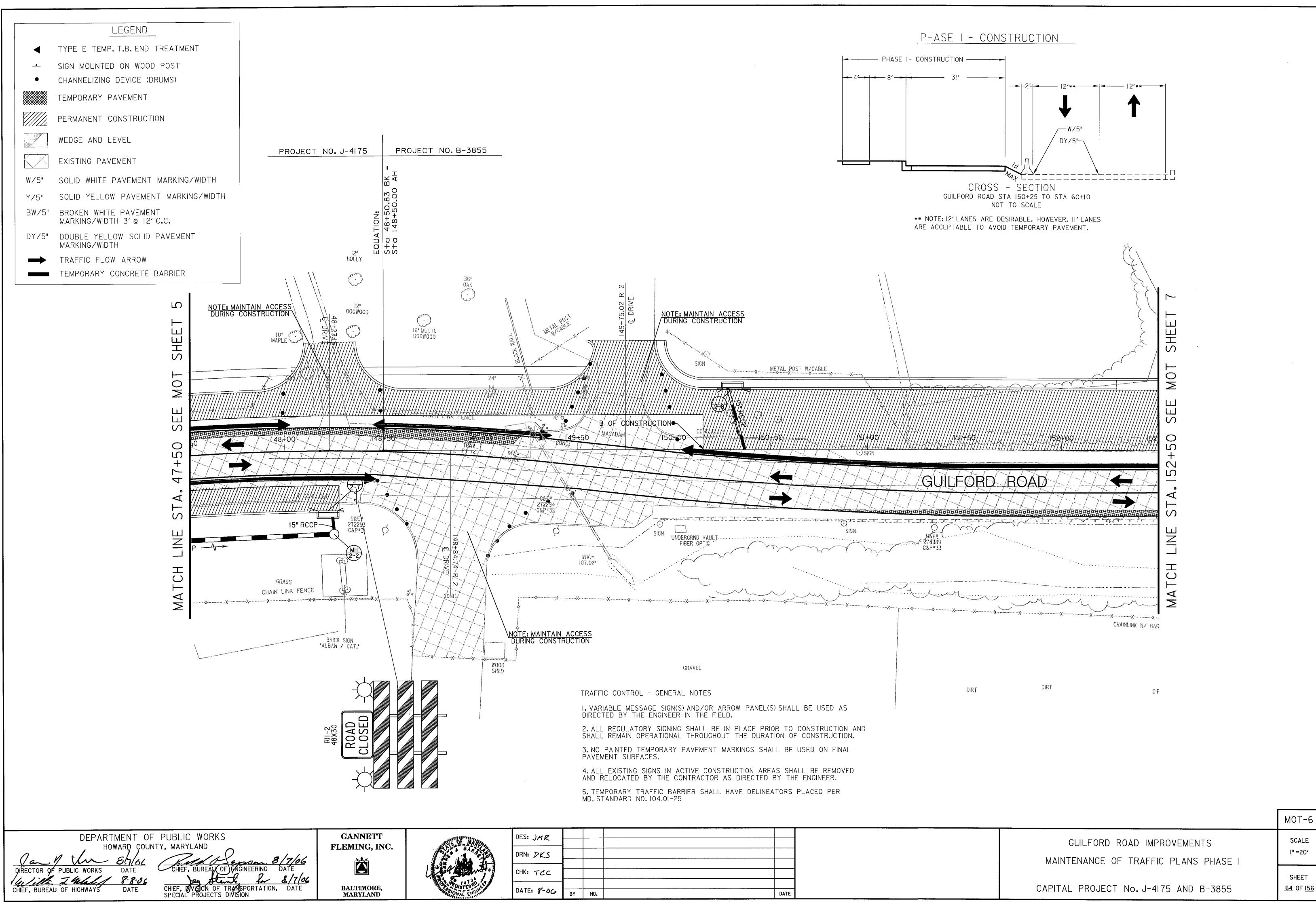
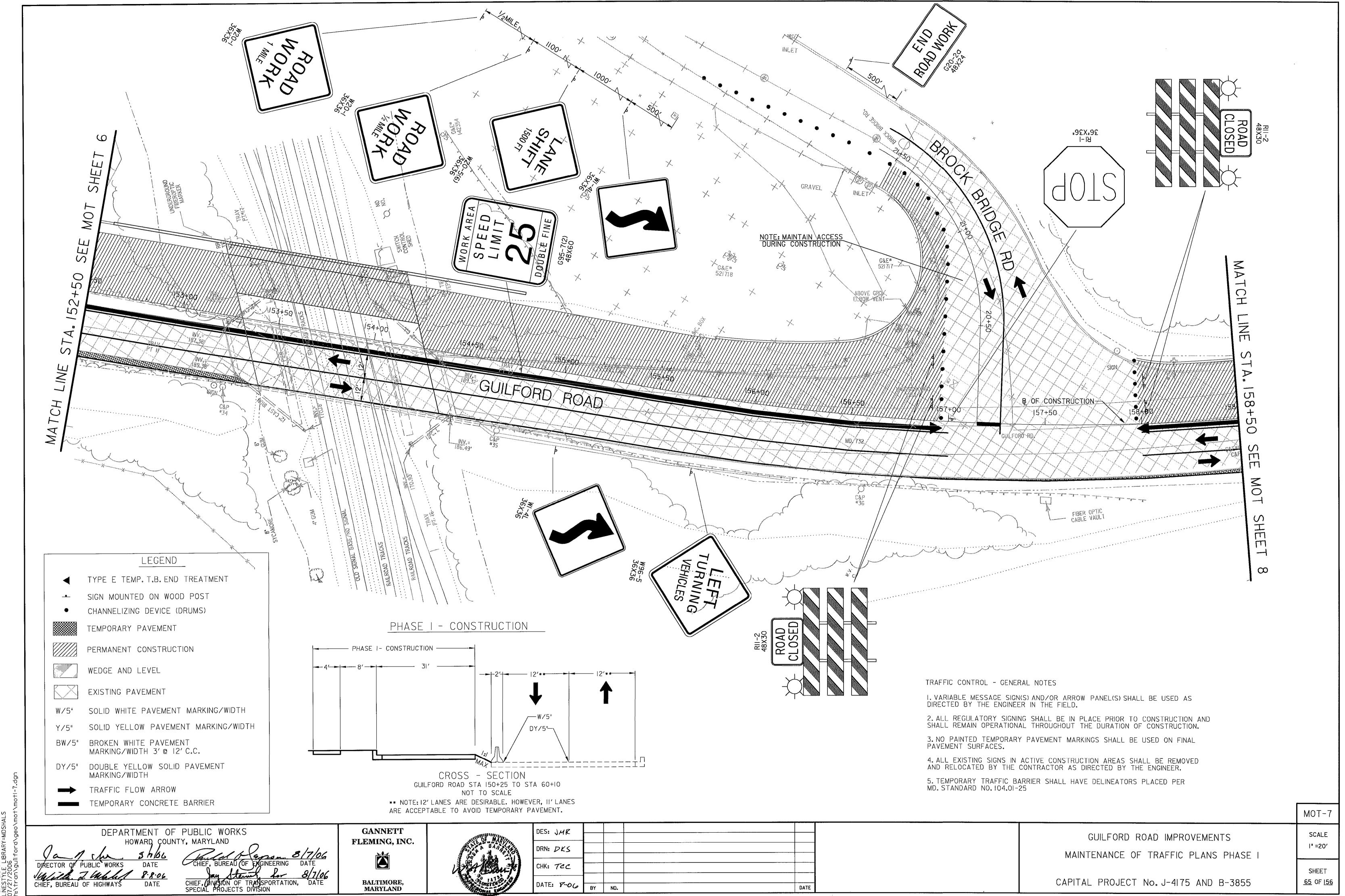


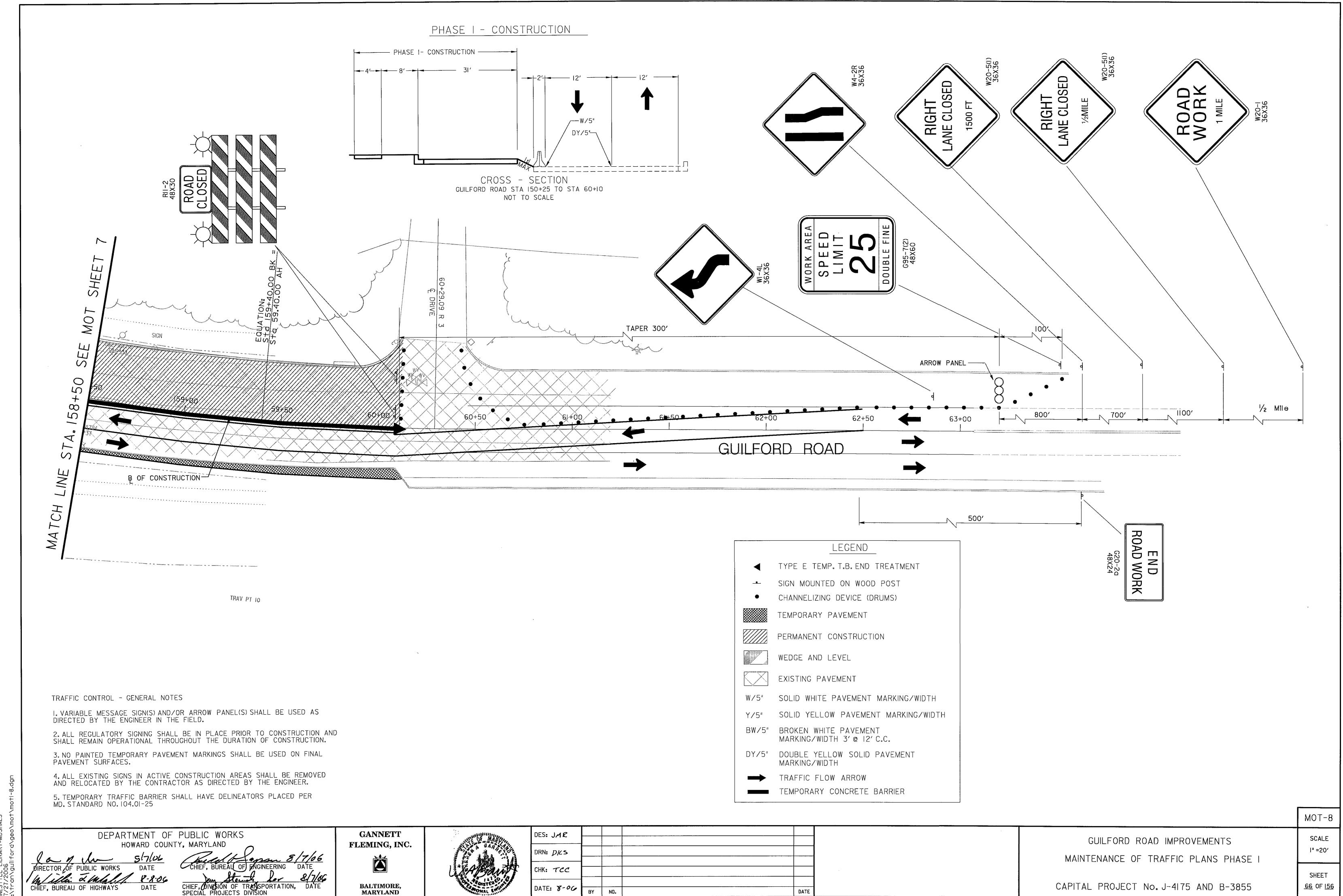
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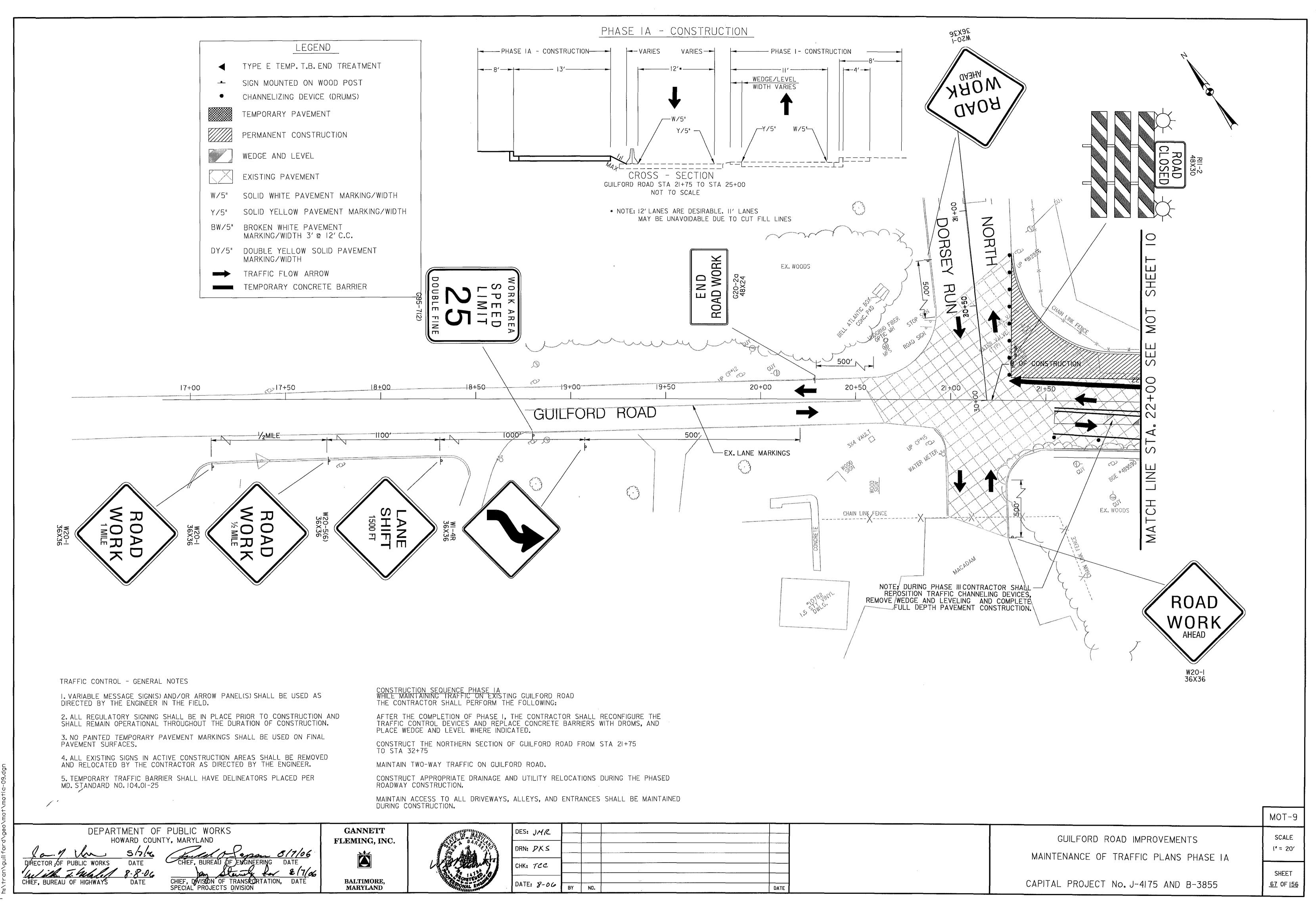
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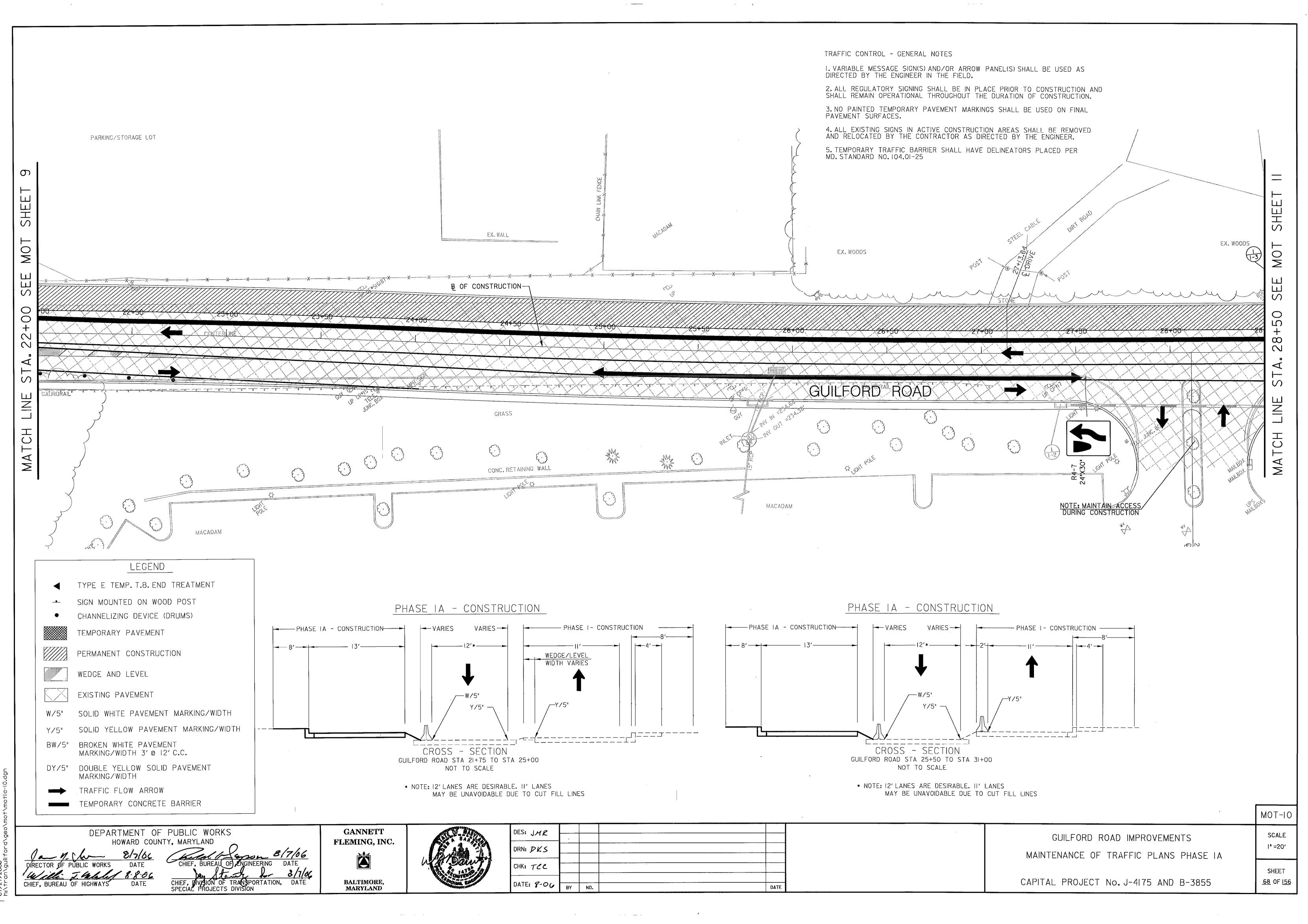


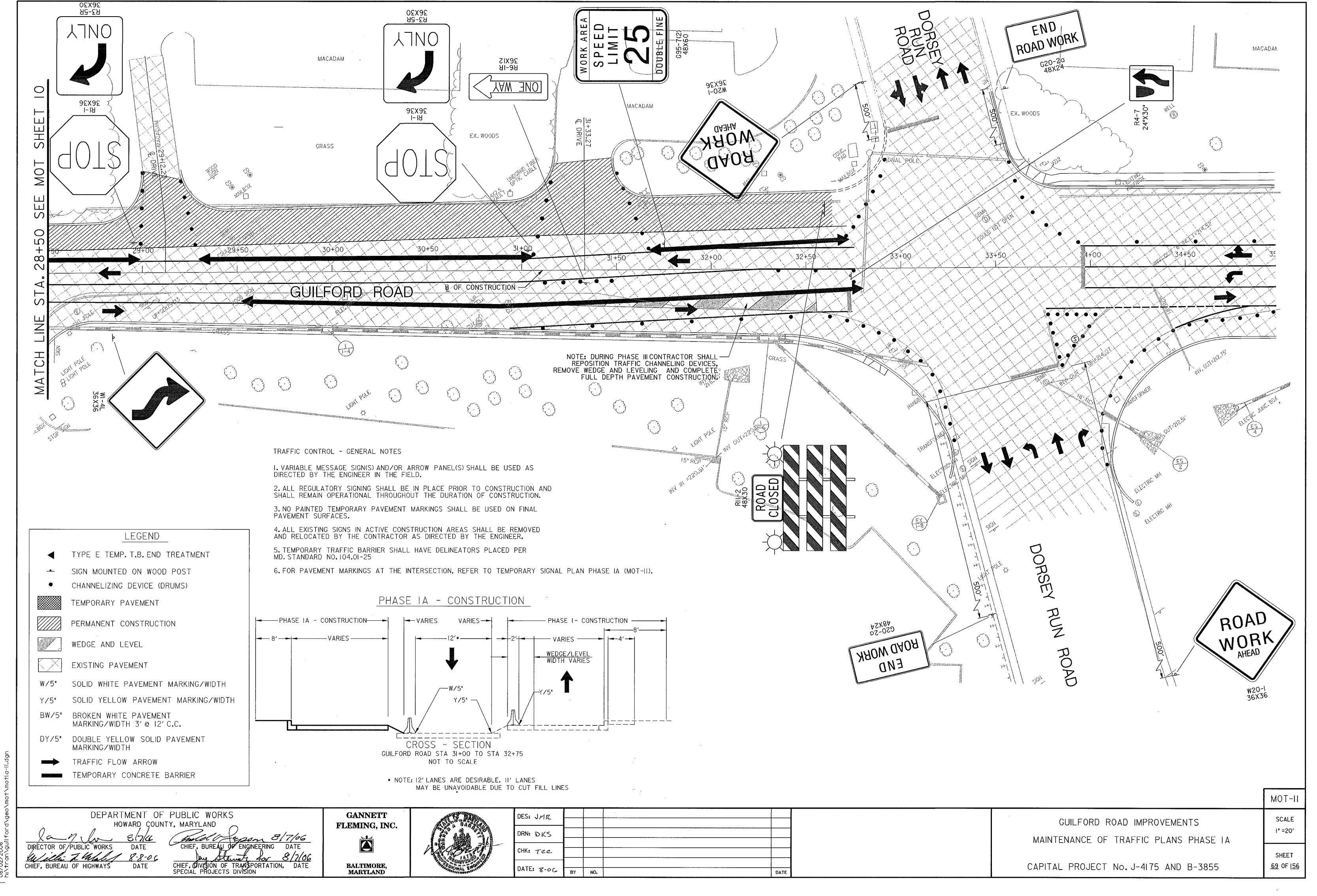
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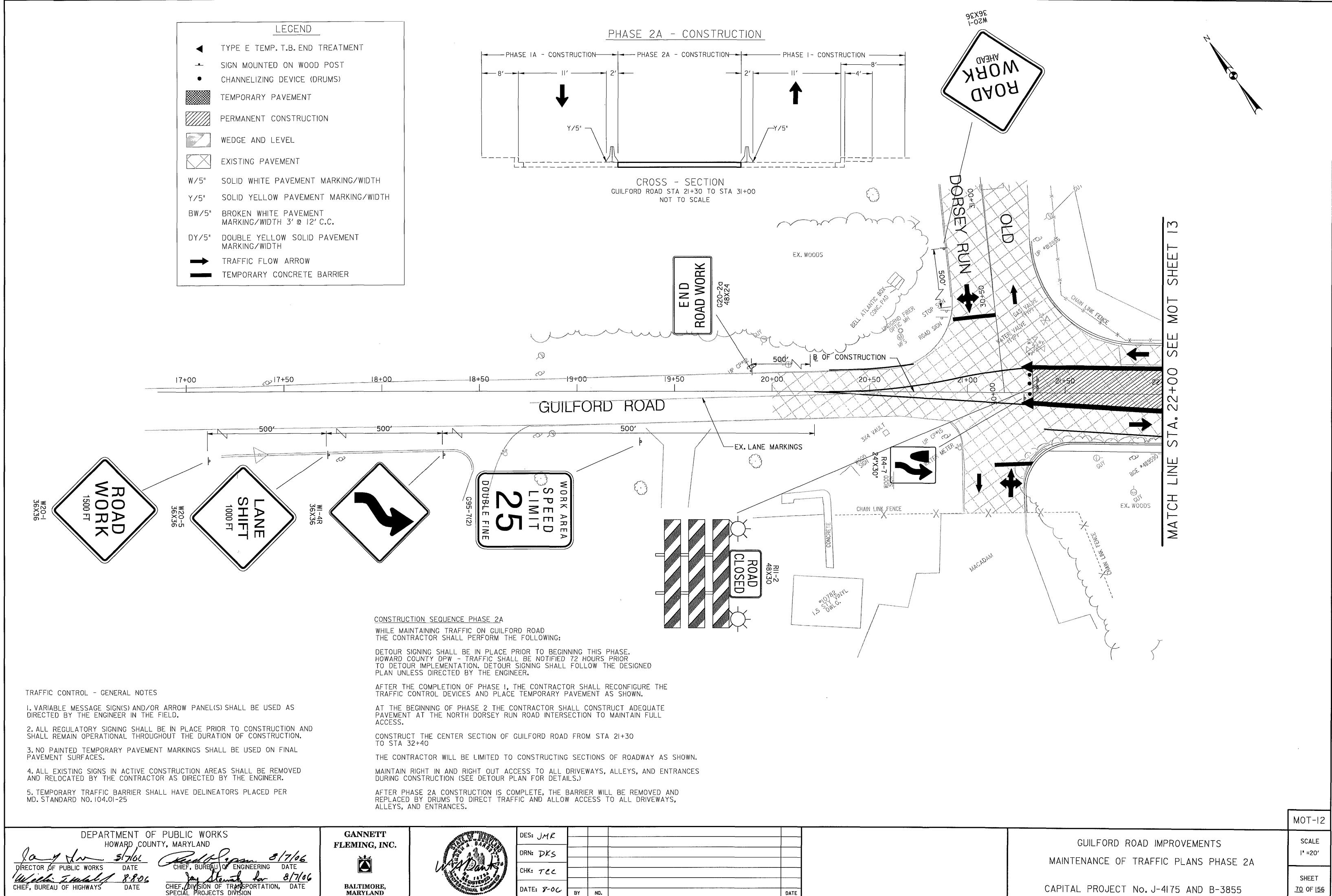
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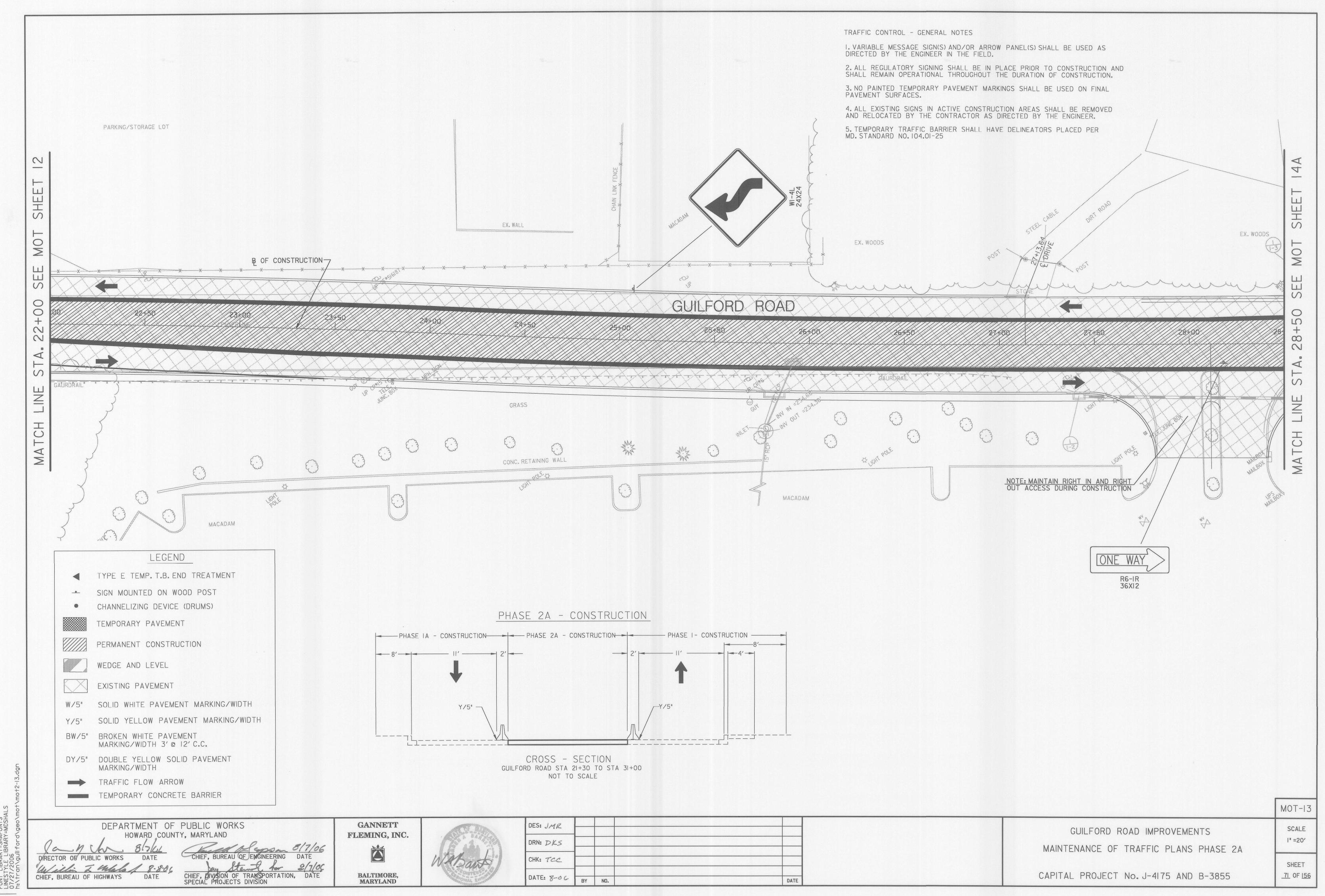


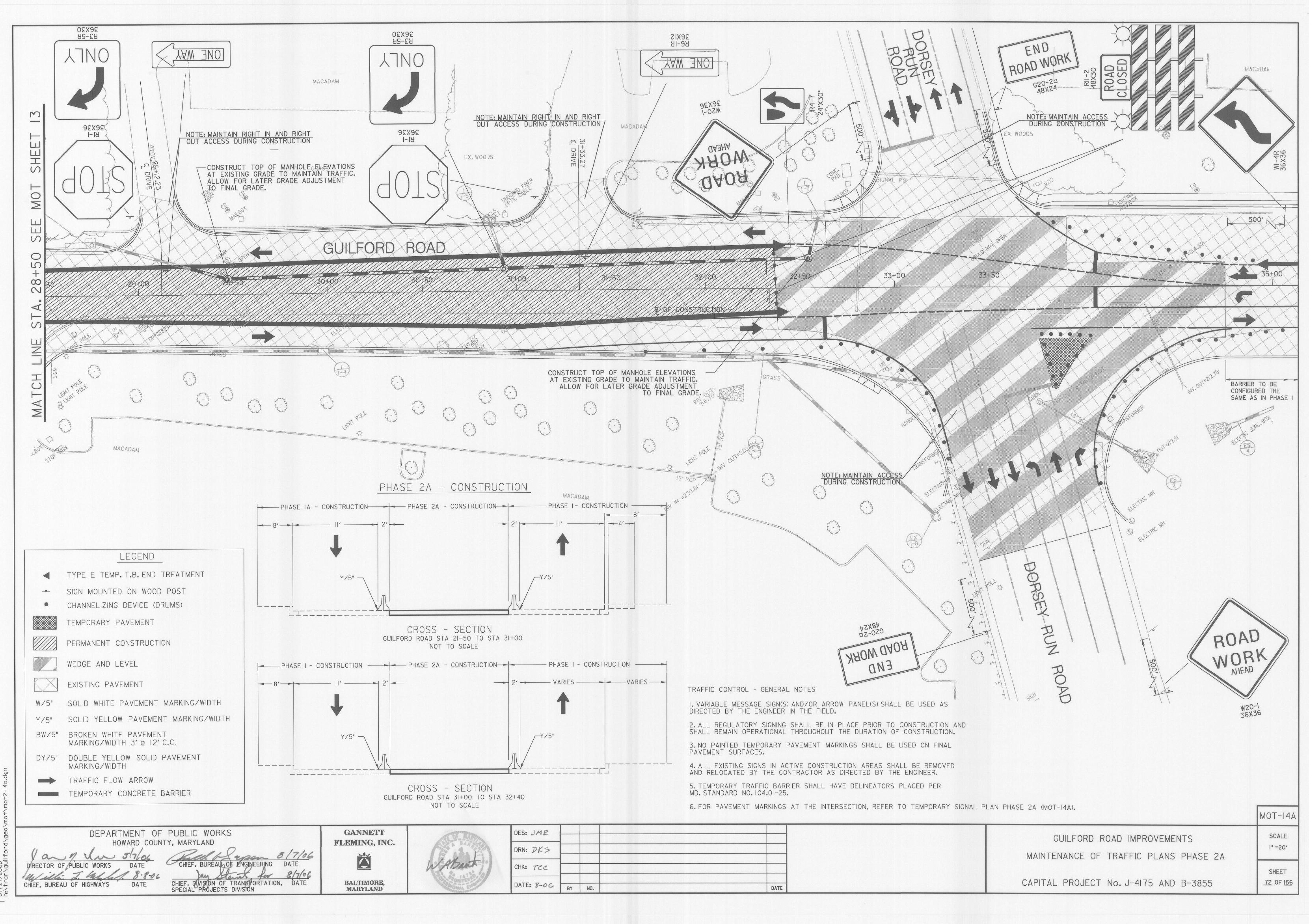


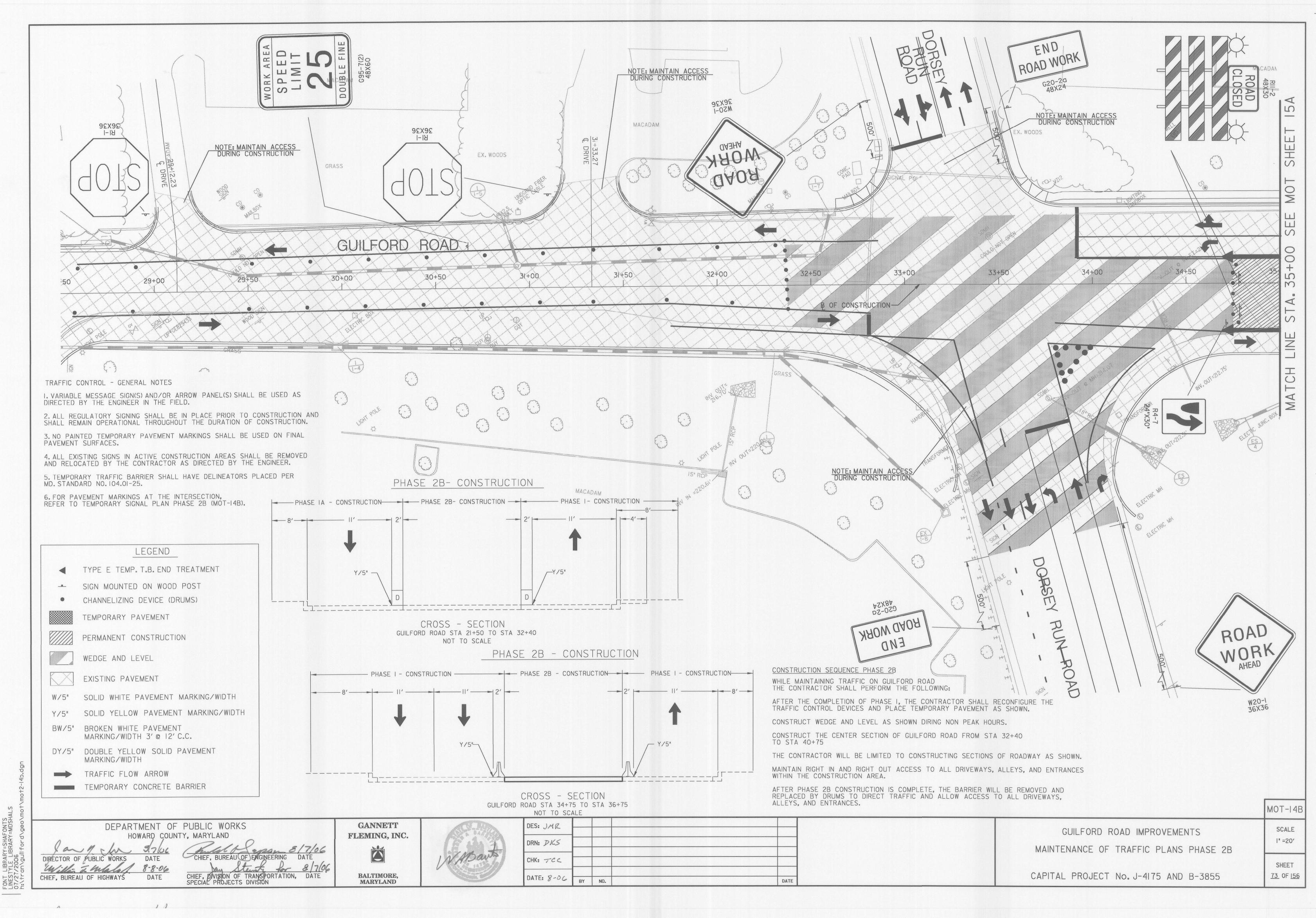
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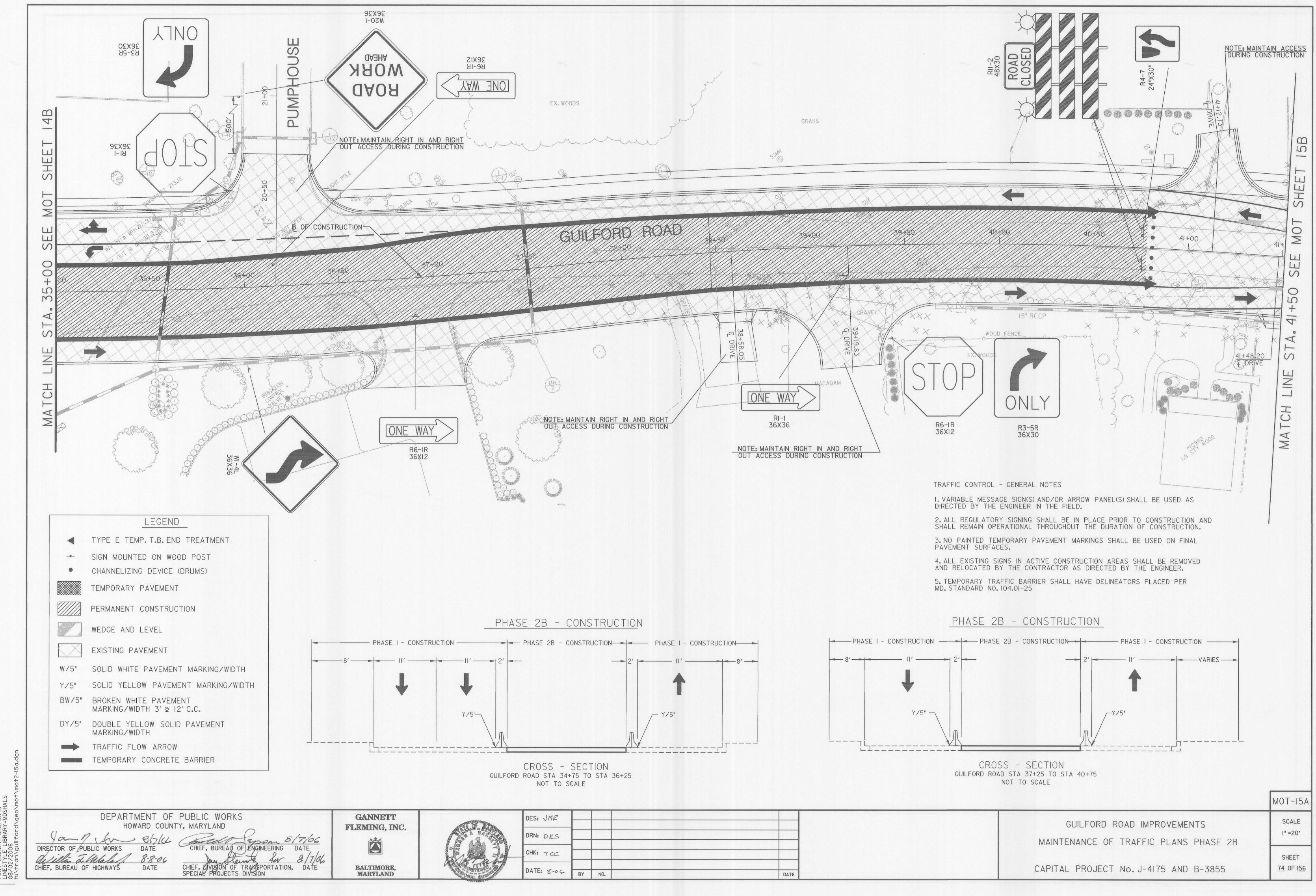


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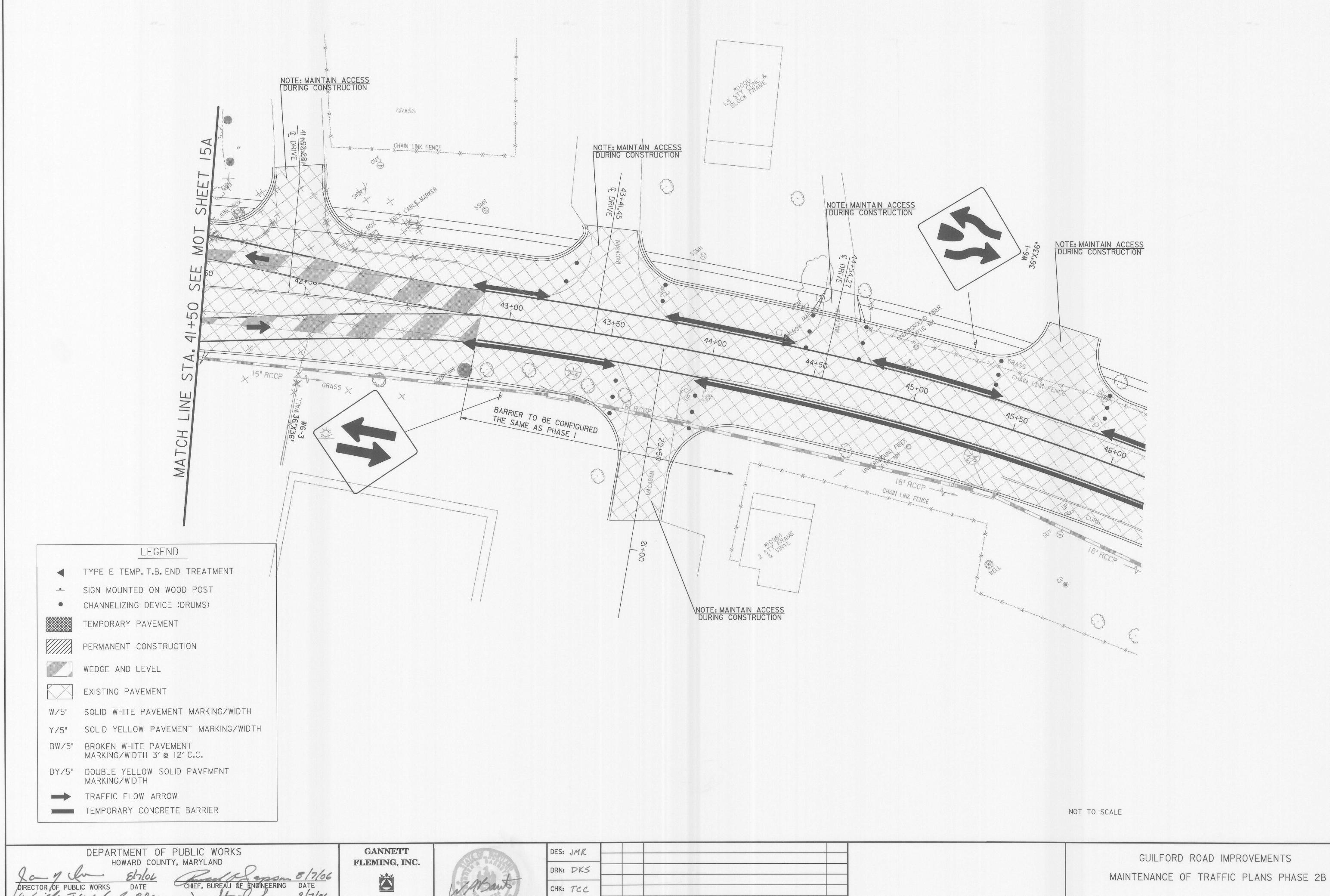








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BALTIMORE, MARYLAND MOT-I5B

SCALE

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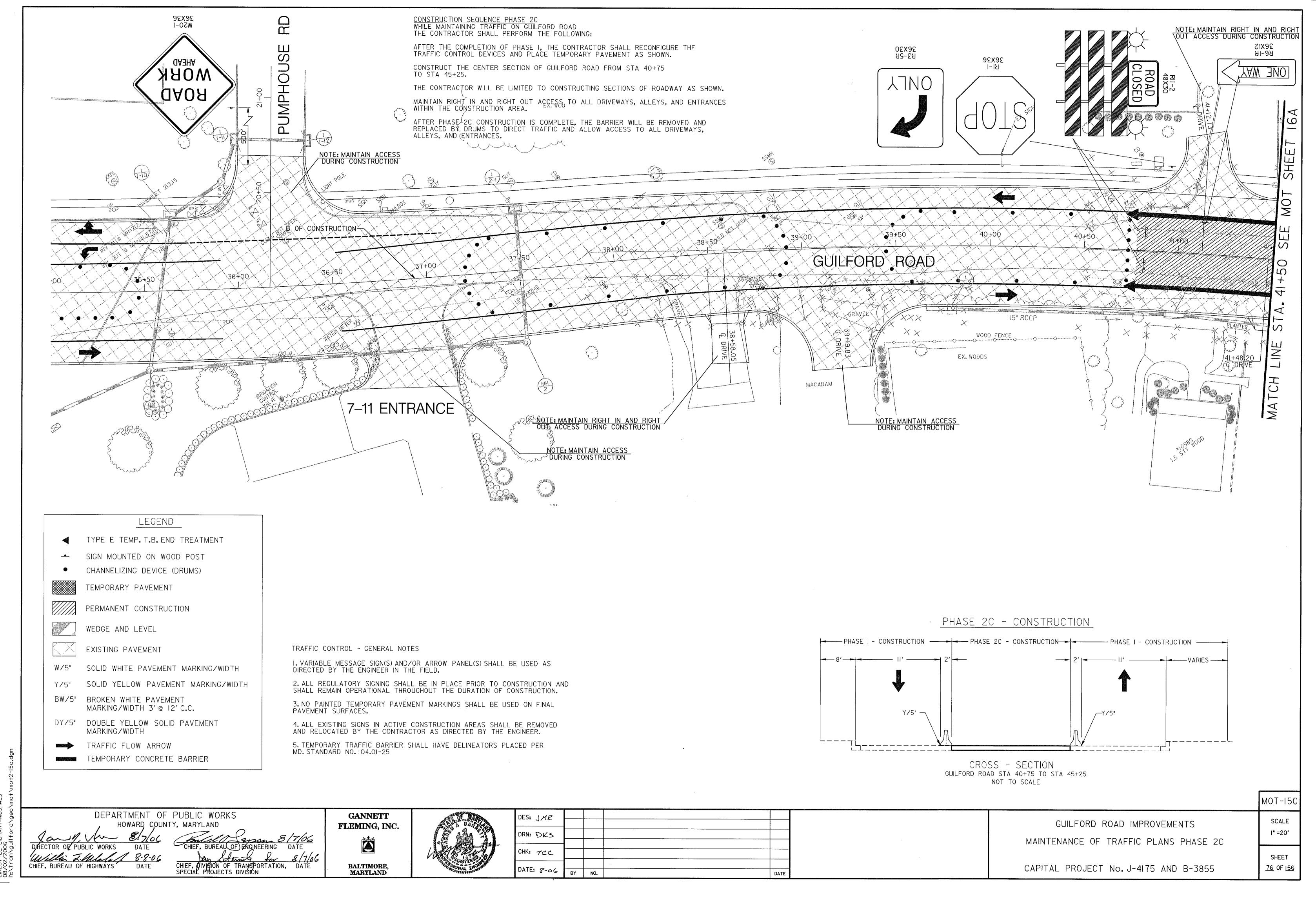
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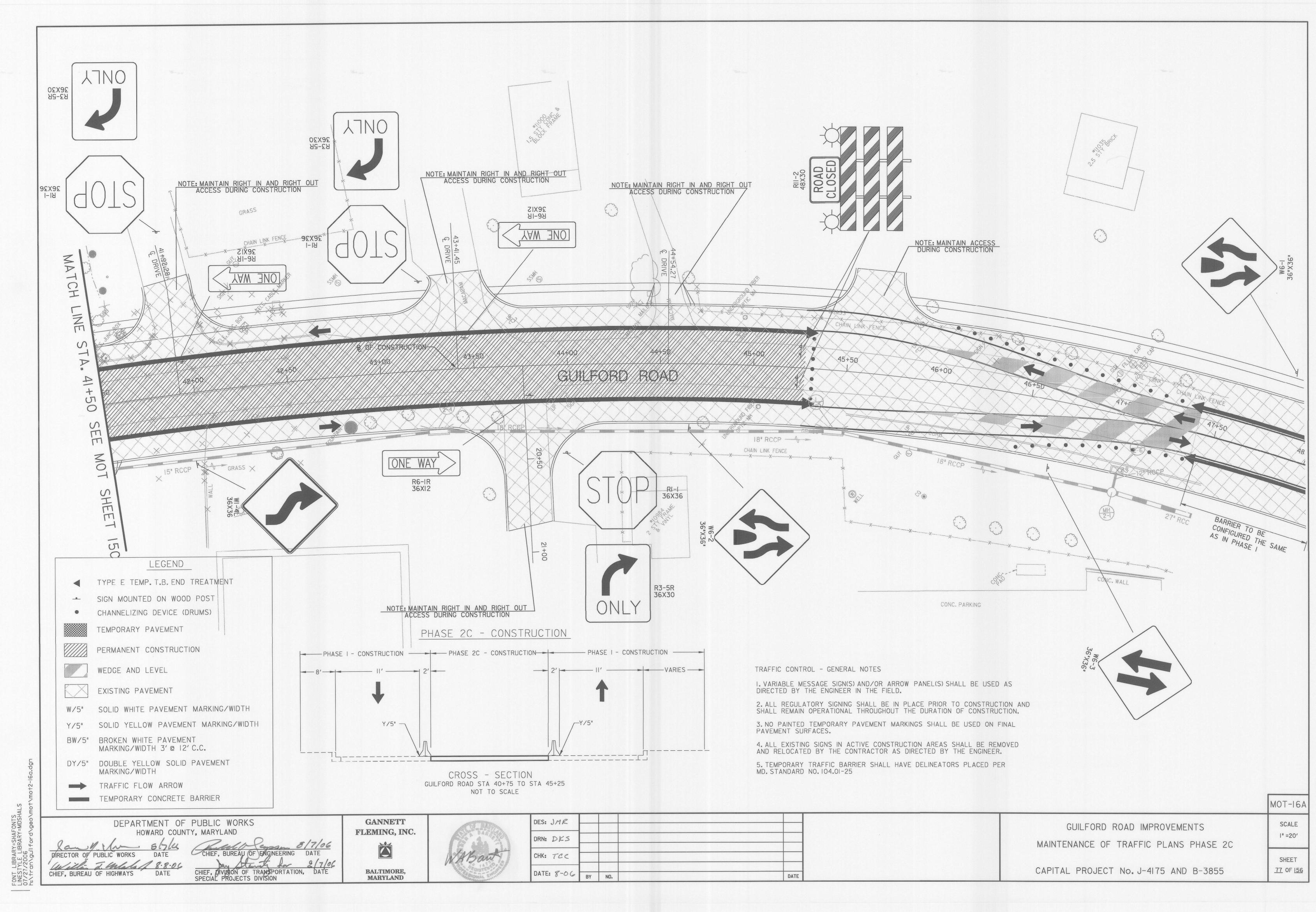
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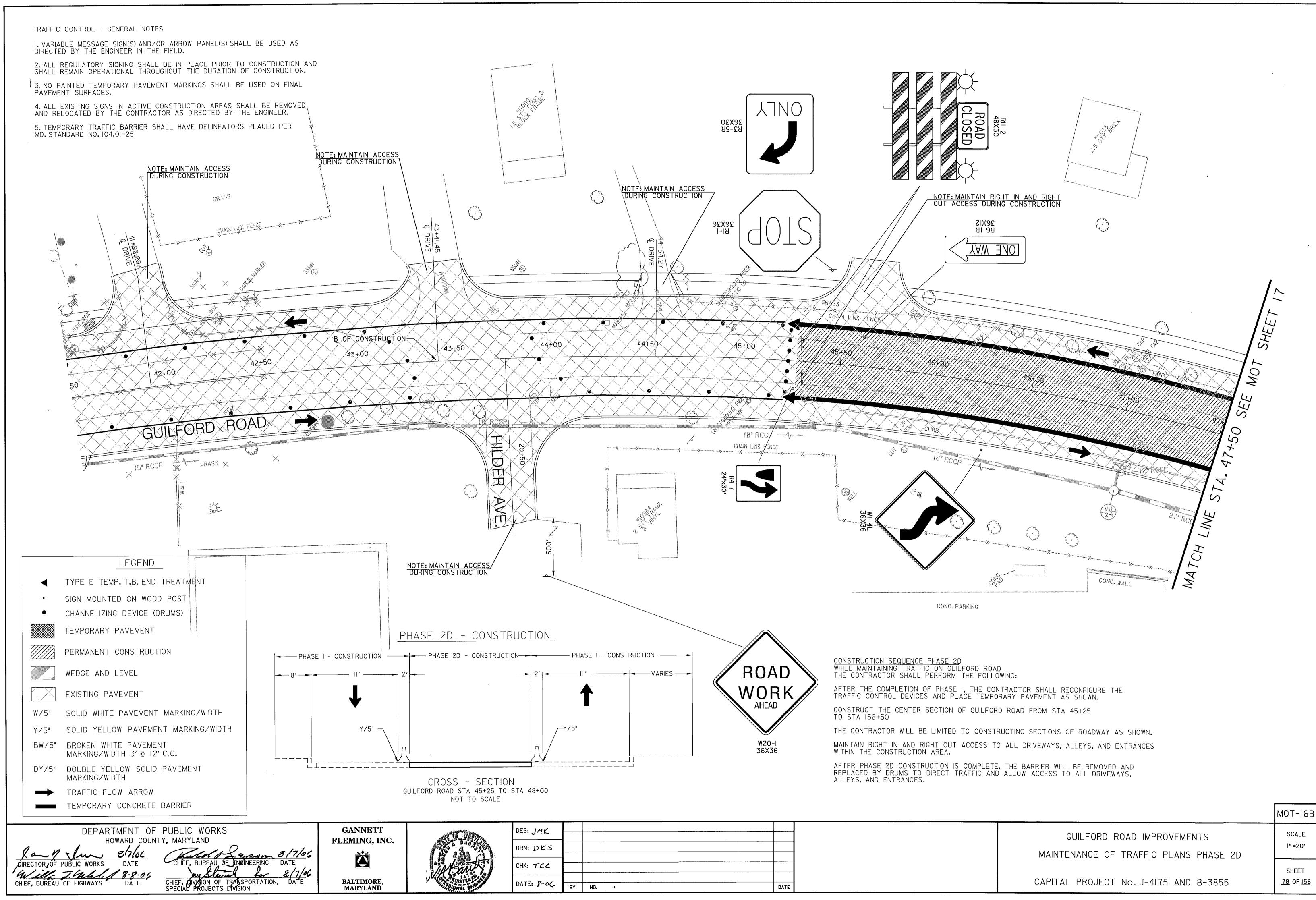
CAPITAL PROJECT No. J-4175 AND B-3855

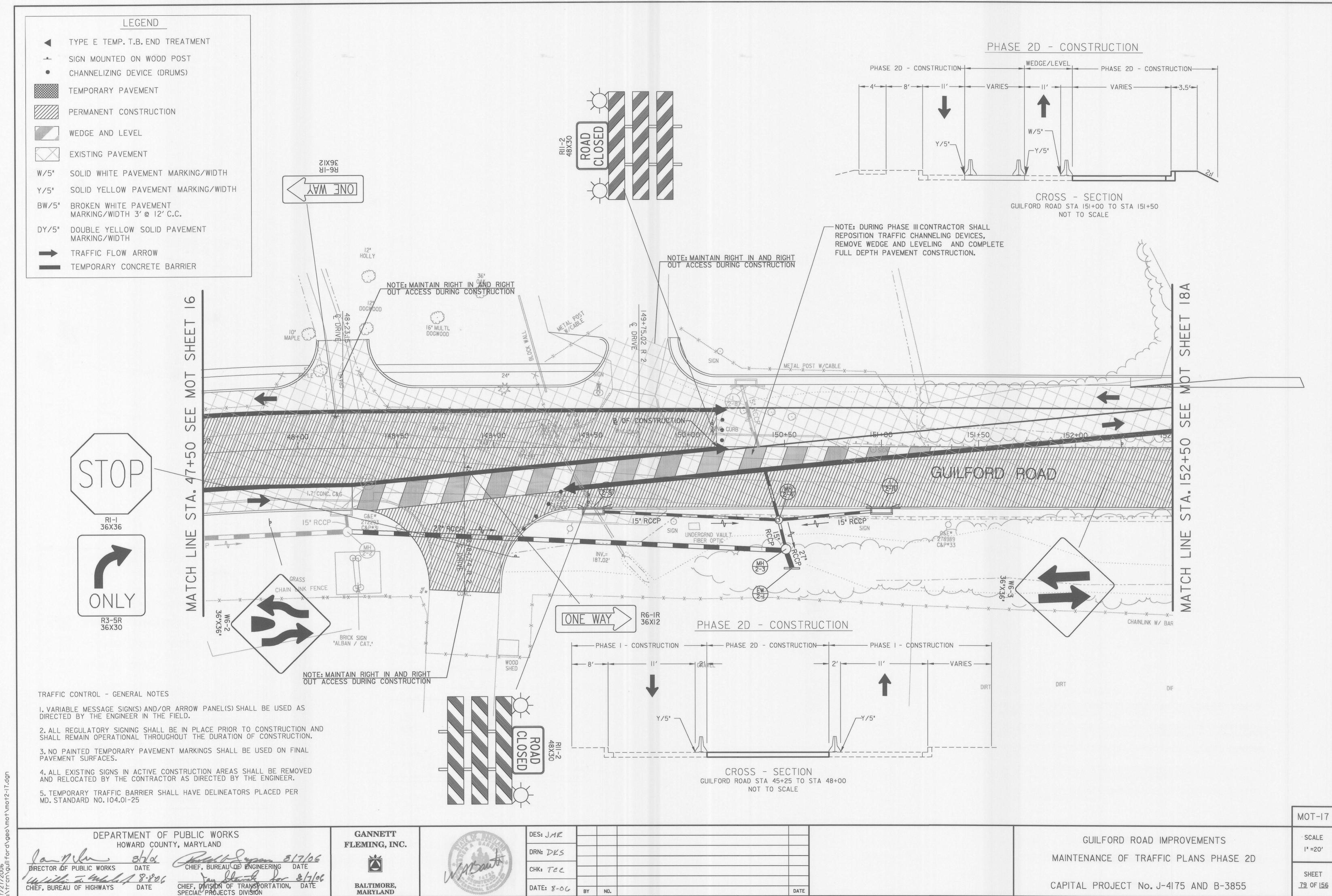
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CHIEF, BUREAU OF HIGHWAYS

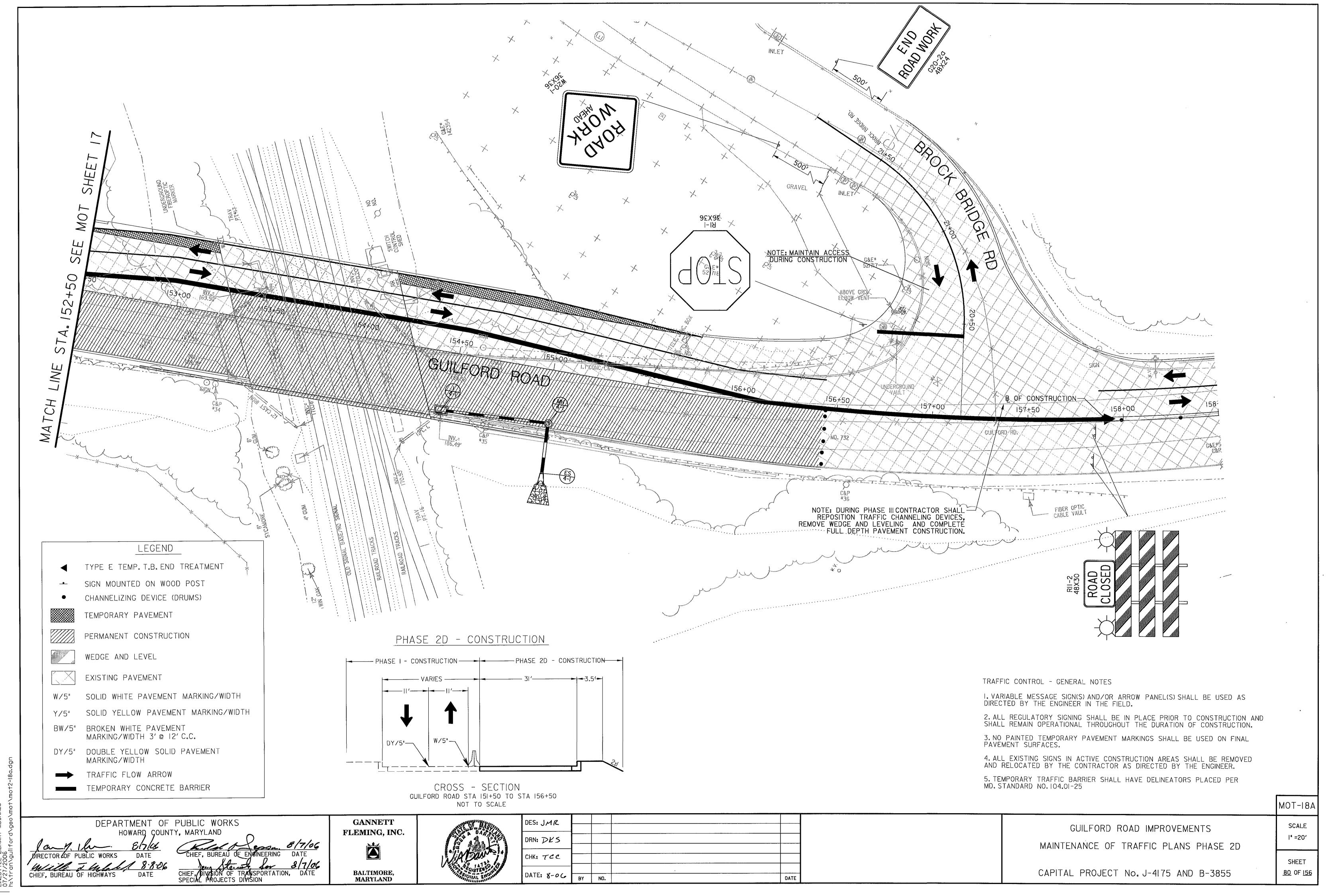




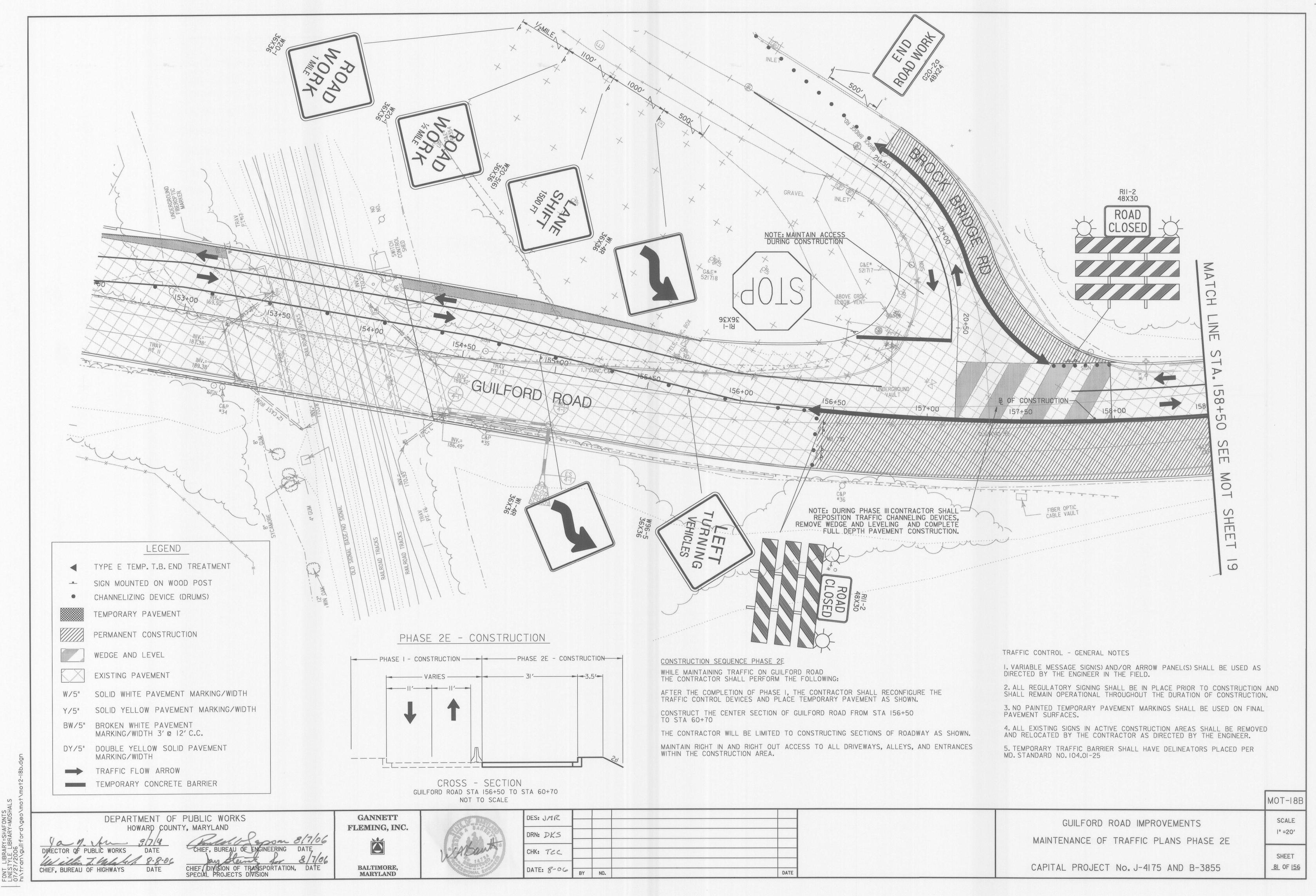


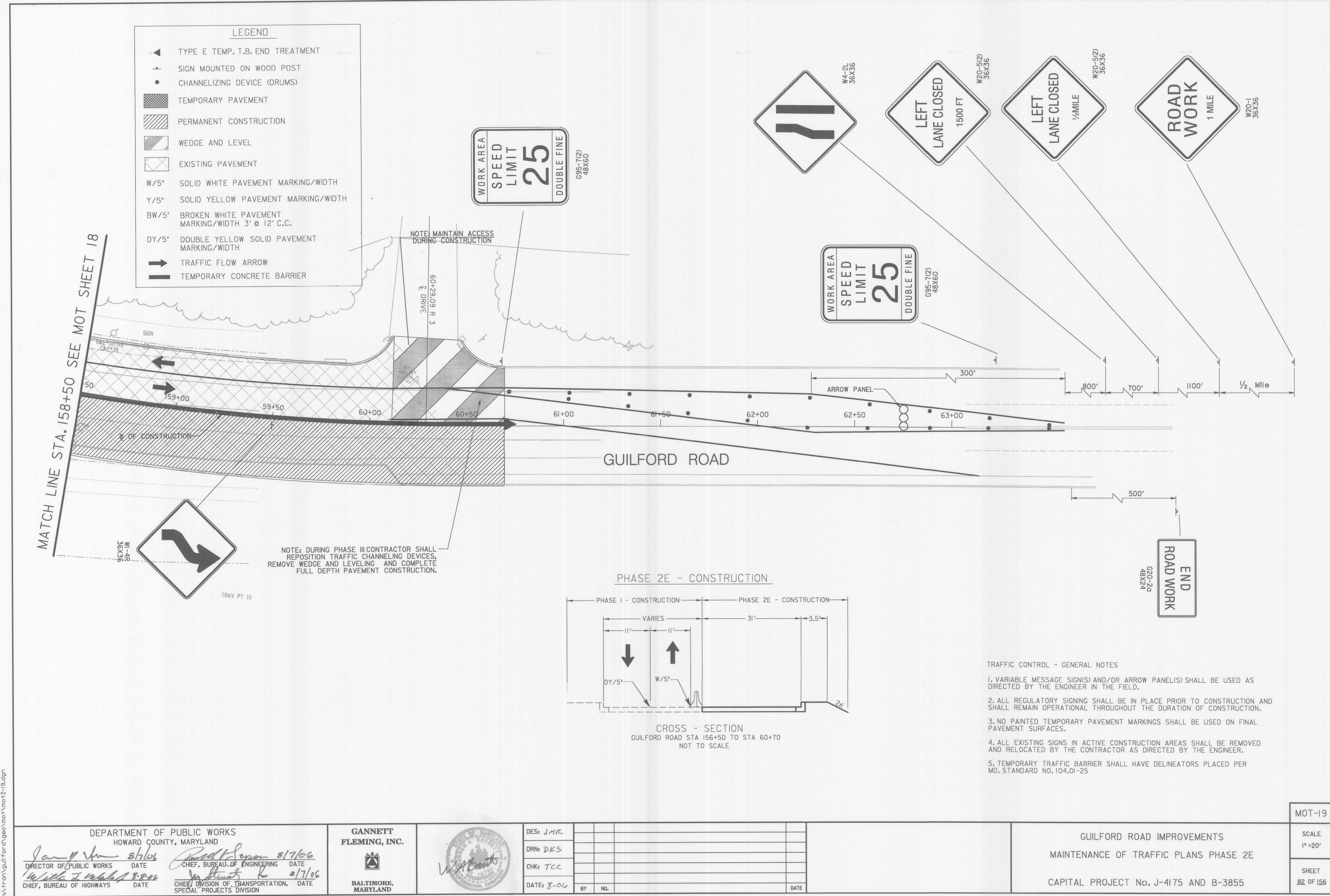


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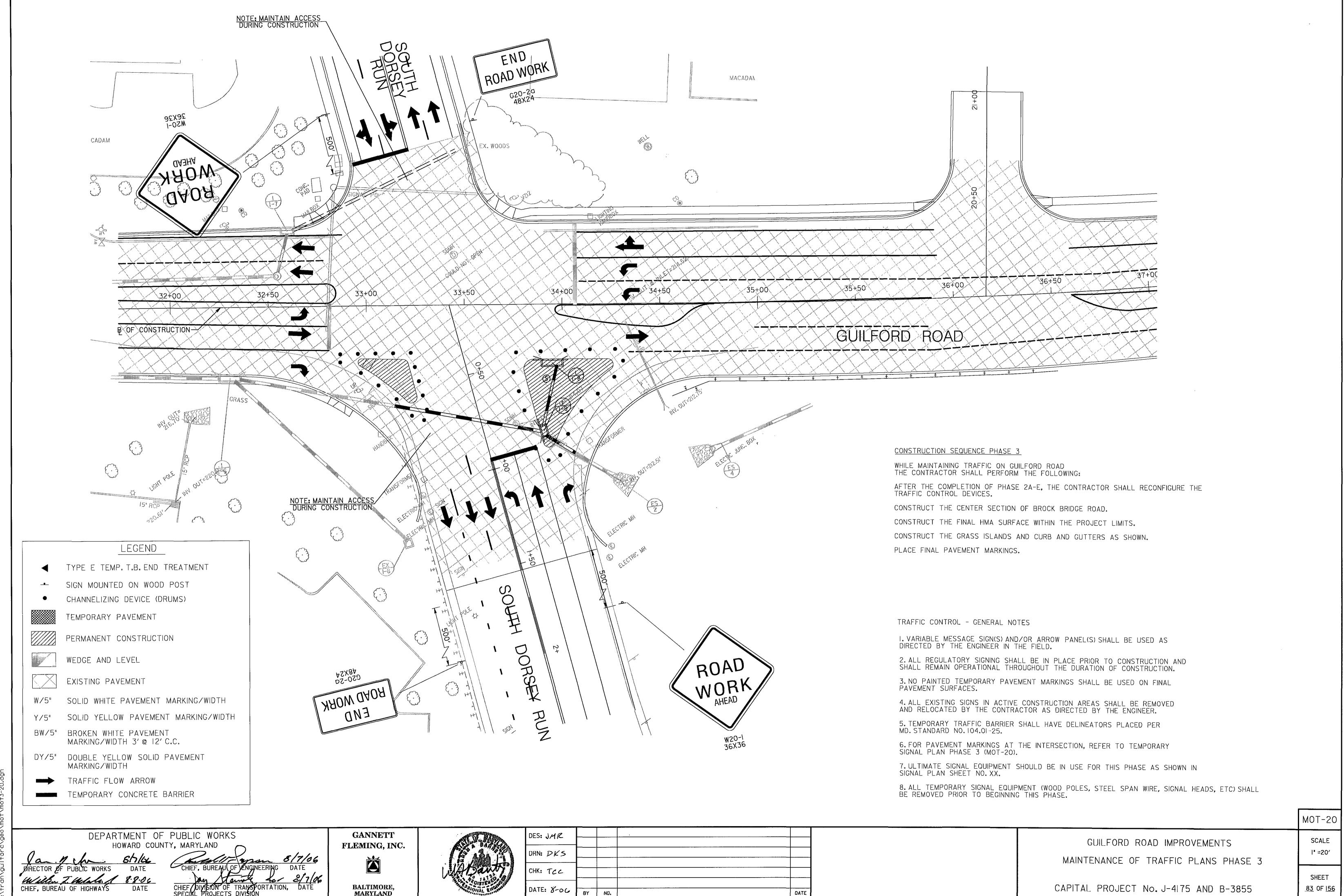
BALTIMORE,

MARYLAND

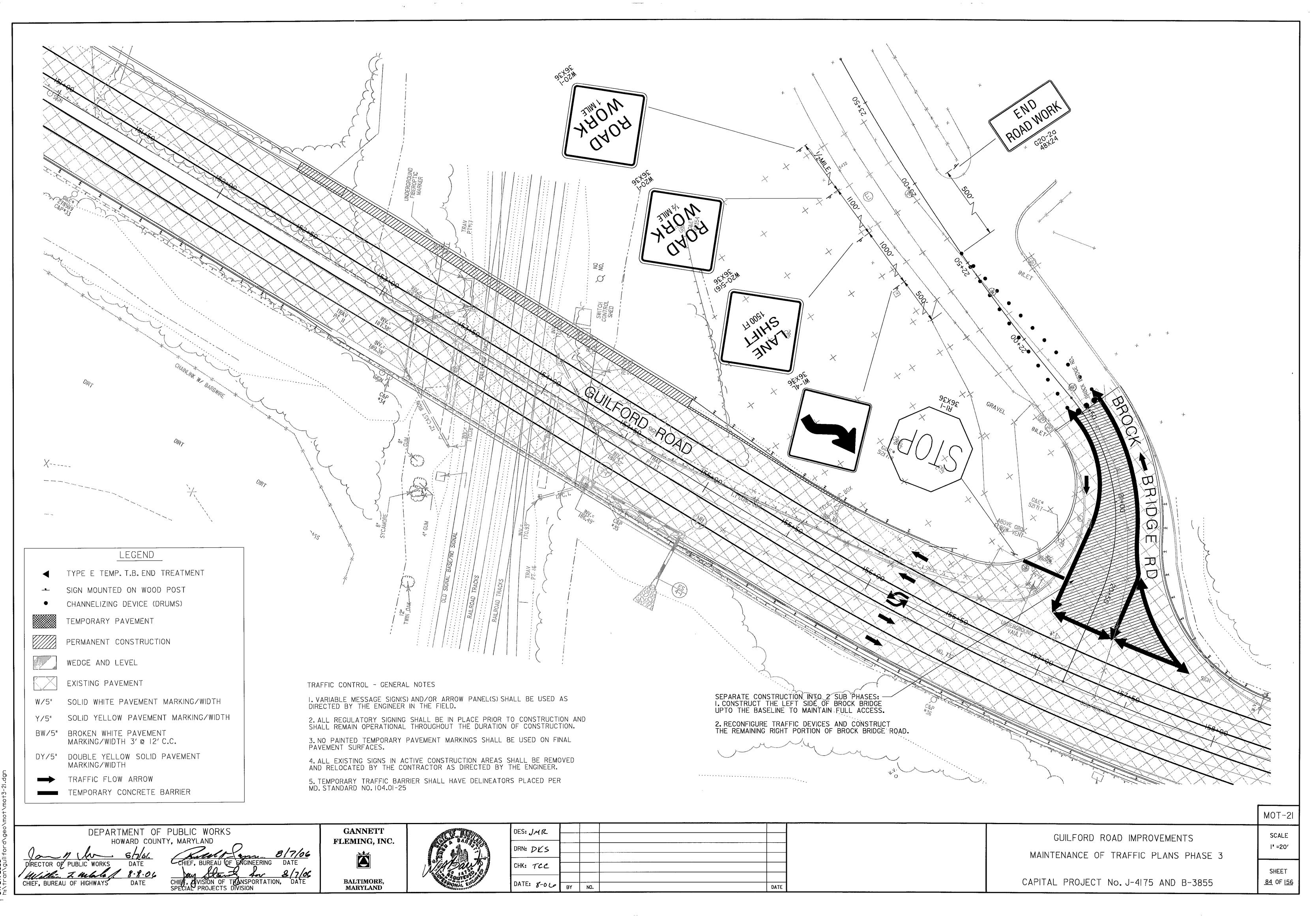
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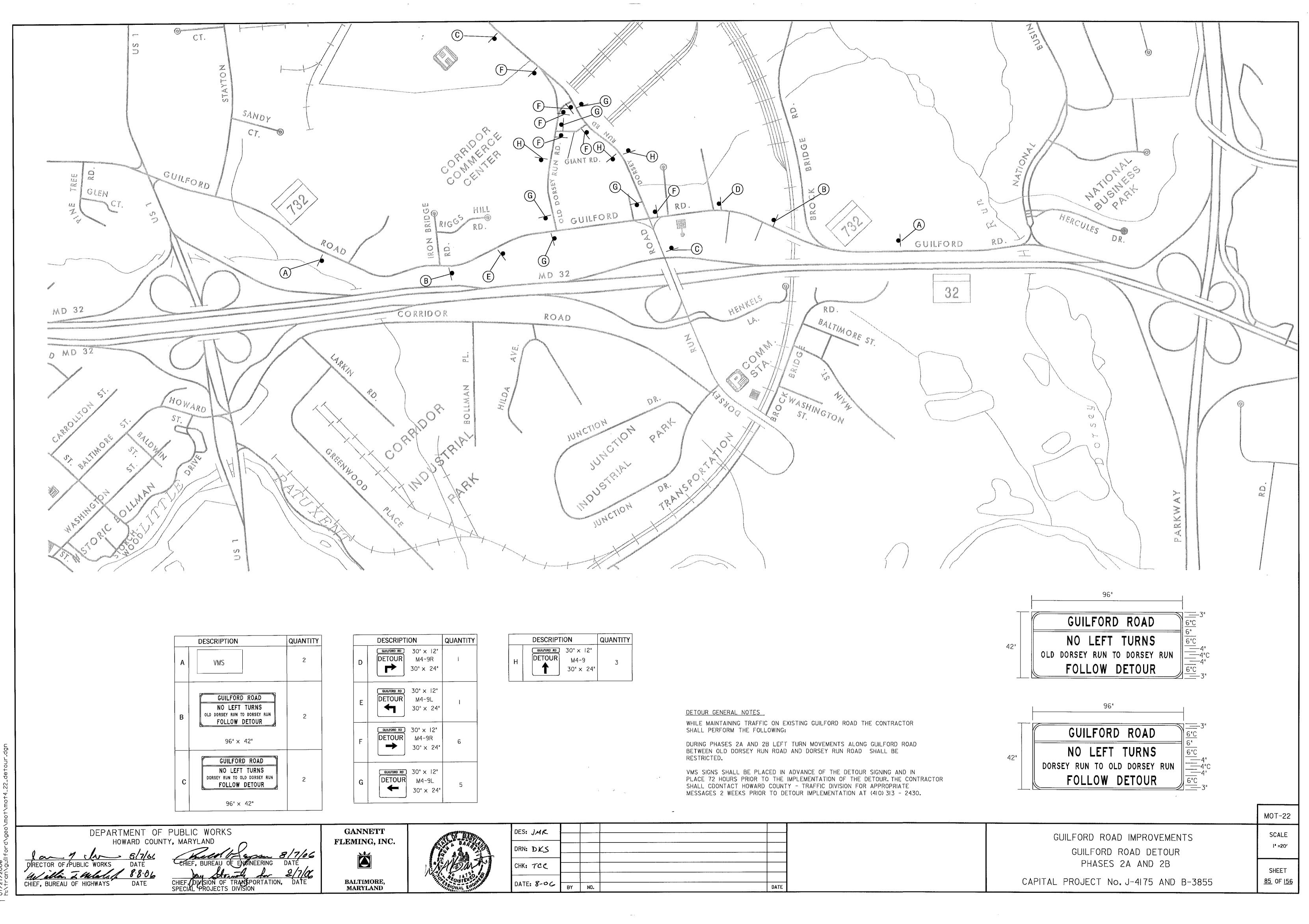
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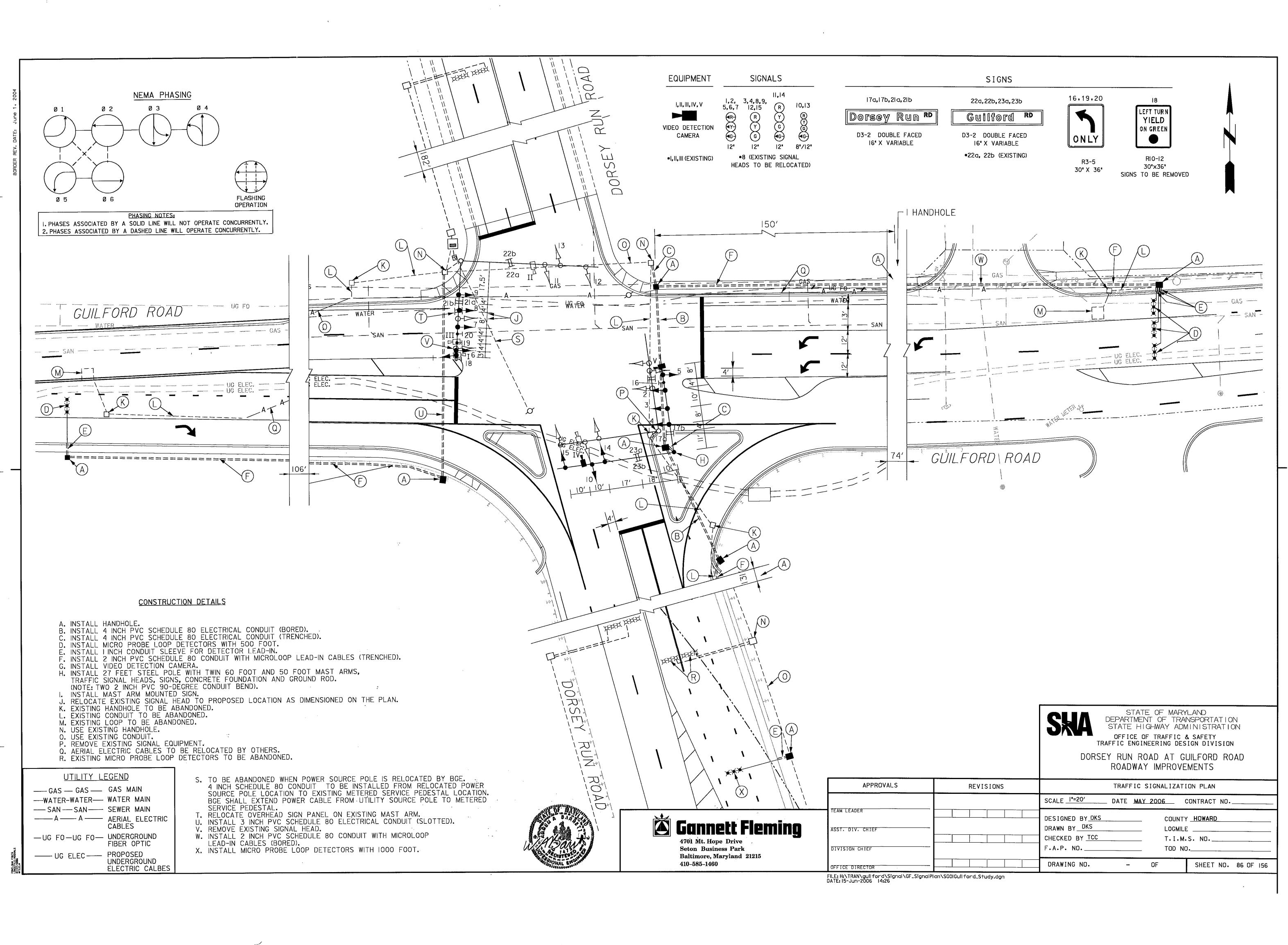
CHIEF, BUREAU OF HIGHWAYS



MARYLAND







PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE GUILFORD ROAD AT DORSEY RUN ROAD INTERSECTION. RECONSTRUCTION OF THE TRYAFFIC SIGNAL IS REQUIRED. GUILFORD ROAD IS ASSUMED TO RUN IN AN EAST - WEST DIRECTION, DORSEY RUN ROAD IS ASSUMED TO RUN IN A NORTH - SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE AS IN EXISTING CONDITIONS. THIS SIGNAL IS INTERCONNECTED TO THE EASTBOUND MD 32/ DORSEY RUN ROAD AND THE WESTBOUND MD 32/ DORSEY RUN ROAD SIGNALIZED INTERSECTIONS.

CONTROLLER REQUIREMENTS

THE SAMPLING DETECTION REGIONS SHALL BE MONITORED / ACTUATED WITH VIDEO-DETECTION CAMERAS.

SPECIAL NOTES

I. THE FOLLOWING CONTACT PERSONS FOR DISTRICT #7 ARE AS FOLLOWS:

PROJECT CONTACTS:

MR. JOHN CONCANNON, ASSISTANT DISTRICT ENGINEER - TRAFFIC PHONE: (301) 624-8140

MR. DAVE COYNE, ASSISTANT DISTRICT ENGINEER- MAINTENANCE PHONE: (301) 624-8105

MR. JAMES BUCKALEW, ASSISTANT DISTRICT ENGINEER - UTILITY PHONE:(301) 624-8115

MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION PHONE:(410) 787-7630

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE FOLLOWING STANDARD PLATES FOR TRAFFIC CONTROL: 104.00 - 30, 104.12 - 01, 104.13 - 01, 104.31 - 01, 104.32 - 01, 104.81 - 02

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
900000	MASTER LOCAL CONTROLLER AND CABINET SIZE 6	EA	l
973023	FLAT SHEET ALUMINUM SIGNS (BLUE OR GREEN)	SF	44.5
	3 EA R3-5 (30" X 36")	SF	22.5

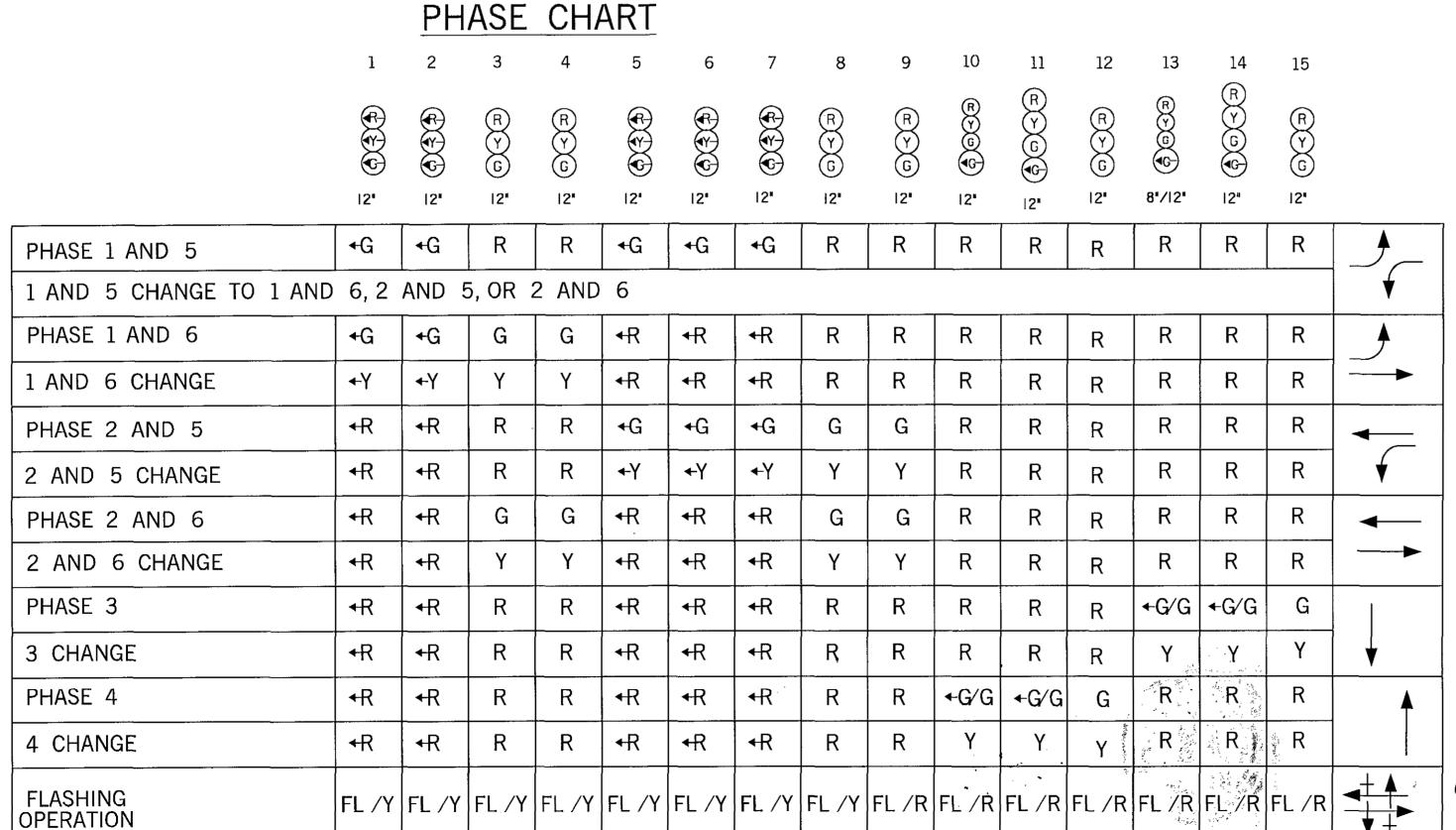
6 EA GUIDE SHIELD ASSEMBLY (16" X 32")

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
203030	TEST PIT EXCAVATION	CY	1.0
585424	24 INCH HEAT APPLIED WHITE PERM. PREFORMED THERMOPLASTIC PAVEMENT MARKINGS	LF	112.5
801004	CONCRETE FOR SIGNAL FOUNDATIONS	CY	4.7
80 607	INSTALL OVERHEAD SIGN	SF	44.5
805105	2 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED	LF	167.0
805118	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED	LF	141.0
805125	2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	456.0
805140	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	13.0
805150	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED	LF	104.0
805160	I INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE	LF	20.0
810550	MICROLOOP PROBE, 500 FOOT LEAD-IN CABLE	EA	4.0
810555	MICROLOOP PROBE, 1000 FOOT LEAD-IN CABLE	EA	1.0
811001	F&I HANDHOLE	EA	9.0
816001	VIDEO DETECTOR CAMERA	EA	2.0
816010	CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER	EA	2.0
818050	STEEL POLE WITH TWIN 50 FOOT AND 60 FOOT MAST ARMS	EA	1.0
832020	BARE COPPER GROUND WIRE, NO. 6 AWG	LF	220.0
837001	GROUND ROD - 3/4 INCH DIA.X IO FT LENGTH	EA	1.0
860265	RELOCATE EXISTING SIGNAL HEAD	EA	1.0
860270	8" VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EΑ	6.0
860284	12" VEHICULAR TRAFFIC SIGNAL HEAD SECTION	ĒA	40.0
861107	ELECTRICAL CABLE - 5 CONDUCTOR (NO.14 AWG)	LF	130.0
861108	ELECTRICAL CABLE - 7 CONDUCTOR (NO.14 AWG)	LF	1190.0
862102	SAWCUT FOR LOOP DETECTOR	LF	112.0
873001	REMOVAL AND SALVAGE EXIST. EQUIPMENT	LS	1.0
800000	REMOVE EXISTING SIGNAL HEAD	EA	1.0

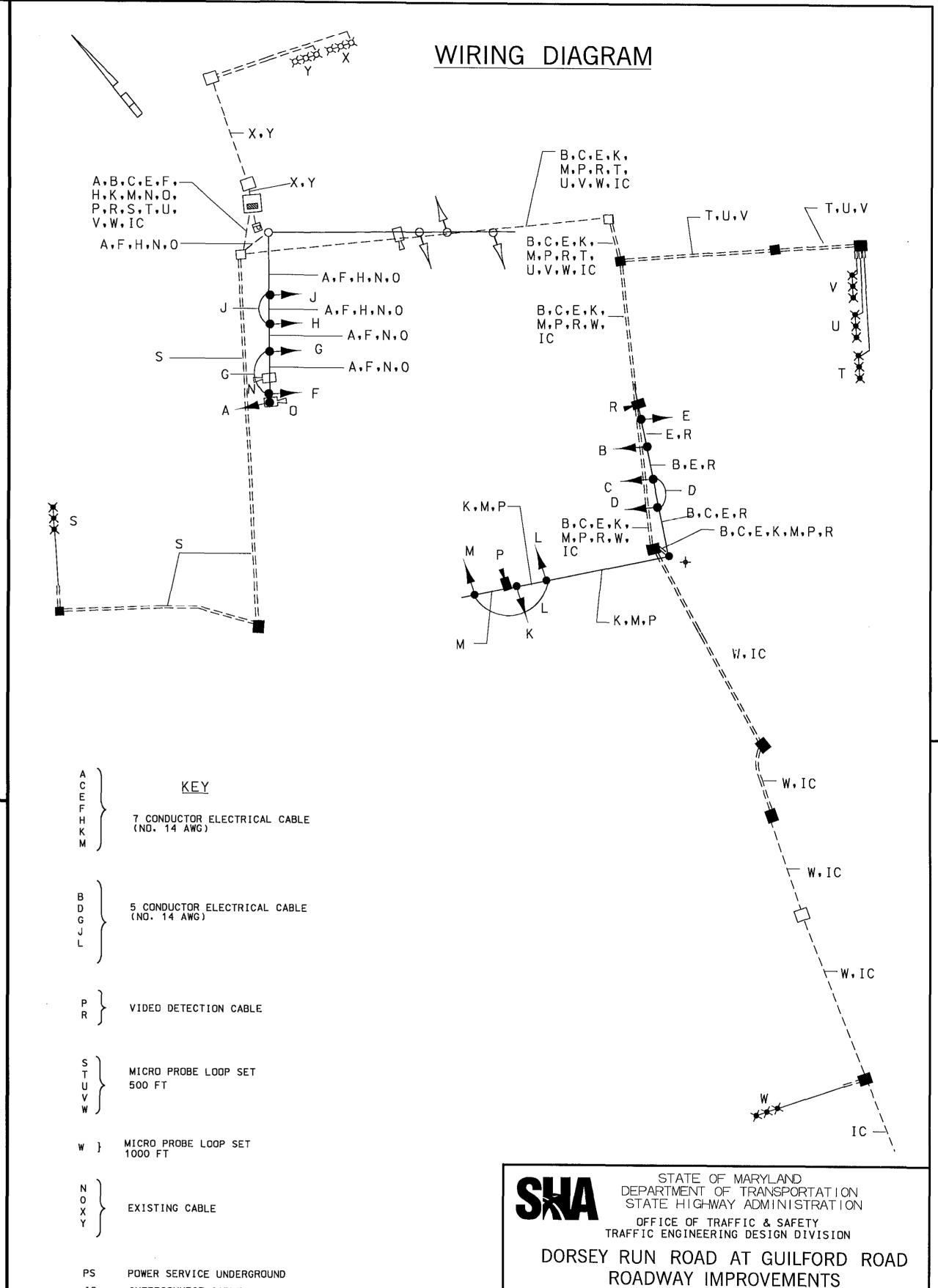
C. MATERIALS TO BE REMOVED BY THE CONTRACTOR.

ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME PROPERTY OF THE CONTRACTOR.



22.0





INTERCONNECT CABLE

GROUND ROD

Cannett Fleming 4701 Mt. Hope Drive

Seton Business Park

410-585-1460

Baltimore, Maryland 21215

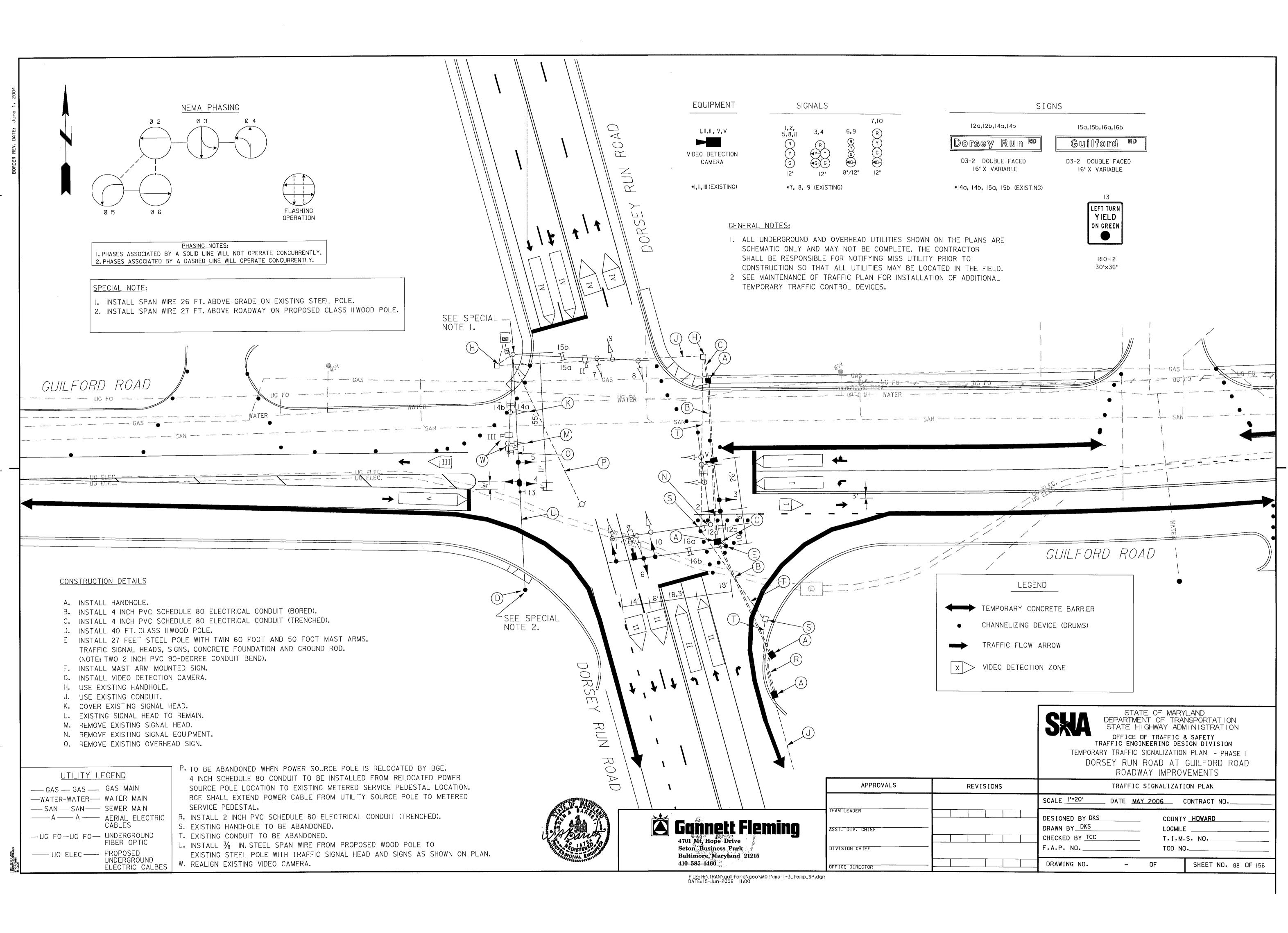
GENERAL INFORMATION SCALE NTS DATE MAY 2006 CONTRACT NO.

DESIGNED BY DKS COUNTY HOWARD DRAWN BY DKS LOGMILE CHECKED BY TCC

F.A.P. NO.

DRAWING NO.

T.I.M.S. NO._ TOD NO._ SHEET NO. 87 OF 156 OF



Ρ	ROJECT	DESCRIPTION
G	ENERAL	

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE GUILFORD ROAD AT DORSEY RUN ROAD INTERSECTION. RECONSTRUCTION OF THE TRTAFFIC SIGNAL IS REQUIRED. GUILFORD ROAD IS ASSUMED TO RUN IN AN EAST - WEST DIRECTION, DORSEY RUN ROAD IS ASSUMED TO RUN IN A NORTH - SOUTH DIRECTION.

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THE INTERSECTION WILL OPERATE AS IN EXISTING CONDITIONS. THIS SIGNAL IS INTERCONNECTED TO THE EASTBOUND MD 32/ DORSEY RUN ROAD AND THE WESTBOUND MD 32/ DORSEY RUN ROAD SIGNALIZED INTERSECTIONS.

CONTROLLER REQUIREMENTS

THE SAMPLING DETECTION REGIONS SHALL BE MONITORED / ACTUATED WITH VIDEO-DETECTION CAMERAS.

SPECIAL NOTES

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MR. JAMES BUCKALEW, ASSISTANT DISTRICT ENGINEER - UTILITY PHONE:(301) 624-8115

MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION PHONE: (410) 787-7630

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE FOLLOWING STANDARD PLATES

C. MATERIALS TO BE REMOVED BY THE CONTRACTOR.

FOR TRAFFIC CONTROL: 104.00 - 30, 104.12 - 01, 104.13 - 01, 104.31 - 01, 104.32 - 01, 104.81 - 02

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

CONCRETE FOR SIGNAL FOUNDATIONS

24 INCH WHITE REMOVABLE PREFORMED PAVEMENT LINE

4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED

FURNISH AND INSTALL ELECTRICAL HANDHOLE

GROUND ROD - 3/4 INCH DIA. X 10 FT LENGTH

8" VEHICULAR TRAFFIC SIGNAL HEAD SECTION

12" VEHICULAR TRAFFIC SIGNAL HEAD SECTION

ELECTRICAL CABLE - 5 CONDUCTOR (NO.14 AWG)

ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)

BARE COPPER GROUND WIRE, NO. 6 AWG

STEEL SPAN WIRE - 3/8 INCH DIAMETER

REMOVE EXISTING SIGNAL HEAD

40 FT. CALSSS II WOOD POLE

REMOVAL AND SALVAGE EXIST. EQUIPMENT

2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED

4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED

CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO

STEEL POLE WITH TWIN 50 FOOT AND 60 FOOT MAST ARMS

DESCRIPTION

CONTROLLER

TEST PIT EXCAVATION

INSTALL OVERHEAD SIGN

VIDEO DETECTOR CAMERA

MARKINGS

CATEGORY

CODE NO.

114245

203030

801004

801607

805118

805/25

805140

811001

816001

816010

818050

832020

837001

860270

860284

861107

861108

869102

873001

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ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME PROPERTY OF THE CONTRACTOR.

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27.0

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1.0

EQUIPMENT LIST

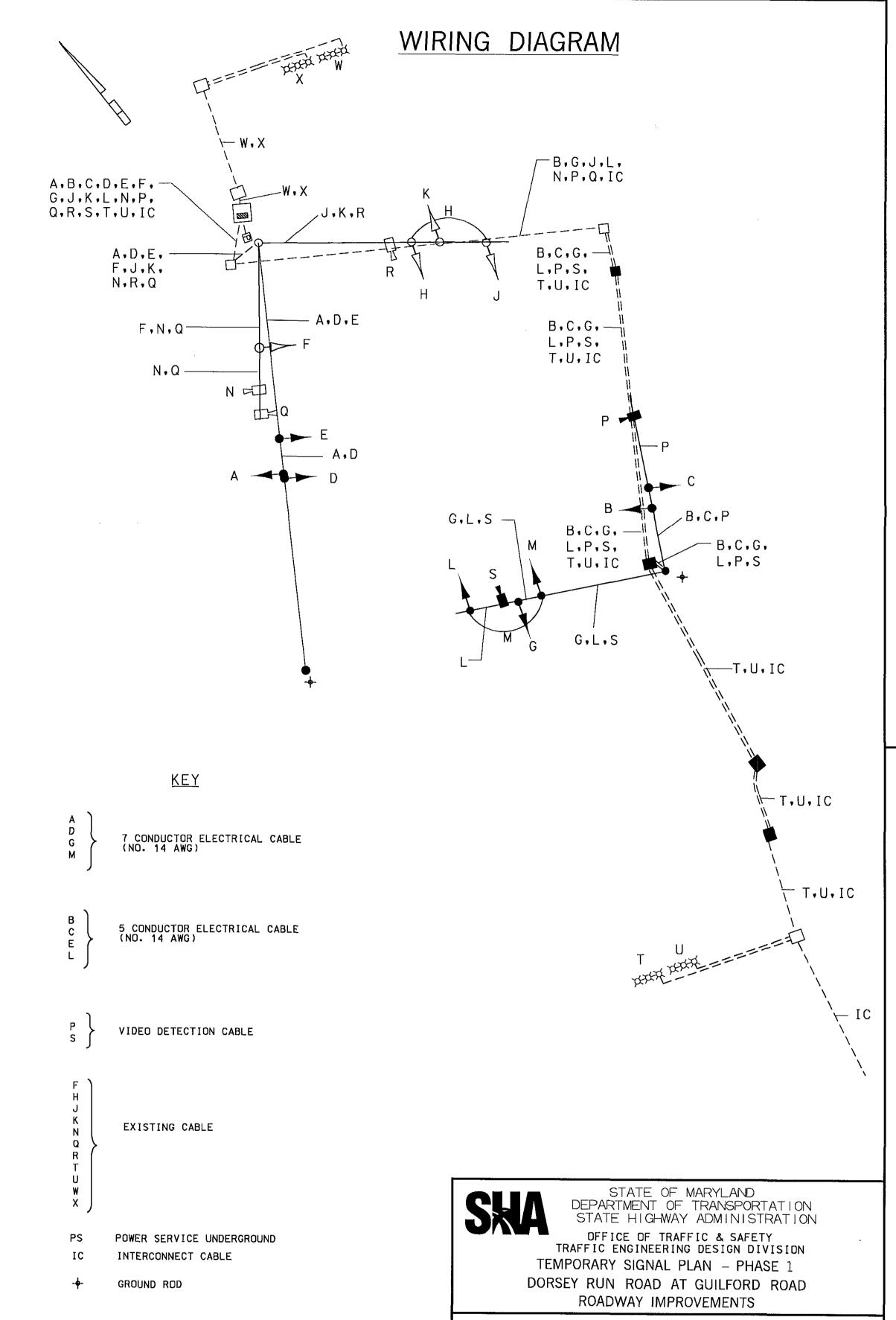
A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
900000 973023	MASTER LOCAL CONTROLLER AND CABINET SIZE 6 FLAT SHEET ALUMINUM SIGNS (BLUE OR GREEN) I EA RIO-12 (30" X 36") 4 EA GUIDE SHIELD ASSEMBLY (16" X 32")	EA SF SF SF	22.5 7.5 15.0

PHASE CHART

				. –		*	12	12		14"	14	
PHASE 2 AND 5	R	R	+G/G	+G/G	G	R	R	R	R	R	R	←
2 AND 5 CHANGE	R	R	← Y	← Υ	G	R	R	R	R	R	R	▼
PHASE 2 AND 6	G	G	G	G	G	R	R	R	R	R	R	—
2 AND 6 CHANGE	Υ	Υ	Υ	Υ	Υ	R	R	R	R	R	R	
PHASE 3	R	R	R	R	R	R	R	R	+G	← G	G	
3 CHANGE	R	R	R	R	R	R	R	R	Υ	Y	Υ	₩
PHASE 4	R	R	R	R	R	←G	← G	G	R	R	R	A
4 CHANGE	R	R	R	R	R	Υ	Y	Y	R	R	R	
FLASHING OPERATION	FL /Y	FL /Y	FL /Y	FL /Y	FL /Y	FL /Y	FL /Y	FL /Y	FL /R	FL /R	FL /R	++





Cannett Fleming

4701 Mt. Hope Drive Seton Business Park Baltimore, Maryland 21215 410-585-1460

GENERAL INFORMATION SCALE NTS DATE MAY 2006 CONTRACT NO. DESIGNED BY DKS COUNTY HOWARD

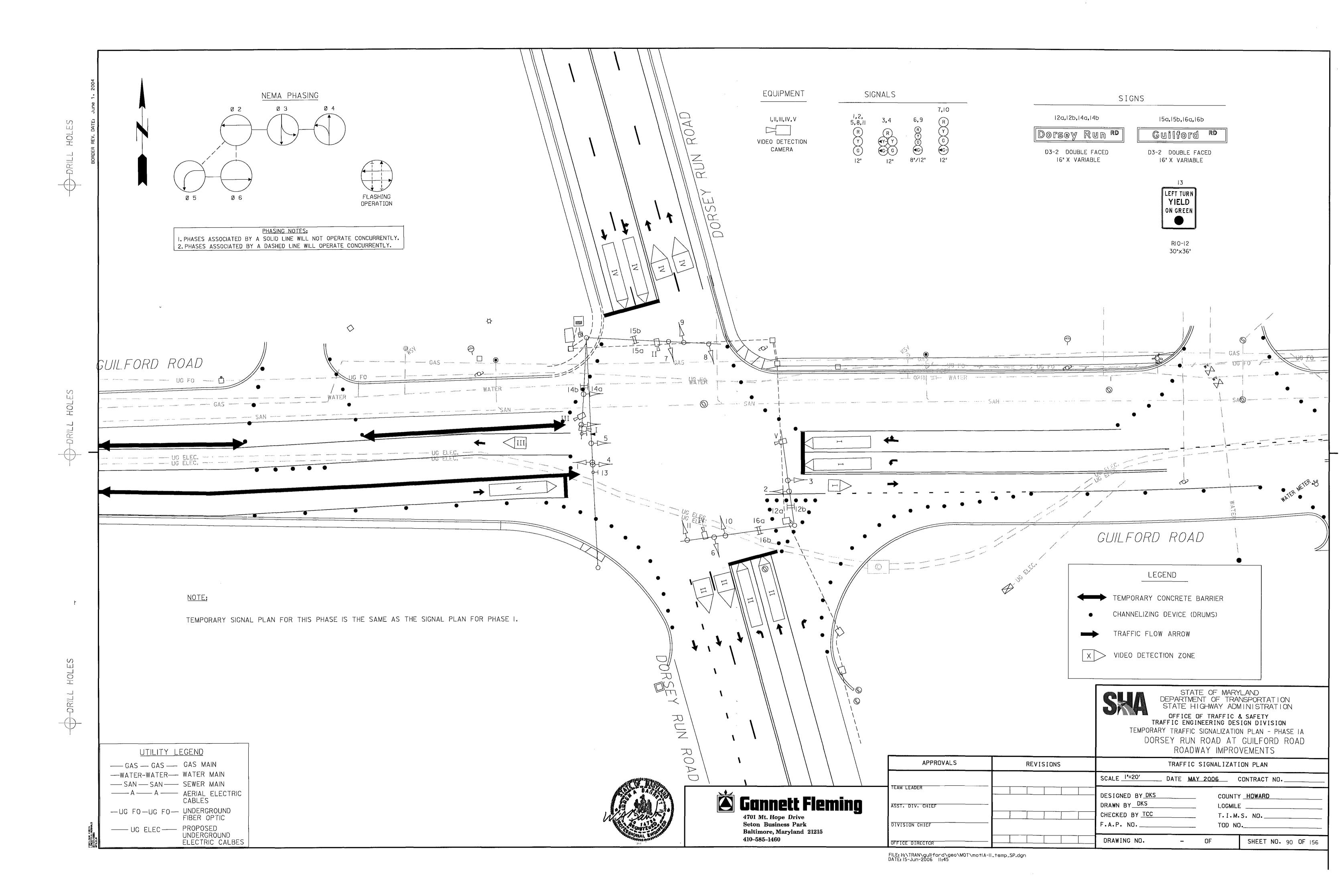
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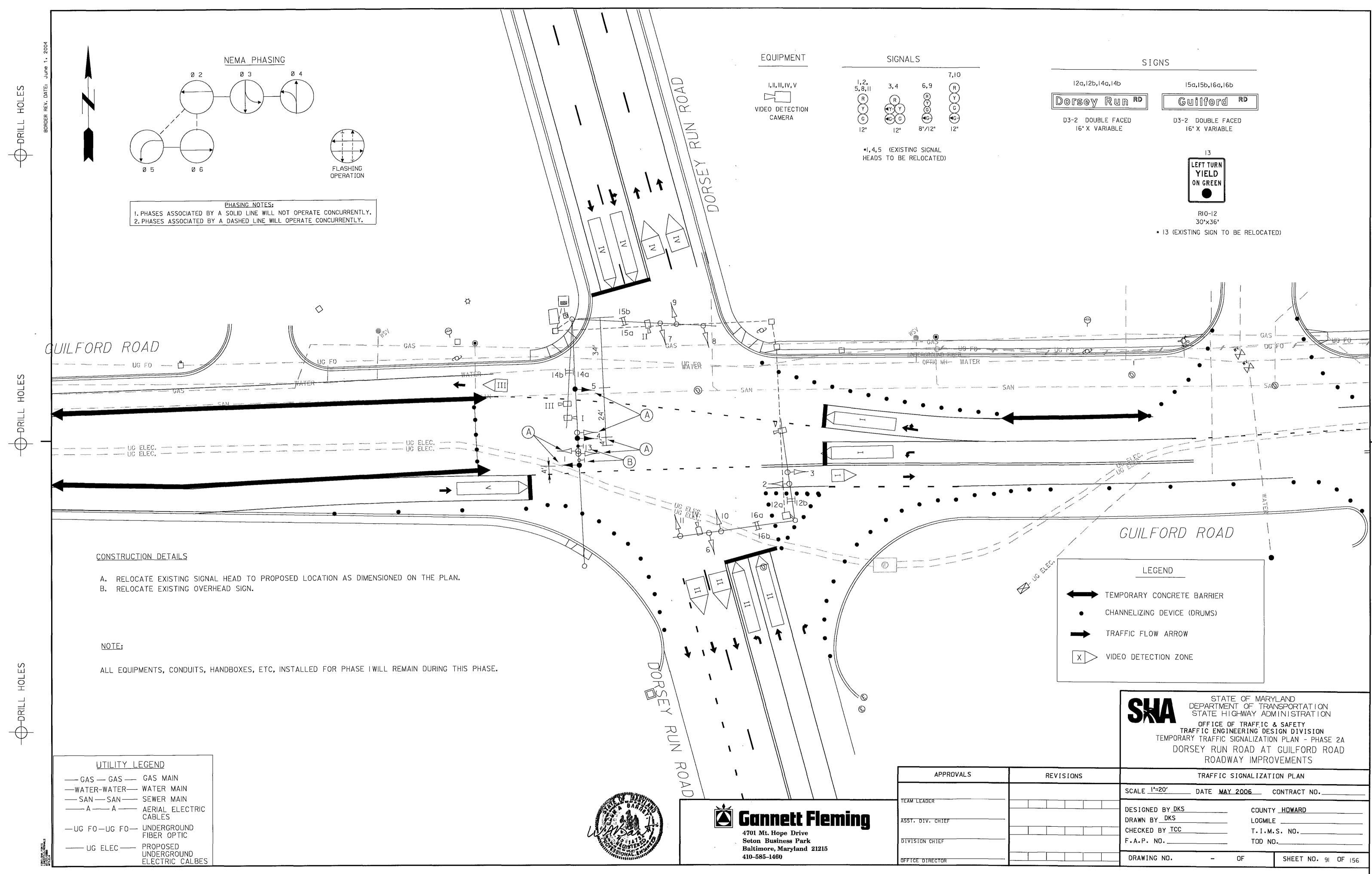
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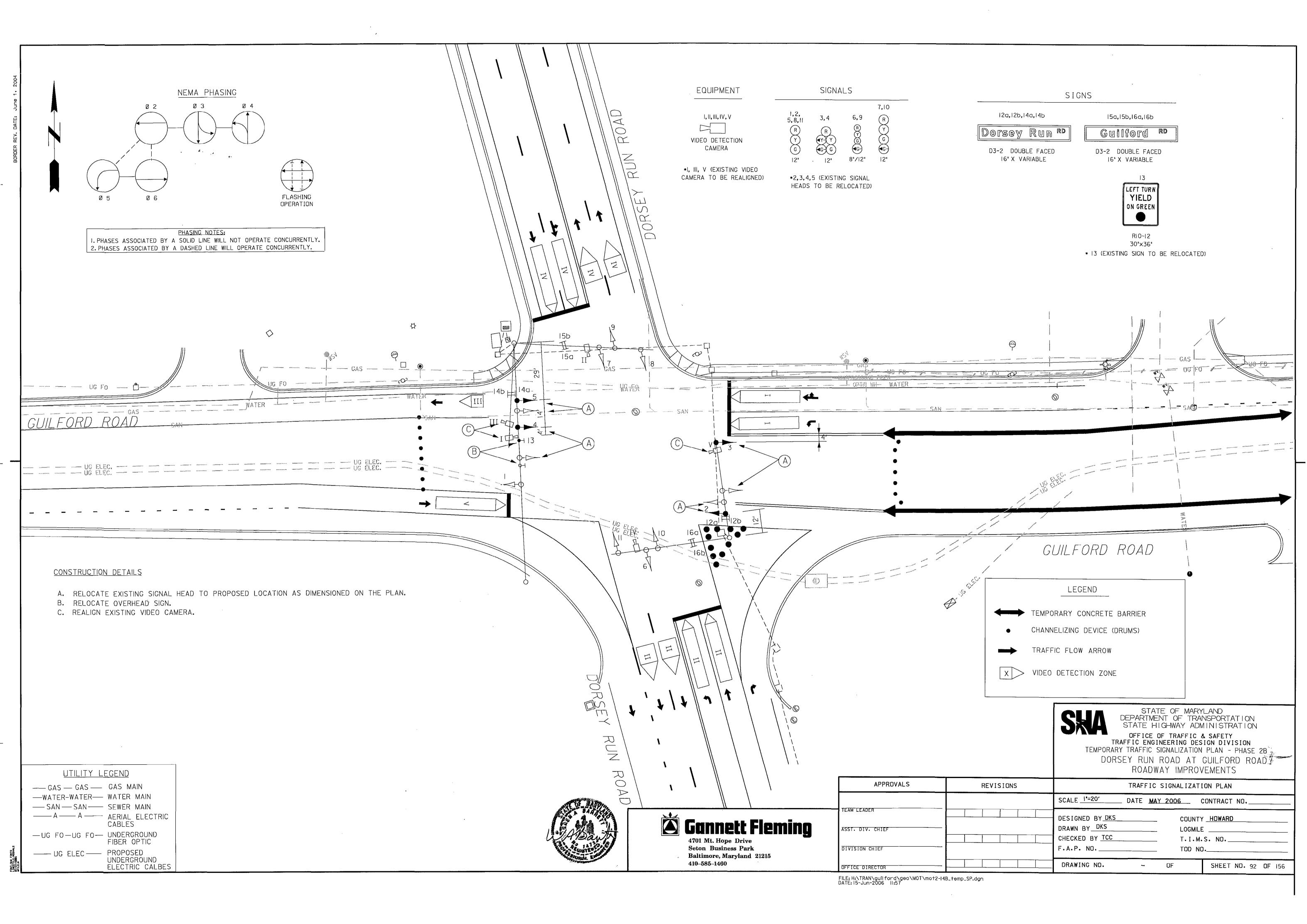
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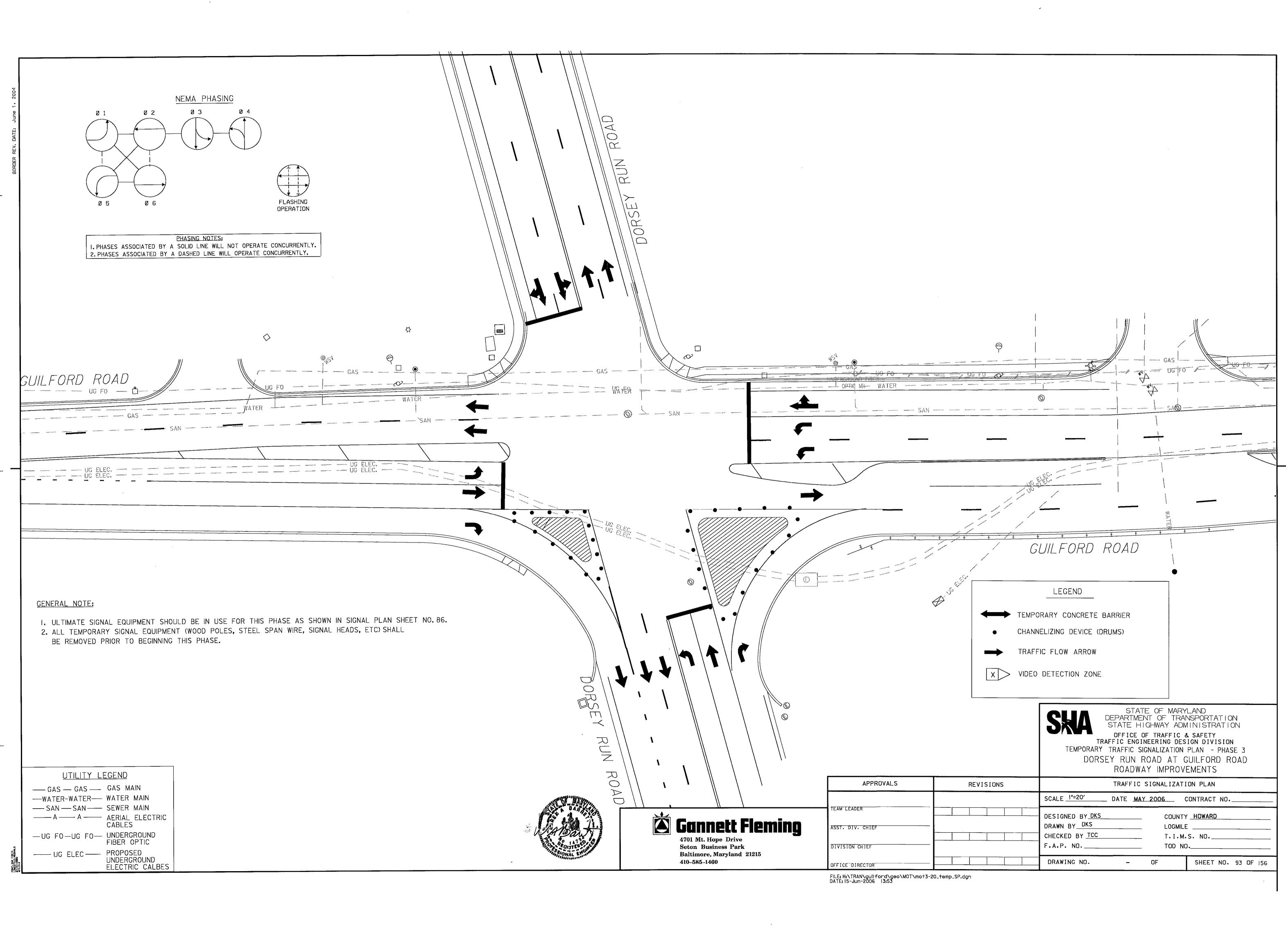
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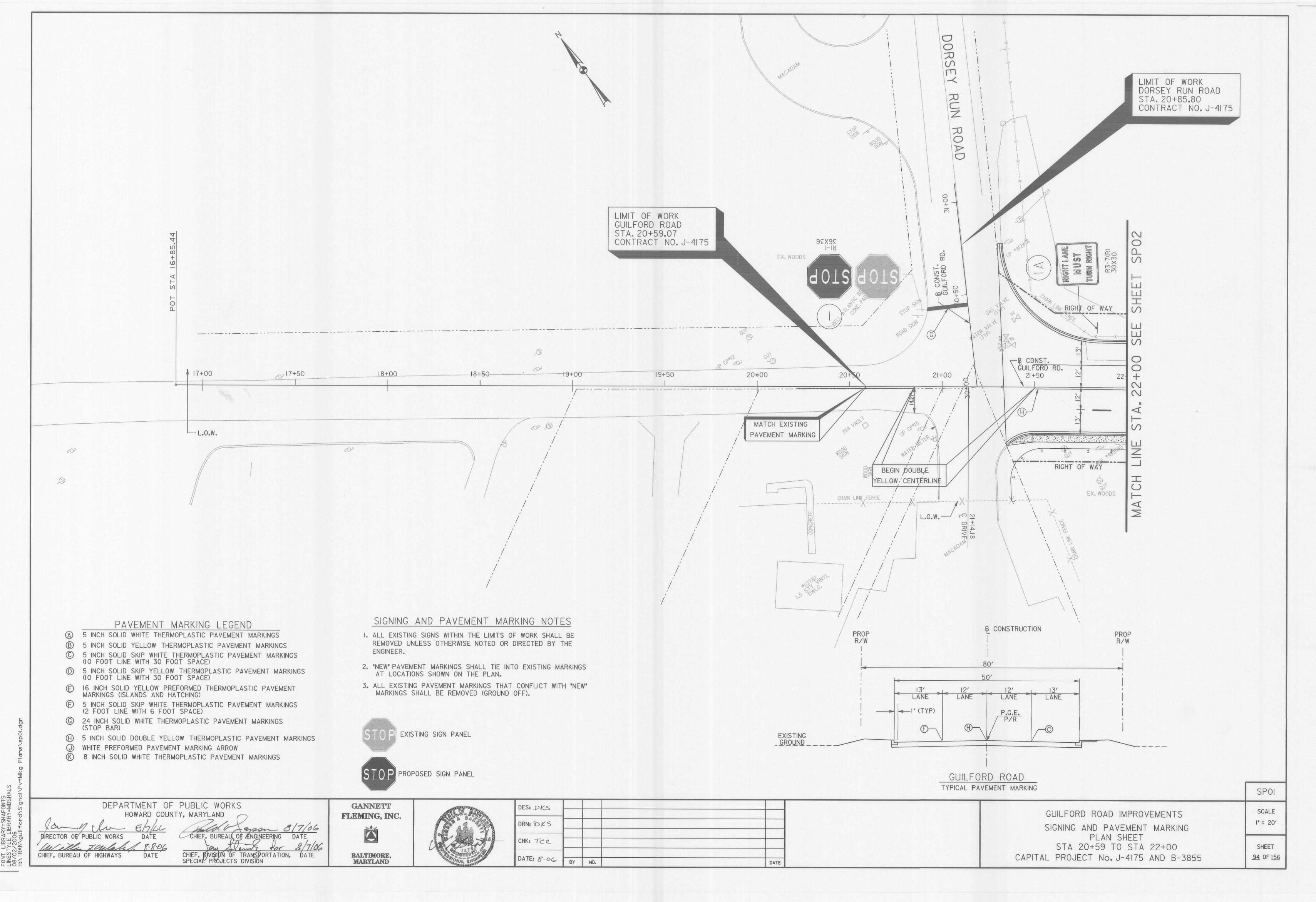


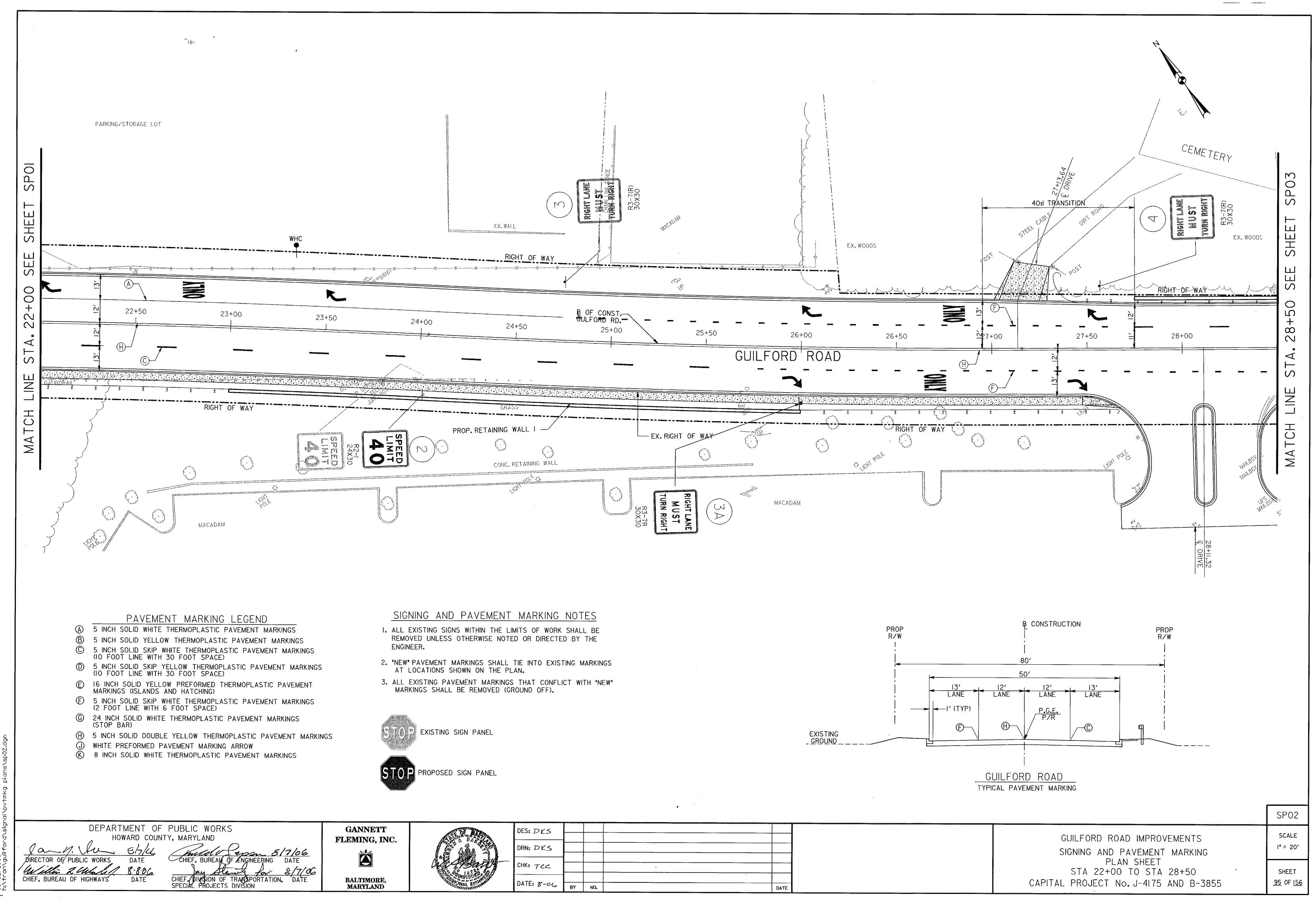




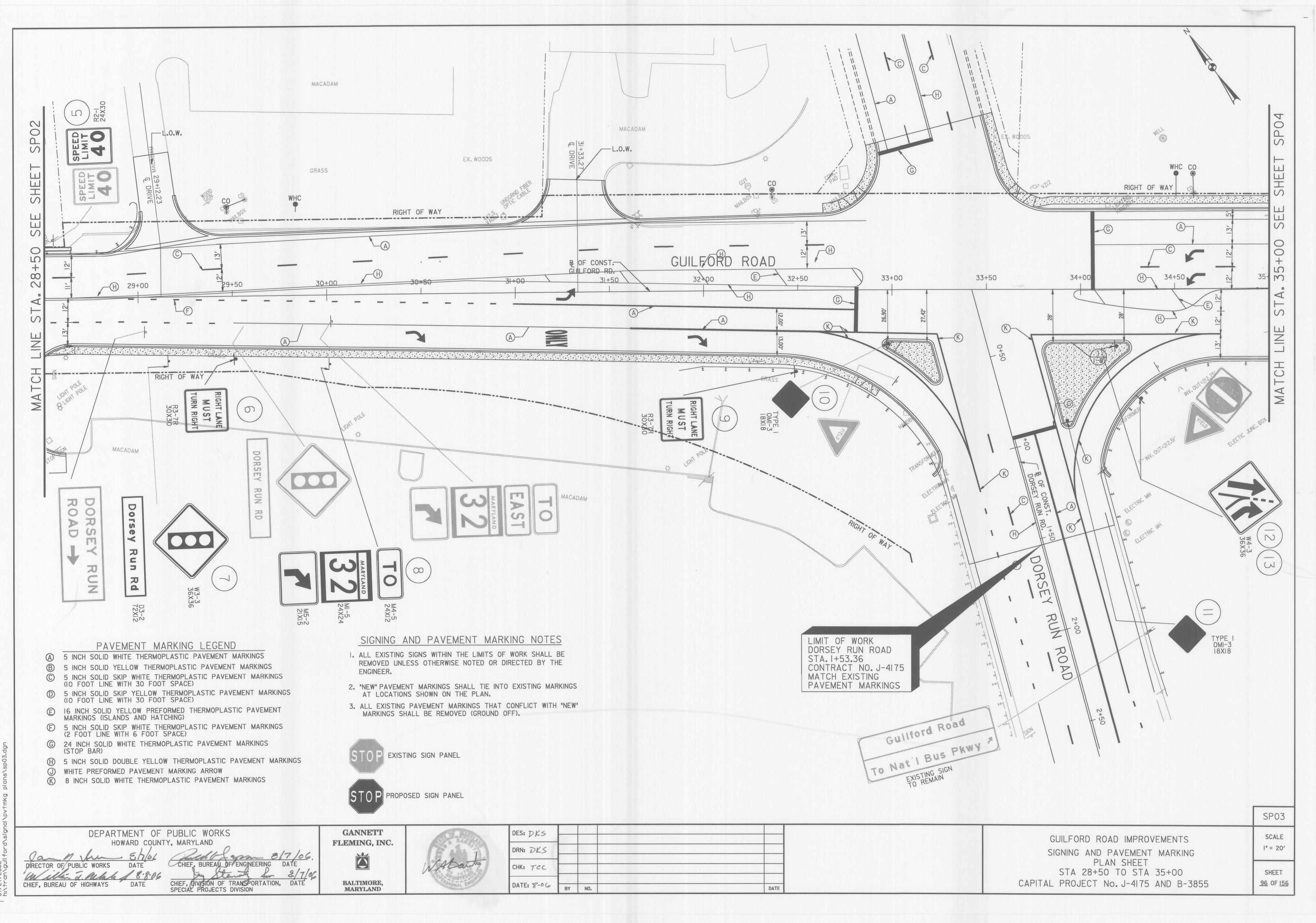
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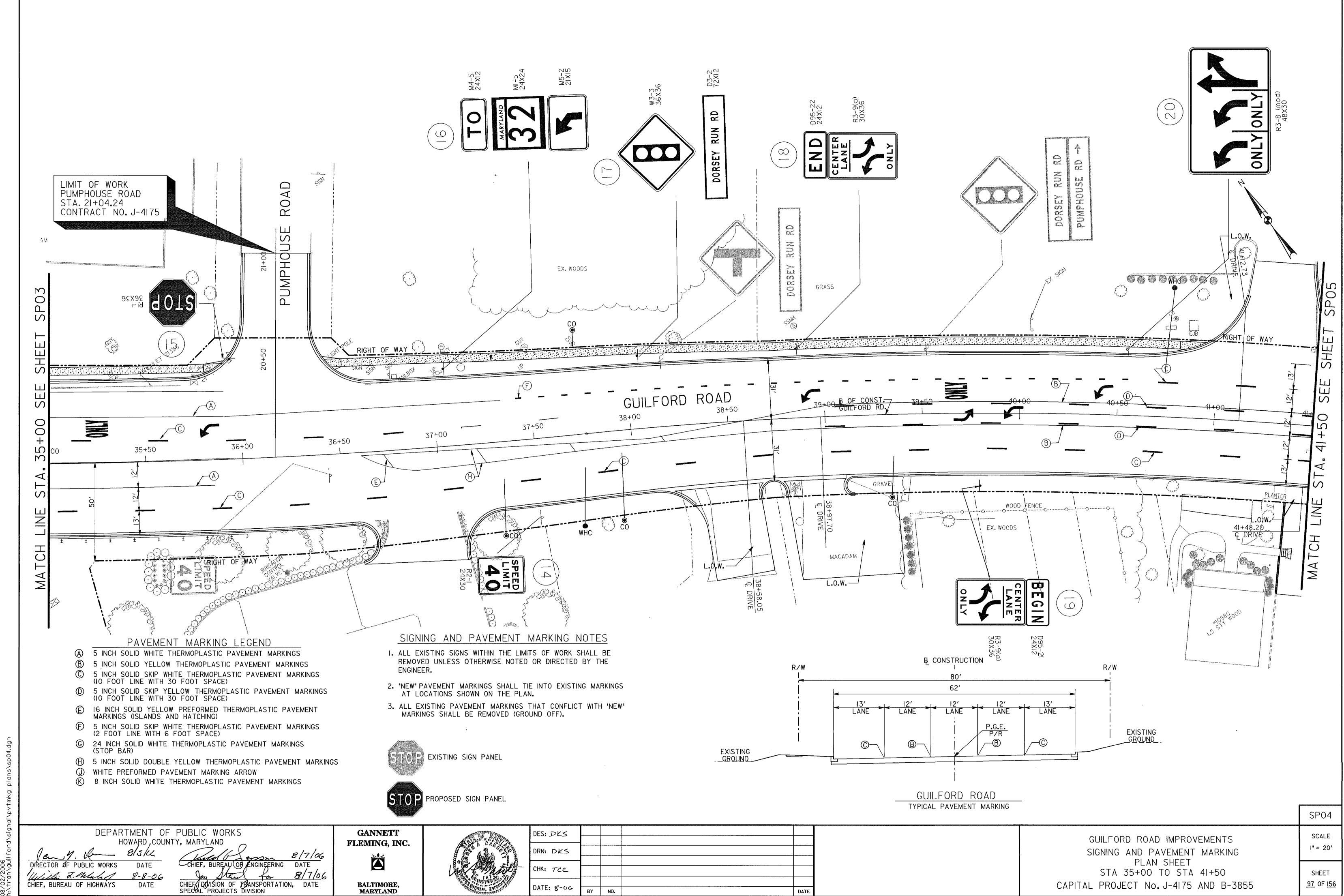




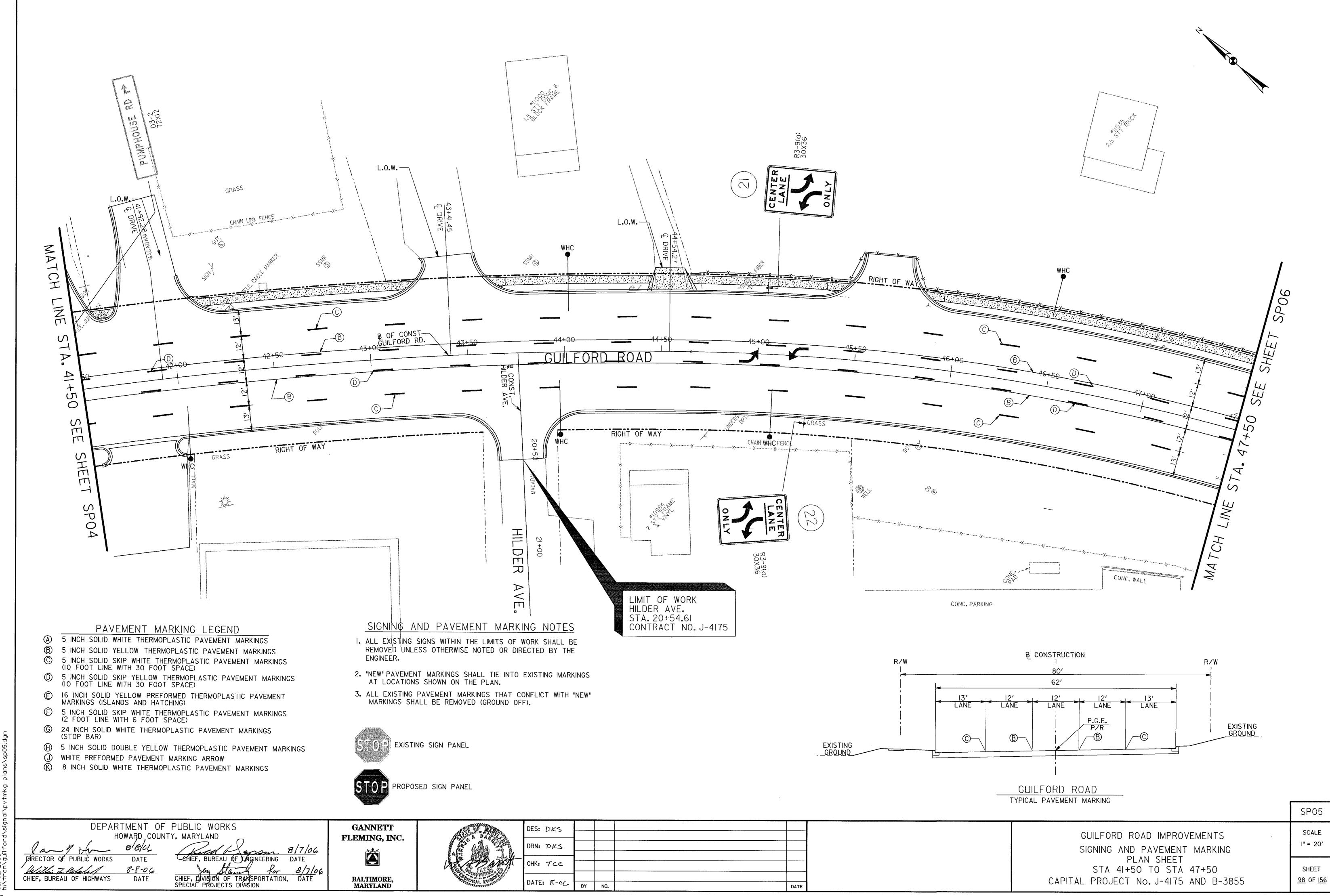


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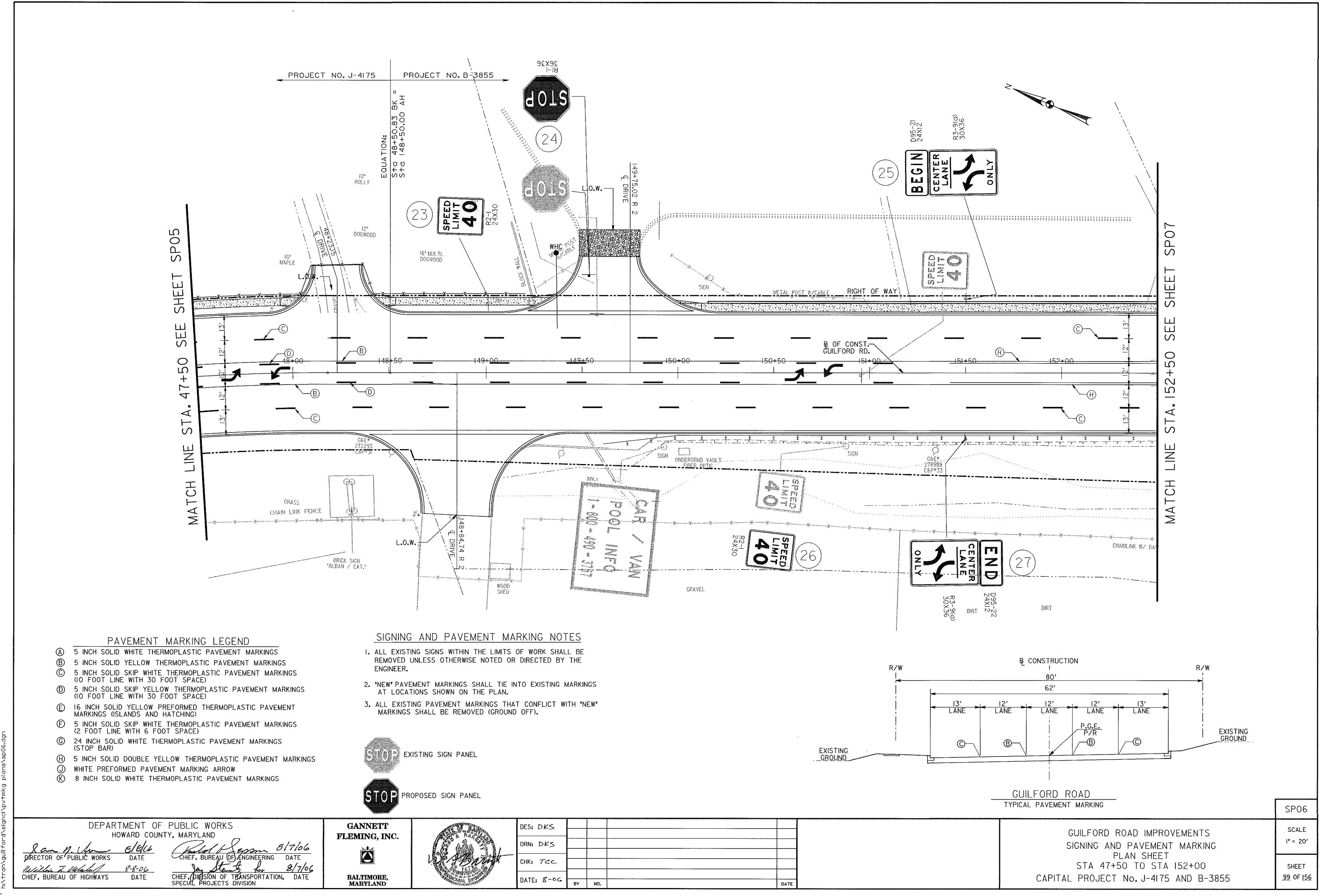




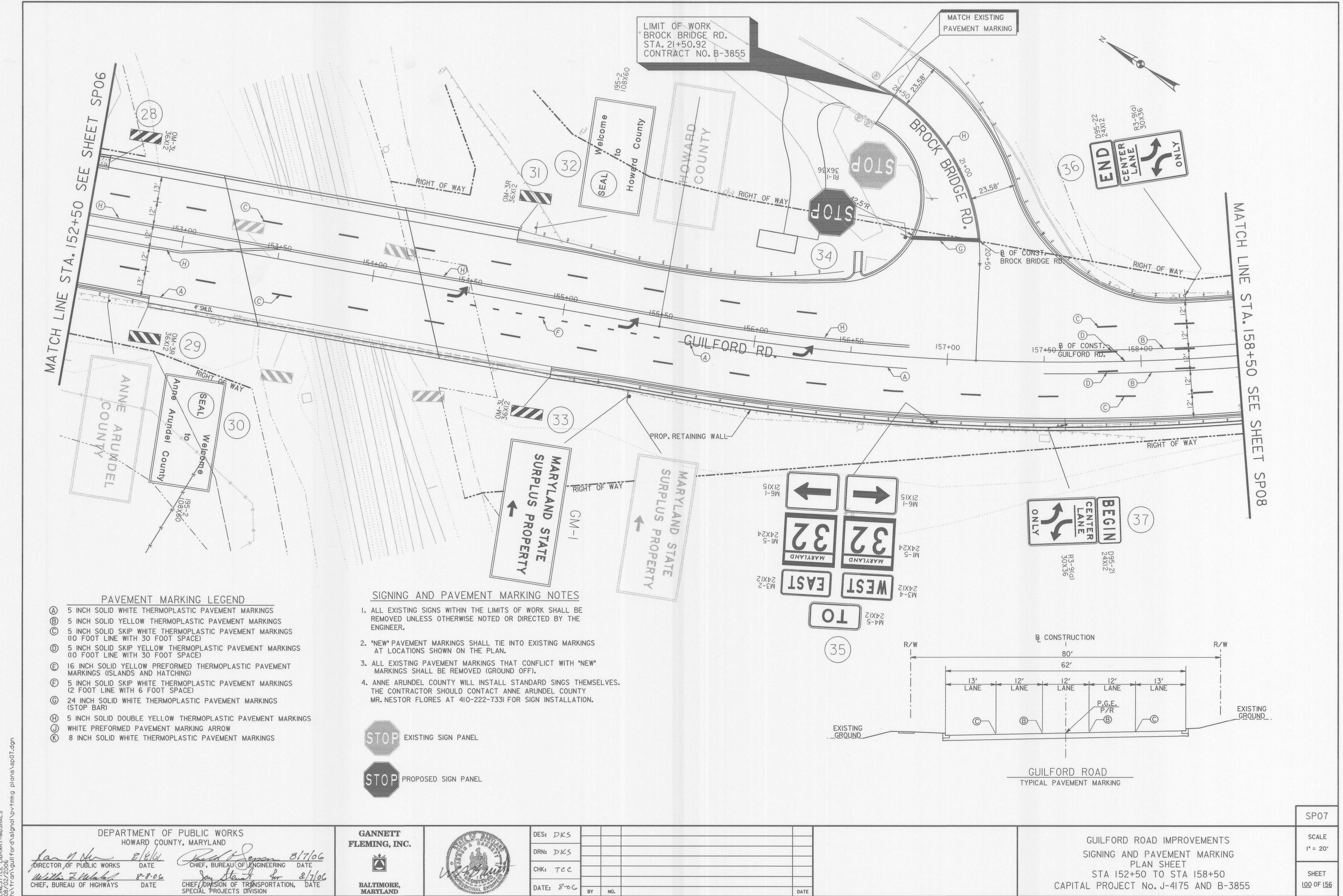
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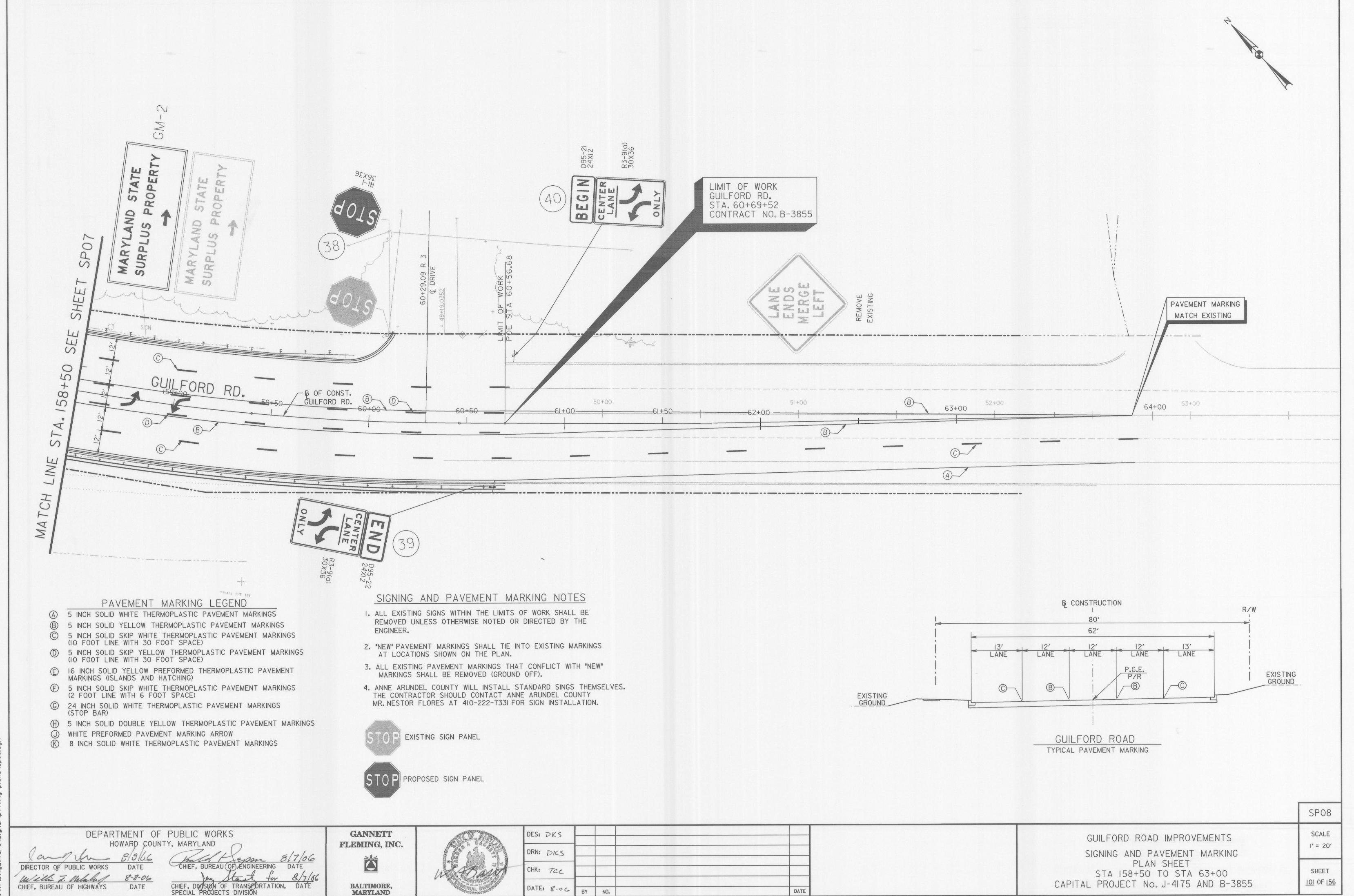
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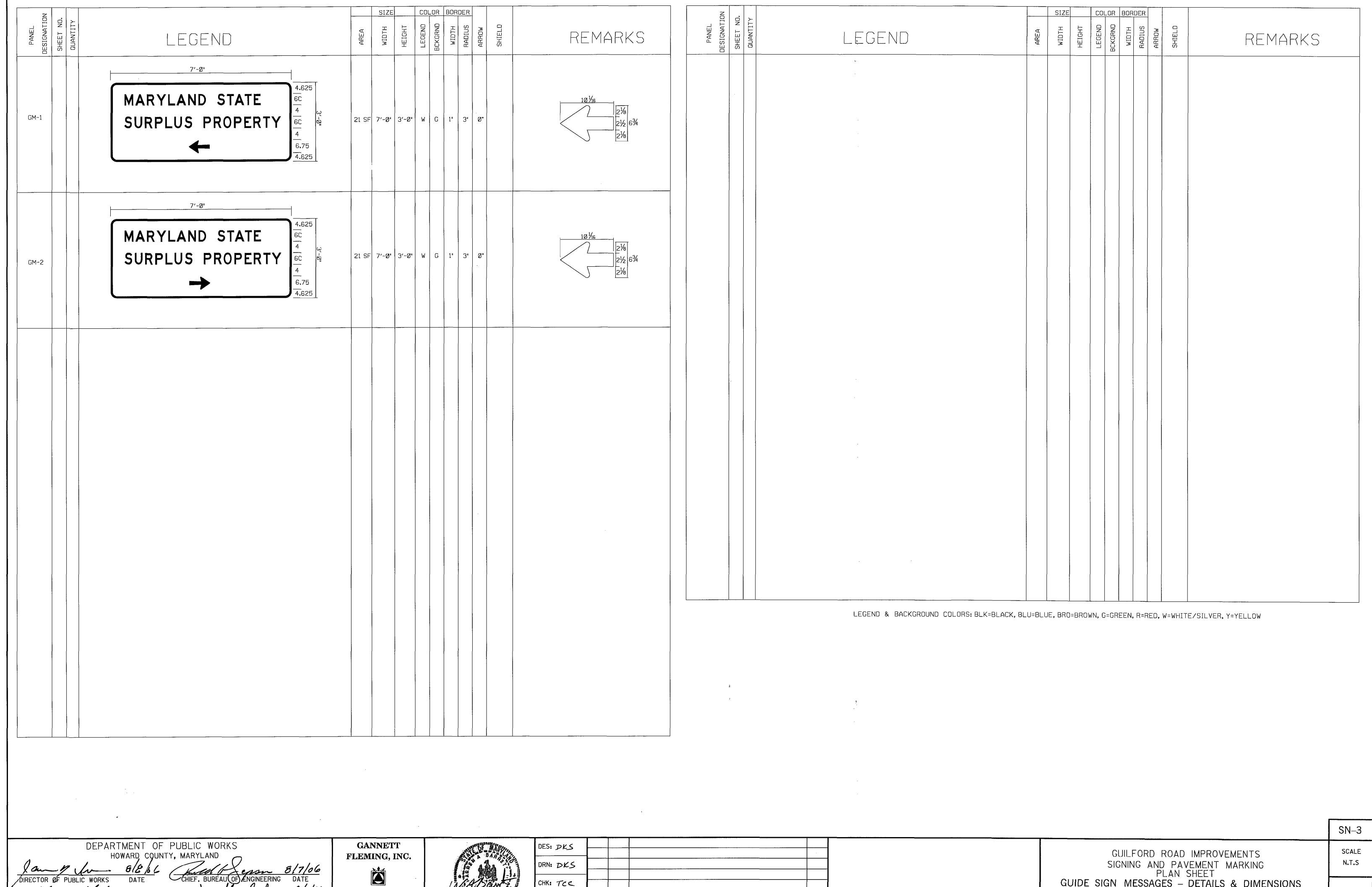
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BALTIMORE, MARYLAND



DES: アKら	ļ	· · · · · · · · ·	
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CHK: TCC	 -		
DATE: 8-00	ВҮ	NO.	DATE

SIGNING AND PAVEMENT MARKING
PLAN SHEET
GUIDE SIGN MESSAGES — DETAILS & DIMENSIONS

CAPITAL PROJECT No. J-4175 AND B-3855

SHEET <u>102</u> 0F <u>156</u>

EXISTING SIGNS TO BE REMOVED (THIS SHEET) SP02 14.5 4"X4" WOOD SUPPORT SP03 R2-I (24" X 30") 14.5 4"X4" WOOD SUPPORT 6.25 SP03 R3-7R (30" X 30") 31.5 2 4"X6" WOOD SUPPORT 15 W3-3 (36" X 36"); D3-2 (72"XI2") SP03 4"X4" WOOD SUPPORT 8.19 M4-5 (24"X|2"); MI-5 (24"X24"); M5-2 (21"x|5) SP03 4"X4" WOOD SUPPORT 14.5 R3-7R (30" X 30") SP03 4"X4" WOOD SUPPORT 2.25 SP03 TYPE | OMI-3 (18" X 18") 2.25 4"X4" WOOD SUPPORT TYPE IOMI-3 (18" X 18") SP03 2 4"X6" WOOD SUPPORT 29**.**5 W4-3 (36" X 36") SP03 4"X6" WOOD SUPPORT SP03 W4-3 (36" X 36") 75.44 SP03 EXISTING SIGNS TO BE REMOVED (THIS SHEET) 4"X4" WOOD SUPPORT 14.5 R2-I (24" X 30") SP04 4"X4" WOOD SUPPORT RI-I (36" X 36") SP04 8.19 14.75 4"X4" WOOD SUPPORT SP04 M4-5 (24" X |2"); MI-5 (24"X24"); M5-2 (2|"X|5") 4"X6" WOOD SUPPORT 15 SP04 W3-3 (36" X 36"); D3-2 (72"XI2") 4"X4" WOOD SUPPORT 9.5 14.5 D95-22 (24" X 12"); R3-9a (30" X 36") SP04 9.5 14.5 4"X4" WOOD, SUPPORT SP04 D95-21 (24" X 12"); R3-9a (30" X 36") 2 4"X6" WOOD SUPPORT 10 29 R3-8 (mod) (48" X 30") SP04 EXISTING SIGNS TO BE REMOVED (THIS SHEET) SP04 7.5 4"X4" WOOD SUPPORT 15 R3-9a (30" X 36") SP05 7.5 15 4"X4" WOOD SUPPORT R3-9a (30" X 36") SP05 EXISTING SIGNS TO BE REMOVED (THIS SHEET) SP05 4"X4" WOOD SUPPORT 14.5 R2-I (24" X 30") SP06 23 15 4"X4" WOOD SUPPORT SP06 RI-I (36" X 36") 14.5 4"X4" WOOD SUPPORT 9.5 SP06 D95-21 (24" X 12"); R3-9a (30" X 36") 25 4"X4" WOOD SUPPORT 14.5 R2-I (24" X 30") SP06 9.5 4"X4" WOOD SUPPORT 14.5 D95-22 (24" X 12"); R3-9a (30" X 36") SP06 EXISTING SIGNS TO BE REMOVED (THIS SHEET) 19 2 4"X4" WOOD SUPPORT OM-3L (36" X 12") SP07 28 9 4"X4" WOOD SUPPORT SP07 OM-3R (36" X 12") 29 2 4"X6" WOOD SUPPORT 195-2 (108" X 60") "ANNE ARUNDEL COUNTY" SP07 4"X4" WOOD SUPPORT 3 OM-3R (36" X 12") SP07 4"X6" WOOD SUPPORT 45 34 195-2 (108" X 60") "HOWARD COUNTY" SP07 4"X4" WOOD SUPPORT 30 SP07 (3'X 7') GM-I 4"X4" WOOD SUPPORT 3 9 SP07 OM-3L (36" X 12") 33 4"X4" WOOD SUPPORT 15 SP07 34 RI-I (36" X 36") 2 4"X4" WOOD SUPPORT 18.375 31.5 M4-5 (24"XI2"); M3-4 (24" X I2"); MI-5 (24" X 24"); M6-1 (21"XI5") SP07 M3-2 (24" X | 2"); MI-5 (24" X 24"); M6-I (21"X|5") 9.5 14.5 4"X4" WOOD SUPPORT D95-22 (24" X 12"); R3-9a (30" X 36") SP07 9.5 14.5 4"X4" WOOD SUPPORT SP07 D95-21 (24" X 12"); R3-9a (30" X 36") 132 EXISTING SIGNS TO BE REMOVED (THIS SHEET) SP07 15 4"X4" WOOD SUPPORT RI-I (36" X 36") SP08 30 4"X4" WOOD SUPPORT 21 (3'X 7') SP08 GM-2 4"X4" WOOD SUPPORT 9.5 14.5 D95-22 (24" X 12"); R3-9a (30" X 36") 39 SP08 36.25 1 4"X4" WOOD SUPPORT 9.5 14.5 D95-21 (24" X 12"); R3-9a (30" X 36") SP08 EXISTING SIGNS TO BE REMOVED (THIS SHEET) SP08 555.50 219.00 323.69 ACTUAL CALCULATED TOTAL 440.00 | 556.00 219.00 324.00 ROUNDED ESTIMATE TOTAL * CODE NUMBER DESCRIPTION & UNIT DESCRIPTION LFAFT CODE NUMBERS CODE NUMBERS DESCRIPTION SF F & I SHEET ALUMINUM F & I WOOD SIGN SUPPORT 4" X 4" ĻF LF F & 1 WOOD SIGN SUPPORT 4" X 6" SF EX. SIGN AND SUPPORT TO BE REMOVED

2 | 3

15

14.5

14.5

14.5

14.5

14.5

6.25

6.25

6.25

4 | 5

6

CODE NUMBERS *

10

12

13

14

15

16 | 17

18

SN-II

SCALE

N.T.S

SHEET

<u>103</u> 0F <u>156</u>

GUILFORD ROAD IMPROVEMENTS

SIGNING AND PAVEMENT MARKING

PLAN SHEET

INDEX OF SIGNING QUANTITIES

CAPITAL PROJECT No. J-4175 AND B-3855

CHIEF, BUREAU OF HIGHWAYS DATE

SHEET

NO.

SPOL

SPOL

SPOL

SP02

SP02

SP02

SP02

SIGN

3A

RI-I (36" X36")

R3-7R (30" X 30")

R2-I (24" X 30")

R3-7R (30" X 30")

R3-7R (30" X 30")

R3-7R (30" X 30")

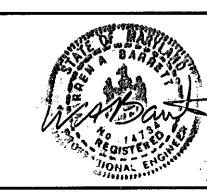
EXISTING SIGNS TO BE REMOVED (THIS SHEET)

REMARKS

4"X4" WOOD SUPPORT

DEPARTMENT OF PUBLIC WORKS HOWARD, COUNTY, MARYLAND

GANNETT FLEMING, INC. BALTIMORE, MARYLAND



DES: PNF

DRN: PNF

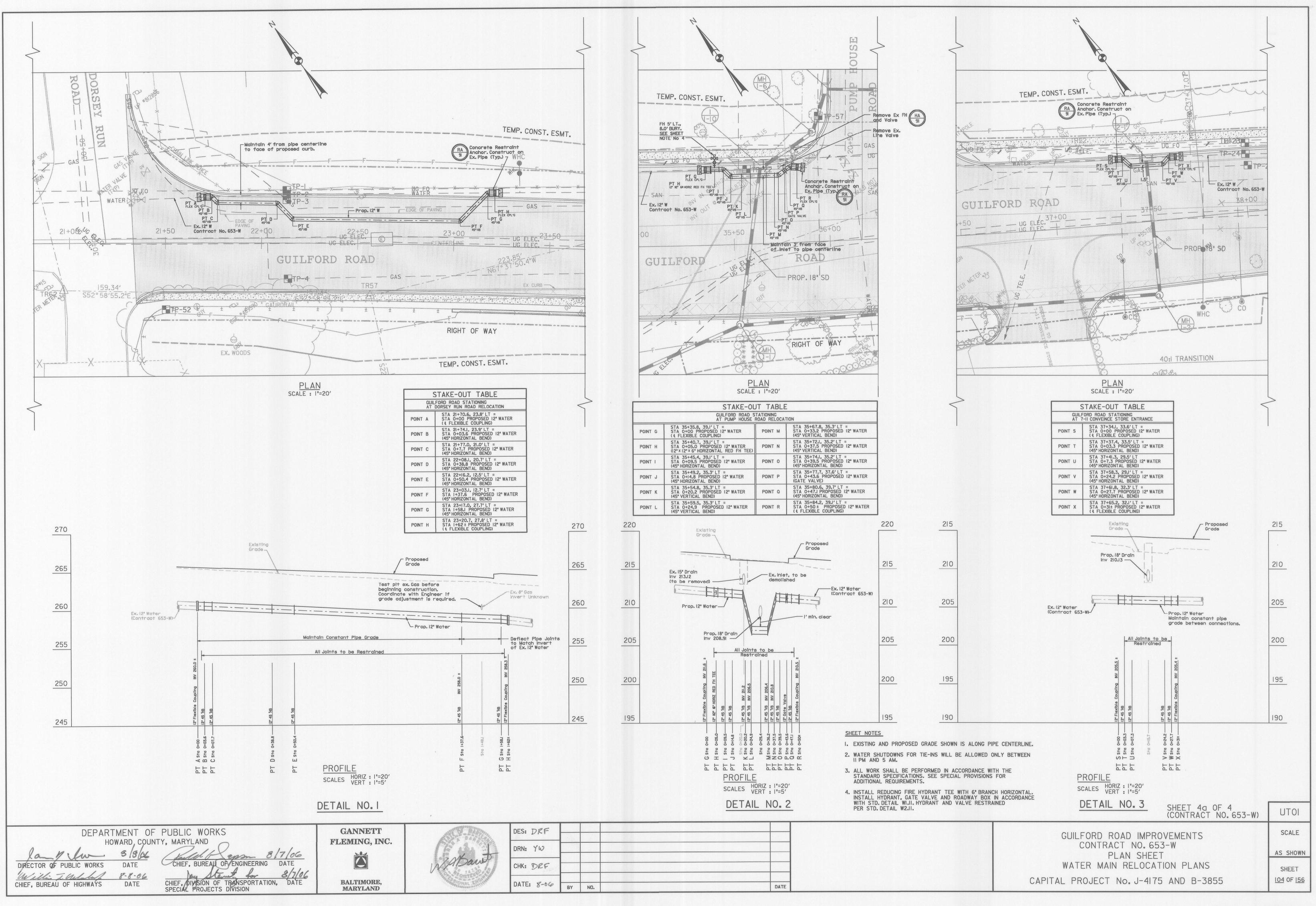
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DATE: 8-06

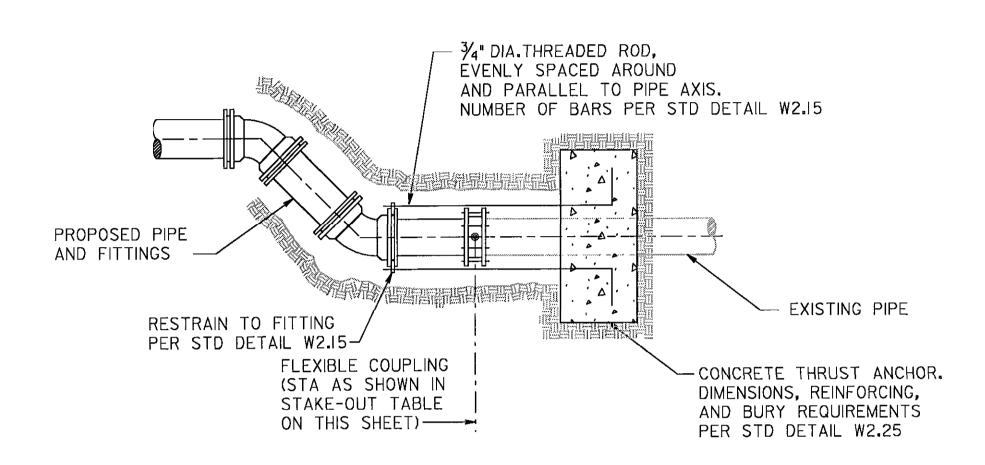
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BY

DATE

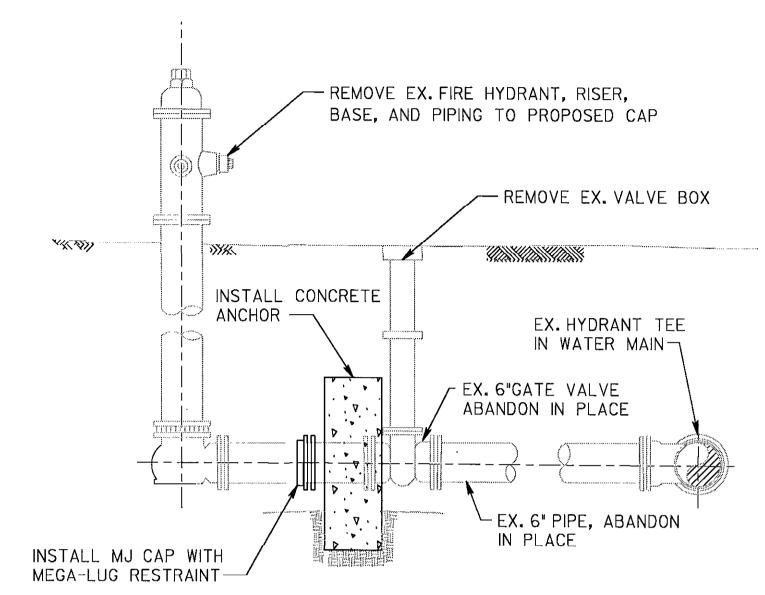


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DETAIL NOTES: I. RESTRAINT ANCHOR CANNOT BE SUBJECTED TO THRUST LOADS UNTIL DESIGN STRENGTH HAS BEEN ATTAINED.



HYDRANT ABANDONMENT DETAIL

HYDRANT ABANDONMENT NOTES: I. INSTALL CONCRETE ANCHOR TO ENCASE DOWNSTREAM JOINT ON EXISTING 6" GV. ANCHOR DIMENSIONS, REINFORCING,

AND BURY REQUIREMENTS PER STD. DETAIL W2.25.

- 2. CONCRETE ANCHOR MUST BE PLACED AND ALLOWED TO ACHIEVE DESIGN STRENGTH BEFORE HYDRANT IS REMOVED.
- 3. CLOSE HYDRANT VALVE. REMOVE VALVE BOX, HYDRANT. AND PIPE TO WITHIN 12" OF CONCRETE ANCHOR, SALVAGE OR' DISPOSE OF REMOVED MATERIAL AS DIRECTED BY HOWARD COUNTY DPW.
- 4. INSTALL MJ CAP ON END OF PIPE TO REMAIN IN PLACE. CAP SHALL BE RESTRAINED TO EXISTING PIPE BY MEGA-LUG RESTRAINT.
- 5. PLACE BACKFILL IN ACCORDANCE WITH MDSHA STD. SPECIFICATION SECTION 302. INSTALL BURIED PIPE WARNING TAPE 12" BELOW GRADE OVER ANCHOR AND ABANDONED VALVE.

DEPARTMENT OF PUBLIC WORKS HOWARD, COUNTY, MARYLAND

CHIEF, BUREAU (OF PINGINEERING DATE CHIEF, PIVISION OF TRANSPORTATION, DATE SPECIAL PROJECTS DIVISION CHIEF. BUREAU OF HIGHWAYS DATE

GANNETT FLEMING, INC.

BALTIMORE,

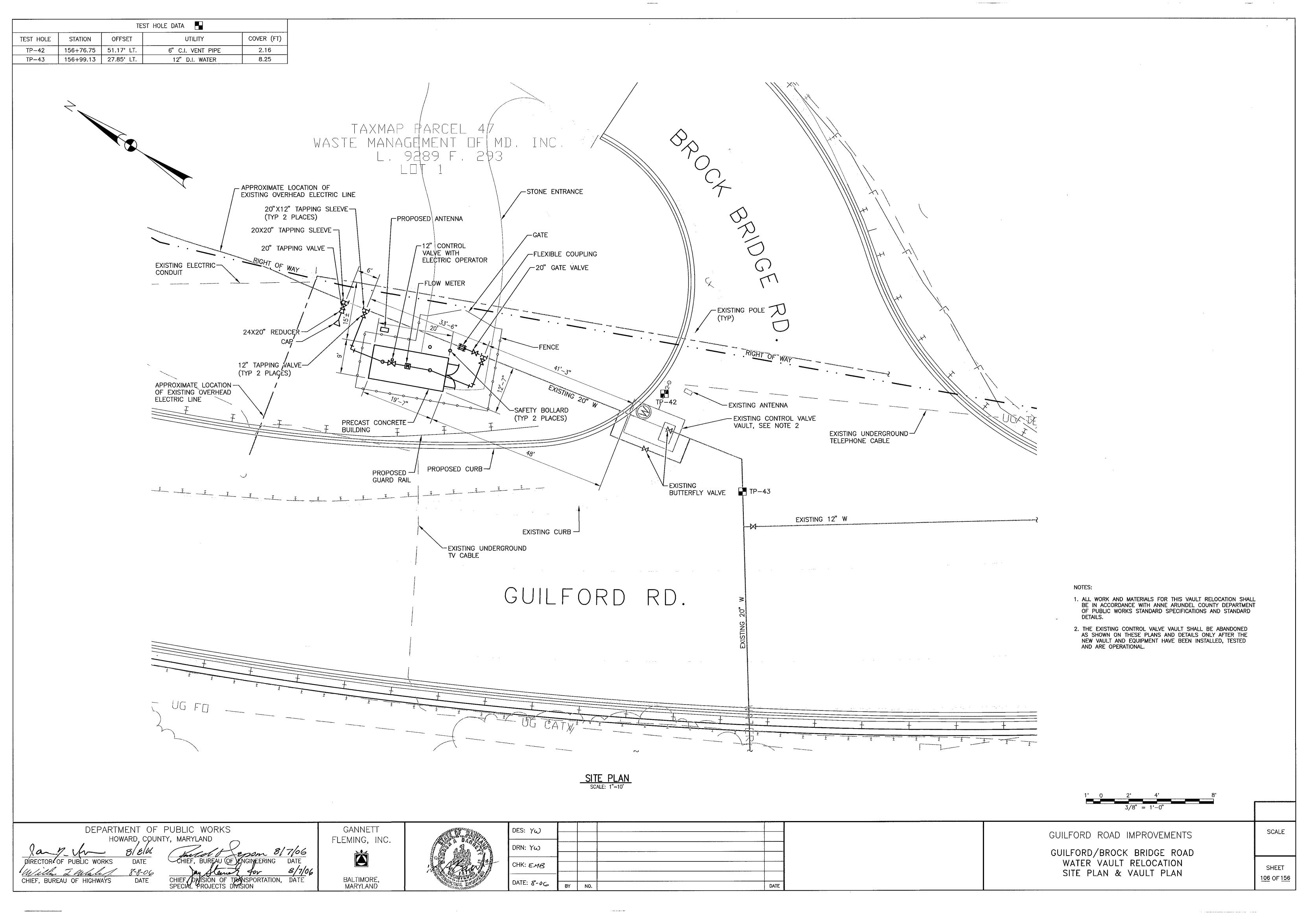
MARYLAND

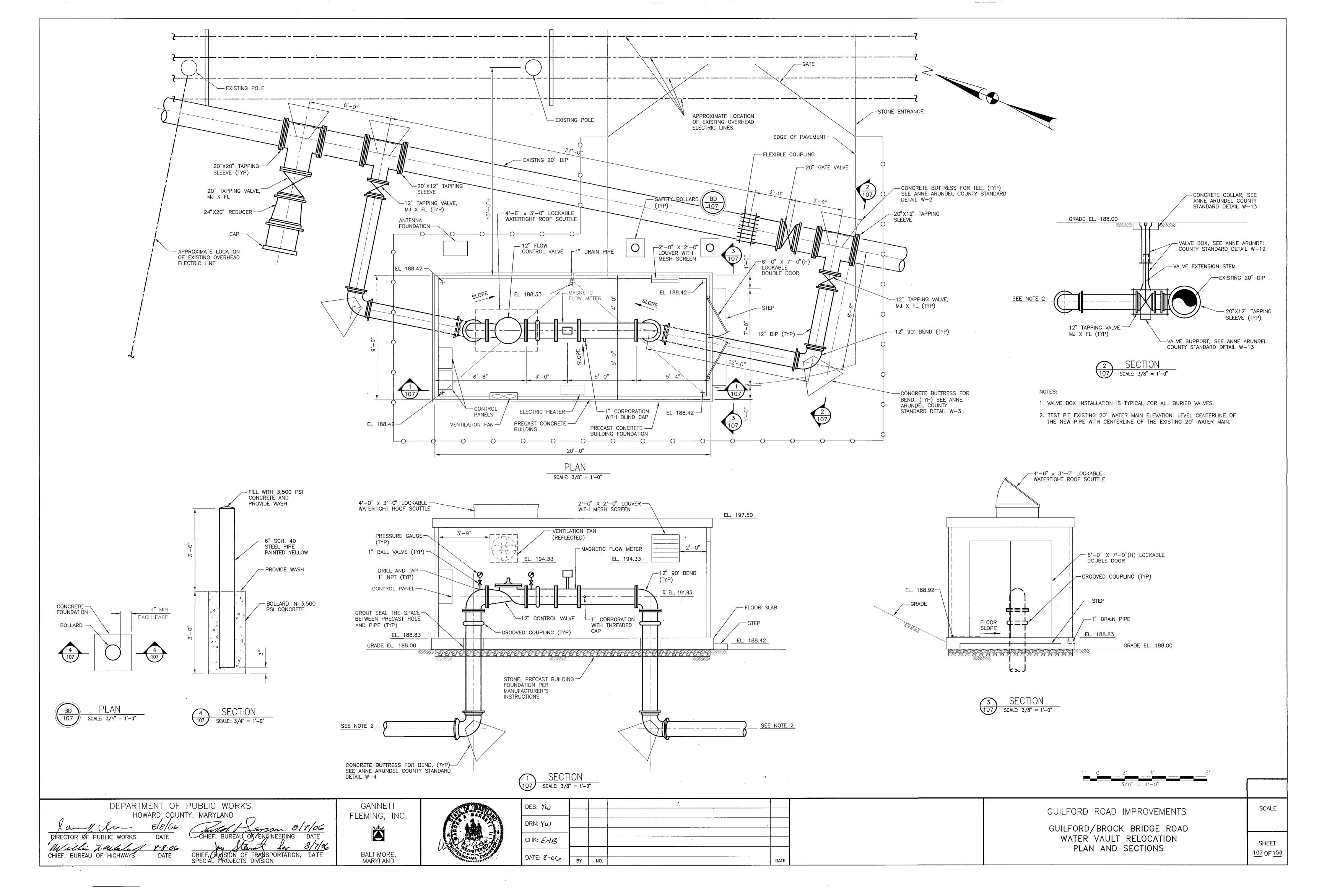


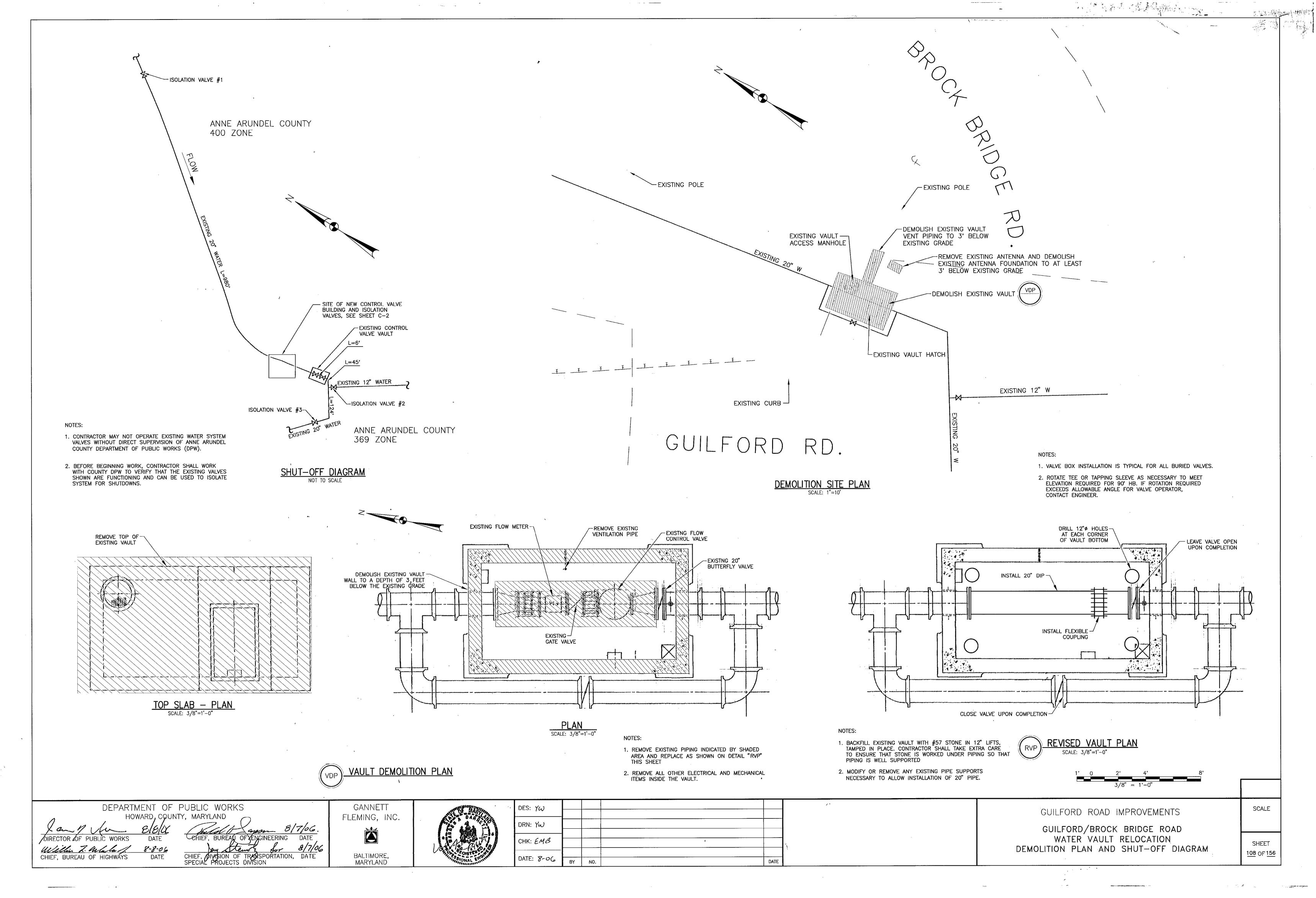
DES: DRF			
DRN: Υω			
CHK: DRF			
 DATE: 8-0C	BY	NO.	DATE

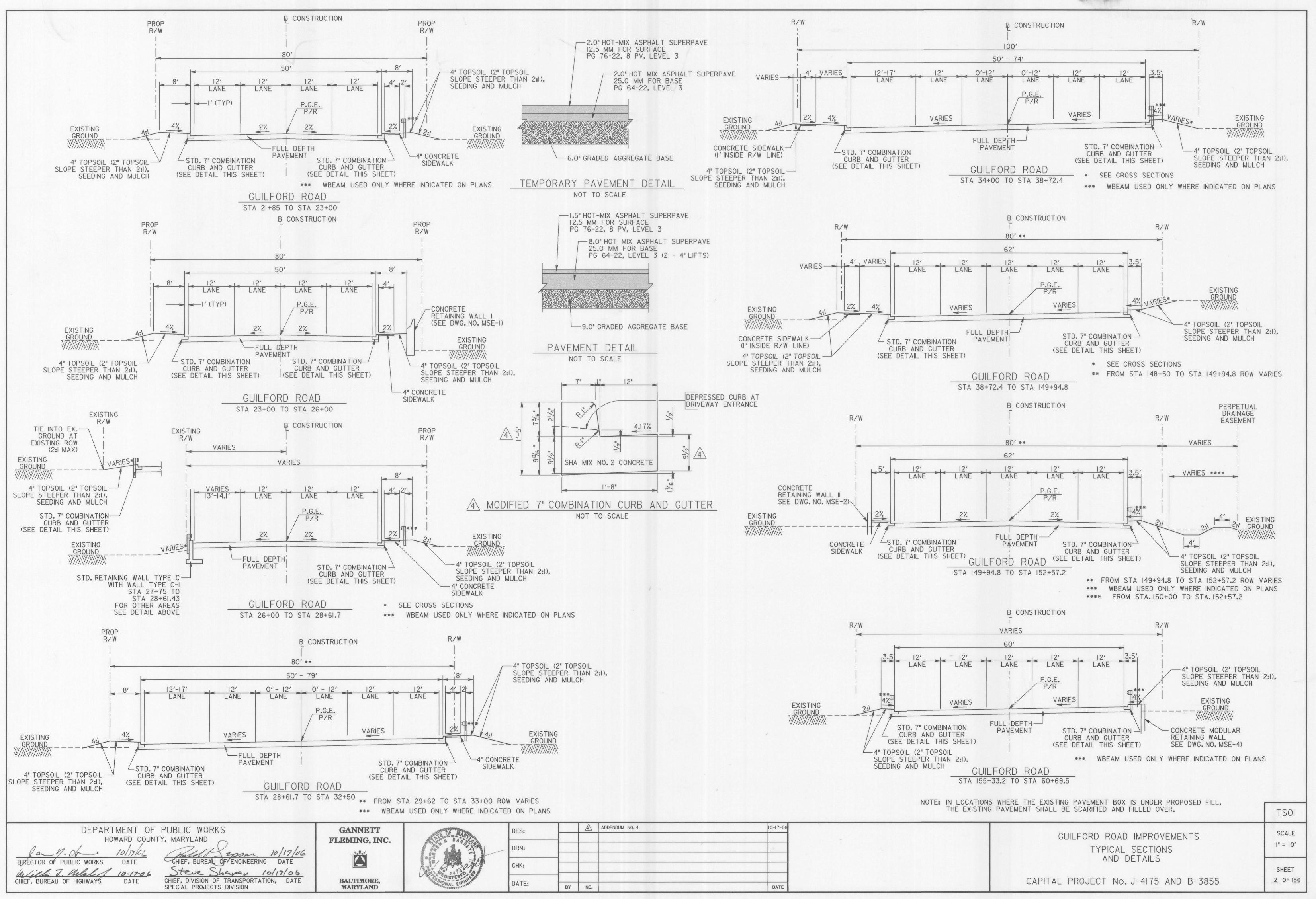
GUILFORD ROAD IMPROVEMENTS CONTRACT NO.653-W WATER MAIN RELOCATION NOTES AND DETAILS CAPITAL PROJECT No. J-4175 AND B-3855

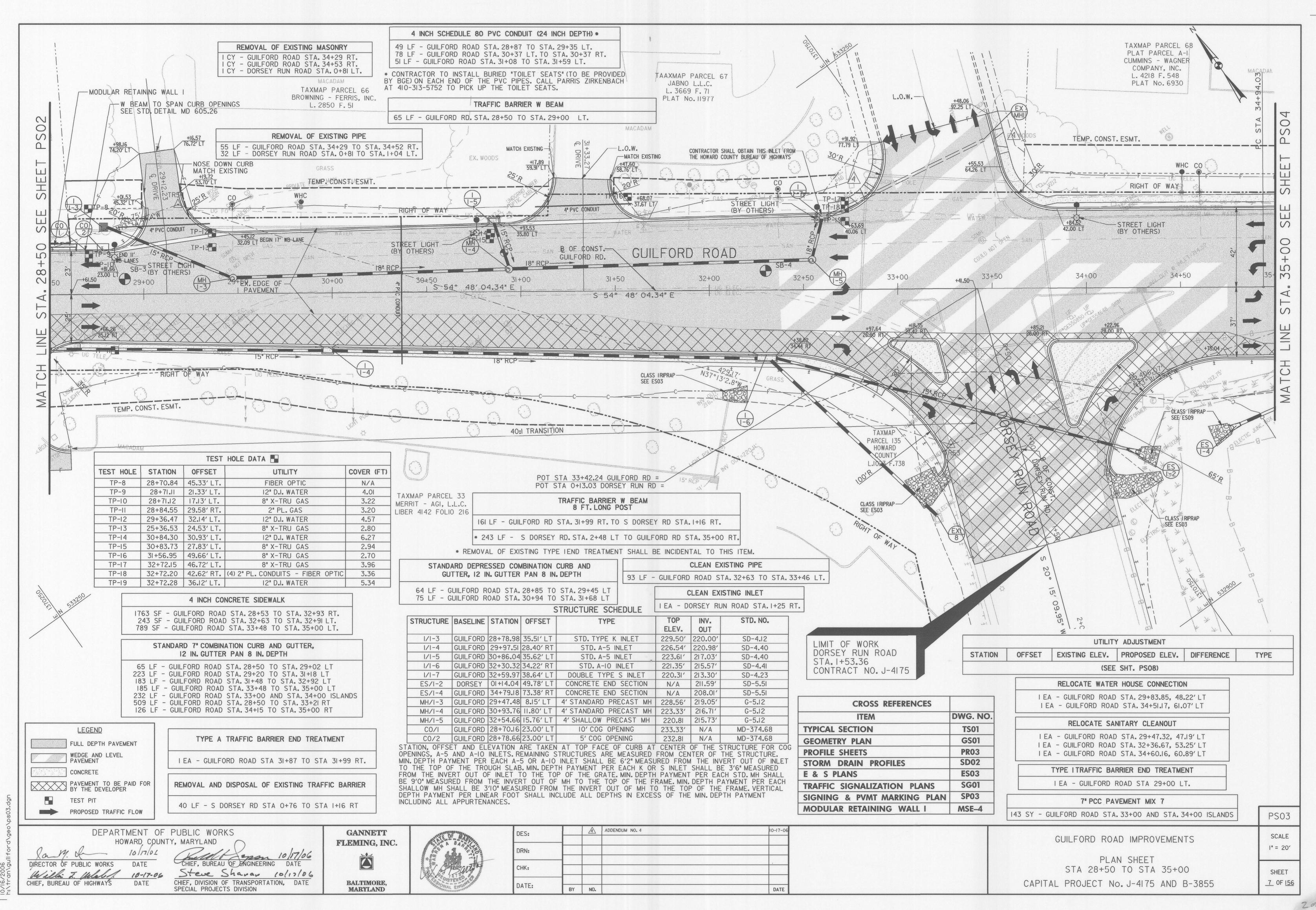
SCALE AS SHOWN SHEET 105 OF 156

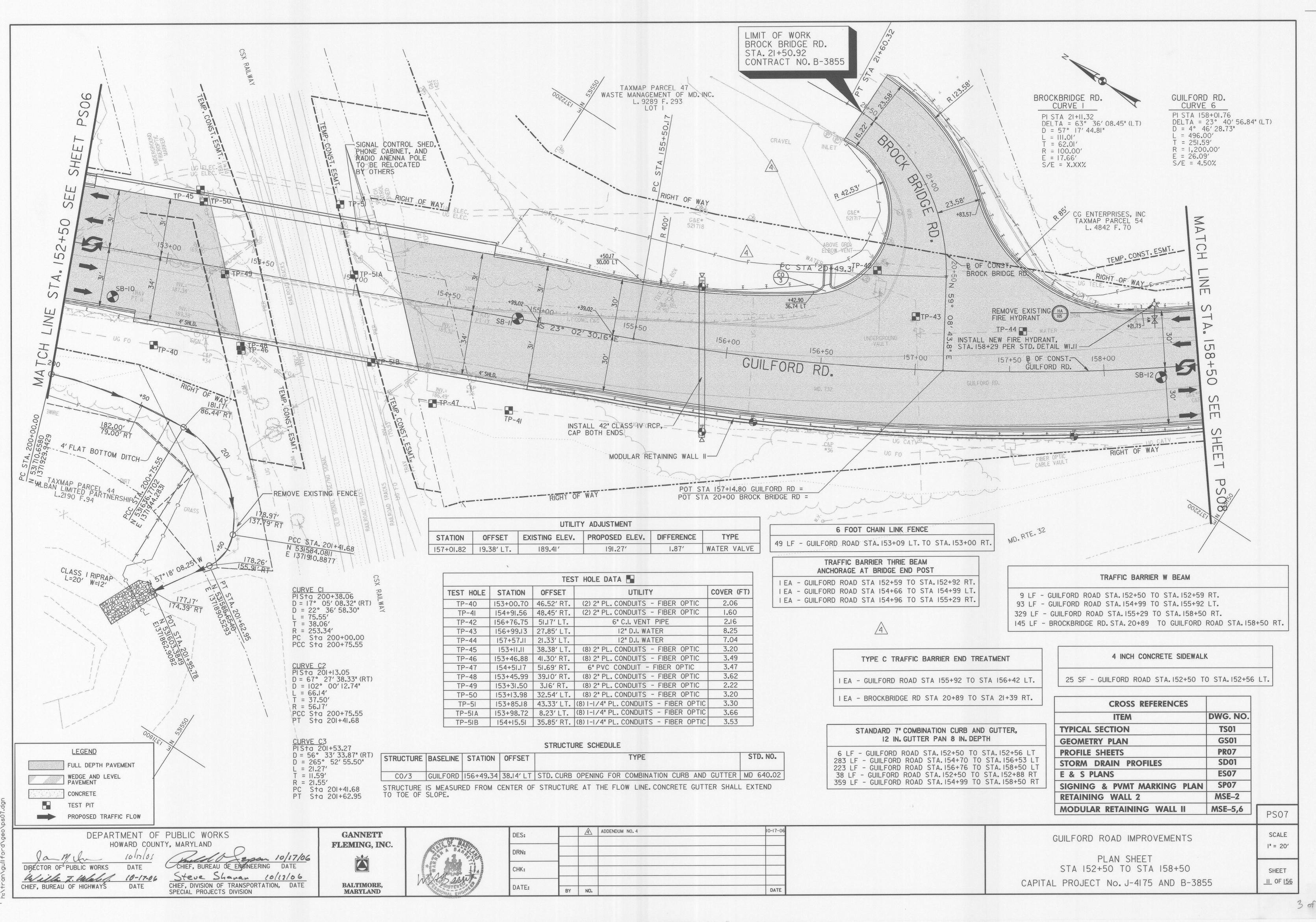


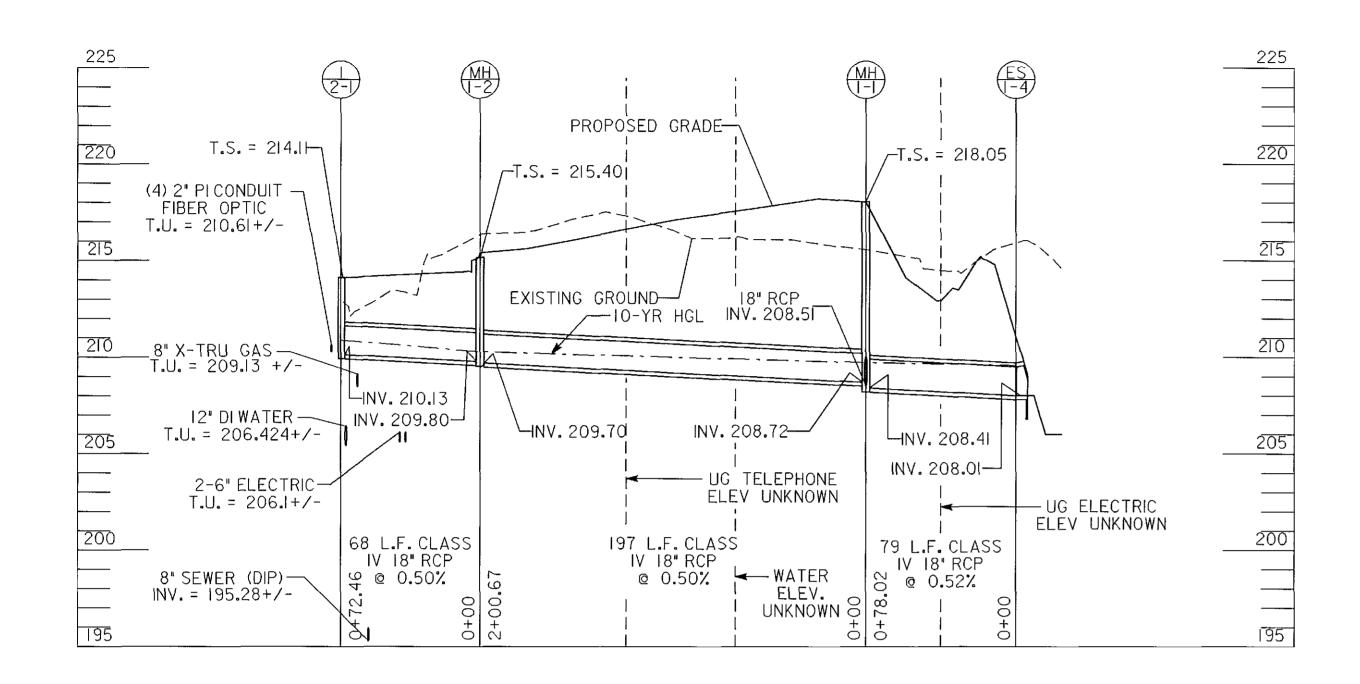


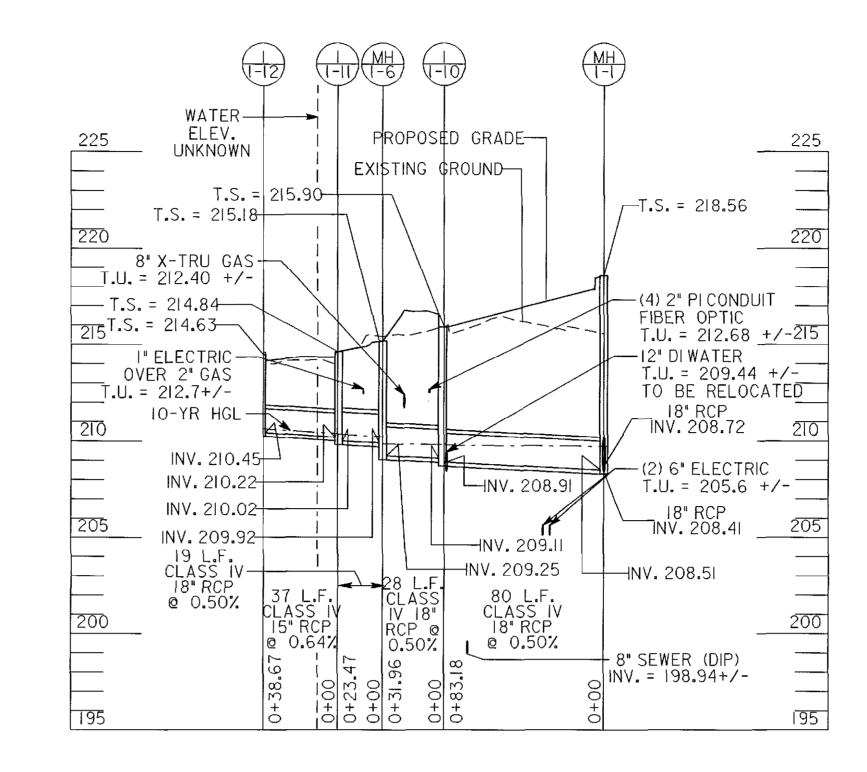








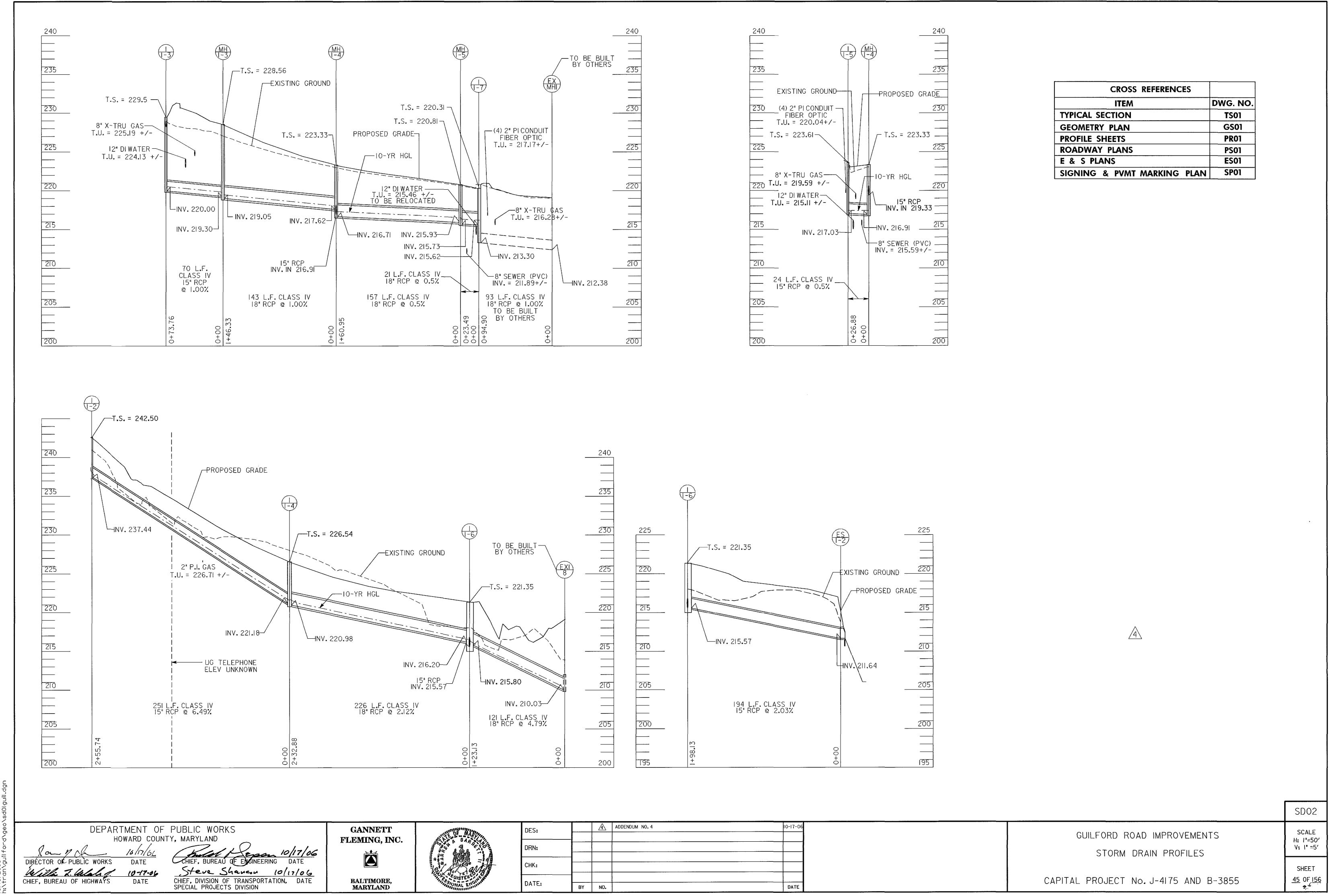


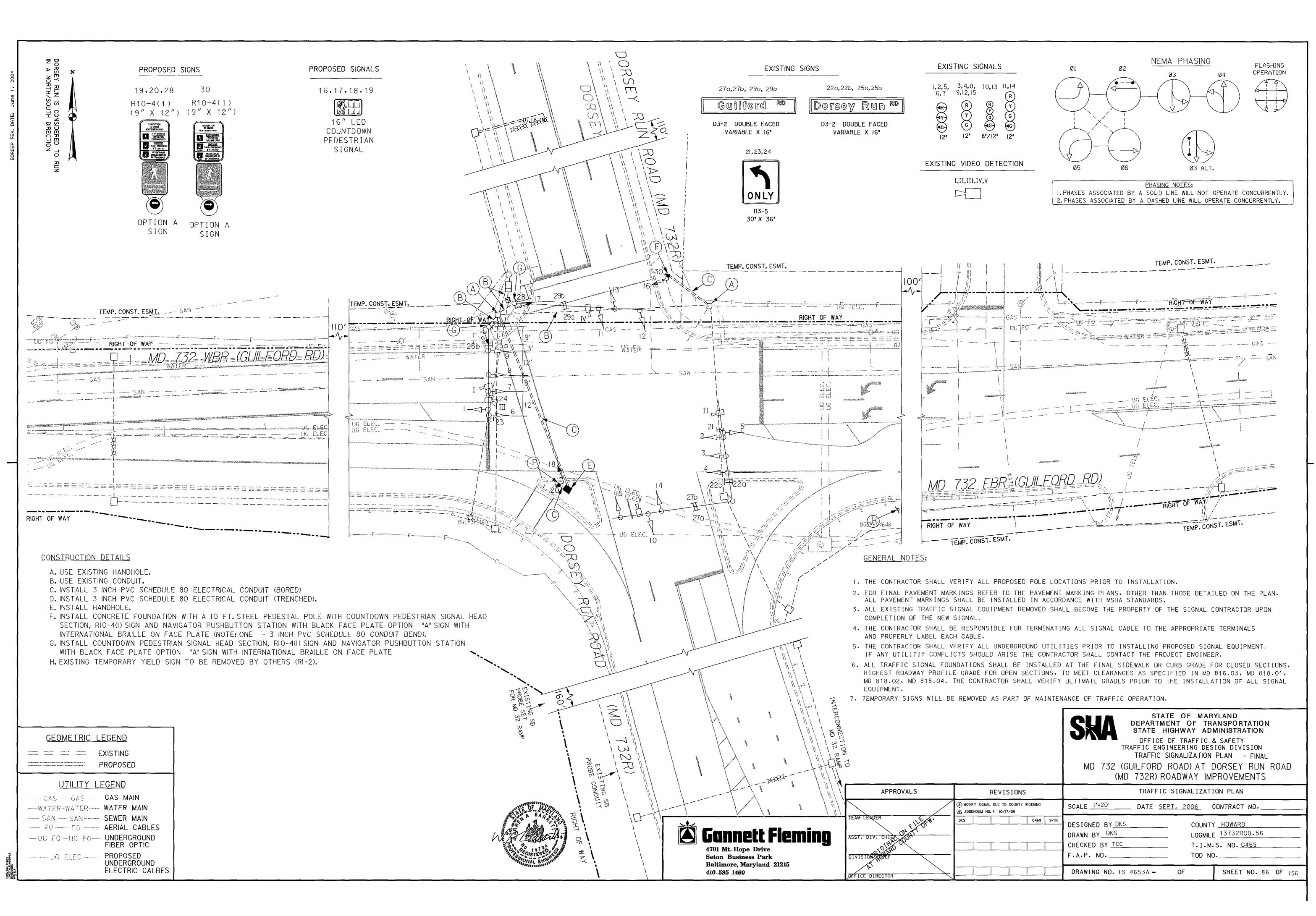


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CROSS REFERENCES	
ITEM	DWG. NO.
TYPICAL SECTION	TS01
GEOMETRY PLAN	GS01
PROFILE SHEETS	PR01
ROADWAY PLANS	PS01
E & S PLANS	ES01
SIGNING & PVMT MARKING PLAN	SP01

SDOI DEPARTMENT OF PUBLIC WORKS ADDENDUM NO. 4 **GANNETT** GUILFORD ROAD IMPROVEMENTS HOWARD COUNTY, MARYLAND FLEMING, INC. H: 1'=50' V: I* =5' STORM DRAIN PROFILES Steve Shaver 10/17/06 CHIEF, DIVISION OF TRANSPORTATION, DATE SPECIAL PROJECTS DIVISION SHEET CHIEF, BUREAU OF HIGHWAYS CAPITAL PROJECT No. J-4175 AND B-3855 BALTIMORE, MARYLAND <u>44</u> 0F <u>156</u> BY





GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF MD 732 (GUILFORD ROAD) AT DORSEY RUN ROAD INTERSECTION. PARTIAL RECONSTRUCTION OF THE TRAFFIC SIGNAL IS REQUIRED. MD 732 (GUILFORD ROAD) IS ASSUMED TO RUN IN AN EAST - WEST DIRECTION, DORSEY RUN ROAD IS ASSUMED TO RUN IN A NORTH - SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE AS IN EXISTING CONDITIONS. THIS SIGNAL IS INTERCONNECTED TO THE EASTBOUND MD 32/ DORSEY RUN ROAD AND THE WESTBOUND MD 32/ DORSEY RUN ROAD SIGNALIZED INTERSECTIONS.

CONTROLLER REQUIREMENTS

INSTALL A NEMA 8 PHASE CONTROLLER IN A NEMA 6 BASE MOUNTED CABINET.

THE PRESENCE AND SAMPLING DETECTION REGIONS SHALL BE MONITORED/ACTUATED WITH VIDEO-DETECTION CAMERAS AND MICRO PROBE LOOP DETECTION. THE ADVANCED DETECTION REGIONS SHALL BE MONITORED/ACTUATED WITH NON-INVASIVE DETECTORS.

SPECIAL NOTES

I. THE FOLLOWING CONTACT PERSONS FOR DISTRICT #7 ARE AS FOLLOWS:

PROJECT CONTACTS:

MR. JOHN CONCANNON, ASSISTANT DISTRICT ENGINEER - TRAFFIC PHONE: (301) 624-8140

MR. RAY JOHNSON, ASSISTANT DISTRICT ENGINEER- MAINTENANCE PHONE: (301) 624-8105

MS. ANDREA ABEND, UTILITY ENGINEER PHONE:(30I) 624-8II5

MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION PHONE: (410) 787-7630

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR ACCORDING TO THE MOT PLANS. REFER TO MOT PLAN PHASE 3.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATOR.

CATEGORY CODE NO.

973023

DESCRIPTION

SHEET ALUMINUM SIGNS

2 EA RIO-4(I) (9" X I2")

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
203030	TEST PIT EXCAVATION	CY	1.0
801004	CONCRETE FOR SIGNAL FOUNDATIONS	CY	1.4
805115	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED	LF	100.0
805135	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED	LF	45.0
811001	FURNISH AND INSTALL ELECTRICAL HANDHOLE	EΑ	1.0
813015	INSTALL OVERHEAD SIGN	SF	1.5
818004	10 FOOT BREAKAWAY PEDESTAL POLE	EA	2.0
832020	BARE COPPER GROUND WIRE, NO. 6 AWG	LF	275.0
837001	GROUND ROD -3/41NCH DIAMETER X 10 FOOT LENGTH	EΑ	1.0
861105	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)	LF	330.0
861107	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	780.0
860278	12 INCH PEDESTRIAN SIGNAL HEAD SECTION POLE MOUNT	EΑ	6
865001	PUSHBUTTON AND SIGN	EΑ	4
800000	FURNISH AND INSTALL AUDIBLE / TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGN	EΑ	4

C. MATERIALS TO BE REMOVED BY THE CONTRACTOR. ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME PROPERTY OF THE CONTRACTOR.

PHASE CHART

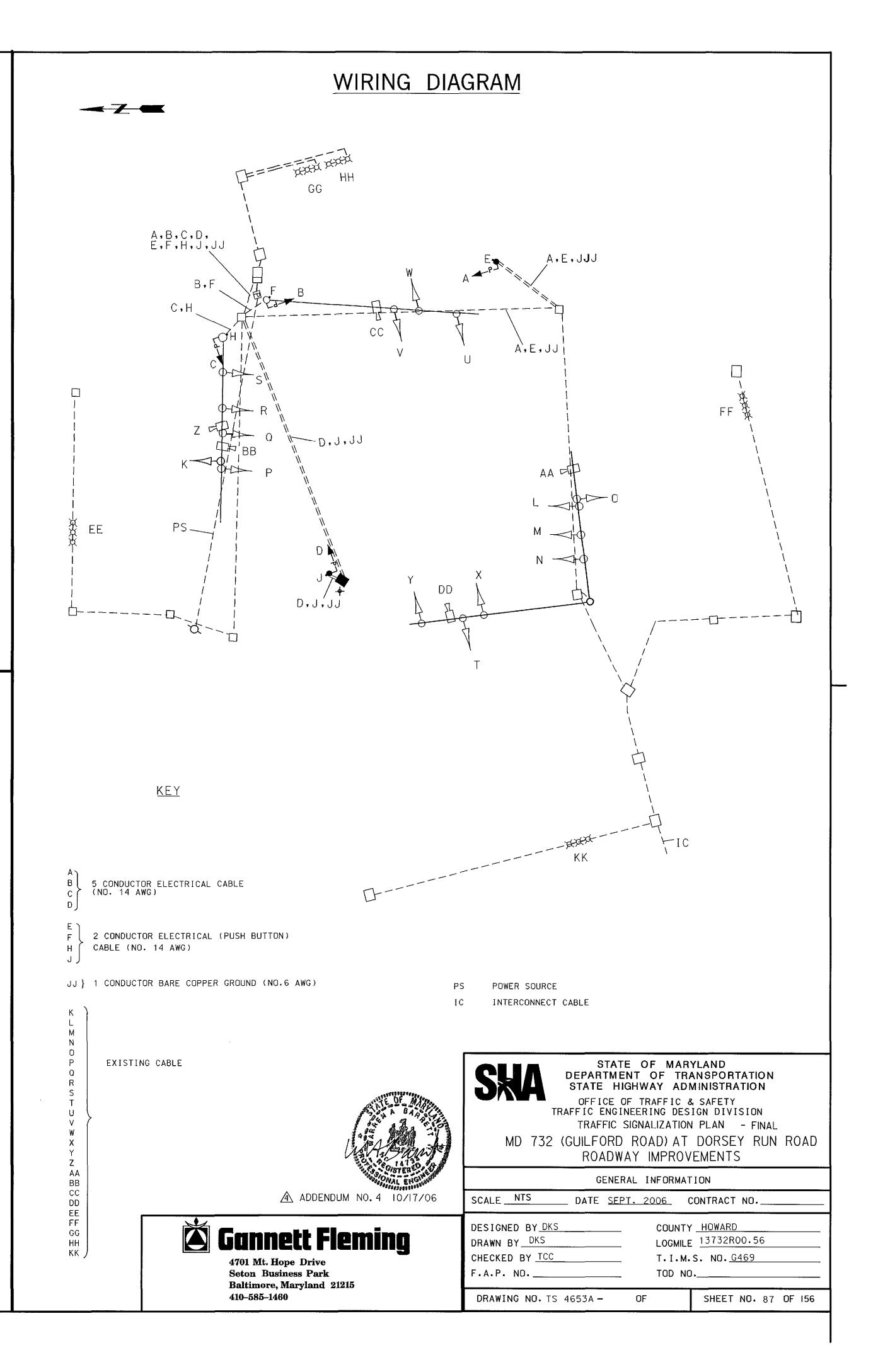
UNITS QUANTITY

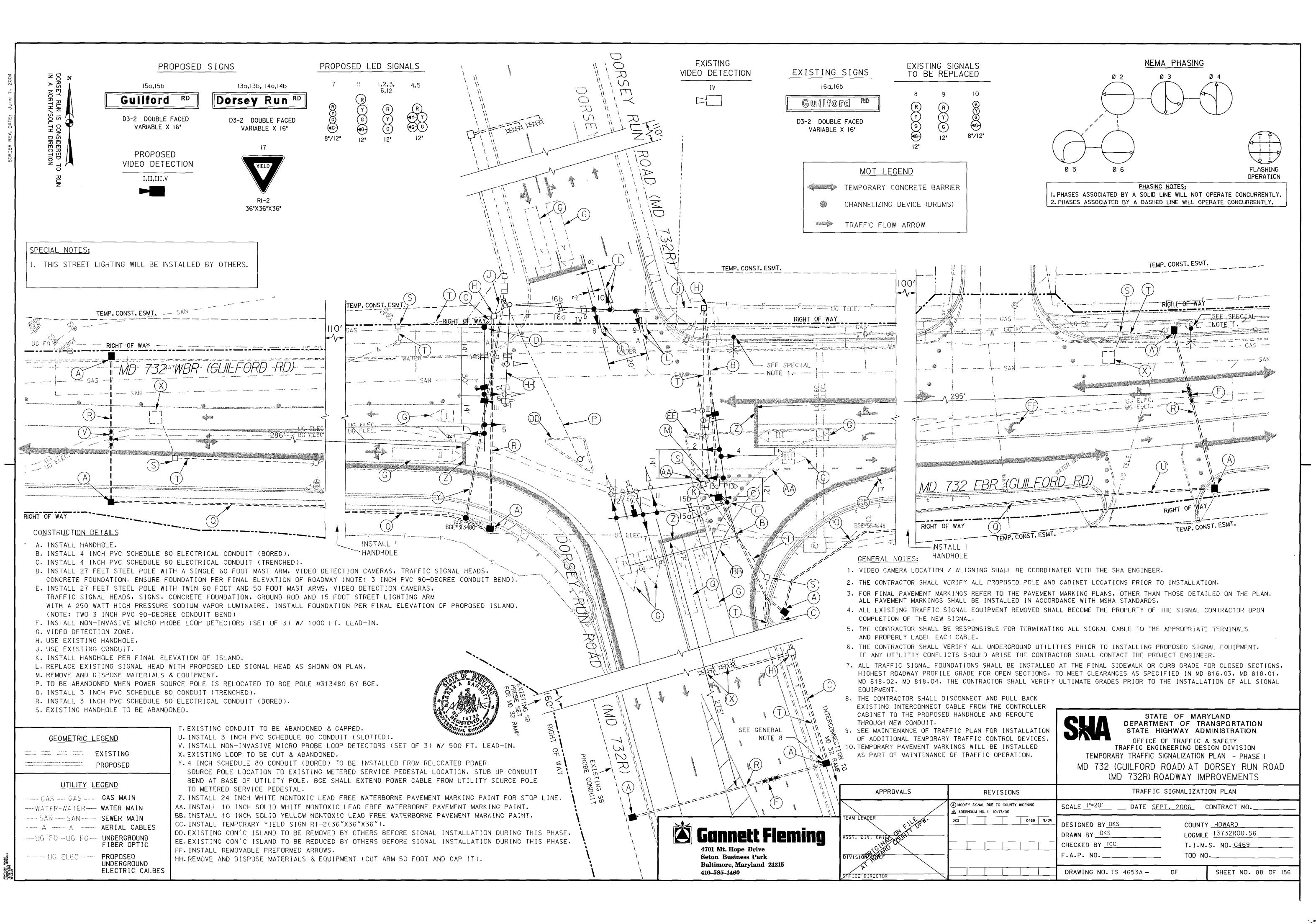
SF 1.5

1.5

R Y G

PHASE 1 AND 5	◆G	+ G	R	R	∢ G	+ G	+ G	R	R	R	R	R	R	R	R	DW	DW	DW	DW	
1 AND 5 CHANGE TO	1 ANI	D 6, 2	AND	5, OR	2 ANI	0 6														Ý
PHASE 1 AND 6	◆G	+ G	G	G	◆R	◆R	+ R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	}
1 AND 6 CHANGE	∢ Υ	+ Υ	Υ	Y	◆R	◆R	◆R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	
PHASE 2 AND 5	◆R	◆R	R	R	∢ G	∢ G	∢ G	G	G	R	R	R	R	R	R	WK	WK	DW	DW	••
2 AND 5 CHANGE	◆R	◆R	R	R	∢ Υ	- Υ	+ Y	Υ	Y	R	R	R	R	R	R	FL/DW	FL / DW	DW	DW	
PHASE 2 AND 6	◆R	◆R	G	G	◆R	◆R	◆R	G	G	R	R	R	R	R	R	WK	WK	DW	DW	••
2 AND 6 CHANGE	◆R	◆R	Υ	Υ	◆R	◆R	∢ R	Υ	Y	R	R	R	R	R	R	FL / DW	FL / DW	DW	DW	
PHASE 3	◆R	◆R	R	R	◆R	◆R	◆R	R	R	R	R	R	+G/G	← G/G	G	DW	DW	DW	DW	
3 CHANGE	◆R	◆R	R	R	+ R	◆R	+ R	R	R	R	R	R	Υ	Υ	Y	DW	DW	DW	DW	
ALT. PHASE 3	◆R	◆R	R	R	◆R	◆R	◆R	R	R	← G/G	+G/G	G	R	R	R	DW	DW	WK	WK	• (
PED CLEAR	◆R	+ R	R	R	◆R	◆R	◆R	R	R	Y	Υ	Υ	R	R	R	DW	DW	FL / DW	FL/DW	
PHASE 4	◆R	◆R	R	R	◆R	◆R	◆R	R	R	← G/G	+G/G	G	R	R	R	DW	DW	DW	DW	\triangle
4 CHANGE	◆R	◆R	R	R	◆R	◆R	+ R	R	R	Υ	Y	Υ	R	R	R	DW	DW	DW	DW	7)
FLASHING OPERATION	FL /Y	FL /Y	FL /Y	FL /Y	FL /Y	FL /Y	FL /Y	FL /Y	FL /R	FL /R	FL /R	FL /R	FL /R	FL /R	FL /R	FL /R	FL /R	FL /R	FL /R	+ 4 + + + + + + + + + + + + + + + + + + +





GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF MD 732 (GUILFORD ROAD) AT DORSEY RUN ROAD INTERSECTION. PARTIAL RECONSTRUCTION OF THE TRAFFIC SIGNAL IS REQUIRED. MD 732 (GUILFORD ROAD) IS ASSUMED TO RUN IN AN EAST - WEST DIRECTION, DORSEY RUN ROAD IS ASSUMED TO RUN IN A NORTH - SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE AS IN EXISTING CONDITIONS. THIS SIGNAL IS INTERCONNECTED TO THE EASTBOUND MD 32/ DORSEY RUN ROAD AND THE WESTBOUND MD 32/ DORSEY RUN ROAD SIGNALIZED INTERSECTIONS.

CONTROLLER REQUIREMENTS

INSTALL A NEMA 8 PHASE CONTROLLER IN A NEMA 6 BASE MOUNTED CABINET.

THE PRESENCE AND SAMPLING DETECTION REGIONS SHALL BE MONITORED/ACTUATED WITH VIDEO-DETECTION CAMERAS AND MICRO PROBE LOOP DETECTION. THE ADVANCED DETECTION REGIONS SHALL BE MONITORED/ACTUATED WITH NON-INVASIVE DETECTORS.

SPECIAL NOTES

I. THE FOLLOWING CONTACT PERSONS FOR DISTRICT #7 ARE AS FOLLOWS:

PROJECT CONTACTS:

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MR. RAY JOHNSON, ASSISTANT DISTRICT ENGINEER- MAINTENANCE PHONE: (301) 624-8105

MS. ANDREA ABEND, UTILITY ENGINEER PHONE:(301) 624-8115

MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION PHONE:(410) 787-7630

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR ACCORDING TO THE MOT PLANS. REFER TO MOT PLAN PHASE I.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATOR.

5-8 CAMERAS

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
973023	FLAT SHEET ALUMINUM SIGNS (BLUE OR GREEN) 2 EA D3-2 DOUBLE FACED (VARIABLE X 16")	SF SF	32.0 32.0
900000	VIDEO DETECTION INTERFACE EQUIPMENT FOR	EA	1

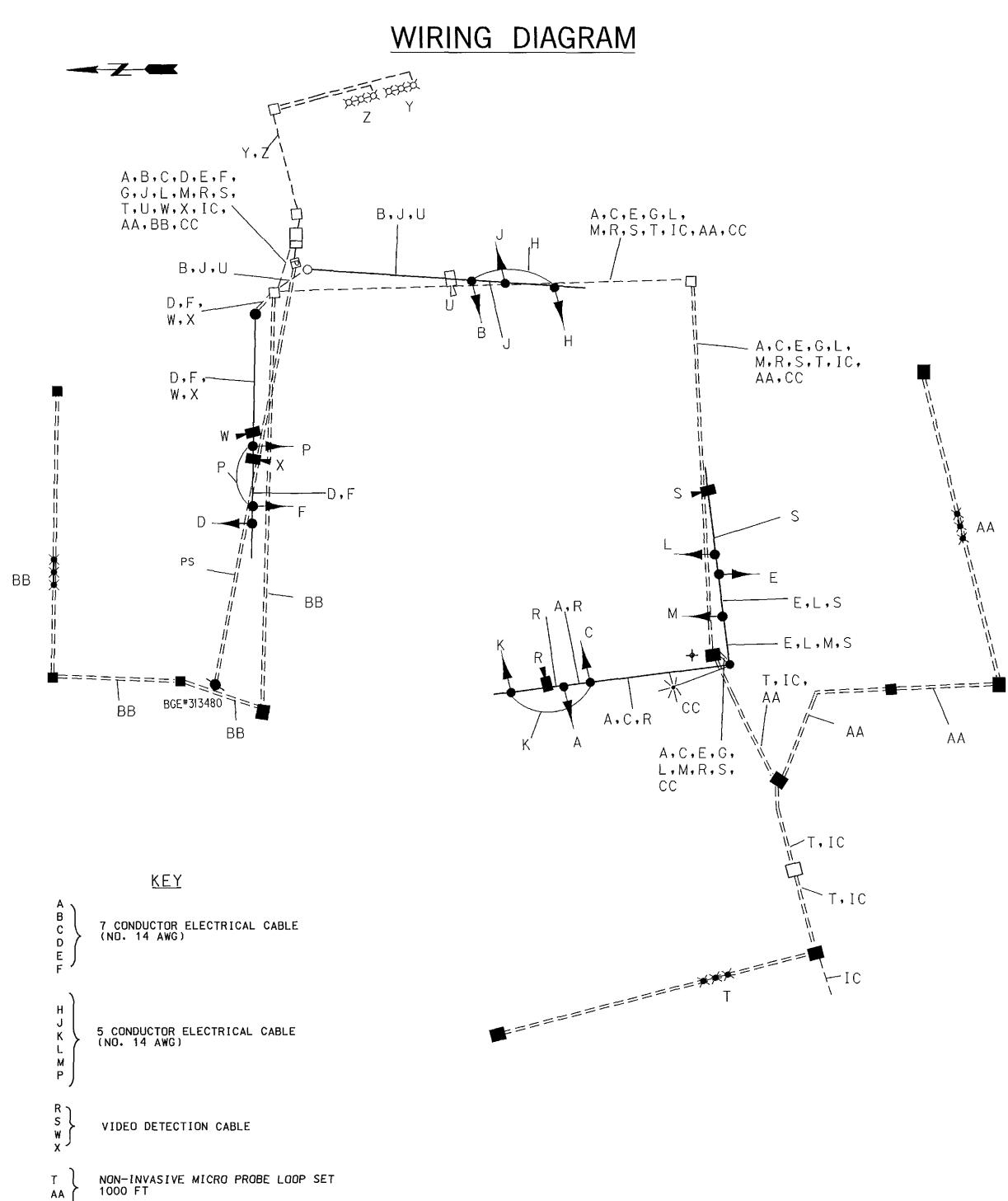
B, EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
114015	10 INCH YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT	LF	60.0
114020	10 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT	LF	100.0
114045	24 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT	LF	60.0
114260	REMOVABLE PREFORMED ARROWS	EΑ	1.0
203030	TEST PIT EXCAVATION	CY	1.0
801004	CONCRETE FOR SIGNAL FOUNDATIONS	CY	9.3
813015	INSTALL OVERHEAD SIGN	\$F	32.0
805115	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED	LF	365.0
805118	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED	LF	165.0
805135	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED	LF	590.0
805140	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	245.0
805150	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED	LF	65.0
810601	NONINVASIVE DETECTOR, 500 FOOT LEAD IN CABLE	EA	1.0
810605	NONINVASIVE DETECTOR, 1000 FOOT LEAD IN CABLE	EA	2.0
811001	FURNISH AND INSTALL ELECTRICAL HANDHOLE	EA	11.0
816001	VIDEO DETECTION CAMERA	EA	4.0
816010	CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER	EA	4.0
818041	STEEL POLE WITH A SINGLE 60 FOOT MAST ARM	EΑ	1.0
818050	STEEL POLE WITH TWIN 50 FOOT AND 60 FOOT MAST ARMS	EΑ	1.0
831010	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE	EΑ	1.0
832020	BARE COPPER GROUND WIRE, NO. 6 AWG	LF	230.0
837001	GROUND ROD -3/4INCH DIA. X 10 FT LENGTH	EΑ	1.0
800000	8" LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	6.0
860284	12" LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EΑ	42.0
861107	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	790.0
861108	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)	LF	1280.0
861116	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)	LF	310.0
866103	15 FOOT LIGHTING ARM ON SIGNAL STRUCTURE	EA	1.0
800000	REMOVE AND DISPOSE MATERIALS & EQUIPMENT	LS	1.0

C. MATERIALS TO BE REMOVED BY THE CONTRACTOR. ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME PROPERTY OF THE CONTRACTOR.

PHASE CHART

2 AND 5 OR 2 AND 6													
PHASE 2 AND 5	R	R	R	+G/G	+G/G	G	R	R	R	R	R	R	→
2 AND 5 CHANGE	R	R	R	ΨY	← Y	Υ	R	R	R	R	R	R	\checkmark
PHASE 2 AND 6	G	G	G	G	G	G	R	R	R	R	R	R	<
2 AND 6 CHANGE	Υ	Υ	Υ	Υ	Υ	Υ	R	R	R	R	R	R	
PHASE 3	R	R	R	R	R	R	R	R	R	+G/G	+G∕G	G	
3 CHANGE	R	R	R	R	R	R	R	R	R	Υ	Υ	Υ	
PHASE 4	R	R	R	R	R	R	+G/G	+G⁄G	G	R	R	R	Δ
4 CHANGE	R	R	R	R	R	R	Υ	Υ	Υ	R	R	R	
FLASHING OPERATION	FL /Y	FL /Y	FL /R	<u></u>									



NON-INVASIVE MICRO PROBE LOOP SET 500 FT

G } 1 CONDUCTOR BARE COPPER GROUND (NO. 6 AWG)

CC 2 CONDUCTOR ELECTRICAL CABLE TYPE T/C (NO 12 AWG)

EXISTING CABLE

POWER SOURCE

INTERCONNECT CABLE

GROUND ROD

A ADDENDUM NO. 4 10/17/06

Cannett Fleming 4701 Mt. Hope Drive Seton Business Park Baltimore, Maryland 21215 410-585-1460

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION TEMPORARY TRAFFIC SIGNALIZATION PLAN - PHASE I MD 732 (GUILFORD ROAD) AT DORSEY RUN ROAD

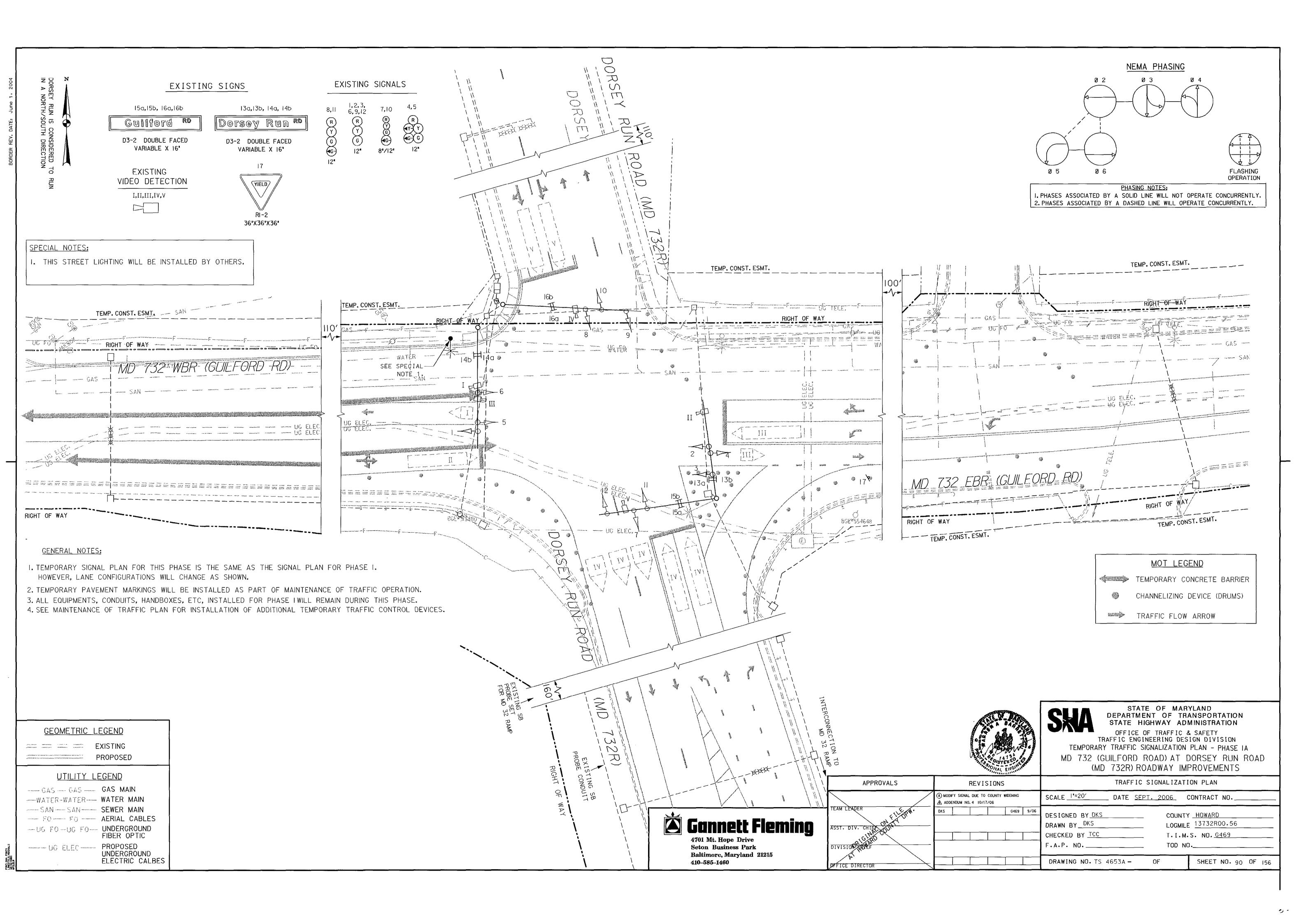
ROADWAY IMPROVEMENTS GENERAL INFORMATION

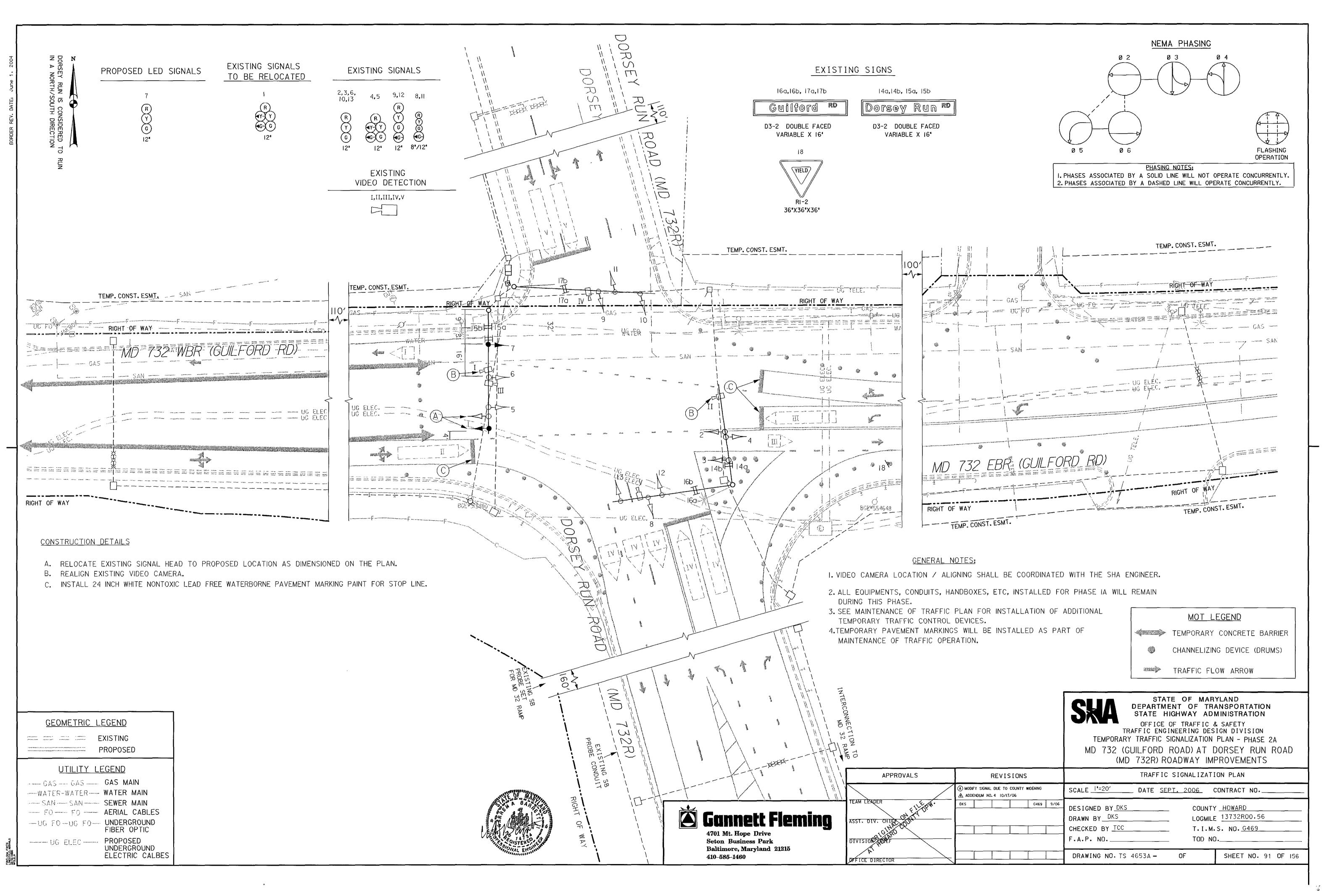
SCALE NTS DATE SEPT. 2006 CONTRACT NO. DESIGNED BY DKS COUNTY HOWARD LOGMILE 13732R00.56

DRAWN BY DKS CHECKED BY TCC F.A.P. NO._

DRAWING NO. TS 4653A -

T.I.M.S. NO. <u>G469</u> TOD NO.__ SHEET NO. 89 OF 156





GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF MD 732 (GUILFORD ROAD) AT DORSEY RUN ROAD INTERSECTION. PARTIAL RECONSTRUCTION OF THE TRAFFIC SIGNAL IS REQUIRED. MD 732 (GUILFORD ROAD) IS ASSUMED TO RUN IN AN EAST - WEST DIRECTION, DORSEY RUN ROAD IS ASSUMED TO RUN IN A NORTH - SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE AS IN EXISTING CONDITIONS. THIS SIGNAL IS INTERCONNECTED TO THE EASTBOUND MD 32/ DORSEY RUN ROAD AND THE WESTBOUND MD 32/ DORSEY RUN ROAD SIGNALIZED INTERSECTIONS.

CONTROLLER REQUIREMENTS

INSTALL A NEMA 8 PHASE CONTROLLER IN A NEMA 6 BASE MOUNTED CABINET.

THE PRESENCE AND SAMPLING DETECTION REGIONS SHALL BE MONITORED/ACTUATED WITH VIDEO-DETECTION CAMERAS AND MICRO PROBE LOOP DETECTION. THE ADVANCED DETECTION REGIONS SHALL BE MONITORED/ACTUATED WITH NON-INVASIVE DETECTORS.

SPECIAL NOTES

I. THE FOLLOWING CONTACT PERSONS FOR DISTRICT *7 ARE AS FOLLOWS:

PROJECT CONTACTS:

MR. JOHN CONCANNON, ASSISTANT DISTRICT ENGINEER - TRAFFIC PHONE: (301) 624-8140

MR. RAY JOHNSON, ASSISTANT DISTRICT ENGINEER- MAINTENANCE PHONE: (301) 624-8105

MS. ANDREA ABEND, UTILITY ENGINEER

PHONE:(30I) 624-8II5 MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION PHONE: (410) 787-7630

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR ACCORDING TO THE MOT PLANS. REFER TO MOT PLAN PHASE 2A.

C. MATERIALS TO BE REMOVED BY THE CONTRACTOR.

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

REALIGN EXISTING VIDEO CAMERA

RELOCATE EXISTING SIGNAL HEAD

PAVEMENT MARKING PAINT

24 INCH WHITE NONTOXIC LEAD FREE WATERBORNE

12" LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION

ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

QUANTITY

60.0

3.0

2.0

1.0

100.0

EΑ

EΑ

EΑ

LF

DESCRIPTION

CATEGORY

CODE NO.

114045

860284

800000

860265

861107

ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME PROPERTY OF THE CONTRACTOR.

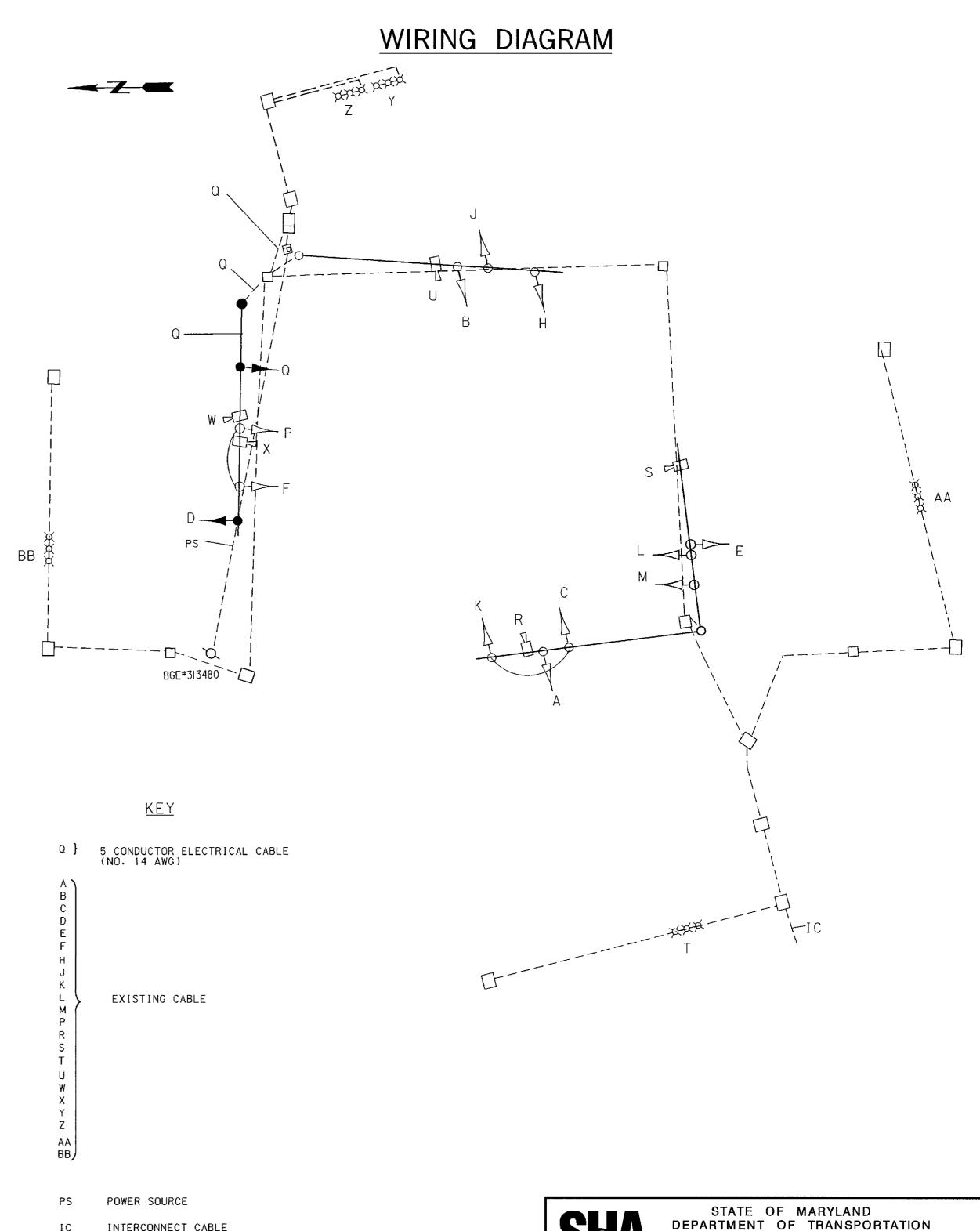
EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATOR.

PHASE CHART

13

2 AND 5 OR 2 AND 6														
PHASE 2 AND 5	R	R	R	+G⁄G	← G/G	G	G	R	R	R	R	R	R	
2 AND 5 CHANGE	R	R	R	ΨY	◆ Υ	Υ	Υ	R	R	R	R	R	R	\(\)
PHASE 2 AND 6	G	G	G	G	G	G	G	R	R	R	R	R	R	
2 AND 6 CHANGE	Υ	Υ	Υ	Υ	Υ	Υ	Y	R	R	R	R	R	R	
PHASE 3	R	R	R	R	R	R	R	R	R	R	+G/G	+G∕G	G	
3 CHANGE	R	R	R	R	R	R	R	R	R	R	Υ	Υ	Υ	
PHASE 4	R	R	R	R	R	R	R	← G/G	+G/G	G	R	R	R	$\begin{array}{ c c } \hline & \hline \\ \hline & \hline \\ \hline \end{array}$
4 CHANGE	R	R	R	R	R	R	R	Υ	Υ	Υ	R	R	R	
FLASHING OPERATION	FL /Y	FL /Y	FL /Y	FL /R	FL /R	FL /R	FL /R	FL /R	FL /R	+ 4 + 4 + + + + + + + + + + + + + + + + + + +				



INTERCONNECT CABLE

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION TEMPORARY TRAFFIC SIGNALIZATION PLAN - PHASE 2A MD 732 (GUILFORD ROAD) AT DORSEY RUN ROAD

ROADWAY IMPROVEMENTS

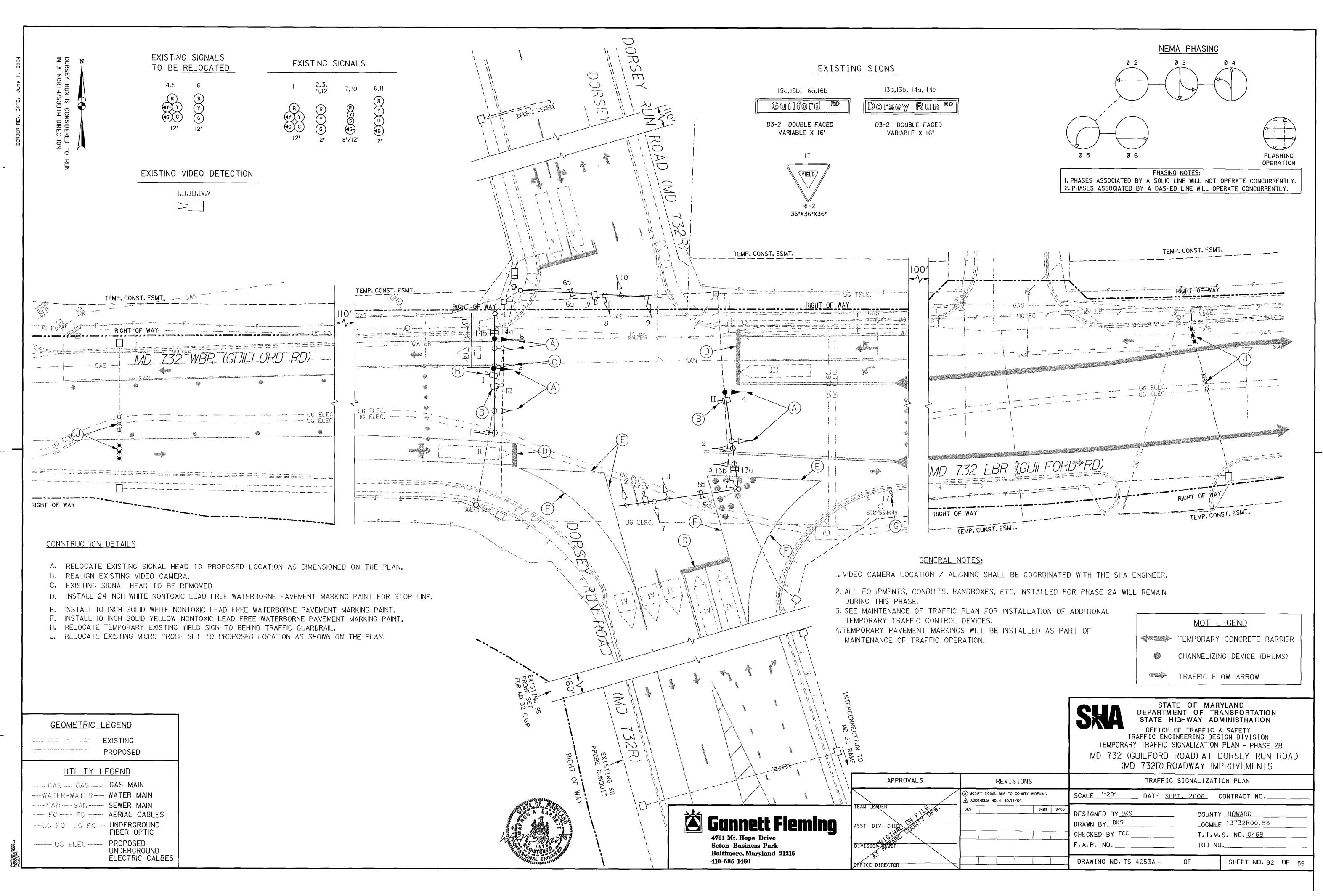
GENERAL INFORMATION

A ADDENDUM NO. 4 10/17/06

Gannett Fleming

4701 Mt. Hope Drive Seton Business Park Baltimore, Maryland 21215 410-585-1460

SCALE NTS DATE SEPT. 2006 CONTRACT NO. DESIGNED BY DKS COUNTY HOWARD DRAWN BY DKS LOGMILE 13732R00.56 CHECKED BY TCC T.I.M.S. NO.<u>G469</u> TOD NO.__ F.A.P. NO._ SHEET NO.91A OF 156 DRAWING NO. TS 4653A -



GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF MD 732 (GUILFORD ROAD) AT DORSEY RUN ROAD INTERSECTION. PARTIAL RECONSTRUCTION OF THE TRAFFIC SIGNAL IS REQUIRED. MD 732 (GUILFORD ROAD) IS ASSUMED TO RUN IN AN EAST - WEST DIRECTION, DORSEY RUN ROAD IS ASSUMED TO RUN IN A NORTH - SOUTH DIRECTION.

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CONTROLLER REQUIREMENTS

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THE PRESENCE AND SAMPLING DETECTION REGIONS SHALL BE MONITORED/ACTUATED WITH VIDEO-DETECTION CAMERAS AND MICRO PROBE LOOP DETECTION. THE ADVANCED DETECTION REGIONS SHALL BE MONITORED/ACTUATED WITH NON-INVASIVE DETECTORS.

SPECIAL NOTES

I. THE FOLLOWING CONTACT PERSONS FOR DISTRICT #7 ARE AS FOLLOWS:

PROJECT CONTACTS:

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MR. RAY JOHNSON, ASSISTANT DISTRICT ENGINEER- MAINTENANCE PHONE: (301) 624-8105

MS. ANDREA ABEND, UTILITY ENGINEER PHONE:(30I) 624-8II5

MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION PHONE: (410) 787-7630

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR ACCORDING TO THE MOT PLANS. REFER TO MOT PLAN PHASE 2B.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATOR.

NONE

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

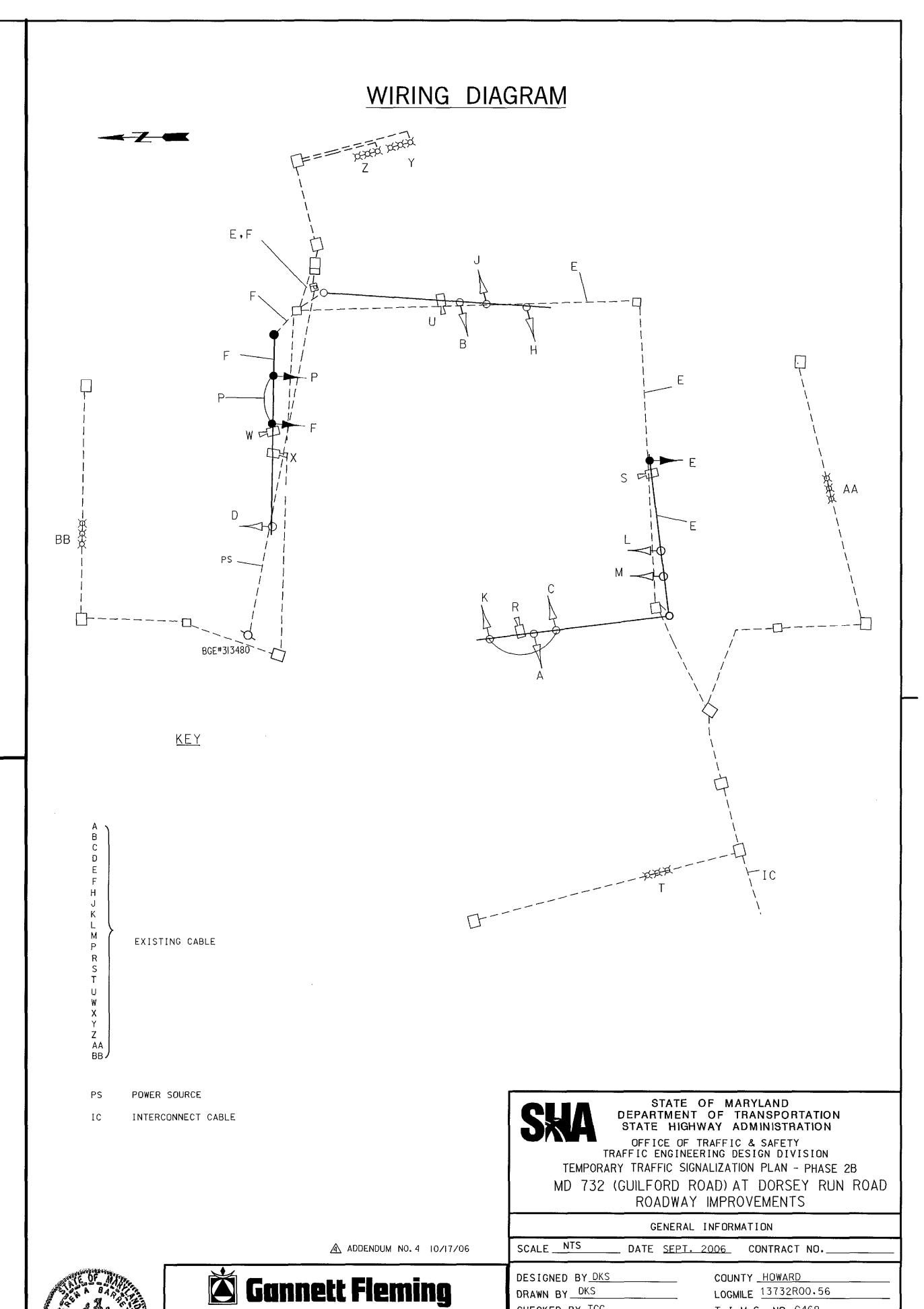
CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTIT
114015	10 INCH YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT	LF	255
114020	10 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT	LF	180
114045	24 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT	LF	63.0
800000 860265	REALIGN EXISTING VIDEO CAMERA RELOCATE EXISTING SIGNAL HEAD	EA EA	3.0 3.0

C. MATERIALS TO BE REMOVED BY THE CONTRACTOR. ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME PROPERTY OF THE CONTRACTOR.

PHASE CHART

1	2	3	4	5	6	7	8	9	10	11	12
R Y G	R Y G	RYG	(R) (T) (Y) (G) (G)	R TY Y TG G	(R) (Y) (G)	R Y G G	R Y G G	R Y G	R S G &	R Y G G	(R) Y) G
12"	12"	12"	12"	12"	12"	8"/12"	12"	12"	8"/12"	12"	12"

2 AND 5 OR 2 AND 6													
PHASE 2 AND 5	R	R	R	+G/G	← G/G	G	R	R	R	R	R	R	←
2 AND 5 CHANGE	R	R	R	← Y	← Y	Υ	R	R	R	R	R	R	\checkmark
PHASE 2 AND 6	G	G	G	G	G	G	R	R	R	R	R	R	↓
2 AND 6 CHANGE	Υ	Y	Y	Υ	Υ	Υ	R	R	R	R	R	R	─ ▷
PHASE 3	R	R	R	R	R	R	R	R	R	+G/G	← G/G	G	
3 CHANGE	R	R	R	R	R	R	R	R	R	Υ	Υ	Υ	$\left[\begin{array}{c} \wedge \\ \uparrow \end{array}\right]$
PHASE 4	R	R	R	R	R	R	+G/G	← G/G	G	R	R	R	→ ↑
4 CHANGE	R	R	R	R	R	R	Υ	Y	Υ	R	R	R	
FLASHING OPERATION	FL /Y	FL /Y	FL /Y	FL /Y	FL /Y	FL /Y	FL /R	FL /R	FL /R	FL /R	FL /R	FL /R	+ 4 + 4 + + + + + + + + + + + + + + + + + + +



DESIGNED BY DKS

CHECKED BY TCC

DRAWING NO. TS 4653A -

DRAWN BY DKS

4701 Mt. Hope Drive Seton Business Park

410-585-1460

Baltimore, Maryland 21215

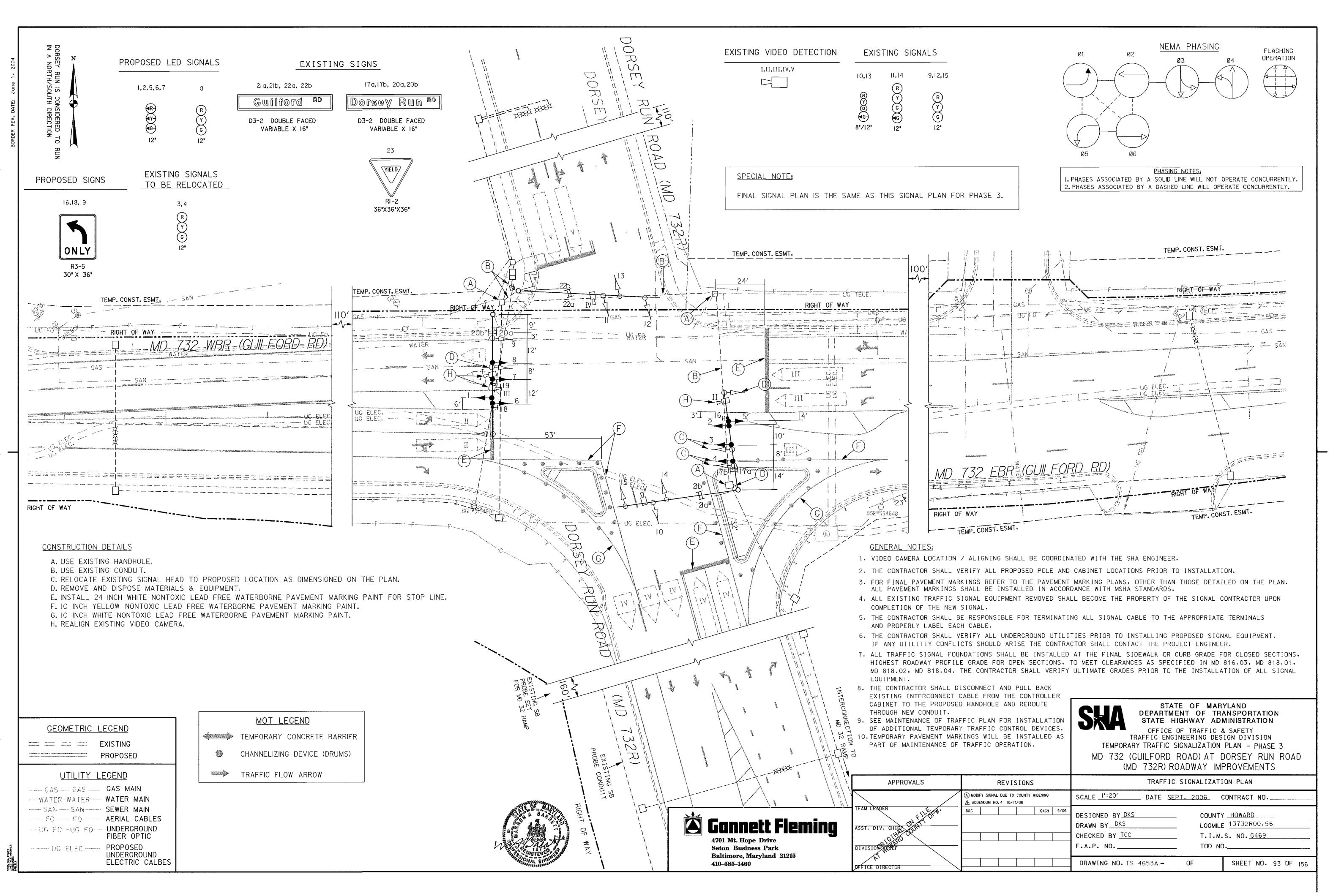
COUNTY HOWARD

TOD NO._

LOGMILE 13732R00.56

SHEET NO. 92A OF 156

T.I.M.S. NO. <u>G469</u>



GENERAL

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PHONE:(301) 624-8115 MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION PHONE: (410) 787-7630

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR ACCORDING TO THE MOT PLANS, REFER TO MOT PLAN PHASE 3.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATOR.

PHASE 1 AND 5

PHASE 1 AND 6

1 AND 6 CHANGE

PHASE 2 AND 5

2 AND 5 CHANGE

PHASE 2 AND 6

2 AND 6 CHANGE

PHASE 3

3 CHANGE

PHASE 4

4 CHANGE

FLASHING

OPERATION

CATEGORY CODE NO.

973023

DESCRIPTION

+G

+G

←Υ

∗R

+R

◆R

⊀R

◆R

◆R

◆R

∗R

G

G

1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6

←G

+R

⊀R

◆R

∢R

◆R

∢R

∗R

SHEET ALUMINUM SIGNS 3 EA R3-5 (30" X 36")

UNITS QUANTITY

←G

◆R

+R

←G

←Υ

⊀R

∗R

+R

◆R

+R

+R

⊀R

|FL /Y |FL /R |FL /R

22.5

22,5

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
114035	12 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT	LF	120.0
114045	24 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT	LF	120.0
813015	INSTALL OVERHEAD SIGN	SF	22.5
832020	BARE COPPER GROUND WIRE, NO. 6 AWG	LF	30.0
860265	RELOCATE EXISTING SIGNAL HEAD	EA	2.0
861107	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	1405.0
860284	12" LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	15.0
800000	REMOVE AND DISPOSE MATERIALS & EQUIPMENT	LS	1.0
800000	REALIGN EXISTING VIDEO CAMERA	EA	3.0

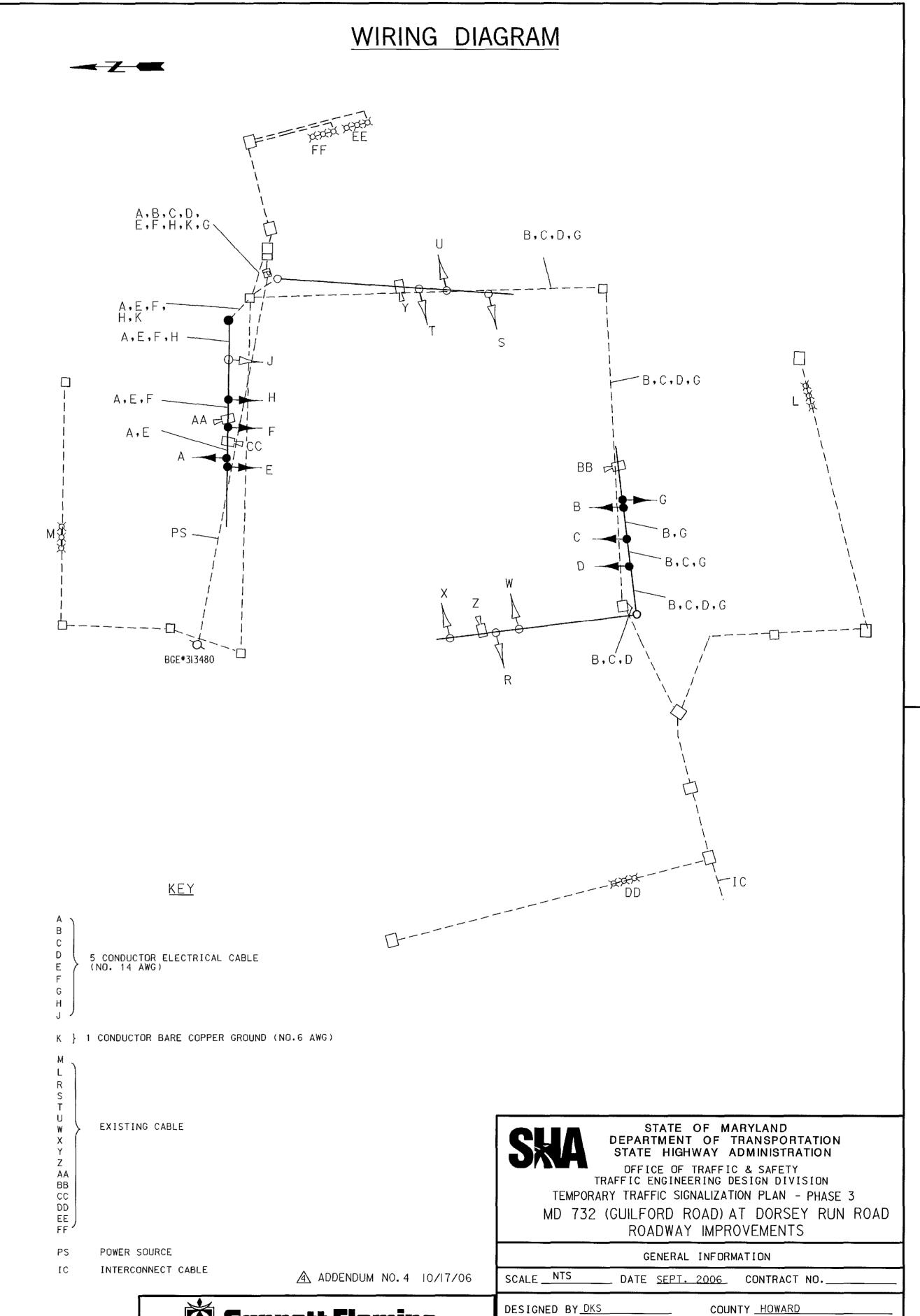
C. MATERIALS TO BE REMOVED BY THE CONTRACTOR.

ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME PROPERTY OF THE CONTRACTOR.

PHASE CHART 12 13 14 15 R R **←**G **←**G ◆R ◆R R **+**R R **←**G **←**G **←**Υ **∗**R G $\overline{}$ **+**R +G/G | +G/G | ◆R $\triangleleft \triangleright$ **+**R ◆R +G/G | +G/G | R R ◆R ◆R G



R



DRAWN BY_DKS CHECKED BY TCC

DRAWING NO. TS 4653A -

F.A.P. NO._

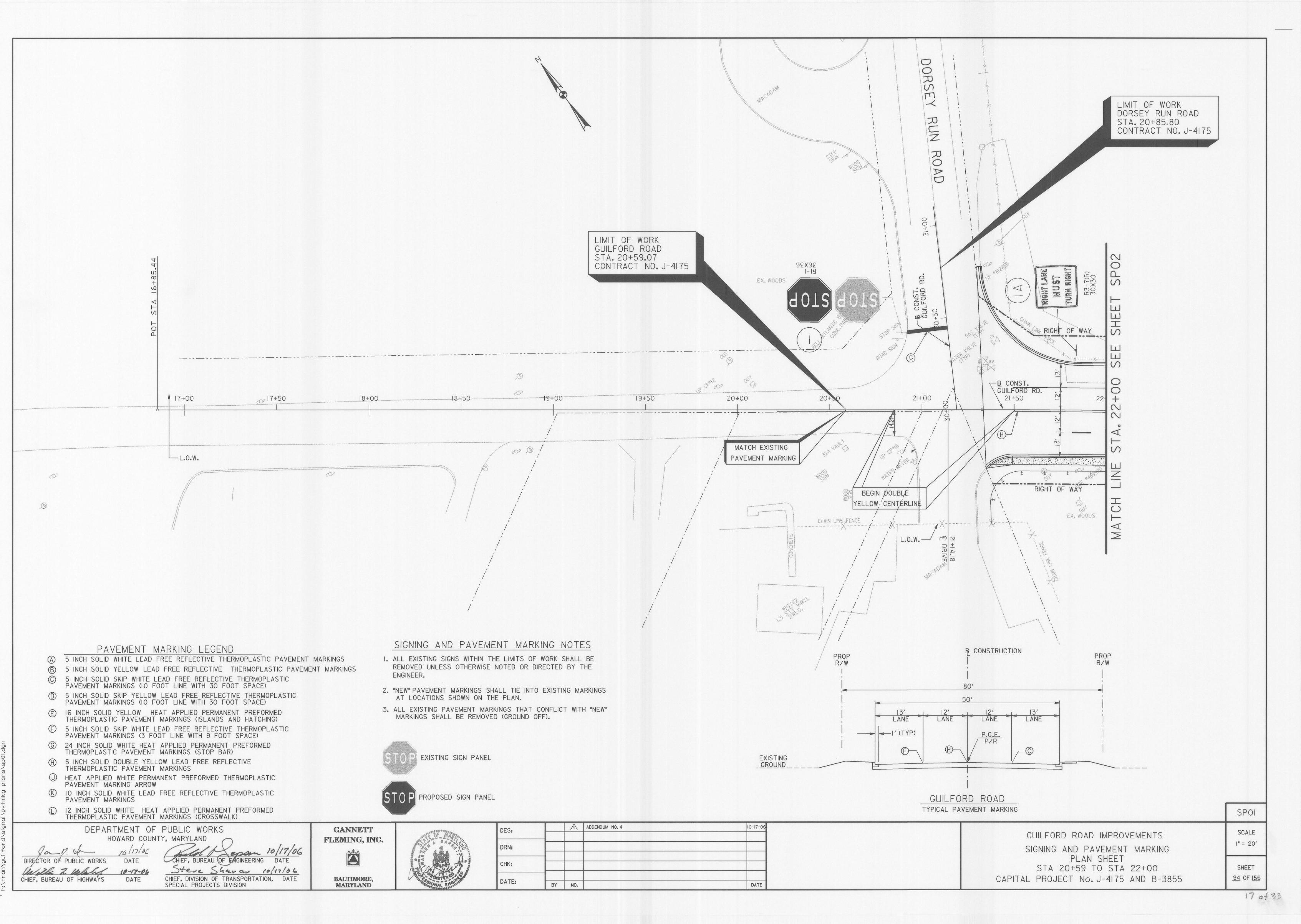
4701 Mt. Hope Drive Seton Business Park Baltimore, Maryland 21215 410-585-1460

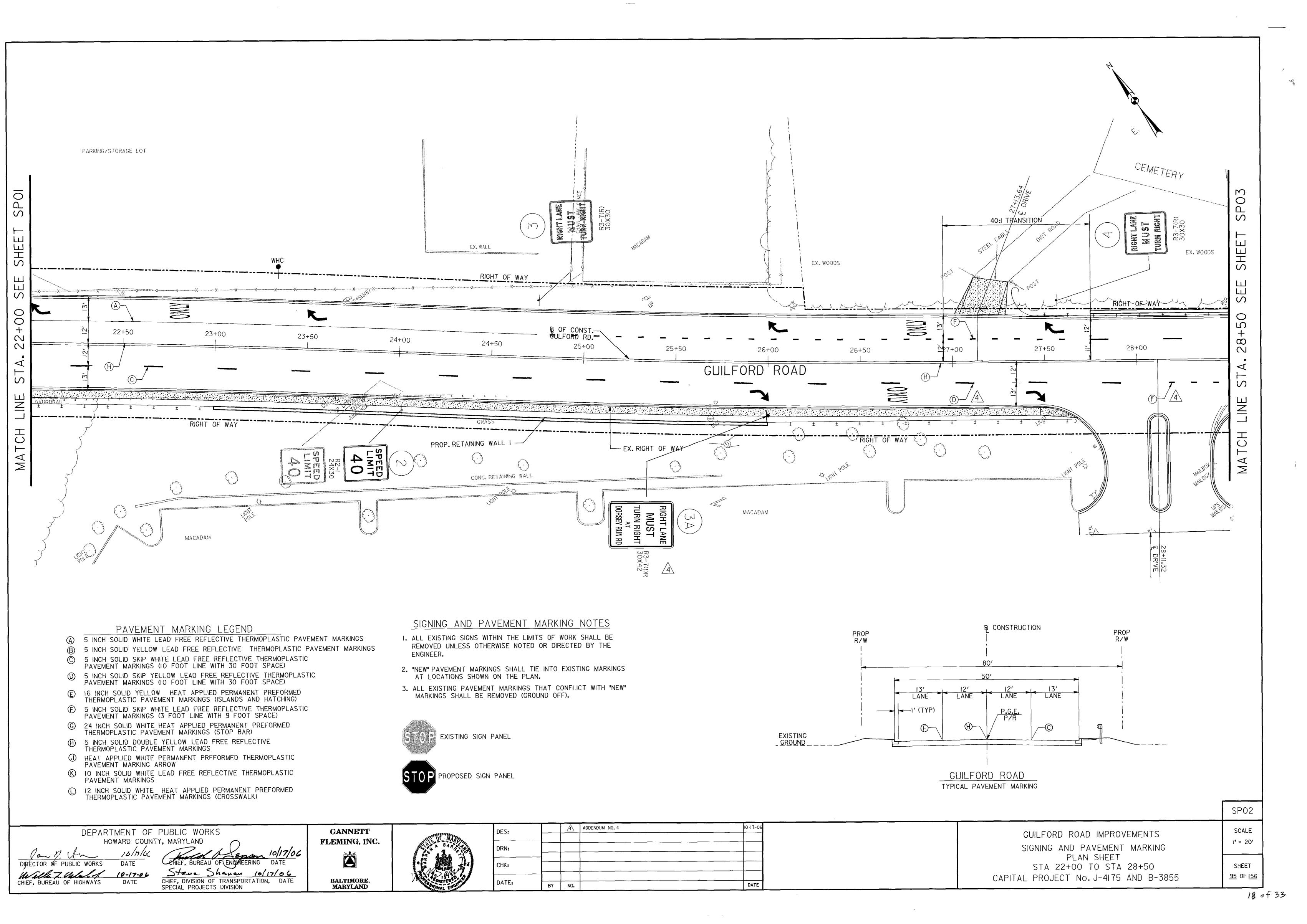
LOGMILE 13732R00.56

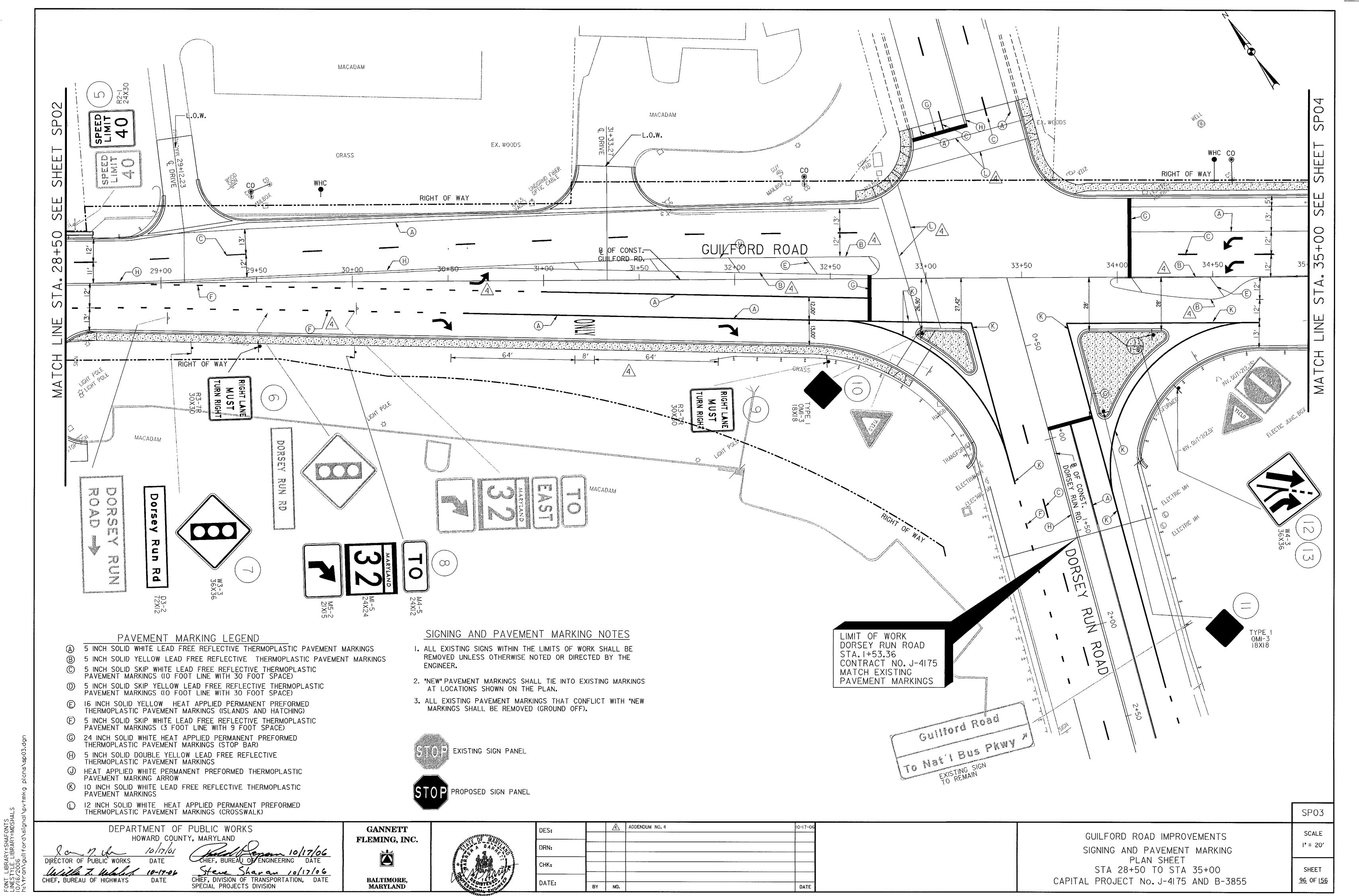
T.I.M.S. NO. <u>G469</u>

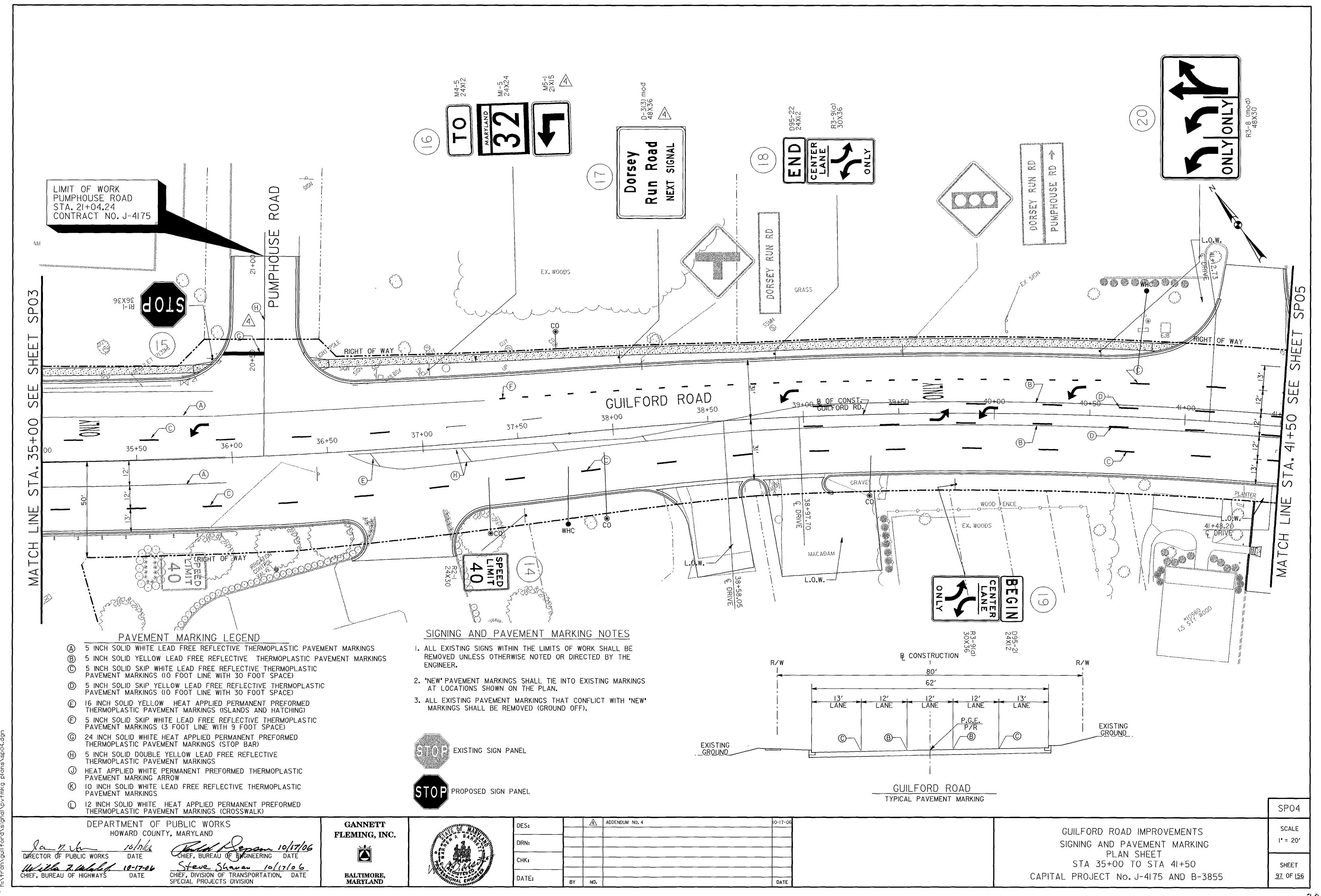
SHEET NO. 93A OF 156

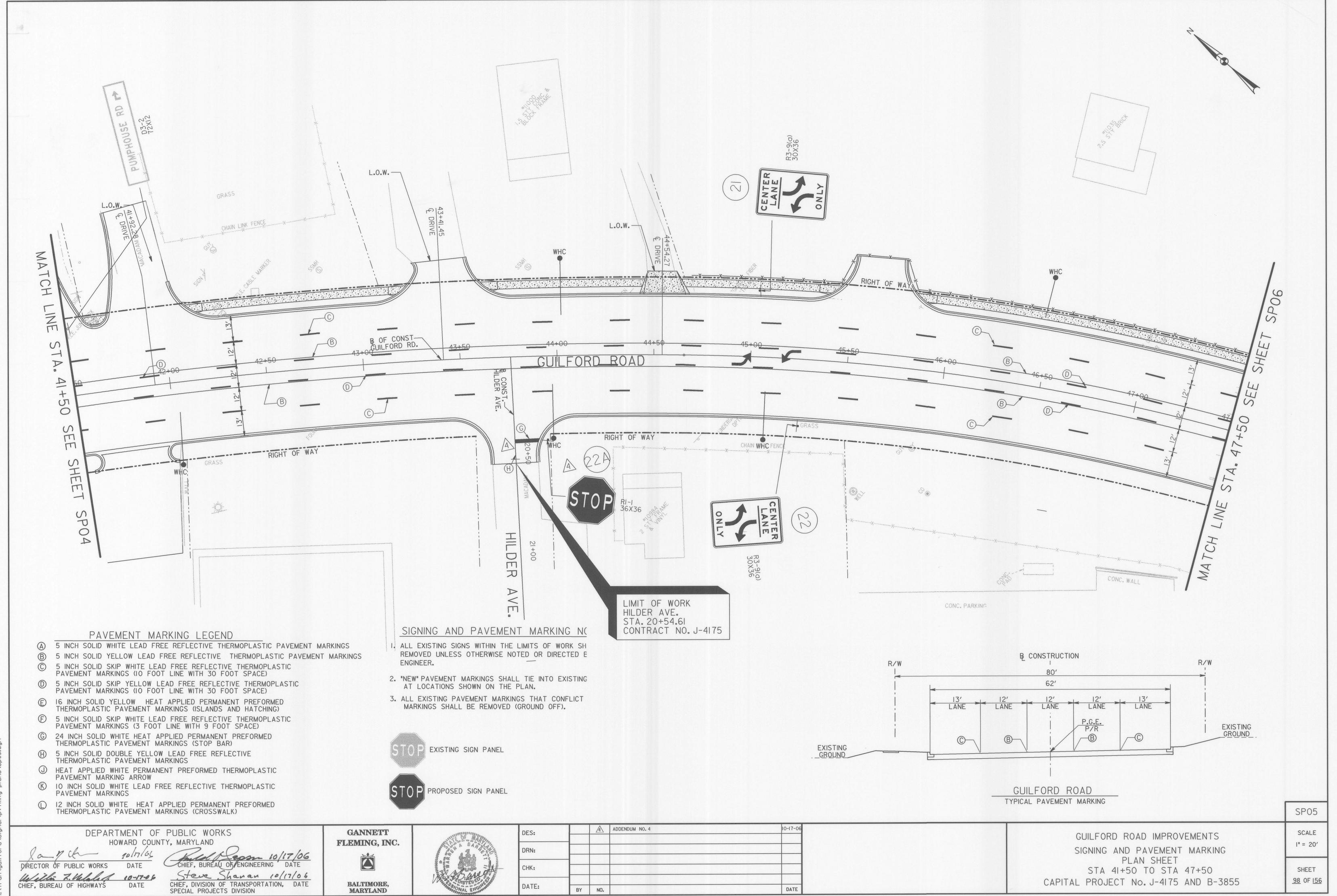
TOD NO._



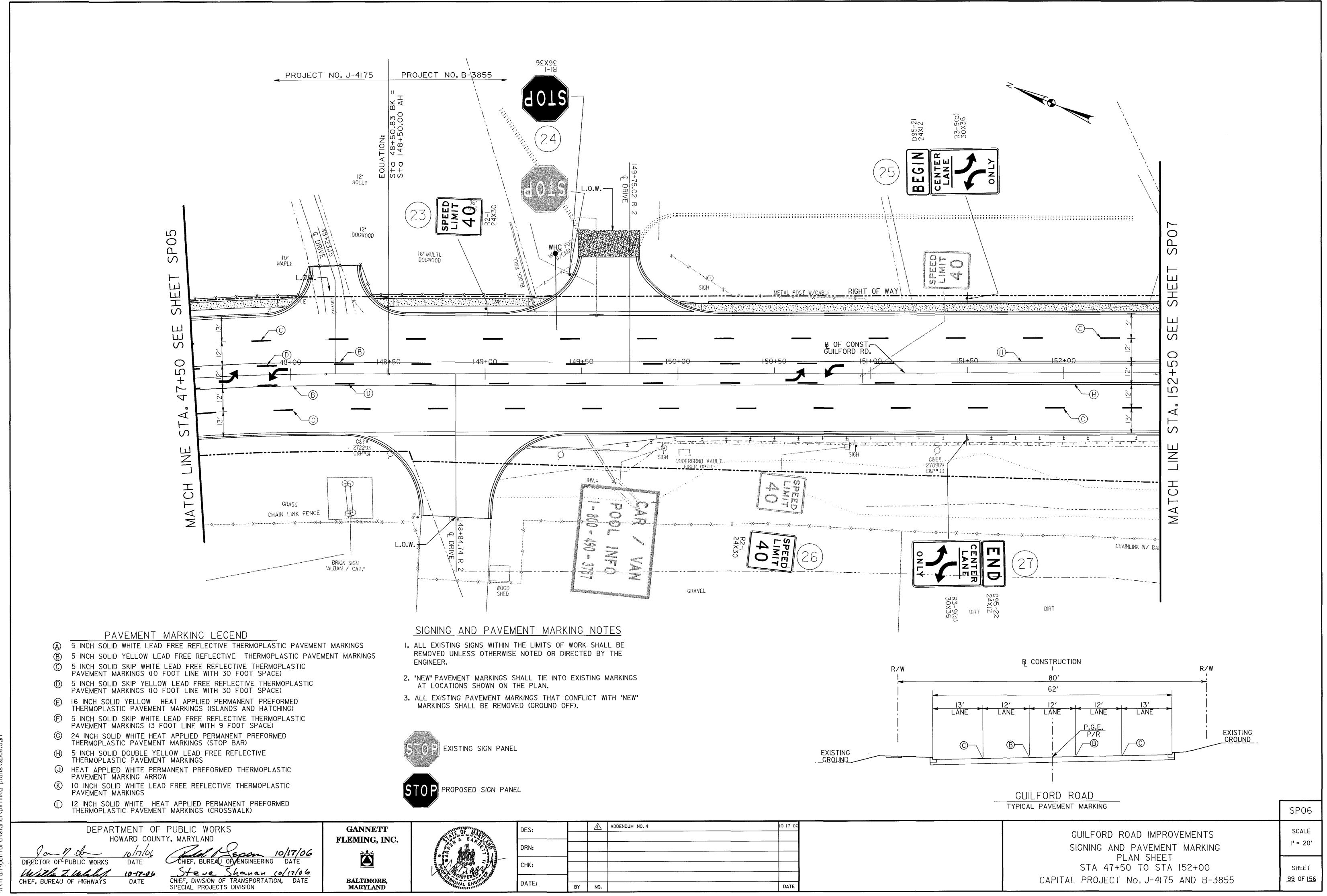


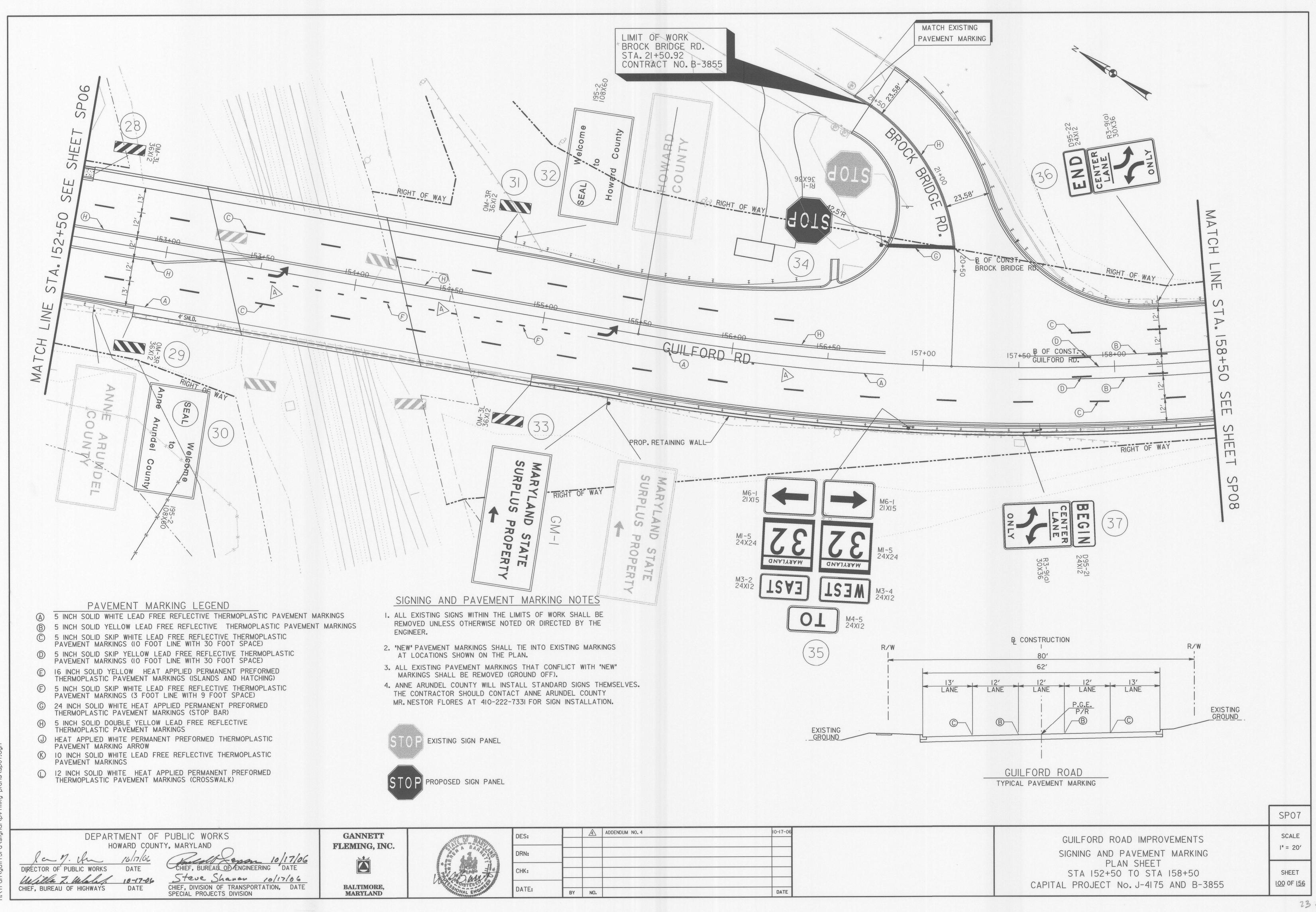


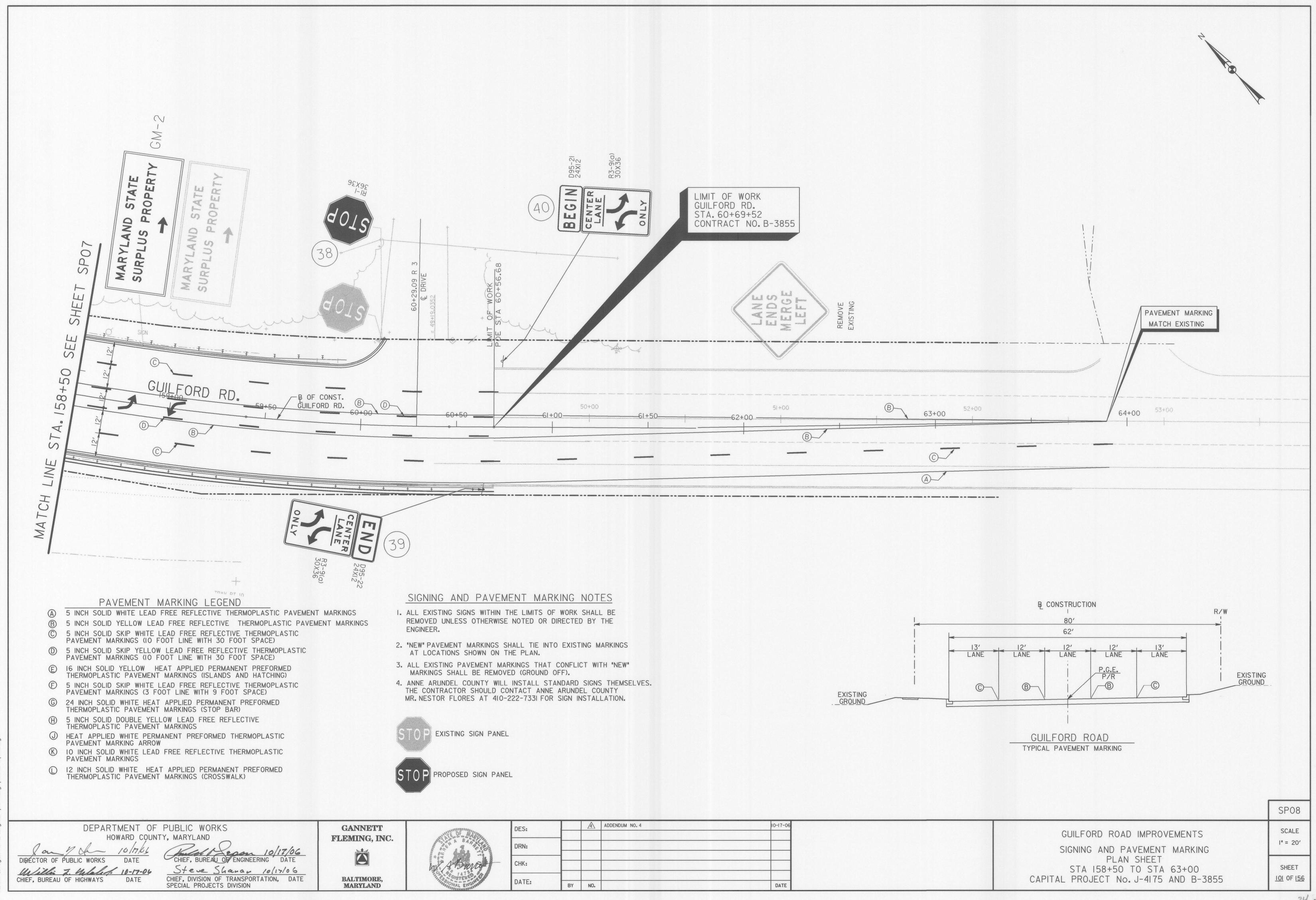




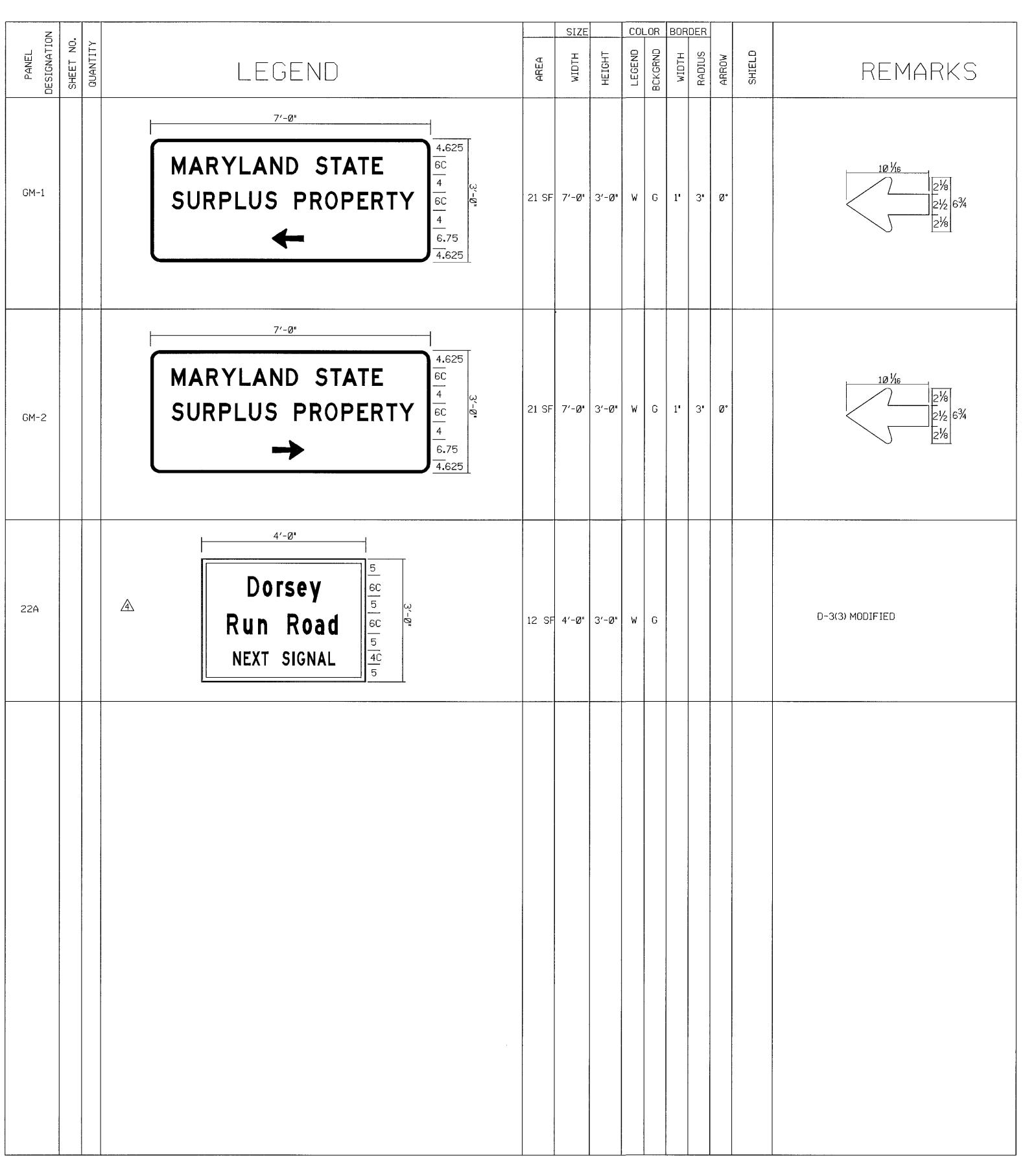
21 0 + 33







24 0+ 33



	PANEL	DESIGNATION	SHEET NO. QUANTITY	LEGEND	AREA	SIZE HLQI M	HEIGHT	LEGEND 0	BCKGRND NOTE	ARROW	REMARKS
-	•										
		and the second second									
							:				

LEGEND & BACKGROUND COLORS: BLK=BLACK, BLU=BLUE, BRO=BROWN, G=GREEN, R=RED, W=WHITE/SILVER, Y=YELLOW

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS DATE

Willa T. Miles 10-17-01

CHIEF BUREAU OF HIGHWAYS DATE

CHIEF, DIVISION OF TRANSPORTATION, DATE SPECIAL PROJECTS DIVISION

GANNETT
FLEMING, INC.

BALTIMORE,
MARYLAND



DES:		<u>A</u>	ADDENDUM NO. 4	10-17-06
DRN:				
CHK:				
DATE:	BY	NO.		DATE

GUILFORD ROAD IMPROVEMENTS
SIGNING AND PAVEMENT MARKING
PLAN SHEET
GUIDE SIGN MESSAGES — DETAILS & DIMENSIONS

CAPITAL PROJECT No. J-4175 AND B-3855

SCALE N.T.S

SN-3

SHEET 102 OF 156

SHEET	SIGN	REMARKS				_	 		-	CC	DDE NUMBERS *	3 00	,	14	ı. I				
NO.	NO.				2	3	4	5 6	7 8	9	10 11	12	13	14	15 16	17	18	19	
SPOI		RI-I (36" X36")	I 4"X4" WOOD SUPPORT	9	15						_		_						
SPOI	IA	R3-7R (30" X 30")	I 4"X4" WOOD SUPPORT	6.25	14.5														
SPOI		EXISTING SIGNS TO BE REMOVED (THIS SHEET)					9												
SP02	2	R2-I (24" X 30")	I 4"X4" WOOD SUPPORT	5	14.5														
SP02	3	R3-7(I) (30" X 42")	I 4"X4" WOOD SUPPORT	8.75	15.5														_
SP02	3A	R3-7R (30" X 30") ,	1 4"X4" WOOD SUPPORT	6.25	14.5														_
SP02	4	R3-7R (30" X 30")	I 4"X4" WOOD SUPPORT	6.25	14.5														
SP02		EXISTING SIGNS TO BE REMOVED (THIS SHEET)					5												
SP03	5	R2-I (24" X 30")	I 4"X4" WOOD SUPPORT	5	14.5						_								
SP03	6	R3-7R (30" X 30")	I 4"X4" WOOD SUPPORT	6.25	14.5														
SP03	7	W3-3 (36" X 36"); D3-2 (72"XI2")	2 4"X6" WOOD SUPPORT	15		31.5													
SP03	8	M4-5 (24"XI2"); MI-5 (24"X24"); M5-2 (21"×I5)	I 4"X4" WOOD SUPPORT	8.19	14.75														
SP03	9	R3-7R (30" X 30")	1 4"X4" WOOD SUPPORT	6.25	14.5														
SP03	10	TYPE IOMI-3 (18" X 18")	I 4"X4" WOOD SUPPORT	2.25	9														
SP03		TYPE IOMI-3 (18" X 18")	I 4"X4" WOOD SUPPORT	2.25	9														
SP03	12	W4-3 (36" X 36")	2 4"X6" WOOD SUPPORT	9		29.5													
SP03	13	W4-3 (36" X 36")	2 4"X6" WOOD SUPPORT	9		29.5													
SP03		EXISTING SIGNS TO BE REMOVED (THIS SHEET)					75.44												†
SP04	14	R2-I (24" X 30")	I 4"X4" WOOD SUPPORT	5	14.5														+
SP04	15	RI-I (36" X 36")	I 4"X4" WOOD SUPPORT	9	15														†
SP04	16	M4-5 (24" X 12"); MI-5 (24"X24"); M5-I (21"XI5")	I 4"X4" WOOD SUPPORT	8.19	14.75			1											
SP04	17	D-3(3) mod (48" X 36")	2 4"X6" WOOD SUPPORT	12		31.5													+
SP04	18	D95-22 (24" X 12"); R3-9a (30" X 36")	I 4"X4" WOOD SUPPORT	9.5	14.5														+
SP04	19	D95-21 (24" X 12"); R3-9a (30" X 36")	I 4"X4" WOOD SUPPORT	9.5	14.5														+
SP04	20	R3-8 (mod) (48" X 30")	2 4"X6" WOOD SUPPORT	10		29													+
SP04		EXISTING SIGNS TO BE REMOVED (THIS SHEET)		1,0			41												
SP05	21	R3-9a (30" X 36")	I 4"X4" WOOD SUPPORT	7.5	15								1						
SP05	22	R3-9a (30" X 36")	I 4"X4" WOOD SUPPORT	7.5	I5														+
SP05	22	EXISTING SIGNS TO BE REMOVED (THIS SHEET)	1 4 74 1000 3011 011		13		6												+
SP06	23	R2-I (24" X 30")	I 4"X4" WOOD SUPPORT	5	14.5		0				_								+
				2	14.5														+
SP06	24	RI-I (36" X 36")	I 4"X4" WOOD SUPPORT	9	10													-	+
SP06	25	D95-21 (24" X 12"); R3-9a (30" X 36")	I 4"X4" WOOD SUPPORT	9.5	14.5														
SP06	26	R2-I (24" X 30")	I 4"X4" WOOD SUPPORT	5	14.5														_
SP06	27	D95-22 (24" X 12"); R3-9a (30" X 36")	I 4"X4" WOOD SUPPORT	9.5	14.5						_								+
SP06		EXISTING SIGNS TO BE REMOVED (THIS SHEET)					19												
SP07	28	OM-3L (36" X 12")	2 4"X4" WOOD SUPPORT	3	9														\perp
SP07	29	OM-3R (36" X 12")	I 4"X4" WOOD SUPPORT	3	9														\perp
SP07	30	195-2 (108" X 60") "ANNE ARUNDEL COUNTY"	2 4"X6" WOOD SUPPORT	45		34													
SP07	31	OM-3R (36" X 12")	I 4"X4" WOOD SUPPORT	3	9		,												
SP07	32	195-2 (108" X 60") "HOWARD COUNTY"	2 4"X6" WOOD SUPPORT	45		34													
SP07	GM-I	(3' X 7')	2 4"X4" WOOD SUPPORT	21	30														<u> </u>
SP07	33	OM-3L (36" X 12")	I 4"X4" WOOD SUPPORT	3	9														
SP07	34	RI-I (36" X 36")	I 4"X4" WOOD SUPPORT	9	15														
SP07	35	M4-5 (24"XI2"); M3-4 (24" X I2"); MI-5 (24" X 24"); M6-I (21"XI5")	2 4"X4" WOOD SUPPORT	18.375	31.5														
		M3-2 (24" X 12"); MI-5 (24" X 24"); M6-I (21"XI5")																	
SP07	36	D95-22 (24" X 12"); R3-9a (30" X 36")	I 4"X4" WOOD SUPPORT	9.5	14.5														
SP07	37	D95-21 (24" X 12"); R3-9a (30" X 36")	I 4"X4" WOOD SUPPORT	9.5	14.5														
SP07		EXISTING SIGNS TO BE REMOVED (THIS SHEET)			_		132												
SP08	38	RI-I (36" X 36")	I 4"X4" WOOD SUPPORT	9	15														
SP08	GM-2	(3' X 7')	2 4"X4" WOOD SUPPORT	21	30														
SP08	39	D95-22 (24" X 12"); R3-9a (30" X 36")	I 4"X4" WOOD SUPPORT	9.5	14.5														
SP08	40	D95-21 (24" X 12"); R3-9a (30" X 36")	I 4"X4" WOOD SUPPORT	9.5	14.5		36.25												
SP08		EXISTING SIGNS TO BE REMOVED (THIS SHEET)																	+
SP05	22A	RI-I (36" X36")	I 4"X4" WOOD SUPPORT	9	15														+
0, 00		ACTUAL CALCULATED TOTAL		448.26	571.50	219.00	323.69												+
		ROUNDED ESTIMATE TOTAL																	+
		LOONDED ESTIMATE TOTAL		449.00	J14.00	219.00	324.00								I		1 .		

			k	4	
		* CODE NUMBER DE	SCRIPTION & UNIT		
CODE NUMBERS	DESCRIPTION	UNIT	CODE NUMBERS	DESCRIPTION	TTAC
1	F & I SHEET ALUMINUM	SF			
2	F & I WOOD SIGN SUPPORT 4" X 4"	LF			
3	F & WOOD SIGN SUPPORT 4" X 6"	LF			
4	EX. SIGN AND SUPPORT TO BE REMOVED	SF			
	"				

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

10/17/4

10/17/4 DIRECTOR OF PUBLIC WORKS

Willa T. Mall.

CHIEF, BUREAU OF HIGHWAYS

DATE Steve Shavar 10/17/06

CHIEF, DIVISION OF TRANSPORTATION, DATE SPECIAL PROJECTS DIVISION

GANNETT FLEMING, INC. BALTIMORE, MARYLAND

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DRN: PNF				
CHK: TCC				
DATE:	BY	NO.		DATE

GUILFORD ROAD IMPROVEMENTS SIGNING AND PAVEMENT MARKING PLAN SHEET INDEX OF SIGNING QUANTITIES CAPITAL PROJECT No. J-4175 AND B-3855

N.T.S SHEET <u>103</u> 0F <u>156</u>

SN-II