

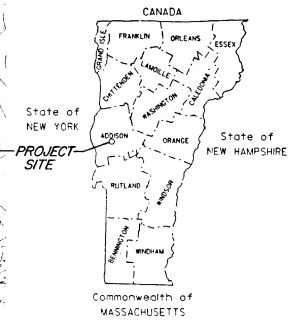
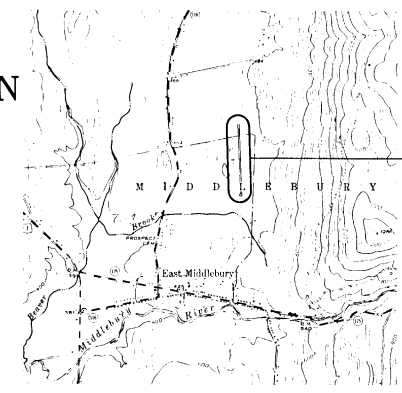
STATE OF VERMONT
AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT
TOWN OF MIDDLEBURY
COUNTY OF ADDISON

MIDDLEBURY STATE AIRPORT
AVGAS FUELING SYSTEM

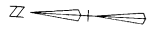
AIR 03-2069
JULY 1990



1" = 200'

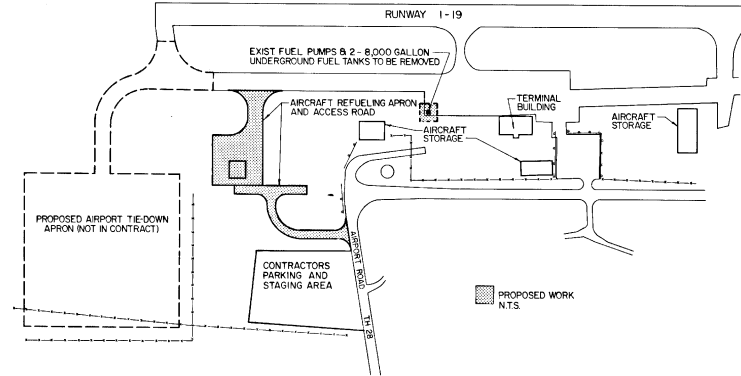
SUMMARY OF QUANTITIES

BASE BID			
ITEM NO	DESCRIPTION	UNITS	QUANTITY
203.17	UNCLASSIFIED EXCAVATION	CY	2000.00
203.28	EXCAVATION OF SURFACES & PAVEMENTS	CY	1.50
203.30	PARTY BORROW	CY	1400.00
203.32	GRANULAR BORROW	CY	2060.00
203.42	FINE SANDY SUBGRADE	SY	3160.00
204.20	TRENCH EXCAVATION	CY	21.00
301.26	THICKNESS OF CURBED STONE	SY	624.00
404.65	EMULSIFIED ASPHALT PRIME COAT	CWT	905.00
404.25	BITUMINOUS CONCRETE PAVEMENT	TON	551.00
501.20	CONCRETE CLASS C	CY	70.00
507.15	REINFORCING STEEL	LB	436.00
601.0013	10" C.S.P.	EA	211.00
601.0015	10" C.S.P.E.S.	EA	5.00
604.21	PRECAST REINFORCED CONCRETE MH	EA	1.00
604.24	CAST IRON MANHOLE - TYPE D	EA	1.00
613.10	STONE FILL - TYPE I	CY	2.00
635.10	MORILLIZATION	LS	1.00
644.20	GEOTEXTILE FABRIC FOR SILT FENCE	SY	230.00
651.15	SEED	LB	40.00
651.18	FERTILIZER	LB	330.00
651.20	AGRICULTURAL LIMESTONE	TON	1.32
651.25	MAP WELCH	TON	1.32
651.35	TOPSOIL	CY	100.00
675.00	JOINT SEALANT - FUEL RESISTANT	GAU	5.00
1000.00	EXISTING TANK REMOVAL AND BACKFILL	LS	1.00
1001.00	PROPOSED TANK INSTALLATION	LS	1.00
1002.00	AVIATION FUELING CABINET	LS	1.00
1003.00	STRIPING & MARKING SUPPORTS	LS	1.00
1004.00	BALLAST & SURFACE PADS	LP	700.00
1005.00	LEAK DETECTION SYSTEM	LS	1.00
1006.00	TANK TESTING & START UP	EA	1.00
1007.00	TRENCHING AND ELECTRICAL CONDUITS	LS	1.00
1008.00	EXHAUSTION PROOF PANEL BOARD	LS	1.00
1009.00	ELECTRICAL EQUIPMENT	LS	1.00
ADDITIVE ALTERNATIVE 1			
203.28	EXCAVATION OF SURFACES & PAVEMENTS	CY	1.00
404.25	BITUMINOUS CONCRETE PAVEMENT	TON	114.00
404.65	EMULSIFIED ASPHALT	CWT	32.00



LEGEND

- BORING LOCATION
- EXISTING CONTOURS
- PROP CORRUGATED STEEL PIPE (C.S.P.)
- C.S.P. END SECTION (VA OT. STANDARD D-4)
- STONE FILL OUTLET PROTECTION



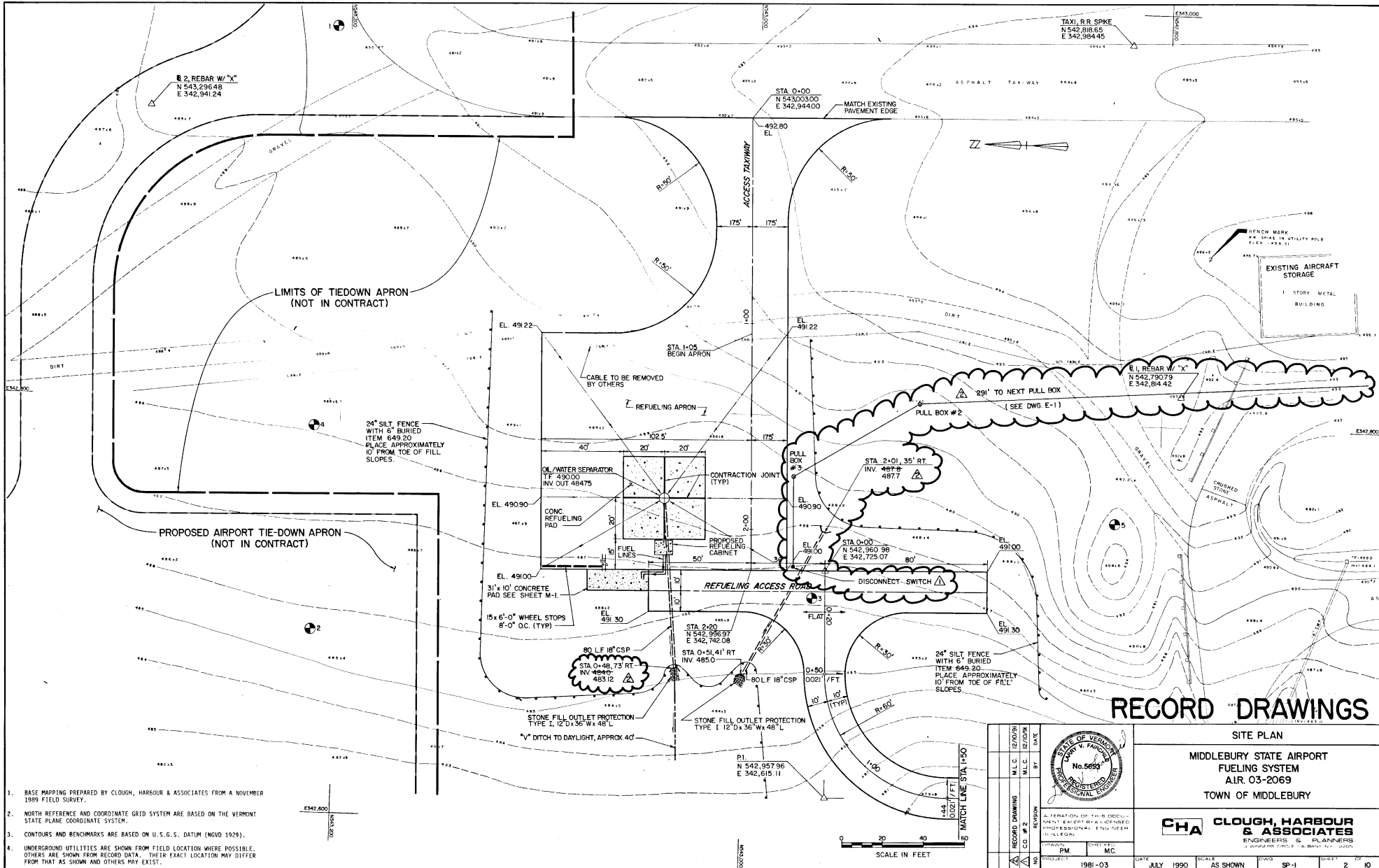
INDEX OF SHEETS		
TITLE	DATE	DRAWING NO.
TITLE SHEET	JULY 1990	-
SITE PLAN	JULY 1990	SP-1
SITE PLAN	JULY 1990	SP-2
TYPICAL SECTIONS	JULY 1990	TS-1
PROFILES	JULY 1990	PF-1
DETAILS	JULY 1990	D-1
APRON CROSS SECTIONS	JULY 1990	CS-1
ACCESS ROAD CROSS SECTIONS	JULY 1990	CS-2
STRIPING PLAN	JUNE 1991	S-1
TANK AND REFUELING CABINET PLAN	JULY 1990	M-1
ELECTRICAL PLAN	JULY 1990	E-1

RECORD DRAWINGS

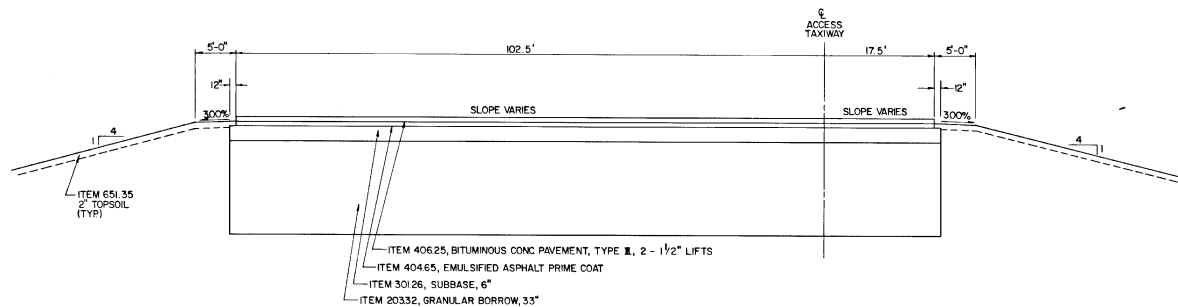
CLOUGH, HARBOUR & ASSOCIATES
ENGINEERS & PLANNERS

C.H.A. PROJECT NO. 1981-03

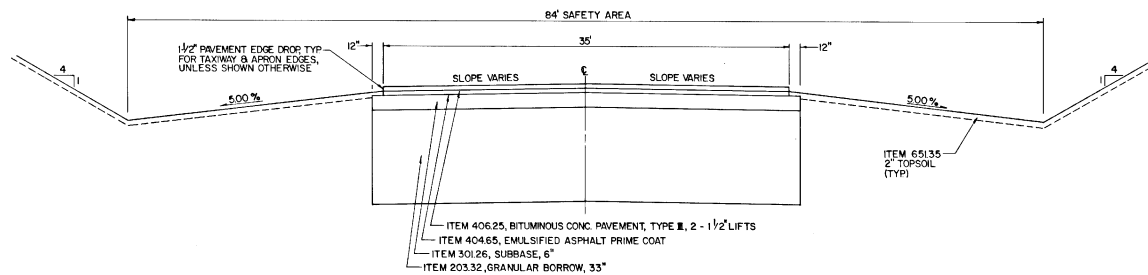
REV. NO.	DATE	DESCRIPTION	REV. NO.	DATE	DESCRIPTION
1	12.10.91	CHANGE ORDER # 2			
2	12.10.91	RECORD DRAWING			



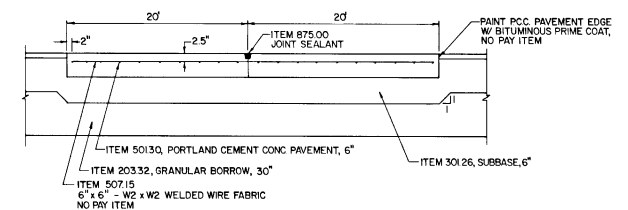
RECORD SET IN DRAWING



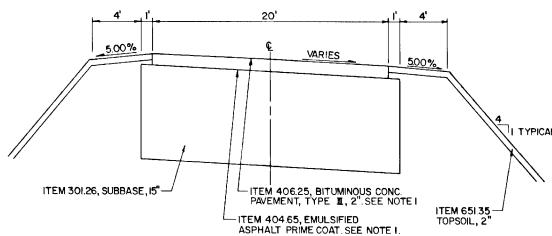
AIRCRAFT REFUELING APRON
NO SCALE



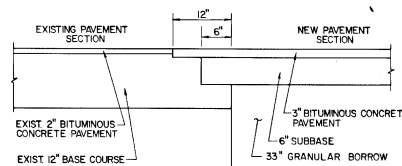
ACCESS TAXIWAY
NO SCALE



CONCRETE REFUELING PAD DETAIL
NO SCALE



ACCESS ROAD
NO SCALE



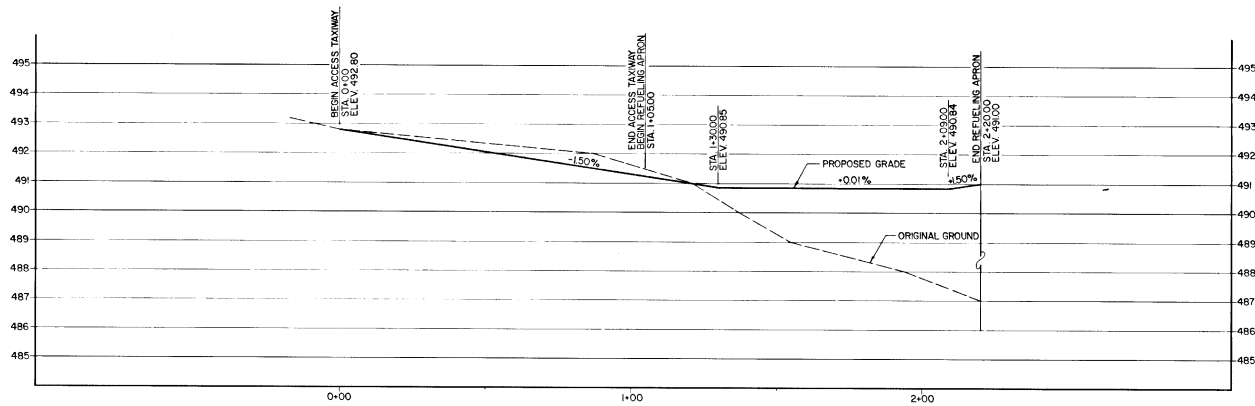
PAVEMENT CONNECTION DETAIL
NO SCALE

- NOTES:
1. ADDITIVE ALTERNATIVE 1 INCLUDES THE ASPHALT PRIME COAT AND BITUMINOUS CONCRETE PAVEMENT FOR THE REFUELING ACCESS ROAD.
 2. ADDITIVE ALTERNATIVE 1 INCLUDES SAWCUTTING AND REMOVAL OF PAVEMENT FOR THE REFUELING ACCESS ROAD INTERSECTION.

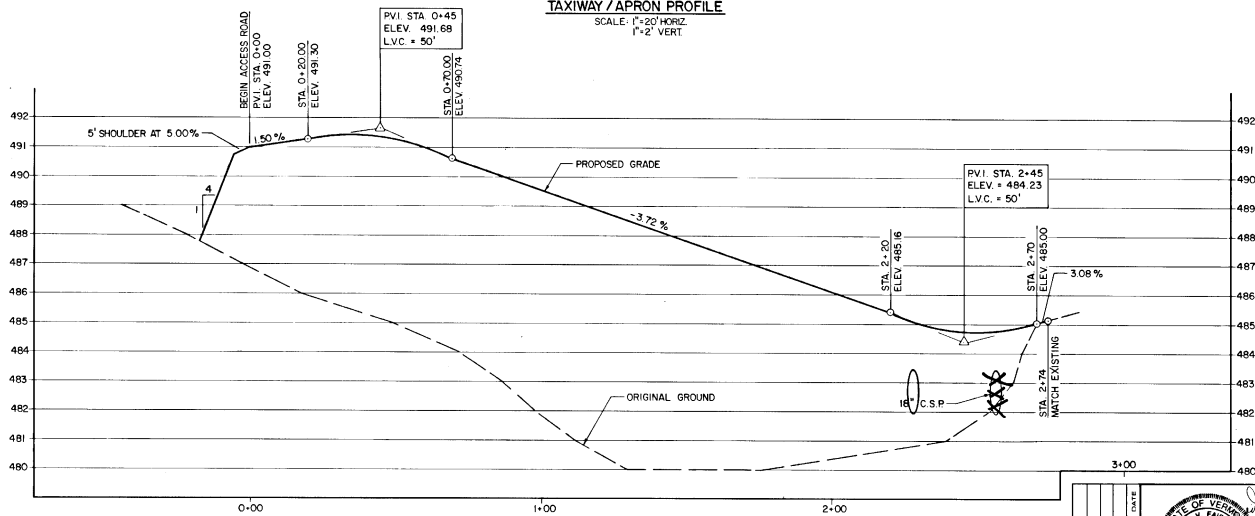
VERTICAL SAWCUT EXISTING PAVEMENT SECTION 12" BACK AND PAINT SAWCUT WITH BITUMINOUS PRIME COAT, NO PAY ITEM. SEE NOTE 2

REVISION		DATE	TYPICAL SECTIONS	
			<p>MIDDLEBURY STATE AIRPORT FUELING SYSTEM A.I.R. 03-2069 TOWN OF MIDDLEBURY</p>	
			<p>CHA CLOUGH, HARBOUR & ASSOCIATES ENGINEERS & PLANNERS 3 WINDERS CIRCLE - ALBANY, N.Y. 12208</p>	
			<p>ALTERNATION OF THIS DOCUMENT EXCEPT BY A LICENSED PROFESSIONAL ENGINEER IS UNLAWFUL</p>	
			<p>PROJECT: 1981-03</p>	<p>DATE: JULY 1990</p>
			<p>SCALE: AS SHOWN</p>	<p>ROWS: TS-1</p>
				<p>SHEET: 4 OF 10</p>

RECORD DRAWINGS



TAXIWAY / APRON PROFILE
SCALE: 1"=20' HORIZ.
1"=2' VERT.



REFUELING ACCESS ROAD PROFILE
SCALE: 1"=20' HORIZ.
1"=2' VERT.

RECORD DRAWINGS	DATE	BY
PROJECT	1981-03	
DESIGNER	PM	MC
CHECKER		
DATE	JULY 1990	
SCALE	AS SHOWN	
DWG	PF-1	
SHEET	5	OF 10



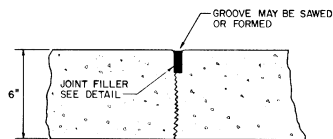
PROFILES

MIDDLEBURY STATE AIRPORT
FUELING SYSTEM
AIR. 03-2069
TOWN OF MIDDLEBURY

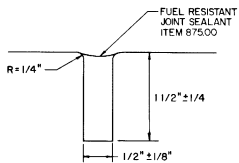
CHA CLOUGH, HARBOUR & ASSOCIATES
ENGINEERS & PLANNERS
3 WATKINS CIRCLE - ALBANY, N.Y. 12205

RECORD DRAWINGS

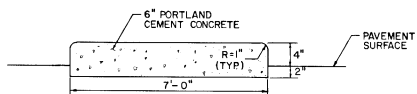
REVISIONS



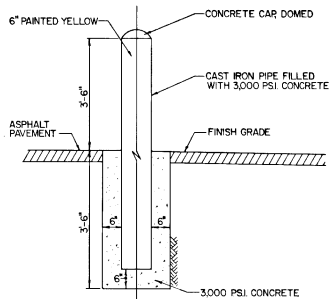
CONTRACTION JOINT DETAIL
NO SCALE



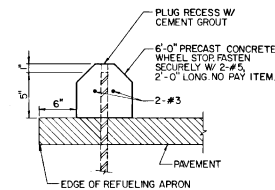
JOINT FILLER DETAIL
NO SCALE



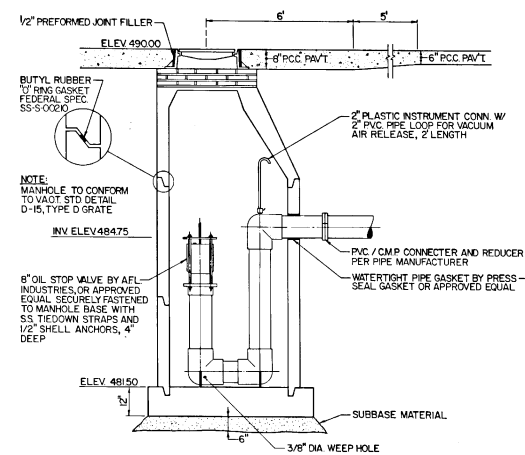
FUEL CABINET PAD DETAIL
NO SCALE



BOLLARD DETAIL
NO SCALE



CONCRETE WHEEL STOP DETAIL
NO SCALE

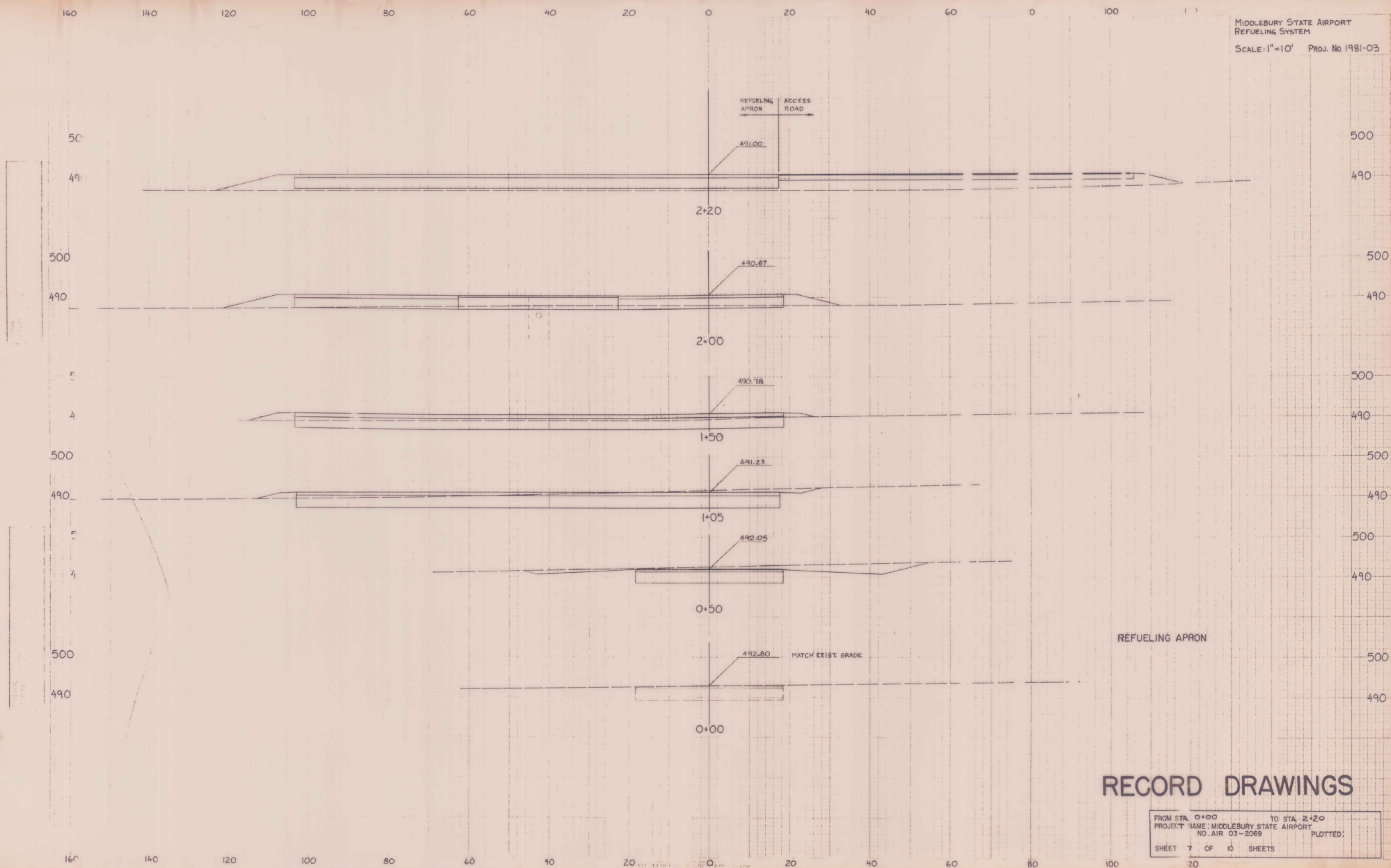


OIL / WATER SEPARATOR
NO SCALE

RECORD DRAWINGS

REVISION		DATE	BY

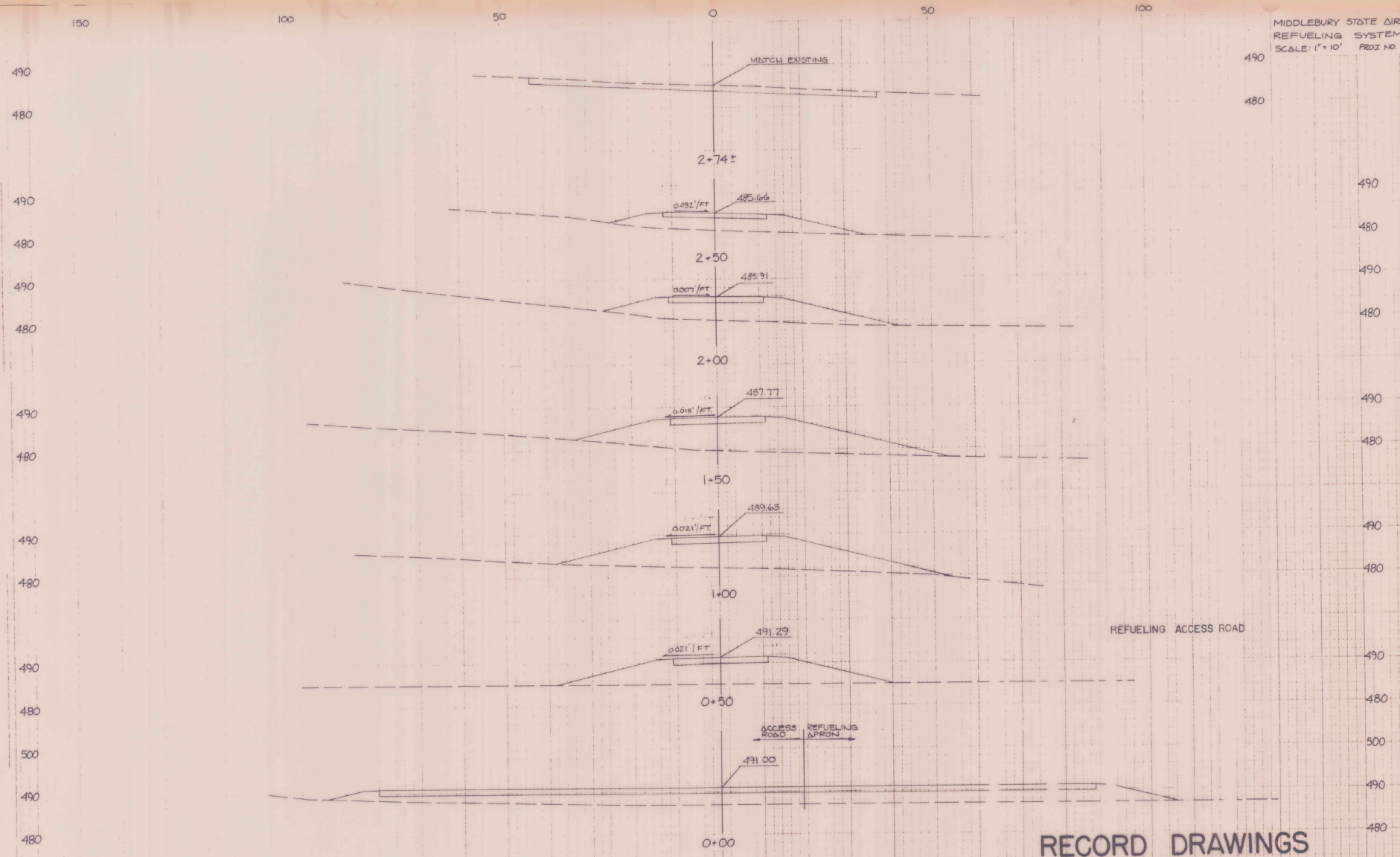
		DETAILS MIDDLEBURY STATE AIRPORT FUELING SYSTEM A.I.R. 03-2069 TOWN OF MIDDLEBURY	
DRAWN: PM CHECKED: MC		CHA CLOUGH, HARBOUR & ASSOCIATES ENGINEERS & PLANNERS 300 WINDMILL LANE - ALBANY, N.Y. 12208	
PROJECT	1981-03	DATE	JULY 1990
SCALE	AS SHOWN	DATE	D-1
SHEET	6	TOTAL SHEETS	10



RECORD DRAWINGS

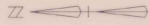
FROM STA.	0+00	TO STA.	2+20
PROJECT NAME:	MIDDLEBURY STATE AIRPORT		
NO. AIR	03-2069	PLOTTED:	
SHEET	7	OF	10 SHEETS
			20

MIDDLEBURY STATE AIRPORT
 REFUELING SYSTEM
 SCALE: 1" = 10' PROJ. NO. 1981-03



RECORD DRAWINGS

FROM STA. 0+00 TO STA. 2+74
 PROJECT NAME: MIDDLEBURY STATE AIRPORT
 NO. AIR 03-2069 PLOTTED:
 SHEET 9 OF 10 SHEETS



TIE INTO EXISTING
& STRIPING

TIE INTO EXISTING
& STRIPING

R=75'

R=75'

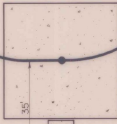
6" CENTERLINE STRIPING

R=50'

R=30'

R=40'

R=40'



- NOTES
1. ALL STRIPING SHALL BE 6 INCH YELLOW PAINT CONFORMING TO VDOT STANDARD SPECIFICATION SECTION 70808 FOR REGULAR DRY YELLOW TRAFFIC PAINT.
 2. CONTRACTOR SHALL COORDINATE STRIPING WITH AIRPORT PERSONNEL TO INSURE THAT AIRCRAFT DO NOT TAXI ACROSS THE STRIPING BEFORE IT DRIES.
 3. CONTRACTOR SHALL APPLY APPROXIMATELY 600 L.F. OF CENTERLINE STRIPING.

RECORD DRAWINGS

STRIPING PLAN

MIDDLEBURY STATE AIRPORT
FUELING SYSTEM
A.I.R. 03-2069
TOWN OF MIDDLEBURY

CHA CLOUGH, HARBOUR
& ASSOCIATES
ENGINEERS & PLANNERS
26 AVIATION RD. - ALBANY, N.Y. 12205

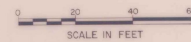


ALTERATION OF THIS DOCUMENT
BY ANY MEANS BY A LICENSED
PROFESSIONAL ENGINEER
IS ILLEGAL

DRAWN BY: PM
CHECKED BY: MC

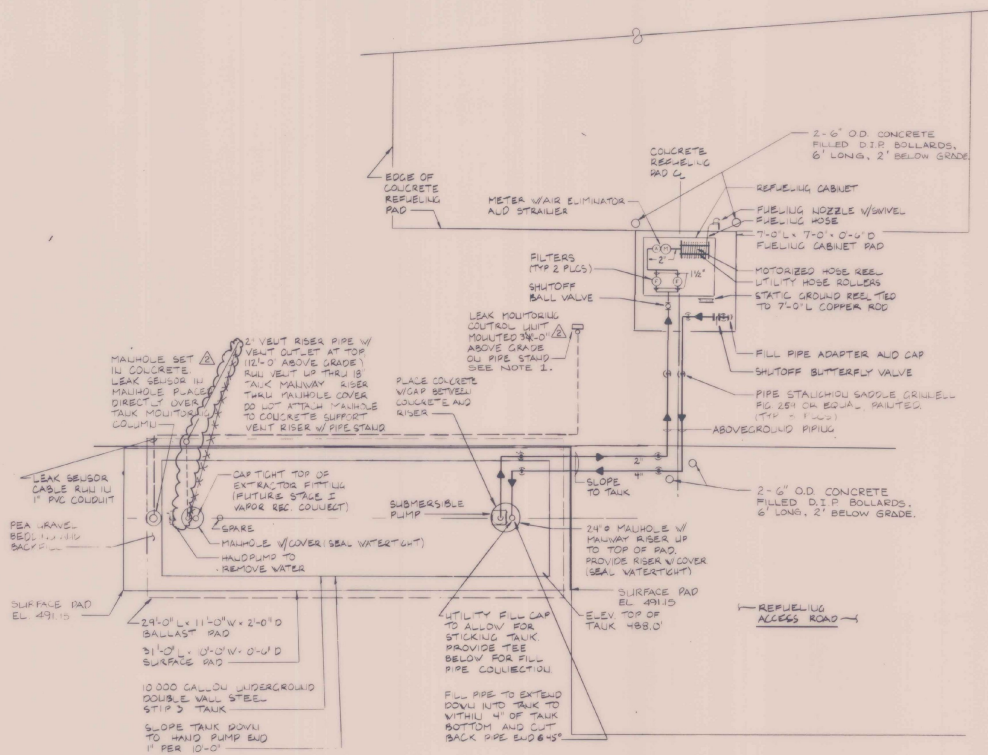
PROJECT: 1981-03

DATE: JUNE 1991
SCALE: AS SHOWN
SHEET: 8A OF 10



SCALE IN FEET

BRUNNEN 67540

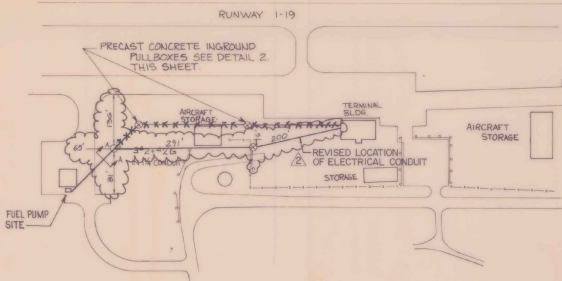


- NOTES:
1. CONTRACTOR SHALL MOUNT A 12"x12" ALUMINUM SIGN DIRECTLY ABOVE THE LEAK MONITORING UNIT WITH THE FOLLOWING MESSAGE:
 - URGENT
 - IF THE LEAK DETECTION ALARM OR LIGHT GOES OFF, CALL THE FOLLOWING PHONE NUMBER COLLECT: 882-2657
 2. REINFORCEMENT FOR BALLAST PAD SHALL BE 2 MATS OF #4-12" EW, 2" MINIMUM COVER.
 3. REINFORCEMENT FOR SURFACE PAD SHALL BE #4x6" Wx2xW2 WWF, 2" MINIMUM COVER.

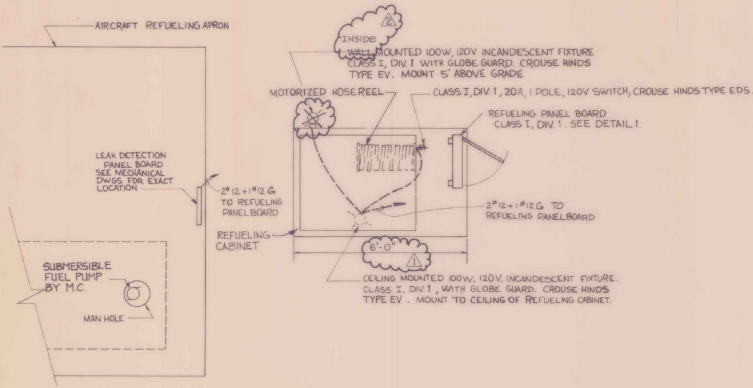
PLAN-TANK, PIPING & REFUELING CABINET
SCALE 1/4" = 1'-0"

RECORD DRAWINGS

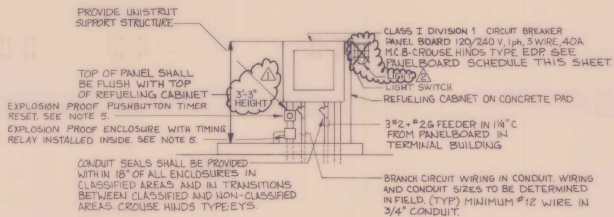
RECORD DRAWINGS		DATE	TANK AND REFUELING CABINET PLAN	
MLC	BY	2/10/91	MIDDLEBURY STATE AIRPORT FUELING SYSTEM A.I.R. 03-2069 TOWN OF MIDDLEBURY	
REVISION	NO. 5963	DATE		
ALTERATION OF THIS DOCUMENT, EXCEPT BY A LICENSED PROFESSIONAL ENGINEER, IS ILLEGAL.				
PROJECT	DATE	SCALE	DWG	SHEET
1981-03	JULY 1990	AS SHOWN	M-1	9 OF 10



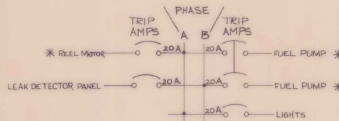
MIDDLEBURY AIRPORT LAYOUT
N.T.S.



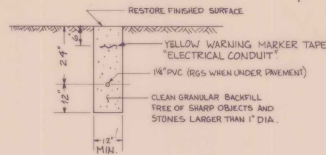
REFUELING CABINET DETAIL
N.T.S.



REFUELING PANEL BOARD
N.T.S.



PANEL BOARD SCHEDULE (SEE NOTE 2)
N.T.S.



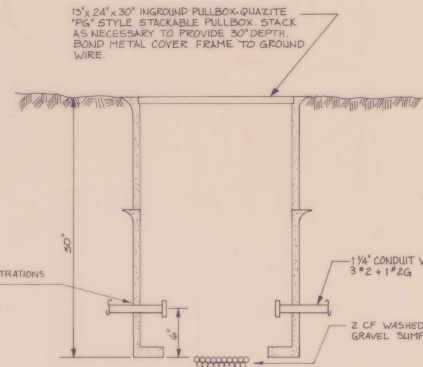
CONDUIT TRENCH
SCALE 1/2" = 1'-0"

LEGEND

- Ⓛ LIGHT SWITCH CLASS I, DIV II
- Ⓧ INCANDESCENT LIGHT FIXTURE CLASS I, DIV II
- Ⓢ CONCRETE INGROUND PULLBOX

NOTES:

1. PROVIDE 3#2 + #2G IN 1 1/4" FROM EXISTING PANELBOARD IN TERMINAL BUILDING TO NEW REFUELING PANELBOARD AT FUEL PUMP SITE. PROVIDE 240V, 2P, 50A, CIRCUIT BREAKER IN EXISTING PANELBOARD FOR FEEDER CIRCUIT BREAKER. SHALL MATCH EXISTING PANELBOARD APPROXIMATE LENGTH OF RUN IS 700'.
2. VERIFY SPECIFICATIONS FOR FUEL PUMP AND REEL MOTOR COORDINATE WITH PANELBOARD CIRCUIT BREAKERS BEFORE INSTALLING TO ENSURE PROPER MOTOR & CIRCUIT PROTECTION.
3. PROVIDE ALL NECESSARY POWER AND CONTROL WIRING PER MANUFACTURERS RECOMMENDATIONS AND THE LATEST ISSUE OF THE NATIONAL ELECTRICAL CODE, FOR HOSE REEL MOTOR AND FUEL PUMP MOTOR INSTALLATION. PROVIDE ALL NECESSARY EQUIPMENT (i.e. DISCONNECT SWITCH, OVERLOAD RELAY, FUSES, CONTROL TRANSFORMERS, ETC.) TO INSURE FULL OPERATION OF MOTORIZED EQUIPMENT AND ELECTRICAL DEVICES. FUSES SHALL BE SIZED TO PROTECT MOTOR FROM OVERLOAD AND SHORT CIRCUIT.
4. PROPERLY SEAL AROUND ALL EXTERIOR CONDUIT PENETRATIONS IN BUILDINGS TO ENSURE WATERTIGHT CONDITIONS.
5. PROVIDE UNIVERSAL TIMER, ADJUST SUFFRINO, IN 6" X 6" X 4" D EXPLOSION PROOF ENCLOSURE. TIMER SHALL BE INSTALLED TO ALLOW REFUELING PUMP TO OPERATE ONLY FOR OWNER SPECIFIED TIME INTERVAL. EXPLOSION PROOF PUSHBUTTON RESET SWITCH SHALL BE INSTALLED TO RESET TIMER SO THAT REFUELING PUMP MAY OPERATE FOR SAME OWNER SPECIFIED TIME INTERVAL. COORDINATE RELAY OPERATING VOLTAGE, CONTACT RATING AND PUSHBUTTON WITH REFUELING PUMP CONTROL CIRCUIT. PROVIDE ALL WIRING, CONDUIT, FUSES, CONTROL TRANSFORMER, ETC., AS NECESSARY FOR OPERATION AS SPECIFIED ABOVE. PROVIDE PLASTIC LAMINATED NAMEPLATE EXPLAINING TIMING AND RESET SEQUENCE AND INSTALL PER OWNERS REQUEST.



INGROUND PULLBOX
N.T.S.

REVISIONS			ELECTRICAL PLAN	
NO.	DATE		MIDDLEBURY STATE AIRPORT FUELING SYSTEM	
BY	DATE	TOWN OF MIDDLEBURY		
APPROVED	DATE			
PROJECT	DATE	SCALE	DWG.	SHEET
1981-	MAY 1990	AS SHOWN	E-1	10 OF 10

RECORD DRAWINGS