

| ITEM NUMBERS | APPROX. QUANTITIES | ITEMS AND UNIT PRICES BID WRITTEN IN WORDS |
|--------------|--------------------|--|
|              |                    | Clearing and Grubbing                      |
| 201.10       | 1 L.S.             |  |
|              |                    | Common Excavation                          |
| 201.15       | 3430 CY            |  |
|              |                    | Solid Rock Excavation                      |
| 203.16       | 1 CY               | NOTE: Not a Bid Item                       |
|              |                    | Muck Excavation                            |
| 203.20       | 1417 C.Y.          |  |
|              |                    | Sand Borrow                                |
|              |                    | *Estimated Quantity                        |
| 203.31       | 500 CY             |  |
|              |                    | Circular Borrow                            |
| 203.32       | 3693 C.Y.          |  |

| ITEM NUMBERS | APPROX. QUANTITIES | ITEMS AND UNIT PRICES BID WRITTEN IN WORDS |
|--------------|--------------------|--|
|              |                    | Trench Excavation of Earth                 |
| 204.20       | 1577 CY            |  |
|              |                    | Trench Excavation of Rock                  |
| 204.21       | 1 CY               | NOTE: Not a Bid Item                       |
|              |                    | General Backfill for Structures            |
| 204.30       | 1 CY               | NOTE: Not a Bid Item                       |
|              |                    | Subbase of Gravel                          |
| 301.15       | 4746 CY            |  |
|              |                    | Subbase of Crushed Gravel (Fine Graded)    |
| 301.26       | 966 CY             |  |
|              |                    | Bidirectional Concrete Pavement            |
| 406.25       | 2015 Tons          |  |

| ITEM NUMBERS | APPROX. QUANTITIES | ITEMS AND UNIT PRICES BID WRITTEN IN WORDS   |
|--------------|--------------------|--|
|              |                    | Concrete, Class B  |
| 501.25       | 45 C.Y.            |  |
|              |                    | Reinforcing Steel  |
| 507.15       | 5714 Lb.           |  |
|              |                    | Asphalt Coated Corrugated Galvanized Metal Pipe (2 2/3" x 4" corrugations) 12 Inch, 0.064" T.                        |
| 601.1332     | 30 L. F.           |  |
|              |                    | Reinforced Concrete Pipe, 15 inch, class III   |
| 601.2613     | 1059 LF            |  |
|              |                    | Reinforced Concrete Pipe 18 inch, Class III  |
| 601.2623     | 255 L.F.           |  |
|              |                    | Metal End Sections for Asphalt Coated Corrugated Galvanized Metal Pipe (2 2/3" x 4" corrugations) 12 Inch, 0.064" T. |
| 601.6202     | 1 each             |  |

| ITEM NUMBERS | APPROX. QUANTITIES | ITEMS AND UNIT PRICES BID WRITTEN IN WORDS               |
|--------------|--------------------|--|
|              |                    | Reinforced Concrete Pipe and Section, 18 Inch, Class III |
| 601.6613     | 2 each             |  |
|              |                    | Concrete Manhole with Cast Iron Cover                    |
| 609.11       | 1 each             |  |
|              |                    | Cast Iron Gate with Frame, Type A                        |
| 604.45       | 22 each            |  |
|              |                    | 6" Underdrain  |
| 609.101      | 300 LF             |  |
|              |                    | Underdrain Carrier Pipe                                  |
| 605.151      | 100 LF             |  |
|              |                    | Underdrain Flushing Basins                               |
| 605.95       | 2 each             |  |

| ITEM NUMBERS | APPROX. QUANTITIES | ITEMS AND UNIT PRICES BID WRITTEN IN WORDS    |
|--------------|--------------------|---|
|              |                    | Dust Control with Water                       |
| 609.10       | 300 GAL.           |   |
|              |                    | Dust and Ice Control with Calcium Chloride    |
| 609.15       | 12 Ton             |   |
|              |                    | Stone Fill, Type I                            |
| 613.10       | 15 c.y.            |   |
|              |                    | Vertical Granite Curb                         |
| 616.16       | 5990 LF            |   |
|              |                    | Portland Cement Concrete Sidewalk, 5 inch     |
| 618.10       | 200 S.Y.           |   |
|              |                    | Insulation Board (unit = thousand board feet) |
| 622.10       | .06 P.F.B.F.       |   |

| ITEM NUMBERS | APPROX. QUANTITIES | ITEMS AND UNIT PRICES BID WRITTEN IN WORDS |
|--------------|--------------------|--|
|              |                    | 1" Plastic Water Pipe rigid                |
| 629.33       | 385 L.F.           |  |
|              |                    | Uniformed Traffic Officer                  |
| 630.10       | 40 HRS             |  |
|              |                    | Flagpersons                                |
| 630.15       | 360 HRS            |  |
|              |                    | Field Office - Engineers                   |
| 631.10       | 1 L.S.             |  |
|              |                    | Mobilization                               |
| 635.10       | Lump Sum           |  |
|              |                    | Durable 4" ReflectORIZED White Lines       |
| 646.60       | 56/5 LF            |  |

| ITEM NUMBERS | APPROX. QUANTITIES | ITEMS AND UNIT PRICES BID WRITTEN IN WORDS    |
|--------------|--------------------|---|
|              |                    | Durable 4" ReflectORIZED Yellow Lines         |
| 646.61       | 1500 LF            |   |
|              |                    | Durable 8" ReflectORIZED White Lines          |
| 646.62       | 70 L.F.            |   |
|              |                    | Durable Crosswalk Marking with Diagonal Lines |
| 646.63       | 24 L.F.            |   |
|              |                    | Durable 24" Stop Bar                          |
| 646.64       | 24 L.F.            |   |
|              |                    | Durable Arrow Markings                        |
| 646.65       | 34 Each            |   |
|              |                    | Seed  |
|              |                    | A = 180 lbs                                   |
|              |                    | B = 65 lbs                                    |
| 651.10       | 245 lb             |   |

| ITEM NUMBERS | APPROX. QUANTITIES | ITEMS AND UNIT PRICES BID WRITTEN IN WORDS |
|--------------|--------------------|--|
|              |                    | Fertilizer                                 |
| 651.15       | 1840 lb            |  |
|              |                    | Agricultural Limestone                     |
| 651.20       | 3.8 T              |  |
|              |                    | Hay Mulch                                  |
| 651.25       | 3.8 T              |  |
|              |                    | Topsoil                                    |
| 653.10       | 800 c.y.           |  |
|              |                    | Erosion Matting                            |
| 654.20       | 2000 S.Y.          |  |
|              |                    | Austrian Pine (Pinus nigra) 5'-6'          |
| 656.123      | 4 each             |  |

| ITEM NUMBERS | APPROX. QUANTITIES | ITEMS AND UNIT PRICES BID WRITTEN IN WORDS   |
|--------------|--------------------|--|
|              |                    | Dark Am. Arborvitae (Thuja Occidentalis Nigra) 80 @ 2'-2 1/2' in height 12 @ 3'-4' in height |
| 656.1541     | 96 EACH            |  |
|              |                    | Greensave Japanese Yew (Taxus cuspidata "Greenwave") 12'-15'                                 |
| 656.154      | 28 each            |  |
|              |                    | Pinetribdom (Rhododendron multiflorum) 15'-24'   |
| 656.262      | 4 each             |  |
|              |                    | Japanese Flowering Crabapple (Malus floribunda) 4'-5'  |
| 656.370      | 8 each             |  |
|              |                    | Red Oak (Quercus borealis) 9'-11'  |
| 656.384      | 8 each             |  |
|              |                    | Transplanting Evergreen Trees  |
| 656.505      | 0                  |  |


| ITEM NUMBERS | APPROX. QUANTITIES | ITEMS AND UNIT PRICES BID WRITTEN IN WORDS |
|--------------|--------------------|--|
|              |                    | Traffic Signs, Type A                      |
| 675.20       | 107.2 S.F.         |  |
|              |                    | Traffic Signs, Type B                      |
| 675.25       | 102 SF             |  |
|              |                    | Traffic Sign Posts, Type A                 |
| 675.35       | 1209 lb            |  |
|              |                    | Traffic Sign Posts, Type C                 |
| 675.37       | 56 lb              |  |
|              |                    | Street Lighting                            |
| 674.15       | Lump Sum           |  |
|              |                    | Plastic Duct, Type I                       |
| 863.01       | 300 L.F.           |  |

| ITEM NUMBERS | APPROX. QUANTITIES | ITEMS AND UNIT PRICES BID WRITTEN IN WORDS |
|--------------|--------------------|--|
|              |                    | Multiple Plastic Duct-in Earth, Type I     |
| 863.02       | 520 L.F.           |  |
|              |                    | Single Duct Concrete Encased               |
| 863.03       | 1 L.F.             | NOTE: Not a Bid Item                       |
|              |                    | Multiple Duct, Concrete Encased            |
| 863.04       | 355 L.F.           |  |
|              |                    | Steel Conduit, Single                      |
| 863.05       | 1 L.F.             | NOTE: Not a Bid Item                       |
|              |                    | Steel Conduit, Multiple                    |
| 863.06       | 1 L.F.             | NOTE: Not a Bid Item                       |

| ITEM NUMBERS | APPROX. QUANTITIES | ITEMS AND UNIT PRICES BID WRITTEN IN WORDS                   |
|--------------|--------------------|--|
|              |                    | Install Septic Tank  |
| 863.07       | Lump Sum           |  |
|              |                    | Remove Dry Well  |
| 863.08       | Lump Sum           |  |
|              |                    | Relocation of Existing Tower Mounted Airport Rotating Beacon |
| 863.10       | Lump Sum           |  |
|              |                    | New Sewage Pump Station                                      |
| 863.11       | Lump Sum           |  |
|              |                    | Installation of Miscellaneous Electrical Facilities          |
| 863.12       | Lump Sum           |  |

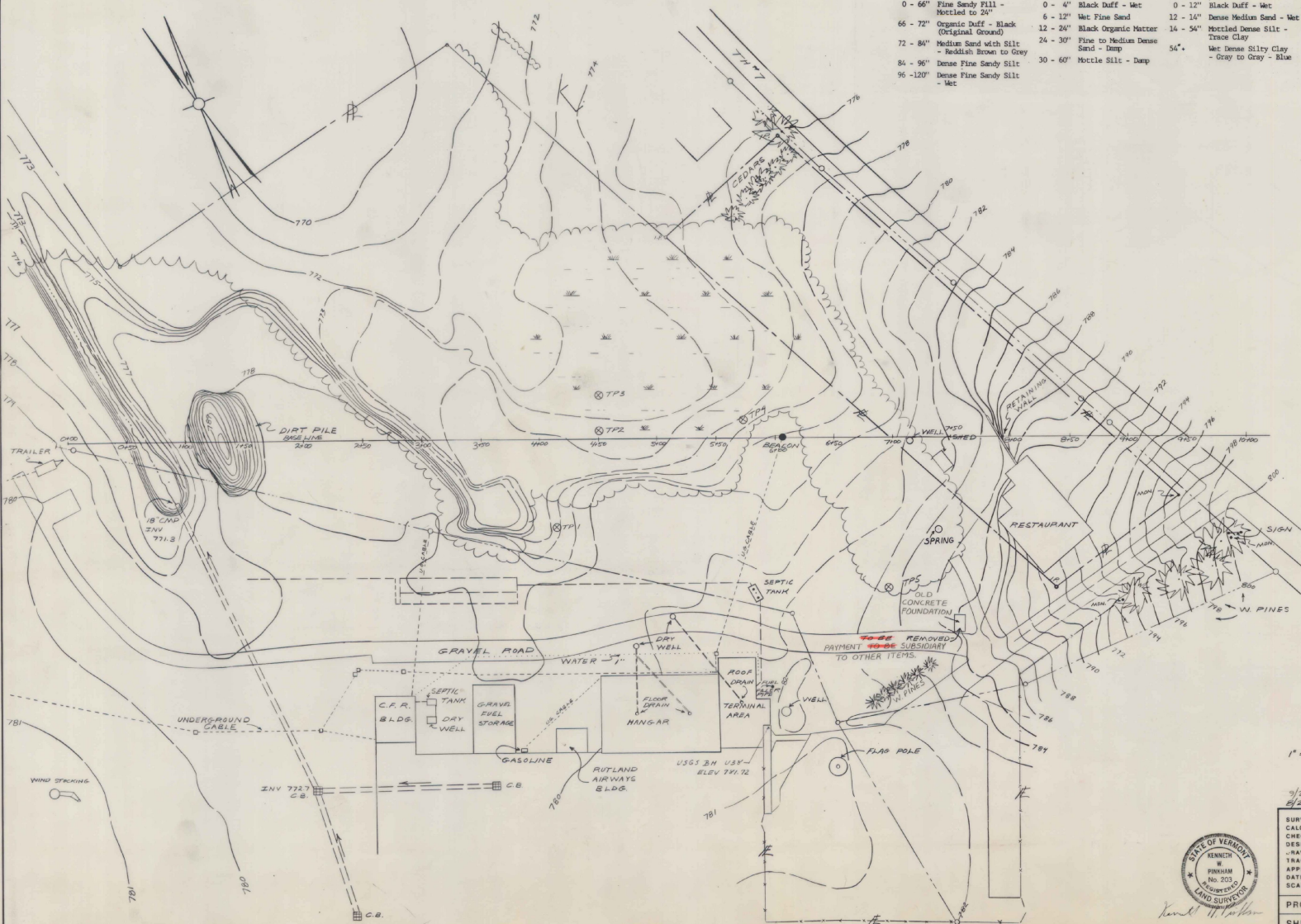
NOTE: Some of the Quantities shown above have been revised, to reflect the deletion of the Northern Access rd. from this contract. (See sheet 3 of 44)

AS BUILT PLATS  
I hereby certify that the construction required by this set of drawings has been completed in accordance with the plans.  
By *Dale R. Poston* District Engineer  
Date *5 Feb 87*

|   |  |
|---|--|
| SURVEY: CALCULATED, CHECKED<br>DESIGN: DRAWN<br>TRACKED: APPROVED<br>DATE: SCALE: | <b>QUANTITY SHEET</b><br>RUTLAND STATE AIRPORT<br>CLARENDON, VERMONT<br>AIP 3-50-0015-02   |
|   | <br>PENNHAM ENGINEERING ASSOCIATES, INC.<br><small>Road 24, Tull Center P.O. Box 485 Williston, Vermont 05495</small> |
|   | PROJ. NO. 5181   |
|   | SHEET 1 OF 44  |

TEST PIT INFORMATION - PITS DUG 7-15-83

| TP #1  | TP #2                                     | TP #3  | TP #4  | TP #5  |
|--|---|--|--|--|
| 0 - 66" Fine Sandy Fill - Mottled to 24"               | 0 - 4" Black Duff - Wet                   | 0 - 12" Black Duff - Wet                       | 0 - 12" Black Duff - Wet                                 | 0 - 4" Brown Topsoil                         |
| 66 - 72" Organic Duff - Black (Original Ground)        | 6 - 12" Wet Fine Sand                     | 12 - 14" Dense Medium Sand - Wet               | 12 - 36" Dense Medium Sand - Wet - Gray to Reddish Brown | 4 - 12" Fine Sandy Fill - Dump               |
| 72 - 84" Medium Sand with Silt - Reddish Brown to Grey | 12 - 24" Black Organic Matter             | 16 - 54" Morticed Dense Silt - Trace Clay      | 36 - 60" Fine Sandy Silt - Wet - Bluish                  | 12 - 28" Black Organic Matter                |
| 84 - 96" Dense Fine Sandy Silt                         | 24 - 30" Fine to Medium Dense Sand - Dump | 54" Wet Dense Silty Clay - Gray to Gray - Blue | 60" Stoney Dense Till                                    | 28 - 96" Mottled Fine Sand - Dump Wet at 78" |
| 96 - 120" Dense Fine Sandy Silt - Wet                  | 30 - 60" Mottle Silt - Dump               |  |  |  |



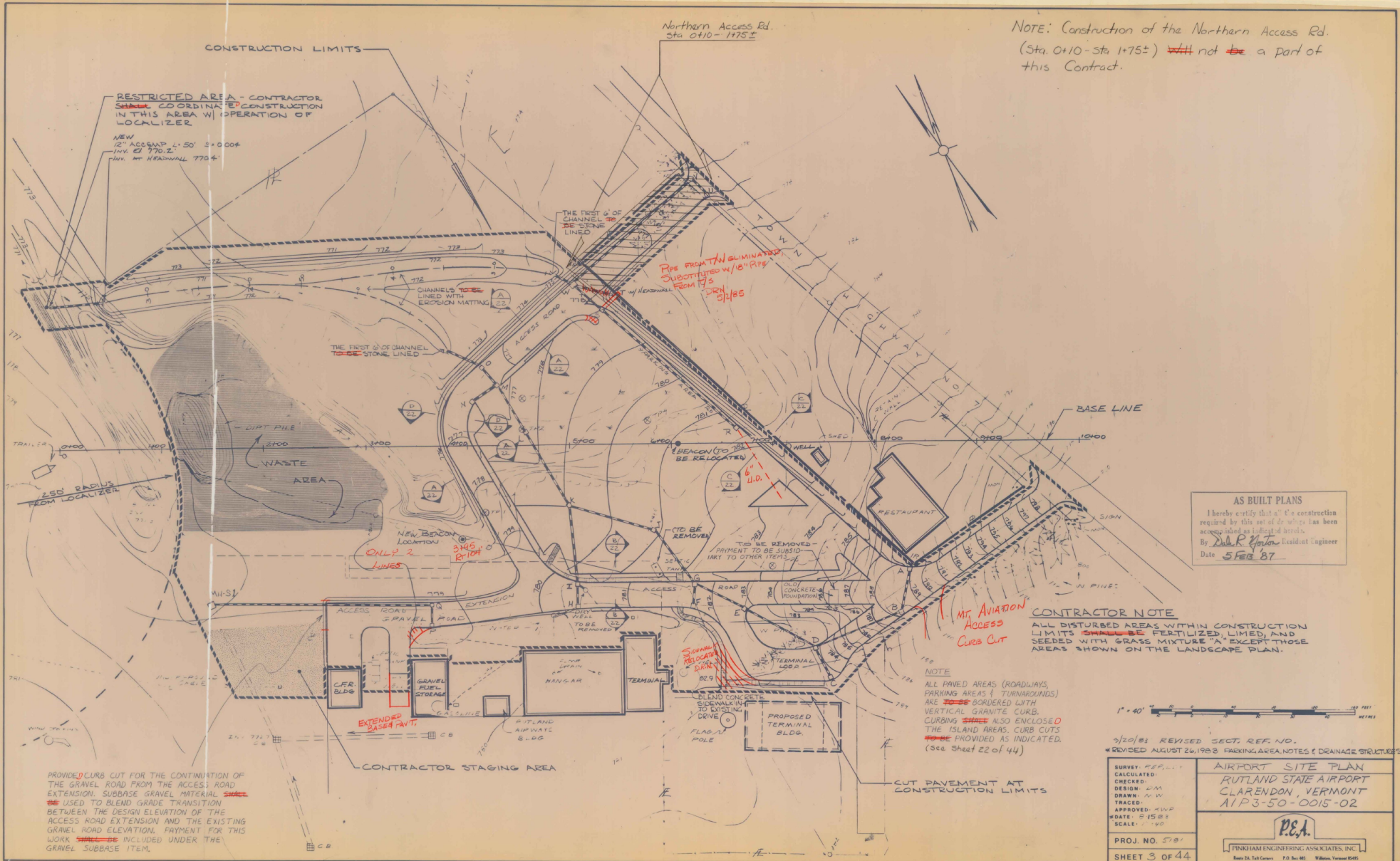
**NOTE:**  
 PROPERTY LINE IS APPROXIMATE ONLY. INFORMATION IS TAKEN FROM PLAN ENTITLED: STATE OF VERMONT AGENCY OF TRANSPORTATION PROJECT RUTLAND NO. AIR 23-2012

**AS BUILT PLANS**  
 I hereby certify that all the work on a project by this set of drawings has been as shown on the field notes.  
 By *David R. Kenner* Resident Engineer  
 Date *5/28/87*

1" = 40'  
 3/20/83 REMOVED STATIONING TABLE  
 6/26/83 ADDED NOTE



|   |  |
|---|--|
| SURVEY: REFLDY<br>CALCULATED:<br>CHECKED:<br>DESIGN: DM<br>DRAWN: MMW<br>TRACED:<br>APPROVED: MWP<br>DATE: 6/26/83<br>SCALE: 1" = 40' | <b>EXISTING FACILITIES</b><br>RUTLAND STATE AIRPORT<br>CLARENDON, VERMONT<br>A/P3-50-0015-02<br><br>PINKHAM ENGINEERING ASSOCIATES, INC.<br>Route 24, Tall Corners P.O. Box 65, Williston, Vermont 05691 |
| PROJ. NO. 5781<br>SHEET 2 OF 44   |  |



NOTE: Construction of the Northern Access Rd. (Sta. 0+10 - Sta. 1+75±) ~~is~~ not ~~be~~ a part of this Contract.

RESTRICTED AREA - CONTRACTOR SHALL COORDINATE CONSTRUCTION IN THIS AREA WITH OPERATION OF LOCALIZER

NEW 12" ACCESS 4.50' 3" 0004 INV. @ 770.2' INV. AT HEADWALL 770.4'

Northern Access Rd. Sta 0+10 - 1+75±

THE FIRST 2' OF CHANNEL TO BE STONE LINED

Pipe front to be eliminated Substituted w/ 6" Pipe From 175' DEN. 2/16/85

THE FIRST 2' OF CHANNEL TO BE STONE LINED

ONLY 2 LINES

MT AVIATION Access CURB CUT

AS BUILT PLANS  
I hereby certify that a 1/2" construction required by this set of drawings has been accurately shown on this set of plans.  
By *John R. Weston* Resident Engineer  
Date 5 FEB 87

CONTRACTOR NOTE  
ALL DISTURBED AREAS WITHIN CONSTRUCTION LIMITS SHALL BE FERTILIZED, LIMED, AND SEEDED WITH GRASS MIXTURE "A" EXCEPT THOSE AREAS SHOWN ON THE LANDSCAPE PLAN.

NOTE  
ALL PAVED AREAS (ROADWAYS, PARKING AREAS & TURNOVERWAYS) ARE BORDERED WITH VERTICAL GRANITE CURB. CURBING SHALL ALSO ENCLOSE THE ISLAND AREAS. CURB CUTS SHALL BE PROVIDED AS INDICATED. (See Sheet 22 of 44)

1" = 40'

3/20/85 REVISED SECT. REF. NO. REVISED AUGUST 26, 1985 PARKING AREA, NOTES & DRAINAGE STRUCTURES

SURVEY: REP. L. I.  
CALCULATED:  
DESIGN: J.M.  
DRAWN: K.W.  
TRACED:  
APPROVED: J.W.P.  
DATE: 5/15/85  
SCALE: 1" = 40'

AIRPORT SITE PLAN  
RUTLAND STATE AIRPORT  
CLARENDON, VERMONT  
AIP3-50-0015-02

P.E.A.

PENKHAM ENGINEERING ASSOCIATES, INC.  
Route 24, Tullahoma, P.O. Box 485, Tullahoma, Vermont 05485

PROJ. NO. 5781  
SHEET 3 OF 44

PROVIDED CURB CUT FOR THE CONTINUATION OF THE GRAVEL ROAD FROM THE ACCESS ROAD EXTENSION. SUBBASE GRAVEL MATERIAL SHALL BE USED TO BLEND GRADE TRANSITION BETWEEN THE DESIGN ELEVATION OF THE ACCESS ROAD EXTENSION AND THE EXISTING GRAVEL ROAD ELEVATION. PAYMENT FOR THIS WORK SHALL BE INCLUDED UNDER THE GRAVEL SUBBASE ITEM.

CONTRACTOR STAGING AREA

CUT PAVEMENT AT CONSTRUCTION LIMITS

| DUCT SCHEDULE         |                 |                          |
|-----------------------|-----------------|--------------------------|
| LOCATION              | SERVICE         | DUCT TYPE                |
| OFF ROAD GRASSY AREAS | POWER TELEPHONE | PLASTIC                  |
| UNDER ACCESS ROAD     | POWER TELEPHONE | CONCRETE ENCASED PLASTIC |
| UNDER PARKING AREA    | POWER TO LIGHTS | STEEL CONDUIT            |

| LEGEND |   |
|--------|---|
| P 3/4" | POWER (UNDERGROUND) SINGLE DUCT           |
| T 3/4" | TELEPHONE (UNDERGROUND) SINGLE DUCT       |
| M 1/2" | POWER/TEL. (UNDERGROUND) MULTIPLE DUCT    |
| F      | FORCE MAIN                                |
| W      | WATER LINE                                |
| S      | SANITARY SEWER                            |
| ---    | STORM DRAIN                               |
| X      | TO BE REMOVED                             |
| =====  | CONCRETE ENCASED UTILITY TO WEA TELEPHONE |

ALL CONDUIT ~~SHALL~~ BE INSTALLED FOR THE BEACON WIRING, THE LIGHTING WIRING, AND THE PUMP STATION WIRING. ~~SHALL~~ BE STEEL CONDUIT AT THE DIAMETERS SPECIFIED, WHERE THE STEEL CONDUIT IS REQUIRED TO CROSS UNDER THE ACCESS ROAD THE CONDUIT ~~SHALL~~ BE ENCASED IN CONCRETE. ALL CONDUIT AND CONCRETE FOR ENCASEMENT ~~SHALL~~ BE PAID FOR UNDER THE RESPECTIVE LUMP SUM ITEM. SEE SHEETS 23 & 24 FOR ADDITIONAL DETAILS.


ESTIMATED QUANTITIES FOR THESE CONDUITS ARE AS FOLLOWS:

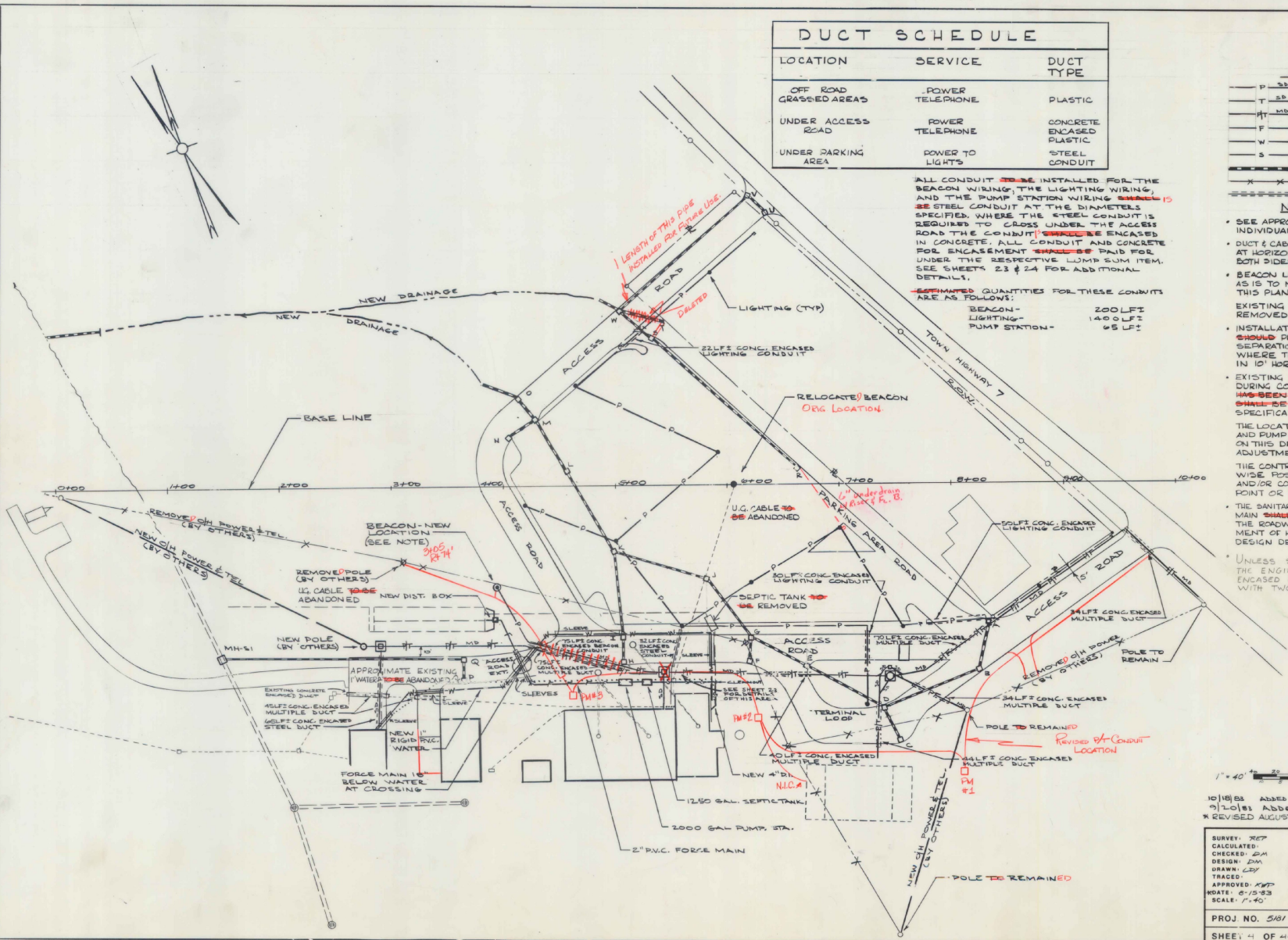
|                     |         |
|---------------------|---------|
| BEACON - LIGHTING - | 200 LFT |
| PUMP STATION -      | 140 LFT |
|                     | 65 LFT  |

- NOTES**
- SEE APPROPRIATE DETAIL SHEETS FOR INDIVIDUAL UTILITIES.
  - DUCT & CABLE MARKERS ARE TO BE PLACED AT HORIZONTAL CHANGES OF DIRECTION, BOTH SIDES OF ROADS, AND AS DIRECTED.
  - BEACON LIGHT AND TOWER TO BE RELOCATED AS IS TO NEW LOCATION INDICATED ON THIS PLAN - BASELINE STA. 2+95.2, 90' BT EXISTING BEACON TOWER CASE ~~SHALL~~ BE REMOVED & DISPOSED OF OFF SITE.
  - INSTALLATION OF WATER AND SEWER PIPE ~~SHOULD~~ PROVIDE FOR 12" MINIMUM VERTICAL SEPARATION AT POINTS OF CROSSING AND WHERE THE PIPES ARE PARALLEL AND WITHIN 10' HORIZONTALLY.
  - EXISTING SEPTIC TANK TO BE MAINTAINED DURING CONSTRUCTION UNTIL NEW SYSTEM ~~HAS~~ BEEN INSTALLED. DISPOSAL OF TANK ~~SHALL~~ BE IN ACCORDANCE WITH THE SPECIFICATIONS.
  - THE LOCATION OF THE NEW SEPTIC TANK AND PUMP STATION ~~SHALL~~ BE AS SHOWN ON THIS DRAWING SUBJECT TO FIELD ADJUSTMENTS MADE BY THE ENGINEER.
  - THE CONTRACTOR ~~SHALL~~ LABEL OR OTHERWISE POSITIVELY IDENTIFY EACH CABLE AND/OR CONDUIT AT EVERY TERMINAL POINT OR JUNCTION.
  - THE SANITARY SEWER LINE AND THE WATER MAIN ~~SHALL~~ BE SLEEVED WHEN WITHIN THE ROADWAY. REFER TO VERMONT DEPARTMENT OF HIGHWAYS STANDARDS D-20 FOR DESIGN DETAIL.
  - UNLESS SPECIFICALLY DIRECTED BY THE ENGINEER ~~SHALL~~ ALL CONCRETE ENCASED MULTIPLE DUCT ~~SHALL~~ BE INSTALLED WITH TWO CONDUITS.

**AS BUILT PLANS**  
 I hereby certify that the construction required by this set of plans has been accomplished as indicated herein.  
 By Dale R. Norton, Resident Engineer  
 Date 5 Feb '87

1" = 40'  
 10/18/85 ADDED CONDUIT & DUCT INFO.  
 2/20/87 ADDED CONDUIT & DUCT INFO.  
 REVISED AUGUST 29, 1988 - PARKING AREA LIGHT POLES

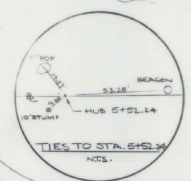
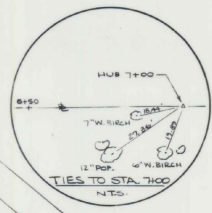
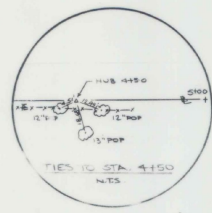
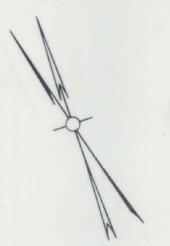
|  |   |
|--|---|
| SURVEY: REP<br>CALCULATED: GMA<br>DESIGN: DM<br>DRAWN: CBY<br>TRACED:<br>APPROVED: AWP<br>DATE: 8-10-83<br>SCALE: 1" = 40' | <b>UTILITY RELOCATION &amp; INSTALLATION</b><br>RUTLAND STATE AIRPORT<br>C. ARENDON, VERMONT<br>AIP 3-SO-0015-02<br><br>PINKHAM ENGINEERING ASSOCIATES, INC.<br><small>Roads 24, Toll Center P.O. Box 950 Rutland, Vermont 05701</small> |
| PROJ. NO. 5481<br>SHEET: 41 OF 44  |   |



| CURVE #1     | CURVE #2                   | CURVE #3                   | CURVE #4                    | CURVE #5                 | CURVE #6                 |
|--------------|----------------------------|----------------------------|-----------------------------|--------------------------|--------------------------|
| Δ 79° 20'    | Δ 106° 54' 23"             | Δ 60° 07' 24"              | Δ 13° 04' 03"               | Δ 61° 30'                | Δ 118° 30'               |
| R 52.0'      | R 28.58'                   | R 67.00'                   | R 337.90'                   | R 67.25'                 | R 22.00'                 |
| D 110.184'   | D 199.7762'                | D 85.5741'                 | D 16.9564'                  | D 85.3336'               | D 360.43546'             |
| T 33.12'     | T 38.70'                   | T 38.70'                   | T 38.70'                    | T 40.00'                 | T 20.98'                 |
| L 72.00'     | L 53.51'                   | L 75.19'                   | L 77.07'                    | L 72.16'                 | L 45.50'                 |
| PC 3472.86'  | PC 3409.04'                | PC 3409.04'                | PC 1480.57'                 | PC 6166.23'              | PC 7492.11' (ACC. RD.)   |
| PT 3484.86'  | PT 1805.1' (ACC. RD. EXT.) | PT 3473.23'                | PT 2427.66'                 | PT 6471.16'              | PT 6471.16'              |
| PI 3455.786' | PI 3447.24 BK (ACCESS RD.) | PI 3447.24 BK (ACCESS RD.) | PI 2419.27 BK (ACCESS EXT.) | PI 7406.23 BK (ACC. RD.) | PI 7406.23 BK (ACC. RD.) |
| 3481.74 AND  | 249.27 AND                 | 3440.53 AND                | 2418.94 AND                 | 6432.16 AND              | 6432.16 AND              |
| (ACC. RD.)   | (ACC. RD. EXT.)            | (ACC. RD.)                 | (ACC. RD. EXT.)             | (TERMINAL LOOP)          | (TERMINAL LOOP)          |

| CURVE #7        | CURVE #8        | CURVE #9                | CURVE #10               | CURVE #11       |
|-----------------|-----------------|-------------------------|-------------------------|-----------------|
| Δ 61° 30'       | Δ 34° 45' 55"   | Δ 102° 27' 19"          | Δ 77° 32' 41"           | Δ 13° 04' 03"   |
| R 40.00'        | R 90.00'        | R 21.00'                | R 36.00'                | R 337.90'       |
| D 143.2295'     | D 95.493'       | D 184.8226'             | D 102.3139'             | D 16.9564'      |
| T 23.79'        | T 18.78'        | T 18.78'                | T 44.98'                | T 20.98'        |
| L 42.948'       | L 30.40'        | L 55.443'               | L 75.79'                | L 38.70'        |
| PC 4784.60'     | PC 1747.33'     | PC 3490.78' (PARK AREA) | PC 3490.78' (PARK AREA) | PC 1480.57'     |
| PT 1727.54'     | PT 1783.73'     | PT 3437.12'             | PT 3440.53' (ACC. RD.)  | PT 1480.57'     |
| PI 1708.396 BK  | PI 1766.11 BK   | PI 2776.78 BK           | PI 4735.71 BK           | PI 1742.2 BK    |
| 1403.75 AND     | 1764.15 AND     | (PARK AREA RD.)         | 8475.55 AND             | 1741.87 AND     |
| (ACC. RD. EXT.) | (ACC. RD. EXT.) | (PARK AREA RD.)         | (ACC. RD. EXT.)         | (ACC. RD. EXT.) |



NOTE  
SUPERELEVATE ACCESS  
RD FROM STA 2475 TO  
STA 4922 SEE SHEETS  
G. 1 & 11

90A ROCK  
UNDERST  
100'S DEN

BASE LINE

EXISTING STONE WEN

RESTAURANT

W PINES

NOTE  
PROPERTY LINES ARE APPROXIMATE ONLY.  
INFORMATION IS TAKEN FROM PLAN  
ENTITLED: STATE OF VERMONT  
AGENCY OF TRANSPORTATION  
PROJECT RUTLAND  
NO. AIR 25-2012

AS BUILT PLANS  
This sheet is a copy of the original plan sheet as shown  
rec'd by the State of Vermont as shown  
by *S. R. Patten* Licensed Engineer  
Date 5 FEB 87

PROVIDE CURB CUT FOR THE CONTINUATION OF  
THE GRAVEL ROAD FROM THE ACCESS ROAD  
EXTENSION. SUBBASE GRAVEL MATERIAL **SHALL**  
**BE** USED TO BLEND GRADE TRANSITION  
BETWEEN THE DESIGN ELEVATION OF THE  
ACCESS ROAD EXTENSION AND THE EXISTING  
GRAVEL ROAD ELEVATION. PAYMENT FOR THIS  
WORK **SHALL** BE INCLUDED UNDER THE  
GRAVEL SUBBASE ITEM.



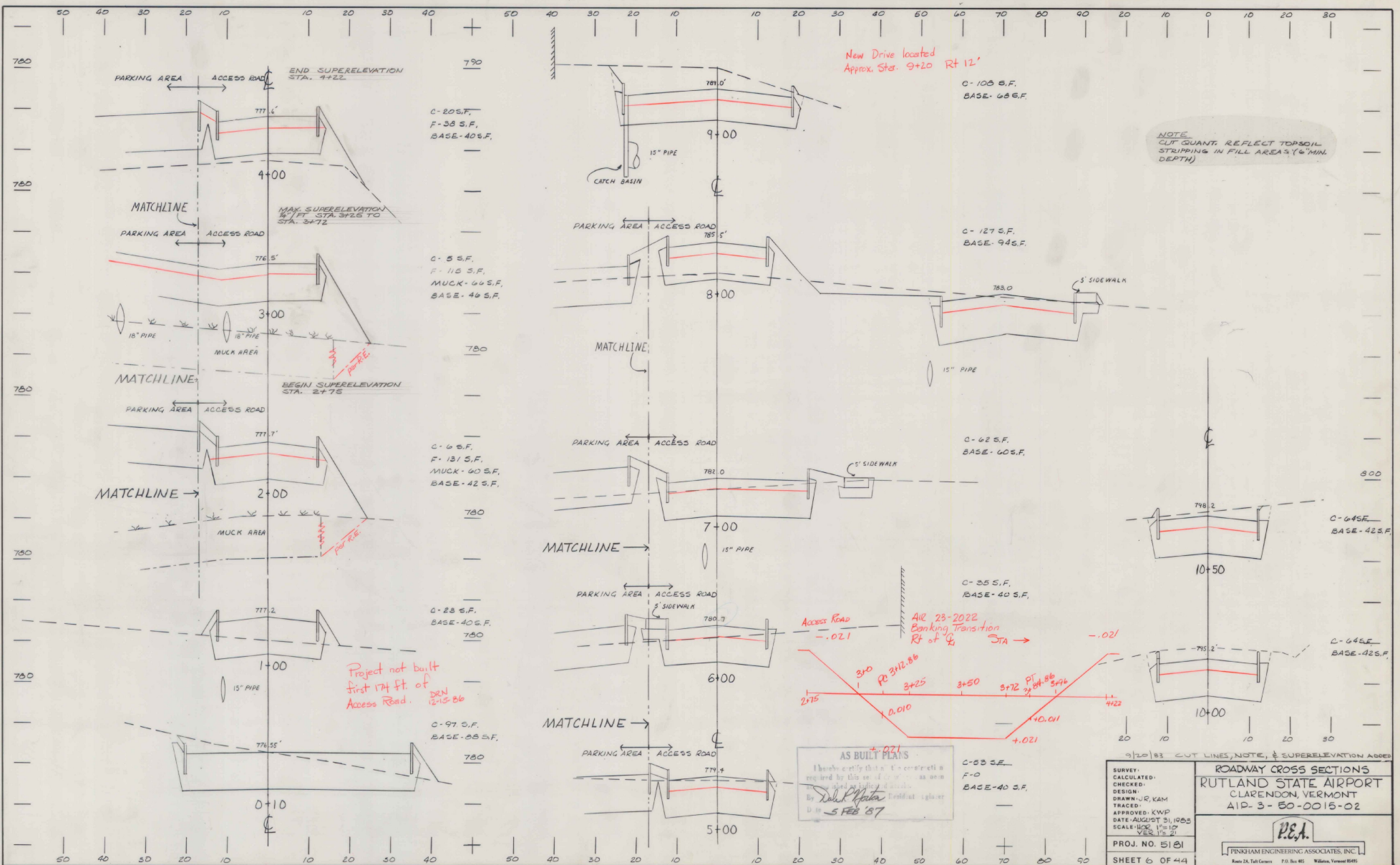
CURVE #12 = 20'  
PI = 41° 30'



9/20/83 ADDED MORE LAYOUT DETAIL  
5/26/85 REVISED PARKING LOT CONFIGURATION

|               |                         |
|---------------|-------------------------|
| SURVEY REPLY  | ACCESS ROAD LAYOUT DATA |
| CALCULATED    | RUTLAND STATE AIRPORT   |
| CHECKED       | CLARENDON, VERMONT      |
| DESIGN BY     | AIP 3-50-0015-02        |
| DRAWN BY      |                         |
| TRACED        |                         |
| APPROVED BY   |                         |
| DATE: 8-8-83  |                         |
| SCALE: 1"=40' |                         |
| PROJ. NO 5781 |                         |
| SHEET 5 OF 44 |                         |

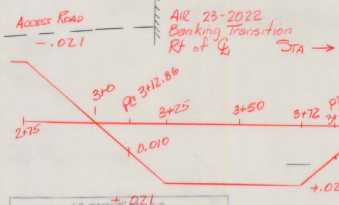
P.E.A.  
PINKHAM ENGINEERING ASSOCIATES, INC.  
Route 24, Lot 6000 P.O. Box 400 Rutland, Vermont 05701



New Drive located  
Approx. Sta. 9+20 Rt 12'

NOTE  
CLIP QUANT. REFLECT TOPSOIL  
STRIPPING IN FILL AREA 2' (6" MIN.  
DEPTH)

Project not built  
first 174 ft. of  
Access Road. DEN  
12/15/80



AS BUILT PLANS  
I hereby certify that the construction is  
required by this set of plans as shown  
on the field notes and plans.  
By *Del K. Horta* Professional Engineer  
D 10 5 FEB '87

9/20/83 CUT LINES, NOTE, & SUPERELEVATION ADDED

|          |                 |
|----------|-----------------|
| SURVEY   | CALCULATED      |
| CHECKED  | F-0             |
| DESIGN   |                 |
| DRAWN    | JR, KAM         |
| TRACED   |                 |
| APPROVED | KWP             |
| DATE     | AUGUST 31, 1983 |
| SCALE    | 1/4" = 1' - 0"  |
| VER      | 1/8" = 1' - 0"  |

PROJ. NO. 5101

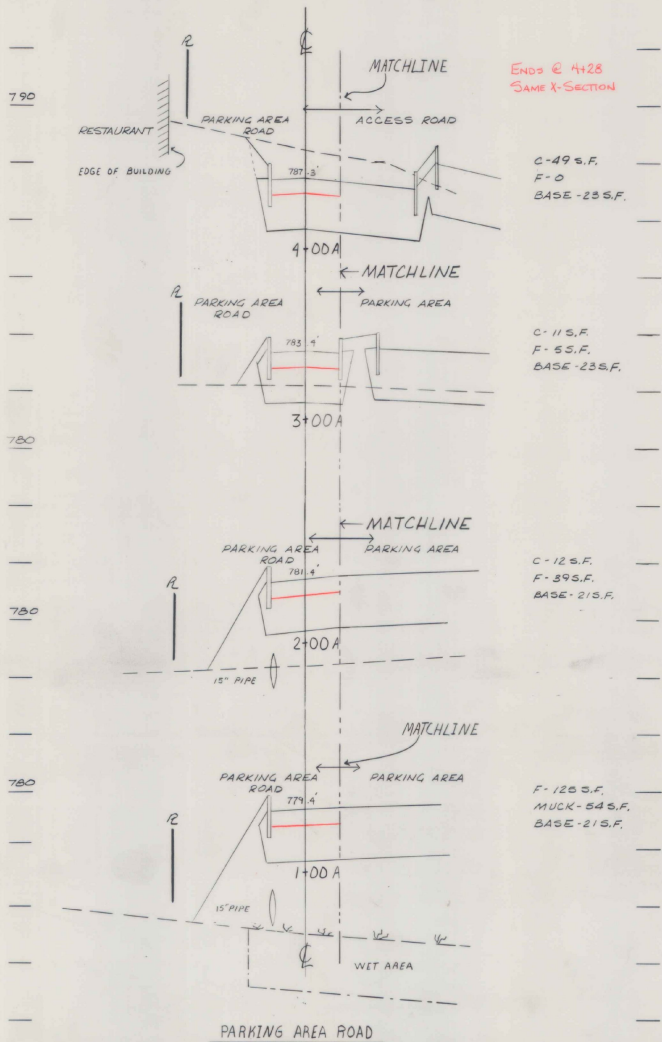
SHEET 6 OF 44

**R.E.A.**  
RUTLAND ENGINEERING ASSOCIATES, INC.  
Route 24, Tull Center P.O. Box 401, Rutland, Vermont 05701

ROADWAY CROSS SECTIONS  
RUTLAND STATE AIRPORT  
CLARENDON, VERMONT  
AIP-3-50-0015-02

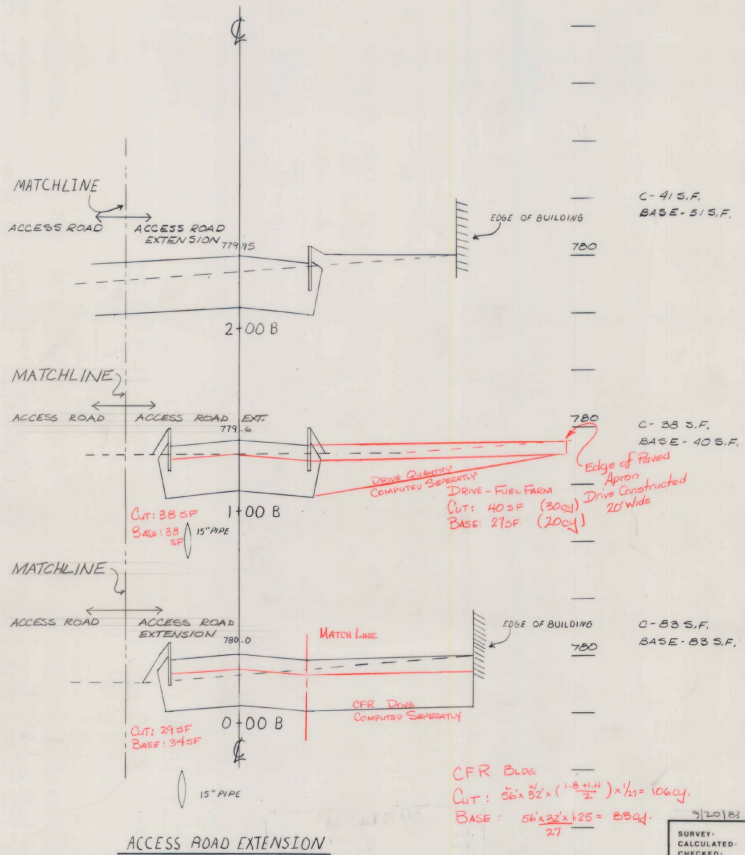
30 20 10 0 10 20 30

30 20 10 0 10 20 30 40 50



ENDS @ 4+28  
SAME X-SECTION

NOTE  
CUT QUANT. REFLECT TOPSOIL  
STRIPPING IN FILL AREAS (6\"/>



CFR Bldg  
Cut:  $56 \times 32 \times (\frac{1.8+1.1}{2}) \times \frac{1}{2} = 1062 \text{ cu yd}$   
Base:  $56 \times 32 \times 1.25 = 2240 \text{ cu yd}$

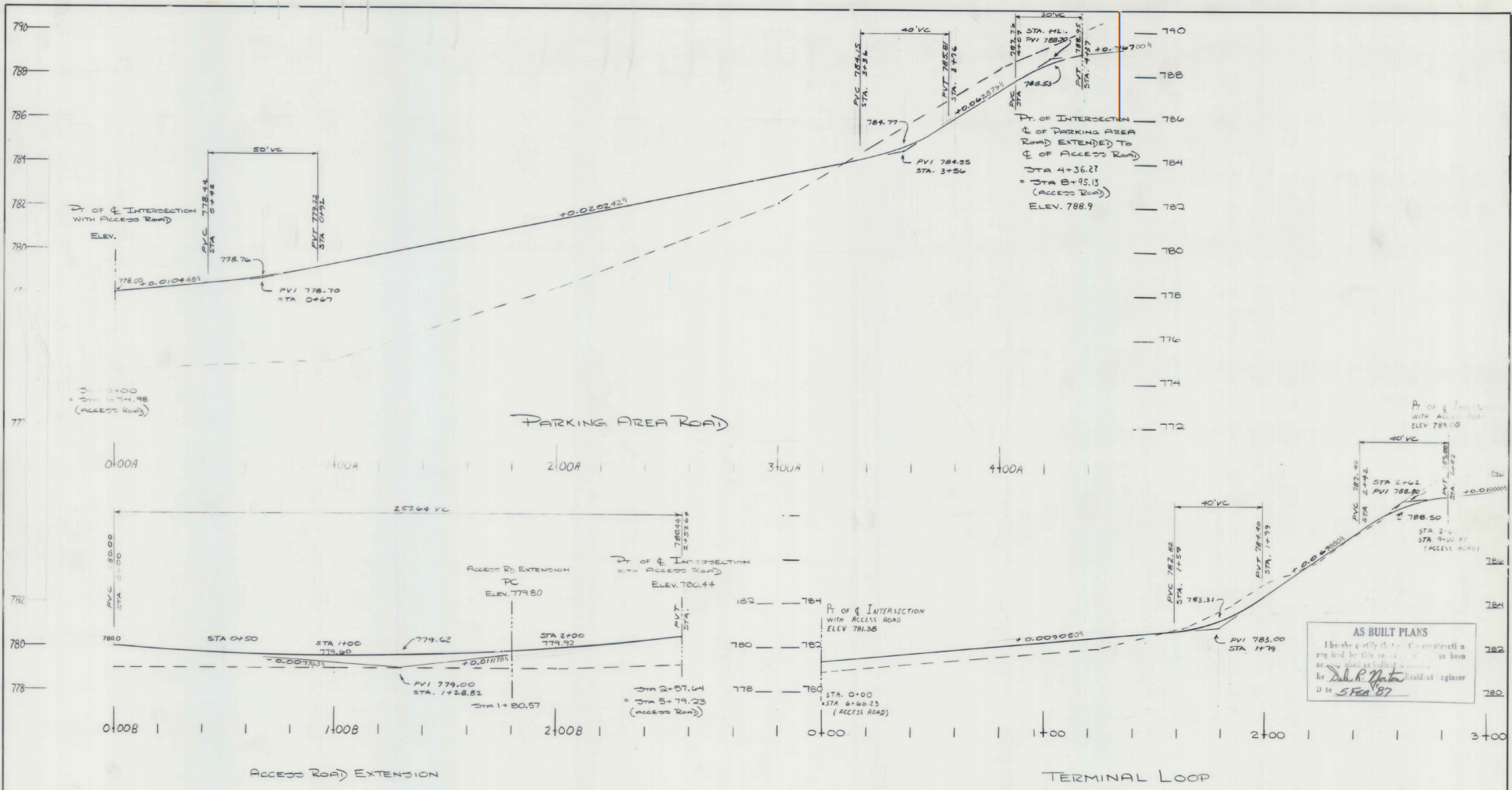
AS BUILT PLANS  
I hereby certify that the construction required by this set of plans has been completed in accordance with the plans.  
By *Dale A. Hinton* Resident Engineer  
Date *5 Feb '87*

|                                  |                        |
|----------------------------------|------------------------|
| 7/20/83 CUT LINES AND NOTE ADDED |                        |
| SURVEY: _____                    | ROADWAY CROSS SECTIONS |
| CALCULATED: _____                | RUTLAND STATE AIRPORT  |
| CHECKED: _____                   | CLARENDON, VERMONT     |
| DESIGN: J.R. KAM                 | AIP-3-50-0015-02       |
| DRAWN: J.R. KAM                  |                        |
| TRACED: _____                    |                        |
| APPROVED: K.W.P.                 |                        |
| DATE: AUGUST 31, 1983            |                        |
| SCALE: HORIZ. 1"=10'             |                        |
| VERT. 1"=2'                      |                        |
| PROJ. NO. 5181                   |                        |
| SHEET 7 OF 44                    |                        |

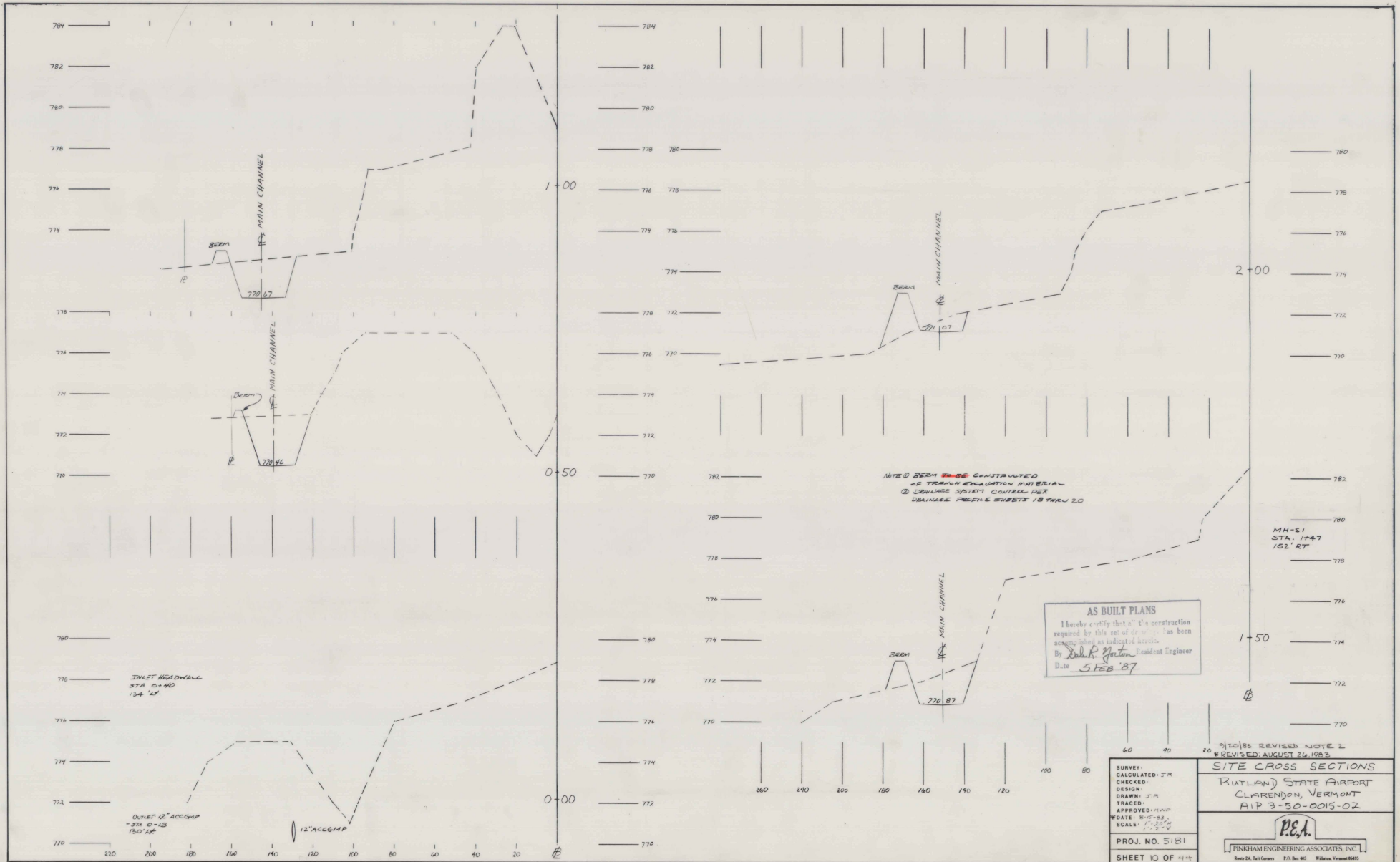
30 20 10 0 10 20 30

30 20 10 0 10 20 30 40 50





|                           |                   |   |
|---------------------------|-------------------|---|
| 7/14/83 REVISED & PROFILE |                   | ROADWAY PROFILES ACCESS ROAD EXTENSION TERMINAL LOOP  |
| SURVEY: JEP               | CALCULATED: JEP   | RUTLAND STATE AIRPORT<br>CLARENDON, VERMONT<br>AIR 3-50-0019-02<br>PENNACUM ENGINEERING ASSOCIATES, INC.<br><small>Roads, 24, Tull Center P.O. Box 400 Windsor, Vermont 05693</small> |
| CHECKED: JEP              | DESIGN: JEP       |   |
| DRAWN: JEP                | TRACED: JEP       |   |
| APPROVED: KWP             | DATE: 8-30-82     |   |
| PROJ. NO. 5181            | SCALE: 1" = 20' H |   |
| SHEET 9 OF 14             |                   |   |



INLET SIDEWALK  
37A 0+40  
134" W

OUTLET 12" ACCOMP  
37A 0+18  
180" W

NOTE: BEAM WAS CONSTRUCTED  
AS TRAMPOLINE EVALUATION MATERIAL  
& DRAINAGE SYSTEM CONTROL PER  
DRAINAGE PEOPLE SHEETS 18 THRU 20

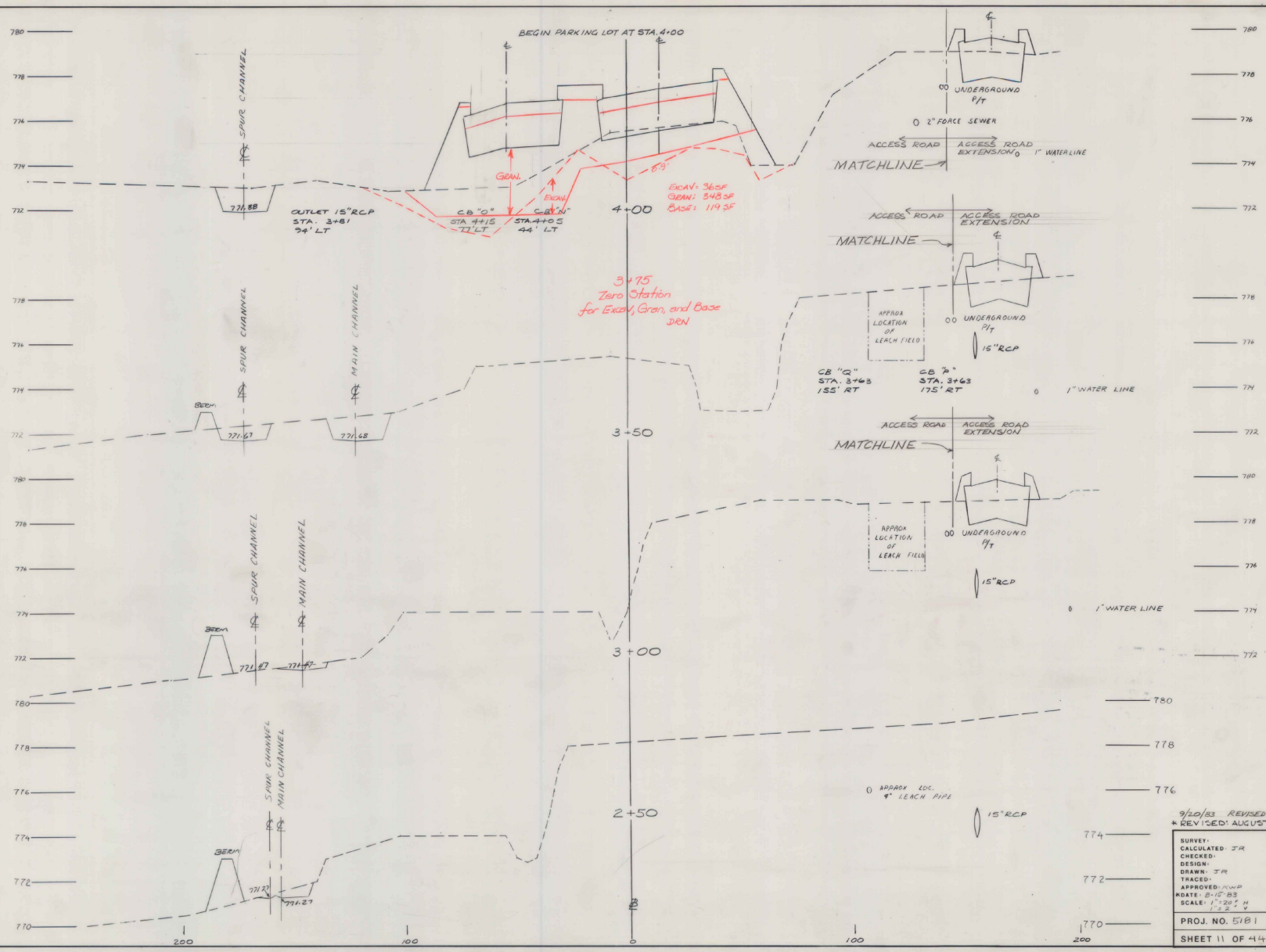
**AS BUILT PLANS**  
I hereby certify that all construction  
required by this set of drawings has been  
accomplished as indicated herein.  
By: *Dale R. Fenton* Resident Engineer  
Date: 5 FEB '87

|                |            |              |
|----------------|------------|--------------|
| SURVEY         | CALCULATED | FM           |
| CHECKED        | DESIGN     | FM           |
| DRAWN          | TRACED     | FM           |
| APPROVED       | DATE:      | 8-15-83      |
|                | SCALE:     | 1/2" = 1'-0" |
| PROJ. NO. 5181 |            |              |
| SHEET 10 OF 44 |            |              |

10/83 REVISED NOTE 2  
\* REVISED AUGUST 26, 1983


**SITE CROSS SECTIONS**  
RUTLAND STATE AIRPORT  
CLARENDON, VERMONT  
AIP 3-50-0015-02

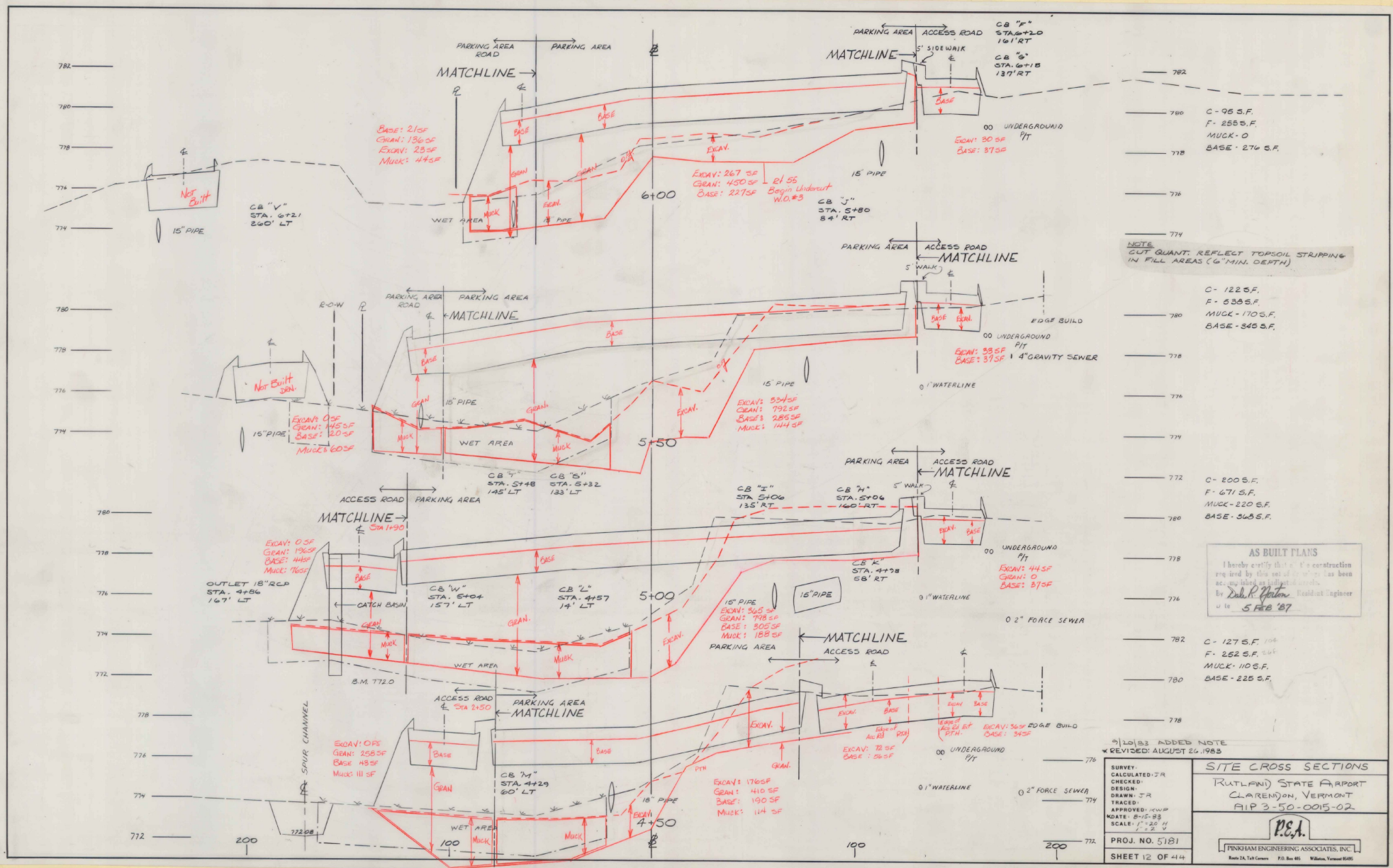
**P.E.A.**  
PENKHAM ENGINEERING ASSOCIATES, INC.  
Route 24, Fair Haven, P.O. Box 401, Fair Haven, Vermont 05743



**AS BUILT PLANS**  
 I hereby certify that all the construction required by this set of drawings has been accurately and fully executed.  
 By *John R. Hartman*, Resident Engineer  
 Date *5 FEB 87*

9/20/83 REVISED SECTIONS  
 \* REVISED: AUGUST 26, 1985

|                   |   |
|-------------------|---|
| SURVEY: _____     | <b>SITE CROSS SECTIONS</b><br>RUTLAND STATE AIRPORT<br>CLARENDON, VERMONT<br>AIP 3-50-0015-02<br><br>PINKHAM ENGINEERING ASSOCIATES, INC.<br><small>Roads, Tels, Concess. P.O. Box 495 W. Rutland, Vermont 05701</small> |
| CALCULATED: J.R.  |   |
| CHECKED: _____    |   |
| DESIGN: _____     |   |
| DRAWN: J.R.       |   |
| TRACED: _____     |   |
| APPROVED: _____   |   |
| DATE: 8-17-85     |   |
| SCALE: 1" = 20' H |   |
| SCALE: 1" = 20' V |   |
| PROJ. NO. 5181    |   |
| SHEET 11 OF 44    |   |



NOTE  
CUT QUANT. REFLECT TOPSOIL STRIPPING  
IN FILL AREAS (6" MIN. DEPTH)

C - 122 S.F.  
F - 638 S.F.  
MUCK - 170 S.F.  
BASE - 846 S.F.

C - 200 S.F.  
F - 671 S.F.  
MUCK - 220 S.F.  
BASE - 366 S.F.

C - 127 S.F.  
F - 262 S.F.  
MUCK - 110 S.F.  
BASE - 225 S.F.

**AS BUILT PLANS**  
I hereby certify that the construction provided by this set of plans has been accomplished as indicated therein.  
By *Debi R. Johnson* Resident Engineer  
on **5 FEB 87**

9/10/83 ADDED NOTE  
REVISED: AUGUST 26, 1983

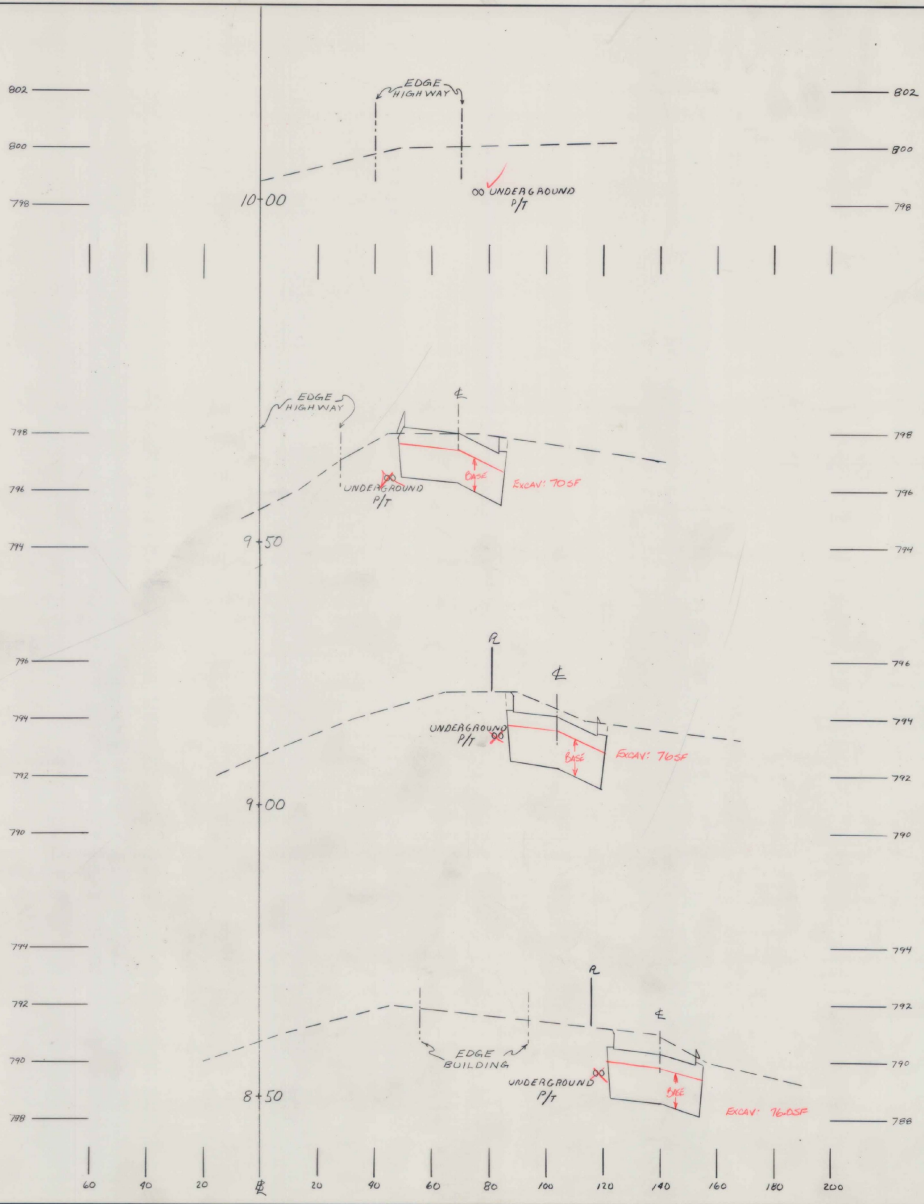
SURVEY CALCULATED: J.R.  
CHECKED:  
DESIGN:  
DRAWN: J.R.  
TRACED:  
APPROVED: J.C.W.P.  
DATE: 8-12-83  
SCALE: 1" = 20' H  
PROJ. NO. 5181

**SITE CROSS SECTIONS**  
RUTLAND STATE AIRPORT  
CLARENDON, VERMONT  
RIP 3-50-0015-02

**P.E.A.**  
PINKHAM ENGINEERING ASSOCIATES, INC.  
Route 26, Toll Center P.O. Box 405 Winochi, Vermont 05490

SHEET 12 OF 44





AS BUILT PLANS  
 I hereby certify that the work shown on these plans has been  
 accomplished as indicated on these plans.  
 By: *Dale R. Hartman* Resident Engineer  
 Date: *SEP 27 1963*

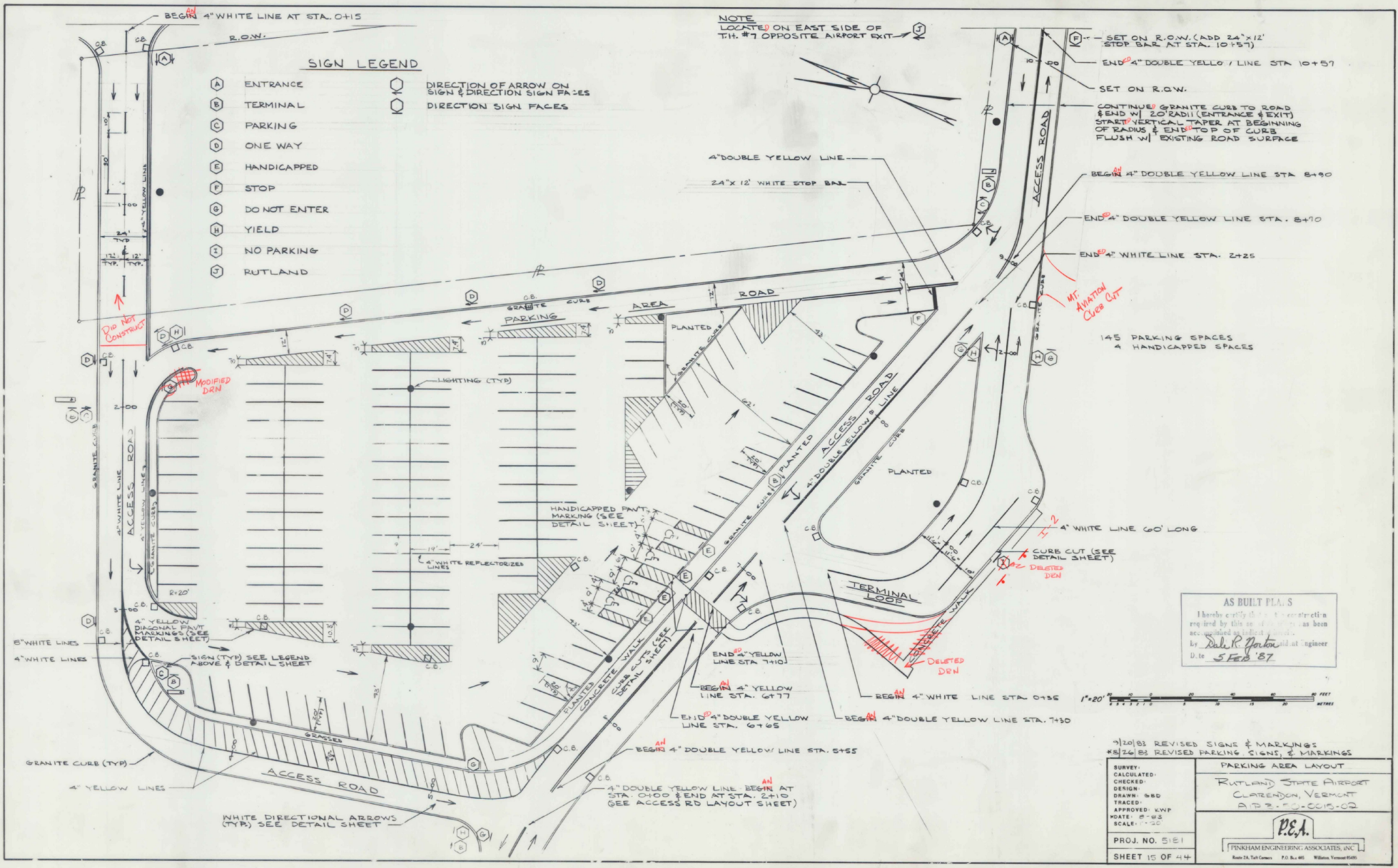
\*REVISED AUGUST 26, 1963

SURVEY: J.F.R.  
 CALCULATED: J.F.R.  
 CHECKED: J.F.R.  
 DESIGN: J.F.R.  
 DRAWN: J.F.R.  
 TRACKED: J.F.R.  
 APPROVED: K.W.P.  
 DATE: 8-15-63  
 SCALE: 1"=20'  
 PROJ. NO. 5181

SITE CROSS SECTIONS  
 RUTLAND STATE AIRPORT  
 CLARENDON, VERMONT  
 AIP 3-50-0015-02

**P.E.A.**  
 PINKHAM ENGINEERING ASSOCIATES, INC.  
 Route 24, Tell City, P.O. Box 401, Williston, Vermont 05495

SHEET 14 OF 44

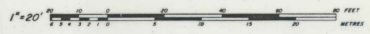


**SIGN LEGEND**

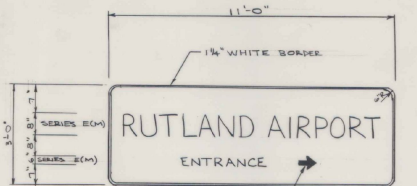
|                  |   |
|------------------|---|
| (A) ENTRANCE     | (O) DIRECTION OF ARROW ON SIGN & DIRECTION SIGN FACES |
| (B) TERMINAL     | (O) DIRECTION SIGN FACES                              |
| (C) PARKING      |   |
| (D) ONE WAY      |   |
| (E) HANDICAPPED  |   |
| (F) STOP         |   |
| (G) DO NOT ENTER |   |
| (H) YIELD        |   |
| (I) NO PARKING   |   |
| (J) RUTLAND      |   |

**NOTE**  
 LOCATED ON EAST SIDE OF  
 T.H. #7 OPPOSITE AIRPORT EXIT

**AS BUILT P.L.S.**  
 I hereby certify that the construction required by this set of plans has been completed as indicated thereon.  
 by *Dale R. Johnson* Professional Engineer  
 D. Lic. 5 Feb '87



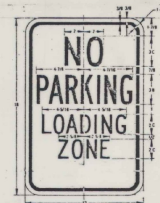
|  |  |
|--|--|
| 7/20/83 REVISED SIGNS & MARKINGS<br>8/26/83 REVISED PARKING SIGNS & MARKINGS   | <b>PARKING AREA LAYOUT</b><br>RUTLAND STATE AIRPORT<br>CLARENDON, VERMONT<br>A.D. 2-75-0015-02                       |
| SURVEY: _____<br>CALCULATED: _____<br>CHECKED: _____<br>DESIGN: _____<br>DRAWN: GBD<br>TRACED: _____<br>APPROVED: KWP<br>DATE: 8-83<br>SCALE: 1"=20' | <b>P.E.A.</b><br>PINGHAM ENGINEERING ASSOCIATES, INC.<br>Route 24, Tall Corners P.O. Box 405 Winooski, Vermont 05490 |
| PROJ. NO. 51E1<br>SHEET 15 OF 44   |  |



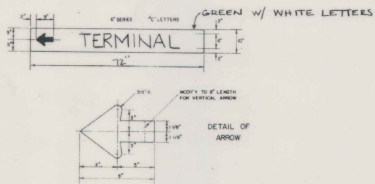
SEE ARROW  
DETAIL BELOW  
GREEN W/  
WHITE LETTERS  
SIGN (A) (TYPE B)



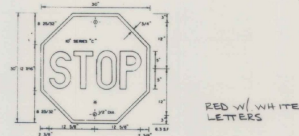
LEGEND AND BORDER - GREEN  
WHITE FINISH ON BLUE BACKGROUND  
BLACK LETTERS - WHITE  
SIGN (E) (TYPE A)



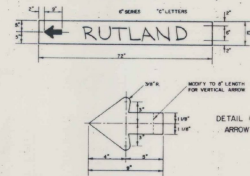
LEGEND - RED  
BACKGROUND - WHITE  
SIGN (H) (TYPE A)



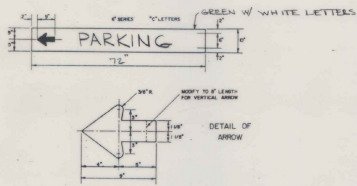
GREEN W/ WHITE LETTERS  
SIGN (B) (TYPE A)



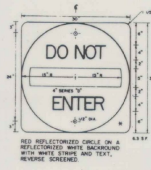
RED W/ WHITE LETTERS  
SIGN (F) (TYPE A)



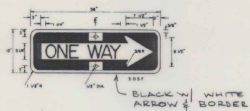
DETAIL OF ARROW  
SIGN (G) (TYPE A)



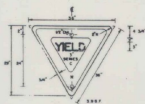
GREEN W/ WHITE LETTERS  
SIGN (C) (TYPE A)



RED REFLECTORIZED BORDER ON A REFLECTORIZED WHITE BACKGROUND WITH BLACK AND TEXT REVERSE SCREENED  
SIGN (D) (TYPE A)

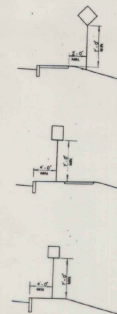
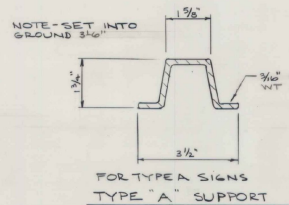


BLACK W/ WHITE ARROW & BORDER  
SIGN (I) (TYPE A)



RED REFLECTORIZED BORDER ON A REFLECTORIZED WHITE BACKGROUND WITH RED PRINTED TEXT REVERSE SCREENED METHOD  
SIGN (H) (TYPE A)

- SIGN NOTES**
- Reflective Material:**
    - This reflective material for the black and white signs **shall** be flat top silver reflective sheeting applied to the entire background of the sign.
    - The reflective material for the red and white signs **shall** have high intensity encapsulated lens reflective sheeting applied to the entire background of the sign.
    - The text of the STOP, DO NOT ENTER, and border of YIELD signs **shall** be reverse screened.
  - Colors:**
    - The regulatory signs shown on this sheet, except the STOP, DO NOT ENTER, and YIELD signs, **shall** have black text on reflectorized white or silver background.
    - The STOP, and DO NOT ENTER, signs **shall** have a reflectorized white or silver text on a reflectorized red background.
    - The YIELD sign **shall** have a text on a reflectorized white background with a red border reverse screened.
    - The reflective material for green signs **shall** be green reflective sheeting applied to the entire background of the sign.
    - The red, white, green, blue and black **shall** conform with the standard colors adopted by the American Association of State Highway Officials and approved by the Department of Transportation, Federal Highway Administration.
  - Text Design:**
    - Letters, digits, arrows, spacings, and text dimensions **shall** conform with the standard alphabets and designs prescribed in the Manual on Uniform Traffic Control Devices prepared by the National Joint Committee on Uniform Traffic Control Devices.
  - Specifications:**
    - All signs **shall** meet the standard state specifications for traffic signs.

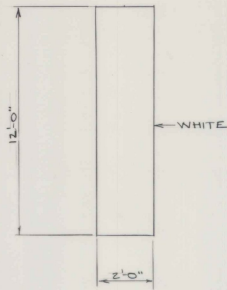


SIGN PLACEMENT

**AS BUILT PLANS**  
This is a copy of the construction record by the contractor as been reviewed and approved by the engineer on 11 FEB 87

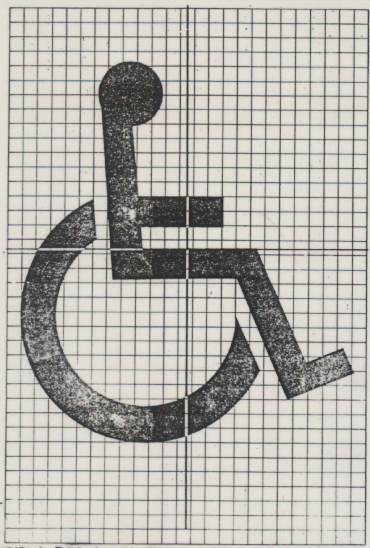
**NOTE**  
FOR TYPE B SIGNS USE TYPE "C" SUPPORT. (SEE STANDARD E-25)  
9/20/83 REVISED TYPE "A" SUPPORT DETAIL  
9/22/83 REVISED SIGNS

|   |   |
|---|---|
| SURVEY:<br>CALCULATED:<br>CHECKED:<br>DESIGN:<br>DRAWN: GWD<br>TRACED:<br>APPROVED: KWP<br>DATE: 07-83<br>SCALE: NONE | <b>SIGNAGE DETAILS</b><br>RUTLAND STATE AIRPORT<br>CLARENDON, VERMONT<br>AIP 3-80-0015-02<br><br>PENKHAM ENGINEERING ASSOCIATES, INC.<br>Route 2A, East Ferris P.O. Box 405 Ferris, Vermont 05455 |
| PROJ. NO. 3181<br>SHEET 16 OF 44  |   |

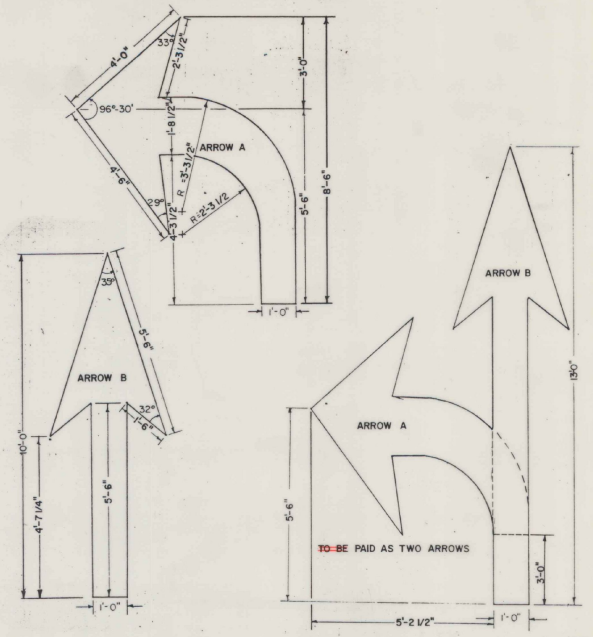


STOP BAR (PAV'T)

EACH SQ 2'x3'

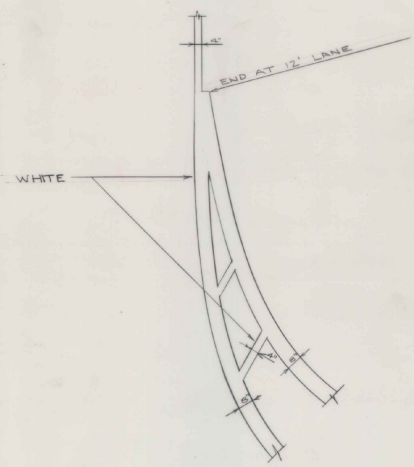


NOTE: PAVT FOR UNDER ITEM 644-65 DURABLE PAINT ARROWS  
HANDICAPPED PARKING (PAV'T)

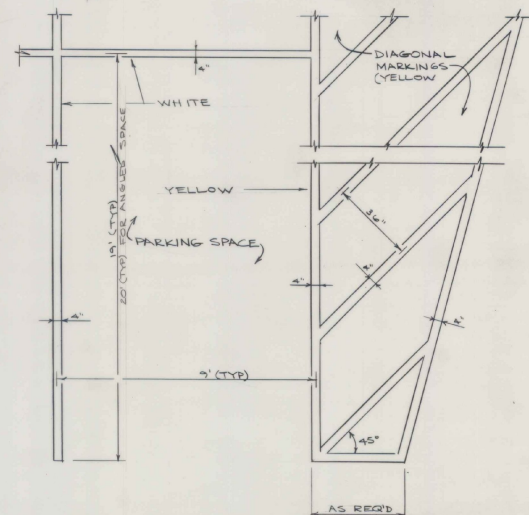


DIRECTIONAL ARROWS (PAV'T)

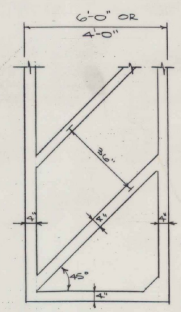
NOTE  
ALL PAVEMENT MARKINGS,  
INCLUDING 4" LINES, SHALL BE  
WHITE OR YELLOW DURABLE  
MATERIAL.



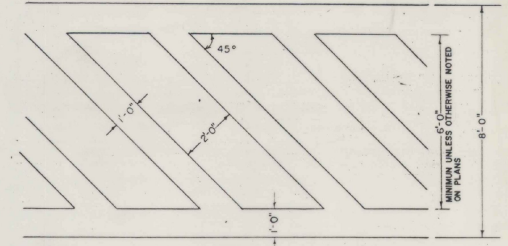
GORE LINE AT PARKING LOT



TYPICAL PARKING SPACE LAYOUT (PAV'T)



HANDICAPPED SPACE (PAV'T)

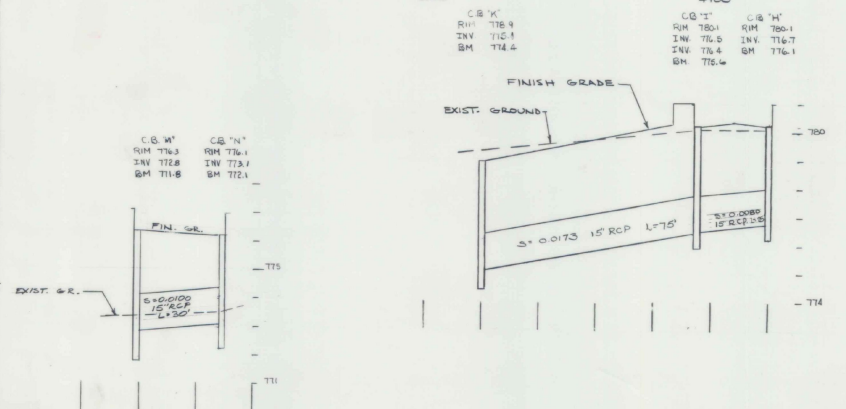
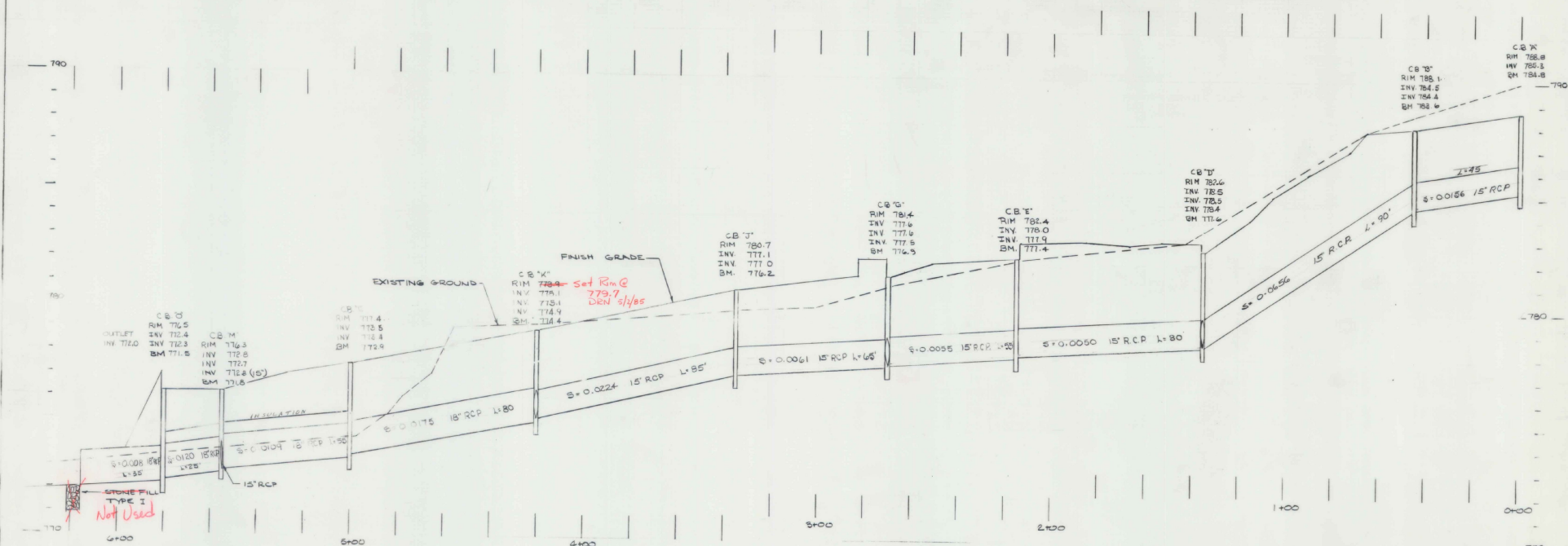


CROSSWALK (PAV'T)

AS BUILT P.L.A.S  
I hereby certify that a copy of all in  
regard by this set of drawings as shown  
on the drawings is true and correct.  
By *Dick K. Hatten* Professional Engineer  
Date *5 FEB 87*

| * 4/26/83 REVISES MARKINGS |      | PAVEMENT MARKING DETAILS   |  |
|----------------------------|------|--|--|
| SURVEY:                    |      | RUTLAND STATE AIRPORT  |  |
| CHECKED:                   |      | CLARENDON, VERMONT   |  |
| DESIGN:                    |      | RIP 3-50-0015-02   |  |
| DRAWN:                     | GSD  |  |  |
| TRACED:                    |      |  |  |
| APPROVED:                  | KWP  |  |  |
| DATE:                      | 8-83 |  |  |
| SCALE:                     | NONE | PINKHAM ENGINEERING ASSOCIATES, INC.<br><small>Route 24, Tell City, Ind. 46514</small> |  |
| PROJ. NO.                  | 5181 | SHEET 17 OF 44   |  |

3/20/83 ADDED NOTE TO GORE LINE DETAIL



**LEGEND**

- B.M. BOTTOM BUMP ELEVATION OF CATCH BASIN
- INV. PIPE INVERT ELEVATION
- RIM TOP RIM ELEVATION
- S PIPE SLOPE
- L LENGTH OF PIPE
- C.B. CATCH BASIN AS SHOWN ON HIGHWAY STANDARDS, SHEET D-6
- TOPS AND RIMS AS SHOWN ON HIGHWAY STANDARDS, SHEETS D-9, D-10, D-11
- REINFORCED CONCRETE STRAIGHT HEADWALLS AS SHOWN ON HIGHWAY STANDARDS, SHEET D-2
- METAL END SECTION FOR CATCH BASIN AS SHOWN ON HIGHWAY STANDARDS, SHEET D-4
- REINFORCED CONCRETE END SECTION AS SHOWN ON HIGHWAY STANDARDS, SHEET D-16

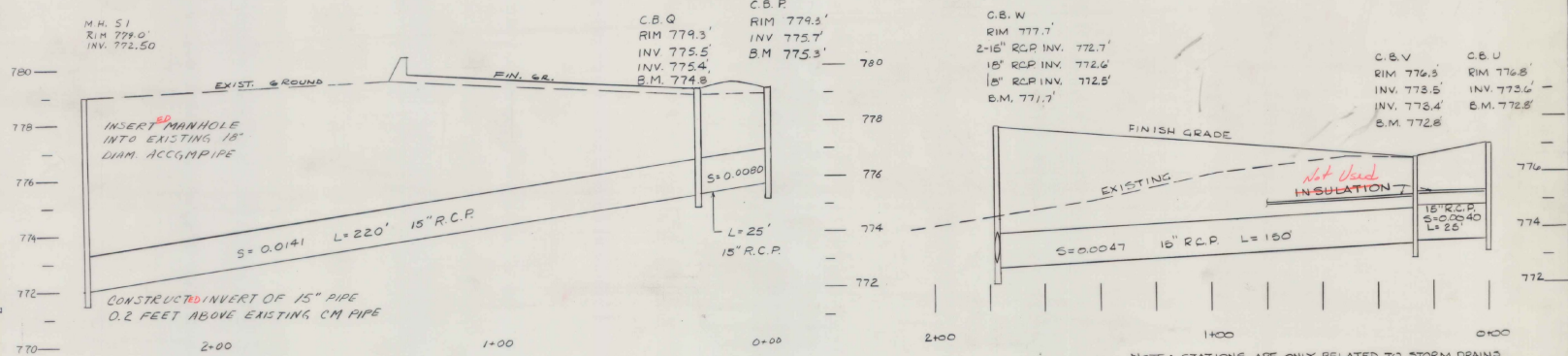
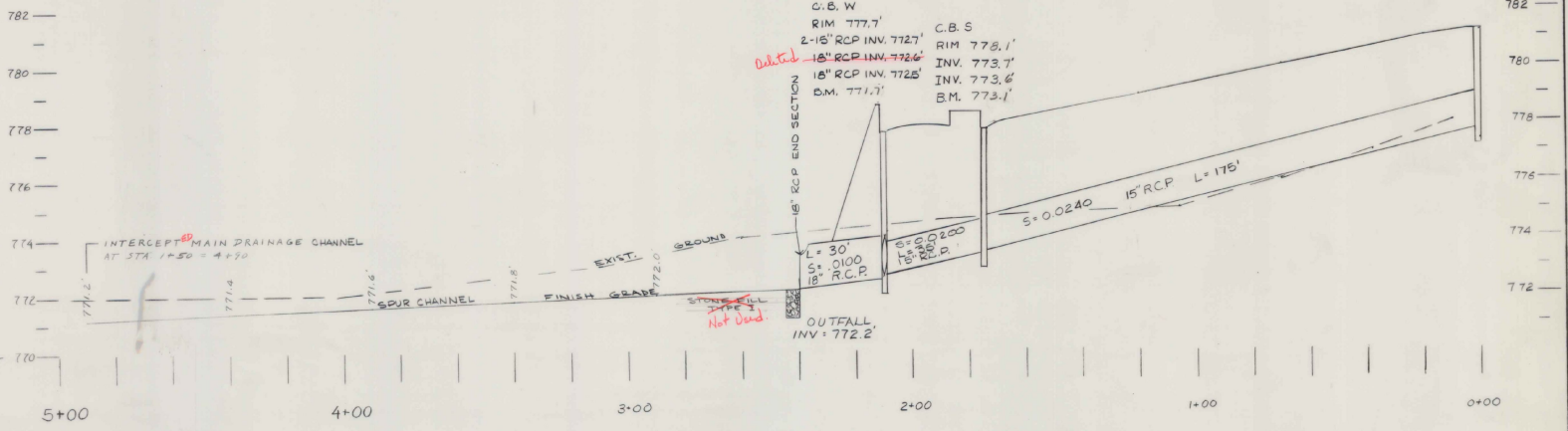
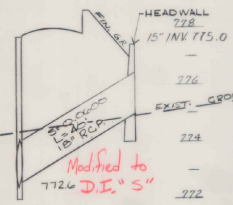
NOTE: STATIONS ARE ONLY RELATED TO STORM DRAIN  
 9/20/88 REVISED C.B. ELEV. & LOC.  
 \*REVISED 8-29-83 INCREASE 12" PIPE TO 15"

**AS BUILT PLANS**  
 I hereby certify that the information required by this plan was obtained as an accurate survey of the site as shown.  
 By: *Dick Spitzer*  
 Date: 5/28/87

|   |   |
|---|---|
| SURVEY: CALCULATED<br>CHECKED: JJB<br>DESIGN: DAT<br>TRACED:<br>APPROVED: KWP<br>DATE: 8-15-83<br>SCALE: 1" = 20' HORIZ<br>1" = 4' VERT<br>PROJ. NO. 5181 | <b>DRAINAGE PROFILES</b><br>RUTLAND STATE AIRPORT<br>CLARENDON, VERMONT<br>AIP 3-50-0015-02 |
|   |   |
| PENNSHAM ENGINEERING ASSOCIATES, INC.<br><small>Route 24, Tuff Cove, P.O. Box 485, William, Vermont 05598</small>   |   |

C.B. W  
RIM 777.7'  
2-18" RCP INV. 772.7'  
18" RCP INV. 772.6'  
18" RCP INV. 772.5'  
B.M. 771.7'

C.B.R  
RIM 781.3'  
INV. 777.7'  
B.M. 777.3'

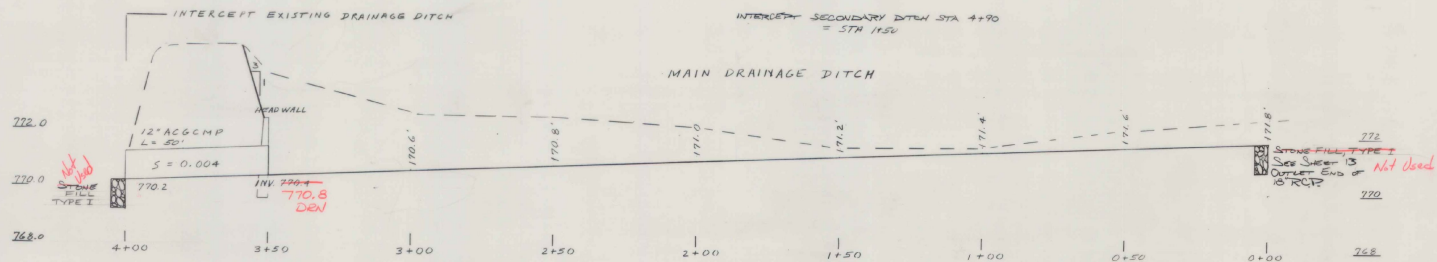


- LEGEND**
- B.M. BOTTOM BUMP ELEVATION OR CATCH BASIN
  - INV. PIPE INVERT ELEVATION
  - RIM TOP RIM ELEVATION
  - S PIPE SLOPE
  - L LENGTH OF PIPE
  - C.B. CATCH BASIN AS SHOWN ON HIGHWAY STANDARDS, SHEET D-5
  - TOPS AND BUMPS AS SHOWN ON HIGHWAY STANDARDS, SHEETS D-4, D-1
  - REINFORCED CONCRETE STRAIGHT HEADWALLS AS SHOWN ON HIGHWAY STANDARDS, SHEET D-2
  - METAL END SECTION FOR CMP AS SHOWN ON HIGHWAY STANDARDS, SHEET D-4
  - REINFORCED CONCRETE END SECTION AS SHOWN ON HIGHWAY STANDARDS, SHEET D-16

NOTE: STATIONS ARE ONLY RELATED TO STORM DRAINS  
 3/20/85 REVISED C.B. ELEV.  
 \* REVISED 8-29-83 INCREASE PIPE SIZES.

**AS BUILT PLANS**  
 I hereby certify that all construction required by this set of drawings has been accomplished as indicated herein.  
 By *Rob. K. Fortson* Resident Engineer  
 Date *5 FEB 87*

|  |  |
|--|--|
| SURVEY: _____<br>CALCULATED: _____<br>CHECKED: _____<br>DESIGN: JJB<br>DRAWN: JGH<br>TRACED: _____<br>APPROVED: <i>KLW</i><br>DATE: 8-15-83<br>SCALE: 1" = 20'<br>PROJ. NO. 5181<br>SHEET 19 OF 44 | <b>DRAINAGE PROFILES</b><br>RUTLAND STATE AIRPORT<br>CLARENDON, VERMONT<br>AIP 3-50-0015-02<br><br>PENNINGTON ENGINEERING ASSOCIATES, INC.<br><small>Roads, Site Plans, P.O. Box 481, Williston, Vermont 05495</small> |
|--|--|



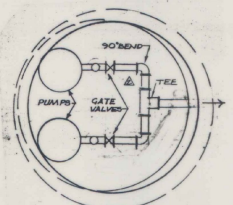
- LEGEND**
- B.M. BOTTOM BUMP ELEVATION OR CATCH BASIN
  - INV. PIPE INVERT ELEVATION
  - RIM TOP RIM ELEVATION
  - S PIPE SLOPE
  - L LENGTH OF PIPE
  - C.B. CATCH BASIN AS SHOWN ON HIGHWAY STANDARDS, SHEET D-8
  - T.O.P.S AND RIMS AS SHOWN ON HIGHWAY STANDARDS SHEETS D-9, D-11
  - REINFORCED CONCRETE STRAIGHT HEADWALLS AS SHOWN ON HIGHWAY STANDARDS, SHEET D-2
  - METAL END SECTION FOR CMP AS SHOWN ON HIGHWAY STANDARDS, SHEET D-4
  - REINFORCED CONCRETE END SECTION AS SHOWN ON HIGHWAY STANDARDS, SHEET D-16

**AS BUILT PLANS**  
 I hereby certify that all construction required by this set of drawings has been accomplished as indicated herein.  
 By *Dale R. Horton* Resident Engineer  
 Date *FEB '87*

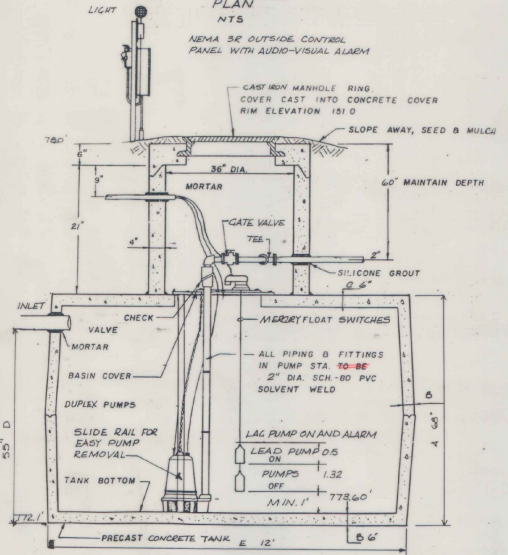
NOTE: STATIONS ARE ONLY RELATED TO STORM DRAINS

3/20/83 STONE FILL  
 \* REVISED 8/2/83 R.P. RAO ADDED

|   |  |
|---|--|
| SURVEY:<br>CALCULATED:<br>CHECKED:<br>DESIGN: JJB<br>DRAWN: REP<br>TRACED:<br>APPROVED: KWP<br>DATE: 3-15-83<br>SCALE: 1"=20'<br>1/2"=20' | <b>DRAINAGE PROFILES</b><br>RUTLAND STATE AIRPORT<br>CLARENDON, VERMONT<br>AIP3-50-0015-02<br><br>PENNSHAM ENGINEERING ASSOCIATES, INC.<br><small>Route 24, Tull Center P.O. Box 462, Williston, Vermont 05495</small> |
| PROJ. NO. 5781<br>SHEET 20 OF 44  |  |

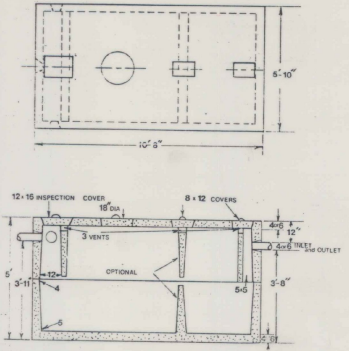


PLAN NTS  
NEMA 3R OUTSIDE CONTROL PANEL WITH AUDIO-VISUAL ALARM



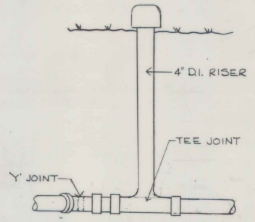
2000 GALLON PUMP STATION DETAIL  
NOT TO SCALE

NOTE: CONTRACTOR'S OPTION TO SUPPLY COMPRESSIBLE PACKAGED STATION AS APPROVED BY ENGINEER.

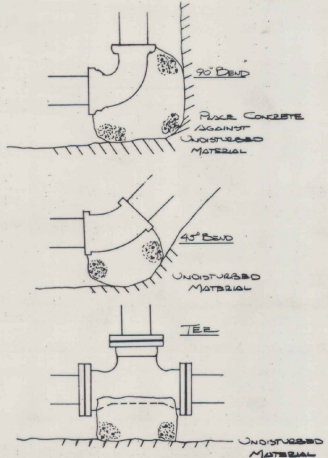


1250 GAL SEPTIC TANK

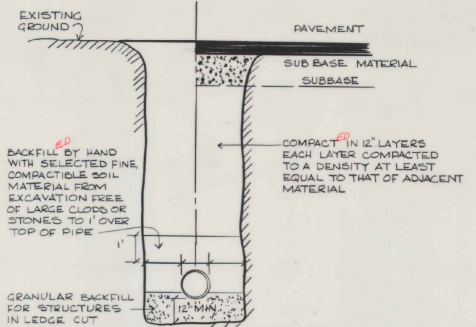
- NOTES
1. Cement 1000PSI @ 28 days
  2. Inlet baffle and outlet chamber are 3/8" cast with top section of tank
  3. Keyed joint sealed with asphalt cement or equivalent, reinforced with 6x6x10 GA. steel wire
  4. Two compartment tank shown, smooth bottom tank available
  5. Excavation must be at least 12" longer and wider
  6. Three inlet positions standard



CLEANOUT DETAIL TYPICAL  
NOT TO SCALE

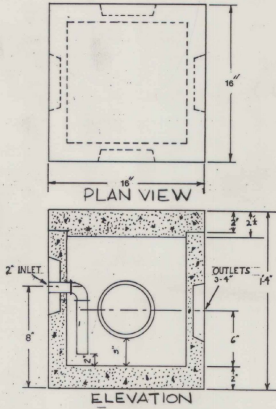


TRENCH BACK DETAIL  
SCALE: 1"=1'  
CONCRETE TO BE CLASS C  
NOTE: CONCRETE REACTION BLOCKING SHALL BE PROVIDED AT ALL BENDS DEFLECTING 22 1/2" OR MORE, 1/2 CY. MIN.



TRENCH TYPICAL

NOT TO SCALE  
THE SANITARY SEWER LINE AND THE WATER MAIN SHALL BE SLEEVED WHEN WITHIN THE ROADWAY, REFER TO VERMONT DEPARTMENT OF HIGHWAYS STANDARDS D-20 FOR DESIGN DETAIL.



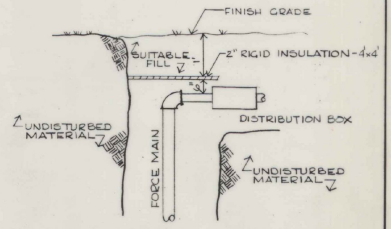
DISTRIBUTION BOX

- NOTE
1. Concrete 1000PSI @ 28 days

- DESIGN CRITERIA - SANITARY SYSTEM
1. THE EXISTING 1250 GAL SEPTIC TANK ~~WILL BE~~ RELOCATED AND REPLACED WITH A NEW 1250 GAL SEPTIC TANK.
  2. THE EFFLUENT FROM THE SEPTIC TANK ~~WILL BE~~ PUMPED UNDER THE ROAD MAINTAINING MINIMUM DEPTH OF 5 FEET BENEATH THE ROAD.
  3. PUMP STATION REQUIREMENTS:  
483 passengers @ 5 GPF = 2415 CPD  
4 doses per day - each dose 603 gal  
USE 2000 GAL PUMP STATION EMERGENCY 4 HOUR STORAGE REQUIRED = 600 gal  
EMERGENCY STORAGE AVAILABLE - VALVE ABOVE PUMP ON AND BELOW INLET INVERT IS 107 C.F. = 800 gal
  4. PUMP REQUIREMENTS:  
PEAK 20 MINUTE FLOW 19+ gpm USE PUMP RATE OF 40 gpm  
HEAD LOSS IN 2" DELIVERY LINE 4.51'  
PUMP STATION PIPING LOSSES 0.93'  
STATIC HEAD 2.90'  
MISCELLANEOUS LOSSES 1.00'  
TDH 10.21'  
PUMP REQUIREMENT 40 gpm AT TDH 10.3'
  5. NEW DISTRIBUTION BOX REQUIRED. AT RISER WHERE FORCE MAIN ENTERS BOX 2", 4"x4" INSULATION ~~SHALL BE~~ USED TO PROTECT THE FORCE MAIN FROM FREEZING.

ELEVATION KEY

|                                      |         |
|--------------------------------------|---------|
| BUILDING SNIER                       | 780.00' |
| SEPTIC TANK INLET INV.               | 777.42' |
| SEPTIC TANK OUTLET INV.              | 776.83' |
| PUMP STATION INLET INV.              | 776.68' |
| PUMP OFF                             | 773.60' |
| PUMP ON                              | 774.92' |
| LAC PUMP ON & ALARM DISTRIBUTION BOX | 775.42' |
|                                      | 776.50' |



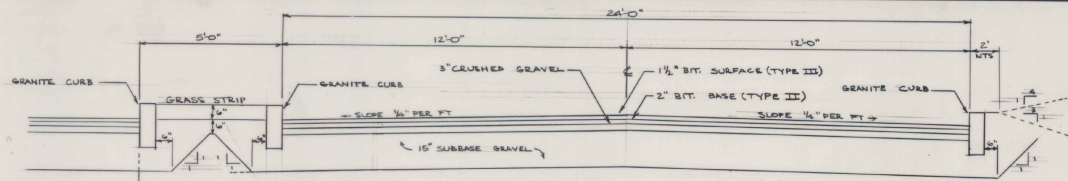
INSULATION TYPICAL  
NOT TO SCALE

AS BUILT PLANS  
I hereby certify that the construction required by this set of drawings as shown on the drawings was completed by *Dick K. Fortson* Licensed Engineer D.Lc. 5/28/87

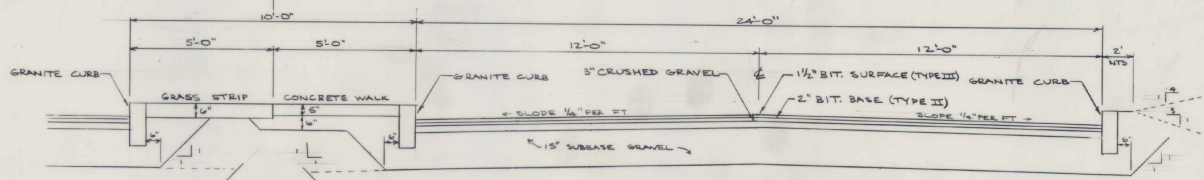
REVISID: AUGUST 26, 1983 - NOTE TO TYPICAL TRENCH

|   |   |
|---|---|
| SURVEY:<br>CALCULATED:<br>CHECKED:<br>DESIGN: GBS<br>DRAWN: EAM<br>TRACED:<br>APPROVED: KMP<br>DATE: AUGUST 18, 1983<br>SCALE: NONE | SEWER SYSTEM DETAILS<br>RUTLAND STATE AIRPORT<br>CLARENDON, VERMONT<br>AIP 3-50-0015-02                     |
| PROJ. NO. 5131  | P.E.A.<br>PENGHAM ENGINEERING ASSOCIATES, INC.<br>Route 24, Tall Corners P.O. Box 88 Waltham, Vermont 05481 |

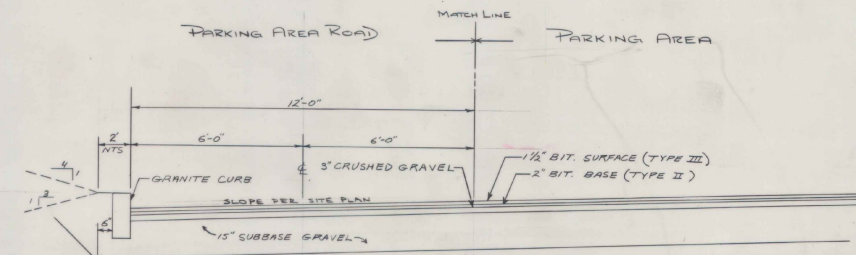
SHEET 21 OF 44



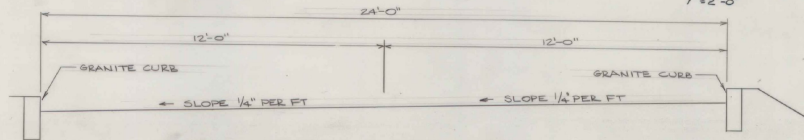
24" SAND CUSHION IN CUT AS DIRECTED BY ENGINEER  
 GRANULAR BORROW (IN FILL)  
 SECTION A  
 1"=2'-0"



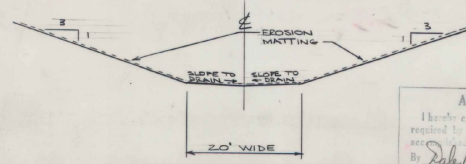
24" SAND CUSHION IN CUT AS DIRECTED BY ENGINEER  
 GRANULAR BORROW (IN FILL)  
 SECTION B  
 1"=2'-0"



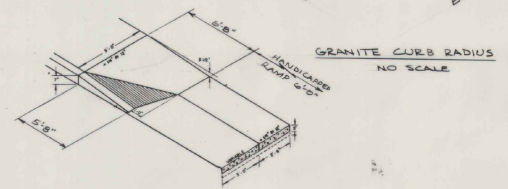
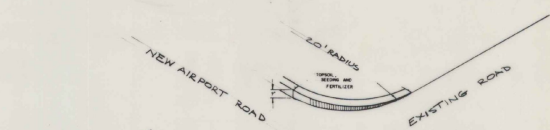
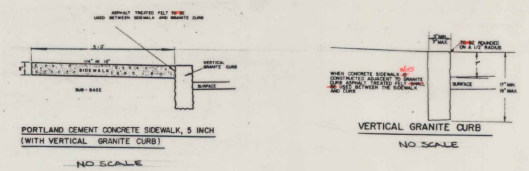
24" SAND CUSHION IN CUT AS DIRECTED BY ENGINEER  
 GRANULAR BORROW (IN FILL)  
 SECTION C  
 1"=2'-0"



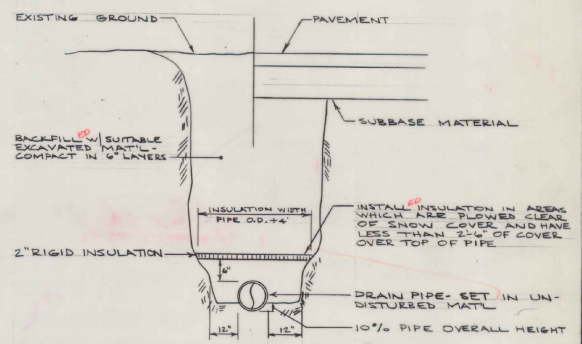
TYPICAL SUPER ELEVATION  
 SECTION D  
 1"=2'-0"



TYPICAL DRAINAGE CHANNEL



CURB CUT FOR HANDICAPPED ACCESS  
 NO SCALE



TYPICAL INSULATED PIPE IN TRENCH

AS BUILT PLANS  
 These plans are to be used for construction required by the State of Vermont.  
 By *Debra P. Porter*  
 Date 5/18/87

12/20/83 REVISED SECT. REF. NO. & ADD. SECT.  
 4/9/24/83 ADDED SECTIONS

SURVEY: CALCULATED  
 CHECKED:  
 DESIGN: 06/87  
 DRAWN: 06/87  
 TRACED:  
 APPROVED: 06/87  
 DATE: 08-03  
 SCALE: AS NOTED  
 PROJ. NO. 5118

TYPICAL ROAD DETAILS  
 RUTLAND STATE AIRPORT  
 CLARENDON, VERMONT  
 AIP 3-50-0015-02  
 P.E.A.  
 PINGHAM ENGINEERING ASSOCIATES, INC.  
 Route 24, Fair Haven P.O. Box 465 Fair Haven Vermont 05455

### ILLUMINATION DESIGN CRITERIA

DESIGN CRITERIA SHALL CONFORM TO RECOMMENDED PRACTICE FOR ROADWAY LIGHTING & PARKING FACILITIES AS OBTAINED IN THE IES LIGHTING HANDBOOK APPLICATIONS - VOLUME 1 CHAPTER 14 - 1978

THE FOLLOWING LEVELS SHALL BE MAINTAINED:

| VEHICULAR TRAFFIC |             |                  |
|-------------------|-------------|------------------|
| LOW ACTIVITY      | FOOT CANDLE | UNIFORMITY RATIO |
| LOW ACTIVITY      | 1.0         | 3 TO 1           |
| MEDIUM ACTIVITY   | 2.0         | 3 TO 1           |
| HIGH ACTIVITY     | 4.0         | 3 TO 1           |

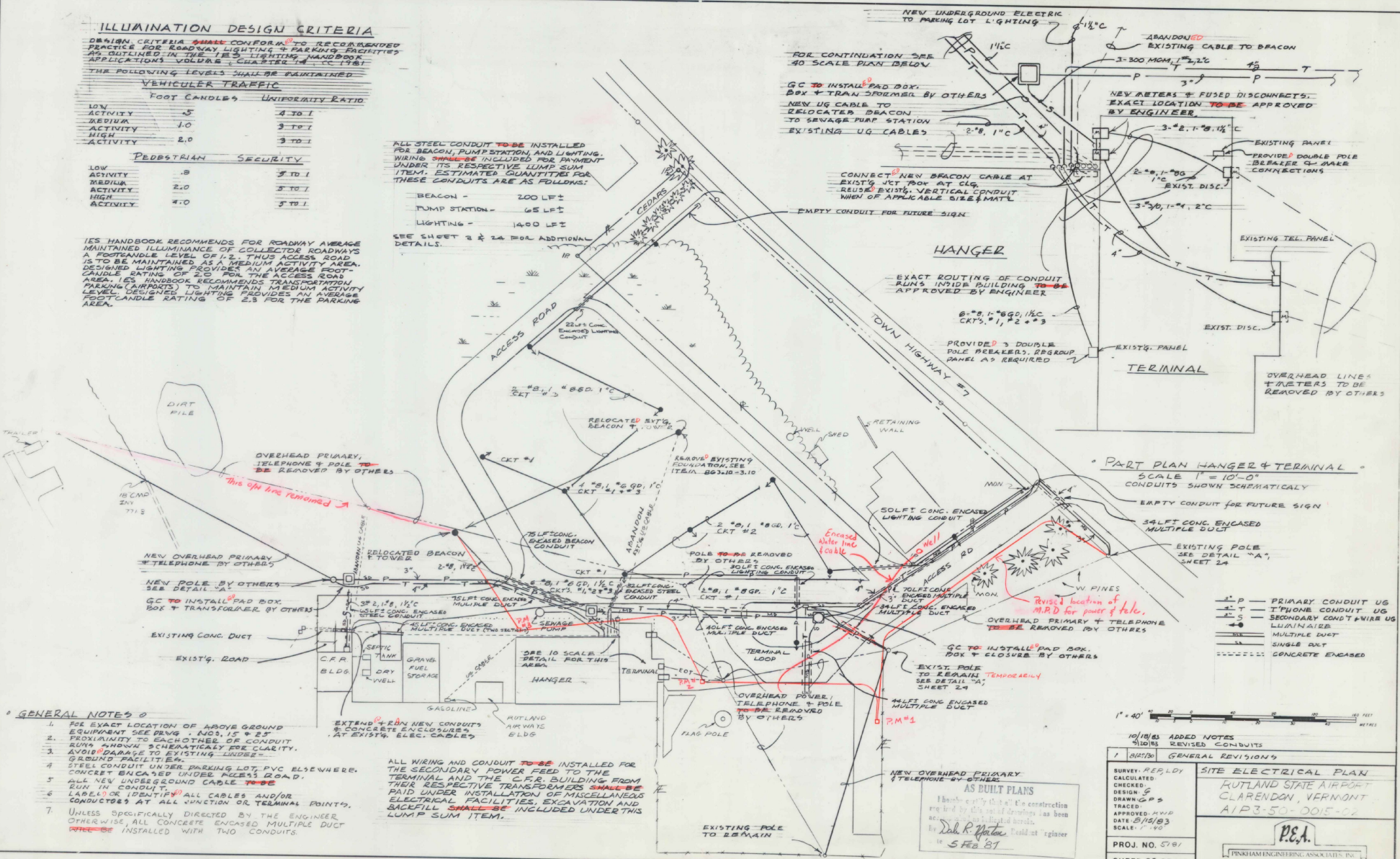
| PEDESTRIAN SECURITY |             |                  |
|---------------------|-------------|------------------|
| LOW ACTIVITY        | FOOT CANDLE | UNIFORMITY RATIO |
| LOW ACTIVITY        | 1.0         | 3 TO 1           |
| MEDIUM ACTIVITY     | 2.0         | 3 TO 1           |
| HIGH ACTIVITY       | 4.0         | 3 TO 1           |

IES HANDBOOK RECOMMENDS FOR ROADWAY AVERAGE MAINTAINED ILLUMINANCE OF COLLECTOR ROADWAYS A FOOTCANDLE LEVEL OF 1.2. THIS ACCESS ROAD IS TO BE MAINTAINED AS A MEDIUM ACTIVITY AREA. DESIGNED LIGHTING PROVIDES AN AVERAGE FOOT-CANDLE RATING OF 2.0 FOR THE ACCESS ROAD AREA. IES HANDBOOK RECOMMENDS TRANSPORTATION PARKING (AIRPORTS) TO MAINTAIN MEDIUM ACTIVITY LEVEL. DESIGNED LIGHTING PROVIDES AN AVERAGE FOOT-CANDLE RATING OF 2.3 FOR THE PARKING AREA.

ALL STEEL CONDUIT TO BE INSTALLED FOR BEACON, PUMP STATION, AND LIGHTING. WIRING SHALL BE INCLUDED FOR PAYMENT UNDER ITS RESPECTIVE LUMP SUM ITEM. ESTIMATED QUANTITIES FOR THESE CONDUITS ARE AS FOLLOWS:

- BEACON - 200 LFT
- PUMP STATION - 65 LFT
- LIGHTING - 1400 LFT

SEE SHEET 2 & 24 FOR ADDITIONAL DETAILS.



**PART PLAN HANGER & TERMINAL**  
SCALE 1" = 10'-0"  
CONDUITS SHOWN SCHEMATICALLY

- P — PRIMARY CONDUIT UG
- T — TELEPHONE CONDUIT UG
- S — SECONDARY CONDUIT WIRE UG
- L — LUMINAIRE
- M — MULTIPLE DUCT
- S — SINGLE DUCT
- C — CONCRETE ENCASED

- GENERAL NOTES**
- FOR EXACT LOCATION OF ABOVE GROUND EQUIPMENT SEE DWGS 1, 2, 3, 15 & 23
  - PROXIMITY TO EACH OTHER OF CONDUIT RUNS SHOWN SCHEMATICALLY FOR CLARITY.
  - AVOID DAMAGE TO EXISTING UNDERGROUND FACILITIES.
  - STEEL CONDUIT UNDER PARKING LOT, P.C. ELSEWHERE.
  - CONCRETE ENCASED UNDER P.C.'S ROAD.
  - ALL NEW UNDERGROUND CABLE TO BE LAYED OR IDENTIFIED ALL CABLES AND/OR CONDUITS AT ALL JUNCTION OR TERMINAL POINTS.
  - UNLESS SPECIFICALLY DIRECTED BY THE ENGINEER OTHERWISE, ALL CONCRETE ENCASED MULTIPLE DUCT SHALL BE INSTALLED WITH TWO CONDUITS.

ALL WIRING AND CONDUIT TO BE INSTALLED FOR THE SECONDARY POWER FEED TO THE TERMINAL AND THE C.F.R. BUILDING SHALL BE PAID UNDER INSTALLATION OF MISCELLANEOUS ELECTRICAL FACILITIES, EXCAVATION AND BACKFILL SHALL BE INCLUDED UNDER THIS LUMP SUM ITEM.

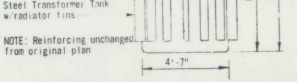
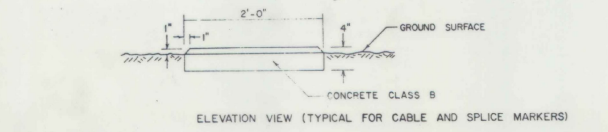
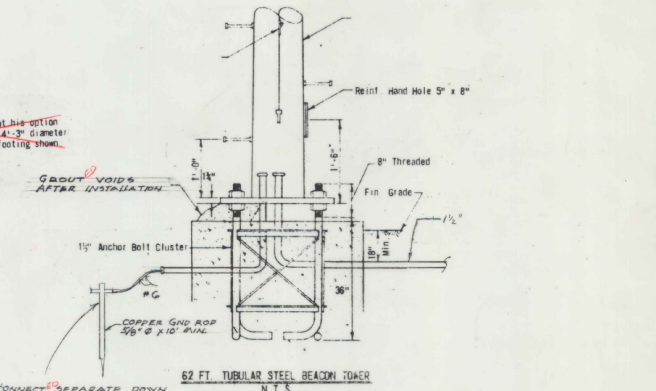
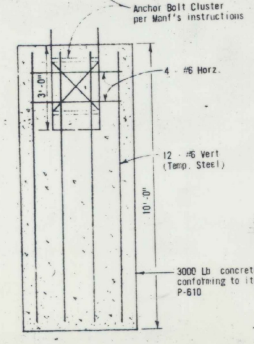
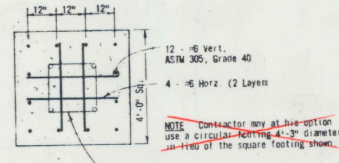
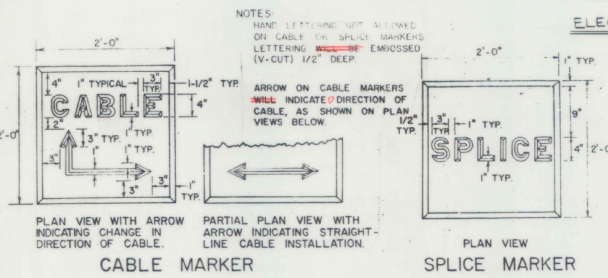
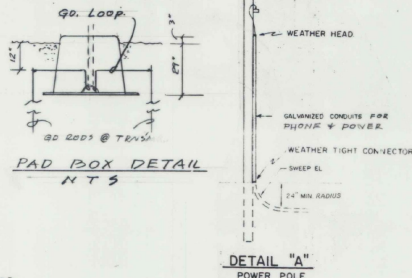
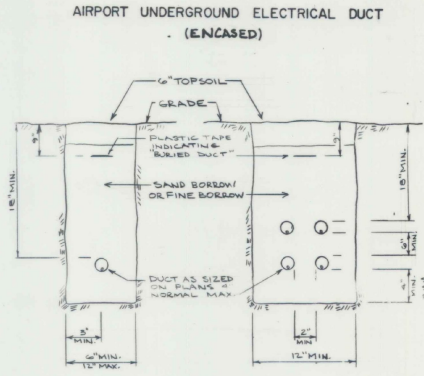
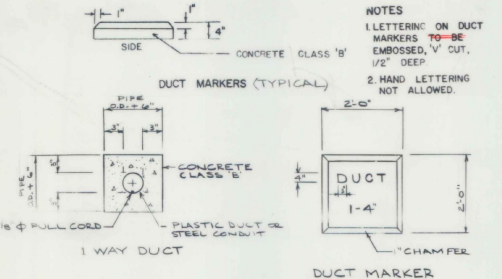
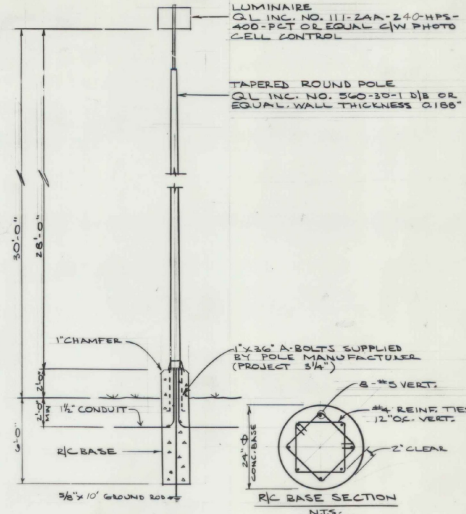
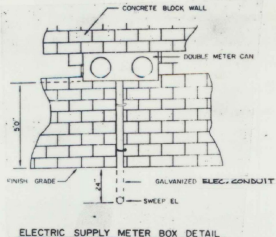
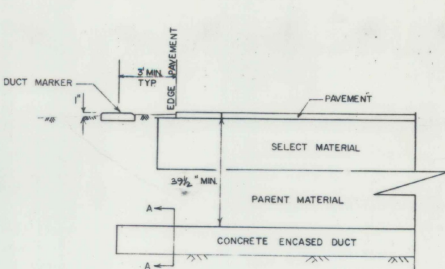
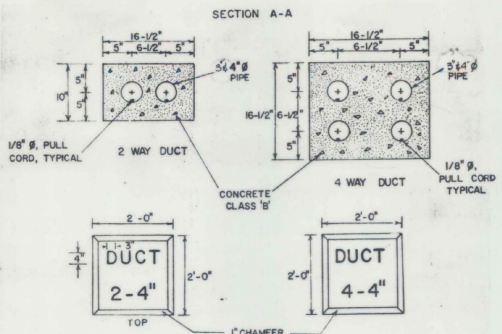
**AS BUILT PLANS**  
I hereby certify that the construction was done in accordance with the drawings as shown on the attached sheets.  
Dale R. Patten  
5 Feb 87

10/18/85 ADDED NOTES  
SIZES REVISED CONDUITS

|                    |                        |
|--------------------|------------------------|
| 1 SURVEY, FIELD BY | 2 SITE ELECTRICAL PLAN |
| 3 CHECKED          | RUTLAND STATE AIRPORT  |
| 4 DESIGN           | CLARENDON, VERMONT     |
| 5 DRAWING          | AIP3-50-0015-02        |
| 6 TRACED           |                        |
| 7 APPROVED, REV'D  |                        |
| 8 DATE: 8/15/83    |                        |
| 9 SCALE: 1" = 40'  |                        |

PROJ. NO. 5781  
SHEET 23 OF 44

**P.E.A.**  
PINKHAM ENGINEERING ASSOCIATES, INC.  
Route 24, Oak Town, VT 05455



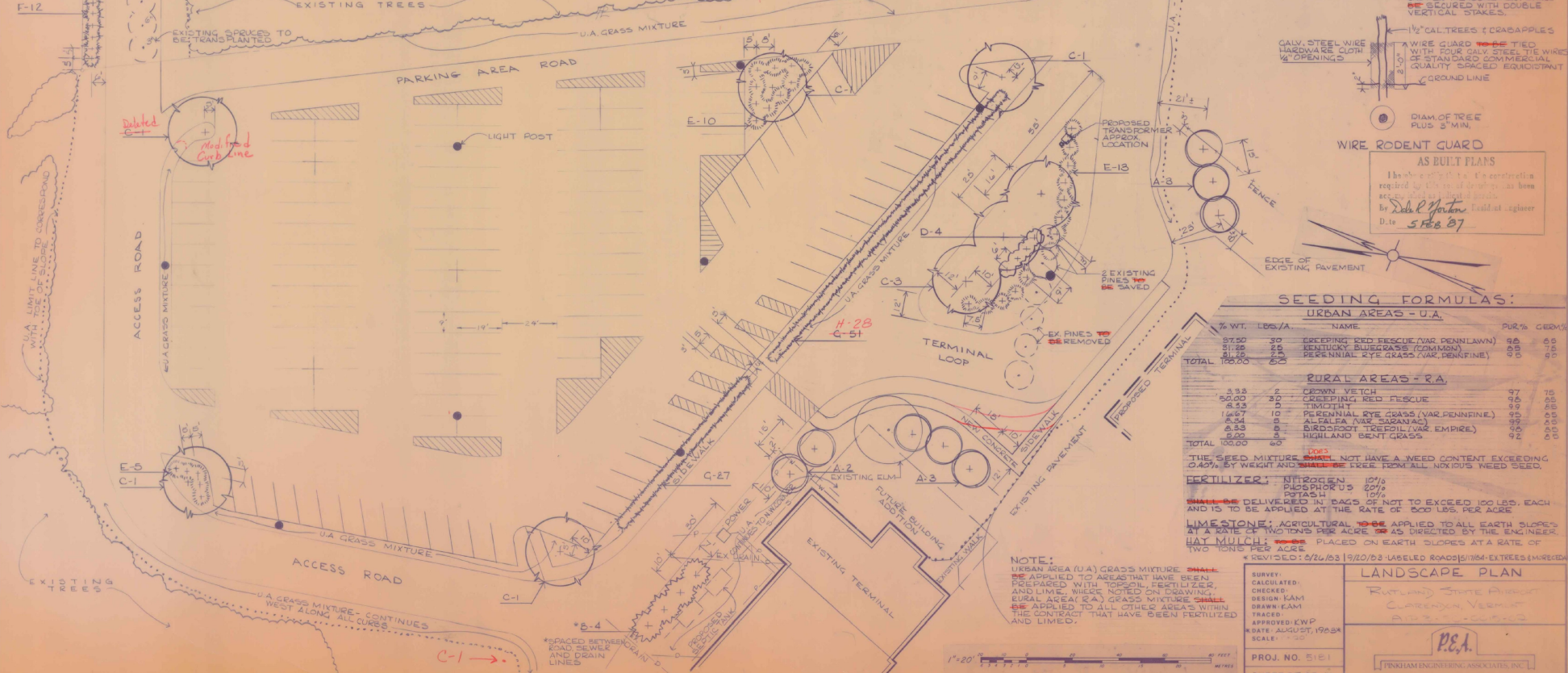
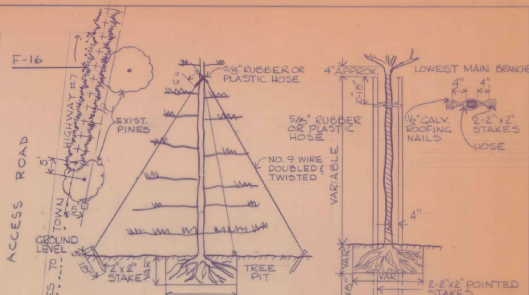
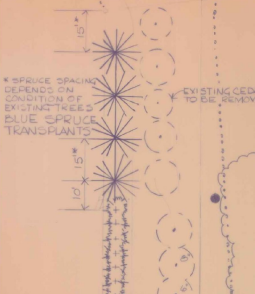
**AS BUILT PLANS**  
 I hereby certify that the construction required by the set of drawings, as been completed in accordance therewith.  
 By *Dale R. Vinton* Licensed engineer to 5 FEB 87

SURVEY: CALCULATED: CHECKED: DRAWN: GFS TRACED: APPROVED: KCV/B DATE: 8/15/88 SCALE: NOTED

**ELECTRICAL DETAILS**  
 RUTLAND AIRPORT  
 CLARENDON, VERMONT  
 AIR 3-50-0015-02  
 P.E.A.  
 PINKHAM ENGINEERING ASSOCIATES, INC.  
 Route 24, Tullahoma, P.O. Box 465, Tullahoma, Tennessee 38465

PLANT LIST

| KEY | SCIENTIFIC NAME              | COMMON NAME   | QUANTITY | SIZE     | MISC. |
|-----|------------------------------|---|----------|----------|-------|
| A   | MALUS FLORIBUNDA             | JAPANESE FLOWERING CRABAPPLE  | 8        | 4-5'     | B & B |
| B   | PINUS NIQUA                  | AUSTRIAN PINE   | 4        | 5-6'     | CONT. |
| C   | QUERCUS BOREALIS             | RED OAK <i>Modified to Norway Maple</i>                                       | 8        | 9-11'    | B & B |
| D   | RHODODENDRON NUDIFLORUM      | PINXTERBLOOM AZALEA   | 4        | 18"-24"  | CONT. |
| E   | TAXUS CUSPIDATA 'GREEN WAVE' | <del>GREEN WAVE JAPANESE YEW</del><br><i>Added</i>                            | 28       | 12'-15"  | B & B |
| F   | THUJA OCCIDENTALIS NIQUA     | <del>DARK AMERICAN ARBORVITAE</del><br><i>Added</i>                           | 28       | 3-4'     | B & B |
| G   | THUJA OCCIDENTALIS NIQUA     | <del>DARK AMERICAN ARBORVITAE</del><br><i>Added</i><br><i>Mugo Pine ADDED</i> | 28       | 2-2 1/2' | B & B |



**WIRE RODENT GUARD AS BUILT PLANS**  
 This is subject to the concentration required by the soil analysis as been by *Edith J. Horton* local engineer. D. to 5 FEB 87

**SEEDING FORMULAS:**

| URBAN AREAS - U.A. |        |                                      |        |
|--------------------|--------|--------------------------------------|--------|
| % WT.              | LEBS/A | NAME                                 | PUR. % |
| 97.20              | 30     | CREEPING RED FESCUE (VAR. PENNINAWN) | 95     |
| 1.78               | 25     | HEALTHY BUEGRASS (COMMON)            | 85     |
| 0.02               | 20     | PERENNIAL RYE GRASS (VAR. PENNIFINE) | 90     |
| TOTAL              | 100.00 |                                      |        |

| RURAL AREAS - R.A. |        |                                      |        |
|--------------------|--------|--------------------------------------|--------|
| % WT.              | LEBS/A | NAME                                 | PUR. % |
| 8.33               | 5      | BROWN VETCH                          | 57     |
| 50.00              | 20     | CREEPING RED FESCUE                  | 56     |
| 8.33               | 10     | TIMOTHY                              | 55     |
| 18.67              | 10     | PERENNIAL RYE GRASS (VAR. PENNIFINE) | 55     |
| 8.34               | 5      | ALFALFA (VAR. SAGANAC)               | 55     |
| 8.33               | 5      | BIRDSEED TREFOIL (VAR. EMPIRE)       | 50     |
| 8.00               | 5      | HIGHLAND BENT GRASS                  | 92     |
| TOTAL              | 100.00 |                                      |        |

THE SEED MIXTURE ~~SHALL~~ NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND ~~SHALL~~ BE FREE FROM ALL NOXIOUS WEED SEED.  
**FERTILIZER:** NITROGEN 10 1/2% PHOSPHORUS 20 1/2% POTASH 10%  
 SHALL BE DELIVERED IN BAGS OF NOT TO EXCEED 100 LBS. EACH AND IS TO BE APPLIED AT THE RATE OF 500 LBS. PER ACRE.  
**LIMESTONE:** AGRICULTURAL SHALL BE APPLIED TO ALL EARTH SLOPES AT A RATE OF TWO TONS PER ACRE OR AS DIRECTED BY THE ENGINEER.  
**HAY MULCH:** SHALL BE PLACED ON EARTH SLOPES AT A RATE OF TWO TONS PER ACRE.  
 \*REVISED: 8/24/83 19/20/83 - UNLEADED ROADS/STREET TREES EMERGENCY

**NOTE:**  
 URBAN AREA (U.A.) GRASS MIXTURE ~~SHALL~~ BE APPLIED TO AREAS THAT HAVE BEEN PREPARED WITH TOPSOIL, FERTILIZER, AND LIME. WEEDS NOTED ON DRAWING. RURAL AREA (R.A.) GRASS MIXTURE ~~SHALL~~ BE APPLIED TO ALL OTHER AREAS WITHIN THE CONTRACT THAT HAVE BEEN FERTILIZED AND LIMED.

**LANDSCAPE PLAN**  
 RUTLAND STATE PARK  
 BRANKHAM  
 BRANKHAM  
 APPROVED: KWP  
 DATE: AUGUST, 1982A  
 SCALE: 1"=20'  
 PROJ. NO. 51-E-1  
 SHEET 25 OF 44

**P.E.A.**  
 PENSILVANIA ENGINEERING ASSOCIATES, INC.  
 Route 12, 7th Floor P.O. Box 800 - Wilkes-Barre, PA 18703

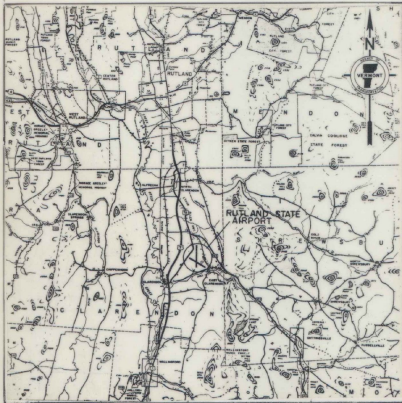


# RUTLAND STATE AIRPORT

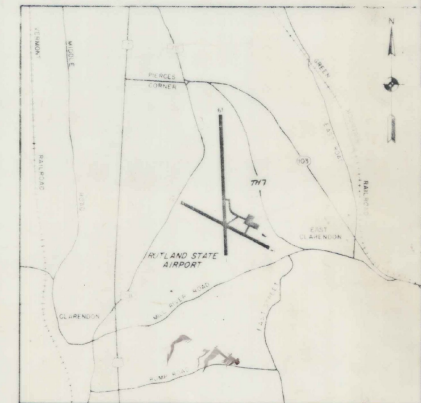
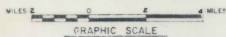
## CLARENDON, VERMONT

PROJECT NO. AIP 3-50-0015-02

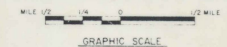
NEW ACCESS ROAD AND PARKING AREA  
WITH RELATED UTILITY MODIFICATIONS



VICINITY MAP



LOCATION MAP



| INDEX OF DRAWINGS                                   |   |
|---|---|
| SHEET 1 QUANTITY SHEET                              | SHEET 23 SITE ELECTRICAL PLAN   |
| SHEET 2 EXISTING FACILITIES                         | SHEET 24 ELECTRICAL DETAILS   |
| SHEET 3 AIRPORT SITE PLAN                           | SHEET 25 LANDSCAPE PLANS  |
| SHEET 4 UTILITY RELOCATION AND INSTALLATION         | SHEET 26 EARTHWORK QUANTITY SHEET   |
| SHEET 5 ACCESS ROAD LAYOUT DATA                     | SHEET 27 B-5 SLOPE GRADING ENHANCEMENTS MUCK 12-6-71                          |
| SHEET 6 ACCESS ROAD CROSS SECTION STA 0400 TO 10450 | SHEET 28 D-2 C.R.M. HEADWALLS, UNDERDRAIN 12-16-76 R                          |
| SHEET 7 ROADWAY CROSS SECTIONS                      | SHEET 29 D-3 TREATED GUTTERS 4-27-73 R  |
| SHEET 8 ACCESS ROAD PROFILE STA 0400 TO 10450       | SHEET 30 D-4 FLOODING BASIN END SECTION ELBOWS 7-24-75 R                      |
| SHEET 9 ROADWAY PROFILES                            | SHEET 31 D-8 REINFORCED CONCRETE DROP INLET 12-6-71                           |
| SHEET 10 SITE CROSS SECTIONS STA 0400 TO 2400       | SHEET 32 D-9 REINFORCED CONCRETE DROP INLET TOPS 12-6-71                      |
| SHEET 11 SITE CROSS SECTIONS STA 2400 TO 4400       | SHEET 33 D-11 GRATE AND COVERS 8-24-81 R                                      |
| SHEET 12 SITE CROSS SECTIONS STA 4400 TO 6400       | SHEET 34 D-13 REINFORCED CONCRETE MANHOLE 8-10-81 R                           |
| SHEET 13 SITE CROSS SECTIONS STA 6400 TO 10400      | SHEET 35 D-16 PRECAST CURB DROP INLET, GRATE, ROP END SECTION ETC. 11-14-72 R |
| SHEET 14 SITE CROSS SECTIONS STA 8450 TO 10400      | SHEET 36 D-20 HIGHWAY CROSSINGS FOR UNDERGROUND UTILITIES 9-9-75 R            |
| SHEET 15 PARKING AREA LAYOUT                        | SHEET 37 E-2 APPROACH SIGNS, ROAD CONSTRUCTION 3-4-81 R                       |
| SHEET 16 SIGNAGE DETAILS                            | SHEET 38 E-6 CONSTRUCTION SIGNS, ON PROJECT 4-1-80 R                          |
| SHEET 17 PAVEMENT MARKING DETAILS                   | SHEET 39 E-7 DELINEATION, BARRICADES, AND DETOURS 2-2-83 R                    |
| SHEET 18 DRAINAGE PROFILES                          | SHEET 40 E-7A TYPE III BARRICADE BREAKAWAY 4-8-82 R                           |
| SHEET 19 DRAINAGE PROFILES                          | SHEET 41 E-25 SIGN SUPPORTS, TUBULAR ALUMINUM, YIELDING 6-17-81 R             |
| SHEET 20 DRAINAGE PROFILES                          | SHEET 42 E-29 SIGN PLACEMENT, NON-EXPRESSWAY 8-25-81 R                        |
| SHEET 21 SEWER SYSTEM DETAILS                       | SHEET 43 T-1 DETAILS 12-7-76 R  |
| SHEET 22 TYPICAL ROAD DETAILS                       | SHEET 44 T-2 DETAILS 7-5-72   |

**AS BUILT PLANS**

I hereby certify that all the construction required by this set of drawings has been accomplished as indicated herein.  
By *Dale R. Hartman* Resident Engineer  
Date *5 FEB 87*

THESE PLANS AND SPECIFICATIONS ARE IN ACCORDANCE WITH CRITERIA CONTAINED IN CURRENT FAR AIRPORT CIRCULARS AS INDICATED IN AC CHECKLIST AC 90-266 DATED 03/15/83.

STATE OF VERMONT  
AGENCY OF TRANSPORTATION

FEDERAL AVIATION  
ADMINISTRATION  
ENGINEERING AND  
SAFETY BRANCH  
Approved: \_\_\_\_\_  
Date: \_\_\_\_\_

STATE OF VERMONT  
AGENCY OF TRANSPORTATION  
DIRECTOR OF ENGINEERING  
AND CONSTRUCTION  
Approved: *S. J. Gagne PE.*  
Date: *11-4-85*

PREPARED BY:  
PINKHAM ENGINEERING ASSOC.  
WILLISTON, VERMONT