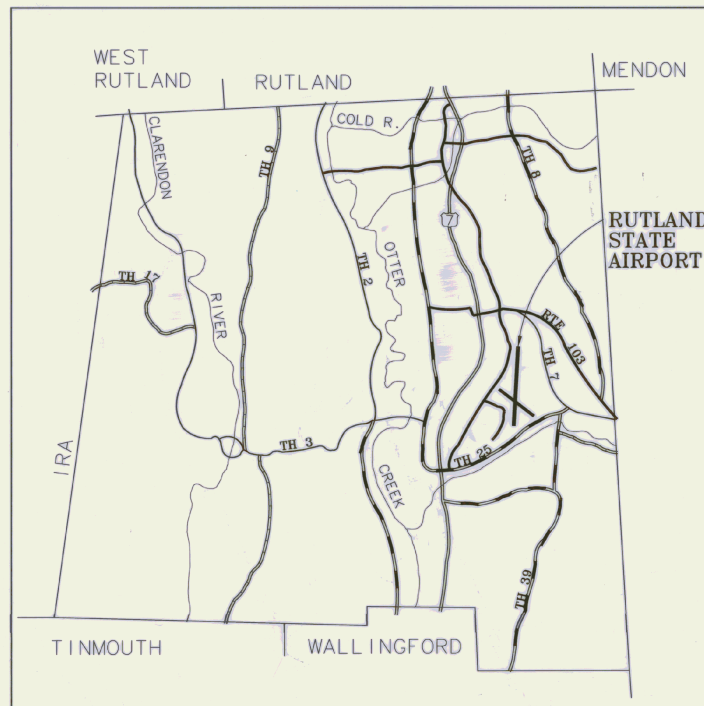


# STATE OF VERMONT AGENCY OF TRANSPORTATION



## PROPOSED IMPROVEMENTS RUTLAND STATE AIRPORT CLARENDON, VERMONT AIP NO. 3-50-0015-11 E.A. 043111

TO INCLUDE: REHABILITATE, LIGHT & MARK RUNWAY 1-19 (100'x5000') &  
RELOCATE LOCALIZER AND SHELTER



LOCATION MAP

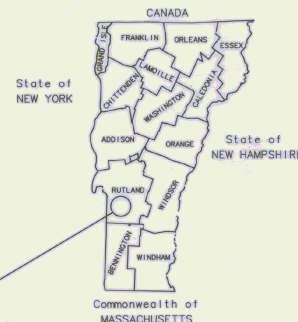
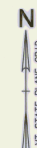
APPROXIMATE SCALE : 1" = 1 MILE

### INDEX OF SHEETS

- 1 TITLE SHEET
- 2 QUANTITY SUMMARY
- 3A&3B DRAINAGE SUMMARY
- 4 GENERAL PROJECT LAYOUT
- 5 GENERAL CONSTRUCTION AND SAFETY NOTES
- 6 PHASING PLAN, NOTES
- 7-9 TYPICAL SECTIONS AND DETAILS
- 10-12 RUNWAY 1-19 PROFILE
- 13 TAXIWAY C,D,E & RUNWAY 13-13 PROFILE
- 14-18 PAVING PLANS AND GEOMETRIC LAYOUT
- 19-23 GRADING & DRAINAGE PLANS
- 24 DRAINAGE DETAILS
- 25 EROSION CONTROL DETAILS
- 26 PAVEMENT MARKING PLAN
- 27-30 RUNWAY LIGHTING PLANS
- 31-33 RUNWAY LIGHTING DETAILS
- 34 VASI MOUNTING DETAILS
- 35-41 ODALS DETAILS
- 42-44 BORING LOGS
- 45 LOCALIZER/DME BUILDING RELOCATION
- 46-57 RUNWAY 1-19 CROSS SECTIONS
- 58-59 TAXIWAY D X-SECTIONS
- 60-65 LOCALIZER REFERENCE DRAWINGS

### VAOT STANDARD DRAWINGS

- |       |                                         |
|-------|-----------------------------------------|
| AP-3  | DUCT AND DUCT MARKER DETAILS            |
| AP-10 | RUNWAY MARKING DETAILS                  |
| AP-11 | TAXIWAY MARKING DETAILS                 |
| B-5   | EMBANKMENTS ON EARTH SLOPE              |
| D-2   | REINFORCED CONCRETE HEADWALL            |
| D-6   | REINFORCED CONCRETE DROP INLET W/ GRATE |
| D-11  | CAST IRON GRATE-TYPE A                  |
| D-16  | ENERGY DISSIPATOR FOR CULVERTS          |
| E-100 | CONSTRUCTION APPROACH SIGNS             |
| E-121 | STANDARD SIGN PLACEMENT                 |



PROJECT SITE

### A.A.I.A. OF 1982 SECTION 509(d) ASSURANCES

IN COMPLIANCE WITH THE AIRPORT AND AIRWAYS IMPROVEMENT ACT OF 1982, SECTION 509 (d) AND THE SPONSOR'S CERTIFICATION, DATED 5/5/97, THESE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED IN ACCORDANCE WITH CURRENT FAA STANDARDS IDENTIFIED IN F.A.R. PART 152. ANY DEVIATION FROM THE FAA STANDARD WERE APPROVED IN A LETTER BY THE FAA, DATED 5/5/97, AND ARE DISCUSSED IN THE ENGINEERING REPORT ACCOMPANYING THESE PLANS.

*[Signature]*  
DESIGN ENGINEER

5/5/97  
DATE

### AS BUILT PLANS

I hereby certify that all the construction required by this set of drawings has been accomplished as indicated herein.

By *[Signature]* *[Signature]*  
Date 12/31/98

URS Greiner, Inc.



APPROVED *[Signature]* DATE 5-20-97  
DIRECTOR OF RAIL, AIR, & PUBLIC TRANSPORTATION

DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

APPROVED \_\_\_\_\_ DATE \_\_\_\_\_  
CHIEF, AIRPORT DIVISION

CLARENDON (RUTLAND ST. AIC)  
AIR 04-3111 C/2

1997 904106

# QUANTITY SHEET

| SUMMARY OF ESTIMATED QUANTITIES |      |                                            |               | AB                 |
|---------------------------------|------|--------------------------------------------|---------------|--------------------|
| QUANTITIES<br>GRAND TOTAL       | UNIT | ITEMS                                      | ITEM<br>NO.   | Finals<br>Rounding |
| 12                              | EA   | CLEARING - LARGE TREES                     | 201.16        | 5                  |
| 112,000                         | CY   | COMMON EXCAVATION                          | 203.15        |                    |
| 250                             | CY   | SOLID ROCK EXCAVATION                      | 203.16        | 54.24              |
| 23,000                          | CY   | GRANULAR BORROW                            | 203.32        | 27,224             |
| 23,000                          | SY   | FINE GRADE                                 | 203.40        | 28,115             |
| 7,000                           | CY   | TRENCH EXCAVATION OF EARTH                 | 204.20        |                    |
| 100                             | CY   | TRENCH EXCAVATION OF ROCK                  | 204.21        | 0                  |
| 4,000                           | SY   | COLD PLANING                               | 210.10        | 235.9              |
| 350                             | CY   | SUBBASE OF GRAVEL, COURSE GRADED           | 301.25        | 0                  |
| 70                              | CY   | SUBBASE OF GRAVEL, FINE GRADED             | 301.26        | 0                  |
| 180                             | TON  | BITUMINOUS CONCRETE PAVEMENT               | 406.25        | 103.36             |
| 13,000                          | TON  | BIT. CONCRETE PAVEMENT (P-401) (P-58-34)   | 406.25 MOD. 1 | 13,331.64          |
| 500                             | LF   | JOINT SEALER, HOT POURED                   | 524.11        | 53.2               |
| 8,500                           | LF   | CRACK REPAIR, TYPE I (P605)                | 524.11 MOD. 1 | 912.4              |
| 7,000                           | LF   | CRACK REPAIR, TYPE II (P605)               | 524.11 MOD. 2 | 11,468             |
| 2,000                           | LF   | CRACK REPAIR, TYPE III (P605)              | 524.11 MOD. 3 | 145.5              |
| 1                               | EA   | RELOCATE LOCALIZER                         | 529.20 MOD. 1 | 1                  |
| 1,300                           | LF   | 15" CSP, 0.070"                            | 601.0011      |                    |
| 675                             | EA   | 15" RCP, CLASS IV                          | 601.0811      | 291                |
| 5                               | EA   | 15" CSP, END SECTION                       | 601.6010      | 568                |
| 1                               | EA   | 15" RCP, END SECTION                       | 601.6810      | 0                  |
| 9                               | EA   | CONCRETE DI/CB W/ CAST IRON FRAME & GRATE  | 604.10        |                    |
| 10                              | EA   | CHANGE ELEVATION OF D.I./C.B.              | 604.40        | 11                 |
| 9,200                           | LF   | 6" UNDERDRAIN                              | 605.10        | 736.2              |
| 500                             | LF   | 6" UNDERDRAIN CARRIER PIPE                 | 605.20        | 889                |
| 38                              | EA   | UNDERDRAIN FLUSHING BASINS                 | 605.95        | 36                 |
| 24                              | HOUR | ALL PURPOSE EXCAVATOR RENTAL, TYPE I       | 608.25        |                    |
| 100                             | MGAL | DUST CONTROL WITH WATER                    | 609.10        | 465.9              |
| 40                              | CY   | STONE FILL, TYPE II                        | 613.11        |                    |
| 1,150                           | LF   | 3" PVC SEWER PIPE                          | 628.35        | 932                |
| 1                               | LS   | TRANSFER TO NEW SYSTEM - SANTARY SEWER     | 628.42        | 1                  |
| 1                               | LS   | FIELD OFFICE - ENGINEERS                   | 631.10        | 1                  |
| 1                               | LS   | MOBILIZATION                               | 635.10        | 1                  |
| 56,000                          | LF   | 6" WHITE LINE (P620)                       | 646.20 MOD. 1 | 32,905             |
| 3,600                           | LF   | 6" YELLOW LINE (P620)                      | 646.21 MOD. 1 | 4096               |
| 2                               | EA   | SYMBOL (1) (P620)                          | 646.30 MOD. 1 | 2                  |
| 1                               | EA   | SYMBOL (9) (P620)                          | 646.30 MOD. 2 | 1                  |
| 24,000                          | LF   | 6" TEMPORARY WHITE LINE (P620)             | 646.60 MOD. 1 | 33,576             |
| 3,000                           | LF   | 6" TEMPORARY YELLOW LINE (P620)            | 646.61 MOD. 1 | 10,500             |
| 4                               | EA   | TEMPORARY SYMBOL (1) (P620)                | 646.70 MOD. 1 | 4                  |
| 2                               | EA   | TEMPORARY SYMBOL (9) (P620)                | 646.70 MOD. 2 | 3                  |
| 2,000                           | SF   | REMOVAL OF EXIST. PAV'T MARKING (P621)     | 646.82        | 0                  |
| 20,000                          | SY   | GEOTEXTILE FOR ROADBED SEPARATOR           | 649.11        | 29,033             |
| 10,000                          | SY   | GEOTEXTILE FOR UNDERDRAIN TRENCH           | 649.41        | 8,516              |
| 600                             | SY   | GEOTEXTILE FOR SILT FENCE                  | 649.51        | 678                |
| 2,900                           | LB   | SEED                                       | 651.15        | 423.5              |
| 24,000                          | LB   | FERTILIZER                                 | 651.18        | 23,800             |
| 95                              | TON  | AGRICULTURAL LIMESTONE                     | 651.20        | 100.6              |
| 500                             | EA   | HAY BALES FOR EROSION CONTROL              | 651.26        | 6,281              |
| 95                              | TON  | MULCH                                      | 651.25        | 108.49             |
| 12,600                          | CY   | TOPSOIL (2")                               | 651.35        | 13,822             |
| 500                             | SY   | EROSION MATTING                            | 654.10        | 840.2              |
| 1                               | EA   | RELOCATE ODALS #1R & #1L (L-125)           | 678.18 MOD. 1 | 1                  |
| 1                               | EA   | RELOCATE ODALS UNIT #13 (L-102)            | 678.17 MOD. 1 | 1                  |
| 1                               | EA   | RELOCATE ODALS UNIT #20 (L-102)            | 678.17 MOD. 2 | 1                  |
| 23,500                          | LF   | 2" DIA. PVC ELECTRICAL CONDUIT (L-110)     | 678.21 MOD. 1 | 17,907             |
| 1                               | EA   | TOWER FOR ODALS UNIT #3 (L-103)            | 679.45 MOD. 1 | 1                  |
| 1                               | EA   | TOWER FOR ODALS UNIT #20 (L-103)           | 679.45 MOD. 2 | 1                  |
| 6,100                           | CY   | CRUSHED AGGREGATE BASE COURSE (P-209)      | 854.04        | 6887               |
| 16,000                          | LF   | CABLE TRENCH (L-108)                       | 864.04        | 13,402             |
| 29,000                          | LF   | 1/C #8, 600 OR 5000V, L-824C (L-108)       | 864.05        | 29,200             |
| 7,000                           | LF   | 1/C #4, 600V, L-824C (L-108)               | 864.05 MOD. 2 | 4,410              |
| 2,500                           | LF   | 6 PAIR #19 CONTROL CABLE (L-108)           | 864.05 MOD. 3 | 2,500              |
| 16,500                          | LF   | #8 OR #6 COUNTERPOISE (L-108)              | 864.06 MOD. 1 | 13,672             |
| 1                               | LS   | INSTALLATION OF VAULT EQUIPMENT (L-109)    | 864.07        | 1                  |
| 180                             | LF   | 4 WAY x 4" DIA. UC ELECTRICAL DUCT (L-110) | 864.09        | 125                |
| 89                              | EA   | MIRLS, BASE MOUNTED (L-125)                | 864.10        | 66                 |
| 3                               | EA   | MIRLS, BASE MOUNTED, IN PAV'T (L-125)      | 864.10 MOD. 1 | 4                  |
| 13                              | EA   | MIRLS, BASE MOUNTED (L-125)                | 864.11        | 16                 |
| 1                               | EA   | RELOCATE VASI-4 (L-125)                    | 864.12 MOD. 1 | 1                  |
| 1                               | EA   | TEMPORARY THRESHOLD (L-125 & P-620)        | 864.15 MOD. 1 | 0                  |
| 20                              | EA   | RELOCATE AIRFIELD SIGNS (L-125)            | 864.14 MOD. 1 | 15                 |
| 1                               | LS   | TESTING EQUIPMENT - CONCRETE               | 631.16        | 1                  |
| 1                               | LS   | TESTING EQUIPMENT - BITUMINOUS             | 631.17        | 1                  |
| 1                               | LS   | FIELD OFFICE - TELEPHONE (N.A.B.I.)        | 631.25        |                    |

| EARTH WORK SUMMARY    |                     |                     |                     |
|-----------------------|---------------------|---------------------|---------------------|
| LOCATION              | TOTAL<br>EXCAVATION | TOTAL<br>EMBANKMENT |                     |
| TAXIWAY "D"           | 3,950 cy            | 5,572 cy            |                     |
| RUNWAY 1-19           |                     |                     |                     |
| -STA. 98+50 - 111+50  | 18,736              |                     |                     |
| -STA. 111+50 - 157+40 | 183,551             | 87,265              |                     |
| SUBTOTALS             | 106,237             | 92,837              |                     |
| RNDG. (4%)            | 5,763               | 13,762              | FACTORED FILL (15%) |
| TOTALS                | 112,000             | 106,762             |                     |
|                       | cy                  | cy                  |                     |

| EXTRA WORK ORDER - DESCRIPTION | EST QUANTITY | FINAL QUANTITY |
|--------------------------------|--------------|----------------|
| 900.01 EWO #1 ALGO RADIOS      | 3 EA         | 3 EA           |
| 900.02 EWO #2 QUARTER HANDHOUS | 1 EA         | 4 EA           |
| 900.03 EWO #3 G VOLT BARS      | 720 EA       | 284 EA         |
| 900.11 AUTHORIZED WORK         | 100 MAN HRS  | 36.5 MAN HRS   |



DESIGNED BY: *[Signature]* DATE: 5/5/97  
 DRAWN BY: *[Signature]* DATE: 5/5/97  
 CHECKED BY: *[Signature]* DATE: 5/5/97  
 APPROVED BY: *[Signature]* DATE: 5/5/97

Scale: HOR. - NONE  
 VERT. - NONE

Date: 5/5/97

Sheet 2 OF 65

Sheet No. 2

ROUTLAND STATE AIRPORT  
 CLARENDON, VERMONT

QUANTITY SUMMARY

**URS Greiner, Inc.**  
 3 MARCUS BOULEVARD  
 ALBANY, NEW YORK



# QUANTITY SHEET

| SUMMARY OF ESTIMATED QUANTITIES |      |                                            |               |          |
|---------------------------------|------|--------------------------------------------|---------------|----------|
| QUANTITIES<br>GRAND TOTAL       | UNIT | ITEMS                                      | ITEM<br>NO.   | ROUNDING |
| 12                              | EA   | CLEARING - LARGE TREES                     | 201.16        |          |
| 112,000                         | CY   | COMMON EXCAVATION                          | 203.15        |          |
| 250                             | CY   | SOLID ROCK EXCAVATION                      | 203.16        |          |
| 23,000                          | CY   | GRANULAR BORROW                            | 203.32        |          |
| 23,000                          | SY   | FINE GRADE                                 | 203.40        |          |
| 7,000                           | CY   | TRENCH EXCAVATION OF EARTH                 | 204.20        |          |
| 100                             | CY   | TRENCH EXCAVATION OF ROCK                  | 204.21        |          |
| 4,000                           | SY   | COLD PLANING                               | 210.10        |          |
| 350                             | CY   | SUBBASE OF GRAVEL, COURSE GRADED           | 301.25        |          |
| 70                              | CY   | SUBBASE OF GRAVEL, FINE GRADED             | 301.28        |          |
| 180                             | TON  | BITUMINOUS CONCRETE PAVEMENT               | 406.25        |          |
| 13,000                          | TON  | BIT. CONCRETE PAVEMENT (P-401) (P658-34)   | 406.25 MOD. 1 |          |
| 500                             | LF   | JOINT SEALER, HOT POURED                   | 524.11        |          |
| 8,500                           | LF   | CRACK REPAIR, TYPE I (P605)                | 524.11 MOD. 1 |          |
| 7,000                           | LF   | CRACK REPAIR, TYPE II (P605)               | 524.11 MOD. 2 |          |
| 2,000                           | LF   | CRACK REPAIR, TYPE III (P605)              | 524.11 MOD. 3 |          |
| 1                               | EA   | RELOCATE LOCALIZER                         | 529.20 MOD.   |          |
| 1,300                           | LF   | 15" CSP, 0.079"                            | 601.0011      |          |
| 675                             | LF   | 15" RCP, CLASS IV                          | 601.0811      |          |
| 5                               | EA   | 15" CSP, END SECTION                       | 601.6010      |          |
| 1                               | EA   | 15" RCP, END SECTION                       | 601.6810      |          |
| 9                               | EA   | CONCRETE DI/CB W/ CAST IRON FRAME & GRATE  | 604.10        |          |
| 10                              | EA   | CHANGE ELEVATION OF D.I./C.B.              | 604.40        |          |
| 9,200                           | LF   | 6" UNDERDRAIN                              | 605.10        |          |
| 500                             | LF   | 6" UNDERDRAIN CARRIER PIPE                 | 605.20        |          |
| 38                              | EA   | UNDERDRAIN FLUSHING BASINS                 | 605.95        |          |
| 24                              | HR   | ALL PURPOSE EXCAVATOR RENTAL, TYPE I       | 608.25        |          |
| 100                             | MGAL | DUST CONTROL WITH WATER                    | 609.10        |          |
| 40                              | CY   | STONE FILL, TYPE II                        | 613.11        |          |
| 1,150                           | LF   | 3" PVC SEWER PIPE                          | 628.35        |          |
| 1                               | LS   | TRANSFER TO NEW SYSTEM - SANITARY SEWER    | 628.42        |          |
| 1                               | LS   | FIELD OFFICE - ENGINEERS                   | 631.10        |          |
| 1                               | LS   | MOBILIZATION                               | 635.10        |          |
| 56,000                          | LF   | 6" WHITE LINE (P620)                       | 646.20 MOD. 1 |          |
| 3,600                           | LF   | 6" YELLOW LINE (P620)                      | 646.21 MOD. 1 |          |
| 2                               | EA   | SYMBOL (1) (P620)                          | 646.30 MOD. 1 |          |
| 1                               | EA   | SYMBOL (9) (P620)                          | 646.30 MOD. 2 |          |
| 24,000                          | LF   | 6" TEMPORARY WHITE LINE (P620)             | 646.60 MOD. 1 |          |
| 3,000                           | LF   | 6" TEMPORARY YELLOW LINE (P620)            | 646.61 MOD. 1 |          |
| 4                               | EA   | TEMPORARY SYMBOL (1) (P620)                | 646.70 MOD. 1 |          |
| 2                               | EA   | TEMPORARY SYMBOL (9) (P620)                | 646.70 MOD. 2 |          |
| 2,000                           | SF   | REMOVAL OF EXIST. PAV'T MARKING (P621)     | 646.82        |          |
| 20,000                          | SY   | GEOTEXTILE FOR ROADBED SEPARATOR           | 649.11        |          |
| 10,000                          | SY   | GEOTEXTILE FOR UNDERDRAIN TRENCH           | 649.41        |          |
| 600                             | SY   | GEOTEXTILE FOR SILT FENCE                  | 649.51        |          |
| 2,900                           | LB   | SEED                                       | 651.15        |          |
| 24,000                          | LB   | FERTILIZER                                 | 651.18        |          |
| 95                              | TON  | AGRICULTURAL LIMESTONE                     | 651.20        |          |
| 500                             | EA   | HAY BALES FOR EROSION CONTROL              | 651.26        |          |
| 95                              | TON  | MULCH                                      | 651.25        |          |
| 12,600                          | CY   | TOPSOIL (2")                               | 651.35        |          |
| 500                             | SY   | EROSION MATTING                            | 654.10        |          |
| 1                               | EA   | RELOCATE ODALS #1R & #1L (L-125)           | 678.16 MOD. 1 |          |
| 1                               | EA   | RELOCATE ODALS UNIT #3 (L-102)             | 678.17 MOD. 1 |          |
| 1                               | EA   | RELOCATE ODALS UNIT #20 (L-102)            | 678.17 MOD. 2 |          |
| 23,500                          | LF   | 2" DIA. PVC ELECTRICAL CONDUIT (L-110)     | 678.21 MOD. 1 |          |
| 1                               | EA   | TOWER FOR ODALS UNIT #3 (L-103)            | 679.45 MOD. 1 |          |
| 1                               | EA   | TOWER FOR ODALS UNIT #20 (L-103)           | 679.45 MOD. 2 |          |
| 6,100                           | CY   | CRUSHED AGGREGATE BASE COURSE (P-209)      | 854.04        |          |
| 16,000                          | LF   | CABLE TRENCH (L-108)                       | 864.04        |          |
| 29,000                          | LF   | 1/2" #8, 600V OR 5000V, L-824C (L-108)     | 864.05        |          |
| 7,000                           | LF   | 1/2" #4, 600V, L-824C (L-108)              | 864.05 MOD. 2 |          |
| 2,500                           | LF   | 6 PAIR #19 CONTROL CABLE (L-108)           | 864.05 MOD. 3 |          |
| 16,500                          | LF   | #8 OR #6 COUNTERPOISE (L-108)              | 864.06 MOD. 1 |          |
| 1                               | LS   | INSTALLATION OF VAULT EQUIPMENT (L-109)    | 864.07        |          |
| 180                             | LF   | 4 WAY x 4" DIA. UG ELECTRICAL DUCT (L-110) | 864.09        |          |
| 69                              | EA   | MIRLS, BASE MOUNTED (L-125)                | 864.10        |          |
| 3                               | EA   | MIRLS, BASE MOUNTED, IN PAV'T (L-125)      | 864.10 MOD. 1 |          |
| 13                              | EA   | MIRLS, BASE MOUNTED (L-125)                | 864.11        |          |
| 1                               | EA   | RELOCATE VASI-4 (L-125)                    | 864.12 MOD. 1 |          |
| 1                               | EA   | TEMPORARY THRESHOLD (L-125 & P-620)        | 864.15 MOD. 1 |          |
| 20                              | EA   | RELOCATE AIRFIELD SIGNS (L-125)            | 864.14 MOD. 1 |          |
| 1                               | LS   | TESTING EQUIPMENT - CONCRETE               | 631.16        |          |
| 1                               | LS   | TESTING EQUIPMENT - BITUMINOUS             | 631.17        |          |
| 1                               | LS   | FIELD OFFICE - TELEPHONE (N.A.B.I.)        | 631.25        |          |

| EARTH WORK SUMMARY    |                     |                     |                     |
|-----------------------|---------------------|---------------------|---------------------|
| LOCATION              | TOTAL<br>EXCAVATION | TOTAL<br>EMBANKMENT |                     |
| TAXIWAY "D"           | 3,950 cy            | 5,572 cy            |                     |
| RUNWAY 1-19           |                     |                     |                     |
| -STA. 98+50 - 111+50  | 18,736              |                     |                     |
| -STA. 111+50 - 157+40 | 183,551             | 87,265              |                     |
|                       |                     |                     |                     |
| SUBTOTALS             | 106,237             | 92,637              |                     |
| RNDG. (4%)            | 5,763               | 13,762              | FACTORED FILL (15%) |
|                       |                     |                     |                     |
| TOTALS                | 112,000<br>cy       | 106,762<br>cy       |                     |
|                       |                     |                     |                     |



|      |      |             |                         |
|------|------|-------------|-------------------------|
| REV. | DATE | DESCRIPTION | File No. 11/01/02/VW-02 |
|      |      |             |                         |
|      |      |             |                         |
|      |      |             |                         |

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT

QUANTITY SUMMARY

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|                               |                                     |
|-------------------------------|-------------------------------------|
| Designed by:<br>10/06/00 2/97 | Date:<br>5/5/97                     |
| Drawn by:<br>10/06/00 2/97    | Scale:<br>HOR - NONE<br>VERT - NONE |
| Checked by:<br>10/06/00 2/97  | Date:<br>5/5/97                     |
| Approved by:<br>10/06/00 2/97 | Sheet 2 Of 65                       |
|                               | Sheet No.                           |
|                               | 2                                   |

# DRAINAGE QUANTITY SHEET

| DRAINAGE STRUCTURES |                   |          |                        |                     |                 | QUANTITIES    |           |                    |                  |              |
|---------------------|-------------------|----------|------------------------|---------------------|-----------------|---------------|-----------|--------------------|------------------|--------------|
| STRUCTURE           | LOCATION          | TYPE     | REMARKS                | PROPOSED T.G. ELEV. | FLOW LINE (OUT) | CONCRETE C.Y. | STEEL LB. | ADJUST. ELEV. EACH | TRENCH EXC. C.Y. | ROCK EXC. CY |
| M1                  | 80' RT 142+00     | C. I. P. | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D2                  | 67' RT 139+57     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D3                  | 67' RT 137+20     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M4                  | 78' RT 137+20     | BRICK    | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D5                  | 67' RT 135+20     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D6                  | 67' RT 133+20     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M7                  | 78' RT 133+20     | BRICK    | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D8                  | 67' RT 131+22     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D9                  | 67' RT 129+21     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M10                 | 78' RT 129+21     | BRICK    | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D11                 | 67' RT 127+20     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D12                 | 67' RT 125+16     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M13                 | 78' RT 125+16     | BRICK    | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D14                 | 67' RT 123+19     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D15                 | 67' RT 121+21     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M16                 | 78' RT 121+21     | BRICK    | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D17                 | 67' RT 119+21     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D18                 | 67' RT 117+21     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M19                 | 78' RT 117+21     | BRICK    | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D20                 | 67' RT 115+21     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D21                 | 67' RT 113+20     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M22                 | 78' RT 113+20     | BRICK    | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M23                 | 78' RT 112+08     | BRICK    | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D24                 | 74' RT 111+89     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D25                 | 67' RT 109+72     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M26                 | 78' RT 109+72     | BRICK    | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D27                 | 67' RT 107+72     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D28                 | 67' RT 105+73     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M29                 | 78' RT 105+73     | BRICK    | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D30                 | 67' RT 103+74     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M31                 | 78' RT 101+84     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D32                 | 67' RT 100+72     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M32                 | 78' RT 100+72     | PRECAST  | ADJUST. ELEV. OF F&G   | 779.27              |                 |               |           | 1                  |                  | 3            |
| M33                 | 78' LT 100+74     | C. I. P. | ADJUST. ELEV. OF F&G   | 778.88              |                 |               |           | 1                  |                  | 3            |
| M33A                | 272' LT 100+74    | C. I. P. | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D33                 | 67' LT 100+74     | C. I. P. | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D34                 | 67' LT 103+73     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M35                 | 80' LT 101+84     | C. I. P. | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D36                 | 67' LT 105+73     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M38                 | 78' LT 105+73     | BRICK    | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D37                 | 67' LT 107+72     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D39                 | 67' LT 109+72     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M41                 | 78' LT 109+72     | BRICK    | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D40                 | 67' LT 111+01     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M42                 | 92' LT 111+01     | BRICK    | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D43                 | 67' LT 113+20     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M44                 | 78' LT 113+20     | BRICK    | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D45                 | 67' LT 115+21     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M46                 | 78' LT 115+21     | BRICK    | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D47                 | 67' LT 117+20     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D48                 | 67' LT 119+20     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M49                 | 78' LT 119+20     | BRICK    | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D50                 | 67' LT 121+21     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D51                 | 67' LT 123+21     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M52                 | 78' LT 123+21     | BRICK    | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D53                 | 67' LT 125+20     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D54                 | 67' LT 127+21     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M55                 | 78' LT 127+21     | BRICK    | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D56                 | 67' LT 129+21     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D57                 | 67' LT 131+21     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M58                 | 78' LT 131+21     | BRICK    | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D59                 | 67' LT 133+21     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D60                 | 67' LT 135+20     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M61                 | 78' LT 135+20     | BRICK    | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D62                 | 67' LT 137+21     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D63                 | 67' LT 139+55     | PRECAST  | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M64                 | 78' LT 139+55     | C. I. P. | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M65                 | 78' LT 142+00     | C. I. P. | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D66                 | 67' LT 142+00     | C. I. P. | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M67                 | 78' LT 143+28     | C. I. P. | ADJUST. ELEV. OF F&G   | 777.45              |                 |               |           | 1                  |                  | 3            |
| D68                 | 67' LT 143+30     | C. I. P. | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M69                 | 77' LT 145+52     | C. I. P. | ADJ. ELEV. OF F&G      | 776.30              |                 |               |           | 1                  |                  | 3            |
| D70                 | 67' LT 145+53     | C. I. P. | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M71                 | 78' LT 147+72     | C. I. P. | ADJ. ELEV. OF F&G      | 775.15              |                 |               |           | 1                  |                  | 3            |
| D72                 | 67' LT 147+72     | C. I. P. | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M73                 | 78' LT 149+91     | C. I. P. | ADJ. ELEV. OF F&G      | 774.02              |                 |               |           | 1                  |                  | 3            |
| D74                 | 67' LT 149+91     | C. I. P. | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M75                 | 81' RT 149+91     | C. I. P. | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D76                 | 67' RT 149+90     | C. I. P. | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M78                 | 81' RT 148+75     | C. I. P. | ADJ. ELEV. OF F&G      | 774.80              |                 |               |           |                    |                  | 3            |
| D79C                | 55' LT 644+00     | C. I. P. | ADJ. ELEV. OF F&G      | 774.21              | 770.10(E)       |               |           | 1                  |                  | 3            |
| D750                | 45' LT 844+00     | C. I. P. | ADJ. ELEV. OF F&G      | 773.18              | RESULT A B      |               |           | 1                  |                  | 3            |
| M77                 | 81' RT 147+71     | C. I. P. | ADJ. ELEV. OF F&G      | 775.09              | 768.80          |               |           |                    |                  | 3            |
| D78                 | 67' RT 147+71     | C. I. P. | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M79                 | 80' RT 145+52     | C. I. P. | ADJ. ELEV. OF F&G      | 776.26              |                 |               |           | 1                  |                  | 3            |
| D80                 | 67' RT 145+52     | C. I. P. | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| M81                 | 80' RT 143+25     | C. I. P. | ADJ. ELEV. OF F&G      | 777.42              |                 |               |           | 1                  |                  | 3            |
| D82                 | 67' RT 143+25     | C. I. P. | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D83                 | 67' RT 142+00     | C. I. P. | TO BE REMOVED          |                     |                 |               |           |                    |                  | 3            |
| D1 100              | 202' LT 118+50    | C. I. P. | TYPE A - NEW           | 781.20              | 778.0           | 1.7           | 150       |                    | 12               |              |
| D1 101              | 202' LT 109+74    | C. I. P. | TYPE A - NEW           | 775.60              | 779.9           | 3.9           | 347       |                    | 45               |              |
| D1 102              | 202' RT 113+48    | C. I. P. | TYPE A - NEW           | 780.88              | 777.8           | 1.9           | 158       |                    | 14               |              |
| D1 103              | 80' LT 305+00     | C. I. P. | TYPE A - NEW           | 780.40              | 775.8           | 2.6           | 231       |                    | 26               |              |
| CB 104              | SW CORNER APRON   | C. I. P. | CUT INTO EXISTING      | 779.81(E)           | 773.50          |               |           |                    |                  |              |
| D1 105              | 80' RT 155+98     | C. I. P. | TYPE A - NEW           | 759.25              | 754.25          | 2.8           | 239       |                    | 30               |              |
| D1 106              | 80' LT 155+98     | C. I. P. | TYPE A - NEW           | 759.25              | 754.25          | 2.8           | 239       |                    | 30               |              |
| CB 107              | 202' RT 121+00    | C. I. P. | TYPE A - NEW           | 782.17              | 778.0           | 3.0           | 270       |                    | 18               |              |
| CB 108              | 380' LT 123+35.5A | C. I. P. | TYPE A - NEW           | 782.50              | 776.55          | 3.5           | 308       |                    | 45               |              |
| CB 109              | 597' RT 126+01.5  | C. I. P. | CUT INTO EXISTING      | 775.50 (E)          | 771.50          |               |           |                    |                  |              |
| CB 110              | 202' LT 143+28    | C. I. P. | TYPE A - NEW           | 773.60              | 763.50          | 5.1           | 454       |                    | 64               |              |
| HEADWALL            | 300' LT 118+55E   | C. I. P. | EXISTING TO BE REMOVED |                     |                 | TOTALS        | 27.3 CY   | 2398 LB            | 11.40 EA.        | 274 CY       |



DESIGNED BY: 6/1/07  
 DRAWN BY: W. B. BULL  
 CHECKED BY: W. B. BULL  
 APPROVED BY: W. B. BULL  
 DATE: 10/10/07  
 REV. 1 10/10/07 As BUILT  
 JOB NO. 17601579-05  
 FILE NO. 17601579-05

RUTLAND STATE AIRPORT  
 CLARENDON, VERMONT  
 DRAINAGE SUMMARY

**URS Greiner, Inc.**  
 3 MARCUS BOULEVARD  
 ALBANY, NEW YORK

Scale: HOR. - NONE  
VERT. - NONE  
 Date: 5/5/97  
 Sheet 3 of 85  
 Sheet No. **3A**

# DRAINAGE QUANTITY SHEET

| CULVERTS AND STORM DRAINS |                |             |                    |           |        |                      |                                         |  |  |
|---------------------------|----------------|-------------|--------------------|-----------|--------|----------------------|-----------------------------------------|--|--|
| LOCATION                  |                | SIZE & TYPE | AB LENGTH          | FLOW LINE |        | TRENCH EXCAVATION CY | REMARKS                                 |  |  |
| BEGIN                     | END            |             |                    | INLET     | OUTLET |                      |                                         |  |  |
| D1 100                    | 300' LT 116+55 | 15" CSP     | 100' <sup>AB</sup> | 778.00    | 777.50 | 45                   | 15" MES W/ STONE FILL, TYPE II @ OUTLET |  |  |
| D1 101                    | 430' LT 100+80 | 15" RCP     | 230' <sup>AB</sup> | 777.01    | 764.20 | 100                  | 15" ES W/ STONE FILL, TYPE II @ OUTLET  |  |  |
| D1 102                    | D1 103         | 15" CSP     | 225' <sup>AB</sup> | 777.80    | 775.90 | 140                  |                                         |  |  |
| D1 103                    | CB 104         | 15" RCP     | 295' <sup>AB</sup> | 775.80    | 774.00 | 220                  |                                         |  |  |
| D1 105                    | 150' RT 155+93 | 15" CSP     | 90' <sup>AB</sup>  | 755.80    | 728.0  | 35                   | 15" MES W/ STONE FILL, TYPE II @ OUTLET |  |  |
| D1 106                    | 168' LT 155+93 | 15" CSP     | 80' <sup>AB</sup>  | 775.80    | 738.0  | 45                   | 15" MES W/ STONE FILL, TYPE II @ OUTLET |  |  |
| CB 107                    | CB 108         | 15" CSP     | 340' <sup>AB</sup> | 778.0     | 774.6  | 230                  |                                         |  |  |
| CB 108                    | CB 109         | 15" CSP     | 335' <sup>AB</sup> | 774.55    | 771.60 | 225                  |                                         |  |  |
| 202' LT 121+40            | 202' LT 121+88 | 15" CSP     | 48' <sup>AB</sup>  | 782.34    | 782.28 | N.A.                 | 15" MES @ INLET & OUTLET                |  |  |
| 55' 105                   | 55' 106        | 15" CSP     | 152' <sup>AB</sup> |           |        |                      |                                         |  |  |
|                           |                |             |                    |           |        | 1040 cy              | SUBTOTAL                                |  |  |
| UNDERDRAIN                |                |             |                    |           |        |                      |                                         |  |  |
| LOCATION                  |                | SIZE & TYPE | LENGTH             | FLOW LINE |        | TRENCH EXCAVATION CY | REMARKS                                 |  |  |
| BEGIN                     | END            |             |                    | INLET     | OUTLET |                      |                                         |  |  |
| M32                       | 78' RT 100+72  | 6" UD       | 220 LF             |           | 774.7  |                      |                                         |  |  |
| FB1                       | 55' RT 102+80  | 6" UD       | 250 LF             | 776.02    |        | 163                  |                                         |  |  |
| FB2                       | 55' RT 105+30  | 6" UD       | 250 LF             | 776.64    |        | 185                  |                                         |  |  |
| FB3                       | 55' RT 107+80  | 6" UD       | 250 LF             | 777.23    |        | 185                  |                                         |  |  |
| FB4                       | 55' RT 109+55  | 6" UD       | 175 LF             | 777.94    |        | 130                  |                                         |  |  |
| FB5                       | 55' RT 112+86  | 6" UD       | 170 LF             | 778.68    |        | 126                  |                                         |  |  |
| FB6                       | 55' RT 114+60  | 6" UD       | 250 LF             | 779.12    |        | 185                  |                                         |  |  |
| FB7                       | 55' RT 117+10  | 6" UD       | 250 LF             | 779.54    |        | 185                  |                                         |  |  |
| FB8                       | 55' RT 119+60  | 6" UD       | 250 LF             | 780.06    |        |                      |                                         |  |  |
| FB9                       | 55' RT 121+00  | 6" UD       | 360 LF             | 781.34    |        | 266                  |                                         |  |  |
| FB10                      | 55' RT 124+60  | 6" UD       | 250 LF             | 780.67    |        | 50                   |                                         |  |  |
| FB11                      | 55' RT 127+10  | 6" UD       | 250 LF             | 780.24    |        | 50                   |                                         |  |  |
| FB12                      | 55' RT 129+60  | 6" UD       | 250 LF             | 779.80    |        | 50                   |                                         |  |  |
| FB13                      | 55' RT 132+10  | 6" UD       | 250 LF             | 778.64    |        | 50                   |                                         |  |  |
| FB14                      | 55' RT 134+60  | 6" UD       | 250 LF             | 777.43    |        | 50                   |                                         |  |  |
| FB15                      | 55' RT 137+10  | 6" UD       | 250 LF             | 776.21    |        | 50                   |                                         |  |  |
| FB16                      | 55' RT 139+60  | 6" UD       | 250 LF             | 774.99    |        | 50                   |                                         |  |  |
| FB17                      | 55' RT 142+10  | 6" UD       | 250 LF             | 773.77    |        | 185                  |                                         |  |  |
| FB18                      | 55' RT 144+60  | 6" UD       | 250 LF             | 772.50    |        | 185                  |                                         |  |  |
| FB19                      | 55' RT 147+10  | 6" UD       | 250 LF             | 771.20    |        | 130                  |                                         |  |  |
| M75B                      | 81' RT 148+75  | 6" UD       | 175 LF             | 770.20    |        |                      |                                         |  |  |
|                           | 140' RT 150+00 |             |                    | 771.3     |        |                      | CONNECT TO EXISTING PVC UNDERDRAIN      |  |  |
|                           |                |             |                    |           |        | 2275 cy              | SUBTOTAL                                |  |  |

\* SEE PLAN SHEETS FOR AS BUILT INFO

| LOCATION        |                | SIZE & TYPE | LENGTH | FLOW LINE |        | TRENCH EXCAVATION CY | REMARKS                                          |  |  |
|-----------------|----------------|-------------|--------|-----------|--------|----------------------|--------------------------------------------------|--|--|
| BEGIN           | END            |             |        | INLET     | OUTLET |                      |                                                  |  |  |
|                 | 150' RT 151+80 | 6" UD       | 150 LF |           | 757.50 | 104                  | OUTLET TO DAYLIGHT, STONE FILL, TYPE II @ OUTLET |  |  |
| M33             | 79' LT 100+74  | 6" UD       | 220 LF |           | 774.70 | 163                  |                                                  |  |  |
| FB20            | 55' LT 102+80  | 6" UD       | 250 LF | 776.02    |        | 185                  |                                                  |  |  |
| FB21            | 55' LT 105+30  | 6" UD       | 250 LF | 776.64    |        | 185                  |                                                  |  |  |
| FB22            | 55' LT 107+80  | 6" UD       | 250 LF | 777.23    |        | 177                  |                                                  |  |  |
| FB23            | 55' LT 110+20  | 6" UD       | 240 LF | 778.09    |        |                      |                                                  |  |  |
| FB24            | 55' LT 112+66  | 6" UD       | 194 LF | 779.10    |        | 144                  |                                                  |  |  |
| FB25            | 55' LT 114+60  | 6" UD       | 250 LF | 779.00    |        | 185                  |                                                  |  |  |
| FB26            | 55' LT 117+10  | 6" UD       | 250 LF | 779.54    |        | 185                  |                                                  |  |  |
| FB27            | 55' LT 119+60  | 6" UD       | 250 LF | 780.06    |        | 185                  |                                                  |  |  |
| FB28            | 55' LT 122+10  | 6" UD       | 250 LF | 780.55    |        | 185                  |                                                  |  |  |
| FB29            | 55' LT 124+60  | 6" UD       | 250 LF | 780.86    |        | 50                   |                                                  |  |  |
| FB30            | 55' LT 127+10  | 6" UD       | 250 LF | 780.63    |        | 50                   |                                                  |  |  |
| FB31            | 55' LT 129+60  | 6" UD       | 250 LF | 779.81    |        | 50                   |                                                  |  |  |
| FB32            | 55' LT 132+10  | 6" UD       | 250 LF | 778.64    |        | 50                   |                                                  |  |  |
| FB33            | 55' LT 134+60  | 6" UD       | 250 LF | 777.43    |        | 50                   |                                                  |  |  |
| FB34            | 55' LT 137+10  | 6" UD       | 250 LF | 776.21    |        | 50                   |                                                  |  |  |
| FB35            | 55' LT 139+60  | 6" UD       | 250 LF | 774.99    |        | 50                   |                                                  |  |  |
| FB36            | 55' LT 142+10  | 6" UD       | 250 LF | 773.77    |        | 185                  |                                                  |  |  |
| FB37            | 55' LT 144+60  | 6" UD       | 250 LF | 772.50    |        | 185                  |                                                  |  |  |
| FB38            | 55' LT 147+10  | 6" UD       | 250 LF | 771.20    |        | 208                  |                                                  |  |  |
| M731            | 78' LT 149+91  | 6" UD       | 281 LF | 769.50    |        |                      |                                                  |  |  |
| FB39            | 55' LT 151+80  | 6" UD       | 240 LF |           | 779.00 | 112                  |                                                  |  |  |
| D1 100          | 202' LT 116+50 | 6" CARRIER  | 240 LF | 778.00    |        |                      |                                                  |  |  |
| FB5             | 55' RT 112+86  | 6" CARRIER  | 160 LF |           |        | 115                  |                                                  |  |  |
| D1 102          | 202' LT 113+48 | 6" CARRIER  | 185 LF | 778.0     |        |                      |                                                  |  |  |
|                 |                |             |        |           |        | 2853 cy              | SUBTOTAL                                         |  |  |
| TOTALS          |                |             |        |           |        | 6168                 | TOTAL                                            |  |  |
| 15" CSP         |                |             |        |           |        | 332                  | RNDG                                             |  |  |
| 15" RCP         |                |             |        |           |        | 550 LF               | TOTAL                                            |  |  |
| 6" UD           |                |             |        |           |        | 9200 LF              |                                                  |  |  |
| 6" CARRIER PIPE |                |             |        |           |        | 400 LF               |                                                  |  |  |
| 15" RCP ES      |                |             |        |           |        | 1 EA.                |                                                  |  |  |
| 15" CSP         |                |             |        |           |        | 5 EA.                |                                                  |  |  |

\* SEE PLAN SHEETS FOR AS BUILT INFO



DESIGNED BY: DATE: 5/2/97  
 DRAWN BY: DATE: 5/2/97  
 CHECKED BY: DATE: 5/2/97  
 APPROVED BY: DATE: 5/2/97

RUTLAND STATE AIRPORT  
 CLARENDON, VERMONT

URS Greiner, Inc.  
 3 MARCUS BOULEVARD  
 ALBANY, NEW YORK

Scale: HOR. - NONE  
 VERT. - NONE  
 Date: 5/2/97  
 Sheet 3 Of 65

3B





# GENERAL CONSTRUCTION AND SAFETY NOTES

## GENERAL NOTES

1. THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT PLANS AND SPECIFICATIONS AND ANY RULES, REGULATIONS, STANDARDS OR SPECIFICATIONS REFERENCED THEREIN. THE PROJECT IS SUBJECT TO INSPECTION BY REPRESENTATIVES OF THE VERMONT AGENCY OF TRANSPORTATION (VAOT), AND THE FEDERAL AVIATION ADMINISTRATION (FAA).
2. THE PROJECT IS TO BE COMPLETED IN CONFORMANCE WITH THE "CONSTRUCTION PHASING PLANS AND NOTES," AS CONTAINED IN THE PLANS, AND SHALL BE CONSTRUCTED IN A TIMELY MANNER IN ACCORDANCE WITH THE CONTRACTOR'S APPROVED PROJECT SCHEDULE. THE SCHEDULE SHALL PROVIDE FOR COMPLETION OF THE PHASES AS SHOWN ON THE PLANS AND DESCRIBED IN THE CONTRACT SPECIFICATIONS.
3. THE CONTRACTOR IS EXPECTED TO MEET COMPLETION OF CRITICAL PORTIONS OF THE PROJECT AND OPEN THOSE SEGMENTS TO TRAFFIC BY THE SPECIFIED TIMES AND TO COMPLETE THE ENTIRE PROJECT ON TIME.
4. RUTLAND 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 SO AS TO MINIMIZE IMPACTS ON AIRPORT OPERATIONS.
5. CONSTRUCTION AND MAINTENANCE OPERATIONS BY OTHERS MAY OCCUR CONCURRENTLY AND AT TIMES IN THE VICINITY OF CONSTRUCTION ASSOCIATED WITH THIS PROJECT. THE CONTRACTOR SHALL COORDINATE HIS OPERATIONS AND COOPERATE WITH MAINTENANCE CREWS AND OTHER CONTRACTORS WORKING ON THE AIRPORT.
6. ACCESS TO THE SITE - THE CONTRACTOR'S ACCESS POINTS TO THE SITE ARE SHOWN ON THE GENERAL PROJECT LAYOUT PLAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL VEHICLES AND PERSONNEL WHO ENTER THROUGH THESE ACCESS POINTS. THE CONTRACTOR SHALL MAINTAIN A SECURITY GUARD AT EACH GATE BEING USED AT ALL TIMES WHILE CONSTRUCTION IS UNDERWAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL ACCESS POINTS BEING USED AT THE END OF EACH CONSTRUCTION DAY OR WHEN ACCESS POINTS ARE UNATTENDED.
7. HAUL ROUTES - APPROXIMATE LOCATION OF HAUL ROUTES ON THE AIRPORT SITE ARE SHOWN ON THE PHASING PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE OFF-SITE HAUL ROUTES (STATE OR TOWN HIGHWAYS) WITH THE APPROPRIATE OWNER WHO HAS JURISDICTION OVER THE AFFECTED ROUTE. ON-SITE HAUL ROUTES SHALL BE MAINTAINED BY THE CONTRACTOR AND SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE TO THEIR ORIGINAL CONDITION UPON COMPLETION OF BEING USED AS A HAUL ROUTE. BEFORE AND AFTER CONDITION OF ON-SITE HAUL ROUTES SHALL BE JOINTLY INSPECTED AND DETERMINED BY THE CONTRACTOR AND THE ENGINEER. FENCING, DRAINAGE, GRADING AND OTHER MISCELLANEOUS CONSTRUCTION REQUIRED TO CONSTRUCT TEMPORARY HAUL ROUTES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO COMMENCING THE WORK. EXISTING ACCESS ROADS TO AIRPORT FACILITIES SHALL REMAIN OPEN AND MAINTAINED AT ALL TIMES.
8. CONTRACTOR'S STAGING AREAS - AN AREA WILL BE MADE AVAILABLE FOR CONTRACTOR'S MOBILIZATION AND STORAGE. THIS AREA IS SHOWN ON THE GENERAL PROJECT LAYOUT. THE CONTRACTOR'S STAGING AREA SHALL BE GRADED, TOPSOILED, SEED, AND MULCHED UPON COMPLETION OF USE, AT THE CONTRACTOR'S EXPENSE.
9. DISPOSAL AREA - WASTE AREAS WILL BE MADE AVAILABLE FOR THE DISPOSAL OF THE CONTRACTOR'S SPILL MATERIALS. THE MANNER IN WHICH MATERIALS ARE PLACED IN EMBANKMENTS SHALL BE AS SPECIFIED AND APPROVED BY THE ENGINEER. WASTE MATERIALS INCLUDE THOSE ITEMS WHICH ARE A DIRECT RESULT OF CONSTRUCTION TRASH (i.e. CUPS, CANS, ETC.) SHALL BE DISPOSED OF THROUGH PROPER SANITARY METHODS.
10. SAFETY - THE CONTRACTOR SHALL CONDUCT HIS ACTIVITIES IN A SAFE MANNER AS SPECIFIED IN THE SECTION TITLED, "SAFETY REQUIREMENTS DURING CONSTRUCTION" ON THIS SHEET.
11. PROTECTION OF AND REPAIR OF DAMAGE TO EXISTING CABLES - LOCATION OF KNOWN EXISTING AIRPORT UNDERGROUND CABLES ARE SHOWN ON THE PLANS AND MUST BE VERIFIED BY THE CONTRACTOR. REPAIR OF CABLES DAMAGED DUE TO CONTRACTOR'S OPERATIONS MUST BE STARTED IMMEDIATELY AND CONTINUED UNTIL COMPLETED. ALL SUCH REPAIRS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND SHALL BE AT THE CONTRACTOR'S EXPENSE. WHEN FAA CABLES ARE DAMAGED, REPAIRS SHALL BE DONE IN ACCORDANCE WITH FAA REQUIREMENTS IN THE PRESENCE OF AN FAA REPRESENTATIVE. THE FAA MAY ELECT TO HAVE THE REPAIR PERFORMED BY OTHERS IN WHICH CASE THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING THE INCURRED COSTS OF REPAIRS.
12. EXISTING AIRFIELD LIGHTING SYSTEMS - INTERRUPTION OF EXISTING AIRFIELD LIGHTING SYSTEMS NOT INCLUDED IN THIS PROJECT SHALL NOT BE PERMITTED. ALL AIRFIELD LIGHTING CIRCUITS AFFECTED BY THIS PROJECT SHALL BE MAINTAINED BY THE CONTRACTOR DURING OPERATIONAL PERIODS IN ACCORDANCE WITH THE SPECIFICATIONS AND/OR AS DIRECTED BY THE ENGINEER.
13. CONSTRUCTION LIMITS - ALL CONTRACTOR VEHICLES AND TRAFFIC (UNLESS OTHERWISE AUTHORIZED) SHALL REMAIN WITHIN THE DESIGNATED CONSTRUCTION LIMITS OR HAUL ROUTES. CONSTRUCTION, STORAGE AND STOCKPILING LIMITS ARE FURTHER DEFINED IN THE SECTION TITLED, "SAFETY REQUIREMENTS DURING CONSTRUCTION" ON THIS SHEET.

14. PORTABLE FLOODLIGHTING - THE CONTRACTOR SHALL PROVIDE PORTABLE FLOODLIGHTING WHEN REQUIRED FOR CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL PROVIDE SUFFICIENT UNITS SO THAT ALL WORK AREAS ARE ILLUMINATED TO A LEVEL OF 5 HORIZONTAL FOOT CANDLES. THE LIGHTING LEVELS SHALL BE CALCULATED AND MEASURED IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE ILLUMINATION ENGINEERING SOCIETY.
15. THE CONTRACTOR SHALL OBTAIN ALL THE PERMITS AND LICENSES REQUIRED FOR THE PROJECT WORK AT HIS OWN EXPENSE.
16. EXISTING TOPOGRAPHIC FIELD SURVEYS FOR THIS PROJECT AREA WERE PERFORMED BY LITTLE RIVER SURVEY CO. IN 1982.
17. THE HORIZONTAL CONTROL ON THIS PROJECT IS TIED TO THE 1983 AND 1988 NATIONAL GEODETIC HORIZONTAL AND VERTICAL DATUM, RESPECTIVELY.

## SAFETY REQUIREMENTS DURING CONSTRUCTION

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

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

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

AND CAN BE REVIEWED AT THE OFFICES OF THE VERMONT AGENCY OF TRANSPORTATION.
- (1) AC 150/5370-2, "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION", CURRENT EDITION.
- (2) FAR PART 77 "OBJECTS AFFECTING NAVIGABLE AIRSPACE, CURRENT EDITION."
- (3) AC 150/5300-13, "AIRPORT DESIGN", CURRENT EDITION, ESTABLISHES DESIGN, OPERATIONAL, AND MAINTENANCE STANDARDS FOR AIRPORTS. STANDARD TERMS USED IN THE CONTRACT PLANS AND SPECIFICATIONS ARE DEFINED BELOW:
  - (a) OBSTACLE FREE ZONE (OFZ) - A VOLUME OF SPACE WHICH IS FREE OF ALL FIXED OBJECTS AND CLEAR OF VEHICLES IN THE 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.
  - (b) RUNWAY PROTECTION ZONE (RPZ): A TRAPEZOIDAL AREA CENTERED ON THE RUNWAY BEGINNING AT A POINT 200 FEET BEYOND THE END OF THE AREA USABLE FOR TAKEOFF OR LANDING.
  - (c) OBJECT FREE AREA (OFA): A TWO DIMENSIONAL GROUND AREA SURROUNDING RUNWAYS, TAXIWAYS, AND TAXILANES WHICH IS CLEAR OF OBJECTS EXCEPT FOR OBJECTS WHOSE LOCATION IS FIXED BY FUNCTION.
  - (d) SAFETY AREA - THE SURFACE ADJACENT TO RUNWAYS, TAXIWAYS, AND TAXILANES OVER WHICH AIRCRAFT SHOULD, IN DRY WEATHER, BE ABLE TO CROSS AT NORMAL SPEEDS WITHOUT INCURRING SIGNIFICANT DAMAGE. A SAFETY AREA IS GRADED, DRAINED AND COMPACTED. IT IS FREE OF ANY HOLES, TRENCHES, BUMPS OR OTHER SIGNIFICANT SURFACE VARIATIONS OR OBJECTS OTHER THAN THOSE WHICH MUST BE THERE BECAUSE OF THEIR ESSENTIAL AERONAUTICAL FUNCTION. THE SAFETY AREA REQUIRES THE CAPABILITY OF SUPPORTING MAINTENANCE VEHICLES AND AIRCRAFT RESCUE AND FIRE FIGHTING VEHICLES UNDER NORMAL (DRY) CONDITIONS.
- (B) GENERAL SAFETY REQUIREMENTS
  - (1) THE CONTRACTOR SHALL ACQUAINT HIS SUPERVISORS AND EMPLOYEES WITH THE AIRPORT ACTIVITY AND OPERATIONS THAT ARE INHERENT TO RUTLAND STATE AIRPORT AND SHALL CONDUCT HIS CONSTRUCTION ACTIVITIES TO CONFORM TO ALL ROUTINE AND EMERGENCY AIR TRAFFIC REQUIREMENTS AND GUIDELINES FOR SAFETY SPECIFIED HEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL SAFETY DEVICES AS REQUIRED FOR THE PROTECTION OF HIS PERSONNEL.
  - (2) PROTECTION OF ALL PERSONS SHALL BE PROVIDED THROUGHOUT THE PROGRESS OF THE WORK. THE WORK SHALL PROCEED IN SUCH A MANNER AS TO PROVIDE SAFE CONDITIONS FOR ALL WORKERS AND AGENCY PERSONNEL. THE SEQUENCE OF OPERATION SHALL BE SUCH THAT MAXIMUM PROTECTION IS AFFORDED TO INSURE THAT PERSONNEL AND WORKERS IN THE WORK AREA ARE NOT SUBJECT TO ANY DANGEROUS CONDITIONS.

- (3) DURING PERFORMANCE OF THIS CONTRACT, THE AIRPORT RUNWAYS, TAXIWAYS, AND AIRCRAFT PARKING APRONS SHALL REMAIN IN USE BY AIRCRAFT TO THE MAXIMUM EXTENT POSSIBLE. ALL AIRCRAFT TRAFFIC ON THESE AREAS SHALL HAVE PRIORITY OVER CONTRACTOR'S TRAFFIC. THE OWNER RESERVES THE RIGHT TO ORDER THE CONTRACTOR AT ANY TIME TO VACATE ANY AREA NECESSARY TO MAINTAIN SAFE AIRCRAFT OPERATIONS. USE OF AREAS NEAR THE CONTRACTOR'S WORK WILL BE CONTROLLED TO MINIMIZE DISTURBANCE TO THE CONTRACTOR'S OPERATION. THE CONTRACTOR SHALL NOT ALLOW EMPLOYEES, SUBCONTRACTORS, SUPPLIERS, OR ANY OTHER UNAUTHORIZED PERSON TO ENTER OR REMAIN IN ANY AIRPORT AREA WHICH WOULD BE HAZARDOUS TO PERSONS OR TO AIRCRAFT OPERATIONS.
- (4) ALL WORK TO BE PERFORMED WHICH IS CLOSE TO AN ACTIVE RUNWAY, TAXIWAY OR APRON SHALL BE PERFORMED WHEN THE RUNWAY, TAXIWAY OR APRON IS NOT IN USE. SUCH WORK SHALL BE ACCOMPLISHED ONLY WITH PRIOR PERMISSION FROM THE ENGINEER AND AIRPORT MANAGER. REQUESTED CLOSINGS SHALL BE DIRECTED TO THE ENGINEER AT LEAST 48 HOURS IN ADVANCE.
- (5) THE FOLLOWING ARE CONSIDERED SAFETY PROBLEMS AND/OR HAZARDS:
  - (a) TRENCHES, HOLES, OR EXCAVATION ON OR ADJACENT TO ANY OPEN RUNWAY OR IN RUNWAY OR TAXIWAY SAFETY AREAS.
  - (b) UNMARKED/UNLIGHTED HOLES OR EXCAVATION IN ANY APRON, OPEN TAXIWAY, OPEN TAXILANE, OR RELATED SAFETY AREA.
  - (c) MOUNDS OR PILES OF EARTH, CONSTRUCTION MATERIALS, TEMPORARY STRUCTURES, OR OTHER OBJECTS IN THE VICINITY OF ANY OPEN RUNWAY, TAXIWAY, TAXILANE, OR IN ANY RELATED SAFETY, APPROACH, OR DEPARTURE AREA.
  - (d) VEHICLES OR EQUIPMENT, WHETHER OPERATING OR IDLE, ON ANY OPEN RUNWAY, TAXIWAY, TAXILANE, OR IN ANY RELATED SAFETY, APPROACH, OR DEPARTURE AREA.
  - (e) VEHICLES, EQUIPMENT, EXCAVATION, STOCKPILES, OR OTHER MATERIALS WHICH COULD INTERFERE WITH ELECTRONIC SIGNALS FROM RADIOS OR ELECTRONIC NAVIGATIONAL AIDS (NAVAIDS).
  - (f) PAYMENT 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 1/2 INCHES.
  - (g) UNMARKED UTILITY, NAVAID, WEATHER SERVICE, RUNWAY LIGHTING, OR OTHER POWER OR SIGNAL CABLES THAT COULD BE DAMAGED DURING CONSTRUCTION.
  - (h) OBJECTS, WHETHER OR NOT MARKED OR FLAGGED, OR ACTIVITIES ANYWHERE ON OR IN THE VICINITY OF THE AIRPORT WHICH COULD BE DISTRACTING, CONFUSING, OR ALARMING TO PILOTS DURING AIRCRAFT OPERATIONS.
  - (i) UNFLAGGED/UNLIGHTED LOW VISIBILITY ITEMS SUCH AS TALL CRANES, DRILLS, AND THE LIKE ANYWHERE IN THE VICINITY OF ACTIVE RUNWAYS, OR IN ANY APPROACH OR DEPARTURE AREA.
  - (j) MISLEADING OR MALFUNCTIONING OBSTRUCTION LIGHTS OR UNLIGHTED/UNMARKED OBSTRUCTIONS IN THE APPROACH TO ANY ACTIVE RUNWAY.
  - (k) WATER, SNOW, DIRT, DEBRIS, OR OTHER TRANSIENT ACCUMULATION WHICH TEMPORARILY OBSCURES PAVEMENT MARKINGS OR PAYMENT EDGES, OR DEGRADATES VISIBILITY OF RUNWAY/TAXIWAY MARKINGS OR LIGHTS.
  - (l) INADEQUATE OR IMPROPER METHODS OF MARKING, BARRICADING, AND LIGHTING OF TEMPORARILY CLOSED PORTIONS OF THE AIRPORT OPERATIONS AREA.
  - (m) TRASH OR OTHER MATERIALS WITH FOREIGN OBJECT DAMAGE (FOD) POTENTIAL: WHETHER ON RUNWAYS, TAXIWAYS, OR APRONS, OR IN RELATED SAFETY AREAS.
  - (n) INADEQUATE BARRICADING OR OTHER MARKING WHICH IS PLACED TO SEPARATE CONSTRUCTION OR MAINTENANCE AREAS FROM OPEN AIRCRAFT OPERATING AREAS.
  - (o) FAILURE TO CONTROL UNAUTHORIZED VEHICLE AND HUMAN ACCESS TO ACTIVE AIRCRAFT OPERATING AREAS.
  - (p) FAILURE TO MAINTAIN RADIO COMMUNICATION BETWEEN CONSTRUCTION/MAINTENANCE VEHICLES AND RUTLAND UNICOM.
  - (q) CONSTRUCTION/MAINTENANCE ACTIVITIES OR MATERIALS WHICH COULD HAMPER THE RESPONSE OF AIRCRAFT RESCUE AND FIRE FIGHTING (ARFF) EQUIPMENT FROM REACHING ALL AIRCRAFT OR ANY PART OF THE RUNWAY/TAXIWAY SYSTEM, RUNWAY APPROACH AND DEPARTURE AREAS AND AIRCRAFT PARKING LOCATIONS.
  - (r) BIRD ATTRACTANTS ON AIRPORT SUCH AS: EDIBLES (FOOD SCRAPS, ETC.), MISCELLANEOUS TRASH, OR PONDED WATER.

- (6) THE CONTRACTOR SHALL CONDUCT ACTIVITIES SO AS NOT TO VIOLATE ANY SAFETY STANDARDS CONTAINED HEREIN. THE CONTRACTOR SHALL INSPECT ALL CONSTRUCTION AND STORAGE AREAS AS OFTEN AS NECESSARY AND PROMPTLY TAKE ALL STEPS NECESSARY TO PREVENT/REMEDY ANY UNSAFE OR POTENTIALLY UNSAFE CONDITIONS OR ACTIVITIES DISCOVERED.
- (7) THE VAOT WILL BE RESPONSIBLE FOR ISSUING APPROPRIATE NOTICE TO AIRMEN (NOTAM) CONCERNING CONSTRUCTION ACTIVITY ON THE AIRFIELD.
- (8) MOTORIZED VEHICLES  
THIS PROJECT INCLUDES WORK WITHIN THE AIRCRAFT OPERATIONS AREA (AOA). ALL PERMITTED VEHICLES SHALL BE EQUIPPED WITH A FLASHING AMBER (YELLOW) DOME-TYPE LIGHT, MOUNTED ON TOP OF THE VEHICLE AND OF SUCH INTENSITY TO CONFORM TO LOCAL CODES FOR MAINTENANCE AND EMERGENCY VEHICLES. ALL VEHICLES OPERATING WITHIN THE AIRFIELD BOUNDARY SHALL BE IDENTIFIED WITH A SIGN ON EACH SIDE OF THE VEHICLE BEARING THE CONTRACTOR'S NAME IN 12-INCH MINIMUM LETTER HEIGHT.  
VEHICLES MAKING ONLY OCCASIONAL VISITS TO THE JOB SITE ARE EXEMPT FROM THE IDENTIFICATION REQUIREMENTS CONTAINED HEREIN ABOVE PROVIDED THAT THEY ARE ESCORTED INTO, THROUGH, AND OUT OF THE AIRPORT AREA BY A PROPERLY IDENTIFIED VEHICLE.
- (9) RADIO COMMUNICATIONS  
RADIO COMMUNICATIONS ARE REQUIRED BETWEEN THE CONTRACTOR'S REPRESENTATIVE AND RUTLAND UNICOM. RADIO CONTACT IS REQUIRED AT ALL TIMES WHILE THE CONTRACTOR HAS PERSONNEL AND EQUIPMENT ON THE PROJECT SITE AND WHILE THEY ARE IN AN ACTIVE AIRCRAFT OPERATIONS AREA (AOA) OF THE AIRPORT. RADIOS SHALL BE FURNISHED BY THE CONTRACTOR AND SHALL BE CAPABLE OF TRANSMITTING AND RECEIVING AT A GROUND CONTROL FREQUENCY OF 122.8 MHZ. THIS FREQUENCY IS TO BE UTILIZED WHEN CROSSING ACTIVE FACILITIES. SUFFICIENT RADIOS SHALL BE ON SITE AND OPERATING AT ALL TIMES SO THAT INSTRUCTIONS OR COMMUNICATIONS MAY BE DISPATCHED TO ALL CREWS AND/OR EQUIPMENT WORKING IN AN ACTIVE AOA.
- (10) DEBRIS  
DEBRIS, WASTE, AND LOOSE MATERIAL (INCLUDING DUST AND DIRT) CAPABLE OF CAUSING DAMAGE TO AIRCRAFT LANDING GEAR OR PROPELLERS, OR BEING INGESTED IN JET ENGINES, SHALL NOT BE ALLOWED ON ACTIVE AIRCRAFT MOVEMENT AREAS OR ADJACENT GRASSED AREAS. MATERIALS OBSERVED TO BE WITHIN THESE AREAS SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR. THE CONTRACTOR SHALL BE REQUIRED TO HAVE A SWEEPING MACHINE AND OPERATOR ON SITE AND READY AT ALL TIMES DURING CONSTRUCTION ACTIVITY. WHERE TRAVEL ON OR ACROSS RUNWAYS, RAMP AREAS, TAXIWAYS, OR AIRCRAFT APRONS IS REQUIRED, THE CONTRACTOR SHALL PROVIDE ADEQUATE PERSONNEL AND EQUIPMENT TO KEEP SUCH SURFACES CLEAR OF DEBRIS.
- (11) FLAGMEN  
IN ACCORDANCE WITH THE SPECIFICATIONS, THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, FURNISH FLAGMEN AS NECESSARY TO CONTROL HIS TRAFFIC (UNLESS OTHERWISE DIRECTED BY THE ENGINEER).  
ALL CONTRACTOR VEHICLES THAT ARE REQUIRED TO CROSS ACTIVE RUNWAYS, RUNWAY SAFETY AREAS, TAXIWAYS AND APRONS SHALL DO SO UNDER THE DIRECT CONTROL OF A COMPETENT FLAGMAN WHO IS IN DIRECT RADIO CONTACT WITH GROUND CONTROL. ALL AIRCRAFT TRAFFIC ON RUNWAYS, TAXIWAYS, AND APRONS SHALL HAVE PRIORITY OVER CONTRACTOR'S TRAFFIC. AT NO TIME SHALL THE CONTRACTOR'S VEHICLES OR PERSONNEL BE ALLOWED TO ENTER OR CROSS ACTIVE RUNWAYS OR CLEAR ZONES WITHOUT PROPER AUTHORIZATION.

- (H) MISCELLANEOUS
  - (1) OPEN FLAME, WELDING OR TORCH CUTTING OPERATIONS ARE PROHIBITED UNLESS ADEQUATE FIRE AND SAFETY PRECAUTIONS HAVE BEEN TAKEN AND THE PROCEDURE PREVIOUSLY APPROVED BY THE ENGINEER.
  - (2) EQUIPMENT AND STOCKPILED MATERIAL SHALL BE CONSTRAINED IN A MANNER TO PREVENT MOVEMENT RESULTING FROM AIRCRAFT JET BLAST OR WIND CONDITIONS IN EXCESS OF 10 KNOTS.
  - (3) THE CONTRACTOR SHALL PROVIDE BUCKET TYPE CONSTRUCTION BARRICADES WITH FLASHING YELLOW LIGHTS AS SHOWN ON THE DRAWINGS TO DELINEATE THE WORK AREAS WHEN CLOSED TO AIRPORT TRAFFIC. OPEN TRENCHES, EXCAVATIONS AND STOCKPILED MATERIAL LOCATED IN THE AOA SHALL BE PROMINENTLY MARKED WITH ORANGE FLAGS AND LIGHTED BY APPROVED LIGHT UNITS DURING HOURS OF LIMITED VISIBILITY AND DARKNESS.
  - (4) ALL MATERIALS AND EQUIPMENT WHEN NOT IN USE SHALL BE PLACED IN APPROVED AREAS WHERE THEY WILL NOT CONSTITUTE A HAZARD TO AIRCRAFT OPERATIONS AND NOT PENETRATE CLEARANCE SURFACES. EQUIPMENT SHALL BE PARKED AT THE STAGING AREA WHEN NOT IN USE.
  - (5) MAXIMUM EQUIPMENT HEIGHT SHALL NOT EXCEED 15 FEET UNLESS PRIOR APPROVAL IS OBTAINED FROM THE ENGINEER.
  - (6) UPON COMPLETION OF ANY STAGE/PHASE OF WORK, THE ENGINEER WILL ARRANGE A PHYSICAL INSPECTION OF THE AREA WITHIN AIRPORT OPERATIONS PERSONNEL PRIOR TO OPENING ANY PORTION OF A RUNWAY, RAMP AREA OR AIRPORT ROADWAY THAT HAS BEEN CLOSED FOR WORK OR USED FOR A CROSSING POINT OR HAUL ROUTE BY THE CONTRACTOR.
  - (7) ENTRANCE TO THE AIRFIELD IS SUBJECT TO SECURITY REGULATIONS. ALL PERSONNEL ENTERING THE AIRFIELD MUST OBTAIN AND DISPLAY SECURITY IDENTIFICATION BADGES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ASSURING THAT ALL OF HIS EMPLOYEES WHO HAVE UNRESTRICTED ACCESS TO THE AIRFIELD, HAVE HAD A BACKGROUND CHECK PERFORMED ON THEM DATING BACK FIVE (5) YEARS VERIFYING REPRESENTATIONS MADE BY THE EMPLOYEE RELATING TO EMPLOYMENT.
  - (8) THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A CURRENT LIST OF ALL EMPLOYEES WORKING ON THE AIRPORT. THE LIST SHALL BE MAINTAINED CURRENT BY THE CONTRACTOR AND APPLIES TO ALL SUBCONTRACTORS.
  - (9) EXCEPT FOR EMERGENCIES, ALL CONTACT WITH AIRPORT PERSONNEL SHALL BE MADE THROUGH THE RESIDENT ENGINEER. FOR EMERGENCIES INVOLVING SAFETY (INJURIES, FIRES, SECURITY BREACHES, ETC.) THE CONTRACTOR SHALL MAKE DIRECT CONTACT WITH AIRPORT OPERATIONS FOLLOWED BY NOTIFICATION TO THE RESIDENT ENGINEER AS SOON AS POSSIBLE.
  - (10) THE CONTRACTOR SHALL PROVIDE THE PHONE NUMBERS OF THREE PERSONNEL, INCLUDING THE PROJECT RESIDENT SUPERINTENDENT, WHO MAY BE CONTACTED IN AN EMERGENCY. PERSONNEL SHALL BE ON CALL 24 HOURS PER DAY FOR MAINTAINING AIRPORT HAZARD LIGHTING AND BARRICADES.
  - (11) IN ACCORDANCE WITH THE SPECIFICATIONS, FEDERAL WAGE RATES SHALL BE POSTED OUTSIDE THE SITE FIELD OFFICE IN A WEATHERPROOF ENCLOSURE.
- (I) UTILITIES
  - (1) UNDERGROUND UTILITIES: THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE CONSIDERED TO BE ONLY ESTIMATED LOCATIONS. ALL UTILITY LOCATIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING CONSTRUCTION. IN THE EVENT ANY UTILITY IS DAMAGED THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING FOR INCURRED COSTS OF REPAIRS.
  - (2) UTILITIES NOTIFICATION: AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN AN AREA WHICH MAY INVOLVE UNDERGROUND UTILITY FACILITIES, THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER, AND THE OWNER OF EACH UNDERGROUND UTILITY FACILITY AFFECTED.
  - (3) THE FOLLOWING IS A LIST OF COMPANIES WITH POSSIBLE UTILITIES WITHIN THE CONSTRUCTION LIMITS.

| UTILITY | 1-800-225-4977 |
|---------|----------------|
| DIGSAFE | 1-800-225-4977 |
| CVPS    | 1-800-649-2877 |



|             |               |
|-------------|---------------|
| FILE NO.    | 11/001/10/001 |
| DATE        | 11/001/10/001 |
| REV         | 11/001/10/001 |
| DESCRIPTION | 11/001/10/001 |

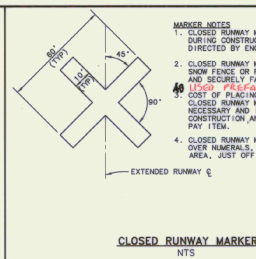
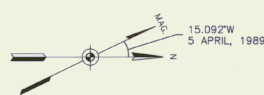
RUTLAND STATE AIRPORT  
CLARENDON, VERMONT

GENERAL CONSTRUCTION & SAFETY NOTES

3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|               |                         |
|---------------|-------------------------|
| Designed by:  | Date:                   |
| Drawn by:     | 11/001/10/001           |
| Checked by:   | 11/001/10/001           |
| Approved by:  | 11/001/10/001           |
| Scale:        | HOR - N/A<br>VERT - N/A |
| Date:         | 5/5/97                  |
| Sheet 5 Of 65 |                         |
| Sheet No      | 5                       |





1. CONTRACTOR'S MAIN ACCESS TO SITE ~~TO BE~~ FROM ROUTE 78.
2. CONTRACTOR ~~TO PROVIDE~~ LEG PERSON AT HAUL / ACCESS ROUTE CROSSING OF RUNWAY 13 SAFETY AREA, WHEN RUNWAY 13-31A OPERATIONAL.
3. FLAGPERSON TO CONTROL ACCESS WITHIN SAFETY AREA. NO VEHICLE TRAFFIC WAS ALLOWED TO ENTER RUNWAY SAFETY AREA WHEN AIRCRAFT WERE LANDING OR DEPARTING RUNWAY 13.
4. ~~TO HAVE~~ USED ANAERONAUTICAL RADIO CAPABLE OF TRANSMITTING AND RECEIVING ON RUTLAND UNICOM FREQUENCY 122.8 MHZ.
5. HAUL ROUTE ~~TO BE~~ GRADED AND RETURNED TO TURF UPON COMPLETION OF PROJECT.
6. WASTE AREAS NO GRADED & SEEDED. PROVIDED BY CONTRACTOR'S CONTROL ENGINEER.

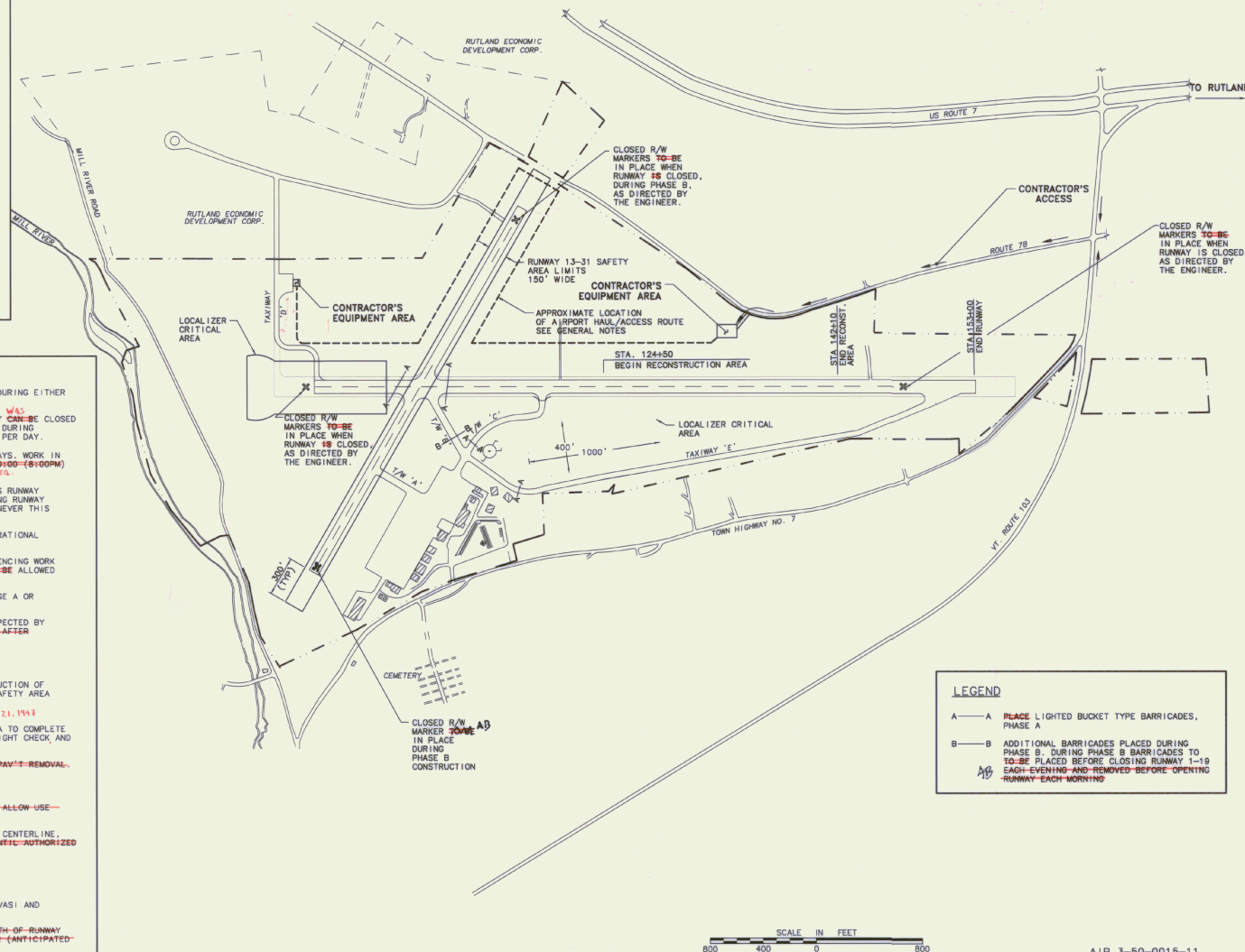
1. ALL MARKINGS TO BE PAINTED WHITE.
2. EIGHT (8) TEMPORARY MEDIAN INTENSITY RUNWAY THRESHOLD LIGHTS (CONFORMING TO SPECIFICATION 0095910) TO BE INSTALLED AS SHOWN - SEE SHEET 31.
3. TEMPORARY THRESHOLD LIGHTS TO BE PLACED ON THE RUNWAY THRESHOLD AS SHOWN - SEE SHEET 31.
4. TEMPORARY THRESHOLD LIGHTS TO BE PLACED ON THE RUNWAY THRESHOLD AS SHOWN - SEE SHEET 31. EXISTING THRESHOLD LIGHTS TO BE PAID FOR AT RELOCATED THRESHOLD AT CONTRACTOR'S OPTION. CONTRACTOR TO SELECT TYPE AND SPACING OF LIGHTS.
5. WHILE PREPARING TEMPORARY THRESHOLD, CLOSED RUNWAY MARKERS TO BE IN PLACE OVER MATERIALS "1" AND "10", RUNWAY 13-31 TO BE OPEN.
6. REMOVE EXISTING PAINT WHICH CONTRASTS WITH RUNWAY MARKING BY SANDBLAST OR WATERBLAST TO THE SATISFACTION OF THE ENGINEER.
7. TEMPORARY MARKERS TO BE PAID FOR UNDER ITEM 646.60, 646.61 AND 646.70.
8. TEMPORARY RELOCATED THRESHOLD WILL BE USED IF A TEMPORARY DISPLACED THRESHOLD IS NOT USED. IF A TEMPORARY DISPLACED THRESHOLD IS USED, THE THRESHOLD WILL BE PAID FOR UNDER ITEM 646.60. IF A TEMPORARY DISPLACED THRESHOLD IS REQUIRED DUE TO THE CONTRACTOR, THERE WILL BE NO PAYMENT FOR THIS ITEM. IF THE TEMPORARY DISPLACED THRESHOLD IS USED, THE AIRPORT, AS DETERMINED BY THE ENGINEER, THE WORK WILL BE PAID FOR UNDER ITEM 1-10.
9. SPACING SHOWN FOR THE EXISTING 150' WIDE RUNWAY, REDUCE SPACING PROPORTIONALLY TO THE WIDTH OF THE RUNWAY.

TEMPORARY RELOCATED THRESHOLD DETAIL (ITEM L-100)  
SCALE: 1"=50'

1. ALL WORK ON THE RUNWAY RECONSTRUCTION PROJECT ~~WILL BE~~<sup>A7</sup> ACCOMPLISHED DURING EITHER PHASE A OR PHASE B.
2. RUNWAY 1-15 ~~WILL BE~~<sup>W6</sup> CLOSED TO AIR TRAFFIC DURING PHASE A. ALL TIMES CAN BE CLOSED FOR UP TO 30 CALENDAR DAYS. RUNWAY 13-31 ~~IS TO BE~~<sup>W6</sup> OPEN AT ALL TIMES DURING PHASE A. WORK, WORK DURING PHASE A CAN BE CARRIED OUT UP TO 24 HOURS PER DAY.
3. WORK DURING PHASE B MUST BE COMPLETED WITHIN NINETY (90) CALENDAR DAYS. WORK IN THIS PHASE ~~MUST BE~~<sup>W6</sup> ALLOWED TO PROCEED UNTIL 23:00 HOURS (LOCAL TIME). ~~NO~~<sup>N8</sup> DISCRETE BY THE ENGINEER.
4. WHENEVER WORK IS SCHEDULED WITHIN THE RUNWAY 13-31 SAFETY AREA, THIS RUNWAY ~~MUST BE~~<sup>W6</sup> CLOSED, AT LEAST 48 HOURS NOTICE ~~IS~~<sup>W6</sup> REQUIRED PRIOR TO CLOSING RUNWAY 13-31. CLOSE COORDINATION WITH THE AIRPORT MANAGER ~~IS~~<sup>W6</sup> NECESSARY WHENEVER THIS RUNWAY ~~IS SCHEDULED TO BE~~<sup>W6</sup> CLOSED.
5. ALL WORK ~~MUST~~<sup>W6</sup> COMPLY WITH THE REQUIREMENTS OF A.C. 150/5370-2C, OPERATIONAL SAFETY DURING CONSTRUCTION, (SEE CONSTRUCTION AND SAFETY NOTES).
6. THE CONTRACTOR ~~MUST SUBMIT~~<sup>W6</sup> A SCHEDULE TO THE ENGINEER PRIOR TO COMMENCING WORK. REPORTS ON THIS SCHEDULE ~~ARE REQUIRED WEEKLY~~<sup>W6</sup>. NO WORK ~~WILL BE~~<sup>W6</sup> ALLOWED OUTSIDE THE AREAS INCLUDED IN THE APPROVED SCHEDULE.
7. WORK OUTSIDE THE RUNWAY SAFETY AREAS ~~CAN BE~~<sup>W6</sup> ACCOMPLISHED DURING PHASE A OR PHASE B. ~~NO~~<sup>A6</sup>
8. PRIOR TO OPENING THE RUNWAYS TO AIR TRAFFIC, THE RUNWAY ~~WILL BE~~<sup>W6</sup> INSPECTED BY THE CONTRACTOR AND ENGINEER. INSPECTIONS ~~WILL BE~~<sup>W6</sup> SCHEDULED FOR 0700-0900 AFTER NIGHT END-DOWN. ~~THIS~~<sup>W6</sup> WILL BE SCHEDULED FOR 0700-0900 AFTER NIGHT END-DOWN.

1. RECONSTRUCT RUNWAY 1-19 FROM STATION 124+50 TO 124+10. BEGIN CONSTRUCTION OF RUNWAY SAFETY AREAS, 200' LEFT AND RIGHT OF RUNWAY CENTERLINE AND SAFETY AREA OVERRUNS, STATION 153+40 TO 156+00.
2. RELOCATED DE ANTEENNA, RELOCATED LOCALIZER AND SHELTER Per to July 21, 1994  
THIS WORK ~~IS~~ TO BE COMPLETED AS SOON AS POSSIBLE TO ALLOW FOR FLTA TO COMPLETE ALL MODIFICATION AND WORK UPON THE AIRFIELD TO INSTALL THE NECESSARY FLIGHT CHECK AND SHELTER, THE NEW APPROACH PLATES (SEE DRAWING).
3. ~~NO WORK ALLOWED SOUTH OF INTERSECTION WITH RUNWAY 13-31 OTHER THAN PAVT REMOVAL.~~  
WORK CONTINUES WITH COORDINATION WITH ENGINEER 1 P.M.

1. OVERLAY RUNWAY 1, TAPER OVERLAY AT THE END OF EACH DAY'S WORK TO ALLOW USE BY AIR TRAFFIC. ALL FLYING COMPLETED UNDER PHASE A. **AB**
2. COMPLETE WORK IN RUNWAY SAFETY AREAS, 200' LEFT AND RIGHT OF RUNWAY CENTERLINE, AND IN SAFETY AREA OVERRUNS. WORK SOUTH OF RWY 1-31 CANNOT BEGIN UNTIL AUTHORIZED BY THE ENGINEER. AFTER LOCATER FLIGHT CHECK. **AB**
3. COMPLETE DRAINAGE WORK.
4. COMPLETE TAXIWAY D.
5. INSTALL/RELOCATE RUNWAY LIGHTING AND SIGNAGE RELOCATIONS, RELOCATE VASI AND OADS.
6. NO SIGNIFICANT EXCAVATION OR GRADING ACTIVITIES WILL BE ALLOWED SOUTH OF RUNWAY INTERSECTION UNTIL FAA COMPLETES FLIGHT CHECK OF RELOCATED LOCATER (ANTICIPATED: 21-22 APRIL).



A—A ~~PLACE~~ LIGHTED BUCKET TYPE BARRICADES,  
PHASE A

B—B ADDITIONAL BARRICADES PLACED DURING  
PHASE B. DURING PHASE B BARRICADES TO  
TO BE PLACED BEFORE CLOSING RUNWAY 1-  
EACH EVENING AND REMOVED BEFORE OPENING  
RUNWAY EACH MORNING

| REV. | DATE     | DESCRIPTION | Job No. | F01312.00 | File No. 11V4012108-02 |
|------|----------|-------------|---------|-----------|------------------------|
| 1    | 12/31/99 | As BUILT    |         |           |                        |

CLARENDON, VERMONT

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|                      |              |
|----------------------|--------------|
| Received by: AMICO   | Date: 2/97   |
| Received by: MCCALLA | Date: 3/97   |
| Received by: AMICO   | Date: 5/5/97 |
| Received by:         |              |

Scale: HOR. - 1" = 400'  
VERT. - N/A

Sheet 6 Of 65

Sheet No  
6





STATE OF VERMONT  
DEPARTMENT OF TRANSPORTATION  
CLARENDON, VERMONT

---

DESIGNED BY: C. D'AMICO

DRAWN BY: M. MCALLA

CHECKED BY: C. D'AMICO

APPROVED BY: M. CHURCHILL

DATE: 5/5/97

SHEET 7 OF 65

SHEET NO.

---

**URS Greiner, Inc.**

3 MARCUS BOULEVARD  
ALBANY, NEW YORK

---

**GENERAL NOTES**

- SUBGRADE UNDER AREAS TO BE PAVED ~~TO BE~~ COMPACTED TO 100% DENSITY AS PER AASHTO T-160, ~~AS IS~~ ~~DIRECTED BY THE ENGINEER~~ ~~AS NOTED BY THE ENGINEER~~.
- BITUMINOUS TACK COAT (EMULSIFIED ASPHALT, RS-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.)
- 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 50'-75' EACH SIDE OF CENTERLINE ~~TO BE~~ REMOVED. PAYMENT ~~TO BE~~ MADE UNDER ITEM 203.15, COMMON EXCAVATION. AREA ~~TO BE~~ GRADED, TOPSOILED AND SEED.
- ALL EXCAVATION ~~TO BE~~ PAID FOR UNDER ITEM 203.15, COMMON EXCAVATION OR 203.16 SOLID ROCK EXCAVATION.
- SEED, ITEM 651.15 ~~TO BE~~ APPLIED AS DIRECTED BY ENGINEER.

| % WT   | LBS / A | NAME                   | EUR % | GERM |
|--------|---------|------------------------|-------|------|
| 3.33   | 2       | CROWN VETCH            | 97    | 75   |
| 50.00  | 30      | CREeping RED FESCUE    | 98    | 85   |
| 8.33   | 5       | TI MOIRY               | 99    | 85   |
| 16.67  | 10      | PERR. RYE GRASS        | 95    | 85   |
| 8.34   | 5       | ALFALFA (VAR. SARANAC) | 99    | 85   |
| 8.33   | 5       | BIRDSFOOT TREFOIL      | 98    | 85   |
| 5.00   | 3       | HIGHLAND BENT GRASS    | 92    | 85   |
| 100.00 | 60      |                        |       |      |

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 IF 500 LBS / ACRE.

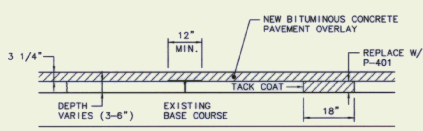
AGRICULTURAL LIMESTONE, ITEM 651.20, ~~TO BE~~ APPLIED AT RATE OF 2 TONS / ACRE OR AS DIRECTED BY ENGINEER.

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.

ALLOWABLE THICKNESS TOLERANCES:  
 SUBGRADE ± 1"  
 CONTROLLED MATERIAL ± 1"  
 PAVEMENT ± 3/16"  
 BASE COURSE ± 1/2"

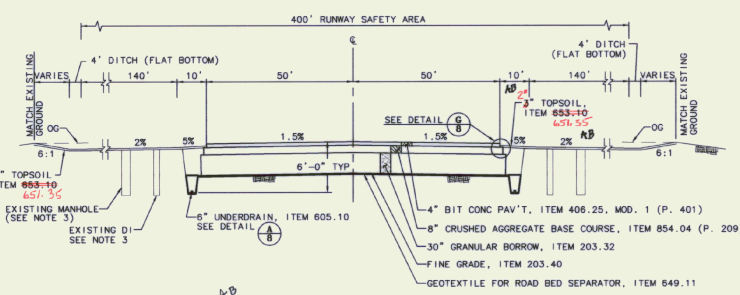
- BITUMINOUS CONCRETE PAVEMENT DESIGN BASED ON PERFORMANCE GRADED ASPHALT - ~~USE~~ PG 58-34 IN ACCORDANCE WITH AASHTO DESIGNATION MP1.
- MINIMUM OVERLAY DEPTH IS 2 INCHES. MILL EXISTING PAVEMENT ~~GRADED ASPHALT~~ - WHEN NECESSARY TO ACHIEVE MINIMUM THICKNESS.



### EXISTING RUNWAY PAVEMENT CRACK REPAIRS

SCALE = NONE

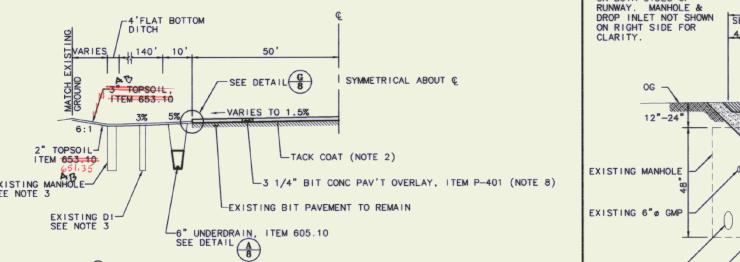
- NOTES:
- PRIOR TO PLACING NEW BITUMINOUS CONCRETE PAVEMENT OVERLAY, PAVEMENT CRACKS ~~TO BE~~ SEALED OR REPAIRED, AS FOLLOWS:  
 TYPE I CRACK REPAIR: CRACKS LESS THAN 3/4" IN WIDTH ~~TO BE~~ ROUTED AND SEALED WITH HOT POURED JOINT SEALING FILLER. PAYMENT ~~TO BE~~ MADE UNDER ITEM 524.11 MOD. 1 (P-605).  
 TYPE II CRACK REPAIR: CRACKS BETWEEN 3/4" AND 1 1/4" IN WIDTH ~~TO BE~~ ROUTED SEALED WITH HOT POURED JOINT SEALING FILLER. PRIOR TO PLACING OVERLAY CRACKS BETWEEN 1/2" AND 1 1/4" ~~SHALL BE~~ COVERED WITH A PAVEMENT REINFORCEMENT MATERIAL SUCH AS "PAVE-PREP" TM OR APPROVED EQUAL. PAYMENT ~~TO BE~~ MADE UNDER ITEM 524.11 MOD. 2 (P-605). TYPE II CRACK REPAIR.  
 TYPE III CRACK REPAIR: CRACKS OVER 1 1/4" IN WIDTH ~~TO BE~~ CUT OUT. EXISTING BIT. CONC. PAVEMENT (9") ON EITHER SIDE OF THE CRACK ~~TO BE~~ REMOVED. BASE MATERIAL RE-COMPACTED, AND NEW BITUMINOUS CONCRETE PAVEMENT (CONFORMING TO ITEM 406.25 MOD. 1 (P-401)) REPLACED. PAYMENT ~~TO BE~~ MADE UNDER ITEM 524.11, MOD. 3 (P-605).
  - DETERMINATION OF USE OF TYPE I, TYPE II, OR TYPE III CRACK REPAIR ~~WILL BE~~ AS DIRECTED BY THE ENGINEER.
  - CRACK SURVEY IN DEC. 1996 REVEALED APPROXIMATELY 17,000 LF OF CRACKS WHICH NEEDED REPAIR. APPROXIMATELY 10% TYPE III, APPROXIMATELY 50% TYPE II AND APPROXIMATELY 40% TYPE I.



### PROPOSED TYPICAL SECTION R/W 1-19

STA 125+00 TO 142+00

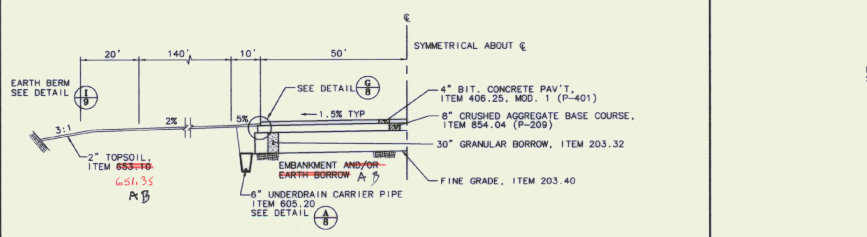
SCALE = NONE



### PROPOSED TYPICAL SECTION R/W 1-19

STA 103+00 TO 124+50

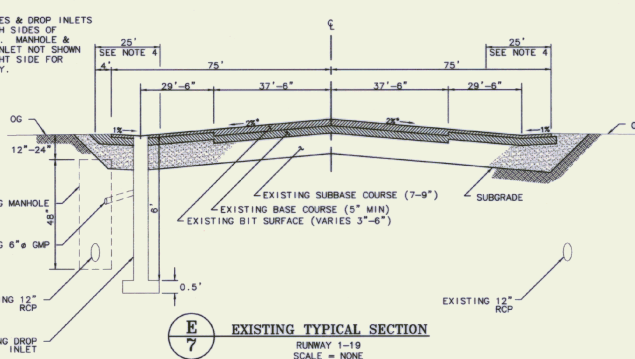
SCALE = NONE



### PROPOSED TYPICAL SECTION R/W 1-19

STA 150+00 TO 153+00

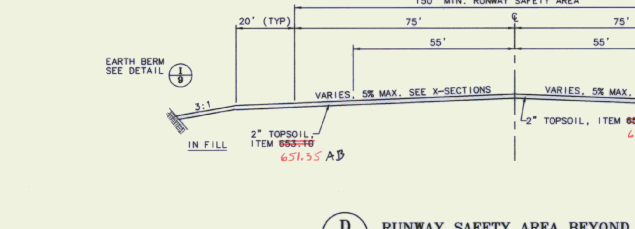
SCALE = NONE



### EXISTING TYPICAL SECTION

RUNWAY 1-19

SCALE = NONE

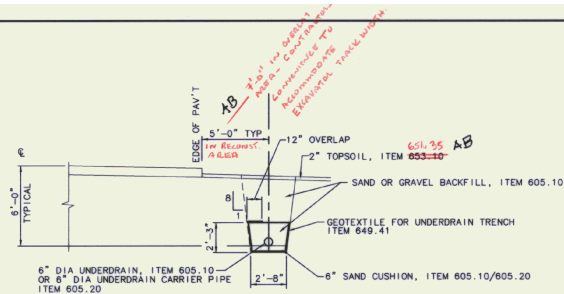


### RUNWAY SAFETY AREA BEYOND RUNWAY THRESHOLD - TYPICAL SECTIONS

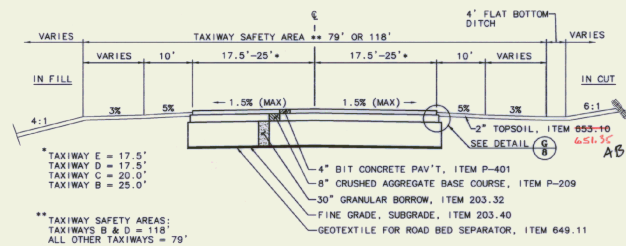
STA 100+00 TO 103+00  
STA 153+00 TO 156+00

SCALE = NONE

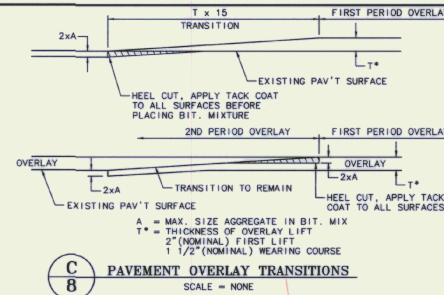
\* WHERE SHOWN ON PLANS OR AS ORDERED BY THE ENGINEER



**A**  
8  
**6\"/>**

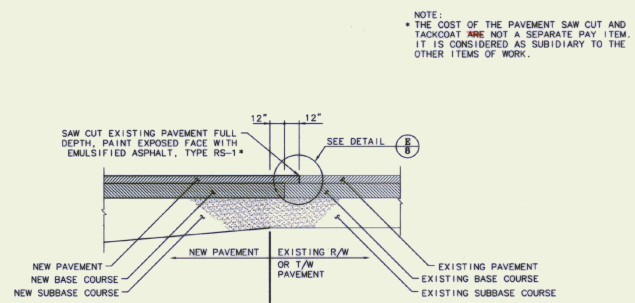


**B**  
8  
**PROPOSED TAXIWAY TYPICAL SECTION**  
SCALE = NONE

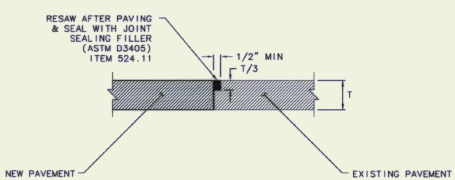


**C**  
8  
**PAVEMENT OVERLAY TRANSITIONS**  
SCALE = NONE

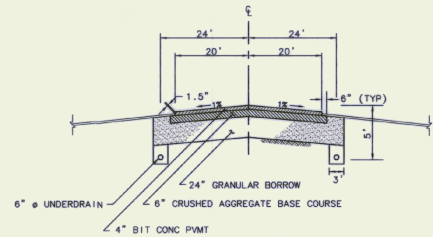
1. OVERLAY OPERATION TO PROCEED FROM SOUTH TO NORTH
2. OVERLAY TO BE COMPLETED FULL WIDTH OF RUNWAY ON EACH EVENING'S WORK. *During Phase A. AB*
3. PLACEMENT OF PAVEMENT OVERLAY TO TERMINATE EACH NIGHT TO ALLOW SUFFICIENT TIME FOR PLACEMENT OF TEMPORARY MARKING AND CLEANUP PRIOR TO RE-OPENING THE RUNWAY.
4. AT THE END OF EACH NIGHT'S WORK, TRANSITION RAMPS TO BE CONSTRUCTED TO PROVIDE TRANSITION FROM COMPLETED COURSE OF THE OVERLAY TO THE EXISTING PAVEMENT.



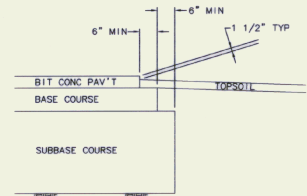
**D**  
8  
**BUTT JOINT DETAIL**  
SCALE = NONE



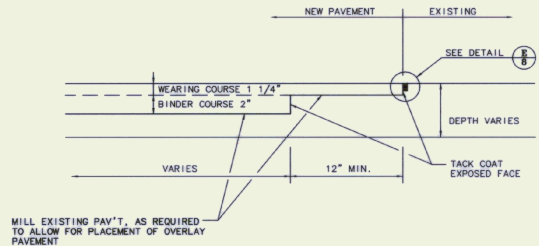
**E**  
8  
**SAWCUT DETAIL**  
SCALE = NONE



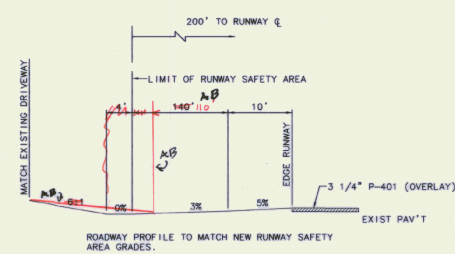
**F**  
8  
**EXISTING TYPICAL SECTION TAXIWAY 'C'**  
SCALE = NONE



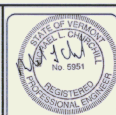
**G**  
8  
**PAVEMENT SECTION EDGE (TYP.)**  
SCALE = NONE



**H**  
8  
**OVERLAY BUTT JOINT DETAIL**  
SCALE = NONE



**I**  
8  
**MAINTENANCE DRIVEWAY PROFILE**  
STA 145+03± LEFT  
SCALE = NONE



| REV. | DATE     | DESCRIPTION | Job No. |
|------|----------|-------------|---------|
| 1    | 12/01/99 | As Bldg     |         |

**RUTLAND STATE AIRPORT**  
CLARENDON, VERMONT

**TYPICAL SECTIONS & DETAILS**

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

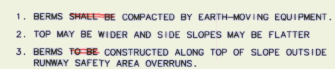
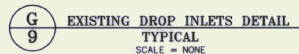
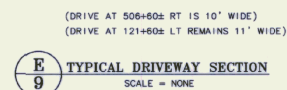
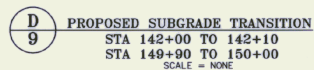
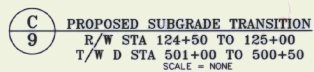
|              |            |      |
|--------------|------------|------|
| Designed by: | D. J. MCOY | 3/97 |
| Drawn by:    | M. MCALLA  | 2/97 |
| Checked by:  | D. J. MCOY | 3/97 |
| Approved by: | M. MCALLA  | 3/97 |

Scale: HS = AS NOTED  
VS = AS NOTED

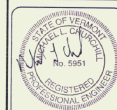
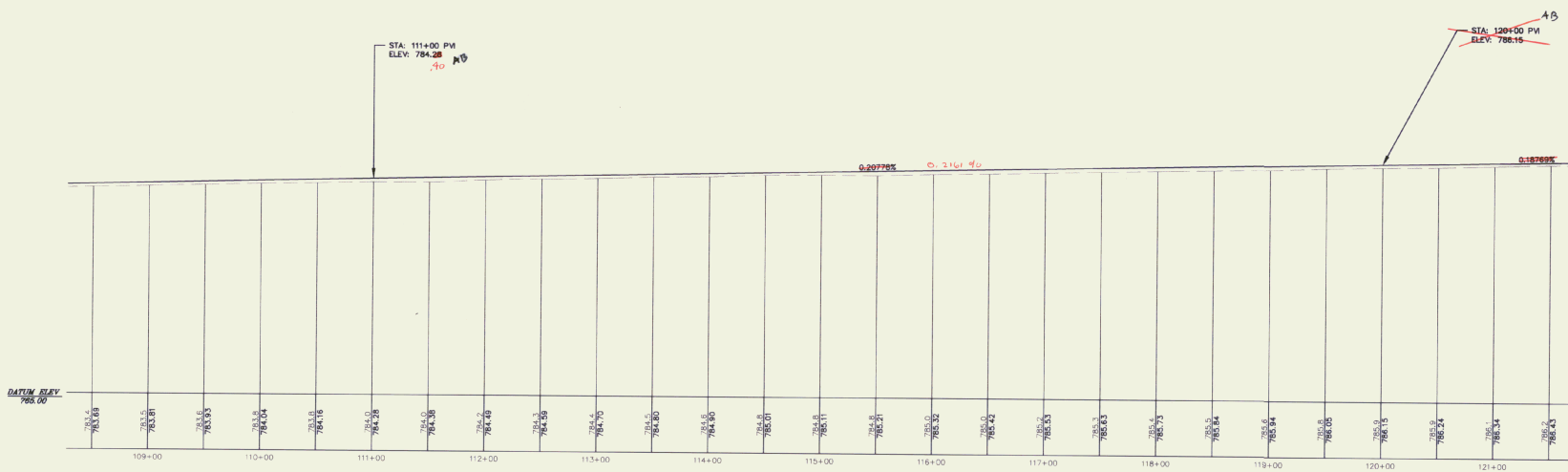
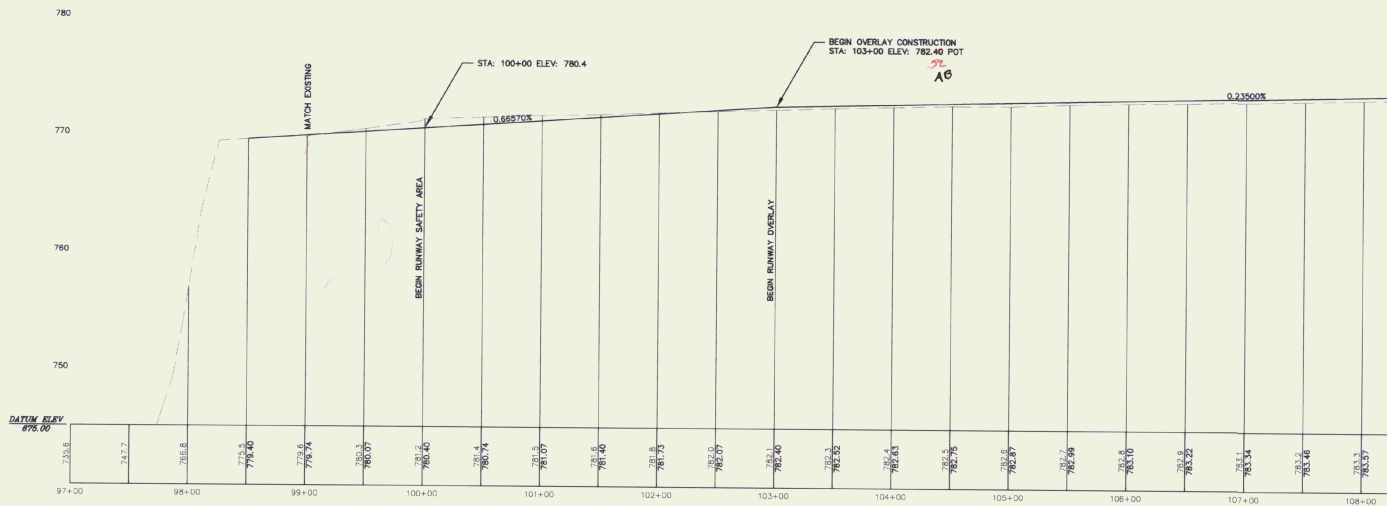
Date: 5/19/97

Sheet 8 Of 65

Sheet No. **8**







| REV. | DATE    | DESCRIPTION                  |
|------|---------|------------------------------|
| 1    | 7/18/22 | Revised STA 103+00 to 103+50 |

Job No. 14022100  
File No. 1402210090

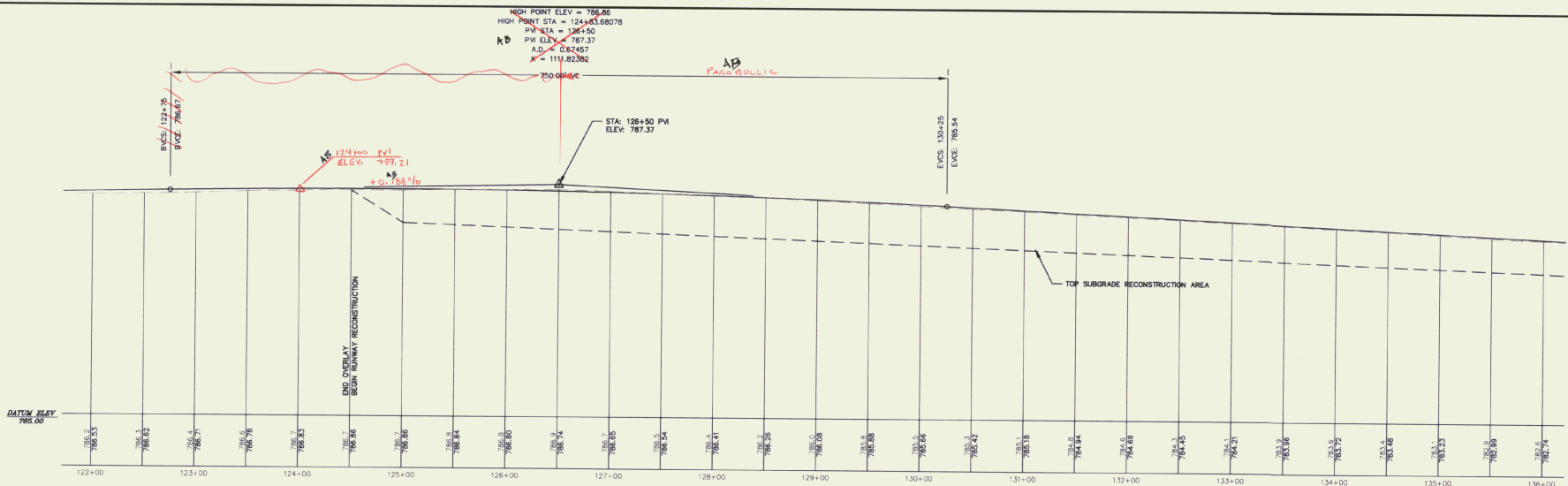
**RUTLAND STATE AIRPORT**  
CLARENDON, VERMONT

**RUNWAY 1-19 PROFILE**

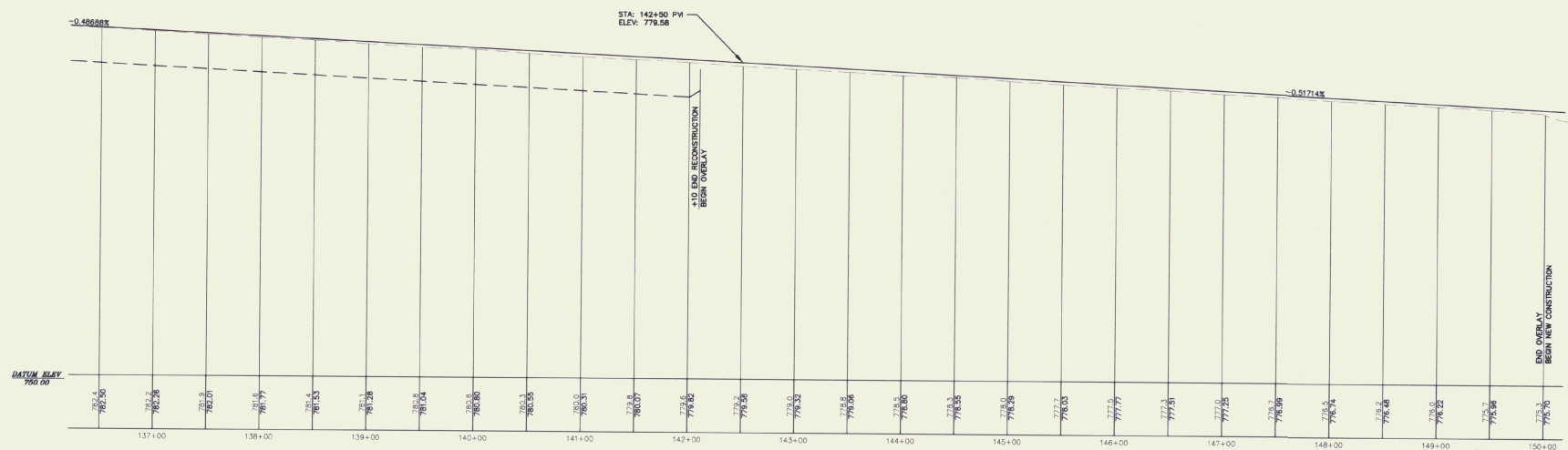
**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|              |          |
|--------------|----------|
| Designed By: | Scale    |
| Drawn By:    | 1" = 50' |
| Checked By:  | 1" = 50' |
| Approved By: | 1" = 50' |

Date: 5/2/97  
Sheet 10 Of 65  
Sheet No.  
**10**



RUNWAY 1-19 PROFILE  
 STA 122+00 TO 136+00



RUNWAY 1-19 PROFILE  
 STA 136+50 TO 150+00



1. 5/10/04 5/10/04 STA 123+00 TO 124+00  
 2. 5/10/04 5/10/04 STA 124+00 TO 125+00  
 3. 5/10/04 5/10/04 STA 125+00 TO 126+00  
 4. 5/10/04 5/10/04 STA 126+00 TO 127+00  
 5. 5/10/04 5/10/04 STA 127+00 TO 128+00  
 6. 5/10/04 5/10/04 STA 128+00 TO 129+00  
 7. 5/10/04 5/10/04 STA 129+00 TO 130+00  
 8. 5/10/04 5/10/04 STA 130+00 TO 131+00  
 9. 5/10/04 5/10/04 STA 131+00 TO 132+00  
 10. 5/10/04 5/10/04 STA 132+00 TO 133+00  
 11. 5/10/04 5/10/04 STA 133+00 TO 134+00  
 12. 5/10/04 5/10/04 STA 134+00 TO 135+00  
 13. 5/10/04 5/10/04 STA 135+00 TO 136+00

REV. DATE DESCRIPTION  
 1. 5/10/04 5/10/04 STA 123+00 TO 124+00  
 2. 5/10/04 5/10/04 STA 124+00 TO 125+00  
 3. 5/10/04 5/10/04 STA 125+00 TO 126+00  
 4. 5/10/04 5/10/04 STA 126+00 TO 127+00  
 5. 5/10/04 5/10/04 STA 127+00 TO 128+00  
 6. 5/10/04 5/10/04 STA 128+00 TO 129+00  
 7. 5/10/04 5/10/04 STA 129+00 TO 130+00  
 8. 5/10/04 5/10/04 STA 130+00 TO 131+00  
 9. 5/10/04 5/10/04 STA 131+00 TO 132+00  
 10. 5/10/04 5/10/04 STA 132+00 TO 133+00  
 11. 5/10/04 5/10/04 STA 133+00 TO 134+00  
 12. 5/10/04 5/10/04 STA 134+00 TO 135+00  
 13. 5/10/04 5/10/04 STA 135+00 TO 136+00

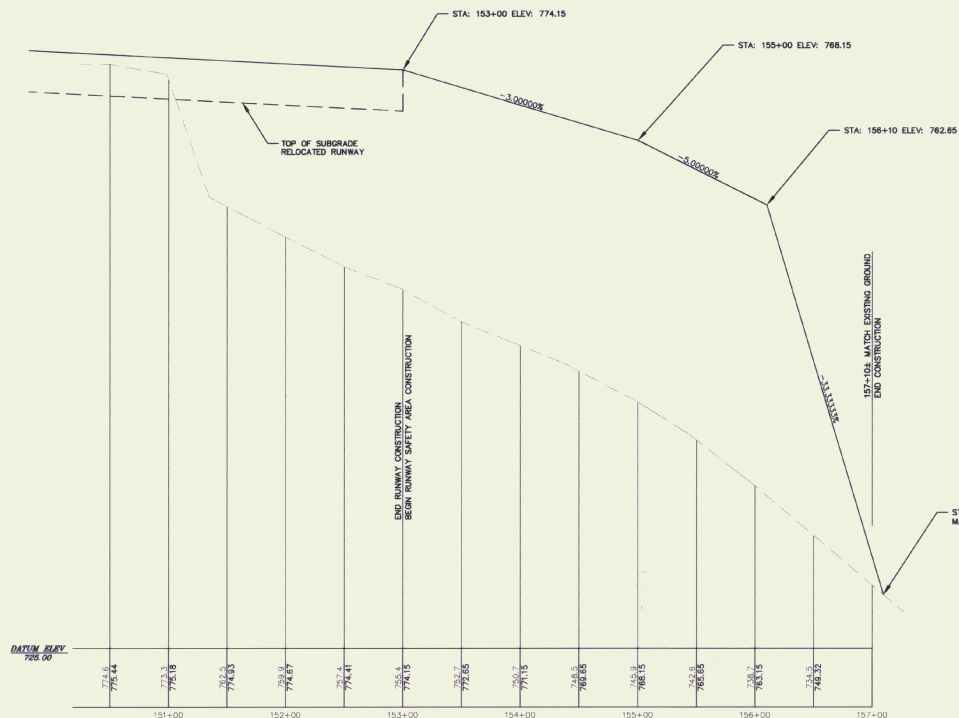
Job No. 14002.00  
 File No. 14002.00

RUTLAND STATE AIRPORT  
 CLARENDON, VERMONT  
 RUNWAY 1-19 PROFILE

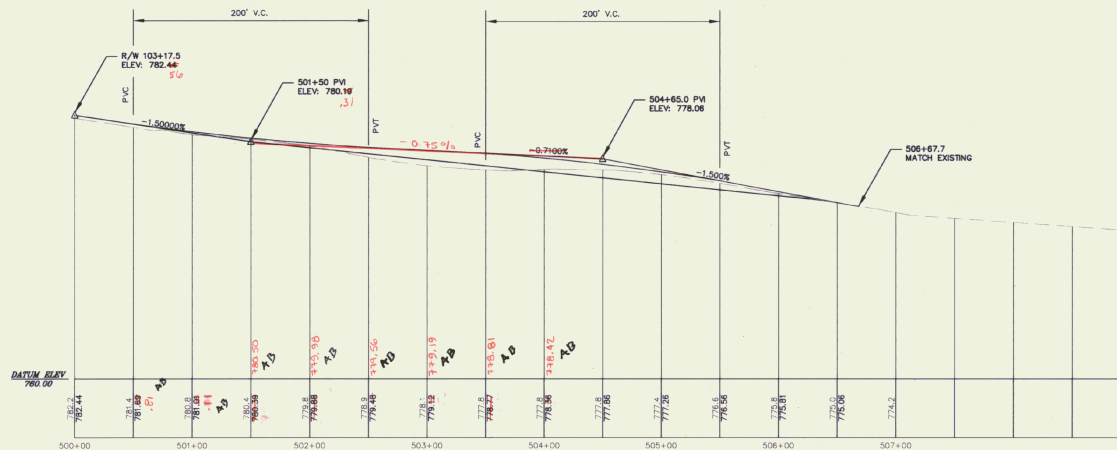
URS Greiner, Inc.  
 3 MARCUS BOULEVARD  
 ALBANY, NEW YORK

Designed by: D. Greiner  
 Checked by: M. Greiner  
 Approved by: M. Greiner

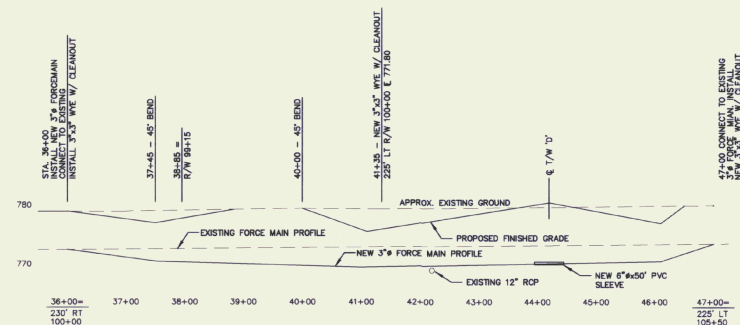
Date: 5/10/04  
 Scale: 1" = 10'



**RUNWAY 1-19 PROFILE**  
STA 150+50 TO 157+10±



**TAXIWAY 'D' PROFILE**  
STA 500+00 TO 507+00



**FORCE MAIN PROFILE**  
1" = 100' HORIZONTAL  
1" = 5' VERTICAL



|                            |                              |                 |
|----------------------------|------------------------------|-----------------|
| DESIGNED BY:<br>C. D'AMICO | CHECKED BY:<br>M. MCALLA     | DATE:<br>5/5/97 |
| DRAWN BY:<br>M. MCALLA     | APPROVED BY:<br>M. CHURCHILL | DATE:<br>5/5/97 |

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

Date: 5/5/97

Sheet 12 OF 65

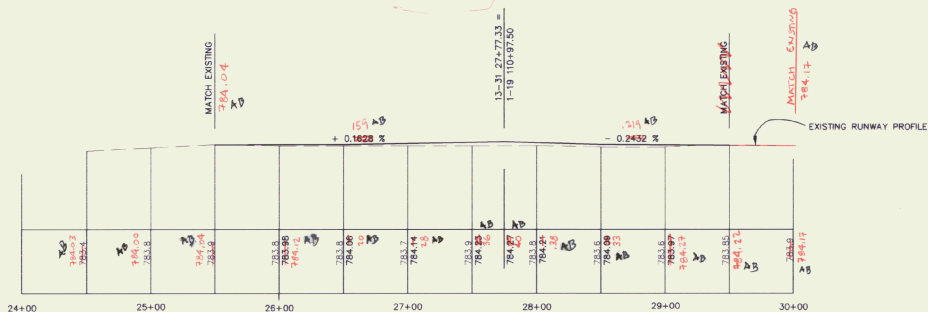
Sheet No.

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

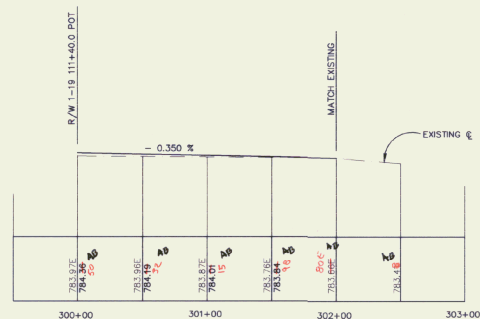
**RUTLAND STATE AIRPORT**  
CLARENDON, VERMONT

**RUNWAY 1-19 PROFILE**





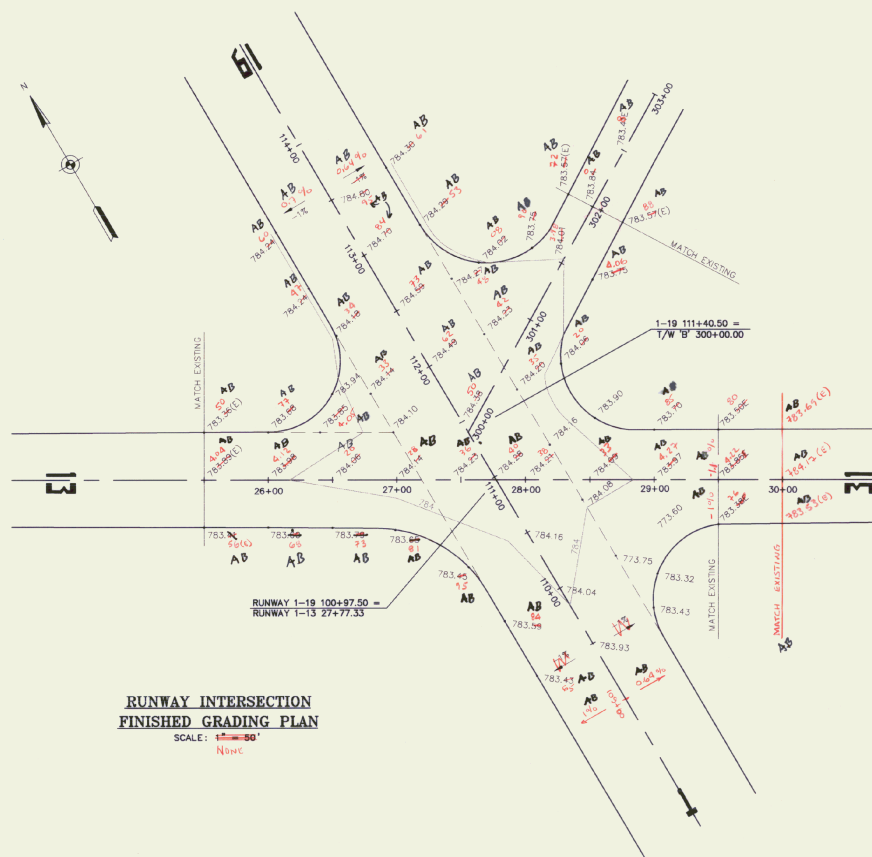
RUNWAY 13-31 PROFILE



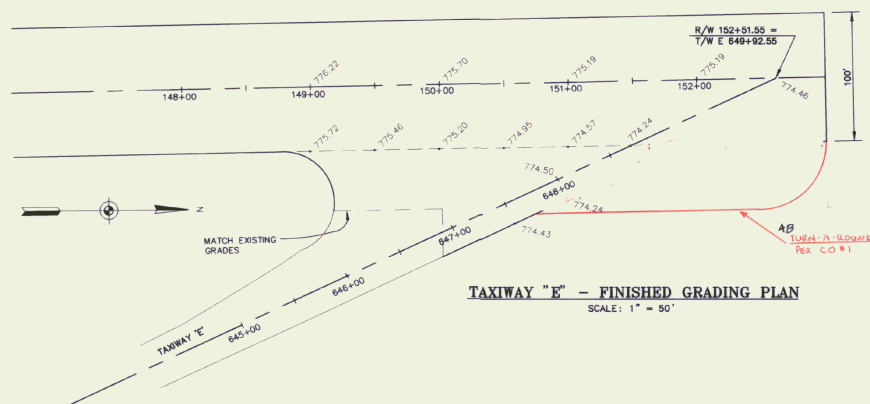
TAXIWAY "B" PROFILE



TAXIWAY "C" PROFILE



Runway Intersection  
Finished Grading Plan  
Scale: 1" = 50'



Taxiway "E" - Finished Grading Plan  
Scale: 1" = 50'



|                          |                           |
|--------------------------|---------------------------|
| Project No. 114021514-PP | Sheet No. 13 of 65        |
| Drawn by: M. McCalla     | Checked by: O. D'Amico    |
| Date: 5/9/97             | Approved by: M. Churchill |

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT

URS Greiner, Inc.  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

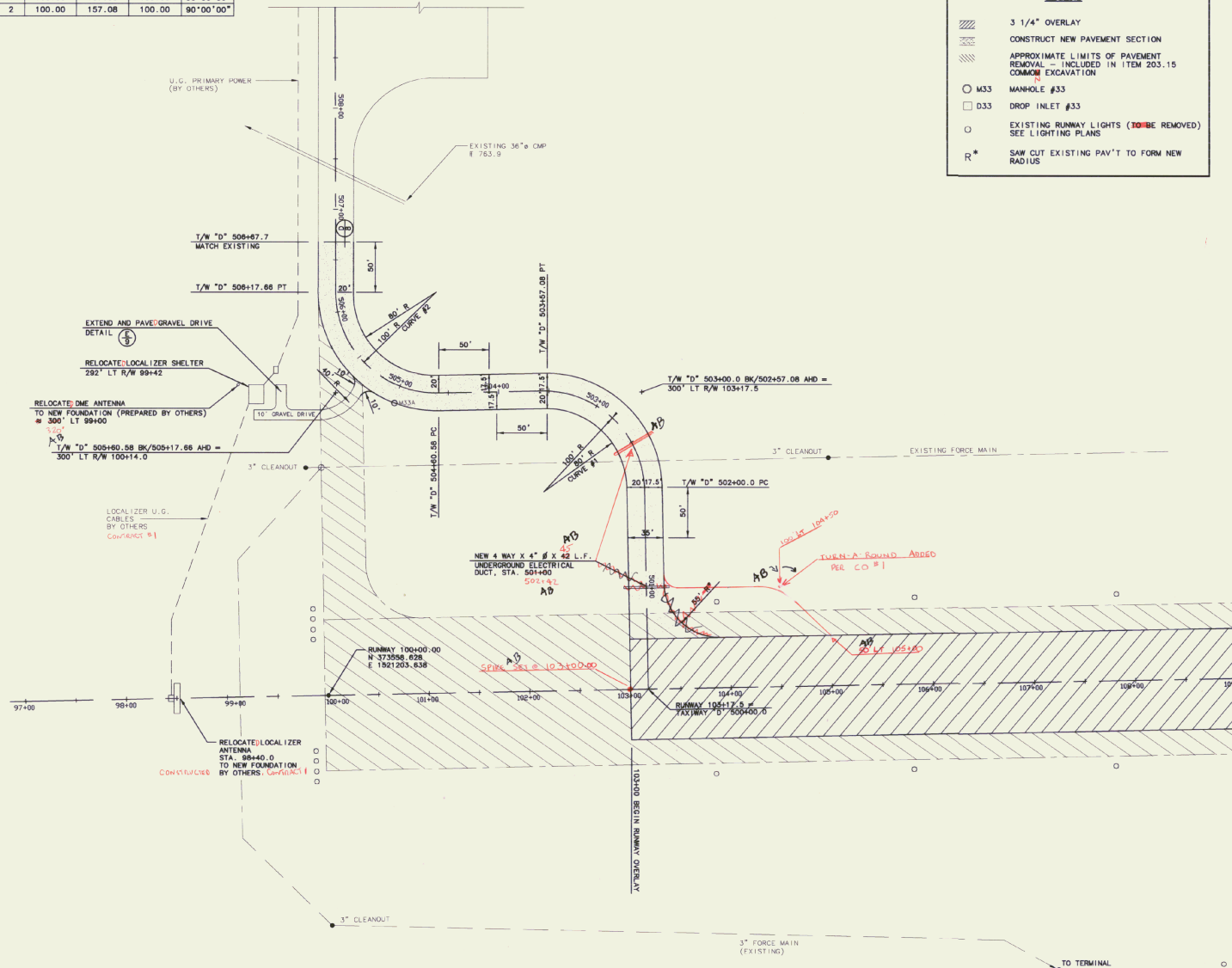
|                           |                 |
|---------------------------|-----------------|
| Designed by: O. D'Amico   | Date: 5/9/97    |
| Drawn by: M. McCalla      | Scale: 1" = 50' |
| Checked by: O. D'Amico    | VERT: NONE      |
| Approved by: M. Churchill | Date: 5/9/97    |
| Sheet 13 of 65            | Sheet No. 13    |

**NOTE:**

- EXISTING RUNWAY 1-19 IS 150' WIDE.  
NEW RUNWAY TO BE 100' WIDE.

| # | RADIUS | LENGTH | TANGENT | DELTA     |
|---|--------|--------|---------|-----------|
| 1 | 100.00 | 157.08 | 100.00  | 90°00'00" |
| 2 | 100.00 | 157.08 | 100.00  | 90°00'00" |

| LEGEND |                                                                                    |
|--------|------------------------------------------------------------------------------------|
|        | 3 1/4" OVERLAY                                                                     |
|        | CONSTRUCT NEW PAVEMENT SECTION                                                     |
|        | APPROXIMATE LIMITS OF PAVEMENT REMOVAL - INCLUDED IN ITEM 203.15 COMMON EXCAVATION |
|        | M33 MANHOLE #33                                                                    |
|        | D33 DROP INLET #33                                                                 |
|        | EXISTING RUNWAY LIGHTS (TO BE REMOVED) SEE LIGHTING PLANS                          |
|        | SAW CUT EXISTING PAV'T TO FORM NEW RADIUS                                          |



MATCH LINE SHEET 15

I hereby certify that all the construction required by this set of drawings has been accomplished as indicated herein.  
By: [Signature] Project Engineer  
Date: 12/20/97



| REV. | DATE     | DESCRIPTION |
|------|----------|-------------|
| 1    | 12/20/97 | AS BUILT    |

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT

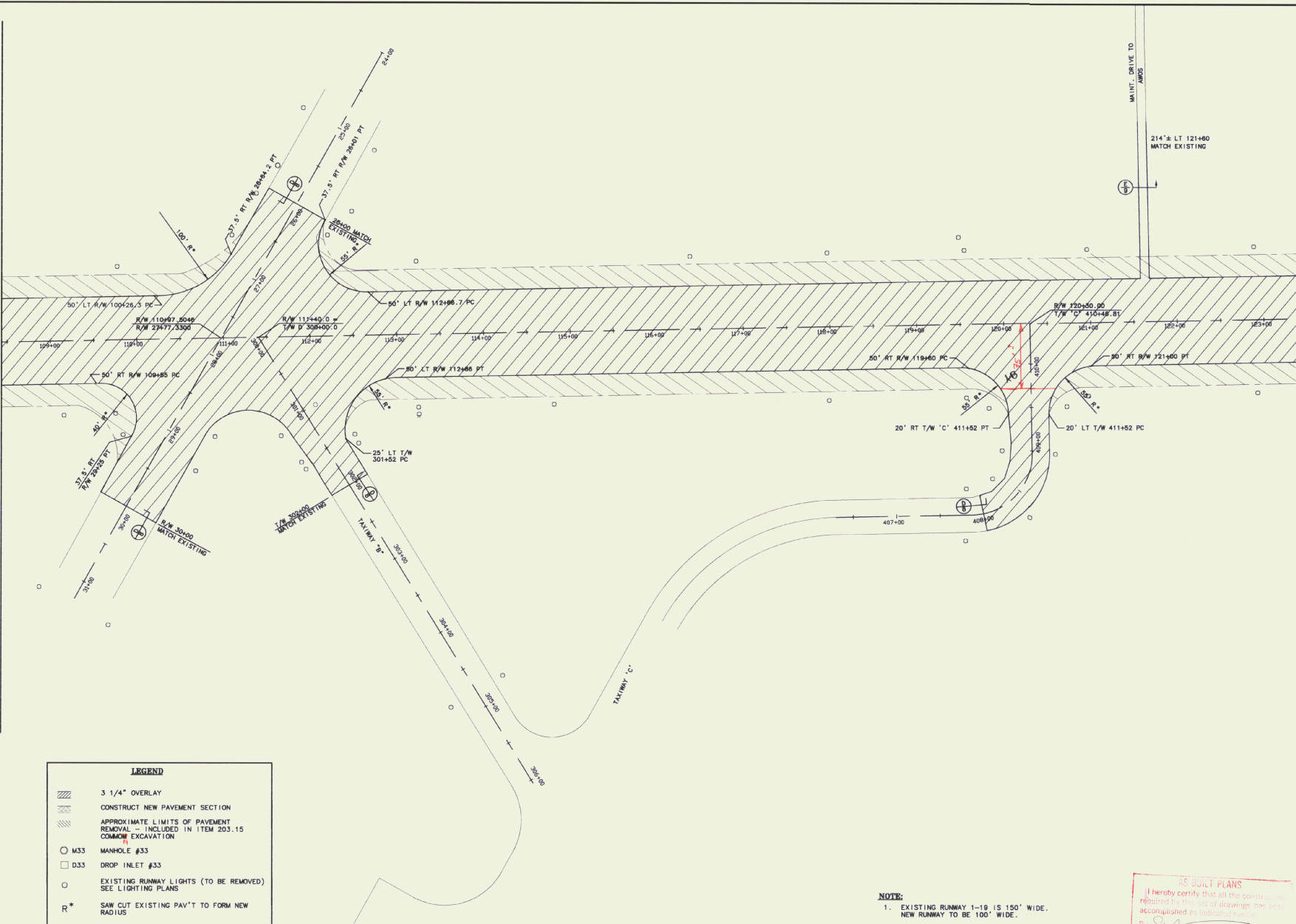
PAVING PLAN &  
GEOMETRIC LAYOUT

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|                                        |               |
|----------------------------------------|---------------|
| Designed by:<br>D. Franco              | Date:<br>2/97 |
| Drawn by:<br>J. P. 3/97                |               |
| Checked by:<br>D. Franco               | 5/9/97        |
| Approved by:<br>M. Chubbuck            | 5/9/97        |
| Scale: HOR. - 1" = 50'<br>VERT. - NONE |               |
| Date: 5/5/97                           |               |
| Sheet 14 Of 65                         |               |
| Sheet No.<br><b>14</b>                 |               |

MATCH LINE SHEET 14

| LEGEND |                                                                                    |
|--------|------------------------------------------------------------------------------------|
|        | 3 1/4" OVERLAY                                                                     |
|        | CONSTRUCT NEW PAVEMENT SECTION                                                     |
|        | APPROXIMATE LIMITS OF PAVEMENT REMOVAL - INCLUDED IN ITEM 203.15 COMMON EXCAVATION |
|        | M33 MANHOLE #33                                                                    |
|        | D33 DROP INLET #33                                                                 |
|        | EXISTING RUNWAY LIGHTS (TO BE REMOVED) SEE LIGHTING PLANS                          |
| R*     | SAW CUT EXISTING PAV'T TO FORM NEW RADIUS                                          |



EXISTING  
AIRPORT  
APRON

**NOTE:**  
1. EXISTING RUNWAY 1-19 IS 150' WIDE.  
NEW RUNWAY TO BE 100' WIDE.

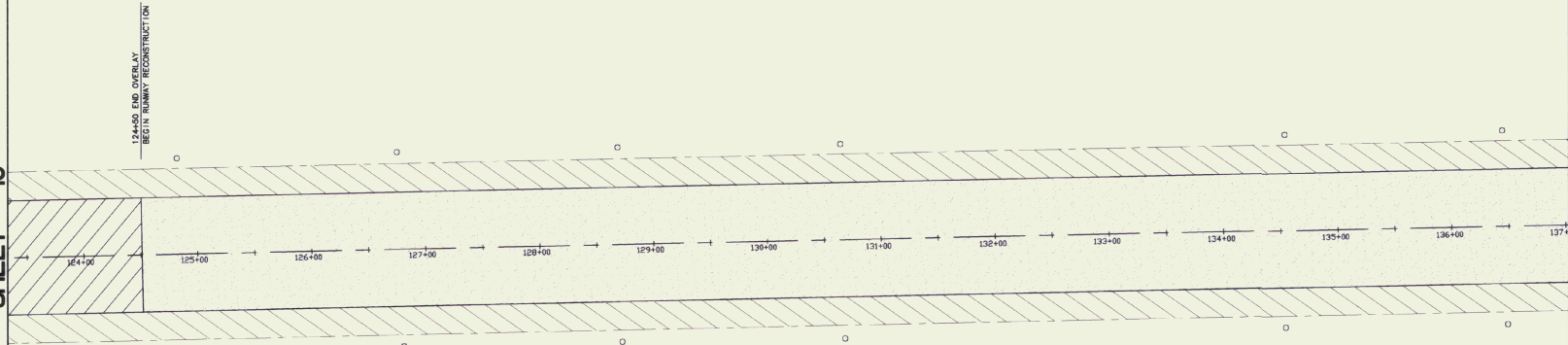
**AS BUILT PLANS**  
I hereby certify that all the construction  
retained by this set of drawings has been  
recompleted as indicated herein.  
By: *[Signature]* Date: 5/5/97  
Project Engineer

MATCH LINE SHEET 16

|                                                                                             |                                                  |
|---------------------------------------------------------------------------------------------|--------------------------------------------------|
|                                                                                             |                                                  |
| A. E. <i>[Signature]</i><br>REV. DATE<br>1. 11/11/97<br>2. 5/5/97<br>3. 5/5/97<br>4. 5/5/97 | DESCRIPTION<br>PAVING PLAN &<br>GEOMETRIC LAYOUT |
| Job No. 140312.00<br>File No. 140312.00                                                     |                                                  |
| Rutland State Airport<br>CLARENDON, VERMONT                                                 |                                                  |
| URS Greiner, Inc.<br>3 MARCUS BOULEVARD<br>ALBANY, NEW YORK                                 |                                                  |
| Designed by:<br>G. P. M. 2/97                                                               | Date:<br>2/97                                    |
| Drawn by:<br>M. J. C. 3/97                                                                  | Scale:<br>HOR. - 1" = 50'<br>VERT. - NONE        |
| Checked by:<br>G. P. M. 5/5/97                                                              | Date:<br>5/5/97                                  |
| Approved by:<br>L. J. C. 5/5/97                                                             | Sheet 15 Of 65                                   |
| Sheet No.<br><b>15</b>                                                                      |                                                  |



MATCH LINE SHEET 15



| LEGEND |                                                                                    |
|--------|------------------------------------------------------------------------------------|
|        | 3 1/4" OVERLAY                                                                     |
|        | CONSTRUCT NEW PAVEMENT SECTION                                                     |
|        | APPROXIMATE LIMITS OF PAVEMENT REMOVAL - INCLUDED IN ITEM 203.15 COMMON EXCAVATION |
|        | M33 MANHOLE #33                                                                    |
|        | D33 DROP INLET #33                                                                 |
|        | EXISTING RUNWAY LIGHTS (TO-BE REMOVED) SEE LIGHTING PLANS                          |
| R*     | SAW CUT EXISTING PAV'T TO FORM NEW RADIUS                                          |

NOTE:  
1. EXISTING RUNWAY 1-19 IS 150' WIDE.  
NEW RUNWAY TO-BE 100' WIDE.

MATCH LINE SHEET 17

**AS BUILT PLANS**  
I hereby certify that all the construction required by this set of drawings has been accomplished as indicated herein.  
By S. J. J. Project Engineer  
Date 5/10/97

AIP 3-50-0015-11



|      |         |             |
|------|---------|-------------|
| REV. | DATE    | DESCRIPTION |
| 1    | 5/10/97 | AS BUILT    |
| 2    | 5/10/97 | AS BUILT    |
| 3    | 5/10/97 | AS BUILT    |
| 4    | 5/10/97 | AS BUILT    |
| 5    | 5/10/97 | AS BUILT    |
| 6    | 5/10/97 | AS BUILT    |
| 7    | 5/10/97 | AS BUILT    |
| 8    | 5/10/97 | AS BUILT    |
| 9    | 5/10/97 | AS BUILT    |
| 10   | 5/10/97 | AS BUILT    |
| 11   | 5/10/97 | AS BUILT    |
| 12   | 5/10/97 | AS BUILT    |
| 13   | 5/10/97 | AS BUILT    |
| 14   | 5/10/97 | AS BUILT    |
| 15   | 5/10/97 | AS BUILT    |
| 16   | 5/10/97 | AS BUILT    |
| 17   | 5/10/97 | AS BUILT    |
| 18   | 5/10/97 | AS BUILT    |
| 19   | 5/10/97 | AS BUILT    |
| 20   | 5/10/97 | AS BUILT    |
| 21   | 5/10/97 | AS BUILT    |
| 22   | 5/10/97 | AS BUILT    |
| 23   | 5/10/97 | AS BUILT    |
| 24   | 5/10/97 | AS BUILT    |
| 25   | 5/10/97 | AS BUILT    |
| 26   | 5/10/97 | AS BUILT    |
| 27   | 5/10/97 | AS BUILT    |
| 28   | 5/10/97 | AS BUILT    |
| 29   | 5/10/97 | AS BUILT    |
| 30   | 5/10/97 | AS BUILT    |
| 31   | 5/10/97 | AS BUILT    |
| 32   | 5/10/97 | AS BUILT    |
| 33   | 5/10/97 | AS BUILT    |
| 34   | 5/10/97 | AS BUILT    |
| 35   | 5/10/97 | AS BUILT    |
| 36   | 5/10/97 | AS BUILT    |
| 37   | 5/10/97 | AS BUILT    |
| 38   | 5/10/97 | AS BUILT    |
| 39   | 5/10/97 | AS BUILT    |
| 40   | 5/10/97 | AS BUILT    |
| 41   | 5/10/97 | AS BUILT    |
| 42   | 5/10/97 | AS BUILT    |
| 43   | 5/10/97 | AS BUILT    |
| 44   | 5/10/97 | AS BUILT    |
| 45   | 5/10/97 | AS BUILT    |
| 46   | 5/10/97 | AS BUILT    |
| 47   | 5/10/97 | AS BUILT    |
| 48   | 5/10/97 | AS BUILT    |
| 49   | 5/10/97 | AS BUILT    |
| 50   | 5/10/97 | AS BUILT    |

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT

PAVING PLAN &  
GEOMETRIC LAYOUT

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|              |      |
|--------------|------|
| Designed by: | 5/97 |
| Drawn by:    | 5/97 |
| Checked by:  | 5/97 |
| Approved by: | 5/97 |

Scale: HORIZ. - 1" = 50'  
VERT. - NONE

Date: 5/10/97

Sheet 16 Of 65

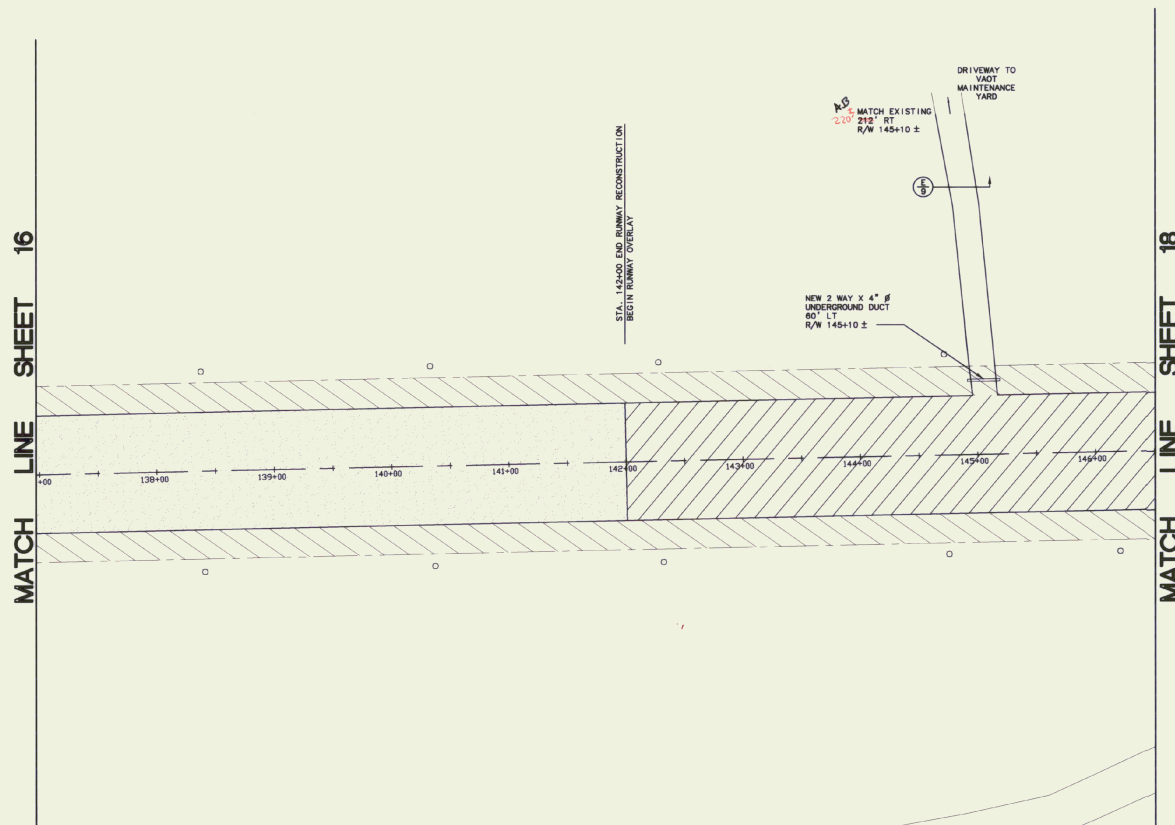
Sheet No.

16

**LEGEND**

- 3 1/4" OVERLAY
- CONSTRUCT NEW PAVEMENT SECTION
- APPROXIMATE LIMITS OF PAVEMENT REMOVAL - INCLUDED IN ITEM 203.15 COMMON EXCAVATION
- M33 MANHOLE #33
- D33 DROP INLET #33
- EXISTING RUNWAY LIGHTS (~~TO BE REMOVED~~) SEE LIGHTING PLANS
- SAW CUT EXISTING PAV'T TO FORM NEW RADIUS

**NOTE:**  
 1. EXISTING RUNWAY 1-19 ~~15~~ 150' WIDE.  
 NEW RUNWAY ~~TO BE~~ 100' WIDE.



**AS BUILT PLANS**  
 I hereby certify that all the construction shown on this set of drawings has been completed in accordance with the approved plans.  
 Date: 5/12/97  
 Project Engineer: [Signature]

**URS Greiner, Inc.**  
 3 MARCUS BOULEVARD  
 ALBANY, NEW YORK

**RUTLAND STATE AIRPORT**  
 CLARENDON, VERMONT

**PAVING PLAN &  
 GEOMETRIC LAYOUT**

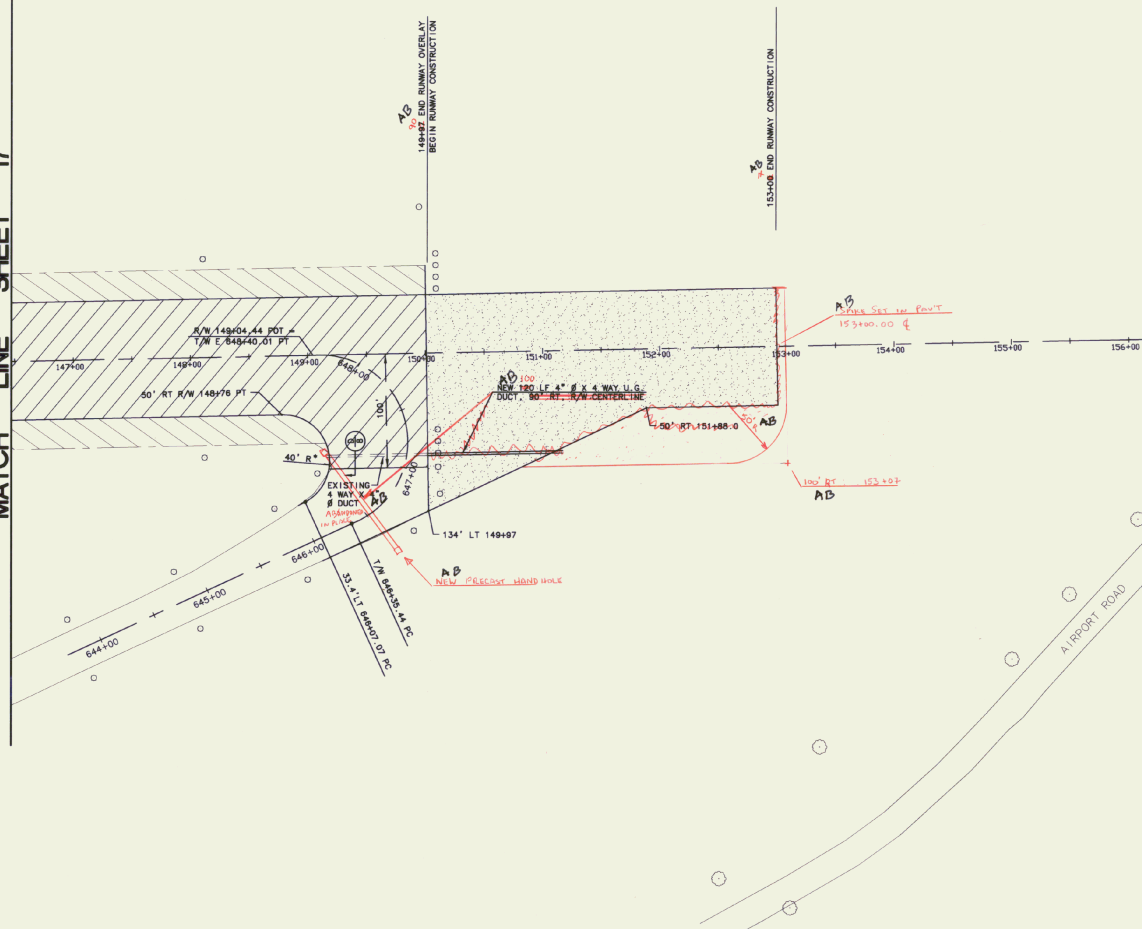
|                                      |                             |                                 |                                  |                 |                |
|--------------------------------------|-----------------------------|---------------------------------|----------------------------------|-----------------|----------------|
| Designed by:<br>0 D'AMICO 5/7/97     | Drawn by:<br>M. MCALLA 5/97 | Checked by:<br>0 D'AMICO 5/9/97 | Approved by:<br>0 D'AMICO 5/9/97 | Date:<br>5/5/97 | Sheet 17 Of 65 |
| Scale: HOR - 1" = 50'<br>VERT - NONE |                             |                                 |                                  |                 |                |
| Sheet No. <b>17</b>                  |                             |                                 |                                  |                 |                |

STATE OF VERMONT  
 JAMES L. CHURCH  
 REGISTERED PROFESSIONAL ENGINEER

REV. 1 5/21/97 A. Roush  
 DATE 5/21/97  
 DESCRIPTION  
 Job No. 140015VW-004  
 File No. 140015VW-004

NOTE:  
1. EXISTING RUNWAY 1-19 IS 150' WIDE.  
NEW RUNWAY TO BE 100' WIDE.

MATCH LINE SHEET 17



NEW 66 LF X 24" B C/P

AS BUILT PLANS  
I hereby certify that all the construction  
required by this set of drawings has been  
accomplished as indicated hereon.  
By Slus Project Engineer  
Date 12/29/97

| LEGEND |                                                                                    |
|--------|------------------------------------------------------------------------------------|
|        | 3 1/4" OVERLAY                                                                     |
|        | CONSTRUCT NEW PAVEMENT SECTION                                                     |
|        | APPROXIMATE LIMITS OF PAVEMENT REMOVAL - INCLUDED IN ITEM 203.15 COMMON EXCAVATION |
|        | M33 MANHOLE #33                                                                    |
|        | D33 DROP INLET #33                                                                 |
|        | EXISTING RUNWAY LIGHTS (TO BE REMOVED) SEE LIGHTING PLANS                          |
| R*     | SAW CUT EXISTING PAV'T TO FORM NEW RADIUS                                          |

AIP 3-50-0015-11



| REV | DATE     | DESCRIPTION |
|-----|----------|-------------|
| 1   | 12/29/97 | AS BUILT    |

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT  
PAVING PLAN &  
GEOMETRIC LAYOUT

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|                                        |                             |                               |                                |
|----------------------------------------|-----------------------------|-------------------------------|--------------------------------|
| Designed by:<br>a D'Amico 5/97         | Drawn by:<br>M. MOALLA 5/97 | Checked by:<br>a D'Amico 5/97 | Approved by:<br>M. MOALLA 5/97 |
| Scale: HOR. - 1" = 50'<br>VERT. - NONE |                             |                               |                                |
| Date: 5/5/97                           |                             |                               |                                |
| Sheet 18 OF 60                         |                             |                               |                                |
| Sheet No<br><b>18</b>                  |                             |                               |                                |



# NOTE:

1. ALL ELEVATIONS REFER TO MEAN SEA LEVEL DATUM. (NAVD-1988-VERTICAL SHIFT TO 1927 DATUM = -0.39')
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 TO ALLOW SUSPENDED SEDIMENT TO SETTLE. (PAID UNDER ITEM 613.11, STONE FILL, TYPE II).
4. EROSION CONTROL MATTING TO BE PLACED ON SLOPES GREATER THAN 5% TO LIMIT THE EFFECT OF RAINFALL IMPACT & RUNOFF.
5. ALL EARTH AREAS SUBJECT TO CONSTRUCTION WILL BE TOPSOILED AND SEEDED, AND EROSION MATTING APPLIED AS SOON AS WORK IN THE AREA IS COMPLETED.

## REMOVE MANHOLES & DROP INLETS

ITEM 203.16  
D27, D28, D30, D32, D37  
D36, D34, D33  
M29, M31, M35, M36, M33A

## CHANGE ELEVATION OF MANHOLES

ITEM 604.40  
M32, M33

## CONSTRUCT SPECIAL DITCH

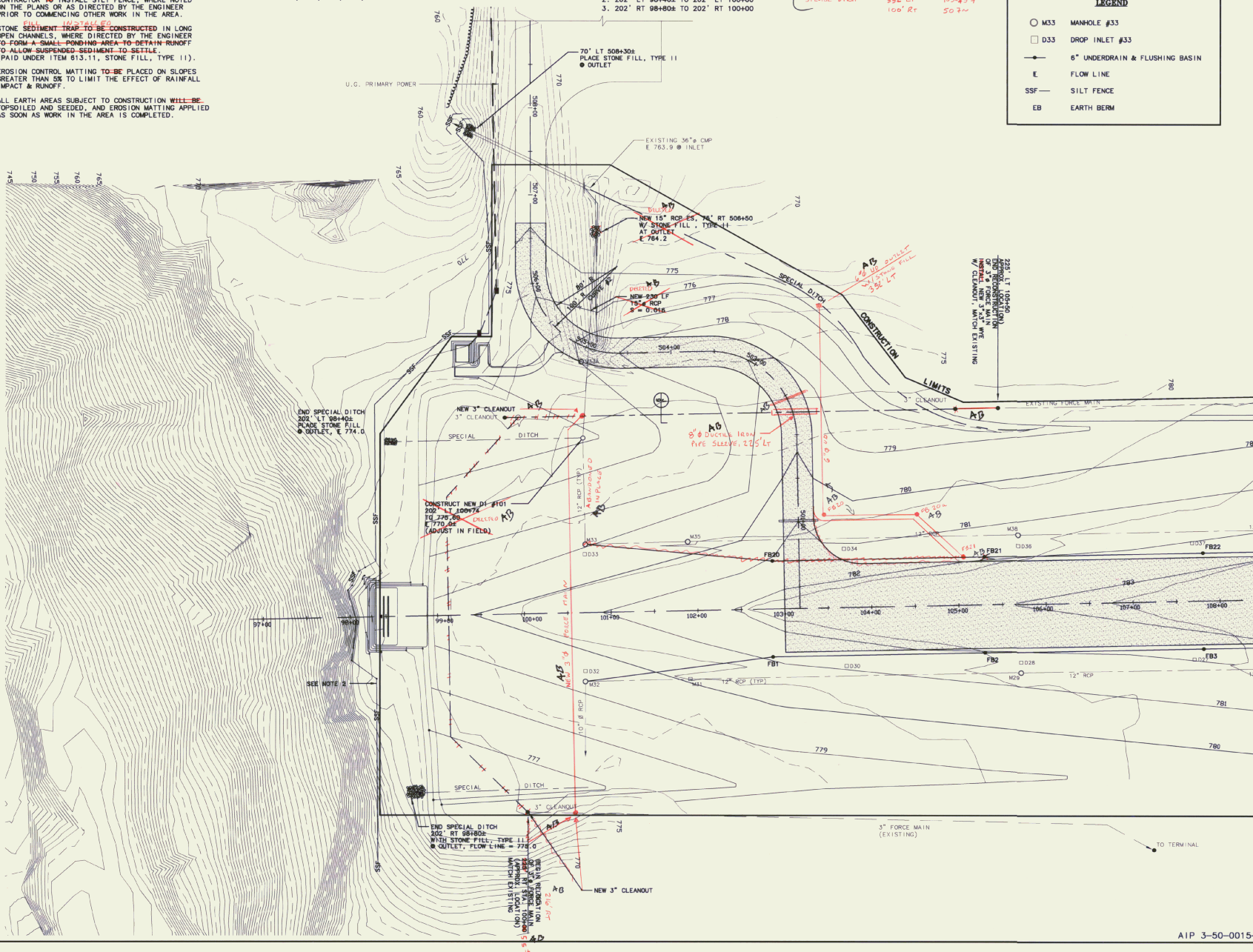
1. 202' LT. 106+00 TO INLET  
EXISTING 36" CMP  
(# 65' RT. 507+104)
2. 202' LT. 98+404 TO 202' LT. 100+00  
AT OUTLET
3. 202' RT. 98+804 TO 202' RT. 100+00

Scale: 1" = 50'  
SPECIAL DITCH 202' RT. 98+404 TO 100+00  
SPECIAL DITCH 392' LT. 100+00 RT. 507+00

98+50 → 100+00  
98+40 → 100+00  
103+45 → 100+00  
507+00

## LEGEND

- M33 MANHOLE #33
- D33 DROP INLET #33
- 6" UNDERDRAIN & FLUSHING BASIN
- FLOW LINE
- SILT FENCE
- EARTH BERM



MATCH LINE SHEET 20



| REV. | DATE   | DESCRIPTION |
|------|--------|-------------|
| 1    | 5/1/97 | As Shown    |

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

Designed By: Date: 5/2/97  
Drawn By: 5/97  
Checked By: 5/97  
Approved By: 5/97

Scale: HOR. - 1" = 50'  
VERT. - NONE

Date: 5/5/97

Sheet 19 Of 65

Sheet No

19

MATCH LINE SHEET 19

MATCH LINE SHEET 21

| LEGEND |                                |
|--------|--------------------------------|
| ○ M33  | MANHOLE #33                    |
| □ D33  | DROP INLET #33                 |
| — 6"   | 6" UNDERDRAIN & FLUSHING BASIN |
| — E    | FLOW LINE                      |
| SSP    | SILT FENCE                     |
| EB     | EARTH BERM                     |

EXISTING CB104  
TO 779.81 (EXISTING)  
15' CSP E IN 773.5  
EXIST. E OUT 773.0

- NOTE:**
- ALL ELEVATIONS REFER TO MEAN SEA LEVEL DATUM.  
(NAVD-1988-VERTICAL SHIFT TO 1927 DATUM = -0.39')
  - 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 POND NO AREA TO OBTAIN RUNOFF  
TO ALLOW SUSPENDED SEDIMENT TO SETTLE.  
(PAID UNDER ITEM 613.11, STONE FILL, TYPE 11).
  - EROSION CONTROL MATTING TO BE PLACED ON SLOPES  
GREATER THAN 2% TO LIMIT THE EFFECT OF RAINFALL  
IMPACT & RUNOFF.
  - ALL EARTH AREAS SUBJECT TO CONSTRUCTION WILL BE  
TOPSOILED AND SEEDED, AND EROSION MATTING, APPLIED  
AS SOON AS WORK IN THE AREA IS COMPLETED.

**REMOVE MANHOLES & DROP INLETS**  
ITEM 203.16

M26, M41, M42, M44, M46, M49  
M23\*\*, M22, M19, M16, M50A  
D15, D17, D18, D20, D21, D24\*\*  
D25, D39, D43, D45, D47, D48  
D50

\*\* REMOVE EXISTING FRAME AND GRATE.  
FILL WITH PCC TO EXISTING PAV'T ELEV.  
PRIOR TO OVERLAY

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

**STATE OF VERMONT**  
DEPARTMENT OF TRANSPORTATION  
CLARENDON, VERMONT

DESIGNED BY: DATE: 5/9/97  
DRAWN BY: W. MCALLA 5/9/97  
CHECKED BY: 5/9/97  
APPROVED BY: 5/9/97

REVISIONS  
REV. DATE DESCRIPTION  
1 5/11/98 AS SHOWN

Scale: HOR. - 1" = 50'  
VERT. - NONE

Date: 5/9/97

Sheet 20 Of 65

Sheet No. 20

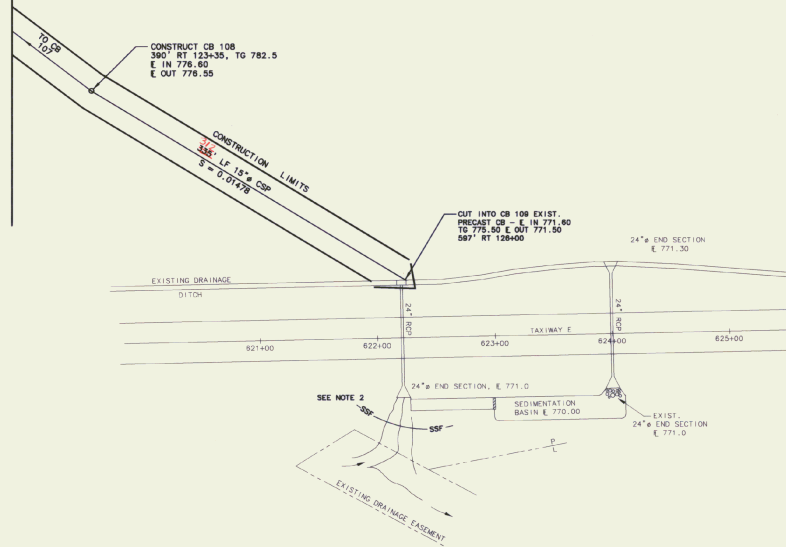
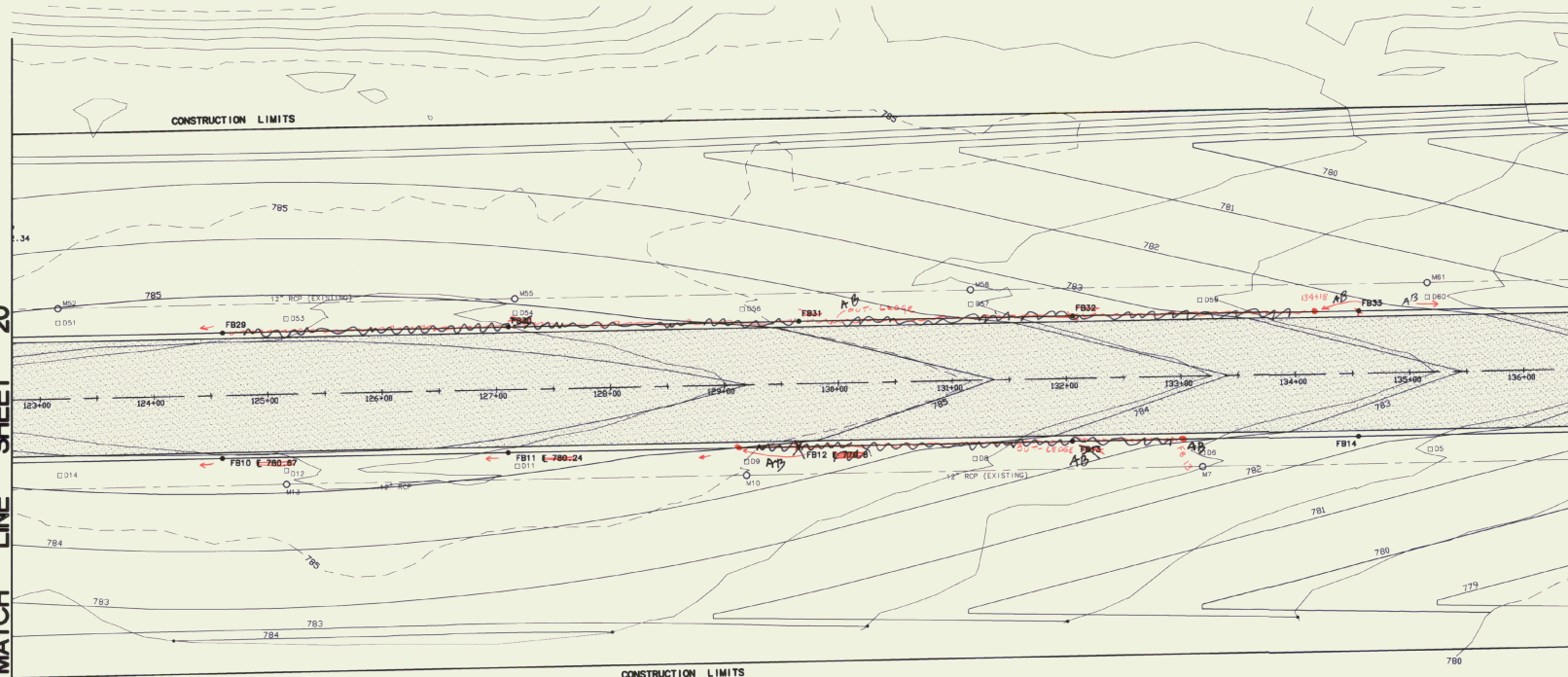
Job No. 1400733-WP-002  
File No. 1400733

GRADING AND DRAINAGE PLAN



MATCH LINE SHEET 20

MATCH LINE SHEET 22



**NOTE:**

- ALL ELEVATIONS REFER TO MEAN SEA LEVEL DATUM. (NAVD-1988-VERTICAL SHIFT TO 1927 DATUM = -0.38')
- 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 TO ALLOW SUSPENDED SEDIMENT TO SETTLE. (PAID UNDER ITEM 613.11, STONE FILL, TYPE II).
- EROSION CONTROL MATTING TO BE PLACED ON SLOPES GREATER THAN 3% TO LIMIT THE EFFECT OF RAINFALL IMPACT & RUNOFF.
- ALL EARTH AREAS SUBJECT TO CONSTRUCTION ~~WILL BE~~ TOPSOILED AND SEEDED, AND EROSION MATTING APPLIED AS SOON AS WORK IN THE AREA IS COMPLETED.

**REMOVE MANHOLES & DROP INLETS**

(ITEM 203.15)  
M7, M10, M13, M52, M55, M58, M61  
D5, D6, D8, D9, D11, D12, D14, D51, D53, D54  
D56, D57, D59, D60, D62

**LEGEND**

- M33 MANHOLE #33
- D33 DROP INLET #33
- 6" UNDERDRAIN & FLUSHING BASIN
- E FLOW LINE
- SSF SILT FENCE
- EB EARTH BERM



| REV. | DATE    | DESCRIPTION |
|------|---------|-------------|
| 1    | 5/10/98 | As Directed |

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT

GRADING AND DRAINAGE PLAN

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|                             |               |
|-----------------------------|---------------|
| Designed by:<br>D. P. Manno | Date:<br>5/97 |
| Drawn by:<br>M. McCalla     | Date:<br>5/97 |
| Checked by:<br>D. P. Manno  | Date:<br>5/97 |
| Approved by:<br>M. McCalla  | Date:<br>5/97 |

# NOTE:

1. ALL ELEVATIONS REFER TO MEAN SEA LEVEL DATUM.  
(NAVD-1988-VERTICAL SHIFT TO 1927 DATUM = -0.39')
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 LOW OPEN CHANNELS, WHERE DIRECTED BY THE ENGINEER TO FORM A SMALL PONDING AREA TO DETAIN RUNOFF TO ALLOW SUSPENDED SEDIMENT TO SETTLE. (PAID UNDER ITEM 613.11, STONE FILL, TYPE III)~~
4. EROSION CONTROL MATTING TO BE PLACED ON SLOPES GREATER THAN ONE TO LIMIT THE EFFECT OF RAINFALL IMPACT & RUNOFF.
5. ALL EARTH AREAS SUBJECT TO CONSTRUCTION WILL BE TOPSOILED AND SEEDED, AND EROSION MATTING, APPLIED AS SOON AS WORK IN THE AREA IS COMPLETED.

## REMOVE MANHOLES & DROP INLETS (ITEM 203.16)

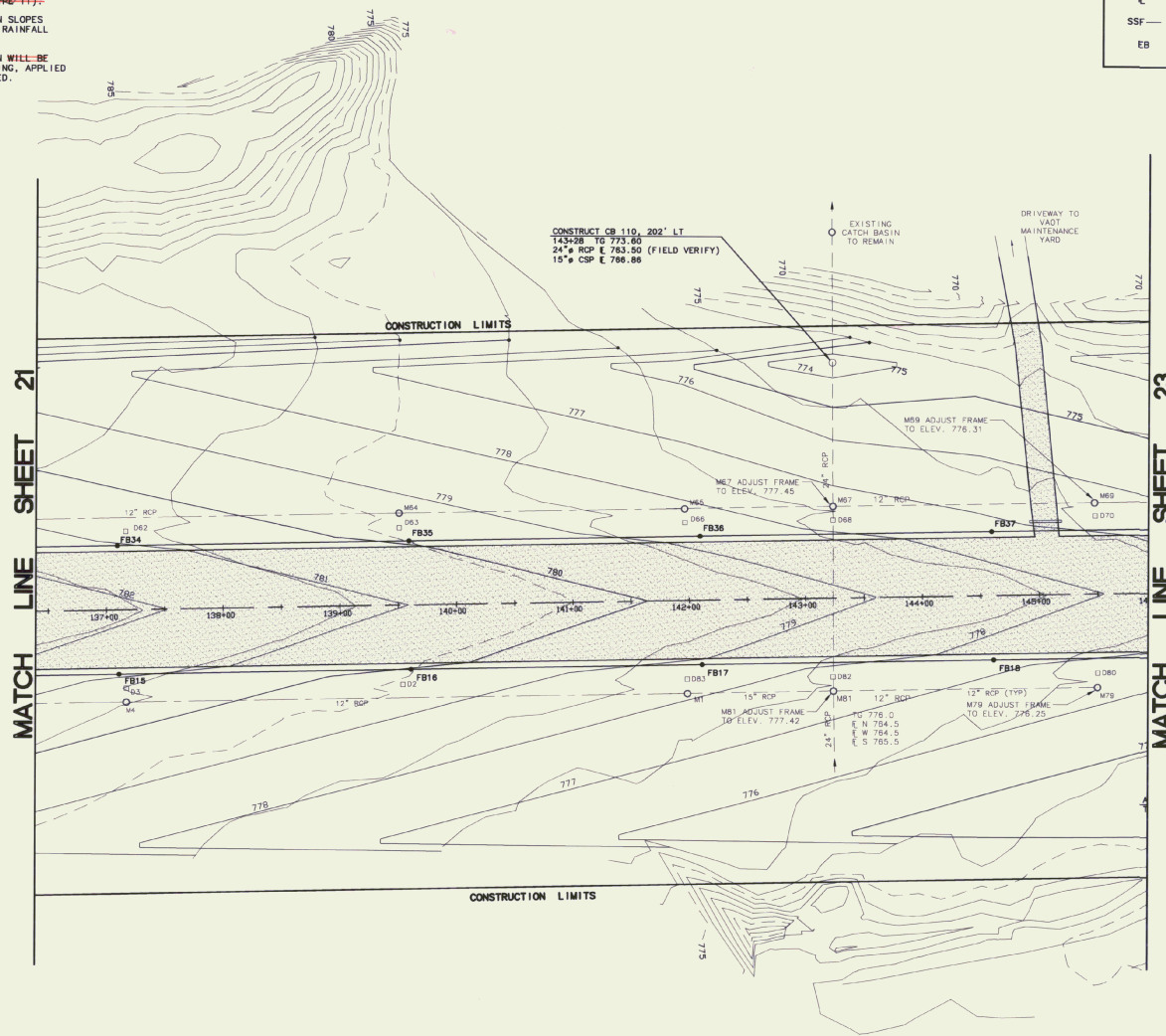
M1, M4, M64, M65, M75  
D2, D3, D62, D63, D66, D68, D70  
D80, D82, D83

## CHANGE ELEVATION OF MANHOLES (ITEM 604.40)

M67, M69, M79, M81

## LEGEND

- M33 MANHOLE #33
- D33 DROP INLET #33
- 6" UNDERDRAIN & FLUSHING BASIN
- FLOW LINE
- SSF — SILT FENCE
- EB EARTH BERM



| REV. | DATE     | DESCRIPTION |
|------|----------|-------------|
| 1    | 12/11/98 | AL 6-11-98  |
| 2    | 12/11/98 | AL 6-11-98  |

|                                             |                           |
|---------------------------------------------|---------------------------|
| RUTLAND STATE AIRPORT<br>CLARENDON, VERMONT | GRADING AND DRAINAGE PLAN |
|---------------------------------------------|---------------------------|

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

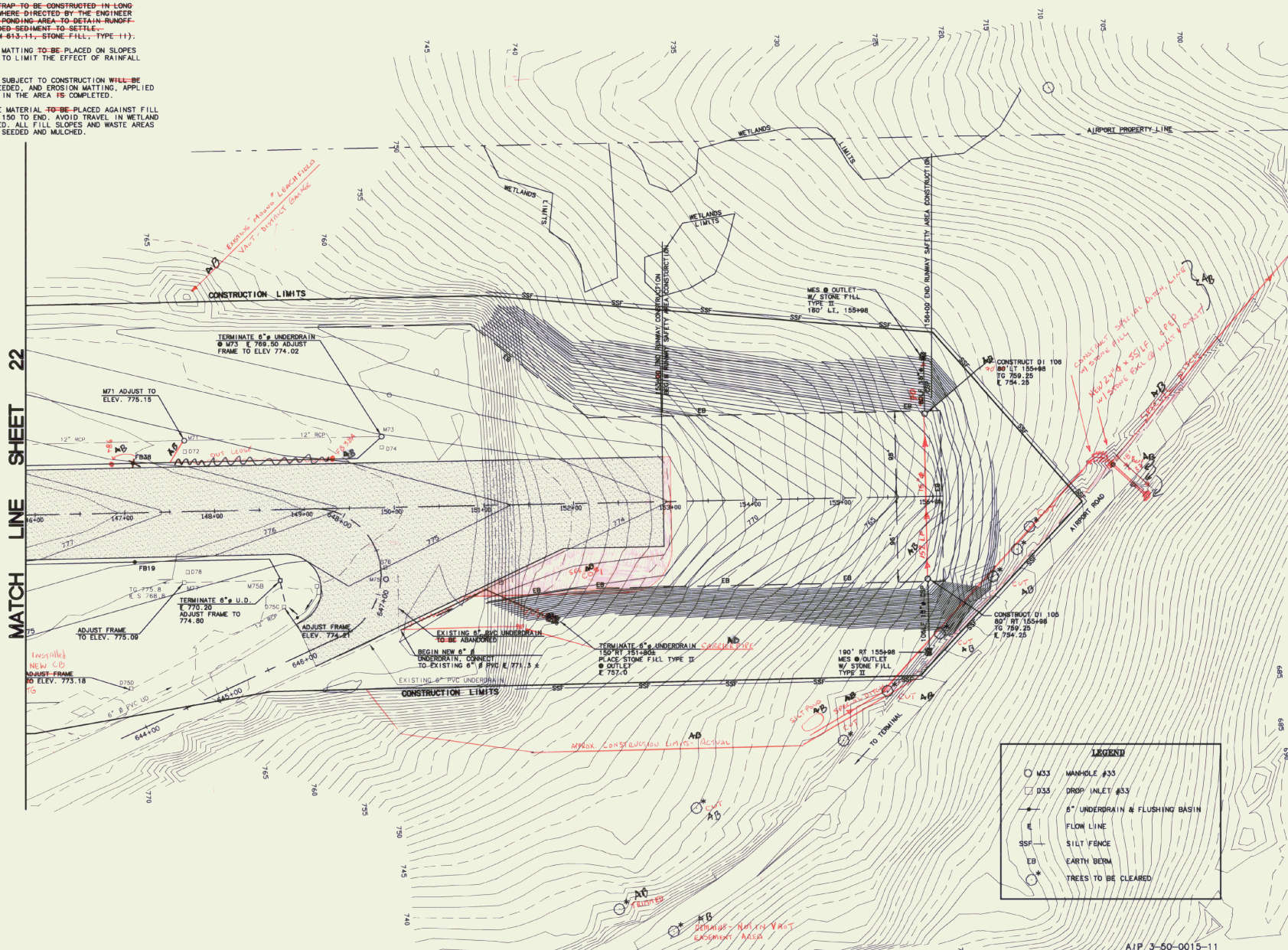
|                             |                 |
|-----------------------------|-----------------|
| Designed by:<br>G.D. MCO    | Date:<br>2/97   |
| Drawn by:<br>M. MICHAEL     | Date:<br>3/97   |
| Checked by:<br>S. J. MCO    | Date:<br>5/9/97 |
| Approved by:<br>M. MICHAEL  | Date:<br>5/9/97 |
| Scale:<br>HORIZ. - 1" = 50' | VERT. - NONE    |
| Date:                       | 5/5/97          |
| Sheet                       | 22 Of 85        |
| Sheet No.                   | 22              |



1. ALL ELEVATIONS REFER TO MEAN SEA LEVEL DATUM.  
(NAVD=1988-VERTICAL SHIFT TO 1927 DATUM = +039')
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 AREAS OF THE PROJECT. THE ENGINEER WILL REQUIRE TO FORM A SMALL PONDING AREA TO DETAIN RUNOFF.  
~~(ALLOW SUPERSEDING DESIGN FOR THIS TYPE TRAP.)~~  
(ALLOW ITEM #63 - STONE-FILL TYPE-I)
4. EROSION CONTROL MATTING TO BE PLACED ON SLOPES GREATER THAN SIX TO LIMIT THE EFFECT OF RAINFALL IMPACT & RUNOFF.
5. ALL EARTH AREAS SUBJECT TO CONSTRUCTION ~~WILL BE~~ TOPSOILED AND SEEDED, AND EROSION CONTROL, APPLIED AS SOON AS WORK IN THE AREA IS COMPLETED.
6. ADDITIONAL WASTE MATERIAL TO BE PLACED AGAINST FILL SLOpes STATIONS 150 TO END. AVOID TRAVEL IN WETLAND AREAS, DESIGNATED. ALL FILL SLOPES AND WASTE AREAS SHALL BE REVEGETATED WITH GRASS.

(ITEM 203.16)  
M64, M75  
D72, D76, D78

ITEM 604.40  
M71, M73, M75B, M77  
D75C, ~~9750~~



|                   |                           |
|-------------------|---------------------------|
| Job No. 740212.00 | File No. 11V012120M-P00.2 |
| REV.              | DATE                      |
| 1                 | 12/26/04                  |
| AB                | As Built                  |

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

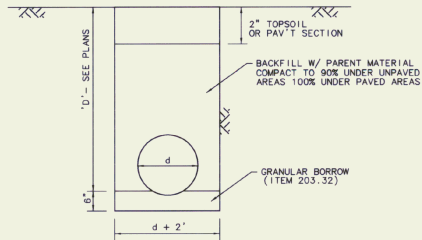
Designed by: 0 V'AMCO 2/97  
 Drawn by: M MCALLA 3/97  
 Checked by: 0 V'AMCO 5/5/97  
 Approved by: M CHURCHILL 5/5/97

Scale: HOR. - 1" = 50'  
 VERT. - NONE

Date: 5/5/97

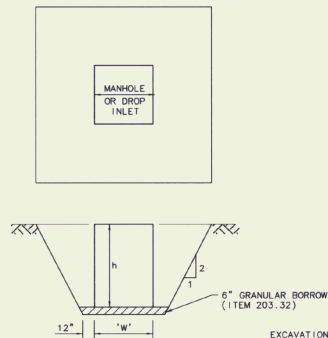
Sheet 23 Of 65

Sheet No  
**23**



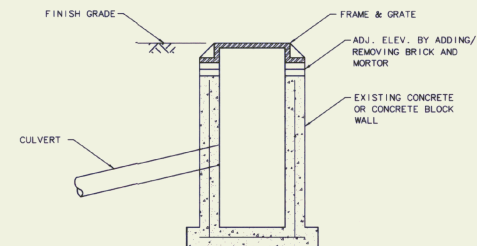
EXCAVATION ~~TO BE~~ PAID UNDER ITEM 204.20  
TRENCH EXCAVATION OF EARTH OR ITEM 204.21  
EXCAVATION OF ROCK

**A**  
**24** CULVERT IN TRENCH - TYPICAL  
SCALE = NONE

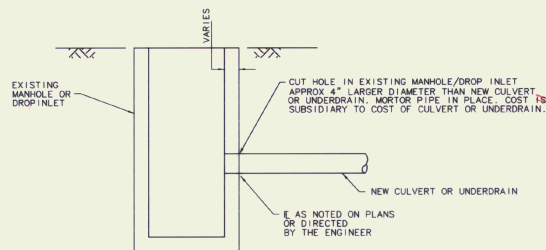


EXCAVATION ~~TO BE~~ PAID UNDER  
ITEM 203.15 COMMON EXCAVATION OR  
ITEM 203.16 ROCK EXCAVATION

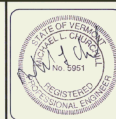
**B**  
**24** DROP INLET/MANHOLE PLACEMENT  
(TYPICAL)  
SCALE = NONE



**C**  
**24** CHANGE ELEVATION OF MANHOLE  
OR DROP INLET  
SCALE = NONE



**D**  
**24** CULVERT/UNDERDRAIN INSTALLATION IN  
EXISTING MANHOLE OR DROP INLET  
SCALE = NONE



| REV. | DATE   | DESCRIPTION |
|------|--------|-------------|
| 1    | 5/9/97 | AS SHOWN    |
| 2    | 5/9/97 | AS SHOWN    |
| 3    | 5/9/97 | AS SHOWN    |
| 4    | 5/9/97 | AS SHOWN    |
| 5    | 5/9/97 | AS SHOWN    |
| 6    | 5/9/97 | AS SHOWN    |
| 7    | 5/9/97 | AS SHOWN    |
| 8    | 5/9/97 | AS SHOWN    |
| 9    | 5/9/97 | AS SHOWN    |
| 10   | 5/9/97 | AS SHOWN    |

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT

DRAINAGE DETAILS

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|                             |                |
|-----------------------------|----------------|
| Designed by:<br>O'D'AMICO   | Scale:<br>3/8" |
| Drawn by:<br>M. MCALLA      | 3/8"           |
| Checked by:<br>O'D'AMICO    | 5/9/97         |
| Approved by:<br>M. CHIBRELL | 5/9/97         |

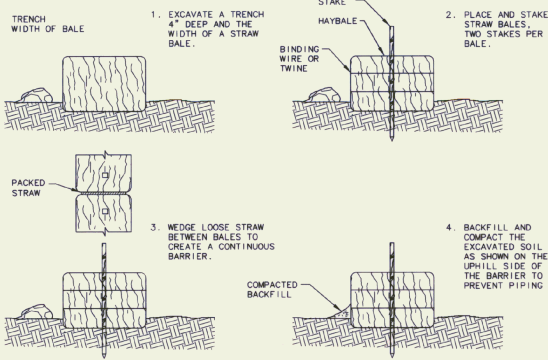
Scale: HS - AS SHOWN  
VS - AS SHOWN

Date: 5/9/97

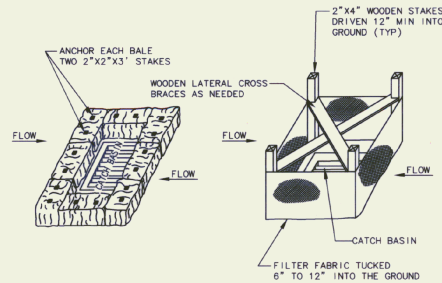
Sheet 24 Of 65

Sheet No

**24**



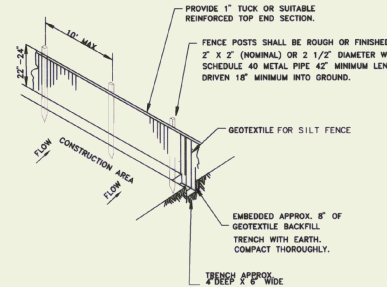
**SEDIMENTATION BARRIER - HAYBALE**  
ITEM 65126



**HAY BALE INSTALLATION**  
ITEM 65126

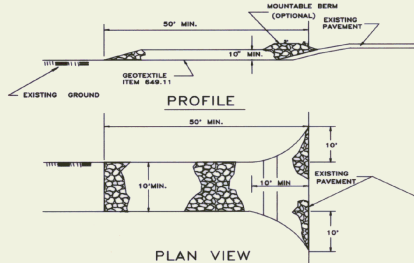
**SILT FENCE INSTALLATION**  
ITEM 64951

**SEDIMENTATION CONTROL  
INLET PROTECTION**



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

**SLOPE SILT FENCE (S.S.F.)**  
NOT TO SCALE



**CONSTRUCTION SPECIFICATIONS**

1. STONE - SUBBASE OF CRUSHED AGGREGATE, COURSE GRADED ITEM 301.25.
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 NUMBER 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 SUCH TIMES AS THEY 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 BED AND BANKS SHALL BE RESTABILIZED IMMEDIATELY AFTER CHANNEL WORK IS COMPLETED, INTERRUPTED, OR STOPPED.
9. NO SOIL, ROCK, DEBRIS, OR ANY OTHER MATERIAL SHALL BE DUMPED OR PLACED INTO A WATER COURSE OR INTO SUCH PROXIMITY THAT IT MAY READILY SLOUGH, SLIP, OR ERODE INTO A WATER COURSE, UNLESS SUCH DUMPING OR PLACING IS AUTHORIZED BY THE ENGINEER AND, WHEN APPLICABLE, THE U.S. ARMY CORPS OF ENGINEERS, FOR SUCH PURPOSES AS, BUT NOT LIMITED TO, CONSTRUCTION OF BRIDGES, CULVERTS, AND EROSION CONTROL STRUCTURES.
10. PERMANENT SEEDING SHALL BE DONE BETWEEN APRIL 30 AND SEPTEMBER 15. IF SEEDING IS DONE AT OTHER TIMES, IT SHALL BE CLASSIFIED AS "TEMPORARY SEEDING." PERMANENT SEED SHALL CONFORM TO THE SEEDING MIXTURE STATED ON SHEET 7. 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 R51.15 AND R51.25 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 DOWNLOVE WITHOUT CAUSING DROPS ON 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.
13. IF ROADWAYS ACCUMULATE DEBRIS, THE CONTRACTOR SHALL USE A POWER BROOM TO REMOVE THE SEDIMENT TO THE SATISFACTION OF THE ENGINEER.
14. SALVAGED TOPSOIL WILL BE PLACED ON WELL DRAINED LAND AWAY FROM STREAMS IN ACCORDANCE WITH APPROVED EROSION AND SEDIMENT CONTROL MEASURES. IT SHALL BE PLACED IN NEAT PILES. THE CONTRACTOR WILL PROVIDE AN ADEQUATE QUANTITY OF SILT FENCE TO CONTROL THE PERIMETER OF THE STOCKPILE. THE CONTRACTOR, WITH THE APPROVAL OF THE ENGINEER, MAY CONSTRUCT AN EARTH DIKE IN LIEU OF SILT FENCE.

**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. 45 ACRES.

EXISTING SOIL TYPES:  
-BROWN SILTY SAND WITH TRACES OF GRAVEL  
-APPROXIMATELY 3" OF TOPSOIL  
-INFORMATION OBTAINED FROM BORINGS DRILLED BY GREEN MOUNTAIN BORING DURING NOVEMBER 1995

SCHEDULE:  
CONSTRUCTION TO COMMENCE SUMMER 1997, AND TO BE COMPLETED FALL, 1997, WITH THE IMPLEMENTATION OF EROSION CONTROL MEASURES TO BE THE FIRST PHASE OF ACTIVITY AND TO CONTINUE THROUGHOUT PROGRESS OF PROJECT.

RECEIVING WATERS:  
WILL RIVER, OTTER CREEK



| REV. | DATE   | DESCRIPTION    |
|------|--------|----------------|
| 1    | 5/3/97 | AS - 31 JUL 97 |

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT

SEDIMENTATION / EROSION  
CONTROL DETAILS

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|                           |                        |                          |                             |
|---------------------------|------------------------|--------------------------|-----------------------------|
| Designed by:<br>O'D'AMICO | Drawn by:<br>M. MCALLA | Checked by:<br>O'D'AMICO | Approved by:<br>M. CHAPPELL |
|---------------------------|------------------------|--------------------------|-----------------------------|

Scale: HOR. - NONE  
VERT. - NONE

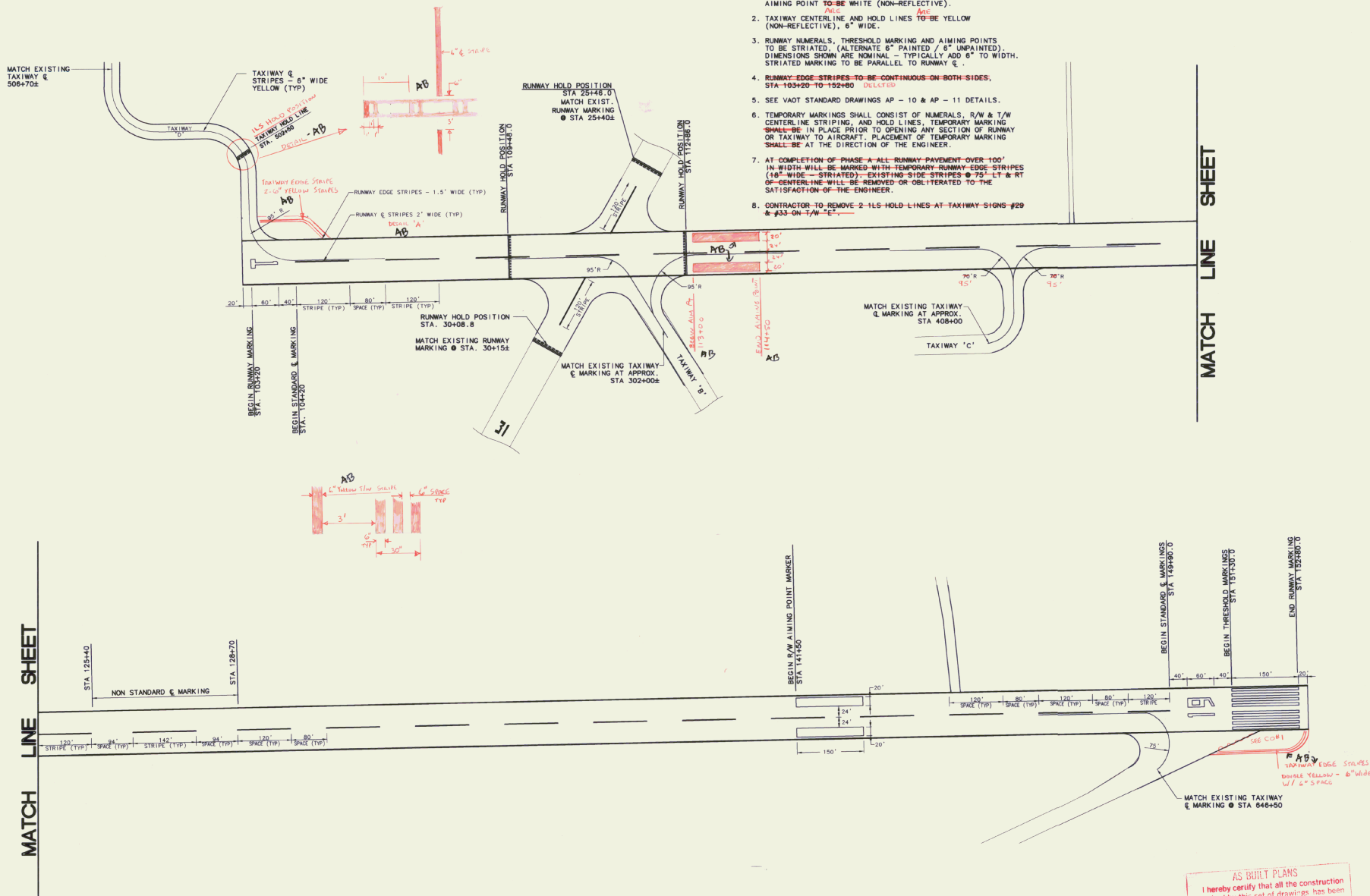
Date: 5/3/97

Sheet 25 Of 65

Sheet No.  
**25**



MATCH LINE SHEET



# MARKING NOTES

1. RUNWAY CENTERLINE, NUMERALS, EDGE STRIPING AND AIMING POINT ~~TO BE~~ WHITE (NON-REFLECTIVE).
2. TAXIWAY CENTERLINE AND HOLD LINES ~~TO BE~~ YELLOW (NON-REFLECTIVE), 6" WIDE.
3. RUNWAY NUMERALS, THRESHOLD MARKING AND AIMING POINTS TO BE STRIATED, (ALTERNATE 6" PAINTED / 6" UNPAINTED). DIMENSIONS SHOWN ARE NOMINAL - TYPICALLY ADD 6" TO WIDTH. STRIATED MARKING TO BE PARALLEL TO RUNWAY C.
4. ~~RUNWAY EDGE STRIPES TO BE CONTINUOUS ON BOTH SIDES, STA 103+20 TO 152+80 DELETED~~
5. SEE VAOT STANDARD DRAWINGS AP - 10 & AP - 11 DETAILS.
6. TEMPORARY MARKINGS SHALL CONSIST OF NUMERALS, R/W & T/W CENTER LINE STRIPING, AND HOLD LINES; TEMPORARY MARKING SHALL BE IN PLACE PRIOR TO OPENING ANY SECTION OF RUNWAY OR TAXIWAY TO AIRCRAFT. PLACEMENT OF TEMPORARY MARKING SHALL BE AT THE DIRECTION OF THE ENGINEER.
7. AT COMPLETION OF PHASE-A ALL RUNWAY-PAVEMENT OVER 100' IN WIDTH WILL BE MARKED WITH TEMPORARY RUNWAY-EDGE STRIPES (18" WIDE - STRIATED) - EXISTING SIDE STRIPES @ 75' LT & RT OF CENTERLINE WILL BE REMOVED OR OBLITERATED TO THE SATISFACTION OF THE ENGINEER.
8. CONTRACTOR TO REMOVE 2-1LS HOLD LINES AT TAXIWAY SIGNS #29 & #33 ON T/W "C".

MATCH LINE SHEET



| REV. | DATE | DESCRIPTION |
|------|------|-------------|
| 1    | 5/13 | AS BUILT    |

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT  
PAVEMENT MARKING  
PLAN

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|                            |                        |                           |                              |
|----------------------------|------------------------|---------------------------|------------------------------|
| Designed by:<br>C. D'AMICO | Drawn by:<br>M. MCALLA | Checked by:<br>C. D'AMICO | Approved by:<br>M. CHURCHILL |
|----------------------------|------------------------|---------------------------|------------------------------|

Scale: HOR. - 1" = 100'  
VERT. - NONE  
Date: 5/5/97  
Sheet 26 Of 65  
Project Engineer  
Date: 5/12/97



# STATE OF VERMONT AGENCY OF TRANSPORTATION



## PROPOSED IMPROVEMENTS RUTLAND STATE AIRPORT CLARENDON, VERMONT AIP NO. 3-50-0015-10 E.A. 043111

TO INCLUDE: LOCALIZER SITE PREPARATION

### INDEX OF SHEETS

- 1 TITLE SHEET
- 2 GENERAL PROJECT LAYOUT
- 3 SAFETY NOTES
- 4 GENERAL CONSTRUCTION AND SAFETY NOTES
- 5-6 LOCALIZER SITE DETAILS
- 7 LOCALIZER RELOCATION - SITE PLAN
- 8 SEDIMENTATION / EROSION CONTROL PLANS
- 9 BORING LOGS

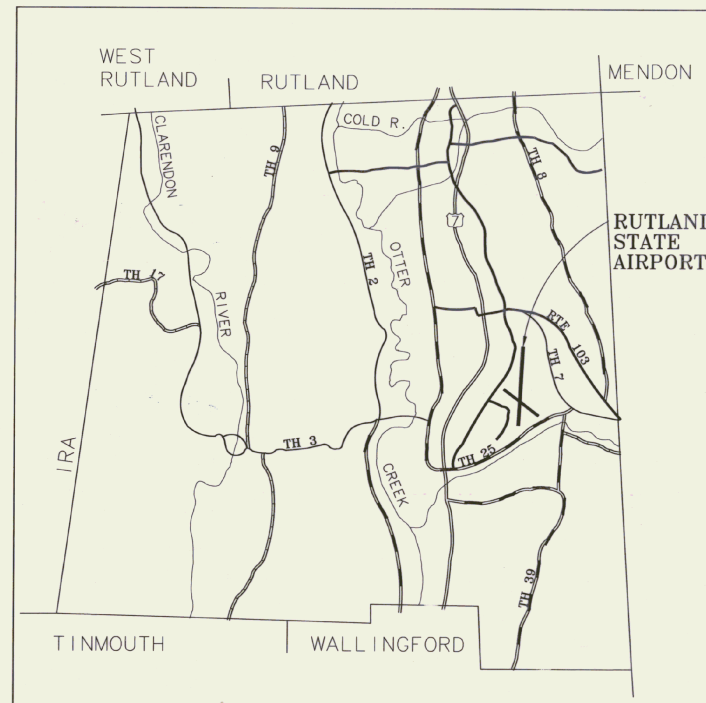
### STANDARDS

AP-2 06/01/94  
AP-3 06/01/94  
AP-10 06/01/94

### TABLE OF QUANTITIES

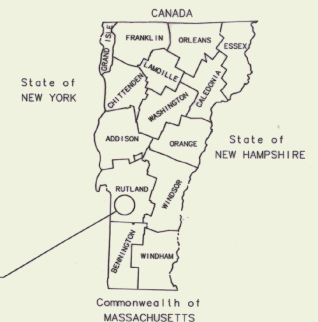
63615(mod)  
NO 2 00.02  
AB

| ITEM NO. | DESCRIPTION            | ESTIMATED QUANTITY |
|----------|------------------------|--------------------|
| N/A      | LOCALIZER SITE WORK    | 1 LUMP SUM         |
| 635.10   | UTILITY COST ALLOWANCE | 1 LUMP SUM         |
| 635.10   | MOBILIZATION           | 1 LUMP SUM         |
| 900.01   | S.A. #1                | 1 LUMP SUM         |



LOCATION MAP

APPROXIMATE SCALE : 1" = 1 MILE



PROJECT SITE

### RECORD PLANS

CONTRACTOR: BELDEN CO., INC.

RESIDENT ENGINEER: G. D'AMICO

CONSTRUCTION BEGAN: JUNE 12, 1997

CONSTRUCTION COMPLETED: SEPTEMBER 19, 1997

RECORD PLANS BY: G. D'AMICO

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

BY G. D'Amico RESIDENT ENGINEER  
DATE 29 Nov '97

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

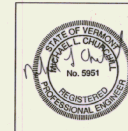
### A.A.I.A. OF 1982 SECTION 509(d) ASSURANCES

IN COMPLIANCE WITH THE AIRPORT AND AIRWAYS IMPROVEMENT ACT OF 1982, SECTION 509 (d) AND THE SPONSOR'S CERTIFICATION, DATED \_\_\_\_\_, THESE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED IN ACCORDANCE WITH CURRENT FAA STANDARDS IDENTIFIED IN F.A.R. PART 152. ANY DEVIATION FROM THE FAA STANDARD WERE APPROVED IN A LETTER BY THE FAA, DATED AUGUST 13, 1996, AND ARE DISCUSSED IN THE ENGINEERING REPORT ACCOMPANYING THESE PLANS.

DESIGN ENGINEER

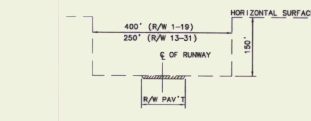
DATE

URS Greiner, Inc.



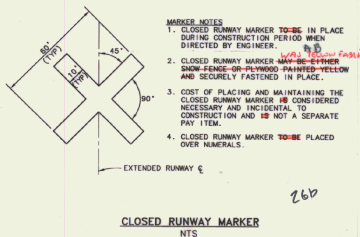
APPROVED 10/28/97 DATE 6-18-97  
DIRECTOR OF RAIL, AIR, & PUBLIC TRANSPORTATION  
DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION  
APPROVED \_\_\_\_\_ DATE \_\_\_\_\_  
CHIEF, AIRPORTS DIVISION

269



**C RUNWAY OBSTACLE FREE ZONE TYP SECTION**  
NOT TO SCALE

TEMPORARY RELOCATED THRESHOLD DETAIL  
SCALE: 1"=50'





# 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 (VADOT), AND THE FEDERAL AVIATION ADMINISTRATION (FAA).
- THE PROJECT IS TO BE COMPLETED IN CONFORMANCE WITH THESE "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.
- RUTLAND 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 SO AS 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. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL VEHICLES AND PERSONNEL WHO ENTER THROUGH THESE ACCESS POINTS. THE CONTRACTOR SHALL MAINTAIN A SECURITY GUARD AT EACH GATE BEING USED AT ALL TIMES WHILE CONSTRUCTION IS UNDERWAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL ACCESS POINTS BEING USED AT THE END OF EACH CONSTRUCTION DAY OR WHEN ACCESS POINTS ARE UNATTENDED.
- HAUL ROUTES - APPROXIMATE LOCATION OF HAUL ROUTES ON THE CONSTRUCTION SITE ARE SHOWN ON THE PHASING PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE OFF-SITE HAUL ROUTES (STATE OR TOWN HIGHWAYS) WITH THE APPROPRIATE OWNER WHO HAS JURISDICTION OVER THE AFFECTED ROUTE. ON-SITE HAUL ROUTES SHALL BE MAINTAINED BY THE CONTRACTOR AND SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE TO THEIR ORIGINAL CONDITION UPON COMPLETION OF BEING USED AS A HAUL ROUTE. THE BEFORE AND AFTER CONDITION OF ON-SITE HAUL ROUTES SHALL BE JOINTLY INSPECTED AND DETERMINED BY THE CONTRACTOR AND THE ENGINEER. FENCING, DRAINAGE, GRADING AND OTHER MISCELLANEOUS CONSTRUCTION REQUIRED TO CONSTRUCT TEMPORARY HAUL ROUTES OR ACCESS POINTS ON THE AIRPORT WILL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO COMMENCING THE WORK. EXISTING ACCESS ROADS TO AIRPORT FACILITIES SHALL REMAIN OPEN AND MAINTAINED AT ALL TIMES.
- CONTRACTOR'S STAGING AREAS - 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 TO BE REMOVED FROM EMBANKMENTS SHALL BE AS SPECIFIED AND APPROVED BY THE ENGINEER. WASTE MATERIALS INCLUDE THOSE ITEMS WHICH ARE A DIRECT RESULT OF CONSTRUCTION. TRASH (i.e., CUPS, CANS, ETC.) SHALL BE DISPOSED OF THROUGH PROPER SANITARY METHODS.
- SAFETY - THE CONTRACTOR SHALL CONDUCT HIS ACTIVITIES IN A SAFE MANNER AS SPECIFIED IN THE SECTION TITLED, "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 COMPLETED. ALL SUCH REPAIRS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND SHALL BE AT THE CONTRACTOR'S EXPENSE. WHEN FAA CABLES ARE DAMAGED, REPAIRS SHALL BE DONE IN ACCORDANCE WITH FAA REQUIREMENTS. AND IN THE PRESENCE OF AN FAA REPRESENTATIVE, THE FAA MAY ELECT TO HAVE THE REPAIR PERFORMED BY OTHERS IN WHICH CASE THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING THE INCURRED COSTS OF REPAIRS.
- EXISTING AIRFIELD LIGHTING SYSTEMS - INTERRUPTION OF EXISTING AIRFIELD LIGHTING SYSTEMS NOT INCLUDED IN THIS PROJECT SHALL NOT BE PERMITTED. ALL BULB LEADING 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 HIS PROJECT WORK ON THE PROJECT AT HIS OWN EXPENSE.
- EXISTING TOPOGRAPHIC FIELD SURVEYS FOR THIS PROJECT AREA WERE PERFORMED BY LITTLE RIVER SURVEY CO. IN 1995 & 1997.
- THE HORIZONTAL CONTROL ON THIS PROJECT IS TIED TO THE 1983 AND 1988 NATIONAL GEODETIC HORIZONTAL AND VERTICAL DATUM, RESPECTIVELY.

## SAFETY REQUIREMENTS DURING CONSTRUCTION

- FEDERAL AVIATION ADMINISTRATION (FAA) ADVISORY CIRCULARS (AC), ORDERS AND FEDERAL AVIATION REGULATIONS (FAR).
- THE FOLLOWING PUBLICATIONS CONTAIN DEFINITIONS/DESCRIPTIONS OF CRITICAL AIRPORT OPERATING AREAS. THE AREAS DEFINED BELOW PERTAIN TO AIRFIELD SAFETY REQUIREMENTS AND ARE REFERENCED THROUGHOUT THE CONTRACT DOCUMENTS. COPIES OF THESE PUBLICATIONS ARE AVAILABLE THROUGH THE FAA OR CAN BE ORDERED BY MAIL FROM:  
U.S. DEPARTMENT OF TRANSPORTATION  
SUBSISTENCE DISTRIBUTION OFFICE  
ARMORE, EAST BUSINESS CENTER  
3341 75TH AVE.  
LANDOVER, MD. 20785  
AND CAN BE REVIEWED AT THE OFFICES OF THE VERMONT AGENCY OF TRANSPORTATION, RAIL, AIR AND PUBLIC TRANSPORTATION DIVISION, NATIONAL LIFE BUILDING, MONTPELIER, VERMONT.
- AC 150/5370-2, "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION", CURRENT EDITION.
- FAR PART 77 "OBJECTS AFFECTING NAVIGABLE AIRSPACE", CURRENT EDITION.
- AC 150/5300-13, "AIRPORT DESIGN", CURRENT EDITION, ESTABLISHES DESIGN, OPERATIONAL, AND MAINTENANCE STANDARDS FOR AIRPORTS. STANDARD TERMS USED IN THE CONTRACT PLANS AND SPECIFICATIONS ARE DEFINED BELOW:  
(a) RUNWAY PROTECTION ZONE (RPZ): A TRAPEZOIDAL AREA CENTERED ON THE RUNWAY BEGINNING AT A POINT 200 FEET BEYOND THE END OF THE AREA USABLE FOR TAKEOFF OR LANDING. THE RPZ IS SHOWN ON THE GENERAL PROJECT LAYOUT PLAN.  
(b) OBJECT FREE AREA (OFA): A TWO DIMENSIONAL GROUND AREA SURROUNDING RUNWAYS, TAXIWAYS, AND TAXILANES WHICH IS CLEAR OF OBJECTS EXCEPT FOR OBJECTS WHOSE LOCATION IS FIXED BY FUNCTION.  
(c) SAFETY AREA - THE SURFACE ADJACENT TO RUNWAYS, TAXIWAYS, AND TAXILANES OVER WHICH AIRCRAFT SHOULD, IN DRY WEATHER, BE ABLE TO CROSS AT NORMAL SPEEDS WITHOUT INCURRING SIGNIFICANT DAMAGE. A SAFETY AREA IS GRADED, DRAINED AND COMPACTED. IT IS FREE OF ANY HOLES, TRENCHES, BUMPS OR OTHER SIGNIFICANT SURFACE VARIATIONS OR OBJECTS OTHER THAN THOSE WHICH MUST BE THERE BECAUSE OF THEIR ESSENTIAL AERONAUTICAL FUNCTION. THE SAFETY AREA REQUIRES THE CAPABILITY OF SUPPORTING MAINTENANCE VEHICLES AND AIRCRAFT RESCUE AND FIRE FIGHTING VEHICLES UNDER NORMAL (DRY) CONDITIONS.
- GENERAL SAFETY REQUIREMENTS  
(1) THE CONTRACTOR SHALL ACQUAINT HIS SUPERVISORS AND EMPLOYEES WITH THE AIRPORT ACTIVITY AND OPERATIONS THAT ARE INHERENT TO RUTLAND STATE AIRPORT AND SHALL CONDUCT HIS CONSTRUCTION ACTIVITIES TO CONFORM TO ALL ROUTINE AND EMERGENCY AIR TRAFFIC REQUIREMENTS AND GUIDELINES FOR SAFETY SPECIFIED HEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL SAFETY DEVICES AS REQUIRED FOR THE PROTECTION OF HIS PERSONNEL.  
(2) PROTECTION OF ALL PERSONS SHALL BE PROVIDED THROUGHOUT THE PROGRESS OF THE WORK. THE WORK SHALL PROCEED IN SUCH A MANNER AS TO PROVIDE SAFE CONDITIONS FOR ALL WORKERS AND AGENCY PERSONNEL. THE SEQUENCE OF OPERATION SHALL BE SUCH THAT MAXIMUM PROTECTION IS AFFORDED TO INSURE THAT PERSONNEL AND WORKERS IN THE WORK AREA ARE NOT SUBJECT TO ANY DANGEROUS CONDITIONS.

- DURING PERFORMANCE OF THIS CONTRACT, THE AIRPORT RUNWAYS, TAXIWAYS, AND AIRCRAFT PARKING APRONS SHALL REMAIN IN USE BY AIRCRAFT TO THE MAXIMUM EXTENT POSSIBLE. ALL AIRCRAFT TRAFFIC ON THESE AREAS SHALL HAVE PRIORITY OVER CONTRACTOR'S TRAFFIC. THE OWNER RESERVES THE RIGHT TO ORDER THE CONTRACTOR AT ANY TIME TO VACATE ANY AREA NECESSARY TO MAINTAIN SAFE AIRCRAFT OPERATIONS. USE OF AREAS NEAR THE CONTRACTOR'S WORK WILL BE CONTROLLED TO MINIMIZE DISTURBANCE TO THE CONTRACTOR'S OPERATION. THE CONTRACTOR SHALL NOT ALLOW EMPLOYEES, SUBCONTRACTORS, SUPPLIERS, OR ANY OTHER UNAUTHORIZED PERSON TO ENTER OR REMAIN IN ANY AIRPORT AREA WHICH WOULD BE HAZARDOUS TO PERSONS OR TO AIRCRAFT OPERATIONS.
- ALL WORK TO BE PERFORMED WHICH IS CLOSE TO AN ACTIVE RUNWAY, TAXIWAY OR APRON SHALL BE PERFORMED WHEN THE RUNWAY, TAXIWAY OR APRON IS NOT IN USE. SUCH WORK SHALL BE ACCOMPLISHED ONLY WITH PRIOR PERMISSION FROM THE ENGINEER AND AIRPORT MANAGER. REQUESTED CLOSINGS SHALL BE DIRECTED TO THE ENGINEER AT LEAST 48 HOURS IN ADVANCE.
- THE FOLLOWING ARE CONSIDERED SAFETY PROBLEMS AND/OR HAZARDS:  
(a) TRENCHES, HOLES, OR EXCAVATION ON OR ADJACENT TO ANY OPEN RUNWAY, TAXIWAY OR TAXIWAY SAFETY AREAS.  
(b) UNMARKED/UNLIGHTED HOLES OR EXCAVATION IN ANY APRON, OPEN TAXIWAY, OPEN TAXILANE, OR RELATED SAFETY AREA.  
(c) MOUNDS OR PILES OF EARTH, CONSTRUCTION MATERIALS, TEMPORARY STRUCTURES, OR OTHER OBJECTS IN THE VICINITY OF ANY OPEN RUNWAY, TAXIWAY, TAXILANE, OR IN ANY RELATED SAFETY, APPROACH, OR DEPARTURE AREA.  
(d) VEHICLES OR EQUIPMENT, WHETHER OPERATING OR IDLE, ON ANY OPEN RUNWAY, TAXIWAY, TAXILANE, OR IN ANY RELATED SAFETY, APPROACH, OR DEPARTURE AREA.  
(e) VEHICLES, EQUIPMENT, EXCAVATION, STOCKPILES, OR OTHER MATERIALS WHICH COULD INTERFERE WITH ELECTRONIC SIGNALS FROM RADIOS OR ELECTRONIC NAVIGATIONAL AIDS (NAVAIDS).  
(f) PAVEMENT DROP-OFFS - UPS (EITHER PERMANENT OR TEMPORARY, WHICH COULD CAUSE DAMAGE TO AIRCRAFT IF CROSSED AT NORMAL OPERATING SPEEDS, THE NORMAL MAXIMUM DROP-OFF OR UP IS 1-1/2 INCHES.  
(g) UNMARKED UTILITY, NAVAID, WEATHER SERVICE, RUNWAY LIGHTING, OR OTHER POWER OR SIGNAL CABLES THAT COULD BE DAMAGED DURING CONSTRUCTION.  
(h) OBJECTS, WHETHER OR NOT MARKED OR FLAGGED, OR ACTIVITIES ANYWHERE ON OR IN THE VICINITY OF THE AIRPORT WHICH COULD BE DISTRACTING, CONFUSING, OR ALARMING TO PILOTS DURING AIRCRAFT OPERATIONS.  
(i) UNFLAGGED/UNLIGHTED LOW VISIBILITY ITEMS SUCH AS TALL CRANES, DRILLS, AND THE LIKE ANYWHERE IN THE VICINITY OF ACTIVE RUNWAYS, OR IN ANY APPROACH OR DEPARTURE AREA.  
(j) MISLEADING OR MALFUNCTIONING OBSTRUCTION LIGHTS OR UNLIGHTED/UNMARKED OBSTRUCTIONS IN THE APPROACH TO ANY ACTIVE RUNWAY.  
(k) WATER, SNOW, DIRT, DEBRIS, OR OTHER TRANSIENT ACCUMULATION WHICH TEMPORARILY OBSCURES PAVEMENT MARKINGS OR PAYMENT EDGES, OR DEGRADATES VISIBILITY OF RUNWAY/TAXIWAY MARKINGS OR LIGHTING.  
(l) INADEQUATE OR IMPROPER METHODS OF MARKING, BARRICADING, AND LIGHTING OF TEMPORARILY CLOSED PORTIONS OF THE AIRPORT OPERATIONS AREA.  
(m) TRASH OR OTHER MATERIALS WITH FOREIGN OBJECT DAMAGE (FOD) POTENTIAL; WHETHER ON RUNWAYS, TAXIWAYS, OR APRONS; OR IN RELATED SAFETY AREAS.  
(n) INADEQUATE BARRICADING OR OTHER MARKING WHICH IS PLACED TO SEPARATE CONSTRUCTION OR MAINTENANCE AREAS FROM OPEN AIRCRAFT OPERATING AREAS.  
(o) FAILURE TO CONTROL UNAUTHORIZED VEHICLE AND HUMAN ACCESS TO ACTIVE AIRCRAFT OPERATING AREAS.  
(p) FAILURE TO MAINTAIN RADIO COMMUNICATION BETWEEN CONSTRUCTION/MAINTENANCE VEHICLES AND RUTLAND UNICOM.  
(q) CONSTRUCTION/MAINTENANCE ACTIVITIES OR MATERIALS WHICH COULD HINDER WOODWARD AIRCRAFT RESCUE AND FIRE FIGHTING (ARFF) EQUIPMENT FROM REACHING ALL AIRCRAFT OR ANY PART OF THE RUNWAY/TAXIWAY SYSTEM, RUNWAY APPROACH AND DEPARTURE AREAS AND AIRCRAFT PARKING LOCATIONS.  
(r) BIRD ATTRACTANTS ON AIRPORT SUCH AS: EDIBLES (FOOD SCRAPS, ETC.), MISCELLANEOUS TRASH, OR PONDED WATER.

- THE CONTRACTOR SHALL CONDUCT ACTIVITIES SO AS NOT TO VIOLATE ANY SAFETY STANDARDS CONTAINED HEREIN. THE CONTRACTOR SHALL INSPECT ALL CONSTRUCTION AND STORAGE AREAS AS OFTEN AS NECESSARY AND PROMPTLY TAKE ALL STEPS NECESSARY TO PREVENT/REMEDY ANY UNSAFE, OR POTENTIALLY UNSAFE CONDITIONS OR ACTIVITIES DISCOVERED.
- THE VADOT WILL BE RESPONSIBLE FOR ISSUING APPROPRIATE NOTICE TO AIRMEN (NOTAM) CONCERNING CONSTRUCTION ACTIVITY ON THE AIRFIELD.
- MOTORIZED VEHICLES  
THIS PROJECT INCLUDES WORK WITHIN THE AIRCRAFT OPERATIONS AREA (AOA). ALL PERMITTED VEHICLES SHALL BE EQUIPPED WITH A FLASHING AMBER (YELLOW) DOME-TYPE LIGHT, MOUNTED ON TOP OF THE VEHICLE AND OF SUCH INTENSITY TO CONFORM TO LOCAL CODES FOR MAINTENANCE AND EMERGENCY VEHICLES. ALL VEHICLES OPERATING WITHIN THE AIRFIELD BOUNDARY SHALL BE IDENTIFIED WITH A SIGN ON EACH SIDE OF THE VEHICLE BEARING THE CONTRACTOR'S NAME IN 12-INCH MINIMUM LETTER HEIGHT.  
VEHICLES MAKING ONLY OCCASIONAL VISITS TO THE JOB SITE ARE EXEMPT FROM THE IDENTIFICATION REQUIREMENTS CONTAINED HEREIN ABOVE PROVIDED THAT THEY ARE ESCORTED INTO, THROUGH, AND OUT OF THE AIRPORT AREA BY A PROPERLY IDENTIFIED VEHICLE.
- RADIO COMMUNICATIONS  
RADIO COMMUNICATIONS ARE REQUIRED BETWEEN THE CONTRACTOR'S REPRESENTATIVE AND RUTLAND UNICOM. RADIO CONTACT IS REQUIRED AT ALL TIMES WHILE THE CONTRACTOR HAS PERSONNEL AND EQUIPMENT ON THE PROJECT SITE AND WHILE THEY ARE IN AN ACTIVE AIR OPERATIONS AREA (AOA) OF THE AIRPORT. RADIOS SHALL BE FURNISHED BY THE CONTRACTOR AND SHALL BE CAPABLE OF TRANSMITTING AND RECEIVING AT A GROUND CONTROL FREQUENCY OF 122.8 MHZ. THIS FREQUENCY IS TO BE UTILIZED WHEN CROSSING ACTIVE FACILITIES. SUFFICIENT RADIOS SHALL BE ON SITE AND OPERATING AT ALL TIMES SO THAT INSTRUCTIONS OR COMMUNICATIONS MAY BE DISPATCHED TO ALL CREWS AND/OR EQUIPMENT WORKING IN AN ACTIVE AOA.
- DEBRIS  
DEBRIS, WASTE, AND LOOSE MATERIAL (INCLUDING DUST AND DIRT) CAPABLE OF CAUSING DAMAGE TO AIRCRAFT LANDING GEAR OR PROPELLERS, OR BEING INGESTED IN JET ENGINES, SHALL NOT BE ALLOWED ON ACTIVE AIRCRAFT MOVEMENT AREAS OR ADJACENT GRASSED AREAS. MATERIALS OBSERVED TO BE WITHIN THESE AREAS SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR. THE CONTRACTOR SHALL BE REQUIRED TO HAVE A SWEEPING MACHINE AND OPERATOR ON SITE AND READY AT ALL TIMES DURING CONSTRUCTION ACTIVITY. WHERE TRAVEL ON OR ACROSS RUNWAYS, RAMP AREAS, TAXIWAYS, OR AIRCRAFT APRONS IS REQUIRED, THE CONTRACTOR SHALL PROVIDE ADEQUATE PERSONNEL AND EQUIPMENT TO KEEP SUCH SURFACES CLEAR OF DEBRIS.
- FLAGMEN  
IN ACCORDANCE WITH THE SPECIFICATIONS, THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, FURNISH FLAGMEN AS NECESSARY TO CONTROL HIS TRAFFIC (UNLESS OTHERWISE DIRECTED BY THE ENGINEER).  
ALL CONTRACTOR VEHICLES THAT ARE REQUIRED TO CROSS ACTIVE RUNWAYS, RUNWAY SAFETY AREAS, TAXIWAYS AND APRONS SHALL DO SO UNDER THE DIRECT CONTROL OF A COMPETENT FLAGMAN WHO IS IN DIRECT RADIO CONTACT WITH GROUND CONTROL. ALL AIRCRAFT TRAFFIC ON RUNWAYS, TAXIWAYS, AND APRONS SHALL HAVE PRIORITY OVER CONTRACTOR'S TRAFFIC. AT NO TIME SHALL THE CONTRACTOR'S VEHICLES OR PERSONNEL BE ALLOWED TO ENTER OR CROSS ACTIVE RUNWAYS OR CLEAR ZONES WITHOUT PROPER AUTHORIZATION.

- MISCELLANEOUS  
(1) OPEN FLAME, WELDING OR TORCH CUTTING OPERATIONS ARE PROHIBITED UNLESS ADEQUATE FIRE AND SAFETY PRECAUTIONS HAVE BEEN TAKEN AND THE PROCEDURE PREVIOUSLY APPROVED BY THE ENGINEER.  
(2) EQUIPMENT AND STOCKPILED MATERIAL SHALL BE CONSTRAINED IN A MANNER TO PREVENT MOVEMENT RESULTING FROM AIRCRAFT JET BLAST OR WIND CONDITIONS IN EXCESS OF 10 KNOTS.  
(3) THE CONTRACTOR SHALL PROVIDE BUCKET TYPE CONSTRUCTION BARRICADES WITH FLASHING YELLOW LIGHTS AS SHOWN ON THE DRAWINGS TO DELINEATE THE WORK AREAS WHEN CLOSED TO AIRPORT TRAFFIC. OPEN TRENCHES, EXCAVATIONS AND STOCKPILED MATERIAL LOCATED IN THE AOA SHALL BE PROMINENTLY MARKED WITH ORANGE FLAGS AND LIGHTED BY APPROVED LIGHT UNITS DURING HOURS OF LIMITED VISIBILITY AND DARKNESS.  
(4) ALL MATERIALS AND EQUIPMENT WHEN NOT IN USE SHALL BE PLACED IN APPROVED AREAS WHERE THEY WILL NOT CONSTITUTE A HAZARD TO AIRCRAFT OPERATIONS AND NOT PENETRATE CLEARANCE SURFACES. EQUIPMENT SHALL BE PARKED AT THE STAGING AREA WHEN NOT IN USE.  
(5) MAXIMUM EQUIPMENT HEIGHT SHALL NOT EXCEED 15 FEET UNLESS PRIOR APPROVAL IS OBTAINED FROM THE ENGINEER.  
(6) UPON COMPLETION OF ANY STAGE/PHASE OF WORK, THE ENGINEER WILL ARRANGE A PHYSICAL INSPECTION OF THE AREA WITH AIRPORT OPERATIONS PERSONNEL PRIOR TO OPENING ANY PORTION OF A RUNWAY, RAMP AREA OR AIRPORT ROADWAY THAT HAS BEEN CLOSED FOR WORK OR USED FOR A CROSSING POINT OR HAUL ROUTE BY THE CONTRACTOR.  
(7) ENTRANCE TO THE AIRFIELD IS SUBJECT TO SECURITY REGULATIONS. ALL PERSONNEL ENTERING THE AIRFIELD MUST OBTAIN AND DISPLAY SECURITY IDENTIFICATION BADGES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ASSURING THAT ALL OF HIS EMPLOYEES WHO HAVE UNSCORTED ACCESS TO THE AIRFIELD, HAVE HAD A BACKGROUND CHECK PERFORMED ON THEM DATING BACK FIVE (5) YEARS VERIFYING REPRESENTATIONS MADE BY THE EMPLOYEE RELATING TO EMPLOYMENT.  
(8) THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A CURRENT LIST OF ALL EMPLOYEES WORKING ON THE AIRPORT. THE LIST SHALL BE MAINTAINED CURRENT BY THE CONTRACTOR AND APPLIES TO ALL SUBCONTRACTORS.  
(9) EXCEPT FOR EMERGENCIES, ALL CONTACT WITH AIRPORT PERSONNEL SHALL BE MADE THROUGH THE RESIDENT ENGINEER. FOR EMERGENCIES INVOLVING SAFETY (INJURIES, FIRES, SECURITY BREACHES, ETC.) THE CONTRACTOR SHALL MAKE DIRECT CONTACT WITH AIRPORT OPERATIONS FOLLOWED BY NOTIFICATION TO THE RESIDENT ENGINEER AS SOON AS POSSIBLE.  
(10) THE CONTRACTOR SHALL PROVIDE THE PHONE NUMBERS OF THREE PERSONNEL, INCLUDING THE PROJECT SUPERINTENDENT, WHO MAY BE CONTACTED IN AN EMERGENCY. PERSONNEL SHALL BE ON CALL 24 HOURS PER DAY FOR MAINTAINING AIRPORT HAZARD LIGHTING AND BARRICADES.  
(11) IN ACCORDANCE WITH THE SPECIFICATIONS, FEDERAL WAGE RATES SHALL BE POSTED OUTSIDE THE SITE FIELD OFFICE IN A WEATHERPROOF ENCLOSURE.
- UTILITIES  
(1) UNDERGROUND UTILITIES: THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE CONSIDERED TO BE ONLY ESTIMATED LOCATIONS. ALL UTILITY LOCATIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING CONSTRUCTION. IN THE EVENT ANY UTILITY IS DAMAGED THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING FOR INCURRED COSTS OF REPAIRS.  
(2) UTILITIES NOTIFICATION: AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN AN AREA WHICH MAY INVOLVE UNDERGROUND UTILITY FACILITIES, THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER, AND THE OWNER OF EACH UNDERGROUND UTILITY FACILITY AFFECTED.  
(3) THE FOLLOWING IS A LIST OF COMPANIES WITH POSSIBLE UTILITIES WITHIN THE CONSTRUCTION LIMITS.  

| UTILITY | DISGISE | 1-800-225-4977 |
|---------|---------|----------------|
| CVPS    |         | 1-800-649-2877 |



Job No. 11V4012020N  
Rev. No. 04/09/97

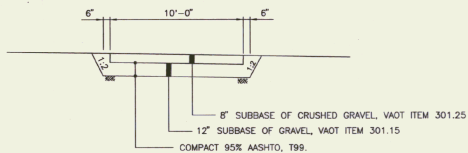
DATE  
REV.  
DATE

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT

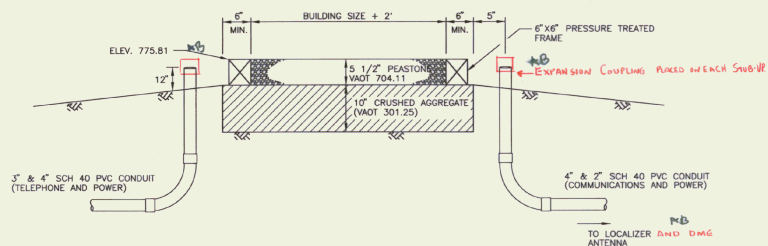
URS Greiner, Inc.  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

Designed by: Date  
Drawn by: 07/2000  
Checked by: 08/2000  
Approved by: 08/2000  
Scale: AS SHOWN  
Date: 04/09/97  
Sheet 3 of 9  
Sheet No.



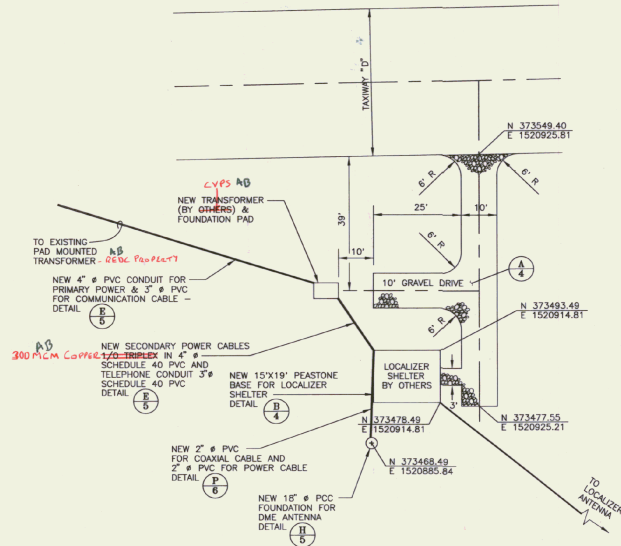


**A** GRAVEL DRIVE  
SCALE: NONE



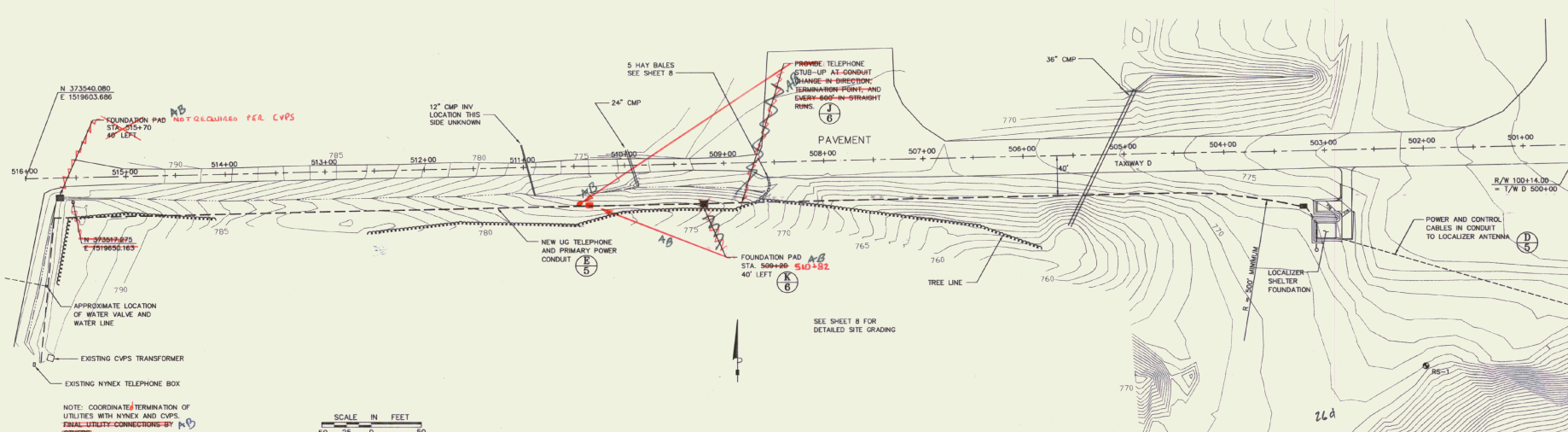
**B** LOCALIZER SHELTER FOUNDATION  
SCALE: NONE

NOTE: PROVIDE 20' CABLE SLACK - EACH END OF ALL CABLES.  
SEAL CONDUITS WITH APPROVED DUCT SEAL AFTER INSTALLATION OF CABLES OR PULL WIRES.



**C** SITE DETAIL - LOCALIZER SHELTER  
SCALE: NONE

- NOTES:
1. SITE PREPARATION: EXCAVATE TOPSOIL TO GOOD BEARING SOIL. COMPACT SUBGRADE, AND CRUSHED AGGREGATE TO 95% AASHTO T99.
  2. PEASTONE LAYER TO BE LEVEL.
  3. SHELTER RELOCATION BY OTHERS MAULISAN NORTH - CONTRACT 2.
  4. SEE DETAIL (B) 4 FOR BUILDING GROUNDING DETAILS.



SCALE IN FEET  
50 25 0 50

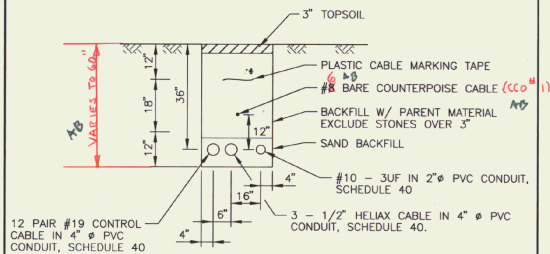


|   |          |                |
|---|----------|----------------|
| 1 | 11/18/92 | PERSON DRAWING |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |
|   |          |                |

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT  
LOCALIZER RELOCATION - SITE PLAN

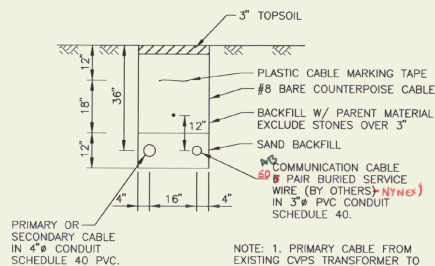
**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|              |              |
|--------------|--------------|
| DESIGNED BY  | D. H. B.     |
| CHECKED BY   | 07/29/97     |
| DRAWN BY     | M. M. MOALLA |
| CHECKED BY   | 08/06/97     |
| APPROVED BY  | S. MILLER    |
| DATE         | 04/08/97     |
| SHEET 4 OF 9 |              |
| SHEET NO.    | 4            |



**D** CONDUIT TRENCH FROM LOCALIZER TO SHELTER

NOTE - PROVIDED 20' CABLE SLACK - EACH END OF ALL CABLES. FOR FUTURE CONNECTION - BY OTHERS. MOUND TOPSOIL SLIGHTLY TO ACCOUNT FOR BACKFILL SETTLEMENT.



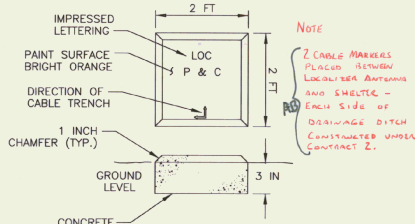
NOTE: 1. PRIMARY CABLE FROM EXISTING CVPS TRANSFORMER TO NEW TRANSFORMER INSTALLED BY CVPS.

2. SECONDARY CABLE FROM NEW TRANSFORMER TO LOCALIZER SHELTER. LEAVE 20' CABLE SLACK FOR CONNECTION TO DISCONNECT ON SHELTER BY OTHERS. CONTRACT 2.

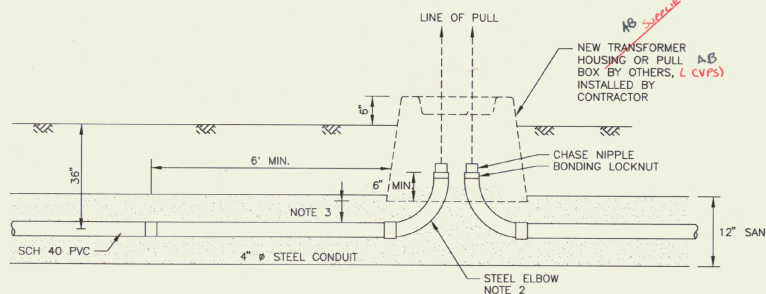
3. TERMINATE SECONDARY CABLE & CONDUIT AT GROUND LEVEL AT PROPOSED LOCALIZER SHELTER SITE. LEAVE 20' CABLE SLACK FOR CONNECTION TO DISCONNECT ON SHELTER BY OTHERS. CONTRACT 2.

4. MOUND TOPSOIL SLIGHTLY TO ACCOUNT FOR BACKFILL SETTLEMENT.

**E** PRIMARY/SECONDARY CONDUIT TRENCH

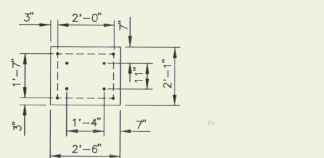


**F** CABLE MARKER

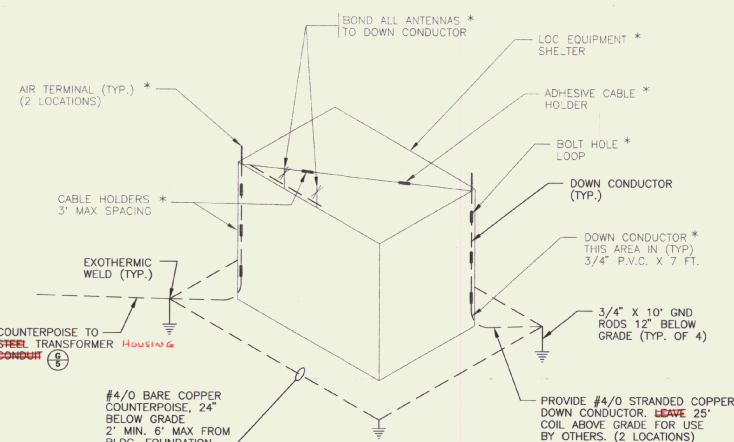


**G** PULL BOX SECTION

- NOTES:
1. ELBOWS ~~TO BE~~ ALIGNED TO ALLOW STRAIGHT PULL THROUGH BOX PAD OPENING
  2. USE 90° ELBOWS
  3. PROVIDE SUFFICIENT CLEARANCE SO BOX PAD DOES NOT CONTACT ELBOWS
  4. INSTALL PULL WIRE IN CONDUIT (500# MIN RATING)
  5. SEAL CONDUITS WITH APPROVED DUCT SEAL AFTER CABLES INSTALLED
  6. BOND STEEL CONDUIT TO GROUND GRID. SEE DETAIL (I)
  7. PROVIDE DRAINAGE AWAY FROM TRANSFORMER HOUSING
  8. PLACE 3\"/>
  9. SEE DETAIL (I) FOR ADDITIONAL DETAIL



**H** PIER FOUNDATION FOR DME ANTENNA MAST



**I** LIGHTNING PROTECTION DETAIL

### GENERAL NOTES

1. ALL DISTURBED AREAS ~~TO BE~~ REGRADED, TOPSOILED (3\"/>
2. CRUSHED AGGREGATE TO CONFORM TO VAOT SPECIFICATION 301.25
3. INSTALLATION OF UNDERGROUND CONDUIT AND COMMUNICATIONS CABLES TO CONFORM TO REQUIREMENTS OF THE LOCAL UTILITY (CVPS) & TELEPHONE Co. (NYNEX).



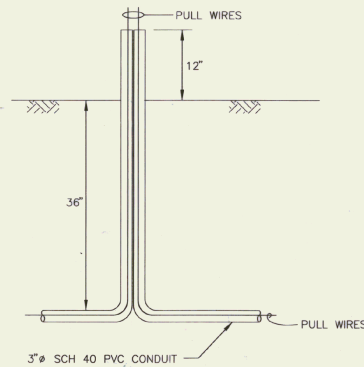
| REV. | DATE     | DESCRIPTION             |
|------|----------|-------------------------|
| 1    | 04/09/97 | Initial Release Drawing |

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT

LOCALIZER SITE DETAILS

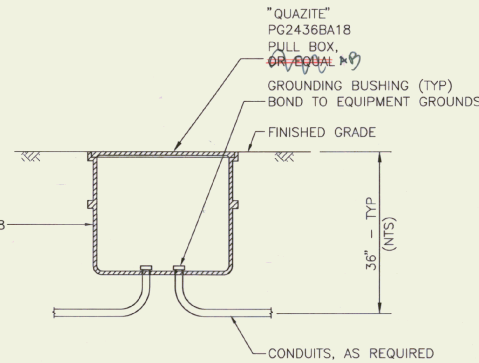
**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|                              |                   |
|------------------------------|-------------------|
| Designed by: B. D'AMICO      | Scale: NCR - NONE |
| Drawn by: M. SCALIA 07/27/97 | Sheet 5 Of 9      |
| Checked by: S. MILLER        | Sheet No. 5       |
| Approved by: M. J. GUNDEL    |                   |



**J TELEPHONE STUB-UP**  
SCALE: NONE

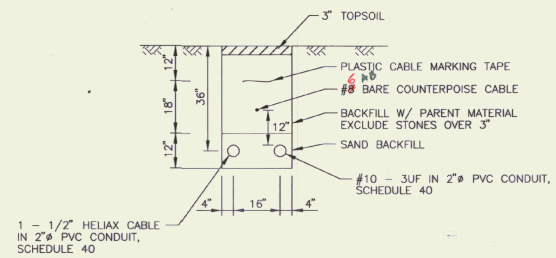
NOTE:  
SEAL CONDUIT WITH APPROVED  
DUCT SEAL AFTER PULL WIRES  
ARE INSTALLED.



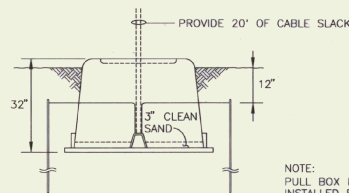
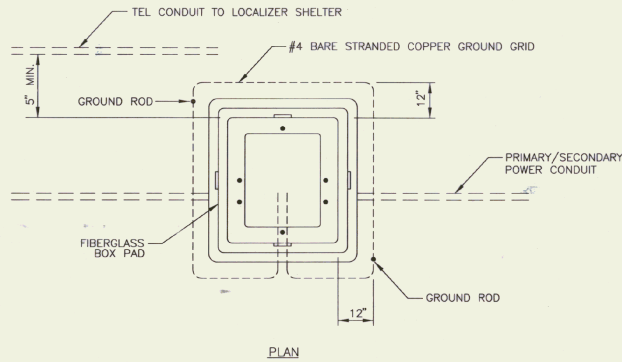
NOTE:  
PROVIDE LOOPS IN HANDHOLES WHERE  
NO SPLICES OCCUR. TERMINATE SPARE  
CABLE IN HANDHOLE WITH 10  
FEET OF EXTRA CABLE COILED AND TAPED.

**O POWER & COMMUNICATION  
HANDHOLE DETAIL**  
SCALE: 1"=1'-0"

SEE LOCATION ON SHEET 8.

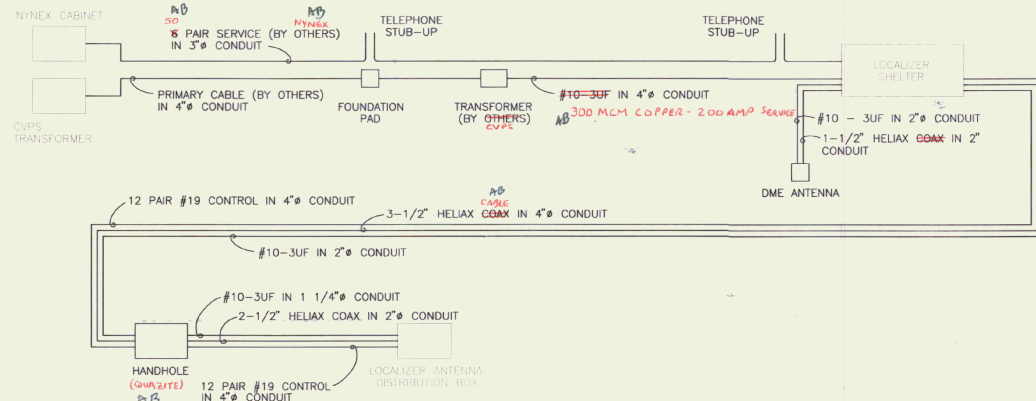


**P CONDUIT TRENCH FROM DME TO SHELTER**  
SCALE: NONE



**K PULL BOX DETAILS**  
SCALE: NONE

NOTE:  
PULL BOX PROVIDED BY CVPS,  
INSTALLED BY CONTRACTOR. ALL  
GROUNDING WORK PROVIDED BY  
CONTRACTOR. PROVIDED 5' MIN.  
HORIZONTAL CLEARANCE BETWEEN  
PULL BOX AND NEW TELEPHONE  
CONDUIT ADJACENT TO PULL BOX.



**Q WIRING DIAGRAM**  
SCALE: NONE



|                             |                  |
|-----------------------------|------------------|
| DESIGNED BY<br>C. D. AMOS   | DATE<br>04/08/97 |
| DRAWN BY<br>M. MCALLISTER   | DATE<br>04/08/97 |
| CHECKED BY<br>S. MILLER     | DATE<br>04/08/97 |
| APPROVED BY<br>W. CHURCHILL | DATE<br>04/08/97 |

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT

LOCALIZER SITE DETAILS

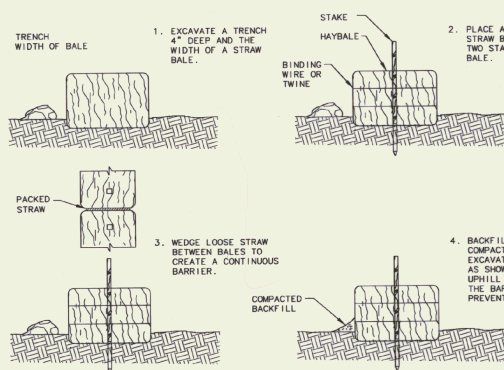
**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|                             |                  |
|-----------------------------|------------------|
| DESIGNED BY<br>C. D. AMOS   | DATE<br>04/08/97 |
| DRAWN BY<br>M. MCALLISTER   | DATE<br>04/08/97 |
| CHECKED BY<br>S. MILLER     | DATE<br>04/08/97 |
| APPROVED BY<br>W. CHURCHILL | DATE<br>04/08/97 |

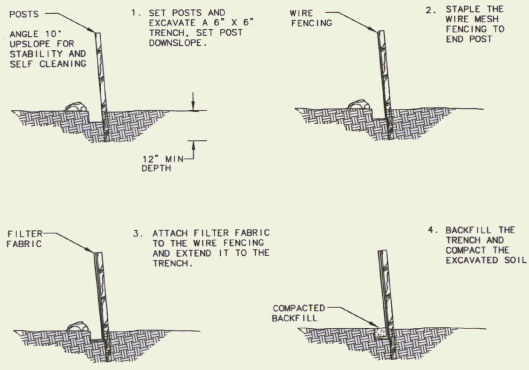
Sheet No.  
**6**



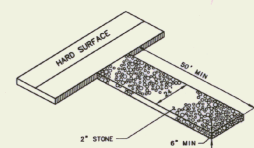




SEDIMENTATION BARRIER - HAYBALE



SEDIMENTATION BARRIER - SILT FENCE



SEDIMENTATION CONTROL CONSTRUCTION ENTRANCE

**SITE DATA**

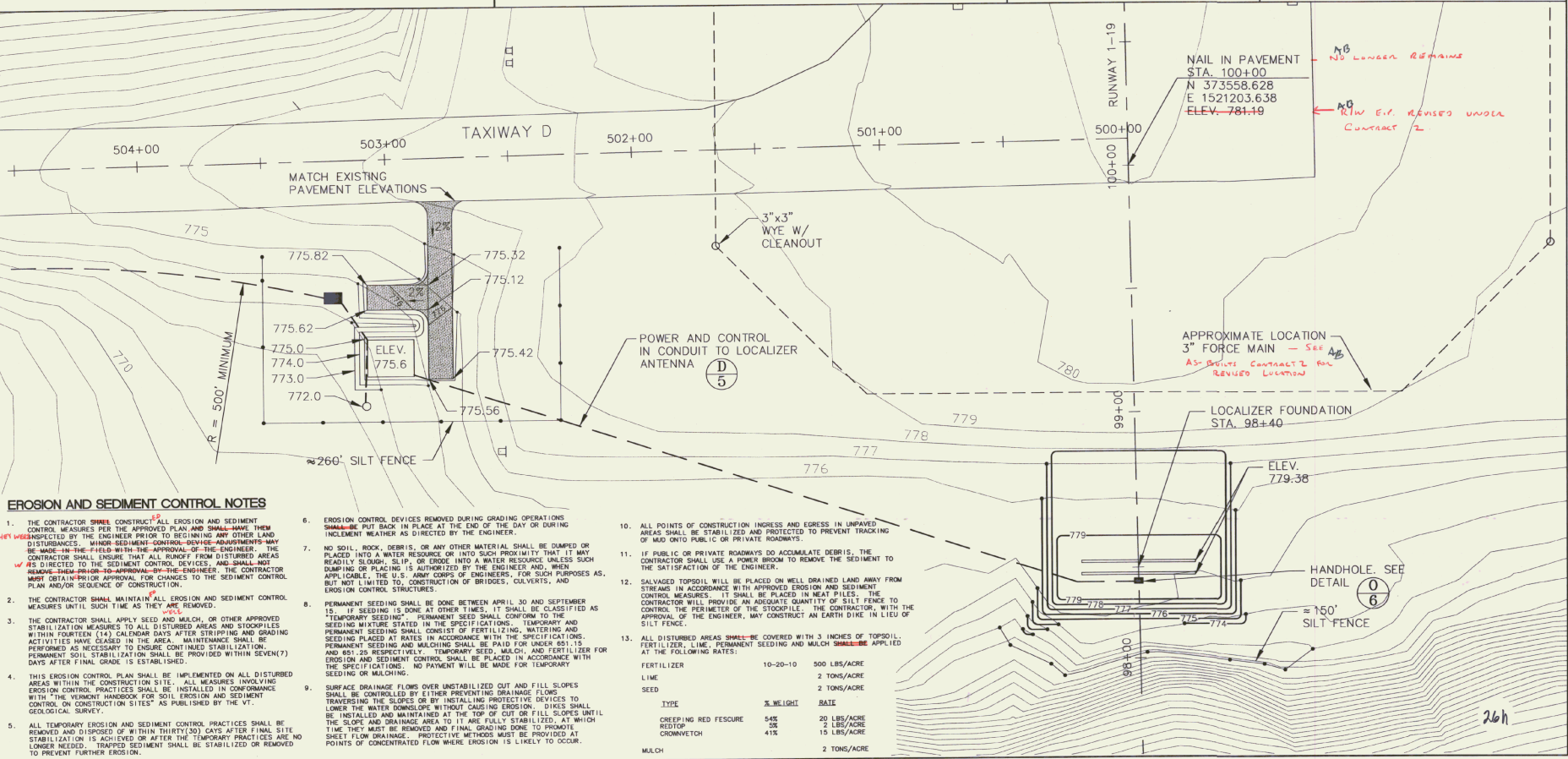
PROJECT DESCRIPTION:  
AIRPORT DEVELOPMENT TO INCLUDE EARTHWORK, STORM DRAINAGE, AND UTILITIES.

TOTAL SITE AREA:  
AREA WITHIN LIMITS OF WORK APPROXIMATELY 1 ACRE.

EXISTING SOIL TYPES:  
- BROWN SILTY SAND WITH TRACES OF GRAVEL.  
- APPROXIMATELY 3" OF TOPSOIL.  
- INFORMATION OBTAINED FROM BORINGS DRILLED BY GREEN MOUNTAIN BORINGS DURING NOVEMBER 1996.

SCHEDULE:  
CONSTRUCTION TO COMMENCE JUNE 1997, AND TO BE COMPLETED AUGUST 1997.  
WITH THE IMPLEMENTATION OF EROSION CONTROL MEASURES TO BE THE FIRST PHASES OF ACTIVITY AND TO CONTINUE THROUGHOUT PROGRESS OF PROJECT.

RECEIVING WATER:  
MILL RIVER, OTTERCREEK.



**EROSION AND SEDIMENT CONTROL NOTES**

1. THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES PER THE APPROVED PLAN AND SHALL MAINTAIN THEM UNLESS OTHERWISE DIRECTED BY THE ENGINEER. MINOR SEDIMENT CONTROL DEVICE 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 REVERSE THEM PRIOR TO APPROVAL BY 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 SUCH TIME AS THEY ARE REMOVED.
3. THE CONTRACTOR SHALL APPLY SEED AND MULCH, OR OTHER APPROVED STABILIZATION MEASURES TO ALL DISTURBED AREAS AND STOCKPILES WITHIN FORTY-THREE (43) 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 AFTER FINAL GRADE IS ESTABLISHED.
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. 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.
6. 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.
7. NO SOIL, ROCK, DEBRIS, OR ANY OTHER MATERIAL SHALL BE DUMPED OR PLACED INTO A WATER RESOURCE OR INTO SUCH PROXIMITY THAT IT MAY READILY SLURRY, SLIP, OR CRUMBLE INTO A WATER RESOURCE UNLESS SUCH DUMPING OR PLACING IS AUTHORIZED BY THE ENGINEER AND, WHEN APPLICABLE, THE U.S. ARMY CORPS OF ENGINEERS, FOR SUCH PURPOSES AS, BUT NOT LIMITED TO, CONSTRUCTION OF BRIDGES, CULVERTS, AND EROSION CONTROL STRUCTURES.
8. 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 IN THE SPECIFICATIONS. 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.
9. SURFACE DRAINAGE FLOWS OVER UNSTABILIZED CUT AND FILL SLOPES SHALL BE CONTROLLED BY EITHER PREVENTING DRAINAGE FLOWS TRAVELING 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.
10. 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.
11. IF PUBLIC OR PRIVATE ROADWAYS DO ACCUMULATE DEBRIS, THE CONTRACTOR SHALL USE A POWER BROOM TO REMOVE THE SEDIMENT TO THE SATISFACTION OF THE ENGINEER.
12. SALVAGED TOPSOIL WILL BE PLACED ON WELL DRAINED LAND AWAY FROM STREAMS IN ACCORDANCE WITH APPROVED EROSION AND SEDIMENT CONTROL MEASURES. IT SHALL BE PLACED IN NEAT PILES. THE CONTRACTOR WILL PROVIDE AN ADEQUATE QUANTITY OF SILT FENCE TO CONTROL THE PERIMETER OF THE STOCKPILE. THE CONTRACTOR, WITH THE APPROVAL OF THE ENGINEER, MAY CONSTRUCT AN EARTH DIRT IN LIEU OF SILT FENCE.
13. ALL DISTURBED AREAS SHALL BE COVERED WITH 3 INCHES OF TOPSOIL, FERTILIZER, LIME, PERMANENT SEEDING AND MULCH SHALL BE APPLIED AT THE FOLLOWING RATES:

| TYPE                | % WEIGHT | RATE         |
|---------------------|----------|--------------|
| FERTILIZER          | 10-20-10 | 500 LBS/ACRE |
| LIME                |          | 2 TONS/ACRE  |
| SEED                |          | 2 TONS/ACRE  |
| CREEPING RED FESCUE | 54%      | 20 LBS/ACRE  |
| REDTOP              | 5%       | 2 LBS/ACRE   |
| CROWN VETCH         | 41%      | 15 LBS/ACRE  |
| MULCH               |          | 2 TONS/ACRE  |

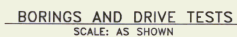
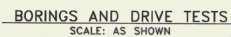


PROJECT NO. 140112100  
JOB NO. 140112100  
DATE  
REV.  
DESCRIPTION  
26h

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT  
SEDIMENTATION / EROSION  
CONTROL DETAILS

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

Designed by: Date: 02/24/97  
Drawn by: M. MOORE 02/24/97  
Checked by: S. MILLER  
Approved by: M. MOORE  
Scale: HOR. - NONE  
VERT. - NONE  
Date: 04/09/97  
Sheet # 01 of 9  
Sheet No. 8



**LEGEND**

N V DEPTH

WL

261

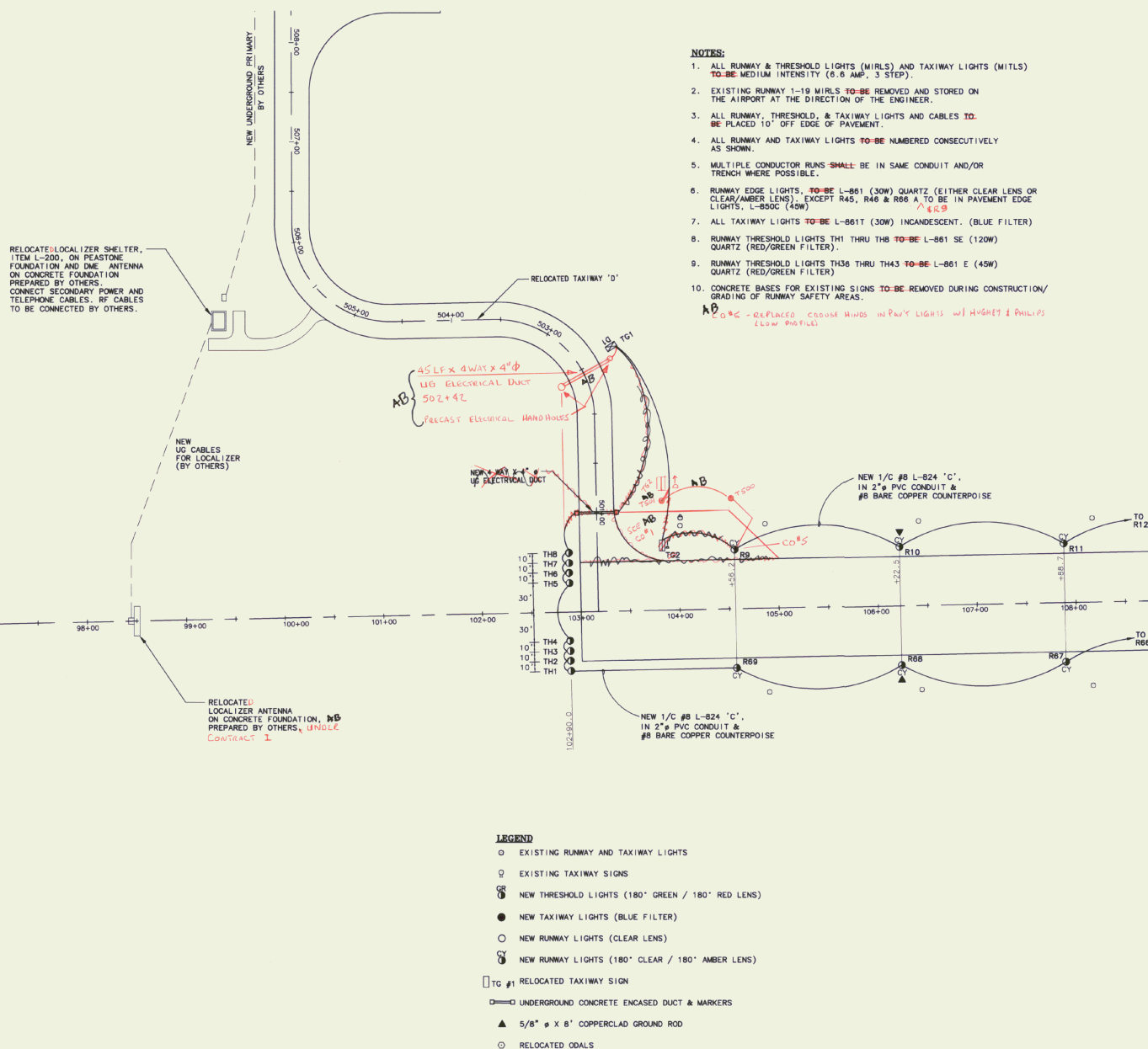


| SIGN SCHEDULE |        |                  |                   |
|---------------|--------|------------------|-------------------|
| SIGN          | LEGEND | NEW LOCATION     | REMARKS           |
| TG #1         | D 1    | 37.5' RT 502+50  | RELOCATE EXISTING |
| TG #2         | D 2    | 70' LT 103+90    | RELOCATE EXISTING |
| TG #3         | 13-31  | 70' LT 109+48    | RELOCATE EXISTING |
| TG #4         | 13-31  | 70' RT 109+48    | RELOCATE EXISTING |
| TG #5         | B 2    | 20' OFF E.O.P.   | TO REMAIN         |
| TG #6         | B 2    | 20' OFF E.O.P.   | TO REMAIN         |
| TG #7         | 31-13  | 70' RT 112+86.0  | RELOCATE EXISTING |
| TG #8         | B 2    | 80' RT 112+86.0  | RELOCATE EXISTING |
| TG #9         | 31-13  | 70' LT 112+86.0  | RELOCATE EXISTING |
| TG #10        | C 2    | 70' RT 119+55.0  | RELOCATE EXISTING |
| TG #11        | C 2    | 70' RT 121+05.0  | RELOCATE EXISTING |
| TG #12        | 0      | 260' LT 145+10 ± | RELOCATE EXISTING |
| TG #13        | E 2    | 70' RT 148+74.8  | RELOCATE EXISTING |
| TG #14        | 1-19   | 57.5' LT 30+08.6 | RELOCATE EXISTING |
| TG #14A       | 1-19   | 57.5' RT 30+08.6 | RELOCATE EXISTING |
| TG #15        | 19-1   | 57.5' LT 25+46.0 | RELOCATE EXISTING |
| TG #15A       | 19-1   | 57.5' RT 25+46.0 | RELOCATE EXISTING |
| TG #16        | 1-19   | 45' LT 303+95 ±  | TO REMAIN         |
| TG #17        | B 2    | 55' LT 303+95 ±  | TO REMAIN         |
| DM #1         | 1-19   | 85' LT 143+00    | RELOCATE EXISTING |
| DM #2         | 1-19   | 85' LT 133+00    | RELOCATE EXISTING |
| DM #3         | 1-19   | 85' LT 123+00    | RELOCATE EXISTING |
| DM #4         | 1-19   | 85' LT 113+00    | RELOCATE EXISTING |

NOTE: (1) 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 SIGNAGE RELOCATION.

(2) BACK SIDE OF SIGNS TG#1 TO TG#17 ARE BLACK

(3) CONTRACTOR TO REMOVE 4 SIGNS ALONG TAXIWAY "E". SIGNS #29, 30, 33 & 34 TO BE TURNED OVER TO AIRPORT MAINTENANCE. REMOVE TRANSFORMERS AND SPLICE CABLES TOGETHER. SEAL BASE CAN. COST TO BE INCLUDED IN ITEM 864.18 MOD. 1, RELOCATE AIRFIELD SIGNS (L-125).



- NOTES:**
- ALL RUNWAY & THRESHOLD LIGHTS (MRLS) AND TAXIWAY LIGHTS (MITLS) TO BE MEDIUM INTENSITY (6.6 AMP, 3 STEP).
  - EXISTING RUNWAY 1-19 MRLS TO BE REMOVED AND STORED ON THE AIRPORT AT THE DIRECTION OF THE ENGINEER.
  - ALL RUNWAY, THRESHOLD, & TAXIWAY LIGHTS AND CABLES TO BE PLACED 10' OFF EDGE OF PAVEMENT.
  - ALL RUNWAY AND TAXIWAY LIGHTS TO BE NUMBERED CONSECUTIVELY AS SHOWN.
  - MULTIPLE CONDUCTOR RUNS SHALL BE IN SAME CONDUIT AND/OR TRENCH WHERE POSSIBLE.
  - RUNWAY EDGE LIGHTS TO BE L-861 (30W) QUARTZ (EITHER CLEAR LENS OR CLEAR/AMBER LENS), EXCEPT R45, R46 & R66 A TO BE IN PAVEMENT EDGE LIGHTS, L-860C (45W).
  - ALL TAXIWAY LIGHTS TO BE L-861T (30W) INCANDESCENT, (BLUE FILTER).
  - RUNWAY THRESHOLD LIGHTS TH1 THRU TH8 TO BE L-861 SE (120W) QUARTZ (RED/GREEN FILTER).
  - RUNWAY THRESHOLD LIGHTS TH36 THRU TH43 TO BE L-861 E (45W) QUARTZ (RED/GREEN FILTER).
  - CONCRETE BASES FOR EXISTING SIGNS TO BE REMOVED DURING CONSTRUCTION/ GRADING OF RUNWAY SAFETY AREAS.
- AD COR - REPLACED CRASH WINDS W/ PWT LIGHTS W/ HUGHES & PHILLIPS (LOW PROFILE)**

- LEGEND**
- EXISTING RUNWAY AND TAXIWAY LIGHTS
  - EXISTING TAXIWAY SIGNS
  - NEW THRESHOLD LIGHTS (180° GREEN / 180° RED LENS)
  - NEW TAXIWAY LIGHTS (BLUE FILTER)
  - NEW RUNWAY LIGHTS (CLEAR LENS)
  - NEW RUNWAY LIGHTS (180° CLEAR / 180° AMBER LENS)
  - TO #1 RELOCATED TAXIWAY SIGN
  - UNDERGROUND CONCRETE ENCASED DUCT & MARKERS
  - ▲ 5/8" ø x 8' COPPERCLAD GROUND ROD
  - RELOCATED ODALS

DESIGNED BY: Date: 2/97  
 DRAWN BY: M. McALLA 2/97  
 CHECKED BY: 5/97  
 APPROVED BY: 3/97

Scale: HOR. - 1" = 50'  
 VERT. - NONE

Date: 5/3/97

Sheet 27 Of 65

Sheet No. 27

UTLAND STATE AIRPORT  
CLARENDON, VERMONT

RUNWAY LIGHTING PLANS

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

STATE OF VERMONT  
REGISTERED PROFESSIONAL ENGINEER  
No. 2591

File No. 1140375W-043

Job No. F40212

## NOTES:

1. ALL RUNWAY & THRESHOLD LIGHTS (MIRLS) AND TAXIWAY LIGHTS (MITLS) TO BE MED. INTENSITY (8.6 AMP, 3 STEP).
2. EXISTING RUNWAY 1-19 MIRLS INCLUDING BASE AND CONDUIT (TO THE EXTENT POSSIBLE) TO BE REMOVED AND STORED ON THE AIRPORT AT THE AIRPORT AT THE DIRECTION OF THE ENGINEER.
3. ALL RUNWAY, THRESHOLD, & TAXIWAY LIGHTS AND CABLES TO BE PLACED 10' OFF EDGE OF PAVEMENT.
4. ALL RUNWAY AND TAXIWAY LIGHTS TO BE NUMBERED CONSECUTIVELY AS SHOWN.
5. MULTIPLE CONDUCTOR RUNS SHALL BE IN SAME CONDUIT AND/OR TRENCH WHERE POSSIBLE.
6. RUNWAY EDGE LIGHTS, TO BE L-861 (30W) QUARTZ (EITHER CLEAR LENS OR CLEAR/AMBER LENS), EXCEPT R45, R46 & R66 A TO BE IN PAVEMENT EDGE LIGHTS, L-850C (45W).
7. ALL TAXIWAY LIGHTS TO BE L-861T (30W) INCANDESCENT. (BLUE FILTER)
8. RUNWAY THRESHOLD LIGHTS TH1 THRU TH8 TO BE L-861 SE (120W) QUARTZ (RED/GREEN FILTER).
9. RUNWAY THRESHOLD LIGHTS TH36 THRU TH43 TO BE L-861 E (45W) QUARTZ (RED/GREEN FILTER).
10. CONCRETE BASES FOR EXISTING SIGNS TO BE REMOVED DURING CONSTRUCTION/ GRADING OF RUNWAY SAFETY AREAS.
11. R #118, #119, #147, #148 TO REMAIN IN PLACE.

CO #5 - CHANGED CROSSING LIGHTS WITH HUGHES & PHILLIPS (LOW PROFILE)

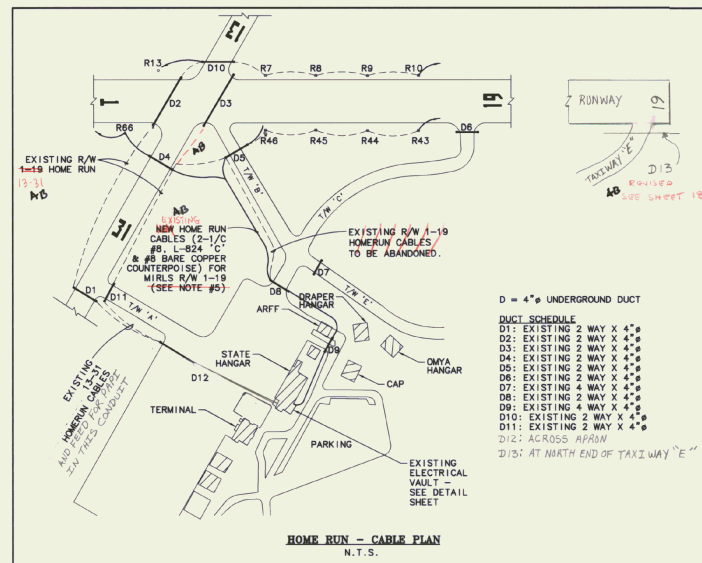
## NOTE:

RUNWAY 1-19 WIRING CIRCUIT  
"...R12 - R13 - TG15A - TG15 - R14  
- DM #4 - R15..."

RUNWAY 13-31 WIRING CIRCUIT  
"...R118 - TG4 - TG3 - R119..."

## NOTE:

RUNWAY 1-19 WIRING CIRCUIT  
"HOMERUN - R65 - R64..."  
TAXIWAY "B" WIRING CIRCUIT  
"...T313 - T314 - T315 - TG8 - TG5..."  
RUNWAY 13-31 WIRING CIRCUIT  
"...R148 - TG7 - TG9 - R147..."



D = 4" UNDERGROUND DUCT

DUCT SCHEDULE  
D1: EXISTING 2 WAY X 4"  
D2: EXISTING 2 WAY X 4"  
D3: EXISTING 2 WAY X 4"  
D4: EXISTING 2 WAY X 4"  
D5: EXISTING 2 WAY X 4"  
D6: EXISTING 2 WAY X 4"  
D7: EXISTING 2 WAY X 4"  
D8: EXISTING 2 WAY X 4"  
D9: EXISTING 2 WAY X 4"  
D10: EXISTING 2 WAY X 4"  
D11: EXISTING 2 WAY X 4"  
D12: ACROSS APRON  
D13: AT NORTH END OF TAXIWAY "E"

## NOTE:

RUNWAY 1-19 WIRING CIRCUIT  
"...R19 - R20 - DM #3 - R21..."

## LEGEND

- EXISTING RUNWAY AND TAXIWAY LIGHTS
- EXISTING TAXIWAY SIGNS
- NEW THRESHOLD LIGHTS (180° GREEN / 180° RED LENS)
- NEW TAXIWAY LIGHTS (BLUE FILTER)
- NEW RUNWAY LIGHTS (CLEAR LENS)
- NEW RUNWAY LIGHTS (180° CLEAR / 180° AMBER LENS)
- TO #1: RELOCATED TAXIWAY SIGN
- UNDERGROUND CONCRETE ENGAGED DUCT & MARKERS
- ▲ 5/8" x 8" COPPERCLAD GROUND ROD
- RELOCATED ODALS

## NOTE:

RUNWAY 1-19 WIRING CIRCUIT  
"VAULT R66A - TG14A - TG14 - R66..."

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

Designed by: Date: 1/97  
Drawn by: M. McCalla, 1/97  
Checked by: O. D'Amico, 5/97  
Approved by: M. Chubb, 5/97

Scale: HOR. - 1" = 50'  
VERT. - NONE

Date: 5/5/97

Sheet 28 Of 65

Sheet No.

**LEGEND**

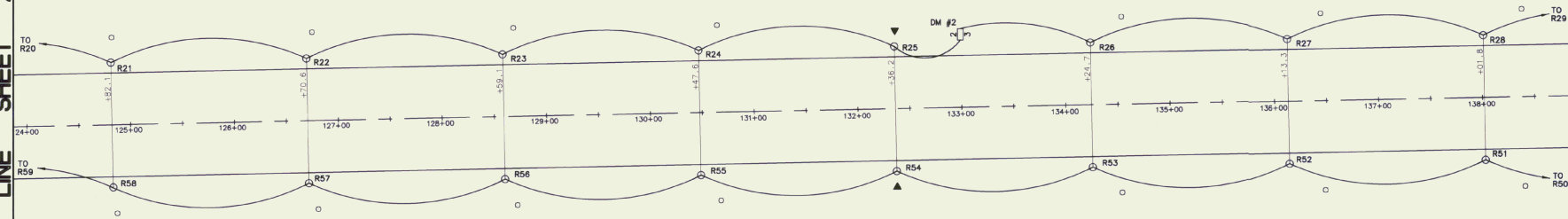
- EXISTING RUNWAY AND TAXIWAY LIGHTS
- EXISTING TAXIWAY SIGNS
- NEW THRESHOLD LIGHTS (180° GREEN / 180° RED LENS)
- NEW TAXIWAY LIGHTS (BLUE FILTER)
- NEW RUNWAY LIGHTS (CLEAR LENS)
- NEW RUNWAY LIGHTS (180° CLEAR / 180° AMBER LENS)
- TG #1 RELOCATED TAXIWAY SIGN
- UNDERGROUND CONCRETE ENCASED DUCT & MARKERS
- ▲ 5/8" x 8" COPPERCLAD GROUND ROD
- RELOCATED ODALS

**NOTE:**

RUNWAY 1-19 WIRING CIRCUIT  
... R25 - DM #2 - R26 ...

**NOTES:**

- ALL RUNWAY & THRESHOLD LIGHTS (MIRLS) AND TAXIWAY LIGHTS (MITLS) **TO BE** MEDIUM INTENSITY (6.6 AMP, 3 STEP).
- EXISTING RUNWAY 1-19 MIRLS **TO BE** REMOVED AND STORED ON THE AIRPORT AT THE DIRECTION OF THE ENGINEER.
- ALL RUNWAY, THRESHOLD, & TAXIWAY LIGHTS AND CABLES **TO BE** PLACED 10' OFF EDGE OF PAVEMENT.
- ALL RUNWAY AND TAXIWAY LIGHTS **TO BE** NUMBERED CONSECUTIVELY AS SHOWN.
- MULTIPLE CONDUCTOR RUNS **SHALL BE** IN SAME CONDUIT AND/OR TRENCH WHERE POSSIBLE.
- RUNWAY EDGE LIGHTS, **TO BE** L-861 (30W) QUARTZ (EITHER CLEAR LENS OR CLEAR/AMBER LENS), EXCEPT R45, R46 & R66 **TO BE** IN PAVEMENT EDGE LIGHTS, L-850C (45W) **TO BE** R45, R46, R66.
- ALL TAXIWAY LIGHTS **TO BE** L-861T (30W) INCANDESCENT, (BLUE FILTER)
- RUNWAY THRESHOLD LIGHTS TH1 THRU TH3 **TO BE** L-861 SE (120W) QUARTZ (RED/GREEN FILTER).
- RUNWAY THRESHOLD LIGHTS TH36 THRU TH43 **TO BE** L-861 E (45W) QUARTZ (RED/GREEN FILTER).
- CONCRETE BASES FOR EXISTING SIGNS **TO BE** REMOVED DURING CONSTRUCTION/ GRADING OF RUNWAY SAFETY AREAS.

**NOTES:**

- EXISTING 7.5 KW REGULATOR **TO BE** REMOVED AND TURNED OVER TO AIRPORT.
- INSTALL NEW 60 AMP, 240 V, 1φ BREAKER IN EXISTING MAIN POWER PANEL.
- CONNECT NEW RUNWAY 1-19 LIGHTING CABLES TO NEW REGULATOR

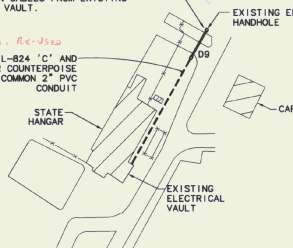
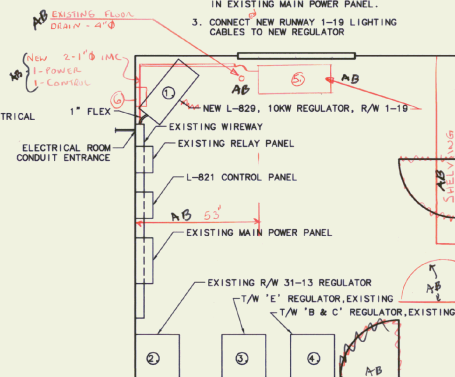
**EQUIPMENT SCHEDULE:**

- L-828, 10 KW, 6.6 AMP (240 V) **(NEW)**. 75 **EXISTING - REMOVE**
- L-828, 7.5 KW, 6.6 AMP (240 V) HEVI DUTY REGULATOR.
- L-828, 7.5 KW, 6.6 AMP (240 V) ADB-ALNACO REGULATOR.
- L-828, 7.5 KW, 6.6 AMP (240 V) ADB-ALNACO REGULATOR.
- NEW L-828, 10 KW (40 AMP) (240 V) REGULATOR - MANABCO
- NEW RADIO CONTROL (CONDUCTOR) (Runway 1-19 ONLY)

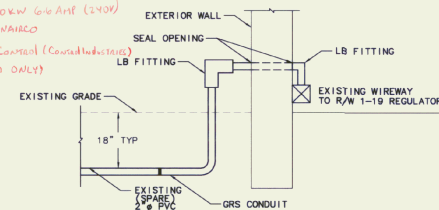
TERMINATE NEW 2" PVC CONDUIT FOR RUNWAY 1-19 HOMERUN @ EXISTING ELECTRICAL HANDHOLE. USE EXISTING (SPARE) 2" PVC CONDUIT FOR RUNWAY 1-19 HOMERUN CABLES FROM EXISTING HANDHOLE TO VAULT.

EXISTING CONDUIT - RE-USED

2-1/2" Ø, 5KV, L-824 'C' AND 1-1/2" Ø BARE COPPER COUNTERPOISE INSTALLED IN A COMMON 2" PVC CONDUIT

**ELECTRICAL VAULT LOCATION****ELECTRICAL VAULT LAYOUT**

N.T.S.

**EXISTING CONDUIT ENTRANCE ELECTRICAL ROOM**

N.T.S.



| REV. | DATE    | DESCRIPTION | FILE NO.     |
|------|---------|-------------|--------------|
| 1    | 10/1/87 | A. Greiner  | 1146113W-003 |
| 2    |         |             |              |
| 3    |         |             |              |
| 4    |         |             |              |
| 5    |         |             |              |
| 6    |         |             |              |
| 7    |         |             |              |
| 8    |         |             |              |
| 9    |         |             |              |
| 10   |         |             |              |

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT

RUNWAY LIGHTING PLANS

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|                |                |
|----------------|----------------|
| Designed by:   | Date:          |
| Drawn by:      | 5/9/97         |
| Checked by:    | 5/9/97         |
| Approved by:   | 5/9/97         |
| Scale:         | HOR - 1" = 50' |
|                | VERT - NONE    |
| Date:          | 5/9/97         |
| Sheet 28 Of 65 |                |
| Sheet No.      |                |



## NOTES:

1. ALL RUNWAY & THRESHOLD LIGHTS (MIRLS) AND TAXIWAY LIGHTS (MITLS) **TO-BE** MEDIUM INTENSITY (6.6 AMP, 3 STEP).
2. EXISTING RUNWAY 1-19 MIRLS **TO-BE** REMOVED AND STORED ON THE AIRPORT AT THE DIRECTION OF THE ENGINEER.
3. ALL RUNWAY, THRESHOLD, & TAXIWAY LIGHTS AND CABLES **TO-BE** PLACED 10' OFF EDGE OF PAVEMENT.
4. ALL RUNWAY AND TAXIWAY LIGHTS **TO-BE** NUMBERED CONSECUTIVELY AS SHOWN.
5. MULTIPLE CONDUCTOR RUNS **SHALL-BE** IN SAME CONDUIT AND/OR TRENCH WHERE POSSIBLE.
6. RUNWAY EDGE LIGHTS, **TO-BE** L-861 (30W) QUARTZ (EITHER CLEAR LENS OR CLEAR/AMBER LENS), EXCEPT R45, R46 & R86 A **TO-BE** IN PAVEMENT EDGE LIGHTS, L-850C (45W) **AB**.
7. ALL TAXIWAY LIGHTS **TO-BE** L-861T (30W) INCANDESCENT. (BLUE FILTER)
8. RUNWAY THRESHOLD LIGHTS TH1 THRU TH3 **TO-BE** L-861 SE (120W) QUARTZ (RED/GREEN FILTER).
9. RUNWAY THRESHOLD LIGHTS TH36 THRU TH43 **TO-BE** L-861 E (45W) QUARTZ (RED/GREEN FILTER)
10. CONCRETE BASES FOR EXISTING SIGNS **TO-BE** REMOVED DURING CONSTRUCTION/ GRADING OF RUNWAY SAFETY AREAS.
11. EXISTING ODALS AND VASI FOUNDATIONS **TO-BE** REMOVED. PAYMENT **TO-BE** MADE UNDER ITEM 204.21, TRENCH EXCAVATION OF ROCK @ 2 CY/EACH FOUNDATION.
12. SEE SHEETS 35-41 FOR ODALS DETAILS.
13. SEE SHEET 34 FOR VASI DETAILS.
14. EXISTING ODALS & VASI CABLES ARE DIRECT BURIAL. HAND-DIGGING **WILL-BE** REQUIRED AROUND THESE CABLES. POWER TO ODALS AND VASI ARE SUPPLIED FROM FAA EQUIPMENT BUILDING NORTH OF RUNWAY ON VT 103. CONTRACTOR TO COORDINATE WITH FAA MAINTENANCE AT 802-851-8723.

CO-5 RELOCATED CROSS HANDS IN PAVEMENT LIGHTING  
 CO-5 HUBBARD & PARKS - LOW PROFILE

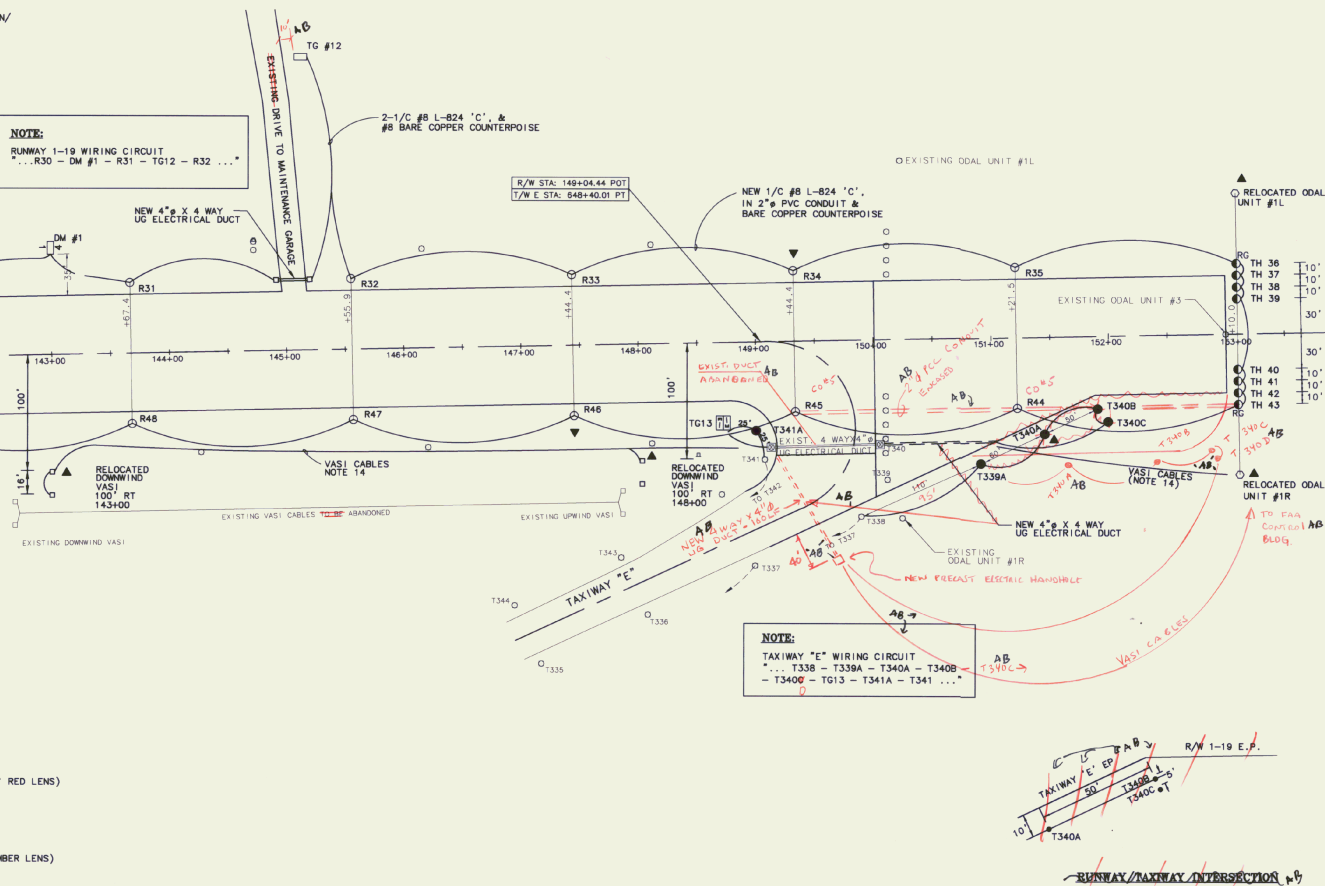
## NOTE:

RUNWAY 1-19 WIRING CIRCUIT  
 "...R30 - DM #1 - R31 - TG12 - R32 ..."

## LEGEND

- EXISTING RUNWAY AND TAXIWAY LIGHTS
- EXISTING TAXIWAY SIGNS
- NEW THRESHOLD LIGHTS (180° GREEN / 180° RED LENS)
- NEW TAXIWAY LIGHTS (BLUE FILTER)
- NEW RUNWAY LIGHTS (CLEAR LENS)
- NEW RUNWAY LIGHTS (180° CLEAR / 180° AMBER LENS)
- TO #1 RELOCATED TAXIWAY SIGN
- UNDERGROUND CONCRETE ENCASED DUCT & MARKERS
- ▲ 5/8" x 8" COPPERCLAD GROUND ROD
- RELOCATED ODALS

| ODALS SCHEDULE |                    |                                                                                                       |
|----------------|--------------------|-------------------------------------------------------------------------------------------------------|
| UNIT #         | EXISTING LOCATION  | REMARKS                                                                                               |
| 1R             | 150' RT 150+20±    | RELOCATED TO 125' RT 153+10 <b>AB</b>                                                                 |
| 1L             | 150' LT 150+20±    | RELOCATED TO 125' LT 153+10 <b>AB</b>                                                                 |
| 2              | 153+00±            | REMOVE EXISTING ODAL & TOWER                                                                          |
| 3              | 156+00±            | MODIFY TOWER AND L.I.R. MAST TO ELEVATION 772.0 RE-USE ODAL UNIT #3.                                  |
| 20             | 158+00± <b>NEW</b> | INSTALL NEW TUBULAR STEEL TOWER AND L.I.R. MAST. RE-USE ODAL UNIT #2. <b>STA: 158+00</b><br><b>AB</b> |



## NOTE:

TAXIWAY "E" WIRING CIRCUIT  
 "...T338 - T339A - T340A - T340B - T340C - TG13 - T341A - T341 ..."



| REV. | DATE | DESCRIPTION |
|------|------|-------------|
| 1    |      |             |
| 2    |      |             |
| 3    |      |             |
| 4    |      |             |
| 5    |      |             |
| 6    |      |             |
| 7    |      |             |
| 8    |      |             |
| 9    |      |             |
| 10   |      |             |

RUTLAND STATE AIRPORT  
 CLARENDON, VERMONT

RUNWAY LIGHTING PLANS

**URS Greiner, Inc.**  
 3 MARCUS BOULEVARD  
 ALBANY, NEW YORK

Designed by: [Signature]  
 Drawn by: [Signature]  
 Checked by: [Signature]  
 Approved by: [Signature]

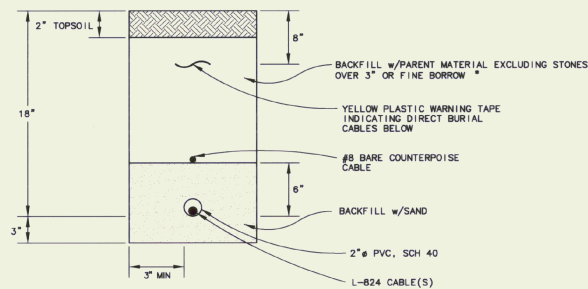
Scale: HOR - 1" = 50'  
 VERT - NONE

Date: 5/3/97

Sheet 30 Of 65

Sheet No.



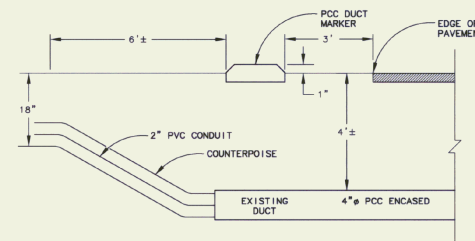


NOTE:  
ADDITIONAL CONDUITS MAY BE  
PLACED IN SAME TRENCH @ 3"  
SPACING, MAX. NUMBER OF  
CABLES / CONDUIT PER N.E.C.

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

**CONDUIT TRENCH DETAIL (TYP)**

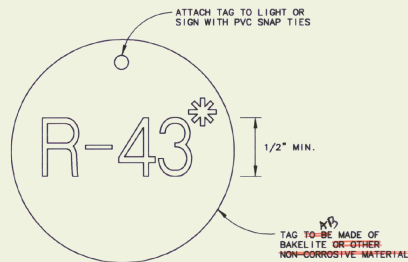
NOT TO SCALE



- NOTE:  
1. PLACE 2" PVC CONDUIT & COUNTERPOISE  
IN EXISTING 4" PCC ENCASED DUCT.  
FULL LENGTH. USE EXISTING SPARE  
(EMPTY) DUCT IF AVAILABLE.  
2. HAND EXCAVATE AROUND EXISTING DUCT.  
EXISTING CABLES MAY BE DIRECT BURIAL.  
3. REPLACE EXISTING PCC DUCT MARKERS,  
AS SHOWN.

**CONDUIT/DUCT DETAIL (TYP)**

NOT TO SCALE

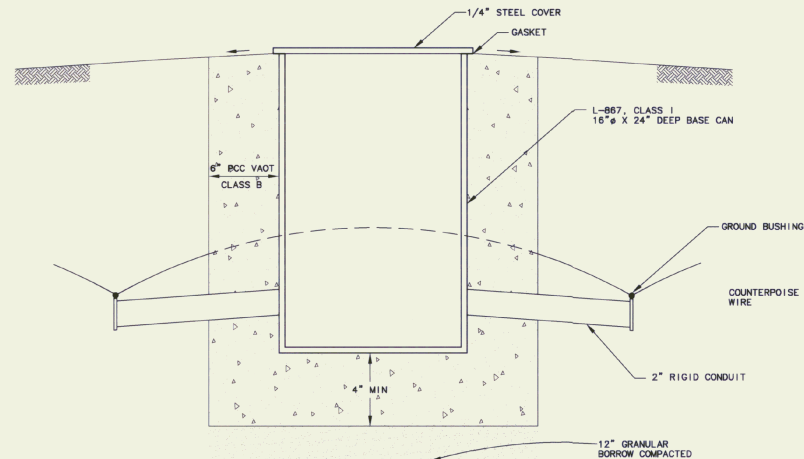


LETTER & NUMBER  
TO BE PERMANENT  
PART OF TAG.  
R = RUNWAY  
T = TAXIWAY  
TH = THRESHOLD  
TO = TAXIWAY SIGNS  
DM = DISTANCE SIGNS

\*SEE LIGHTING PLAN FOR  
FIXTURE DELINEATION

**FIXTURE IDENTIFICATION TAG (TYP)**

NOT TO SCALE



**ELECTRICAL HANDHOLE (TYP)**

NOT TO SCALE



|         |           |                         |
|---------|-----------|-------------------------|
| DATE    | AS-BUILT  | EXCAVATING              |
| REV.    | DATE      | DESCRIPTION             |
| Job No. | 140123.00 | File No. 11/40123/00-00 |

RUTLAND STATE AIRPORT  
CLAREMONT, VERMONT

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|              |        |
|--------------|--------|
| Designed by: | Date:  |
| Drawn by:    | 5/7/97 |
| Checked by:  | 5/7/97 |
| Approved by: | 5/7/97 |

Scale: VS = N/A  
VS = N/A

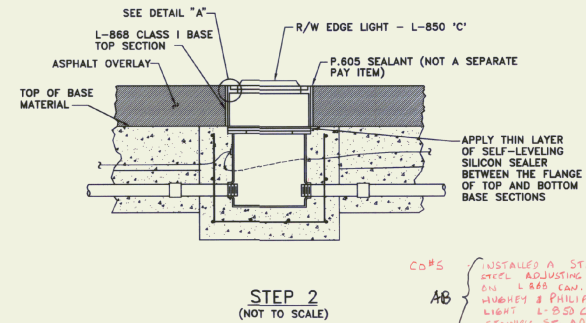
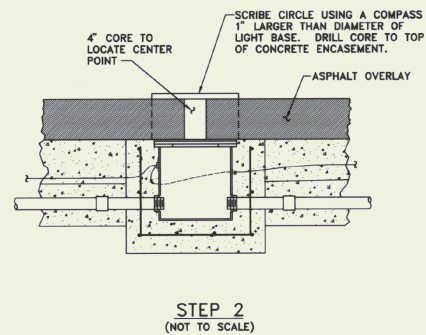
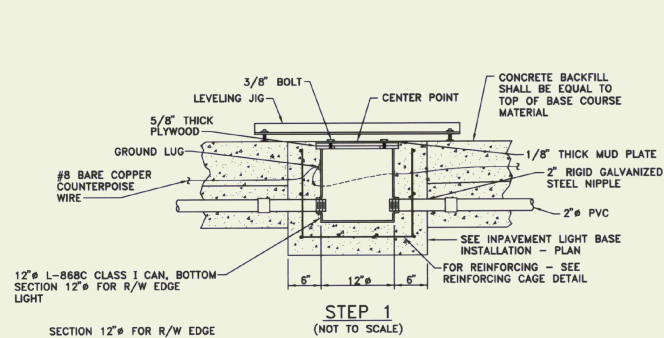
Date: 5/5/97

Sheet 32 Of 65

Sheet No.

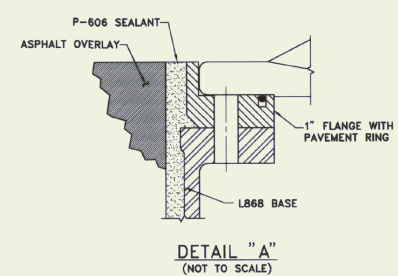
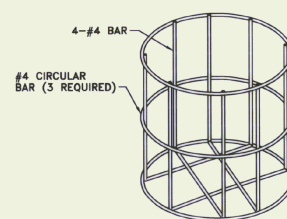
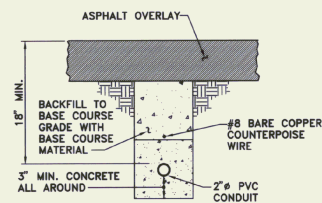
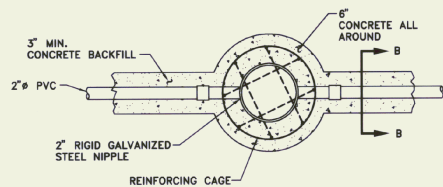
32





#### GENERAL NOTES:

1. VIBRATE CONCRETE BACKFILL TO ENSURE THERE ARE NO VOIDS.
2. CONCRETE TO CONFORM TO VAOT SPECIFICATIONS SECTION 501, CLASS B, 3/4" MAX SIZE AGGREGATE
3. 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.
4. TIGHTEN ALL BOLTS TO THE TORQUE SPECIFIED BY THE MANUFACTURER. DO NOT REUSE SHIPPING BOLTS TO INSTALL COVERS.



## INSTALLATION OF IN PAVEMENT LIGHTING (L-850-C)



| REV. | DATE   | DESCRIPTION | FILE NO.     |
|------|--------|-------------|--------------|
| 1    | 5/1/97 | As Built    | 11/400131/VL |

RUTLAND STATE AIRPORT  
CLAREMONT, VERMONT

RUNWAY LIGHTING DETAILS

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|              |       |
|--------------|-------|
| Designed by: | Date: |
| Drawn by:    | 7/97  |
| Checked by:  | 5/97  |
| Approved by: | 5/97  |

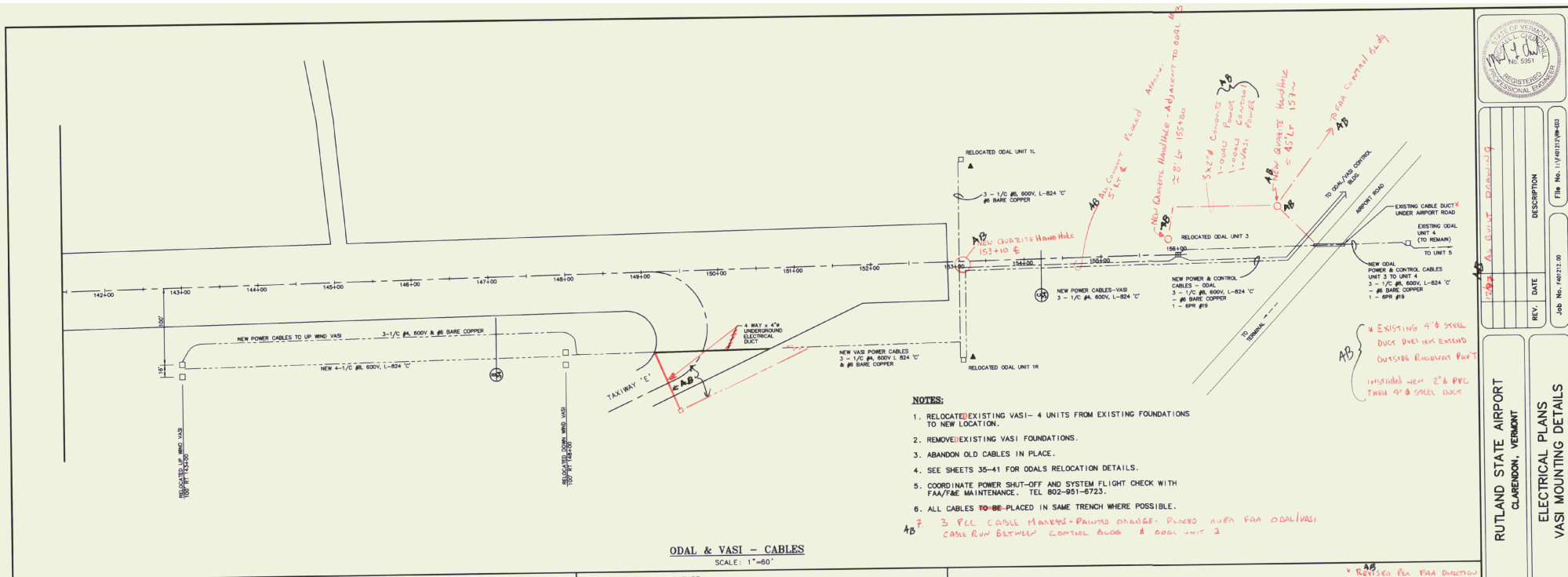
Scale: 1/8" = 1'-0"

Date: 5/15/97

Sheet 33 Of 65

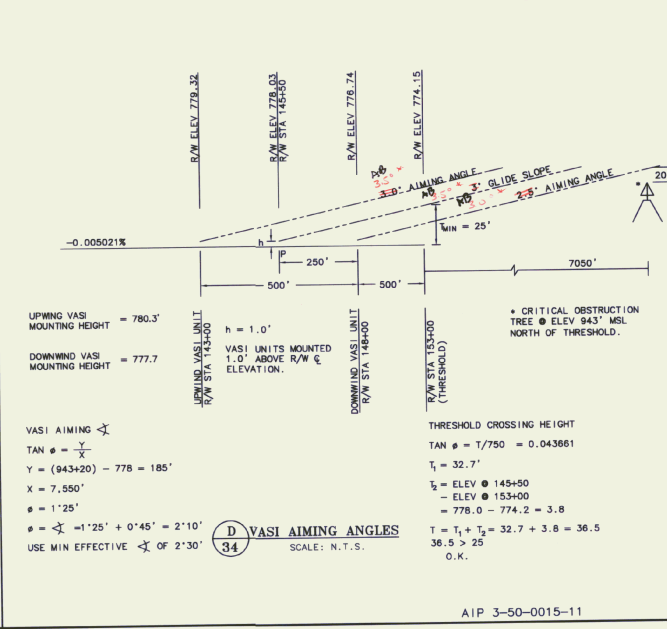
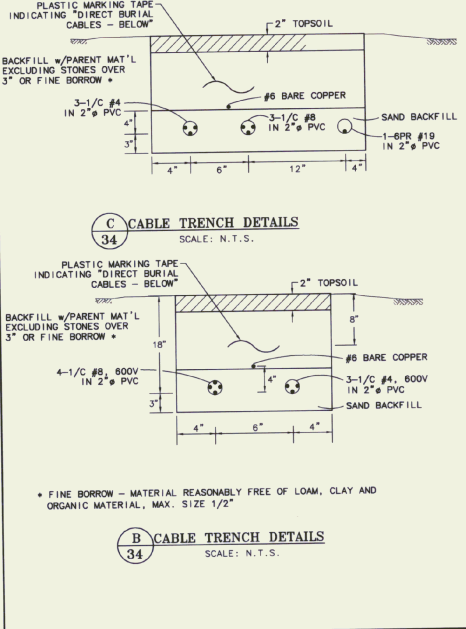
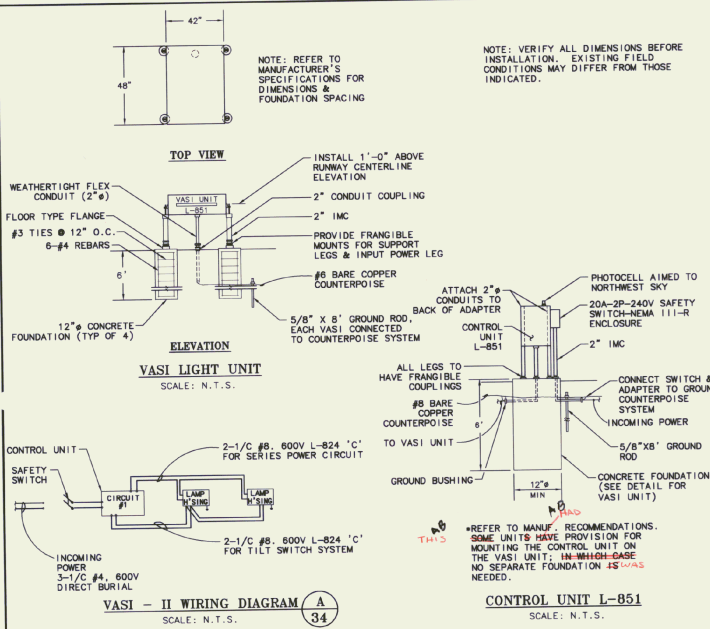
Sheet No.

33



- NOTES:**
1. RELOCATED EXISTING VASI - 4 UNITS FROM EXISTING FOUNDATIONS TO NEW LOCATION.
  2. REMOVE EXISTING VASI FOUNDATIONS.
  3. ABANDON OLD CABLES IN PLACE.
  4. SEE SHEETS 35-41 FOR ODALS RELOCATION DETAILS.
  5. COORDINATE POWER SHUT-OFF AND SYSTEM FLIGHT CHECK WITH FAA/FAA MAINTENANCE. TEL 802-881-6723.
  6. ALL CABLES TO BE PLACED IN SAME TRENCH WHERE POSSIBLE.
  7. 3 PCL CABLE MARKERS - PAINTED ORANGE - PLACED AHEAD FAA ODAL/VASI CABLE RUN BETWEEN CONTROL BUDG & ADJ UNIT 3

**ODAL & VASI - CABLES**  
SCALE: 1"=60'



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

Job No. 140712.00

**RUTLAND STATE AIRPORT**  
CLARENDON, VERMONT

**ELECTRICAL PLANS**  
VASI MOUNTING DETAILS

**Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|                                |               |                                 |               |
|--------------------------------|---------------|---------------------------------|---------------|
| Designed by:<br>G. P. Maco     | Date:<br>2/87 | Drawn by:<br>M. B. O'Connell    | Date:<br>3/97 |
| Checked by:<br>A. P. O'Connell | Date:<br>5/97 | Approved by:<br>A. P. O'Connell | Date:<br>5/97 |

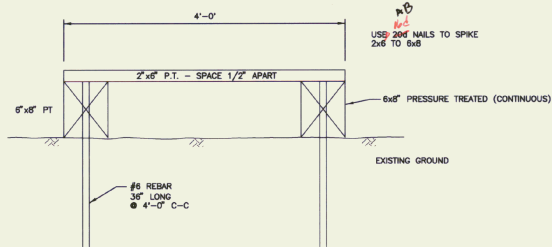
Scale: HOR. - AS NOTED  
VERT. - NONE

Date: 5/9/97

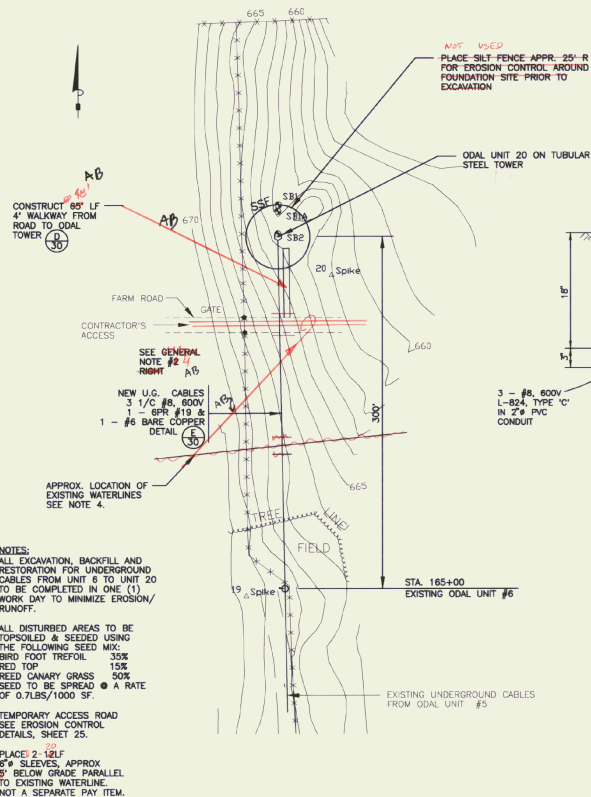
Sheet 34 Of 85

Sheet No. **34**

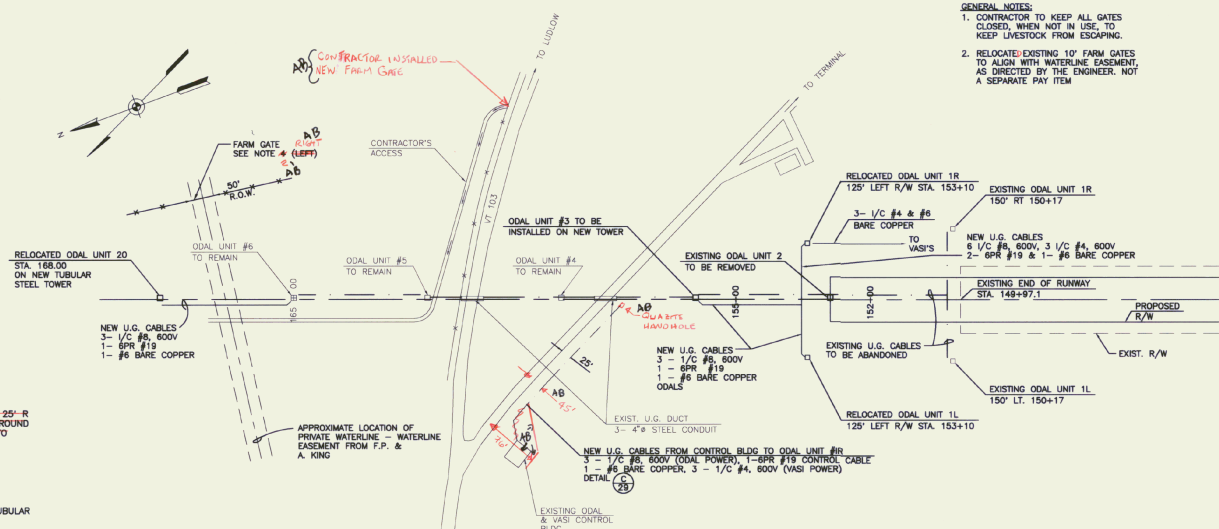
AIP 3-50-0015-11



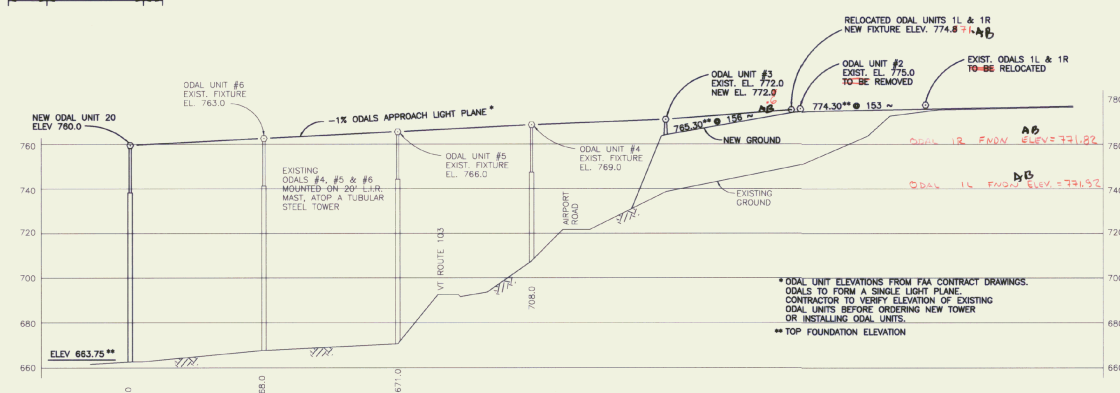
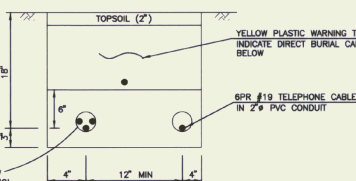
**D**  
35  
WALKWAY DETAIL  
N.T.S.



**A**  
35  
ODAL UNIT 20  
SCALE: 1" = 50'



**C**  
35  
ODAL UNIT PLAN  
N.T.S.



**B**  
35  
ODAL TOWERS - PROFILE  
N.T.S.

- GENERAL NOTES:**
1. CONTRACTOR TO KEEP ALL GATES CLOSED, WHEN NOT IN USE, TO KEEP LIVESTOCK FROM ESCAPING.
  2. RELOCATED EXISTING 10' FARM GATES TO ALIGN WITH WATERLINE EASEMENT AS DIRECTED BY THE ENGINEER. NOT A SEPARATE PAY ITEM.



| DESIGN | DATE  | DESCRIPTION |
|--------|-------|-------------|
| 12/18  | 12/18 | 12/18       |

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|              |        |
|--------------|--------|
| Designed by: | Date:  |
| Drawn by:    | 5/7/97 |
| Checked by:  | 5/7/97 |
| Approved by: | 5/7/97 |

Scale: HOR. - 1" = 100'  
VERT. - 1" = 20'

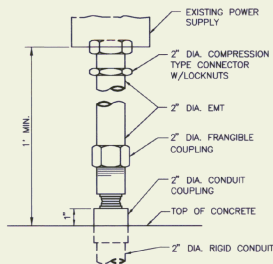
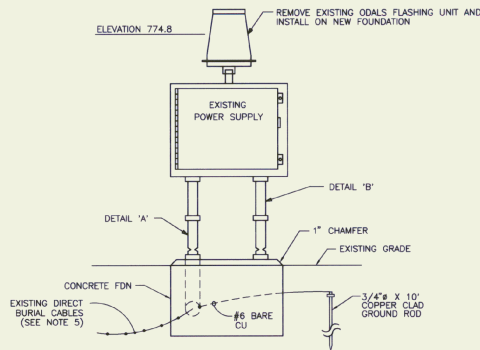
Date: 5/5/97

Sheet 35 OF 65

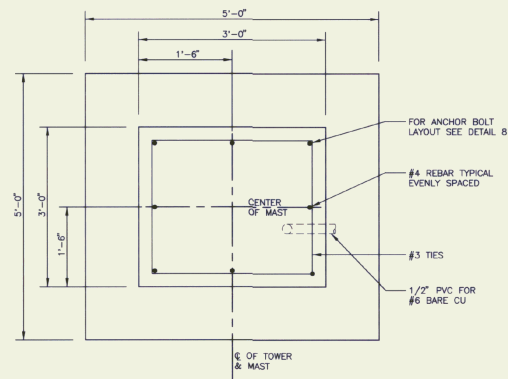
Sheet No.

35

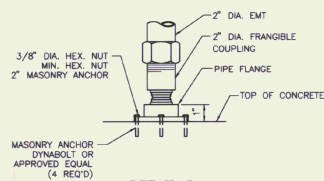




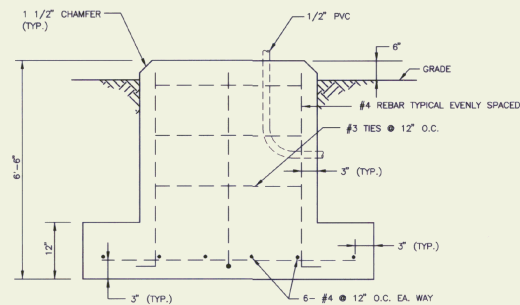
DETAIL 4



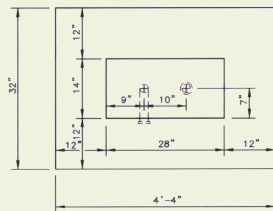
DETAIL 6



DETAIL 5

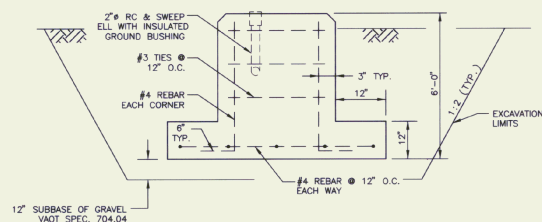


DETAIL 7



DETAIL 2

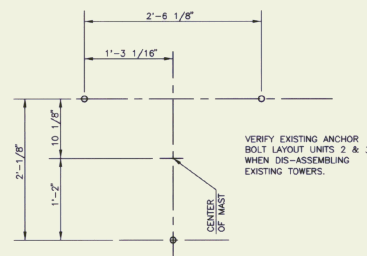
**ODALS FOUNDATION DETAILS**  
ODALS UNITS #1R & #1L  
125' LT & RT OF STA. 153+20



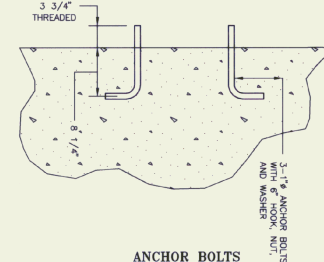
DETAIL 3

**NOTES:**

1. EXISTING FOUNDATIONS UNITS #2 & #3 ~~TO BE~~ ABANDONED IN PLACE.
2. ODALS ELECTRICAL CABLES ~~TO BE~~ RE-ROUTED TO NEW LOCATION.
3. EXISTING ODALS UNITS ~~TO BE~~ REMOVED FROM EXISTING FOUNDATIONS AND PLACED ON NEW FOUNDATIONS.
4. ALL CONCRETE ~~TO BE~~ CLASS B, CONFORMING TO SECTION 501. STRUCTURAL CONCRETE, VAOT SPECIFICATIONS.
5. EXISTING UNDERGROUND (DIRECT BURIAL CABLES) 3-1/2\"/>
6. USE ANTI-SEIZE COMPOUND ON ALL THREADS.
7. ALL ANCHOR BOLTS, NUTS & WASHERS SHALL BE HOT DIP GALVANIZED PER ASTM - 13 & ASTM - 325.



**ANCHOR BOLT PLAN**  
DETAIL 8



**ANCHOR BOLTS**  
DETAIL 9

**ODALS FOUNDATION DETAILS**  
UNIT #3  
STATION 156+00

AIP 3-50-0015-11



|             |      |      |                         |
|-------------|------|------|-------------------------|
| DESIGNER    | DATE | REV. | FILE NO. 1146032500L-01 |
| DESCRIPTION |      |      |                         |

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT  
ODALS FOUNDATION DETAILS

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|                          |                                       |
|--------------------------|---------------------------------------|
| Designed by: G. D'AMICO  | Scale: HS - AS SHOWN<br>VS - AS SHOWN |
| Drawn by: M. MCALLA      | Date: 5/5/97                          |
| Checked by: G. D'AMICO   | Sheet 36 OF 65                        |
| Approved by: M. CHIRIELL | Sheet No.                             |
|                          | 36                                    |



36" DIA. FOUNDATION PIER



- MOMENT = 229 K-FT.  
VERTICAL SHEAR = 6256 LBS.  
HORIZONTAL SHEAR = 4360 LBS.

PLAN  
N.T.S

PLAN  
N.T.S

**ELEVATION**  
ODALS UNIT 1R & 1L  
N.T.S

STRUCTURAL LEG-DETAIL 'B'

---

N.T.S

ELEVATION  
N.T.S

ODAL UNIT #3  
\* REUSE EXISTING TOWER-  
ADJUST TO HEIGHT

## ELEVATION

### PLAN

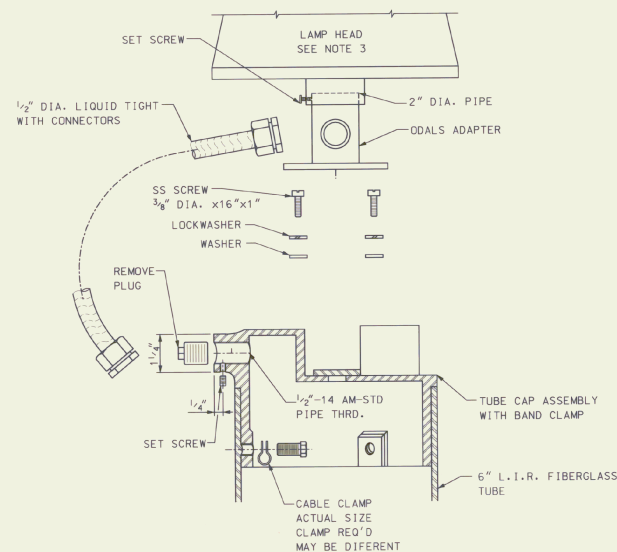
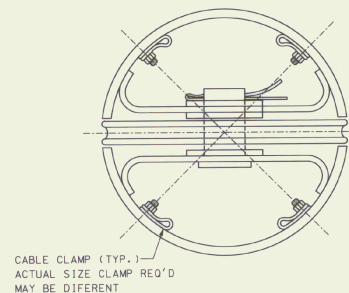
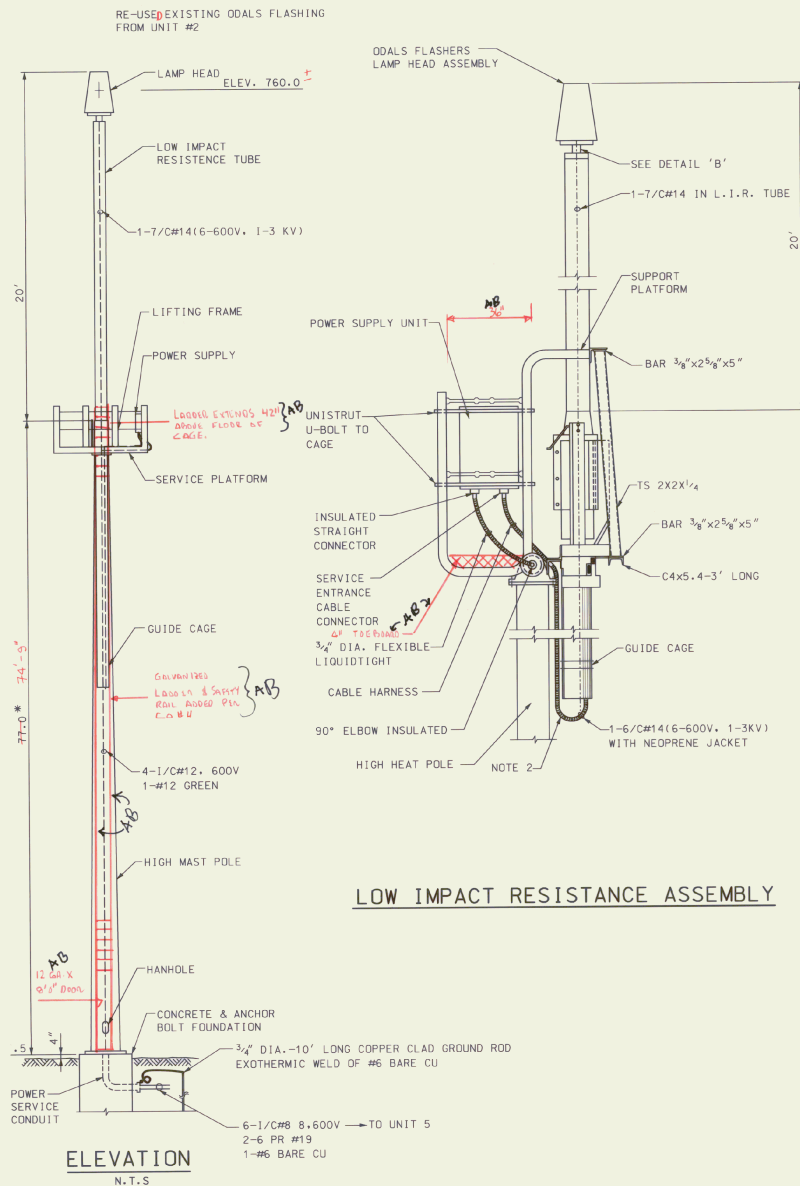
#### EQUIPMENT PAD FOUNDATION DETAILS

STRUCTURAL LEG-DETAIL 'A'

NOTES:

1. REFER TO FACILITY LAYOUT PLAN FOR LIGHT FIXTURE ELEVATIONS.
2. REFER TO SHEET 35 FOR TOP ELEVATION OF CONCRETE FOUNDATION.
3. REFER TO CABLE LAYOUT PLAN FOR ROUTING.
4. USE ANTI-SEIZE COMPOUND ON ALL PIPE THREADS.
5. RELOCATE ALL EXISTING EQUIPMENT, RE-USE TO THE EXISTENT POSSIBLE. CONTRACTOR TO SUPPLY NEW PCC FOUNDATIONS AND ALL CONDUIT, FITTINGS, CABLES, ETC.
6. CONTRACTOR TO INSPECT ALL EQUIPMENT PRIOR TO RELOCATING. EXISTING DAMAGE TO BE NOTED. CONTRACTOR WILL BE RESPONSIBLE FOR REPLACING OR REPAIRING ALL DAMAGE CAUSED BY HIS FORCES DURING RELOCATION & RE-INSTALLATION.
7. CONTRACTOR TO VERIFY NEW ODAI UNIT ELEVATION AND TOWER HEIGHT PRIOR TO INSTALLATION.





## NOTES:

1. MAKE ALL TERMINATIONS IN HANDHOLE USING WIRE NUTS OR BURNDY CONNECTORS AND LEAVE 3' OF SLACK. TAG ALL CONTROL CABLES IN HANDHOLES OR JUNCTION BOXES SHALL BE TAGGED AS TO ORIGIN OR DESTINATION AND COLOR CODED (POWER) OR NUMBERED (CONTROL).
2. TIE CABLE HARNESS EVERY 3' TO TOWER OR GUIDE CAGE FROM CONTROL BOX TO BOTTOM OF CAGE USING BLACK WEATHER RESISTANT CABLE TIES TYPE PLT. FROM BOTTOM OF GUIDE CAGE TO LIR TUBE LEAVE LOOSE. SEE DETAIL 'A' FOR CONNECTION AT LIR TUBE.
3. FOR LAMP HEAD LEVELING PROCEDURE SEE MANUFACTURE INSTRUCTION MANUAL (TI G350.47).
4. HIGH MAST TOWER FOR ODAL UNIT 20 ONLY.

5. HIGH MAST POLE SUPPLIED BY VALMONT INDUSTRIES VALLEY, NEBRASKA - SEE SHOP DRAWINGS FOR DETAILS
6. CABLE REQUESTED BY FAH ADDED LADDER & INCREASED CAGE SIZE. LADDER DETAILS PROVIDED BY PA ADGML, W.C. SOUTH BURNINGHAM, VT.
7. SENTRY RAIL SUPPLIED BY FAH

\* CONTRACTOR TO VERIFY ELEVATIONS  
SEE NOTES SHEET 30



| REV. | DATE    | DESCRIPTION |
|------|---------|-------------|
| 1    | 1/20/16 | AL BUILT    |
| 2    | 4/8     |             |

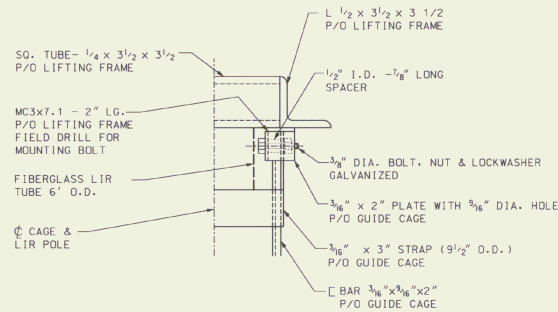
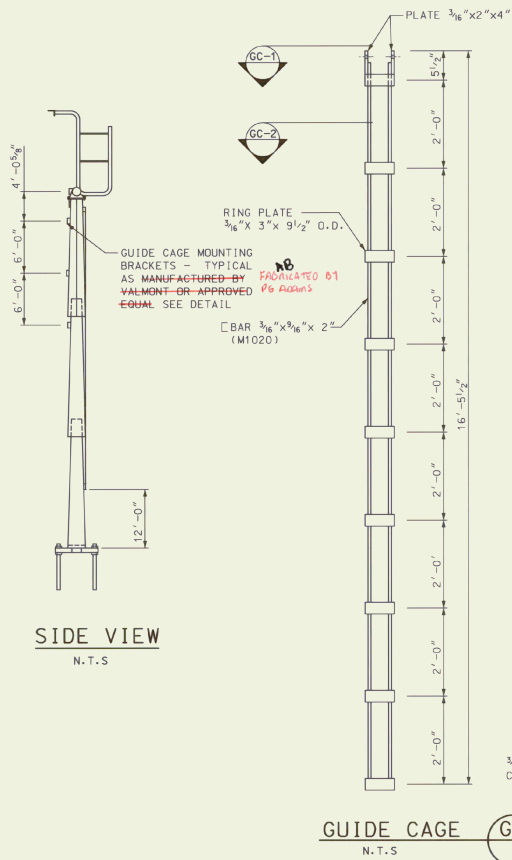
RUTLAND STATE AIRPORT  
CLARENDON, VERMONT

ODALS UNIT #20  
WIRING AND EQUIPMENT MOUNTING

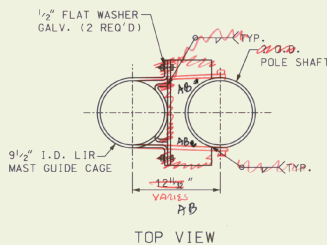
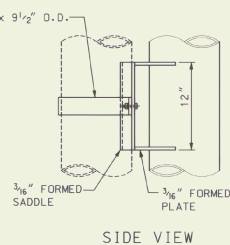
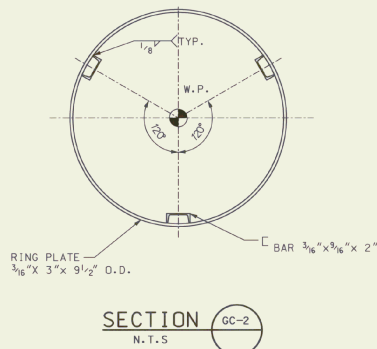
**URS Greiner, Inc**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|              |        |
|--------------|--------|
| Design by:   | 5/5/16 |
| Drawn by:    | 5/5/16 |
| Checked by:  | 5/5/16 |
| Approved by: | 5/5/16 |

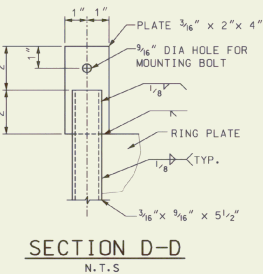
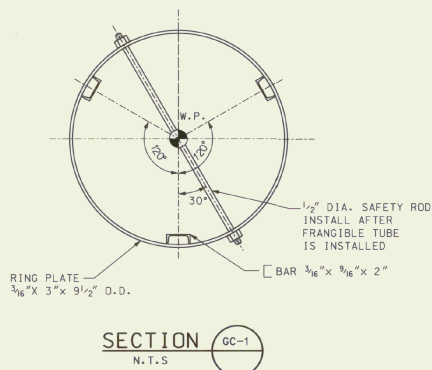
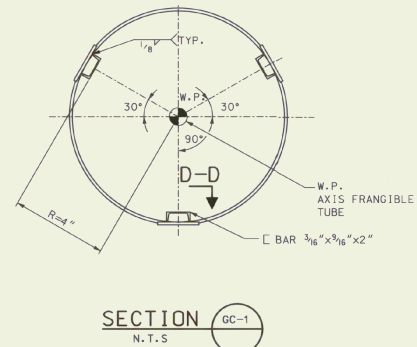
|          |          |
|----------|----------|
| Scale:   | N.T.S.   |
| Date:    | 5/5/16   |
| Sheet    | 39 OF 65 |
| Sheet No | 39       |



**GUIDE CAGE MOUNTING DETAIL**  
SCALE: 3" = 1'-0"



**GUIDE CAGE MOUNTING BRACKET**  
N.T.S.



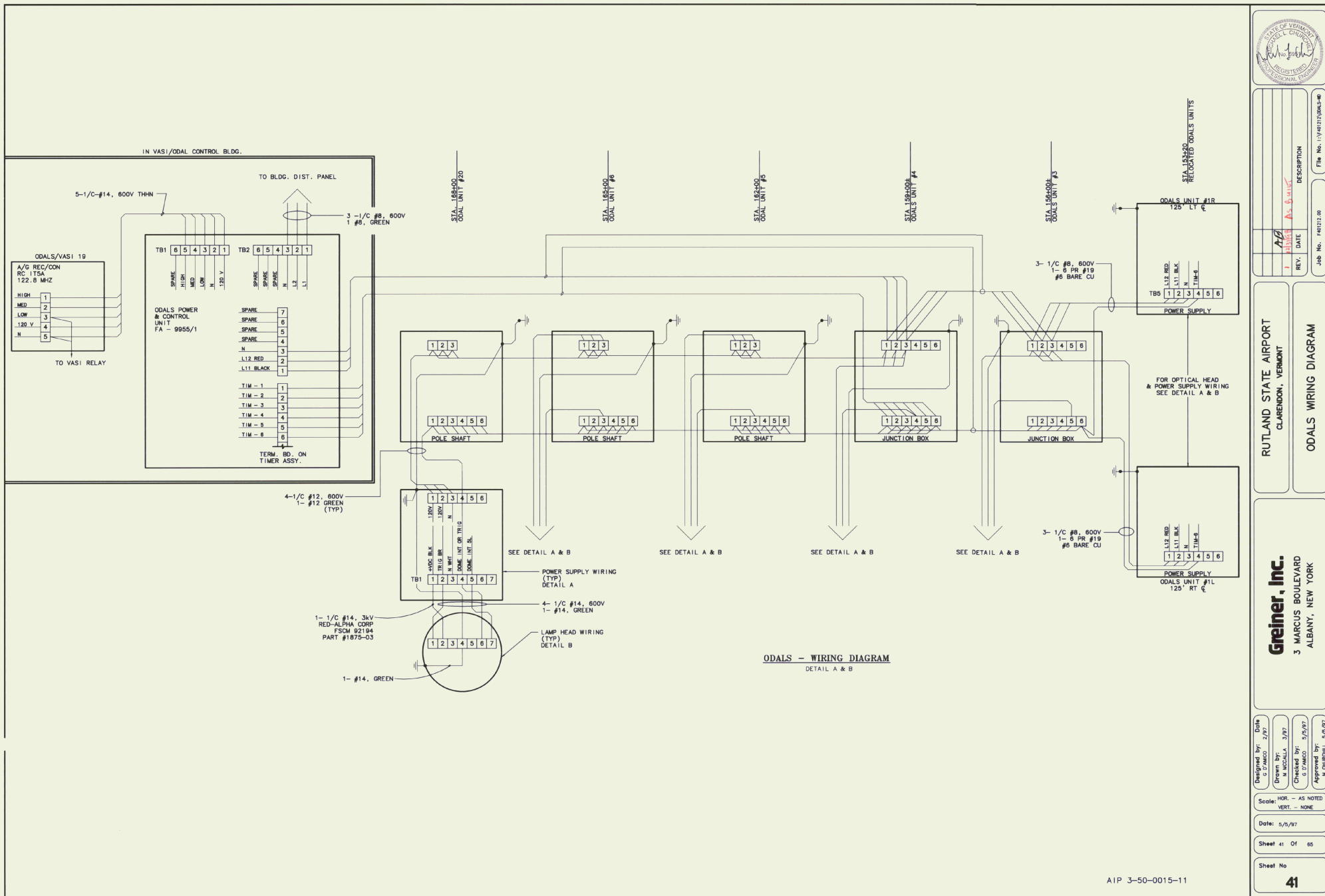
| REV. | DATE   | DESCRIPTION | FILE NO. P-1440/04/05 |
|------|--------|-------------|-----------------------|
| 1    | 5/5/97 | AS NOTED    |                       |

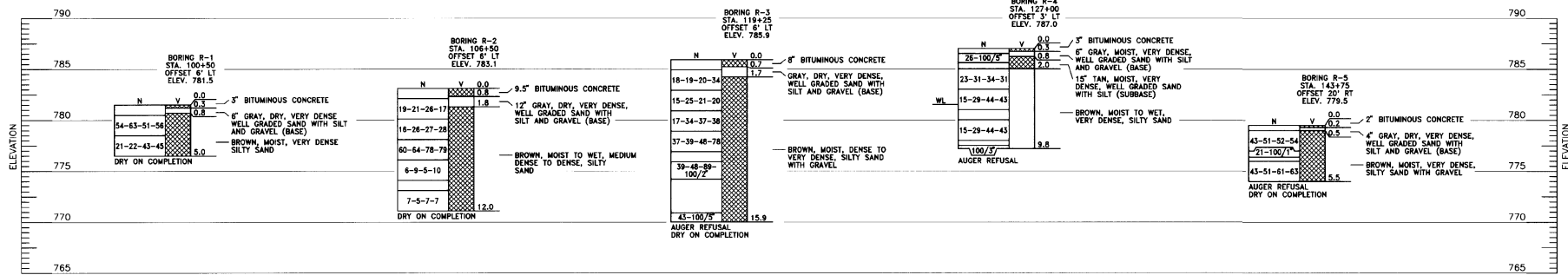
**RUTLAND STATE AIRPORT**  
CLARENDON, VERMONT

**ODALS UNIT #6**  
**L.I.R. GUIDE CAGE DETAILS**

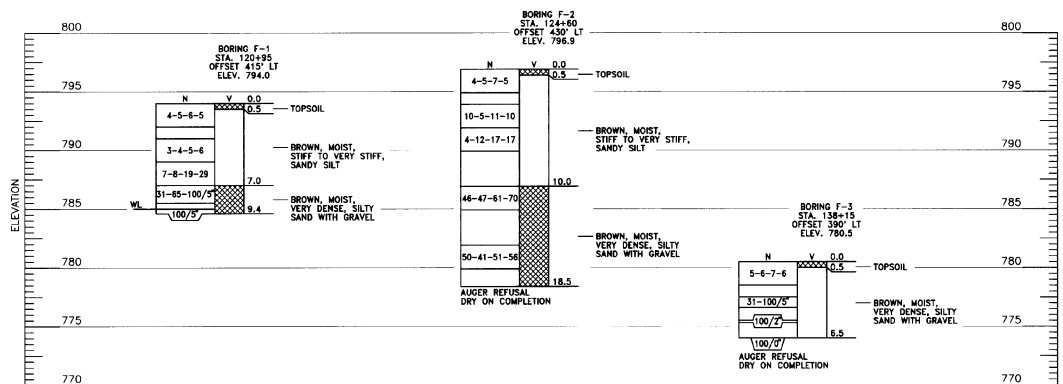
**URS Greiner, Inc**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|                           |                          |                           |
|---------------------------|--------------------------|---------------------------|
| DESIGNED BY:<br>S.D. MULL | CHECKED BY:<br>M. MCALLA | APPROVED BY:<br>M. MCALLA |
| DATE: 5/5/97              | DATE: 5/5/97             | DATE: 5/5/97              |
| Scale: AS NOTED           | Date: 5/5/97             | Sheet 40 OF 65            |
| Sheet No                  |                          | 40                        |





**BORINGS AND DRIVE TESTS**  
SCALE: AS SHOWN



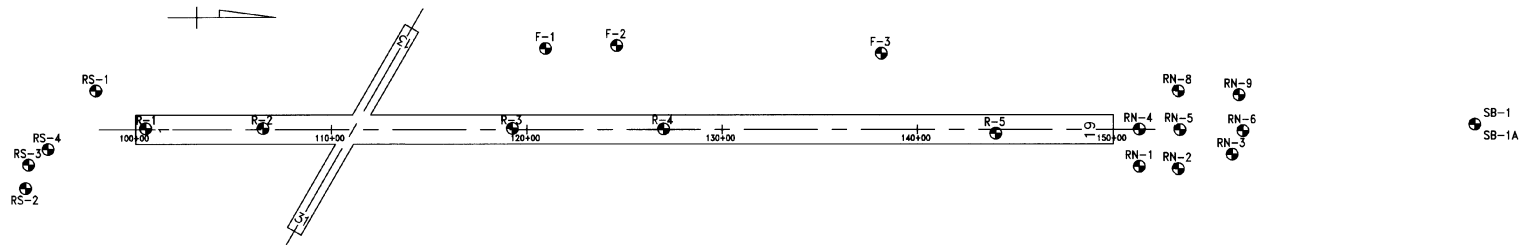
**BORINGS AND DRIVE TESTS**  
SCALE: AS SHOWN

**NOTE:**

- 1.) BORINGS AND DRIVE TESTS WERE TAKEN IN NOVEMBER 1995, AND JAN 97 BY GREEN MOUNTAIN BORING.
- 2.) N-BLOWS PER 6 INCH INCREMENT OF PENETRATION OF SAMPLING SPOON OR PENETRATION IN INCHES FOR THE INDICATED BLOWS OF A 140 LB. HAMMER FALLING 30". WHERE ROCK IS ENCOUNTERED, PERCENT CORE RECOVERY IS SHOWN. R.Q.D. IS SHOWN IN PARENTHESES.

THE ROCK QUALITY DESIGNATION (R.Q.D.) IS BASED ON A MODIFIED CORE RECOVERY PROCEDURE WHICH, IN TURN, IS BASED INDIRECTLY ON THE NUMBER OF FRACTURES (EXCEPT THOSE DUE DIRECTLY TO DRILLING OPERATIONS) AND THE AMOUNT OF SOFTENING OR ALTERATION IN THE ROCK MASS AS OBSERVED IN THE ROCK CORES FROM A DRILL HOLE. INSTEAD OF COUNTING THE FRACTURES, AN INDIRECT MEASURE IS OBTAINED BY SUMMING THE TOTAL LENGTH OF CORE RECOVERED BY COUNTING ONLY THOSE PIECES OF HARD AND SOUND CORE WHICH ARE 4 INCHES OR GREATER IN LENGTH. THE RATIO OF THIS MODIFIED CORE RECOVERY LENGTH TO THE TOTAL CORE RUN LENGTH IS KNOWN AS THE R.Q.D.

V-ALTERNATE SHADING INDICATES EXTENT OF SOIL OR ROCK LAYERS.  
WL-WATER LEVEL READING AT COMPLETION OF BORING.



**BORINGS AND DRIVE TESTS LOCATION PLAN**  
SCALE: 1" = 300'



| REV. | DATE   | DESCRIPTION      | Job No.               |
|------|--------|------------------|-----------------------|
| 1    | 2/1/97 | ADD 98-1 / 98-1A | File No. 11/001298-08 |
|      |        |                  | Job No. F402200       |

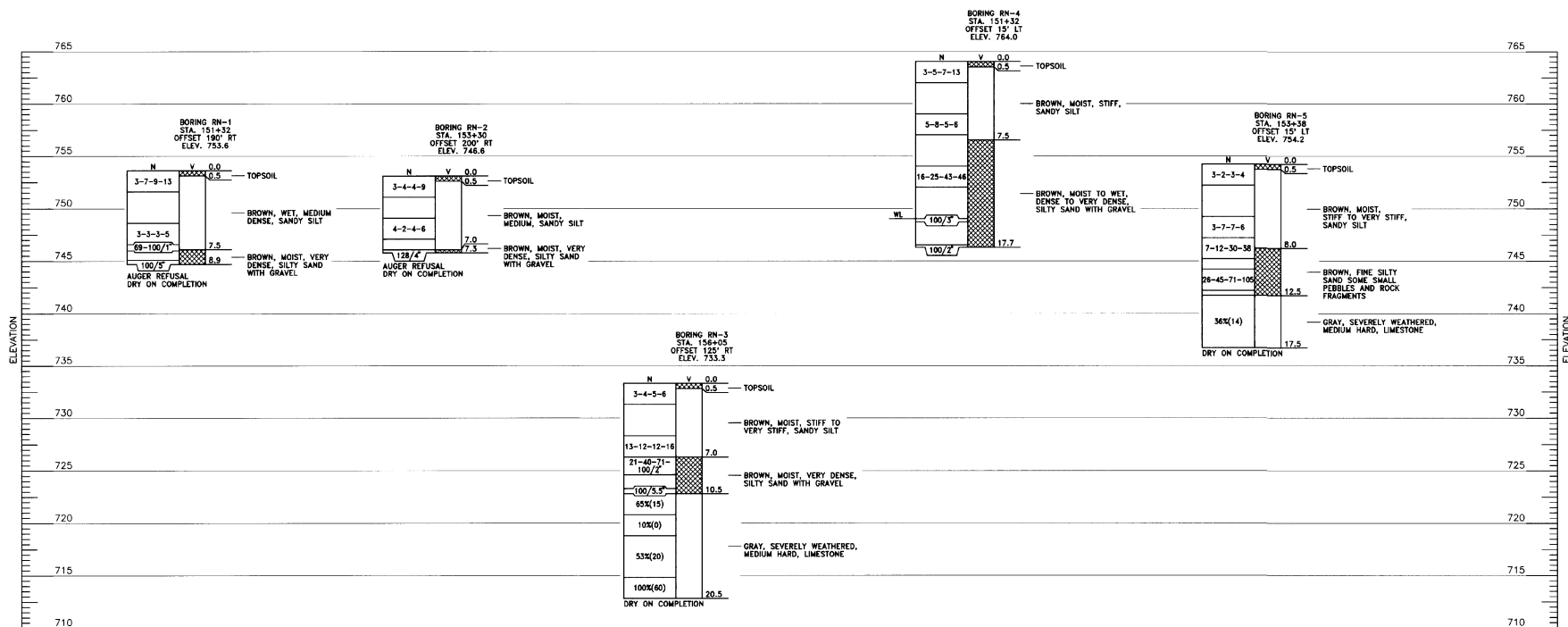
**RUTLAND STATE AIRPORT**  
CLARENDON, VERMONT

**BORING LOGS**

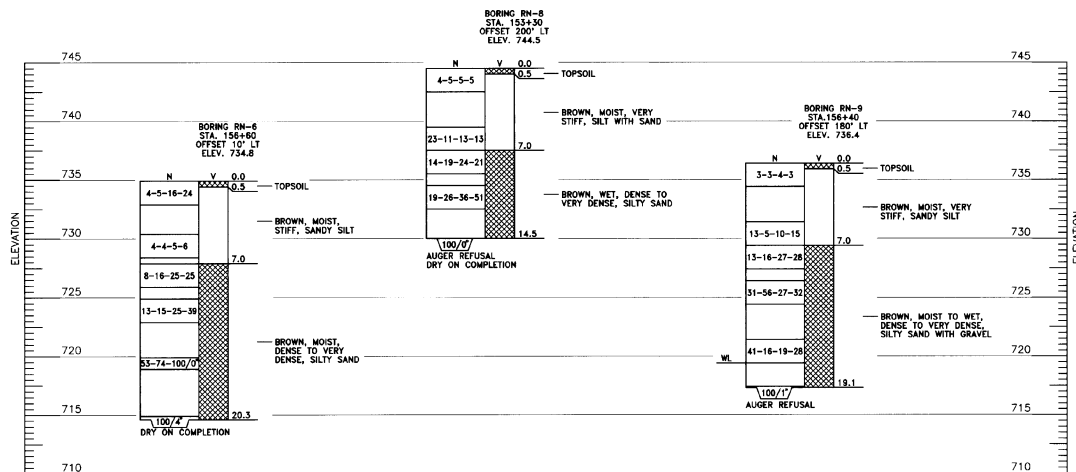
**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|              |           |
|--------------|-----------|
| Designed by: | Date:     |
| Drawn by:    | Scale:    |
| Checked by:  | Date:     |
| Approved by: | Sheet No. |
|              | 42        |





**BORINGS AND DRIVE TESTS**  
SCALE: AS SHOWN



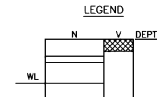
**BORINGS AND DRIVE TESTS**  
SCALE: AS SHOWN

**NOTE:**

- BORINGS AND DRIVE TESTS WERE TAKEN IN NOVEMBER 1995, BY GREEN MOUNTAIN BORING.
- N = BLOWS PER 6 INCH INCREMENT OF PENETRATION OF SAMPLING SPOON OR PENETRATION IN INCHES FOR THE INDICATED BLOWS OF A 140 LB. HAMMER FALLING 30". WHERE ROCK IS ENCOUNTERED, PERCENT CORE RECOVERY IS SHOWN. R.Q.D. IS SHOWN IN PARENTHESES.

THE ROCK QUALITY DESIGNATION (R.Q.D.) IS BASED ON A MODIFIED CORE RECOVERY PROCEDURE WHICH, IN TURN, IS BASED INDIRECTLY ON THE NUMBER OF FRACTURES (EXCEPT THOSE DUE DIRECTLY TO DRILLING OPERATIONS) AND THE AMOUNT OF SOFTENING OR ALTERATION IN THE ROCK MASS AS OBSERVED IN THE ROCK CORES FROM A DRILL HOLE. INSTEAD OF COUNTING THE FRACTURES, AN INDIRECT MEASURE IS OBTAINED BY SUMMING THE TOTAL LENGTH OF CORE RECOVERED BY COUNTING ONLY THOSE PIECES OF HARD AND SOUND CORE WHICH ARE 4 INCHES OR GREATER IN LENGTH. THE RATIO OF THIS MODIFIED CORE RECOVERY LENGTH TO THE TOTAL CORE RUN LENGTH IS KNOWN AS THE R.Q.D.

V- ALTERNATE SHADING INDICATES EXTENT OF SOIL OR ROCK LAYERS.  
WL- WATER LEVEL READING AT COMPLETION OF BORING.



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

**RUTLAND STATE AIRPORT**  
CLARENDON, VERMONT

**BORING LOGS**

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|              |              |
|--------------|--------------|
| Designed by: | Date:        |
| Drawn by:    | Drawn by:    |
| Checked by:  | Checked by:  |
| Approved by: | Approved by: |

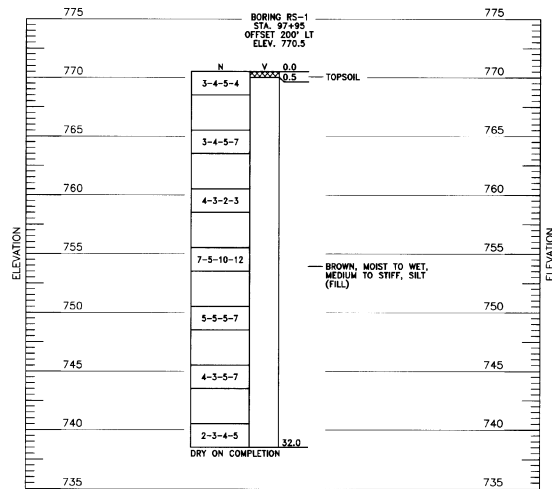
Scale: HOR. - AS SHOWN  
VERT. - NONE

Date: 5/5/97

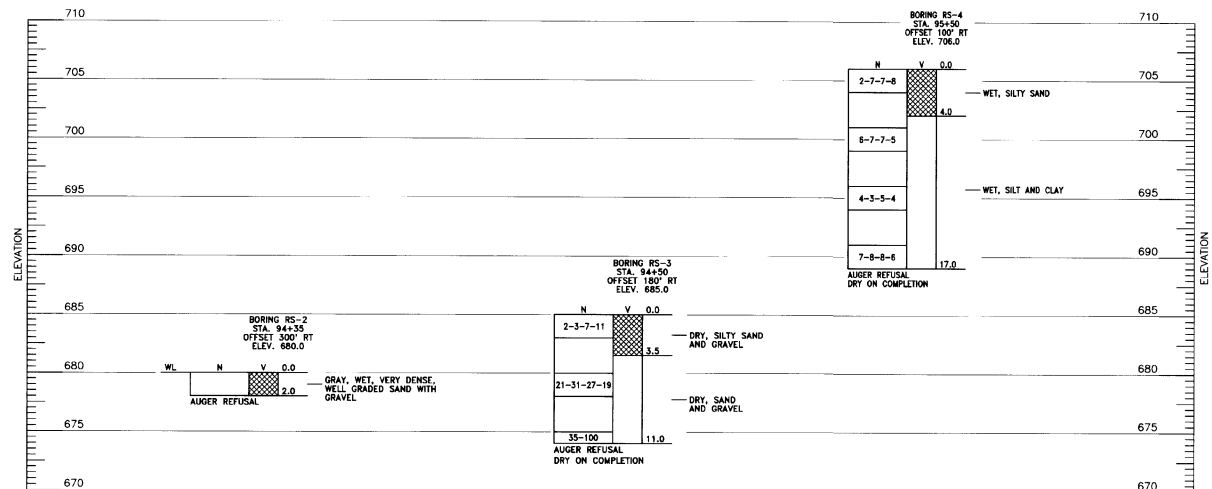
Sheet 43 Of 65

Sheet No

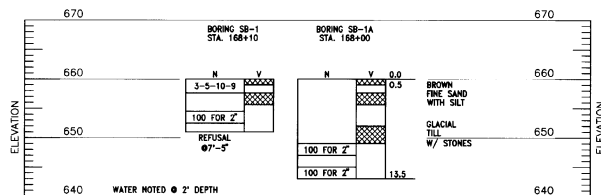
**43**



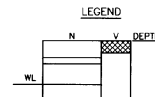
**BORINGS AND DRIVE TESTS**  
SCALE: AS SHOWN



**BORINGS AND DRIVE TESTS**  
SCALE: AS SHOWN



**BORINGS AND DRIVE TESTS**  
SCALE: AS SHOWN



**NOTE:**

- 1.) BORINGS AND DRIVE TESTS WERE TAKEN IN NOVEMBER 1995, BY GREEN MOUNTAIN BORING.
- 2.) N-BLOWS PER 6 INCH INCREMENT OF PENETRATION OF SAMPLING SPOON OR PENETRATION IN INCHES FOR THE INDICATED BLOWS OF A 140 LB. HAMMER FALLING 30". WHERE ROCK IS ENCOUNTERED, PERCENT CORE RECOVERY IS SHOWN. R.Q.D. IS SHOWN IN PARENTHESES.

THE ROCK QUALITY DESIGNATION (R.Q.D.) IS BASED ON A MODIFIED CORE RECOVERY PROCEDURE WHICH, IN TURN, IS BASED INDIRECTLY ON THE NUMBER OF FRACTURES (EXCEPT THOSE DUE DIRECTLY TO DRILLING OPERATIONS) AND THE AMOUNT OF SOFTENING OR ALTERATION IN THE ROCK MASS AS OBSERVED IN THE ROCK CORES FROM A DRILL HOLE. INSTEAD OF COUNTING THE FRACTURES, AN INDIRECT MEASURE IS OBTAINED BY SUMMING THE TOTAL LENGTH OF CORE RECOVERED BY COUNTING ONLY THOSE PIECES OF HARD AND SOUND CORE WHICH ARE 4 INCHES OR GREATER IN LENGTH. THE RATIO OF THIS MODIFIED CORE RECOVERY LENGTH TO THE TOTAL CORE RUN LENGTH IS KNOWN AS THE R.Q.D.

V-ALTERNATE SHADING INDICATES EXTENT OF SOIL OR ROCK LAYERS.  
WL-WATER LEVEL READING AT COMPLETION OF BORING.



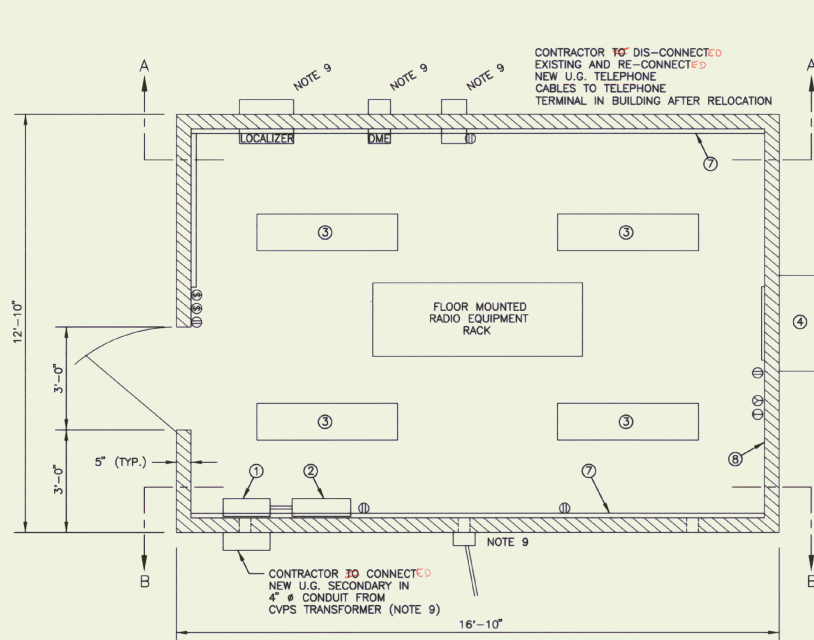
| REV. | DATE     | DESCRIPTION |
|------|----------|-------------|
| 1    | 12/18/95 | ADD         |

**RUTLAND STATE AIRPORT**  
CLARENDON, VERMONT

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

Designed by: *[Signature]*  
Drawn by: *[Signature]*  
Checked by: *[Signature]*  
Approved by: *[Signature]*

Scale: HOR - AS SHOWN  
VERT - NONE  
Date: 5/5/97  
Sheet 44 Of 65  
Sheet No. **44**



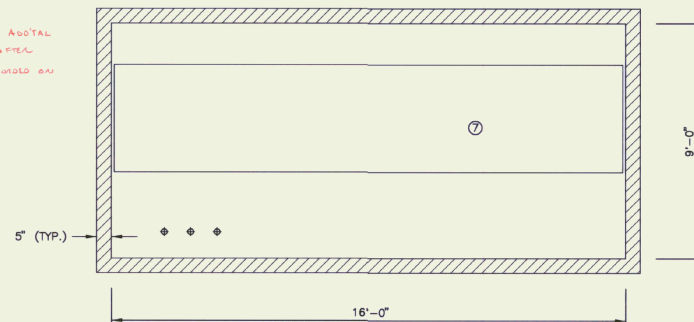
EXISTING LOCALIZER BLDG. EQUIPMENT LAYOUT

SCALE: NONE

NOTES:

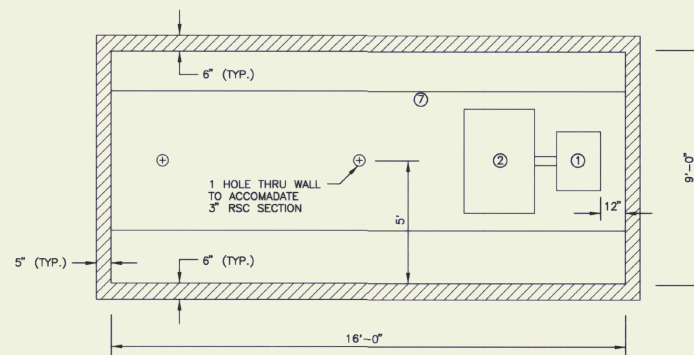
- NEMA 1 ENCLOSURE, FUSED 2 POLE, SOLID NEUTRAL, DEAD FRONT, 400 AMP DISCONNECT SWITCH.
- NEMA 1 ENCLOSURE, 1 PHASE, 3-WIRE, S/N, 120/240 VOLT, 400 AMP MAIN BREAKER WITH NEUTRAL ALL BOLT ON BREAKERS.
- FLUORESCENT LIGHT FIXTURE.
- AIR CONDITIONER - WALL MOUNTED.
- EXTERIOR DOOR.
- HEAVY DUTY, WEATHER PROOF, EXTERIOR WALL LIGHT MOUNTED ABOVE DOOR.
- 3/4 IN. PLYWOOD BOLTED TO WALL.
- PAINTED DRYWALL INTERIOR.
- EXISTING SHELTER IS A PRE-CAST CONCRETE UNIT COMPLETE WITH WALLS, FLOOR & CEILING EXISTING BUILDING ON A PEASTONE BASE. CONTRACTOR TO DISCONNECT ALL CABLES & CONDUIT AT EXISTING LOCATION BEFORE RELOCATING SHELTER.
- ALL LOOSE MATERIALS TO BE PACKAGED AND MOVED SEPARATELY. SECURE ALL EQUIPMENT PRIOR TO RELOCATING SHELTER. REMOVE ROOF MOUNTED ANTENNAS.
- BUILDING/SHELTER TO BE LIFTED AND TRANSPORTED TO NEW SITE AS A COMPLETE UNIT.
- BUILDING/SHELTER TO BE POSITIONED AT NEW LOCATION AS SHOWN ON SITE PLAN OR AS DIRECTED BY THE ENGINEER. CONNECT NEW CABLES AND CONDUITS AT NEW SITE. NEW CABLES AND CONDUITS BY OTHERS. COORDINATE TELEPHONE AND POWER CABLES WITH LOCAL PHONE AND UTILITY COMPANIES. COORDINATE FAA CABLE CONNECTIONS WITH FAA/FAE CONTACT JAMES CAULFIELD, (617) 238-7462.
- CONTRACTOR TO REMOVE ELECTRICAL CABLING, & PEASTONE FOUNDATION FROM EXISTING SITE. CONTRACTOR TO REMOVE EXISTING FOUNDATION FOR LOCALIZER & DME. AREA TO BE REGRADED, TOPSOILED AND SEEDED. COST OF THIS WORK TO BE INCLUDED IN COST OF ITEM 529.20 MOD 1.

NOTE -  
FAA - PRE CONTRACTOR MAKE ADDITIONAL  
RELOCATIONS INSIDE BUILDING AFTER  
RELOCATION - CHANGES NOT RECORDED ON  
THESE DRAWINGS.



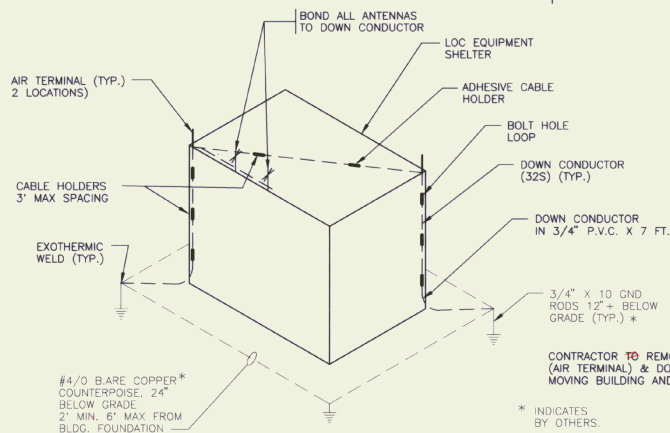
SECTION "A-A"

SCALE: NONE



SECTION "B-B"

SCALE: NONE



LIGHTNING PROTECTION DETAILS

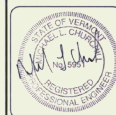
SCALE: NONE

LEGEND

- ⑤ LIGHT SWITCH, 4'-6" ABOVE FLOOR
- ⑥ DUPLEX RECEPTACLE, 4' ABOVE FLOOR
- ⑦ 240 VOLT RECEPTACLE, 4' ABOVE FLOOR
- ⑧ 240 VOLT LINE THERMOSTAT

CONTRACTOR TO REMOVE/SALVAGE LIGHTING ROD (AIR TERMINAL) & DOWN CONDUCTORS PRIOR TO MOVING BUILDING AND RE-INSTALLING IN NEW LOCATION.

\* INDICATES BY OTHERS.



| REV. | DATE     | DESCRIPTION |
|------|----------|-------------|
| 1    | 10/19/92 | AS BUILT    |

Job No. 144937300  
File No. 144937300

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT  
LOCALIZER/DME RUNWAY 19  
POWER AND CONTROL BUILDING

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

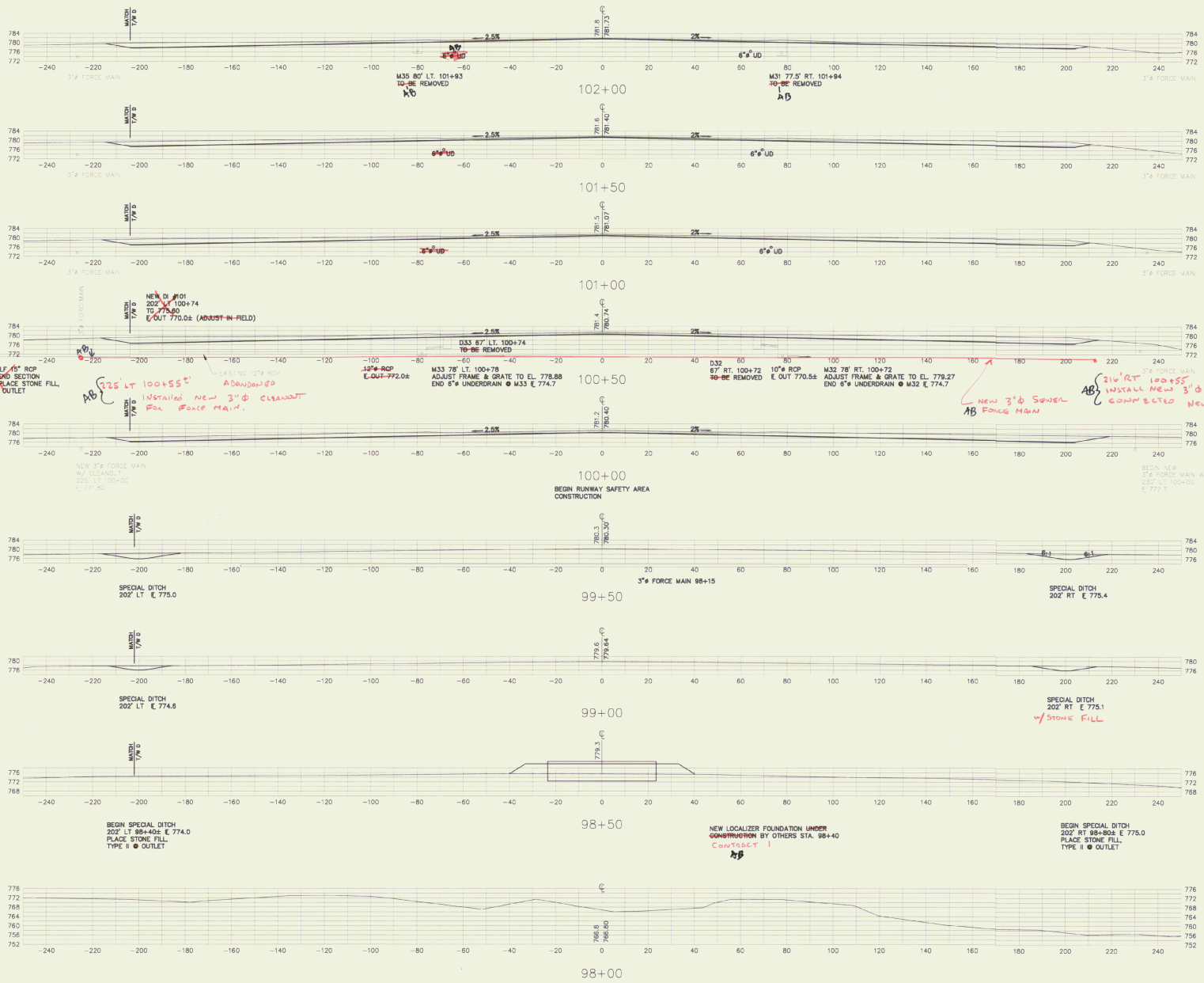
|              |       |
|--------------|-------|
| Designed by: | Date: |
| 6/1/92       | 2/87  |
| Drawn by:    |       |
| 6/1/92       | 3/87  |
| Checked by:  |       |
| 6/1/92       | 5/92  |
| Approved by: |       |
| 6/1/92       | 5/92  |

Scale: HOR. - 1" = 40'  
VERT. - 1" = 4'

Date: 5/5/97

Sheet 45 Of 55

Sheet No.



**UPS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

**RUTLAND STATE AIRPORT**  
CLARENDON, VERMONT

**RUNWAY CROSS SECTIONS**

Designed by: **G. O'NEILL**  
Checked by: **M. MURPHY**  
Approved by: **M. MURPHY**

Date: **5/2/97**  
Scale: **HOR. - 1" = 20'**  
**VERT. - 1" = 20'**

Sheet 48 Of 65

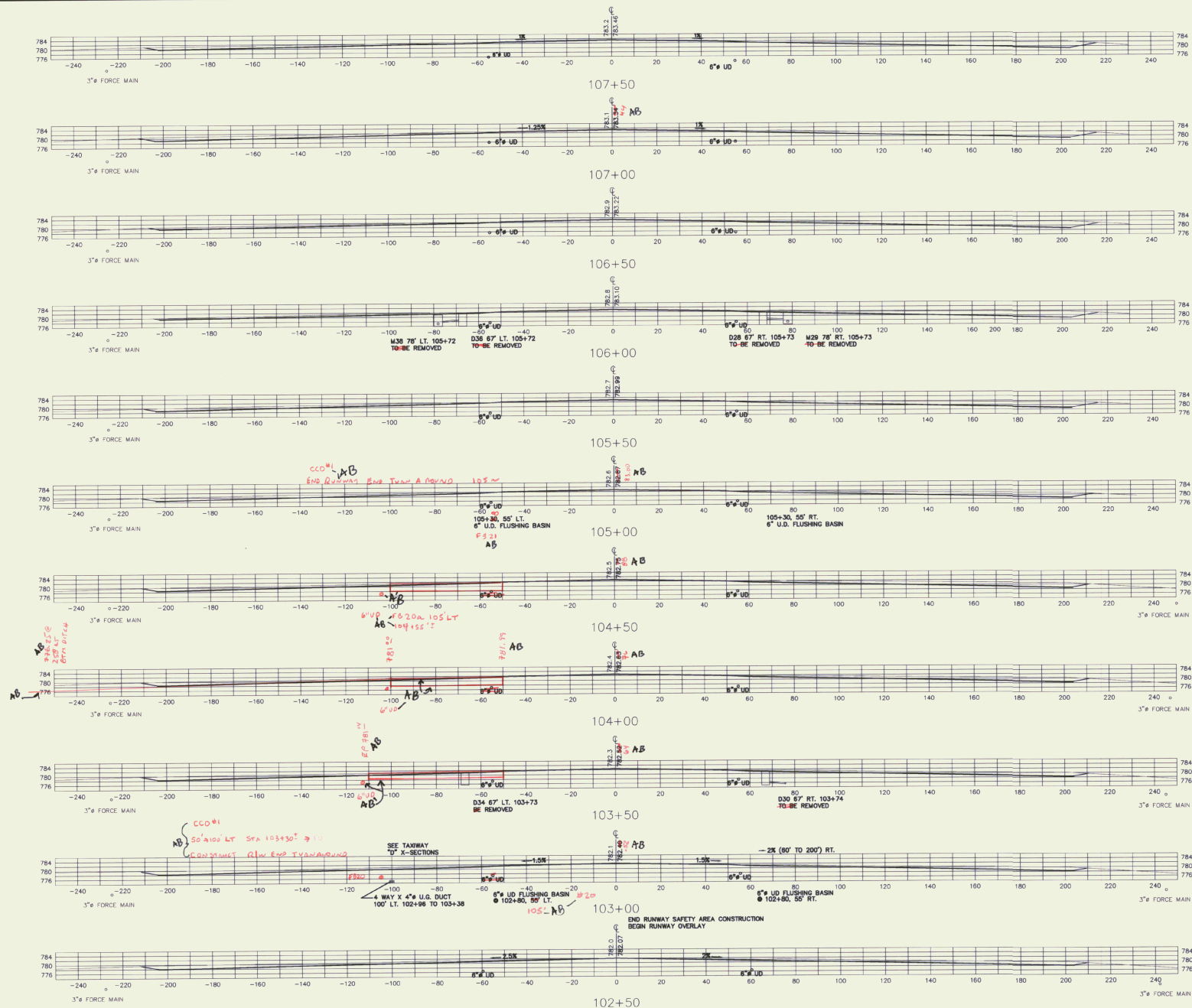
DATE OF VERIFICATION: **5/2/97**  
PROJECT NO.: **5951**  
JOB NO.: **1001010101**

DESCRIPTION: **Runway Cross Sections**

REV. **1** DATE **5/2/97** BY **A. MURPHY**

46





| REV. | DATE     | DESCRIPTION | FILE NO.     |
|------|----------|-------------|--------------|
| 1    | 10/10/98 | AS-BUILT    | 104121/101-8 |
| 2    | 10/10/98 | AS-BUILT    | 104121/101-8 |

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|              |          |
|--------------|----------|
| Designed by: | Scale:   |
| Drawn by:    | 1" = 20' |
| Checked by:  | 1" = 20' |
| Approved by: | 1" = 20' |

Date: 5/5/97

Sheet 47 Of 85

Sheet No  
**47**



[illegible]

CLARENDON, VERMONT

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|              |           |      |        |
|--------------|-----------|------|--------|
| Designed by: | G D'AMICO | Date | 2/97   |
| Drawn by:    | M MCCALLA |      | 3/97   |
| Checked by:  | G D'AMICO |      | 5/5/97 |
| Approved by: | M MCCALLA |      | 5/5/97 |

Scale: HOR. - 1" = 20'  
VERT. - 1" = 20'

Date: 5/5/97

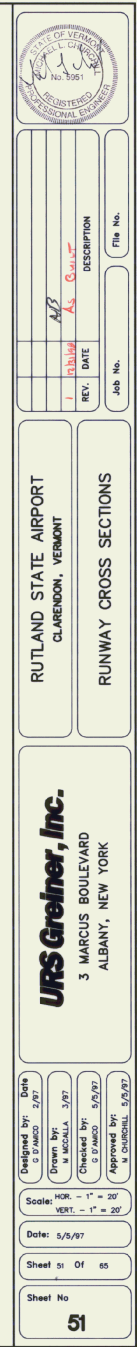
Sheet 49 Of 65

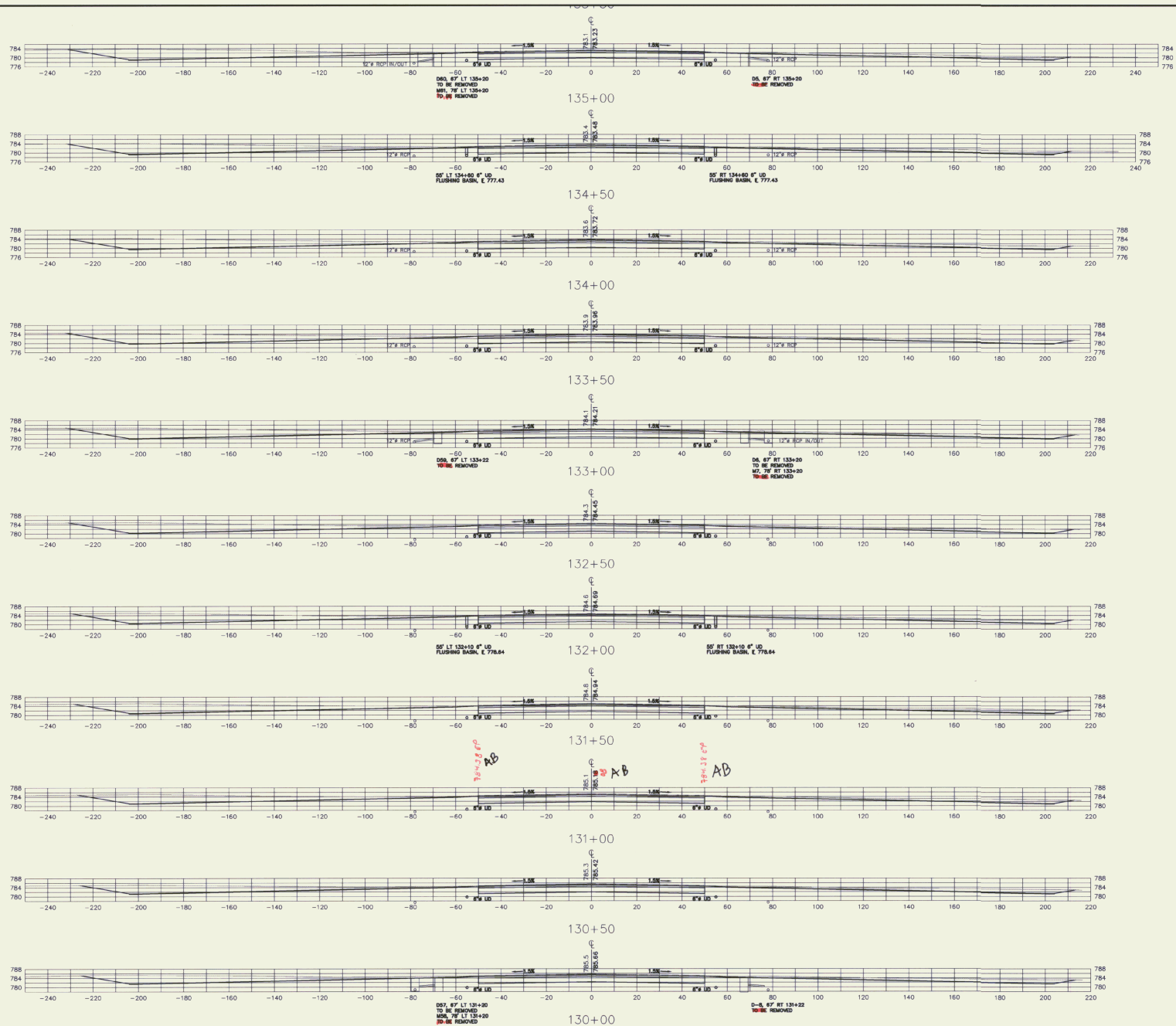
Sheet No

49









| REV. | DATE    | DESCRIPTION    | Job No.         |
|------|---------|----------------|-----------------|
| 1    | 1/11/11 | As Constructed | 1460113 (12-05) |

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT

RUNWAY CROSS SECTIONS

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

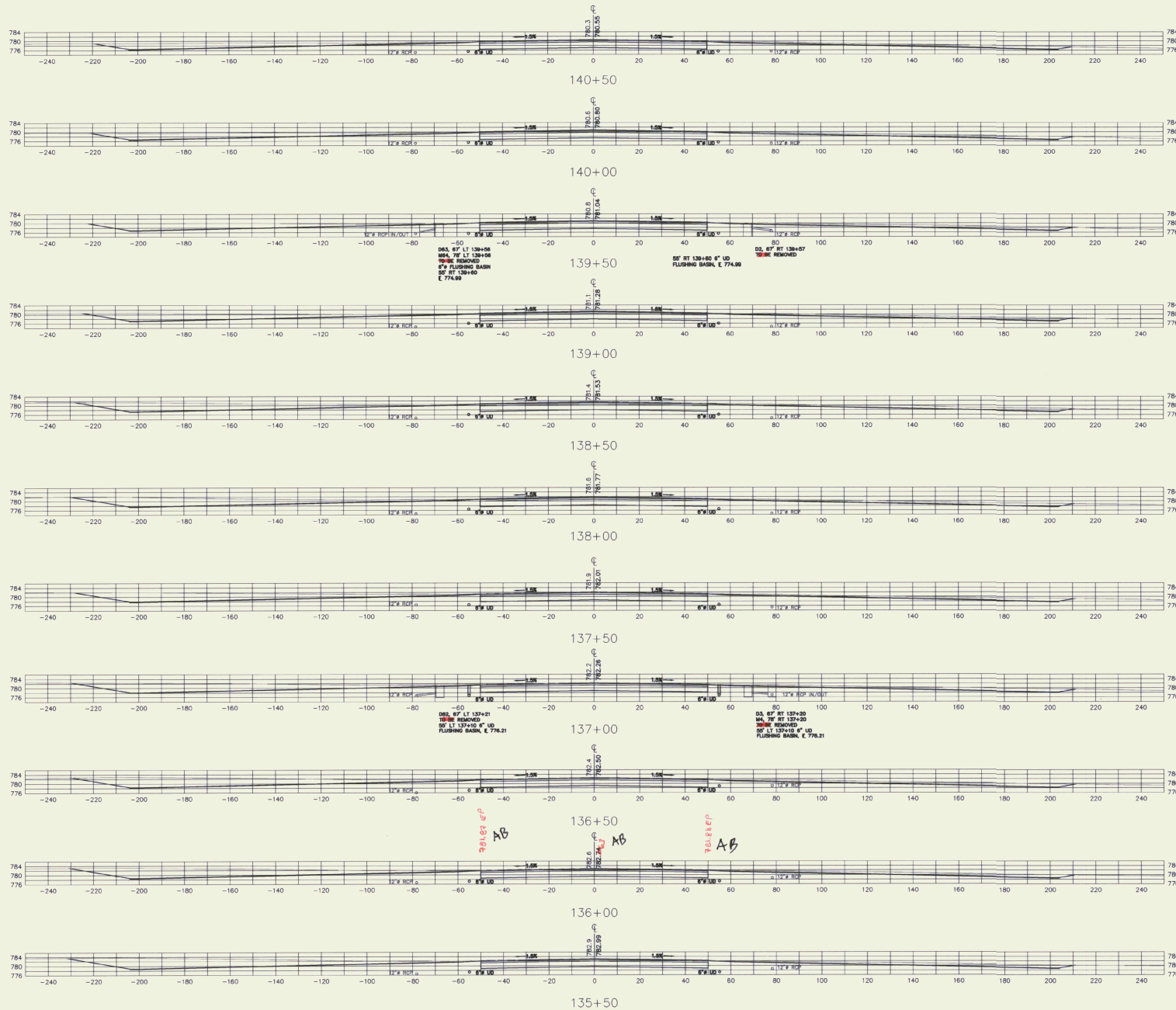
|              |             |
|--------------|-------------|
| Designed by: | Date:       |
| D. V. M. C.  | 1/1/11      |
| Drawn by:    | Check by:   |
| M. McCalla   | D. V. M. C. |
| 5/1/11       | 5/1/11      |
| Approved by: | 5/1/11      |
| M. C. M. C.  |             |

Scale: HOR. - 1" = 20'  
VERT. - 1" = 20'

Date: 5/5/11

Sheet 52 Of 57

Sheet No.



|      |        |             |
|------|--------|-------------|
| REV. | DATE   | DESCRIPTION |
| 1    | 5/1/97 | AB          |

File No. V-00111-02-95

Job No. 1001230

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT

RUNWAY CROSS SECTIONS

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

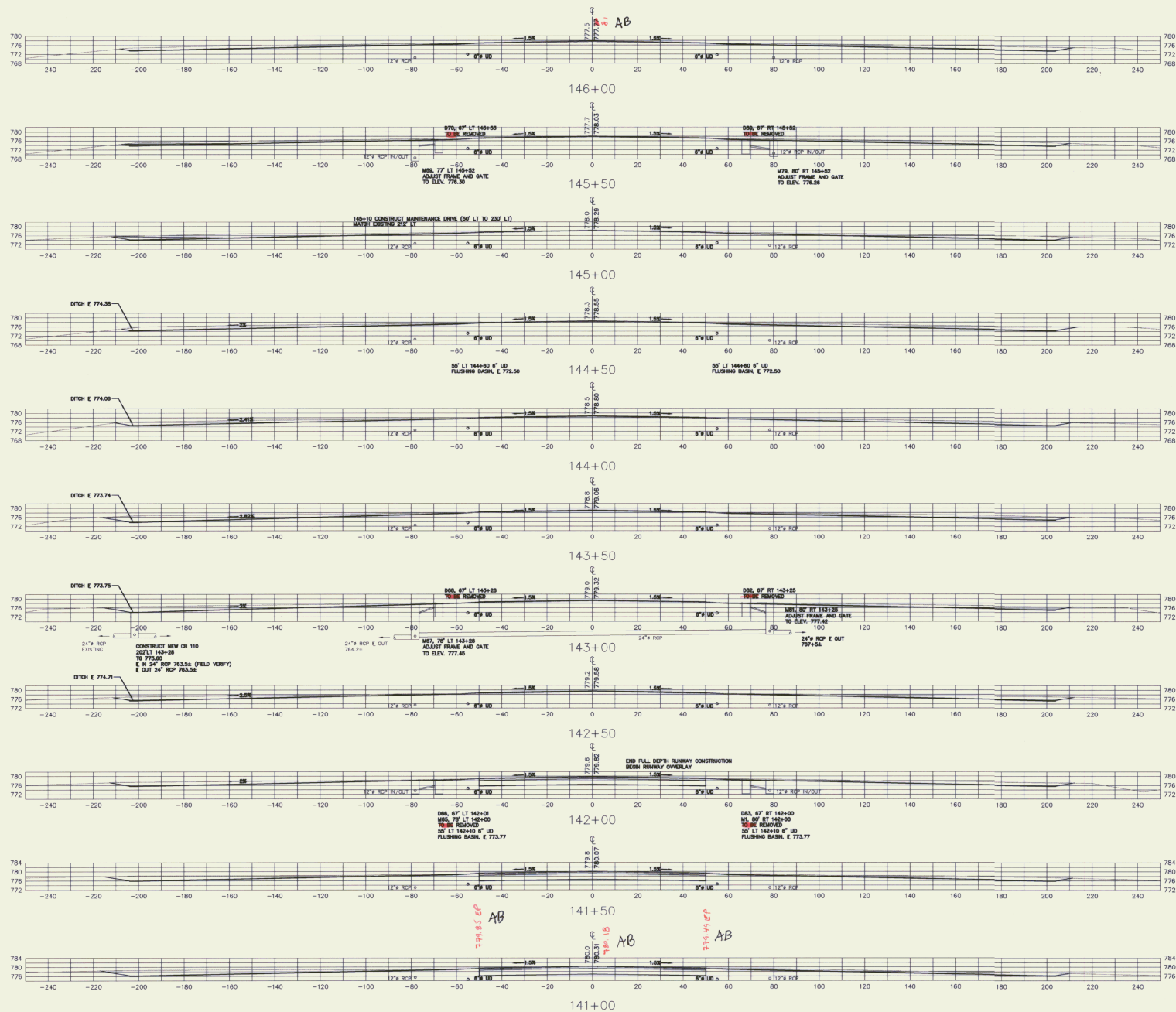
Designed by: G. D'AMICO  
Drawn by: M. MCALLA  
Checked by: G. D'AMICO  
Approved by: M. CHANDLER

Scale: HOR. - 1" = 20'  
VERT. - 1" = 20'

Date: 5/5/97

Sheet 53 Of 57

Sheet No.



| REV. | DATE     | DESCRIPTION | File No.         |
|------|----------|-------------|------------------|
| 1    | 10/14/04 | As BUILT    | 1460113, 1412-05 |
|      |          |             | Job No. 14601230 |

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT

RUNWAY CROSS SECTIONS

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|              |        |
|--------------|--------|
| Designed by: | Date:  |
| C. D'Amico   | 1/7/7  |
| Drawn by:    |        |
| M. McCalla   | 1/7/7  |
| Checked by:  |        |
| C. D'Amico   | 5/5/97 |
| Approved by: |        |
| M. O'Connell | 5/5/97 |

Scale: HOR. - 1" = 30'

VERT. - 1" = 20'

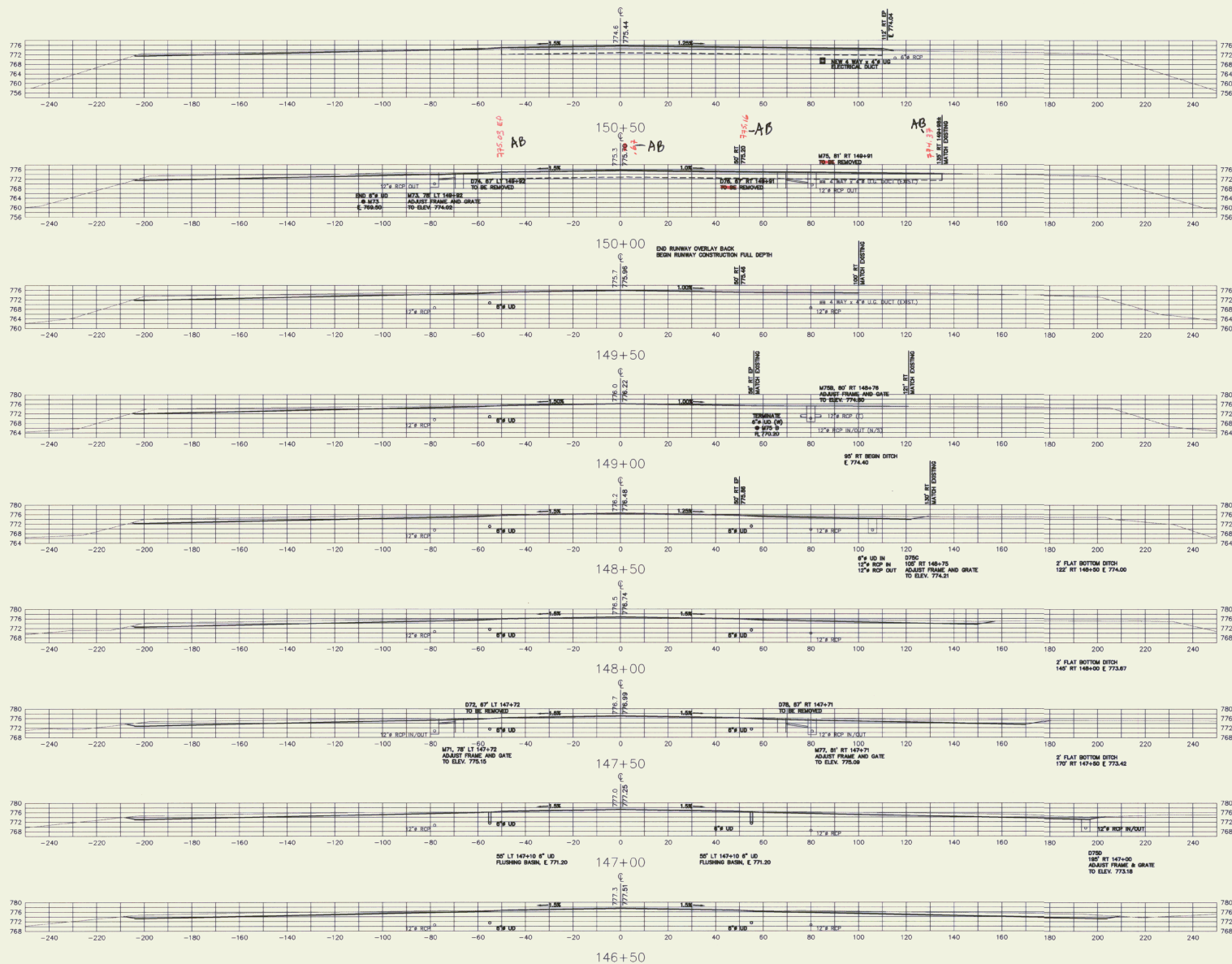
Date: 5/5/97

Sheet 54 Of 57

Sheet No.

54





| REV. | DATE   | DESCRIPTION |
|------|--------|-------------|
| 1    | 5/5/97 | AB          |
| 2    | 5/5/97 | AB          |
| 3    | 5/5/97 | AB          |
| 4    | 5/5/97 | AB          |
| 5    | 5/5/97 | AB          |
| 6    | 5/5/97 | AB          |
| 7    | 5/5/97 | AB          |
| 8    | 5/5/97 | AB          |
| 9    | 5/5/97 | AB          |
| 10   | 5/5/97 | AB          |

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT

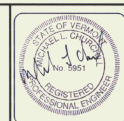
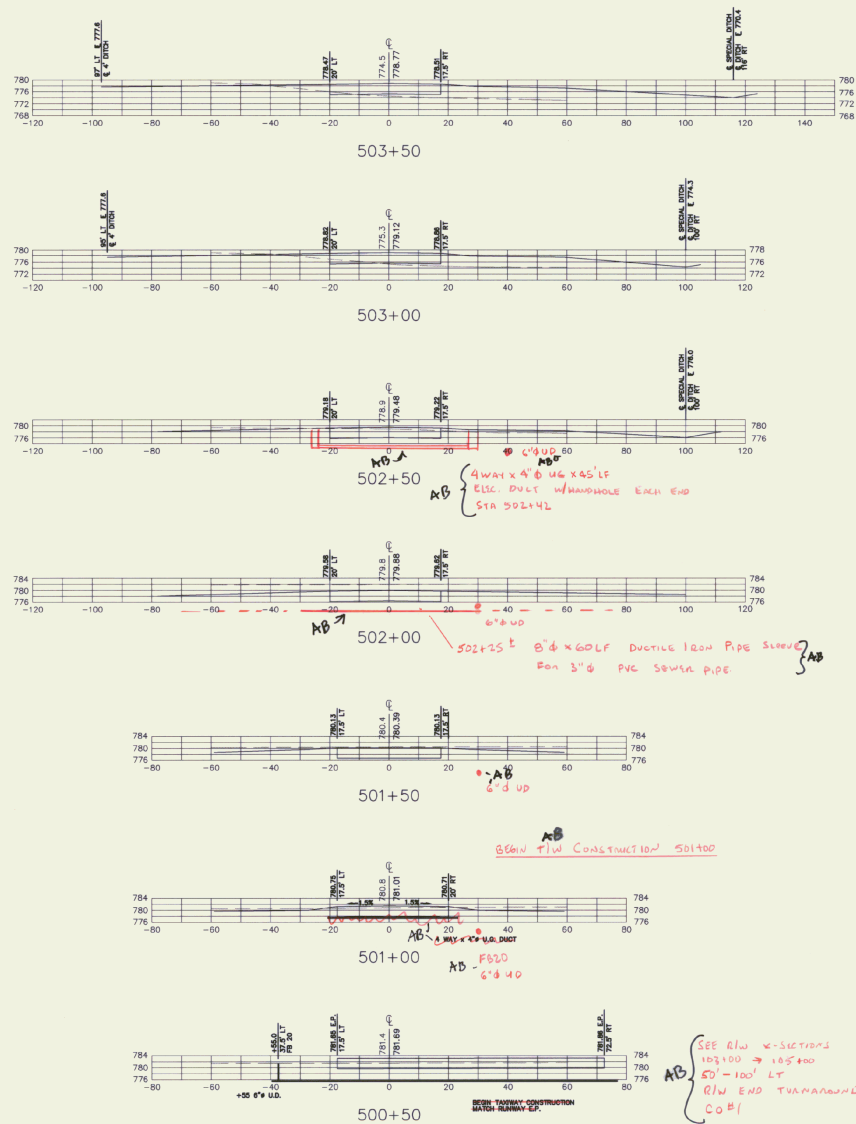
Runway Cross Sections

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|              |                  |
|--------------|------------------|
| Designed by: | Scale:           |
| Drawn by:    | VERT. - 1" = 20' |
| Checked by:  | DATE: 5/5/97     |
| Approved by: | Sheet 50 Of 57   |
|              | Sheet No.        |







| REV. | DATE   | DESCRIPTION | File No.        |
|------|--------|-------------|-----------------|
| 1    | 5/5/97 | AKG         | 1460112, 132-08 |
|      |        |             | Job No. 1460112 |

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT

TAXIWAY CROSS SECTIONS

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|              |       |
|--------------|-------|
| Designed by: | Date: |
| G. D'AMICO   | 5/97  |
| Drawn by:    |       |
| M. MCALLA    | 5/97  |
| Checked by:  |       |
| G. D'AMICO   | 5/97  |
| Approved by: |       |
| M. CHESNELL  | 5/97  |

Scale: HOR. - 1" = 20'  
VERT. - 1" = 20'

Date: 5/5/97

Sheet 58 Of 58

Sheet No.

58





| REV. | DATE    | DESCRIPTION |
|------|---------|-------------|
| 1    | 12/1/98 | AS BUILT    |
|      |         | AS          |
|      |         |             |
|      |         |             |
|      |         |             |

Job No. 1401212.00

File No. 1401212/1212-332

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

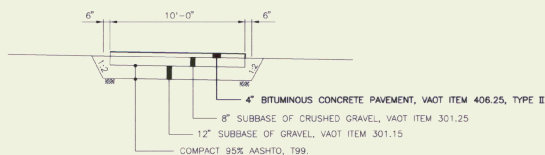
|                           |              |
|---------------------------|--------------|
| Designed by:<br>G D'AMICO | Date<br>2/97 |
| Drawn by:<br>M MCALLA     | 3/97         |
| Checked by:<br>G D'AMICO  | 5/5/97       |
| Approved by:<br>MCURCHILL | 5/5/97       |

Scale: HOR. - 1" = 20  
VERT. - 1" = 20

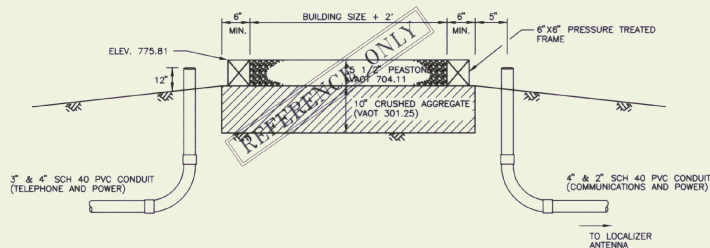
Sheet 59 Of 59

Sheet No

**59**

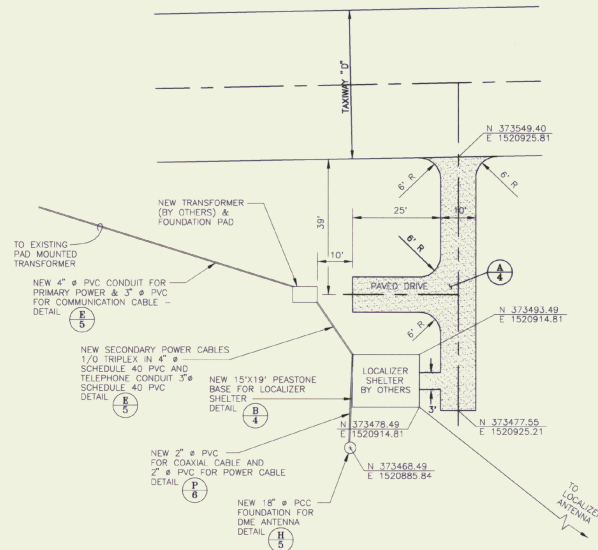


**A GRAVEL DRIVE**  
SCALE: NONE



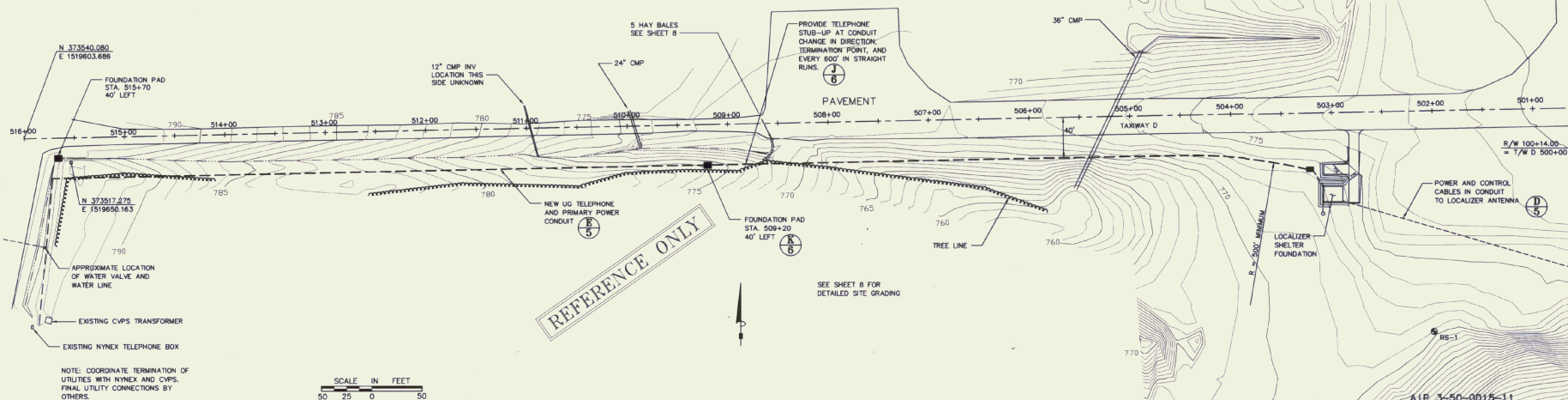
NOTE: PROVIDE 20' CABLE SLACK - EACH END OF ALL CABLES.  
SEAL CONDUITS WITH APPROVED DUCT SEAL AFTER INSTALLATION  
OF CABLES OR PULL WIRES.

**B LOCALIZER SHELTER FOUNDATION**  
SCALE: NONE



**C SITE DETAIL - LOCALIZER SHELTER**  
SCALE: NONE

- NOTES:
1. SITE PREPARATION: EXCAVATE TOPSOIL TO GOOD BEARING SOIL. COMPACT SUBGRADE, AND CRUSHED AGGREGATE TO 95%, AASHTO 199.
  2. PEASTONE LAYER TO BE LEVEL.
  3. SHELTER RELOCATION BY OTHERS.
  4. SEE DETAIL (C) FOR BUILDING GROUNDING DETAILS.



SCALE IN FEET  
50 25 0 25

NOTE: COORDINATE TERMINATION OF UTILITIES WITH NYNEX AND CVPs. FINAL UTILITY CONNECTIONS BY OTHERS.

NOTES:

1. CONTRACTOR TO RELOCATE EXISTING LOCALIZER SHELTER ONTO EXISTING EXISTING PEASTONE FOUNDATION IN ACCORDANCE WITH SPECIFICATION SECTION L-200.
2. CONTRACTOR TO MAKE FINAL ELECTRICAL CONNECTIONS AT TRANSFORMER TO SECONDARY POWER CABLES, FROM SECONDARY POWER CABLES TO THE POWER PANEL INSIDE THE LOCALIZER SHELTER, AND FROM THE POWER PANEL TO THE LOCALIZER ANTENNA ARRAY.
3. CONTRACTOR TO MAKE FINAL COMMUNICATIONS (TELEPHONE) CONNECTIONS FROM TELEPHONE CABINET ADJACENT TO LOCALIZER SHELTER TO THE CONTROL INTERFACE BOX MOUNTED ON EXTERIOR OF BUILDING.
4. FAA TO MAKE ALL COAXIAL CABLE CONNECTIONS.
5. CONTRACTOR TO EXTEND SHELTER DRIVEWAY AS SHOWN ON SHEET 14. CONTRACTOR TO PAVE SHELTER DRIVEWAY.



| REV. | DATE   | DESCRIPTION |
|------|--------|-------------|
| 1    | 5/5/97 | As Shown    |

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT  
LOCALIZER RELOCATION - SITE PLAN

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

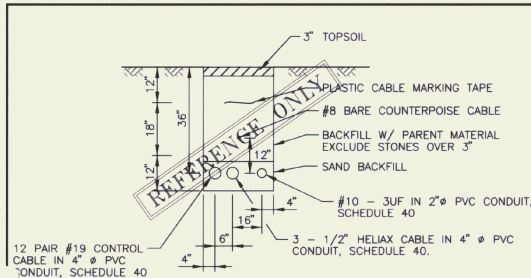
|              |           |
|--------------|-----------|
| Designed by: | D. J. MEO |
| Drawn by:    | M. MCALLA |
| Checked by:  | D. J. MEO |
| Approved by: | M. MCALLA |

Scale: HOR - 1" = 50'  
VERT - NONE

Date: 5/5/97

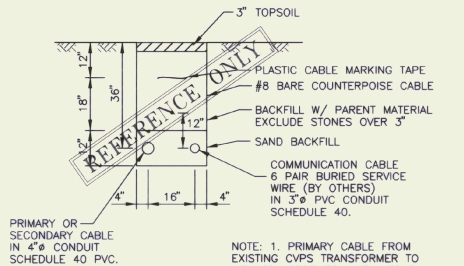
Sheet 60 Of 60

Sheet No.

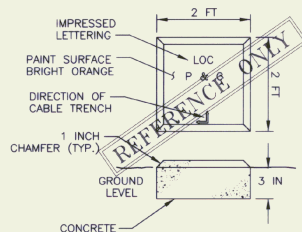


**D CONDUIT TRENCH FROM LOCALIZER TO SHELTER**

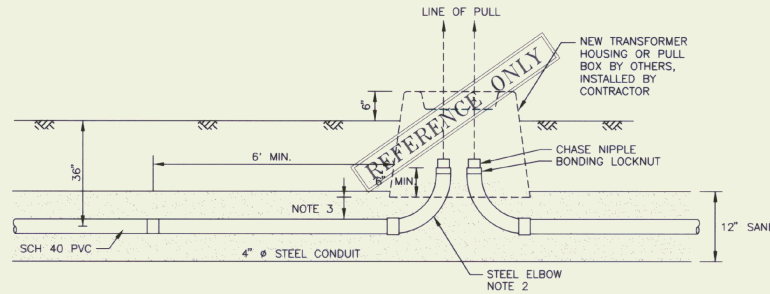
NOTE - PROVIDE 20' CABLE SLACK - EACH END OF ALL CABLES. FOR FUTURE CONNECTION - BY OTHERS. MOUND TOPSOIL SLIGHTLY TO ACCOUNT FOR BACKFILL SETTLEMENT.



**E PRIMARY/SECONDARY CONDUIT TRENCH**

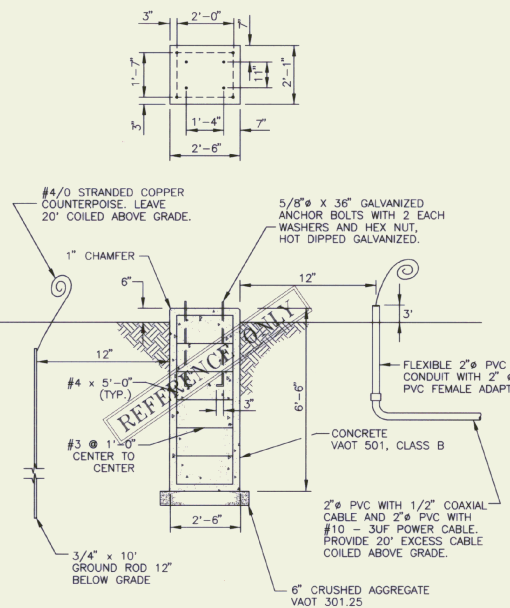


**F CABLE MARKER**

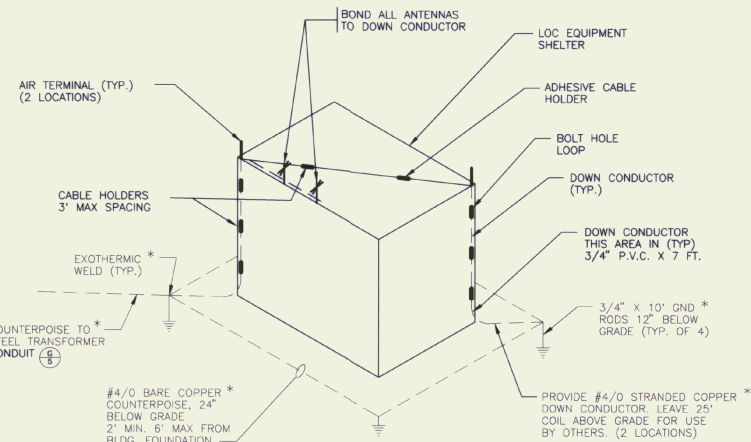


**G PULL BOX SECTION**

- NOTES:
1. ELBOWS TO BE ALIGNED TO ALLOW STRAIGHT PULL THROUGH BOX PAD OPENING
  2. USE 90° ELBOWS
  3. PROVIDE SUFFICIENT CLEARANCE SO BOX PAD DOES NOT CONTACT ELBOWS
  4. INSTALL PULL WIRE IN CONDUIT (500# MIN RATING)
  5. SEAL CONDUITS WITH APPROVED DUCT SEAL AFTER CABLES INSTALLED
  6. BOND STEEL CONDUIT TO GROUND GRID. SEE DETAIL ④
  7. PROVIDE DRAINAGE AWAY FROM TRANSFORMER HOUSING
  8. PLACE 3\"/>



**H PIER FOUNDATION FOR DME ANTENNA MAST**

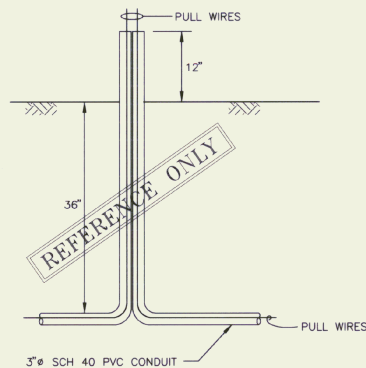


**I LIGHTNING PROTECTION DETAIL**

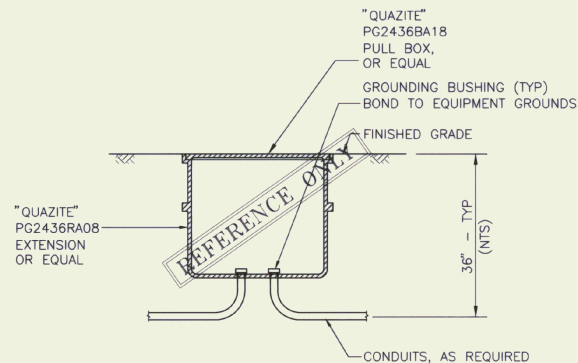
**GENERAL NOTES**

1. ALL DISTURBED AREAS TO BE REGRADED, TOPSOILS (3\"/>

|                                                                                 |                                                    |                                    |                                                             |
|---------------------------------------------------------------------------------|----------------------------------------------------|------------------------------------|-------------------------------------------------------------|
| <b>RUTLAND STATE AIRPORT</b><br>CLARENDON, VERMONT                              |                                                    | <b>LOCALIZER SITE DETAILS</b>      |                                                             |
| DESIGNED BY: <b>URS Greiner, Inc.</b><br>3 MARCUS BOULEVARD<br>ALBANY, NEW YORK | DATE: 5/5/97<br>SCALE: HOR. - NONE<br>VERT. - NONE | SHEET NO. 01 OF 05<br>SHEET NO. 61 | JOB NO. 11V40113.00-A<br>REV. DATE DESCRIPTION<br>1. 5/5/97 |

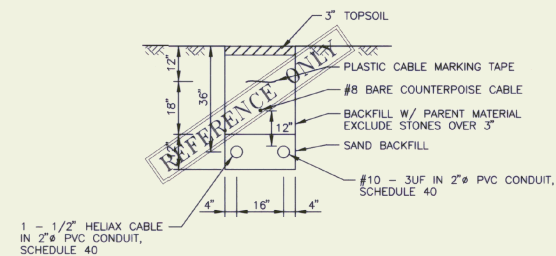


**J TELEPHONE STUB-UP**  
SCALE: NONE

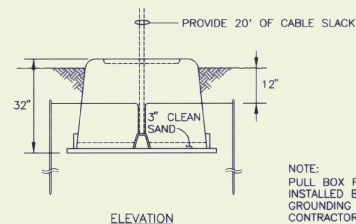
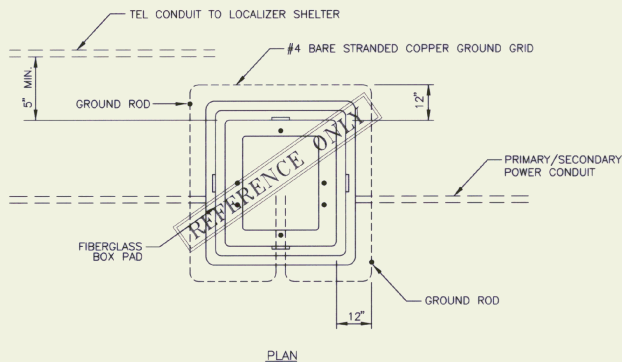


NOTE:  
PROVIDE LOOPS IN HANDHOLES WHERE  
NO SPLICES OCCUR. TERMINATE SPARE  
COAXIAL CABLE IN HANDHOLE WITH 10  
FEET OF EXTRA CABLE COILED AND TAPED.

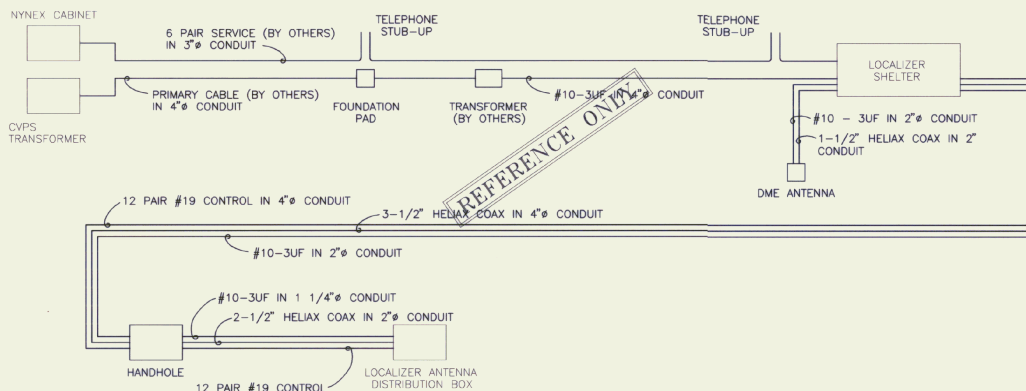
**O POWER & COMMUNICATION  
HANDHOLE DETAIL**  
SCALE: 1"=1'-0"



**P CONDUIT TRENCH FROM DME TO SHELTER**  
SCALE: NONE



**K PULL BOX DETAILS**  
SCALE: NONE



**Q WIRING DIAGRAM**  
SCALE: NONE



| REV. | DATE   | DESCRIPTION |
|------|--------|-------------|
| 1    | 1/1/94 | AS          |
| 2    | 1/1/94 | AS          |

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT

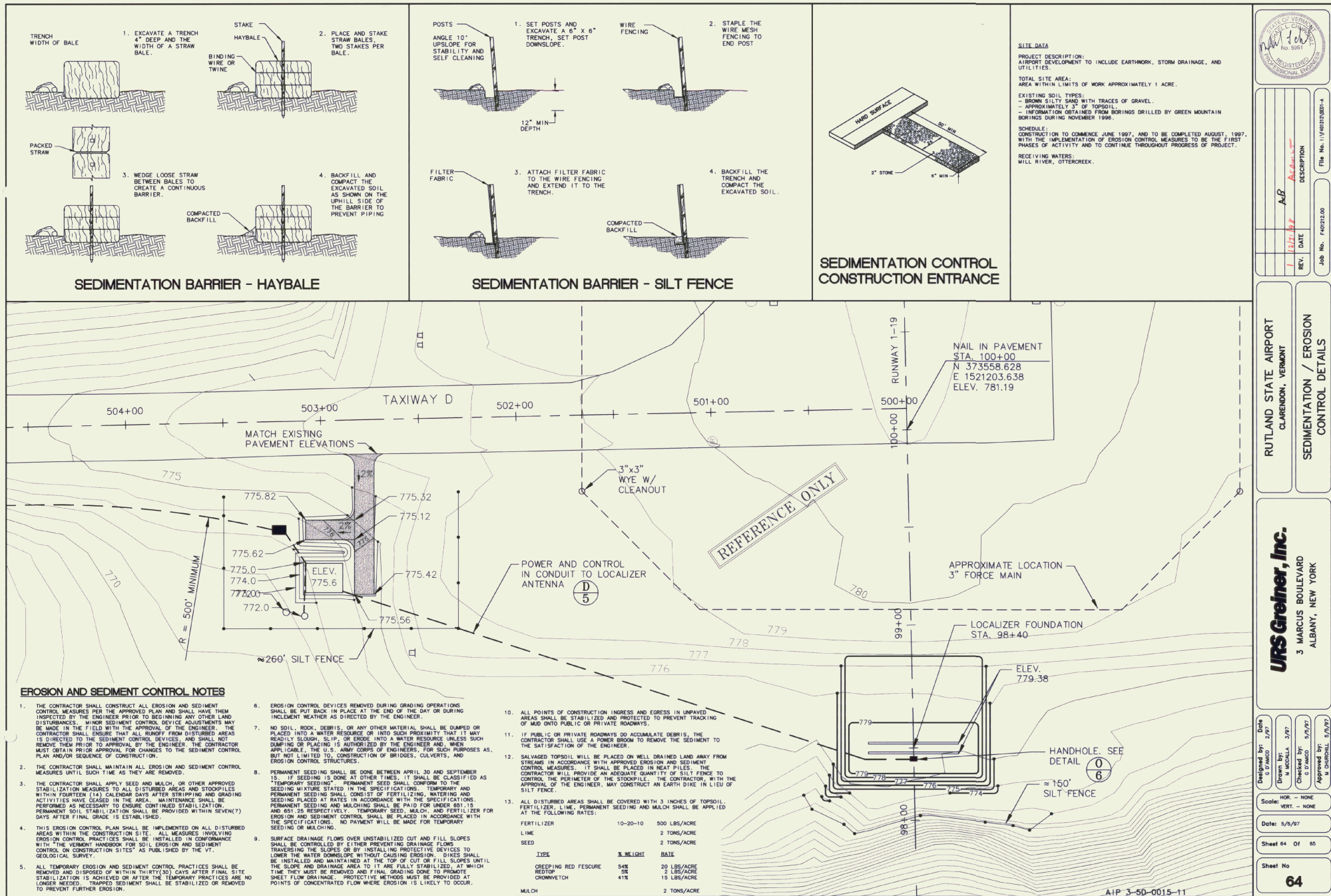
**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

|              |        |
|--------------|--------|
| Designed by: | DATE   |
| Checked by:  | 1/1/94 |
| Approved by: | 1/1/94 |

Scale: HOR. - NONE  
VERT. - NONE  
Date: 1/1/94  
Sheet 62 Of 65  
Sheet No







STATE OF VERMONT  
No. 5591  
REGISTERED PROFESSIONAL ENGINEER

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

TOTAL SITE AREA: AREA WITHIN LIMITS OF WORK APPROXIMATELY 1 ACRE.

EXISTING SOIL TYPES: - BROWN SILTY SAND WITH TRACES OF GRAVEL. - APPROXIMATELY 3" OF TOPSOIL. - INFORMATION OBTAINED FROM BORINGS DRILLED BY GREEN MOUNTAIN BORINGS DURING NOVEMBER 1996.

SCHEDULE: CONSTRUCTION TO COMMENCE JUNE 1997, AND TO BE COMPLETED AUGUST, 1997, WITH THE IMPLEMENTATION OF EROSION CONTROL MEASURES TO BE THE FIRST PHASES OF ACTIVITY AND TO CONTINUE THROUGHOUT PROGRESS OF PROJECT.

RECEIVING WATERS: MILL RIVER, OTTERCREEK.

REV: DATE DESCRIPTION

Job No. 11/040131001-4

File No. 11/040131001-4

RUTLAND STATE AIRPORT  
CLARENDON, VERMONT

SEDIMENTATION / EROSION  
CONTROL DETAILS

**URS Greiner, Inc.**  
3 MARCUS BOULEVARD  
ALBANY, NEW YORK

Designed by: C. J. ANDERSON  
Drawn by: M. MCALLA  
Checked by: C. J. ANDERSON  
Approved by: M. CHURCHILL

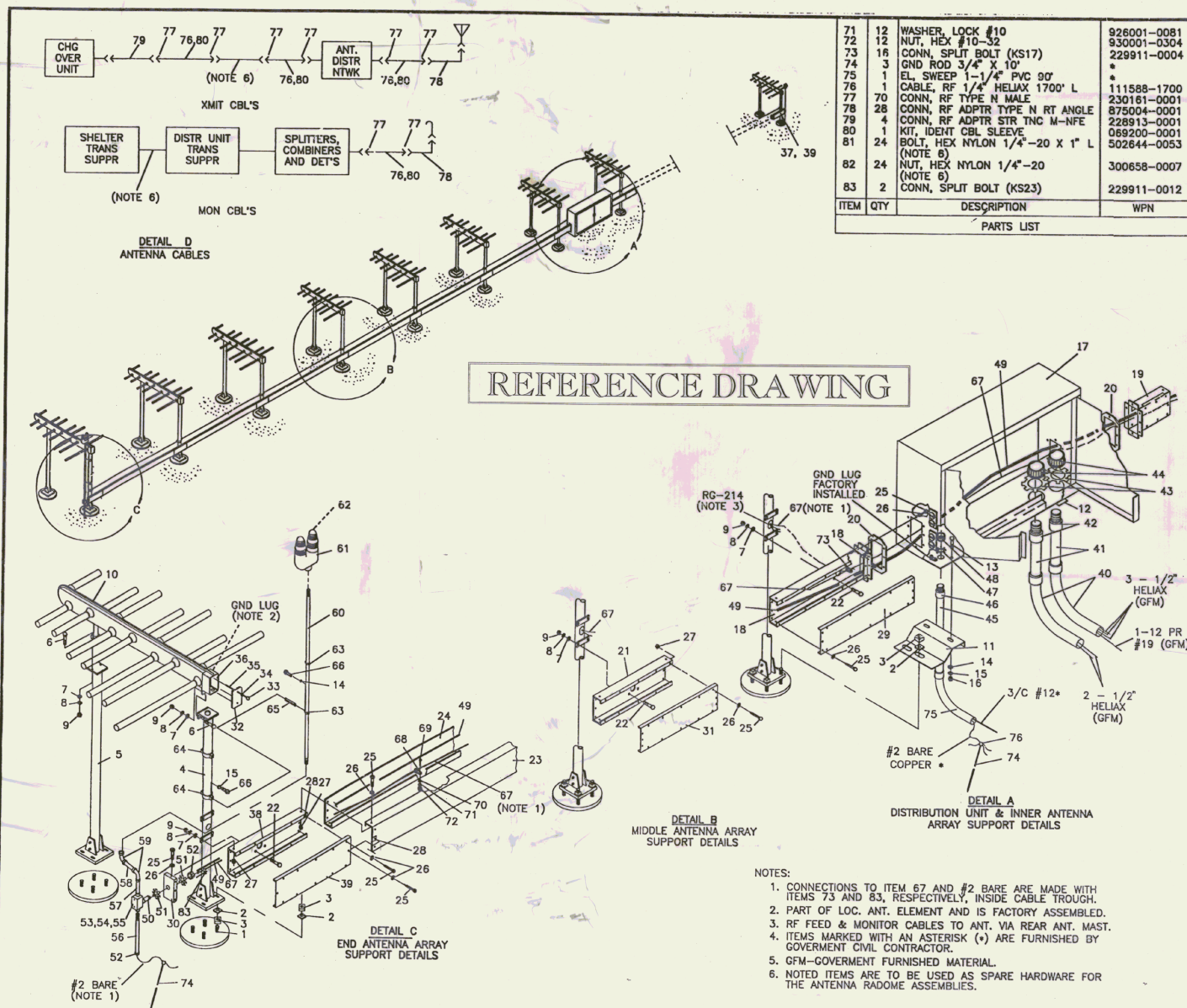
Date: 5/5/97

Scale: HOR - NONE  
VERT - NONE

Sheet 64 Of 65

Sheet No. 64





- NOTES:
1. CONNECTIONS TO ITEM 67 AND #2 BARE ARE MADE WITH ITEMS 73 AND 83, RESPECTIVELY, INSIDE CABLE TROUGH.
  2. PART OF LOC. ANT. ELEMENT AND IS FACTORY ASSEMBLED.
  3. RF FEED & MONITOR CABLES TO ANT. VIA REAR ANT. MAST.
  4. ITEMS MARKED WITH AN ASTERISK (\*) ARE FURNISHED BY GOVERNMENT CIVIL CONTRACTOR.
  5. GFM-GOVERNMENT FURNISHED MATERIAL.
  6. NOTED ITEMS ARE TO BE USED AS SPARE HARDWARE FOR THE ANTENNA RADOME ASSEMBLIES.

| DATE                                                                                                                | DESCRIPTION               | CHECKED      | APPROVED |
|---------------------------------------------------------------------------------------------------------------------|---------------------------|--------------|----------|
| DEPARTMENT OF TRANSPORTATION<br>FEDERAL AVIATION ADMINISTRATION<br>WASHINGTON, D.C. 20590                           |                           |              |          |
| INSTRUMENT LANDING SYSTEM<br>CAPTURE EFFECT LOCALIZER<br>ANTENNA ARRAY<br>INSTALLATION DETAILS<br>TYPE NO. FA-10582 |                           |              |          |
| REVIEWED BY                                                                                                         | SUBMITTED BY              | APPROVED BY  |          |
| DESIGNED BY                                                                                                         | ISSUED BY                 | DATE: 7-1-94 |          |
| CHECKED BY                                                                                                          | AIRWAY FACILITIES SERVICE | REV. 112     |          |
|                                                                                                                     |                           | D-6288-18    |          |