

Applicant Contact Name: \_\_\_\_\_

Applicant Contact Phone #: \_\_\_\_\_

**MISSISSIPPI DEPARTMENT OF TRANSPORTATION  
APPLICATION FOR PERMIT TO LOCATE CERTAIN FACILITIES  
ON OR TO PERFORM CERTAIN WORK ON STATE  
HIGHWAY RIGHT OF WAY**

(Please Print) Name: \_\_\_\_\_ Address: \_\_\_\_\_  
Company (or) Individual Street/Route

City County State Zip Code

herein called the applicant, who does hereby make application to the Mississippi Department of Transportation, the duly authorized agent for the Mississippi Transportation Commission, for permission to \_\_\_\_\_

\_\_\_\_\_ on or across

Highway No. \_\_\_\_\_ between \_\_\_\_\_ and \_\_\_\_\_

Latitude (decimal degrees) \_\_\_\_\_ Longitude (decimal degrees) \_\_\_\_\_

in \_\_\_\_\_ County, Mississippi and in consideration of this permit being granted, said applicant does hereby agree to perform the above work in accordance with the plan shown herein below and does further agree, with full understanding of the terms thereof, to the following provisions:

- (a) That the Mississippi Department of Transportation does not purport to grant to said applicant any right, title, claim or easement in or upon said highway or right-of-way appurtenant thereto.
- (b) The plan of the proposed work or facility set out below or attached hereto is incorporated herein by reference and made a part of this application as if fully described herein by words and figures.
- (c) It is agreed that this permit is void if all work shown on this plan is not completed in accordance with this plan within one year after date of approval.
- (d) It is agreed that no trees or shrubs on the highway right-of-way will be cut, trimmed, or damaged during the process of the proposed work or maintenance of this work or facility except as shown on the plan.
- (e) All sod disturbed by the proposed work shall be neatly dressed and grassed in accordance with the vegetation schedule outlined elsewhere in this permit. The applicant shall maintain the dressed and grassed area for a sufficient length of time to insure a growing sod.
- (f) The applicant is responsible for any conflicts with other utilities on the highway right-of-way and is to secure permission from said utilities for any necessary alterations.
- (g) The Mississippi Department of Transportation may at any time require and compel the removal or relocation of any facility herein described, shown or referred to, when said Mississippi Department of Transportation deems it necessary. All expense of said removal or relocation is to be borne exclusively by the applicant, and the Mississippi Department of Transportation is to be in no way liable.
- (h) The applicant accepts the responsibility of the safety of the traveling public and his/her workers and agrees to furnish, place and maintain traffic control devices, if required, in accordance with Part 6 of the Manual On Uniform Traffic Control Devices For Streets and Highways (MUTCD), Current Edition as a minimum. The applicant shall attach a special traffic control plan to the application if special traffic control details are required.
- (i) All work associated with this permit shall be designed, detailed and constructed in accordance with the Department's Roadway and Bridge Design Manuals and Standard Drawings and the Mississippi Standard Specifications for Road and Bridge Construction.
- (j) The Mississippi Department of Transportation in granting this permit does not in any way assume the maintenance or upkeep of the facility or proposed improvement herein described. Nor, will the Mississippi Department of Transportation be held responsible for any damage, which may be inadvertently done to this facility or proposed improvement regardless of the source or cause of such damage.
- (k) A copy of the approved plan is to be kept at the site of the work at all times while work is in progress.
- (l.) Said applicant hereby expressly agrees for himself, his heirs, assigns and legal representatives, that upon request of said Mississippi Department of Transportation, he will without delay either reconstruct, remove or move the facility herein described to another location, all in accordance with the terms of the request so made by the said Mississippi Department of Transportation. It is distinctly understood that said new location will be made or designated by said Mississippi Department of Transportation after agreement with said applicant or its successors, if possible. It is further understood and agreed that, if this permit is granted and acted upon by the said applicant, the said Mississippi Department of Transportation will use all reasonable effort to avoid the necessity of requesting that the herein mentioned facility be removed, moved, altered, or reconstructed.

(m.) The applicant does hereby covenant and agree to indemnify and hold harmless the Mississippi Transportation Commission and the Mississippi Department of Transportation from and against any claims, actions, suits, causes or demands, including court costs and reasonable attorney's fees, proximately resulting from acts or omissions of the applicant, or applicant's servants, agents or employees in the construction and maintenance of all facilities outlined under this permit.

Witness my signature this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_, which is applicable to sheets 1 through \_\_\_\_\_ of permit number \_\_\_\_\_.

\_\_\_\_\_  
Signature of Applicant

By: \_\_\_\_\_  
Printed Name and Title

STATE OF MISSISSIPPI  
COUNTY OF \_\_\_\_\_

Personally appeared before me, the undersigned authority, \_\_\_\_\_ whose  
Printed Name of Applicant

names(s) \_\_\_\_\_ subscribed to this instrument as the \_\_\_\_\_ of  
is/are \_\_\_\_\_ Title of Applicant

\_\_\_\_\_ who having been first fully sworn acknowledged that they  
Name of Company (or) Individual

executed the above agreement as the act and deed of the said applicant for the purpose and consideration and in the capacity therein expressed and on the date above written.

Given under my hand and seal of office this the \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_

My Commission Expires: \_\_\_\_\_  
Signature of Notary Officer

Field Inspection By: \_\_\_\_\_ 20\_\_\_\_

Approved: MISSISSIPPI DEPARTMENT OF TRANSPORTATION  
\_\_\_\_\_  
Deputy Executive Director/Chief Engineer

By: \_\_\_\_\_ 20\_\_\_\_

Installation Inspection By: \_\_\_\_\_ 20\_\_\_\_

Mississippi Department of Transportation  
Completion of Work Certification

This permit requires that the named applicant submit the following certification with signature(s) and insure proper filing with MDOT's District Permit Department before the permit is closed and all associated bonds are released:

Permit Representative's signature(s) acknowledges the following:

We/(I), certify that the requirements of this permit have been constructed as stated in the approved final permit. Furthermore, no work performed as an exercise of the approved permit, has been relocated or altered without such change being shown on an approved revision of the permit or approved addenda thereto.

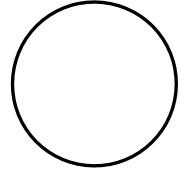
\_\_\_\_\_  
Printed Name of Applicant

\_\_\_\_\_  
Signature of Applicant

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Permit No.: \_\_\_\_\_

REVISIONS			
APPLICANT		MDOT	
DATE	BY	DATE	BY



Show North

**SUMMARY OF QUANTITIES (SHEET 1)**

PAY ITEM NO.	PAY ITEM	UNIT	PRELIMINARY	FINAL
618-A001	MAINTENANCE OF TRAFFIC	LS	1	
620-A001	MOBILIZATION	LS	1	
630-A001	STANDARD ROADSIDE SIGNS, SHEET ALUMINUM, 0.080" THICKNESS	SF	15	
630-A002	STANDARD ROADSIDE SIGNS, SHEET ALUMINUM, 0.125" THICKNESS	SF	18	
630-A004	STANDARD ROADSIDE SIGNS, SHEET ALUMINUM, 0.125" THICKNESS, OVERHEAD MOUNTED	SF	18	
630-C004	STEEL U-SECTION POSTS, 3.0 TO 3.5 LB/FT	LF	28	
636-A005	SHIELDED CABLE, AWG #14, 2 CONDUCTOR	LF	559	
639-A127	TRAFFIC SIGNAL EQUIPMENT POLE, TYPE I, WOOD, 40 FOOT	EA	2	
640-A016	TRAFFIC SIGNAL HEADS, TYPE 1 LED	EA	4	
640-A028	TRAFFIC SIGNAL HEADS, TYPE 8 LED, GREEN INDICATION	EA	1	
642-A004	SOLID STATE TRAFFIC ACTUATED CONTROLLERS, TYPE 4A	EA	1	
666-C007	ELECTRIC CABLE, AERIAL SUPPORTED, IMSA 20-1, AWG 14, 7 CONDUCTOR	LF	120	
666-C013	ELECTRIC CABLE, AERIAL SUPPORTED, IMSA 20-1, AWG 8, 3 CONDUCTOR	LF	191	
668-C001	TRAFFIC SIGNAL CONDUIT, AERIAL SUPPORTED, TYPE 1, 1 1/2"	LF	58	

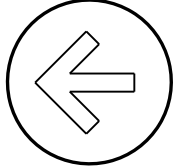
**GENERAL NOTES**

- ① ALL SIGNS, SIGNALS AND PAVEMENT MARKINGS ARE TO CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST ADOPTED EDITION AND ALL SUBSEQUENT REVISIONS).
- ② SIGNAL CONTROLLER TIMINGS TO BE PROVIDED BY STANTEC TRAFFIC ENGINEERING DIVISION.
- ③ EQUIPMENT SHOWN ON THESE PLANS ARE IN APPROXIMATE LOCATIONS. THE PROPOSED LOCATION OF ALL EQUIPMENT SHALL BE FIELD LOCATED BY THE CONTRACTOR WITH PROPOSED LOCATIONS APPROVED BY MDOT. CONTRACTOR TO STAKE EACH LOCATION A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO REVIEW BY MDOT. THE COST OF FIELD STAKING WILL NOT BE MEASURED FOR SEPARATE PAYMENT, BUT WILL BE ABSORBED UNDER OTHER ITEMS. CONTRACTOR SHALL INSTALL ALL EQUIPMENT, PULL BOXES, AND CONDUIT WITHIN PUBLIC RIGHT OF WAY.
- ④ EMERGENCY PREEMPTION PHASE SELECTORS SHALL BE SECURITY-ENABLED.
- ⑤ ALL CONNECTIONS, MODIFICATIONS, SPLICES, AND NECESSARY EQUIPMENT NEEDED TO INTERCONNECT THE TRAFFIC SIGNALS, AS SHOWN ON THE PLANS, SHALL BE COST ABSORBED.
- ⑥ ALL CONDUITS SHALL BE SEALED WITH DUCT PLUG TO PREVENT WATER INTRUSION ONCE CABLE IS INSTALLED. COST TO BE ABSORBED UNDER PAY ITEM NOS. 668-A OR 668-B.
- ⑦ ALL ABOVE GROUND CONDUIT SHALL BE TYPE 1, RIGID METAL. PVC CONDUIT SHALL NOT BE ALLOWED ABOVE GROUND.
- ⑧ ANY AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR (TO INCLUDE GRASSING AND SITE GRADING) AS DIRECTED BY THE ENGINEER. ALL REMOVAL AND REPLACEMENT OF EXISTING SOD, SIDEWALK, ASPHALT AND CONCRETE, AND BACKFILL ARE COST ABSORBED AND CONSIDERED PART OF THE COST OF THE CONDUIT.
- ⑨ THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO THE SURFACE TREATED SHOULDER WHICH MIGHT OCCUR DURING CONSTRUCTION. ANY REPAIR TO SHOULDER WILL BE IN ACCORDANCE WITH SECTION 410 OF THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2004 EDITION. NO PAYMENT WILL BE MADE FOR REPAIR OF DAMAGED SHOULDER.
- ⑩ THE COST OF DISPOSING OF ALL UNUSED OR REMOVED MATERIALS SHALL BE ABSORBED FOR PAYMENT IN OTHER ITEMS.
- ⑪ CONTRACTOR SHALL MAKE APPLICATION FOR POWER SERVICE, COORDINATING WITH MDOT AND THE LOCAL UTILITY PROVIDER(S), IN ADVANCE OF ACQUIRING THE ELECTRICAL SERVICES. IF ELECTRICAL SERVICE REQUIRES SERVICE METER TO BE INSTALLED, CONTRACTOR SHALL CONTACT THE APPROPRIATE AGENCY FOR INSPECTION PRIOR TO SERVICE CONNECTION BEING MADE BY POWER COMPANY. INSTALLATIONS OF AERIAL POWER CIRCUITS, POLE RISERS, WEATHERHEADS, METER BASE, DISCONNECT BOX AND BREAKER, WOOD POLES, GALVANIZED STRUCTURAL COMPONENTS, MISC. HARDWARE OR CONCRETE FOR BASE PAD, ETC. REQUIRED FOR POWER SERVICE TO BE COST ABSORBED. CONTRACTOR SHALL ESTABLISH POWER SERVICE IN HIS OR HER NAME UTILIZING HIS OR HER BILLING ADDRESS, AND SHALL PAY ALL UTILITY CONNECTION CHARGES AND CHARGES FOR SERVICE UNTIL FINAL PROJECT ACCEPTANCE.
- ⑫ CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UTILITY MAKE-READY COSTS INCURRED TO PROVIDE POWER AND COMMUNICATION SERVICES TO THE EQUIPMENT, AND SHALL BE PAID FOR UNDER PAY ITEM 620-B001.
- ⑬ POWER SERVICE METER OR DISCONNECT SHALL BE MOUNTED ON THE NEW SPAN WIRE TIMBER SIGNAL POLE (AS SHOWN IN THE PLANS).
- ⑭ THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2004 EDITION, PUBLISHED BY MDOT SHALL GOVERN THIS PROJECT UNLESS OTHERWISE NOTED BY SPECIAL PROVISIONS, NOTICE TO BIDDERS, OR PLAN NOTES.
- ⑮ ALL EQUIPMENT SUBMITTALS, UNLESS OTHERWISE ADVISED, SHALL BE IN ACCORDANCE WITH SECTION 634.02.2 OF THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2004 EDITION.
- ⑯ ALL SIGNAL HEADS SHALL BE LED, BLACK IN COLOR AND EQUIPPED WITH BLACK BACKPLATES AND VISORS.
- ⑰ THE CONTRACTOR SHALL BE REQUIRED TO ADEQUATELY AND COMPLETELY COVER TRAFFIC SIGNAL HEADS WHEN NOT IN OPERATION WITH A DURABLE, OUTDOOR-HARDENED MATERIAL THAT CONTRASTS WITH THE COLOR OF THE HEAD THAT CLEARLY DESIGNATES THAT THE SIGNAL IS NOT IN STOP AND GO MODE. HEAD COVERS ARE TO BE APPROVED BY THE ENGINEER.

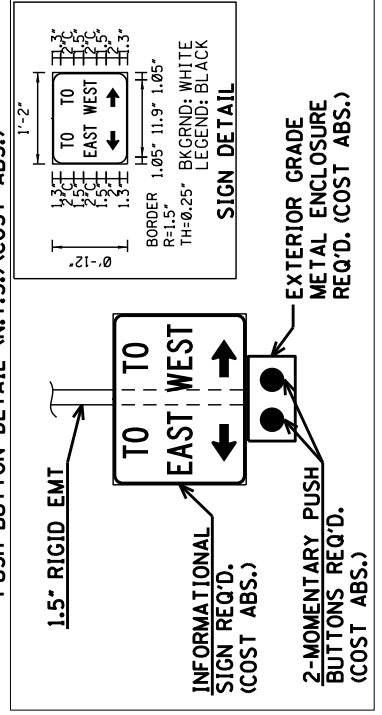
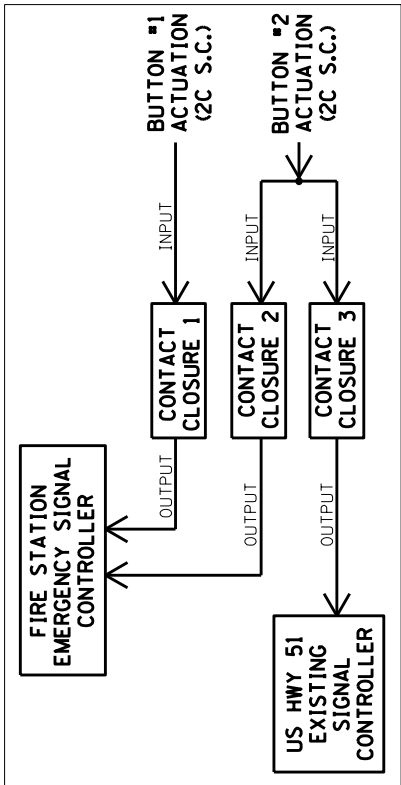
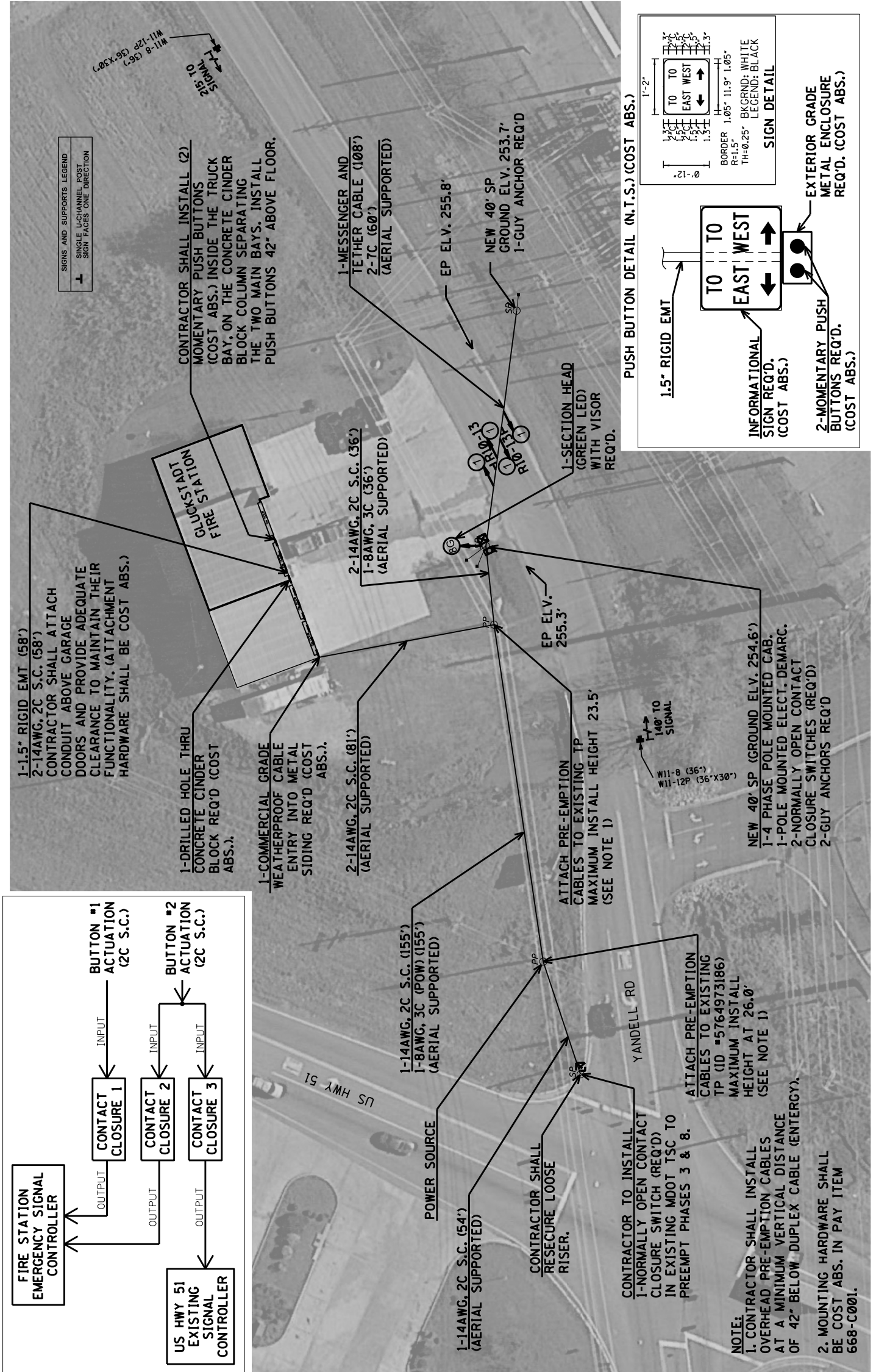
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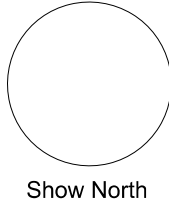
**NOTE:**

- CONTRACTOR SHALL INSTALL OVERHEAD PRE-EMPTION CABLES AT A MINIMUM VERTICAL DISTANCE OF 42" BELOW DUPLEX CABLE (ENERGY). MOUNTING HARDWARE SHALL BE COST ABS. IN PAY ITEM 668-C001.
- CONTRACTOR SHALL INSTALL 1-NORMALLY OPEN CONTACT CLOSURE SWITCH (REQ'D) IN EXISTING MDOT TSC TO PREEMPT PHASES 3 & 8.
- CONTRACTOR SHALL RESECURE LOOSE RISER.
- CONTRACTOR TO INSTALL 1-NORMALLY OPEN CONTACT CLOSURE SWITCH (REQ'D) IN EXISTING MDOT TSC TO PREEMPT PHASES 3 & 8.

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GENERAL NOTES

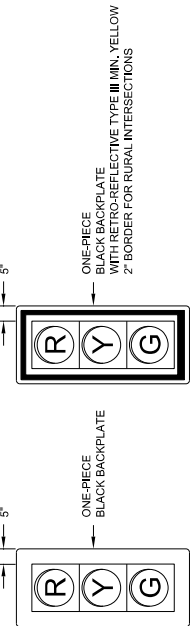
- INTERCONNECT CABLE SHALL BE EITHER IMSA 40-2 OR IMSA 40-4 SIGNAL CABLE. STRANDED. AVG NUMBER AND NUMBER OF CONDUCTORS AS SHOWN ON PLANS.
- SIGNAL SUPPLY CABLE SHALL BE IMSA 20-1-1891 SIGNAL CABLE. STRANDED. AVG NUMBER AND NUMBER OF CONDUCTORS AS SHOWN ON PLANS.
- POWER SUPPLY CABLE SHALL BE IMSA 20-1-2 CONDUCTOR CABLE. STRANDED. AVG NUMBER AS SHOWN ON PLANS.
- DETECTOR SHIELDED CABLE SHALL BE IMSA 50-2 SIGNAL CABLE. AVG #14 STRANDED COPPER CONDUCTORS. UNLESS OTHERWISE NOTED ON THE PLANS.
- POLES. SIGNAL HEADS. EQUIPMENT BOXES. PULLBOXES AND CONDUIT MAY BE VARIED SLIGHTLY TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. HOWEVER, SIGNAL HEAD OR POLE SHALL BE IDENTICAL TO THE MANUFACTURER'S LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND HIGHWAY DESIGN AND OPERATIONAL PRACTICES RELATED TO HIGHWAY SAFETY.
- POLES AND FOUNDATIONS OF EXISTING SIGNAL INSTALLATIONS SHALL BE 6" BELOW GROUND OR REMOVED AND AREA REPAVED TO MATCH ADJACENT SURFACE AS DIRECTED BY THE ENGINEER.
- LOOP AMPLIFIERS SHALL BE REQUIRED AS SHOWN ON PLANS WHERE TWO OR MORE LOOPS ARE CONNECTED TO THE SAME CHANNEL. THEY SHALL BE WIRED IN SERIES.
- THE CONTRACTOR SHALL PROVIDE MAST ARM POLE DESIGN CERTIFICATION AND CALCULATIONS AS OUTLINED IN SECTION 722.02 OF STANDARD SPECIFICATIONS. DESIGN STANDARD FOR MAST ARMS POLES SHALL BE 2013 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS. USE FATIGUE DESIGN AND DESIGN LOADS AND DESIGN WIND LOADS AS BASED UPON MAPS IN THE 2013 AASHTO SPECIFICATION, USE UPSWEPT MAST ARMS.
- DETERMINATION OF REQUIRED SIZES, LENGTHS AND GAUGES OF TYPE I, II, III AND IV STEEL POLES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR IN ADVANCE WITH THE DESIGN SECTION 722.02 OF THE STANDARD SPECIFICATIONS, UNLESS OTHERWISE SPECIFIED IN PLANS OR SPECIFICATIONS.
- THE TOP OF THE STRAIN POLE FOUNDATION SHALL BE 6" ABOVE THE GROUND. THE CONTRACTOR SHALL PROVIDE POLES OF SUFFICIENT LENGTH PLUS 2 FEET TO PROVIDE REQUIRED EXCESS LENGTH FOR THE STRAIN POLE FOUNDATION. THE POINT WHERE THE FOUNDATION MEETS THE GROUND SURFACE OF THE POINT WHERE THE POLE IS LOCATED. EVEN THOUGH THIS MAY BE BELOW THE FINISHED GRADE OF THE ROADWAY.
- ALL STRAIN POLES AT AN INTERSECTION SHALL BE THE SAME DIAMETER AND UTILIZE THE SAME BOLT CIRCLE SPACING.
- POLE FOUNDATIONS AND BASE MOUNTED CABINET FOUNDATIONS. GRADE SHALL BE ESTABLISHED TO ±3" OF EDGE OF PAVEMENT ELEVATION AS DIRECTED BY THE ENGINEER.
- TRAFFIC SIGNAL CABINETS AND CONTROLLERS SHALL BE WIRED TO PROVIDE ALL THE PHASES AND PHASE SEQUENCES IN ACCORDANCE WITH THE PHASE SEQUENCE DIAGRAM.
- ALL EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED AND SALVAGED BY THE CONTRACTOR WITH THE COST TO BE ABSORBED. UNLESS OTHERWISE NOTED IN THE PLANS, THE EXISTING POLES, CABINETS, CONTROLLERS, PULLBOXES AND TRAFFIC SIGNAL EQUIPMENT NOTED ON PLANS ARE TO BE STOCKPILED AS DIRECTED BY THE ENGINEER FOR PICKUP BY STATE FORCES OR AS NOTED ON PLANS. ALL OTHER SIGNAL EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ELECTRICAL SERVICE FROM THE POWER COMPANY SERVICE POINT TO THE SIGNAL POLES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE POWER COMPANY SERVICE POINT FROM THE POWER COMPANY SERVICE POINT TO THE SIGNAL POLE NEAREST THE CONTROLLER. THE SERVICE SHALL THEN RUN TO THE CONTROLLER AS SHOWN ON THE PLANS. FOR MAST ARM INSTALLATION, POWER SHALL RUN FROM THE POWER COMPANY SERVICE POINT UNDERGROUND TO THE CONTROLLER AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAKE APPLICATION WITH THE POWER COMPANY IN ADVANCE OF NEEDING THE SERVICE. INSTALLATION OF NEW SERVICE POLE (IF NEEDED) IS THE RESPONSIBILITY OF THE CONTRACTOR AND IS COST ABSORBED.

DETAIL OF TYPICAL TRAFFIC SIGNAL HEADS

TYPE 1	TYPE 2	TYPE 2 FYA	TYPE 3	TYPE 4	TYPE 5	TYPE 6	TYPE 7	TYPE 8

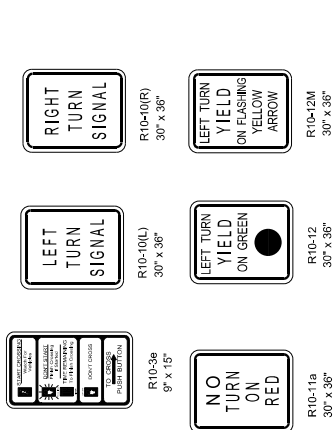
- NOTES:
- ALL SIGNAL HEADS SHALL BE BLACK IN COLOR UNLESS OTHERWISE NOTED ON THE PLANS.
  - ALL SIGNAL HEADS SHALL BE LED. LENSES UNLESS OTHERWISE NOTED ON THE PLANS. TYPE "A" SIGNAL HEAD IS TO BE OPTICALLY PROGRAMMED VIA LOUVERS.
  - LETTER "R" ON HEAD TYPES MEANS RIGHT TURN ARROWS(S).
  - TYPE 6 SIGNAL HEAD SHALL BE FURNISHED WITH R10-36 SIGN & PEDESTRIAN PUSHBUTTON. TYPE 6 SIGNAL HEAD IS TO BE OPTICALLY PROGRAMMED VIA LOUVERS.
  - TYPE 3 SIGNAL HEAD SHALL BE FURNISHED WITH R10-12 SIGN WHEN INDICATED ON PLANS.
  - TYPE 4 & 5 SIGNAL HEADS SHALL BE FURNISHED WITH R10-10L SIGNS.
  - TYPE 2 FYA SIGNAL HEAD SHALL BE FURNISHED WITH A FYA SIGN.
  - COST OF SIGNAL SIGNS SHALL BE COST ABSORBED.
  - FOR SPAN WIRE INSTALLATION, THE HOUSING FOR THE RED INDICATION OF A TYPE 7 HEAD, SHALL BE ALUMINUM.

DETAIL OF TRAFFIC SIGNAL WITH BACKPLATE



- NOTE:
- ALL SIGNAL HEADS SHALL INCLUDE BACKPLATES UNLESS OTHERWISE NOTED ON TRAFFIC SIGNAL INSTALLATION SHEETS.

DETAIL OF TYPICAL TRAFFIC SIGNAL SIGNS



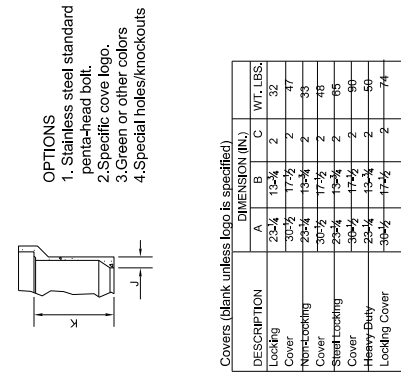
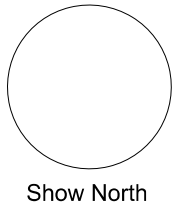
- NOTES:
- ALUMINUM SIGN BLANKS ARE TO BE ALLOY 5052-H38 AND 0.08" (NOMINAL) THICK.
  - THE SIGNS SHALL BE SUPPLIED WITH MOUNTING BRACKETS AS REQUIRED.
  - NUMBER 12 PLATED JACK CHAINS SHALL BE ATTACHED TO THE BOTTOM OF ALL SPAN WIRE MOUNTED SIGNS.
  - CHAINS SHALL BE ATTACHED TO SIGN AND TETHER USING "S" HOOKS.
  - THE SIZE OF THE SIGN BLANK, LEGEND, BORDER AND THE COLOR OF THE BACKGROUND AND LEGEND IS TO CONFORM TO THE MUTCD.
  - THE BACKGROUND SHALL BE REFLECTORIZED USING TYPE IX SHEETING.

DETAIL OF TRAFFIC SIGNAL HEADS, TRAFFIC SIGNAL SIGNS, AND GENERAL NOTES

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DATE	BY	DATE	BY



**OPTIONS**

1. Stainless steel standard penta-head bolt.
2. Specific cover logo.
3. Green or other colors.
4. Special holes/knockouts

Covers (blank unless logo is specified)

DESCRIPTION	DIMENSION (IN.)			WT. LBS.
	A	B	C	
Locking Cover	25 1/4	13 1/2	2	32
Non-locking Cover	30 1/2	17 1/2	2	47
Steel Locking Cover	30 1/2	17 1/2	2	33
Heavy Duty Cover	36 1/2	19 1/2	2	65
Locking Cover	36 1/2	19 1/2	2	80
Locking Cover	36 1/2	19 1/2	2	74

DESCRIPTION	DIMENSION (IN.)											WT. LBS.					
	D	E	F	G	H	J	K	L	M	N	P						
Standard Box	25	15 1/2	12	9 1/4	19 1/4	1 1/4	10	53									
Box w/ Mouseholes	25	15 1/2	18	9 1/4	19 1/4	1 1/4	16	62									
Box	32 1/4	19 1/4	12	13 1/2	25 1/2	1 1/4	10	82									
Box	32 1/4	19 1/4	18	13 1/2	25 1/2	1 1/4	16	94									
Box	25	15 1/2	12	9 1/4	19 1/4	1 1/4	10	49									
Box	25	15 1/2	18	9 1/4	19 1/4	1 1/4	16	61									
Box	32 1/4	19 1/4	12	13 1/2	25 1/2	1 1/4	10	80									
Box	32 1/4	19 1/4	18	13 1/2	25 1/2	1 1/4	16	90									
Box	25	15 1/2	12	9 1/4	19 1/4	1 1/4	10	104									
Box	25	15 1/2	18	9 1/4	19 1/4	1 1/4	16	73									
Box	32 1/4	19 1/4	12	13 1/2	25 1/2	1 1/4	10	108									
Box	32 1/4	19 1/4	18	13 1/2	25 1/2	1 1/4	16	108									

\*Not to be used for extensions

Extensions (For use under box only)

DESCRIPTION	DIMENSION (IN.)											WT. LBS.					
	L	M	N	P	O	R	S	T	U	V	W						
Extension (One Per Box)	23 1/4	14 1/4	8 1/4	10 1/4	19 1/4	8	1	25									
Extension w/ Sock Base	30 1/4	17 1/4	8 1/4	13 1/4	26 1/4	8	1	47									
Extension w/ Sock Base	23 1/4	14 1/4	8 1/4	9 1/4	19 1/4	8	1	35									
Extension w/ Sock Base	30 1/4	17 1/4	8 1/4	9 1/4	19 1/4	8	1	65									

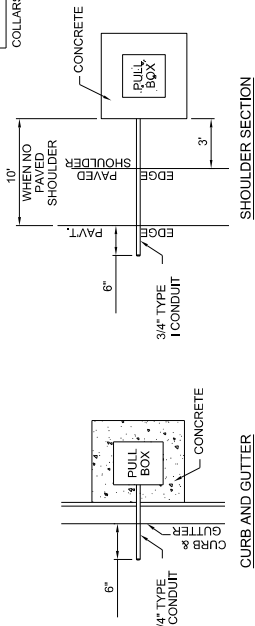
Underground enclosures shall be Composite. Enclosures and covers shall be concrete gray color and rated for no less than 8,000 lbs. over a 10" x 10" area and be designed and tested to temperatures of -50 F. Material compressive strength shall be no less than 11,000 psi. Covers shall have a minimum coefficient of friction of .5. Boxes shall be stackable for extra depth.

**NOMINAL PULLBOX SIZES**

TYPE 1	TYPE 2	TYPE 3
9" x 11" x 6 3/4"	15" x 25" x 18"	19" x 32" x 24"

COLLARS AND GRAVEL UNDER PULLBOX REQUIRED FOR ALL TYPES OF PULLBOXES

**PULL BOX AND CONDUIT TRENCHING DETAILS FOR TRAFFIC SIGNAL INSTALLATION**

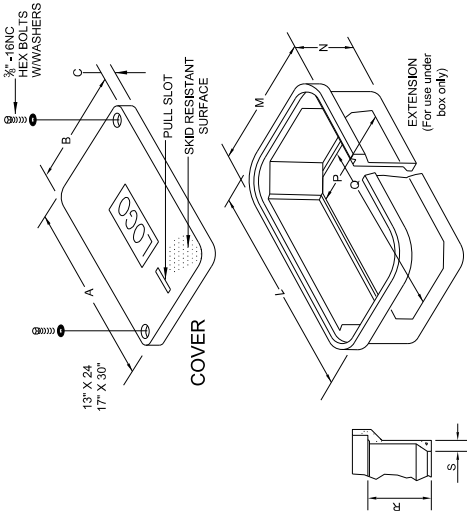


**PULL BOX LOCATION DETAIL**

NOT TO SCALE

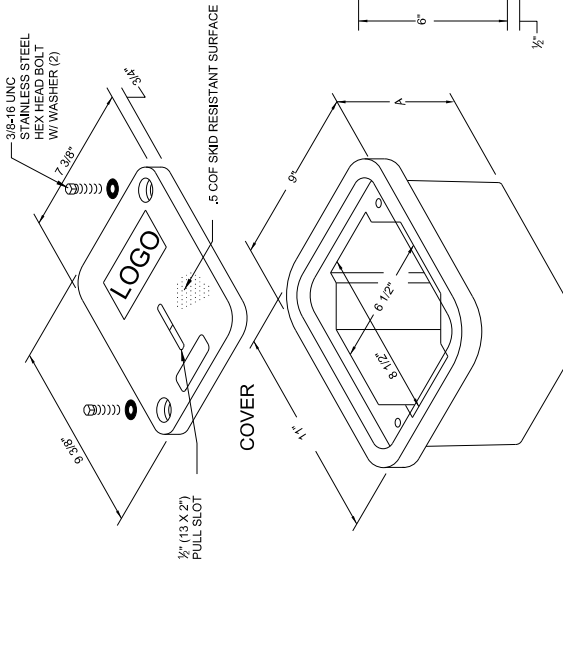
**TYPE 2 or 3 PULLBOX**

NOT TO SCALE



**TYPE 1 PULLBOX**

NOT TO SCALE



Covers (blank unless logo is specified)

DESCRIPTION	WEIGHT #	DESIGN/TEST LOAD #	ANSI TIER
Gasketed w/4 Bolts	4	8,000 / 12,000	8
Gasketed w/2 Bolts	4	8,000 / 12,000	8
Open Bottom	12	15,000 / 22,500	15
Soild Bottom	14.5	15,000 / 22,500	15
Soild Bottom w/Gasket	14.5	15,000 / 22,500	15

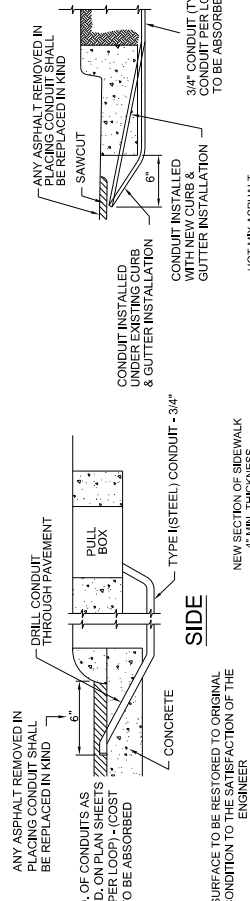
Boxes (Stackable with self-aligning, replaceable EZ-NU)

DESCRIPTION	WEIGHT #	DESIGN/TEST LOAD #	ANSI TIER
Open Bottom	6 1/2	15,000 / 22,500	15
Soild Bottom	6 1/2	15,000 / 22,500	15
Soild Bottom w/Gasket	7 1/4	15,000 / 22,500	15
Soild Bottom w/Gasket	7 1/4	15,000 / 22,500	15

Dimensions & weights in parentheses are metric equivalents.

**CONDUIT NOTES:**

1. CONDUIT TO BE SEALED WITH DUCT SEALER ONCE CABLE IS INSTALLED.
2. SAWCUT SIDEWALK AT EXISTING JOINTS AND REPLACE ENTIRE SECTION TO MATCH EXISTING MATERIAL. WHEN NEW SIDEWALK IS BEING CONSTRUCTED, CONDUIT, PULLBOX, AND POLE ARE TO BE INSTALLED BEFORE SIDEWALK IS POURED.
3. TYPE I CONDUIT IS RIGID PIPE; TYPE IV CONDUIT IS PVC.
4. ELECTRICAL SUBCONTRACTOR SHALL COORDINATE CONDUIT INSTALLATION WORK UNDER ROADWAY WITH ROADWAY CONSTRUCTION PHASING IN ORDER TO MINIMIZE JACKING.
5. MATERIAL REMOVED THAT IS NOT SUITABLE FOR BACKFILL OR IS EXCESS SHALL BE DISPOSED OF BY THE CONTRACTOR. (COST ABSORBED)



**CONDUIT TRENCHING DETAIL**

NOT TO SCALE

**PULL BOX LOCATION DETAIL**

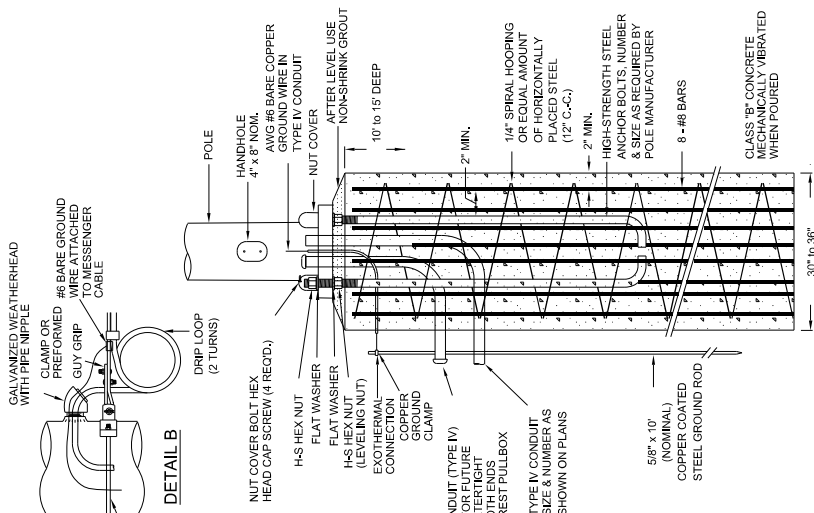
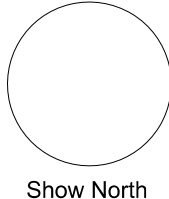
NOT TO SCALE

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APPLICANT		MDOT	
DATE	BY	DATE	BY



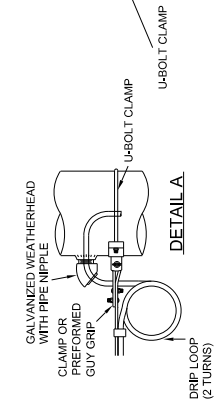
TYPE 1 POLE FOUNDATION DETAIL

GENERAL FOUNDATION NOTES

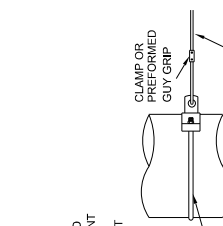
- EXACT DIMENSIONS AND LOCATIONS OF ANCHOR BOLTS TO BE SUPPLIED BY THE MANUFACTURER. ANY FOUNDATIONS FAILING TO MEET MINIMUM DIMENSIONS WILL BE REJECTED.
  - DRY SHAFT EXCAVATION MUST MEET REQUIREMENTS OF SECTION 603.03.2.2. IF GROUNDWATER OR HOLE INSTABILITY IS ENCOUNTERED, SLIP CASING AND 10' TREMIE SHALL BE REQUIRED.
  - WIND LOAD DETERMINES SHAFT DIAMETER AND DEPTH:
    - COASTAL COUNTIES (140mph) - 36" DIAMETER, 15' DEPTH WITH SLIP CASING.
    - 100mph to 130mph - 36" DIAMETER, 15' DEPTH. SLIP CASING NOT REQUIRED.
    - ALL OTHER COUNTIES (80mph) - 36" DIAMETER, 12' DEPTH.
- \*SEE WIND LOAD MAP IN 2001 AASHTO GUIDELINES.

SPAN WIRE AND STEEL STRAIN POLE DETAILS FOR TRAFFIC SIGNAL INSTALLATION

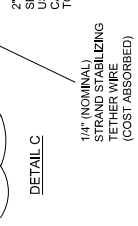
TSD-4



DETAIL A



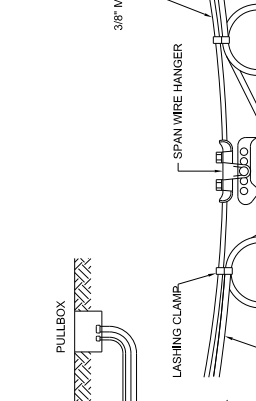
DETAIL B



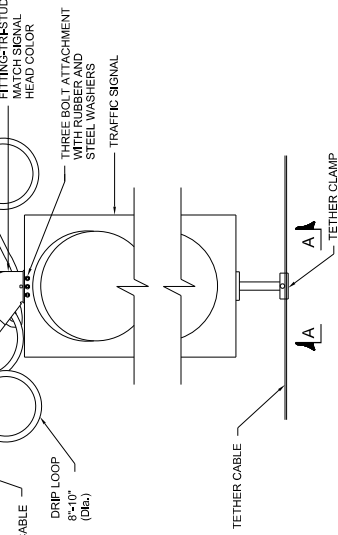
DETAIL C



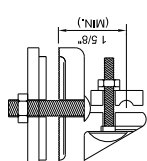
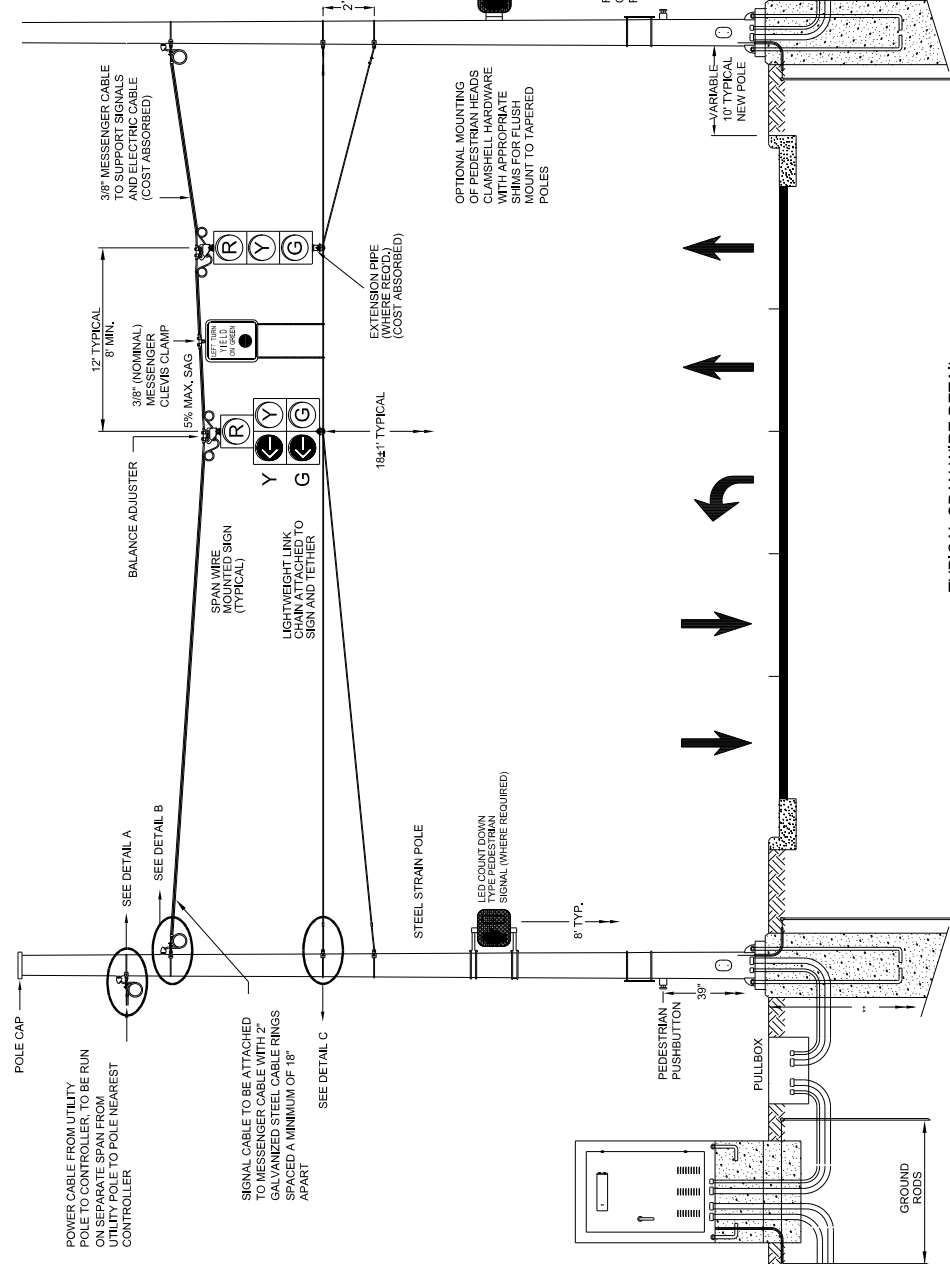
DETAIL D



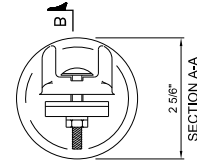
TYPICAL SPAN WIRE DETAIL  
NOT TO SCALE



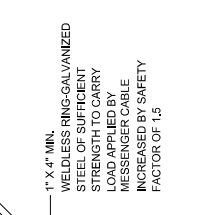
DETAIL OF SPAN WIRE ATTACHMENT FOR SIGNAL HEADS  
NOT TO SCALE



SECTION B-B



SECTION A-A



DETAIL 'D'

DETAIL OF MESSENGER CABLE CONNECTION USING TENSION RING  
NOT TO SCALE

DETAIL OF TETHER CLAMP  
NOT TO SCALE

NOT TO SCALE

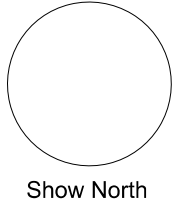




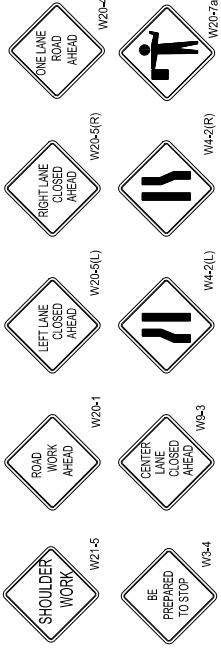
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DATE	BY	DATE	BY



**SIGN LEGEND**



**GENERAL NOTES**

- ADDITIONAL ADVANCE WARNING SIGNS MAY BE NECESSARY. ANY ADDITIONAL SIGNS SHOULD BE INCLUDED UNDER PAY ITEM 907-618-A, MAINTENANCE OF TRAFFIC.
- POST MOUNTED SIGNS SHALL HAVE A 7' MINIMUM MOUNTING HEIGHT.
- PAYMENT FOR ALL SIGNS, CONES, DRUMS, CONCRETE BARRIERS, STEEL PLATES AND OTHER MATERIALS, BARRICADES, LABOR AND INCIDENTALS REQUIRED TO IMPLEMENT THE TRAFFIC CONTROL PLAN SHALL BE INCLUDED UNDER PAY ITEM 618-A, MAINTENANCE OF TRAFFIC.
- APPROACH SIDE TRAFFIC CONTROL TO BE USED WHEN WORK OCCURS ON EITHER THE APPROACH SIDE OR THE FAR SIDE OF THE INTERSECTION. FAR SIDE TRAFFIC CONTROL IS NOT NEEDED WHEN WORK IS CONFINED TO THE APPROACH SIDE ONLY.
- FOR A DIVIDED HIGHWAY SITUATION, A SECOND SET OF ADVANCE WARNING SIGNS SHALL BE ERRECTED IN MEDIAN AREA (8' MIN. MEDIAN WIDTH REQUIRED).

**LEGEND**

- DRUMS (30" MAXIMUM SPACING) - CONES SHALL BE NARROW PROFILE WITH A MINIMUM HEIGHT OF 28 INCHES AND A MINIMUM WEIGHT OF TEN (10) POUNDS. CONES USED IN SPEED ZONES EQUAL TO OR GREATER THAN 45 MPH SHALL BE NARROW PROFILE WITH A MINIMUM HEIGHT OF 28 INCHES AND A MINIMUM WEIGHT OF FIFTEEN (15) POUNDS. ALL CONES SHALL BE APPROVED BY THE ENGINEER PRIOR TO USE.
- SIGNS - SEE SIGN LEGEND MIN. SIZE 48" x 48", BLACK ON ORANGE BACKGROUND
- FLAGGER WITH PADDDLE - 18" STOP/SLOW PADDDLES ACCEPTED AS PROPER TRAFFIC CONTROL DEVICES SHALL BE USED. HANDHELD FLAGS SHALL NOT BE FOR FLAGGING OPERATION.

WORK AREA



BUFFER AREA

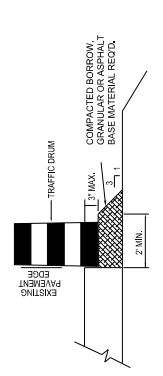
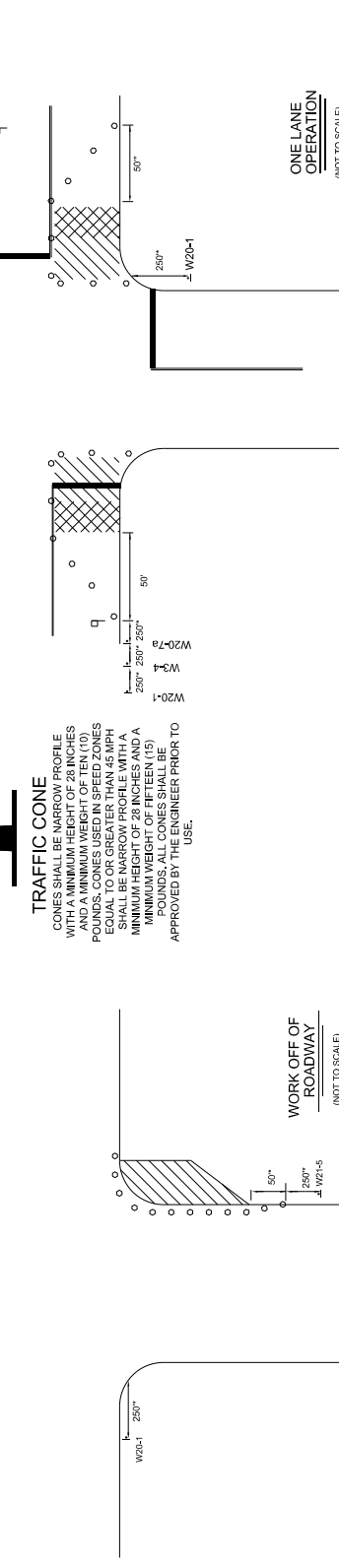
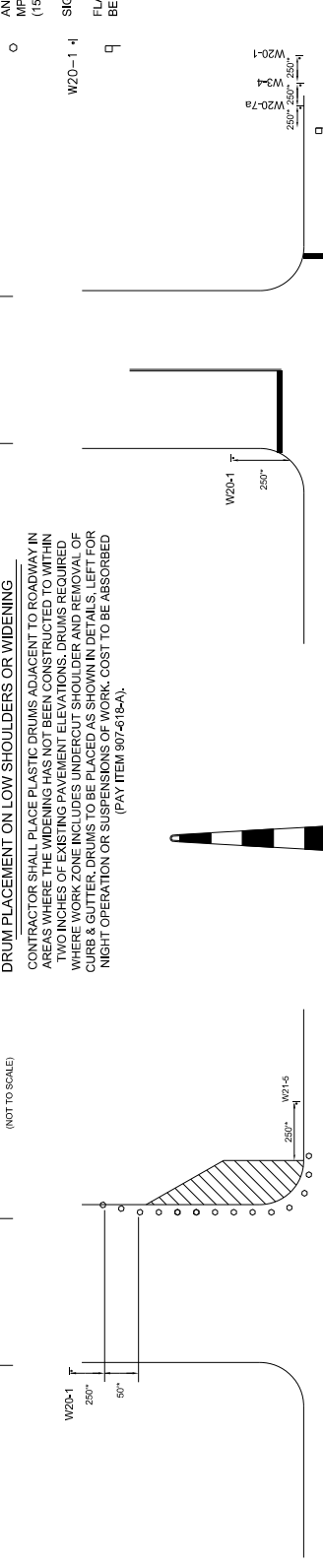
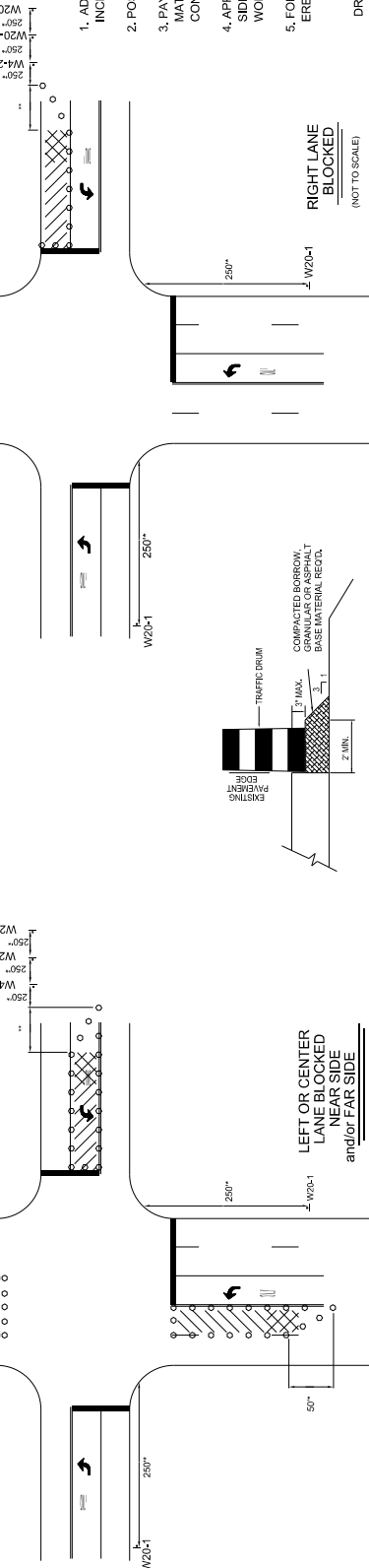


CONSIDERED MINIMUM DISTANCE - ENGINEER TO DETERMINE APPROPRIATE SPACING IN THE FIELD

SPEED LIMIT	FEET	TAPER LENGTH (Feet)
M.P.H.		(Per 1/2 Lane Shift)
20	115	80
25	155	125
30	200	180
35	250	245
40	305	320
45	360	400
50	425	490
55	495	590
60	570	720
65	645	880
70	730	1050

TRAFFIC CONTROL PLAN  
(TYPICAL SIGNAL INSTALLATION)

TSD-7



**DRUM PLACEMENT ON LOW SHOULDERS OR WIDENING**  
CONTRACTOR SHALL PLACE PLASTIC DRUMS ADJACENT TO ROADWAY IN AREAS WHERE THE WIDENING HAS NOT BEEN CONSTRUCTED TO WITHIN TWO INCHES OF EXISTING PAVEMENT ELEVATIONS. DRUMS REQUIRED WHERE WORK ZONE INCLUDES UNDERCUT SHOULDER AND REMOVAL OF CURB & GUTTER, DRUMS TO BE PLACED AS SHOWN IN DETAILS, LEFT FOR NIGHT OPERATION OR SUSPENSIONS OF WORK. COST TO BE ABSORBED (PAY ITEM 907-618-A).

**TRAFFIC CONE**

CONES SHALL BE NARROW PROFILE WITH A MINIMUM HEIGHT OF 28 INCHES AND A MINIMUM WEIGHT OF TEN (10) POUNDS. CONES USED IN SPEED ZONES EQUAL TO OR GREATER THAN 45 MPH SHALL BE NARROW PROFILE WITH A MINIMUM HEIGHT OF 28 INCHES AND A MINIMUM WEIGHT OF FIFTEEN (15) POUNDS. ALL CONES SHALL BE APPROVED BY THE ENGINEER PRIOR TO USE.

ONE LANE OPERATION  
(NOT TO SCALE)

WORK OFF OF ROADWAY  
(NOT TO SCALE)