BLACK  
B/Y = BLACK ON YELLOW
- 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.
- (F) = FRONT OF SIGN.  
(B) = BACK OF SIGN.

# SIGN SCHEDULE - 1

| SIGN | LEGEND |       | FAA SPEC   | COLOR | NEW LOCATION    | REMARKS           |
|------|--------|-------|------------|-------|-----------------|-------------------|
|      | FRONT  | BACK  |            |       |                 |                   |
| 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     | (B) L-858Y | Y/B   | 45' RT 402+00   | NEW               |
| TG4  | 35-17  | BLANK | L-858R     | W/R   | 40' RT 402+00   | RELOCATE EXISTING |
| TG5  | B      | E     | (E) L-858Y | Y/B   | 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     | (B) L-858Y | Y/B   | 55' RT 612+57   | NEW               |
| TG10 | 35-17  | RAMP  | (E) L-858Y | W/R   | 50' RT 612+57   | RELOCATE EXISTING |
| TG11 | 35-17  | RAMP  | (B) L-858Y | W/R   | 50' RT 612+20   | NEW               |
| TG12 | C      | BLANK | L-858Y     | Y/B   | 55' RT 612+20   | NEW               |
| TG13 | 17-35  | 5     | (E) L-858Y | W/R   | 70' LT 146+32   | NEW               |
| TG14 | 17-35  | 5     | (B) L-858Y | W/R   | 70' RT 146+32   | NEW               |
| TG15 | F      | -     | L-858Y     | Y/B   | 70' RT 134+97   | REPLACE EXISTING  |
| TG16 | F      | -     | L-858Y     | Y/B   | 70' RT 133+47   | REPLACE EXISTING  |
| TG17 | F      | -     | L-858Y     | Y/B   | 70' RT 126+97   | REPLACE EXISTING  |
| TG18 | F      | -     | L-858Y     | Y/B   | 70' RT 125+47   | REPLACE EXISTING  |



**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

RECONSTRUCTION OF RUNWAY 17-35  
RUNWAY LIGHTING PLAN

Job No. F200001718.01  
File # 16270180m30.dgn

DESIGN: PT ON  
DATE: REV. DATE

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

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

# NOTES:

- EDGE LIGHTS ALONG RUNWAY 17-35 TO BE MEDIUM INTENSITY (MIRLS) 6.6 AMP, L-861. SEE DETAIL ON SHEET 34.
- EXISTING EDGE LIGHTS TO BE REMOVED AND STORED ON THE AIRPORT, WHERE DIRECTED BY THE ENGINEER. (NOT A SEPARATE PAY ITEM.)
- ALL RUNWAY, THRESHOLD AND TAXIWAY LIGHTS AND CABLES TO BE PLACED 10' OFF EDGE OF PAVEMENT.
- PLACE MULTIPLE CONDUCTOR RUNS IN SAME CONDUIT AND/OR TRENCH WHERE POSSIBLE.
- ENCASE 2" DIA. PVC IN CONCRETE WHENEVER IT IS PLACED DIRECTLY UNDER PAVEMENT.
- PLACE RUNWAY/TAXIWAY SIGNS, 20 FEET (NEAR EDGE) OFF PAVEMENT, UNLESS SHOWN OTHERWISE.
- CONTRACTOR TO VERIFY CONDITION OF EXISTING UNDERGROUND ELECTRICAL DUCT DURING TAXIWAY/RUNWAY RECONSTRUCTION. REFER TO DETAIL ON SHEET 35.
- DISCONNECT EXISTING HOME RUN TO TERMINAL BUILDING. CONNECT JUMPER CABLE BETWEEN EXISTING DT63 AND DT64.
- NEW TAXIWAY LIGHTS ALONG RUNWAY 5-23 TO BE PLACED 15' OFF RUNWAY EDGE.
- R56 & R55 TO BE LOW PROFILE, IN PAVEMENT RUNWAY LIGHT CONFORMING TO FAA SPECIFICATION L-850C. SEE DETAILS ON SHEET 36.
- REFER TO DETAILS ON SHEET 35.
- RETROREFLECTIVE TAXIWAY MARKERS (L-853) CONFORMING TO FAA AC 150/5345-390, TO BE PLACED 10' OFF TAXIWAY EDGE ON PAVEMENT.
- RUNWAY 5 THRESHOLD THRESHOLD LIGHTS TO REMAIN. CONTRACTOR TO REPLACE LENSES THAT DO NOT CONFORM WITH LAYOUT SHOWN. THRESHOLD LIGHTS TO BE CLEANED, SET PLUMB, AND PROPERLY SPT. (NOT A SEPARATE PAY ITEM.)

## RUNWAY LIGHTING CIRCUIT

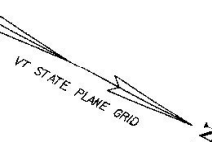
- R57-T09-TG10-TG11-TG12-TG13-VAULT
- VAULT-TG14-R55-R56-R54

## TAXIWAY LIGHTING CIRCUIT

- T128-T127-T100-T101...-T110-T111-T112...

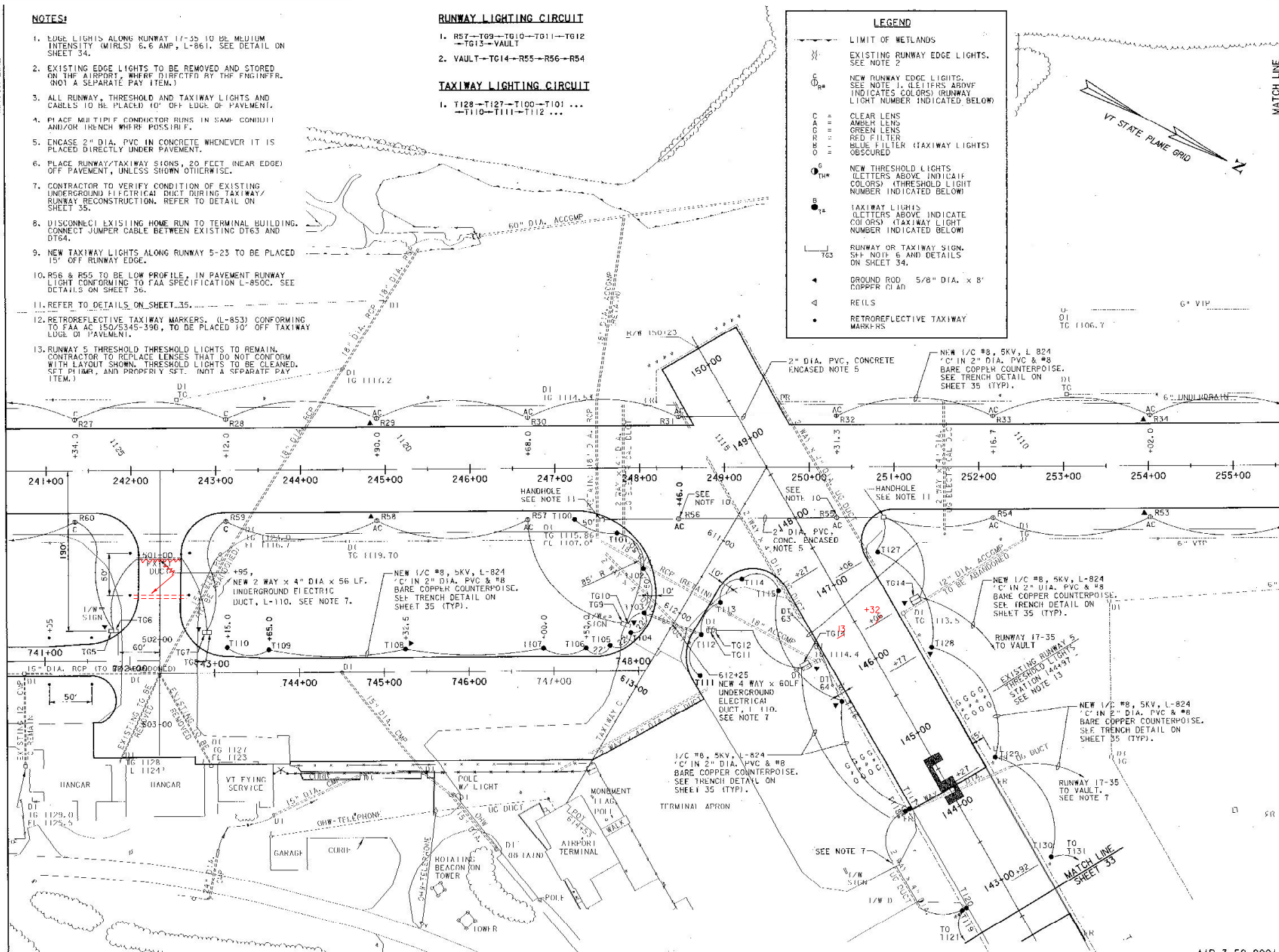
## LEGEND

- LIMIT OF WETLANDS
- EXISTING RUNWAY EDGE LIGHTS. SEE NOTE 2
- NEW RUNWAY EDGE LIGHTS. SEE NOTE 1. (LETTERS ABOVE INDICATE COLORS) (RUNWAY LIGHT NUMBER INDICATED BELOW)
- CLEAR LENS
- AMBER LENS
- GREEN LENS
- RED FILTER
- BLUE FILTER (TAXIWAY LIGHTS)
- 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



MATCH LINE

MATCH LINE



MATCH LINE

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

EXISTING RUNWAY EDGE LIGHTS.  
SEE NOTE 3

NEW RUNWAY EDGE LIGHTS.  
SEE NOTE 1. (LETTERS ABOVE  
INDICATES COLORS) (RUNWAY  
LIGHT NUMBER INDICATED BELOW)

CLEAR LENS  
AMBER LENS  
GREEN LENS  
RED FILTER  
BLUE FILTER (TAXIWAY LIGHTS)  
OBSCURED

NEW THRESHOLD LIGHTS  
(LETTERS ABOVE INDICATE  
COLORS) (THRESHOLD LIGHT  
NUMBER INDICATED BELOW)

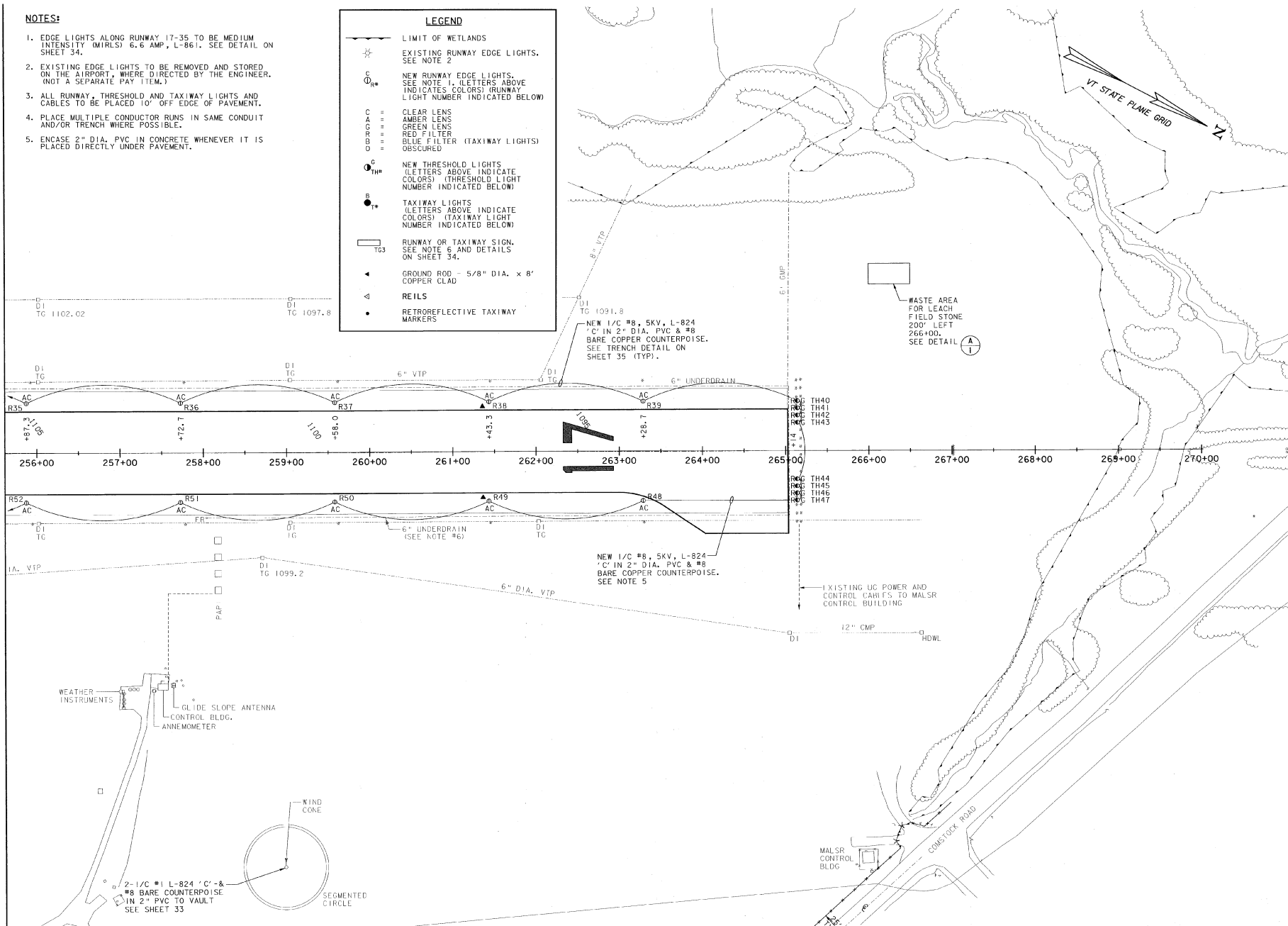
TAXIWAY LIGHTS  
(LETTERS ABOVE INDICATE  
COLORS) (TAXIWAY LIGHT  
NUMBER INDICATED BELOW)

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

[illegible]

**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

RECONSTRUCTION OF RUNWAY 17-35  
RUNWAY LIGHTING PLAN

**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

|                  |
|------------------|
| Designed by: GND |
| Drawn by: MUM    |
| Checked by: BWC  |

Scale: 1" = 50'

Date: 3/21/01

Sheet - Of -

Sheet No

32

# NOTES:

1. ALL TAXIWAY LIGHTS TO BE MEDIUM INTENSITY L-861 I.
2. EXISTING WILDS NOT SHOWN ON TAXIWAY F. (REFER TO SHEET 7/19 OF PLANS "PARTIAL PARALLEL TAXIWAY TO RUNWAY 5-23" BY RUFFENSBERRY, APRIL, 1984 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

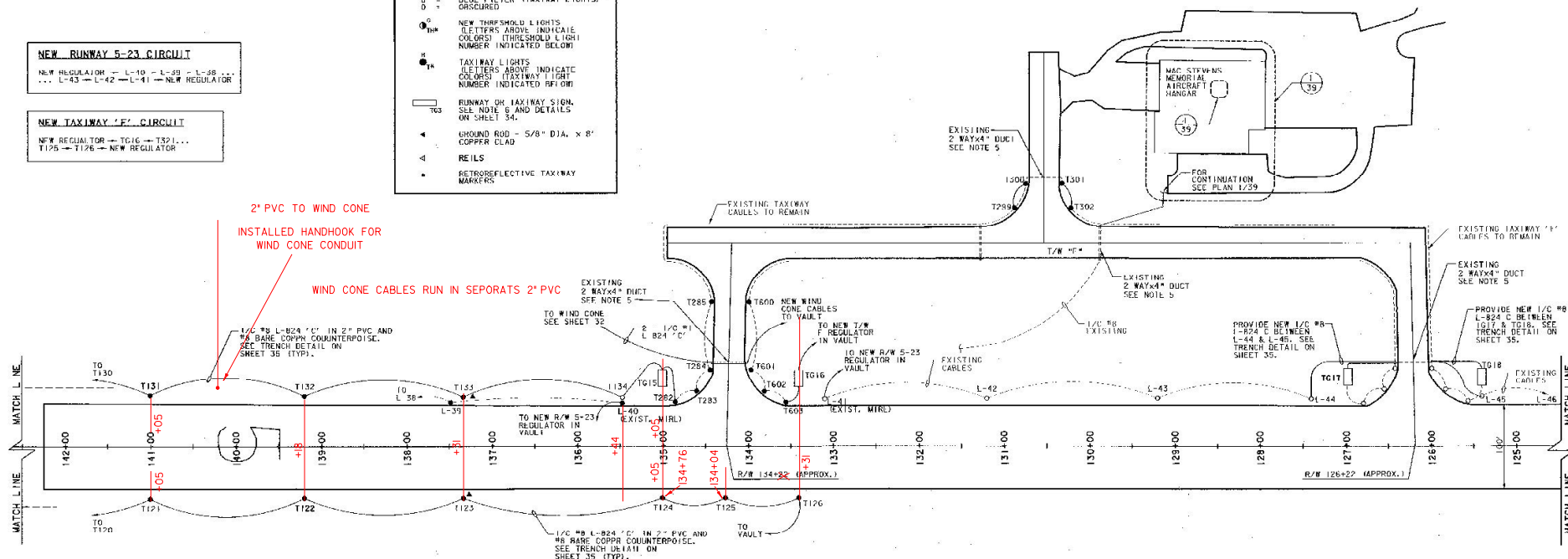
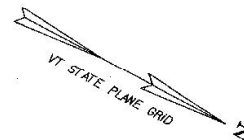
NEW REGULATOR - L-10 - L-29 - L-38 - L-41  
... L-43 - L-42 - L-41 - NEW REGULATOR

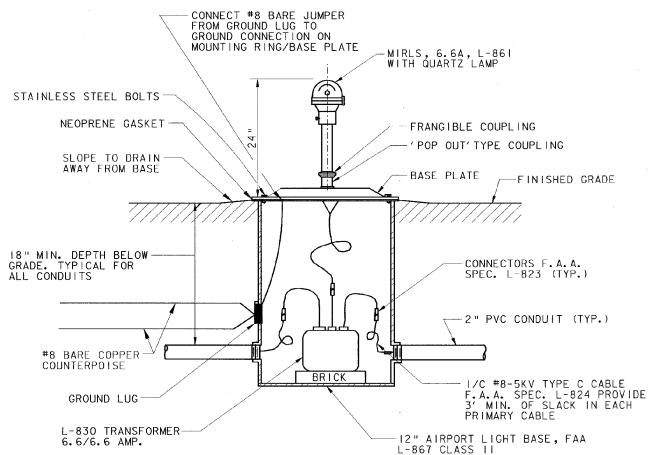
## NEW TAXIWAY 'F' CIRCUIT

NEW REGULATOR - T616 - T571...  
T175 - T126 - NEW REGULATOR

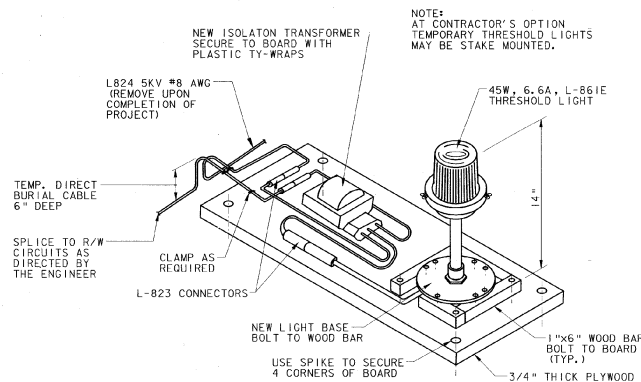
## LEGEND

- 1. LIMIT OF WETLANDS
- EXISTING RUNWAY EDGE LIGHTS. SEE NOTE 2
- NEW RUNWAY EDGE LIGHTS. SEE NOTE 1. (LETTERS ABOVE INDICATE COLORS) (RUNWAY LIGHT NUMBER INDICATED BELOW)
- CELLAR LENS
- AMBER LENS
- GREEN LENS
- RED FILTER
- BLUE FILTER (TAXIWAY LIGHTS) - DISCLOSED
- 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
- REELS
- RETROREFLECTIVE TAXIWAY MARKERS

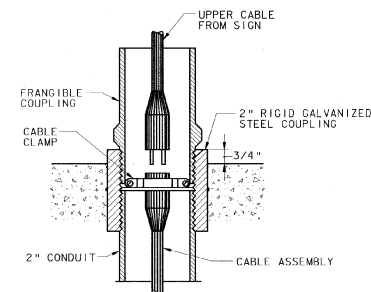




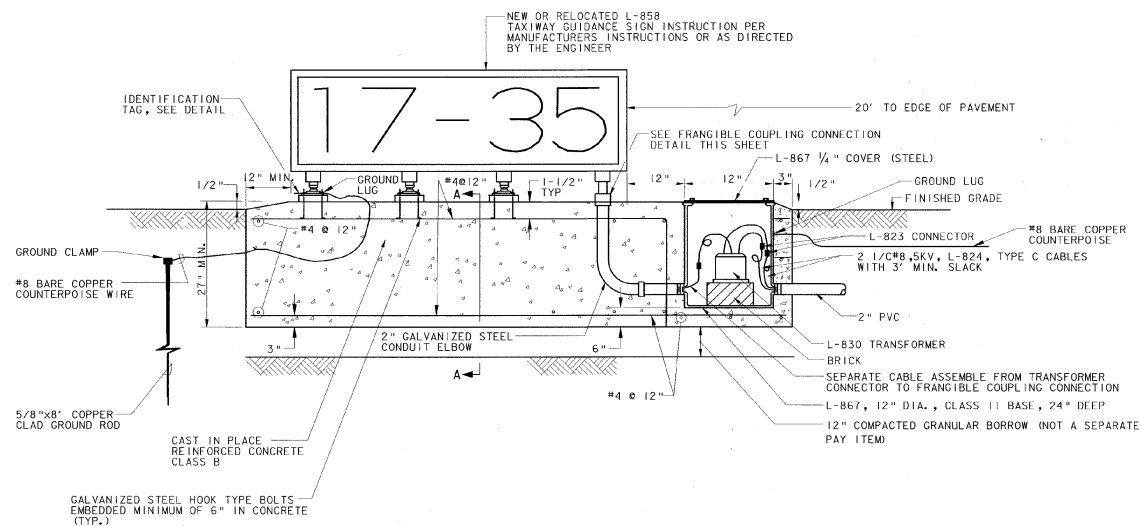
**TYPICAL ELEVATED EDGE LIGHT**  
NOT TO SCALE



**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



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**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

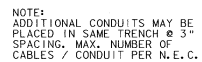
Job No. F20000118.01

Runway Lighting Details

**URS**

ONE NORTHWAY LANE  
LATHAM, NEW YORK

|                  |               |                 |                  |
|------------------|---------------|-----------------|------------------|
| Designed by: CND | Drawn by: AMB | Checked by: BNC | Approved by: CND |
| Scale: NTS       | Date: 3/21/01 | Sheet: 01       | Sheet No: 34     |



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

The diagram shows a cross-section of a road edge. A horizontal line represents the 'EDGE OF PAVEMENT'. Below this line, a 'PCC DUCT MARKER' is shown, which is 6' ± from the edge. A '2" PVC CONDUIT' is shown running parallel to the edge, with a '5' TYPICAL' distance between the marker and the conduit. The conduit is 18" high. Below the conduit, there is an 'EXISTING DUCT' with a '4" DIA. PCC ENCASED' section. The distance from the edge of the pavement to the existing duct is 3'. The distance from the existing duct to the edge of the pavement is 1". The conduit is labeled as '#8 BARE COOPR COUNTERPOISE'.

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

| REV. | DATE | DESCRIPTION |
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Job No. F200001718.01

File No F20171801de35.dgn

**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

## RUNWAY LIGHTING DETAILS

**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

|                  |
|------------------|
| Designed by: CND |
| Drawn by: AMB    |
| Checked by: BNC  |
| Approved by: CND |

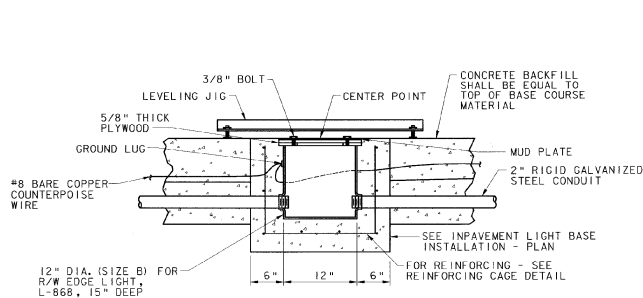
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Date: 3/21/01

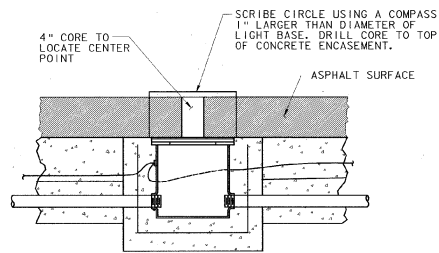
Sheet - Of -

Sheet No  
**35**

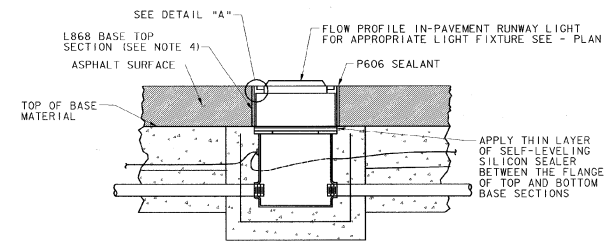




**STEP 1**  
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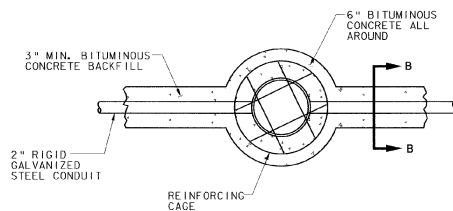
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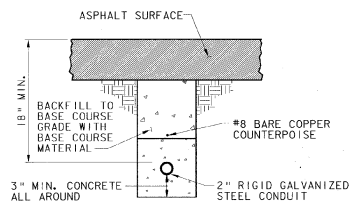
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**GENERAL NOTES:**

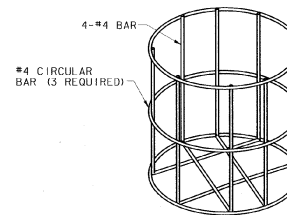
1. CONCRETE TO CONFIRM VAOT SPECIFICATIONS SECTION 501, CLASS B, 3/4" MAX SIZE AGGREGATE.
2. PRIOR TO ASPHALT PAVING, COVER MUD PLATE WITH A SHINGLE OR ANOTHER THIN ARTICLE WHEN TACK COAT IS APPLIED PRIOR TO PAVING. BEFORE PAVING COMMENCES, REMOVE SHINGLE AND LIGHTLY WIPE DOWN MUD PLATE WITH VEGETABLE 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.



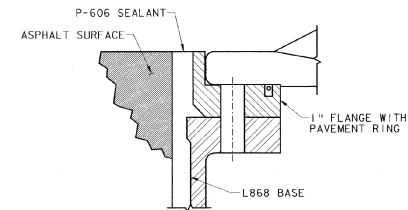
**IN-PAVEMENT LIGHT BASE  
INSTALLATION - PLAN**  
SCALE: NONE



**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



| REV. | DATE | DESCRIPTION |
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**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

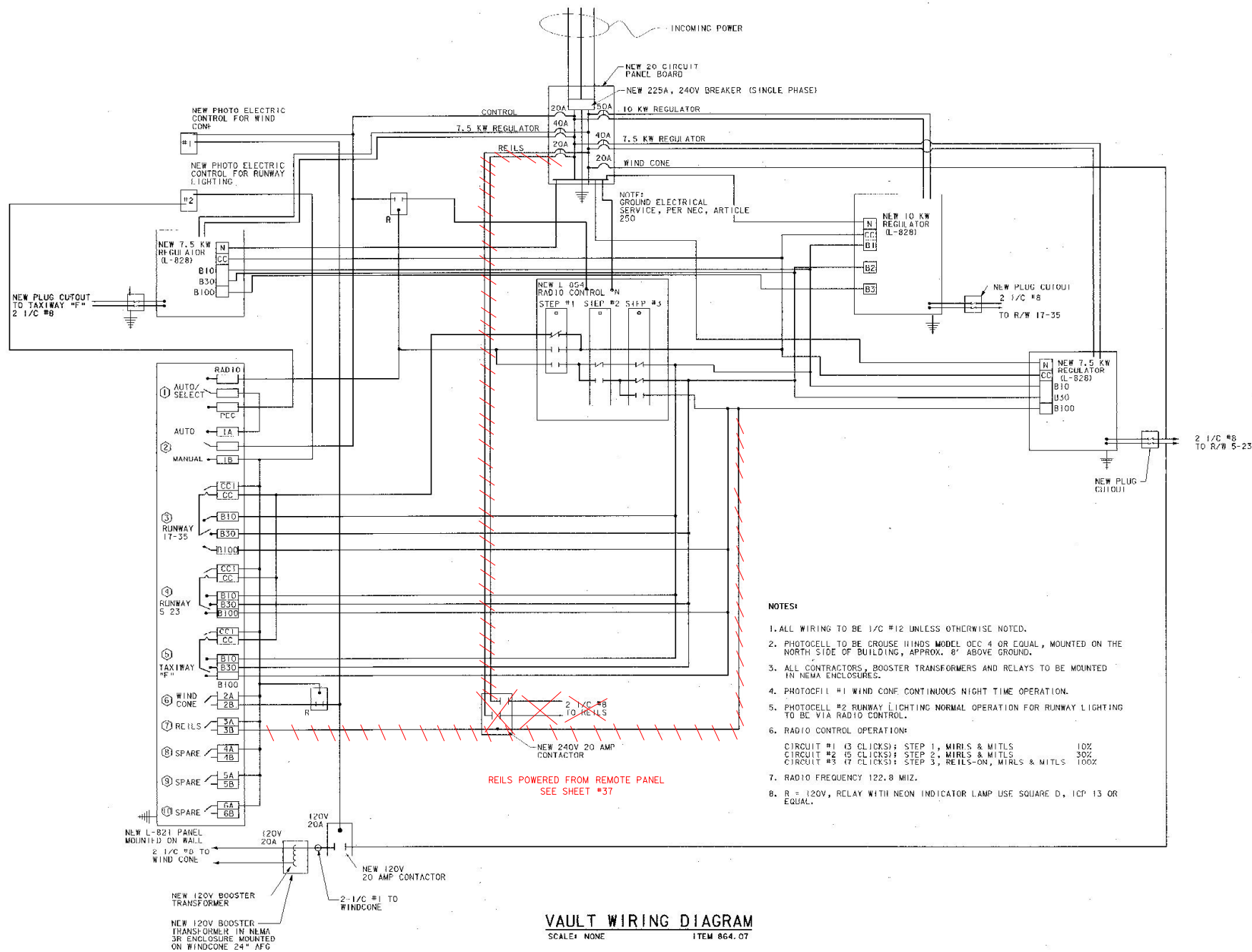
**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

**RUNWAY LIGHTING DETAILS**

**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

|                  |               |                 |                  |
|------------------|---------------|-----------------|------------------|
| Designed by: GMP | Drawn by: AMB | Checked by: BNC | Approved by: GMP |
| Scale: NTS       | Date: 3/21/01 | Sheet: 01       | Sheet No: 36     |





**VAULT WIRING DIAGRAM**  
SCALE: NONE ITEM 864.07



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**EDWARD F. KNAPP STATE AIRPORT**  
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**VAULT WIRING DIAGRAM**

**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

|             |     |
|-------------|-----|
| Designed by | 640 |
| Drawn by    | MM  |
| Checked by  |     |
| Approved by | 640 |

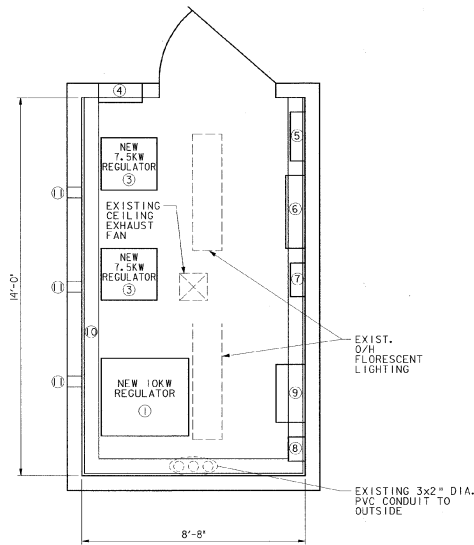
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| Date     | 3/21/01 |
| Sheet    | OF      |
| Sheet No | 38      |

# NOTES:

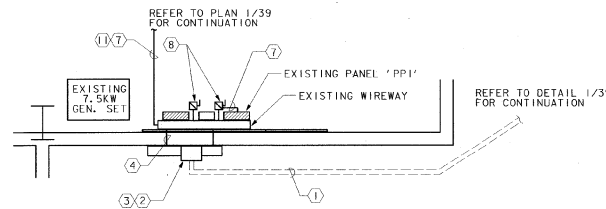
1. REFER TO SHEET 40 FOR SYMBOLS AND DEMOLITION & CONSTRUCTION NOTES.
2. VAULT WALL CONSTRUCTION (EXIST.): 5/8" TYPE X GYPSUM WALL BOARD MTD ON 6" METAL STUDS.
3. VAULT CEILING CONSTRUCTION: 5/8" FIRE RETARDANT TREATED PLYWOOD OVER 8" STEEL JOISTS @ 16" O.C. 5/8" TYPE X GYPSUM BOARD BELOW.
4. VAULT CEILING, 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: ④

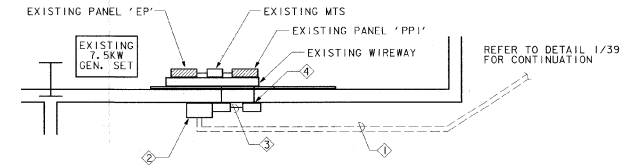
1. NEW L828 7.5KW REGULATOR (R/W 17-35) 240V, 1 PHASE, 3 STEP 6.6 AMP OUTPUT.
2. NEW L828 7.5KW REGULATOR (R/W 5-23) 240V, 1 PHASE, 3 STEP 6.6 AMP OUTPUT.
3. NEW L828 7.5KW REGULATOR (TAXIWAY 'F'), 240V, 1 PHASE, 3 STEP
4. NEW WALL FAN.
5. NEW L821 CONTROL PANEL.
6. NEW L-854 REMOTE RADIO CONTROLLER.
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.



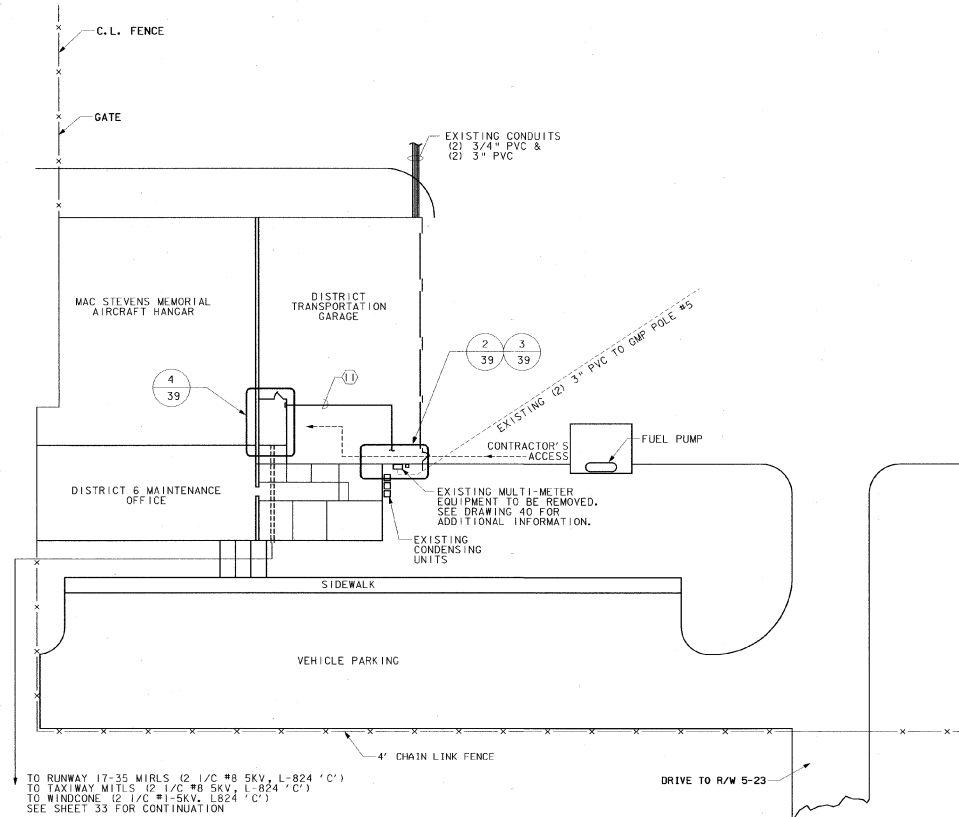
④  
39 NEW VAULT LAYOUT  
SCALE: 1/2" = 1'-0"



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"



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

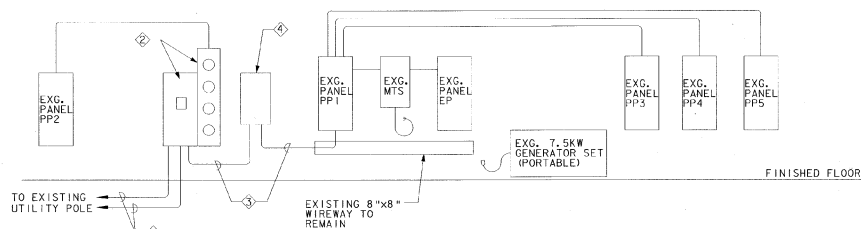


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EDWARD F. KNAPP STATE AIRPORT  
BERLIN, VERMONT

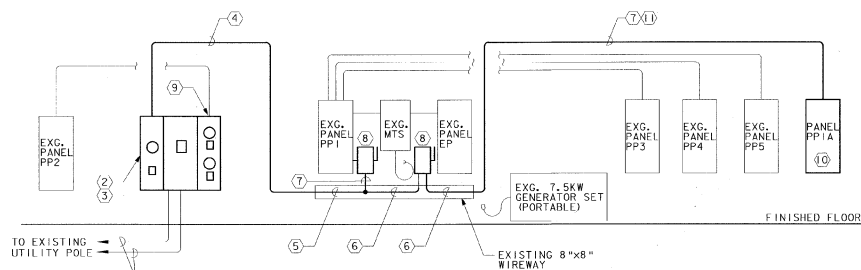
URS  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

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|-----------------|---------------|----------------|-----------------|
| Designed by RMA | Drawn by MAM  | Checked by LAM | 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. CONTRACTOR 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:

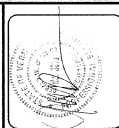
1. PROVIDE 3-350NCW IN EXISTING 3" CONDUIT.
2. PROVIDE AN OUTDOOR (NEMA 3R) MODULAR MULTI-METER CENTER, 120/240V, 1Ø, 3W, WITH THE FOLLOWING COMPONENTS:
  - SERVICE ENTRANCE MODULE WITH 600A CIRCUIT BREAKER (SIEMENS \*WMCBU/BOTTOM FEED - QUANTITY = 1)
  - RINGLESS 400A METER SOCKET AND 400A CIRCUIT BREAKER (SIEMENS \*WIMM1400 - QUANTITY = 1)
  - RINGLESS 400A METER SOCKET AND 400A CIRCUIT BREAKER (SIEMENS \*WIMM1400 - QUANTITY = 1)
3. INSTALL UNIT ON EXISTING MOUNTING STRUTS AND PROVIDE ADDITIONAL HARDWARE AS REQUIRED.
4. PROVIDE 3-500NCW & 1\*3G IN 4" GRC.
5. PROVIDE 3-500NCW & 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                                                                                        |
|        | SINGLE POLE WALL SWITCH                                                                                 |
|        | DUPLEX RECEPTACLE (18" AFF, UNLESS OTHERWISE NOTED).                                                    |
|        | 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                                    |
|        | 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 INTERRUPTING CAPACITY |
| AWG          | AMERICAN WIRE GAGE           |
| C            | CONDUIT                      |
| C/B          | CIRCUIT BREAKER              |
| DAI.         | DIAMETER                     |
| ER           | EXISTING TO REMAIN           |
| EXG          | EXISTING                     |
| EXST.        | 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                  |
| UN           | UNLESS OTHERWISE NOTED       |
| V            | VOLTS                        |
| VA           | VOLT-AMPERE                  |
| W            | WATT OR WIRE                 |
| WP           | WEATHERPROOF                 |



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**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

**ELECTRICAL NOTES: SYMBOLS, ABBREVIATIONS, & RISER DIAGRAMS**

**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

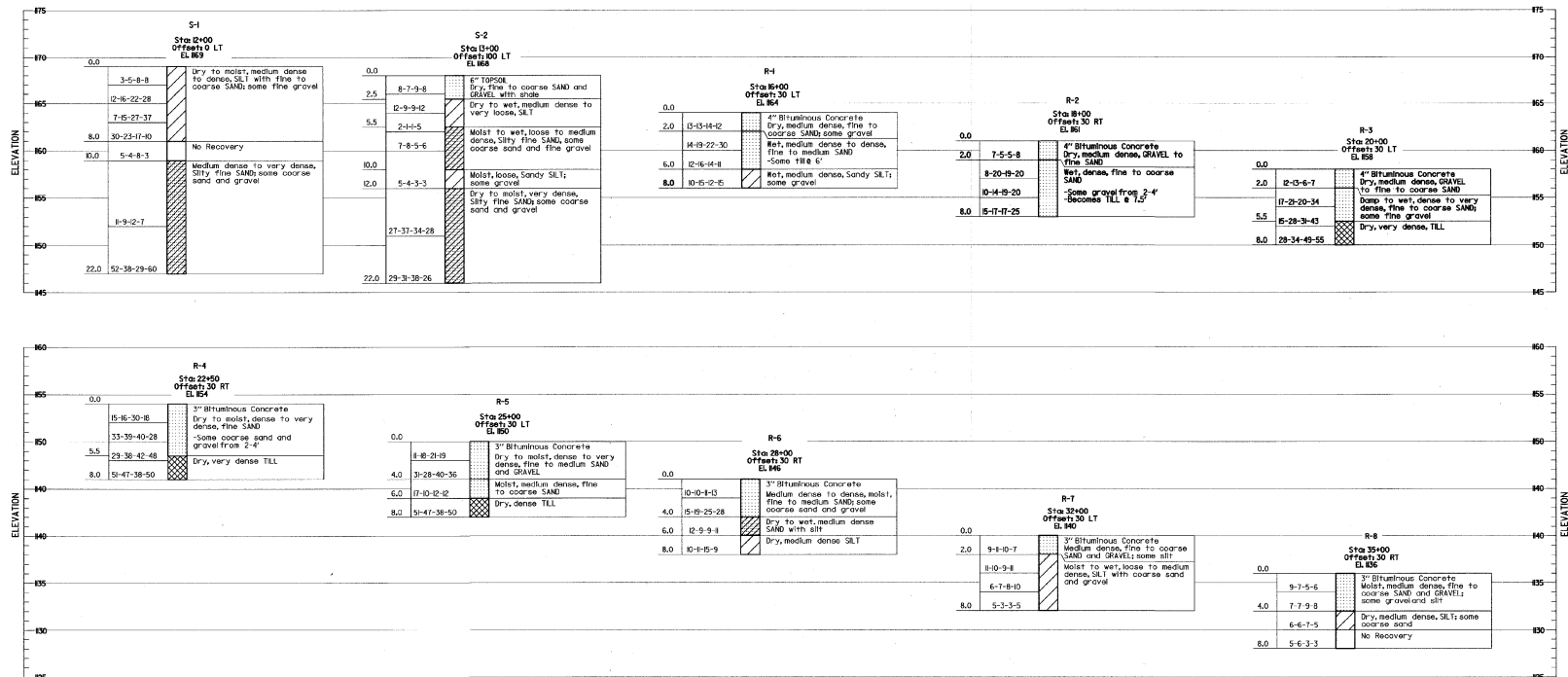
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| Designed by: <b>END</b> | Drawn by: <b>MM</b> | Checked by: <b>LMM</b> | Approved by: <b>END</b> |
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Scale: AS SHOWN

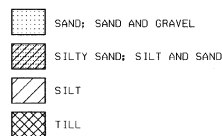
Date: 3/21/01

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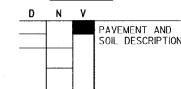
# SYMBOLS:



# NOTES:

1. BORINGS DRILLED BY GREEN MOUNTAIN BORING, OCTOBER 1988.
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

**URS**  
 ONE NORTHWAY LANE  
 LATHAM, NEW YORK

EDWARD F. KNAPP STATE AIRPORT  
 BERLIN, VERMONT

BORING LOGS

| REV. | DATE | DESCRIPTION |
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Job No. F20000118.01 File No. F20180808-4409

Designed by KLL  
 Drawn by  
 Checked by  
 Approved by GMD

Scale: 1" = 5'

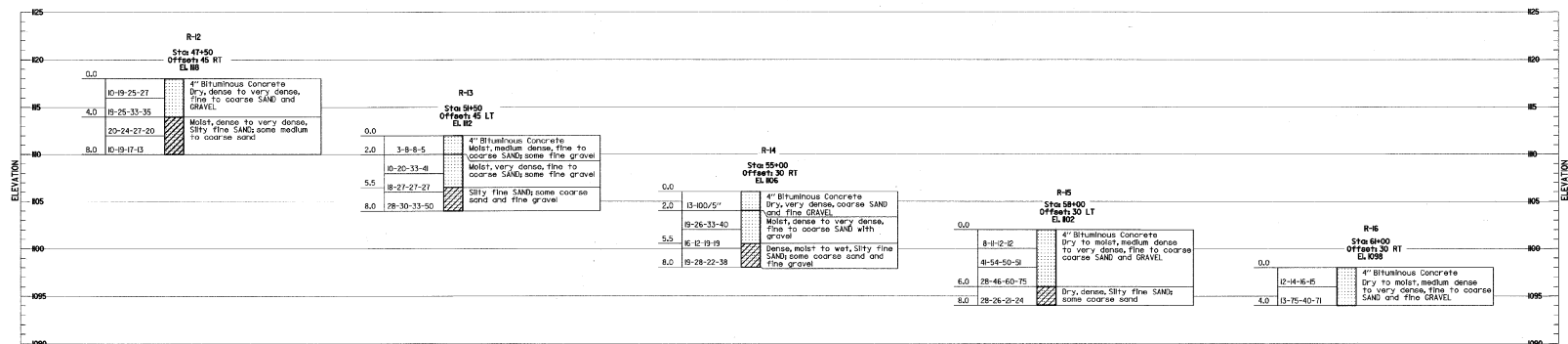
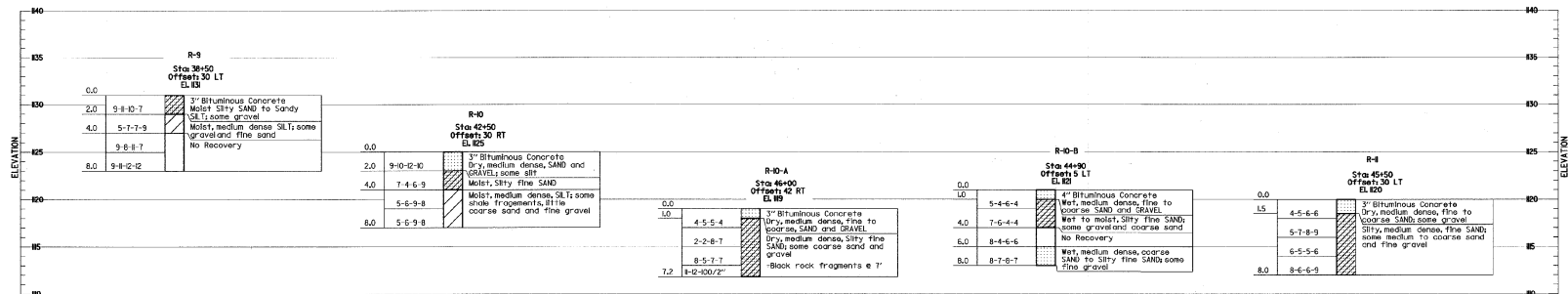
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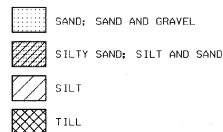
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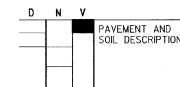
#### SYMBOLS:



#### 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

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 CND

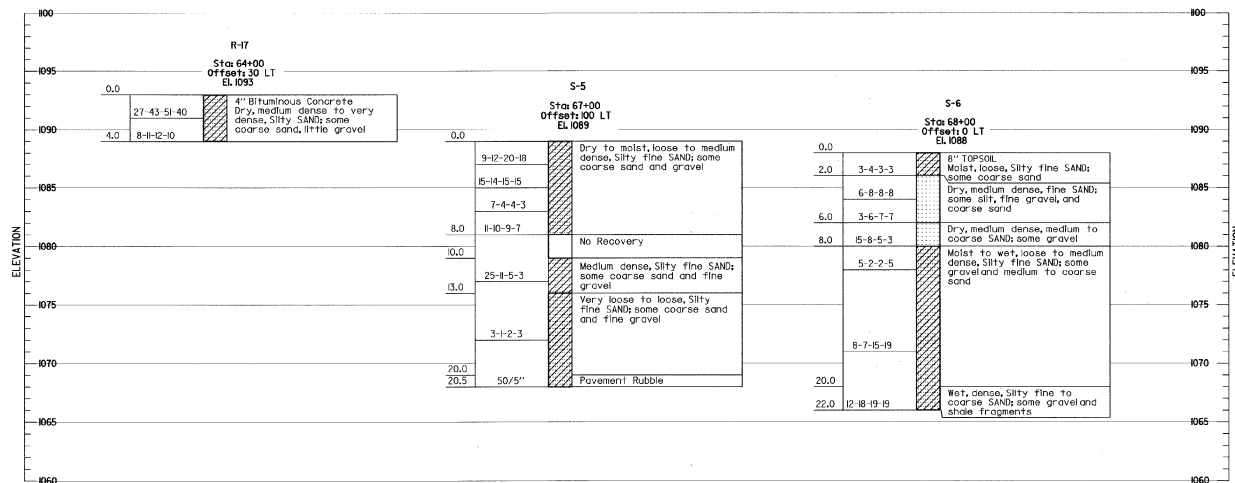
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Date: 3/21/01

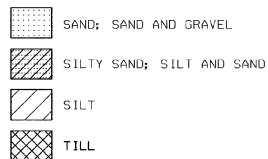
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Sheet No.

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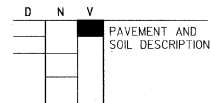
#### SYMBOLS:



#### 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

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 GMP

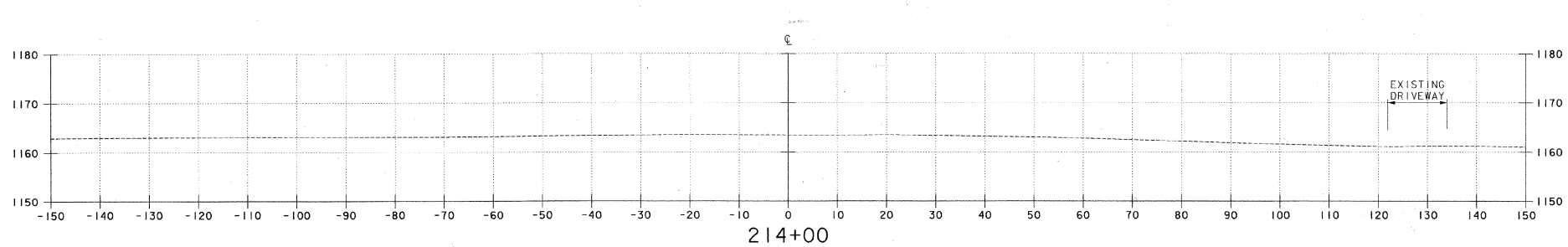
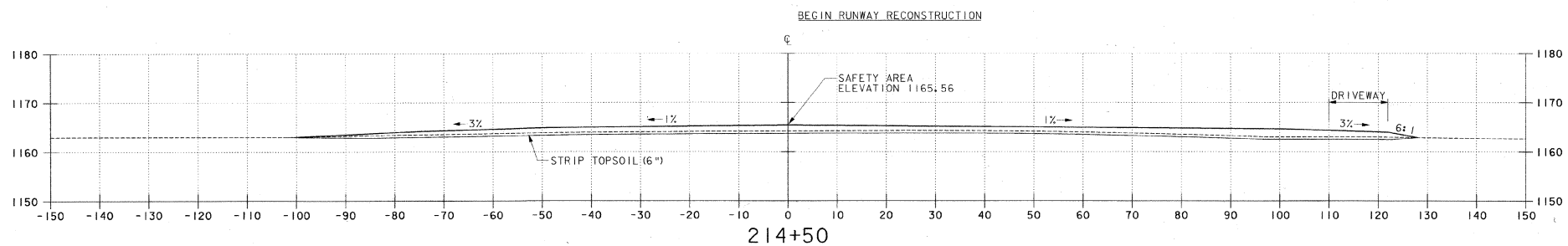
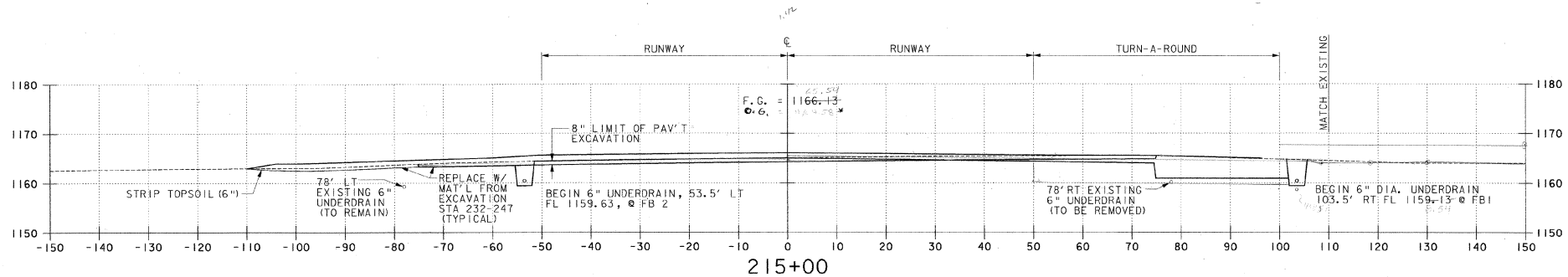
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Date: 3/21/01

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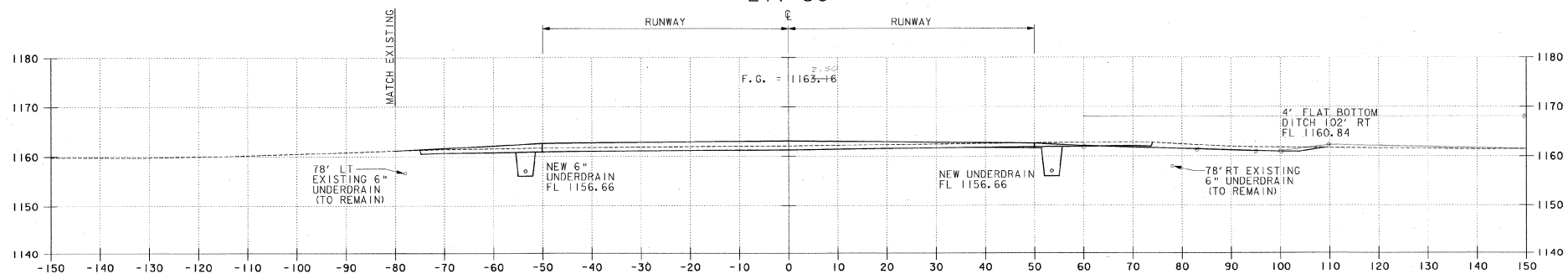
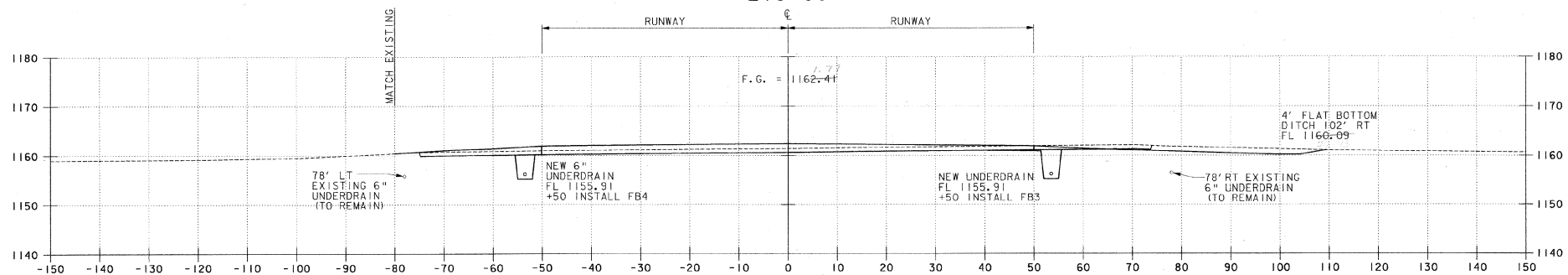
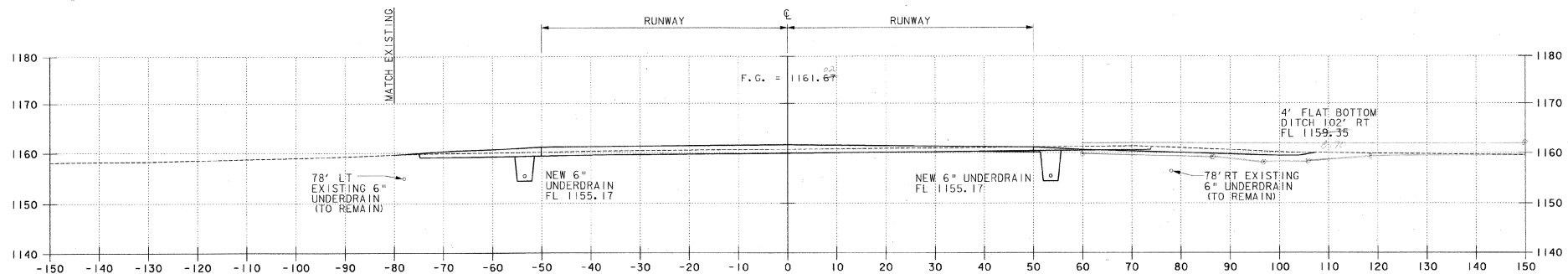
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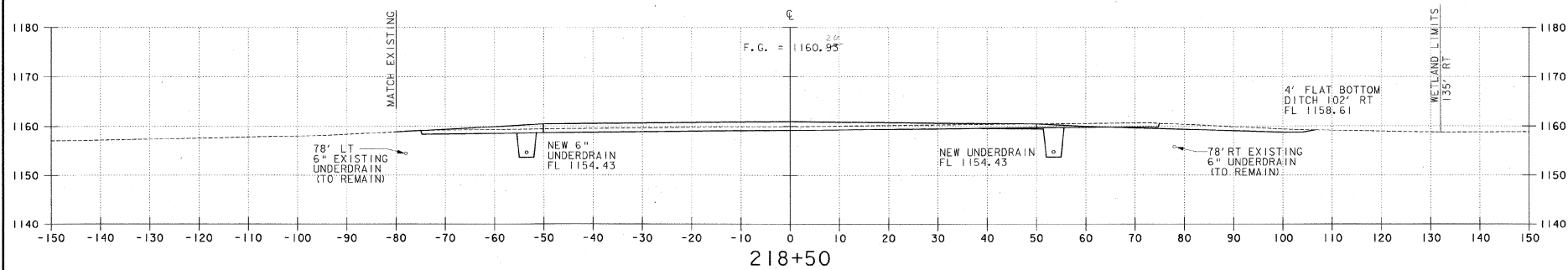
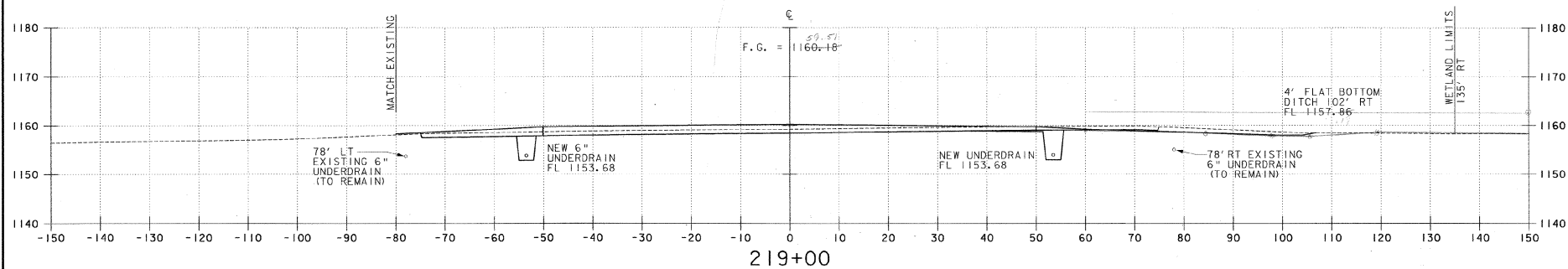
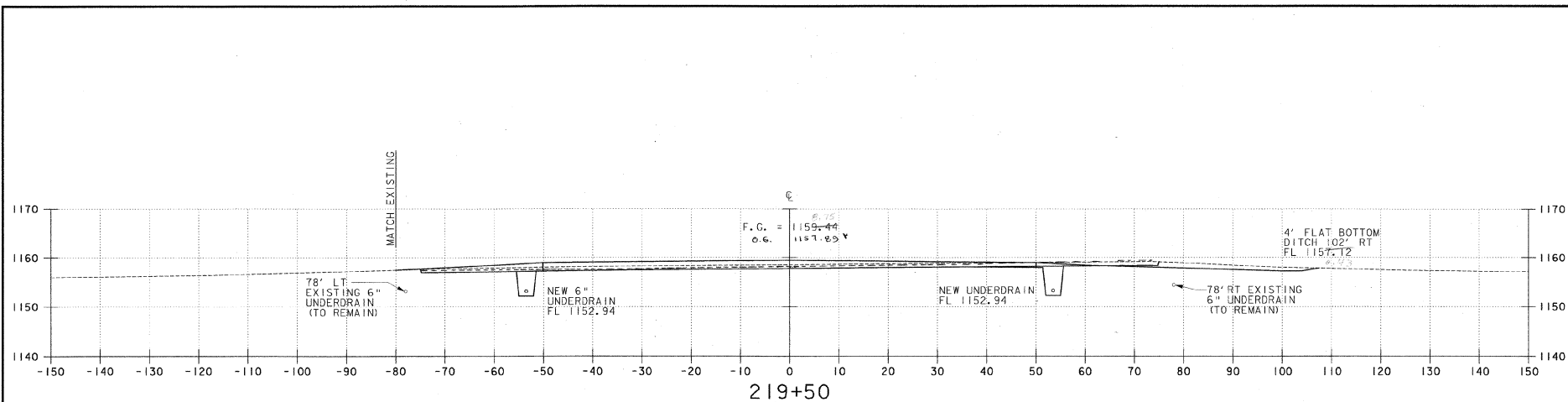


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| <b>EDWARD F. KNAPP STATE AIRPORT</b><br>BERLIN, VERMONT                  |                                           | REV. DATE<br>DESCRIPTION<br>Job No. F200001718.01<br>File No. F20180044.dgn |
| <b>URS</b><br>ONE NORTHWAY LANE<br>LATHAM, NEW YORK                      |                                           | Runway 17-35 Cross Section                                                  |
| Designed by: GMD<br>Drawn by: MAM<br>Checked by: BAC<br>Approved by: GMD | Scale: HORIZ. 1" = 100'<br>VERT. 1" = 10' |                                                                             |
| Date: 3/21/01                                                            |                                           |                                                                             |
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| Sheet No. <b>44</b>                                                      |                                           |                                                                             |

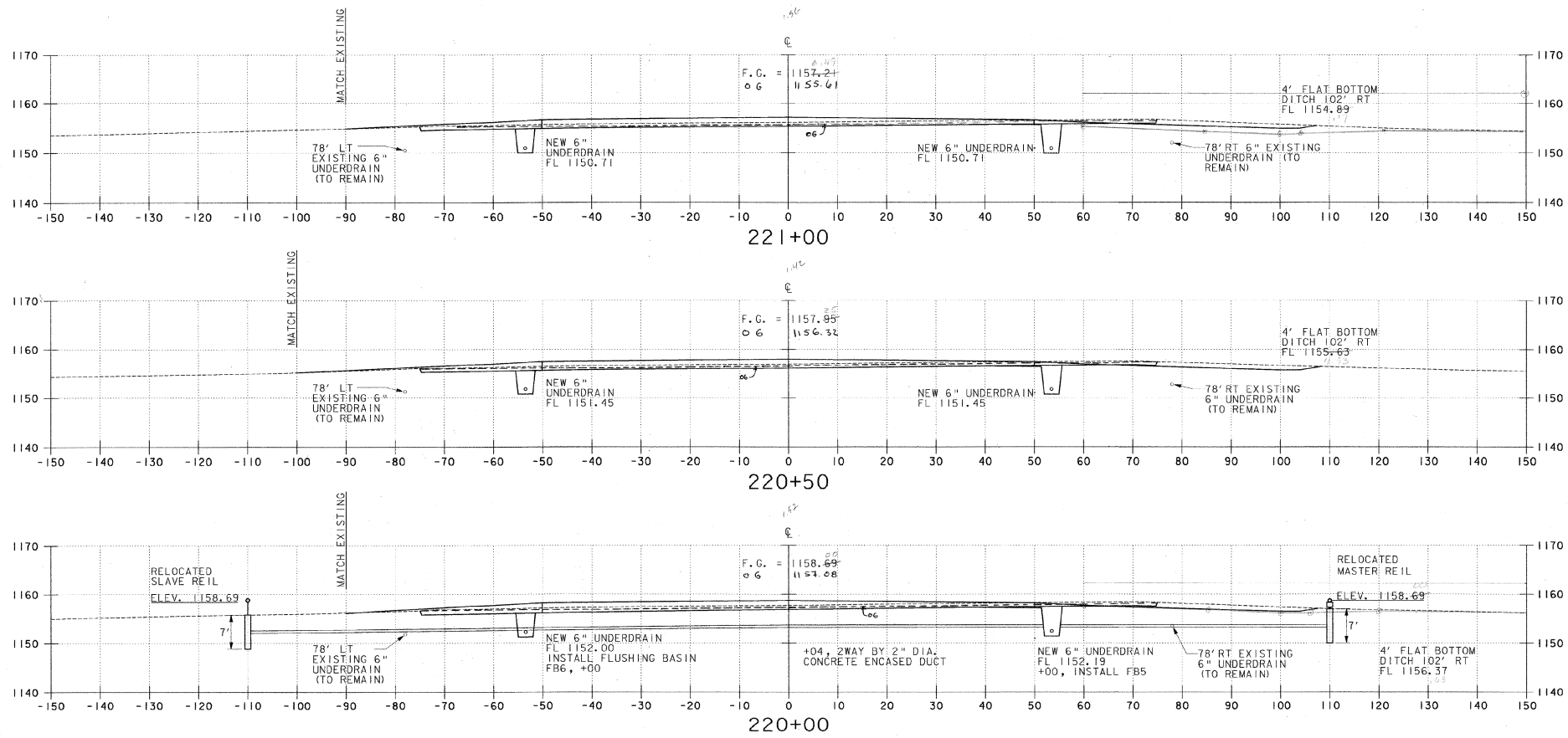




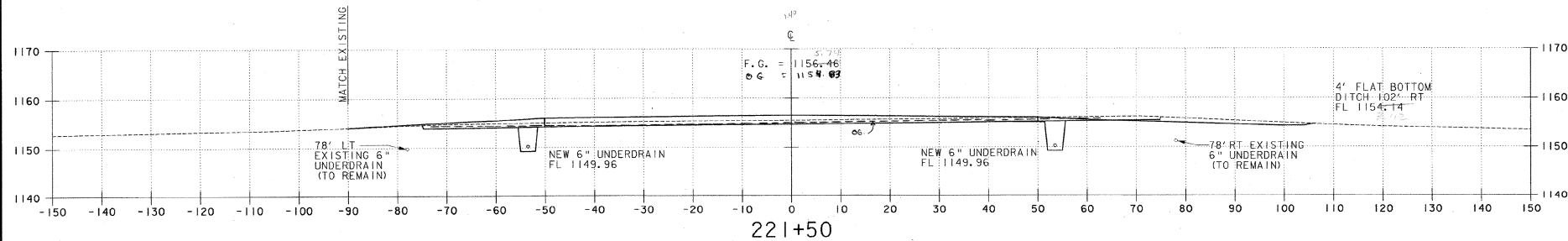
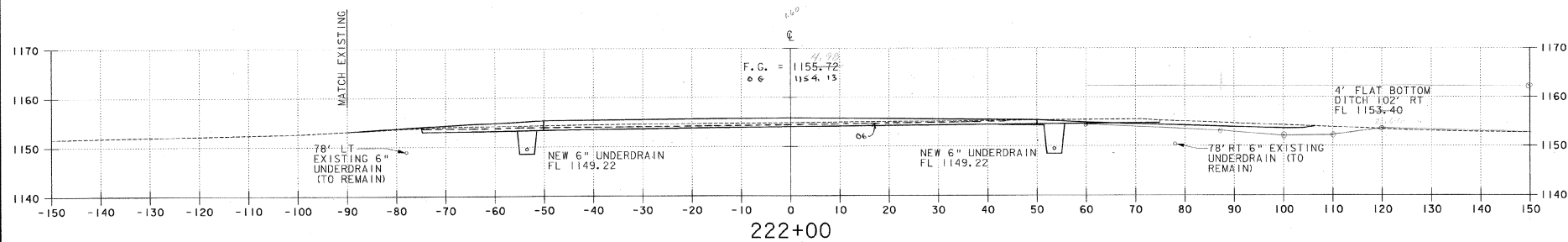
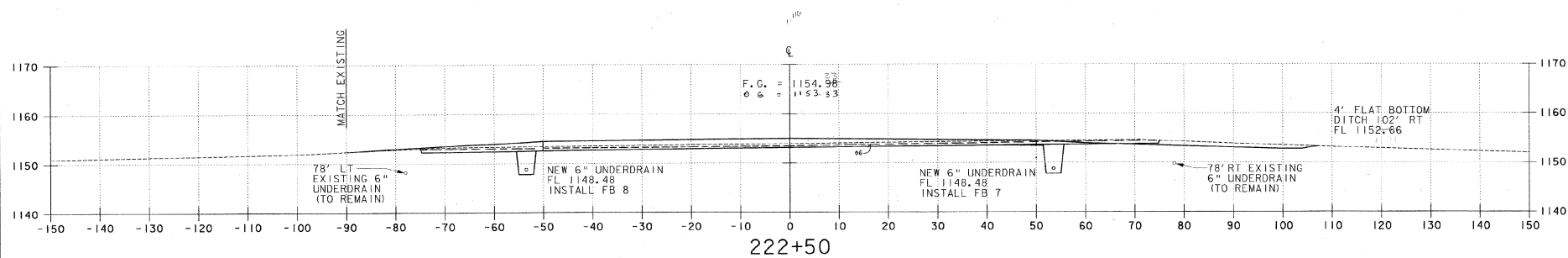
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| REV.                                                                                         | DATE             | DESCRIPTION |    |                       |     |                         |     |
|                                                                                              |                  |             |    |                       |     |                         |     |
| <b>EDWARD F. KNAPP STATE AIRPORT</b><br>BERLIN, VERMONT<br><b>RUNWAY 17-35 CROSS SECTION</b> |                  |             |    |                       |     |                         |     |
| <b>URS</b><br>ONE NORTHWAY LANE<br>LATHAM, NEW YORK                                          |                  |             |    |                       |     |                         |     |
| Designed by                                                                                  | CHP              | Drawn by    | MM | Checked by            | BMC | Approved by             | CHP |
| Scale:                                                                                       | HORIZ. 1" = 165' |             |    |                       |     |                         |     |
|                                                                                              | VERT. 1" = 10'   |             |    |                       |     |                         |     |
| Date:                                                                                        | 3/21/01          |             |    |                       |     |                         |     |
| Sheet                                                                                        | - Of -           |             |    |                       |     |                         |     |
| Sheet No.                                                                                    | 46               |             |    |                       |     |                         |     |



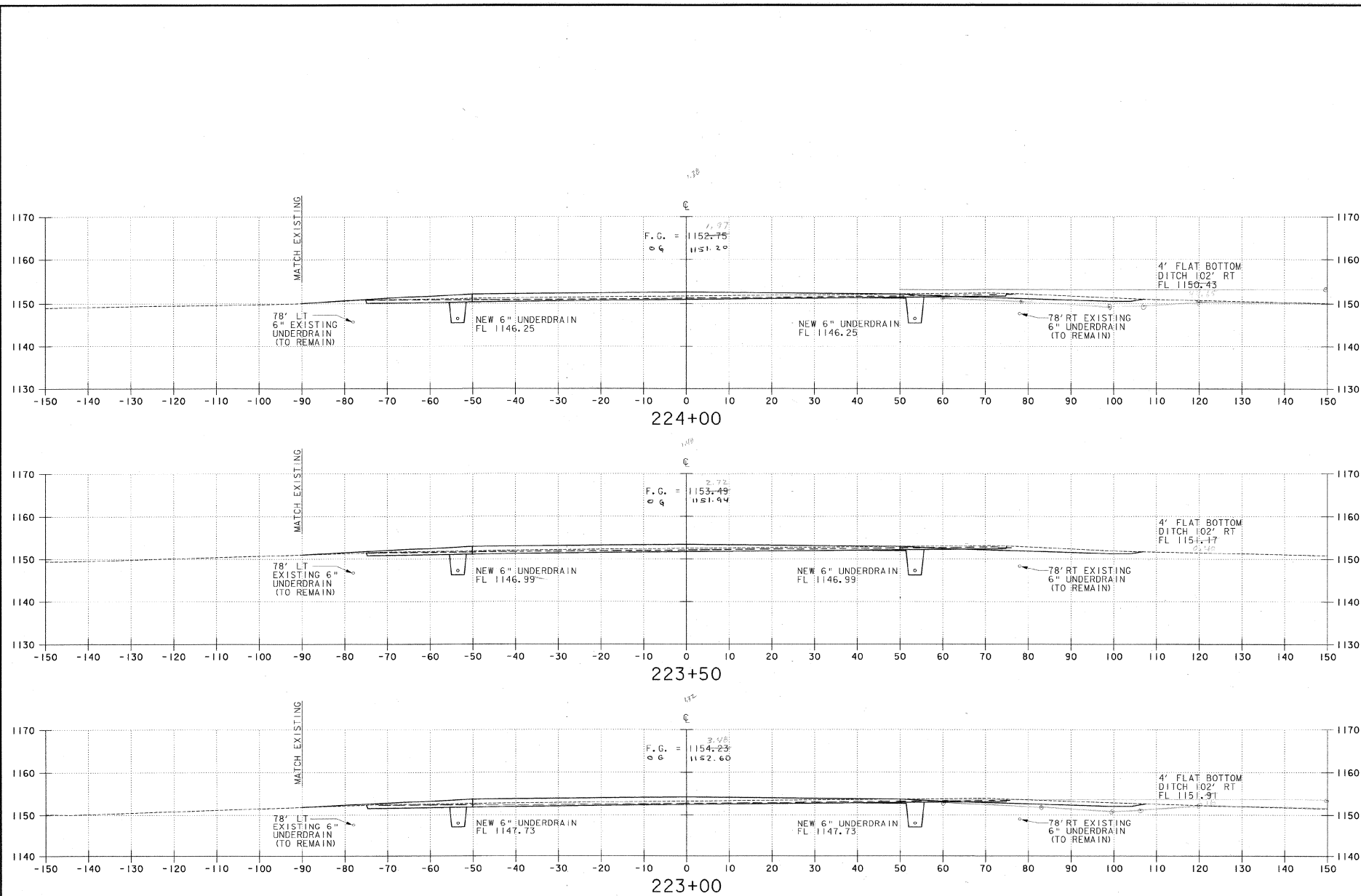
|                                                                      |                                          |                                                      |
|----------------------------------------------------------------------|------------------------------------------|------------------------------------------------------|
| <b>EDWARD F. KNAPP STATE AIRPORT</b><br>BERLIN, VERMONT              |                                          | RUNWAY 17-35 CROSS SECTION                           |
| <b>URS</b><br>ONE NORTHWAY LANE<br>LATHAM, NEW YORK                  |                                          |                                                      |
| Designed by CND<br>Drawn by MAM<br>Checked by BNC<br>Approved by CND | Scale: HORZ. 1" = 100'<br>VERT. 1" = 10' | Date: 3/21/01<br>Sheet - of -<br>Sheet No. <b>47</b> |



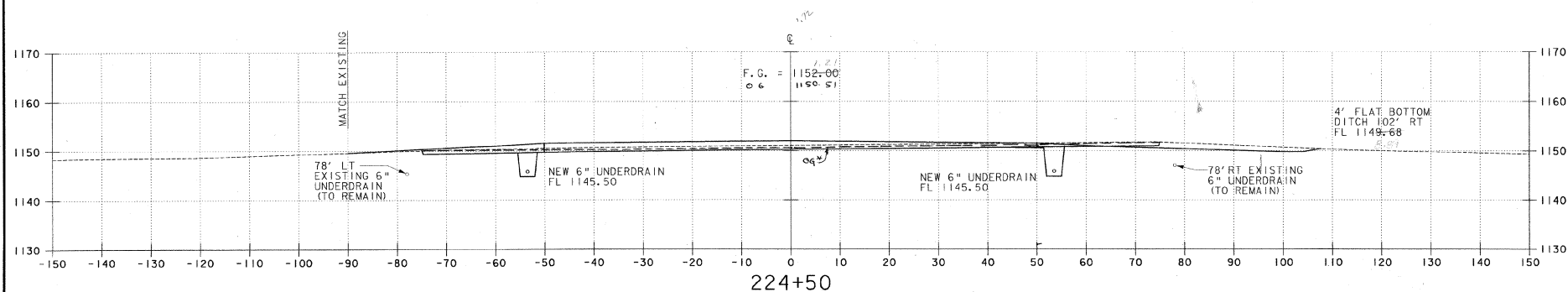
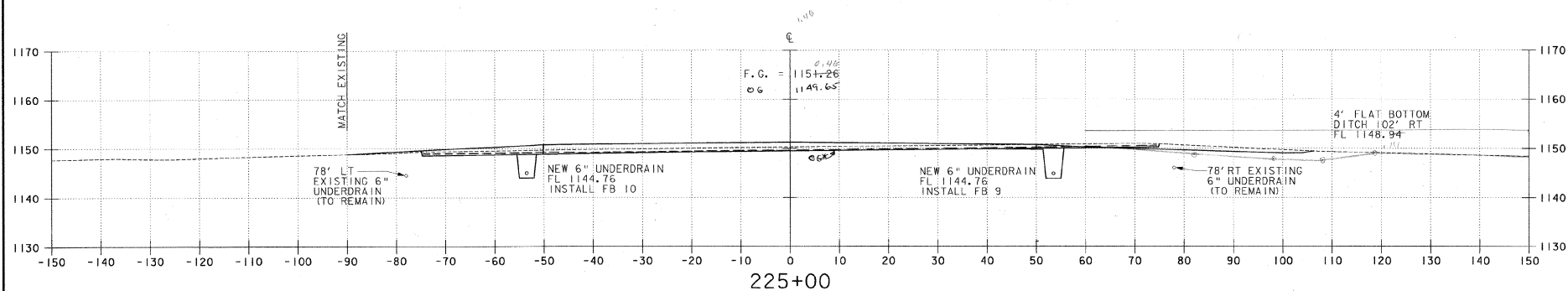
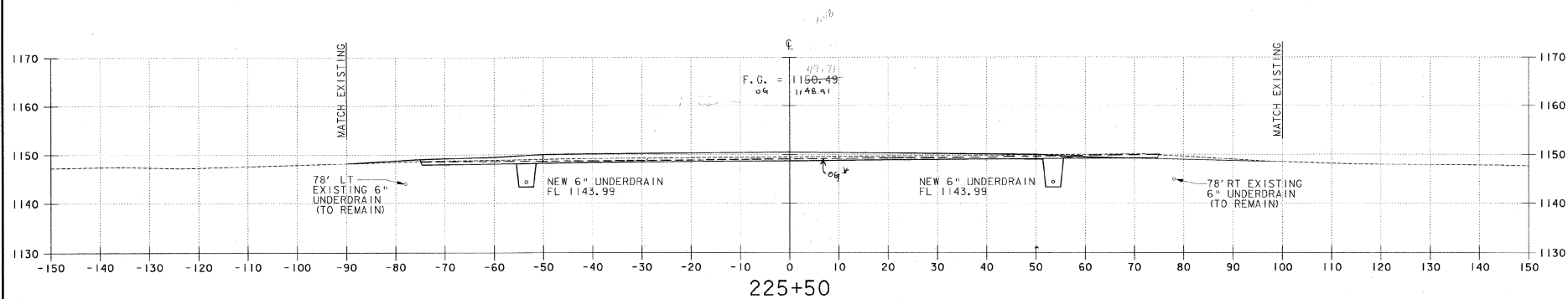




|                                                  |              |                                       |                 |             |                        |
|--------------------------------------------------|--------------|---------------------------------------|-----------------|-------------|------------------------|
| EDWARD F. KNAPP STATE AIRPORT<br>BERLIN, VERMONT |              | REV.                                  | DATE            | DESCRIPTION | FILE NO. 220180000.dgn |
| UR                                               |              | ONE NORTHWAY LANE<br>LATHAM, NEW YORK |                 |             |                        |
| Designed by CND                                  | Drawn by MAM | Checked by BNC                        | Approved by CND |             |                        |
| Scale: HORIZ. 1" = 10'                           |              | VERT. 1" = 10'                        |                 |             |                        |
| Date: 3/21/01                                    |              | Sheet - 01                            |                 |             |                        |
| Sheet No                                         |              | 49                                    |                 |             |                        |

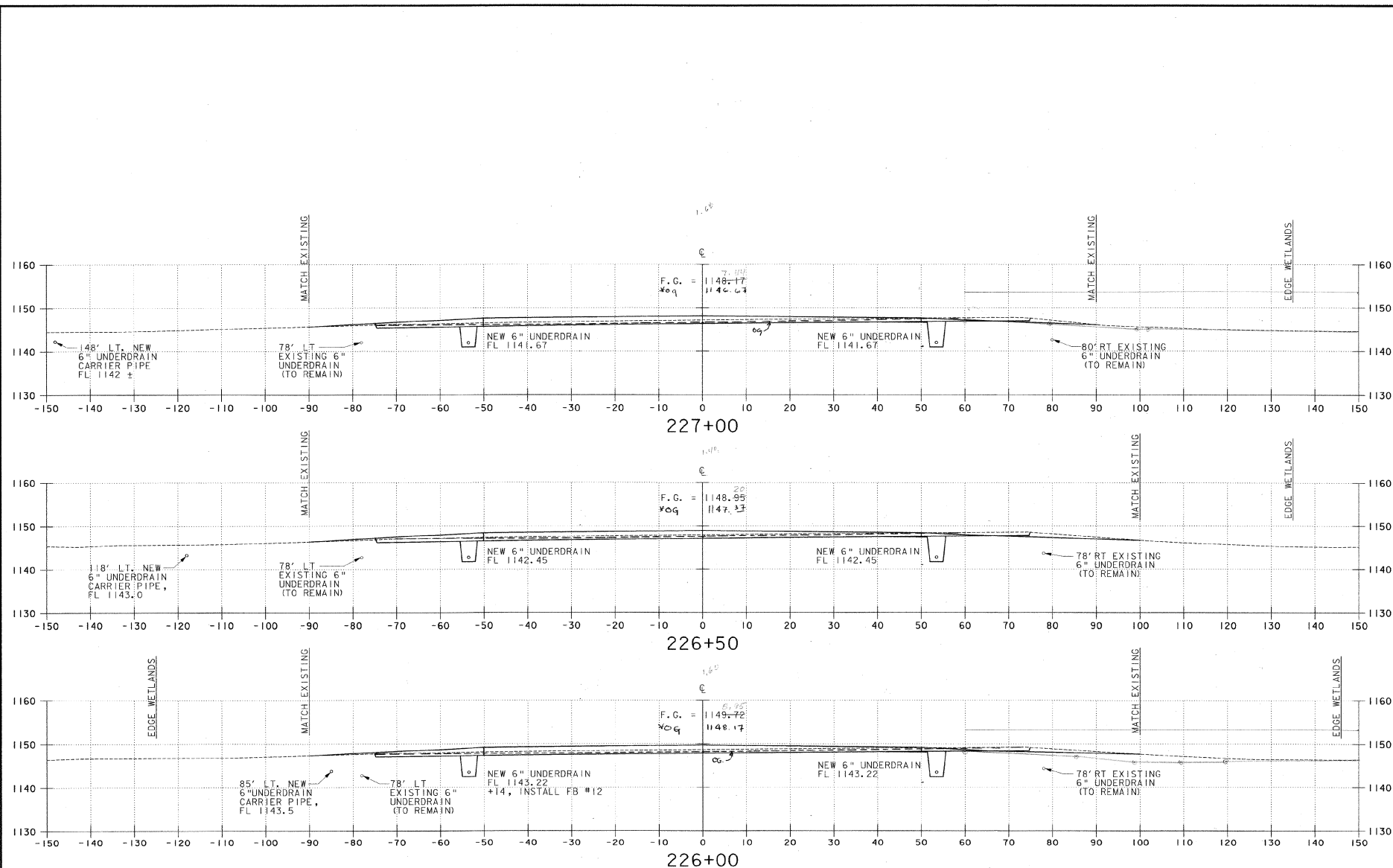


|                                                                                                     |                                                                  |
|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| <b>EDWARD F. KNAPP STATE AIRPORT</b><br>BERLIN, VERMONT                                             |                                                                  |
| REV. DATE<br>1 1 1 1                                                                                | DESCRIPTION<br>RUNWAY 17-35 CROSS SECTION                        |
| Job No. F200001718.01<br>File No. F2018040.dgn                                                      |                                                                  |
| <b>URS</b><br>ONE NORTHWAY LANE<br>LATHAM, NEW YORK                                                 |                                                                  |
| Designed by: <b>END</b><br>Drawn by: <b>MM</b><br>Checked by: <b>BHC</b><br>Approved by: <b>END</b> | Scale: <b>HORIZ. P. = 1" = 10'</b><br><b>VERT. P. = 1" = 10'</b> |
| Date: 3/21/01<br>Sheet: 1 of 1<br>Sheet No. <b>50</b>                                               |                                                                  |



|                                                                        |  |                                                                                |
|------------------------------------------------------------------------|--|--------------------------------------------------------------------------------|
| Desig'd by: CND<br>Draw'n by: MAM<br>Check'd by: BNC<br>Appr'd by: CND |  | <b>URS</b><br>ONE NORTHWAY LANE<br>LATHAM, NEW YORK                            |
| Scale: HORIZ. 1" = 10'<br>VERT. 1" = 10'                               |  |                                                                                |
| Date: 3/21/01                                                          |  | EDWARD F. KNAPP STATE AIRPORT<br>BERLIN, VERMONT<br>RUNWAY 17-35 CROSS SECTION |
| Sheet - 01                                                             |  |                                                                                |
| Sheet No. <b>51</b>                                                    |  | Job No. F200001716.01<br>File No. F201780241.dgn                               |

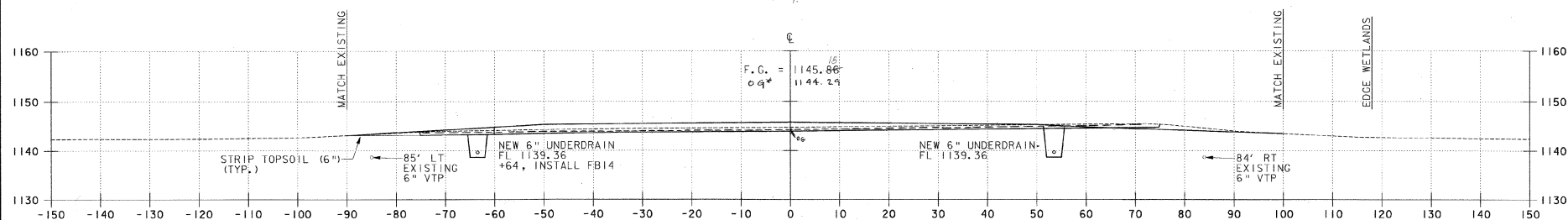
\*D.G. BASED ON AS BUILT FB-ADAP-04, ADJUSTED TO HAND-SS



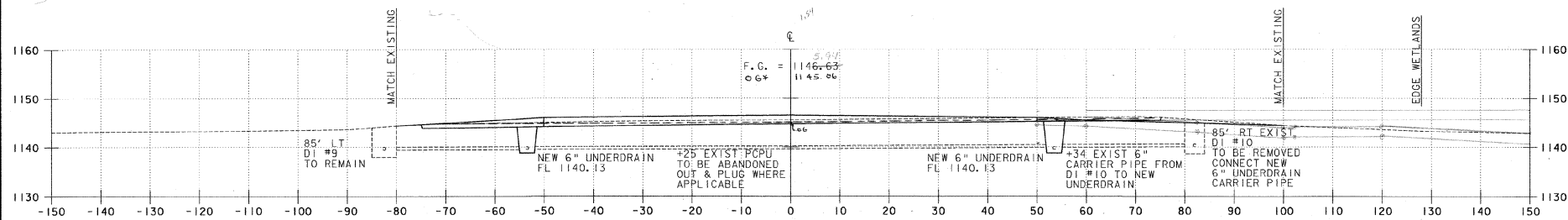
As Based on As Built PG. App-44, connected to NWD PG

AIP 3-50-0001-06

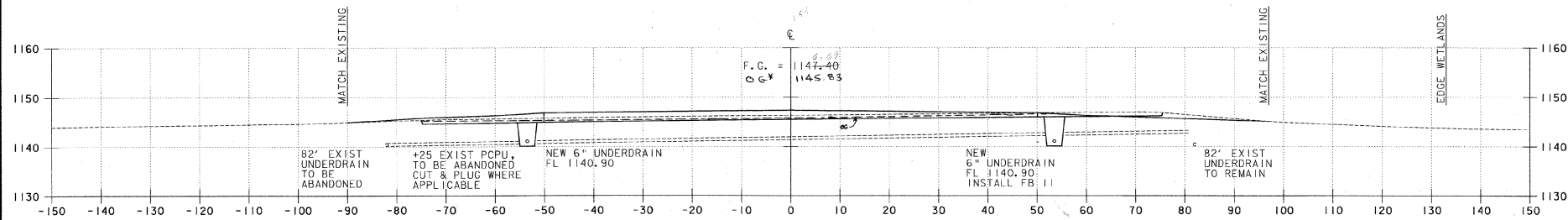
|                                                                                                     |                                                       |                                                         |                      |
|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------|----------------------|
| <b>URS</b><br>ONE NORTHWAY LANE<br>LATHAM, NEW YORK                                                 |                                                       | <b>EDWARD F. KNAPP STATE AIRPORT</b><br>BERLIN, VERMONT |                      |
|                                                                                                     |                                                       | RUNWAY 17-35 CROSS SECTION                              |                      |
| Designed by: <b>END</b><br>Drawn by: <b>MM</b><br>Checked by: <b>BRC</b><br>Approved by: <b>END</b> | Scale: <b>HORZ. 1" = 10'</b><br><b>VERT. 1" = 10'</b> | Date: <b>3/21/01</b>                                    | Sheet: <b>- of -</b> |
| Sheet No. <b>52</b>                                                                                 |                                                       | File No. <b>F200001716.01</b>                           |                      |



228+50

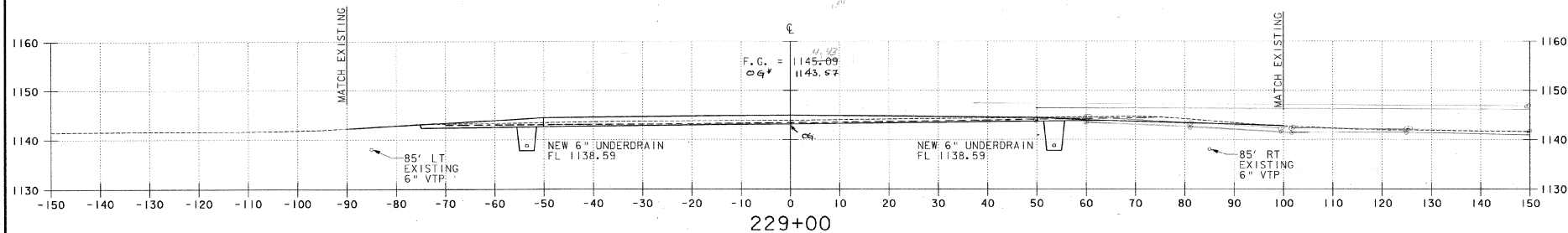
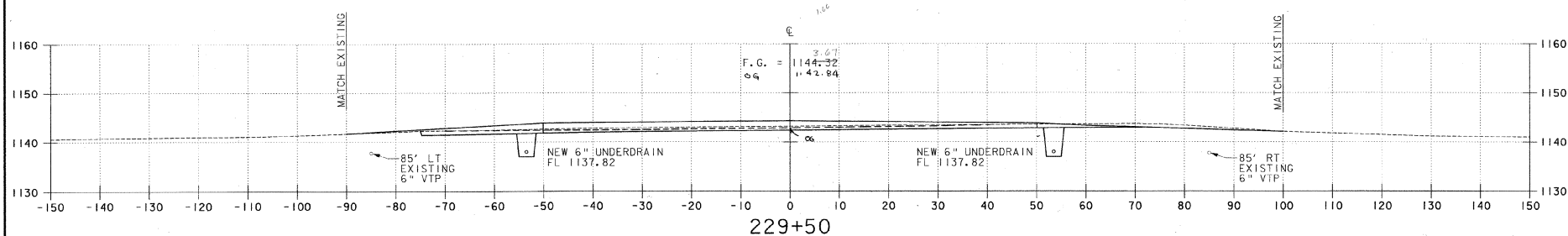
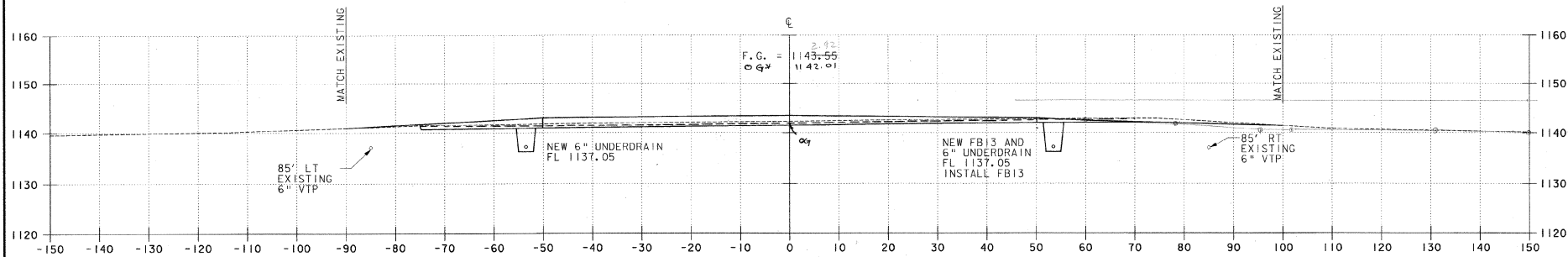


228+00

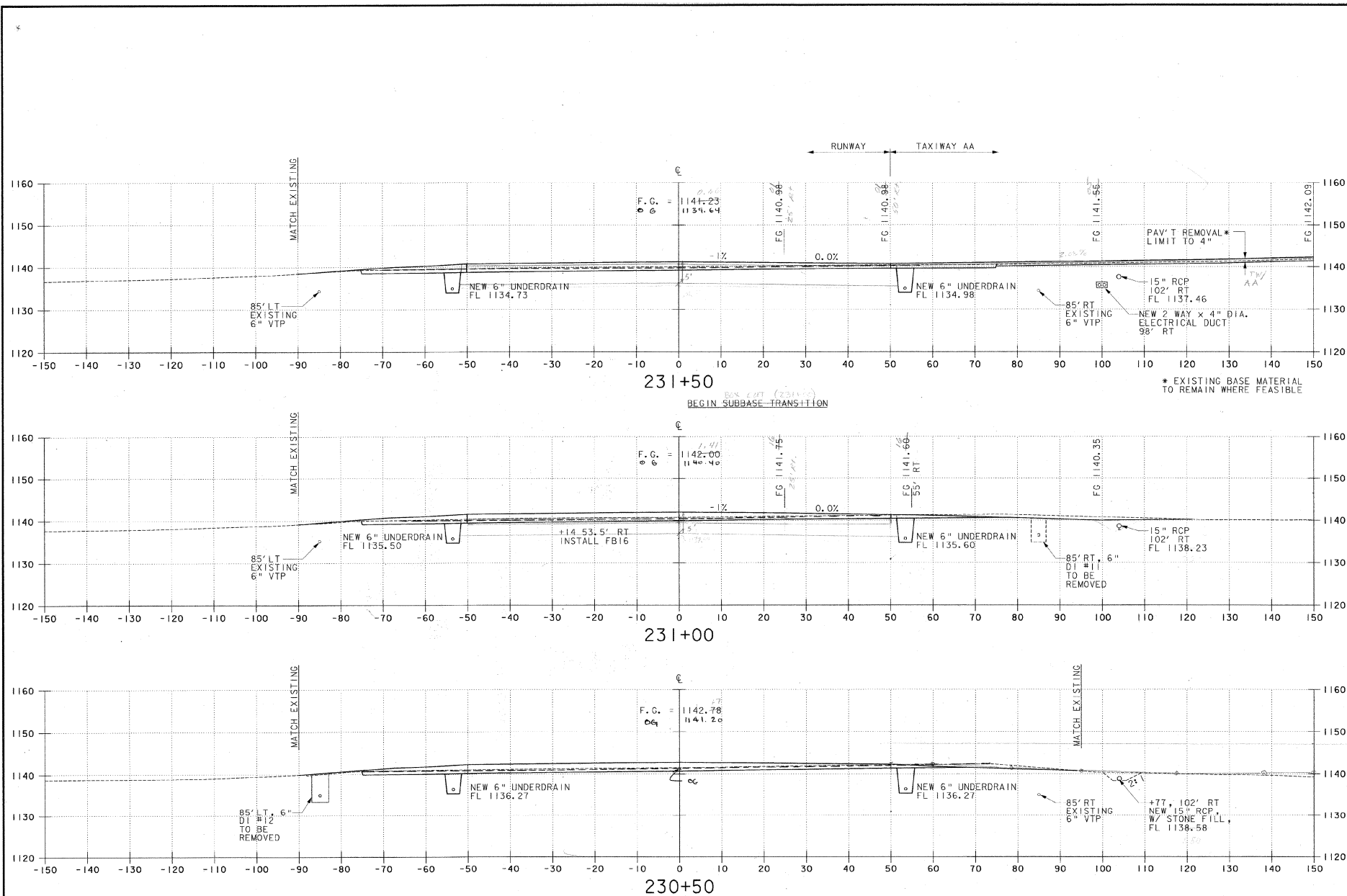


227+50

|                                                                                               |                                                                                                |                                                                             |
|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| <b>EDWARD F. KNAPP STATE AIRPORT</b><br>BERLIN, VERMONT                                       |                                                                                                | REV. DATE<br>DESCRIPTION<br>Job No. F200001718.01<br>File No. F200001718.01 |
| <b>URS</b><br>ONE NORTHWAY LANE<br>LATHAM, NEW YORK                                           |                                                                                                |                                                                             |
| Des. by: <b>MM</b><br>Drawn by: <b>MM</b><br>Checked by: <b>BFC</b><br>Approved by: <b>MM</b> | Scale: HORZ. 1" = 10'<br>VERT. 1" = 10'<br>Date: 3/21/01<br>Sheet: - 01<br>Sheet No: <b>53</b> |                                                                             |

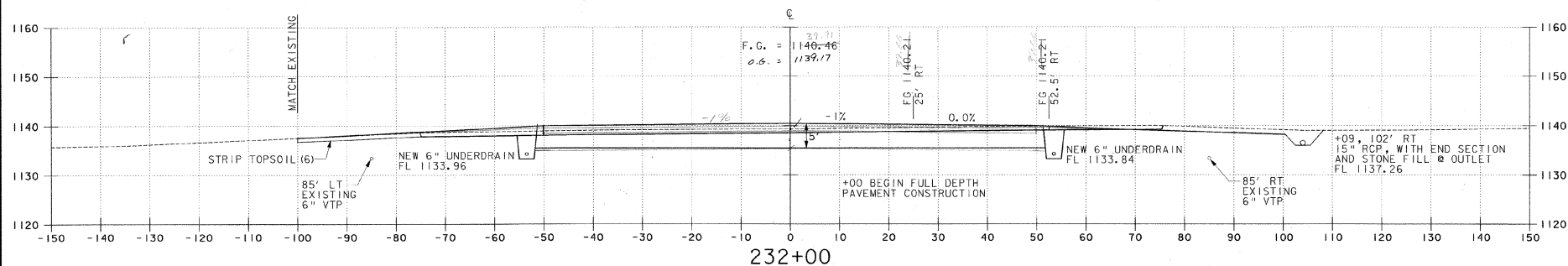
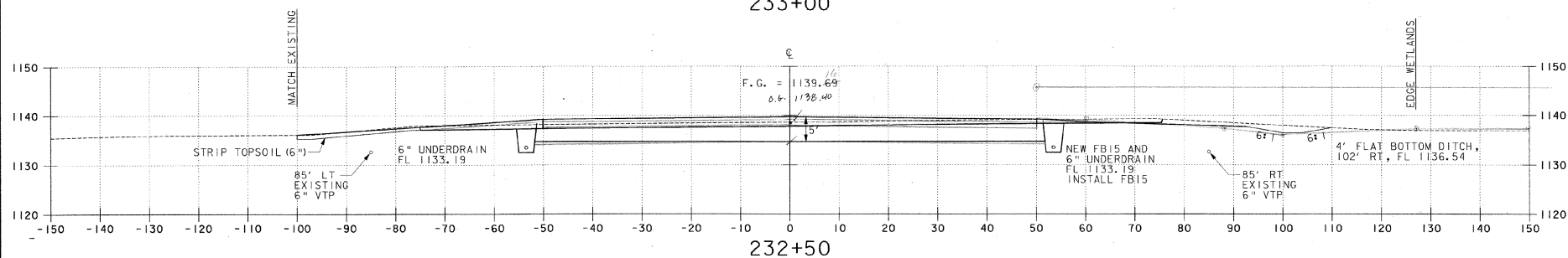
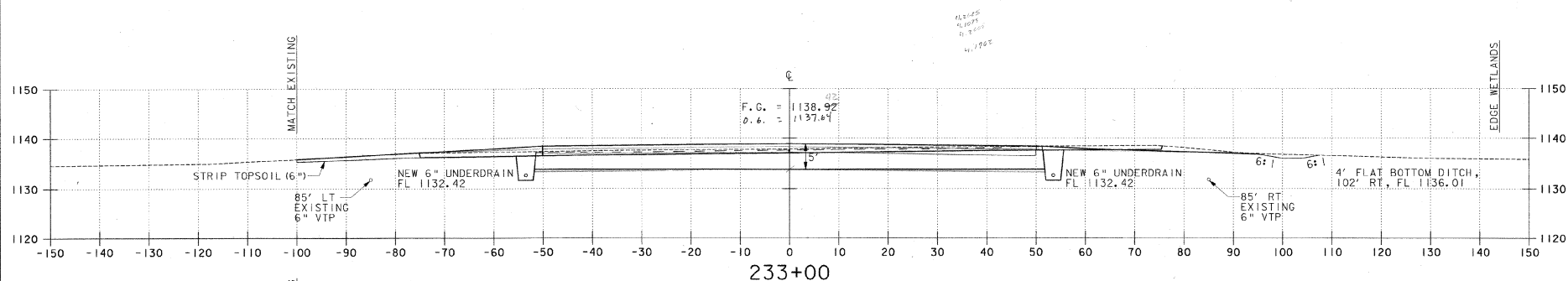


|                                                                                                     |                                                                                                                             |                                                                             |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| <b>EDWARD F. KNAPP STATE AIRPORT</b><br>BURLINGTON, VERMONT                                         |                                                                                                                             | REV. DATE<br>DESCRIPTION<br>Job No. F200001718.01<br>File No. F20780244.dgn |
| RUNWAY CROSS SECTION                                                                                |                                                                                                                             |                                                                             |
| <b>URS</b><br>ONE NORTHWAY LANE<br>LATHAM, NEW YORK                                                 |                                                                                                                             |                                                                             |
| Designed by: <b>END</b><br>Drawn by: <b>MM</b><br>Checked by: <b>BRC</b><br>Approved by: <b>END</b> | Scale: <b>HORIZ. 1" = 100'</b><br><b>VERT. 1" = 10'</b><br>Date: <b>3/21/01</b><br>Sheet - <b>01</b><br>Sheet No. <b>54</b> |                                                                             |



|                                                                                       |  |                     |  |                        |  |                               |  |
|---------------------------------------------------------------------------------------|--|---------------------|--|------------------------|--|-------------------------------|--|
| DESIGN BY: <b>URS</b>                                                                 |  | DRAWN BY: <b>MM</b> |  | CHECKED BY: <b>BIC</b> |  | APPROVED BY: <b>MD</b>        |  |
| DATE: <b>3/21/01</b>                                                                  |  | SHEET: <b>01</b>    |  | SHEET NO: <b>55</b>    |  | FILE NO: <b>F200001718.01</b> |  |
| <b>EDWARD F. KNAPP STATE AIRPORT</b><br>BERLIN, VERMONT<br>RUNWAY 17-35 CROSS SECTION |  |                     |  |                        |  |                               |  |
| ONE NORTHWAY LANE<br>LATHAM, NEW YORK                                                 |  |                     |  |                        |  |                               |  |





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| REV. | DATE | DESCRIPTION |
|------|------|-------------|
|      |      |             |
|      |      |             |

Job No. F20000716.01 File No. F20180046.dgn

**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

**URS**

ONE NORTHWAY LANE  
LATHAM, NEW YORK

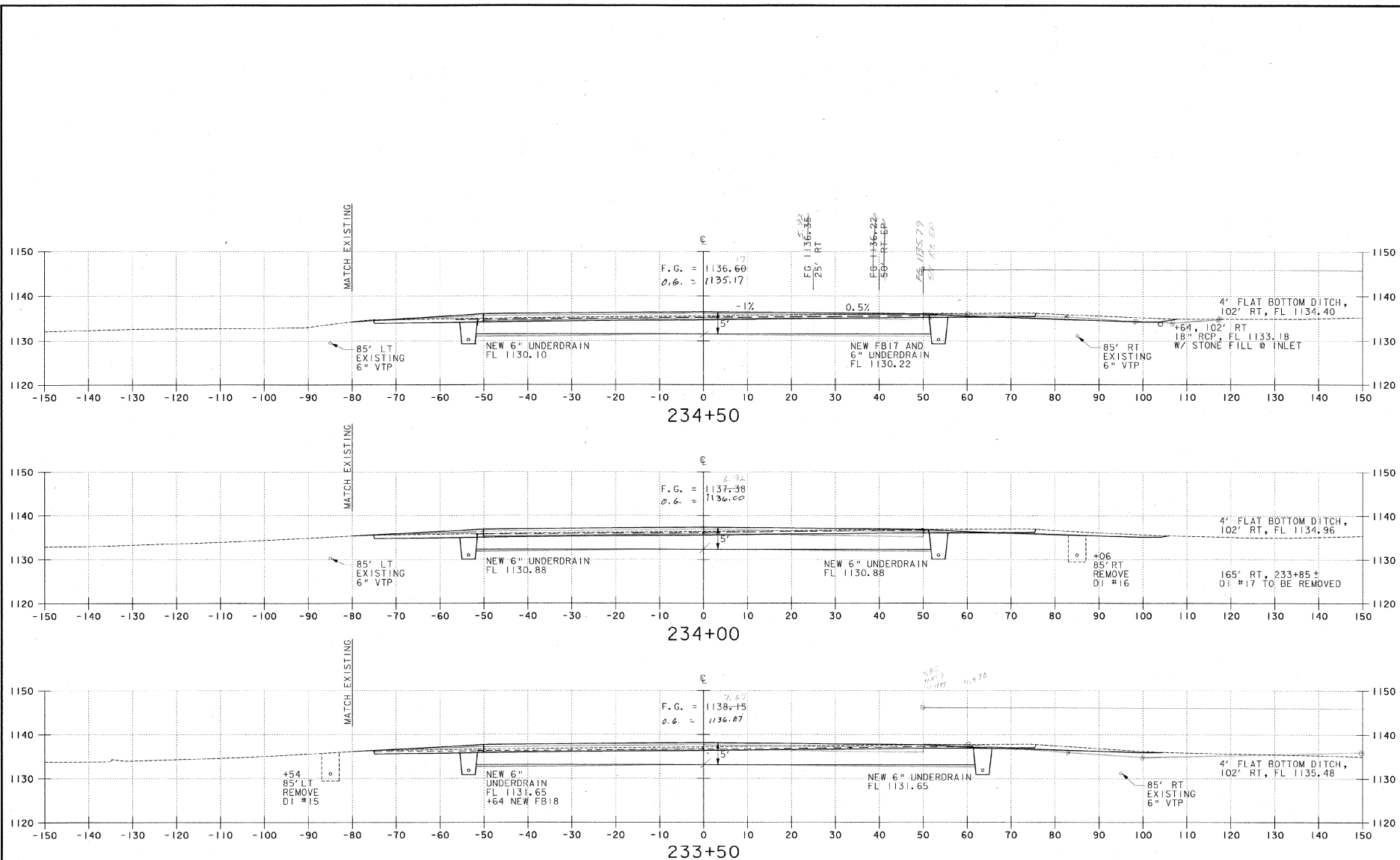
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|-----------------|--------------|----------------|-----------------|
| Designed by GND | Drawn by MAM | Checked by BNC | Approved by GND |
|-----------------|--------------|----------------|-----------------|

Scales: HORZ. 1" = 10'; VERT. 1" = 10'

Date: 3/21/01

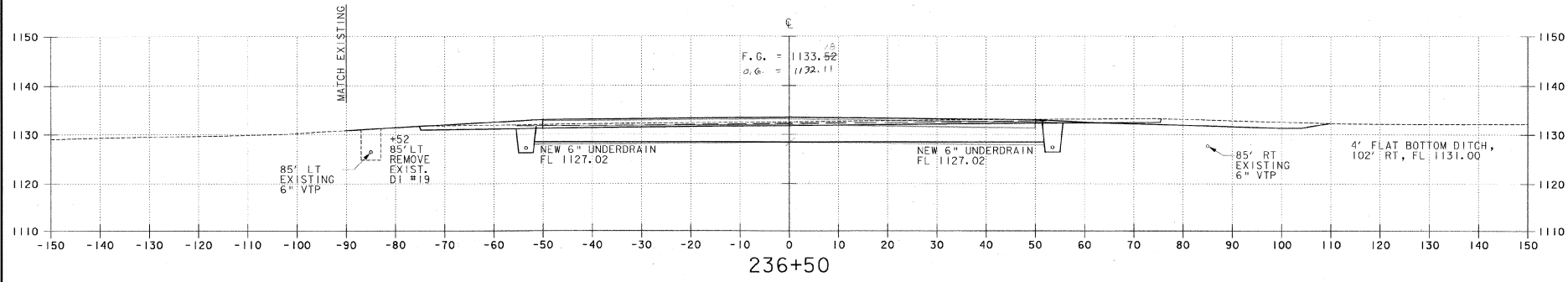
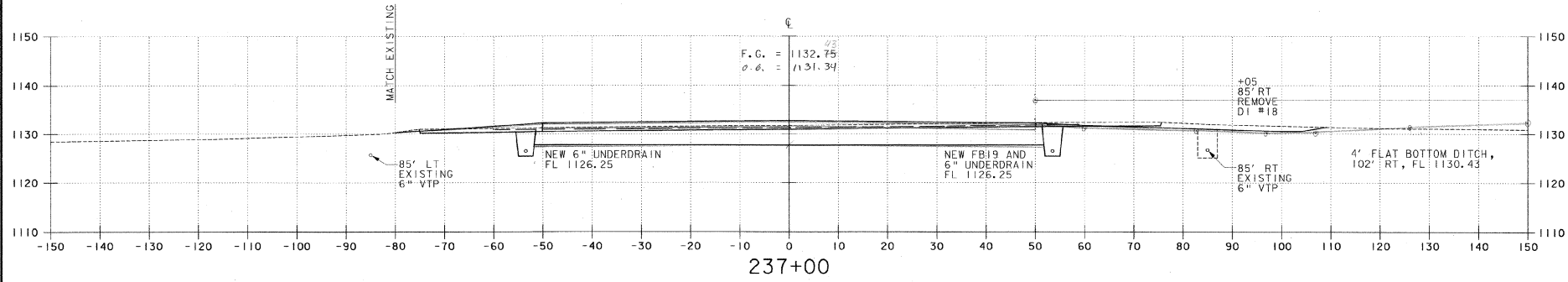
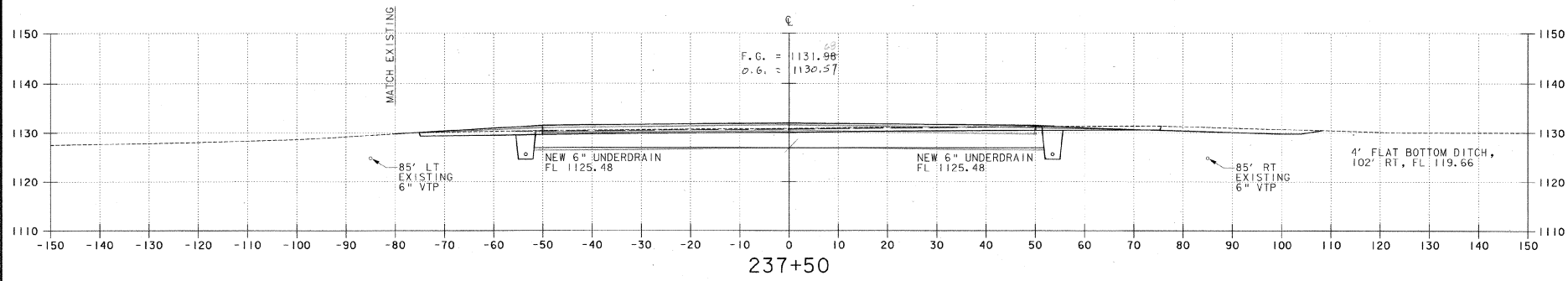
Sheet - of

Sheet No. **56**



|                                                                          |                                                                                      |                                                                             |
|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| <b>EDWARD F. KNAPP STATE AIRPORT</b><br>BERLIN, VERMONT                  |                                                                                      | REV. DATE<br>DESCRIPTION<br>Job No. F20000116.0<br>File No. F20000116.0.dgn |
| Designed by: GND<br>Drawn by: MMU<br>Checked by: BRC<br>Approved by: GND | Scale: HORZ. 1" = 10'<br>VERT. 1" = 10'<br>Date: 3/21/01<br>Sheet: - 01<br>Sheet No: | <b>URS</b><br>ONE NORTHWAY LANE<br>LATHAM, NEW YORK<br><b>57</b>            |





**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

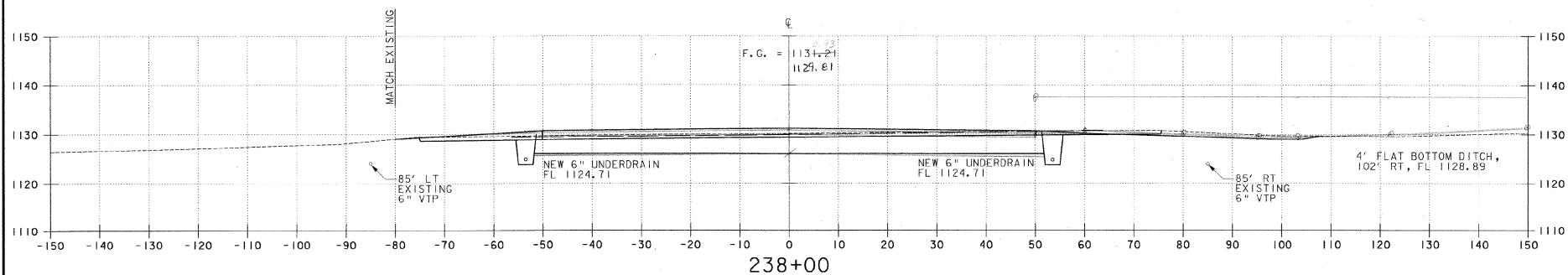
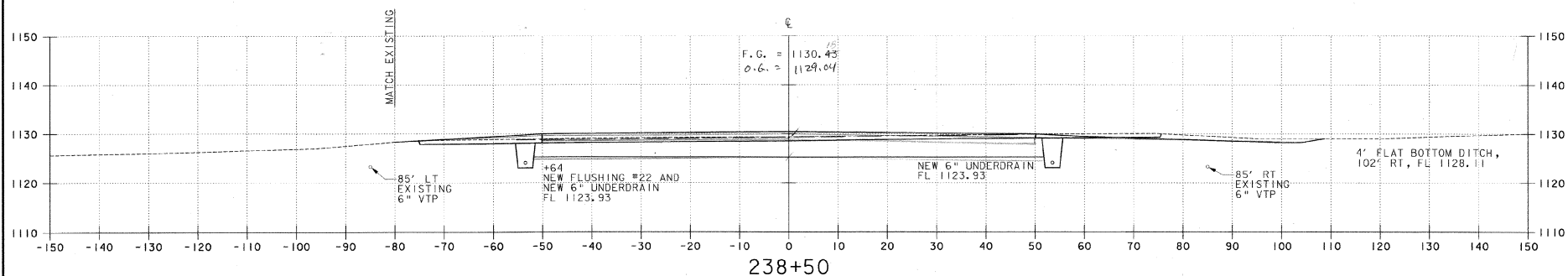
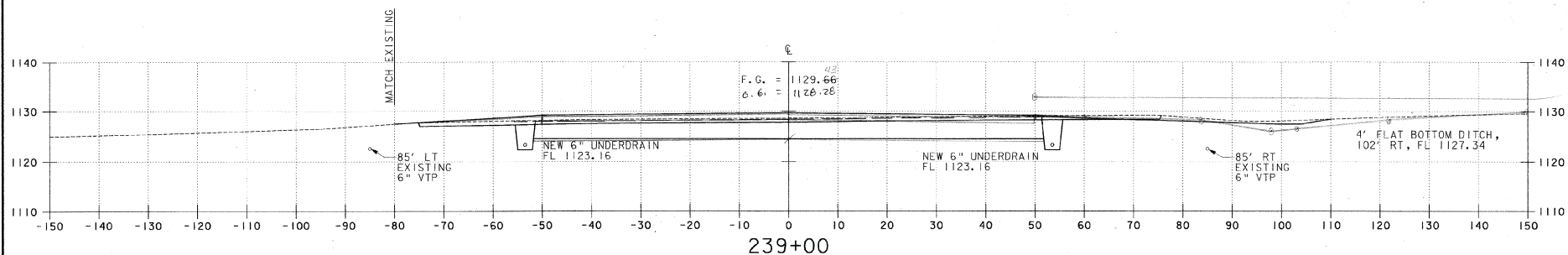
**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

DESIGNED BY: **MM**  
DRAWN BY: **MM**  
CHECKED BY: **BMC**  
APPROVED BY: **MM**

DATE: 3/21/01  
SHEET: 1 OF 1  
SHEET NO: **59**

Scale: HORIZ. 1" = 100'  
VERT. 1" = 10'

Job No. F200001716.01  
File No. F200001716.01



| REV. | DATE | DESCRIPTION |
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Job No. P20000116.01  
File No. P20000116.01

EDWARD F. KNAPP STATE AIRPORT  
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

Designed by CND  
Drawn by MMU  
Checked by BNC  
Approved by CND

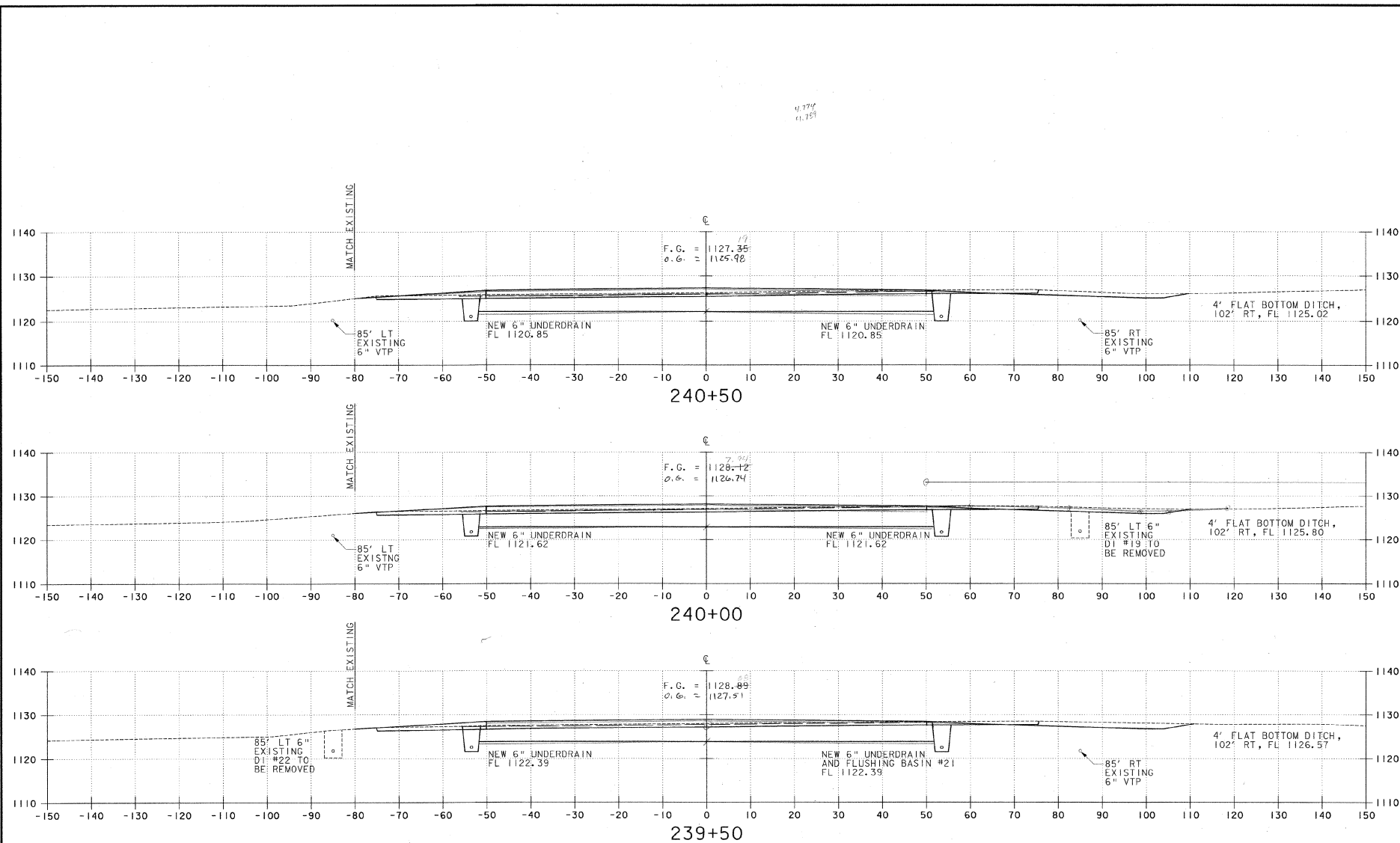
Scale: HORIZ. 1" = 10'  
VERT. 1" = 10'

Date: 3/21/01

Sheet - of

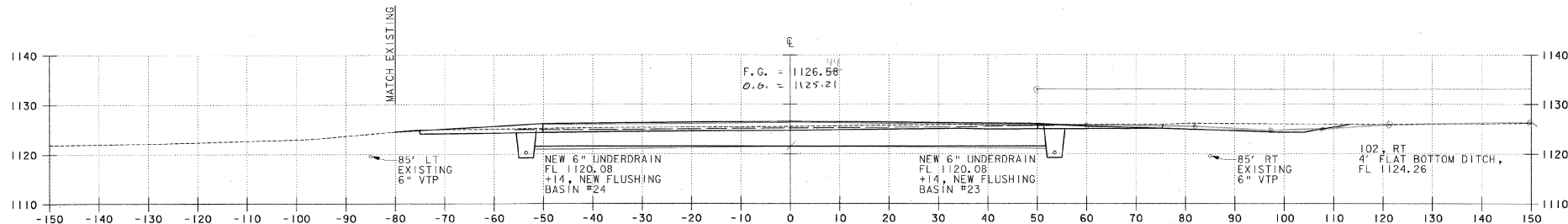
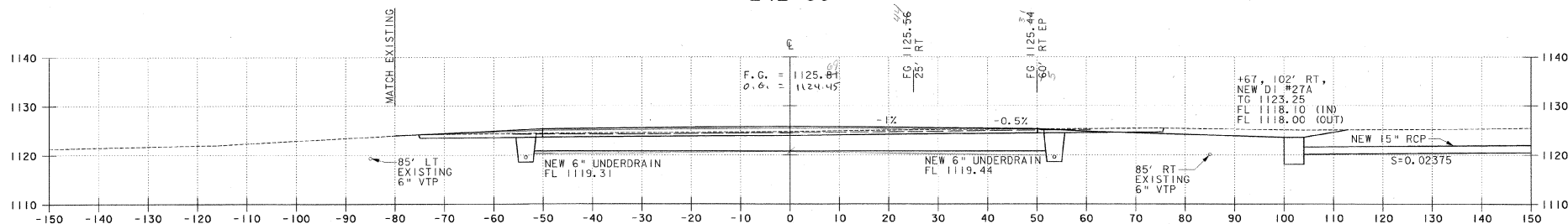
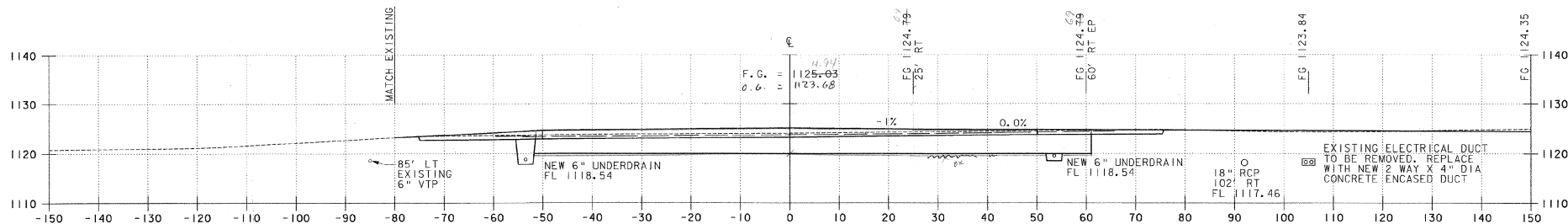
Sheet No

**60**

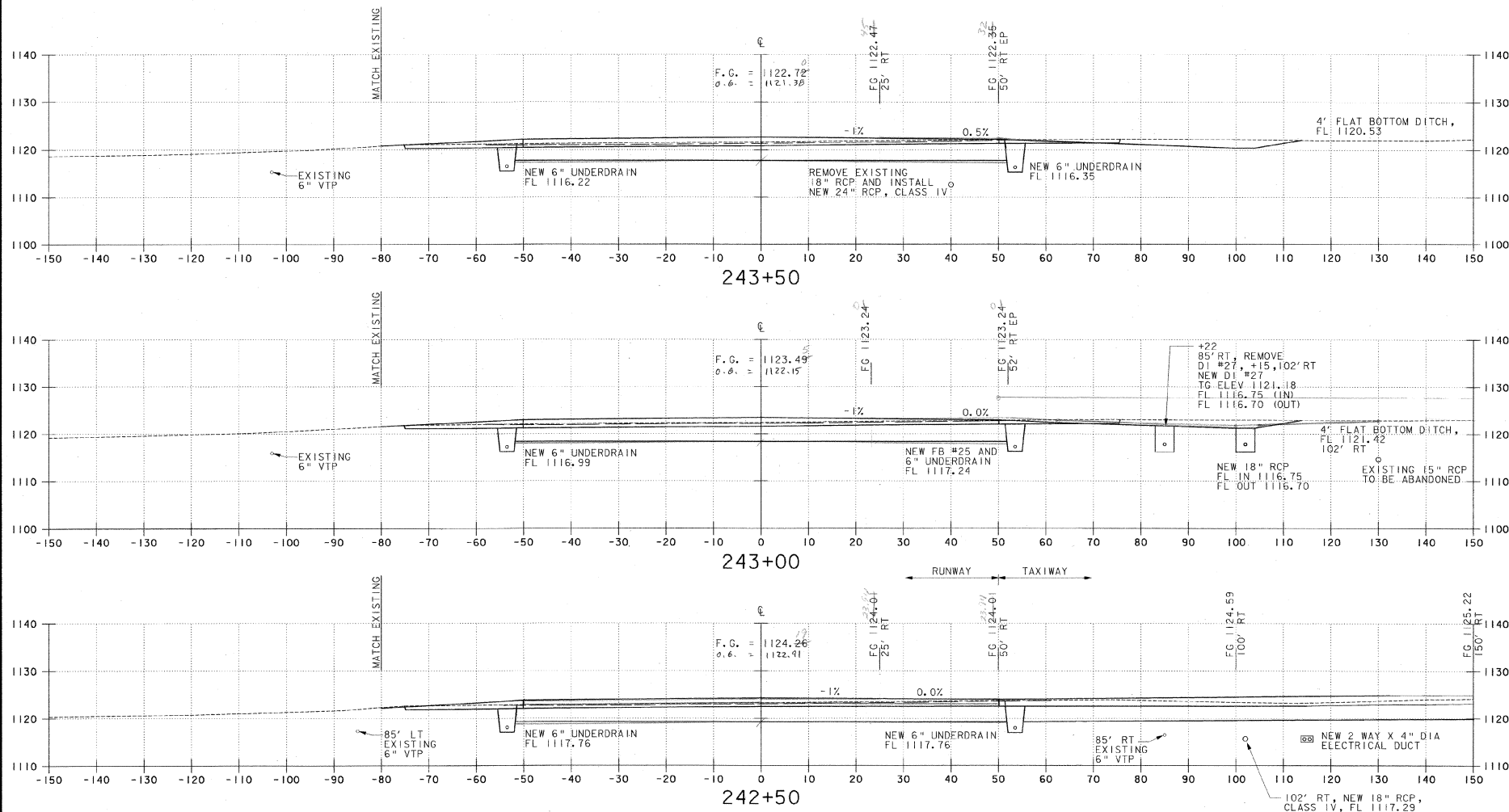


|                                                         |  |                                                                      |                                           |                                               |
|---------------------------------------------------------|--|----------------------------------------------------------------------|-------------------------------------------|-----------------------------------------------|
| <b>EDWARD F. KNAPP STATE AIRPORT</b><br>BERLIN, VERMONT |  | REV. DATE<br>1 1 19                                                  | DESCRIPTION<br>RUNWAY 17-35 CROSS SECTION | Job No. F20000116.01<br>File No. F20000116.01 |
| <b>URS</b><br>ONE NORTHWAY LANE<br>LATHAM, NEW YORK     |  | Designed by CND<br>Drawn by MMW<br>Checked by BNC<br>Approved by CND | Date: 3/21/01<br>Sheet - of<br>Sheet No.  | Scale: HORZ. 1" = 10'<br>VERT. 1" = 10'       |

AIP 3-50-0001-06



|                        |  |                                                                                                                    |      |      |             |
|------------------------|--|--------------------------------------------------------------------------------------------------------------------|------|------|-------------|
| DESIGN BY: GMD         |  | <b>EDWARD F. KNAPP STATE AIRPORT</b><br>BERLIN, VERMONT<br><br><b>URS</b><br>ONE NORTHWAY LANE<br>LATHAM, NEW YORK | REV. | DATE | DESCRIPTION |
| DRAWN BY: MAM          |  |                                                                                                                    |      |      |             |
| CHECKED BY: BNC        |  |                                                                                                                    |      |      |             |
| APPROVED BY: GMD       |  |                                                                                                                    |      |      |             |
| Scales: HORZ. 1" = 10' |  | Job No. F200001116.01 File No. F201800422.00                                                                       |      |      |             |
| Date: 3/21/01          |  | Runway 17-35 Cross Section                                                                                         |      |      |             |
| Sheet - 01             |  | Sheet No.                                                                                                          |      |      |             |
| Sheet No.              |  | 62                                                                                                                 |      |      |             |



| REV. | DATE | DESCRIPTION |
|------|------|-------------|
|      |      |             |
|      |      |             |
|      |      |             |

**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

Job No. F20000118.01 File No. F201808x83.01

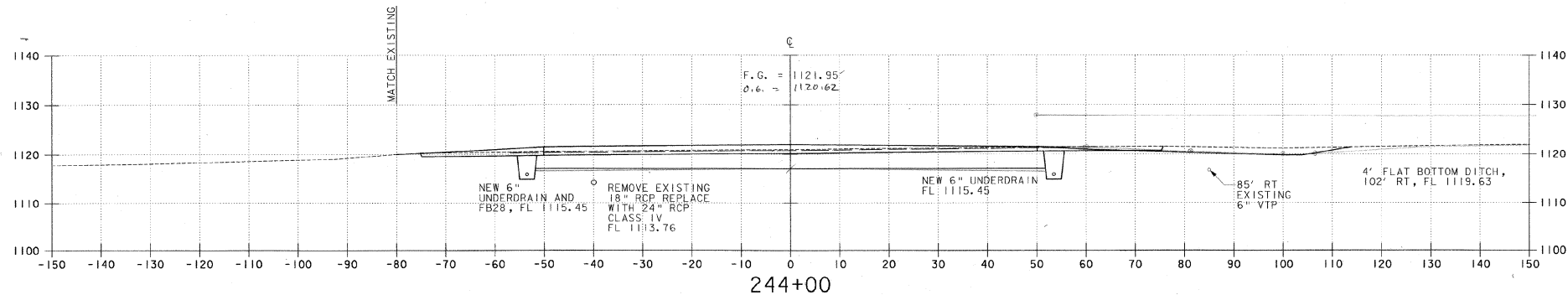
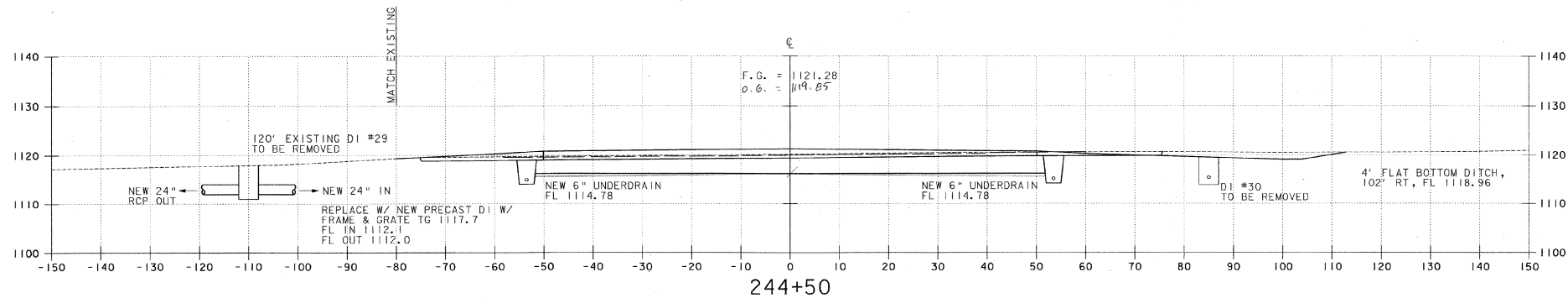
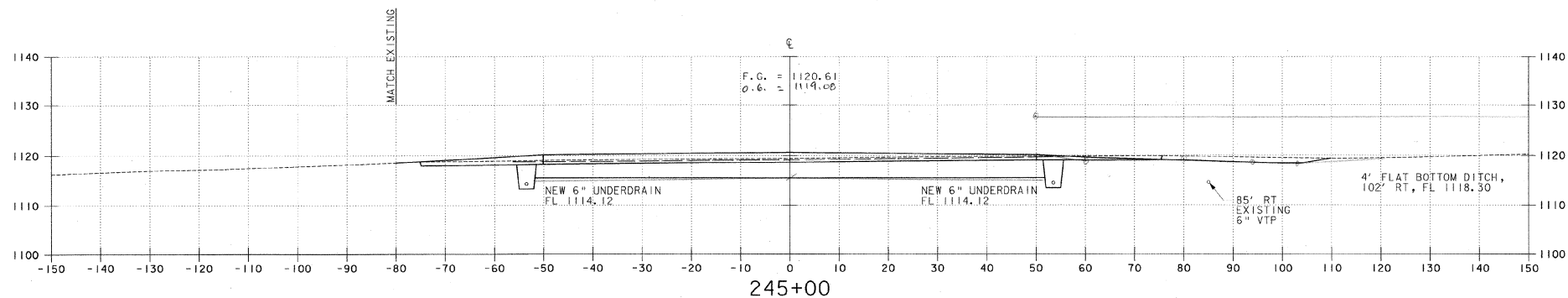
Runway 17-35 CROSS SECTION

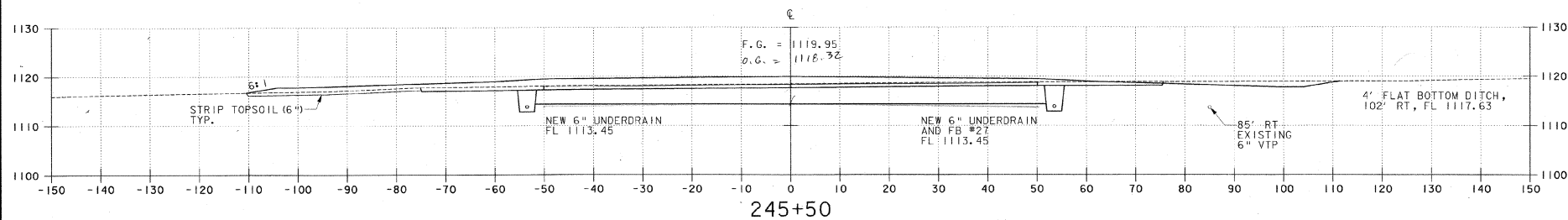
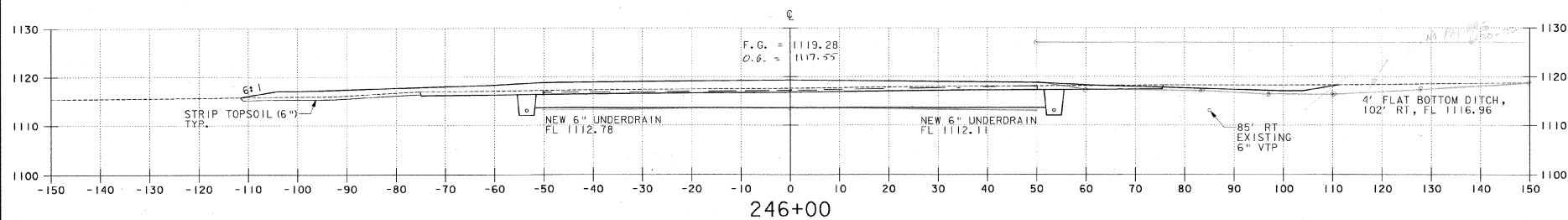
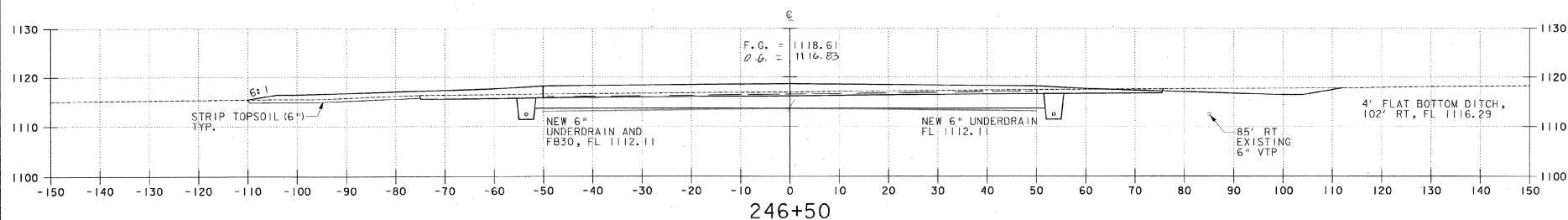
**URS**

ONE NORTHWAY LANE  
LATHAM, NEW YORK

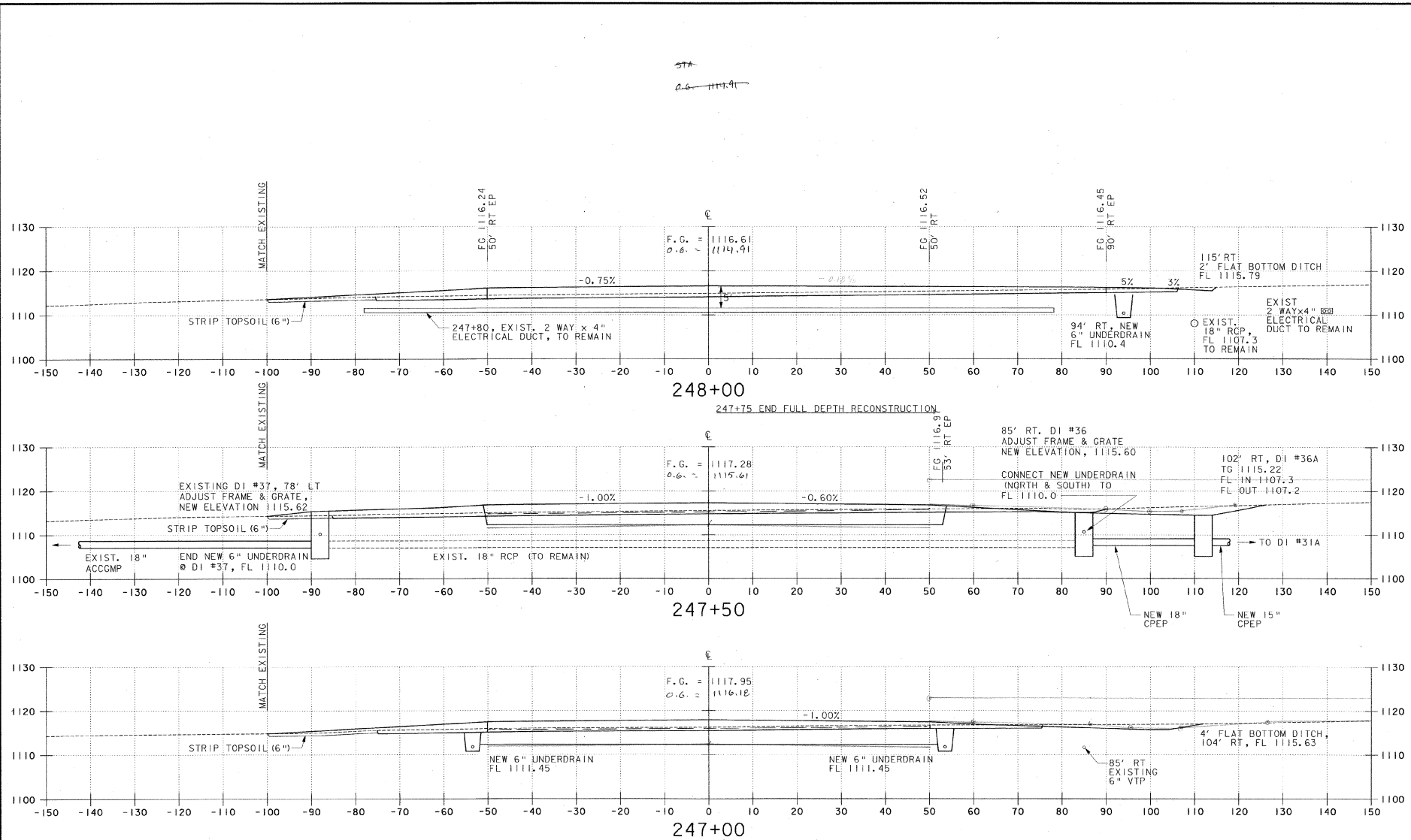
|                                       |              |                |                 |
|---------------------------------------|--------------|----------------|-----------------|
| Designed by CRD                       | Drawn by MAM | Checked by BVC | Approved by BVB |
| Scale: HORIZ. 1" = 10' VERT. 1" = 10' |              |                |                 |
| Date: 3/21/01                         |              |                |                 |
| Sheet - 01                            |              |                |                 |
| Sheet No. <b>63</b>                   |              |                |                 |







|                                                         |          |                                                    |             |                       |
|---------------------------------------------------------|----------|----------------------------------------------------|-------------|-----------------------|
| DESIGN                                                  |          | REVISIONS                                          |             | FILE NO. F20000118.01 |
| DESIGNED BY                                             | DATE     | REV.                                               | DATE        | DESCRIPTION           |
|                                                         |          |                                                    |             |                       |
|                                                         |          |                                                    |             |                       |
|                                                         |          |                                                    |             |                       |
| <b>EDWARD F. KNAPP STATE AIRPORT</b><br>BERLIN, VERMONT |          | JOB NO. F20000118.01<br>RUNWAY 17-35 CROSS SECTION |             |                       |
| <b>URS</b><br>ONE NORTHWAY LANE<br>LATHAM, NEW YORK     |          |                                                    |             |                       |
| DESIGNED BY                                             | DRAWN BY | CHECKED BY                                         | APPROVED BY |                       |
|                                                         |          |                                                    |             |                       |
| SCALE: HORZ. 1" = 100'<br>VERT. 1" = 10'                |          |                                                    |             |                       |
| DATE: 3/21/01                                           |          |                                                    |             |                       |
| SHEET - OF                                              |          |                                                    |             |                       |
| SHEET NO. <b>65</b>                                     |          |                                                    |             |                       |



EDWARD F. KNAPP STATE AIRPORT  
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

Designed by GND  
Drawn by MAM  
Checked by BNC  
Approved by GND

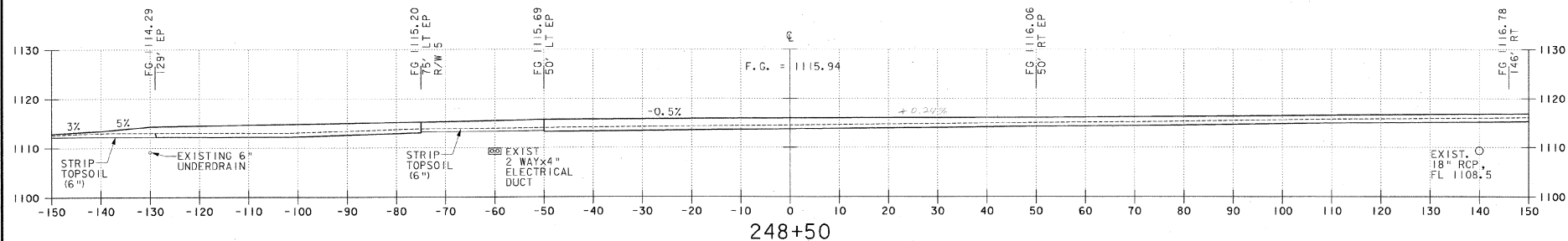
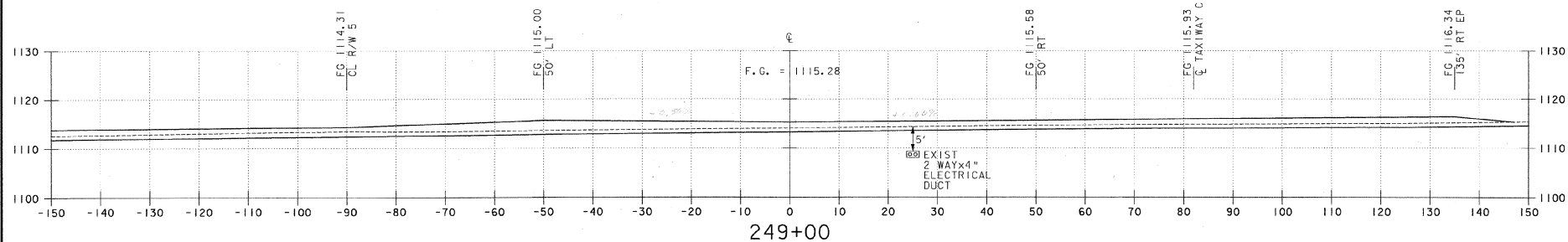
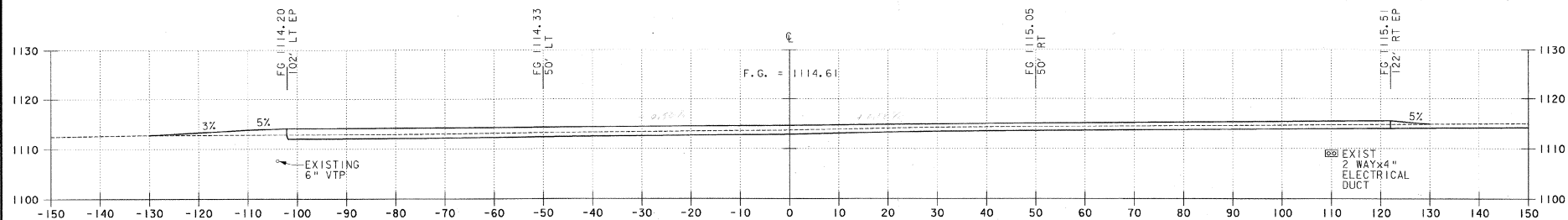
Scales: HORZ. 1" = 10'  
VERT. 1" = 10'

Date: 3/21/01

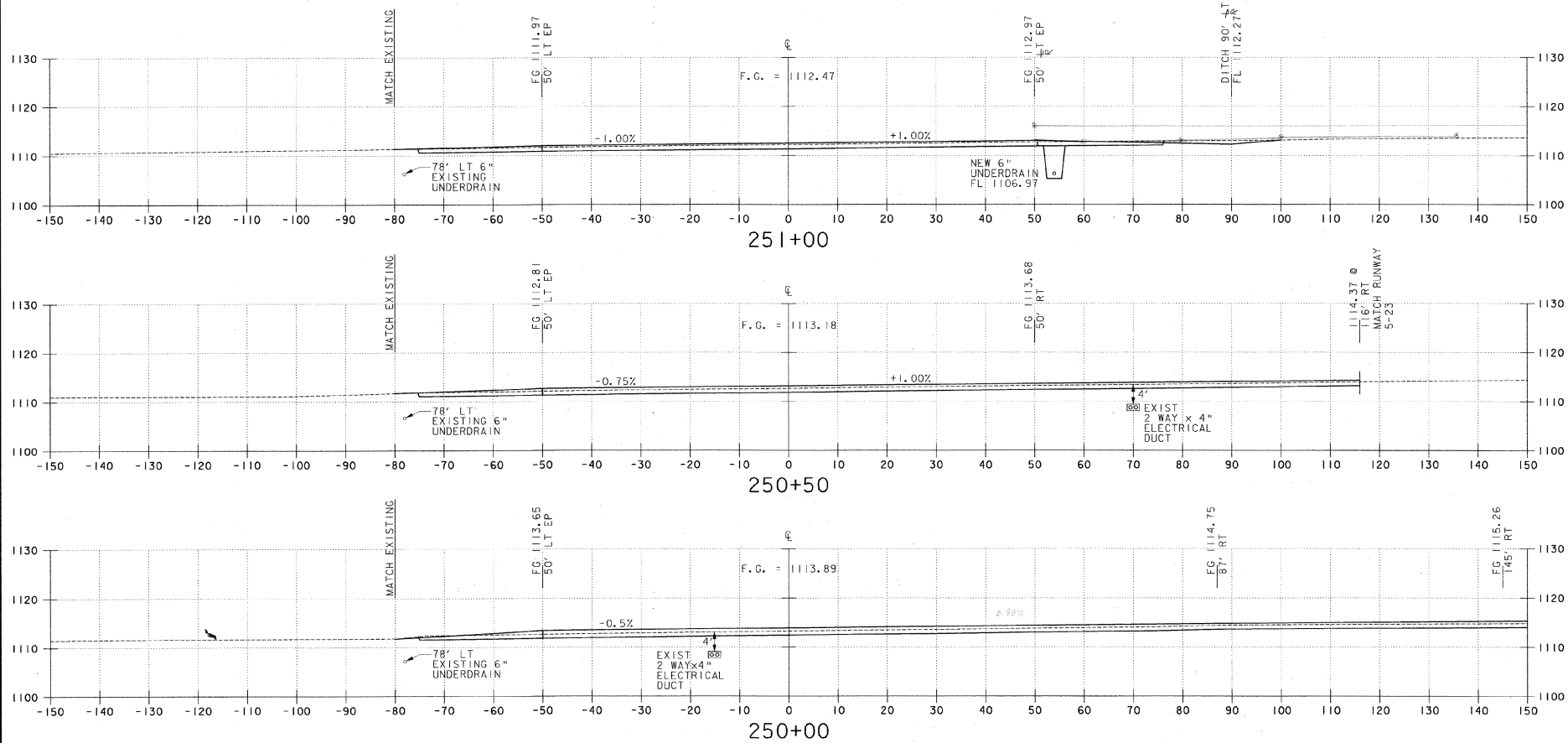
Sheet - 01

Sheet No

**66**



|                                                                          |                                           |                                                                           |
|--------------------------------------------------------------------------|-------------------------------------------|---------------------------------------------------------------------------|
| <b>EDWARD F. KNAPP STATE AIRPORT</b><br>BERLIN, VERMONT                  |                                           | REV. DATE<br>DESCRIPTION<br>Job No. F20000116.01<br>File No. F20000116.01 |
| <b>URS</b><br>ONE NORTHWAY LANE<br>LATHAM, NEW YORK                      |                                           | Runway 17-35 Cross Section                                                |
| Designed by: GMD<br>Drawn by: MMU<br>Checked by: BNC<br>Approved by: GMD | Date: 3/21/01<br>Sheet: - of<br>Sheet No. | 67                                                                        |



|                  |  |              |  |                 |  |                  |  |
|------------------|--|--------------|--|-----------------|--|------------------|--|
| DESIGNED BY: CND |  | DRAWN BY: MM |  | CHECKED BY: BIC |  | APPROVED BY: CND |  |
| DATE: 3/21/01    |  | SHEET: 01    |  | SHEET NO: 68    |  | AIP 3-50-0001-06 |  |

**URS**

ONE NORTHWAY LANE  
LATHAM, NEW YORK

**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

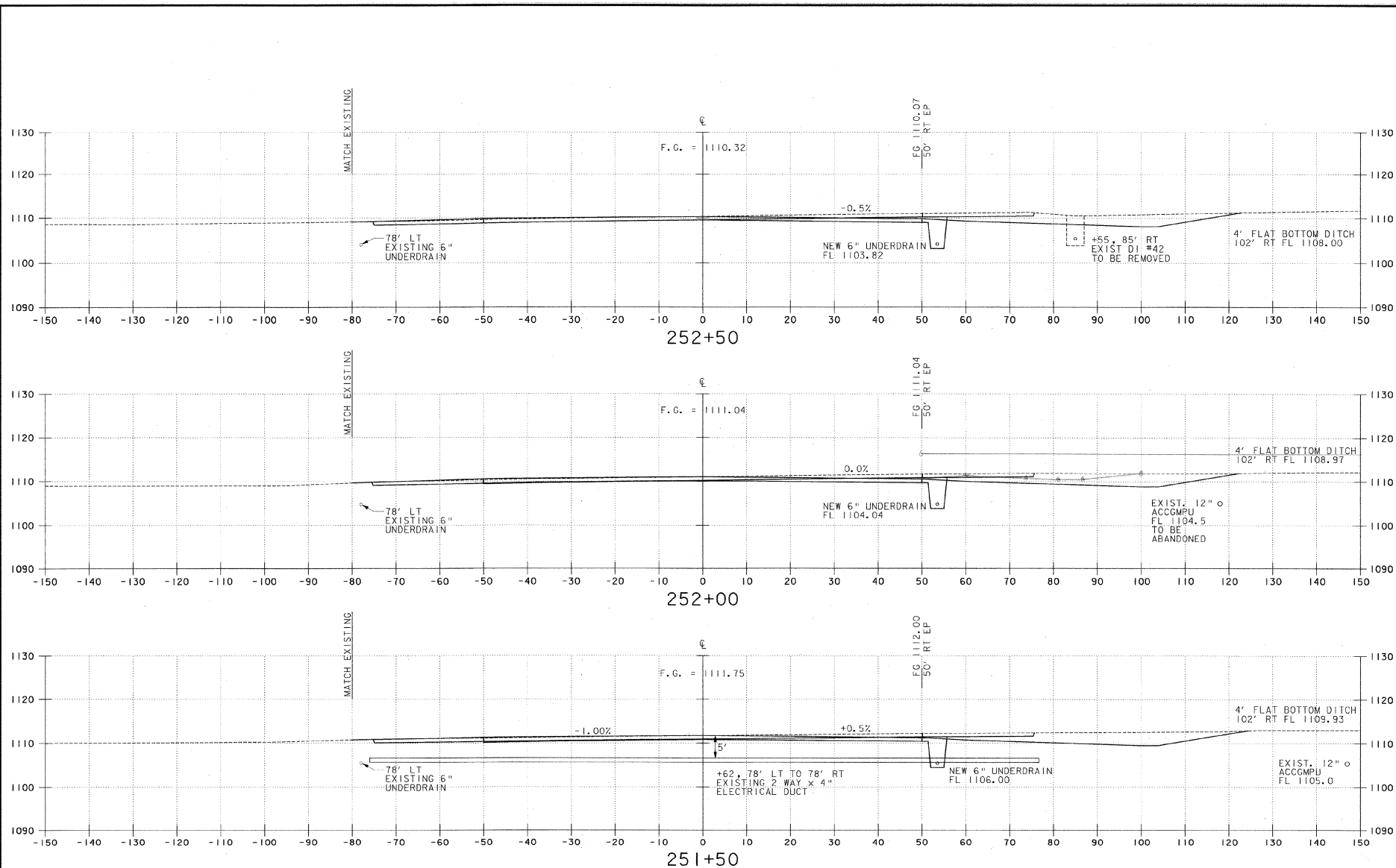
RUNWAY 17-35 CROSS SECTION

REV. DATE

DESCRIPTION

Job No. F200001715.01

File: bsc201700x26.dwg



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|-----------------------|------|-------------------------|------|
| DESIGN                |      | DESCRIPTION             |      |
| REV.                  | DATE | REV.                    | DATE |
| Job No. F200001118.01 |      | File Name F200001118.01 |      |

**EDWARD F. KNAPP STATE AIRPORT**  
 BERLIN, VERMONT

**URS**  
 ONE NORTHWAY LANE  
 LATHAM, NEW YORK

Runway 17-35 CROSS SECTION

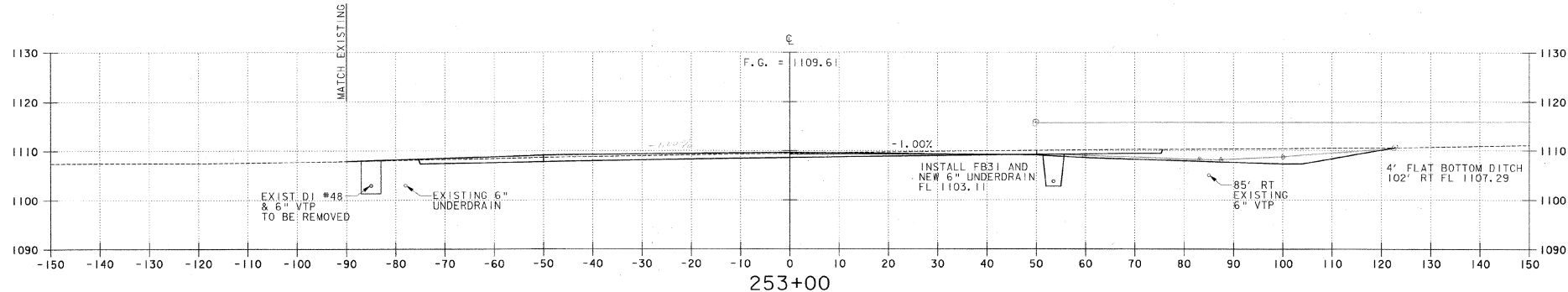
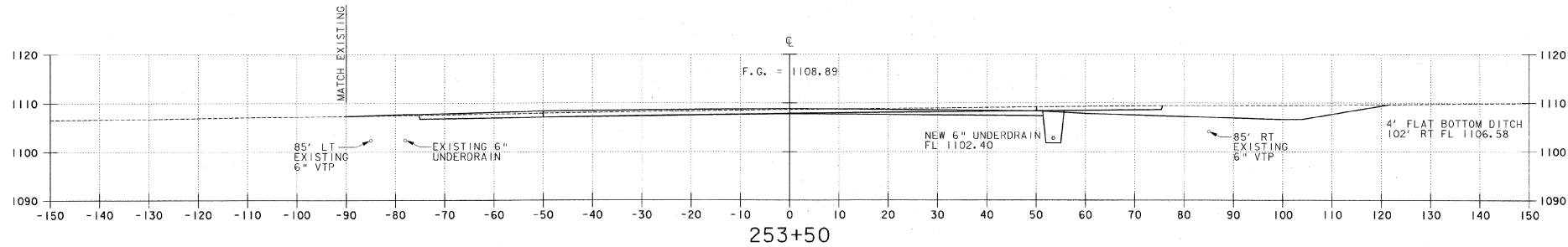
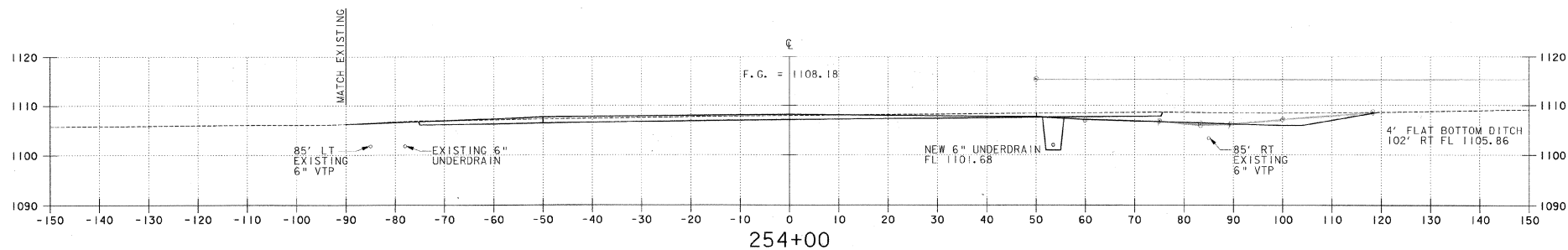
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|-------------|-----|
| Designed by | MD  |
| Drawn by    | MM  |
| Checked by  | BNC |
| Approved by | MD  |

Scale: HORZ. 1" = 100'  
 VERT. 1" = 10'

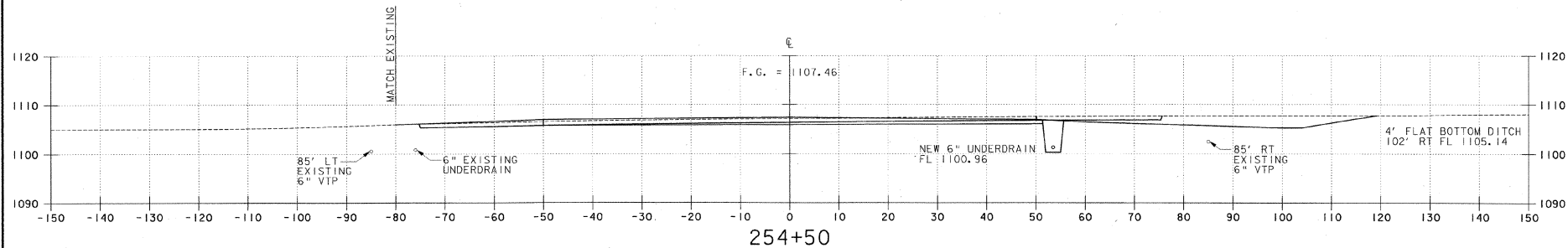
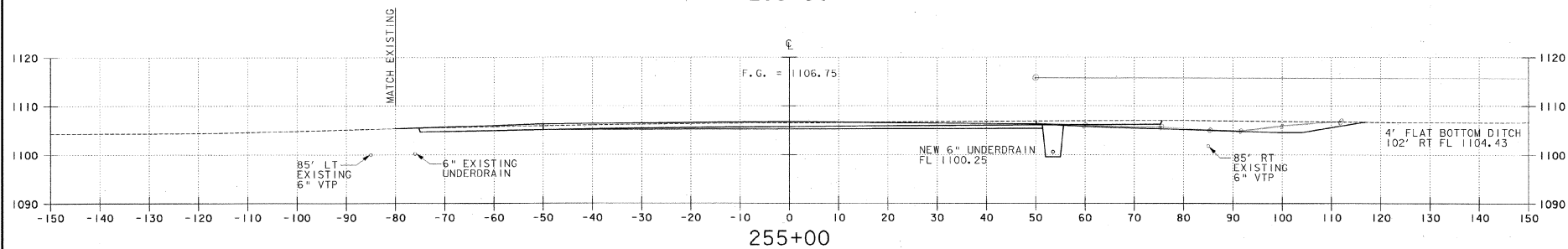
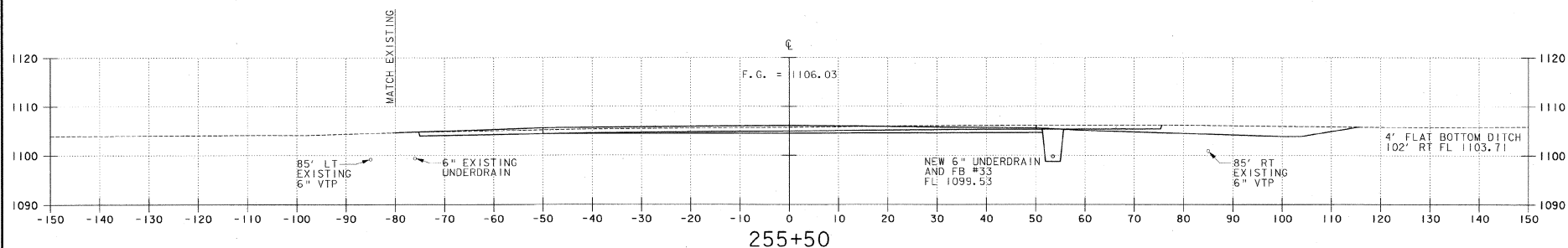
Date: 3/21/01

Sheet - of

Sheet No. **69**



|                                                                                                      |                                       |                                                                                                |
|------------------------------------------------------------------------------------------------------|---------------------------------------|------------------------------------------------------------------------------------------------|
| <b>EDWARD F. KNAPP STATE AIRPORT</b><br>BERLIN, VERMONT                                              |                                       | RUNWAY 17-35 CROSS SECTION                                                                     |
| DESIGNED BY: <b>URS</b><br>DRAWN BY: <b>URS</b><br>CHECKED BY: <b>URS</b><br>APPROVED BY: <b>URS</b> | ONE NORTHWAY LANE<br>LATHAM, NEW YORK | REV. DATE DESCRIPTION<br>1 3/21/01 110.01<br>Job No. F20000 7116.01<br>File No. F20000 7116.01 |



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File No. F201806x(dgm)

Job No. F200001714.01

**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION

**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

|                 |              |                |                 |
|-----------------|--------------|----------------|-----------------|
| Designed by CND | Drawn by MMU | Checked by BNC | Approved by CND |
|-----------------|--------------|----------------|-----------------|

Scale: HORZ. 1" = 100'  
VERT. 1" = 10'

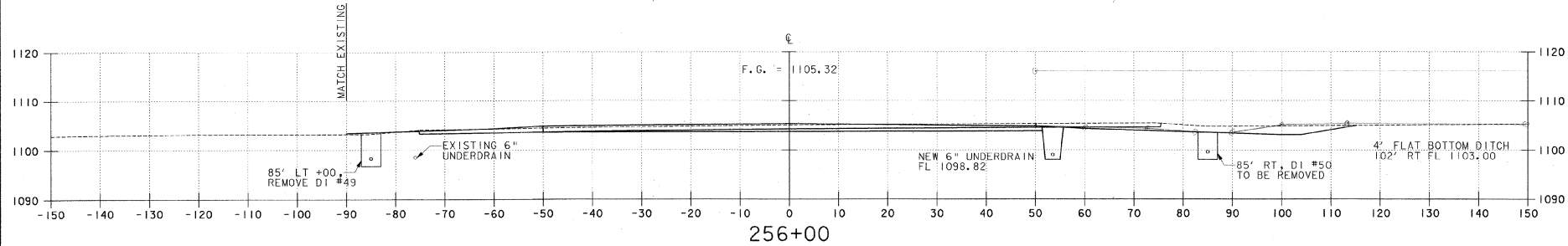
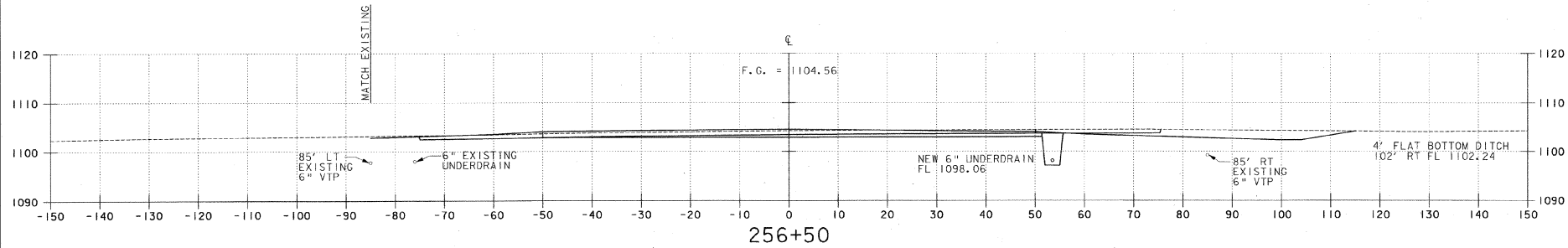
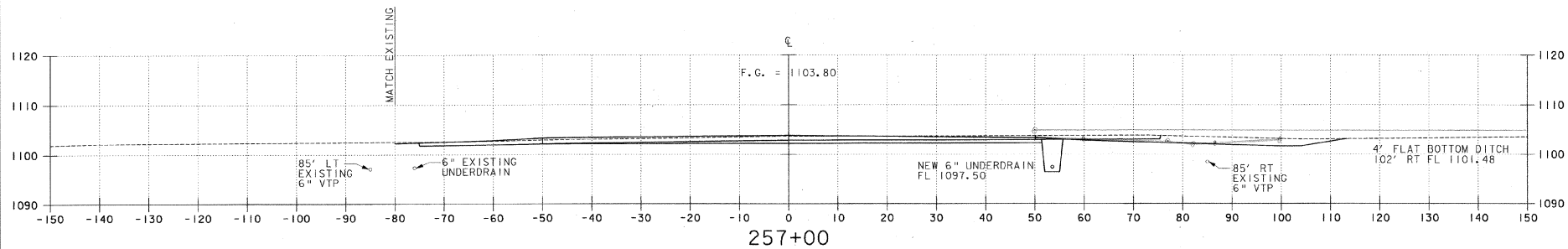
Date: 3/21/01

Sheet - 01

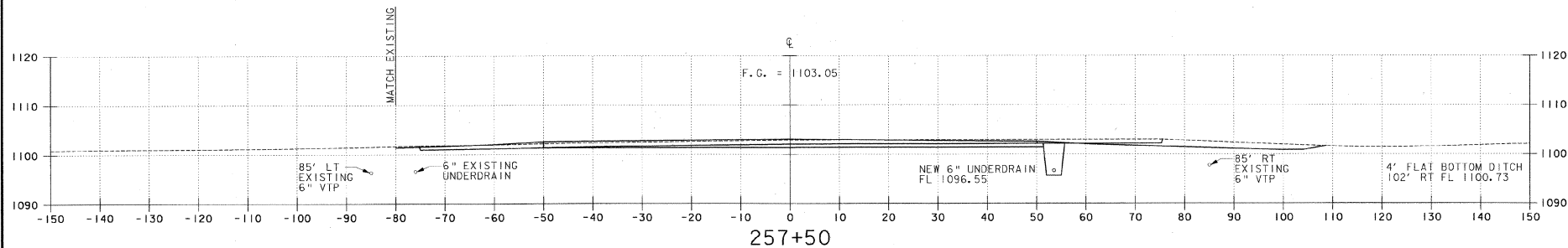
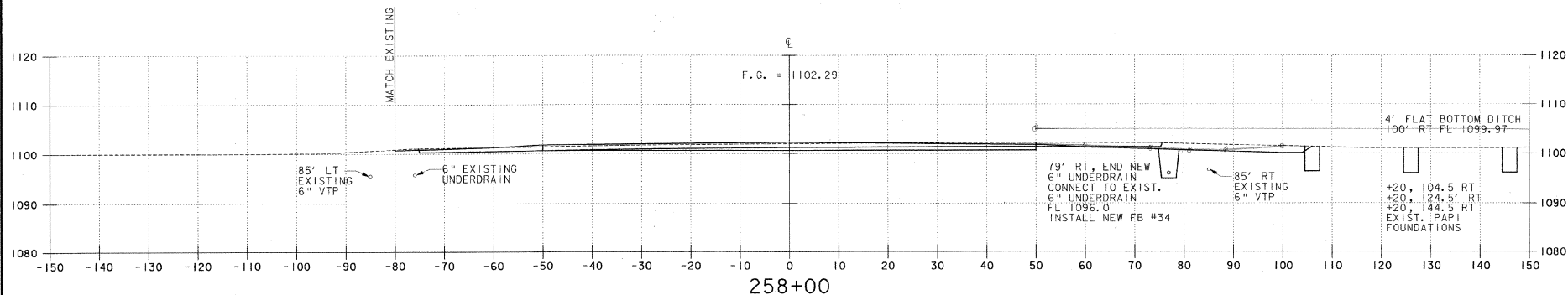
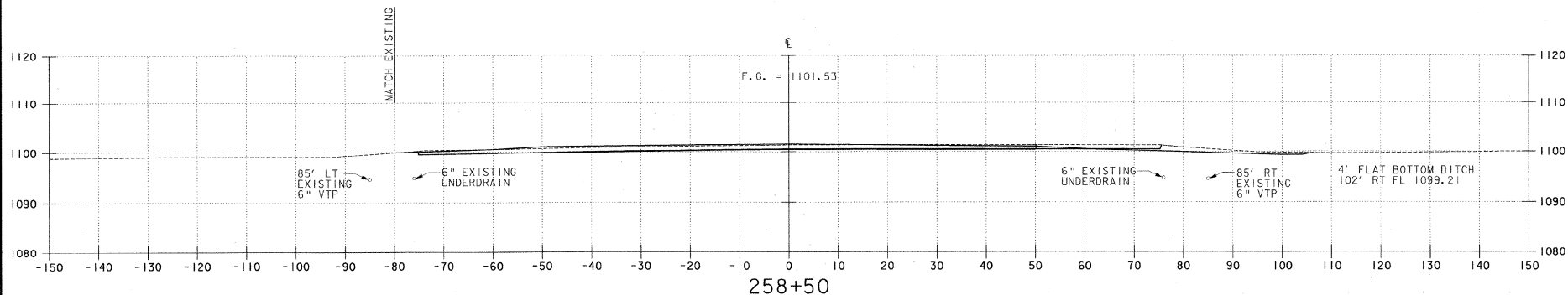
Sheet No.

**71**

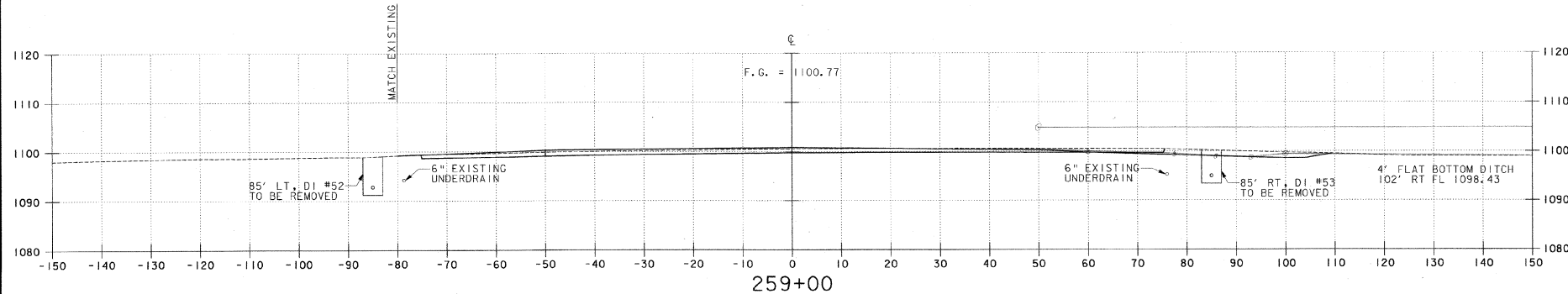
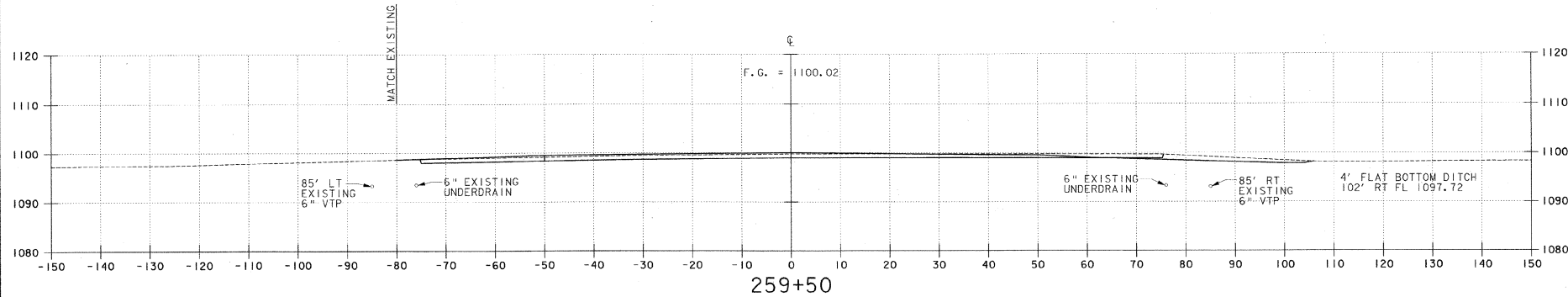
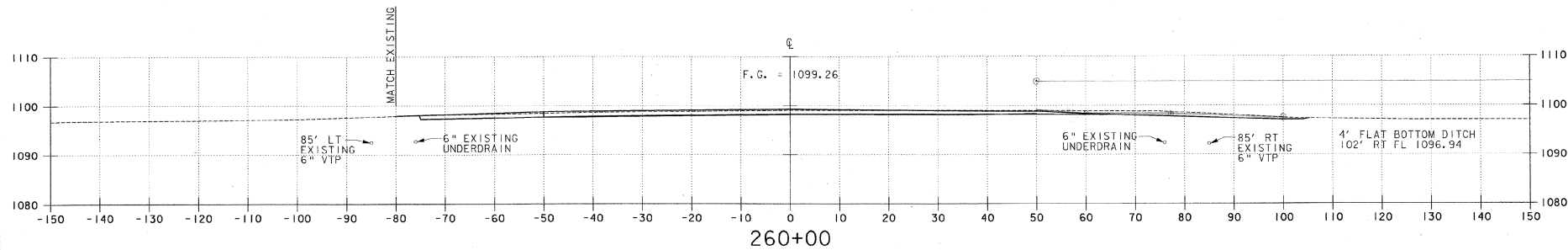




|                                                                               |                                           |                                                     |  |
|-------------------------------------------------------------------------------|-------------------------------------------|-----------------------------------------------------|--|
| <b>EDWARD F. KNAPP STATE AIRPORT</b><br>BERLIN, VERMONT                       |                                           | <b>URS</b><br>ONE NORTHWAY LANE<br>LATHAM, NEW YORK |  |
| REV.<br>DATE<br>DESCRIPTION<br>JOB NO. F200001718.01<br>FILE NO. 200180x2.dwg | RUNWAY 17-35 CROSS SECTION                |                                                     |  |
| Designed by: GMP<br>Drawn by: MAM<br>Checked by: BMC<br>Approved by: GMP      | Scale: HORIZ. 1" = 100'<br>VERT. 1" = 10' |                                                     |  |
| Date: 3/21/01                                                                 |                                           |                                                     |  |
| Sheet: - 01                                                                   |                                           |                                                     |  |
| Sheet No. <b>72</b>                                                           |                                           |                                                     |  |



|                                                                                                    |                                                                  |                                                                   |
|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------|-------------------------------------------------------------------|
| <b>EDWARD F. KNAPP STATE AIRPORT</b><br>BERLIN, VERMONT                                            |                                                                  | RUNWAY 17-35 CROSS SECTION                                        |
| DESIGNED BY: <b>URS</b><br>DRAWN BY: <b>MM</b><br>CHECKED BY: <b>BBC</b><br>APPROVED BY: <b>MB</b> | JOB NO. <b>F200001116.01</b><br>FILE NO. <b>W2020180-433.dwg</b> | DATE: <b>3/21/01</b><br>SHEET: <b>- 01</b><br>SHEET NO. <b>73</b> |



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|-------------|--|------|--|-----------------------|--|
| DESIGNER    |  | DATE |  | JOB NO. P200001718.01 |  |
| DRAWN BY    |  | DATE |  | JOB NO. P200001718.01 |  |
| CHECKED BY  |  | DATE |  | JOB NO. P200001718.01 |  |
| APPROVED BY |  | DATE |  | JOB NO. P200001718.01 |  |

**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

Runway 17-35 Cross Section

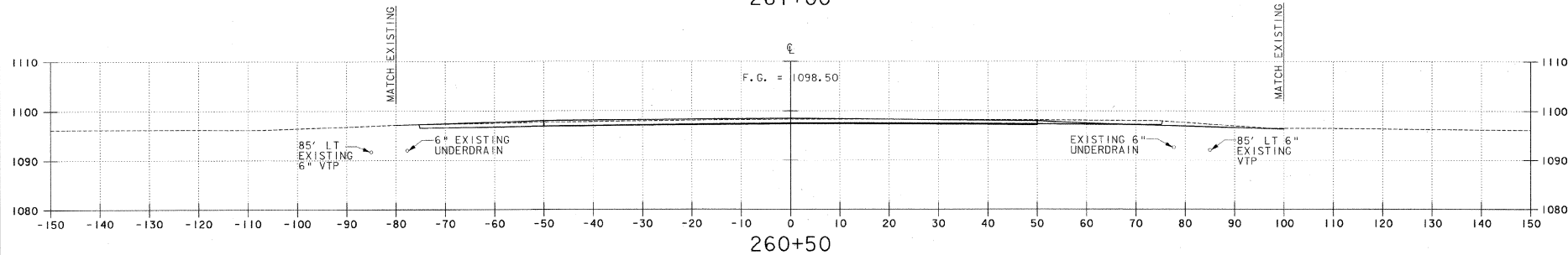
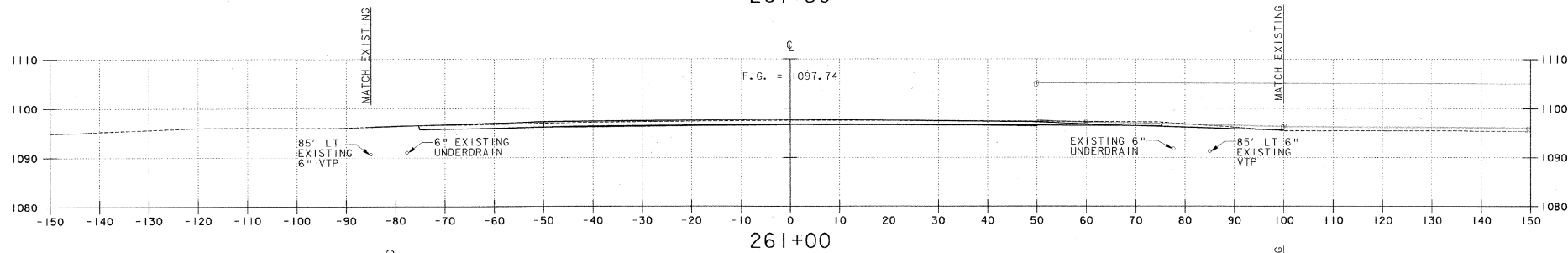
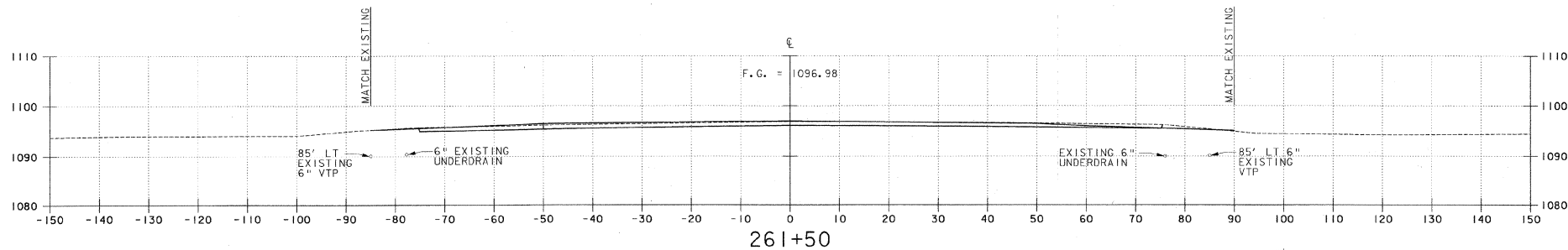
Designed by: **URS**  
Drawn by: **URS**  
Checked by: **URS**  
Approved by: **URS**

Scale: HORIZ. 1" = 100'  
VERT. 1" = 10'

Date: 3/21/01

Sheet - 01

Sheet No. **74**



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| REV. | DATE | DESCRIPTION |
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**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

Job No. F200001716.01 File No. F20201800a35.dgn

RUNWAY 17-35 CROSS SECTION

**URS**

ONE NORTHWAY LANE  
LATHAM, NEW YORK

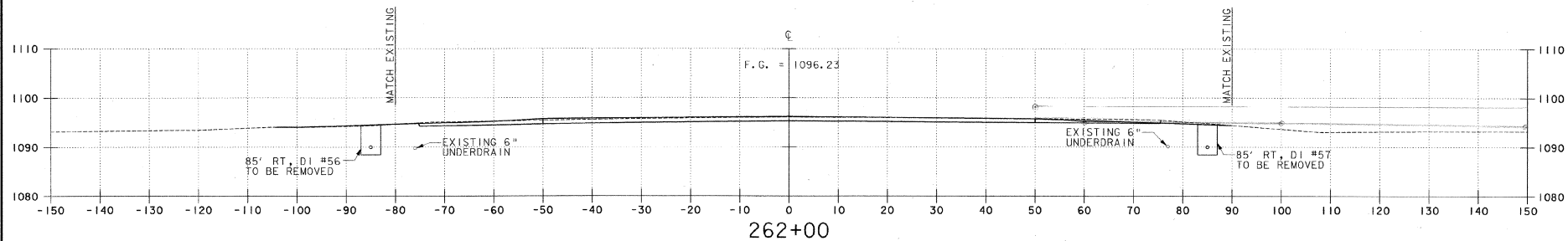
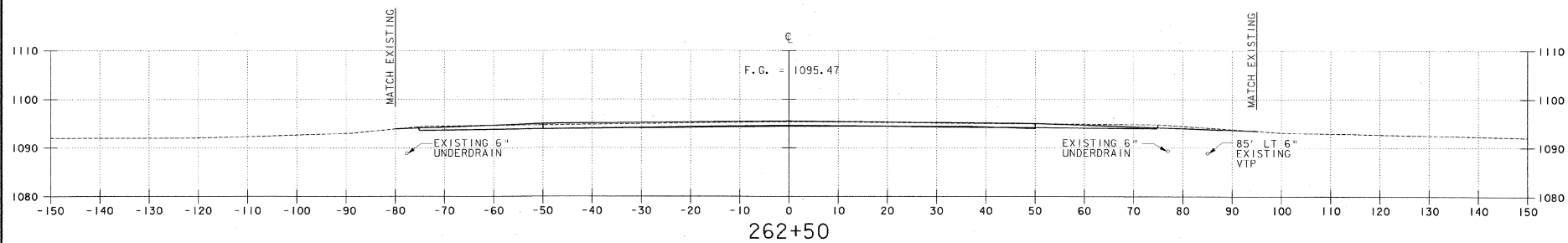
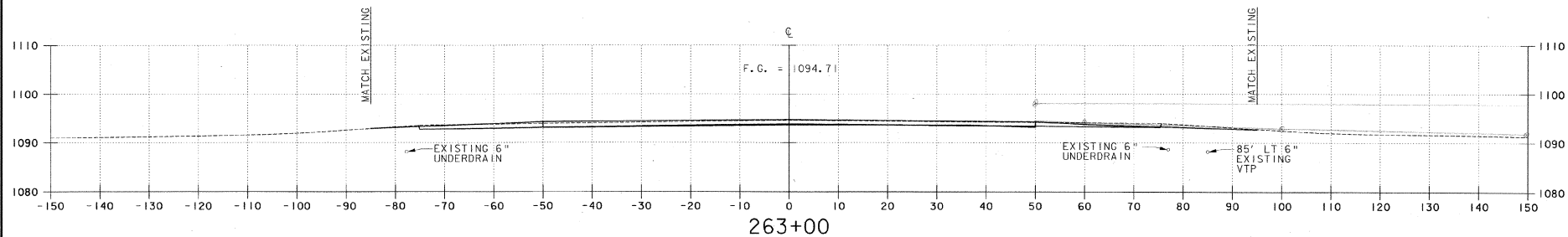
Designed by CND  
Drawn by MAM  
Checked by BNC  
Approved by CND

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

Date: 3/21/01

Sheet - 01

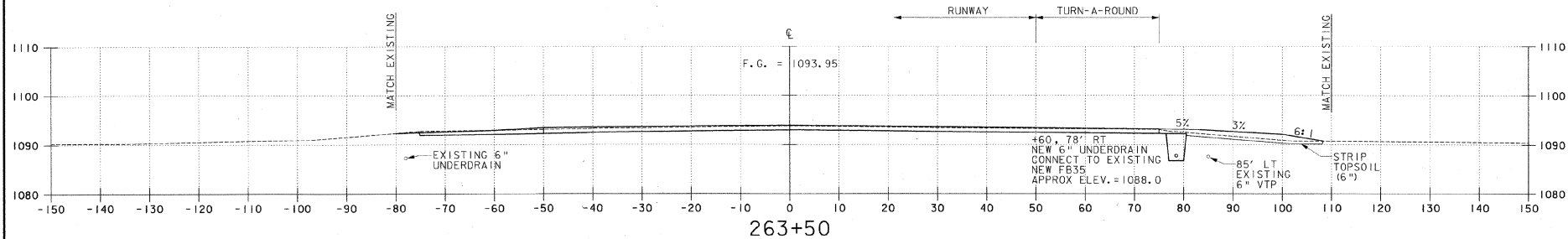
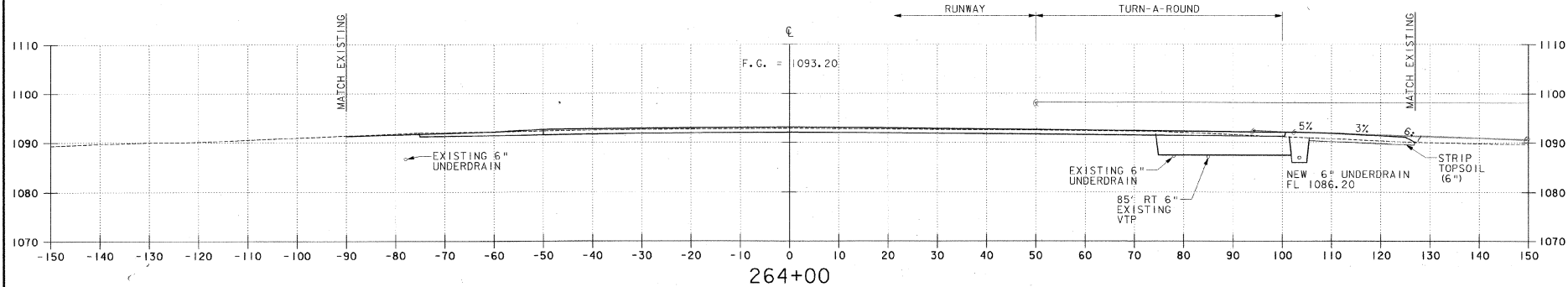
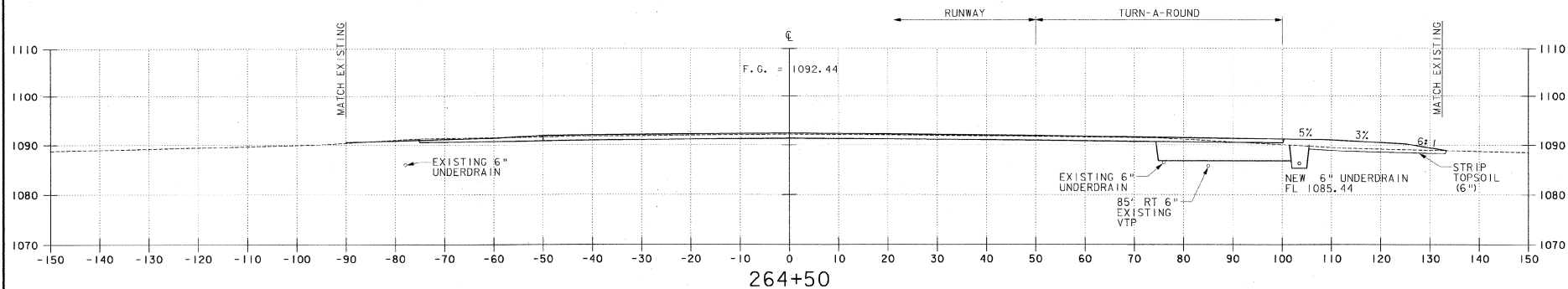
Sheet No  
**75**



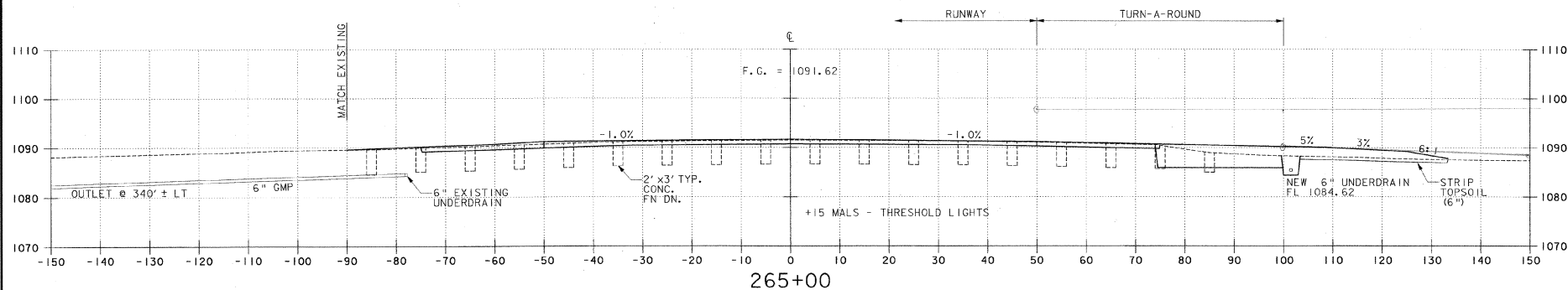
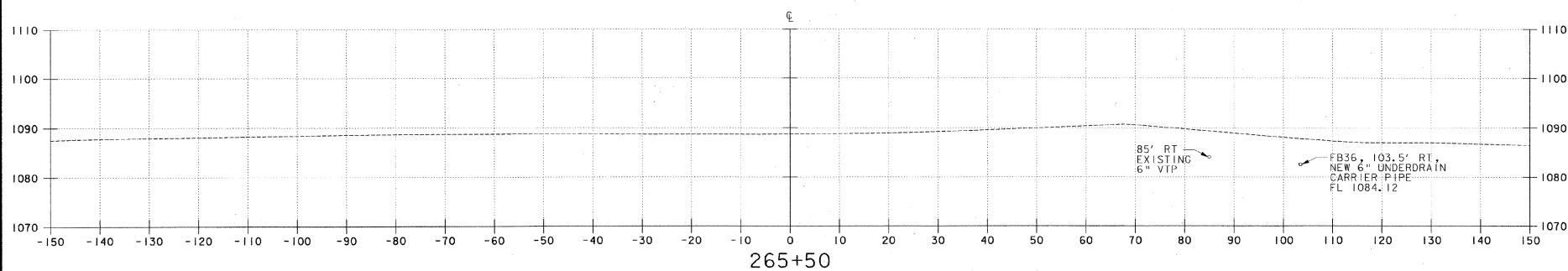
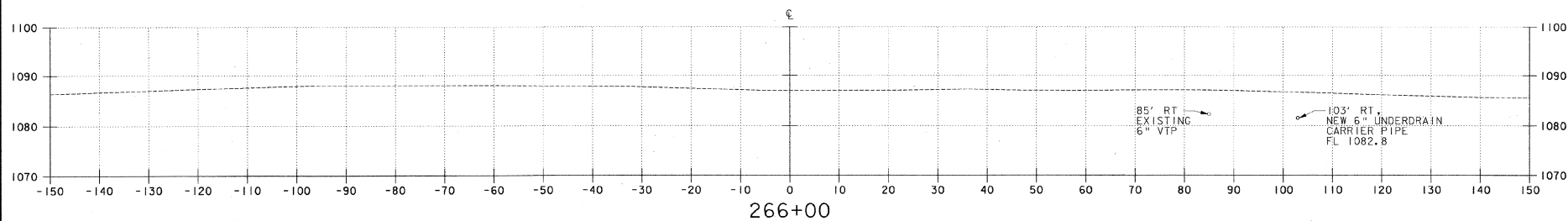
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| Designed by: <b>MD</b><br>Drawn by: <b>MM</b><br>Checked by: <b>BBC</b><br>Approved by: <b>MD</b> |  | Scale: <b>HORZ. 1" = 10'</b><br><b>VERT. 1" = 10'</b> | Date: <b>3/21/01</b><br>Sheet: <b>- 01</b><br>Sheet No: <b>76</b> |
| URS<br>ONE NORTHWAY LANE<br>LATHAM, NEW YORK                                                      |  |                                                       |                                                                   |

**EDWARD F. KNAPP STATE AIRPORT**  
 BERLIN, VERMONT  
 RUNWAY 17-35 CROSS SECTION

Job No. **F20000118.01**  
 Title **17-35 CROSS SECTION**



|                                                          |                              |                                                |
|----------------------------------------------------------|------------------------------|------------------------------------------------|
| <b>EDWARD F. KNAPP STATE AIRPORT</b><br>BERLIN, VERMONT  |                              | Job No. F20000178-01<br>File No. E20780437.dwg |
| DESIGNED BY:<br>DRAWN BY:<br>CHECKED BY:<br>APPROVED BY: | DATE:<br>SHEET:<br>SHEET NO. | DESCRIPTION:<br>RUNWAY 17-35 CROSS SECTION     |
| <b>URS</b><br>ONE NORTHWAY LANE<br>LATHAM, NEW YORK      |                              |                                                |
| Scale: HORIZ. 1" = 100'<br>VERT. 1" = 10'                |                              |                                                |
| Date: 3/21/01                                            |                              |                                                |
| Sheet: - of -                                            |                              |                                                |
| Sheet No. <b>77</b>                                      |                              |                                                |



END RUNWAY CONSTRUCTION  
265+04

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Job No. F200001718-01  
File No. F200001718-01

**EDWARD F. KNAPP STATE AIRPORT**  
BERLIN, VERMONT

**RUNWAY 17-35 CROSS SECTION**

**URS**

ONE NORTHWAY LANE  
LATHAM, NEW YORK

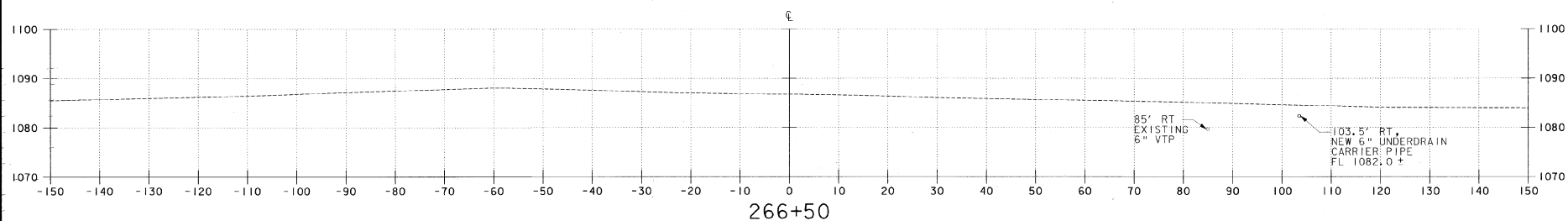
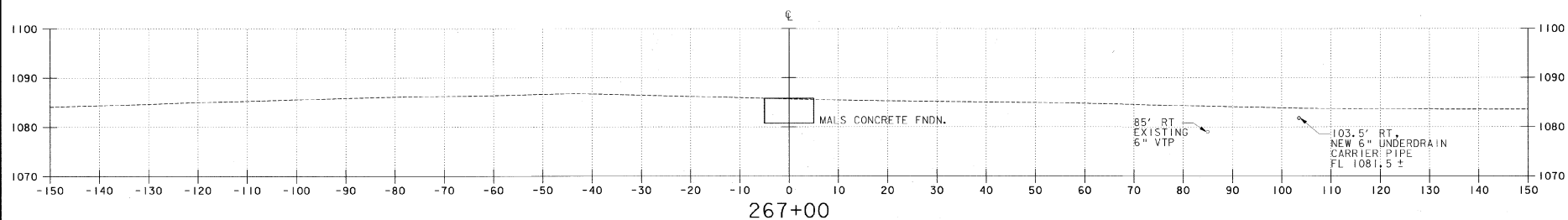
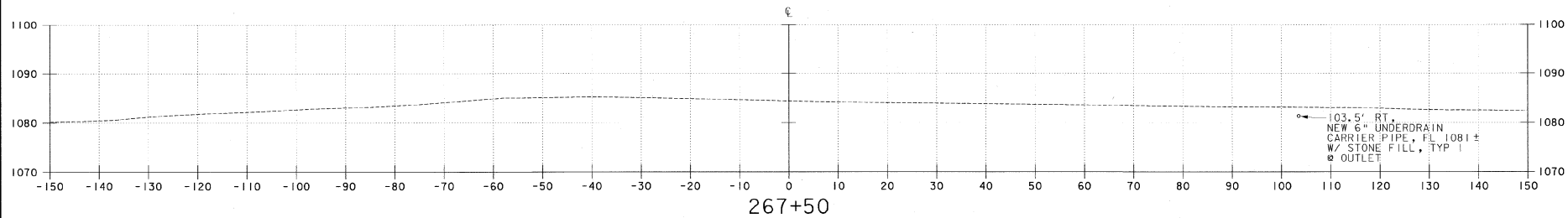
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| Designed by: <b>elo</b> | Drawn by: <b>MMU</b> | Checked by: <b>BIC</b> | Approved by: <b>elo</b> |
|-------------------------|----------------------|------------------------|-------------------------|

Scale: HORZ. 1" = 100'  
VERT. 1" = 10'

Date: 3/21/01

Sheet: - of -

Sheet No: **78**



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| DESIGNED BY: CND |  | DRAWN BY: MM |  | CHECKED BY: BFC |  | APPROVED BY: CND |  |
| DATE: 3/21/01    |  | SHEET: 01    |  | SHEET NO: 79    |  | AIP 3-50-0001-06 |  |

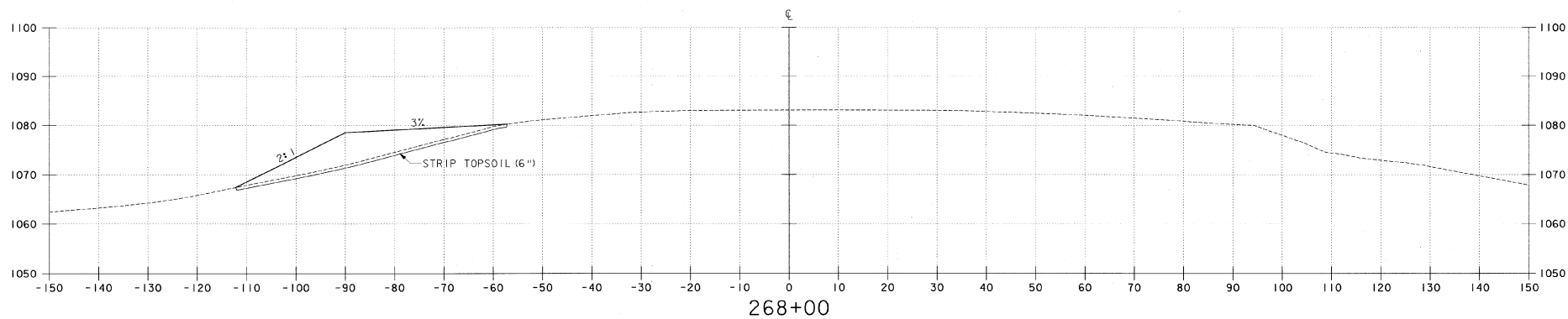
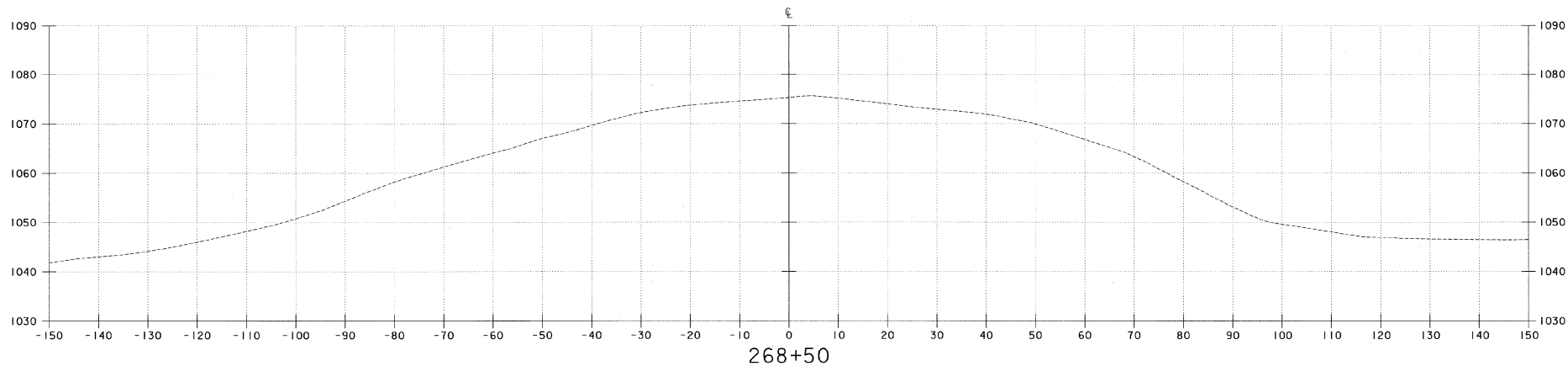
URS

ONE NORTHWAY LANE  
LATHAM, NEW YORK

EDWARD F. KNAPP STATE AIRPORT  
BERLIN, VERMONT

RUNWAY 17-35 CROSS SECTION





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| Job No. F20000.718.01 |      |             |

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| <b>EDWARD F. KNAPP STATE AIRPORT</b><br>BERLIN, VERMONT | RUNWAY 17-35 CROSS SECTION |
|---------------------------------------------------------|----------------------------|

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| <b>URS</b><br>ONE NORTHWAY LANE<br>LATHAM, NEW YORK |
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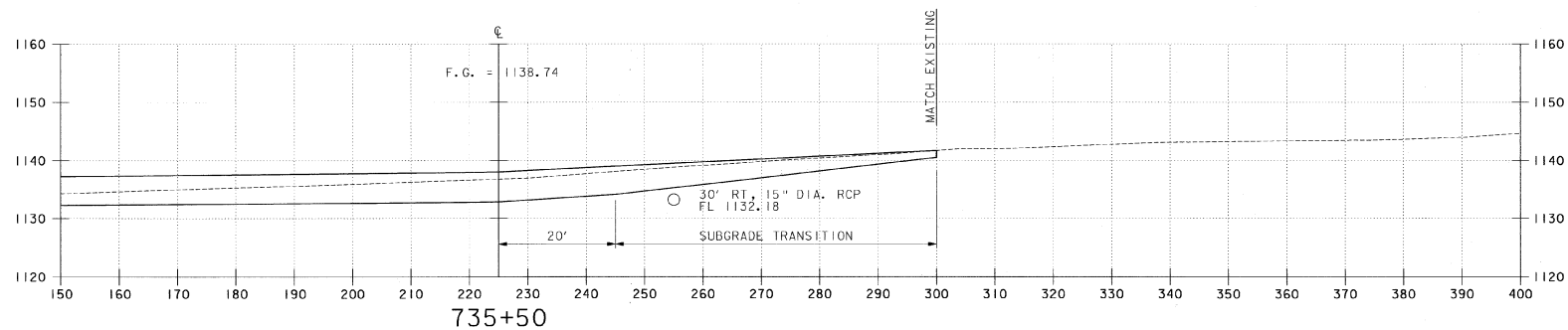
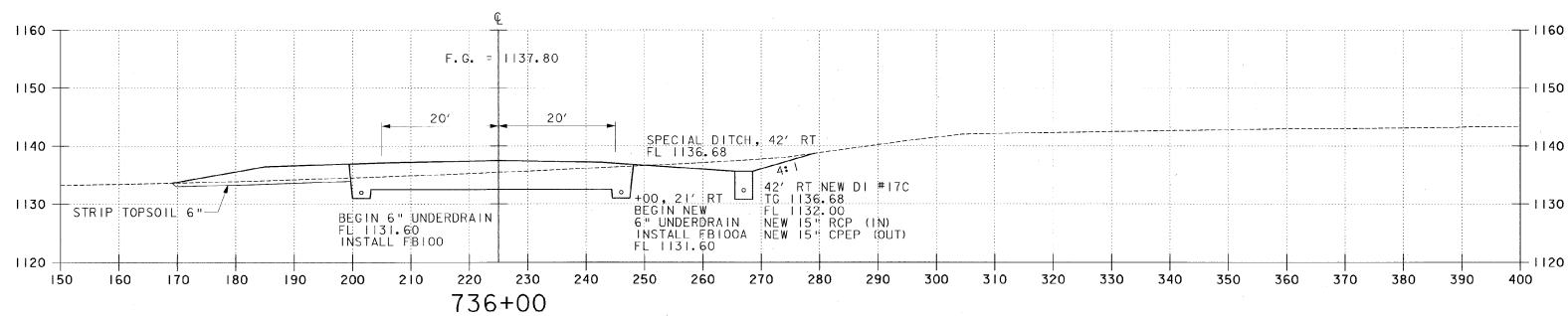
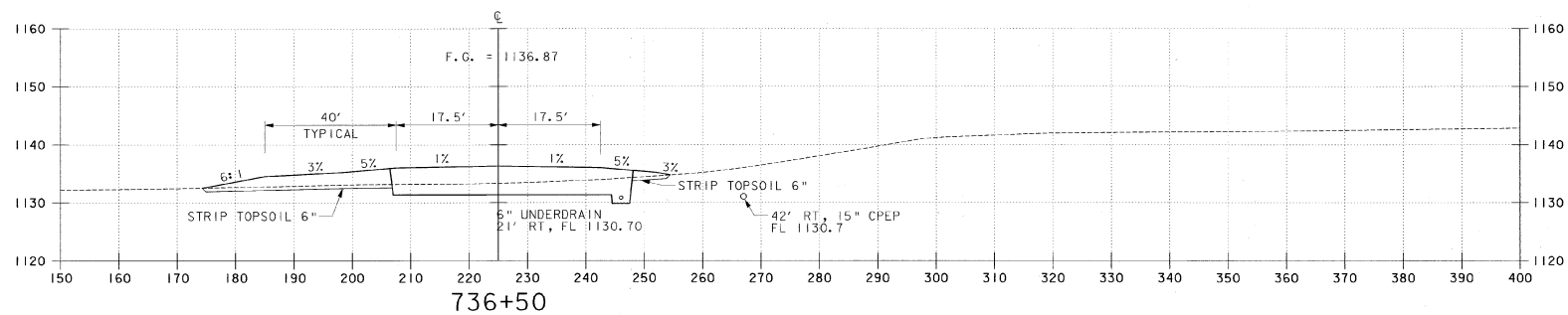
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| Designed by: GMD | Drawn by: MAM    |
| Checked by: BFC  | Approved by: GMD |

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| Scale for | HORIZ. 1" = 10' | VERT. 1" = 10' |
|-----------|-----------------|----------------|

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| Date: | 3/21/01 |
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| Sheet | - Of |
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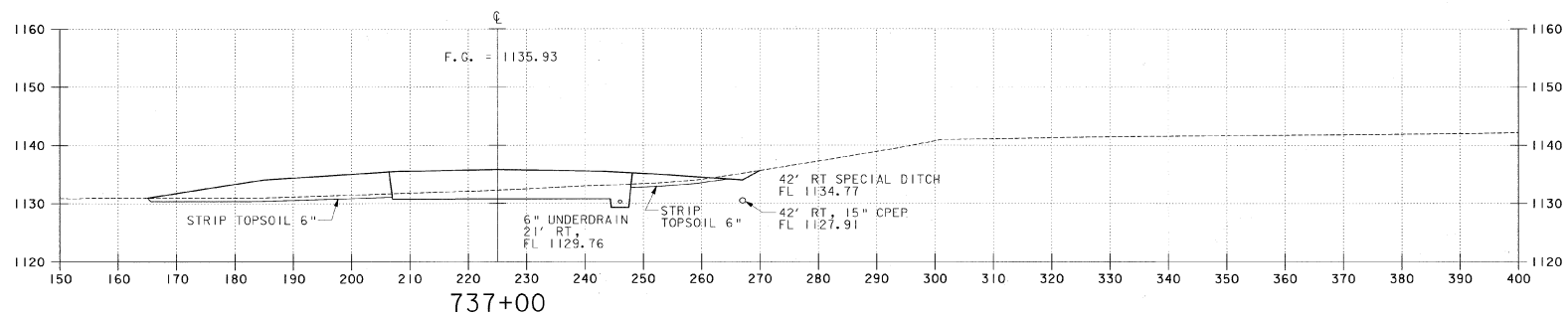
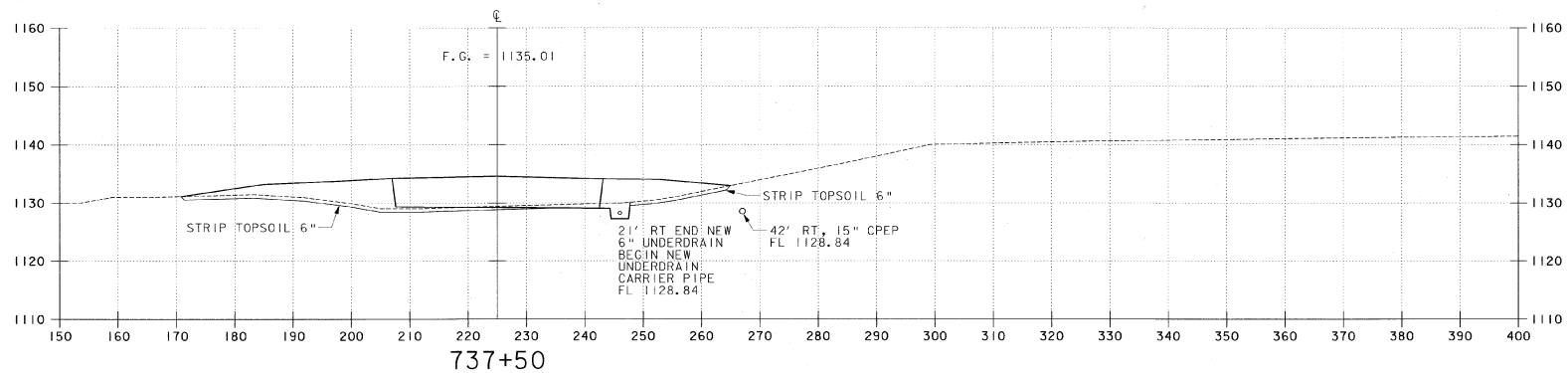
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| Sheet No. | 80 |
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20' LT T/W A 225+00  
BEGIN T/W E CONSTRUCTION

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

|                                                                         |                                              |                                                                                         |                                          |
|-------------------------------------------------------------------------|----------------------------------------------|-----------------------------------------------------------------------------------------|------------------------------------------|
| <b>EDWARD F. KNAPP STATE AIRPORT</b><br>BERLIN, VERMONT                 |                                              | <b>URS</b><br>ONE NORTHWAY LANE<br>LATHAM, NEW YORK                                     |                                          |
| DESIGNED BY: GPD<br>DRAWN BY: MM<br>CHECKED BY: BNC<br>APPROVED BY: GPD | DATE: 3/21/01<br>SHEET: - OF<br>SHEET NO: 81 | DESCRIPTION: TAXIWAY E CROSS SECTION<br>JOB NO: F200001716.01<br>FILE NO: F20180541.dgn | SCALE: HORIZ. 1" = 10'<br>VERT. 1" = 10' |



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

EDWARD F. KNAPP STATE AIRPORT  
BERLIN, VERMONT

TAXIWAY E CROSS SECTION

**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

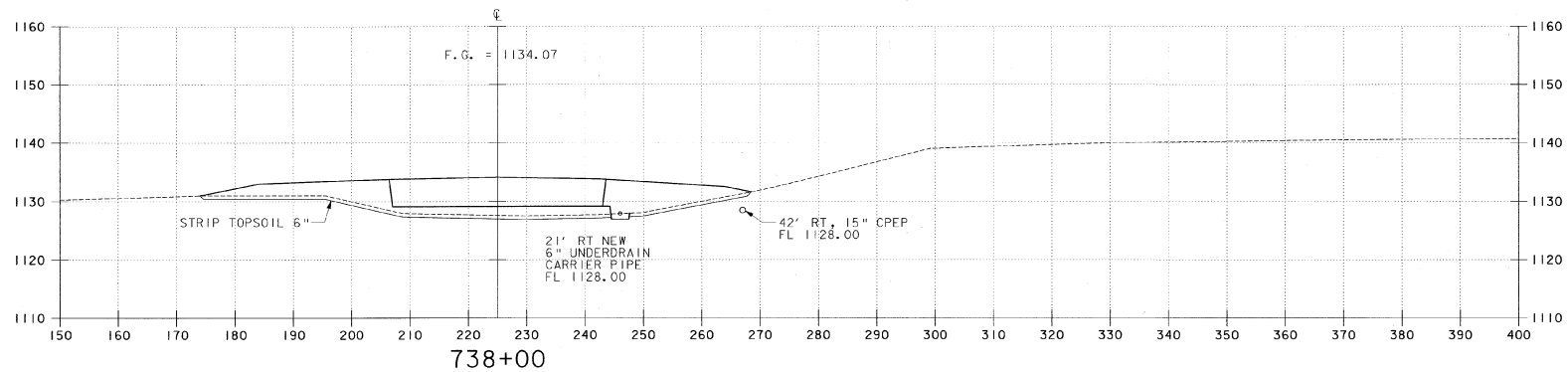
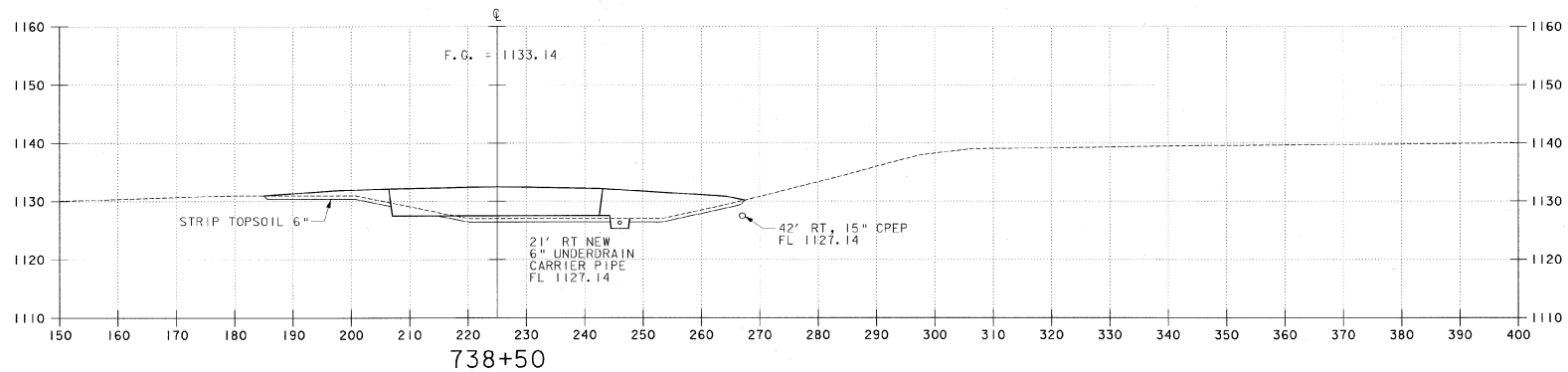
Designed by: GND  
Drawn by: MM  
Checked by: BFC  
Approved by: GND

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

Date: 3/21/01

Sheet - 01

Sheet No.  
**82**



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

EDWARD F. KNAPP STATE AIRPORT  
BERLIN, VERMONT

**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

Designed by CND  
Drawn by MM  
Checked by BNC  
Approved by CND

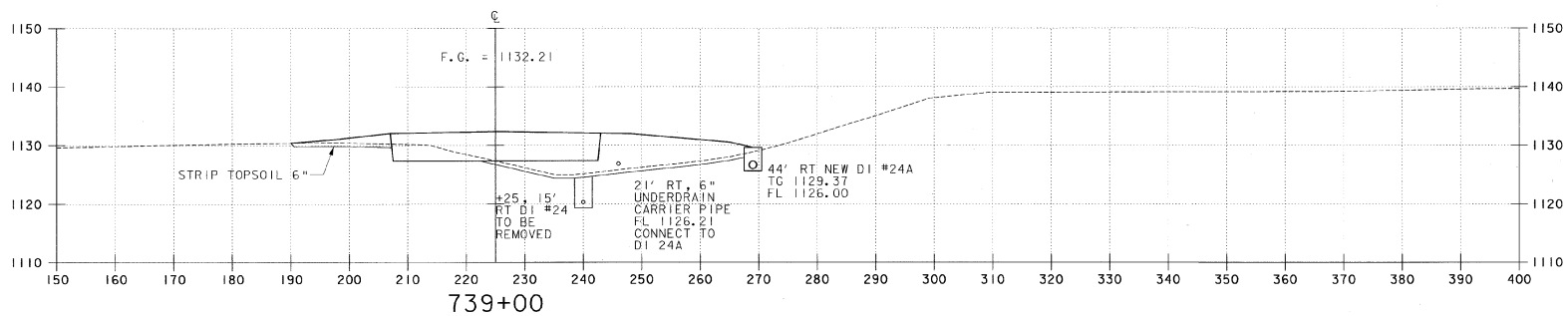
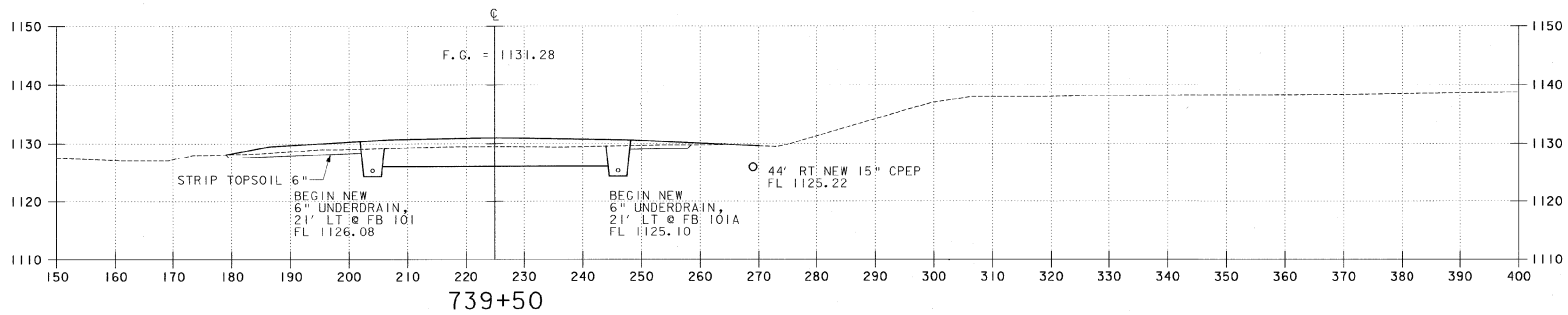
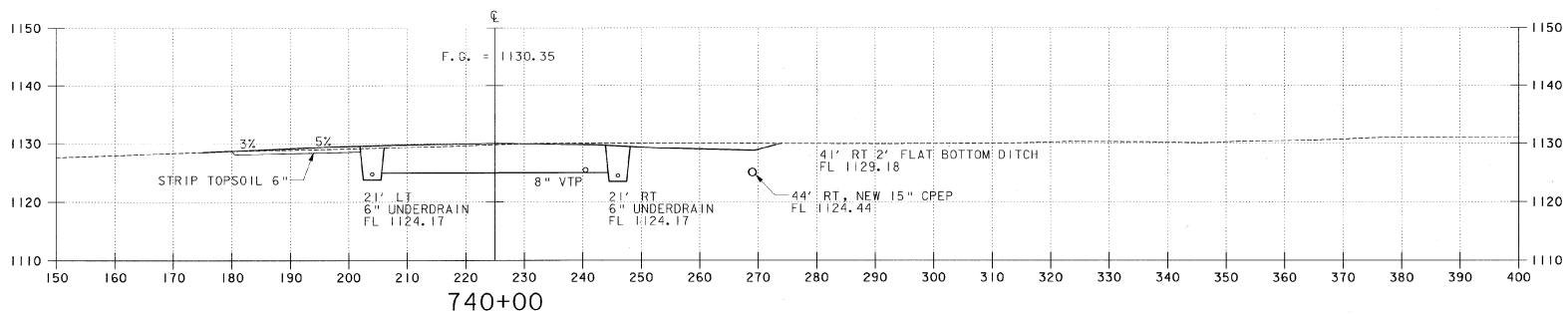
Scale: HORZ. 1" = 10'  
VERT. 1" = 10'

Date: 3/21/01

Sheet - 01

Sheet No.

**83**



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

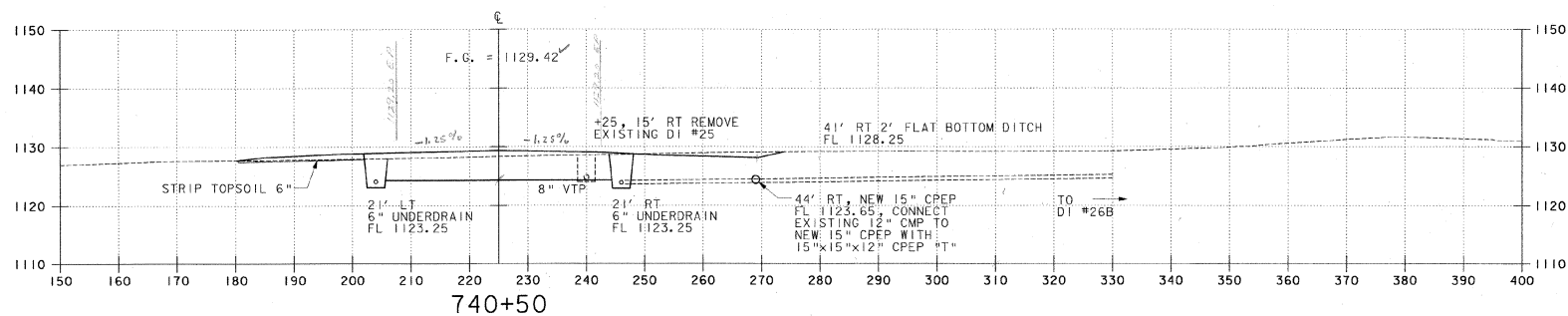
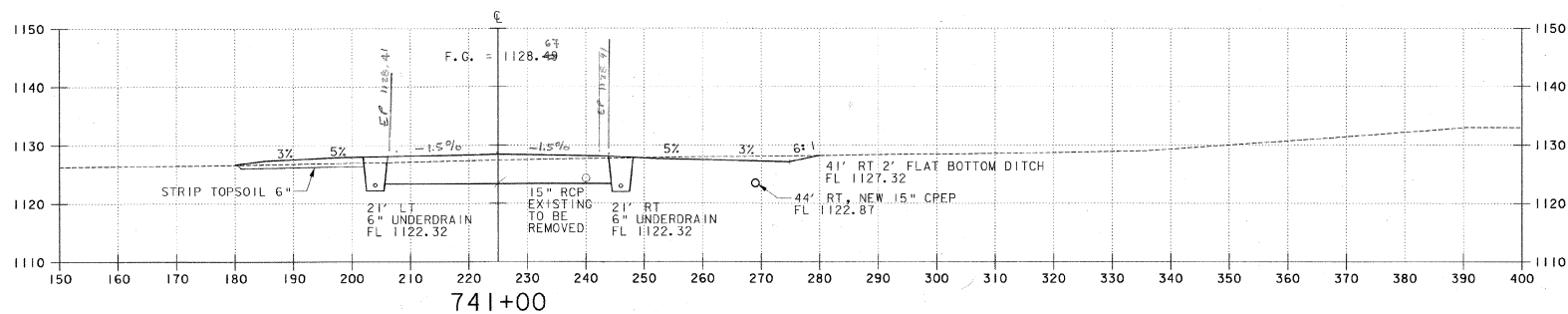
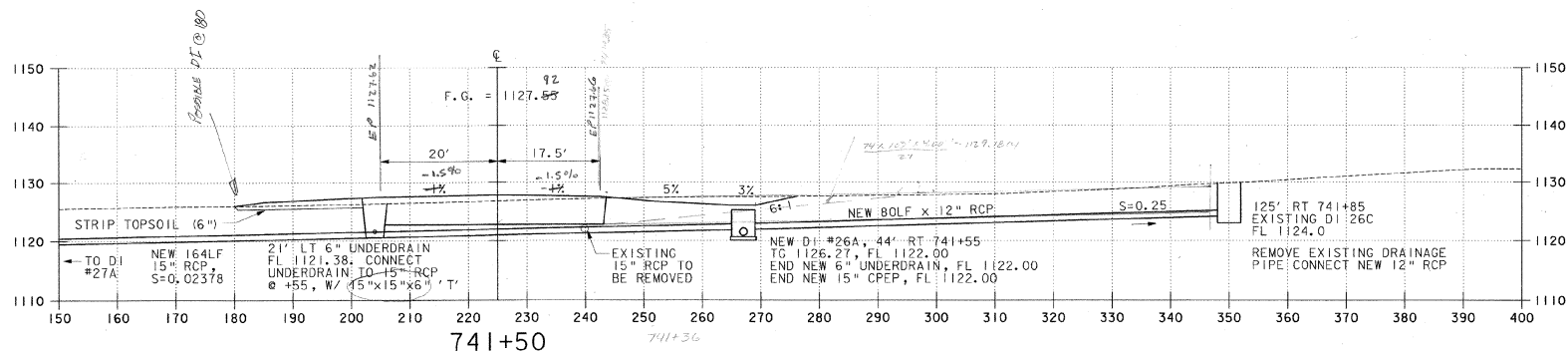
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| DESIGNED BY | MM  |
| DRAWN BY    | MM  |
| CHECKED BY  | BMC |
| APPROVED BY | MM  |

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| Job No. F20000718.01                             | File McF20180x44.dgn |
| EDWARD F. KNAPP STATE AIRPORT<br>BERLIN, VERMONT |                      |
| TAXIWAY E CROSS SECTION                          |                      |

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| URS                                   |
| ONE NORTHWAY LANE<br>LATHAM, NEW YORK |

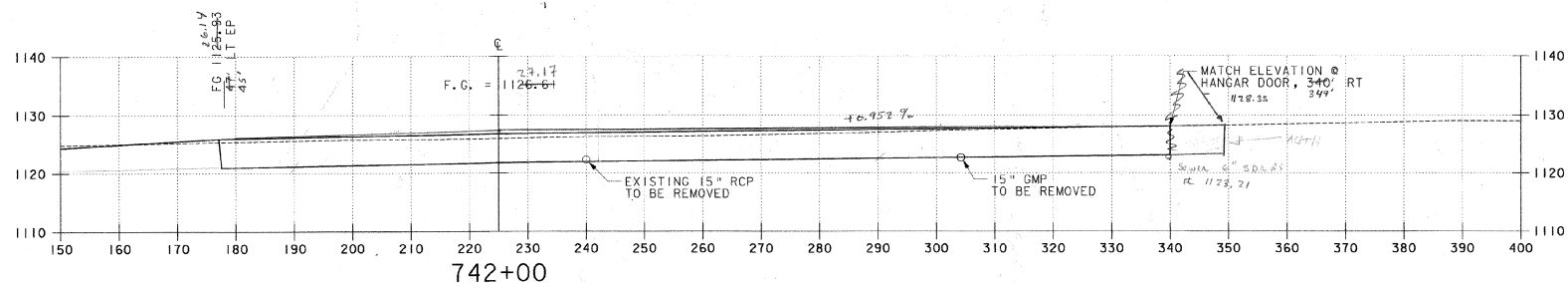
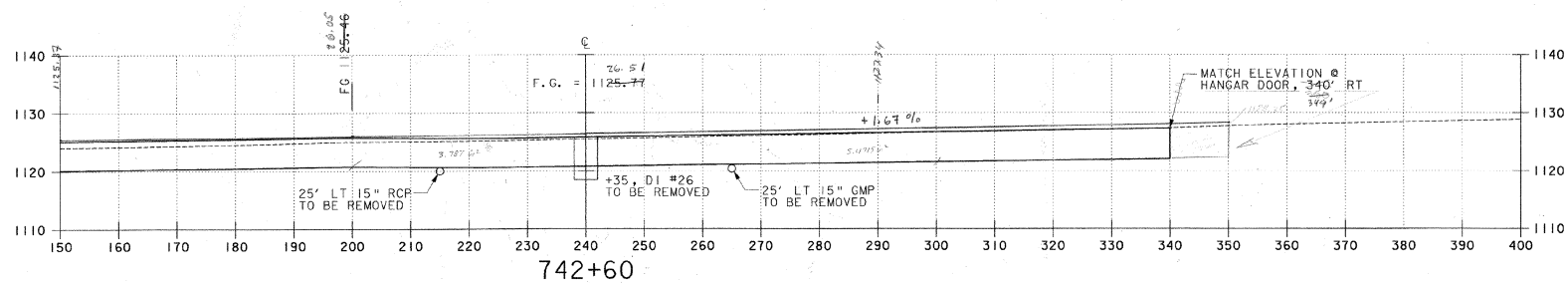
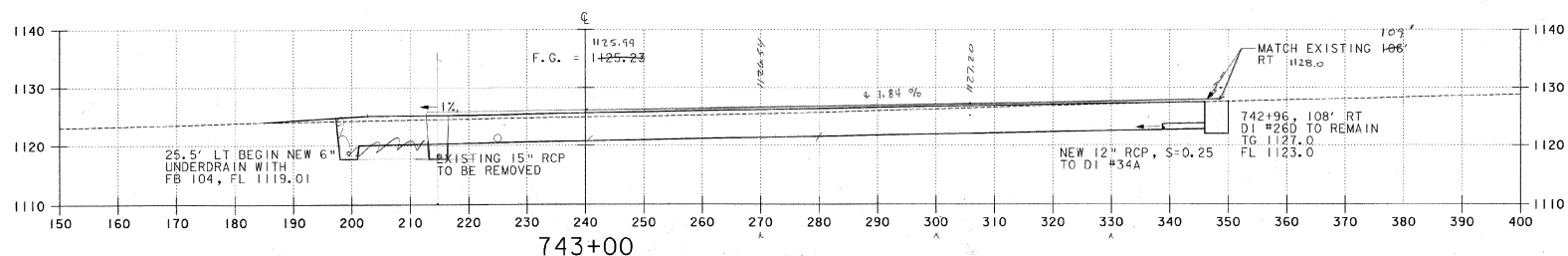
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|-----------------------|----------------|
| Scale: HORZ. 1" = 10' | VERT. 1" = 10' |
| Date: 3/21/01         | Sheet: - Of    |
| Sheet No.             | 84             |



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

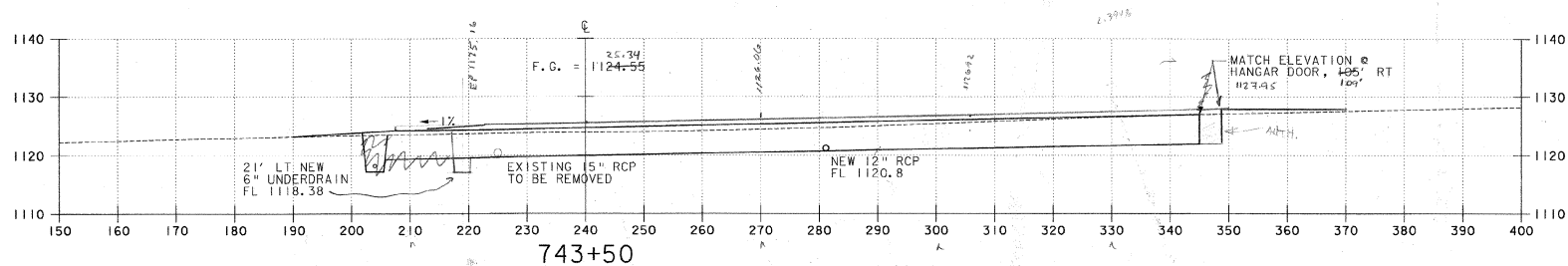
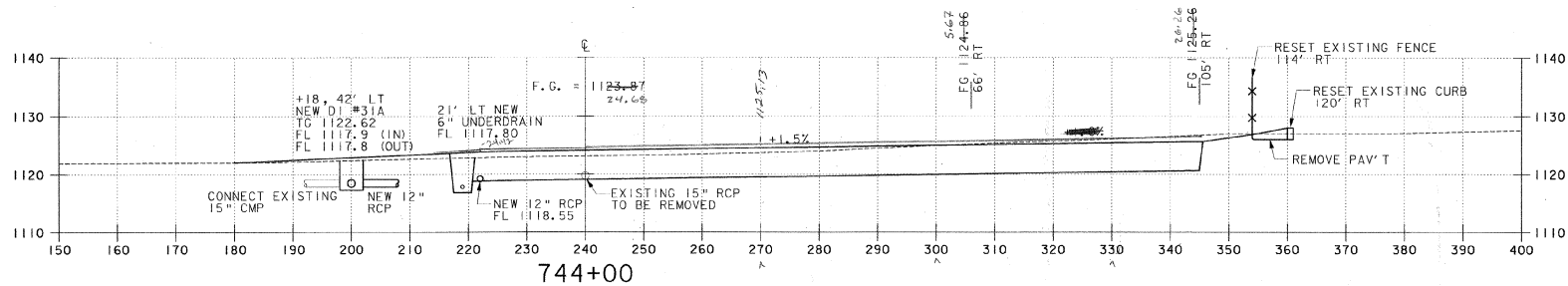
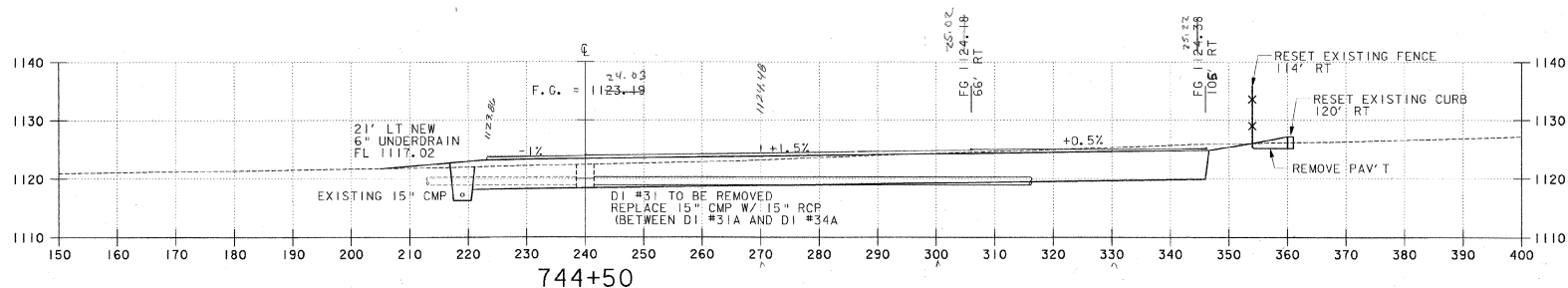
FINISHED GRADES AS SHOWN 4/10/01  
R. J. [Signature]

|                                                                                                      |                                                    |                                                                               |                         |
|------------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------------------------------------------------------------------|-------------------------|
| <b>URS</b><br>ONE NORTHWAY LANE<br>LATHAM, NEW YORK                                                  |                                                    | EDWARD F. KNAPP STATE AIRPORT<br>BERLIN, VERMONT                              | TAXIWAY E CROSS SECTION |
| Designed by [Signature]<br>Drawn by [Signature]<br>Checked by [Signature]<br>Approved by [Signature] | Date: 3/21/01<br>Sheet - 01<br>Sheet No. <b>85</b> | DESCRIPTION<br>REV. DATE<br>Job No. F2000017 (S.01)<br>File No. F201800045.09 |                         |



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

|                                                                      |                                                    |                                                                             |
|----------------------------------------------------------------------|----------------------------------------------------|-----------------------------------------------------------------------------|
| <b>URS</b><br>ONE NORTHWAY LANE<br>LATHAM, NEW YORK                  |                                                    | Job No. F200007116.01<br>File No. F20180046.dgn                             |
| Designed by CND<br>Drawn by MMW<br>Checked by BNC<br>Approved by CND | Date: 3/21/01<br>Sheet - 01<br>Sheet No. <b>86</b> | EDWARD F. KNAPP STATE AIRPORT<br>BERLIN, VERMONT<br>TAXIWAY E CROSS SECTION |

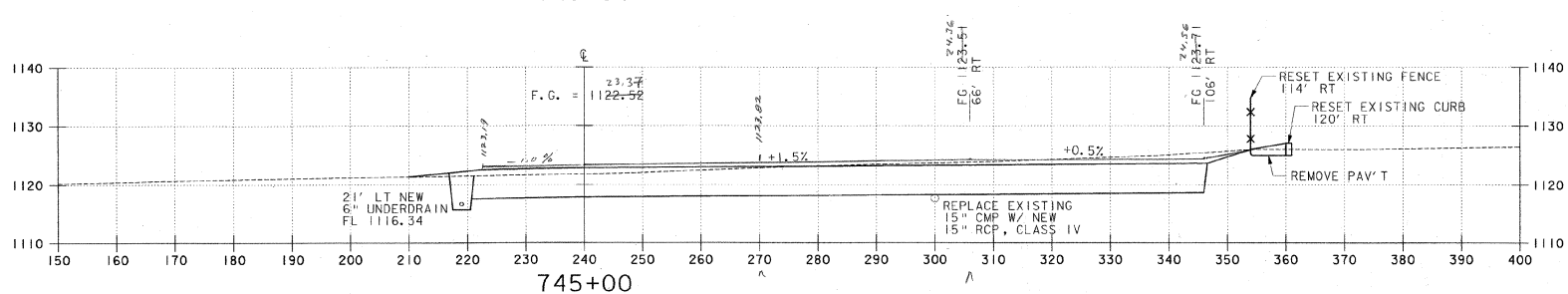
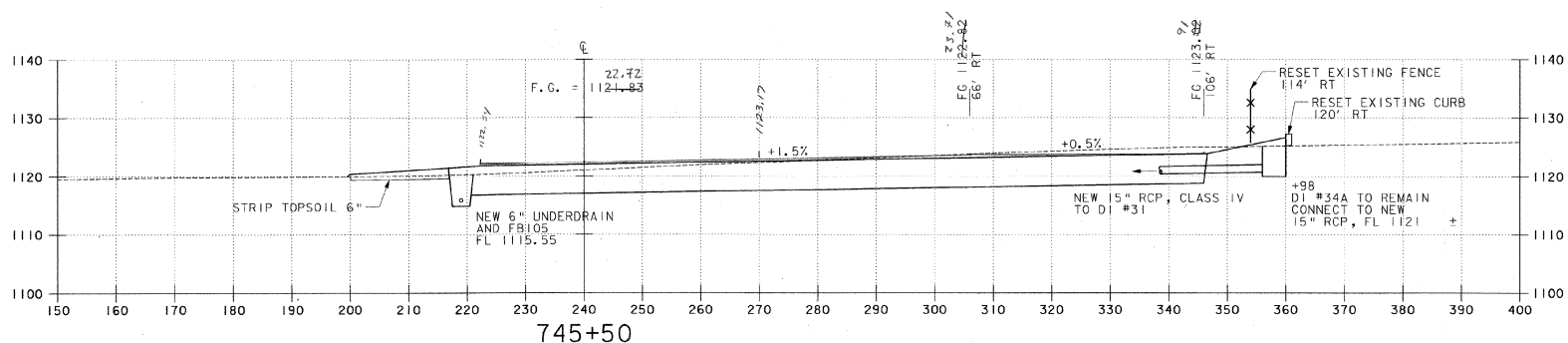
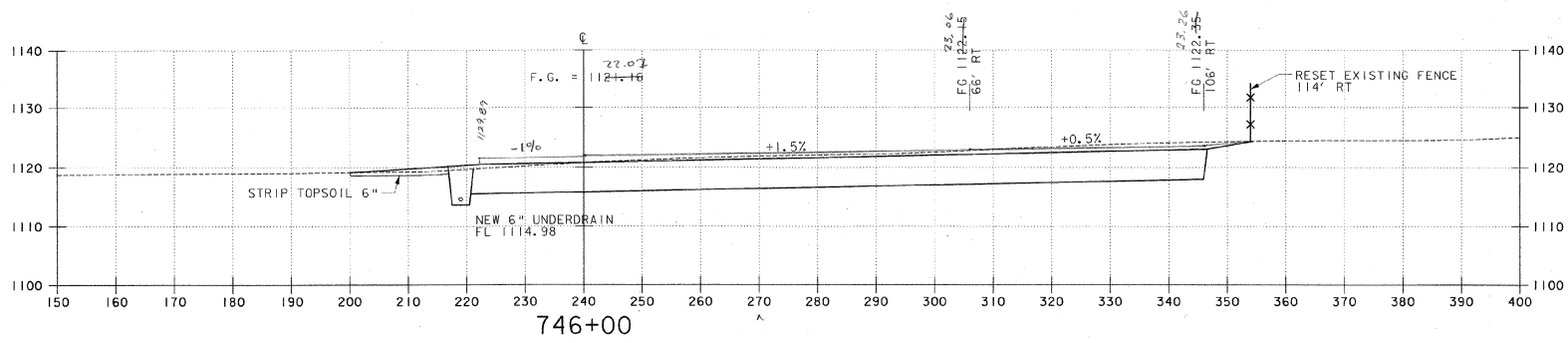


NOTE: OFFSET DISTANCES  
SHOWN ARE RIGHT OF  
RUNWAY 17-35 CENTERLINE

final grades revised 8/10/01  
Jude

|                                                                                                        |                                                            |                                                                                                 |                                                        |                                                                   |
|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------------------------------------------|
| <div>URS</div> <div>ONE NORTHWAY LANE<br/>LATHAM, NEW YORK</div>                                       |                                                            | <div>EDWARD F. KNAPP STATE AIRPORT<br/>BERLIN, VERMONT</div> <div>TAXIWAY E CROSS SECTION</div> | <div>DESCRIPTION</div> <div>DATE</div> <div>REV.</div> | <div>Job No. F200001716.01</div> <div>File No. F20000047.00</div> |
| <div>Designed by CND</div> <div>Drawn by MM</div> <div>Checked by BNC</div> <div>Approved by CND</div> | <div>Scale: HORZ. 1" = 10'</div> <div>VERT. 1" = 10'</div> | <div>Date: 3/21/01</div> <div>Sheet - of</div> <div>Sheet No.</div>                             | <div>87</div>                                          |                                                                   |

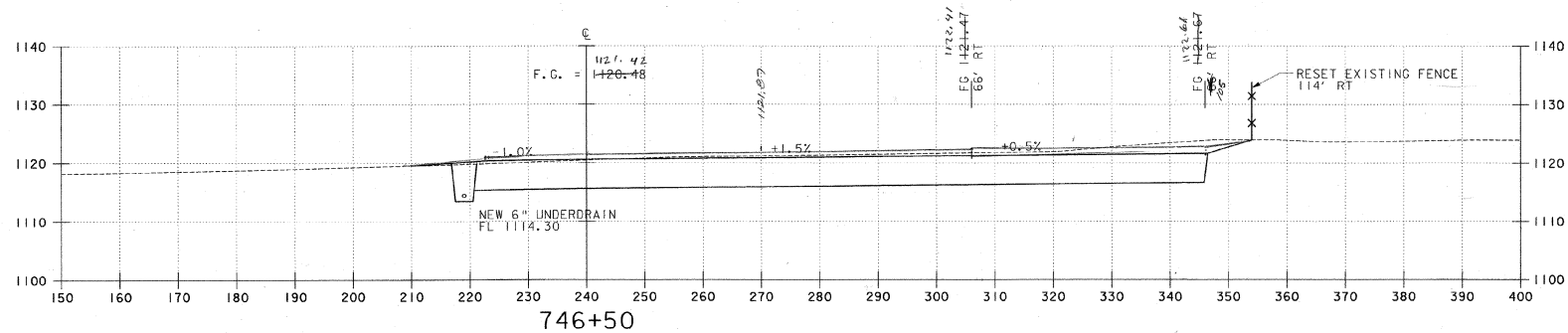
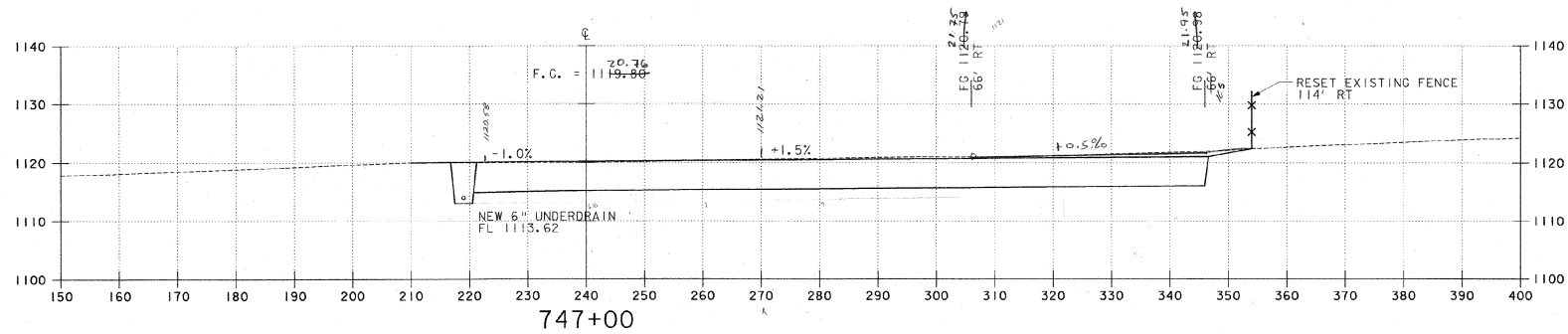
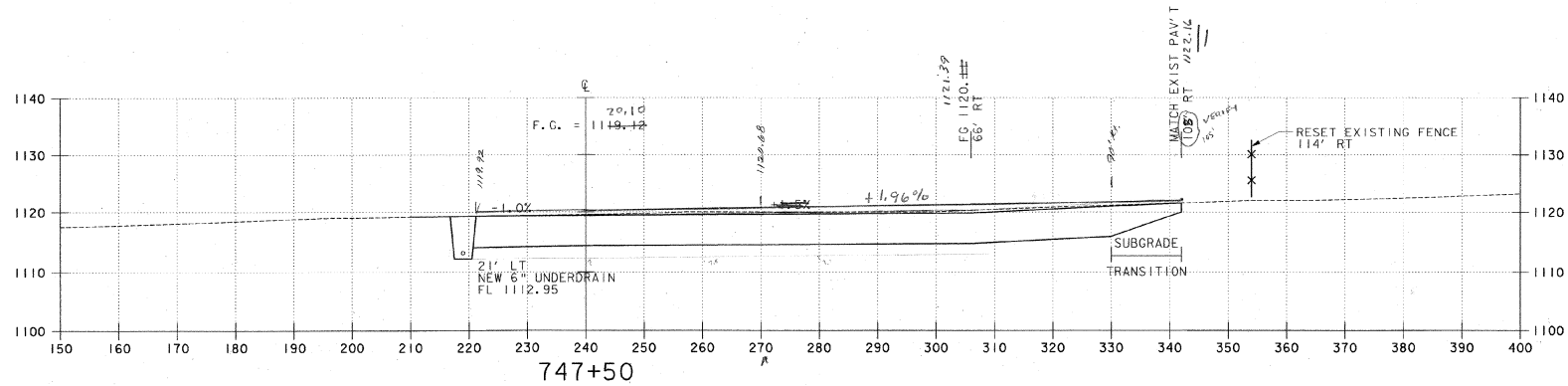




NOTE: OFFSET DISTANCES SHOWN ARE RIGHT OF RUNWAY 17-35 CENTERLINE

finish grades revised 8/10/01  
 J. Smith

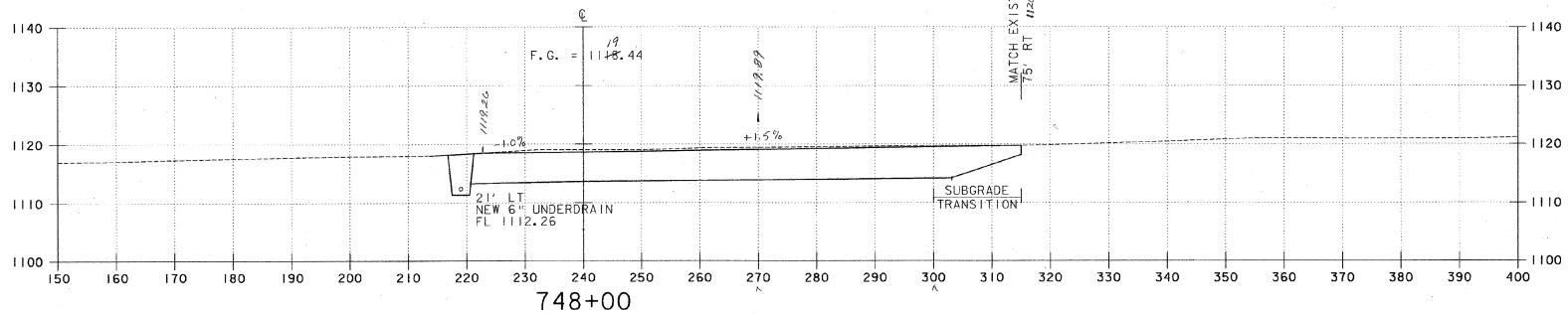
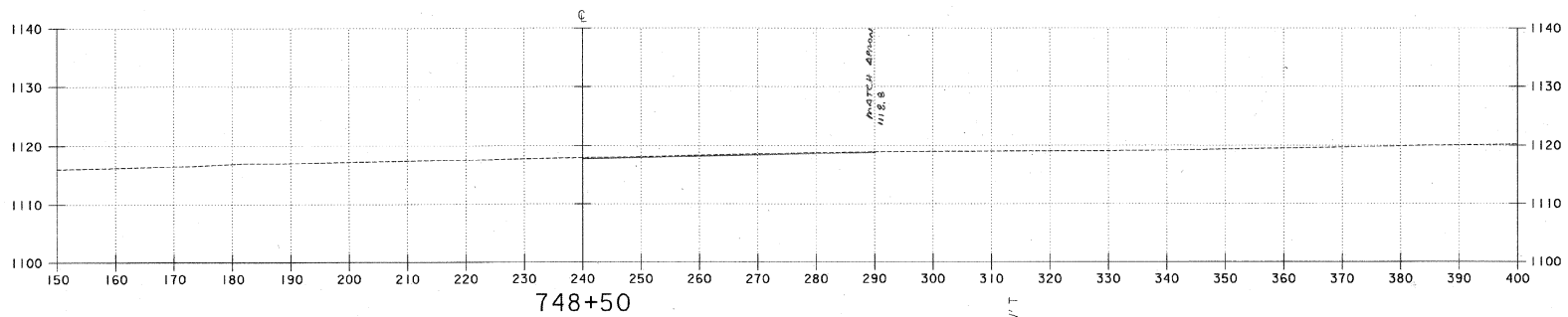
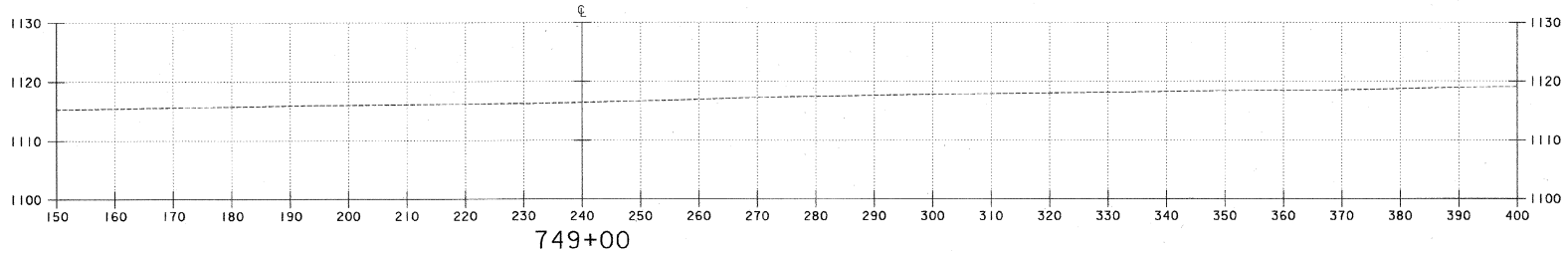
|                                                                          |                                                                                   |
|--------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| <b>URS</b><br>ONE NORTHWAY LANE<br>LATHAM, NEW YORK                      |                                                                                   |
| Designed by: CMB<br>Drawn by: MMU<br>Checked by: BNC<br>Approved by: BNC | Job No. F20000116.01<br>File Mac200000000000                                      |
| Date: 3/21/01<br>Sheet: - 01<br>Sheet No: <b>88</b>                      | <b>EDWARD F. KNAPP STATE AIRPORT</b><br>BERLIN, VERMONT<br>TAXWAY E CROSS SECTION |



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

Finalized Grades Revised 8/10/01 BMD

|                                                  |               |                        |                  |
|--------------------------------------------------|---------------|------------------------|------------------|
| DESIGN                                           |               | DESCRIPTION            |                  |
| REV.                                             | DATE          | REV.                   | DATE             |
| Job No. F200001718.01                            |               | File No. F200001718.01 |                  |
| EDWARD F. KNAPP STATE AIRPORT<br>BERLIN, VERMONT |               |                        |                  |
| TAXIWAY E CROSS SECTION                          |               |                        |                  |
| URS<br>ONE NORTHWAY LANE<br>LATHAM, NEW YORK     |               |                        |                  |
| Designed by: BMD                                 | Drawn by: MAM | Checked by: BNC        | Approved by: BMD |
| Date: 3/21/01                                    | Sheet - 01    |                        |                  |
| Sheet No. 89                                     |               |                        |                  |



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

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

EDWARD F. KNAPP STATE AIRPORT  
BERLIN, VERMONT

TAXIWAY E CROSS SECTION

URS  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

Designed by: GIP  
Drawn by: MAM  
Checked by: GIP  
Approved by: GIP

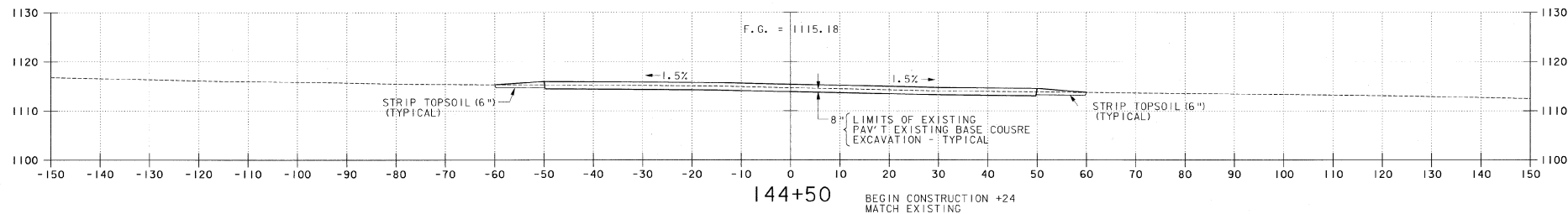
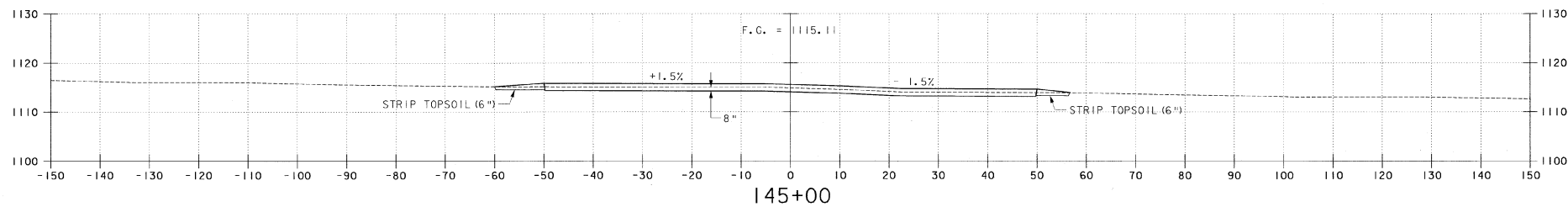
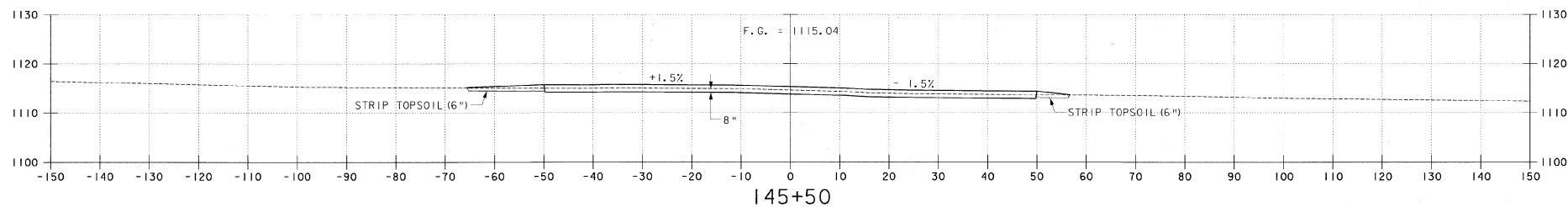
Scale: HORIZ. 1" = 40'  
VERT. 1" = 10'

Date: 3/21/01

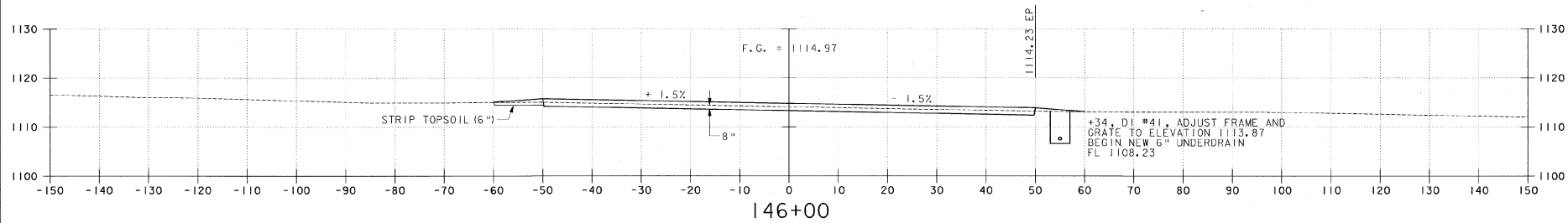
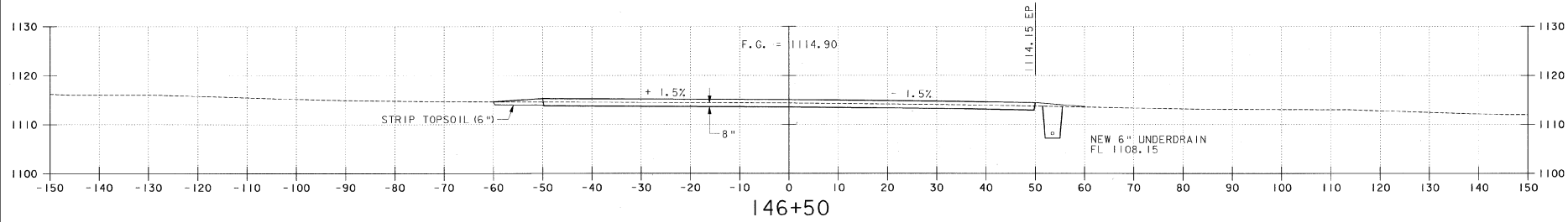
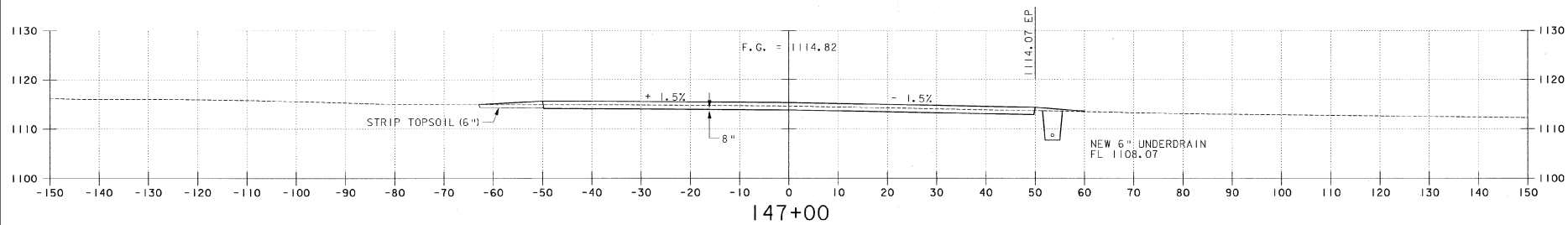
Sheet - 01

Sheet No

90



BEGIN CONSTRUCTION +24  
MATCH EXISTING



EDWARD F. KNAPP STATE AIRPORT  
BERLIN, VERMONT

TAXIWAY 5-23 CROSS SECTION

**URS**  
ONE NORTHWAY LANE  
LATHAM, NEW YORK

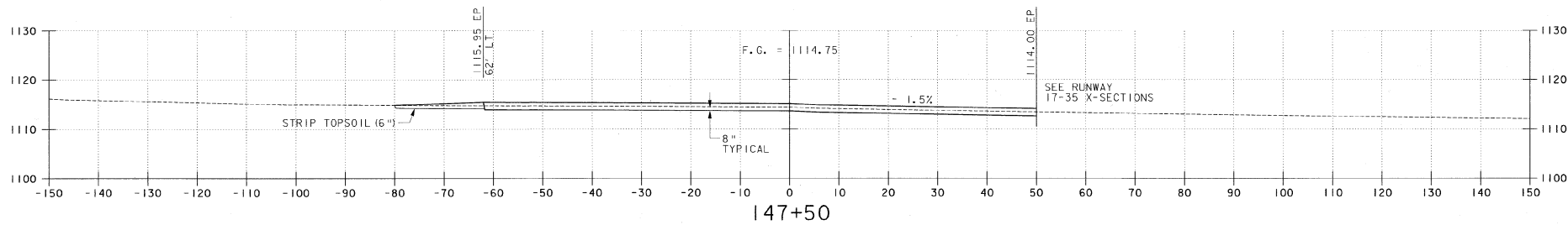
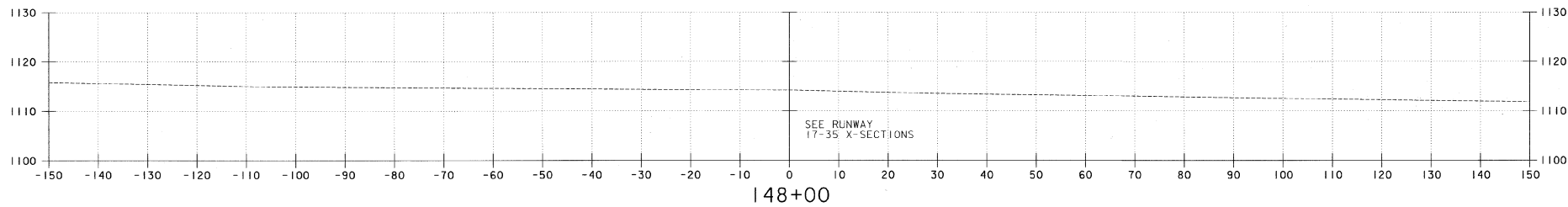
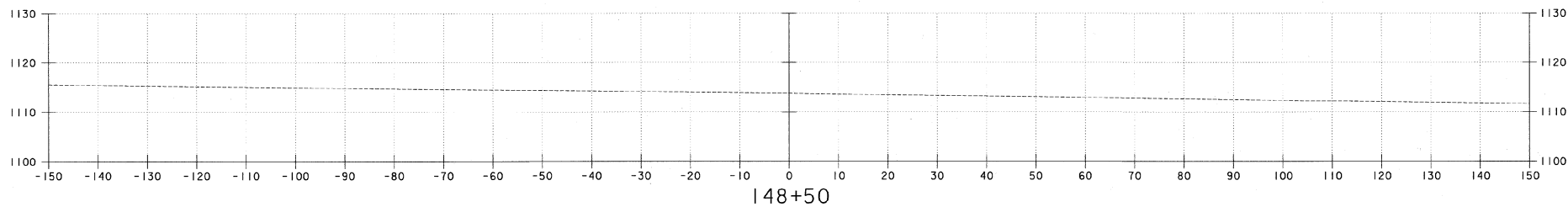
Designed by: **and**  
Drawn by: **MM**  
Checked by: **BFC**  
Approved by: **and**

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

Date: **3/21/01**

Sheet - **01**

Sheet No  
**92**



|                                                          |                               |                                              |
|----------------------------------------------------------|-------------------------------|----------------------------------------------|
| <b>EDWARD F. KNAPP STATE AIRPORT</b><br>BERLIN, VERMONT  |                               | Job No. F20000718.01<br>File Ref20180x45.dgn |
| DESIGNED BY:<br>DRAWN BY:<br>CHECKED BY:<br>APPROVED BY: | DATE:<br>REV:<br>DESCRIPTION: | SHEET NO. 93<br>OF 93                        |
| TAXIWAY 5-23 CROSS SECTION                               |                               |                                              |
| <b>URS</b><br>ONE NORTHWAY LANE<br>LATHAM, NEW YORK      |                               |                                              |

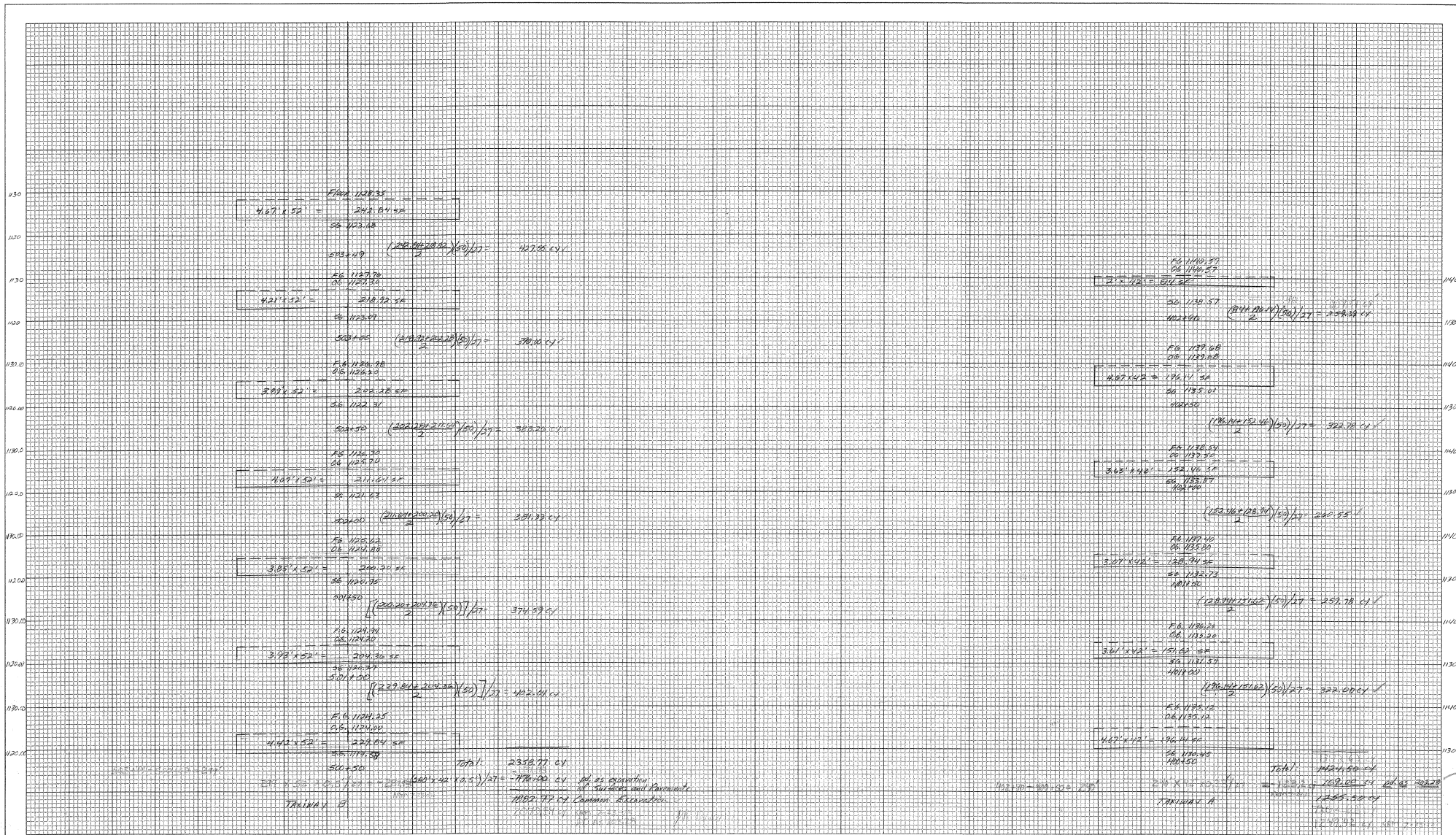


STATE OF VERMONT  
AGENCY OF TRANSPORTATION

[illegible]

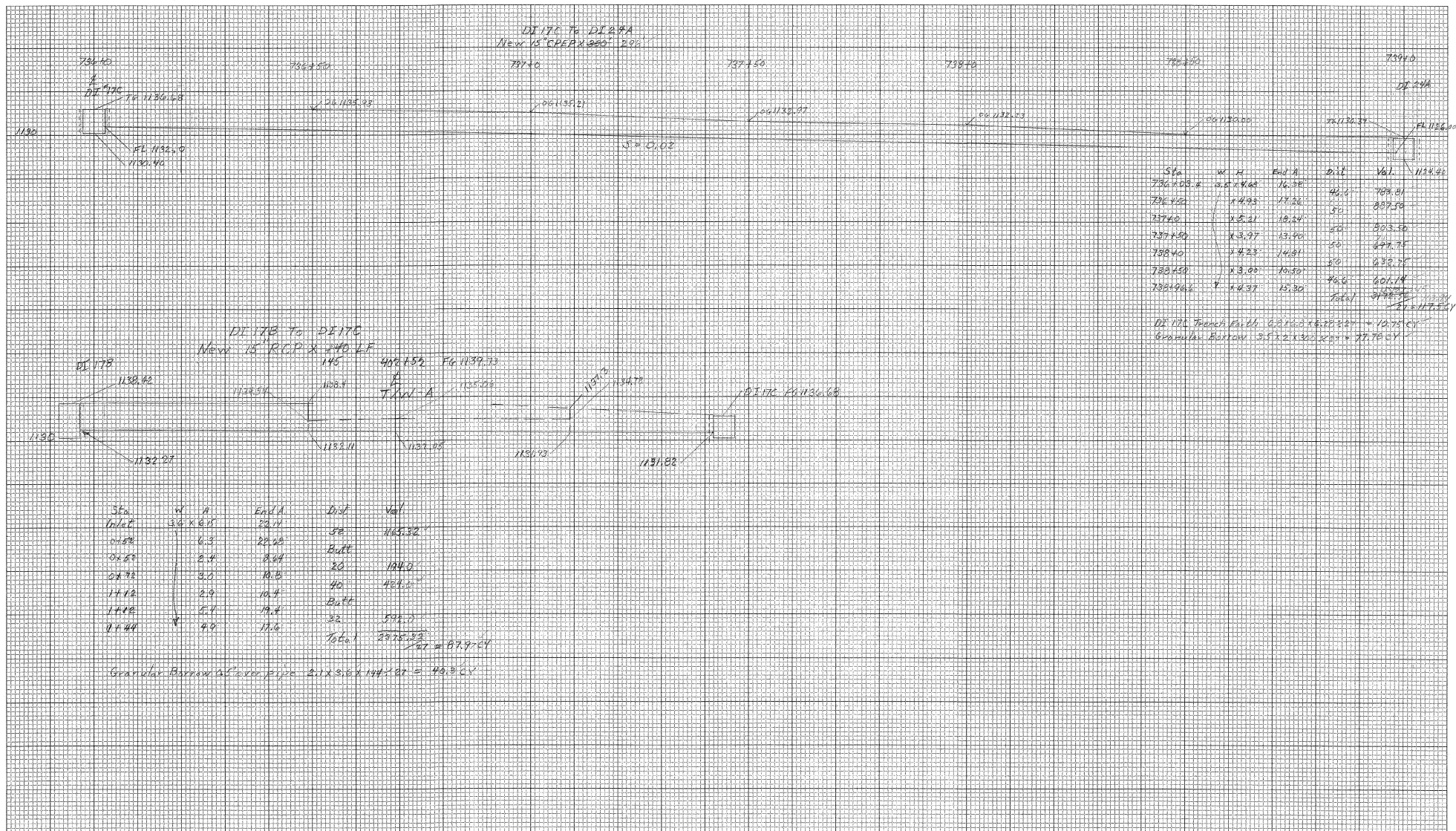






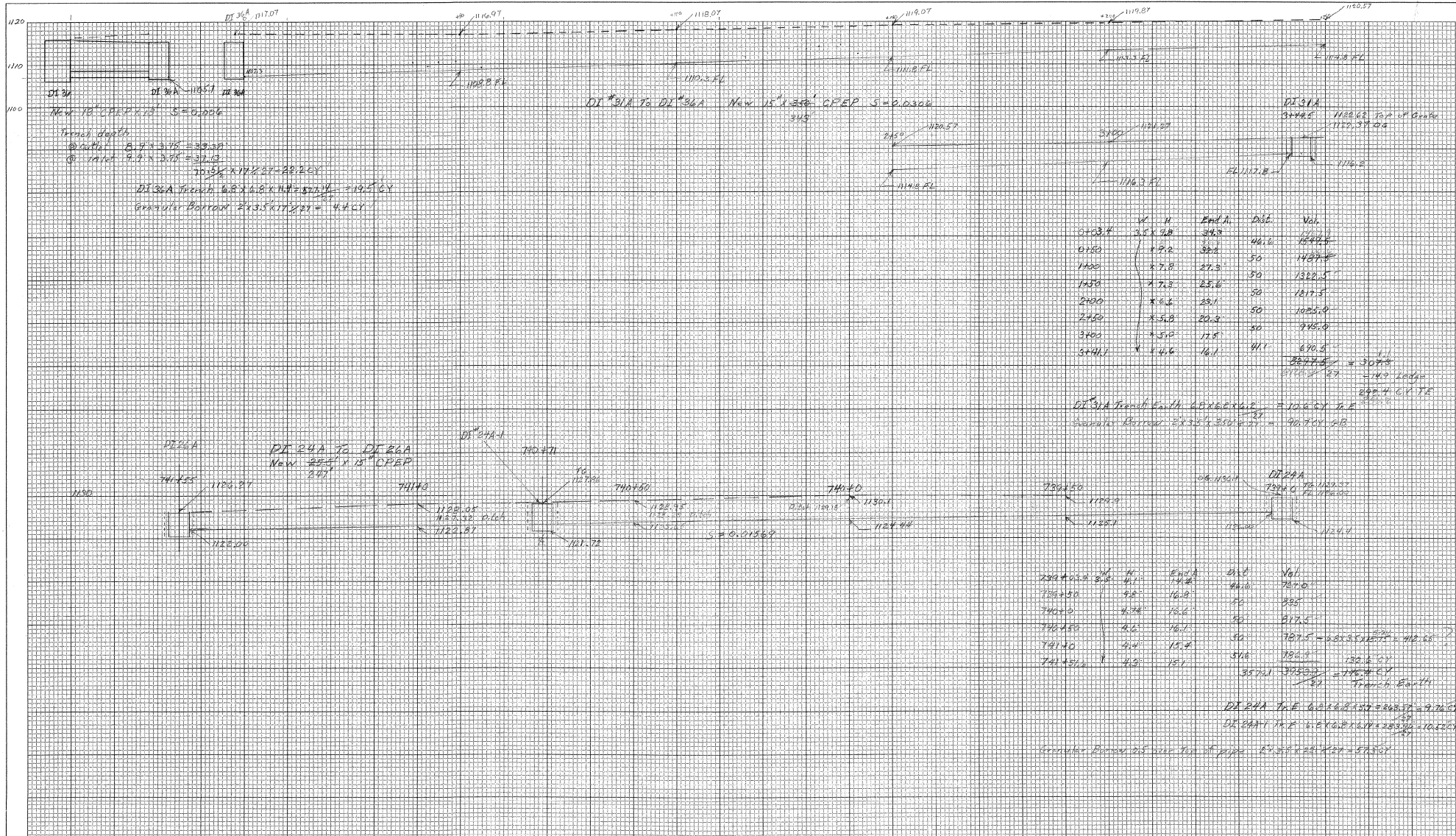
# CROSS SECTION SHEET





# CROSS SECTION SHEET

PROJECT NAME: Berlin Air 04-3064  
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



# CROSS SECTION SHEET

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





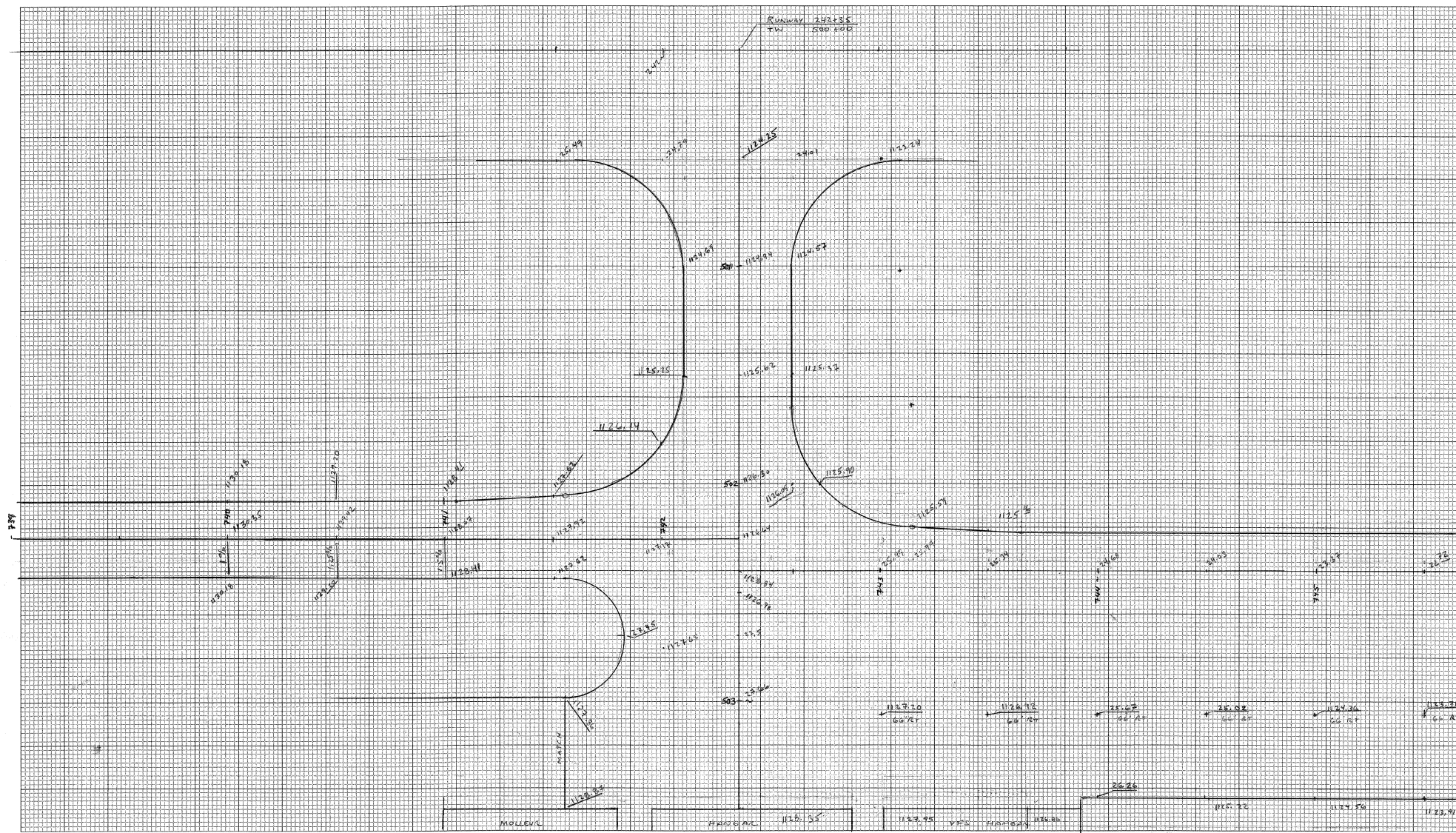












# CROSS SECTION SHEET

1" = 20'

2.7745

|                                                         |                           |
|---------------------------------------------------------|---------------------------|
| 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 ____ |                           |

