PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES RECONSTRUCTION OF EXISTING TRAFFIC SIGNALS AT THE INTERSECTION OF MD 124 (WOODFIELD ROAD) AT FIELDCREST ROAD/HADLEY FARMS DRIVE IN MONTGOMERY COUNTY. MD 124 IS ASSUMED TO RUN IN A NORTH SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A SEMI-ACTUATED MODE USING FOUR NEMA PHASES. AN EXCLUSIVE LEFT TURN PHASE WILL BE PROVIDED FOR WESTBOUND FIELDCREST ROAD.

PEDESTRIAN OPERATION

NAVIGATOR AUDIBLE PEDESTRIAN PUSHBUTTON MOVEMENTS TO CROSS THE WEST AND SOUTH LEGS OF THE INTERSECTION ARE TO BE PROVIDED.
WHEN THE PEDESTRIAN LOCATES AND PRESSES THE PUSH BUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE THE FOLLOWING MESSAGE:
WEST: "WAIT TO CROSS HADLEY FARMS AT WOODFIELD."
SOUTH: "WAIT TO CROSS WOODFIELD AT HADLEY FARMS/FIELDCREST."

SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

   PROJECT CONTACTS:
   MR. JEFFREY WENTZ, ASSISTANT DISTRICT ENGINEER - TRAFFIC
   PHONE: (301) 513-7358
   MR. DUANE BERNDARD, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
   PHONE: (301) 513-7336
   MR. WAYNE A. MOWDY, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
   PHONE: (301) 513-7304
   MR. AUGIE REBISH, UTILITY ENGINEER
   PHONE: (301) 513-7350
   MR. ROBERT SNYDER, SR. CHIEF TRAFFIC OPERATIONS DIVISION
   PHONE: (410) 787-7630

   MR. KAMAL HAMUD
   MONTGOMERY COUNTY
   240-777-8761

   MR. STEVE CUSTER
   PEPCO CUSTOMER DESIGN
   201 W. GUIDE DR.
   ROCKVILLE, MD 20850
   PHONE: (301) 548-4333
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 ADMINISTRATION.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
816110	TRAFFIC SIGNAL CABINET NEMA SIZE 6	EA	1
900000	TRAFFIC SIGNAL CONTROLLER WITH VIDEO DETECTION INTERFACE EQUIPMENT	EA	1
900000	MONTGOMERY COUNTY INTERCONNECT SPLICE CABINET	EA	1
973023	FLAT SHEET ALUMINUM SIGNS CONSISTING OF: R3-5(L) (30"X 36") MAST ARM MOUNT - 3 EACH D3-1(1) (96" X 16) MAST ARM MOUNT - 8 EACH (DUAL FACED) R10-3(1)(9"X15") POLE MOUNT SIGN TO READ "PUSH BUTTON TO CROSS" - 4 EACH ASSOCIATED SHIELD ASSEMBLY (30"X51") BAND TO POLE - 2 EACH ASSOCIATED SHIELD ASSEMBLY (48"X75") BAND TO POLE - 2 EACH	SF	183

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

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
120500	MAINTENANCE OF TRAFFIC	LS	1
203030	TEST PIT EXCAVATION	CY	2
585452	24 INCH WHITE PERMANENT PREFORMED PAVEMENT MARKINGS	LF	110
800000	INSTALL COUNTY SPLICE CABINET	EA	1
800000	AUDIBLE TACTILE PEDESTRIAN PUSH BUTTON STATION AND SIGN	EA	4
800000	16 INCH LED COUNTDOWN PEDESTRIAN SIGNAL HEAD SECTION POLE MOUNT (5"X7" WITH BRAILLE DENOTING CROSSING STREET)	EA	8
800000	ELECTRICAL CABLE - 1 CONDUCTOR (250 KCMIL)	LF	180
800000	6 - PAIR COMMUNICATION CABLE	LF	25
801004	CONCRETE FOR SIGNAL FOUNDATION	CY	21
801607	INSTALL SHEET ALUMINUM SIGN	SF	75
802501	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	470
805125	2" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	45
805135	3" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	90
805140	4" SCHEDULE 80 RIGID PVC CONDUIT -TRENCHED	LF	120
805155	4" SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED	LF	590
811001	FURNISH AND INSTALL ELECTRICAL HANDHOLE	EA	5
818004	10 FOOT BREAKAWAY PEDESTAL POLE	EA	2
816001	VIDEO DETECTION CAMERA	EA	4
816005	VIDEO DETECTION CABLE, 250 FT	EA	3
816010	VIDEO DETECTION CABLE, 500 FT.	EA	1
818052	STEEL POLE WITH A SINGLE 70 FOOT MAST ARM	EA	4
807202	METERED SERVICE PEDESTAL	EA	1
831010	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE	EA	4
832017	ELECTRICAL CABLE - 1 CONDUCTOR, NO 4AWG, TYPE USE, 600V	LF	30
833062	4" DIAMETER POLYVINYL CHLORIDE CONDUIT, SCHEDULE 80, RISER	LF	20
837001	GROUND ROD - 3/4 INCH DIAMETER X 10-FOOT LENGTH	EA	5
860284	12" VEHICULAR LED TRAFFIC SIGNAL HEAD SECTION	EA	33
861105	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)	LF	425
861107	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	770
861108	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)	LF	1495
861116	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) TRAY CABLE	LF	865
866101	10 FOOT LIGHTING ARM ON SIGNAL STRUCTURE	EA	2
866104	20 FOOT LIGHTING ARM ON SIGNAL STRUCTURE	EA	2

KCI TECHNOLOGIES
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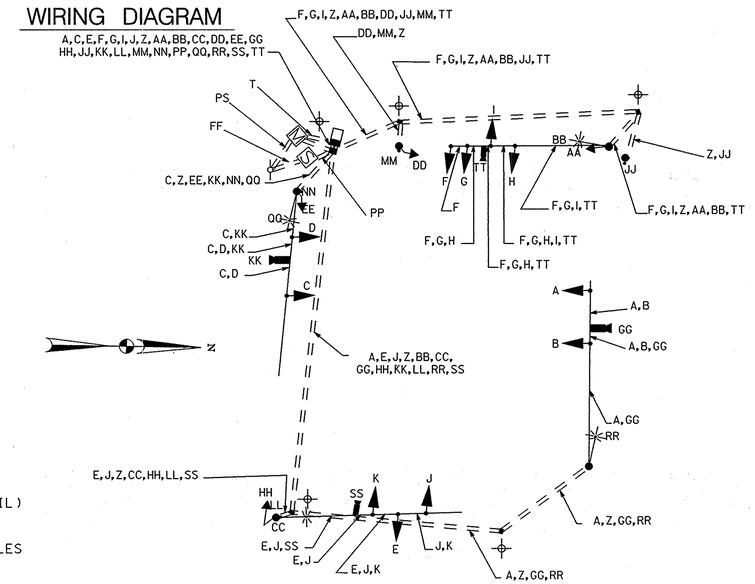
SCIENTISTS
CONSTRUCTION MANAGERS
10 NORTH PARK DRIVE
HUNT VALLEY, MD 21030
PHONE: (410) 316-7800
FAX: (410) 316-7817
www.kci.com

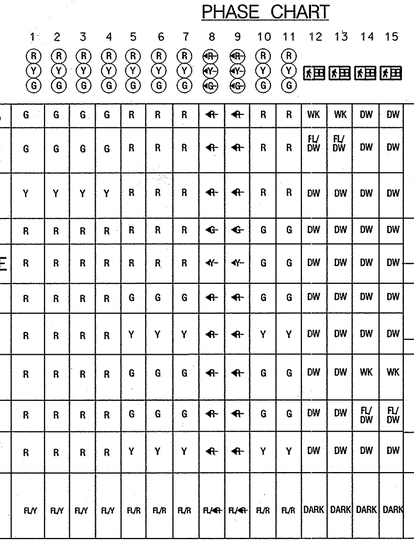
KEY

A,C,E,F,I,J	7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
B,D,G,H,K,AA, DD,EE,HH	5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
BB,CC,QQ,RR	2 CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG) TRAY CABLE
JJ,LL,MM,NN,	2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
GG,KK,SS,TT	VIDEO DETECTION CONTROL CABLE
Z	1 CONDUCTOR (NO. 6 AWG) STRANDED COPPER GROUND WIRE
T	POWER SERVICE UNDERGROUND 3 WIRE 1 CONDUCTOR (NO.4 AWG)
	GROUND ROD
PS	3-1 CONDUCTOR ELECTRICAL CABLES (250 KCMIL)
PP	6-PAIR COMMUNICATION CABLE
FF	12-PAIR SELF SUPPORTING INTERCONNECT CABLES

WIRING DIAGRAM



PHASE CHART



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PHASE 2 AND 6	G	G	G	G	R	R	R	↖	↖	R	R	WK	WK	DW	DW
PED CLEARENCE	G	G	G	G	R	R	R	↖	↖	R	R	FL/ DW	FL/ DW	DW	DW
PHASE 2 AND 6 CHANGE	Y	Y	Y	Y	R	R	R	↖	↖	R	R	DW	DW	DW	DW
PHASE 3 AND 8	R	R	R	R	R	R	R	←	←	G	G	DW	DW	DW	DW
PHASE 3 CHANGE	R	R	R	R	R	R	R	↙	↙	G	G	DW	DW	DW	DW
PHASE 4 AND 8	R	R	R	R	G	G	G	↖	↖	G	G	DW	DW	DW	DW
PHASE 4 AND 8 CHANGE	R	R	R	R	Y	Y	Y	↖	↖	Y	Y	DW	DW	DW	DW
PHASE 4 AND 8 ALT	R	R	R	R	G	G	G	↖	↖	G	G	DW	DW	WK	WK
PED CLEARENCE	R	R	R	R	G	G	G	↖	↖	G	G	DW	DW	FL/ DW	FL/ DW
PHASE 4 AND 8 ALT CHANGE	R	R	R	R	Y	Y	Y	↖	↖	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/↖	FL/↖	FL/R	FL/R	DARK	DARK	DARK	DARK

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 124 (WOODFIELD RD) AND FIELDCREST RD /HARDLEY FARMS DRIVE

STAGE I

GENERAL INFORMATION SHEET

SCALE 1" = 20' DATE N/A CONTRACT NO. M06325171

DESIGNED BY AH COUNTY MONTGOMERY
DRAWN BY AF LOGMILE 15012408.87
CHECKED BY JFL TIMS NO. H079
FAP NO. AC-STP-1103(8)E TOD NO.

TS NO. 3976-C | DRAWING SP-28 OF 39 | SHEET NO. 286 OF 377

PLOTTED: "02:59 PM on Tuesday, March 04, 2008"
FILE: M:\2007\01070459.cb\drawings\pSG-N004A_MD124.dgn

BY: Aaron Hottenstein Division: 0101 Transportation