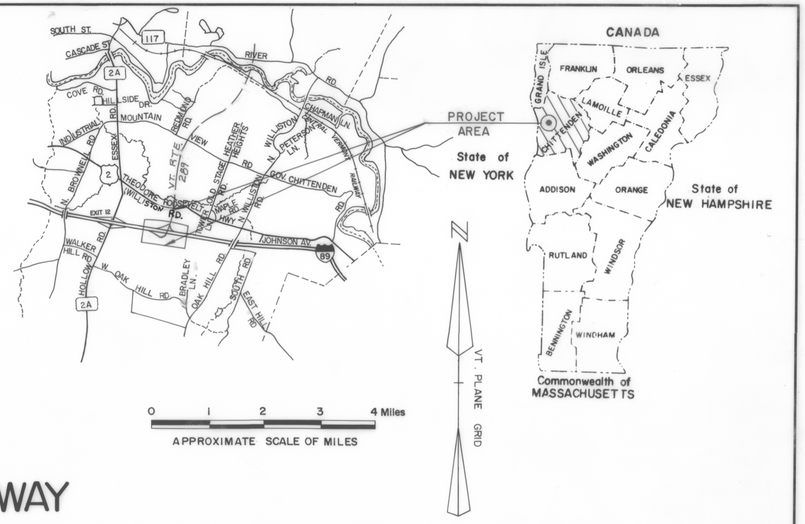
INDEX OF SHEETS

SHEET	1	TITLE PAGE
	2-4	TYPICAL SECTIONS
	5-6	R.O.W. DETAIL SHEETS
	7-12	R.O.W. LAYOUT SHEETS
	13-17	PROFILE SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION



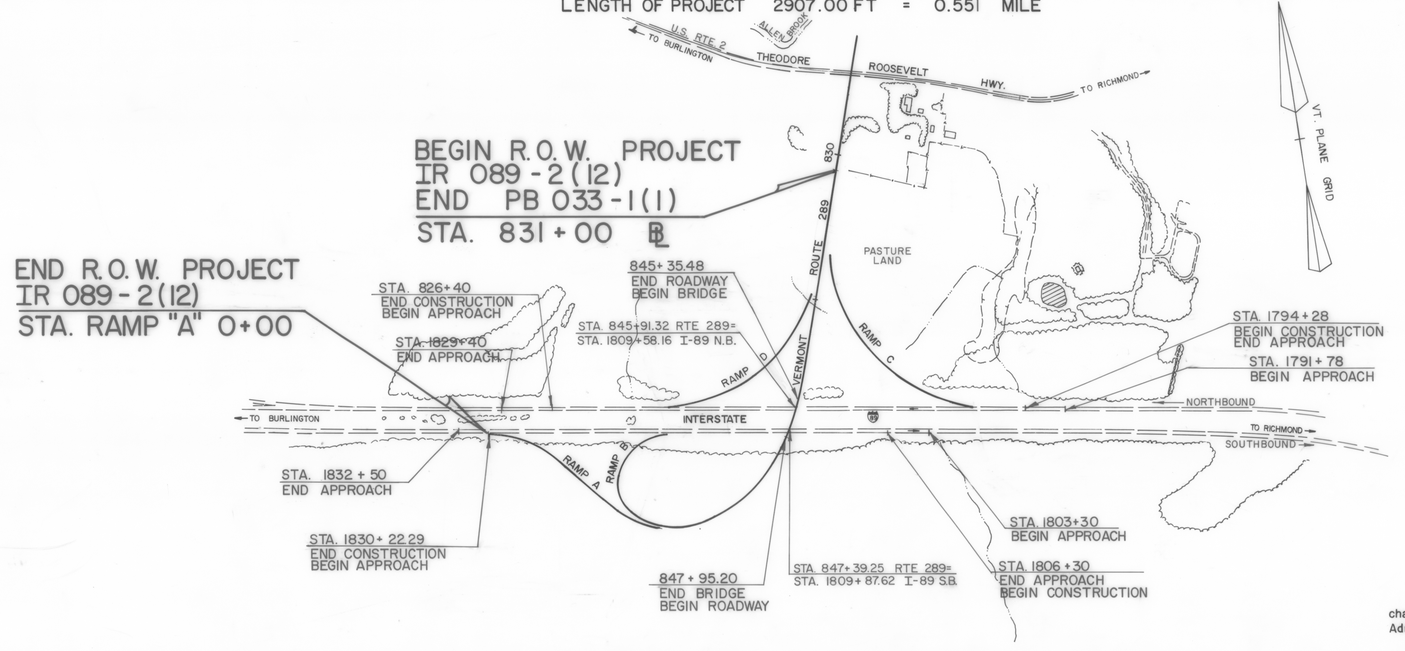
PROPOSED IMPROVEMENT
TOWN OF WILLISTON
COUNTY OF CHITTENDEN
CHITTENDEN COUNTY CIRCUMFERENTIAL HIGHWAY
VERMONT ROUTE 289

BEGINNING AT A POINT APPROXIMATELY 0.108 MILES SOUTHERLY OF ROUTE 2 THEODORE ROOSEVELT HIGHWAY AND EXTENDING SOUTHERLY 0.551 MILES

LENGTH OF ROADWAY	2647.28 FT	=	0.501 MILE
LENGTH OF BRIDGE	259.72 FT	=	0.049 MILE
LENGTH OF PROJECT	2907.00 FT	=	0.551 MILE

TRAFFIC DATA

1984	ADT	
2004	ADT	16000
1984	DHV	
2004	DHV	1500
	T	5%
	V	50 MPH



R.O.W. PLANS

Scale in feet
200 0 200 400 600 800 1000

CONVENTIONAL SIGNS

COUNTY LINE
TOWN LINE
LIMITS OF ACCESS
POINT OF ACCESS
FENCE LINE
STONE WALL
TRAVELED WAY
GUARD RAIL
RAILROAD
SURVEY LINE
CULVERT
POWER POLE
TELEPHONE POLE
TREES
CONTROL OF ACCESS
PROPERTY LINE
R.O.W. TAKING LINE
SLOPE RIGHTS SR
TOP OF CUT
TOE OF SLOPE

DATUM
VERTICAL NGVD 1929
HORIZONTAL N/A

These plans are subject to such engineering changes as may be required by the Federal Highway Administration or the Chief Engineer.

Construction is to be carried on in accordance with these plans and the Standard Specifications for Construction dated 1986, for use on these projects, including all subsequent provisions as are incorporated in these plans.

APPROVED _____ DATE 7/10/89
RIGHT OF WAY DIRECTOR

SUBMITTED BY ORDER OF THE STATE TRANSPORTATION BOARD
APPROVED _____ DATE 7/10/89
DIRECTOR OF ENGINEERING AND CONSTRUCTION

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED _____ DATE _____
DIVISION ADMINISTRATOR

HNTB
HOWARD NEEDLES TAMMEN & BERGENDOFF

PROJECT WILLISTON Nº IR - 089 - 2(12)
SHEET 1 OF 17 SHEETS

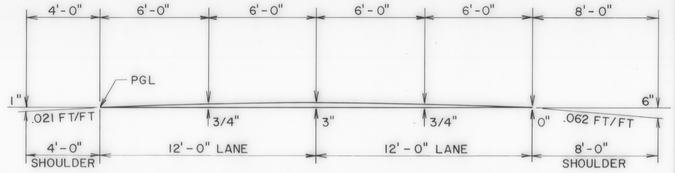
BRUNING 44-131 40592-1

D-10

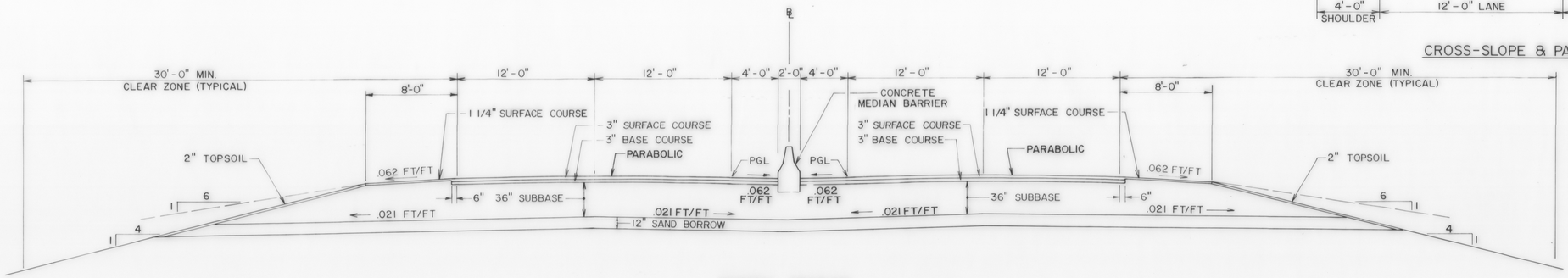
SRS 12/17/70

TYPICAL SECTIONS

3" BITUMINOUS CONCRETE PAVEMENT - 1 1/4" TYPE III WEARING COURSE, 1 3/4" TYPE II BINDER COURSE
3" BITUMINOUS CONCRETE PAVEMENT, TYPE I - BASE COURSE 1-3" COURSE
36" SUBBASE OF DENSE GRADED CRUSHED STONE
SHOULDERS 1 1/4" BITUMINOUS CONCRETE PAVEMENT
12" SAND BORROW

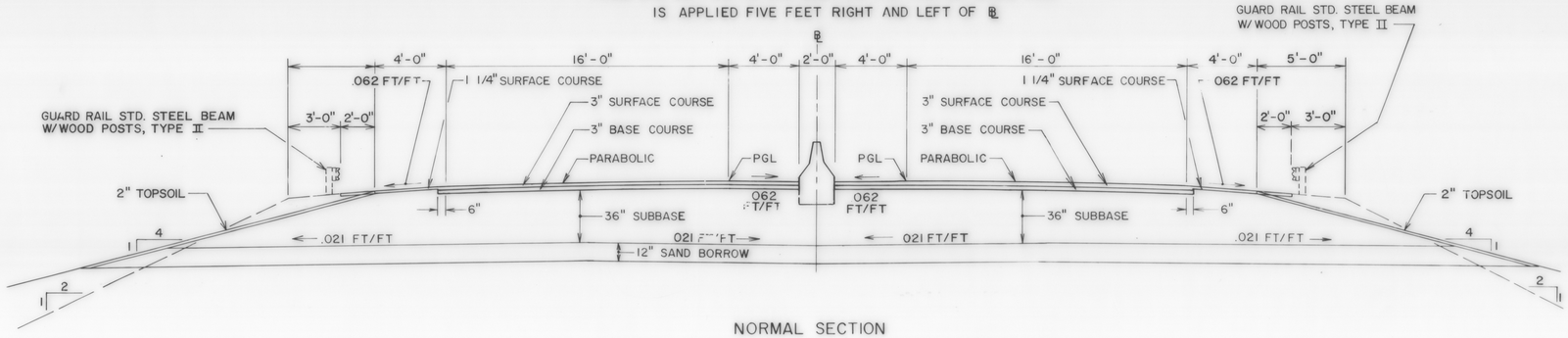


CROSS-SLOPE & PARABOLIC DETAIL



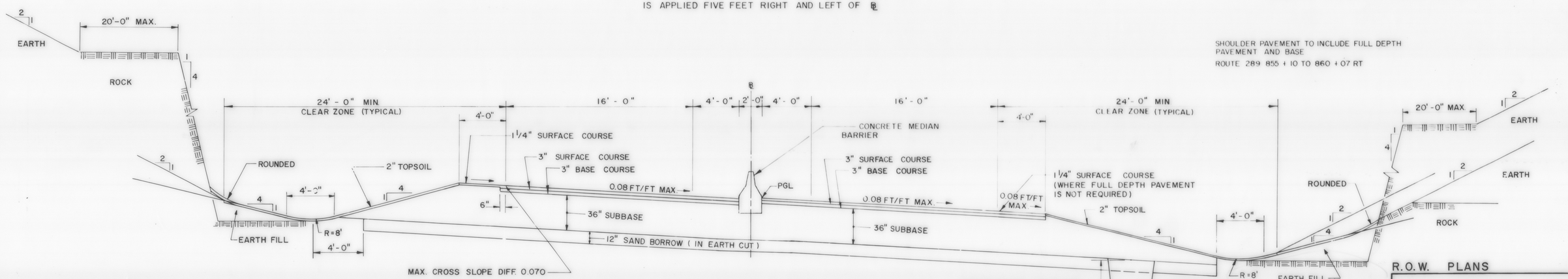
NORMAL SECTION

FROM STA. 831+00 TO STA. 838+00 THE PROFILE GRADE LINE
IS APPLIED FIVE FEET RIGHT AND LEFT OF ℄



NORMAL SECTION

FROM STA. 838+50 TO STA. 842+00 THE PROFILE GRADE LINE
IS APPLIED FIVE FEET RIGHT AND LEFT OF ℄



BANKED SECTION

FROM STA 841+00 TO STA 860+00 THE PROFILE GRADE LINE
IS APPLIED ONE FOOT RIGHT OF ℄

NOTE.
UNDERDRAIN SHOULD BE PROVIDED IN EARTH CUT WHERE THE SAND BORROW IS IN A BOX CUT, OR AS DIRECTED BY THE ENGINEER.

SEEDING FORMULA, ITEM 651.15
RURAL AREAS

% WT.	lbs/A	NAME	PUR. %	GERM %
3.33	2	CROWN VETCH	97	75
50.00	30	CREEPING RED FESCUE	98	85
8.33	5	TIMOTHY	99	85
16.67	10	PERENNIAL RYE GRASS (VAR. PENNFINE	95	85
8.34	5	ALFALFA (VAR. SARANAC)	99	85
8.33	5	BIRDSFOOT TREFOIL (VAR. EMPIRE)	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 FROM ALL NOXIOUS WEED SEED.
HAY MULCH, ITEM 651.25, TO BE PLACED ON ALL EARTH SLOPES AT THE RATE OF TWO TONS PER ACRE, OR AS DIRECTED BY THE ENGINEER.
FERTILIZER, ITEM 651.18, SHALL BE MIXED AS FOLLOWS:

NITROGEN	10%
PHOSPHORUS	20%
POTASH	10%

FERTILIZER 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 OR AS DIRECTED BY THE ENGINEER. AGRICULTURAL LIMESTONE, ITEM 651.20 TO BE APPLIED TO ALL SLOPES AT THE RATE OF TWO TONS PER ACRE OR AS DIRECTED BY THE ENGINEER.
WOOD MARKER POSTS, ITEM 619.15 TO BE PLACED AS DIRECTED BY THE ENGINEER. FOR ROUNDING OF SLOPES, SEE STANDARD SHEET B-5.

DATUM
VERTICAL _____
HORIZONTAL _____

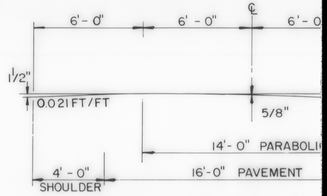
R.O.W. PLANS

SURVEYED BY PINKHAM ENG DATE 7/87
DRAWN BY R.C.A. DATE 10/88
TRACED BY N.P.D. DATE 10/88

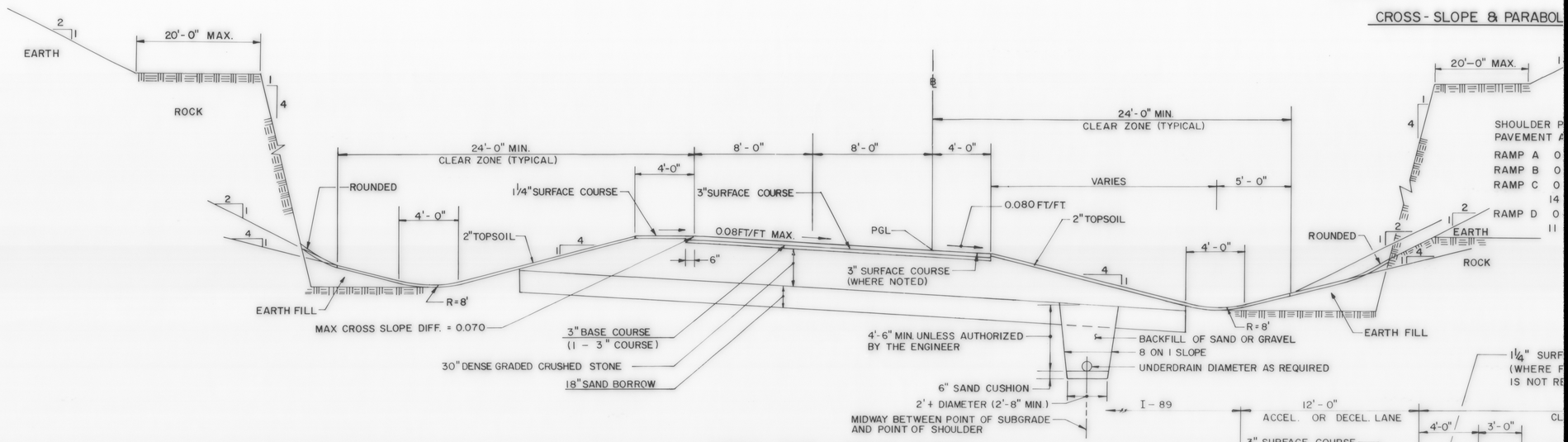
VERMONT ROUTE 289 (F.A.P.)
TOWN OF WILLISTON
PROJ WILLISTON NO. IR 089-2(12)
SHEET 2 OF 17

RAMP TYPICAL SECTIONS

3" BITUMINOUS CONCRETE PAVEMENT - 1 1/4" TYPE III WEARING COURSE, 1 3/4" TYPE II BINDER COURSE
3" BITUMINOUS CONCRETE PAVEMENT, TYPE I - BASE COURSE 1-3" COURSE
30" SUBBASE OF DENSE GRADED CRUSHED STONE
SHOULDERS 1 1/4" BITUMINOUS CONCRETE PAVEMENT
18" SAND BORROW



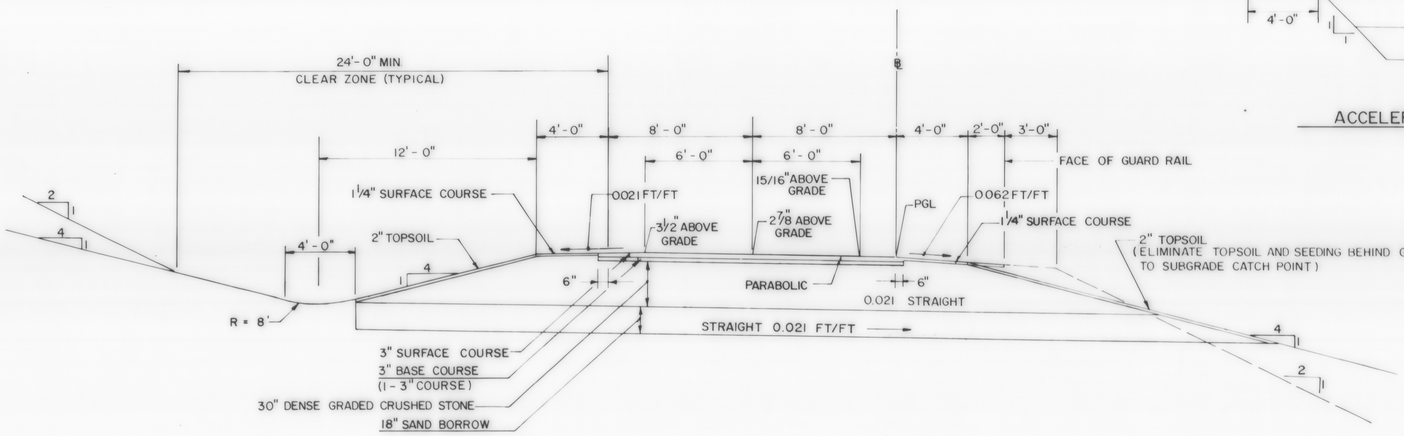
CROSS-SLOPE & PARABOL



TYPICAL RAMP - BANKED SECTION
SCALE : 1/4" = 1'-0" VERT
1/4" = 1'-0" HORZ

ACCELERATION / DECELERATION LA
I-89

SHOULDER PA
PAVEMENT A
I-89 NB 17
18
I-89 SB 18
18



NOTE:
1. WHEN EXISTING SUBGRADE MA
THE REQUIREMENTS FOR SAN
SHALL REMAIN AND THE SAN
THAT AREA.
2. UNDERDRAIN SHOULD BE PROVIDE
IS IN A BOX CUT, OR AS DIRECT

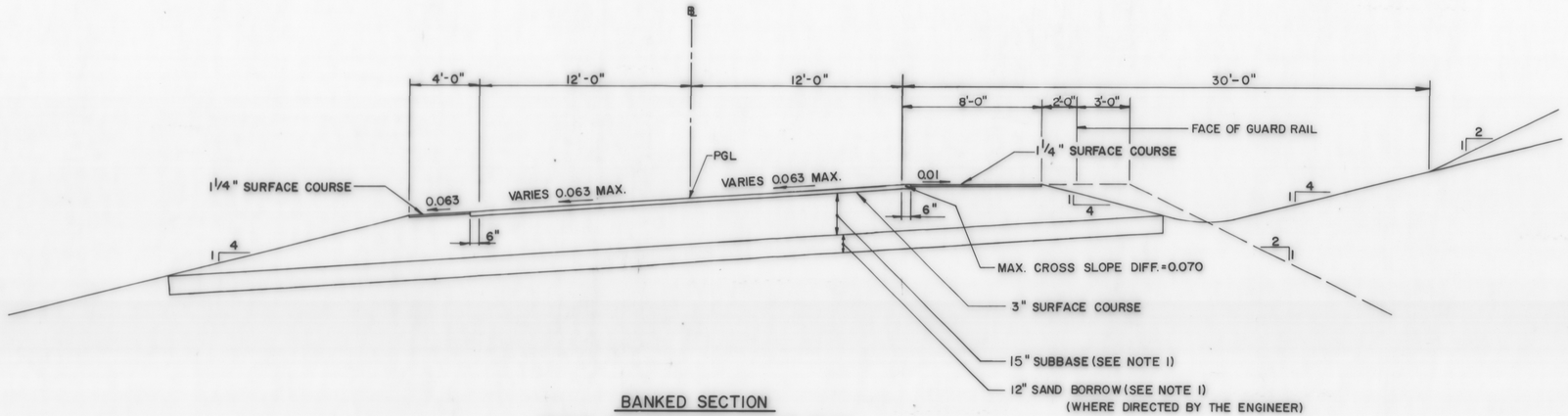
TYPICAL RAMP - NORMAL SECTION
SCALE : 1/4" = 1'-0" VERT
1/4" = 1'-0" HORZ

DATUM
VERTICAL _____
HORIZONTAL _____

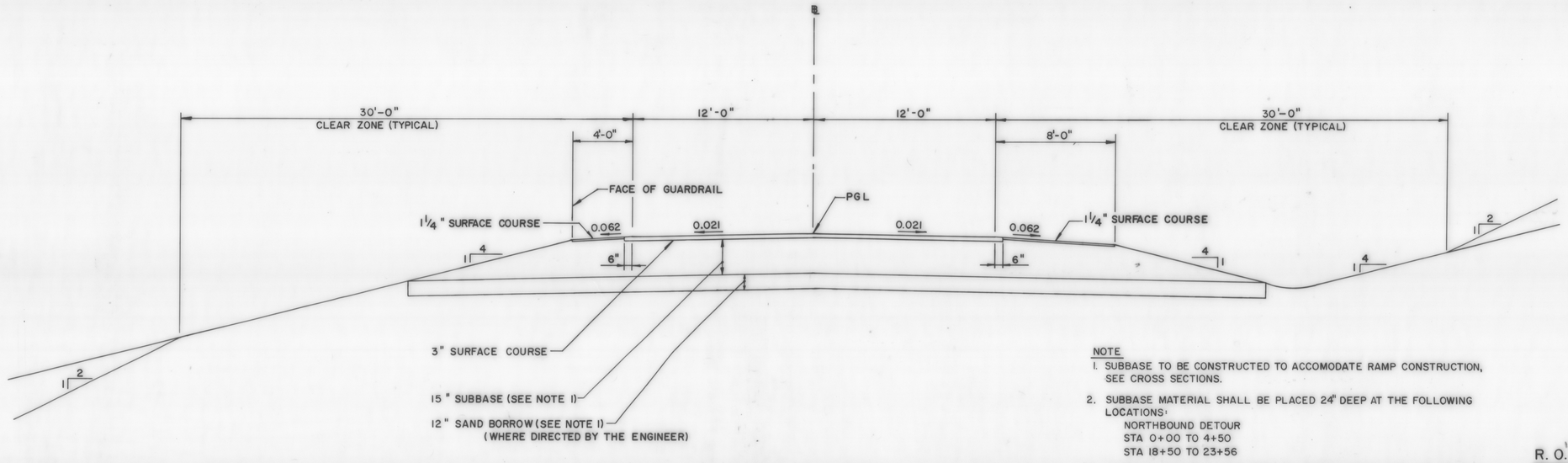
TYPICAL SECTIONS

3" BITUMINOUS CONCRETE PAVEMENT - 1 1/4" TYPE III WEARING COURSE, 1 3/4" TYPE II BINDER COURSE

15" SUBBASE OF DENSE GRADED CRUSHED STONE
12" SAND BORROW (WHERE DIRECTED BY THE ENGINEER)



BANKED SECTION
BRIDGE CONSTRUCTION DETOUR ROAD
NB STA 5+25± TO STA 18+25±



NORMAL SECTION
BRIDGE CONSTRUCTION DETOUR ROAD

NOTE
1. SUBBASE TO BE CONSTRUCTED TO ACCOMODATE RAMP CONSTRUCTION, SEE CROSS SECTIONS.
2. SUBBASE MATERIAL SHALL BE PLACED 24" DEEP AT THE FOLLOWING LOCATIONS:
   NORTHBOUND DETOUR
   STA 0+00 TO 4+50
   STA 18+50 TO 23+56
3. SUBBASE MATERIAL USED FOR THE DETOUR ROADS AND NOT TO BE PART OF THE FINAL RAMP SUBBASE SHALL BE REMOVED AND REUSED IN THE BOTTOM 8" LAYER OF VT 289 SUBBASE. PAYMENT TO BE ITEM 301.35 SUBBASE OF DENSE GRADED CRUSHED STONE. (RECYCLED)

DATUM
VERTICAL _____
HORIZONTAL _____

R. O. W. PLANS

SURVEYED BY PINKHAM ENG. DATE 11/87
DRAWN BY R.C.A. DATE 11/88
TRACED BY L.S. DATE 11/88

VERMONT ROUTE 289 (F.A.P.)
TOWN OF WILLISTON
PROJ. WILLISTON NO. IR 089-2(12)

STATE OF VERMONT
AGENCY OF TRANSPORTATION
RIGHT OF WAY PLANS
DETAIL SHEET

TABLE OF PROJECT PROPERTY ACQUISITION

PARCEL NO.	GRANTOR	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKING	REM.	RIGHTS	TITLE TAKEN	DATE	TOWN OR CITY RECORDED	BK.	PG.	REMARKS
	SEE PB 033-1(1) SECTION 1A AND 1B FOR PARCELS 0101-0113.												
0116A	C.S.D., INC. TOM CARLSON, AGENT	7, 8 & 11	831+00 ℄	RAMP "D" 12+50 RT.	6.66 A±			WD		WILLISTON			SEE PB 033-1(1) FOR ADDITIONAL TAKINGS. (SECTION 1B, PARCEL 0113)
		7, 8, & 11	831+00 RT.	RAMP "D" 12+50 RT.		223.54 A±							REMAINDER AFTER TAKINGS OF CONTRACT PB 033-1(1). (SECTION 1B, PARCEL 0113)
		7 & 8	834+65 RT.	835+20 RT.			CONST.EASE.(T)(0.01 A±)						(230 SF±)
		8	835+50 RT.				DRAINAGE (P)						
		8	836+75 RT.	RAMP "D" 6+40 RT.			CONST.EASE.(T)(0.09 A±)						(3875 SF±)
		8	RAMP "D" 6+50 RT.				DRAINAGE(P)						
0116B		11	N.B.1819+90 RT.	N.B.1823+00 RT.	0.65 A±			WD		WILLISTON			
		11	N.B.1820+40 RT.				DRAINAGE(P)						
0117A	BURNETT, WILLIAM S. AND CARROLL, ELIZABETH B.	7, 8 & 10	831+00 ℄	N.B.1798+52 RT.	9.56 A±			WD		WILLISTON			SEE PB 033-1(1) FOR ADDITIONAL TAKINGS.
		7, 8, & 10	831+00 LT.	N.B. 1798+52 RT.		93.34 A±							REMAINDER AFTER TAKINGS OF CONTRACT PB 033-1(1). (SECTION 1B, PARCEL 0111)
		10	RAMP "C" 3+00 RT.				DRAINAGE (P)						
		10	RAMP "C" 3+35 RT.				DRAINAGE(P)						
		10	RAMP "C" 5+75 RT.				DRAINAGE(P)						
		10	RAMP "C" 6+00 RT.				DRAINAGE (P)						
		10	RAMP "C" 7+25 RT.	RAMP "C" 8+30 RT.			DITCH & DRAINAGE(P) (0.05 A±)						(2145 SF±)
		8	RAMP "C" 9+80 RT.										W-24, SPRING
0117B		8, 9	S.B.1807+00 LT.	851+35 LT.	0.55 A±			WD		WILLISTON			

TABLE OF REVISIONS

REVISION NO.	SHEET NO.	DESCRIPTION OF REVISION	DATE	MADE BY	APPROVED BY

LEGEND

DR. RT. - DRAINAGE RIGHT
DIT. RT. - DITCHING RIGHT
CH. RT. - CHANNEL RIGHT
DRIVE RT. - DRIVE RIGHT
CUL. RT. - CULVERT RIGHT
(D) - DEMOLITION OR REMOVAL
(W) - WATER SOURCES

PRESENT R.O.W.
TAKING WITHOUT ACCESS
TAKING WITHOUT ACCESS ALONG PROPERTY LINES
TAKING WITH ACCESS
(P) PERMANENT EASEMENT
(T) TEMPORARY EASEMENT

CONST. EASE. — CONST. EASEMENT
SR — SR — SLOPE RIGHTS
P — P — PROPERTY LINE
L — L — TOP OF CUT
TOE OF SLOPE

MADE BY: DRO DATE 5/89
CHECKED BY: SLC DATE 5/89

APPROVED [signature] DATE 7/10/89

PROJECT WILLISTON-COLCHESTER
NO. IR 089-2(12)
SHEET 5 OF 17

ROW

STATE OF VERMONT
AGENCY OF TRANSPORTATION
RIGHT OF WAY PLANS
DETAIL SHEET

TABLE OF PROJECT PROPERTY ACQUISITION

PARCEL NO.	GRANTOR	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKING	REM.	RIGHTS	TITLE TAKEN	DATE	TOWN OR CITY RECORDED	BK.	PG.	REMARKS
0118	GREGORY, CRAWFORD W. AND JUDITH A. (H & W)	8, 9 & 12	S.B. 1809+85 LT.	RAMP "A" 4+04 RT.	24.43 A±			WD		WILLISTON			
		9,12	853+50 LT.	RAMP "A" 4+04 RT.		56.57 A±							
0119	HILLSIDE EAST CORP. WILLIAM DUNN, AGENT	12	S.B. 1826+40 LT.	S.B. 1829+90 LT.	0.35 A±			WD		WILLISTON			
		12	RAMP "A" 4+04 RT.	S.B. 1829+90 LT.		4.21 A±							
0120A	VERMONT ELECTRIC POWER CO., INC. (VELCO) CHARLES F. LYONS, REAL ESTATE MANAGER	7, 8	831+00 ℄	N.B. 1810+64 RT.	4.01 A±	N/A	ALL R.,T., & I.	WD		WILLISTON			PERMANENT EASEMENT
0120B		8, 9	S.B. 1809+85 LT.	854+62 LT.	2.00 A±	N/A	ALL R.,T. & I.	WD		WILLISTON			PERMANENT EASEMENT
0122 B	NEW ENGLAND TELEPHONE AND TELEGRAPH CO.	8,10, & 11											UTILITY

TABLE OF REVISIONS

REVISION NO.	SHEET NO.	DESCRIPTION OF REVISION	DATE	MADE BY	APPROVED BY

LEGEND

DR. RT. - DRAINAGE RIGHT
DIT. RT. - DITCHING RIGHT
CH. RT. - CHANNEL RIGHT
DRIVE RT. - DRIVE RIGHT
CUL. RT. - CULVERT RIGHT
(D) - DEMOLITION OR REMOVAL
(W) - WATER SOURCES

PRESENT R.O.W.
TAKING WITHOUT ACCESS
TAKING WITHOUT ACCESS ALONG PROPERTY LINES
TAKING WITH ACCESS
(P) PERMANENT EASEMENT
(T) TEMPORARY EASEMENT

CONST. EASE. — CONST. EASEMENT
SR — SR — SLOPE RIGHTS
P — P — PROPERTY LINE
L — L — TOP OF CUT
TOE OF SLOPE

MADE BY: DRO DATE 5/89
CHECKED BY: SLC DATE 5/89

APPROVED _____ DATE 7/10/89

PROJECT WILLISTON-COLCHESTER
NO. IR 089-2(12)
SHEET 6 OF 17

ROW

N709,250 | N708,750 | E344,500 | N708,250 | N707,750

VT. PLANE GRID

CONCRETE MEDIAN BARRIER
STA 831 + 00 TO STA 835 + 00 ℄

END ROW PROJECT
PB 033-1(1) SECT. 1
STA. 831+00 ℄

831+00
110' LT.

BEGIN ROW PROJECT
IR 089-2(12)
STA. 831+00 ℄

825+06.05 ROUTE 289 ℄ =
19+98.65 ROUTE 2 REVISED ℄

STA 831+00.00
BEGIN PROJECT
IR 089-2(12)

BURNETT, WILLIAM S.
AND
CARROLL, ELIZABETH B.

PASTURE

STA 831+00 LT TO STA 835+00 LT
CONSTRUCT 2' WIDE SPECIAL DITCH
2:1 SIDE SLOPES TYPE I STONE FILL
1.0' DEEP

STA 832+50 ℄ TO STA 832+50 LT
NEW 18"x 78' OPTION PIPE

PT 17+22.63 =
833+97.03

500'

01
17A

BURNETT, WILLIAM S.
AND
CARROLL, ELIZABETH B.

BRUSH

BURNETT & CARROLL
C.S.D., INC.

CONCRETE MEDIAN BARRIER

01
20A

86-HB-49F

831+00

C.S.D., INC.

VERMONT ELECTRIC POWER CO., INC.
(PERMANENT 125' EASEMENT)

612'

01
16A

C.S.D., INC.

STA 835+00 MATCH LINE

831+00
100' RT.

STA 832+50 ℄ TO STA 832+50 ℄
NEW 12" x 4' CSP (GAUGE=.064")

STA 832+68 RT
STEEL BRACE FOR
EXISTING FENCE
INTO ROW FENCE

CONST. EASE. (T)

C.S.D., INC.

PASTURE

823 LEFT TURN | 824 LANE | 825 | 826 | 827 | 828 | 829 | 830 | 831 | 832 | 833 | 834 | 835

8" CSP | D.I. | 7.33' | 12" W.M. | 6" F.M. | 5" W | 8" W.M. | 6" F.M. | 12" W.M. | 6" F.M. | 5" W

Garage | Shed | 2 STY. W.F. | AC | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 | 15

Route 2 | U.S. | 2

Stream | Allen | Brook | 36" CSP

4' HIGH WOVEN WIRE FENCE

RTE. 289 STA. 831+00, 100' RT. TO RTE. 289 STA. 835+00, 112' RT.
RTE. 289 STA. 831+00, 110' LT. TO RTE. 289 STA 835+00, 110' LT.

REMOVAL OF EXISTING FENCE

STA 831 + 00 ℄ TO STA 835 + 00 ℄, 400 L.F.
STA 832 + 70 ℄ TO STA 832 + 68, 105' RT., 105 L.F.

STEEL BRACE

STA 832 + 68 RT 2 EA

E344,000 | E343,500 | E343,750 | N709,250 | N708,750 | N708,250

DATUM
VERTICAL _____
HORIZONTAL _____

R. O. W. PLANS

SURVEYED BY PINKHAM ENG DATE 7-87
DRAWN BY D. R. O. DATE 5-89
TRACED BY J. B. C./A. P. P. DATE 5-89

VERMONT ROUTE 289 (F.A.P.)
TOWN OF WILLISTON
PROJ. WILLISTON NO. IR 089-2(12)

SHEET 7 OF 17

CONST. PHASE	SETTLEMENT PLATFORM LOCATIONS & ELEVATIONS					S.P. TYPE
	PLATFORM	LOCATION	STATION	OFFSET	ELEVATION	
I	S-20	RAMP C	9+75	0	426	I
I	S-21	RAMP C	11+00	0	425	I

NOTES
1. FOR SETTLEMENT PLATFORM DETAILS, SEE STD. L-1 & SPECIAL PROVISIONS.
2. ANTICIPATED SETTLEMENT, APPROXIMATELY 5 INCHES.
3. FOR CONSTRUCTION PROCEDURE, SEE SHEET 53.

BURNETT, WILLIAM S. AND CARROLL, ELIZABETH B.

VT. PLANE GRID

N 707,750 E 344,250

N 707,250 E 344,250

N 706,750

E 343,750

E 343,250

RESET STEEL GUARD RAIL w/ STEEL POSTS
STA. 9+00 RT. TO STA. 12+00 RT RAMP C

STEEL BEAM GUARD RAIL W/ WOOD POSTS
STA 836 + 72 RT TO STA 837 + 60 RT ROUTE 289
STA 837 + 11 LT TO STA 837 + 98 LT ROUTE 289
STA 843 + 18 LT TO STA 844 + 81 LT ROUTE 289
STA 843 + 21 RT TO STA 844 + 46 RT ROUTE 289
STA 848 + 62 RT TO STA 849 + 50 RT ROUTE 289
STA 848 + 74 LT TO STA 849 + 37 LT ROUTE 289

STA. 9+00 RT STA. 9+50 RT
CONSTR. 2' WIDE SPECIAL DITCH
2:1 SIDE SLOPES, TYPE II STONE FILL

RAMP "C" STA 10+00 LT TO RAMP "C" 10+00 RT
NEW 24"x100' OPTION PIPE

20' EMBANKMENT BERM

ANCHOR FOR STEEL BEAM GUARD RAIL (SEE STD G-ID)

RP "C" 12+00

RAMP C STA 12+00 RT TO RAMP D STA 181+00 RT
NEW 12"x76' CSP (GAUGE=.064")

PASTURE

ANCHOR FOR STEEL BEAM GUARD RAIL (SEE STD. G-ID)

836+00 110' LT.

RTE 289 STA 835+00 ℄ TO RAMP C STA 9+50 RT
CONST. 2' WIDE SPECIAL DITCH, 2:1 SIDE SLOPES AND TYPE I STONE FILL

STA 835+50 ℄ TO STA 835+50 LT
NEW 18"x 66' OPTION PIPE

(500')

(630')

284'

MATCH LINE STA 9+00

RAMP C STA. 9+00 RT. TO RAMP C STA. 9+00 RT.
NEW 12"x 64' CSP (GAUGE=.064")

STA 845+91.32 RTE 289 = STA 1809+58.16 I-89 N.B.

GUARD RAIL APPROACH SECTION TYPE II (SEE STD SB-R4B-82)

845+35.48 END ROADWAY BEGIN BRIDGE

01 17A

BURNETT, WILLIAM S. AND CARROLL, ELIZABETH B.

STA. 842+50 ℄ TO 842+50 LT.
NEW 18"x 30' OPTION PIPE W/ 3'x 10'6" FLOW PAD TYPE I STONE FILL

STA. 845+10 ℄ TO STA. 845+00 RT
NEW 18"x 30' OPTION PIPE

EDGE OF SHOULDER
EDGE OF RAIL
ANCHOR FOR STEEL BEAM GUARD RAIL (SEE STD G-ID)

BREAKAWAY CABLE TERMINAL FOR STEEL BEAM GUARD RAIL W/ WOOD POSTS (SEE STD G-14)

BEGIN FLARE STA 837+85.5

86-HR-51F

VERMONT ROUTE 289

(1389')

BURNETT & CARROLL C.S.D., INC.

CONCRETE MEDIAN BARRIER

01 16A
C.S.D., INC.

END FLARE STA 836+84.5

ANCHOR FOR STEEL BEAM GUARD RAIL (SEE STD. G-ID)

BREAKAWAY CABLE TERMINAL FOR STEEL BEAM GUARD RAIL W/ WOOD POSTS (SEE STD G-14)

01 20A
VERMONT ELECTRIC POWER CO., INC. (PERMANENT 125' EASEMENT)

BREAKAWAY CABLE TERMINAL FOR STEEL BEAM GUARD RAIL W/ WOOD POSTS (SEE STD G-14)

STA 845+00 RT TO STA. 845+00 RT
NEW 18"x 64' OPTION PIPE W/ 3'x6' FLOW PAD TYPE I STONE FILL

EDGE OF SHOULDER
EDGE OF RAIL
END FLARE STA 843+37.5

(612')

DR. RT. (P)

CONST EASE.(T)

837+11.93 119' RT.

RAMP "D" 1+15 90' RT.

STA 835+50 ℄ TO STA 835+50 ℄
NEW 12"x4' CSP (GAUGE=.064")

STA 838+30 RT. STEEL BRACE FOR EXISTING FENCE TIE INTO ROW FENCE

PASTURE

805'

CONST. EASE.(T)

RAMP D

DR. RT. (P)

RAMP D STA 6+50 LT TO RAMP D STA 6+50 RT
NEW 18" x 74' OPTION PIPE W/ 3'x 6' OUTLET PAD, TYPE I STONE FILL

01 16A
C.S.D., INC.
86-HB-64F

SEE DETOUR ROAD

GUARD RAIL APPROACH SECTION TYPE I (SEE STD SB-R4B-82)

STATE OF VERMONT

N.B. STA 1811+23 TO N.B. STA 1814+00 RT
NEW 24"x278' RCP CLASS III

P 616'

STA 9+00

MATCH LINE

STA 1806+00 SB LT TO STA 1806+50 SB LT
NEW 6"x 50' UNDERDRAIN

S.B. STA. 1806+62 LT. TO S.B. STA. 1806+62 RT.
NEW 18"x 74' RCP CLASS III

STA 1806+62 SB LT
REMOVE EXIST D.I. & 18" RCP

S.B. 1807+00 125' LT.

RTE 289 STA 850+00 LT TO S.B. I-89 STA 1806+00 LT
CONSTRUCT 2' WIDE INTERCEPTOR DITCH, 2:1 SIDE SLOPES, 2' DEEP W/TYPE I STONE FILL

BURNETT, WILLIAM S. AND CARROLL, ELIZABETH B.

STA 847+39.25 RTE 289 = STA 1809+87.62 I-89 S.B.

GUARD RAIL APPROACH SECTION TYPE I (SEE STD SB-R4B-82

847+95.20 END BRIDGE BEGIN ROADWAY

STA 848+20 ℄ TO STA 848+00 RT
NEW 18"x86' OPTION PIPE

EDGE OF SHOULDER

290' BEGIN FLARE STA 849+15.5

STA 849+00 LT TO STA 850+00 LT
NEW 6"x 98' UNDERDRAIN

BREAKAWAY CABLE TERMINAL FOR STEEL BEAM GUARD RAIL W/ WOOD POSTS (SEE STD G-14)

01 20B
VERMONT ELECTRIC POWER CO., INC (PERMANENT 125' EASEMENT)

ANCHOR FOR STEEL BEAM GUARD RAIL (SEE STD G-ID)

CURVE 12
PI STA 849+93.17 BACK = STA 849+91.83 AHEAD

01 18
GREGORY, CRAWFORD W. AND GREGORY, JUDITH A.

STA 849+00 RT TO STA 850+00 RT
NEW 6"x 96' UNDERDRAIN

EDGE OF SHOULDER

STA 849+00 LT TO STA 850+00 LT
NEW 18"x 78' RCP CLASS III

RTE 289 STA 849+00 RT TO S.B. I-89 STA 1811+06 LT
NEW 18"x84' OPTION PIPE

S.B. STA 1811+06 LT TO S.B. STA 1811+07 LT
NEW 18"x10' RCP CLASS III

WOODS

I-89 STA 1812+50 SB LT TO STA 1814+00 SB LT
CONSTUCT 2' WIDE SPECIAL DITCH, 2:1 S.S., 1' DEEP W/TYPE I STONE FILL

STATE OF VERMONT

I-89 NORTHBOUND

I-89 SOUTHBOUND

STA 1806+30 END APPROACH BEGIN CONSTRUCTION

STA 1806+55 SB LT TO STA 1811+06 SB LT
NEW 6"x 455' UNDERDRAIN W/CAP END

STA 1811+10 SB LT TO STA 1814+00 SB LT
NEW 6"x 290' UNDERDRAIN W/CAP END

STA 1811+07 SB LT
REMOVE EXIST. D.I.

GUARD RAIL APPROACH SECTION TYPE II (SEE STD SB-R4B-82)

N.B. 1807+00 100' RT.

N.B. 1809+36 100' RT.

N.B. 1810+64 100' RT.

S.B. 1809+85 125' LT.

S.B. 1810+12.90 125' LT.

CURVE II
PI STA 846.53.30 BACK = STA 846+51.70 AHEAD

S.B. STA 1809+50 LT TO S.B. STA 1811+06 LT
NEW 18"x155' RCP CLASS III

P 285'

P 888'

P 380'

P 127'

CONCRETE MONUMENT

MATCH LINE STA 1806+00

MATCH LINE STA. 1814+00

CONCRETE MEDIAN BARRIER
STA 835+00 TO STA 845+35 ℄
STA 847+95 TO STA 850+00 ℄

CURVE C-I DATA
D = 05° 43' 46.48"
Δ = 98° 41' 57.43"
R = 1000.00'
L = 1722.63'
T = 1164.65'

CURVE D-I DATA
D = 05° 43' 46.48"
Δ = 81° 18' 02.57"
R = 1000.00'
L = 1418.97'
T = 858.63'

CURVE II DATA RTE 289
D = 03° 10' 59.16"
Δ = 12° 34' 23.67"
R = 1800.00'
L = 395.00'
T = 198.30'

CURVE 12 DATA RTE 289
D = 04° 46' 28.73"
Δ = 13° 36' 27.89"
R = 1200.00'
L = 285.00'
T = 143.17'

REMOVAL OF EXISTING FENCE
STA 1806+00 NB 110' RT TO STA 1814+00 NB 100' RT, 800 L.F.
STA 1807+00 SB 125' LT TO STA 1814+00 SB 118' LT, 700 L.F.
RTE 289 STA 838+30, 130' RT TO STA 838+39, ℄, 130 L.F.
RTE 289 STA 835+00 ℄ TO STA. 844+90 ℄, 990 L.F.

GUARD RAIL APPROACH SECTION, TYPE I
RTE 289 STA 844 + 46, RT
RTE 289 STA 848 + 23, LT

GUARD RAIL APPROACH SECTION, TYPE II
RTE 289 STA 844 + 81, LT
RTE 289 STA 848 + 50, RT
C.S.D., INC.

4' HIGH WOVEN WIRE FENCE
RTE 289 STA 835+00, 112' RT TO STA 837+12, 119' RT
RTE 289 STA 837+12, 119' RT TO RAMP D STA 9+00, 90' RT
RTE 289 STA 835+00 110' LT TO STA 836+00, 110' LT
RTE 289 STA 836+00, 110' LT TO RAMP C STA 12+00, 100' RT
RAMP C STA 12+00, 100' RT TO STA 9+00, 100' RT
I-89 STA 1807+00 SB, 125' LT TO STA 1809+00 SB, 185' LT
I-89 STA 1809+00 SB, 185' LT TO RTE 289 STA 850+00, 140' LT

STEEL BRACE
STA. 838+30 RT. 2 EA.

DATUM
VERTICAL _____
HORIZONTAL _____

R. O. W. PLANS

SURVEYED BY PINKHAM ENG. DATE 7-87
DRAWN BY D. R. O. DATE 5-89
TRACED BY J. B. C. /A. P. P. DATE 5-89

VERMONT ROUTE 289 (F.A.P.)
TOWN OF WILLISTON
PROJ. WILLISTON NO. IR 089-2(12)
SHEET 8 OF 17

VT. PLANE GRID

DRILLING AND BLASTING OF SOLID ROCK SUBGRADE
STA 854 + 50 TO STA 860 + 07 ROUTE 289
STA 8 + 50 TO STA 12 + 89 RAMP A
STA 0 + 00 TO STA 3 + 25 RAMP B

CURVE 12 DATA
D = 04° 46' 28.73"
Δ = 13° 36' 27.89"
R = 1200'
L = 285.00'
T = 143.17'

CURVE 13 DATA
D = 07° 09' 43.10"
Δ = 26° 51' 26.63"
R = 800'
L = 375.00'
T = 191.01'

CURVE 14 DATA
D = 10° 54' 48.53"
Δ = 54° 14' 24.02"
R = 525.00'
L = 497.00'
T = 268.89'

CURVE A-2 DATA
D = 07° 09' 43.10"
Δ = 16° 41' 14.62
R = 800'
L = 233.00'
T = 117.33'

CURVE B-1 DATA
D = 20° 50' 05.38"
Δ = 116° 22' 56.04"
R = 275.00'
L = 558.59'
T = 443.38

CURVE B-2 DATA
D = 11° 27' 32.96"
Δ = 37° 38' 24.32"
R = 500.00'
L = 328.47'
T = 170.41'

E 343.250
854+62
317' LT.
297'
159'
853+50
336' LT.
335'
P L
856 + 50
350' LT.
E 342.750
227'
E 342.250
858+50
320' LT.
STA 860+07.00
END PROJECT
IR 089-2(12)
378'
GREGORY, CRAWFORD W. & JUDITH A.
RTE 289 STA 856+50 LT TO RAMP A STA 8+50 RT
CONST. 2' WIDE INTERCEPTOR DITCH, 2:1 SIDE SLOPES
2' DEEP W/TYPE II STONE FILL
RP "A"
250' RT.
STA 858+50 LT TO
RAMP A STA 10+50 RT
NEW 6" x 400' UNDERDRAIN
W/ CAP END
N 706,250
(796')
STA 9+00
MATCH LINE
RAMP A
RAMP A STA 8+50 LT
RAMP A STA 10+50 LT
NEW 18"x200' RCP CLASS III
RAMP A STA 10+50 LT TO
RAMP A STA 11+50 LT
NEW 6"x100' UNDERDRAIN
W/CAP END
Brook
Stream
PC 10+56.32
RAMP B
RAMP B STA 2+00 LT TO STA 4+00 LT
TYPE I STONE FILL
RAMP B STA 0+50 LT TO RAMP B STA 4+00 LT
NEW 6" x 378' UNDERDRAIN W/CAP END
RAMP B STA 4+00 LT TO
RAMP B STA 4+00 RT
NEW 18"x58' OPTION PIPE
WOODS
RAMP B STA 4+00LT TO RAMP B STA 6+00LT
NEW 6" x 220' UNDERDRAIN W/CAP END
RAMP B STA 6+00 LT TO RAMP B STA 6+50 RT
NEW 18"x66' OPTION PIPE
STA 1819+23 SB LT TO STA 1819+35 SB LT
REMOVE EXIST. 18"x40' CMP & HEADWALL
R.O.W. PLANS
S.B.
1820+00
125' LT.
CONCRETE
MONUMENT
641'
86-HB-62C
86-HB-61C
86-HB-60C
86-HB-59C
86-HB-54C
86-HB-53C
86-HB-52C
CURVE 14
PI STA 857 + 78.89 BACK=
STA 857 + 38.11 AHEAD
STA 858 + 50 LT TO
STA 858 + 50 ℄
NEW 18" x 34' OPTION PIPE
RAMP A STA 10 + 50 RT TO
RAMP A STA 10 + 50 LT
NEW 18" x 52' OPTION PIPE
CURVE A-2
PI STA 11 + 73.65 BACK=
STA 11 + 71.99 AHEAD
PT 12+89.32
STA 860+07
PCC 0+00.00=
STA.860+07
STA 856+50 LT TO STA.850+00 LT.
CONST. 2' WIDE INTERCEPTOR DITCH, 2:1 SIDE SLOPES
2' DEEP W/TYPE II STONE FILL
N 706,250
NOTE :
I-289 STA 852+00 LT TO RAMP'A' STA 851+35 149' LT.
LOCATION OF UNDERDRAIN ALONG THE BENCHES SHALL BE DETERMINED BY THE FIELD ENGINEER IN ACCORDANCE WITH THE ACTUAL ROCK LOCATION
BURNETT, WILLIAM S. AND
CARROLL, ELIZABETH B.
01 18
01 20B
01 17B
BURNETT & CARROLL
GREGORY
GREGORY, CRAWFORD W. & JUDITH A.
VERMONT ELECTRIC POWER CO., INC.
(PERMANENT 125' EASEMENT)
VERMONT ROUTE 289
STA 855+00 LT TO STA 855+00 LT
NEW 18"x68' OPTION PIPE
STA 855+00 LT TO STA 855+00 LT
NEW 18"x60' OPTION PIPE
CURVE 13
PI STA 853 + 26.01 BACK
STA 853 + 18.99 AHEAD
STA 855+00 LT TO STA 858+50 LT
NEW 6"x360' UNDERDRAIN W/ CAP END
STA 855+00 RT TO STA 858+50 RT
NEW 18"x330' OPTION PIPE
STA 858+50 ℄ TO STA 858+50 RT
NEW 18"x 42' OPTION PIPE
STA 858+50 RT TO STA 860+00 RT
NEW 18"x 136' OPTION PIPE
STA 860+00 ℄ TO STA 860+00 RT
NEW 18"x42' OPTION PIPE
STA 858+50 RT TO STA 860+00 RT
NEW 6"x 138' UNDERDRAIN W/CAP END
STA 855+00 LT TO STA 855+00 RT
NEW 18"x 34' OPTION PIPE
STA 855+00 ℄ TO STA 855+00 RT
NEW 18"x 44' OPTION PIPE
STA 855+00 RT TO STA 858+50 RT
NEW 6" x 330' UNDERDRAIN W/CAP END
STA 850+00 LT TO STA 855+00 LT
NEW 6"x 518' UNDERDRAIN
STA 850+00
(290')
(380')
MATCH LINE
STA 850+00
4' HIGH WOVEN WIRE FENCE
RTE 289 STA 850+00, 140' LT TO STA 851+35, 149' LT
RTE 289 STA 851+ 35, 149' LT TO STA 853+50, 336' LT
RTE 289 STA 853+50, 336' LT TO STA 856+50, 350' LT
RTE 289 STA 856+50, 350' LT TO STA 858+50, 320' LT
RTE 289 STA 858+50, 320' LT TO RAMP A STA 11+90, 250' RT
RAMP A STA 11+90, 250' RT TO STA 8+50, 195' RT
REMOVAL OF EXISTING FENCE
STA 1814 + 00 SB 118' LT TO STA 1821+00 SB 106'LT., 700LF
REMOVAL AND DISPOSAL OF GUARD RAIL
I-89 STA 1820+00 SB, RT TO STA 1821+00 SB, RT
RAMP B STA 0+00 RT TO
RAMP B STA 2+00 RT
NEW 6" x 202' UNDERDRAIN W/CAP END
STA 860+00 RT TO RAMP B STA 2+00 RT
NEW 24"x 196' OPTION PIPE
RAMP B STA 1+00 RT TO STA 4+00 RT
TYPE I STONE FILL
RAMP B STA 2+00 RT TO RAMP B STA 4+00 RT
NEW 24"x190' OPTION PIPE
RAMP B STA 2+00 RT TO STA 4+00 RT
NEW 6"x100' UNDERDRAIN W/CAP END
GREGORY, CRAWFORD W. & JUDITH A.
RAMP B STA 4+00 RT TO
RAMP B STA 6+50 RT
NEW 24"x240' OPTION PIPE
RAMP B STA 4+00 RT TO
RAMP B STA 6+50 RT
NEW 6"x240' UNDERDRAIN
W/CAP END
RAMP B STA 6+50 RT TO
RAMP B STA 8+38 RT
NEW 30"x168' RCP CLASS III
RAMP B STA 6+50 RT TO
RAMP B STA 6+50 RT
NEW 18"x76' OPTION PIPE
I-89 STA 1814+00 S.B. TO RAMP B STA 2+50 RT
CONST. 2' WIDE INTERCEPTOR DITCH, 2:1 SIDE
SLOPES, 1' DEEP W/TYPE I STONE FILL
STA. 1814+00 SB LT TO
STA. 1817+06 SB LT.
NEW 6"x310' UNDERDRAIN W/ CAP END
STA 1815+10 SB LT TO
STA 1815+10 SB LT
REMOVE EXIST. 18"x24'
RCP & DI, PLUG EXIST.
PIPE
STA 1814+90 SB LT TO
STA 1815+10 SB LT
REMOVE EXIST. 18"x78'
CMP & HEADWALL
CURVE B-2
PI STA 7 + 29 BACK=
STA 7 + 16.65 AHEAD
STA. 1816+47.39
8+87.06 =
(888')
GREGORY
STATE OF VERMONT
STATE OF VERMONT
MATCH LINE STA 1814+00
MATCH LINE STA 1821+00
18" CMP
6" PACCGM Underdrain
ACCGMPUFB
D.I.
Directional Sign
S.B. STA 1817+06 LT TO S.B. STA 1817+06 RT
NEW 30" x 76' RCP CLASS III
STA 6+50 RT TO STA 8+00 RT
NEW 6"x150' UNDERDRAIN W/CAP END
GUARD RAIL
I-89 SOUTHBOUND
PCC 851+35.00
PCC 855+10.00
PCC 5+98.59
WOODS
DATUM
VERTICAL
HORIZONTAL
SURVEYED BY PINKHAM ENG. DATE 7-87
DRAWN BY D.R.O. DATE 5-89
TRACED BY J.B.C./A.P.P DATE 5-89
VERMONT ROUTE 289 (F.A.P.)
TOWN OF WILLISTON
PROJ WILLISTON NO. IR 089-2(12)
SHEET 9 OF 17

GREGORY, CRAWFORD W. & JUDITH A.

BURNETT, WILLIAM S. AND CARROLL, ELIZABETH B.

VT. PLANE GRID

E 345,250

E 344,750

N706,500

N707,000

EXIST. ROW LIMITS

GREGORY STATE OF VERMONT

1799+13
123' LT.

WOODS

GREGORY BURNETT AND CARROLL

CONCRETE MONUMENT

BURNETT STATE OF VERMONT

1076'

I-89 SB STA. 1806+00 LT. TO I-89 SB STA. 1805+50 LT.
CONSTRUCT 2' WIDE INTERCEPTOR DITCH 2:1 SIDE SLOPES
TYPE II STONE FILL & CARROLL

STA 1805+00 SB LT - STA 1803+50 SB LT
TYPE II STONE FILL

TYPE IV STONE FILL

Ditch

6" PACCGM Underdrain

ACCGMPUFB

Guard Rail

STA 1804+50 SB LT - STA 1806+00 SB LT
NEW 6" x 150' UNDERDRAIN W/ CAP END

STA 1803+30
BEGIN APPROACH

STA 1806+00 MATCH LINE

I-89 SOUTHBOUND

I-89 NORTHBOUND

STATE OF VERMONT

18"CMP

DI

1791 1792 1793 1794 1795 1796 1797 1798 1799 1800 1801 1802 1803 1804 1805

EDGE OF SHOULDER

EDGE OF RAIL

END FLARE STA 1793+12.5

STATE OF VERMONT
GOODRICH

BREAKAWAY CABLE TERMINAL
FOR STEEL BEAM GUARD RAIL
W/STEEL POSTS (SEE STD G-15)

NET&T Line (Approx. Location)

Woods

CONCRETE MONUMENT

P L

208'

EXIST. ROW LIMITS

1794+98
102' RT.

STA 1791+78
BEGIN APPROACH

STA 1794+28
BEGIN CONSTRUCTION
END APPROACH

N.B.
1797+01
151' RT.

PC 0+00.00 = STA 1797+55.15

36'

345'

ROW FENCE

DR. RT. (P)

STA 1793+52 NB, RT.
STEEL BRACE FOR EXISTING
FENCE TIE INTO ROW. FENCE

N.B. STA. 1800+76 RT. TO N.B. STA. 1800+76 RT.
NEW 48" x 60' CSP (GAUGE=.064") WITH
TYPE IV STONE FILL

N.B.
1798+52
151' RT.

N.B.
1798+16
151' RT.

GOODRICH
BURNETT & CARROLL

STA 3+00 RT TO STA 3+00 RT
NEW 12" x 84' CSP(GAUGE=.064)W/3'x6'
FLOW PAD W/ TYPE I STONE FILL

850'

RAMP C

WOODS

REMOVE EXISTING HEADWALL

I-89 N.B. STA 1803+60 RT TO
RAMP "C" STA 5+70 RT
NEW 18"x 204' PCCSP
W/3'x6' FLOW PAD TYPE I
STONE FILL

RP "C"
5+00
100' RT.

TYPE IV STONE FILL

RAMP "C" STA 6+00 RT TO RAMP "C" STA 6+00 LT
NEW 12" x 68' CSP (GAUGE=.064") W/3'x6'
FLOW PAD W/TYPE I STONE FILL

630'

DIT. & DR. RT. (P)

Mile 83 Marker

STA. 1803+60 RT
REMOVE EXISTING
HEADWALL

STATE OF VERMONT
BURNETT & CARROLL

NET&T Line
(Approx. location)

86-HB-66F

01
17A

SEE DETOUR
ROAD CONSTRUCTION
PLANS

BURNETT, WILLIAM S.
AND
CARROLL, ELIZABETH B.

RAMP C STA 9+00 RT TO
RAMP C STA 9+00 RT
NEW 12"x64' CSP(GAUGE=.064")

EDGE OF SHOULDER
EDGE OF RAIL

STA 9+00

MATCH LINE

TYPE II STONE FILL

DIT. & DR. RT. (P)

BURNETT, WILLIAM S.
AND
CARROLL, ELIZABETH B.

RAMP C
STA. 8+00 RT. TO STA. 9+00 RT.
CONST. 2' WIDE SPECIAL DITCH
2:1 SIDE SLOPES, TYPE II
STONE FILL

GOODRICH, HERBERT C. & RITA

4' HIGH WOVEN WIRE FENCE

I-89 STA 1798 + 52 NB, 145'RT TO RAMP C STA 5+00, 100' RT
RAMP C STA 5+00, 100' RT TO STA 9+00, 100' RT

STEEL BEAM GUARD RAIL W/ STEEL POSTS

STA 1793+00 RT TO RAMP C STA 3+70 RT, 825 L.F.

REMOVAL OF EXISTING FENCE

STA 1798 + 52 NB, 145' RT. TO STA 1806 +00 NB, 110' RT, 748 L.F.

REMOVAL AND DISPOSAL OF GUARD RAIL

STA 1793 + 00 TO STA 1805 + 25 RT

REMOVING AND RESET GUARD RAIL

REMOVE FROM NB DETOUR ROAD STA. 1+75 RT. TO STA. 10+00 RT., 825 L.F.
RESET ON RAMP C STA. 3+70 RT. TO STA. 9+00 RT.

STEEL BRACE

STA. 1798+52 NB, RT 2EA.

CURVE C-1 DATA

D = 05° 43' 46.48"
Δ = 98° 41' 57.43"
R = 1000.00'
L = 1722.63'
T = 1164.65'

DATUM
VERTICAL _____
HORIZONTAL _____

R.O.W. PLANS

SURVEYED BY PINKHAM ENG. DATE 7-87
DRAWN BY D.R.O. DATE 5-89
TRACED BY J.B.C./A.P.P. DATE 5-89

VERMONT ROUTE 289 (F.A.P.)
TOWN OF WILLISTON
PROJ WILLISTON NO. IR 089-2(12)

SHEET 10 OF 17

E 342,750

E 342,250

E 341,750

N 706,250

VT. PLANE GRID

N

RAMP B

RAMP A

S.B. STA 1815+10 LT TO S.B. STA 1815+10 LT
REMOVE 18"x24' RCP AND D.I., PLUG EXIST. PIPE

S.B. STA 1814+90 LT TO S.B. STA 1815+10 LT
REMOVE 18"x78' EXIST. CMP AND HEADWALL

S.B. STA 1817+06 LT TO S.B. STA 1817+06 RT
NEW 30"x76' RCP CLASS III

S.B. STA 1819+23 LT TO S.B. STA 1819+35 LT
REMOVE 18"x40' EXIST. CMP AND HEADWALL

S.B. STA 1817+10 LT TO S.B. STA 1821+00 RT
ABANDON EXISTING UNDERDRAIN

N.B. STA 1821+10 RT TO N.B. STA 1821+60 LT
ABANDON 18"x124' EXIST. CMP, REMOVE HEADWALLS AND PLUG PIPE

S.B. STA 1823+58 LT TO S.B. STA 1823+58 RT
NEW 24"x138' OPTION PIPE W/HEADWALL AT INLET & END SECTION AT OUTLET

RAMP A STA. 2+50 RT. TO I-89 SB. STA 1827+55 LT.
NEW 24"x102' CSP (GAUGE=.064") W/HEADWALL AT INLET

WOODS

Ditch

STA 1814+00 S.B. LT TO STA 1817+06 S.B. LT
NEW 6"x310' UNDERDRAIN W/CAP END

6" PACCMP Underdrain

Directional Sign

N.B. STA 1822+00 LT TO N.B. STA 1823+68 LT
CONSTRUCT 2' WIDE DITCH W/TYPE I STONE FILL

Speed Sign

6" PACCGM Underdrain

Guard Rail

I-89 SOUTHBOUND

REMOVE EXISTING HEADWALLS LT. AND 24" CMP

TYPE II STONE FILL

MATCH LINE

MATCH LINE STA. 1814+00

ACCGMPUFB

D.I.

18" RCP

18" CMP

24" CMP

CONTRACTOR TO VERIFY ELEVATION OF EXISTING UNDERDRAIN. OUTLET REMAINING UNDERDRAIN TO STA 1817+19 LT

S.B. STA 1817+06 RT TO N.B. STA 1817+19 LT
NEW 30"x68' OPTION PIPE

N.B. STA 1819+30 LT TO N.B. STA 1819+45 LT
NEW 6"x20' CARRIER PIPE

N.B. STA 1819+30 LT TO N.B. STA 1820+45 RT
ABANDON EXIST. UNDERDRAIN & REMOVE OUTLET HEADWALL

STATE OF VERMONT

N.B. STA 1815+20 RT TO N.B. STA 1815+20 RT
NEW 18"x10' RCP CLASS III

N.B. STA 1817+05 LT TO N.B. STA 1817+19 LT
NEW 6"x20' CARRIER PIPE

N.B. STA 1817+19 LT TO RAMP D STA 13+00 RT
NEW 30"x82' OPTION PIPE

6" PACCGM Underdrain

I-89 NORTHBOUND

TYPE II STONE FILL

Ditch

WOODS

N.B. STA 1814+00 RT TO N.B. STA 1815+10 RT
NEW 24"x110' RCP CLASS III

RAMP D

12" Poplar

TBM=97

24" CMP & Ditch

Bit.

Ditch

SEDIMENTATION POOL
310' 80'x4' INVERT 413.00
SPILLWAY LENGTH 70'
TOP 416.00

CONCRETE MONUMENT

WOOD MARKER POSTS (TYP)
SEE DETAIL SH. 106

CONCRETE MONUMENT

STATE OF VERMONT
DESCHENES
STA 1826+40
END CONSTRUCTION
BEGIN APPROACH

STA 1829+40
END APPROACH

(616')

STATE OF VERMONT
C.S.D., INC.

310'

256'

N.B. 1825+55 125' RT.

BS-HB-67F

01
16A

C.S.D., INC.

NET&T Line (Approx. Location)

232'

(805')

RAMP D STA 11+00 RT TO RAMP D STA 13+00 RT
NEW 30"x192' RCP CLASS III

RAMP "D" 12+50 63' RT.

N.B. STA 1815+20 RT TO N.B. STA 1819+25 RT
REMOVE 24"x405' EXIST. CMP AND D.I.

RAMP "D" 10+00 90' RT.

RAMP D STA 11+00 RT TO RAMP D STA 11+05 LT
NEW 30"x64' RCP CLASS III

N.B. STA 1819+70 RT TO N.B. STA 1820+25 RT, NEW 36"x70' OPTION PIPE

N.B. 1819+90 100' RT.

N.B. STA 1819+25 RT TO N.B. STA 1819+65 RT
REMOVE 24"x40' EXIST. CMP, INLET D.I., AND OUTLET HEADWALL

PT 14+18.97 = STA. 1818+37.24

RAMP D STA 13+00 RT TO N.B. STA 1819+70 RT
NEW 36"x244' RCP CLASS III

N.B. 1820+40 210' RT.

STATE OF VERMONT
C.S.D., INC.

011
6B

DR. RT. (P)

210'

121'

TOP OF BERM = 417.00

STA 1822+00 LT TO STA 1822+00 RT
NEW 18"x114' OPTION PIPE W/TYPE II STONE FILL

N.B. 1823+00 100' RT.

N.B. STA 1823+68 LT TO N.B. STA 1824+46 RT
ABANDON 24"x150' EXIST. CMP, REMOVE HEADWALLS AND PLUG PIPE

DRIVEWAY AT 1823+00 RT
D = 7°23'39.8"
Δ = 90°
R = 50'
L = 78.54'
T = 50.00'
1822+50 21.00' RT.

4' HIGH WOVEN WIRE FENCE

RAMP D STA 9+00, 90' RT TO STA 10+00, 90' RT
RAMP D STA 10+00, 90' RT TO STA 12+50, 63' RT
I-89 STA 1819+90 NB, 100' RT TO STA 1820+40 NB, 210' RT
I-89 STA 1820+40 NB, 210' RT TO STA 1822+50 NB, 210' RT
I-89 STA 1822+50 NS, 210' RT TO STA 1823+00 NB, 100' RT

REMOVAL OF EXISTING FENCE
STA 1814+00 NB, 100' RT TO STA 1816+79 NB, 100' RT, 280 L.F
STA 1819+90 NB, 100' RT TO STA 1823+00 NB, 100' RT, 310 L.F

C. S. D., INC.

SUBBASE OF DENSE GRADED CRUSHED STONE (RECYCLED)
ACCESS DRIVE STA 1823+00 RT SUBBASE

CSD., INC. DESCHENES

DESCHENES, JOHN J.

R.O.W. PLANS

CURVE D-1 DATA
D = 05° 43' 46.48"
Δ = 81° 18' 02.57"
R = 1000.00'
L = 1418.97'
T = 858.63'

N 707,250

E 343,250

E 342,750

E 342,250

E 341,750

DATUM
VERTICAL _____
HORIZONTAL _____

SURVEYED BY PINKHAM ENG. DATE 7-87
DRAWN BY D. R. O. DATE 5-89
TRACED BY J. B. C./A.P.P. DATE 5-89

VERMONT ROUTE 289 (F.A.P.)
TOWN OF WILLISTON
PROJ. WILLISTON NO IR 089-2(12)

SHEET 11 OF 17

E 342,000

E 341,500

E 341,000

N 706,750

N 707,250

VT. PLANE GRID

N

REMOVAL AND DISPOSAL OF GUARD RAIL
STA 1821 + 00 SB RT TO STA 1826 + 00 SB RT

LOT 17

HURRICANE AVENUE

END R.O.W. PROJECT
I.R. 089-2 (12)
STA. RAMP "A" 0+00

CURVE A-1 DATA
D = 05° 43'46.48"
Δ = 42° 39'54.26"
R = 1000.00'
L = 744.65'
T = 390.54'

LOT 16

LOT 15

LOT 10

HILLSIDE EAST CORPORATION

PROPOSED 20' WIDE ELECTRICAL EASEMENT (BY OTHERS)

STEEL BEAM GUARD RAIL W/STEEL POSTS
RAMP "A" STA. 0+75 RT. TO I-89 STA. 1830+34 LT.

STEEL BRACE
STA. 1829+90 SB, LT 2 EA.

4' WOVEN WIRE FENCE
RAMP A STA 8+50, 195' RT TO STA 4+04, 89' RT
RAMP A STA 4+04, 89' RT TO I-89 STA 1829+90 SB, 100' LT

REMOVAL OF EXISTING FENCE
STA 1821 + 00 S.B. 107' LT TO STA 1829+90 S.B. 100' LT, 890 LF.

CONTRACTOR TO VERIFY ELEVATION OF EXISTING UNDERDRAIN. OUTLET REMAINING UNDERDRAIN TO STA. 1831+90 LT.

150' INTERSTATE SETBACK

STA 1830+22.29
END CONSTRUCTION
BEGIN APPROACH

STA 1832+50
HILLSIDE EAST CORPORATION
END APPROACH

STA. 1829+90 SB., LT.
STEEL BRACE FOR EXISTING FENCE
TIE INTO ROW FENCE

BEGIN LANE
CONCRETE BARRIER W/ STEEL POSTS (MEDIAN)

END LANE
CONCRETE BARRIER W/ STEEL POSTS (MEDIAN)

STA. 1832+10 LT. TO STA. 1831+90 LT.
NEW 6"x 30' UNDERDRAIN CARRIER PIPE

6" PACCGM Underdrain

ACCGM PUFB

I-89 SOUTHBOUND

STA. 1826+25 RT TO STA. 1832+00 RT.
6" PACCGM UNDERDRAIN TO BE ABANDONED IN PLACE

MATCH LINE STA. 9+00

RAMP A STA 8+00 RT TO RAMP A STA 8+50 RT
NEW 6"x 50' UNDERDRAIN

RAMP A STA 8+00 LT TO RAMP A STA 8+00 RT
NEW 18"x 58' RCP CLASS III

RAMP A STA 8+50 RT TO RAMP A STA 10+50 RT
NEW 6"x 200' UNDERDRAIN W/CAP END

RAMP A STA 8+50 LT TO RAMP A STA 10+50 LT
NEW 6"x 200' UNDERDRAIN W/CAP END

CURVE B-1
PI STA 1+15.21 AHEAD
STA 1+43.38 BACK

PT 7+44.65

RAMP A STA 5+50 RT TO RAMP A STA 8+00 RT
NEW 6"x 250' UNDERDRAIN W/CAP END

RAMP A STA 5+50 RT TO RAMP A STA 8+00 RT
NEW 18"x 248' RCP CLASS III

RAMP A STA 8+00 LT TO RAMP A STA 8+50 LT.
NEW 18"x 50' RCP CLASS III

RAMP A STA 8+00 LT TO RAMP A STA 8+50 LT
NEW 6"x 52' UNDERDRAIN

RAMP A STA 5+50 LT TO RAMP A STA 8+00 LT
NEW 6"x 252' UNDERDRAIN W/CAP END

RP. "A"
4+04
89' RT.

RAMP A STA 3+00 RT TO RAMP A STA 5+50 RT
NEW 6"x 252' UNDERDRAIN W/CAP END

RAMP A STA 0+00 RT TO RAMP A STA 8+50 RT
CONST. 2' WIDE SPECIAL DITCH, 2:1 SIDE SLOPES, 2' DEEP W/TYPE II STONE FILL

RAMP A STA 3+00 RT TO RAMP A STA 5+50 RT
NEW 18"x 246' RCP CLASS III

RAMP A STA 0+00 RT TO RAMP A STA 3+00 RT
NEW 6"x 298' UNDERDRAIN W/CAP END

RAMP A STA 3+00 RT TO RAMP A STA 3+00 LT
NEW 24"x 52' RCP CLASS III

ANCHOR FOR STEEL BEAM GUARD RAIL (SEE STD G-ID)

01 19

01 18

GREGORY, CRAWFORD W. & JUDITH A.

GREGORY EAST CORPORATION

HILLSIDE EAST CORPORATION

WOODS

RAMP A STA 5+50 LT TO RAMP A STA 5+50 RT
NEW 18"x 54' OPTION PIPE

RAMP A STA 3+00 LT TO RAMP A STA 5+50 LT
NEW 6"x 250' UNDERDRAIN W/CAP END

RAMP A STA 3+00 RT TO RAMP A STA 3+00 LT
NEW 24"x 52' RCP CLASS III

S.B. STA 1823+50 LT TO S.B. STA 1824+00 LT
CONST. 2' WIDE SPECIAL DITCH, 2:1 SIDE SLOPES W/TYPE II STONE FILL

S.B. STA 1823+58 LT TO S.B. STA 1823+58 RT.
NEW 24"x 138' OPTION PIPE W/HEADWALL AT INLET AND END SECTION AT OUTLET

I-89 S.B. STA 1824+00 LT TO RAMP A STA 3+00 LT
NEW 24"x 310' RCP CLASS III

CONCRETE MONUMENT

S.B. 1826+40 100' LT.

S.B. 1829+90 100' LT.

EDGE OF RAIL

EDGE OF SHOULDER

1 Speed Sign

MATCH LINE STA 1821+00 S.B.

N.B. STA. 1821+10 TO N.B. STA. 1821+60
ABANDON 18" CMP PLUG BOTH ENDS AND REMOVE HEADWALLS

Guard Rail

REMOVE EXISTING HEADWALLS LT. AND 24" CMP

TYPE II STONE FILL

CURVE A-1
PI STA 3 + 90.54 BACK =
STA 3 +54.11 AHEAD

REMOVE EXIST. 24" CMP AND HEADWALL AT INLET

RAMP A STA 2+50 RT TO I-89 S.B. STA 1827+55 LT
NEW 24"x 102' CSP(GAUGE=.064") W/ HEADWALL AT INLET

MATCH LINE

STATE OF VERMONT

I-89 NORTHBOUND

15" Walnut

18" CMP

24" CMP

Ditch

Brook

N.B. STA 1823+68 LT TO N.B. STA 1824+46 RT
ABANDON 24"x 150' EXIST. CMP, REMOVE HEADWALLS AND PLUG PIPE

STA. 1822+00 LT TO STA 1822+00 RT
NEW 24"x 114' OPTION PIPE W/TYPE II STONE FILL

1821 1822 1823 1824 1825 1826 1827 1828 1829 1830 1831 1832 1833 1834 1835 1836

R. O. W. PLANS

DATUM
VERTICAL
HORIZONTAL

SURVEYED BY PINKHAM ENG. DATE 7-87
DRAWN BY D. R. O. DATE 5-89
TRACED BY J. B. C. /A. P. P. DATE 5-89

VERMONT ROUTE 289 (F.A.P.)
TOWN OF WILLISTON
PROJ. WILLISTON NO. IR 089-2(12)

SHEET 12 OF 17

PLAN

NOTE BOOK

No.

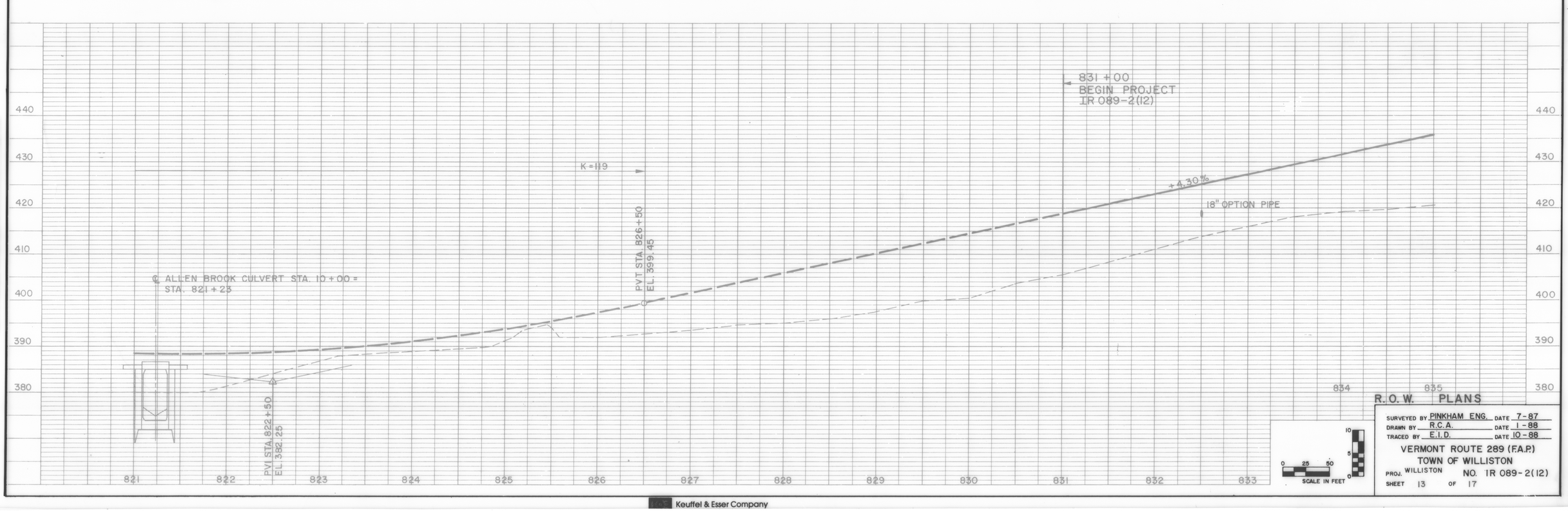
	BY	DATE
SURVEYED		
PLOTTED		
ALIGNMENT CHECKED		
RT OF WAY CHECKED		

PROFILE

NOTE BOOK

No.

	BY	DATE
SURVEYED		
PLOTTED		
GRADES CHECK'D		
R. W.'s NOTED		
ESTIMATE QUANTITIES CHECKED		



R.O.W. PLANS

SURVEYED BY PINKHAM ENG. DATE 7-87
DRAWN BY R.C.A. DATE 1-88
TRACED BY E.I.D. DATE 10-88

VERMONT ROUTE 289 (F.A.P.)
TOWN OF WILLISTON
PROJ. WILLISTON NO. IR 089-2(12)
SHEET 13 OF 17

Keuffel & Esser Company

PROFILE
SURVEYED BY DATE
PLOTTED
NOTE BOOK GRADES CHECKED
B.M.'s NOTED
NO. STRUCTURE NOTATING CHKD

PROFILE GRADE LINE IS APPLIED FIVE FEET RIGHT AND LEFT OF ℄

PROFILE GRADE LINE IS APPLIED ONE FOOT RIGHT OF ℄

STA 845+35.48 END ROADWAY BEGIN BRIDGE

STA 847+95.20 END BRIDGE BEGIN ROADWAY

+4.30%

+4.50%

18" OPTION PIPE

16" OPTION PIPE

STA 847+58 ANGLE POINT EL. 477.54

STA 845+91.32 RTE. 289 = STA 1809+58.16 I-89 NB

STA 847+39.25 RTE. 289 = STA 1809+87.69 I-89 SB

PVC STA 848+00 EL. 492.90

VC = 850'

K = 90

490 480 470 460 450 440 430 420

835 836 837 838 839 840 841 842 843 844 845 846 847 848 849

STA 860+07 ROUTE 289 = STA 12+89.32 RAMP A = STA. 0+00 RAMP B

PVC STA 672+25 EL 512.45

+4.60%

-4.8%

PROFILE GRADE LINE IS APPLIED ONE FEET RIGHT OF ℄

UND. 4.00% LT.

APPROXIMATE TOP OF ROCK

UND. -2.40% LT.

UND. -3.40% RT.

18" OPTION PIPE

UND. +1.00% LT.

491.75

491.25

18" OPTION PIPE

487.80

488.70

494.50

UND. +1.60 % LT.

UND. +1.80 % RT.

491.40

496.30

UND. +1.20% LT.

UND. +1.00% RT.

492.90

494.80

UND. +1.00% LT.

UND. +1.40% RT.

490.80

490.00

487.10

UND. -2.40% RT.

PVT STA 856+50 EL 492.05

483.70

484.00

480.50

475.70

UND. -2.60% LT.

UND. -2.00% RT.

UND. -6.40% RT.

UND. +4.20% LT.

UND. +4.80% RT.

479.80

476.50

476.70

473.00

477.20

18" OPTION PIPE

UND. +4.80% LT.

UND. +4.80% RT.

UND. +1.00% RT.

470.00

468.20

467.70

RAMP A

RAMP B

18" OPTION PIPE

VC = 850'

K = 90

550 540 530 520 510 500 490 480

849 850 851 852 853 854 855 856 857 858 859 860

SCALE IN FEET 0 25 50 — 10 5 0

R. O. W. PLANS

SURVEYED BY PINKHAM ENG. DATE 7-87
DRAWN BY R.C.A. DATE 10-87
TRACED BY N.P.D. DATE 11-87

VERMONT ROUTE 289 (F.A.P.)
TOWN OF WILLISTON
WILLISTON PROJ. NO. IR 089-2(12)
SHEET 14 OF 17

I-89 INTERCHANGE

PROFILE
SURVEYED BY
PLOTTED DATE
NOTE BOOK DRAWN & CHECKED
NO. ____ B.M.'s NOTED
STRUCTURE NOTATIONS CHKD

STA. 0+00 RAMP A =
STA. 1830+22.29 I-89 SB ℄
BEGIN CONSTRUCTION
END APPROACH

VC=700'
K=96'
P.V.C. STA. 1+50
EL. 445.90
P.V.T. STA. 8+50
EL. 454.79
2.30%
441.00
UND. -2.40% RT.
24" CSP
434.00
435.30
433.00
24" RCP
434.50
UND. +1.00% LT.
UND. +1.00% RT.
UND. +1.50% RT.
437.80
439.00
436.00
PVI STA. 5+00
EL. 437.35
436.50
437.00
18" OPTION PIPE
UND. +4.00% RT.
UND. +4.40% LT.
UND. +4.20% RT.
UND. +2.20% LT.
UND. +1.00% RT.
445.00
447.20
444.50
447.70
446.50
444.00
18" RCP
443.50
RAMP A
0 1 2 3 4 5 6 7 8 9

APPROXIMATE TOP OF ROCK
P.V.T. STA. 8+50
EL. 454.79
UND. +4.60% RT.
+4.98%
18" OPTION PIPE
458.50
456.90
459.50
457.00
454.90
UND. +1.30% LT.
UND. +4.00% RT.
UND. +4.20% RT.
UND. +2.20% LT.
UND. +1.00% RT.
UND. +4.40% LT.
445.00
447.20
444.50
447.70
446.50
444.00
18" RCP
443.50
UND. +5.20% RT.
UND. +4.80% LT.
436.50
437.00
RAMP A
18" OPTION PIPE
8 9 10 11 12

STA. 0+00 RAMP B =
STA. 860+07.00 RTE. 289

APPROXIMATE TOP OF ROCK
P.V.I. STA. 1+50
EL. 466.26
P.V.C. STA. 1+00
EL. 458.61
P.V.T. STA. 2+00
EL. 463.26
℄ P.T.
-4.70%
465.40
467.00
UND. -8.90% RT.
462.55
460.10
458.25
UND. +3.70% RT.
UND. +1.90% RT.
UND. +5.40% LT.
-6.00%
457.50
455.50
UND. -6.20% RT.
VC=100
K=77.78'
VC=400
P.V.C. STA. 3+50
EL. 454.26
UND. -4.40% LT.
447.00
446.20
445.50
444.00
443.00
UND. -4.40% RT.
UND. -4.00% LT.
441.50
UND. -1.00% LT.
UND. -4.00% RT.
439.00
UND. -2.40% RT.
18" OPTION PIPE
435.40
440.50
30" OPTION PIPE
437.00
PVI STA. 5+50
EL. 442.26
RAMP B
0 1 2 3 4 5 6

VC=400
K=52
P.V.C. STA. 3+50
EL. 454.26
P.V.T. STA. 7+50
EL. 445.67
UND. -4.40% LT.
447.00
UND. -4.00% LT.
441.50
UND. -1.00% LT.
+1.70%
18" OPTION PIPE
445.50
444.00
443.00
UND. -4.00% RT.
439.00
UND. -2.40% RT.
18" OPTION PIPE
435.40
440.50
30" OPTION PIPE
435.00
437.00
30" OPTION PIPE
PVI STA. 5+50
EL. 442.26
RAMP B
4 5 6 7 8

I-89 INTERCHAN

K=96'
P.V.T. STA. 8+50
EL. 454.79
STA. 12+89
STA. 860+0

MAKEPEACE

PROFILE
SURVEYED
PLOTTED
NOTE BOOK
PAGES
NO.
CHKD
DRAWN
B.M. = NOTED
STRUCTURE NOTATNS
BY
DATE

STA. 0+00 RAMP C =
STA. 1797+55.29 I-89 NB ℄

VC=300
PVC STA 2+00
EL. 475.66
K=279
PVT STA 5+00
EL. 467.50
-2.25%
-2.18%
EXIST 18" CMP
PV STA 3+50
EL. 470.77
EXIST 48" CSP
24" OPTION PIPE

490 480 470 460 450 440 430 420

0 1 2 3 4 5 6 7 8 9

RAMP C

PVI STA 10+00
EL 456.60
BEGIN STA 9+50
TOP OF SURCHAGE
END STA 10+50
-2.18%
-3.45%
PVC STA 9+00
EL 458.78
24" OPTION PIPE
VC=200
K=156
PVT STA 11+00
EL. 453.14
STA 17+22.63 RAMP C =
STA. 833+97.03 ROUTE 289

470 460 450 440 430 420 410

9 10 11 12 13 14 15 16 17

RAMP C

0 25 50'
SCALE IN FEET
10 5 0

R.O.W. PLANS

SURVEYED BY PINKHAM ENG. DATE 7-87
DRAWN BY M.A.F. DATE 9-88
TRACED BY C.J.W. DATE 9-88

VERMONT ROUTE 289 (F.A.P.)
TOWN OF WILLISTON
PROJ. WILLISTON NO. IR 089-2(12)
SHEET 16 OF 17

I-89 INTERCHANGE

135139
MAKEPEACE

PROFILE
SURVEYED BY
PLOTTED DATE
NOTE BOOK CHECKED
NO. ____ B.M.'s NOTED
STRUCTURE NOTATING CHKD

STA. 0+00 RAMP D =
STA. 937+11.93 ROUTE 289

PVI STA. 4+25
EL. 461.11

+3.82 %

PVC STA. 1+25
EL. 449.86

VC = 600

18" OPTION PIPE

K = 70

-4.77 %

PVT STA. 7+25
EL. 446.80

PVC STA. 8+50
EL. 440.84

VC = 400

K = 10

PVT STA. 10+50
EL. 431.30

PVT STA. 12+50
EL. 430.30

STA. 14+18.97
STA 1818+37.
I-89 - NB

+0.50 %

Ø = 30" RCP

30" OPTION PIPE

460
450
440
430
420
410
400

0 1 2 3 4 5 6 7 8 9 10 11 12 13

RAMP D

0 25 50
SCALE IN FEET

MAKEPEACE

I-89 INTERCHANGE