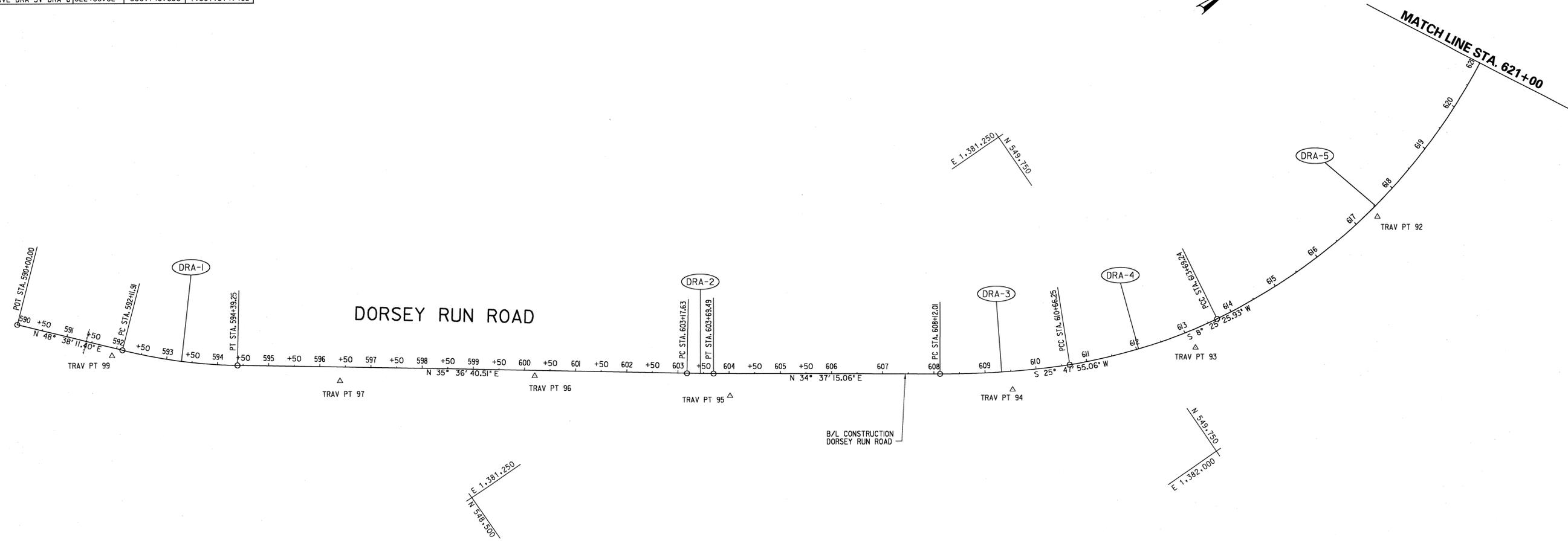


DORSEY RUN ROAD			
DESIGNATION	STATION	NORTHING	EASTING
DORSEY RUN ROAD			
POT	590+00.00	547,962.632	1,380,464.434
PC CURVE DRA-1	592+11.91	548,102.670	1,380,623.481
PI CURVE DRA-1	593+26.07	548,178.110	1,380,709.161
PT CURVE DRA-1	594+39.24	548,270.919	1,380,775.633
PC CURVE DRA-2	603+17.63	548,985.033	1,381,287.100
PI CURVE DRA-2	603+43.56	549,006.113	1,381,302.199
PT CURVE DRA-2	603+69.49	549,027.451	1,381,316.930
PC CURVE DRA-3	608+12.01	549,391.620	1,381,568.349
PI CURVE DRA-3	609+39.38	549,496.437	1,381,640.714
PCC CURVE DRA-3, DRA-4	610+66.25	549,611.119	1,381,696.135
PI CURVE DRA-4	612+18.92	549,748.574	1,381,762.561
PCC CURVE DRA-4, DRA-5	613+69.24	549,899.588	1,381,784.949
PI CURVE DRA-5	618+41.88	550,367.121	1,381,854.259
PCC CURVE DRA-5, DRA-6	622+66.02	550,748.050	1,381,574.465

CURVE DATA						
CURVE NO.	DELTA	DEGREE	RADIUS	TANGENT	LENGTH	EXTERNAL
DORSEY RUN ROAD						
DRA-1	13°01'30.89"LT	5°43'46.48"	1,000.00'	114.16'	227.33'	6.49
DRA-2	0°59'25.45"LT	1°54'35.49"	3,000.00'	155.62'	307.82'	0.11
DRA-3	8°49'41.98"LT	3°28'20.90"	1,650.00'	176.33'	349.07'	4.91
DRA-4	17°21'36.20"LT	5°43'46.48"	1,000.00'	152.66'	302.99'	11.59
DRA-5	44°43'47.72"LT	4°59'16.21"	1,148.71'	472.64'	896.78'	93.44

TRAVERSE POINTS			
DESIGNATION	ELEVATION	NORTHING	EASTING
TRAVERSE POINT 92	186.73	550271.698	1381797.337
TRAVERSE POINT 93	199.54	549832.162	1381808.428
TRAVERSE POINT 94	194.24	549490.982	1381674.123
TRAVERSE POINT 95	169.76	549028.865	1381372.041
TRAVERSE POINT 96	158.47	548736.725	1381123.154
TRAVERSE POINT 97	157.70	548418.057	1380915.435
TRAVERSE POINT 99	157.25	548079.709	1380621.200



Professional Certification: I hereby certify that these documents were prepared or supervised by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16186, Expiration Date: 8-28-2010

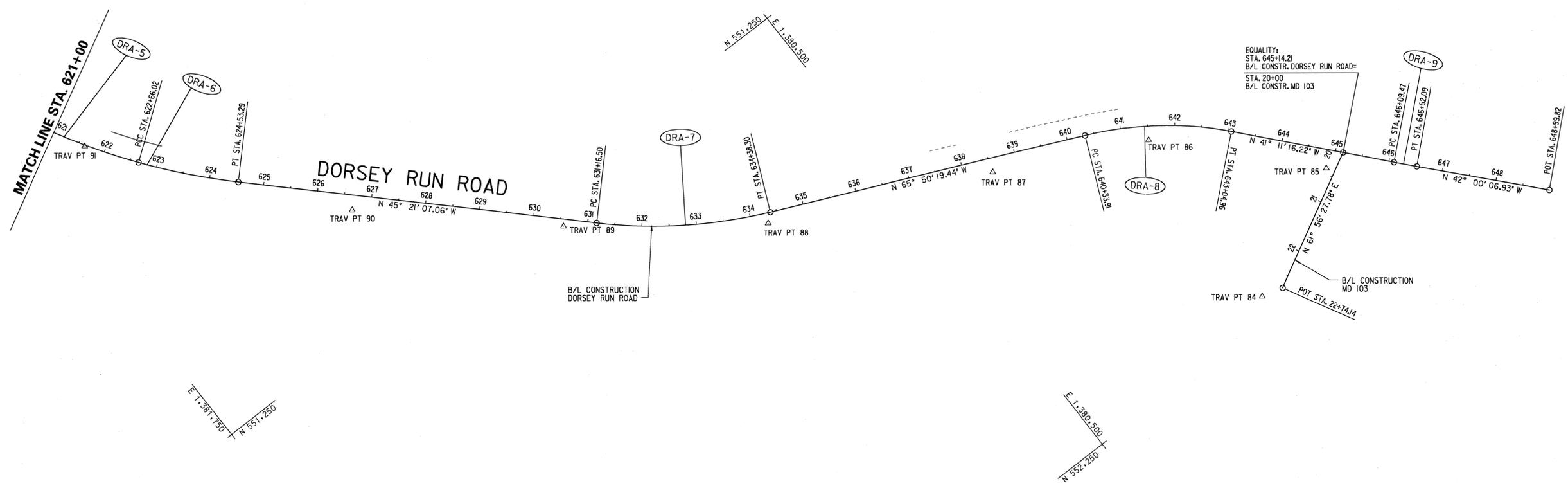


<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND</p> <p>Director of Public Works: Steve Sharan, 12/16/08 Chief, Division of Transportation and Special Projects</p>	<p>PREPARED BY URS 4 NORTH PARK DRIVE HUNT VALLEY, MARYLAND TEL: (410) 785-7220</p>		<p>DES: CRC DRN: CDF CHK: DTM DATE: 12/15/08</p>	<p>GEOMETRIC SHEET</p>	<p>WIDENING OF DORSEY RUN ROAD STA. 591+43 TO STA. 648+12</p> <p>ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND CAPITAL PROJECT J-4148-A</p>	<p>SCALE AS SHOWN</p> <p>SHEET 2 OF 84</p>
<p>BY: _____ NO.: _____ REVISION: _____ DATE: _____</p>		<p>SCALE MAP NO.: N/A BLOCK NO.: _____</p>				

DORSEY RUN ROAD			
DESIGNATION	STATION	NORTHING	EASTING
DORSEY RUN ROAD			
PCC CURVE DRA-5.6	622+66.02	550,748.050	1,381,574.465
PI CURVE DRA-6	623+59.85	550,823.672	1,381,518.920
PT CURVE DRA-6	624+53.29	550,889.610	1,381,452.167
PC CURVE DRA-7	631+16.50	551,355.682	1,380,980.334
PI CURVE DRA-7	632+79.14	551,469.976	1,380,864.626
PT CURVE DRA-7	634+38.30	551,536.546	1,380,716.235
PC CURVE DRA-8	640+33.91	551,780.329	1,380,172.809
PI CURVE DRA-8	641+71.56	551,836.673	1,380,047.213
PT CURVE DRA-8	643+04.96	551,940.266	1,379,956.563
PC CURVE DRA-9	646+09.47	552,169.425	1,379,756.034
PI CURVE DRA-9	646+30.78	552,185.465	1,379,741.999
PT CURVE DRA-9	646+52.09	552,201.303	1,379,727.737
PDT	648+99.82	552,385.391	1,379,561.972
MD 103			
PDT	20+00.00	552,097.740	1,379,818.763
PDT	22+74.14	552,226.689	1,380,060.680

TRAVERSE POINTS			
DESIGNATION	ELEVATION	NORTHING	EASTING
TRAVERSE POINT 84	174.49	552215.820	1380099.784
TRAVERSE POINT 85	178.12	552102.099	1379861.135
TRAVERSE POINT 86	174.03	551858.902	1380085.617
TRAVERSE POINT 87	168.98	551730.012	1380348.797
TRAVERSE POINT 88	161.88	551550.410	1380732.250
TRAVERSE POINT 89	143.35	551323.141	1381032.244
TRAVERSE POINT 90	134.48	551059.831	1381319.588
TRAVERSE POINT 91	157.02	550663.292	1381634.138

CURVE DATA						
CURVE NO.	DELTA	DEGREE	RADIUS	TANGENT	LENGTH	EXTERNAL
DORSEY RUN ROAD						
DRA-5	44°43'47.72"LT	4°59'16.21"	1,148.71'	472.64'	896.78'	93.44
DRA-6	9°03'16.32"LT	4°50'06.31"	1,185.00'	93.83'	187.27'	3.71
DRA-7	20°29'12.38"LT	6°21'58.31"	900.00'	162.64'	321.81'	14.58
DRA-8	24°39'03.22"RT	9°05'40.45"	630.00'	137.66'	271.05'	14.86
DRA-9	0°48'50.71"LT	1°54'35.49"	3,000.00'	21.31'	42.63'	0.08



Professional Certification. I hereby certify that these documents were prepared or supervised by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156, Expiration Date: 9-28-2010



DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: Steve Shavan, 12/16/08
 Chief, Division of Transportation and Special Projects: Steve Shavan, 12/16/08
 Chief, Bureau of Engineering: [Signature], 12/16/08
 Chief, Bureau of Highways: [Signature], 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	CRC		
DRN:	CDF		
CHK:	DTM		
DATE:	12/15/08		
BY:	NO.	REVISION	DATE

GEOMETRIC SHEET

SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12

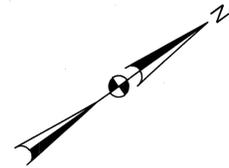
ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE AS SHOWN

SHEET 3 OF 84

BALTIMORE WASHINGTON
AUTO EXCHANGE, INC.
PLATBOOK NO. 12015 & 10216

E 1,381,000
N 549,000



LIMIT OF WORK
STA. 591+43

PT. STA. 590+00.00

E 1,380,500
N 548,250

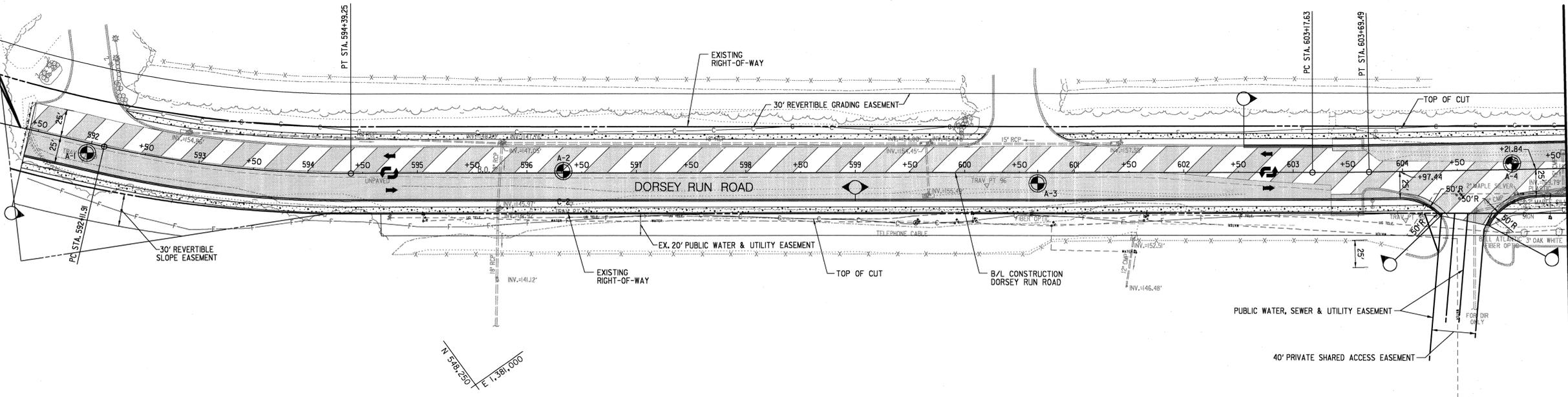
PT. STA. 594+39.25

PC STA. 603+17.63

PT. STA. 603+68.49

MATCH LINE STA. 605+50

CAPITAL PROJECT
J-4148-B



N/P
NEWSOME DORSEY INDUSTRIAL PARK
2113436

LEGEND

- FULL DEPTH PAVEMENT
- 2" GRIND & RESURFACE PAVEMENT
- REMOVE EXISTING PAVEMENT
- TO BE REMOVED
- STD. CURB & GUTTER (ARROW INDICATES DIRECTION)
- STD. TYPE A CURB & GUTTER (MD STD. NO. 620.02)
- SOIL BORING
- CONCRETE SIDEWALK

SOIL BORING LOCATION				
NO.	NORTH	EAST	STATION	OFFSET
A1	548,086.497	1,380,619.168	591+97.99	9.29 RT
A2	548,429.830	1,380,887.267	596+33.44	1.77 LT
A3	548,775.415	1,381,148.710	600+66.63	9.55 RT
A4	549,138.224	1,381,386.659	605+00.26	5.55 LT

- NOTES:
- ALL BORINGS DRILLED BY EBA ENGINEERING, INC. IN JANUARY 2006.
 - DRILLING AND SAMPLING CONFORMS TO AASHTO DESIGNATION T-206.

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	12
GRADING & DRAINAGE PLAN	17
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	24 & 28
SIGNING & MARKING PLAN	34
MAINTENANCE OF TRAFFIC PLANS	40
UTILITY/STREET LIGHTING PLAN	44
LANDSCAPE PLAN	48



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 16162 Registration Date: 9-28-2010

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: *Steve Sharan* 12/15/08
Chief, Division of Transportation and Special Projects: *Steve Sharan* 12/15/08

Prepared by: *William J. ...* 12-17-08
Chief, Bureau of Highways: *William J. ...* 12-17-08

PREPARED BY
URS
4 NORTH PARK DRIVE
HUNT VALLEY, MARYLAND
TEL: (410) 785-7220



DES: CRC			
DRN: CDF			
CHK: DTM			
DATE: 12/15/08	BY NO.	REVISION	DATE

ROADWAY PLAN
SEGMENT A

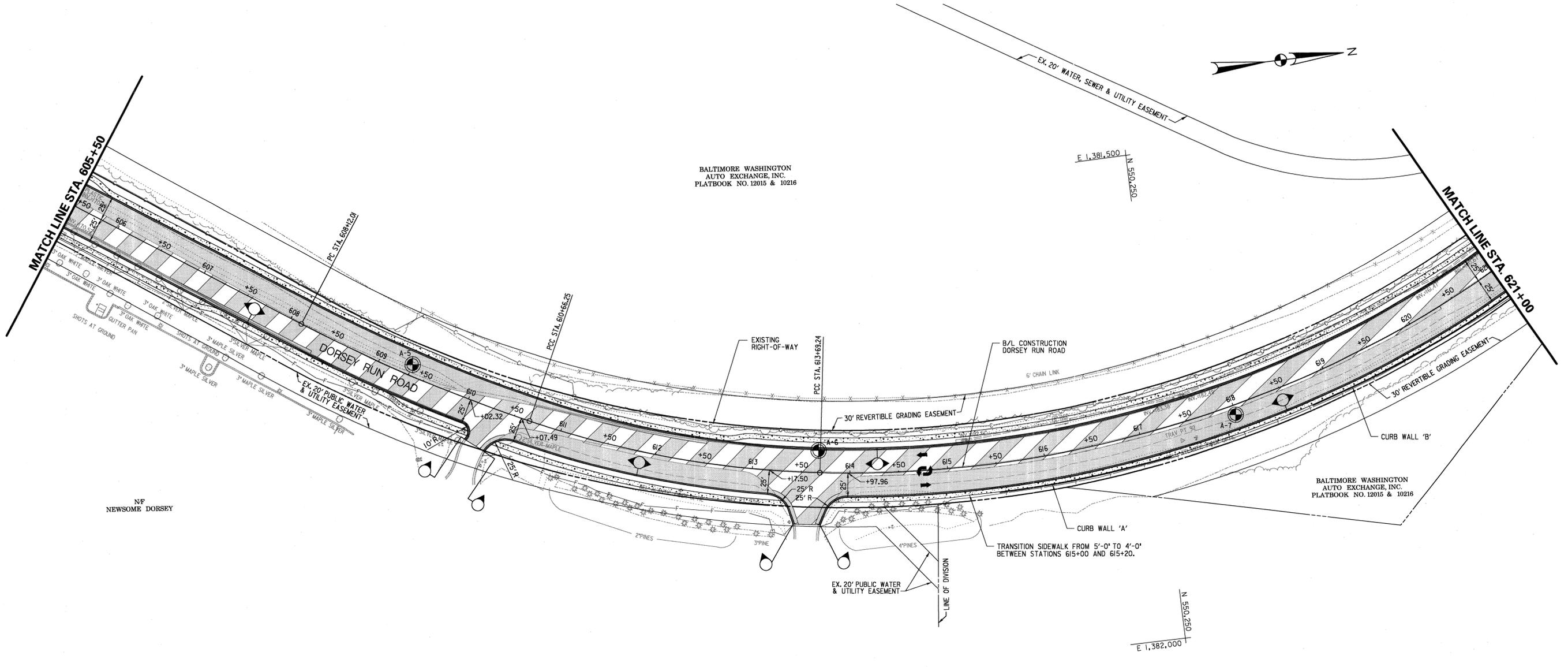
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
CAPITAL PROJECT J-4148-A

SCALE
AS SHOWN

SHEET
4 OF 84



BALTIMORE WASHINGTON
AUTO EXCHANGE, INC.
PLATBOOK NO. 12015 & 10216

BALTIMORE WASHINGTON
AUTO EXCHANGE, INC.
PLATBOOK NO. 12015 & 10216

N/P
NEWSOME DORSEY

HOWARD BUSINESS PARK
14169-14171

LEGEND

- FULL DEPTH PAVEMENT
- 2" GRIND & RESURFACE PAVEMENT
- REMOVE EXISTING PAVEMENT
- TO BE REMOVED
- STD. CURB & GUTTER (ARROW INDICATES DIRECTION)
- STD. TYPE A CURB & GUTTER (MD STD NO. 620.02)
- SOIL BORING
- CONCRETE SIDEWALK

SOIL BORING LOCATION				
NO.	NORTH	EAST	STATION	OFFSET
A5	549,499.702	1,381,623.927	609+33.47	11.23 LT
A6	549,901.149	1,381,762.295	613+67.42	22.64 LT
A7	550,329.106	1,381,777.561	617+99.36	9.99 RT

- NOTES:
- ALL BORINGS DRILLED BY EBA ENGINEERING, INC. IN JANUARY 2006.
 - DRILLING AND SAMPLING CONFORMS TO AASHTO DESIGNATION T-206.

CROSS REFERENCES

ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	13
GRADING & DRAINAGE PLAN	18
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	25 & 29
SIGNING & MARKING PLAN	35
MAINTENANCE OF TRAFFIC PLANS	41
UTILITY/STREET LIGHTING PLAN	45
LANDSCAPE PLAN	49

CURB WALL 'A' DATA					
STATION	OFFSET	TOP OF WALL	BOTTOM OF WALL	HEIGHT (FT)	REMARKS
615+50	29.58' RT	198.5		6"	BEGIN
616+00	29.58' RT	197.0		12"	
616+50	29.58' RT	195.2		15"	
617+00	29.58' RT	193.0		18"	
617+25	29.58' RT	191.0		6"	END

CURB WALL 'B' DATA					
STATION	OFFSET	TOP OF WALL	BOTTOM OF WALL	HEIGHT (FT)	REMARKS
618+75	29.58' RT	181.25		6"	BEGIN
619+00	29.58' RT	180.0		12"	
619+50	29.58' RT	176.0		12"	
620+00	29.58' RT	172.25		12"	
620+50	29.58' RT	167.8		12"	
621+00	29.58' RT	163.9		12"	
921+25	29.58' RT	162.0		6"	END

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16456 Expiration Date: 8/28/2010



DEPARTMENT OF PUBLIC WORKS
HARVARD COUNTY, MARYLAND

Director of Public Works: *Steve Sharan* 12/17/08
 Chief, Division of Transportation and Special Projects: *Steve Sharan* 12/16/08

Chief, Bureau of Engineering: *Willie J. Whittall* 12/17/08
 Chief, Bureau of Highways: *Willie J. Whittall* 12/17/08

PREPARED BY
URS
4 NORTH PARK DRIVE
HUNT VALLEY, MARYLAND
TEL: (410) 785-7220



DES:	CRC			
DRN:	CDP			
CHK:	DTM			
DATE:	12/15/08	BY:	NO.	
		REVISION		
		DATE		

ROADWAY PLAN
SEGMENT A

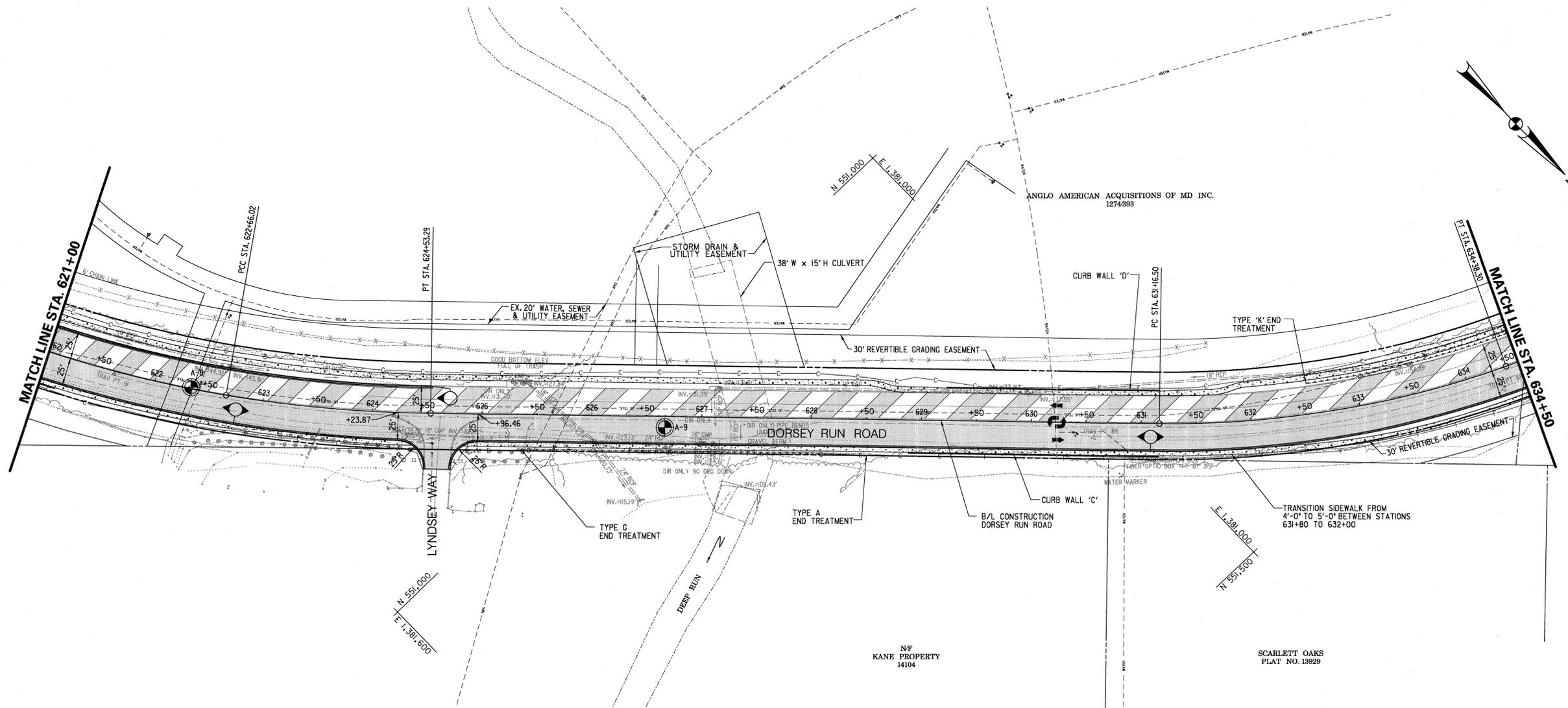
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
CAPITAL PROJECT J-4148-A

SCALE
AS SHOWN

SHEET
5 OF 84



CURB WALL 'C' DATA					
STATION	OFFSET	TOP OF WALL	BOTTOM OF WALL	HEIGHT (FT)	REMARKS
628+75	29.58' RT	138.25		6"	BEGIN
629+00	29.58' RT	139.5		18"	-
629+50	29.58' RT	141.0		18"	-
630+00	29.58' RT	143.5		24"	-
630+50	29.58' RT	146.5		24"	-
631+00	29.58' RT	149.0		18"	-
631+25	29.58' RT	150.0		6"	END

CURB WALL 'D' DATA					
STATION	OFFSET	TOP OF WALL	BOTTOM OF WALL	HEIGHT (FT)	REMARKS
629+25	29.58' LT	139.25			BEGIN
629+50	29.58' LT	141.00		18"	-
630+00	29.58' LT	143.0		18"	-
630+50	29.58' LT	145.5		24"	-
631+00	29.58' LT	147.0		12"	-
631+25	29.58' LT	147.0		6"	END

Professional Certification: I hereby certify that these documents were prepared or supervised by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16186, Expiration Date: 8-28-2010

SOIL BORING LOCATION				
NO.	NORTH	EAST	STATION	OFFSET
A8	550,720.821	1,381,592.195	622+33.54	1.37 LT
A9	551,046.463	1,381,307.302	626+66.58	9.79 Rt

- NOTES:
- ALL BORINGS DRILLED BY EBA ENGINEERING, INC. IN JANUARY 2006.
 - DRILLING AND SAMPLING CONFORMS TO AASHTO DESIGNATION T-206.



LEGEND	
	FULL DEPTH PAVEMENT
	2' GRIND & RESURFACE PAVEMENT
	REMOVE EXISTING PAVEMENT
	TO BE REMOVED
	STD. CURB & GUTTER (ARROW INDICATES DIRECTION)
	STD. TYPE A CURB & GUTTER (MD STD NO. 620.02)
	SOIL BORING
	CONCRETE SIDEWALK

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	14
GRADING & DRAINAGE PLAN	19
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	26 & 30
SIGNING & MARKING PLAN	36
MAINTENANCE OF TRAFFIC PLANS	42
UTILITY/STREET LIGHTING PLAN	46
LANDSCAPE PLAN	50

DEPARTMENT OF PUBLIC WORKS

Director of Public Works: Steve Shanar, DATE: 12/16/08

Chief, Bureau of Engineering: [Signature], DATE: 12/16/08

Chief, Division of Transportation and Special Projects: [Signature], DATE: 12-17-08

Chief, Bureau of Highways: [Signature], DATE: 12-17-08

PREPARED BY

URS

4 NORTH PARK DRIVE
HUNT VALLEY, MARYLAND
TEL: (410) 785-7220



DES:	CRC
DRN:	CDF
CHK:	DTM
DATE:	12/15/08
BY:	NO.
REVISION:	
DATE:	

ROADWAY PLAN
SEGMENT A

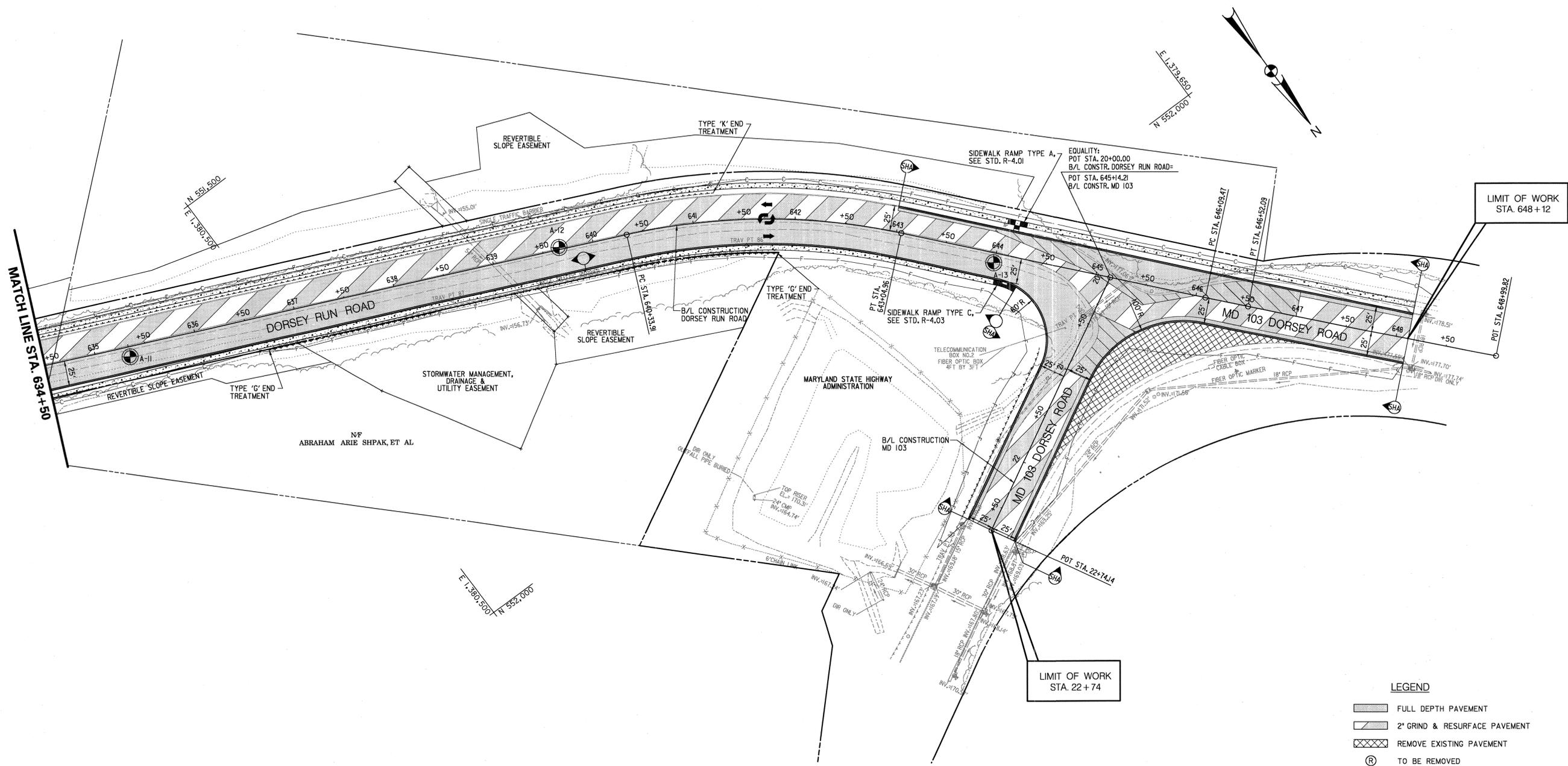
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
CAPITAL PROJECT J-4148-A

SCALE
AS SHOWN

SHEET
6 OF 84



LEGEND

- FULL DEPTH PAVEMENT
- 2" GRIND & RESURFACE PAVEMENT
- REMOVE EXISTING PAVEMENT
- TO BE REMOVED
- STD. CURB & GUTTER (ARROW INDICATES DIRECTION)
- STD. TYPE A CURB & GUTTER (MD STD NO. 620.02)
- SOIL BORING
- CONCRETE SIDEWALK

SOIL BORING LOCATION

NO.	NORTH	EAST	STATION	OFFSET
A11	551,584.401	1,380,633.763	635+33.14	9.91 RT
A12	551,750.837	1,380,233.383	639+66.57	2.12 LT
A13	552,017.744	1,379,901.455	643+99.55	9.55 RT

- NOTES:**
- ALL BORINGS DRILLED BY EBA ENGINEERING, INC. IN JANUARY 2006.
 - DRILLING AND SAMPLING CONFORMS TO AASHTO DESIGNATION T-206.
 - SIDEWALK RAMPS SHALL HAVE A DETECTABLE WARNING SURFACE EQUIVALENT TO MD SHA STD. 655.40.

CROSS REFERENCES

ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	15 & 16
GRADING & DRAINAGE PLAN	20
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	27 & 31
SIGNING & MARKING PLAN	37
MAINTENANCE OF TRAFFIC PLANS	43
UTILITY/STREET LIGHTING PLAN	47
LANDSCAPE PLAN	51

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156 Expiration Date: 8-28-2016



DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: Steve Sharav 12/16/08
 Chief, Bureau of Engineering: [Signature] 12/16/08
 Chief, Division of Transportation and Special Projects: [Signature] 12-17-08
 Chief, Bureau of Highways: [Signature] 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES: CRC			
DRN: CDF			
CHK: DTM			
DATE: 12/15/08	BY NO.	REVISION	DATE

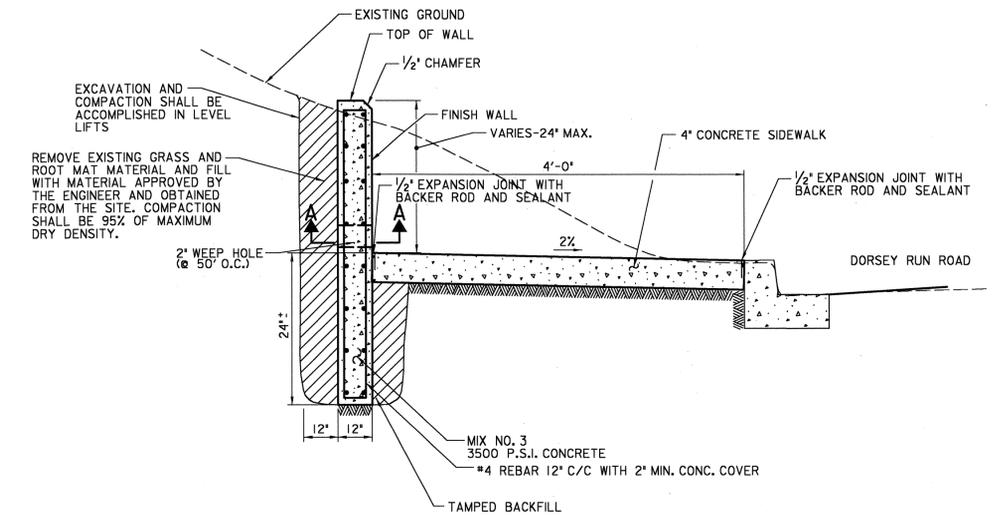
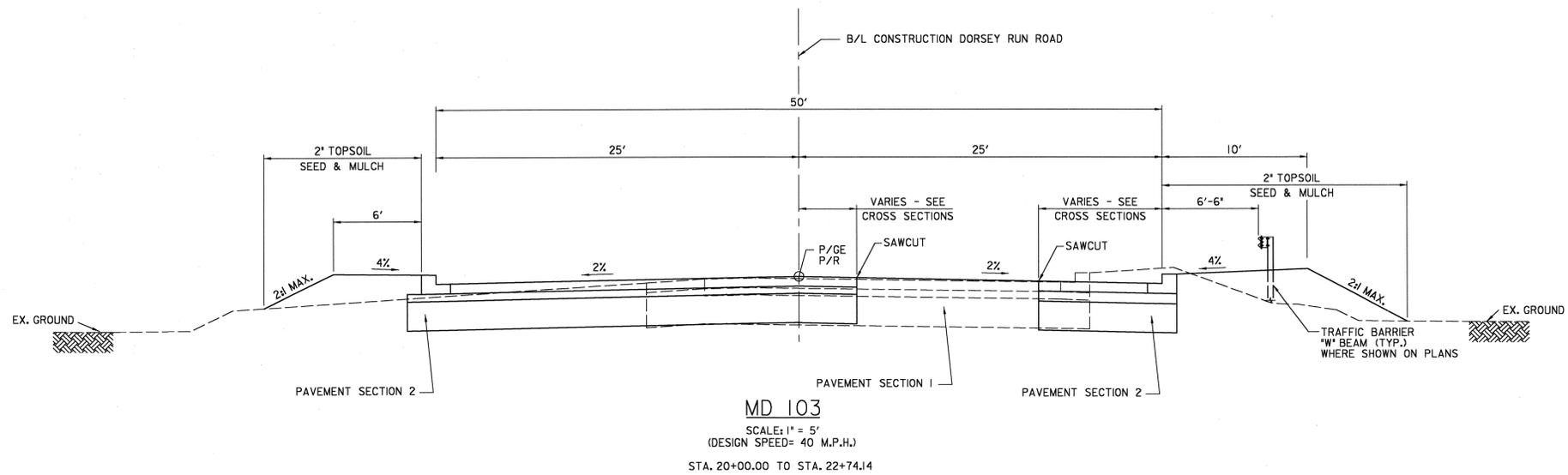
ROADWAY PLAN
 SEGMENT A

SCALE MAP NO. N/A BLOCK NO.

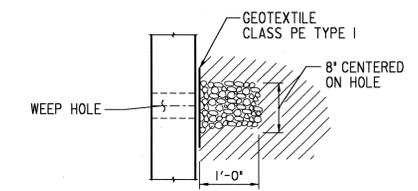
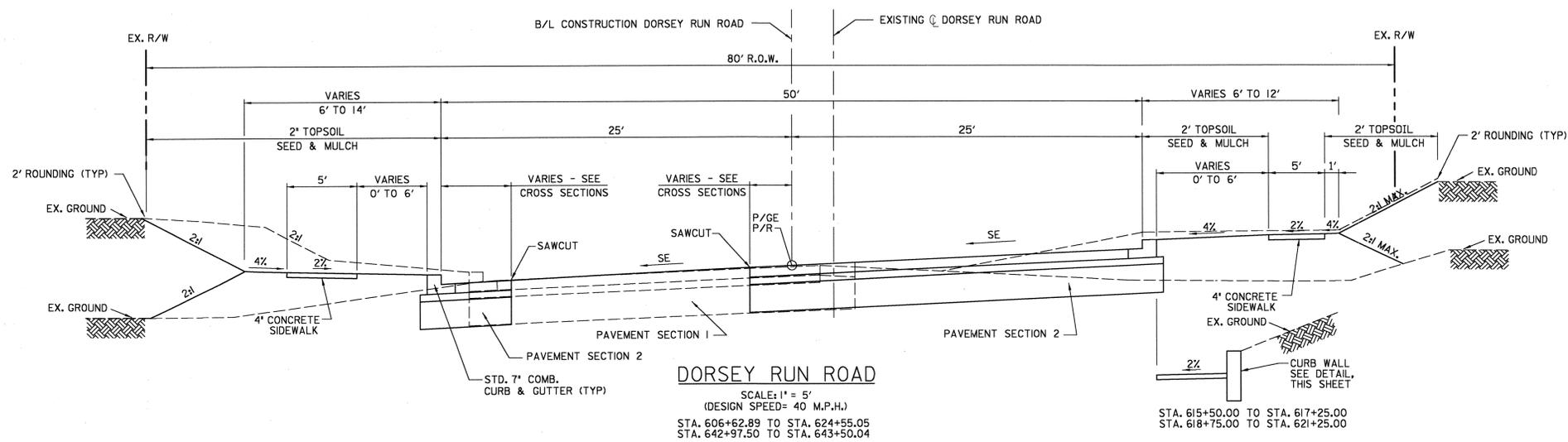
WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

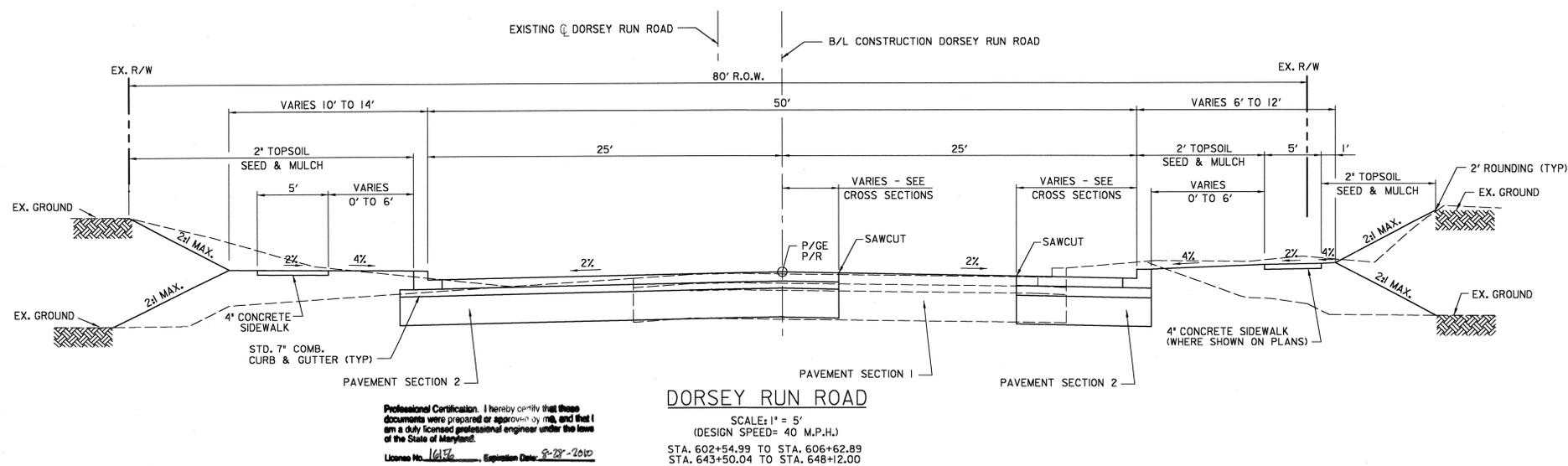
SCALE AS SHOWN
 SHEET 7 OF 84



CONCRETE CURB WALL
NOT TO SCALE



SECTION A-A
NOT TO SCALE
NOTE: GEOTEXTILE AND STONE EXTEND 3' ON BOTH SIDES OF WEEP HOLE



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 16152, Expiration Date: 9-28-2012

- GENERAL NOTES:
- SEE CROSS SECTIONS TO VARIATIONS TO THE TYPICAL SECTIONS.
 - SEE PLANS FOR LOCATIONS OF SHA CURB AND GUTTER.
 - ALL CONCRETE SIDEWALK SHALL CONFORM TO SHA SPECIFICATIONS.

DEPARTMENT OF PUBLIC WORKS

12/17/08
Steve Sharar
DIRECTOR OF PUBLIC WORKS
CHIEF, DIVISION OF TRANSPORTATION AND SPECIAL PROJECTS

12/16/08
W. J. Wall
CHIEF, BUREAU OF ENGINEERING
CHIEF, BUREAU OF HIGHWAYS

PREPARED BY
URS
4 NORTH PARK DRIVE
HUNT VALLEY, MARYLAND
TEL: (410) 785-7220



DES:	CRC				
DRN:	CDP				
CHK:	DTM				
DATE:	12/15/08	BY	NO.	REVISION	DATE

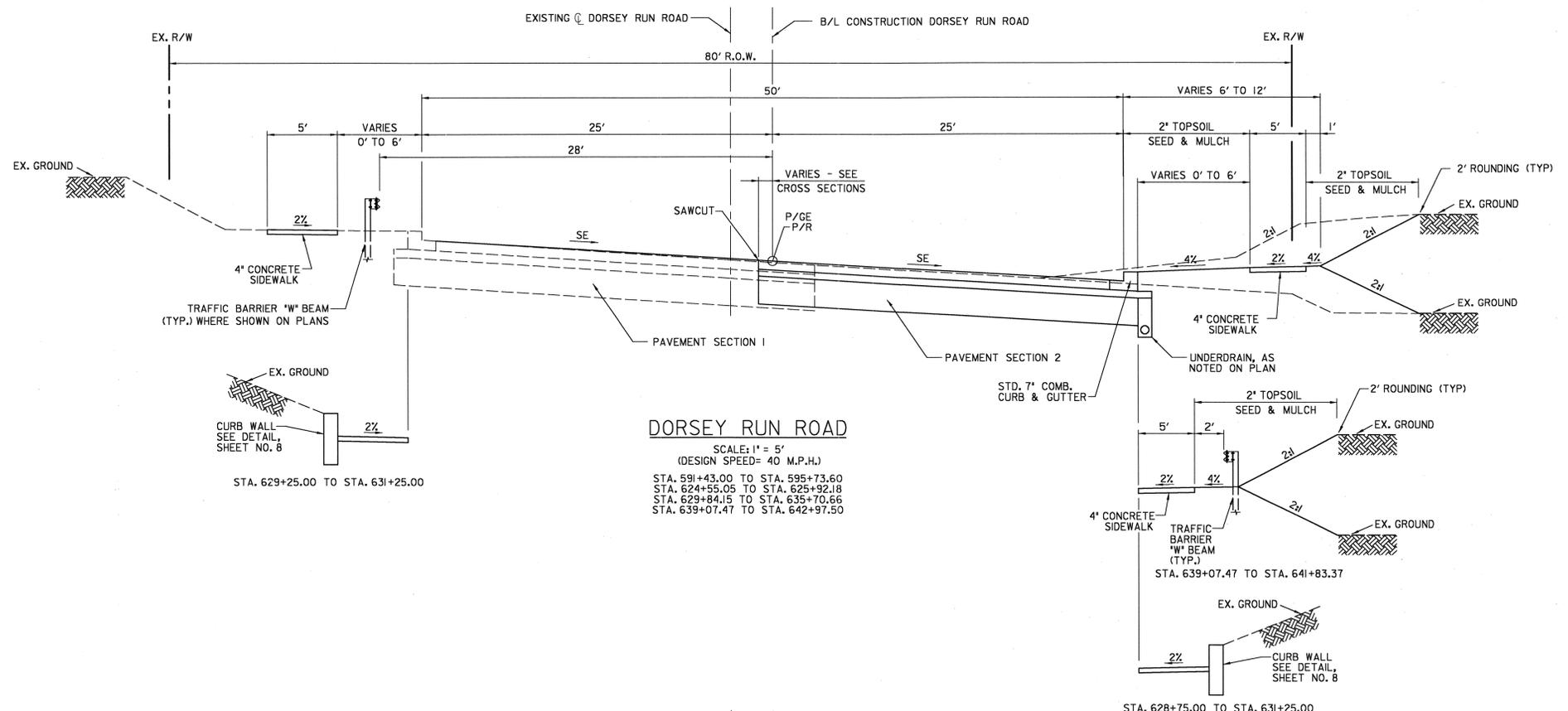
TYPICAL ROADWAY SECTIONS

WIDENING OF DORSEY RUN ROAD
STA. 591+43 TO STA. 648+12

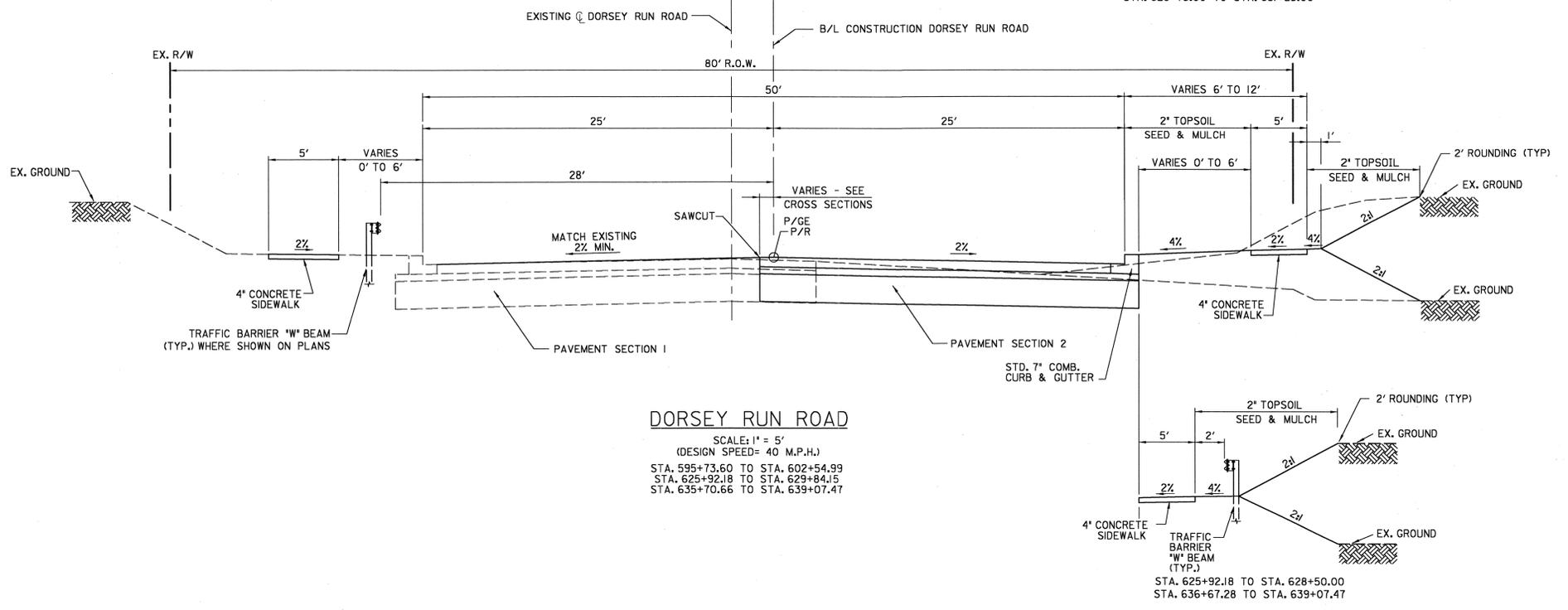
ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
CAPITAL PROJECT J-4148-A

SCALE
1" = 5'

SHEET
8 OF 84



DORSEY RUN ROAD
 SCALE: 1" = 5'
 (DESIGN SPEED= 40 M.P.H.)
 STA. 591+43.00 TO STA. 595+73.60
 STA. 624+55.05 TO STA. 625+92.18
 STA. 629+84.15 TO STA. 635+70.66
 STA. 639+07.47 TO STA. 642+97.50



DORSEY RUN ROAD
 SCALE: 1" = 5'
 (DESIGN SPEED= 40 M.P.H.)
 STA. 595+73.60 TO STA. 602+54.99
 STA. 625+92.18 TO STA. 629+84.15
 STA. 635+70.66 TO STA. 639+07.47

SUMMARY OF EARTHWORK						
BASELINE	CLASS 1 EXCAVATION		TOPSOIL		ROOTMAT	
	EXCAVATION	EMBANKMENT	CUT	FILL	CUT	FILL
DORSEY RUN ROAD	5.692	5.144	1.649	1.067	0	0
MD 103	172	465	25	79	0	0

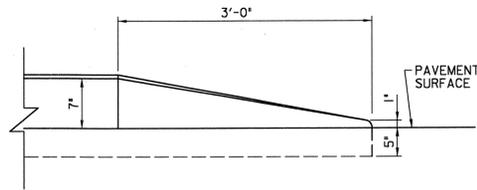
SUMMARY OF EARTHWORK

CLASS 1 EXCAVATION	
CLASS 1 EXCAVATION	5.864 CY
TOPSOIL REMOVED UNDER FILL	1.146 CY
ROOTMAT REMOVED UNDER FILL	0 CY
TOTAL CLASS 1 EXCAVATION	7.010 CY
CLASS 1 EXCAVATION AVAILABLE FOR EMBANKMENT	
TOTAL CLASS 1 EXCAVATION	5.864 CY
MINUS: TOPSOIL REMOVED IN CUT	1.674 CY
ROOTMAT REMOVED IN CUT	0 CY
SOIL EXCAVATION ADJUSTED	4.190 CY
SOIL EXCAVATION DENSIFIED (80%)	3.352 CY
CLASS 1 EXCAVATION AVAILABLE FOR EMBANKMENT	3.352 CY
EMBANKMENT REQUIRED	
EMBANKMENT	5.608 CY
REFILL FOR TOPSOIL REMOVED UNDER FILL	1.146 CY
REFILL FOR ROOTMAT REMOVED UNDER FILL	0 CY
EMBANKMENT ADJUSTED	6.754 CY
BORROW DENSIFICATION (25%)	1.689 CY
TOTAL EMBANKMENT REQUIRED	8.443 CY
BALANCE	
TOTAL EMBANKMENT REQUIRED	8.443 CY
MINUS: TOTAL CLASS 1 EXCAVATION AVAILABLE FOR EMBANKMENT	3.352 CY
BORROW	5.091 CY

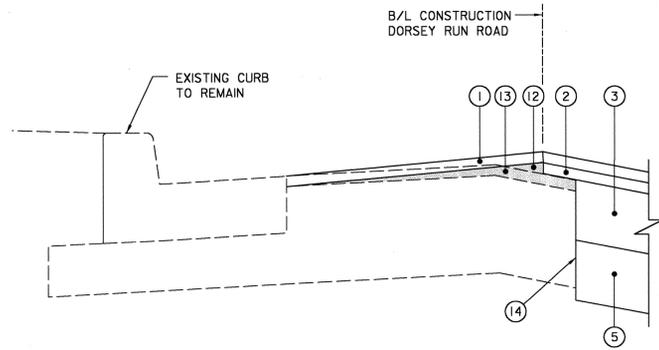
Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16162, Expiration Date: 8-28-2016

* VARIES - SEE CROSS SECTIONS

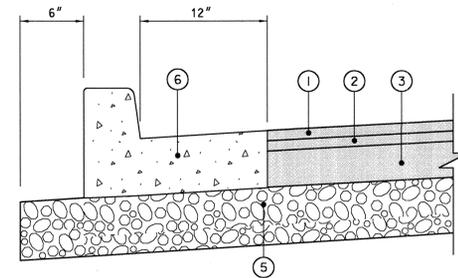
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director of Public Works: Steve Shagar, DATE: 12/16/08 Chief, Bureau of Engineering: [Signature], DATE: 12/16/08 Chief, Bureau of Highways: [Signature], DATE: 12-17-08	PREPARED BY URS 4 NORTH PARK DRIVE HUNT VALLEY, MARYLAND TEL: (410) 785-7220		DES: CRC				TYPICAL ROADWAY SECTIONS	WIDENING OF DORSEY RUN ROAD STA. 591+43 TO STA. 648+12 ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND CAPITAL PROJECT J-4148-A	SCALE 1" = 5'
			DRN: CDF						DATE: 12/15/08



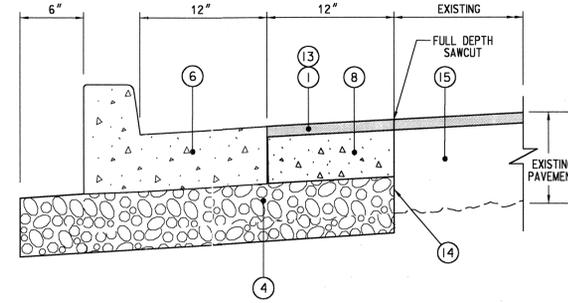
ELEVATION - CURB NOSE DOWN
DORSEY RUN ROAD
SCALE: 1" = 1'



PAVEMENT DETAIL 1
(WEDGE AND LEVEL)
NOT TO SCALE



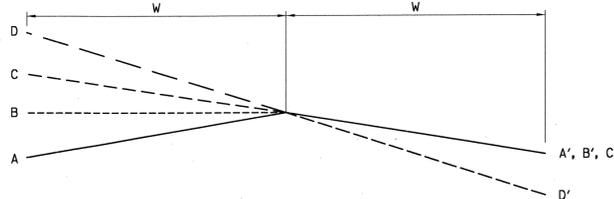
PAVEMENT DETAIL 2
(GRANULAR BASE)
NOT TO SCALE



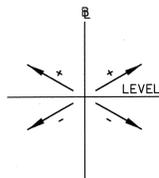
PAVEMENT DETAIL 3
(CURB REPLACEMENT AND RESURFACING DETAIL)
STA. 602+54.99 LT. TO STA. 603+36.11 LT.
STA. 604+22.53 RT. TO STA. 604+34.95 RT.
STA. 604+78.10 RT. TO STA. 604+85.88 RT.
STA. 608+36.71 RT. TO STA. 610+11.07 RT.
STA. 612+41.18 LT. TO STA. 624+54.84 LT.
STA. 642+97.50 LT. TO STA. 644+22.37 LT.
NOT TO SCALE

DETAIL LEGEND

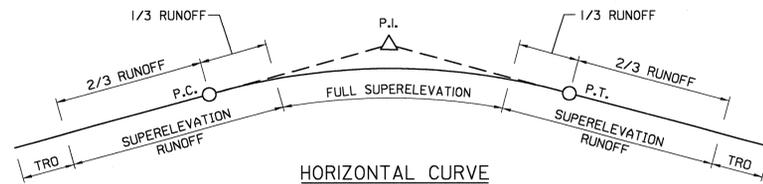
- ① 2" HOT MIX ASPHALT SUPERPAVE 12.5 mm FOR SURFACE, PG 64-22, LEVEL 2
- ② 2" HOT MIX ASPHALT SUPERPAVE 12.5 mm FOR BASE, PG 64-22, LEVEL 2
- ③ 4" HOT MIX ASPHALT SUPERPAVE 12.5 mm FOR BASE, PG 64-22, LEVEL 2
- ④ 6" GRADED AGGREGATE BASE (GAB)
- ⑤ 12" GRADED AGGREGATE BASE (2-6" LIFTS)
- ⑥ STANDARD 7" COMBINATION CURB AND GUTTER (R-3.0)
- ⑦ STANDARD TYPE 'A' COMBINATION CURB AND GUTTER (STD MD 620.02)
- ⑧ 6" MOD. MIX 6 PORTLAND CEMENT CONCRETE STRIP
- ⑨ 3" GRADED AGGREGATE BASE (GAB)
- ⑩ TOP OF EXISTING PAVEMENT PRIOR TO 2" MILLING
- ⑪ TOP OF EXISTING PAVEMENT AFTER 2" MILLING
- ⑫ VARIABLE DEPTH BITUMINOUS CONCRETE FOR WEDGE AND LEVEL
- ⑬ 2" GRINDING
- ⑭ FULL DEPTH SAWCUT
- ⑮ EX. PAVEMENT



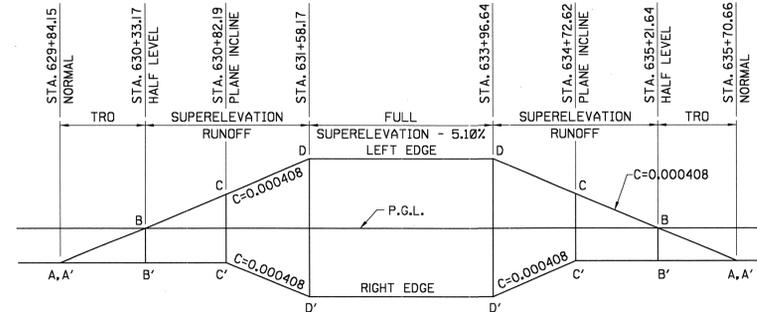
CROSS SECTION



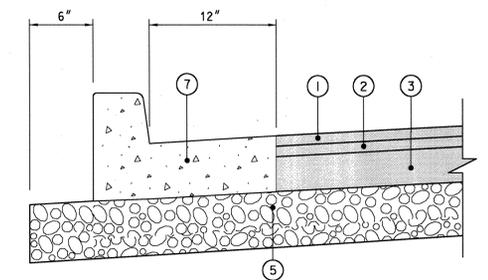
SUPERELEVATION SIGN CONVENTION



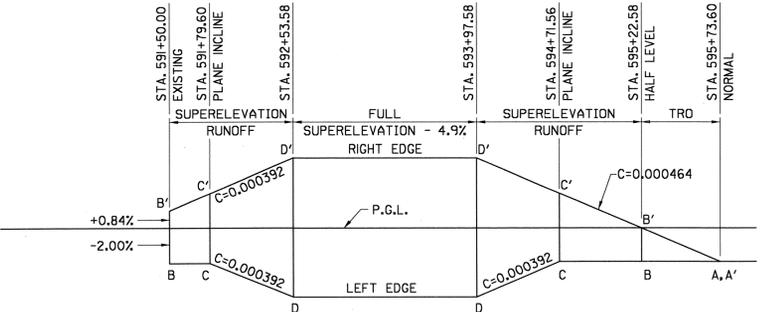
HORIZONTAL CURVE



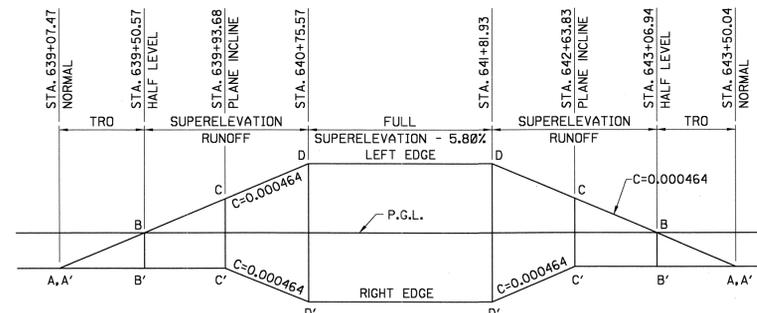
EDGE PROFILES (DRA-7)



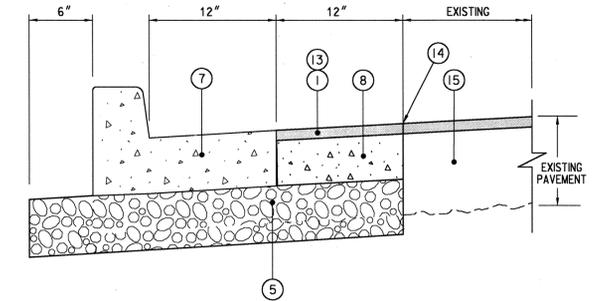
PAVEMENT DETAIL 4 (SHA HEAVY DUTY)
(GRANULAR BASE)
NOT TO SCALE



EDGE PROFILES (CURVE DRA-1)



EDGE PROFILES (DRA-8)



PAVEMENT DETAIL 5 (SHA)
(CURB REPLACEMENT AND RESURFACING DETAIL)
NOT TO SCALE

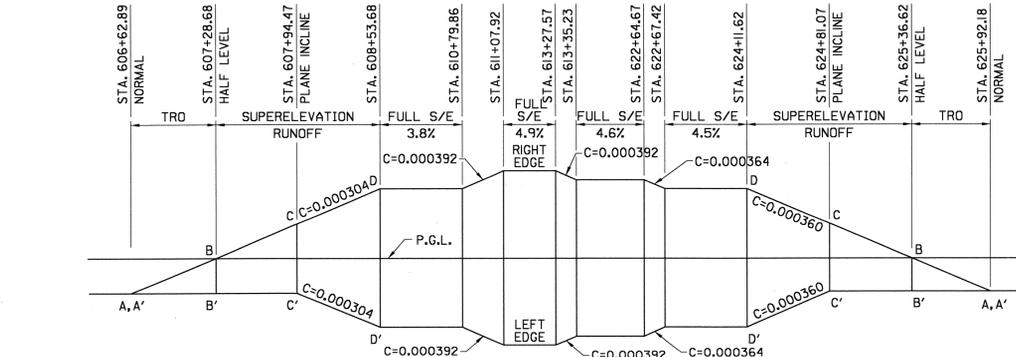
SUPERELEVATION DATA
DORSEY RUN ROAD

STATION	REMARKS	CROSS SLOPE		FACTORS FT./FT.
		LT./RT.	RT./LT.	
POT 591+50.00	MATCH EXISTING ROADWAY CROSS SLOPE	-2.00	0.84	
PC 591+79.60	PLANE INCLINE	-2.00	2.00	
POC 592+53.58	FIRST FULL SUPER	-4.90	4.90	C=0.000392
POC 593+97.58	LAST FULL SUPER	-4.90	4.90	
PT 594+71.56	PLANE INCLINE	-2.00	2.00	
PT 595+73.60	FIRST NORMAL	-2.00	-2.00	
PC 606+62.89	LAST NORMAL	-2.00	-2.00	
PC 607+94.47	PLANE INCLINE	-2.00	2.00	C=0.000304
POC 608+53.68	FIRST FULL SUPER	-3.80	3.80	
POC 610+79.86	LAST FULL SUPER	-3.80	3.80	C=0.000392
POC 611+07.92	FIRST FULL SUPER	-4.90	4.90	
POC 613+27.57	LAST FULL SUPER	-4.90	4.90	C=0.000392
POC 613+35.23	FIRST FULL SUPER	-4.60	4.60	
POC 622+64.67	LAST FULL SUPER	-4.60	4.60	C=0.000364
POC 622+67.42	FIRST FULL SUPER	-4.50	4.50	
POC 624+11.62	LAST FULL SUPER	-4.50	4.50	
PT 624+81.07	PLANE INCLINE	-2.00	2.00	C=0.000360
PT 625+92.18	FIRST NORMAL	-2.00	-2.00	
PC 629+84.15	LAST NORMAL	-2.00	-2.00	
PC 630+82.19	PLANE INCLINE	-2.00	2.00	
POC 631+58.17	FIRST FULL SUPER	-5.10	5.10	C=0.000408
POC 633+96.64	LAST FULL SUPER	-5.10	5.10	
PT 634+72.62	PLANE INCLINE	-2.00	2.00	
PT 635+70.66	FIRST NORMAL	-2.00	-2.00	
PC 639+07.47	LAST NORMAL	-2.00	-2.00	
PC 639+93.68	PLANE INCLINE	2.00	-2.00	
POC 640+75.57	FIRST FULL SUPER	5.80	-5.80	C=0.000464
POC 641+81.93	LAST FULL SUPER	5.80	-5.80	
PT 642+63.83	PLANE INCLINE	2.00	-2.00	
PT 643+50.04	FIRST NORMAL	-2.00	-2.00	
POT 648+00.00	MATCH EXISTING ROADWAY CROSS SLOPE	-2.00	-2.00	

LEGEND

P.C. - POINT OF CURVATURE
P.T. - POINT OF TANGENCY
TRO - TANGENT RUNOFF
P.G.L. - PROFILE GRADE LINE

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 16152, Expiration Date: 8-24-2016



EDGE PROFILES (CURVES DRA-3 THRU DRA-6)

SUPERELEVATION DIAGRAMS
NOT TO SCALE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works
Steve Sharan 12/16/08

Chief, Bureau of Engineering
W. J. Wilson 12-17-08

PREPARED BY
URS
4 NORTH PARK DRIVE
HUNT VALLEY, MARYLAND
TEL: (410) 785-7220



DES: CRC
DRN: CDF
CHK: DTM
DATE: 12/15/08

BY	NO.	REVISION	DATE

TYPICAL DETAILS

SCALE MAP NO. N/A BLOCK NO.

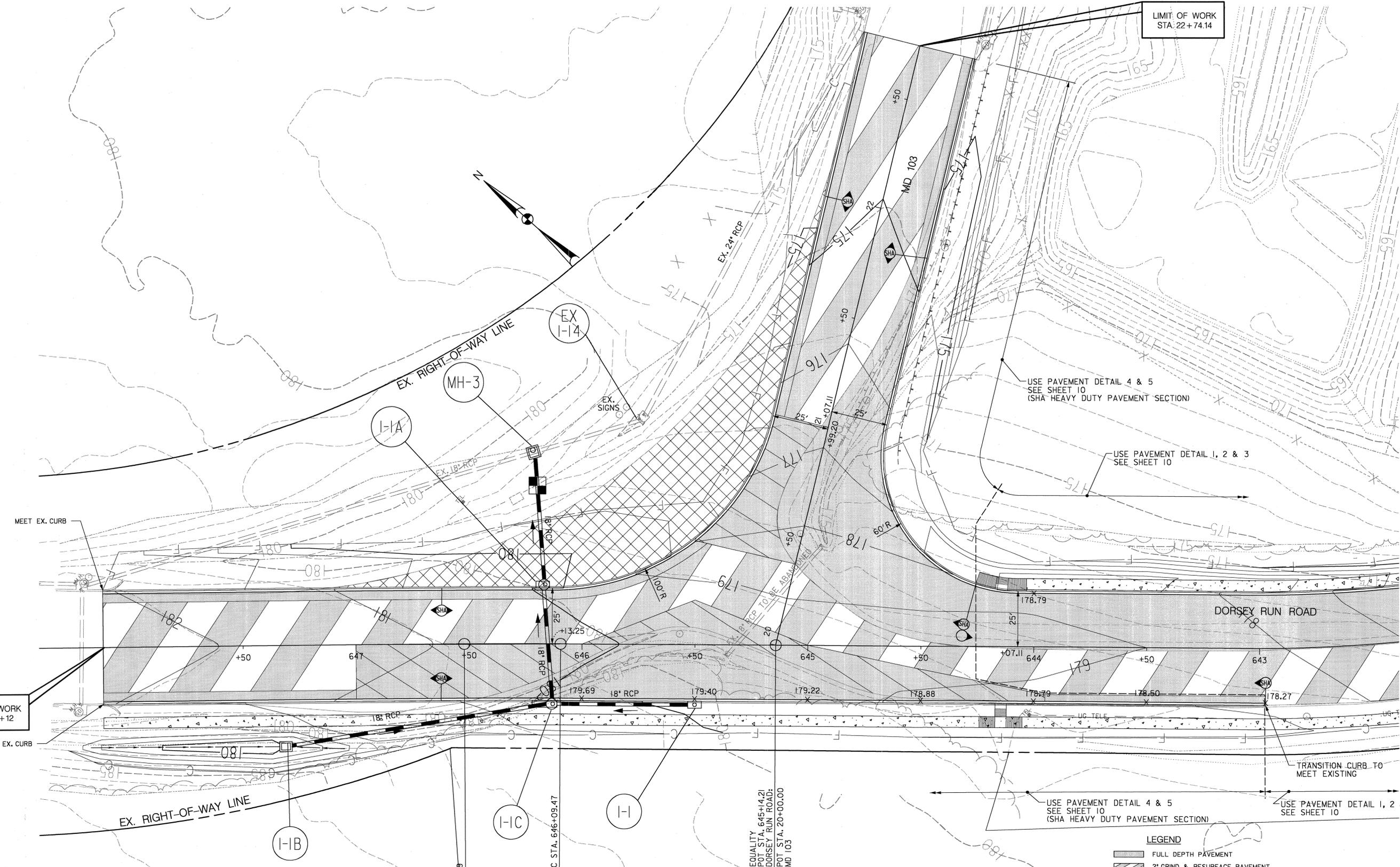
WIDENING OF DORSEY RUN ROAD
STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
CAPITAL PROJECT J-4148-A

SCALE
AS SHOWN
SHEET
10 OF 84

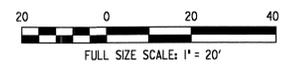
LIMIT OF WORK
STA. 22+74.14

LIMIT OF WORK
STA. 648+12



Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 161526, Expiration Date: 8-28-2010

- NOTES:
- ALL CURB LOCATIONS ARE SHOWN TO THE BOTTOM FACE OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
 - SEE UTILITY PLANS FOR UTILITY INFORMATION.
 - SEE GRADING AND DRAINAGE PLANS AND DRAINAGE PROFILES FOR DRAINAGE INFORMATION.



LEGEND

	FULL DEPTH PAVEMENT
	2\"/>
	CONCRETE SIDEWALK
	REMOVE EXISTING PAVEMENT
	STANDARD 7\"/>
	STANDARD TYPE 'A' CURB AND GUTTER (MD STD. 620.02)
	TEST PIT

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: *Steve Sharar* 12/16/08
Date: 12/16/08

Chief, Bureau of Engineering: *Paul J. Mason* 12/16/08
Date: 12/16/08

Chief, Bureau of Highways: *W. Williams* 12-17-08
Date: 12-17-08

PREPARED BY
URS
4 NORTH PARK DRIVE
HUNT VALLEY, MARYLAND
TEL: (410) 785-7220



DES:	CRC				
DRN:	CDF				
CHK:	DTM				
DATE:	12/15/08	BY:	NO.	REVISION	DATE

INTERSECTION DETAIL

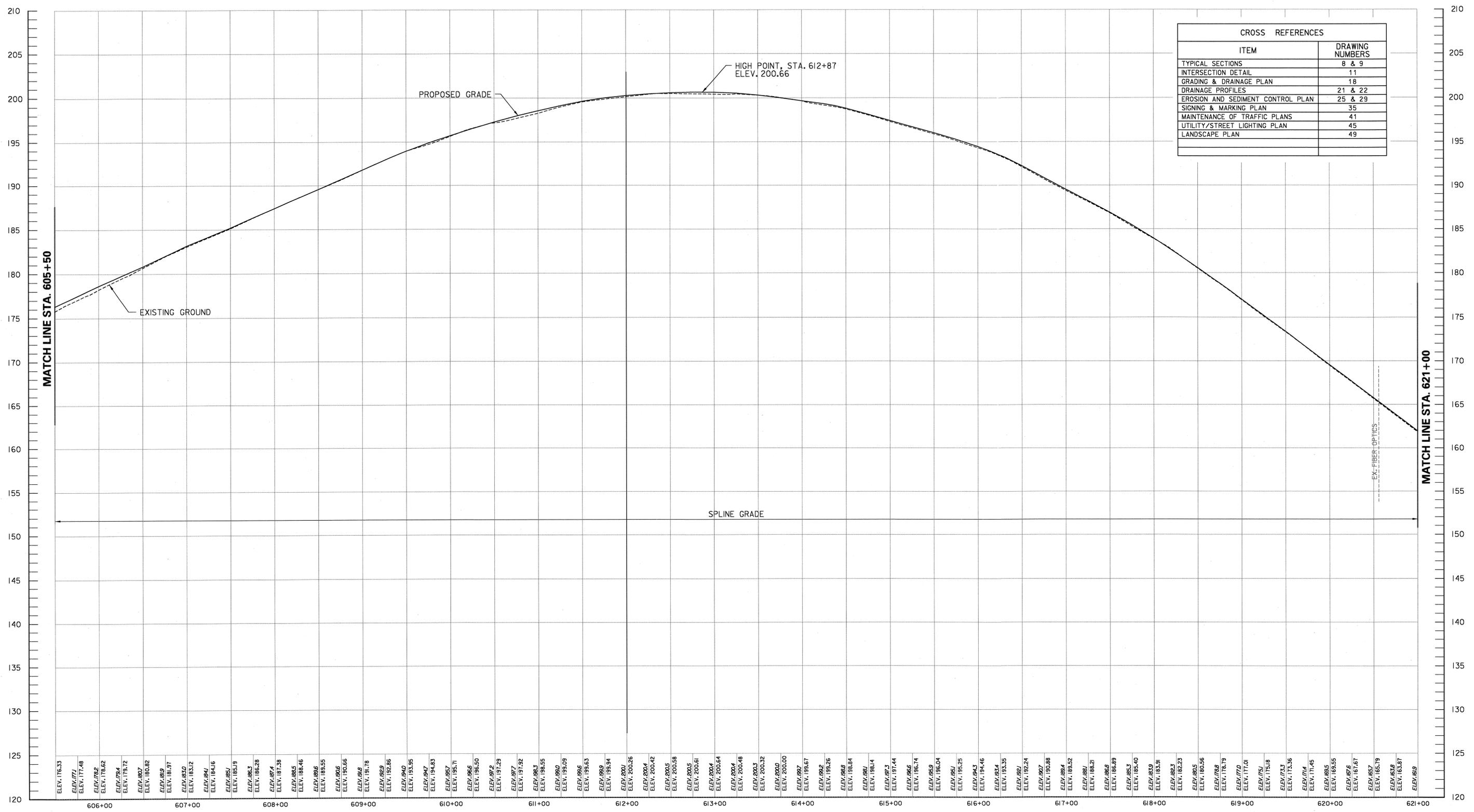
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
CAPITAL PROJECT J-4148-A

SCALE
AS SHOWN

SHEET
11 OF 84

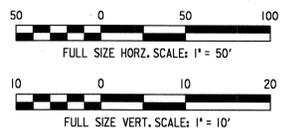


CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
GRADING & DRAINAGE PLAN	18
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	25 & 29
SIGNING & MARKING PLAN	35
MAINTENANCE OF TRAFFIC PLANS	41
UTILITY/STREET LIGHTING PLAN	45
LANDSCAPE PLAN	49

MATCH LINE STA. 605+50

MATCH LINE STA. 621+00

DORSEY RUN ROAD



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16166, Expiration Date: 9-28-2016

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: Steve Shayan, 12/16/08
 Chief, Division of Transportation and Special Projects: Steve Shayan, 12/16/08
 Chief, Bureau of Engineering: [Signature], 12/16/08
 Chief, Bureau of Highways: [Signature], 12-17-08

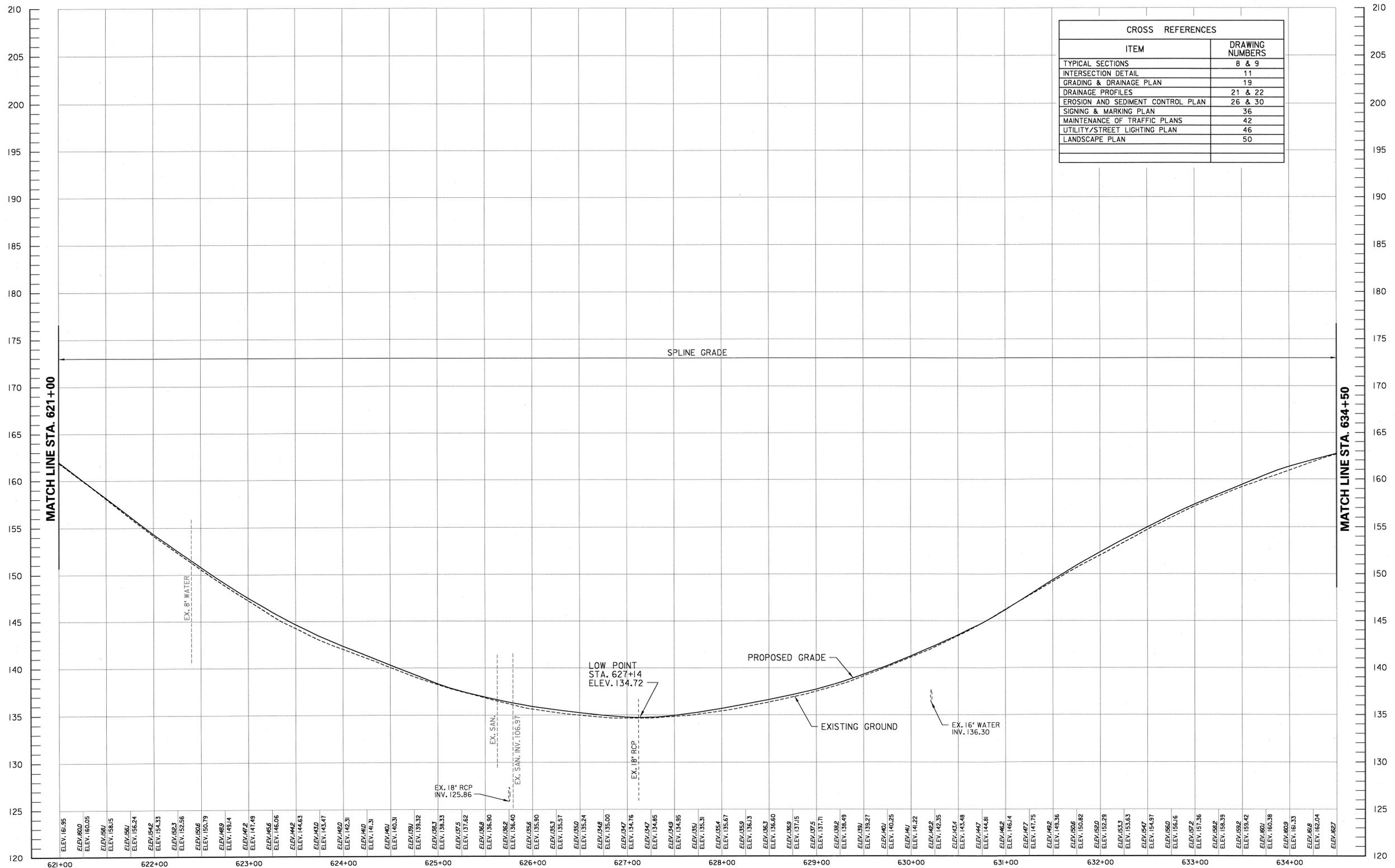


DES:	CRC
DRN:	CDF
CHK:	DTM
DATE:	12/15/08
BY:	NO.
REVISION:	DATE

ROADWAY PROFILE
 SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12
 ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

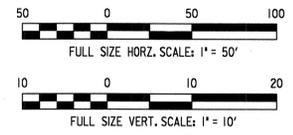
SCALE AS SHOWN
 SHEET 13 OF 84



CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
GRADING & DRAINAGE PLAN	19
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	26 & 30
SIGNING & MARKING PLAN	36
MAINTENANCE OF TRAFFIC PLANS	42
UTILITY/STREET LIGHTING PLAN	46
LANDSCAPE PLAN	50

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156, Expiration Date: 2-28-2010

DORSEY RUN ROAD



DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: Steve Shawan, 12/16/08
 Chief, Division of Transportation and Special Projects

Prepared by: URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220

Chief, Bureau of Engineering: [Signature], 12/16/08
 Chief, Bureau of Highways: [Signature], 12-17-08

DES: CRC
 DRN: CDF
 CHK: DTM
 DATE: 12/15/08



NO.	REVISION	DATE

ROADWAY PROFILE

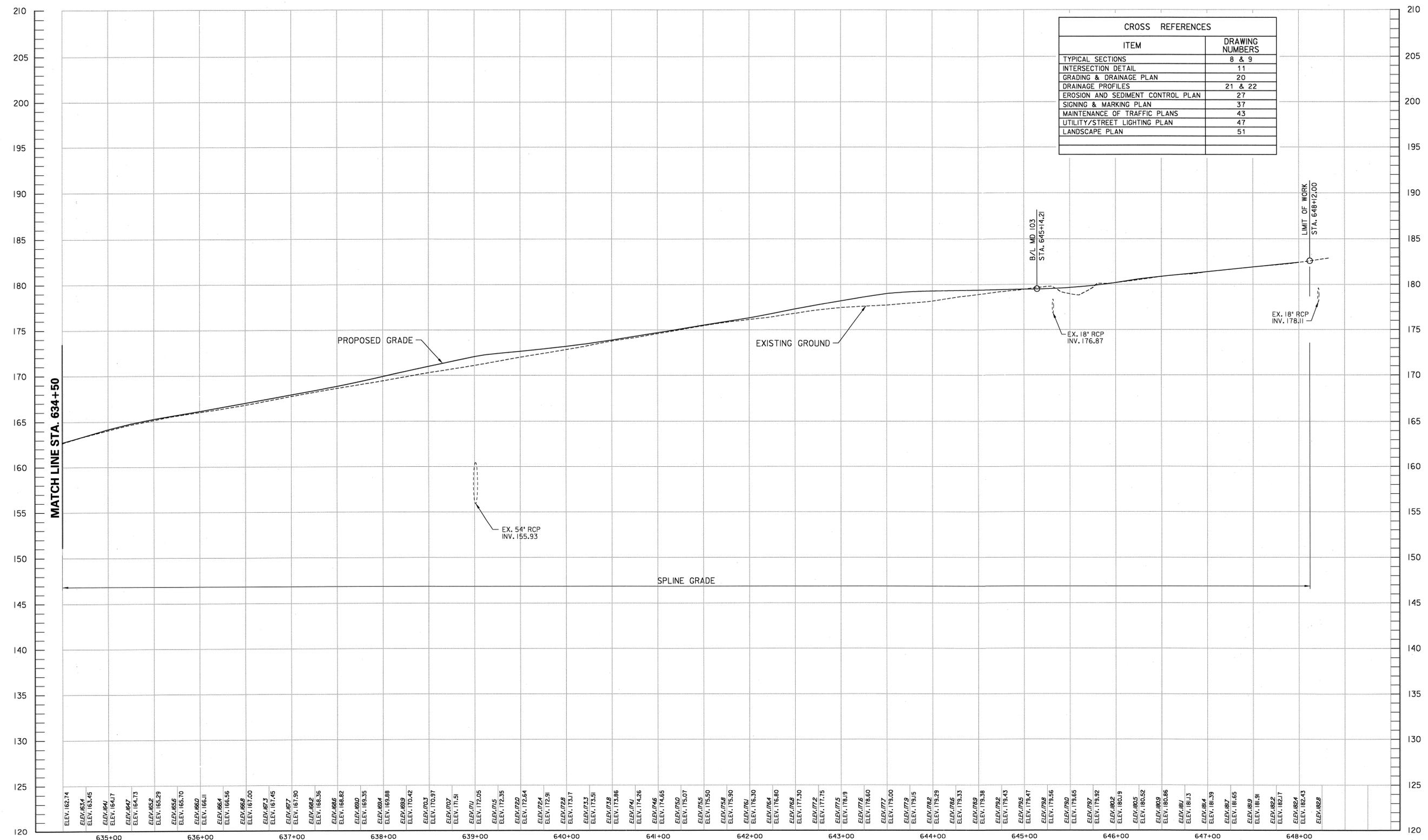
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE AS SHOWN

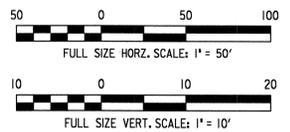
SHEET 14 OF 84



CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
GRADING & DRAINAGE PLAN	20
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	27
SIGNING & MARKING PLAN	37
MAINTENANCE OF TRAFFIC PLANS	43
UTILITY/STREET LIGHTING PLAN	47
LANDSCAPE PLAN	51

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156, Expiration Date: 8-28-2010

DORSEY RUN ROAD



DEPARTMENT OF PUBLIC WORKS

Director of Public Works: Steve Shaper, 12/16/08
 Chief, Division of Transportation and Special Projects

Chief, Bureau of Engineering: [Signature], 12/16/08
 Chief, Bureau of Highways: [Signature], 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES: CRC			
DRN: CDF			
CHK: DTM			
DATE: 12/15/08	BY: NO.	REVISION	DATE

ROADWAY PROFILE

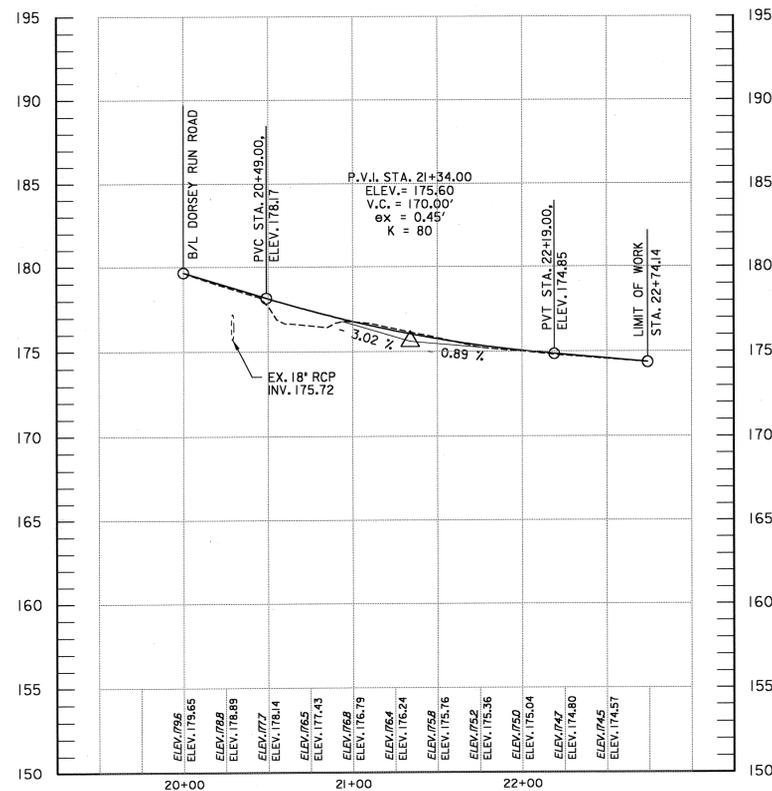
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE AS SHOWN

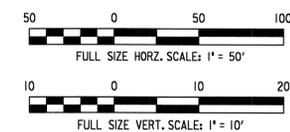
SHEET 15 OF 84



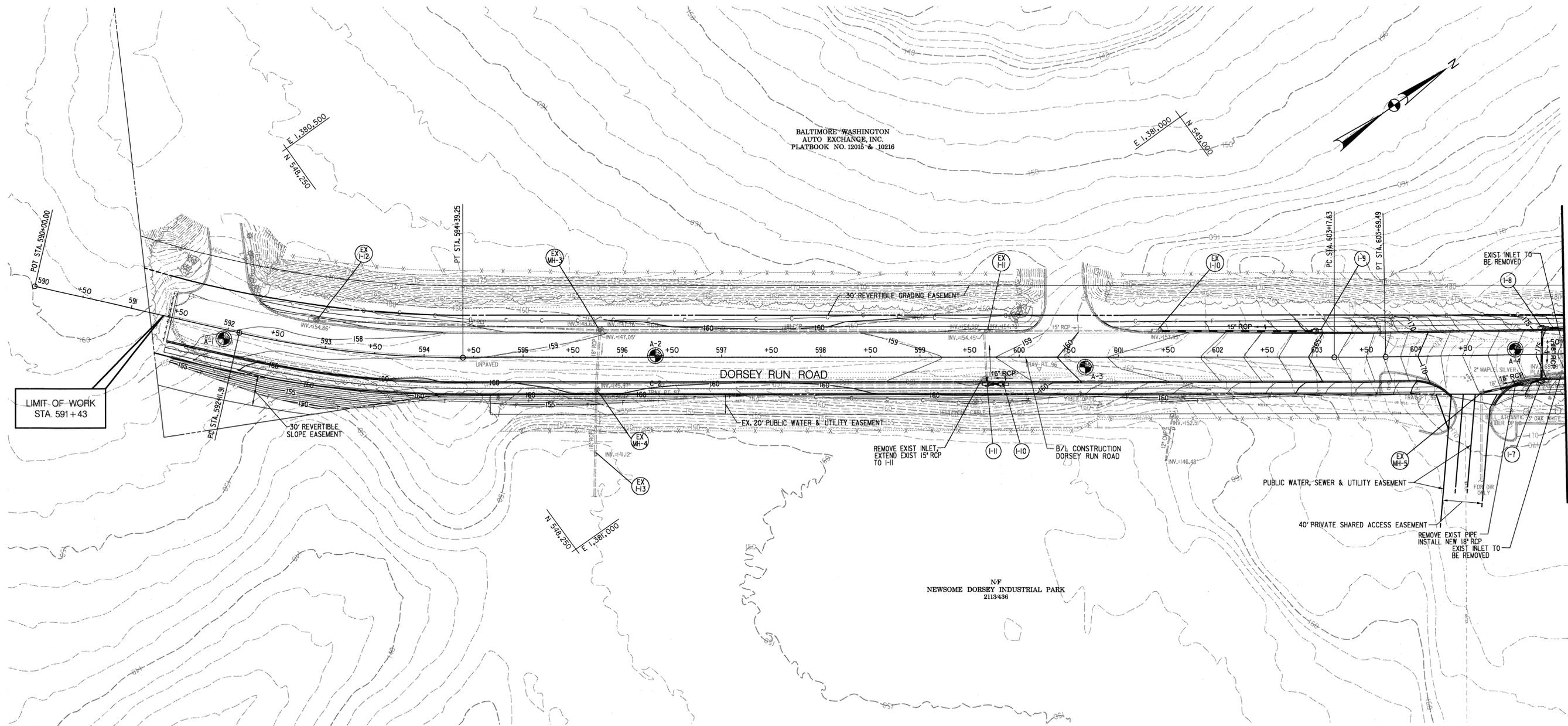
MD 103

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
GRADING & DRAINAGE PLAN	20
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	27 & 31
SIGNING & MARKING PLAN	37
MAINTENANCE OF TRAFFIC PLANS	43
UTILITY/STREET LIGHTING PLAN	47
LANDSCAPE PLAN	51

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16137, Expiration Date: 8-28-2016



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director of Public Works: Steve Shaner 12/16/08 Chief, Division of Transportation and Special Projects: Steve Shaner 12/16/08	PREPARED BY URS 4 NORTH PARK DRIVE HUNT VALLEY, MARYLAND TEL: (410) 785-7220		DES: CRC			ROADWAY PROFILE	WIDENING OF DORSEY RUN ROAD STA. 591+43 TO STA. 648+12 ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND CAPITAL PROJECT J-4148-A	SCALE AS SHOWN
			DRN: CDF					DATE: 12/15/08



LIMIT OF WORK
STA. 591+43

MATCH LINE STA. 605+12

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 16196, Expiration Date: 8-18-2010



CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	12
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	24 & 28
SIGNING & MARKING PLAN	34
MAINTENANCE OF TRAFFIC PLANS	40
UTILITY/STREET LIGHTING PLAN	44
LANDSCAPE PLAN	48

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Steve Shear 12/16/08
DIRECTOR OF PUBLIC WORKS DATE

William J. Mahall 12-17-09
CHIEF, BUREAU OF HIGHWAYS DATE

PREPARED BY
URS
4 NORTH PARK DRIVE
HUNT VALLEY, MARYLAND
TEL: (410) 785-7220



DES: CRC			
DRN: CDF			
CHK: DTM			
DATE: 12/15/08			
BY	NO.	REVISION	DATE

GRADING AND DRAINAGE PLAN

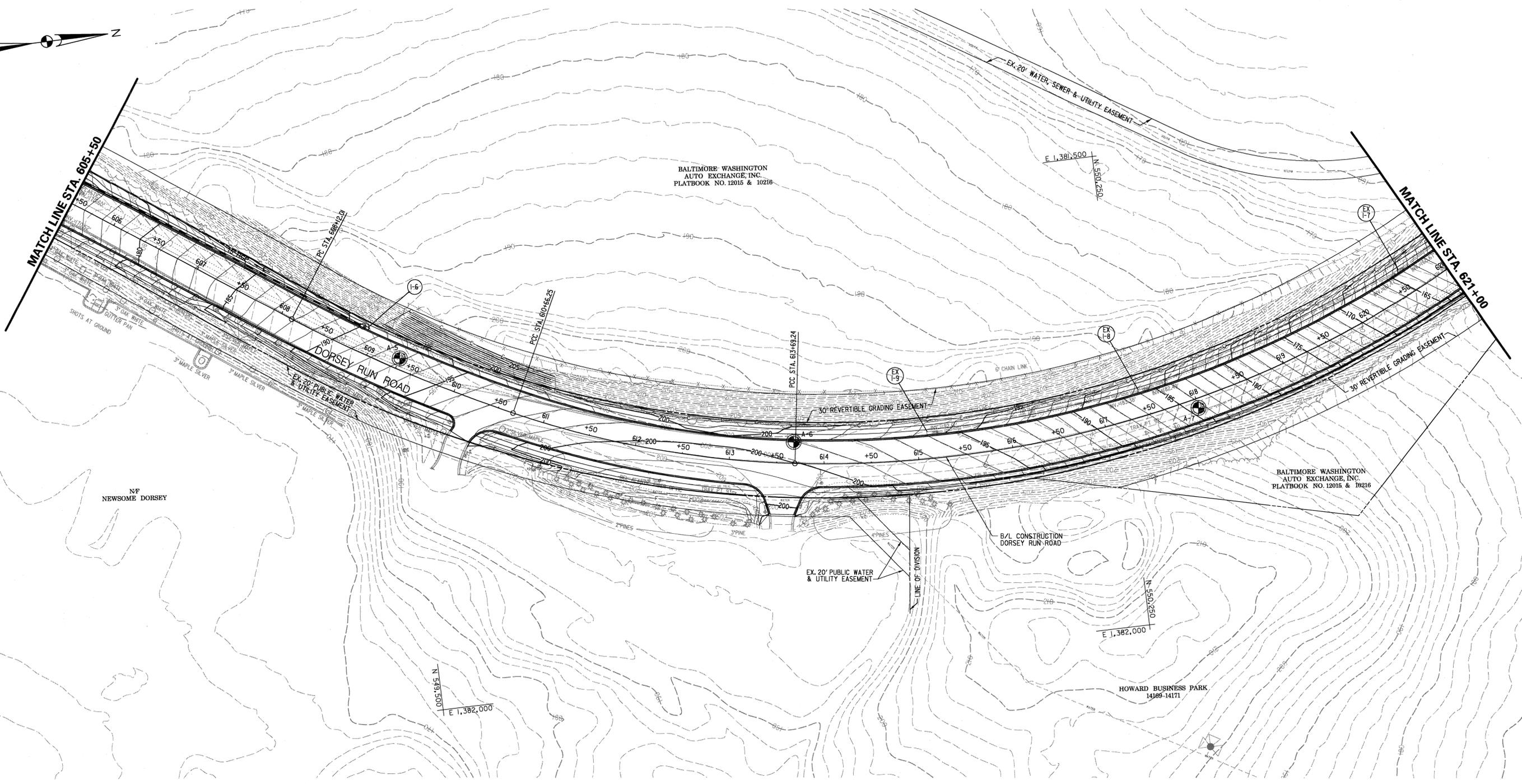
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
CAPITAL PROJECT J-4148-A

SCALE
AS SHOWN

SHEET
17 OF 84



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156 Expiration Date: 8-28-2010



CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	13
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	25 & 29
SIGNING & MARKING PLAN	35
MAINTENANCE OF TRAFFIC PLANS	41
UTILITY/STREET LIGHTING PLAN	45
LANDSCAPE PLAN	49

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: *Ken J. H.* 12/17/08
 Steve Shuman 12/16/08
 CHIEF, DIVISION OF TRANSPORTATION AND SPECIAL PROJECTS

Chief, Bureau of Engineering: *William J. Mason* 12/16/08
 Chief, Bureau of Highways: *William J. Mason* 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	CRC			
DRN:	CDF			
CHK:	DTM			
DATE:	12/15/08	BY	NO.	REVISION

GRADING AND DRAINAGE PLAN

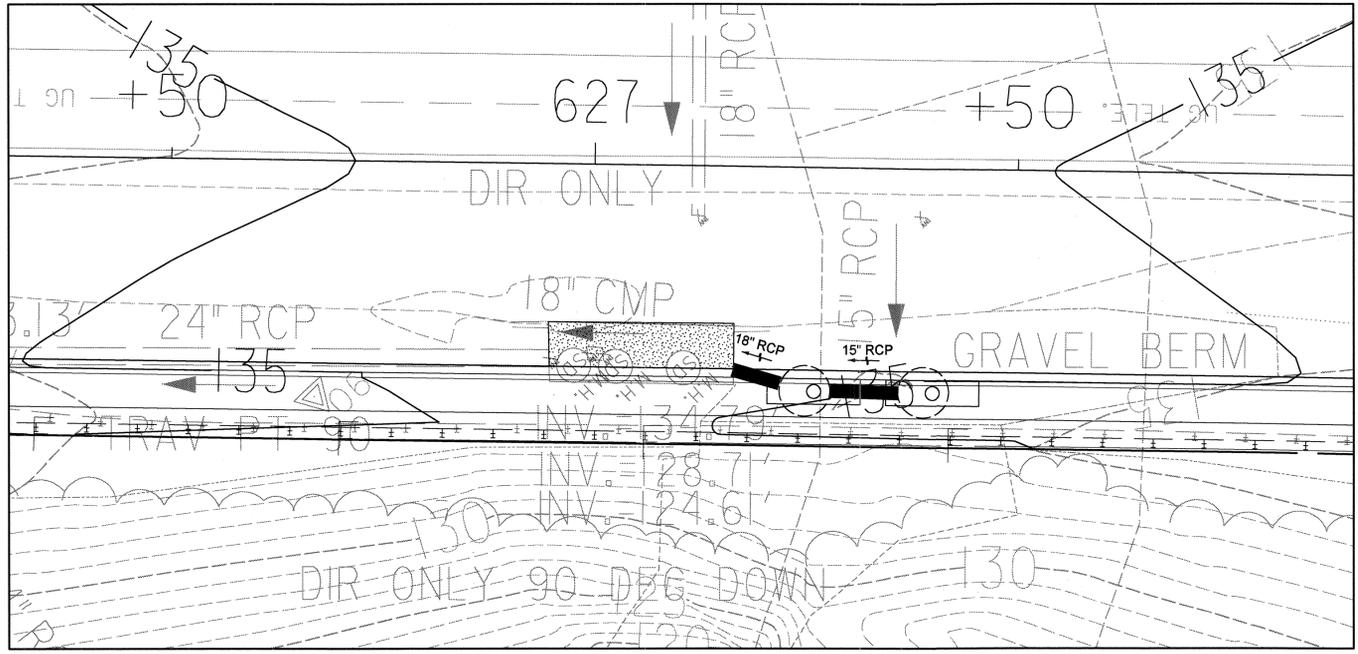
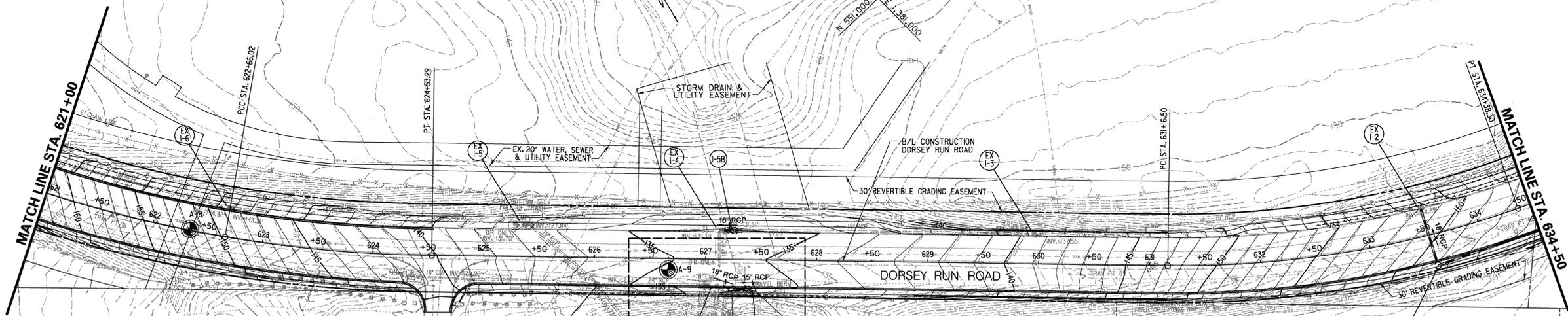
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 AS SHOWN

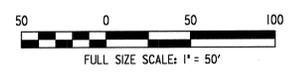
SHEET
 18 OF 84



EXISTING WATER QUALITY CONTROL STRUCTURE (S-2)
SCALE: 1" = 10'

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	14
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	26 & 30
SIGNING & MARKING PLAN	36
MAINTENANCE OF TRAFFIC PLANS	42
UTILITY/STREET LIGHTING PLAN	46
LANDSCAPE PLAN	50

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 16163 Expiration Date: 9-27-2016



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Director of Public Works: Steve Sharau 12/16/08
DATE: 12/16/08
CHIEF, BUREAU OF ENGINEERING: [Signature] 12/16/08
DATE: 12/16/08
CHIEF, BUREAU OF HIGHWAYS: [Signature] 12/17-12-08
DATE: 12/17-12-08

PREPARED BY
URS
4 NORTH PARK DRIVE
HUNT VALLEY, MARYLAND
TEL: (410) 785-7220

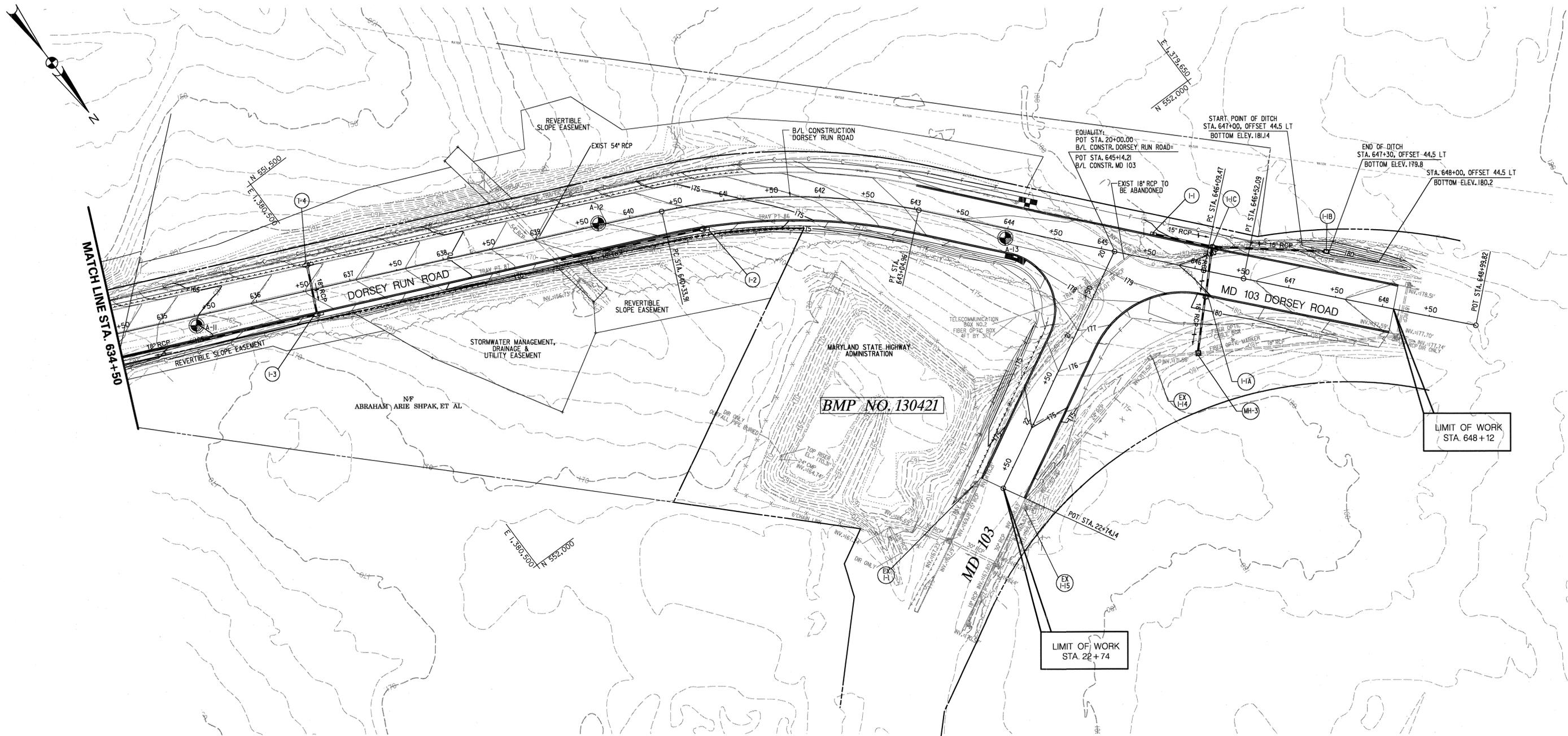


DES: CRC			
DRN: CDF			
CHK: DTM			
DATE: 12/15/08	BY NO.	REVISION	DATE

GRADING AND DRAINAGE PLAN
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
STA. 591+43 TO STA. 648+12
ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
CAPITAL PROJECT J-4148-A

SCALE AS SHOWN
SHEET 19 OF 84

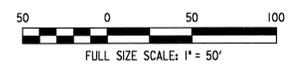


LIMIT OF WORK
STA. 648+12

LIMIT OF WORK
STA. 22+74

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	15 & 16
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	27 & 31
SIGNING & MARKING PLAN	37
MAINTENANCE OF TRAFFIC PLANS	43
UTILITY/STREET LIGHTING PLAN	47
LANDSCAPE PLAN	51

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 16156, Expiration Date: 8-28-2010



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: Steve Shaner, 12/16/08
 Chief, Bureau of Engineering: [Signature], 12/16/08
 Chief, Bureau of Highways: [Signature], 12-17-09

PREPARED BY
URS
4 NORTH PARK DRIVE
HUNT VALLEY, MARYLAND
TEL: (410) 785-7220



DES:	CRC				
DRN:	CDF				
CHK:	DTM				
DATE:	12/15/08	BY	NO.	REVISION	DATE

GRADING AND DRAINAGE PLAN

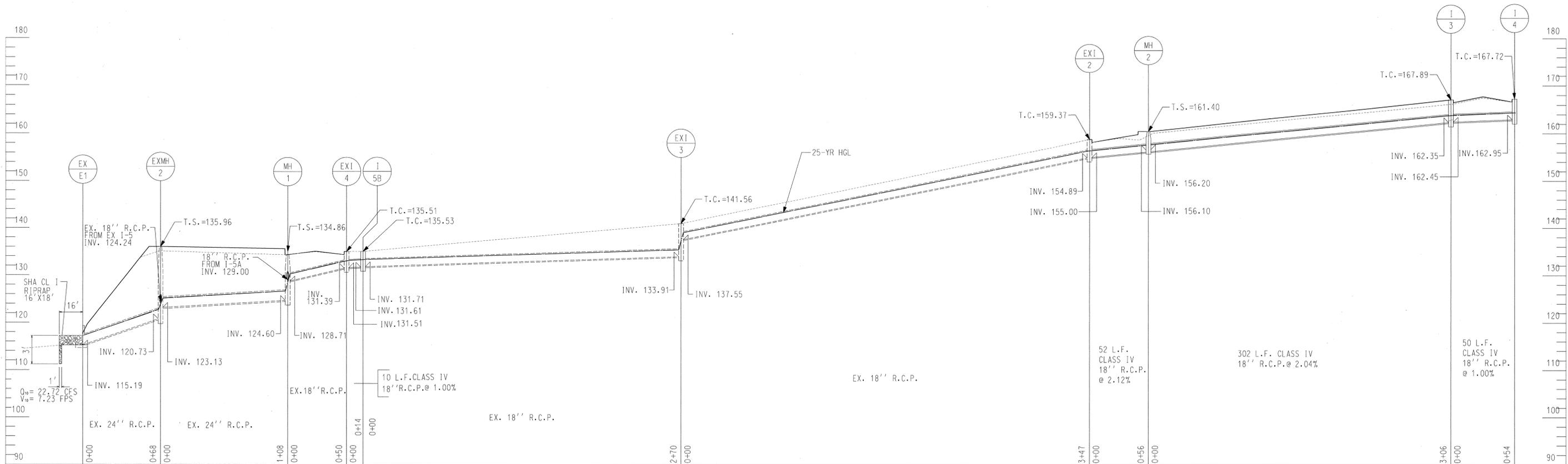
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
STA. 591+43 TO STA. 648+12

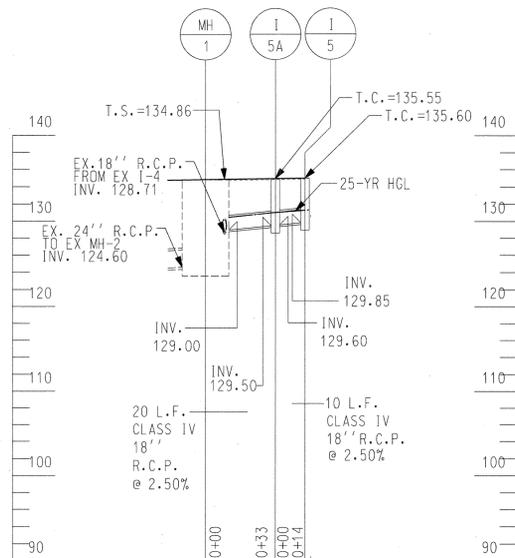
ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
CAPITAL PROJECT J-4148-A

SCALE AS SHOWN

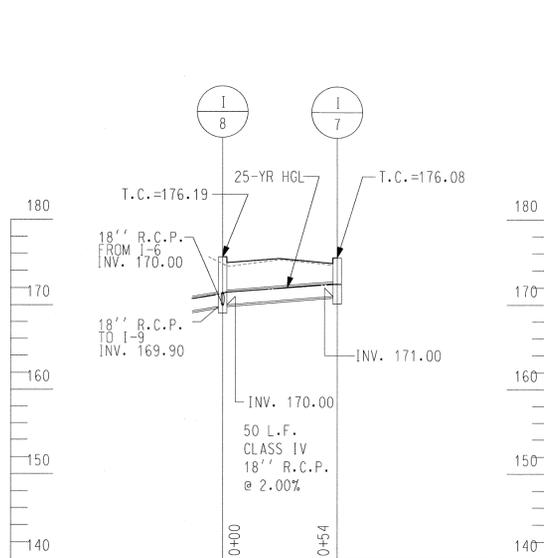
SHEET 20 OF 84



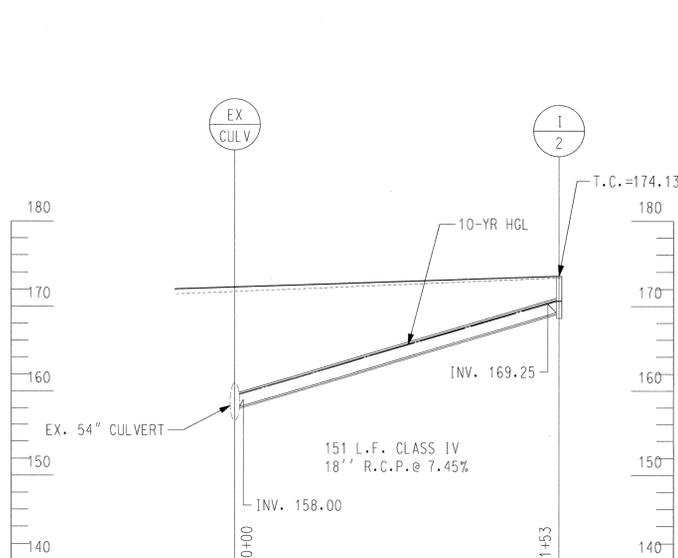
STA 636+61 TO STA 626+44 - DORSEY RUN ROAD



STA 627+40 TO STA 627+03 - DORSEY RUN ROAD



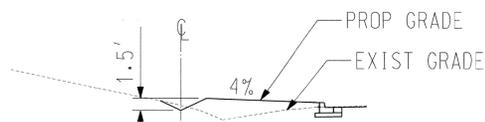
STA 605+30 TO STA 605+32 - DORSEY RUN ROAD



STA 640+74 - DORSEY RUN ROAD

DRAINAGE STRUCTURE SCHEDULE - NEW STRUCTURES							
STRUCTURE NO.	STATION	OFFSET (FEET)	INV. IN	INV. OUT	TOP ELEV.	TYPE	STD. REF.
I-2	640+74	27 RT	-	169.25	174.13	A-10	HCPDW SD-4.02
I-3	636+61	27 RT	162.45	162.35	167.89	A-10	HCPDW SD-4.02
I-4	636+61	27 RT	-	162.95	167.72	A-10	HCPDW SD-4.02
I-5	627+40	27 RT	-	129.85	135.60	A-10	HCPDW SD-4.02
I-5A	627+26	27 RT	129.60	129.50	135.55	A-10	HCPDW SD-5.52
I-5B	627+27	27 LT	131.71	131.61	135.53	A-10	HCPDW SD-5.52
I-7	605+30	27 RT	-	171.00	176.08	A-10	HCPDW SD-5.52
I-8	605+32	27 LT	170.00/170.00	169.90	176.19	A-10	HCPDW SD-5.52
MH-1	627+03	24 RT	128.71/129.00	124.60	134.86	STD. MANHOLE	MD 383.01
MH-2	633+55	29 RT	156.20	156.10	161.40	STD. MANHOLE	MD 383.01

DRAINAGE STRUCTURE SCHEDULE - MODIFICATION OF EXISTING STRUCTURES							
STRUCTURE NO.	STATION	OFFSET (FEET)	INV. IN	INV. OUT	TOP ELEV.	TYPE	STD. REF.
EX I-2	633+53	27 LT	155.00	-	-	ADJUST EXIST INLET	-



TYP DITCH SECTION, STA 647+00 L TO STA 648+50 L

NOTE: DITCH DEPTH IS 0 AT STARTING POINT OF DITCH AT STA 647+00



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156, Expiration Date: 2-28-2010

HOR. SCALE: 1" = 40'
 VERT. SCALE: 1" = 10'

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: Steve Shayan 12/15/08
 Chief, Division of Transportation and Special Projects: Steve Shayan 12/15/08

Chief of Engineering: [Signature] 12/16/08
 Chief, Bureau of Engineering: [Signature] 12/16/08

Chief of Highways: [Signature] 12-17-09
 Chief, Bureau of Highways: [Signature] 12-17-09

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220

RJM
 RJM ENGINEERING, INC.
 CONSULTING ENGINEERS
 COLUMBIA, MARYLAND
 TEL: (410) 730-1001 FAX: (410) 730-5403

DES:	ST			
DRN:	ST			
CHK:	JSM			
DATE:	12/15/08			
BY:	NO.			
REVISION:				
DATE:				

DRAINAGE PROFILES - 1

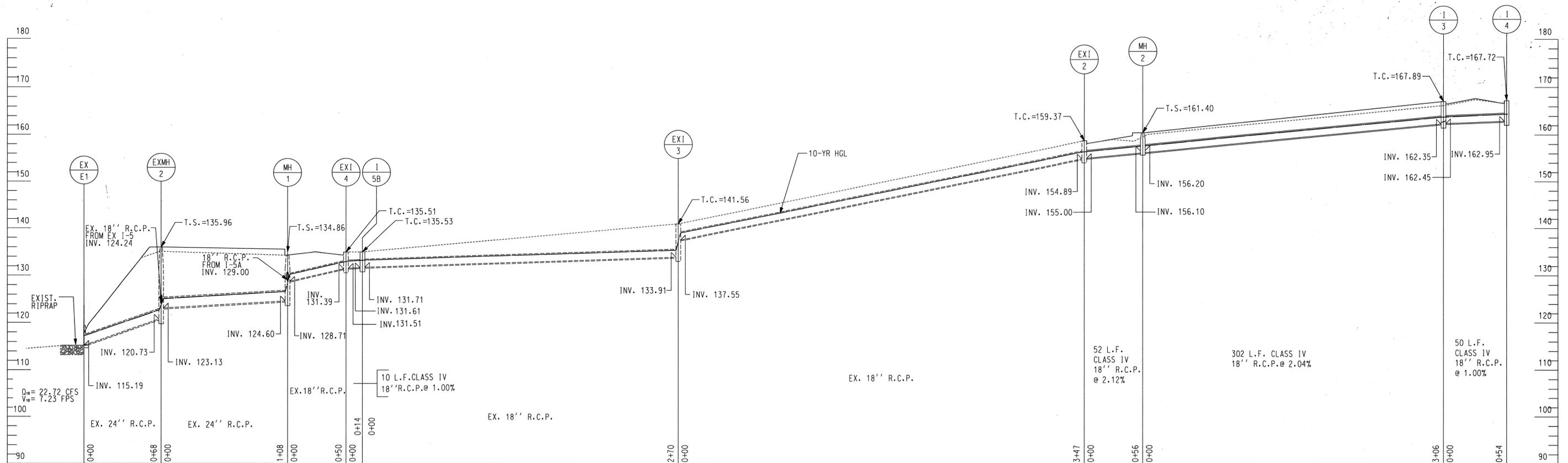
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12

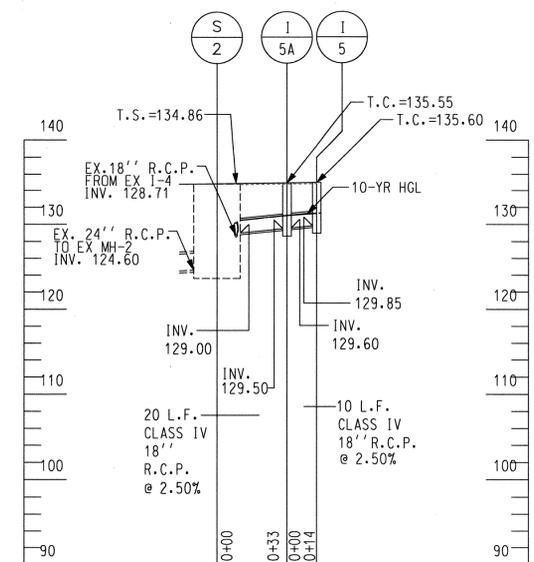
ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148A

SCALE
 As Shown

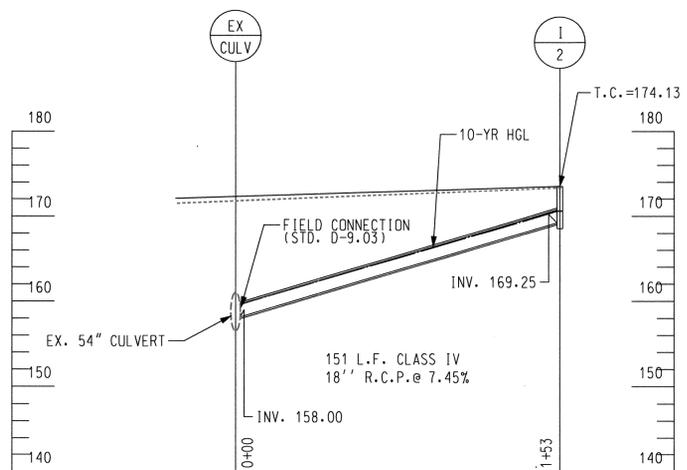
SHEET
 21 OF 84



STA 636+61 TO STA 626+44 - DORSEY RUN ROAD



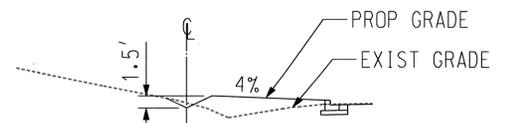
STA 627+40 TO STA 627+06 - DORSEY RUN ROAD



STA 640+74 - DORSEY RUN ROAD

DRAINAGE STRUCTURE SCHEDULE - NEW STRUCTURES							
STRUCTURE NO.	STATION	OFFSET (FEET)	INV. IN	INV. OUT	TOP ELEV.	TYPE	STD. REF.
I-2	640+74	25 RT	-	169.25	174.13	A-10	HCDPW SD-4.02
I-3	636+60	25 RT	162.45	162.35	167.89	A-10	HCDPW SD-4.02
I-4	636+61	25 LT	-	162.95	167.72	A-10	HCDPW SD-4.02
I-5	627+40	25 RT	-	129.85	135.60	A-10	HCDPW SD-4.02
I-5A	627+26	25 RT	129.60	129.50	135.55	A-10	HCDPW SD-4.02
I-5B	627+27	25 LT	131.71	131.61	135.53	A-10	HCDPW SD-4.02
MH-2	633+57	29 RT	156.20	156.10	161.40	SHA STD. SHALLOW MANHOLE	MD 383.00

DRAINAGE STRUCTURE SCHEDULE - MODIFICATION OF EXISTING STRUCTURES							
STRUCTURE NO.	STATION	OFFSET (FEET)	INV. IN	INV. OUT	TOP ELEV.	TYPE	STD. REF.
EX I-2	633+53	25 LT	155.00	-	-	ADJUST EXIST INLET	-
EX I-4	627+12	25 LT	131.51	131.39	135.51	ADJUST EXIST INLET	-
S-2	627+06	22 RT	128.71/129.00	124.60	134.86	SEE SHEET 24	-



TYP DITCH SECTION, STA 647+00 L TO STA 648+50 L

NOTE: DITCH DEPTH IS 0 AT STARTING POINT OF DITCH AT STA 647+00



PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
 LICENCE NO. 16156 EXPIRATION DATE: 08/28/2010

HOR. SCALE: 1" = 40'
 VERT. SCALE: 1" = 10'

DEPARTMENT OF PUBLIC WORKS

Director of Public Works: *Steve Shaver* 8/31/09
 Chief, Bureau of Transportation and Special Projects: *Steve Shaver* 8/31/09

Chief, Bureau of Engineering: *Steve Shaver* 8/31/09
 Chief, Bureau of Highways: *Steve Shaver* 8/31/09

PREPARED BY

URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220

RJM
 RJM ENGINEERING, INC.
 CONSULTING ENGINEERS
 COLUMBIA, MARYLAND
 TEL: (410) 730-1001 FAX: (410) 730-5403

DES:	WJ		
DRN:	ST		
CHK:	JW		
DATE:	03/08		
DTM:	1	REPLACEMENT SHEETS	8/09
BY:	NO.	REVISION	DATE

DRAINAGE PROFILES - 1

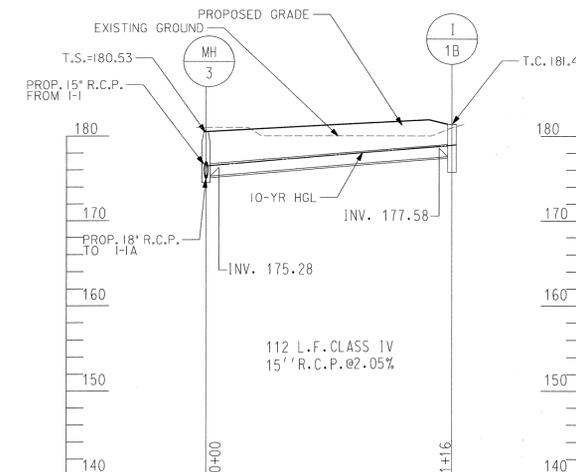
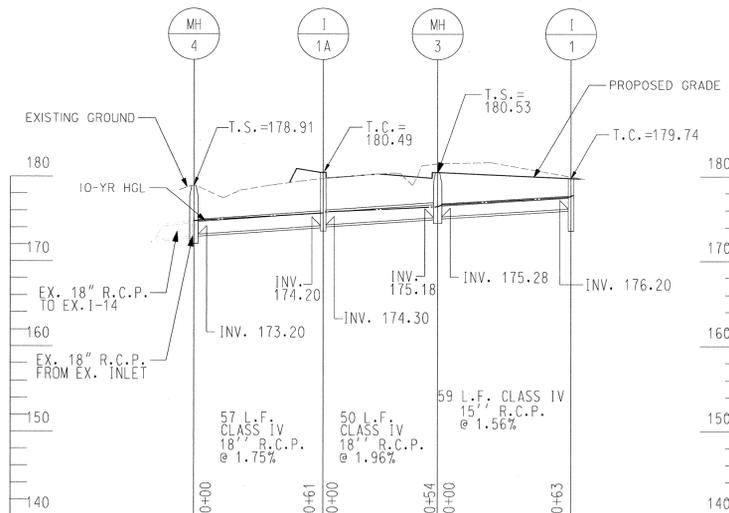
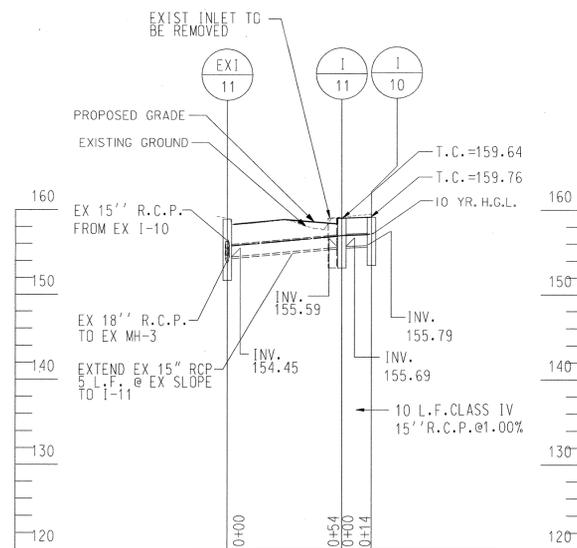
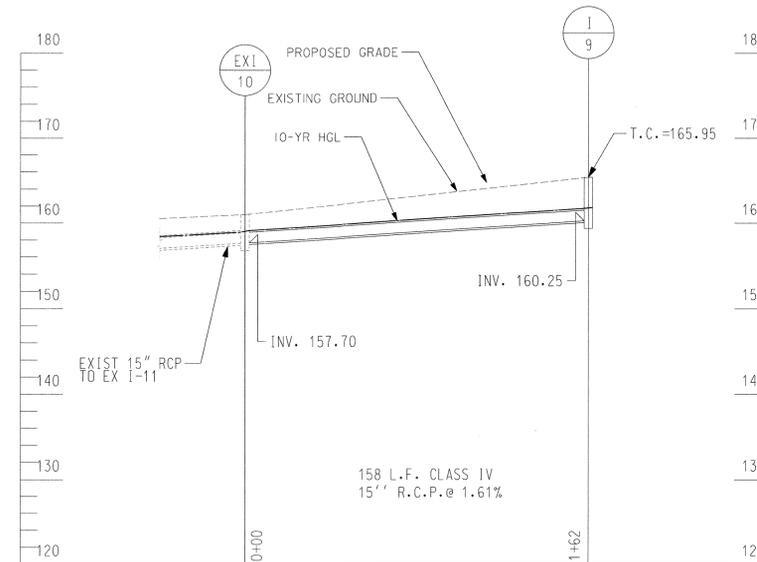
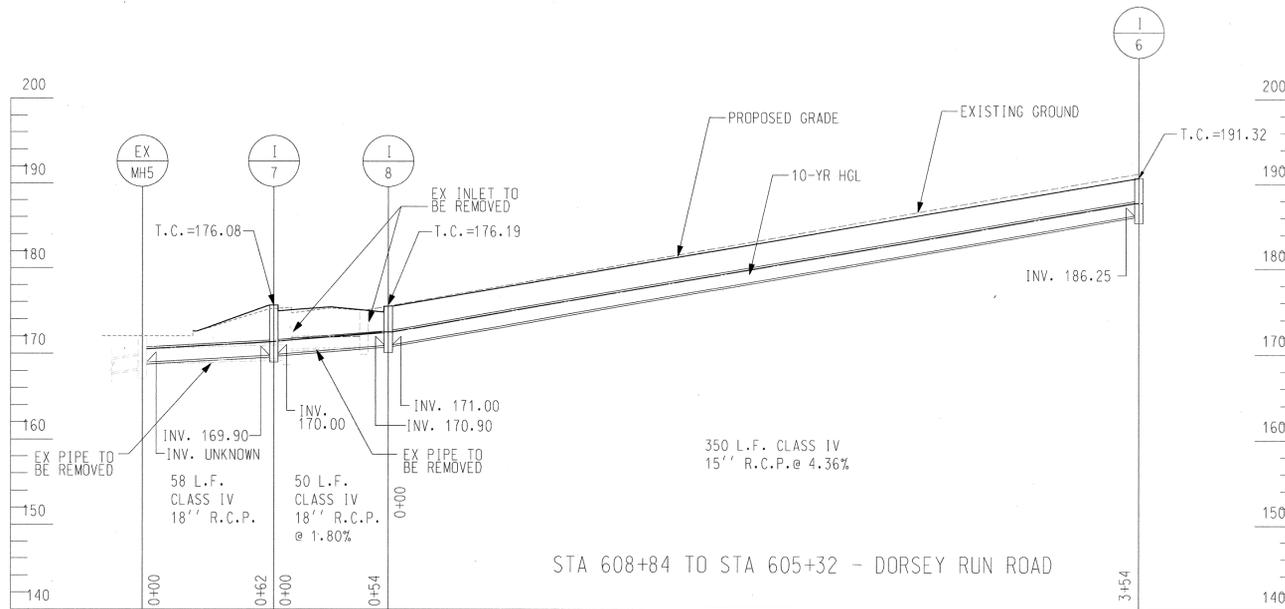
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148A

SCALE AS SHOWN

SHEET 21 OF 86



STA 599+84 TO STA 599+67 - DORSEY RUN ROAD

STA 645+53 TO STA 645+74 - DORSEY RUN ROAD

STA 599+84 TO STA 599+67 - DORSEY RUN ROAD

DRAINAGE STRUCTURE SCHEDULE - NEW STRUCTURES							
STRUCTURE NO.	STATION	OFF SET	INV. IN	INV. OUT	TOP OF CURB/RIM GRATE	TYPE	STD. REF.
I-4	645+53	26 LT	-	176.20	179.74	A-10	HCDPW SD-4.02
I-4A	646+15	24 RT	174.30	174.20	180.49	A-5	HCDPW SD-4.01
I-4B	647+30	42 LT	-	177.58	181.59	STD TYPE K INLET	MD 378.11
I-6	608+85	27 LT	-	186.25	191.32	A-10	HCDPW SD-4.02
I-7	605+30	26 RT	170.00	169.90	176.08	A-10	HCDPW SD-4.02
I-8	605+32	27 LT	171.00	170.90	176.19	A-10	HCDPW SD-4.02
I-9	603+00	26 LT	-	160.25	165.95	A-10	HCDPW SD-4.02
I-10	599+84	27 RT	179.16	155.79	159.76	A-10	HCDPW SD-4.02
I-11	599+69	27 RT	155.69	155.59	159.64	A-10	HCDPW SD-4.02
MH-3	646+15	29 LT	175.28 / 175.28	175.18	180.53	STD. MANHOLE	MD 383.01
MH-4	646+34	82 RT	173.20 / -	-	178.91	STD. MANHOLE	MD 383.01

DRAINAGE STRUCTURE SCHEDULE - MODIFICATION OF EXISTING STRUCTURES							
STRUCTURE NO.	STATION	OFF SET	INV. IN	INV. OUT	TOP OF CURB/RIM GRATE	TYPE	
EX I-10	601+40	27 LT	157.70	-	-	ADJUST EXIST INLET	



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16152, Expiration Date: 2-28-2016

HOR. SCALE: 1" = 40'
 VERT. SCALE: 1" = 10'

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: Steve Shaver, 12/16/08
 Chief, Division of Transportation and Special Projects: Steve Shaver, 12/16/08

Chief, Bureau of Engineering: Robert Jessup, 12/16/08
 Chief, Bureau of Highways: Mike Zehner, 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220

RJM
 RIM ENGINEERING, INC.
 CONSULTING ENGINEERS
 COLUMBIA, MARYLAND
 TEL: (410) 730-1001 FAX: (410) 730-5403

DES:	WJ				
DRN:	ST				
CHK:	JW				
DATE:	12/16/08	BY:	NO.	REVISION	DATE

DRAINAGE PROFILES - 2

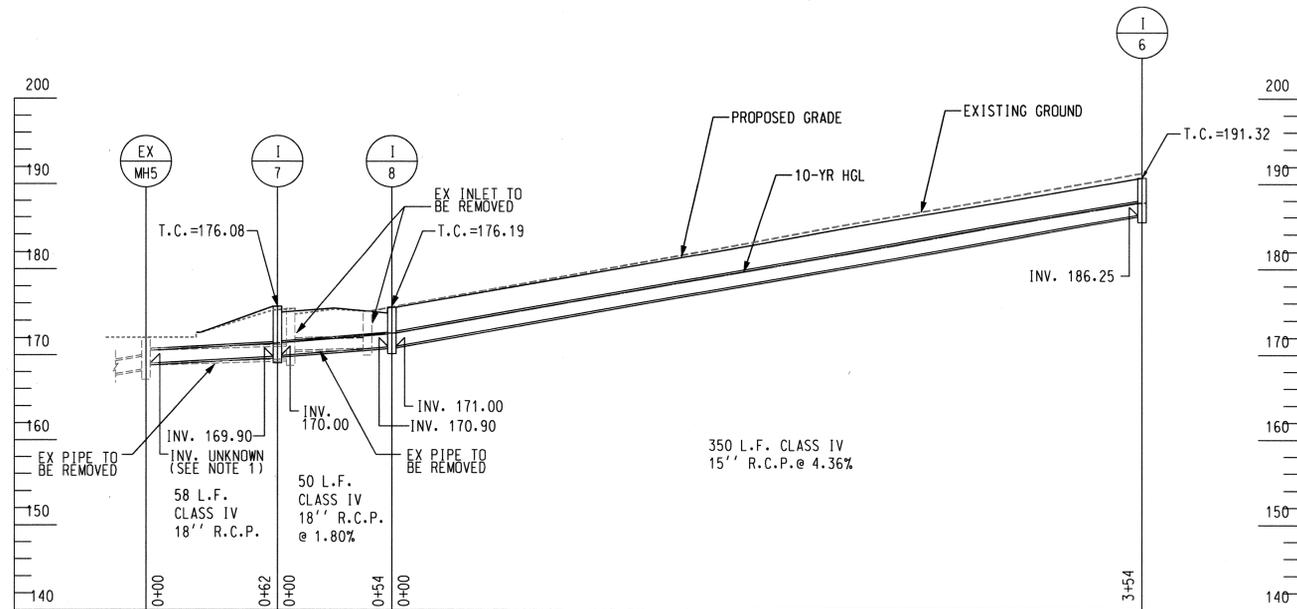
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148A

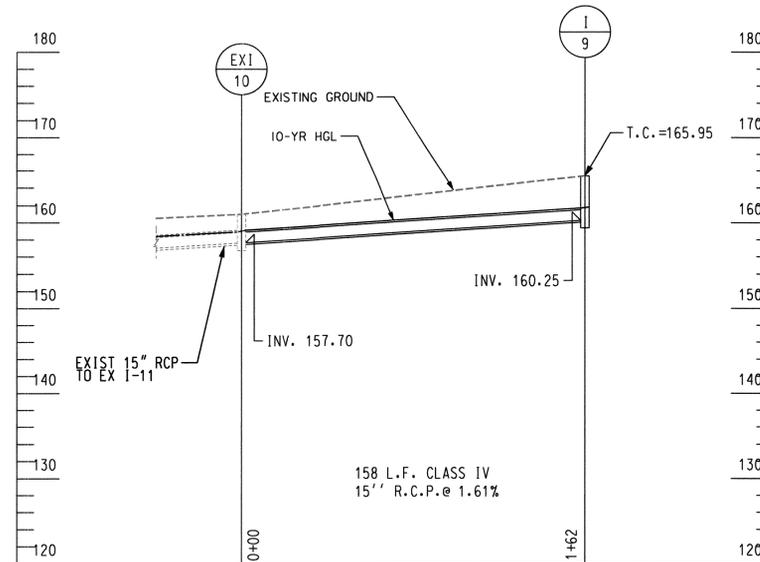
SCALE
 AS SHOWN

SHEET
 22 OF 84

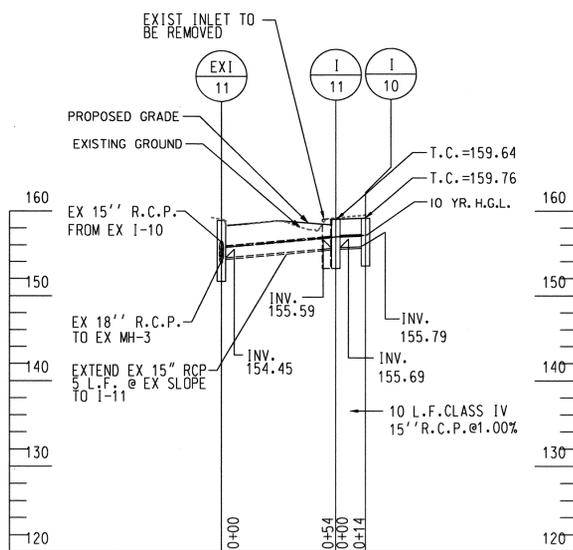


STA 608+84 TO STA 604+65 - DORSEY RUN ROAD

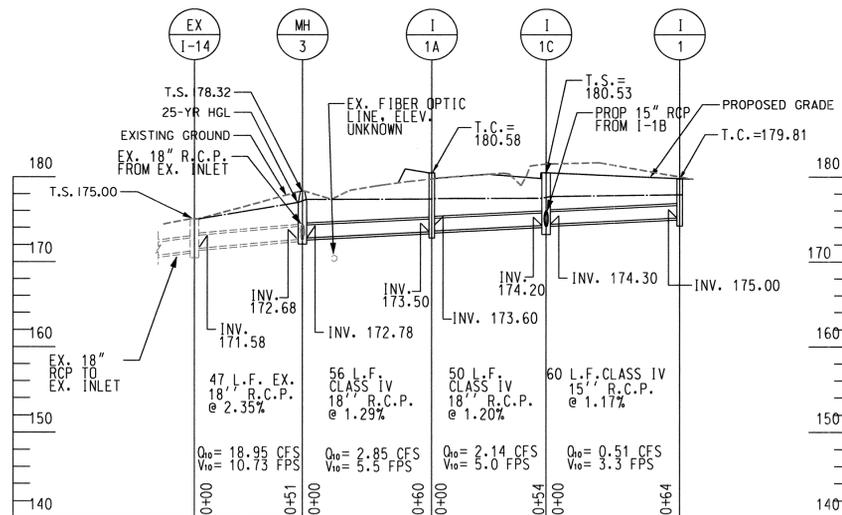
NOTE:
1. CONTRACTOR SHALL FIELD VERIFY INVERT ELEV. PRIOR TO CONSTRUCTION.



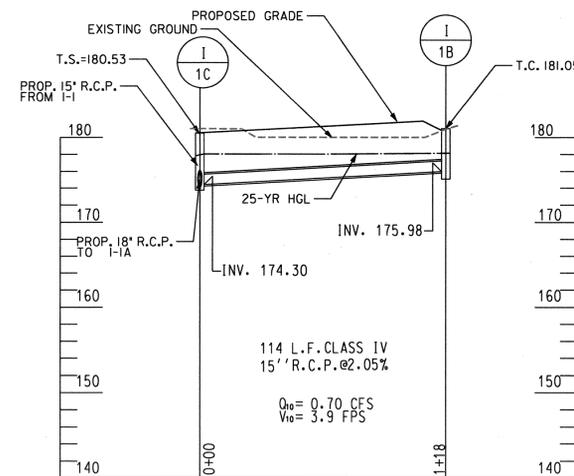
STA 603+00 TO STA 601+38 - DORSEY RUN ROAD



STA 599+84 TO STA 599+67 - DORSEY RUN ROAD



STA 645+50 TO STA 645+73 - DORSEY RUN ROAD



STA 647+31 TO STA 646+13 - DORSEY RUN ROAD

DRAINAGE STRUCTURE SCHEDULE - NEW STRUCTURES

STRUCTURE NO.	STATION	OFFSET (FEET)	INV. IN	INV. OUT	TOP OF CURB/RIM GRATE	TYPE	STD. REF.
I-1	645+50	25 LT	-	175.00	179.81	A-5	HCDPW SD -4.01
I-1A	646+17	25 RT	173.60	173.50	180.58	SHA STD. 5\"/>	

DRAINAGE STRUCTURE SCHEDULE - MODIFICATION OF EXISTING STRUCTURES

STRUCTURE NO.	STATION	OFFSET (FEET)	INV. IN	INV. OUT	TOP OF CURB/RIM GRATE	TYPE	STD. REF.
EX I-10	601+41	26 LT	157.70	-	-	ADJUST EXIST INLET	-
EX MH-5	604+45	38 RT	FIELD VERIFY	-	-	ADJUST EXIST MANHOLE	-



PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENCE NO. 16156 EXPIRATION DATE: 08/28/2010

HOR. SCALE: 1" = 40'
VERT. SCALE: 1" = 10'

DEPARTMENT OF PUBLIC WORKS

Director of Public Works
Steve Shuman
8/3/09

Chief, Bureau of Engineering
8/3/09
Chief, Bureau of Highways
8-4-09

PREPARED BY
URS
4 NORTH PARK DRIVE
HUNT VALLEY, MARYLAND
TEL: (410) 785-7220

RJM ENGINEERING, INC.
CONSULTING ENGINEERS
COLUMBIA, MARYLAND
TEL: (410) 730-1001 FAX: (410) 730-5403

DES: WJ					
DRN: ST					
CHK: JW					
DATE: 03/08	DTM: 1	REPLACEMENT SHEETS	8/09		
	BY NO.	REVISION	DATE		

DRAINAGE PROFILES - 2

SCALE MAP NO. N/A BLOCK NO.

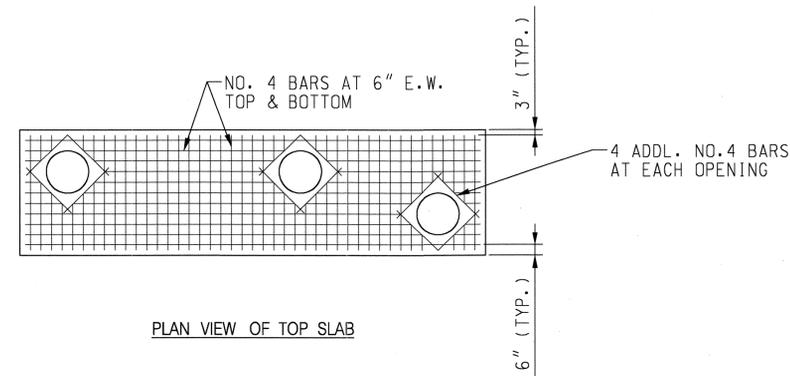
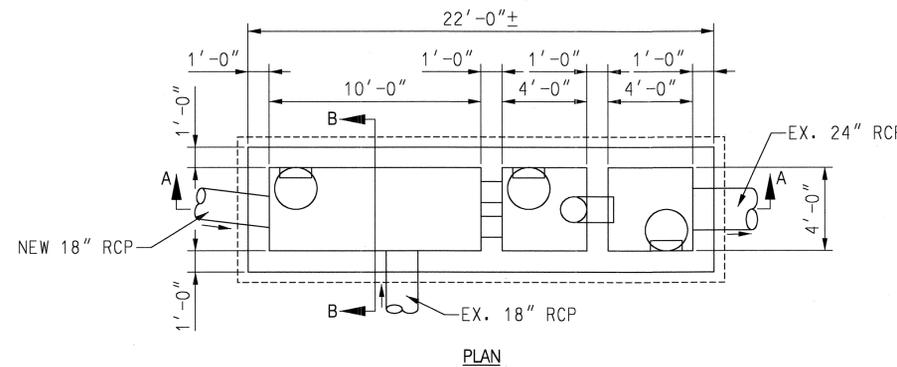
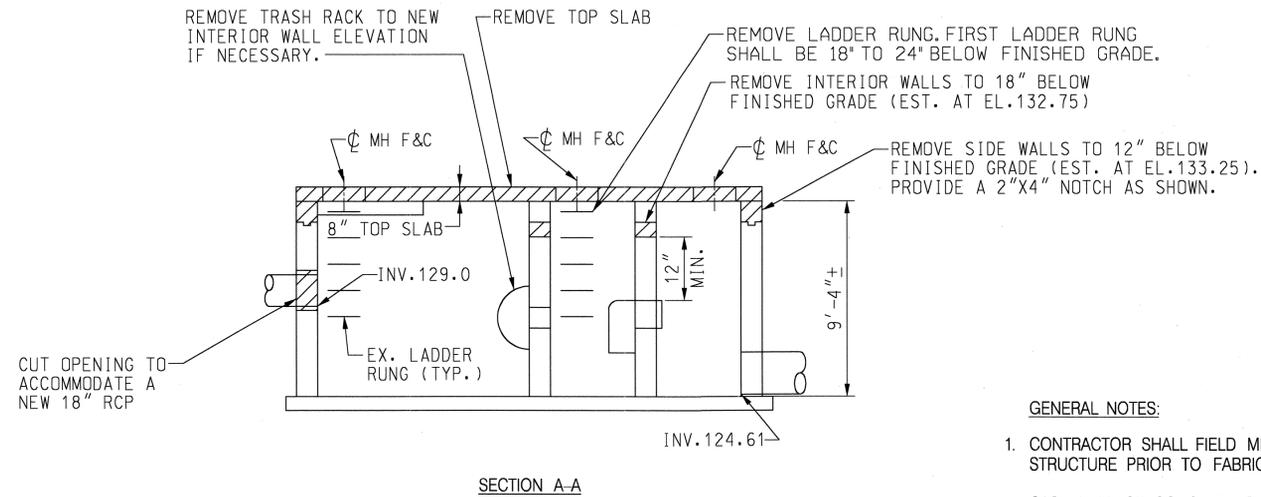
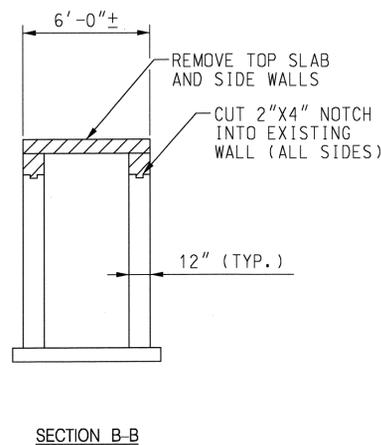
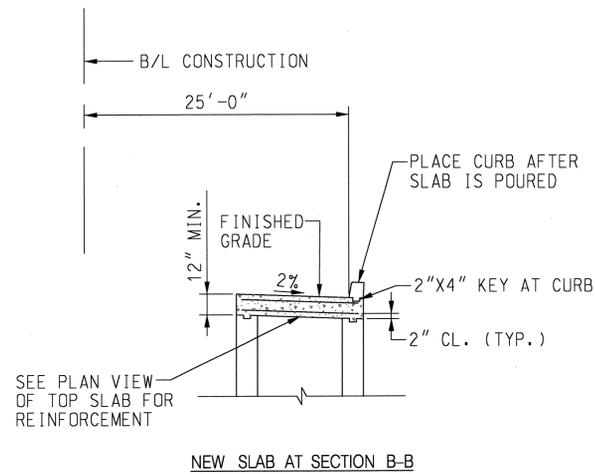
WIDENING OF DORSEY RUN ROAD
STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
CAPITAL PROJECT J-4148A

SCALE AS SHOWN
SHEET 22 OF 86

\$FILES

\$DATES \$TIME \$USERS



GENERAL NOTES:

1. CONTRACTOR SHALL FIELD MEASURE DIMENSIONS OF STRUCTURE PRIOR TO FABRICATION OF TOP SLAB.
2. CAST-IN-PLACE CONCRETE SHALL BE 4,000 PSI @ 28 DAYS. REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ASTM A615 GRADE 60.
3. STD MANHOLE FRAME AND COVERS SHALL ALIGN WITH THE LOCATION OF THE LADDER RUNGS INSIDE THE STRUCTURE. CONTRACTOR MUST FIELD VERIFY PRIOR TO CONSTRUCTION.
4. CONTRACTOR SHALL REMOVE ALL SEDIMENT AND DEBRIS FROM THE STRUCTURE. ALL REMOVE MATERIAL SHALL BE TAKEN TO AN APPROVED SANITARY LANDFILL.

MODIFICATION TO EXISTING WATER QUALITY CONTROL STRUCTURE (S-2)

SCALE: 1/4" = 1'-0"

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16177, Expiration Date: 8-28-2010

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: Steve Shayan, 12/16/08
 Chief, Bureau of Engineering: [Signature], 12/16/08
 Chief, Bureau of Highways: [Signature], 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	CRC				
DRN:	CDF				
CHK:	DTM				
DATE:	12/15/08	BY:	NO.	REVISION	DATE

STORM DRAIN DETAILS

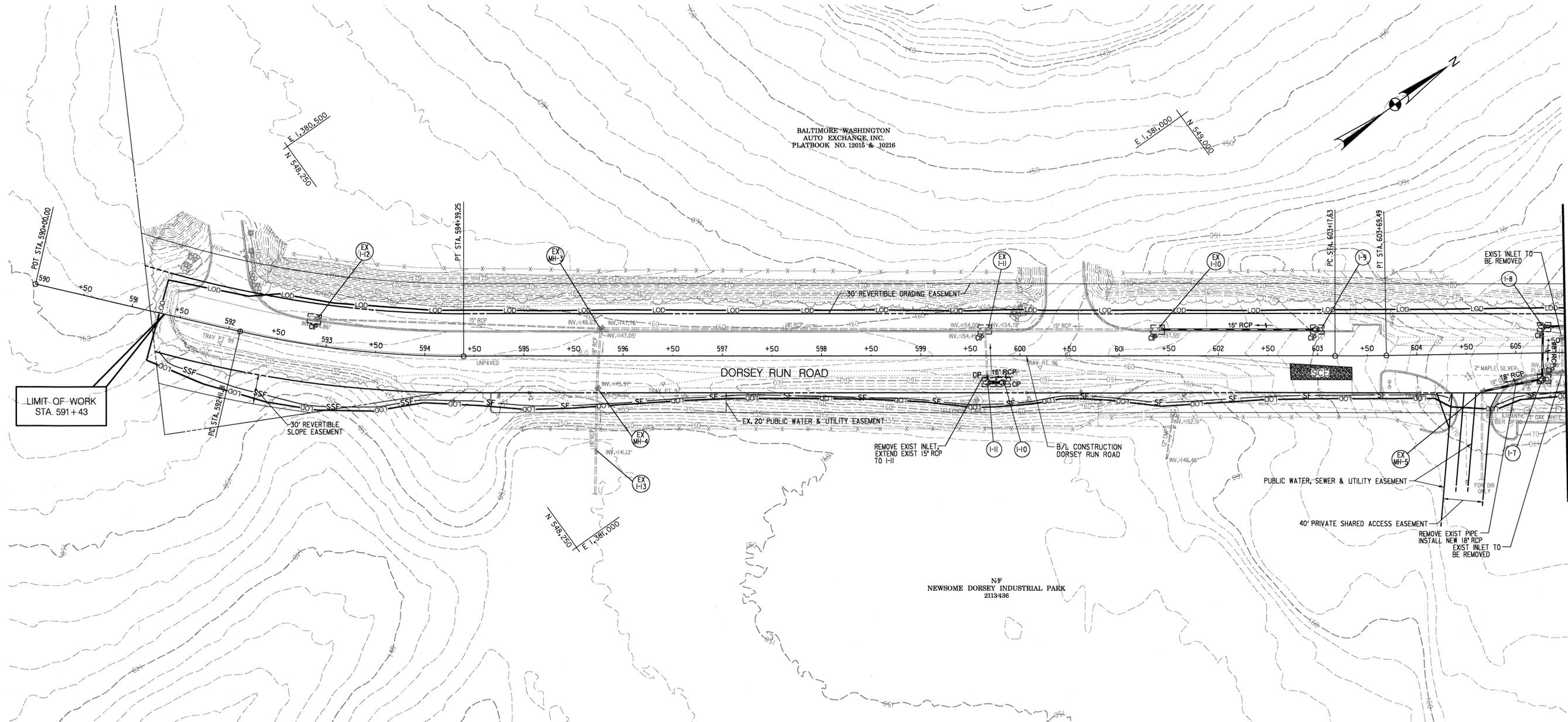
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 N.T.S.

SHEET
 23 OF 84



LIMIT OF WORK
STA. 591+43

MATCH LINE STA. 605+50

- LEGEND**
- SF — SILT FENCE
 - SSF — SUPER SILT FENCE
 - LOD — LIMIT OF DISTURBANCE
 - SCB STABILIZED CONSTRUCTION ENTRANCE
 - CIP CURB INLET PROTECTION
 - AGIP AT-GRADE INLET PROTECTION
 - MIP MEDIAN INLET PROTECTION

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	12
GRADING & DRAINAGE PLAN	17
DRAINAGE PROFILES	21 & 22
SIGNING & MARKING PLAN	34
MAINTENANCE OF TRAFFIC PLANS	40
UTILITY/STREET LIGHTING PLAN	44
LANDSCAPE PLAN	48

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156, Expiration Date: 8-20-2010



THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
John R. Robertson 12/16/08
 HOWARD SOIL CONSERVATION DISTRICT DATE

ENGINEER'S CERTIFICATE

" I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

DM 12-15-2008
 Signature of Engineer (print name below signature) Date
 DAVID T. MORIGIAN

DEVELOPER'S CERTIFICATE

" I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction of this project will have a Certificate of Attendance at a Department of Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.

Robert J. Sporn 12/16/08
 Signature of Developer (print name below signature) Date
 Emuld G. Lepsen

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Steve Sharav 12/16/08
 DIRECTOR OF PUBLIC WORKS DATE

Walter J. Mohr 12-17-09
 CHIEF, BUREAU OF HIGHWAYS DATE

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	CRC			
DRN:	CDF			
CHK:	DTM			
DATE:	12/15/08			
BY NO.		REVISION		DATE

EROSION & SEDIMENT CONTROL PLAN INITIAL PHASE

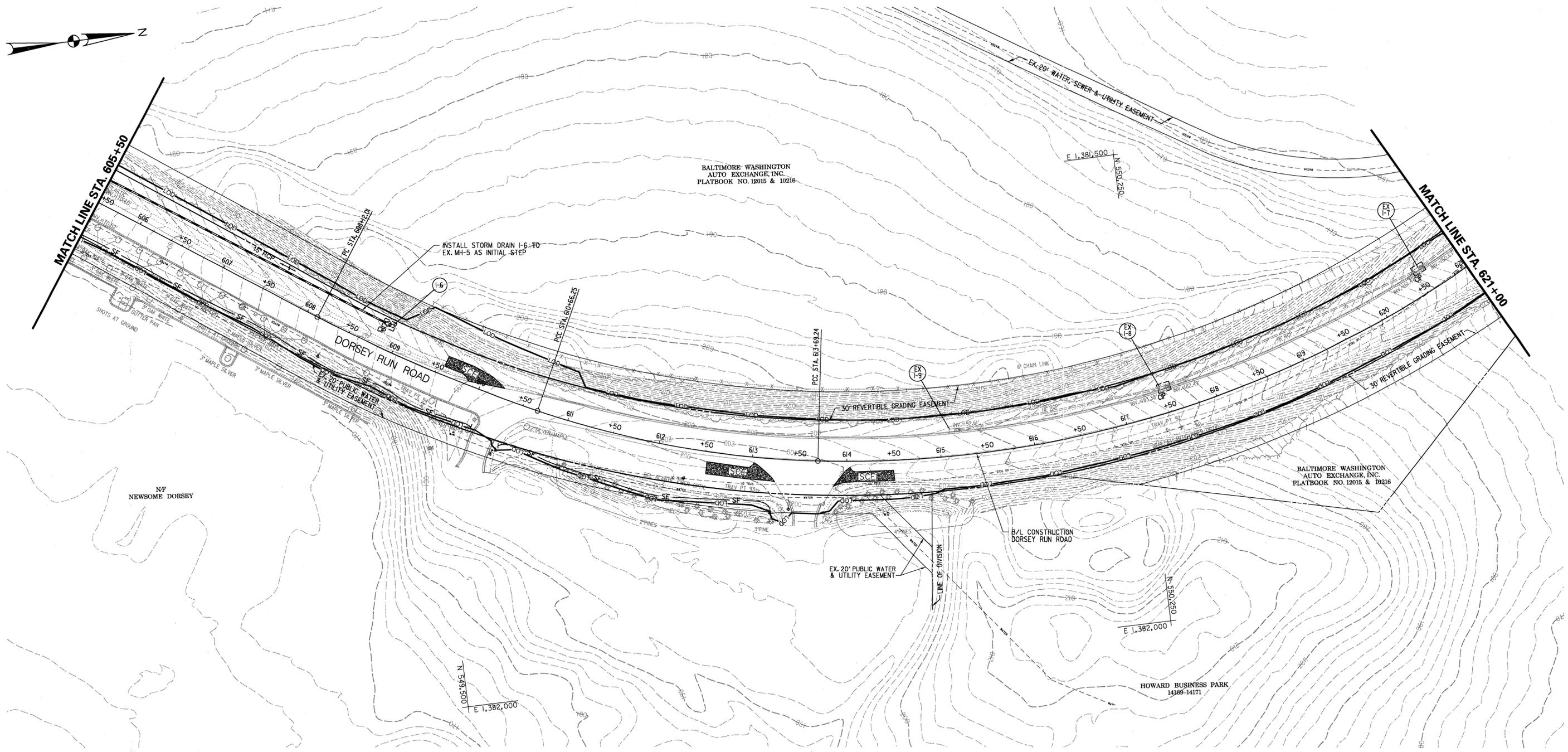
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE AS SHOWN

SHEET 24 OF 84



- LEGEND**
- SF— SILT FENCE
 - SSF— SUPER SILT FENCE
 - LOD— LIMIT OF DISTURBANCE
 - STABILIZED CONSTRUCTION ENTRANCE
 - CIP CURB INLET PROTECTION
 - AT-GRADE INLET PROTECTION
 - MEDIAN INLET PROTECTION

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	13
GRADING & DRAINAGE PLAN	18
DRAINAGE PROFILES	21 & 22
SIGNING & MARKING PLAN	35
MAINTENANCE OF TRAFFIC PLANS	41
UTILITY/STREET LIGHTING PLAN	45
LANDSCAPE PLAN	49

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16176, Expiration Date: 8-28-2010



THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
John A. Blanton 1/6/09
 HOWARD SOIL CONSERVATION DISTRICT DATE

ENGINEER'S CERTIFICATE
 "I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."
David T. Morianni 12-15-2008
 Signature of Engineer (print name below signature) Date

DEVELOPER'S CERTIFICATE
 "I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction of this project will have a Certificate of Attendance at a Department of Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."
Ernest G. Lepson 12/16/08
 Signature of Developer (print name below signature) Date

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: *Steve Sharpe* 12/16/08
 Chief, Division of Transportation and Special Projects: *Steve Sharpe* 12/16/08
 Chief, Bureau of Engineering: *Willie J. Muhl* 12-17-08
 Chief, Bureau of Highways: *Willie J. Muhl* 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 795-7220

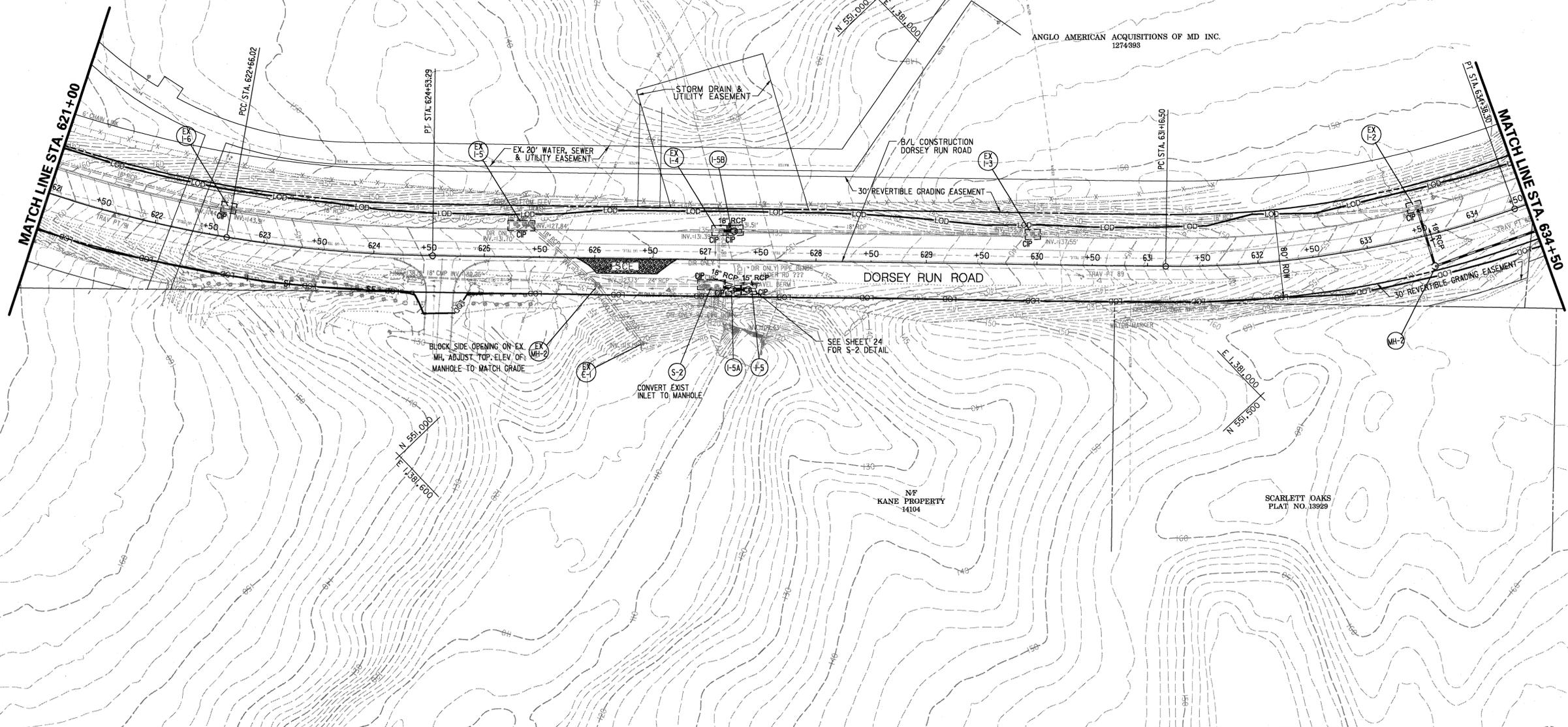


DES:	CRC		
DRN:	CDF		
CHK:	DTM		
DATE:	12/15/08		
BY	NO.	REVISION	DATE

EROSION & SEDIMENT CONTROL PLAN
INITIAL PHASE
 SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12
 ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE AS SHOWN
 SHEET 25 OF 84



- LEGEND**
- SF — SILT FENCE
 - SSF — SUPER SILT FENCE
 - LOD — LIMIT OF DISTURBANCE
 - STABILIZED CONSTRUCTION ENTRANCE
 - CIP CURB INLET PROTECTION
 - AGIP AT-GRADE INLET PROTECTION
 - MIP MEDIAN INLET PROTECTION

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	14
GRADING & DRAINAGE PLAN	19
DRAINAGE PROFILES	21 & 22
SIGNING & MARKING PLAN	36
MAINTENANCE OF TRAFFIC PLANS	42
UTILITY/STREET LIGHTING PLAN	46
LANDSCAPE PLAN	50

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156, Expiration Date: 8-28-2010



THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
John K. [Signature] 1/6/09
 HOWARD SOIL CONSERVATION DISTRICT DATE

ENGINEER'S CERTIFICATE
 "I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
[Signature] 12/15/2008
 Signature of Engineer (print name below signature) Date
 DAVID T. MORICONI

DEVELOPER'S CERTIFICATE
 "I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction of this project will have a Certificate of Attendance at a Department of Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.
[Signature] 12/16/08
 Signature of Developer (print name below signature) Date
 Kenneth G. Lapsen

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: Steve Sharan 12/16/08
 Chief, Division of Transportation and Special Projects
 Chief, Bureau of Engineering: [Signature] 12/16/08
 Chief, Bureau of Highways: [Signature] 12-17-09

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220

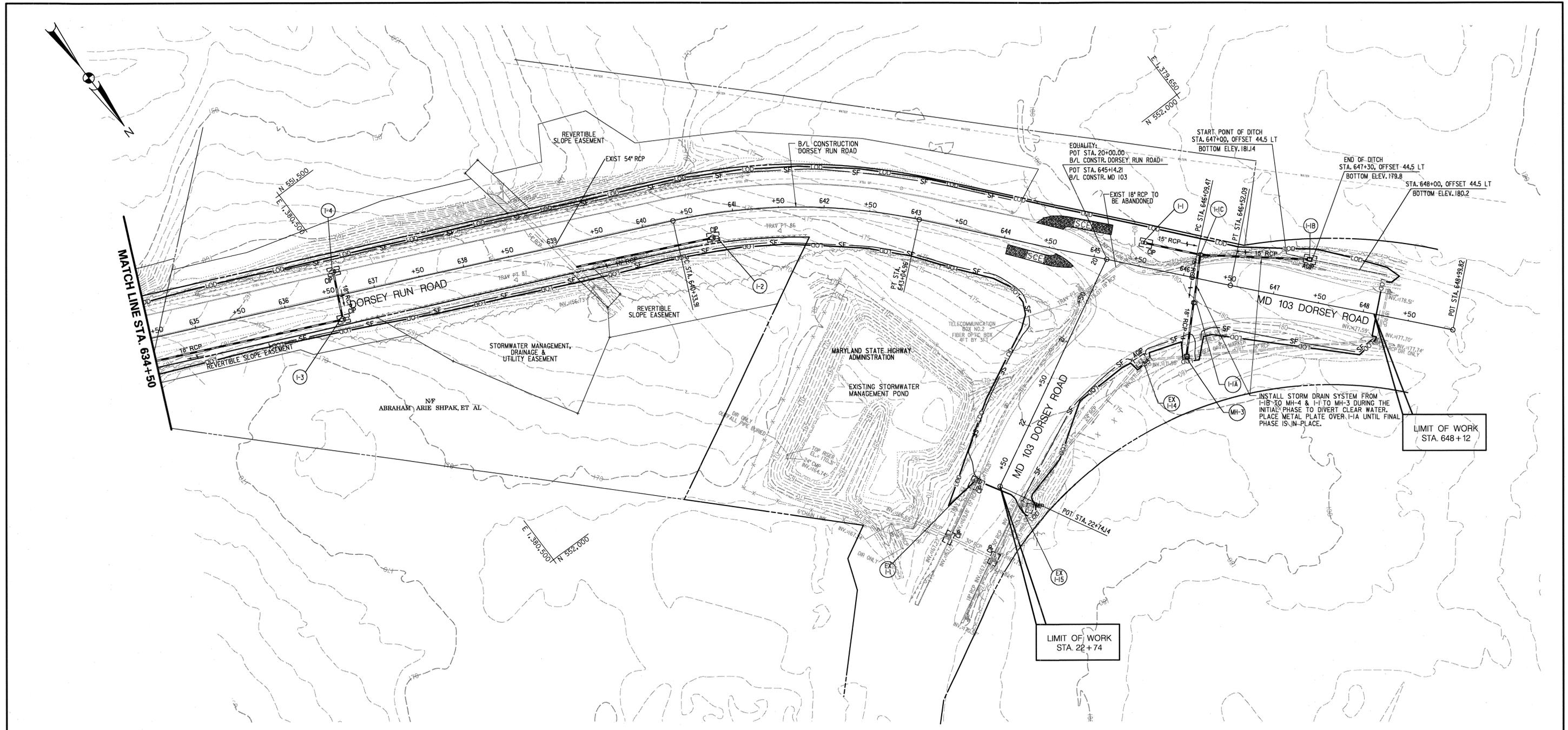


DES:	CRC				
DRN:	CDF				
CHK:	DTM				
DATE:	12/15/08	BY	NO.	REVISION	DATE

EROSION & SEDIMENT CONTROL PLAN
 INITIAL PHASE
 SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12
 ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE AS SHOWN
 SHEET 26 OF 84



- LEGEND**
- SF— SILT FENCE
 - SSF— SUPER SILT FENCE
 - LOD— LIMIT OF DISTURBANCE
 - SCS STABILIZED CONSTRUCTION ENTRANCE
 - CIP CURB INLET PROTECTION
 - AGIP AT-GRADE INLET PROTECTION
 - MIP MEDIAN INLET PROTECTION

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	15 & 16
GRADING & DRAINAGE PLAN	20
DRAINAGE PROFILES	21 & 22
SIGNING & MARKING PLAN	37
MAINTENANCE OF TRAFFIC PLANS	43
UTILITY/STREET LIGHTING PLAN	47
LANDSCAPE PLAN	51

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16157, Expiration Date: 8-25-2010



THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
John P. Roberts 1/16/09
 HOWARD SOIL CONSERVATION DISTRICT DATE

ENGINEER'S CERTIFICATE

"I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

DAVID T. MORICIANI 12-15-2008
 Signature of Engineer (print name below signature) Date

DEVELOPER'S CERTIFICATE

"I/we certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction of this project will have a Certificate of Attendance at a Department of Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.

Ernest G. Lepson 12/16/08
 Signature of Developer (print name below signature) Date

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Steve Sharan 12/16/08
 DIRECTOR OF PUBLIC WORKS DATE

Ernest G. Lepson 12/16/08
 CHIEF, BUREAU OF ENGINEERING DATE

William J. Mallon 12-17-08
 CHIEF, BUREAU OF HIGHWAYS DATE

PREPARED BY

URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	CRC				
DRN:	CDF				
CHK:	DTM				
DATE:	12/15/08	BY	NO.	REVISION	DATE

EROSION & SEDIMENT CONTROL PLAN
 INITIAL PHASE

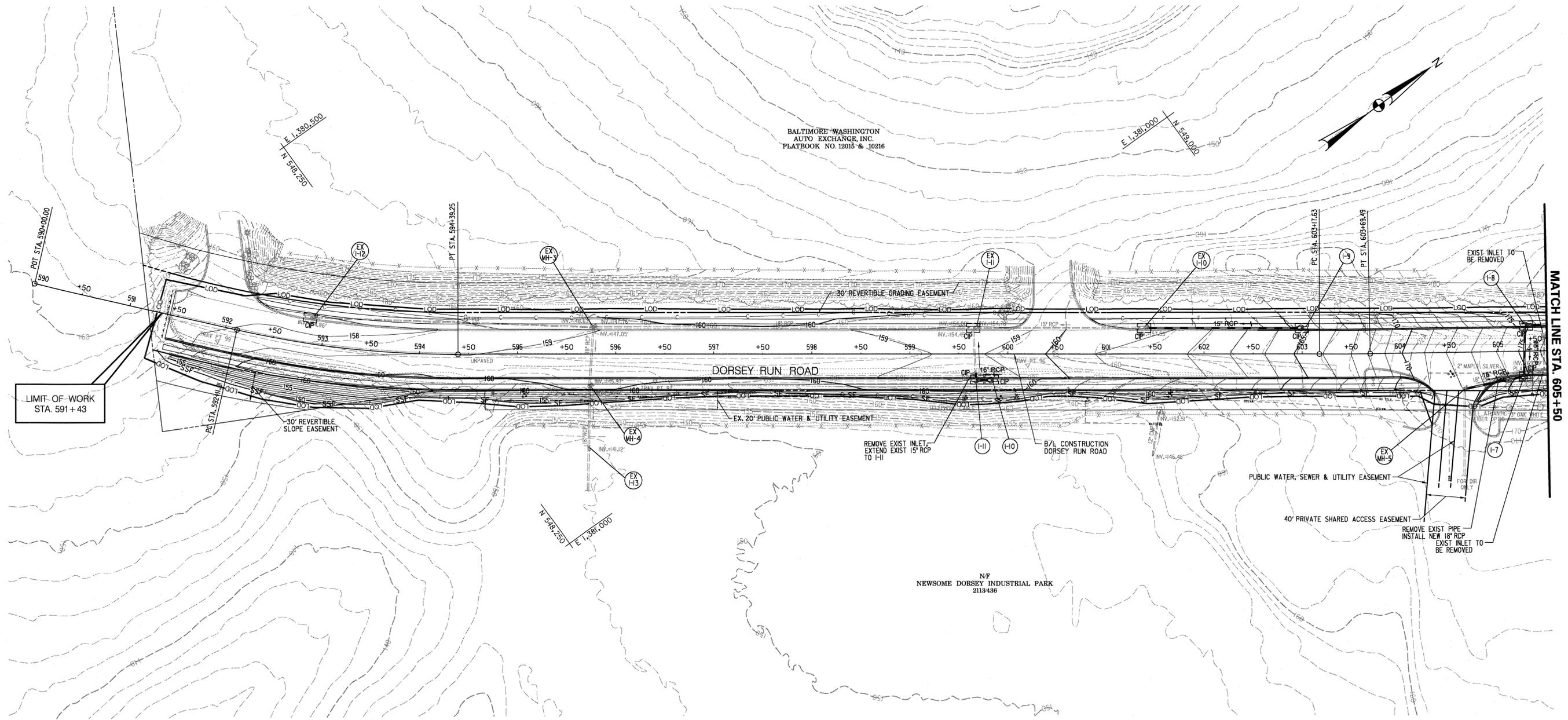
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE AS SHOWN

SHEET 27 OF 84



LIMIT OF WORK STA. 591+43

MATCH LINE STA. 605+50

- LEGEND**
- SF — SILT FENCE
 - SSF — SUPER SILT FENCE
 - LOD — LIMIT OF DISTURBANCE
 - SCB STABILIZED CONSTRUCTION ENTRANCE
 - CIP CURB INLET PROTECTION
 - AGIP AT-GRADE INLET PROTECTION
 - MIP MEDIAN INLET PROTECTION

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	12
GRADING & DRAINAGE PLAN	17
DRAINAGE PROFILES	21 & 22
SIGNING & MARKING PLAN	34
MAINTENANCE OF TRAFFIC PLANS	40
UTILITY/STREET LIGHTING PLAN	44
LANDSCAPE PLAN	48

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16177, Expiration Date: 8-28-2010

50 0 50 100
 FULL SIZE SCALE: 1" = 50'

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

John K. Roberts 11/6/09
 HOWARD SOIL CONSERVATION DISTRICT DATE

ENGINEER'S CERTIFICATE

"I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

David T. Morlan 12-15-2008
 Signature of Engineer (print name below signature) Date

DEVELOPER'S CERTIFICATE

"I/we certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction of this project will have a Certificate of Attendance at a Department of Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."

Ronald G. Lepson 12/16/08
 Signature of Developer (print name below signature) Date

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Steve Sharar 12/16/08
 DIRECTOR OF PUBLIC WORKS DATE

Walter J. Mohr 12-17-08
 CHIEF, BUREAU OF HIGHWAYS DATE

PREPARED BY

URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	CRC		
DRN:	CDF		
CHK:	DTM		
DATE:	12/15/08		
BY	NO.	REVISION	DATE

EROSION & SEDIMENT CONTROL PLAN
FINAL PHASE

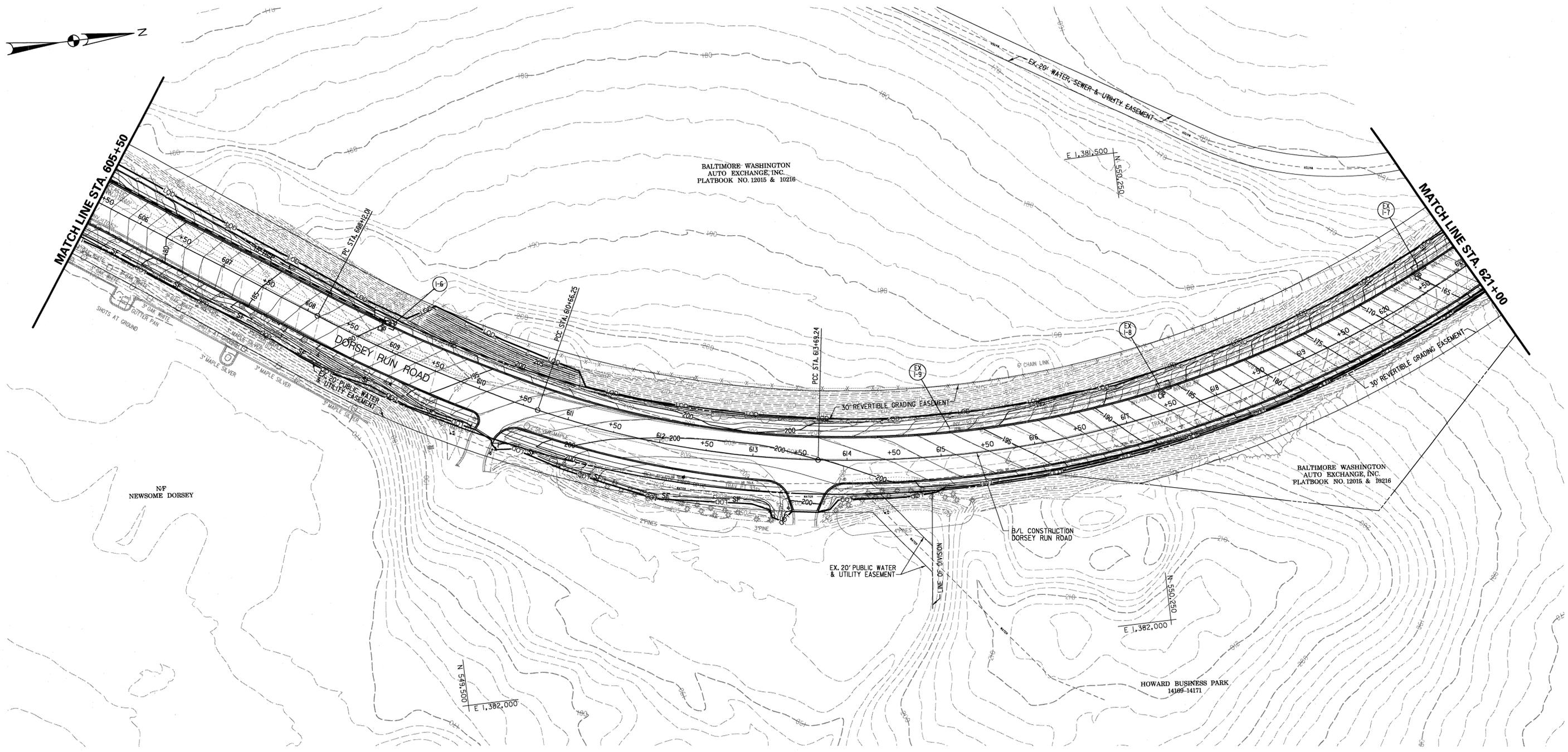
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

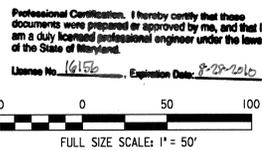
SCALE AS SHOWN

SHEET 28 OF 84



- LEGEND**
- SF— SILT FENCE
 - SSF— SUPER SILT FENCE
 - LOD— LIMIT OF DISTURBANCE
 - STABILIZED CONSTRUCTION ENTRANCE
 - CIP CURB INLET PROTECTION
 - AT-GRADE INLET PROTECTION
 - MEDIAN INLET PROTECTION

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	13
GRADING & DRAINAGE PLAN	18
DRAINAGE PROFILES	21 & 22
SIGNING & MARKING PLAN	35
MAINTENANCE OF TRAFFIC PLANS	41
UTILITY/STREET LIGHTING PLAN	45
LANDSCAPE PLAN	49



THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

John K. Roberts 1/6/09
 HOWARD SOIL CONSERVATION DISTRICT DATE

ENGINEER'S CERTIFICATE

"I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

David T. Moricone 12-15-2008
 Signature of Engineer (print name below signature) Date

DEVELOPER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction of this project will have a Certificate of Attendance at a Department of Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.

Ronald G. Lepson 12/16/08
 Signature of Developer (print name below signature) Date

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Steve Sharan 12/16/08
 DIRECTOR OF PUBLIC WORKS DATE

William J. Doherty 12-17-08
 CHIEF, BUREAU OF HIGHWAYS DATE

PREPARED BY

URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES: CRC			
DRN: CDF			
CHK: DTM			
DATE: 12/15/08	BY NO.	REVISION	DATE

EROSION & SEDIMENT CONTROL PLAN
FINAL PHASE

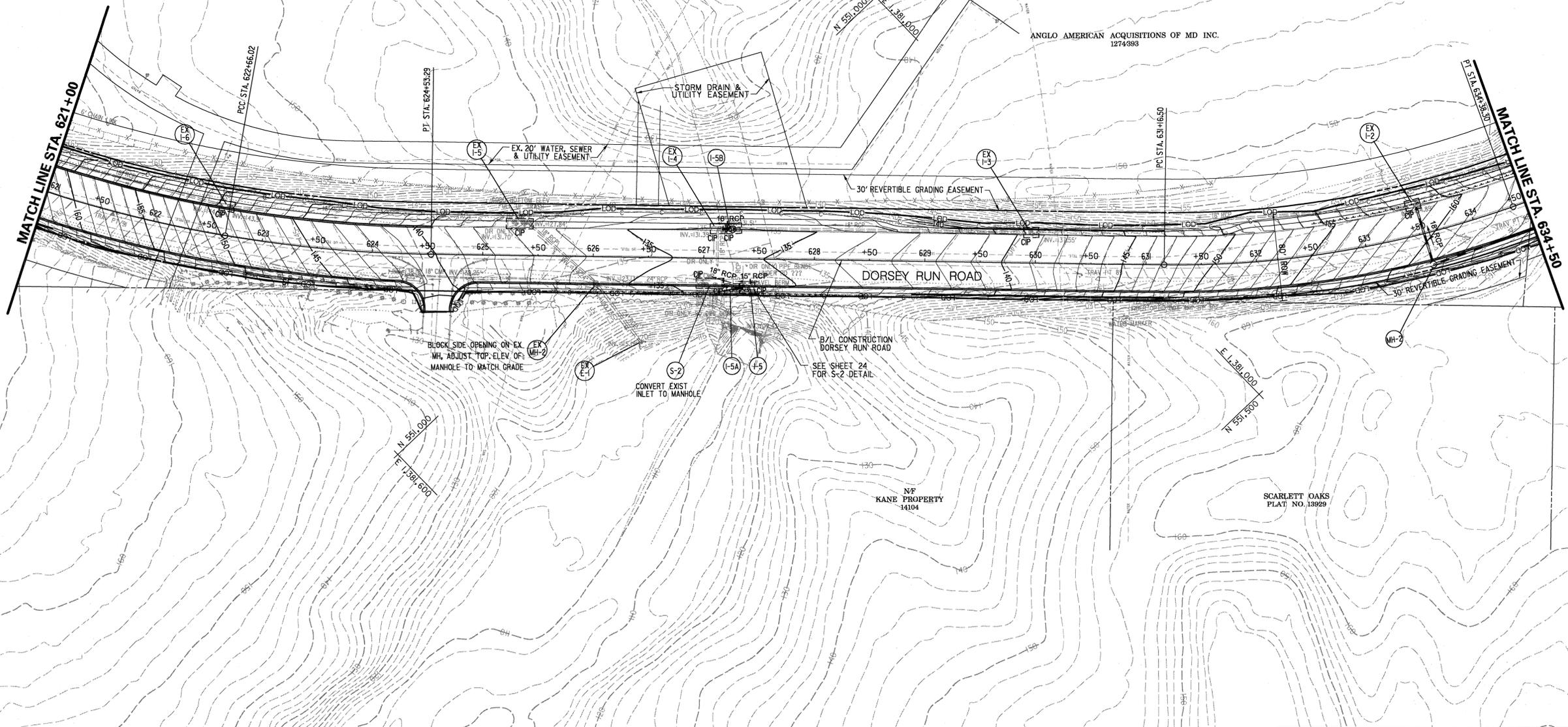
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE AS SHOWN

SHEET 29 OF 84



- LEGEND**
- SF — SILT FENCE
 - SSF — SUPER SILT FENCE
 - LOD — LIMIT OF DISTURBANCE
 - STABILIZED CONSTRUCTION ENTRANCE
 - CIP CURB INLET PROTECTION
 - AT-GRADE INLET PROTECTION
 - MEDIAN INLET PROTECTION

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	14
GRADING & DRAINAGE PLAN	19
DRAINAGE PROFILES	21 & 22
SIGNING & MARKING PLAN	36
MAINTENANCE OF TRAFFIC PLANS	42
UTILITY/STREET LIGHTING PLAN	46
LANDSCAPE PLAN	50

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156 Expiration Date: 8-28-2016

50 0 50 100
 FULL SIZE SCALE: 1" = 50'

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
John K. Blunt 1/6/19
 HOWARD SOIL CONSERVATION DISTRICT DATE

ENGINEER'S CERTIFICATE

" I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

David T. Morison 12-15-2008
 Signature of Engineer (print name below signature) Date
 DAVID T. MORISON

DEVELOPER'S CERTIFICATE

" I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction of this project will have a Certificate of Attendance at a Department of Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.

Ronald G. Lepson 12/16/08
 Signature of Developer (print name below signature) Date
 Ronald G. Lepson

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Steve Sharan 12/16/08
 DIRECTOR OF PUBLIC WORKS DATE

Willie J. Mahan 12-17-08
 CHIEF, BUREAU OF HIGHWAYS DATE

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES: CRC			
DRN: CDF			
CHK: DTM			
DATE: 12/15/08	BY NO.	REVISION	DATE

EROSION & SEDIMENT CONTROL PLAN
FINAL PHASE

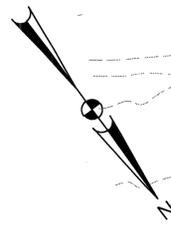
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12

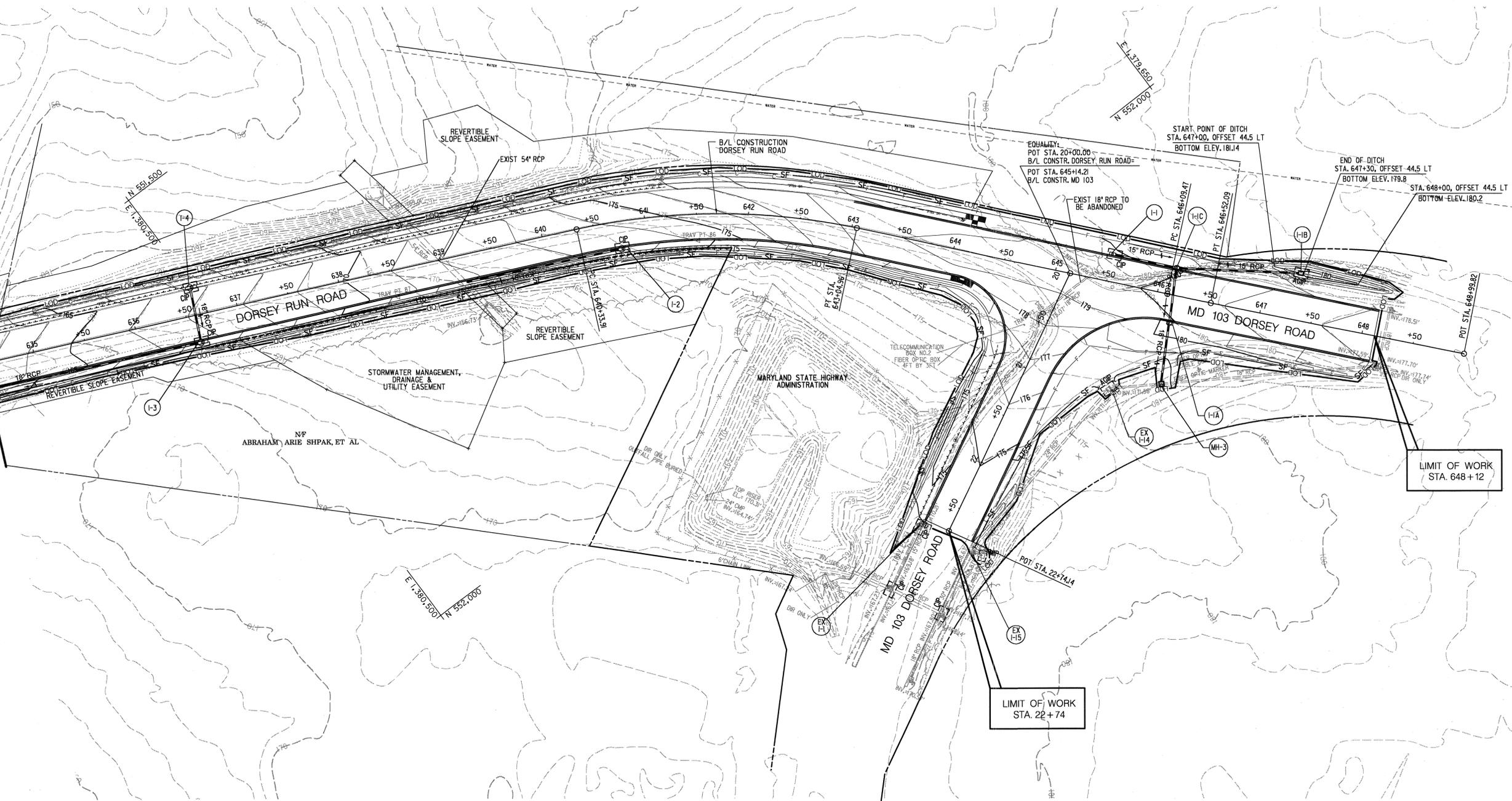
ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 AS SHOWN

SHEET
 30 OF 84



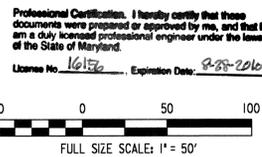
MATCH LINE STA. 634+50



LEGEND

- SF — SILT FENCE
- SSF — SUPER SILT FENCE
- LOD — LIMIT OF DISTURBANCE
- STABILIZED CONSTRUCTION ENTRANCE
- CIP CURB INLET PROTECTION
- AGIP AT-GRADE INLET PROTECTION
- MIP MEDIAN INLET PROTECTION

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	15 & 16
GRADING & DRAINAGE PLAN	20
DRAINAGE PROFILES	21 & 22
SIGNING & MARKING PLAN	37
MAINTENANCE OF TRAFFIC PLANS	43
UTILITY/STREET LIGHTING PLAN	47
LANDSCAPE PLAN	51



THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

John R. Roberts 1/6/09
 HOWARD SOIL CONSERVATION DISTRICT DATE

ENGINEER'S CERTIFICATE

"I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

David T. Marlow 12-15-2008
 Signature of Engineer (print name below signature) Date

DEVELOPER'S CERTIFICATE

"I/we certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction of this project will have a Certificate of Attendance at a Department of Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."

Emold G. Lepson 12/16/08
 Signature of Developer (print name below signature) Date

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Steve Sharan 12/16/08 DATE
 CHIEF, DIVISION OF TRANSPORTATION AND SPECIAL PROJECTS

Emold G. Lepson 12/16/08 DATE
 CHIEF, BUREAU OF ENGINEERING

Walter J. J. J. 12-17-08 DATE
 CHIEF, BUREAU OF HIGHWAYS

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	CRC				
DRN:	CDF				
CHK:	DTM				
DATE:	12/15/08				
BY	NO.	REVISION	DATE		

EROSION & SEDIMENT CONTROL PLAN
FINAL PHASE

WIDENING OF DORSEY RUN ROAD
STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 AS SHOWN

SHEET
 31 OF 84

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER 3 INCHES OF SOIL BY RAKING, DISCING, OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

- 1) PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS. PER 1,000 SQUARE FEET) AND 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS. PER 1,000 SQUARE FEET) BEFORE SEEDING. HARROW OR DISC INTO UPPER 3 INCHES OF SOIL AT TIME OF SEEDING. APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS. PER 1,000 SQUARE FEET).
- 2) ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS. PER 1,000 SQUARE FEET) AND 1,000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS. PER 1,000 SQUARE FEET) BEFORE SEEDING. HARROW OR DISC INTO UPPER 3 INCHES OF SOIL.

SEEDING: FOR THE PERIOD MARCH 1 THROUGH APRIL 30 AND FROM AUGUST 1

THROUGH OCTOBER 15, SEED WITH 60 LBS. PER ACRE (14 LBS. PER 1,000 SQUARE FEET) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 60 LBS. KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS. PER ACRE (0.05 LBS. PER 1,000 SQUARE FEET) OF WEEPING LOVEGRASS. DURING THE PERIOD OCTOBER 16 THROUGH FEBRUARY 28, PROTECT SITE BY ONE OF THE FOLLOWING OPTIONS:

- 1) 2 TONS PER ACRE OF WELL-ANCHORED MULCH STRAW AND SEED AS SOON AS POSSIBLE IN THE SPRING.
- 2) USE SOD.
- 3) SEED WITH 60 LBS. PER ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS PER ACRE WELL ANCHORED STRAW.

MULCHING: APPLY 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS. PER 1,000 SQUARE FEET) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GALLONS PER 1,000 SQUARE FEET) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES, 8 FEET OR HIGHER, USE 347 GALLONS PER ACRE (8 GALLONS PER 1,000 SQUARE FEET) FOR ANCHORING.

MAINTENANCE: INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS, AND RESEEDINGS.

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTRIBUTED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER 3 INCHES OF SOIL BY RAKING, DISCING, OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

SOIL AMENDMENTS: APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS. PER 1,000 SQUARE FEET).

SEEDING: FOR PERIODS MARCH 1 THROUGH APRIL 30 AND FROM AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 2 1/2 BUSHELS PER ACRE OF ANNUAL RYE (3.2 LBS. PER 1,000 SQUARE FEET). FOR THE PERIOD MAY 1 THROUGH AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WEEPING LOVEGRASS (0.07 LBS. PER 1,000 SQUARE FEET). FOR THE PERIOD NOVEMBER 16 THROUGH FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING OR USE SOD.

MULCHING: APPLY 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS. PER 1,000 SQUARE FEET) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GALLONS PER 1,000 SQUARE FEET) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES, 8 FEET OR HIGHER, USE 347 GALLONS PER ACRE (8 GALLONS PER 1,000 SQUARE FEET) FOR ANCHORING. REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTRIBUTED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER 3 INCHES OF SOIL BY RAKING, DISCING, OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

SOIL AMENDMENTS: APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS. PER 1,000 SQUARE FEET).

SEEDING: FOR PERIODS MARCH 1 THROUGH APRIL 30 AND FROM AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 2 1/2 BUSHELS PER ACRE OF ANNUAL RYE (3.2 LBS. PER 1,000 SQUARE FEET). FOR THE PERIOD MAY 1 THROUGH AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WEEPING LOVEGRASS (0.07 LBS. PER 1,000 SQUARE FEET). FOR THE PERIOD NOVEMBER 16 THROUGH FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING OR USE SOD.

MULCHING: APPLY 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS. PER 1,000 SQUARE FEET) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GALLONS PER 1,000 SQUARE FEET) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES, 8 FEET OR HIGHER, USE 347 GALLONS PER ACRE (8 GALLONS PER 1,000 SQUARE FEET) FOR ANCHORING. REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

STANDARD SEDIMENT CONTROL NOTES

1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (410-313-1855).

2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.

3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:

- A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DISES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3:1.
- B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THE PERIMETER IN ACCORDANCE WITH VOLUME 1, CHAPTER 7, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.

5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING, SOD, TEMPORARY SEEDING, AND MULCHING (SECTION G). TEMPORARY STABILIZATION WITH MULCH ALONE SHALL ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.

6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

7. SITE ANALYSIS:

AREA DISTURBED - 12.72 ACRES
 AREA TO BE ROOFED OR PAVED - 6.63 ACRES
 AREA TO BE VEGETATIVELY STABILIZED - 2.00 ACRES
 TOTAL CUT - 5,864 CY
 TOTAL FILL - 8,608 CY
 OFF-SITE WASTE SITE - HOWARD COUNTY LANDFILL
 OFF-SITE BORROW SITE - APPROVED SITE

8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.

9. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

10. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.

11. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

12. SITE GRADING WILL BEGIN ONLY AFTER ALL PERIMETER SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED AND ARE IN A FUNCTIONING CONDITION.

13. SEDIMENT WILL BE REMOVED FROM TRAPS WHEN ITS DEPTH REACHES CLEAN OUT ELEVATION SHOWN ON THE PLANS.

14. CUT AND FILL QUANTITIES PROVIDED UNDER SITE ANALYSIS DO NOT REPRESENT BID QUANTITIES. THESE QUANTITIES DO NOT DISTINGUISH BETWEEN TOPSOIL, STRUCTURAL FILL OR EMBANKMENT MATERIAL, NOR DO THEY REFLECT CONSIDERATION OF UNDERCUTTING OR REMOVAL OF UNSUITABLE MATERIAL. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH SITE CONDITIONS WHICH MAY AFFECT THE WORK.

15. CONSTRUCTION WITHIN, ALONG OR ACROSS STREAM CHANNELS SHALL, AS A MINIMUM, CONFIRM TO CRITERIA DESCRIBED UNDER MARYLAND'S GUIDELINES TO WATERWAY CONSTRUCTION.

SEQUENCE OF CONSTRUCTION

NOTE THAT SOME SEQUENCE STEPS MAY BE PERFORMED CONCURRENTLY WITH THE APPROVAL OF THE COUNTY INSPECTOR.

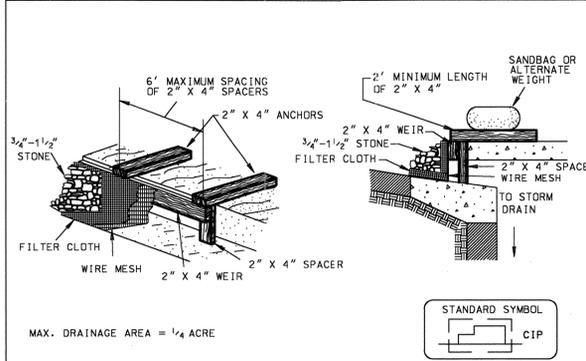
INITIAL PHASE:

- OBTAIN THE NECESSARY GRADING PERMITS PRIOR TO CONSTRUCTION (1 DAY).
- NOTIFY HOWARD COUNTY AT (410)-313-1855 AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION (1 DAY).
- WITH THE APPROVAL OF THE INSPECTOR, INSTALL STABILIZED CONSTRUCTION ENTRANCES WITH MOUNTABLE BERMS AND PIPES (IF NECESSARY) (2 DAYS).
- CLEAR AND GRUB FOR THE INSTALLATION OF THE EROSION AND SEDIMENT CONTROL MEASURES NOTED BELOW (5 DAYS).
- ESTABLISH STAGING AREA(S) FOR CONSTRUCTION TRAILORS AND COORDINATE UTILITY SERVICES (5 DAYS).
- COORDINATE THE DISCONNECTION OF ALL EXISTING UTILITIES (IF NOT DONE SO ALREADY) TO EXISTING DWELLINGS WITHIN THE LIMIT OF DISTURBANCE (5 DAYS).
- INSTALL SUPER SILT FENCE AND SILT FENCE SHOWN ON E&S CONTROL PLANS - INITIAL PHASE (5 DAYS).
- WITH THE APPROVAL OF THE INSPECTOR, BEGIN INSTALLATION OF UNDERGROUND DRAINAGE SYSTEMS AS LISTED BELOW. STABILIZE THE EARTH AT THE END OF EACH WORK DAY (1 DAY).
 A. INSTALL I-SB TO EX-1/10
 B. INSTALL I-SB AND CONNECT TO EX I-4
- ONCE DRAINAGE ABOVE IS COMPLETE, INSTALL INLET PROTECTION DEVICES ON EXISTING INLETS AND INSTALLED INLETS ABOVE AS MARKED ON PLANS, WHERE CURB INLET PROTECTION (CIP) IS SHOWN ON PLANS, UNLAP THE INLET IN SUPER SILT FENCE AS ADDED PROTECTION (2 DAYS).

FINAL PHASE:

- WITH APPROVAL OF THE INSPECTOR AND HOWARD COUNTY REPRESENTATIVE, INSTALL MAINTENANCE OF TRAFFIC DEVICES AS SHOWN ON PLANS, REMOVE EXISTING EXISTING PAVEMENT MARKINGS THAT ARE IN CONFLICT WITH TEMPORARY TRAFFIC PATTERNS AND ADD TEMPORARY PAVEMENT MARKINGS AS SHOWN ON PLANS (5 DAYS).
- ONCE TRAFFIC PATTERNS ARE IN PLACE, SAWCUT EXISTING ROADWAY AND BEING REMOVING EXISTING PAVEMENT AND CURB AND GUTTER AS SHOWN ON PLANS (10 DAYS).
- ONCE REMOVED, PERFORM REST OF STORM DRAIN TASKS AS NOTED ON E&S PLANS, AND INSTALL REST OF DRAINAGE SYSTEMS, MODIFY EXISTING WATER QUALITY CONTROL STRUCTURE (S-2) AND BLOCK SIDE OPENING ON EX-MH/2 AND ADJUST TOP ELEV. TO MATCH FINAL GRADE (5 DAYS).
- ONCE CURB IS IN PLACE, INSTALL PAVEMENT SECTIONS, SIDEWALK, AND RETAINING AND CURB WALLS, GRADE BEHIND WALLS AS SHOWN ON PLANS (10 DAYS).
- WITH THE APPROVAL OF HOWARD COUNTY REPRESENTATIVE, CLOSE SECTIONS OF DORSEY RUN ROAD TO MILL AND OVERLAY EXISTING ROADWAY TO MATCH PLANS, REMOVE SECTION OF PAVEMENT BY MD 103 AS WELL AS SHOWN ON PLANS (1 DAY).
- REMOVE TEMPORARY ROADWAY PATTERNS AND ADD PROPOSED PAVEMENT MARKINGS, ADD PROPOSED SIGNS AS WELL (1 DAY).
- WITH THE APPROVAL OF THE INSPECTOR, REMOVE ALL REMAINING SEDIMENT CONTROL DEVICES AND COMPLETE THE FINAL STABILIZATION (1 DAY).

DETAIL 23C - CURB INLET PROTECTION (COG OR COS INLETS)



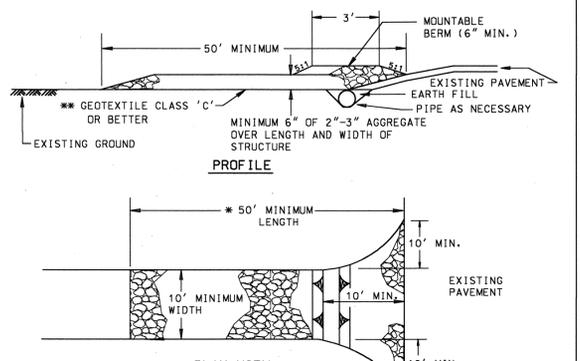
MAX. DRAINAGE AREA = 1/4 ACRE

Construction Specifications

4') to the 2" x 4" weir (measuring throat length plus 2') as shown on the standard drawing.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 16 - 5B	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
---	---------------------	---

DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



STANDARD SYMBOL

PLAN VIEW

Construction Specification

- Length - minimum of 50' (#30' for single residence lot).
- Width - 10' minimum, should be flared at the existing road to provide a turning radius.
- Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. **The plan approval authority may not require single family residences to use geotextile.
- Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
- Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
- Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE F - 17 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
---	--------------------	---

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 Signature: [Signature] DATE: 11/6/09
 HOWARD SOIL CONSERVATION DISTRICT

ENGINEER'S CERTIFICATE
 "I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."
 Signature of Engineer (print name below signature): DAVID T. MCELROY
 Date: 12-15-2008

DEVELOPER'S CERTIFICATE
 "I/we certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction of this project will have a Certificate of Attendance at a Department of Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."
 Signature of Developer (print name below signature): Ronald G. Lepson
 Date: 12/16/08

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 161636, Expiration Date: 8-28-2010

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: Steve Shuman 12/16/08
 Chief, Division of Transportation and Special Projects: [Signature] DATE: 12/16/08

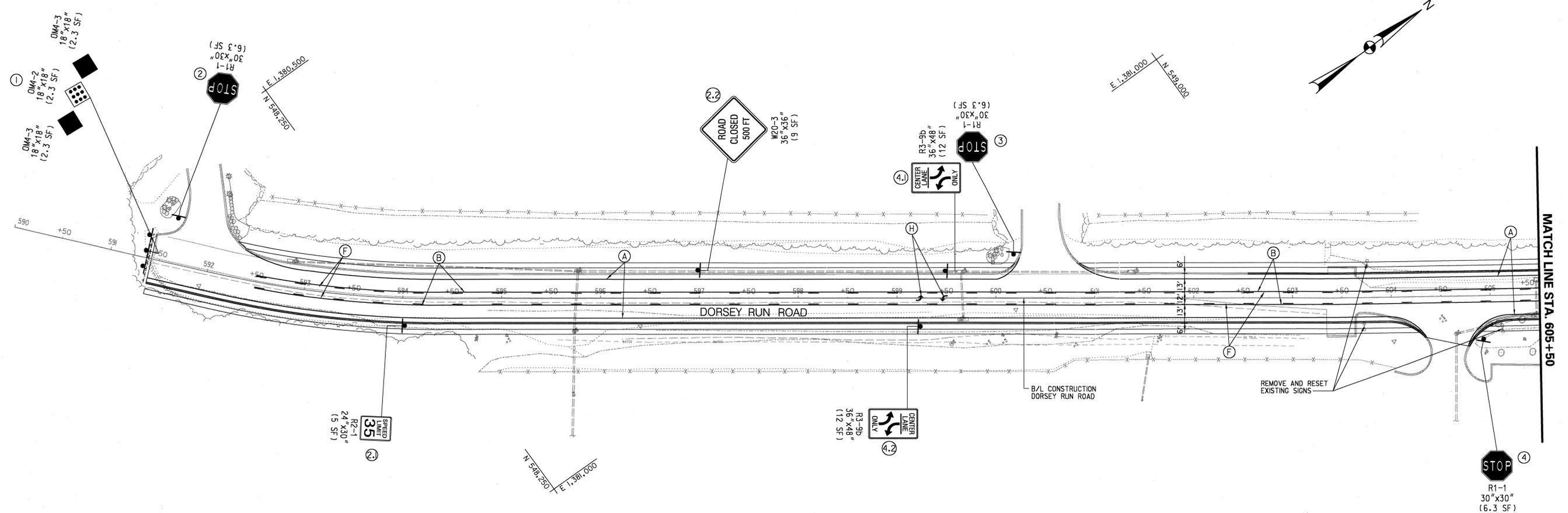
PREPARED BY
 URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	CRC				
DRN:	CDF				
CHK:	DTM				
DATE:	12/15/08	BY:	NO.	REVISION	DATE

EROSION AND SEDIMENT CONTROL
 DETAILS AND NOTES - I
 SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12
 ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A
 SCALE N.T.S.
 SHEET 32 OF 84



SIGN LEGEND

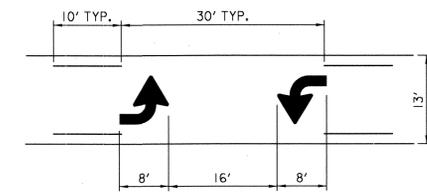
- EXISTING SIGN AND SUPPORT
- NEW SIGN
- EXISTING SIGN AND SUPPORT TO BE REMOVED
- SIGN ASSEMBLY NUMBER
- EXISTING SIGN AND SUPPORT
- NEW SIGN AND SUPPORT

PAVEMENT MARKING LEGEND

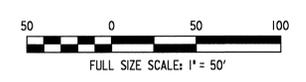
- (A) 5" WHITE SOLID PERMANENT PREFORMED PAVEMENT MARKINGS
- (B) 5" YELLOW SOLID PERMANENT PREFORMED PAVEMENT MARKINGS
- (C) 5" DOUBLE YELLOW SOLID PERMANENT PREFORMED PAVEMENT MARKINGS
- (D) 5" WHITE PERMANENT PREFORMED PAVEMENT MARKINGS (10' LINE, 30' GAP)
- (E) 5" WHITE PERMANENT PREFORMED PAVEMENT MARKINGS (3' LINE, 9' GAP)
- (F) 5" YELLOW PERMANENT PREFORMED PAVEMENT MARKINGS (10' LINE, 30' GAP)
- (G) 10" YELLOW SOLID PERMANENT PREFORMED PAVEMENT MARKINGS
- (H) SOLID WHITE PERMANENT PREFORMED PAVEMENT MARKINGS ARROWS
- (J) 24" WHITE SOLID PERMANENT PREFORMED PAVEMENT MARKINGS
- (K) 12" WHITE SOLID PERMANENT PREFORMED PAVEMENT MARKINGS

SIGNING AND MARKING NOTES

1. ALL PAVEMENT MARKINGS ON THE ROADWAY SHALL BE PERMANENT PREFORMED PAVEMENT MARKINGS.
2. PAVEMENT MARKING DIMENSIONS ARE TO FACE OF CURB.
3. ALL WARNING SIGNS SHALL BE BLACK LEGEND WITH FLUORESCENT YELLOW BACK GROUND.
4. THE CHOSEN DATE TO BE DISPLAYED ON THE SIGN FACE AS THE EFFECTIVE DATE SHALL BE DESIGNATED AS APPROXIMATELY ONE MONTH AFTER THE SIGNS HAS BEEN INSTALLED.
5. ON THE EFFECTIVE DATE, REMOVE SIGN ASSEMBLY NOS. 18, 20, 21, AND 23. REPLACE SIGN GM-2 WITH SIGN GM-3 AND INSTALL SIGN W4-4P UNDER SIGN R1-1 AS PART OF ASSEMBLY NO. 25. SEE SIGN DETAILS.
6. 60 DAYS AFTER THE EFFECTIVE DATE, REMOVE SIGN GM-4 AND SIGN ASSEMBLY NO. 27.
7. ALL SIGN POST USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) - 3' LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.



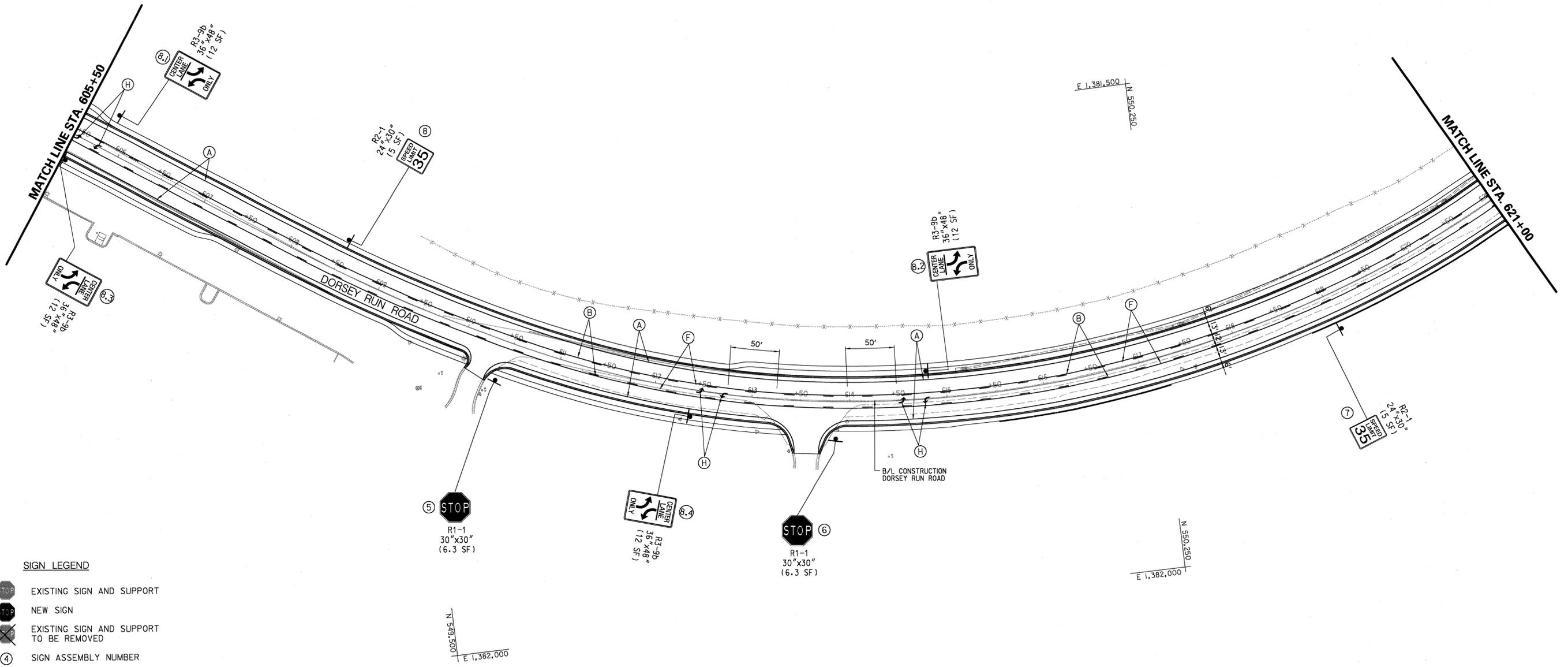
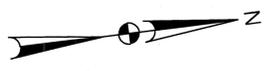
CENTER TURN LANE DETAIL
N.T.S.



Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 16156, Expiration Date: 9-28-2010

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	12
GRADING & DRAINAGE PLAN	17
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	24 & 28
MAINTENANCE OF TRAFFIC PLANS	40
UTILITY/STREET LIGHTING PLAN	44
LANDSCAPE PLAN	48

<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND</p> <p>Director of Public Works: Steve Sharan 12/16/08 Date: 12/17/08</p> <p>Chief, Division of Transportation and Special Projects</p>	<p>PREPARED BY</p> <p>URS 4 NORTH PARK DRIVE HUNT VALLEY, MARYLAND TEL: (410) 785-7220</p>		<p>DES: CRC</p> <p>DRN: CDF</p> <p>CHK: DTM</p> <p>DATE: 12/15/08</p>	<p>BY: _____ NO. _____</p> <p>REVISION: _____</p> <p>DATE: _____</p>	<p>SIGNING AND MARKING PLAN</p> <p>SCALE MAP NO. N/A BLOCK NO. _____</p>	<p>WIDENING OF DORSEY RUN ROAD STA. 591+43 TO STA. 648+12</p> <p>ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND CAPITAL PROJECT J-4148-A</p>	<p>SCALE AS SHOWN</p> <p>SHEET 34 OF 84</p>
--	---	--	---	--	---	---	---



SIGN LEGEND

- EXISTING SIGN AND SUPPORT
- NEW SIGN
- EXISTING SIGN AND SUPPORT TO BE REMOVED
- SIGN ASSEMBLY NUMBER
- EXISTING SIGN AND SUPPORT
- NEW SIGN AND SUPPORT

PAVEMENT MARKING LEGEND

- (A) 5" WHITE SOLID PERMANENT PREFORMED PAVEMENT MARKINGS
- (B) 5" YELLOW SOLID PERMANENT PREFORMED PAVEMENT MARKINGS
- (C) 5" DOUBLE YELLOW SOLID PERMANENT PREFORMED PAVEMENT MARKINGS
- (D) 5" WHITE PERMANENT PREFORMED PAVEMENT MARKINGS (10' LINE, 30' GAP)
- (E) 5" WHITE PERMANENT PREFORMED PAVEMENT MARKINGS (3' LINE, 9' GAP)
- (F) 5" YELLOW PERMANENT PREFORMED PAVEMENT MARKINGS (10' LINE, 30' GAP)
- (G) 10" YELLOW SOLID PERMANENT PREFORMED PAVEMENT MARKINGS
- (H) SOLID WHITE PERMANENT PREFORMED PAVEMENT MARKINGS ARROWS
- (J) 24" WHITE SOLID PERMANENT PREFORMED PAVEMENT MARKINGS
- (K) 12" WHITE SOLID PERMANENT PREFORMED PAVEMENT MARKINGS

SIGNING AND MARKING NOTES

1. ALL PAVEMENT MARKINGS ON THE ROADWAY SHALL BE PERMANENT PREFORMED PAVEMENT MARKINGS.
2. PAVEMENT MARKING DIMENSIONS ARE TO FACE OF CURB.
3. ALL WARNING SIGNS SHALL BE BLACK LEGEND WITH FLUORESCENT YELLOW BACK GROUND.
4. THE CHOSEN DATE TO BE DISPLAYED ON THE SIGN FACE AS THE EFFECTIVE DATE SHALL BE DESIGNATED AS APPROXIMATELY ONE MONTH AFTER THE SIGNS HAS BEEN INSTALLED.
5. ON THE EFFECTIVE DATE, REMOVE SIGN ASSEMBLY NOS. 18, 20, 21, AND 23. REPLACE SIGN GM-2 WITH SIGN GM-3 AND INSTALL SIGN W4-4P UNDER SIGN R1-1 AS PART OF ASSEMBLY NO. 25. SEE SIGN DETAILS.
6. 60 DAYS AFTER THE EFFECTIVE DATE, REMOVE SIGN GM-4 AND SIGN ASSEMBLY NO. 27.
7. ALL SIGN POST USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) - 3' LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.



Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 161FL Expiration Date: 9-29-2010

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	13
GRADING & DRAINAGE PLAN	18
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	25 & 29
MAINTENANCE OF TRAFFIC PLANS	41
UTILITY/STREET LIGHTING PLAN	45
LANDSCAPE PLAN	49

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: *Steve Shuman* 12/16/08
 Chief, Division of Transportation and Special Projects

Chief of Bureau of Engineering: *William J. White* 12-17-08
 Chief, Bureau of Highways

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	CRC
DRN:	CDF
CHK:	DTM
DATE:	12/15/08
BY:	NO.
REVISION	DATE

SIGNING AND MARKING PLAN

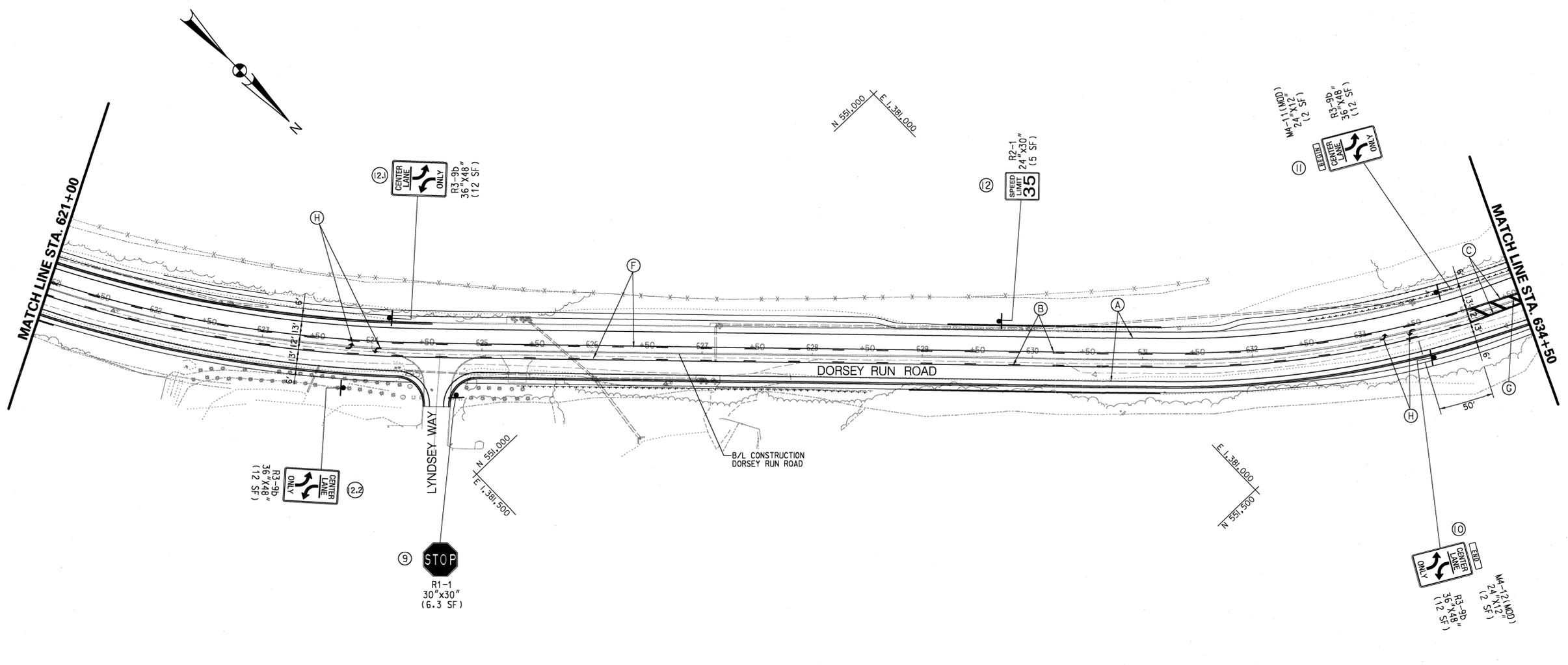
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 AS SHOWN

SHEET
 35 OF 84



SIGN LEGEND

- EXISTING SIGN AND SUPPORT
- NEW SIGN
- EXISTING SIGN AND SUPPORT TO BE REMOVED
- SIGN ASSEMBLY NUMBER
- EXISTING SIGN AND SUPPORT
- NEW SIGN AND SUPPORT

PAVEMENT MARKING LEGEND

- (A) 5" WHITE SOLID PERMANENT PREFORMED PAVEMENT MARKINGS
- (B) 5" YELLOW SOLID PERMANENT PREFORMED PAVEMENT MARKINGS
- (C) 5" DOUBLE YELLOW SOLID PERMANENT PREFORMED PAVEMENT MARKINGS
- (D) 5" WHITE PERMANENT PREFORMED PAVEMENT MARKINGS (10' LINE, 30' GAP)
- (E) 5" WHITE PERMANENT PREFORMED PAVEMENT MARKINGS (3' LINE, 9' GAP)
- (F) 5" YELLOW PERMANENT PREFORMED PAVEMENT MARKINGS (10' LINE, 30' GAP)
- (G) 10" YELLOW SOLID PERMANENT PREFORMED PAVEMENT MARKINGS
- (H) SOLID WHITE PERMANENT PREFORMED PAVEMENT MARKINGS ARROWS
- (J) 24" WHITE SOLID PERMANENT PREFORMED PAVEMENT MARKINGS
- (K) 12" WHITE SOLID PERMANENT PREFORMED PAVEMENT MARKINGS

SIGNING AND MARKING NOTES

1. ALL PAVEMENT MARKINGS ON THE ROADWAY SHALL BE PERMANENT PREFORMED PAVEMENT MARKINGS.
2. PAVEMENT MARKING DIMENSIONS ARE TO FACE OF CURB.
3. ALL WARNING SIGNS SHALL BE BLACK LEGEND WITH FLUORESCENT YELLOW BACK GROUND.
4. THE CHOSEN DATE TO BE DISPLAYED ON THE SIGN FACE AS THE EFFECTIVE DATE SHALL BE DESIGNATED AS APPROXIMATELY ONE MONTH AFTER THE SIGNS HAS BEEN INSTALLED.
5. ON THE EFFECTIVE DATE, REMOVE SIGN ASSEMBLY NOS. 18, 20, 21, AND 23. REPLACE SIGN GM-2 WITH SIGN GM-3 AND INSTALL SIGN W4-4P UNDER SIGN R1-1 AS PART OF ASSEMBLY NO. 25. SEE SIGN DETAILS.
6. 60 DAYS AFTER THE EFFECTIVE DATE, REMOVE SIGN GM-4 AND SIGN ASSEMBLY NO. 27.
7. ALL SIGN POST USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) - 3' LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16143, Expiration Date: 8-28-2010

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	14
GRADING & DRAINAGE PLAN	19
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	26 & 30
MAINTENANCE OF TRAFFIC PLANS	42
UTILITY/STREET LIGHTING PLAN	46
LANDSCAPE PLAN	50

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: Steve Sharav 12/16/08
 Chief, Division of Transportation and Special Projects: Steve Sharav 12/16/08

Chief, Bureau of Engineering: [Signature] 12/16/08
 Chief, Bureau of Highways: [Signature] 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	CGK				
DRN:	SYC				
CHK:	DTM				
DATE:	12/15/08	BY:	NO.	REVISION	DATE

SIGNING AND MARKING PLAN

SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE AS SHOWN

SHEET 36 OF 84



SIGN LEGEND

- EXISTING SIGN AND SUPPORT
- NEW SIGN
- EXISTING SIGN AND SUPPORT TO BE REMOVED
- SIGN ASSEMBLY NUMBER
- EXISTING SIGN AND SUPPORT
- NEW SIGN AND SUPPORT

PAVEMENT MARKING LEGEND

- (A) 5" WHITE SOLID PERMANENT PREFORMED PAVEMENT MARKINGS
- (B) 5" YELLOW SOLID PERMANENT PREFORMED PAVEMENT MARKINGS
- (C) 5" DOUBLE YELLOW SOLID PERMANENT PREFORMED PAVEMENT MARKINGS
- (D) 5" WHITE PERMANENT PREFORMED PAVEMENT MARKINGS (10' LINE, 30' GAP)
- (E) 5" WHITE PERMANENT PREFORMED PAVEMENT MARKINGS (3' LINE, 9' GAP)
- (F) 5" YELLOW PERMANENT PREFORMED PAVEMENT MARKINGS (10' LINE, 30' GAP)
- (G) 10" YELLOW SOLID PERMANENT PREFORMED PAVEMENT MARKINGS
- (H) SOLID WHITE PERMANENT PREFORMED PAVEMENT MARKINGS ARROWS
- (J) 24" WHITE SOLID PERMANENT PREFORMED PAVEMENT MARKINGS
- (K) 12" WHITE SOLID PERMANENT PREFORMED PAVEMENT MARKINGS

SIGNING AND MARKING NOTES

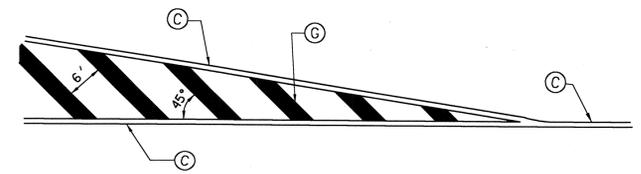
1. ALL PAVEMENT MARKINGS ON THE ROADWAY SHALL BE PERMANENT PREFORMED PAVEMENT MARKINGS.
2. PAVEMENT MARKING DIMENSIONS ARE TO FACE OF CURB.
3. ALL WARNING SIGNS SHALL BE BLACK LEGEND WITH FLUORESCENT YELLOW BACK GROUND.
4. THE CHOSEN DATE TO BE DISPLAYED ON THE SIGN FACE AS THE EFFECTIVE DATE SHALL BE DESIGNATED AS APPROXIMATELY ONE MONTH AFTER THE SIGNS HAS BEEN INSTALLED.
5. ON THE EFFECTIVE DATE, REMOVE SIGN ASSEMBLY NOS. 18, 20, 21, AND 23. REPLACE SIGN GM-2 WITH SIGN GM-3 AND INSTALL SIGN W4-4P UNDER SIGN R1-1 AS PART OF ASSEMBLY NO. 25. SEE SIGN DETAILS.
6. 60 DAYS AFTER THE EFFECTIVE DATE, REMOVE SIGN GM-4 AND SIGN ASSEMBLY NO. 27.
7. ALL SIGN POST USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) - 3' LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
8. SIGN TO BE INSTALLED ONCE DORSEY RUN ROAD EXTENDS TO MONTEVIDEO ROAD BY OTHERS.

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	15 & 16
GRADING & DRAINAGE PLAN	20
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	27 & 31
MAINTENANCE OF TRAFFIC PLANS	43
UTILITY/STREET LIGHTING PLAN	47
LANDSCAPE PLAN	51

SIGN DETAILS
N.T.S.



HATCHING DETAILS
N.T.S.



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16157, Expiration Date: 8-28-2010

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: Steve Shaver, 12/16/08
 Chief, Bureau of Engineering: [Signature], 12/16/08
 Chief, Division of Transportation and Special Projects: [Signature], 12/16/08
 Chief, Bureau of Highways: [Signature], 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	CRC				
DRN:	CDF				
CHK:	DTM				
DATE:	12/15/08	BY:	NO.	REVISION	DATE

SIGNING AND MARKING PLAN

SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE AS SHOWN

SHEET 37 OF 84

PANEL DESIGNATION	QUANTITY	LEGEND	SIZE			COLOR		BORDER		ARROW	SHIELD	REMARKS
			AREA (SF)	WIDTH (FT)	HEIGHT (FT)	LEGEN	BCKGRND	WIDTH	RADIUS			
GM-1	2		9	3	3	B	W	3/4"	1 1/2"	-	-	SHEET ALUMINUM
GM-2	1		9	3	3	B	W	3/4"	1 1/2"	-	-	SHEET ALUMINUM

PANEL DESIGNATION	QUANTITY	LEGEND	SIZE			COLOR		BORDER		ARROW	SHIELD	REMARKS
			AREA (SF)	WIDTH (FT)	HEIGHT (FT)	LEGEN	BCKGRND	WIDTH	RADIUS			
GM-3	1		5.25	3	1.75	B	W	3/4"	1 1/2"	-	-	SHEET ALUMINUM
D1-1(2)	1		12	6	2	W	G	1/2"	-	-	-	SHEET ALUMINUM *ARROW DET-1
D1-1(2)	1		12	6	2	W	G	1/2"	-	-	-	SHEET ALUMINUM *ARROW DET-1

LEGEND & BACKGROUND COLORS: B=BLACK, BR=BROWN, G=GREEN, R=RED, W=WHITE/SILVER, Y=YELLOW

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156, Expiration Date: 9-25-2010

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: Steve Shaper 12/16/08
 Chief, Bureau of Engineering: [Signature] 12/16/08
 Chief, Bureau of Highways: [Signature] 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES: CRC					
DRN: CDF					
CHK: DTM					
DATE: 12/15/08	BY	NO.	REVISION	DATE	

GUIDE SIGN MESSAGES -
 DETAILS & DIMENSIONS
 SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12
 ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1" = 50'
 SHEET
 38 OF 84

SHEET NO.	SIGN NO.	REMARKS	CODE NUMBERS *																			
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
34	1	OM4-3 (18"x18"); OM4-2 (18"x18"); OM4-3 (18"x18")	2-SUPPORTS	6.9																		24.0
	2	R1-1 (30"x30")	1-SUPPORT	6.3																		15.0
	2.1	R2-1 (24"x30")	1-SUPPORT	5.0																		15.0
	2.2	W20-3 (36"x36")	1-SUPPORT	9.0																		16.5
	3	R1-1 (30"x30")	1-SUPPORT	6.3																		15.0
	4	R1-1 (30"x30")	1-SUPPORT	6.3																		15.0
	4.1	R-3-9b (36"x48")	2-SUPPORTS	12.0																		33.0
	4.2	R-3-9b (36"x48")	2-SUPPORTS	12.0																		33.0
35	5	R1-1 (30"x30")	1-SUPPORT	6.3																		15.0
	6	R1-1 (30"x30")	1-SUPPORT	6.3																		15.0
	7	R2-1 (24"x30")	1-SUPPORT	5.0																		15.0
	8	R2-1 (24"x30")	1-SUPPORT	5.0																		15.0
	8.1	R-3-9b (36"x48")	2-SUPPORTS	12.0																		33.0
	8.2	R-3-9b (36"x48")	2-SUPPORTS	12.0																		33.0
	8.3	R-3-9b (36"x48")	2-SUPPORTS	12.0																		33.0
	8.4	R-3-9b (36"x48")	2-SUPPORTS	12.0																		33.0
36	9	R1-1 (30"x30")	1-SUPPORT	6.3																		15.0
	10	M4-12 MOD. (24"x12"); R3-9b (36"x48")	2-SUPPORTS	14.0																		35.0
	11	M4-11 MOD. (24"x12"); R3-9b (36"x48")	2-SUPPORTS	14.0																		35.0
	12	R2-1 (24"x30")	1-SUPPORT	5.0																		15.0
	12.1	R-3-9b (36"x48")	2-SUPPORTS	12.0																		33.0
	12.2	R-3-9b (36"x48")	2-SUPPORTS	12.0																		33.0
37	13	W9-2(2) (48"x48"); W9-2(3) (30"x24")	2-SUPPORT	21.0																		37.0
	14	W4-2(R) (36"x36")	1-SUPPORT	9.0																		16.5
	15	W9-2(1) (36"x36")	1-SUPPORT	9.0																		16.5
	16	R2-1 (24"x30")	1-SUPPORT	5.0																		16.5
	17	D1-1(2) (72"x24"); M4-5 (24"x12"); M1-4a (24"x24"); M6-1 (21"x15")	2-SUPPORTS	20.2																		292.0
	18	R1-1 (30"x30"); GM-1 (36"x36")	2-SUPPORTS	15.3																		36.0
	19	M3-2 (24"x12"); M1-5 (30"x24"); M6-1 (21"x15")	1-SUPPORT	9.1																		16.5
	20	W3-1a (36"x36")	1-SUPPORT	9.0																		16.5
	21	W3-1a (36"x36")	1-SUPPORT	9.0																		16.5
	22	M3-2 (24"x12"); M1-5 (30"x24"); M6-1 (21"x15")	2-SUPPORTS	18.3																		33.5
		M3-4 (24"x12"); M1-5 (30"x24"); M6-3 (21"x15")																				
	23	R1-1 (30"x30"); GM-1 (36"x36")	2-SUPPORTS	15.3																		36.0
	24	M3-4 (24"x12"); M1-5 (30"x24"); M2-1 (21"x15"); M1-4a (24"x24")	2-SUPPORTS	13.1																		32.0
	25	D3-1 (72"x12"); R1-1 (30"x30")	1-SUPPORT	12.3																		15.5
	26	M4-5 (24"x12"); M1-5 (30"x24"); M6-1 (21"x15"); M3-4 (24"x12"); M1-5 (30"x24"); M6-1 (21"x15")	2-SUPPORTS	18.3																		33.5
	27	W3-1a (36"x36"); GM-2 (36"x36")	2-SUPPORTS	18.0																		37.0
	30	D1-1(2) (72"x24")	2-SUPPORT	12.0																		15.5
	32	GM-3 (36"x21")	SEE NOTE 5 SHEET 39	5.3																		
	33	W4-4P (30"x15")	SEE NOTE 5 SHEET 39	3.1																		
PAVEMENT MARKING QUANTITIES																						2
							2814	2600					666		6							
1		STA. 591+43 TO 605+50				3100	3100						1034		4							
2		STA. 605+50 TO 621+00				2700	2700	100					867	50								
3		STA. 621+00 TO 634+50				2724		1562	808	200			100	2								
4		STA. 634+50 TO 648+12				548		224	150						25							
4		STA. 20+00 TO 22+74																				
TOTAL				453.4			11886	8614	1886	958	200	2567	150	14	25							978.0

• CODE NUMBER DESCRIPTION & UNIT		
CODE NUMBERS	DESCRIPTION	UNIT
1	SHEET ALUMINUM SIGN	S.F.
2	WOOD SIGN SUPPORT 4"x4"	L.F.
3	WOOD SIGN SUPPORT 4"x6" (DRILLED)	L.F.
4	5" WHITE SOLID PERMANENT PREFORMED PAVEMENT MARKINGS	L.F.
5	5" YELLOW SOLID PERMANENT PREFORMED PAVEMENT MARKINGS	L.F.
6	5" DOUBLE YELLOW SOLID PERMANENT PREFORMED PAVEMENT MARKINGS	L.F.
7	5" WHITE PERMANENT PREFORMED PAVEMENT MARKINGS (10' LINE, 30' GAP)	L.F.
8	5" WHITE PERMANENT PREFORMED PAVEMENT MARKINGS (3' LINE, 9' GAP)	L.F.
9	5" YELLOW PERMANENT PREFORMED PAVEMENT MARKINGS (10' LINE, 30' GAP)	L.F.
10	10" YELLOW SOLID PERMANENT PREFORMED PAVEMENT MARKINGS	L.F.

• CODE NUMBER DESCRIPTION & UNIT		
CODE NUMBERS	DESCRIPTION	UNIT
11	SOLID WHITE PERMANENT PREFORMED PAVEMENT MARKINGS ARROWS	EA.
12	24" WHITE SOLID PERMANENT PREFORMED PAVEMENT MARKINGS	L.F.
13	12" WHITE SOLID PERMANENT PREFORMED PAVEMENT MARKINGS	L.F.
14	2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (14 GA.) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GA.) - 3' LONG. SEE NOTE 7 ON SHEET 36.	L.F.

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156, Expiration Date: 8-28-2010

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: Steve Shaner 12/16/08
 Chief, Division of Transportation and Special Projects: Willie J. White 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-1220



DES:	KJS
DRN:	MBW
CHK:	DTM
DATE:	12/15/08
BY:	NO.
REVISION:	
DATE:	

SIGNING AND MARKING SUMMARY TABLE

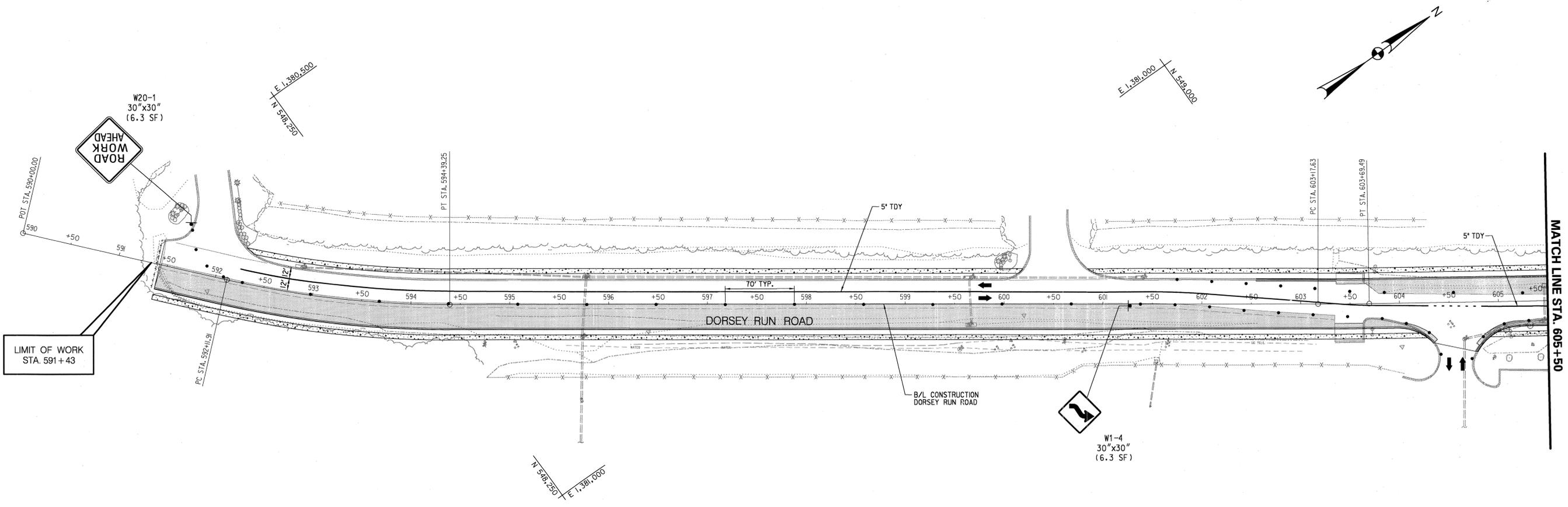
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1" = 50'

SHEET
 39 OF 84



LEGEND

- TEMPORARY TRAFFIC BARRIER
- WORK ZONE
- CHANNELIZING BARRELS
- TEMPORARY SIGN & SUPPORT
- DIRECTION OF TRAVEL
- 5' TW TEMPORARY PAVEMENT MARKING PAINT WHITE
- 5' TDY TEMPORARY PAVEMENT MARKING PAINT DOUBLE YELLOW
- 40 MPH TEMPORARY CRASH CUSHION

GENERAL NOTES:

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SUPPLY, INSTALL & MAINTAIN ALL TEMPORARY TRAFFIC CONTROL EQUIPMENT FOR THE DURATION OF THE CONTRACT.
2. ALL MAINTENANCE OF TRAFFIC MUST COMPLY WITH SECTION VI OF THE MD MUTCD-2006 EDITION AND SECTION 104 OF THE SHA STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES.
3. THE MINIMUM LANE WIDTH SHALL BE 10.5 FEET FOR LANE CLOSURES AND SHOULDER CLOSURES REFER TO THE SPECIFICATIONS.
4. AT THE COMPLETION OF THE WORK DAY, THE CONTRACTOR SHALL REFER TO MD SHA STANDARD 104.01-28 STAGED ROADWAY CONSTRUCTION.
5. ALL TEMPORARY SIGNS SHALL BE MOUNTED, AS DIRECTED IN THE SHA STD. MD 104.01-17 ROADSIDE SIGN/SIGN SUPPORT PLACEMENT.
6. EXISTING PAVEMENT MARKINGS AND SIGNS THAT CONFLICT WITH TEMPORARY TRAFFIC PATTERNS SHALL BE REMOVED OR COVERED.

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	12
GRADING & DRAINAGE PLAN	17
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	24 & 28
SIGNING & MARKING PLAN	34
UTILITY/STREET LIGHTING PLAN	44
LANDSCAPE PLAN	48

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156 Expiration Date: 8-28-2010



DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: Steve Sharon 12/16/08
 Chief, Bureau of Engineering: [Signature] 12/16/08
 Chief, Bureau of Highways: [Signature] 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES: CRC			
DRN: CDF			
CHK: DTM			
DATE: 12/15/08	BY	NO.	REVISION

MAINTENANCE OF TRAFFIC PLAN

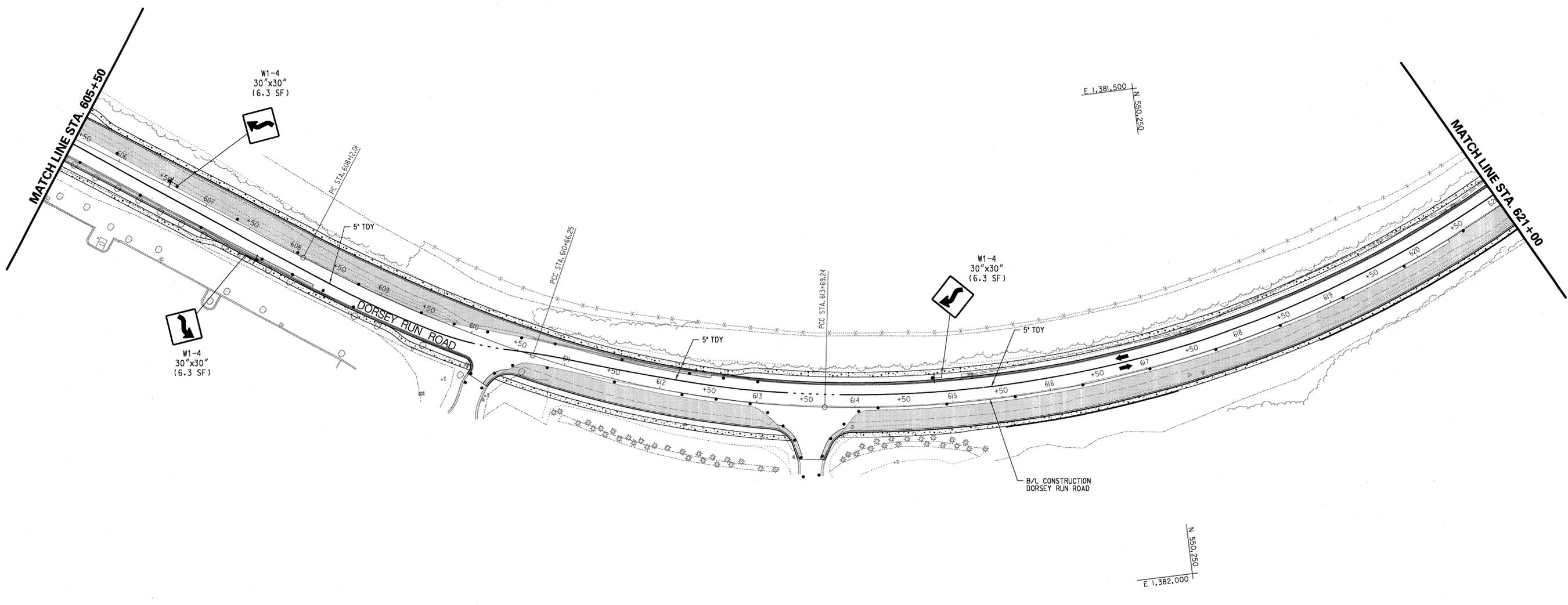
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE AS SHOWN

SHEET 40 OF 84



LEGEND

- TEMPORARY TRAFFIC BARRIER
- WORK ZONE
- CHANNELIZING BARRELS
- TEMPORARY SIGN & SUPPORT
- DIRECTION OF TRAVEL
- 5' TW TEMPORARY PAVEMENT MARKING PAINT WHITE
- 5' TDY TEMPORARY PAVEMENT MARKING PAINT DOUBLE YELLOW
- 40 MPH TEMPORARY CRASH CUSHION

GENERAL NOTES:

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SUPPLY, INSTALL & MAINTAIN ALL TEMPORARY TRAFFIC CONTROL EQUIPMENT FOR THE DURATION OF THE CONTRACT.
2. ALL MAINTENANCE OF TRAFFIC MUST COMPLY WITH SECTION VI OF THE MD MUTCD-2006 EDITION AND SECTION 104 OF THE SHA STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES.
3. THE MINIMUM LANE WIDTH SHALL BE 10.5 FEET FOR LANE CLOSURES AND SHOULDER CLOSURES REFER TO THE SPECIFICATIONS.
4. AT THE COMPLETION OF THE WORK DAY, THE CONTRACTOR SHALL REFER TO MD SHA STANDARD 104.01-28 STAGED ROADWAY CONSTRUCTION.
5. ALL TEMPORARY SIGNS SHALL BE MOUNTED AS DIRECTED IN THE SHA STD. MD 104.01-17 ROADSIDE SIGN/SIGN SUPPORT PLACEMENT.
6. EXISTING PAVEMENT MARKINGS AND SIGNS THAT CONFLICT WITH TEMPORARY TRAFFIC PATTERNS SHALL BE REMOVED OR COVERED.

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	13
GRADING & DRAINAGE PLAN	18
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	25 & 29
SIGNING & MARKING PLAN	35
UTILITY/STREET LIGHTING PLAN	41
LANDSCAPE PLAN	49

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156, Expiration Date: 8-25-2010



DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: Steve Slaven 12/16/08
 Chief, Bureau of Engineering: [Signature] 12/16/08
 Chief, Bureau of Highways: [Signature] 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES: CRC			
DRN: CDF			
CHK: DTM			
DATE: 12/15/08	BY	NO.	REVISION
			DATE

MAINTENANCE OF TRAFFIC PLAN

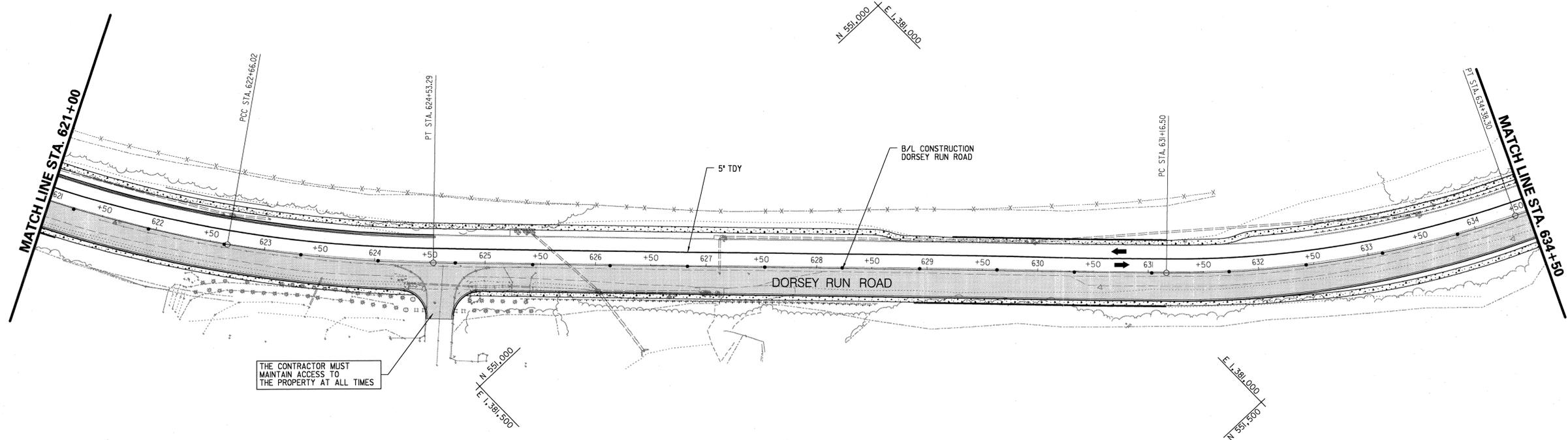
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE AS SHOWN

SHEET 41 OF 84



THE CONTRACTOR MUST MAINTAIN ACCESS TO THE PROPERTY AT ALL TIMES

LEGEND

- TEMPORARY TRAFFIC BARRIER
- ▬ WORK ZONE
- CHANNELIZING BARRELS
- TEMPORARY SIGN & SUPPORT
- DIRECTION OF TRAVEL
- 5' TW TEMPORARY PAVEMENT MARKING PAINT WHITE
- 5' TDY TEMPORARY PAVEMENT MARKING PAINT DOUBLE YELLOW
- 40 MPH TEMPORARY CRASH CUSHION

GENERAL NOTES:

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SUPPLY, INSTALL & MAINTAIN ALL TEMPORARY TRAFFIC CONTROL EQUIPMENT FOR THE DURATION OF THE CONTRACT.
2. ALL MAINTENANCE OF TRAFFIC MUST COMPLY WITH SECTION VI OF THE MD MUTCD-2006 EDITION AND SECTION 104 OF THE SHA STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES.
3. THE MINIMUM LANE WIDTH SHALL BE 10.5 FEET FOR LANE CLOSURES AND SHOULDER CLOSURES REFER TO THE SPECIFICATIONS.
4. AT THE COMPLETION OF THE WORK DAY, THE CONTRACTOR SHALL REFER TO MD SHA STANDARD 104.01-28 STAGED ROADWAY CONSTRUCTION.
5. ALL TEMPORARY SIGNS SHALL BE MOUNTED, AS DIRECTED IN THE SHA STD. MD 104.01-17 ROADSIDE SIGN/SIGN SUPPORT PLACEMENT.
6. EXISTING PAVEMENT MARKINGS AND SIGNS THAT CONFLICT WITH TEMPORARY TRAFFIC PATTERNS SHALL BE REMOVED OR COVERED.

CROSS REFERENCES

ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	14
GRADING & DRAINAGE PLAN	19
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	26 & 30
SIGNING & MARKING PLAN	36
UTILITY/STREET LIGHTING PLAN	42
LANDSCAPE PLAN	50

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156, Expiration Date: 9-29-2016



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: Steve Slavan 12/16/08
 Chief, Bureau of Engineering: Willie R. Mullen 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES: CRC			
DRN: CDF			
CHK: DTM			
DATE: 12/15/08	BY	NO.	REVISION
			DATE

MAINTENANCE OF TRAFFIC PLAN

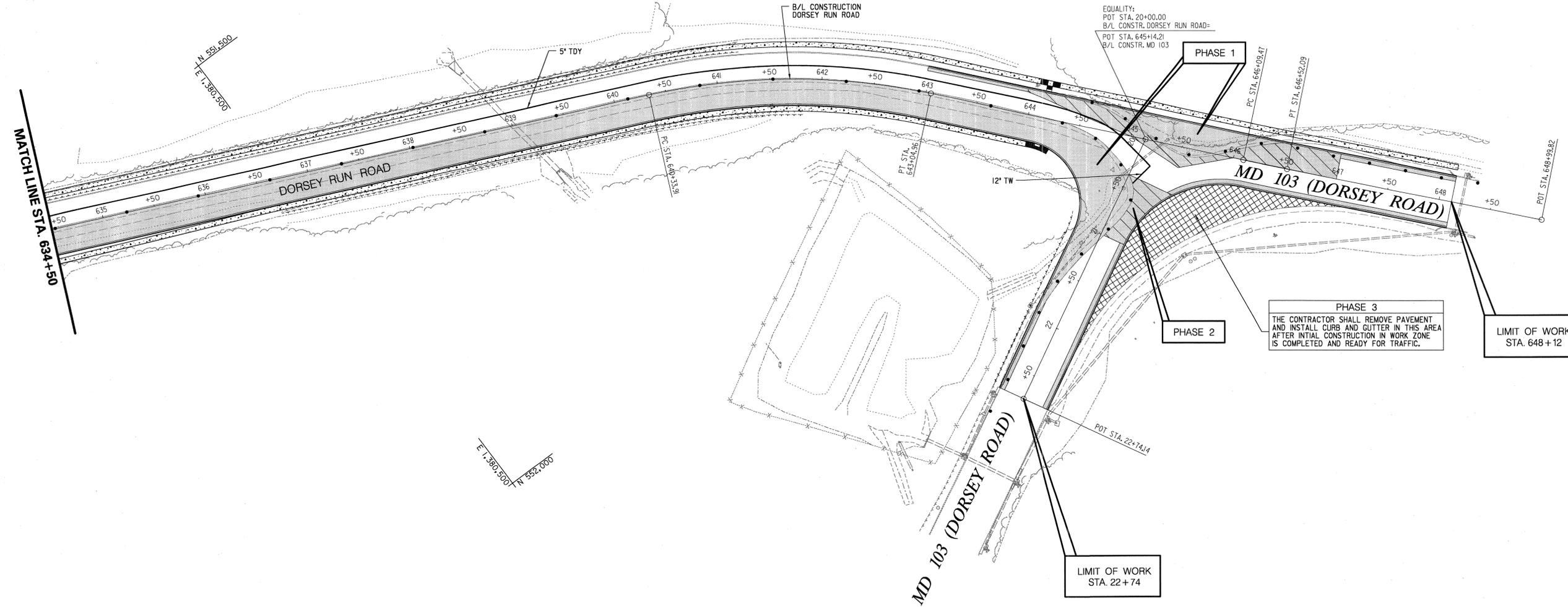
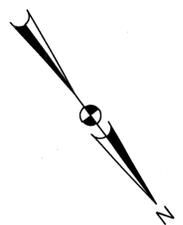
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE AS SHOWN

SHEET 42 OF 84



GENERAL NOTES:

- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SUPPLY, INSTALL & MAINTAIN ALL TEMPORARY TRAFFIC CONTROL EQUIPMENT FOR THE DURATION OF THE CONTRACT.
- ALL MAINTENANCE OF TRAFFIC MUST COMPLY WITH SECTION VI OF THE MD MUTCD-2006 EDITION AND SECTION 104 OF THE SHA STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES.
- THE MINIMUM LANE WIDTH SHALL BE 10.5 FEET FOR LANE CLOSURES AND SHOULDER CLOSURES REFER TO THE SPECIFICATIONS.
- AT THE COMPLETION OF THE WORK DAY, THE CONTRACTOR SHALL REFER TO MD SHA STANDARD 104.01-28 STAGED ROADWAY CONSTRUCTION.
- ALL TEMPORARY SIGNS SHALL BE MOUNTED AS DIRECTED IN THE SHA STD. MD 104.01-17 ROADSIDE SIGN/SIGN SUPPORT PLACEMENT.
- EXISTING PAVEMENT MARKINGS AND SIGNS THAT CONFLICT WITH TEMPORARY TRAFFIC PATTERNS SHALL BE REMOVED OR COVERED.
- WORK SHOWN IN THE HATCHED AREA SHALL BE ACCOMPLISHED USING FLAGGING OPERATION DURING OFF-PEAK HOURS USING MD 104.02-10. ADVANCED SIGNING SHALL BE LIMITED TO 500 FT.
- TEMPORARY SHOULDER WORK SHALL COMPLY WITH MD 104.03-02. ADVANCED SIGNING FROM U.S.1 TO THE WORK ZONE SHALL BE LIMITED TO 500 FT.

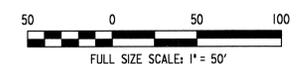
LEGEND

- TEMPORARY TRAFFIC BARRIER
- WORK ZONE
- CHANNELIZING BARRELS
- TEMPORARY SIGN & SUPPORT
- DIRECTION OF TRAVEL
- 5' TW TEMPORARY PAVEMENT MARKING PAINT WHITE
- 5' TDY TEMPORARY PAVEMENT MARKING PAINT DOUBLE YELLOW
- 12' TW TEMPORARY PAVEMENT MARKING PAINT WHITE (STOP BARS)
- 40 MPH TEMPORARY CRASH CUSHION

CROSS REFERENCES

ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	15 & 16
GRADING & DRAINAGE PLAN	20
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	27 & 31
SIGNING & MARKING PLAN	37
UTILITY/STREET LIGHTING PLAN	47
LANDSCAPE PLAN	51

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156, Expiration Date: 8-25-2016



DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: Steve Shaver 12/16/08
 Chief, Bureau of Engineering: [Signature] 12/16/08
 Chief, Bureau of Highways: [Signature] 12-17-09

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES: CRC	BY NO.	REVISION	DATE
DRN: CDF			
CHK: DTM			
DATE: 12/15/08			

MAINTENANCE OF TRAFFIC PLAN

SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12

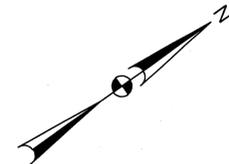
ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE AS SHOWN

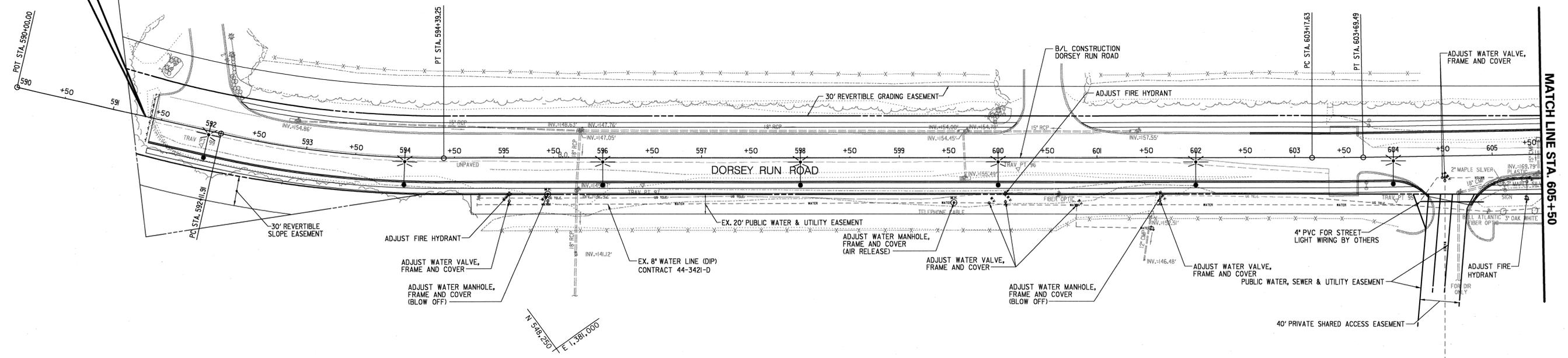
SHEET 43 OF 84

BALTIMORE WASHINGTON
AUTO EXCHANGE, INC.
PLATBOOK NO. 12015 & 10216

E 1,380,000
N 548,250



LIMIT OF WORK
STA. 591+43



N/F
NEWSOME DORSEY INDUSTRIAL PARK
2113436

UTILITY ADJUSTMENTS		
STATION	OFFSET	TYPE
594+73.58	40.78' RT	TELEPHONE
595+05.57	37.18' RT	FIRE HYDRANT
595+05.39	43.97' RT	WATER VALVE
599+55.29	45.78' RT	WATER MANHOLE
599+90.97	46.00' RT	WATER VALVE
600+07.50	44.81' RT	WATER VALVE
600+07.29	36.90' RT	FIRE HYDRANT
600+59.98	38.24' RT	TELEPHONE
600+79.27	48.25' RT	WATER VALVE
601+63.74	43.67' RT	WATER VALVE
604+48.84	21.13' RT	WATER VALVE
605+34.50	44.46' RT	FIRE HYDRANT

STREET LIGHTS

- ALL STREET LIGHTS ARE 250 WATT HPS VAPOR WITH SAG LENS COBRA HEAD FIXTURES MOUNTED AT 30' ON A BRONZE FIBERGLASS POLE USING A 12' ARM, UNLESS INDICATED WITH A DIFFERENT WATTAGE.
- ALL LIGHTS WILL BE INSTALLED BY HOWARD COUNTY AND ARE NOT PART OF THE BID.
- PROVIDE STREET LIGHT CONDUIT CROSSINGS ARE INDICATED, THE ENDS OF THE PVC SHALL INCLUDE "TOILET SEATS" SUPPLIED TO THE CONTRACTOR BY THE COUNTY.

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	12
GRADING & DRAINAGE PLAN	17
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	24 & 28
SIGNING & MARKING PLAN	34
MAINTENANCE OF TRAFFIC PLANS	40
LANDSCAPE PLAN	48

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 16158, Expiration Date: 9-28-2016

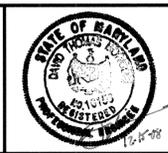


DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Steve Shaper 12/16/08
DIRECTOR OF PUBLIC WORKS DATE

William Z. Miller 12-17-08
CHIEF, BUREAU OF HIGHWAYS DATE

PREPARED BY
URS
4 NORTH PARK DRIVE
HUNT VALLEY, MARYLAND
TEL: (410) 785-7220



DES: CRC			
DRN: CDF			
CHK: DTM			
DATE: 12/15/08	BY	NO.	REVISION

UTILITY/STREET LIGHTING PLAN

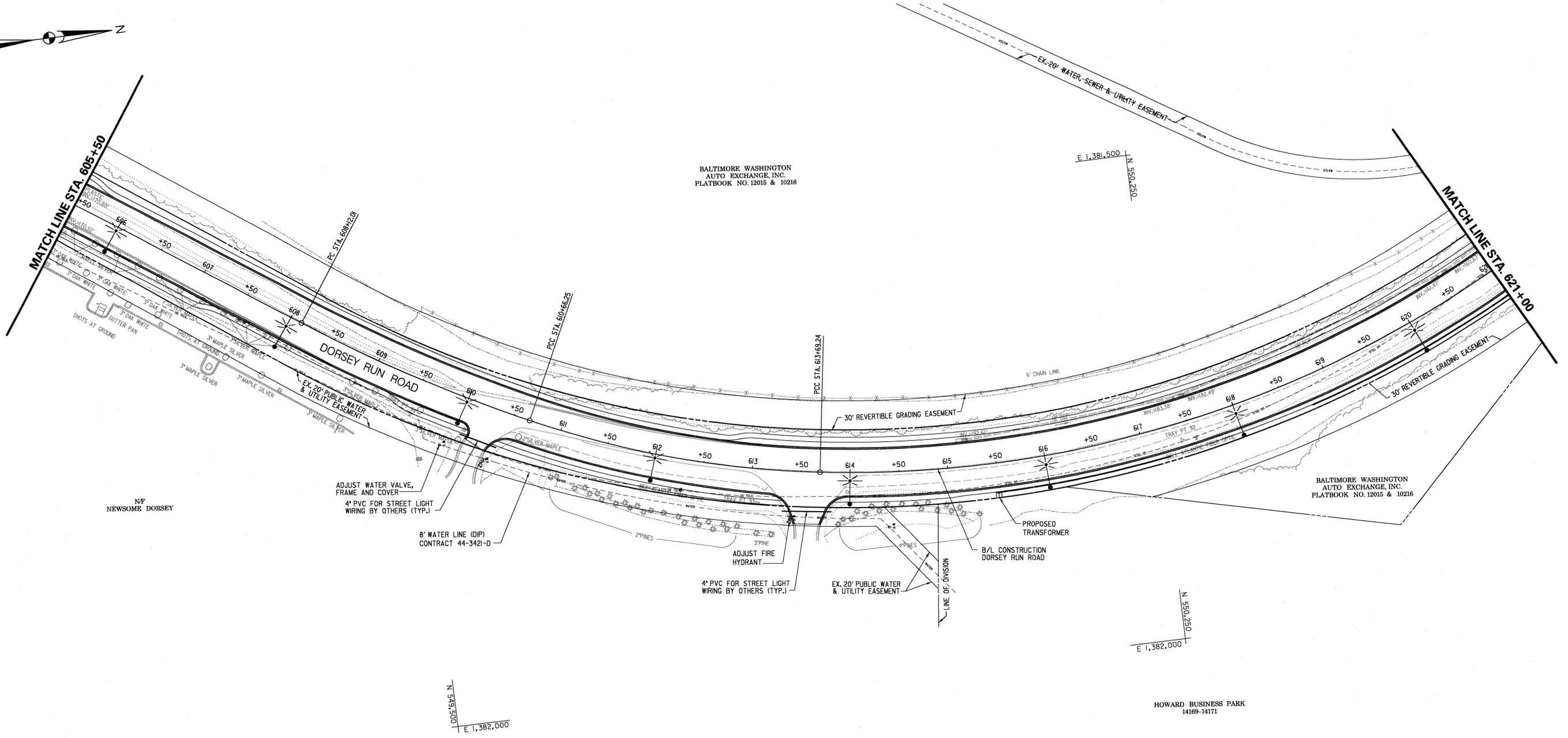
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
CAPITAL PROJECT J-4148-A

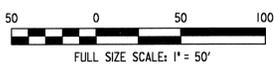
SCALE
AS SHOWN

SHEET
44 OF 84



UTILITY ADJUSTMENTS		
STATION	OFFSET	TYPE
608+31.61	36.90' RT	FIRE HYDRANT
612+29.83	32.25' RT	TELEPHONE
613+40.86	52.61' RT	FIRE HYDRANT
617+52.65	18.81' RT	TELEPHONE

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 161576 Expiration Date: 9-28-2016



- STREET LIGHTS
- ALL STREET LIGHTS ARE 250 WATT HPS VAPOR WITH SAG LENS COBRA HEAD FIXTURES MOUNTED AT 30' ON A BRONZE FIBERGLASS POLE USING A 12' ARM, UNLESS INDICATED WITH A DIFFERENT WATTAGE.
 - ALL LIGHTS WILL BE INSTALLED BY HOWARD COUNTY AND ARE NOT PART OF THE BID.
 - PROVIDE STREET LIGHT CONDUIT CROSSINGS AS INDICATED. THE ENDS OF THE PVC SHALL INCLUDE "TOILET SEATS" SUPPLIED TO THE CONTRACTOR BY THE COUNTY.
 - LOCATION OF TRANSFORMER AT STA. 615+50 WILL BE COORDINATED WITH BGE BY THE COUNTY.

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	13
GRADING & DRAINAGE PLAN	18
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	25 & 29
SIGNING & MARKING PLAN	35
MAINTENANCE OF TRAFFIC PLANS	41
LANDSCAPE PLAN	49

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: Steve Sharan 12/16/08
 Chief, Bureau of Engineering: [Signature] 12/16/08

Chief, Division of Transportation and Special Projects: Steve Sharan 12/16/08
 Chief, Bureau of Highways: [Signature] 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES: CRC			
DRN: CDF			
CHK: DTM			
DATE: 12/15/08	BY NO.	REVISION	DATE

UTILITY / STREET LIGHTING PLAN

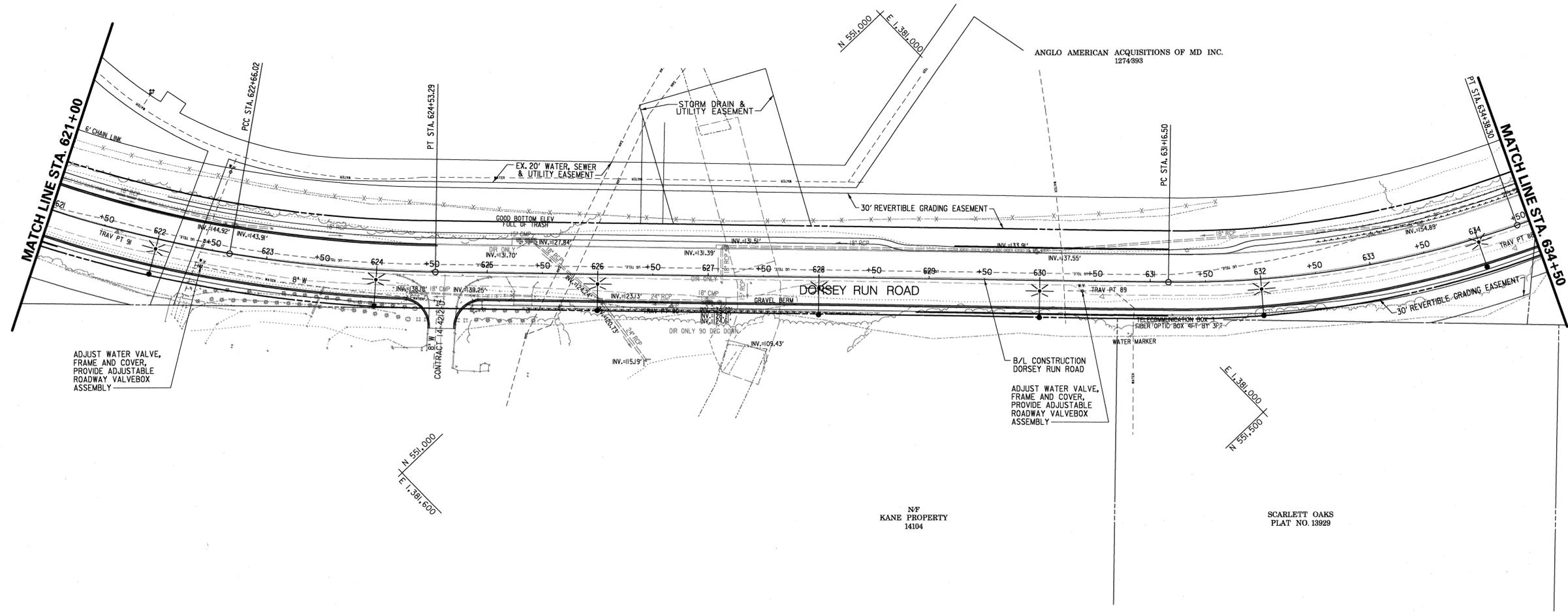
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 AS SHOWN

SHEET
 45 OF 84



ADJUST WATER VALVE, FRAME AND COVER, PROVIDE ADJUSTABLE ROADWAY VALVEBOX ASSEMBLY

B/L CONSTRUCTION DORSEY RUN ROAD
ADJUST WATER VALVE, FRAME AND COVER, PROVIDE ADJUSTABLE ROADWAY VALVEBOX ASSEMBLY

UTILITY ADJUSTMENTS		
STATION	OFFSET	TYPE
625+58.08	47.51' RT	SAN. SEWER MH
630+38.59	8.77' RT	WATER VALVE
633+68.77	32.66' LT	TELEPHONE

- STREET LIGHTS**
- ALL STREET LIGHTS ARE 250 WATT HPS VAPOR WITH SAG LENS COBRA HEAD FIXTURES MOUNTED AT 30' ON A BRONZE FIBERGLASS POLE USING A 12" ARM, UNLESS INDICATED WITH A DIFFERENT WATTAGE.
 - ALL LIGHTS WILL BE INSTALLED BY HOWARD COUNTY AND ARE NOT PART OF THE BID.
 - PROVIDE STREET LIGHT CONDUIT CROSSINGS AS INDICATED. THE ENDS OF THE PVC SHALL INCLUDE "TOILET SEATS" SUPPLIED TO THE CONTRACTOR BY THE COUNTY.

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	14
GRADING & DRAINAGE PLAN	19
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	26 & 30
SIGNING & MARKING PLAN	37
MAINTENANCE OF TRAFFIC PLANS	42
LANDSCAPE PLAN	50



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 16153, Expiration Date: 8-28-2010

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: Steve Shaver 12/16/08
Chief, Division of Transportation and Special Projects

Chief, Bureau of Engineering: [Signature] 12/16/08
Chief, Bureau of Highways: [Signature] 12-17-08

PREPARED BY
URS
4 NORTH PARK DRIVE
HUNT VALLEY, MARYLAND
TEL: (410) 785-7220



DES: CRC			
DRN: CDF			
CHK: DTM			
DATE: 12/15/08	BY NO.	REVISION	DATE

UTILITY /STREET LIGHTING PLAN

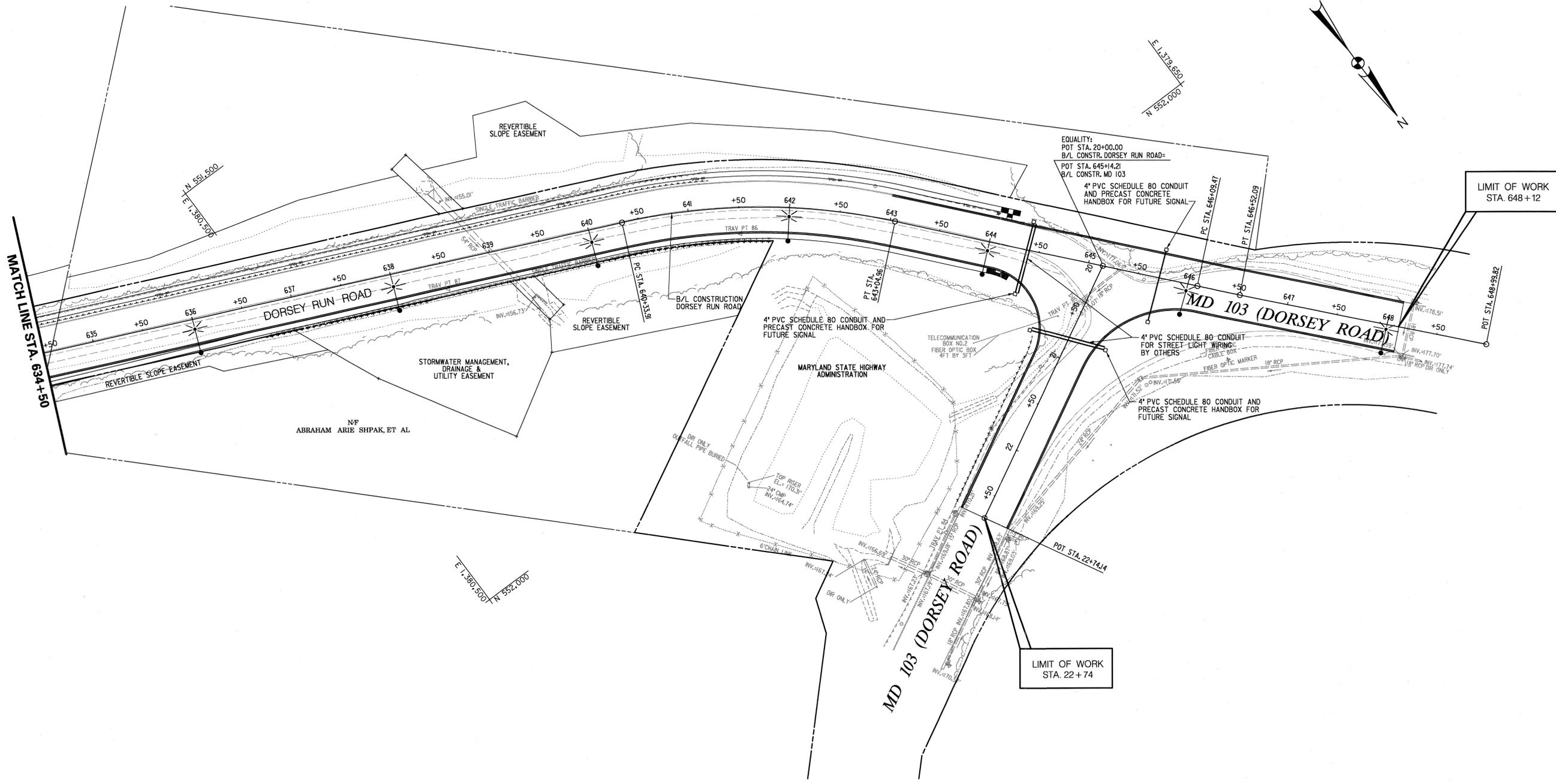
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
CAPITAL PROJECT J-4148-A

SCALE AS SHOWN

SHEET 46 OF 84



UTILITY ADJUSTMENTS		
STATION	OFFSET	TYPE
644+01.80	30.12' LT	TELEPHONE



Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 26152 Expiration Date: 8-28-2010

- STREET LIGHTS
- ALL STREET LIGHTS ARE 250 WATT HPS VAPOR WITH SAG LENS COBRA HEAD FIXTURES MOUNTED AT 30' ON A BRONZE FIBERGLASS POLE USING A 12' ARM, UNLESS INDICATED WITH A DIFFERENT WATTAGE.
 - ALL LIGHTS WILL BE INSTALLED BY HOWARD COUNTY AND ARE NOT PART OF THE BID.
 - PROVIDE STREET LIGHT CONDUIT CROSSINGS ARE INDICATED. THE ENDS OF THE PVC SHALL INCLUDE 'TOILET SEATS' SUPPLIED TO THE CONTRACTOR BY THE COUNTY.

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	15
GRADING & DRAINAGE PLAN	20
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	27 & 31
SIGNING & MARKING PLAN	38
MAINTENANCE OF TRAFFIC PLANS	43
LANDSCAPE PLAN	51

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: *Steve Sharan* 12/16/08
 Chief, Division of Transportation and Special Projects

Chief, Bureau of Engineering: *William P. DeWalt* 12-17-08
 Chief, Bureau of Highways

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES: CRC			
DRN: CDF			
CHK: DTM			
DATE: 12/15/08	BY NO.	REVISION	DATE

UTILITY / STREET LIGHTING PLAN

SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12

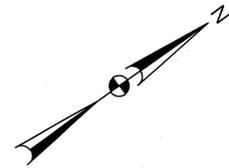
ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE AS SHOWN

SHEET 47 OF 84

BALTIMORE WASHINGTON
AUTO EXCHANGE, INC.
PLATBOOK NO. 12015 & 10216

E 1,381,000
N 548,250



LIMIT OF WORK
STA. 591+43

POI STA. 590+00.00
590

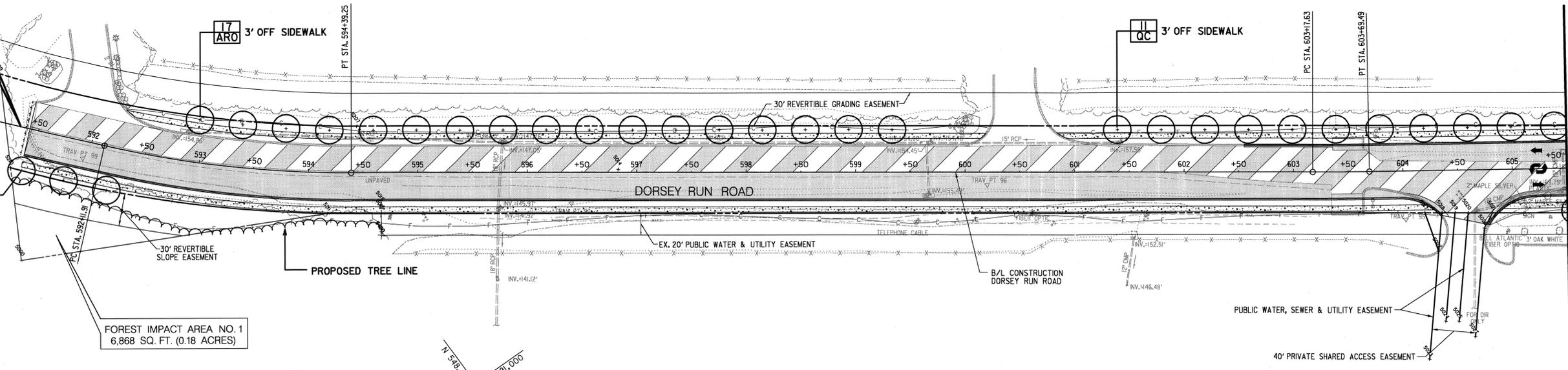
17 ARO 3' OFF SIDEWALK

11 QC 3' OFF SIDEWALK

MATCH LINE STA. 605+50

3' OFF SIDEWALK ARO

FOREST IMPACT AREA NO. 1
6,868 SQ. FT. (0.18 ACRES)



NF
NEWSOME DORSEY INDUSTRIAL PARK
2113436

- NOTES:
- PLANS ARE FOR LANDSCAPE PURPOSES ONLY. AS-BUILT HIGHWAY CONDITIONS MAY VARY. CONTRACTOR SHALL VERIFY CONDITIONS AND UTILITY LOCATIONS AND INFORM THE ENGINEER OF ANY DISCREPANCIES OR POTENTIAL PROBLEMS PRIOR TO PERFORMING THE WORK. DIMENSIONS SHALL BE VERIFIED IN THE FIELD. DEVIATIONS FROM DIMENSIONS GIVEN SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE START OF WORK.
 - CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO PLANT INSTALLATION. CONTRACTOR SHALL CONTACT MISS UTILITY (1-800-251-7777) A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
 - EXISTING CONDITIONS THAT BECOME DAMAGED DURING CONSTRUCTION SHALL BE REPLACED OR REPAIRED WITH MATERIALS TO MATCH THOSE EXISTING. MATERIALS SHALL BE SUPPLIED BY THE CONTRACTOR AT NO ADDITIONAL COST.
 - PLANT MATERIAL SHALL BE OFFSET 6'-0" MINIMUM OFF THE BACK OF W-BEAM TRAFFIC BARRIERS, CONCRETE BARRIERS, AND RETAINING WALLS, AS APPLICABLE.
 - TREES OR SHRUBS SHALL NOT BE PLANTED WITHIN 5'-0" OF THE CENTERLINE OF SWALES OR DITCHES, OR WITHIN 10'-0" OF THE CENTERLINE OF GAS UTILITY AND SANITARY SEWER.
 - EXISTING LIGHTING AND SIGNAGE SHALL BE FIELD VERIFIED. NOTIFY THE ENGINEER OF CONFLICTS BETWEEN SIGN VISIBILITY AND PLANT LOCATION PRIOR TO PLANT INSTALLATION. PLANT MATERIAL SHALL NOT BE PLANTED DIRECTLY IN FRONT OF ROADWAY SIGN SIGHT LINES. COORDINATE PLANT OR SIGN LOCATION ADJUSTMENTS WITH THE ENGINEER.
 - DECIDUOUS TREES SHALL BE INSTALLED AND STAKED PER SPECIFICATION SECTION 710.03.07 OF THE MD SHA STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS.
 - QUANTITIES SHOWN IN SCHEDULES ARE FOR CONTRACTOR'S CONVENIENCE. PLAN SHALL GOVERN.

NOTE:
A 20' SPACING MUST BE MAINTAINED
BETWEEN ANY TREES AND STREET LIGHTS.

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	12-16
GRADING & DRAINAGE PLAN	17
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	24 & 28
SIGNING & MARKING PLAN	34
MAINTENANCE OF TRAFFIC PLANS	40
UTILITY/STREET LIGHTING PLAN	44

FOREST IMPACT SUMMARY			
SHEET NO.	FOREST IMPACT AREA NUMBER	SQUARE FEET	ACRES
52	1	6,868	0.18
53	2	13,465	0.31
54	3	13,620	0.31
55	4	1,906	0.04
TOTAL		35,859	0.82

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 16152 Expiration Date: 9/23/2010



SHADE TREES		STREET TREE SCHEDULE - THIS SHEET ONLY			
KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	PLANTING SIZE	SPACING
ARO	20	Acer rubrum "October Glory"	October Glory Red Maple	2.5' Cal.	40' o.c.
ARR	0	Acer rubrum "Red Sunset"	Red Sunset Red Maple	2.5' Cal.	40' o.c.
PS	0	Pinus strobus	White Pine	4' HT.	unsheared, 15' o.c.
QC	11	Quercus coccolnea	Scarlet Oak	2.5' Cal.	40' o.c.

Note: All street trees to be single trunk trees whose lower branches are pruned to a height of 6'

DEPARTMENT OF PUBLIC WORKS
HARVARD COUNTY, MARYLAND

Director of Public Works: Steve Shuman 12/16/08
Chief, Division of Transportation and Special Projects

Prepared by: URS
4 North Park Drive, Hunt Valley, Maryland
Tel: (410) 785-7220

Chief, Bureau of Engineering: [Signature] 12/16/08
Chief, Bureau of Highways: [Signature] 12-17-08

DES: CLLK
DRN: CLLK
CHK: DRKK
DATE: 12/15/08



BY	NO.	REVISION	DATE

LANDSCAPE PLAN

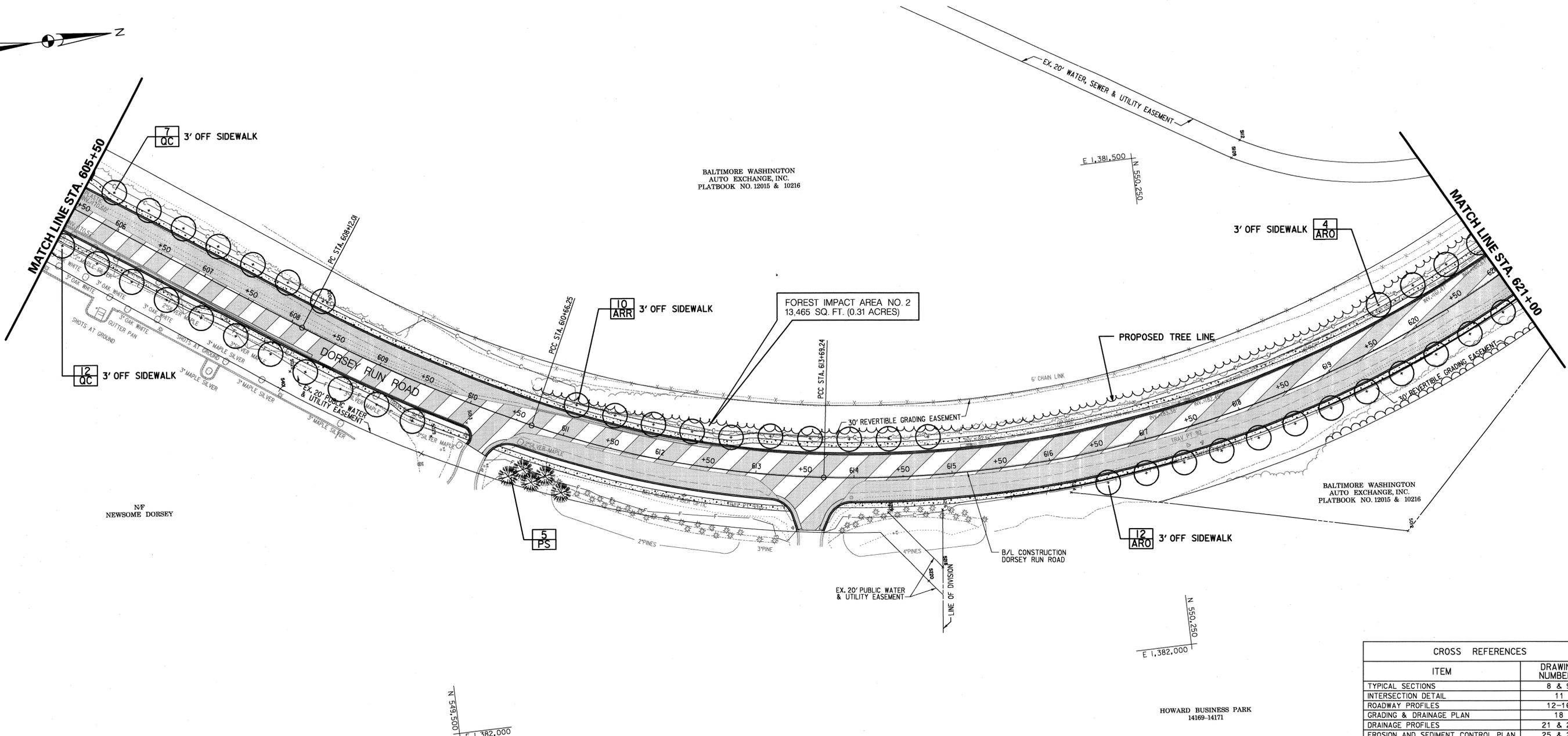
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
CAPITAL PROJECT J-4148-A

SCALE AS SHOWN

SHEET 48 OF 84



BALTIMORE WASHINGTON
AUTO EXCHANGE, INC.
PLATBOOK NO. 12015 & 10216

BALTIMORE WASHINGTON
AUTO EXCHANGE, INC.
PLATBOOK NO. 12015 & 10216

NP
NEWSOME DORSEY

HOWARD BUSINESS PARK
14169-14171

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	12-16
GRADING & DRAINAGE PLAN	18
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	25 & 29
SIGNING & MARKING PLAN	35
MAINTENANCE OF TRAFFIC PLANS	41
UTILITY/STREET LIGHTING PLAN	45

NOTES:

- PLANS ARE FOR LANDSCAPE PURPOSES ONLY. AS-BUILT HIGHWAY CONDITIONS MAY VARY. CONTRACTOR SHALL VERIFY CONDITIONS AND UTILITY LOCATIONS AND INFORM THE ENGINEER OF ANY DISCREPANCIES OR POTENTIAL PROBLEMS PRIOR TO PERFORMING THE WORK. DIMENSIONS SHALL BE VERIFIED IN THE FIELD. DEVIATIONS FROM DIMENSIONS GIVEN SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE START OF WORK.
- CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO PLANT INSTALLATION. CONTRACTOR SHALL CONTACT MISS UTILITY (1-800-257-7777) A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
- EXISTING CONDITIONS THAT BECOME DAMAGED DURING CONSTRUCTION SHALL BE REPLACED OR REPAIRED WITH MATERIALS TO MATCH THOSE EXISTING. MATERIALS SHALL BE SUPPLIED BY THE CONTRACTOR AT NO ADDITIONAL COST.
- PLANT MATERIAL SHALL BE OFFSET 6'-0" MINIMUM OFF THE BACK OF W-BEAM TRAFFIC BARRIERS, CONCRETE BARRIERS, AND RETAINING WALLS, AS APPLICABLE.
- TREES OR SHRUBS SHALL NOT BE PLANTED WITHIN 5'-0" OF THE CENTERLINE OF SWALES OR DITCHES, OR WITHIN 10'-0" OF THE CENTERLINE OF GAS UTILITY AND SANITARY SEWER.
- EXISTING LIGHTING AND SIGNAGE SHALL BE FIELD VERIFIED. NOTIFY THE ENGINEER OF CONFLICTS BETWEEN SIGN VISIBILITY AND PLANT LOCATION PRIOR TO PLANT INSTALLATION. PLANT MATERIAL SHALL NOT BE PLANTED DIRECTLY IN FRONT OF ROADWAY SIGN SIGHT LINES. COORDINATE PLANT OR SIGN LOCATION ADJUSTMENTS WITH THE ENGINEER.
- DECIDUOUS TREES SHALL BE INSTALLED AND STAKED PER SPECIFICATION SECTION 710.03.07 OF THE MD SHA STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS.
- QUANTITIES SHOWN IN SCHEDULES ARE FOR CONTRACTOR'S CONVENIENCE. PLAN SHALL GOVERN.

SHADE TREES						STREET TREE SCHEDULE - THIS SHEET ONLY					
KEY	QUANTITY	BOTANICAL NAME		COMMON NAME		PLANTING SIZE	SPACING				
ARO	16	Acer rubrum 'October Glory'		October Glory Red Maple		2.5' Cal.	40' o.c.				
ARR	10	Acer rubrum 'Red Sunset'		Red Sunset Red Maple		2.5' Cal.	40' o.c.				
PS	5	Pinus strobus		White Pine		4' HT.	unsheared, 15' o.c.				
OC	19	Quercus coccinea		Scarlet Oak		2.5' Cal.	40' o.c.				

Note: All street trees to be single trunk trees whose lower branches are pruned to a height of 6'



Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 16172, Expiration Date: 8-25-2010

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: Steve Shavan 12/16/08
Chief, Division of Transportation and Special Projects

Prepared by: URS
4 North Park Drive, Hunt Valley, Maryland, Tel: (410) 785-7220

Chief, Bureau of Engineering: [Signature] 12/16/08
Chief, Bureau of Highways: [Signature] 12-17-08

DES: CLLK
DRN: CLLK
CHK: DRKK
DATE: 12/15/08



BY	NO.	REVISION	DATE

LANDSCAPE PLAN

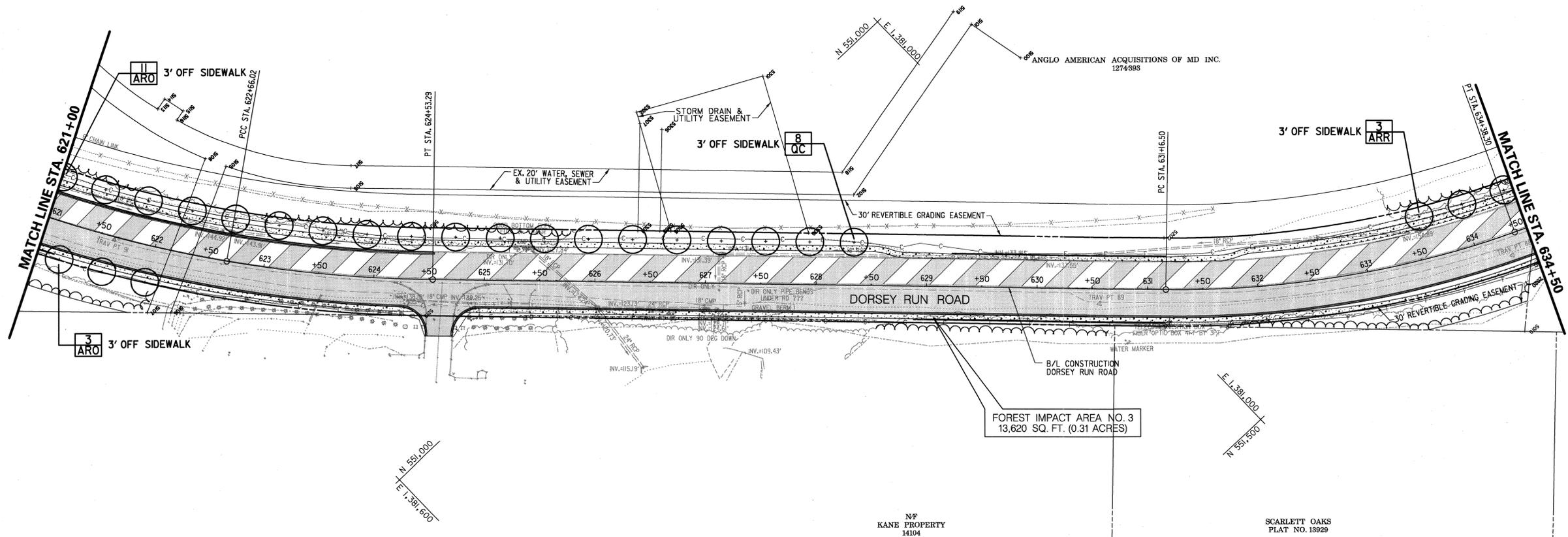
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
CAPITAL PROJECT J-4148-A

SCALE AS SHOWN

SHEET 49 OF 84



- NOTES:
- PLANS ARE FOR LANDSCAPE PURPOSES ONLY. AS-BUILT HIGHWAY CONDITIONS MAY VARY. CONTRACTOR SHALL VERIFY CONDITIONS AND UTILITY LOCATIONS AND INFORM THE ENGINEER OF ANY DISCREPANCIES OR POTENTIAL PROBLEMS PRIOR TO PERFORMING THE WORK. DIMENSIONS SHALL BE VERIFIED IN THE FIELD. DEVIATIONS FROM DIMENSIONS GIVEN SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE START OF WORK.
 - CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO PLANT INSTALLATION. CONTRACTOR SHALL CONTACT MISS UTILITY (1-800-257-7777) A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
 - EXISTING CONDITIONS THAT BECOME DAMAGED DURING CONSTRUCTION SHALL BE REPLACED OR REPAIRED WITH MATERIALS TO MATCH THOSE EXISTING. MATERIALS SHALL BE SUPPLIED BY THE CONTRACTOR AT NO ADDITIONAL COST.
 - PLANT MATERIAL SHALL BE OFFSET 6'-0" MINIMUM OFF THE BACK OF W-BEAM TRAFFIC BARRIERS, CONCRETE BARRIERS, AND RETAINING WALLS, AS APPLICABLE.
 - TREES OR SHRUBS SHALL NOT BE PLANTED WITHIN 5'-0" OF THE CENTERLINE OF SWALES OR DITCHES, OR WITHIN 10'-0" OF THE CENTERLINE OF GAS UTILITY AND SANITARY SEWER.
 - EXISTING LIGHTING AND SIGNAGE SHALL BE FIELD VERIFIED. NOTIFY THE ENGINEER OF CONFLICTS BETWEEN SIGN VISIBILITY AND PLANT LOCATION PRIOR TO PLANT INSTALLATION. PLANT MATERIAL SHALL NOT BE PLANTED DIRECTLY IN FRONT OF ROADWAY SIGN SIGHT LINES. COORDINATE PLANT OR SIGN LOCATION ADJUSTMENTS WITH THE ENGINEER.
 - DECIDUOUS TREES SHALL BE INSTALLED AND STAKED PER SPECIFICATION SECTION 710.03.07 OF THE MD SHA STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS.
 - QUANTITIES SHOWN IN SCHEDULES ARE FOR CONTRACTOR'S CONVENIENCE. PLAN SHALL GOVERN.

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	12-16
GRADING & DRAINAGE PLAN	19
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	26 & 30
SIGNING & MARKING PLAN	36
MAINTENANCE OF TRAFFIC PLANS	42
UTILITY/STREET LIGHTING PLAN	46

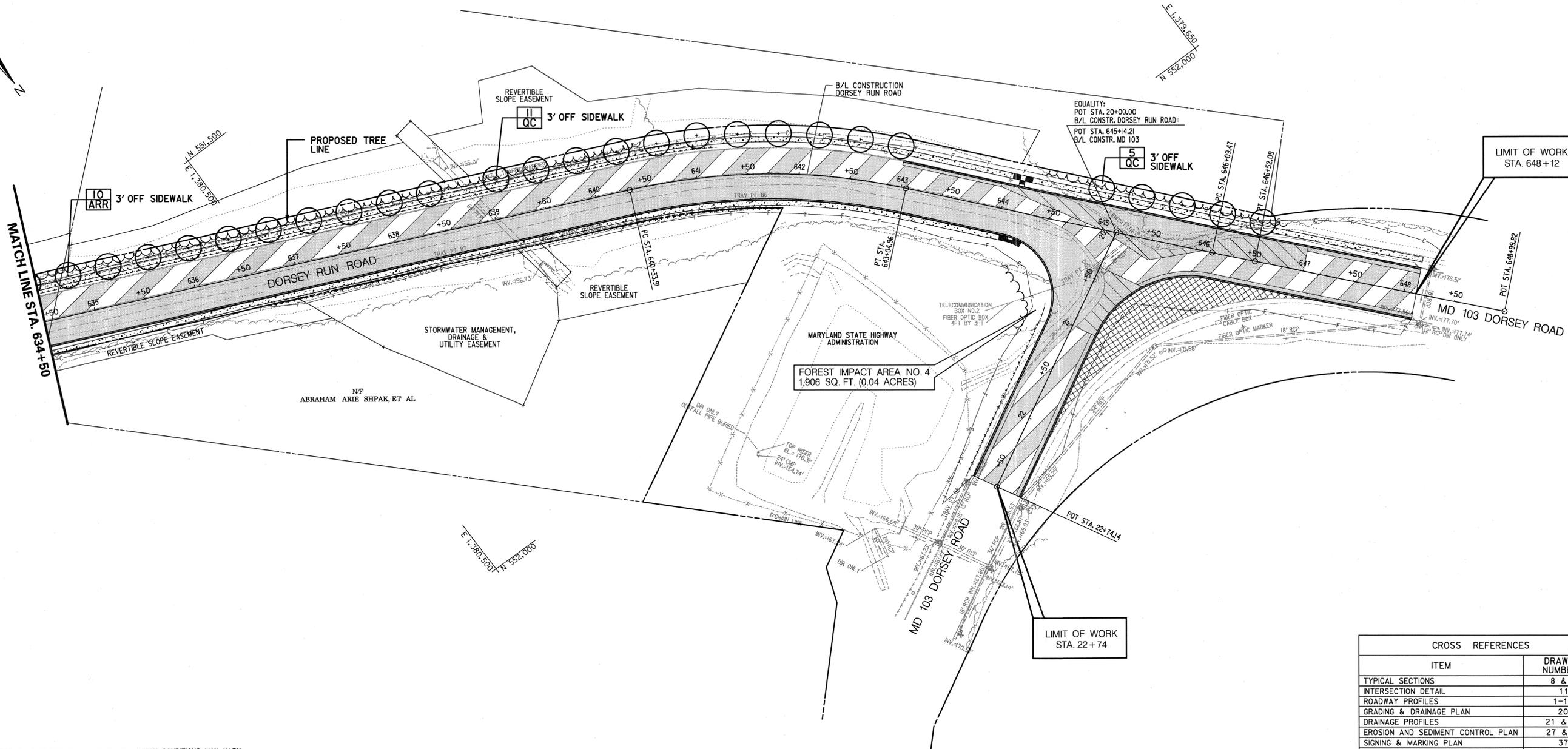
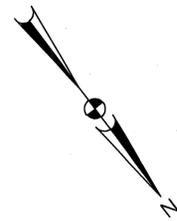
SHADE TREES						STREET TREE SCHEDULE - THIS SHEET ONLY					
KEY	QUANTITY	BOTANICAL NAME		COMMON NAME		PLANTING SIZE	SPACING				
ARO	14	Acer rubrum 'October Glory'		October Glory Red Maple		2.5' Cal.	40' o.c.				
ARR	3	Acer rubrum 'Red Sunset'		Red Sunset Red Maple		2.5' Cal.	40' o.c.				
PS	0	Pinus strobus		White Pine		4' HT.	unsheared, 15' o.c.				
QC	8	Quercus coccinea		Scarlet Oak		2.5' Cal.	40' o.c.				

Note: All street trees to be single trunk trees whose lower branches are pruned to a height of 6'



Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156, Expiration Date: 8-28-2016

<p>DEPARTMENT OF PUBLIC WORKS HARVARD COUNTY, MARYLAND</p> <p>Steve Shuman 12/16/08 DIRECTOR OF PUBLIC WORKS DATE</p> <p>Walter Z. Wohl 12-17-09 CHIEF, BUREAU OF HIGHWAYS DATE</p>	<p>PREPARED BY</p> <p>URS 4 NORTH PARK DRIVE HUNT VALLEY, MARYLAND TEL: (410) 785-7220</p>		<p>DES: CLLK</p> <p>DRN: CLLK</p> <p>CHK: CRKK</p> <p>DATE: 12/15/08</p>	<p>BY NO. REVISION DATE</p>	<p>LANDSCAPE PLAN</p>	<p>WIDENING OF DORSEY RUN ROAD STA. 591+43 TO STA. 648+12</p> <p>ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND CAPITAL PROJECT J-4148-A</p>	<p>SCALE AS SHOWN</p> <p>SHEET 50 OF 84</p>
--	---	--	--	-----------------------------	------------------------------	---	---



NOTES:

- PLANS ARE FOR LANDSCAPE PURPOSES ONLY. AS-BUILT HIGHWAY CONDITIONS MAY VARY. CONTRACTOR SHALL VERIFY CONDITIONS AND UTILITY LOCATIONS AND INFORM THE ENGINEER OF ANY DISCREPANCIES OR POTENTIAL PROBLEMS PRIOR TO PERFORMING THE WORK. DIMENSIONS SHALL BE VERIFIED IN THE FIELD. DEVIATIONS FROM DIMENSIONS GIVEN SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE START OF WORK.
- CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO PLANT INSTALLATION. CONTRACTOR SHALL CONTACT MISS UTILITY (1-800-257-7777) A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
- EXISTING CONDITIONS THAT BECOME DAMAGED DURING CONSTRUCTION SHALL BE REPLACED OR REPAIRED WITH MATERIALS TO MATCH THOSE EXISTING. MATERIALS SHALL BE SUPPLIED BY THE CONTRACTOR AT NO ADDITIONAL COST.
- PLANT MATERIAL SHALL BE OFFSET 6'-0" MINIMUM OFF THE BACK OF W-BEAM TRAFFIC BARRIERS, CONCRETE BARRIERS, AND RETAINING WALLS, AS APPLICABLE.
- TREES OR SHRUBS SHALL NOT BE PLANTED WITHIN 5'-0" OF THE CENTERLINE OF SWALES OR DITCHES, OR WITHIN 10'-0" OF THE CENTERLINE OF GAS UTILITY AND SANITARY SEWER.
- EXISTING LIGHTING AND SIGNAGE SHALL BE FIELD VERIFIED. NOTIFY THE ENGINEER OF CONFLICTS BETWEEN SIGN VISIBILITY AND PLANT LOCATION PRIOR TO PLANT INSTALLATION. PLANT MATERIAL SHALL NOT BE PLANTED DIRECTLY IN FRONT OF ROADWAY SIGN SIGHT LINES. COORDINATE PLANT OR SIGN LOCATION ADJUSTMENTS WITH THE ENGINEER.
- DECIDUOUS TREES SHALL BE INSTALLED AND STAKED PER SPECIFICATION SECTION 710.03.07 OF THE MD SHA STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS.
- QUANTITIES SHOWN IN SCHEDULES ARE FOR CONTRACTOR'S CONVENIENCE. PLAN SHALL GOVERN.

CROSS REFERENCES	
ITEM	DRAWING NUMBERS
TYPICAL SECTIONS	8 & 9
INTERSECTION DETAIL	11
ROADWAY PROFILES	1-16
GRADING & DRAINAGE PLAN	20
DRAINAGE PROFILES	21 & 22
EROSION AND SEDIMENT CONTROL PLAN	27 & 31
SIGNING & MARKING PLAN	37
MAINTENANCE OF TRAFFIC PLANS	43
UTILITY/STREET LIGHTING PLAN	47

SHADE TREES STREET TREE SCHEDULE - THIS SHEET ONLY					
KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	PLANTING SIZE	SPACING
ARO	0	Acer rubrum 'October Glory'	October Glory Red Maple	2.5' Cal.	40' o.c.
ARR	10	Acer rubrum 'Red Sunset'	Red Sunset Red Maple	2.5' Cal.	40' o.c.
PS	0	Pinus strobus	White Pine	4' HT.	unsheared, 15' o.c.
QC	16	Quercus coccolnea	Scarlet Oak	2.5' Cal.	40' o.c.

Note: All street trees to be single trunk trees whose lower branches are pruned to a height of 6'

SHADE TREES STREET TREE SCHEDULE - TOTAL					
KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	PLANTING SIZE	SPACING
ARO	50	Acer rubrum 'October Glory'	October Glory Red Maple	2.5' Cal.	40' o.c.
ARR	23	Acer rubrum 'Red Sunset'	Red Sunset Red Maple	2.5' Cal.	40' o.c.
PS	5	Pinus strobus	White Pine	4' HT.	unsheared, 15' o.c.
QC	54	Quercus coccolnea	Scarlet Oak	2.5' Cal.	40' o.c.

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 16156 Expiration Date: 8-28-2010



DEPARTMENT OF PUBLIC WORKS
HARVARD COUNTY, MARYLAND

Director of Public Works DATE 12/16/08
Steve Shuman 12/16/08
Chief, Division of Transportation and Special Projects

Chief, Bureau of Engineering DATE 12/16/08
William A. Mohr 12-17-08
Chief, Bureau of Highways



DES:	CLLK				
DRN:	CLLK				
CHK:	DRKK				
DATE:	12/15/08	BY	NO.	REVISION	DATE

LANDSCAPE PLAN

SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
CAPITAL PROJECT J-4148-A

SCALE AS SHOWN
SHEET 51 OF 84

Project Name: Dorsey Run Road - Segment A		Borehole No.: A-1	
Project Number: 20830999.00000		Location: Jessup, Maryland	
Date Started: 12/7/06	Date Completed: 12/7/06	Driller: Duane Addison	
Drilling Company: EBA Engineering		Elevation: 157	Sheet 1 of 1
North: 548086	East: 1380619	Station: 591+98	Offset: 9 R

Depth:	Sample No.	Blow Count:	Recovery:	RCD (%)	Sampled:	Description:	Graphic Log:	USCS:	Remarks:
1	2-2-3	6"							
2	3-2-4	10"				Light reddish brown, moist, CLAY, little mf sand		CL	
3	1-6-12	8"							
4	8-7-8	9"				Light gray with light brown, moist, CLAY, some f. sand		CL	
Dry at completion									

URS 4 North Park Drive, Suite 300
 Hunt Valley, MD 21030
 Tel: (410)785-7220
 Fax: (410)785-6818
 Inspected By: Diana Castro
 Signature:

Project Name: Dorsey Run Road - Segment A		Borehole No.: A-11	
Project Number: 20830999.00000		Location: Jessup, Maryland	
Date Started: 12/7/06	Date Completed: 12/7/06	Driller: Duane Addison	
Drilling Company: EBA Engineering		Elevation: 165	Sheet 1 of 1
North: 551584	East: 1380634	Station: 635+33	Offset: 10 R

Depth:	Sample No.	Blow Count:	Recovery:	RCD (%)	Sampled:	Description:	Graphic Log:	USCS:	Remarks:
1	5-5-10	6"							
2	5-10-12	17"				Light brown, moist, CLAY, trace f sand, trace gravel		CL	
3	3-5-7	8"							
4	7-9-12	18"				Light brown with light gray, moist, CLAY		CL	
Boring caved at 3.4' at completion Dry at completion									

URS 4 North Park Drive, Suite 300
 Hunt Valley, MD 21030
 Tel: (410)785-7220
 Fax: (410)785-6818
 Inspected By: Diana Castro
 Signature:

Project Name: Dorsey Run Road - Segment A		Borehole No.: A-12	
Project Number: 20830999.00000		Location: Jessup, Maryland	
Date Started: 1/30/06	Date Completed: 1/30/06	Driller: Duane Addison	
Drilling Company: EBA Engineering		Elevation: 172	Sheet 1 of 1
North: 551751	East: 1380233	Station: 639+67	Offset: 2 L

Depth:	Sample No.	Blow Count:	Recovery:	RCD (%)	Sampled:	Description:	Graphic Log:	USCS:	Remarks:
1	6-9-8	14"				9" Bituminous Concrete 6" Crushed Aggregate Base		ASPH	
2	6-10-10	12"				Brown, moist, clayey SAND, trace f gravel		SC	
3	3-5-6	12"				Brown and red, moist, CLAY, some of sand, little f gravel		CL	
4	8-15-10	12"				Brown, moist, SILT, some gravel, little of sand		ML	
Boring caved at 3' at completion Dry at completion									

URS 4 North Park Drive, Suite 300
 Hunt Valley, MD 21030
 Tel: (410)785-7220
 Fax: (410)785-6818
 Inspected By: Diana Castro
 Signature:

Project Name: Dorsey Run Road - Segment A		Borehole No.: A-13	
Project Number: 20830999.00000		Location: Jessup, Maryland	
Date Started: 12/7/06	Date Completed: 12/7/06	Driller: Duane Addison	
Drilling Company: EBA Engineering		Elevation: 172	Sheet 1 of 1
North: 552017	East: 1379901	Station: 644+00	Offset: 10 R

Depth:	Sample No.	Blow Count:	Recovery:	RCD (%)	Sampled:	Description:	Graphic Log:	USCS:	Remarks:
1	5-7-7	11"				Gray, moist, silty SAND, little gravel		SM	
2	5-6-6	10"				Grayish brown, moist, CLAY, trace f. sand		CL	
3	8-8-12	14"				Light brown, silty mf SAND, trace clay		SM	
4	13-11-10	18"				Brown, moist, clayey mf SAND, some gravel		SC	
Dry at completion									

URS 4 North Park Drive, Suite 300
 Hunt Valley, MD 21030
 Tel: (410)785-7220
 Fax: (410)785-6818
 Inspected By: Diana Castro
 Signature:

Project Name: Dorsey Run Road - Segment A		Borehole No.: A-2	
Project Number: 20830999.00000		Location: Jessup, Maryland	
Date Started: 12/7/06	Date Completed: 12/7/06	Driller: Duane Addison	
Drilling Company: EBA Engineering		Elevation: 159	Sheet 1 of 1
North: 548430	East: 1380887	Station: 596+33	Offset: 2 L

Depth:	Sample No.	Blow Count:	Recovery:	RCD (%)	Sampled:	Description:	Graphic Log:	USCS:	Remarks:
1	9-9-5	6"				7" Bituminous Concrete 2" Crushed Aggregate Base		ASPH	
2	6-7-14	15"				Light gray, wet, of sandy GRAVEL, some silt		GM	
3	5-8-10	12"				Red to dark brown, CLAY, trace f sand, trace gravel		CL	
4	9-11-14	11"				Light gray with light brown, moist, f. sandy CLAY		CL	
Dry at completion									

URS 4 North Park Drive, Suite 300
 Hunt Valley, MD 21030
 Tel: (410)785-7220
 Fax: (410)785-6818
 Inspected By: Diana Castro
 Signature:

Project Name: Dorsey Run Road - Segment A		Borehole No.: A-3	
Project Number: 20830999.00000		Location: Jessup, Maryland	
Date Started: 12/7/06	Date Completed: 12/7/06	Driller: Duane Addison	
Drilling Company: EBA Engineering		Elevation: 160	Sheet 1 of 1
North: 548775	East: 1381149	Station: 600+67	Offset: 10 R

Depth:	Sample No.	Blow Count:	Recovery:	RCD (%)	Sampled:	Description:	Graphic Log:	USCS:	Remarks:
1	5-8-7	8"				Light gray, moist, SILT, trace f. sand		ML	
2	5-7-8	7"				Reddish brown, moist, sandy CLAY		CL	
3	4-5-7	8"				Light gray with light brown, moist, CLAY, trace f sand		CL	
4	8-11-32					Brown, moist, mf sandy SILT		ML	
Dry at completion									

URS 4 North Park Drive, Suite 300
 Hunt Valley, MD 21030
 Tel: (410)785-7220
 Fax: (410)785-6818
 Inspected By: Diana Castro
 Signature:

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: *Steve Shagan* 12/16/08
 Chief, Division of Transportation and Special Projects: *Steve Shagan* 12/16/08
 Chief, Bureau of Engineering: *Richard Johnson* 12/16/08
 Chief, Bureau of Highways: *Willie J. Wald* 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	CRC			
DRN:	CDF			
CHK:	DTM			
DATE:	12/15/08	BY:	NO.	
		REVISION		DATE

SOIL BORING LOGS - I

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO STA. 648+12
 ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 N.T.S.
 SHEET
 52 OF 84

Project Name: Dorsey Run Road - Segment A		Borehole No.: A-4							
Project Number: 20830999.00000		Location: Jessup, Maryland							
Date Started: 13006	Date Completed: 13006	Driller: Duane Addison							
Drilling Company: EBA Engineering		Elevation: 173.5	Sheet 1 of 1						
North: 549138	East: 1381387	Station: 605+00	Offset: 6 L						
Depth:	Sample No.	Blow Count:	Recovery:	RDD (%)	Sampled:	Description:	Graphic Log:	USCS:	Remarks:
	1	4-4-4	12"		X	1.3 5" Bituminous Concrete 9" Crushed Aggregate Base		ASPH	
					X	Gray with red & brown, moist, CLAY, trace f. sand		CL	
5	2	4-5-6	10"		X	Light gray with brown & red, moist, CLAY, little f. sand		CL	
	3	3-5-6	14"		X			CL	
10	4	4-6-8	16"		X	Brown with light gray, moist, CLAY		CL	
Boring caved at 3' at completion Dry at completion									
URS		4 North Park Drive, Suite 300 Hunt Valley, MD 21030 Tel: (410)785-7220 Fax: (410)785-6818		Inspected By: Diana Castro		Signature:			

Project Name: Dorsey Run Road - Segment A		Borehole No.: A-5							
Project Number: 20830999.00000		Location: Jessup, Maryland							
Date Started: 12706	Date Completed: 12706	Driller: Duane Addison							
Drilling Company: EBA Engineering		Elevation: 193	Sheet 1 of 1						
North: 549500	East: 1381624	Station: 609+33	Offset: 11 L						
Depth:	Sample No.	Blow Count:	Recovery:	RDD (%)	Sampled:	Description:	Graphic Log:	USCS:	Remarks:
	1	5-6-6	10"		X	0.5 5" Topsoil		TOS	
5	2	2-6-6	6"		X	Light brown, moist, c-m SAND, little gravel, trace silt		SP, SM	
	3	5-8-11	2"		X			GP	
10	4	17-13-10	11"		X	8.5 Light gray & light brown, moist, GRAVEL, little of sand, trace silt		GP	
Boring caved at 4.3' at completion Dry at completion									
URS		4 North Park Drive, Suite 300 Hunt Valley, MD 21030 Tel: (410)785-7220 Fax: (410)785-6818		Inspected By: Diana Castro		Signature:			

Project Name: Dorsey Run Road - Segment A		Borehole No.: A-6							
Project Number: 20830999.00000		Location: Jessup, Maryland							
Date Started: 12706	Date Completed: 12706	Driller: Duane Addison							
Drilling Company: EBA Engineering		Elevation: 200	Sheet 1 of 1						
North: 549901	East: 1381762	Station: 61+67	Offset: 23 L						
Depth:	Sample No.	Blow Count:	Recovery:	RDD (%)	Sampled:	Description:	Graphic Log:	USCS:	Remarks:
	1	2-3-4	8"		X	1.3 5" Bituminous Concrete 10" Crushed Aggregate Base		ASPH	
					X	Light red with light gray, moist, CLAY, trace of sand		CL	
5	2	2-3-7	8"		X	Gray, moist, CLAY, some f sand		CH	
	3	2-5-5	12"		X			CL	
10	4	4-4-6	10"		X	5.5 Gray and brown, moist, CLAY, trace f. sand		CL	
Dry at completion									
URS		4 North Park Drive, Suite 300 Hunt Valley, MD 21030 Tel: (410)785-7220 Fax: (410)785-6818		Inspected By: Diana Castro		Signature:			

Project Name: Dorsey Run Road - Segment A		Borehole No.: A-7							
Project Number: 20830999.00000		Location: Jessup, Maryland							
Date Started: 13006	Date Completed: 13006	Driller: Duane Addison							
Drilling Company: EBA Engineering		Elevation: 184	Sheet 1 of 1						
North: 550329	East: 1381778	Station: 617+99	Offset: 10 R						
Depth:	Sample No.	Blow Count:	Recovery:	RDD (%)	Sampled:	Description:	Graphic Log:	USCS:	Remarks:
	1	3-7-10	12"		X	Silty Gravel		GM	
5	2	5-8-12	14"		X			CH	
	3	5-7-12	14"		X	Light brown, red, gray, moist, CLAY, trace f. sand		CH	
10	4	6-10-12	18"		X			GM	
Boring caved at 1.7' at completion Dry at completion									
URS		4 North Park Drive, Suite 300 Hunt Valley, MD 21030 Tel: (410)785-7220 Fax: (410)785-6818		Inspected By: Diana Castro		Signature:			

Project Name: Dorsey Run Road - Segment A		Borehole No.: A-8							
Project Number: 20830999.00000		Location: Jessup, Maryland							
Date Started: 13006	Date Completed: 13006	Driller: Duane Addison							
Drilling Company: EBA Engineering		Elevation: 151.5	Sheet 1 of 1						
North: 550721	East: 1381592	Station: 622+34	Offset: 1 L						
Depth:	Sample No.	Blow Count:	Recovery:	RDD (%)	Sampled:	Description:	Graphic Log:	USCS:	Remarks:
	1	2-2-3	5"		X	1.2 8.5" Bituminous Concrete 6" Crushed Aggregate Base		ASPH	
					X	Red, moist, CLAY, some mf sand		CL	
5	2	6-5-8	14"		X	3.5 Moist, mf SAND, little gravel		SP	
	3	3-5-2	14"		X			CL	
10	4	5-8-10	18"		X	4.8 Brown with gray, moist, CLAY, some mf sand, trace gravel		CL	
Boring caved at 4.4' at completion Dry at completion									
URS		4 North Park Drive, Suite 300 Hunt Valley, MD 21030 Tel: (410)785-7220 Fax: (410)785-6818		Inspected By: Diana Castro		Signature:			

Project Name: Dorsey Run Road - Segment A		Borehole No.: A-9							
Project Number: 20830999.00000		Location: Jessup, Maryland							
Date Started: 12706	Date Completed: 12706	Driller: Duane Addison							
Drilling Company: EBA Engineering		Elevation: 135	Sheet 1 of 1						
North: 551046	East: 1381307	Station: 626+67	Offset: 10 R						
Depth:	Sample No.	Blow Count:	Recovery:	RDD (%)	Sampled:	Description:	Graphic Log:	USCS:	Remarks:
	1	10-7-5	11"		X	2 Reddish brown, moist, CLAY, some silt, little gravel, little of sand		CL	
					X	Reddish brown, moist, CLAY, little of sand		CL	
5	2	3-4-4	8"		X	3.5 Brown, moist, of SAND, some silt, trace gravel		SM	
	3	6-3-7	18"		X			CL	
10	4	4-4-5			X	7 Light reddish brown to brown with gray, moist, CLAY, trace f sand		CL	
Dry at completion									
URS		4 North Park Drive, Suite 300 Hunt Valley, MD 21030 Tel: (410)785-7220 Fax: (410)785-6818		Inspected By: Diana Castro		Signature:			

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Steve Shaver 12/16/08
DIRECTOR OF PUBLIC WORKS DATE

Walter R. Hubert 12-17-08
CHIEF, BUREAU OF HIGHWAYS DATE

PREPARED BY
URS
4 NORTH PARK DRIVE
HUNT VALLEY, MARYLAND
TEL: (410) 785-7220



DES:	CRC			
DRN:	CDF			
CHK:	DTM			
DATE:	12/15/08	BY	NO.	REVISION
				DATE

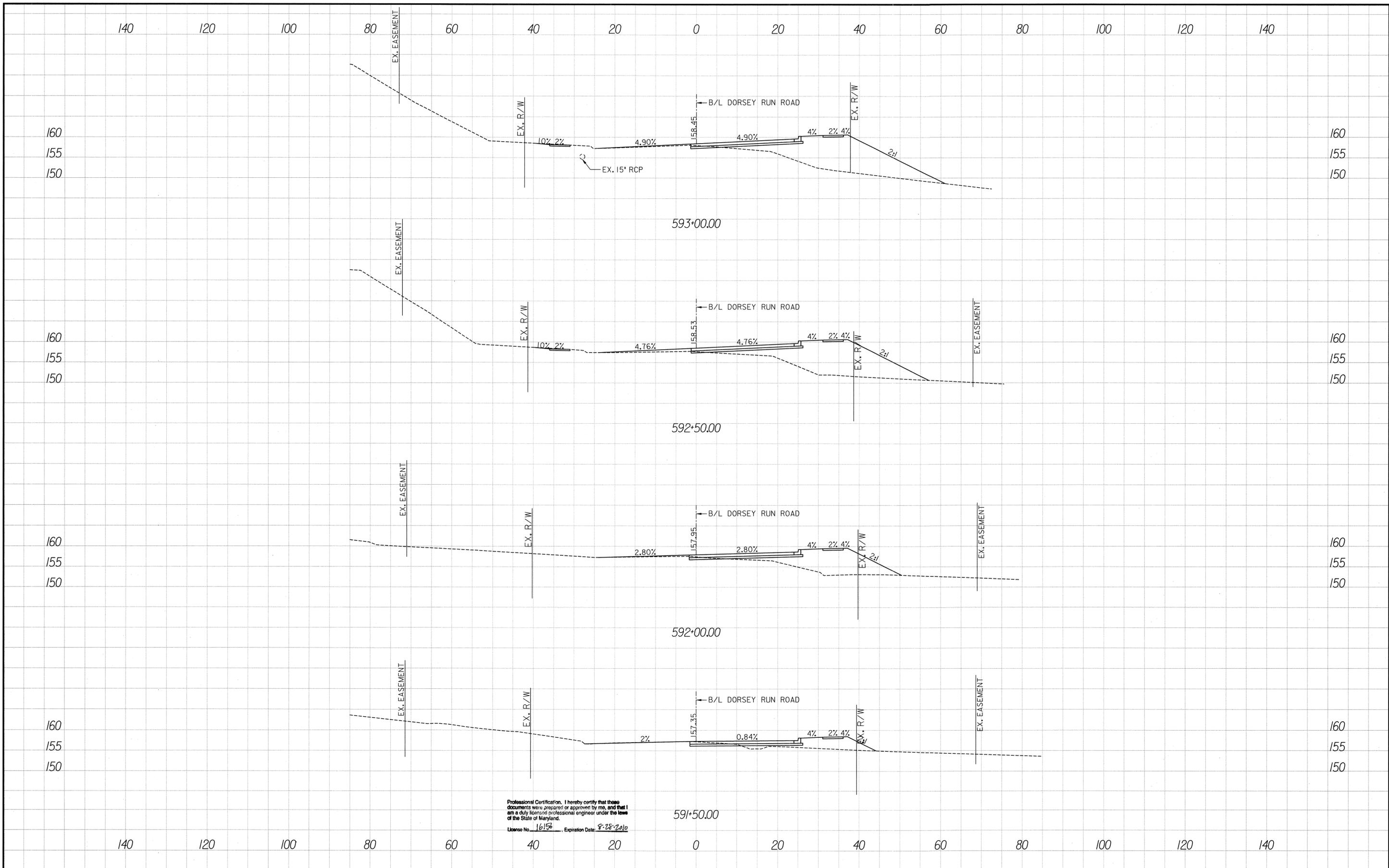
SOIL BORING LOGS - II

WIDENING OF DORSEY RUN ROAD
STA. 591+43 TO STA. 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
CAPITAL PROJECT J-4148-A

SCALE
N.T.S.

SHEET
53 OF 84



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156 Expiration Date 8-28-2010

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: *Steve Shaver* 12/16/08
 Chief, Division of Transportation and Special Projects

Chief, Bureau of Engineering: *Willie J. Wall* 12-17-08
 Chief, Bureau of Highways

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY:	NO.
REVISION:	
DATE:	

CROSS SECTIONS
 STA. 591+50 TO STA. 593+00

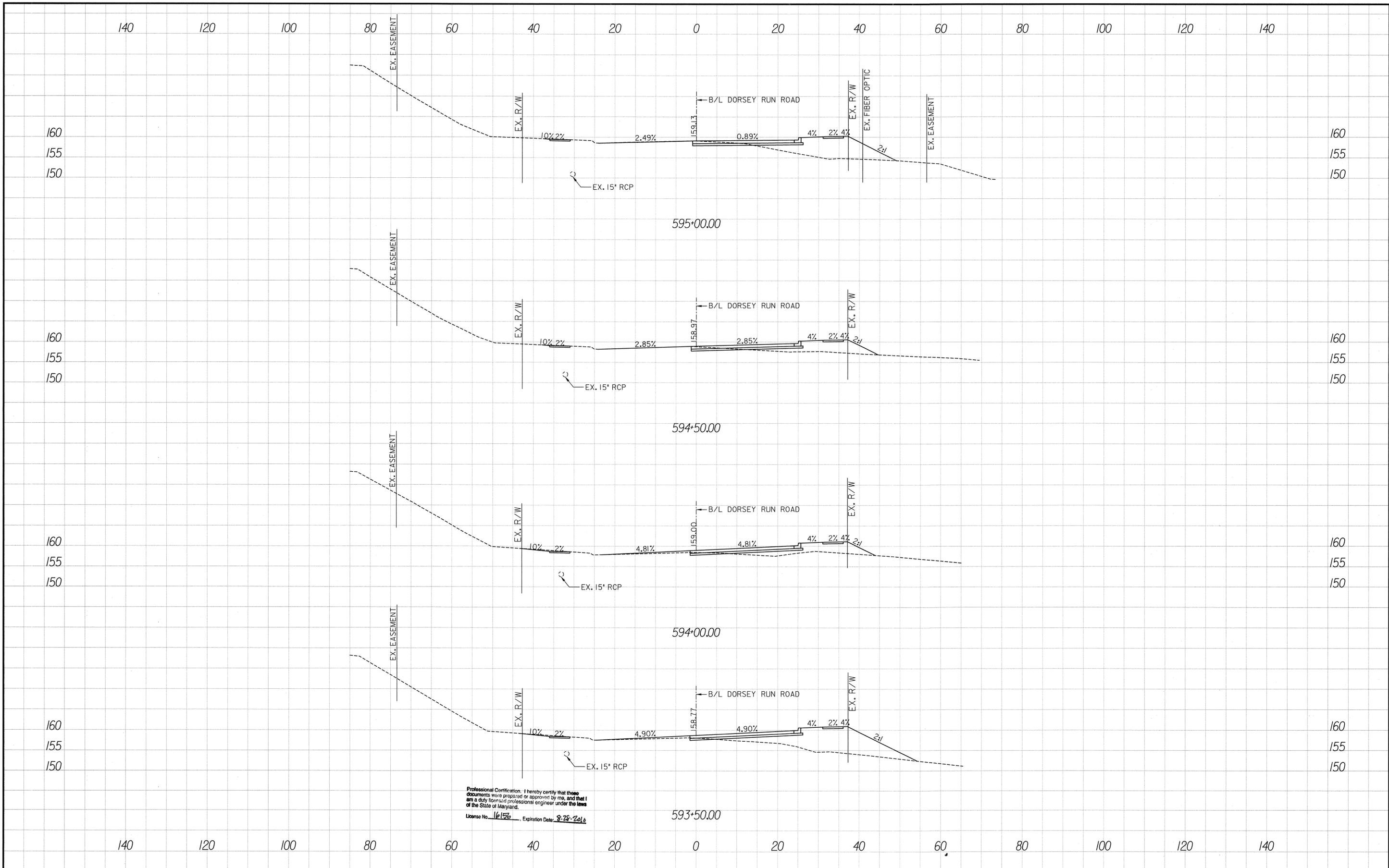
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'

SHEET
 54 OF 84



Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156, Expiration Date: 8-25-2016

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: Steve Shaver 12/16/08
 Chief, Division of Transportation and Special Projects: Steve Shaver 12/16/08
 Chief, Bureau of Engineering: Walter R. ... 12/16/08
 Chief, Bureau of Highways: Walter R. ... 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220

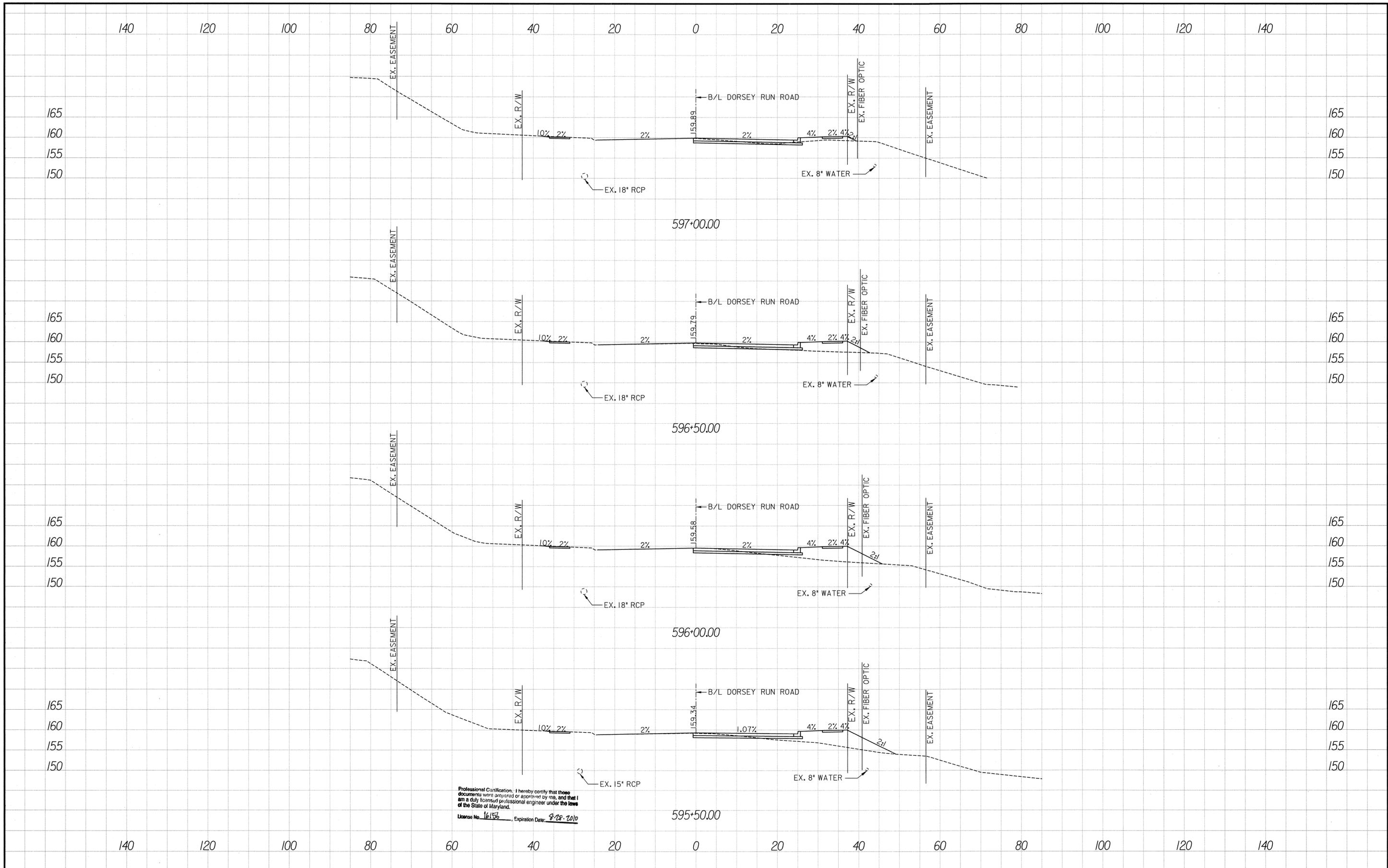


DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY NO.	
REVISION	
DATE	

CROSS SECTIONS
 STA. 593+50 TO STA. 595+00
 SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12
 ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'
 SHEET
 55 OF 84



Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156, Expiration Date: 8-28-2010

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: Steve Shuman 12/16/08
 Chief, Bureau of Engineering: [Signature] 12/16/08
 Chief, Bureau of Highways: [Signature] 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220

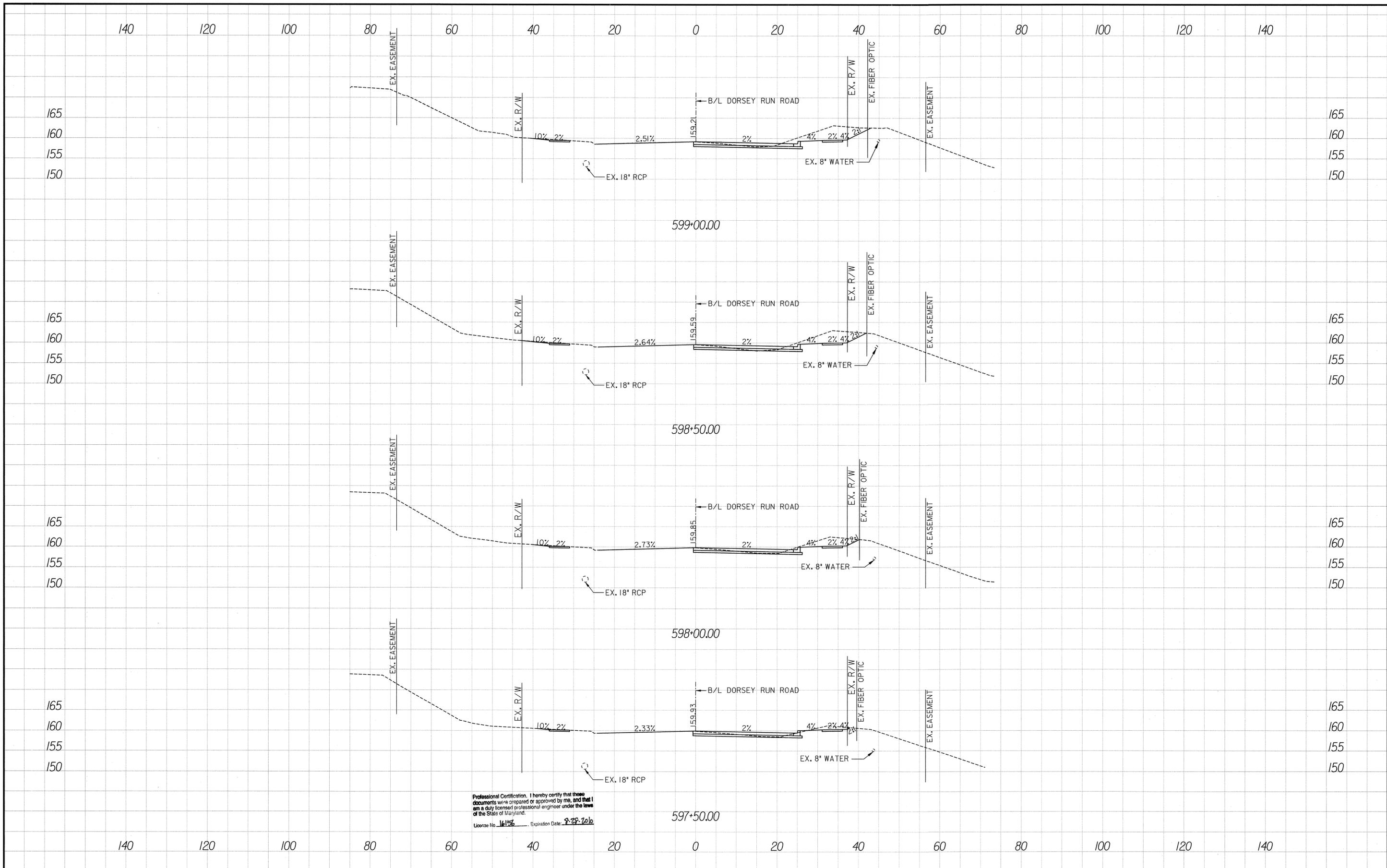


DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY:	NO.
REVISION	
DATE	

CROSS SECTIONS
 STA. 595+50 TO STA. 597+00
 SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12
 ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'
 SHEET
 56 OF 84



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16152 Expiration Date: 8-28-2016

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: Steve Shaner 12/16/08
 Chief, Division of Transportation and Special Projects: Steve Shaner 12/16/08
 Chief, Bureau of Engineering: Michael R. Peterson 12/16/08
 Chief, Bureau of Highways: William R. Hall 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220

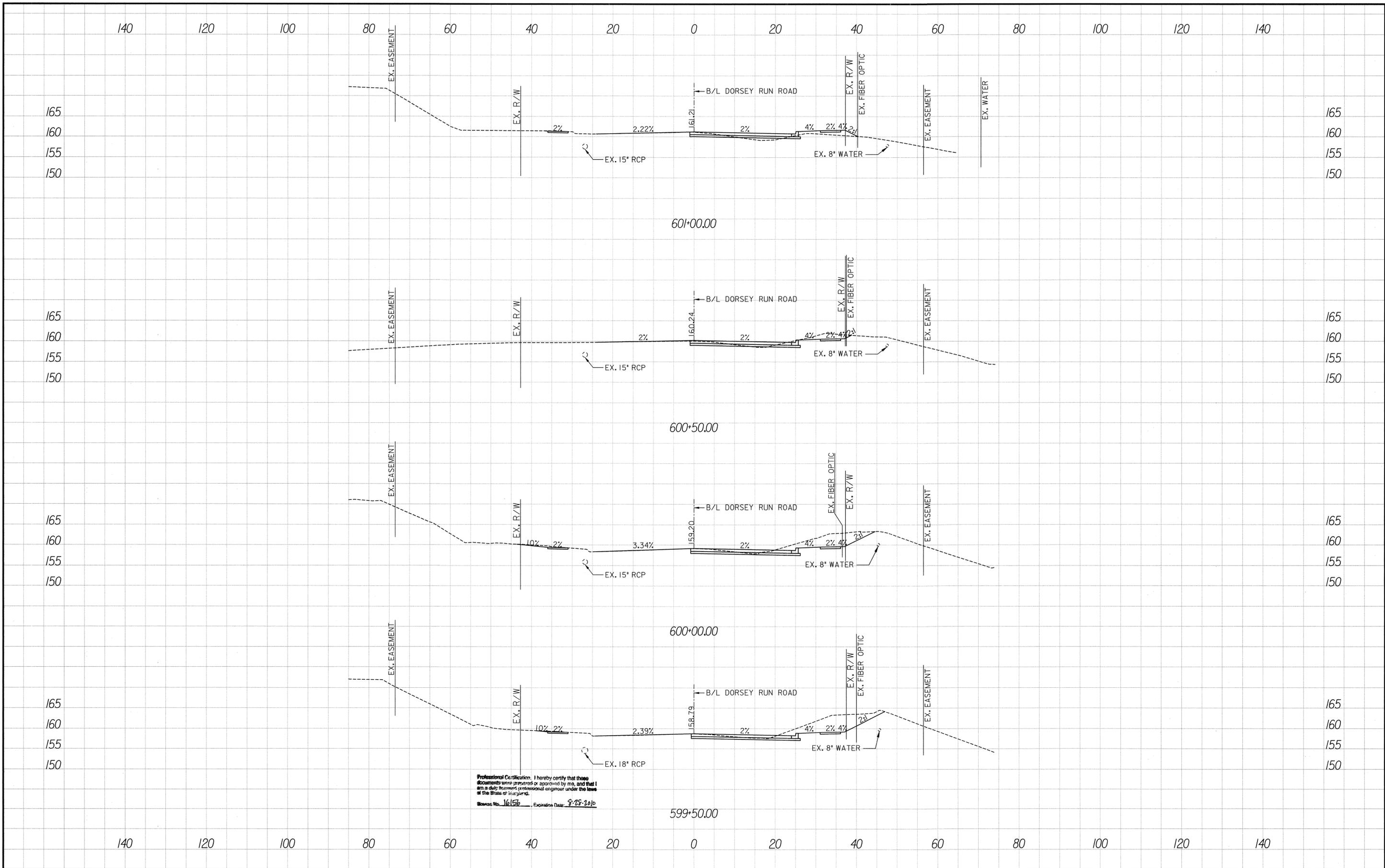


DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY NO.	
REVISION	
DATE	

CROSS SECTIONS
 STA. 597+50 TO STA. 599+00
 SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12
 ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'
 SHEET
 57 OF 84



Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16152, Expiration Date: 9-28-2010

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: *Steve Shaner* 12/16/08
 Chief, Bureau of Engineering: *Willie Z. Wall* 12-17-08
 Chief, Bureau of Highways: *Willie Z. Wall* 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY NO.	
REVISION	
DATE	

CROSS SECTIONS
 STA. 599+50 TO STA. 601+00

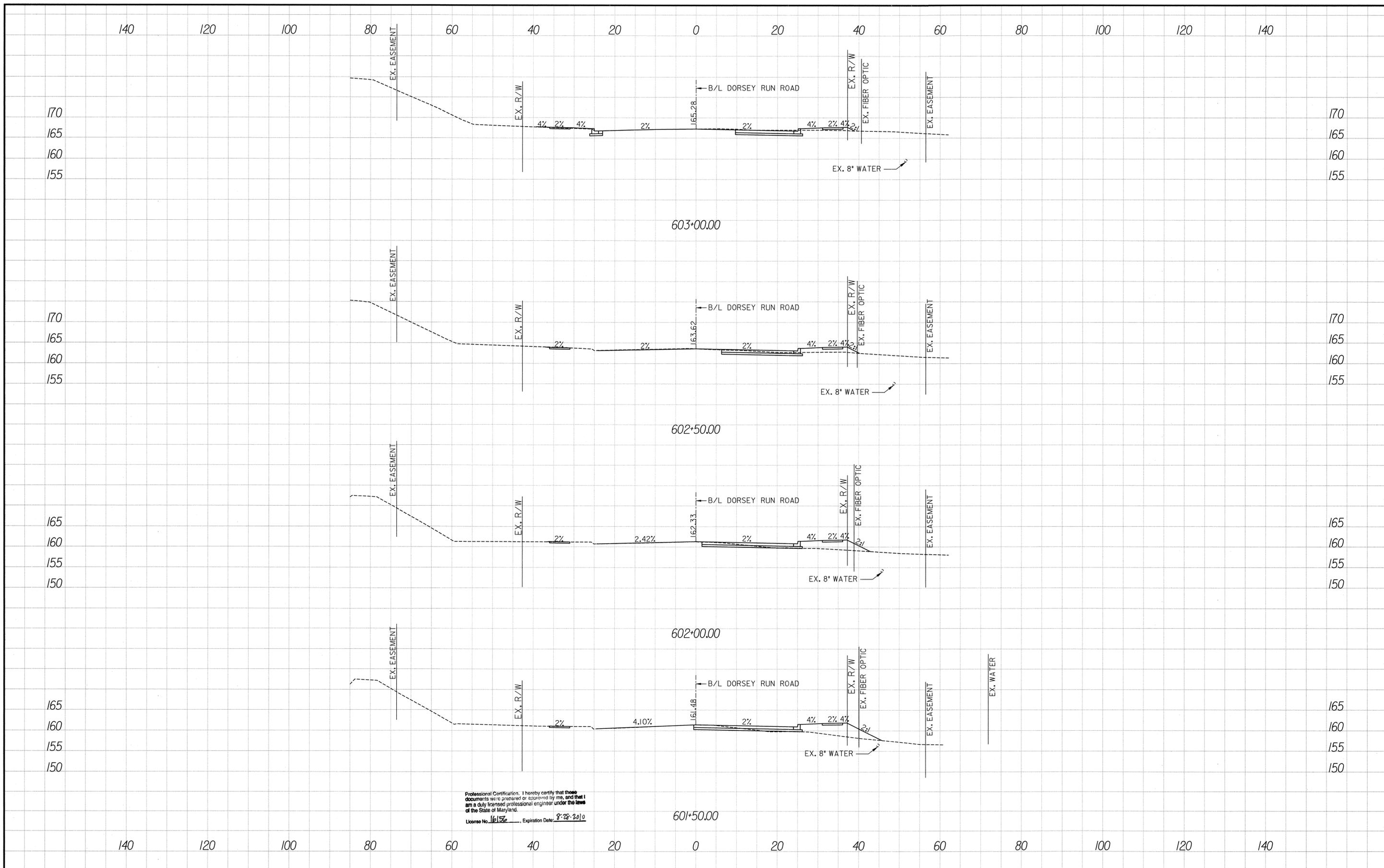
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'

SHEET
 58 OF 84



Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156, Expiration Date: 8-28-2010

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: *Steve Sharan* 12/16/08
 Chief, Division of Transportation and Special Projects: *Steve Sharan* 12/16/08

Chief, Bureau of Engineering: *William J. Walsh* 12-17-08
 Chief, Bureau of Highways: *William J. Walsh* 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY:	NO.
REVISION:	
DATE:	

CROSS SECTIONS
 STA. 601+50 TO STA. 603+00

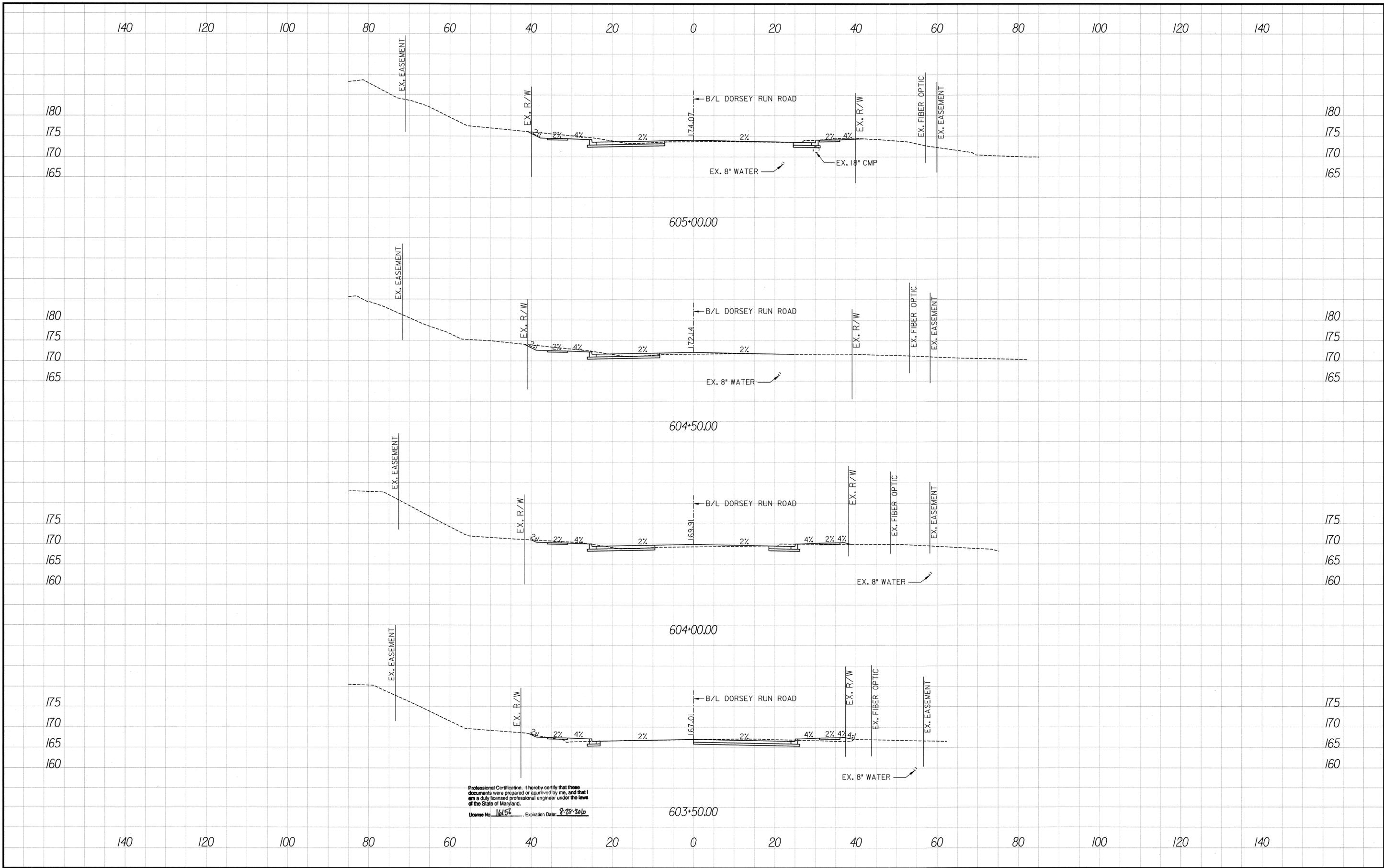
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'

SHEET
 59 OF 84



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16157, Expiration Date: 8-28-2010

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: Steve Sheras, 12/16/08
 Chief, Bureau of Engineering: [Signature], 12/16/08
 Chief, Bureau of Highways: [Signature], 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY:	NO.
REVISION:	
DATE:	

CROSS SECTIONS
 STA. 603+50 TO STA. 605+00

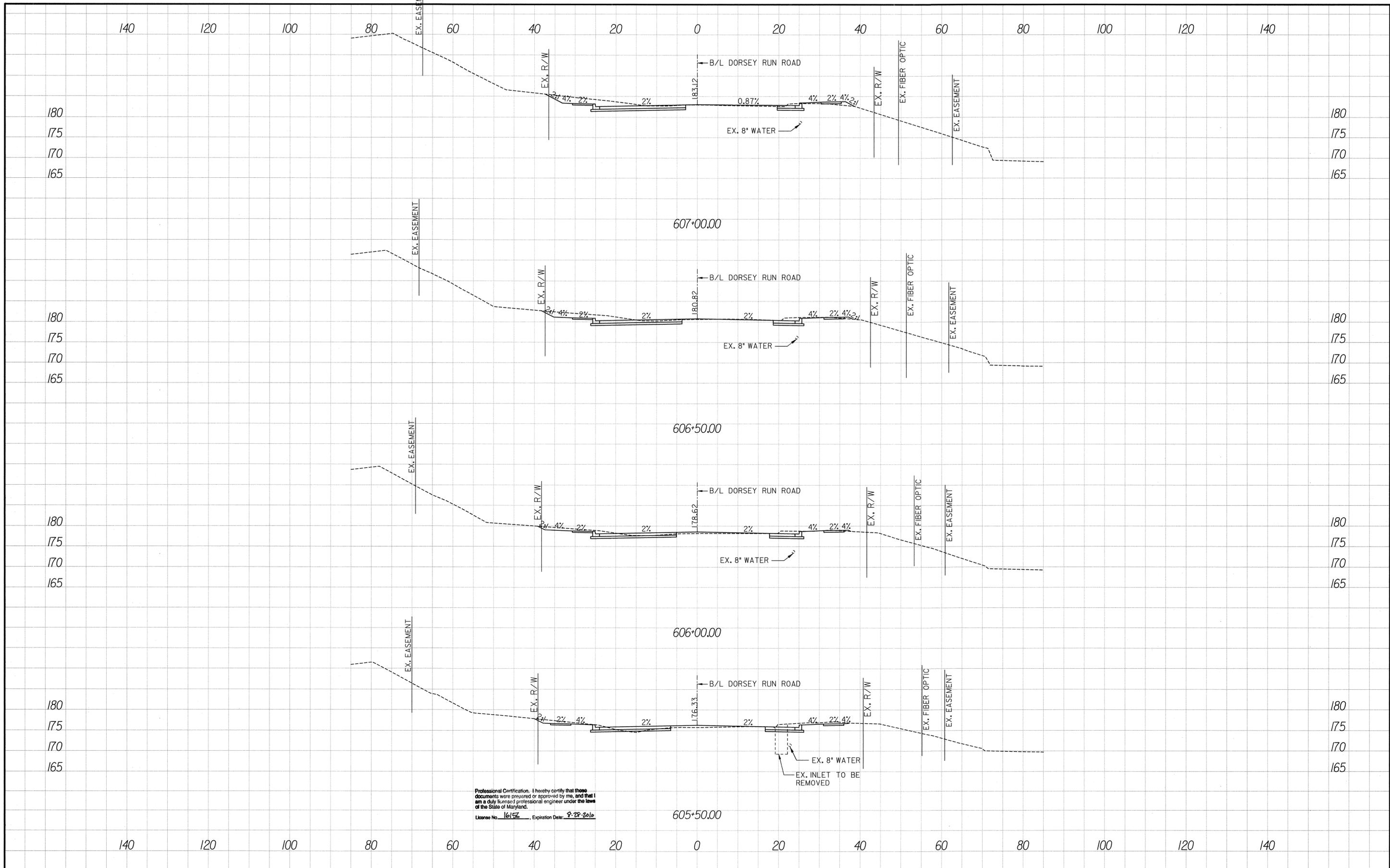
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'

SHEET
 60 OF 84



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16152, Expiration Date: 9-28-2016

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: Steve Sharar, 12/16/08
 Chief, Bureau of Engineering: [Signature], 12/16/08
 Chief, Bureau of Highways: [Signature], 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220

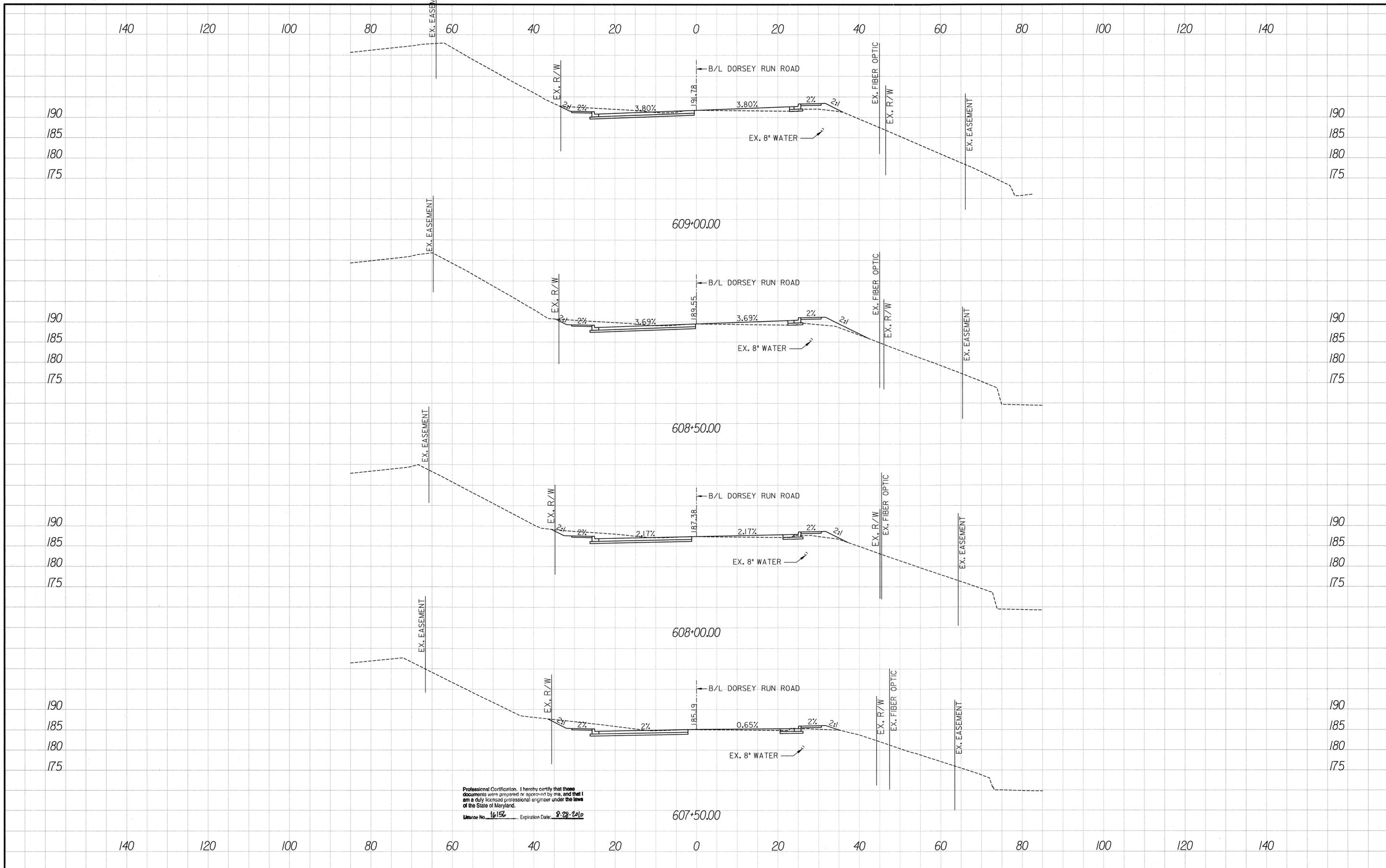


DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY:	NO.
REVISION:	
DATE:	

CROSS SECTIONS
 STA. 605+50 TO STA. 607+00
 SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12
 ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'
 SHEET
 61 OF 84



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16152 Expiration Date: 8-28-2010

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: *Steve Sharan* 12/16/08
 Chief, Division of Transportation and Special Projects: *Steve Sharan* 12/16/08
 Chief, Bureau of Engineering: *David Johnson* 12/16/08
 Chief, Bureau of Highways: *William Z. McCall* 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220

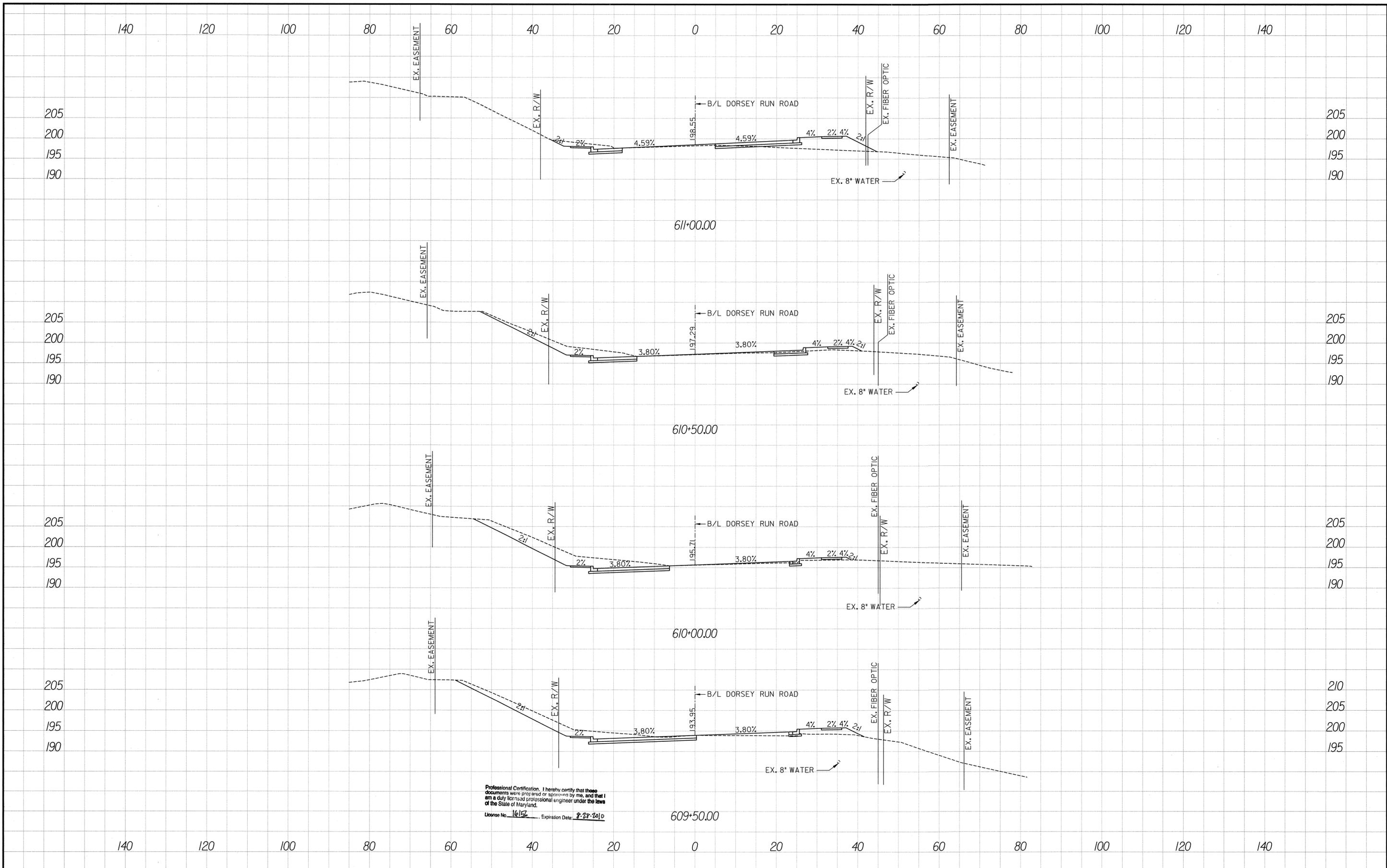


DES:				
DRN:	CF			
CHK:	DTM			
DATE:	12/15/08	BY NO.		
		REVISION		
		DATE		

CROSS SECTIONS
 STA. 607+50 TO STA. 609+00
 SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12
 ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'
 SHEET
 62 OF 84



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16152 Expiration Date: 9-28-2010

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: Steve Shaver DATE: 12/16/08
 Chief, Bureau of Engineering: Walter Small DATE: 12-17-08
 Chief, Bureau of Highways: Walter Small DATE: 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY NO.	
REVISION	
DATE	

CROSS SECTIONS
 STA. 609+50 TO STA. 611+00

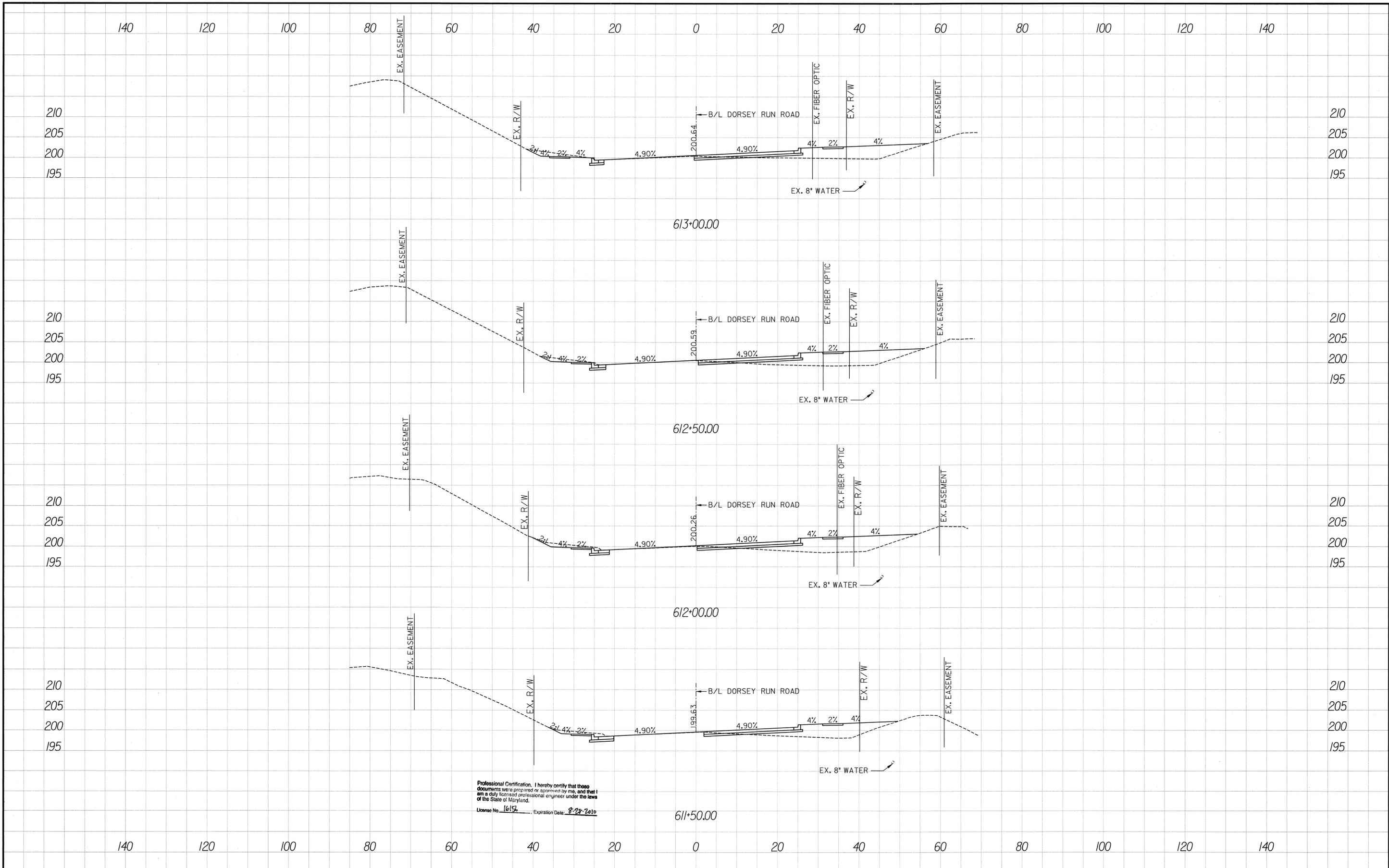
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'

SHEET
 63 OF 84



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16152 Expiration Date: 8-28-2010

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: Steve Shuman 12/16/08
 Chief, Division of Transportation and Special Projects: Steve Shuman 12/16/08
 Chief, Bureau of Engineering: [Signature] 12/16/08
 Chief, Bureau of Highways: [Signature] 12/17/08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220

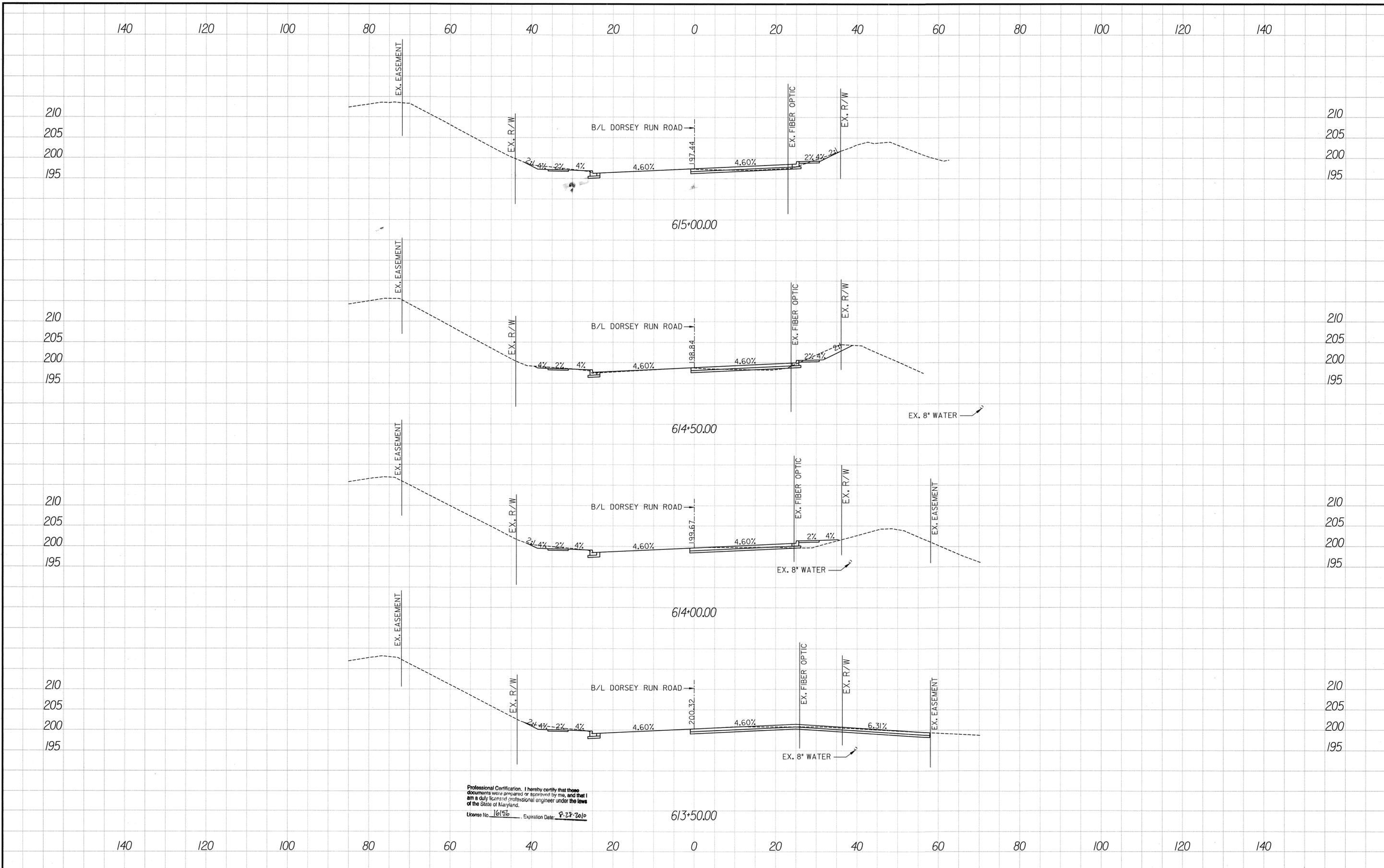


DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY NO.	
REVISION	
DATE	

CROSS SECTIONS
 STA. 611+50 TO STA. 613+00
 SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12
 ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'
 SHEET
 64 OF 84



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156 Expiration Date: 8-28-2010

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: Steve Shuman 12/16/08
 Chief, Division of Transportation and Special Projects: Steve Shuman 12/16/08

Chief, Bureau of Engineering: [Signature] 12/16/08
 Chief, Bureau of Highways: [Signature] 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:				
DRN:	CF			
CHK:	DTM			
DATE:	12/15/08	BY:	NO.	
		REVISION		DATE

CROSS SECTIONS
 STA. 613+50 TO STA. 615+00

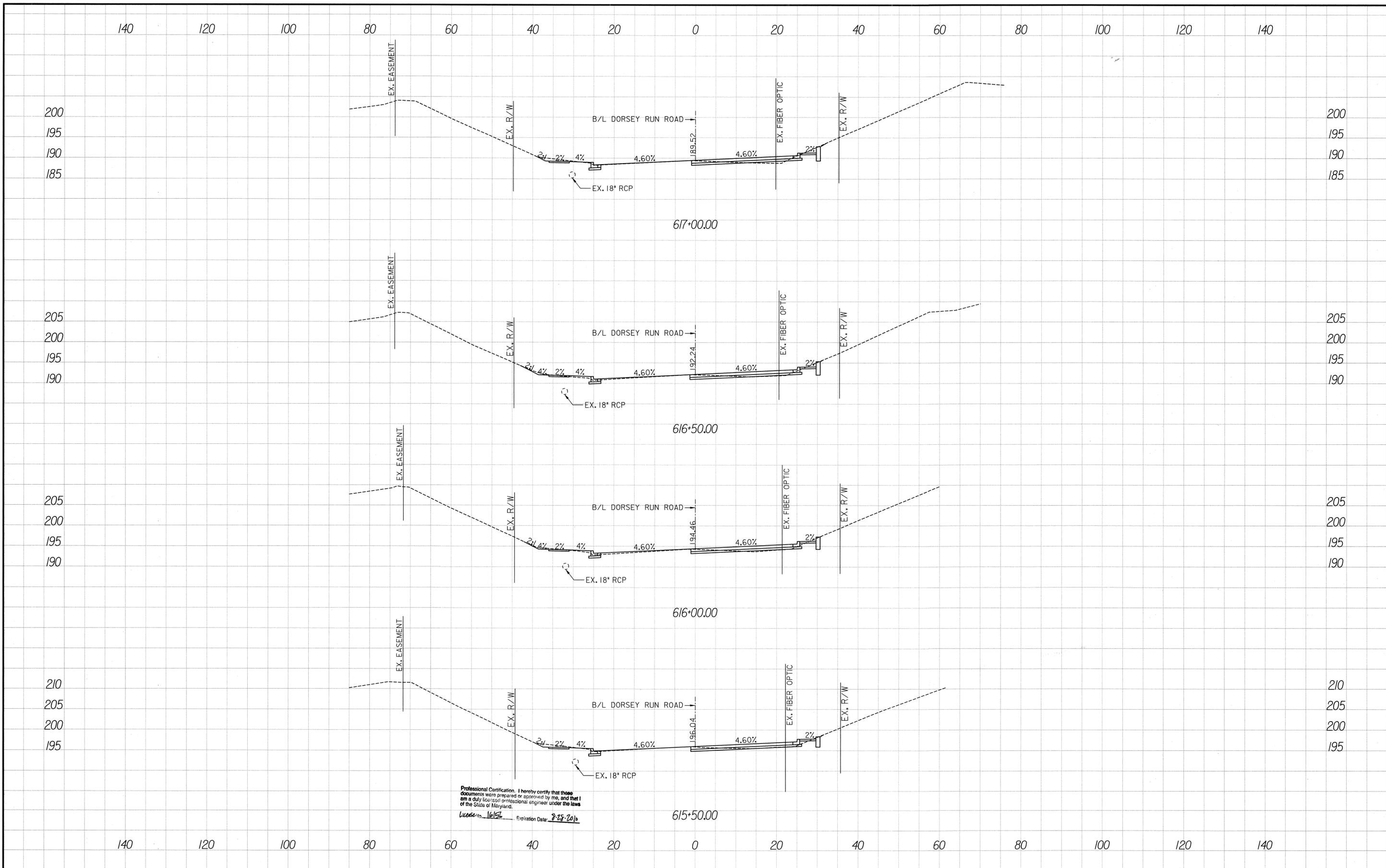
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'

SHEET
 65 OF 84



Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16157 Expiration Date: 8-29-2016

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: Steve Sharan 12/16/08
 Chief, Division of Transportation and Special Projects: Steve Sharan 12/16/08
 Chief, Bureau of Engineering: [Signature] 12/16/08
 Chief, Bureau of Highways: [Signature] 12-17-09

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220

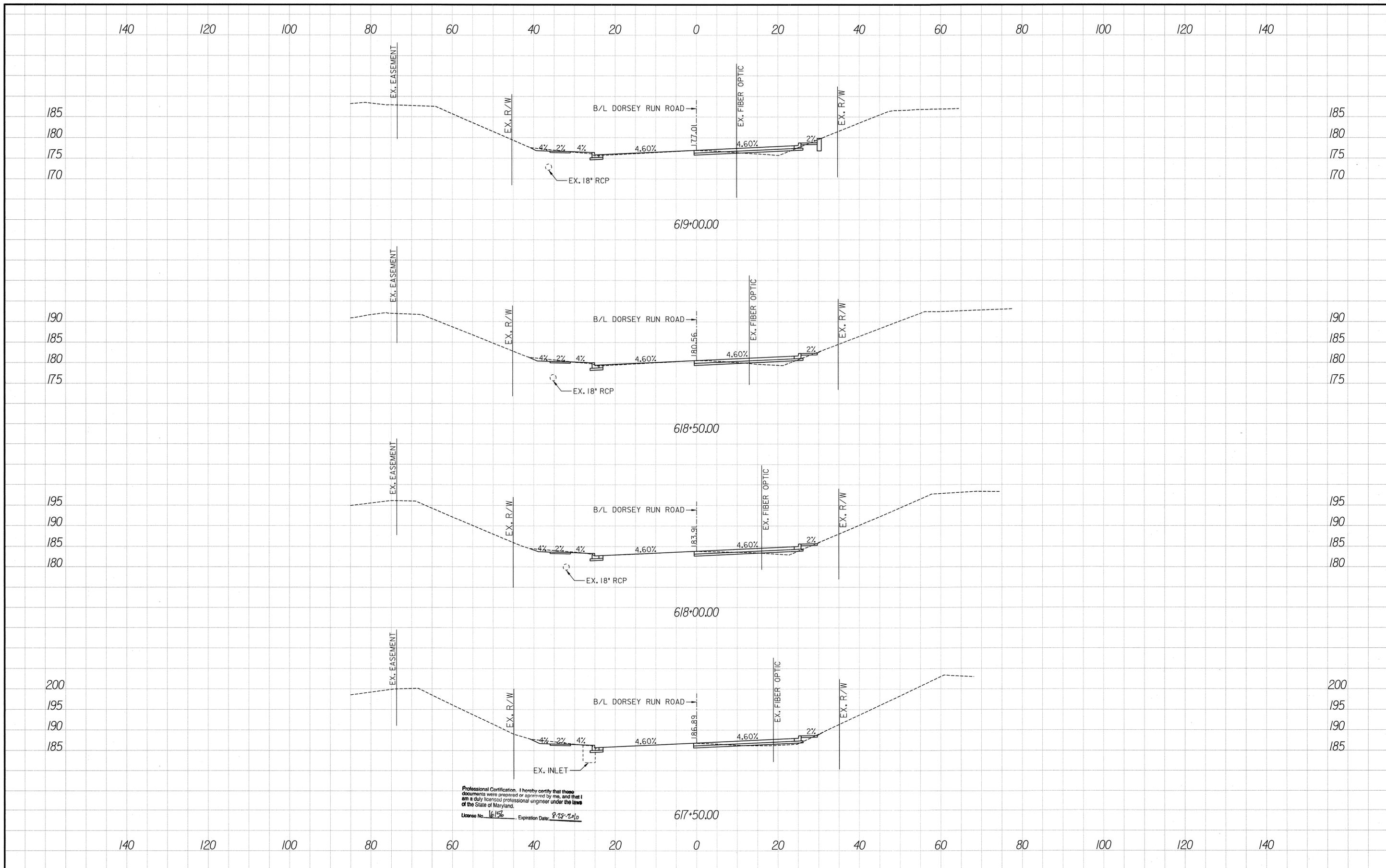


DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY:	NO.
REVISION	
DATE	

CROSS SECTIONS
 STA. 615+50 TO STA. 617+00
 SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12
 ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'
 SHEET
 66 OF 84



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156 Expiration Date: 8-28-2010

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: *Steve Shuman* 12/16/08
 Chief, Division of Transportation and Special Projects: *Steve Shuman* 12/16/08

Chief, Bureau of Engineering: *Paul Seaman* 12/16/08
 Chief, Bureau of Highways: *Walter J. Wall* 12-17-07

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY:	NO.
REVISION	
DATE	

CROSS SECTIONS
 STA. 617+50 TO STA. 619+00

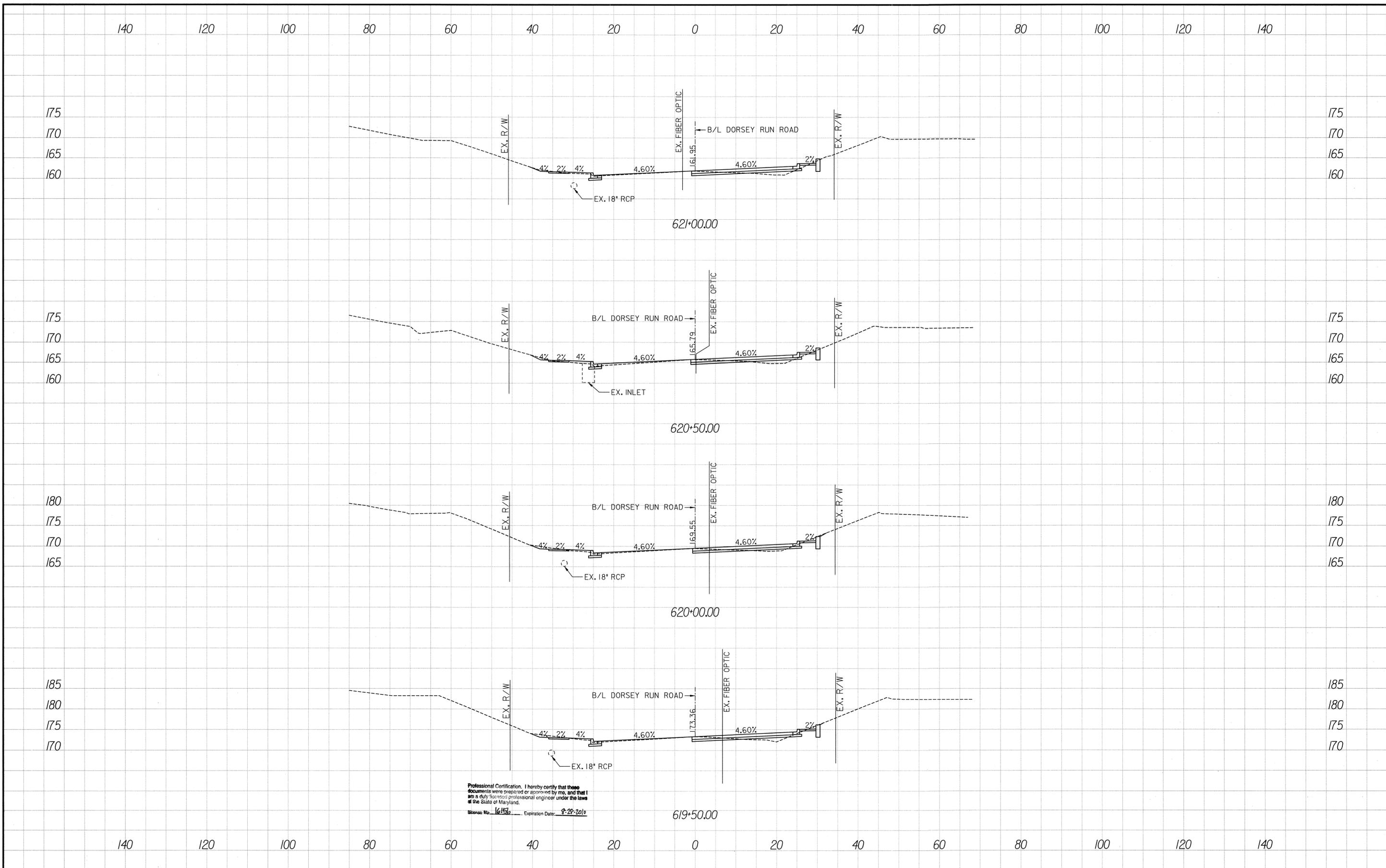
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'

SHEET
 67 OF 84



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16152 Expiration Date: 8-28-2018

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Steve Sharon 12/16/08
 DIRECTOR OF PUBLIC WORKS DATE

Walter Z. Hall 12-17-08
 CHIEF, BUREAU OF HIGHWAYS DATE

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY:	NO.
REVISION	
DATE	

CROSS SECTIONS
 STA. 619+50 TO STA. 621+00

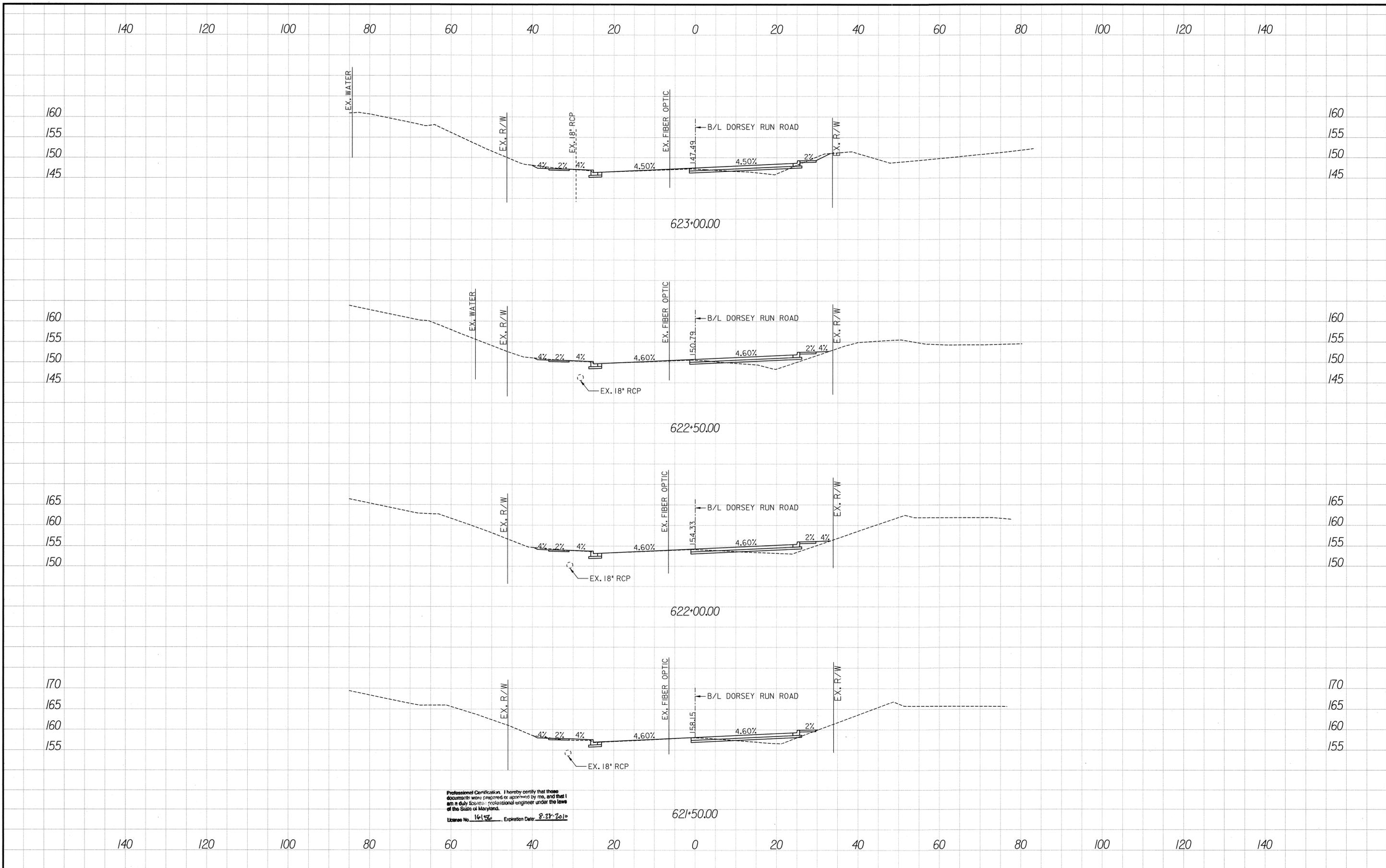
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'

SHEET
 68 OF 84



Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16152, Expiration Date: 8-21-2016

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: *Steve Shaver* 12/16/08
 Chief, Bureau of Engineering: *Walter J. Wall* 12-17-08
 Chief, Bureau of Highways: *Walter J. Wall* 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY NO.	
REVISION	
DATE	

CROSS SECTIONS
 STA. 621+50 TO STA. 623+00

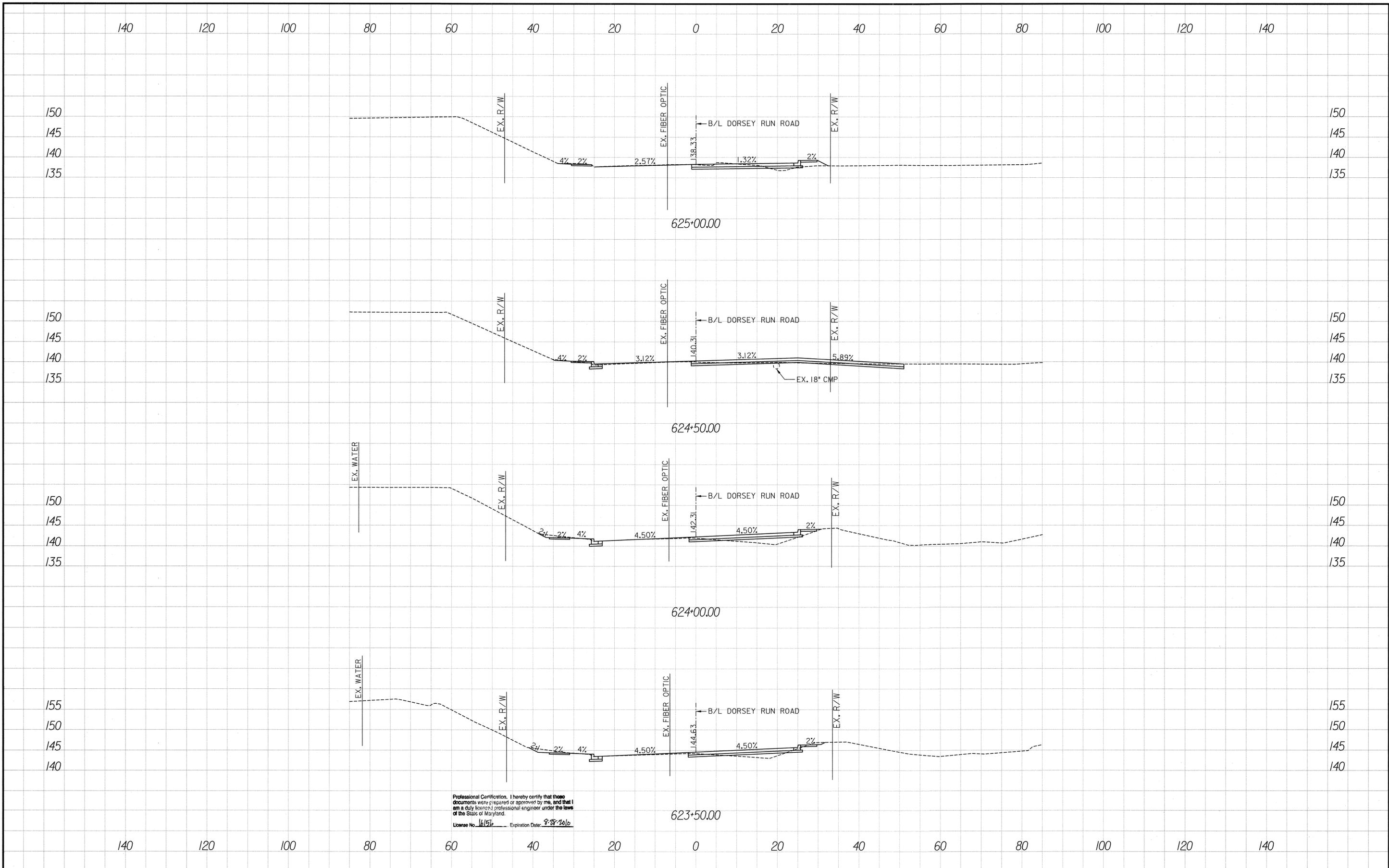
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'

SHEET
 69 OF 84



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16152 Expiration Date: 8-28-2016

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: *Steve Shaner* 12/16/08
 Chief, Division of Transportation and Special Projects: *Steve Shaner* 12/16/08

Chief, Bureau of Engineering: *Paul Johnson* 12/16/08
 Chief, Bureau of Highways: *Walter J. [unclear]* 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY NO.	
REVISION	
DATE	

CROSS SECTIONS
 STA. 623+50 TO STA. 625+00

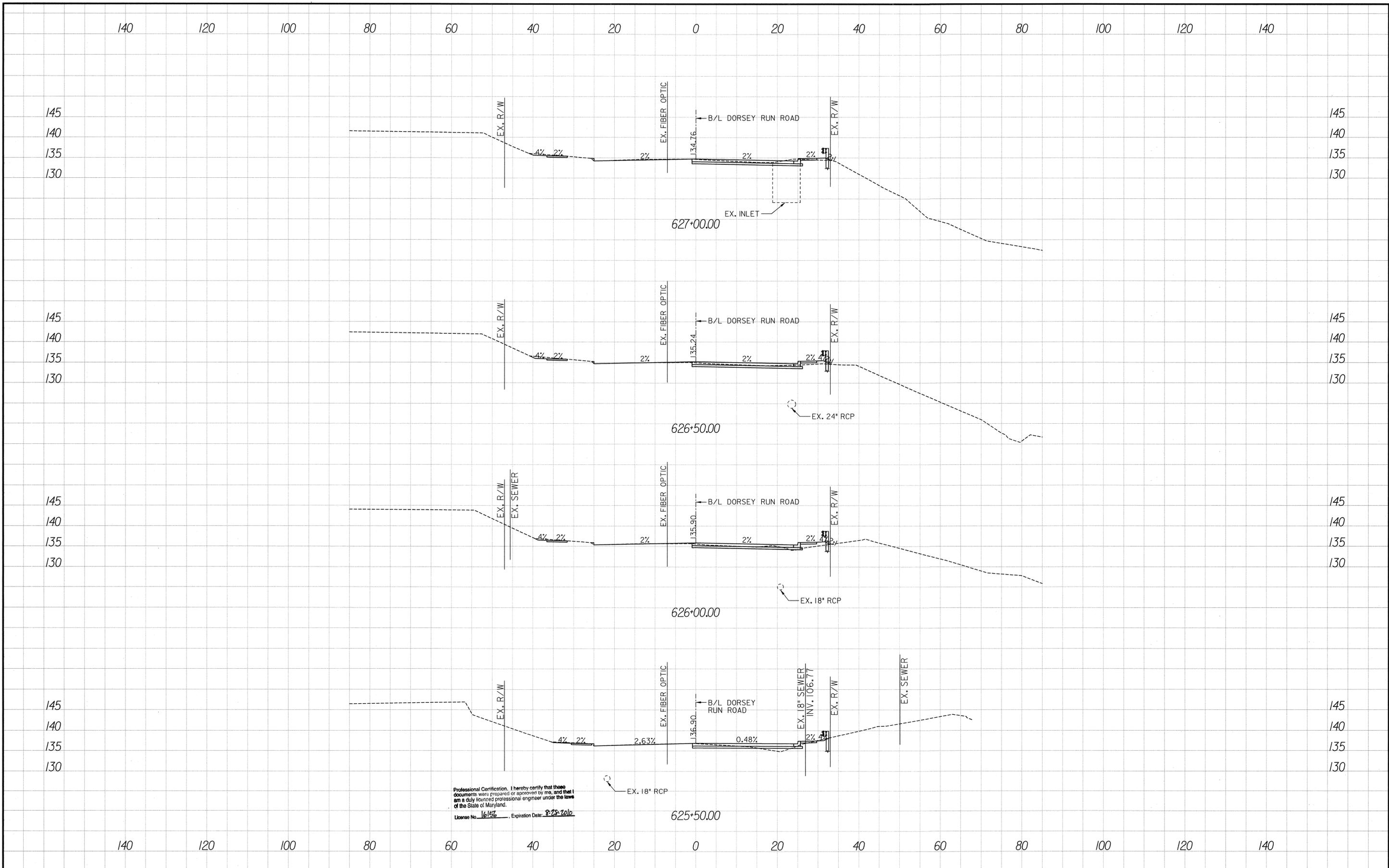
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'

SHEET
 70 OF 84



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156, Expiration Date: 8-28-2010

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: *Steve Sharan* 12/16/08
 Chief, Bureau of Engineering: *Paul Johnson* 12/16/08
 Chief, Bureau of Highways: *Willie A. Webb* 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220

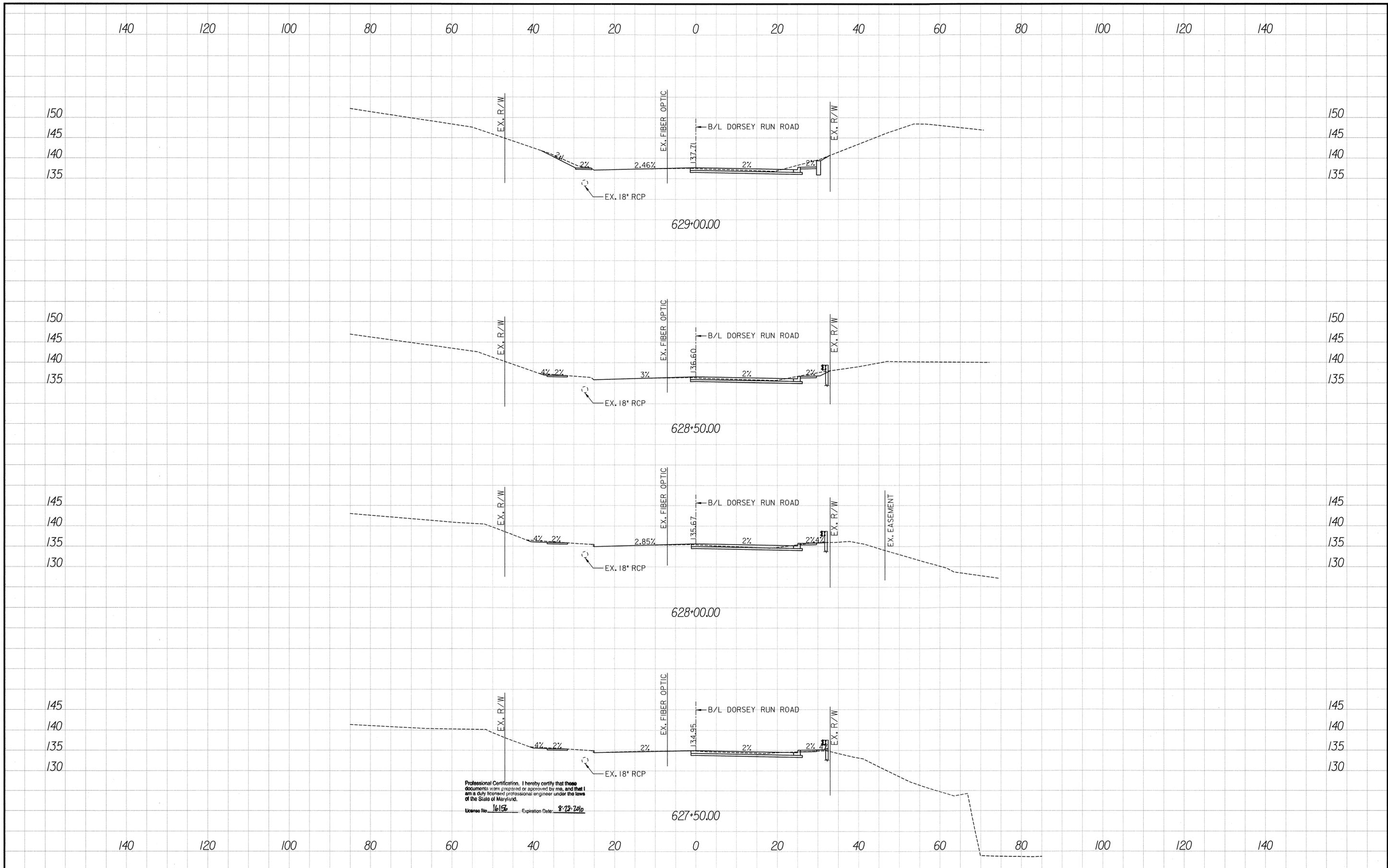


DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY:	NO.
REVISION	
DATE	

CROSS SECTIONS
 STA. 625+50 TO STA. 627+00
 SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12
 ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

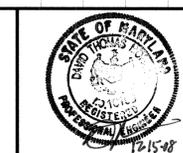
SCALE
 1"=10'
 SHEET
 71 OF 84



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16152 Expiration Date: 8-23-2016

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: Steve Sharan 12/16/08
 Chief, Division of Transportation and Special Projects: Steve Sharan 12/16/08
 Chief, Bureau of Engineering: Willie R. Mahall 12-17-08
 Chief, Bureau of Highways: Willie R. Mahall 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220

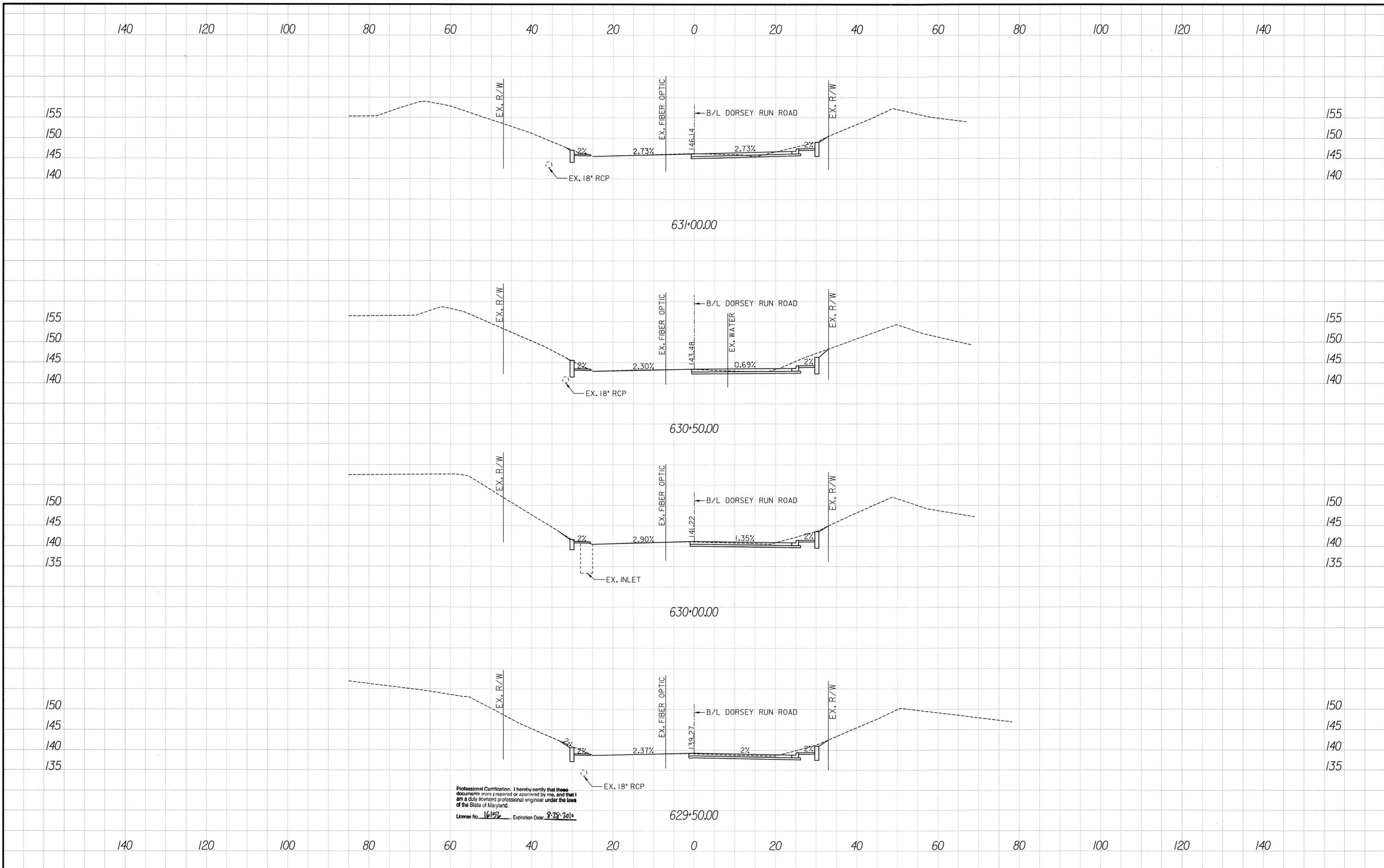


DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY NO.	
REVISION	
DATE	

CROSS SECTIONS
 STA. 627+50 TO STA. 629+00
 SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12
 ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'
 SHEET
 72 OF 84



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16152 Expiration Date: 8-28-2016

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: Steve Shaver DATE: 12/16/08
 Chief, Division of Transportation and Special Projects: Steve Shaver DATE: 12/16/08
 Chief, Bureau of Engineering: W. J. Mason DATE: 12/16/08
 Chief, Bureau of Highways: W. J. Mason DATE: 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220

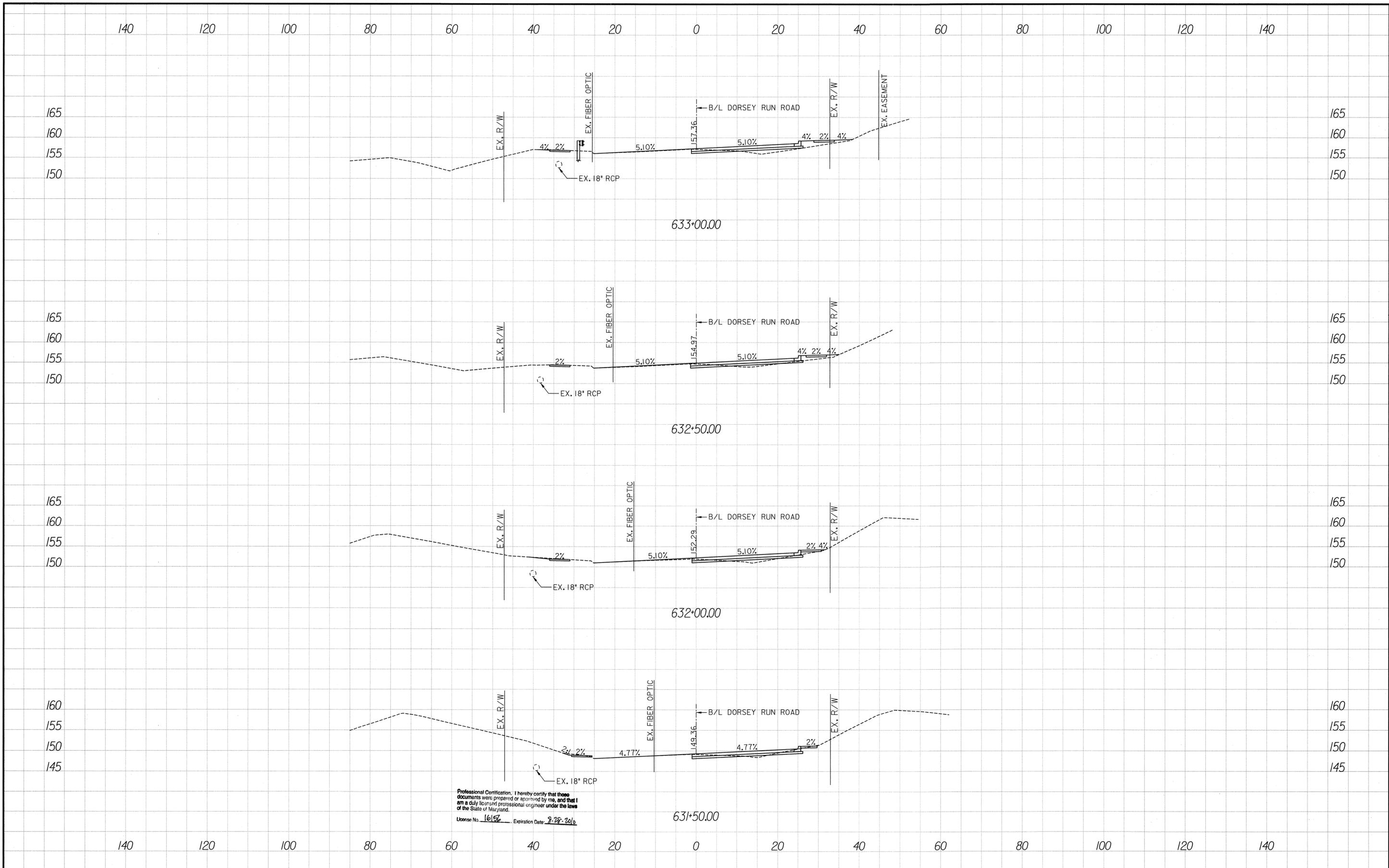


DES:				
DRN:	CF			
CHK:	DTM			
DATE:	12/15/08	BY NO.		REVISION
				DATE

CROSS SECTIONS
 STA. 629+50 TO STA. 631+00
 SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12
 ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'
 SHEET
 73 OF 84

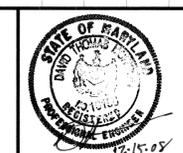


Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16152 Expiration Date: 9-28-2016

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: *Steve Sharan* 12/16/08
 Chief, Bureau of Engineering: *Walter J. Hall* 12-17-08
 Chief, Bureau of Highways: *Walter J. Hall* 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY:	NO.
REVISION:	
DATE:	

CROSS SECTIONS
 STA. 631+50 TO STA. 633+00

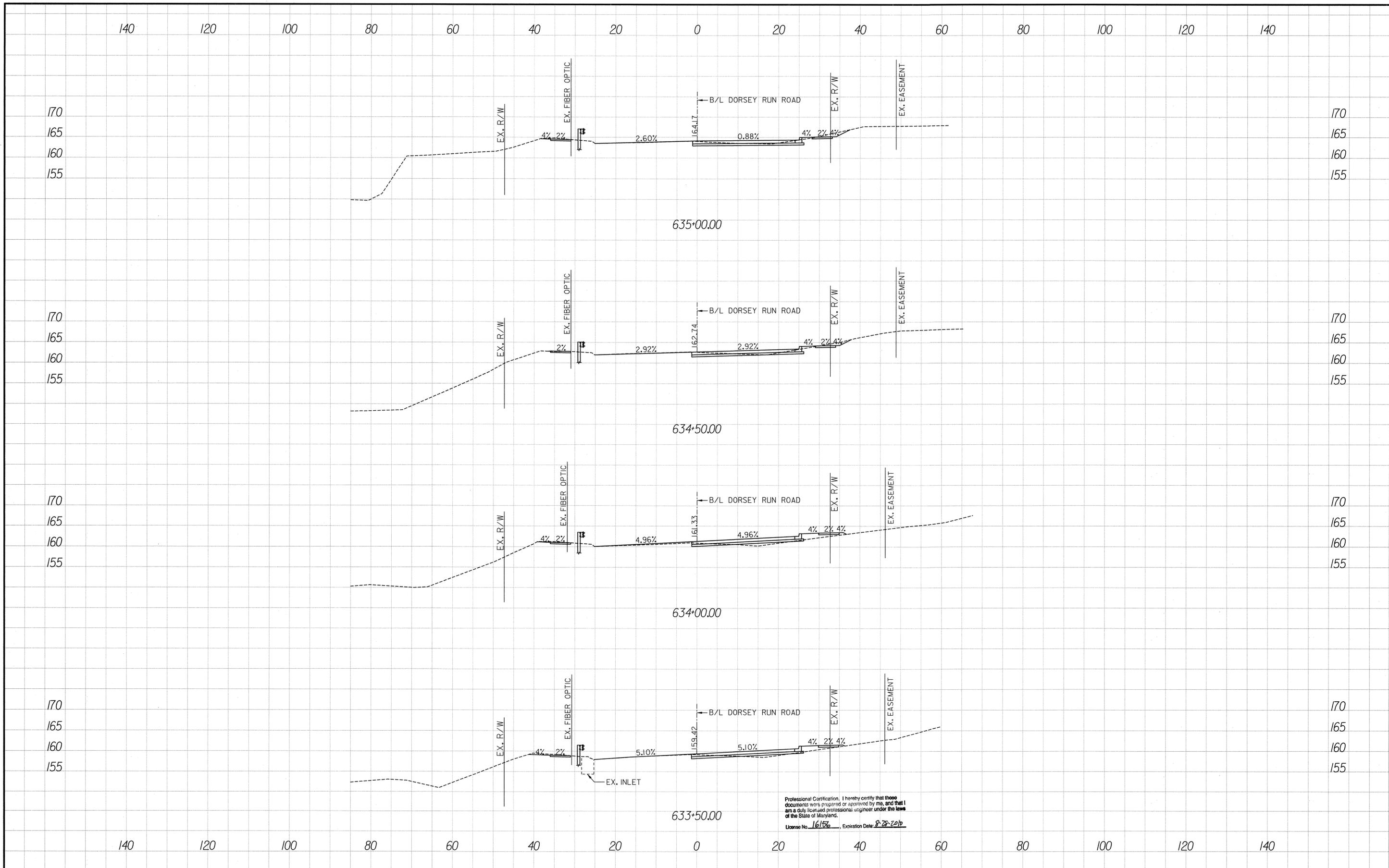
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'

SHEET
 74 OF 84



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156 Expiration Date: 8-28-2012

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: Steve Shuman 12/16/08
 Chief, Bureau of Engineering: [Signature] 12/16/08
 Chief, Bureau of Highways: [Signature] 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY:	NO.
REVISION:	
DATE:	

CROSS SECTIONS
 STA. 633+50 TO STA. 635+00

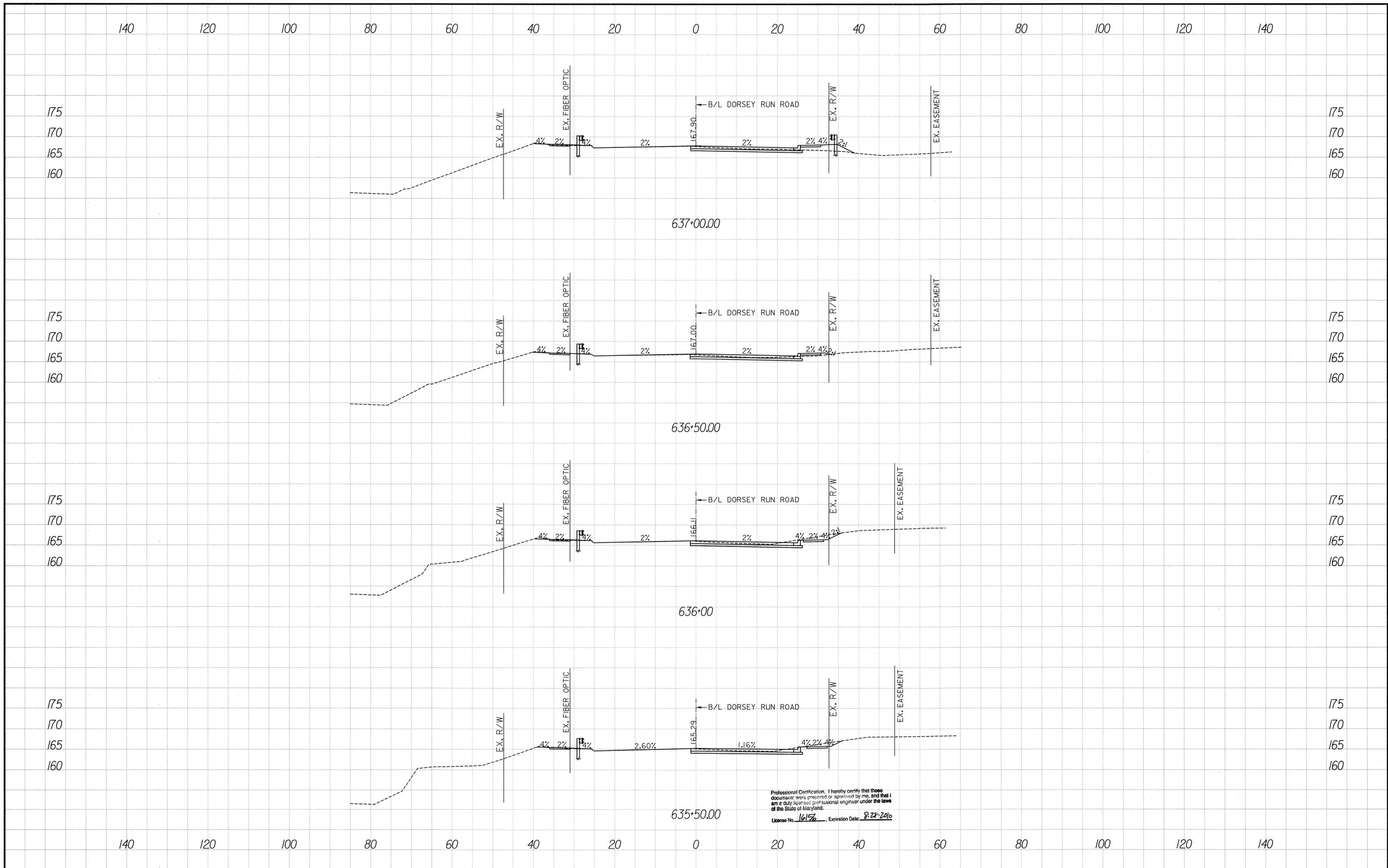
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'

SHEET
 75 OF 84



DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Steve Shuman 12/16/08
 DIRECTOR OF PUBLIC WORKS DATE

W. J. Hill 12-17-09
 CHIEF, BUREAU OF ENGINEERING DATE

W. J. Hill 12-17-09
 CHIEF, BUREAU OF HIGHWAYS DATE

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY NO.	
REVISION	
DATE	

CROSS SECTIONS
 STA. 635+50 TO STA. 637+00

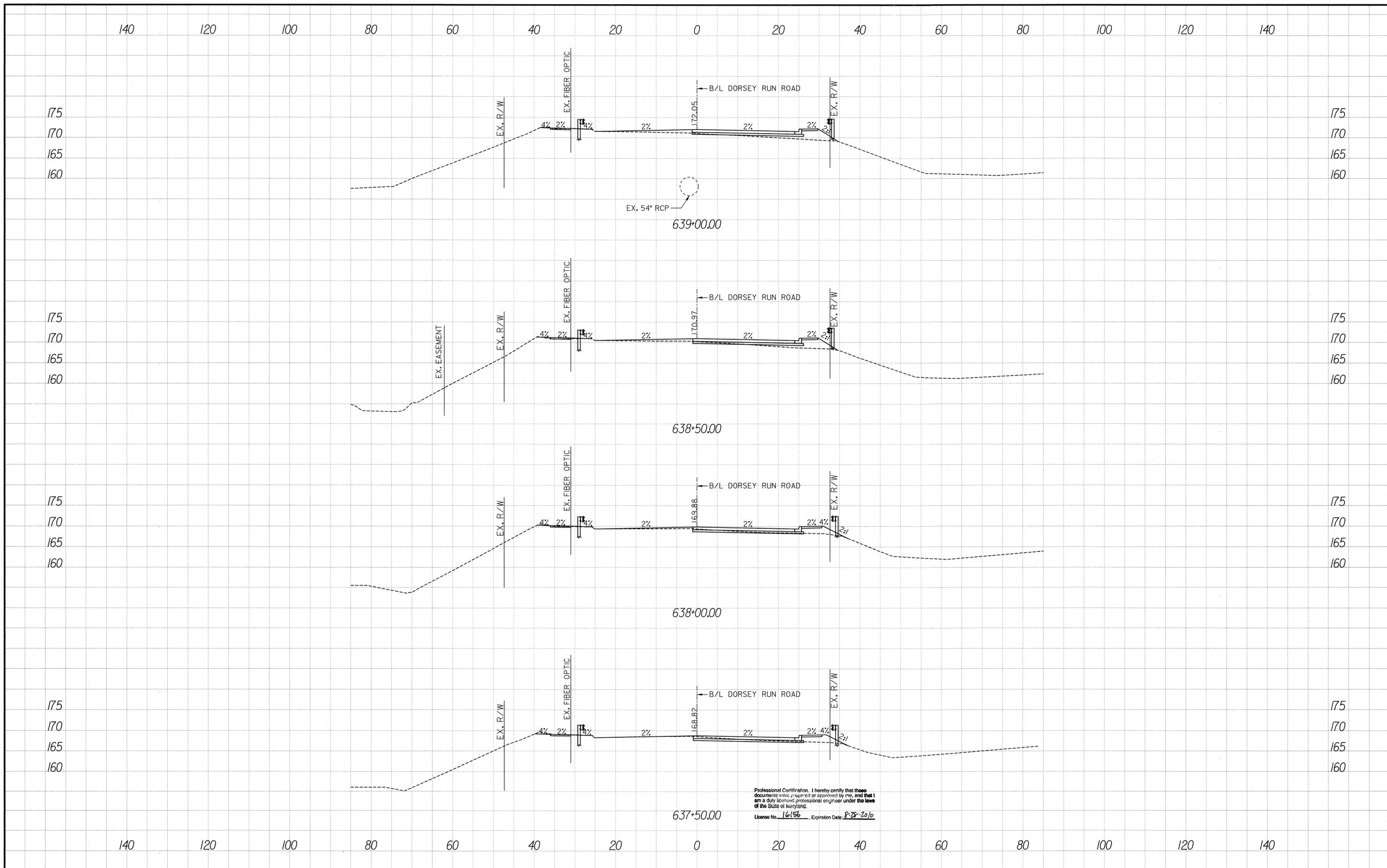
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'

SHEET
 76 OF 84



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156 Expiration Date: 8-25-2012

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: *Steve Sharan* 12/16/08
 Chief, Bureau of Engineering: *Willie P. Hall* 12-17-08

Chief, Division of Transportation and Special Projects: *Steve Sharan* 12/16/08
 Chief, Bureau of Highways: *Willie P. Hall* 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY NO.	
REVISION	
DATE	

CROSS SECTIONS
 STA. 637+50 TO STA. 639+00

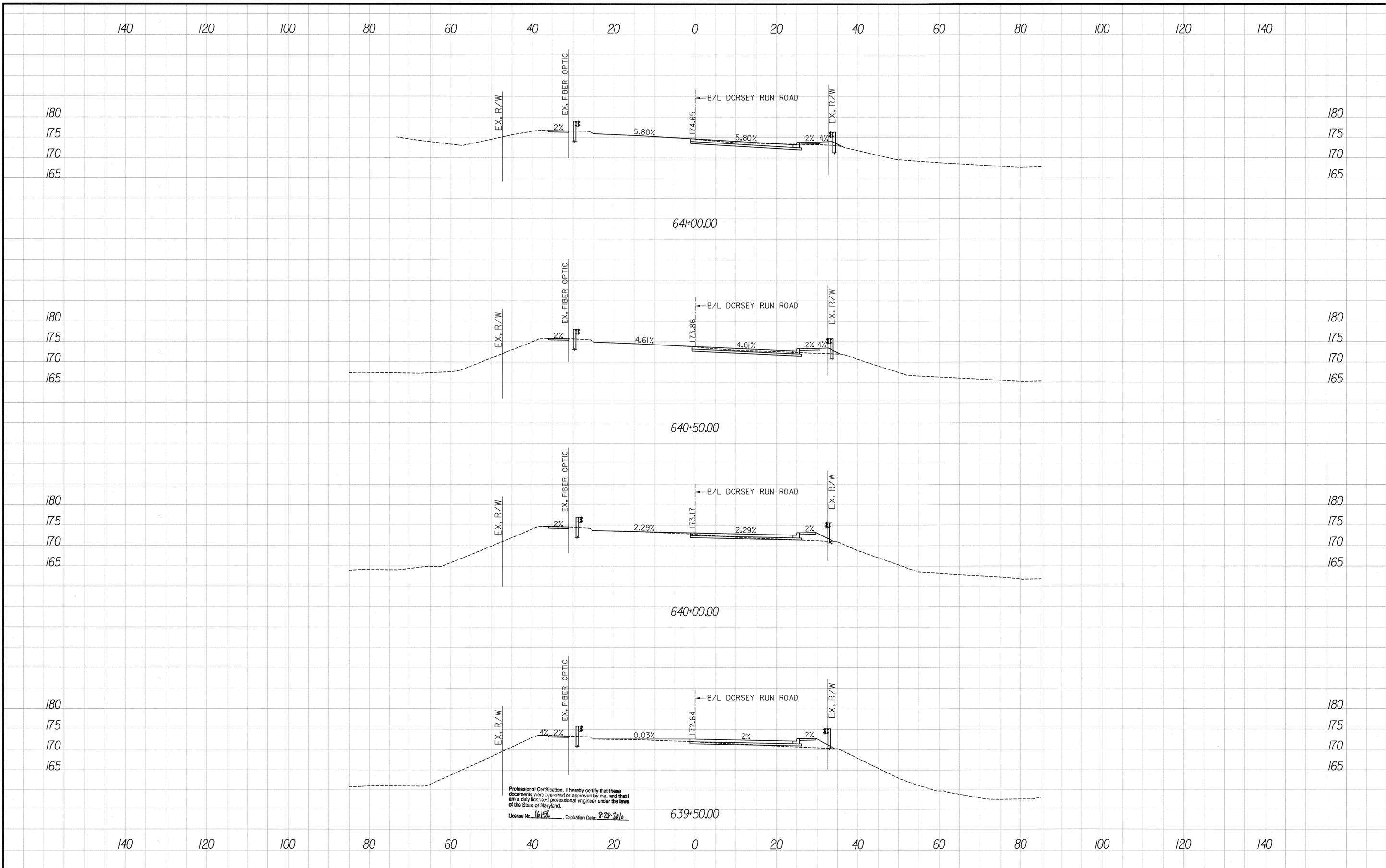
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'

SHEET
 77 OF 84



DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

12/12/08
 Director of Public Works

12/16/08
 Chief, Bureau of Engineering

12/16/08
 Chief, Bureau of Highways

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY NO.	
REVISION	
DATE	

CROSS SECTIONS
 STA. 639+50 TO STA. 641+00

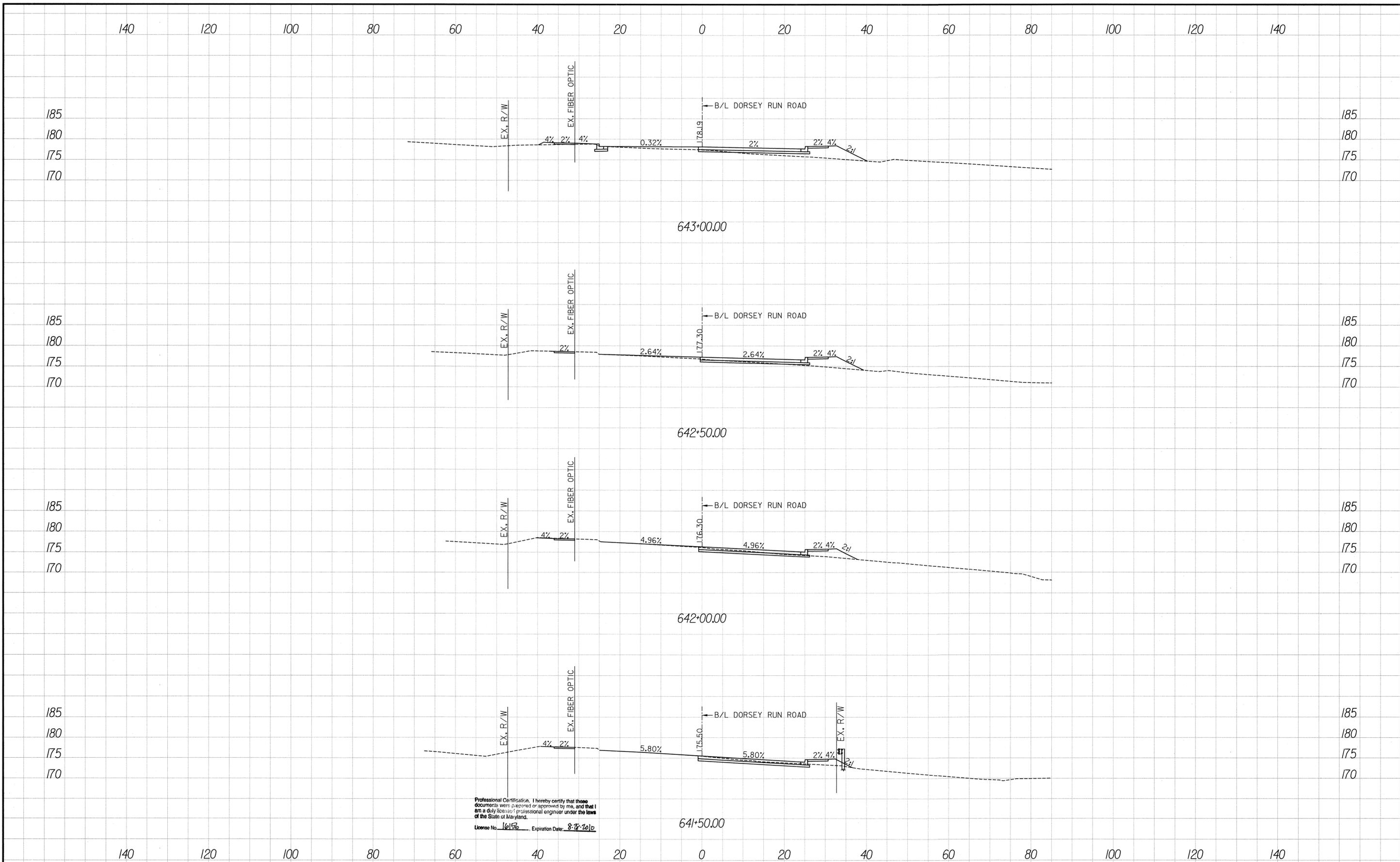
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'

SHEET
 78 OF 84



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156, Expiration Date: 8-28-2010

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: Steve Shaper 12/16/08
 Chief, Division of Transportation and Special Projects: Steve Shaper 12/16/08
 Chief, Bureau of Engineering: Willie R. Wall 12-17-08
 Chief, Bureau of Highways: Willie R. Wall 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220

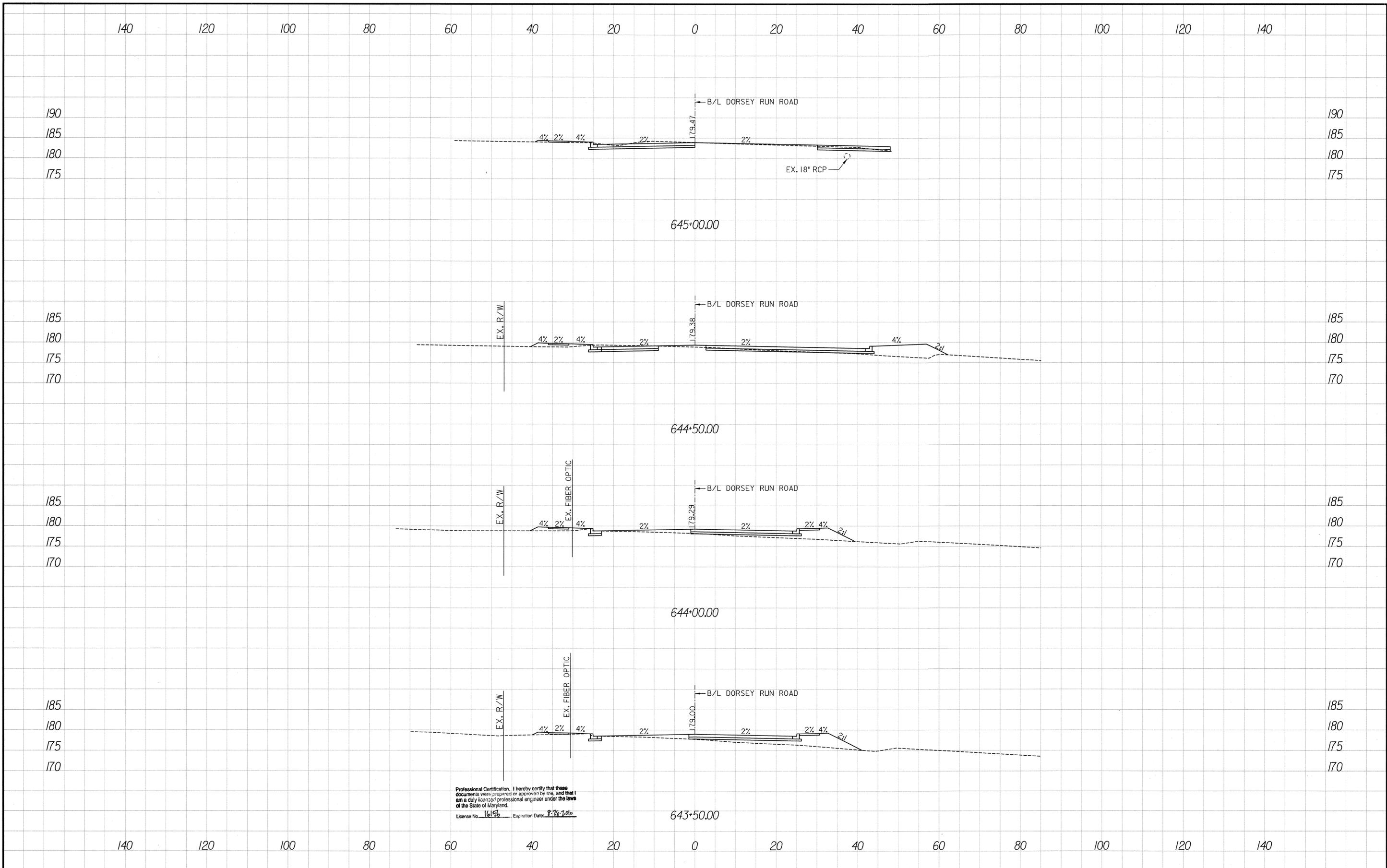


DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY NO.	
REVISION	
DATE	

CROSS SECTIONS
 STA. 641+50 TO STA. 643+00
 SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12
 ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

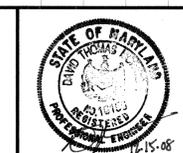
SCALE
 1"=10'
 SHEET
 79 OF 84



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156 Expiration Date: 8-25-2016

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: Steve Shuman 12/16/08
 Chief, Bureau of Engineering: Walter J. Wilson 12-17-08
 Chief, Bureau of Highways: Walter J. Wilson 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220

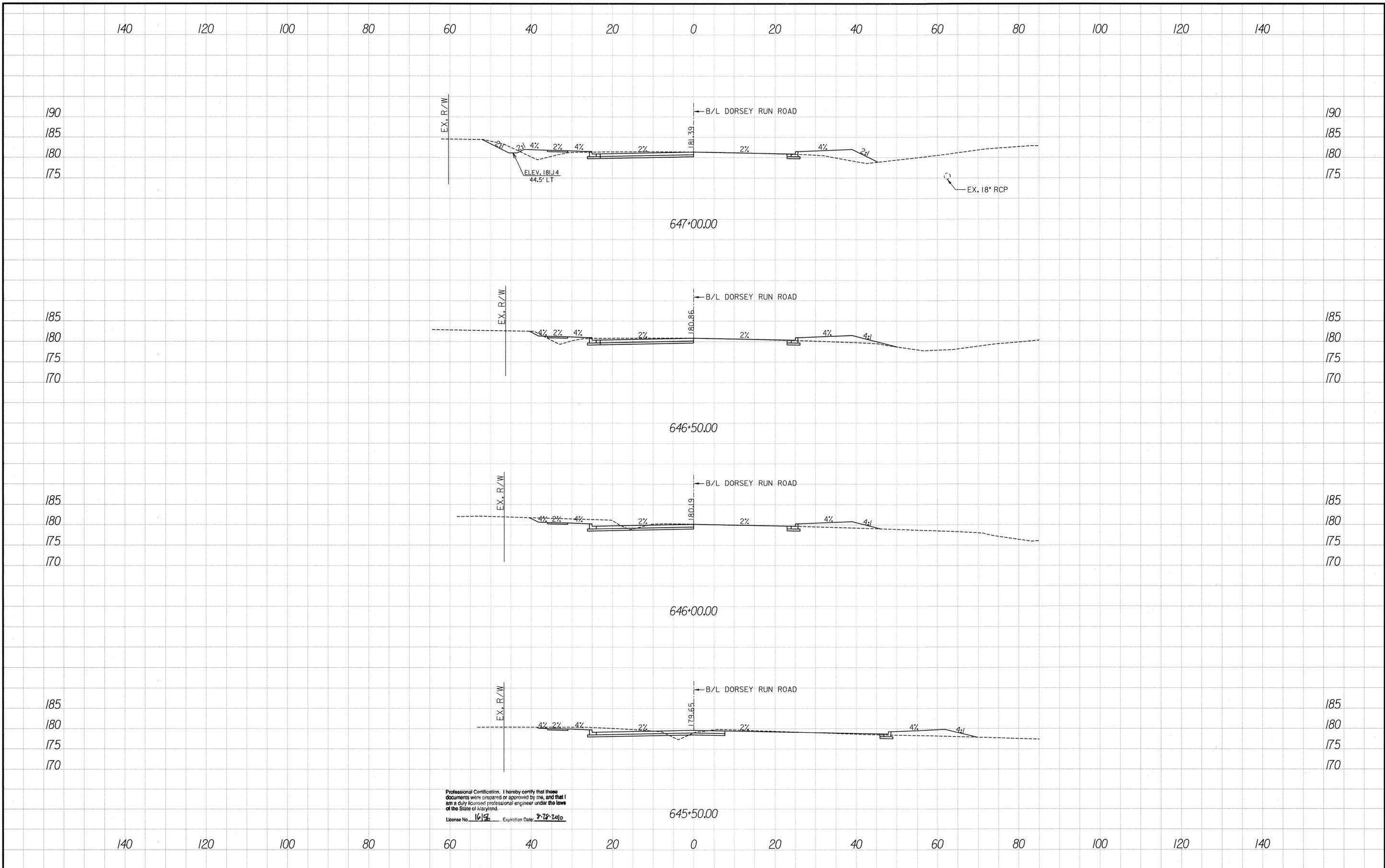


DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY NO.	
REVISION	
DATE	

CROSS SECTIONS
 STA. 643+50 TO STA. 645+00
 SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12
 ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'
 SHEET
 80 OF 84



DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: *Steve Shaver* 12/16/08
 Chief, Bureau of Engineering: *Will Johnson* 12-17-08
 Chief, Bureau of Highways: *Will Johnson* 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



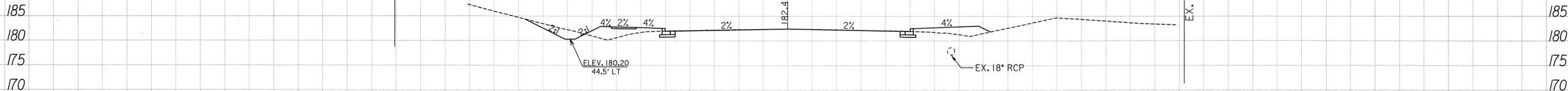
DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY NO.	
REVISION	
DATE	

CROSS SECTIONS
 STA. 645+50 TO STA. 647+00
 SCALE MAP NO. N/A BLOCK NO.

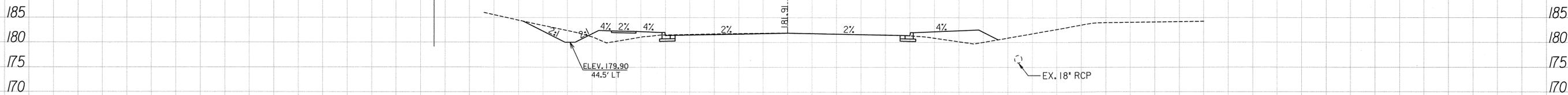
WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12
 ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'
 SHEET
 81 OF 84

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140



648+00.00



647+50.00

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16152 Expiration Date: 9-29-2016

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: *Steve Shaver* 12/16/08
 Chief, Bureau of Engineering: *William Zablith* 12/17/08
 Chief, Bureau of Highways: *William Zablith* 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY:	NO.
REVISION:	
DATE:	

CROSS SECTIONS
 STA. 647+50 TO STA. 648+00

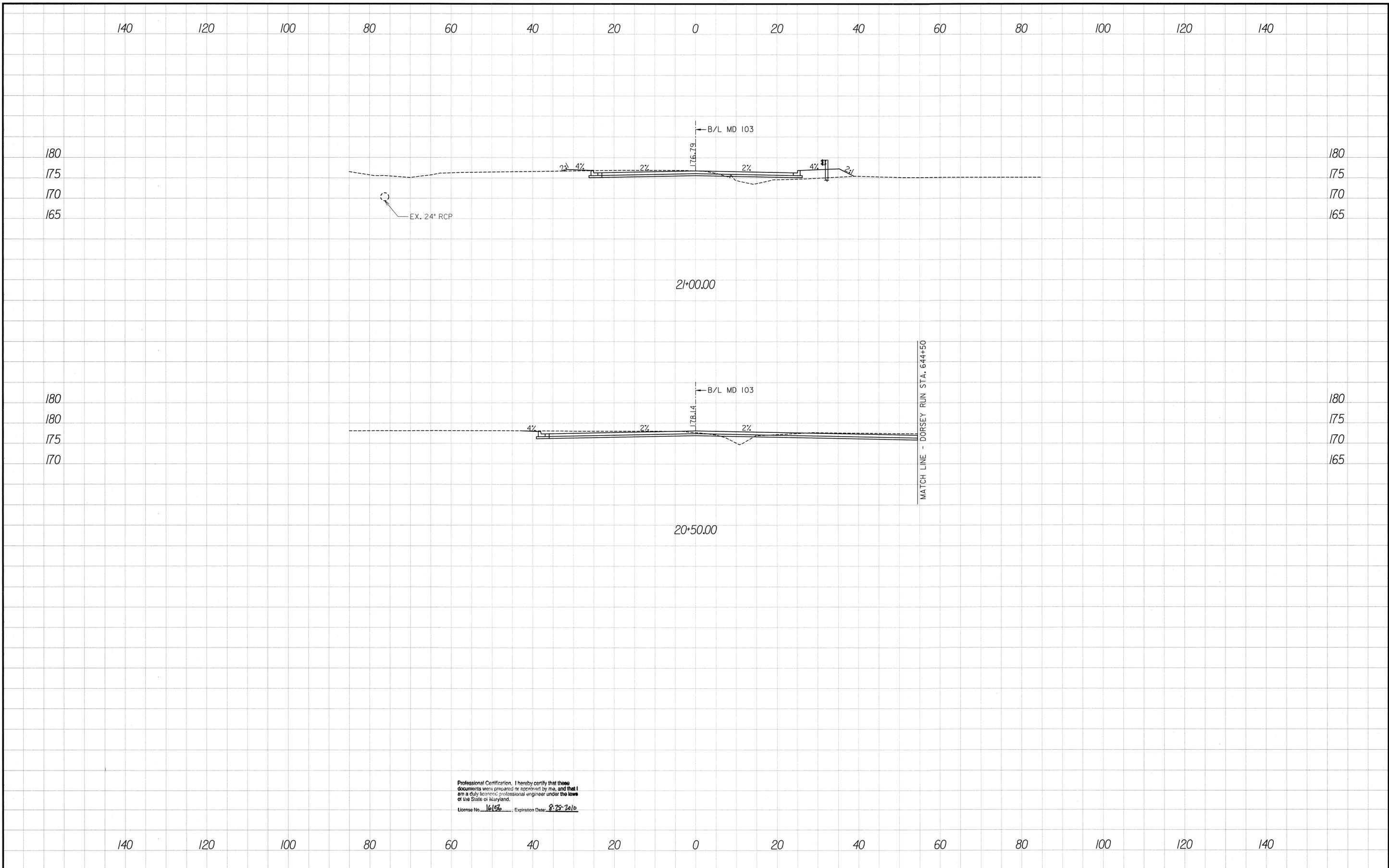
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
 STA. 591+43 TO 648+12

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'

SHEET
 82 OF 84



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16156 Expiration Date: 8-25-2010

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Steve Shaver 12/17/08
 DIRECTOR OF PUBLIC WORKS DATE

William R. ... 12-17-08
 CHIEF, BUREAU OF ENGINEERING DATE

... 12-17-08
 CHIEF, BUREAU OF HIGHWAYS DATE

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:	
DRN:	CF
CHK:	DTM
DATE:	12/15/08
BY:	NO.
REVISION	
DATE	

MD 103 (DORSEY ROAD)
CROSS SECTIONS
STA. 20+00 TO STA. 21+00

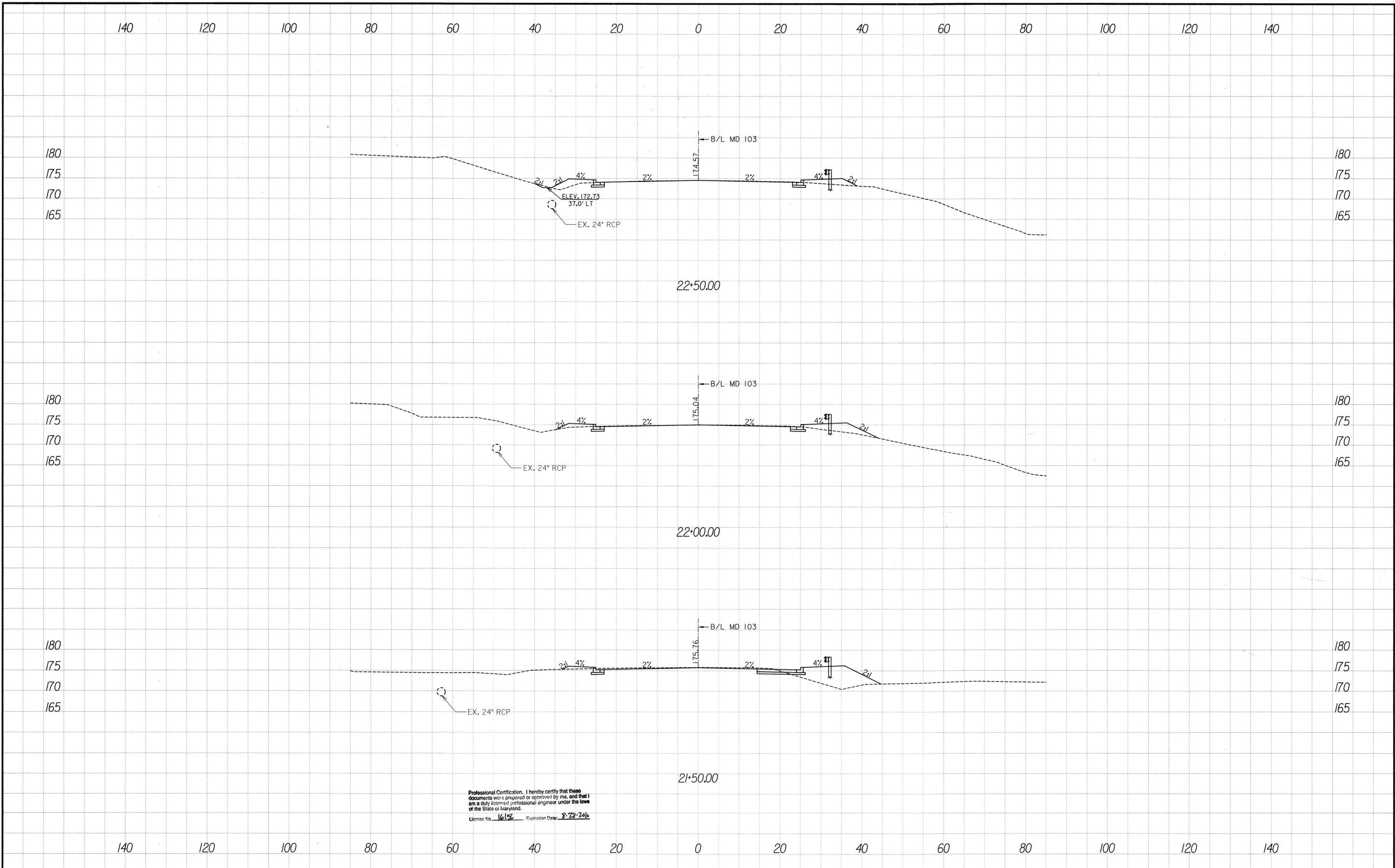
SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
STA. 20+00 TO STA. 22+50

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'

SHEET
 83 OF 84



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 16152 Expiration Date: 8-23-2016

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: Steve Shaver 12/16/08
 Chief, Bureau of Engineering: William Hill 12-17-08
 Chief, Bureau of Highways: William Hill 12-17-08

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
 TEL: (410) 785-7220



DES:				
DRN:	CF			
CHK:	DTM			
DATE:	12/15/08	BY:	NO.	
		REVISION		DATE

MD 103 (DORSEY ROAD)
CROSS SECTIONS
STA. 21+50 TO STA. 22+50
 SCALE MAP NO. N/A BLOCK NO.

WIDENING OF DORSEY RUN ROAD
STA. 20+00 TO STA. 22+50
 ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
 CAPITAL PROJECT J-4148-A

SCALE
 1"=10'
 SHEET
 84 OF 84