

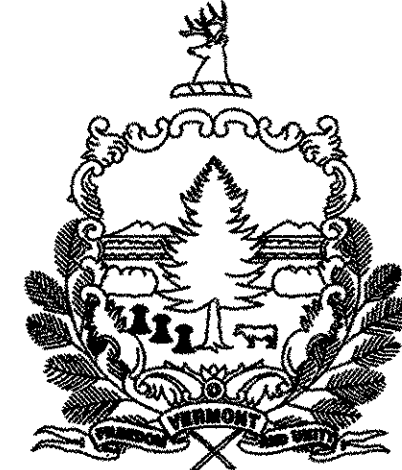
**INDEX OF SHEETS**

- 1 TITLE SHEET
- 2 QUANTITY SHEET
- 3 RIGHT-OF-WAY PLAN
- 4 LAYOUT PLAN
- 5 LIGHTING PLAN
- 6 LIGHTING DETAILS 1
- 7 LIGHTING DETAILS 2
- 8 LIGHTING DETAILS 3
- 9 CONSTRUCTION APPROACH SIGNS
- 10 EROSION CONTROL PLAN
- 11 EROSION CONTROL DETAILS
- 12 EROSION CONTROL NOTES
- 13 GENERAL DETAILS
- 14 SIGN DETAILS

**VTRANS DESIGN STANDARDS**

E - 100	CONSTRUCTION APPROACH SIGNS	01/02/04
E - 100A	SIDE ROAD CONSTRUCTION APPROACH SIGNS	01/02/04
E - 144	REGULATORY SIGN DETAILS	03/29/99
E - 160	FLANGED CHANNEL SIGN POST	05/20/99
E - 173	PULLBOXES AND JUNCTION BOXES	08/09/95
E - 175	POWER DROP STANCHIONS	11/17/93
E - 180A	STREET LIGHTING DETAILS	08/09/95
E - 180B	STREET LIGHTING DETAILS	08/09/95
E - 193	PAVEMENT MARKING DETAILS	08/18/95
E - 164	SQUARE STEEL SIGN POST	05/20/99

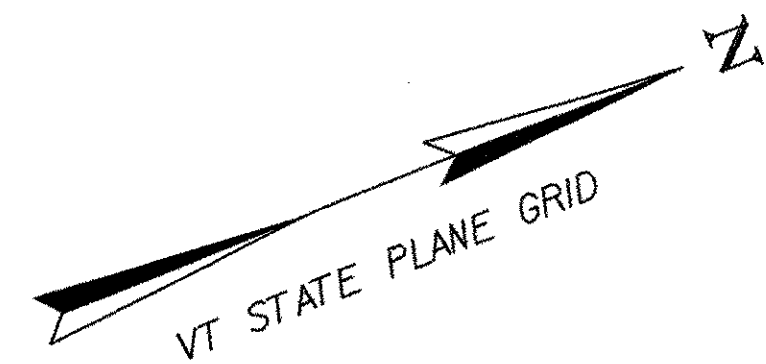
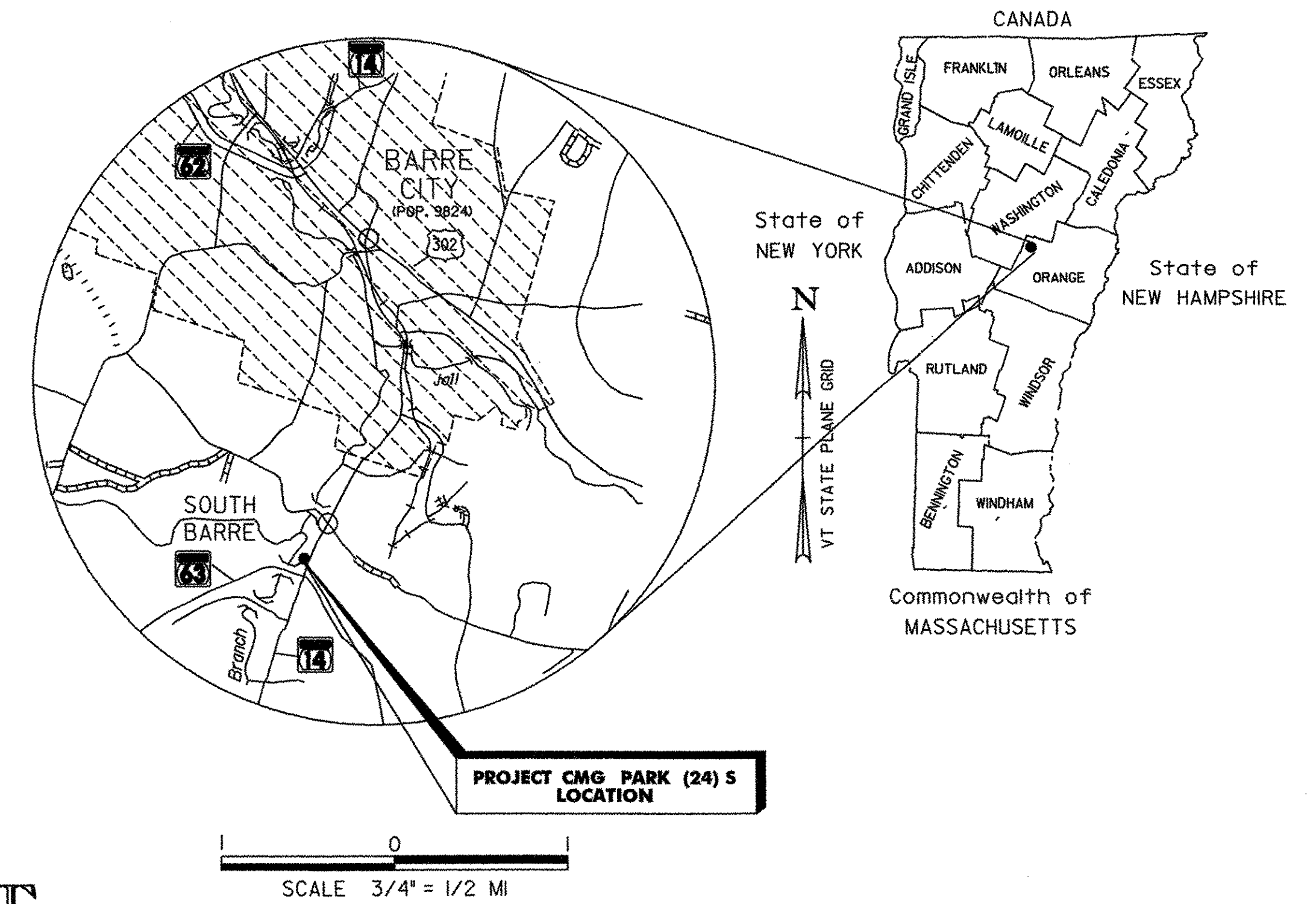
# STATE OF VERMONT AGENCY OF TRANSPORTATION



## PROPOSED IMPROVEMENT TOWN OF BARRE COUNTY OF WASHINGTON COMMUTER PARK-AND-RIDE LOT

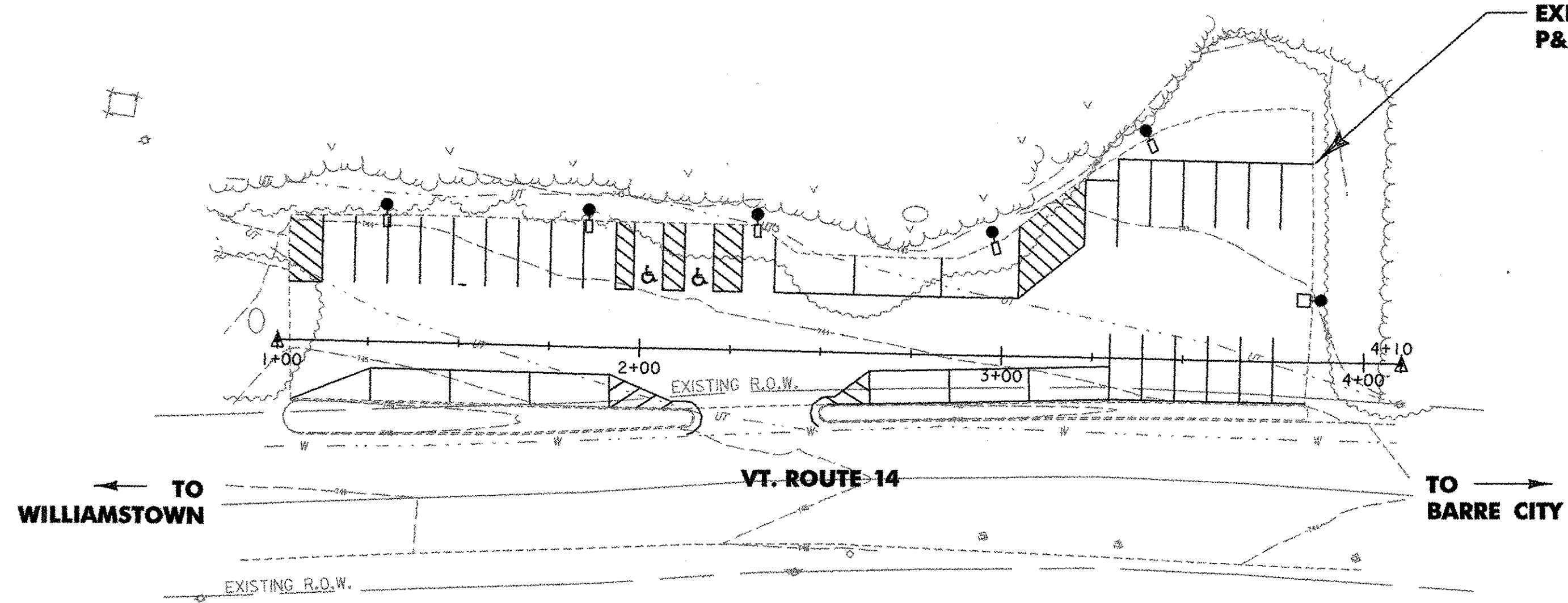
THIS PROJECT IS LOCATED ON THE WEST SIDE OF VT ROUTE 14 IN THE TOWN OF BARRE,  
NORTH OF THE VT ROUTE 14 AND VT ROUTE 63 INTERSECTION.

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES NEW LIGHTING WITH OTHER APPURTENANCES, NEW PAVEMENT MARKINGS, AND SIGNS.

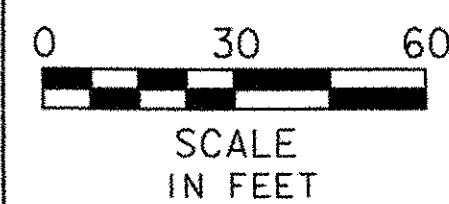


RECORD PLANS	
CONTRACTOR:	TREMBLAY CONSTRUCTION, LLC - WASHINGTON, VT
RESIDENT ENGINEER:	CARL FIELDER
CONSTRUCTION BEGAN:	JULY 18, 2006
CONSTRUCTION COMPLETE:	DECEMBER 6, 2006
RECORD PLANS BY:	CARL FIELDER
I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.	
BY:	<i>Carl Fielder</i> RESIDENT ENGINEER
DATE:	8/9/07
NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found at Central Files in the electronic archives.	

CONVENTIONAL SYMBOLS	
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	
TOP OF CUT	
TOE OF SLOPE	

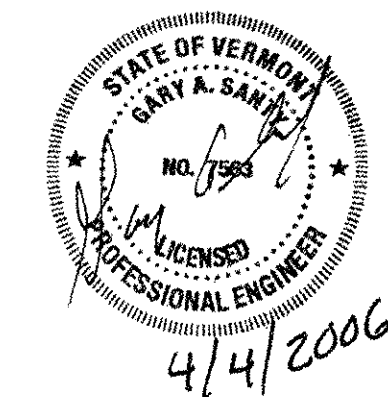


SURVEYED BY :	VSE
SURVEYED DATE :	JUNE, 2005
DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83



BUILT AS DESIGNED

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.  
CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2001, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JANUARY 4, 2001 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

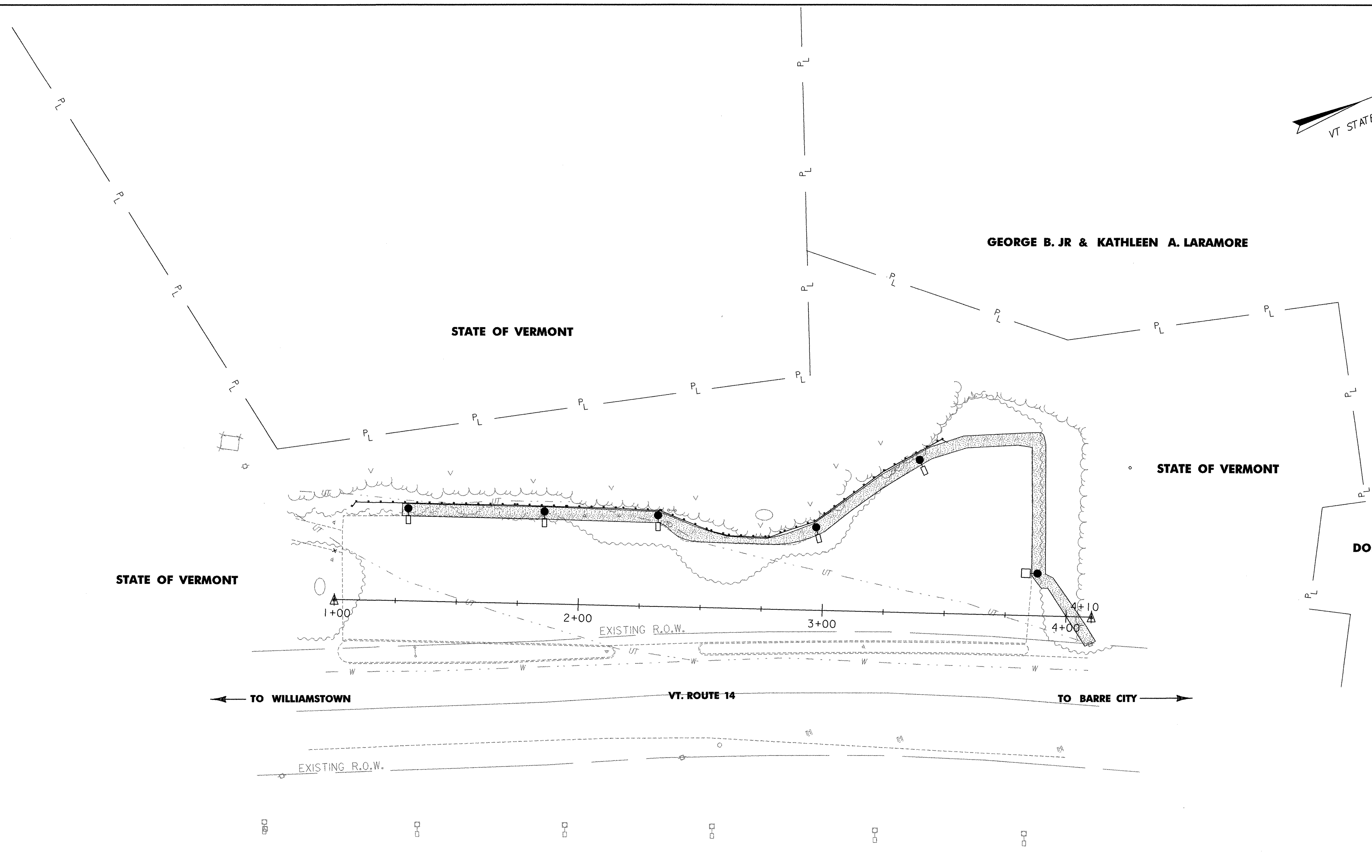
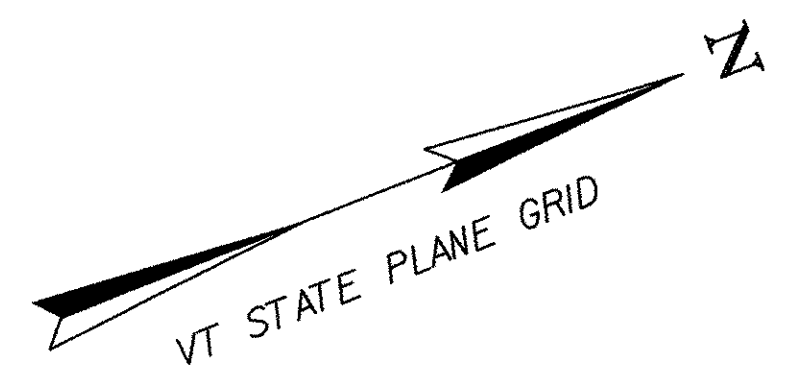


DIRECTOR OF PROGRAM DEVELOPMENT	
APPROVED: <i>Richard Johnson</i>	DATE: 4-5-06
PROJECT MANAGER : WAYNE L. DAVIS	
PROJECT NAME : BARRE TOWN	
PROJECT NUMBER : CMG PARK (24) S	
SHEET 1 OF 14 SHEETS	



# QUANTITY SHEET

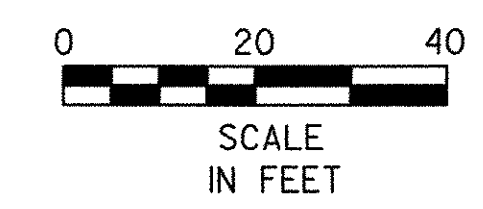
SUMMARY OF ESTIMATED QUANTITIES														TOTALS			DESCRIPTIONS			DETAILED SUMMARY OF QUANTITIES				
														EROSION CONTROL	PARK & RIDE QUANTITY	ROUND	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	QUANTITIES	UNIT	ITEMS
															1	EST.	1		ACRE	THINNING AND TRIMMING	201.30			
														10		EST.	10		CY	GRAVEL BACKFILL FOR SLOPE STABILIZATION	203.35			
															3	0.5	3.5		CY	CONCRETE, CLASS B	501.25			
														468		12	480		LF	SNOW FENCE (MOD.-PDF)	620.70			
															1	EST.	1		LS	MOBILIZATION / DEMOBILIZATION	635.11			
															1	EST.	1		LS	TRAFFIC CONTROL (MOD.)	641.10			
															1411	19	1430		LF	DURABLE 4" WHITE LINE	646.40			
															2	0	2		EA	DURABLE LETTER OR SYMBOL	646.50			
															912	0	912		SF	REMOVAL OF EXISTING PAVEMENT MARKINGS	646.85			
														116		4	120		SY	GEOTEXTILE FOR SILT FENCE	649.51			
															161	39	200		LB	SEED	651.15			
															21	29	50		LB	FERTILIZER	651.18			
															1	0	1		TON	AGRICULTURAL LIMESTONE	651.20			
															1	0	1		TON	HAY MULCH	651.25			
															17	3	20		CY	TOPSOIL	651.35			
														1		-	1		LS	EROSION PREVENTION AND SEDIMENT CONTROL PLAN	652.10			
														16		8	24		HR	MONITORING EROSION PREVENTION AND SEDIMENT CONTROL PLAN	652.20			
														1		-	1		LU	MAINTENANCE OF EROSION PREVENTION AND SEDIMENT CONTROL PLAN (N.A.B.I.)	652.30			
														400		EST	400		SY	EROSION MATTING	654.10			
															13	0	13		SF	TRAFFIC SIGNS, TYPE A	675.20			
																				BEGIN OPTION POSTS				
															45	0	45		LF	FLANGED CHANNEL SIGN POST	675.301			
															45	0	45		LF	SQUARE TUBE SIGN POSTS AND ANCHOR	675.341			
																				END OPTION POSTS				
															3	0	3		EA	REMOVING SIGNS	675.50			
															505	0	505		LF	WIRED CONDUIT (2" )(PVC)	678.23			
															1	0	1		EACH	PULLBOX - STANDARD	678.25			
															6	0	6		EACH	LIGHT POLE BASE	679.21			
															1	0	1		EACH	POWER STANCHION	679.28			
															6	0	6		EACH	LIGHT POLE	679.45			
															6	0	6		EACH	LUMNAIRE	679.50			



**LEGEND**

	TOPSOIL, SEED & HAY MULCH, TYP. WIDTH 4'-6'		STEEP SLOPE
	GEOTEXTILE FOR SILT FENCE		NEW LIGHT POLE AND LUMINAIRE
	LIMITS OF CONSTRUCTION		UNDERGROUND TELEPHONE
	APPROX. R.O.W. LINE		EXISTING CONTOURS
	APPROX. PROPERTY LINE		

LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES (P/L) ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE STATE OF VERMONT'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.



PROJECT NAME: BARRE TOWN PARK-AND-RIDE	
PROJECT NUMBER: CMG PARK (24) S	
FILE NAME: ...Trans\PlotFiles\03 row01.ptf	PLOT DATE: 4/4/2006
PROJECT LEADER: GAS	DRAWN BY: SRZ
DESIGNED BY: SRZ	CHECKED BY: GAS
<b>RIGHT-OF-WAY PLAN</b>	
	SHEET 3 OF 14

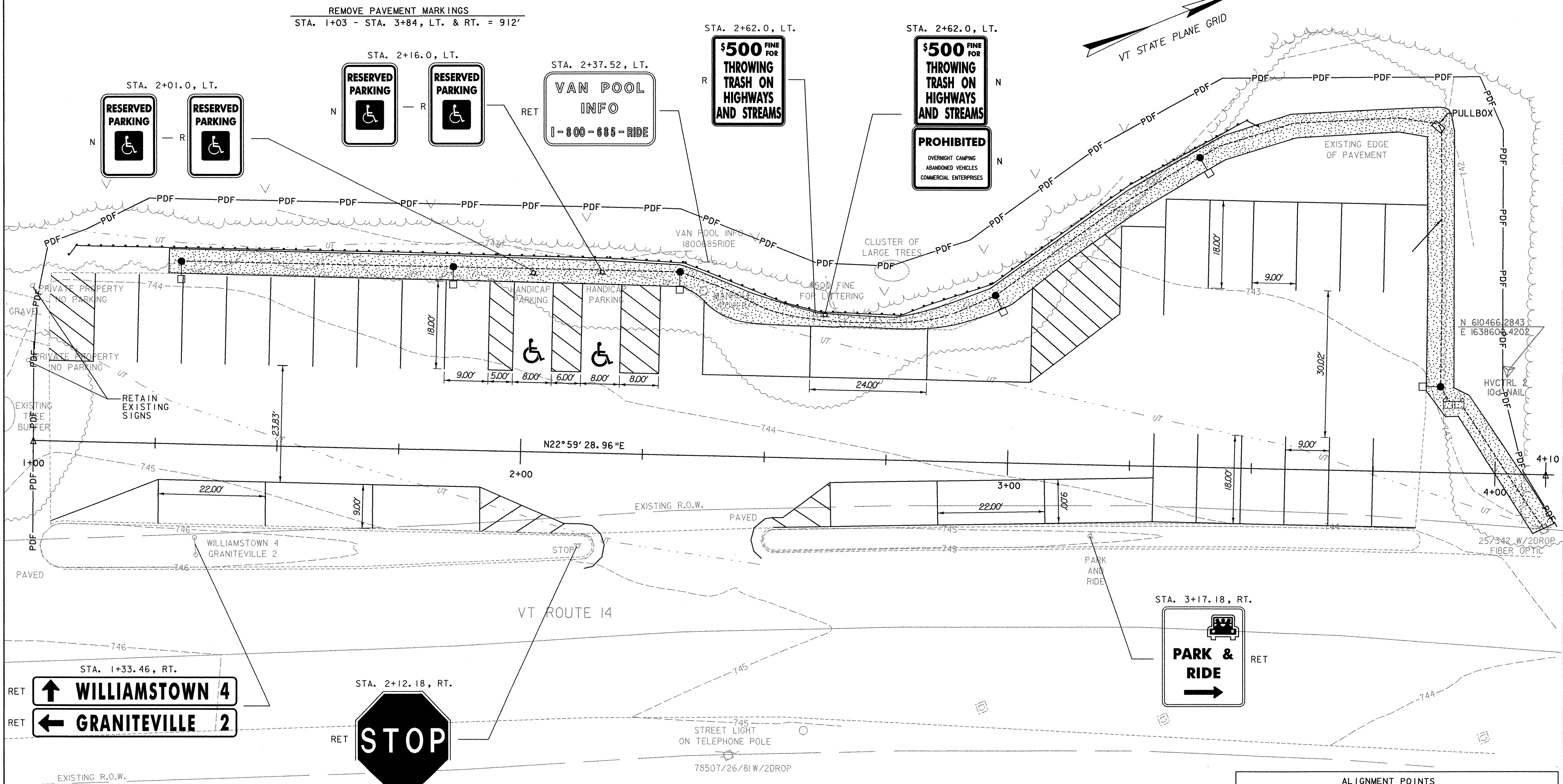
THINNING AND TRIMMING  
 STA. 1+00.0, 47.0' LT. - 20.0' RT. TO  
 STA. 4+10.0, 77.0' LT. - 10.0' RT.

REMOVE SIGNS  
 AS SHOWN - 3

4" DURABLE WHITE LINES  
 STA. 1+03, LT. & RT. - STA. 3+84, LT. & RT.

DURABLE LETTERS AND SYMBOLS  
 STA. 2+01.8, 19.6' LT. - " & "  
 STA. 2+16.0, 19.6' LT. - " & "

SNOW FENCE (MOD.-PDF)  
 STA. 1+00.00, RT. - STA. 4+11.00, LT.



N 610140.6089  
 E 1638578.3425

**LEGEND**

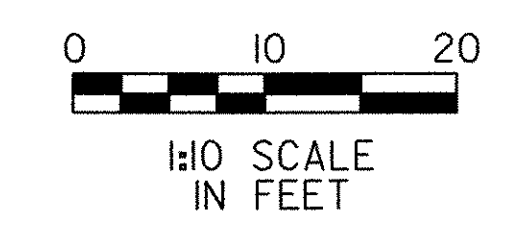
	TOPSOIL SEED & HAY MULCH, TYP. WIDTH 4'-6"		STEEP SLOPE
	GEOTEXTILE FOR SILT FENCE		NEW LIGHT POLE AND LUMINAIRE
	LIMITS OF CONSTRUCTION		UNDERGROUND TELEPHONE
	APPROX. FOLIAGE OVERHANG		EXISTING CONTOURS
	APPROX. EDGE OF FOLIAGE		
	APPROX. R.O.W. LINE		

**SIGN LEGEND**

N - NEW  
 R - REMOVE  
 S - SALVAGE  
 RET - RETAIN

**NOTES:**

- HAND DIG AROUND EXISTING UTILITIES AS REQUIRED. THIS WORK WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED INCIDENTAL TO ALL CONTRACT ITEMS. REPAIRS FOR DAMAGE TO EXISTING UTILITIES WILL BE MADE AT THE EXPENSE OF THE CONTRACTOR.
- FOR SEED FORMULA AND NOTES, SEE GENERAL DETAILS.
- FOR LIGHTING NOTES, SEE LIGHTING LAYOUT AND DETAILS.



**ALIGNMENT POINTS**

POINT	NORTHING	EASTING	STATION	ELEVATION
HVCTRL 1	610466.2843	1638602.4202	4+02.2 LT 21.1'	742.9169
HVCTRL 2	610154.9877	1638584.7655	1+03.0 RT 83.7'	752.4222
1+00	610179.8317	1638503.7819	1+00	N/A
4+00	610456.9444	1638620.6292	4+00	N/A

PROJECT NAME: BARRE TOWN PARK-AND-RIDE  
 PROJECT NUMBER: CMG PARK (24) S  
 FILE NAME: ...Trans\PlotFiles\04 plan.ptf PLOT DATE: 4/14/2006  
 PROJECT LEADER: GAS DRAWN BY: SRZ  
 DESIGNED BY: SRZ CHECKED BY: GAS  
**LAYOUT PLAN** SHEET 4 OF 14

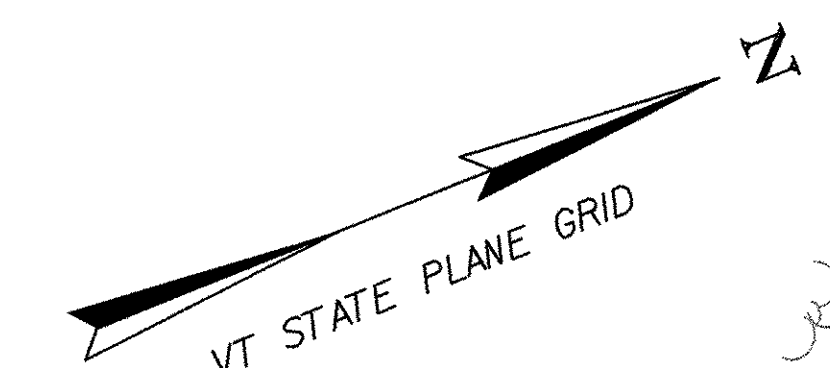
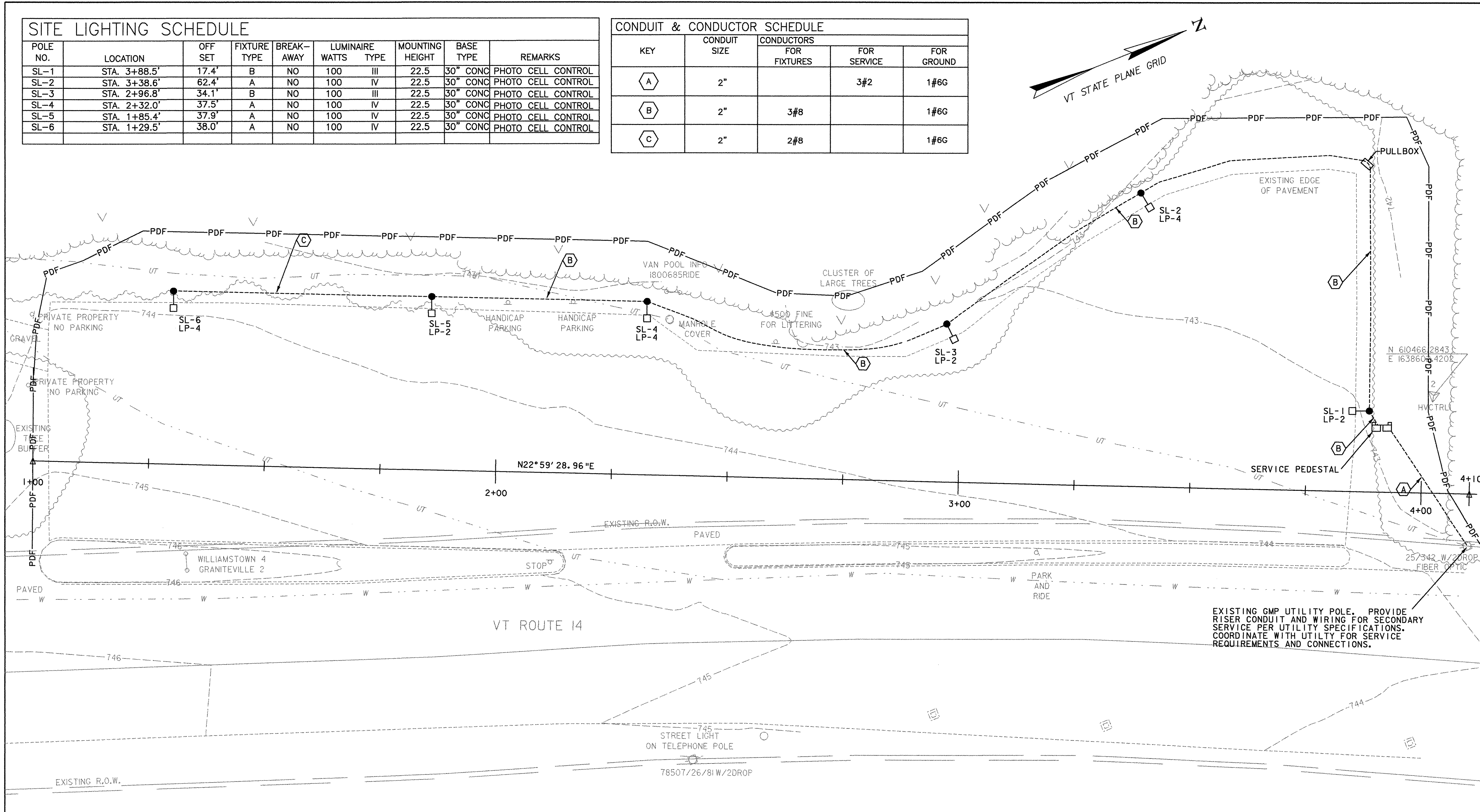


**SITE LIGHTING SCHEDULE**

POLE NO.	LOCATION	OFF SET	FIXTURE TYPE	BREAK-AWAY	LUMINAIRE WATTS	LUMINAIRE TYPE	MOUNTING HEIGHT	BASE TYPE	REMARKS
SL-1	STA. 3+88.5'	17.4'	B	NO	100	III	22.5	30" CONG	PHOTO CELL CONTROL
SL-2	STA. 3+38.6'	62.4'	A	NO	100	IV	22.5	30" CONG	PHOTO CELL CONTROL
SL-3	STA. 2+96.8'	34.1'	B	NO	100	III	22.5	30" CONG	PHOTO CELL CONTROL
SL-4	STA. 2+32.0'	37.5'	A	NO	100	IV	22.5	30" CONG	PHOTO CELL CONTROL
SL-5	STA. 1+85.4'	37.9'	A	NO	100	IV	22.5	30" CONG	PHOTO CELL CONTROL
SL-6	STA. 1+29.5'	38.0'	A	NO	100	IV	22.5	30" CONG	PHOTO CELL CONTROL

**CONDUIT & CONDUCTOR SCHEDULE**

KEY	CONDUIT SIZE	CONDUCTORS		
		FOR FIXTURES	FOR SERVICE	FOR GROUND
(A)	2"		3#2	1#6G
(B)	2"	3#8		1#6G
(C)	2"	2#8		1#6G



N 610154.9877  
E 1638584.7655

HVCTRL2

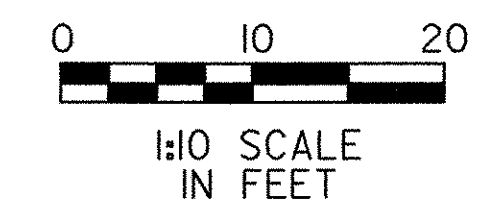
**LEGEND**

- SB-# ● NEW SITE LIGHT FIXTURE, TYPES A AND B
- LP-# □ SB-# = FIXTURE ID NUMBER
- LP-# = CIRCUIT NUMBER
- SEE SITE LIGHTING SCHEDULE FOR TYPE
- UNDERGROUND ELECTRICAL CONDUIT
- ELECTRIC SERVICE PEDESTAL WITH ELECTRIC METER AND PANEL BOXES
- SEE LIGHTING DETAIL SHEET 3

**GENERAL NOTES:**

1. MAXIMUM OF 270° IN TOTAL BENDS PERMITTED IN SINGLE RUN OF CONDUIT.
2. LIGHTS SHALL BE FUSED AT BASE WITH Y-TYPE FUSE KIT (EQUAL TO HOMAC (FLOOD SEAL)) FYC-6 AND 10 AMP FUSE.
3. CIRCUIT CONDUCTORS INCLUDING NEUTRAL CONDUCTOR SHALL BE CLEARLY IDENTIFIED BY CORROSION RESISTANT TAGS INDICATING CIRCUIT NUMBER AND PANEL SOURCES AT EVERY POLE BASE AND HANDHOLE.
4. UTILIZE APPROVED DUAL-RATED PARALLEL TAP CONNECTOR EQUAL TO ILSCO GTA SERIES WITH INSULATED COVER FOR TAPS AT POLE BASE.

GMP UTILITY CONTACT:  
NAME: STARR PARNIGONI  
TEL: 802-229-7933

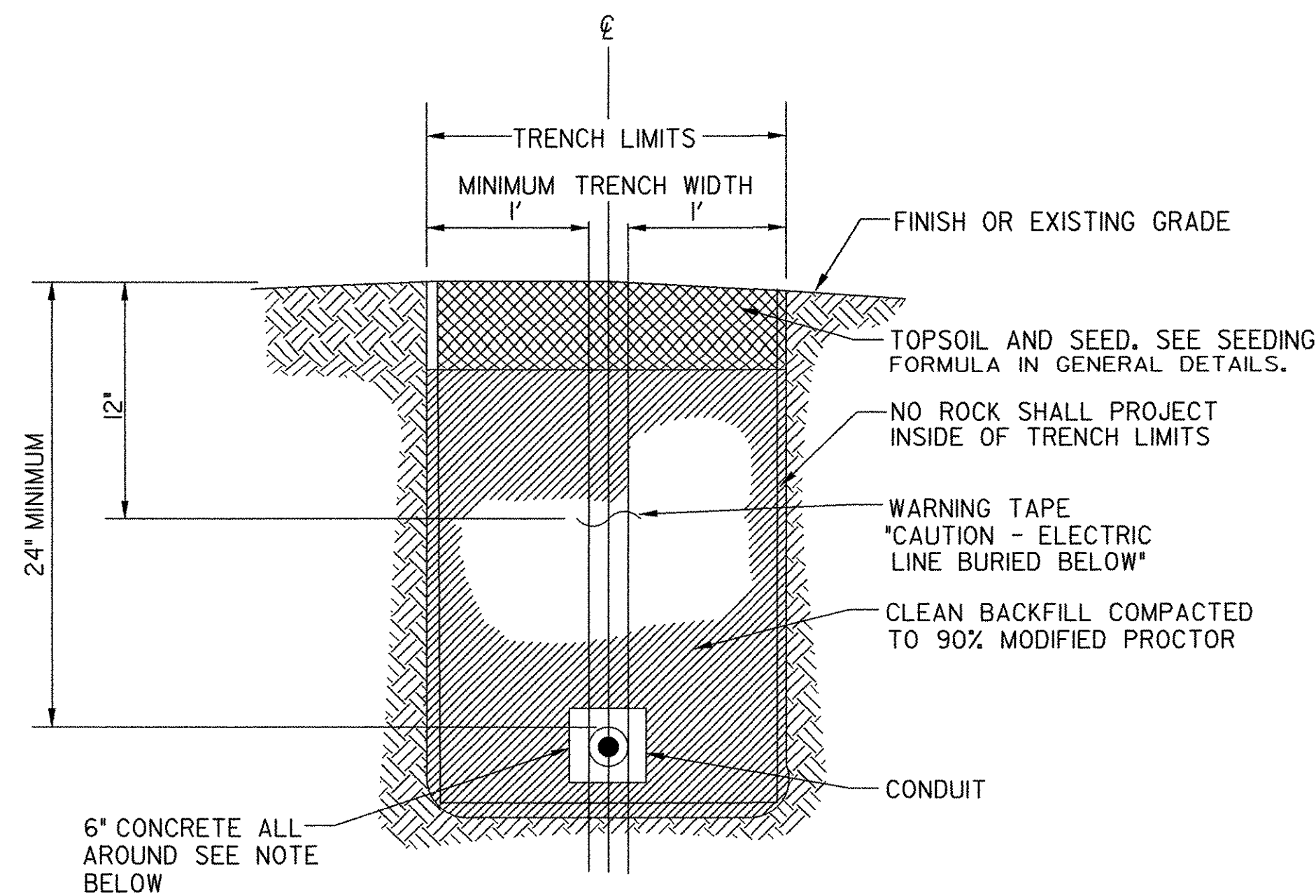


PROJECT NAME: BARRE TOWN PARK-AND-RIDE  
PROJECT NUMBER: CMG PARK (24) S  
FILE NAME: ...\\PlotFiles\05 Lighting.plt  
PROJECT LEADER: GAS  
DESIGNED BY: MLC  
PLOT DATE: 4/4/2006  
DRAWN BY: PBH  
CHECKED BY: LAB  
SHEET 5 OF 14

**LIGHTING PLAN**

EXISTING GMP UTILITY POLE. PROVIDE RISER CONDUIT AND WIRING FOR SECONDARY SERVICE PER UTILITY SPECIFICATIONS. COORDINATE WITH UTILITY FOR SERVICE REQUIREMENTS AND CONNECTIONS.

**GENERAL SITE LIGHT NOTES**



**TYPICAL TRENCH SECTION**  
NOT TO SCALE

**TRENCH SECTION NOTES**

1. BOTTOM OF TRENCH SHALL BE UNDISTURBED ORIGINAL GROUND OR FIRMLY COMPACTED EARTH FREE FROM VOIDS, ROCK OR RUBBLE AND OF RELATIVELY SMOOTH ARCH.
2. 6" CONCRETE ENCASEMENT SHALL BE INSTALLED AROUND CONDUIT AND PAID FOR AS ITEM 501.25 CONCRETE, CLASS B.
3. A 3" SPACING SHALL BE MAINTAINED BETWEEN ADJACENT CONDUITS.
4. PVC CONDUIT SHALL BE PRIMED AND GLUED TO FORM A WATERTIGHT SEAL.
5. EXCAVATION COST TO BE INCLUSIVE WITH ITEM 678.23 WIRED CONDUIT.
6. TOPSOIL AND SEED TO BE PAID FOR AS 651.15, 651.20, 651.25 AND 651.35.

**CONCRETE BASES**

WHEN CONCRETE BASES ARE INSTALLED IN SLOPING GROUND, THE GREATEST EXPOSED HEIGHT TO KEEP ALL OF THE TOP ABOVE GROUND MUST BE DOUBLED AND THEN ADDED TO THE MINIMUM DEPTH FOR THE TOTAL BASE DEPTH.

CARE SHOULD BE TAKEN WHERE CONCRETE BASES, DRAINAGE STRUCTURES OR UTILITIES ARE CLOSE TOGETHER.

**POLES, ANCHOR BASES AND ARMS**

ALL NEW SITE LIGHT POLES AND LUMINAIRE ARMS SHALL BE ALUMINUM IN ACCORDANCE WITH SUBSECTION 753.01(B) AND SHALL BE DARK BRONZE IN COLOR.

**LUMINAIRES AND POLES**

TYPE A: ALUMINUM, DARK BRONZE, 'SHOEBOX' TYPE 100W METAL HALIDE, FORWARD THROW DISTRIBUTION, EQUIVALENT TO LITHONIA CATALOG NO. KAD-100M-R4-TB-SPD04-LPI-PER-PE WITH PHOTO CELL.

TYPE B: ALUMINUM, DARK BRONZE, 'SHOEBOX' TYPE 100W METAL HALIDE, TYPE III DISTRIBUTION EQUIVALENT TO LITHONIA CATALOG NO. KAD-100M-R3-TB-SPD04-LPI-PER-PE WITH PHOTO CELL.

POLES: ROUND ALUMINUM, 20 FT. DARK BRONZE, WITH BASE COVER EQUIVALENT TO LITHONIA RSA 20-4-5G.

LUMINAIRE SUBSTITUTIONS SHALL MEET THE ISO FOOTCANDLE DATA AND THE ILLUMINATION LEVELS AS DESCRIBED BELOW.

**ILLUMINATION LEVELS**

PARK AND RIDE SHALL HAVE AN AVERAGE OF 1.0 FC AND A MAX/MIN RATIO OF 7.3:1.

**CONDUIT**

A 2 INCH (I.D.) MINIMUM CONDUIT SHALL BE USED AT ALL LOCATIONS UNLESS OTHERWISE NOTED ON THE PLANS, ALL CONDUIT SHALL BE AT LEAST SCHEDULE 40 P.V.C. EXPOSED CONDUIT SHALL BE SCHEDULE 80 PVC.

**CONDUIT SLEEVE**

MINIMUM WALL THICKNESS FOR RIGID PLASTIC PIPE SLEEVES SHALL BE 1/35TH THE DIAMETER. ALL CONDUIT RUNS UNDER ROADWAY SHALL BE INSTALLED IN RIGID PLASTIC OR STEEL PIPE SLEEVES. THE SLEEVE SHALL EXTEND TO WITHIN 2 FEET OF THE SIDE OF A CONCRETE BASE OR PULLBOX. WHERE NO CONCRETE BASE OR PULLBOX IS PRESENT, THE SLEEVE SHALL EXTEND 4 FEET BEYOND THE OUTSIDE EDGE OF SHOULDER OR FACE OF CURB. BACKFILLING AROUND A SLEEVE SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

WHEN JACKING A SLEEVE UNDER A ROADWAY IT SHALL BE STEEL WITH A MINIMUM DIAMETER OF 8 INCHES AND MINIMUM WALL THICKNESS OF 3/8 INCH. ACTUAL LENGTH TO BE DETERMINED IN THE FIELD BY THE RESIDENT ENGINEER.

**WIRE**

ALL WIRING BETWEEN THE METER AND/OR POWER SOURCE AND THE FIRST POLE AND/OR PULLBOX AND BETWEEN POLES AND/OR PULLBOXES SHALL BE COPPER AND SIZED AS SPECIFIED ON THE PLANS. ALL WIRE SHALL HAVE TYPE XHHW INSULATION OR EQUIVALENT.

**GROUNDING**

ALL CONDUIT MUST INCLUDE A GROUNDING CONDUCTOR. RIGID STEEL CONDUIT SHALL BE PROPERLY CONNECTED AT THE JOINTS SO AS TO BE WATERTIGHT AND MAINTAIN ELECTRICAL CONTINUITY AND HAVE GROUNDING BUSHINGS SO AS TO ACT AS A GROUND CONDUCTOR.

ALUMINUM WIRE SHALL NOT BE USED FOR GROUND WIRE.

**PULLBOXES**

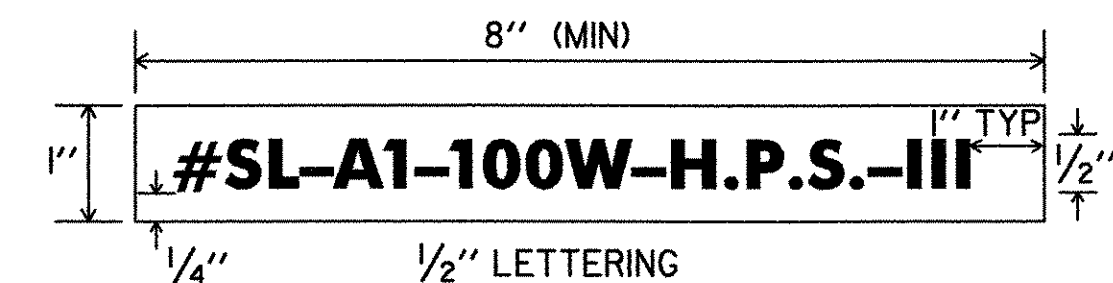
FOR DETAILS SEE VTRANS STANDARD SHEET E-173.

**GENERAL**

THE LOAD ON EACH BRANCH OF A THREE WIRE CIRCUIT SHALL BE AS BALANCED AS POSSIBLE, LOAD TO NEUTRAL.

THE LAST CONCRETE POLE BASE AT THE END OF EACH CIRCUIT AND SOME PULLBOXES SHALL HAVE A CONDUIT SWEEP WITH CAP INSTALLED FOR FUTURE USE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING NECESSARY ELECTRICAL PERMITS.



LEGEND: BLACK OR WHITE (NON-REFL.) - STAMPED PRIOR TO PRINTING/PAINING.

BACKGROUND: NATURAL ALUMINUM OR FLAT BLACK SURFACE, SAME AS POLE FINISH.

**DETAILS FOR TAGS ATTACHED TO STREET LIGHT POLES**

**NOTES**

1. THE TAG SHALL BE MOUNTED ON ALL STREET LIGHT POLES IN SUCH A MANNER AS NOT TO BE EASILY REMOVED, SUCH AS WELDED, RIVETED, OR BOLTED WITH VANDAL PROOF BOLTS.
2. THE LETTERS SHALL BE PUNCHED, STAMPED, ENGRAVED, OR PHOTO-ETCHED. PUNCHING, STAMPING OR ENGRAVING SHALL PENETRATE AT LEAST 1/2 THE BASE MATERIAL THICKNESS.
3. THE BASE MATERIAL FOR THE TAG SHALL BE ALUMINUM WITH A MINIMUM THICKNESS OF 0.100 INCHES.
4. THE TAG SHALL BE ATTACHED TO THE POLE ABOVE THE HANDHOLE, 6 INCHES MAXIMUM. IF THE POLE HAS A TRANSFORMER BASE ATTACH TAG TO COVER.
5. TYPE 'A' FIXTURE  
TAG SHALL READ: A-#-100W-H.P.S.-V.  
TYPE 'B' FIXTURE TAG SHALL READ:  
B-#-150W-H.P.S.-III.

PROJECT NAME: BARRE TOWN PARK-AND-RIDE

PROJECT NUMBER: CMG PARK (24) S

FILE NAME: ...\\PlotFiles\06-08 lightdets.ptf PLOT DATE: 4/14/2006

PROJECT LEADER: GAS

DRAWN BY: PBH

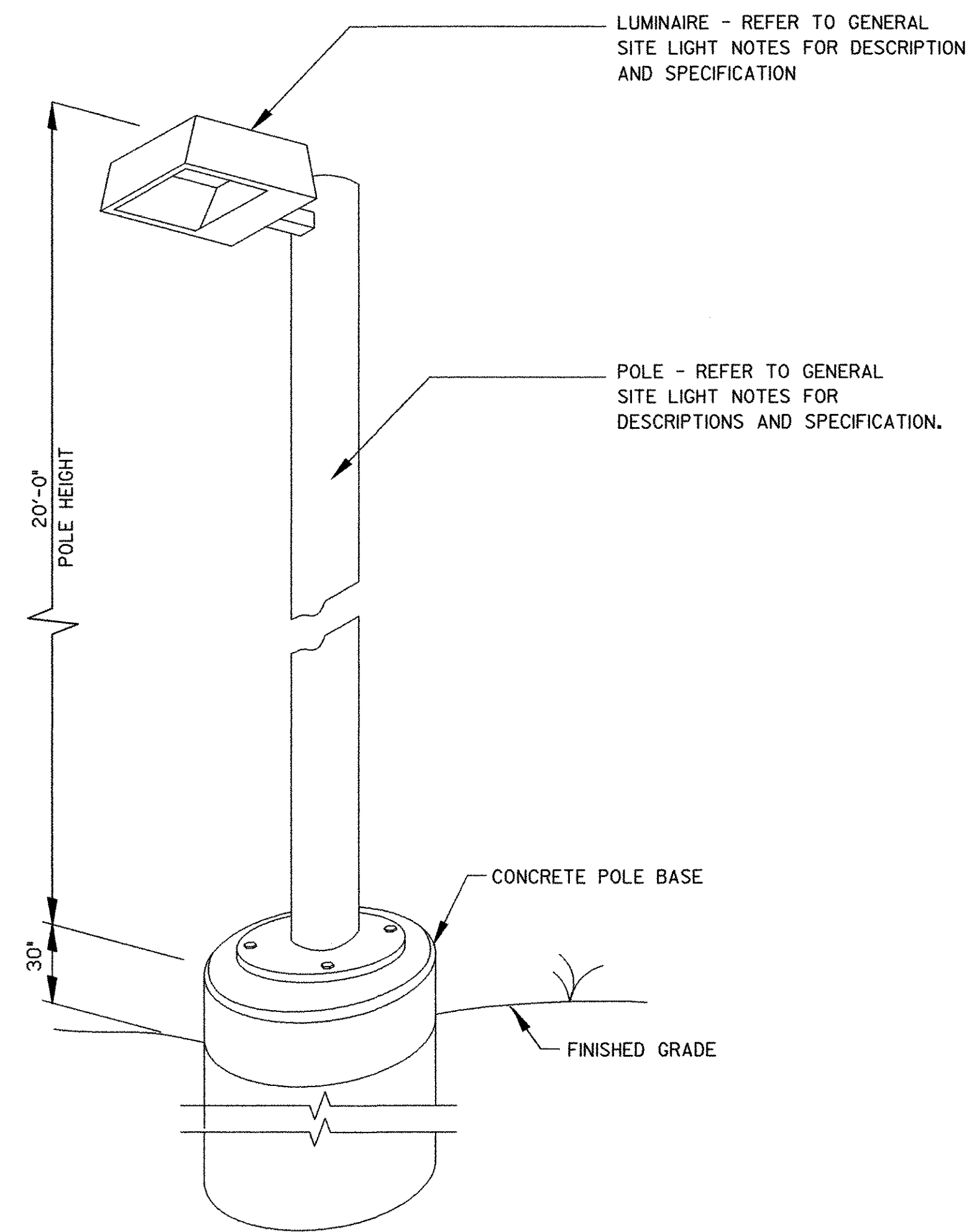
DESIGNED BY: MLC

CHECKED BY: GAS

**LIGHTING DETAILS 1**

SHEET 6 OF 14



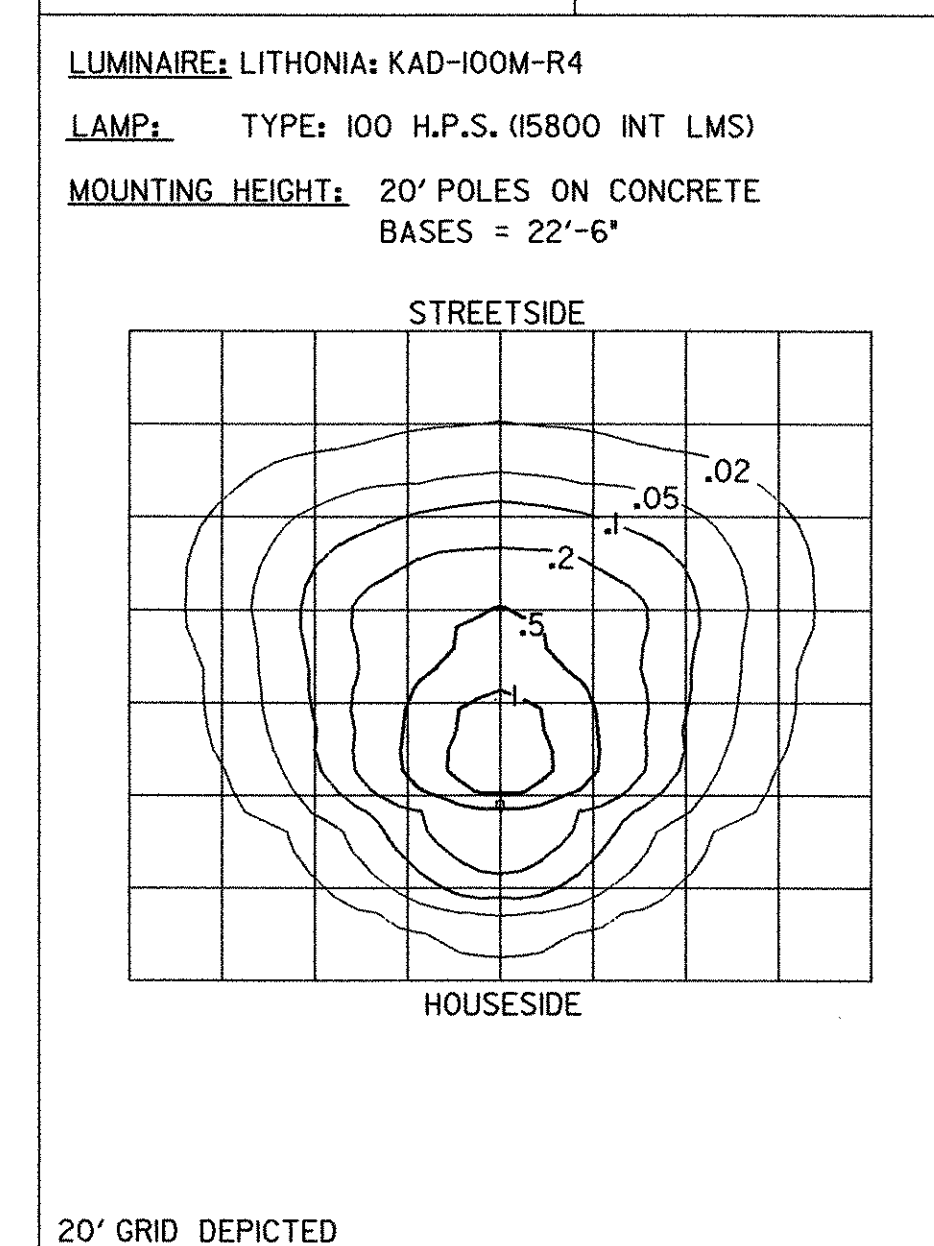


**SITE LIGHT TYPES 'A' AND 'B'**  
NOT TO SCALE

**LUMINAIRE:**  
LENS FINISH: CLEAR FLAT GLASS  
HOUSING: ALUMINUM

**LAMP:**  
TYPE: 100W H.P.S.  
LUMENS: 15800 INT LMS  
CAT. NO.: ED-23 1/2  
MOG/150

**ANSI/IES TYPE:**  
TYPE IV CUT-OFF OPTICS

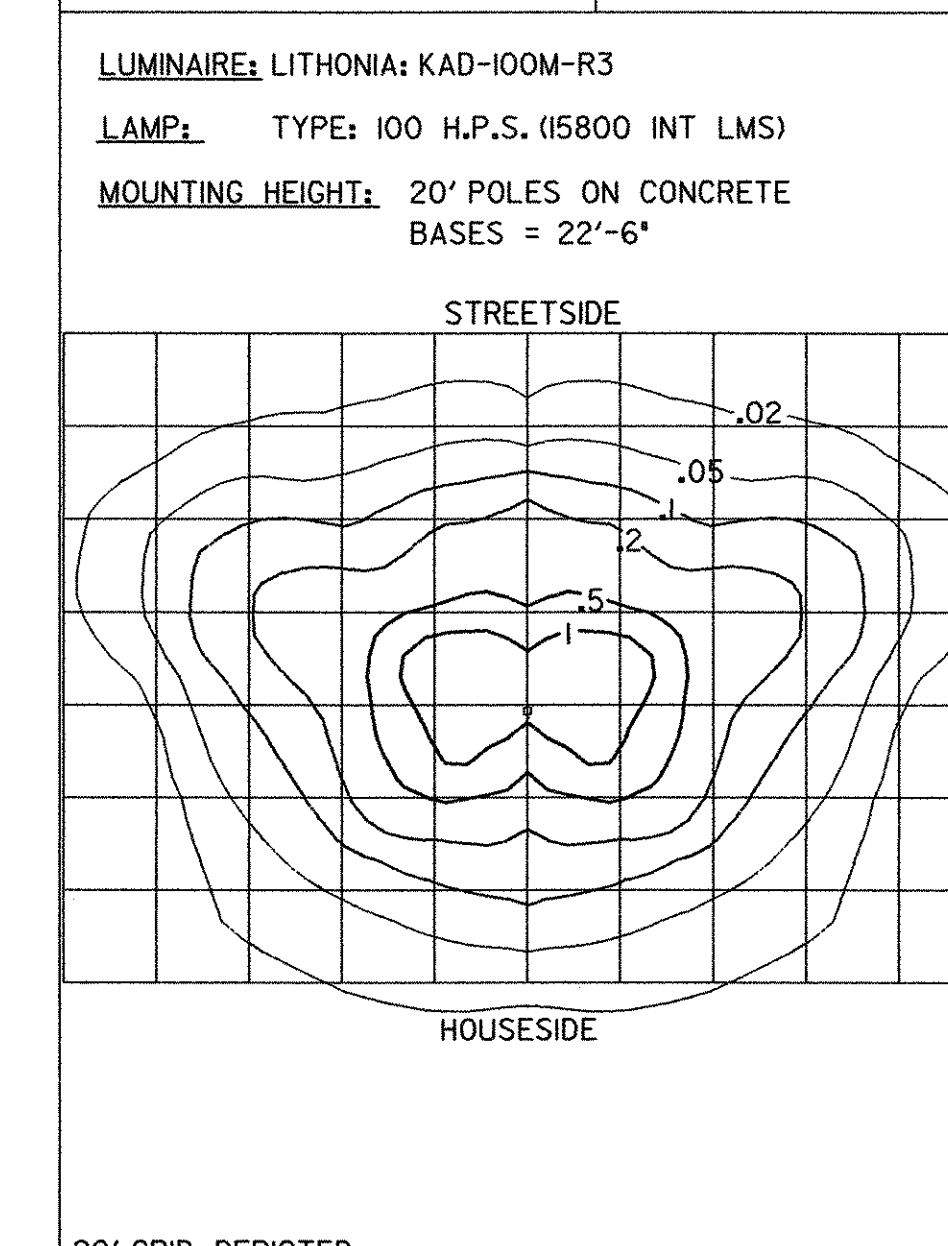


**SITE LIGHT TYPE 'A'**  
**ISO-FOOTCANDLE DATA**  
NO SCALE

**LUMINAIRE:**  
LENS FINISH: CLEAR FLAT GLASS  
HOUSING: ALUMINUM

**LAMP:**  
TYPE: 100W H.P.S.  
LUMENS: 15800 INT LMS  
CAT. NO.: ED-23 1/2  
MOG/150

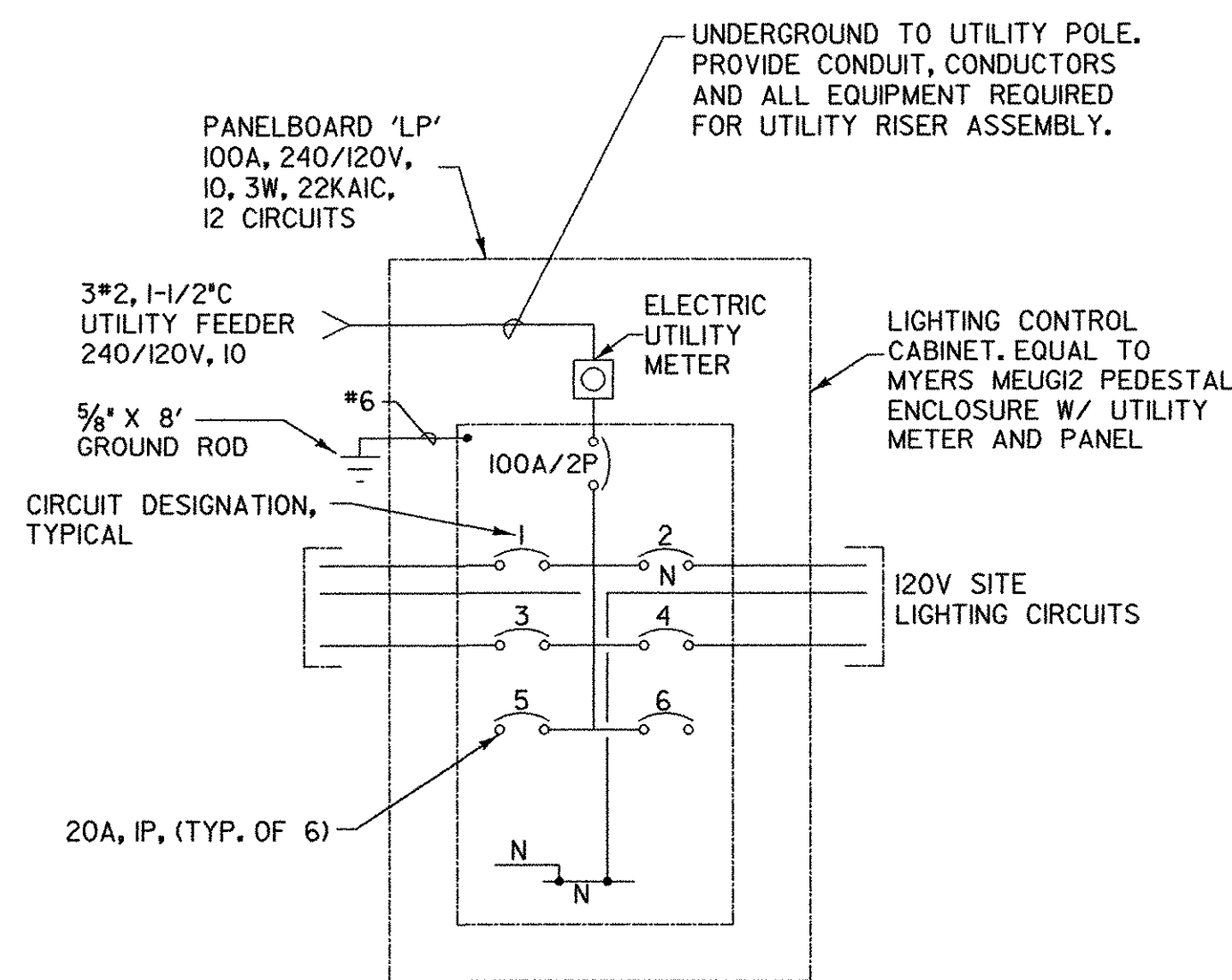
**ANSI/IES TYPE:**  
TYPE III CUT-OFF OPTICS



**SITE LIGHT TYPE 'B'**  
**ISO-FOOTCANDLE DATA**  
NO SCALE

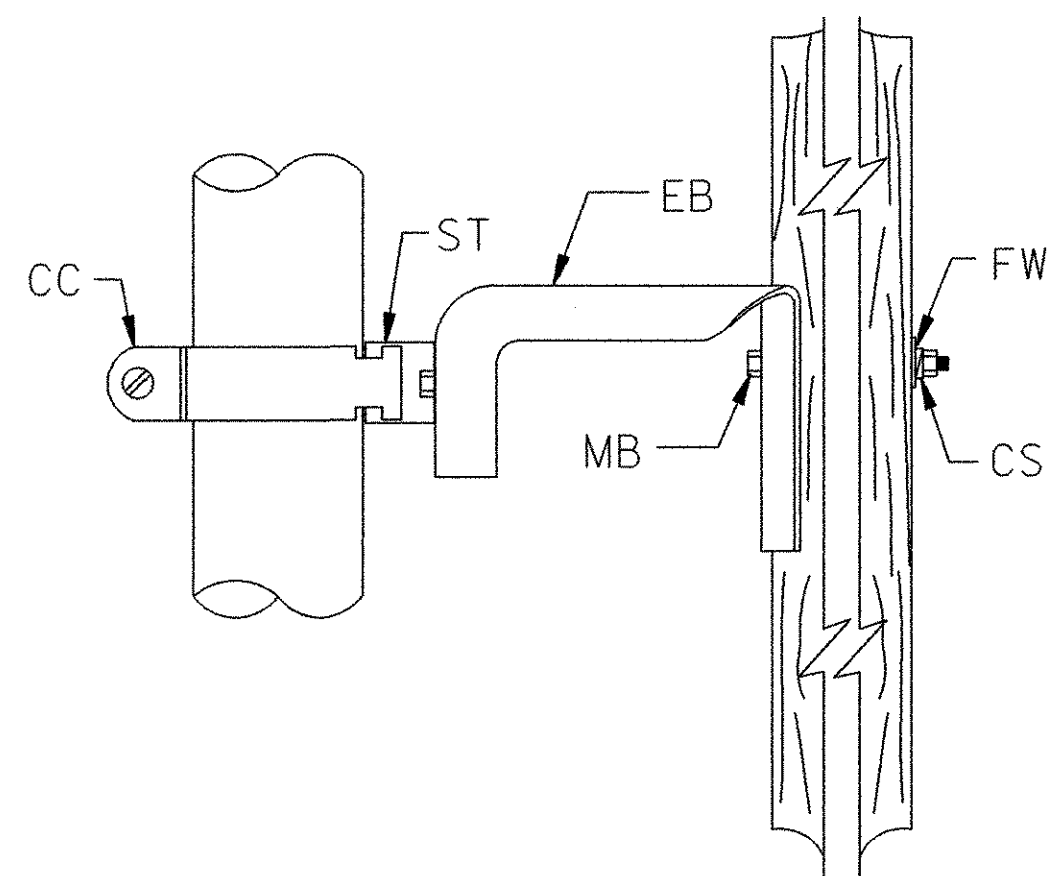
PROJECT NAME:	BARRE TOWN PARK-AND-RIDE		
PROJECT NUMBER:	CMG PARK (24) S		
FILE NAME:	... \PlotFiles\06-08 lightdets.pdff	PLOT DATE:	4/13/2006
PROJECT LEADER:	GAS	DRAWN BY:	PBH
DESIGNED BY:	MLC	CHECKED BY:	GAS
<b>LIGHTING DETAILS 2</b>		SHEET	7 OF 14





**ONE-LINE DIAGRAM ROADWAY LIGHTING SERVICE PEDESTAL**

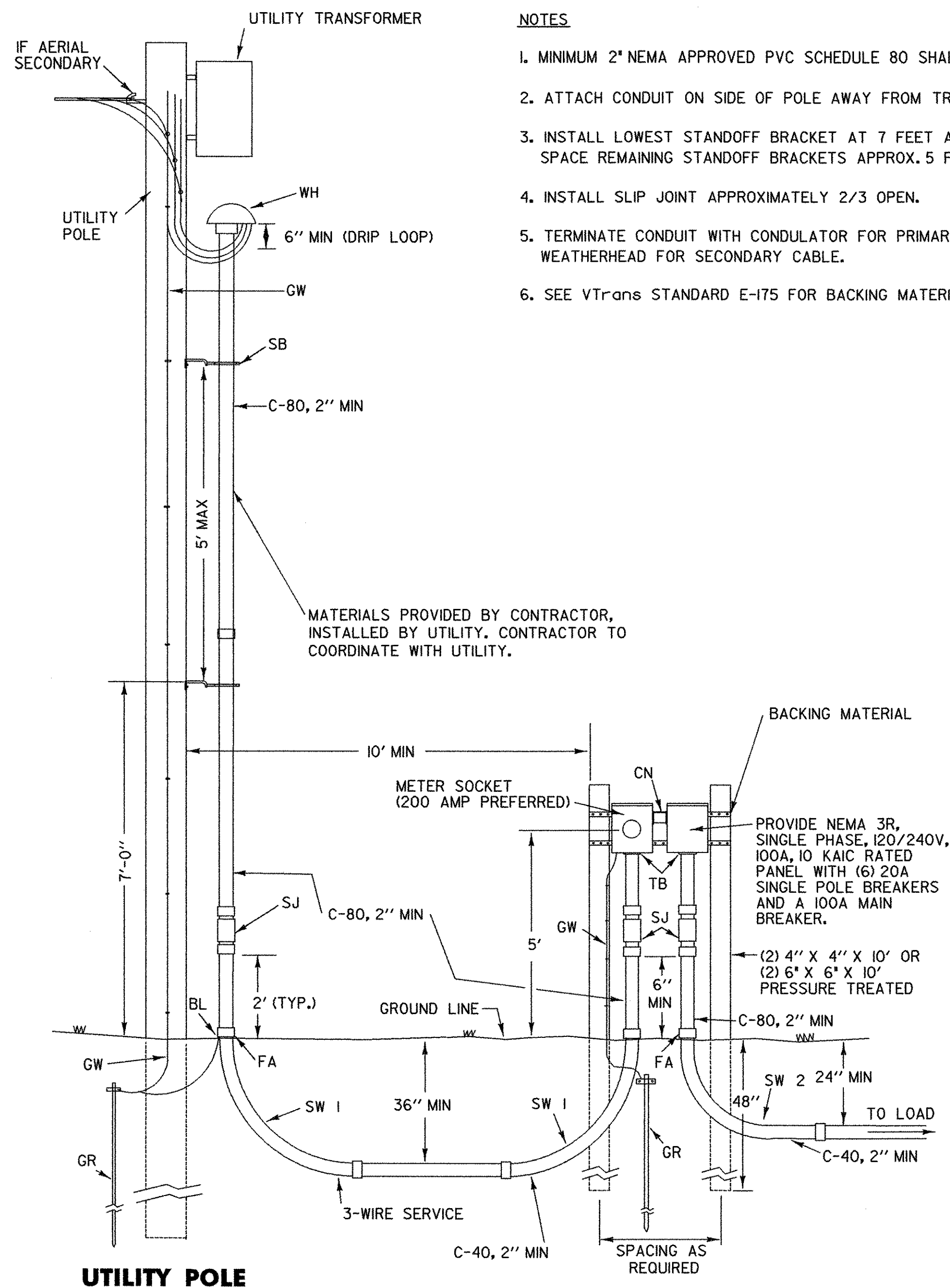
NOT TO SCALE  
NOTE: NO RELAYS REQUIRED



MATERIAL FOR ONE STANDOFF BRACKET			
ITEM	NO REQUIRED	CODE	MATERIAL
FW	1		FLAT WASHER 2"x2"
CS	1		COIL SPRING WASHER
REB	1		RACK EXTENSION BRACKET
ST	1		STRUT (CUT TO LENGTH)
CC	1		CONDUIT CLAMP
MB	1		MACHINE BOLT 5/8"

**STANDOFF BRACKET**

NOT TO SCALE



**UTILITY POLE**

**SERVICE PEDESTAL**

**ELECTRICAL SERVICE RISER AND PEDESTAL**

LEGEND	
ITEM	MATERIAL
BL	BONDING LUG (IF STEEL CONDUIT)
C-40	CONDUIT - PVC SCHEDULE 40
C-80	CONDUIT - PVC SCHEDULE 80
CN	CONDUIT NIPPLE
FA	FEMALE ADAPTER OR COUPLINGS AS REQUIRED
GR	GROUND ELECTRODE, 5/8" X 8" (MIN) COPPER CLAD (2 REQ.)
GW	GROUND CONDUCTOR, #6 AWG CU (MIN)
SB	STANDOFF BRACKET (SEE DETAIL)
SJ	SLIP JOINT, INSTALL 2/3 OPEN
SSS	STAINLESS STEEL STRAP (1" MIN)
SW 1	90° SWEEPS, (PVC) 36" R. - SERVICE
SW 2	90° SWEEPS, (PVC) 24" R. - LOAD
TB	THREADED BUSHING
WH	WEATHERHEAD OR CONDULATOR

(ALL WORK TO BE PAID FOR UNDER 679.28 POWER STANCHION)

**NOTES**

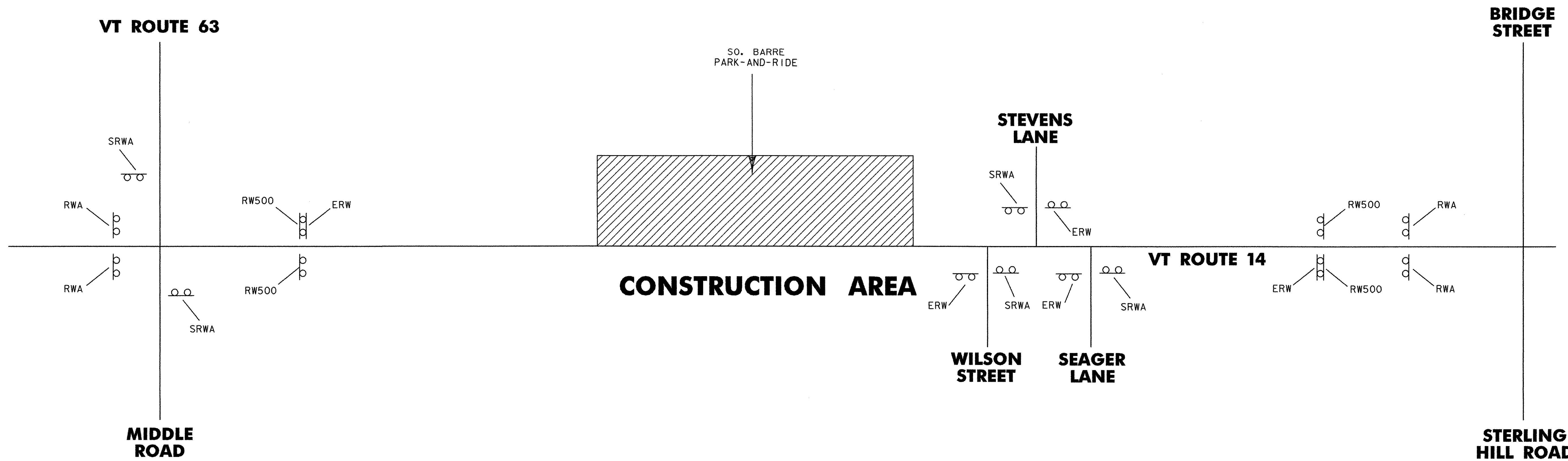
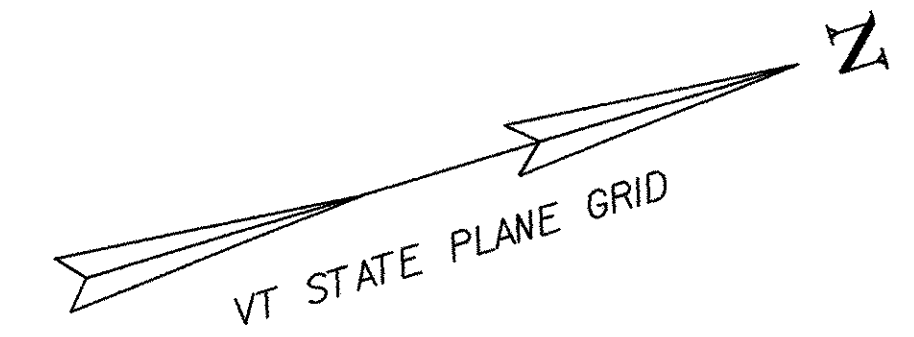
1. MINIMUM 2" NEMA APPROVED PVC SCHEDULE 80 SHALL BE USED.
2. ATTACH CONDUIT ON SIDE OF POLE AWAY FROM TRAFFIC WHEN POSSIBLE.
3. INSTALL LOWEST STANDOFF BRACKET AT 7 FEET ABOVE GRADE. SPACE REMAINING STANDOFF BRACKETS APPROX. 5 FEET APART.
4. INSTALL SLIP JOINT APPROXIMATELY 2/3 OPEN.
5. TERMINATE CONDUIT WITH CONDULATOR FOR PRIMARY CABLE, OR WEATHERHEAD FOR SECONDARY CABLE.
6. SEE VTRANS STANDARD E-175 FOR BACKING MATERIAL DETAIL.

NOTE: REFERENCE VTRANS STD E-175 FOR ADDITIONAL DETAILS



PROJECT NAME: BARRE TOWN PARK-AND-RIDE  
PROJECT NUMBER: CMG PARK (24) S

FILE NAME: ...PlotFiles\06-08 lightdets.pptfPLOT DATE: 4/13/2006  
PROJECT LEADER: GAS DRAWN BY: PBH  
DESIGNED BY: MLC CHECKED BY: GAS  
**LIGHTING DETAILS 3** SHEET 8 OF 14



**LEGEND**

- ERW = END ROAD WORK
- RW500 = ROAD WORK 500 FT
- RWA = ROAD WORK AHEAD
- SRWA = SIDE ROAD WORK AHEAD

LOCATION	ERW	RW500	RWA	SRWA
<b>VT ROUTE 14</b>				
BEGIN APPROACH	1	2	2	0
END APPROACH	1	2	2	0
SIDE APPROACH	3	0	0	5
TOTALS	5	4	4	5

**CONSTRUCTION APPROACH SIGNING**

NOT TO SCALE  
 SEE VTrans STANDARD E-100 & E-100A FOR SIGN PLACEMENT.  
 THIS WORK TO BE PAID FOR UNDER ITEM 641.10.

PROJECT NAME:	BARRE TOWN PARK-AND-RIDE		
PROJECT NUMBER:	CMG PARK (24) S		
FILE NAME:...	PlotFiles\09 approach.ptf	PLOT DATE:	4/4/2006
PROJECT LEADER:	GAS	DRAWN BY:	MBL
DESIGNED BY:	SRZ	CHECKED BY:	GAS
<b>CONSTRUCTION APPROACH SIGNS</b>		SHEET	9 OF 14

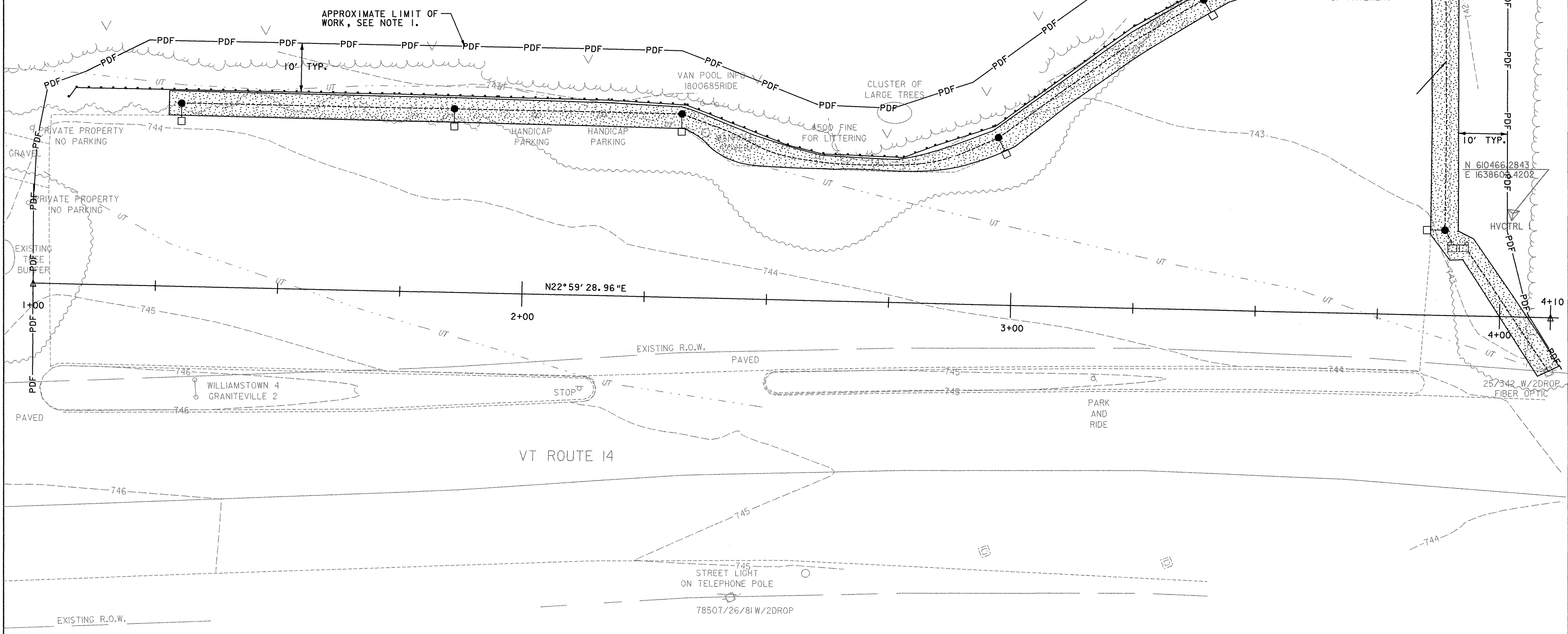
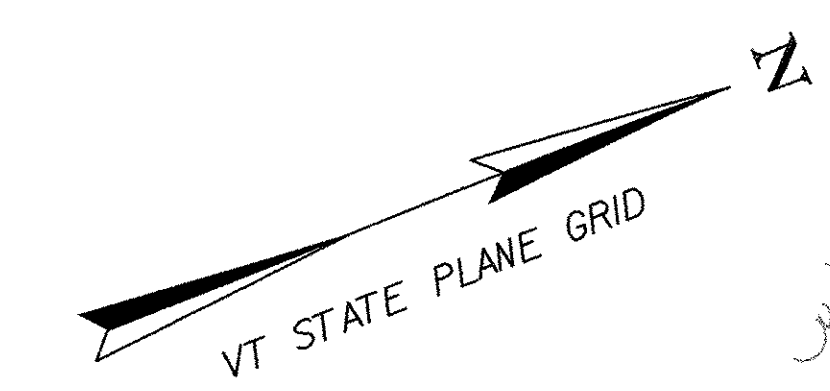


**EROSION CONTROL NOTES**

GEOTEXTILE FOR SILT FENCE  
 STA. 1+06.5, LT 38.1' TO 3+50.1, LT 70.6'

TOPSOIL (3"), SEED, FERTILIZER & HAY MULCH  
 STA. 1+27.3, LT 37.5' TO 4+10.0, RT 11.4'

GRAVEL BACKFILL FOR SLOPE STABILIZATION  
 DURING CONST. MAINTAIN SLOPE STABILITY AS  
 DIRECTED BY RESIDENT ENGINEER



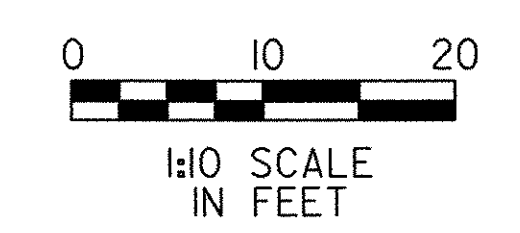
N 610154.9877  
 E 1638584.7655  
**HVCCTRL 2**

**LEGEND**

	TOPSOIL, SEED & HAY MULCH, TYP. WIDTH 4'-6"		STEEP SLOPE
	GEOTEXTILE FOR SILT FENCE		NEW LIGHT POLE AND LUMINAIRE
	LIMITS OF CONSTRUCTION		UNDERGROUND TELEPHONE
	APPROX. FOLIAGE OVERHANG		EXISTING CONTOURS
	APPROX. EDGE OF FOLIAGE		
	APPROX. R.O.W. LINE		

1. EROSION MATTING SHALL BE USED ON SLOPES STEEPER THAN 1:3 OR AS DETERMINED BY RESIDENT ENGINEER. SEE EROSION CONTROL DETAILS FOR EROSION MATTING INFORMATION.

SEE SHEETS 11,12,13 FOR NOTES APPLICABLE TO EROSION PREVENTION AND SEDIMENT CONTROL



**EXISTING CONDITIONS / EPSC / FINAL CONDITIONS**

PROJECT NAME:	BARRE TOWN PARK-AND-RIDE	FILE NAME:	...Trans\PlotFiles\10 epsc.ptf	PLOT DATE:	4/13/2006
PROJECT NUMBER:	CMG PARK (24) S	PROJECT LEADER:	GAS	DRAWN BY:	SRZ
		DESIGNED BY:	SRZ	CHECKED BY:	GAS
		<b>EROSION CONTROL PLAN</b>		SHEET	10 OF 14

## SILT FENCE

### APPLICATION NOTES:

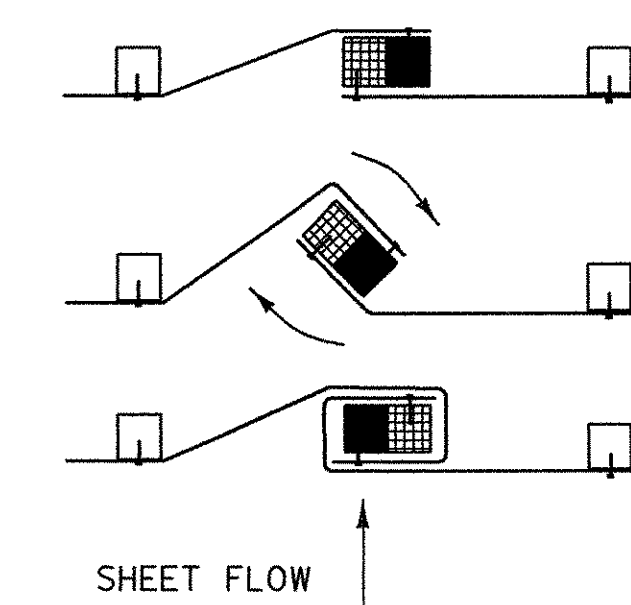
- THE PRIMARY PURPOSE OF SILT FENCE IS TO REDUCE RUNOFF VELOCITY AND TRAP SEDIMENT. VELOCITY IS REDUCED, WATER IS IMPOUNDED BEHIND THE MEASURE, AND SEDIMENT FALLS OUT OF SUSPENSION.
- SILT FENCE SHALL BE INSTALLED ON A LINE OF EQUAL ELEVATION (CONTOUR). IT MAY BE INSTALLED AT INTERMEDIATE POINTS UP SLOPES AS WELL AS AT THE BOTTOM, AS SHOWN IN THE DETAIL.
- SILT FENCE SHALL NOT BE USED ACROSS CONCENTRATED FLOW.

### GENERAL NOTES:

- SILT FENCE SHALL GENERALLY BE PLACED A MINIMUM OF 5 FEET BEYOND TOE OF SLOPE, 10 FEET PREFERRED, TO PROVIDE ADEQUATE AREA FOR SEDIMENT STORAGE AND FACILITATE MAINTENANCE OF SEDIMENT CONTAINMENT AREA.
- ALL ENDS SHALL BE "J" HOOKED TO TRAP SEDIMENT.
- IN AREAS WITH TWO SLOPES, SILT FENCE SHALL BE USED TO ERECT A DAM AND TRAP SEDIMENT AT THE BASE OF THE STEEPER SLOPE.
- THE BOTTOM EDGE OF SILT FENCE SHALL BE BURIED A MINIMUM OF 6 INCHES BELOW GROUND, AND KEYED IN 4 INCHES. THE FENCE SHALL BE INSTALLED WITH THE POSTS ON THE DOWNSTREAM SIDE OF THE FABRIC.
- MAXIMUM DRAINAGE AREA TRIBUTARY TO 100 FEET OF SILT FENCE SHALL BE 0.25 ACRES.
- THE FOLLOWING ARE MAXIMUM SLOPE LENGTHS FOR THESE MEASURES:

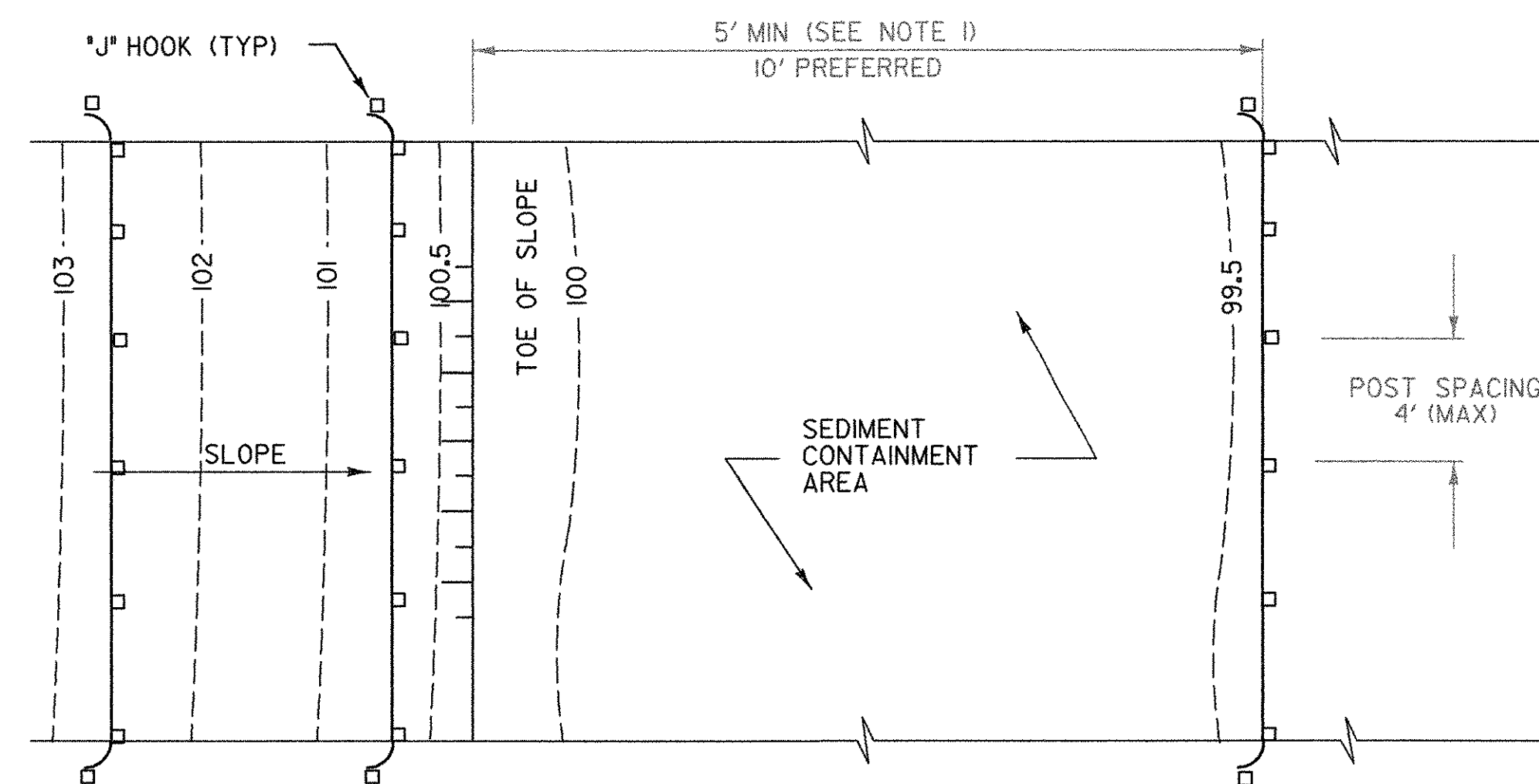
CONSTRUCTED SLOPE	SLOPE LENGTH (LS) FT	HORIZONTAL LENGTH (LH) FT
3 : 1	80	75
4 : 1	130	125
5 : 1	200	200
>5 : 1	250	250

- MEASURES SHALL BE INSPECTED EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF A STORM EVENT GREAT ENOUGH TO CAUSE WATER TO LEAVE THE CONSTRUCTION SITE.
- MEASURES SHALL BE CLEANED AND REPAIRED AS NEEDED. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATION REACHES ONE-HALF OF THE MEASURE HEIGHT. SEDIMENT SHALL BE DISPOSED OF AS UNSUITABLE MATERIAL.
- SILT FENCE SHALL BE REMOVED WHEN THE AREA HAS BEEN STABILIZED. AT TIME OF REMOVAL OF THE SILT FENCE, THE DISTURBED AREA SHALL BE REPAIRED AND STABILIZED.
- PAYMENT FOR INSTALLATION AND REMOVAL OF SILT FENCE SHALL BE MADE UNDER THE GEOTEXTILE FOR SILT FENCE ITEM.
- PAYMENT FOR MONITORING SILT FENCE SHALL BE MADE UNDER THE MONITORING EROSION & SEDIMENT CONTROL PLAN ITEM.
- PAYMENT FOR MAINTAINING SILT FENCE SHALL BE MADE UNDER THE FIELD MAINTENANCE OF EROSION & SEDIMENT CONTROL PLAN ITEM, UNLESS MAINTENANCE IS REQUIRED DUE TO POOR INSTALLATION PRACTICES.

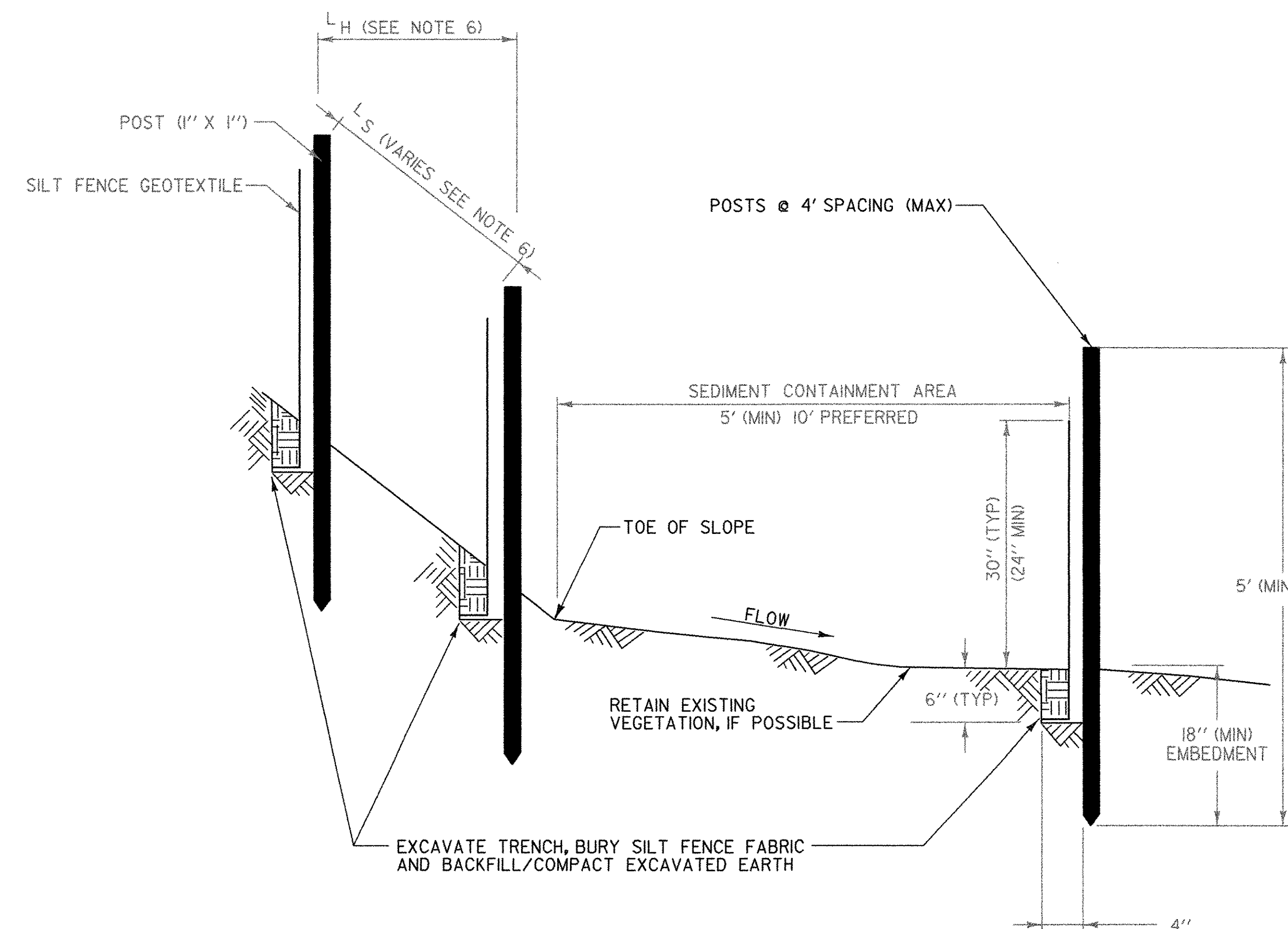


- PLACE THE END POST OF ONE FENCE INSIDE THE END POST OF THE OTHER FENCE.
- ROTATE BOTH POSTS AT LEAST 180 DEGREES IN A CLOCKWISE DIRECTION TO CREATE A TIGHT SEAL WITH THE FABRIC MATERIAL.
- DRIVE BOTH POSTS 18 INCHES INTO THE GROUND AND BURY THE FLAP IN THE TRENCH.

### SPLICING DETAIL



PLAN



SECTION  
SILT FENCE - TEMPORARY

PROJECT NAME: BARRE TOWN PARK-AND-RIDE

PROJECT NUMBER: CMG PARK (24) S

FILE NAME: ... \PlotFiles\11-12 ec det.s,ptf PLOT DATE: 4/4/2006

PROJECT LEADER: GAS

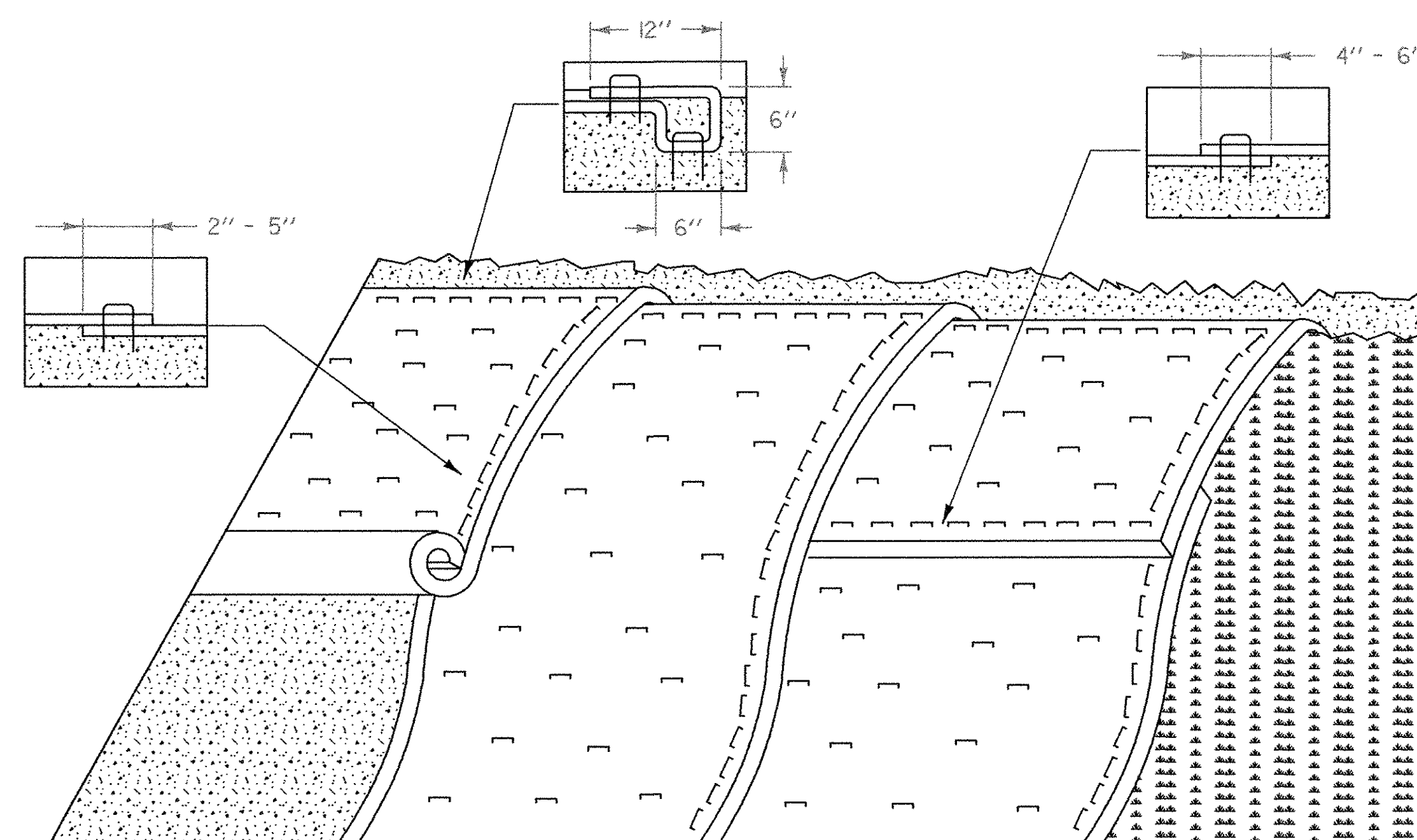
DRAWN BY: SRZ

DESIGNED BY: SRZ

CHECKED BY: GAS

EROSION CONTROL DETAILS

SHEET 11 OF 14



EROSION PREVENTION FOR SIDE SLOPES

**APPLICATION NOTES:**

- A. THE PURPOSE OF MATTING ON SIDE SLOPES IS TO REDUCE EROSION AND AID THE STABLISHMENT OF VEGETATION
- B. EROSION CONTROL MATTING SHALL BE USED FOR THE FOLLOWING REASONS:
  - SIDE SLOPES > 3:1 (H:V)
  - AREAS WHERE SEED AND MULCH WILL NOT STAY IN PLACE ALONE
  - WHERE SEEDING IS OUTSIDE THE GROWING SEASON.

**GENERAL NOTES:**

1. GRADE AND SMOOTH THE SLOPE TO PROVIDE GOOD MATTING TO SOIL SURFACE CONTACT.
2. APPLY FERTILIZER, LIME, AND SEED PRIOR TO PLACING MATTING.
3. ANCHOR MATTING AS SHOWN, UTILIZING ANCHOR STAPLES. STAPLE PLACEMENT SHALL BE DETERMINED BY THE MANUFACTURER'S INTALLATION INSTRUCTIONS.
4. UNROLL MATTING VERTICALLY DOWN SLOPE IN THE DIRECTION OF WATER FLOW.
5. OVERLAP UPPER MATTING OVER LOWER MATTING AS SHOWN.
6. OVERLAP ADJACENT MATTING AS SHOWN.
7. CUT EXCESS MATTING AT END OF SLOPE AND ANCHOR THE END.
8. MEASURES SHALL BE INSPECTED EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF A STORM EVENT GREAT ENOUGH TO CAUSE WATER TO LEAVE THE CONSTRUCTION SITE.
9. MATTING SHALL BE REPAIRED AND RESTAPLED AS NECESSARY TO ENSURE PROPER FUNCTION.
10. PAYMENT FOR INSTALLATION OF MATTING SHALL BE MADE UNDER THE EROSION CONTROL WITH MATTING ITEM.
11. PAYMENT FOR MONITORING EROSION CONTROL MATTING SHALL BE MADE UNDER THE MONITORING EROSION & SEDIMENT CONTROL PLAN ITEM.
12. PAYMENT FOR MAINTAINING SLOPE PROTECTION SHALL BE MADE UNDER THE FIELD MAINTENANCE OF EROSION & SEDIMENT CONTROL PLAN ITEM, UNLESS MAINTENANCE IS REQUIRED DUE TO POOR INSTALLATION PRACTICES.

PROJECT NAME:	BARRE TOWN PARK-AND-RIDE
PROJECT NUMBER:	CMG PARK (24) S
FILE NAME:...\PlotFiles\11-12 ec det.s.pft	PLOT DATE: 4/13/2006
PROJECT LEADER: GAS	DRAWN BY: SRZ
DESIGNED BY: SRZ	CHECKED BY: GAS
<b>EROSION CONTROL DETAILS</b>	SHEET 11A OF 14

# EROSION PREVENTION AND SEDIMENT CONTROL PLAN GENERAL NOTES

## I. CONTRACTOR'S RESPONSIBILITIES FOR EROSION PREVENTION AND SEDIMENT CONTROL

- A. PREVENT OR MINIMIZE SOIL EROSION OF DISTURBED LAND AND PREVENT THE DISCHARGE OF SEDIMENT AND OTHER CONSTRUCTION RELATED POLLUTANTS TO WATERS OF THE STATE.
- B. FURNISH, INSTALL, INSPECT AND MAINTAIN EROSION AND SEDIMENT CONTROL MATERIALS IN CONJUNCTION WITH THE GENERAL CLEARING, GRADING AND EXCAVATION OF THE SITE.
- C. ESTABLISH LIMITS OF SOIL DISTURBANCE; LOCATION(S) OF TOPSOIL STOCKPILES; CONSTRUCTION STAGING AREAS; STORAGE AREAS; REFUELING AND MAINTENANCE AREAS.
- D. ESTABLISH AND MARK BOUNDARIES FOR ANY UNDISTURBED RIPARIAN BUFFER ZONES AND MAINTAIN ALL EXISTING STREAMS AND RIPARIAN BUFFER ZONES IN THEIR NATURAL CONDITION.
- E. LOCATE AREAS FOR DISPOSAL OF STUMPS, EXCESS SOILS AND COLLECTED SEDIMENT AND OTHER POLLUTANTS, AND DISPOSE OF THESE MATERIALS IN A MANNER THAT WILL NOT RESULT IN SEDIMENTS AND POLLUTANTS ENTERING WATERS OF THE STATE.
- F. SEQUENCE CONSTRUCTION ACTIVITIES TO MINIMIZE THE EXTENT OF DISTURBED SOILS LEFT OPEN TO EROSION AT ANY GIVEN TIME AS DETAILED IN THE EROSION AND SEDIMENT CONTROL PLANS.
- G. AVOID ALL LAND DISTURBANCES WITHIN 50 FEET OF ALL WATER BODIES, MEASURED FROM THE TOP OF BANK, AND WETLANDS, EXCEPT WHERE NECESSARY FOR THE RECONSTRUCTION OF EXISTING ROADS AND THE CONSTRUCTION OF BRIDGES, STREAM CROSSINGS, AND COMPONENTS OF STORMWATER MANAGEMENT SYSTEMS WHICH BY NECESSITY MUST BE LOCATED IN THIS ZONE.
- H. MAINTAIN AND PRESERVE TO THE EXTENT POSSIBLE THE SITE'S NATURAL DRAINAGE WAYS THAT CONVEY STORMWATER TO STREAMS, RIVERS, LAKES, PONDS AND WETLANDS.
- I. PREVENT OFF-SITE STORMWATER FROM ENTERING AREAS OF DISTURBED SOIL ON-SITE.
- J. PREVENT THE OFF-SITE DISCHARGE OF SEDIMENT MOBILIZED ON THE CONSTRUCTION SITE, INCLUDING OFF-SITE TRACKING OF SEDIMENT ONTO PAVED PUBLIC OR PRIVATE ROADWAYS BY CONSTRUCTION VEHICLES.
- K. DISPOSE OF SEDIMENTS AND OTHER POLLUTANTS WHICH HAVE BEEN COLLECTED AND REMOVED IN THE COURSE OF STORMWATER TREATMENT IN A MANNER THAT WILL NOT RESULT IN THE SEDIMENTS AND POLLUTANTS ENTERING WATERS OF THE STATE. DISPOSAL SITES REQUIRE RELATIVELY LEVEL TERRAIN WITH AN ISOLATION DISTANCE OF AT LEAST 100 FEET FROM ANY SURFACE WATERS, INCLUDING WETLANDS.

## 2. LIMITATIONS AND PROHIBITIONS

- A. THE CONTRACTOR SHALL SCHEDULE EARTHWORK COMPLETION, SITE STABILIZATION, ESTABLISHMENT OF PERENNIAL COVER AND INSTALLATION OF NON-VEGETATIVE PROTECTION MEASURES NO LATER THAN OCTOBER 15. TO ASSURE ESTABLISHMENT OF VEGETATED COVER, SEEDING AND MULCHING ACTIVITIES SHALL BE COMPLETED BY SEPTEMBER 15.  
  
FOR PROJECTS EXTENDING BEYOND OCTOBER 15, LIMIT EXPOSURE OF SOILS AND MINIMIZE ADDITIONAL EARTHWORKS. ANY PROPOSED SOIL DISTURBANCE AND EARTHWORKS BETWEEN OCTOBER 15 AND MAY 1 WILL REQUIRE DEVELOPMENT OF A SPECIAL WINTER EROSION AND SEDIMENT CONTROL PLAN ADDRESSING THE SPECIFIC CONCERNS OF WINTER CONSTRUCTION. THIS PLAN MUST BE FILED WITH, AND APPROVED BY, THE PERMITTING AUTHORITY BY SEPTEMBER 15. IF IT IS DETERMINED BY THE ENGINEER OR THE PERMITTING AUTHORITY THAT WINTER CONSTRUCTION WOULD PRESENT A SIGNIFICANT RISK TO WATER QUALITY, THE CONTRACTOR WILL NEED TO REQUEST A WINTER SHUTDOWN IN ACCORDANCE WITH THE PROVISIONS OF THE CONTRACT DOCUMENTS.
- B. DISCHARGES OF ANY MATERIAL OTHER THAN STORMWATER, SUCH AS VEHICLE AND EQUIPMENT MAINTENANCE SPILLS, FUELS, WASH WATER, CONSTRUCTION DEBRIS, OIL, WET CONCRETE (INCLUDING WASHOUT WATER FROM CONCRETE BATCH TRUCKS OR EQUIPMENT USED TO MIX CONCRETE), AND OTHER SUBSTANCES, ARE PROHIBITED.
- C. NO SILT FENCE SHALL BE UTILIZED IN AREAS OF CONCENTRATED FLOWS, SUCH AS CHANNELS OR DITCHES.
- D. DISPOSAL OF SEDIMENT IN A WETLAND OR ANY CORRECTIVE ACTION UNDERTAKEN TO REMOVE SEDIMENT FROM A WETLAND IS PROHIBITED.
- E. THE FAILURE TO PROMPTLY ABATE THE DISCHARGE OF SEDIMENT OR ANY OTHER WASTE WHICH CAUSES A VISIBLE DISCOLORATION OF SURFACE WATERS (INCLUDING WETLANDS), OR IS FOUND TO BE EXCEEDING WATER QUALITY STANDARDS BASED ON MONITORING, IS PROHIBITED.

## 3. GENERAL CONSTRUCTION NOTES

- A. SEE THE EROSION CONTROL PLAN FOR CONSTRUCTION NOTES.
- ~~B. VEHICLE AND EQUIPMENT STORAGE AREAS OR AREAS ADJACENT TO CONSTRUCTION TRAILER OR OTHER HIGH TRAFFIC AREAS SHALL BE COVERED WITH GEOTEXTILE FABRIC AND 12 INCHES OF GRAVEL. FOLLOWING COMPLETION OF CONSTRUCTION, ALL NON-NATIVE MATERIALS SHALL BE REMOVED FROM THE STAGING AREA. COMPACTED, RUTTED, OR OTHERWISE DISTURBED SOILS SHALL BE TILLED, RAKED, SEEDED AND MULCHED. FABRIC AND GRAVEL SHALL BE PAID FOR UNDER 652.30 MAINTENANCE OF EROSION CONTROL PLAN.~~
- ~~C. ERODIBLE MATERIALS STOCKPILED WITHIN THE MATERIAL STORAGE AREAS SHALL BE ISOLATED WITH FILTER FABRIC. SOIL STOCKPILED ON THE SITE SHALL BE SEEDED AND MULCHED. FILTER FABRIC SHALL BE PAID FOR UNDER 652.30 MAINTENANCE OF EROSION CONTROL PLAN.~~
- D. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED WITHIN 24 HOURS OF BEING STRIPPED OR BACKFILLED AND GRADED.
- E. STOCKPILES SHALL BE MULCHED IF THEY WILL BE UNDISTURBED FOR MORE THAN 24 HOURS.

## 4. INSPECTION

- A. THE ONSITE COORDINATOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL STRUCTURES AND MEASURES, AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND NO LATER THAN 24 HOURS AFTER ANY STORM EVENT WHICH GENERATES A DISCHARGE OF STORMWATER RUNOFF FROM THE CONSTRUCTION SITE, TO ENSURE THEY ARE OPERATING CORRECTLY.
- B. THE ONSITE COORDINATOR SHALL INSPECT ANY SITES THAT HAVE BEEN TEMPORARILY OR FINALLY STABILIZED A MINIMUM OF ONCE A MONTH.
- C. THE CONTRACTOR SHALL INSPECT CHANNEL LININGS, EMBANKMENTS AND CHANNEL BEDS DAILY FOR ANY SIGN OF EROSION.
- D. THE CONTRACTOR SHALL INSPECT DISCHARGE POINTS DAILY TO VISUALLY ASSESS WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING IMPACTS TO RECEIVING WATERS.
- E. IN THE CASE OF SOIL DISTURBANCE OR EARTHWORK OCCURRING OVER THE WINTER PERIOD (OCT. 15 TO MAY 1), DAILY MONITORING OF ALL EROSION PREVENTION, SEDIMENT CONTROL AND CONSTRUCTION ACTIVITIES SHALL BE REQUIRED IN AREAS WHERE SUCH SOIL DISTURBANCE, EARTHWORK OR ACTIVITIES ARE ONGOING. IN AREAS THAT HAVE BEEN SHUT DOWN FOR THE WINTER, THE ONSITE COORDINATOR SHALL INSPECT EROSION PREVENTION AND SEDIMENT CONTROL DEVICES IN THE FIELD MONTHLY, NO LATER THAN 24 HOURS AFTER ANY STORM EVENT WHICH GENERATES A DISCHARGE OF STORMWATER RUNOFF FROM THE CONSTRUCTION SITE, OR DURING A THAW. THE CONTRACTOR SHALL BE DIRECTED TO MAKE REPAIRS OR INSTALL ADDITIONAL MEASURES AS NECESSARY.
- F. THE ONSITE COORDINATOR AND THE CONTRACTOR SHALL INSPECT FOR THE EVIDENCE OF, OR THE POTENTIAL FOR, SEDIMENT LEAVING FROM ALL DISTURBED AREAS OR MATERIAL STORAGE AREAS.
- G. AN EROSION AND SEDIMENT CONTROL MONITORING REPORT FORM COMPLETED BY THE ONSITE COORDINATOR STATING THE DATE OF REVIEW AND DESCRIBING THE EROSION AND SEDIMENT CONTROL AND STORMWATER MANAGEMENT MEASURES REVIEWED, THE EFFECTIVENESS OF THEIR OPERATION, ANY DEFICIENCIES, AND CORRECTIVE ACTION TO BE UNDERTAKEN SHALL BE PREPARED AFTER EACH REVIEW. A COPY SHALL BE PROVIDED TO THE ENGINEER AND MAINTAINED ON FILE AT THE PROJECT SITE.

## 5. MAINTENANCE

- A. THE CONTRACTOR SHALL KEEP ALL SEEDED AREAS WATERED AND IN GOOD CONDITION, RE-SEEDING IF AND WHEN NECESSARY UNTIL A GOOD, HEALTHY, UNIFORM GROWTH IS ESTABLISHED OVER THE ENTIRE AREA SEEDED.
- B. THE CONTRACTOR SHALL REPAIR ALL EROSION AND SEDIMENT CONTROL STRUCTURES AND MEASURES THAT ARE DETERMINED TO BE FAILING, OR NOT FUNCTIONING AS DESIGNED, WITHIN 24 HOURS OF INSPECTION.
- C. THE CONTRACTOR SHALL REMOVE ACCUMULATED SEDIMENT FROM CONTAINMENT SYSTEMS AND OTHER SEDIMENT CONTROL STRUCTURES AS REQUIRED, SUCH THAT PERFORMANCE OF THESE SYSTEMS IS NOT COMPROMISED OR IN ANY WAY IMPAIRED.
- D. THE CONTRACTOR SHALL REMOVE ALL DEBRIS AND REPAIR ALL DAMAGES CAUSED BY SOIL EROSION OR CONSTRUCTION EQUIPMENT AT OR BEFORE THE END OF EACH WORKING DAY.

## 6. CORRECTIVE ACTION

- A. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AS SOON AS POSSIBLE, BUT WITHIN 24 HOURS, OF ANY EVIDENCE OF MEASURABLE AMOUNTS OF SEDIMENT OR SEDIMENT-LADEN WATER LEAVING THE CONSTRUCTION SITE OR ANY VISIBLE DISCOLORATION OF SURFACE WATERS (INCLUDING WETLANDS).
- B. THE CONTRACTOR SHALL TAKE IMMEDIATE ACTION TO CORRECT THE DISCHARGE, INCLUDING HALTING OR REDUCING CONSTRUCTION ACTIVITIES AS NECESSARY UNTIL THE DISCHARGE AND/OR THE CONDITION IS FULLY CORRECTED.

PROJECT NAME: BARRE TOWN PARK-AND-RIDE

PROJECT NUMBER: CMG PARK (24) S

FILE NAME: ...\\PlotFiles\11-12 ec dete.ptf PLOT DATE: 4/13/2006

PROJECT LEADER: GAS DRAWN BY: SRZ

DESIGNED BY: SRZ CHECKED BY: GAS

**EROSION CONTROL NOTES**

SHEET 12 OF 14

**DH** Dufresne-Henry

## PROJECT NARRATIVE

### PROJECT DESCRIPTION:

THIS PROJECT IS LOCATED A FEW HUNDRED FEET NORTHWEST OF THE VT ROUTE 63 AND VT ROUTE 14 INTERSECTION IN THE TOWN OF BARRE. WORK PERFORMED INCLUDES THE CONSTRUCTION OF SIX (6) LIGHT POLES WITH BASES AND FIXTURES, NEW PAVEMENT MARKINGS AND SIGNAGE WITHIN THE EXISTING PAVED PARK AND RIDE FACILITY. WORK INCLUDES INSTALLATION OF LIGHTING EQUIPMENT WITH ASSOCIATED ELECTRICAL AND MISCELLANEOUS APPURTENANCES, INSTALLATION OF NEW SIGNS AND PAVEMENT MARKINGS. APPROXIMATELY 0.6 ACRES WILL BE DISTURBED DURING THIS CONSTRUCTION.

### SITE INVENTORY AND SITE ANALYSIS:

VTRANS CURRENTLY OWNS THE SITE. ONE (1) STREAM, STEPHEN'S BRANCH, IS LOCATED TO THE WEST OF THIS FACILITY AND WILL BE UNDISTURBED DURING AND AFTER CONSTRUCTION. THIS SITE IS MAPPED AS ADAMS SAND AND SUNNY LOAM. IT HAS BEEN STRIPPED OF TOPSOIL SOMETIME IN THE PAST, AND THEREFORE IS UNLIKELY TO BE USED FOR AGRICULTURAL PRACTICES IN THE FUTURE. THE TOPOGRAPHY CONSISTS OF 0-8% SLOPES WITH MIXED COVER PRIMARILY CONSISTING OF SMALL SHRUBS AND BRUSH. THE SITE IS PAVED CURRENTLY. GIVEN THE CURRENT USE OF THE SITE, IT DOES NOT SUPPORT SIGNIFICANT WILDLIFE SPECIES AND HAS A LOW HABITAT POTENTIAL FOR THREATENED AND ENDANGERED SPECIES. ACCORDINGLY, THERE WILL BE NO AFFECT TO EITHER DUE TO THE CONSTRUCTION OF THIS PROJECT.

### EROSION PREVENTION AND SEDIMENT CONTROL:

SEDIMENT CONTROL MEASURES TO BE UTILIZED ON THIS PROJECT INCLUDE SILT FENCE AND GRAVEL BACKFILL.

### SNOW FENCE (MOD.-PDF)

FENCING WILL BE USED TO DEMARCAT CONSTRUCTION LIMITS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER. FENCING SHALL BE PAID FOR UNDER ITEM 620.70: SNOW FENCE (MOD.-PDF)

### SILT FENCE

SILT FENCE WILL BE INSTALLED TO PREVENT SEDIMENT FROM DISCHARGING TO THE ADJACENT STREAM. SILT FENCE IS TO BE CONSTRUCTED AS SHOWN ON THE CONTRACT PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER, WITH PROPER EMBEDMENT AND ANCHORING. THE ENDS OF THE SILT FENCE SHALL BE "CURLED" UPHILL TO PROMOTE PONDING AND SETTLING OF SEDIMENT.

### GRAVEL BACKFILL AND EROSION MATTING:

GRAVEL BACKFILL FOR SLOPE STABILIZATION AND EROSION MATTING SHALL BE USED TO MAINTAIN SLOPE STABILITY DURING CONSTRUCTION AS DIRECTED BY RESIDENT ENGINEER.

### TEMPORARY SEED AND MULCH:

TEMPORARY SEEDING AND MULCH OR MATTING SHALL BE USED TO TEMPORARILY STABILIZE AREAS THAT WILL BE EXPOSED FOR MORE THAN ONE WEEK.

### DESIGN CALCULATIONS:

NO DESIGN CALCULATIONS FOR TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL MEASURES WERE REQUIRED.

## SEEDING FORMULA - RURAL AREAS

% WT.	LBS./AC.		NAME	GERM %
	BROADCAST	HYDROSEED		
37.6	75.2	94.0	CREEPING RED FESCUE/DEN	90
28.4	56.8	71.0	SPARTAN HARD FESCUE	85
14.4	28.8	36.0	AZAY SHEEPS FESCUE	87
14.2	28.4	35.5	ANNUAL RYEGRASS	90
1.0	2.0	2.5	CROP	
4.3	8.6	10.8	INERT	
0.1	0.2	0.2	WEED	
	200.0	250.0		

## SEEDING NOTES

1. SEED MIXTURE: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.
2. SEED: TO BE APPLIED PER SEEDING FORMULAS OR AS DIRECTED BY THE ENGINEER. HYDROSEED MAY BE USED BUT NOTE THAT QUANTITIES WERE CALCULATED USING BROADCAST APPLICATION RATE.
3. FERTILIZER: FORMULA 10-20-10, TO BE USED WITH SEED, APPLIED AT THE RATE OF 500 LBS./ACRE. (HYDRO SEEDERS MAY USE 19-19-19 FORMULA).
4. AGRICULTURAL LIMESTONE: TO BE APPLIED AT THE RATE OF 2 TONS/ACRE, OR AS DIRECTED BY THE ENGINEER.
5. HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, OR AS DIRECTED BY THE ENGINEER.
6. TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.

## GENERAL NOTES

1. ALL PLANTS SHALL BE CAREFULLY AND THOROUGHLY WATERED DURING PLANTING AND AS OFTEN AS NECESSARY THEREAFTER TO PROVIDE THE BEST GROWING CONDITIONS UNTIL ACCEPTANCE OF THE WORK.
2. MAINTAIN LAWNS BY WATERING, FERTILIZING, WEEDING, MOWING (2" HEIGHT), TRIMMING, AND OTHER OPERATIONS SUCH AS ROLLING, REGRADING, AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS AT THE EXPENSE OF THE CONTRACTOR.

## SO BARRE N 610162.1097 E 1637191.1810 ELEV. 746.0615

SOUTH BARRE, VT TO REACH FROM THE JUNCTION OF VERMONT ROUTE 63 AND VERMONT ROUTE 14 IN SOUTH BARRE PROCEED WESTERLY ALONG ROUTE 63 FOR 0.25 MI TO THE MARK ON THE RIGHT. TO REACH FROM THE JUNCTION OF VERMONT ROUTE 63 AND MILLER ROAD (EXT) PROCEED EASTERLY ALONG ROUTE 63 FOR 1.75 MI TO THE MARK ON THE LEFT. THE MARK IS A 4 INCH SQUARE RIGHT OF WAY MONUMENT WITH A SURVEY DISK IN THE TOP AND IS LOCATED 0.7 FT BELOW THE ROAD. THE MARK IS LOCATED 119.4 FT EAST OF AN 18 INCH CGMP CULVERT WITH CONCRETE HEADWALL, 74.9 FT NORTHWEST OF A TRAFFIC SIGNAL SIGN, 71.5 FT NORTHEAST OF A DIVIDED HIGHWAY SIGN AND 2.3 FT NORTH OF THE EDGE OF VERMONT ROUTE 63. OWNERSHIP IS STATE OF VERMONT.

## SO BARRE AZ MK N 608573.5335 E 1634218.2342 ELEV. 928.8039

SOUTH BARRE, VT TO REACH FROM THE JUNCTION OF VERMONT ROUTE 63 AND VERMONT ROUTE 14 IN SOUTH BARRE PROCEED WESTERLY ALONG ROUTE 63 FOR 0.9 MI TO THE MARK ON THE LEFT. TO REACH FROM THE JUNCTION OF VERMONT ROUTE 63 AND MILLER ROAD (EXT) PROCEED EASTERLY ALONG ROUTE 63 FOR 1.1 MI TO THE MARK ON THE RIGHT. THE MARK IS SET IN A 5 FT WIDE X 3 FT HIGH ROCK OUTCROP. THE MARK IS LOCATED 59 FT SOUTHWEST OF A 2 FOOT SQUARE D1, 31 FT SOUTH OF AND 6 FT HIGHER THAN THE SOUTH EDGE OF VERMONT ROUTE 63.

PROJECT NAME:	BARRE TOWN PARK-AND-RIDE
PROJECT NUMBER:	CMG PARK (24) S
FILE NAME:...	PlotFiles\13 generaldets.pxf PLOT DATE: 4/14/2006
PROJECT LEADER: GAS	DRAWN BY: MBL
DESIGNED BY: SRZ	CHECKED BY: GAS
<b>GENERAL DETAILS</b>	SHEET 13 OF 14

