EXISTING SIGNS TO BE REMOVED

36"X60" (1 EA.)

36"X60" (1 EA.)

US 40 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION

24"X30" (1 EA.)

30"X36" (1 EA.)

72"x16" (2 EA.)

9"X[illegible] (2 EA.)

30"X36" (1 EA.)

PROPOSED SIGNS

26,42 — M1-5(4) 78"X36"

27,35 — M1-5(4) 78"X36"

29a,29b,30a,30b — D-3(1) 60"X16" (DUAL FACED)

36 — R3-5(2) MOD 60"X36"

37 — R3-5L 30"X36"

34 — R3-5R 30"X36"

33 — R3-6(1) 30"X30"

31,32 — R4-7 @ 15° 24"X30"

28 — OM1-3 FY 18"X18"

EXISTING SIGNALS TO BE REMOVED

12" (4 EA.) (6 EA.)

12" (2 EA.)

16" (2 EA.)

PROPOSED LED SIGNALS

1,2,5,6,7 — 12"

3,4,8, 9,11,13 — 12"

10,12 — 12"

14,15,16, 17,18,19 — 16"

a,b,c,d — PROPOSED IP-BASED VIDEO DETECTION

NEMA PHASING

Ø1 Ø2 Ø3 Ø4 FLASHING OPERATION

Ø5 Ø6 Ø4 ALT.

NOTE:
PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

CONSTRUCTION DETAILS (CONT.)

W. INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.

X. INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT - BORED.

Y. INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.

Z. INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.

AA. INSTALL NON-INVASIVE MICROLOOP PROBE WITH LEAD-IN CABLE.

BB. REMOVE EXISTING GROUND MOUNTED SIGN AND SUPPORTS.

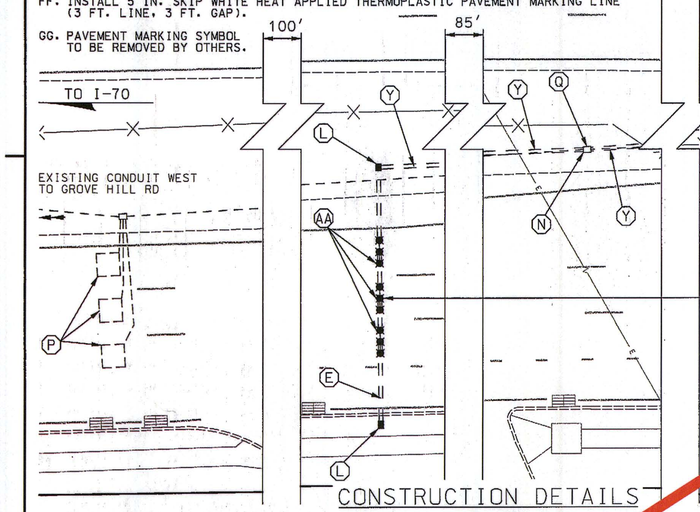
CC. INSTALL GROUND MOUNTED SIGN ON 1-4"X4" WOOD SIGN SUPPORT. NOTE: SIGN POSTS INSTALLED IN BRICK OR CONCRETE SHALL HAVE SLEEVED FOUNDATIONS MEETING THE REQUIREMENTS OF STANDARDS MD 812.05-01 AND MD 812.05-02. SLEEVED FOUNDATIONS ARE INCIDENTAL TO THE WOOD SIGN SUPPORTS.

DD. INSTALL BASE MOUNTED CABINET AND CONTROLLER WITH IP-BASED VIDEO DETECTION INTERFACE EQUPMENT, 2-WIRE APS CENTRAL CONTROL UNIT AND UPS BATTERY BACKUP. NOTE: INSTALL 2-2 IN. AND 2-4 IN. CONDUIT BENDS IN BASE. CAP UNUSED BEND.

EE. INSTALL GROUND MOUNTED SIGN ON 1-4"X6" WOOD SIGN SUPPORT (DRILLED).

FF. INSTALL 5 IN. SKIP WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING LINE (3 FT. LINE, 3 FT. GAP).

GG. PAVEMENT MARKING SYMBOL TO BE REMOVED BY OTHERS.



CONSTRUCTION DETAILS

A. INSTALL 27 FT. TWIN MAST ARM POLE WITH 70 FT. AND 50 FT. MAST ARMS, LED SIGNAL HEADS, IP-BASED VIDEO DETECTION CAMERAS, 20 FT. LIGHTING ARM WITH LED LUMINAIRE, AND SIGNS. NOTE: INSTALL 1-3 IN. CONDUIT BEND IN POLE BASE.

B. INSTALL 27 FT. TWIN MAST ARM POLE WITH 70 FT. AND 50 FT. MAST ARMS, LED SIGNAL HEADS, IP-BASED VIDEO DETECTION CAMERAS, 15 FT. LIGHTING ARM WITH LED LUMINAIRE, AND SIGNS. NOTE: INSTALL 1-3 IN. CONDUIT BEND IN POLE BASE.

C. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, APS PUSHBUTTON AND SIGN (ORIENT PARALLEL TO CROSSWALK). NOTE: INSTALL 1-2 IN. CONDUIT BEND IN POLE BASE. REFER TO STANDARD MD 801.01-01 FOR FOUNDATION DETAILS. TOP OF FOUNDATION SHALL BE INSTALLED FLUSH WITH FINAL SIDEWALK GRADE.

D. REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, PUSHBUTTON AND SIGN FROM PEDESTAL POLE. INSTALL LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, APS PUSHBUTTON AND SIGN (ORIENT PARALLEL TO CROSSWALK) ON EXISTING PEDESTAL POLE. PLUG UNUSED HOLES.

E. INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT - BORED FOR CARRIER PIPE.

F. REMOVE EXISTING BASE MOUNTED CABINET AND CONTROLLER. REMOVE EXISTING FOUNDATION 12 IN. BELOW GRADE AND BACKFILL TO GRADE. CAP AND ABANDON EXISTING CONDUITS.

G. REMOVE EXISTING SIGNAL POLE, ASSOCIATED EQUIPMENT AND SIGNS. REMOVE EXISTING FOUNDATION 12 IN. BELOW GRADE AND MAKE FLUSH WITH FINAL GRADE. UTILITY COMPANY TO DISCONNECT EXISTING ELECTRICAL SERVICE.

H. INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED. REFER TO INTERCONNECT PLAN FOR DETAILS.

I. INSTALL 100 AMP EMBEDDED METERED SERVICE PEDESTAL. NOTE: INSTALL 1-4 IN. AND 3-2 IN. CONDUIT BENDS IN BASE.

J. INSTALL ELECTRICAL HANDHOLE.

K. REMOVE EXISTING SIGNAL POLE, ASSOCIATED EQUIPMENT AND SIGNS. REMOVE EXISTING FOUNDATION 12 IN. BELOW GRADE AND MAKE FLUSH WITH FINAL GRADE.

L. INSTALL ELECTRICAL HANDHOLE WITH LONG DIMENSION PERPENDICULAR TO ROADWAY.

M. REMOVE EXISTING HANDHOLE. CAP AND ABANDON EXISTING CONDUITS AND BACKFILL TO GRADE.

N. DISCONNECT, PULLBACK AND REROUTE EXISTING INTERCONNECT COMMUNICATION CABLE.

O. PROPOSED VIDEO DETECTION ZONE.

P. ABANDON EXISTING LOOP DETECTOR.

Q. USE EXISTING HANDHOLE.

R. REMOVE EXISTING PAVEMENT MARKING.

S. INSTALL 12 IN. WHITE PERMANENT PREFORMED HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING LINE.

T. INSTALL 24 IN. WHITE PERMANENT PREFORMED HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING LINE.

U. INSTALL WHITE PREFORMED HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING SYMBOL.

V. INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED. STUB AT UTILITY POLE NO. 6.

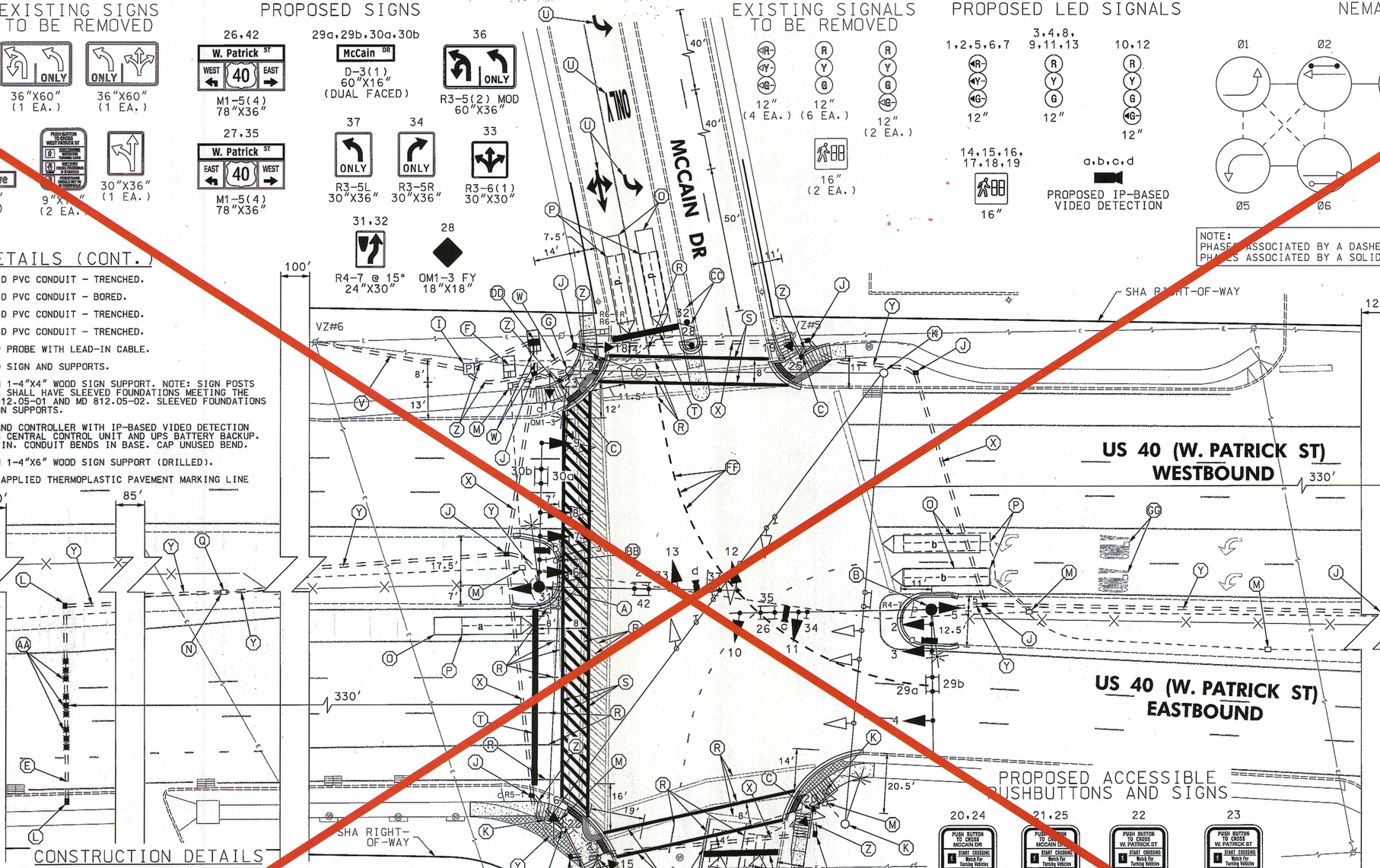
GEOMETRIC LEGEND

EXISTING

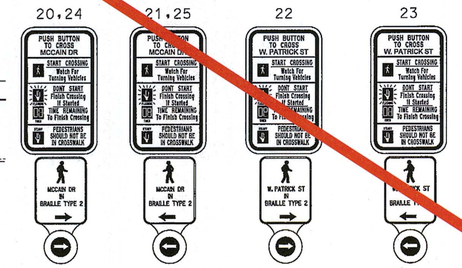
PROPOSED

UTILITY LEGEND

SD STORM DRAIN
G GAS MAIN
W WATER MAIN
S SEWER MAIN
E ELECTRIC CABLES
E AERIAL CABLES
T TELEPHONE CABLES
F FIBER-OPTIC



PROPOSED ACCESSIBLE PUSHBUTTONS AND SIGNS



MCCAIN DR R10-3(1) 9"X15"

MCCAIN DR R10-3(1) 9"X15"

W. PATRICK ST R10-3(1) 9"X15"

W. PATRICK ST R10-3(1) 9"X15"

1 REDLINE NO. 1 JULY 2013 DELETE SHEET

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Engineers Construction Managers Planners Scientists
www.rkk.com

APPROVALS	
TEAM LEADER	ORIGINAL ON FILE
ASST. DIV. CHIEF	
DIVISION CHIEF	
DEPUTY/DIRECTOR	

REVISIONS						

(B) SIGNAL RECONSTRUCTION, 03-2013
INSTALL APS/CPS
SHA NO. XX6505185, TIMS NO. L536
WCS BJG — INSTALL CPSL — 11-12-2004
A SHA NO. AT3585185

JWA	CTS	WNB	JAB	BEK	TH

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

US 40 (W. PATRICK STREET) AT MCCAIN DRIVE
FREDERICK, MARYLAND

TRAFFIC SIGNAL PLAN

SCALE 1"=20' DATE _____ CONTRACT NO. FR3315171

DESIGNED BY _____ COUNTY FREDERICK
DRAWN BY S.BLOSS LOGMILE 10004012.15
CHECKED BY N.LEARY TIMS NO. _____
FAP NO. _____ TOD NO. _____

TS NO. 1347B | DRAWING SP-1 OF 2 | SHEET NO. [illegible] OF 5

BY WFW