

STATE OF TENNESSEE

SHELBY COUNTY

TDOT P.I.N.: 040595.00
 FEDERAL PROJECT NO.: CM-NHE-7900 (28)
 STATE PROJECT NO.: 79946-3253-54
 LOCALLY MANAGED PROJECT

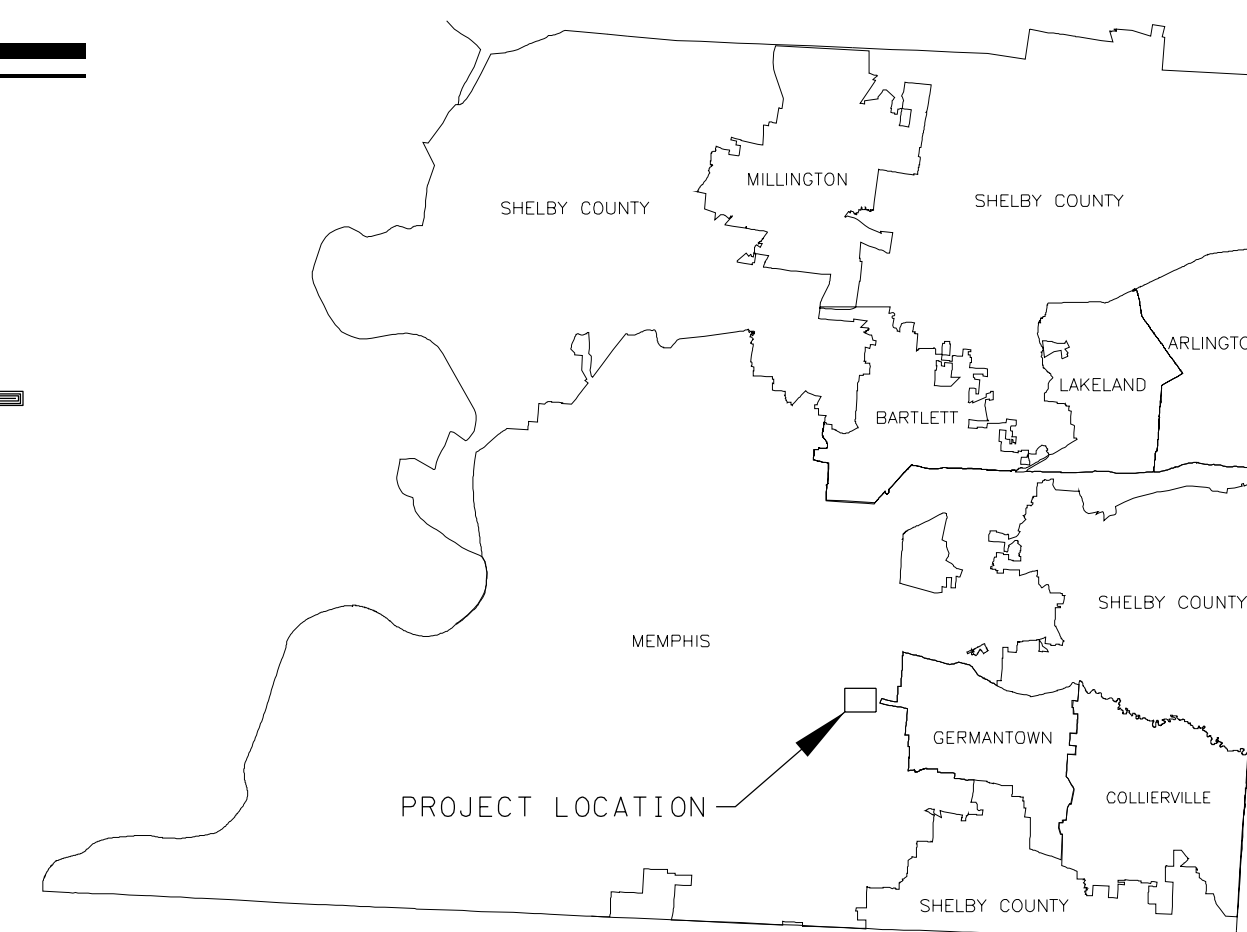
DIVISION OF PUBLIC WORKS

PLAN FOR PROPOSED IMPROVEMENTS

CONGESTION MANAGEMENT PROGRAM

POPLAR AVENUE AND INTERNATIONAL DRIVE

TRAFFIC SIGNAL IMPROVEMENTS



LOCATION MAP
NOT TO SCALE

SCOPE OF WORK

CONSTRUCTION INCLUDES THE INSTALLATION OF A TRAFFIC SIGNAL, TRAFFIC SIGNAL POLES, VIDEO VEHICLE DETECTION, EMERGENCY VEHICLE PREEMPTION EQUIPMENT AND PAVEMENT MARKINGS AT THE INTERSECTION OF POPLAR AVENUE AND INTERNATIONAL DRIVE.

NOTES:

PROPOSALS MAY BE REJECTED BY THE COUNTY ENGINEER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

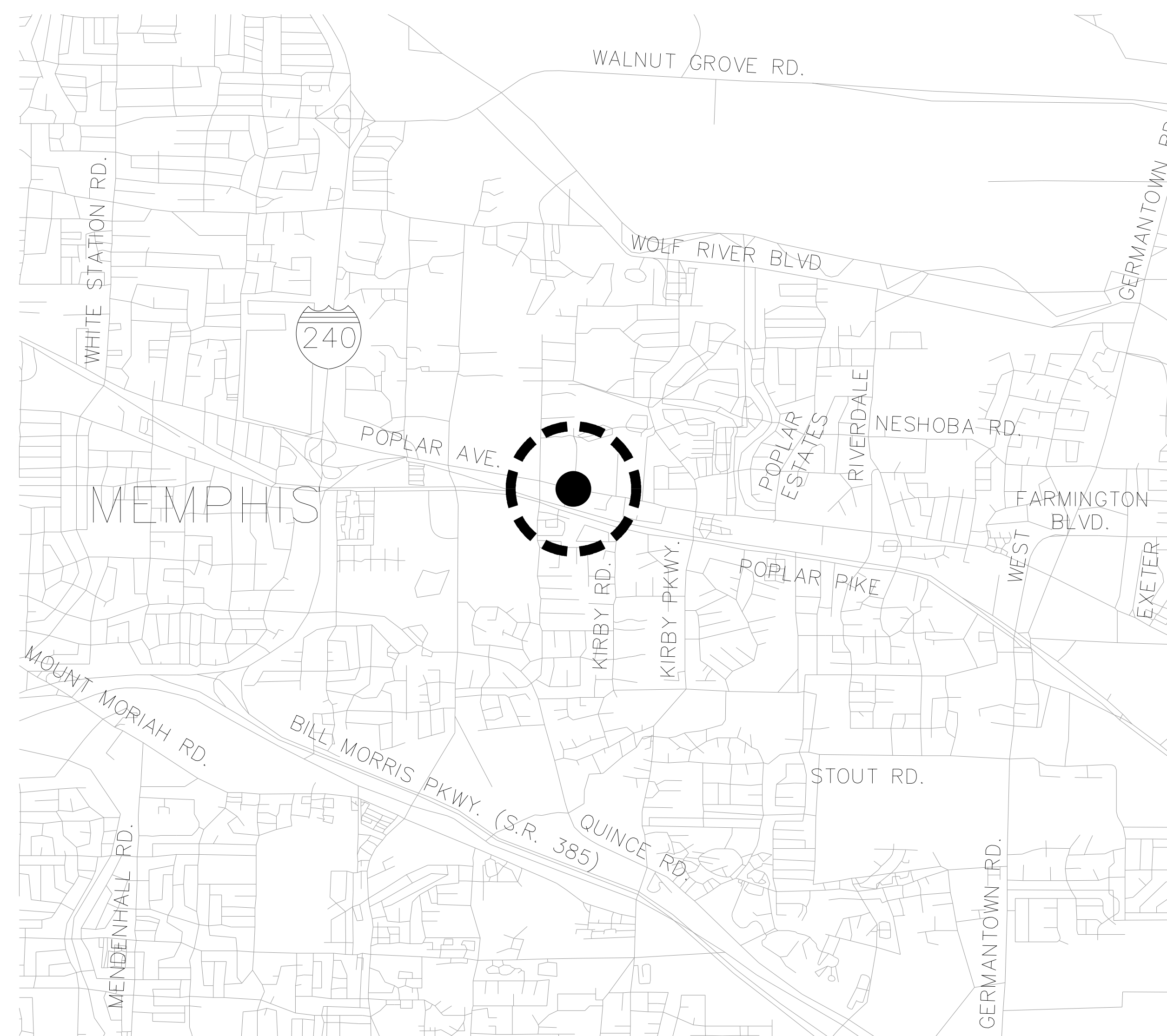
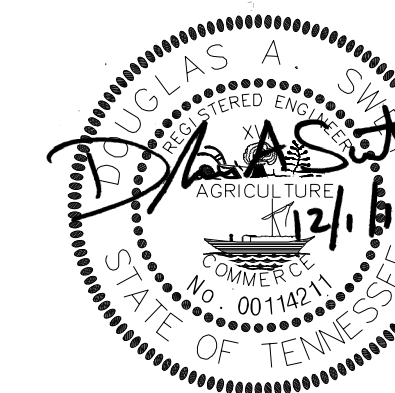
CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ANY UTILITY COMPANY WHICH MAINTAINS A UTILITY LINE WITHIN THE BOUNDARIES OF THE PROJECT PRIOR TO THE INITIATION OF ANY CONSTRUCTION ON THE PROJECT OR IN THE STREETS BORDERING THE PROJECT. THE CONTRACTOR SHALL ALSO ASSUME RESPONSIBILITY FOR ALL DAMAGE TO ANY UTILITY LINES, WHETHER SHOWN ON THE CONSTRUCTION PLANS OR NOT, DURING WORK ON THE PROJECT.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED MARCH 1, 2006 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

HON. MARK H. LUTTRELL, JR, MAYOR

APPROVED: _____ DATE: _____

MR. DARREN SANDERS, P.E.
SHELBY COUNTY ENGINEER



VICINITY MAP
NOT TO SCALE

EQUATIONS: NONE
EXCEPTIONS: NONE

☉ - PROJECT LOCATION

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	QUANTITIES
3	GENERAL NOTES
4	R.O.W. ACQUISITION
5	TRAFFIC SIGNAL LAYOUT
6-7	TRAFFIC SIGNAL DETAILS
8	EXISTING STRIPING PLAN
9	PROPOSED STRIPING PLAN
10	CROSS ACCESS PLAN

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	
1	202-03	REMOVAL OF RIGID PAVEMENT, SIDEWALK, ETC.	S.Y.	15
2	203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	50
3, 4	203-06	WATER	M.G.	1.5
3, 4	209-05	SEDIMENT REMOVAL	C.Y.	5
	306-03.01	PORTLAND CEMENT CONCRETE BASE (PLAIN) 8"	S.Y.	88
	403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TN	0.01
	407-20.05	SAW CUTTING ASPHALT PAVEMENT	L.F.	188
	411-01.10	ASPHALT CEMENT (PG64-22) (ACS) GRADING D	TN	7
	701-02.01	CONCRETE CURB RAMP (RETROFIT)	S.F.	175
	701-02.03	CONCRETE CURB RAMP	S.F.	135
	702-01.02	CONCRETE CURB	L.F.	170
	707-08.10	TEMPORARY CONSTRUCTION FENCE	L.F.	155
5	712-01	TRAFFIC CONTROL	LS	1
6	713-16.20	SIGNS (MAST ARM MOUNTED STREET NAME SIGN)	EACH	2
7	713-16.21	SIGNS (MAST ARM MOUNTED STREET NAME SIGN)	EACH	2
8	713-16.22	SIGNS (MAST ARM MOUNTED)	EACH	4
9	714-25.09	ELECTRICAL CONNECTION (FOR MLGW COST ONLY)	EACH	1
	716-02.01	PLASTIC PAVEMENT MARKING (4" LINE) - SINGLE	L.M.	0.35
	716-02.03	PLASTIC PAVEMENT MARKING (CROSS-WALK)	L.F.	410
	716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	180
	716-02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	6
	716-03.01	PLASTIC WORD PAVEMENT MARKING (ONLY)	EACH	5
	716-04.01	PLASTIC PAVEMENT MARKING (STRAIGHT-TURN ARROW)	EACH	1
	716-04.05	PLASTIC PAVEMENT MARKING (STRAIGHT ARROW)	EACH	2
	716-08.01	REMOVAL OF PAVEMENT MARKING (LINE)	L.F.	530
	716-08.03	REMOVAL OF PAVEMENT MARKING (CROSS-WALK)	L.F.	165
	716-08.09	REMOVAL OF PAVEMENT MARKING (DOTTED LINE)	L.F.	97
	716-10.30	TRUNCATED DOME DETECTABLE WARNING MAT	S.F.	30
	717-01	MOBILIZATION	LS	1
10	725-02.79	FIBER SPLICE ENCLOSURE(WEATHER PROOF)	EACH	1
10	725-10.01	ETHERNET CABINET SWITCH (LAYER 2)	EACH	1
	730-02.09	SIGNAL HEAD ASSEMBLY (130 WITH BACKPLATE)	EACH	6
	730-02.17	SIGNAL HEAD ASSEMBLY (150 A2H WITH BACKPLATE)	EACH	4
	730-02.18	SIGNAL HEAD ASSEMBLY (150 A2V POLE MOUNTED)	EACH	4
	730-03.16	FIBER DISTRIBUTION BOX	EACH	1
	730-03.20	INSTALL PULL BOX (TYPE B)	EACH	4
11	730-03.24	INSTALL PULL BOX (FIBER OPTIC-TYPE B)	EACH	1
12	730-05.01	ELECTRICAL SERVICE CONNECTION	EACH	1
	730-08.01	SIGNAL CABLE - 3 CONDUCTOR	L.F.	80
	730-08.02	SIGNAL CABLE - 5 CONDUCTOR	L.F.	400
	730-08.03	SIGNAL CABLE - 7 CONDUCTOR	L.F.	670
13	730-08.41	INTERCONNECT CABLE - FIBER OPTIC (DROP CABLE, 6-FIBER, SINGLE MODE)	L.F.	140
	730-12.03	CONDUIT 3" DIAMETER (PVC)	L.F.	60
	730-12.13	CONDUIT 2" DIAMETER (JACK AND BORE)	L.F.	140
	730-12.14	CONDUIT 3" DIAMETER (JACK AND BORE)	L.F.	455
14	730-12.42	CURB MARKER (CURB MOUNTED CABLE MARKER)	EACH	6
15	730-13.02	VEHICLE DETECTOR (VIDEO)	EACH	1
16	730-13.06	VEHICLE DETECTOR (OPTICALLY ACTIVATED PRIORITY CONTROL)	EACH	1
17	730-15.32	CABINET (EIGHT PHASE BASE MOUNTED)	EACH	1
17	730-16.02	EIGHT PHASE ACTUATED CONTROLLER	EACH	1
18	730-23.36	CANTILEVER SIGNAL SUPPORT (1 ARM @ 68')	EACH	1
18	730-23.37	CANTILEVER SIGNAL SUPPORT (1 ARM @ 56')	EACH	1
18	730-23.38	CANTILEVER SIGNAL SUPPORT (1 ARM @ 52')	EACH	1
18	730-23.39	CANTILEVER SIGNAL SUPPORT (1 ARM @ 70')	EACH	1
19	730-26.05	COUNTDOWN PEDESTRIAN SIGNAL	EACH	6
	771-30.32	CONCRETE CURB AND GUTTER	L.F.	170
	771-30.33	CONCRETE SIDEWALK	S.F.	230
	802-01.10	TREES (REMOVAL)	EACH	5
	802-01.11	TREES (BURFORDI HOLLIES)	EACH	5
	803-01	SODDING (NEW SOD)	S.Y.	110

FOOTNOTES:

- 1 TO INCLUDE SIDEWALK REMOVAL FOR INSTALLATION OF HANDICAP RAMPS.
- 2 TO INCLUDE PAVEMENT REMOVAL, CURB AND GUTTER REMOVAL, AND EXCAVATION.
- 3 TO BE USED AS DIRECTED BY THE ENGINEER.
- 4 SEE SUBSECTION 209.07 OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT.
- 5 TO INCLUDE ALL NECESSARY ITEMS TO PROVIDE TRAFFIC CONTROL IN ACCORDANCE
- 6 TO INCLUDE MAST ARM MOUNTED "POPLAR AVE" SIGN WITH MOUNTING BRACKETS.
- 7 TO INCLUDE MAST ARM MOUNTED "INTERNATIONAL DR" SIGN WITH MOUNTING BRACKETS.
- 8 TO INCLUDE MAST ARM MOUNTED "LEFT TURN ONLY" SIGN (R3-5L) AND MOUNTING BRACKETS.
- 9 ALLOWANCE TO COVER THE COST ASSOCIATED WITH POWER CONNECTION FOR THE TRAFFIC SIGNAL FROM THE TRANSFORMER TO THE DEMARCATION POINT.
- 10 SEE THE LATEST "CITY OF MEMPHIS - STANDARD CONSTRUCTION SPECIFICATIONS" FOR TECHNICAL REQUIREMENTS.
- 11 QUAZITE BRAND (MODEL NO. PG3048BB36 WITH PG3048HS6L COVER) OR APPROVED EQUIVALENT. COST INCLUDES ALL LABOR AND MATERIALS (REMOVING AND REPLACING NECESSARY SIDE WALK PANELS, REPAIR LANDSCAPING, REMOVING EXISTING PULL BOX, AND OTHER MISCELLANEOUS MATERIALS) TO COMPLETE PULL BOX INSTALLATION.
- 12 CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH POWER CONNECTION FOR TRAFFIC SIGNAL FROM THE DEMARCATION POINT TO THE CABINET.
- 13 CONTRACTOR SHALL INSTALL A TRACER WIRE WITH THE FIBER OPTIC CABLE FOR ALL CONDUIT ROUTING.
- 14 SEE CONSTRUCTION PLANS GENERAL NOTES SHEET FOR DETAILS.
- 15 TO BE ITERIS VANTAGE SYSTEM OR APPROVED EQUIVALENT. INCLUDES DETECTION CAMERAS, PROCESSOR UNIT, CARD RACK, POWER SUPPLY UNIT, SERIES SURGE PROTECTION EQUIPMENT, 10" COLOR LCD MONITOR, MOUSE AND ALL OTHER CABLING, CONNECTIONS AND HARDWARE TO COMPLETE THE INSTALLATION OF A FULLY FUNCTIONAL VIDEO DETECTION SYSTEM. THIS ITEM SHALL INCLUDE ONE ITERIS VANTAGE EDGE CONNECT CARD OR APPROVED EQUIVALENT.
- 16 TO BE GTT OPTICOM SYSTEM OR APPROVED EQUIVALENT. INCLUDES OPTICAL DETECTORS, CONFIRMATION LAMPS (PAR 90), POLE-MOUNTED BEACONS, FOUR-CHANNEL PHASE SELECTOR, CARD RACK (OPTICOM 760) AND ALL OTHER CABLING, CONNECTIONS AND HARDWARE TO COMPLETE THE INSTALLATION OF A FULLY-FUNCTIONAL PREEMPTION SYSTEM, INCLUDING FIELD FINE-TUNING.
- 17 THE CONTROLLER CABINET SHALL BE AN EIGHT PHASE CABINET SIZE P CABINET. THIS ITEM INCLUDES THE TRAFFIC SIGNAL CONTROLLER. THE TRAFFIC SIGNAL CONTROLLER SHALL BE AN EAGLE EPAC M52 KEYBOARD UNIT OR APPROVED EQUIVALENT WITH BUILT-IN ETHERNET PORT AND BUILT-IN PORT 3 FIBER MODEM (SINGLE MODE), AND BUILT-IN STRETCH AND DELAY FEATURES FOR EACH PHASE. THE TRAFFIC CONTROLLER INSTALLATION ALONG WITH ALL AUXILIARY EQUIPMENT TO BE INSTALLED IN THE CABINET SHALL BE MANUFACTURED, SUPPLIED AND INSTALLED IN ACCORDANCE WITH THE LATEST CITY OF MEMPHIS TRAFFIC SIGNAL CONTROLLER AND CABINET SPECIFICATIONS. THE INSTALLATION SHALL HAVE A 12-CHANNEL MALFUNCTION MONITOR UNIT INSTALLED AS MODEL EDI SSM12LE-P. CABINET SHALL INCLUDE 1 VEHICLE DETECTOR CARD (4-CHANNEL) IN ADDITION TO THE QUANTITIES OF ITEM NUMBER 730-13.02.
- 18 SHALL BE GALVANIZED STEEL PER CITY OF MEMPHIS STANDARDS. ITEM ALSO INCLUDES CONCRETE FOUNDATION.
- 19 TO INCLUDE SIGNS AND PUSHBUTTONS.

STANDARD DRAWINGS

CITY OF MEMPHIS

TS-1 THRU TS-10

TENNESSEE DEPARTMENT OF TRANSPORTATION

RD-L-3, RD-L-4

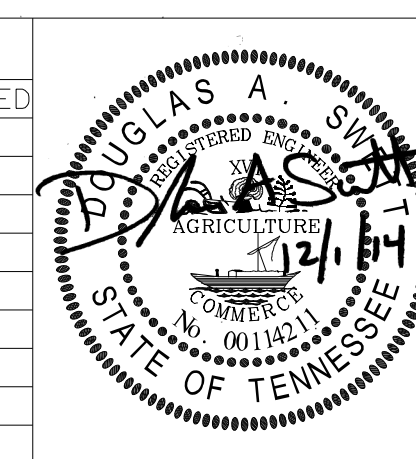
RP-H-3, RP-H-4, RP-H-5, RP-H-7, RP-H-9, RP-NMC-10

T-M-3, T-M-4, T-S-20, T-SG-2, T-SG-3A, T-SG-5, T-SG-7, T-SG-7A, T-SG-9, T-SG-9A, T-SG-10, T-SG-12, T-WZ-40, T-WZ-41, T-WZ-42, T-WZ-51, T-WZ-55, T-FO-2, T-FO-4

SPECIAL DETAILS WITHIN THIS PLANSET SHALL SUPERCEDE THOSE FOUND ON THE LISTED STANDARD DRAWINGS.

REVISIONS

DATE	DESCRIPTIONS	APPROVED
11/14	ADDENDUM 1	



DIVISION OF PUBLIC WORKS
CONGESTION MANAGEMENT PROGRAM
POPLAR AVENUE AT INTERNATIONAL DRIVE
MEMPHIS, TN

QUANTITIES

DRAFTED: KHA 01/14 DESIGNED: KHA 01/14
CHECKED: JEC 01/14 SCALE: N.T.S.

CITY TRAFFIC ENGINEER: _____ DATE: _____
CITY ENGINEER: _____ DATE: _____

Kimley»Horn

UTILITIES

1. THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY CONTACTING THE UTILITY COMPANIES INVOLVED. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC., AT 1-800-351-1111 AS REQUIRED BY TCA 65-31-106 WILL BE REQUIRED.
2. UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR ITS REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO COOPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT.
3. PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS.
4. THE CONTRACTOR SHALL FURNISH ALL LABOR AND MATERIALS NECESSARY TO PROVIDE ELECTRICAL SERVICE TO THE CONTROLLER FROM THE POINT OF DEMARCATION.
5. THE CONTRACTOR MUST CONTACT THE ENGINEER IF EXISTING UTILITIES CONFLICT WITH INSTALLATION OR OPERATION OF PROPOSED EQUIPMENT.
6. THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.
7. THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY IN THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY IN ACCORDANCE WITH TCA 65-31-106.

TRAFFIC SIGNAL NOTES

1. INSTALL SIGNS AND MARKINGS AS SHOWN PER CITY OF MEMPHIS STANDARDS.
2. INSTALL CONDUIT BEFORE POURING CONCRETE FOR SIDEWALKS AND WHEELCHAIR RAMPS.
3. EQUIPMENT AND INSTALLATION SHALL COMPLY WITH THE CITY OF MEMPHIS TRAFFIC SIGNAL SPECIFICATIONS.
4. THE CONTRACTOR SHALL REFER TO THE CITY OF MEMPHIS "DESIGN STANDARDS" FOR INSTALLATION DETAILS (SHEETS TS-1 THRU TS-10).
5. THE CONTRACTOR SHALL CONTACT THE ADA COORDINATOR AT THE CITY ENGINEERING OFFICE (576-6700) FOR LAYOUT AND APPROVAL PRIOR TO INSTALLING WHEELCHAIR RAMPS AND POLE FOUNDATIONS.
6. THE CONTRACTOR SHALL NOTIFY THE CITY TRAFFIC ENGINEERING DEPARTMENT AT 576-6710 AT LEAST 48 HOURS PRIOR TO POURING CONCRETE FOR POLE FOUNDATIONS.
7. THE PROPOSED LOCATIONS OF THE SIGNAL SUPPORT POLES, AS SHOWN ON THESE PLANS, IS APPROXIMATE. SOME FIELD ADJUSTMENT MAY BE REQUIRED IN ORDER TO AVOID CONFLICTS WITH EITHER UNDERGROUND OR OVERHEAD UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING AND STAKING THE OPTIMUM LOCATIONS FOR THE POLES AND FOR THEN RECEIVING APPROVAL FROM THE CITY AND THE APPROPRIATE UTILITIES BEFORE THE INSTALLATION BEGINS.
8. SIGNAL DISPLAYS SHALL BE MOUNTED AT 17.5' FROM THE PAVEMENT TO THE BOTTOM OF THE BACKPLATE, UNLESS OTHERWISE NOTED.
9. VEHICULAR SIGNAL HEADS ON THE POLES ARE TO BE LOCATED SO THE BOTTOM OF THE HEADS ARE A MINIMUM OF 10 FEET FROM THE BASE OF THE POLE.
10. PEDESTRIAN SIGNAL HEADS ON THE POLES ARE TO BE LOCATED SO THE BOTTOM OF THE HEADS ARE A MINIMUM OF 8 FEET FROM THE BASE OF THE POLE.
11. THE TOP OF THE CONCRETE FOOTING FOR THE SIGNAL POLE SHALL BE FLUSH WITH THE ADJACENT SIDEWALK.
12. THE POLE FOUNDATION AND CURB RAMP SHALL BE FORMED AT THE SAME TIME FOR ADA COORDINATOR AND INSPECTOR APPROVAL.
13. ALL SIGNAL HEADS AS WELL AS PEDESTRIAN SIGNALS SHALL BE LED SIGNALS.
14. THE CONTRACTOR SHALL VERIFY MAST ARM DIMENSIONS, MAST ARM ATTACHMENT HEIGHTS AND SIGNAL HEAD VERTICAL PLACEMENTS PRIOR TO ORDERING MAST ARMS FROM THE MANUFACTURER.
15. USE THE TDOT STANDARD MAST ARM POLE FOUNDATION.

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL NOTES

1. ALL TRAFFIC CONTROL DEVICES AND THEIR INSTALLATION SHALL MEET THE STANDARD PRESCRIBED IN THE STATE OF TENNESSEE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND SHALL COMPLY WITH THE STATE OF TENNESSEE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 712 TEMPORARY TRAFFIC CONTROL.
2. NOTHING IN THIS PLAN IS INTENDED TO SUPERSEDE OR RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF INSTALLING THE APPROPRIATE TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE CURRENT STATE OF TENNESSEE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS."
3. THE CONTRACTOR SHALL BE REQUIRED TO NOTIFY THE CITY OF MEMPHIS TRAFFIC ENGINEERING DEPARTMENT A MINIMUM OF 72 HOURS PRIOR TO IMPLEMENTING A TRAFFIC CONTROL PLAN. ALL TRAFFIC CONTROL DEVICES MUST BE IN PLACE BEFORE CONSTRUCTION ACTIVITY BEGINS.
4. IF USED, THE CONTRACTOR SHALL USE PLASTIC DRUMS WITH TYPE "C" WARNING LIGHTS TO SEPARATE TRAFFIC FROM THE CONSTRUCTION AREA. DRUMS WITH TYPE "C" WARNING LIGHTS SHALL DELINEATE THE EDGE OF PAVEMENT THROUGH THE ENTIRE CONSTRUCTION AREA, IF USED.
5. ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY-EIGHT (48) HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY BE ERECTED UP TO ONE WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.
6. IF THE CONTRACTOR MOVES OFF THE PROJECT, HE SHALL COVER OR REMOVE ALL UNNEEDED SIGNS AS DIRECTED BY THE ENGINEER. COSTS OF REMOVAL, COVERING, AND REINSTALLING SIGNS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT ALL COSTS SHALL BE INCLUDED IN THE ORIGINAL UNIT PRICE BID FOR ITEM NO 712-01.
7. A LONG TERM BUT SPORADIC USE WARNING SIGN, SUCH AS A FLAGGER SIGN, MAY REMAIN IN PLACE WHEN NOT REQUIRED PROVIDED THE SIGN FACE IS FULLY COVERED.
8. THE CONTRACTOR SHALL COVER ALL EXISTING SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL SIGNS OR DEVICES DURING CONSTRUCTION AND THEY SHALL REMAIN COVERED DURING CONSTRUCTION AND UNTIL SUCH TIME THAT NO CONFLICT EXISTS.
9. TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.
10. USE OF BARRICADES, PORTABLE BARRIER RAILS, VERTICAL PANELS, AND DRUMS SHALL BE LIMITED TO THE IMMEDIATE AREAS OF CONSTRUCTION WHERE A HAZARD IS PRESENT. THESE DEVICES SHALL NOT BE STORED ALONG THE ROADWAY WITHIN THIRTY (30) FEET OF THE EDGE OF THE TRAVELED WAY BEFORE OR AFTER USE UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES. THESE DEVICES SHALL BE REMOVED FROM THE CONSTRUCTION WORK ZONE WHEN THE ENGINEER DETERMINES THEY ARE NO LONGER NEEDED. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.
11. THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES.
12. ACCESS TO ADJACENT PROPERTIES SHALL BE MAINTAINED AT ALL TIMES. SIDE STREET, DRIVEWAY ACCESS, AND SAFE PEDESTRIAN WAYS SHALL BE MAINTAINED AT ALL TIMES.
13. DURING CONSTRUCTION, A MINIMUM OF ONE 11 FOOT LANE OF TRAFFIC IN EACH DIRECTION SHALL REMAIN OPEN AT ALL TIMES ON INTERNATIONAL DRIVE AND THE PRIVATE DRIVE. A MINIMUM OF TWO 11' LANES IN EACH DIRECTION SHALL REMAIN OPEN ON POPLAR AVENUE AT ALL TIMES.
14. THE PROPOSED TRAFFIC SIGNAL SHALL BE COMPLETELY INSTALLED, OPERATING AND CONTROLLING TRAFFIC PRIOR TO REMOVAL OF ANY EXISTING TRAFFIC CONTROL MEASURES.
15. WORK WITHIN THE ROADWAY SHALL BE CONDUCTED BETWEEN 9:00 A.M. AND 4:00 P.M. AND THE ROADWAY SHALL BE COMPLETELY OPEN TO TRAFFIC AT ALL OTHER TIMES AND ALL INAPPROPRIATE SIGNS SHALL BE COVERED OR REMOVED. THE CONTRACTOR MAY CONDUCT WORK FROM 7:00 P.M. AND 7:00 A.M. WITH PRIOR APPROVAL FROM THE CITY OF MEMPHIS AND SHELBY COUNTY.

UTILITY OWNERS		
GAS, WATER & ELECTRIC:	MEMPHIS LIGHT, GAS, & WATER 220 S. MAIN ST. MEMPHIS, TN 38103 (901) 528-4186 TOM WORD	TELEPHONE: AT & T 3845 OUTLAND ROAD MEMPHIS, TN 38118 (901) 797-3504 BETH CARTER
TRAFFIC SIGNAL:	CITY OF MEMPHIS SIGNAL MAINTENANCE 980 S. THIRD ST. MEMPHIS, TN 38106 (901) 528-2844 JAY WALKO	CATV: COMCAST INC. 5450 WINCHESTER RD. MEMPHIS, TN 38115 (901) 365-1770 EXT. 4114 REX MORRIS
		SEWER: CITY OF MEMPHIS PUBLIC WORKS 125 N. MAIN ST. MEMPHIS, TN 38103 (901) 576-6742

CABLE MARKERS

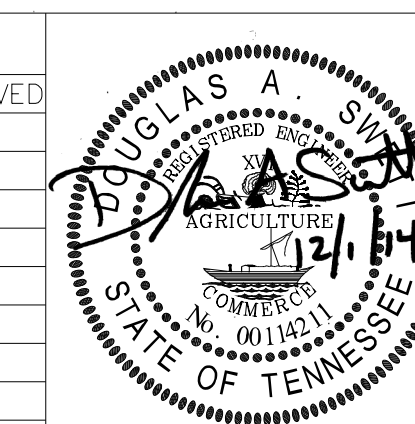
1. THE CONTRACTOR SHALL INSTALL CABLE MARKERS TO IDENTIFY THE PROPOSED SIGNAL CABLES AND FIBER OPTIC COMMUNICATION CABLES. LEGENDS AND COLORS FOR CABLE MARKERS ARE TO APPEAR ACCORDING TO THE INFORMATION SUPPLIED BY THE CITY OF MEMPHIS SIGNAL MAINTENANCE DEPARTMENT. THE MARKERS ARE TO BE PERMANENT, BRIGHTLY COLORED, NON-REFLECTIVE, WITH BLACK LETTERING. CURB MARKERS SHALL BE RED IN COLOR FOR TRAFFIC SIGNALS AND ORANGE IN COLOR FOR FIBER OPTIC CABLES. MARKERS ARE TO BE MANUFACTURED OF PLASTIC, VINYL OR FIBERGLASS MATERIAL THAT IS DURABLE, UV LIGHT-RESISTANT, WEATHER-PROOF AND SCRATCH-RESISTANT.
2. CURB MARKERS SHALL BE INSTALLED TO IDENTIFY CABLES THAT ARE IN OR NEAR THE STREET. CURB MARKERS ARE TO BE FOUR-INCH DIAMETER ROUND DISKS APPLIED TO CONCRETE OR METAL SURFACES WITH AN ADHESIVE ACCORDING TO THE RECOMMENDATIONS OF THE MANUFACTURER. CURB MARKERS ARE TO BE INSTALLED ON CABINET AND POLE FOUNDATIONS ON THE SIDE ABOVE THE CABLE. CURB MARKERS ARE TO BE INSTALLED ON THE STREET CURB OVER THE LOCATION OF CROSSING CABLES. CURB MARKERS ARE ALSO TO BE PLACED ON THE CURB AT 100-FOOT SPACING ALONG ANY RUN OF CABLE THAT IS PARALLEL TO THE CURB. WHERE PAVED SHOULDER EXISTS INSTEAD OF CURB, PLACE CURB MARKERS ON THE PAVEMENT SURFACE ONE FOOT FROM THE EDGE OF THE SURFACE, OR DIRECTLY OVER THE CONDUIT OR CABLE. CURB MARKERS ARE TO BE DURACAST STYLE CURB MARKERS AS MADE BY DAS MANUFACTURING, WILLIAM FRICK AND CO., OR APPROVED EQUAL. CURB MARKERS SHALL BE ABRASION AND UV-RESISTANT.
3. PAYMENT AT THE CONTRACT UNIT PRICE, PER EACH, SHALL BE MADE FOR EACH INSTALLED AND ACCEPTED CABLE MARKER AS FOLLOWS:

ITEM NUMBER 730-12.42 - CURB MARKER (CURB MOUNTED CABLE MARKER)

MISCELLANEOUS

1. THE CONTRACTOR SHALL ADJUST OR MODIFY THE LOCATIONS OF THE EMERGENCY VEHICLE OPTICAL DETECTORS TO ACHIEVE RELIABLE PERFORMANCE (AS DETERMINED BY THE ENGINEER) WHEN FIELD-TESTED WITH ACTUAL FIRE DEPARTMENT VEHICLES.
2. REGARDLESS OF THE ENGINEER'S PRE-INSTALLATION APPROVAL, THE CONTRACTOR SHALL ADJUST OR MODIFY THE LOCATIONS OF THE EMERGENCY VEHICLE CONFIRMATION LAMP(S) AND BEACON(S) TO ACHIEVE SATISFACTORY VISIBILITY (AS DETERMINED BY THE ENGINEER).
3. ALL EMERGENCY VEHICLE PREEMPTION EQUIPMENT INCLUDING OPTICAL DETECTOR CABLE SHALL BE SUPPLIED BY THE SAME MANUFACTURER.
4. THE CONTRACTOR SHALL BRING THE NEW CONTROLLER UNIT AND THE SIGNAL TIMING SHEET TO THE CITY OF MEMPHIS TRAFFIC SIGNAL MAINTENANCE OFFICE FOR REVIEW PRIOR TO INSTALLATION OF THE CONTROLLER IN THE CABINET.
5. NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS ALONG THE PROPOSED CONSTRUCTION AREA.
6. A MINIMUM OF 48 HOURS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CITY OF MEMPHIS ENGINEERING OFFICE AT (901) 576-6700 AND THE SHELBY COUNTY DEPARTMENT OF ROADS, BRIDGES AND ENGINEERING AT (901) 222-7705.
7. ALL CONSTRUCTION MATERIALS AND PROCEDURES SHALL MEET OR EXCEED THE REQUIREMENTS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARD CONSTRUCTION SPECIFICATIONS, DATED MARCH 1, 2006 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.
8. PROPERTY LINES SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
9. VERIFY SITE CONDITIONS PRIOR TO CONSTRUCTION. NOTIFY THE CITY OF MEMPHIS TRAFFIC ENGINEERING DEPARTMENT OF ANY VARIATIONS PRIOR TO THE COMMENCEMENT OF WORK.
10. LANDSCAPING DISTURBED BY THIS PROJECT SHOULD BE RETURNED TO AN AESTHETIC CONDITION EQUAL TO ITS EXISTING CONDITION.
11. THE CONTRACTOR IS RESPONSIBLE FOR SECURING ALL NECESSARY PERMITS.
12. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES AT ALL TIMES.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING THE SIGNAL TIMING IN THE CONTROLLER. CONTACT JAMES COLLINS, KIMLEY-HORN AND ASSOCIATES, INC. AT (901) 374-9109 A MINIMUM OF THIRTY (30) DAYS PRIOR TO ACTIVATION OF THE NEW SIGNAL HEADS TO OBTAIN TIMINGS.

REVISIONS		
DATE	DESCRIPTIONS	APPROVED
11/14	ADDENDUM 1	



DIVISION OF PUBLIC WORKS
CONGESTION MANAGEMENT PROGRAM
POPLAR AVENUE AT INTERNATIONAL DRIVE
MEMPHIS, TN

GENERAL NOTES

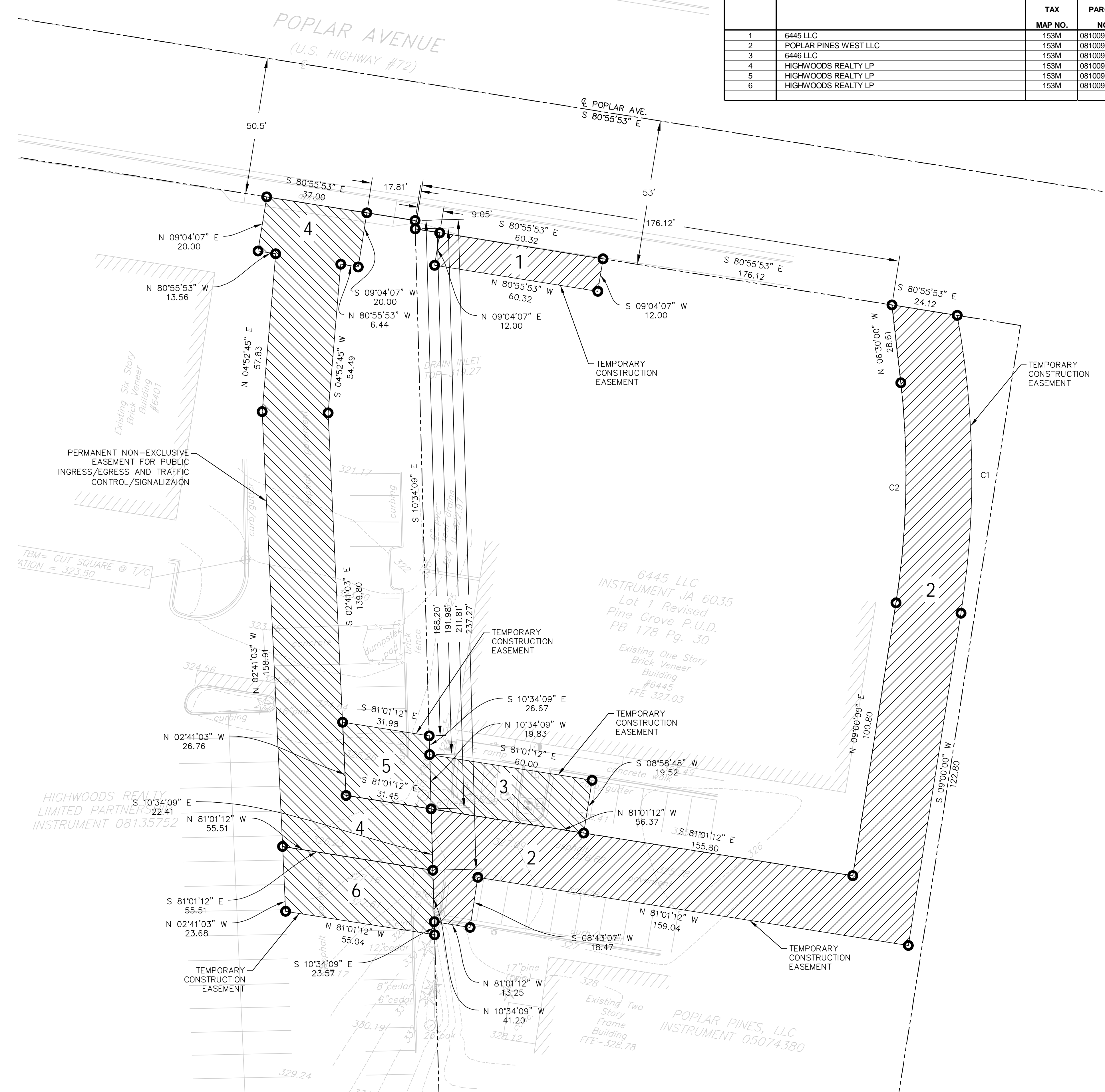
DRAFTED: KHA 01/14 DESIGNED: KHA 01/14
CHECKED: JEC 01/14 SCALE: N.T.S.

CITY TRAFFIC ENGINEER: _____ DATE: _____
CITY ENGINEER: _____ DATE: _____

Kimley»Horn

DRAWING NAME: K:\MEM_TPTD\115087003 - Poplar Ave at International Drive Traffic Signal Design\Cadd\Plans\Cross Access Plans\04 - ROW Acquisition.dwg Layout1 Dec 01, 2014 4:32PM BY: blaine.lynch

R.O.W. ACQUISITION TABLE																	
TRACT NO.	PROPERTY OWNERS	COUNTY RECORDS				TOTAL AREA ACRES			AREA TO BE ACQUIRED ACRES			AREA REMAINING ACRES		EASEMENT (SQUARE FEET)			
		TAX MAP NO.	PARCEL NO.	DEED DOCUMENT REFERENCE		LEFT	RIGHT	TOTAL	LEFT	RIGHT	TOTAL	LEFT	RIGHT	TRAFFIC CONTROL	SLOPE	PERM. ING/EGR	TEMP. CONST.
1	6445 LLC	153M	081009 00008	178	30		0.83	0.83				0.83				724	
2	POPLAR PINES WEST LLC	153M	081009 00008	178	30		1.28	1.28				1.28				9105	
3	6446 LLC	153M	081009 00008	178	30		0.83	0.83				0.83				1135	
4	HIGHWOODS REALTY LP	153M	081009 00002	L	31		4.89	4.89				4.89			6630	831	
5	HIGHWOODS REALTY LP	153M	081009 00002	L	31		4.89	4.89				4.89				1281	
6	HIGHWOODS REALTY LP	153M	081009 00002	L	31		4.89	4.89				4.89					



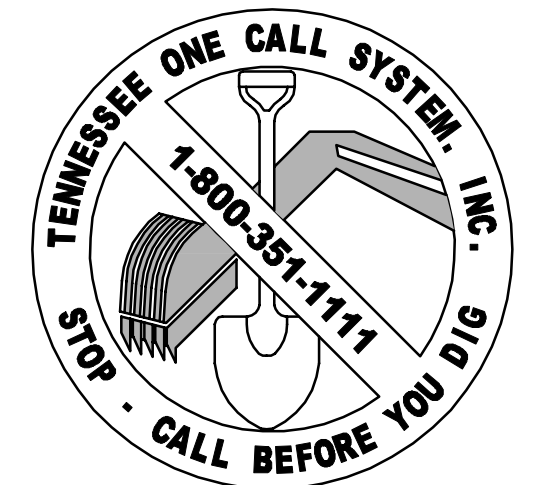
CURVE	DELTA	RADIUS	ARC	CHORD	CHORD BEARING
C1	19°26'32"	322	109.27	108.71	S 00°43'16" E
C2	15°27'07"	298.99	80.63	80.37	N 01°15'26" E

REVISIONS		
DATE	DESCRIPTIONS	APPROVED
11/14	ADDENDUM 1	



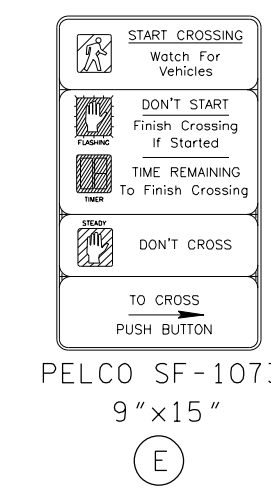
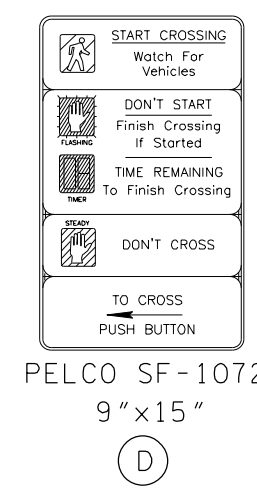
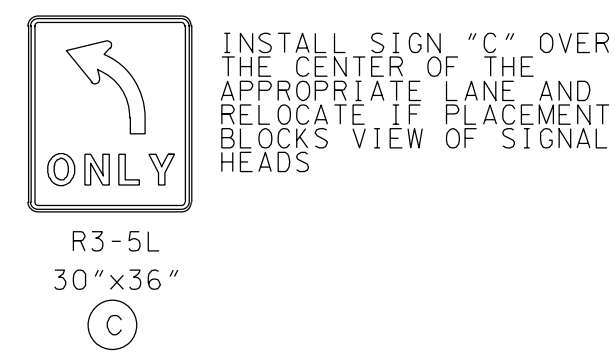
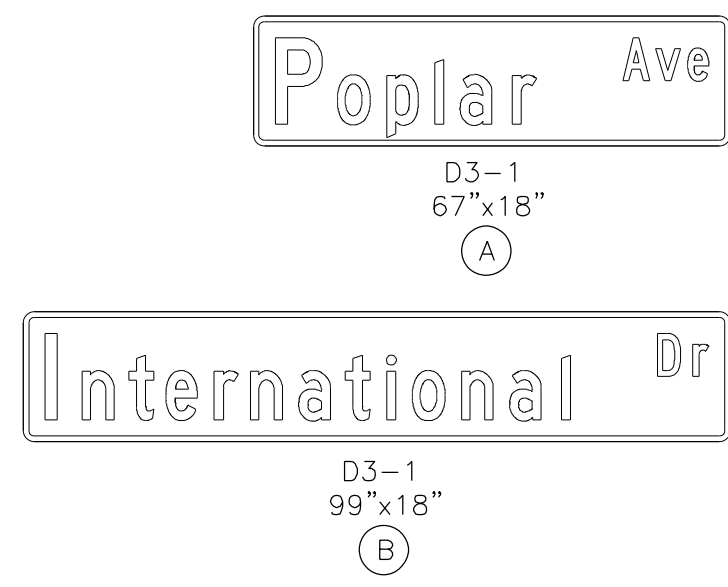
DIVISION OF PUBLIC WORKS
 CONGESTION MANAGEMENT PROGRAM
 POPLAR AVENUE AT INTERNATIONAL DRIVE
 MEMPHIS, TN
 R.O.W. ACQUISITION

DRAFTED: KHA 01/14 DESIGNED: KHA 01/14
 CHECKED: JFC 01/14 SCALE: 1"=20'
 CITY TRAFFIC ENGINEER: DATE:
 CITY ENGINEER: DATE:
 SHEET 4 OF 10



Kimley»Horn

SIGNS



INSTALL SIGN "C" OVER THE CENTER OF THE APPROPRIATE LANE AND RELOCATE IF PLACEMENT BLOCKS VIEW OF SIGNAL HEADS

INSTALL MAST ARM POLE (POLE #2)
(23'± FROM F.O.C. EXTENDED POPLAR AVE. & 32'± FROM F.O.C. EXTENDED INTERNATIONAL DR.)
MAST ARM LENGTH = 70'
FOUNDATION DEPTH = 15'
MAXIMUM MOMENT = 90,700 FT-LBS

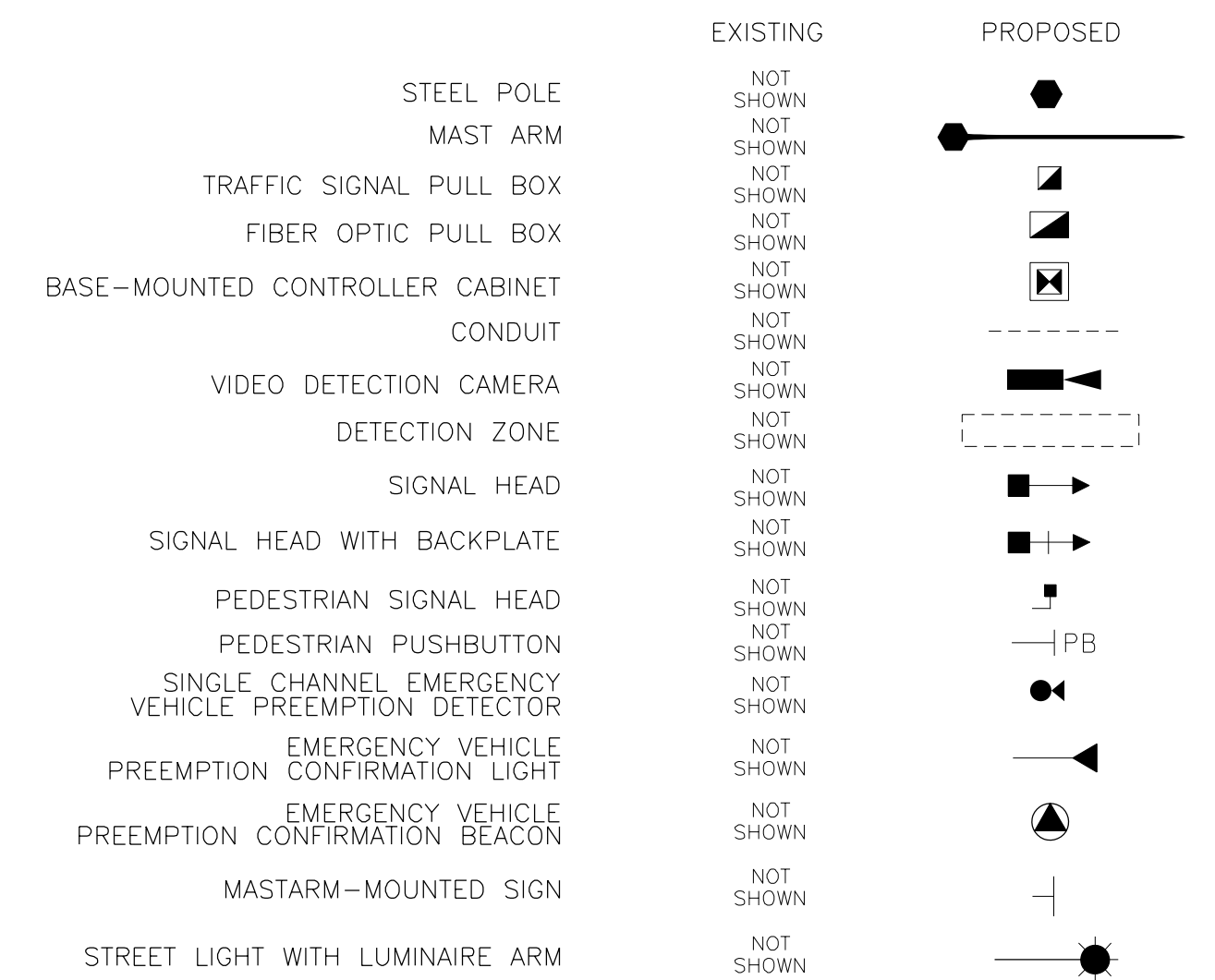
EXISTING PEDESTRIAN/ SIDEWALK & UTILITY EASEMENT

DETECTION ZONE ASSIGNMENT CHART

ZONE	MODE
ø1-1	PRESENCE
ø2-1	PRESENCE
ø2-2	PRESENCE
ø2-3	PRESENCE
ø3-1	PRESENCE
ø4-1	PRESENCE
ø5-1	PRESENCE
ø6-1	PRESENCE
ø6-2	PRESENCE
ø6-3	PRESENCE
ø7-1	PRESENCE
ø8-1	PRESENCE
*ø8-2	PRESENCE

*5 SECOND DELAY

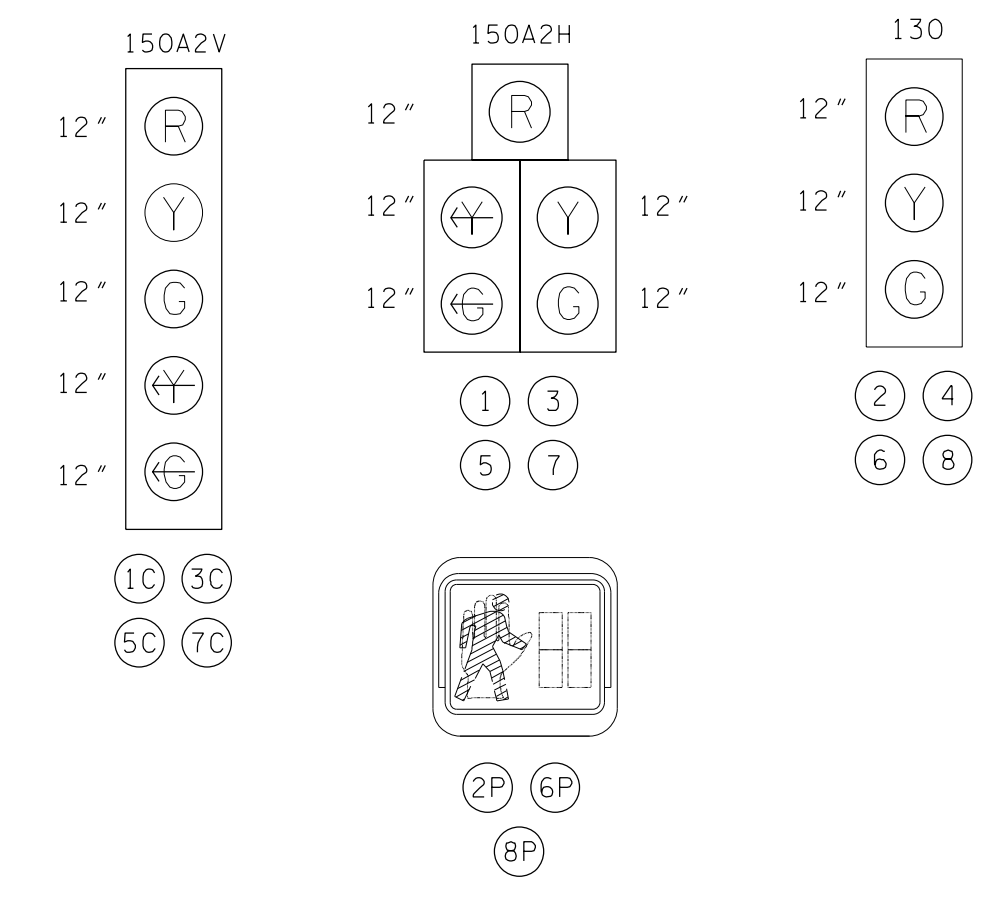
TRAFFIC SIGNAL LEGEND



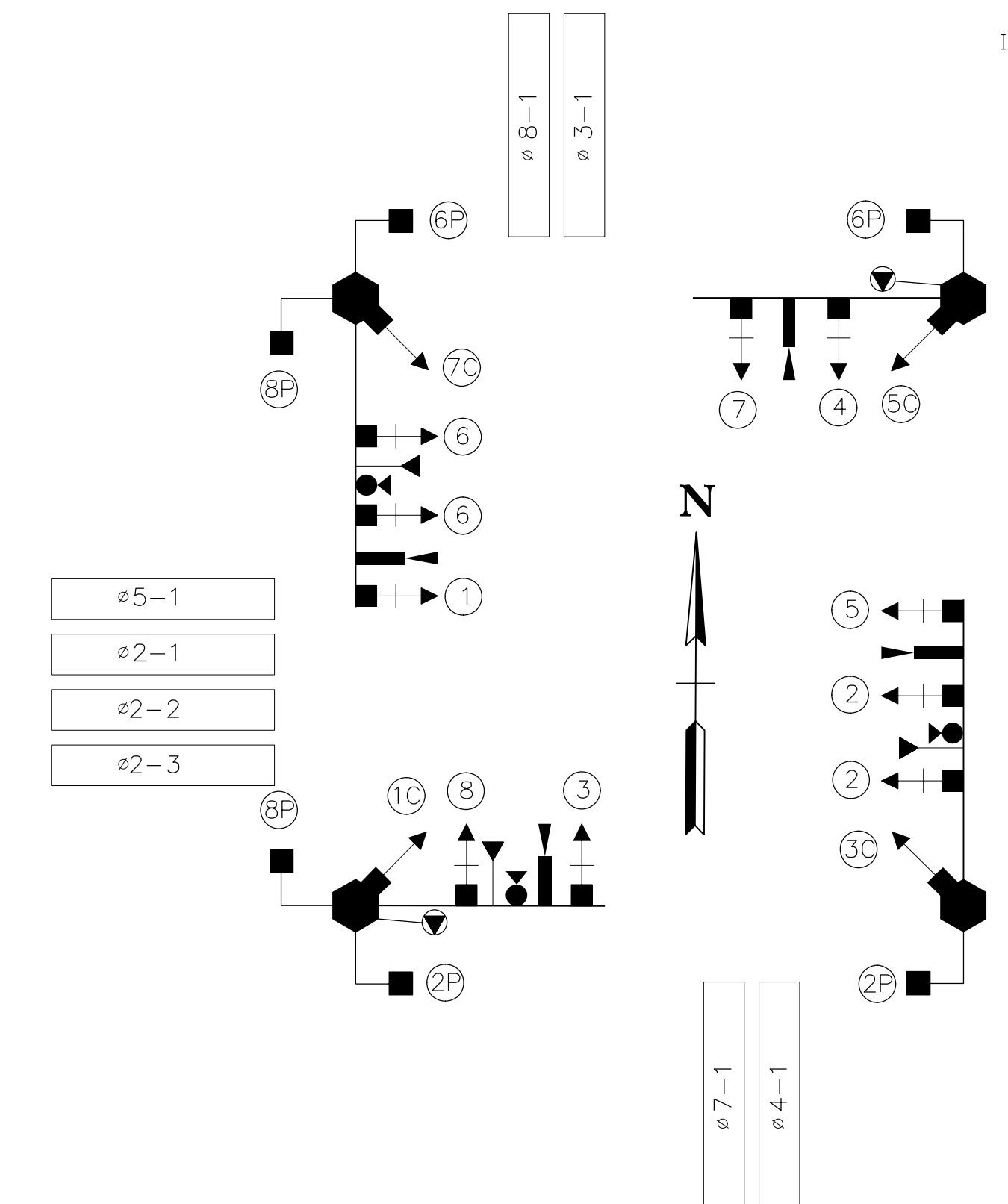
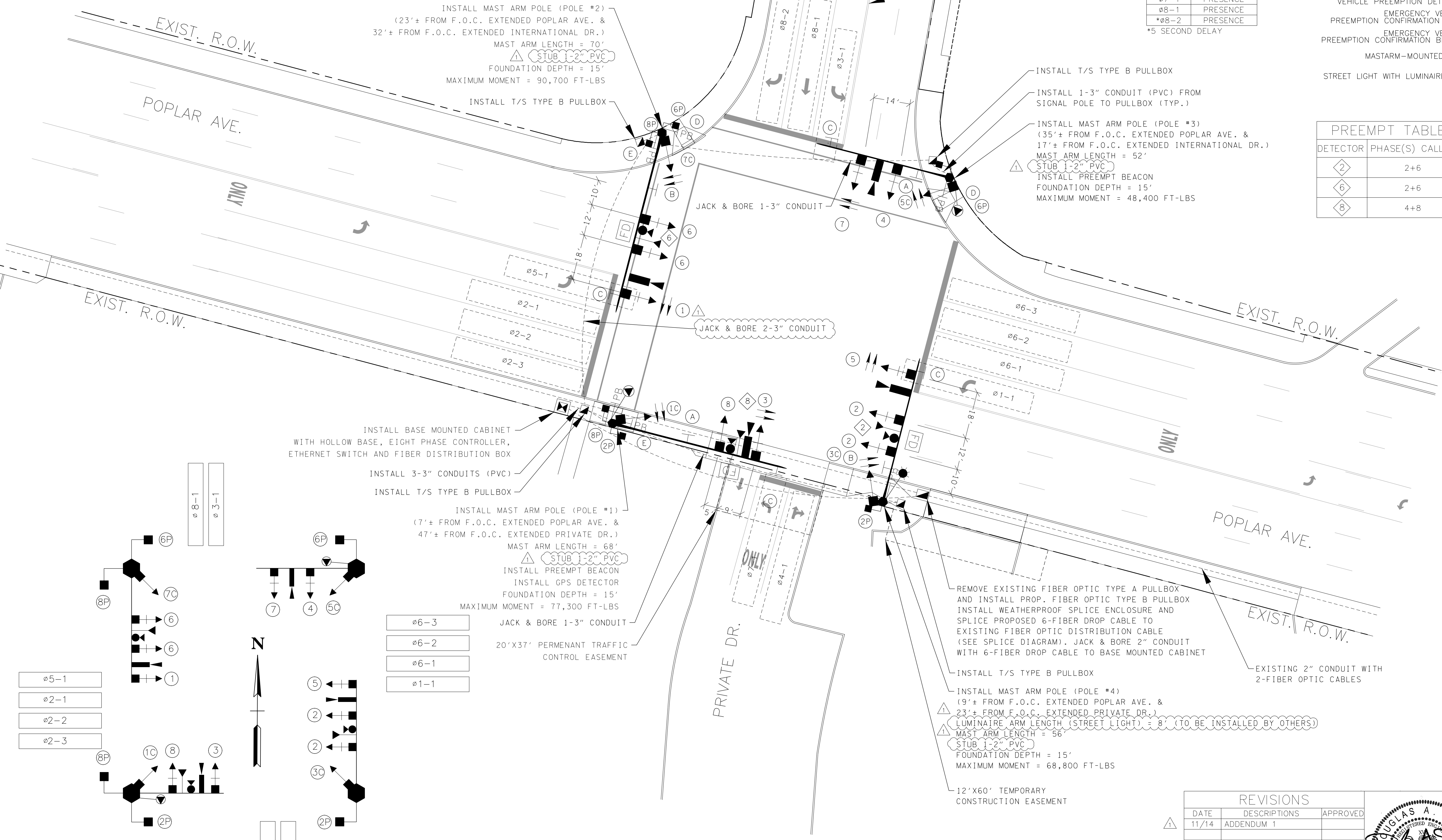
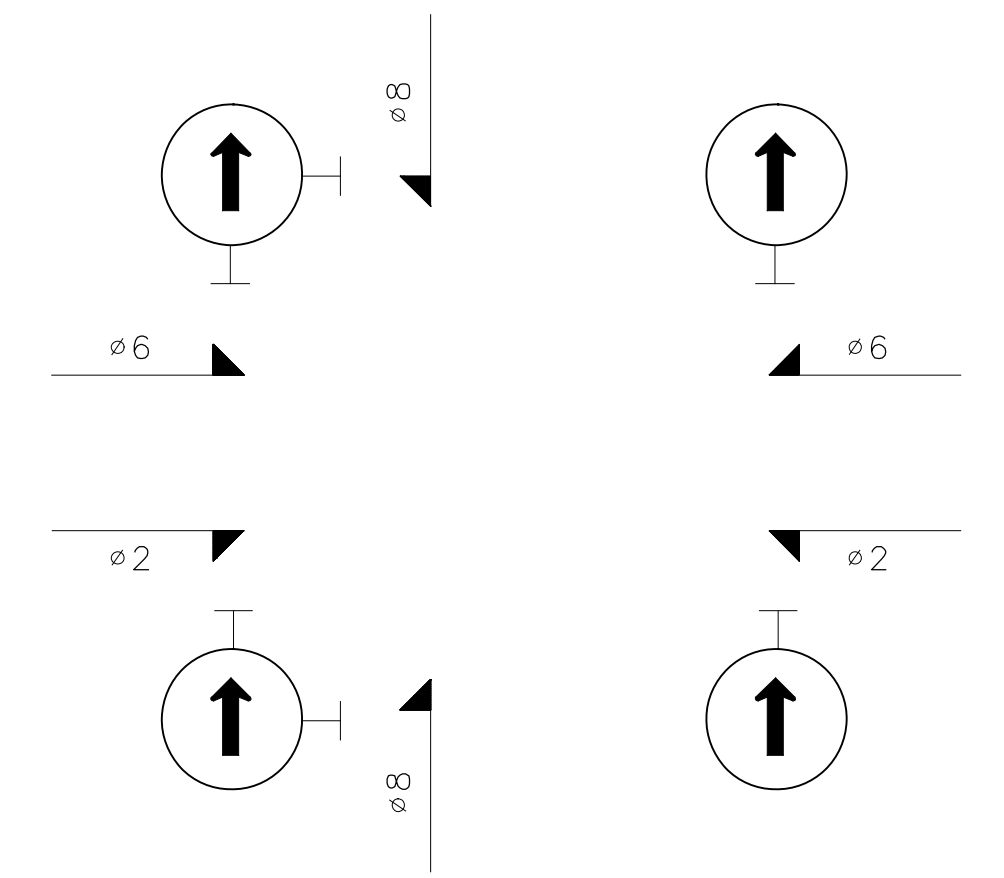
PREEMPT TABLE

DETECTOR	PHASE(S) CALLED
ø2	2+6
ø6	2+6
ø8	4+8

SIGNAL HEADS

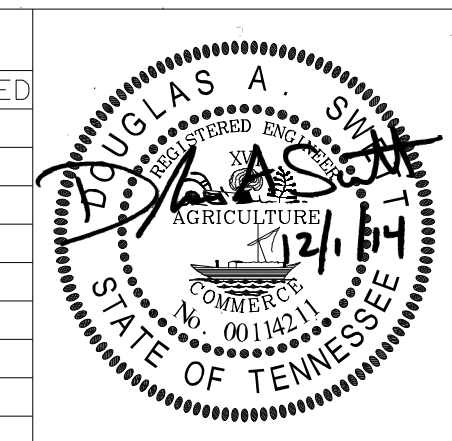


PUSHBUTTON ORIENTATION AND PHASE ASSIGNMENT



REVISIONS

DATE	DESCRIPTIONS	APPROVED
11/14	ADDENDUM 1	



DIVISION OF PUBLIC WORKS
CONGESTION MANAGEMENT PROGRAM
POPLAR AVENUE AT INTERNATIONAL DRIVE
MEMPHIS, TN

TRAFFIC SIGNAL LAYOUT

DRAFTED: KHA 01/14 DESIGNED: KHA 01/14
CHECKED: JEC 01/14 SCALE: 1"=20'
CITY TRAFFIC ENGINEER: DATE:
CITY ENGINEER: DATE:



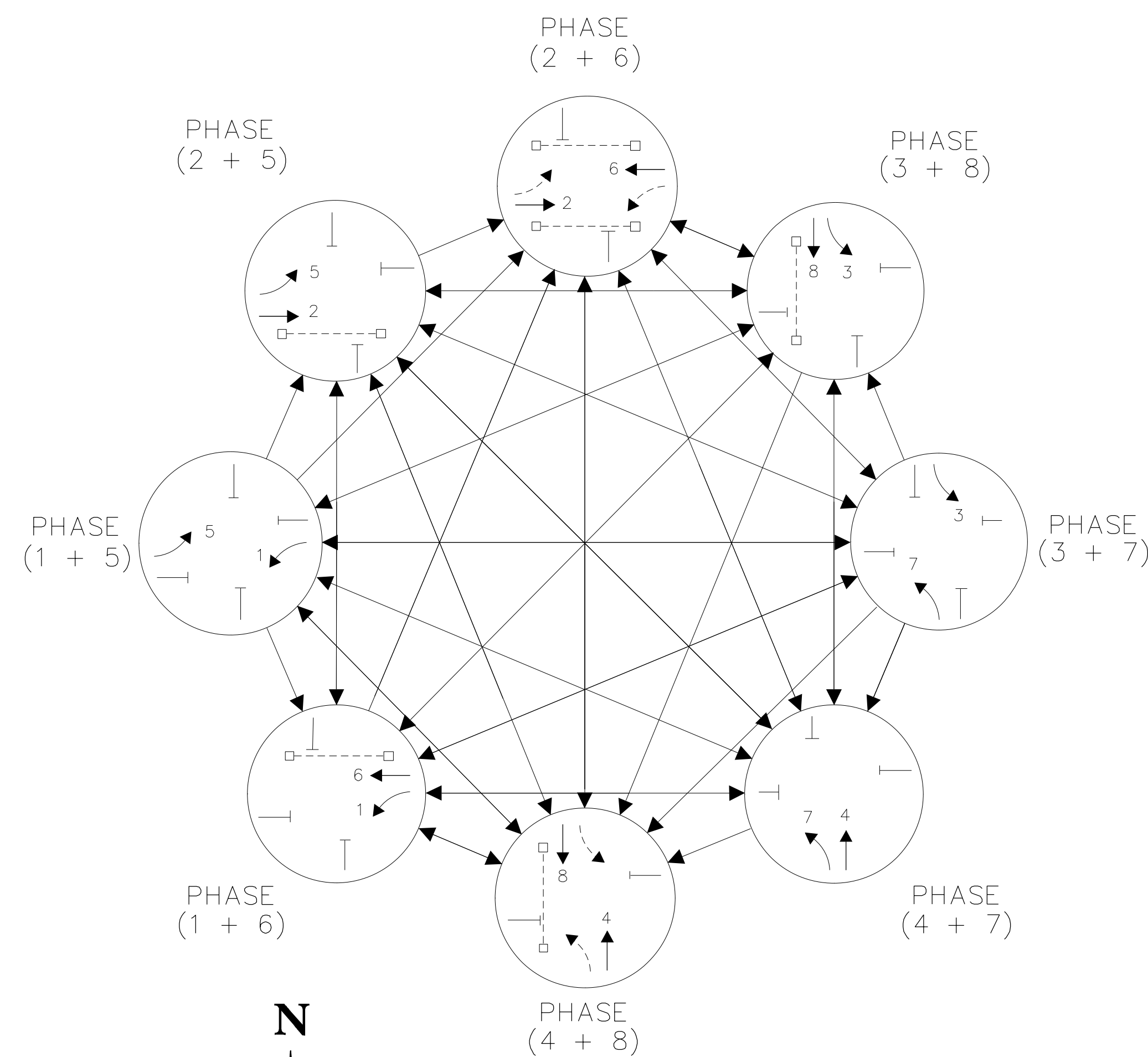
SEQUENCE CHART

SIGNAL HEAD	PHASE 1+5														PED CL	PHASE 1+6														PED CL	PHASE 2+5														PED CL	PHASE 2+6														SIGNAL HEAD
	CLEARANCE TO PHASE:															CLEARANCE TO PHASE:															CLEARANCE TO PHASE:															CLEARANCE TO PHASE:														
	1+6		2+5		2+6		3+7		3+8		4+7		4+8			2+5		2+6		3+7		3+8		4+7		4+8		1+6			2+6		3+7		3+8		4+7		4+8		3+7		3+8			4+7		4+8												
	1	2	1	2	1	2	1	2	1	2	1	2	1	2		1	2	1	2	1	2	1	2	1	2	1	2	1	2		1	2	1	2	1	2	1	2	1	2	1	2	1	2		1	2	1	2	1	2	1	2							
1, 1C	R, GA	R, GA	R, GA	R, YA	R	R, YA	R	R, YA	R	R, YA	R	R, YA	R	R	G, GA	G, GA	G, GA	Y, YA	R	G, YA	G	Y, YA	R	Y, YA	R	Y, YA	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	1, 1C														
2	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	2														
3, 3C	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	3, 3C													
4	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	4														
5, 5C	R, GA	R, YA	R	R, GA	R, GA	R, YA	R	R, YA	R	R, YA	R	R, YA	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	5, 5C													
6	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	Y	R	G	G	Y	R	Y	R	Y	R	Y	R	Y	R	Y	R	Y	R	Y	R	Y	R	Y	R	Y	R	Y	6															
7, 7C	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	7, 7C														
8	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	8															
2P	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	2P														
6P	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	6P														
8P	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	8P														

SIGNAL HEAD	PHASE 3+7														PED CL	PHASE 3+8														PED CL	PHASE 4+7														PED CL	PHASE 4+8														SIGNAL HEAD
	CLEARANCE TO PHASE:															CLEARANCE TO PHASE:															CLEARANCE TO PHASE:															CLEARANCE TO PHASE:														
	1+5		1+6		2+5		2+6		3+8		4+7		4+8			1+5		1+6		2+5		2+6		3+8		4+7		4+8			1+5		1+6		2+5		2+6		3+8		4+7		4+8			1+5		1+6		2+5		2+6								
	1	2	1	2	1	2	1	2	1	2	1	2	1	2		1	2	1	2	1	2	1	2	1	2	1	2	1	2		1	2	1	2	1	2	1	2	1	2	1	2	1	2		1	2	1	2	1	2	1	2	1	2	1	2			
1, 1C	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	1, 1C														
2	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	2														
3, 3C	R, GA	R, YA	R	R, YA	R	R, YA	R	R, YA	R	R, GA	R, GA	R, YA	R	R, YA	R	R, YA	R	R, YA	R	R, YA	R	R, YA	R	R, YA	R	R, YA	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	3, 3C													
4	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	4														
5, 5C	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	5, 5C														
6	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	6														
7, 7C	R, GA	R, YA	R	R, YA	R	R, YA	R	R, YA	R	R, YA	R	R, YA	R	R, GA	R, GA	R, YA	R	R, YA	R	R, YA	R	R, YA	R	R, YA	R	R, YA	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	7, 7C													
8	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	8														
2P	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	2P														
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8P	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	8P													

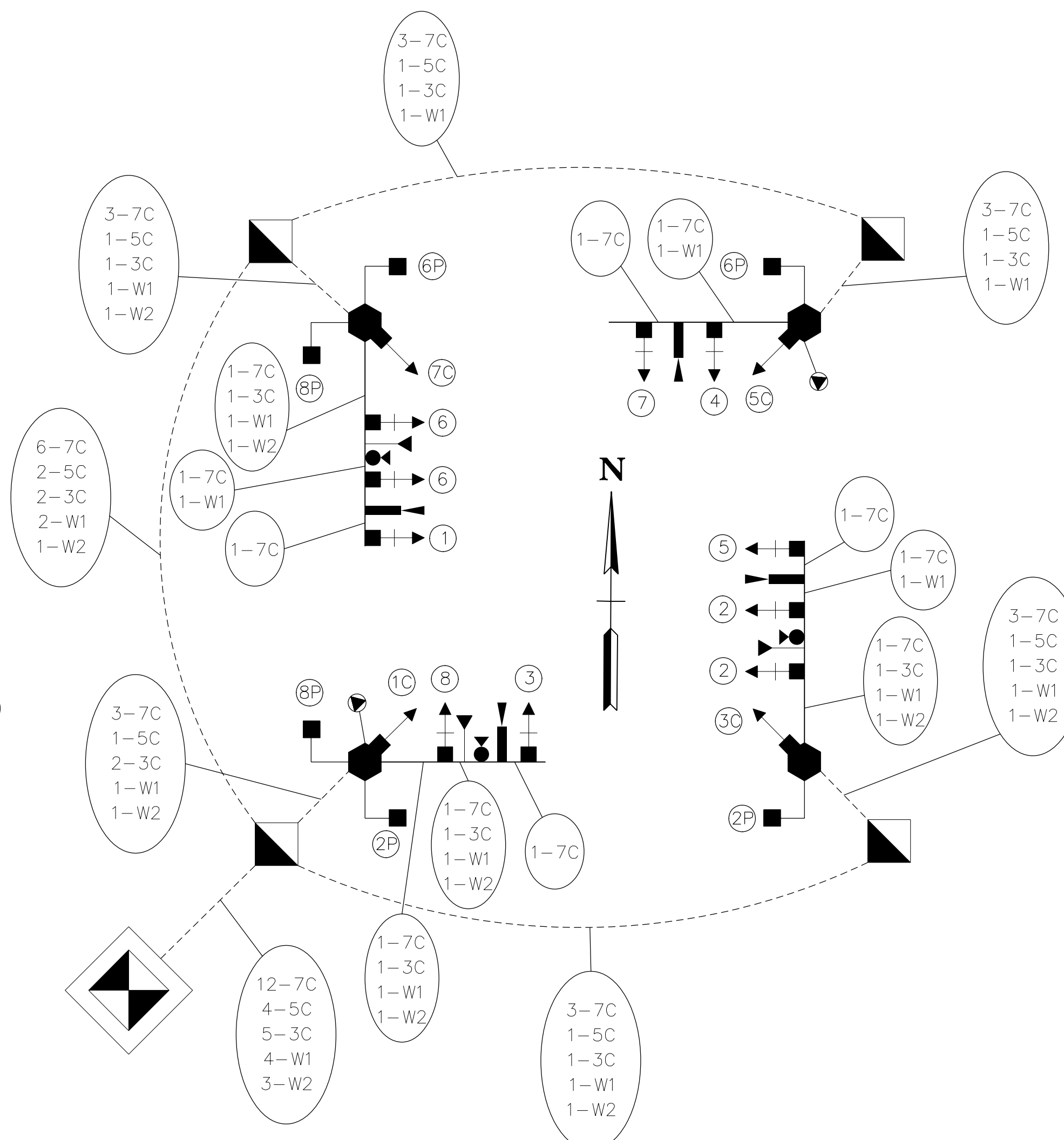
* "W" AND "FDW" ARE TO REMAIN "DW" IN ABSENCE OF A PEDESTRIAN CALL

PHASE DIAGRAM



PHASE DIAGRAM LEGEND

- THROUGH/RIGHT →
- PROTECTED LEFT TURN ↷
- PERMISSIVE LEFT TURN - - - - -
- DISPLAYED WALK INDICATION □ - - - □



DISPLAY AND GENERAL WIRING DIAGRAM

W1 = VIDEO DETECTION CABLE
W2 = EVP DETECTOR CABLE

NOTES:

ALL SPLICES AND TERMINATIONS OF CABLES SHALL BE MADE IN THE POLE BASES, SIGNAL HEADS AND PUSHBUTTONS.

INDIVIDUAL 3C SHALL BE RUN TO EACH PEDESTRIAN SIGNAL HEAD AND PUSHBUTTON ON EACH POLE. THE INDIVIDUAL 3C SHALL BE SPLICED IN THE POLE BASE PER THE WIRING AND CONDUCTOR ASSIGNMENT CHARTS SHOWN ON THIS SHEET.

PROTECTED/PERMISSIVE LEFT TURN 7C CABLE	
PHASE	CONDUCTOR COLOR
RED	RED
YELLOW	ORANGE
GREEN	GREEN
YELLOW ARROW	BLACK
GREEN ARROW	BLUE
NEUTRAL	WHITE
SPARE	ORANGE
SPARE	GREEN
SPARE	WHITE/BLACK

PROTECTED ONLY LEFT TURN 7C CABLE	
PHASE	CONDUCTOR COLOR
RED	RED
YELLOW ARROW	BLACK
GREEN ARROW	BLUE
NEUTRAL	WHITE
SPARE	ORANGE
SPARE	GREEN
SPARE	WHITE/BLACK

PEDESTRIAN SIGNALS 7C CABLE	
PHASE	CONDUCTOR COLOR
EAST OR WEST	
DON'T WALK	RED
WALK	BLACK
NORTH OR SOUTH	
DON'T WALK	ORANGE
WALK	GREEN
NEUTRAL	WHITE
SPARE	BLUE
SPARE	WHITE/BLACK

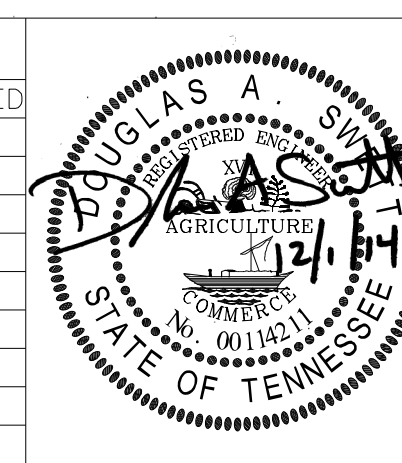
PEDESTRIAN PUSHBUTTONS 5C CABLE	
PHASE	CONDUCTOR COLOR
EAST/WEST	BLACK
NORTH/SOUTH	RED
NEUTRAL	WHITE
SPARE	ORANGE
SPARE	GREEN

EVP BEACONS 3C CABLE	
PHASE	CONDUCTOR COLOR
BEACON	RED
SPARE	BLACK
NEUTRAL	WHITE

EVP CONFIRMATION LAMPS 3C CABLE	
PHASE	CONDUCTOR COLOR
LAMP	BLACK
SPARE	RED
NEUTRAL	WHITE

WIRING AND CONDUCTOR ASSIGNMENT

REVISIONS		
DATE	DESCRIPTIONS	APPROVED
11/14	ADDENDUM 1	



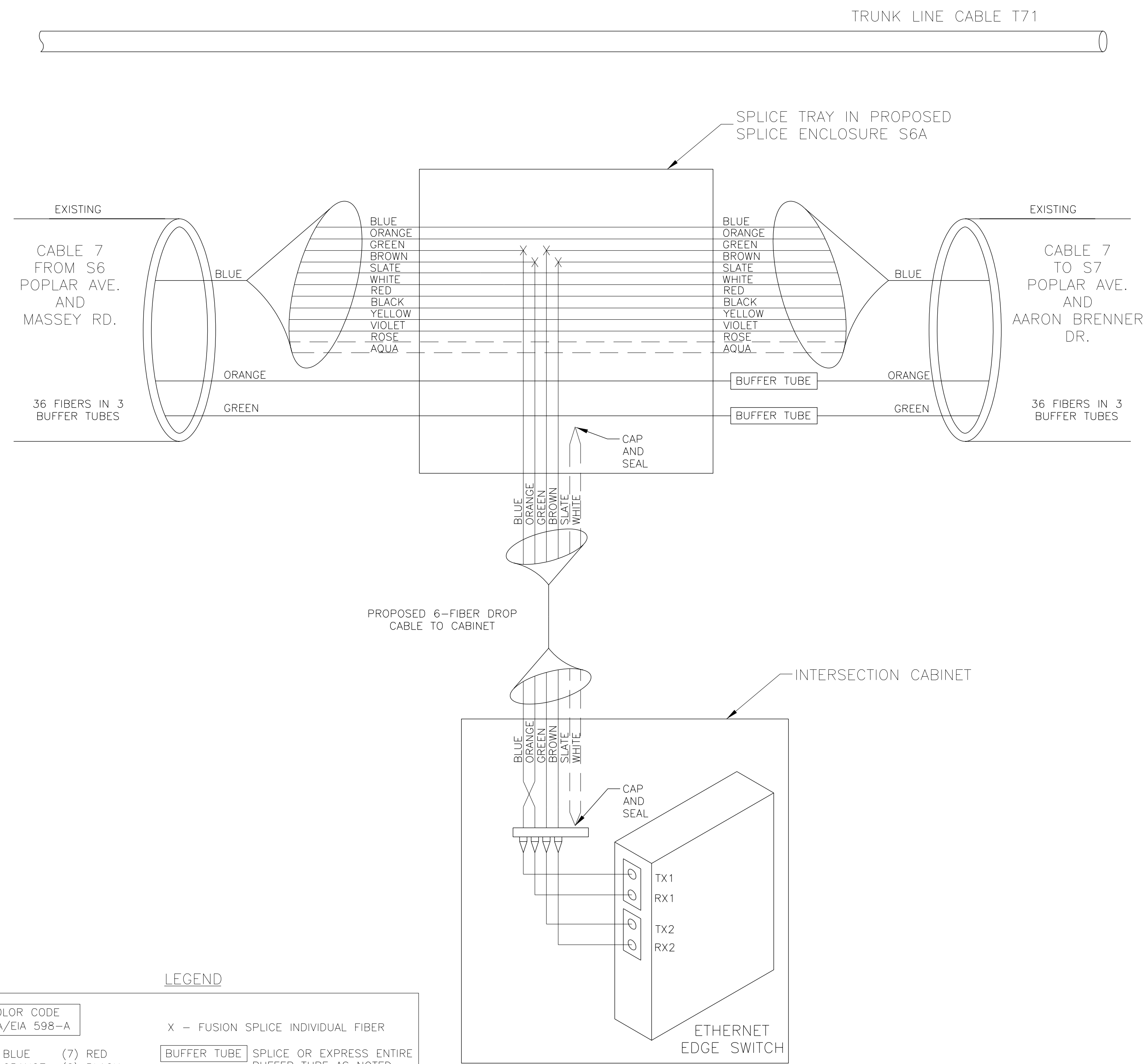
DIVISION OF PUBLIC WORKS
CONGESTION MANAGEMENT PROGRAM
POPLAR AVENUE AT INTERNATIONAL DRIVE
MEMPHIS, TN

TRAFFIC SIGNAL DETAILS

DRAFTED: KHA 01/14 DESIGNED: KHA 01/14
CHECKED: JEC 01/14 SCALE: N.T.S.

CITY TRAFFIC ENGINEER: _____ DATE: _____
CITY ENGINEER: _____ DATE: _____

Kimley Horn



SPLICE DIAGRAM
POPLAR AVE. AND INTERNATIONAL DR.

LEGEND

COLOR CODE TIA/EIA 598-A	
(1) BLUE	(7) RED
(2) ORANGE	(8) BLACK
(3) GREEN	(9) YELLOW
(4) BROWN	(10) VIOLET
(5) SLATE	(11) ROSE
(6) WHITE	(12) AQUA

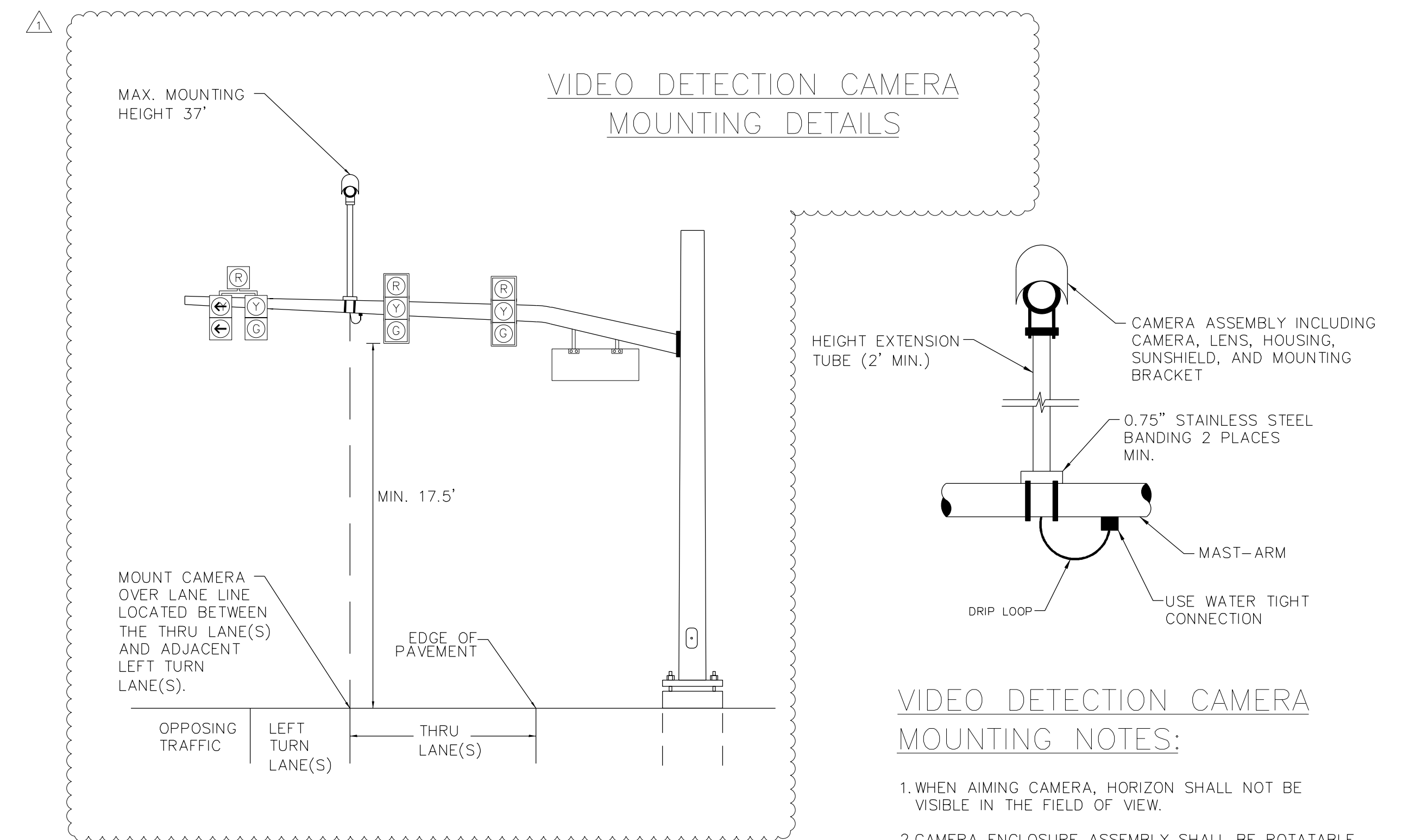
X - FUSION SPLICE INDIVIDUAL FIBER

[BUFFER TUBE] SPLICE OR EXPRESS ENTIRE BUFFER TUBE AS NOTED

— ACTIVE FIBER

- - - INACTIVE FIBER

X CONNECTION/SPLICE TO BE MADE BY OTHERS.

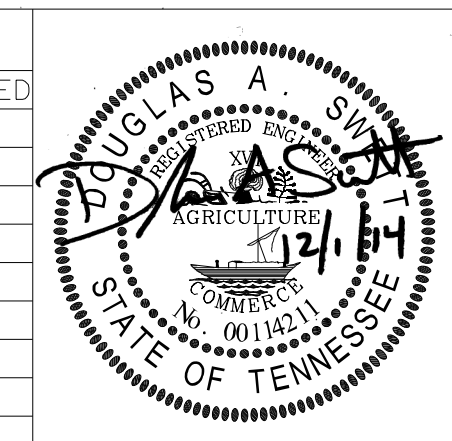


VIDEO DETECTION CAMERA MOUNTING NOTES:

1. WHEN AIMING CAMERA, HORIZON SHALL NOT BE VISIBLE IN THE FIELD OF VIEW.
2. CAMERA ENCLOSURE ASSEMBLY SHALL BE ROTATABLE AFTER INSTALLATION TO PROVIDE PROPER ALIGNMENT.
3. VIDEO CABLE SHALL BE BELDEN OR ENGINEER-APPROVED EQUAL. CABLE SHALL NOT BE SPLICED.
4. SUNSHIELD SHALL BE EXTENDED TO THE MAXIMUM EXTENT WITHOUT BEING IN THE CAMERA FIELD OF VIEW.

REVISIONS

DATE	DESCRIPTIONS	APPROVED
11/14	ADDENDUM 1	



DIVISION OF PUBLIC WORKS
CONGESTION MANAGEMENT PROGRAM
POPLAR AVENUE AT INTERNATIONAL DRIVE
MEMPHIS, TN

TRAFFIC SIGNAL DETAILS

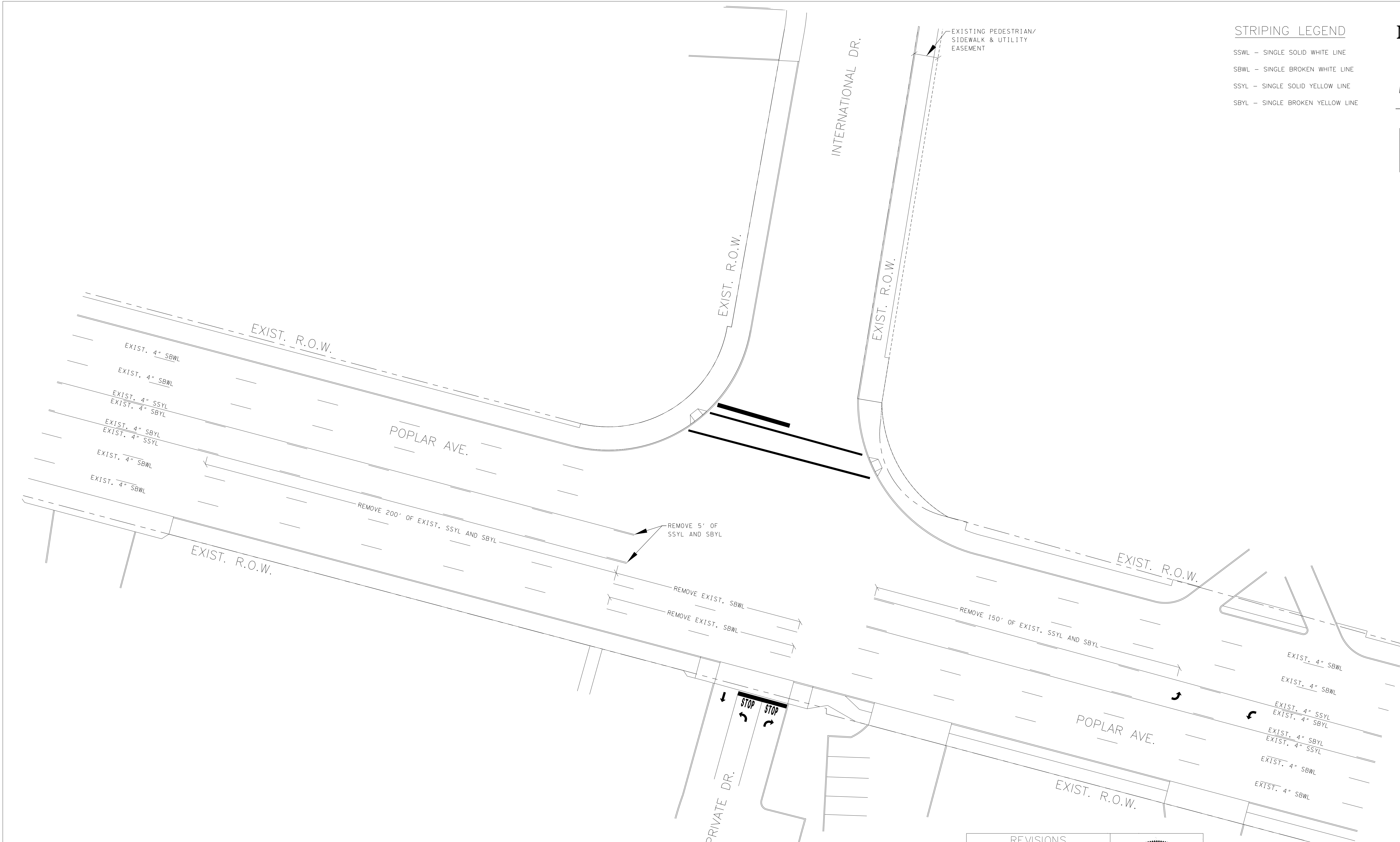
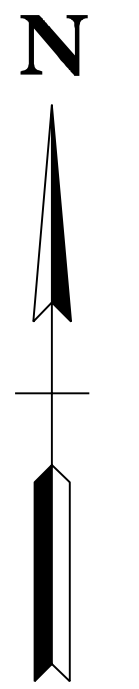
DRAFTED: KHA 01/14 DESIGNED: KHA 01/14
CHECKED: JEC 01/14 SCALE: N.T.S.

CITY TRAFFIC ENGINEER: _____ DATE: _____
CITY ENGINEER: _____ DATE: _____

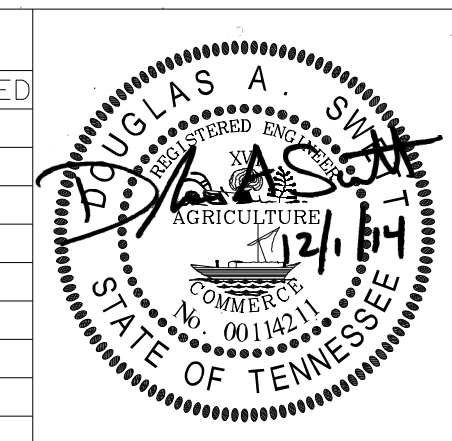


STRIPING LEGEND

- SSWL - SINGLE SOLID WHITE LINE
- SBWL - SINGLE BROKEN WHITE LINE
- SSYL - SINGLE SOLID YELLOW LINE
- SBYL - SINGLE BROKEN YELLOW LINE



REVISIONS		
DATE	DESCRIPTIONS	APPROVED
11/14	ADDENDUM 1	



DIVISION OF PUBLIC WORKS
 CONGESTION MANAGEMENT PROGRAM
 POPLAR AVENUE AT INTERNATIONAL DRIVE
 MEMPHIS, TN

EXISTING STRIPING PLAN

DRAFTED: KHA 01/14 DESIGNED: KHA 01/14
 CHECKED: JEC 01/14 SCALE: 1"=20'

CITY TRAFFIC ENGINEER: _____ DATE: _____
 CITY ENGINEER: _____ DATE: _____

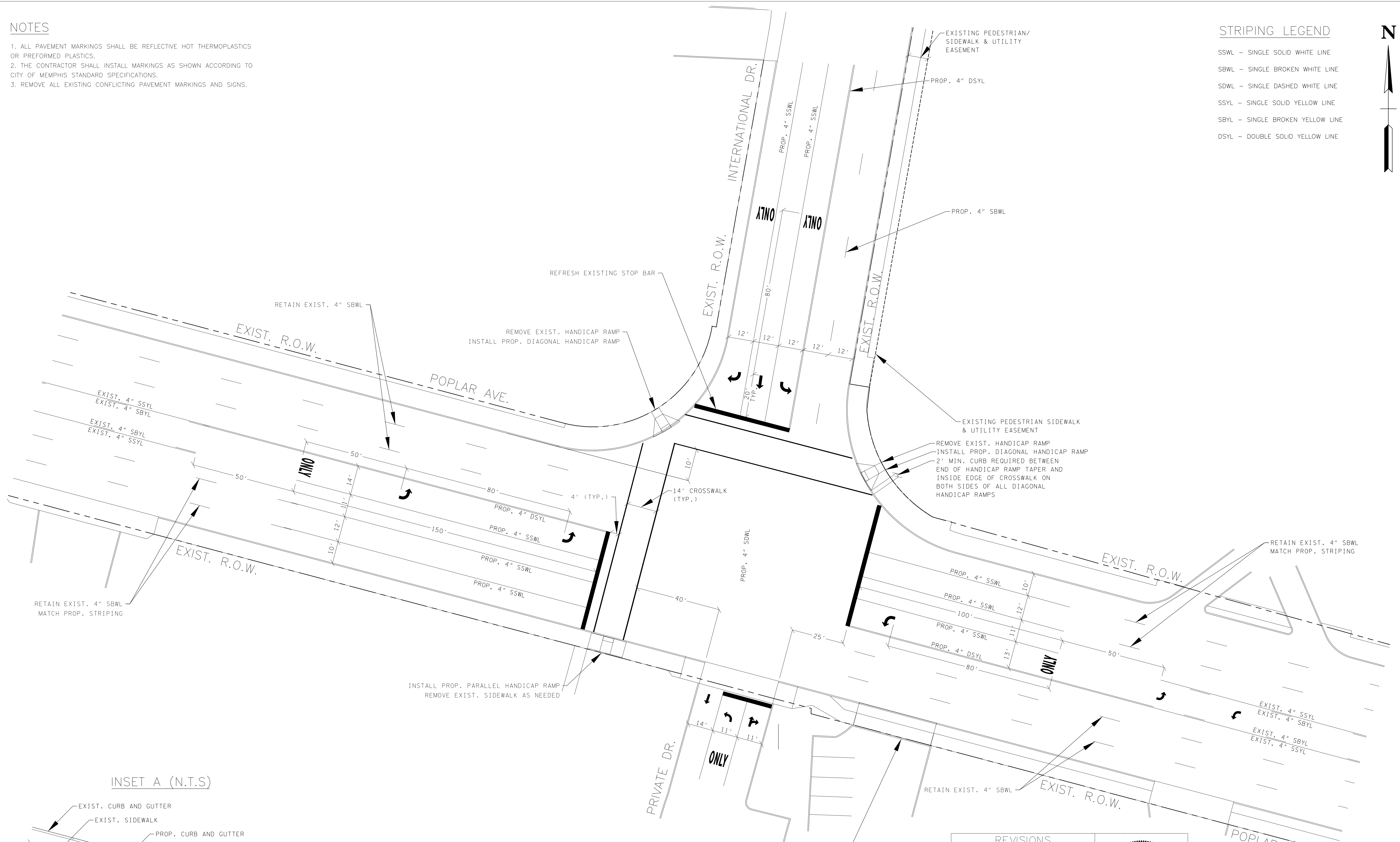
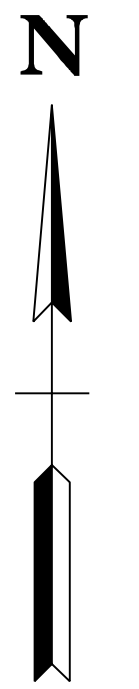


NOTES

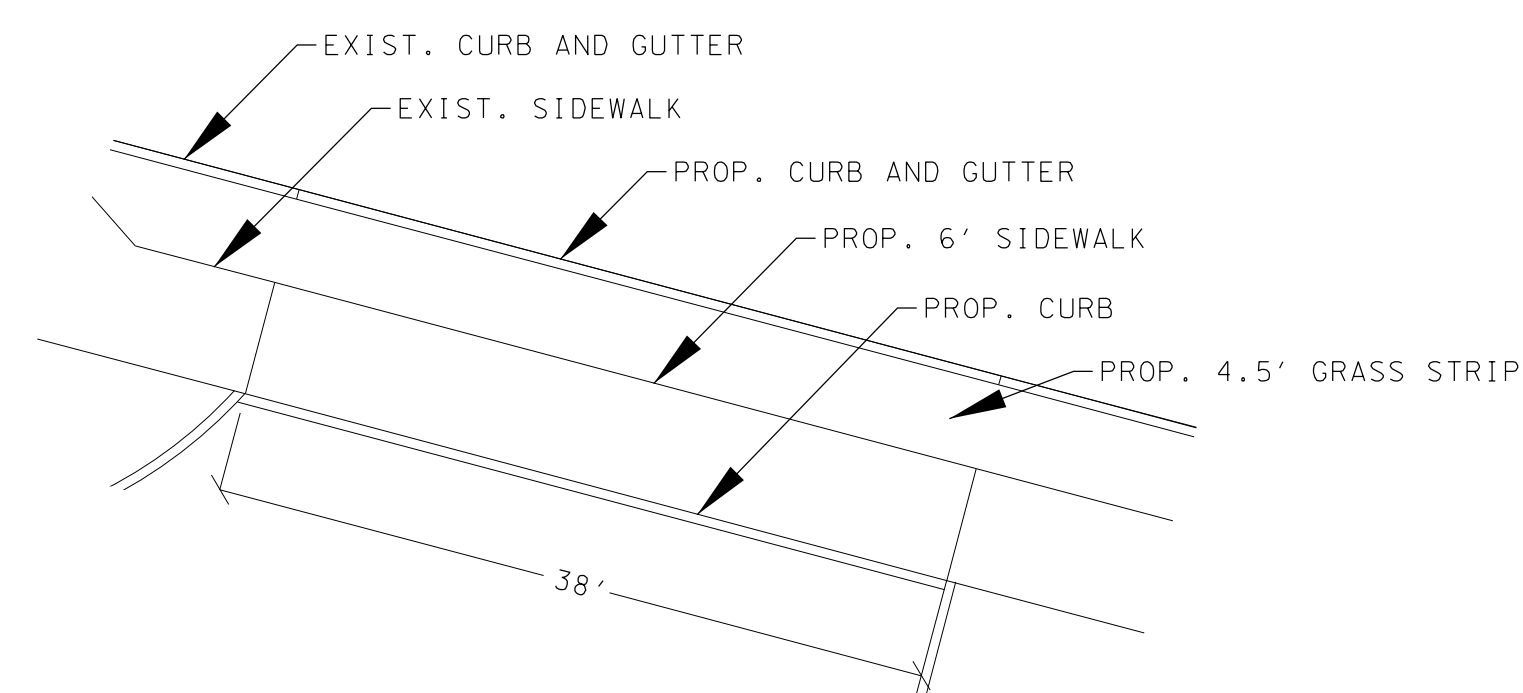
1. ALL PAVEMENT MARKINGS SHALL BE REFLECTIVE HOT THERMOPLASTICS OR PREFORMED PLASTICS.
2. THE CONTRACTOR SHALL INSTALL MARKINGS AS SHOWN ACCORDING TO CITY OF MEMPHIS STANDARD SPECIFICATIONS.
3. REMOVE ALL EXISTING CONFLICTING PAVEMENT MARKINGS AND SIGNS.

STRIPING LEGEND

- SSWL - SINGLE SOLID WHITE LINE
- SBWL - SINGLE BROKEN WHITE LINE
- SDWL - SINGLE DASHED WHITE LINE
- SSYL - SINGLE SOLID YELLOW LINE
- SBYL - SINGLE BROKEN YELLOW LINE
- DSYL - DOUBLE SOLID YELLOW LINE



INSET A (N.T.S)



REVISIONS		
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DIVISION OF PUBLIC WORKS
CONGESTION MANAGEMENT PROGRAM
POPLAR AVENUE AT INTERNATIONAL DRIVE
MEMPHIS, TN

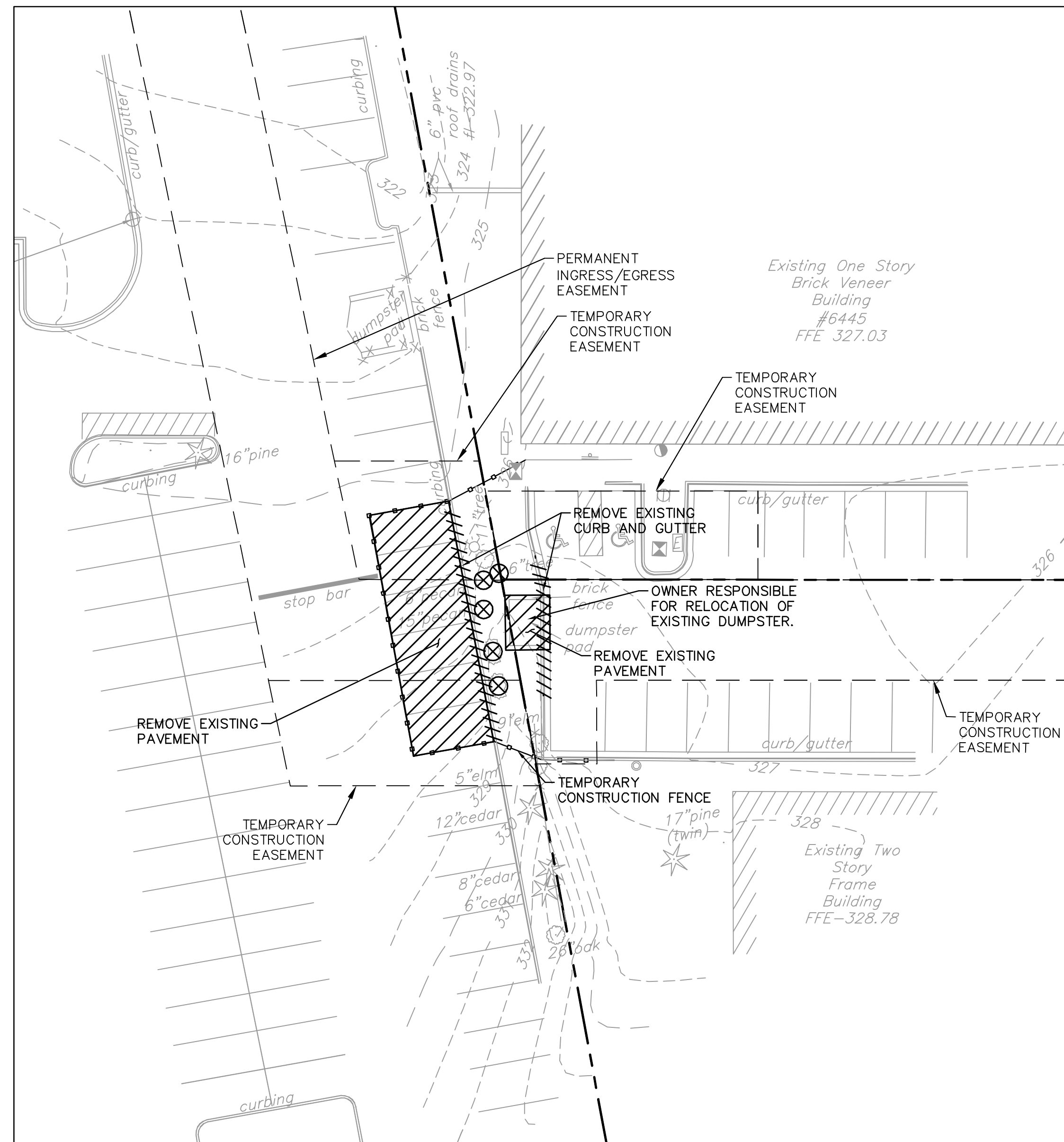
PROPOSED STRIPING PLAN

DRAFTED: KHA 01/14 DESIGNED: KHA 01/14
CHECKED: JEC 01/14 SCALE: 1"=20'

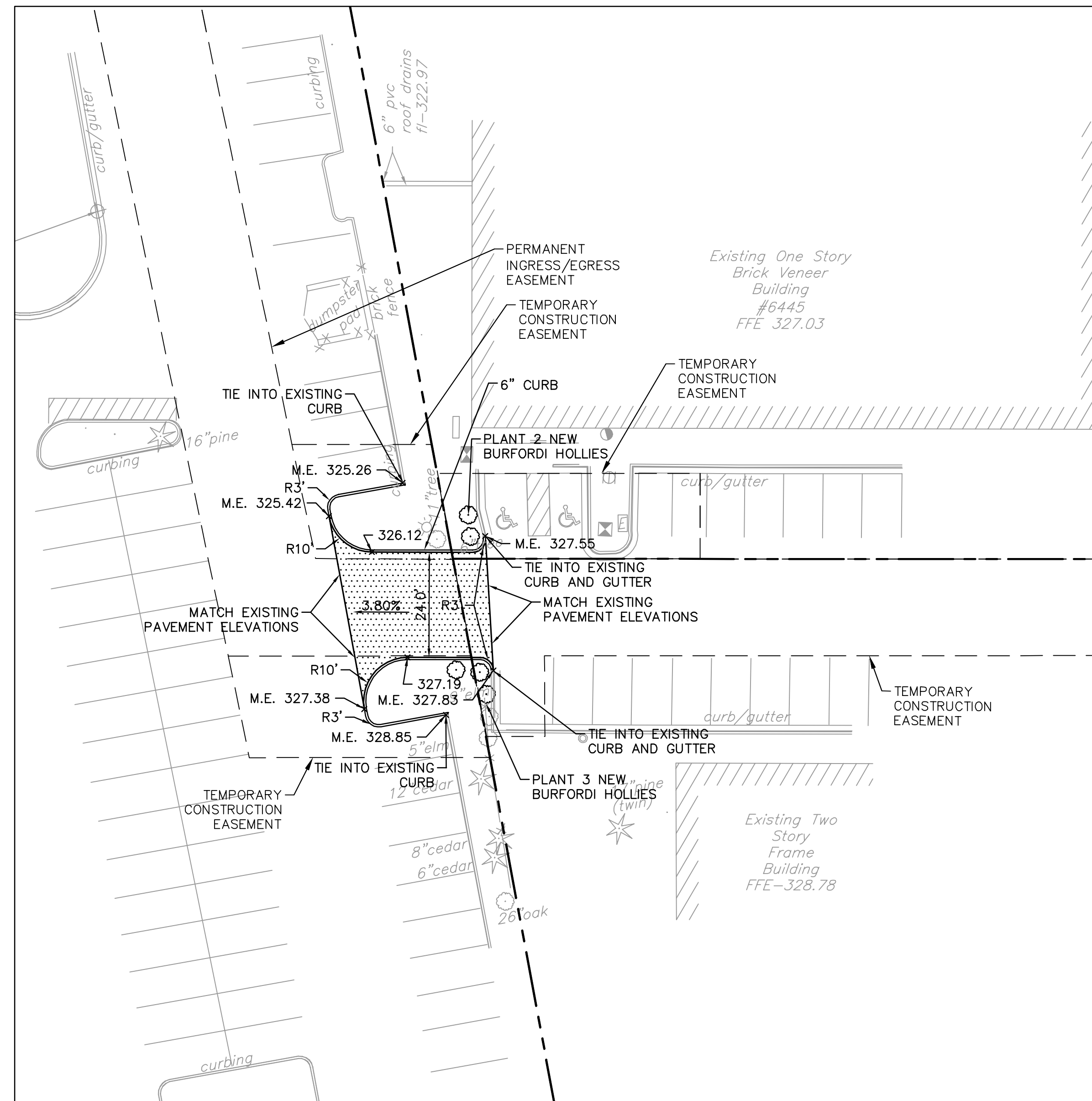
CITY TRAFFIC ENGINEER: _____ DATE: _____
CITY ENGINEER: _____ DATE: _____



DRAWING NAME: K:\MEM_TPTD\115087003 - Poplar Ave at International Drive Traffic Signal Design\Cadd\Plans\Cross Access Plans\10 - Cross Access Plan.dwg Layout1 Dec 01, 2014 4:33PM BY: blaine.lynch



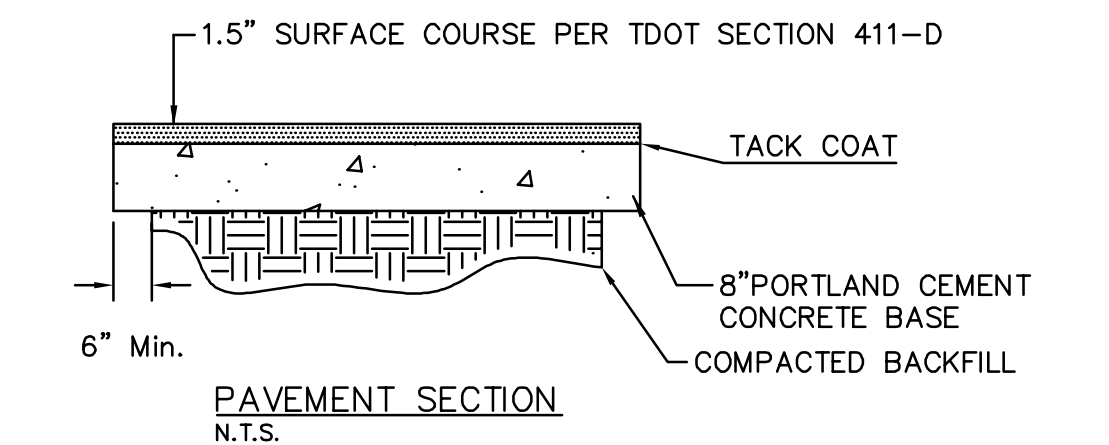
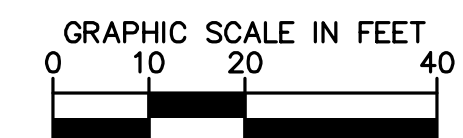
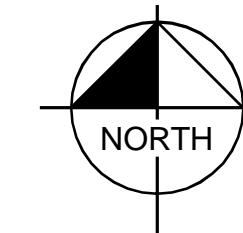
EXISTING CONDITIONS AND DEMOLITION PLAN



PROPOSED LAYOUT

LEGEND

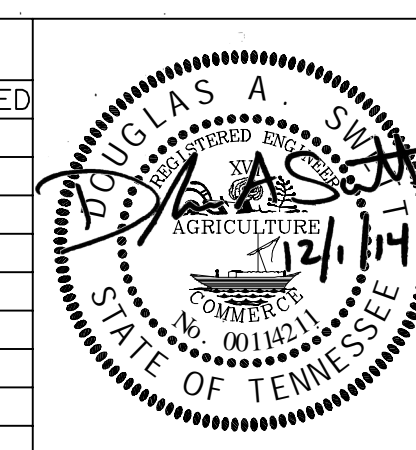
- ////// REMOVE CURB
- ▨ REMOVE EXISTING PAVEMENT
- ▨ ASPHALT PAVEMENT
- M.E. MATCH EXISTING
- ⊗ REMOVE EXISTING TREE OR SHRUB
- CONSTRUCTION FENCE



GENERAL SITE NOTES

1. A MINIMUM OF 24 HOURS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CITY OF MEMPHIS CONSTRUCTION INSPECTION OFFICE AT (901) 729-2462.
2. ALL NEWLY CUT OR FILLED AREA, LACKING ADEQUATE VEGETATION, SHALL BE SEEDED, MULCHED, FERTILIZED, AND /OR SODDED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.
3. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT NECESSARILY ALL OF SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE UTILITY COMPANIES, WHICH MAINTAIN A UTILITY LINE WITHIN THE BOUNDARIES OF THE PROJECT, PRIOR TO THE INITIATION OF ANY CONSTRUCTION ON THE PROJECT OR IN THE STREETS BORDERING THE PROJECT. THE CONTRACTOR SHALL ALSO ASSUME FULL RESPONSIBILITY FOR DAMAGE TO ANY UTILITIES ENCOUNTERED WITHIN CONSTRUCTION PERIMETERS, WHETHER SHOWN ON THE CONSTRUCTION PLANS OR NOT, DURING THE WORK ON THE PROJECT. FOR SITE LOCATION OF EXISTING UTILITIES CALL 1-800-351-1111. FOR SEWER LOCATIONS CALL 529-8025.
4. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES.
5. ALL FILL SOILS SHALL BE COMPACTED TO A MINIMUM OF 95% OF STANDARD PROCTOR DENSITY (ASTM D-698) WITHIN 3% OF OPTIMUM MOISTURE CONTENT IN LIFTS NOT TO EXCEED SIX INCHES OF COMPACTED THICKNESS.
6. ALL CONSTRUCTION MATERIALS AND PROCEDURES SHALL MEET OR EXCEED THE REQUIREMENTS OF THE CITY OF MEMPHIS STANDARD CONSTRUCTION SPECIFICATIONS.
7. PROPERTY LINES SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. GRADING, CLEARING, AND THE ERECTION OR REMOVAL OF FENCES ALONG PROPERTY LINES SHALL BE FULLY COORDINATED WITH ADJACENT PROPERTY OWNERS.
8. VERIFY SITE CONDITIONS PRIOR TO CONSTRUCTION. NOTIFY THE CITY OF MEMPHIS CONSTRUCTION INSPECTION OFFICE ENGINEER OF ANY VARIATIONS PRIOR TO COMMENCEMENT OF WORK.
9. ALL GRADING WORK SHALL BE PERFORMED IN SUCH A MANNER THAT ADJACENT PROPERTIES ARE NOT DAMAGED OR ADVERSELY AFFECTED.
10. THE CONTRACTOR SHALL PROVIDE ADEQUATE AND EFFECTIVE EROSION CONTROL AS NECESSARY TO PREVENT ANY SILTATION INTO EXISTING DRAINAGE SYSTEM AND/OR ADJACENT PROPERTIES.
11. ALL CONSTRUCTION SHALL CONFORM WITH APPLICABLE STATE AND LOCAL CONSTRUCTION STANDARDS AS IDENTIFIED IN THESE PLANS. THE CONTRACTOR SHALL MAINTAIN A CURRENT RELEASE OF THE STATE AND LOCAL LAND DEVELOPMENT STANDARDS MANUAL ON THE PROJECT SITE FOR REFERENCE DURING CONSTRUCTION OF THE PROJECT. IN CASE OF CONFLICTING SPECIFICATIONS OR DETAILS, THE OWNER AND ENGINEER SHALL BE CONTACTED PRIOR TO CONSTRUCTION. GENERALLY, THE MOST STRINGENT SPECIFICATIONS SHALL APPLY.
12. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE CITY PUBLIC UTILITIES DEPARTMENT AT LEAST 48 HOURS PRIOR TO ANY DEMOLITION, GRADING, OR CONSTRUCTION ACTIVITY FOR PROPER IDENTIFICATION OF EXISTING UTILITIES WITHIN THE PROJECT SITE.
13. THE CONTRACTOR WILL BE FURNISHED WITH THE SITE PLAN IN AUTOCAD 2010. KEY DIMENSIONS HAVE BEEN PROVIDED ON THE PLAN AND MUST BE VERIFIED PRIOR TO ACTUAL CONSTRUCTION.
14. THE CONTRACTOR SHALL PROOF ROLL SUBGRADE WITH AXIAL LOAD OF 9 TONS. REPLACE ALL SOIL THAT RUTS EXCESSIVELY (>1")
15. THE CONTRACTOR SHALL VERIFY EXISTING DATA AND REPORT ANY DISCREPANCIES TO THE PROJECT MANAGER.
16. THE CONTRACTOR SHALL COORDINATE ANY INTERRUPTION OF UTILITY SERVICE WITH OWNER AND UTILITY COMPANY. A 48 HOUR NOTICE SHALL BE PROVIDED BEFORE THE INTERRUPTION.
17. THE CONTRACTOR SHALL PROTECT ANY PIPES EXPOSED DURING CONSTRUCTION.
18. ALL CURB AND GUTTER SHALL BE 6-18 UNLESS OTHERWISE NOTED.
19. ALL SPOT ELEVATIONS SHOWN ARE TO PAVEMENT ELEVATION AT FACE OF CURB UNLESS OTHERWISE NOTED.

REVISIONS		
DATE	DESCRIPTIONS	APPROVED
11/14	ADDENDUM 1	



DIVISION OF PUBLIC WORKS
CONGESTION MANAGEMENT PROGRAM
POPLAR AVENUE AT INTERNATIONAL DRIVE
MEMPHIS, TN

CROSS ACCESS PLAN

DRAFTED: KHA 01/14 DESIGNED: KHA 01/14
CHECKED: JFC 01/14 SCALE: 1"=20'

CITY TRAFFIC ENGINEER: DATE:
CITY ENGINEER: DATE:

