



**Highway Factors Attachment – Roadway and Bridge Reconstruction Plans for the  
Pennsylvania Turnpike in the vicinity of the crash location**

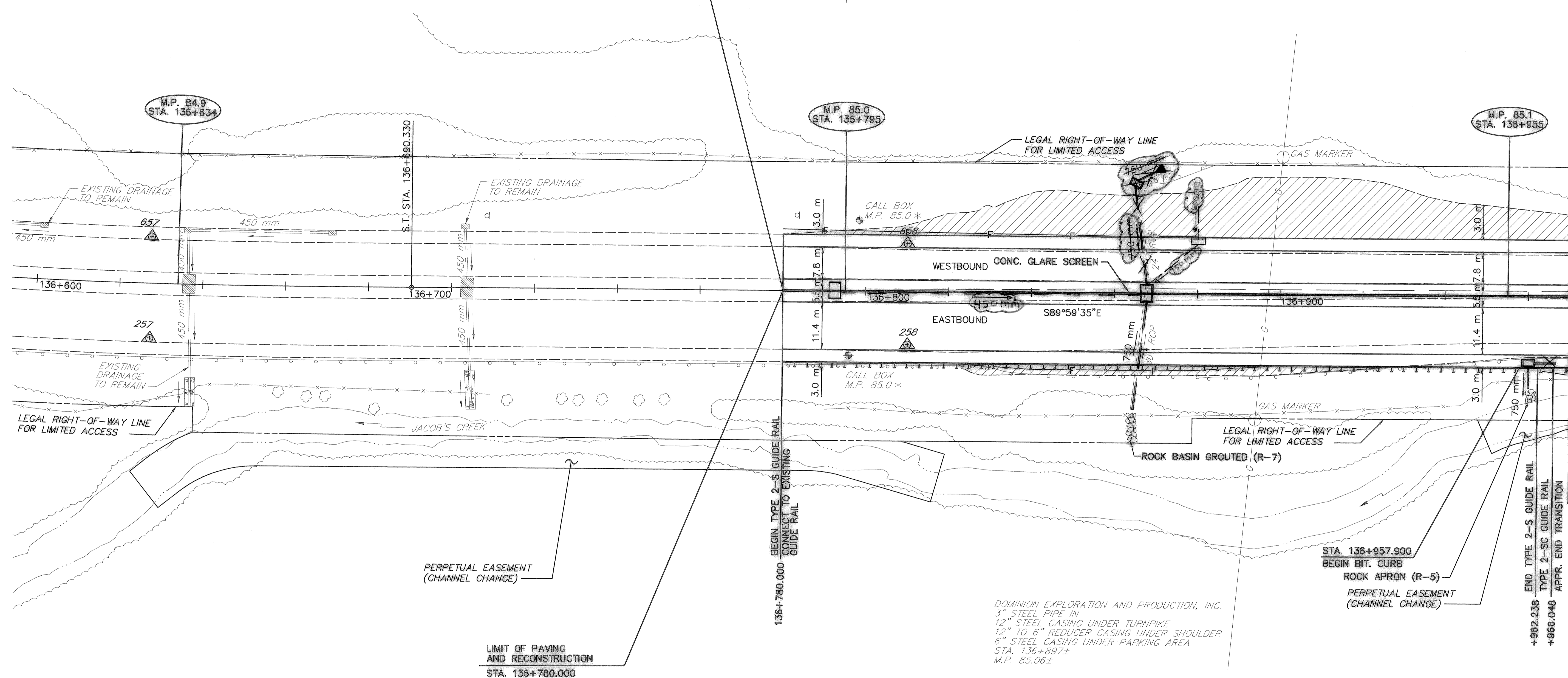
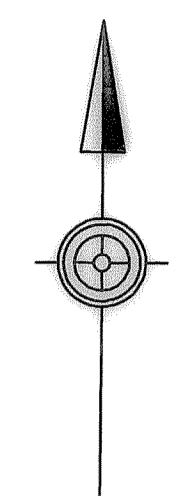
**Mount Pleasant, PA**

**HWY20MH002**

(11 pages)

**TURNPIKE MAINLINE**  
P.I. STA. 136+498.589 k = 52.494 m  
 $\Delta = 18^\circ 25' 00''$  (LT.) p = 0.525 m  
 $\Delta_s = 11^\circ 32' 14''$  x<sub>c</sub> = 104.962 m  
R<sub>c</sub> = 874.482 m y<sub>c</sub> = 2.101 m  
L<sub>c</sub> = 176.086 m LT = 70.013 m  
 $\theta_s = 3^\circ 26' 23''$  ST = 35.012 m  
L<sub>s</sub> = 105.000 m LC = 104.983 m  
T<sub>s</sub> = 194.344 m  
E<sub>s</sub> = 11.949 m

**FINAL  
LIMIT OF WORK**  
STA. 136+780.000  
M.P. 84.99  
MOUNT PLEASANT TOWNSHIP  
WESTMORELAND COUNTY

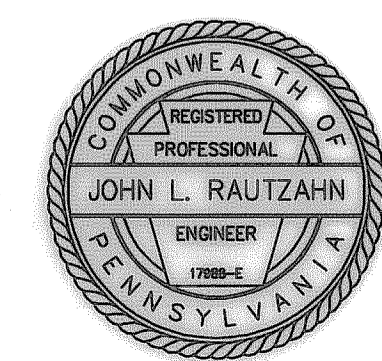


REVISIONS: 10-26-2001  
 SCALE: 1:500  
 AUTHOR: JRS  
 DATE: 10-26-2001  
 FILE NAME: Y:\Projects\PTC\99-003\AS-BUILT\PTC-99-003-048.dwg  
 COMPANY: J. L. RAUTZAHN & ASSOCIATES, INC.

\* CALL BOX MILEPOST IS NOT BASED ON PLAN MILEPOST LOCATION.  
 NOTE: USE EXTREME CAUTION WHEN WORKING NEAR UTILITY LINES

**LEGEND**  
 ELIMINATION OF PARKING AREAS, TYPE A

NO.	REVISIONS	DATE	APP'D
DESIGNED:	CHK'D:	DRAWN:	CHK'D:



**AS-BUILT  
DATE: APRIL, 2005**

SEE ROADWAY PROFILE DRAWING 1 OF 43

**PENNSYLVANIA TURNPIKE COMMISSION**

ROADWAY AND BRIDGE RECONSTRUCTION  
M.P. 85.00 TO M.P. 94.00

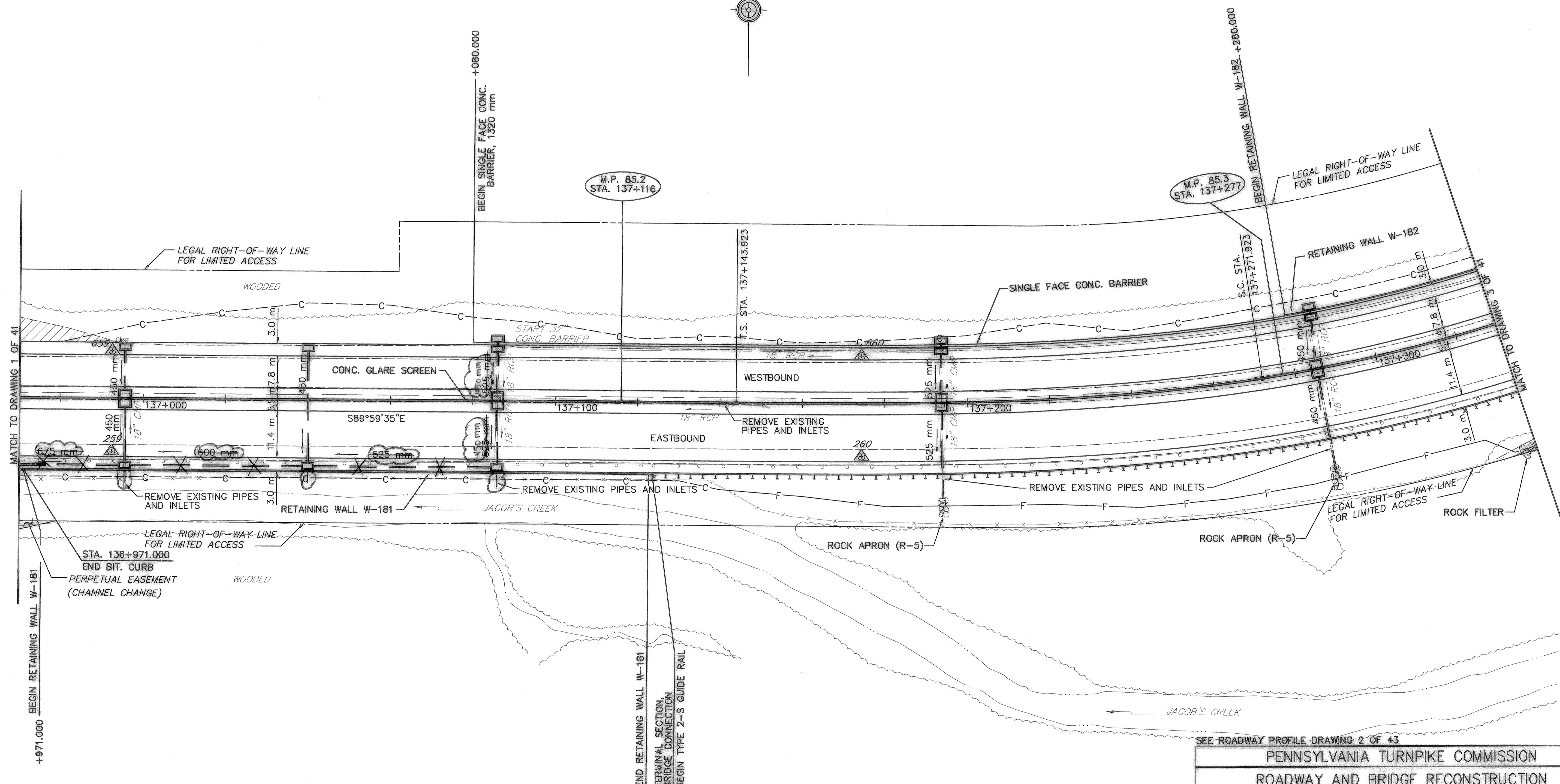
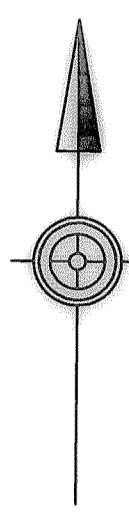
**ROADWAY PLAN**  
STA. 136+600 TO STA. 136+970

DWG. NAME: PTC-SHTA		STRUCTURE NO:	
SCALE: 0 10 20m	CONTRACT 99-003-RC6C-C	DWG. NO. 1 OF 41	SHEET NO. 124 OF 238

DOMINION EXPLORATION AND PRODUCTION, INC.  
 3" STEEL PIPE IN  
 12" STEEL CASING UNDER TURNPIKE  
 12" TO 6" REDUCER CASING UNDER SHOULDER  
 6" STEEL CASING UNDER PARKING AREA  
 STA. 136+897±  
 M.P. 85.06±

MATCH TO DRAWING 2 OF 41

TURNPIKE MAINLINE  
P.I. STA. 137+405.715 k = 63.944 m  
 $\Delta = 53^{\circ}00'40''$  (LT.) p = 1.727 m  
 $\Delta_c = 34^{\circ}26'39''$  x\_c = 127.664 m  
R\_c = 395.000 m y\_c = 6.900 m  
L\_c = 237.460 m LT = 85.451 m  
 $\theta_s = 9^{\circ}17'00''$  ST = 42.774 m  
L\_s = 128.000 m LC = 127.851 m  
T\_s = 261.792 m SUPERELEVATE 8.0%  
E\_s = 48.324 m



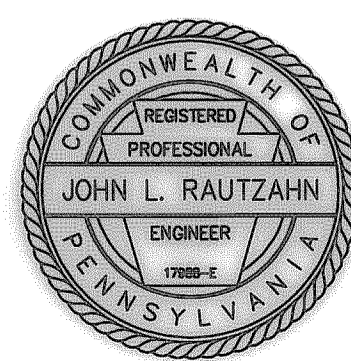
REVISION DATE: 10-29-2001  
AUTHOR: RJS  
MODIFIED: TAYLOR & ASSOCIATES, INC.  
FILE NAME: 3. PROJECT\136-970 TO 137-330\136-970 TO 137-330.dwg

SEE ROADWAY PROFILE DRAWING 2 OF 43  
PENNSYLVANIA TURNPIKE COMMISSION  
ROADWAY AND BRIDGE RECONSTRUCTION  
M.P. 85.00 TO M.P. 94.00

ROADWAY PLAN  
STA. 136+970 TO STA. 137+330

DWG. NAME: PTC-SHTA	STRUCTURE NO.:
SCALE: 0 10 20m	CONTRACT 99-003-RC6C-C
	DWG. NO. 2 OF 41
	SHEET NO. 125 OF 238

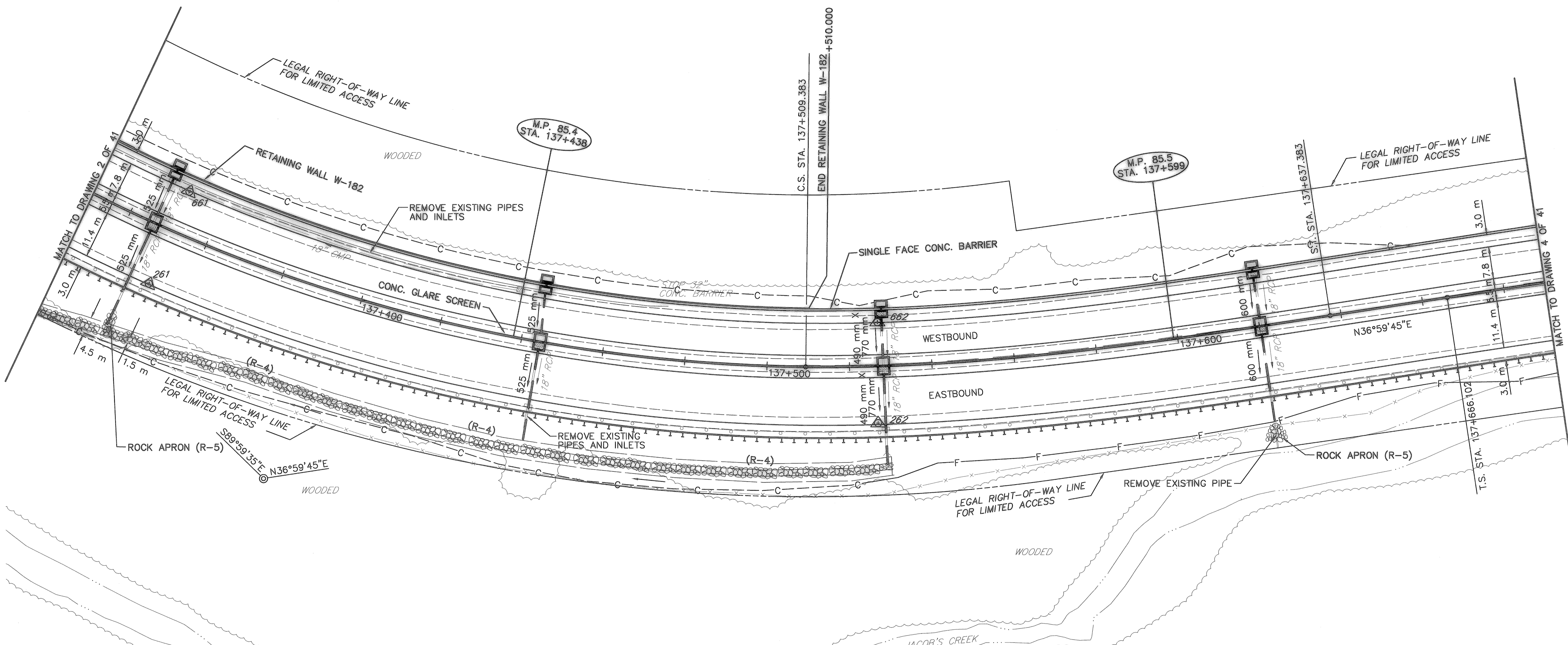
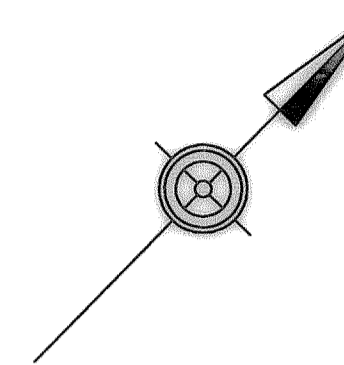
AS-BUILT  
DATE: APRIL, 2005



**LEGEND**  
 ELIMINATION OF PARKING AREAS, TYPE A

NO.	REVISIONS	DATE	APP'D
DESIGNED:	CHK'D:	DRAWN:	CHK'D:

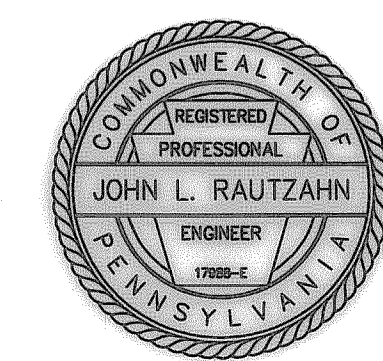
TURNPIKE MAINLINE  
P.I. STA. 137+405.715 k = 63.944 m  
 $\Delta = 53^{\circ}00'40''$ (LT.) p = 1.727 m  
 $\Delta_e = 34^{\circ}26'39''$  x<sub>e</sub> = 127.664 m  
R<sub>e</sub> = 395.000 m y<sub>e</sub> = 6.900 m  
L<sub>e</sub> = 237.460 m LT = 85.451 m  
 $\Theta_e = 9^{\circ}17'00''$  ST = 42.774 m  
L<sub>s</sub> = 128.000 m LC = 127.851 m  
T<sub>s</sub> = 261.792 m SUPERELEVATE 8.0%  
E<sub>s</sub> = 48.324 m



REVISION DATE: 10-28-2001  
DESIGNED: JAVIER B. ASSOCIATES, INC.  
FILE NAME: Y:\Projects\99-003\99-003-RC6C-C\PTC-AS-Built.dwg

**AS-BUILT**  
DATE: APRIL 2005

NO.	REVISIONS	DATE	APP'D
DESIGNED:	CHK'D:	DRAWN:	CHK'D:



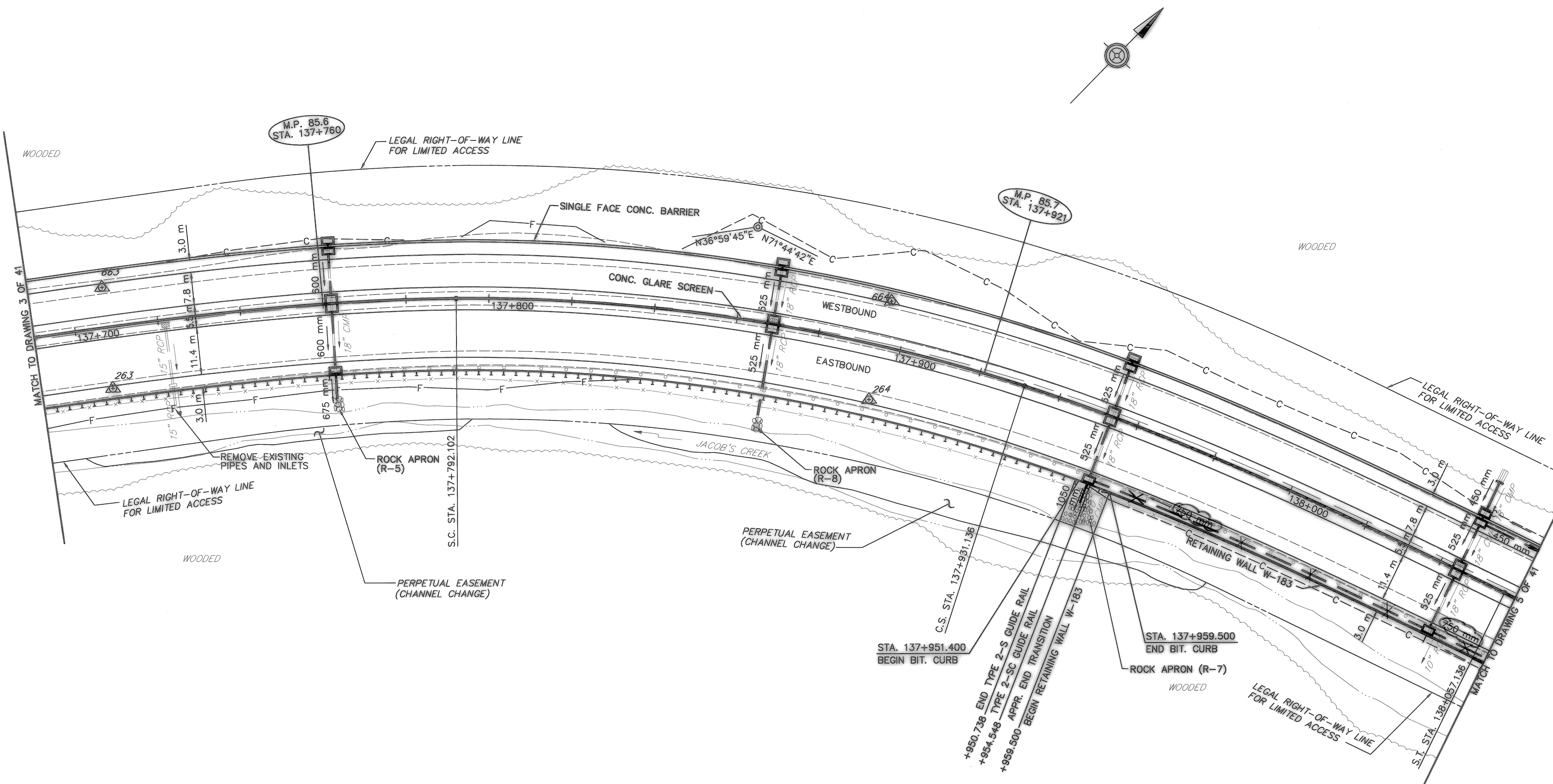
SEE ROADWAY PROFILE DRAWING 3 OF 43

PENNSYLVANIA TURNPIKE COMMISSION  
ROADWAY AND BRIDGE RECONSTRUCTION  
M.P. 85.00 TO M.P. 94.00

ROADWAY PLAN  
STA. 137+330 TO STA. 137+690

DWG. NAME: PTC-SHTA      STRUCTURE NO:

SCALE: 0 10 20m      CONTRACT 99-003-RC6C-C      DWG. NO. 3 OF 41      SHEET NO. 126 OF 238

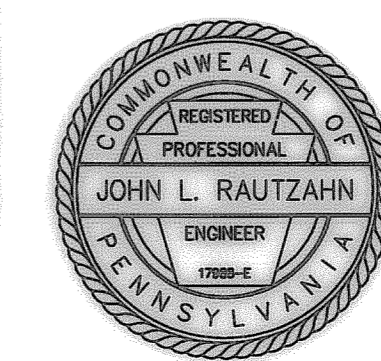


REVISION DATE: 10-28-2001  
 DESIGNER: TAYLOR & ASSOCIATES, INC.  
 PROJECT NO.: 99-003-RC6C-C  
 FILE NAME: T:\Projects\99-003-RC6C-C\Drawings\PTC-5HTA.dwg

**TURNPIKE MAINLINE**

P.I. STA. 137+866.266	k = 62.956 m
$\Delta = 34^{\circ}44'57''$ (RT.)	p = 1.513 m
$\Delta_c = 18^{\circ}13'45''$	$x_c = 125.738$ m
$R_c = 437.000$ m	$y_c = 6.046$ m
$L_c = 139.035$ m	LT = 84.092 m
$\theta_s = 8^{\circ}15'36''$	ST = 42.083 m
$L_s = 126.000$ m	LC = 125.884 m
$T_s = 200.164$ m	SUPERELEVATE 7.9%
$E_s = 22.477$ m	

**AS-BUILT**  
DATE: APRIL, 2005

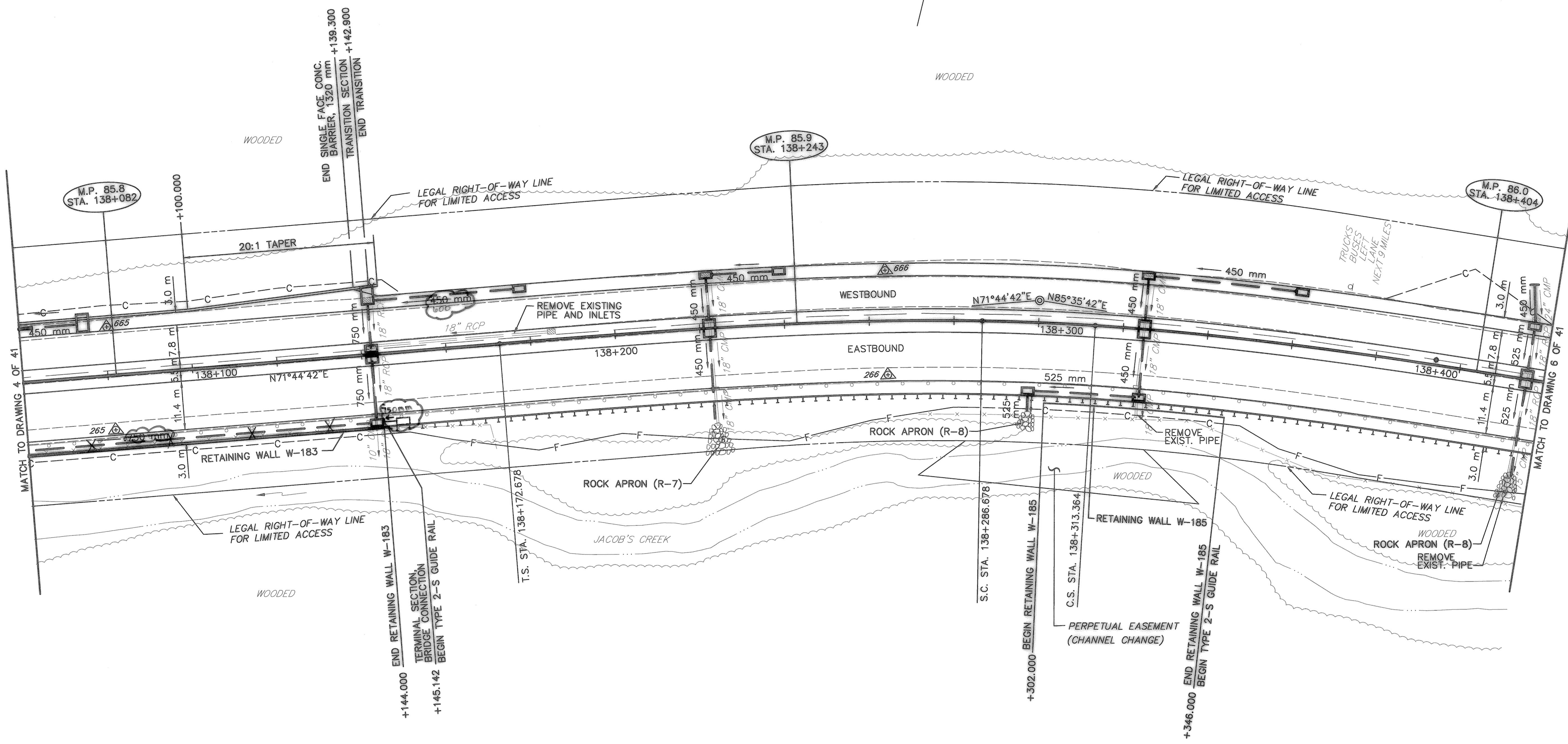
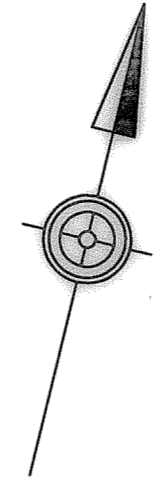


NO.	REVISIONS	DATE	APP'D
DESIGNED:	CHK'D:	DRAWN:	CHK'D:

SEE ROADWAY PROFILE DRAWING 4 OF 43  
**PENNSYLVANIA TURNPIKE COMMISSION**  
 ROADWAY AND BRIDGE RECONSTRUCTION  
 M.P. 85.00 TO M.P. 94.00

**ROADWAY PLAN**  
 STA. 137+690 TO STA. 138+060

DWG. NAME: PTC-5HTA		STRUCTURE NO.:	
SCALE: 0 10 20m	CONTRACT	DWG. NO.	SHEET NO.
	99-003-RC6C-C	4 OF 41	127 OF 238

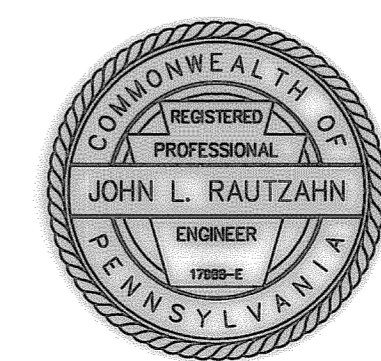


REVISION DATE: 10-26-2001  
 SCALE: 1:500  
 AUTHOR: JRS  
 DRAWING: PTC-SHTA  
 SHEET TITLE: PLAN  
 FILE NAME: Y:\Projects\PTC-03-PA\AUTOCAD\PTC-shta.dwg

**TURNPIKE MAINLINE**  
 P.I. STA. 138+300.460    k = 56.982 m  
 $\Delta = 13^{\circ}51'00''$  (RT.)    p = 0.930 m  
 $\Delta_c = 2^{\circ}37'38''$     x\_c = 113.891 m  
 $R_c = 582.000$  m    Y\_c = 3.719 m  
 $L_c = 26.686$  m    LT = 76.038 m  
 $\theta_c = 5^{\circ}36'41''$     ST = 38.035 m  
 $L_s = 114.000$  m    LC = 113.951 m  
 $T_s = 127.782$  m    SUPERELEVATE 7.1%  
 $E_s = 5.214$  m

**AS-BUILT**  
 DATE: APRIL, 2005

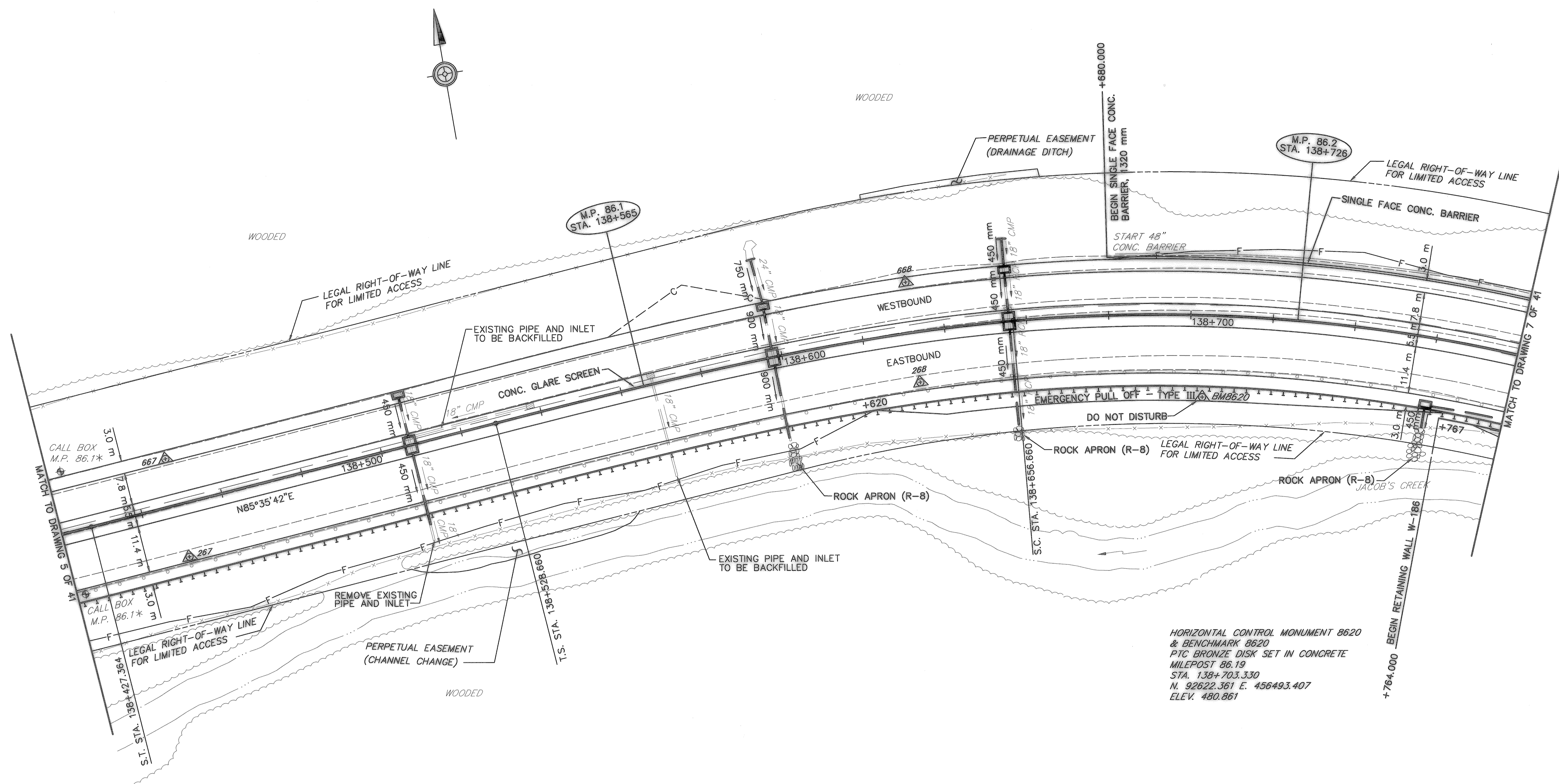
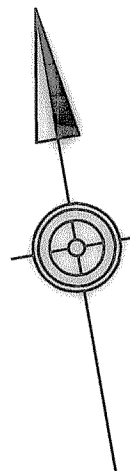
NO.	REVISIONS	DATE	APP'D
DESIGNED:	CHK'D:	DRAWN:	CHK'D:



SEE ROADWAY PROFILE DRAWING 5 OF 43

**PENNSYLVANIA TURNPIKE COMMISSION**  
 ROADWAY AND BRIDGE RECONSTRUCTION  
 M.P. 85.00 TO M.P. 94.00  
**ROADWAY PLAN**  
 STA. 138+060 TO STA. 138+420

DWG. NAME: PTC-SHTA	STRUCTURE NO:
SCALE: 0 10 20m	CONTRACT 99-003-RC6C-C
	DWG. NO. 5 OF 41
	SHEET NO. 128 OF 238



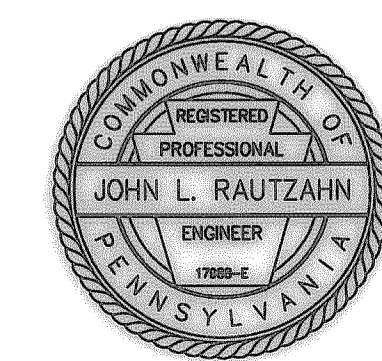
HORIZONTAL CONTROL MONUMENT 8620  
 & BENCHMARK 8620  
 PTC BRONZE DISK SET IN CONCRETE  
 MILEPOST 86.19  
 STA. 138+703.330  
 N. 92622.361 E. 456493.407  
 ELEV. 480.861

**TURNPIKE MAINLINE**  
 P.I. STA. 138+300.460 k = 56.982 m  
 $\Delta = 13^{\circ}51'00''$  (RT.) p = 0.930 m  
 $\Delta_c = 2^{\circ}37'38''$  x\_c = 113.891 m  
 R\_c = 582.000 m y\_c = 3.719 m  
 L\_c = 26.686 m LT = 76.038 m  
 $\Theta_s = 5^{\circ}36'41''$  ST = 38.035 m  
 L\_s = 114.000 m LC = 113.951 m  
 T\_s = 127.782 m SUPERELEVATE 7.1%  
 E\_s = 5.214 m

**TURNPIKE MAINLINE**  
 P.I. STA. 138+826.061 k = 63.944 m  
 $\Delta = 60^{\circ}57'00''$  (RT.) p = 1.727 m  
 $\Delta_c = 42^{\circ}23'00''$  x\_c = 127.664 m  
 R\_c = 395.000 m y\_c = 6.900 m  
 L\_c = 292.192 m LT = 85.451 m  
 $\Theta_s = 9^{\circ}17'00''$  ST = 42.774 m  
 L\_s = 128.000 m LC = 127.851 m  
 T\_s = 297.401 m SUPERELEVATE 8.0%  
 E\_s = 65.320 m

**AS-BUILT**  
 DATE: APRIL, 2005

NO.	REVISIONS	DATE	APP'D
DESIGNED:	CHK'D:	DRAWN:	CHK'D:



SEE ROADWAY PROFILE DRAWING 6 OF 43

**PENNSYLVANIA TURNPIKE COMMISSION**

ROADWAY AND BRIDGE RECONSTRUCTION  
 M.P. 85.00 TO M.P. 94.00

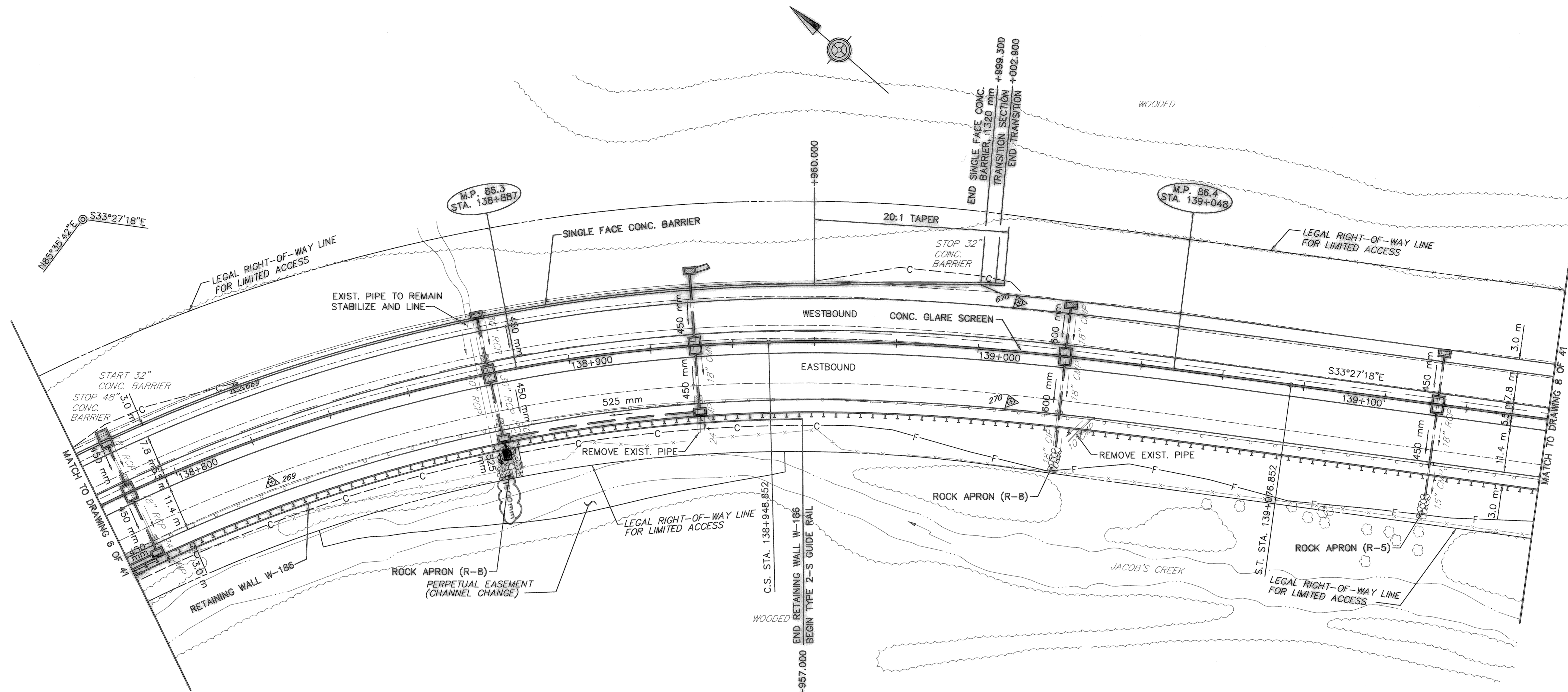
**ROADWAY PLAN**  
 STA. 138+420 TO STA. 138+780

DWG. NAME: PTC-SHTA STRUCTURE NO:

SCALE: 0 10 20m CONTRACT DWG. NO. SHEET NO.  
 99-003-RC6C-C 6 OF 41 129 OF 238

REVISION DATE: 10-29-2001  
 DRAWN BY: J. R. TAYLOR  
 CHECKED BY: J. R. TAYLOR  
 DESIGNED BY: J. R. TAYLOR  
 PTC PROJECT NO. 99-003-RC6C-C

\* CALL BOX MILEPOST IS NOT BASED ON PLAN MILEPOST LOCATION.

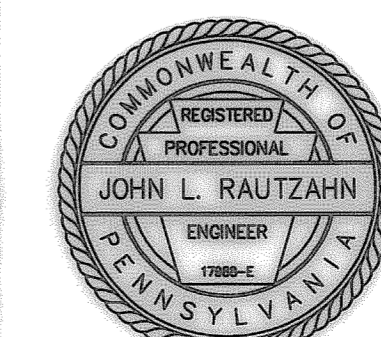


TURNPIKE MAINLINE

P.I. STA. 138+826.061	k = 63.944 m
$\Delta = 60^{\circ}57'00''$ (RT.)	p = 1.727 m
$\Delta_c = 42^{\circ}23'00''$	$x_c = 127.664$ m
$R_c = 395.000$ m	$y_c = 6.900$ m
$L_c = 292.192$ m	LT = 85.451 m
$\theta_s = 9^{\circ}17'00''$	ST = 42.774 m
$L_s = 128.000$ m	LC = 127.851 m
$T_s = 297.401$ m	SUPERELEVATE 8.0%
$E_s = 65.320$ m	

SEE ROADWAY PROFILE DRAWING 7 OF 43  
**PENNSYLVANIA TURNPIKE COMMISSION**  
 ROADWAY AND BRIDGE RECONSTRUCTION  
 M.P. 85.00 TO M.P. 94.00

**ROADWAY PLAN**  
 STA. 138+780 TO STA. 139+140



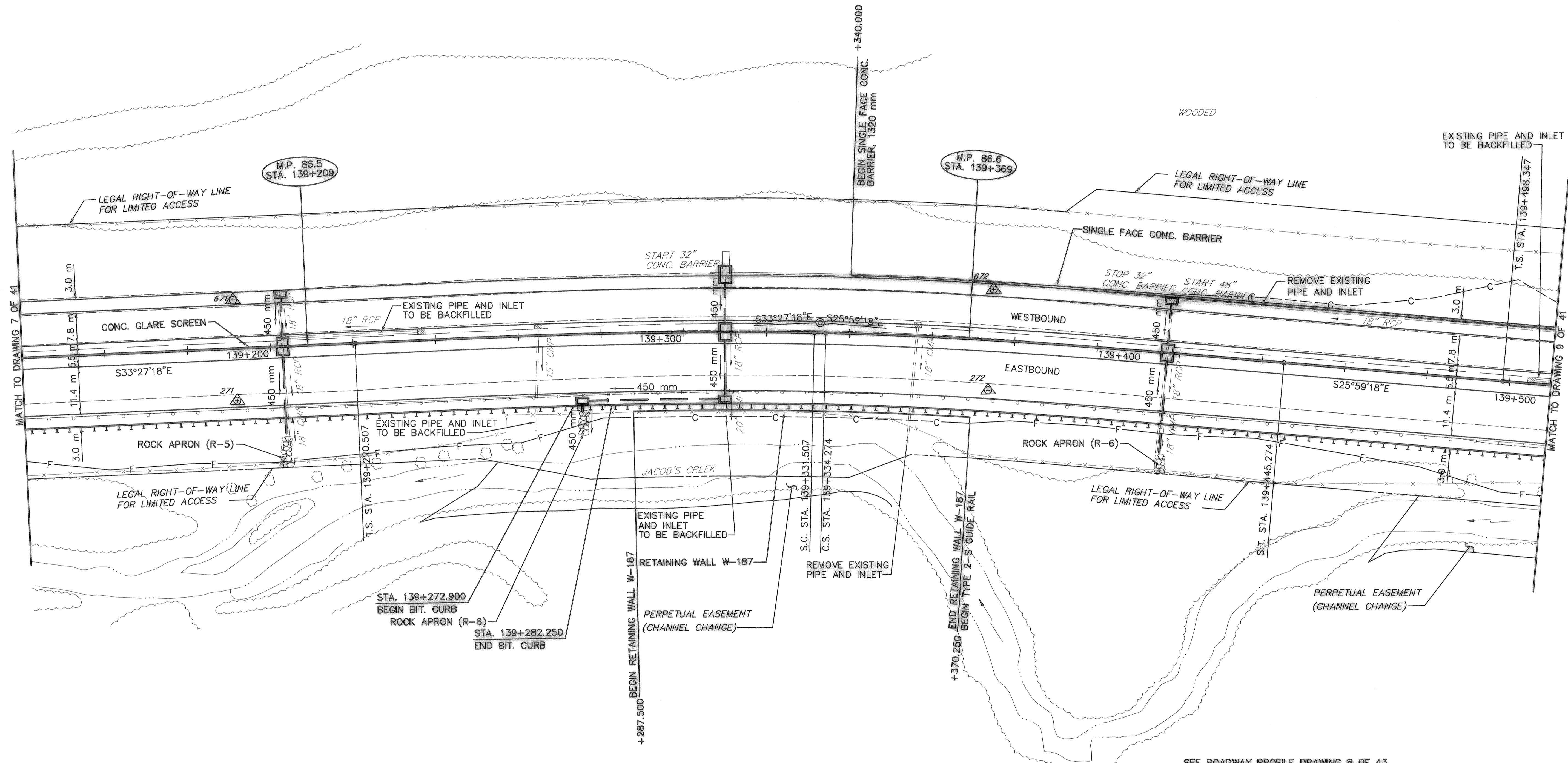
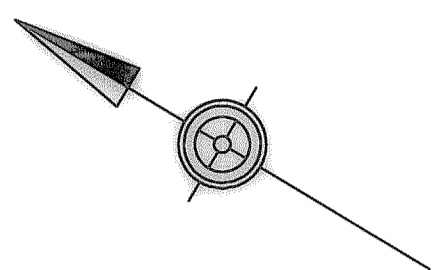
**AS-BUILT**  
 DATE: APRIL 2005

NO.	REVISIONS	DATE	APP'D
DESIGNED:	CHK'D:	DRAWN:	CHK'D:

DWG. NAME: PTC-SHTA		STRUCTURE NO.:	
SCALE: 0 10 20m	CONTRACT	DWG. NO.	SHEET NO.
	99-003-RC6C-C	7 OF 41	130 OF 238

REVISION DATE: 10-29-2001  
 MAGNIFICENT TAYLOR & ASSOCIATES, INC.  
 P.E. NAME: T. PROBST/PTC ID: 34140/PTC ID: 34140





SEE ROADWAY PROFILE DRAWING 8 OF 43

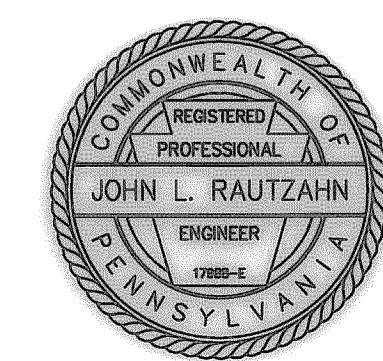
PENNSYLVANIA TURNPIKE COMMISSION

ROADWAY AND BRIDGE RECONSTRUCTION

M.P. 85.00 TO M.P. 94.00

ROADWAY PLAN

STA. 139+140 TO STA. 139+510



**AS-BUILT**

DATE: APRIL 2005

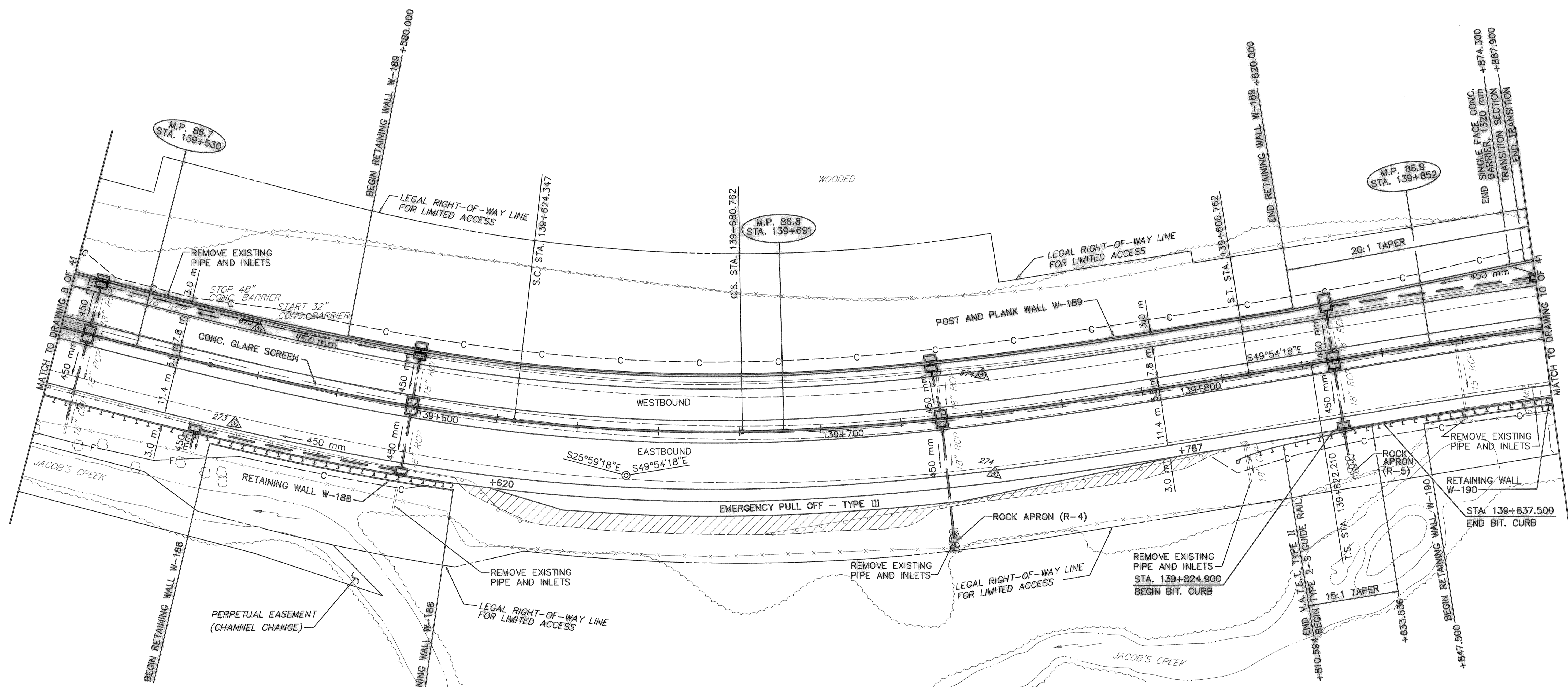
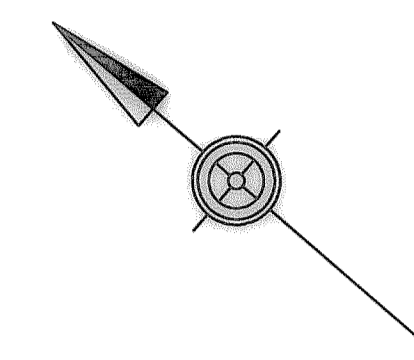
NO.	REVISIONS	DATE	APP'D
DESIGNED:	CHK'D:	DRAWN:	CHK'D:

DWG. NAME: PTC-SHTA	STRUCTURE NO.:
SCALE: 0 10 20m	CONTRACT: 99-003-RC6C-C
	DWG. NO. 8 OF 41
	SHEET NO. 131 OF 238

REVISION DATE: 10-28-2001  
 AUTHOR: JRS  
 CHECKED: JRS  
 PROJECT: PROJECT NO. 99-003-RC6C-C  
 DRAWING: PTC-SHTA

**TURNPIKE MAINLINE**  
P.I. STA. 139+654.179 k = 62.956 m  
 $\Delta = 23^{\circ}55'00''$  (LT.) p = 1.513 m  
 $\Delta_c = 7^{\circ}23'48''$  x<sub>c</sub> = 125.738 m  
R<sub>c</sub> = 437.000 m y<sub>c</sub> = 6.046 m  
L<sub>c</sub> = 56.415 m LT = 84.092 m  
 $\theta_s = 8^{\circ}15'36''$  ST = 42.083 m  
L<sub>s</sub> = 126.000 m LC = 125.884 m  
T<sub>s</sub> = 155.832 m SUPERELEVATE 7.9%  
E<sub>s</sub> = 11.240 m

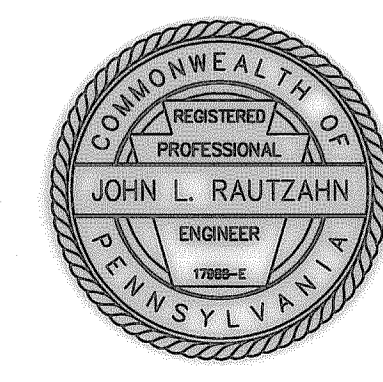
**TURNPIKE MAINLINE**  
P.I. STA. 139+937.633 k = 56.982 m  
 $\Delta = 11^{\circ}27'00''$  (RT.) p = 0.930 m  
 $\Delta_c = 0^{\circ}13'38''$  x<sub>c</sub> = 113.891 m  
R<sub>c</sub> = 582.000 m y<sub>c</sub> = 3.719 m  
L<sub>c</sub> = 2.307 m LT = 76.038 m  
 $\theta_s = 5^{\circ}36'41''$  ST = 38.035 m  
L<sub>s</sub> = 114.000 m LC = 113.951 m  
T<sub>s</sub> = 115.423 m SUPERELEVATE 7.1%  
E<sub>s</sub> = 3.852 m



**LEGEND**  
 ELIMINATION OF PARKING AREAS, TYPE A

**AS-BUILT**  
DATE: APRIL 2005

NO.	REVISIONS	DATE	APP'D
DESIGNED:	CHK'D:	DRAWN:	CHK'D:



SEE ROADWAY PROFILE DRAWING 9 OF 43  
**PENNSYLVANIA TURNPIKE COMMISSION**  
ROADWAY AND BRIDGE RECONSTRUCTION  
M.P. 85.00 TO M.P. 94.00

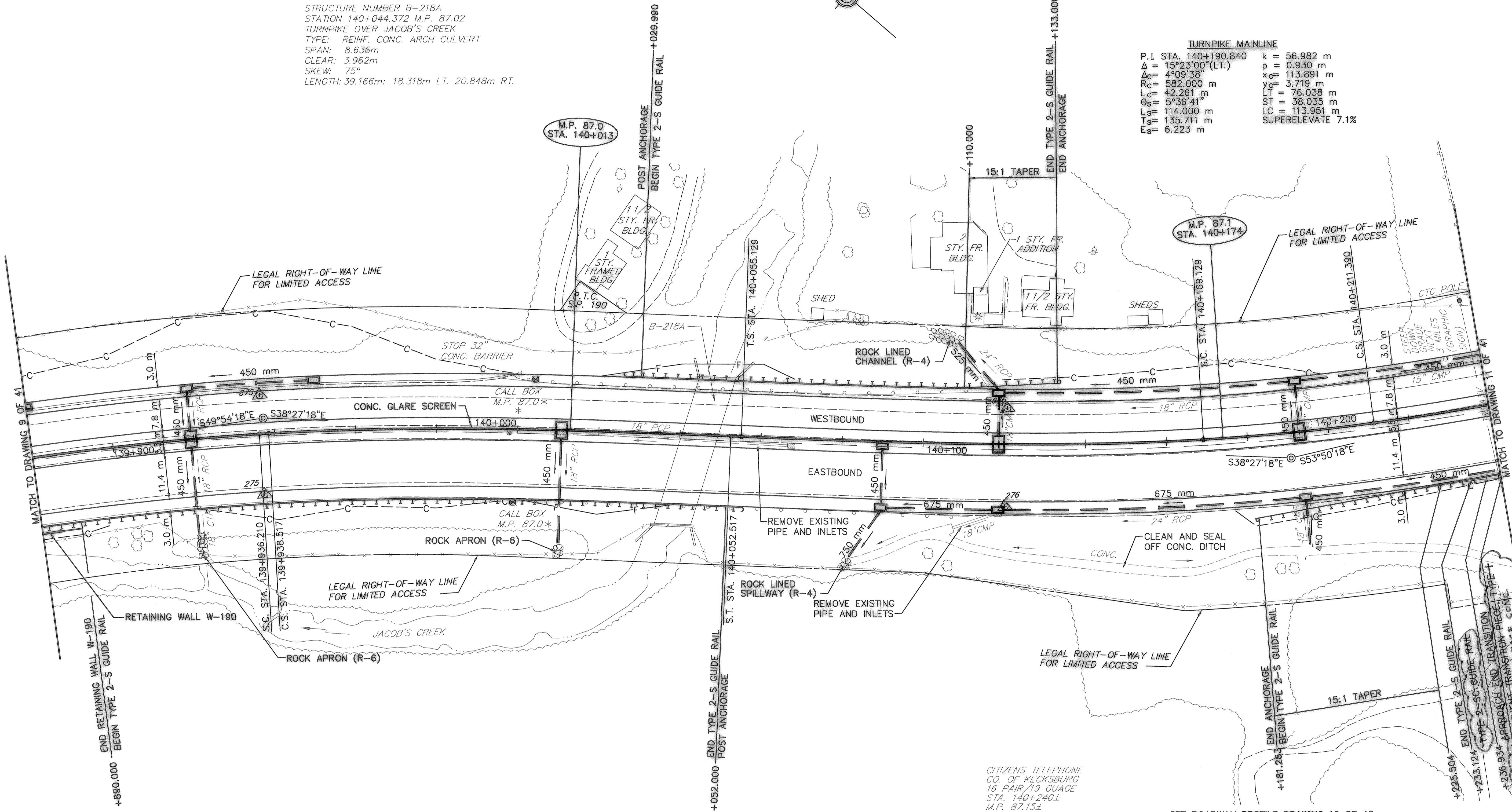
**ROADWAY PLAN**  
STA. 139+510 TO STA. 139+880

DWG. NAME: PTC-SHTA		STRUCTURE NO.:	
SCALE:	CONTRACT: 99-003-RC6C-C	DWG. NO. 9 OF 41	SHEET NO. 132 OF 238

REVISION DATE: 10-29-2001  
AUTHOR: JRS  
DESIGNER: JRS  
CHECKER: JRS  
DRAWN: JRS  
DATE: APRIL 2005  
FILE NAME: Y:\Projects\105-25\105\105-25\105-25.dwg

STRUCTURE NUMBER B-218A  
 STATION 140+044.372 M.P. 87.02  
 TURNPIKE OVER JACOB'S CREEK  
 TYPE: REINF. CONC. ARCH CULVERT  
 SPAN: 8.636m  
 CLEAR: 3.962m  
 SKEW: 75°  
 LENGTH: 39.166m: 18.318m LT. 20.848m RT.

**TURNPIKE MAINLINE**  
 P.I. STA. 140+190.840 k = 56.982 m  
 $\Delta = 15^{\circ}23'00''$  (LT.) p = 0.930 m  
 $\Delta_c = 4^{\circ}09'38''$  x<sub>c</sub> = 113.891 m  
 R<sub>c</sub> = 582.000 m y<sub>c</sub> = 3.719 m  
 L<sub>c</sub> = 42.261 m LT = 76.038 m  
 $\theta_s = 5^{\circ}36'41''$  ST = 38.035 m  
 L<sub>s</sub> = 114.000 m LC = 113.951 m  
 T<sub>s</sub> = 135.711 m  
 E<sub>s</sub> = 6.223 m SUPERELEVATE 7.1%



**TURNPIKE MAINLINE**  
 P.I. STA. 139+937.633 k = 56.982 m  
 $\Delta = 11^{\circ}27'00''$  (RT.) p = 0.930 m  
 $\Delta_c = 0^{\circ}13'38''$  x<sub>c</sub> = 113.891 m  
 R<sub>c</sub> = 582.000 m y<sub>c</sub> = 3.719 m  
 L<sub>c</sub> = 2.307 m LT = 76.038 m  
 $\theta_s = 5^{\circ}36'41''$  ST = 38.035 m  
 L<sub>s</sub> = 114.000 m LC = 113.951 m  
 T<sub>s</sub> = 115.423 m  
 E<sub>s</sub> = 3.852 m SUPERELEVATE 7.1%

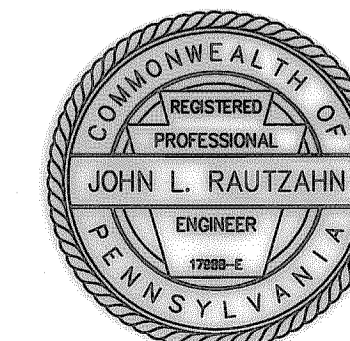
CITIZENS TELEPHONE CO. OF KECKSBURG  
 16 PAIR/19 GAUGE  
 STA. 140+240±  
 M.P. 87.15±

ARMSTRONG COMMUNICATIONS, INC.  
 1/2" AERIAL CABLE  
 STA. 140+240±  
 M.P. 87.15±

SEE ROADWAY PROFILE DRAWING 10 OF 43

PENNSYLVANIA TURNPIKE COMMISSION  
 ROADWAY AND BRIDGE RECONSTRUCTION  
 M.P. 85.00 TO M.P. 94.00

ROADWAY PLAN  
 STA. 139+880 TO STA. 140+240



AS-BUILT  
 DATE: APRIL, 2005

NO.	REVISIONS	DATE	APP'D
DESIGNED:	CHK'D:	DRAWN:	CHK'D:

DWG. NAME: PTC-SHTA		STRUCTURE NO:	
SCALE: 0 10 20m	CONTRACT 99-003-RC6C-C	DWG. NO. 10 OF 41	SHEET NO. 133 OF 238

\* CALL BOX MILEPOST IS NOT BASED ON PLAN MILEPOST LOCATION.  
 NOTE: USE EXTREME CAUTION WHEN WORKING NEAR UTILITY LINES

DESIGNED: DATE: 10-26-2001  
 SCALE: 1"=50'  
 AUTHOR: JRS

CONSULTING: TAYLOR & ASSOCIATES, INC.  
 SHEET TITLE: ROADWAY PLAN  
 FILE NAME: Y:\Projects\PTC 10-26-01\TA\PTC10-26-01.dwg