

FOREWORD

UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS' CONSTRUCTION, OFFSITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA

The following participating entities of the Clark County, Nevada area have adopted these standard drawings.

CITY OF LAS VEGAS

Adopted by City Council action November 4, 1987

CITY OF HENDERSON

Adopted by City Council action October 20, 1987

CITY OF NORTH LAS VEGAS

Adopted by City Council action November 4, 1987

CITY OF BOULDER CITY

Adopted by City Council action January 26, 1988

CITY OF MESQUITE

Adopted by City Council action January 26, 1988

CLARK COUNTY

Adopted by Board action April 1998

REGIONAL STREET AND HIGHWAY COMMISSION

Adopted by Commission Action..... October 8, 1987

The Uniform Standard Drawings for Public Works Construction may be revised by issuance of revisions or supplements to correct errors and omissions found in these drawings and to reflect advanced thinking and the changing technology of the construction industry. Each revision will supersede any previous pertinent drawing. Upon approval by the RTC, revisions will become effective and be posted on the RTC web-site, www.rtcnv.com, by the first day of the month of January and July.

To implement this end a Specifications Committee has been established as a permanent organization to continually study and recommend changes to the standard drawings. Interested parties may address suggested changes and questions to the Regional Transportation Commission, 600 South Grand Central Parkway, Suite 350, Las Vegas, Nevada, 89106-4512.

SECTION LINE



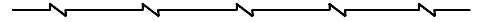
CENTERLINE OR
SURVEY LINE



RIGHT-OF-WAY OR
PROPERTY LINE



CUT LINE-ASPHALT
CONC. OR PCC CONC.



DIRECTION OF FLOW



MISCELLANEOUS TOPOGRAPHIC SYMBOLS

VALVE (INITIALS INDICATE OWNERSHIP
AND / OR TYPE)



STREET NAME SIGN



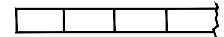
GAS CATHODE PROTECTION RECTIFIER



TEST HOLE



CONCRETE BLOCK WALL



UTILITY BOX (INITIALS INDICATE
OWNERSHIP AND / OR TYPE)



FIRE ALARM BOX ON PEDESTAL



PUBLIC SERVICE UTILITY POLE,
LINE TO SHOW DIRECTION OF
RUN OF OVERHEAD LINE



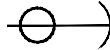
CONCRETE MONUMENT



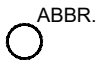
TREE (NO. INDICATES
TRUCK DIA. IN INCHES)



POLE WITH GUY ANCHOR



MISCELLANEOUS SYMBOL (ABBREVIATION
INDICATES TYPE)



FIRE HYDRANT



HEDGE (NOTE SIZE □ SPECIES)



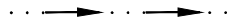
FENCE



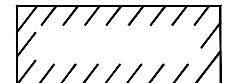
STEPS (NOTE TYPE AND
NO. OF RISERS)



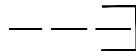
FLOW LINE OF DITCH
OR CHANNEL



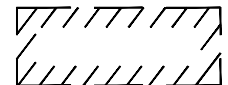
EXISTING BUILDING



EXISTING UTILITY STUB-OUT



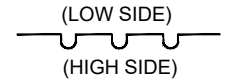
EXISTING BUILDING
FOUNDATION



TRAFFIC CONTROL SIGN



RETAINING WALL



AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SYMBOLS

DATE

DWG. NO.

101

SHEET

1 OF 4

PLAN ONLY

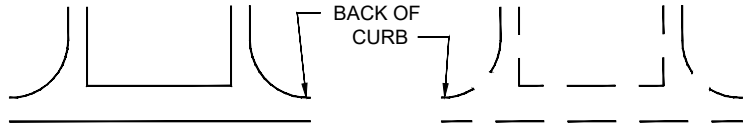
PROPOSED CONSTRUCTION

EXISTING

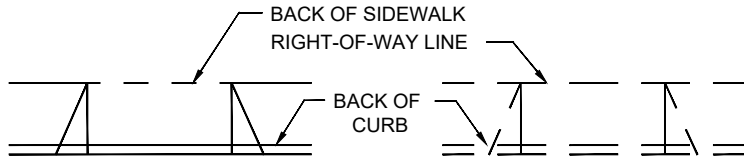
CURB AND GUTTER



VALLEY GUTTER



DRIVEWAY



WHEELCHAIR RAMP



DROP INLET



EDGE OF PAVEMENT

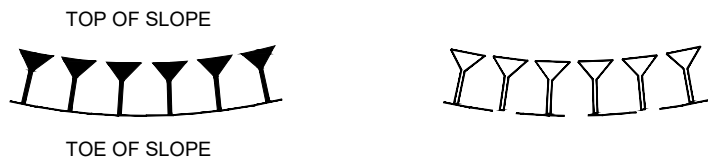


ELEVATIONS

0.00

(0.00)

CUT OR FILL SLOPES



NOTE: FUTURE CONSTRUCTION ITEMS ON PLANS SHALL BE INDICATED BY A DASHED LINE AND APPROPRIATE NOTE.

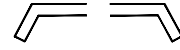
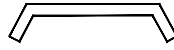
AGENCY APPROVED	B	C	H	L	M	N
UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
SYMBOLS						
DATE	DWG. NO.	101	SHEET	2 OF 4		

PLAN ONLY

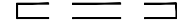
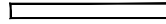
PROPOSED CONSTRUCTION

EXISTING

WING TYPE HEADWALL



VALLEY GUTTER



UNDERGROUND UTILITY
WITH MANHOLE AND
CASING

OWNERSHIP INDICATED BY LINE LEGEND



SIZE AND TYPE OF CONDUIT SHALL
BE PLACED ON CONDUIT WHEN
AVAILABLE

LEGEND

TSI = TRAFFIC SIGNAL INTERCONNECT
E = ELECTRIC
FA = FIRE ALARM
SL = STREET LIGHT
CATV = CABLE TELEVISION

SS = SANITARY SEWER
SD = STORM DRAIN
W = WATER
S-G = STEEL GAS
PL-G = PLASTIC GAS
T = TELEPHONE

PROFILE ONLY

CENTERLINE GRADE



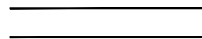
TOP OF CURB OR FLOW
LINE



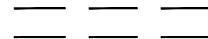
PIPE



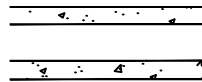
OR



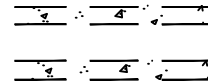
OR



OR



OR



AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SYMBOLS

DATE

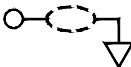
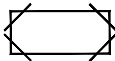
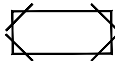
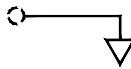
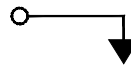
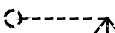
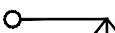
DWG. NO.

101

SHEET

3 OF 4

MISCELLANEOUS ELECTRICAL SYMBOLS

PLAN ONLY	EXISTING	PROPOSED CONSTRUCTION					
TRAFFIC SIGNAL CONTROLLER							
PULL BOX (INITIALS INDICATE OWNERSHIP AND NUMBER INDICATES SIZE)	SL 	SL-SIZE 					
TRAFFIC SIGNAL WITH LUMINAIRE							
TRAFFIC SIGNAL DETECTOR LOOP							
SERVICE POINT, PAD MOUNTED							
7 GAGE LIGHTING STANDARD							
11 GAGE LIGHTING STANDARD							
LUMINAIRE 100 W (HPS) □ 55 W (IND) 							
LUMINAIRE 150 W (HPS) □ 150 W (IND) 							
200 W LUMINAIRE							
LUMINAIRE 250 W (HPS) □ 150 W (IND) 							
LUMINAIRE 400 W (HPS) □ 250 W (IND) 							
750 W LUMINAIRE							
TRAFFIC SIGNAL POLE							
SCHOOL FLASHER							
AGENCY APPROVED		B	C		L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		SYMBOLS					
		DATE 12-12-96		DWG. NO. 101		SHEET 4 OF 4	

Effective 12/10/2020 to 06/09/2021

A□□□	- A□□□□□	E□□□	- E□□□□□
AIP	- A□□□□□ed □□P□□□e	E□□□□	- E□□□□□□□e□□
A□□□	- A□□□□□□e	ECR	- E□d □□C□□□Re□□□□
A□□□	- A□□□□□□e	EC	- E□d □□C□□□e
A	- A□□□de, G□□□	EBS	- C□□□□de Pr□□□□□□□□ B□□□□ S□□□□□
ACP	- A□□□□□□□Ce□□e□□P□□□e	ETS	- C□□□□de Pr□□□□□□□□ Te□□S□□□□□
AC	- A□□□□□□□C□□□□□□e	EVC	- E□d □□Ver□□□□C□□□e
A□□e	- A□□□□□e	E□□□□	- E□□□□□□□
BC	- B□□□□□C□□□□	F□	- Fee□□□ F□□□□
BCR	- B□□□□□C□□□□ Rd□□□□	FG	- F□□□□ Gr□□de
BVC	- Be□□□□□□□□ Ver□□□□□C□□□e	FA	- Fire A□□□□
BM	- Be□□□□ M□□□□	FH	- Fire Hd□□□□□
Bdr□□L□□□e	- B□□□□□□□L□□□e	f□	- F□□□ L□□□e
CATV	- C□□□□ Te□□□□□□□□	G□□□□	- G□□□□□□□□ed
C-C	- Ce□□□□□ □□ Ce□□□□□	GM	- G□□ Me□□□□
C□	- Ce□□□□□□□e	GR	- G□□ Pre□□□□□ Re□□□□□□□
CBC	- C□□□□□B□□□□der C□□□□	PL-G	- P□□□□□□□G□□
CLV	- C□□□□□L□□□Ve□□□□	S-G	- Stee□□G□□
COH	- C□□□□□He□□□□□□□□	GB	- Gr□□de Bre□□□□
CM	- C□□□□□Me□□□□□□e	G□□	- G□□□□□
CNLV	- C□□□□□N□□□□□L□□□Ve□□□□	Hd□□□	- He□d□□□□□
CC	- C□□□□□C□□□□□□□□	I□	- I□□□□
CCSD	- C□□□□□C□□□□□□□□ S□□□□□□□□□□ D□□□□□□□	INT	- I□□□□□□□□□□□□
CO	- Ca□□□□□□□□ Se□□□□□	INV	- I□□□□□□
C□□□□□	- C□□□□□□□□□□□□	ISL	- I□□□□□□
C□□□□□ PCC	- C□□□□□□□e	IB	- □□□□□□□□□□ B□□
C□□□□□□	- C□□□□□□□□□□□□□□□□□□□□	LOC	- Le□□□□□□□□C□□□□
C□□	- C□□□□□□	L□	- Le□□□
CMP	- C□□□□□□□□□□ Me□□□□□□e	LF	- Lin□□□□□ Fee□□
CSAP	- C□□□□□□□□□□□□□□□□□□□□□□	LVVWD	- L□□□□□□□□□□□□□□□□ D□□□□□□□
CSP	- C□□□□□□□□□□□□□□□□□□□□	MH	- M□□□□□□□e
C□□G	- C□□□□□□□□□□□□□□	M□□□	- M□□□□□□□□
CIP	- C□□□□□□□□□□□□□□□□□□□□	M□□□	- M□□□□□□□□□□
C□□□	- C□□□□□□□□	M□□□	- M□□□□□□□□□□□□
C□□Yd, CY	- C□□□□□□□□□□□□□□	N/□	- N□□□□□□□□□
C□□F□□CF	- C□□□□□□□□□□□□□□□□□□□□	NTS	- N□□□□□□□□□□□□
C□□□□	- C□□□□□□□□□□	OC	- O□□□□□□□□□□
CF	- C□□□□□□□□□□	OG	- O□□□□□□□□□□□□□□□□□□□□□□ Or□□□□□□□□□□□□□□□□□□□□
De□□□	- De□□□□□□□□□□□□□□□□□□□□	P□□□□□	- P□□□□□□□□□□
D□□□	- D□□□□□□□□□□□□□□□□□□□□	PI	- P□□□□□□□□□□□□□□□□□□□□
D□□□	- Dr□□□□□□□□□□□□□□□□□□□□	PRC	- P□□□□□□□□□□□□□□□□□□□□
DI	- Dr□□□□□□□□□□□□□□□□□□□□	PC	- P□□□□□□□□□□□□□□□□□□□□
E□□□□□	- E□□□□□□□□□□□□□□□□□□□□	PT	- P□□□□□□□□□□□□□□□□□□□□
E/□	- E□□□□□□□□□□□□□□□□□□□□	PCC	- P□□□□□□□□□□□□□□□□□□□□
EP	- Ed□□□□□□□□□□□□□□□□□□□□	PCC, C□□□□	- P□□□□□□□□□□□□□□□□□□□□
EO	- Ed□□□□□□□□□□□□□□□□□□□□		
E	- E□□□□□□□□□□□□□□□□□□□□		
EM	- E□□□□□□□□□□□□□□□□□□□□		

		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
		ABBREVIATIONS							
-		DATE	DWG. NO.	105	SHEET	1 OF 2			

PP	- P _{ro} cess P _{lan}
P	- P _{ro} cess
P _L	- P _{ro} cess L _{ine}
Pr _o	- P _{ro} cess
PB	- P _{ro} cess B _{ox}
RP	- R _{oad} P _{lan}
R	- R _{oad}
RR	- R _{oad}
Re _o	- R _{oad}
RC	- R _{oad} C _{or} rected C _{or} rected
RCB	- R _{oad} C _{or} rected C _{or} rected B _{ox}
RCP	- R _{oad} C _{or} rected C _{or} rected P _{lan}
Re _o	- R _{oad}
RT	- R _{oad}
R/W	- R _{oad} W _{ide}
RD	- R _{oad}
SS	- S _{ite} S _{urvey}
S _o	- S _{ite}
S/ _o	- S _{ite}
SW	- S _{ide} W _{all}
SQ FT, SF	- S _{quare} F _{oot} , S _{quare} F _{oot}
SQ YD, SY	- S _{quare} Y _{ard} , S _{quare} Y _{ard}
S _o	- S _{ite}
SHP	- S _{ite} H _{and} P _{lan}
SD	- S _{ite} D _{raw}
STD	- S _{ite} D _{raw}
S _o	- S _{ite} S _{urvey}
S _o	- S _{ite}
SL	- S _{ite} L _{ine}
T	- T _{able}
Te _o	- T _{able}
TBA	- T _{able} A _d
TBR	- T _{able} R _{oad}
TC	- T _{able} C _{or} rect
TP	- T _{able} P _{lan}
TS	- T _{able} S _{urvey}
TSI	- T _{able} S _{urvey} I _{nter} sected
Tr _o	- T _{able}
T _o	- T _{able}
UG	- U _{nder} G _{round}
V _o	- V _{er} ification
Ver _o	- V _{er} ification
VC	- V _{er} ification C _{or} rect
VG	- V _{er} ification G _{round}
VCP	- V _{er} ification C _{or} rect P _{lan}
W	- W _{ater}
WM	- W _{ater} M _{eter}
W/ _o	- W _{ater}
Yd	- Y _{ard}

		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
		ABBREVIATIONS							
		DATE	DWG. NO.		105	SHEET		2 OF 2	

R-Value	RESIDENTIAL								MINOR COLLECTOR							
	N=1 Tr=1 (5.0)				He=1 Tr=1 (5.5)				N=1 Tr=1 (6.0)				He=1 Tr=1 (6.5)			
	SN	AC	T-II	T-I	SN	AC	T-II	T-I	SN	AC	T-II	T-I	SN	AC	T-II	T-I
16	1.70	2.0	4.0	5.0	2.00	2.5	4.0	6.0	2.25	3.0	4.0	6.5	2.50	3.5	4.0	7.5
18	1.70	2.0	4.0	5.0	1.95	2.5	4.0	5.5	2.20	3.0	4.0	6.0	2.45	3.5	4.0	7.0
20	1.65	2.0	4.0	4.5	1.90	2.5	4.0	5.0	2.15	3.0	4.0	5.5	2.40	3.5	4.0	6.5
22	1.60	2.0	4.0	4.0	1.85	2.5	4.0	4.5	2.05	3.0	4.0	5.0	2.35	3.5	4.0	6.0
24	1.55	2.0	7.5	NA	1.80	2.5	4.0	4.0	2.00	3.0	4.0	4.5	2.25	3.5	4.0	5.0
26	1.50	2.0	7.0	NA	1.75	2.5	7.5	NA	1.95	3.0	4.0	4.0	2.20	3.5	4.0	4.5
28	1.45	2.0	6.5	NA	1.70	2.5	7.0	NA	1.90	3.0	7.5	NA	2.15	3.5	4.0	4.0
30	1.40	2.0	6.0	NA	1.65	2.5	6.5	NA	1.85	3.0	7.0	NA	2.10	3.5	7.5	NA
32	1.35	2.0	5.5	NA	1.60	2.5	6.0	NA	1.80	3.0	6.5	NA	2.05	3.5	7.0	NA
34	1.35	2.0	5.5	NA	1.55	2.5	6.0	NA	1.75	3.0	6.0	NA	2.00	3.5	6.5	NA
36	1.30	2.0	5.0	NA	1.50	2.5	5.5	NA	1.70	3.0	5.5	NA	1.95	3.5	6.0	NA
38	1.25	2.0	5.0	NA	1.45	2.5	5.0	NA	1.65	3.0	5.0	NA	1.85	3.5	5.5	NA
40	1.20	2.0	4.5	NA	1.40	2.5	4.5	NA	1.60	3.0	5.0	NA	1.80	3.5	5.0	NA
42	1.15	2.0	4.0	NA	1.35	2.5	4.0	NA	1.55	3.0	4.5	NA	1.75	3.5	4.5	NA
44	1.15	2.0	4.0	NA	1.35	2.5	4.0	NA	1.55	3.0	4.5	NA	1.70	3.5	4.0	NA
46	1.10	2.0	4.0	NA	1.30	2.0	5.0	NA	1.50	3.0	4.0	NA	1.70	3.5	4.0	NA
48	1.05	2.0	4.0	NA	1.25	2.0	5.0	NA	1.45	3.0	4.0	NA	1.65	3.0	5.0	NA
50	1.05	2.0	4.0	NA	1.20	2.0	4.5	NA	1.40	3.0	4.0	NA	1.60	3.0	5.0	NA
52	1.00	2.0	4.0	NA	1.20	2.0	4.5	NA	1.35	3.0	4.0	NA	1.55	3.0	4.5	NA
54	0.95	2.0	4.0	NA	1.15	2.0	4.0	NA	1.30	3.0	4.0	NA	1.50	3.0	4.0	NA
56	0.95	2.0	4.0	NA	1.10	2.0	4.0	NA	1.30	3.0	4.0	NA	1.45	3.0	4.0	NA
58	0.90	2.0	4.0	NA	1.05	2.0	4.0	NA	1.25	3.0	4.0	NA	1.40	3.0	4.0	NA
60	0.85	2.0	4.0	NA	1.05	2.0	4.0	NA	1.20	3.0	4.0	NA	1.35	3.0	4.0	NA
62	0.85	2.0	4.0	NA	1.00	2.0	4.0	NA	1.15	3.0	4.0	NA	1.35	3.0	4.0	NA
64	0.80	2.0	4.0	NA	0.95	2.0	4.0	NA	1.15	3.0	4.0	NA	1.30	3.0	4.0	NA
66	0.75	2.0	4.0	NA	0.95	2.0	4.0	NA	1.10	3.0	4.0	NA	1.25	3.0	4.0	NA
68	0.75	2.0	4.0	NA	0.90	2.0	4.0	NA	1.05	3.0	4.0	NA	1.20	3.0	4.0	NA
70	0.70	2.0	4.0	NA	0.85	2.0	4.0	NA	1.00	3.0	4.0	NA	1.15	3.0	4.0	NA
72	0.70	2.0	4.0	NA	0.80	2.0	4.0	NA	1.00	3.0	4.0	NA	1.15	3.0	4.0	NA
74	0.65	2.0	4.0	NA	0.75	2.0	4.0	NA	0.95	3.0	4.0	NA	1.10	3.0	4.0	NA
76	0.65	2.0	4.0	NA	0.75	2.0	4.0	NA	0.90	3.0	4.0	NA	1.05	3.0	4.0	NA
78	0.65	2.0	4.0	NA	0.70	2.0	4.0	NA	0.85	3.0	4.0	NA	1.05	3.0	4.0	NA

NOTES:

1. THIS CHART WAS CONSTRUCTED USING THE 1993 AASHTO PAVEMENT DESIGN GUIDE, 1996 NDOT MANUAL AND THE 2000 RTC DESIGN CRITERIA, SECTION 401.01.02 OF THE STANDARD SPECIFICATIONS.
2. AN AVERAGE R-VALUE MAY BE USED IF IT IS REPRESENTATIVE OF ALL PROJECT CONDITIONS.
3. ADDITIONAL DESIGN COMPENSATION IS REQUIRED IF EXPANSIVE SOILS, HYDRO-COLLAPSIBLE SOILS, OR SOLUBLE MATERIALS ARE PRESENT.
4. AC DEPTHS SHOWN ARE MINIMUMS AND 4" MINIMUM TYPE II IS REQUIRED; OTHER COMBINATIONS THAT MEET OR EXCEED THE STRUCTURAL NUMBER REQUIREMENTS ARE ACCEPTABLE.

SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
401	PLANTMIX BITUMINOUS PAVEMENTS	PAVEMENT STRUCTURE DESIGN GUIDELINE CHART FOR MINOR COLLECTOR AND RESIDENTIAL ROADWAYS						
DATE 11-10-04		DWG. NO. 200.1						

R-Value	MAJOR COLLECTOR								ARTERIAL							
	N or Tr (8.0)				He Tr (8.5)				N or Tr (9.0)				He Tr (9.5)			
	SN	AC	T-II	T-I	SN	AC	T-II	T-I	SN	AC	T-II	T-I	SN	AC	T-II	T-I
16	3.35	4.0	4.0	13.5	3.65	4.5	4.0	14.5	4.25	5.0	4.0	18.5	4.55	5.5	4.0	19.5
18	3.30	4.0	4.0	13.0	3.55	4.5	4.0	14.0	4.15	5.0	4.0	17.5	4.45	5.5	4.0	19.0
20	3.20	4.0	4.0	12.0	3.45	4.5	4.0	13.0	4.05	5.0	4.0	16.5	4.35	5.5	4.0	18.0
22	3.10	4.0	4.0	11.5	3.40	4.5	4.0	12.5	3.95	5.0	4.0	16.0	4.25	5.5	4.0	17.0
24	3.05	4.0	4.0	11.0	3.30	4.5	4.0	11.5	3.85	5.0	4.0	15.0	4.15	5.5	4.0	16.0
26	2.95	4.0	4.0	10.0	3.20	4.5	4.0	10.5	3.75	5.0	4.0	14.0	4.05	5.5	4.0	15.0
28	2.90	4.0	4.0	9.5	3.15	4.5	4.0	10.0	3.65	5.0	4.0	13.0	3.95	5.5	4.0	14.0
30	2.80	4.0	4.0	8.5	3.05	4.5	4.0	9.0	3.55	5.0	4.0	12.00	3.85	5.5	4.0	13.5
32	2.75	4.0	4.0	8.0	2.95	4.5	4.0	8.5	3.45	5.0	4.0	11.5	3.75	5.5	4.0	12.5
34	2.65	4.0	4.0	7.0	2.90	4.5	4.0	8.0	3.40	5.0	4.0	11.0	3.65	5.5	4.0	11.5
36	2.60	4.0	4.0	6.5	2.80	4.5	4.0	7.0	3.30	5.0	4.0	10.0	3.55	5.5	4.0	10.5
38	2.50	4.0	4.0	6.0	2.75	4.5	4.0	6.5	3.20	5.0	4.0	9.0	3.45	5.5	4.0	9.5
40	2.45	4.0	4.0	5.5	2.65	4.5	4.0	5.5	3.15	5.0	4.0	8.5	3.35	5.5	4.0	9.0
42	2.40	4.0	4.0	5.0	2.60	4.5	4.0	5.0	3.05	5.0	4.0	7.5	3.30	5.5	4.0	8.5
44	2.35	4.0	4.0	4.5	2.55	4.5	4.0	4.5	2.95	5.0	4.0	7.0	3.20	5.5	4.0	7.5
46	2.25	4.0	4.0	4.0	2.45	4.5	4.0	4.0	2.90	5.0	4.0	6.5	3.10	5.5	4.0	6.5
48	2.20	4.0	7.0	NA	2.40	4.5	7.0	NA	2.80	5.0	4.0	5.5	3.05	5.5	4.0	6.0
50	2.15	4.0	6.5	NA	2.35	4.5	6.5	NA	2.75	5.0	4.0	5.0	2.95	5.5	4.0	5.0
52	2.10	4.0	6.0	NA	2.30	4.5	6.0	NA	2.65	5.0	4.0	4.0	2.90	5.5	4.0	4.5
54	2.05	4.0	5.5	NA	2.20	4.5	5.5	NA	2.60	5.0	7.5	NA	2.80	5.5	4.0	4.0
56	2.00	4.0	5.0	NA	2.15	4.5	5.0	NA	2.55	5.0	7.0	NA	2.75	5.5	7.0	NA
58	1.95	4.0	5.0	NA	2.10	4.5	4.5	NA	2.45	5.0	6.0	NA	2.65	5.5	6.5	NA
60	1.90	4.0	4.5	NA	2.05	4.5	4.0	NA	2.40	5.0	5.5	NA	2.60	5.5	6.0	NA
62	1.85	4.0	4.0	NA	2.00	4.0	5.0	NA	2.35	5.0	5.0	NA	2.50	5.5	5.0	NA
64	1.80	4.0	4.0	NA	1.95	4.0	5.0	NA	2.30	5.0	4.5	NA	2.45	5.5	4.5	NA
66	1.75	4.0	4.0	NA	1.90	4.0	4.5	NA	2.20	5.0	4.0	NA	2.40	5.5	4.0	NA
68	1.70	4.0	4.0	NA	1.85	4.0	4.0	NA	2.15	4.5	5.0	NA	2.35	5.0	5.0	NA
70	1.65	4.0	4.0	NA	1.80	4.0	4.0	NA	2.10	4.5	4.5	NA	2.25	5.0	4.5	NA
72	1.60	4.0	4.0	NA	1.75	4.0	4.0	NA	2.05	4.5	4.0	NA	2.20	5.0	4.0	NA
74	1.55	4.0	4.0	NA	1.70	4.0	4.0	NA	2.00	4.0	5.0	NA	2.15	4.5	5.0	NA
76	1.50	4.0	4.0	NA	1.65	4.0	4.0	NA	1.95	4.0	4.5	NA	2.10	4.5	4.5	NA
78	1.45	4.0	4.0	NA	1.60	4.0	4.0	NA	1.90	4.0	4.0	NA	2.05	4.5	4.0	NA

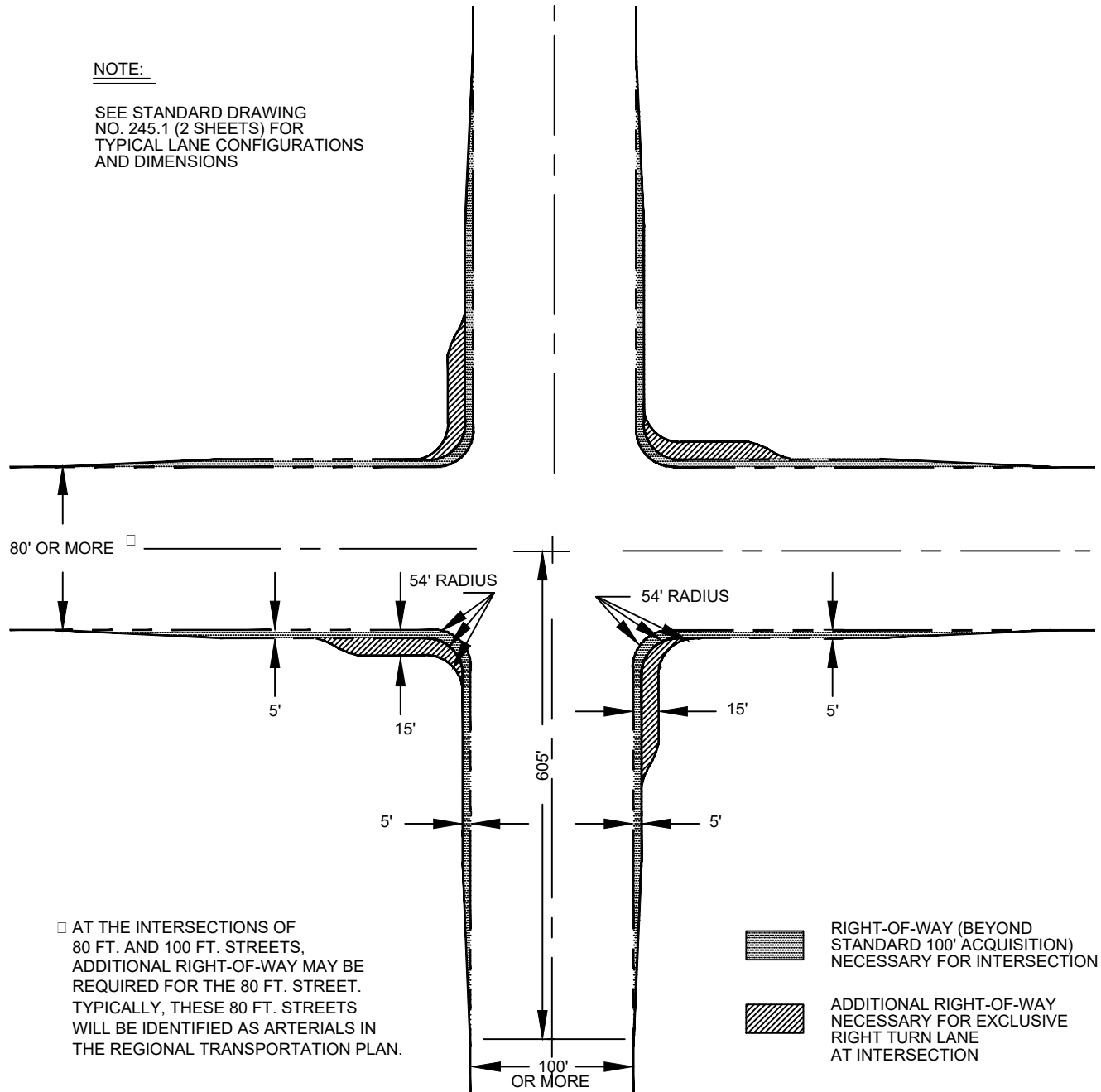
NOTES:

1. THIS CHART WAS CONSTRUCTED USING THE 1993 AASHTO PAVEMENT DESIGN GUIDE, 1996 NDOT MANUAL AND THE 2000 RTC DESIGN CRITERIA, SECTION 401.01.02 OF THE STANDARD SPECIFICATIONS.
2. A TRAFFIC STUDY MAY BE REQUIRED IF TI $\leq$ 9.5.
3. AN AVERAGE R-VALUE MAY BE USED IF IT IS REPRESENTATIVE OF ALL PROJECT CONDITIONS.
4. ADDITIONAL DESIGN COMPENSATION IS REQUIRED IF EXPANSIVE SOILS, HYDRO-COLLAPSIBLE SOILS, OR SOLUBLE MATERIALS ARE PRESENT.
5. AC DEPTHS SHOWN ARE MINIMUMS AND 4" MINIMUM TYPE II IS REQUIRED; OTHER COMBINATIONS THAT MEET OR EXCEED THE STRUCTURAL NUMBER REQUIREMENTS ARE ACCEPTABLE.

		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
401	PLANTMIX BITUMINOUS PAVEMENTS	PAVEMENT STRUCTURE DESIGN GUIDELINE CHART FOR MAJOR COLLECTOR AND ARTERIAL ROADWAYS							
		DATE 11-10-04	DWG. NO.		200				

NOTE:

SEE STANDARD DRAWING
NO. 245.1 (2 SHEETS) FOR
TYPICAL LANE CONFIGURATIONS
AND DIMENSIONS



AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

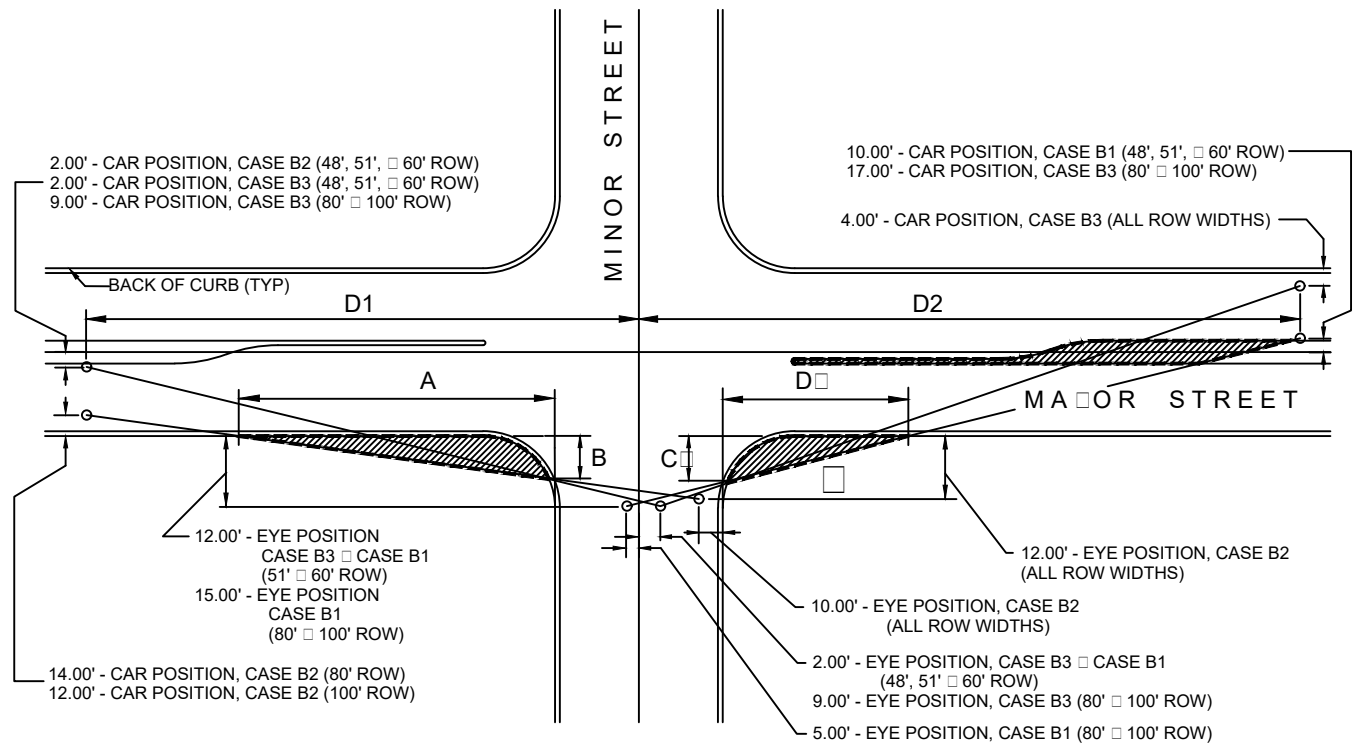
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

ADDITIONAL RIGHT-OF-WAY REQUIRED
AT MAJOR INTERSECTIONS

DATE 7-10-03

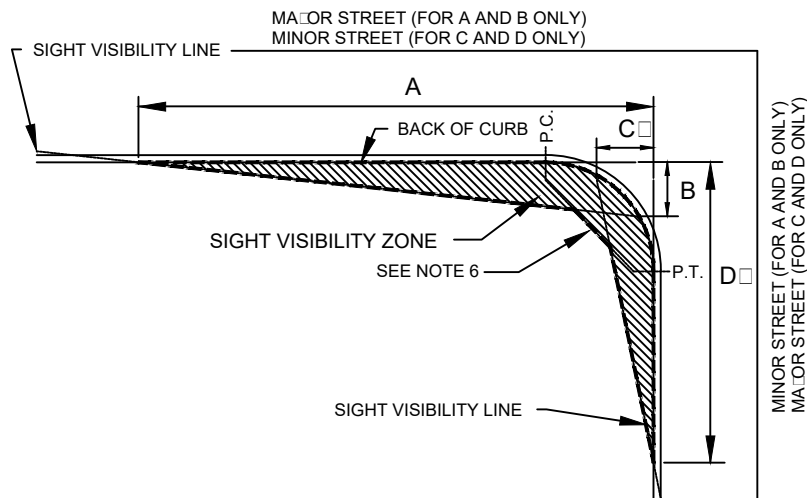
DWG. NO.

201.1



INTERSECTION SIGHT VISIBILITY ZONE

□ THE SIGHT VISIBILITY ZONE CREATED BY "C" AND "D" IS NOT REQUIRED
 IF THE INTERSECTION IS CONTROLLED BY AN EXISTING TRAFFIC SIGNAL



TYPICAL INTERSECTION CORNER

SEE SHEETS 3 THROUGH 8 FOR TYPICAL INTERSECTION SIGHT VISIBILITY ZONE LIMITS

NOTE: FOR SIGHT ZONE DIMENSIONS, SEE SETBACK TABLE ON SHEET 2 OF THIS STANDARD DRAWING.

SPECIFICATION REFERENCE		AGENCY APPROVED							
		B	C	H	L	M	N	R	
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
		SIGHT VISIBILITY ZONES AT INTERSECTIONS							
		DATE 01-09-20				DWG. NO. 201.2		SHEET 1 OF 8	

MAJOR ROW \ MINOR ROW	48'	51'	60'	80'	100'
	D1:286'(B1) D1:286'(B2) D2:330'(B1) D2:286'(B3)	D1:286'(B1) D1:286'(B2) D2:330'(B1) D2:286'(B3)	D1:381'(B1) D1:381'(B2) D2:469'(B1) D2:440'(B3)	D1:411'(B1) D1:381'(B2) D2:499'(B1) D2:469'(B3)	D1:521'(B2) D1:605'(B3) D2:726'(B1) D2:726'(B3)
48'	A □ 92' B □ 12' C □ 12' D □ 79'	A □ 87' B □ 11' C □ 11' D □ 75'	A □ 106' B □ 11' C □ 11' D □ 97'	A □ 163' B □ 10' C □ 11' D □ 76'	A □ 272' B □ 11' C □ 11' D □ 101'
51'	A □ 91' B □ 12' C □ 12' D □ 79'	A □ 87' B □ 10' C □ 10' D □ 75'	A □ 108' B □ 10' C □ 10' D □ 101'	A □ 159' B □ 10' C □ 10' D □ 75'	A □ 272' B □ 11' C □ 11' D □ 99'
60'	A □ 85' B □ 11' C □ 11' D □ 85'	A □ 86' B □ 10' C □ 10' D □ 92'	A □ 104' B □ 10' C □ 11' D □ 97'	A □ 136' B □ 9' C □ 10' D □ 71'	A □ 221' B □ 10' C □ 11' D □ 95'
80'	D1:411'(B1) D1:381'(B2) D2:499'(B1) D2:469'(B3)	N/A	A □ 112' B □ 12' C □ 12' D □ 101'	A □ 118' B □ 12' C □ 11' D □ 72'	A □ 201' B □ 11' C □ 11' D □ 101'
100'	D1:521'(B2) D1:605'(B3) D2:726'(B1) D2:726'(B3)	N/A	N/A	A □ 110' B □ 10' C □ 9' D □ 62'	A □ 181' B □ 10' C □ 10' D □ 91'

GENERAL NOTES**SETBACK TABLE**

- EACH CORNER OF EVERY INTERSECTION SHALL HAVE A SIGHT VISIBILITY ZONE REGARDLESS OF RIGHT-OF-WAY WIDTH.
- NO WALLS, FENCES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES, FIRE HYDRANTS, TREES, AND STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS SAID OBJECT IS MAINTAINED AT LESS THAN 24 INCHES IN HEIGHT, MEASURED FROM TOP OF CURB, OR WHERE NO CURB EXISTS, A HEIGHT OF 27 INCHES MEASURED FROM THE TOP OF ADJACENT ASPHALT, GRAVEL OR PAVEMENT STREET SURFACE. THIS RESTRICTION EXTENDS ALONG THE SIGHT VISIBILITY LINE THROUGH LANDSCAPED MEDIANS.
- AT INTERSECTIONS WHERE THE CLASSIFICATION OF MAJOR AND MINOR STREETS CANNOT BE PERMANENTLY ESTABLISHED, EACH LEG OF THE INTERSECTION MUST BE ANALYZED AS IF THE APPROACH LEG IS A MINOR STREET INTERSECTING A MAJOR STREET. THE PORTIONS OF THE SIGHT VISIBILITY ZONE LABELED "N/A" IN THE SETBACK TABLE ARE NOT REQUIRED. AT "T" INTERSECTIONS, THE TERMINATING LEG WILL ALWAYS BE THE MINOR STREET.
- CURVING ROADWAYS AND ROADWAYS WITH INTERSECTING ANGLES GREATER THAN 10 DEGREES MUST BE ANALYZED USING D1, D2, THE EYE POSITION, AND THE CAR POSITION AS SHOWN IN THE INFORMATION ABOVE.
- USE OF A SIGHT VISIBILITY ZONE DIFFERENT THAN THAT SHOWN HEREIN SHALL REQUIRE A SIGHT VISIBILITY ANALYSIS PREPARED AND SUBMITTED FOR APPROVAL TO THE LOCAL ENTITY ENGINEER BY A CIVIL ENGINEER REGISTERED IN THE STATE OF NEVADA.
- THE AREA WITHIN THE LIMITS OF THE ARC AND THE CHORD AT THE CURB RETURN (OFFSET 5' FROM BACK OF CURB) SHALL BE ADDED TO THE SIGHT VISIBILITY ZONE AT EACH CORNER OF EVERY INTERSECTION, EXCEPT FOR 80' □ 80' INTERSECTIONS OR GREATER.
- ON-STREET PARKING SHALL BE PROHIBITED WITHIN AREAS DESIGNATED BY DIMENSIONS "A" AND "D" ON SHEET 1 OF THIS DRAWING, SUBJECT TO THE APPROVAL OF THE TRAFFIC ENGINEER OR DESIGNATED REPRESENTATIVE OF THE ENTITY HAVING JURISDICTION.
- TREES WITH A MATURE SINGLE TRUNK DIAMETER LESS THAN 10-INCHES, A CANOPY HEIGHT GREATER THAN 8-FEET, A MINIMUM SPACING GREATER THAN ONE HALF THE ROADWAY WIDTH (BACK OF CURB TO BACK OF CURB), AND A MINIMUM OF 30-FEET FROM THE NEAREST CURB RETURN WILL BE ALLOWED IN THE SIGHT VISIBILITY ZONE, SUBJECT TO THE APPROVAL OF THE ENTITY HAVING JURISDICTION.
- CONSULT THE AASHTO PUBLICATION A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS FOR RIGHT-OF-WAYS GREATER THAN 100'.

BASIS FOR ANALYSIS

THE FOLLOWING CRITERIA WAS USED AS THE BASIS FOR DESIGN OF SIGHT VISIBILITY ZONES:

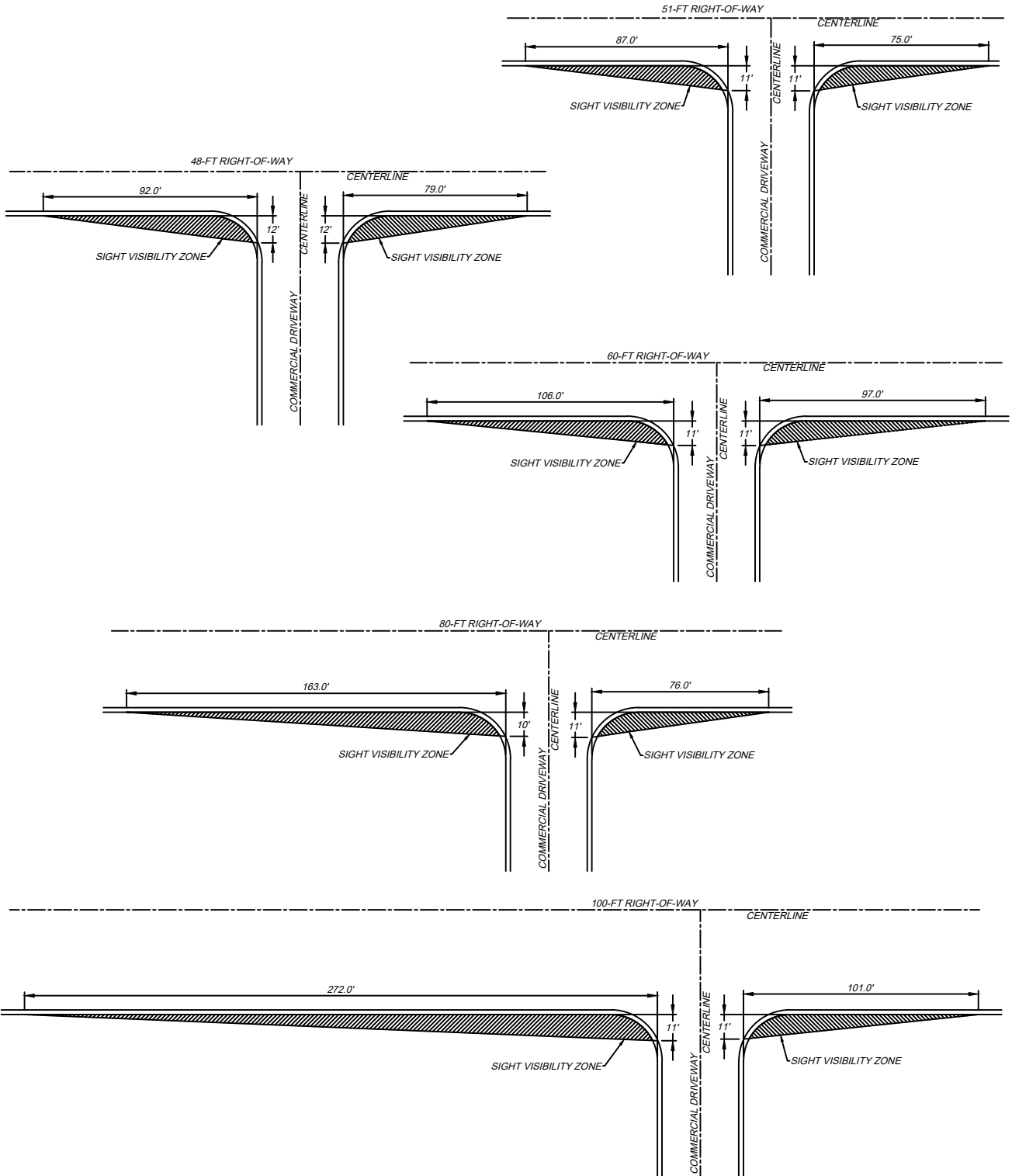
AASHTO PUBLICATION A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, 2011 EDITION, CHAPTER IX, USING THE MOST RESTRICTIVE SIGHT LINE DERIVED FROM EACH OF THE THREE POSSIBLE CROSSING MANEUVERS (STOPPED CONDITION):

CASE B3 - CROSSING MANEUVER
CASE B1 - LEFT TURN MANEUVER ONTO A MAJOR STREET
CASE B2 - RIGHT TURN MANEUVER ONTO A MAJOR STREET

THE ANALYSIS USED A DESIGN SPEED EQUAL TO THE POSTED SPEED DIVIDED BY 0.85 (ROUNDED TO THE NEAREST 5 MPH INCREMENT).

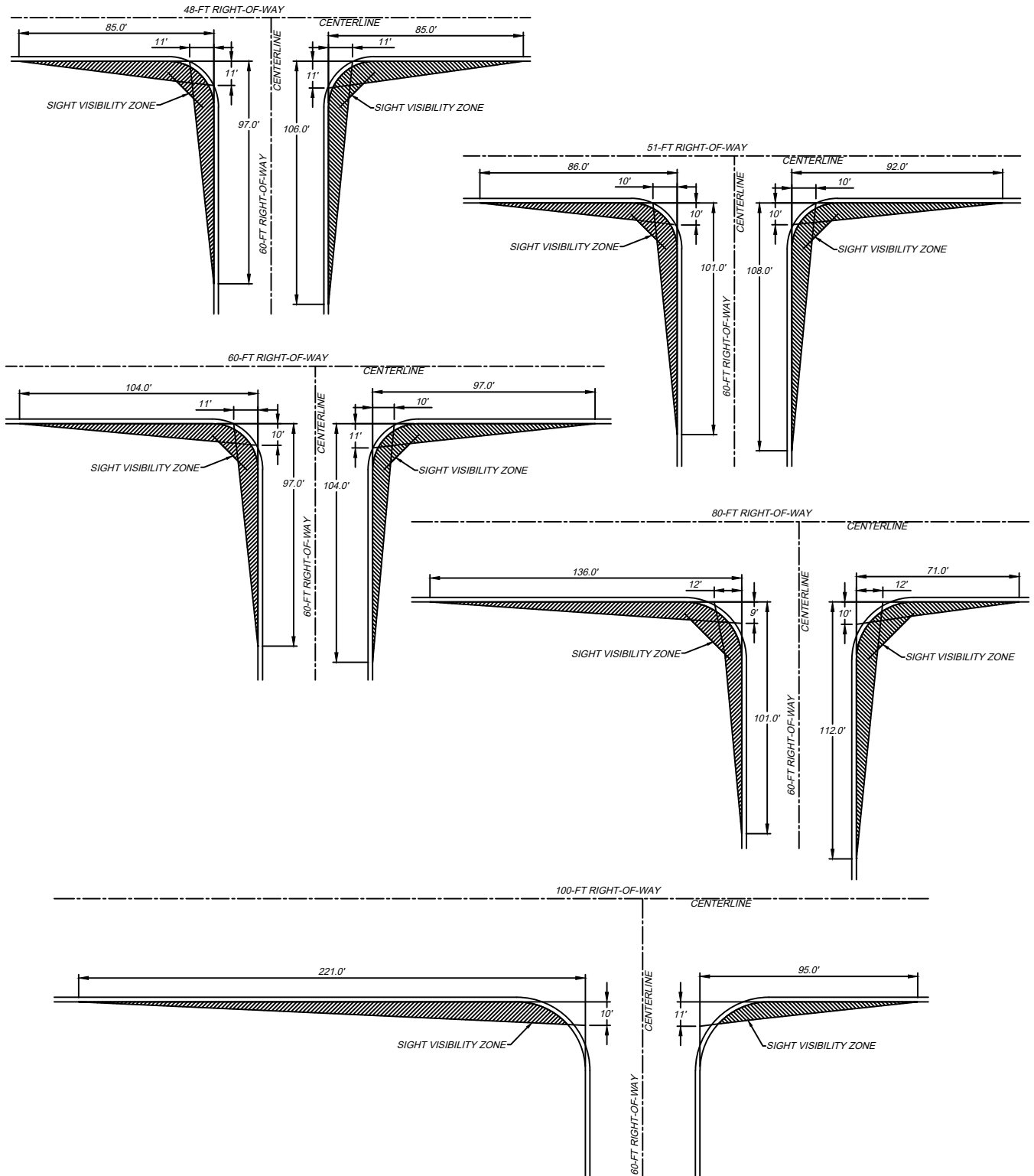
CAR AND EYE POSITIONS ARE AS SHOWN ON SHEET 1 OF THIS DRAWING.

SPECIFICATION REFERENCE		AGENCY APPROVED							
		B C H L M N R							
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
		SIGHT VISIBILITY ZONES AT INTERSECTIONS							
		DATE 01-09-20				DWG. NO. 201.2		SHEET 2 OF 8	



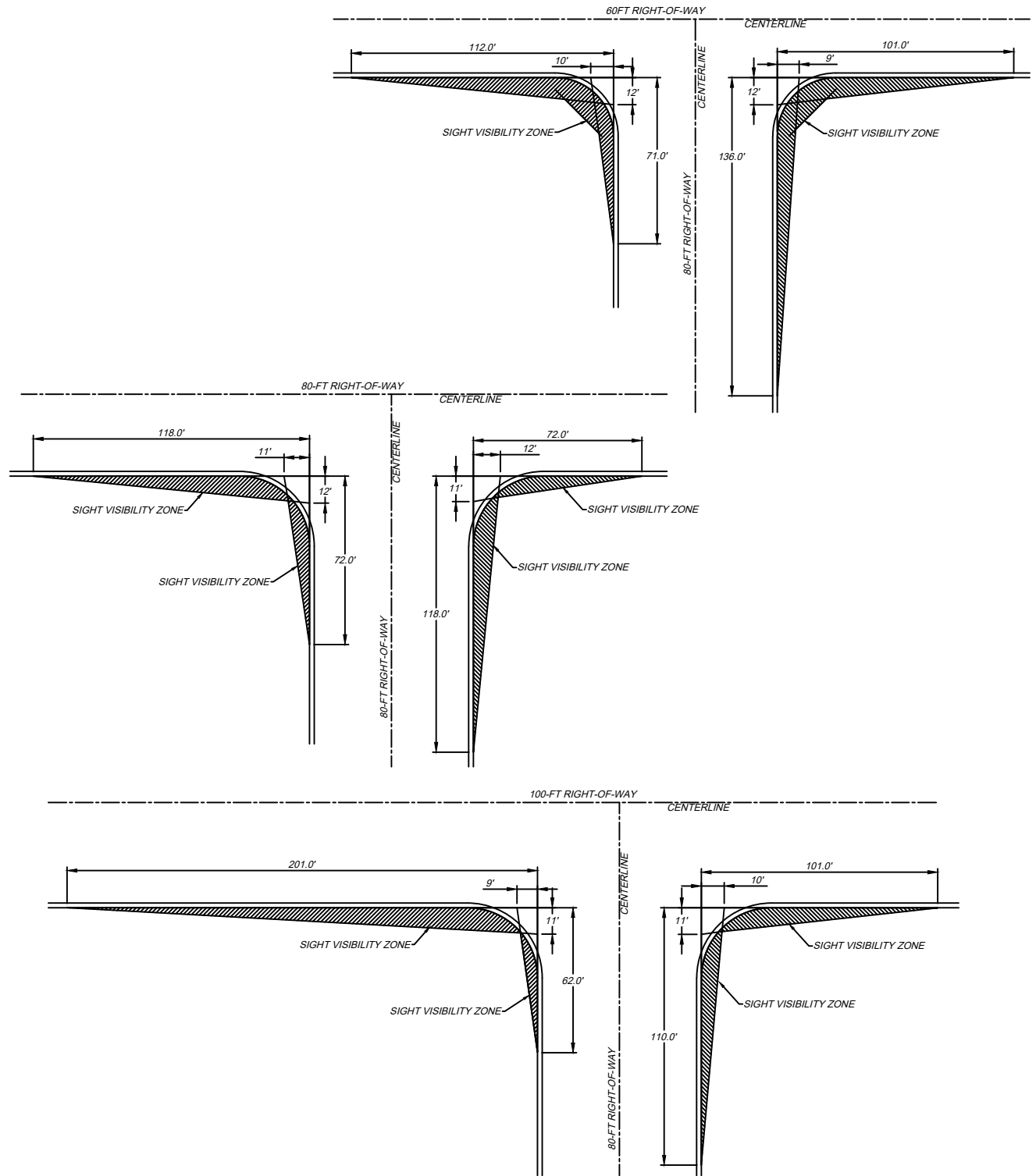
TYPICAL SIGHT VISIBILITY ZONES FOR COMMERCIAL DRIVEWAY APPROACHES

AGENCY APPROVED		B	C	H	L	M	N	R
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
		SIGHT VISIBILITY ZONES AT INTERSECTIONS						
DATE	01-09-20	DWG. NO. 201.2			SHEET 3 OF 8			



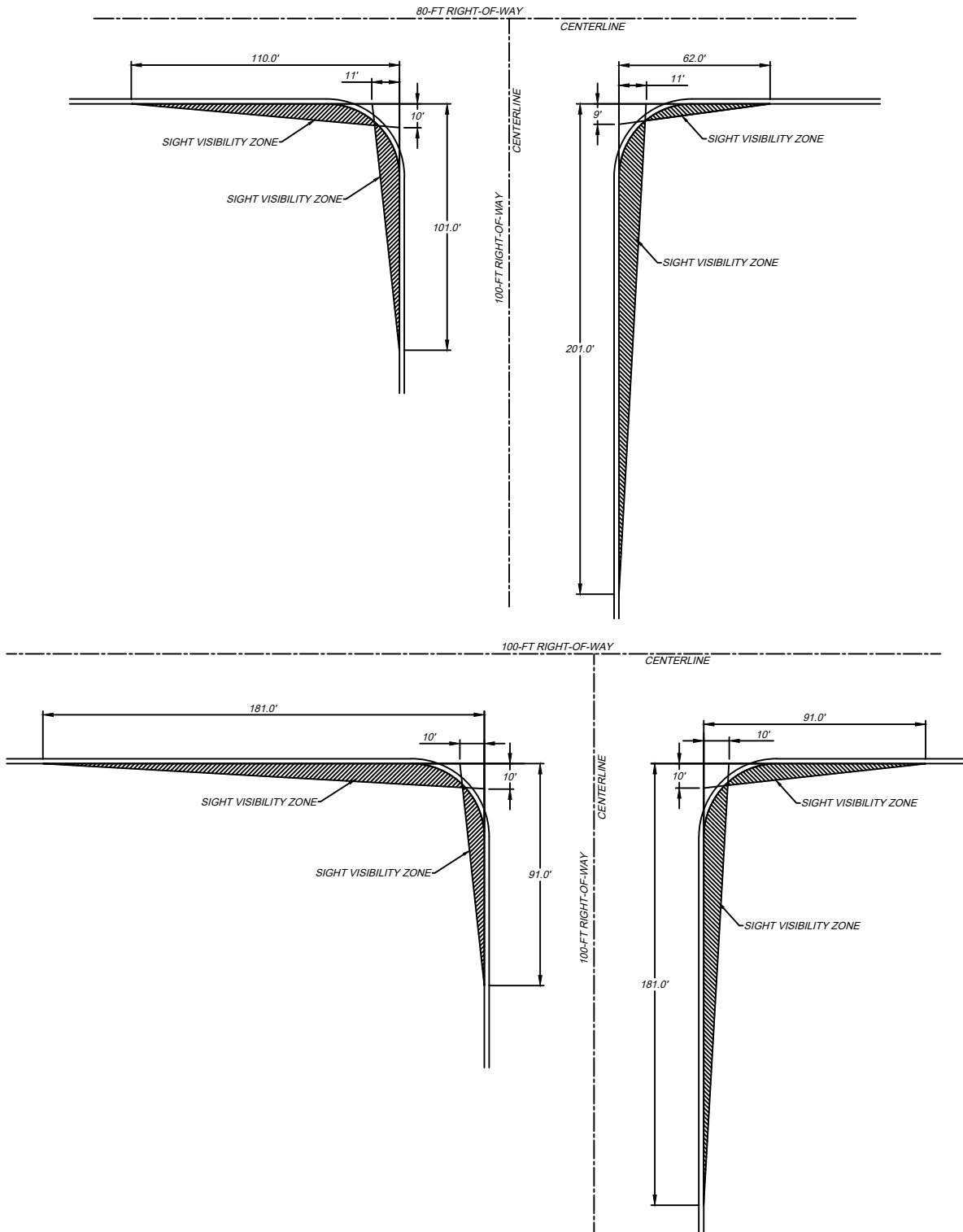
TYPICAL SIGHT VISIBILITY ZONES FOR 60-FT RIGHT-OF-WAY ROADWAY APPROACHES

AGENCY APPROVED		B	C	H	L	M	N	R
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
		SIGHT VISIBILITY ZONES AT INTERSECTIONS						
DATE	01-09-20	DWG. NO. 201.2				SHEET 6 OF 8		



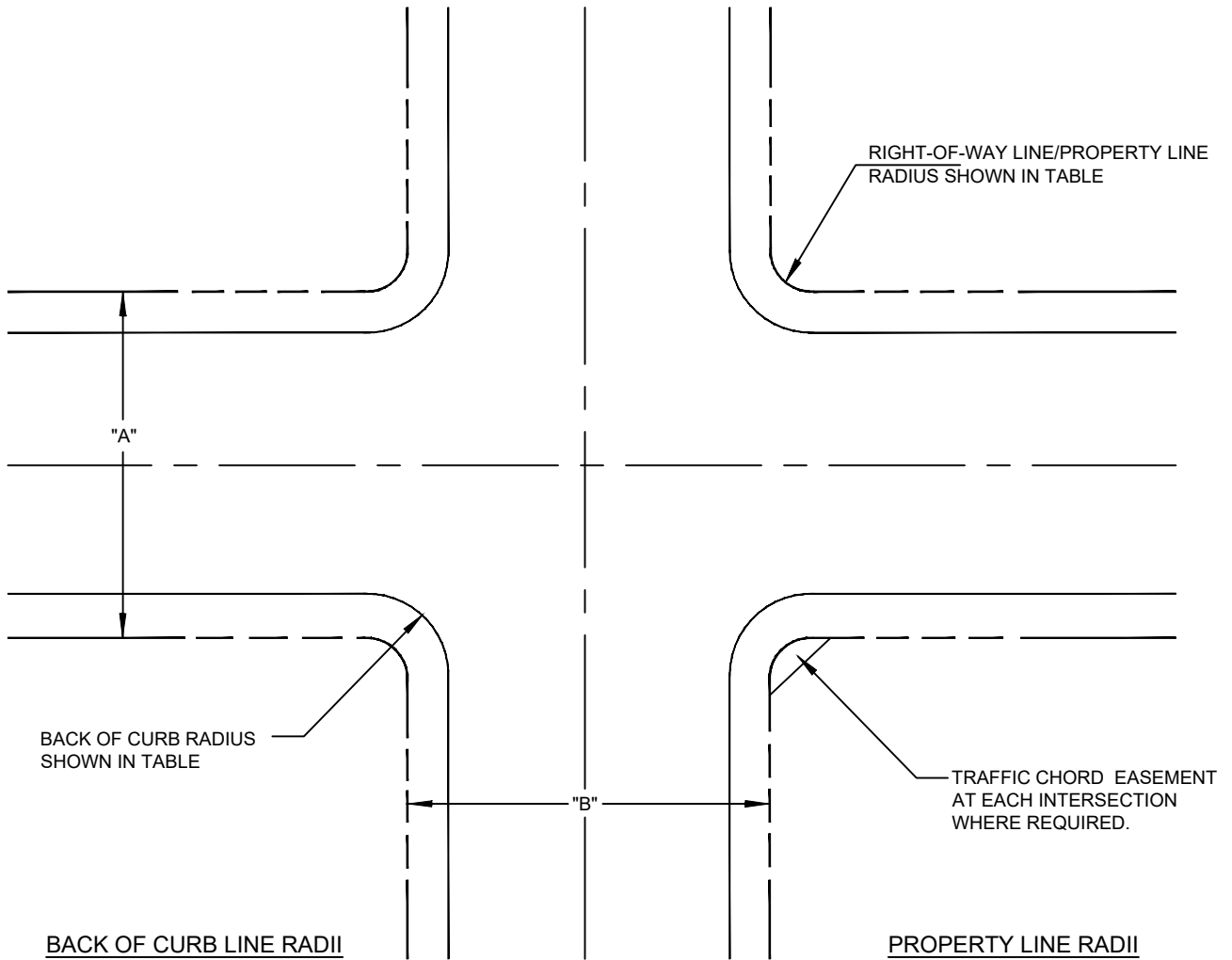
TYPICAL SIGHT VISIBILITY ZONES FOR 80-FT RIGHT-OF-WAY ROADWAY APPROACHES

AGENCY APPROVED		B	C	H	L	M	N	R
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
		SIGHT VISIBILITY ZONES AT INTERSECTIONS						
DATE	01-09-20	DWG. NO. 201.2			SHEET 7 OF 8			



TYPICAL SIGHT VISIBILITY ZONES FOR 100-FT RIGHT-OF-WAY ROADWAY APPROACHES

		AGENCY APPROVED							
		B	C	H	L	M	N	R	
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS							
		CLARK COUNTY AREA							
		SIGHT VISIBILITY ZONES							
		AT INTERSECTIONS							
		DATE 01-09-20		DWG. NO. 201.2				SHEET 8 OF 8	



"B" \ "A"	60' OR LESS	80'	100' OR MORE
60' OR LESS	20'	25'	30'
80'	25'	30'	30'
100' OR MORE	30'	30'	30'

NOTES

- ☐ A TRAFFIC CHORD EASEMENT WILL BE REQUIRED AT THIS CORNER.

"B" \ "A"	60' OR LESS	80'	100' OR MORE
60' OR LESS	15'	25'	30'
80'	25'	☐ 35'	☐ 35'
100' OR MORE	30'	☐ 35'	☐ 35'

AGENCY APPROVED

L

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

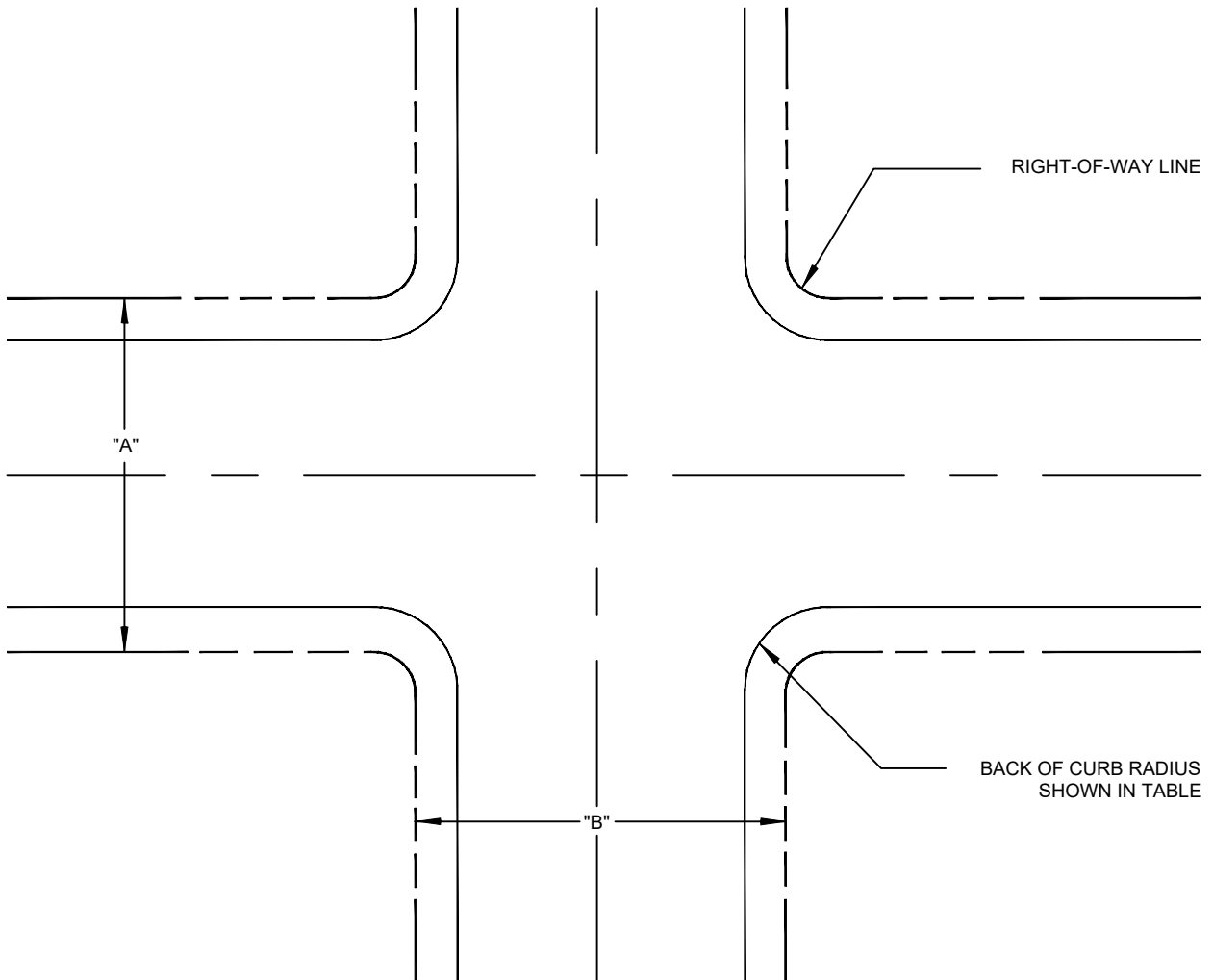
SUPPLEMENTAL DRAWING

MINIMUM PROPERTY LINE AND
BACK OF CURB RADII
COMPLETE STREET ALTERNATIVE

DATE 07-01-12

DWG. NO.

201.3.S1



NOTES

PROPERTY LINES SHALL BE PARALLEL AND RADIAL TO THE BACK OF CURB AT A DISTANCE CONSISTENT WITH THE STANDARD STREET SECTIONS DRAWING NUMBERS.

☐ PROPERTY LINE RADIUS SHALL BE A MINIMUM OF 54 FEET.

☐ PROPERTY LINE RADIUS SHALL BE A MINIMUM OF 40 FEET.

"B" / "A"	60' OR LESS	80'	100' OR MORE
60' OR LESS	20'	25'	30'
80'	25'	☐ 30'	☐ 30'
100' OR MORE	30'	☐ 30'	☐ 30'

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

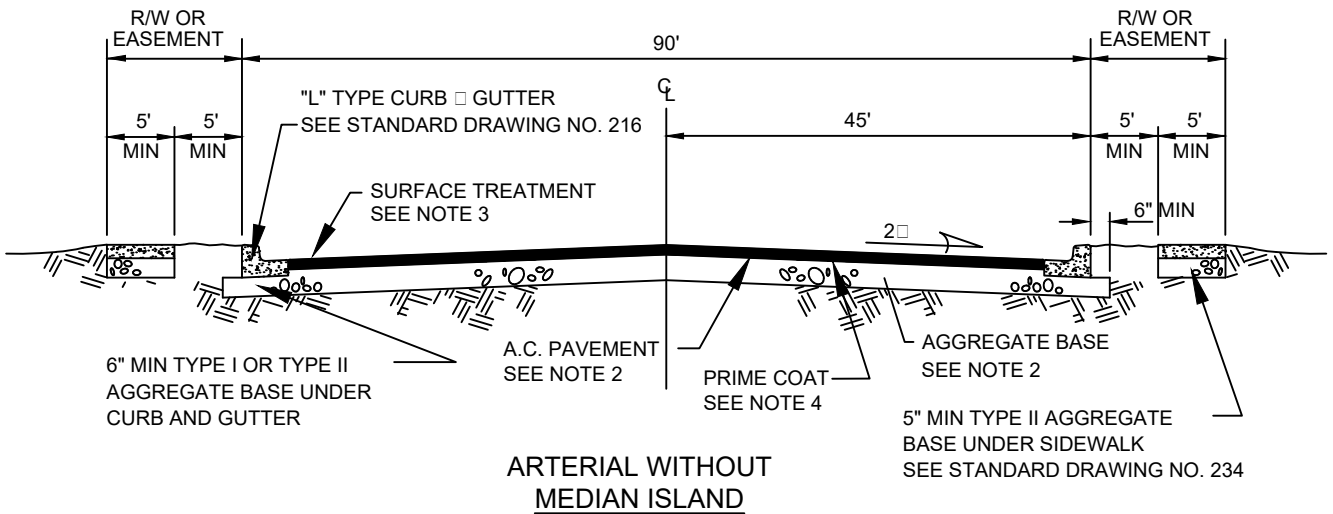
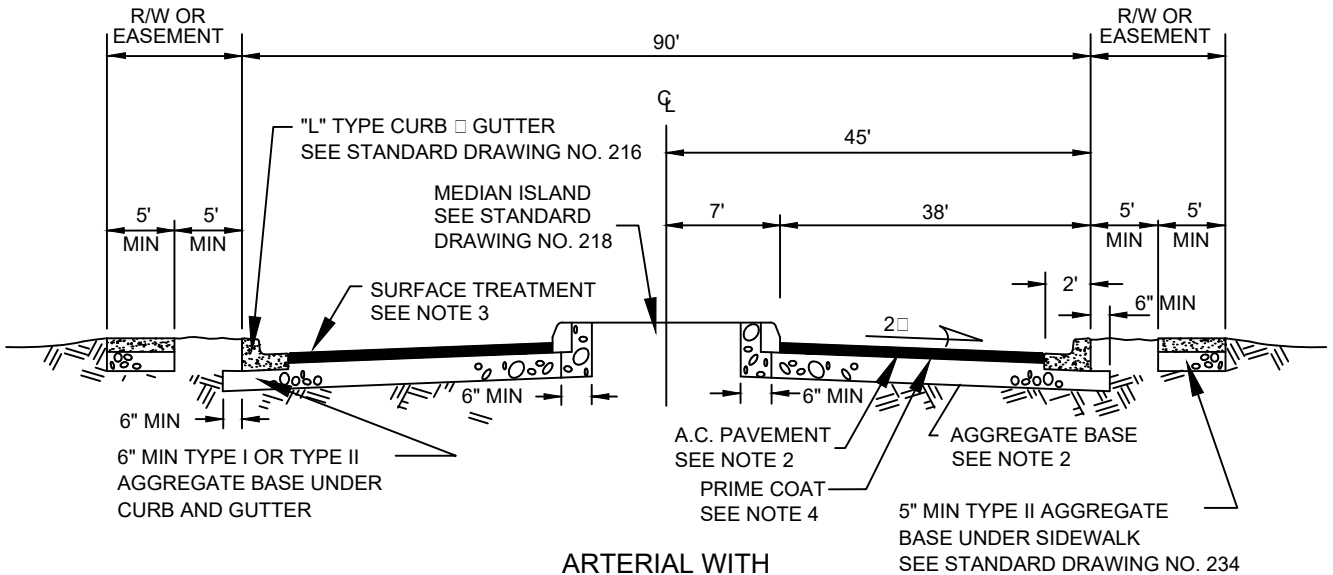
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

MINIMUM BACK OF CURB RADIUS

DATE 11-10-04

DWG. NO.

201



NOTES

1. FINAL A.C. PAVEMENT SURFACE SHALL BE 1/2" MAXIMUM ABOVE LIP OF GUTTER AFTER COMPACTION, EXCEPT WHERE THERE IS OVERLAP WITH PEDESTRIAN ACCESS ROUTES. CONNECTIONS BETWEEN PAVEMENT SURFACES, GUTTERS, AND CURB RAMPS WITHIN PEDESTRIAN ACCESS ROUTES SHALL HAVE NO VERTICAL SURFACE DISCONTINUITIES GREATER THAN 1/4", REGARDLESS OF CONSTRUCTION TOLERANCES.
2. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 401 AND STANDARD DRAWING 200.
3. THE FINAL A.C. PAVEMENT SURFACE MATERIAL REQUIREMENTS ARE:

JURISDICTION	A.C. PAVEMENT SURFACE MATERIAL
CLV, NLV	1-INCH UTACS
CC, MES, BC	FOG SEAL
HEN	FOG SEAL AND/OR OPEN GRADE



4. PRIME COAT IS NOT REQUIRED IN LAS VEGAS, HENDERSON, MESQUITE, AND BOULDER CITY WHEN A.C. THICKNESS IS ≥ 5 IN.

AGENCY APPROVED

B

C

H

L

M

N

R

SPECIFICATION REFERENCE

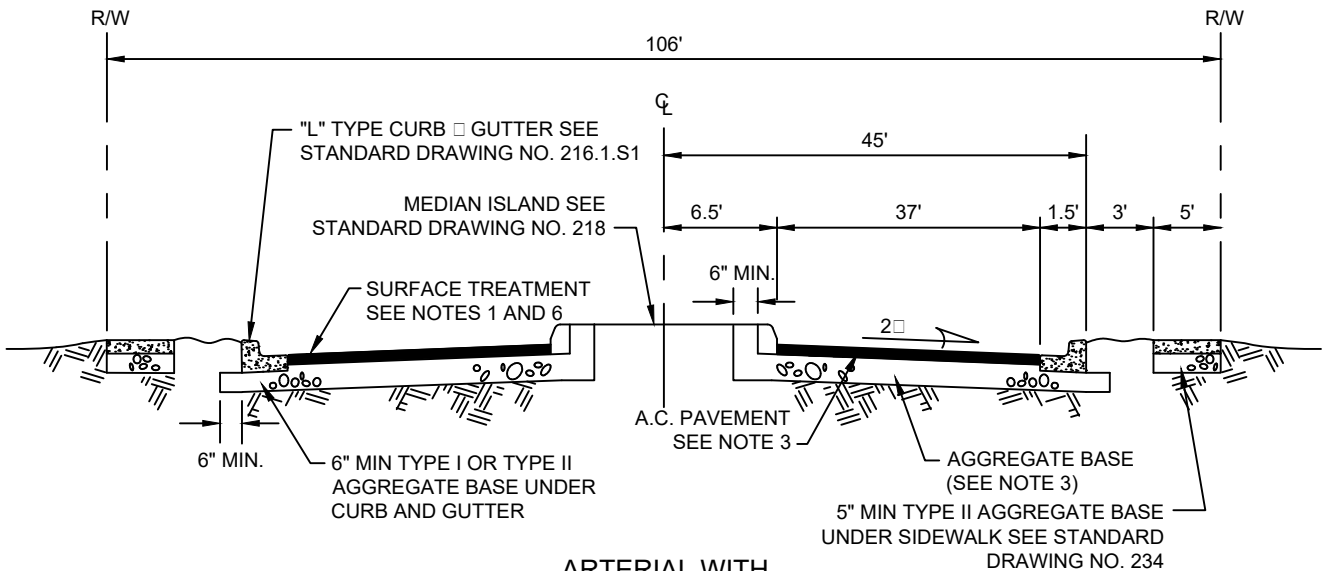
302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT
403	OPEN GRADE
413	BITUMINOUS GAP GRADED PAVEMENT
501	CONCRETE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

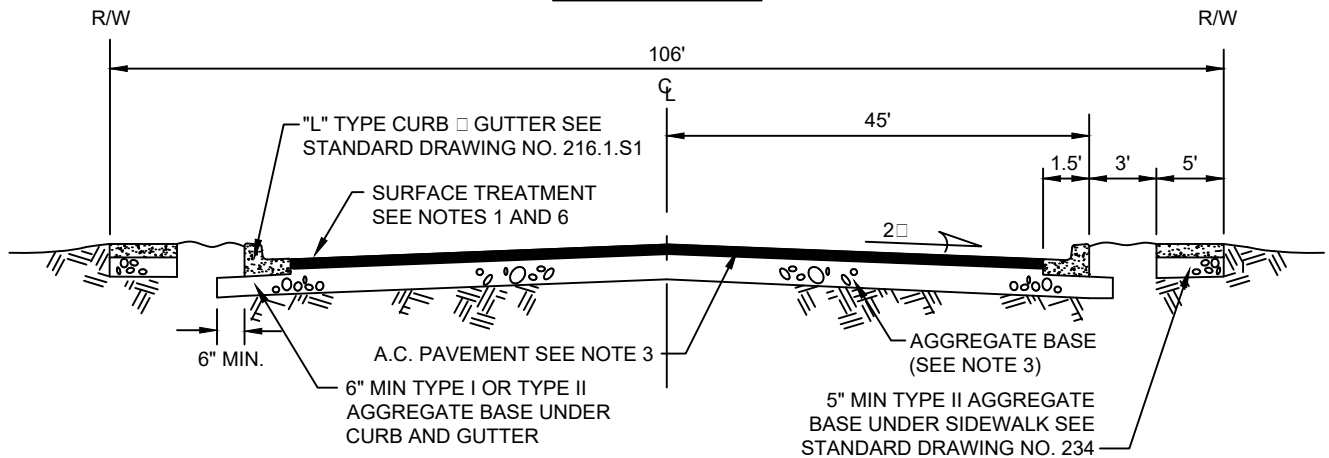
ARTERIAL
URBAN AREA STREET SECTIONS

DATE 01-09-20

DWG. NO. 202



**ARTERIAL WITH
MEDIAN ISLAND**

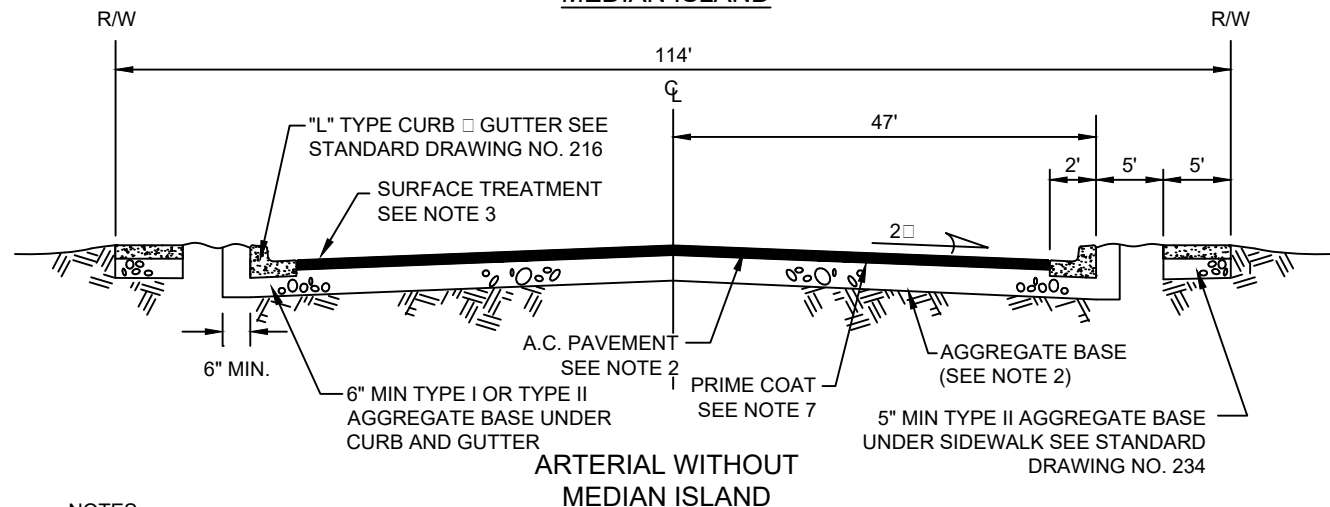
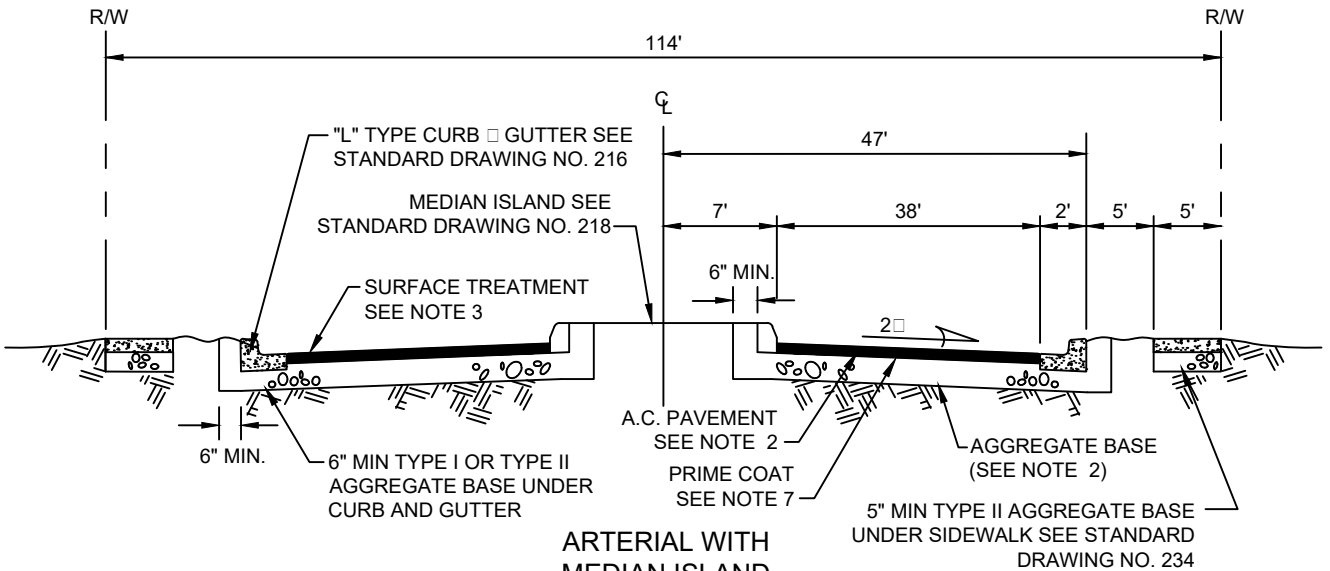


**ARTERIAL WITHOUT
MEDIAN ISLAND**

NOTES

1. FINAL A.C. PAVEMENT SURFACE (INCLUDING UTACS OR OPEN GRADE) SHALL BE 3/4" MAXIMUM ABOVE LIP OF GUTTER AFTER COMPACTION, EXCEPT WHERE THERE IS OVERLAP WITH PEDESTRIAN ACCESS ROUTES. CONNECTIONS BETWEEN PAVEMENT SURFACES, GUTTERS, AND CURB RAMPS WITHIN PEDESTRIAN ACCESS ROUTES SHALL HAVE NO VERTICAL SURFACE DISCONTINUITIES GREATER THAN 1/4", REGARDLESS OF CONSTRUCTION TOLERANCES. DENSE GRADE SHALL BE FLUSH WITH LIP OF GUTTER.
2. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 401 AND STANDARD DRAWING NO. 200.
3. THIS STANDARD IS AN ALTERNATE STREET SECTION TO BE USED AT LOCATIONS DETERMINED BY EACH LOCAL JURISDICTION. NO ABOVE GROUND OBJECTS SHALL BE PLACED WITHIN THE 5 FOOT SIDEWALK.
4. UNDERGROUND DRY UTILITIES SHALL BE PLACED IN A UTILITY CORRIDOR UNDER THE SIDEWALK.
5. OVERLAY 1" UTACS UNLESS OTHERWISE REQUIRED BY THE AGENCY.

SPECIFICATION REFERENCE		AGENCY APPROVED	B	C	H	L	M	N	R
302	AGGREGATE BASE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
401	BITUMINOUS PAVEMENT	SUPPLEMENTAL DRAWING							
403	OPEN GRADE	PRIMARY ARTERIAL							
501	CONCRETE	COMPLETE STREET ALTERNATIVE							
		DATE 01-09-20	DWG. NO. 203.1.S1						



NOTES

1. FINAL A.C. PAVEMENT SURFACE SHALL BE 1/2" MAXIMUM ABOVE LIP OF GUTTER AFTER COMPACTION, EXCEPT WHERE THERE IS OVERLAP WITH PEDESTRIAN ACCESS ROUTES. CONNECTIONS BETWEEN PAVEMENT SURFACES, GUTTERS, AND CURB RAMPS WITHIN PEDESTRIAN ACCESS ROUTES SHALL HAVE NO VERTICAL SURFACE DISCONTINUITIES GREATER THAN 1/4", REGARDLESS OF CONSTRUCTION TOLERANCES.
2. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 401 AND STANDARD DRAWING NO. 200.
3. THE FINAL A.C. PAVEMENT SURFACE MATERIAL REQUIREMENTS ARE:

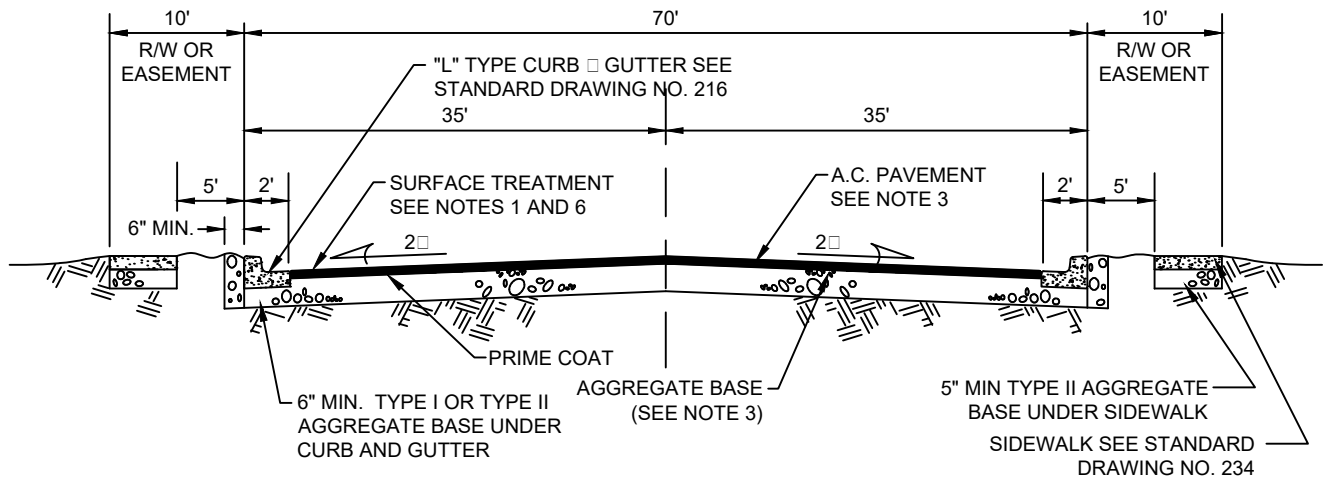
JURISDICTION	A.C. PAVEMENT SURFACE MATERIAL
CLV, NLV	1-INCH UTACS
CC, MES, BC	FOG SEAL
HEN	FOG SEAL AND/OR OPEN GRADE

4. THIS STANDARD IS AN ALTERNATE STREET SECTION TO BE USED AT LOCATIONS DETERMINED BY EACH LOCAL JURISDICTION. NO ABOVE GROUND OBJECTS SHALL BE PLACED WITHIN THE 5 FOOT SIDEWALK.
5. UNDERGROUND DRY UTILITIES SHOULD BE PLACED IN A UTILITY CORRIDOR UNDER THE SIDEWALK.
6. INCREASE PAVEMENT WIDTH BY 11 FEET ON EACH SIDE OF ROADWAY FOR AN 8 LANE CROSS SECTION. PRIME COAT IS NOT REQUIRED IN LAS VEGAS, HENDERSON, MESQUITE, AND BOULDER CITY WHEN A.C. THICKNESS IS ≥ 5 IN.



AGENCY APPROVED B C H L M N R

SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA	
302	AGGREGATE BASE	ARTERIAL ALTERNATE URBAN AREA STREET SECTIONS WITH OFFSET SIDEWALK	
401	BITUMINOUS PAVEMENT		
403	OPEN GRADE		
413	BITUMINOUS GAP GRADED PAVEMENT		
501	CONCRETE		
		DATE 01-09-20	DWG. NO. 203



MAJOR COLLECTOR

NOTES

1. FINAL A.C. PAVEMENT TO BE 1/2" MAXIMUM ABOVE LIP OF GUTTER AFTER COMPACTION, EXCEPT WHERE THERE IS OVERLAP WITH PEDESTRIAN ACCESS ROUTES. CONNECTIONS BETWEEN PAVEMENT SURFACES, GUTTERS, AND CURB RAMPS WITHIN PEDESTRIAN ACCESS ROUTES SHALL HAVE NO VERTICAL SURFACE DISCONTINUITIES GREATER THAN 1/4", REGARDLESS OF CONSTRUCTION TOLERANCES.
2. THE GRADE BREAK OCCURRING IN THE CROSS SECTION SHALL FALL BETWEEN DRIVING LANES.
3. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 401 AND STANDARD DRAWING NOS. 200 AND 200.1.
4. THIS STANDARD IS AN ALTERNATE STREET SECTION TO BE USED AT LOCATIONS DETERMINED BY EACH LOCAL JURISDICTION. NO ABOVE GROUND OBJECTS SHALL BE PLACED WITHIN THE 5 FOOT SIDEWALK.
5. UNDERGROUND DRY UTILITIES SHOULD BE PLACED IN A UTILITY CORRIDOR UNDER THE SIDEWALK.
6. THE FINAL A.C. PAVEMENT SURFACE MATERIAL REQUIREMENTS ARE:

JURISDICTION	A.C. PAVEMENT SURFACE MATERIAL
CLV, NLV	1-INCH UTACS
CC, MES, BC	FOG SEAL
HEN	FOG SEAL AND/OR OPEN GRADE



7. PRIME COAT IS NOT REQUIRED IN LAS VEGAS, HENDERSON, MESQUITE, OR BOULDER CITY WHEN A.C. THICKNESS $\geq$ 5 IN.

		AGENCY APPROVED		B	C	H	L	M	N	R
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA								
302	AGGREGATE BASE	SUPPLEMENTAL DRAWING COLLECTOR ALTERNATE URBAN AREA STREET SECTIONS WITH OFFSET SIDEWALK								
401	BITUMINOUS PAVEMENT									
406	PRIME COAT									
407	FOG COAT									
413	BITUMINOUS GAP GRADED PAVEMENT									
501	CONCRETE	DATE 01-09-20	DWG. NO. 205.1.S1							

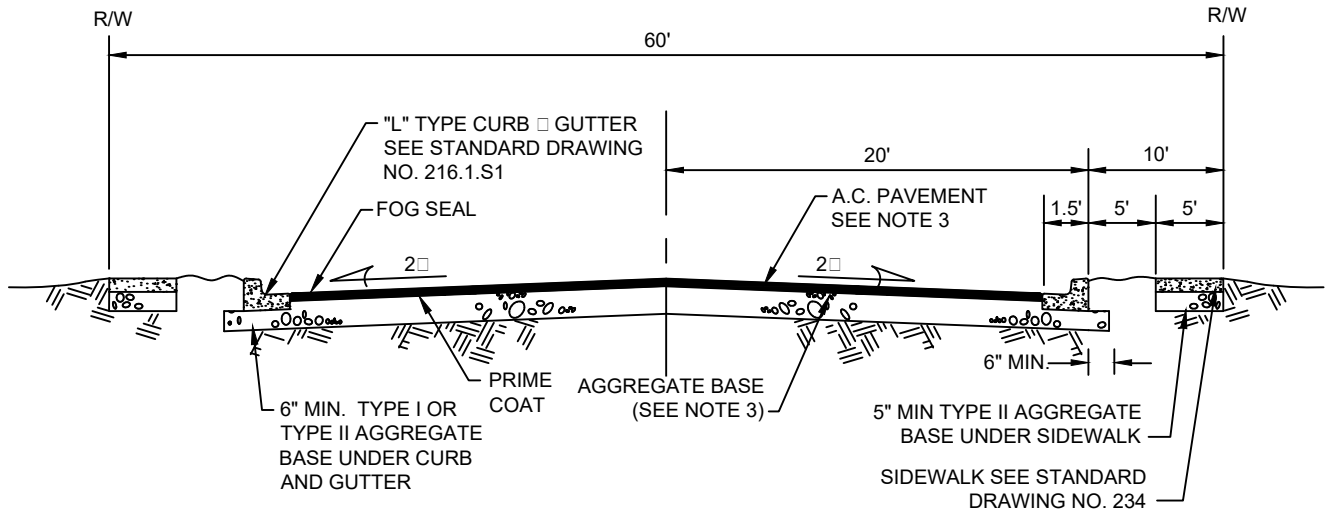
Diagram illustrating the cross-section of a **MAJOR COLLECTOR WITH MEDIAN ISLAND**. The total width is 60'.

Key components and dimensions:

- Median Island:** 8' wide.
- Travel Lane:** 32' wide.
- Shoulder:** 28' wide (14' on each side of the median island).
- Subgrade:** 6" MIN. (under the curb and gutter).
- Aggregate Base:** 6" MIN. TYPE I OR TYPE II AGGREGATE BASE UNDER CURB AND GUTTER.
- A.C. Pavement:** SEE NOTE 3.
- Aggregate Base:** 5" MIN TYPE II AGGREGATE BASE UNDER SIDEWALK (SEE STANDARD DRAWING NO. 234).
- Surface Treatment:** SEE NOTES 1 AND 6.
- Fog Seal:** Indicated on the travel lane.
- "L" Type Curb & Gutter:** SEE STANDARD DRAWING NO. 216.1.S1.
- Median Island:** SEE STANDARD DRAWING NO. 218.

1. FINAL A.C. PAVEMENT TO BE 1/2" MAXIMUM ABOVE LIP OF GUTTER AFTER COMPACTION, EXCEPT WHERE THERE IS OVERLAP WITH PEDESTRIAN ACCESS ROUTES. CONNECTIONS BETWEEN PAVEMENT SURFACES, GUTTERS, AND CURB RAMPS WITHIN PEDESTRIAN ACCESS ROUTES SHALL HAVE NO VERTICAL SURFACE DISCONTINUITIES GREATER THAN 1/4", REGARDLESS OF CONSTRUCTION TOLERANCES.
2. THE GRADE BREAK OCCURRING IN THE CROSS SECTION SHALL FALL BETWEEN DRIVING LANES.
3. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 401 AND STANDARD DRAWING NOS. 200 AND 200.1.
4. THIS STANDARD IS AN ALTERNATE STREET SECTION TO BE USED AT LOCATIONS DETERMINED BY EACH LOCAL JURISDICTION. NO ABOVE GROUND OBJECTS SHALL BE PLACED WITHIN THE 5 FOOT SIDEWALK.
5. UNDERGROUND DRY UTILITIES SHOULD BE PLACED IN A UTILITY CORRIDOR UNDER THE SIDEWALK.
6. OVERLAY 1" UTACS UNLESS OTHERWISE REQUIRED BY THE AGENCY.

		AGENCY APPROVED					L		
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
302	AGGREGATE BASE	SUPPLEMENTAL DRAWING MAJOR COLLECTOR COMPLETE STREET ALTERNATIVE							
401	BITUMINOUS PAVEMENT								
406	PRIME COAT								
407	FOG SEAL								
501	CONCRETE								
.		DATE 01-09-20		DWG. NO. 205.2.S1					

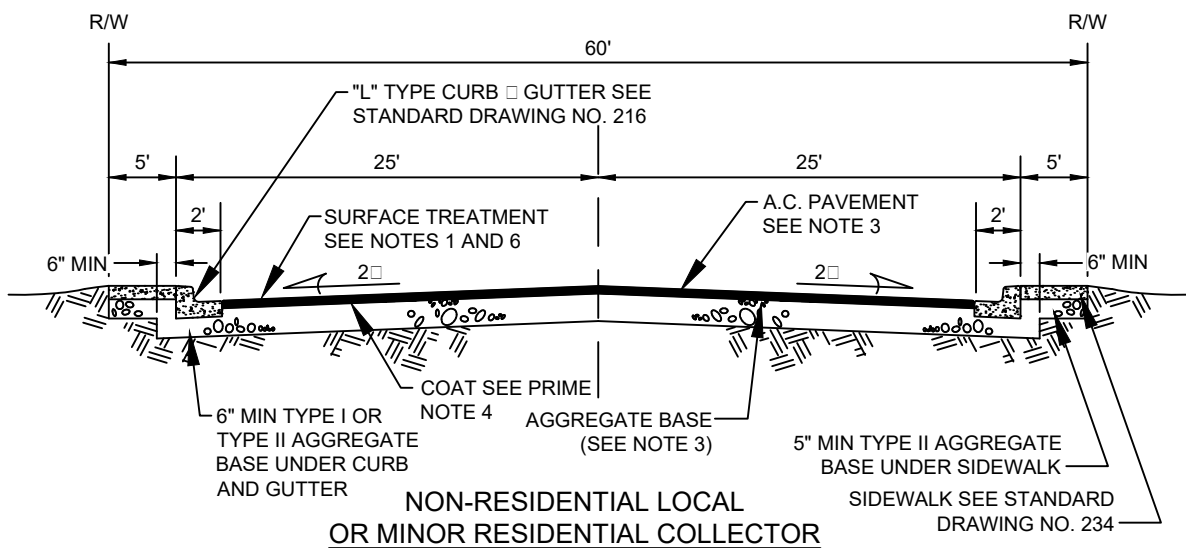
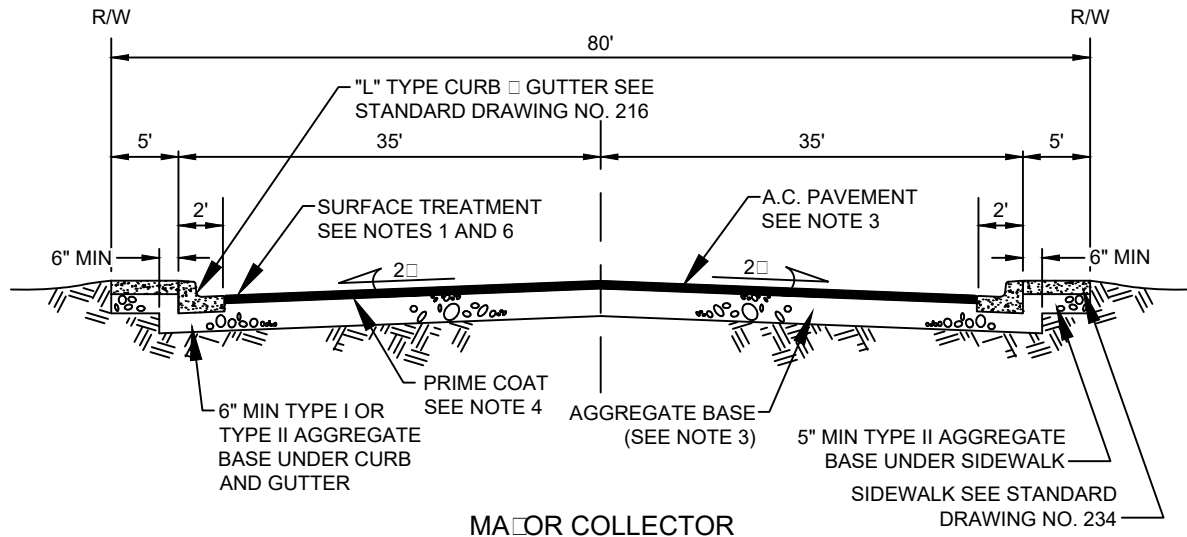


MINOR COLLECTOR

NOTES

1. FINAL A.C. PAVEMENT TO BE 1/2" MAXIMUM ABOVE LIP OF GUTTER AFTER COMPACTION, EXCEPT WHERE THERE IS OVERLAP WITH PEDESTRIAN ACCESS ROUTES. CONNECTIONS BETWEEN PAVEMENT SURFACES, GUTTERS, AND CURB RAMPS WITHIN PEDESTRIAN ACCESS ROUTES SHALL HAVE NO VERTICAL SURFACE DISCONTINUITIES GREATER THAN 1/4", REGARDLESS OF CONSTRUCTION TOLERANCES.
2. THE GRADE BREAK OCCURRING IN THE CROSS SECTION SHALL FALL BETWEEN DRIVING LANES.
3. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 401 AND STANDARD DRAWING NOS. 200 AND 200.1.
4. THIS STANDARD IS A COMPLETE STREET ALTERNATE STREET SECTION TO BE USED AT LOCATIONS DETERMINED BY EACH LOCAL JURISDICTION. NO ABOVE GROUND OBJECTS SHALL BE PLACED WITHIN THE 5 FOOT SIDEWALK.
5. UNDERGROUND DRY UTILITIES SHALL BE PLACED IN A UTILITY CORRIDOR UNDER THE SIDEWALK.

		AGENCY APPROVED							
		L							
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
302	AGGREGATE BASE	SUPPLEMENTAL DRAWING							
401	BITUMINOUS PAVEMENT	MINOR COLLECTOR							
406	PRIME COAT								
407	FOG SEAL								
501	CONCRETE								
		COMPLETE STREET ALTERNATIVE							
		DATE 01-09-20		DWG. NO. 205.3.S1					



NOTES

1. FINAL A.C. PAVEMENT TO BE 1/2" MAXIMUM ABOVE LIP OF GUTTER AFTER COMPACTION, EXCEPT WHERE THERE IS OVERLAP WITH PEDESTRIAN ACCESS ROUTES. CONNECTIONS BETWEEN PAVEMENT SURFACES, GUTTERS, AND CURB RAMPS WITHIN PEDESTRIAN ACCESS ROUTES SHALL HAVE NO VERTICAL SURFACE DISCONTINUITIES GREATER THAN 1/4", REGARDLESS OF CONSTRUCTION TOLERANCES.
2. THE GRADE BREAK OCCURRING IN THE CROSS SECTION SHALL FALL BETWEEN DRIVING LANES.
3. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 401 AND STANDARD DRAWING NOS. 200 AND 200.1.
4. **B H L M** PRIME COAT IS NOT REQUIRED IN LAS VEGAS, HENDERSON, MESQUITE OR BOULDER CITY WHEN A.C. THICKNESS $\geq$ 5 IN.
5. **B H M** 4 INCH MINIMUM THICKNESS REQUIRED IN HENDERSON, MESQUITE AND BOULDER CITY.
6. THE FINAL A.C. PAVEMENT SURFACE MATERIAL REQUIREMENTS ARE:

JURISDICTION	A.C. PAVEMENT SURFACE MATERIAL
CLV, NLV	1-INCH UTACS (80-FT OR GREATER)
CC, MES, BC	FOG SEAL
HEN	FOG SEAL AND/OR OPEN GRADE

AGENCY APPROVED **B** **C** **H** **L** **M** **N** **R**

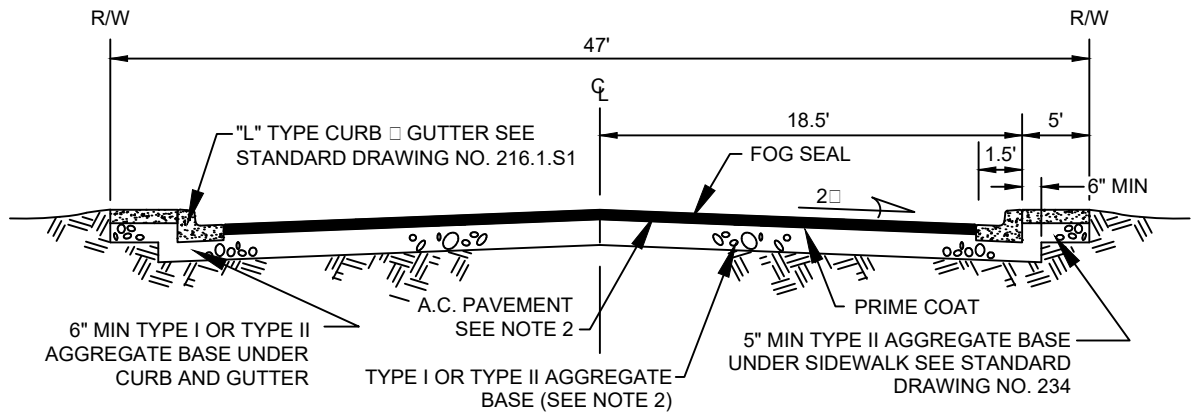
SPECIFICATION REFERENCE

302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT
406	PRIME COAT
407	FOG COAT
413	BITUMINOUS GAP GRADED PAVEMENT
501	CONCRETE

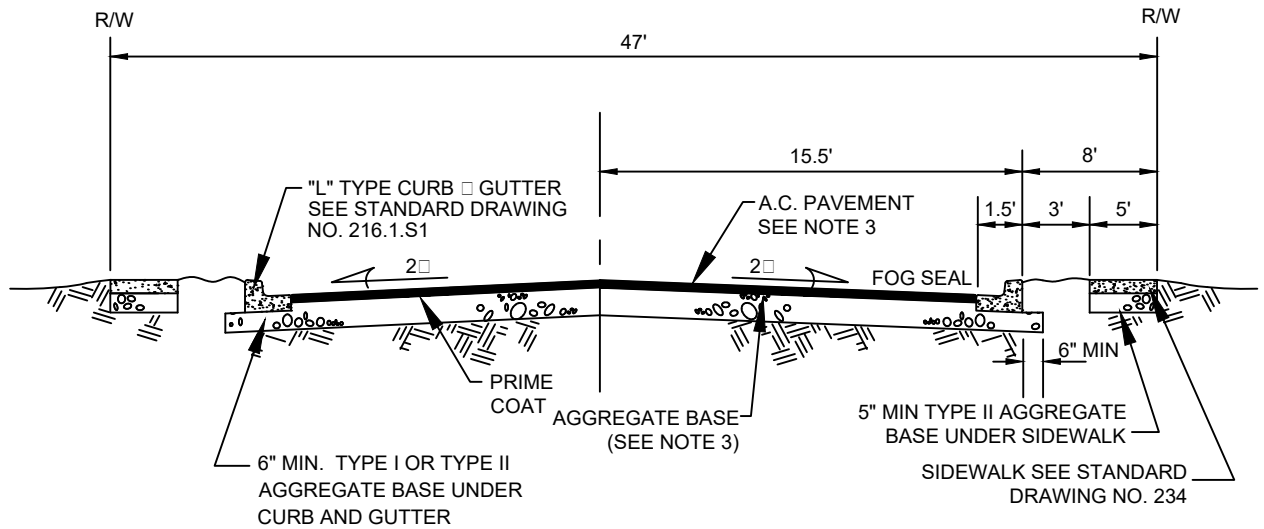
UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA

COLLECTOR URBAN AREA STREET SECTIONS WITH CURBSIDE SIDEWALK

DATE 01-09-20 DWG. NO. 205



**RESIDENTIAL TWO-WAY LOCAL OR CUL-DE-SAC
(LOTS 40' WIDE OR LESS)**

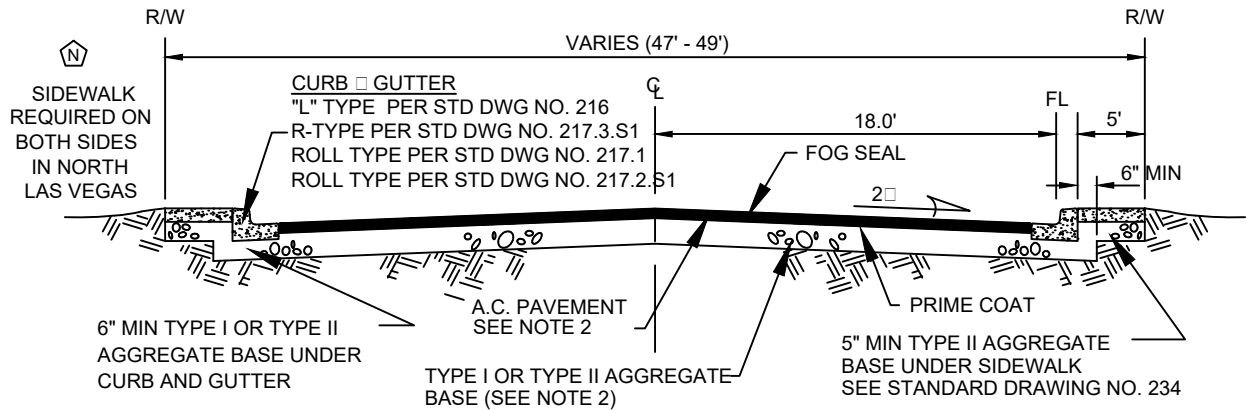


**RESIDENTIAL TWO-WAY LOCAL OR CUL-DE-SAC
(LOTS GREATER THAN 40' WIDE - SEE NOTE 3)**

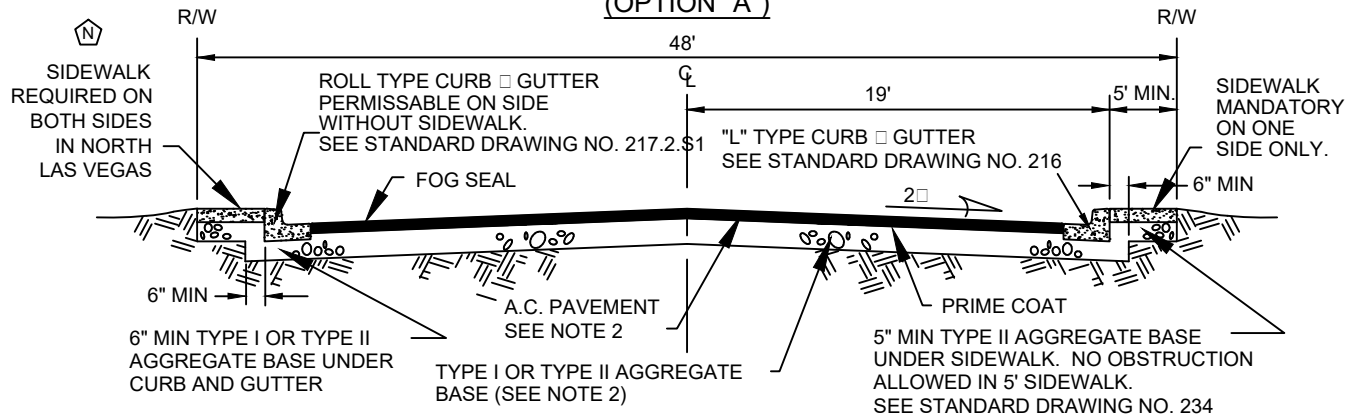
NOTES

1. FINAL A.C. PAVEMENT SURFACE SHALL BE 1/4" MAXIMUM ABOVE LIP OF GUTTER AFTER COMPACTION, EXCEPT WHERE THERE IS OVERLAP WITH PEDESTRIAN ACCESS ROUTES. CONNECTIONS BETWEEN PAVEMENT SURFACES, GUTTERS, AND CURB RAMPS WITHIN PEDESTRIAN ACCESS ROUTES SHALL HAVE NO VERTICAL SURFACE DISCONTINUITIES GREATER THAN 1/4", REGARDLESS OF CONSTRUCTION TOLERANCES.
2. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 401 AND STANDARD DRAWING NO. 200.1.
3. HOMES ADJACENT TO THIS STREET SECTION MAY REQUIRE SPRINKLERS PER AGENCY FIRE CODE.

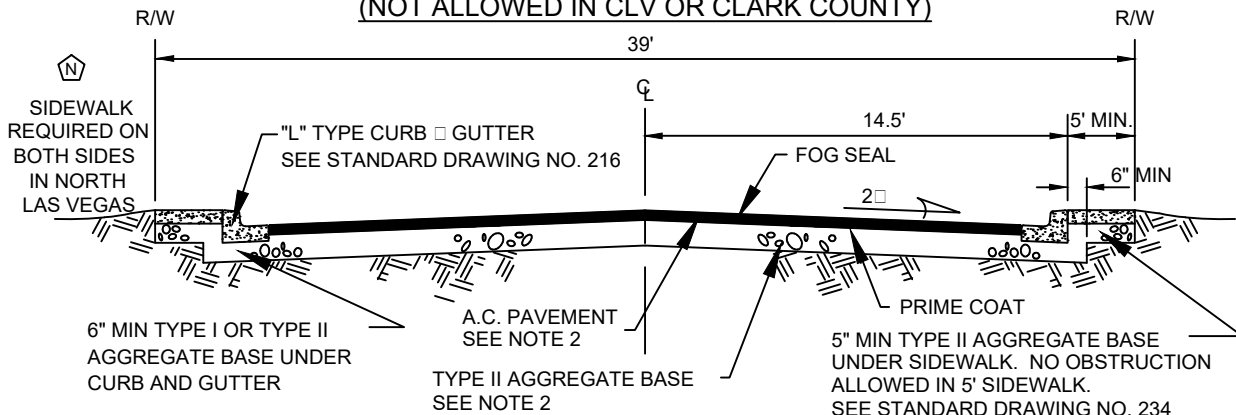
		AGENCY APPROVED						L				
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA										
302	AGGREGATE BASE	SUPPLEMENTAL DRAWING										
401	BITUMINOUS PAVEMENT	LOCAL RESIDENTIAL										
406	PRIME COAT	COMPLETE STREET ALTERNATIVES										
407	FOG SEAL											
501	CONCRETE											
		DATE 01-09-20		DWG. NO. 206.1.S1								



RESIDENTIAL TWO-WAY LOCAL OR CUL-DE-SAC (OPTION "A")



RESIDENTIAL TWO-WAY LOCAL, CUL-DE-SAC (OPTION "B") (NOT ALLOWED IN CLV OR CLARK COUNTY)



RESIDENTIAL ONE-WAY (NOT ALLOWED IN CLV OR CLARK COUNTY)

NOTES

1. FINAL A.C. PAVEMENT SURFACE SHALL BE 1/4" MAXIMUM ABOVE LIP OF GUTTER AFTER COMPACTION, EXCEPT WHERE THERE IS OVERLAP WITH PEDESTRIAN ACCESS ROUTES. CONNECTIONS BETWEEN PAVEMENT SURFACES, GUTTERS, AND CURB RAMPS WITHIN PEDESTRIAN ACCESS ROUTES SHALL HAVE NO VERTICAL SURFACE DISCONTINUITIES GREATER THAN 1/4", REGARDLESS OF CONSTRUCTION TOLERANCES.
2. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 401 AND STANDARD DRAWING NO. 200.1.
3. RESIDENTIAL ONE-WAY STREET SHALL NOT EXCEED ONE THOUSAND FEET OR TWENTY RESIDENTIAL LOTS IN LENGTH, WHICHEVER IS LESS.

AGENCY APPROVED

C

L

N

SPECIFICATION REFERENCE

302 AGGREGATE BASE

401 BITUMINOUS PAVEMENT

406 PRIME COAT

407 FOG SEAL

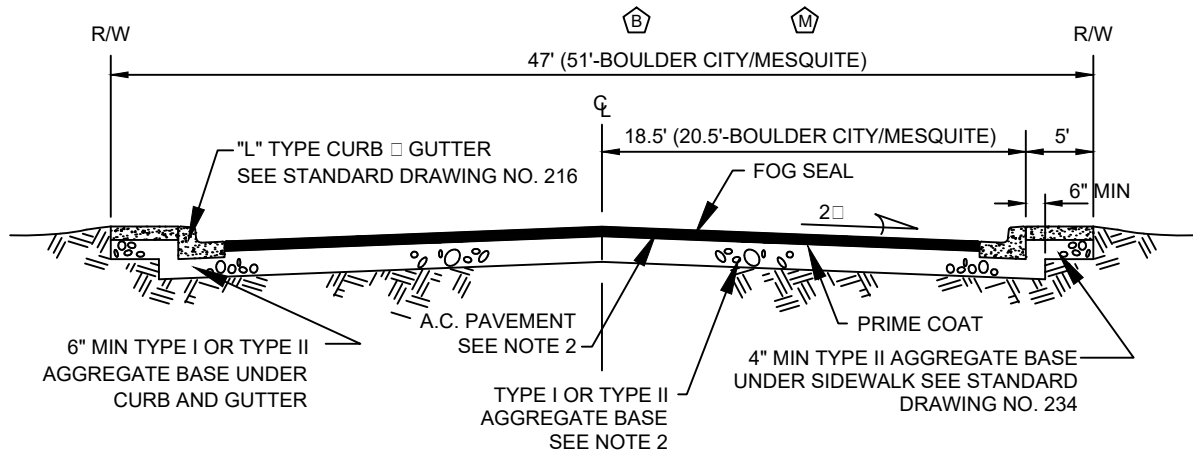
501 CONCRETE

UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

LOCAL RESIDENTIAL URBAN AREA STREET SECTIONS

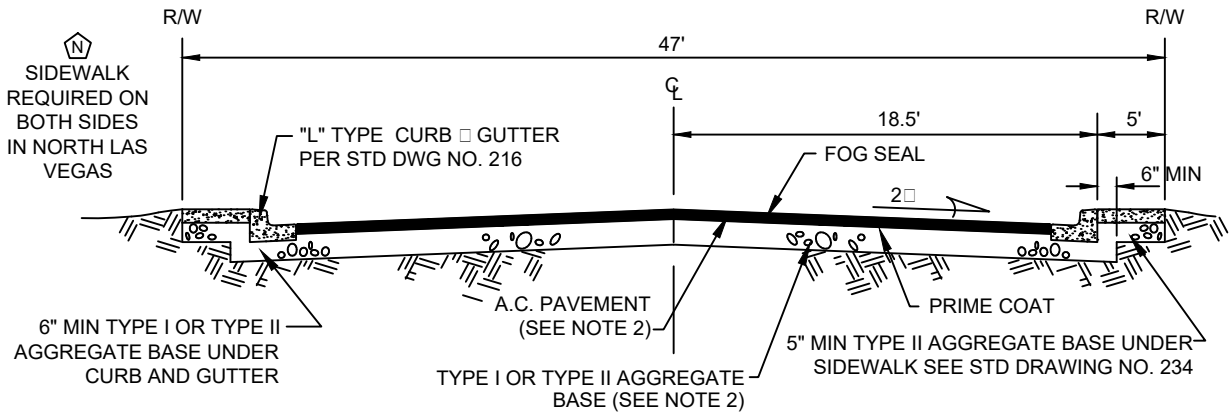
DATE 01-09-20 DWG. NO. 206.S1



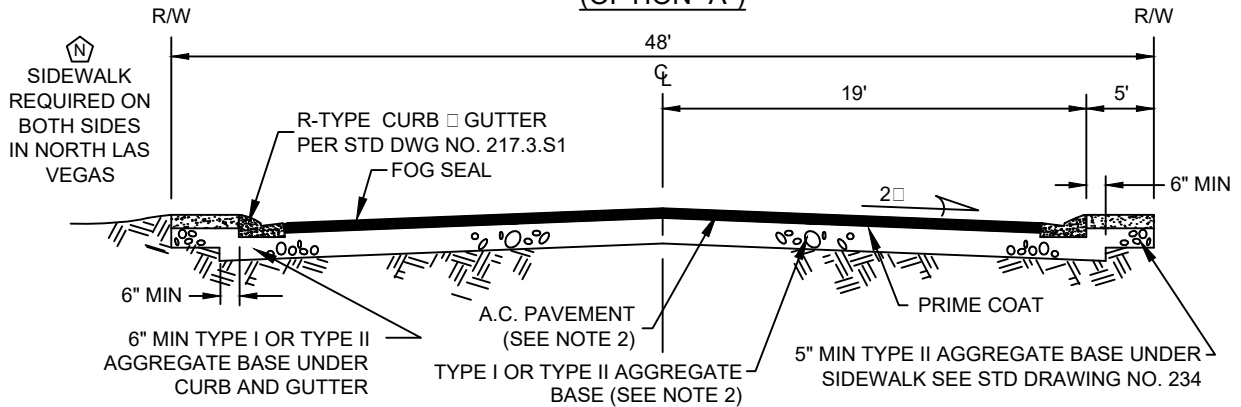
NOTES

1. FINAL A.C. PAVEMENT SURFACE SHALL BE 1/4" MAXIMUM ABOVE LIP OF GUTTER AFTER COMPACTION, EXCEPT WHERE THERE IS OVERLAP WITH PEDESTRIAN ACCESS ROUTES. CONNECTIONS BETWEEN PAVEMENT SURFACES, GUTTERS, AND CURB RAMPS WITHIN PEDESTRIAN ACCESS ROUTES SHALL HAVE NO VERTICAL SURFACE DISCONTINUITIES GREATER THAN 1/4", REGARDLESS OF CONSTRUCTION TOLERANCES.
2. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 401 AND STANDARD DRAWING NO. 200.1.

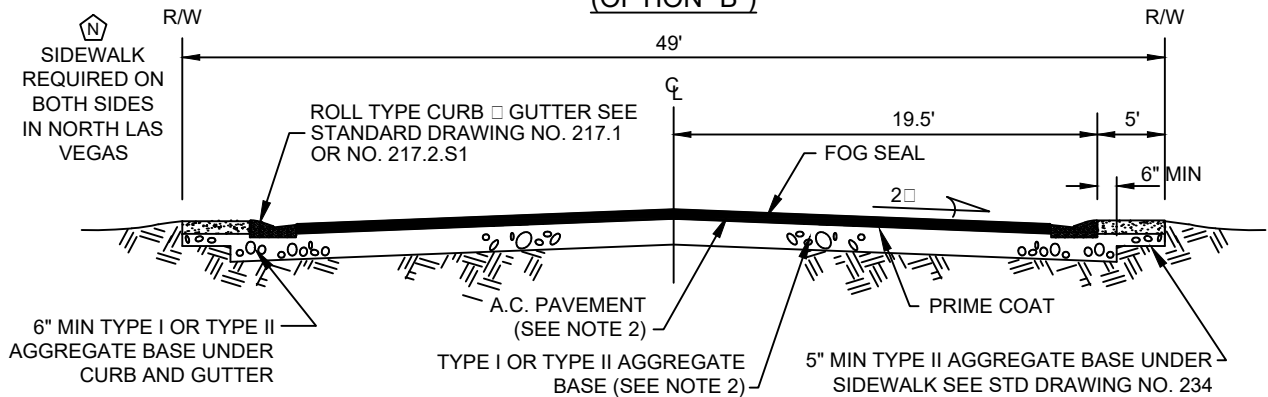
		AGENCY APPROVED		B		H		M		
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA								
302	AGGREGATE BASE	SUPPLEMENTAL DRAWING								
401	BITUMINOUS PAVEMENT	LOCAL RESIDENTIAL URBAN AREA STREET SECTION								
406	PRIME COAT									
407	FOG COAT									
501	CONCRETE									
		DATE 01-09-20		DWG. NO. 206.S2						



**RESIDENTIAL TWO-WAY LOCAL OR CUL-DE-SAC
(OPTION "A")**



**RESIDENTIAL TWO-WAY LOCAL, CUL-DE-SAC
(OPTION "B")**



**RESIDENTIAL TWO-WAY LOCAL, CUL-DE-SAC
(OPTION "C")**

NOTES

1. FINAL A.C. PAVEMENT SURFACE SHALL BE 1/4" MAXIMUM ABOVE LIP OF GUTTER AFTER COMPACTION, EXCEPT WHERE THERE IS OVERLAP WITH PEDESTRIAN ACCESS ROUTES. CONNECTIONS BETWEEN PAVEMENT SURFACES, GUTTERS, AND CURB RAMPS WITHIN PEDESTRIAN ACCESS ROUTES SHALL HAVE NO VERTICAL SURFACE DISCONTINUITIES GREATER THAN 1/4", REGARDLESS OF CONSTRUCTION TOLERANCES.
2. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 401 AND STD. DWG. NO. 200.1.
3. RESIDENTIAL ONE-WAY STREET SHALL NOT EXCEED ONE THOUSAND FEET OR TWENTY RESIDENTIAL LOTS IN LENGTH, WHICHEVER IS LESS.

AGENCY APPROVED

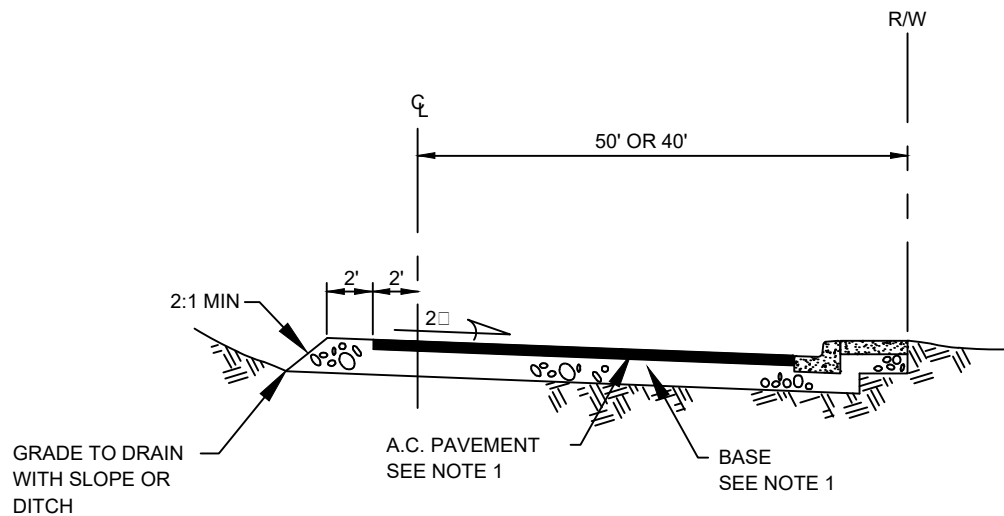
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

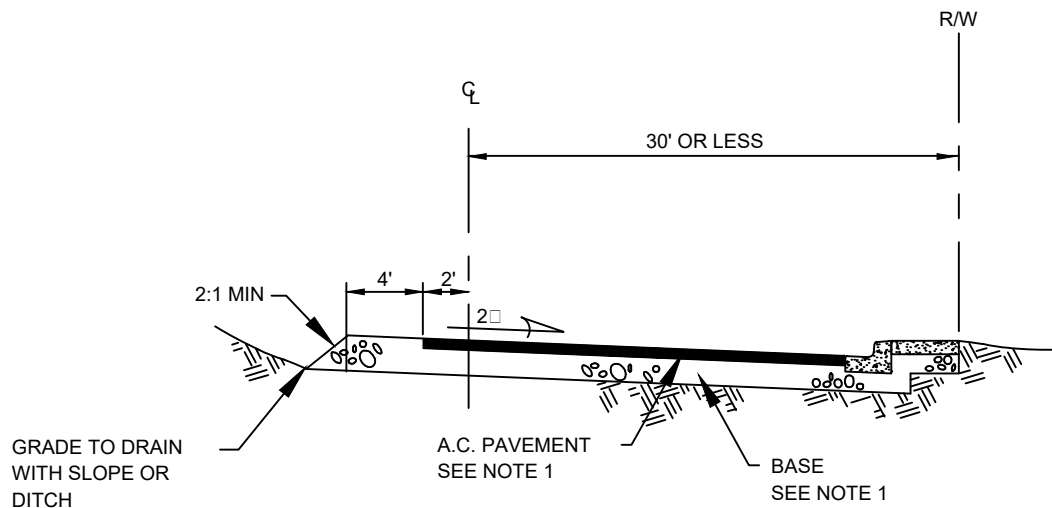
LOCAL RESIDENTIAL
URBAN AREA STREET SECTION

DATE 01-09-20 DWG. NO. 206.S3

SPECIFICATION REFERENCE	
302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT
406	PRIME COAT
407	FOG COAT
501	CONCRETE



ARTERIAL OR MAJOR COLLECTOR

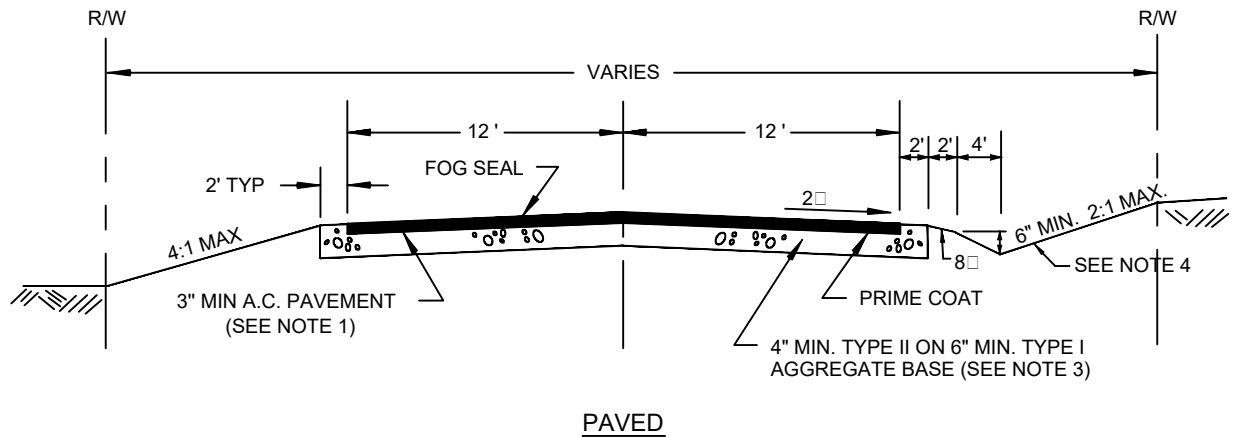
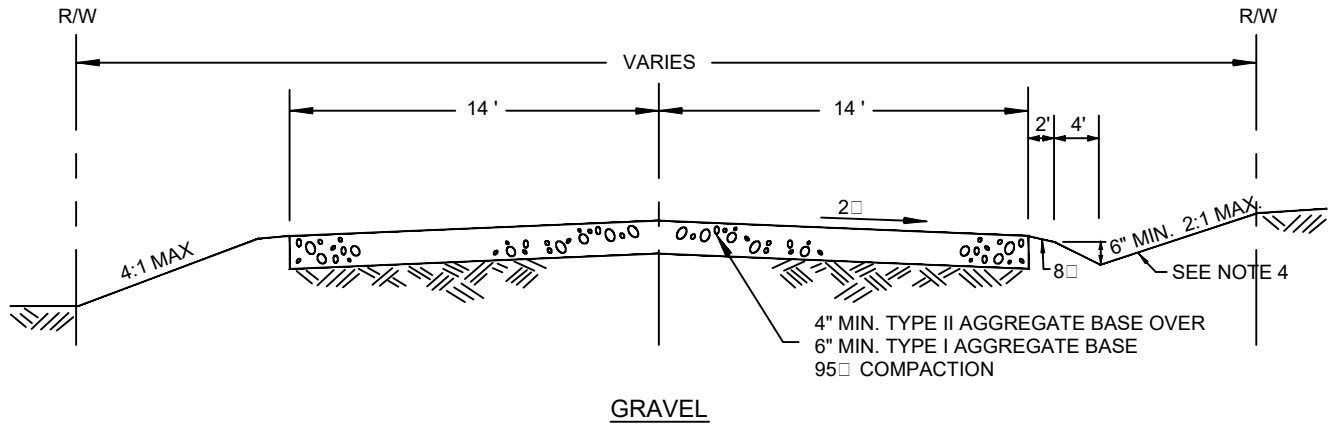


COMMERCIAL/INDUSTRIAL LOCAL
OR MINOR RESIDENTIAL COLLECTOR
OR LOCAL RESIDENTIAL

NOTES:

1. A.C. PAVEMENT AND BASE THICKNESS SHALL BE IN ACCORDANCE TO STANDARD DRAWINGS NUMBER 202 THROUGH 206.S2, WHICHEVER IS APPLICABLE.
2. GREATER WIDTHS MAY BE REQUIRED IF TRAFFIC WARRANTS, AS DETERMINED BY THE ENGINEER.

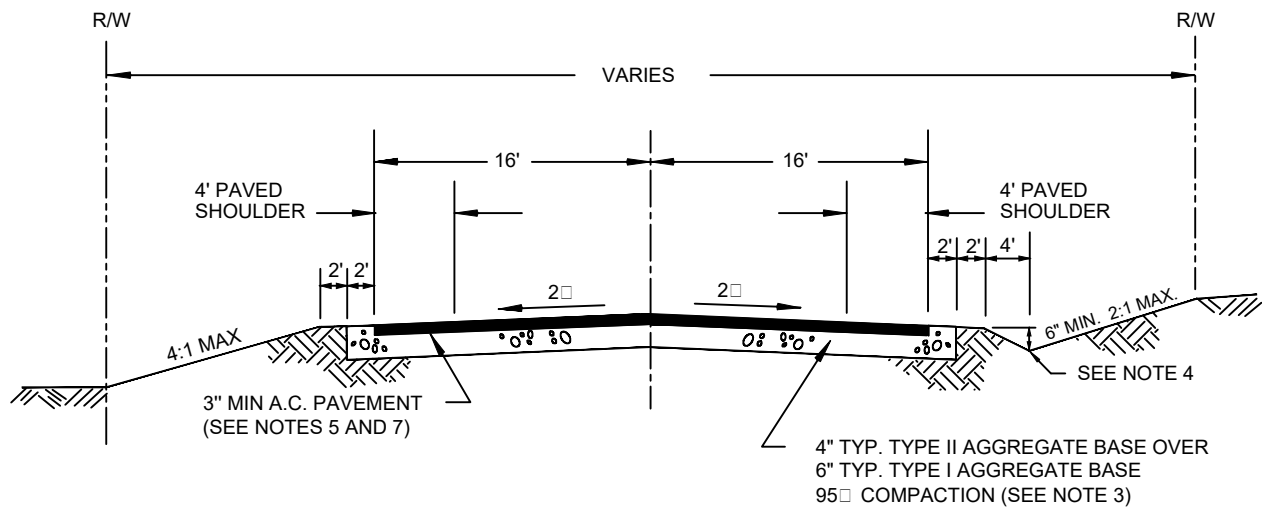
		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
302	AGGREGATE BASE	HALF STREET CONSTRUCTION SECTIONS											
401	BITUMINOUS PAVEMENT												
406	PRIME COAT												
407	FOG SEAL												
501	CONCRETE												
.		DATE		DWG. NO.		208							



NOTES:

1. INTERSECTIONS SHALL HAVE 25 FOOT MINIMUM EDGE OF OIL RADII.
2. COMPACTION OF AGGREGATE BASE AND SUBGRADE PREPARATION SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS".
3. STRUCTURAL SECTION SHOWN IS BASED ON A SUBGRADE "R" VALUE OF 20. OTHER STRUCTURAL SECTIONS MAY BE APPROVED IF BASED ON ENGINEERING ANALYSIS BASED ON "R" OR "CBR" VALUES DETERMINED BY SOIL TESTING. IN NO CASE SHALL THE A.C. THICKNESS BE LESS THAN THAT SHOWN, NOR SHALL THE BASE BE LESS THAN 4".
4. CULVERTS MAY BE REQUIRED AT DRIVEWAYS.

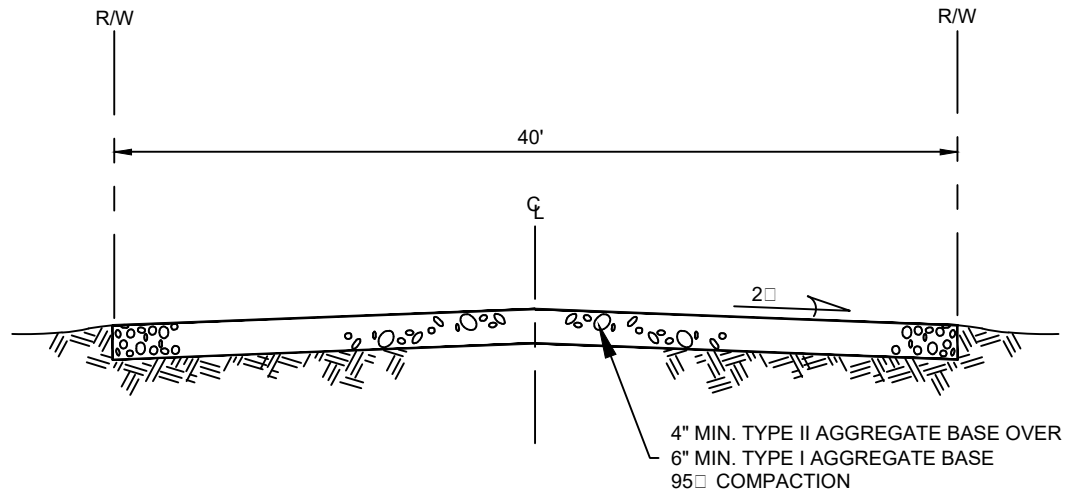
		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
302	AGGREGATE BASE	ACCESS ROADS (FOR USE IN PM-10 COMPLIANT AREAS)											
401	BITUMINOUS PAVEMENT												
406	PRIME COAT												
407	FOG SEAL												
		DATE 12-14-00			DWG. NO. 209.1								



NOTES:

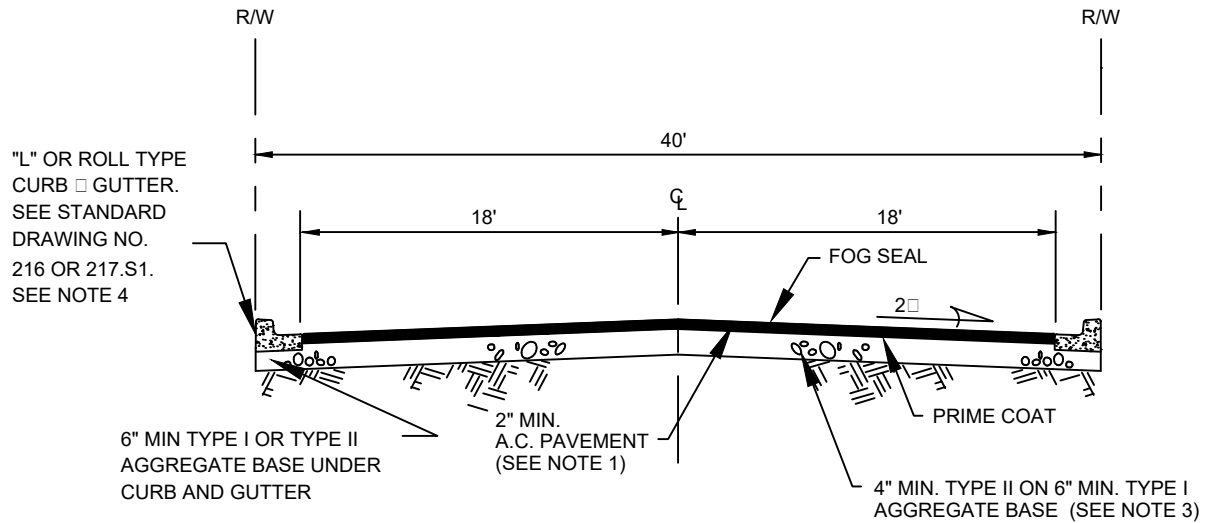
1. INTERSECTIONS SHALL HAVE 34 FOOT MINIMUM EDGE OF A.C. RETURN RADII.
2. COMPACTION OF AGGREGATE BASE AND SUBGRADE PREPARATION SHALL BE IN ACCORDANCE WITH THE UNIFORM STANDARD SPECIFICATIONS.
3. STRUCTURAL SECTION SHOWN IS BASED ON A SUBGRADE "R" VALUE OF 20. OTHER STRUCTURAL SECTIONS MAY BE APPROVED IF BASED ON ENGINEERING ANALYSIS BASED ON "R" OR "CBR" VALUES DETERMINED BY SOIL TESTING.
4. CULVERTS MAY BE REQUIRED AT DRIVEWAYS.
5. A.C. PAVEMENT SHALL BE IN ACCORDANCE WITH SECTION 401 OF THE UNIFORM STANDARD SPECIFICATIONS. ALTERNATE PAVING MATERIALS MAY BE USED AT THE DISCRETION OF THE ENTITY.
6. PAVEMENT MARKINGS MAY BE REQUIRED AND INCLUDE DOUBLE YELLOW CENTERLINE, RAISED PAVEMENT MARKERS OR YELLOW PAINT, AND 4' OFFSET WHITE PAINTED EDGELINES.
7. PAVEMENT WIDTH AND PAVEMENT THICKNESS MAY BE REDUCED TO 28 FEET (14 FEET EACH DIRECTION) AND 2 INCHES RESPECTIVELY BASED UPON A DETERMINATION BY THE LOCAL ENTITY THAT THE REDUCED WIDTH AND THICKNESS WILL PROVIDE SATISFACTORY LIFE AND A SAFE ROADWAY.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
302	AGGREGATE BASE	ACCESS ROADS (FOR USE IN HYDROGRAPHIC BASIN NO. 212) (PM-10 NON-ATTAINMENT AREAS)											
401	BITUMINOUS PAVEMENT												
		DATE	5-20-04	DWG. NO.	209								



GRAVEL

(THIS SECTION NOT FOR USE IN PM-10 NON-ATTAINMENT AREAS)

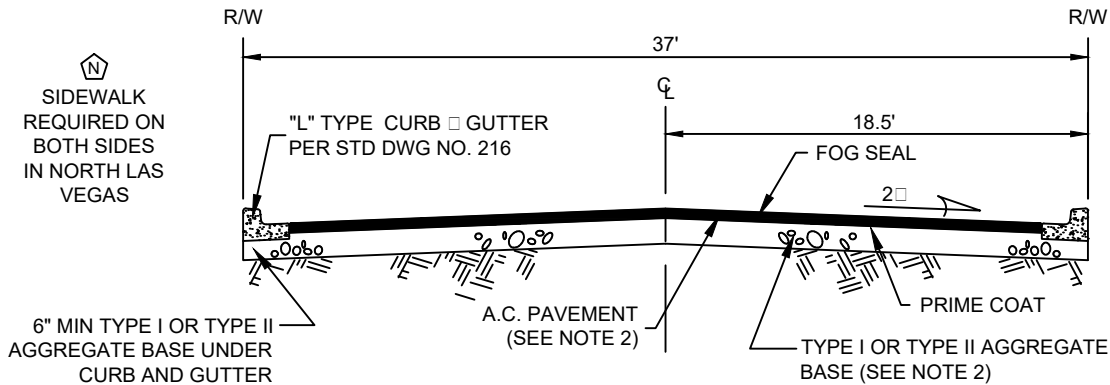


PAVED

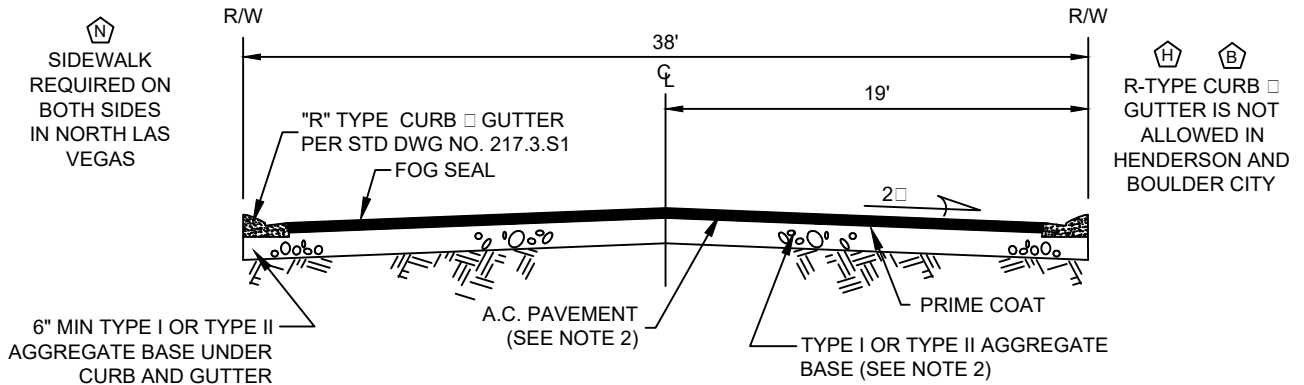
NOTES:

1. INTERSECTIONS SHALL HAVE 25 FOOT MINIMUM EDGE OF OIL RADII OR 20 FOOT MINIMUM BACK OF CURB RADII.
2. COMPACTION OF AGGREGATE BASE AND SUBGRADE PREPARATION SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATION".
3. STRUCTURAL SECTION SHOWN IS BASED ON A SUBGRADE "R" VALUE OF 20. OTHER STRUCTURAL SECTIONS MAY BE APPROVED IF BASED ON ENGINEERING ANALYSIS BASED ON "R" OR "CBR" VALUES DETERMINED BY SOIL TESTING. IN NO CASE SHALL THE A.C. THICKNESS BE LESS THAN THAT SHOWN, NOR SHALL THE BASE BE LESS THAN 4" EXCEPT THAT THE BASE SHALL NOT BE LESS THAN 10" IN NORTH LAS VEGAS.
4. ALLOW IN CITY OF NORTH LAS VEGAS ONLY WITH EXPRESS WRITTEN PERMISSION FROM THE CITY ENGINEER.

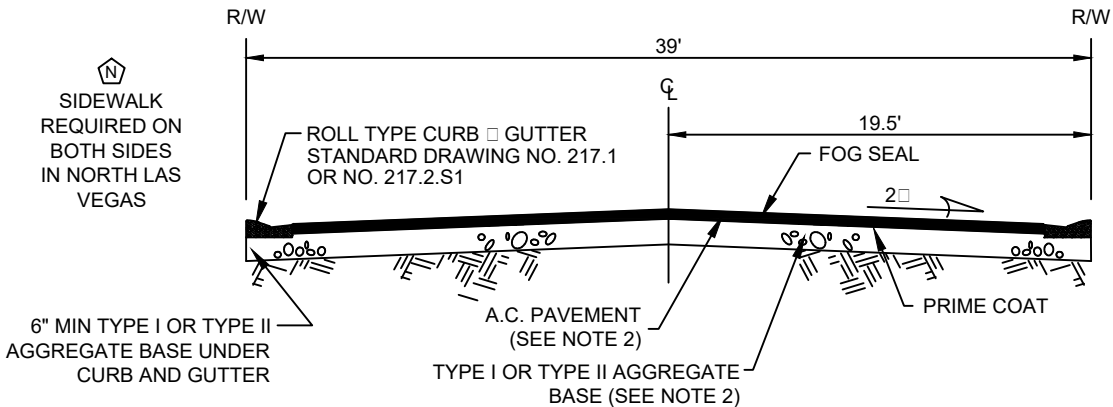
		AGENCY APPROVED		B	C	H	L	M	N	
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA								
302	AGGREGATE BASE	PRIVATE STREET SECTIONS								
401	BITUMINOUS PAVEMENT									
406	PRIME COAT									
407	FOG SEAL									
501	CONCRETE									
-		DATE 12-14-00	DWG. NO.		210					



OPTION "A" - PAVED



OPTION "B" - PAVED



OPTION "C" - PAVED

NOTES

1. FINAL A.C. PAVEMENT SURFACE SHALL BE 1/4" MAXIMUM ABOVE LIP OF GUTTER AFTER COMPACTION, EXCEPT WHERE THERE IS OVERLAP WITH PEDESTRIAN ACCESS ROUTES. CONNECTIONS BETWEEN PAVEMENT SURFACES, GUTTERS, AND CURB RAMPS WITHIN PEDESTRIAN ACCESS ROUTES SHALL HAVE NO VERTICAL SURFACE DISCONTINUITIES NO GREATER THAN 1/4", REGARDLESS OF CONSTRUCTION TOLERANCES.
2. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 401 AND STD. DWG. NO. 200.1.
3. RESIDENTIAL ONE-WAY STREET SHALL NOT EXCEED ONE THOUSAND FEET OR TWENTY RESIDENTIAL LOTS IN LENGTH, WHICHEVER IS LESS.

AGENCY APPROVED C L M R

SPECIFICATION REFERENCE

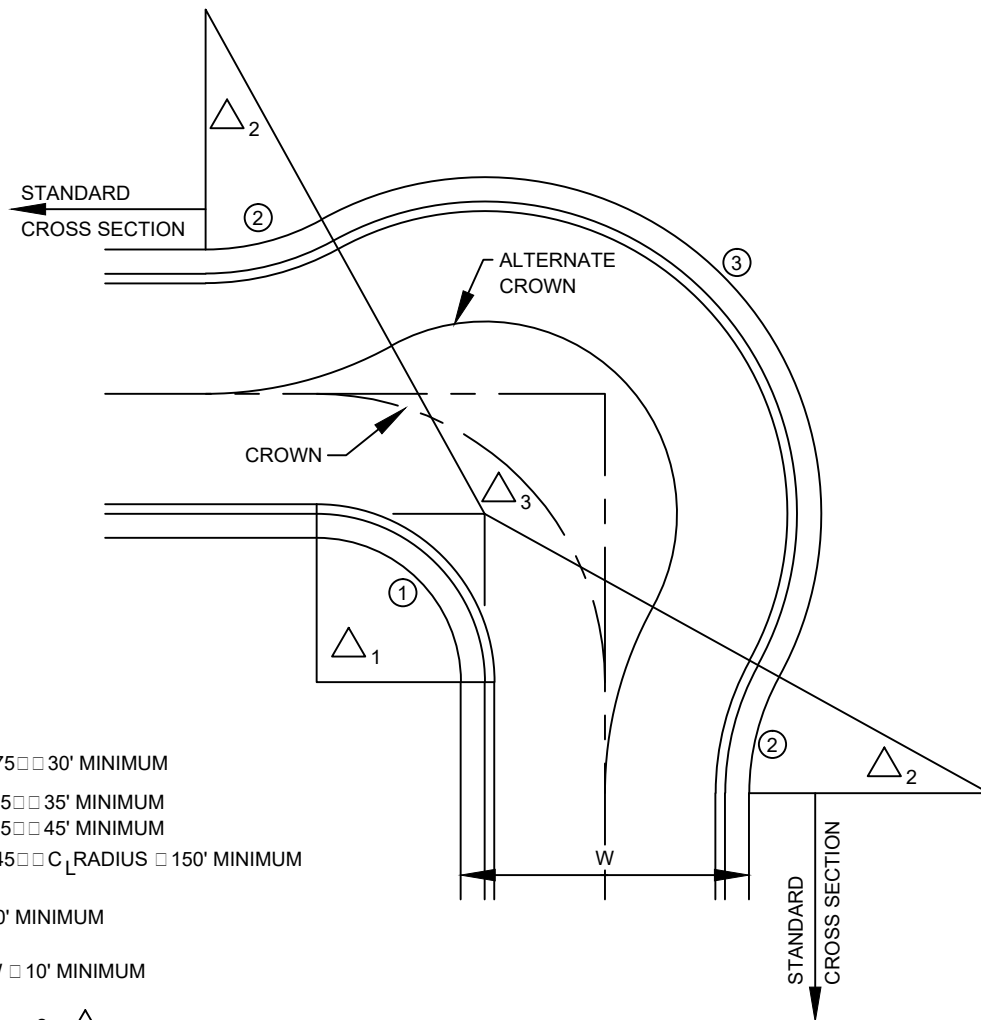
302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT
406	PRIME COAT
407	FOG COAT
501	CONCRETE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

PRIVATE STREET SECTIONS

DATE 01-09-20 DWG. NO. 210.S1

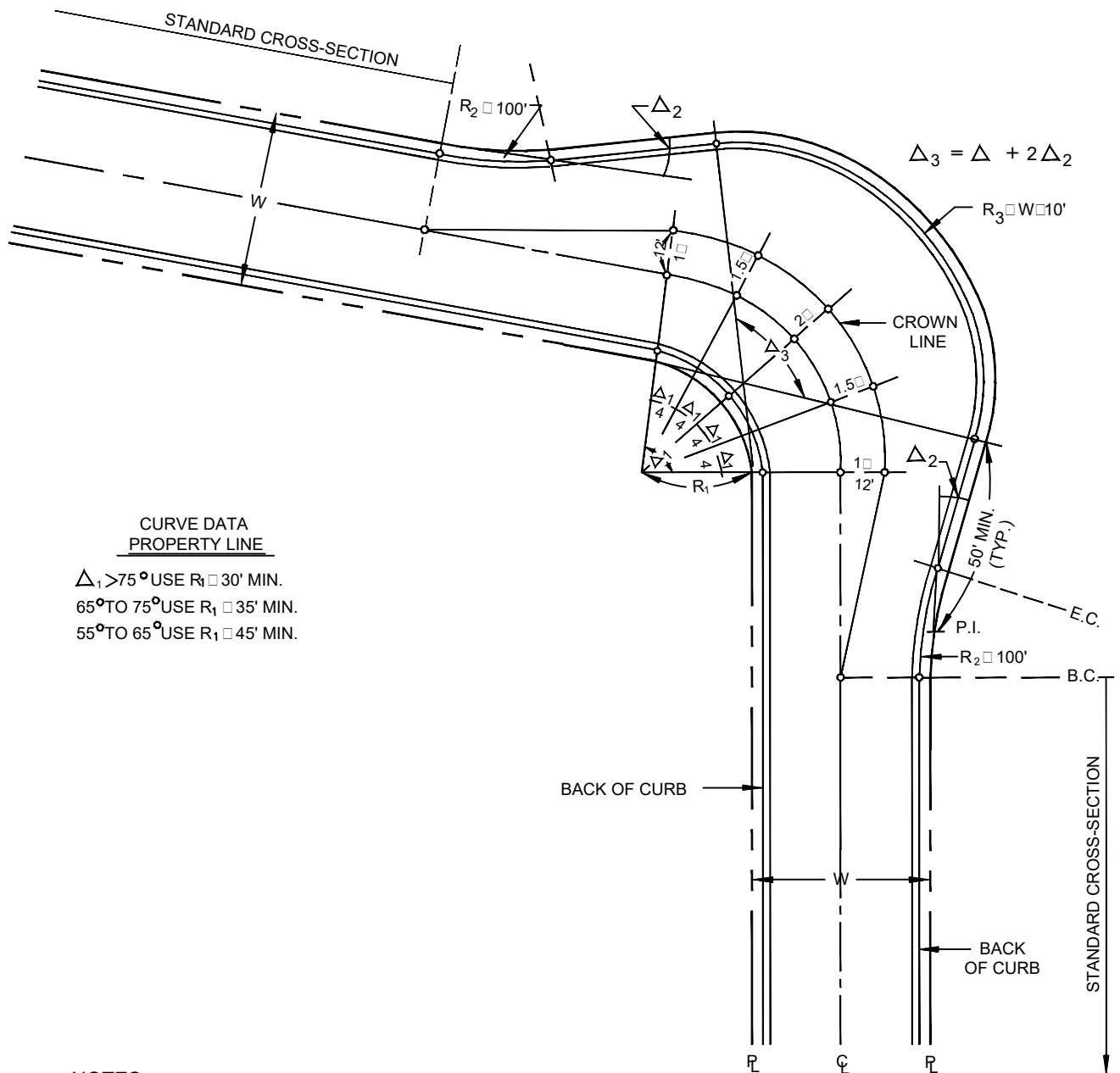


- ① BCR
 $\square 75 \square \square 30'$ MINIMUM
 65 $\square$ TO 75 $\square \square 35'$ MINIMUM
 45 $\square$ TO 65 $\square \square 45'$ MINIMUM
 $\square 45 \square \square C_L$ RADIUS $\square 150'$ MINIMUM
- ② BCR $\square 50'$ MINIMUM
- ③ BCR $\square W \square 10'$ MINIMUM
-  $\square$  $\square^2$ 

NOTES:

1. USE 2" SLOPE FROM INNER CURB TO CROWN LINE.
2. FROM CROWN LINE TO OUTER CURB, THE STANDARD SLOPE IS 0.90" (MIN).
3. ELEVATIONS REQUIRED ALONG CURBS (3) AND CROWN EVERY 1/4" (MIN).
4. KNUCKLES ARE ALLOWED ON RESIDENTIAL STREETS ONLY.
5. MINIMUM SLOPE ALONG THE BACK OF CURB OF CURVES (2) AND (3) SHALL BE 0.60" (MIN).
6. SPECIAL KNUCKLE DESIGNS INCLUDING LANDSCAPED MEDIAN ISLAND MAY BE PERMITTED, IF APPROVED BY THE COUNTY ENGINEER.

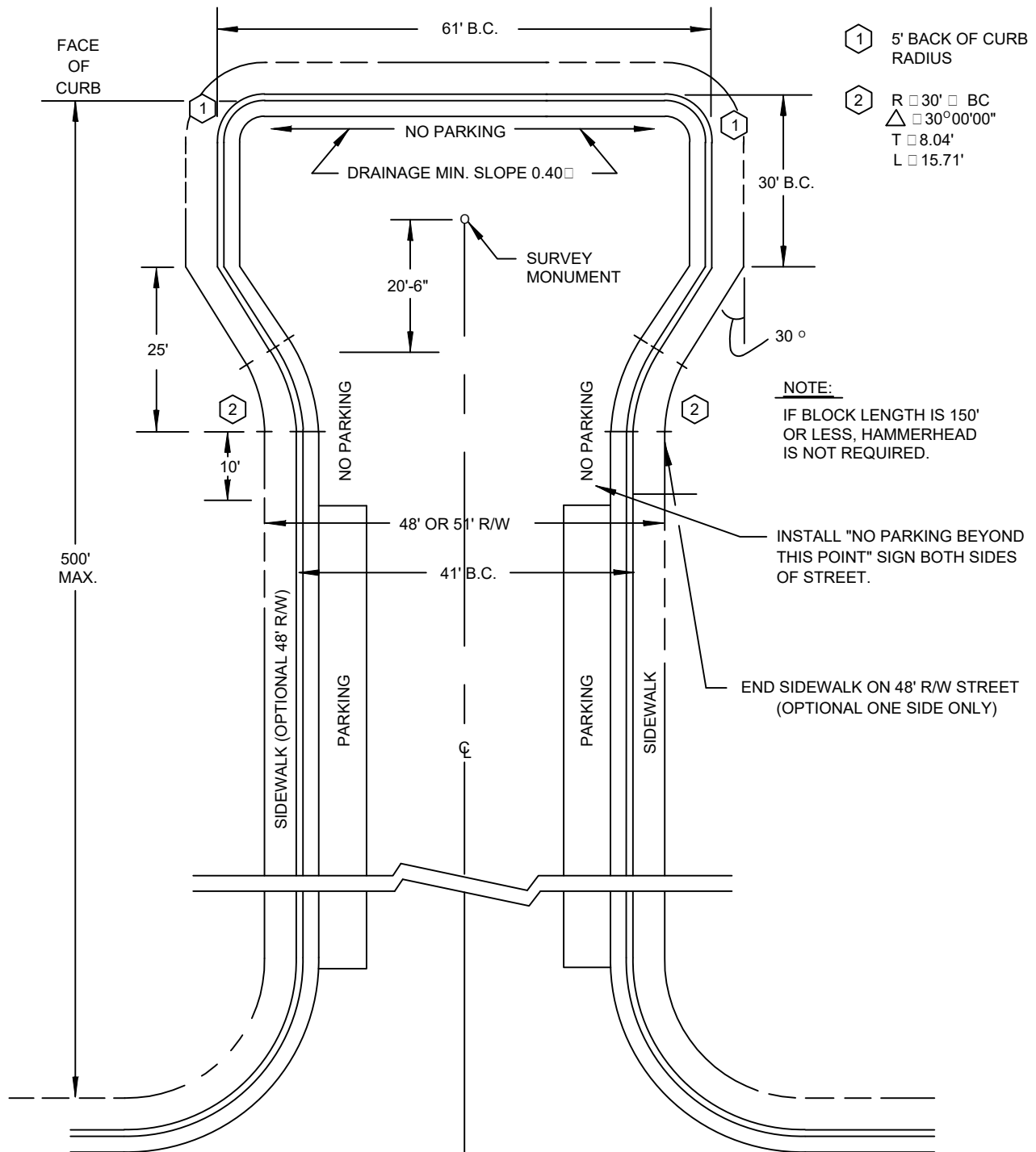
		AGENCY APPROVED			C			
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
		SUPPLEMENTAL DRAWING						
		KNUCKLE - TYPE I						
.		DATE	8-12-99	DWG. NO.	211.1.S1			



NOTES

1. USE NORMAL SECTION FROM INNER CURB TO CENTER LINE.
2. FROM CROWN LINE TO OUTER CURB, THE STANDARD SLOPE IS 2%.
3. SUPERELEVATION PERCENTAGES SHOWN ARE A STRAIGHT GRADE FROM CENTER LINE TO CROWN LINE.
4. ELEVATIONS ARE REQUIRED WHERE CIRCLES (ϕ) ARE SHOWN.
5. KNUCKLES ARE NOT ALLOWED ON MAJOR COLLECTOR OR ARTERIAL STREETS.

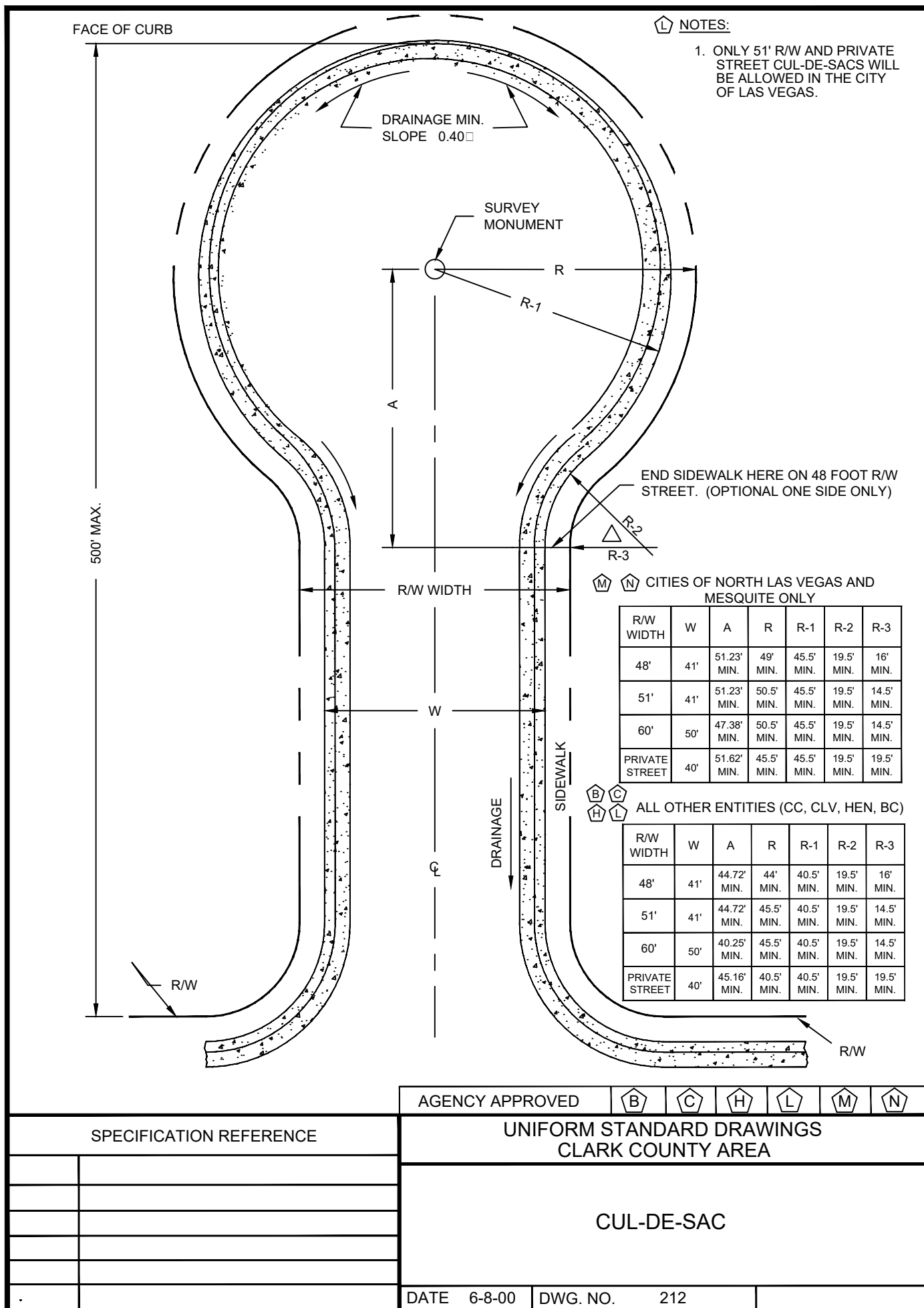
AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		KNUCKLE					
DATE		DWG. NO. 211					

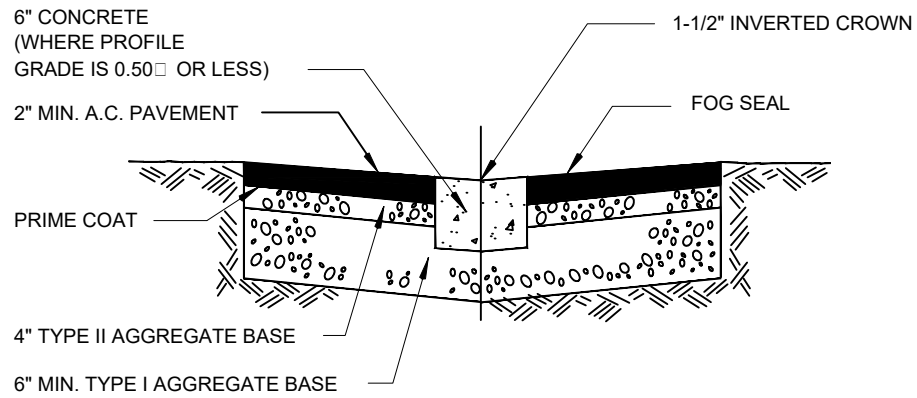


NOTE:

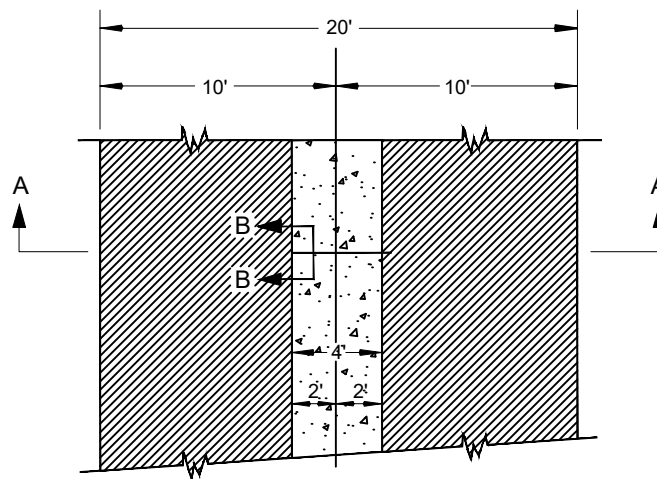
USE OF THE HAMMERHEAD WILL BE ALLOWED IN SINGLE FAMILY RESIDENTIAL DWELLING AREAS ONLY.

AGENCY APPROVED		C				
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA				
		SUPPLEMENTAL DRAWING				
		HAMMERHEAD				
DATE 11-10-04		DWG. NO.		212.1.S1		

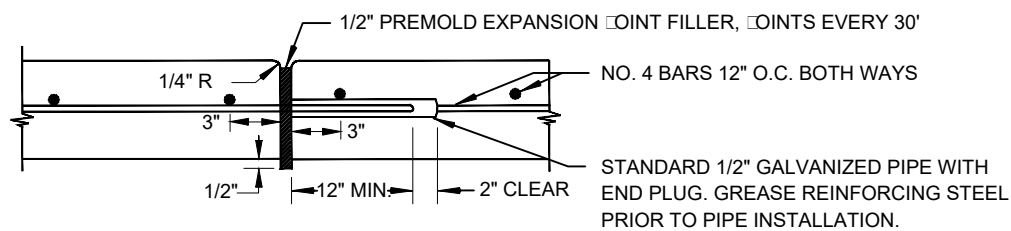




SECTION A-A

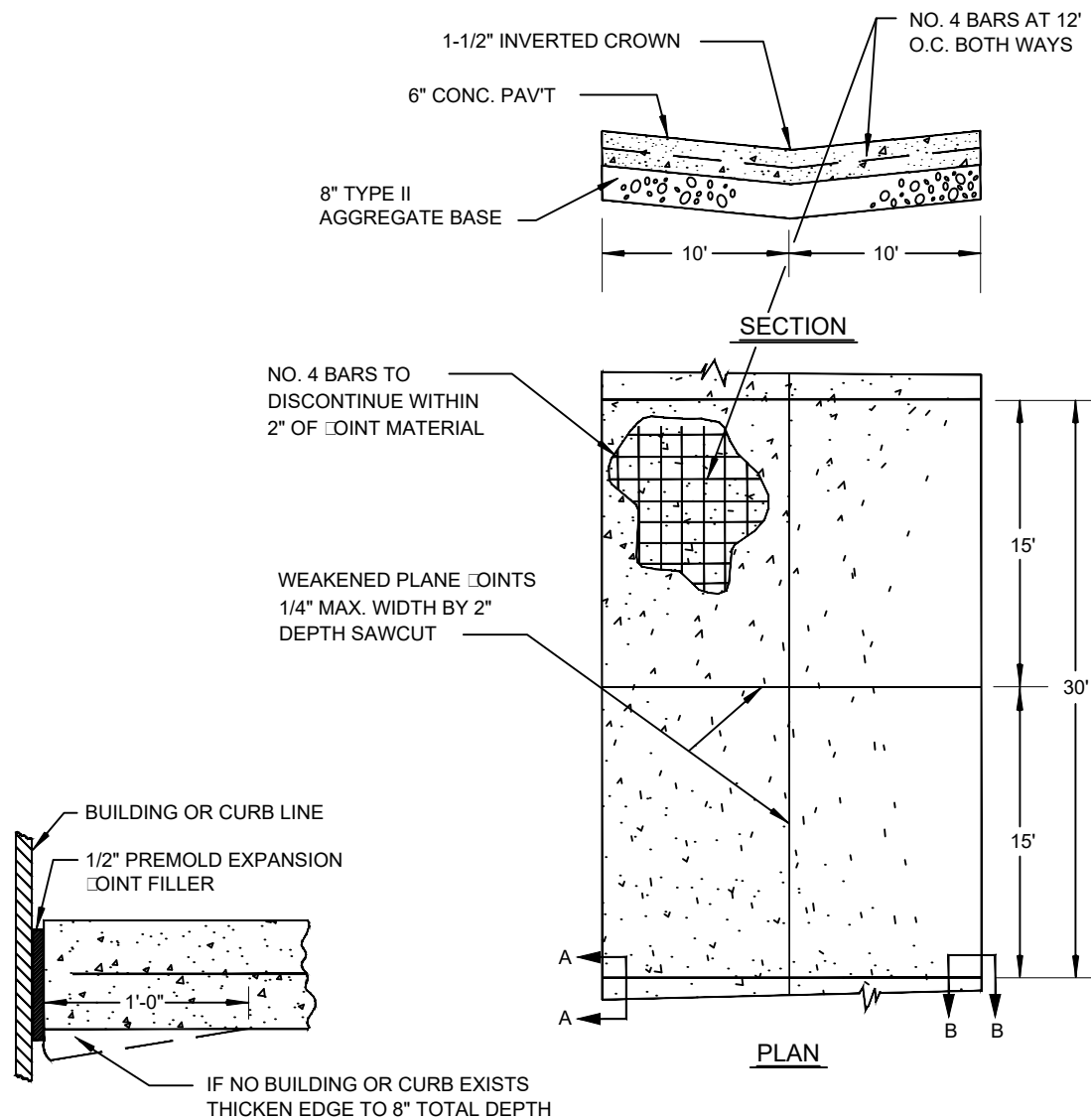


PLAN

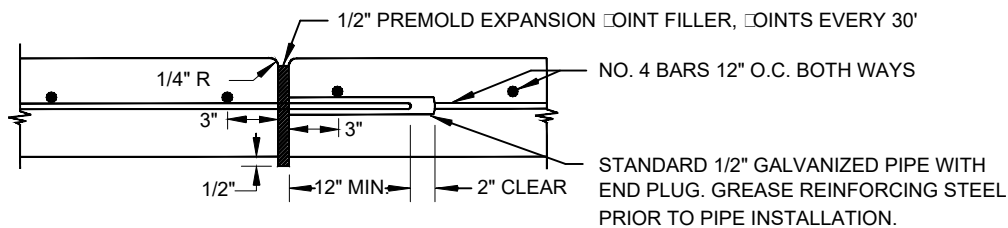


SECTION B-B

		AGENCY APPROVED		B		H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
302	AGGREGATE BASE	SUPPLEMENTAL DRAWING ALLEY							
501	CONCRETE								
505	REINFORCING STEEL								
707	JOINT MATERIAL								
		DATE 12-14-00		DWG. NO.		214.S1			

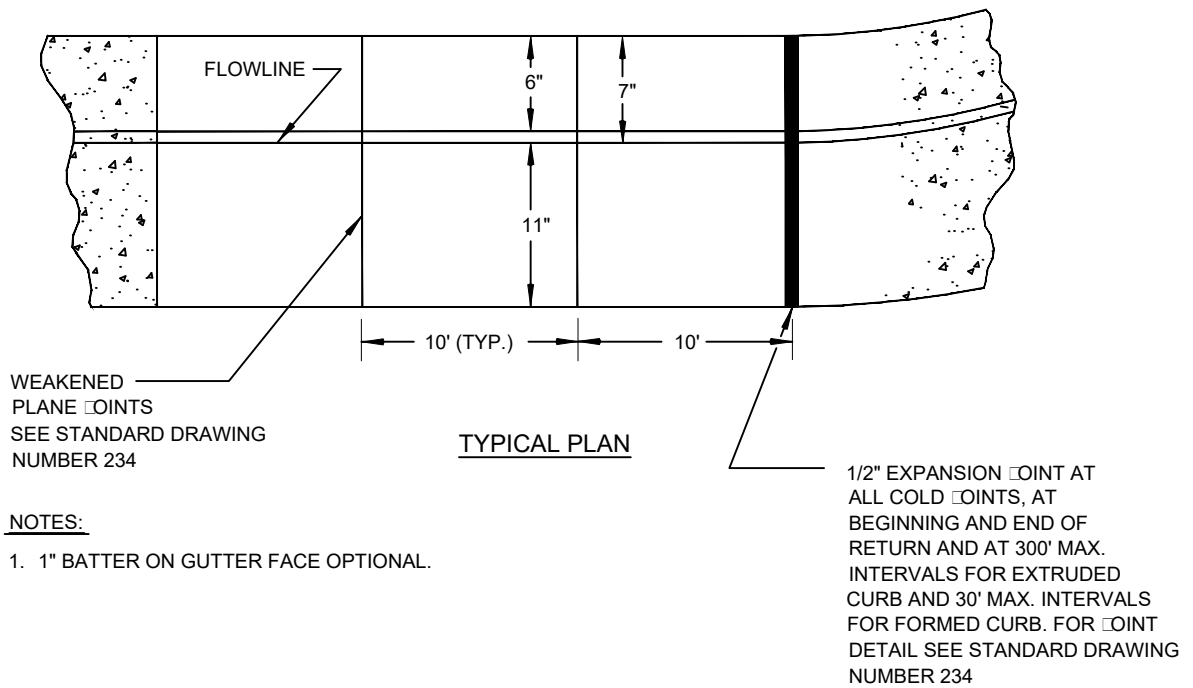
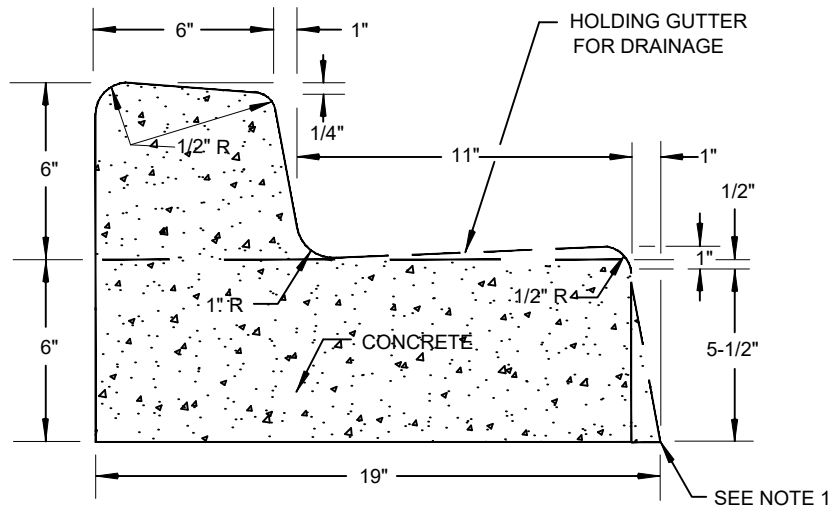


SECTION B-B



SECTION A-A

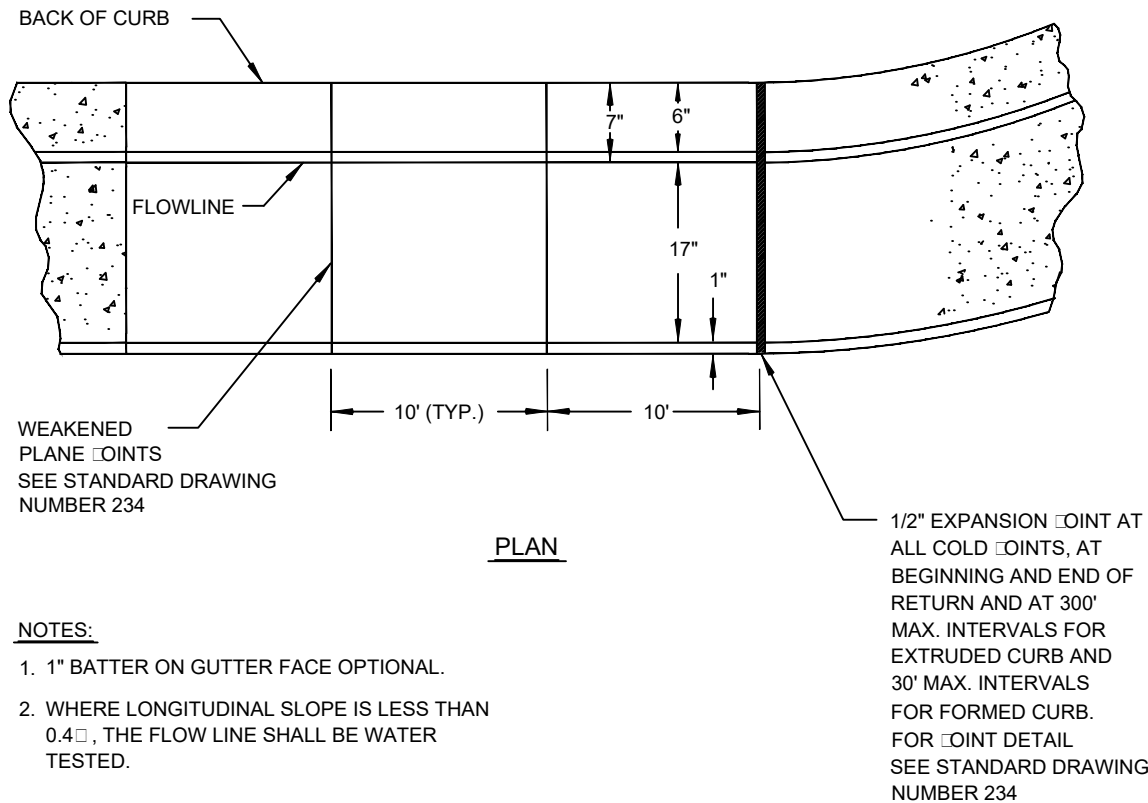
		AGENCY APPROVED						B		H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
302	AGGREGATE BASE	SUPPLEMENTAL DRAWING											
501	CONCRETE	ALLEY, CONCRETE											
505	REINFORCING STEEL												
707	JOINT MATERIAL												
		DATE 12-14-00		DWG. NO.		215.S1							



NOTES:

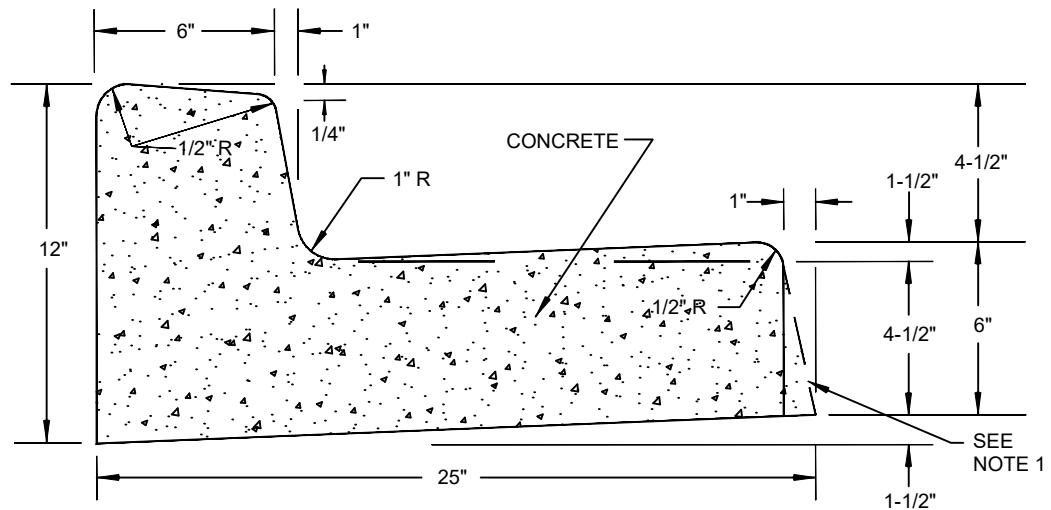
1. 1" BATTER ON GUTTER FACE OPTIONAL.

		AGENCY APPROVED				L		
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
302	AGGREGATE BASE COURSE	SUPPLEMENTAL DRAWING						
501	CONCRETE	"L" TYPE CURB AND GUTTER						
707	JOINT MATERIAL							
		COMPLETE STREET ALTERNATIVE						
		DATE 07-01-12	DWG. NO.	216.1.S1				

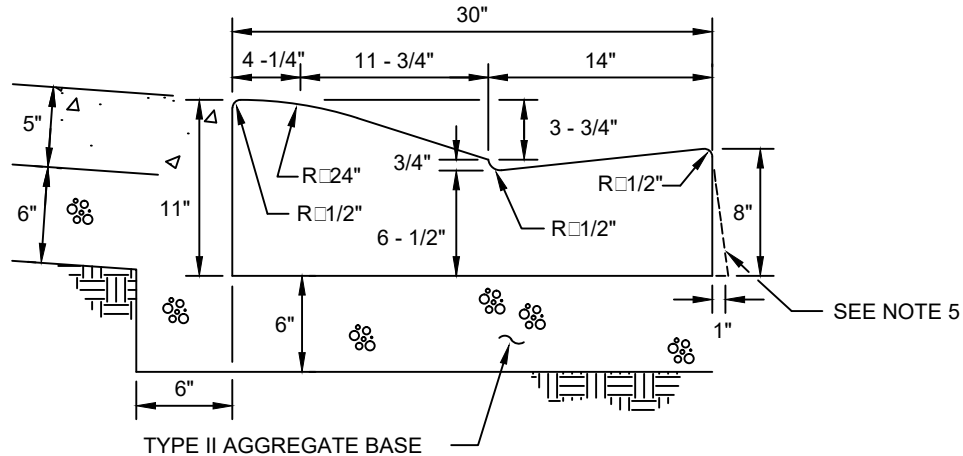


NOTES:

1. 1" BATTER ON GUTTER FACE OPTIONAL.
2. WHERE LONGITUDINAL SLOPE IS LESS THAN 0.4%, THE FLOW LINE SHALL BE WATER TESTED.



		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
501	CONCRETE	"L" TYPE CURB AND GUTTER											
502	CONCRETE STRUCTURES												
707	JOINT MATERIAL												
		DATE 12-14-00		DWG. NO.		216							

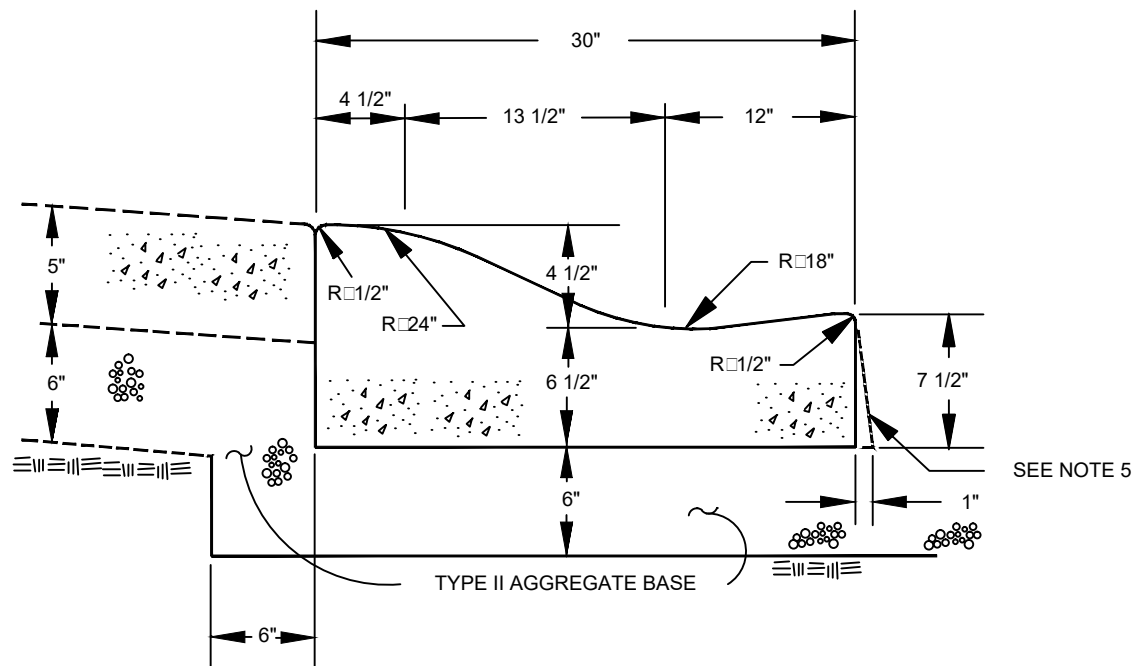


NOTES:

1. USE OF ROLL CURB MAY BE RESTRICTED BY SURFACE DRAINAGE CONSIDERATIONS.
2. SIDEWALK CONSTRUCTED CONTIGUOUS TO ROLL CURB SHALL BE 5 INCHES THICK (MIN.).
3. ALL CURB FLOW LINES SHALL BE WATER TESTED. ANY CURB THAT DOES NOT FLOW SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE PERMITTING AGENCY AT THE SOLE EXPENSE OF THE CONTRACTOR.
4. CONSTRUCT 1/2" EXPANSION JOINT AT ALL COLD JOINTS, AT BEGINNING AND END OF CURB RETURNS, AND AT 300 FT. MAX. INTERVALS FOR EXTRUDED CURB AND 30 FT. MAX. INTERVALS FOR FORMED CURB. WEAKENED PLANE JOINTS SHALL BE FORMED AT THE REMAINING 15 FT. INTERVALS. SEE STD. DWG. NO. 234 FOR JOINT DETAILS.
5. ONE INCH BATTER AT CURB FACE IS OPTIONAL.
6. NO UTILITY BOXES AND COVERS ADJACENT TO 30 INCH MODIFIED ROLL CURB AND GUTTER RESIDENTIAL AREA SHALL BE ALLOWED AT DRIVEWAY LOCATIONS.
- B

 7. BOULDER CITY ENGINEER APPROVAL REQUIRED FOR USE OF 30 INCH MODIFIED CURB AND GUTTER RESIDENTIAL AREA .
8. IF ROLL CURB IS APPROVED FOR OTHER LOCATIONS THAT ARE SUBJECTED TO REGULAR TRAFFIC, THEN UTILITY BOXES AND COVERS ADJACENT TO ROLL CURB SHALL MEET H20-44 FOR STEEL BOXES AND ANSI/SCTE 77-2007 (TIER-22) FOR FIBERGLASS POLYMER CONCRETE BOXES RATED "TRAFFIC BEARING" TYPE.

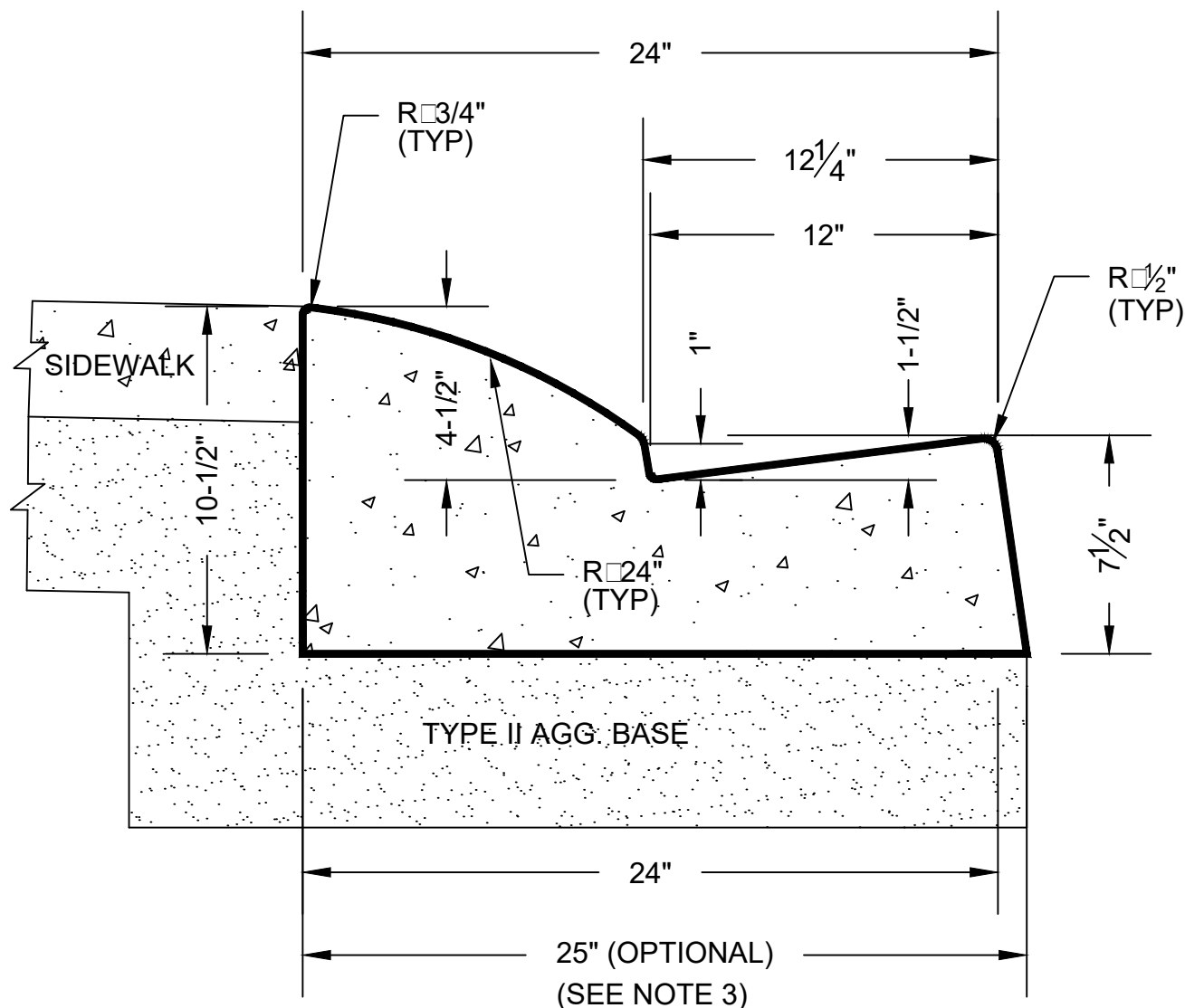
		AGENCY APPROVED						
		B C H L M N						
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
320	AGGREGATE BASE	30 INCH MODIFIED ROLL CURB AND GUTTER RESIDENTIAL AREA						
501	CONCRETE							
502	CONCRETE STRUCTURES							
707	JOINT MATERIAL							
		DATE 01-01-17	DWG. NO.		217.1			



NOTES:

1. USE OF ROLL CURB MAY BE RESTRICTED BY SURFACE DRAINAGE CONSIDERATIONS.
2. SIDEWALK CONSTRUCTED CONTIGUOUS TO ROLL CURB SHALL BE 5 INCHES THICK (MIN).
3. WHERE LONGITUDINAL SLOPE IS LESS THAN 0.4% THE FLOW LINE SHALL BE WATER TESTED.
4. CONSTRUCT 1/2" EXPANSION JOINT AT ALL COLD JOINTS, AT BEGINNING AND END OF CURB RETURNS, AND AT 300 FT. MAX. INTERVALS FOR EXTRUDED CURB AND 30 FT. MAX. INTERVALS FOR FORMED CURB. WEAKENED PLANE JOINTS SHALL BE FORMED AT THE REMAINING 15 FT. INTERVALS. SEE STD. DWG. NO. 234 FOR JOINT DETAILS.
5. ONE INCH BATTER AT CURB FACE IS OPTIONAL.
6. CITY OF LAS VEGAS COUNCIL APPROVAL REQUIRED FOR USE OF 30" ROLL CURB IN THE CITY OF LAS VEGAS.
7. IN NORTH LAS VEGAS, ROLL CURBS ARE PROHIBITED IN AREAS WHERE FLOW LINE GRADIENT IS LESS THAN 0.8% UNLESS OTHERWISE APPROVED BY CITY ENGINEER.
8. NO UTILITY BOXES AND COVERS ADJACENT TO 30 INCH MODIFIED ROLL CURB AND GUTTER RESIDENTIAL AREA SHALL BE ALLOWED AT DRIVEWAY LOCATIONS.
9. IF ROLL CURB IS APPROVED FOR OTHER LOCATIONS THAT ARE SUBJECTED TO REGULAR TRAFFIC, THEN UTILITY BOXES AND COVERS ADJACENT TO ROLL CURB SHALL MEET H20-44 FOR STEEL BOXES AND ANSI/SCTE 77-2007 (TIER-22) FOR FIBERGLASS POLYMER CONCRETE BOXES RATED "TRAFFIC BEARING" TYPE.

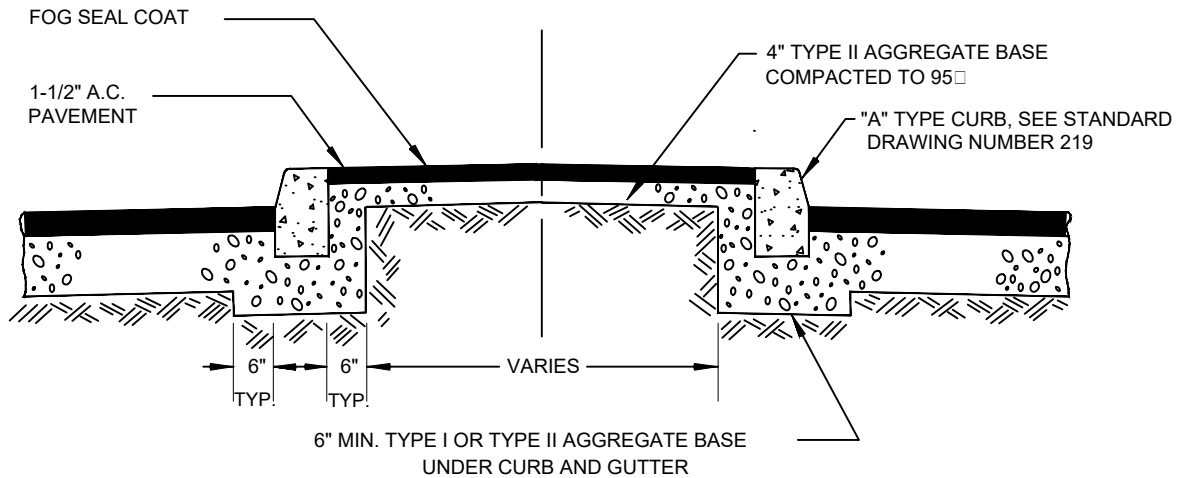
		AGENCY APPROVED		C	H	L	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
320	AGGREGATE BASE	SUPPLEMENTAL DRAWING					
501	CONCRETE	30 INCH ROLL CURB RESIDENTIAL AREA					
502	CONCRETE STRUCTURES						
707	JOINT MATERIAL						
		DATE 01-01-17	DWG. NO. 217.2.S1				



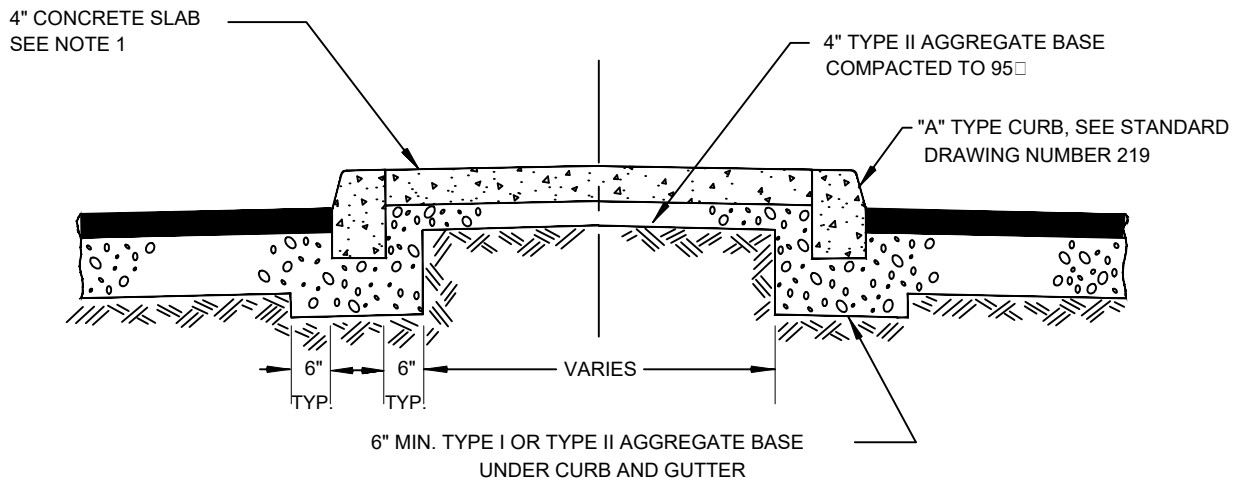
NOTES:

1. WHERE LONGITUDINAL SLOPE IS LESS THAN 0.4% THE FLOW LINE SHALL BE WATER TESTED.
2. CONSTRUCT 1/2" EXPANSION JOINT AT ALL COLD JOINTS, AT BEGINNING AND END OF CURB RETURNS, AND AT 300 FT. MAX. INTERVALS FOR EXTRUDED CURB AND 30 FT. MAX. INTERVALS FOR FORMED CURB. WEAKENED PLANE JOINTS SHALL BE FORMED AT THE REMAINING 15 FT. INTERVALS. SEE STD. DWG. NO. 234 FOR JOINT DETAILS.
3. ONE INCH BATTER AT GUTTER FACE IS OPTIONAL.
4. NO UTILITY BOXES AND COVERS ADJACENT TO R-TYPE CURB SHALL BE ALLOWED AT DRIVEWAY LOCATIONS.
5. IF R-TYPE CURB IS APPROVED FOR OTHER LOCATIONS THAT ARE SUBJECTED TO REGULAR TRAFFIC, THEN UTILITY BOXES AND COVERS ADJACENT TO R-TYPE CURB SHALL MEET H20-44 FOR STEEL BOXES AND ANSI/SCTE 77-2007 (TIER-22) FOR FIBERGLASS POLYMER CONCRETE BOXES RATED "TRAFFIC BEARING" TYPE.
6. FOR NEW CONSTRUCTION ON RESIDENTIAL SUBDIVISION STREETS ONLY.

		AGENCY APPROVED						C	L	M		
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA										
320	AGGREGATE BASE	SUPPLEMENTAL DRAWING										
501	CONCRETE	RESIDENTIAL CURB & GUTTER R-TYPE										
502	CONCRETE STRUCTURES											
707	JOINT MATERIAL											
		DATE 12-10-20		DWG. NO. 217.3.S1								



AC MEDIAN



PCC MEDIAN

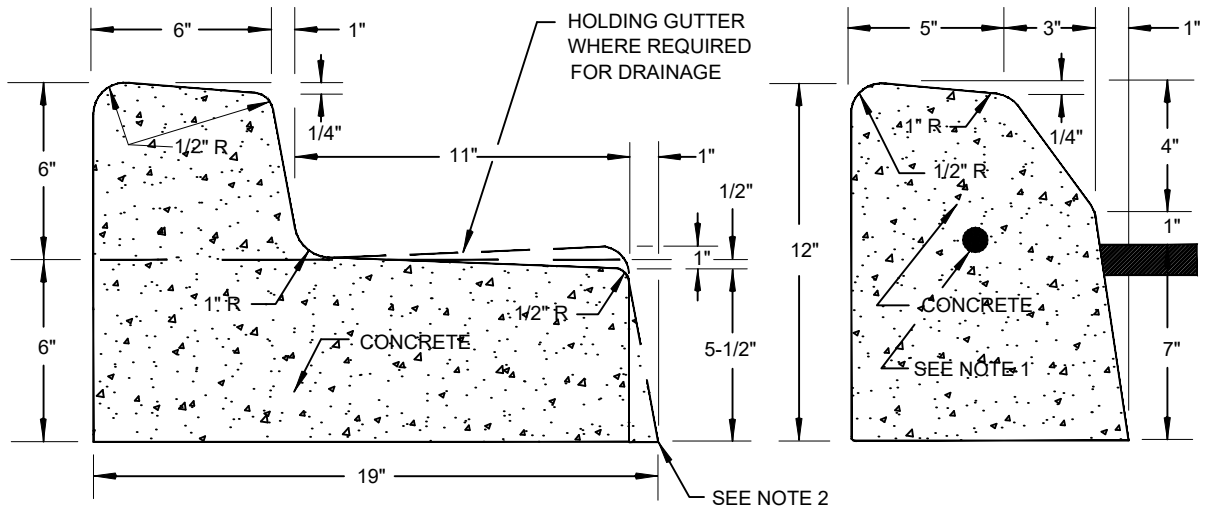
NOTES:

1. CONSTRUCT WEAKENED PLANE JOINT IN CURB AND SLAB AT SAME LOCATION EVERY 10'; CONSTRUCT EXPANSION JOINTS EVERY 300' FOR CONCRETE SLAB TO MATCH CURB JOINTS. FOR JOINT DETAILS SEE STANDARD DRAWING NUMBER 234.

 2. "L" -TYPE CURB AND GUTTER PER STANDARD DRAWING NUMBER 219 IS REQUIRED IN THE CITY OF HENDERSON AND MAY BE REQUIRED FOR DRAINAGE CONSIDERATIONS.

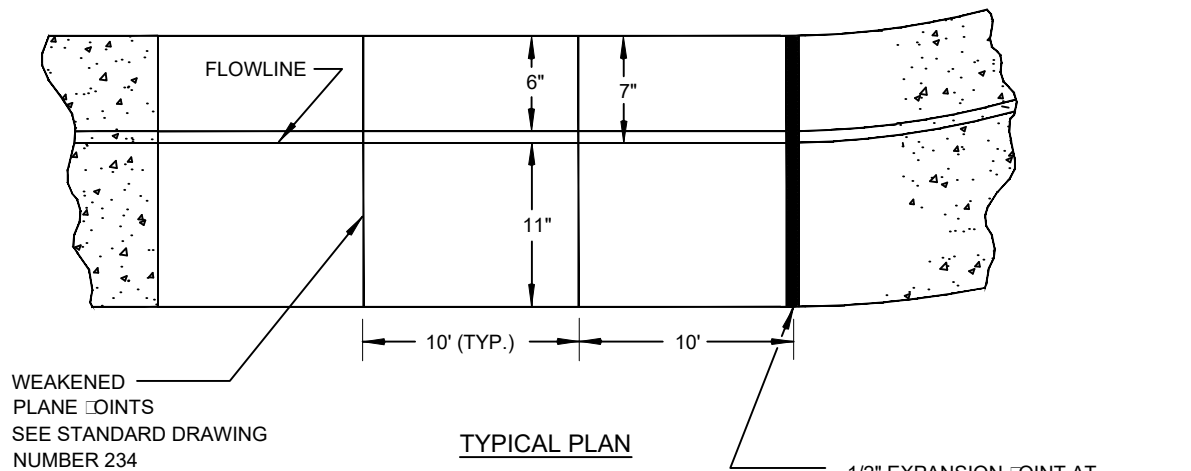
3. WHEN CURB MACHINE IS USED TO PLACE CURB, A 2" MINIMUM LEVELING COURSE OF TYPE II AGGREGATE BASE IS REQUIRED.

		AGENCY APPROVED						B	C		L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
302	AGGREGATE BASE	MEDIAN ISLAND TYPICAL SECTION											
501	CONCRETE												
.		DATE 12-14-00			DWG. NO.			218					



"L" CURB SECTION

"A" CURB SECTION



TYPICAL PLAN

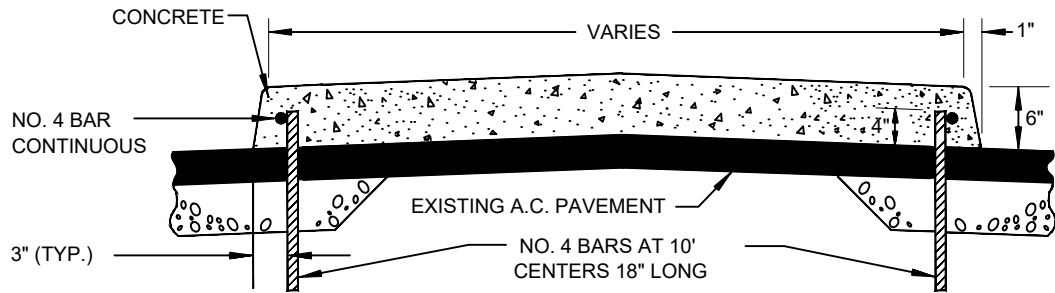
NOTES:

1. CONTINUOUS NO. 4 BAR REQUIRED IN NOSE OF MEDIAN ONLY.
2. 1" BATTER ON GUTTER FACE OPTIONAL.

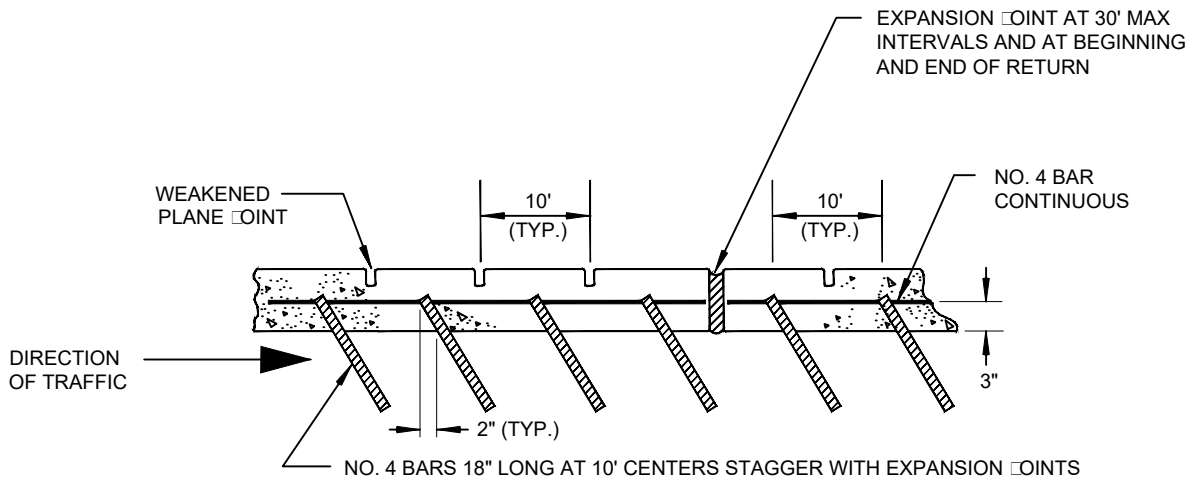
1/2" EXPANSION JOINT AT ALL COLD JOINTS, AT BEGINNING AND END OF RETURN AND AT 300' MAX. INTERVALS FOR EXTRUDED CURB AND 30' MAX. INTERVALS FOR FORMED CURB. FOR JOINT DETAIL SEE STANDARD DRAWING NUMBER 234

AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
302	AGGREGATE BASE COURSE	"A" AND "L" TYPE ISLAND CURB					
501	CONCRETE						
707	JOINT MATERIAL						
DATE 12-14-00		DWG. NO.		219			

1/2" RADIUS ROUNDED
EDGE ON ALL EXPOSED
CORNERS



SECTION



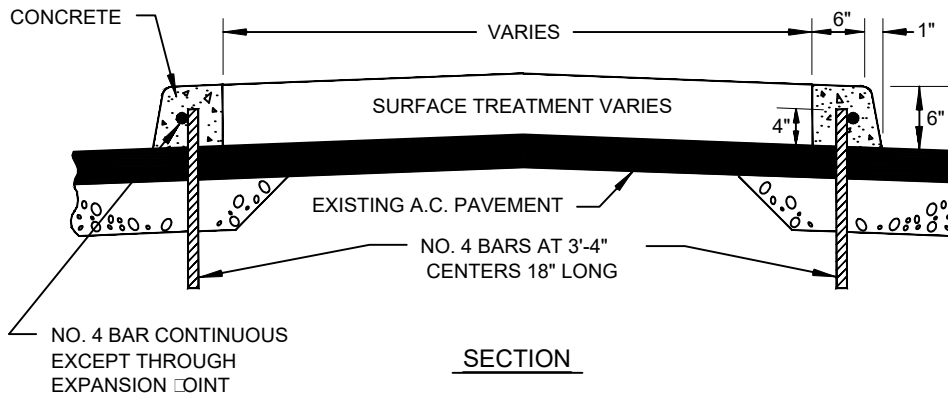
SIDE VIEW

NOTES:

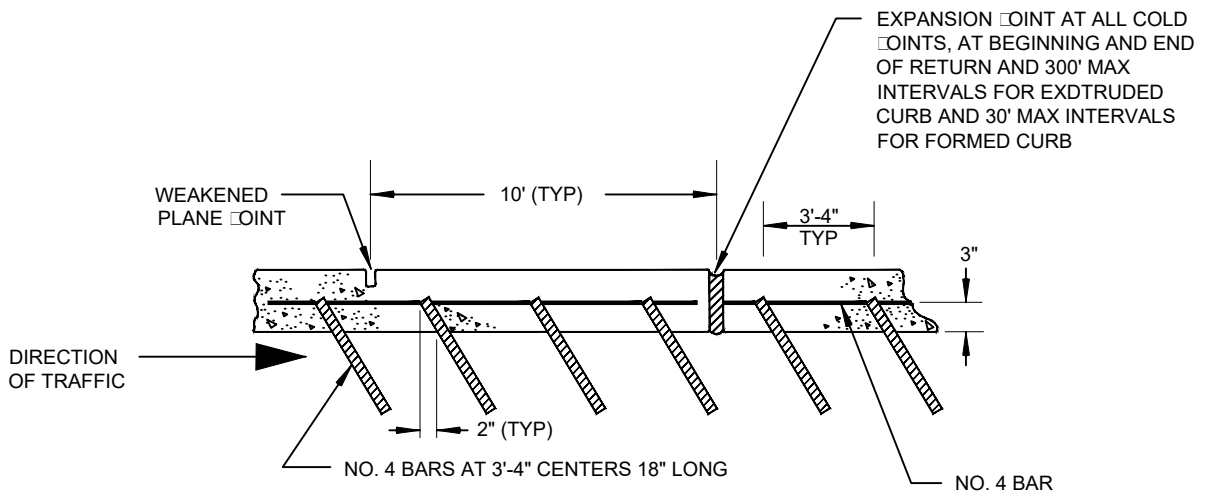
1. FOR EXPANSION JOINT AND WEAKENED PLANE JOINT DETAIL, SEE STANDARD DRAWING NO. 234.
2. WHEN APPROVED BY THE ENGINEER/ENTITY, STRUCTURAL EPOXY ADHESIVE MAY BE USED IN LIEU OF NUMBER 4 DOWEL BAR EXCEPT AT CURB NOSE AND WITHIN 2 FEET OF ANY POINT OF CURVATURE.

SPECIFICATION REFERENCE		AGENCY APPROVED						
501	CONCRETE	B						
505	REINFORCING STEEL	C						
707	JOINT MATERIAL	L						
		M						
		N						
		UNIFORM STANDARD DRAWINGS						
		CLARK COUNTY AREA						
		SUPPLEMENTAL DRAWING						
		TACK - ON ISLAND						
		DATE	01-13-05	DWG. NO.	220.1.S1			

1/2" RADIUS ROUNDED
EDGE ON ALL EXPOSED
CORNERS



SECTION

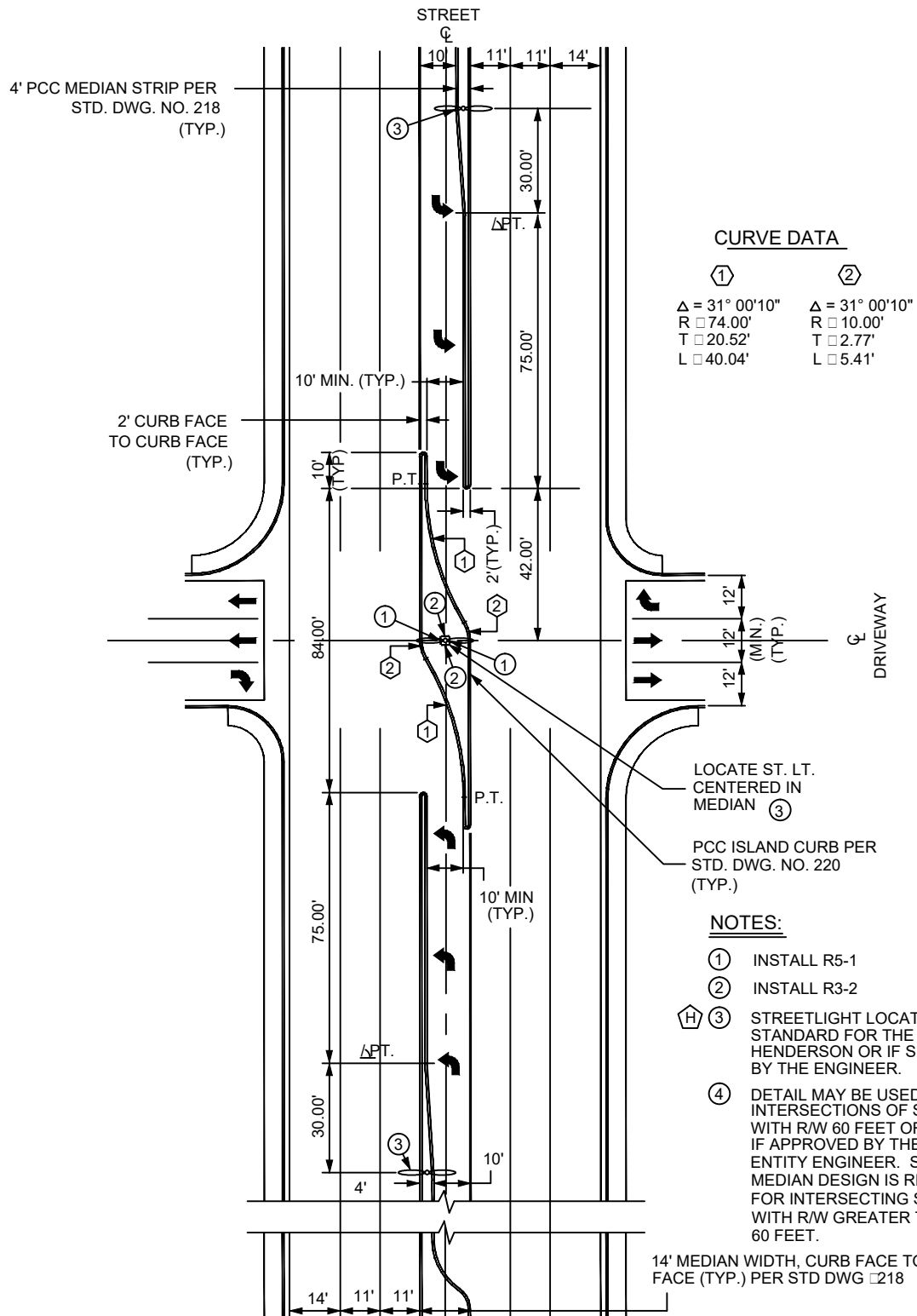


SIDE VIEW

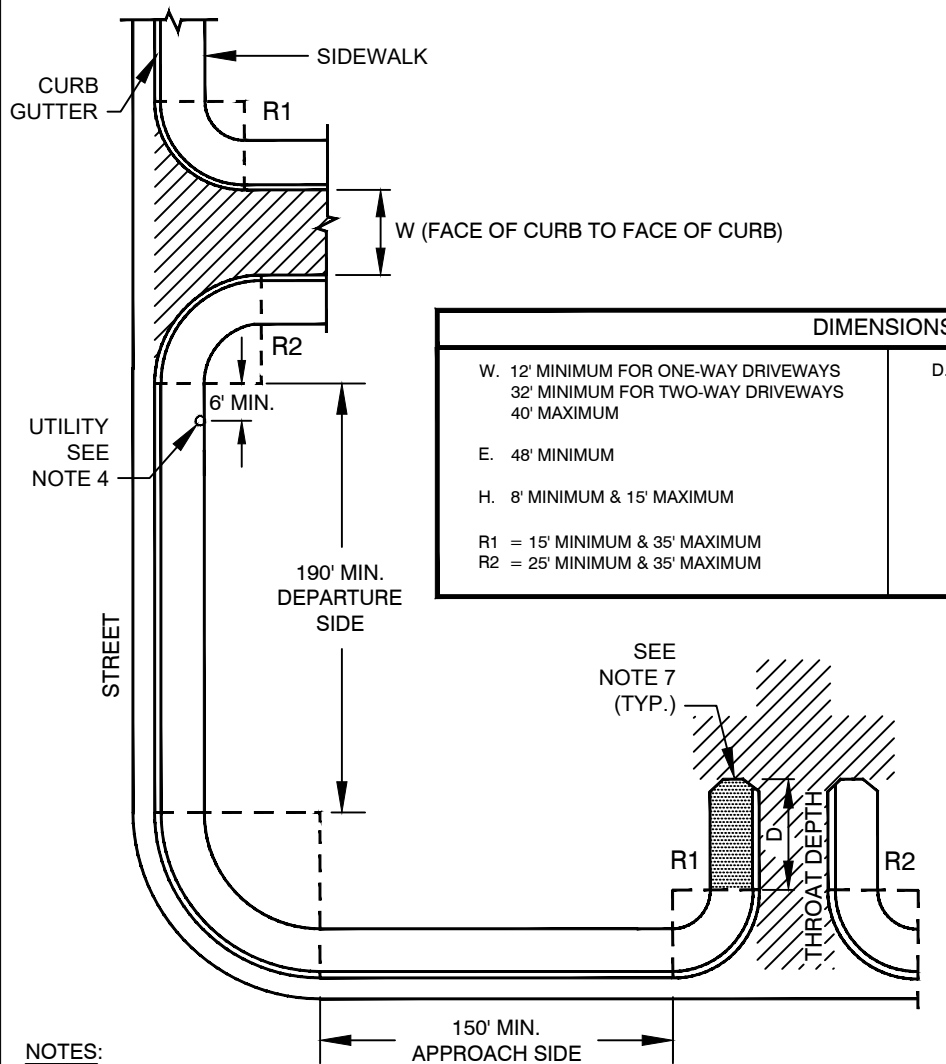
NOTES:

1. FOR EXPANSION JOINT AND WEAKENED PLANE JOINT DETAIL, SEE STANDARD DRAWING NO. 234.
2. WEAKENED PLANE JOINTS EVERY 10' STAGGER WITH NO. 4 BARS.
3. ALL REINFORCING STEEL SHALL HAVE 2" CLEAR COVER UNLESS OTHERWISE SHOWN.
4. WHEN APPROVED BY THE ENGINEER/ENTITY, STRUCTURAL EPOXY ADHESIVE MAY BE USED IN LIEU OF NUMBER 4 DOWEL BAR EXCEPT AT CURB NOSE AND WITHIN 2 FEET OF ANY POINT OF CURVATURE.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
501	CONCRETE	TACK - ON ISLAND CURB											
505	REINFORCING STEEL												
707	JOINT MATERIAL												
		DATE 01-13-05		DWG. NO.		220							



SPECIFICATION REFERENCE		AGENCY APPROVED					
		B	C	H	L	M	N
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		CHANNELIZED MEDIAN DETAIL FOR COMMERCIAL DRIVEWAYS OR INTERSECTING STREETS					
		DATE	6-9-11	DWG. NO.	221		



NOTES:

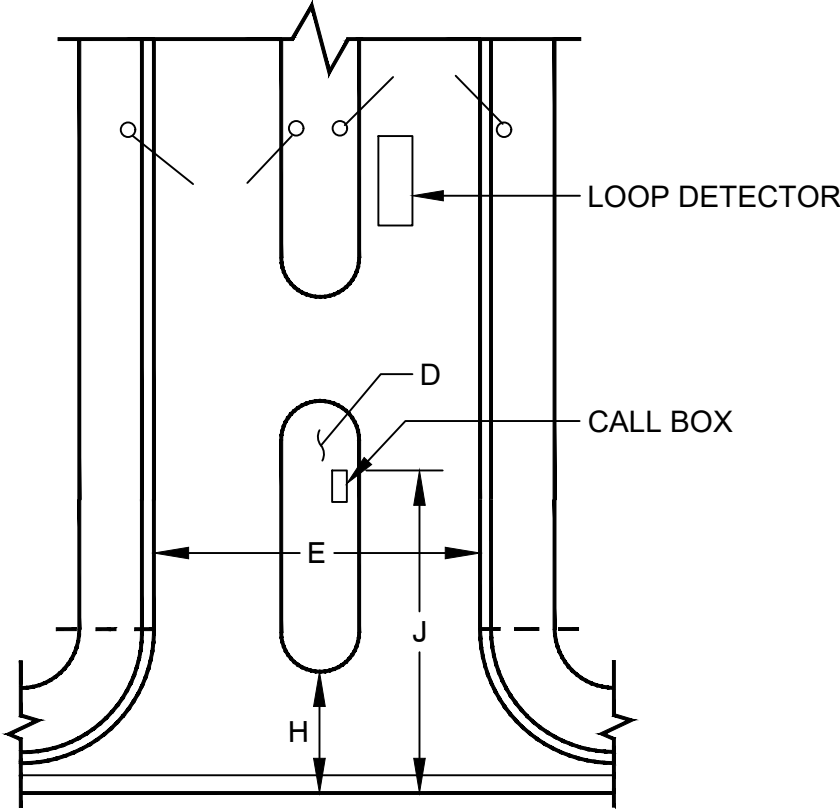
1. COMMERCIAL AND MULTI-FAMILY DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DRAWING NUMBERS 224, 225, 228, 235 AND 235.1.
2. LOCAL ORDINANCES AND POLICIES MAY APPLY AND SHALL HAVE PRECEDENCE. SEE NDOT ACCESS MANAGEMENT SYSTEM AND STANDARDS FOR STATE ROADWAYS.
3. THE TOTAL WIDTH "W" OF DRIVEWAY CURB OPENINGS SHALL NOT EXCEED 65% OF FRONT FOOTAGE.
4. NO DRIVEWAY SHALL BE LOCATED WITHIN 6 FEET OF A LIGHT POLE (UNLESS APPROVED BY THE ENTITY TRAFFIC ENGINEER), FIRE HYDRANT, MAIL BOX, ABOVE-GROUND ELECTRICAL TRANSFER BOX, OR BLOCK WALL HIGHER THAN 2 FEET.
5. THE CENTERLINES OF THE DRIVEWAYS ON OPPOSITE SIDES OF THE STREET AT A MEDIAN OPENING SHOULD BE WITHIN 10' FROM EACH OTHER AT THE MEDIAN OPENING.
6. GEOMETRICS APPLY TO NEW CONSTRUCTION ONLY, AND EXCEPTIONS MAY BE GRANTED BY THE APPROVAL OF THE AGENCY TRAFFIC ENGINEER BASED ON SITE CONSTRAINTS.
7. SIDEWALKS SHALL BE PROVIDED ADJACENT TO DRIVEWAYS TO THE P.C. OF THE ONSITE CURB RETURN, MINIMUM, OR AT AN ALTERNATE LOCATION.
8. WHEN A PROPERTY LINE FALLS IN A MEDIAN OPENING A JOINT DRIVEWAY AGREEMENT SHALL BE REQUIRED OR NO DRIVEWAY WILL BE ALLOWED.
9. WHERE A PEDESTRIAN ACCESS ROUTE CROSSES A DRIVEWAY, THE PEDESTRIAN ACCESS ROUTE ACROSS THE DRIVEWAY SHALL HAVE A CROSS SLOPE NO GREATER THAN 2%, REGARDLESS OF CONSTRUCTION TOLERANCES.

AGENCY APPROVED	B	C	H	L	M	N	R

SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA	
		COMMERCIAL AND MULTI-FAMILY DRIVEWAY GEOMETRICS	
DATE	05-21-20	DWG. NO.	222 .1
		SHEET	1 OF 2

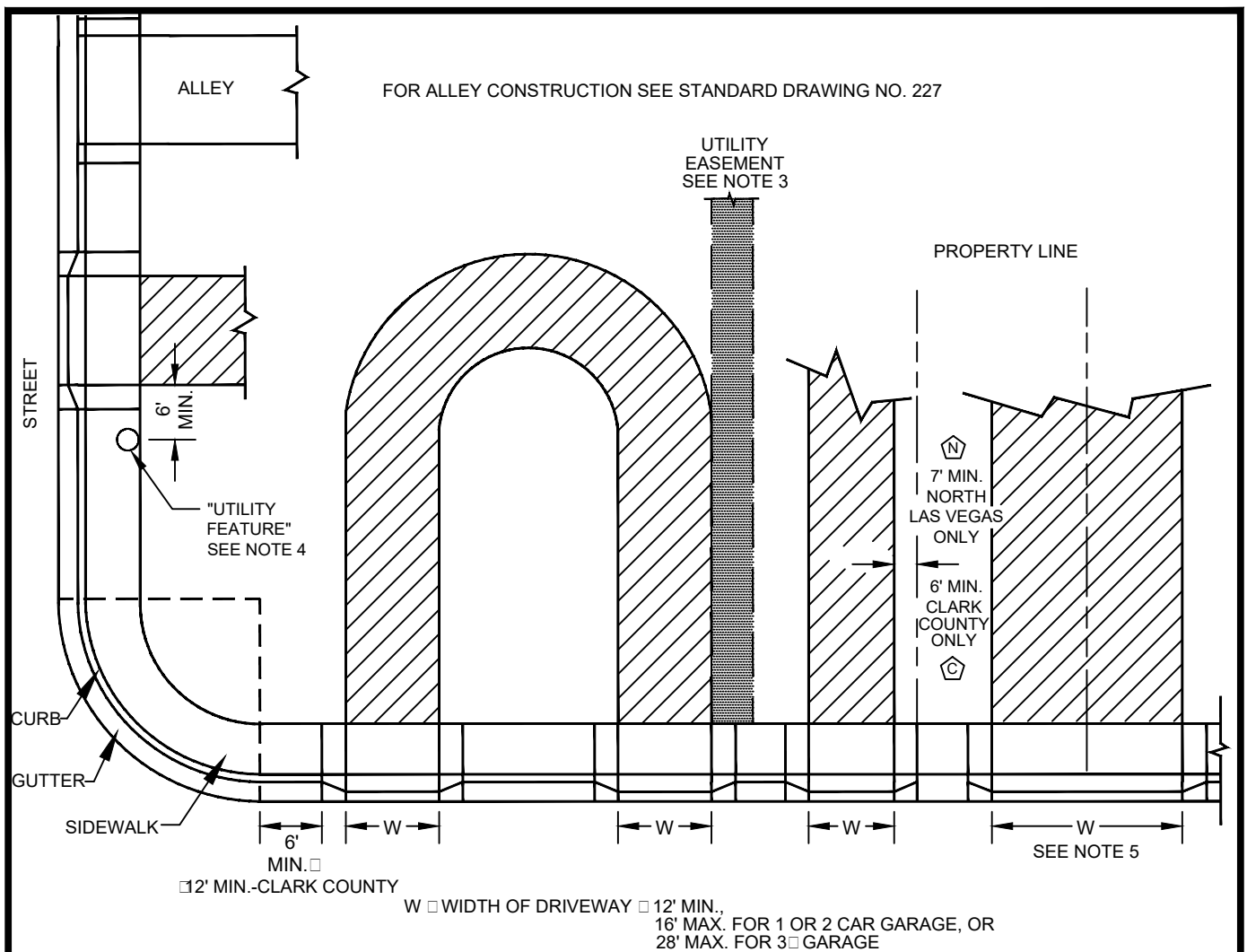
DIMENSIONS
□ THROAT DEPTH FOR SECURITY GATE 50' MINIMUM FOR 1 TO 49 HOMES OR APT. UNITS TO VISITOR CALL BOX. 100' MINIMUM FOR 50 TO 100 HOMES OR APT. UNITS TO VISITOR CALL BOX. GREATER THAN 100 HOMES OR APT. UNITS REQUIRE TRAFFIC STUDY

DIMENSIONS FOR SECURITY GATE CONTROLLED DRIVEWAY DETAIL
D. ISLAND : LENGTH-20' MINIMUM WIDTH- 4' MINIMUM G. 15' MINIMUM E. 48' MINIMUM H. 8' MINIMUM □ 15' MAXIMUM



DETAIL FOR SECURITY GATE
CONTROLLED DRIVEWAYS

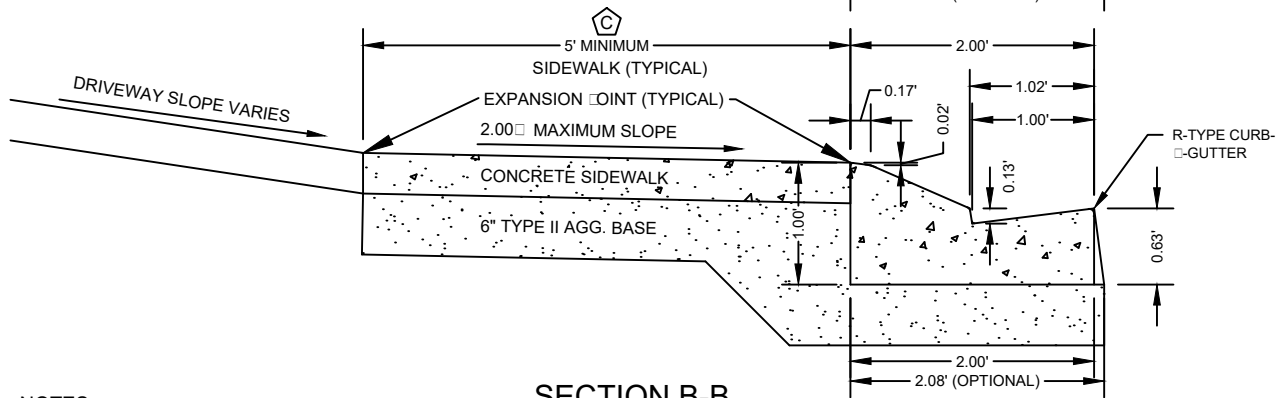
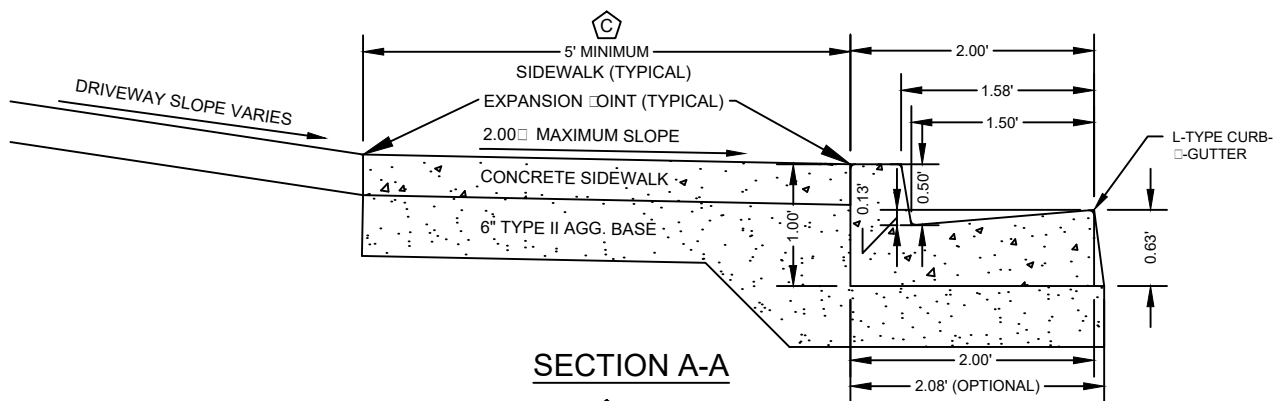
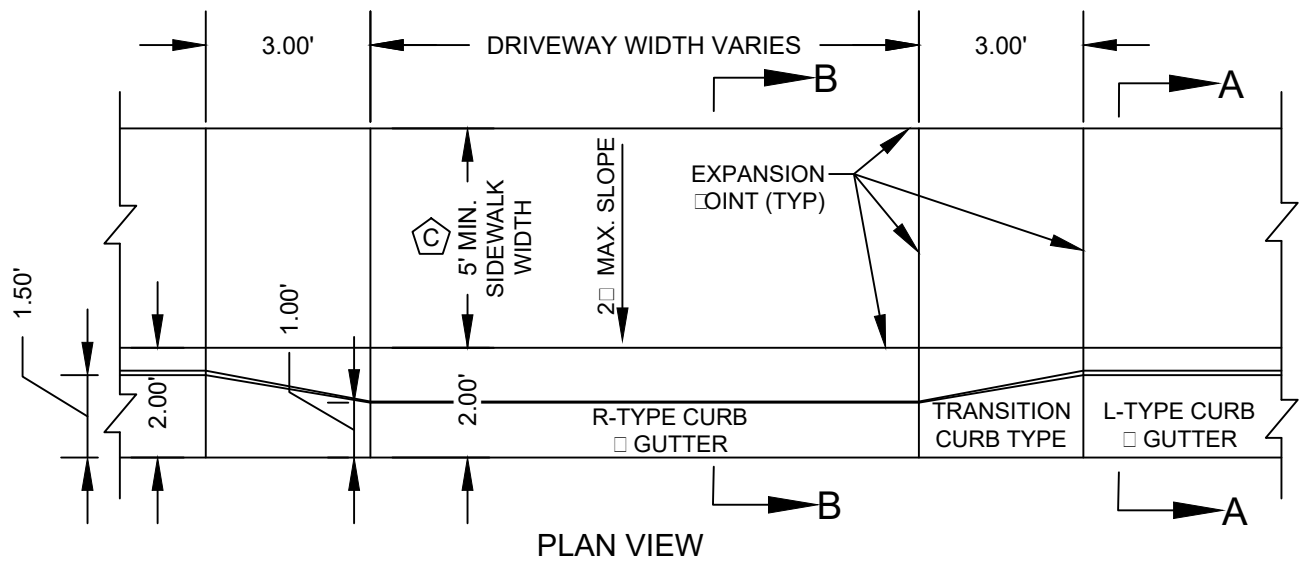
		AGENCY APPROVED	B	C	H	L	M	N	R
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
		COMMERCIAL AND MULTI-FAMILY SECURITY GATE GEOMETRICS							
		DATE 05-21-20	DWG. NO. 222.1				SHEET 2 OF 2		



NOTES

1. ALL RESIDENTIAL PROPERTIES MAY HAVE ONLY ONE CURB CUT EXCEPT CIRCULAR DRIVEWAYS AS SHOWN.
2. LOCAL ORDINANCES MAY APPLY AND SHALL HAVE PREFERENCE.
3. NO DRIVEWAY SHALL BE LOCATED WHOLLY OR PARTIALLY, ON OR OVER A UTILITY EASEMENT WHICH RUNS PERPENDICULAR TO THE CURB LINE.
4. NO DRIVEWAY SHALL BE LOCATED WITHIN 6 FEET OF A LIGHT POLE (UNLESS ACCEPTED BY THE ENTITY TRAFFIC ENGINEER), FIRE HYDRANT, MAIL BOX, ABOVE-GROUND ELECTRICAL TRANSFER BOX, BLOCK WALL HIGHER THAN 2 FEET, OR THE CURB RETURN AT A STREET INTERSECTION OR ALLEY.
5. COMMON DRIVEWAY CONSTRUCTION MAY BE PERMITTED AT ANY TWO RESIDENTIAL PROPERTIES OF 60 FEET IN WIDTH OR LESS. THE WIDTH OF THE JOINT DRIVEWAY SHALL BE A MAXIMUM OF 24 FEET. A JOINT DRIVEWAY AGREEMENT SHALL BE REQUIRED. (EXCEPT CLARK COUNTY)
6. GEOMETRICS APPLY TO NEW CONSTRUCTION ONLY, AND MAY VARY IN EXISTING SUBDIVISIONS SUBJECT TO APPROVAL OF THE ENGINEER.
7. MULTI-FAMILY RESIDENTIAL AND ALL NON-RESIDENTIAL DRIVEWAYS SHALL CONFORM TO THE COMMERCIAL DRIVEWAY STANDARDS.
8. ALL DRIVEWAY LOCATIONS SHALL BE SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEER.
9. FOR CURB DEPRESSION AND DRIVEWAY APRON DETAIL, SEE STD. DWG. NO. 223.

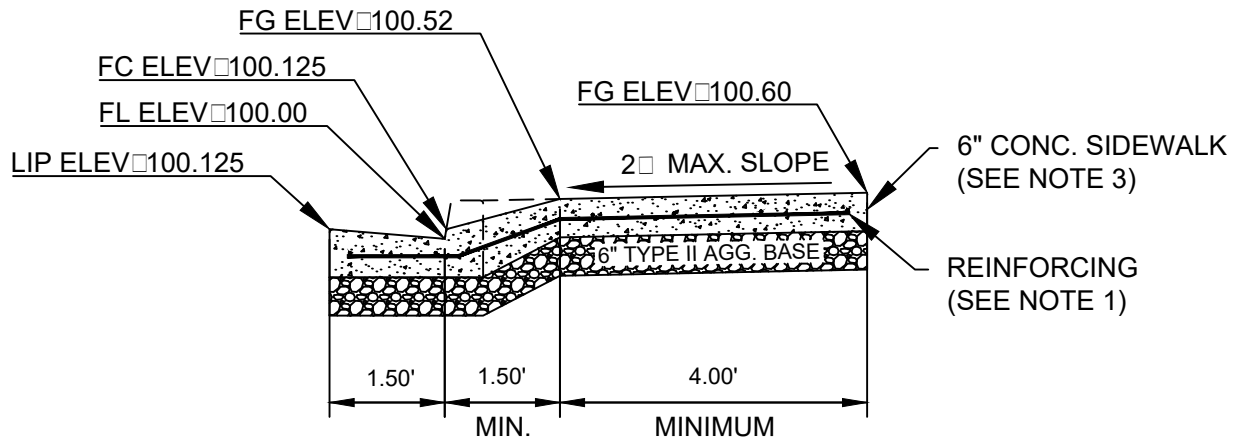
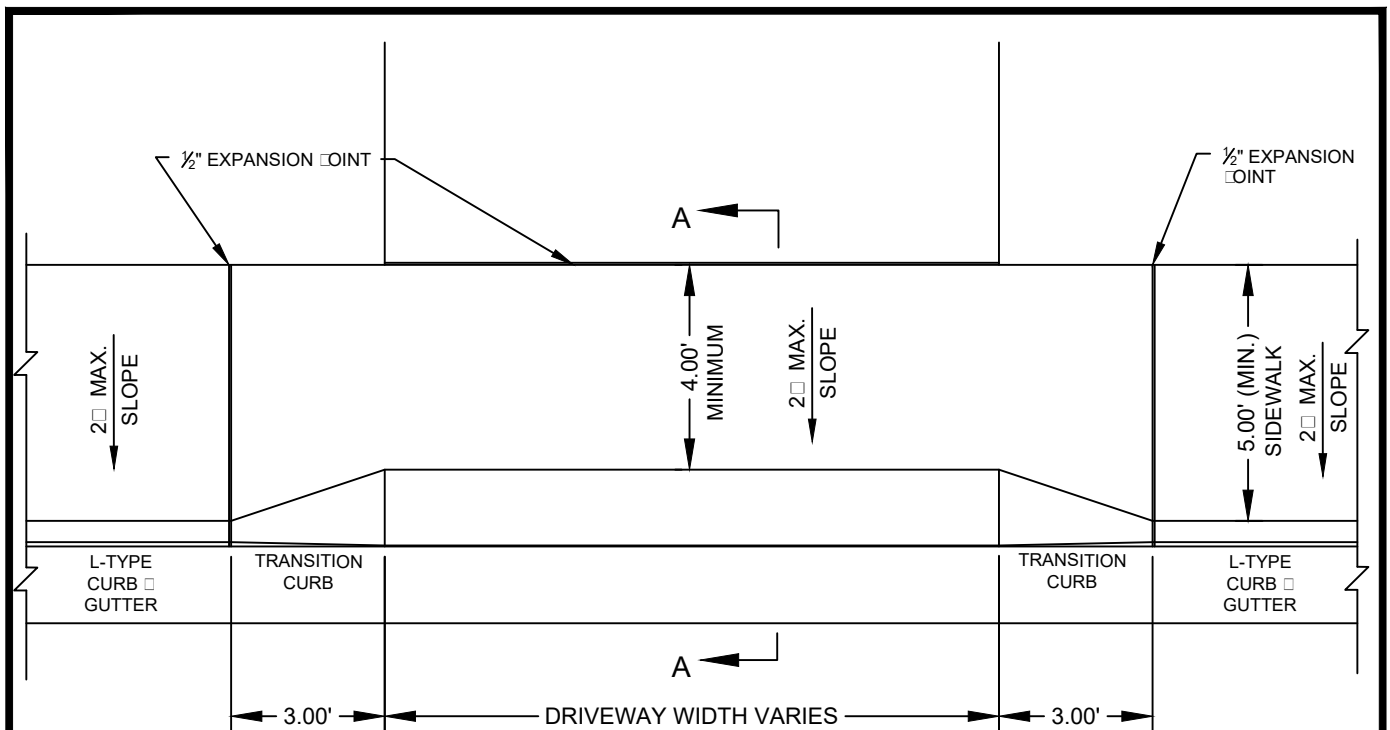
AGENCY APPROVED		B	C	H	L	M	N	R
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
		RESIDENTIAL DRIVEWAY GEOMETRICS						
DATE 05-21-20		DWG. NO. 222						



NOTES:

1. WHEN CONSTRUCTING DRIVEWAY WHERE CURB AND GUTTER EXISTS, COMPLETELY REMOVE INTERFERING PORTIONS OF EXISTING CURB AND GUTTER. DRIVEWAYS MAY BE MONOLITHIC TO A.C. LINE.
2. WEAKENED PLANE JOINTS SHALL BE UNIFORMLY PLACED BETWEEN 5' AND 7' INTERVALS, SEE STANDARD DRAWING 234.
3. WHERE A PEDESTRIAN ACCESS ROUTE CROSSES A DRIVEWAY, THE PEDESTRIAN ACCESS ROUTE ACROSS THE DRIVEWAY SHALL HAVE A CROSS SLOPE NO GREATER THAN 2%, REGARDLESS OF CONSTRUCTION TOLERANCES.
4. MINIMUM SIDEWALK WIDTH OF 4' ALLOWED IN CLARK COUNTY ONLY. WHERE THE CLEAR WIDTH OF A PEDESTRIAN ACCESS ROUTE IS LESS THAN 5', PASSING SPACES OF 5' MINIMUM BY 5' MINIMUM SHALL BE PROVIDED AT INTERVALS OF 200' MAXIMUM.

AGENCY APPROVED									
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
302	AGGREGATE BASE	RESIDENTIAL DRIVEWAY							
501	CONCRETE								
502	CONCRETE STRUCTURES								
707	JOINT MATERIAL								
DATE 12-10-20		DWG. NO. 223							



NOTES

NOTE: ELEVATIONS SHOWN ARE TYPICAL

1. NO. 4 BARS AT 16" O.C. BOTH WAYS EXTENDING INTO GUTTER. NO. 4 BARS SHALL BE PLACED 3" ABOVE BOTTOM OF CONCRETE SUPPORTED BY NON-FERROUS CHAIRS APPROVED BY THE ENGINEER.
2. WHEN CONSTRUCTING DRIVEWAY WHERE CURB AND GUTTER EXISTS, COMPLETELY REMOVE INTERFERING PORTIONS OF EXISTING CURB AND GUTTER. DRIVEWAY SHALL BE MONOLITHIC TO A.C. LINE.
3. DRIVEWAY THICKNESS FOR INDUSTRIAL USE SHALL BE 8" MIN.
4. WEAKENED PLANE JOINTS SHALL BE EQUALLY SPACED AT 15' MAX. INTERVALS, SEE STANDARD DRAWING NO. 234.
5. NO UTILITY BOXES AND COVERS ADJACENT TO R-TYPE CURB SHALL BE ALLOWED AT DRIVEWAY LOCATIONS.
6. PEDESTRIAN ACCESS ROUTE SHALL HAVE A CROSS SLOPE NO GREATER THAN 2", REGARDLESS OF CONSTRUCTION TOLERANCES.

AGENCY APPROVED	B	C	H	L	M	N	R

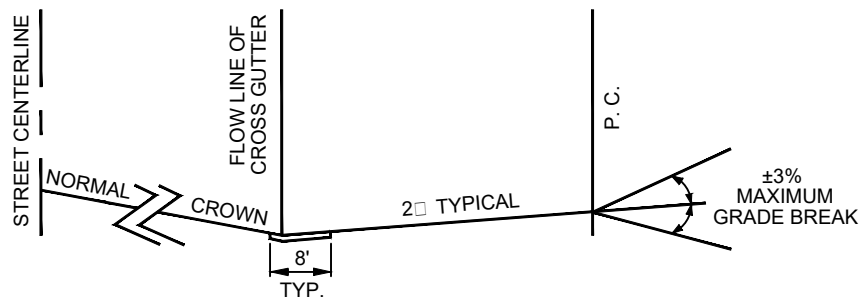
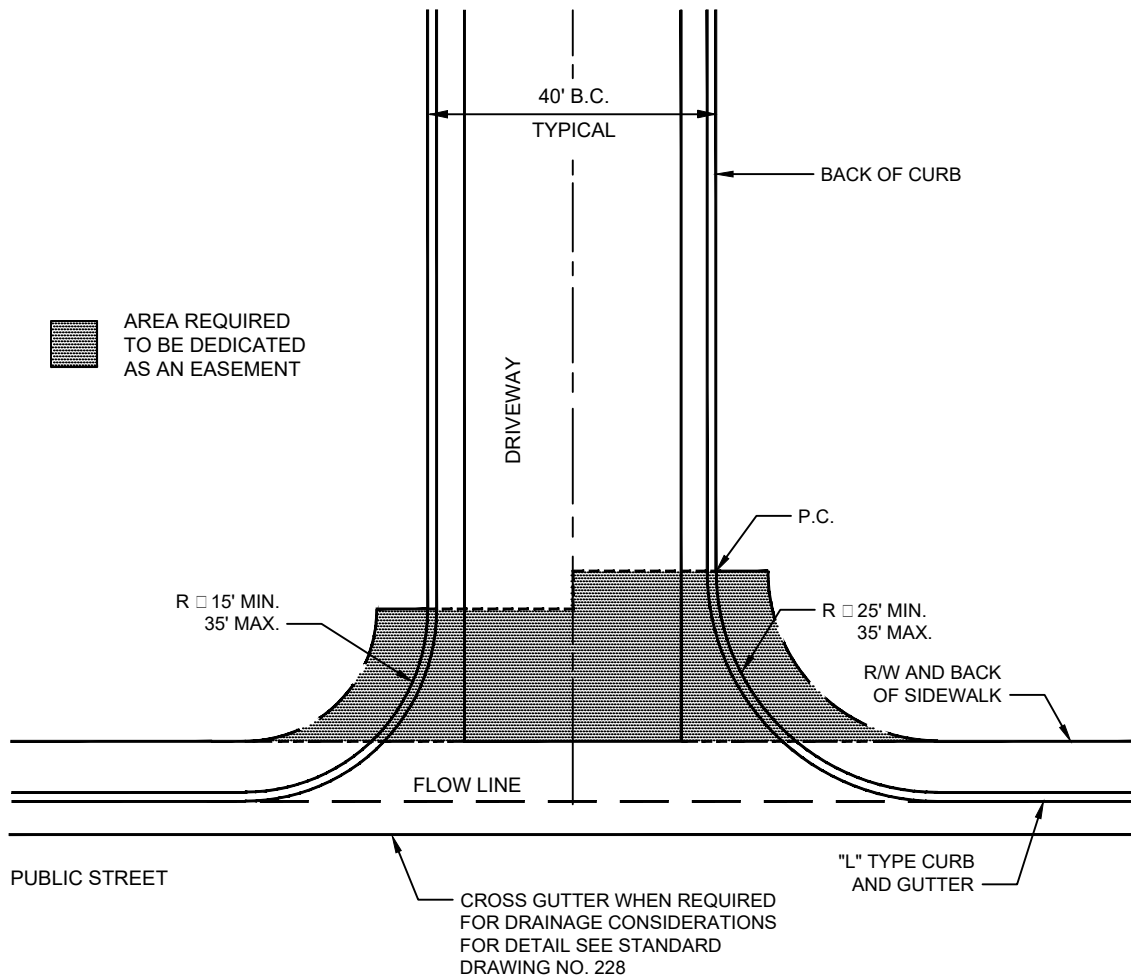
SPECIFICATION REFERENCE

302	AGGREGATE BASE
501	CONCRETE
502	CONCRETE STRUCTURES
505	REINFORCING STEEL
707	JOINT MATERIAL
.	

UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA

COMMERCIAL AND INDUSTRIAL DRIVEWAY (OPTION A)

DATE 05-21-20	DWG. NO. 224

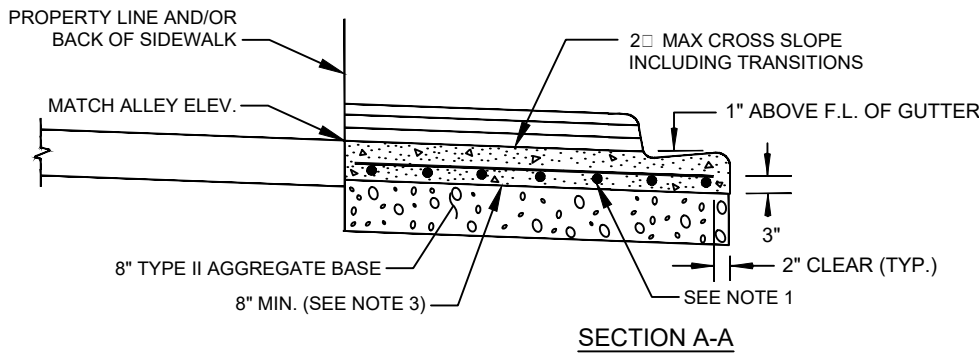
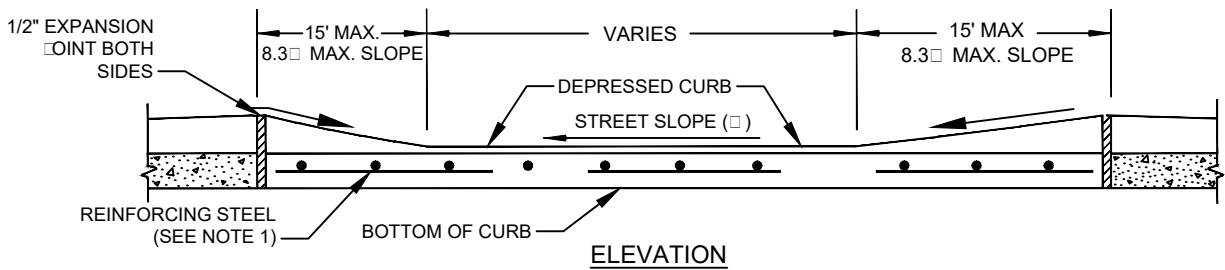
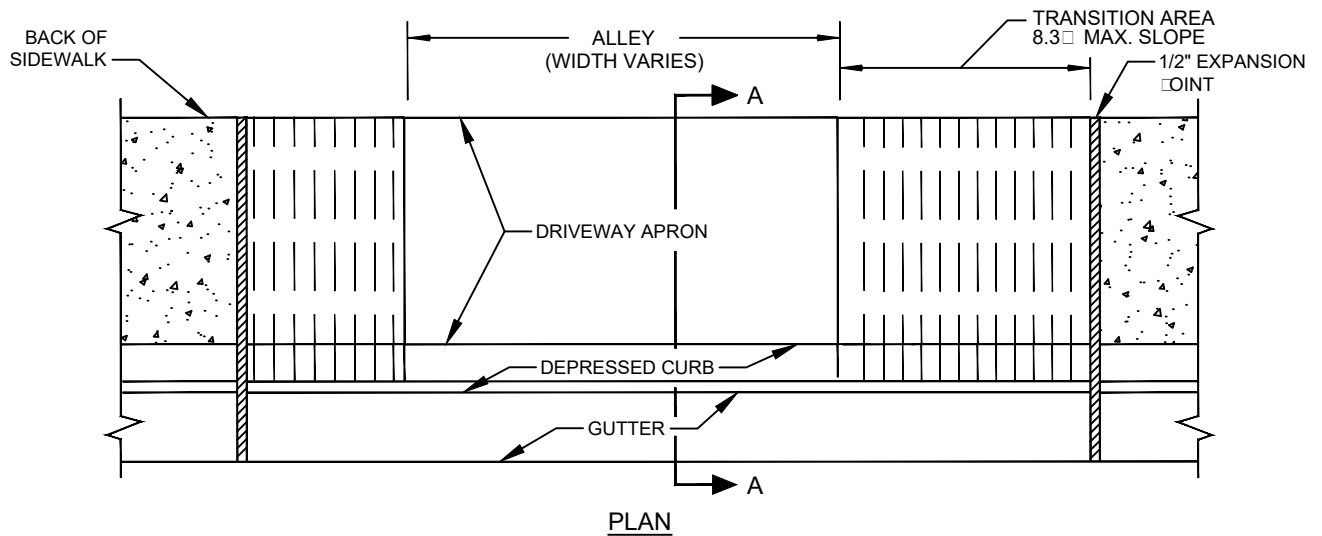


TYPICAL CROSS SECTION

NOTES

1. SEPARATION OF PEDESTRIAN AND VEHICLE TRAFFIC MUST BE MAINTAINED ON SITE.
2. FOR GRADE CHANGES GREATER THAN 3', VERTICAL CURVES OF AT LEAST 10 FEET MUST BE USED.
3. CURB RAMPS SHALL BE CONSTRUCTED IN THE CURB RETURN IN ACCORDANCE WITH STANDARD DRAWING NO. 235.
4. WHERE A PEDESTRIAN ACCESS ROUTE CROSSES A DRIVEWAY, THE PEDESTRIAN ACCESS ROUTE ACROSS THE DRIVEWAY SHALL HAVE A CROSS SLOPE NO GREATER THAN 2', REGARDLESS OF CONSTRUCTION TOLERANCES.

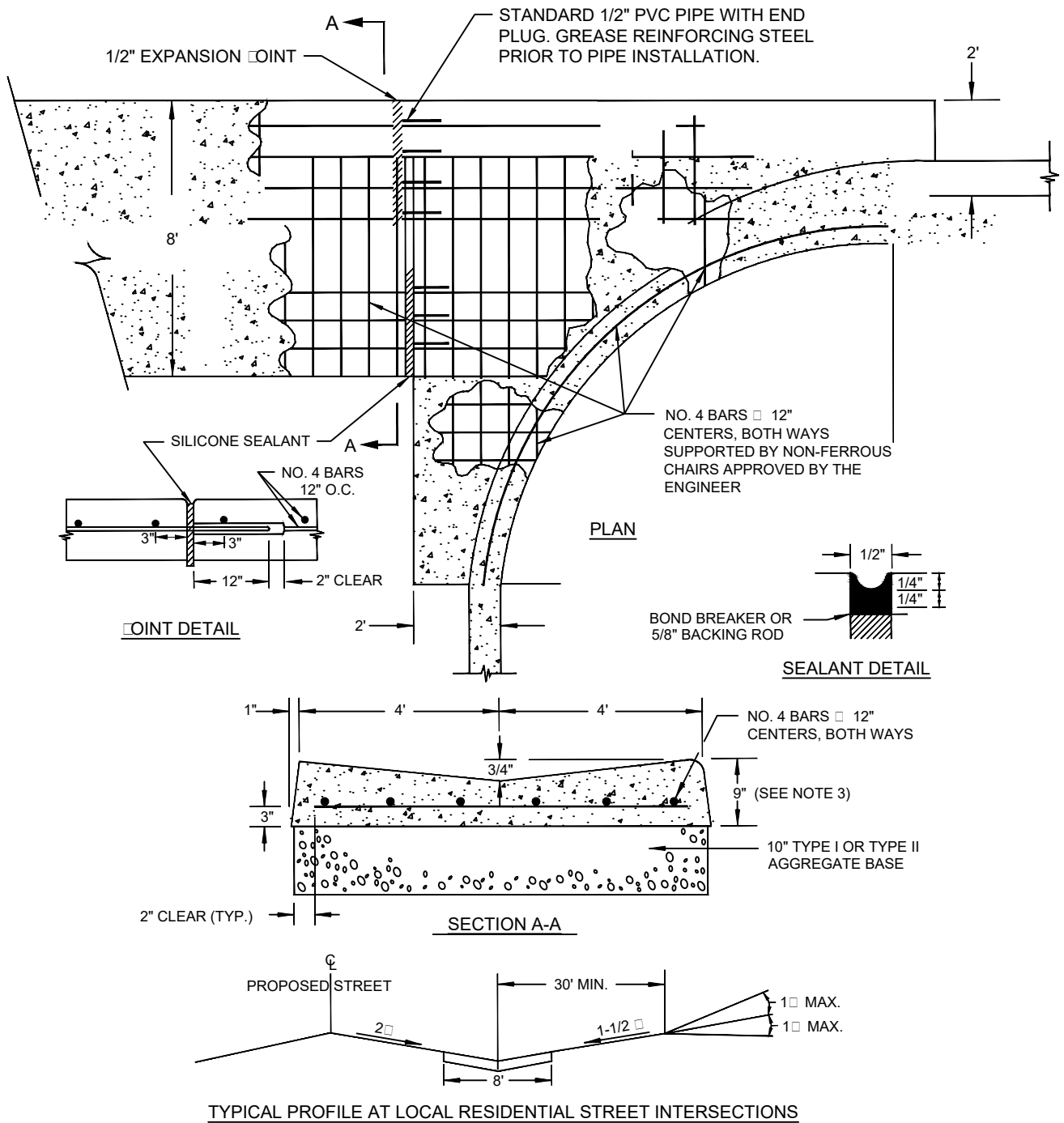
SPECIFICATION REFERENCE		AGENCY APPROVED							
		B C H L M N R							
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
		COMMERCIAL AND INDUSTRIAL DRIVEWAY (OPTION B)							
		DATE 05-21-20 DWG. NO. 225							



NOTES

1. NO. 4 BARS AT 16" O.C. BOTH WAYS CONTINUOUS THROUGH GUTTER. NO. 4 BARS SHALL BE PLACED 3" ABOVE BOTTOM OF CONCRETE.
2. WHEN CONSTRUCTING DRIVEWAY WHERE CURB AND GUTTER EXISTS, COMPLETELY REMOVE INTERFERING PORTIONS OF EXISTING CURB AND GUTTER. DRIVEWAY SHALL BE MONOLITHIC TO A.C. LINE.
3. DRIVEWAY THICKNESS SHALL BE 8" MIN.
4. PEDESTRIAN ACCESS ROUTES SHALL HAVE A CROSS SLOPE NO GREATER THAN 2%, REGARDLESS OF CONSTRUCTION TOLERANCES.
5. THE RUNNING SLOPE AND LENGTH OF TRANSITION WITHIN THE PEDESTRIAN ACCESS ROUTE SHALL BE MAXIMUM DIMENSIONS, REGARDLESS OF CONSTRUCTION TOLERANCES.

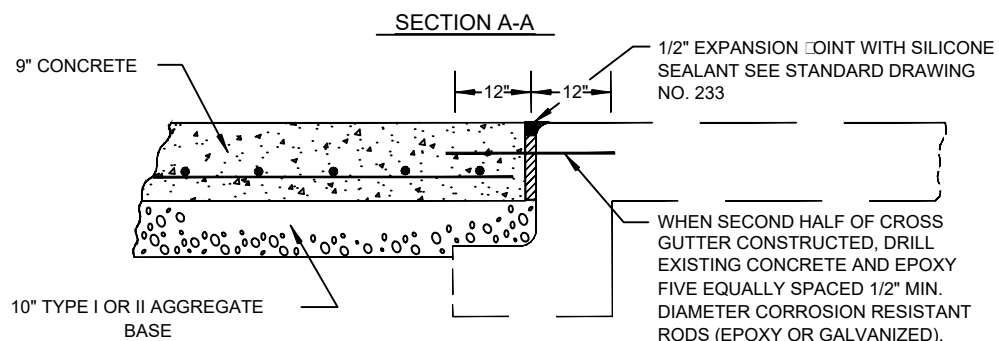
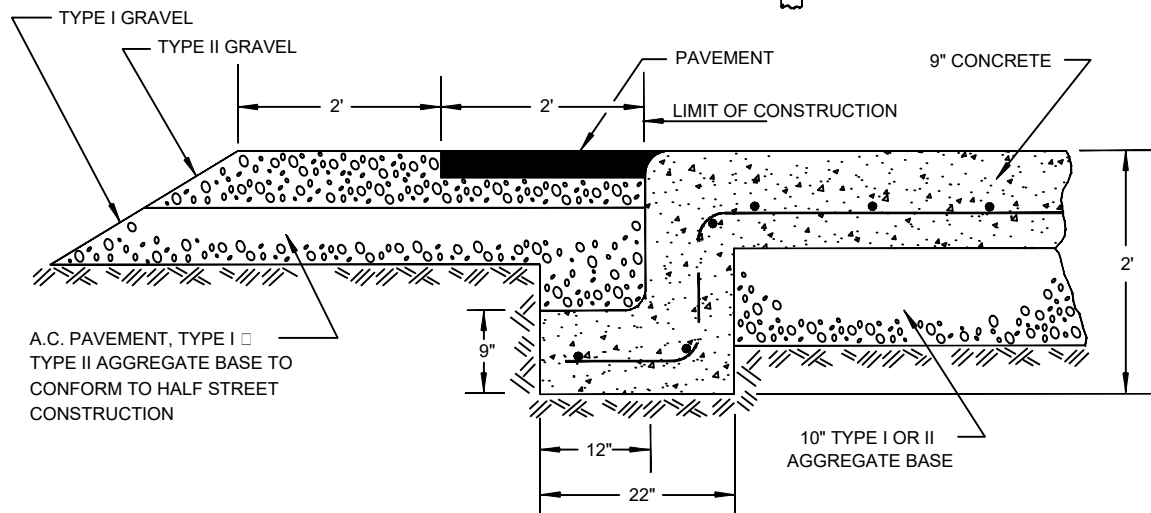
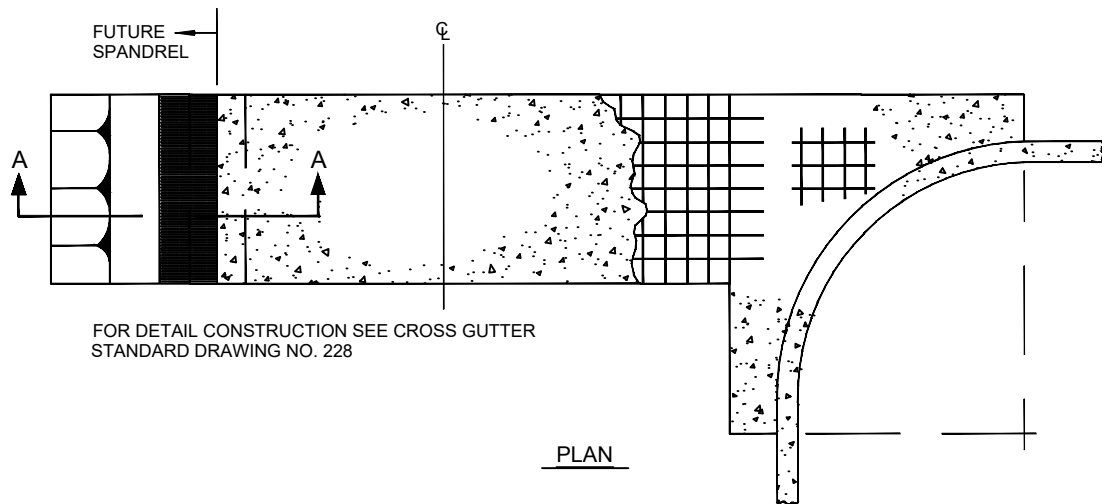
		AGENCY APPROVED							B	C	H	L		N	R
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA													
		SUPPLEMENTAL DRAWING													
		DEPRESSED ALLEY DRIVEWAY													
		DATE 05-21-20		DWG. NO. 227.S1											



NOTES:

1. FINISHED ASPHALT CONCRETE SURFACE TO BE FLUSH WITH CROSS GUTTER LIP.
2. CONSTRUCTION OF CROSS GUTTER IS NOT ALLOWED ACROSS MAJOR COLLECTOR OR ARTERIAL STREETS.
3. ADJACENT SPANDREL SHALL BE 9" THICK P.C.C.

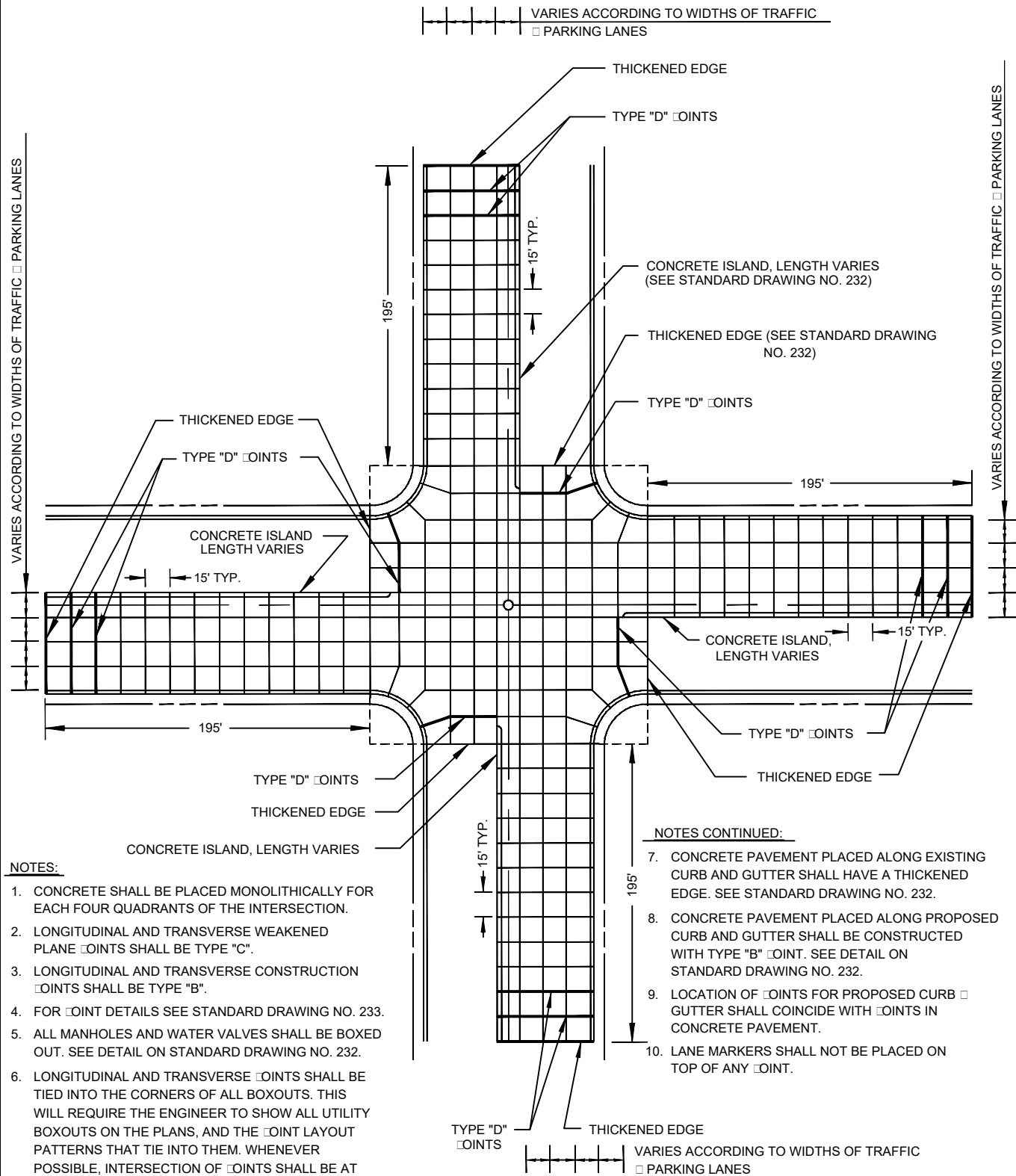
AGENCY APPROVED		B	C	H	L	M	N	R
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
302	AGGREGATE BASE	CROSS GUTTER						
501	CONCRETE							
502	CONCRETE STRUCTURES							
505	REINFORCING STEEL							
707	EXPANSION JOINT MATERIAL							
TT-S-00153A CLASS A SEALANT		DATE 08-08-19		DWG. NO. 228				



DETAIL FOR FUTURE CONSTRUCTION

Effective 12/10/2020 to 06/09/2021

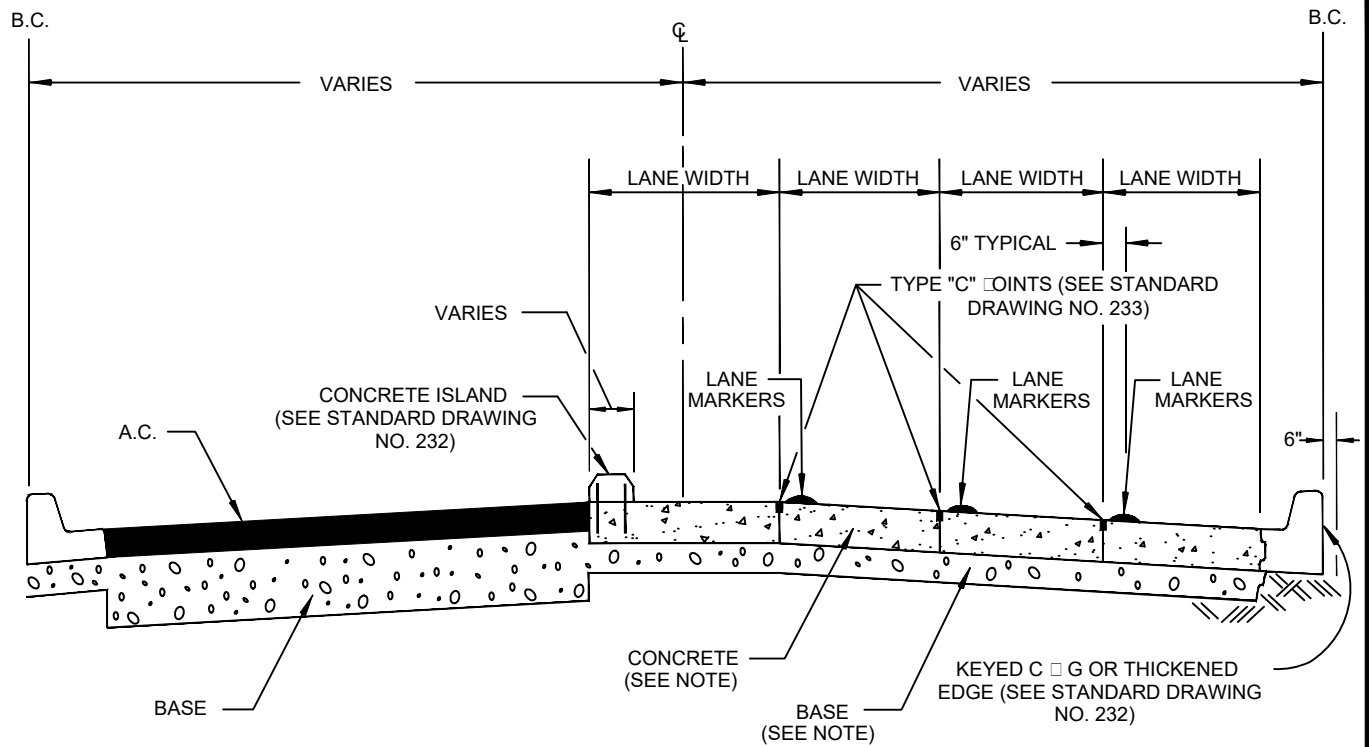
		AGENCY APPROVED					
		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS					
		CLARK COUNTY AREA					
302	AGGREGATE BASE	HALF STREET CROSS GUTTER					
501	CONCRETE						
502	CONCRETE STRUCTURES						
505	REINFORCING STEEL						
707	EXPANSION JOINT MATERIAL						
TT-S-00153A CLASS A SEALANT		DATE	DWG. NO.	229			



NOTES:

- CONCRETE SHALL BE PLACED MONOLITHICALLY FOR EACH FOUR QUADRANTS OF THE INTERSECTION.
- LONGITUDINAL AND TRANSVERSE WEAKENED PLANE JOINTS SHALL BE TYPE "C".
- LONGITUDINAL AND TRANSVERSE CONSTRUCTION JOINTS SHALL BE TYPE "B".
- FOR JOINT DETAILS SEE STANDARD DRAWING NO. 233.
- ALL MANHOLES AND WATER VALVES SHALL BE BOXED OUT. SEE DETAIL ON STANDARD DRAWING NO. 232.
- LONGITUDINAL AND TRANSVERSE JOINTS SHALL BE TIED INTO THE CORNERS OF ALL BOXOUTS. THIS WILL REQUIRE THE ENGINEER TO SHOW ALL UTILITY BOXOUTS ON THE PLANS, AND THE JOINT LAYOUT PATTERNS THAT TIE INTO THEM. WHENEVER POSSIBLE, INTERSECTION OF JOINTS SHALL BE AT 90°, BUT NOT LESS THAN 60° OR GREATER THAN 140°.

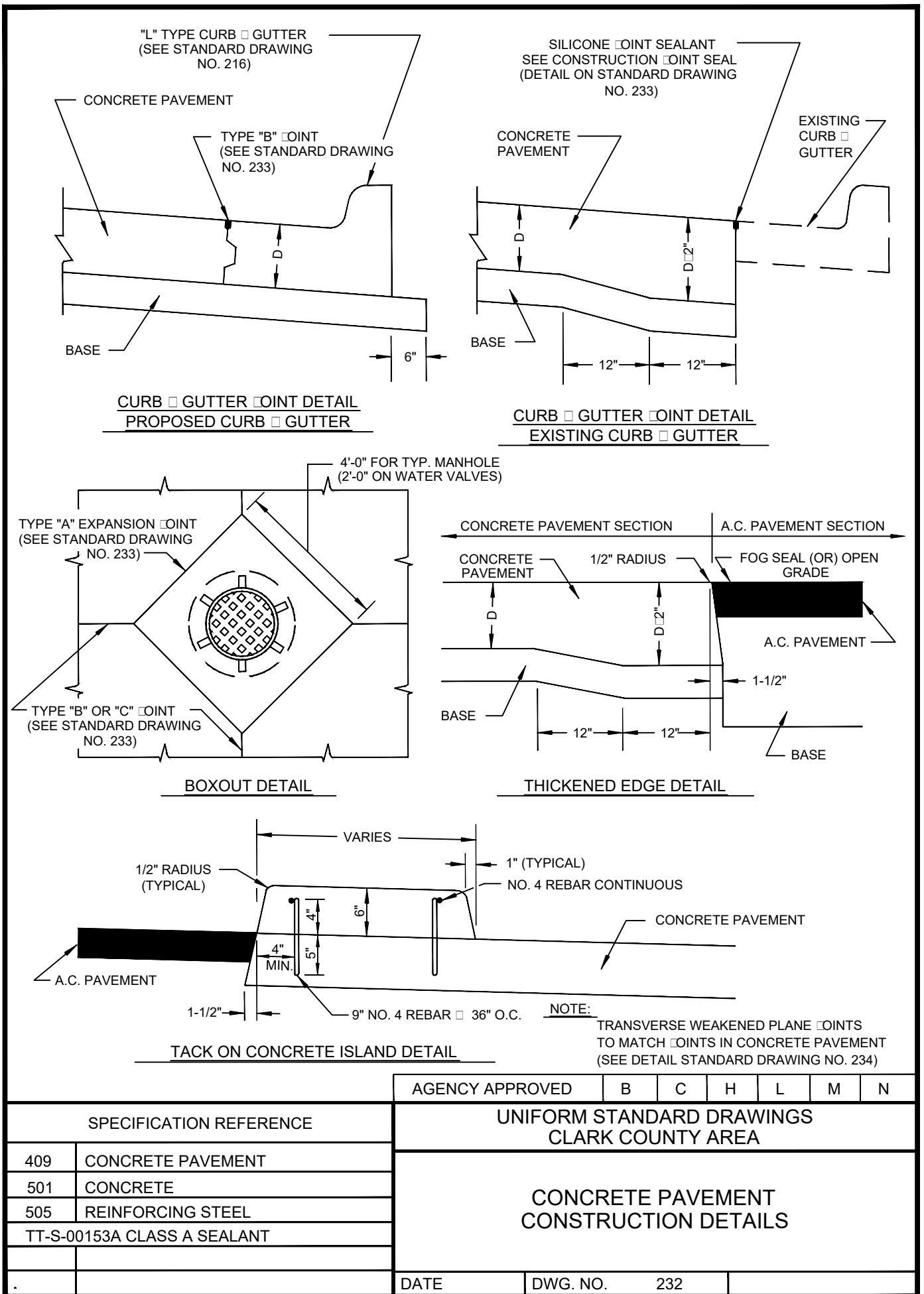
SPECIFICATION REFERENCE		AGENCY APPROVED					
409	CONCRETE PAVEMENT	B	C	H	L	M	N
501	CONCRETE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		CONCRETE PAVEMENT INTERSECTION TYPICAL LAYOUT					
		DATE	DWG. NO.	230			

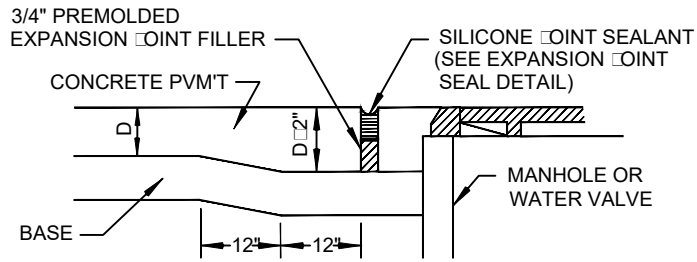


NOTE:

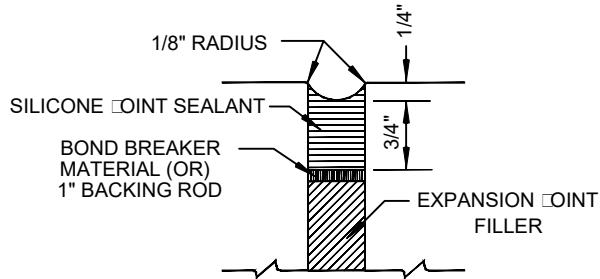
CONCRETE AND BASE THICKNESS TO BE DETERMINED BY ENGINEERING ANALYSIS BASED ON TRAFFIC CONDITIONS, SUBGRADE STRENGTH, QUALITY OF BASE, AND FLEXURAL STRENGTH OF CONCRETE.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
302	AGGREGATE BASE	CONCRETE PAVEMENT TYPICAL ROADWAY SECTION											
409	CONCRETE PAVEMENT												
501	CONCRETE												
633	PAVEMENT MARKERS												
707	JOINT MATERIAL												
		DATE		DWG. NO.		231							

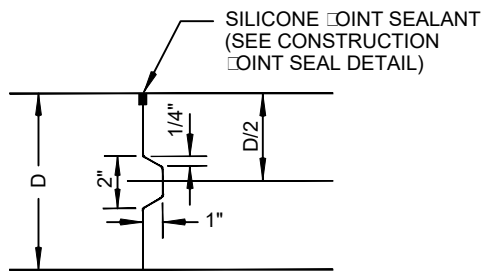




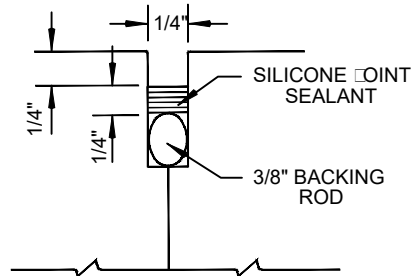
**TYPE "A" EXPANSION JOINT DETAIL
BOXOUT**



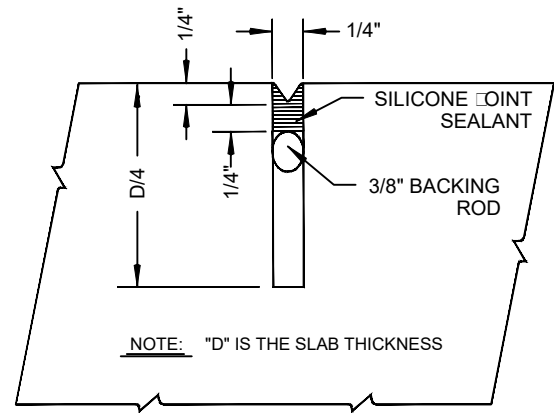
EXPANSION JOINT SEAL DETAIL



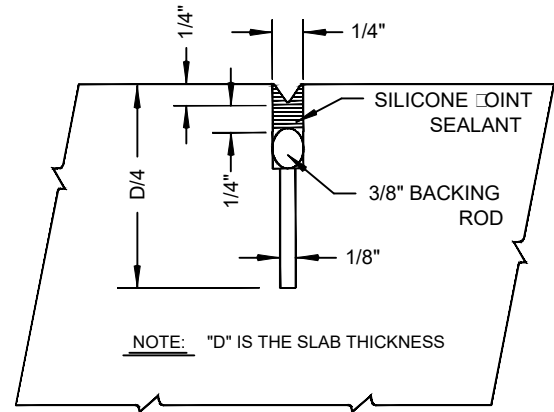
**TYPE "B" CONSTRUCTION JOINT DETAIL
KEYWAY**



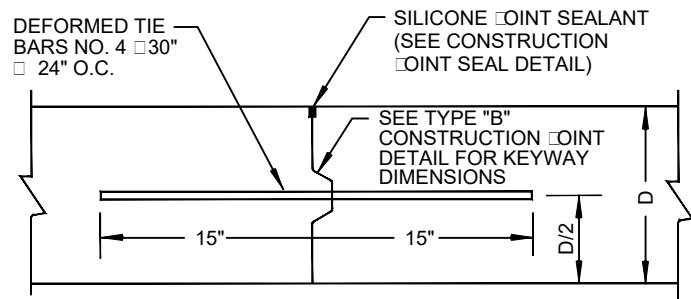
CONSTRUCTION JOINT SEAL DETAIL



**TYPE "C" WEAKENED PLANE JOINT DETAIL
SINGLE SAW-CUT**



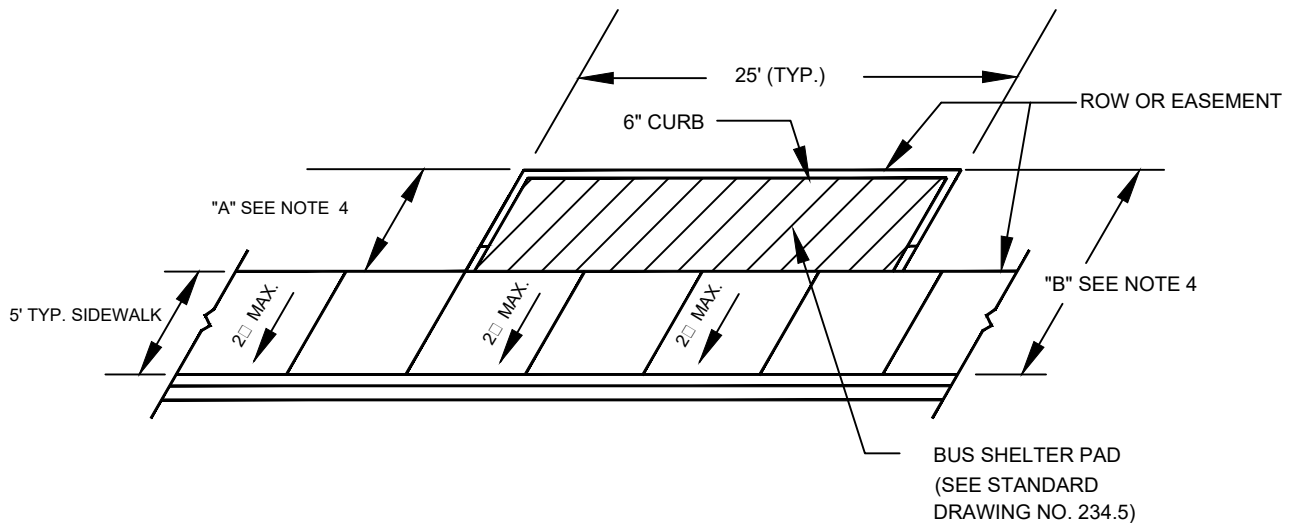
**TYPE "C" WEAKENED PLANE JOINT DETAIL
DOUBLE SAW-CUT**



TYPE "D" TIED CONSTRUCTION JOINT DETAIL

SPECIFICATION REFERENCE		AGENCY APPROVED						
409	CONCRETE PAVEMENT	B C H L M N						
707	JOINT MATERIAL	UNIFORM STANDARD DRAWINGS						
	TT-S-00153A CLASS A SEALANT	CLARK COUNTY AREA						
		CONCRETE PAVEMENT						
		JOINT DETAILS						
		DATE	DWG. NO.	233				

		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
302	AGGREGATE BASE	TYPICAL BUS TURN-OUT							
501	CONCRETE								
502	CONCRETE STRUCTURES								
.		DATE 07-01-16	DWG. NO.		234.1				

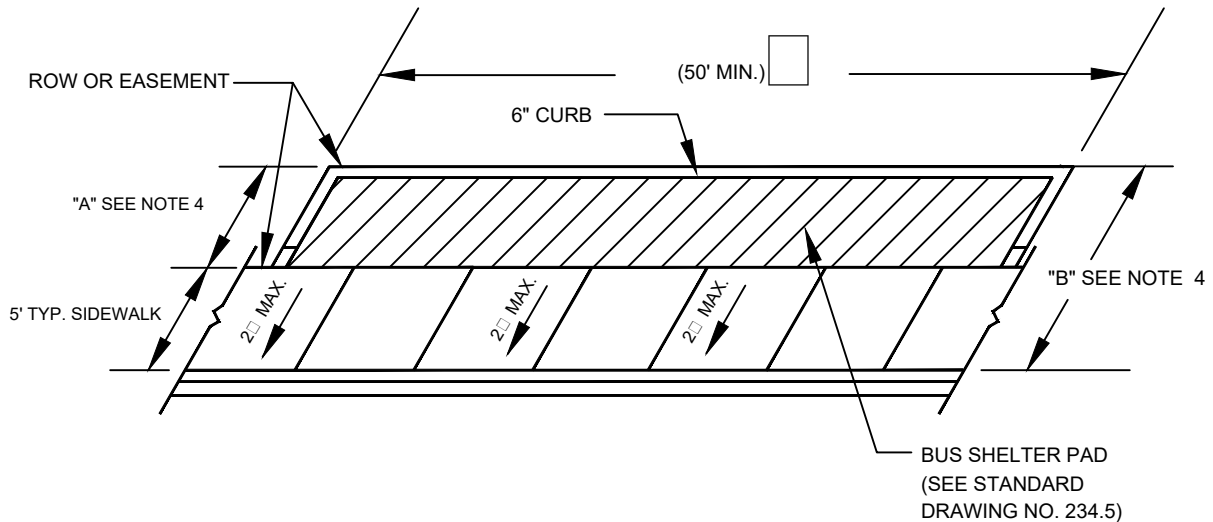


ADDITIONAL AREA REQUIRED BEHIND
TYPICAL 5 FT. SIDEWALK FOR
BUS SHELTER PAD

NOTES

1. SIDEWALK MAY BE REQUIRED TO BE CONSTRUCTED IN THOSE LOCATIONS WHERE THE BUS STOP WOULD OTHERWISE BE INACCESSIBLE AS DEFINED BY THE AMERICANS WITH DISABILITIES ACT. SEE DRAWING NO. 235, SHEET 4 OF 4 FOR SIDEWALK RAMP DETAILS.
2. ADDITIONAL RIGHT-OF-WAY OR EASEMENT IS REQUIRED FOR BUS SHELTER PAD AND VARIABLE HEIGHT CURB AT BACK OF SIDEWALK RAMP AND SHALL BE DEDICATED TO THE LOCAL ENTITY.
3. BUS SHELTER PAD CONNECTION TO DETACHED SIDEWALK CONDITION SHALL BE DETERMINED BY THE ENTITIES.
4. "A" $\square$ 10', "B" $\square$ 15' UNLESS BUS TURNOUT IS CONSTRUCTED PER STANDARD DRAWINGS 234.1 OR 234.4, THEN "A" $\square$ 5', "B" $\square$ 10'.
5. A 5' $\square$ 25' BUS SHELTER PAD BEHIND THE SIDEWALK WHERE NECESSARY MAY BE ALLOWED AS APPROVED BY THE RTC.
6. PEDESTRIAN ACCESS ROUTE SHALL HAVE A CROSS SLOPE OF NO GREATER THAN 2%, REGARDLESS OF CONSTRUCTION TOLERANCES.
7. PARALLEL TO THE STREET OR HIGHWAY, THE GRADE OF THE BOARDING AND ALIGHTING AREA SHALL BE THE SAME AS THE STREET OR HIGHWAY, TO THE EXTENT PRACTICAL. PERPENDICULAR TO THE STREET OR HIGHWAY, THE GRADE OF THE BOARDING AND ALIGHTING AREA SHALL NOT BE STEEPER THAN 2%, REGARDLESS OF CONSTRUCTION TOLERANCES.

		AGENCY APPROVED	B	C	H	L	M	N	R
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
302	AGGREGATE BASE	TYPICAL BUS STOP PASSENGER LOADING WITH SHELTER PADS							
501	CONCRETE								
502	CONCRETE STRUCTURES								
		DATE 01-09-20	DWG. NO. 234.2						



ADDITIONAL AREA REQUIRED BEHIND
TYPICAL 5 FT. SIDEWALK FOR
BUS SHELTER PAD



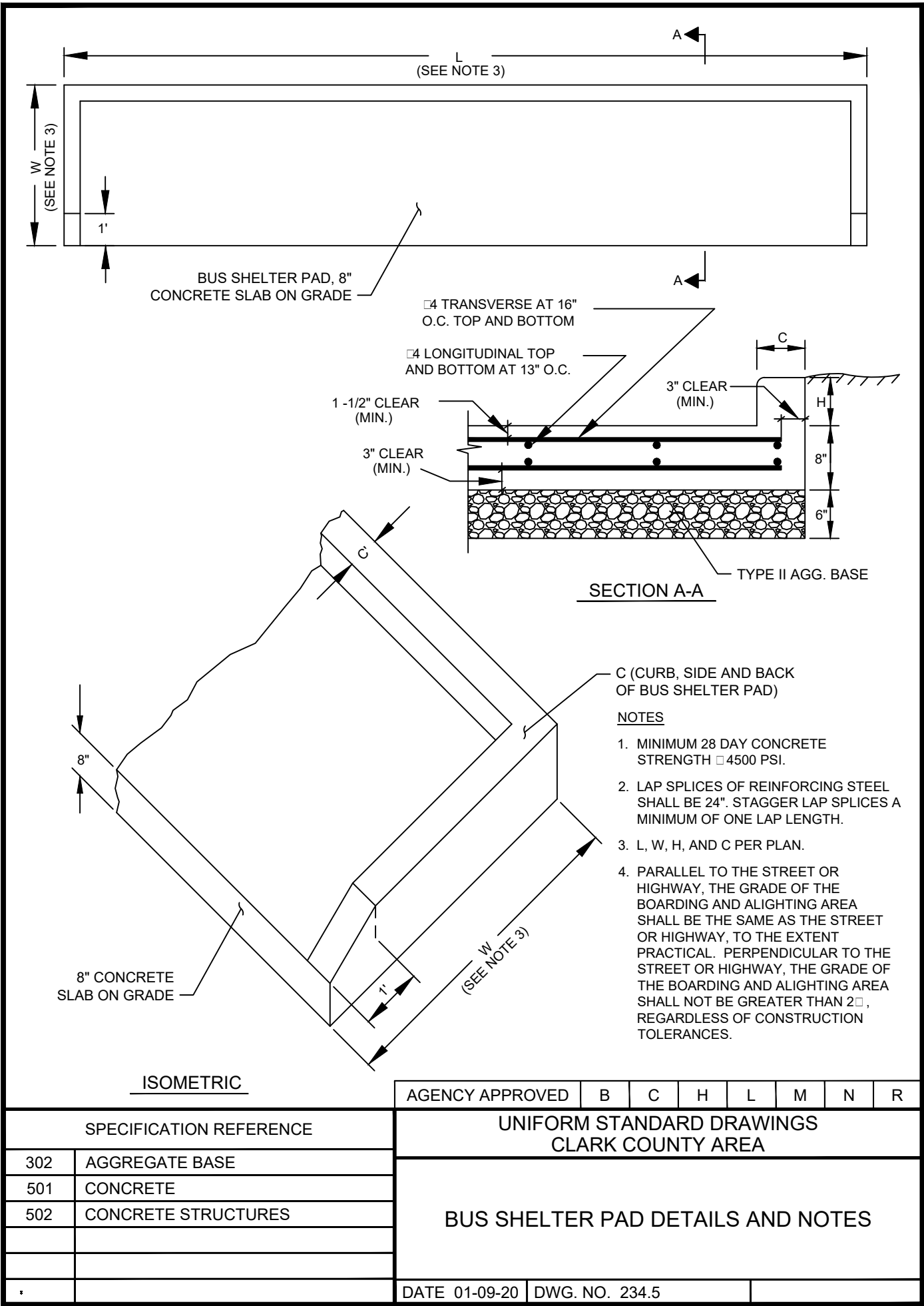
ADDITIONAL 25 FEET MAY BE
REQUIRED BY RTC.

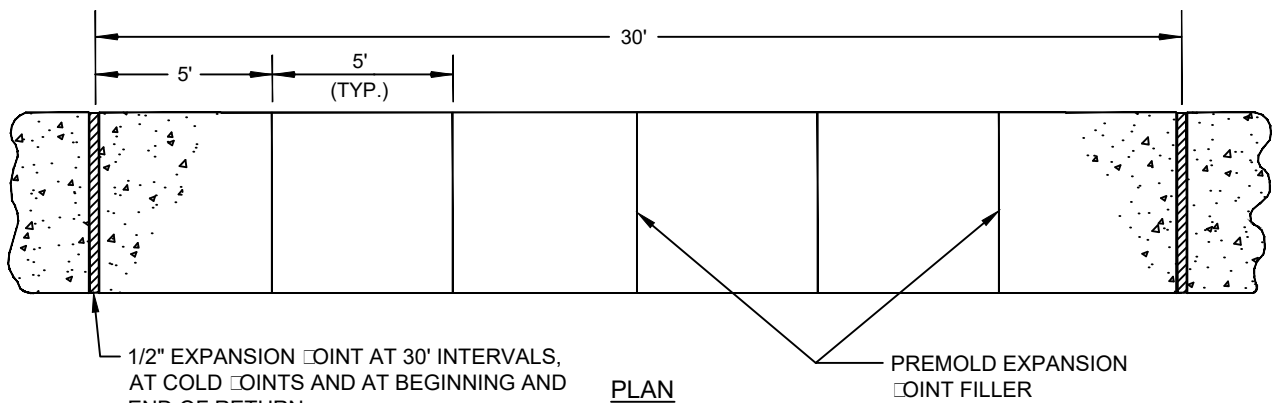
NOTES

1. SIDEWALK MAY BE REQUIRED TO BE CONSTRUCTED IN THOSE LOCATIONS WHERE THE BUS STOP WOULD OTHERWISE BE INACCESSIBLE AS DEFINED BY THE AMERICANS WITH DISABILITIES ACT. SEE DRAWING NO. 235, SHEET 4 OF 4 FOR SIDEWALK RAMP DETAILS.
2. ADDITIONAL RIGHT-OF-WAY OR EASEMENT IS REQUIRED FOR BUS SHELTER PAD AND VARIABLE HEIGHT CURB AT BACK OF SIDEWALK RAMP AND SHALL BE DEDICATED TO THE LOCAL ENTITY.
3. BUS SHELTER PAD CONNECTION TO DETACHED SIDEWALK CONDITION SHALL BE DETERMINED BY THE ENTITIES.
4. "A" $\square$ 10', "B" $\square$ 15' UNLESS BUS TURNOUT IS CONSTRUCTED PER STANDARD DRAWINGS 234.1 OR 234.4, THEN "A" $\square$ 5', "B" $\square$ 10'.
5. A 5' $\square$ 50' BUS SHELTER PAD BEHIND THE SIDEWALK WHERE NECESSARY MAY BE ALLOWED AS APPROVED BY THE RTC.
6. PEDESTRIAN ACCESS ROUTE SHALL HAVE A CROSS SLOPE OF NO GREATER THAN 2 $\square$, REGARDLESS OF CONSTRUCTION TOLERANCES.
7. PARALLEL TO THE STREET OR HIGHWAY, THE GRADE OF THE BOARDING AND ALIGHTING AREA SHALL BE THE SAME AS THE STREET OR HIGHWAY, TO THE EXTENT PRACTICAL. PERPENDICULAR TO THE STREET OR HIGHWAY, THE GRADE OF THE BOARDING AND ALIGHTING AREA SHALL NOT BE STEEPER THAN 2 $\square$, REGARDLESS OF CONSTRUCTION TOLERANCES.

		AGENCY APPROVED							B	C	H	L	M	N	R
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA													
302	AGGREGATE BASE	TYPICAL DOUBLE BUS STOP PASSENGER LOADING WITH SHELTER PADS													
501	CONCRETE														
502	CONCRETE STRUCTURES														
		DATE 01-09-20							DWG. NO. 234.3						

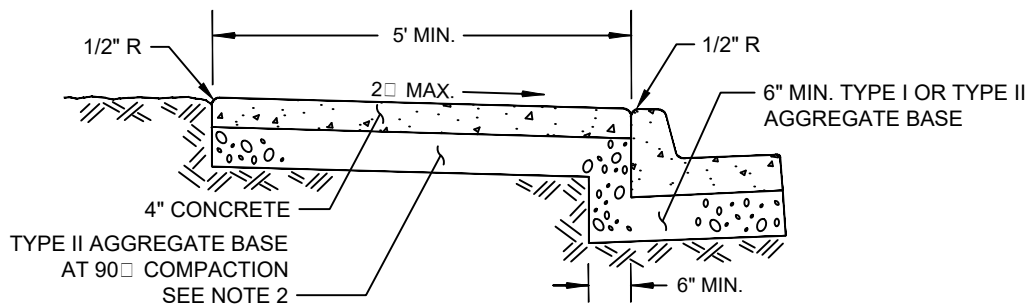
		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
302	AGGREGATE BASE	BUS STOP PLACEMENT WITHIN EXCLUSIVE RIGHT TURN LANE FOR COMMERCIAL PROPERTIES							
501	CONCRETE								
502	CONCRETE STRUCTURES								
628	PAINTING TRAFFIC STRIPING,								
	PAVEMENT MARKINGS								
.		DATE 07-01-16	DWG. NO.		234.4				



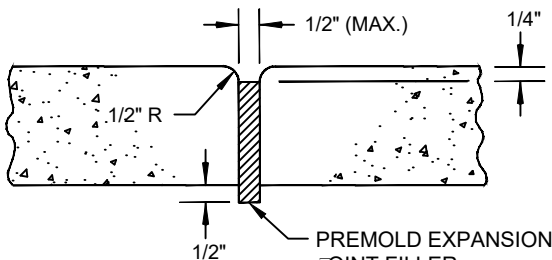


1/2" EXPANSION JOINT AT 30' INTERVALS, AT COLD JOINTS AND AT BEGINNING AND END OF RETURN.
EXPANSION JOINTS TO MATCH LOCATION MATCH LOCATION OF CURB AND GUTTER EXPANSION JOINT.

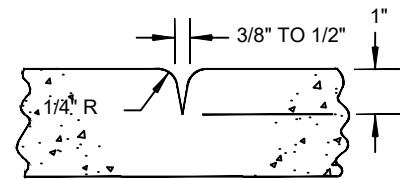
PLAN



TYPICAL SECTION



EXPANSION JOINT

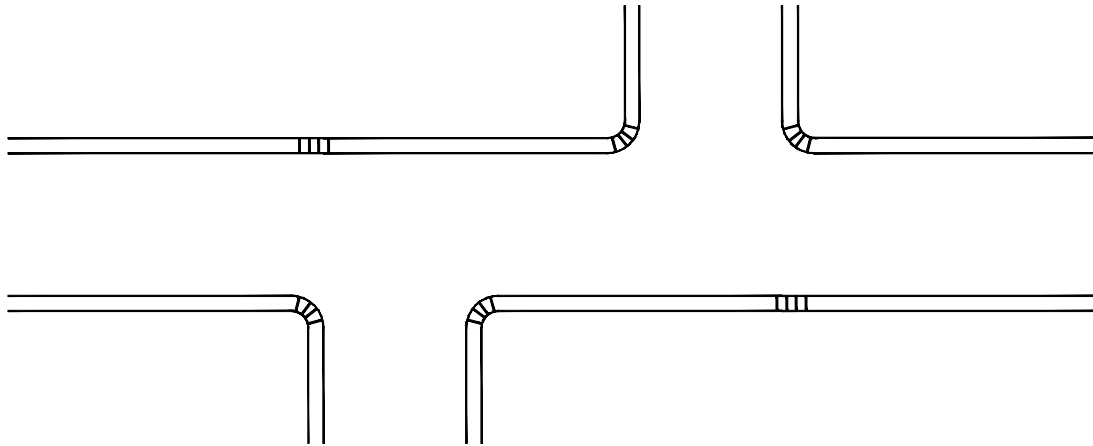


WEAKENED PLANE JOINT (TOOL CUT)

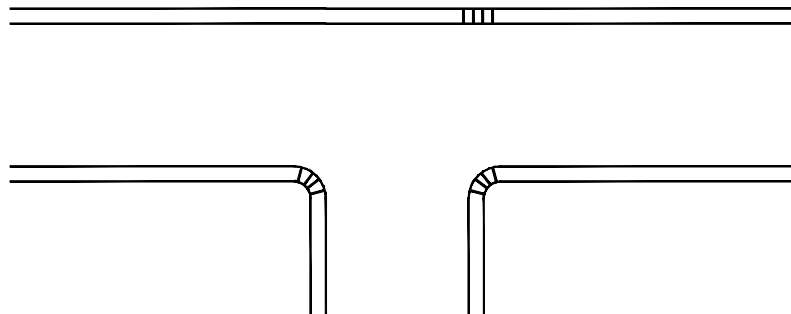
NOTES

- ON ALL CURB RETURNS A 1/2" EXPANSION JOINT SHALL BE CONSTRUCTED BETWEEN THE BACK OF CURB AND THE SIDEWALK FOR THE ENTIRE LENGTH OF THE RETURN.
- THE TYPE II AGGREGATE BASE THICKNESS IS SHOWN ON THE TYPICAL SECTION DRAWINGS 202 - 207.
- LONGITUDINAL WEAKENED PLANE JOINT REQUIRED AT MIDPOINT OF SIDEWALK 10' OR WIDER.
- WHEN INSTALLED WITHIN THE ROW, SIDEWALK GRADE IS PERMITTED TO EQUAL THE GENERAL GRADE ESTABLISHED FOR THE ADJACENT STREET OR HIGHWAY.
- OBJECTS WITH LEADING EDGES MORE THAN 2.25 FT. AND NOT MORE THAN 6.7 FT. ABOVE FINISH SURFACE SHALL PROTRUDE 4 IN. MAXIMUM HORIZONTALLY INTO PEDESTRIAN CIRCULATION PATH. THE MINIMUM HEIGHT, MEASURED VERTICALLY FROM THE BOTTOM OF THE SIGN TO THE TOP OF SIDEWALK, OF SIGNS INSTALLED ABOVE SIDEWALKS, SHALL BE 7 FT.
- PEDESTRIAN ACCESS ROUTE SHALL HAVE A CROSS SLOPE OF NO GREATER THAN 2%, REGARDLESS OF CONSTRUCTION TOLERANCES.

SPECIFICATION REFERENCE		AGENCY APPROVED							
302	AGGREGATE BASE	B	C	H	L	M	N	R	
501	CONCRETE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
502	CONCRETE STRUCTURES								
707	JOINT MATERIAL								
		SIDEWALK							
		DATE 01-09-20 DWG. NO. 234							



OFFSET "T"

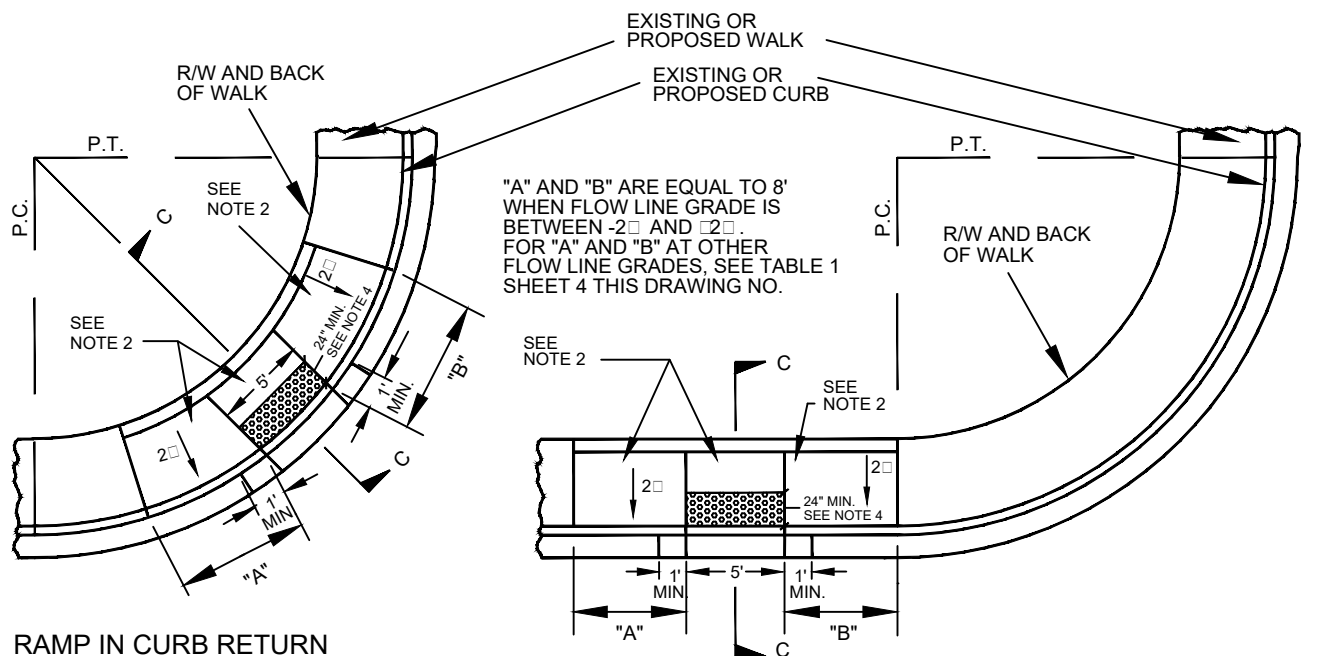


ISOLATED "T"

NOTES:

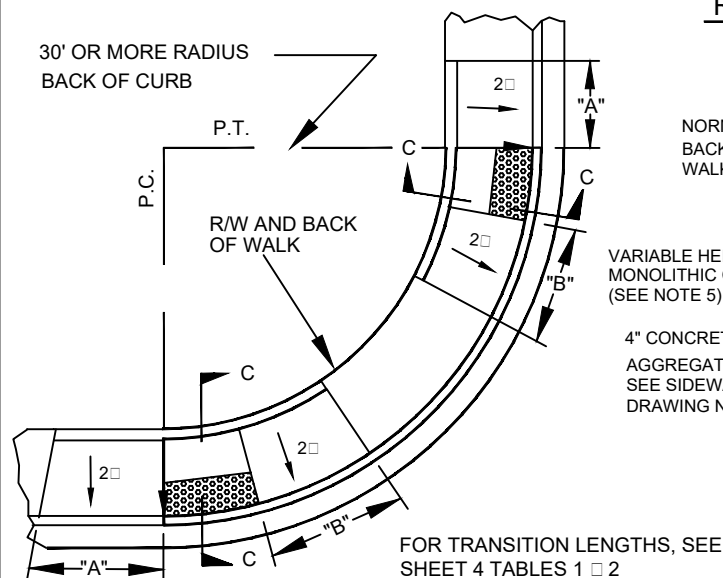
1. THE TYPICAL LOCATIONS OF SIDEWALK RAMPS SHOWN ABOVE ARE INTENDED TO MEET THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA). AT LEAST ONE SIDEWALK RAMP SHALL BE CONSTRUCTED OPPOSITE THE INTERSECTING ROADWAY. ADDITIONAL SIDEWALK RAMPS MAY BE REQUIRED BY THE ENGINEER TO PROVIDE A CONTINUOUS UNOBSTRUCTED PEDESTRIAN CIRCULATION PATH AS DEFINED BY THE ADA.
2. SIDEWALK RAMP LOCATIONS SHOWN ARE FOR INTERSECTIONS WITH UNMARKED CROSSWALKS. IF A PEDESTRIAN CROSSING AREA IS MARKED, SIDEWALK RAMPS SHALL BE LOCATED WITHIN THE MARKED CROSSWALKS AS APPROVED BY THE ENGINEER.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		SIDEWALK RAMP LOCATION "T" INTERSECTIONS											
		DATE	6-13-96	DWG. NO.	235.1								

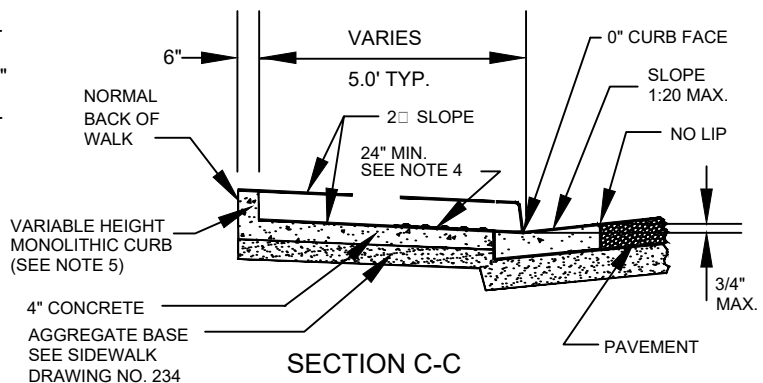


RAMP IN CURB RETURN

RAMP OUTSIDE CURB RETURN

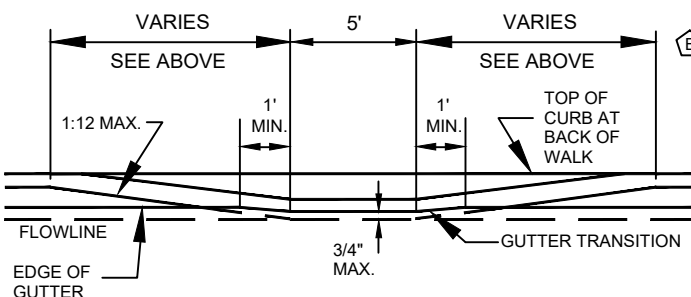


PAIRED RAMP IN CURB RETURN



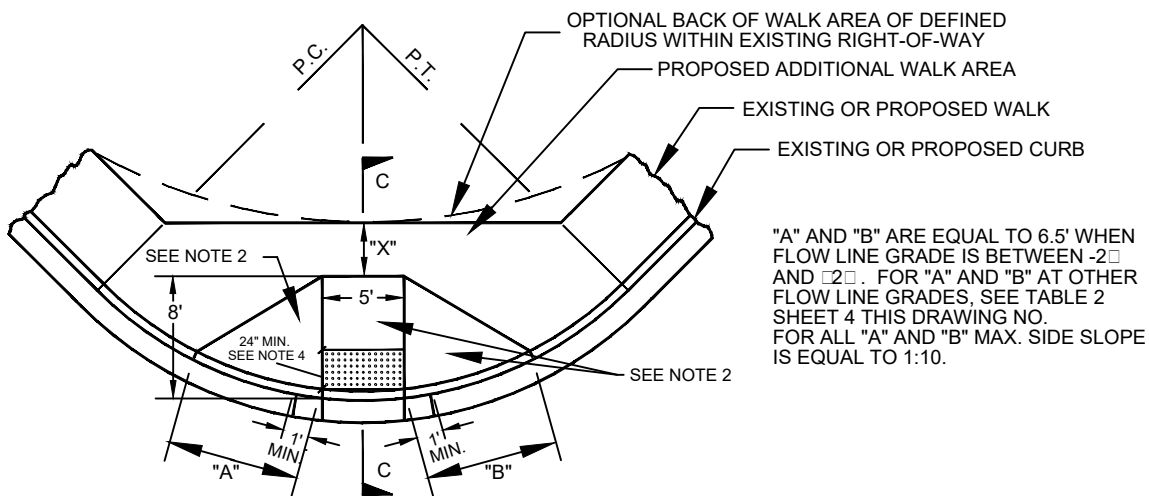
NOTES:

1. SIDEWALK RAMPS OUTSIDE OF THE CURB RETURN SHALL BE LOCATED ADJACENT TO THE RETURN UNLESS OTHERWISE APPROVED.
2. RAMPS SHALL BE CONSTRUCTED WITH A ROUGH BROOM FINISH TRANSVERSE TO THE SLOPE OF THE RAMP.
3. WHEN CONSTRUCTING RAMP WHERE CURB & GUTTER EXISTS, COMPLETELY REMOVE INTERFERING PORTIONS OF EXISTING CURB & GUTTER.
4. DETECTABLE WARNING CONSISTING OF RAISED TRUNCATED DOMES WHICH COMPLY WITH DETAILS ON SHEET 4 OF THIS DRAWING NO. AND CONTRASTING VISUALLY WITH ADJOINING SURFACES SHALL BE PLACED ON BOTTOM PORTION OF RAMP EXTENDING THE FULL WIDTH OF THE RAMP AND TO A MINIMUM DEPTH OF 24 INCHES. PAVEMENT PERMITTED ONLY IN THE CITY OF BOULDER CITY FOR DETECTABLE WARNING AREAS.
5. CURB MAY BE PLACED AND IS PREFERRED BEHIND BACK OF WALK IF SUFFICIENT RIGHT-OF-WAY OR EASEMENTS EXIST AND AS APPROVED BY THE ENGINEER.

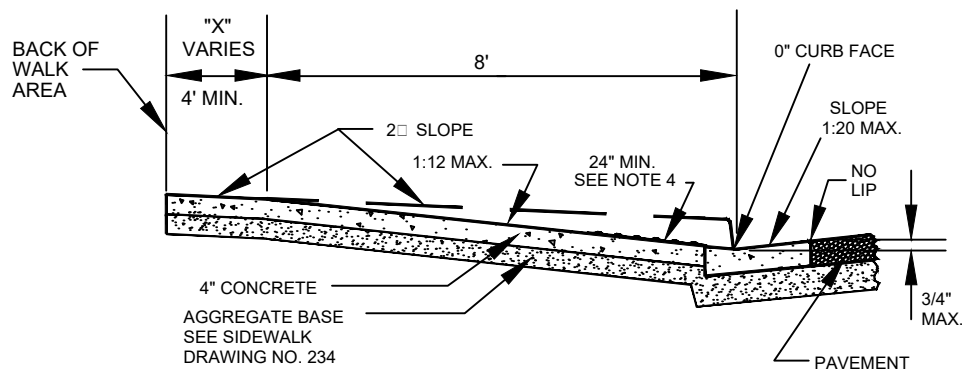


PROFILE

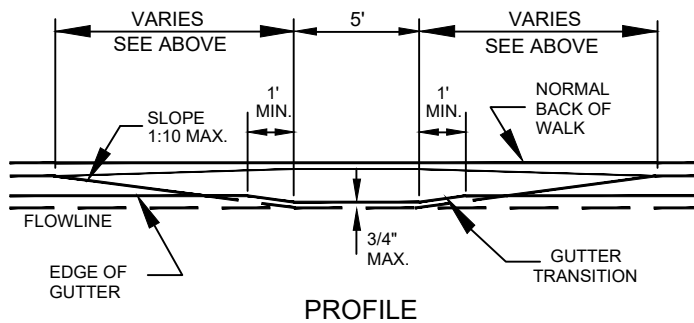
GUTTER		PROFILE		AGENCY APPROVED			C	H	L	M	N
SPECIFICATION REFERENCE				UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
302	AGGREGATE BASE			SIDEWALK RAMP CASE I							
501	CONCRETE										
502	CONCRETE STRUCTURES										
				DATE 11-8-07		DWG. NO. 235			SHEET 1 OF 4		



RAMP IN CURB RETURN
(NO BACK OF WALK DEPRESSION)



SECTION C-C



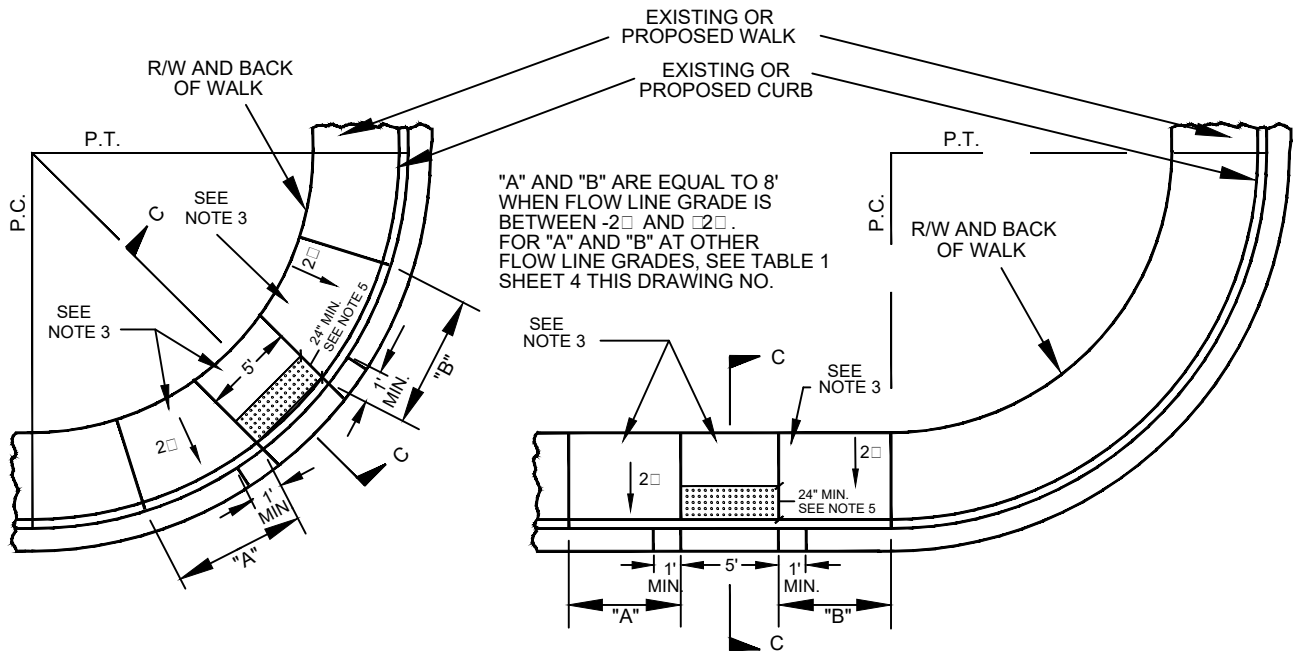
PROFILE

CASE II SHALL BE USED WHERE R/W AND FIELD CONDITIONS PERMIT.

NOTES:

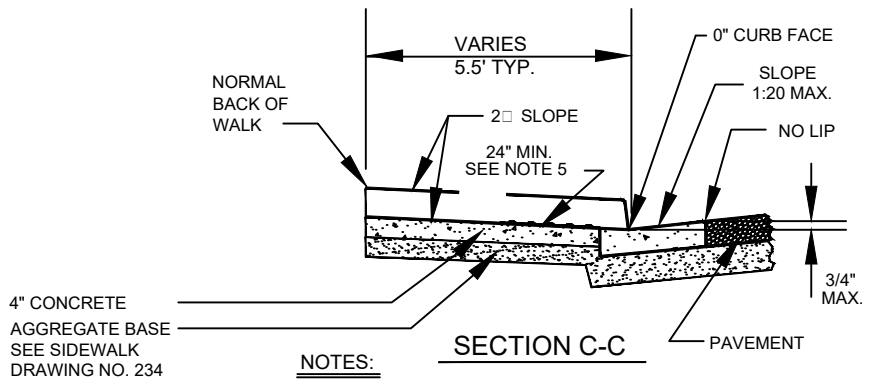
1. SIDEWALK RAMP WITHIN CURB RETURN SHALL BE LOCATED AT THE MIDPOINT OF CURB RETURN UNLESS OTHERWISE APPROVED.
2. RAMPS SHALL BE CONSTRUCTED WITH A ROUGH BROOM FINISH TRANSVERSE TO THE SLOPE OF THE RAMP.
3. WHEN CONSTRUCTING RAMP WHERE CURB $\square$ GUTTER EXISTS, COMPLETELY REMOVE INTERFERING PORTIONS OF EXISTING CURB $\square$ GUTTER.
4. DETECTABLE WARNING CONSISTING OF RAISED TRUNCATED DOMES WHICH COMPLY WITH DETAILS ON SHEET 4 OF THIS DRAWING NO. AND CONTRASTING VISUALLY WITH ADJACENT SURFACES SHALL BE PLACED ON BOTTOM PORTION OF RAMP EXTENDING THE FULL WIDTH OF THE RAMP AND TO A MINIMUM DEPTH OF 24 INCHES. PAVER BLOCKS PERMITTED ONLY IN THE CITY OF BOULDER CITY FOR DETECTABLE WARNING AREAS.

AGENCY APPROVED		$\square$	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
302	AGGREGATE BASE	SIDEWALK RAMP CASE II					
501	CONCRETE						
502	CONCRETE STRUCTURES						
DATE 11-10-04		DWG. NO. 235		SHEET 2 OF 4			



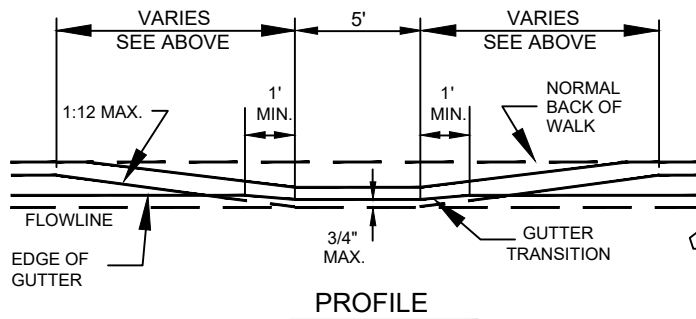
RAMP IN CURB RETURN

RAMP OUTSIDE CURB RETURN



NOTES:

SECTION C-C

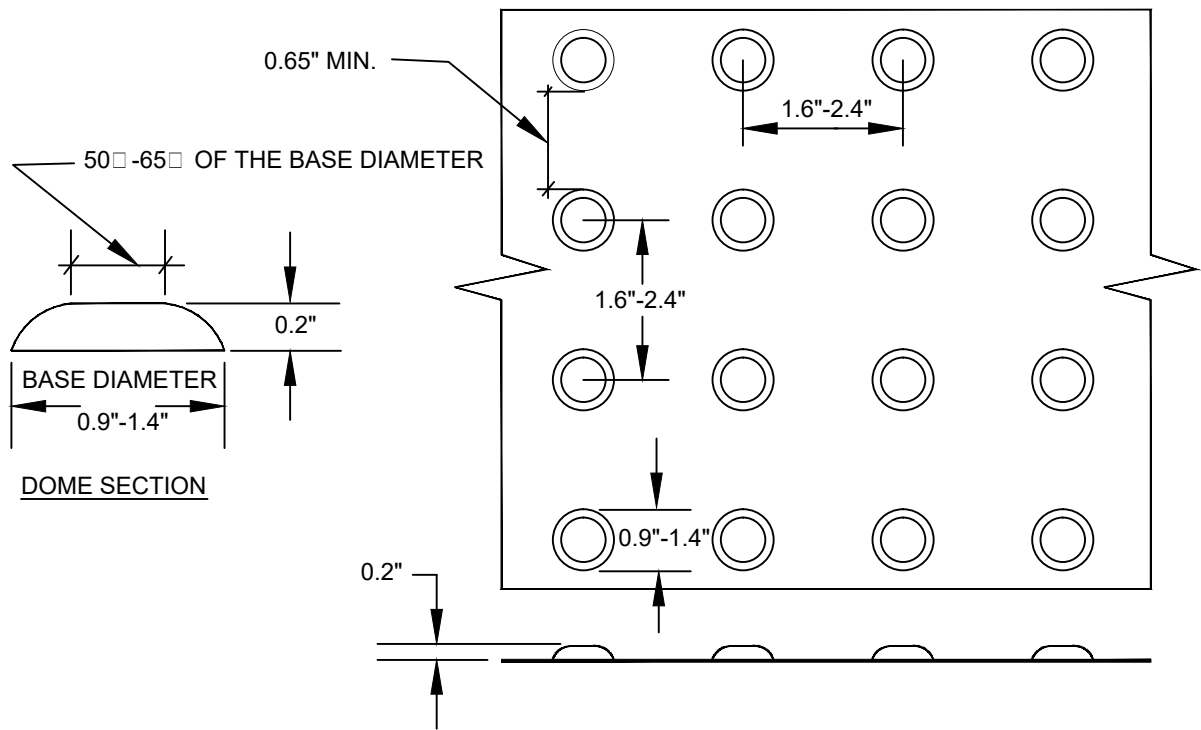


PROFILE

CASE III TO BE USED FOR AREAS WHERE OBSTRUCTION (I.E. BLOCK WALL) EXISTS AT BACK OF WALK ONLY WHEN APPROVED BY THE ENGINEER.

1. SIDEWALK RAMP WITHIN CURB RETURN SHALL BE LOCATED AT THE MIDPOINT OF CURB RETURN UNLESS OTHERWISE APPROVED.
2. SIDEWALK RAMPS OUTSIDE OF THE CURB RETURN SHALL BE LOCATED ADJACENT TO THE RETURN UNLESS OTHERWISE APPROVED.
3. RAMPS SHALL BE CONSTRUCTED WITH A ROUGH BROOM FINISH TRANSVERSE TO THE SLOPE OF THE RAMP.
4. WHEN CONSTRUCTING RAMP WHERE CURB & GUTTER EXISTS, COMPLETELY REMOVE INTERFERING PORTIONS OF EXISTING CURB & GUTTER.
5. DETECTABLE WARNING CONSISTING OF RAISED TRUNCATED DOMES WHICH COMPLY WITH DETAILS ON SHEET 4 OF THIS DRAWING NO. AND CONTRASTING VISUALLY WITH ADJOINING SURFACES SHALL BE PLACED ON BOTTOM PORTION OF RAMP EXTENDING THE FULL WIDTH OF THE RAMP AND TO A MINIMUM DEPTH OF 24 INCHES. PAVER BLOCKS PERMITTED ONLY IN THE CITY OF BOULDER CITY FOR DETECTABLE WARNING AREAS.

AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
302	AGGREGATE BASE	SIDEWALK RAMP CASE III					
501	CONCRETE						
502	CONCRETE STRUCTURES						
DATE 11-10-04		DWG. NO. 235			SHEET 3 OF 4		



DETECTABLE WARNING DETAILS (TRUNCATED DOMES)

GRADE (□) "B" TO "A"	"A" (FT) MIN.	"B" (FT) MIN.
-6 TO -5.01	4.5	21.5
-5 TO -4.01	4.5	15.0
-4 TO -3.01	4.5	12.0
-3 TO -2.01	4.5	9.5
-2 TO 2	8.0	8.0
2.01 TO 3	9.5	4.5
3.01 TO 4	12.0	4.5
4.01 TO 5	15.0	4.5
5.01 TO 6	21.5	4.5

TABLE 1. TRANSITION LENGTHS
FOR 1:12 SIDE SLOPES

GRADE (□) "B" TO "A"	"A" (FT) MIN.	"B" (FT) MIN.
-6 TO -5.01	4.0	12.5
-5 TO -4.01	4.0	10.0
-4 TO -3.01	4.0	8.5
-3 TO -2.01	4.0	7.5
-2 TO 2	6.5	6.5
2.01 TO 3	7.5	4.0
3.01 TO 4	8.5	4.0
4.01 TO 5	10.0	4.0
5.01 TO 6	12.5	4.0

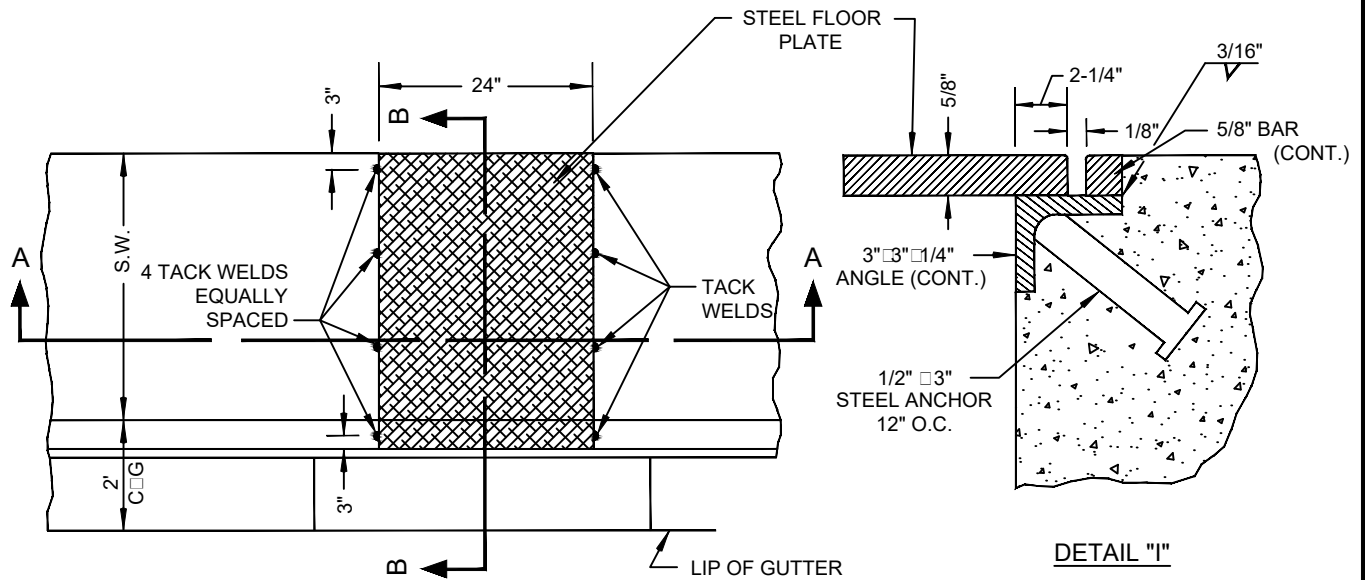
TABLE 2. TRANSITION LENGTHS
FOR 1:10 SIDE SLOPES

NOTE:

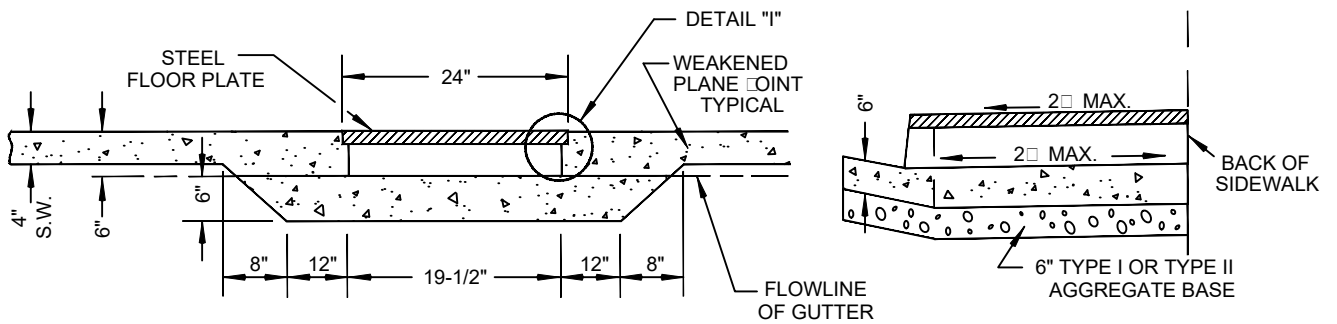
CHARTS APPLY TO CURB WITH 6" CURB FACE.
IF CURB HAS GREATER THAN A 6" CURB FACE,
A SPECIAL DESIGN IS REQUIRED.

Effective 12/10/2020 to 06/09/2021

SPECIFICATION REFERENCE		AGENCY APPROVED						
302	AGGREGATE BASE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
501	CONCRETE							
502	CONCRETE STRUCTURES							
		SIDEWALK RAMP DETAILS						
		DATE	6-8-06	DWG. NO.	235	SHEET 4 OF 4		



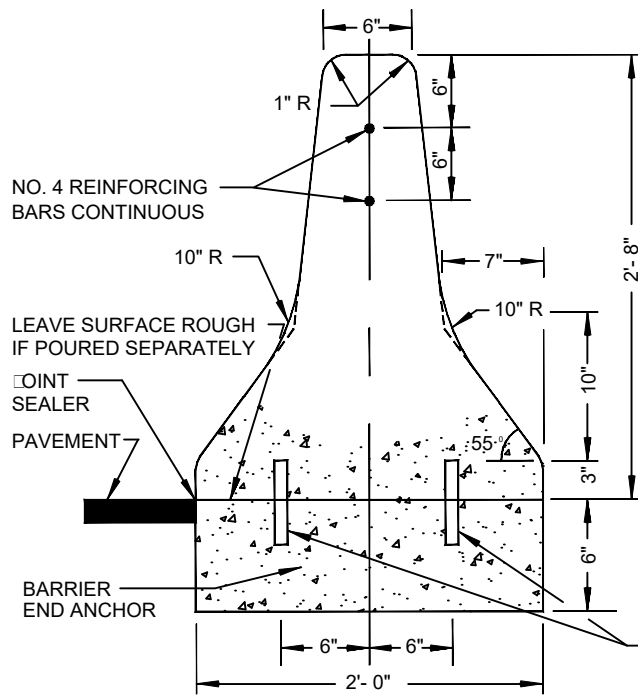
PLAN



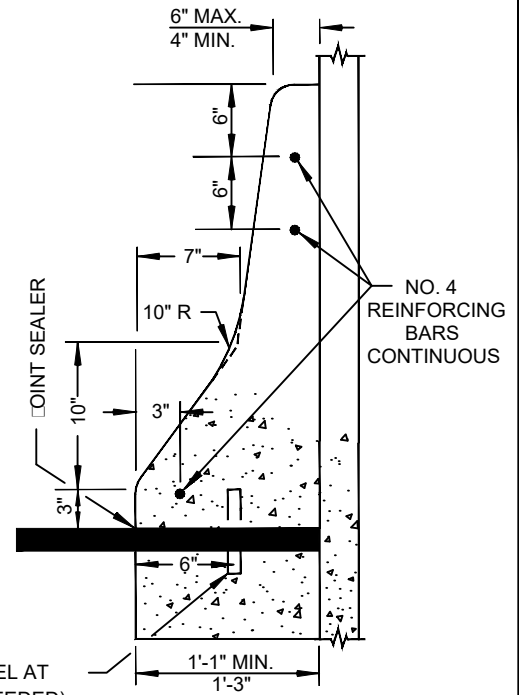
NOTES

1. IF WIDTH OF PLATE IS GREATER THAN 24", A SPECIAL DESIGN IS REQUIRED.
2. ALL EXPOSED METAL PARTS SHALL BE GALVANIZED, AND ALL GALVANIZING DAMAGED BY FABRICATION OR INSTALLATION SHALL RECEIVE TWO COATS OF ALUMINUM PAINT (GALVONOX OR EQUAL). EXPOSED METAL PARTS IN THE PEDESTRIAN ACCESS ROUTE SHALL BE FIRM, STABLE, AND SLIP-RESISTANT.
3. TACK WELDS BETWEEN SIDEWALK AND STEEL PLATE FLOOR WITHIN PEDESTRIAN ACCESS ROUTES SHALL HAVE NO VERTICAL SURFACE DISCONTINUITIES GREATER THAN 1/4", REGARDLESS OF CONSTRUCTION TOLERANCES.

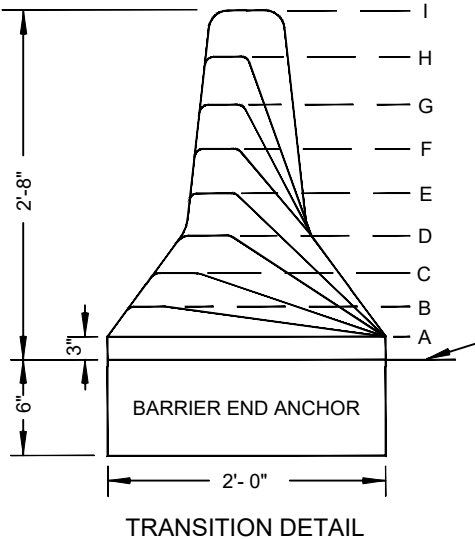
AGENCY APPROVED		B	C	H	L	M	N	R
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
302	BASE AGGREGATES	SIDEWALK DRAIN						
501	CONCRETE							
710	STRUCTURAL STEEL							
DATE 03-12-20		DWG. NO. 236						



TYPE A

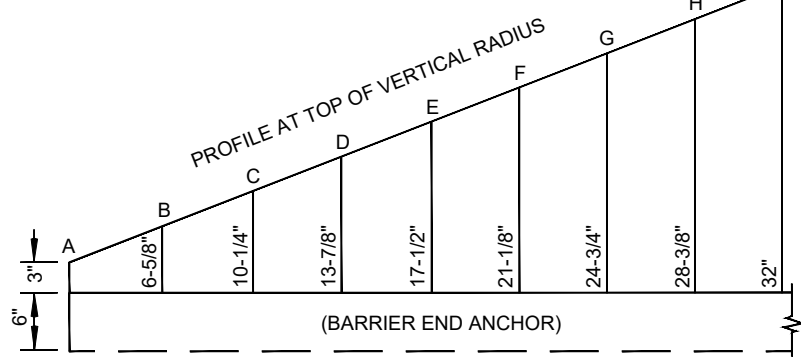


TYPE B



CONCRETE BARRIER RAIL
FLARE RATES

OPERATING SPEED	FLARE RATE
60	17:1 MAX
50	14:1
40	11:1



TRANSITION OF END OF BARRIER
TO BE USED ONLY IF END IS FLARED

NOTES:

1. TRANSVERSE JOINTS WITH 1" PREMOLDED EXPANSION JOINT FILLER OR 1" OPEN TRANSVERSE JOINTS SHALL BE PLACED AT STRUCTURES. JOINTS IN BARRIER RAIL OVER A STRUCTURE SHALL BE AT THE SAME LOCATION AND OF THE SAME DIMENSION AS THOSE IN THE STRUCTURE.
2. BITUMINOUS PAVING REQUIRED: PAVING SHALL BUTT AGAINST THE BARRIER RAIL END ANCHOR SECTION AND SHALL EXTEND FULL WIDTH UNDER THE NORMAL BARRIER RAIL SECTION PLUS 6" MINIMUM 6-INCH DEEP BARRIER. END ANCHORS SHALL BE CONSTRUCTED IN THE FIRST AND LAST 10 LINEAR FEET OF THE FULL HEIGHT BARRIER RAIL RUN. IF TRANSITIONS ARE USED, THE ANCHOR SHALL BE EXTENDED UNDER THE TRANSITION.

AGENCY APPROVED	B	C	H	L	M	N

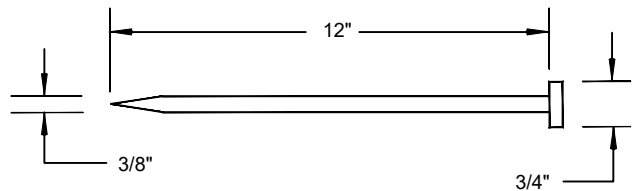
SPECIFICATION REFERENCE	
501	CONCRETE
502	CONCRETE STRUCTURES

UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA	
CONCRETE BARRIER RAIL	
DATE 12-14-00	DWG. NO. 237

A 3D perspective diagram of a concrete beam. The beam is rectangular with a trapezoidal cross-section. It contains several longitudinal reinforcement bars (top and bottom) and two sets of U-shaped stirrups. An arrow points from the word "CONCRETE" to the top surface of the beam.

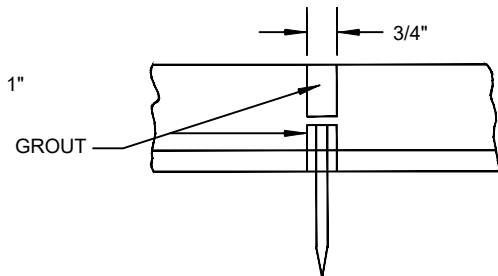
1. PRECAST BUMPER BLOCK TO BE USED IN PARKING LOTS ONLY.

2. GROUT HOLE BEFORE DRIVING SPIKE. AFTER DRIVING SPIKE, FILL HOLE WITH CONCRETE MORTAR AND FINISH FLUSH WITH TOP.

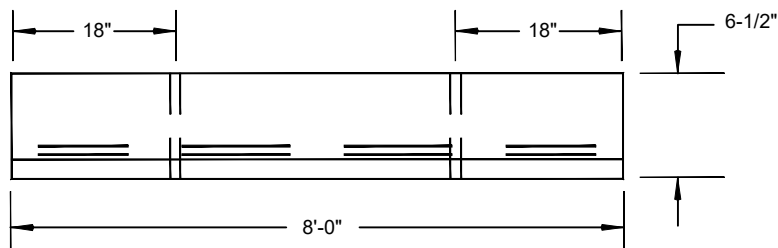


STEEL WIRE BRIDGE SPIKE

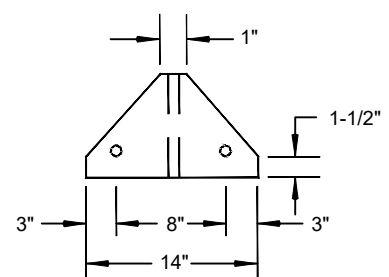
TOP VIEW



HOLE DETAIL

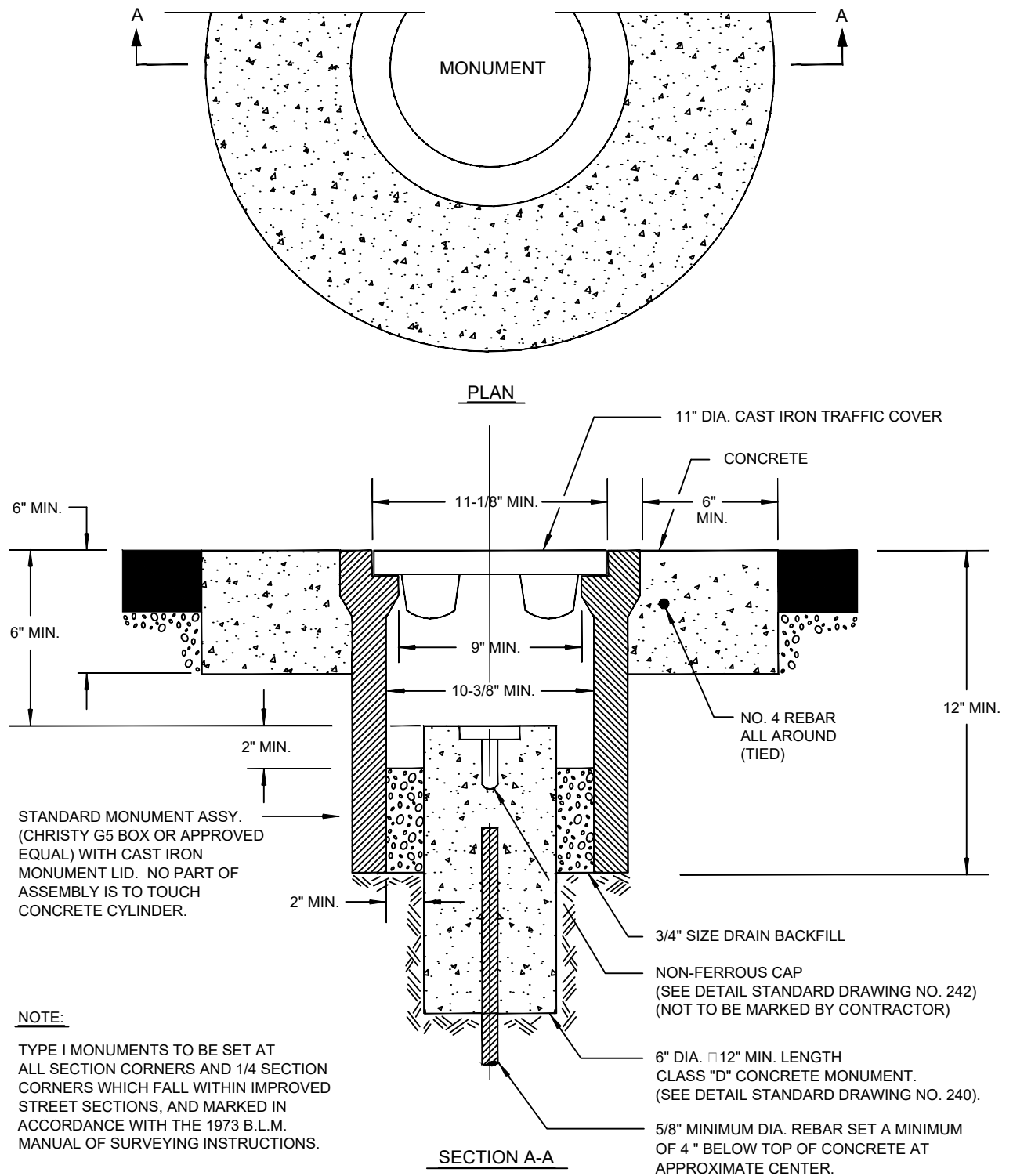


SIDE VIEW



END VIEW

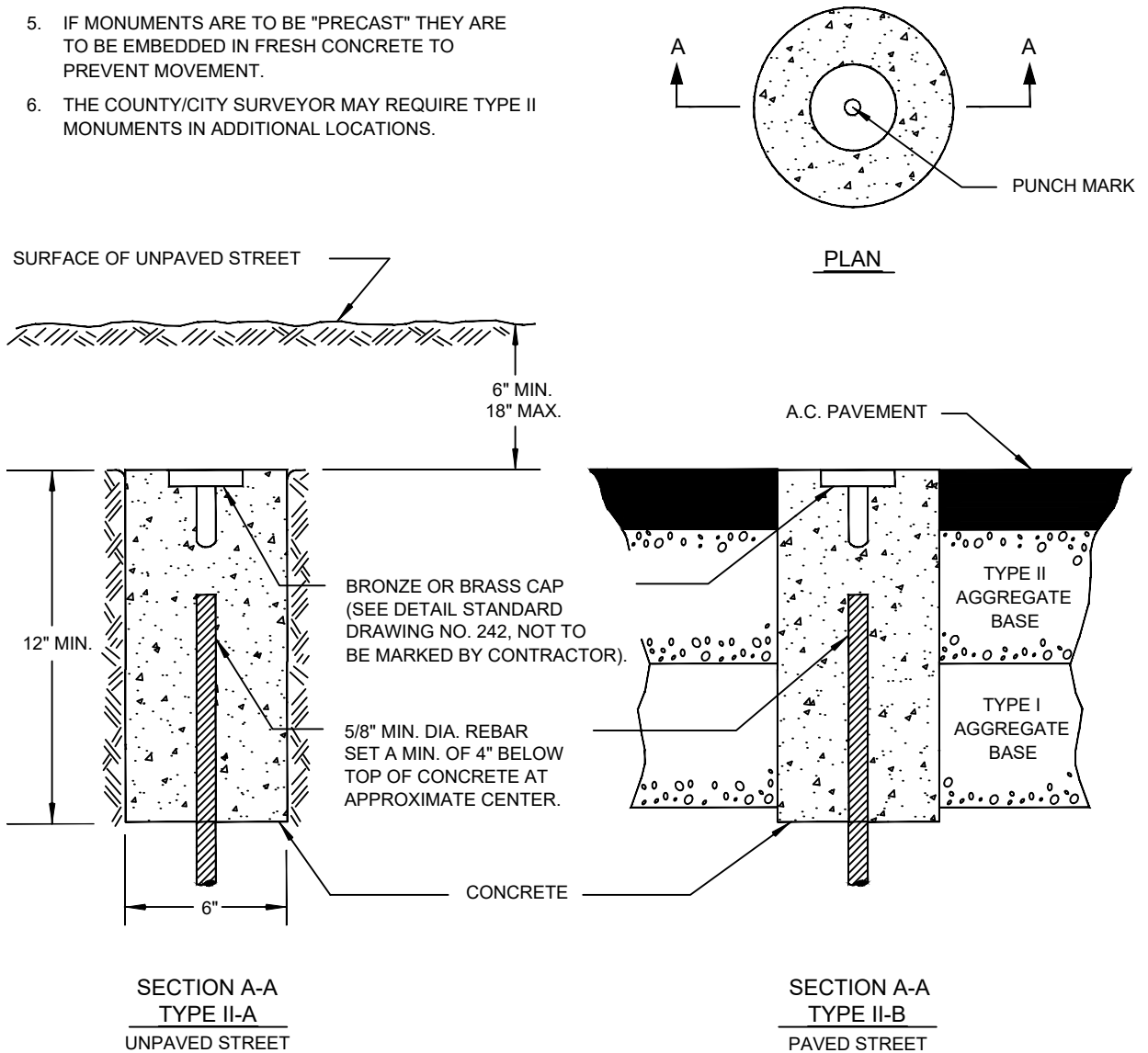
		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
501	CONCRETE	PRECAST BUMPER BLOCK							
505	REINFORCING STEEL								
.		DATE 12-14-00		DWG. NO. 238					



		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
501	CONCRETE	TYPE I MONUMENT											
621	MONUMENTS												
704	BASE AGGREGATE												
		DATE 12-14-00		DWG. NO.		239							

NOTES:

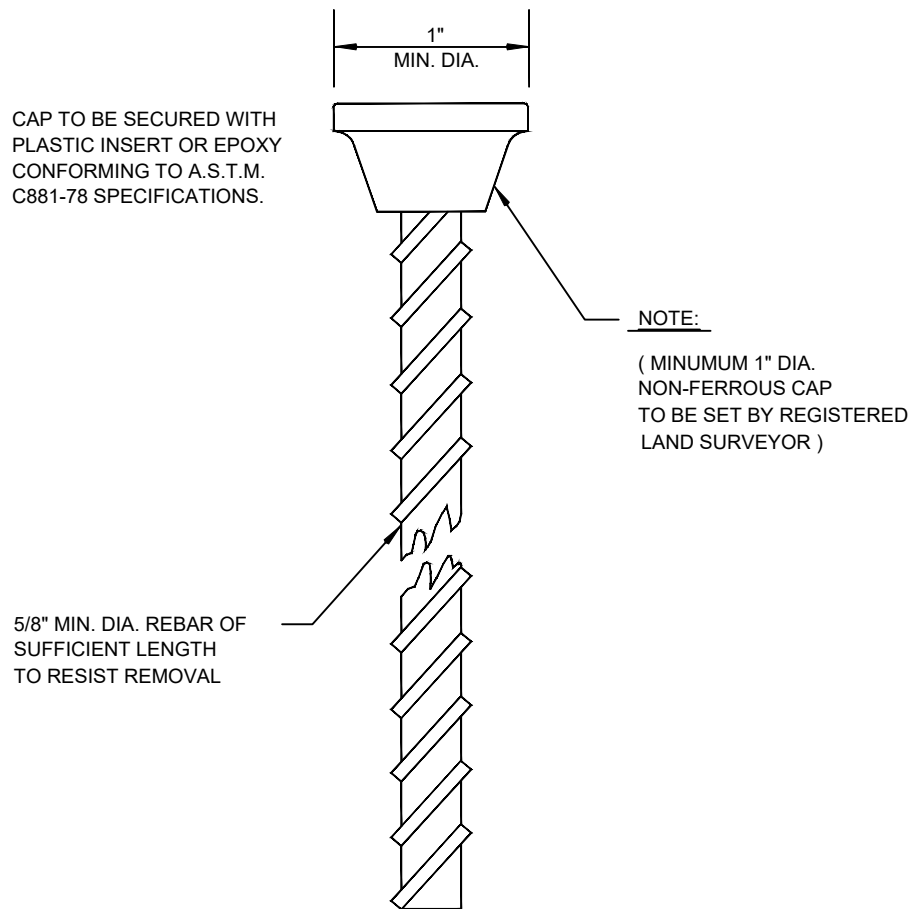
1. TYPE II-A MONUMENTS TO BE SET AT ALL SECTION CORNERS, 1/4 SECTION CORNERS AND 1/16 SECTION CORNERS WHICH FALL WITHIN UNIMPROVED STREET SECTIONS.
2. TYPE II-B MONUMENTS TO BE SET AT ALL 1/16 SECTION CORNERS WHICH FALL WITHIN IMPROVED STREET SECTIONS.
3. ALL TYPE II MONUMENTS ARE TO BE MARKED IN ACCORDANCE WITH THE 1973 B.L.M. MANUAL OF SURVEYING INSTRUCTIONS.
4. 6" □ 6" SQUARE MONUMENTS ARE ALSO ACCEPTABLE.
5. IF MONUMENTS ARE TO BE "PRECAST" THEY ARE TO BE EMBEDDED IN FRESH CONCRETE TO PREVENT MOVEMENT.
6. THE COUNTY/CITY SURVEYOR MAY REQUIRE TYPE II MONUMENTS IN ADDITIONAL LOCATIONS.



		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
501	CONCRETE	TYPE II MONUMENT											
621	MONUMENTS												
		DATE 12-14-00		DWG. NO.		240							

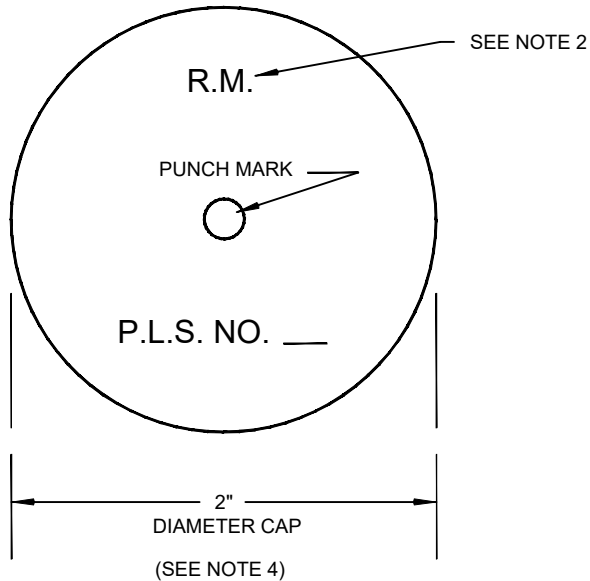
NOTES:

1. TYPE III MONUMENTS TO BE SET AT ALL CENTERLINE CONTROL POINTS NOT OTHERWISE IDENTIFIED BY A TYPE I OR TYPE II MONUMENT, INCLUDING STREET INTERSECTIONS, POINTS OF CURVATURE, POINTS OF TANGENCY, POINTS OF INTERSECTION AND CENTERS OF HAMMERHEAD TURNAROUNDS OR CIRCULAR CUL-DE-SACS.
2. THE REGISTERED LAND SURVEYOR'S NUMBER, AND A PUNCH MARK ARE TO APPEAR ON THE SURFACE OF THE CAP.



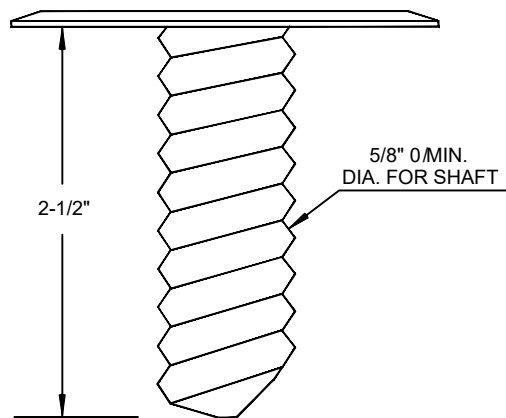
TYPE III MONUMENT

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
621	MONUMENTS	TYPE III MONUMENT											
		DATE		DWG. NO.		241							

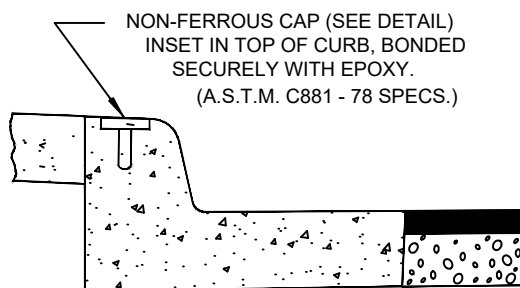


NOTES:

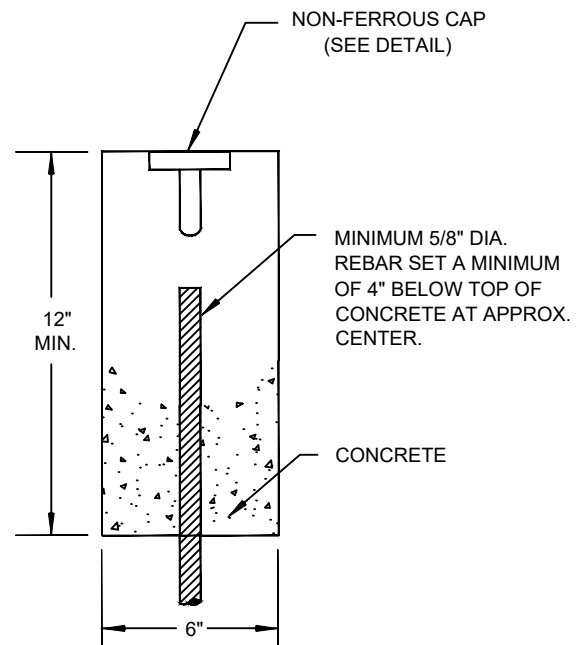
1. FOUR (4) TYPE IV REFERENCE MONUMENTS TO BE SET WITHIN A RADIUS OF TWENTY (20) TO ONE HUNDRED (100) FEET FROM ALL TYPE I, II, AND III MONUMENTS.
2. THE TIE DISTANCE AND THE INITIALS R.M. ARE TO BE STAMPED ON THE CAP, FOR TYPE IV MONUMENTS.
3. NON-FERROUS CAP TO BE MADE FROM CAST VIRGIN METAL IN ONE PIECE, FREE FROM CASTING IMPERFECTIONS, WITH CORRUGATED SHAFT.
4. TYPE III AND TYPE IV MONUMENT CAP DIAMETER MAY BE REDUCED TO 1".



DETAIL
STANDARD CAP

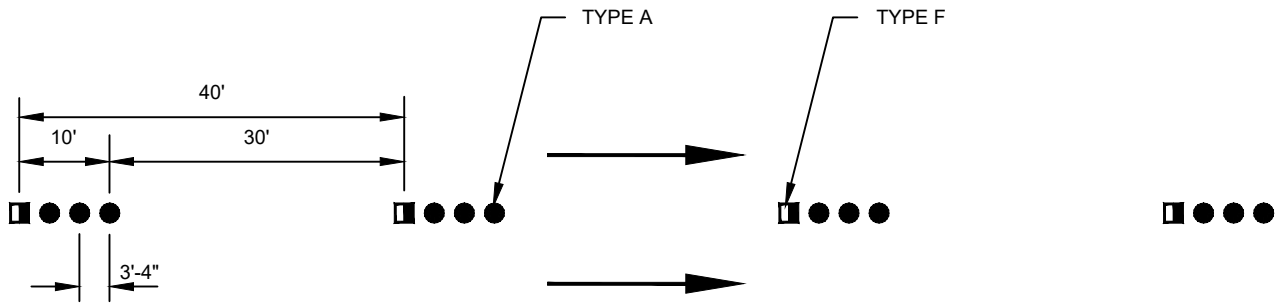


TYPE IV-A MONUMENT
EXISTING CURB □ GUTTER



TYPE IV-B MONUMENT
NO CURB □ GUTTER

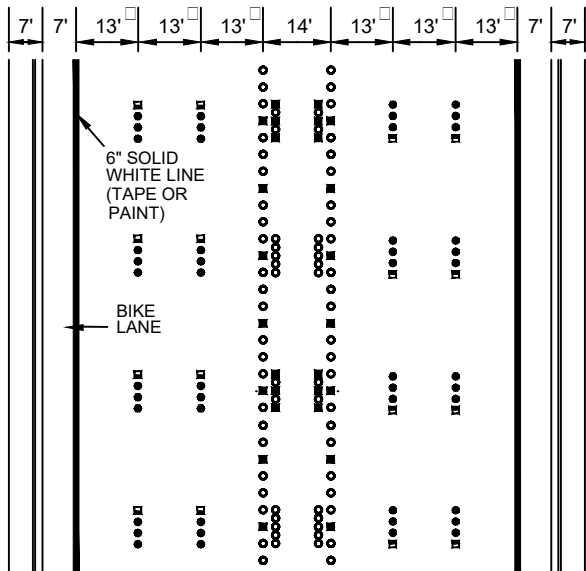
SPECIFICATION REFERENCE		AGENCY APPROVED	B	C	H	L	M	N
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
501	CONCRETE	TYPE IV MONUMENT						
621	MONUMENTS							
		DATE 12-14-00	DWG. NO.	242				



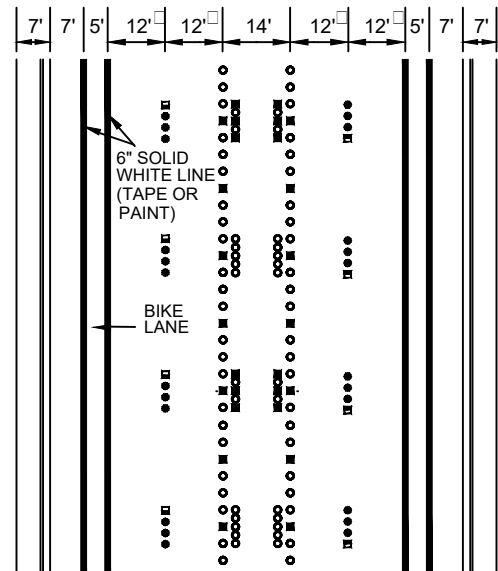
TYPE 4 LANE LINE
(DIVIDED, UNDIVIDED OR ONE-WAY ROADWAY)

Effective 12/10/2020 to 06/09/2021

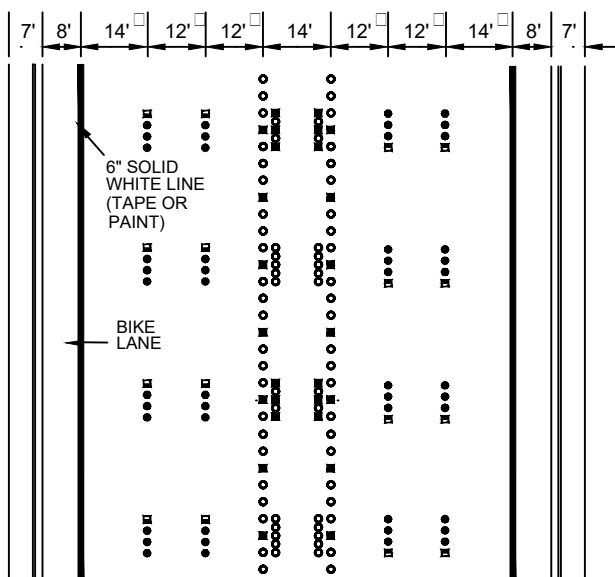
		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
633	PAVEMENT MARKERS	TYPICAL LANE LINE DELINEATION											
.		DATE 4-8-99			DWG. NO. 244.1								



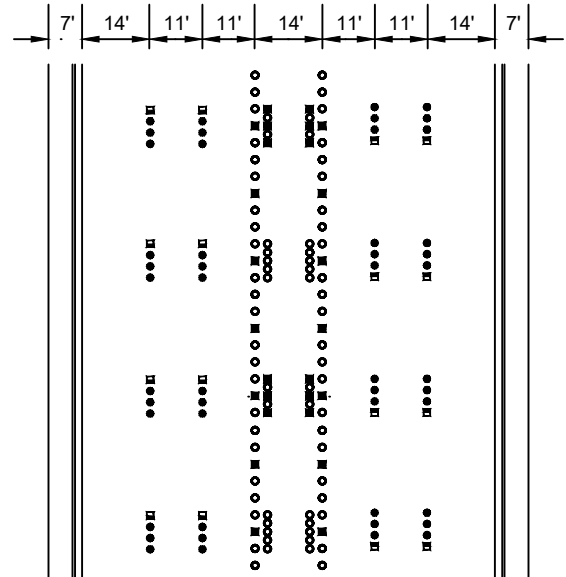
120 FT. STREET WITH BIKE LANE
(WITHOUT PARKING)



100 FT. STREET WITH BIKE LANE
(WITH PARKING/EMERGENCY LANE)



120 FT. STREET WITH BIKE LANE
(WITHOUT PARKING)



100 FT. STREET WITH SHARED
BIKE/VEHICLE LANE (WITHOUT PARKING)

NOTES:
 □ THE WIDTH OF TRAVEL LANES ADJACENT TO BIKE LANES MAY VARY FROM 12 FT. TO 16 FT.
 WIDTHS OF INTERIOR TRAVEL LANES MAY VARY FROM 11 FT. TO 13 FT.

1. LANE LINE DELINEATION SHALL COMPLY WITH STANDARD DRAWING NOS. 244 □ 244.1.
2. IN SOME CASES, A MEDIAN WILL EXIST INSTEAD OF TWO-WAY LEFT TURN LANE.
3. BIKE LANES MUST BE A MINIMUM OF 4 FT. AND NO GREATER THAN 8 FT. WIDE; HOWEVER, A WIDTH OF 5 FT. IS PREFERRED.
4. WHERE 6 FT. SIDEWALK EXISTS, WIDTH OF MEDIAN MAY BE REDUCED BY 2 FT. OR TRAVEL LANES MAY BE REDUCED TO 11 FT.
5. ALL CURB LANES ARE MEASURED TO LIP OF GUTTER OR EDGE OF PAVEMENT IF CURB AND GUTTER DO NOT EXIST.

AGENCY APPROVED	B	C	H	L	M	N

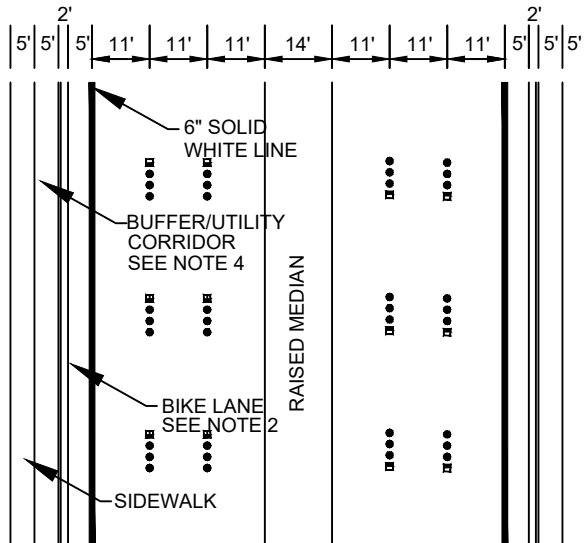
SPECIFICATION REFERENCE

628	PAINTING TRAFFIC STRIPING
633	PAVEMENT MARKERS

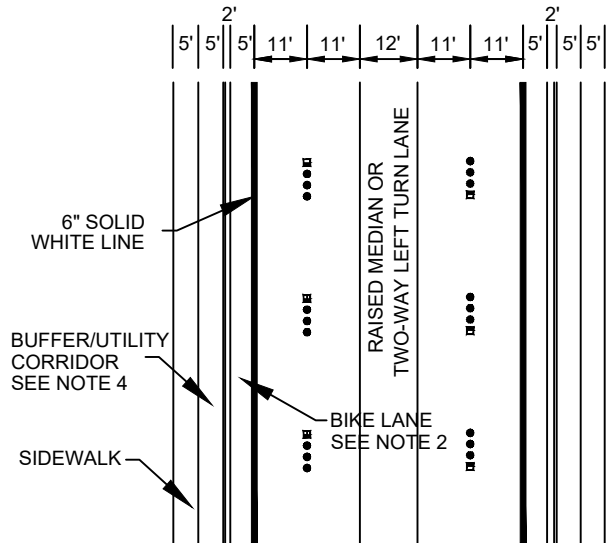
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPICAL DELINEATION FOR ROADWAYS
100 FT. OR GREATER RIGHT-OF-WAY
WITH CURBSIDE SIDEWALK

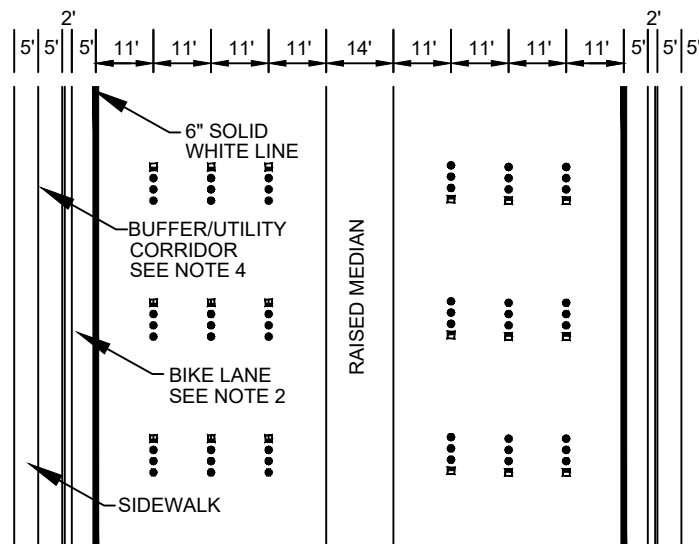
DATE 7-10-03	DWG. NO. 244.2



114 FT. STREET



90 FT. STREET

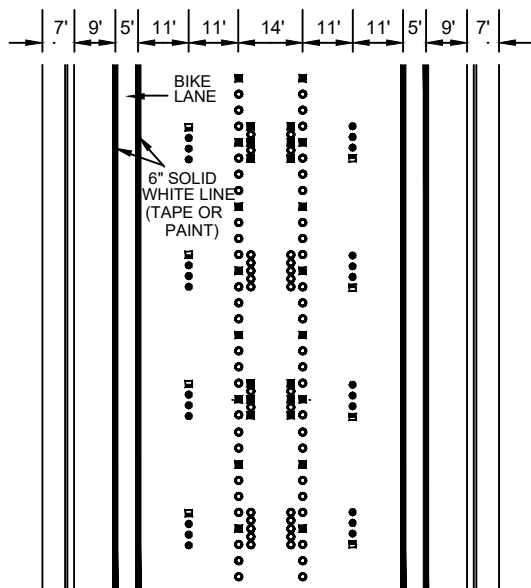


136 FT. STREET

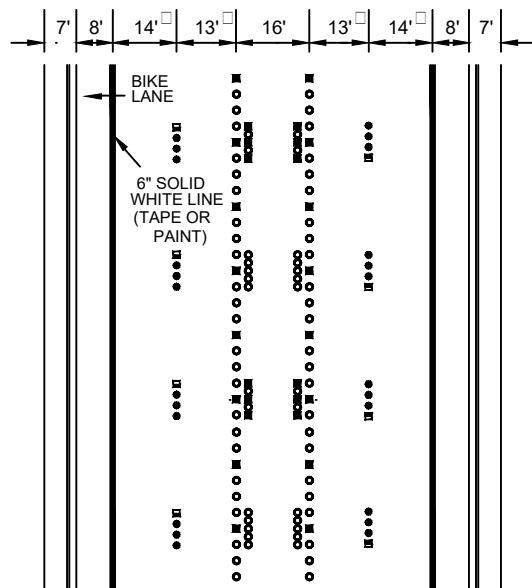
NOTES:

1. LANE LINE DELINEATION SHALL COMPLY WITH STANDARD DRAWING NO. 244 □ 244.1.
2. BIKE LANES TO BE PROVIDED IF SEGMENT CONNECTS TO OTHER BIKE LANES OR IF ROADWAY SEGMENT IS 1 MILE OR GREATER. IF BIKE LANE IS NOT PROVIDED, TRAVEL LANES SHOULD REMAIN AT DIMENSIONS SHOWN SO A BICYCLE LANE COULD BE PROVIDED IN THE FUTURE. SEE DRAWING NUMBER 246.1 FOR BIKE LANE SIGNING AND STRIPING DETAILS.
3. ALL CURB LANES ARE MEASURED TO LIP OF GUTTER OR EDGE OF PAVEMENT IF CURB AND GUTTER DO NOT EXIST.
4. CONTACT THE LOCAL JURISDICTIONAL FOR DEVELOPMENT REQUIREMENTS FOR THE AREA BETWEEN THE CURB AND SIDEWALK.

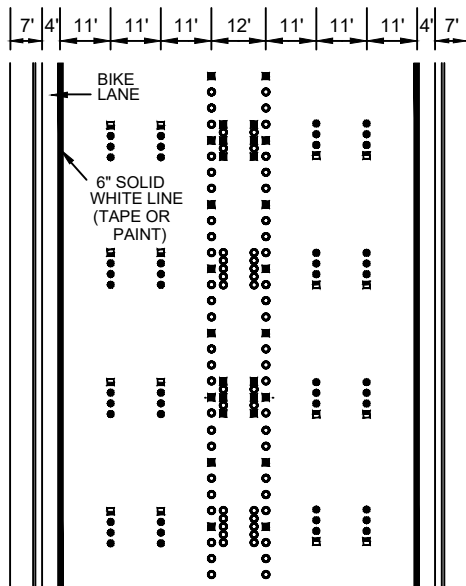
		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
628	PAINTING TRAFFIC STRIPING	TYPICAL DELINEATION FOR ALTERNATE ROADWAYS WITH OFFSET SIDEWALK											
633	PAVEMENT MARKERS												
		DATE	7-10-03	DWG. NO.	244.3								



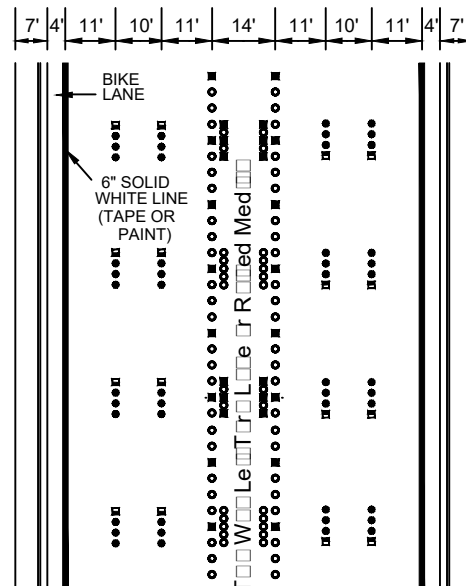
100 FT. STREET WITH BIKE LANE
(WITH PARKING/EMERGENCY LANE)



100 FT. STREET WITH BIKE LANE
(WITHOUT PARKING/EMERGENCY LANE)



100 FT. STREET WITH BIKE LANE
(WITHOUT PARKING/EMERGENCY LANE)



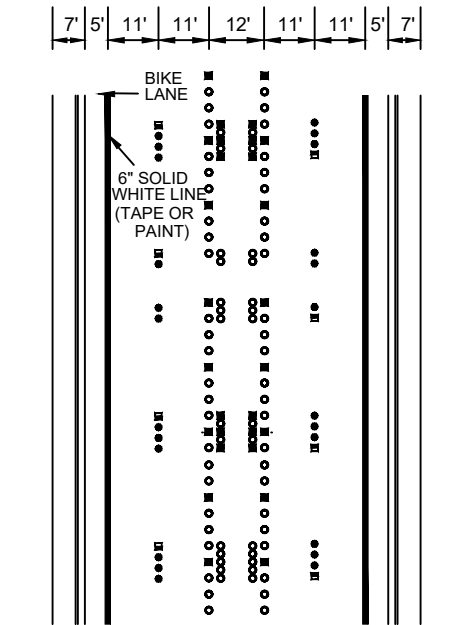
100 FT. STREET WITH BIKE LANE
(WITHOUT PARKING/EMERGENCY LANE)

NOTES:

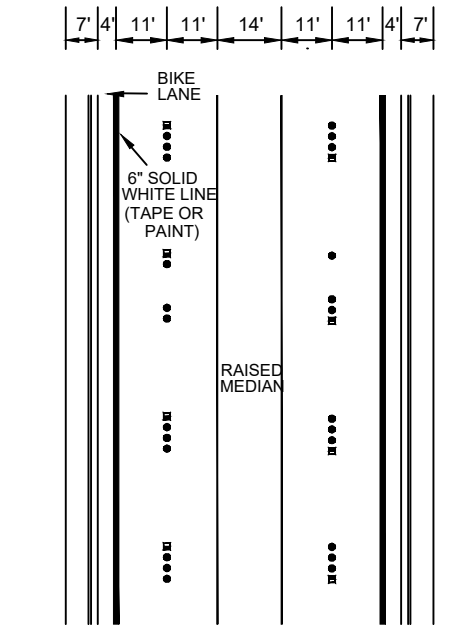
1. LANE LINE DELINEATION SHALL COMPLY WITH STANDARD DRAWING NOS. 244 □ 244.1.
2. IN SOME CASES, A MEDIAN WILL EXIST INSTEAD OF TWO-WAY LEFT TURN LANE.
3. BIKE LANES MUST BE A MINIMUM OF 4 FT. AND NO GREATER THAN 8 FT. WIDE; HOWEVER, A WIDTH OF 5 FT. IS PREFERRED.
4. WHERE 6 FT. SIDEWALK EXISTS, WIDTH OF MEDIAN MAY BE REDUCED BY 2 FT. OR TRAVEL LANES MAY BE REDUCED TO 11 FT.
5. ALL CURB LANES ARE MEASURED TO LIP OF GUTTER OR EDGE OF PAVEMENT IF CURB AND GUTTER DO NOT EXIST.

□ THE WIDTH OF TRAVEL LANES ADJACENT TO BIKE LANES MAY VARY FROM 12 FT. TO 16 FT. WIDTHS OF INTERIOR TRAVEL LANES MAY VARY FROM 11 FT. TO 13 FT.

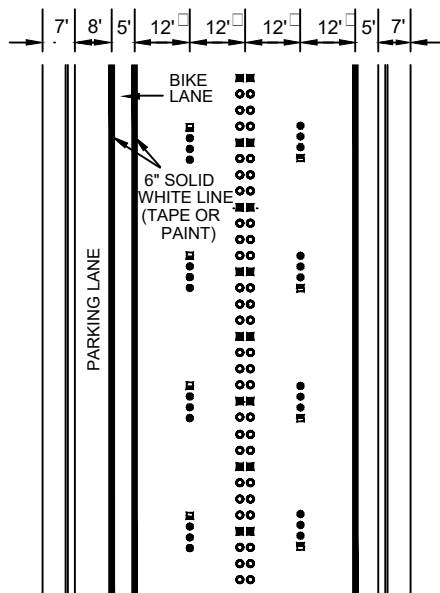
AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
628	PAINTING TRAFFIC STRIPING	TYPICAL DELINEATION FOR ROADWAYS 100 FT. RIGHT-OF-WAY WITH CURBSIDE SIDEWALK					
401	PAVEMENT MARKERS						
DATE 3-9-06		DWG. NO.		244.4			



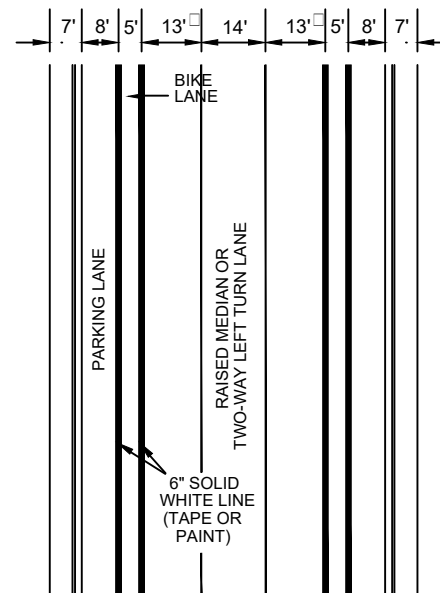
80 FT. STREET WITH BIKE LANE
(WITHOUT PARKING/EMERGENCY LANE)



80 FT. STREET WITH BIKE LANE
(WITHOUT PARKING/EMERGENCY LANE)



80 FT. STREET WITH BIKE LANE
(WITH PARKING ON ONE SIDE)



80 FT. STREET WITH BIKE LANE
(WITH PARKING ON BOTH SIDES)

NOTES:

□ THE WIDTH OF TRAVEL LANE MAY VARY FROM 11 FT. TO 13 FT.

1. LANE LINE DELINEATION SHALL COMPLY WITH STANDARD DRAWING NOS. 244 □ 244.1.
2. BIKE LANES MUST BE A MINIMUM OF 4 FT. AND NO GREATER THAN 8 FT. WIDE; HOWEVER, A WIDTH OF 5 FT. IS PREFERRED.
3. WHERE 6 FT. SIDEWALK EXISTS, WIDTH OF MEDIAN MAY BE REDUCED BY 2 FT. OR TRAVEL LANES MAY BE REDUCED TO 11 FT.
4. ALL CURB LANES ARE MEASURED TO LIP OF GUTTER OR EDGE OF PAVEMENT IF CURB AND GUTTER DO NOT EXIST.

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

628 PAINTING TRAFFIC STRIPING

633 PAVEMENT MARKERS

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

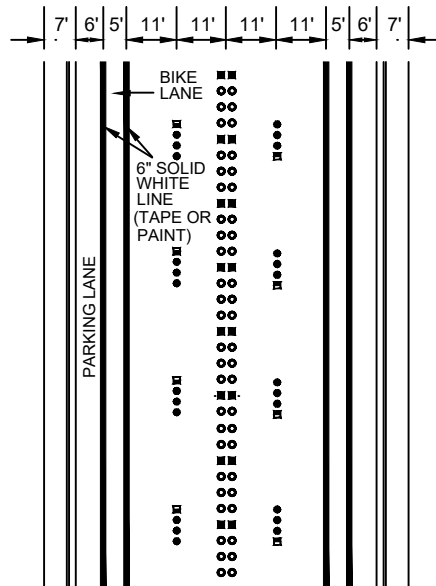
TYPICAL DELINEATION FOR
ROADWAYS 80 FT. RIGHT-OF-WAY
WITH CURBSIDE SIDEWALK

DATE 7-10-03

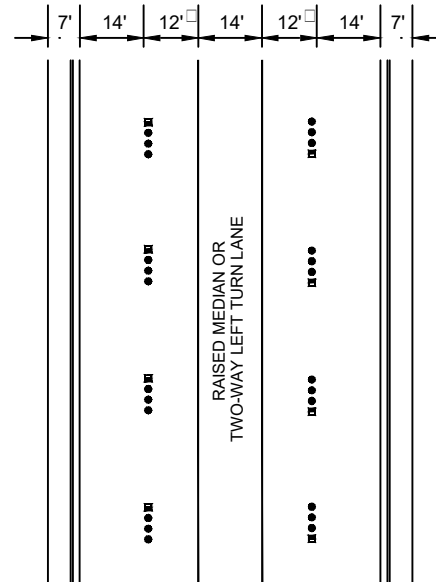
DWG. NO.

244.5

SHEET 1 OF 2



80 FT. STREET WITH BIKE LANE
(WITH PARKING ON BOTH SIDES)



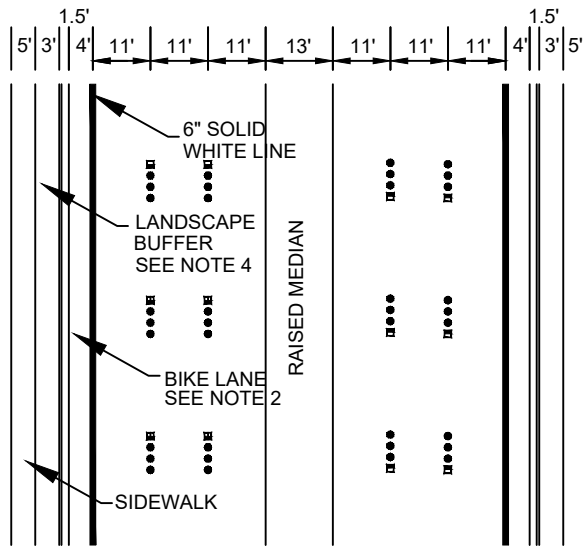
80 FT. STREET WITH SHARED BIKE/VEHICLE LANE
(WITHOUT PARKING/EMERGENCY LANE)

□ WIDTH OF TRAVEL LANE MAY VARY
FROM 11 FT. TO 12 FT.

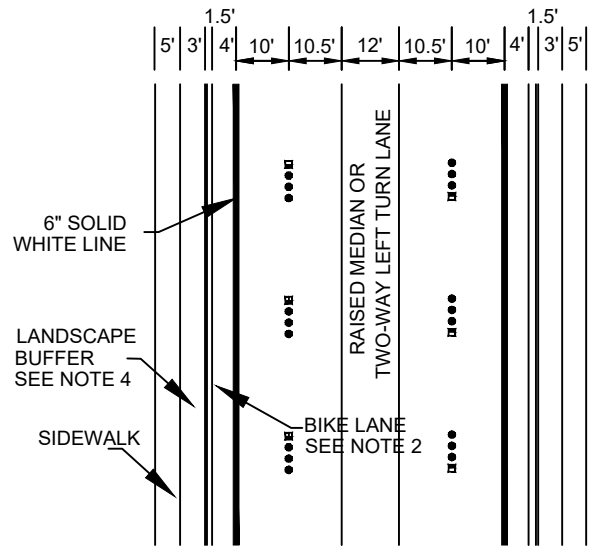
NOTES:

1. LANE LINE DELINEATION SHALL COMPLY WITH STANDARD DRAWING NO. 244 □ 244.1.
2. BIKE LANES MUST BE A MINIMUM OF 4 FT. AND NO GREATER THAN 8 FT. WIDE; HOWEVER, A WIDTH OF 5 FT. IS PREFERRED.
3. WHERE 6 FT. SIDEWALK EXISTS, WIDTH OF MEDIAN MAY BE REDUCED BY 2 FT. OR TRAVEL LANES MAY BE REDUCED TO 11 FT.
4. ALL CURB LANES ARE MEASURED TO LIP OF GUTTER OR EDGE OF PAVEMENT IF CURB AND GUTTER DO NOT EXIST.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
628	PAINTING TRAFFIC STRIPING	TYPICAL DELINEATION FOR ROADWAYS 80 FT. RIGHT-OF-WAY WITH CURBSIDE SIDEWALK											
633	PAVEMENT MARKERS												
		DATE 7-10-03			DWG. NO. 244.5			SHEET 2 OF 2					



106 FT. STREET

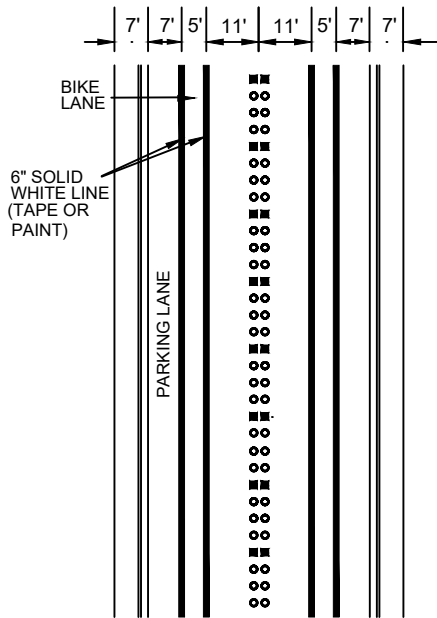


80 FT. STREET

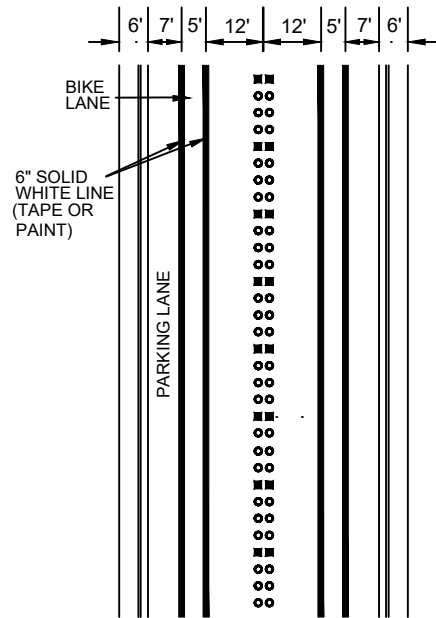
NOTES:

1. LANE LINE DELINEATION SHALL COMPLY WITH STANDARD DRAWING NO. 244 □ 244.1.
2. BIKE LANES TO BE PROVIDED IF SEGMENT CONNECTS TO OTHER BIKE LANES OR IF ROADWAY SEGMENT IS 1 MILE OR GREATER. IF BIKE LANE IS NOT PROVIDED, TRAVEL LANES SHOULD REMAIN AT DIMENSIONS SHOWN SO A BICYCLE LANE COULD BE PROVIDED IN THE FUTURE. SEE DRAWING NUMBER 246.1 FOR BIKE LANE SIGNING AND STRIPING DETAILS.
3. ALL CURB LANES ARE MEASURED TO LIP OF GUTTER OR EDGE OF PAVEMENT IF CURB AND GUTTER DO NOT EXIST.
4. CONTACT THE LOCAL JURISDICTIONAL FOR DEVELOPMENT REQUIREMENTS FOR THE AREA BETWEEN THE CURB AND SIDEWALK.

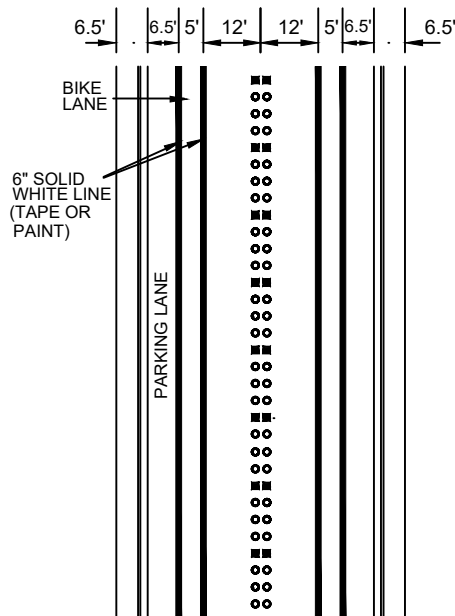
		AGENCY APPROVED					
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
628	PAINTING TRAFFIC STRIPING	SUPPLEMENTAL DRAWING					
633	PAVEMENT MARKERS	TYPICAL DELINEATION FOR ROADWAYS					
		COMPLETE STREET ALTERNATIVE					
		DATE 07-01-12 DWG. NO. 244.6.S1					



ALTERNATE A



ALTERNATE B

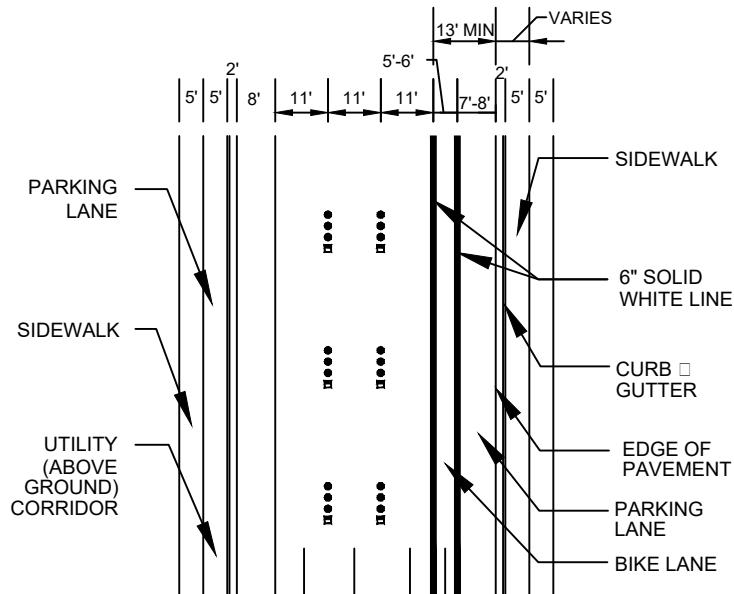


ALTERNATIVE C

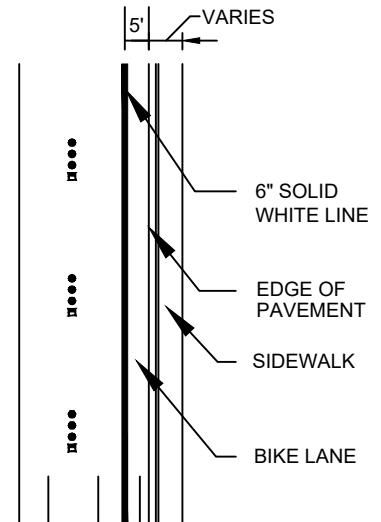
NOTES:

1. LANE LINE DELINEATION SHALL COMPLY WITH STANDARD DRAWING NO. 244 □ 244.1.
2. BIKE LANES MUST BE A MINIMUM OF 4 FT. AND NO GREATER THAN 8 FT. WIDE; HOWEVER, A WIDTH OF 5 FT. IS PREFERRED.
3. ALL CURB LANES ARE MEASURED TO LIP OF GUTTER OR EDGE OF PAVEMENT IF CURB AND GUTTER DO NOT EXIST.

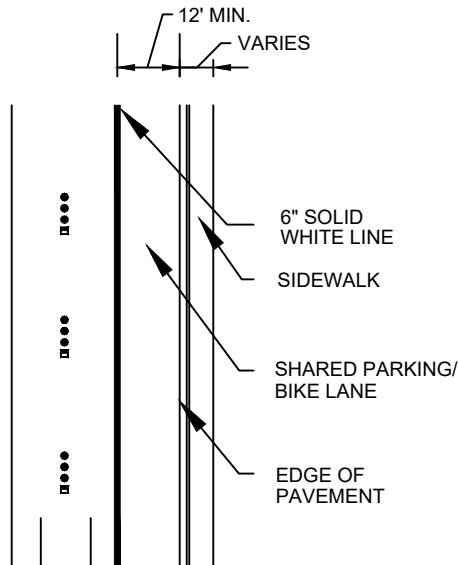
		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
628	PAINTING TRAFFIC STRIPING	TYPICAL DELINEATION FOR BIKE FACILITIES 60 FT. RIGHT-OF-WAY (PARKING ON BOTH SIDES)											
633	PAVEMENT MARKERS												
		DATE	6-8-95	DWG. NO.	244.7								



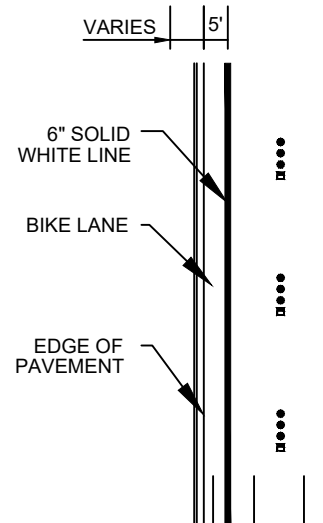
ONE-WAY STREET WITH BIKE LANE
(WITH PARKING ON RIGHT SIDE)



ONE-WAY STREET WITH BIKE LANE
(WITHOUT PARKING ON RIGHT SIDE)



ONE-WAY STREET WITH SHARED
BIKE/PARKING LANE

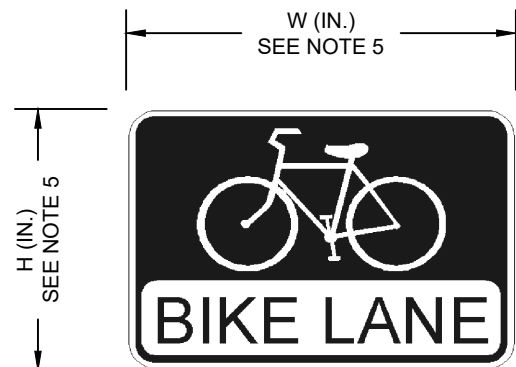
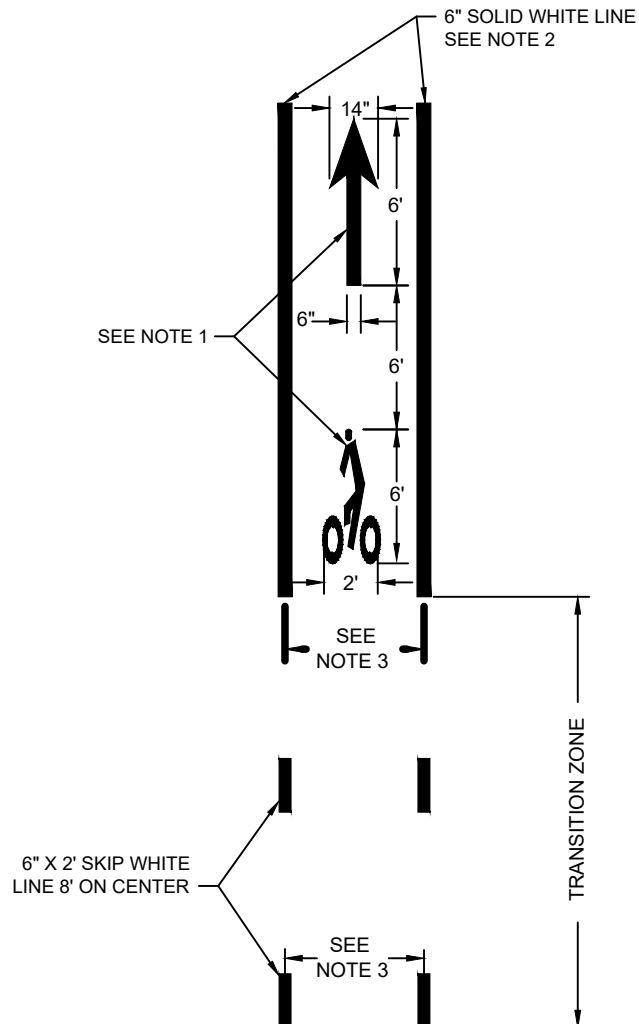


ONE-WAY STREET WITH LEFT-SIDE
BIKE LANE (SEE NOTE 4)

NOTES:

1. LANE LINE DELINEATION SHALL COMPLY WITH STANDARD DRAWING NO. 244 □ 244.1.
2. BIKE LANES MUST BE A MINIMUM OF 5 FEET WHERE ADJACENT TO A PARKING LANE, 4 FEET MINIMUM IN OTHER CASES AND NO GREATER THAN 8 FEET WIDE.
3. ALL CURB LANES ARE MEASURED TO THE EDGE OF PAVEMENT. THE TOP OF PAVEMENT SHALL BE FLUSH WITH GUTTER.
4. BICYCLE LANE SHALL BE ON RIGHT SIDE OF ONE-WAY ROADWAYS, EXCEPT IN LIMITED SITUATIONS, SUCH AS WHEN THERE ARE SIGNIFICANTLY LESS POTENTIAL CONFLICTS ALONG THE LEFT SIDE OF THE ROADWAY OR WHEN SIGNIFICANT BICYCLE TRIP GENERATION ARE ALONG THE LEFT SIDE OF THE ROADWAY.
5. SEE DRAWING NO. 244.9 FOR BIKE LANE SIGNAGE DETAILS.

SPECIFICATION REFERENCE		AGENCY APPROVED						
628	PAINTING TRAFFIC STRIPING	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA BICYCLE LANE DELINEATION ON ONE-WAY STREET						
633	PAVEMENT MARKERS							
		DATE	7-10-03	DWG. NO.	244.8			



R3-17
(BLACK AND WHITE)

BIKE LANE SIGNAGE

BIKE LANE DELINEATION AND LEGEND

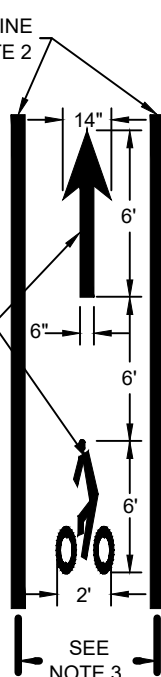
NOTES

1. BIKE LANE LEGENDS SHALL BE APPROVED TYPE I PAVEMENT MARKING FILM AND SHALL BE SLIP RESISTANT.
2. BIKE LANE LINES SHALL BE APPROVED TYPE II PAVEMENT MARKING FILM AND SHALL BE SLIP RESISTANT.
3. BIKE LANES MUST BE A MINIMUM OF 5 FEET WHEN ADJACENT TO A PARKING LANE, 4 FEET MINIMUM IN OTHER CASES AND NO GREATER THAN 8 FT WIDE; HOWEVER A WIDTH OF 5 FEET IS PREFERRED.
4. BICYCLE LANE DELINEATION, LEGEND, AND SIGNING SHALL CONFORM TO THE MUTCD, LATEST EDITION.
5. SIGN SIZE AND PLACEMENT SHALL CONFORM TO THE REQUIREMENTS OF THE MUTCD, LATEST EDITION.
6. THE BIKE LANE SIGNAGE SHALL BE TYPE XI SHEETING.
7. SIGN PLACEMENT SHALL CONFORM WITH STANDARD DRAWING NO. 249.

		AGENCY APPROVED							
		B	C	H	L	M	N	R	
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
		BICYCLE LANE DELINEATION, LEGEND, AND SIGNAGE							
		DATE 03-12-20		DWG. NO. 244.9					

6" SOLID WHITE LINE
SEE NOTE 2

SEE NOTE 1



SEE
NOTE 3

SEE
NOTE 3

6" X 2' SKIP WHITE
LINE 8' ON CENTER

TRANSITION ZONE

BIKE LANE DELINEATION AND LEGEND

W"
SEE NOTE 5



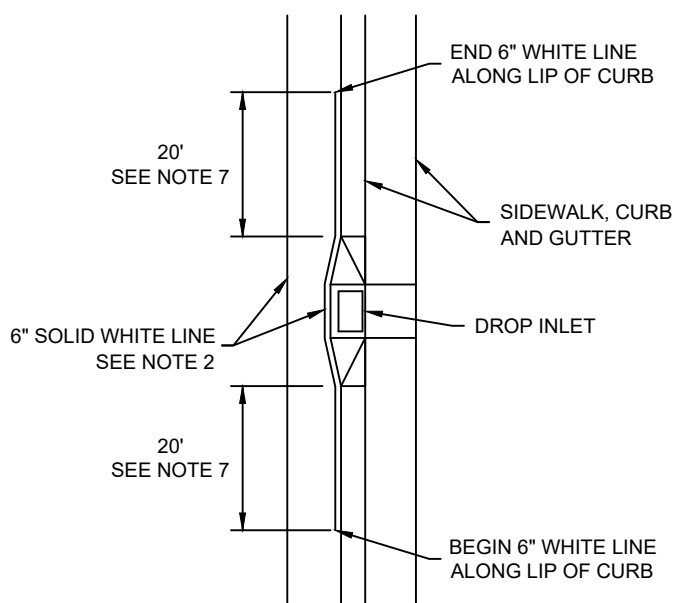
R3-17
(BLACK AND WHITE)

SEE NOTE 8



R3-17B
(BLACK AND WHITE)

BIKE LANE SIGNAGE



BIKE LANE DELINEATION AT DROP INLET

NOTES

1. BIKE LANE LEGENDS SHALL BE APPROVED TYPE I PAVEMENT MARKING FILM AND SHALL BE SLIP RESISTANT.
2. BIKE LANE LINES SHALL BE APPROVED TYPE II PAVEMENT MARKING FILM AND SHALL BE SLIP RESISTANT.
3. BIKE LANES MUST BE A MINIMUM OF 5 FEET WHEN ADJACENT TO A PARKING LANE, 4 FEET MINIMUM IN OTHER CASES AND NO GREATER THAN 8 FT WIDE; HOWEVER A WIDTH OF 5 FEET IS PREFERRED.
4. BICYCLE LANE DELINEATION, LEGEND, AND SIGNING SHALL CONFORM TO THE MUTCD LATEST EDITION.
5. SIGN SIZE AND PLACEMENT SHALL CONFORM TO THE REQUIREMENTS OF THE MUTCD, LATEST EDITION.
6. THE BIKE LANE SIGNAGE SHALL BE TYPE XI SHEETING.
7. A CONTINUOUS 6" WHITE LINE SHALL EXTEND 20' ON EACH SIDE OF THE DROP INLET.
8. INSTALL "DO NOT RIDE IN GUTTER" SIGN IN THE CITY OF LAS VEGAS, SIGN WIDTH TO MATCH R3-17.
9. THE WIDTH OF THE BICYCLE LANE SHALL EXCLUDE THE GUTTER PAN.
10. SIGN PLACEMENT SHALL CONFORM WITH STANDARD DRAWING NO. 249.

AGENCY APPROVED

L

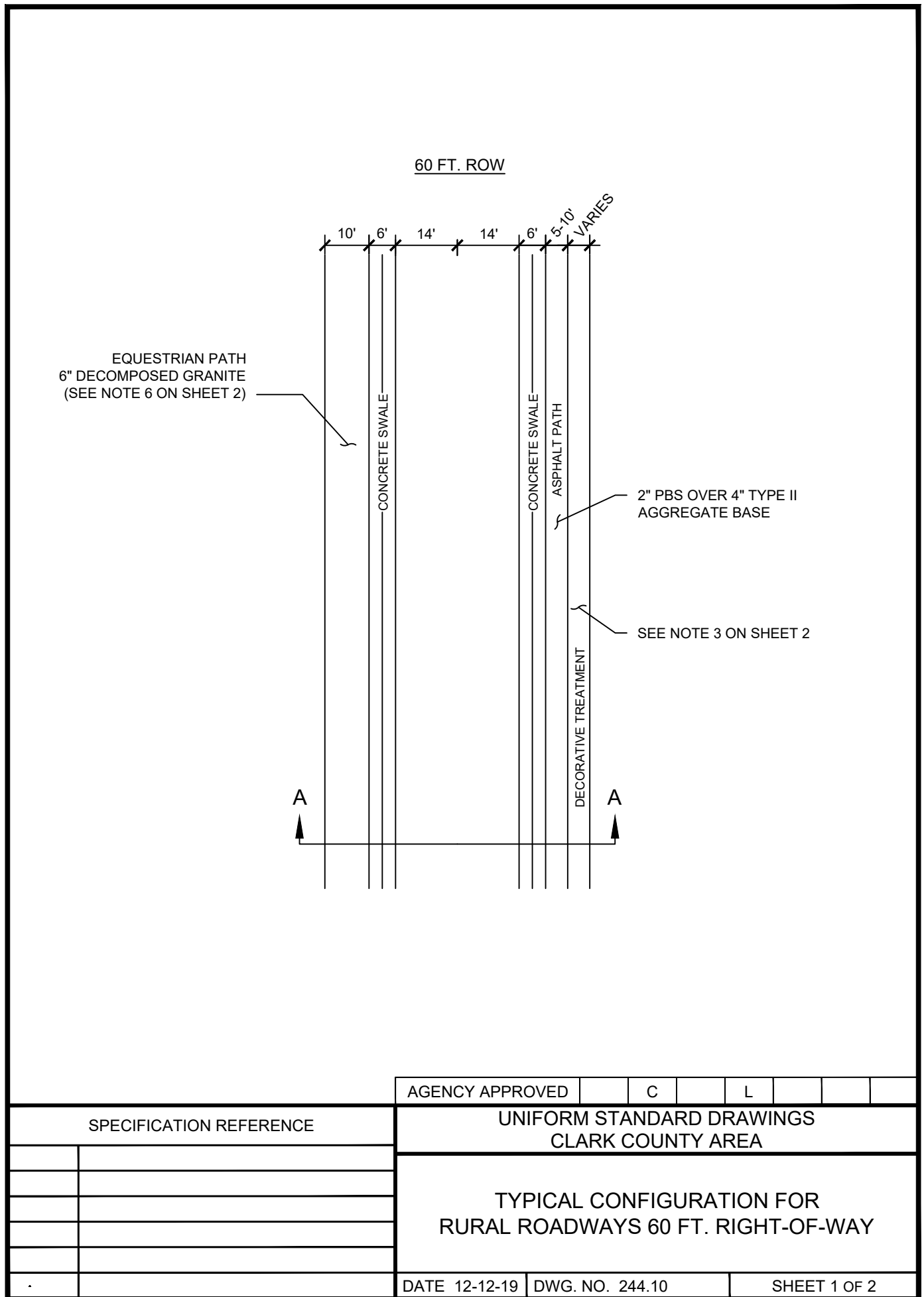
SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

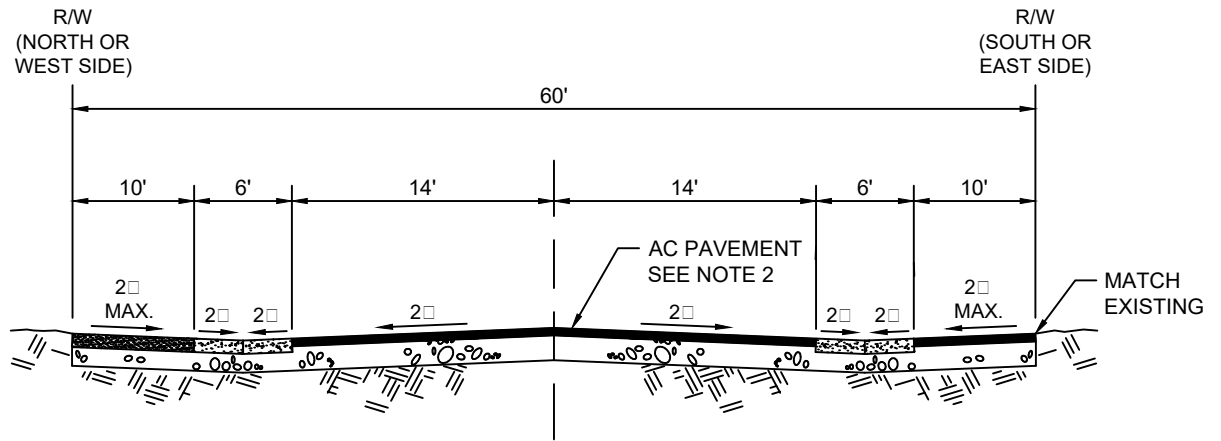
SUPPLEMENTAL DRAWING

BICYCLE LANE DELINEATION,
LEGEND, AND SIGNAGE

DATE 12-10-20 DWG. NO. 244.9.S1



SPECIFICATION REFERENCE		AGENCY APPROVED							
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
		TYPICAL CONFIGURATION FOR RURAL ROADWAYS 60 FT. RIGHT-OF-WAY							
		DATE 12-12-19				DWG. NO. 244.10		SHEET 1 OF 2	

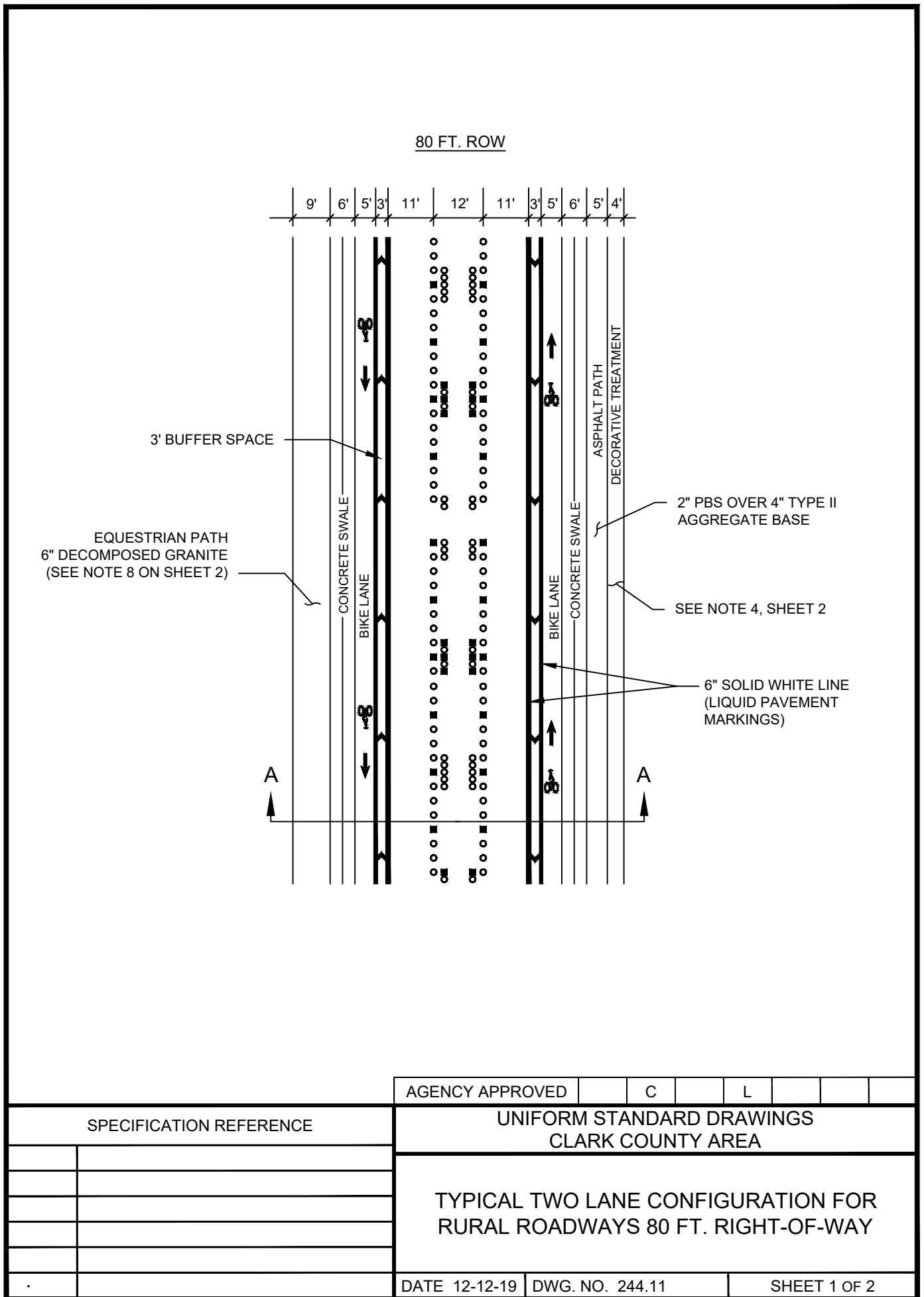


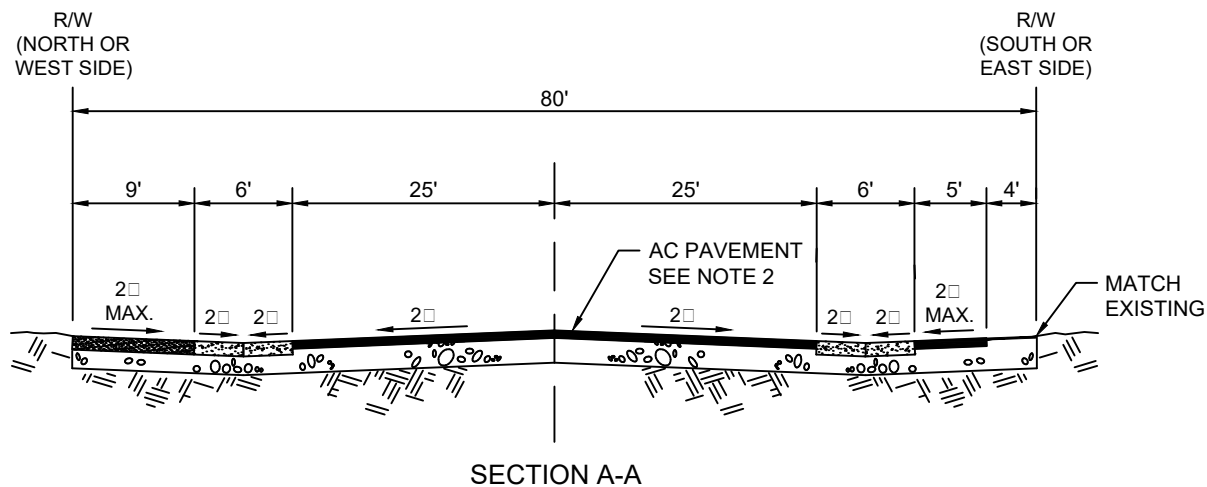
SECTION A-A

NOTES

1. DRAWING IS ONLY APPLICABLE TO THE CITY OF LAS VEGAS AND UNINCORPORATED AREA OF CLARK COUNTY, IN THE AREA BOUNDED BY CLARK COUNTY 215 BRUCE WOODBURY BELTWAY ON THE WEST AND NORTH, ALEXANDER ROAD ON THE SOUTH AND DURANGO DRIVE ON THE EAST, OR IN OTHER AREAS APPROVED BY THE AGENCY.
2. MINIMUM PAVEMENT STRUCTURE AND DESIGN SHALL CONFORM WITH STANDARD DRAWING 200.1.
3. TREATMENT SHALL CONFORM WITH CLARK COUNTY DEPARTMENT OF AIR QUALITY AND NEVADA DIVISION OF ENVIRONMENTAL PROTECTION REGULATIONS.
4. THE CONCRETE SWALE SHALL BE 6' WIDE AND 6" THICK WITH MINIMAL STEEL REQUIRED PER ACI. WHEN VEHICULAR TRAFFIC IS REQUIRED TO CROSS THE SWALE, IT SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DRAWING 228.
5. THE STREET SECTION IS NOT ANTICIPATED TO MEET CCRFCD DRAINAGE REQUIREMENTS AND MAY REQUIRE A STORM DRAINAGE SYSTEM AS DETERMINED BY THE APPROVED TECHNICAL DRAINAGE STUDY.
6. IT IS RECOMMENDED THAT THE EQUESTRIAN TRAIL BE LOCATED ON THE NORTH SIDE OF EAST-WEST ROADWAYS OR THE WEST SIDE OF NORTH-SOUTH ROADWAYS.
7. STREET LIGHTS REQUIRED ONLY AT INTERSECTIONS.
8. UTILITY PLACEMENT MUST BE APPROVED BY THE APPROVING AGENCY.

		AGENCY APPROVED		C					
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
		TYPICAL CONFIGURATION FOR RURAL ROADWAYS 60 FT. RIGHT-OF-WAY							
		DATE 12-12-19		DWG. NO. 244.10			SHEET 2 OF 2		





NOTES

1. DRAWING IS ONLY APPLICABLE TO THE CITY OF LAS VEGAS AND UNINCORPORATED AREA OF CLARK COUNTY, IN THE AREA BOUNDED BY CLARK COUNTY 215 BRUCE WOODBURY BELTWAY ON THE WEST AND NORTH, ALEXANDER ROAD ON THE SOUTH, AND DURANGO DRIVE ON THE EAST, OR IN OTHER AREAS APPROVED BY THE AGENCY.
2. LANE LINE DELINEATION SHALL COMPLY WITH STANDARD DRAWINGS 244 AND 244.1.
3. MINIMUM PAVEMENT STRUCTURE AND DESIGN SHALL CONFORM WITH STANDARD DRAWING 200.
4. TREATMENT SHALL CONFORM WITH CLARK COUNTY DEPARTMENT OF AIR QUALITY AND NEVADA DIVISION OF ENVIRONMENTAL PROTECTION REGULATIONS.
5. THE CONCRETE SWALE SHALL BE 6' WIDE AND 6" THICK WITH MINIMAL STEEL REQUIRED PER ACI. WHEN VEHICULAR TRAFFIC IS REQUIRED TO CROSS THE SWALE, IT SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DRAWING 228.
6. THE STREET SECTION IS NOT ANTICIPATED TO MEET CCRFCD DRAINAGE REQUIREMENTS AND MAY REQUIRE A STORM DRAINAGE SYSTEM AS DETERMINED BY THE APPROVED TECHNICAL DRAINAGE STUDY.
7. RAISED LANDSCAPE MEDIAN MAY BE REQUIRED BY CLARK COUNTY.
8. IT IS RECOMMENDED THAT THE EQUESTRIAN TRAIL BE LOCATED ON THE NORTH SIDE OF EAST-WEST ROADWAYS OR THE WEST SIDE OF NORTH-SOUTH ROADWAYS.
9. STREET LIGHTS REQUIRED ON ONE SIDE OF THE STREET AND AT INTERSECTIONS.
10. UTILITY PLACEMENT MUST BE APPROVED BY THE APPROVING AGENCY.

		AGENCY APPROVED		C	L			
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
		TYPICAL TWO LANE CONFIGURATION FOR RURAL ROADWAYS 80 FT. RIGHT-OF-WAY						
		DATE 12-12-19	DWG. NO. 244.11			SHEET 2 OF 2		

SIDEWALK

BIKE LANE

– CURB AND GUTTER

SIDEWALK

▶ DECORATIVE
TREATMENT
SEE NOTE 5

1. DRAWING IS ONLY APPLICABLE TO THE UNINCORPORATED AREA OF CLARK COUNTY, IN THE AREA BOUNDED BY CLARK COUNTY 215 BRUCE WOODBURY BELTWAY ON THE WEST AND NORTH, ALEXANDER ROAD ON THE SOUTH, AND DURANGO DRIVE ON THE EAST.
2. LANE LINE DELINEATION SHALL COMPLY WITH STANDARD DRAWINGS 244 AND 244.1.
3. MINIMUM PAVEMENT STRUCTURE AND DESIGN SHALL CONFORM WITH STANDARD DRAWING 200.
4. RAISED LANDSCAPE MEDIAN MAY BE REQUIRED BY CLARK COUNTY.
5. TREATMENT SHALL CONFORM WITH CLARK COUNTY DEPARTMENT OF AIR QUALITY AND NEVADA DIVISION OF ENVIRONMENTAL PROTECTION REGULATIONS.

		AGENCY APPROVED		C		L		
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
		TYPICAL CONFIGURATION FOR RURAL ROADWAYS 100 FT. RIGHT-OF-WAY						
•		DATE 09-12-19	DWG. NO. 244.12					

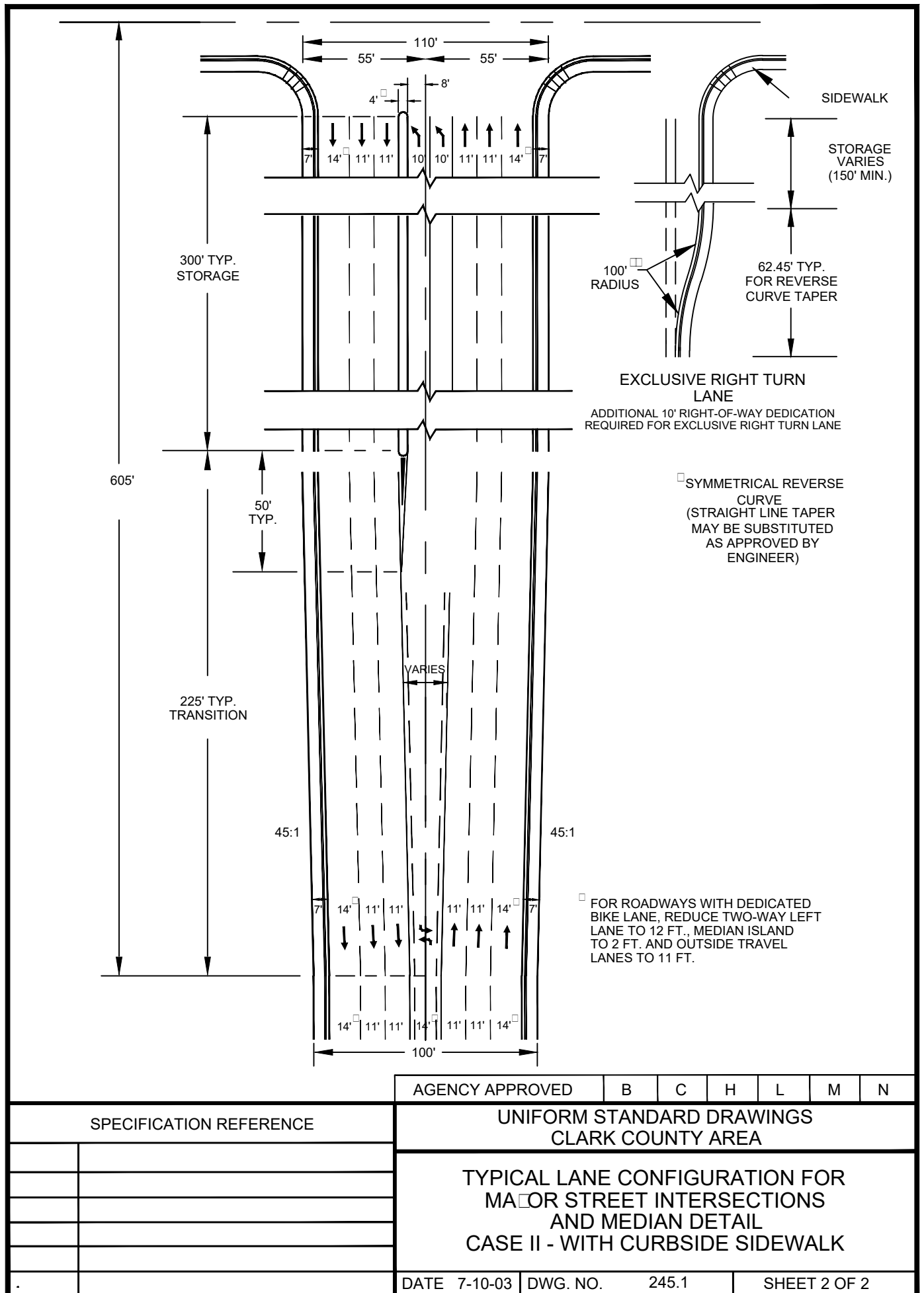
Diagram illustrating the plan view of a two-lane road with a 3' shoulder and various lane widths. The road is divided into a "NO PASSING SIDE" and a "PASSING SIDE". The diagram shows a 3' shoulder on the left, followed by a 20' typical lane width, a 5' typical lane width, and a 2.5' typical lane width. The "NO PASSING SIDE" has a 10' lane width, a 30' lane width, and a 2.5' typical lane width. The "PASSING SIDE" has a 10' lane width, a 30' lane width, and a 2.5' typical lane width. The diagram also shows a 3' shoulder on the right. The road is marked with circles and squares representing lane boundaries and center lines. The diagram is labeled with "TYPE B" and "TYPE C" for different lane configurations.

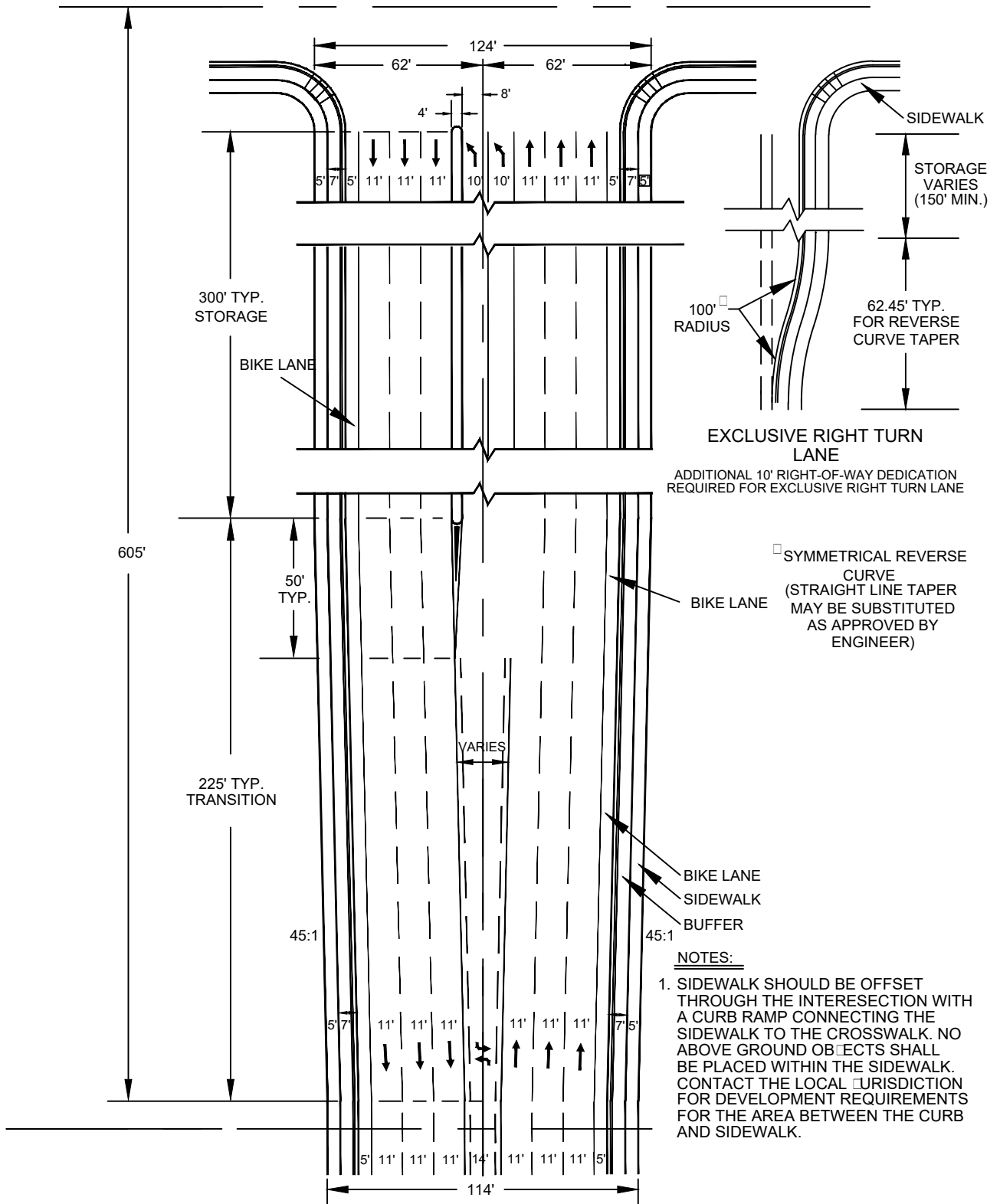
Diagram illustrating the cross-section of a curb and gutter assembly. The total width is 40'. The curb is 15' wide and 15' high. The gutter is 15' wide and 3'-4" deep. The diagram shows the curb, gutter, and the 40' total width. It also shows the 10' distance from the curb to the gutter, the 15' distance from the gutter to the curb, and the 3'-4" typical depth of the gutter. The diagram is labeled 'TYPE C' and 'TYPE B'.

		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
633	PAVEMENT MARKERS	TYPICAL CENTERLINE DELINEATION							
		DATE 6-11-93	DWG. NO. 244						

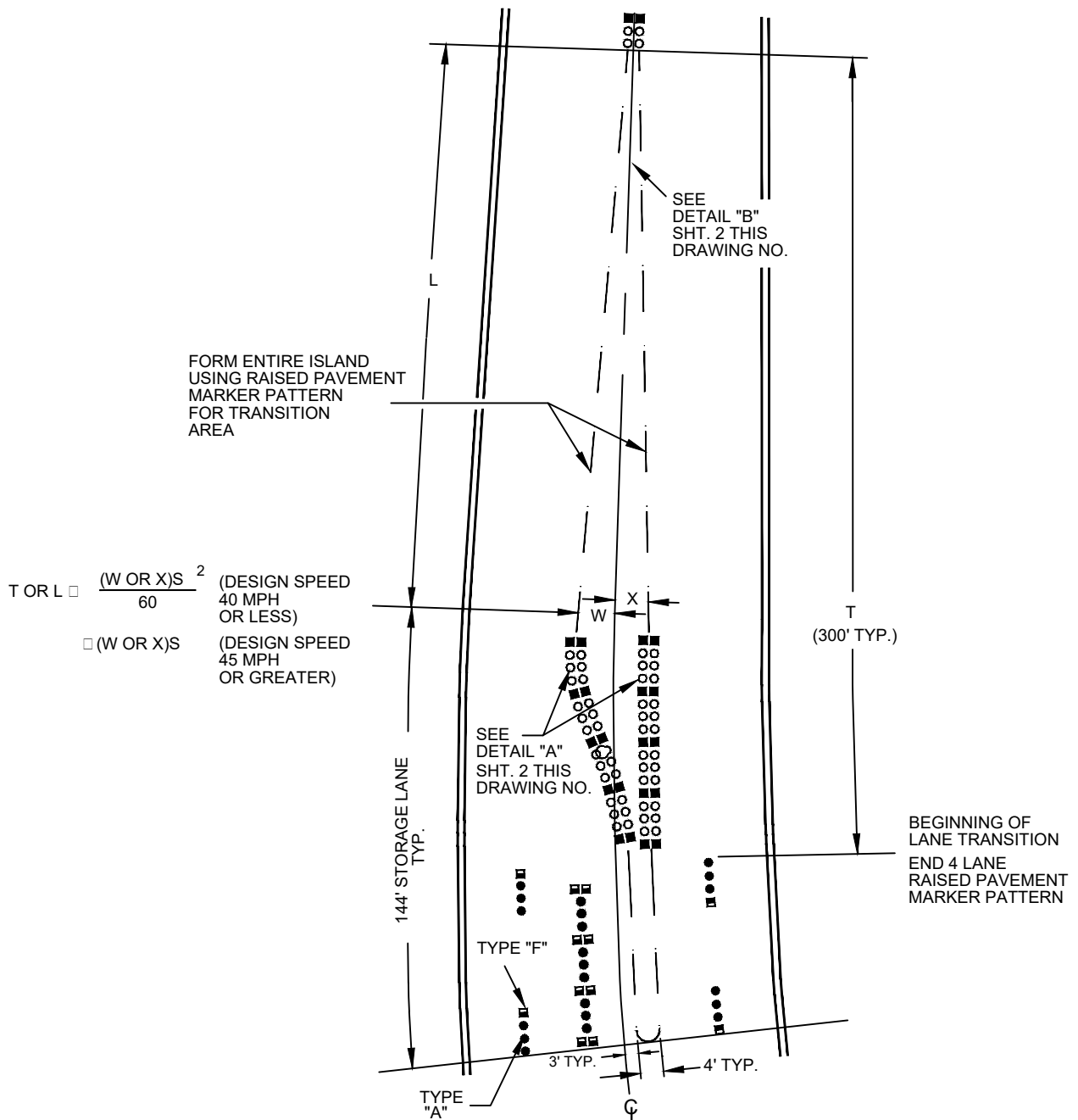


		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
		TYPICAL LANE CONFIGURATION FOR MAJOR STREET INTERSECTIONS AND MEDIAN DETAIL CASE I - WITH CURBSIDE SIDEWALK							
-		DATE 7-10-03	DWG. NO. 245.1			SHEET 1 OF 2			





AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		TYPICAL LANE CONFIGURATION FOR MAJOR STREET INTERSECTIONS AND MEDIAN DETAIL CASE II - WITH OFFSET SIDEWALK					
DATE 7-10-03		DWG. NO.		245.2		SHEET 2 OF 2	



NOTE:

SEE SHEET 3 THIS DRAWING NUMBER IF PATTERN IS TO BE USED AT A GORE POINT TO DIVIDE TRAFFIC MOVING IN SAME DIRECTION.

SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
628	PAINTING TRAFFIC STRIPING	TYPICAL LANE DELINEATION IN TRANSITION SECTIONS					
633	PAVEMENT MARKERS						
		DATE	6-11-93	DWG. NO.	245	SHEET 1 OF 3	

AGENCY APPROVED

B

C

H

L

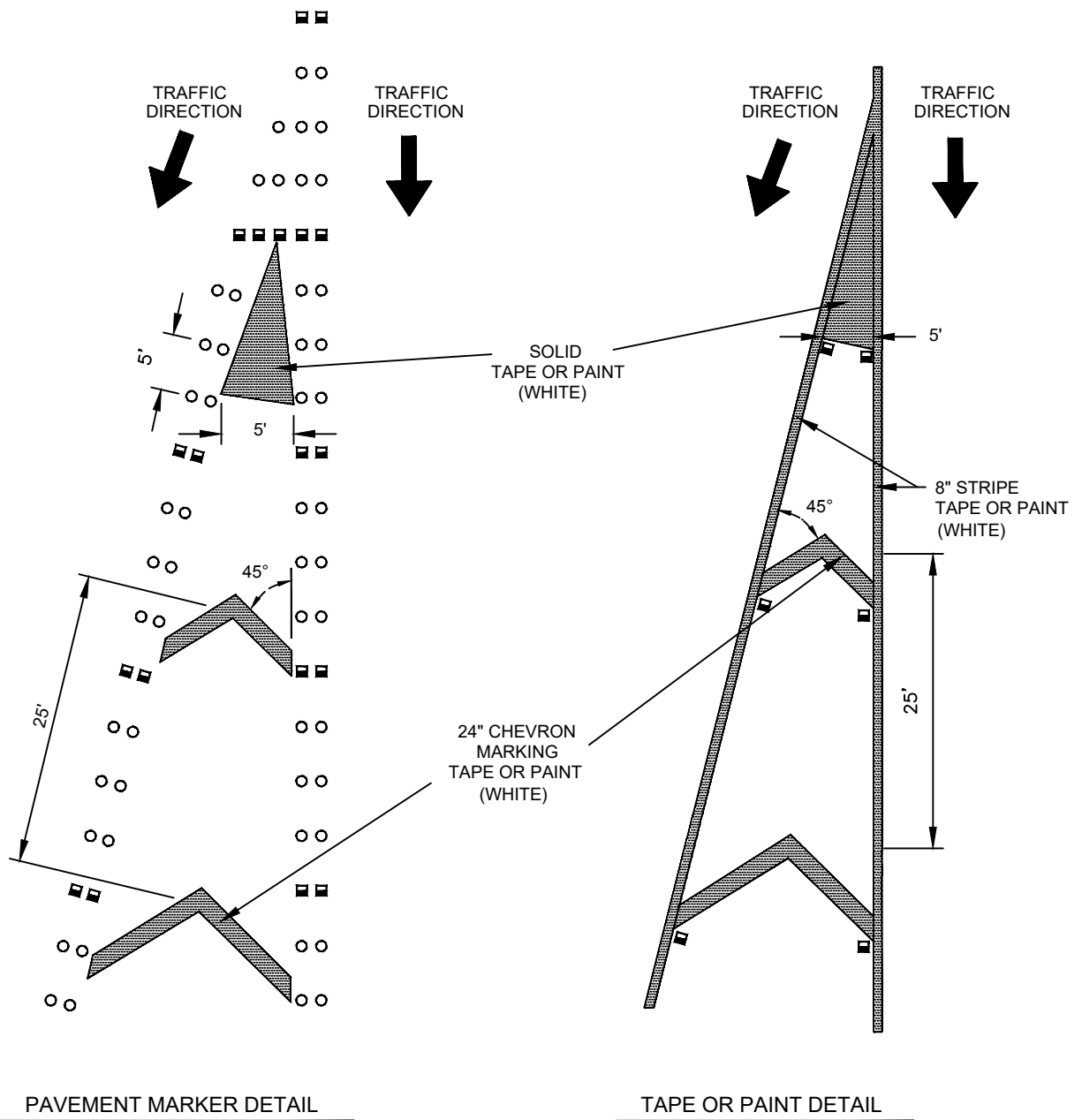
M

N

DETAIL "B"

PAINT MAY BE USED IN LIEU OF TAPE AND/OR RAISED PAVEMENT MARKERS
AT THE DISCRETION OF THE ENGINEER.

		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
628	PAINTING TRAFFIC STRIPING	DETAILS FOR TYPICAL LANE DELINEATION IN TRANSITION SECTIONS							
633	PAVEMENT MARKERS								
		DATE 6-11-93	DWG. NO.	245	SHEET 2 OF 3				



SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
628	PAINTING TRAFFIC STRIPING	TYPICAL LANE DELINEATION IN TRANSITION SECTIONS WHERE TRAFFIC FLOW IN SAME DIRECTION					
633	PAVEMENT MARKERS						
		DATE 6-11-93	DWG. NO.	245	SHEET 3 OF 3		

AGENCY APPROVED

B

C

H

L

M

N

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

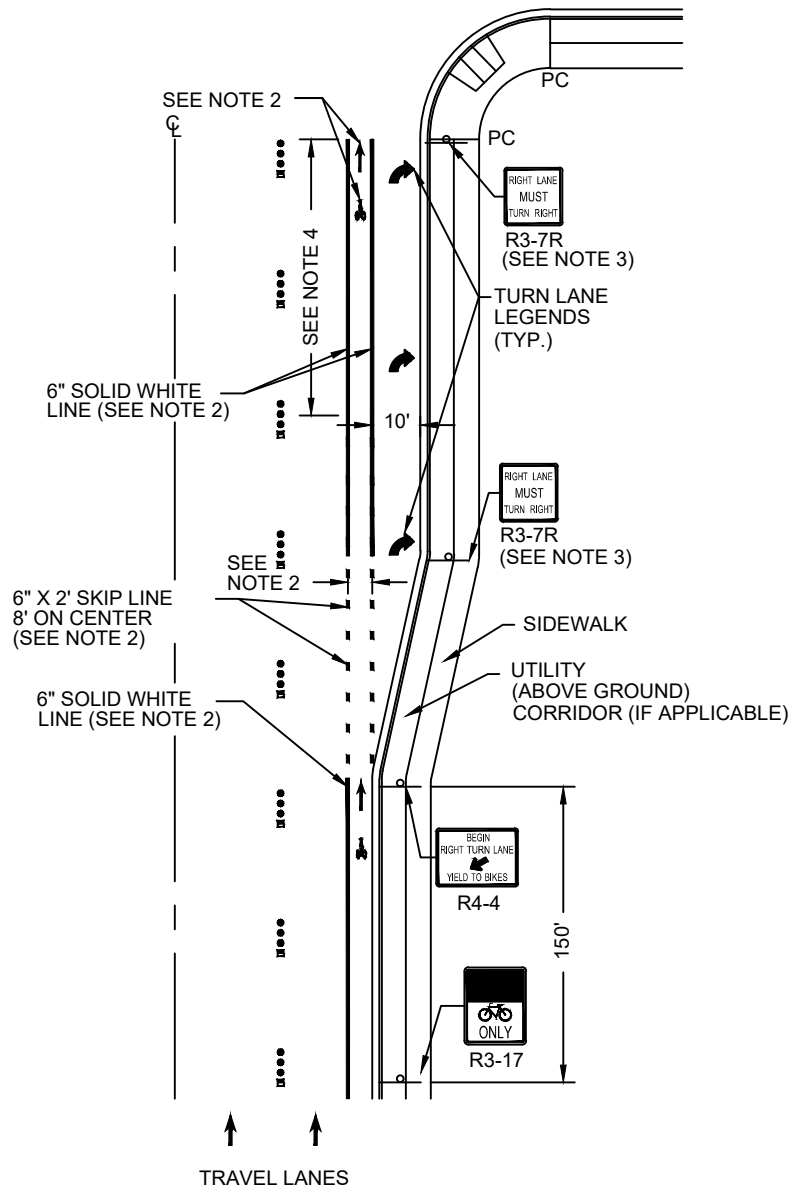
TYPICAL LANE DELINEATION IN
TRANSITION SECTIONS WHERE
TRAFFIC FLOW IN SAME DIRECTION

DATE 6-11-93

DWG. NO.

245

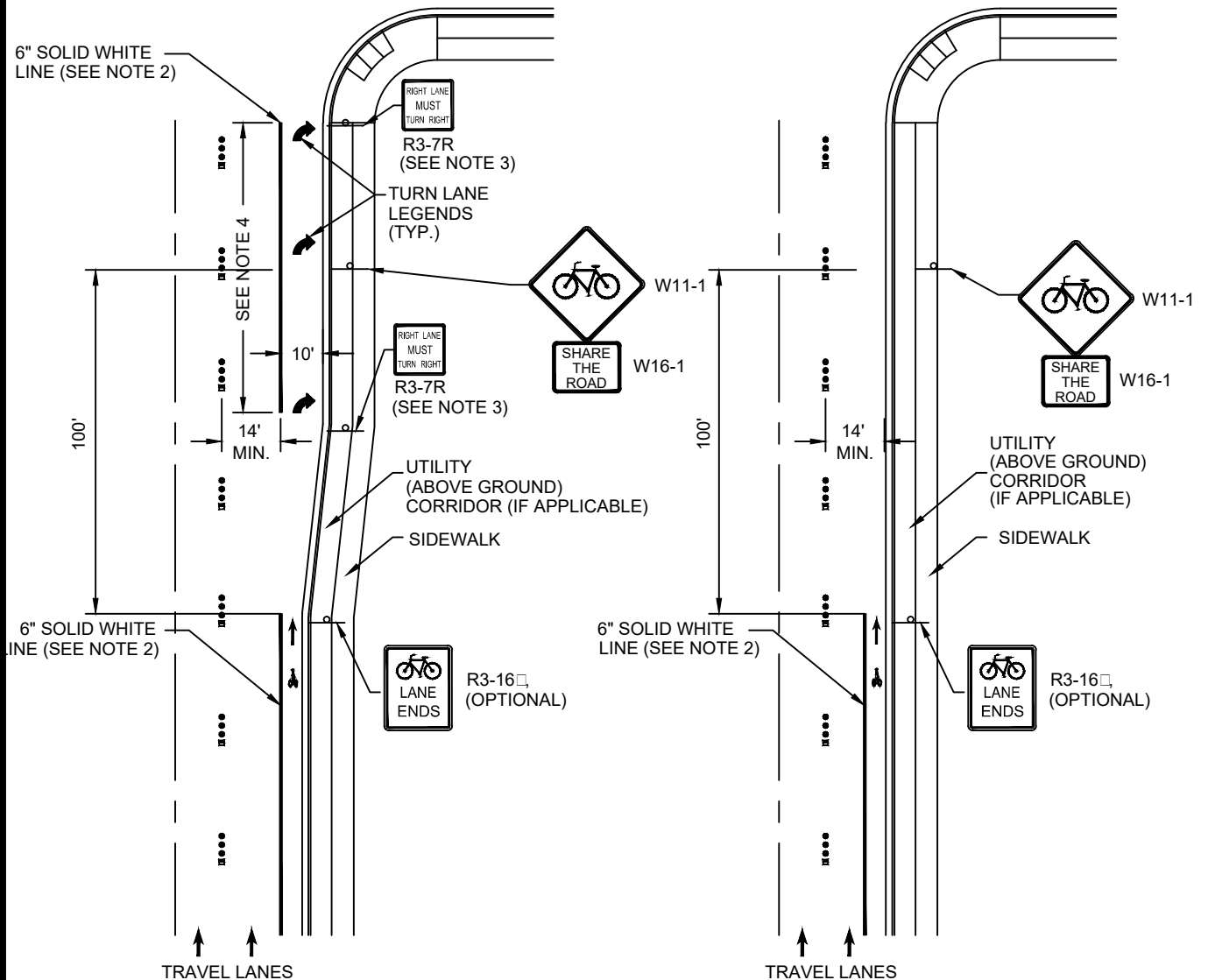
SHEET 3 OF 3



NOTES:

1. STORAGE LENGTH TO BE DETERMINED BY TRAFFIC ENGINEER.
2. SEE DRAWING NO. 244.9 FOR BIKE LANE LEGEND AND SIGNAGE.
3. WHERE ADDITIONAL MOTORIST GUIDANCE IS DEEMED NECESSARY BY THE TRAFFIC ENGINEER, INSTALL R3-7R SIGN AND ARROW SYMBOL. PAVEMENT MARKINGS FOR THE LENGTH OF THE STORAGE LINE. APPROVED TYPE II PAVEMENT MARKING FILM SHALL BE USED FOR SYMBOL MARKINGS.
4. SEE DRAWING NO. 246 NOTE 1 FOR STANDARD PAVEMENT MARKERS ADDED TURN LANE.

AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
628	PAINTING TRAFFIC STRIPING	BICYCLE LANE APPROACH TO INTERSECTION WITH EXCLUSIVE RIGHT TURN LANE					
633	PAVEMENT MARKERS						
DATE 06-09-11		DWG. NO.		246.1			



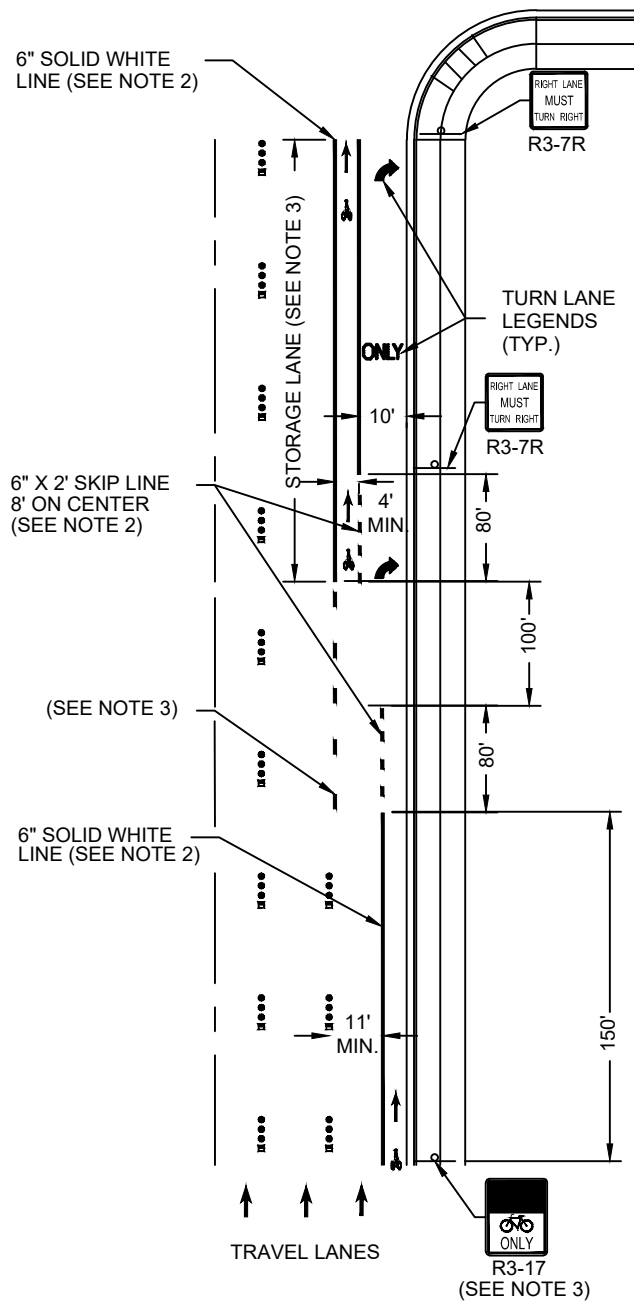
WITH EXCLUSIVE RIGHT-TURN LANE

WITHOUT EXCLUSIVE RIGHT-TURN LANE

NOTES:

1. STORAGE LENGTH TO BE DETERMINED BY TRAFFIC ENGINEER.
2. SEE DRAWING NUMBER 244.9 FOR BIKE LANE LEGEND AND SIGNAGE.
3. WHERE ADDITIONAL MOTORIST GUIDANCE IS DEEMED NECESSARY BY THE ENGINEER, INSTALL R3-7R SIGN AND ARROW SYMBOL PAVEMENT MARKINGS FOR THE LENGTH OF THE STORAGE LINE. APPROVED TYPE II PAVEMENT MARKING FILM SHALL BE USED FOR SYMBOL MARKINGS.
4. SEE DWG. 246 NOTE 1 FOR STANDARD PAVEMENT MARKERS ADDED TURN LANE.
5. THE ABOVE DETAIL SHOULD BE FOLLOWED IN SITUATIONS WHERE THERE IS NOT ADEQUATE SPACE TO PROVIDE A SEPARATE BICYCLE LANE.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
628	PAINTING TRAFFIC STRIPING	BICYCLE LANE TRANSITION TO SHARED LANE AT INTERSECTION											
633	PAVEMENT MARKERS												
		DATE 06-09-11		DWG. NO.		246.2							



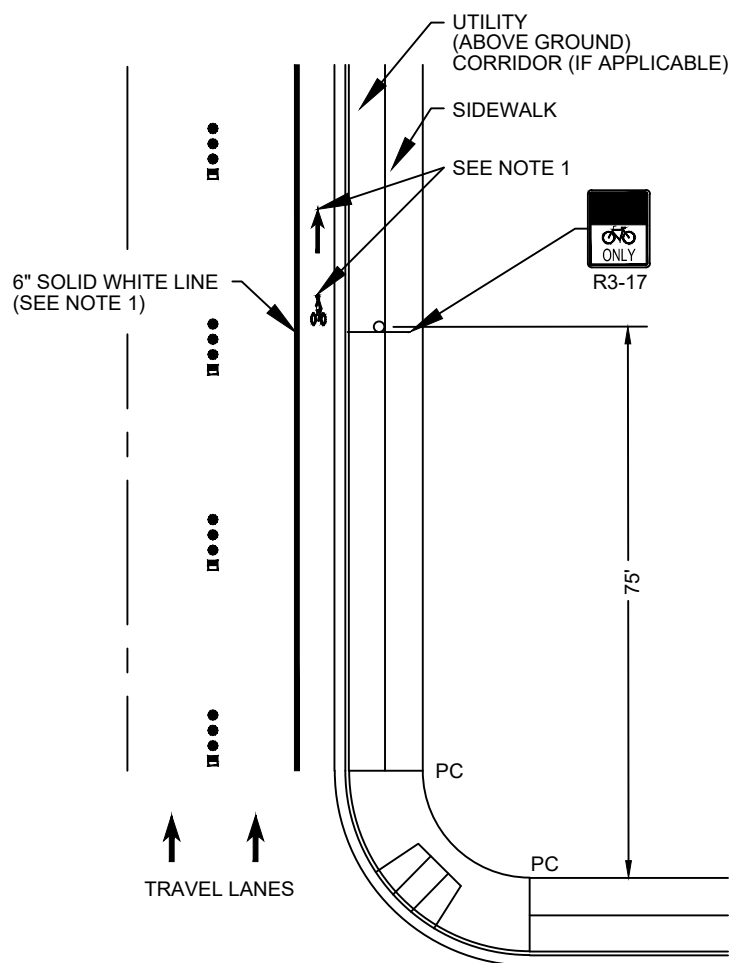
NOTES:

1. FORCED RIGHT-TURN LANES AND LONG RIGHT TURN POCKETS ARE NOT DESIRABLE FOR BICYCLISTS AND SHOULD BE AVOIDED WHEN POSSIBLE.
2. SEE DRAWING NO. 244.9 FOR BIKE LANE DELINEATION, LEGEND, AND SIGNAGE DETAILS.
3. SEE DRAWING NO. 246.6 FOR DETAILS ON THE FORCED TURN LANE.

AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
628	PAINTING TRAFFIC STRIPING	BICYCLE LANE AT A RIGHT TURN DROP LANE					
633	PAVEMENT MARKERS						
DATE 7-10-03		DWG. NO.		246.3			



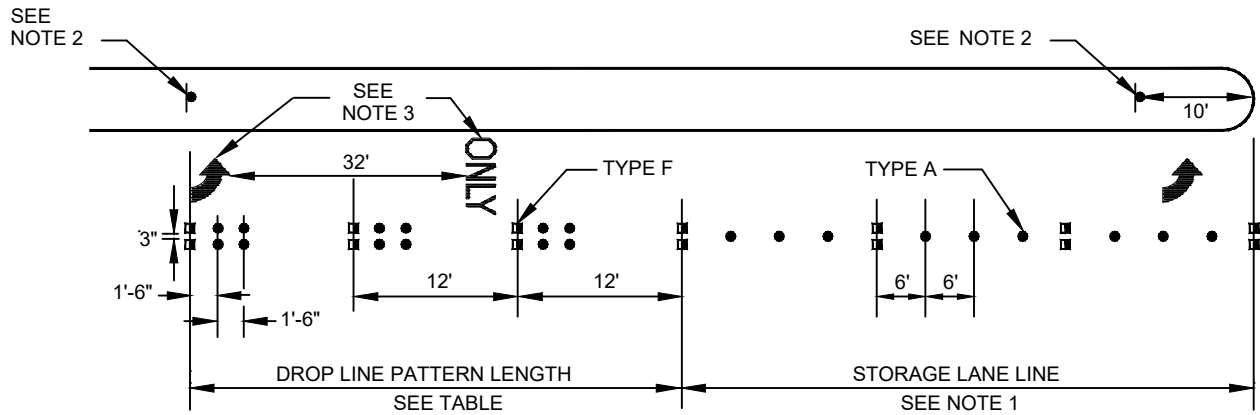
		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
628	PAINTING TRAFFIC STRIPING	BICYCLE LANE DELINEATION AT APPROACH TO INTERSECTION WITHOUT EXCLUSIVE RIGHT TURN LANE							
633	PAVEMENT MARKERS								
		DATE	7-10-03	DWG. NO.	246.4				



NOTES:

1. SEE DRAWING NUMBER 244.9 FOR BIKE LANE LEGEND AND SIGNAGE DETAILS.
2. USE 2 FOOT LONG SKIP LINE, 8 FEET ON CENTER, FOR LOCATIONS WITH BUS STOPS. FOR TYPICAL BUS STOP, TRANSITION FROM SOLID LINE TO SKIP LINE FOR 150 FEET CENTERED ON BUS STOP.

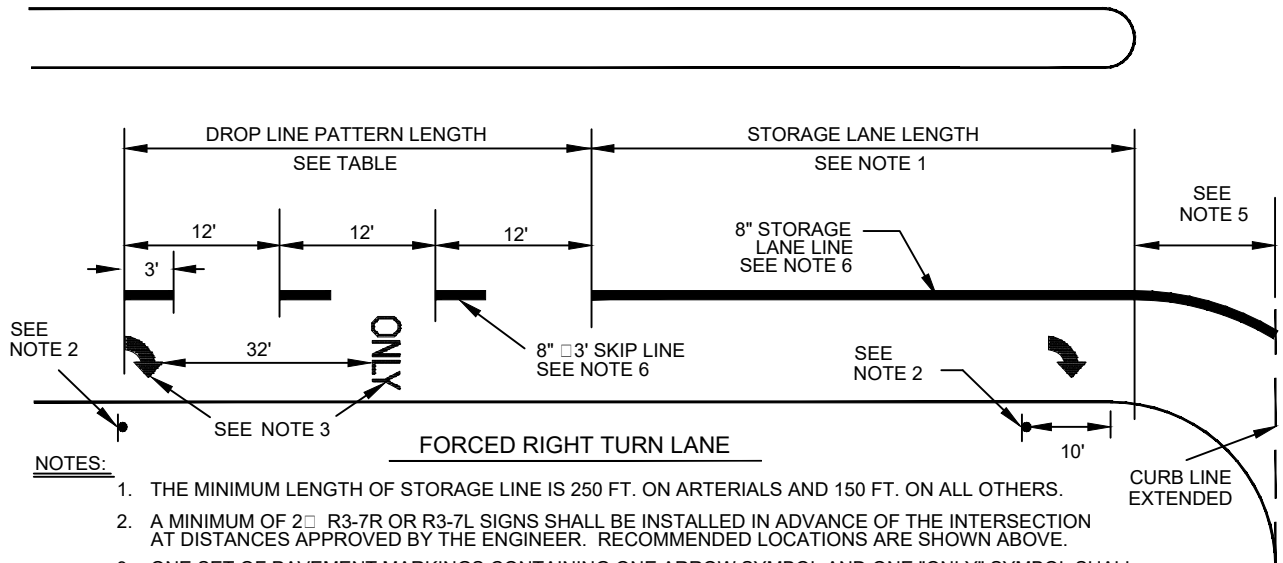
		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
628	PAINTING TRAFFIC STRIPING	BICYCLE LANE DEPARTURE FROM INTERSECTIONS							
633	PAVEMENT MARKERS								
		DATE	7-10-03	DWG. NO.	246.5				



TYP. DROP LINE LENGTHS

POSTED SPEED (MPH)	LENGTH (FT)
25	240
30	320
35	400
40	480
45	560
50	640
55	720

FORCED LEFT TURN LANE



NOTES:

1. THE MINIMUM LENGTH OF STORAGE LINE IS 250 FT. ON ARTERIALS AND 150 FT. ON ALL OTHERS.
2. A MINIMUM OF 2 R3-7R OR R3-7L SIGNS SHALL BE INSTALLED IN ADVANCE OF THE INTERSECTION AT DISTANCES APPROVED BY THE ENGINEER. RECOMMENDED LOCATIONS ARE SHOWN ABOVE.
3. ONE SET OF PAVEMENT MARKINGS CONTAINING ONE ARROW SYMBOL AND ONE "ONLY" SYMBOL SHALL BE PLACED AT THE BEGINNING OF THE DROP LANE.
4. WHERE ADDITIONAL MOTORIST GUIDANCE IS DEEMED NECESSARY BY THE ENGINEER, ADDITIONAL ARROW AND "ONLY" SYMBOL PAVEMENT MARKINGS AND OVERHEAD MOUNTED R3-5 SIGNS MAY BE INSTALLED. SYMBOLS SHALL BE APPROVED TYPE II PAVEMENT MARKING FILM.
5. APPROVED TYPE I PAVEMENT MARKING FILM OR RAISED PAVEMENT MARKERS MAY BE USED FOR ADDITIONAL GUIDANCE AT THE DISCRETION OF THE ENGINEER.
6. STORAGE LANE LINE AND SKIP LINES SHALL BE APPROVED TYPE I PAVEMENT MARKING FILM OR IF APPROVED BY THE ENGINEER, RAISED PAVEMENT MARKERS MAY BE USED.

AGENCY APPROVED

B

C

H

L

M

N

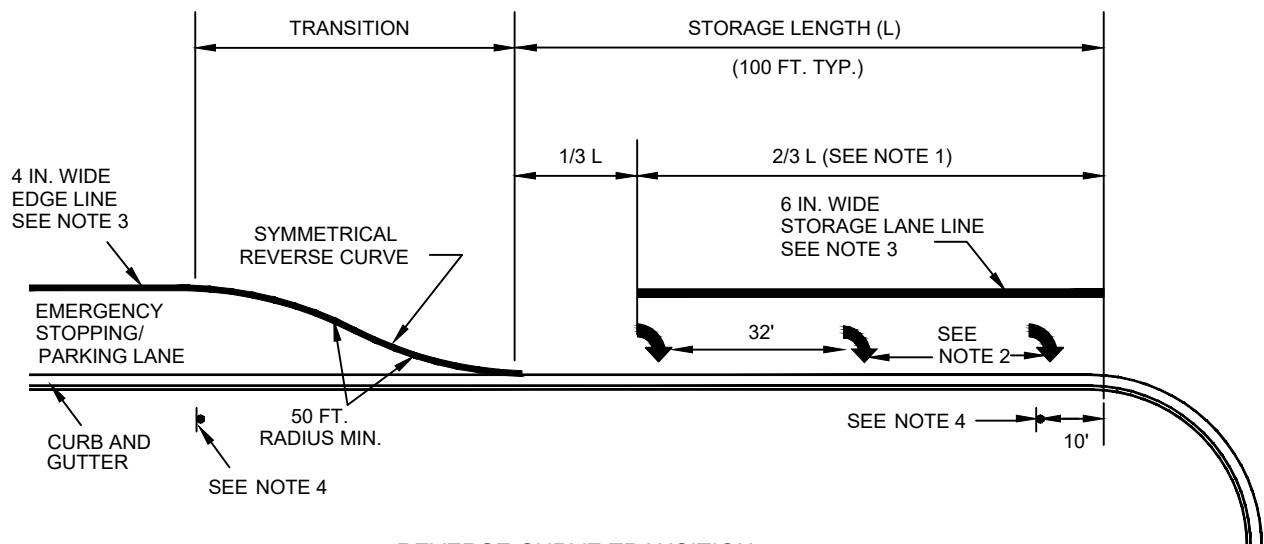
SPECIFICATION REFERENCE

633	PAVEMENT MARKERS
628	PAINTING TRAFFIC STRIPING, PAVEMENT MARKINGS

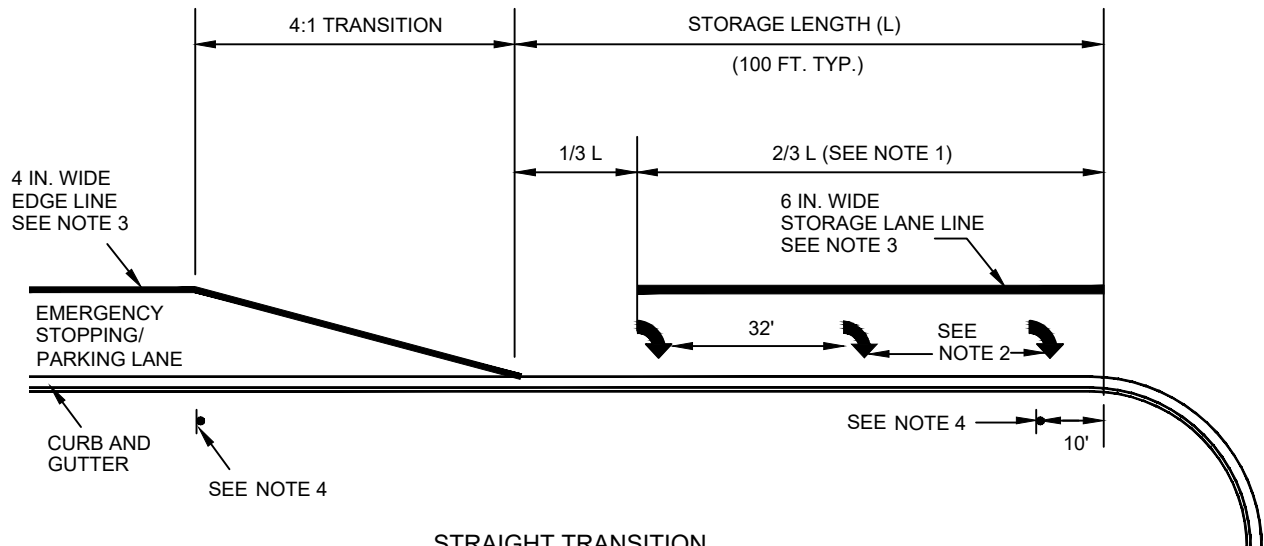
UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA

STANDARD PAVEMENT MARKERS FORCED TURN LANE

DATE 07-01-16 DWG. NO. 246.6



REVERSE CURVE TRANSITION

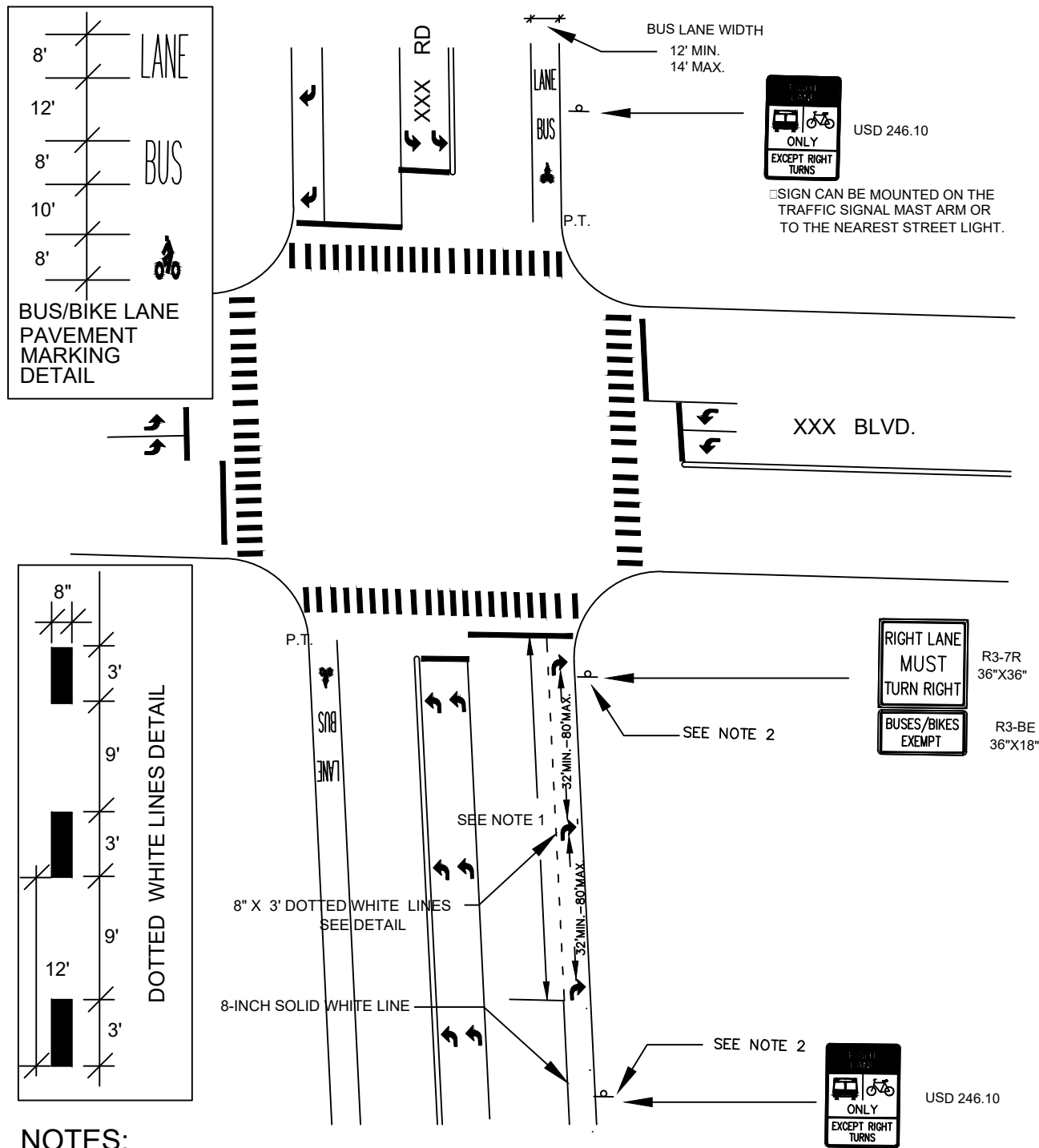


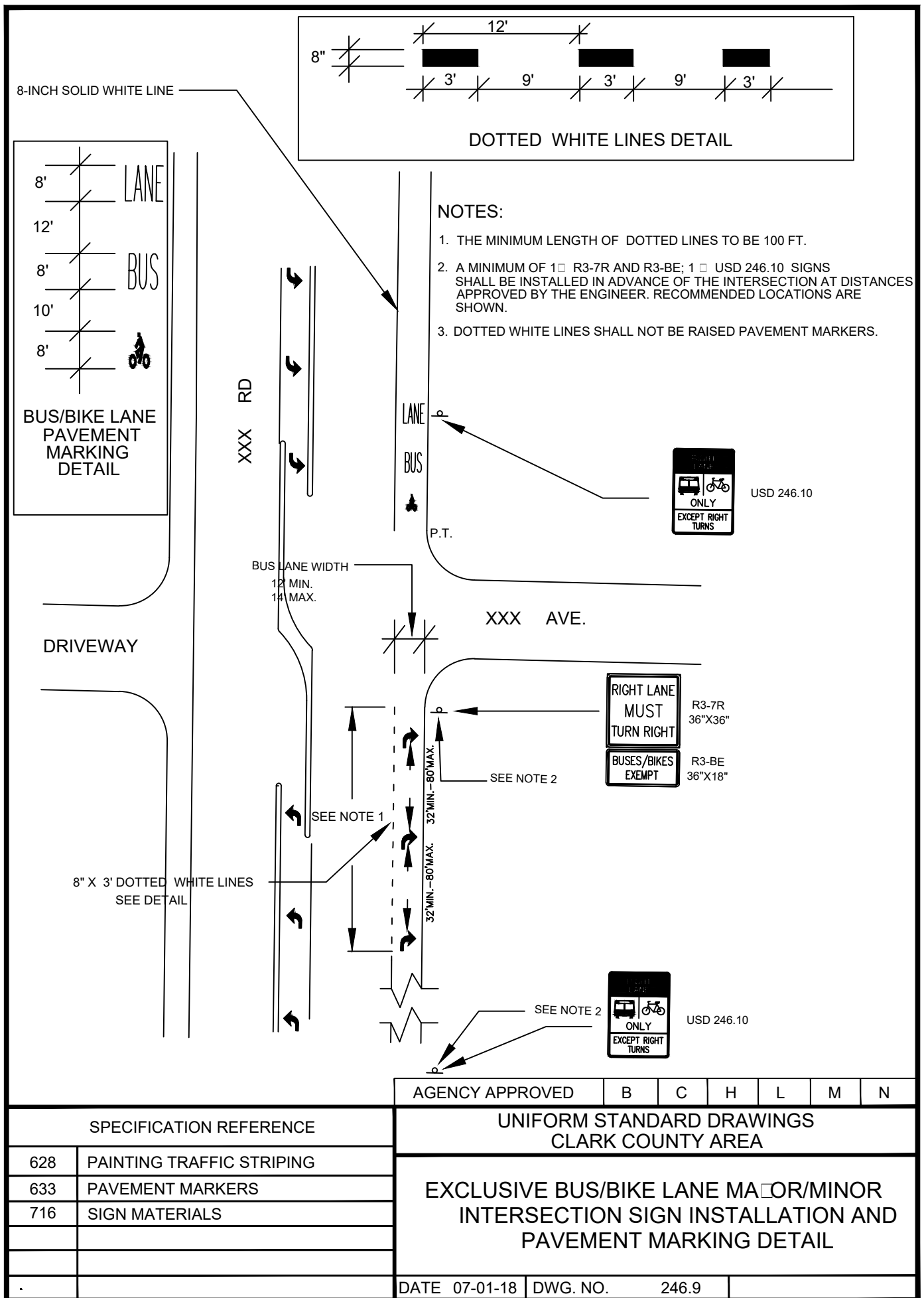
STRAIGHT TRANSITION

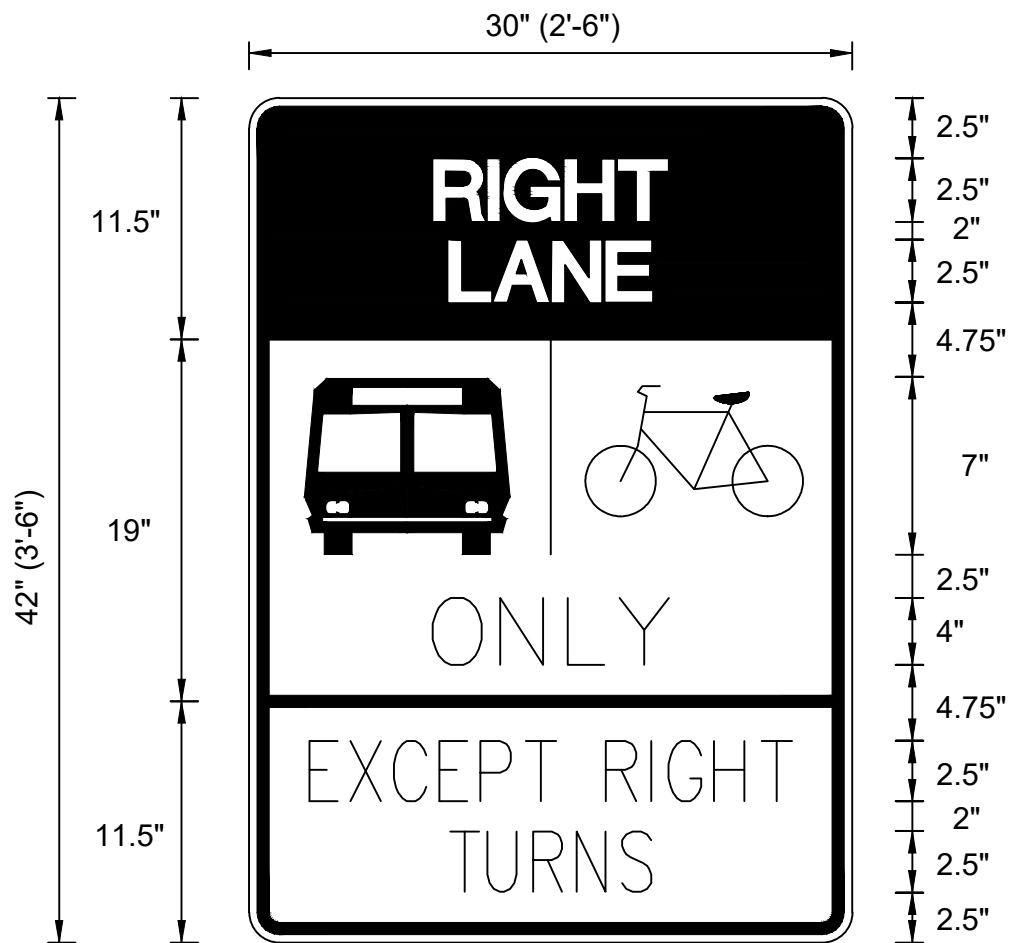
NOTES:

1. LENGTH OF STORAGE LANE LINE IS TWO THIRDS OF THE TURN LANE STORAGE LENGTH.
2. WHERE ADDITIONAL MOTORIST GUIDANCE IS DEEMED NECESSARY BY THE ENGINEER, INSTALL ARROW SYMBOL PAVEMENT MARKINGS FOR THE LENGTH OF THE STORAGE LINE.
3. PAVEMENT MARKINGS SHALL BE TYPE I TAPE OR PAINT AS DIRECTED BY THE ENGINEER.
4. INSTALL "NO PARKING" SIGNS FOR ENTIRE LENGTH OF TURN LANE. WHERE ADDITIONAL MOTORIST GUIDANCE IS DEEMED NECESSARY BY THE ENGINEER, INSTALL R3-7R SIGNS.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
633	PAVEMENT MARKERS	PAVEMENT MARKING AND SIGNAGE RIGHT TURN LANE AT MINOR INTERSECTIONS (ARTERIALS WITH EMERGENCY/PARKING LANE)											
		DATE 06-09-11		DWG. NO.		246.7							

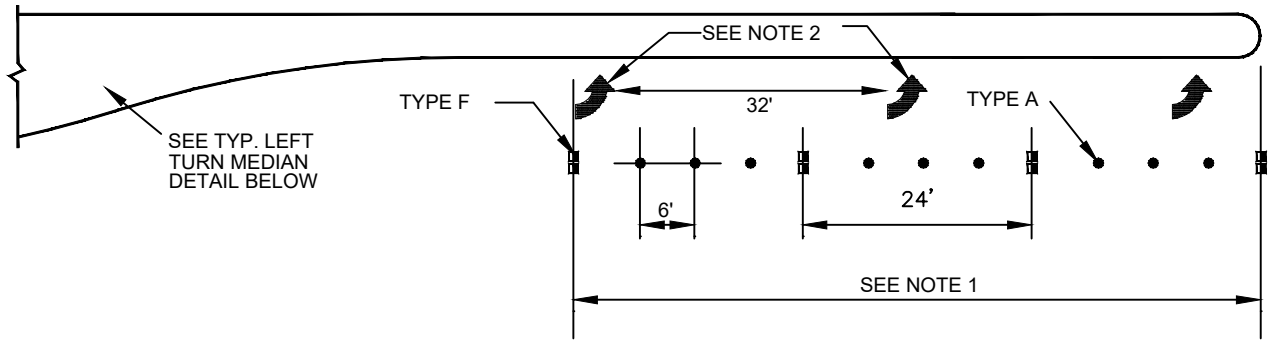




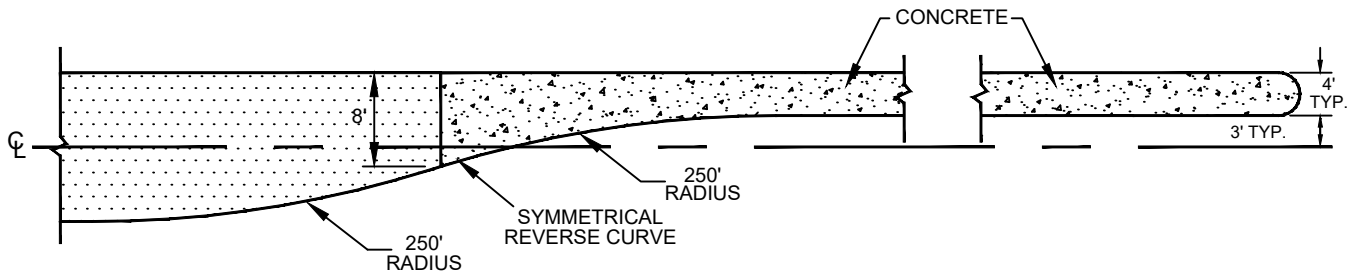


SIGN NUMBER	SP-1
WIDTH	30"
HEIGHT	42"
BORDER WIDTH	0.75"
BORDER RADII	1.875"
BACKGROUND COLOR	WHITE
LEGEND ☐ BORDER COLOR	BLACK

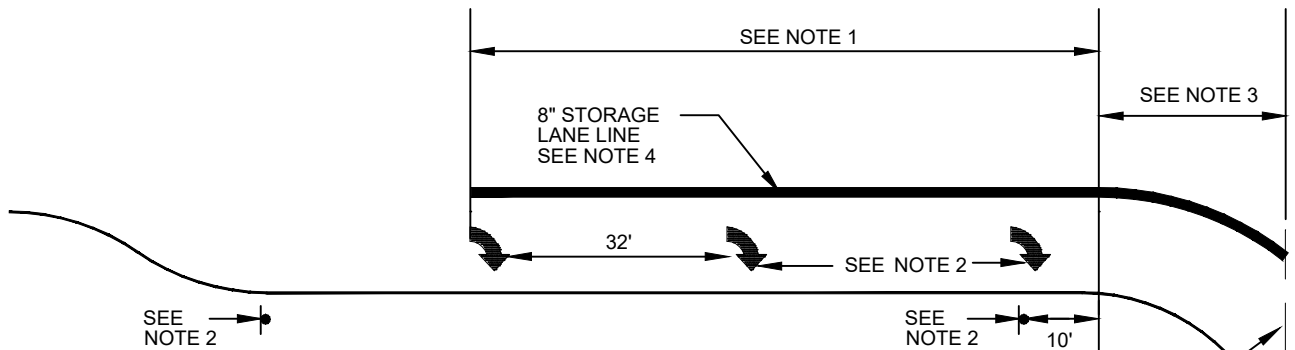
		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
716	SIGN MATERIALS	EXCLUSIVE BUS/BIKE LANE SPECIAL SIGN DETAIL											
		DATE	01-01-18	DWG. NO.	246.10								



ADDED LEFT TURN LANE



TYPICAL LEFT TURN MEDIAN DETAIL



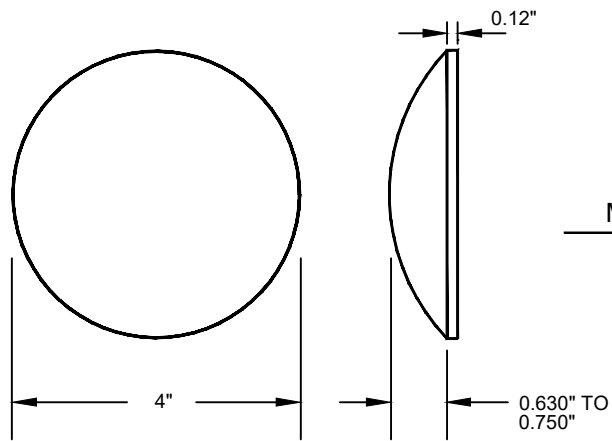
ADDED RIGHT TURN LANE

NOTES:

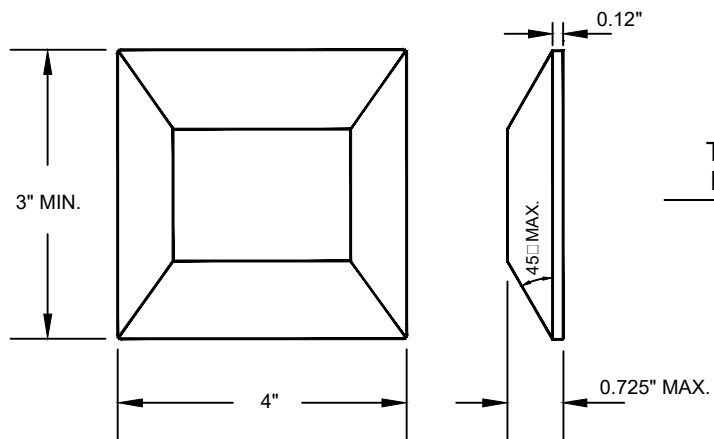
1. LENGTH OF STORAGE LINE IS TWO THIRDS OF THE ADDED TURN BAY. (MIN. 100')
2. WHERE ADDITIONAL MOTORIST GUIDANCE IS DEEMED NECESSARY BY THE ENGINEER, INSTALL R3-7R SIGN AND ARROW SYMBOL PAVEMENT MARKINGS FOR THE LENGTH OF THE STORAGE LINE. SYMBOLS SHALL BE APPROVED TYPE II PAVEMENT MARKING FILM.
3. APPROVED TYPE II PAVEMENT MARKING FILM OR RAISED PAVEMENT MARKERS MAY BE USED FOR ADDITIONAL GUIDANCE AT THE DISCRETION OF THE ENGINEER.
4. STORAGE LANE LINE SHALL BE APPROVED TYPE I PAVEMENT MARKING FILM OR IF APPROVED BY THE ENGINEER, RAISED PAVEMENT MARKERS MAY BE USED.

CURB LINE EXTENDED

SPECIFICATION REFERENCE		AGENCY APPROVED						
633	PAVEMENT MARKERS	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
628	PAINTING TRAFFIC STRIPING, PAVEMENT MARKINGS...							
		STANDARD PAVEMENT MARKERS ADDED TURN LANE						
		DATE 06-09-11	DWG. NO.		246			



TYPE A □ B
MARKER DETAIL
(NON-REFLECTIVE)

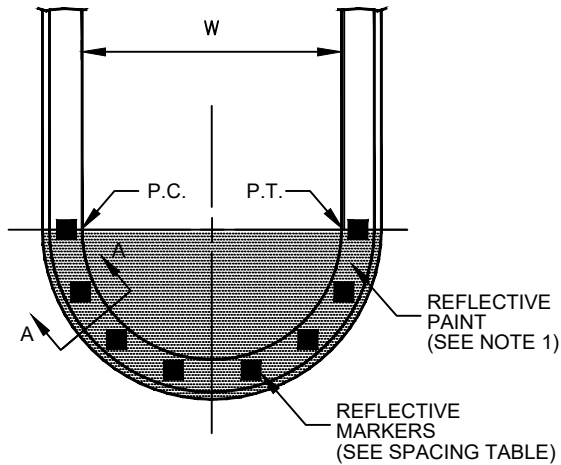


TYPE C, D, E □ F
MARKER DETAIL
(REFLECTIVE)

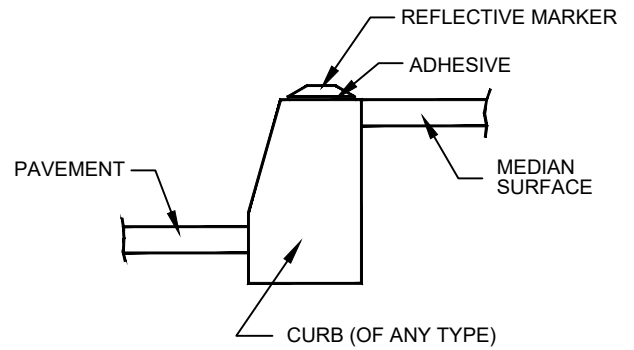
LANE MARKER SCHEDULE

TYPE A	●	CIRCULAR WHITE CERAMIC MARKER
TYPE B	○	CIRCULAR YELLOW CERAMIC MARKER
TYPE C	■	TWO WAY YELLOW REFLECTOR
TYPE D	▣	ONE WAY YELLOW REFLECTOR, YELLOW TOWARD ONCOMING TRAFFIC
TYPE E	□	ONE WAY WHITE REFLECTOR, WHITE TOWARD ONCOMING TRAFFIC
TYPE F	▣	TWO WAY WHITE AND RED REFLECTOR, WHITE TOWARD ONCOMING TRAFFIC

SPECIFICATION REFERENCE		AGENCY APPROVED	B	C	H	L	M	N
633	PAVEMENT MARKERS	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
		MARKER DETAILS AND LANE MARKER SCHEDULE						
		DATE 5-13-99	DWG. NO.	247				



PLAN



SECTION A-A

SPACING TABLE

"W"	NUMBER OR REFLECTORS PER MEDIAN NOSE □
1.0' TO 2.0'	3
2.0' TO 3.0'	4
3.0' TO 4.0'	5
4.0' □ GREATER	1 EACH FOR EVERY 1.0' OF CURB LENGTH

□ 1 MARKER EACH SHALL BE PLACED ON THE P.C. AND THE P.T. OF THE MEDIAN NOSE; ALL OTHERS SPACED EQUALLY BETWEEN P.T. □ P.C.

NOTES:

1. ENTIRE MEDIAN SHALL BE PAINTED WITH REFLECTIVE PAINT, OF SAME COLOR AS REFLECTIVE MARKERS, FROM THE MEDIAN NOSE BACK 5 FEET OR TO THE P.C., WHICHEVER IS GREATER.
2. REFLECTIVE PAVEMENT MARKERS USED ON MEDIAN SHALL CONFORM TO STANDARD DRAWING NO. 247.
3. ORIENTATION OF THE REFLECTIVE MARKERS FACES SHALL BE MADE IN THE FIELD TO ENSURE THAT MARKERS ARE AIMED AT APPROACHING VEHICLES TO BEST ADVANTAGE, ESPECIALLY IN HORIZONTALLY CURVED ROAD SECTIONS.

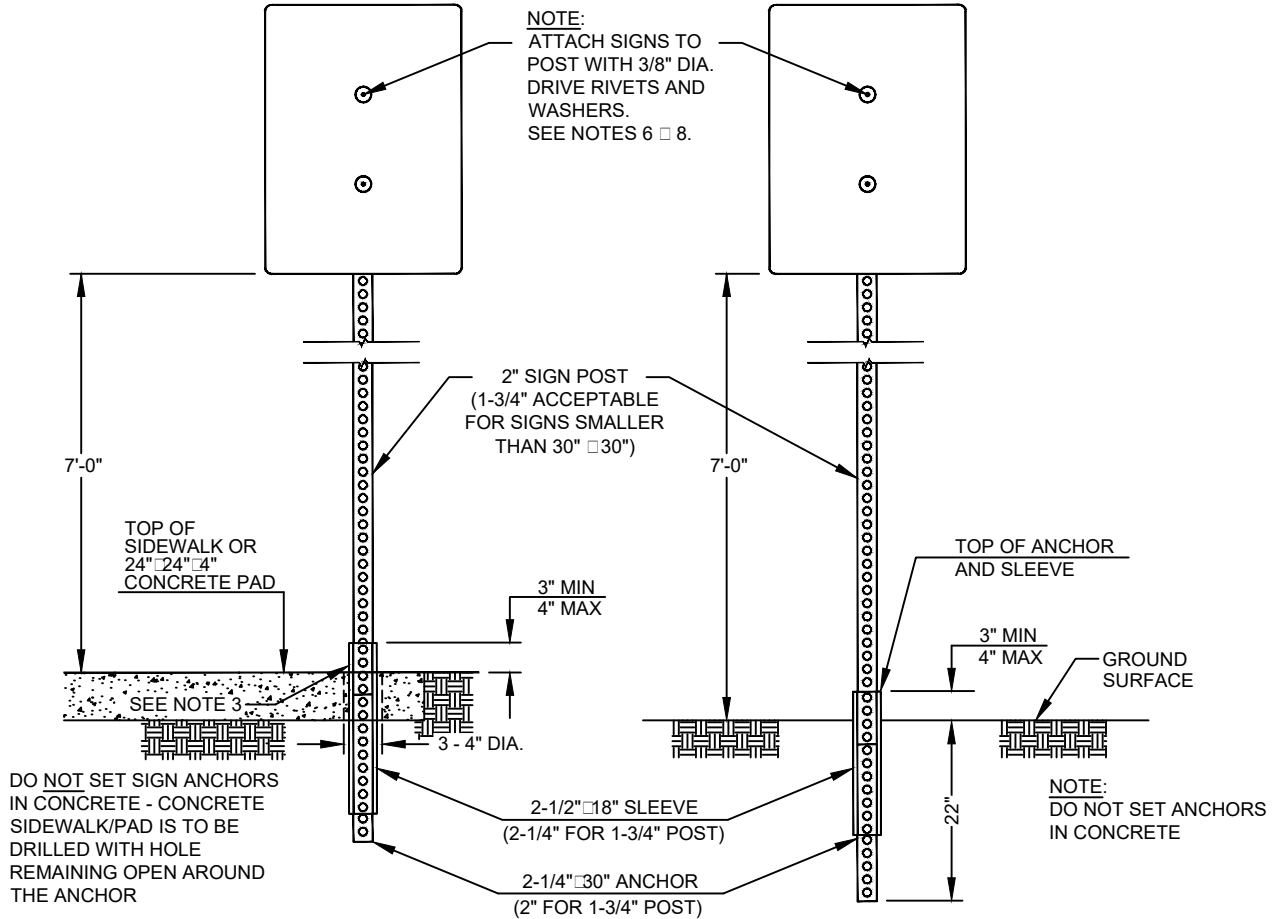
		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
628	PAINTING TRAFFIC STRIPING	MEDIAN NOSE MARKINGS											
633	REFLECTIVE PAVEMENT MARKERS												
		DATE 6-11-93			DWG. NO. 248								

URBAN INSTALLATIONS

SEE NOTE 9

RURAL INSTALLATIONS

(NO LANDSCAPING)



NOTES

- ALL COMPONENTS SHALL BE MINIMUM 12 GA. SQUARE POST WITH 7/16" PUNCHED THRU HOLES □ 1" ON CENTER, ON ALL FOUR SIDES. ANCHORS SHALL BE TWO PIECE BREAKAWAY ANCHORS.
- ATTACH ANCHOR AND SLEEVE TOGETHER PRIOR TO DRIVING INTO GROUND. LEAVE AT LEAST TWO HOLES, BUT NO MORE THAN THREE HOLES ABOVE GROUND OR ABOVE SIDEWALK.
- FOR SIDEWALK INSTALLATION, DRILL SIDEWALK AND CONCRETE PAD INSTALLATION, DRILL A 3" TO 4" DIA. HOLE (DEPENDENT UPON ANCHOR SIZE), THE CENTER TO BE 6" FROM THE BACK OF SIDEWALK.
- ATTACH POST TO ANCHORING SYSTEM BY USING AT LEAST TWO 3/8" DIA. DRIVE RIVETS.
- PROVIDE 4" MINIMUM LAP BETWEEN BOTTOM OF POST AND THE BOTTOM OF THE ANCHOR/SLEEVE ASSEMBLY.
- SIGNS LARGER THAN 24" □ 30" REQUIRE 3/8" □ 1-1/2" FENDER WASHERS UNDER DRIVE RIVETS.
- "U-CHANNEL" POSTS ARE NOT ACCEPTABLE.
- BOLTS IN LIEU OF DRIVE RIVETS ARE NOT ACCEPTABLE.
- ALL URBAN SIGN INSTALLATIONS ARE TO BE INSTALLED IN A CONCRETE SIDEWALK, OR IN A CONCRETE PAD (24" □ 24" □ 4") WHEN NO SIDEWALK EXISTS.
- IF SIGN POST IS INSTALLED IN SIDEWALK, A MINIMUM HORIZONTAL CLEAR WIDTH OF 48" AND A MINIMUM VERTICAL CLEARANCE OF 7' SHALL BE MAINTAINED ON THE SIDEWALK FOR COMPLIANCE WITH ACCESSIBILITY REQUIREMENTS.
- SIGNS SHALL HAVE A STICKER AT THE BACK WITH THE NAME OF THE CONTRACTOR AND THE DATE OF INSTALLATION.

AGENCY APPROVED	B	C	H	L	M	N	R

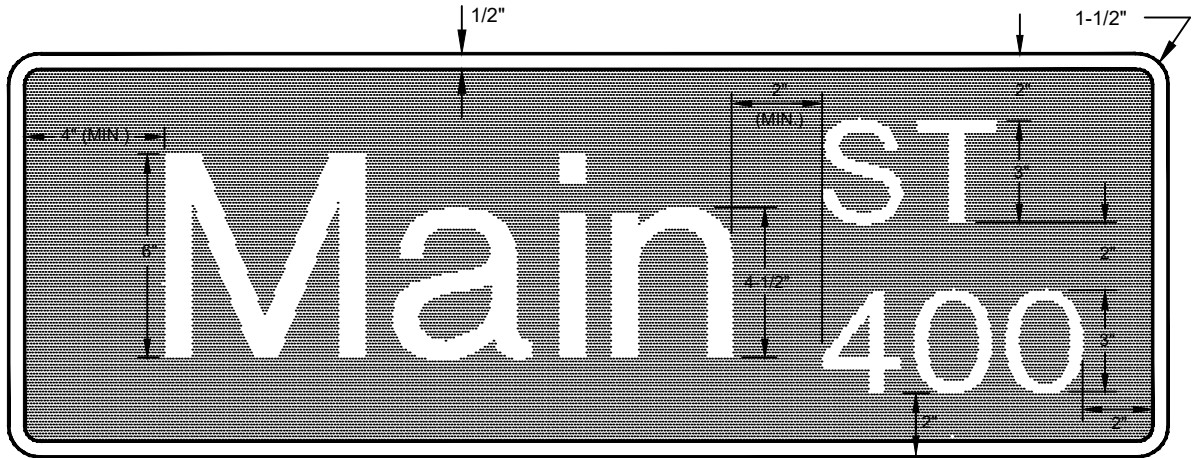
SPECIFICATION REFERENCE

631	STREET NAME SIGNS

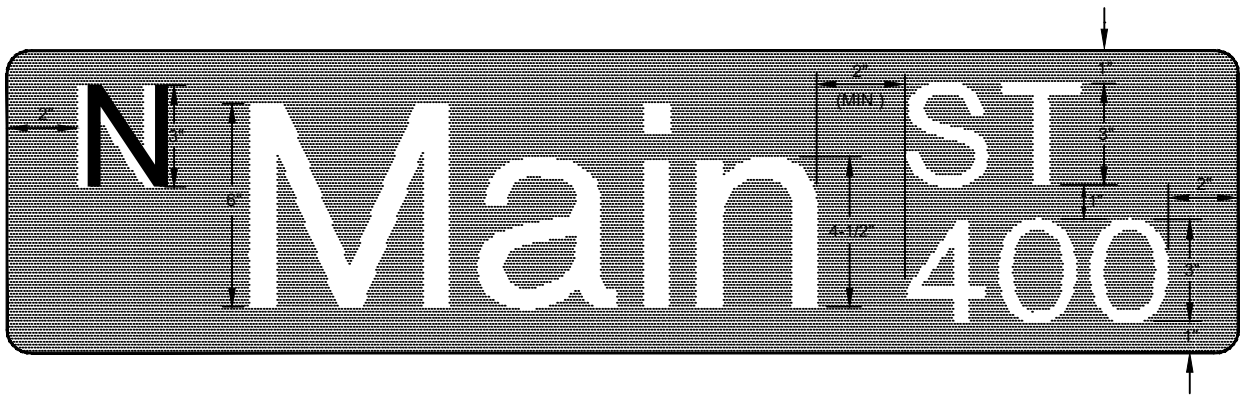
UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA

SIGN INSTALLATION DETAIL

DATE 12-10-20	DWG. NO. 249.1



12" (MAJOR STREETS)



9" (MINOR STREETS)

NOTES:

1. SIGN SHALL BE WHITE LETTERS AND NUMBERS ON GREEN BACKGROUND. (THE CITY OF NORTH LAS VEGAS BACKGROUND IS BLUE.) CUT-OUT LETTERS AND NUMBERS ARE NOT ACCEPTABLE (EXCEPT FOR THE BLOCK NUMBER).
2. REFLECTIVE SHEETING MATERIAL SHALL BE TYPE XI.
3. PRIMARY COPY FOR 9" AND 12" SIGNS SHALL BE 6" SERIES 'C' UPPERCASE WITH 4 1/2" SERIES 'C' LOWERCASE; HOWEVER, WHEN DESCENDERS ARE REQUIRED ON 9" SIGNS, PRIMARY COPY SHALL BE 5 1/2". ORDINAL, SUFFIX AND BLOCK NUMBER SHALL BE 3" SERIES 'C' UPPERCASE. (ORDINAL MAY BE OMITTED FROM 12" SIGNS, EXCEPT IN CLARK COUNTY.) SPACING BETWEEN LETTERS SHALL BE AS ON SHEET 2 OF THIS DRAWING.
4. THE SIGN SHALL HAVE A MINIMUM LENGTH OF 30". WHERE EXTRA LENGTH IS REQUIRED, IT SHALL BE PROVIDED IN 6" INCREMENTS. GROUND MOUNTED SIGNS SHALL HAVE A MAXIMUM LENGTH OF 42".
5. BOTH SIGNS PLACED ON MAJOR STREETS WITH RIGHTS-OF-WAY 80' OR GREATER SHALL HAVE A HEIGHT OF 12"; SIGNS PLACED ON MINOR STREETS WITH RIGHTS-OF-WAY OF LESS THAN 80' SHALL HAVE A HEIGHT OF 9".
6. 12" SIGNS SHALL HAVE A 1/2" WHITE BORDER AT THE EDGE.
7. SIGN BLANKS SHALL HAVE ROUNDED CORNERS.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
631	STREET NAME SIGNS	STREET NAME SIGNS FACE COPY											
716	SIGN MATERIALS												
		DATE	07/01/12	DWG. NO.	250	SHEET 1 OF 2							

SPACING OF STREET NAME SIGN LEGENDS

SPACING FOR STREET NAME SIGN LEGENDS SHALL BE OBTAINED BY MODIFICATION TO THE REQUIREMENTS OF THE FHWA STANDARD SPACING CHART FOR 6" UPPERCASE LETTERS. THE FOLLOWING STEPS SHALL BE USED TO DETERMINE REQUIRED SPACING:

1. SIGN LAYOUT COMPUTER SOFTWARE SHALL BE EVALUATED TO DETERMINE THE "CORRECTION FACTOR" NECESSARY FOR LAYOUT SOFTWARE LETTER SPACING TO BE APPROXIMATELY EQUAL TO THE FHWA STANDARD SPACING FOR UPPERCASE LETTERS.
2. CORRECTION FACTOR SHALL BE USED TO ADJUST THE SPACING FOR THE LOWERCASE LETTERS.
3. SPACING FOR STREET NAME SIGN LEGENDS SHALL BE EQUAL TO 110% OF THE "CORRECTED" LAYOUT SOFTWARE LETTER SPACING.

(SAME STEPS ARE TO BE FOLLOWED WHEN FONT SIZE OF LEGEND IS REDUCED IN ORDER NOT TO EXCEED THE MAXIMUM LENGTH LIMITATIONS.)

IF LEGEND SPACED ACCORDING TO RECOMMENDED PROCEDURE ABOVE EXCEEDS THE MAXIMUM ALLOWABLE SIGN LENGTH (42" FOR GROUND-MOUNTED), THE FOLLOWING ACTIONS, LISTED IN PRIORITY ORDER, SHALL BE TAKEN TO REDUCE LENGTH OF THE SIGNBLANK.

- A. REDUCE THE FONT TO 5 1/2" SERIES 'C'.
- B. REDUCE THE SPACING TO 100% OF THE "FEDERAL STANDARD".
- C. REDUCE THE FONT TO 5 1/2" SERIES "B".
- D. CONSIDER ABBREVIATING ANY LEGEND WORDS WHICH ARE EXTREMELY COMMON (I.E., "MTN" FOR "MOUNTAIN") SUCH ABBREVIATIONS MUST BE APPROVED BY THE TRAFFIC ENGINEER AND THE FIRE DEPARTMENT.
- E. REDUCE THE LEADING AND TRAILING BLANK GREEN SPACE BY 50%.
- F. CONSTRUCT THE SIGN ACCORDING TO THE STANDARD SPACING WHICH WILL BE GREATER THAN 42" IN LENGTH, AND MOUNT ON A STREETLIGHT POLE OR OTHER ELEVATED MOUNT AS APPROVED BY THE TRAFFIC ENGINEER WITH APPROPRIATE SIGN BRACING AND MOUNTING HARDWARE.

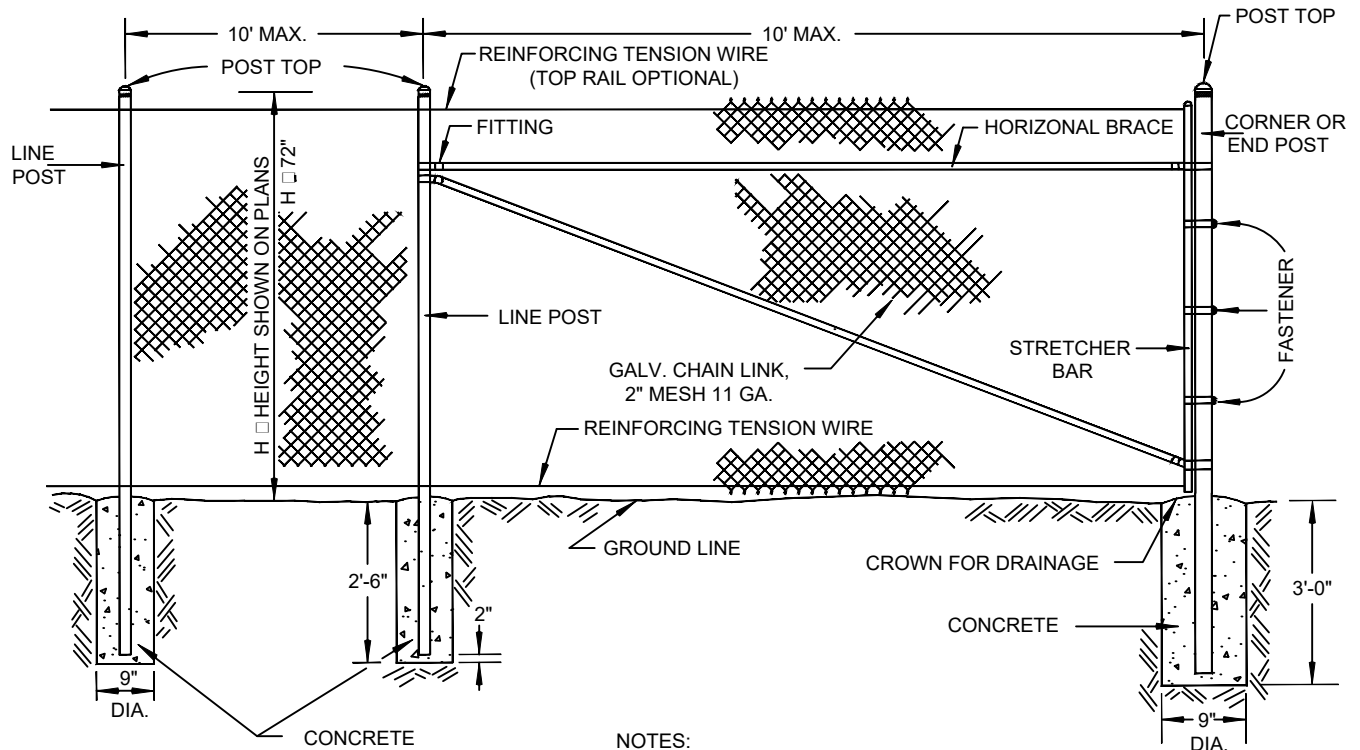
		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
631	STREET NAME SIGNS	STREET NAME SIGNS LETTER SPACING											
716	SIGN MATERIALS												
		DATE	6-12-97	DWG. NO.	250	SHEET 2 OF 2							



5052-H38 OR 6061-T6, HEAT-TREATED, HIGH TENSILE; DEGREASED AND ALODINE 1200 FINISH; THICKNESS TO BE 0.080" FOR SIGNS LESS THAN 36" AND 0.100" FOR SIGNS 36" AND LONGER.

NOTE:

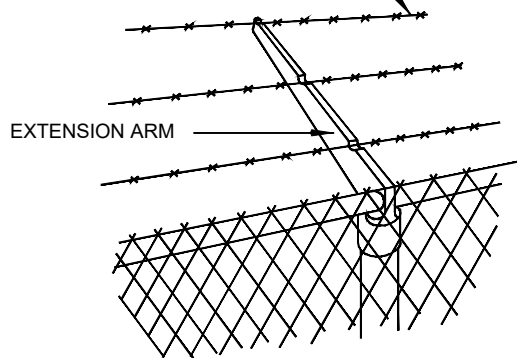
1. FOR SIGN FACE SPECIFICATIONS SEE STANDARD DRAWING NO. 250.



NOTES:

- FENCING SHALL BE CHAIN LINK AND SHALL CONSIST OF GALVANIZED CHAIN LINK FABRIC ON STEEL POSTS.
 - ALL POSTS TOPS SHALL BE FITTED WITH SUITABLE FINIALS.
 - BRACES SHALL BE SPACED APPROXIMATELY 12" BELOW TOP OF TERMINAL POSTS AND SHALL EXTEND FROM END, GATE, OR CORNER POSTS TO FIRST ADJACENT LINE POST.
 - ALL FITTINGS SHALL BE HOT-DIPPED GALVANIZED MALLEABLE, CAST IRON, OR PRESSED STEEL.
 - TOP AND BOTTOM SELVAGES OF THE FENCE SHALL HAVE A TWISTED AND BARBED FINISH.
- BARBED WIRE, EXTENSION ARMS, AND TOP HORIZONTAL RAILS SHALL BE INSTALLED ONLY WHEN SHOWN ON THE PLANS AND/OR CALLED FOR IN THE SPECIAL PROVISIONS.

BARB WIRE (IF SPECIFIED)
2 STRAND, 12 GA., 4 PT.



EXTENSION ARM - BARBED WIRE

TABLE I

FOR CHAIN LINK FENCE 72" AND LESS

LOCATION	MIN. SIZE	MIN. WEIGHT
END, CORNER - PULL	2.351 O.D.	3.10
LINE	2.00 O.D.	2.72
BRACES	1.630 O.D.	2.27
TOP RAIL	1.630 O.D.	2.27

AGENCY APPROVED B C H L M N

SPECIFICATION REFERENCE

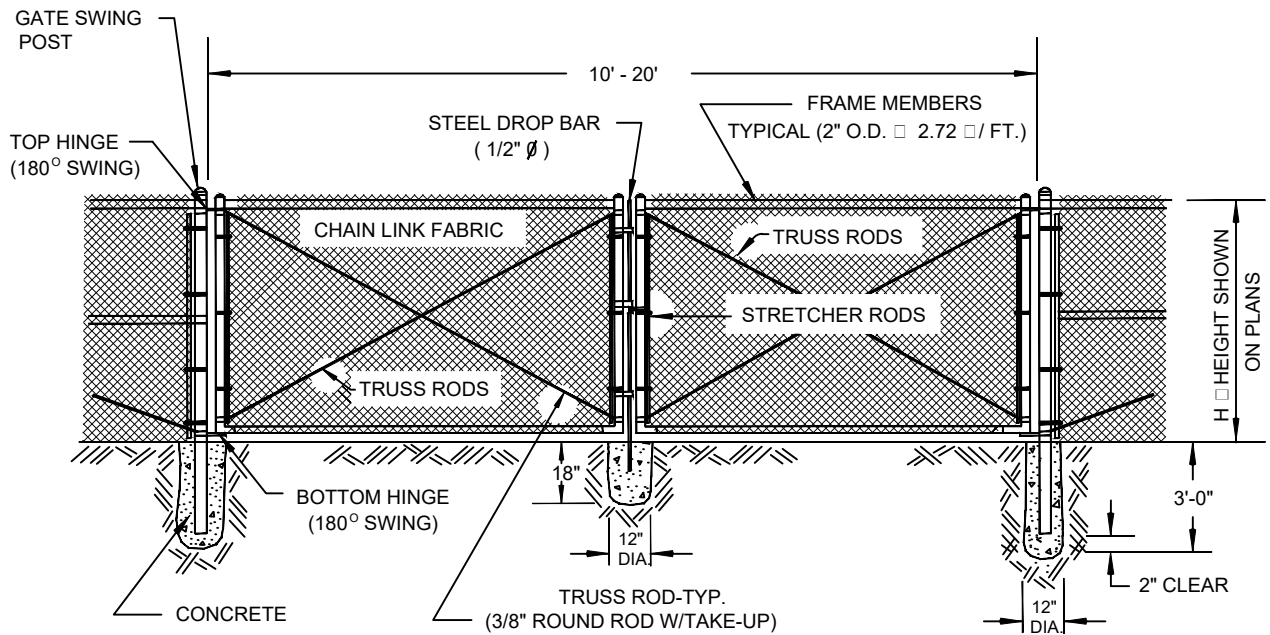
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

501 CONCRETE

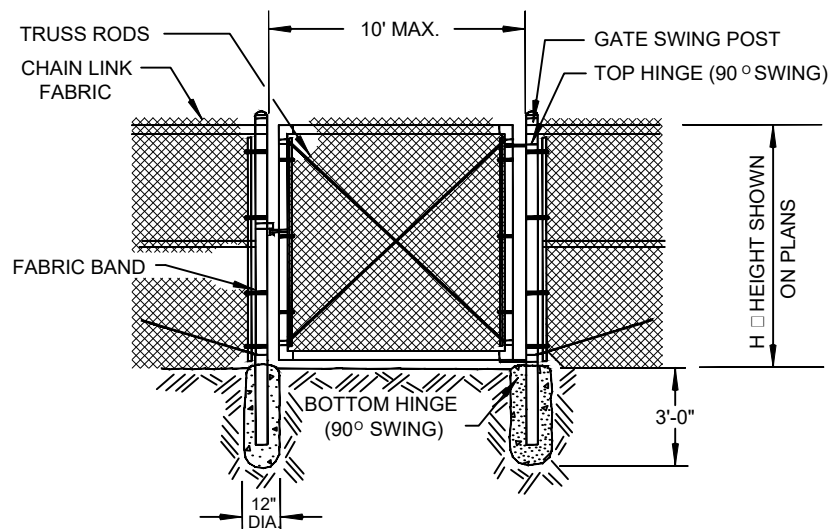
616 FENCING

CHAIN LINK FENCE
(72 INCH HIGH OR LESS)

DATE 12-14-00 DWG. NO. 252



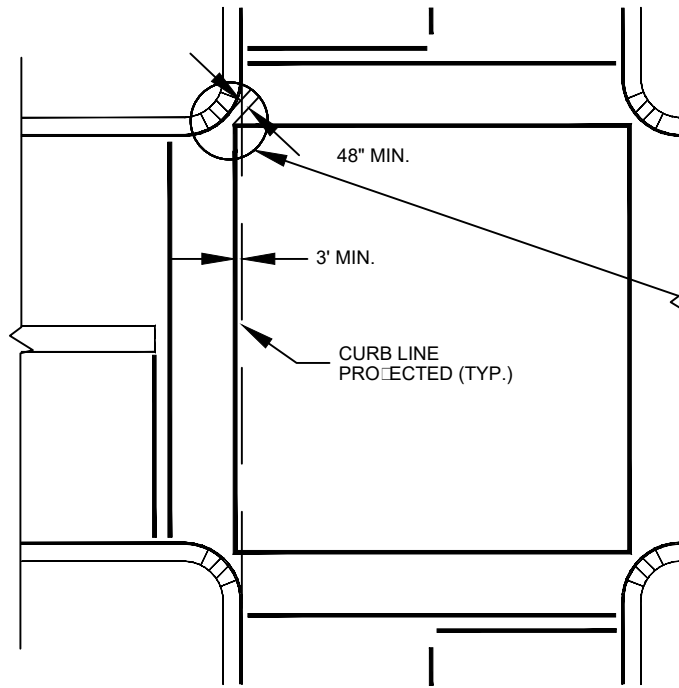
DOUBLE SWING GATE



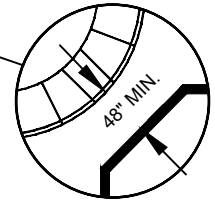
SINGLE GATE

GATE SWING POST DIA.	
GATE SIZE	PIPE DIA.
6' AND LESS	3"O.D. - 5.79 LBS./FT.
6' - 10'	4"O.D. - 9.10 LBS./FT.

SPECIFICATION REFERENCE		AGENCY APPROVED	B	C	H	L	M	N
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
501	CONCRETE	CHAIN LINK GATES						
616	FENCING							
		DATE 12-14-00	DWG. NO.	253				



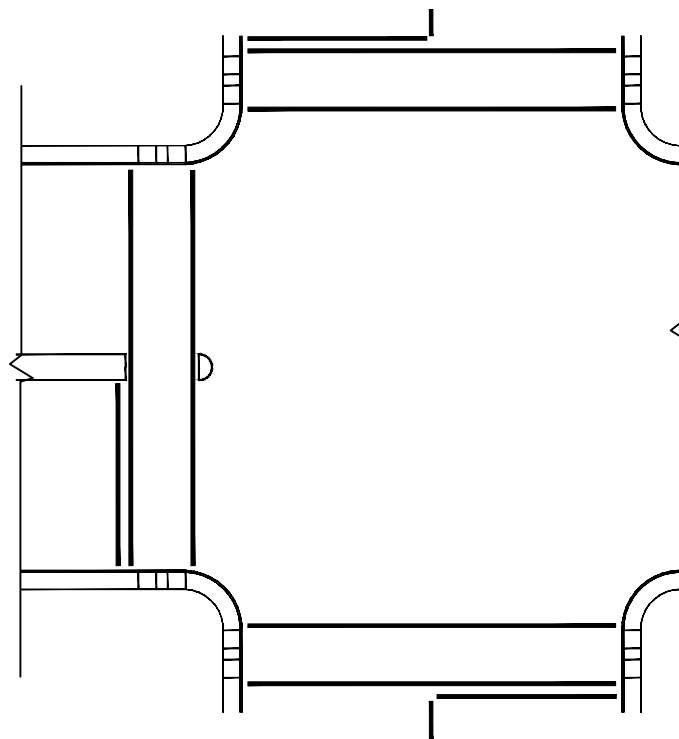
TYPICAL MARKING
CURB RAMP IN
MIDDLE OF
CURB RETURN



OPTIONAL DETAIL

NOTE:

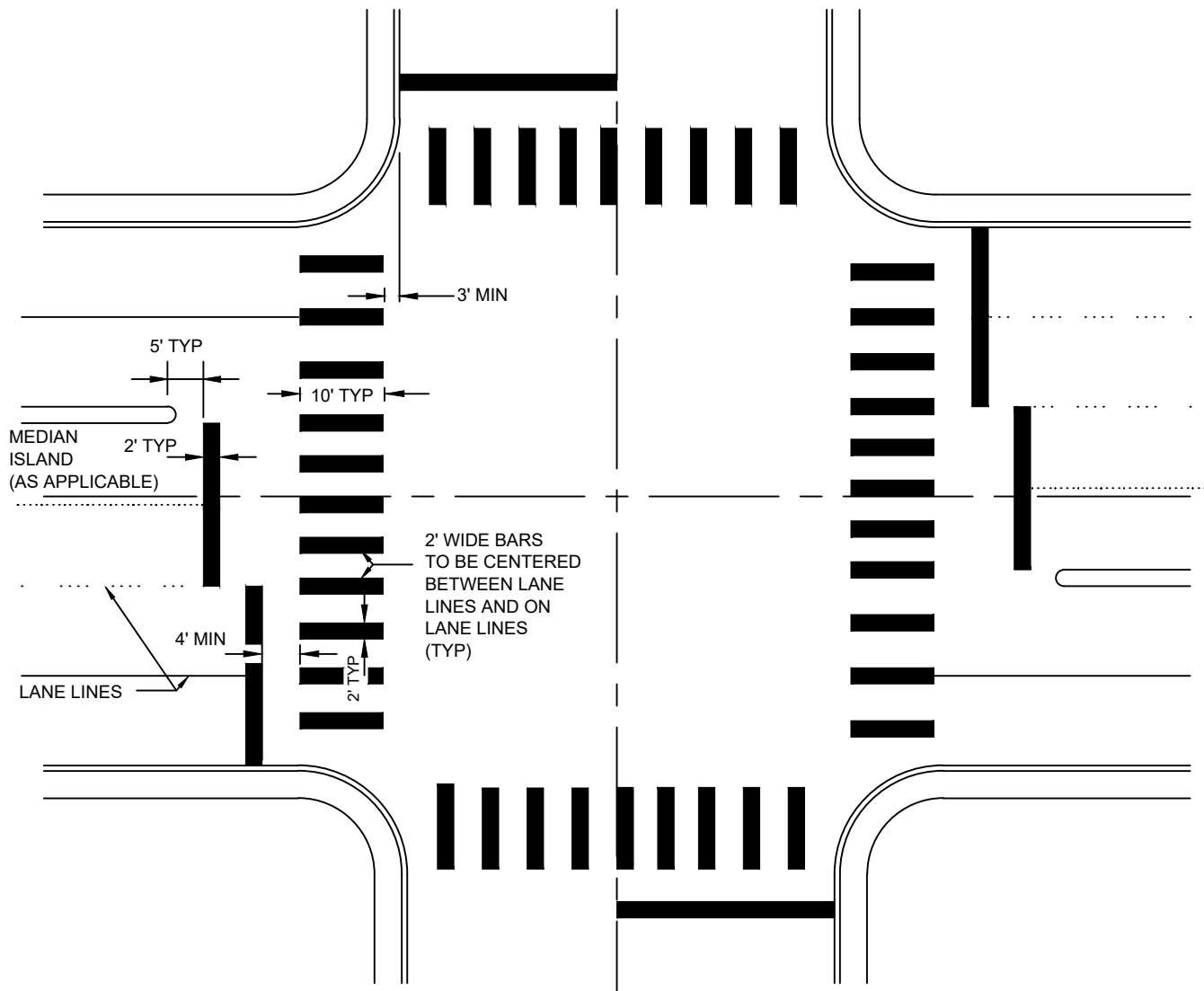
USE MARKING PER
OPTIONAL DETAIL IF
NECESSARY TO OBTAIN
3' MINIMUM CLEARANCE
BETWEEN CROSSWALK
AND CURB LINE
PROJECTED.



TYPICAL MARKING
CURB RAMP
ADJOINING
CURB RETURN

Effective 12/10/2020 to 06/09/2021

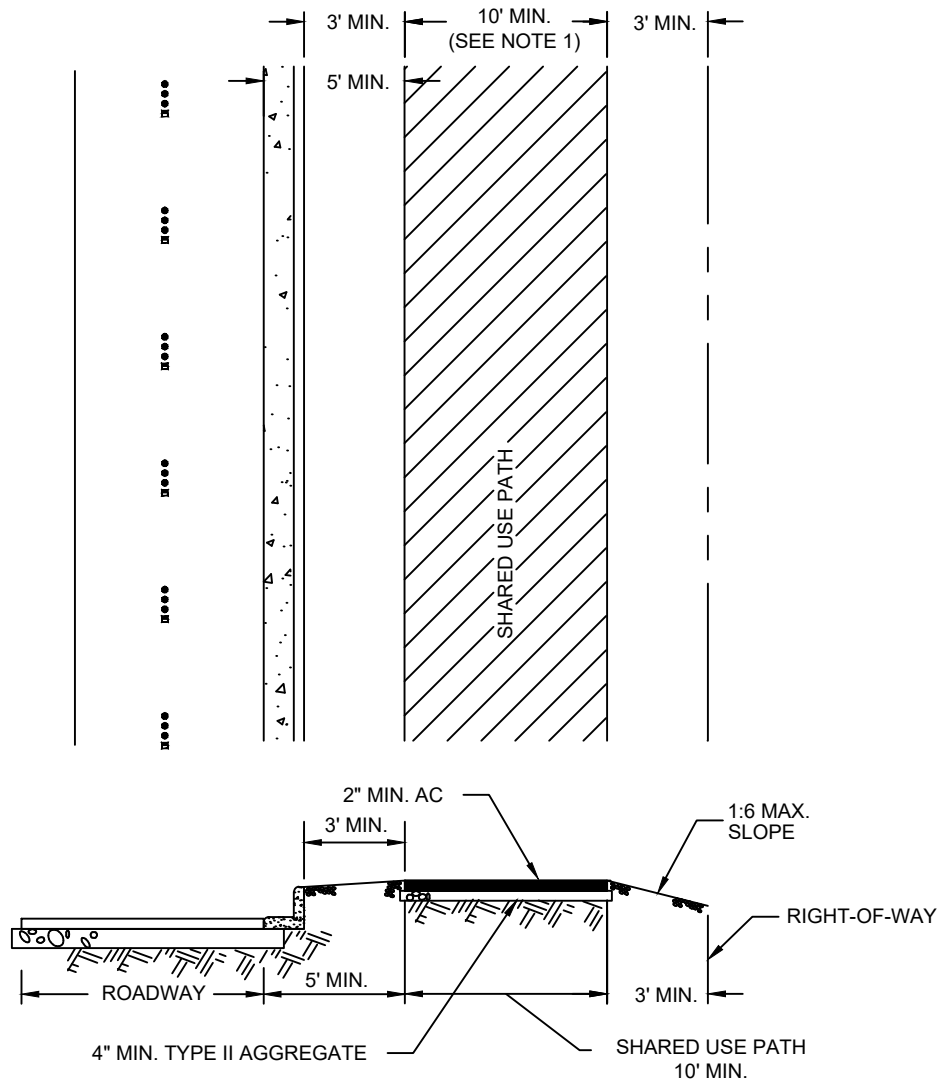
		AGENCY APPROVED						B		H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		SUPPLEMENTAL DRAWING											
		CROSSWALK MARKINGS - TYPE II											
		DATE 8-12-99		DWG. NO.		254.1.S1							



TYPICAL CROSSWALK
STRIPING DETAIL

Effective 12/10/2020 to 06/09/2021

SPECIFICATION REFERENCE		AGENCY APPROVED						B	C	H	L	M	N
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		CROSSWALK MARKINGS - TYPE I											
		DATE 11-12-09		DWG. NO.		254							



NOTES:

1. 12 FOOT WIDTH IS RECOMMENDED. 10 FOOT WIDTH IS ALLOWABLE ALONG A PATH PARALLEL TO A ROADWAY OR WHERE SPACE IS LIMITED. PAVEMENT AND BASE DEPTH WILL VARY BASED ON SOIL CONDITIONS. PORTLAND CEMENT CONCRETE (PCC) MAY BE USED INSTEAD OF ASPHALT AND PCC MAY BE REQUIRED BY THE LOCAL JURISDICTION.
2. SEE DRAWING NUMBER 255 FOR SHARED USE PATH NOT ALONG A ROADWAY.
3. SEE THE GUIDE FOR THE DEVELOPMENT OF BICYCLE FACILITIES, ASSHTO 1999, AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR ADDITIONAL GUIDELINES AND STANDARDS.
4. SEE LOCAL JURISDICTIONS FOR LANDSCAPING REQUIREMENTS.
5. 3 FOOT LATERAL CLEARANCE RECOMMENDED BETWEEN EDGE OF PATH AND A FIXED OBJECT, 2 FOOT MINIMUM.
6. IF 16 FEET IS NOT AVAILABLE FROM THE BACK OF CURB TO THE RIGHT-OF-WAY LINE, A BICYCLE LANE/ROUTE AND THE SIDEWALK WILL SUBSTITUTE FOR THE PATH. PLACE A PATH ENDS SIGN (W9) 25 FEET IN ADVANCE OF THE PATH ENDING.

		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
628	PAINTING TRAFFIC STRIPING	SHARED USE PATH ALONG A ROADWAY							
633	PAVEMENT MARKERS								
		DATE	7-10-03	DWG. NO.	255.1				

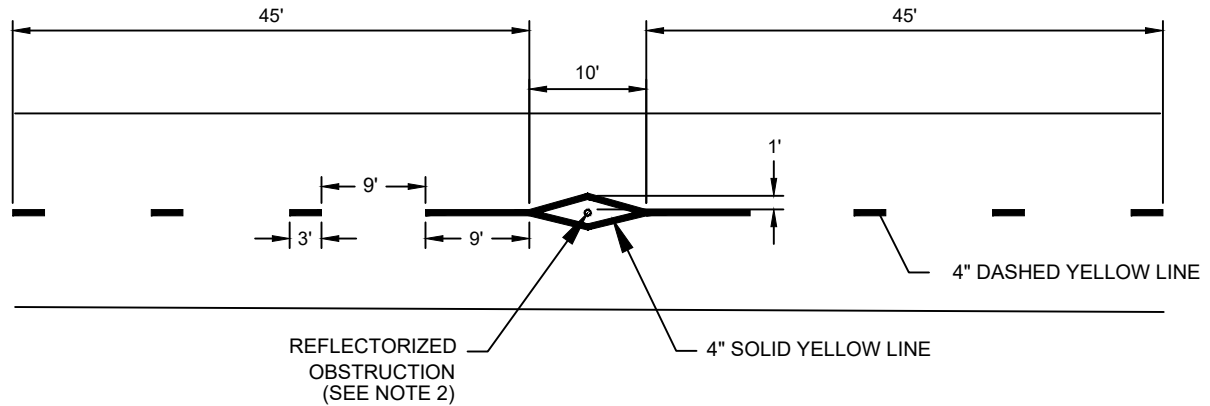
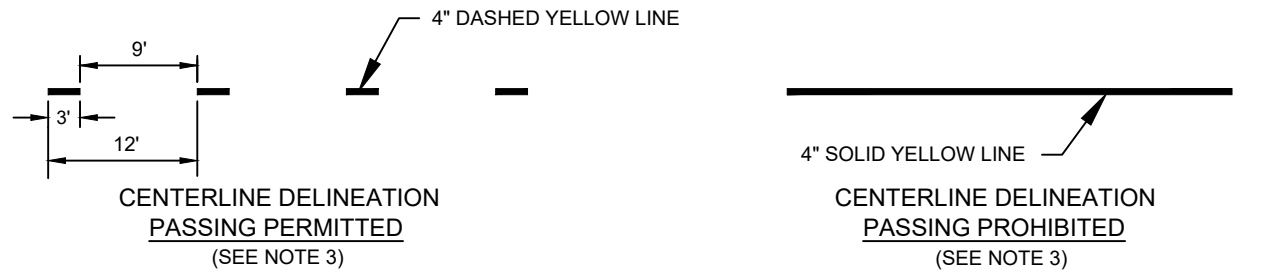
SIGN SIZES FOR SHARED-USE PATHS

<u>MUTCD CODE</u>	<u>SIGN</u>	<u>MINIMUM SIGN SIZE (IN)</u>
R1-1	STOP	18 X 18
R1-2	YIELD	24 X 24 X 24
R3-16, 16A, 17, 17A	BICYCLE LANE	24 X 30
R4-1, 2, 3, 7	MOVEMENT RESTRICTION	12 X 18
R4-4	BEGIN RIGHT TURN LANE YIELD TO BIKES	36 X 30
R5-3	NO MOTOR VEHICLES	24 X 24
R5-6	BICYCLE PROHIBITION	24 X 24
R7-9, 9A	NO PARKING BIKE LANE	12 X 18
R9-3A	PEDESTRIANS PROHIBITED	18 X 18
R9-5, 6	BICYCLE REGULATORY	12 X 18
R9-7	SHARED-USE PATH RESTRICTION	12 X 18
R15-1	RAILROAD CROSSBUCK	24 X 4.5
W1-1, 2, 3, 4, 5	TURN AND CURVE WARNING	18 X 18
W1-6, 7	ARROW WARNING	24 X 12
W2-1, 2, 3, 4, 5	INTERSECTION WARNING	18 X 18
W3-1A, 2A, 3	STOP, YIELD, SIGNAL AHEAD	18 X 18
W5-2A	ROAD NARROWS	18 X 18
W5-4	BIKEWAY NARROWS	18 X 18
W7-5	HILL SIGN	18 X 18
W8-1, 2	BUMP OR DIP	18 X 18
W8-10	BICYCLE SURFACE CONDITION	18 X 18
W10-1	ADVANCE GRADE CROSSING	18 DIA.
W11-1	BICYCLE CROSSING	18 X 18
W12-2	LOW CLEARANCE	18 X 18
W16-1	SHARE THE ROAD PLAQUE	24 X 30
D1-1	SUPPLEMENTAL BIKE ROUTE PLAQUE	24 X 6
D4-3	BICYCLE PARKING	12 X 18
D11-1	BIKE ROUTE	24 X 18
M1-8	BIKE ROUTE MARKER	12 X 18
M1-9	BIKE ROUTE MARKER	18 X 24
M4-11, 12, 13	SUPPLEMENTAL BICYCLE ROUTE GUIDE	12 X 4
M7-1, 2, 3, 4, 5, 6, 7	ROUTE MARKER SUPPLEMENTAL PLAQUES	12 X 9

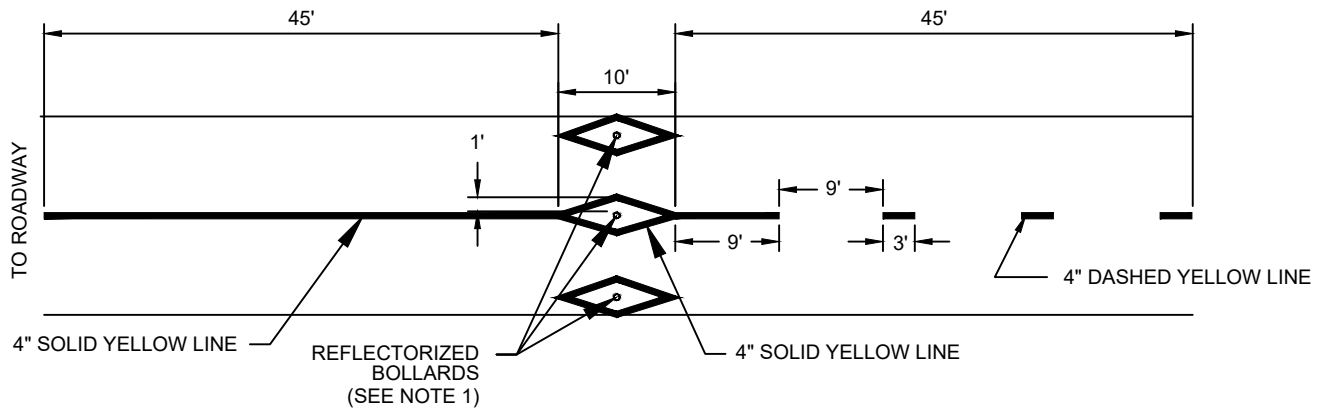
NOTES:

1. SIGN TABLE INSERTED FROM MUTCD FOR REFERENCE. SEE CURRENT MUTCD FOR UPDATED INFORMATION.
2. SIGNS R3-16(A), R3-17(A), R4-4, W5-2A, AND W16-1 NOT USED FOR SHARED USE PATHS.

		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
628	PAINTING TRAFFIC STRIPING	SIGN SIZES FOR SHARED USE PATH							
633	PAVEMENT MARKERS								
		DATE	7-10-03	DWG. NO.	255.3				



TYPICAL CENTERLINE DELINEATION AROUND OBSTRUCTION



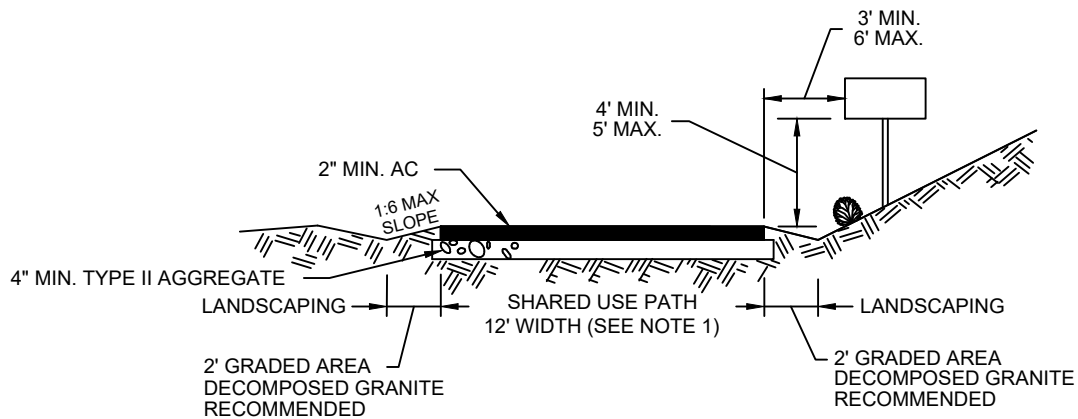
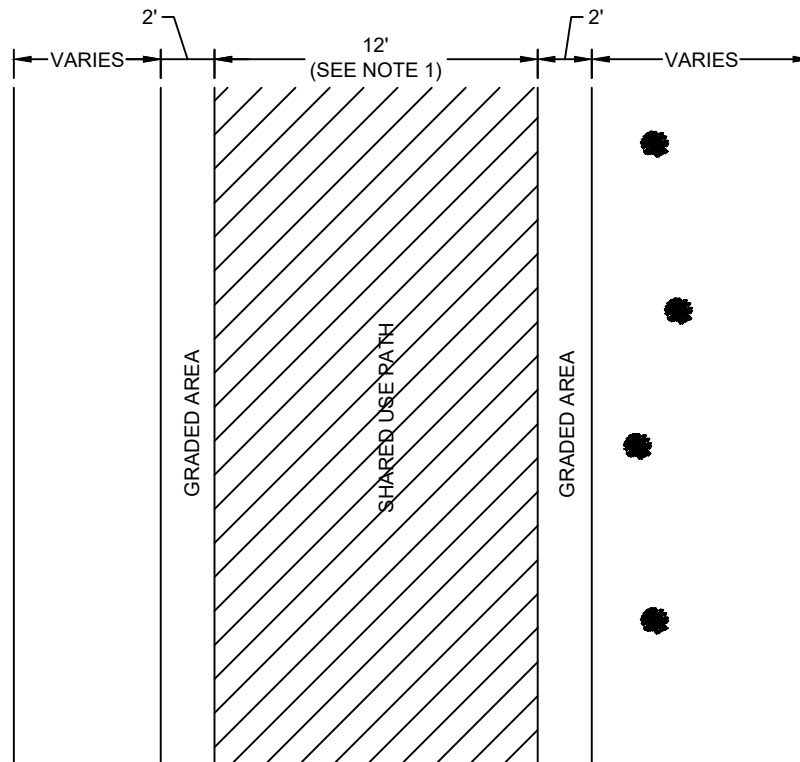
TYPICAL CENTERLINE DELINEATION AT THE BEGINNING AND END OF A SHARED USE PATH

NOTES

1. USE BOLLARDS ONLY AT LOCATIONS WHERE UNAUTHORIZED ACCESS IS ANTICIPATED. INSTALL EITHER 1 OR 3 (5 FT. SPACING DESIRABLE, 4 FT. CLEAR SPACING MINIMUM) SIX-INCH DIAMETER BY 3 FT. TALL REFLECTORIZED BOLLARDS WHEN NECESSARY. CENTERLINE DELINEATION SHOULD BE PROVIDED AT APPROACH TO INTERSECTION EVEN WHEN BOLLARD IS NOT PROVIDED.
2. ANY OBSTRUCTION IN PATH SHOULD BE REMOVED. IF OBSTRUCTION CANNOT BE REMOVED, OBSTRUCTION MUST BE REFLECTORIZED.
3. USE CENTERLINE DELINEATION AT APPROACHES TO INTERSECTIONS AND AROUND OSTRUCTIONS IN ALL CASES. ONLY USE CENTERLINE DELINEATION IN OTHER CASES WHERE CONFLICTS BETWEEN USERS TRAVELING IN OPPOSITE DIRECTIONS ARE ANTICIPATED.

AGENCY APPROVED	B	C	H	L	M	N	R

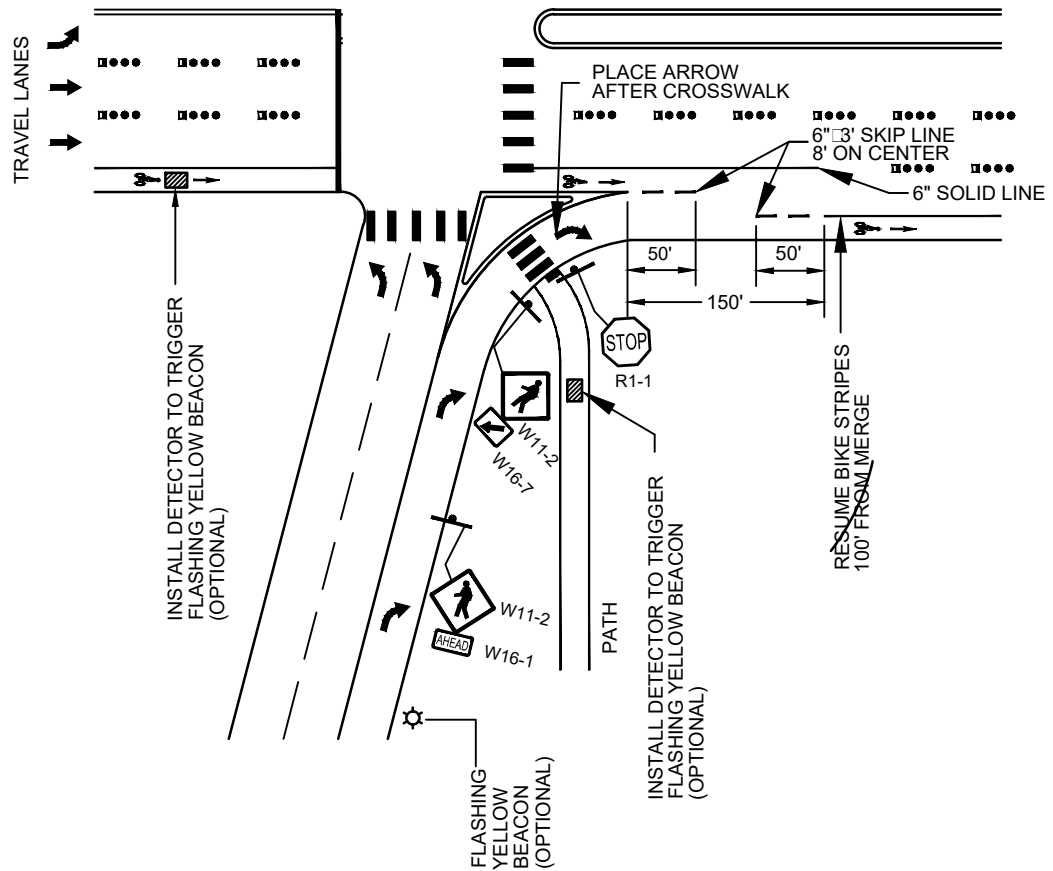
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA	
628	TRAFFIC STRIPING	DELINEATION AND BOLLARD USAGE ON SHARED USE PATH	
633	PAVEMENT MARKERS		
		DATE 03-12-20	DWG. NO. 255.4



NOTES:

1. 12 FOOT WIDTH IS RECOMMENDED. 10 FOOT WIDTH IS ALLOWABLE ALONG A PATH PARALLEL TO A ROADWAY OR WHERE SPACE IS LIMITED. PAVEMENT AND BASE DEPTH WILL VARY BASED ON SOIL CONDITIONS. PORTLAND CEMENT CONCRETE MAY BE USED INSTEAD OF ASPHALT.
2. SEE DRAWING NUMBER 255.1 FOR SHARED USE PATH ALONG A ROADWAY.
3. SEE THE GUIDE FOR THE DEVELOPMENT OF BICYCLE FACILITIES, AASHTO 1999, AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR ADDITIONAL GUIDELINES AND STANDARDS.
4. SEE LOCAL JURISDICTIONS FOR LANDSCAPING REQUIREMENTS.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
628	PAINTING TRAFFIC STRIPING	SHARED USE PATH											
633	PAVEMENT MARKERS												
		DATE	7-10-03	DWG. NO.	255								



NOTES:

1. USE ENGINEERING JUDGEMENT TO APPLY THIS DETAIL TO SIMILAR SCENARIOS.
2. CONTACT AGENCY'S TRAFFIC ENGINEER TO VERIFY IF AGENCY PREFERS TO USE A W11-1 (BICYCLE) SIGN IN PLACE OF THE W11-2 SIGN.

		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
628	PAINTING TRAFFIC STRIPING	SHARED USE PATH CROSSING OF FREE RIGHT TURN LANE							
633	PAVEMENT MARKERS								
.		DATE	7-10-03	DWG. NO.	256				

1. INSTALL STREETLIGHT STANDARDS AT INTERSECTIONS INCLUDING "L" AND "T" TYPES, PER STANDARD DRAWINGS 301 THROUGH 310 IN ACCORDANCE WITH THE APPROPRIATE RIGHT-OF-WAY.
2. STREET CLASSIFICATION AND STREETLIGHT STANDARD APPLICATION SHALL BE AS LISTED IN TABLE 1 BELOW. ACTUAL LUMINAIRE WATTAGE AND/OR STREETLIGHT STANDARD SPACING MAY BE VARIED BY THE ENGINEER, WHEN SUPPORTED BY AN APPROVED LIGHTING STUDY IN ACCORDANCE WITH THE IES RECOMMENDED PRACTICE FOR ROADWAY LIGHTING IN ORDER TO MEET CURRENT AND FUTURE TRAFFIC CONTROL NEEDS AND APPROVED BY THE RESPECTIVE AGENCY. AVERAGE LEVELS ARE MAINTAINED LEVELS AT A 0.8 MAINTENANCE FACTOR (0.82 FOR CLARK COUNTY)  IN FOOTCANDLES MEASURED HORIZONTALLY AT THE SURFACE.

TABLE 1
HIGH PRESSURE SODIUM (H.P.S.) TYPE LIGHTING

CLASSIFICATION	R/W	LUMINAIRE (H.P.S.)	AVG. IES LIGHTING LEVEL	IES UNIFORMITY AVG/MIN
ARTERIAL	100' OR MORE	250W	1.58 FC	3:1
MAJOR COLLECTOR	80'	150W 250W (CC) 	0.84 FC	4:1
MINOR COLLECTOR	60'	150W 100W (CC) 	0.38 FC	6:1
RESIDENTIAL	51' OR LESS	100W	0.38 FC	6:1

3. NEW STREETLIGHT STANDARDS INSTALLED ADJACENT TO OR OPPOSITE FROM EXISTING STREETLIGHTS SHALL MATCH THE EXISTING LOCATION, SPACING, POLE AND LUMINAIRE TYPES UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
4. STREETLIGHT STANDARDS INSTALLED ON 60' OR LESS RIGHT-OF-WAYS MAY BE INSTALLED ON EITHER SIDE OF ROADWAY AS DIRECTED BY THE ENGINEER.
5. TRAFFIC SIGNAL FOUNDATIONS AND ADAPTOR PLATES MAY BE REQUIRED AT INTERSECTIONS AS DIRECTED BY THE ENGINEER.
6. AT LEAST ONE STREETLIGHT SHALL BE REQUIRED IN THE BULB SECTION OF A CUL-DE-SAC OR HAMMERHEAD. LOCATION SHALL BE AS REQUIRED BY THE ENGINEER.

		AGENCY APPROVED	B			L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
623	TRAFFIC SIGNALS & STREETLIGHTING	SUPPLEMENTAL DRAWING						
		STREETLIGHT LOCATION H.P.S. LIGHTING STANDARDS AND GENERAL NOTES						
		DATE 07-01-13	DWG. NO.	300.S1				

1. INSTALL STREETLIGHT STANDARDS AT INTERSECTIONS INCLUDING "L" AND "T" TYPES, PER STANDARD DRAWINGS 301 THROUGH 310 IN ACCORDANCE WITH THE APPROPRIATE RIGHT-OF-WAY.
2. STREET CLASSIFICATION AND STREETLIGHT STANDARD APPLICATION SHALL BE AS LISTED IN TABLE 1 BELOW. ACTUAL LUMINAIRE WATTAGE AND/OR STREETLIGHT STANDARD SPACING MAY BE VARIED BY THE ENGINEER, WHEN SUPPORTED BY AN APPROVED LIGHTING STUDY IN ACCORDANCE WITH THE IES RECOMMENDED PRACTICE FOR ROADWAY LIGHTING IN ORDER TO MEET CURRENT AND FUTURE TRAFFIC CONTROL NEEDS AND APPROVED BY THE RESPECTIVE AGENCY. AVERAGE LEVELS ARE MAINTAINED LEVELS AT A 0.8 MAINTENANCE FACTOR IN FOOTCANDLES MEASURED HORIZONTALLY AT THE SURFACE.

TABLE 1
INDUCTION TYPE LIGHTING

CLASSIFICATION	RW	LUMINAIRE (INDUCTION)	AVG PHOTOPIC ILLUMINANCE	UNIFORMITY AVG/MIN
SIGNALIZED INTERSECTIONS	ALL	250W 5000K CCT	1.80 FC	3:1
ARTERIAL	100' OR MORE	150W 5000K CCT	1.24 FC	3:1
MAJOR COLLECTOR	80'	150W 5000K CCT	0.49 FC	4:1
MINOR COLLECTOR	60'	55W 850K CCT	0.17 FC	6:1
RESIDENTIAL	51' OR LESS	55W 850K CCT	0.17 FC	6:1

3. NEW STREETLIGHT STANDARDS INSTALLED ADJACENT TO OR OPPOSITE FROM EXISTING STREETLIGHTS SHALL MATCH THE EXISTING LOCATION, SPACING, POLE AND LUMINAIRE TYPES UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
4. STREETLIGHT STANDARDS INSTALLED ON 60' OR LESS RIGHT-OF-WAYS MAY BE INSTALLED ON EITHER SIDE OF ROADWAY AS DIRECTED BY THE ENGINEER.
5. TRAFFIC SIGNAL FOUNDATIONS AND ADAPTOR PLATES MAY BE REQUIRED AT INTERSECTIONS AS DIRECTED BY THE ENGINEER.
6. AT LEAST ONE STREETLIGHT SHALL BE REQUIRED IN THE BULB SECTION OF A CUL-DE-SAC OR HAMMERHEAD. LOCATION SHALL BE AS REQUIRED BY THE ENGINEER.
7. LUMINAIRE SPECIFICATIONS (MINIMUM VALUES)
 - 80% LIGHT OUTPUT & 80,000 HR LIFE
 - SCOTOPIC/PHOTOPIC RATIO OF LIGHT SOURCE 1.8
 - HIGH COLOR RENDITIONS 80 CRI
 - 10 YEAR WARRANTY ON LUMINAIRE AND BALLAST

		AGENCY APPROVED				H			
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
623	TRAFFIC SIGNALS & STREETLIGHTING	SUPPLEMENTAL DRAWING							
		STREETLIGHT LOCATION INDUCTION LIGHTING STANDARDS AND GENERAL NOTES							
		DATE 07-01-13	DWG. NO.	300.S2					

1. INSTALL STREETLIGHT STANDARDS AT INTERSECTIONS INCLUDING "L" AND "T" TYPES, PER STANDARD DRAWINGS 301 THROUGH 310 IN ACCORDANCE WITH THE APPROPRIATE RIGHT-OF-WAY.
2. STREET CLASSIFICATION, THE RESPECTIVE LIGHTING LEVELS, AND STREETLIGHT STANDARD APPLICATION IS LISTED IN TABLE 1 BELOW. ACTUAL LUMINAIRE WATTAGE AND/OR STREETLIGHT STANDARD SPACING MAY BE VARIED BY THE ENGINEER, WHEN SUPPORTED BY AN APPROVED LIGHTING STUDY IN ACCORDANCE WITH THE IES RECOMMENDED PRACTICE FOR ROADWAY LIGHTING IN ORDER TO MEET CURRENT AND FUTURE TRAFFIC CONTROL NEEDS AND APPROVED BY THE RESPECTIVE AGENCY. FOR LED FIXTURES, THE AVERAGE LEVELS ARE MAINTAINED LEVELS AT A 0.92 MAINTENANCE FACTOR IN FOOTCANDLES MEASURED HORIZONTALLY AT GROUND LEVEL.
3. NEW STREETLIGHT STANDARDS INSTALLED ADJACENT TO OR OPPOSITE FROM EXISTING STREETLIGHTS SHALL MATCH THE EXISTING LOCATION, SPACING, POLE AND LUMINAIRE TYPES UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
4. STREETLIGHT STANDARDS INSTALLED ON 60' OR LESS RIGHT-OF-WAYS MAY BE INSTALLED ON EITHER SIDE OF ROADWAY AS DIRECTED BY THE ENGINEER.
5. TRAFFIC SIGNAL FOUNDATIONS AND ADAPTOR PLATES MAY BE REQUIRED AT INTERSECTIONS AS DIRECTED BY THE ENGINEER.
6. AT LEAST ONE STREETLIGHT SHALL BE REQUIRED IN THE BULB SECTION OF A CUL-DE-SAC OR HAMMERHEAD. LOCATION SHALL BE AS REQUIRED BY THE ENGINEER.
7. FOR A SPECIFIC FIXTURE TO BE APPROVED, AN INDEPENDENT EVALUATION WITH THE AGI32 LIGHTING MODELING SOFTWARE PROGRAM (OR OTHER SOFTWARE APPROVED BY THE AGENCY) SHALL BE SUBMITTED FOR REVIEW BY THE AGENCY. THE IES PHOTOMETRIC FILE SHALL BE LOADED INTO THE MODEL AND ALL REQUISITE INPUTS SHALL CONFORM TO THE LOCATION, HEIGHT, AND OTHER ASSOCIATED FACTORS DESIGNATED IN DRAWINGS 301 THROUGH 310 IN ACCORDANCE WITH THE APPROPRIATE RIGHT-OF-WAY.

TABLE 1

REQUIRED ILLUMINANCE VALUES FOR ROADWAYS					
ROADWAY CLASS	R.O.W. WIDTHS	ROADWAY LIGHTING ILLUMINANCE LEVELS		SIDEWALK / WALKWAY ILLUMINANCE LIGHTING LEVELS	
		MIN. AVG.	UNIFORMITY AVG./MIN.	MIN. ILLUMINANCE	UNIFORMITY AVG./ MIN.
ARTERIAL	100' OR GREATER	1.58 FC	3:1	0.2 FC	4:1
MAJOR COLLECTOR	80' TO 99'	0.84 FC	4:1	0.2 FC	4:1
MINOR COLLECTOR	60' TO 79'	0.38 FC	6:1	0.08 FC	6:1
RESIDENTIAL	51' OR LESS	0.38 FC	6:1	0.08 FC	6:1

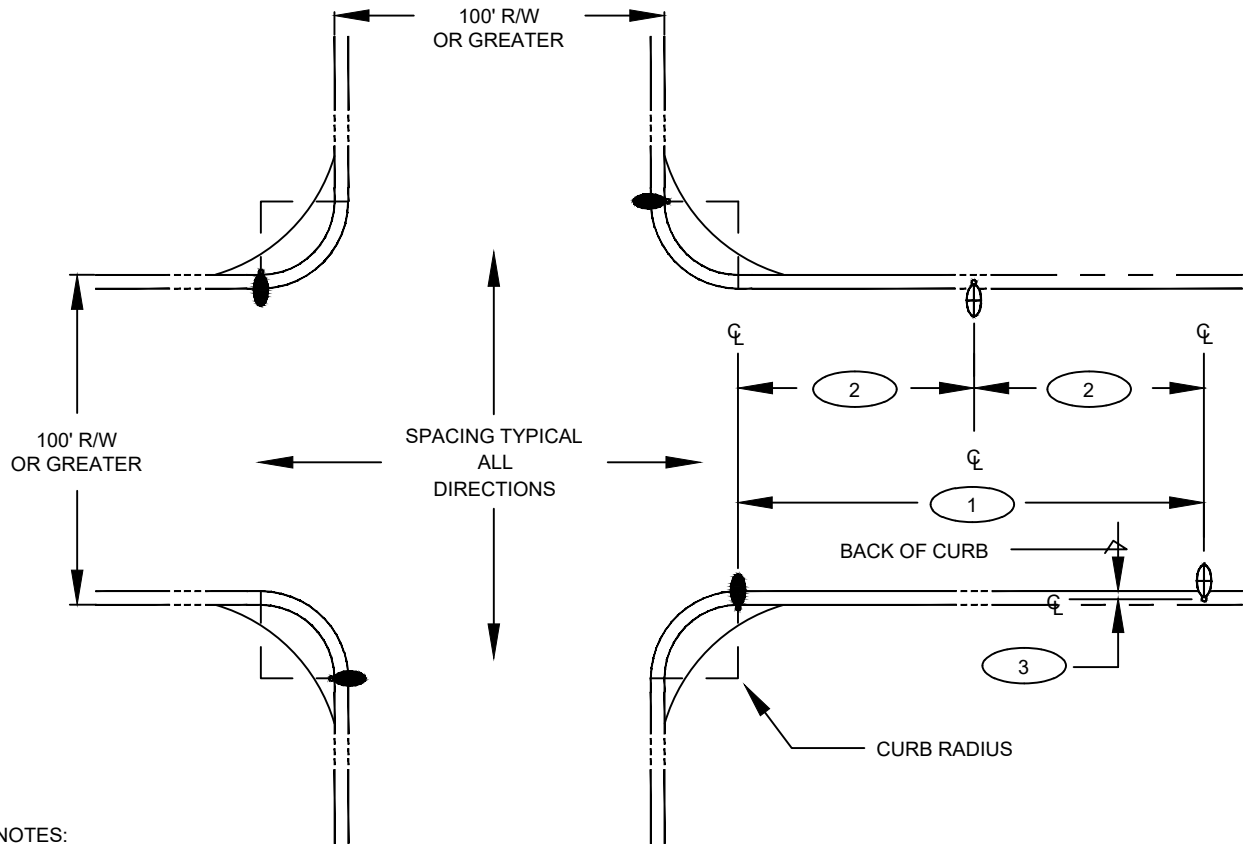
SPECIFICATION REFERENCE		AGENCY APPROVED	B	C	H	L	M	N
623	TRAFFIC SIGNALS □ STREETLIGHTING	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
		SUPPLEMENTAL DRAWING						
		STREETLIGHT LOCATION L.E.D. LIGHTING STANDARDS AND GENERAL NOTES						
		DATE 07-01-14	DWG. NO.	300.S3	SHEET 1 OF 2			

8. FOR EACH FIXTURE ASSESSED, UPON DEMONSTRATION OF THE ADEQUATE ILLUMINATION CAPABILITY THROUGH THE COMPUTER MODEL ON THE SPECIFIC ROADWAY TYPE, THE VENDOR SHALL DELIVER THE REQUESTED NUMBER OF LUMINAIRES OF THAT TYPE FOR FURTHER AGENCY EVALUATION. THEY WILL BE EVALUATED ON THE CRITERIA NOTED IN THE FOLLOWING SECTION, THOUGH THE AGENCY MAY INCLUDE ADDITIONAL REQUIREMENTS. FINAL APPROVAL AND ACCEPTANCE OF THE RESPECTIVE LUMINAIRES FOR A SPECIFIC APPLICATION SHALL BE AT THE SOLE DISCRETION OF THE PURCHASING AGENCY.
9. THE FOLLOWING LIST REPRESENTS THE CRITERIA UPON WHICH EACH LUMINAIRE SHALL BE EVALUATED. THE AGENCY MAY INCLUDE ADDITIONAL ITEMS FOR EVALUATION AT ITS SOLE DISCRETION.
- COLOR RENDERING INDEX
 - ENERGY EFFICIENCY
 - AESTHETICS
 - QUALITY OF CONSTRUCTION
 - WEATHERPROOFING
 - IP65 RATING
 - DURABILITY
 - EASE OF MAINTENANCE
 - EASE OF INSTALLATION
 - WEIGHT
 - POWER CONSUMPTION
 - COLOR TEMPERATURE (CCT)
 - LIFE OF FIXTURE AND INDIVIDUAL COMPONENTS
 - LENGTH OF WARRANTY LUMINAIRE FIXTURE, LED'S, AND BALLAST
 - INITIAL COST
 - LIFE CYCLE COST
 - LM 79, LM 80
 - BUG RATING (BACKLIGHTING, UPLIGHTING, GLARE)
 - TRANSIENT VOLTAGE SURGE SUPPRESSION - SPD (SURGE PROTECTION DEVICE)

TABLE 2

REQUIRED ILLUMINANCE VALUES FOR SIGNALIZED INTERSECTIONS							
ROADWAY CLASS	R.O.W. WIDTHS	MIN. AVE. ILLUMINANCE BY PEDESTRIAN AREA CLASSIFICATION			SIDEWALK / WALKWAY LIGHTING LEVELS		
		HIGH	MEDIUM	LOW	MIN. AVG. ILLUMINANCE	MIN. ILLUMINANCE	UNIFORMITY AVG./ MIN.
ARTERIAL / ARTERIAL	100' OR GREATER BY 100' OR GREATER BY	3.4 FC	2.6 FC	1.8 FC	2.0 FC	1.0 FC	4:1
ARTERIAL / MAJOR COLLECTOR	100' OR GREATER BY 80' OR GREATER BY	2.9 FC	2.2 FC	1.5 FC	2.0 FC	1.0 FC	4:1
ARTERIAL / MINOR COLLECTOR - RESIDENTIAL	100' OR GREATER BY 79' OR LESS	2.6 FC	2.0 FC	1.3 FC	2.0 FC	1.0 FC	4:1
MAJOR COLLECTOR / MAJOR COLLECTOR	80' - 99' BY 80' - 99'	2.4 FC	1.8 FC	1.2 FC	2.0 FC	1.0 FC	4:1
MAJOR COLLECTOR / RESIDENTIAL	80' - 99' BY 79' OR LESS	2.1 FC	1.6 FC	1.0 FC	2.0 FC	1.0 FC	4:1

		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
623	TRAFFIC SIGNALS □ STREETLIGHTING	SUPPLEMENTAL DRAWING							
		STREETLIGHT LOCATION L.E.D. LIGHTING STANDARDS AND GENERAL NOTES							
		DATE 07-01-14	DWG. NO.	300.S3	SHEET 2 OF 2				



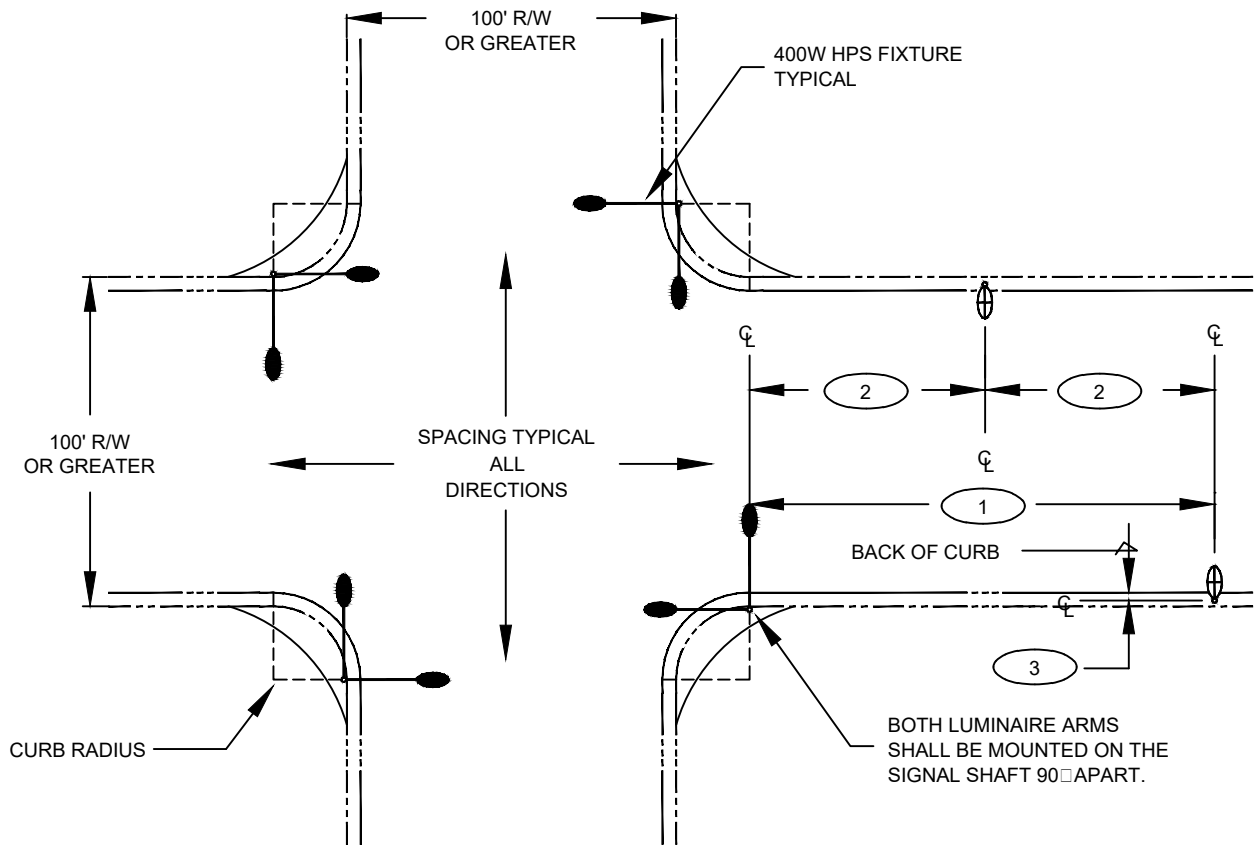
NOTES:

1. SEE GENERAL NOTES STANDARD DRAWING NO. 300.
2. AN APPROVED LIGHTING STUDY PER NOTE 2, STANDARD DRAWING NO. 300, IS REQUIRED FOR RIGHT-OF-WAY GREATER THAN 100 FEET.
- B** **H** 3. CITY OF HENDERSON AND BOULDER CITY REQUIRE STREETLIGHTING IN THE MEDIAN FOR RIGHTS-OF-WAY 100 FEET OR GREATER. SEE STANDARD DRAWING NO. 312.S2. IN THE ABSENCE OF A MEDIAN, STREETLIGHT LOCATION SHALL BE THE SAME AS THE OTHER ENTITIES.

POLE LOCATION TABLE						
KEYED NOTE	ENTITY	CLV	NLV	MES	BC	HND
1			160'			140'
2			80'			70'
3			(SEE DRAWING NO. 320)			N/A
INTERSECTION LUMINAIRE TYPE		400W HPS				150W IND.

AGENCY APPROVED **B** **H** L M N

SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA		
623	TRAFFIC SIGNALS □ STREETLIGHTING	SUPPLEMENTAL DRAWING		
		STREETLIGHT LOCATIONS AT INTERSECTIONS 100' OR GREATER/100' OR GREATER RIGHT-OF-WAY		
		DATE 07-01-13	DWG. NO. 301.S1	PAGE NO.



NOTES:

1. SEE GENERAL NOTES STANDARD DRAWING NO. 300.
2. AN APPROVED LIGHTING STUDY PER NOTE 2, STANDARD DRAWING NO. 300, IS REQUIRED FOR RIGHT-OF-WAY GREATER THAN 100 FEET.
3. WITH THE ENGINEER'S APPROVAL, A SECOND LUMINAIRE MOUNTING PLATE MAY BE FIELD WELDED BY A CERTIFIED WELDER.
4. ALL LUMINAIRE MAST ARMS FOR 400W FIXTURES SHALL BE 15 FT. LONG AND INSTALLED PER STANDARD DRAWING NO. 808 UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.

POLE LOCATION TABLE	
KEYED NOTE	ENTITY
1	120'
2	60'
3	(SEE DRAWING NO. 320)

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

C

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

623 TRAFFIC SIGNALS □ STREETLIGHTING

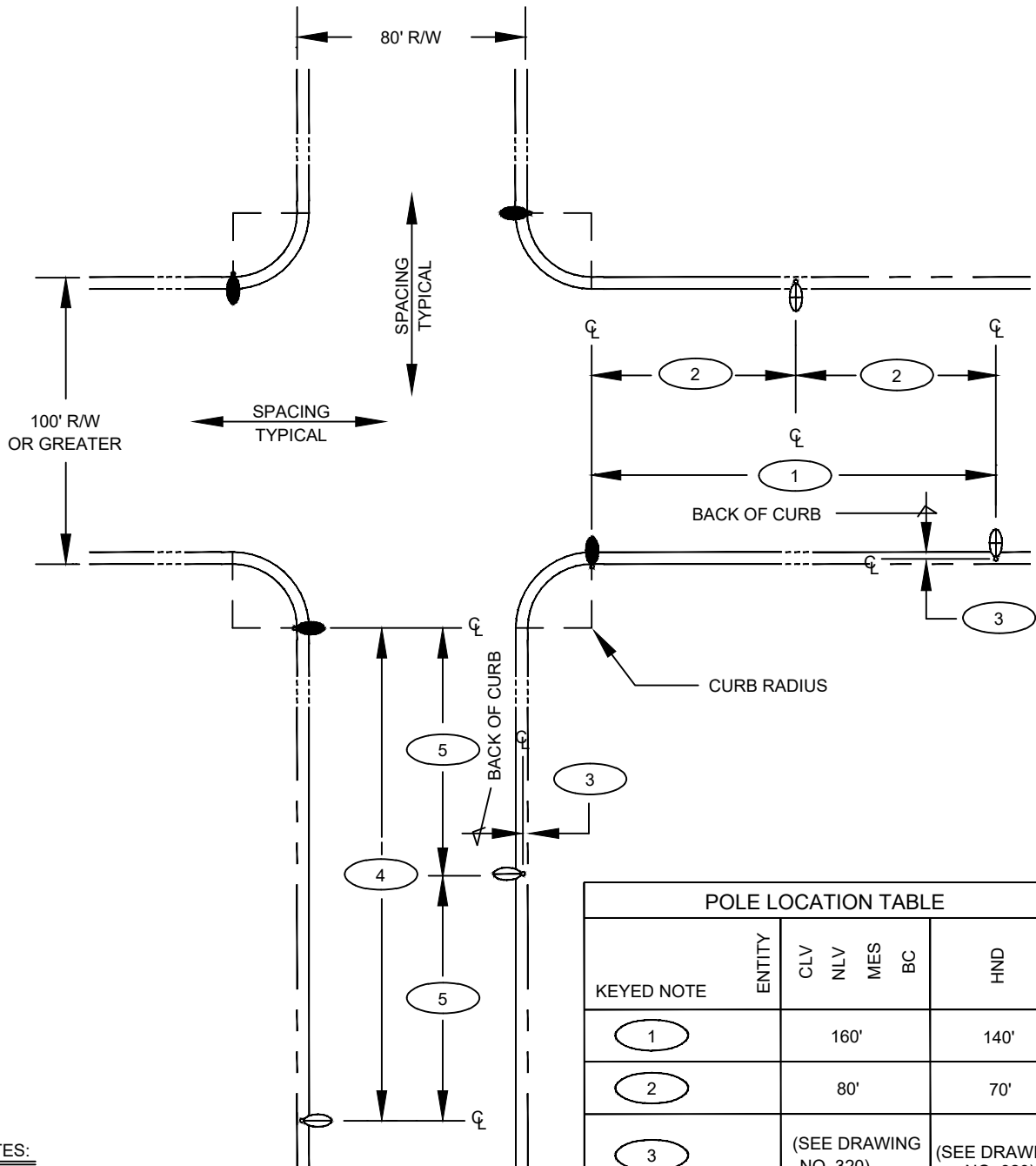
SUPPLEMENTAL DRAWING

STREETLIGHT LOCATIONS AT INTERSECTIONS
100 FT. OR GREATER/100 FT. OR GREATER
RIGHT-OF-WAY

DATE 07-01-13

DWG. NO.

301.S2



NOTES:

1. SEE GENERAL NOTES STANDARD DRAWING NO. 300.
2. AN APPROVED LIGHTING STUDY PER NOTE 2, STANDARD DRAWING NO. 300, IS REQUIRED FOR RIGHT-OF-WAY GREATER THAN 100 FEET.
3. CITY OF HENDERSON AND BOULDER CITY REQUIRE STREETLIGHTING IN THE MEDIAN FOR RIGHTS-OF-WAY 100 FEET OR GREATER. SEE STANDARD DRAWING NO. 312. IN THE ABSENCE OF A MEDIAN, STREETLIGHT LOCATION SHALL BE THE SAME AS THE OTHER ENTITIES.

POLE LOCATION TABLE					
KEYED NOTE	ENTITY	CLV	NLV	MES	BC
1		160'			140'
2		80'			70'
3		(SEE DRAWING NO. 320)		(SEE DRAWING NO. 320)	
4		170'			140'
5		85'			70'
INTERSECTION LUMINAIRE TYPE		400W HPS		150W IND	

AGENCY APPROVED B H L M N

SPECIFICATION REFERENCE

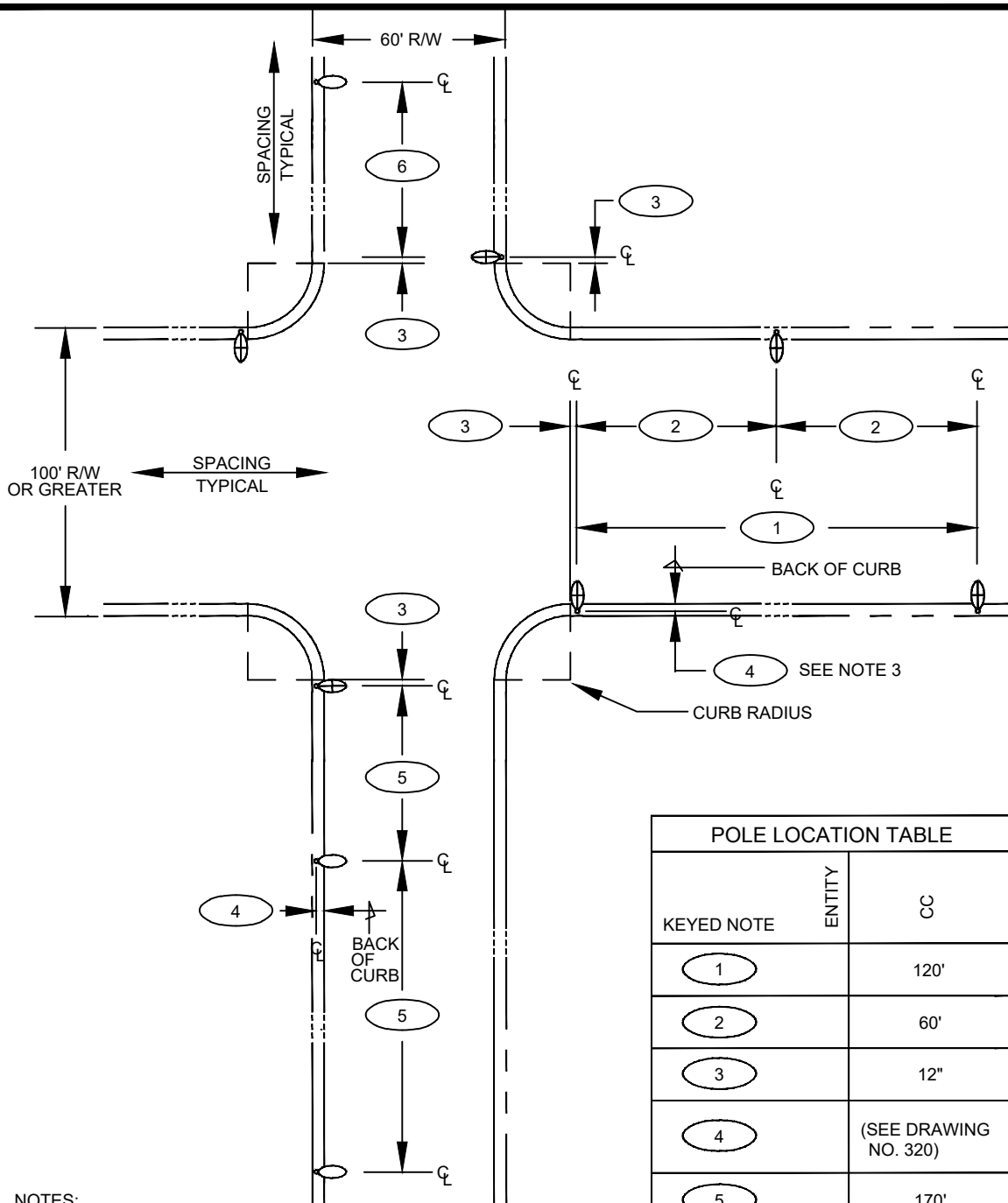
623 TRAFFIC SIGNALS □ STREETLIGHTING

**UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA**

SUPPLEMENTAL DRAWING

**STREETLIGHT LOCATIONS AT INTERSECTIONS
100' OR GREATER/80' RIGHT-OF-WAY**

DATE 07-01-13 DWG. NO. 302.S1 PAGE NO.

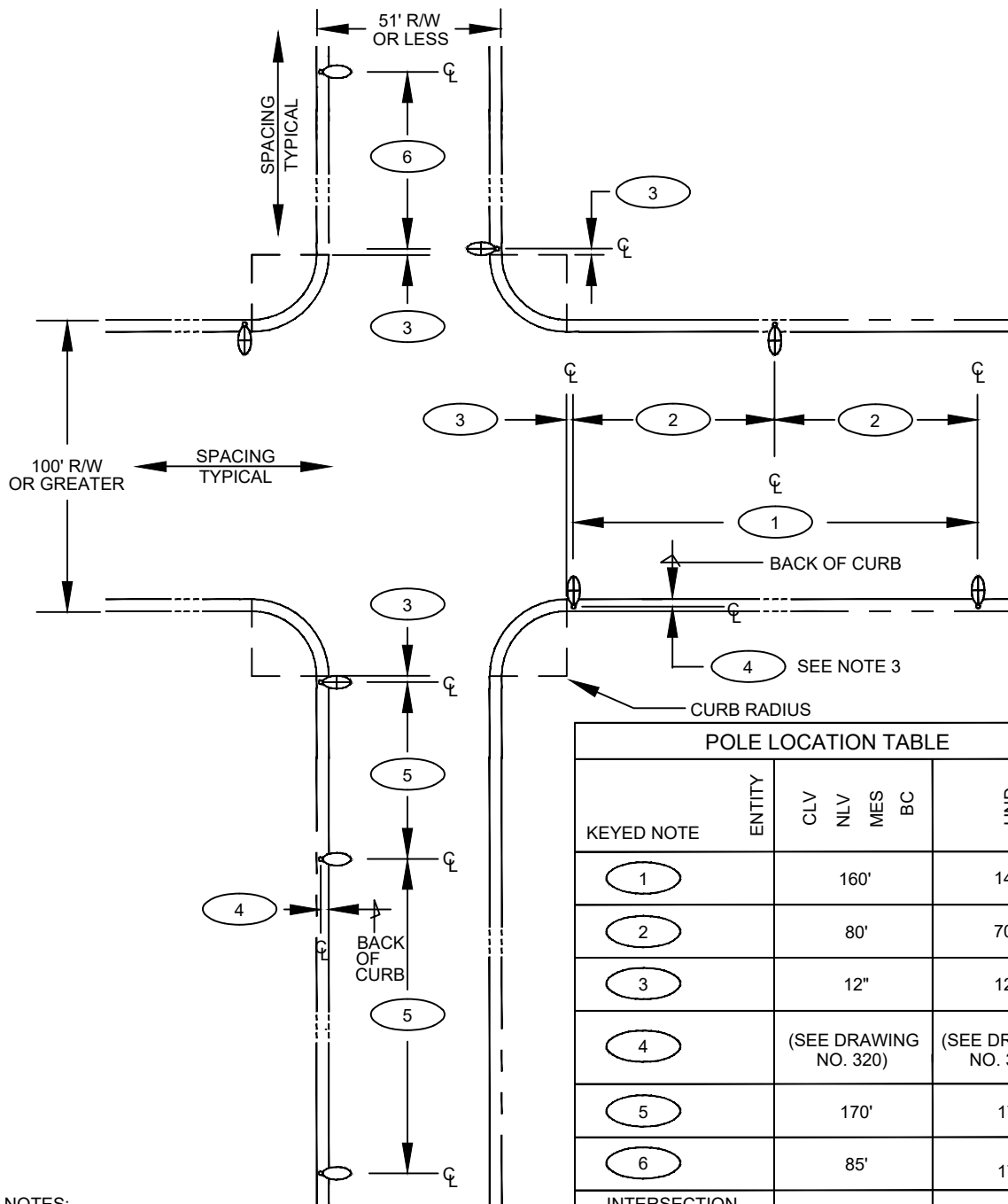


NOTES:

1. SEE GENERAL NOTES STANDARD DRAWING NO. 300.
2. AN APPROVED LIGHTING STUDY PER NOTE 2, STANDARD DRAWING NO. 300 IS REQUIRED FOR RIGHT-OF-WAY GREATER THAN 100 FEET.
3. IF INTERSECTION IS SIGNALIZED, 400 WATT LUMINAIRES SHALL BE INSTALLED ON ALL CORNERS AND DUAL ARM CONFIGURATION SHALL BE USED FOR 100 FT. RIGHT-OF-WAY SIMILAR TO STANDARD DRAWING NO. 302.S2.

POLE LOCATION TABLE		
KEYED NOTE	ENTITY	Ø
1		120'
2		60'
3		12"
4		(SEE DRAWING NO. 320)
5		170'
6		170'

AGENCY APPROVED		C				
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA				
623	TRAFFIC SIGNALS □ STREETLIGHTING	SUPPLEMENTAL DRAWING				
		STREETLIGHT LOCATIONS AT INTERSECTIONS 100' OR GREATER/60' RIGHT-OF-WAY				
		DATE 07-01-13	DWG. NO.	303.S2		

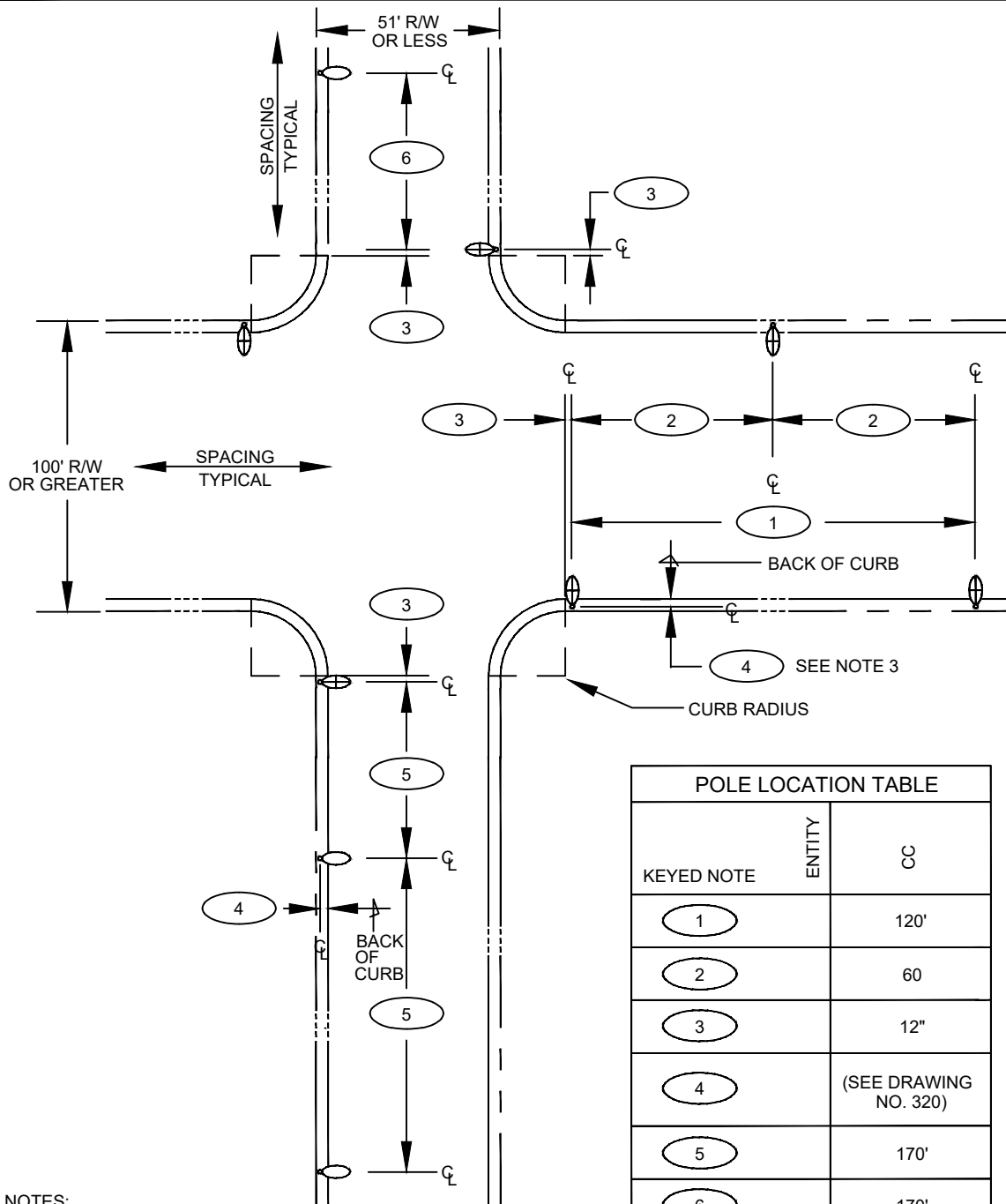


NOTES:

1. SEE GENERAL NOTES STANDARD DRAWING NO. 300.
2. AN APPROVED LIGHTING STUDY PER NOTE 2, STANDARD DRAWING NO. 300 IS REQUIRED FOR RIGHT-OF-WAY GREATER THAN 100 FEET. ADEQUATE INTERSECTION LIGHTING SHALL ALSO BE ADDRESSED IN THE LIGHTING STUDY.
3. CITY OF HENDERSON AND BOULDER CITY REQUIRE STREETLIGHTING IN THE MEDIAN FOR RIGHTS-OF-WAY 100 FEET OR GREATER. SEE STANDARD DRAWING NO. 312.S2. IN THE ABSENCE OF A MEDIAN, STREETLIGHT LOCATION SHALL BE THE SAME AS THE OTHER ENTITIES.

POLE LOCATION TABLE						
KEYED NOTE	ENTITY	CLV	NLV	MES	BC	HND
1		160'				140'
2		80'				70'
3		12"				12"
4		(SEE DRAWING NO. 320)				(SEE DRAWING NO. 320)
5		170'				170'
6		85'				170'
INTERSECTION LUMINAIRE TYPE		250W HPS				150W IND

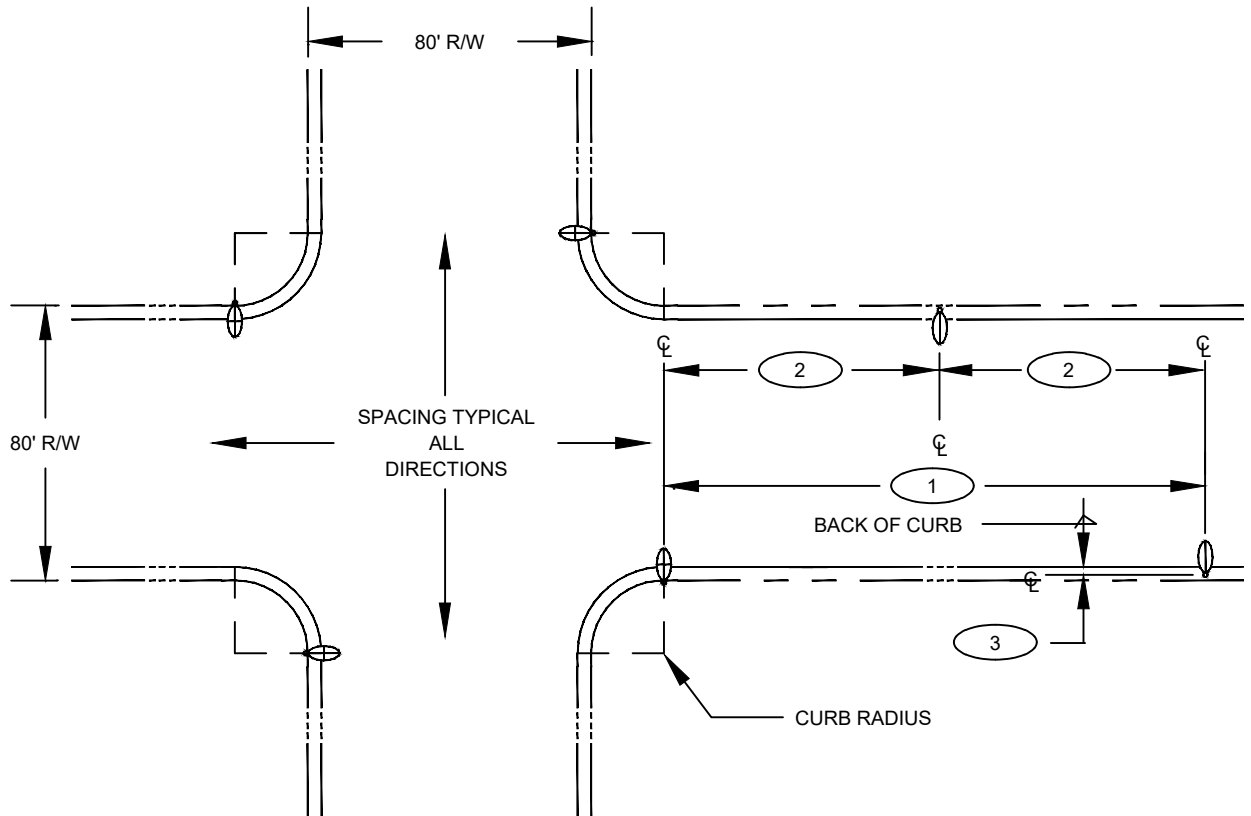
AGENCY APPROVED				L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA				
623	TRAFFIC SIGNALS □ STREETLIGHTING	SUPPLEMENTAL DRAWING				
		STREETLIGHT LOCATIONS AT INTERSECTIONS 100' OR GREATER/51' OR LESS RIGHT-OF-WAY				
		DATE 07-01-13	DWG. NO.	304.S1		



NOTES:

1. SEE GENERAL NOTES STANDARD DRAWING NO. 300.
2. AN APPROVED LIGHTING STUDY PER NOTE 2, STANDARD DRAWING NO. 300 IS REQUIRED FOR RIGHT-OF-WAY GREATER THAN 100 FEET. ADEQUATE INTERSECTION LIGHTING SHALL ALSO BE ADDRESSED IN THE LIGHTING STUDY.
3. IF INTERSECTION IS SIGNALIZED, 400 WATT LUMINAIRES SHALL BE INSTALLED ON ALL CORNERS AND DUAL ARM CONFIGURATION SHALL BE USED FOR 100 FT. RIGHT-OF-WAY SIMILAR TO STANDARD DRAWING NO. 302.S2.

AGENCY APPROVED		C				
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA				
623	TRAFFIC SIGNALS □ STREETLIGHTING	SUPPLEMENTAL DRAWING				
		STREETLIGHT LOCATIONS AT INTERSECTIONS 100' OR GREATER/51' OR LESS RIGHT-OF-WAY				
		DATE	07-01-13	DWG. NO.	304.S2	

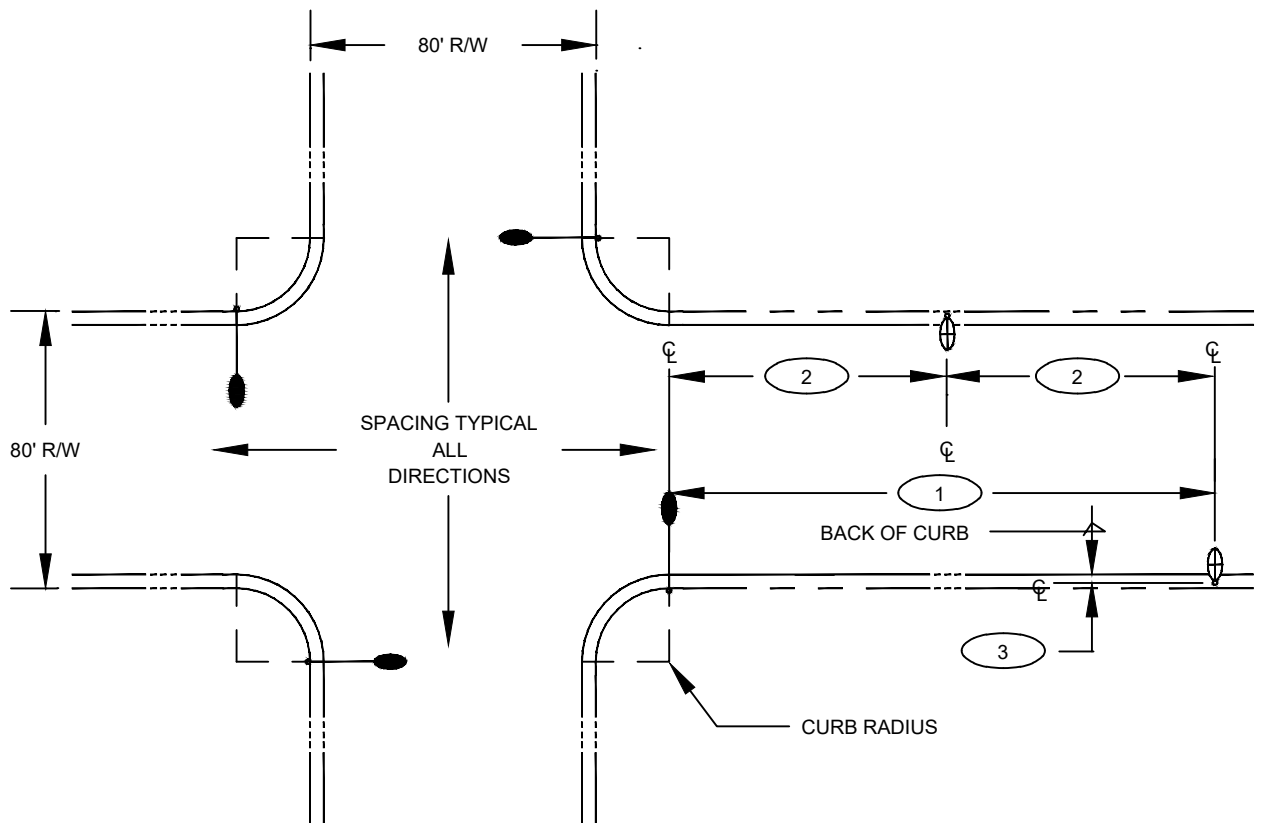


NOTE:

SEE GENERAL NOTES STANDARD DRAWING NO. 300.

POLE LOCATION TABLE						
KEYED NOTE	ENTITY	BC	CLV	MES	NLV	HND
1		170'				140
2		85'				70'
3		(SEE DRAWING NO. 320)				(SEE DRAWING NO. 320)
INTERSECTION LUMINAIRE TYPE		250W HPS				150W IND

		AGENCY APPROVED						B		H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
623	TRAFFIC SIGNALS □ STREETLIGHTING	SUPPLEMENTAL DRAWING											
		STREETLIGHT LOCATIONS AT INTERSECTIONS 80'/80' RIGHT-OF-WAY											
		DATE 07-01-13			DWG. NO. 305.S1			PAGE NO.					

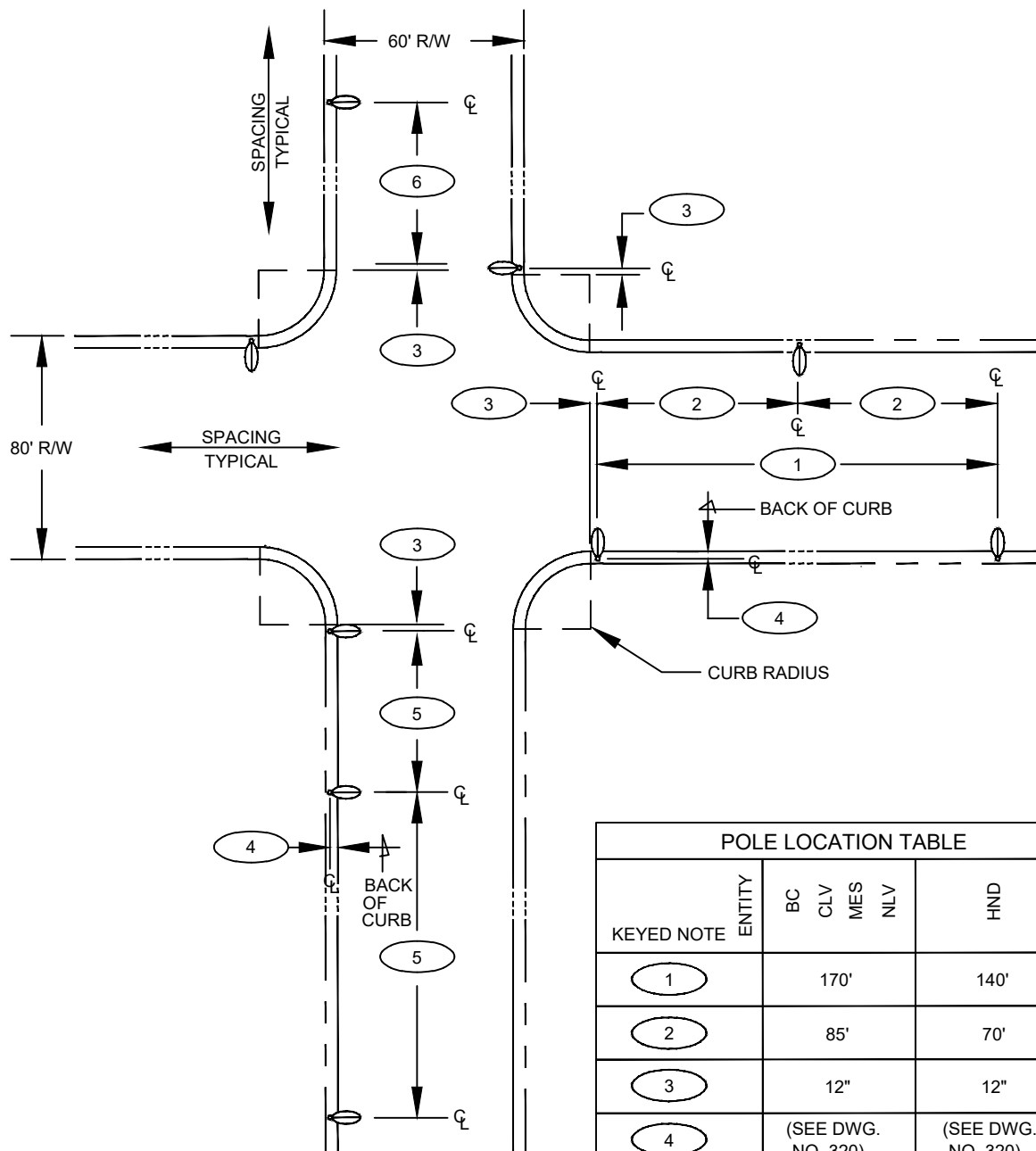


NOTE:

SEE GENERAL NOTES STANDARD DRAWING NO. 300.

POLE LOCATION TABLE		
KEYED NOTE	ENTITY	CLARK COUNTY
1		170'
2		85'
3		(SEE DRAWING NO. 320)

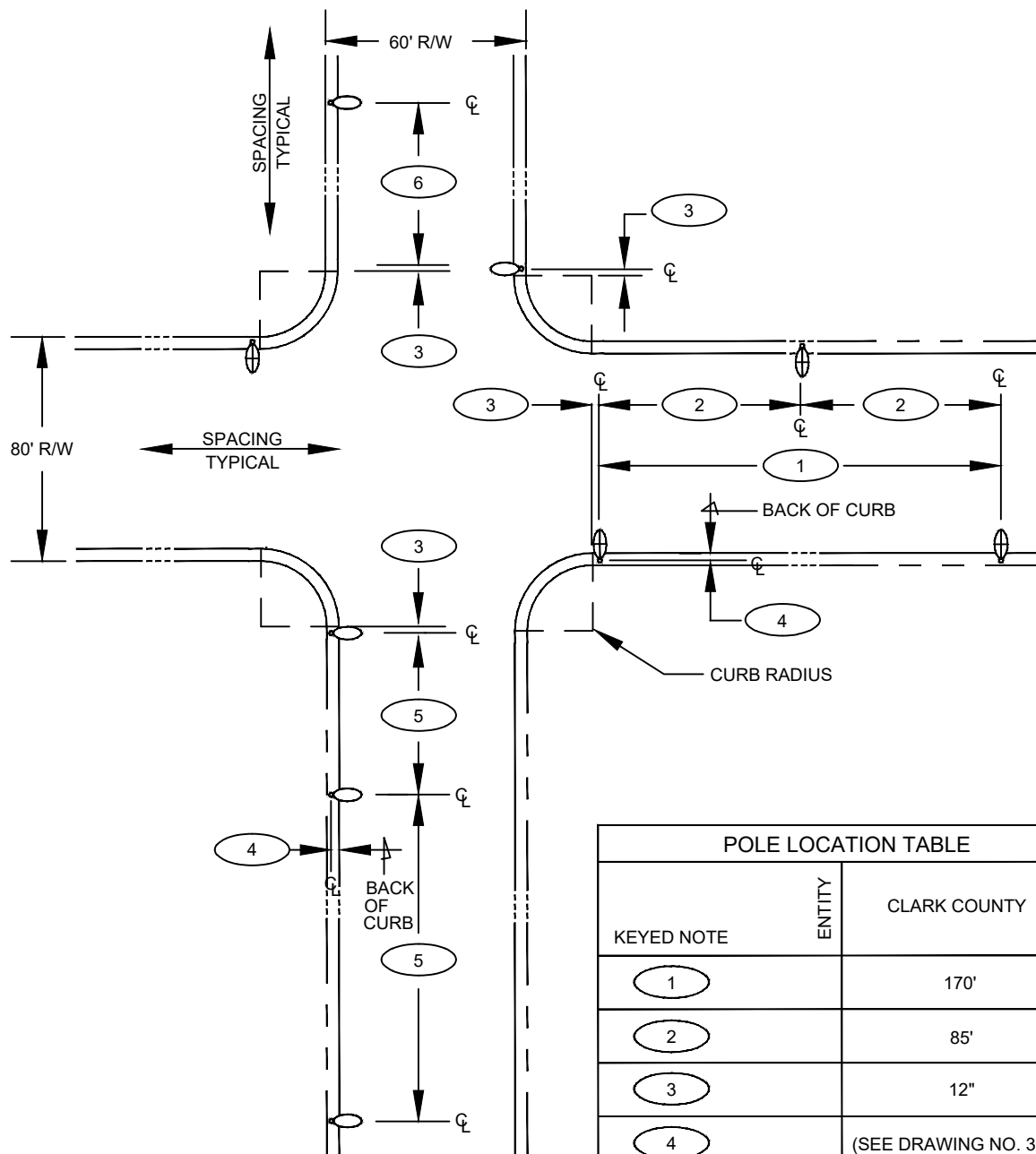
SPECIFICATION REFERENCE		AGENCY APPROVED					
623	TRAFFIC SIGNALS ☐ STREETLIGHTING	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		SUPPLEMENTAL DRAWING					
		STREETLIGHT LOCATIONS AT INTERSECTIONS 80'/80' RIGHT-OF-WAY					
		DATE 07-01-13	DWG. NO.	305.S2	PAGE NO.		



NOTE:
SEE GENERAL NOTES STANDARD DRAWING NO. 300.

POLE LOCATION TABLE						
KEYED NOTE	ENTITY					HND
		BC	CLV	MES	NLV	
1		170'				140'
2		85'				70'
3		12"				12"
4		(SEE DWG. NO. 320)				(SEE DWG. NO. 320)
5		180'				170'
6		90'				85'
INTERSECTION LUMINAIRE TYPE		150W HPS				150W IND

AGENCY APPROVED		B		H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
623	TRAFFIC SIGNALS □ STREETLIGHTING	SUPPLEMENTAL DRAWING					
		STREETLIGHT LOCATIONS AT INTERSECTIONS 80'/60' RIGHT-OF-WAY					
		DATE 07-01-13	DWG. NO.	306.S1			

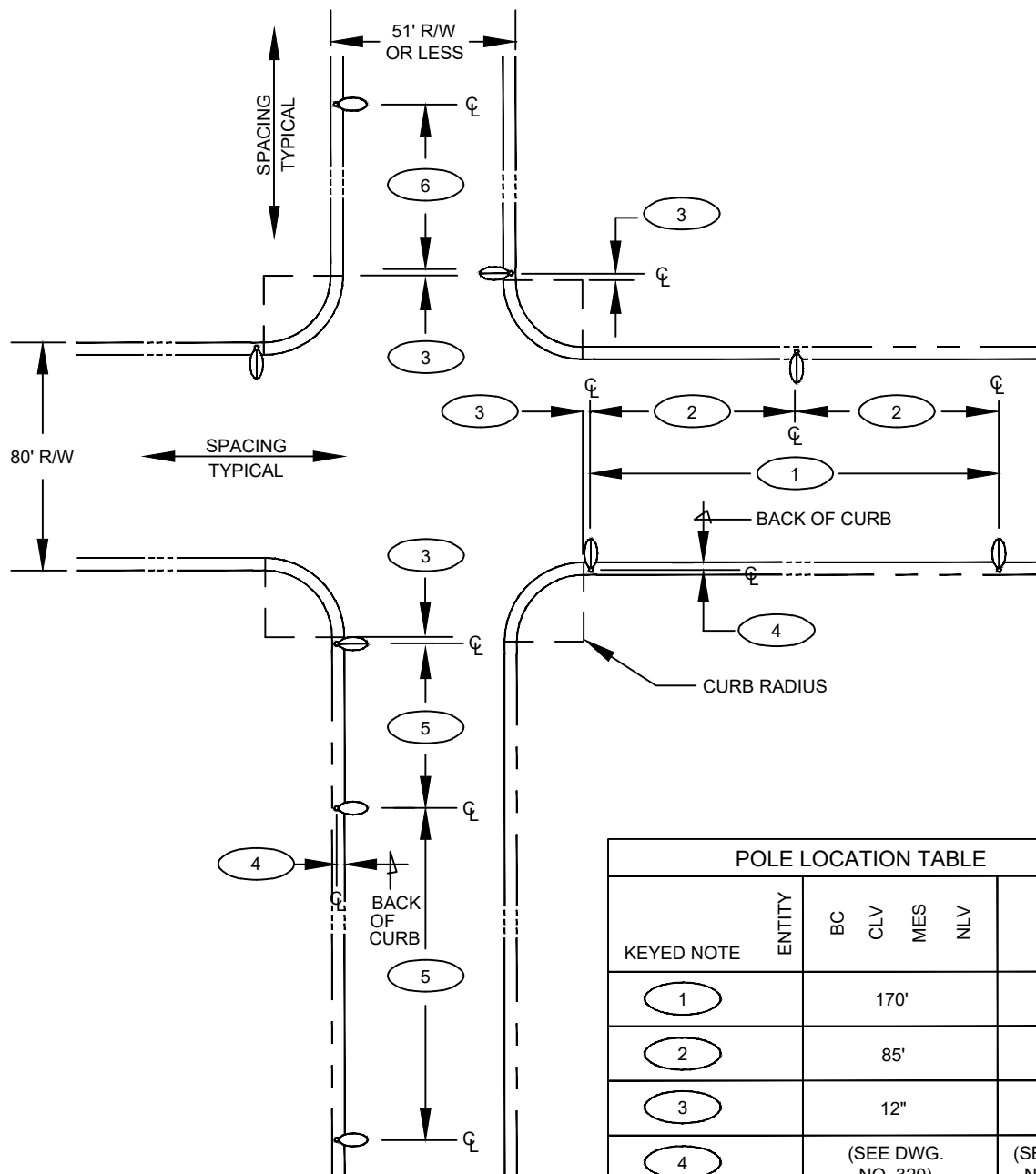


POLE LOCATION TABLE		
KEYED NOTE	ENTITY	CLARK COUNTY
1		170'
2		85'
3		12"
4		(SEE DRAWING NO. 320)
5		170'
6		85'

NOTE:

1. SEE GENERAL NOTES STANDARD DRAWING NO. 300.
2. IF THE INTERSECTION IS SIGNALIZED, 400 WATT LUMINAIRES SHALL BE INSTALLED ON ALL CORNERS.

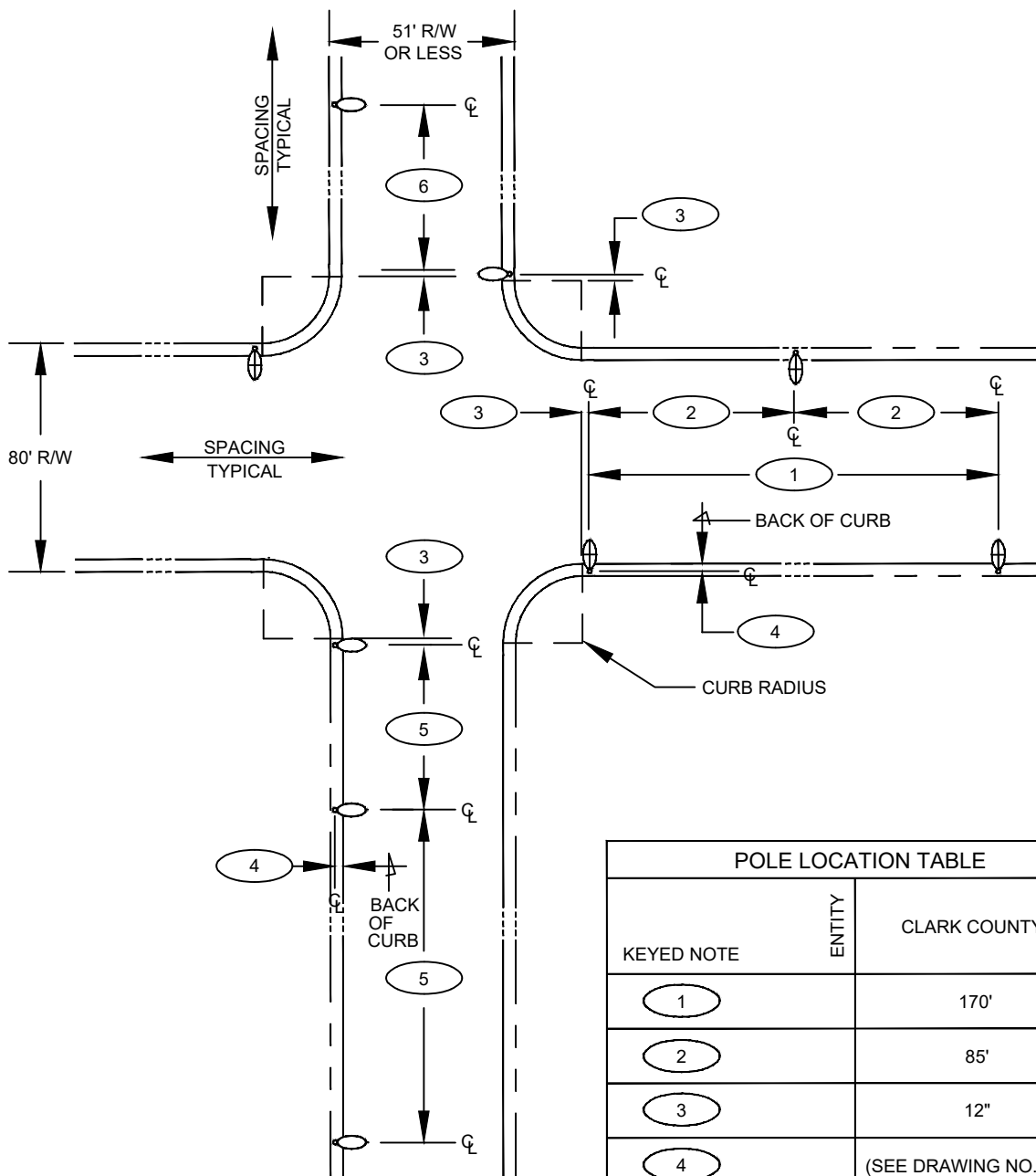
		AGENCY APPROVED						C				
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA										
623	TRAFFIC SIGNALS □ STREETLIGHTING	SUPPLEMENTAL DRAWING										
		STREETLIGHT LOCATIONS AT INTERSECTIONS 80'/60' RIGHT-OF-WAY										
		DATE	07-01-13	DWG. NO.	306.S2							



NOTE:
SEE GENERAL NOTES STANDARD DRAWING NO. 300.

POLE LOCATION TABLE							
KEYED NOTE	ENTITY	BC	CLV	MES	NLV	HND	
	1	170'					140
	2	85'					70'
	3	12"					12"
	4	(SEE DWG. NO. 320)					(SEE DWG. NO. 320)
	5	170'					170'
	6	85'					85'
	INTERSECTION LUMINAIRE TYPE	150W HPS					150W IND

AGENCY APPROVED		B		H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
623	TRAFFIC SIGNALS □ STREETLIGHTING	SUPPLEMENTAL DRAWING					
		STREETLIGHT LOCATIONS AT INTERSECTIONS 80'/51' OR LESS RIGHT-OF-WAY					
		DATE 07-01-13	DWG. NO.	307.S1			

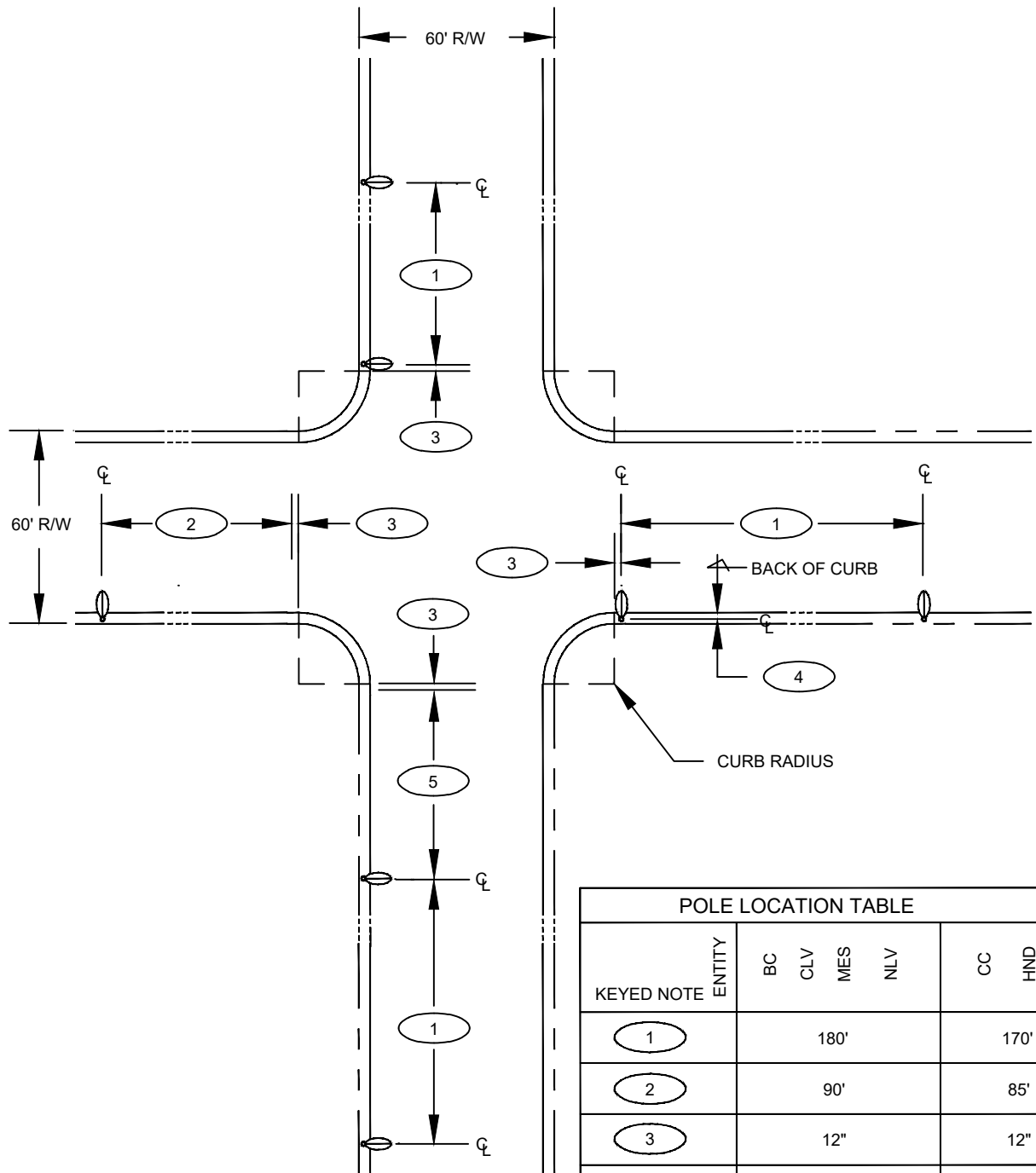


POLE LOCATION TABLE		
KEYED NOTE	ENTITY	CLARK COUNTY
1		170'
2		85'
3		12"
4		(SEE DRAWING NO. 320)
5		170'
6		85'

NOTE:

1. SEE GENERAL NOTES STANDARD DRAWING NO. 300.
2. IF INTERSECTION IS SIGNALIZED, 400 WATT LUMINAIRES SHALL BE INSTALLED ON ALL CORNERS.

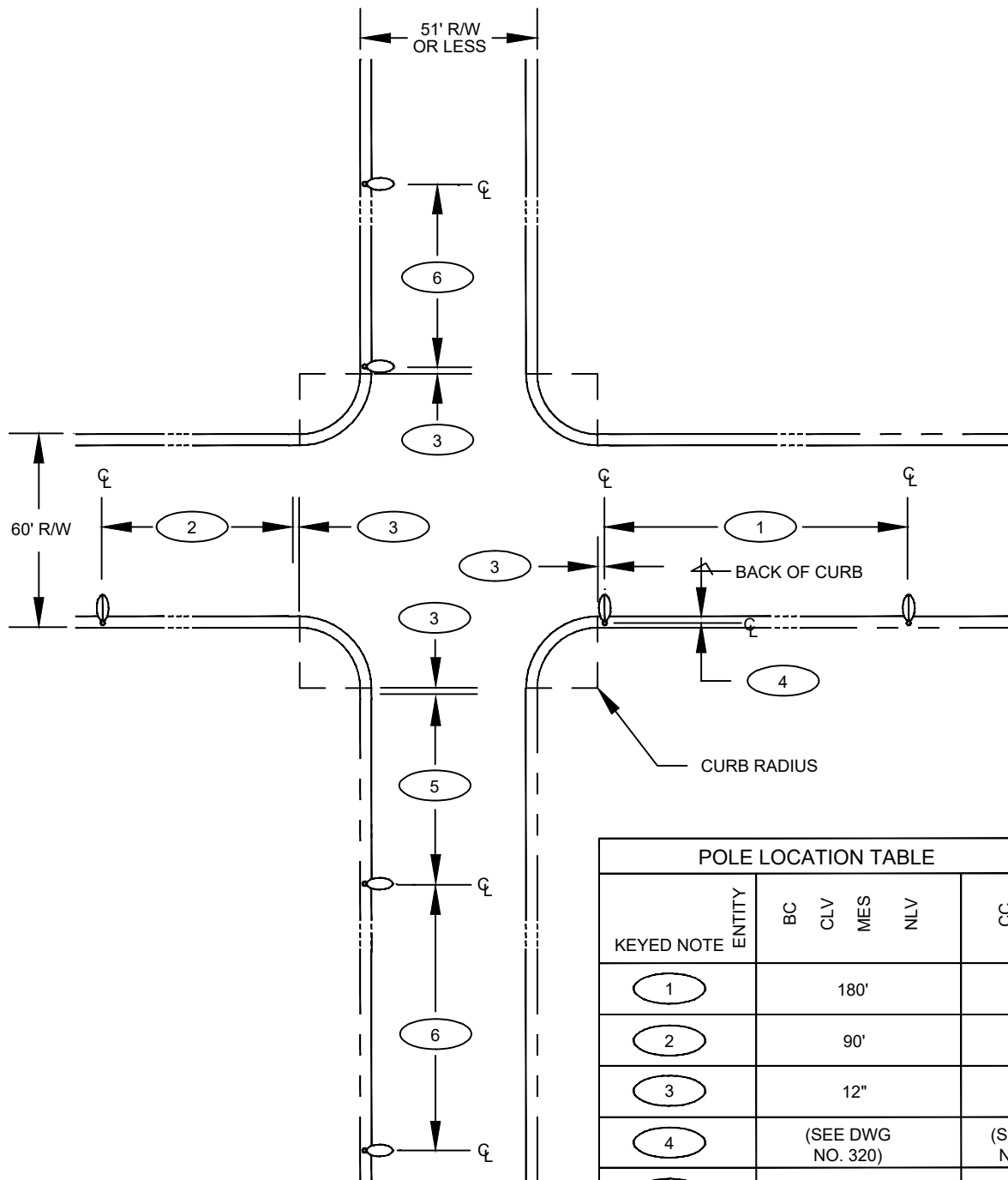
AGENCY APPROVED		C				
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA				
623	TRAFFIC SIGNALS □ STREETLIGHTING	SUPPLEMENTAL DRAWING				
		STREETLIGHT LOCATIONS AT INTERSECTIONS 80'/51' OR LESS RIGHT-OF-WAY				
		DATE 07-01-13	DWG. NO.	307.S2		



NOTE:
SEE STANDARD DRAWING NO. 300 FOR LUMINAIRE TYPE.

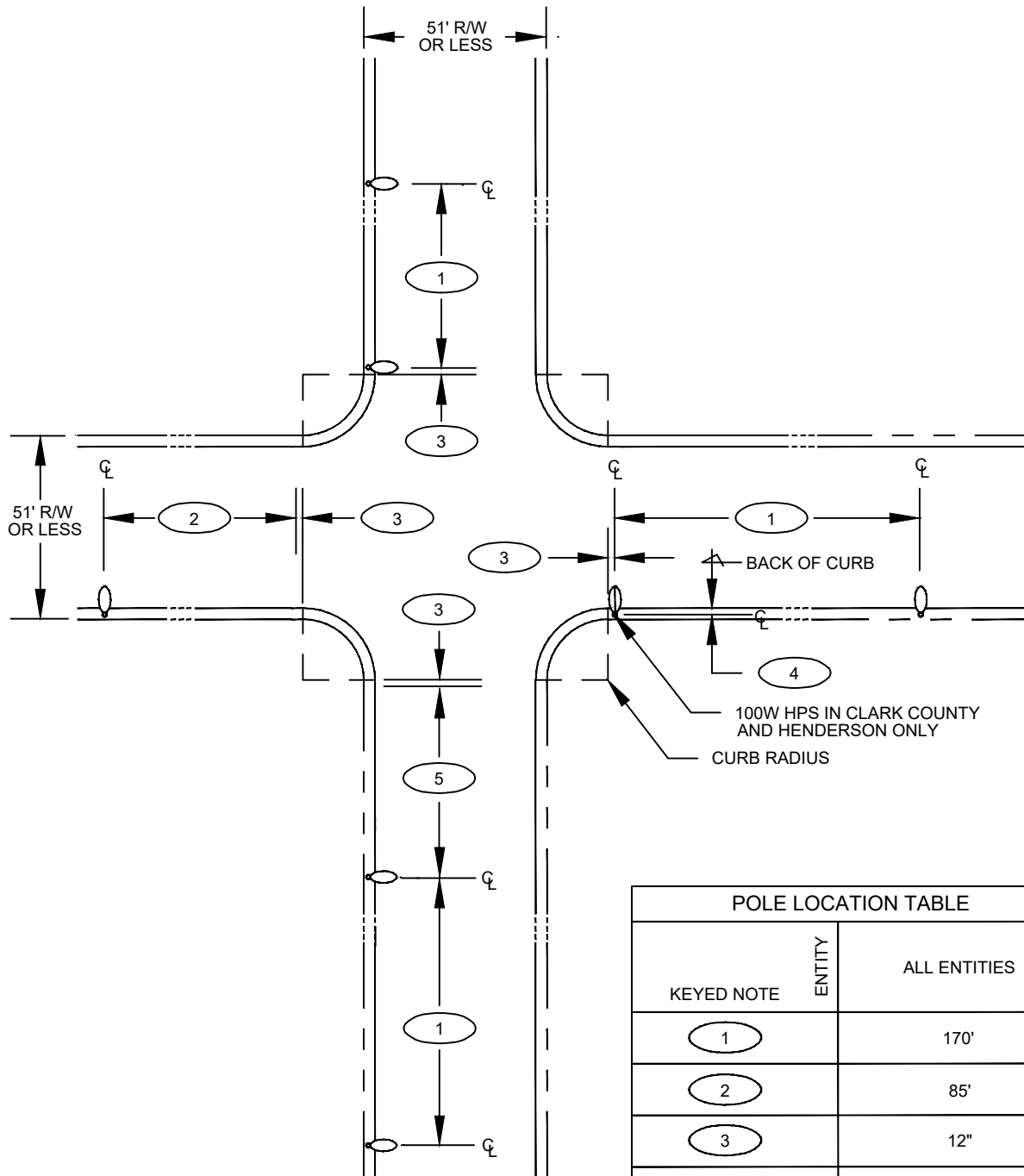
POLE LOCATION TABLE						
KEYED NOTE	ENTITY	BC	CLV	MES	NLV	CC HND
1			180'			170'
2			90'			85'
3			12"			12"
4			(SEE DWG NO. 320)			(SEE DWG NO. 320)
5			90'			85'

SPECIFICATION REFERENCE		AGENCY APPROVED					
623	TRAFFIC SIGNALS □ STREETLIGHTING	B	C	H	L	M	N
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		STREETLIGHT LOCATIONS AT INTERSECTIONS 60'/60' RIGHT-OF-WAY					
		DATE 07-01-13 DWG. NO. 308					



NOTE:
SEE STANDARD DRAWING NO. 300 FOR LUMINAIRE TYPE.

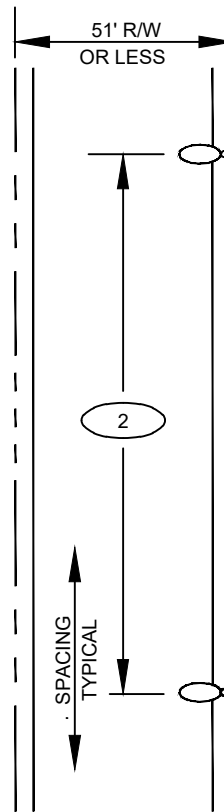
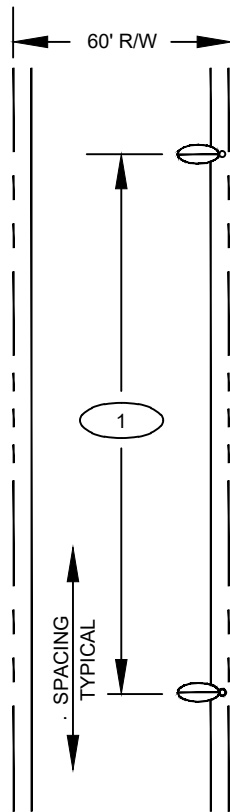
AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
623	TRAFFIC SIGNALS □ STREETLIGHTING	STREETLIGHT LOCATIONS AT INTERSECTIONS 60'/51' OR LESS RIGHT-OF-WAY					
DATE 07-01-13		DWG. NO. 309					



NOTE:
SEE GENERAL NOTES STANDARD DRAWING NO. 300.

POLE LOCATION TABLE		
KEYED NOTE	ENTITY	ALL ENTITIES
1		170'
2		85'
3		12"
4		(SEE DRAWING NO. 320)
5		85'

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE		AGENCY APPROVED						
		B	C	H	L	M	N	
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS						
623 TRAFFIC SIGNALS □ STREETLIGHTING		CLARK COUNTY AREA						
		STREETLIGHT LOCATIONS AT INTERSECTIONS						
		51 FT. OR LESS/51 FT. OR LESS						
		RIGHT-OF-WAY						
		DATE 2-08-07	DWG. NO.		310			

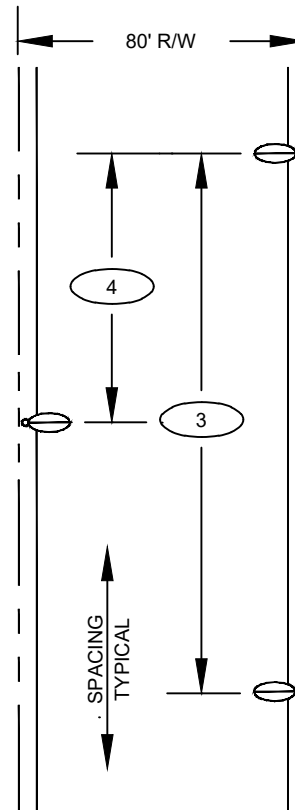
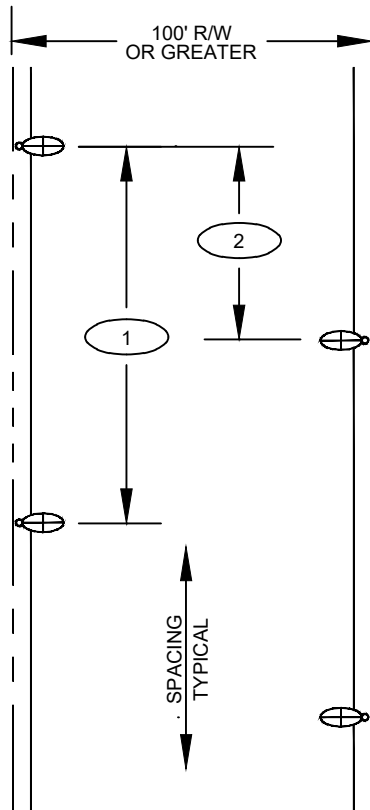


POLE LOCATION TABLE						
KEYED NOTE	ENTITY	BC	CLV	MES	NLV	CC HND
1				180'		170'
2				170'		170'

NOTES:

1. SEE STANDARD DRAWING NO. 300 FOR LUMINAIRE TYPE.

AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
623	TRAFFIC SIGNALS □ STREETLIGHTING	STREETLIGHT STANDARDS MAXIMUM SPACING (60 FT. OR LESS RIGHT-OF-WAY)					
DATE 07-01-13		DWG. NO.		311.1			



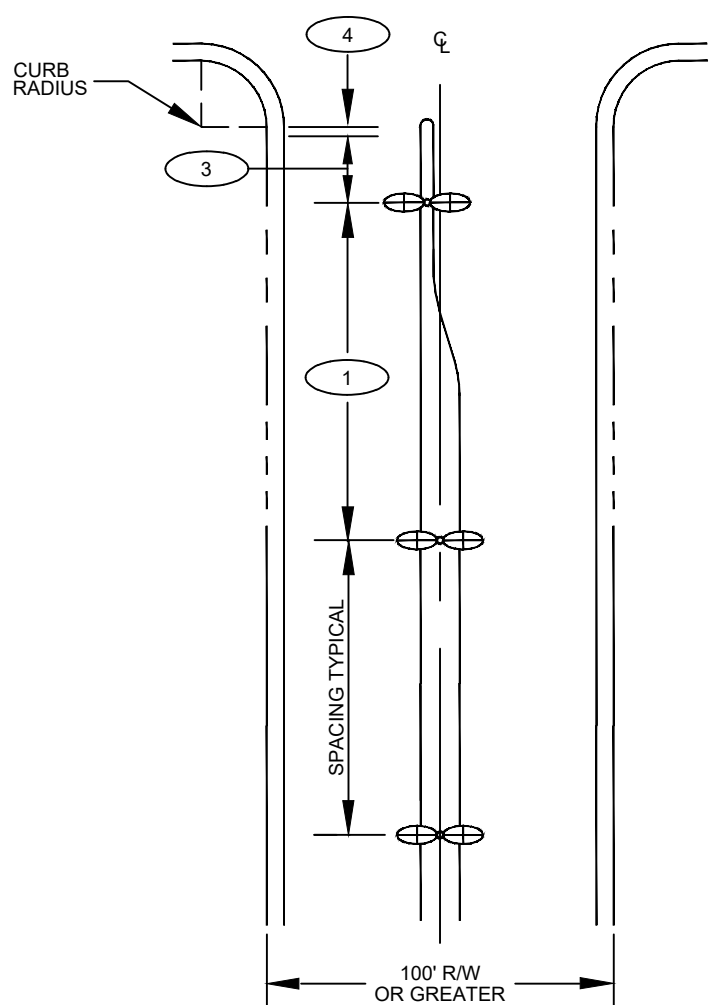
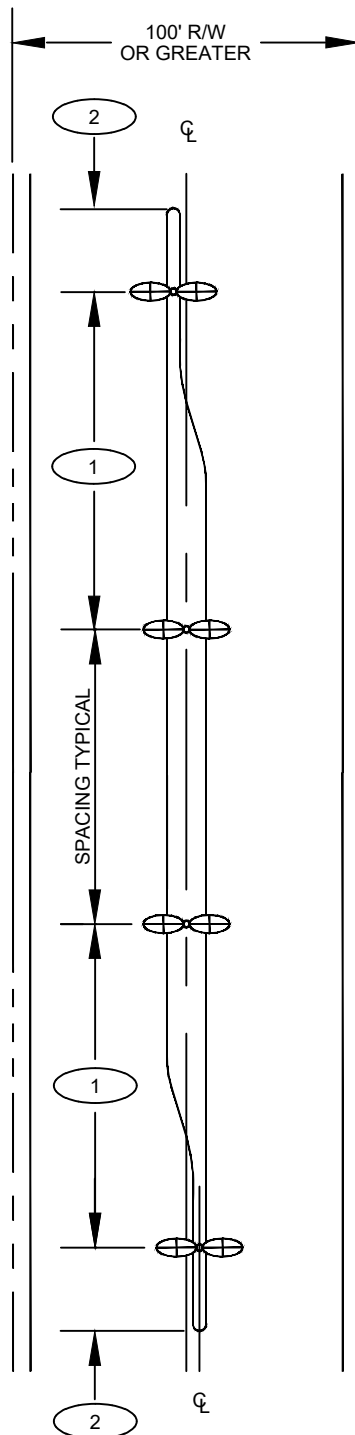
POLE LOCATION TABLE

POLE LOCATION TABLE							
KEYED NOTE	ENTITY	BC	CLV	MES	NLV	CC	HND
1		160'				120'	140'
2		80'				60'	70'
3		170'				170'	140'
4		85'				85'	70'

NOTES:

1. SEE STANDARD DRAWING NO. 300 FOR LUMINAIRE TYPE.
2. AN APPROVED LIGHTING STUDY PER NOTE 2, STANDARD DRAWING NO. 300, IS REQUIRED FOR RIGHT-OF-WAY GREATER THAN 100 FEET.

		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
623	TRAFFIC SIGNALS □ STREETLIGHTING	STREETLIGHT STANDARDS MAXIMUM SPACING (80 FT. OR GREATER RIGHT-OF-WAY)							
.		DATE 07-01-13	DWG. NO.	311	PAGE NO.				



SPACING FOR SIGNALIZED INTERSECTIONS

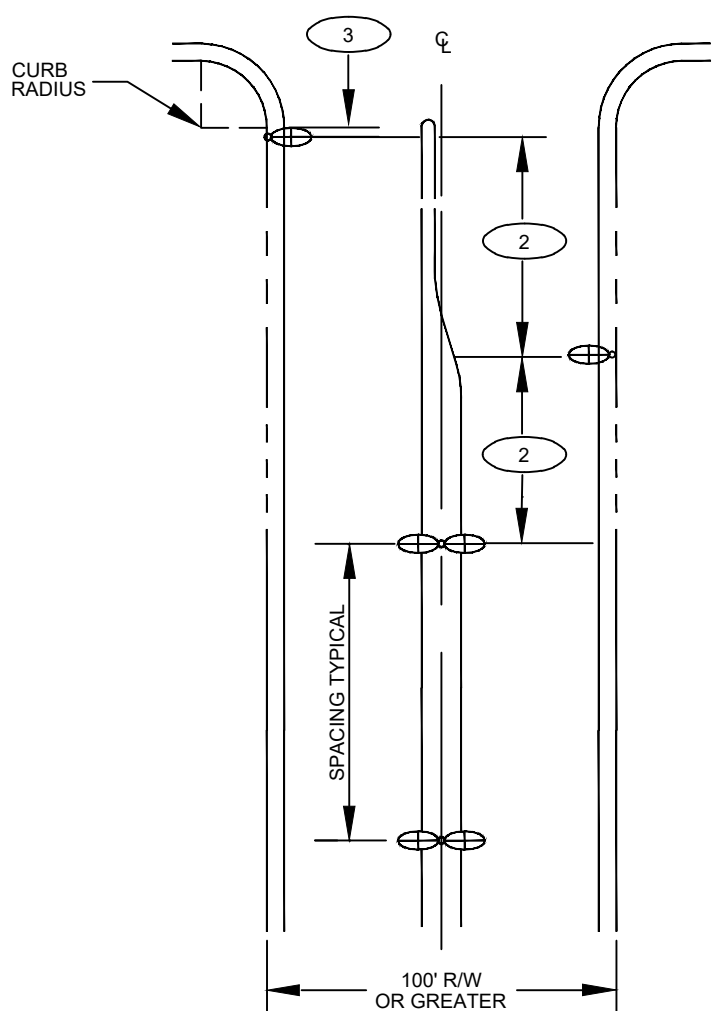
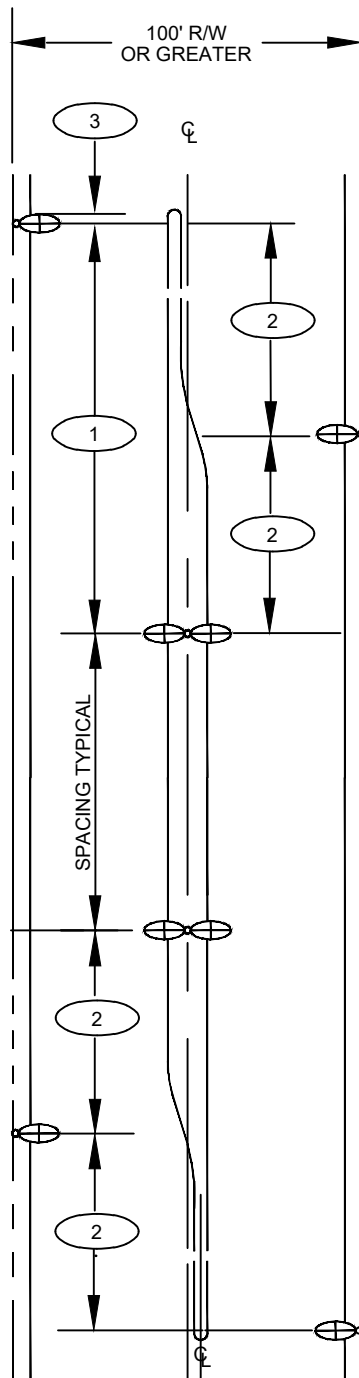
POLE LOCATION TABLE					
KEYED NOTE	ENTITY	BC	CLV	MES	NLV
□ 1		160'			120'
2		10'			10' (MIN.)
3		80'			120'
4		12"			12"

NOTES:

1. SEE STANDARD DRAWING NO. 300 FOR LUMINAIRE TYPE.
2. AN APPROVED LIGHTING STUDY PER NOTE 2, STANDARD DRAWING NO. 300, IS REQUIRED FOR RIGHT-OF-WAY GREATER THAN 100 FEET.

□ DISTANCE LISTED INDICATES MAXIMUM SPACING. LIGHTING STANDARDS SHALL BE EQUIDISTANT AFTER LOCATING THE END OF ISLAND POLES.

SPECIFICATION REFERENCE		AGENCY APPROVED					
623	TRAFFIC SIGNALS □ STREETLIGHTING	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		SUPPLEMENTAL DRAWING					
		STREETLIGHT LOCATIONS ON TRAFFIC ISLANDS 100' OR GREATER RIGHT-OF-WAY					
		DATE 07-01-13	DWG. NO.	312.S1	PAGE NO.		



SPACING FOR SIGNALIZED INTERSECTIONS

POLE LOCATION TABLE		
KEYED NOTE	ENTITY	HND
□ 1		140'
2		70'
3		12"

NOTES:

1. SEE STANDARD DRAWING NO. 300 FOR LUMINAIRE TYPE.
2. AN APPROVED LIGHTING STUDY PER NOTE 2, STANDARD DRAWING NO. 300, IS REQUIRED FOR RIGHT-OF-WAY GREATER THAN 100 FEET.
3. STREET LIGHTING IN THE MEDIAN IS ALLOWED FOR MEDIAN WIDTHS OF 10 FEET OR GREATER.

□ DISTANCE LISTED INDICATES MAXIMUM SPACING. LIGHTING STANDARDS SHALL BE EQUIDISTANT AFTER LOCATING THE END OF ISLAND POLES.

SPECIFICATION REFERENCE		AGENCY APPROVED			
623	TRAFFIC SIGNALS □ STREETLIGHTING	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA			
		SUPPLEMENTAL DRAWING			
		STREETLIGHT LOCATIONS ON TRAFFIC ISLANDS 100' OR GREATER RIGHT-OF-WAY			
		DATE	DWG. NO.	312.S2	PAGE NO.

1. ALL STREETLIGHT STANDARDS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF THE STANDARD SPECIFICATIONS AND AS INDICATED ON THESE DRAWINGS.

2. ALL COMPONENTS OF THE STREETLIGHT STANDARD INCLUDING THE POLE, ARM, HANDHOLE COVER, BASE COVER AND THE POLE CAP SHALL BE FERROUS METAL AND HOT-DIP GALVANIZED AFTER CONSTRUCTION IN ACCORDANCE WITH ASTM A123; ALUMINUM OR ALUMINUM ALLOY IS NOT ACCEPTABLE. FLAWS IN THE APPEARANCE OF THESE GALVANIZED COMPONENTS (i.e. "TIGER-STRIPED", "ZEBRA-STRIPED"), SHALL BE CAUSE FOR REJECTION. NON-METALLIC TYPE BASE COVERS MAY BE ACCEPTABLE AND SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. CONCRETE POLES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

3. ALL FASTENING HARDWARE SHALL BE NON-CORROSIVE, CADMIUM-PLATED, OR EQUAL, APPROVED BY THE ENGINEER. FASTENERS SHALL BE OF THE SIZE AND CONFIGURATION NOTED ON THE DRAWINGS.

4. CONCRETE POLE FOUNDATIONS SHOULD BE POURED AGAINST UNDISTURBED, NATURAL SOIL OR IF FORMING MATERIAL IS USED IT SHALL BE STRIPPED AWAY FROM THE FOUNDATION AT LEAST ONE (1) FOOT BELOW FINISHED GRADE.

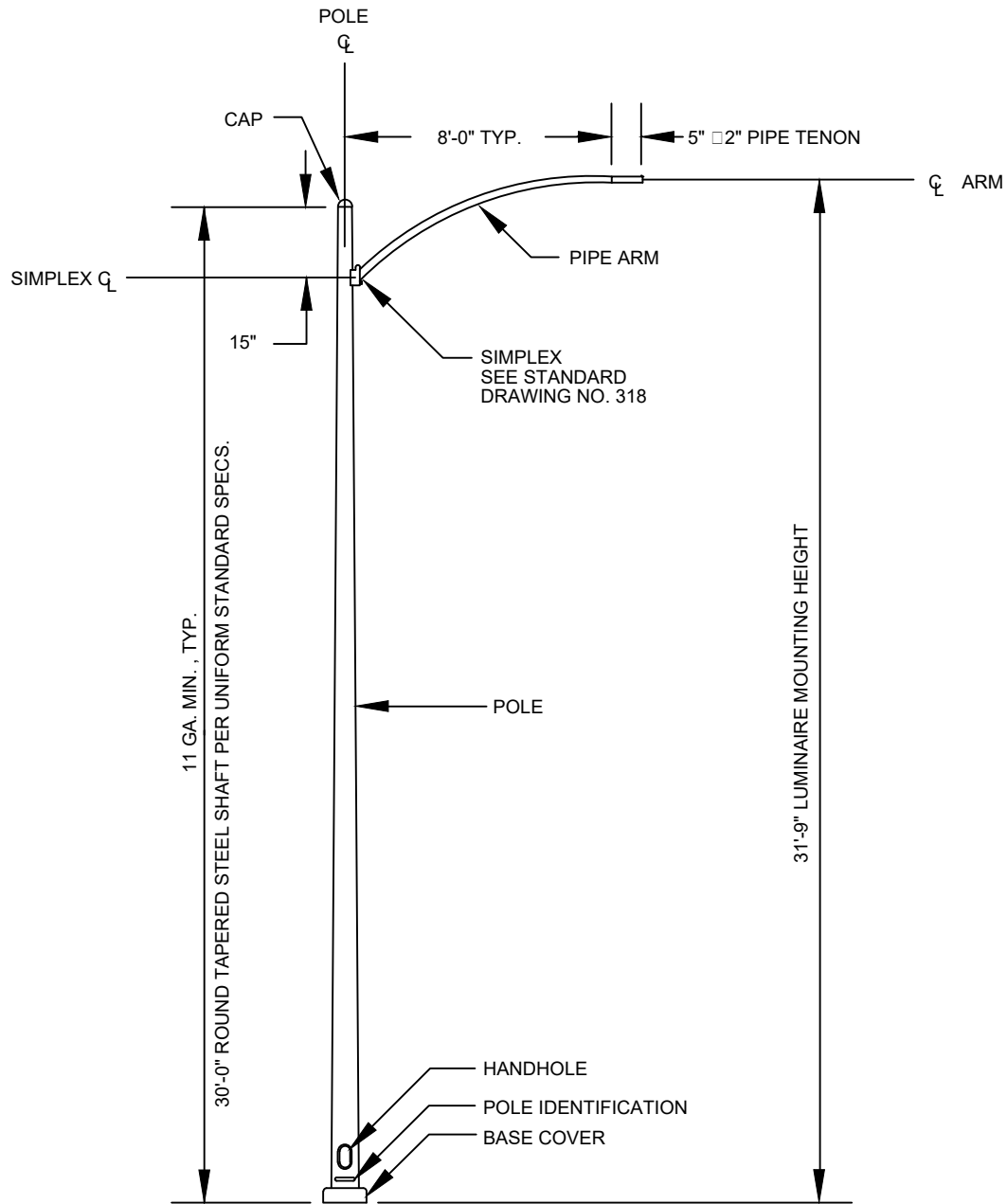
5. POLES SHALL BE INSTALLED ON CONCRETE FOUNDATIONS WITH ANCHOR BOLTS. EACH BOLT SHALL BE INSTALLED WITH TWO (2) HEX NUTS AND TWO (2) FLAT WASHERS. EXCEPT FOR "H" AND "L" FOUNDATIONS, THE ANCHOR BOLTS SHALL BE 1" X 36" X 4" FOR ELEVEN (11) GAGE POLES AND 1 1/8" X 40" X 4" FOR SEVEN (7) GAGE POLES. THE ANCHOR BOLTS, NUTS AND WASHERS SHALL BE HOT-DIP GALVANIZED. THE POLE SHALL BE PLUMBED PRIOR TO PLACING THE GROUT OR CONCRETE CAP. USE OF GROUT OR CONCRETE FOR CAP SHALL BE DESIGNATED BY ENTITY ENGINEER. SHIMS OR WEDGES OF ANY KIND ARE NOT ACCEPTABLE TO PLUMB THE POLE AFTER THE CAP HAS BEEN PLACED.

6. ALL UNDERGROUND CONDUIT INSTALLED SHALL HAVE RED, CONTINUOUS MARKING TAPE INSTALLED IN THE TRENCH AT 12" BELOW FINISHED GRADE.

7. WHERE SIGNALS AND STANDARDS ARE INSTALLED UNDER OVERHEAD POWER LINES, CLEARANCES SHALL BE PER NATIONAL ELECTRICAL SAFETY CODE SECTION 234 REQUIREMENTS. INSTALL STRAIGHT ARM STREETLIGHT ASSEMBLIES WHERE ADDITIONAL CLEARANCE IS REQUIRED.

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

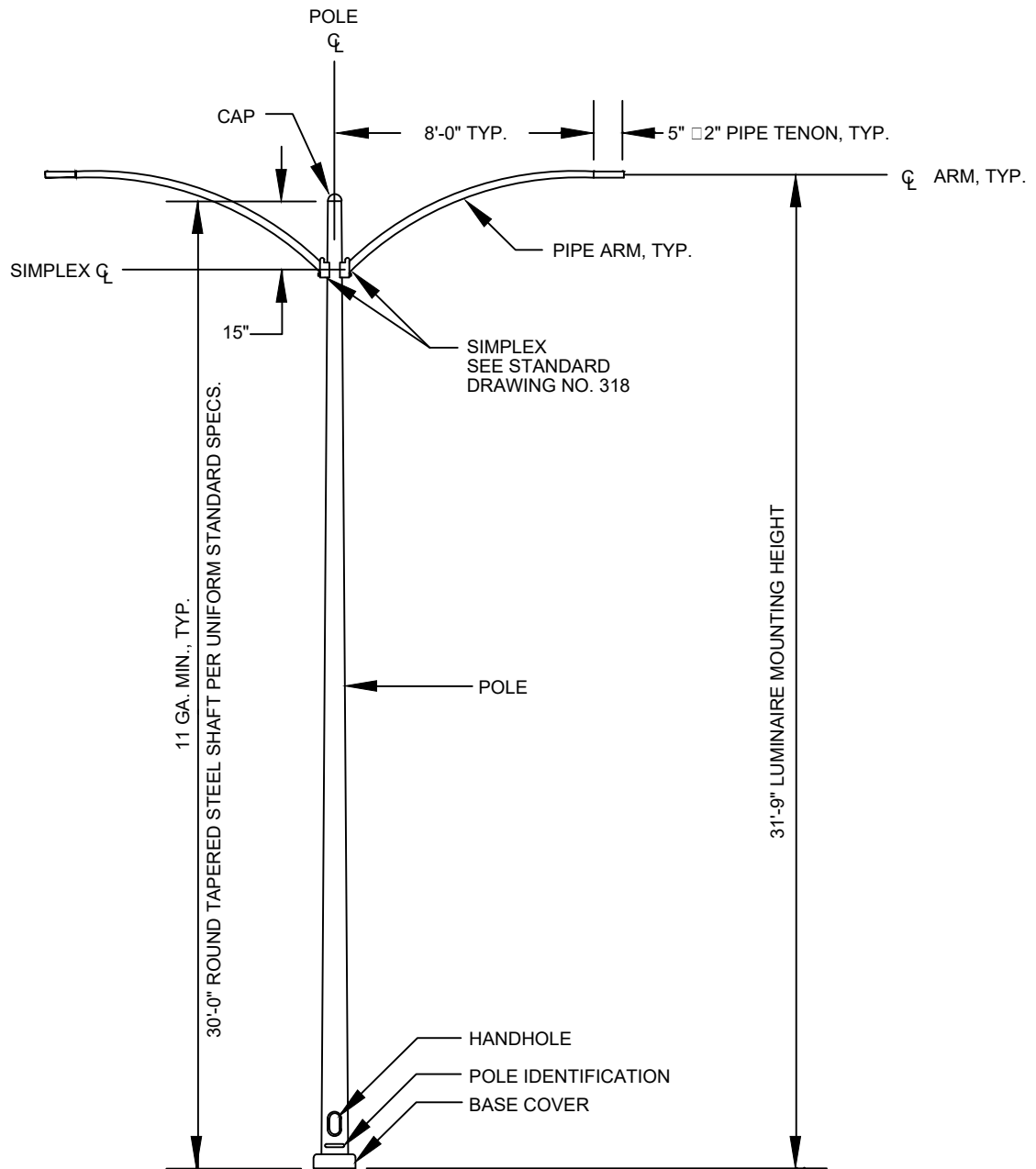
		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
623	TRAFFIC SIGNALS □ STREETLIGHTING	STREETLIGHT STANDARD GENERAL NOTES							
		DATE 7-8-04	DWG. NO. 313						



NOTES:

1. SEE GENERAL NOTES STANDARD DRAWING NO. 313.
2. SEE STANDARD DRAWING NO. 319 FOR DETAIL OF POLE BASE.
3. SEE STANDARD DRAWING NO. 318 FOR DETAIL OF POLE CAP.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
506	STEEL STRUCTURES	STREETLIGHT STANDARD WITH 2 INCH PIPE ARM											
623	TRAFFIC SIGNALS □ STREETLIGHTING												
715	GALVANIZING												
		DATE 12-12-96		DWG. NO.		314							

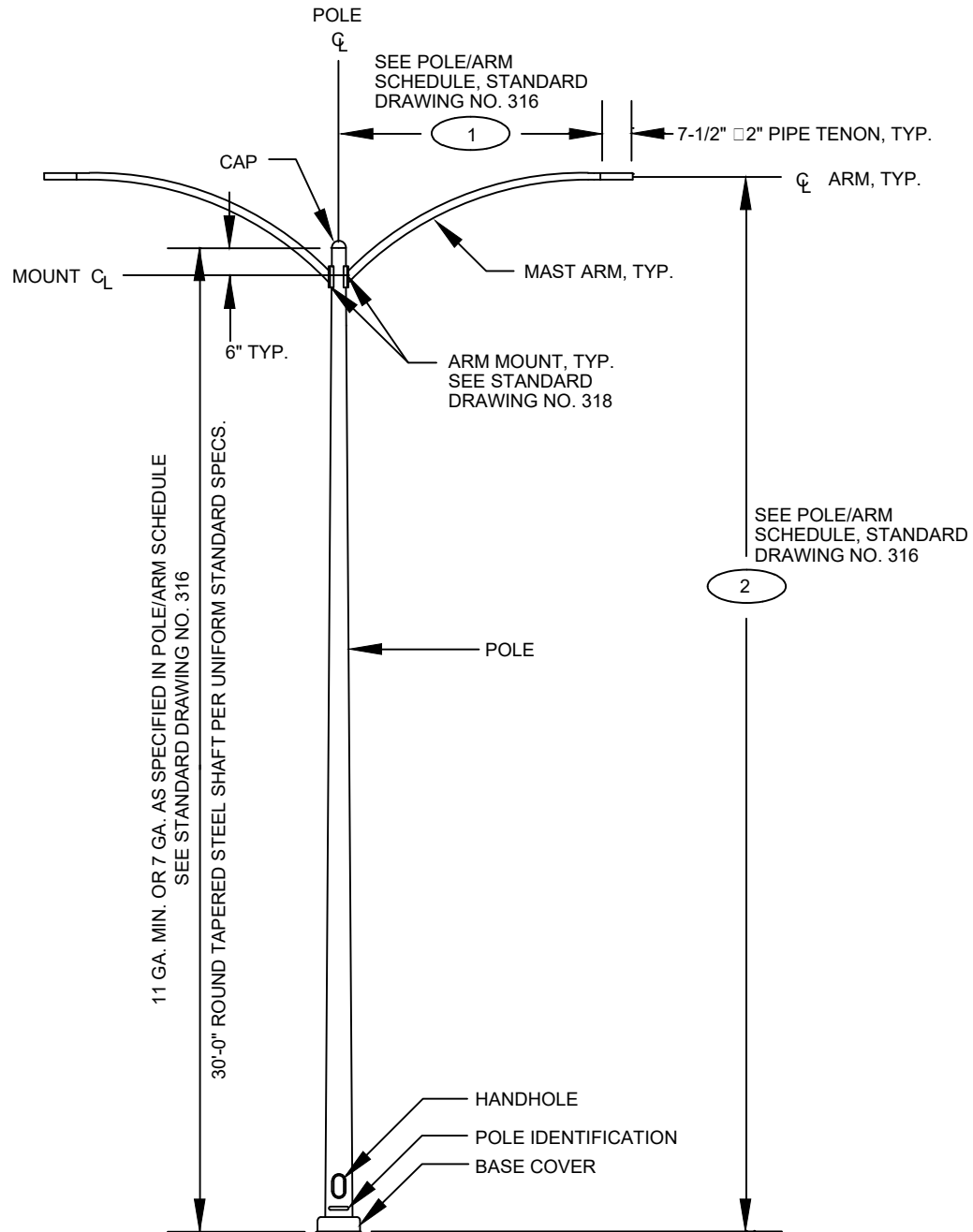


NOTES:

1. SEE GENERAL NOTES STANDARD DRAWING NO. 313.
2. SEE STANDARD DRAWING NO. 319 FOR DETAIL OF POLE BASE.
3. SEE STANDARD DRAWING NO. 318 FOR DETAIL OF POLE CAP.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
506	STEEL STRUCTURES	STREETLIGHT STANDARD WITH DOUBLE 2 INCH PIPE ARM											
623	TRAFFIC SIGNALS □ STREETLIGHTING												
715	GALVANIZING												
		DATE 12-12-96		DWG. NO.		315							

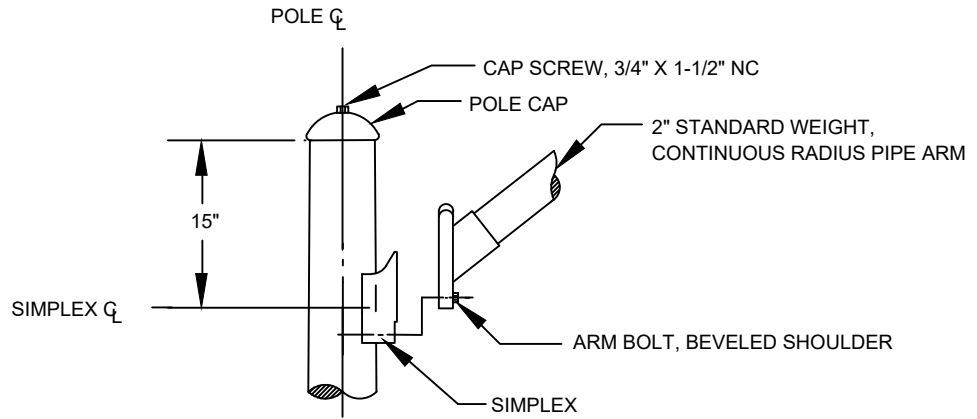
		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
506	STEEL STRUCTURES	STREETLIGHT STANDARD WITH TAPERED MAST ARM							
623	TRAFFIC SIGNALS □ STREETLIGHTING								
715	GALVANIZING								
.		DATE 12-12-96		DWG. NO. 316					



NOTES:

1. SEE GENERAL NOTES STANDARD DRAWING NO. 313.
2. SEE STANDARD DRAWING NO. 319 FOR DETAIL OF POLE BASE.
3. SEE STANDARD DRAWING NO. 318 FOR DETAIL OF POLE CAP.

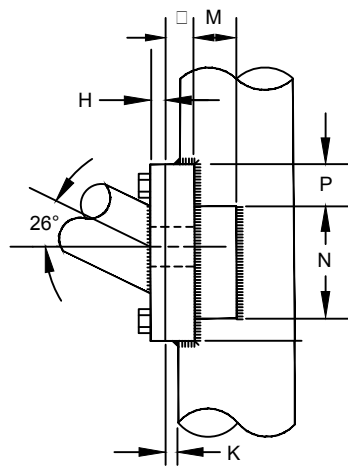
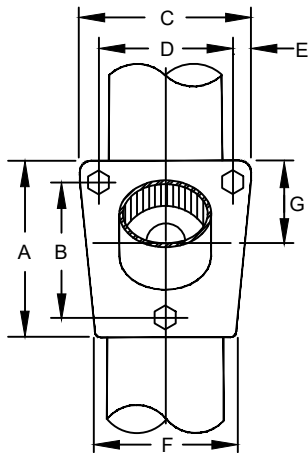
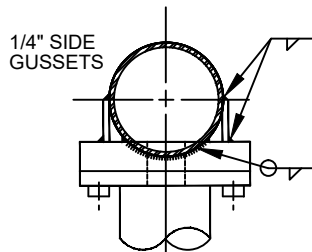
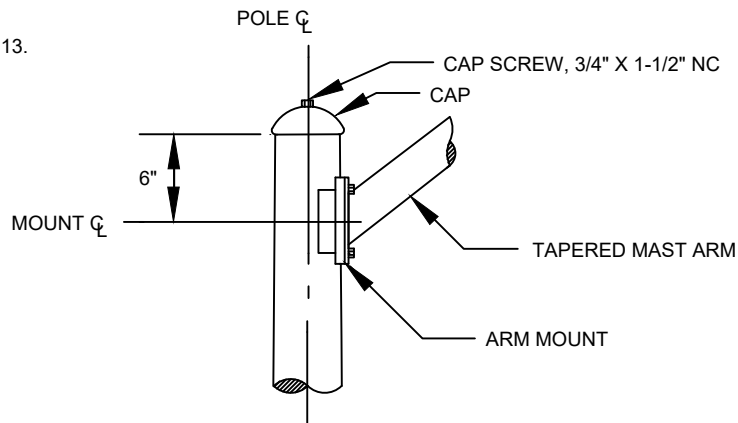
AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
506	STEEL STRUCTURES	STREETLIGHT STANDARD WITH DOUBLE TAPERED MAST ARM					
623	TRAFFIC SIGNALS □ STREETLIGHTING						
715	GALVANIZING						
DATE 12-12-96		DWG. NO.		317			



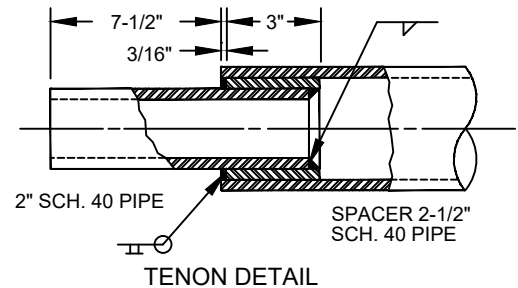
PIPE ARM

NOTE:

SEE GENERAL NOTES
STANDARD DRAWING NO. 313.



MAST ARM AND DETAILS



MAST ARM	A	B	C	D	E	F	G
8'-15' INCL.	7-1/2"	5-3/4"	6-3/8"	4-5/8"	7/8"	5"	3-3/8"
15'-18' INCL.	9"	7"	8"	6"	1"	6"	4"

MAST ARM	H	□	K	L	M	N	N
8'-15' INCL.	1/2"	1"	5/16"	5/8"-11 □ 1/2"	1-1/2"	5"	1-5/8"
15'-18' INCL.	3/4"	1"	5/16"	3/4"-10 □ 1-3/4"	2"	5"	1-3/4"

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

506	STEEL STRUCTURES
623	TRAFFIC SIGNALS □ STREETLIGHTING
715	GALVANIZING

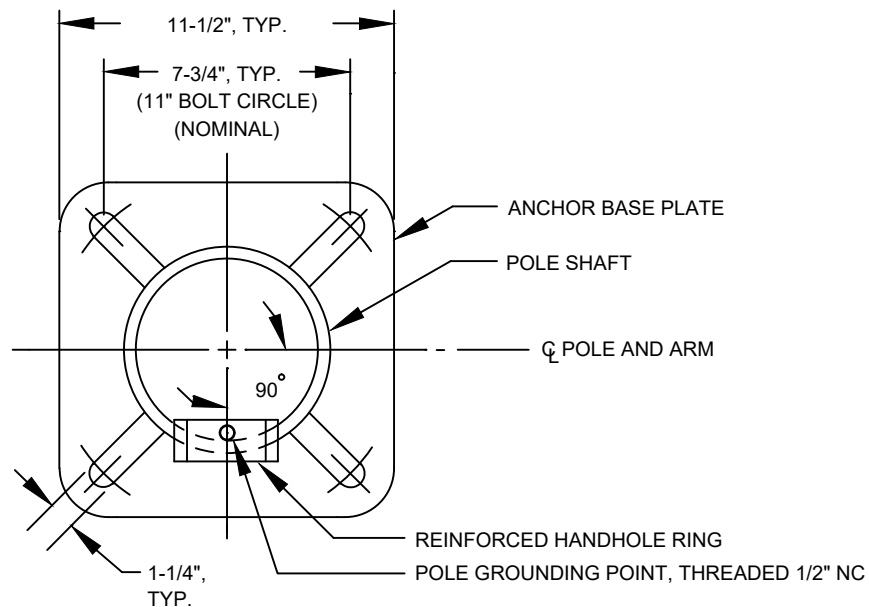
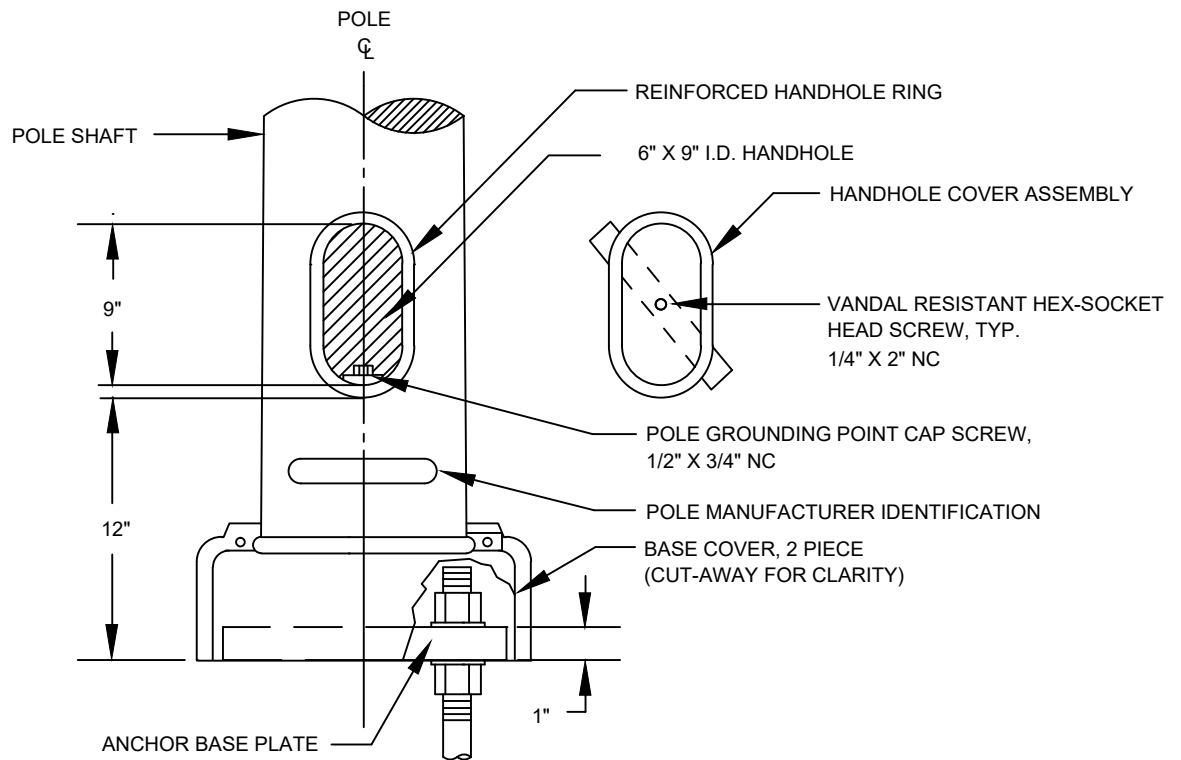
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

POLE TOP AND ARM MOUNTING
DETAILS

DATE 12-12-96

DWG. NO.

318



NOTES:

1. SEE GENERAL NOTES STANDARD DRAWING NO. 313
2. HANDHOLE SHALL FACE AWAY FROM ONCOMING TRAFFIC.
3. HANDHOLE SIZE FOR CC AND CLV FOR STREET LIGHT POLES SHALL BE 4" X 6" I.D.



AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

506	STEEL STRUCTURES
623	TRAFFIC SIGNALS □ STREETLIGHTING
715	GALVANIZING

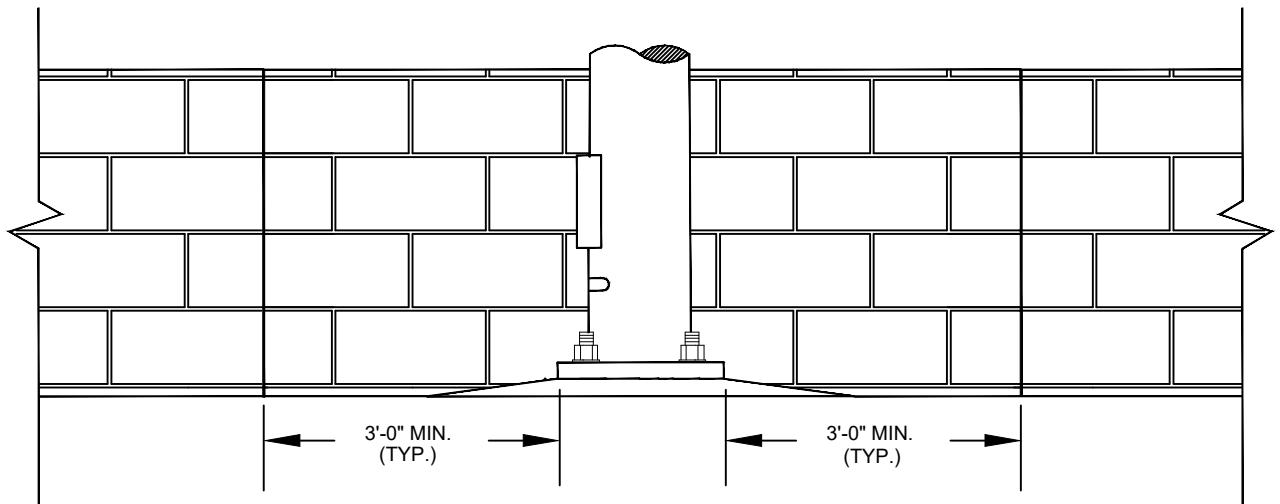
**UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA**

**LOWER POLE DETAILS
FOR PIPE AND MAST ARM
POLES**

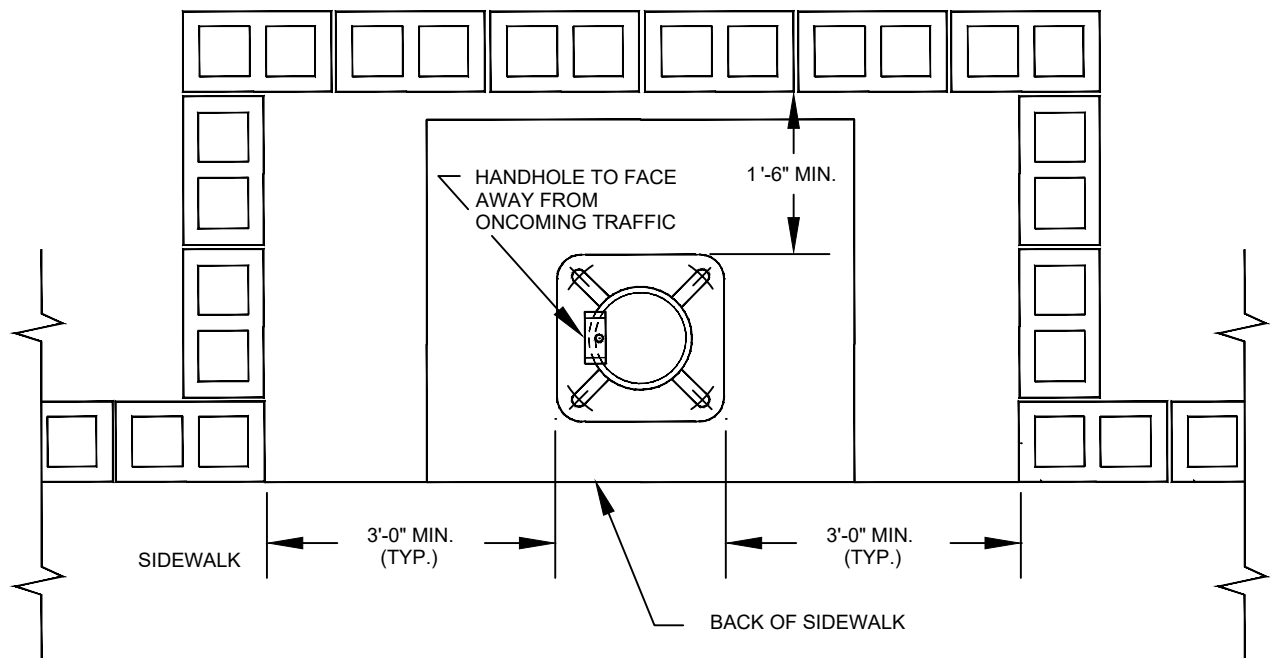
DATE 07-01-17

DWG. NO.

319



ELEVATION

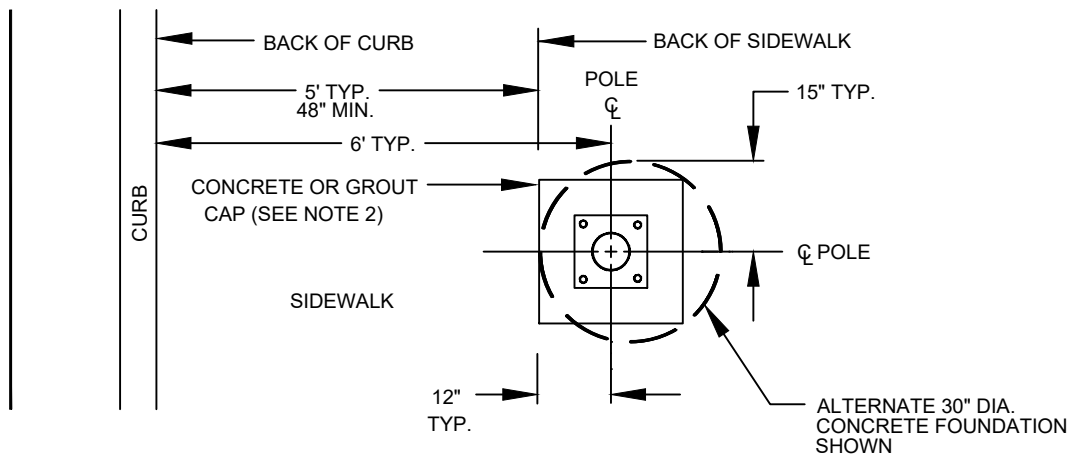


PLAN

NOTE:

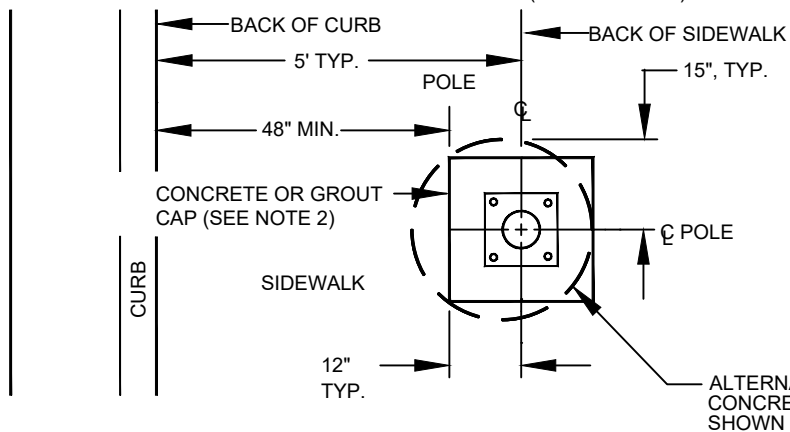
POLE BASE COVERS SHALL BE FURNISHED AND INSTALLED FOR ALL POLES
PER THE STANDARD SPECIFICATIONS AND DRAWINGS.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
623	TRAFFIC SIGNALS □ STREETLIGHTING	LIGHTING STANDARD SETBACK FROM BLOCK WALL											
		DATE	5-13-99	DWG. NO.	320.1								



BEHIND CURBSIDE SIDEWALK

(EASEMENT MAY BE REQUIRED)
(SEE USD 320.1)

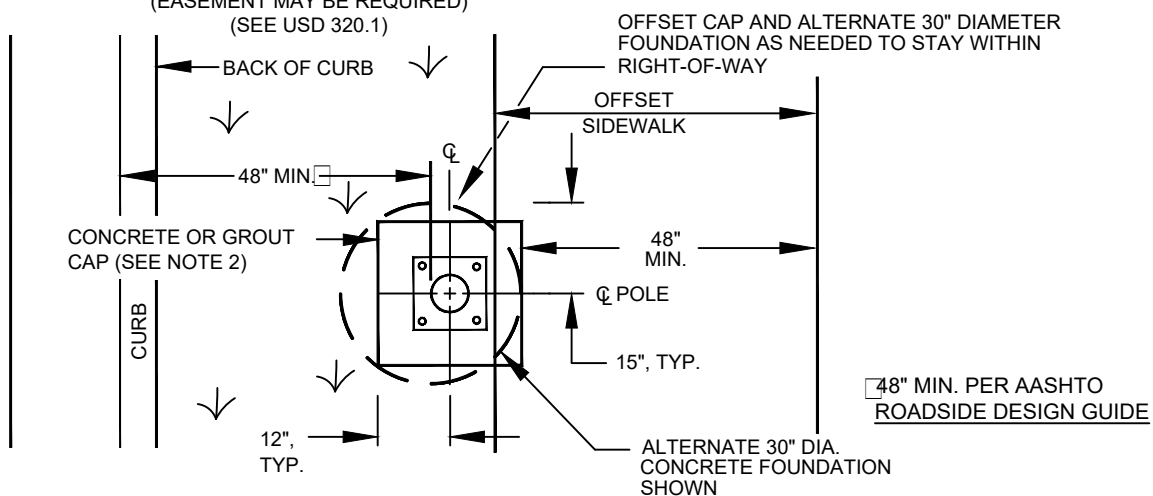


NOTES

1. FOUNDATIONS SHALL BE LOCATED OUTSIDE OF THE SIDEWALK WHENEVER FEASIBLE. A CLEARANCE OF 48" SHALL BE MAINTAINED ON PEDESTRIAN ACCESS ROUTE.
2. FOUNDATION CAP SHALL BE CONCRETE OR GROUT AS DESIGNATED BY THE ENTITY ENGINEER.
3. REFER TO STANDARD DRAWING NO. 321 FOR FOUNDATION DETAIL.

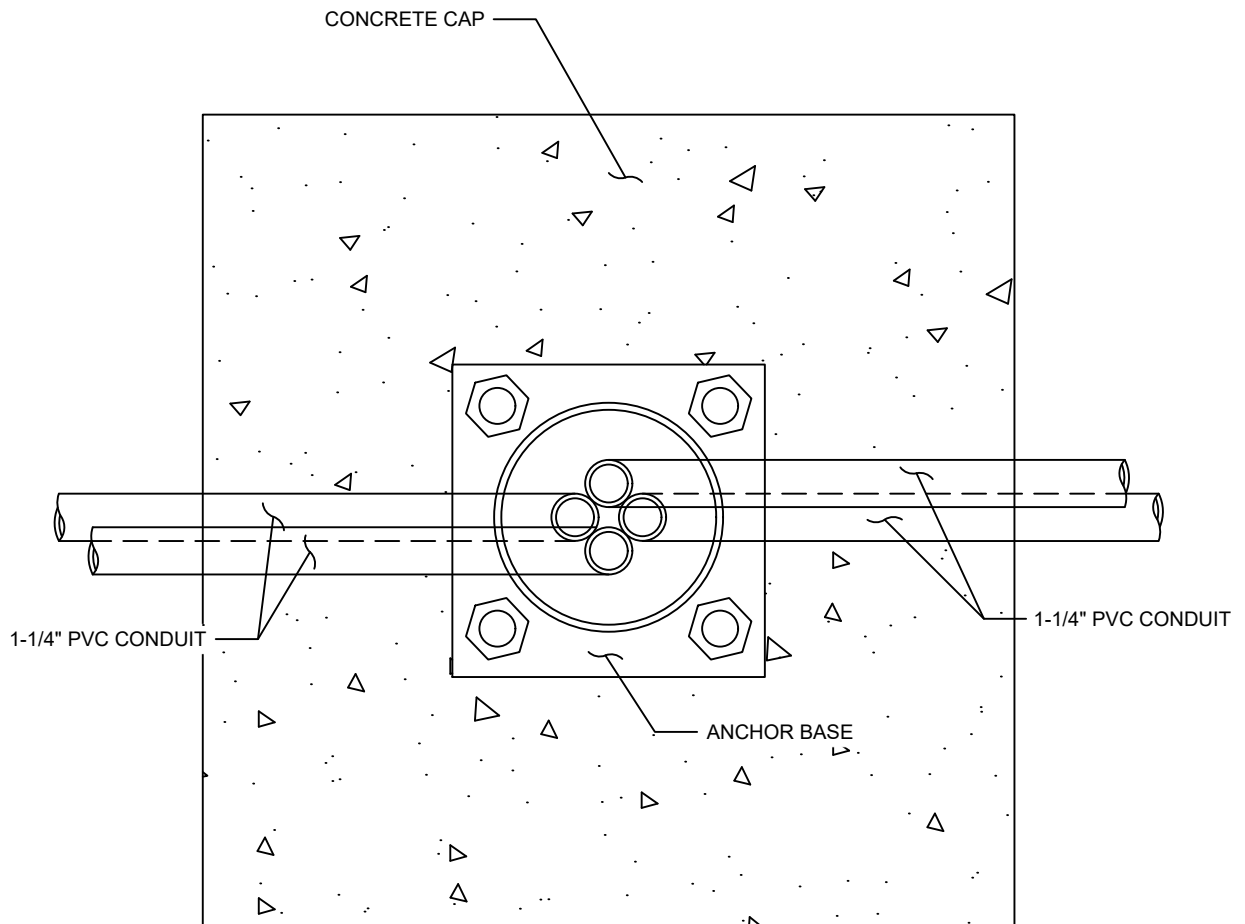
BACK PORTION OF CURBSIDE SIDEWALK (NOT FOR NEW CONSTRUCTION)

(EASEMENT MAY BE REQUIRED)
(SEE USD 320.1)



OPEN AREA OR BETWEEN CURB AND SIDEWALK

		AGENCY APPROVED							
		B	C	H	L	M	N	R	
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS							
		CLARK COUNTY AREA							
501	PORTLAND CEMENT CONCRETE	LIGHTING STANDARD SETBACK							
623	TRAFFIC SIGNALS □ STREETLIGHTING								
		DATE 03-12-20		DWG. NO. 320					

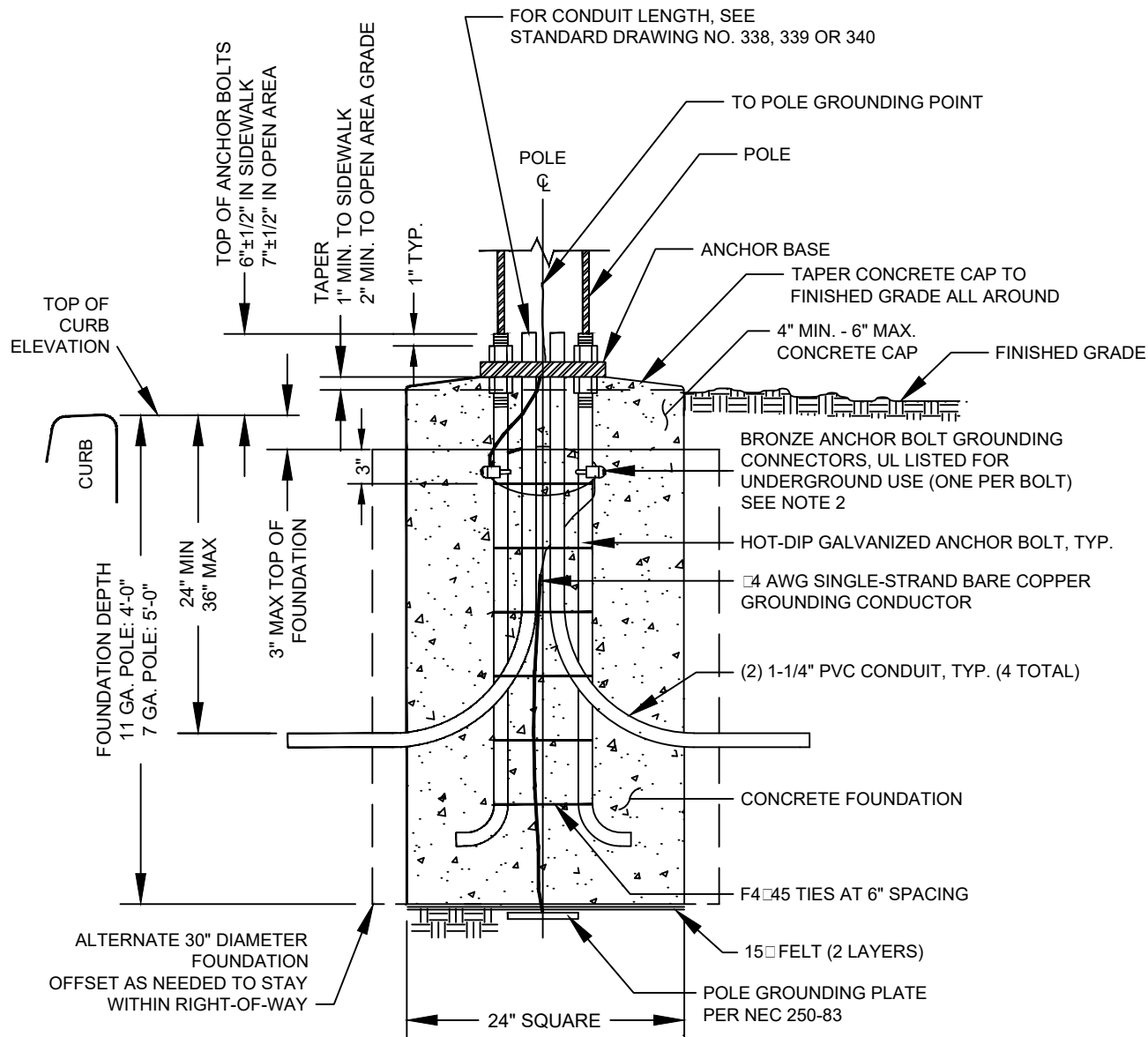


PLAN

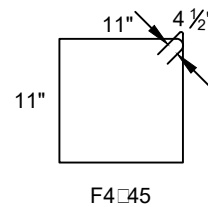
NOTES

1. SEE GENERAL NOTES STANDARD DRAWING NO. 313.
2. CONTINUOUS BARE COPPER GROUNDING CONDUCTOR SHALL BE LOOPED AROUND ANCHOR BOLTS ONE TIME AND CONNECTED TO EACH ANCHOR BOLT BEFORE CONTINUING DOWN TO THE POLE GROUNDING PLATE.
3. FOUNDATION CAP SHALL BE CONCRETE OR GROUT AS DESIGNATED BY THE ENTITY ENGINEER.

		AGENCY APPROVED							
		B	C	H	L	M	N	R	
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
501	PORTLAND CEMENT CONCRETE	LIGHTING STANDARD FOUNDATION							
623	TRAFFIC SIGNALS □ STREETLIGHTING								
		DATE 01-09-20			DWG. NO. 321			SHEET 1 OF 2	



SECTION



PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

B

C

H

L

M

N

R

SPECIFICATION REFERENCE

501

PORTLAND CEMENT CONCRETE

623

TRAFFIC SIGNALS □ STREETLIGHTING

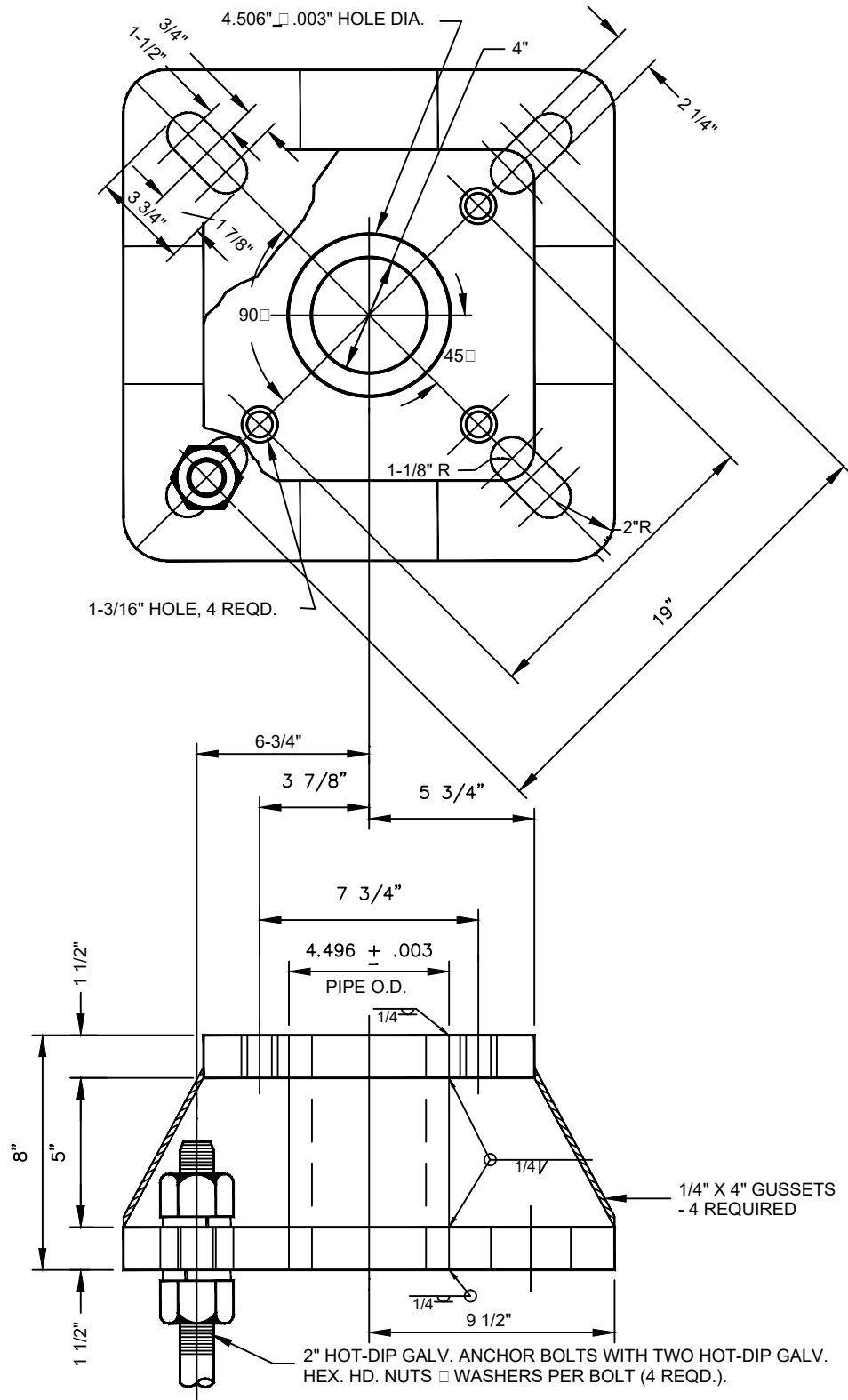
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

LIGHTING STANDARD
FOUNDATION

DATE 01-09-20

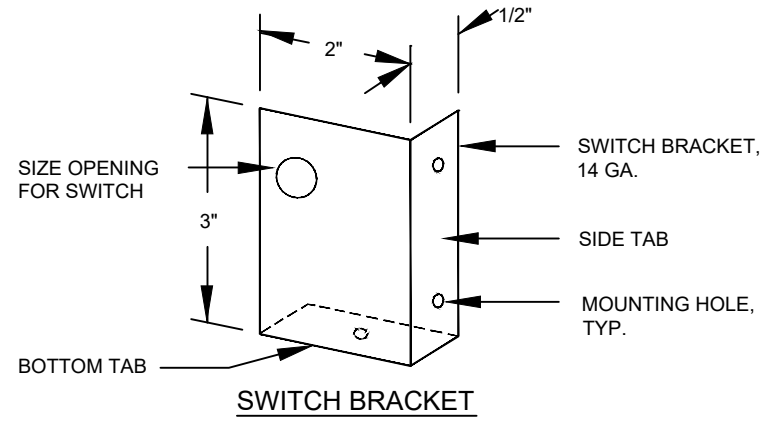
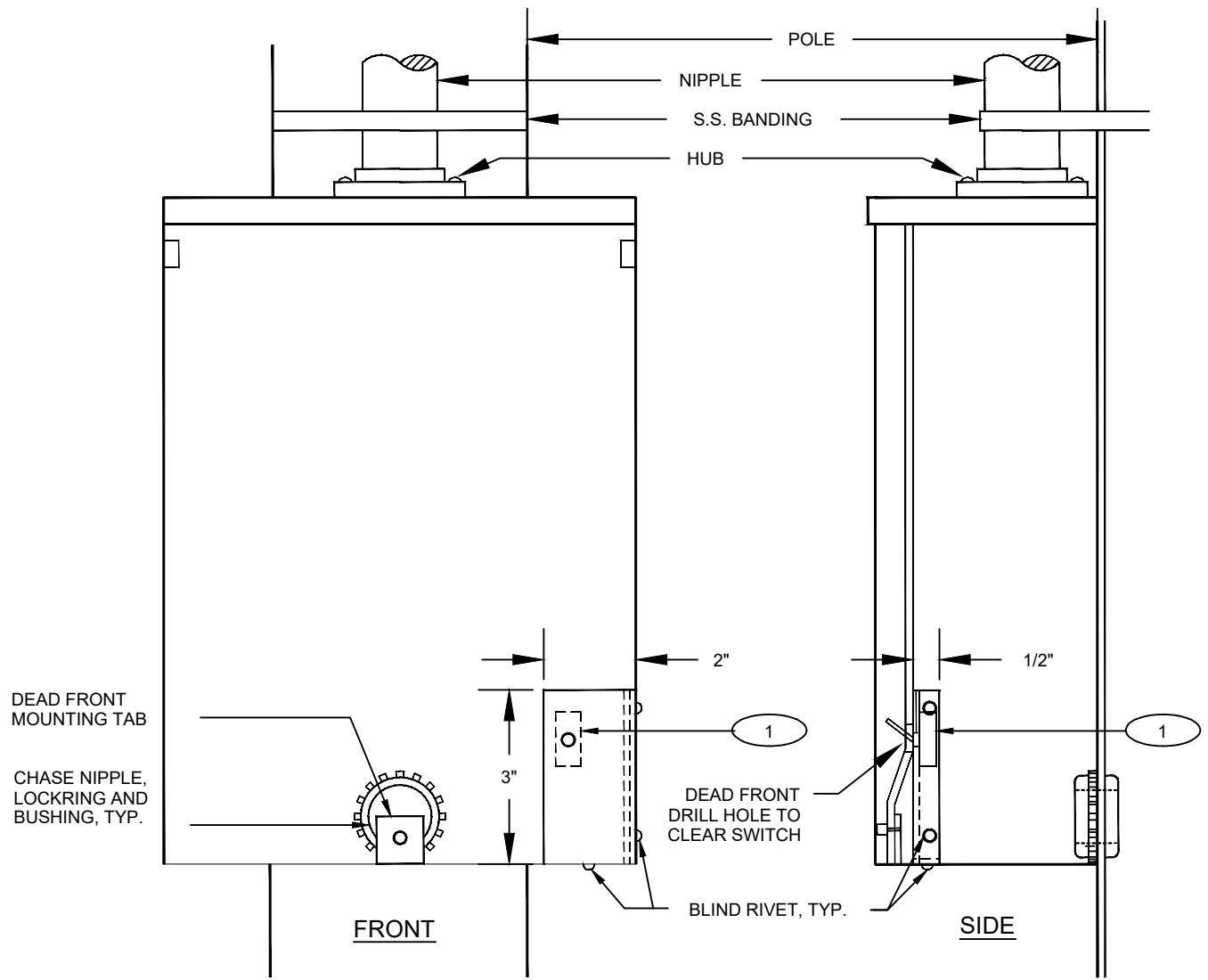
DWG. NO. 321

SHEET 2 OF 2



SPECIFICATION REFERENCE		AGENCY APPROVED					
		B	C	H	L	M	N
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		BASE ADAPTOR PLATE FOR 19 INCH BOLT CIRCLE FOUNDATION					
		DATE 12-12-96	DWG. NO. 322.1				

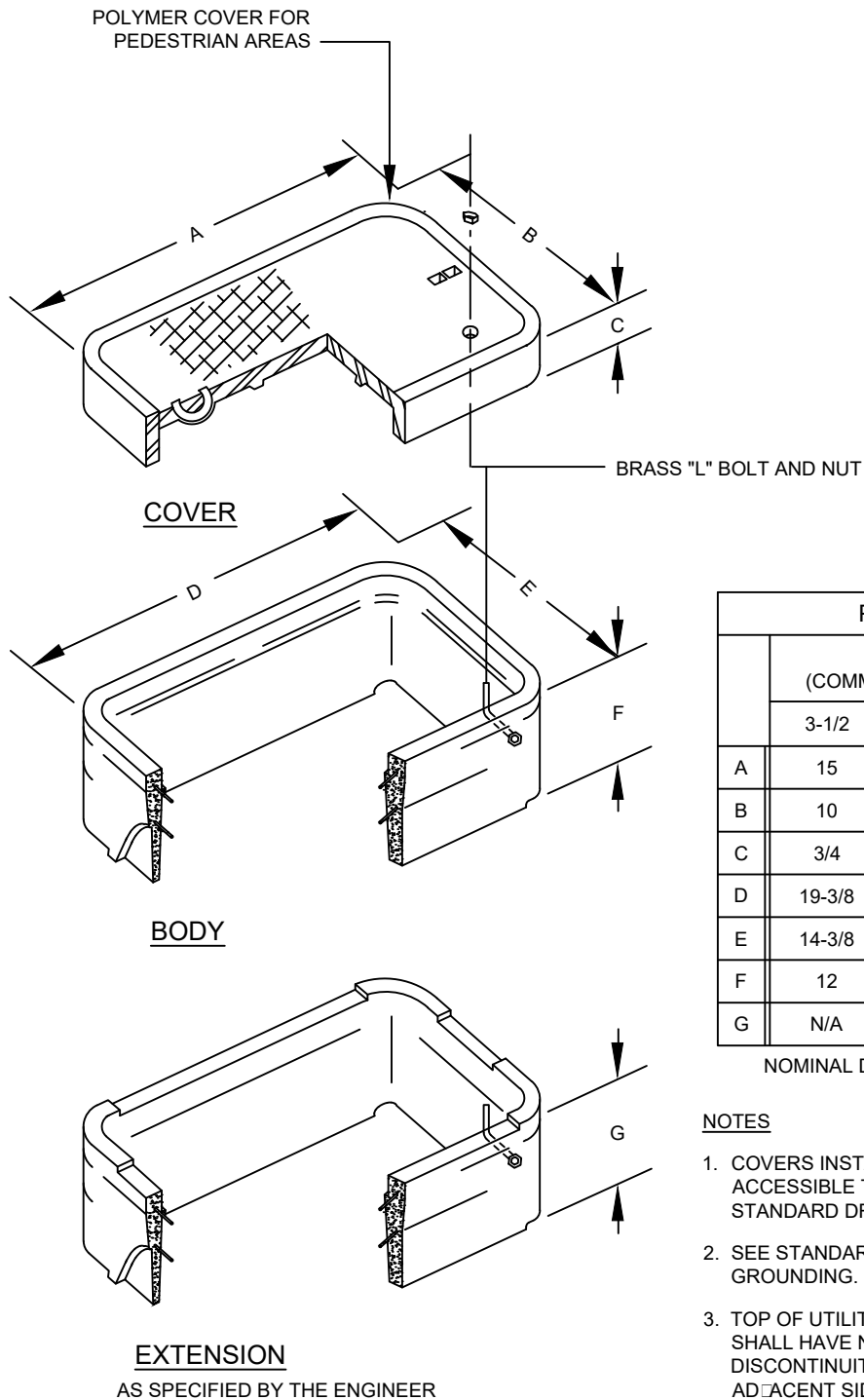
AGENCY APPROVED	B	C	H	L	M	N
UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
BASE ADAPTOR PLATE FOR 16-1/2 INCH BOLT CIRCLE FOUNDATION						
DATE 12-12-96	DWG. NO. 322					



KEYED NOTE:

- (1) SINGLE POLE, SINGLE THROW ON-OFF, 10 AMP, 125 VAC SWITCH, SEALED, WITH 5 IN. WIRE LEADS

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE		AGENCY APPROVED						M	
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
623	TRAFFIC SIGNALS □ STREETLIGHTING	SUPPLEMENTAL DRAWING							
		BYPASS SWITCH BRACKET FOR POLE MOUNTED STREET LIGHTING SERVICE							
		DATE 4-13-00		DWG. NO.		324.S1			



PULL BOX			
	SIZE (COMMERCIAL DESIGNATION)		
	3-1/2	5	7
A	15	21-3/4	30-5/8
B	10	11-3/4	17-5/8
C	3/4	2	2
D	19-3/8	25	34-3/4
E	14-3/8	15	21-3/4
F	12	12	12
G	N/A	10-1/4	11-1/2

NOMINAL DIMENSION IN INCHES

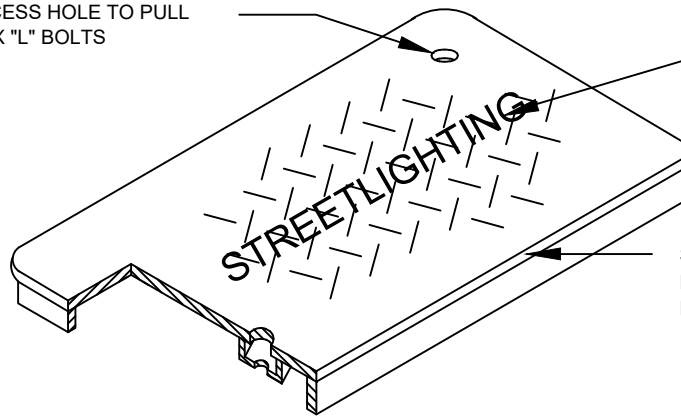
NOTES

- COVERS INSTALLED IN TRAFFIC AND OPEN AREAS ACCESSIBLE TO TRAFFIC SHALL BE PER STANDARD DRAWING NO. 327.
- SEE STANDARD DRAWING NO. 323 FOR COVER GROUNDING.
- TOP OF UTILITY BOXES INSTALLED IN SIDEWALK SHALL HAVE NO VERTICAL SURFACE DISCONTINUITIES GREATER THAN 1/4" WITH ADJACENT SIDEWALK, HAVE NO GAPS GREATER THAN 1/2" REGARDLESS OF CONSTRUCTION TOLERANCES, AND BE FIRM, STABLE, AND SLIP RESISTANT.

SPECIFICATION REFERENCE		AGENCY APPROVED	B	C	H	L	M	N	R
503	PRECAST PRESTRESSED CONCRETE MEMBERS	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
623	TRAFFIC SIGNALS □ STREETLIGHTING								
		PRECAST REINFORCED CONCRETE PULL BOX							
		DATE 01-09-20	DWG. NO. 326						

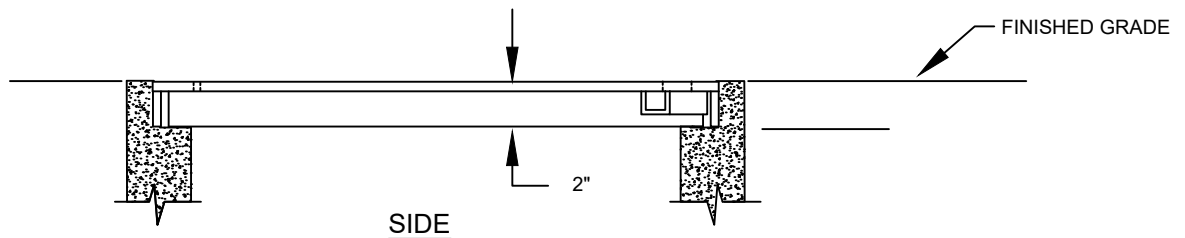
ACCESS HOLE TO PULL
BOX "L" BOLTS

BEAD WELD INSCRIPTION

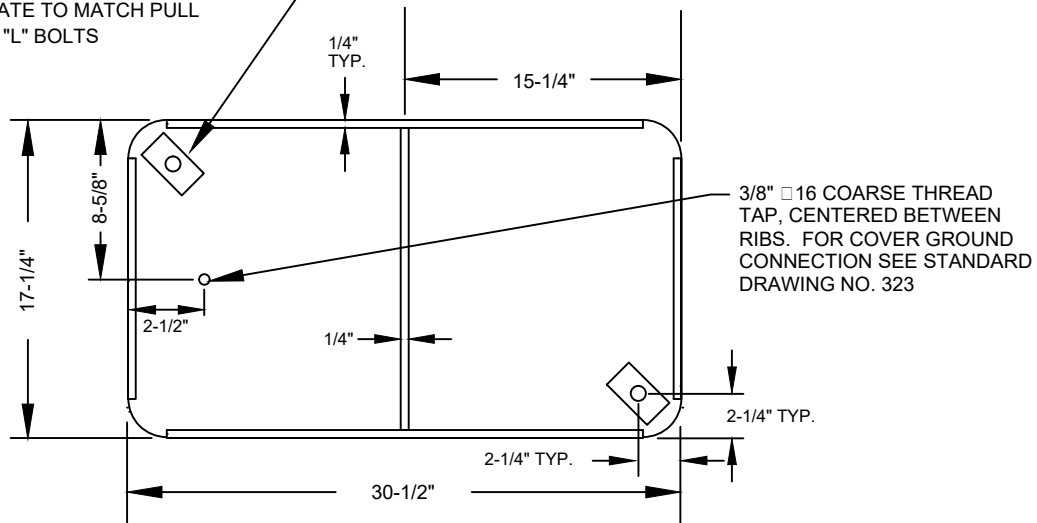


STEEL FLOOR PLATE, 3/8" THICK,
ROUND CORNERS TO MATCH
EDGES OF PULL BOX

COVER



MOUNTING BRACKET,
WELDED TO COVER, TYP.
LOCATE TO MATCH PULL
BOX "L" BOLTS



BOTTOM

NOTES:

1. COVER USED IN TRAFFIC AND OPEN AREAS ACCESSIBLE TO TRAFFIC ONLY.
2. TYPICAL NO. 7 PULL BOX COVER SHOWN. SUBMIT OTHERS TO THE ENGINEER FOR APPROVAL.
3. ALL TRAFFIC AND OPEN AREA COVERS SHALL BE H 20 RATED.

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

506

STEEL STRUCTURES

623

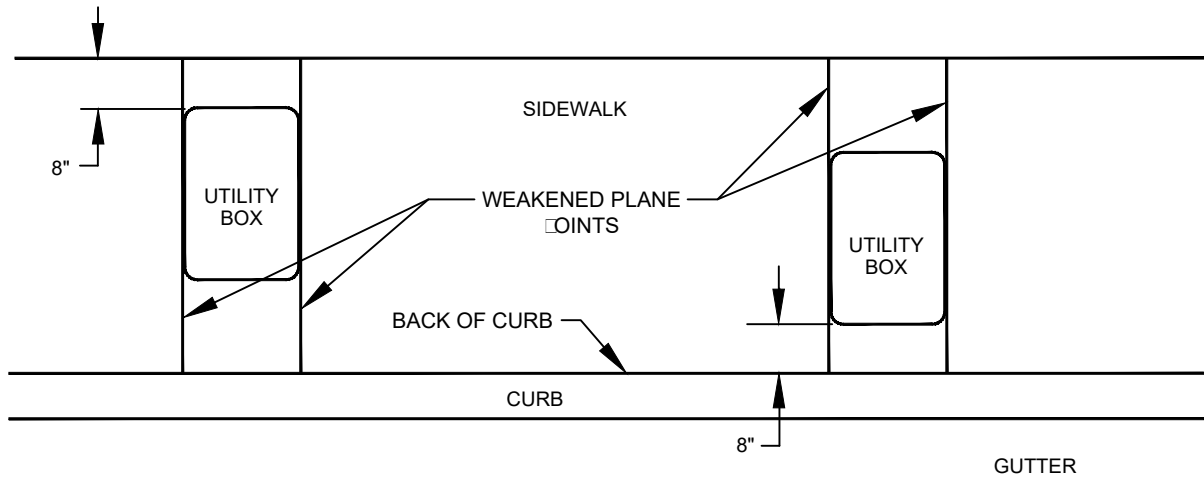
TRAFFIC SIGNALS □ STREETLIGHTING

PULL BOX STREET COVER

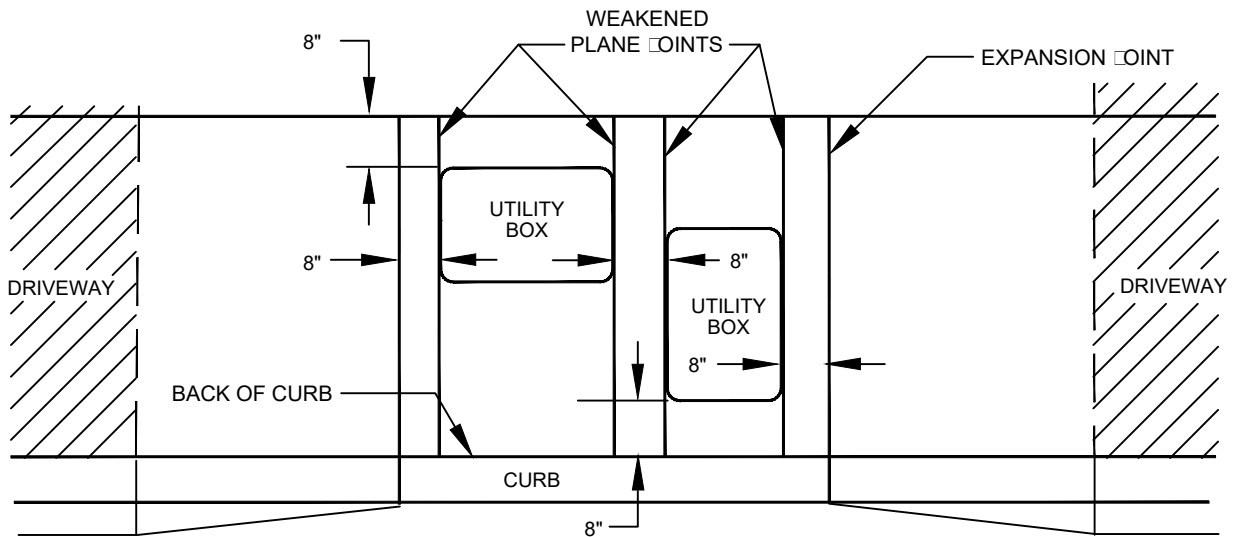
DATE 12-12-96

DWG. NO.

327



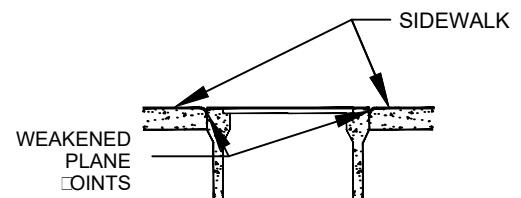
UTILITY BOXES IN SIDEWALK



UTILITY BOXES BETWEEN DRIVEWAYS

NOTES

1. PROVIDE A MINIMUM OF 8" AROUND ALL BOXES. ANY BOX SHALL NOT BE PLACED WITHIN 3'-3" OF FIRE HYDRANTS IN DRIVEWAYS OR DRIVEWAY APRONS. THIS DRAWINGS IS NOT INTENDED TO LIMIT THE NUMBER OF BOXES BETWEEN DRIVEWAYS TO TWO.
2. FOR WATER SERVICE BOXES, REFER TO UDACS PLATE 1-7.
3. WHEN INSTALLED WITHIN PEDESTRIAN ACCESS ROUTES, TOP OF MANHOLE COVERS SHALL HAVE NO VERTICAL SURFACE DISCONTINUITIES GREATER THAN 1/4" WITH ADJACENT SURFACE, HAVE NO GAPS GREATER THAN 1/2" REGARDLESS OF CONSTRUCTION TOLERANCES, AND BE FIRM, STABLE, AND SLIP RESISTANT.



TYPICAL SECTION

AGENCY APPROVED	B	C	H	L	M	N	R

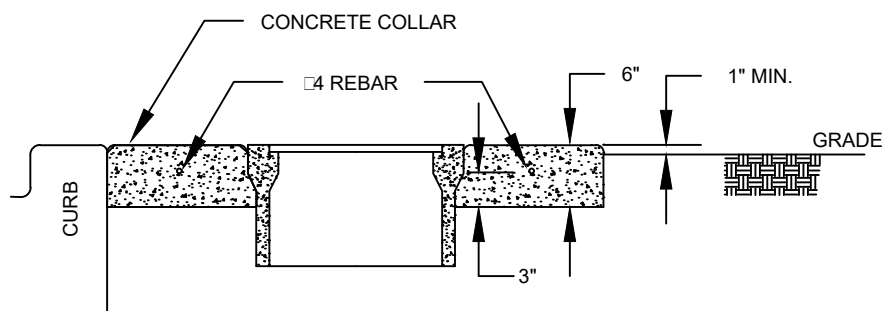
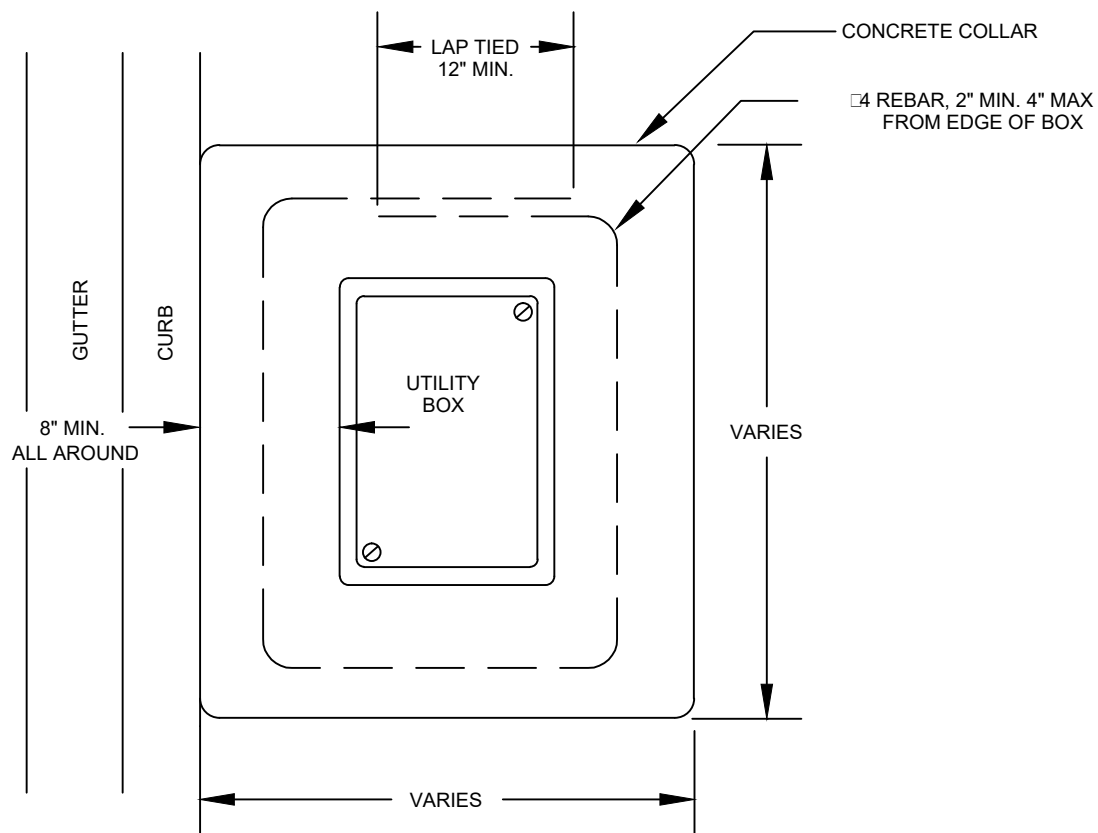
SPECIFICATION REFERENCE

505	REINFORCING STEEL
623	TRAFFIC SIGNALS □ STREETLIGHTING

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

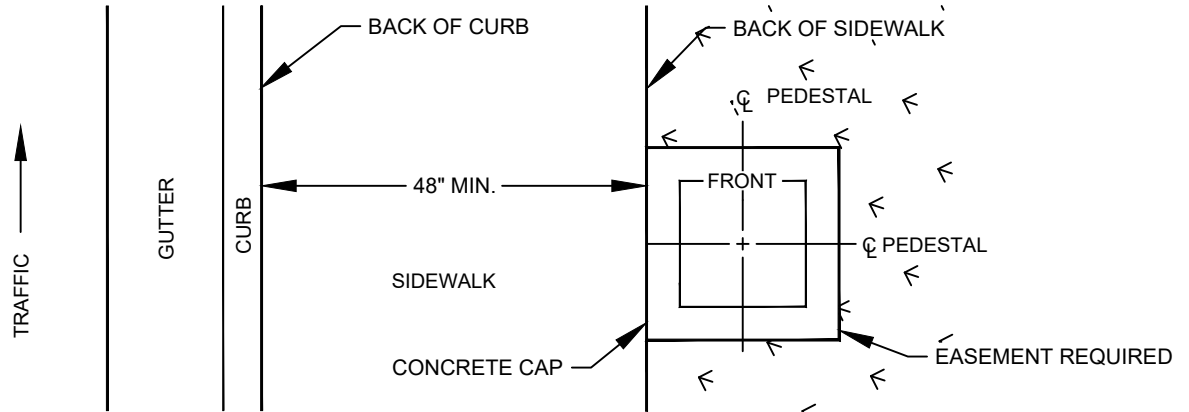
UTILITY PULL BOX LOCATIONS SIDEWALK AND
BETWEEN DRIVEWAYS

DATE 01-09-20	DWG. NO. 328

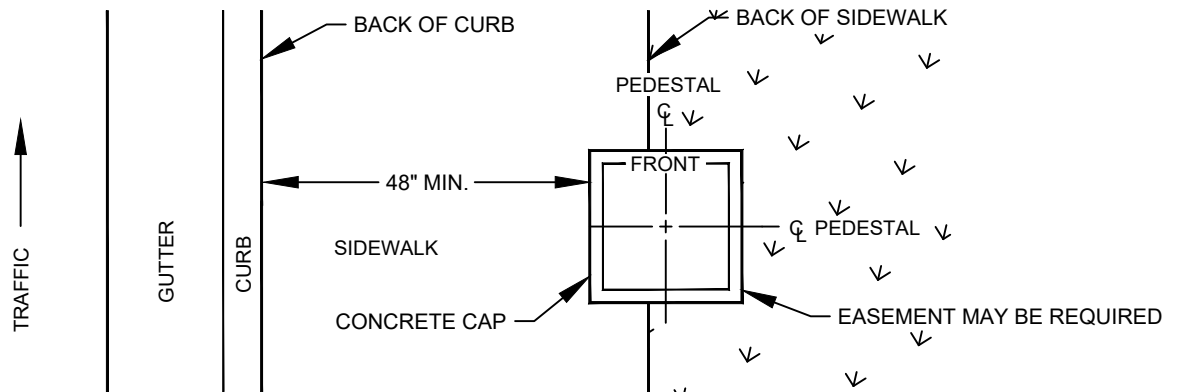


TYPICAL SECTION

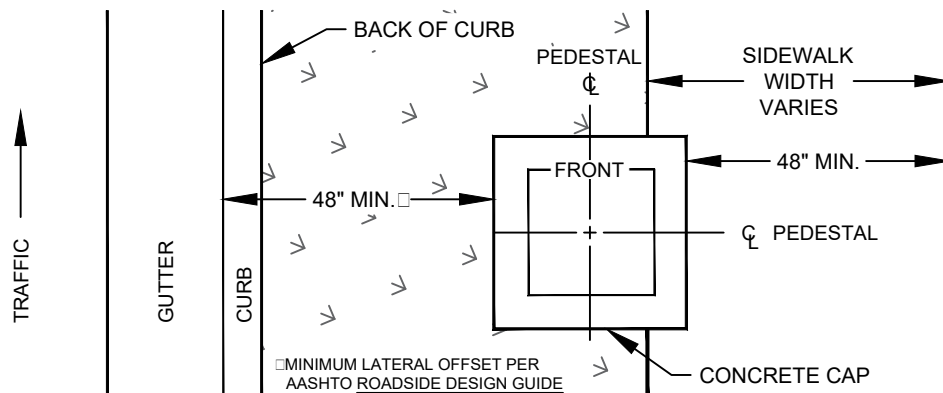
		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
501	PORTLAND CEMENT CONCRETE	CONCRETE AROUND PULL BOXES IN UNDEVELOPED AREAS											
505	REINFORCING STEEL												
623	TRAFFIC SIGNALS □ STREETLIGHTING												
		DATE 12-12-96		DWG. NO.		329							



BEHIND SIDEWALK (FOR WIDTHS LESS THAN 5 FT.)



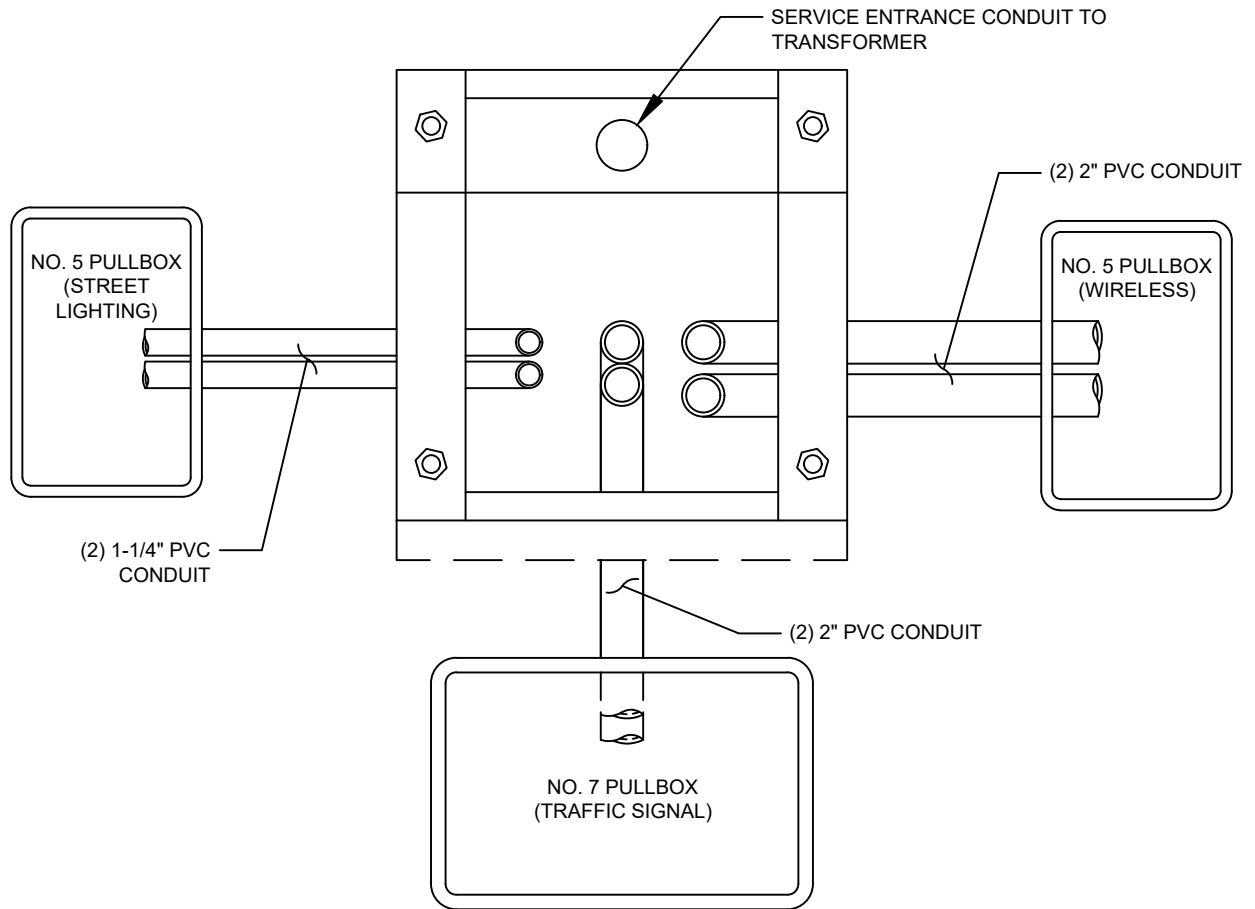
BACK PORTION OF SIDEWALK (FOR WIDTHS OF 5 FT. OR GREATER)



OPEN AREA OR WITH AMENITY ZONE

NOTE: SURFACE TREATMENT ADJACENT TO FRONT OF PEDESTAL TO BE DETERMINED BY AGENCY.

SPECIFICATION REFERENCE		AGENCY APPROVED	B	C	H	L	M	N	R
501	PORTLAND CEMENT CONCRETE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
623	TRAFFIC SIGNALS □ STREETLIGHTING								
		SERVICE PEDESTAL SETBACK AND ORIENTATION							
		DATE	08-08-19	DWG. NO.	331				

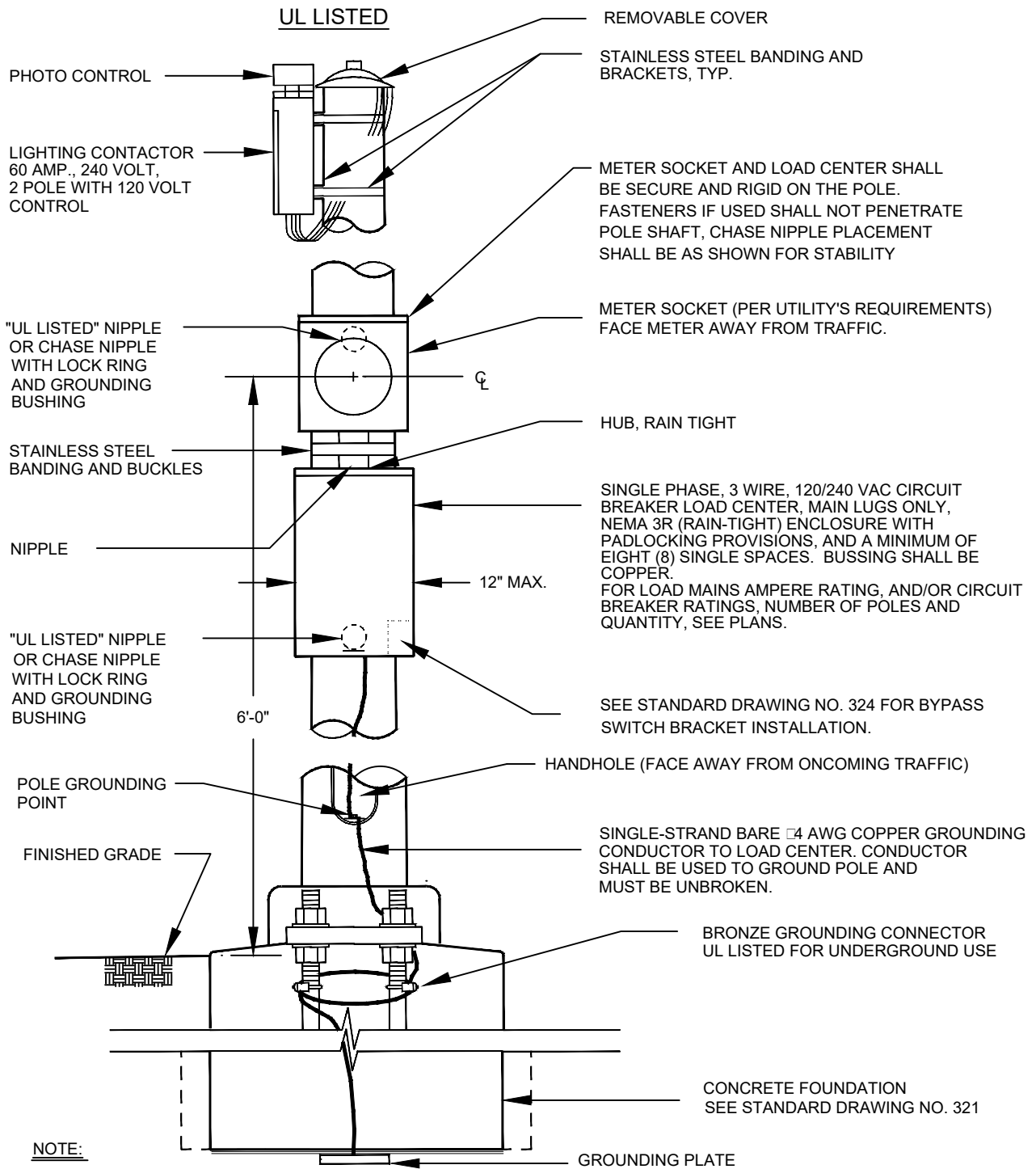


**PLAN VIEW
MOUNTING BASE DETAIL**

NOTES

1. BARE COPPER GROUNDING CONDUCTOR SHALL BE LOOPED AROUND ANCHOR BOLTS ONE TIME AND CONNECTED TO EACH ANCHOR BOLT BEFORE CONTINUING DOWN TO THE GROUNDING PLATE.
2. IN AREAS WHERE R/W PERMITS, THE CONCRETE BASE SHALL BE PLACED AT THE BACK EDGE OF THE SIDEWALK.
3. REFER TO STD. DWG. 331 FOR SERVICE PEDESTAL SETBACK AND ORIENTATION.
4. WIRE SIZES ARE BASED ON UNDERGROUND FEED.
5. WIRE SIZES SHALL BE INCREASED FOR VOLTAGE DROP LIMITATION WHEN RUN IS LONG.
6. PULLBOX LOCATION TO BE DETERMINED BY THE ENGINEER.
7. WHERE FOUNDATION IS INSTALLED IN SIDEWALK, A CLEAR WIDTH OF 48" MIN. SHALL BE MAINTAINED ON SIDEWALK.

		AGENCY APPROVED							
		B	C	H	L	M	N	R	
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
501	PORTLAND CEMENT CONCRETE	SERVICE PEDESTAL FOUNDATION STREET LIGHTING AND/OR TRAFFIC SIGNAL							
623	TRAFFIC SIGNALS ☐ STREET LIGHTING								
		DATE 03-12-20				DWG. NO. 332		SHEET 1 OF 2	



PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

M

SPECIFICATION REFERENCE

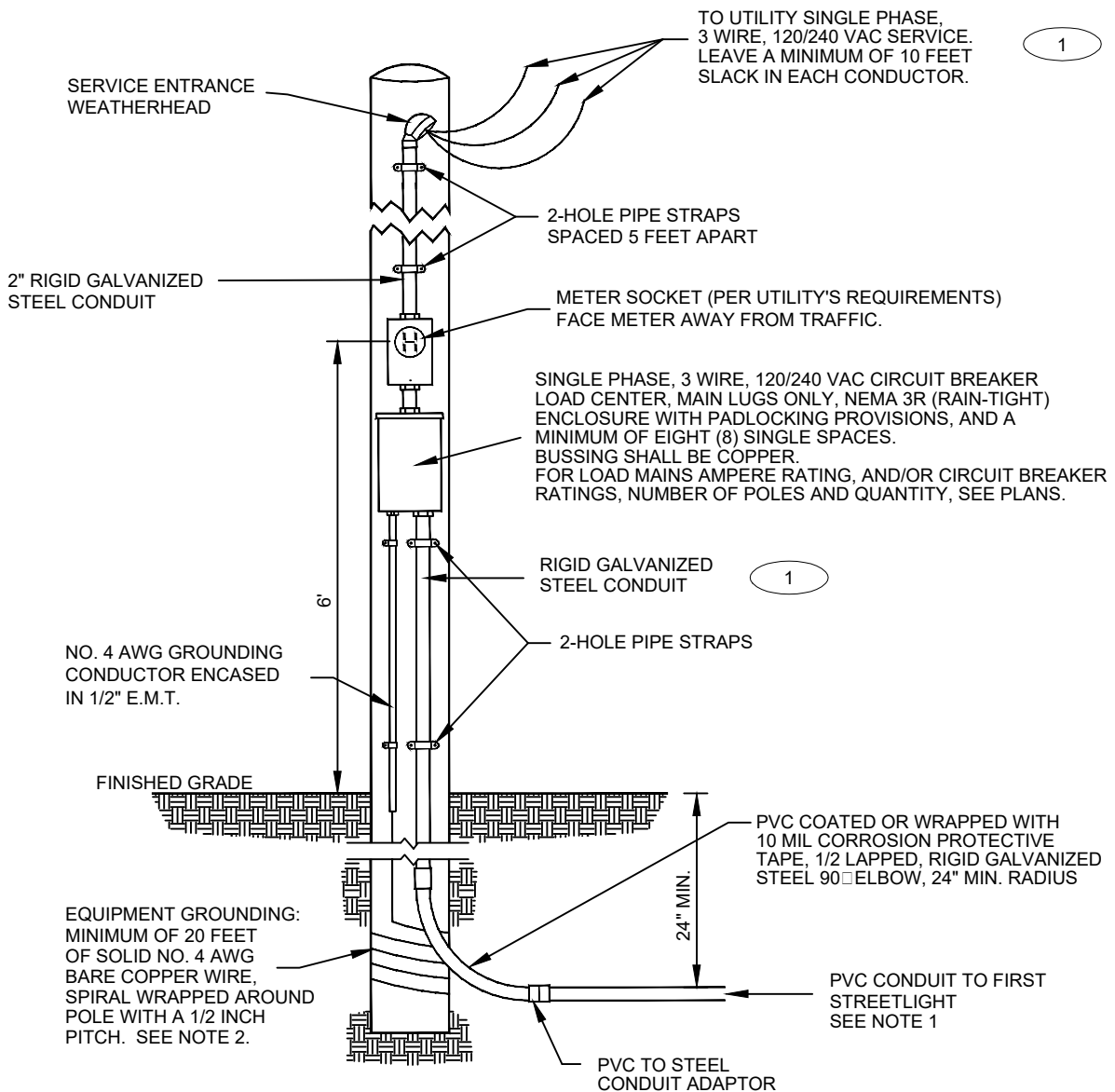
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

623 TRAFFIC SIGNALS □ STREETLIGHTING

SUPPLEMENTAL DRAWING

STREET LIGHTING SERVICE
POINT LOCATED ON
STREETLIGHT STANDARD

DATE 4-13-00 DWG. NO. 333.S1



- 1 125 AMP SERVICE: 2" CONDUIT, 2 1/0 THW AND 1 4 WHITE THW
200 AMP SERVICE: 2" CONDUIT, 2 250 KCMIL THW AND 1 1/0 WHITE THW
(0.82 DERATE HAS BEEN APPLIED FOR AMBIENT TEMPERATURE)

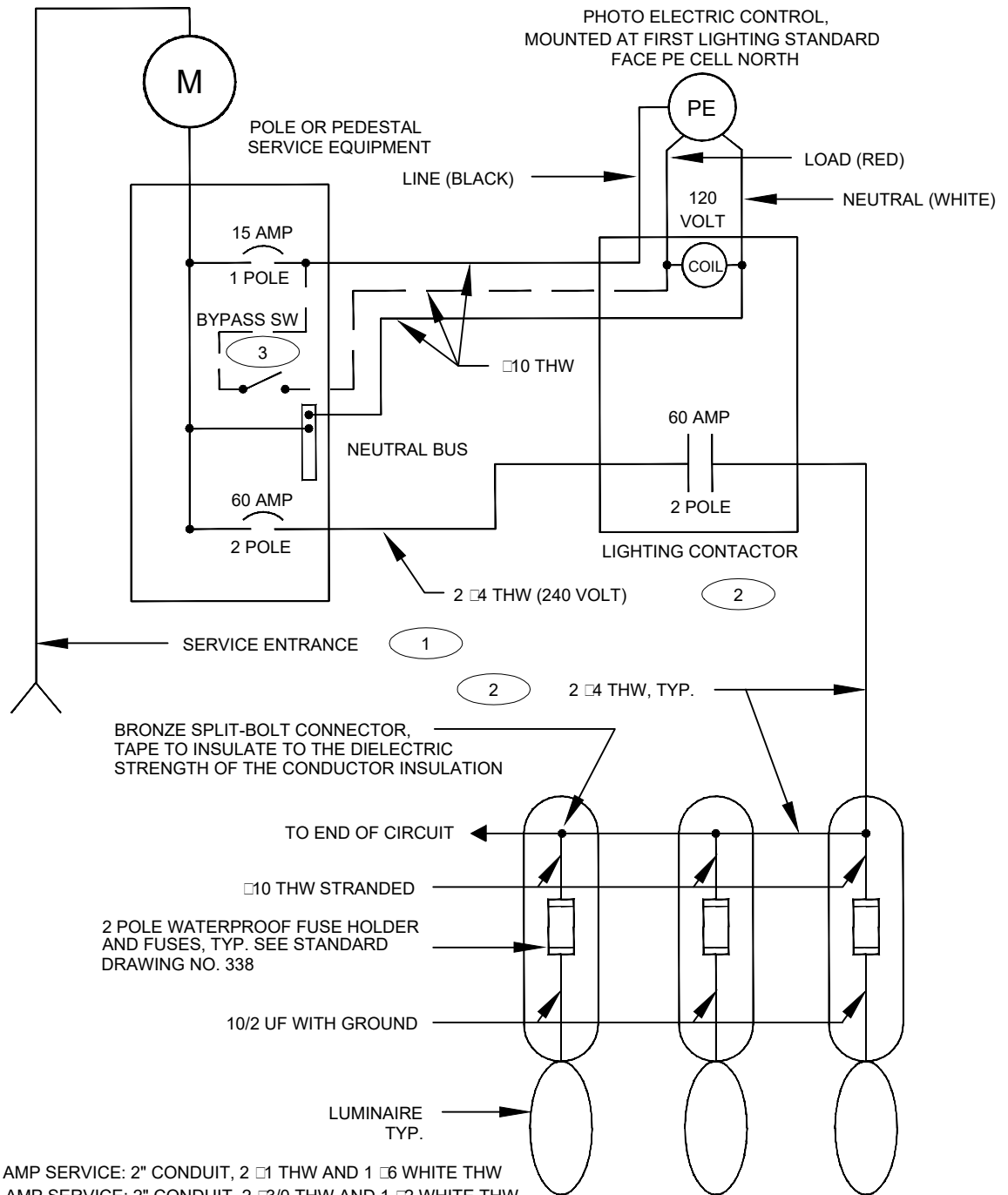
NOTES:

1. ALL WIRES TO BE COPPER; SEE PLANS FOR QUANTITY AND GAGES.
2. WITH ENGINEER'S APPROVAL, AN 8 FT. BY 5/8 IN. COPPER-CLAD GROUNDING ROD MAY BE USED.
3. ALL CONDUIT FITTINGS TO BE WATER-TIGHT.

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED B C H L M N

SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA				
		TEMPORARY APPLICATION 120/240 VAC SERVICE ON WOOD POLE OVERHEAD SERVICE				
DATE	8-12-99	DWG. NO.	334			



- 1 125 AMP SERVICE: 2" CONDUIT, 2 1 THW AND 1 6 WHITE THW
200 AMP SERVICE: 2" CONDUIT, 2 3/0 THW AND 1 2 WHITE THW
FOR POLE SERVICE, WIRE SIZES SHALL BE TEMPERATURE DERATED.
- 2 GROUNDING AND BONDING CONDUCTORS OMITTED FOR CLARITY,
SEE STANDARD DRAWING NOS. 336 AND 337.
- 3 SINGLE POLE, SINGLE THROW, ON-OFF, 10 AMP, 125 VAC SWITCH, SEALED, WITH 5 IN. LEADS

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

B

H

M

N

SPECIFICATION REFERENCE

623

TRAFFIC SIGNALS & STREETLIGHTING

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

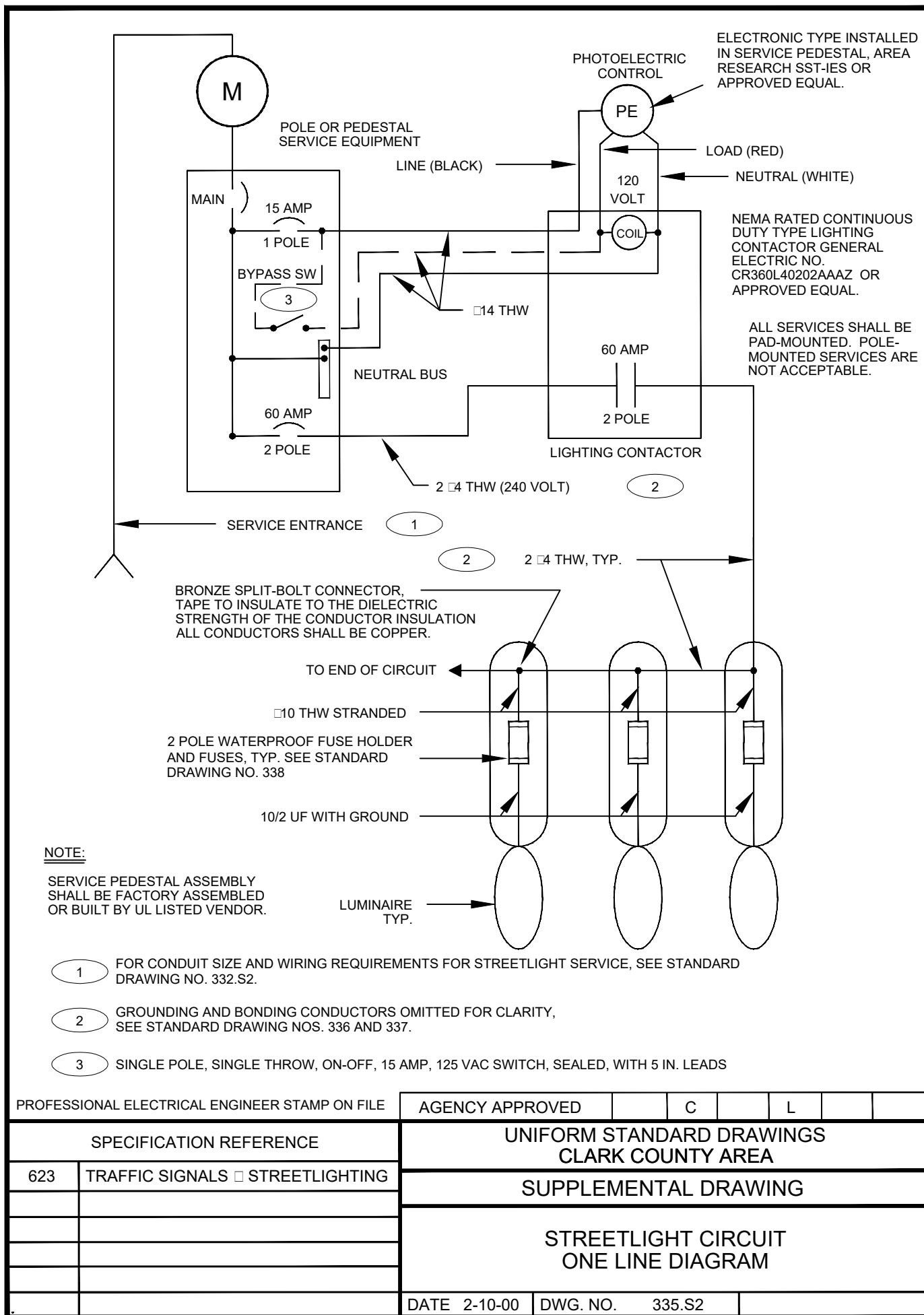
SUPPLEMENTAL DRAWING

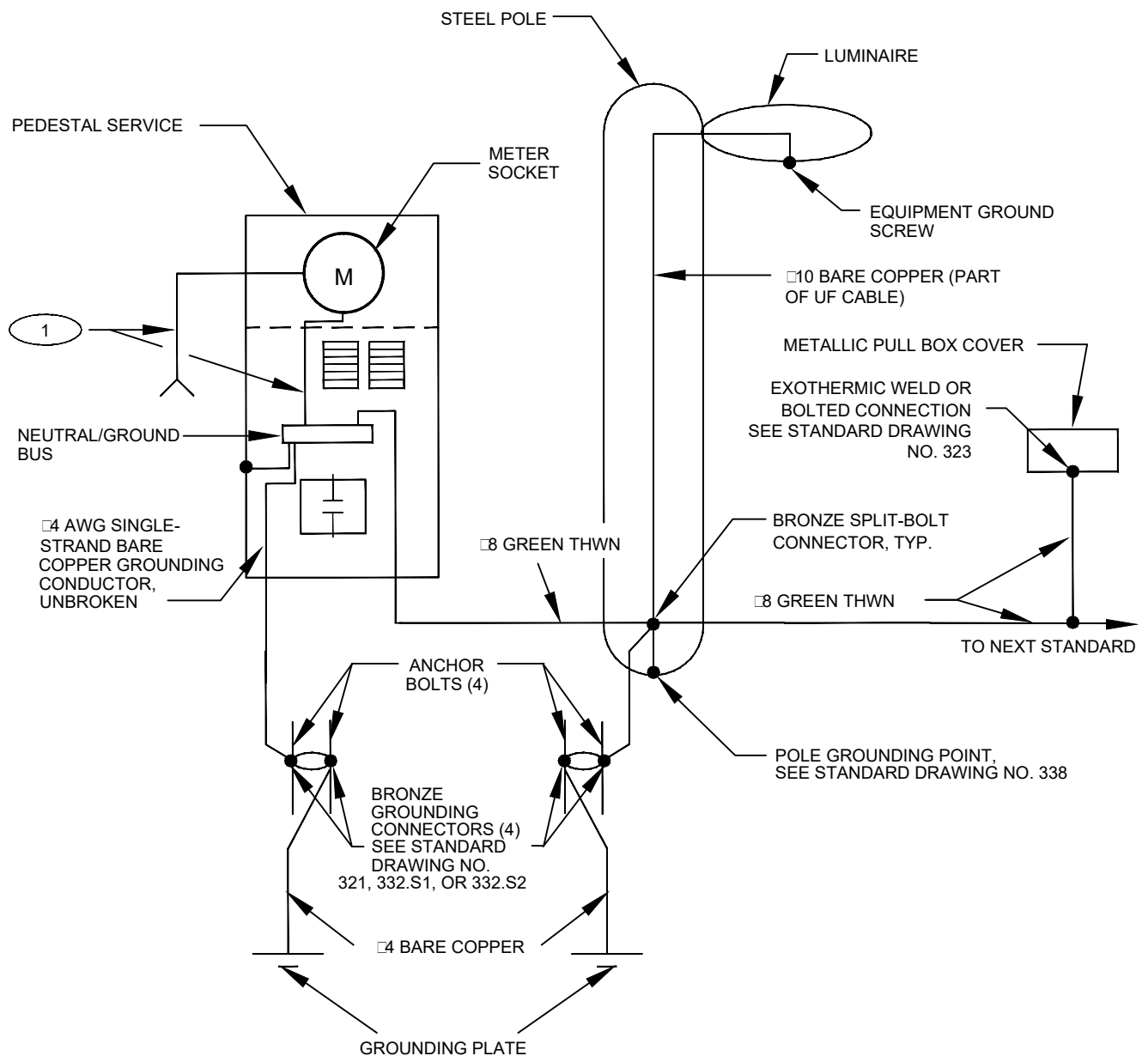
STREETLIGHT CIRCUIT
ONE LINE DIAGRAM

DATE 2-10-00

DWG. NO.

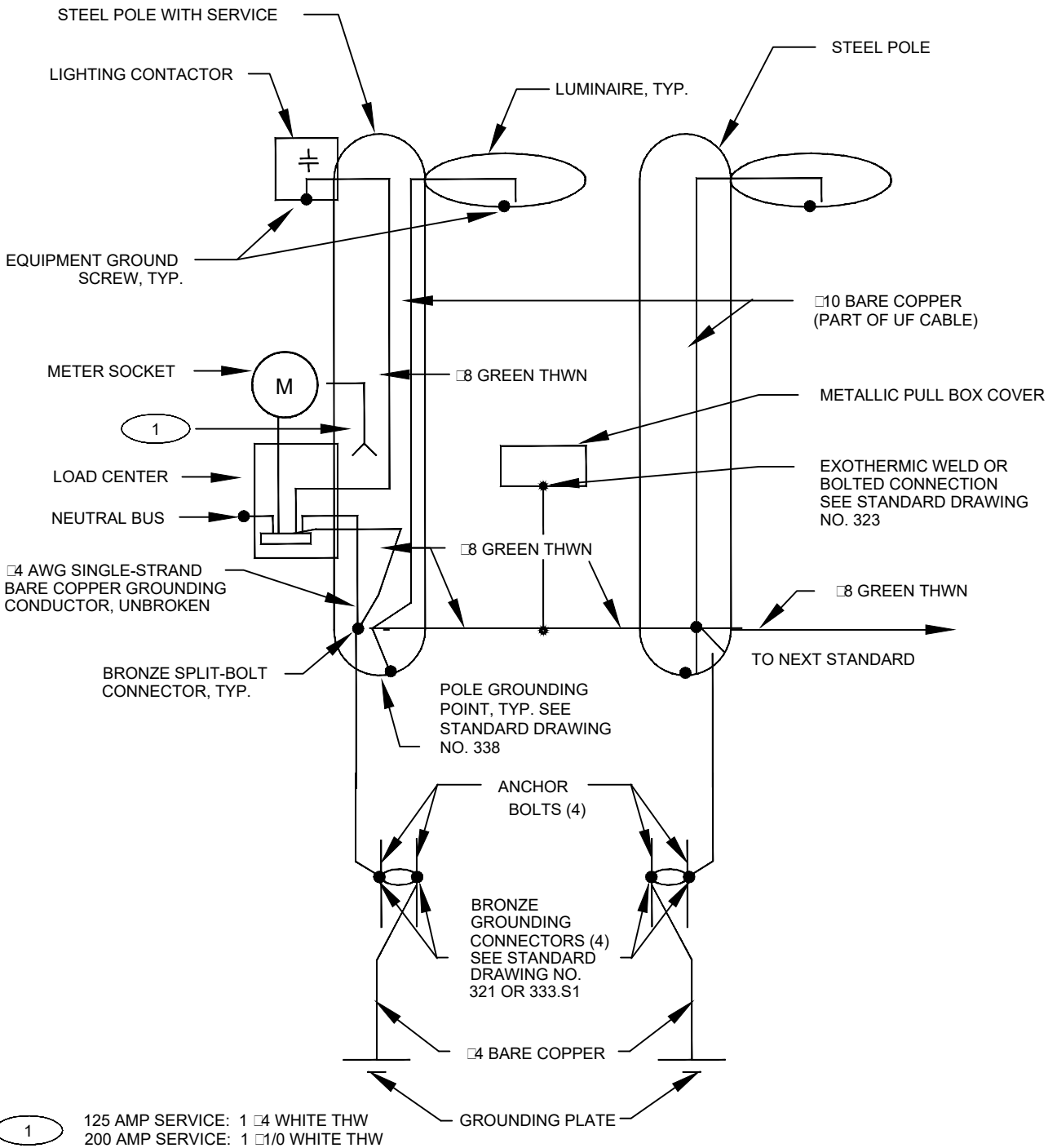
335.S1





1 FOR CONDUIT SIZE AND WIRING REQUIREMENTS FOR STREET LIGHT SERVICE,
SEE STANDARD DRAWING NO. 332.S2 FOR LAS VEGAS AND CLARK COUNTY ONLY
AND 332.S1 FOR ALL OTHER ENTITIES.

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
623	TRAFFIC SIGNALS □ STREETLIGHTING	SYSTEM GROUNDING PLAN WITH PEDESTAL SERVICE							
		DATE 2-10-00	DWG. NO. 336						



PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

623

TRAFFIC SIGNALS 4 STREETLIGHTING

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SYSTEM GROUNDING PLAN
WITH POLE MOUNTED SERVICE

DATE 8-12-99 DWG. NO. 337

BRONZE SPLIT-BOLT
CONNECTOR OR APPROVED
EQUAL INSULATED PER
STANDARD SPECIFICATIONS

10/2 UF WITH GROUND

G A B

10 BARE COPPER

4 AWG SINGLE-STRAND
BARE COPPER GROUNDING
CONDUCTOR

LOAD SIDE

DOUBLE POLE WATERPROOF
FUSE HOLDER ASSEMBLY

LINE SIDE

HEX HEAD NON-CORROSIVE
CAP SCREW WITH FLAT WASHER

10 THW STRANDED

POLE GROUNDING POINT

HANDHOLE, PROVIDE SLACK
IN WIRES TO EXTRACT FUSE
HOLDER AND CONNECTIONS,
18" MIN.

POLE SHAFT

3"

4 AWG SINGLE-STRAND
BARE COPPER GROUNDING
CONDUCTOR

1-1/4" PVC CONDUIT

BRONZE ANCHOR BOLT
GROUNDING CONNECTOR
UL LISTED FOR
UNDERGROUND USE

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

623

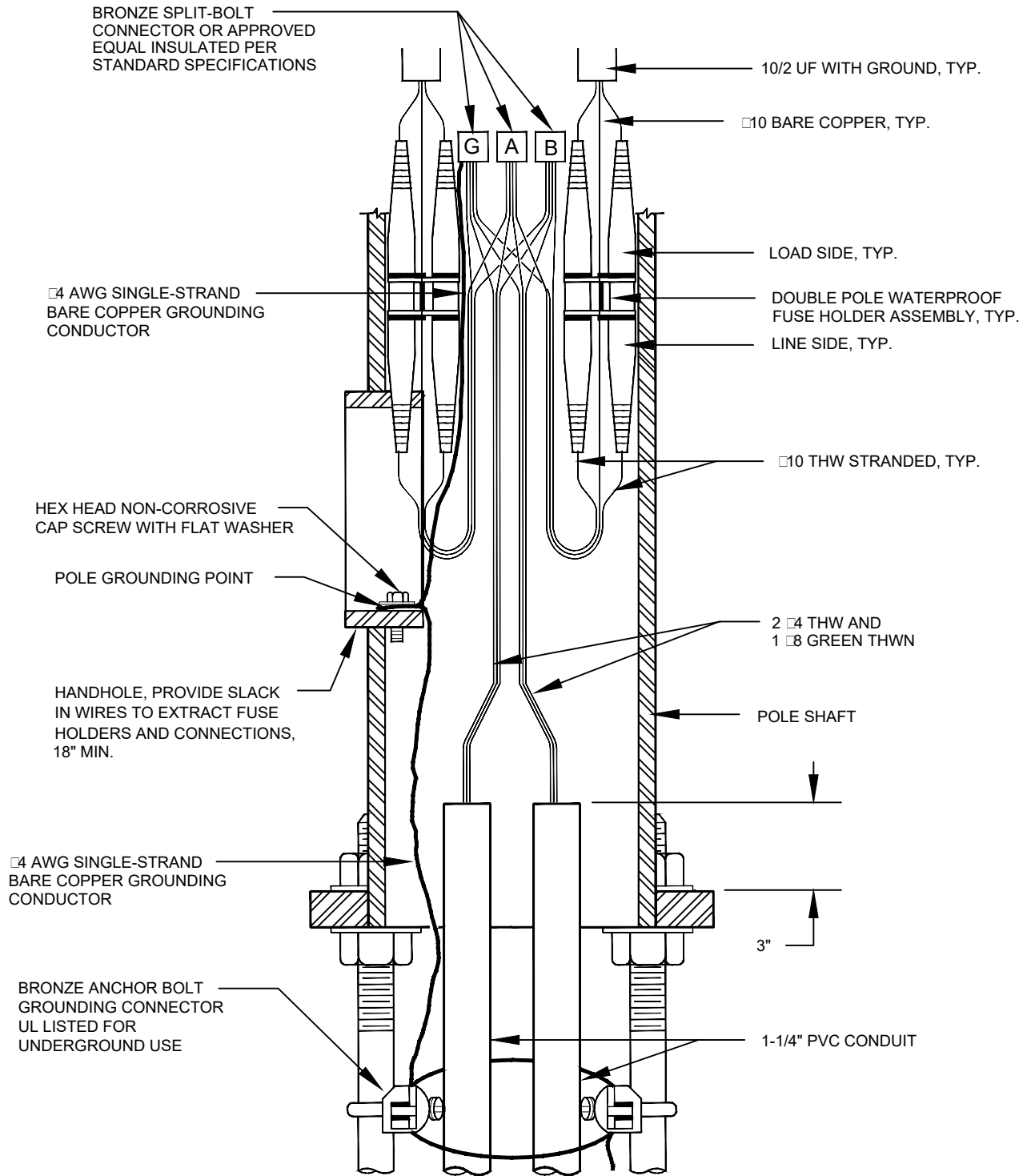
TRAFFIC SIGNALS □ STREETLIGHTING

LIGHTING STANDARD WIRING
DIAGRAM, 240 VOLT, TWO WIRE

DATE 12-12-96

DWG. NO.

338



PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

623

TRAFFIC SIGNALS □ STREETLIGHTING

TWIN LIGHTING STANDARD WIRING
DIAGRAM, 240 VOLT, TWO WIRE

DATE 12-12-96

DWG. NO.

339

BRONZE SPLIT-BOLT
CONNECTOR OR APPROVED
EQUAL INSULATED PER
STANDARD SPECIFICATIONS.
ALTERNATE PHASE
CONNECTIONS AT
EACH POLE

4 AWG SINGLE-STRAND
BARE COPPER GROUNDING
CONDUCTOR

HEX HEAD NON-CORROSIVE
CAP SCREW WITH FLAT WASHER

POLE GROUNDING POINT

HANDHOLE, PROVIDE SLACK
IN WIRES TO EXTRACT FUSE
HOLDER AND CONNECTIONS,
18" MIN.

4 AWG SINGLE-STRAND
BARE COPPER GROUNDING
CONDUCTOR

BRONZE ANCHOR BOLT
GROUNDING CONNECTOR
UL LISTED FOR
UNDERGROUND USE

10/2 UF WITH GROUND

NEUTRAL

10 BARE COPPER

LOAD SIDE

SINGLE POLE WATERPROOF
FUSE HOLDER ASSEMBLY

LINE SIDE

10 THW STRANDED

2 4 WHITE THW

3 4 THW AND
1 8 GREEN THWN

POLE SHAFT

3"

1-1/4" PVC CONDUIT

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

623

TRAFFIC SIGNALS STREETLIGHTING

LIGHTING STANDARD WIRING DIAGRAM
120 VOLT, ONE PHASE, THREE WIRE

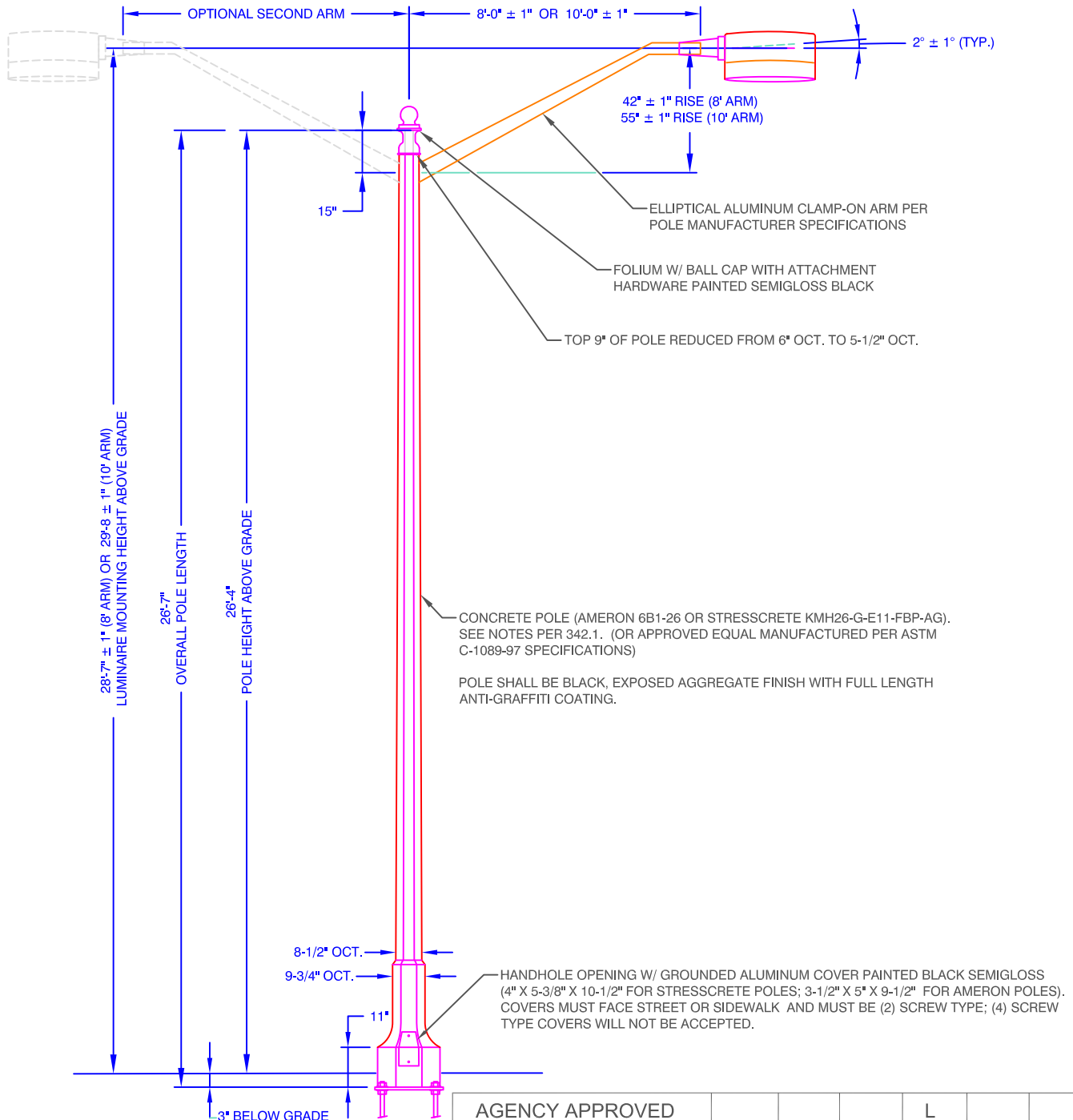
DATE 12-12-96

DWG. NO.

340

NOTES

1. ADDITIONAL SPECIFICATIONS PER POLE MANUFACTURER.
2. 8' ARMS SHALL BE USED FOR ROADSIDE INSTALLATIONS ON STREETS WITH LESS THAN 100' RIGHT-OF-WAY, UNLESS OTHERWISE DIRECTED.
3. 10' ARMS SHALL BE USED FOR MEDIAN INSTALLATIONS AND ON ROADSIDES WITH 100' OR GREATER RIGHT-OF-WAY, UNLESS OTHERWISE DIRECTED.
4. PAINT ARMS AND ATTACHMENT HARDWARE SEMIGLOSS BLACK.
5. BANNER ARMS ONLY WHEN SPECIFIED ON THE PLANS.
6. CONSTRUCT FOUNDATION PER USD 343.
7. DESIGN PROFESSIONAL AND CONTRACTOR SHALL VERIFY CITY'S LATEST LED FIXTURE SPECIFICATIONS AND APPROVED FIXTURES PER CLV WEBSITE, PRIOR TO ORDERING MATERIALS. APPROVED FIXTURE LIST IS LOCATED ON CLV WEBSITE, UNDER BUILDING AND SAFETY FORMS.
8. CITY ENGINEER MAY APPROVE EQUAL FIXTURES THAT MEET AESTHETIC AND LIGHT LEVEL REQUIREMENT PER USD 300.S3. LIGHTING STUDY REQUIRED.



AGENCY APPROVED

L

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

623

TRAFFIC SIGNALS & STREET LIGHTING

CITY OF LAS VEGAS
26' STREET LIGHT POLE
FOR TOWN CENTER AREA

DATE 08-09-18

DWG. NO.

341

AMERON NOTES AND SPECIFICATIONS:

'F' LEVEL CONFIG CODES			'P' LEVEL CONFIG CODES		
OPTION CLASS	ENTRY	INFO.	OPTION CLASS	ENTRY	INFO.
COATING	1	-	MIX	12	-
HH COVER	43436PA	"LV"	FINISH	3	-
DOOR SCRS	TMP	-	BASEPLATE	45042	NOTE #8
DRILL-IN MOD	MODEBEB	-	POLE TOP CON.	MOD90	-

DECORATIVE BASE OCTAGONAL BASE PLATE POLE

POLE DESIGNATION	POLE HEIGHT ABOVE GRADE	OVERALL POLE LENGTH	BOLT CIRCLE	BASE O.D.	ULTIMATE G.J. MOMENT (FT.-LBS.)	POLE WEIGHT (LBS.)
6B121	20'-10"	21'-1"	21"	18"	18,400	1,255

() POLES REQUIRED, EACH WITH 4' & 8' DOUBLE ALUMINUM LMA

SINGLE BELL RECEPTACLE (P/N: T.B.D.) & TAMPER

PROOF WRENCH (P/N: 45126)

NOTES:

1. MIX (1231): BLACK, EXPOSED AGGREGATE FINISH WITH AMERSHIELD ANTI-GRAFFITI COATING.

2. f_c @ 28 DAYS = 6,000 PSI, USING SPUN CYLINDER TEST.

3. f_c @ 28 DAYS = 5,000 PSI USING ASTM C-31 CYLINDER TEST.

4. POLES MANUFACTURED PER ASTM C-1089-06 SPECIFICATIONS.

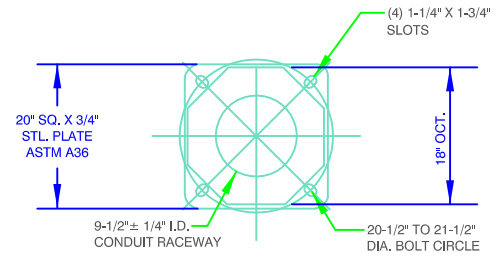
5. BASEPLATE ASTM A-36 FULLY PRESTRESSED WITH (8) 5/16" DIA. A-416 WIRES (7-STRAND CABLES).

6. PROTECTIVE COAT EXPOSED P.C. WIRES AT POLE ENDS.

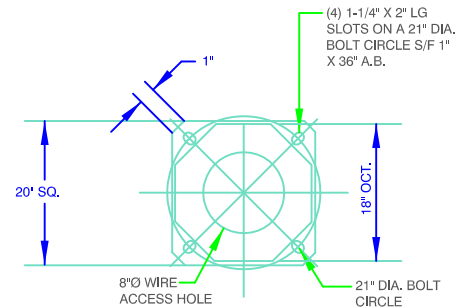
7. LMA IS DESIGNED TO ROTATE TO ANY OCTAGONAL FLATS PER CUSTOMER'S REQUIREMENTS.

8. POLE SHOWN IS SUITABLE FOR CAPPED BASE PLATE (ENCASED IN CONCRETE). OTHERWISE, OTHER NON-CAPPED INSTALLATION REQUIRED A GALVANIZED BASE PLATE.

9. THE 8" DOUBLE TOP MOUNT ALUMINUM DECORATIVE S-ARM PIPE LMA ASSEMBLY (NOT TO EXCEED UP TO, 1.74 SQ. FT. EPA, 12 LBS. PER SIDE) DEPICTED ON THIS DRAWING IS DESIGNED TO WITHSTAND THE LOADS IMPARTED BY (2) GE DECAPHERE FLAT LUMINAIRES (NOT TO EXCEED 1.9 SQ. FT. EPA, 48 LBS. EACH, ONE PER SIDE); THE POLE DEPICTED IS DESIGNED TO WITHSTAND THE LOADS IMPARTED BY TO TOP MOUNT LMA, THE (2) LUMINAIRES & (2) 18" X 60" BANNER CENTERED NO HIGHER THAN 12'-6" ABOVE GRADE, AS DESIGNED PER THE 2009 AASHTO LTS-5 IN A 90MPH WIND ZONE (3-SECOND GUSTS). PLEASE ADVISE IF THE INTENDED LOADING EXCEEDS THESE VALUES.



AMERON BASE PLATE DETAIL
N.T.S.



STRESSCRETE BASE PLATE DETAIL
1" THK.
GALV. STEEL
N.T.S.

STRESSCRETE NOTES AND SPECIFICATIONS:

POLE SPECIFICATIONS:

CATALOGUE NO.:	KMH21-G-E11-FBP C/W 140-35/55
SECTION:	OCTAGONAL
COLOUR:	ECLIPSE
FINISH:	ETCHED
POLE LENGTH:	21'-0"
POLE TOP:	7 3/16" FL/FL
POLE BUTT:	18" FL/FL
APPROX. WGT.:	T.B.A.
QUANTITY:	
MIN. RACEWAY:	1 1/8" Ø

ARM SPECIFICATIONS:

CATALOGUE NO.:	KA33-T-4/8'-2
QUANTITY:	
MATERIAL:	ALUMINUM
PAINT:	SEMI-GLOSS BLACK

COATINGS REQUIRED:

-1 COAT ANTI-GRAFFITI
FULL LENGTH

NOTES:

- MIX ECLIPSE BLACK, EXPOSED AGGREGATE FINISH WITH JONES BLAIR ANT GRAFFITI COATING.
- f_c @ 28 DAYS = 8,000 PSI, USING ASTM C-31 CYLINDER TEST.
- POLES MANUFACTURED PER ASTM C-1089-06 SPECIFICATIONS.
- BASEPLATES ASTM A-36 WELDED BY CERTIFIED WELDER.
- PROTECTIVE COAT EXPOSED P.C. WIRES AT POLE ENDS.
- LMA IS DESIGNED TO ROTATE TO ANY OCTAGONAL FLATS PER CUSTOMERS REQUIREMENTS.
- POLE SHOWN IS SUPPLIED WITH GALV. STEEL BASEPLATE FOR CAPPED OR NON-CAPPED INSTALLATION.
- THE 8" DOUBLE TOP MOUNT ALUMINUM DECORATIVE S-ARM PIPE LMA ASSEMBLY (NOT TO EXCEED UP TO, 1.74 SQ. FT. EPA, 12 LBS. PER SIDE) DEPICTED ON THIS DRAWING IS DESIGNED TO WITHSTAND THE LOADS IMPARTED BY GARDCO OR KING LUMINAIRE FIXTURES. THE POLE DEPICTED IS DESIGNED TO WITHSTAND THE LOADS IMPARTED BY THE TOP MOUNT LMA AND THE (2) LUMINAIRES, AS DESIGNED PER THE 2009 AASHTO LTS-5 IN A 90MPH WIND ZONE (3-SECOND GUSTS).
- STRESSCRETE POLE WARRANTY - LIFETIME.

AGENCY APPROVED

L

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

501 PORTLAND CEMENT CONCRETE

623 TRAFFIC SIGNALS & STREET LIGHTING

CITY OF LAS VEGAS
STREET LIGHT NOTES AND SPECIFICATIONS
(AMERON AND STRESSCRETE)

DATE 08-09-18

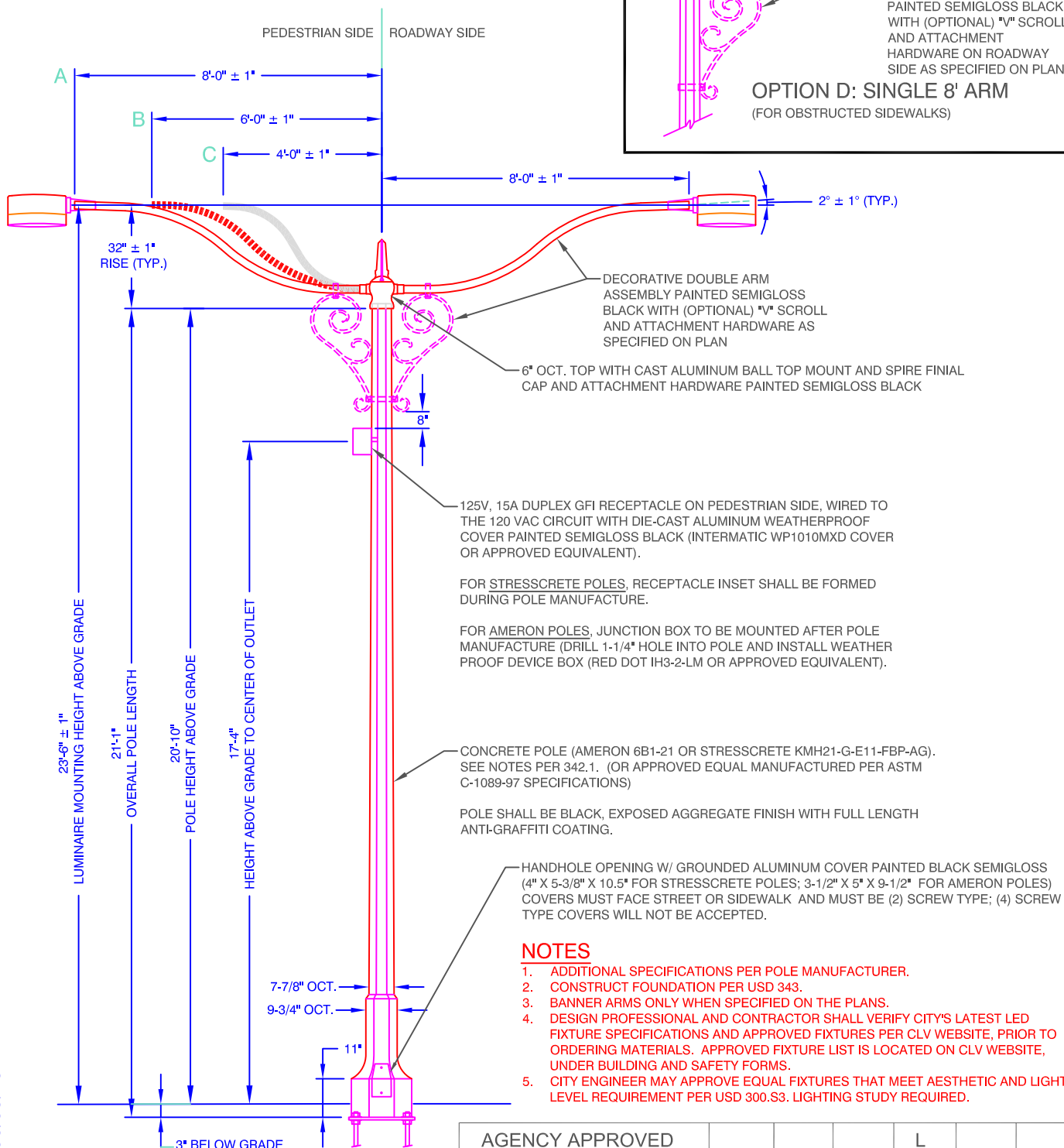
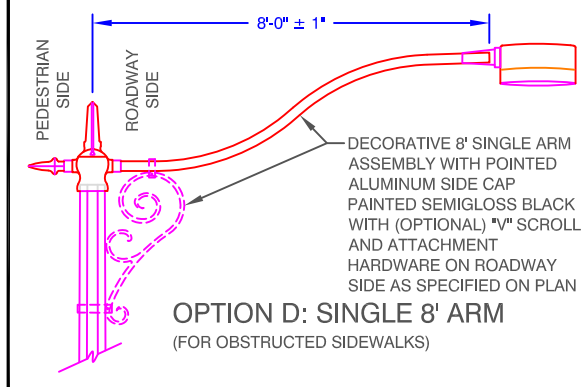
DWG. NO.

342.1

OPTION A: 8' + 8' ARMS (FOR 15'+ SIDEWALKS OR FOR MEANDERING SIDEWALKS)

OPTION B: 6' + 8' ARMS (FOR 15' SIDEWALKS, INCLUDING AMENITY ZONE)

OPTION C: 4' + 8' ARMS (FOR 10' SIDEWALKS, INCLUDING AMENITY ZONE)



NOTES

1. ADDITIONAL SPECIFICATIONS PER POLE MANUFACTURER.
2. CONSTRUCT FOUNDATION PER USD 343.
3. BANNER ARMS ONLY WHEN SPECIFIED ON THE PLANS.
4. DESIGN PROFESSIONAL AND CONTRACTOR SHALL VERIFY CITY'S LATEST LED FIXTURE SPECIFICATIONS AND APPROVED FIXTURES PER CLV WEBSITE, PRIOR TO ORDERING MATERIALS. APPROVED FIXTURE LIST IS LOCATED ON CLV WEBSITE, UNDER BUILDING AND SAFETY FORMS.
5. CITY ENGINEER MAY APPROVE EQUAL FIXTURES THAT MEET AESTHETIC AND LIGHT LEVEL REQUIREMENT PER USD 300.S3. LIGHTING STUDY REQUIRED.

AGENCY APPROVED

L

SPECIFICATION REFERENCE

623

TRAFFIC SIGNALS & STREET LIGHTING

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

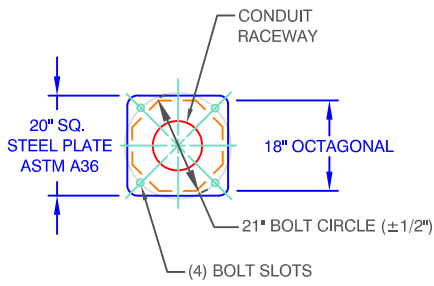
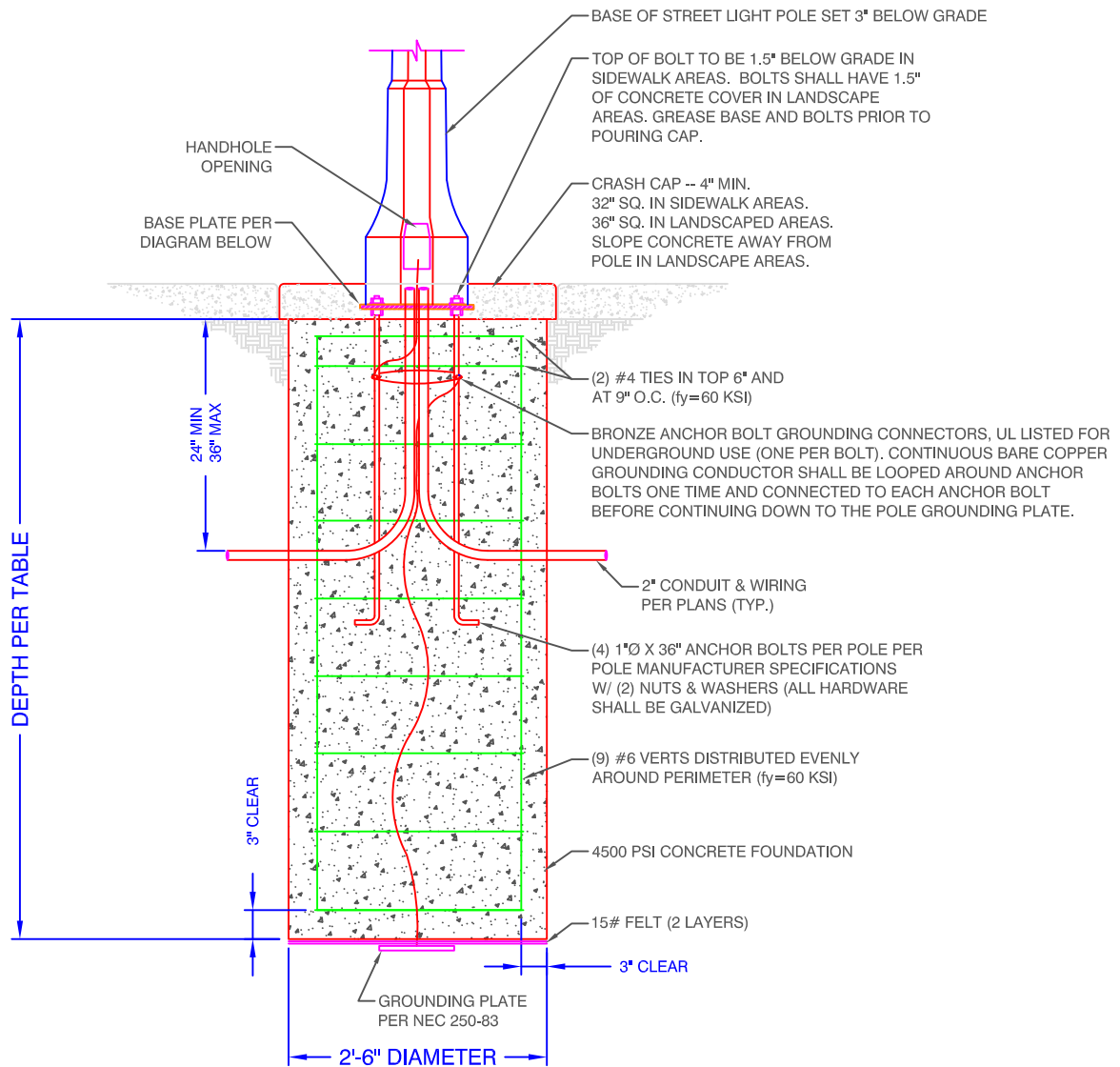
CITY OF LAS VEGAS
21' STREET LIGHT POLE
FOR DOWNTOWN CENTENNIAL AREA

DATE 08-09-18

DWG. NO.

342

Effective 12/10/2020 to 06/09/2021



BASE DIAGRAM

BASE PLATES SHALL BE PER POLE MANUFACTURER SPECIFICATIONS

FOUNDATION DEPTH				
POLE & ARM CONFIGURATION	SOIL TYPE			
	SAND/GRAVEL ($\phi=30^\circ$, $\gamma=110\text{pcf}$)	STIFF CLAY ($C=1.0$)	MEDIUM CLAY ($C=0.60$)	SOFT CLAY ($C=0.25$)
21' TALL WITH 1 OR 2 ARMS UP TO 10' EACH	5'-3"	6'-6"	7'-4"	9'-6"
26' TALL WITH 1 ARM UP TO 12'	5'-9"	6'-9"	7'-8"	8'-6"
26' TALL WITH 2 ARMS UP TO 12' EACH	6'-3"	7'-3"	8'-4"	10'-0"

NOTES:

1. C = COHESION MEASURED IN KIPS PER SQUARE FOOT.
2. CONTRACTOR SHALL DETERMINE SOIL TYPE BY TAKING UNDISTURBED SAMPLES AS REQUIRED BY THE CITY ENGINEER.
3. ANALYSIS BY PROFESSIONAL STRUCTURAL ENGINEER ON FILE WITH CITY ENGINEER.

AGENCY APPROVED _____ L _____

SPECIFICATION REFERENCE

501	PORTLAND CEMENT CONCRETE
623	TRAFFIC SIGNALS & STREET LIGHTING

**UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA**

**CITY OF LAS VEGAS
STREET LIGHT POLE FOUNDATION
FOR DOWNTOWN CENTENNIAL
AND TOWN CENTER AREAS**

DATE 08-09-18 DWG. NO. 343

Effective 12/10/2020 to 06/09/2021

MANHOLE NOTES:

1. MANHOLE MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF SECTION 609, "CATCH BASINS, MANHOLES AND INLETS" OF THE "STANDARD SPECIFICATIONS".
2. REINFORCING STEEL SHALL BE AS SHOWN, WIRED TIGHTLY AT ALL INTERSECTIONS AND EMBEDDED AT LEAST ONE (1) INCH CLEAR UNLESS OTHERWISE NOTED.
3. EXCAVATION SHALL BE AS NEARLY VERTICAL AS POSSIBLE (SHEET AND SHORE, IF SOIL CONDITIONS REQUIRE), IN EXISTING STREET SECTIONS, ALLEY SECTIONS AND CONFINED AREAS SUCH AS LIMITED EASEMENTS OR ADJACENT TO STRUCTURES. NATURAL ANGLE OF REPOSE WILL ALLOW IN ALL OTHER AREAS.
4. MANHOLE DESIGN FOR PIPE LARGER THAN SIXTY (60) INCHES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
5. MANHOLE DESIGN FOR DEPTHS EXCEEDING EIGHTEEN (18) FEET SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
6. TYPE AND SIZE OF MANHOLE TO BE CONSTRUCTED IN A PARTICULAR LOCATION SHALL BE DETERMINED BY THE PIPE SIZE, ALIGNMENT AND GRADE AS FOLLOWS:

TYPE I

FORTY-EIGHT (48) INCH SIZE

- A. ALL CASES FOR PIPE EIGHTEEN (18) INCHES AND SMALLER.
- B. TWENTY-FOUR (24) INCHES AND SMALLER PIPE ON TANGENT LINE AND GRADE.

SIXTY (60) INCH SIZE

- A. TWENTY-SEVEN (27) INCH THROUGH THIRTY-SIX (36) INCH PIPE ON TANGENT LINE AND GRADE.
- B. TWENTY-ONE (21) INCH THROUGH TWENTY-SEVEN (27) INCH PIPE AT ANGLE POINTS AND CHANGES IN GRADE OR PIPE SIZE.

TYPE I-A

USED IN PLACE OF TYPE I WHEN COVER ABOVE CONDUIT IS LIMITED, AND WHEN APPROVED BY THE ENGINEER.

TYPE II

FORTY-EIGHT (48) INCH SIZE

- A. THIRTY (30) INCH THROUGH SIXTY (60) INCH PIPE ON TANGENT LINE WITH A CHANGE IN GRADE OR PIPE SIZE.

		AGENCY APPROVED	B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
501	CONCRETE	STORM DRAIN MANHOLES GENERAL NOTES						
609	CATCH BASINS, MANHOLES □							
	INLETS							
		DATE 2-9-06	DWG. NO.	401	SHEET 1 OF 2			

MANHOLE NOTES (CONTINUED):

TYPE III

TANGENT

SIXTY (60) INCH SIZE

- A. THIRTY-NINE (39) INCH THROUGH SIXTY (60) INCH PIPE ON TANGENT LINE AND GRADE WITH NO CHANGE IN PIPE SIZE.

ANGLE POINT

SIXTY (60) INCH SIZE

- A. THIRTY (30) INCH THROUGH SIXTY (60) INCH PIPE AT THE ANGLE POINT IN LINE.

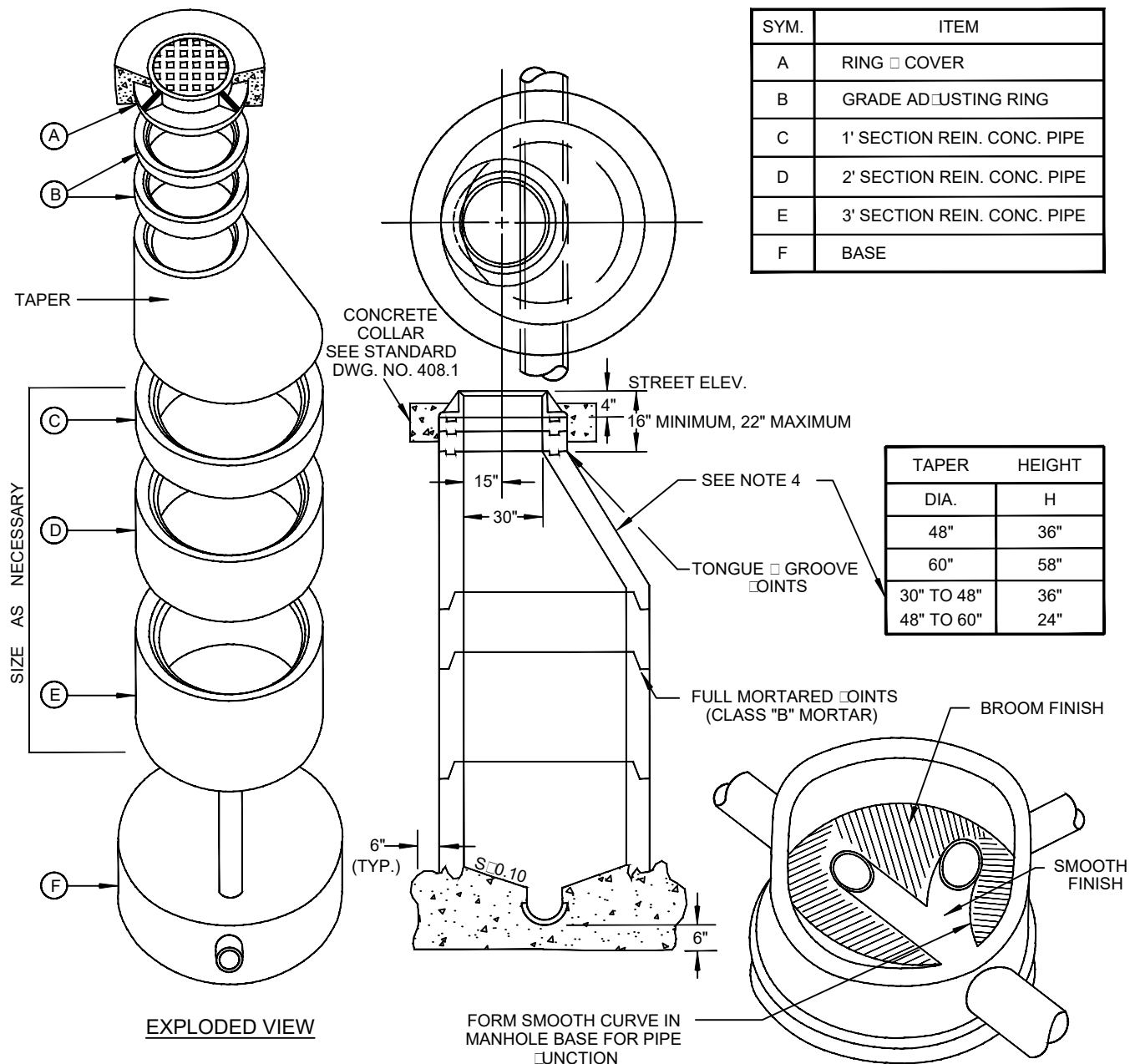
7. PRECAST MANHOLE COMPONENTS SHALL CONFORM TO ASTM C-478.
8. DISTANCE BETWEEN THE TOP OF MANHOLE AND FIRST STEP SHALL BE A MAXIMUM OF SIXTEEN (16) INCHES. MANHOLE STEPS SHALL BE GROUTED IN PLACE.
9. (CLARK COUNTY ONLY) DISTANCE BETWEEN MANHOLES SHALL BE A MAXIMUM OF FOUR HUNDRED (400) FEET.
10. MANHOLE SPACING SHALL BE REFERRED TO THE WASTE WATER COLLECTION STANDARDS.

		AGENCY APPROVED						
		B	C	H	L	M	N	
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
501	CONCRETE	STORM DRAIN MANHOLES GENERAL NOTES						
609	CATCH BASINS, MANHOLES ☐							
	INLETS							
		DATE 2-9-06	DWG. NO.	401	SHEET 2 OF 2			

DROP INLET NOTES

1. ALL DROP INLETS, REGARDLESS OF TYPE, SHALL BE LOCATED SUCH THAT THE CURB OPENING (OR GRATE) IS A MINIMUM OF TEN (10) FEET FROM THE NEAREST P.C. OR P.T. OF THE CURRENT OR FUTURE CURB RETURN.
2. FOR CURB RETURNS WHERE A LOW POINT CONDITION EXIST OR IS PROPOSED AT THE P.C. OR P.T., THE CURB PROFILE SHALL BE DESIGNED SUCH THAT THE LOW POINT COINCIDES WITH THE CURB OPENING AS SPECIFIED ON NOTE NO. 1.
3. IF DRIVEWAYS OR UTILITIES EXIST, THE ENTITY ENGINEER SHALL APPROVE THE LOCATION OF THE DROP INLET.
4. WHEN INSTALLED WITHIN PEDESTRIAN ACCESS ROUTES, TOP OF MANHOLE COVERS SHALL HAVE NO VERTICAL SURFACE DISCONTINUITIES GREATER THAN 1/4" WITH ADJACENT SURFACE, HAVE NO GAPS GREATER THAN 1/2" REGARDLESS OF CONSTRUCTION TOLERANCES, AND BE FIRM, STABLE, AND SLIP RESISTANT.

		AGENCY APPROVED		B	C	H	L	M	N	R
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA								
501	CONCRETE	STORM DRAIN DROP INLET GENERAL NOTES								
609	CATCH BASINS, MANHOLES □ INLETS									
		DATE 01-09-20		DWG. NO. 402						

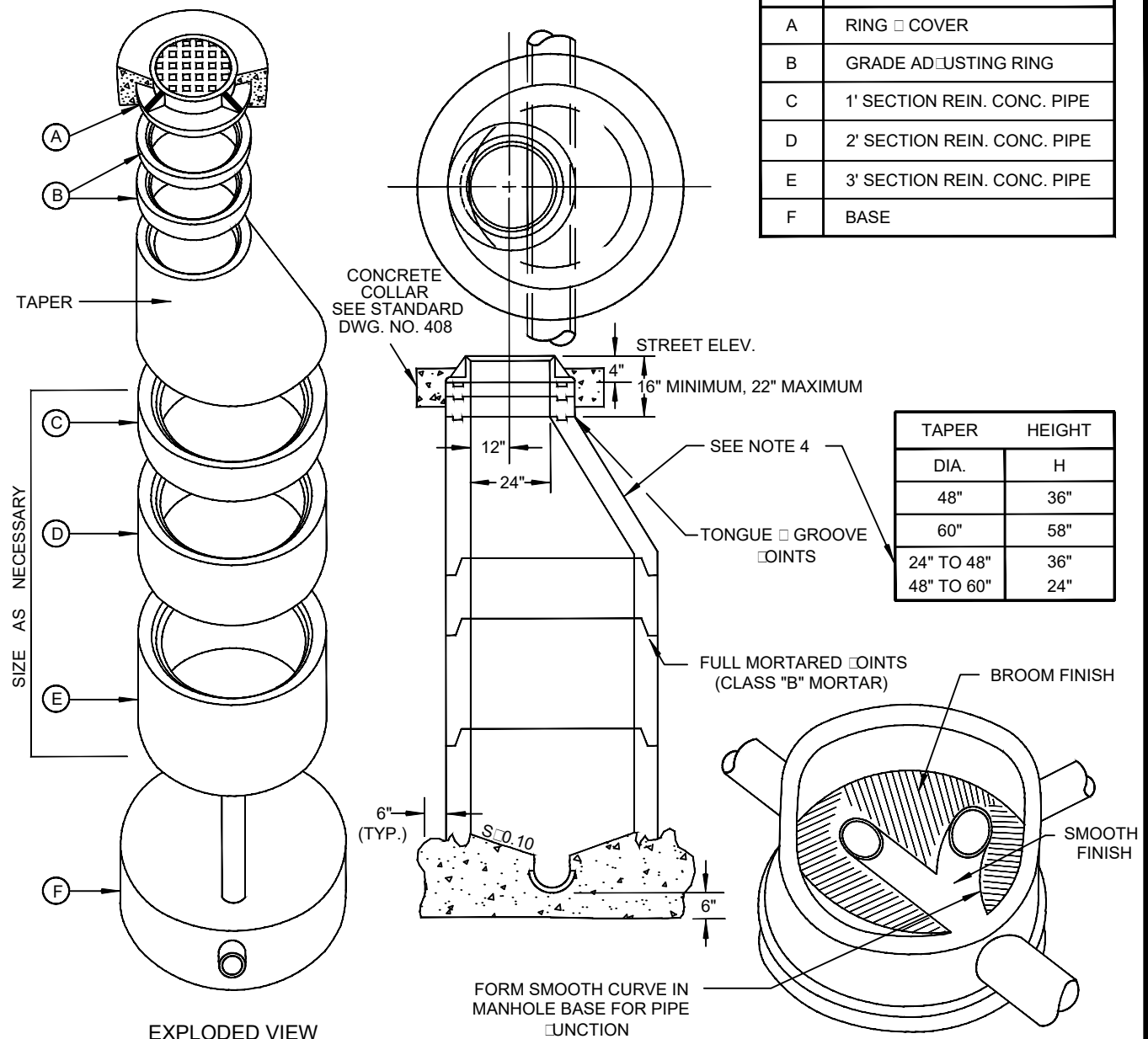


NOTES

1. IN UNIMPROVED NON-TRAFFIC AREAS, TOP OF MANHOLE SHALL BE 6" TO 9" ABOVE GRADE.
2. PIPES SHALL NOT PROTRUDE MORE THAN 3" INSIDE OF MANHOLE SECTION. CONSTRUCT WATER TIGHT CONNECTION TO MANHOLE.
3. PIPE SECTION LENGTHS ARRANGED TO FIT DEPTH.
4. AN OPTIONAL TWO PIECE 30" TO 48" AND 48" TO 60" CONE MAY BE USED.
5. THE USE OF A 30" RING AND COVER SHALL BE APPROVED BY THE ENTITY ENGINEER.
6. WHEN INSTALLED WITHIN PEDESTRIAN ACCESS ROUTES, TOP OF MANHOLE COVERS SHALL HAVE NO VERTICAL SURFACE DISCONTINUITIES GREATER THAN 1/4" WITH ADJACENT SURFACE, HAVE NO GAPS GREATER THAN 1/2" REGARDLESS OF CONSTRUCTION TOLERANCES, AND BE FIRM, STABLE, AND SLIP RESISTANT.

ISOMETRIC VIEW

AGENCY APPROVED		B	C	H	L	M	N	R
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
501	CONCRETE □ MORTAR	TYPE I MANHOLE 30 INCH RING AND COVER						
609	CATCH BASINS, MANHOLES □ INLETS							
DATE 01-09-20		DWG. NO. 403.1						

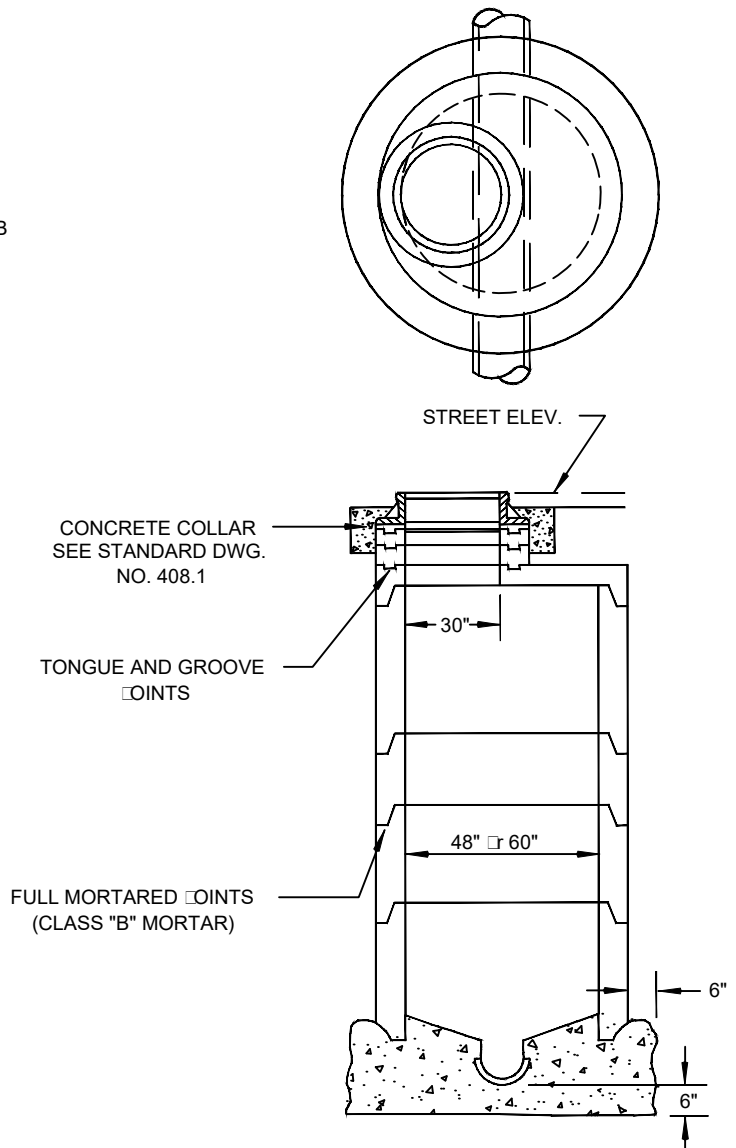
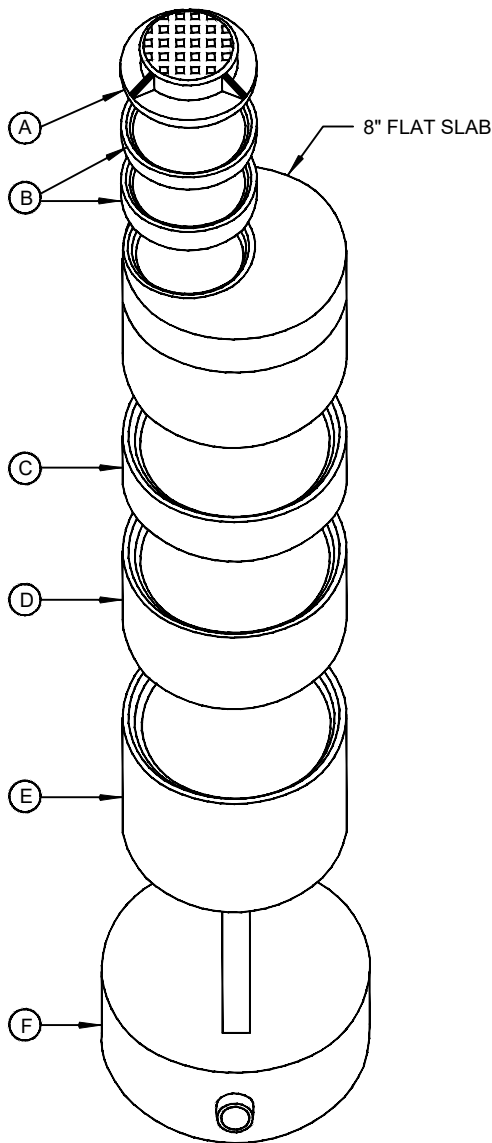


NOTES

1. IN UNIMPROVED NON-TRAFFIC AREAS, TOP OF MANHOLE SHALL BE 6" TO 9" ABOVE GRADE.
2. PIPES SHALL NOT PROTRUDE MORE THAN 3" INSIDE OF MANHOLE SECTION. CONSTRUCT WATER TIGHT CONNECTION TO MANHOLE.
3. PIPE SECTION LENGTHS ARRANGED TO FIT DEPTH.
4. AN OPTIONAL TWO PIECE 24" TO 48" AND 48" TO 60" CONE MAY BE USED.
5. WHEN INSTALLED WITHIN PEDESTRIAN ACCESS ROUTES, TOP OF MANHOLE COVERS SHALL HAVE NO VERTICAL SURFACE DISCONTINUITIES GREATER THAN 1/4" WITH ADJACENT SURFACE, HAVE NO GAPS GREATER THAN 1/2" REGARDLESS OF CONSTRUCTION TOLERANCES, AND BE FIRM, STABLE, AND SLIP RESISTANT.

ISOMETRIC VIEW

		AGENCY APPROVED		B	C	H	L	M	N	R
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA								
501	CONCRETE □ MORTAR	TYPE I MANHOLE								
609	CATCH BASINS, MANHOLES □ INLETS									
		DATE 01-09-20	DWG. NO. 403							

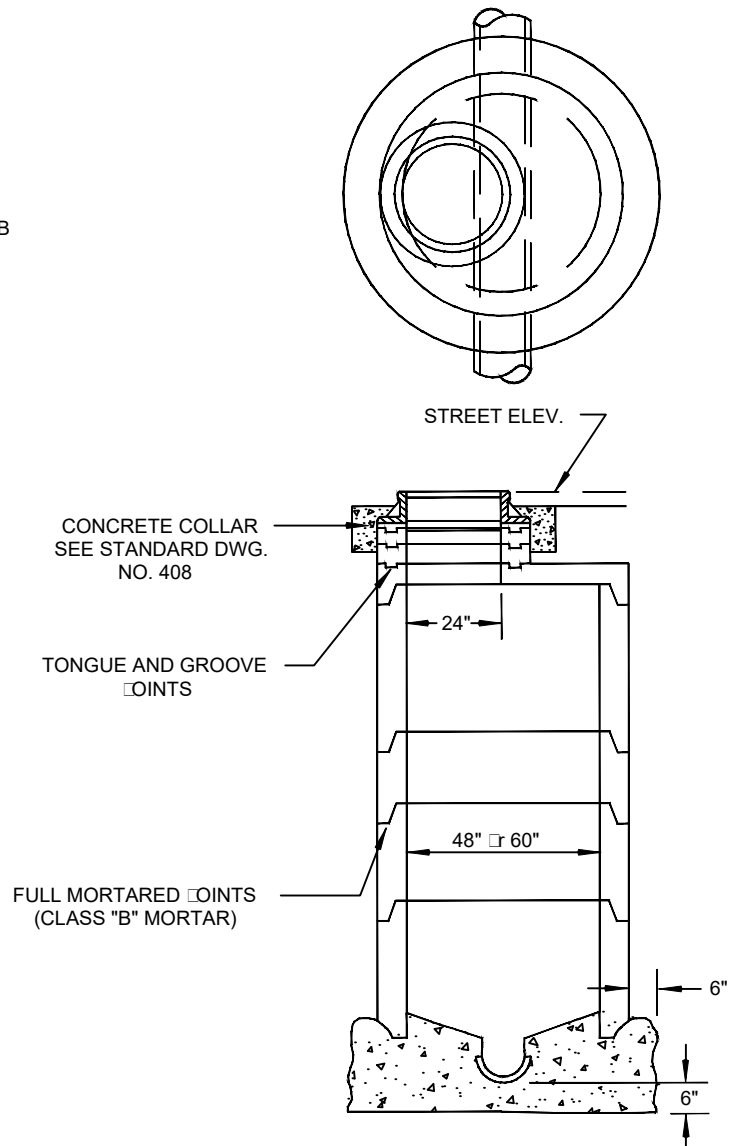
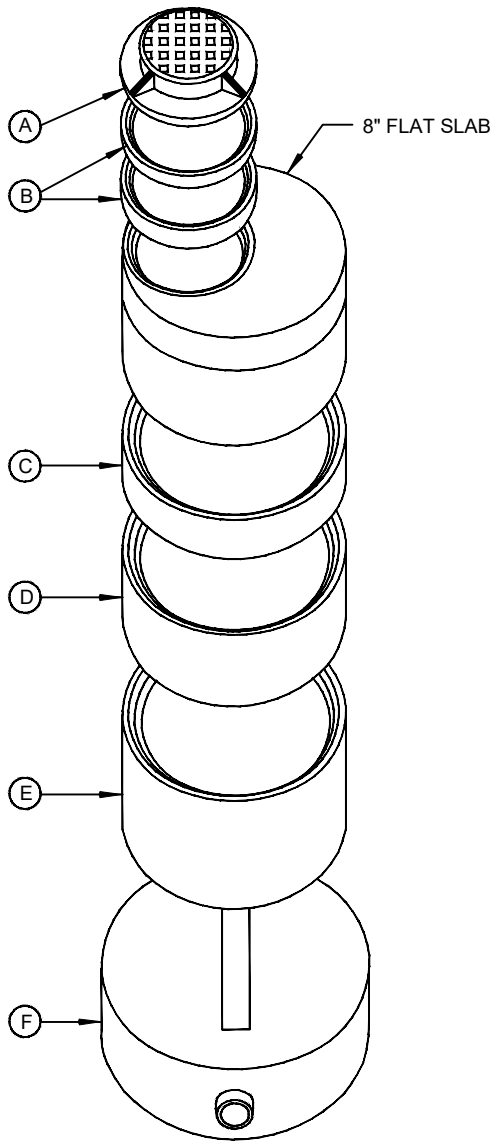


SYM.	ITEM
A	RING & COVER
B	GRADE ADJUSTING RING
C	1' SECTION REIN. CONC. PIPE
D	2' SECTION REIN. CONC. PIPE
E	3' SECTION REIN. CONC. PIPE
F	BASE

NOTE:

1. PIPE SECTION LENGTHS ARRANGED TO FIT DEPTH.
2. THE USE OF A 30" RING AND COVER SHALL BE APPROVED BY THE ENTITY ENGINEER.

SPECIFICATION REFERENCE		AGENCY APPROVED	B	C	H	L	M	N
501	CONCRETE & MORTAR	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
609	CATCH BASINS, MANHOLES & INLETS							
		TYPE IA MANHOLE 30 INCH RING AND COVER						
		DATE 11-10-05	DWG. NO.	404.1				



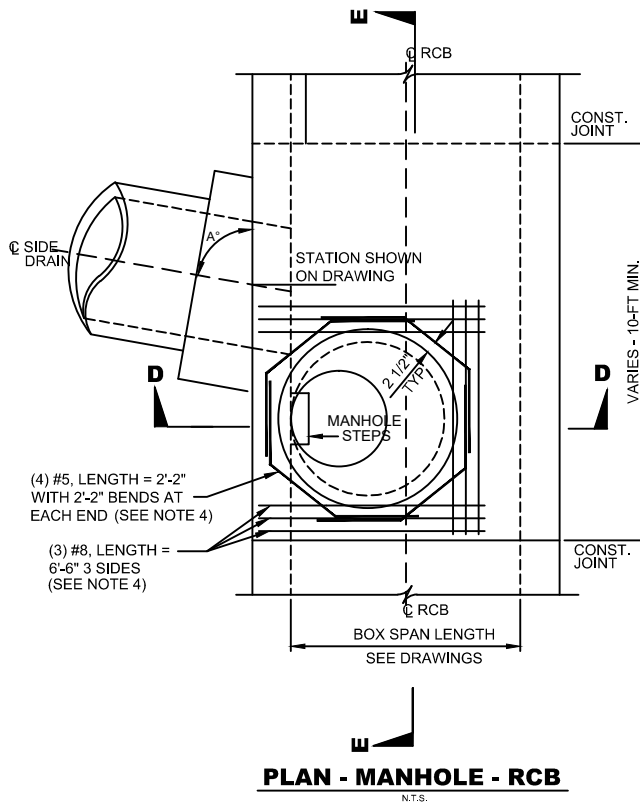
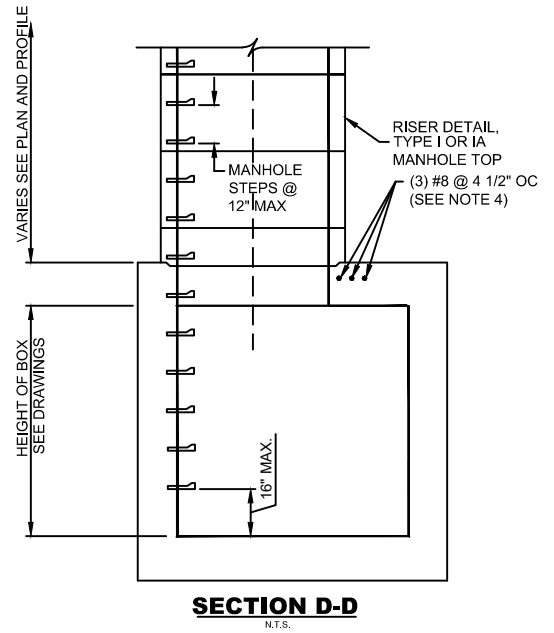
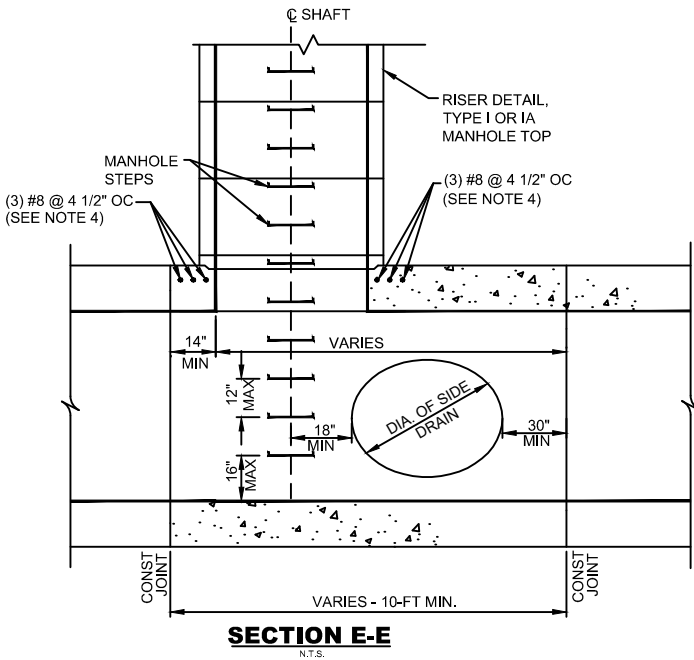
SYM.	ITEM
A	RING & COVER
B	GRADE ADJUSTING RING
C	1' SECTION REIN. CONC. PIPE
D	2' SECTION REIN. CONC. PIPE
E	3' SECTION REIN. CONC. PIPE
F	BASE

NOTE:

1. PIPE SECTION LENGTHS ARRANGED TO FIT DEPTH.

SPECIFICATION REFERENCE		AGENCY APPROVED	B	C	H	L	M	N
501	CONCRETE & MORTAR	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
609	CATCH BASINS, MANHOLES & INLETS							
		TYPE IA MANHOLE						
		DATE 11-10-05	DWG. NO.	404				

		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
501	CONCRETE AND MORTAR	TYPE II MANHOLE 30 INCH RING AND COVER							
505	REINFORCING STEEL								
609	CATCH BASINS, MANHOLES □ INLETS								
.		DATE 11/10/05	DWG. NO.		405.1				

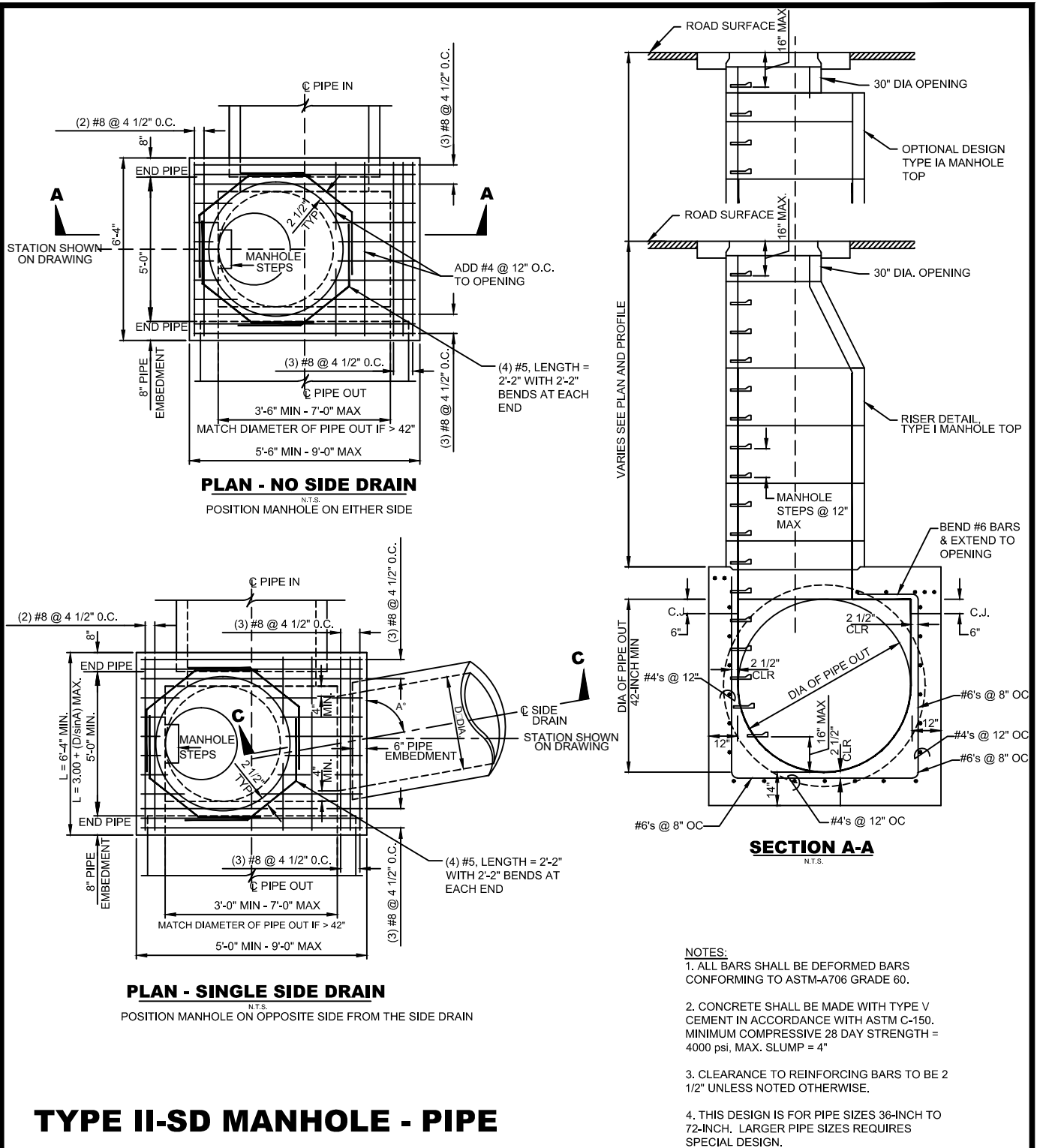


NOTES:

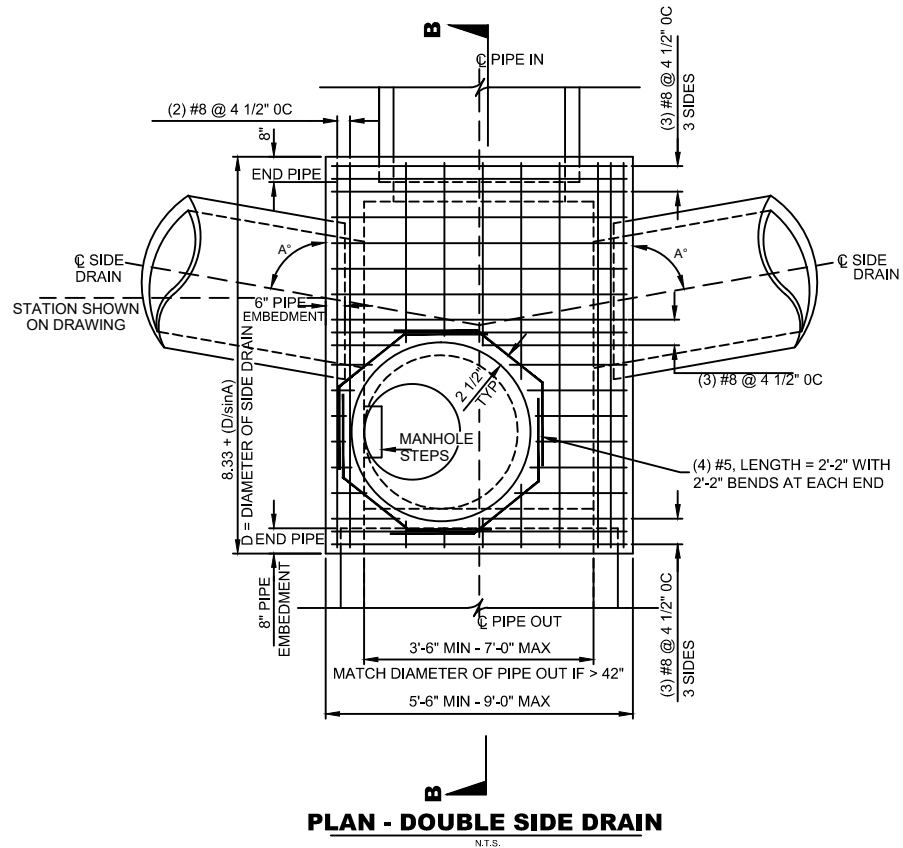
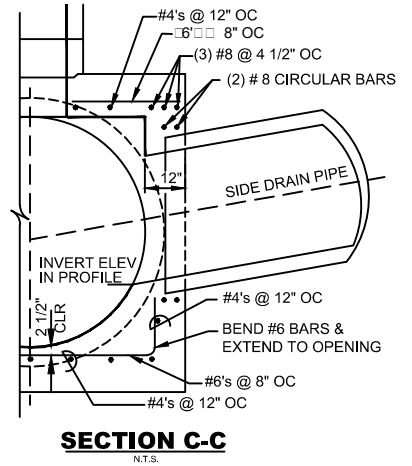
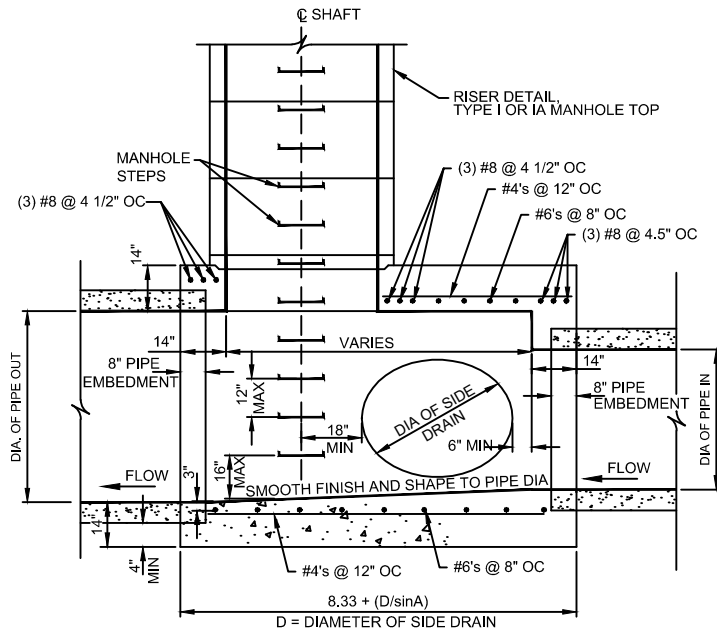
1. ALL BARS SHALL BE DEFORMED BARS CONFORMING TO ASTM-A706 GRADE 60.
2. CONCRETE SHALL BE MADE WITH TYPE V CEMENT IN ACCORDANCE WITH ASTM C-150. MINIMUM COMPRESSIVE 28 DAY STRENGTH = 4000 psi, MAX. SLUMP = 4"
3. CLEARANCE TO REINFORCING BARS TO BE 2 1/2" UNLESS NOTED OTHERWISE.
4. FOR PRECAST RCB, THE REINFORCING SHALL BE IN ACCORDANCE WITH MANUFACTURER DESIGN, AS APPROVED BY THE ENGINEER.

TYPE II-SD MANHOLE - RCB

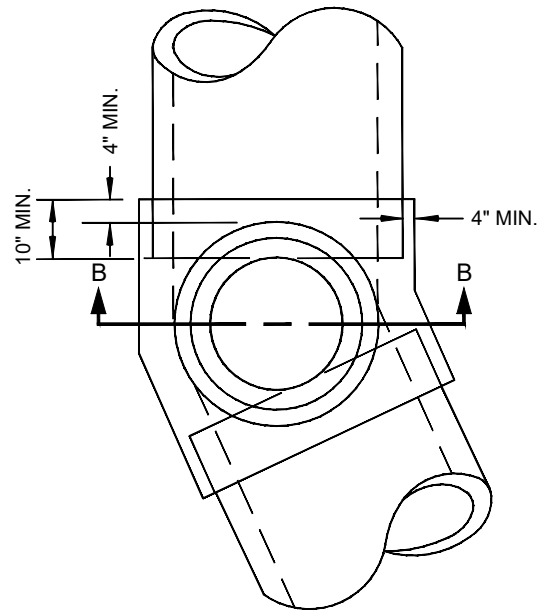
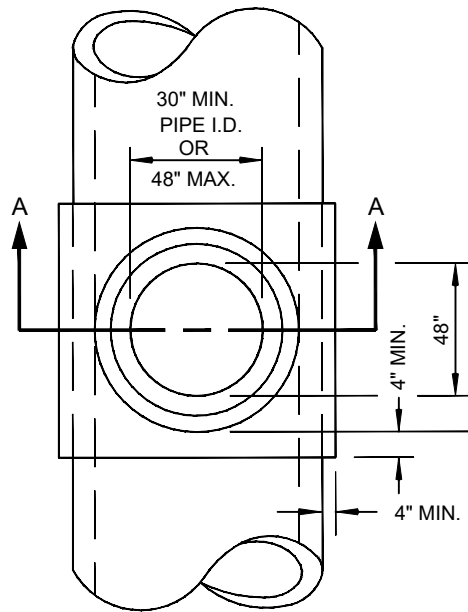
SPECIFICATION REFERENCE		AGENCY APPROVED					
		B	C	H	L	M	N
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		TYPE II-SD MANHOLE					
		DATE 07-01-14	DWG. NO.	405.2	SHEET	1 OF 3	



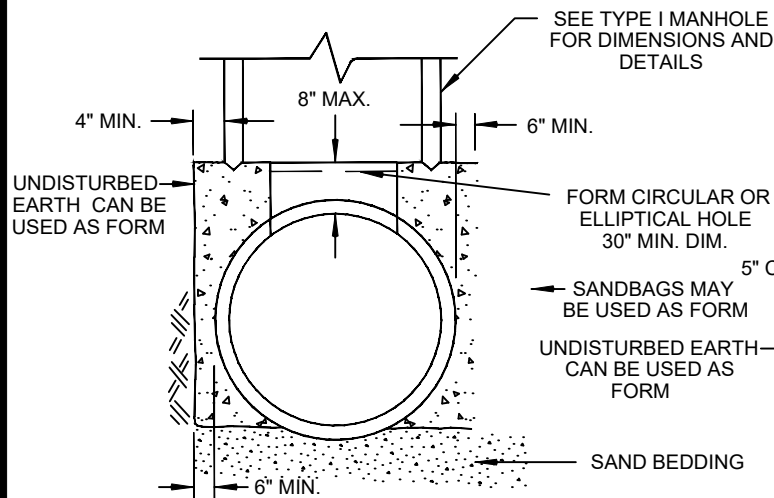
AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		TYPE II-SD MANHOLE					
DATE 07-01-14		DWG. NO. 405.2		SHEET		2 OF 3	



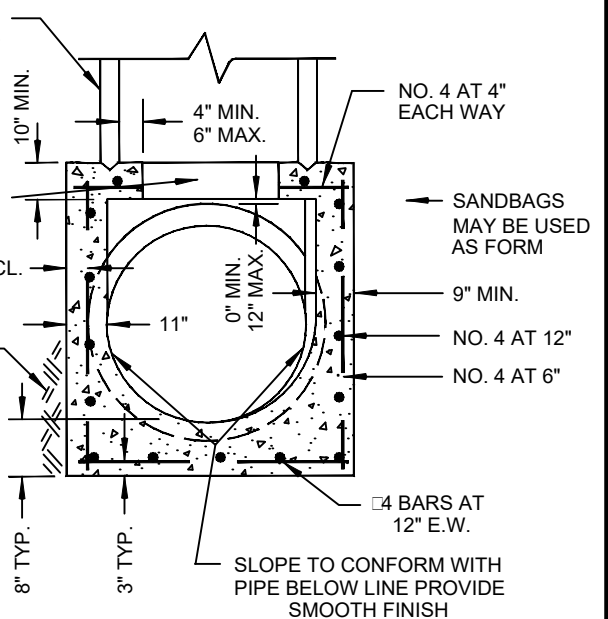
AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		TYPE II-SD MANHOLE					
DATE 07-01-14		DWG. NO. 405.2		SHEET		3 OF 3	



PLAN



SECTION A-A
TANGENT

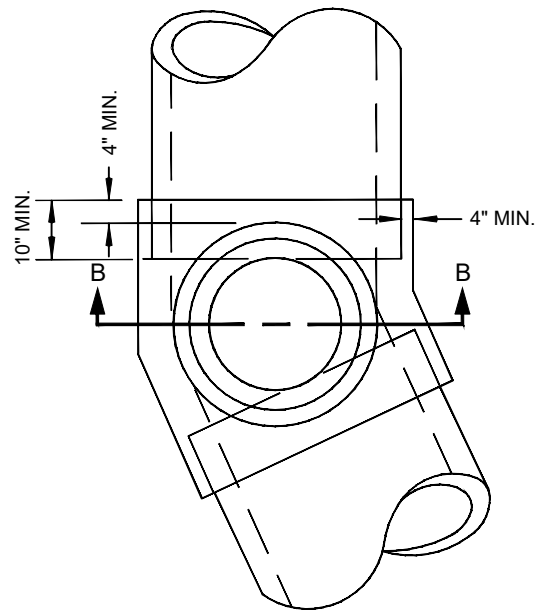
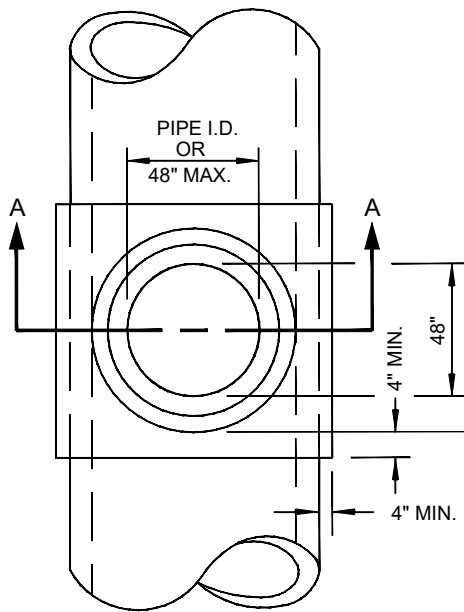


SECTION B-B
ANGLE POINT

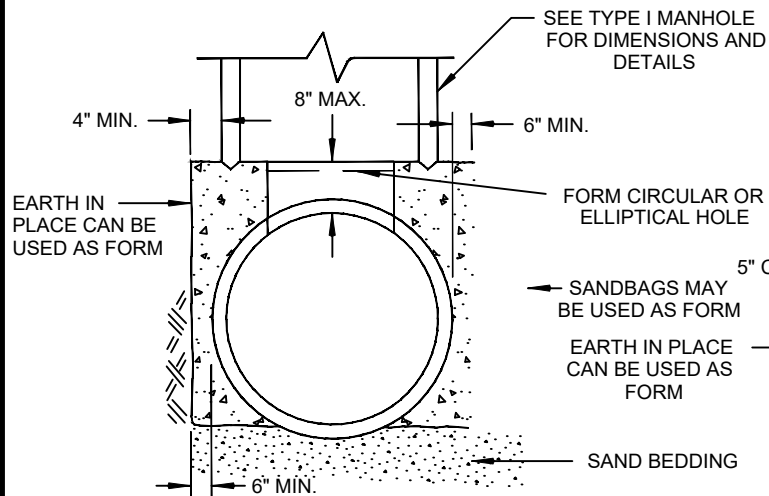
NOTE:

1. STEPS SHALL BE INSTALLED ON THE UPSTREAM WALL OF THE MANHOLE.
2. THE USE OF A 30" RING AND COVER SHALL BE APPROVED BY THE ENTITY ENGINEER.

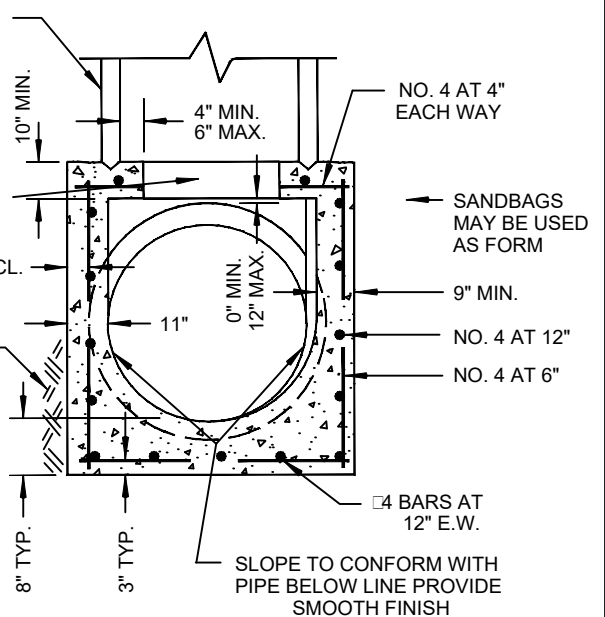
SPECIFICATION REFERENCE		AGENCY APPROVED						UNIFORM STANDARD DRAWINGS	
501	CONCRETE		B	C	H	L	M	N	CLARK COUNTY AREA
505	REINFORCING STEEL	TYPE III MANHOLE 30 INCH RING AND COVER							
609	CATCH BASINS, MANHOLES □ INLETS								
		DATE 11-10-05	DWG. NO.	406.1					



PLAN



SECTION A-A
TANGENT



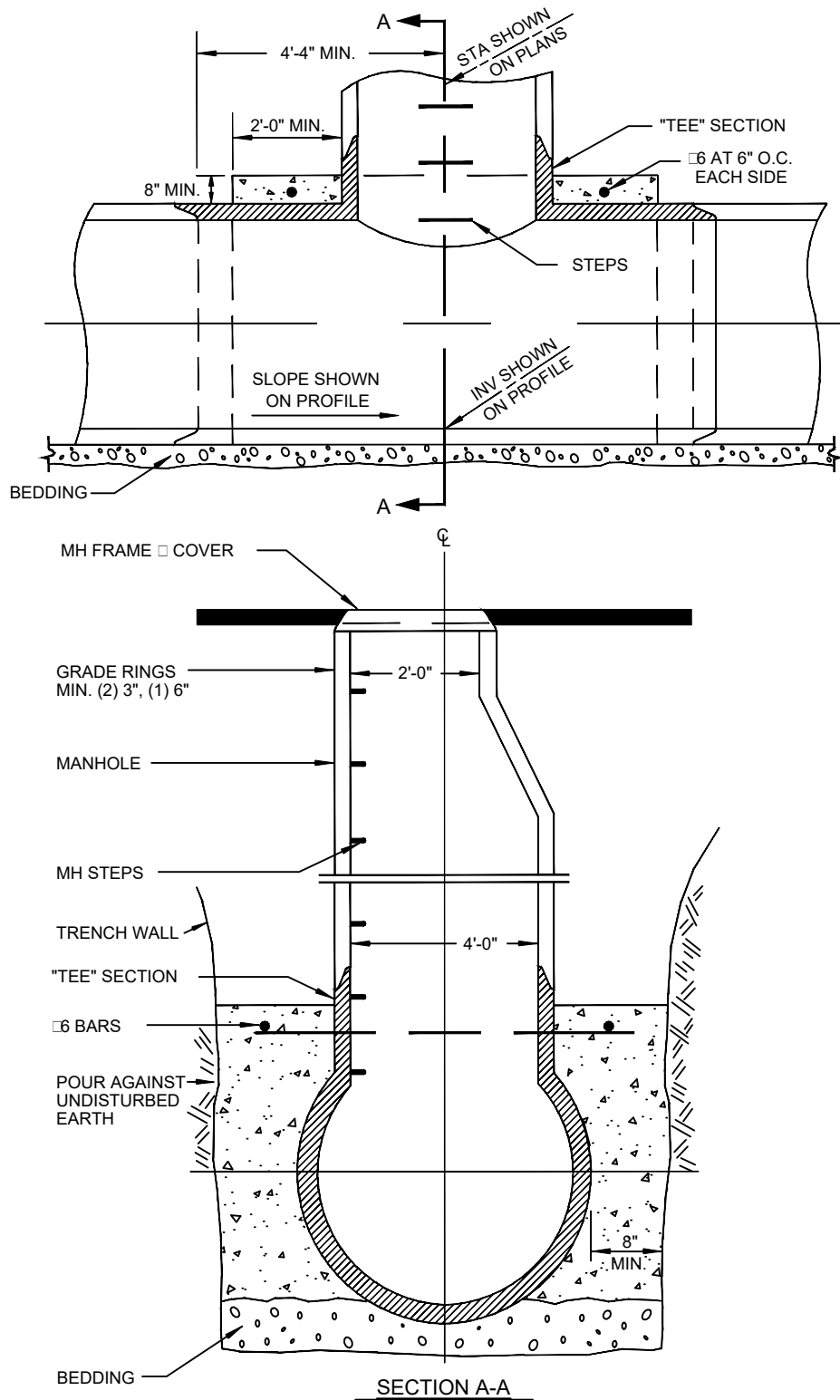
SECTION B-B
ANGLE POINT

NOTE:

1. STEPS SHALL BE INSTALLED ON THE UPSTREAM WALL OF THE MANHOLE.

		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
501	CONCRETE	TYPE III MANHOLE							
505	REINFORCING STEEL								
609	CATCH BASINS, MANHOLES □ INLETS								
.		DATE	DWG. NO.		406				

		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
501	CONCRETE	PRECAST MANHOLE TEES 30 INCH RING AND COVER							
609	CATCH BASINS, MANHOLES □ INLETS								
.		DATE 11-10-05	DWG. NO.	407.1					



SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
501	CONCRETE	PRECAST MANHOLE TEES					
609	CATCH BASINS, MANHOLES & INLETS						
DATE		DWG. NO.		407			

AGENCY APPROVED

B

C

H

L

M

N

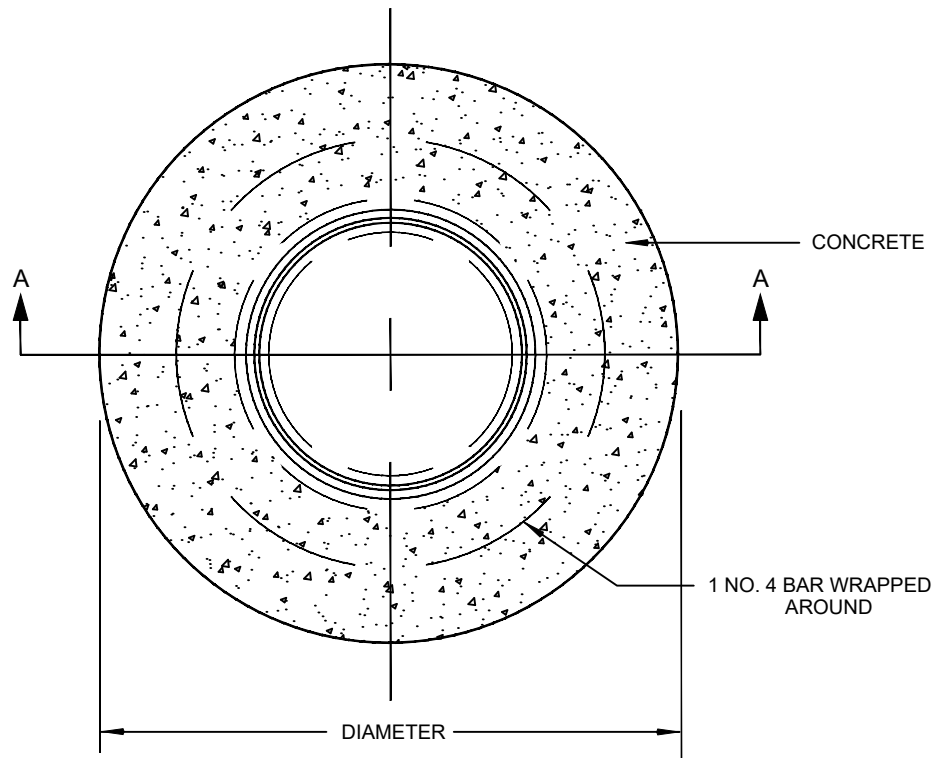
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

PRECAST MANHOLE TEES

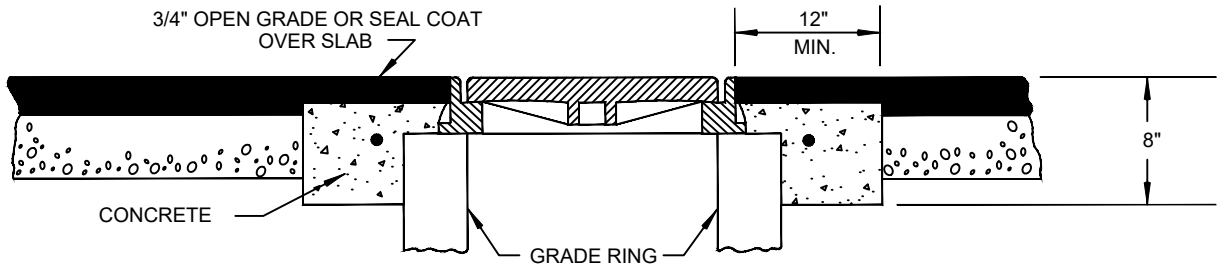
DATE

DWG. NO.

407



PLAN



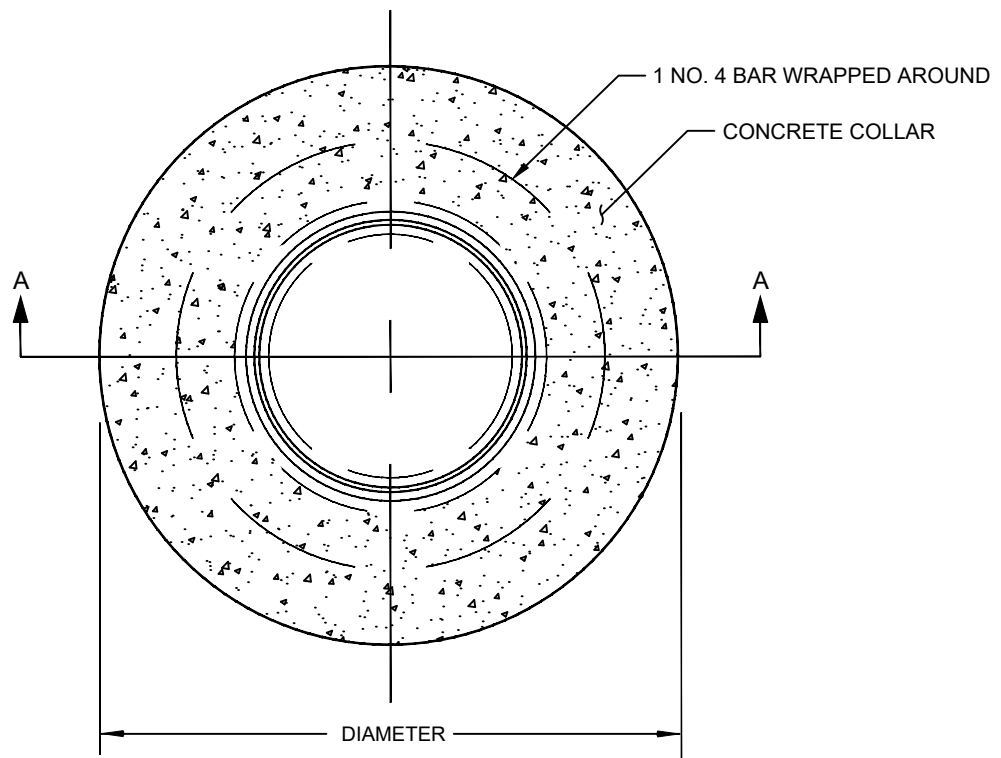
SECTION A-A

NOTES:

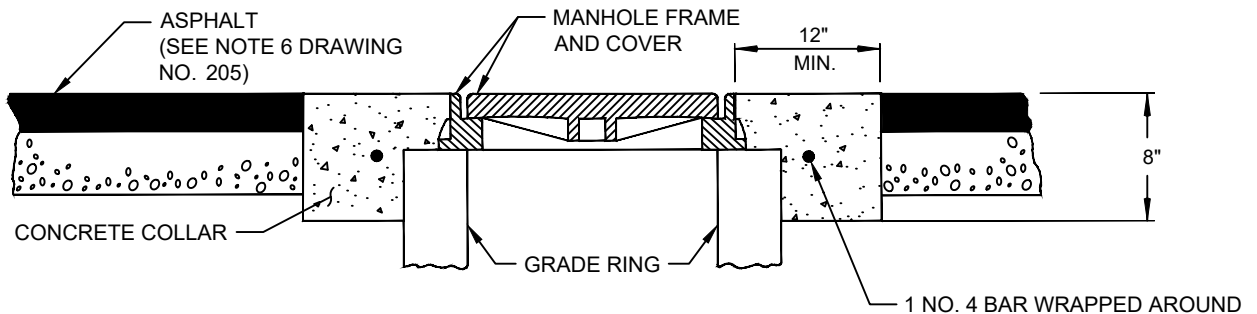
1. CONCRETE COLLAR TO BE CONSTRUCTED 1/8" BELOW SURFACE OF DENSE GRADE WHERE OPEN GRADE IS NOT USED.
2. CONCRETE COLLAR NOT REQUIRED IN UNINCORPORATED CLARK COUNTY  RESIDENTIAL STREETS LESS THAN 80' R/W WIDTH.
3. THE USE OF 30" RING AND COVER SHALL BE APPROVED BY THE ENTITY ENGINEER.
4. WHEN INSTALLED WITHIN PEDESTRIAN ACCESS ROUTES, TOP OF MANHOLE COVERS SHALL HAVE NO VERTICAL SURFACE DISCONTINUITIES GREATER THAN 1/4" WITH ADJACENT SURFACE, HAVE NO GAPS GREATER THAN 1/2" REGARDLESS OF CONSTRUCTION TOLERANCES, AND BE FIRM, STABLE, AND SLIP RESISTANT.

AGENCY APPROVED	B		H	L	M	N	R

SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA	
501	CONCRETE	CONCRETE COLLAR AROUND MANHOLES 30 INCH RING AND COVER	
505	REINFORCING STEEL		
		DATE 01-09-20	DWG. NO. 408.1



PLAN



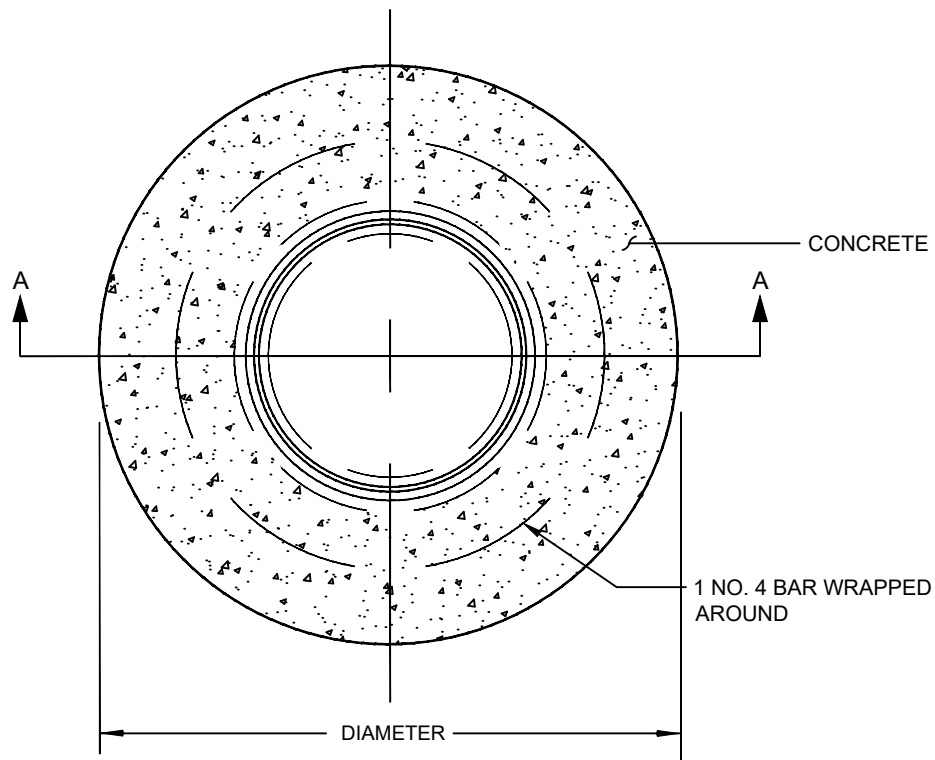
SECTION A-A

NOTES

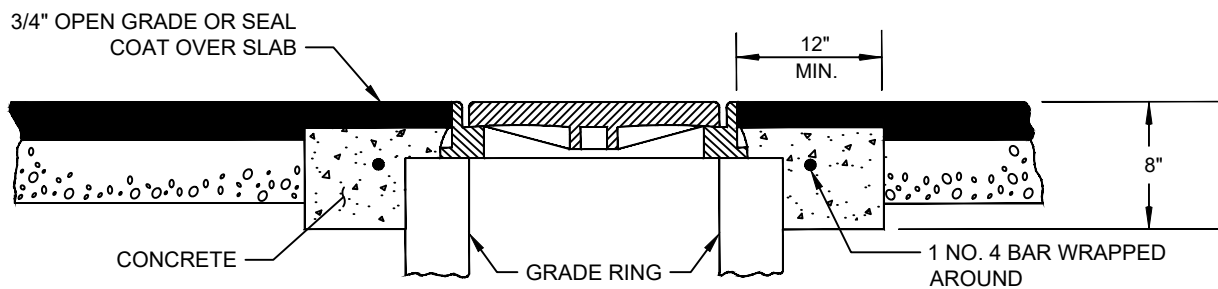
1. CONCRETE COLLAR, FRAME, AND COVER SHALL BE CONSTRUCTED 1/8" BELOW THE ADJACENT SURFACE, $\pm 1/16"$.
2. CONCRETE COLLAR NOT REQUIRED IN UNINCORPORATED CLARK COUNTY RESIDENTIAL STREETS LESS THAN 80' R/W WIDTH.
3. IF MANHOLE IS MORE THAN 1-1/2" ABOVE OR BELOW THE ADJACENT ROADWAY SURFACE, MANHOLE SHALL BE ADJUSTED TO GRADE BY UTILITY OWNER.
4. IF MANHOLE IS MORE THAN 1/4" ABOVE OR BELOW THE ADJACENT ROADWAY SURFACE IN A BICYCLE LANE, MANHOLE SHALL BE ADJUSTED TO GRADE BY UTILITY OWNER.
5. THE USE OF 30" RING AND COVER SHALL BE APPROVED BY THE ENTITY ENGINEER.
6. WHEN INSTALLED WITHIN PEDESTRIAN ACCESS ROUTES, TOP OF MANHOLE COVERS SHALL HAVE NO VERTICAL SURFACE DISCONTINUITIES GREATER THAN 1/4" WITH ADJACENT SURFACE, HAVE NO GAPS GREATER THAN 1/2" REGARDLESS OF CONSTRUCTION TOLERANCES, AND BE FIRM, STABLE, AND SLIP RESISTANT.

AGENCY APPROVED					L		

SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA		
501	CONCRETE	SUPPLEMENTAL DRAWING		
505	REINFORCING STEEL			
		CONCRETE COLLAR AROUND MANHOLES 30 INCH RING AND COVER		
.		DATE 01-09-20	DWG. NO. 408.1.S1	



PLAN



SECTION A-A

NOTES

1. CONCRETE COLLAR TO BE CONSTRUCTED 1/8" BELOW SURFACE OF DENSE GRADE WHERE OPEN GRADE IS NOT USED.
2. CONCRETE COLLAR NOT REQUIRED IN UNINCORPORATED CLARK COUNTY RESIDENTIAL STREETS LESS THAN 80' R/W WIDTH.
3. WHEN INSTALLED WITHIN PEDESTRIAN ACCESS ROUTES, TOP OF MANHOLE COVERS SHALL HAVE NO VERTICAL SURFACE DISCONTINUITIES GREATER THAN 1/4" WITH ADJACENT SURFACE, HAVE NO GAPS GREATER THAN 1/2" REGARDLESS OF CONSTRUCTION TOLERANCES, AND BE FIRM, STABLE, AND SLIP RESISTANT.

AGENCY APPROVED	B	C	H	L	M	N	R

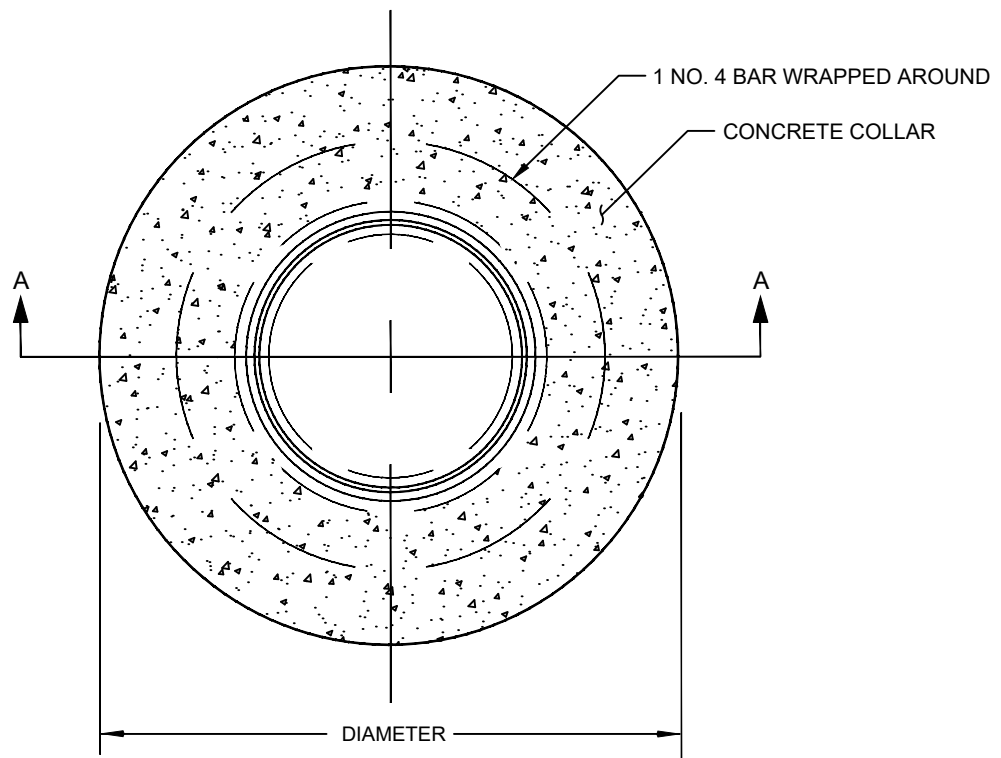
SPECIFICATION REFERENCE

501	CONCRETE
505	REINFORCING STEEL

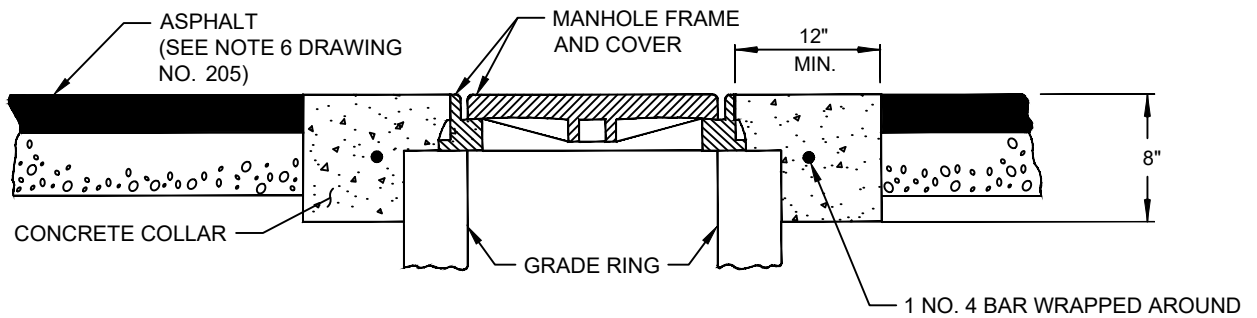
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

CONCRETE COLLAR AROUND
MANHOLES

DATE 01-09-20	DWG. NO. 408



PLAN



SECTION A-A

NOTES

1. CONCRETE COLLAR, FRAME, AND COVER SHALL BE CONSTRUCTED 1/8" BELOW THE ADJACENT SURFACE, $\pm 1/16"$.
2. CONCRETE COLLAR NOT REQUIRED IN UNINCORPORATED CLARK COUNTY RESIDENTIAL STREETS LESS THAN 80' R/W WIDTH.
3. IF MANHOLE IS MORE THAN 1-1/2" ABOVE OR BELOW THE ADJACENT ROADWAY SURFACE, MANHOLE SHALL BE ADJUSTED TO GRADE BY UTILITY OWNER.
4. IF MANHOLE IS MORE THAN 1/4" ABOVE OR BELOW THE ADJACENT ROADWAY SURFACE IN A BICYCLE LANE, MANHOLE SHALL BE ADJUSTED TO GRADE BY UTILITY OWNER.
5. WHEN INSTALLED WITHIN PEDESTRIAN ACCESS ROUTES, TOP OF MANHOLE COVERS SHALL HAVE NO VERTICAL SURFACE DISCONTINUITIES GREATER THAN 1/4" WITH ADJACENT SURFACE, HAVE NO GAPS GREATER THAN 1/2" REGARDLESS OF CONSTRUCTION TOLERANCES, AND BE FIRM, STABLE, AND SLIP RESISTANT.

AGENCY APPROVED

L

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

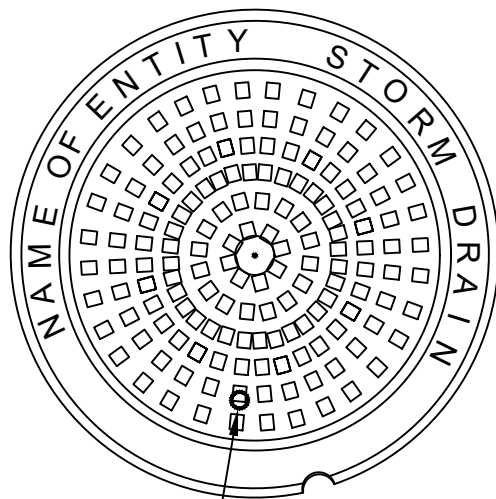
501 CONCRETE

SUPPLEMENTAL DRAWING

505 REINFORCING STEEL

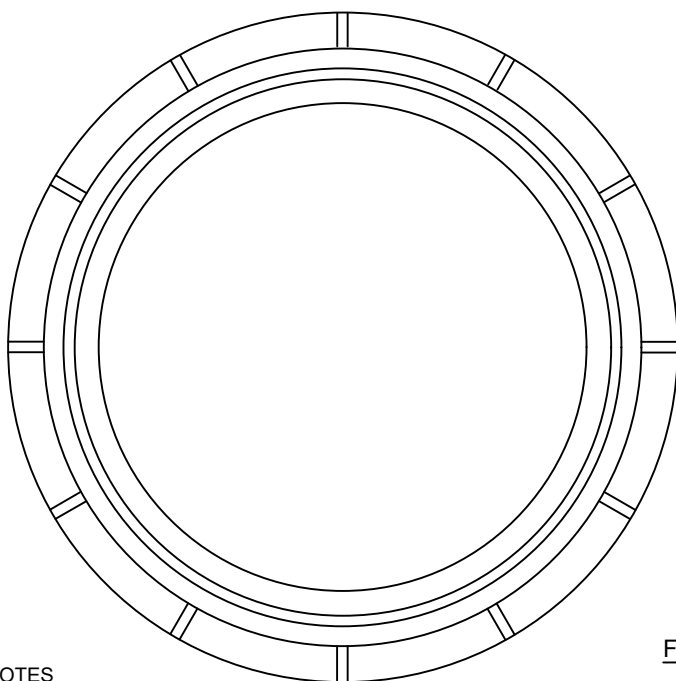
CONCRETE COLLAR AROUND
MANHOLES

DATE 01-09-20 DWG. NO. 408.S1

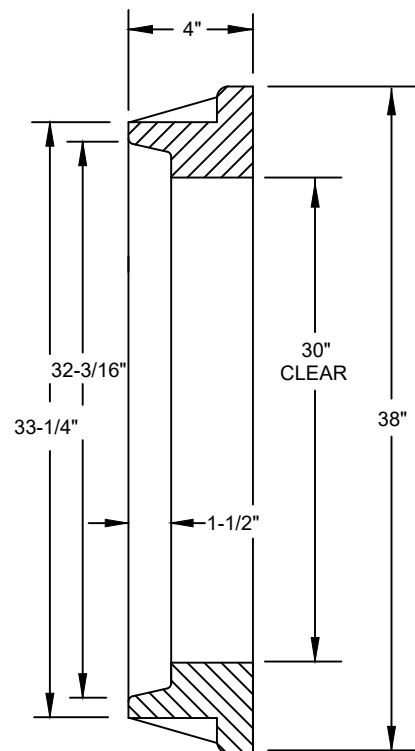
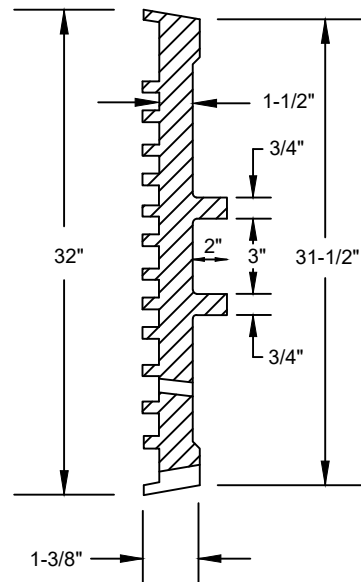


1" DIA. VENT HOLE

COVER



FRAME



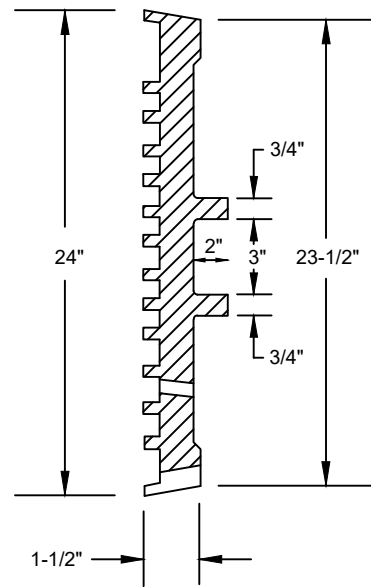
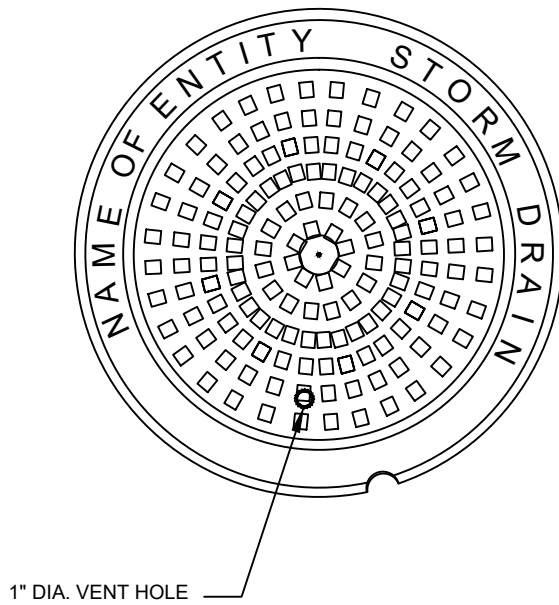
NOTES

1. FRAME AND COVER TO BE ALHAMBRA FOUNDRY COMPANY TYPE A1252B IN ACCORDANCE WITH ASTM A-48, CLASS 30, OR APPROVED EQUAL.
2. CAST IRON SHALL HAVE MINIMUM TENSILE STRENGTH OF 30,000 P.S.I.
3. FRAME AND COVER MACHINED TO FIT.
4. WEIGHT OF FRAME AND COVER 330 LBS. MINIMUM.
5. THE USE OF A 30" RING AND COVER SHALL BE APPROVED BY THE ENTITY ENGINEER.

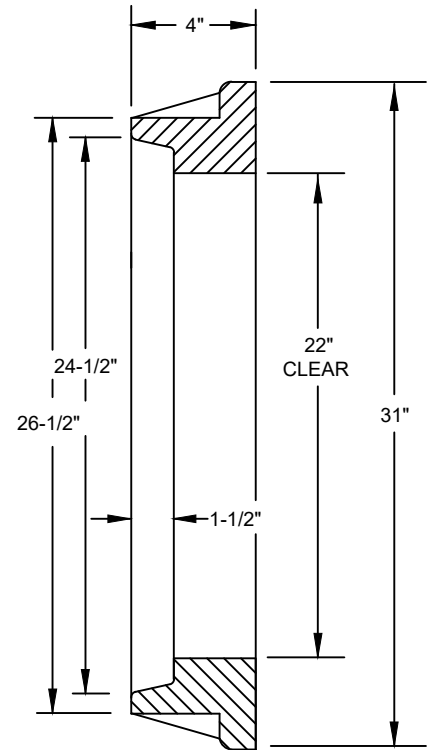
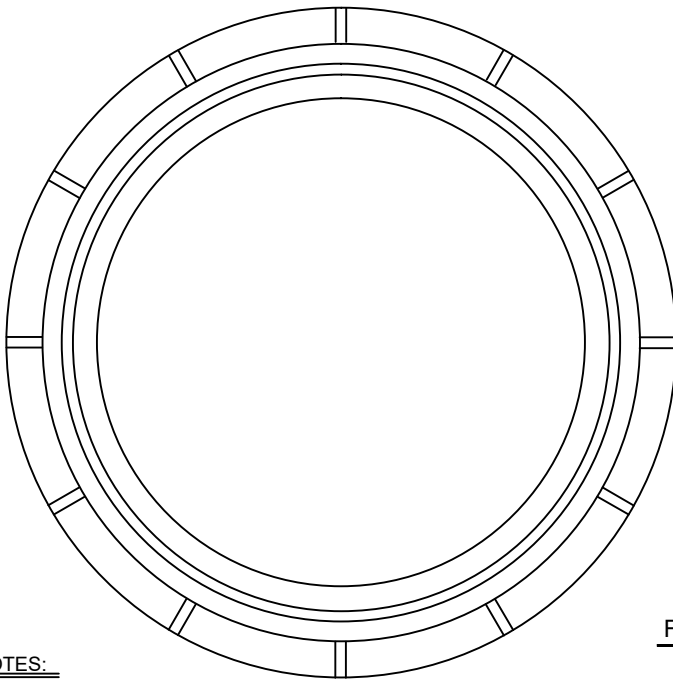
AGENCY APPROVED	B	C	H	L	M	N	R

SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA	
712	MISCELLANEOUS METALS	STANDARD MANHOLE 30 INCH COVER AND RING	
DATE 10/08/20		DWG. NO. 409.1	

Effective 12/10/2020 to 06/09/2021



COVER

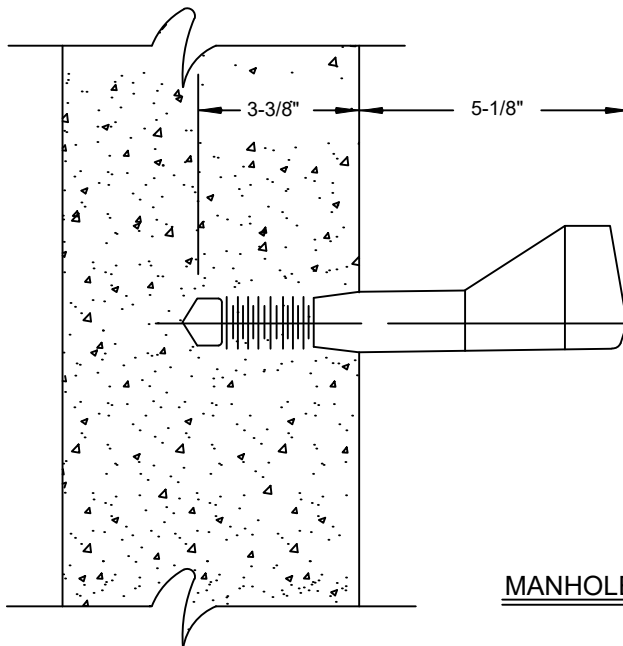
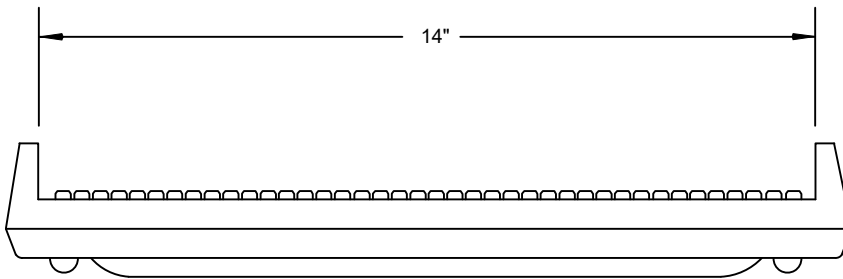
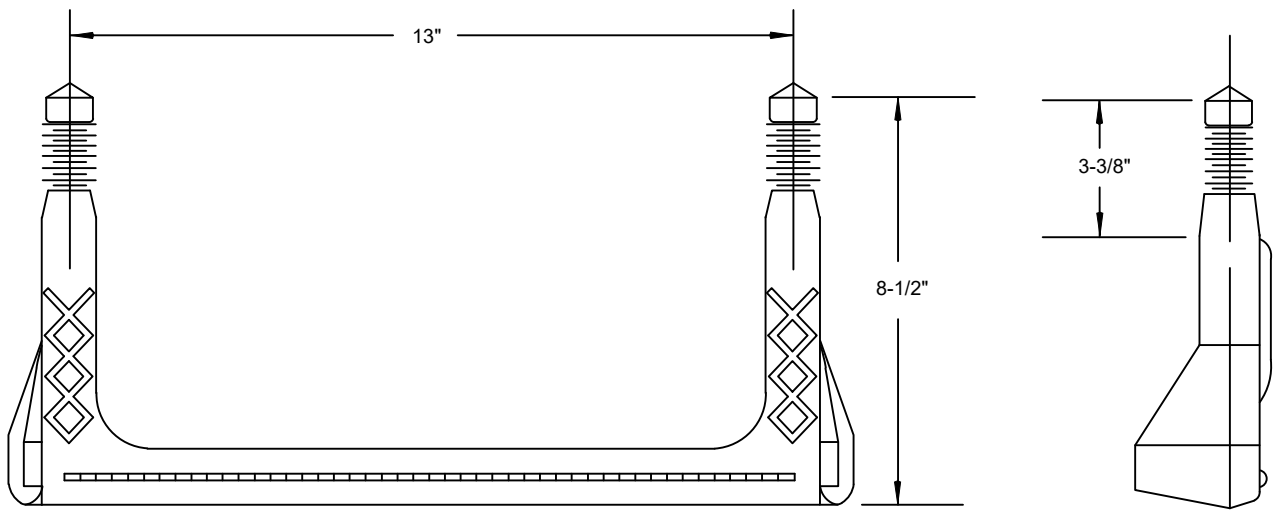


FRAME

NOTES:

1. FRAME AND COVER TO BE ALHAMBRA FOUNDRY COMPANY TYPE A1310 IN ACCORDANCE WITH ASTM A-48, CLASS 30, OR APPROVED EQUAL.
2. CAST IRON SHALL HAVE MINIMUM TENSILE STRENGTH OF 30,000 P.S.I.
3. FRAME AND COVER MACHINED TO FIT.
4. WEIGHT OF FRAME AND COVER 330 LBS. MINIMUM.

AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
712	MISCELLANEOUS METALS	STANDARD MANHOLE COVER AND RING					
DATE		DWG. NO. 409					



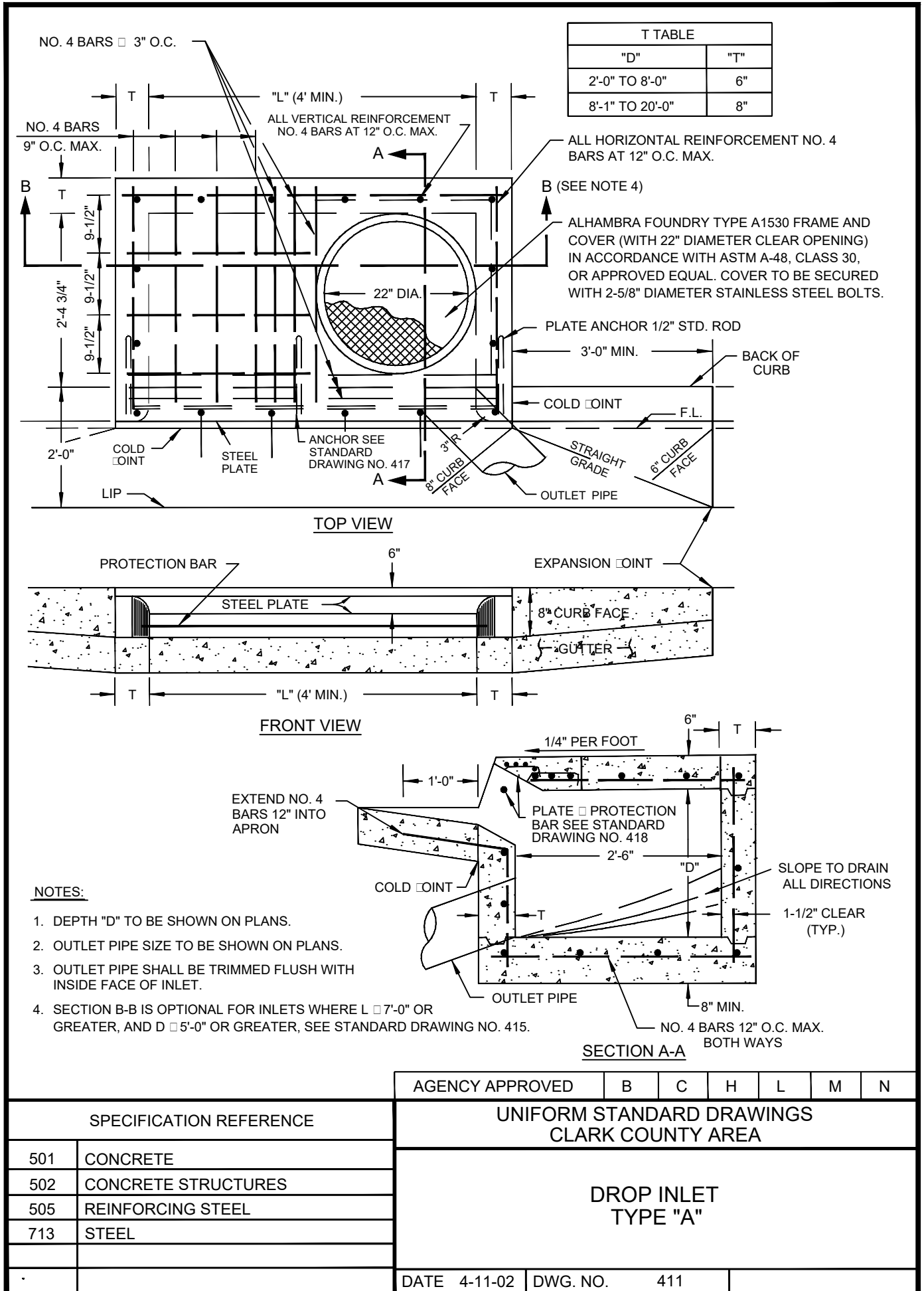
NOTES:

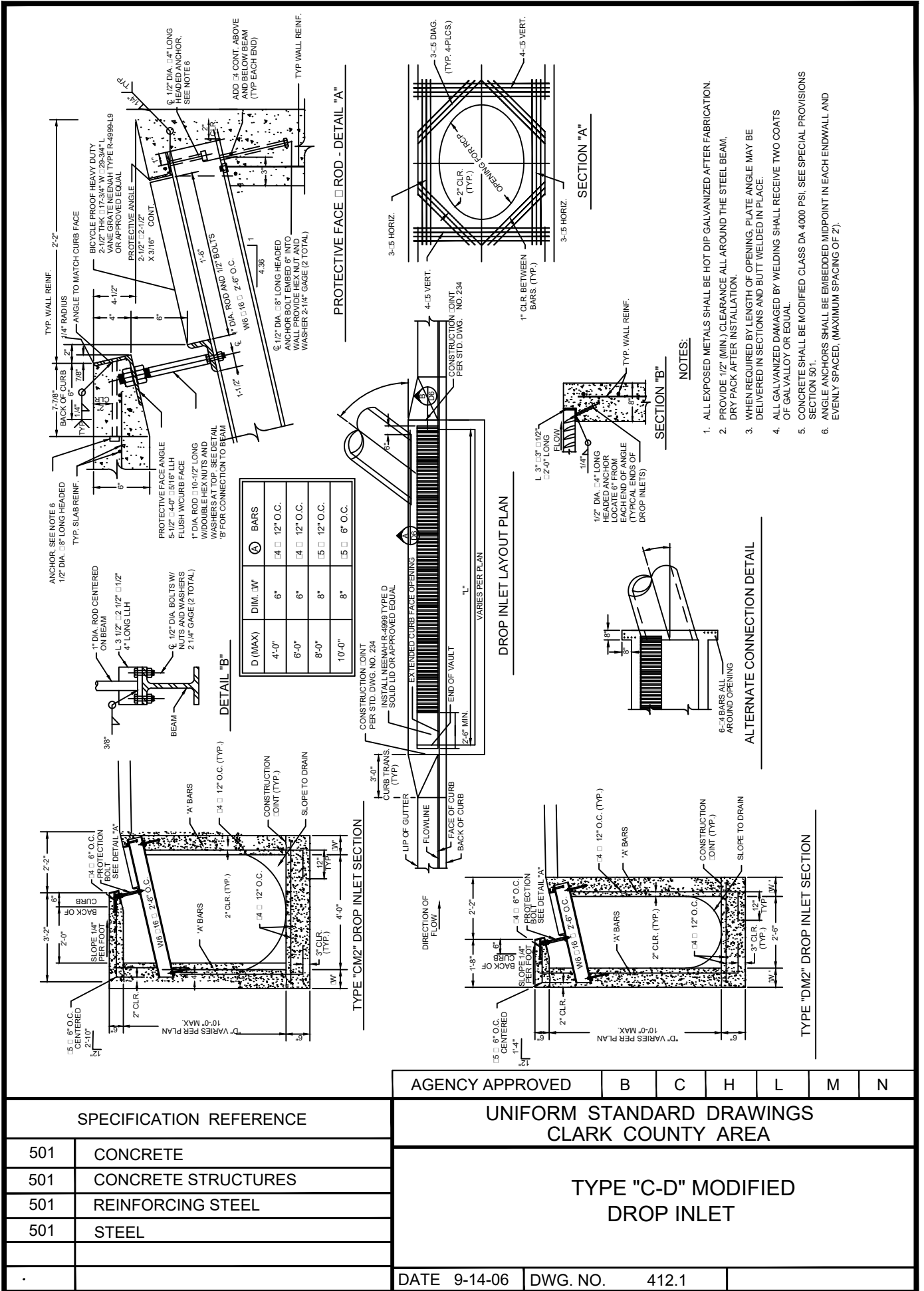
1. MANHOLE STEP SHALL CONFORM TO A.S.T.M. C-478 AND C-497.
2. ALUMINUM STEPS SHALL BE SOLID, MADE FROM MATERIAL IN CONFORMANCE WITH A.S.T.M. B221 (ALLOY 6005-TS).
3. REINFORCED PLASTIC STEPS SHALL BE POLYPROPYLENE PLASTIC, WITH NO. 3 (MIN.) DEFORMED STEEL ROD (GRADE 60/A.S.T.M. A-615).
4. STEPS SHALL BE EVENLY SPACED FROM 12" TO 16".
5. ALL STEPS MUST BE EPOXIED IN PLACE DURING THE INSTALLATION PROCESS.

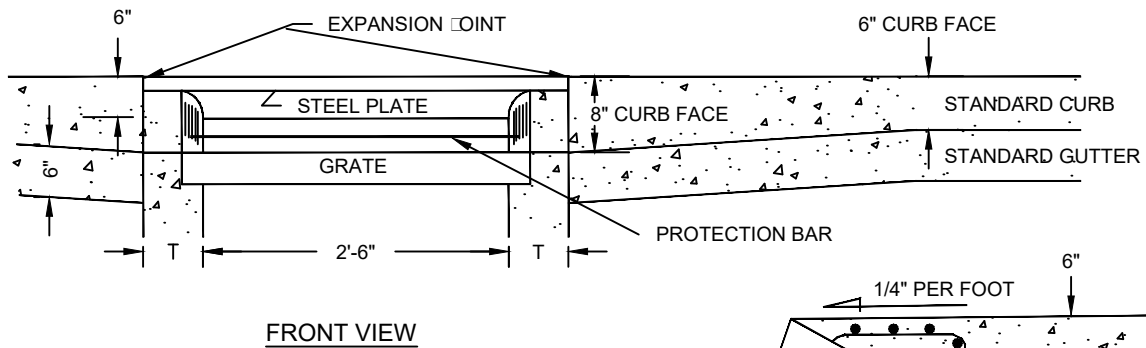
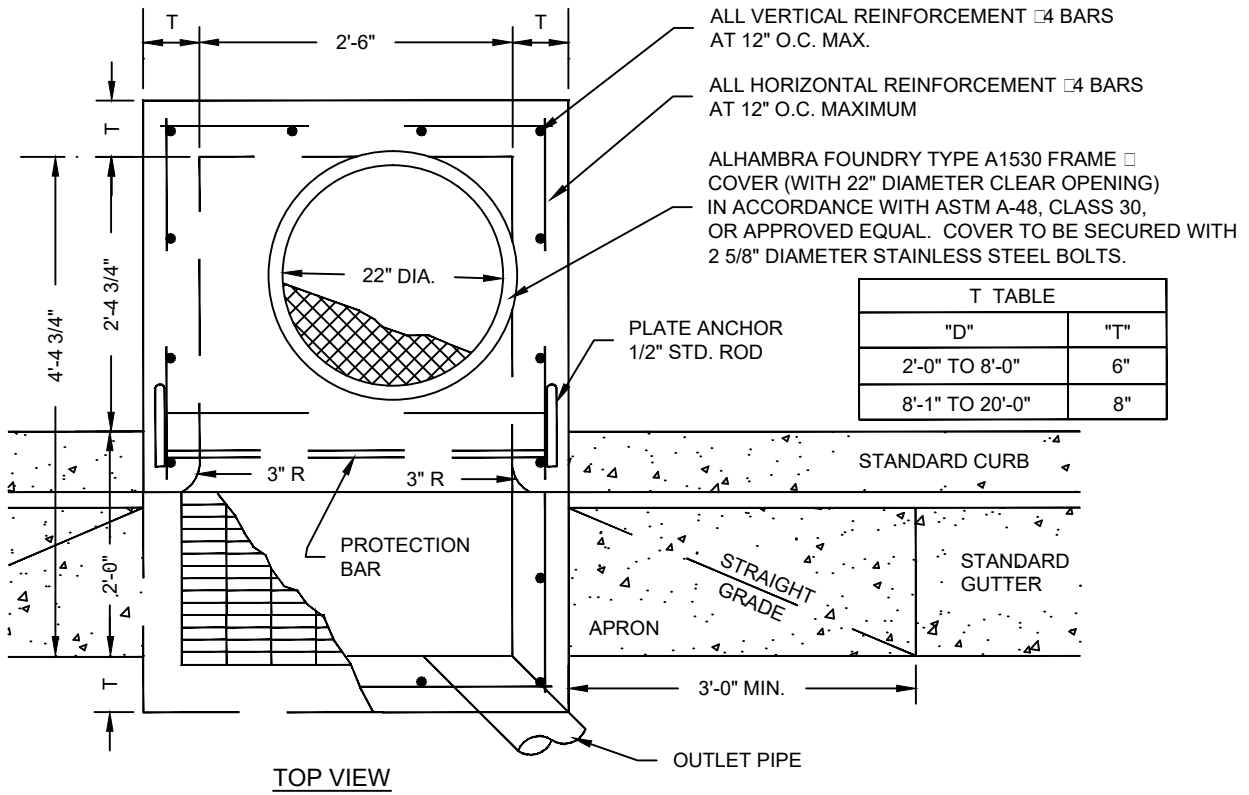
MANHOLE STEPS

SPECIFICATION REFERENCE		AGENCY APPROVED							B	C	H	L	M	N
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA												
		STANDARD MANHOLE STEPS												
		DATE 3-11-04 DWG. NO. 410												



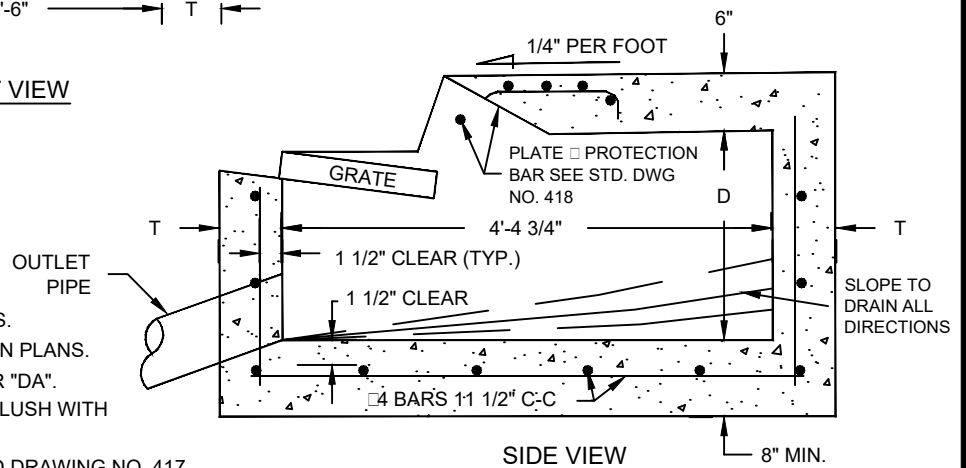




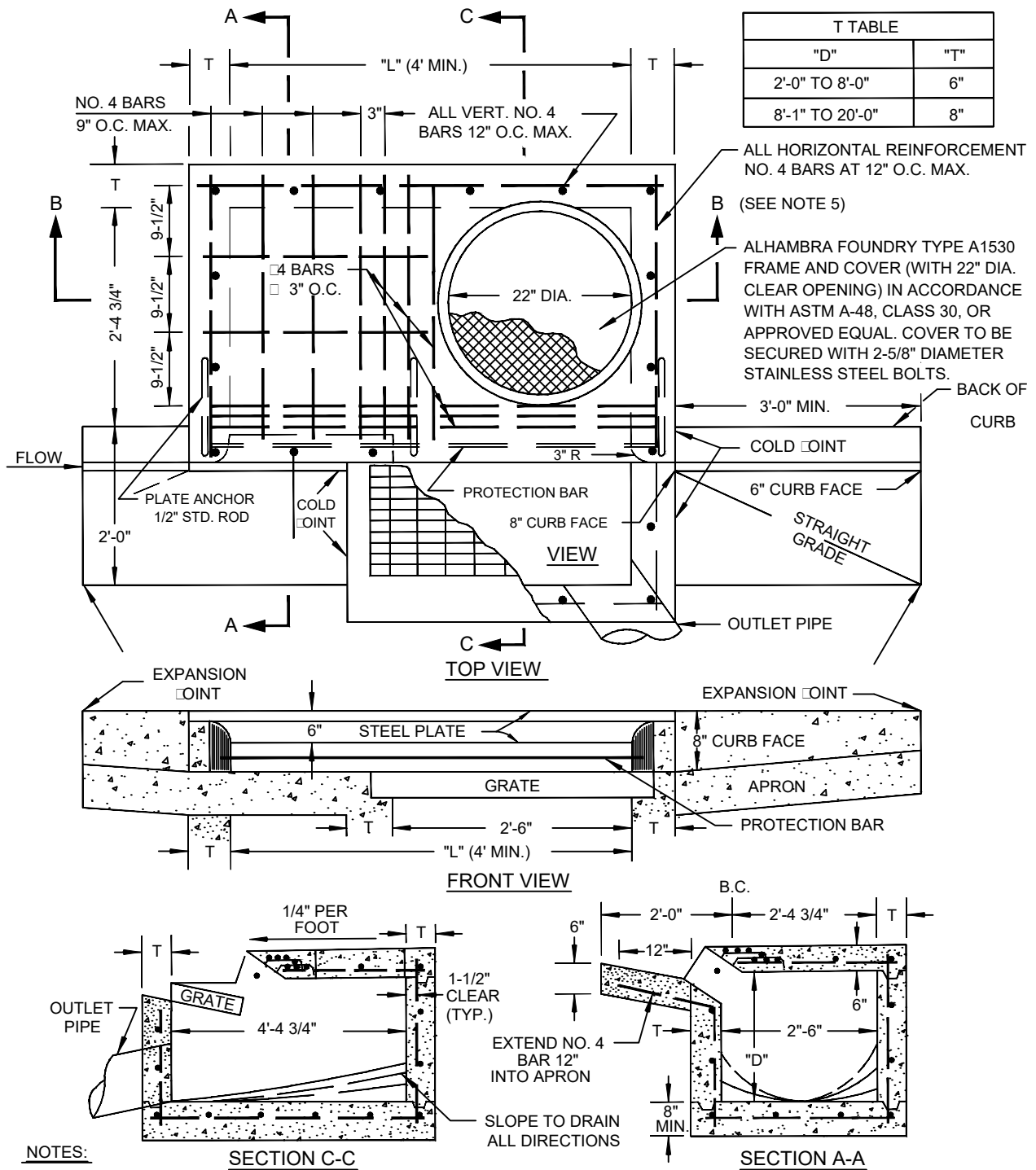


NOTES:

1. DEPTH "D" TO BE SHOWN ON PLANS.
2. OUTLET PIPE SIZE TO BE SHOWN ON PLANS.
3. CONCRETE SHALL BE CLASS "D" OR "DA".
4. OUTLET PIPE SHALL BE TRIMMED FLUSH WITH INSIDE FACE OF INLET.
5. FOR GRATE DETAIL SEE STANDARD DRAWING NO. 417



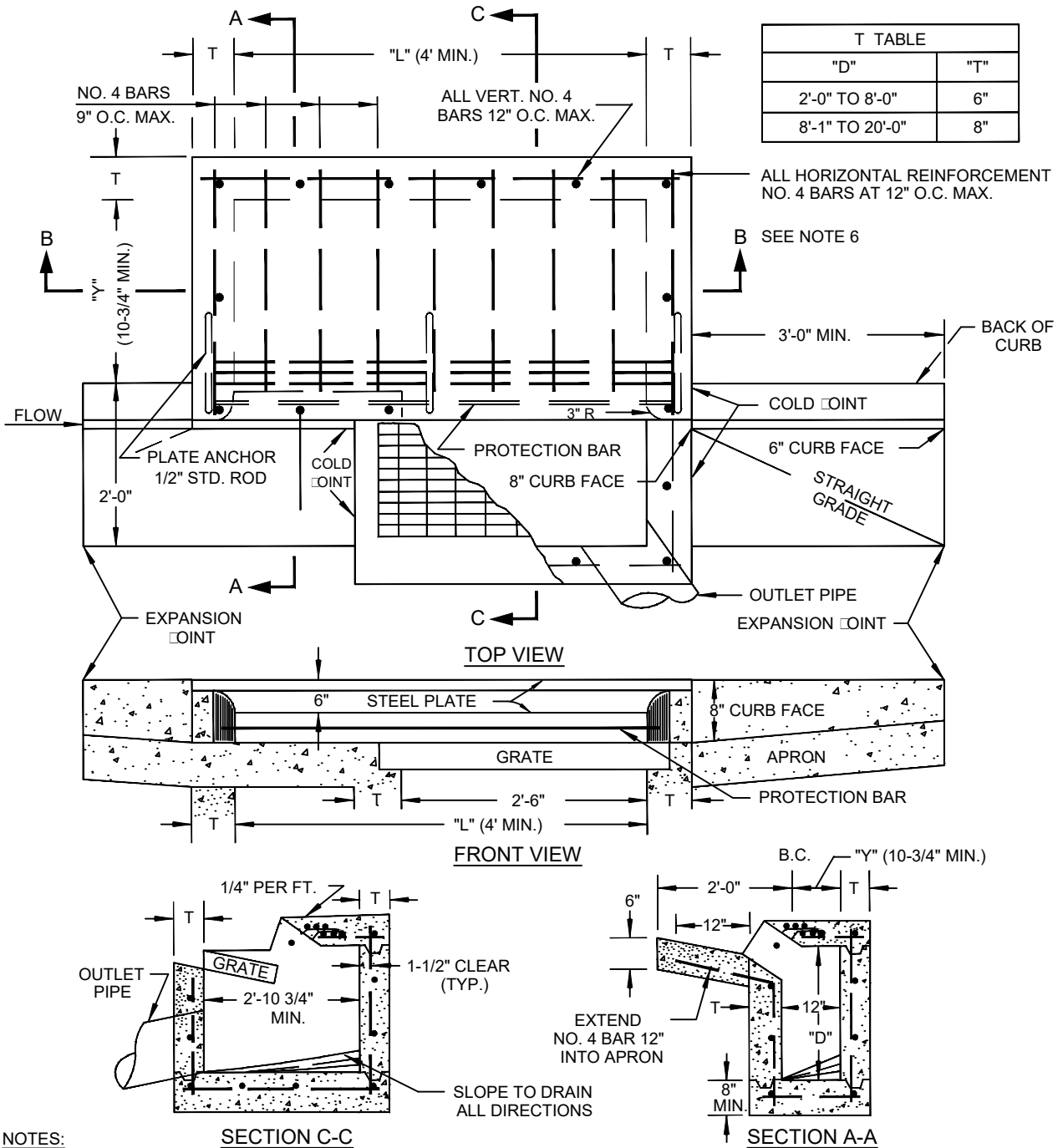
SPECIFICATION REFERENCE		AGENCY APPROVED						
501	CONCRETE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
502	CONCRETE STRUCTURES							
505	REINFORCING STEEL							
713	STEEL							
		DROP INLET TYPE "B"						
		DATE	4-11-02	DWG. NO.	412			



NOTES:

1. DEPTH "D" TO BE SHOWN ON PLANS.
2. OUTLET PIPE SIZE TO BE SHOWN ON PLANS.
3. WHEN LENGTH "L" EXCEEDS 4'-0" SUPPORT BOLTS REQUIRED, SEE STANDARD DRAWING NO. 418.
4. FOR GRATE DETAIL SEE STANDARD DRAWING NO. 417.
5. SECTION B-B IS OPTIONAL FOR INLETS WHERE L $\geq$ 7'-0" AND D $\geq$ 5'-0", SEE STANDARD DRAWING NO. 415.

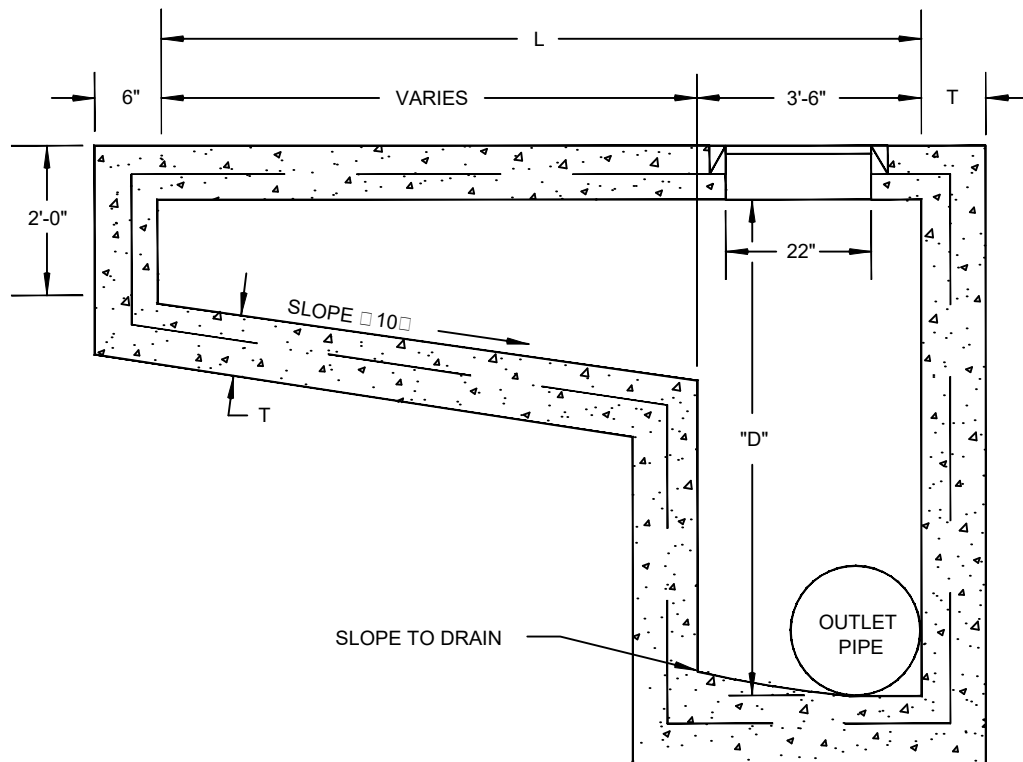
AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
501	CONCRETE	DROP INLET TYPE "C"					
502	CONCRETE STRUCTURES						
505	REINFORCING STEEL						
713	STEEL						
DATE 4-11-02		DWG. NO.		413			



NOTES:

1. DROP INLET TYPE "D" TO BE USED WHEN CONFLICTING UTILITIES ARE LOCATED IN THE SIDEWALK AREA.
2. DEPTH "D" AND DISTANCE "Y" TO BE SHOWN ON PLANS.
3. OUTLET PIPE SIZE TO BE SHOWN ON PLANS.
4. WHEN LENGTH "L" EXCEEDS 4'-0" SUPPORT BOLTS REQUIRED, SEE STANDARD DRAWING NO. 418.
5. FOR GRATE DETAIL SEE STANDARD DRAWING NO. 417.
6. SECTION B-B IS OPTIONAL FOR INLETS WHERE L $\leq$ 7'-0" AND D $\leq$ 5'-0", SEE STANDARD DRAWING NO. 415.

SPECIFICATION REFERENCE		AGENCY APPROVED					
501	CONCRETE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
502	CONCRETE STRUCTURES						
505	REINFORCING STEEL						
713	STEEL						
		DROP INLET TYPE "D"					
		DATE	4-11-02	DWG. NO.	414		



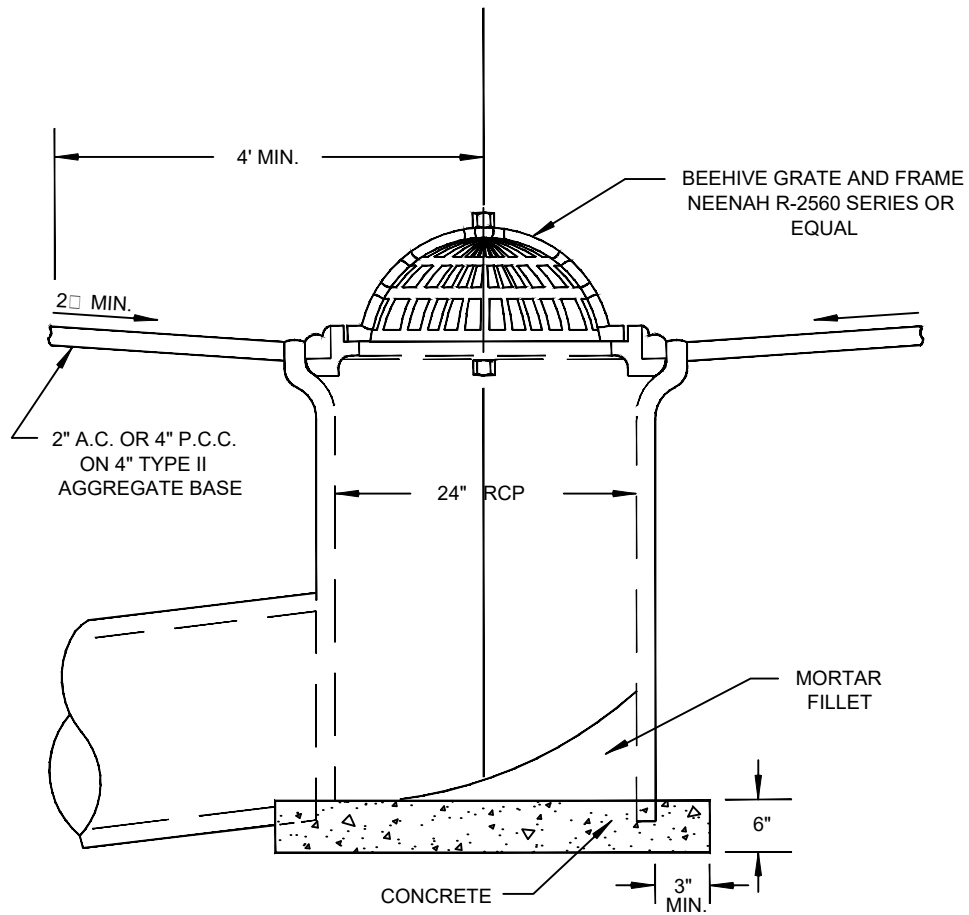
SECTION B-B

T TABLE	
"D"	"T"
2'-0" TO 8'-0"	6"
8'-1" TO 20'-0"	8"

NOTES:

1. DEPTH "D" TO BE SHOWN ON PLANS.
2. OUTLET PIPE SIZE TO BE SHOWN ON PLANS.
3. SECTION APPEARS AS SECTION B-B FOR DROP INLET TYPE "A", STANDARD DRAWING NO. 411 AND FOR DROP INLET TYPE "C" STANDARD DRAWING NO. 413.

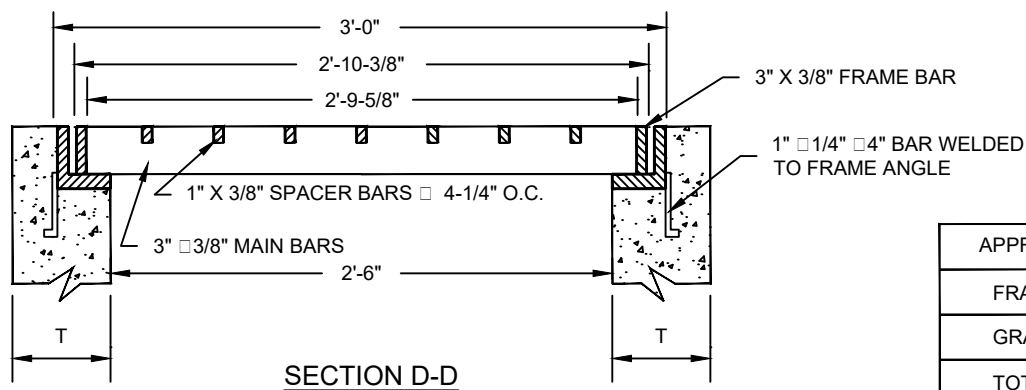
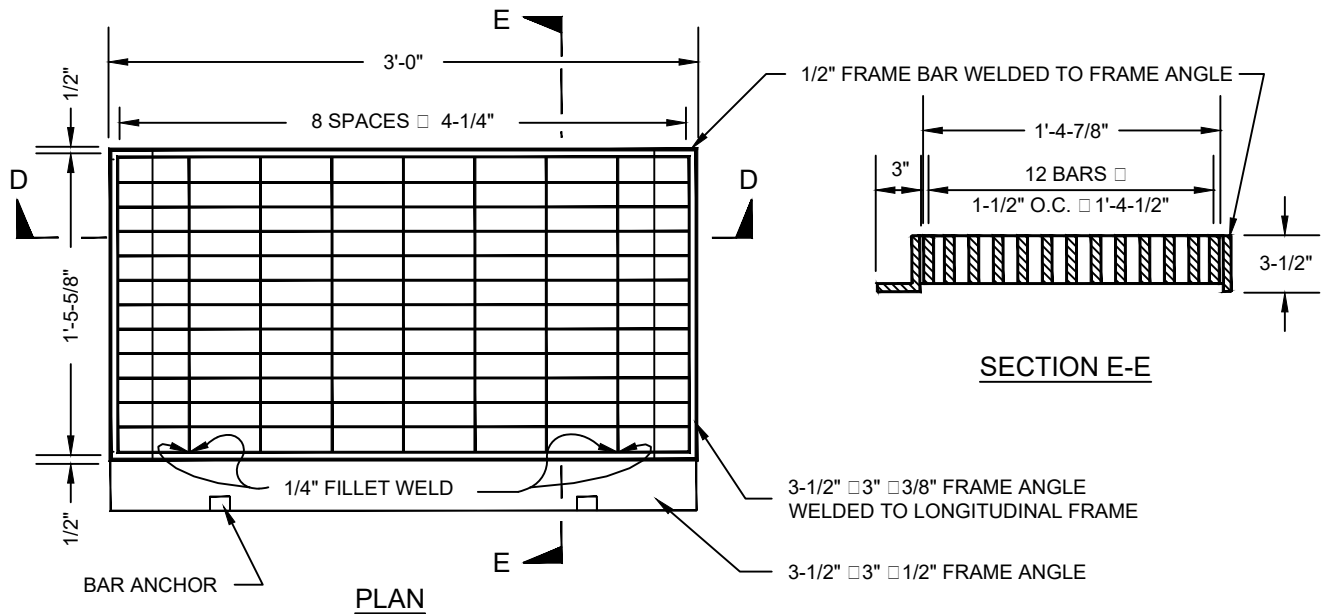
SPECIFICATION REFERENCE		AGENCY APPROVED						
501	CONCRETE	B C H L M N						
502	CONCRETE STRUCTURES	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
		DROP INLET TYPES "A" AND "B" SPECIAL DESIGN						
		DATE		DWG. NO.		415		



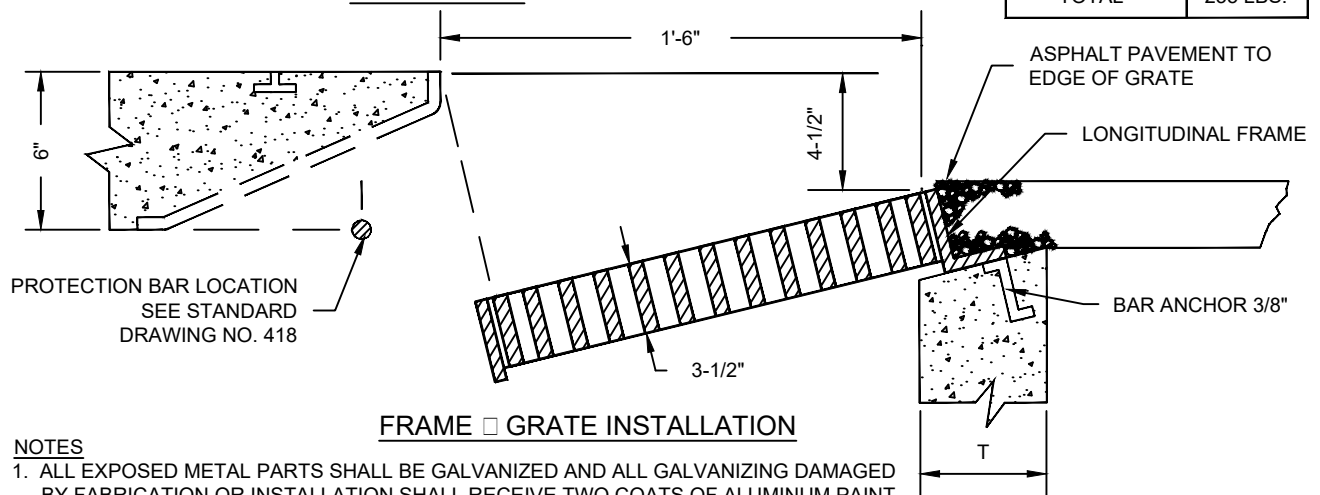
NOTE:

BEEHIVE DROP INLETS SHALL BE USED AT LOCATIONS APPROVED BY THE ENGINEER.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
603	REINFORCED CONCRETE PIPE	BEEHIVE DROP INLET											
712	MISCELLANEOUS METAL												
		DATE 12-14-00		DWG. NO.		416							



APPROXIMATE WEIGHT	
FRAME	78 LBS.
GRATE	157 LBS.
TOTAL	235 LBS.

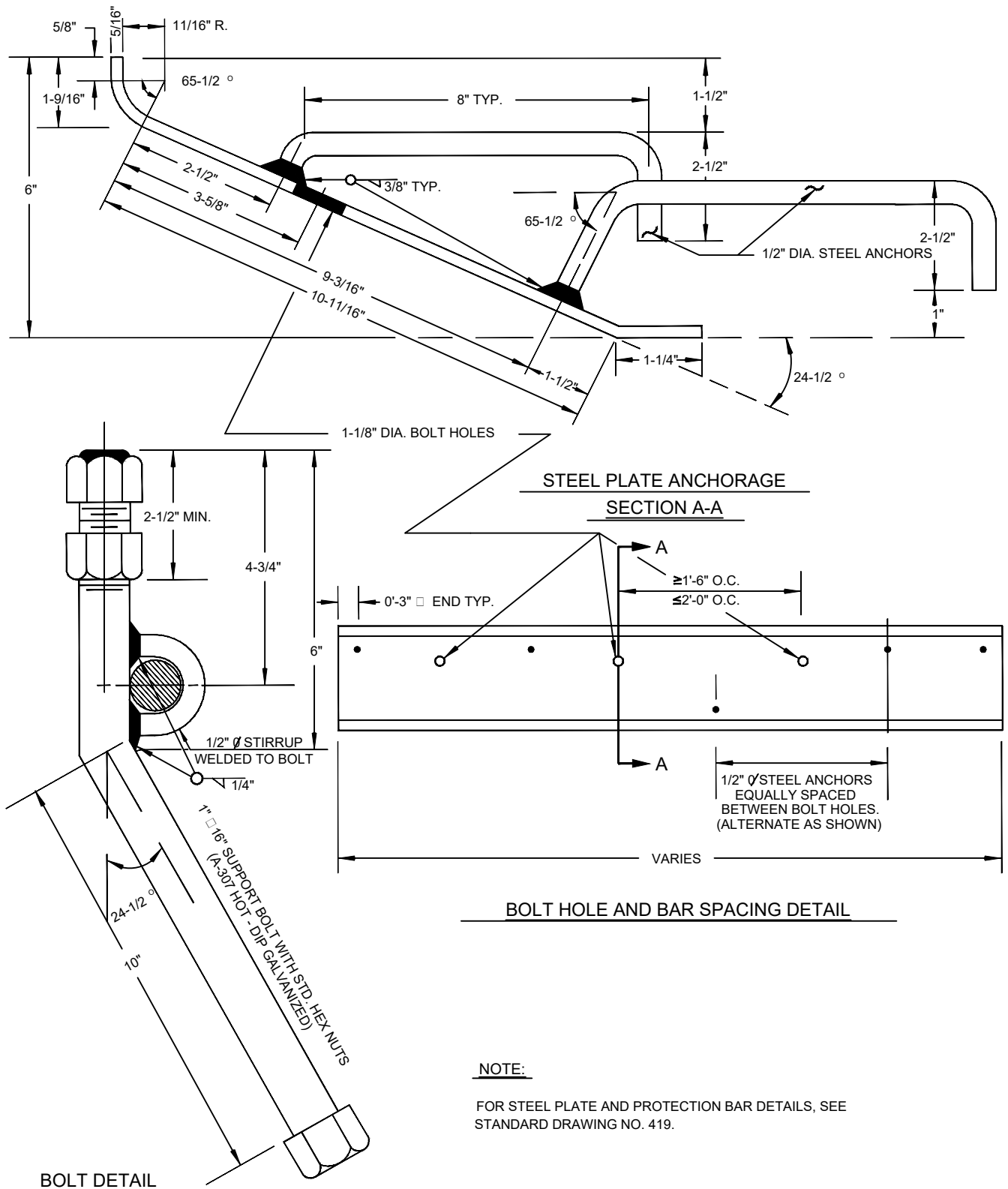


NOTES

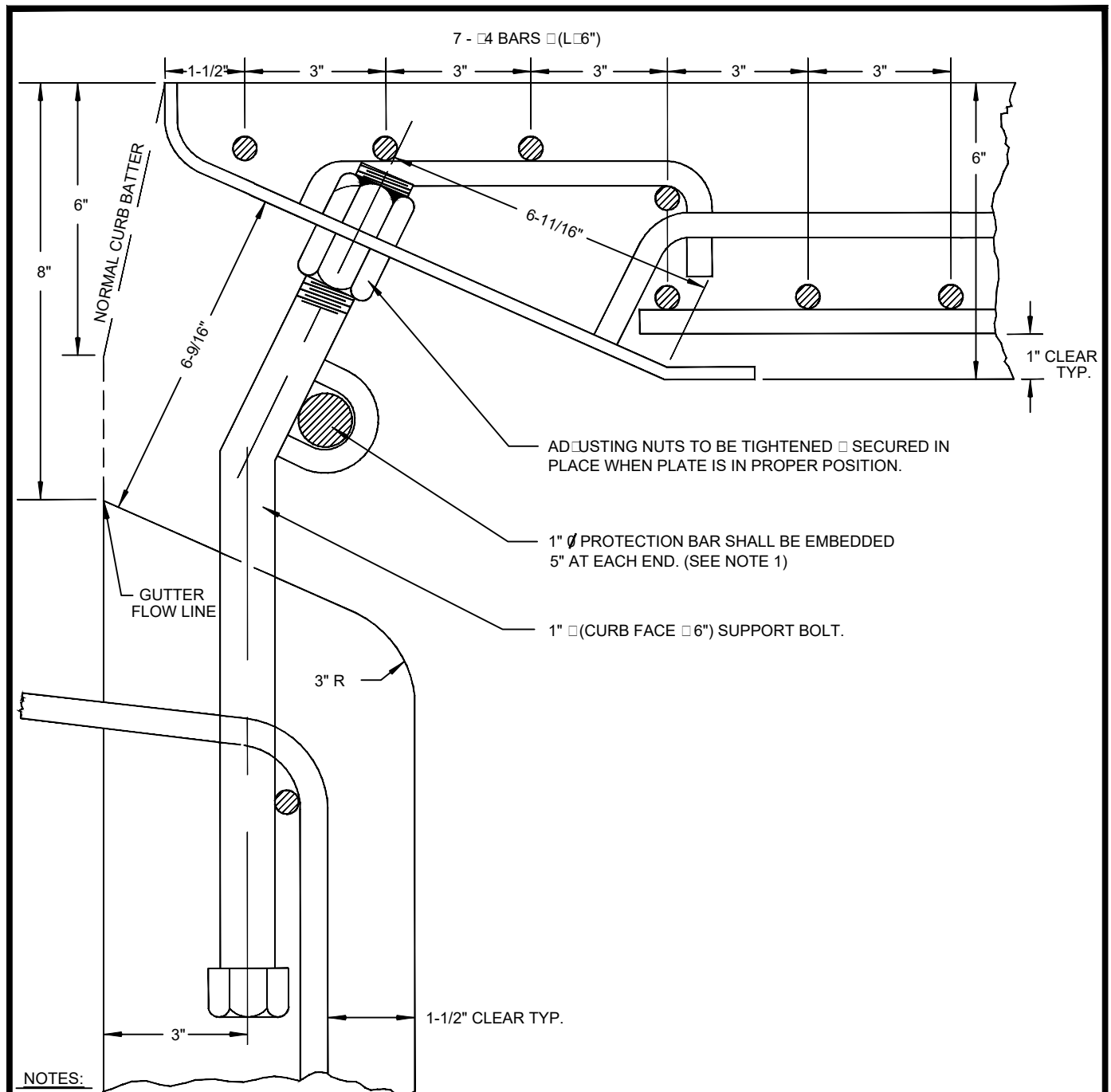
1. ALL EXPOSED METAL PARTS SHALL BE GALVANIZED AND ALL GALVANIZING DAMAGED BY FABRICATION OR INSTALLATION SHALL RECEIVE TWO COATS OF ALUMINUM PAINT (GALVONOX OR EQUAL).
2. GRATES SHALL NOT BE INSTALLED IN PEDESTRIAN ACCESS ROUTES.
3. GRATES MUST BE BICYCLE SAFE.

AGENCY APPROVED B C H L M N R

SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA	
712	MISCELLANEOUS METAL	DROP INLET FRAME AND GRATE	
714	PAINT		
715	GALVANIZING		
DATE 01-09-20		DWG. NO. 417	



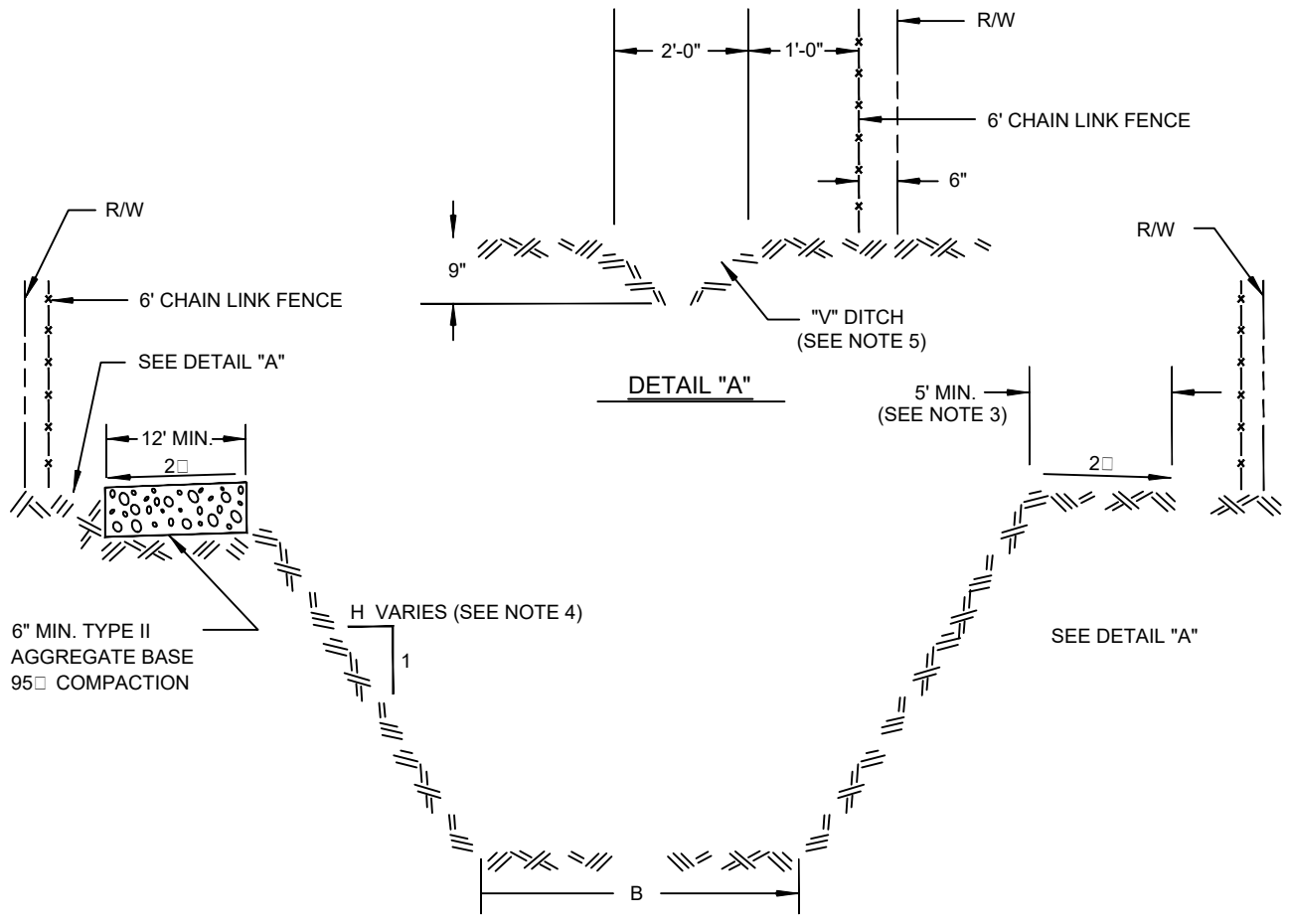
AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
710	STRUCTURAL STEEL	DROP INLET STEEL PLATE ANCHORAGE					
713	REINFORCEMENT STEEL						
715	GALVANIZING						
DATE		DWG. NO.		418			



NOTES:

1. PROTECTION BAR SHALL BE REQUIRED ON ALL INLETS AND SHALL BE PLACED PARALLEL TO THE STEEL FACE PLATE.
2. SUPPORT BOLTS SHALL BE EQUALLY SPACED AT NOT MORE THAN 2'-0" O.C. AND NOT LESS THAN 1'-6" O.C.
3. ALL EXPOSED METAL PARTS SHALL BE GALVANIZED AND GALVANIZING DAMAGED BY FABRICATION OR INSTALLATION SHALL RECEIVE TWO COATS OF ALUMINUM PAINT (GALVONOX OR EQUAL).
4. FOR STEEL PLATE ANCHORAGE, SEE STANDARD DRAWING NO. 418.
5. #4 BARS (L=6") SHALL BE IN ADDITION TO REINFORCING STEEL PER APPLICABLE DROP INLET STANDARD PLAN.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
713	REINFORCEMENT PLATES	DROP INLET STEEL PLATE AND PROTECTION BAR											
714	PAINT												
715	GALVANIZING												
		DATE		DWG. NO.		419							

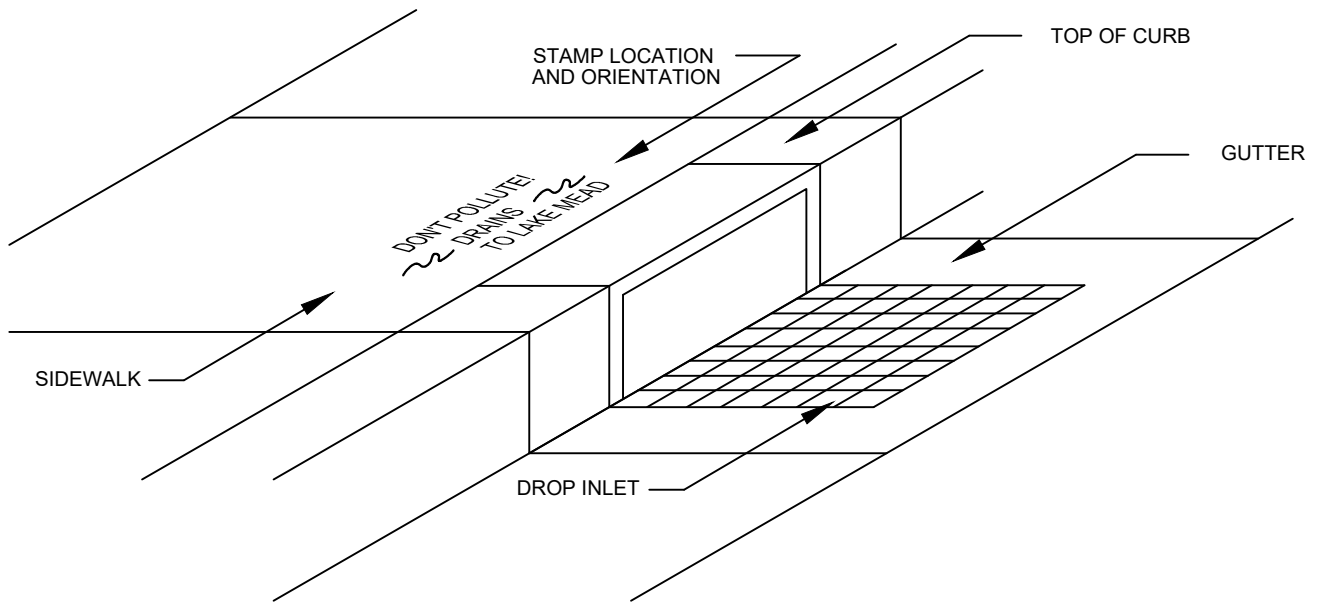


NOTES:

1. CONSTRUCT 14-FOOT WIDE CHAIN LINK GATE AT ALL STREET ACCESS POINTS, FOR ACCESS ONTO 12-FOOT ACCESS ROADS.
2. CONSTRUCT 3-FOOT WIDE CHAIN LINK GATE AT ALL STREET ACCESS POINTS FOR ACCESS ON THE 5-FOOT WIDTH ACCESS SIDE.
3. CONSTRUCT SECOND ACCESS ROAD (12-FOOT MINIMUM WIDTH WITH 6-INCH MIN. TYPE II AGGREGATE BASE) IF B EXCEEDS 30'.
4. FOR UNLINED CHANNELS $H \geq 2$
5. "V" DITCH SHALL BE CONSTRUCTED TO PREVENT OVERLAND RUNOFF FROM ERODING SIDES OF BANK. AN ADEQUATE NUMBER OF INLETS ALONG THE "V" DITCH SHALL BE DESIGNED WITH A MINIMUM 12-INCH CMP LATERAL DISCHARGING INTO THE CHANNEL. APPROPRIATE BANK PROTECTION FOR LATERAL PIPE DISCHARGE SHALL BE PROVIDED. OTHER METHODS OF OVERLAND RUNOFF CONTROL MAY BE ACCEPTABLE IF APPROVED BY THE ENGINEER.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		TYPICAL OPEN CHANNEL											
		DATE		DWG. NO.		420							

STORMWATER INLET CONCRETE STAMP

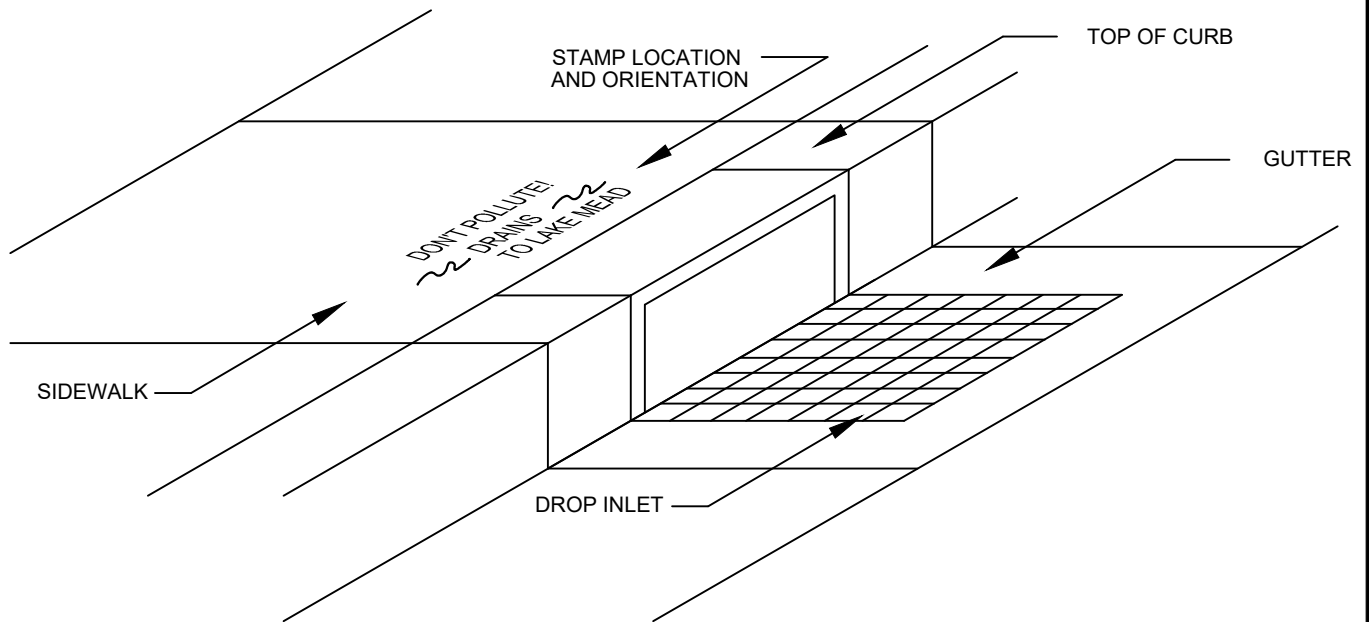


NOTES:

1. MESSAGE OR SYMBOL SHALL BE AS SHOWN ON THE DRAWING OR ON THE VERTICAL CURB NEXT TO THE DROP INLET OR AS APPROVED BY THE APPROPRIATE CITY OR COUNTY ENGINEER.
2. LETTERS SHALL BE 1-7/16" IN HEIGHT. THE MESSAGE SHALL BE CENTERED ON THE BACK OF THE INLET OR ON THE TOP OF CURB.
3. CONCRETE SHALL BE STAMPED IN SUCH A WAY AS TO PROVIDE FOR A CLEAR AND LEGIBLE IMAGE. (APPROXIMATE DEPTH OF 1/4").
4. ALL STAMPS SHALL BE APPROVED BY THE CITY OR COUNTY ENGINEER BEFORE BEING USED.
5. STAMP MAY BE PERMANENTLY CAST INTO CAST IRON FRAME OR PRE-CAST CONCRETE PORTIONS OF INLET.
6. WHERE RETROFITTING IS REQUIRED, AN EPOXIED PLACARD BEARING THE MESSAGE AND SYMBOL APPROVED BY THE APPROPRIATE CITY OR COUNTY ENGINEER SHALL BE PERMANENTLY AFFIXED ON THE TOP OF THE ADJACENT CURB.
7. THIS STANDARD IS REQUIRED IN THE LAS VEGAS VALLEY IN WHICH AREA WATER DRAINS TO LAKE MEAD.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		STORM WATER QUALITY MANAGEMENT STAMP AND SIGN DETAIL											
		DATE	12-09-10	DWG. NO.	421	SHEET 1 OF 3							

STORMWATER INLET CONCRETE STAMP

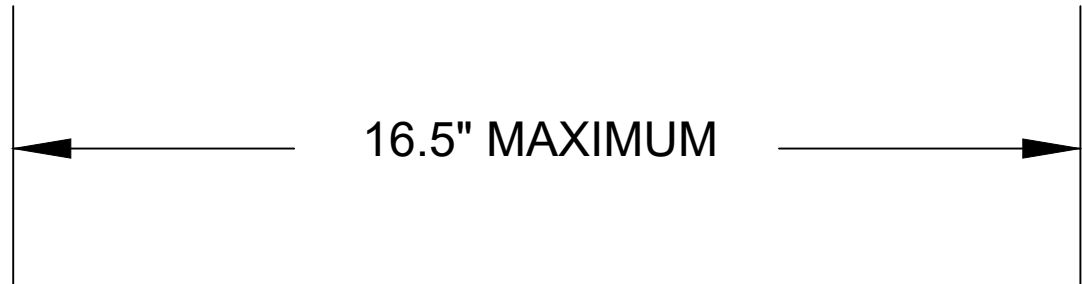


NOTES:

1. MESSAGE OR SYMBOL SHALL BE AS SHOWN ON THE DRAWING OR ON THE VERTICAL CURB NEXT TO THE DROP INLET OR AS APPROVED BY THE APPROPRIATE CITY OR COUNTY ENGINEER.
2. LETTERS SHALL BE 1-7/16" IN HEIGHT. THE MESSAGE SHALL BE CENTERED ON THE BACK OF THE INLET OR ON THE TOP OF CURB.
3. CONCRETE SHALL BE STAMPED IN SUCH A WAY AS TO PROVIDE FOR A CLEAR AND LEGIBLE IMAGE. (APPROXIMATE DEPTH OF 1/4").
4. ALL STAMPS SHALL BE APPROVED BY THE CITY OR COUNTY ENGINEER BEFORE BEING USED.
5. STAMP MAY BE PERMANENTLY CAST INTO CAST IRON FRAME OR PRE-CAST CONCRETE PORTIONS OF INLET.
6. WHERE RETROFITTING IS REQUIRED, AN EPOXIED PLACARD BEARING THE MESSAGE AND SYMBOL APPROVED BY THE APPROPRIATE CITY OR COUNTY ENGINEER SHALL BE PERMANENTLY AFFIXED ON THE TOP OF THE ADJACENT CURB.
7. THIS STANDARD IS REQUIRED IN THE LAS VEGAS VALLEY IN WHICH AREA WATER DRAINS TO LAKE MEAD.

		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
		STORM WATER QUALITY MANAGEMENT STAMP AND SIGN DETAIL							
.		DATE 12-09-10	DWG. NO.	421	SHEET 1 OF 3				

STAMP MESSAGES AND SYMBOLS



 **DON'T POLLUTE** ☐
 5"
 MAX. *~~~~~* **DRAINS** *~~~~~*
 **TO LAKE MEAD** ☐

Effective 12/10/2020 to 06/09/2021

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		STORM WATER QUALITY MANAGEMENT STAMP AND SIGN DETAIL											
		DATE 12-09-10			DWG. NO. 421			SHEET 2 OF 3					

4" PLACARD - COLORS ☐ BLUE AND GREEN

THIS EPOXY PLACARD MESSAGE AND SYMBOL HAS BEEN APPROVED BY THE APPROPRIATE CITY OR COUNTY ENGINEER. ANY OTHER EQUIVALENT MESSAGE AND SYMBOL DESIGNS WILL REQUIRE PRIOR APPROVAL OF THE APPROPRIATE CITY OR COUNTY BEFORE INSTALLATION. THE PLACARD MATERIAL SHALL BE EITHER POLYCARBONATE OR METAL AND THE FINISH SHALL BE UV AND ABRASION RESISTANT.

STORM DRAIN MARKER

		AGENCY APPROVED	B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
		STORM WATER QUALITY MANAGEMENT STAMP AND SIGN DETAIL						
		DATE 12-09-10	DWG. NO.	421	SHEET 3 OF 3			

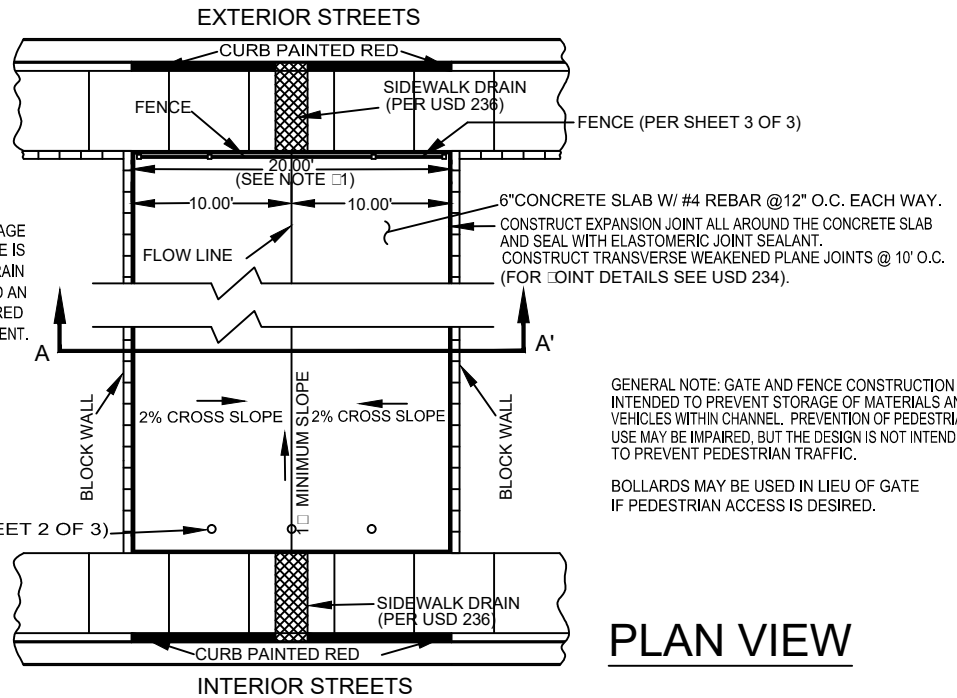
ONE PERCENT MINIMUM SLOPE THROUGH DRAINAGE SLAB IS REQUIRED. WHERE A STORM DRAIN LINE IS AVAILABLE IN THE EXTERIOR STREET, A STORM DRAIN INLET AT THE BEGINNING OF THE EASEMENT AND AN 18-INCH MINIMUM STORM DRAIN PIPE IS REQUIRED TO CONVEY NUISANCE WATER THROUGH THE EASEMENT.

NOTE #1: 20' STANDARD WIDTH, DIFFERENT WIDTHS TO BE DESIGNED ACCORDINGLY AND IN CONFORMANCE WITH THE CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT HYDROLOGIC CRITERIA AND DRAINAGE DESIGN MANUAL.

GENERAL NOTE: GATE AND FENCE CONSTRUCTION IS INTENDED TO PREVENT STORAGE OF MATERIALS AND VEHICLES WITHIN CHANNEL. PREVENTION OF PEDESTRIAN USE MAY BE IMPAIRED, BUT THE DESIGN IS NOT INTENDED TO PREVENT PEDESTRIAN TRAFFIC.

BOLLARDS MAY BE USED IN LIEU OF GATE IF PEDESTRIAN ACCESS IS DESIRED.

BOLLARDS (PER SHEET 2 OF 3)

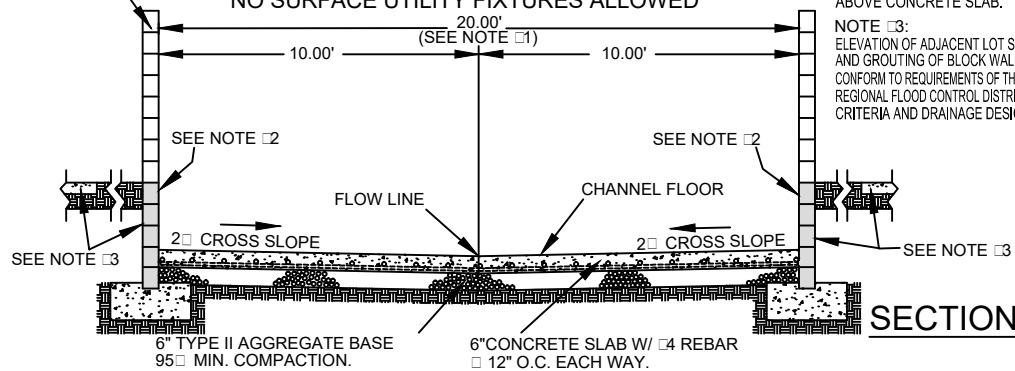


BLOCK WALLS PRIVATELY OWNED AND MAINTAINED.

NO SURFACE UTILITY FIXTURES ALLOWED

NOTE #2: SOLID GROUT 3 COURSES MINIMUM ABOVE CONCRETE SLAB.

NOTE #3: ELEVATION OF ADJACENT LOT SLAB ON GRADE AND GROUTING OF BLOCK WALL CELLS SHALL CONFORM TO REQUIREMENTS OF THE CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT HYDROLOGIC CRITERIA AND DRAINAGE DESIGN MANUAL.



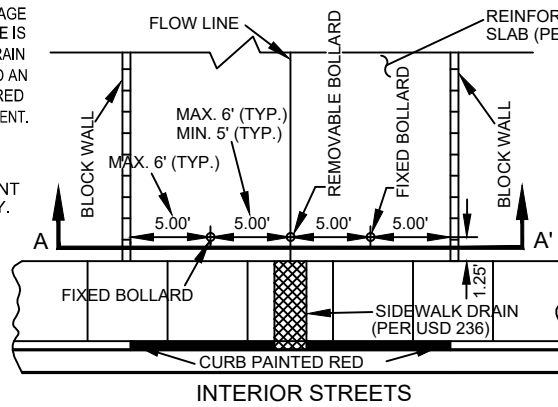
SECTION A-A'

NOT FOR USE IN EMERGENCY ACCESS

SPECIFICATION REFERENCE		AGENCY APPROVED					
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		SUPPLEMENTAL DRAWING					
		THROUGH-LOT DRAIN					
		DATE	07-01-14	DWG. NO.	425.S1	SHEET	1 OF 3

ONE PERCENT MINIMUM SLOPE THROUGH DRAINAGE SLAB IS REQUIRED. WHERE A STORM DRAIN LINE IS AVAILABLE IN THE EXTERIOR STREET, A STORM DRAIN INLET AT THE BEGINNING OF THE EASEMENT AND AN 18-INCH MINIMUM STORM DRAIN PIPE IS REQUIRED TO CONVEY NUISANCE WATER THROUGH THE EASEMENT.

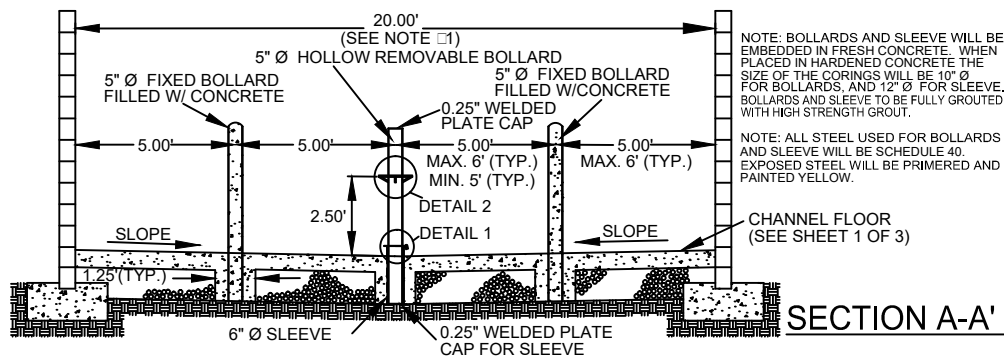
NOTE #1: 20' STANDARD WIDTH, DIFFERENT WIDTHS TO BE DESIGNED ACCORDINGLY.



GENERAL NOTE: GATE AND FENCE CONSTRUCTION IS INTENDED TO PREVENT STORAGE OF MATERIALS AND VEHICLES WITHIN CHANNEL. PREVENTION OF PEDESTRIAN USE MAY BE IMPAIRED, BUT THE DESIGN IS NOT INTENDED TO PREVENT PEDESTRIAN TRAFFIC.

BOLLARDS MAY BE USED IN LIEU OF GATE IF PEDESTRIAN ACCESS IS DESIRED.

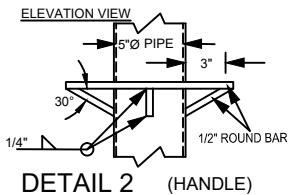
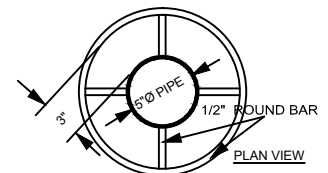
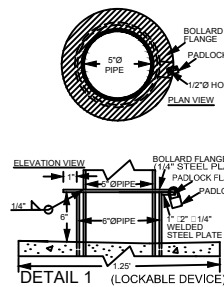
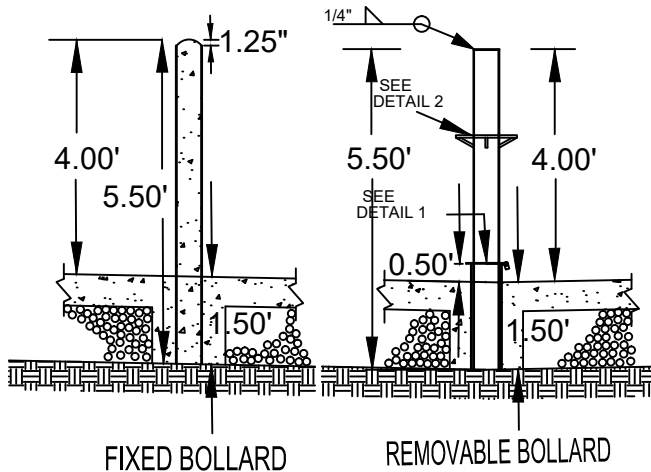
PLAN VIEW



NOTE: BOLLARDS AND SLEEVE WILL BE EMBEDDED IN FRESH CONCRETE. WHEN PLACED IN HARDENED CONCRETE THE SIZE OF THE CORINGS WILL BE 10" Ø FOR BOLLARDS, AND 12" Ø FOR SLEEVE. BOLLARDS AND SLEEVE TO BE FULLY GROUTED WITH HIGH STRENGTH GROUT.

NOTE: ALL STEEL USED FOR BOLLARDS AND SLEEVE WILL BE SCHEDULE 40. EXPOSED STEEL WILL BE PRIMERED AND PAINTED YELLOW.

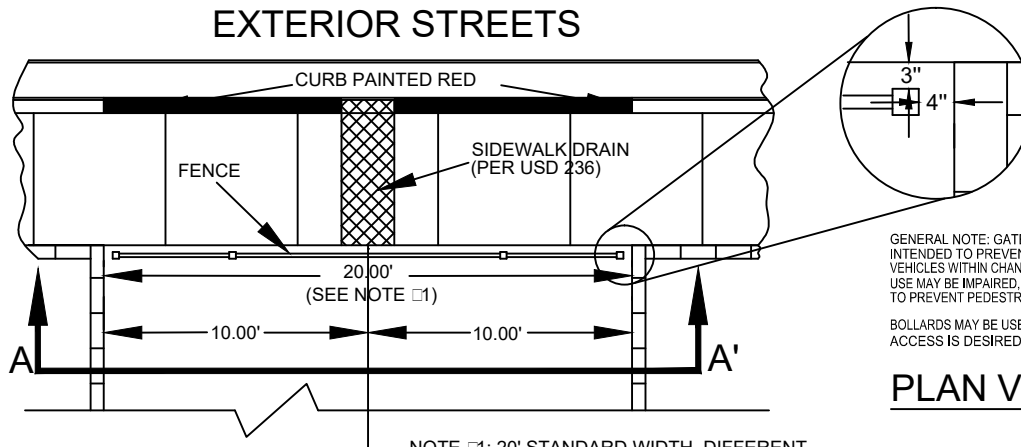
SECTION A-A'



NOT FOR USE IN EMERGENCY ACCESS

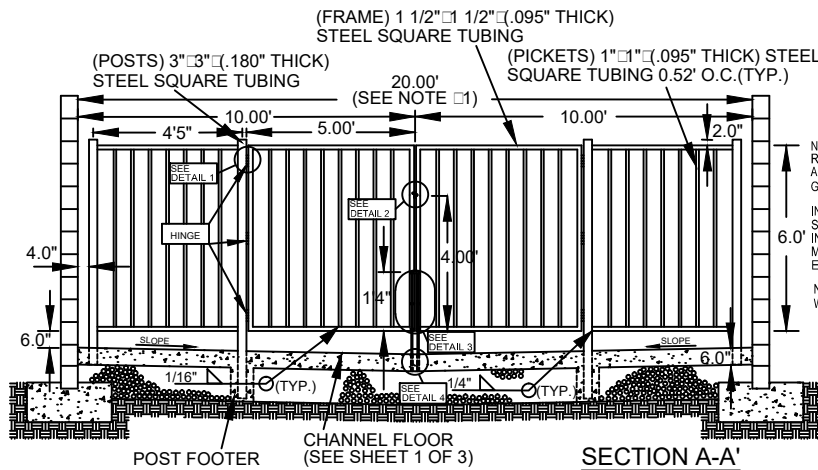
SPECIFICATION REFERENCE		AGENCY APPROVED				UNIFORM STANDARD DRAWINGS	
						CLARK COUNTY AREA	
						SUPPLEMENTAL DRAWING	
						THROUGH-LOT DRAIN	
		DATE	07-01-14	DWG. NO.	425.S1	SHEET	2 OF 3

EXTERIOR STREETS

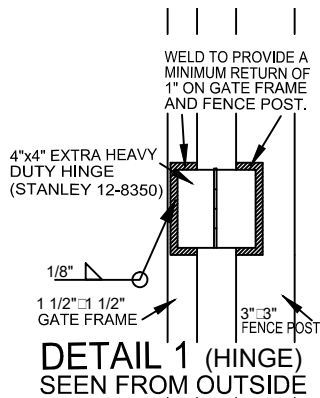


PLAN VIEW

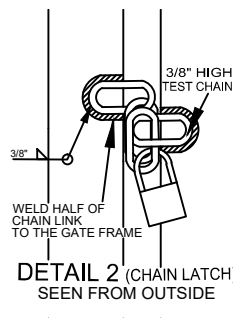
NOTE 1: 20' STANDARD WIDTH, DIFFERENT WIDTHS TO BE DESIGNED ACCORDINGLY.



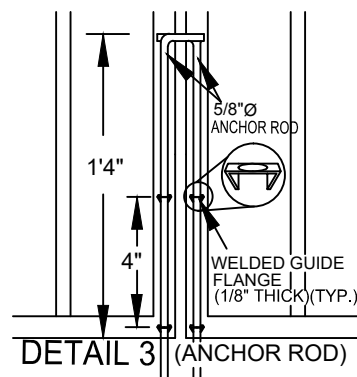
SECTION A-A'



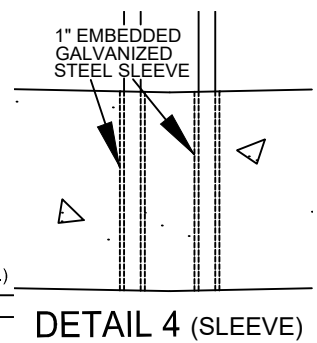
DETAIL 1 (HINGE)
SEEN FROM OUTSIDE



DETAIL 2 (CHAIN LATCH)
SEEN FROM OUTSIDE



DETAIL 3 (ANCHOR ROD)



DETAIL 4 (SLEEVE)

NOT FOR USE IN EMERGENCY ACCESS

AGENCY APPROVED

L

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

THROUGH-LOT DRAIN

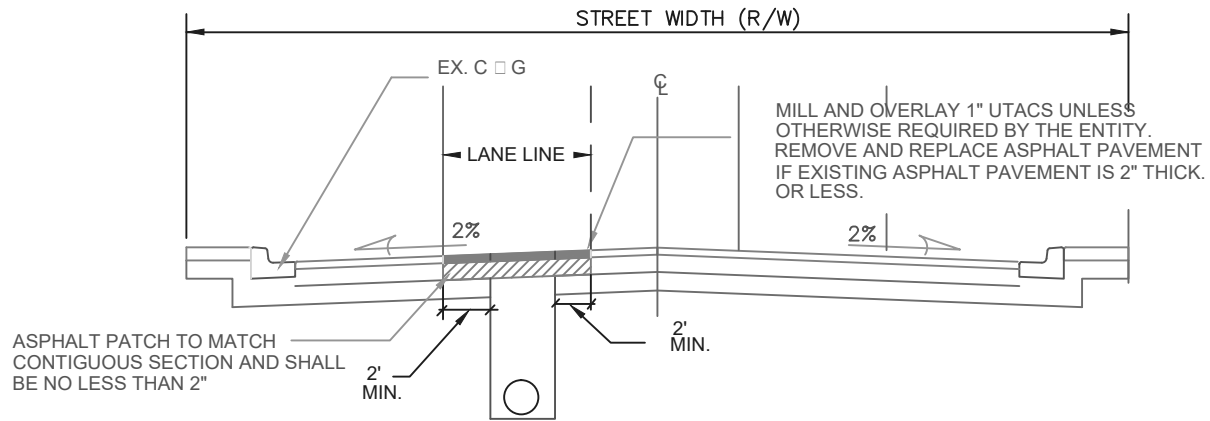
DATE 07-01-14

DWG. NO.

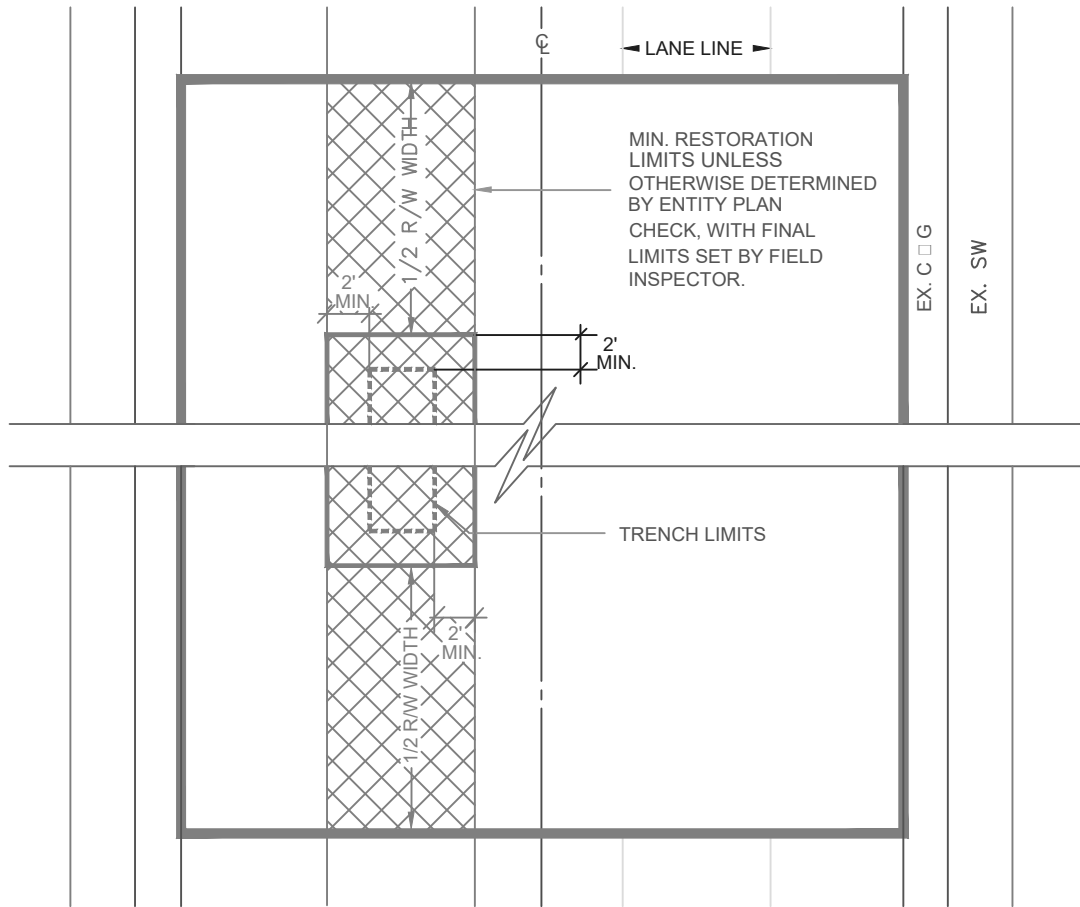
425.S1

SHEET

3 OF 3



LONGITUDINAL CUT RESTORATION

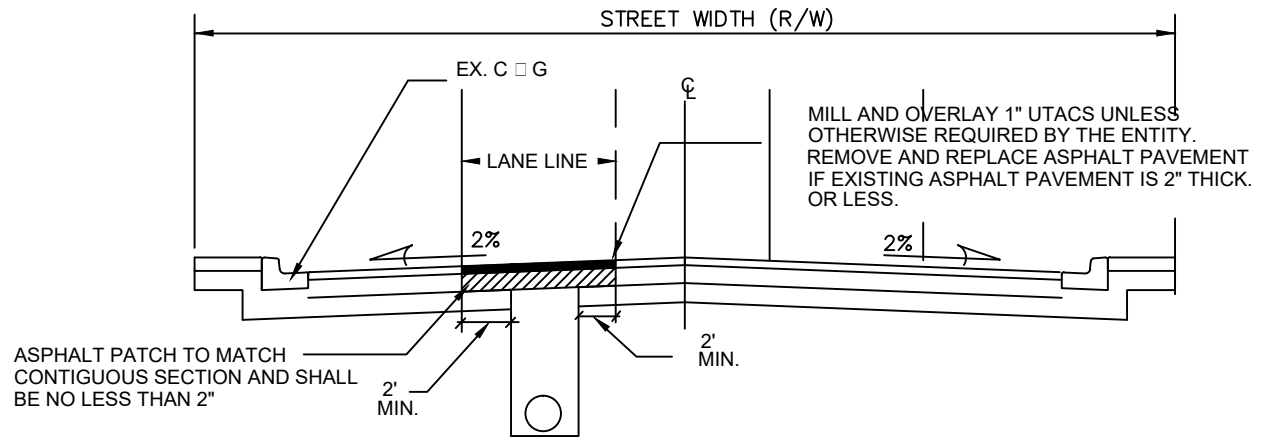


PLAN VIEW

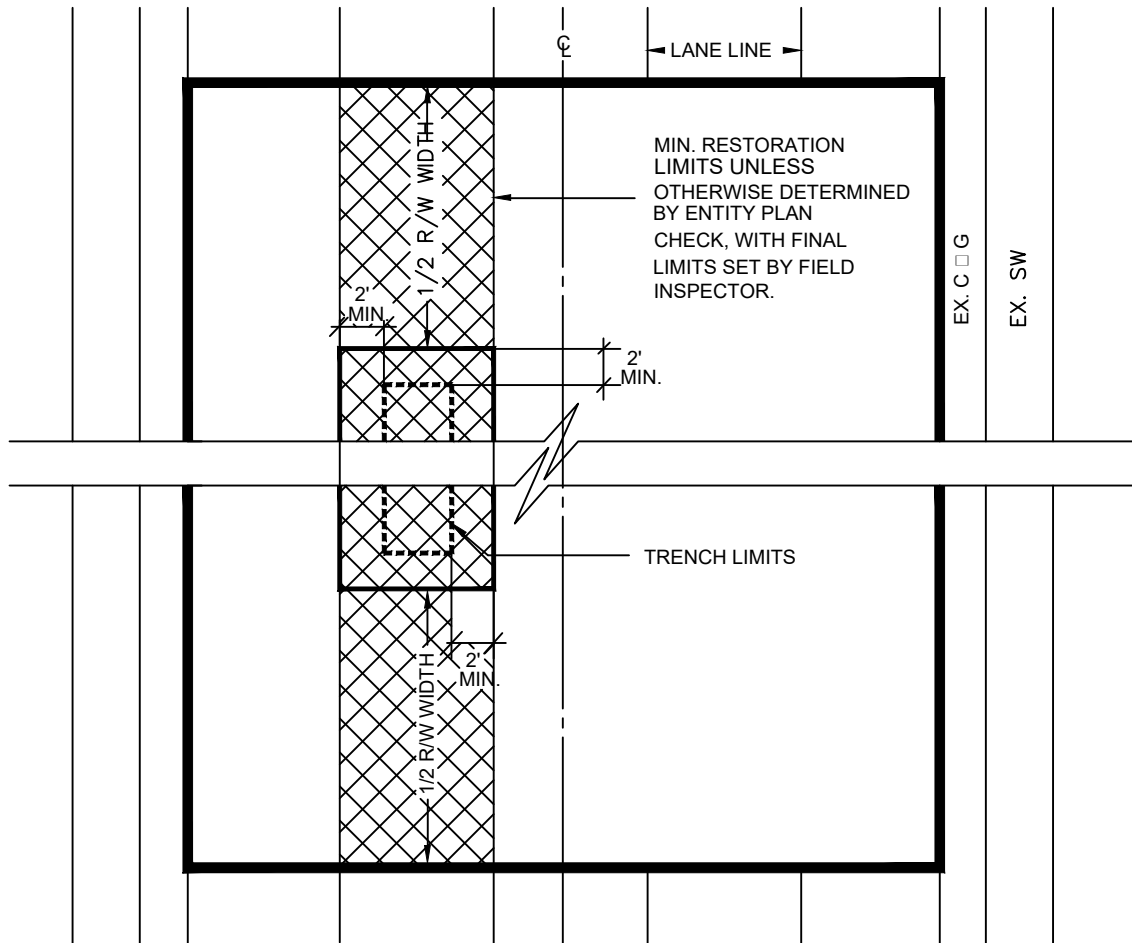
NOTES:

SEE DWG. 500.1 SHEET 2 OF 2

SPECIFICATION REFERENCE		AGENCY APPROVED					
302	AGGREGATE BASE	B	C	H	L	M	N
401	BITUMINOUS PAVEMENT	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA 0 TO 5 YEARS PAVEMENT RESTORATION LONGITUDINAL CUT					
406	PRIME COAT						
407	FOG SEAL						
501	CONCRETE						
		DATE 6-12-08		DWG. NO. 500.1		SHEET 1 OF 2	



LONGITUDINAL CUT RESTORATION



PLAN VIEW

NOTES:

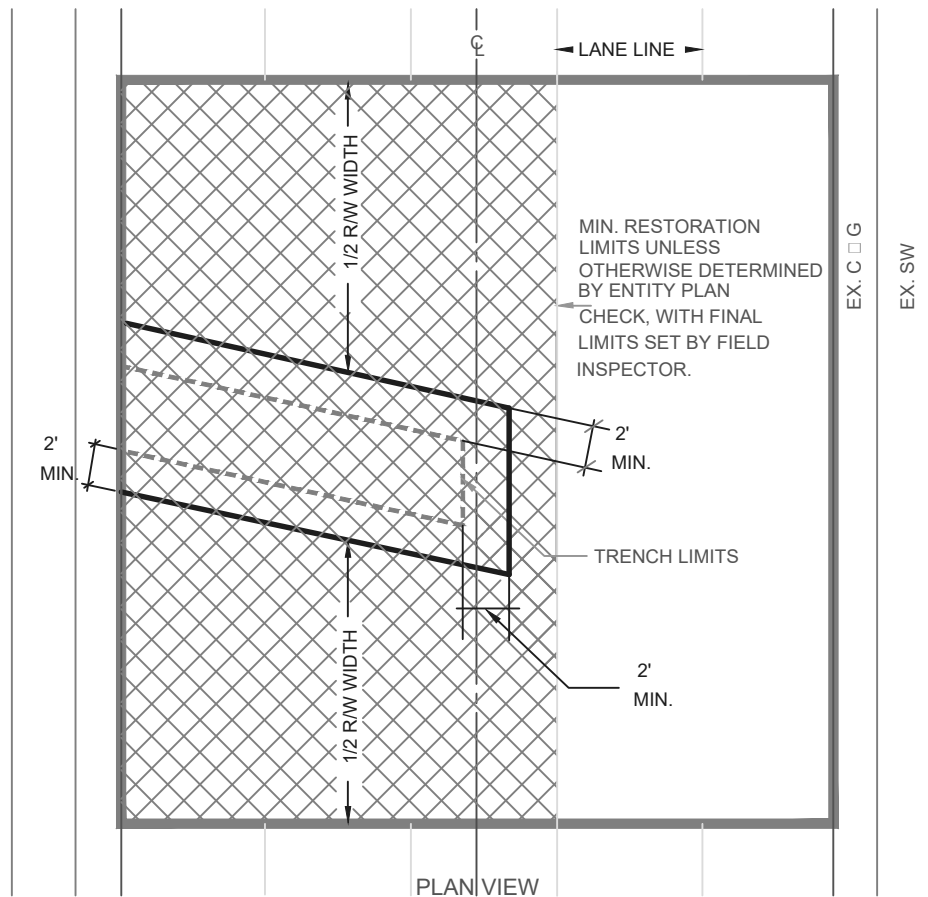
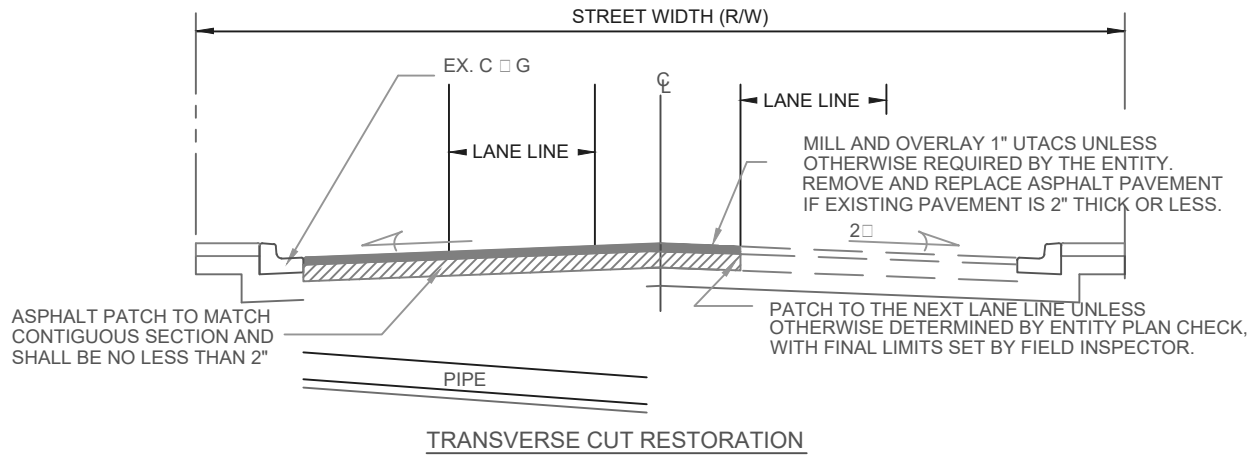
SEE DWG. 500.1 SHEET 2 OF 2

		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
302	AGGREGATE BASE	0 TO 5 YEARS PAVEMENT RESTORATION LONGITUDINAL CUT							
401	BITUMINOUS PAVEMENT								
406	PRIME COAT								
407	FOG SEAL								
501	CONCRETE								
.		DATE 6-12-08	DWG. NO. 500.1			SHEET 1 OF 2			

NOTES:

1. IF THERE IS A MEDIAN, RESTORATION MAY BE LIMITED TO THE AREA BETWEEN C & G AND THE MEDIAN CURB.
2. WHEN EXISTING PAVEMENT IS 2" THICK OR LESS, PAVEMENT WITHIN THE RESTORATION AREA SHALL BE REMOVED AND REPLACED IN KIND AS REQUIRED BY THE ENTITY.
3. IF SAWCUT LINE IS WITHIN FIVE FEET OF EDGE OF EXISTING ASPHALT CONCRETE SURFACE OR EXISTING SAWCUT LINE, MILL AND OVERLAY OR REPLACE TO THAT EDGE.
4. PAVEMENT RESTORATION AREA SAWCUT LINES SHALL NOT FALL WITHIN STREET INTERSECTION.
5. IF CUT IS WITHIN A LANE , PAVEMENT RESTORATION MUST EXTEND TO THE NEXT LANE LINE.
6. THE ENTITY'S REQUIREMENTS TAKE PRECEDENCE OVER ANY MINIMUM REQUIREMENTS SHOWN HEREON.

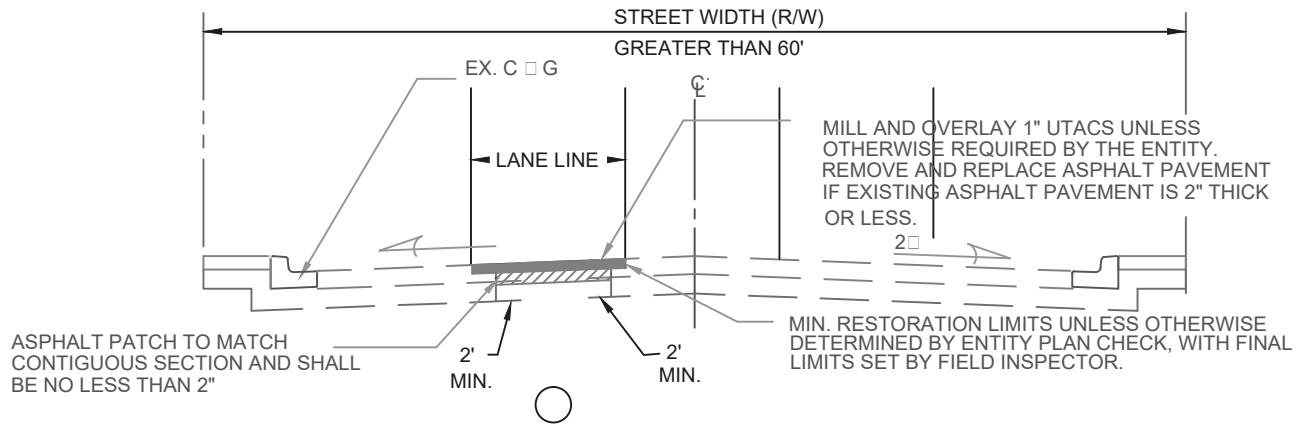
		AGENCY APPROVED							B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA												
302	AGGREGATE BASE	0 TO 5 YEARS PAVEMENT RESTORATION LONGITUDINAL CUT												
401	BITUMINOUS PAVEMENT													
406	PRIME COAT													
407	FOG SEAL													
501	CONCRETE													
.		DATE 6-12-08			DWG. NO. 500.1				SHEET 2 OF 2					



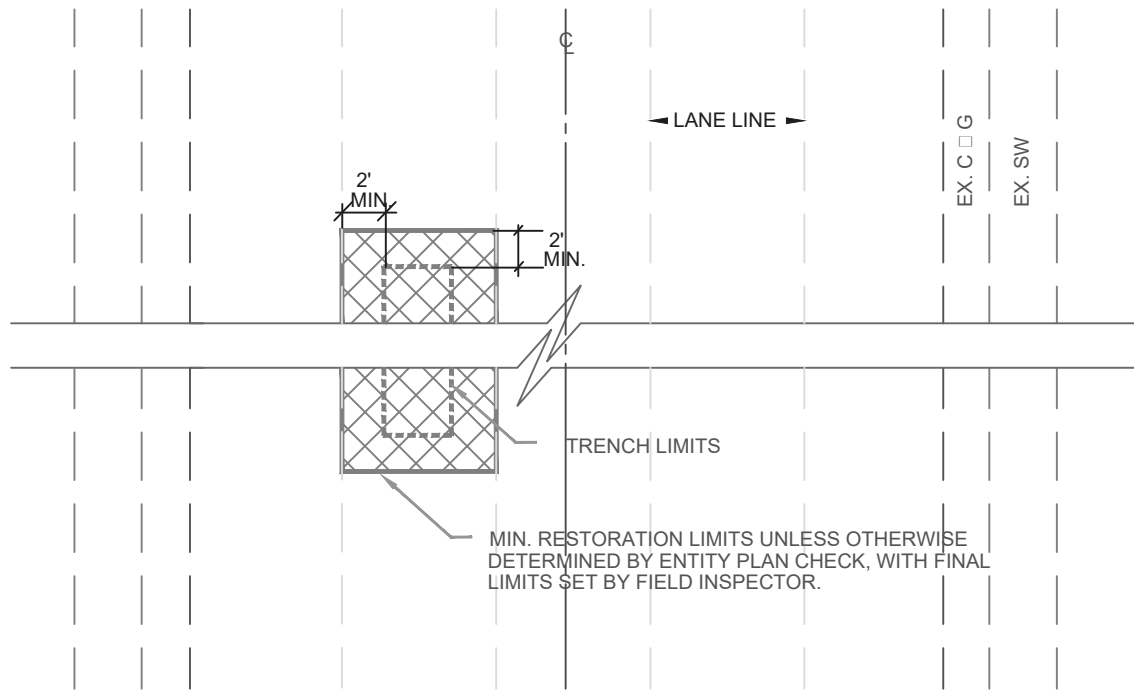
NOTES:

1. IF THERE IS MEDIAN, RESTORATION MAY BE LIMITED TO THE AREA BETWEEN C & G TO CURB OF MEDIAN.
2. IF SAWCUT LINE IS WITHIN FIVE FEET OF EDGE OF EXISTING ASPHALT CONCRETE SURFACE OR EXISTING SAWCUT LINE, MILL AND OVERLAY OR REPLACE TO THAT EDGE.
3. WHEN EXISTING PAVEMENT IS LESS 2" THICK OR LESS, PAVEMENT WITHIN THE RESTORATION AREA SHALL BE REMOVED AND REPLACED IN KIND AS REQUIRED BY THE ENTITY.
4. PAVEMENT RESTORATION AREA SAWCUT LINES SHALL NOT FALL WITHIN STREET INTERSECTION.
5. IF CUT IS WITHIN A LANE, PAVEMENT RESTORATION MUST EXTEND TO THE NEXT LANE LINE.
6. THE ENTITY'S REQUIREMENTS TAKE PRECEDENCE OVER ANY MINIMUM REQUIREMENTS SHOWN HEREON.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
302	AGGREGATE BASE	0 TO 5 YEARS PAVEMENT RESTORATION TRANSVERSE CUT											
401	BITUMINOUS PAVEMENT												
406	PRIME COAT												
407	FOG SEAL												
501	CONCRETE												
		DATE 6-12-08			DWG. NO. 500.2								



LONGITUDINAL CUT RESTORATION

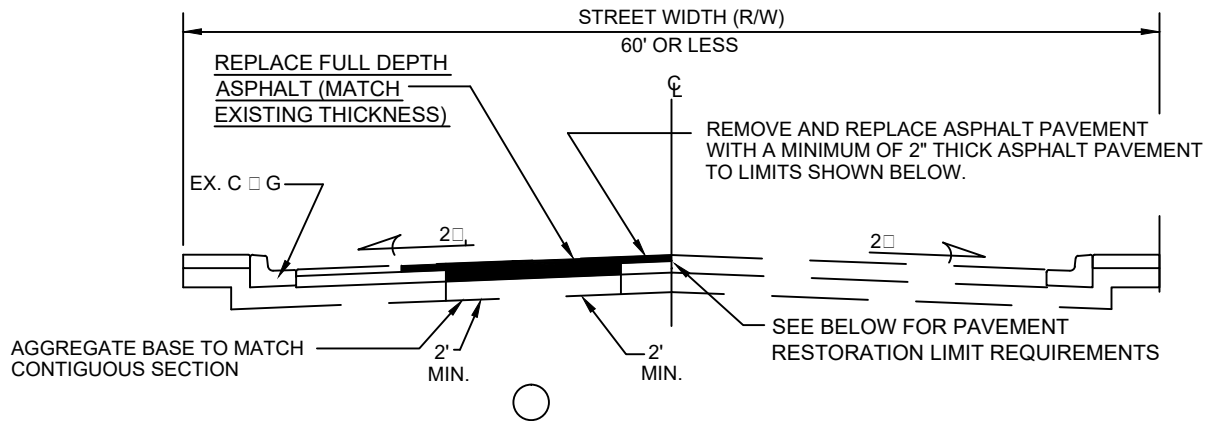


PLAN VIEW

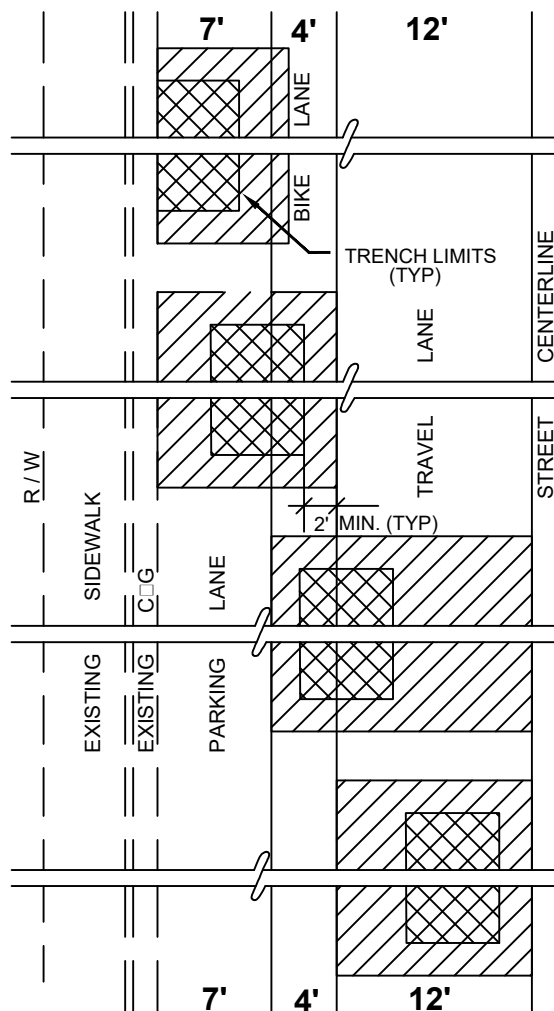
NOTES:

1. IF CUT IS WITHIN A LANE, PAVEMENT RESTORATION MUST EXTEND TO THE NEXT LANE LINE.
2. THE ENTITY'S REQUIREMENTS TAKE PRECEDENCE OVER ANY MINIMUM REQUIREMENTS SHOWN HEREON.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
302	AGGREGATE BASE	OVER 5 YEARS PAVEMENT RESTORATION - LONGITUDINAL CUT- GREATER THAN 60 FT. RIGHT-OF-WAY											
401	BITUMINOUS PAVEMENT												
406	PRIME COAT												
407	FOG SEAL												
501	CONCRETE												
		DATE 6-12-08			DWG. NO. 500.3								



LONGITUDINAL CUT RESTORATION



IF TRENCH EDGE IS 5-FT OR LESS FROM LIP OF GUTTER, THEN REPLACE 8-FT (MIN.) OF ASPHALT.

IF TRENCH EDGE IS BETWEEN 5-FT & 9-FT FROM LIP OF GUTTER, THEN REPLACE 11-FT (MIN.) OF ASPHALT.

EXCEPTION: FOR RESIDENTIAL STREETS 51-FT OR LESS, REPLACE FULL HALF STREET.

IF TRENCH EDGE IS BETWEEN 10-FT & 14-FT FROM CENTERLINE, THEN REPLACE 16-FT (MIN.) OF ASPHALT.

EXCEPTION: FOR RESIDENTIAL STREETS 51-FT OR LESS, REPLACE FULL HALF STREET.

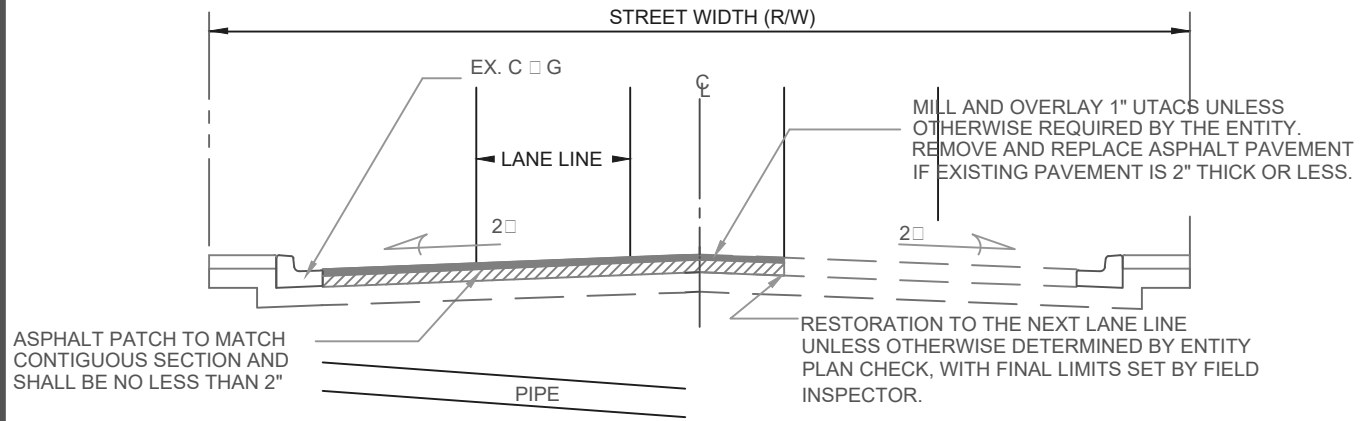
IF TRENCH EDGE IS BETWEEN 2-FT & 10-FT FROM CENTERLINE, THEN REPLACE 12-FT (MIN.) OF ASPHALT.

NOTES:

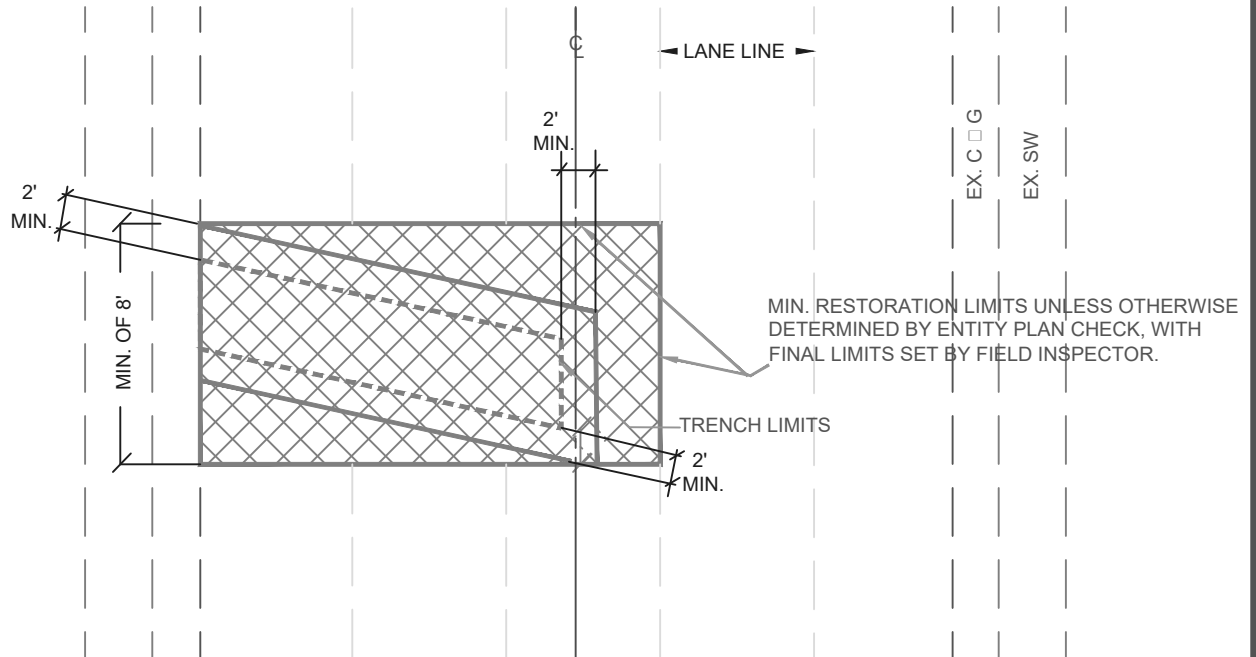
1. IF CUT IS WITHIN A MARKED LANE, PAVEMENT RESTORATION MUST EXTEND TO THE MARKED LANE LINE.
2. THE ENTITY'S REQUIREMENTS TAKE PRECEDENCE OVER ANY MINIMUM REQUIREMENTS SHOWN HEREON.
3. MINIMUM ASPHALT REPLACEMENT WIDTH SHALL NOT BE LESS THAN THE LIMITS OF THE PAVING MACHINERY USED.

PLAN VIEW

AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
302	AGGREGATE BASE	OVER 5 YEARS PAVEMENT RESTORATION LONGITUDINAL CUT - 60' R/W OR LESS					
401	BITUMINOUS PAVEMENT						
406	PRIME COAT						
407	FOG SEAL						
501	CONCRETE						
DATE 6-12-08		DWG. NO.		500.4			



TRANSVERSE CUT RESTORATION

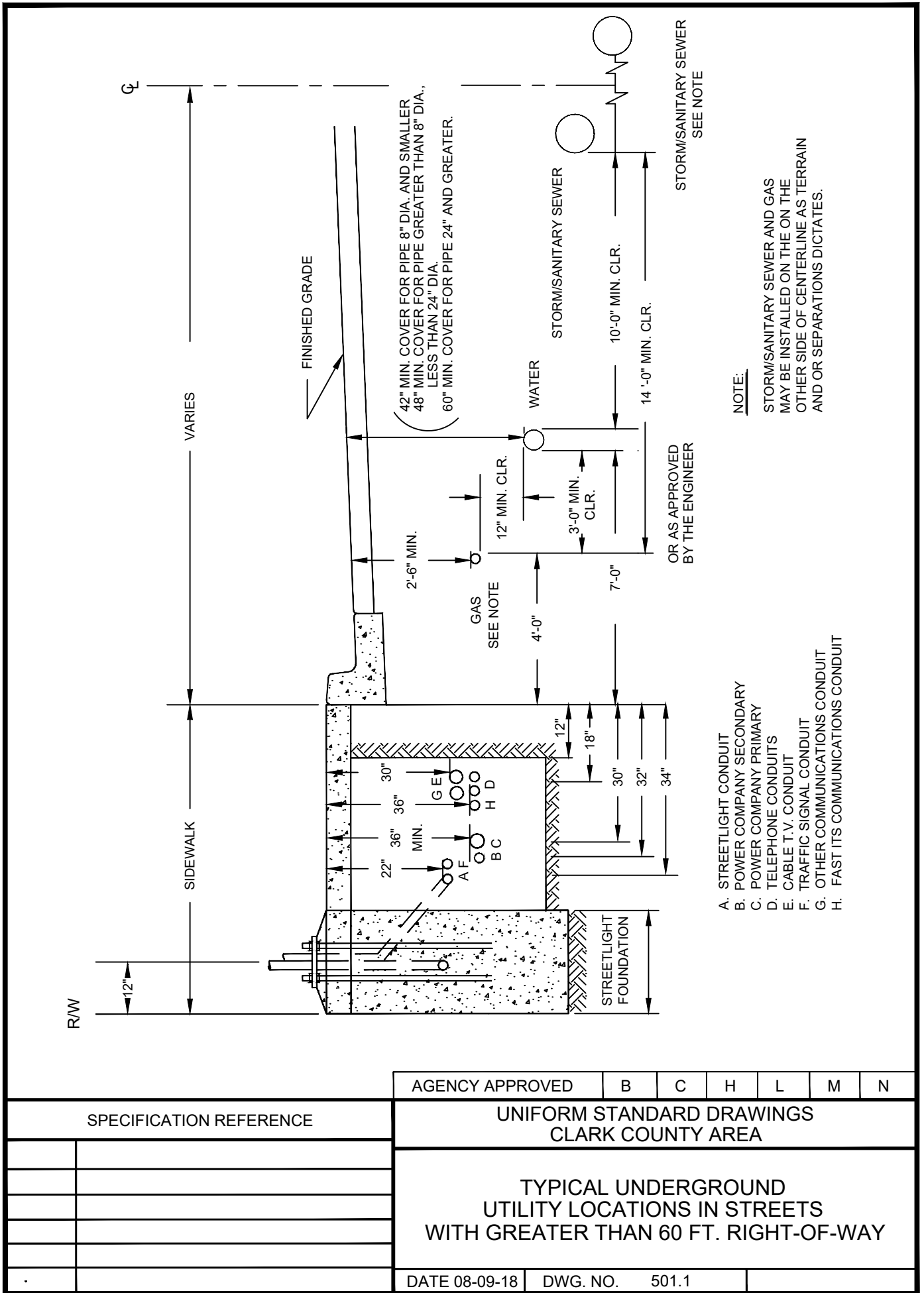


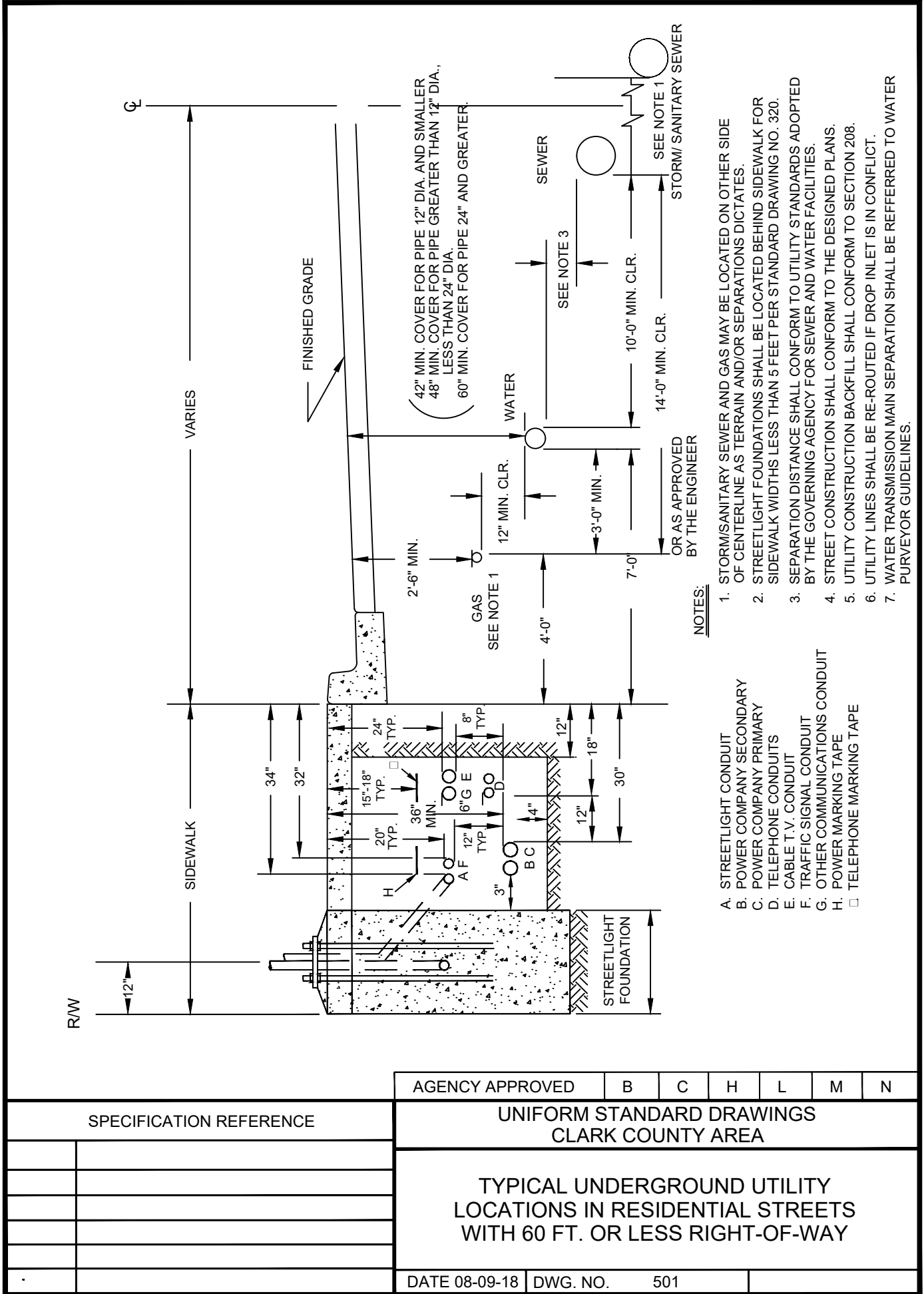
PLAN VIEW

NOTES:

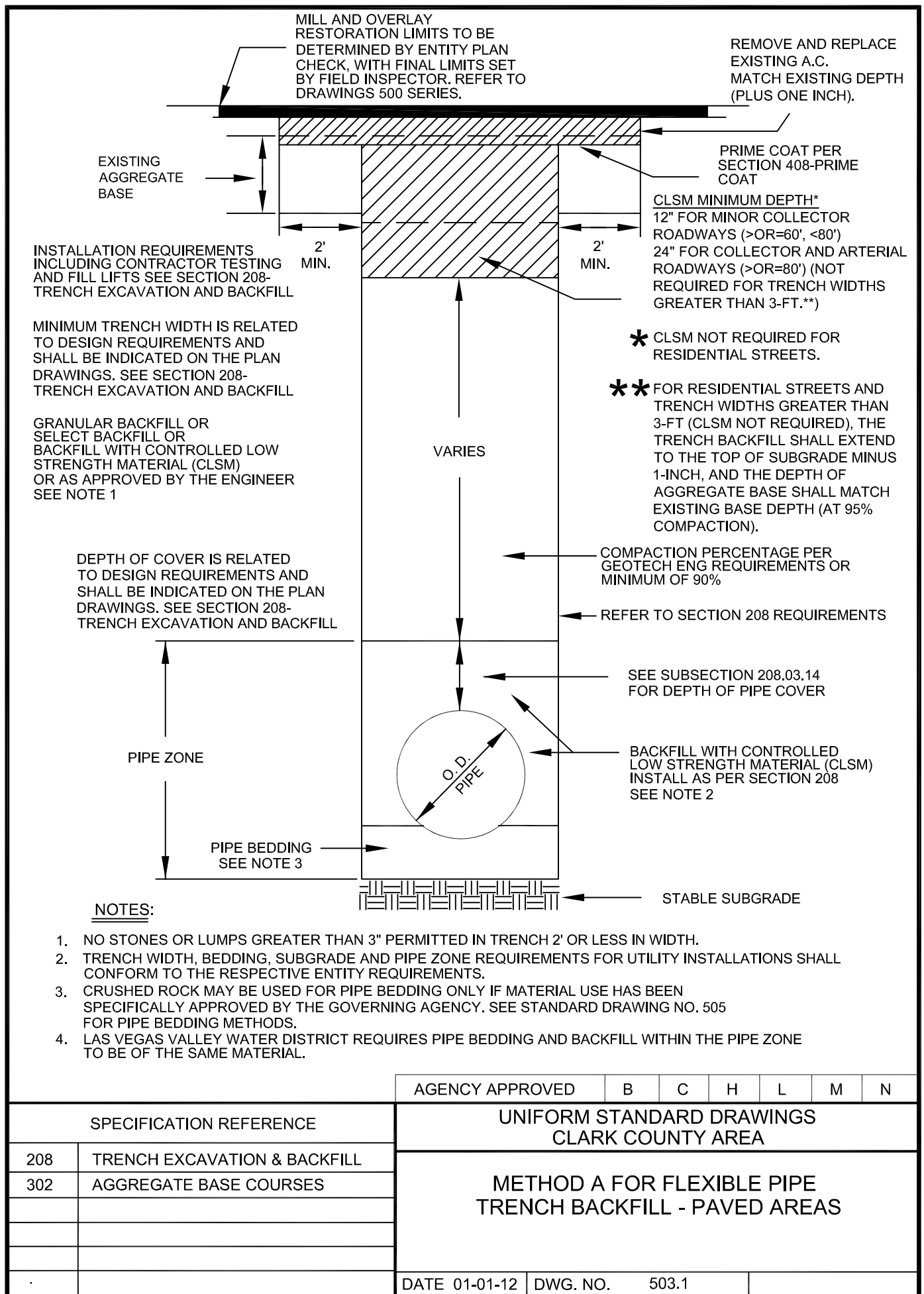
1. IF CUT IS WITHIN A LANE, PAVEMENT RESTORATION MUST EXTEND TO THE NEXT LANE LINE.
2. THE ENTITY'S REQUIREMENTS TAKE PRECEDENCE OVER ANY MINIMUM REQUIREMENTS SHOWN HEREON.

SPECIFICATION REFERENCE		AGENCY APPROVED	B	C	H	L	M	N
302	AGGREGATE BASE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA OVER 5 YEARS PAVEMENT RESTORATION TRANSVERSE CUT ALL RIGHT-OF-WAY WIDTHS						
401	BITUMINOUS PAVEMENT							
406	PRIME COAT							
407	FOG SEAL							
501	CONCRETE							
.		DATE 6-12-08	DWG. NO. 500.5					



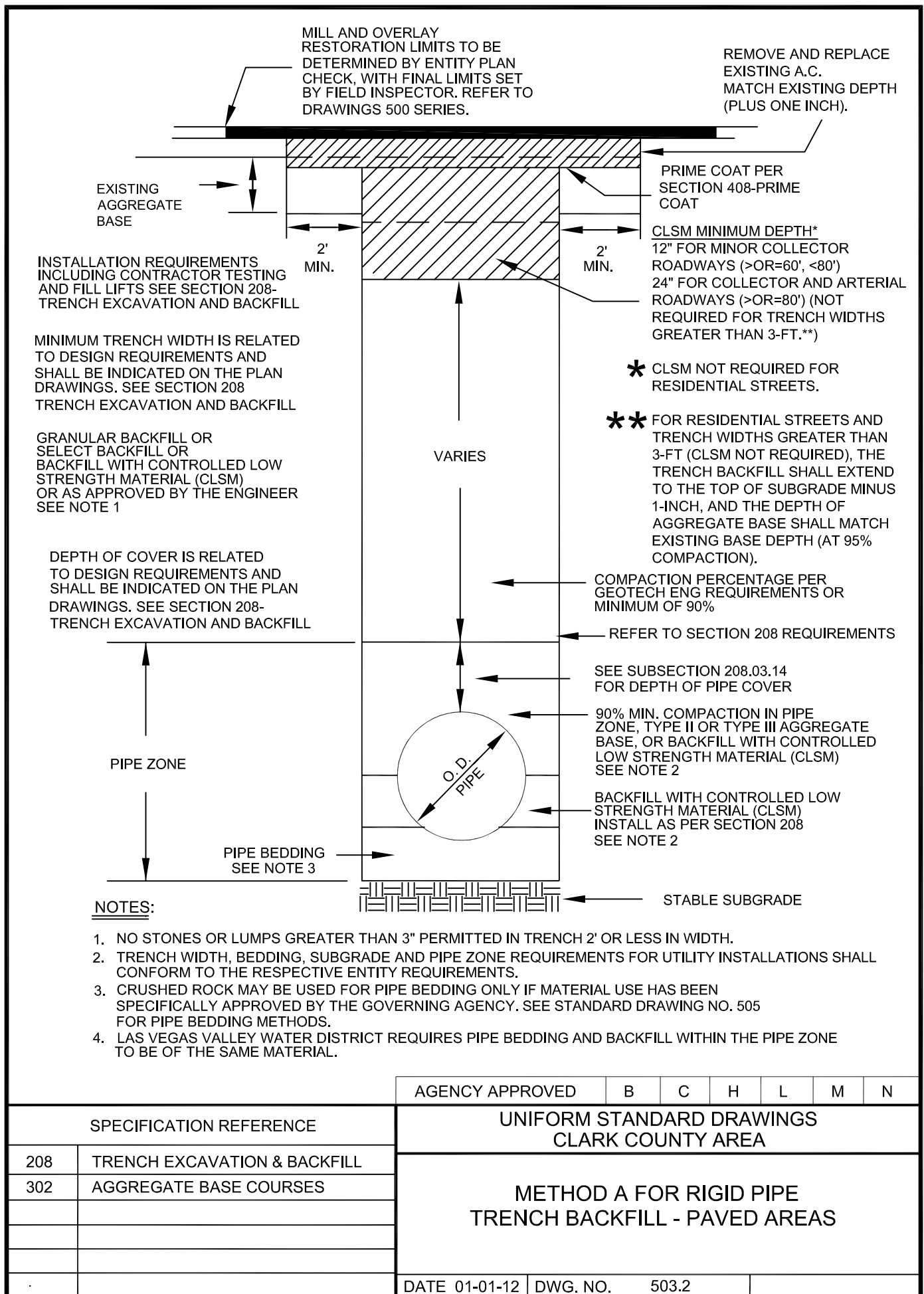


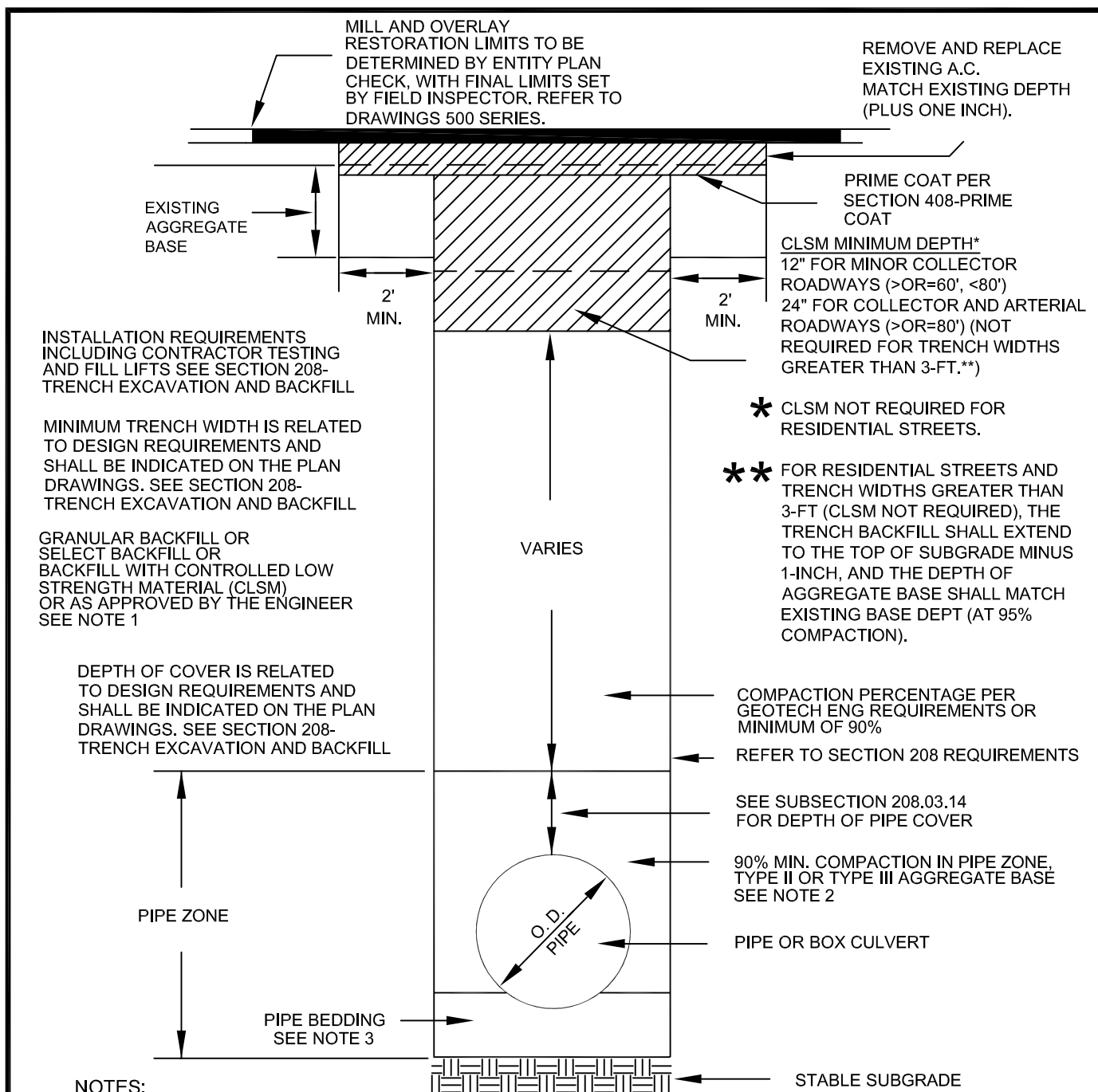
SPECIFICATION REFERENCE		AGENCY APPROVED						
		B						
		C						
		H						
		L						
		M						
		N						
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
		TYPICAL UNDERGROUND UTILITY LOCATIONS IN RESIDENTIAL STREETS WITH 60 FT. OR LESS RIGHT-OF-WAY						
		DATE 08-09-18	DWG. NO.		501			



Effective 12/10/2020 to 06/09/2021

		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
208	TRENCH EXCAVATION & BACKFILL	METHOD A FOR FLEXIBLE PIPE TRENCH BACKFILL - PAVED AREAS							
302	AGGREGATE BASE COURSES								
		DATE 01-01-12	DWG. NO.	503.1					

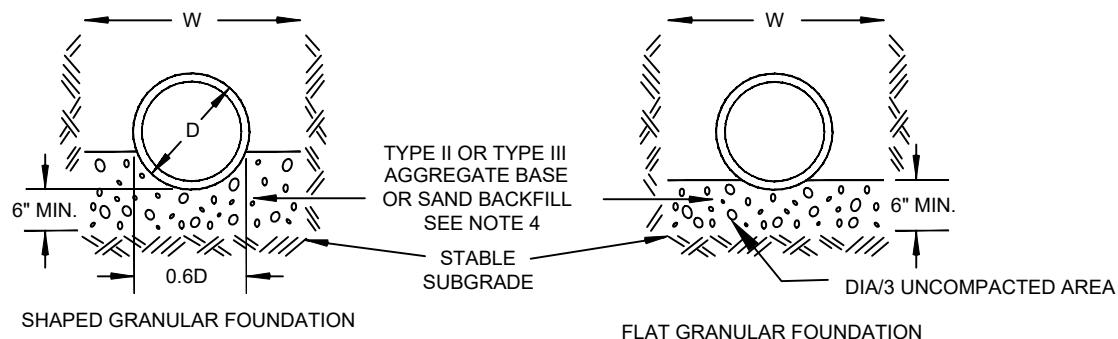




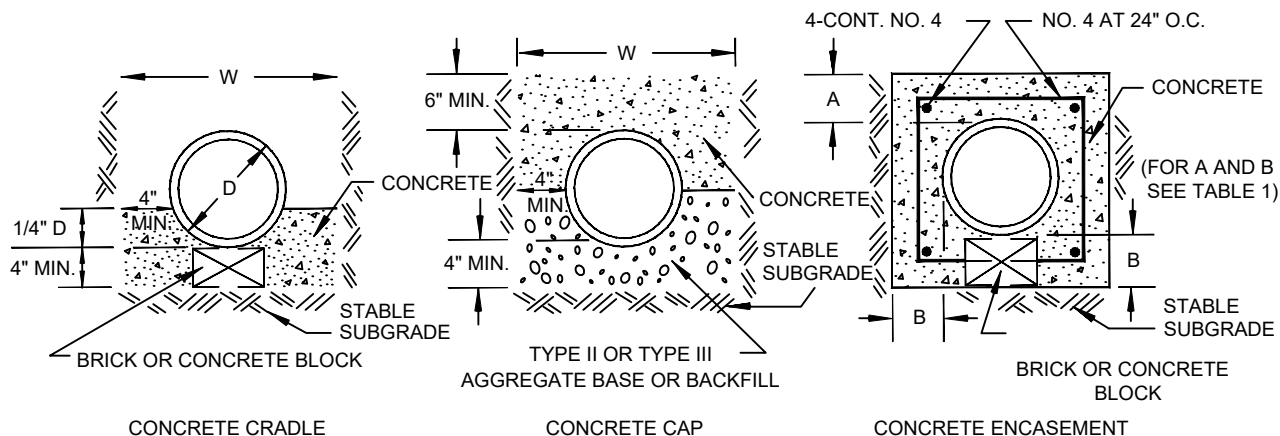
NOTES:

1. NO STONES OR LUMPS GREATER THAN 3" PERMITTED IN TRENCH 2' OR LESS IN WIDTH.
2. TRENCH WIDTH, BEDDING, SUBGRADE AND PIPE ZONE REQUIREMENTS FOR UTILITY INSTALLATIONS SHALL CONFORM TO THE RESPECTIVE ENTITY REQUIREMENTS.
3. CRUSHED ROCK MAY BE USED FOR PIPE BEDDING ONLY IF MATERIAL USE HAS BEEN SPECIFICALLY APPROVED BY THE GOVERNING AGENCY. SEE STANDARD DRAWING NO. 505 FOR PIPE BEDDING METHODS.
4. LAS VEGAS VALLEY WATER DISTRICT REQUIRES PIPE BEDDING AND BACKFILL WITHIN THE PIPE ZONE TO BE OF THE SAME MATERIAL.

		AGENCY APPROVED					
		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
208	TRENCH EXCAVATION & BACKFILL	METHOD B FOR RIGID AND FLEXIBLE PIPE TRENCH BACKFILL - PAVED AREAS					
302	AGGREGATE BASE COURSES						
		DATE 01-01-12	DWG. NO.	503			



NORMAL BEDDING



CONCRETE BEDDING

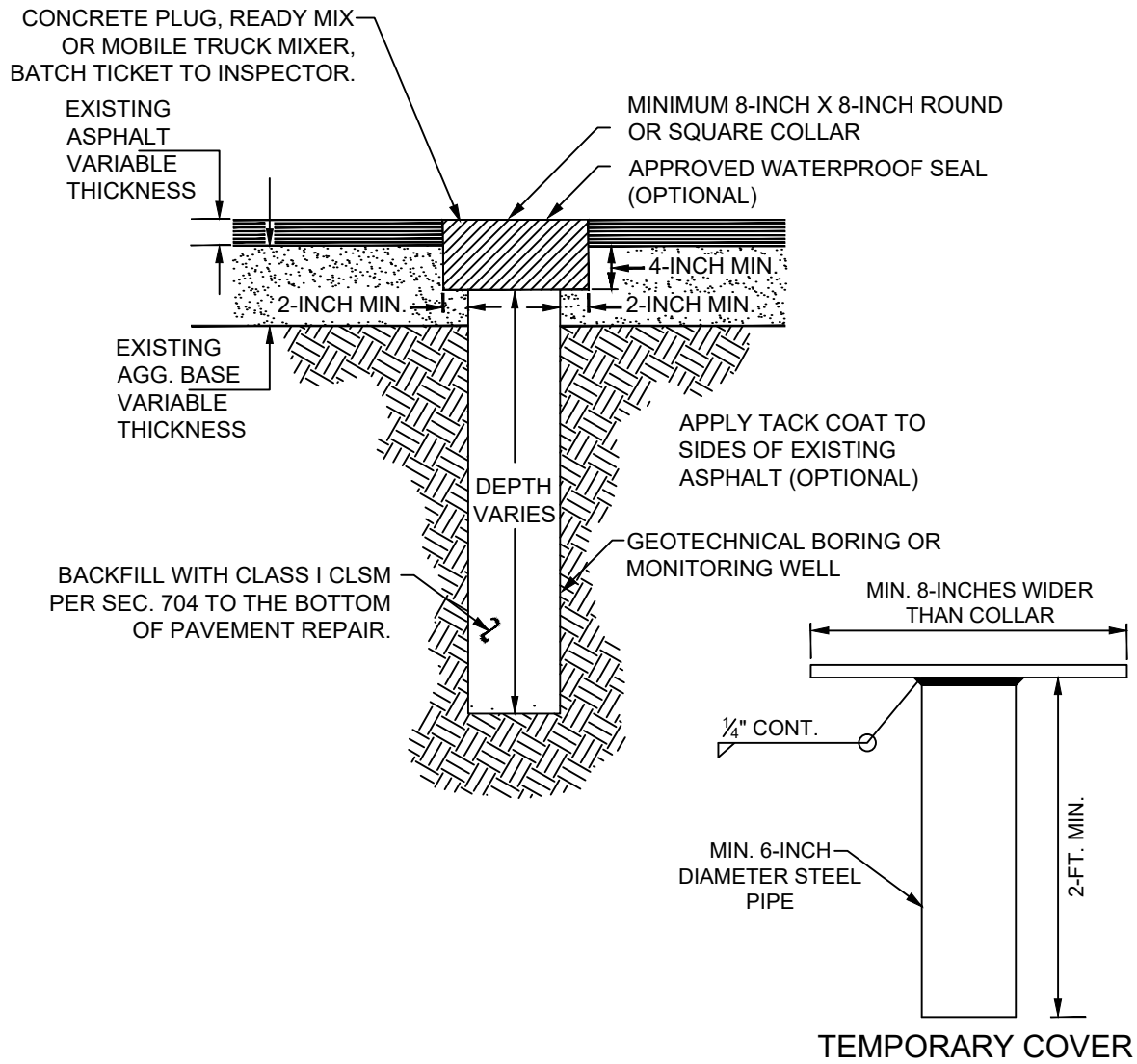
TABLE 1					
PIPE SIZE	B	A	PIPE SIZE	B	A
6"	4"	4"	24"	6"	6"
8"	4"	4"	27"	7"	6"
10"	4"	4"	30"	8"	6"
12"	4"	4"	33"	8"	6"
15"	4"	4"	36"	9"	6"
18"	5"	5"	39"	9"	6"
21"	5"	5"	42"	10"	6"

D □ OUTSIDE DIAMETER OF PIPE
W □ OUTSIDE DIAMETER OF PIPE □ 24" MAXIMUM

NOTES:

- PIPE BEDDING TO BE COMPACTED TO AT LEAST 90% OF MAXIMUM DENSITY. SUBGRADE SHALL CONFORM TO RESPECTIVE ENTITY REQUIREMENTS.
- INDICATED THICKNESS OF BEDDING MATERIAL TO BE CONSTRUCTED UNDER THE BARREL. SUBGRADE TO BE EXCAVATED TO PROVIDE 2" CLEARANCE UNDER THE BELL.
- OTHER BEDDING METHODS MAY BE SPECIFIED OR APPROVED.
- CRUSHED ROCK MAY BE USED FOR PIPE BEDDING ONLY IF MATERIAL USE HAS BEEN SPECIFICALLY APPROVED BY THE GOVERNING AGENCY.

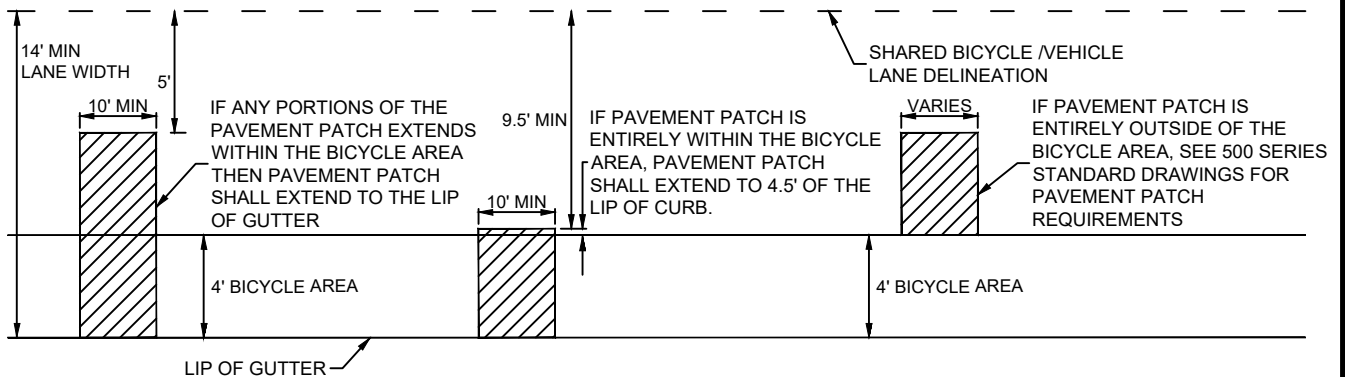
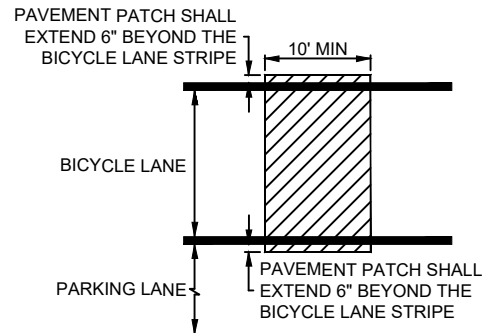
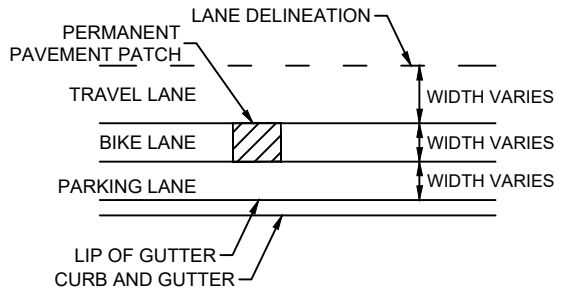
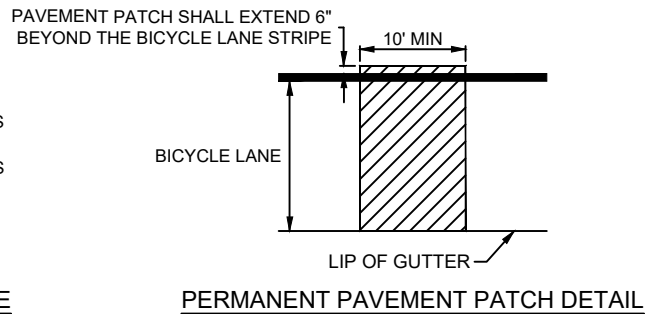
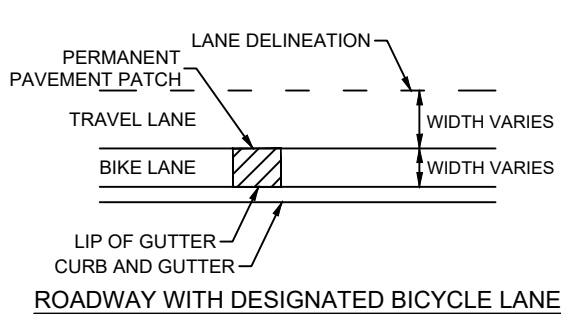
SPECIFICATION REFERENCE		AGENCY APPROVED						
208	TRENCH EXCAVATION □ BACKFILL	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
302	AGGREGATE BASE COURSES							
501	CONCRETE							
505	REINFORCEMENT STEEL							
		PIPE TRENCH BEDDING METHODS						
		DATE	11-9-06	DWG. NO.	505			



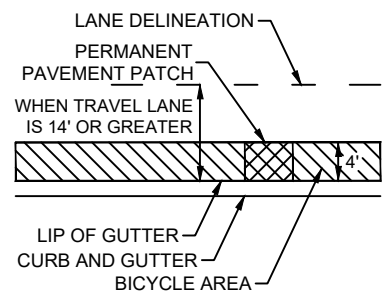
NOTES:

1. CALL AND SCHEDULE INSPECTION TO OBSERVE CONCRETE PLUG AFTER PLACEMENT.
2. PERMIT TYPICALLY VALID FOR 30 DAYS - EXTENSION OF PERMIT IS REQUIRED PRIOR TO EXPIRATION IF WORK IS NOT COMPLETE.
3. FOR BORINGS GREATER THAN 12-INCHES IN DIAMETER, SUBMIT PERMANENT PATCHING PLAN WITH PERMIT APPLICATION.
4. IF GROUNDWATER IS ENCOUNTERED FOLLOW APPROPRIATE AGENCY REQUIREMENTS.
5. THE CONNECTION OF THE PIPE AND FLAT PLATE SHALL BE CONTINUOUSLY WELDED ALL OF THE WAY AROUND. THE SIZE OF THE WIRE SHALL BE 0.35 WIRE (ER70S-6) OR 7018 ROD, AND THE WELDER SHALL HAVE A W.S. CERTIFICATION IN FLAT PLATE.

		AGENCY APPROVED		C				
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
208	TRENCH EXCAVATION AND BACKFILL	SUPPLEMENTAL DRAWING						
		METHOD FOR GEOTECHNICAL BORING AND MONITORING WELL BACKFILL AND PATCH FOR BORINGS 12-INCHES OR LESS IN DIAMETER						
		DATE 07-01-14	DWG. NO.		507.S1			



PERMANENT PAVEMENT PATCH DETAIL



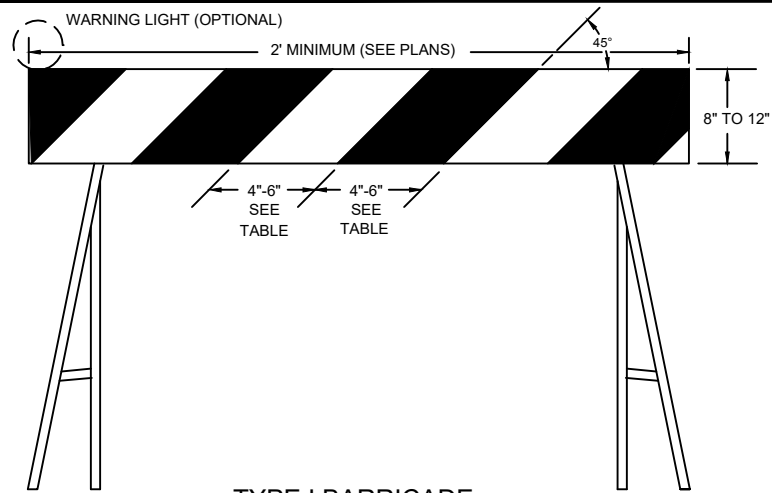
ROADWAY WITH SHARED BICYCLE/VEHICLE LANE

		AGENCY APPROVED					L		
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
208	TRENCH EXCAVATION ☐ BACKFILL	SUPPLEMENTAL DRAWING							
302	AGGREGATE BASE COURSES	BICYCLE LANE PERMANENT PAVEMENT PATCH							
.		DATE 01-01-16	DWG. NO.	508.S1	SHEET 1 OF 2				

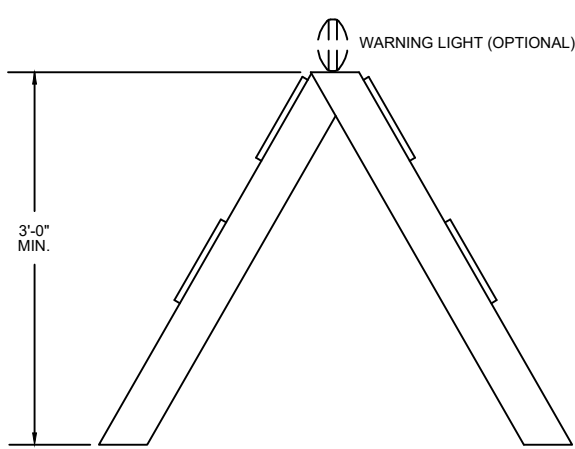
1. LONGITUDINAL JOINTS ARE NOT ALLOWED WITHIN A BICYCLE LANE/AREA.
2. PAVEMENT PATCHES WITHIN A BICYCLE LANE SHALL NOT BE WITHIN 100' OF ANOTHER PAVEMENT PATCH (EXISTING OR PROPOSED). IF A PAVEMENT PATCH IS WITHIN 100', THE PAVEMENT BETWEEN PATCHES SHALL BE REMOVED AND REPLACED WITH ONE CONTINUOUS PATCH.
3. NO PATCHES WITHIN A BICYCLE LANE/AREA SHALL BE LESS THAN 10' IN LENGTH.
4. TEMPORARY PATCHES SHALL BE ASPHALT.
5. THE CONTRACTOR'S NAME AND DATE OF CONSTRUCTION SHALL BE SPRAY PAINTED ON THE TEMPORARY PATCH BY THE CONTRACTOR.
6. TEMPORARY PATCHES SHALL BE COMPACTED, MAINTAINED, AND FLUSH WITH THE ADJACENT PAVEMENT AT ALL TIMES.
7. TEMPORARY PATCHES SHALL BE REMOVED AND REPLACED WITHIN 60 CALENDAR DAYS.
8. A RING TOP DELINEATOR POST SHALL BE PLACED WITHIN THE GUTTER TO ALERT BICYCLISTS OF THE TEMPORARY PATCH CONDITION IF THE BICYCLE LANE IS ADJACENT TO CURB AND GUTTER OR EDGE OF PAVEMENT.
9. CONTRACTOR SHALL INSTALL ROUGH ROAD WARNING SIGNS TO WARN BICYCLISTS OF THE TEMPORARY PATCH CONDITION.
10. ASPHALT DESIGN GRADATION SHALL BE CONTINUOUS WITH ADJACENT ROADWAY.
11. SEE 500 SERIES STANDARD DRAWINGS FOR BACKFILL REQUIREMENTS.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES DUE TO NON-COMPLIANCE WITH THESE REQUIREMENTS AND ALL APPLICABLE CODES AND REGULATIONS.
13. CONTRACTOR SHALL HAVE PERMIT ON-SITE WHEN PRESENT. CONTRACTOR WILL BE ASSESSED A \$300 FINE IF PERMIT IS NOT ON-SITE.
14. ALL PATCHES SHALL BE MACHINE LAID.

Effective 12/10/2020 to 06/09/2021

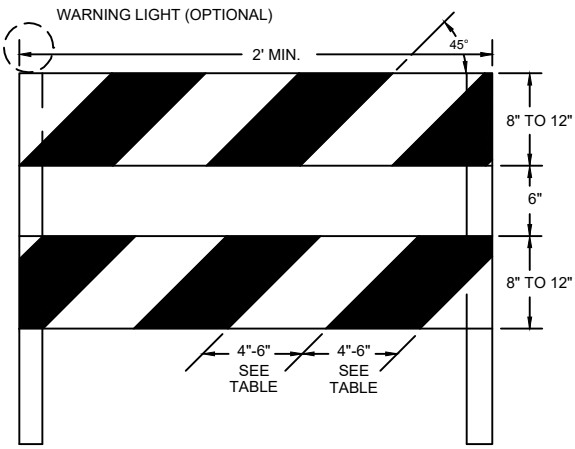
Effective 12/10/2020 to 06/09/2021



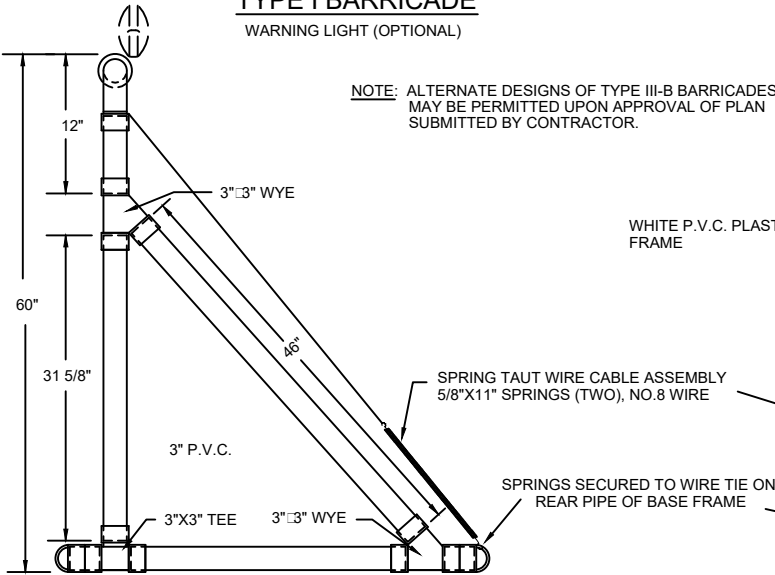
TYPE I BARRICADE
WARNING LIGHT (OPTIONAL)



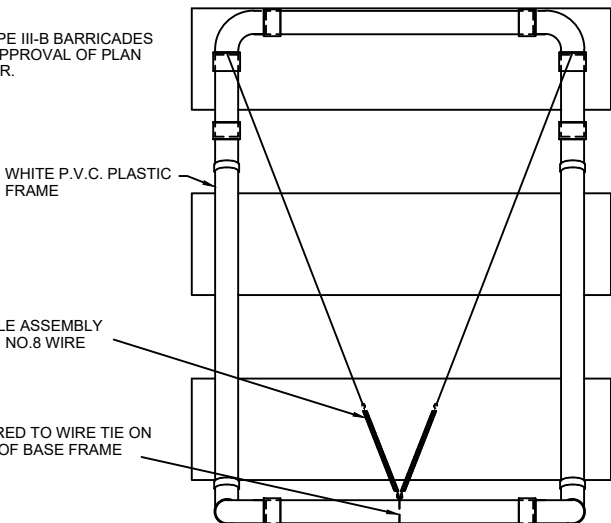
TYPE II BARRICADE
(FRAMEWORK TO BE WHITE OR ORANGE)



- BARRICADE NOTES**
- ALL REFLECTIVE SHEETING ON BARRICADES, VERTICAL PANELS □ VERTICAL PANEL POST HAVING AN ORANGE COLOR SHALL BE MADE OF MATERIALS CONFORMING TO SUBSECTION 716.03.01 OF THE UNIFORM STANDARD SPECIFICATIONS.
 - BARRICADES MAY BE WEIGHTED WITH SANDBAGS, BUT SUCH SANDBAGS SHALL NOT BE PLACED SO AS TO OBSCURE ANY RETRO REFLECTIVE SURFACE, NOR SHALL THEY BE LOCATED HIGHER THAN 24" ABOVE THE PAVEMENT.
 - WARNING LIGHTS MAY BE PLACED ON ALL BARRICADES WHEN USED DURING NIGHTTIME HOURS.
 - NAME □ PHONE NUMBER OF OWNER MAY BE SHOWN ON NON-REFLECTIVE SURFACE; MUST BE OF ONE COLOR, NON-REFLECTIVE, WITH MAXIMUM 1" LETTERS ON THE FACE.
 - THE SIDES OF BARRICADES FACING TRAFFIC SHALL HAVE RETROREFLECTIVE SURFACE.

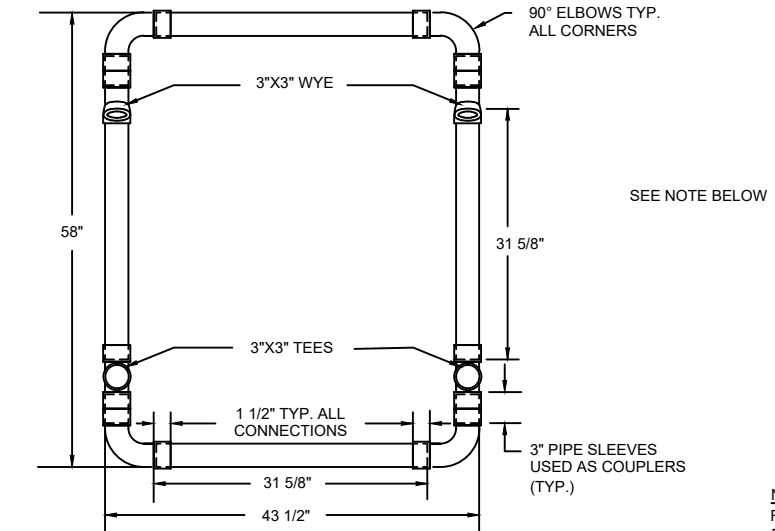


SIDE VIEW

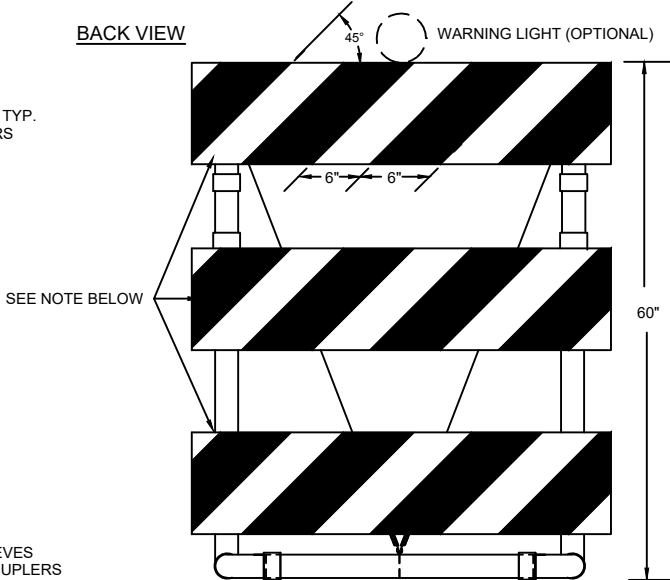


BACK VIEW

BARRICADE CHARACTERISTICS			
TYPE	I	II	IIB
WIDTH OF RAIL	8" TO 12"	8" TO 12"	8" TO 12"
LENGTH OF RAIL	2' MIN.	2' MIN.	4' MIN.
WIDTH OF STRIPES	RAIL LENGTH □ 3'- 4" RAIL LENGTH □ 3' - 6"	RAIL LENGTH □ 3'- 4" RAIL LENGTH □ 3' - 6"	6"
HEIGHT	3' MIN.	3' MIN.	5' MIN.
NUMBER OF REFLECTORIZED RAIL FACES	2 (ONE EACH DIRECTION)	4 (TWO EACH DIRECTION)	3 IF FACING TRAFFIC IN ONE DIRECTION 6 IF FACING TRAFFIC IN TWO DIRECTIONS

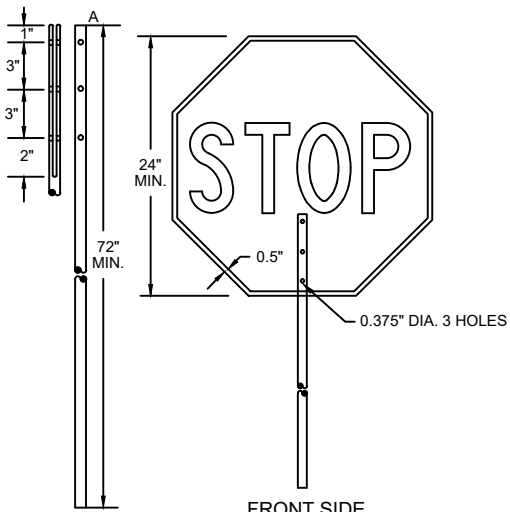


TOP VIEW OF BASE

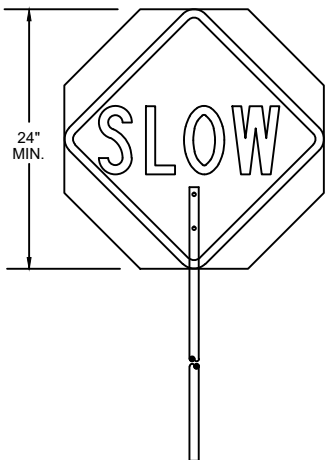


FRONT VIEW

NOTE: 9" x 48" BARRICADE HAZARD PANELS ORANGE AND WHITE RIGHT OR LEFT. (0.025 ANODIZED ALUMINUM OR 3/4" WOOD) PANELS ATTACHED WITH 1" NO. 14 PAN HEAD METAL SCREW.



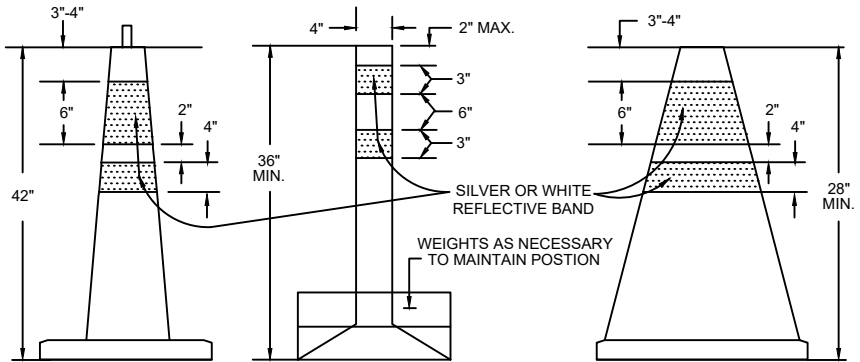
FRONT SIDE



REVERSE SIDE

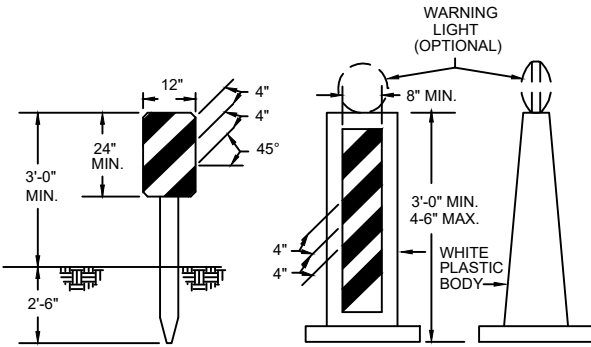
FLAGGER SIGN

- THE STOP FACE SHALL CONSIST OF WHITE LETTERS AND BORDER ON A RED REFLECTORIZED BACKGROUND.
- THE SLOW FACE SHALL CONSIST OF BLACK LETTERS AND BORDER ON AN ORANGE REFLECTORIZED BACKGROUND.
- BOTH FACES SHALL BE MADE OF MATERIALS CONFORMING TO SECTION 716.03.01 OF THE UNIFORM STANDARD SPECIFICATIONS.
- AREAS OUTSIDE SIGN BORDERS SHALL BE BLACK.
- THE SIGN BLANK SHALL BE OCTAGONAL.
- THE PORTION OF THE STAFF WITHIN THE SIGN FACE SHALL MATCH THE SIGN COLORS.
- ALL COLORS AND LETTERS SHALL MEET APPLICABLE FEDERAL STANDARDS.
- THE STAFF SHALL CONSIST OF TWO SECTIONS JOINED BY A COUPLING LOCATED 60 IN. FROM THE BOTTOM OF THE STAFF. ALTERNATE DESIGNS MAY BE USED WHEN APPROVED BY THE TRAFFIC ENGINEER. ALL MATERIALS SHALL BE SUBSTANTIAL AND DURABLE.
- THIS SIGN SHALL BE FURNISHED BY THE CONTRACTOR AND SHALL BE USED BY THE FLAGGER IN LIEU OF FLAGS OR OTHER SIGNALING DEVICES.
- STOP - SIX (6) INCH SERIES C LETTERS. SLOW - SIX (6) INCH SERIES B LETTERS.
- PADDLES SHALL CONFORM TO SECTION 6E-4 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
- THE PADDLE MAY BE SUPPLEMENTED BY ONE OR TWO SYMMETRICALLY POSITIONED ALTERNATELY FLASHING WHITE HIGH INTENSITY LAMPS ON EACH SIDE.



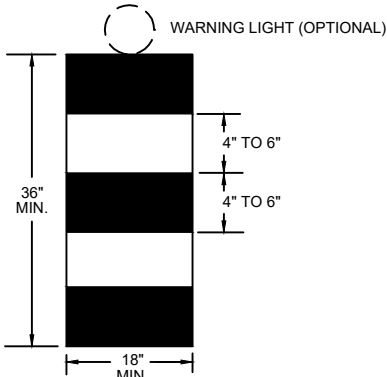
TRAFFIC CONES

- CONES TO BE PREDOMINATELY ORANGE.
- CONES TO BE USED DURING HOURS OF DARKNESS SHALL BE REFLECTORIZED AS SHOWN ABOVE.
- CONES, DRUMS AND VERTICAL PANEL POST SHALL HAVE WEIGHTED BASES; HOWEVER IF THE CONTRACTOR WISHES IN LIEU OF WEIGHTED BASES, THE DEVICES MAY BE NAILED OR EPOXIED IN PLACE. DO NOT NAIL OR EPOXY TO FINAL PAVEMENT.



VERTICAL PANEL

VERTICAL PANEL POST



TRAFFIC DRUM

TRAFFIC CONTROL PLAN
FOR
HIGHWAY WORK ZONE

SPECIFICATION REFERENCE

TYPICAL APPLICATION FOR

BARRICADES □ FLAGGER TRAFFIC CONTROL SIGN STANDARD DESIGNS

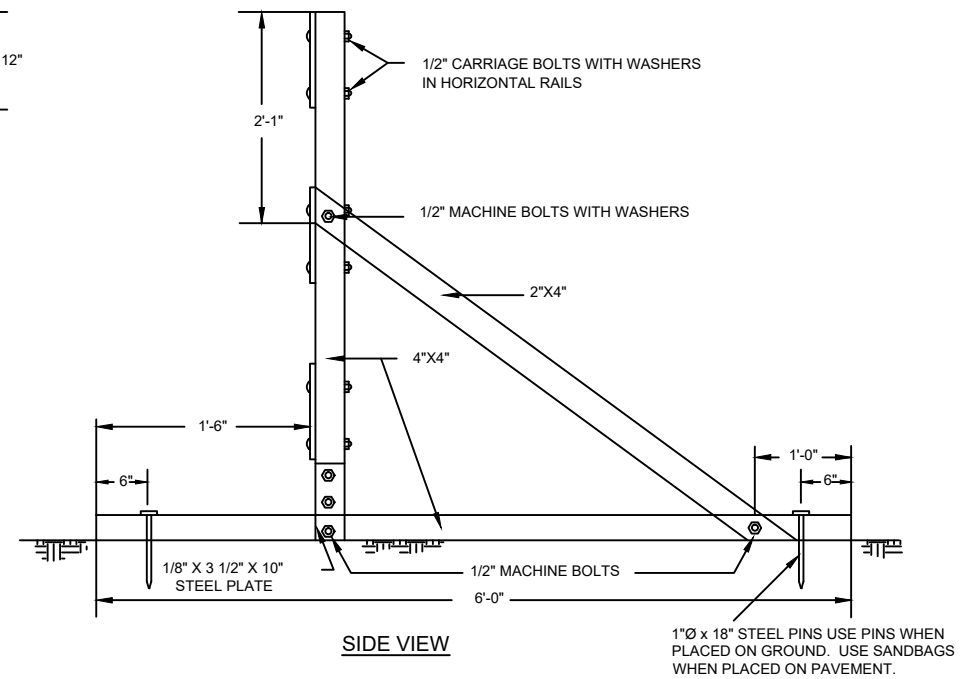
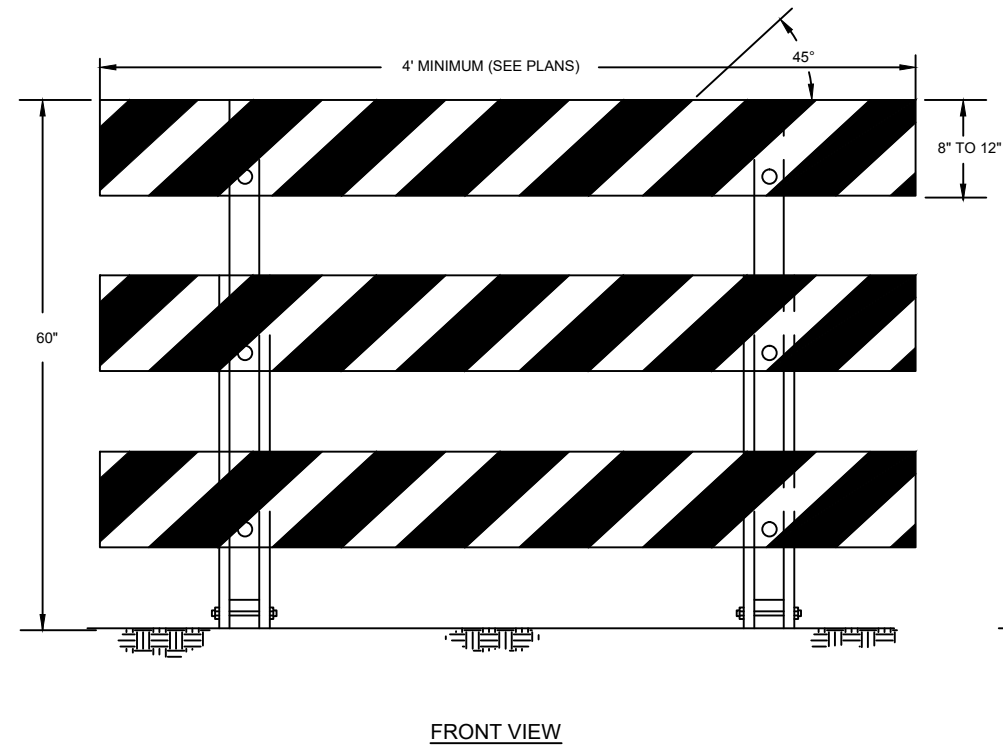
AGENCY APPROVED B C H L M N

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

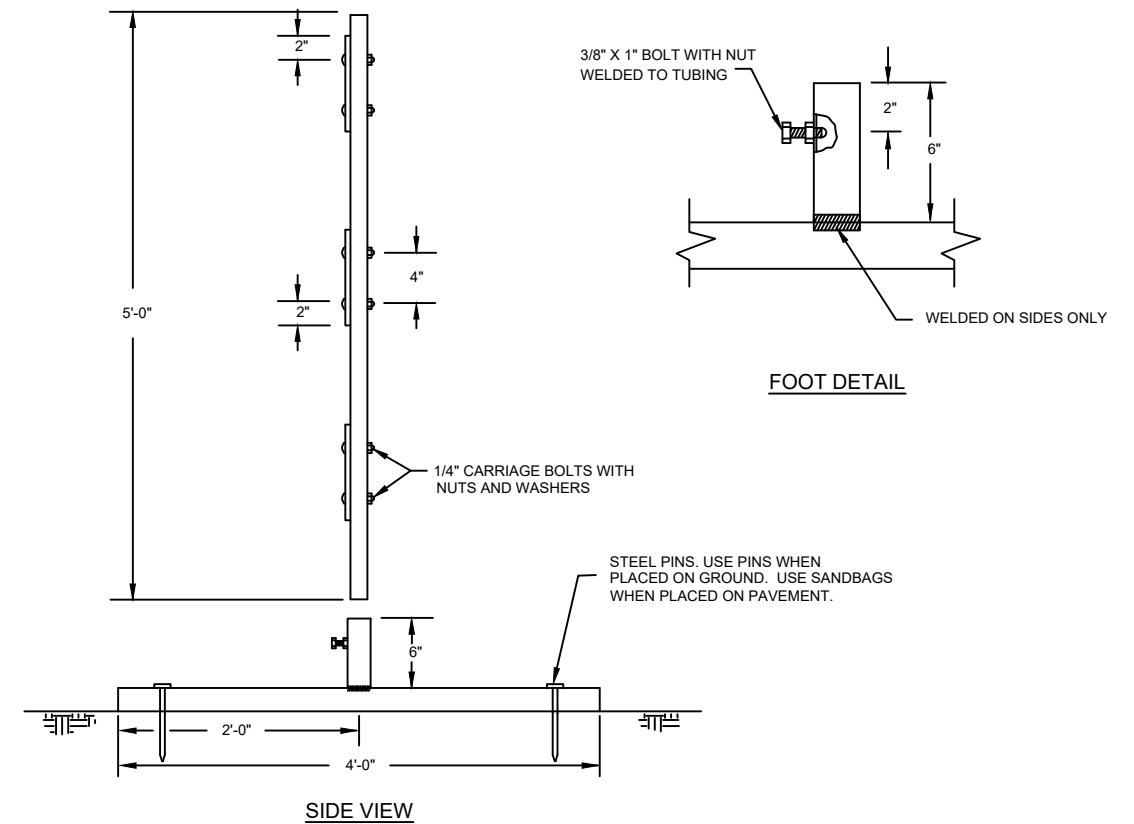
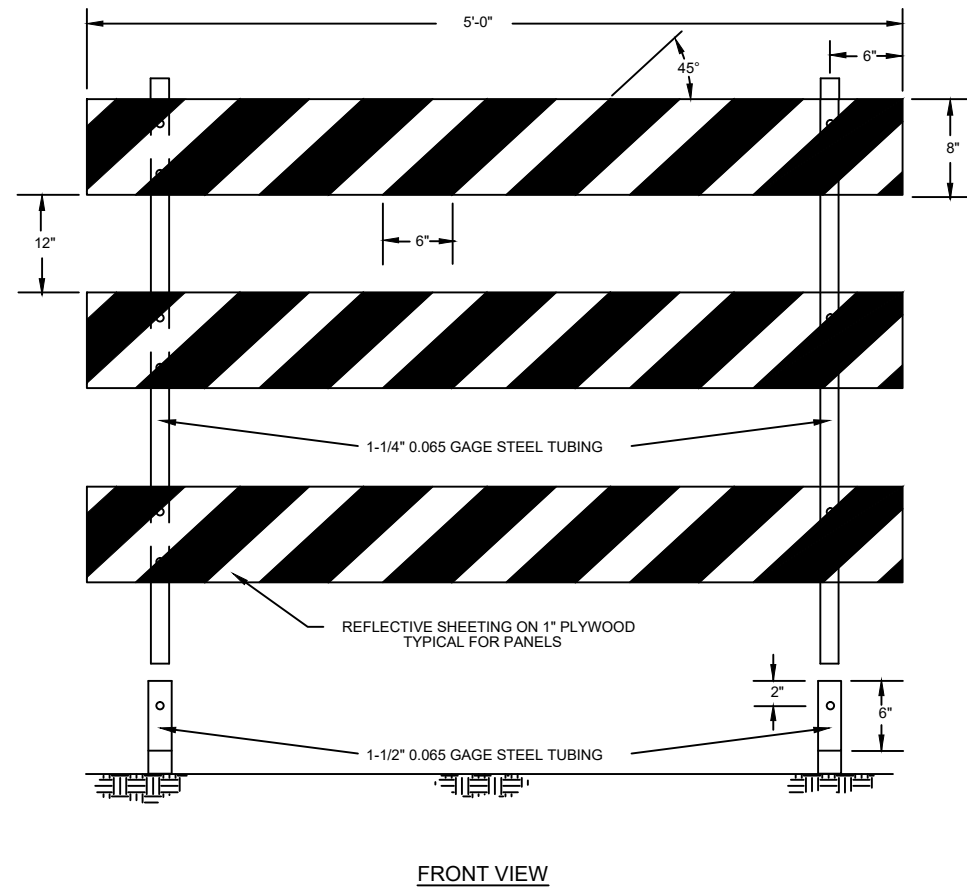
DATE 1-9-97 DWG. NO. 601 SHEET 1 OF 2

Effective 12/10/2020 to 06/09/2021

TYPE IIIA BARRICADE
N.T.S.



PORTABLE TYPE IIIA
BARRICADE
N.T.S.



AGENCY APPROVED B C H L M N

TRAFFIC CONTROL PLAN
FOR
HIGHWAY WORK ZONE

SPECIFICATION REFERENCE

TYPICAL APPLICATION FOR

BARRICADES □ FLAGGER TRAFFIC CONTROL SIGN STANDARD DESIGNS

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

DATE 1-9-97 DWG. NO. 601 SHEET 2 OF 2

PORTABLE CONCRETE BARRIER RAIL SHALL BE USED TO PROTECT ANY WORK AREA IN WHICH IS ESTABLISHED A CONDITION SHOWN IN FIGURES A □ B OR TABLES 1,2 □ 3 (BELOW) WARRANTING A BARRIER

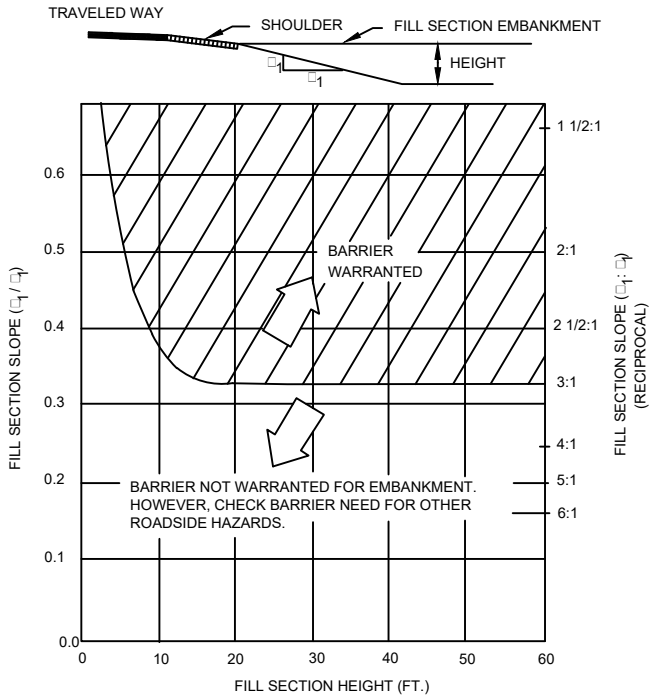


FIGURE A. WARRANTS FOR FILL SECTION EMBANKMENTS

DESIGN SPEED	DESIGN ADT	FILL SLOPES			CUT SLOPES		
		6:1 OR FLATTER	5:1 TO 4:1	3:1	3:1	5:1 TO 4:1	6:1 OR FLATTER
40 MPH OR LESS	UNDER 750	7-10	7-10	□	7-10	7-10	7-10
	750-1500	10-12	12-14	□	10-12	10-12	10-12
	1500-6000	12-14	14-16	□	12-14	12-14	12-14
	OVER 6000	14-16	16-18	□	14-16	14-16	14-16
45-50 MPH	UNDER 750	10-12	12-14	□	8-10	8-10	10-12
	750-1500	12-14	16-20	□	10-12	12-14	14-16
	1500-6000	16-18	20-26	□	12-14	14-16	16-18
	OVER 6000	18-20	24-28	□	14-16	18-20	20-22
55 MPH	UNDER 750	12-14	14-18	□	8-10	10-12	10-12
	750-1500	16-18	20-24	□	10-12	14-16	16-18
	1500-6000	20-22	24-30	□	14-16	16-18	20-22
	OVER 6000	22-24	26-32□	□	16-18	20-22	22-24
60 MPH	UNDER 750	16-18	20-24	□	10-12	12-14	14-16
	750-1500	20-24	26-32□	□	12-14	16-18	20-22
	1500-6000	26-30	32-40□	□	14-18	18-22	24-26
	OVER 6000	30-32□	36-44□	□	20-22	24-26	26-28
65-70 MPH	UNDER 750	18-20	20-26	□	10-12	14-16	14-16
	750-1500	24-26	28-36□	□	12-16	18-20	20-22
	1500-6000	28-32□	34-42□	□	16-20	22-24	26-28
	OVER 6000	30-34□	38-46□	□	22-24	26-30	28-30

THE TABLES AND FIGURES SHOWN ABOVE ARE TAKEN IN THEIR ENTIRETY FROM THE ROADSIDE DESIGN GUIDE, AMERICAN ASSOCIATION OF STATE HIGHWAY □ TRANSPORTATION OFFICIALS (AASHTO). WASHINGTON, D.C. 1989 AND USED TO ESTIMATE CLEAR ZONE DIMENSION. REFER TO ROADSIDE DESIGN GUIDE FOR ADDITIONAL INFORMATION AND GUIDELINES WHICH SHOULD BE CONSIDERED.

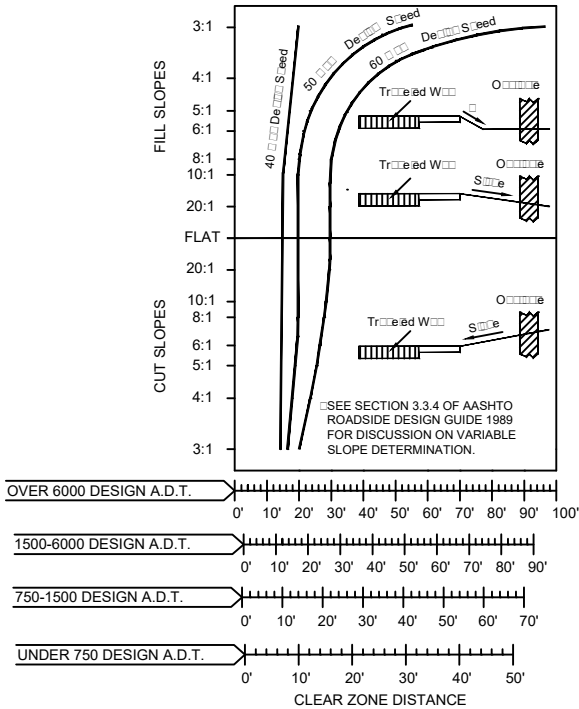


FIGURE B. CLEAR ZONE DISTANCE CURVES

(FOR SLOPES GREATER THAN 4:1 CONSULT AASHTO ROADSIDE DESIGN GUIDE 1989)

□ MAY BE LIMITED TO 30 FEET BASED SITE SPECIFIC INVESTIGATION. SEE ROADSIDE DESIGN GUIDE FOR FURTHER DISCUSSION.

□ FIXED OBJECTS SHOULD NOT BE PRESENT IN THE VICINITY OF THE TOE OF THESE SLOPES. RECOVERY OF HIGH SPEED VEHICLES THAT ENCROACH BEYOND THE EDGE OF SHOULDER MAY BE EXPECTED TO OCCUR BEYOND THE TOE OF THE SLOPE. SEE ROADSIDE DESIGN GUIDE FOR FURTHER DISCUSSION.

TABLE 2. TYPICAL WARRANTS FOR NONTRAVERSABLE AND FIXED OBJECT HAZARDS

BRIDGE PIERS, ABUTMENTS AND RAILING ENDINGS	SHIELDING GENERALLY REQUIRED
BOULDERS	A JUDGEMENT DECISION BASED ON NATURE OF HAZARD AND LIKELIHOOD OF IMPACT
CULVERTS, PIPES, HEADWALLS	A JUDGEMENT DECISION BASED ON SIZE, SHAPE AND LOCATION OF HAZARD
CUT SLOPES (SMOOTH)	SHIELDING NOT GENERALLY REQUIRED
CUT SLOPES (ROUGH)	A JUDGEMENT DECISION BASED ON LIKELIHOOD OF IMPACT
DITCHES (PARALLEL)	REFER TO ROADSIDE DESIGN GUIDE SECTION 3.2.4
DITCHES (TRANSVERSE)	SHIELDING GENERALLY REQUIRED IF LIKELIHOOD OF HEAD-ON IMPACT IS HIGH
EMBANKMENT	A JUDGEMENT DECISION BASED ON FILL HEIGHT AND SLOPE (SEE FIGURE A)
RETAINING WALLS	A JUDGEMENT DECISION BASED ON RELATIVE SMOOTHNESS OF WALL AND ANTICIPATED MAXIMUM ANGLE OF IMPACT
SIGN/LUMINAIRE SUPPORTS ³	SHIELDING GENERALLY REQUIRED FOR NON-BREAKAWAY SUPPORTS
TRAFFIC SIGNAL SUPPORTS ⁴	ISOLATED TRAFFIC SIGNALS WITHIN CLEAR ZONE ON HIGH-SPEED RURAL FACILITIES MAY WARRANT SHIELDING
TREES	A JUDGEMENT DECISION BASED ON SITE SPECIFIC CIRCUMSTANCES
UTILITY POLES	SHIELDING MAY BE WARRANTED ON A CASE-BY-CASE BASIS
PERMANENT BODIES OF WATER	A JUDGEMENT DECISION BASED ON LOCATION AND DEPTH OF WATER AND LIKELIHOOD OF ENCROACHMENT

- SHIELDING A NON-TRAVERSABLE OR FIXED OBJECT HAZARD IS USUALLY WARRANTED ONLY WHEN THE HAZARD IS WITHIN THE CLEAR ZONE AND CANNOT PRACTICALLY OR ECONOMICALLY BE REMOVED, RELOCATED OR MADE BREAKAWAY, AND IT IS DETERMINED THAT THE BARRIER IS A LESSER HAZARD THAN THE UNSHIELDED CONDITION.
- MARGINAL SITUATIONS, WITH RESPECT TO PLACEMENT OR OMISSION OF A BARRIER, WILL USUALLY BE DECIDED BY ACCIDENT EXPERIENCE, EITHER AT THE SITE OR AT A COMPARABLE SITE.
- WHERE FEASIBLE, ALL SIGN AND LUMINAIRE SUPPORTS SHOULD BE A BREAKAWAY DESIGN REGARDLESS OF THEIR DISTANCE FROM THE ROADWAY IF THERE IS A REASONABLE LIKELIHOOD OF THEIR BEING HIT BY AN ERRANT MOTORIST.
- IN PRACTICE, RELATIVELY FEW TRAFFIC SIGNAL SUPPORTS, INCLUDING FLASHING LIGHT SIGNALS AND GATES USED AT RAILROAD CROSSING, ARE SHIELDED. IF SHIELDING IS DEEMED UNNECESSARY, HOWEVER, CRASH CUSHIONS ARE SOMETIMES USED IN LIEU OF A LONGITUDINAL BARRIER INSTALLATION.

TABLE 3. HORIZONTAL CURVE ADJUSTMENTS

K _{CZ} (CURVE CORRECTION FACTOR)								CZ_C (L_C)(K_{CZ}) WHERE: CZ_C □ CLEAR ZONE ON OUTSIDE OF CURVATURE, FT. L_C □ CLEAR ZONE DISTANCE, FT., FIGURE B. K_{CZ} □ CURVE CORRECTION FACTOR NOTE: CLEAR ZONE CORRECTION FACTOR IS APPLIED TO OUTSIDE CURVES ONLY. CURVES FLATTER THAN 2° DO NOT REQUIRE AN ADJUSTED CLEAR ZONE.
DEGREE OF CURVE	DESIGN SPEED							
	40	45	50	55	60	65	70	
2.0	1.08	1.10	1.12	1.15	1.19	1.22	1.27	
2.5	1.10	1.12	1.15	1.19	1.23	1.28	1.33	
3.0	1.11	1.15	1.18	1.23	1.28	1.33	1.40	
3.5	1.13	1.17	1.22	1.26	1.32	1.39	1.46	
4.0	1.15	1.19	1.25	1.30	1.37	1.44		
4.5	1.17	1.22	1.28	1.34	1.41	1.49		
5.0	1.19	1.24	1.31	1.37	1.46			
6.0	1.23	1.29	1.36	1.45	1.54			
7.0	1.26	1.34	1.42	1.52				
8.0	1.30	1.38	1.48					
9.0	1.34	1.43	1.53					
10.0	1.37	1.47						
15.0	1.54							

AGENCY APPROVED B C H L M N

TRAFFIC CONTROL PLAN
FOR
HIGHWAY WORK ZONE

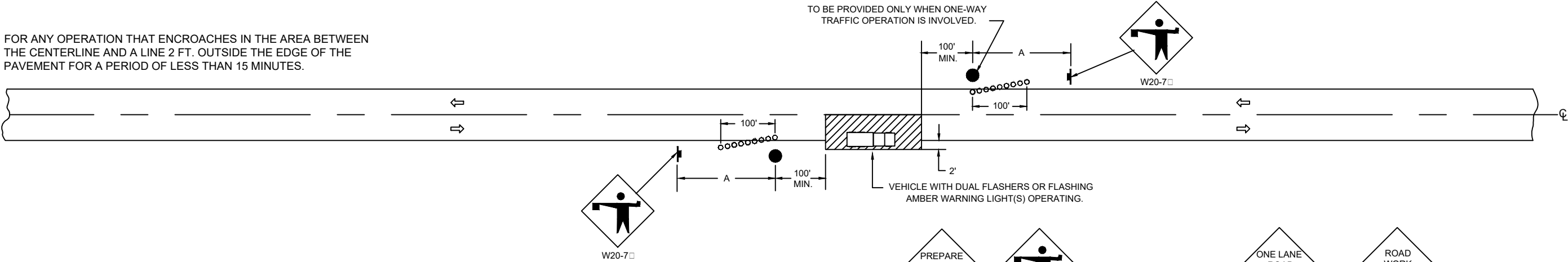
SPECIFICATION REFERENCE

WARRANTING CONDITIONS FOR
PORTABLE CONCRETE BARRIER RAIL

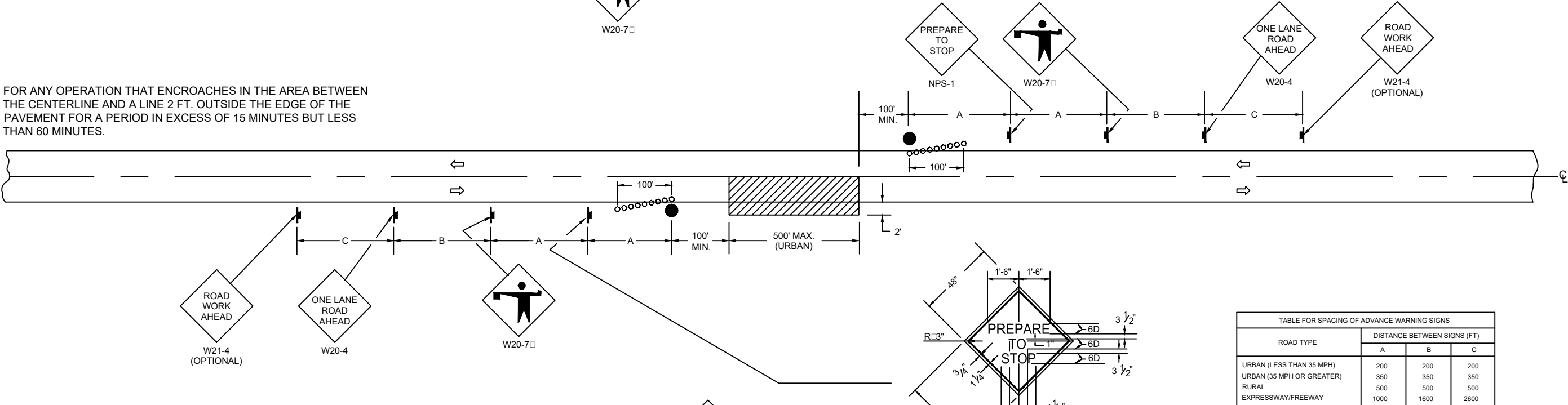
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

DATE 1-9-97 DWG. NO. 602 SHEET 1 OF 2

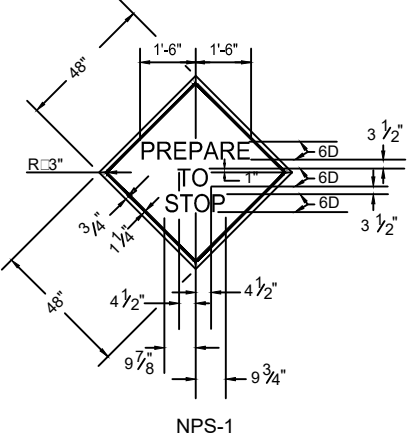
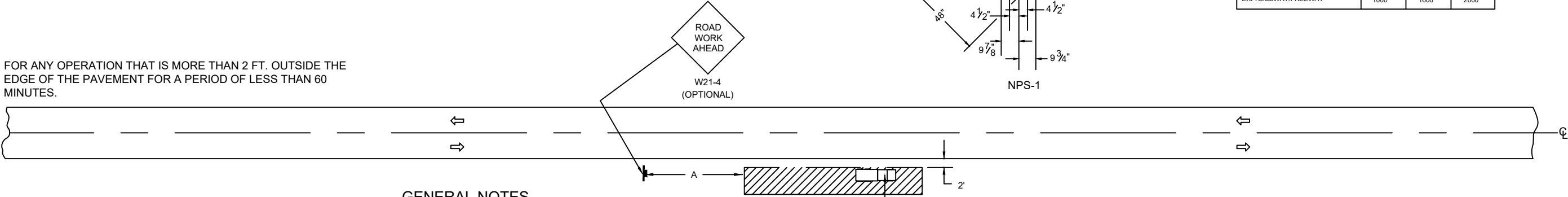
A. FOR ANY OPERATION THAT ENCROACHES IN THE AREA BETWEEN THE CENTERLINE AND A LINE 2 FT. OUTSIDE THE EDGE OF THE PAVEMENT FOR A PERIOD OF LESS THAN 15 MINUTES.



B. FOR ANY OPERATION THAT ENCROACHES IN THE AREA BETWEEN THE CENTERLINE AND A LINE 2 FT. OUTSIDE THE EDGE OF THE PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES BUT LESS THAN 60 MINUTES.



C. FOR ANY OPERATION THAT IS MORE THAN 2 FT. OUTSIDE THE EDGE OF THE PAVEMENT FOR A PERIOD OF LESS THAN 60 MINUTES.



ROAD TYPE	DISTANCE BETWEEN SIGNS (FT)		
	A	B	C
URBAN (LESS THAN 35 MPH)	200	200	200
URBAN (35 MPH OR GREATER)	350	350	350
RURAL	500	500	500
EXPRESSWAY/FREEWAY	1000	1600	2600

GENERAL NOTES

- CONSTRUCTION OPERATIONS SHALL BE CONFINED TO ONE TRAFFIC LANE. ON TWO-LANE ROADS, AT LEAST 500 FT. OF BOTH TRAFFIC LANES SHALL BE AVAILABLE FOR TRAFFIC MOVEMENT AT INTERVALS NOT GREATER THAN 1,000 FT. AND A COMPLETE TRAFFIC CONTROL PLAN MUST BE APPROVED FOR ANY PROJECT EXPECTED TO EXCEED 1,000 FT. IN LENGTH.
- THE FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES.
- ALL SIGNS ARE TO BE REMOVED AT COMPLETION OF EACH OPERATION.
- FOR THREE LANE ROADWAYS, THE FLAGGER SHOWN FOR TRAFFIC APPROACHING FROM THE OPPOSITE DIRECTION MAY BE DELETED, IF ONE LANE IS MAINTAINED IN EACH DIRECTION, AS DIRECTED BY THE TRAFFIC ENGINEER, THE ADVANCE WARNING SIGN FOR TRAFFIC APPROACHING FROM THE OPPOSITE DIRECTION OMITTED, AND THE "ONE LANE ROAD AHEAD" SIGN CHANGED TO "RIGHT (LEFT) LANE CLOSED AHEAD". FOR MULTILANE ROADWAYS WITH TWO LANES IN EACH DIRECTION, THE FLAGGER MAY BE DELETED IF DEEMED UNNECESSARY BY THE TRAFFIC ENGINEER.

- LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS BY THE TRAFFIC ENGINEER. THE LATERAL PLACEMENT OF THE FLAGGERS MAY BE VARIED FROM THAT SHOWN.
- ALL VEHICLES, EQUIPMENT, WORKERS (EXCEPT FLAGGERS) AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE PAVEMENT UNLESS OTHERWISE AUTHORIZED BY THE TRAFFIC ENGINEER.
- ALL WARNING SIGNS SHALL HAVE BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND. ALL SIGNS HAVING AN ORANGE COLOR SHALL BE MADE OF MATERIALS CONFORMING TO SECTION 716.03.01 OF THE UNIFORM STANDARD SPECIFICATIONS.
- IF WORKING AT OR NEAR A TRAFFIC SIGNAL, CONTACT LVACTS AT 229-6611 AND LOCAL ENTITY AT APPROPRIATE NUMBERS LISTED BELOW AT LEAST TWO WORKING DAYS PRIOR TO BEGINNING WORK.

BOULDER CITY	293-9200	LAS VEGAS	229-6331
CLARK COUNTY	455-6100	MESQUITE	346-5295
HENDERSON	565-2140	NORTH LAS VEGAS	642-2462

- IF THE WORK PLACE IS IN THE MEDIAN OF A DIVIDED HIGHWAY, AN ADVANCE WARNING SIGN SHOULD ALSO BE PLACED ON THE LEFT SIDE OF THE DIRECTIONAL ROADWAY.
- ACCESS FOR CAT TRANSIT SERVICE, PEDESTRIANS AND BICYCLES SHALL BE MAINTAINED THROUGHOUT DURATION OF CONSTRUCTION. IF RE-ROUTING OF ACCESS IS NECESSARY, THE CONTRACTOR SHALL PROVIDE THE ENTITY'S TRAFFIC ENGINEER WITH A MAP SHOWING THE PROPOSED RE-ROUTES FOR APPROVAL. IF CONSTRUCTION OPERATIONS AFFECT CAT BUS STOPS OR FACILITIES, THE CONTRACTOR SHALL NOTIFY THE REGIONAL TRANSPORTATION COMMISSION AT 455-4481 AT LEAST 3 NORMAL WORKING DAYS PRIOR TO BEGINNING SUCH OPERATIONS.
- FLOODLIGHTS SHOULD BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT AS NEEDED.
- TYPE "B" HIGH INTENSITY FLASHING WARNING LIGHTS MAY BE INSTALLED ABOVE EACH WORK ZONE CONSTRUCTION FOR USE DURING HOURS OF DARKNESS.

SYMBOLS

- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH TRAFFIC CONTROL SIGN
- TRAFFIC CONES
- TRAFFIC DIRECTION

TYPICAL APPLICATIONS

- MARKING PATCHES
- FIELD SURVEY
- STRING LINE
- UTILITY OPERATION
- CLEANING UP DEBRIS ON PAVEMENT

TRAFFIC CONTROL PLAN
FOR
HIGHWAY WORK ZONE

SPECIFICATION REFERENCE

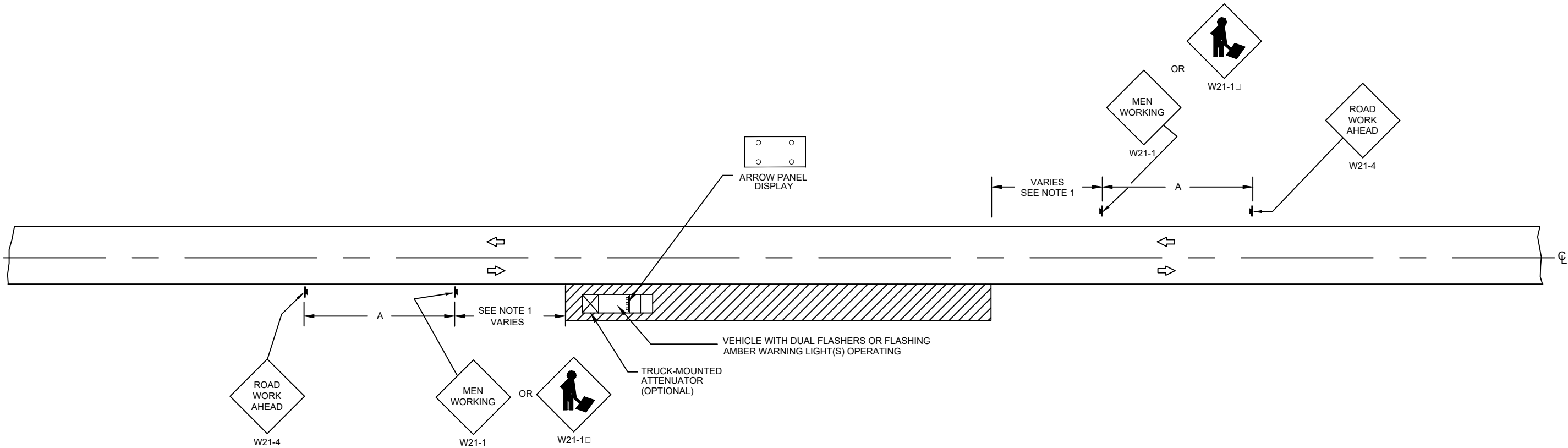
TYPICAL APPLICATION FOR

SHORT TIME, DAY OR NIGHT OPERATIONS

AGENCY APPROVED B C H L M N

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

DATE 1-9-97 DWG NO. 603



GENERAL NOTES

1. MINIMUM DISTANCE IS 200 FT. MAXIMUM DISTANCE TO BE DETERMINED BY THE TRAFFIC ENGINEER BUT SHOULD NOT EXCEED 1/2 THE LENGTH REQUIRED FOR ONE NORMAL WORKING DAY'S OPERATION. IN SITUATIONS WHERE MULTIPLE WORK LOCATIONS IN A LIMITED DISTANCE MAKE IT PRACTICABLE TO PLACE STATIONARY SIGNS, THE MAXIMUM SPACING FOR THE ADVANCE WARNING SIGN IS 5 MILES IN ADVANCE OF THE WORK.

2. IF THE WORK OPERATION DOES NOT EXCEED 60 MINUTES, TRAFFIC CONTROL MAY BE IN CONFORMANCE WITH STANDARD DRAWING NO. 603.

3. ALL SIGNS ARE TO BE REMOVED AT COMPLETION OF THE DAY'S OPERATION.

4. FOR DIVIDED ROADWAYS THE REQUIRED ADVANCE WARNING SIGNS SHALL BE POSTED ON BOTH THE RIGHT AND MEDIAN SIDE OF THE AFFECTED APPROACH.

5. FOR MULTILANE ROADWAYS THE ADVANCE WARNING SIGNS MAY BE REQUIRED FOR TRAFFIC APPROACHING FROM THE OPPOSITE DIRECTION.

6. WORKER SIGNS ARE TO BE REMOVED WHEN NO WORK IS BEING PERFORMED. ANY UNATTENDED OBSTACLE OR EXCAVATION IN THE WORK AREA, WHICH IN THE OPINION OF THE TRAFFIC ENGINEER CONSTITUTES A HAZARD, SHALL BE PROTECTED BY BARRICADES WITH FLASHING LIGHTS AT NIGHT AT THE POINTS OF HAZARD. STEADY BURNING LIGHTS SHALL BE USED FOR DELINEATION AND LONG LINE GUIDANCE. BARRICADES SHALL BE PLACED ACCORDING TO MAXIMUM SPACING VALUES LISTED IN THE TABLE BELOW.
7. IF THE WORK OPERATION REQUIRES ANY WORK VEHICLE TO ENTER OR LEAVE THE THROUGH TRAFFIC LANES, A FLAGGER SHALL BE PROVIDED AND THE FLAGGER SIGN SHALL BE SUBSTITUTED FOR THE WORKER SIGN. A 100 FT. CONE TAPER SHALL BE PROVIDED PRIOR TO STATION TO PROTECT THE FLAGGER. FLAGGER IS NOT REQUIRED FOR 25 MPH OR LESS RESIDENTIAL STREETS.

8. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS BY THE TRAFFIC ENGINEER.

9. ALL VEHICLES, EQUIPMENT, WORKERS AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE PAVEMENT UNLESS OTHERWISE AUTHORIZED BY THE TRAFFIC ENGINEER.

10. ALL WARNING SIGNS SHALL HAVE BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND. ALL SIGNS HAVING AN ORANGE COLOR SHALL BE MADE OF MATERIALS CONFORMING TO SECTION 716.03.01 OF THE UNIFORM STANDARD SPECIFICATIONS.
13. ACCESS FOR CAT TRANSIT SERVICE, PEDESTRIANS AND BICYCLES SHALL BE MAINTAINED THROUGHOUT DURATION OF CONSTRUCTION. IF RE-ROUTING OF ACCESS IS NECESSARY, THE CONTRACTOR SHALL PROVIDE THE ENTITY'S TRAFFIC ENGINEER WITH A MAP SHOWING THE PROPOSED RE-ROUTES FOR APPROVAL. IF CONSTRUCTION OPERATIONS AFFECT CAT BUS STOPS OR FACILITIES, THE CONTRACTOR SHALL NOTIFY THE REGIONAL TRANSPORTATION COMMISSION AT 455-4481 AT LEAST 3 NORMAL WORKING DAYS PRIOR TO BEGINNING SUCH OPERATIONS.

SYMBOLS

- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TRAFFIC DIRECTION

TABLE FOR SPACING OF ADVANCE WARNING SIGNS			
ROAD TYPE	DISTANCE BETWEEN SIGNS (FT)		
	A	B	C
URBAN (LESS THAN 35 MPH)	200	200	200
URBAN (35 MPH OR GREATER)	350	350	350
RURAL	500	500	500
EXPRESSWAY/FREEWAY	1000	1600	2600

12. IF WORKING AT OR NEAR A TRAFFIC SIGNAL, CONTACT LVACTS AT 229-6611 AND LOCAL ENTITY AT APPROPRIATE NUMBERS LISTED BELOW AT LEAST TWO WORKING DAYS PRIOR TO BEGINNING WORK.

BOULDER CITY	293-9200	MESQUITE	346-5295
CLARK COUNTY	455-6100	NORTH LAS VEGAS	642-2462
HENDERSON	565-2140		
LAS VEGAS	229-6331		

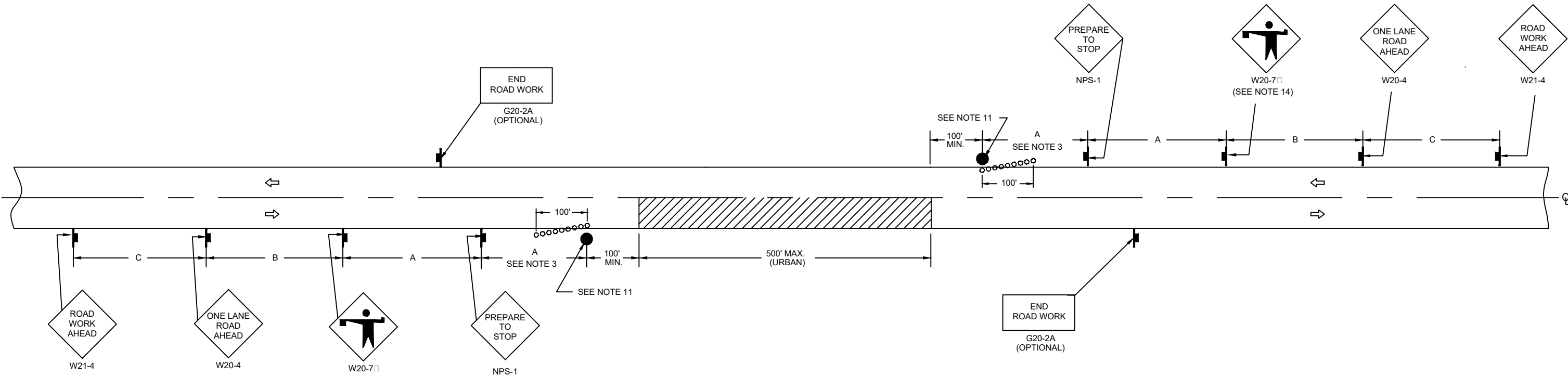
TAPER LENGTHS FOR LANE CLOSURES - DISTANCE L					
SPEED	TAPER LENGTH			NUMBER OF CHANNELIZING DEVICES FOR TAPER	MAX. SPACING OF DEVICES ALONG TAPER IN FEET
MILES PER HOUR 85 TH PERCENTILE	LANE WIDTH IN FEET				
	10	11	12		
20	70	75	80	5	20
25	105	115	125	6	25
30	150	165	180	7	30
35	205	225	245	8	35
40	270	295	320	9	40
45	450	495	540	13	45
50	500	550	600	13	50
55	550	605	660	13	55
60	600	660	720	13	60
65	650	715	780	13	65
70	700	770	840	13	70

TYPICAL APPLICATIONS

- SHOULDER WORK
- MOWING
- UTILITY OPERATIONS

TRAFFIC CONTROL PLAN FOR HIGHWAY WORK ZONE	SPECIFICATION REFERENCE			TYPICAL APPLICATION FOR			UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
				RURAL MOVING DAY OPERATIONS WHERE ACTIVITIES ENCROACH ON THE SHOULDER			DATE	1-9-97	DWG NO.	604		

AGENCY APPROVED	B	C	H	L	M	N



SHALL BE USED WHEN PRIME COAT IS APPLIED TO PAVEMENT AND SHALL REMAIN UNTIL NO TRACKING. INSTALL A MINIMUM OF 500 FT. PRECEDING START OF PRIME.

FRESH OIL

W21-2

TYPICAL APPLICATIONS

BITUMINOUS RESURFACING
CRACK POURING
UTILITY OPERATIONS

- CONSTRUCTION OPERATIONS SHALL BE CONFINED TO ONE TRAFFIC LANE, LEAVING THE OPPOSITE LANE OPEN TO TRAFFIC. AT LEAST 500' OF BOTH TRAFFIC LANES SHALL BE AVAILABLE FOR TRAFFIC MOVEMENT AT INTERVALS NOT GREATER THAN 1,000 FT. A SPECIAL TRAFFIC CONTROL DETAIL MUST BE APPROVED FOR ANY PROJECT EXPECTED TO EXCEED 1,000 FT. IN LENGTH.
- THE FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIME.
- MAXIMUM DISTANCE TO BE DETERMINED BY THE TRAFFIC ENGINEER BUT SHOULD NOT EXCEED 1/2 THE LENGTH REQUIRED FOR ONE NORMAL WORKING DAY'S OPERATION OR 1,000 FT., WHICHEVER IS LESS.
- IF THE WORK OPERATION DOES NOT EXCEED 60 MINUTES, TRAFFIC CONTROL WILL BE IN CONFORMANCE WITH STANDARD DRAWING NO. 603.
- ALL SIGNS ARE TO BE REMOVED AT COMPLETION OF THE DAY'S OPERATIONS.
- FOR DIVIDED ROADWAYS THE REQUIRED ADVANCE WARNING SIGNS SHALL BE POSTED ON BOTH THE RIGHT AND LEFT SIDE OF THE AFFECTED APPROACH.
- FOR MULTILANE ROADWAYS, THE FLAGGER AND THE ADVANCE WARNING SIGNS SHOWN MAY BE REQUIRED FOR TRAFFIC APPROACHING FROM THE OPPOSITE DIRECTION. "RIGHT LANE CLOSED AHEAD" SIGNS SHALL BE SUBSTITUTED FOR THE "ONE LANE ROAD AHEAD" SIGNS.
- THIS CASE ALSO APPLIES WHEN WORK IS BEING PERFORMED IN LANES ADJACENT TO THE CENTERLINE OF AN UNDIVIDED MULTILANE HIGHWAY OR ADJACENT TO THE MEDIAN ON A DIVIDED HIGHWAY. UNDER THESE CONDITIONS, "LEFT LANE CLOSED AHEAD" SIGNS SHALL BE SUBSTITUTED FOR "RIGHT LANE CLOSED AHEAD" SIGNS.
- THIS CASE DOES NOT APPLY WHEN WORK IS BEING PERFORMED IN THE MIDDLE LANE(S) OF A SIX OR MORE LANE HIGHWAY. SPECIAL TRAFFIC CONTROL DETAILS APPROVED BY THE TRAFFIC ENGINEER WILL BE REQUIRED.

GENERAL NOTES

- "ONE LANE ROAD AHEAD" AND FLAGGER SIGNS SHALL BE REMOVED OR COVERED WHEN NO WORK IS BEING PERFORMED.
- LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS BY THE TRAFFIC ENGINEER. THE LATERAL PLACEMENT OF THE FLAGGERS MAY BE VARIED FROM THAT SHOWN. IF A CURVED SECTION OF ROADWAY IS INVOLVED FLAGGER SHOULD BE PLACED AT THE BEGINNING OF CURVE (P.C.).
- ALL VEHICLES, EQUIPMENT, WORKERS (EXCEPT FLAGGERS) AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE PAVEMENT UNLESS OTHERWISE AUTHORIZED BY THE TRAFFIC ENGINEER.
- ALL WARNING SIGNS SHALL HAVE BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND. ALL SIGNS HAVING AN ORANGE COLOR SHALL BE MADE OF MATERIALS CONFORMING TO SECTION 716.03.01 OF THE UNIFORM STANDARD SPECIFICATIONS.
- IN MULTILANE SITUATIONS, THE FLAGGER AND FLAGGER WARNING SIGNS ON THE SIDE OPPOSITE TO THE WORK AREA ARE REQUIRED ONLY WHEN TRAFFIC IN ANY DIRECTION IS MADE TO CROSS THE ROAD CENTER LINE.
- TABLE FOR SPACING OF ADVANCE WARNING SIGNS

TABLE FOR SPACING OF ADVANCE WARNING SIGNS			
ROAD TYPE	DISTANCE BETWEEN SIGNS (FT)		
	A	B	C
URBAN (LESS THAN 35 MPH)	200	200	200
URBAN (35 MPH OR GREATER)	350	350	350
RURAL	500	500	500
EXPRESSWAY/FREEWAY	1000	1600	2600

- IF WORKING AT OR NEAR A TRAFFIC SIGNAL, CONTACT LVACTS AT 229-6611 AND LOCAL ENTITY AT APPROPRIATE NUMBERS LISTED BELOW AT LEAST TWO WORKING DAYS PRIOR TO BEGINNING WORK.

BOULDER CITY	293-9200	LAS VEGAS	229-6331
CLARK COUNTY	455-6100	MESQUITE	346-5295
HENDERSON	565-2140	NORTH LAS VEGAS	642-2462

SYMBOLS

- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH TRAFFIC CONTROL SIGN
- TRAFFIC CONE
- TRAFFIC DIRECTION

TRAFFIC CONTROL PLAN
FOR
HIGHWAY WORK ZONE

SPECIFICATION REFERENCE

TYPICAL APPLICATION FOR

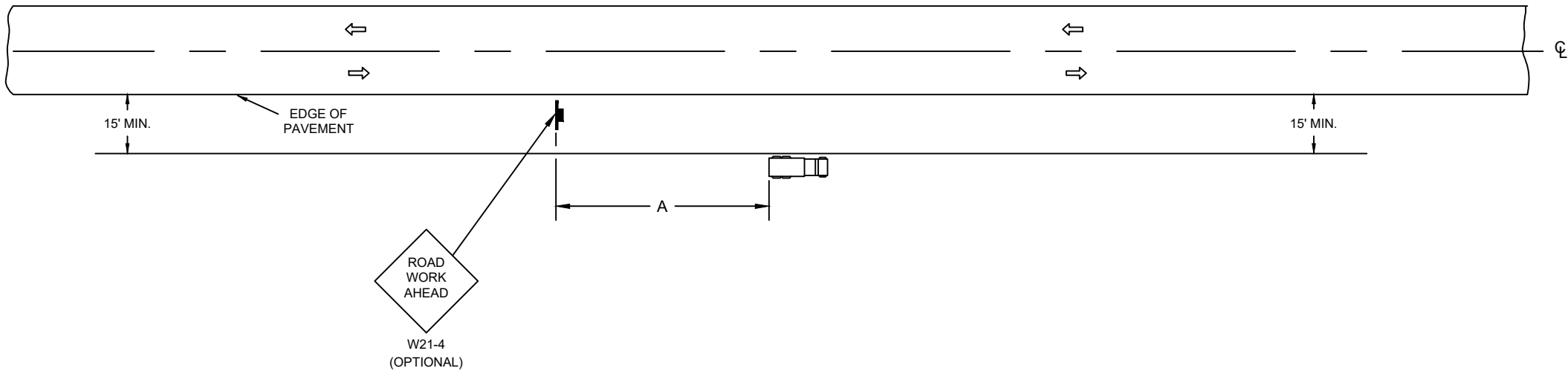
RURAL MOVING DAY OPERATIONS WHERE ACTIVITIES ENCROACH ON THE PAVEMENT

AGENCY APPROVED

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

DATE 1-9-97

DWG NO. 605



GENERAL NOTES

1. NO SPECIAL SIGNING IS REQUIRED.

2. IF THE WORK OPERATION REQUIRES ANY WORK VEHICLES TO CROSS THE 15 FT. CLEAR ZONE, TRAFFIC CONTROL SHALL CONFORM WITH STANDARD DRAWING NO. 607.

3. IF WORKING AT OR NEAR A TRAFFIC SIGNAL, CONTACT LVACTS AT 229-6611 AND LOCAL ENTITY AT APPROPRIATE NUMBERS LISTED BELOW AT LEAST TWO WORKING DAYS PRIOR TO BEGINNING WORK.

4. TYPE "B" HIGH INTENSITY FLASHING WARNING LIGHTS MAY BE INSTALLED ABOVE EACH WORK ZONE CONSTRUCTION SIGN FOR USE DURING HOURS OF DARKNESS.
- BOULDER CITY293-9200

MESQUITE346-5295

CLARK COUNTY455-6100

NORTH LAS VEGAS642-2462

HENDERSON565-2140

LAS VEGAS229-6331

TABLE FOR SPACING OF ADVANCE WARNING SIGNS			
ROAD TYPE	DISTANCE BETWEEN SIGNS (FT)		
	A	B	C
URBAN (LESS THAN 35 MPH)	200	200	200
URBAN (35 MPH OR GREATER)	350	350	350
RURAL	500	500	500
EXPRESSWAY/FREEWAY	1000	1600	2600

SYMBOLS

- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TRAFFIC DIRECTION

TYPICAL APPLICATIONS

- LANDSCAPING WORK
- UTILITY WORK
- FENCING CONTRACTS AND MAINTENANCE
- CLEANING CULVERTS

TRAFFIC CONTROL PLAN
FOR
HIGHWAY WORK ZONE

SPECIFICATION REFERENCE

TYPICAL APPLICATION FOR

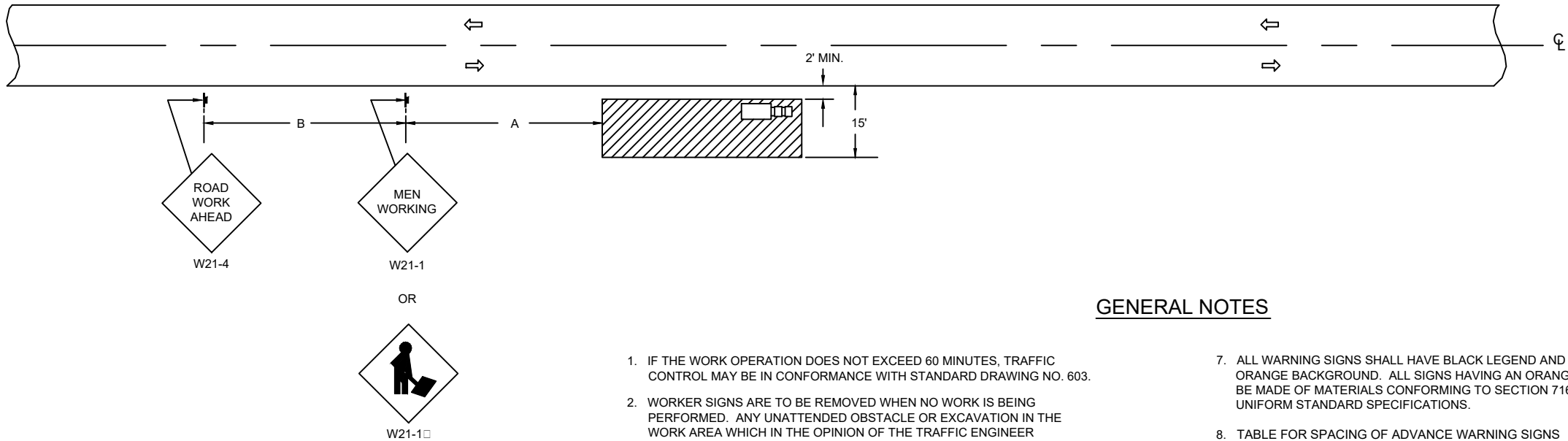
TWO-LANE, TWO-WAY, RURAL DAY OR NIGHT OPERATIONS WHERE
ACTIVITIES ARE MORE THAN 15 FT. FROM EDGE OF PAVEMENT

AGENCY APPROVED

B C H L M N

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

DATE 1-9-97 DWG NO. 606



TYPICAL APPLICATIONS

UTILITY OPERATION
CULVERT EXTENSIONS
SIDE SLOPE CHANGES
GUARD RAIL INSTALLATION AND MAINTENANCE
DELINEATOR INSTALLATION AND MAINTENANCE
LANDSCAPING OPERATIONS
CLEANING DITCHES AND DRAINAGE STRUCTURES
SIGN INSTALLATION AND MAINTENANCE
SHOULDER REPAIR

SYMBOLS

- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TRAFFIC DIRECTION

GENERAL NOTES

- IF THE WORK OPERATION DOES NOT EXCEED 60 MINUTES, TRAFFIC CONTROL MAY BE IN CONFORMANCE WITH STANDARD DRAWING NO. 603.
- WORKER SIGNS ARE TO BE REMOVED WHEN NO WORK IS BEING PERFORMED. ANY UNATTENDED OBSTACLE OR EXCAVATION IN THE WORK AREA WHICH IN THE OPINION OF THE TRAFFIC ENGINEER CONSTITUTES A HAZARD SHALL BE PROTECTED BY BARRICADES WITH FLASHING LIGHTS AT NIGHT AT THE POINTS OF HAZARD. STEADY BURNING LIGHTS SHALL BE USED FOR DELINEATION AND LONG LINE GUIDANCE. BARRICADES SHALL BE PLACED ACCORDING TO MAXIMUM SPACING VALUES LISTED IN THE TABLE BELOW.

TAPER LENGTHS FOR LANE CLOSURES - DISTANCE L					
SPEED MILES PER HOUR 85 TH PERCENTILE	TAPER LENGTH LANE WIDTH IN FEET			NUMBER OF CHANNELIZING DEVICES FOR TAPER	MAX. SPACING OF DEVICES ALONG TAPER IN FEET
	10	11	12		
20	70	75	80	5	20
25	105	115	125	6	25
30	150	165	180	7	30
35	205	225	245	8	35
40	270	295	320	9	40
45	450	495	540	13	45
50	500	550	600	13	50
55	550	605	660	13	55
60	600	660	720	13	60
65	650	715	780	13	65
70	700	770	840	13	70

- TYPE "B" HIGH INTENSITY FLASHING WARNING LIGHTS MAY BE INSTALLED ABOVE EACH WORK ZONE CONSTRUCTION SIGN FOR USE DURING HOURS OF DARKNESS.
- IF THE WORK OPERATION REQUIRES ANY WORK VEHICLES TO ENTER OR LEAVE THROUGH TRAFFIC LANES, A FLAGGER SHALL BE PROVIDED AND A FLAGGER SIGN SHALL BE SUBSTITUTED FOR THE WORKER SIGN. A 100 FT. CONE TAPER SHALL BE PROVIDED PRIOR TO STATION TO PROTECT THE FLAGGER. FLAGGER IS NOT REQUIRED FOR 25 MPH OR LESS RESIDENTIAL STREETS.
- LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS BY THE TRAFFIC ENGINEER.
- ALL VEHICLES, EQUIPMENT, WORKERS AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE PAVEMENT UNLESS OTHERWISE AUTHORIZED BY THE TRAFFIC ENGINEER.

- ALL WARNING SIGNS SHALL HAVE BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND. ALL SIGNS HAVING AN ORANGE COLOR SHALL BE MADE OF MATERIALS CONFORMING TO SECTION 716.03.01 OF THE UNIFORM STANDARD SPECIFICATIONS.

TABLE FOR SPACING OF ADVANCE WARNING SIGNS

ROAD TYPE	DISTANCE BETWEEN SIGNS (FT)		
	A	B	C
URBAN (LESS THAN 35 MPH)	200	200	200
URBAN (35 MPH OR GREATER)	350	350	350
RURAL	500	500	500
EXPRESSWAY/FREEWAY	1000	1600	2600

- IF WORKING AT OR NEAR A TRAFFIC SIGNAL, CONTACT LVACTS AT 229-6611 AND LOCAL ENTITY AT APPROPRIATE NUMBERS LISTED BELOW AT LEAST TWO WORKING DAYS PRIOR TO BEGINNING WORK.

BOULDER CITY	293-9200	LAS VEGAS	229-6331
CLARK COUNTY	455-6100	MESQUITE	346-5295
HENDERSON	565-2140	NORTH LAS VEGAS	642-2462
- FLOODLIGHTS SHOULD BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT AS NEEDED.
- IF WORKSPACE IS IN THE MEDIAN OF A DIVIDED HIGHWAY, AN ADVANCE WARNING SIGN SHOULD ALSO BE PLACED ON THE LEFT SIDE OF THE DIRECTIONAL ROADWAY.
- ACCESS FOR CAT TRANSIT SERVICE, PEDESTRIANS AND BICYCLES SHALL BE MAINTAINED THROUGHOUT DURATION OF CONSTRUCTION. IF RE-ROUTING OF ACCESS IS NECESSARY, THE CONTRACTOR SHALL PROVIDE THE ENTITY'S TRAFFIC ENGINEER WITH A MAP SHOWING THE PROPOSED RE-ROUTES FOR APPROVAL. IF CONSTRUCTION OPERATIONS AFFECT CAT BUS STOPS OR FACILITIES, THE CONTRACTOR SHALL NOTIFY THE REGIONAL TRANSPORTATION COMMISSION AT 455-4481 AT LEAST 3 NORMAL WORKING DAYS PRIOR TO BEGINNING SUCH OPERATIONS.

TRAFFIC CONTROL PLAN
FOR
HIGHWAY WORK ZONE

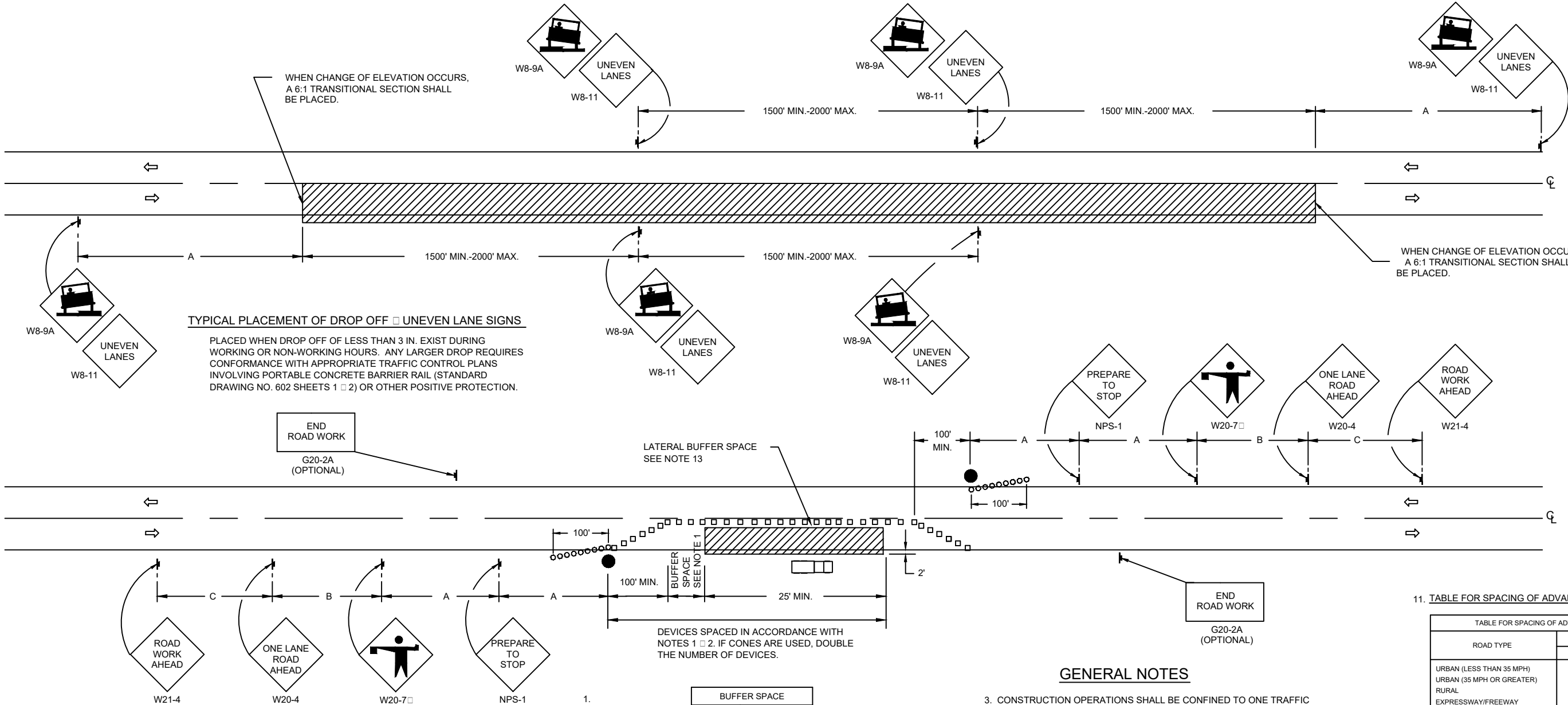
SPECIFICATION REFERENCE

TYPICAL APPLICATION FOR
TWO-LANE, TWO-WAY, RURAL DAY OR NIGHT OPERATIONS WHERE ACTIVITIES
WILL ENCROACH BETWEEN 15 FT. ± 2 FT. OUTSIDE OF PAVEMENT EDGE

AGENCY APPROVED

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

DATE 1-9-97 DWG NO. 607



TYPICAL PLACEMENT OF DROP OFF UNEVEN LANE SIGNS

PLACED WHEN DROP OFF OF LESS THAN 3 IN. EXIST DURING WORKING OR NON-WORKING HOURS. ANY LARGER DROP REQUIRES CONFORMANCE WITH APPROPRIATE TRAFFIC CONTROL PLANS INVOLVING PORTABLE CONCRETE BARRIER RAIL (STANDARD DRAWING NO. 602 SHEETS 1 2) OR OTHER POSITIVE PROTECTION.

LATERAL BUFFER SPACE
SEE NOTE 13

DEVICES SPACED IN ACCORDANCE WITH
NOTES 1 2. IF CONES ARE USED, DOUBLE
THE NUMBER OF DEVICES.

BUFFER SPACE	
SPEED (M.P.H.)	BUFFER SPACE (FT.)
70	585
65	485
60	415
55	335
50	280
45	220
40	170
35	120
30	85
25	55
20	35

POSTED SPEED, OFF-PEAK 85TH PERCENTILE
SPEED PRIOR TO WORK STARTING OR THE
ANTICIPATED OPERATING SPEED.

TAPER LENGTHS FOR LANE CLOSURES - DISTANCE L				
SPEED MILES PER HOUR	TAPER LENGTH LANE WIDTH IN FEET			MAX. SPACING OF DEVICES ALONG TAPER IN FEET
	10	11	12	
20	70	75	80	5
25	105	115	125	6
30	150	165	180	7
35	205	225	245	8
40	270	295	320	9
45	450	495	540	13
50	500	550	600	13
55	550	605	660	13
60	600	660	720	13
65	650	715	780	13
70	700	770	840	13

2. ALL DEVICES ESTABLISHING A TAPER OR A TANGENT LINE SHALL BE
OF ONE TYPE; DEVICES SHALL NOT BE MIXED BY TYPE.

GENERAL NOTES

- CONSTRUCTION OPERATIONS SHALL BE CONFINED TO ONE TRAFFIC LANE, LEAVING THE OPPOSITE LANE OPEN TO TRAFFIC. AT LEAST 500 FT. OF BOTH TRAFFIC LANES SHALL BE AVAILABLE FOR TRAFFIC MOVEMENT AT INTERVALS NOT GREATER THAN 1000 FT.
- IF THE WORK OPERATION DOES NOT EXCEED 60 MINUTES, TRAFFIC CONTROL MAY BE IN CONFORMANCE WITH STANDARD DRAWING NO. 603.
- THE FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES.
- WHEN NO WORK IS BEING PERFORMED, THE FLAGGERS WILL NOT BE REQUIRED. IF THE FLAGGERS ARE NOT PRESENT, THE FLAGGER SIGNS SHALL BE REMOVED OR COVERED.
- ALL SIGNS, CONES, BARRICADES, AND DRUMS SHALL BE REMOVED AT COMPLETION OF OPERATIONS DURING DAYLIGHT AND THE WORK AREA OPEN TO TRAFFIC.
- LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS BY THE TRAFFIC ENGINEER. THE LATERAL PLACEMENT OF THE FLAGGER MAY BE VARIED FROM SHOWN.
- ALL VEHICLES, EQUIPMENT, WORKERS (EXCEPT FLAGGERS), AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE PAVEMENT UNLESS OTHERWISE AUTHORIZED BY THE TRAFFIC ENGINEER.
- ALL WARNING SIGNS SHALL HAVE BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND. ALL SIGNS HAVING AN ORANGE COLOR SHALL BE MADE OF MATERIALS CONFORMING TO SECTION 716.03.01 OF THE UNIFORM STANDARD SPECIFICATIONS.

11. TABLE FOR SPACING OF ADVANCE WARNING SIGNS

TABLE FOR SPACING OF ADVANCE WARNING SIGNS			
ROAD TYPE	DISTANCE BETWEEN SIGNS (FT)		
	A	B	C
URBAN (LESS THAN 35 MPH)	200	200	200
URBAN (35 MPH OR GREATER)	350	350	350
RURAL	500	500	500
EXPRESSWAY/FREEWAY	1000	1600	2600

12. IF WORKING AT OR NEAR A TRAFFIC SIGNAL, CONTACT LVACTS AT 229-6611 AND LOCAL ENTITY AT APPROPRIATE NUMBERS LISTED BELOW AT LEAST TWO WORKING DAYS PRIOR TO BEGINNING WORK.

BOULDER CITY	293-9200
CLARK COUNTY	455-6100
HENDERSON	565-2140
LAS VEGAS	229-6331
MESQUITE	346-5295
NORTH LAS VEGAS	642-2462

13. A LATERAL BUFFER SPACE MAY BE REQUIRED TO SEPARATE WORK SPACE FROM TRAFFIC SPACE. THE WIDTH SHALL BE DETERMINED BY THE TRAFFIC ENGINEER.

14. ACCESS FOR CAT TRANSIT SERVICE, PEDESTRIANS AND BICYCLES SHALL BE MAINTAINED THROUGHOUT DURATION OF CONSTRUCTION. IF RE-ROUTING OF ACCESS IS NECESSARY, THE CONTRACTOR SHALL PROVIDE THE ENTITY'S TRAFFIC ENGINEER WITH A MAP SHOWING THE PROPOSED RE-ROUTES FOR APPROVAL. IF CONSTRUCTION OPERATIONS AFFECT CAT BUS STOPS OR FACILITIES, THE CONTRACTOR SHALL NOTIFY THE REGIONAL TRANSPORTATION COMMISSION AT 455-4481 AT LEAST 3 NORMAL WORKING DAYS PRIOR TO BEGINNING SUCH OPERATIONS.

TYPICAL APPLICATIONS

UTILITY OPERATIONS
PAVEMENT PATCH



WORK AREA



SIGN ON PORTABLE OR PERMANENT SUPPORT



FLAGGER WITH TRAFFIC CONTROL SIGN



CONE, BARRICADE OR DRUM



TRAFFIC CONE



TRAFFIC DIRECTION

SYMBOLS

TRAFFIC CONTROL PLAN
FOR
HIGHWAY WORK ZONE

SPECIFICATION REFERENCE

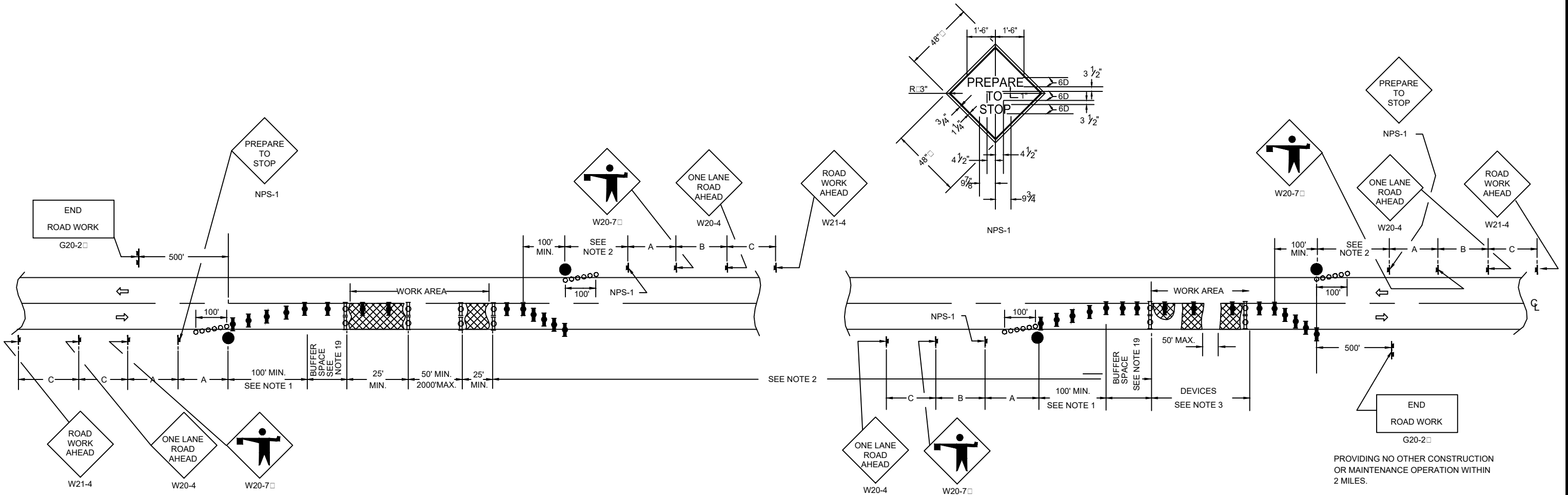
TYPICAL APPLICATION FOR

TWO-LANE, TWO-WAY, RURAL DAY OPERATIONS WHERE ACTIVITIES WILL ENCROACH
BETWEEN CENTERLINE AND 2 FT. OUTSIDE OF PAVEMENT EDGE

AGENCY APPROVED B C H L M N

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

DATE 1-9-97 DWG NO. 608



GENERAL NOTES

TYPICAL APPLICATIONS

- CABLE LAYING
- OVERHEAD STRINGING OF CABLE
- PATCHING

SYMBOLS

- PATCH
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH TRAFFIC CONTROL SIGN
- BARRICADE OR DRUM WITH OPTIONAL FLASHING LIGHT
- BARRICADE OR DRUM WITH STEADY BURNING LIGHT
- TRAFFIC CONES
- TRAFFIC DIRECTION

- ALL DEVICES ESTABLISHING A TAPER OR TANGENT LINE SHALL BE OF ONE TYPE; DEVICES SHALL NOT BE MIXED BY TYPE.
- WHEN THE DISTANCE BETWEEN SUCCESSIVE PATCHES IS LESS THAN 2,000 FT., THE ENTIRE OPERATION MAY BE CONSIDERED AS ONE WORK AREA FOR SIGNING PURPOSES. WHEN SINGLE-SIGNING SET-UP IS USED FOR WORK SITES UP TO 2,000 FT. APART, LANE CLOSURE SHOULD BE CONTINUED THROUGH ENTIRE WORK. WHEN THE DISTANCE BETWEEN SUCCESSIVE PATCHES EXCEEDS 2,000 FT., ADDITIONAL WARNING SIGNS AND TAPER SHALL BE PLACED AS REQUIRED FOR DISTANCES LESS THAN 2,000 FT. AT THE DISCRETION OF THE TRAFFIC ENGINEER.
- WHERE SUCCESSIVE PATCHES ARE MORE THAN 50 FT. BUT LESS THAN 2,000 FT. APART, BARRICADES WITH FLASHING LIGHTS SHALL BE PLACED ON THE PAVEMENT BEYOND AND IN ADVANCE OF THE WORK AREAS. ALL BARRICADES WILL HAVE THE REFLECTIVE SURFACE FACING TRAFFIC AT NIGHT.
- THE FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIME AND SHALL BE POSITIONED TO PROTECT THE WORKERS. THE FIRST FLAGGER SHALL BE A MINIMUM OF 200 FT. AND A MAXIMUM DISTANCE OF 1/2 DAY'S NORMAL OPERATION BEYOND THE FLAGGER SIGN AND A MINIMUM OF 100 FT. IN ADVANCE OF THE WORK PARTY.
- FLAGGERS SHALL BE REQUIRED AT ALL ENTRY POINTS INTO THE WORK AREA.
- WHEN NO WORK IS BEING PERFORMED, THE FLAGGERS WILL NOT BE REQUIRED. IF THE FLAGGERS ARE NOT PRESENT, THE FLAGGER SIGNS SHALL BE REMOVED OR COVERED, AND ALL BARRICADES OR CONES SHALL BE REMOVED.
- LIGHTS WILL NOT BE REQUIRED ON BARRICADES FOR DAY OPERATIONS.
- WHEN THE DISTANCE BETWEEN PATCHES IS LESS THAN 500 FT., THE BARRICADE ADJACENT TO THE EDGE OF PAVEMENT ON THE FAR SIDE OF THE PATCH MAY BE OMITTED.

- ALL SIGNS SHALL BE GROUND-MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS AND AS REQUIRED BY SECTION 625 OF THE UNIFORM STANDARD SPECIFICATIONS.
- TYPE "B" HIGH INTENSITY FLASHING LIGHTS MAY BE INSTALLED ABOVE EACH WORK ZONE CONSTRUCTION SIGN FOR USE DURING HOURS OF DARKNESS.
- LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS BY THE TRAFFIC ENGINEER. THE LATERAL PLACEMENT OF THE FLAGGERS MAY BE VARIED FROM THAT SHOWN.
- ALL VEHICLES, EQUIPMENT, WORKERS (EXCEPT FLAGGERS) AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE PAVEMENT UNLESS OTHERWISE AUTHORIZED BY THE TRAFFIC ENGINEER.
- ALL BARRICADE LIGHTS SHALL BE BIDIRECTIONAL, EXCEPT LIGHTS ON TAPER BARRICADES, WHICH SHALL BE MONODIRECTIONAL.
- ALL WARNING SIGNS SHALL HAVE BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND. ALL SIGNS HAVING AN ORANGE COLOR SHALL BE MADE OF MATERIALS CONFORMING TO SECTION 716.03.01 OF THE UNIFORM STANDARD SPECIFICATIONS.
- CONSTRUCTION OPERATIONS SHALL BE CONFINED TO ONE TRAFFIC LANE, LEAVING THE OPPOSITE LANE OPEN TO TRAFFIC. AT LEAST 500 FT. OF BOTH TRAFFIC LANES SHALL BE AVAILABLE FOR TRAFFIC MOVEMENT AT INTERVALS NOT GREATER THAN 1000 FT. TWO FLAGGERS SHALL BE REQUIRED FOR EACH SEPARATE CONSTRUCTION OPERATION. ALL WORK AREAS SHALL BE PROTECTED DURING PERIODS WHEN WORKERS ARE PRESENT BY CONES OR BARRICADES ALONG THE CENTER LINE.
- DURING DAYTIME OPERATIONS, CONES MAY BE SUBSTITUTED FOR BARRICADES AT HALF THE BARRICADE SPACING.

17. TABLE FOR SPACING OF ADVANCE WARNING SIGNS

ROAD TYPE	DISTANCE BETWEEN SIGNS (FT)		
	A	B	C
URBAN (LESS THAN 35 MPH)	200	200	200
URBAN (35 MPH OR GREATER)	350	350	350
RURAL	500	500	500
EXPRESSWAY/FREEWAY	1000	1600	2600

- IF WORKING AT OR NEAR A TRAFFIC SIGNAL, CONTACT LVACTS AT 229-6611 AND LOCAL ENTITY AT APPROPRIATE NUMBERS LISTED BELOW AT LEAST 2 WORKING DAYS PRIOR TO BEGINNING WORK.

BOULDER CITY	293-9200
CLARK COUNTY	455-6100
HENDERSON	565-2140
LAS VEGAS	229-6331
MESQUITE	346-5295
NORTH LAS VEGAS	642-2462

19.

BUFFER SPACE	
SPEED ¹ (M.P.H.)	BUFFER SPACE (FT.)
70	585
65	485
60	415
55	335
50	280
45	220
40	170
35	120
30	85
25	55
20	35

¹ POSTED SPEED, OFF-PEAK 85TH PERCENTILE SPEED PRIOR TO WORK STARTING OR THE ANTICIPATED OPERATING SPEED.

- A LATERAL BUFFER SPACE MAY BE REQUIRED TO SEPARATE WORK SPACE FROM TRAFFIC SPACE. THE WIDTH SHALL BE DETERMINED BY THE TRAFFIC ENGINEER.
- FLOODLIGHTS SHOULD BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT AS NEEDED.
- ACCESS FOR CAT TRANSIT SERVICE, PEDESTRIANS AND BICYCLES SHALL BE MAINTAINED THROUGHOUT DURATION OF CONSTRUCTION. IF RE-ROUTING OF IF RE-ROUTING NECESSARY, THE CONTRACTOR SHALL PROVIDE THE ENTITY'S TRAFFIC ENGINEER WITH A MAP SHOWING THE PROPOSED RE-ROUTES FOR APPROVAL. IF CONSTRUCTION OPERATIONS AFFECT CAT BUS STOPS OR FACILITIES, THE CONTRACTOR SHALL NOTIFY THE REGIONAL TRANSPORTATION COMMISSION AT 455-4481 AT LEAST 3 NORMAL WORKING DAYS PRIOR TO BEGINNING SUCH OPERATIONS.

TAPER LENGTHS FOR LANE CLOSURES - DISTANCE L				
SPEED MILES PER HOUR 85 TH PERCENTILE	TAPER LENGTH LANE WIDTH IN FEET			MAX. SPACING OF DEVICES ALONG TAPER IN FEET
	10	11	12	
20	70	75	80	20
25	105	115	125	25
30	150	165	180	30
35	205	225	245	35
40	270	295	320	40
45	450	495	540	45
50	500	550	600	50
55	550	605	660	55
60	600	660	720	60
65	650	715	780	65
70	700	770	840	70

AGENCY APPROVED B C H L M N

TRAFFIC CONTROL PLAN
FOR
HIGHWAY WORK ZONE

SPECIFICATION REFERENCE

TYPICAL APPLICATION FOR

TWO-LANE, TWO-WAY, RURAL DAY OR NIGHT OPERATIONS WHERE ACTIVITIES WILL
ENCROACH BETWEEN CENTERLINE 2 FT. OUTSIDE OF PAVEMENT EDGE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

DATE 1-9-97 DWG NO. 610

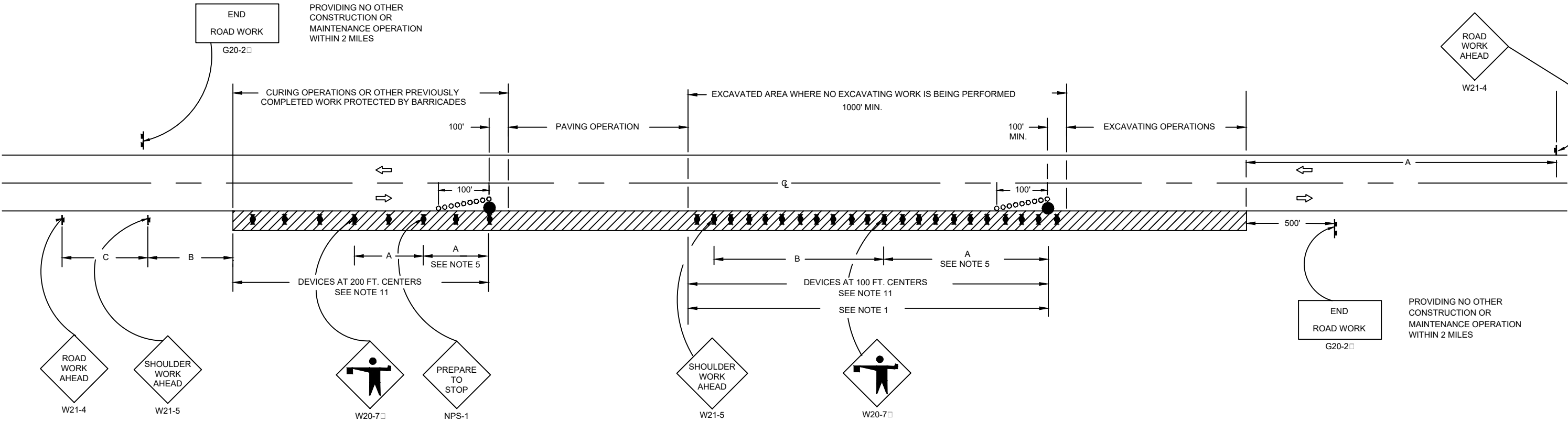


TABLE FOR SPACING OF ADVANCE WARNING SIGNS

ROAD TYPE	DISTANCE BETWEEN SIGNS (FT)		
	A	B	C
URBAN (LESS THAN 35 MPH)	200	200	200
URBAN (35 MPH OR GREATER)	350	350	350
RURAL	500	500	500
EXPRESSWAY/FREEWAY	1000	1600	2600

- WHERE THE DISTANCE BETWEEN PAVING AND EXCAVATING OPERATIONS IS LESS THAN 2,000 FT. THE ENTIRE OPERATION MAY BE CONSIDERED AS ONE WORK AREA FOR SIGNING PURPOSES. WHEN THE DISTANCE BETWEEN OPERATIONS EXCEEDS 2,000 FT. ADDITIONAL WARNING SIGNS SHALL BE PLACED AS SHOWN. UNDER RESTRICTED SIGHT DISTANCE CONDITIONS, SUCH ADDITIONAL DEVICES MAY ALSO BE REQUIRED FOR DISTANCES LESS THAN 2,000 FT. AT THE DISCRETION OF THE TRAFFIC ENGINEER.
- ONE FLAGGER SHALL BE REQUIRED FOR EACH SEPARATE CONSTRUCTION OPERATION. FOR RESIDENTIAL STREETS 25 MPH OR LESS, FLAGGERS MAY BE REQUIRED AS DIRECTED BY THE TRAFFIC ENGINEER.
- THE FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES.
- NO PAVING OR EXCAVATING OPERATIONS SHALL BE PERFORMED AT NIGHT UNLESS AUTHORIZED BY THE TRAFFIC ENGINEER.
- MAXIMUM DISTANCE TO BE DETERMINED BY THE TRAFFIC ENGINEER BUT IN NO CASE TO EXCEED THE LENGTH OF 1/2 DAY'S NORMAL OPERATION.
- ALL SIGNS SHALL BE GROUND-MOUNTED IF THE WORKING TIME EXCEEDS FOUR DAYS AND AS REQUIRED BY SECTION 625 OF THE UNIFORM STANDARD SPECIFICATIONS.

- TYPE "B" HIGH INTENSITY FLASHING WARNING LIGHTS MAY BE INSTALLED ABOVE EACH WORK ZONE CONSTRUCTION SIGN FOR USE DURING HOURS OF DARKNESS.
- LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS BY THE TRAFFIC ENGINEER. THE LATERAL PLACEMENT OF THE FLAGGER MAY BE VARIED FROM THAT SHOWN.
- ALL VEHICLES, EQUIPMENT, WORKERS, FLAGGERS AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE ROADWAY UNLESS OTHERWISE AUTHORIZED BY THE TRAFFIC ENGINEER.
- ALL WARNING SIGNS SHALL HAVE BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND. ALL SIGNS HAVING AN ORANGE COLOR SHALL BE MADE OF MATERIALS CONFORMING TO SECTION 716.03.01 OF THE UNIFORM STANDARD SPECIFICATIONS.
- ALL DEVICES ESTABLISHING A TAPER OR TANGENT LINE SHALL BE OF ONE TYPE; DEVICES SHALL NOT BE MIXED BY TYPE.
- IF WORKING AT OR NEAR A TRAFFIC SIGNAL, CONTACT LVACTS AT 229-6611 AND LOCAL ENTITY AT APPROPRIATE NUMBERS LISTED BELOW AT LEAST TWO WORKING DAYS PRIOR TO BEGINNING WORK.

BOULDER CITY	293-9200	LAS VEGAS	229-6331
CLARK COUNTY	455-6100	MESQUITE	346-5295
HENDERSON	565-2140	NORTH LAS VEGAS	642-2462

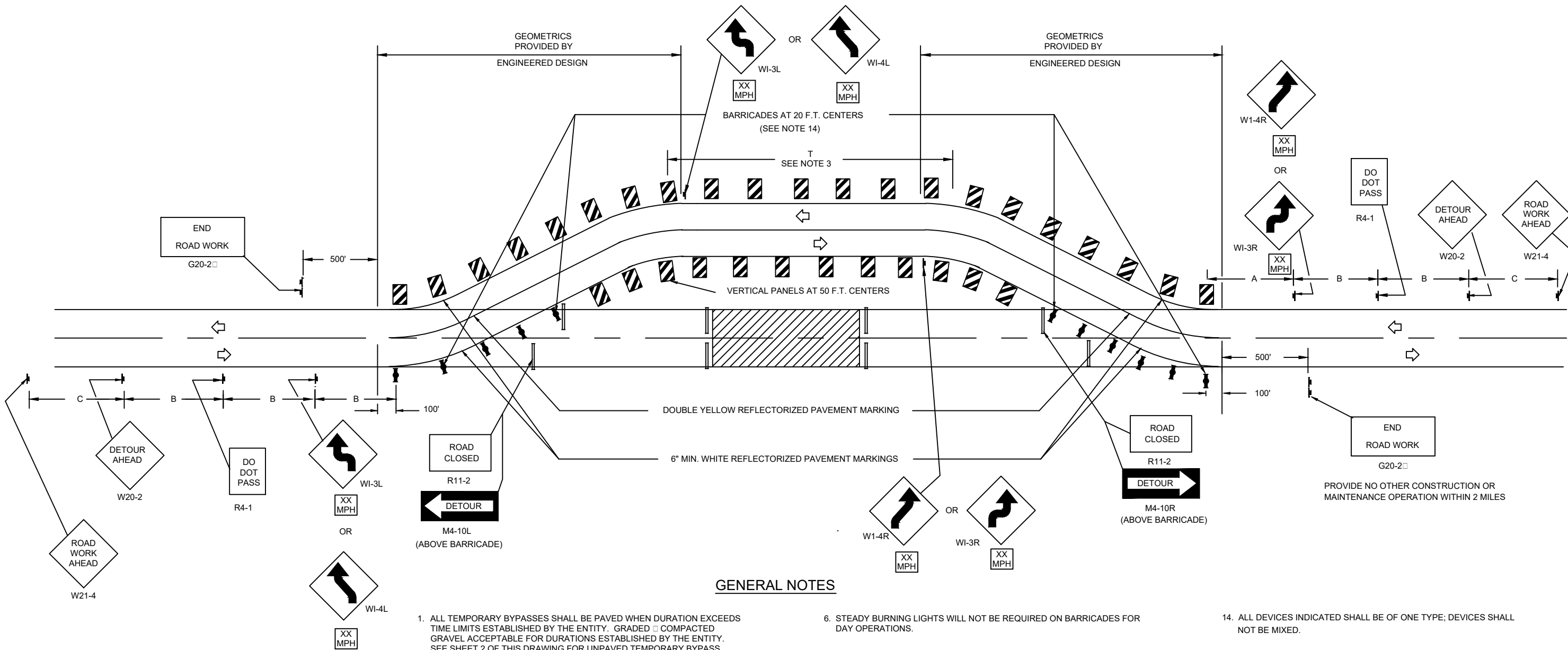
SYMBOLS

- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH TRAFFIC CONTROL SIGN
- BARRICADE OR DRUM WITH STEADY BURNING LIGHT
- TRAFFIC CONE
- TRAFFIC DIRECTION

- FLOODLIGHTS SHOULD BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT AS NEEDED.
- ACCESS FOR CAT TRANSIT SERVICE, PEDESTRIANS AND BICYCLES SHALL BE MAINTAINED THROUGHOUT DURATION OF CONSTRUCTION. IF RE-ROUTING OF ACCESS IS NECESSARY, THE CONTRACTOR SHALL PROVIDE THE ENTITY'S TRAFFIC ENGINEER WITH A MAP SHOWING THE PROPOSED RE-ROUTES FOR APPROVAL. IF CONSTRUCTION OPERATIONS AFFECT CAT BUS STOPS OR FACILITIES, THE CONTRACTOR SHALL NOTIFY THE REGIONAL TRANSPORTATION COMMISSION AT 455-4481 AT LEAST 3 NORMAL WORKING DAYS PRIOR TO BEGINNING SUCH OPERATIONS.

GENERAL NOTES

TRAFFIC CONTROL PLAN FOR HIGHWAY WORK ZONE	SPECIFICATION REFERENCE		TYPICAL APPLICATION FOR TWO-LANE, TWO-WAY, RURAL OR SUBURBAN, DAY OR NIGHT PAVEMENT WIDENING	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
				AGENCY APPROVED	B	C	H	L	M	N
				DATE	1-9-97	DWG NO.	611			



GENERAL NOTES

- ALL TEMPORARY BYPASSES SHALL BE PAVED WHEN DURATION EXCEEDS TIME LIMITS ESTABLISHED BY THE ENTITY. GRADED ☐ COMPACTED GRAVEL ACCEPTABLE FOR DURATIONS ESTABLISHED BY THE ENTITY. SEE SHEET 2 OF THIS DRAWING FOR UNPAVED TEMPORARY BYPASS.
- ON PAVED BYPASSES, REFLECTIVE EDGE LINES AND A CENTER LINE REFLECTORIZED, REMOVABLE, NON-FOIL PAVEMENT MARKING TAPE SHALL BE USED FOR MARKING THE EDGE LINES AND CENTER LINE ON EXISTING PAVEMENT. (REFLECTORIZED PAVEMENT MARKING PAINT MAY BE USED FOR MARKINGS ON THE PAVED BYPASSES.) RAISED REFLECTIVE PAVEMENT MARKERS CONFORMING TO CLARK COUNTY STANDARDS MAY BE USED IN LIEU OF TAPE OR PAINT WHERE THE PAVEMENT MARKING IS TO BE PLACED ADJACENT TO BARRICADES OR VERTICAL PANELS. ALL EXISTING PAVEMENT MARKING WHICH CONFLICT WITH THE REVISED TRAFFIC PATTERN SHALL BE REMOVED. IF STRIPING IS TO BE PLACED ON FINAL PAVEMENT ONLY REMOVABLE, NON-FOIL TAPE SHALL BE USED. EDGE LINE MARKINGS SHALL BE A MINIMUM OF 6 IN. WIDE.
- WHEN (T) IS GREATER THAN 800 FEET, 4 FOOT LENGTHS OF SINGLE YELLOW REFLECTORIZED, REMOVABLE, NON-FOIL PAVEMENT MARKING TAPE AT 40 FOOT CENTERS MAY BE USED WITHIN THE TANGENT SECTION (ONLY IF PASSING ZONES CAN BE SAFELY ALLOWED IN ACCORDANCE WITH MUTCD SECTS. 3B-3 THRU. 3B-5).
- A CURVE SIGN WILL BE REQUIRED AT EXIT END OF THE BYPASS IF (T) IS EQUAL TO OR GREATER THAN 1,000 FEET.
- THE ADVISORY SAFE SPEED TO BE SHOWN BELOW THE REVERSE CURVE (TURN) SIGNS SHALL BE DETERMINED AT THE SITE AND APPROVED BY THE TRAFFIC ENGINEER.
- STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES FOR DAY OPERATIONS.
- CONES MAY BE SUBSTITUTED FOR BARRICADES AT HALF THE SPACING DURING DAY OPERATIONS.
- ALL SIGNS SHALL BE GROUND-MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS AND AS REQUIRED BY SECTION 625 OF THE UNIFORM STANDARD SPECIFICATIONS.
- TYPE "B" HIGH INTENSITY FLASHING WARNING LIGHTS MAY BE INSTALLED ABOVE EACH WORK ZONE CONSTRUCTION SIGN FOR USE DURING HOURS OF DARKNESS.
- LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS BY THE TRAFFIC ENGINEER.
- ALL BARRICADE LIGHTS SHALL BE BIDIRECTIONAL.
- ALL WARNING SIGNS SHALL HAVE BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND. ALL SIGNS HAVING AN ORANGE COLOR SHALL BE MADE OF MATERIALS CONFORMING TO SECTION 716.03.01 OF THE UNIFORM STANDARD SPECIFICATIONS.
- TABLE FOR SPACING OF ADVANCE WARNING SIGNS

ROAD TYPE	DISTANCE BETWEEN SIGNS (FT)		
	A	B	C
URBAN (LESS THAN 35 MPH)	200	200	200
URBAN (35 MPH OR GREATER)	350	350	350
RURAL	500	500	500
EXPRESSWAY/FREEWAY	1000	1600	2600

- ALL DEVICES INDICATED SHALL BE OF ONE TYPE; DEVICES SHALL NOT BE MIXED.
- IF WORKING AT OR NEAR A TRAFFIC SIGNAL, CONTACT LVACTS AT 229-6611 AND LOCAL ENTITY AT APPROPRIATE NUMBERS LISTED BELOW AT LEAST TWO WORKING DAYS PRIOR TO BEGINNING WORK.

BOULDER CITY	293-9200	MESQUITE	346-5295
CLARK COUNTY	455-6100	NORTH LAS VEGAS	642-2462
HENDERSON	565-2140		
LAS VEGAS	229-6331		
- WHERE THE TEMPORARY PAVEMENT AND OLD PAVEMENT ARE DIFFERENT COLORS, THE TEMPORARY PAVEMENT SHOULD START ON THE TANGENT OF THE EXISTING PAVEMENT AND END ON THE TANGENT OF THE EXISTING PAVEMENT.
- ACCESS FOR CAT TRANSIT SERVICE, PEDESTRIANS AND BICYCLES SHALL BE MAINTAINED THROUGHOUT DURATION OF CONSTRUCTION. IF RE-ROUTING OF ACCESS IS NECESSARY, THE CONTRACTOR SHALL PROVIDE THE ENTITY'S TRAFFIC ENGINEER WITH A MAP SHOWING THE PROPOSED RE-ROUTES FOR APPROVAL. IF CONSTRUCTION OPERATIONS AFFECT CAT BUS STOPS OR FACILITIES, THE CONTRACTOR SHALL NOTIFY THE REGIONAL TRANSPORTATION COMMISSION AT 455-4481 AT LEAST 3 NORMAL WORKING DAYS PRIOR TO BEGINNING SUCH OPERATIONS.
- IF THE DETOUR IS SHORT AND HAS SHARP CURVES (30 MPH OR LESS), REVERSE TURN (W1-3) SIGN SHOULD BE USED.
- PAVEMENT MARKINGS THAT ARE NO LONGER APPLICABLE SHALL BE MASKED WITH APPROVED BLACKOUT TAPE OR OBLITERATED AS APPROVED BY THE TRAFFIC ENGINEER.

TYPICAL APPLICATIONS

BRIDGE CONSTRUCTION
CULVERT CONSTRUCTION

SYMBOLS

- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- BARRICADE OR DRUM WITH STEADY BURNING LIGHT
- VERTICAL PANEL (SEE STANDARD DRAWING NO. 601 SHEET 1)
- TYPE III BARRICADE
- TRAFFIC DIRECTION

TRAFFIC CONTROL PLAN
FOR
HIGHWAY WORK ZONE

SPECIFICATION REFERENCE

TYPICAL APPLICATION FOR

TWO-LANE, TWO-WAY, RURAL OR SUBURBAN, DAY OR NIGHT TEMPORARY PAVED BYPASS

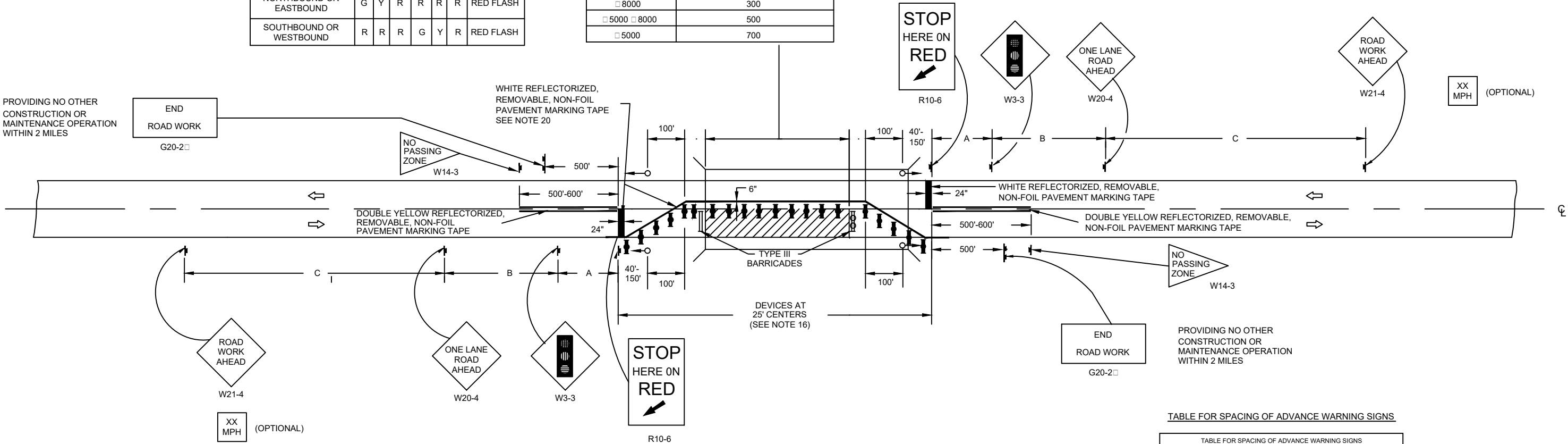
AGENCY APPROVED B C H L M N

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

DATE 1-9-97 DWG NO. 612 SHEET 1 OF 2

SEQUENCE OF OPERATIONS						
PHASE	A			B		
INTERVAL	1	2	3	4	5	6
NORTHBOUND OR EASTBOUND	G	Y	R	R	R	R
SOUTHBOUND OR WESTBOUND	R	R	R	G	Y	R
						RED FLASH

IF A.D.T. IS	MAXIMUM DISTANCE (FT.)
□ 8000	300
□ 5000 □ 8000	500
□ 5000	700



GENERAL NOTES

1. THE TRAFFIC ENGINEER MUST BE NOTIFIED AT LEAST 72 HOURS PRIOR TO PLACING THE TEMPORARY SIGNALS IN OPERATION SO THAT ARRANGEMENTS CAN BE MADE TO INSPECT THE INSTALLATION AND SET THE TIMING OF THE SIGNALS.
2. AT ANY TIME THAT THE SIGNALS ARE NOT OPERATING THE SIGNAL HEAD SHALL BE HOODED AND THE SIGNAL AHEAD SIGN COVERED OR REMOVED.
3. THE LEFT SIGNAL HEAD SHALL NORMALLY BE MOUNTED AT A HEIGHT OF 10 FEET ABOVE THE ROAD SURFACE MEASURED TO THE BOTTOM OF THE SIGNAL HEAD. THE RIGHT HEAD SHALL NORMALLY BE MOUNTED AT A HEIGHT OF 14 FEET ABOVE THE ROAD SURFACE. BAFFLE OR BACK PLATES WILL BE REQUIRED ON ALL SIGNALS. A MAST ARM SIGNAL SHOULD BE USED ON THE RIGHT SIDE WHEN EVER POSSIBLE.
4. ALL LENSES SHALL BE 12 INCH NOMINAL DIAMETER. THE RIGHT SIGNAL HEAD SHALL BE AIMED SO THE CENTERS OF THE LIGHT BEAMS OF THE INDICATIONS ARE DIRECTED TOWARD A POINT IN THE CENTER OF THE APPROACH LANE 500 FEET IN ADVANCE OF THE SIGNAL. THE LEFT INDICATION SHALL BE AIMED AT A POINT IN THE CENTER OF THE APPROACH LANE 100 FEET IN ADVANCE OF THE STOP LINE.
5. EACH SIGNAL SHALL BE WIRED TO ALLOW FOR FLASH RED.
6. IF FLAGGERS ARE USED INSTEAD OF TRAFFIC SIGNALS, THE TRAFFIC CONTROL DEVICES SHALL CONFORM TO STANDARD DRAWING NO. 601. A 100 FT. CONE TAPER SHALL BE PROVIDED PRIOR TO FLAGGER STATION TO PROTECT THE FLAGGER. FLOODLIGHTS SHOULD BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT AS NEEDED.
7. DURING DAYTIME OPERATIONS CONES MAY BE SUBSTITUTED FOR BARRICADES WITH STEADY BURNING LIGHTS AT HALF THE BARRICADE SPACING.
8. STEADY BURNING LIGHTS WILL NOT BE REQUIRED FOR DAY

9. BIDIRECTIONAL LIGHTS SHALL BE USED AT NIGHT ALONG THE CENTER LINE WHETHER THE WORK AREA IS SEPARATED FROM THE TRAVELLED LANE USING BARRICADES OR BY USING OTHER DEVICES. MONODIRECTIONAL LIGHTS SHALL BE USED AT NIGHT ON ALL OTHER BARRICADES.
10. ALL SIGNS SHALL BE GROUND-MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS AND AS REQUIRED BY SECTION 625 OF THE UNIFORM STANDARD SPECIFICATIONS.
11. TYPE "B" HIGH INTENSITY FLASHING WARNING LIGHTS MAY BE INSTALLED ABOVE EACH WORK ZONE CONSTRUCTION SIGN FOR USE DURING HOURS OF DARKNESS.
12. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS BY THE TRAFFIC ENGINEER.
13. ALL VEHICLES, EQUIPMENT, WORKERS AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE PAVEMENT UNLESS OTHERWISE AUTHORIZED BY THE TRAFFIC ENGINEER.
14. ALL WARNING SIGNS SHALL HAVE BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND. ALL SIGNS HAVING AN ORANGE COLOR SHALL BE MADE OF MATERIALS CONFORMING TO SECTION 716.03.01 OF THE UNIFORM STANDARD SPECIFICATIONS.
15. IF WORKING AT OR NEAR A TRAFFIC SIGNAL, CONTACT LVACTS AT 229-6611 AND LOCAL ENTITY AT APPROPRIATE NUMBERS LISTED BELOW AT LEAST TWO WORKING DAYS PRIOR TO BEGINNING WORK.

BOULDER CITY	293-9200	LAS VEGAS	229-6331
CLARK COUNTY	455-6100	MESQUITE	346-5295
HENDERSON	565-2140	NORTH LAS VEGAS	642-2462

TABLE FOR SPACING OF ADVANCE WARNING SIGNS

ROAD TYPE	DISTANCE BETWEEN SIGNS (FT)		
	A	B	C
URBAN (LESS THAN 35 MPH)	200	200	200
URBAN (35 MPH OR GREATER)	350	350	350
RURAL	500	500	500
EXPRESSWAY/FREEWAY	1000	1600	2600

16. ALL DEVICES ESTABLISHING A TAPER OR TANGENT LINE SHALL BE OF ONE TYPE; DEVICES SHALL NOT BE MIXED BY TYPE.
17. ADEQUATE AREA ILLUMINATION TO CLEARLY IDENTIFY BOTH ENDS OF THE WORK SPACE AT NIGHT FOR LONG-TERM OPERATIONS OF 72 CONTINUOUS HOURS OR MORE SHOULD BE PROVIDED.
18. A LATERAL BUFFER SPACE MAY BE REQUIRED TO SEPARATE WORK SPACE FROM TRAFFIC SPACE. THE WIDTH SHALL BE DETERMINED BY THE TRAFFIC ENGINEER.
19. ACCESS FOR CAT TRANSIT SERVICE, PEDESTRIANS AND BICYCLES SHALL BE MAINTAINED THROUGHOUT DURATION OF CONSTRUCTION. IF RE-ROUTING OF ACCESS IS NECESSARY, THE CONTRACTOR SHALL PROVIDE THE ENTITY'S TRAFFIC ENGINEER WITH A MAP SHOWING THE PROPOSED RE-ROUTES FOR APPROVAL. IF CONSTRUCTION OPERATIONS AFFECT CAT BUS STOPS OR FACILITIES, THE CONTRACTOR SHALL NOTIFY THE REGIONAL TRANSPORTATION COMMISSION AT 455-4481 AT LEAST 3 NORMAL WORKING DAYS PRIOR TO BEGINNING SUCH OPERATIONS.
20. EDGE LINE SHALL BE A MINIMUM OF 6 IN. WIDE AND SHOULD BE INSTALLED FROM THE START OF THE TAPER TO A POINT BEYOND THE WORK AREA REJOINING THE PERMANENT EDGE LINE.
21. FOR LONG TERM PROJECTS OF 72 CONTINUOUS HOURS OR MORE, CONFLICTING PAVEMENT MARKINGS BETWEEN ACTIVITY AREA AND STOP LINE SHALL BE REMOVED.

TYPICAL APPLICATIONS

BRIDGE DECK REPAIR
ONE-HALF ROAD CONSTRUCTION

SYMBOLS

- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- BARRICADE OR DRUM WITH FLASHING LIGHT
- BARRICADE OR DRUM WITH STEADY BURNING LIGHT
- BARRICADE OR DRUM
- TRAFFIC SIGNAL
- TRAFFIC DIRECTION

TRAFFIC CONTROL PLAN
FOR
HIGHWAY WORK ZONE

SPECIFICATION REFERENCE

TYPICAL APPLICATION FOR

TWO-LANE, TWO-WAY, RURAL DAY OR NIGHT OPERATIONS WITH ONE LANE CLOSED

AGENCY APPROVED B C H L M N

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

DATE 1-9-97 DWG NO. 613

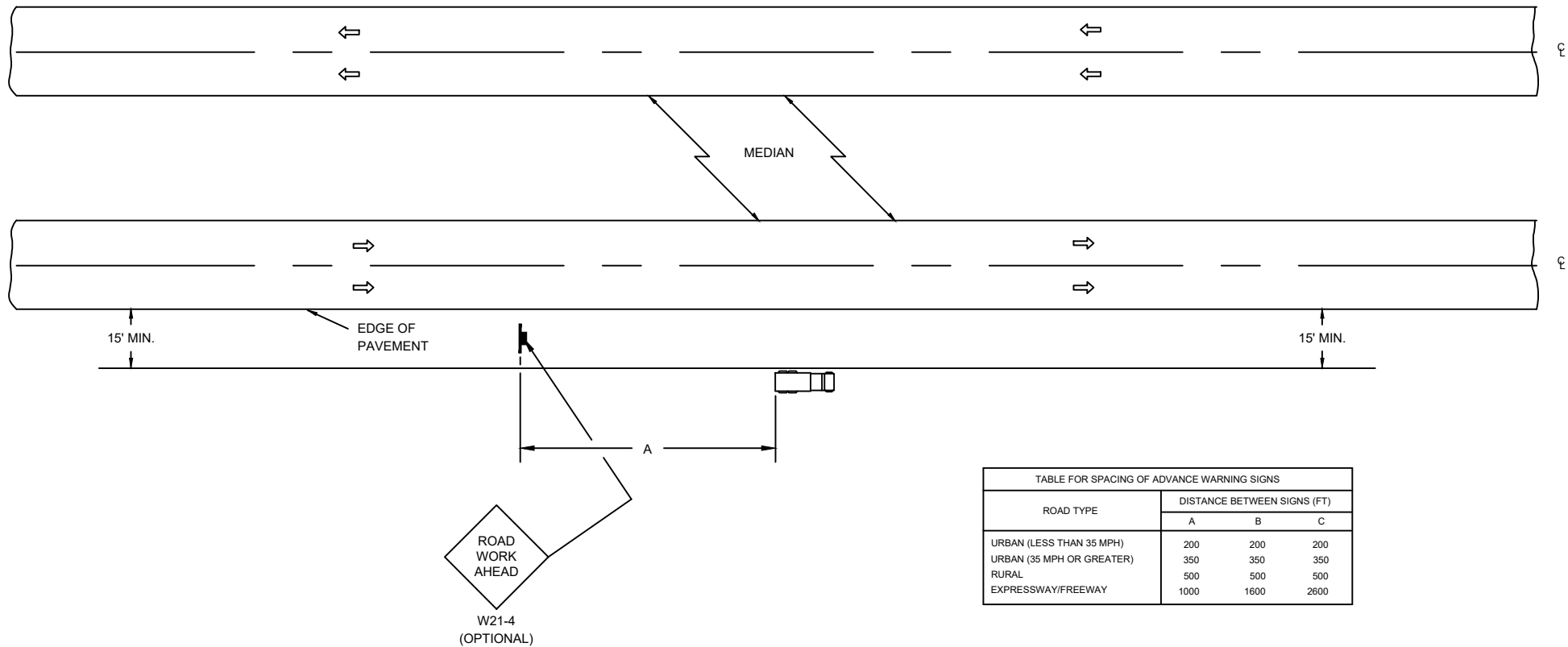


TABLE FOR SPACING OF ADVANCE WARNING SIGNS			
ROAD TYPE	DISTANCE BETWEEN SIGNS (FT)		
	A	B	C
URBAN (LESS THAN 35 MPH)	200	200	200
URBAN (35 MPH OR GREATER)	350	350	350
RURAL	500	500	500
EXPRESSWAY/FREEWAY	1000	1600	2600

TYPICAL APPLICATIONS

LANDSCAPING WORK
UTILITY WORK
FENCING CONTRACTS AND MAINTENANCE
CLEANING CULVERTS

GENERAL NOTES

1. NO SPECIAL SIGNING IS REQUIRED.
2. IF THE WORK OPERATION REQUIRES TWO OR MORE WORK VEHICLES CROSS THE 15 FT. CLEAR ZONE IN ANY ONE HOUR TRAFFIC CONTROL WILL BE IN CONFORMANCE WITH STANDARD DRAWING NO. 615.
3. THIS CASE ALSO APPLIES TO WORK PERFORMED IN THE MEDIAN MORE THAN 15 FT. FROM EITHER PAVEMENT.
4. IF WORKING AT OR NEAR A TRAFFIC SIGNAL, CONTACT LVACTS AT 229-6611 AND LOCAL ENTITY AT APPROPRIATE NUMBERS LISTED BELOW AT LEAST TWO WORKING DAYS PRIOR TO BEGINNING WORK.

BOULDER CITY	293-9200	MESQUITE	346-5295
CLARK COUNTY	455-6100	NORTH LAS VEGAS	642-2462
HENDERSON	565-2140		
LAS VEGAS	229-6331		
5. TYPE "B" HIGH INTENSITY FLASHING WARNING LIGHTS MAY BE INSTALLED ABOVE EACH WORK ZONE CONSTRUCTION SIGN FOR USE DURING HOURS OF DARKNESS.

SYMBOLS

 SIGN ON PORTABLE OR PERMANENT SUPPORT
 TRAFFIC DIRECTION

										AGENCY APPROVED		B	C	H	L	M	N	
TRAFFIC CONTROL PLAN FOR HIGHWAY WORK ZONE	SPECIFICATION REFERENCE		TYPICAL APPLICATION FOR										UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
			MULTILANE, DIVIDED OR UNDIVIDED, RURAL OR SUBURBAN, DAY OR NIGHT OPERATIONS WHERE ACTIVITIES ARE MORE THAN 15 FT FROM EDGE OF PAVEMENT															
													DATE 1-9-97		DWG NO. 614			

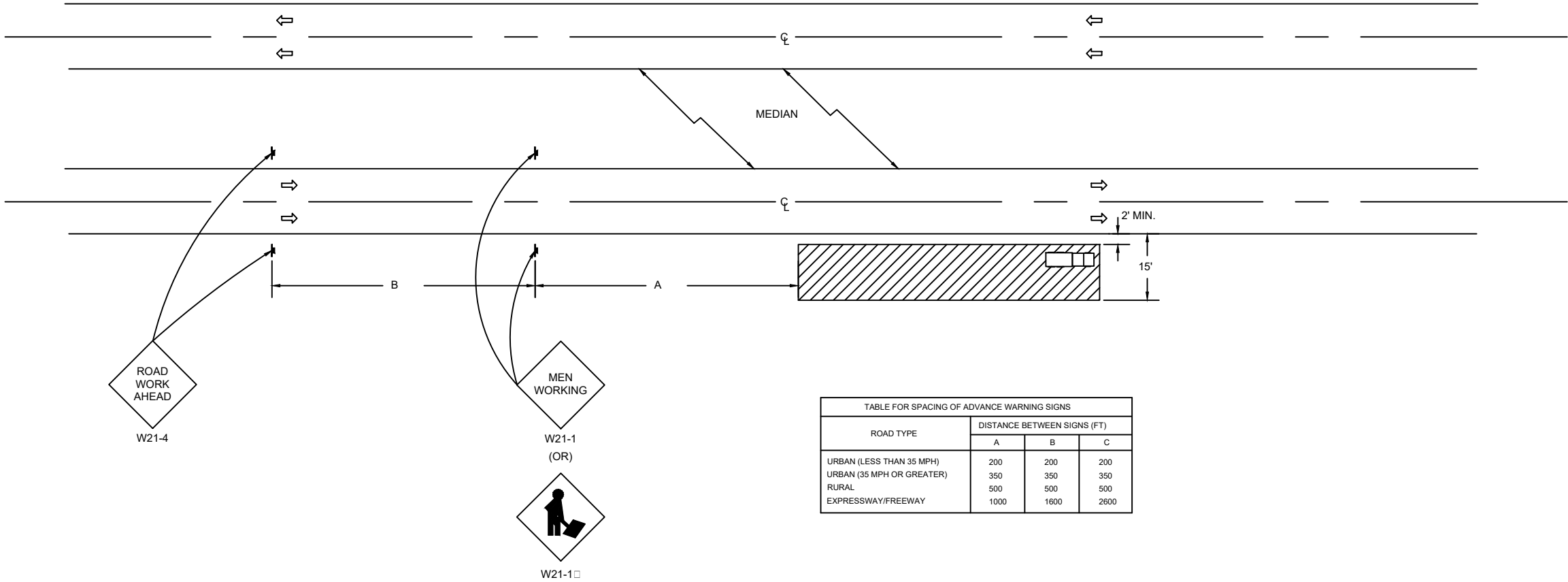


TABLE FOR SPACING OF ADVANCE WARNING SIGNS			
ROAD TYPE	DISTANCE BETWEEN SIGNS (FT)		
	A	B	C
URBAN (LESS THAN 35 MPH)	200	200	200
URBAN (35 MPH OR GREATER)	350	350	350
RURAL	500	500	500
EXPRESSWAY/FREEWAY	1000	1600	2600

SYMBOLS	
	WORK AREA
	SIGN ON PORTABLE OR PERMANENT SUPPORT
	SIGN ON PORTABLE OR PERMANENT SUPPORT

GENERAL NOTES

1. WORKER SIGNS ARE TO BE REMOVED WHEN NO WORK IS BEING PERFORMED. ANY UNATTENDED OBSTACLE OR EXCAVATION IN THE WORK AREA WHICH IN THE OPINION OF THE TRAFFIC ENGINEER CONSTITUTES A HAZARD SHALL BE PROTECTED BY BARRICADES WITH FLASHING LIGHTS AT NIGHT AT THE POINTS OF HAZARD. STEADY BURNING LIGHTS SHALL BE USED FOR DELINEATION AND LONG LINE GUIDANCE. BARRICADE SHALL BE PLACED ACCORDING TO MAXIMUM SPACING VALUES LISTED IN THE TABLE BELOW.

TAPER LENGTHS FOR LANE CLOSURES - DISTANCE L					
SPEED MILES PER HOUR 85 TH PERCENTILE	TAPER LENGTH LANE WIDTH IN FEET			NUMBER OF CHANNELIZING DEVICES FOR TAPER	MAX. SPACING OF DEVICES ALONG TAPER IN FEET
	10	11	12		
20	70	75	80	5	20
25	105	115	125	6	25
30	150	165	180	7	30
35	205	225	245	8	35
40	270	295	320	9	40
45	450	495	540	13	45
50	500	550	600	13	50
55	550	605	660	13	55
60	600	660	720	13	60
65	650	715	780	13	65
70	700	770	840	13	70

2. IF THE WORK OPERATION REQUIRES THAT FOUR OR MORE WORK VEHICLES ENTER THROUGH TRAFFIC LANES IN A ONE HOUR PERIOD, A FLAGGER SHALL BE SUBSTITUTED FOR THE WORKER SIGN. A 100 FT. CONE TAPER SHALL BE PROVIDED PRIOR TO FLAGGER STATION TO PROTECT THE FLAGGER. FLOODLIGHTS SHOULD BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT AS NEEDED.
3. THIS CASE ALSO APPLIES WHEN WORK IS BEING PERFORMED ON A MULTILANE UNDIVIDED HIGHWAY. UNDER THESE CONDITIONS THE SIGNS NORMALLY MOUNTED IN THE MEDIAN SHALL BE OMITTED.
4. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS
5. ALL VEHICLES, EQUIPMENT, WORKERS AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE PAVEMENT UNLESS OTHERWISE AUTHORIZED BY THE TRAFFIC ENGINEER.

8. REQUIRED PROTECTION FOR OPEN EXCAVATIONS DURING NON-WORKING HOURS: OPEN TRENCHES SHALL BE COMPLETELY FENCED (ALL FENCES TO BE SIX(6) FOOT HIGH, NON-CLIMBABLE FENCE), BACKFILLED OR PLATED IN ANY AREA OF THE CITY OF LAS VEGAS THAT ARE WITHIN 300 FT. OF ANY BUILDING OR ROADWAY, AFTER WORKING HOURS. BEYOND 300', TRENCH MAY BE PROTECTED BY A THREE (3) FOOT MOUND OF EARTH COMPLETELY AROUND THE TRENCH AND TYPE II BARRICADES WITH FLASHERS SPOTTED AROUND THE TOP AFTER WORKING HOURS.

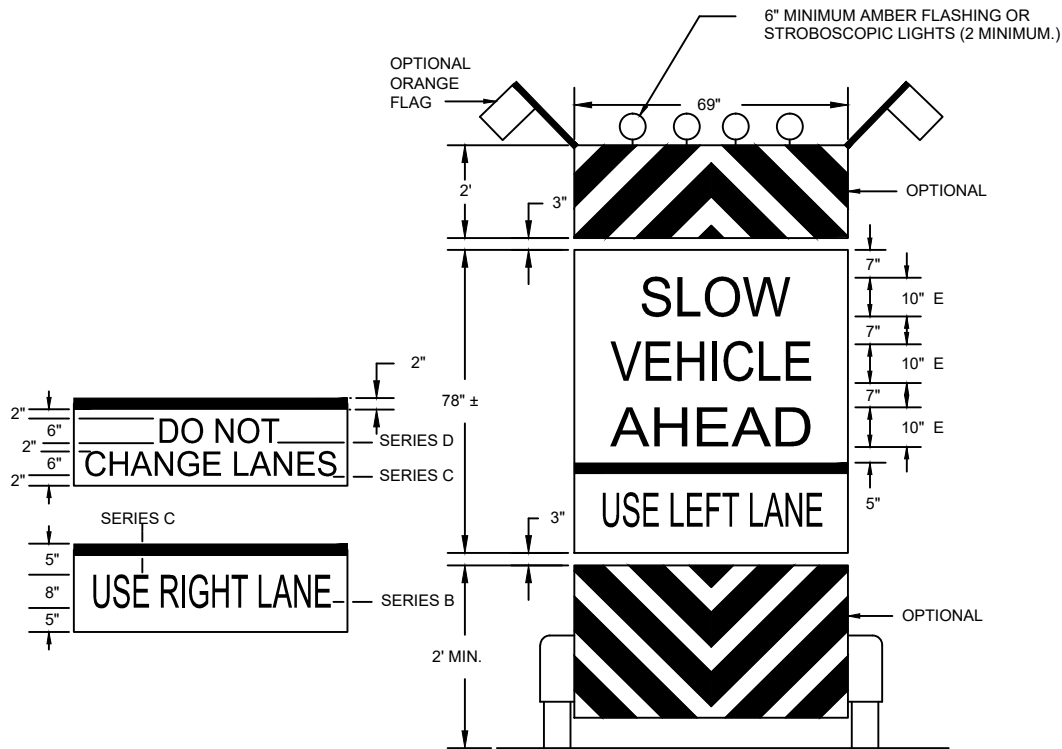
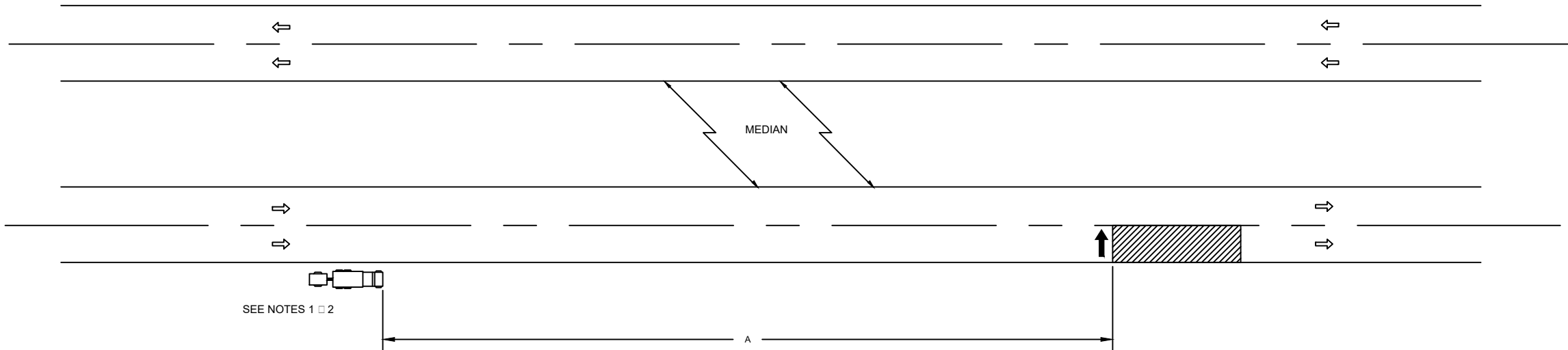
9. IF WORKING AT OR NEAR A TRAFFIC SIGNAL, CONTACT LVACTS AT 229-6611 AND LOCAL ENTITY AT APPROPRIATE NUMBERS LISTED BELOW AT LEAST TWO WORKING DAYS PRIOR TO BEGINNING WORK.

BOULDER CITY	293-9200	MESQUITE	346-5295
CLARK COUNTY	455-6100	NORTH LAS VEGAS	642-2462
HENDERSON	565-2140		
LAS VEGAS	229-6331		

10. IF THE WORK SPACE IS IN THE MEDIAN OF A DIVIDED HIGHWAY, AN ADVANCE WARNING SIGN SHOULD ALSO BE PLACED ON THE LEFT SIDE OF THE DIRECTIONAL ROADWAY.

11. ACCESS FOR CAT TRANSIT SERVICE, PEDESTRIANS AND

										AGENCY APPROVED		B	C	H	L	M	N
TRAFFIC CONTROL PLAN FOR HIGHWAY WORK ZONE	SPECIFICATION REFERENCE		TYPICAL APPLICATION FOR										UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA				
			MULTILANE, DIVIDED OR UNDIVIDED, RURAL OR SUBURBAN, DAY OR NIGHT OPERATIONS WHERE ACTIVITIES WILL ENCROACH BETWEEN 15 FT. ± 2 FT. OUTSIDE PAVEMENT EDGE														
													DATE 1-9-97		DWG NO. 615		



GENERAL NOTES

- HIGHWAY, THE PROTECTION VEHICLE SHALL FOLLOW ON THE LEFT SHOULDER AND THE BOTTOM LINE SHALL READ "USE RIGHT LANE".
- IF WORK IS BEING PERFORMED ON THE CENTER LANE OF THE ROADWAY, TRAFFIC SHALL BE DIVERTED TO EITHER LEFT OR RIGHT LANE. AT NO TIME IS TRAFFIC PERMITTED TO PASS ON BOTH SIDES OF MOVING OPERATION. CENTER LANE OPERATIONS SHALL NOT BE PERFORMED DURING PEAK TRAVEL TIMES.
 - THE LIGHTS ON THE TRAILER SHALL FLASH IN PAIRS ALTERNATING BETWEEN THE TWO OUTSIDE LIGHTS AND THE TWO INSIDE LIGHTS OR SEQUENTIAL FLASHING.
 - ALL STRIPING SHALL HAVE ALTERNATING WHITE AND ORANGE STRIPES AT 45° FROM THE VERTICAL. ALL STRIPES SHALL BE 6" IN WIDTH.
 - THE SIGN PANELS SHALL HAVE THE MINIMUM DIMENSIONS SHOWN AND HAVE BLACK LEGEND ON AN ORANGE REFLECTORIZED BACKGROUND CONFORMING TO SECTION 716.03.01 OF THE UNIFORM STANDARD SPECIFICATIONS.
 - PAVEMENT STRIPING AND CONE PICKUP WILL BE CONSIDERED AS TWO SEPARATE OPERATIONS.
 - WHERE WORK OPERATIONS ARE MORE THAN 2 FT. FROM THE EDGE OF THE PAVEMENT, PROTECTION VEHICLES MAY BE OMITTED.
 - THIS CASE DOES NOT APPLY WHEN WORK IS BEING PERFORMED IN THE MIDDLE LANE(S) OF A SIX OR MORE LANE HIGHWAY. SPECIAL PLANS APPROVED BY THE TRAFFIC ENGINEER ARE REQUIRED.
 - LONGITUDINAL DIMENSIONS MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS BY THE TRAFFIC ENGINEER.
 - ALL VEHICLES, EQUIPMENT, WORKERS AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE PAVEMENT UNLESS OTHERWISE AUTHORIZED BY THE TRAFFIC ENGINEER.
 - ALL WARNING SIGNS HAVE BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND. ALL SIGNS HAVING AN ORANGE COLOR SHALL BE MADE OF MATERIALS CONFORMING TO SECTION 716.03.01 OF THE UNIFORM STANDARD SPECIFICATIONS.

12. TABLE FOR SPACING OF FOLLOWING VEHICLE

ROAD TYPE	DISTANCE BETWEEN SIGNS (FT)		
	A	B	C
URBAN (LESS THAN 35 MPH)	200	200	200
URBAN (35 MPH OR GREATER)	350	350	350
RURAL	500	500	500
EXPRESSWAY/FREEWAY	1000	1600	2600

13. IF WORKING AT OR NEAR A TRAFFIC SIGNAL, CONTACT LVACTS AT 229-6611 AND LOCAL ENTITY AT APPROPRIATE NUMBERS LISTED BELOW AT LEAST TWO WORKING DAYS PRIOR TO BEGINNING WORK.
- | | |
|-----------------|----------|
| BOULDER CITY | 293-9200 |
| CLARK COUNTY | 455-6100 |
| HENDERSON | 565-2140 |
| LAS VEGAS | 229-6331 |
| MESQUITE | 346-5295 |
| NORTH LAS VEGAS | 642-2462 |
14. ACCESS FOR CAT TRANSIT SERVICE, PEDESTRIANS AND BICYCLES SHALL BE MAINTAINED THROUGHOUT DURATION OF CONSTRUCTION. IF RE-ROUTING OF ACCESS IS NECESSARY, THE CONTRACTOR SHALL PROVIDE THE ENTITY'S TRAFFIC ENGINEER WITH A MAP SHOWING THE PROPOSED RE-ROUTES FOR APPROVAL. IF CONSTRUCTION OPERATIONS AFFECT CAT BUS STOPS OR FACILITIES, THE CONTRACTOR SHALL NOTIFY THE REGIONAL TRANSPORTATION COMMISSION AT 455-4481 AT LEAST 3 NORMAL WORKING DAYS PRIOR TO BEGINNING SUCH OPERATIONS.

SYMBOLS

- WORK AREA
- VEHICLE MOUNTED ARROW PANEL
- TRAFFIC DIRECTION

TYPICAL APPLICATIONS

- PAVEMENT STRIPING
- WEED SPRAYING
- ROADOMETER MEASUREMENTS

TRAFFIC CONTROL PLAN
FOR
HIGHWAY WORK ZONE

SPECIFICATION REFERENCE

TYPICAL APPLICATION FOR
MULTILANE, DIVIDED, RURAL OR SUBURBAN, DAY OPERATIONS
WHERE OPERATION MOVES BETWEEN 1 MPH AND 15 MPH

AGENCY APPROVED

B	C	H	L	M	N

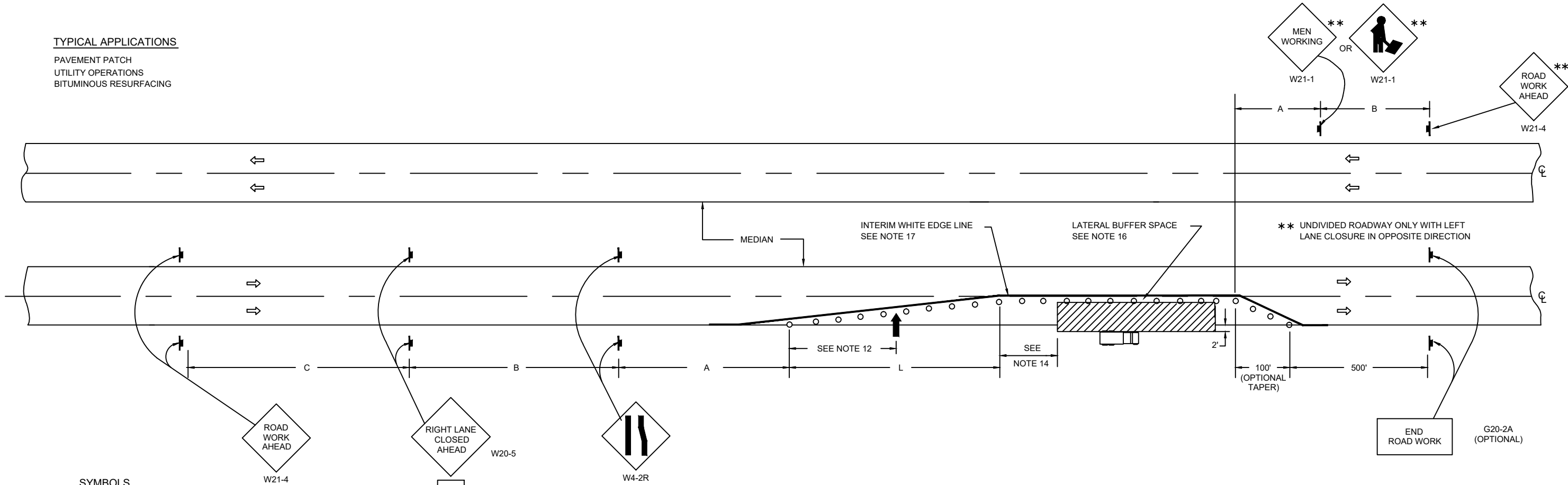
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

DATE 1-9-97

DWG NO. 616

TYPICAL APPLICATIONS

PAVEMENT PATCH
UTILITY OPERATIONS
BITUMINOUS RESURFACING



SYMBOLS

- ARROW BOARD
- WORK AREA
- CONE, DRUM OR BARRICADE
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TRAFFIC DIRECTION

1. THE "L" DISTANCE EQUALS:

FORMULAS FOR TAPER LENGTH

SPEED	FORMULA
40 M.P.H. OR UNDER	$L \geq WS^2/60$
40 M.P.H. OR OVER	$L \geq WS$

WHERE:

- L = TAPER LENGTH
- W = WIDTH OF LANE OR OFFSET
- S = POSTED SPEED, OR OFF-PEAK 85TH PERCENTILE PRIOR TO WORK STARTING OR ANTICIPATED OPERATING SPEED

TAPER LENGTHS FOR LANE CLOSURES - DISTANCE L					
SPEED MILES PER HOUR 85 TH PERCENTILE	TAPER LENGTH LANE WIDTH IN FEET			NUMBER OF CHANNELIZING DEVICES FOR TAPER	MAX. SPACING OF DEVICES ALONG TAPER IN FEET
	10	11	12		
20	70	75	80	5	20
25	105	115	125	6	25
30	150	165	180	7	30
35	205	225	245	8	35
40	270	295	320	9	40
45	450	495	540	13	45
50	500	550	600	13	50
55	550	605	660	13	55
60	600	660	720	13	60
65	650	715	780	13	65
70	700	770	840	13	70

- WHEN EQUIPMENT ENTERS OR EXITS THE WORK AREA DIRECTLY FROM THE ADJOINING LANE CARRYING TRAFFIC, A FLAGGER WILL BE REQUIRED. IF THE FLAGGER IS PRESENT, THE FLAGGER SIGN SHALL BE PLACED AT DISTANCE "A" PRIOR TO THE FLAGGER AND "PREPARE TO STOP" SIGN (NPS-1) SHALL BE PLACED AT DISTANCE "A" PRIOR TO FLAGGER SIGN. FLAGGERS SHALL NOT BE REQUIRED FOR SPEEDS OF 25 MPH OR LESS. A 100 FT. CONE TAPER SHALL BE PROVIDED PRIOR TO FLAGGER STATION TO PROTECT THE FLAGGER. FLOODLIGHTS SHOULD BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT AS NEEDED.
- THIS CASE ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE LEFT LANE. UNDER THESE CONDITIONS, LEFT LANE CLOSED SIGNS SHALL BE SUBSTITUTED FOR RIGHT LANE CLOSED SIGNS. ON INDIVIDUAL HIGHWAYS, SIGNS SHALL BE ADDED IN THE OPPOSITE DIRECTION AS SHOWN AND CONES SHALL BE PLACED ALONG THE CENTERLINE THROUGHOUT THE TAPER AND WORK AREA.
- ALL SIGNS, CONES, BARRICADES AND DRUMS ARE TO BE REMOVED AT COMPLETION OF THE DAY'S OPERATIONS AND THE WORK AREA OPENED TO TRAFFIC.
- THIS CASE DOES NOT APPLY WHEN WORK IS BEING PERFORMED IN THE MIDDLE LANE(S) OF A SIX OR MORE LANE HIGHWAY. SPECIAL PLANS APPROVED BY THE TRAFFIC ENGINEER WILL BE REQUIRED.
- CONES SHALL BE A MINIMUM OF 28 IN. IN HEIGHT.
- LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS BY THE TRAFFIC ENGINEER. THE LATERAL PLACEMENT OF THE FLAGGERS, IF NECESSARY, MAY BE VARIED.

GENERAL NOTES

- ALL VEHICLES, EQUIPMENT, WORKERS (EXCEPT FLAGGERS) AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE PAVEMENT UNLESS OTHERWISE AUTHORIZED BY THE TRAFFIC ENGINEER.
- ALL WARNING SIGNS SHALL HAVE BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND. ALL SIGNS HAVING AN ORANGE COLOR SHALL BE MADE OF MATERIALS CONFORMING TO SECTION 716.03.01 OF THE UNIFORM STANDARD SPECIFICATIONS.
- ALL DEVICES ESTABLISHING A TAPER OR TANGENT LINE SHALL BE OF ONE TYPE; DEVICES SHALL NOT BE MIXED BY TYPE.
- TABLE FOR SPACING OF ADVANCE WARNING SIGNS
- ARROWBOARD PANELS SHALL BE USED ON HIGH SPEED ROADWAYS WITH SPEED LIMITS OVER 35 MPH OR AS DIRECTED BY THE TRAFFIC ENGINEER. ARROWBOARD SHOULD BE PLACED AS CLOSE TO THE BEGINNING OF THE TAPER AS POSSIBLE, AS SOON AS THERE IS ADEQUATE SPACE.
- IF WORKING AT OR NEAR A TRAFFIC SIGNAL, CONTACT LVACTS AT 229-6611 AND LOCAL ENTITY AT APPROPRIATE NUMBERS LISTED BELOW AT LEAST TWO WORKING DAYS PRIOR TO BEGINNING WORK.

TABLE FOR SPACING OF ADVANCE WARNING SIGNS			
ROAD TYPE	DISTANCE BETWEEN SIGNS (FT)		
	A	B	C
URBAN (LESS THAN 35 MPH)	200	200	200
URBAN (35 MPH OR GREATER)	350	350	350
RURAL	500	500	500
EXPRESSWAY/FREEWAY	1000	1600	2600

BOULDER CITY	293-9200	LAS VEGAS	229-6331
CLARK COUNTY	455-6100	MESQUITE	346-5295
HENDERSON	565-2140	NORTH LAS VEGAS	642-2462

14. BUFFER SPACE SHALL BE:

BUFFER SPACE	
SPEED - (M.P.H.)	BUFFER SPACE (FT.)
70	585
65	485
60	415
55	335
50	280
45	220
40	170
35	120
30	85
25	55
20	35

POSTED SPEED, OFF-PEAK 85TH PERCENTILE
SPEED PRIOR TO WORK STARTING OR THE
ANTICIPATED OPERATING SPEED.

- WHEN A SIDE ROAD INTERSECTS THE HIGHWAY WITHIN THE TEMPORARY TRAFFIC CONTROL ZONE, ADDITIONAL TRAFFIC CONTROL DEVICES SHALL BE ERECTED, AS NEEDED.
- A LATERAL BUFFER SPACE MAY BE REQUIRED TO SEPARATE WORK SPACE FROM TRAFFIC SPACE. THE WIDTH SHALL BE DETERMINED BY THE TRAFFIC ENGINEER.
- FOR LONG TERM PROJECTS OF 72 CONTINUOUS HOURS OR MORE, A 6 IN. WIDE INTERIM WHITE EDGE LINE SHOULD BE INSTALLED FROM THE START OF THE TAPER TO A POINT BEYOND THE WORK AREA, REJOINING THE PERMANENT EDGE LINE. INTERIM EDGE LINE SHALL BE REMOVABLE, NON-FOIL PAVEMENT MARKING TAPE. FOR LEFT LANE CLOSURE, THE EDGE LINE SHALL BE YELLOW. PAVEMENT MARKINGS THAT ARE NO LONGER APPLICABLE SHALL BE MASKED WITH APPROVED BLACKOUT TAPE OR OBLITERATED AS APPROVED BY THE TRAFFIC ENGINEER FROM THE END OF THE ENTRANCE TAPER TO A POINT LOCATED 1/2A FROM THE TAPER BEGINNING.
- ACCESS FOR CAT TRANSIT SERVICE, PEDESTRIANS AND BICYCLES SHALL BE MAINTAINED THROUGHOUT DURATION OF CONSTRUCTION. IF RE-ROUTING OF ACCESS IS NECESSARY, THE CONTRACTOR SHALL PROVIDE THE ENTITY'S TRAFFIC ENGINEER WITH A MAP SHOWING THE PROPOSED RE-ROUTES FOR APPROVAL. IF CONSTRUCTION OPERATIONS AFFECT CAT BUS STOPS OR FACILITIES, THE CONTRACTOR SHALL NOTIFY THE REGIONAL TRANSPORTATION COMMISSION AT 455-4481 AT LEAST 3 NORMAL WORKING DAYS PRIOR TO BEGINNING SUCH OPERATIONS.

TRAFFIC CONTROL PLAN
FOR
HIGHWAY WORK ZONE

SPECIFICATION REFERENCE

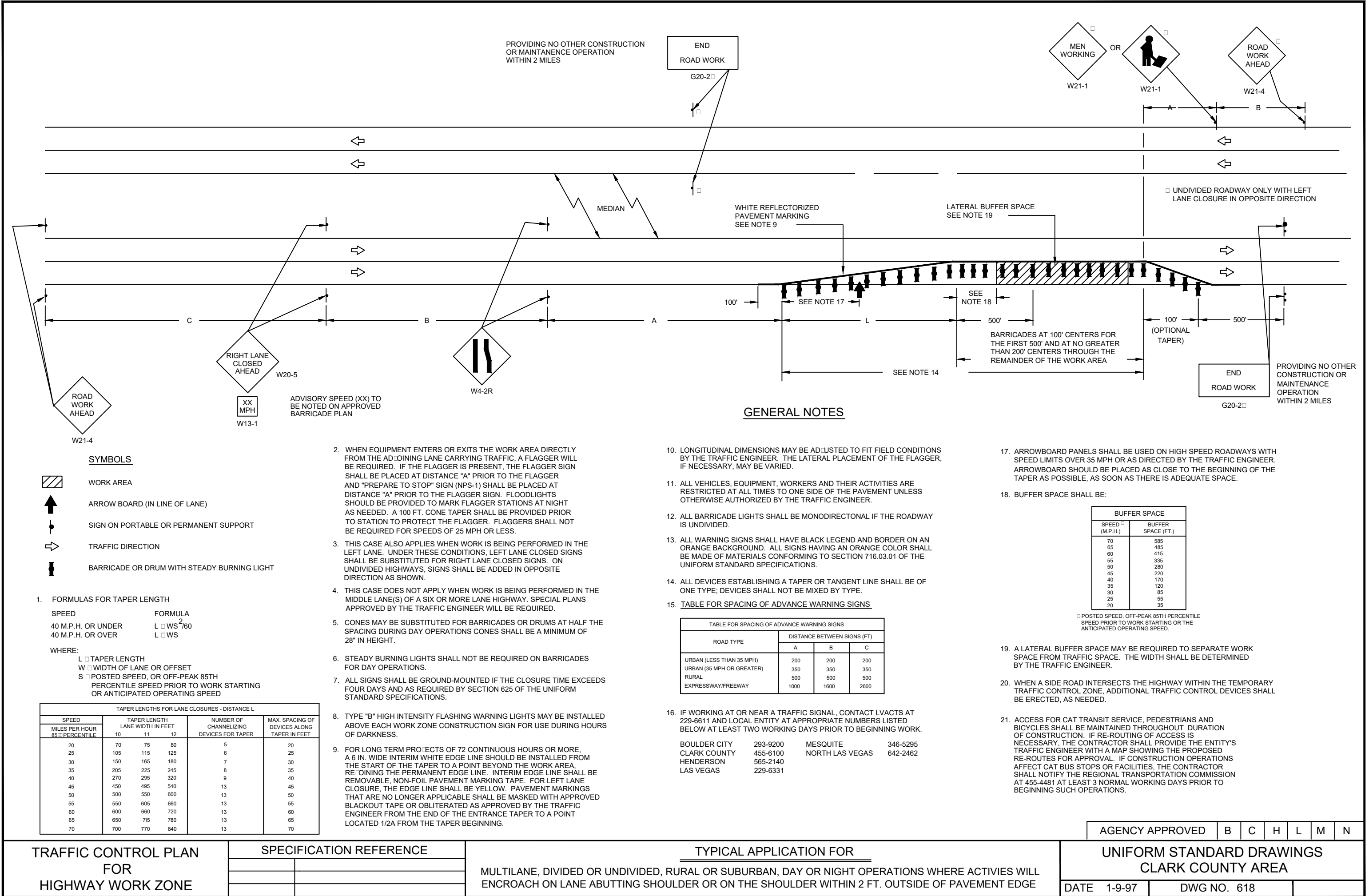
TYPICAL APPLICATION FOR

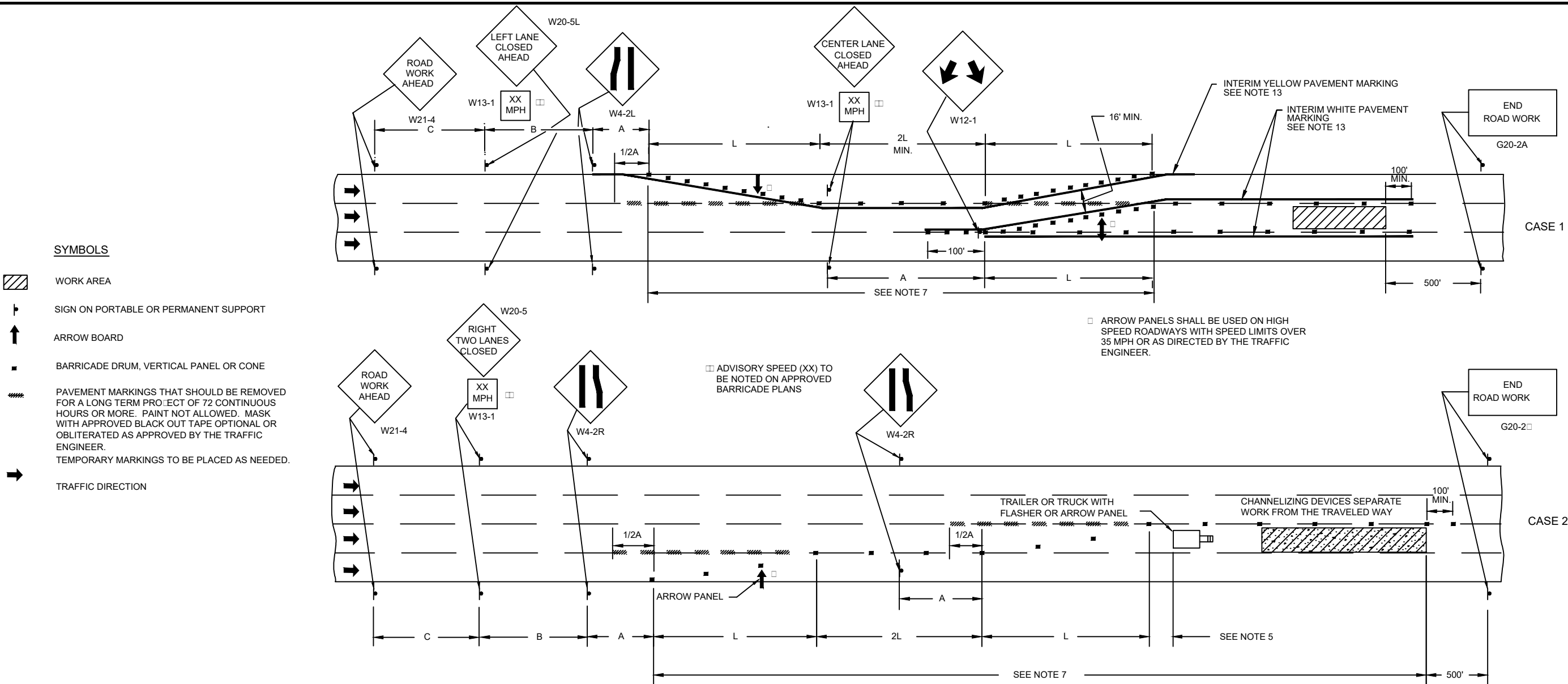
MULTILANE, DIVIDED OR UNDIVIDED, RURAL OR SUBURBAN, DAY OPERATIONS WHERE ACTIVITIES WILL ENCROACH ON LANE ABUTTING SHOULDER OR ON THE SHOULDER WITHIN 2 FT. OUTSIDE THE PAVEMENT EDGE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

DATE 1-9-97 DWG NO. 617

AGENCY APPROVED B C H L M N





1. TAPER FORMULA: $L \geq S \times W$ FOR SPEEDS OF 45 MPH OR MORE
 $L \geq \frac{WS^2}{60}$ FOR SPEEDS OF 40 MPH OR LESS

WHERE: L = MINIMUM LENGTH OF TAPER
S = POSTED SPEED, 85TH PERCENTILE SPEED PRIOR TO WORK STARTING OR ANTICIPATED OPERATING SPEED
W = WIDTH OF OFFSET

TAPER LENGTHS FOR LANE CLOSURES - DISTANCE L					
SPEED MILES PER HOUR 85TH PERCENTILE	TAPER LENGTH LANE WIDTH IN FEET			NUMBER OF CHANNELIZING DEVICES FOR TAPER	MAX. SPACING OF DEVICES ALONG TAPER IN FEET
	10	11	12		
20	70	75	80	5	20
25	105	115	125	6	25
30	150	165	180	7	30
35	205	225	245	8	35
40	270	295	320	9	40
45	450	495	540	13	45
50	500	550	600	13	50
55	550	605	660	13	55
60	600	660	720	13	60
65	650	715	780	13	65
70	700	770	840	13	70

BUFFER SPACE	
SPEED (M.P.H.)	BUFFER SPACE (FT.)
70	585
65	485
60	415
55	335
50	280
45	220
40	170
35	120
30	85
25	55
20	35

POSTED SPEED, OFF-PEAK 85TH PERCENTILE SPEED PRIOR TO WORK STARTING OR THE ANTICIPATED OPERATING SPEED.

TABLE FOR SPACING OF ADVANCE WARNING SIGNS			
ROAD TYPE	DISTANCE BETWEEN SIGNS (FT)		
	A	B	C
URBAN (LESS THAN 35 MPH)	200	200	200
URBAN (35 MPH OR GREATER)	350	350	350
RURAL	500	500	500
EXPRESSWAY/FREEWAY	1000	1600	2600

9. IF WORKING AT OR NEAR A TRAFFIC SIGNAL, CONTACT LVACTS AT 229-6611 AND LOCAL ENTITY AT APPROPRIATE NUMBERS LISTED BELOW AT LEAST TWO WORKING DAYS PRIOR TO BEGINNING WORK.

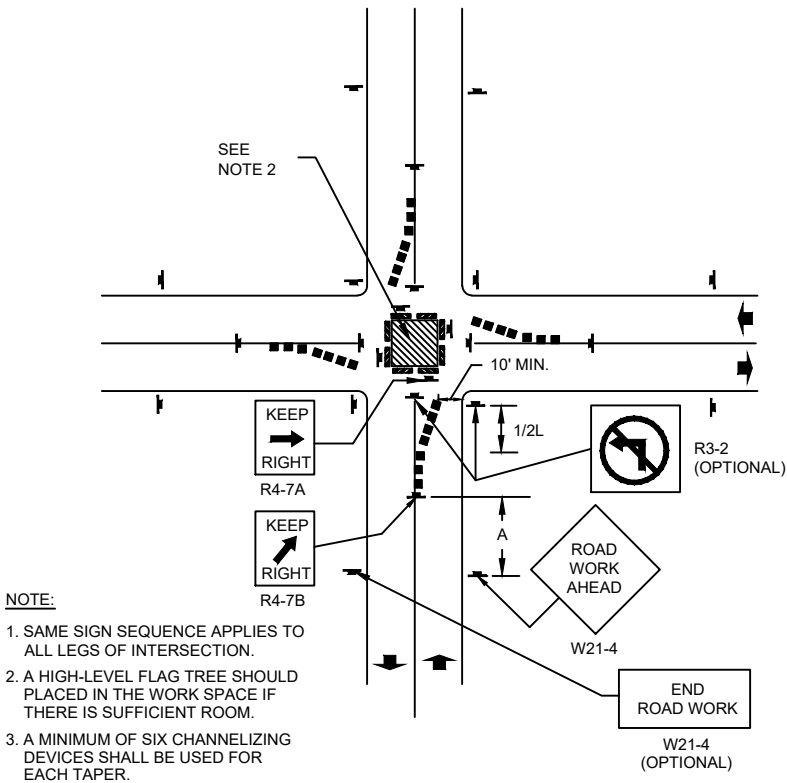
BOULDER CITY	293-9200	MESQUITE	346-5295
CLARK COUNTY	455-6100	NORTH LAS VEGAS	642-2462
HENDERSON	565-2140		
LAS VEGAS	229-6331		

TRAFFIC CONTROL PLAN
FOR
HIGHWAY WORK ZONE

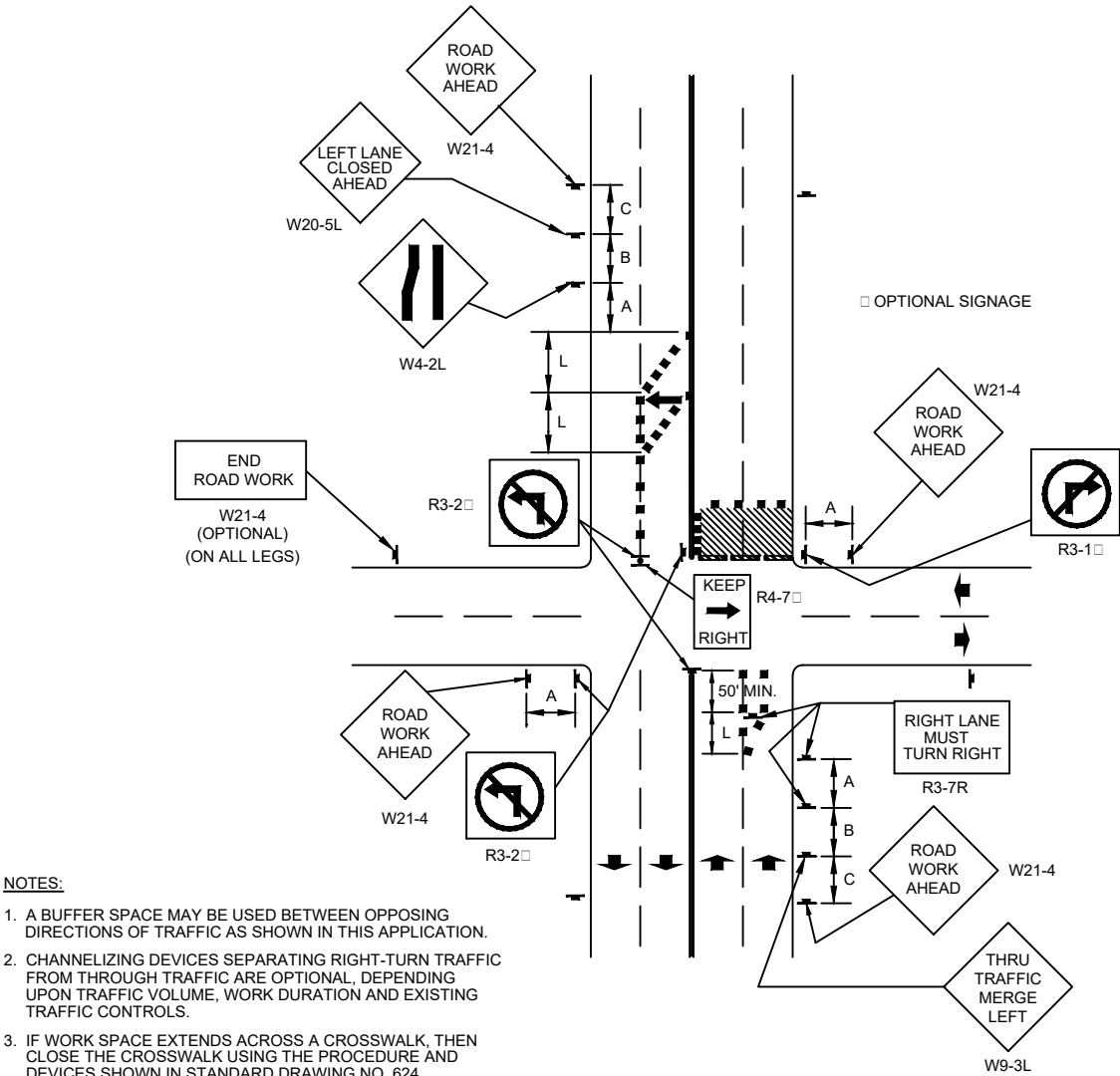
SPECIFICATION REFERENCE

TYPICAL APPLICATION FOR
MULTILANE, ONE-WAY OR DIVIDED, RURAL OR SUBURBAN, DAY OR NIGHT
OPERATIONS WHERE CENTER LANE(S) ARE CLOSED

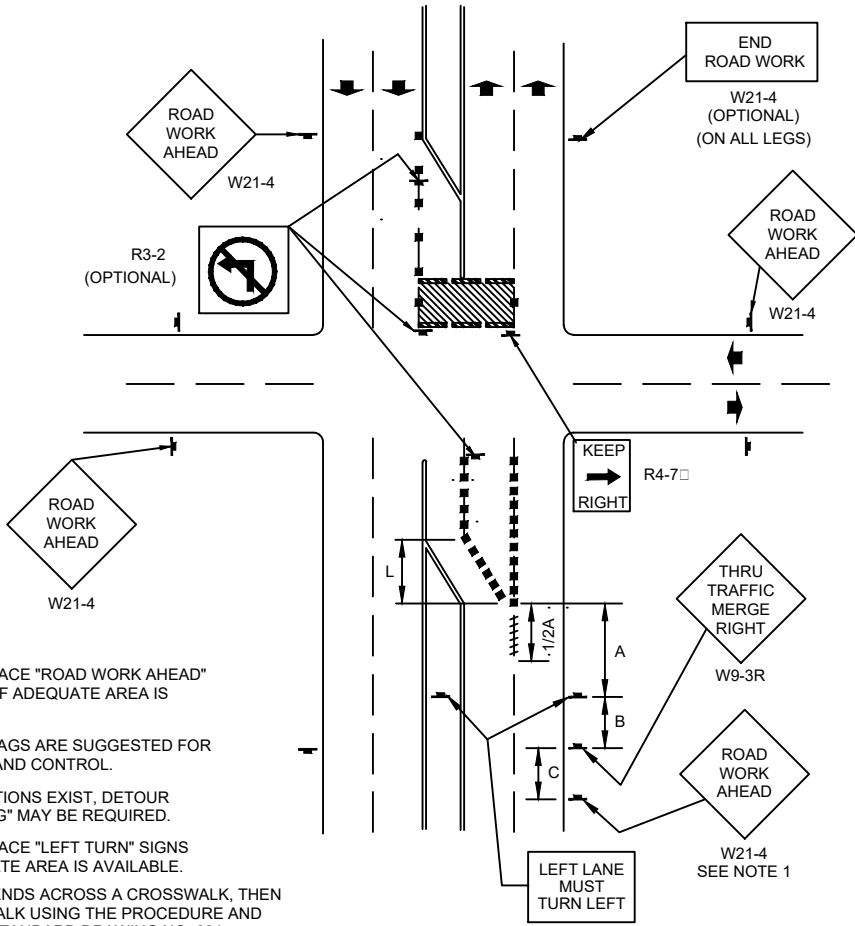
AGENCY APPROVED		B	C	H	L	M	N
UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
DATE	1-9-97	DWG NO. 620					



A. WORK AREA IS IN THE CENTER OF AN INTERSECTION



B. WORK AREA NEAR AN INTERSECTION, ALLOWING RIGHT TURNS.



C. WORK AREA NEAR AN INTERSECTION, PROVIDING ACCESS TO LEFT-TURN LANE.

- NOTE:
1. SAME SIGN SEQUENCE APPLIES TO ALL LEGS OF INTERSECTION.
 2. A HIGH-LEVEL FLAG TREE SHOULD BE PLACED IN THE WORK SPACE IF THERE IS SUFFICIENT ROOM.
 3. A MINIMUM OF SIX CHANNELIZING DEVICES SHALL BE USED FOR EACH TAPER.

- NOTES:
1. A BUFFER SPACE MAY BE USED BETWEEN OPPOSING DIRECTIONS OF TRAFFIC AS SHOWN IN THIS APPLICATION.
 2. CHANNELIZING DEVICES SEPARATING RIGHT-TURN TRAFFIC FROM THROUGH TRAFFIC ARE OPTIONAL, DEPENDING UPON TRAFFIC VOLUME, WORK DURATION AND EXISTING TRAFFIC CONTROLS.
 3. IF WORK SPACE EXTENDS ACROSS A CROSSWALK, THEN CLOSE THE CROSSWALK USING THE PROCEDURE AND DEVICES SHOWN IN STANDARD DRAWING NO. 624.

- NOTES:
1. IF MEDIAN EXISTS, PLACE "ROAD WORK AHEAD" SIGN IN THE MEDIAN IF ADEQUATE AREA IS AVAILABLE.
 2. LARGE SIGNS AND FLAGS ARE SUGGESTED FOR MAXIMUM VISIBILITY AND CONTROL.
 3. IF TURNING RESTRICTIONS EXIST, DETOUR ROUTE "TRAILBLAZING" MAY BE REQUIRED.
 4. IF MEDIAN EXISTS, PLACE "LEFT TURN" SIGNS IN MEDIAN IF ADEQUATE AREA IS AVAILABLE.
 5. IF WORK SPACE EXTENDS ACROSS A CROSSWALK, THEN CLOSE THE CROSSWALK USING THE PROCEDURE AND DEVICES SHOWN IN STANDARD DRAWING NO. 624.

GENERAL NOTES

1. FORMULAS FOR TAPER LENGTH

SPEED	FORMULA
40 M.P.H. OR UNDER	$L \geq WS^2/60$
40 M.P.H. OR OVER	$L \geq WS$

WHERE:

- L = TAPER LENGTH
- W = WIDTH OF LANE OR OFFSET
- S = POSTED SPEED, 85TH PERCENTILE SPEED PRIOR TO STARTING WORK OR ANTICIPATED OPERATING SPEED

TAPER LENGTHS FOR LANE CLOSURES - DISTANCE L				
SPEED MILES PER HOUR 85 TH PERCENTILE	TAPER LENGTH LANE WIDTH IN FEET			MAX. SPACING OF DEVICES ALONG TAPER IN FEET
	10	11	12	
20	70	75	80	20
25	105	115	125	25
30	150	165	180	30
35	205	225	245	35
40	270	295	320	40
45	450	495	540	45
50	500	550	600	50
55	550	605	660	55
60	600	660	720	60
65	650	715	780	65
70	700	770	840	70

2. ADDITIONAL ADVANCE WARNING MAY BE NECESSARY
3. PROHIBIT TURNS AS REQUIRED BY TRAFFIC CONDITIONS

4. TABLE FOR SPACING OF ADVANCE WARNING SIGNS

ROAD TYPE	DISTANCE BETWEEN SIGNS (FT)		
	A	B	C
URBAN (LESS THAN 35 MPH)	200	200	200
URBAN (35 MPH OR GREATER)	350	350	350
RURAL	500	500	500
EXPRESSWAY/FREEWAY	1000	1600	2600

5. ALL DEVICES ESTABLISHING A TAPER OF TANGENT LINE SHALL BE OF ONE TYPE, DEVICES SHALL NOT BE MIXED BY TYPE.
6. IF WORKING AT OR NEAR A TRAFFIC SIGNAL, CONTACT LVACTS AT 229-6611 AND LOCAL ENTITY AT APPROPRIATE NUMBERS LISTED BELOW AT LEAST TWO WORKING DAYS PRIOR TO BEGINNING WORK.

BOULDER CITY	293-9200	LAS VEGAS	229-6331
CLARK COUNTY	455-6100	MESQUITE	346-5295
HENDERSON	565-2140	NORTH LAS VEGAS	642-2462
7. FLASHING WARNING LIGHTS AND/OR FLAGS MAY BE USED TO CALL ATTENTION TO THE ADVANCE WARNING SIGNS.

8. ACCESS FOR CAT TRANSIT SERVICE, PEDESTRIANS AND BICYCLES SHALL BE MAINTAINED THROUGHOUT DURATION OF CONSTRUCTION. IF RE-ROUTING OF ACCESS IS NECESSARY, THE CONTRACTOR SHALL PROVIDE THE ENTITY'S TRAFFIC ENGINEER WITH A MAP SHOWING THE PROPOSED RE-ROUTES FOR APPROVAL. IF CONSTRUCTION OPERATIONS AFFECT CAT BUS STOPS OR FACILITIES, THE CONTRACTOR SHALL NOTIFY THE REGIONAL TRANSPORTATION COMMISSION AT 455-4481 AT LEAST 3 NORMAL WORKING DAYS PRIOR TO BEGINNING SUCH OPERATIONS.

SYMBOLS

- CHANNELIZING DEVICES
- PAVEMENT MARKINGS THAT SHOULD BE REMOVED FOR A LONG TERM PROJECT OF 72 CONTINUOUS HOURS OR MORE. PAINT NOT ALLOWED. MASK WITH APPROVED BLACK OUT TAPE OPTIONAL OR OBLITERATED AS APPROVED BY THE TRAFFIC ENGINEER. TEMPORARY MARKINGS TO BE PLACED AS NEEDED.
- TRAFFIC DIRECTION
- TYPE III BARRICADE
- WORK AREA

TRAFFIC CONTROL PLAN
FOR
HIGHWAY WORK ZONE

SPECIFICATION REFERENCE

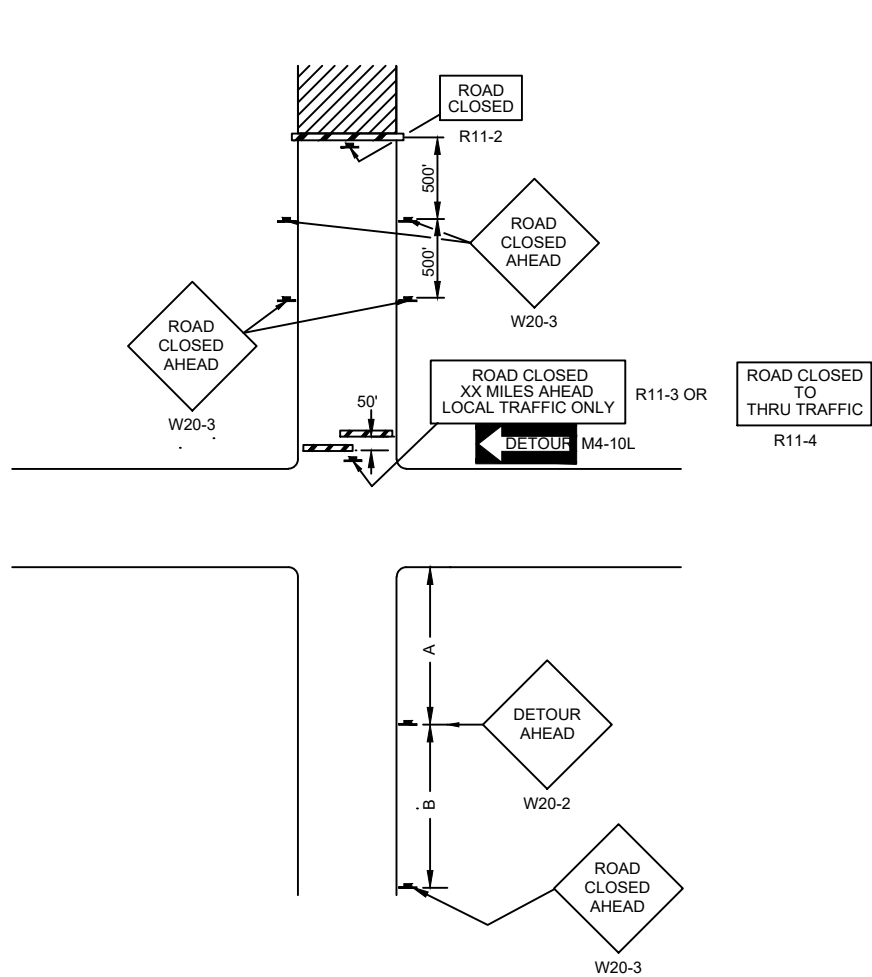
TYPICAL APPLICATION FOR

WORK AREAS WITHIN OR NEAR SUBURBAN INTERSECTIONS

AGENCY APPROVED B C H L M N

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

DATE 1-9-97 DWG NO. 622



A. TYPICAL APPLICATION-ROADWAY CLOSED BEYOND DETOUR POINT.

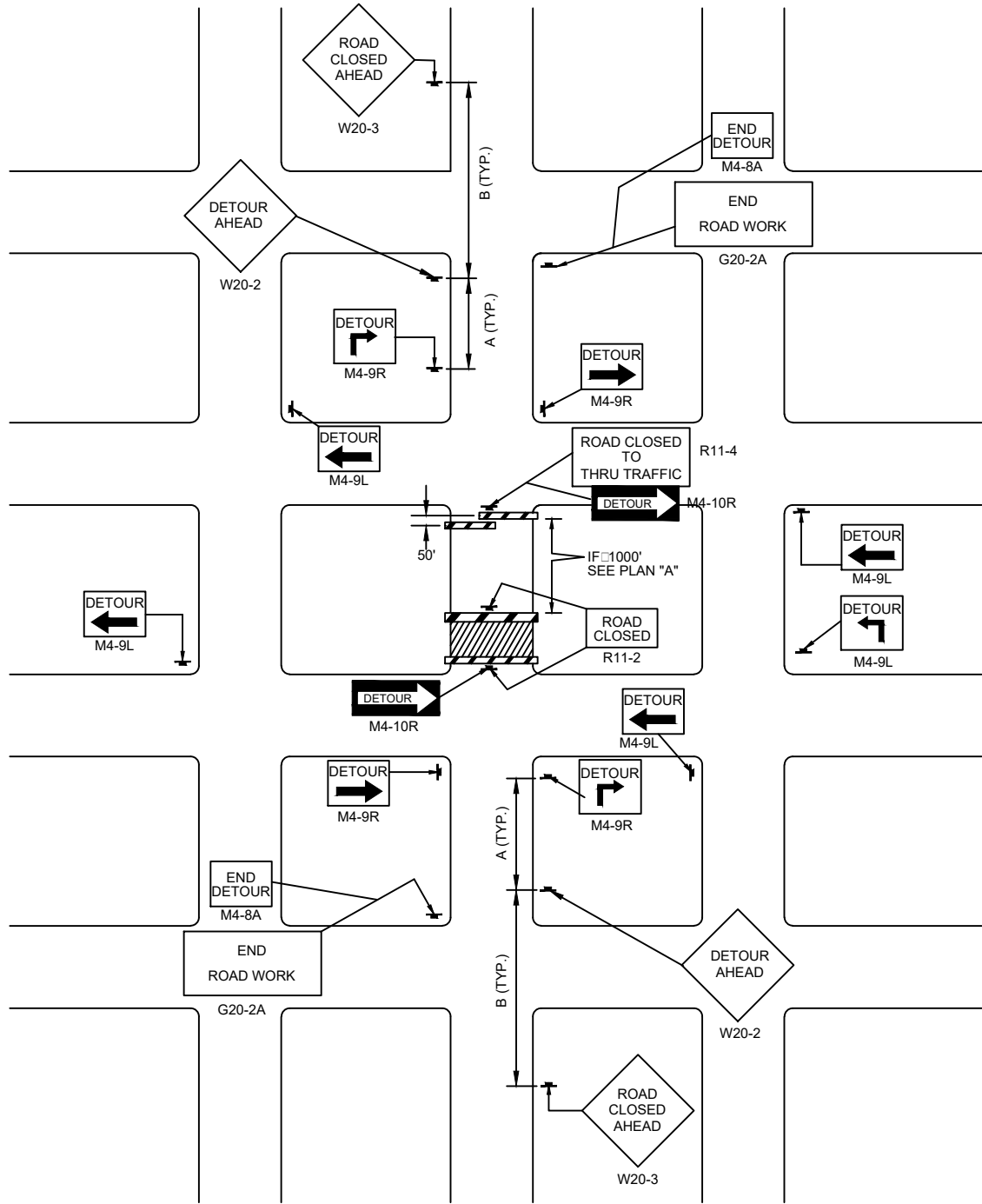
GENERAL NOTES

1. ANY ROAD CLOSURE MUST BE EXPRESSLY PERMITTED IN WRITING BY THE ADMINISTERING ENTITY'S TRAFFIC MANAGEMENT DIVISION MANAGER OR THE DIRECTOR OF ITS PUBLIC WORKS DEPARTMENT.
2. ALL WARNING SIGNS SHALL HAVE BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND. ALL SIGNS HAVING AN ORANGE COLOR SHALL BE MADE OF MATERIALS CONFORMING TO SECTION 716.03.01 OF THE UNIFORM STANDARD SPECIFICATIONS.
3. REGULATORY TRAFFIC CONTROL DEVICES TO BE MODIFIED AS NEEDED FOR THE DURATION OF THE DETOUR.
4. WARNING LIGHTS MAY BE USED TO MARK BARRICADES AT NIGHT AS NEEDED.
5. STREET NAMES MAY BE USED WHEN DESIRABLE FOR DIRECTING DETOURED TRAFFIC. LETTERS USED FOR STREET NAMES SHALL A MINIMUM OF 6" IN HEIGHT.
6. IF WORKING AT OR NEAR A TRAFFIC SIGNAL, CONTACT LVACTS AT 229-6611 AND LOCAL ENTITY AT APPROPRIATE NUMBERS LISTED BELOW AT LEAST TWO WORKING DAYS PRIOR TO BEGINNING WORK.

BOULDER CITY	293-9200	MESQUITE	346-5295
CLARK COUNTY	455-6100	NORTH LAS VEGAS	642-2462
HENDERSON	565-2140		
LAS VEGAS	229-6331		
7. TYPE "B" HIGH INTENSITY FLASHING WARNING LIGHTS MAY BE INSTALLED ABOVE EACH WORK ZONE CONSTRUCTION SIGN FOR USE DURING HOURS OF DARKNESS.

SYMBOLS

- WORK AREA
- TYPE III BARRICADES, PLACED END-TO-END FOR WIDTH OF ROADWAY DEPICTED.
- SIGN ON PORTABLE OR PERMANENT SUPPORT



B. TYPICAL APPLICATION-DETOUR SIGNING FOR ROAD CONSTRUCTION PROJECT IN A STREET GRID.

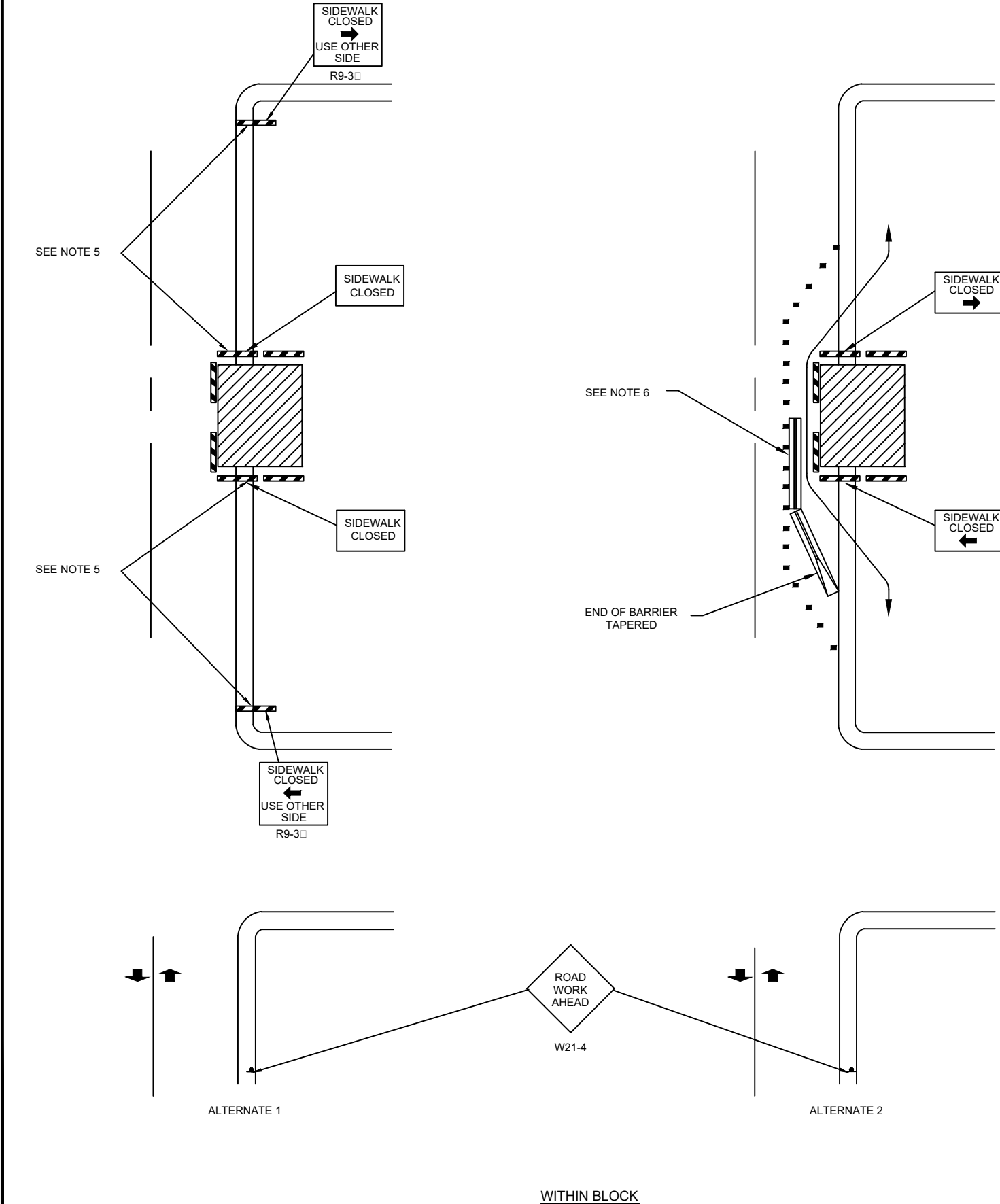
8. M4-9 DETOUR SIGNS MAY BE LOCATED ON THE FAR SIDE OF THE INTERSECTIONS.

9. TABLE FOR SPACING OF ADVANCE WARNING SIGNS

ROAD TYPE	DISTANCE BETWEEN SIGNS (FT)		
	A	B	C
URBAN (LESS THAN 35 MPH)	200	200	200
URBAN (35 MPH OR GREATER)	350	350	350
RURAL	500	500	500
EXPRESSWAY/FREEWAY	1000	1600	2600

10. ACCESS FOR CAT TRANSIT SERVICE, PEDESTRIANS AND BICYCLES SHALL BE MAINTAINED THROUGHOUT DURATION OF CONSTRUCTION. IF RE-ROUTING OF ACCESS IS NECESSARY, THE CONTRACTOR SHALL PROVIDE THE ENTITY'S TRAFFIC ENGINEER WITH A MAP SHOWING THE PROPOSED RE-ROUTES FOR APPROVAL. IF CONSTRUCTION OPERATIONS AFFECT CAT BUS STOPS OR FACILITIES, THE CONTRACTOR SHALL NOTIFY THE REGIONAL TRANSPORTATION COMMISSION AT 455-4481 AT LEAST 3 NORMAL WORKING DAYS PRIOR TO BEGINNING SUCH OPERATIONS.

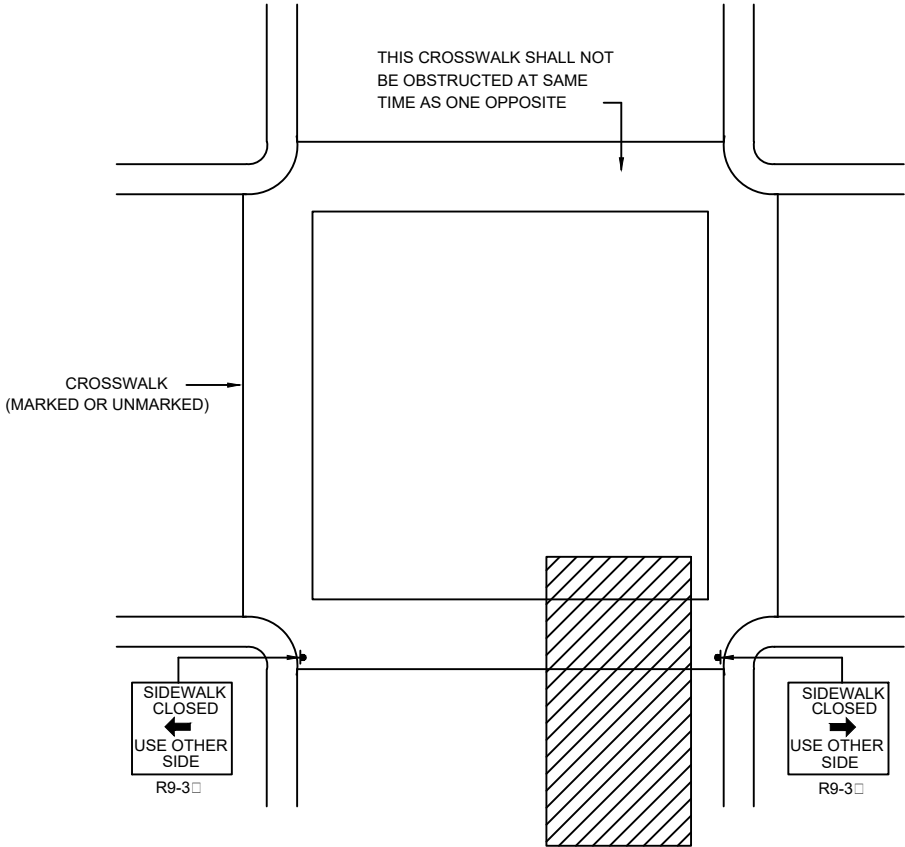
TRAFFIC CONTROL PLAN FOR HIGHWAY WORK ZONE	SPECIFICATION REFERENCE		TYPICAL APPLICATION FOR TWO-LANE, TWO-WAY, RURAL OR SUBURBAN, DAY OR NIGHT ROAD CLOSURE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA				
				DATE	1-9-97	DWG NO.	623	



SYMBOLS

- CHANNELIZING DEVICES
- ▨ BARRICADES
- ▨ WORK AREA
- ▨ CONCRETE BARRIER RAIL
- ↓ ↑ TRAFFIC DIRECTION

- GENERAL NOTES:**
1. ADDITIONAL ADVANCE WARNING MAY BE NECESSARY.
 2. CONTROLS FOR PEDESTRIANS ONLY ARE SHOWN. VEHICULAR TRAFFIC CONTROLS SHALL COMPLY WITH APPROPRIATE STANDARD DRAWINGS.
 3. STREET LIGHTING SHOULD BE CONSIDERED.
 4. WARNING LIGHTS MAY BE USED ON BARRIER RAILS.
 5. IF THERE EXIST ANY SOURCE OF PEDESTRIAN MOVEMENTS IN THIS AREA, SUCH THAT THE PEDESTRIAN APPROACHING THE WORK AREA COULD NOT SEE THE R9-3C SIGN, THEN ALTERNATES MUST BE USED TO INSURE THAT THIS IS VISIBLE.
 6. CONCRETE BARRIER RAIL SHALL CONFORM TO STANDARD DRAWING NO. 602. WHEN PEDESTRIAN ROUTE IS DIVERTED TO TRAVEL LANE TO AVOID WORK AREA AND/OR HIGH SPEEDS ARE ANTICIPATED, BARRIER RAIL SHALL BE USED TO SEPARATE TEMPORARY WALKWAY FROM TRAFFIC.



- AT INTERSECTION**
7. IF WORKING AT OR NEAR A TRAFFIC SIGNAL, CONTACT LVACTS AT 229-6611 AND LOCAL ENTITY AT APPROPRIATE NUMBERS LISTED BELOW AT LEAST TWO WORKING DAYS PRIOR TO BEGINNING WORK.

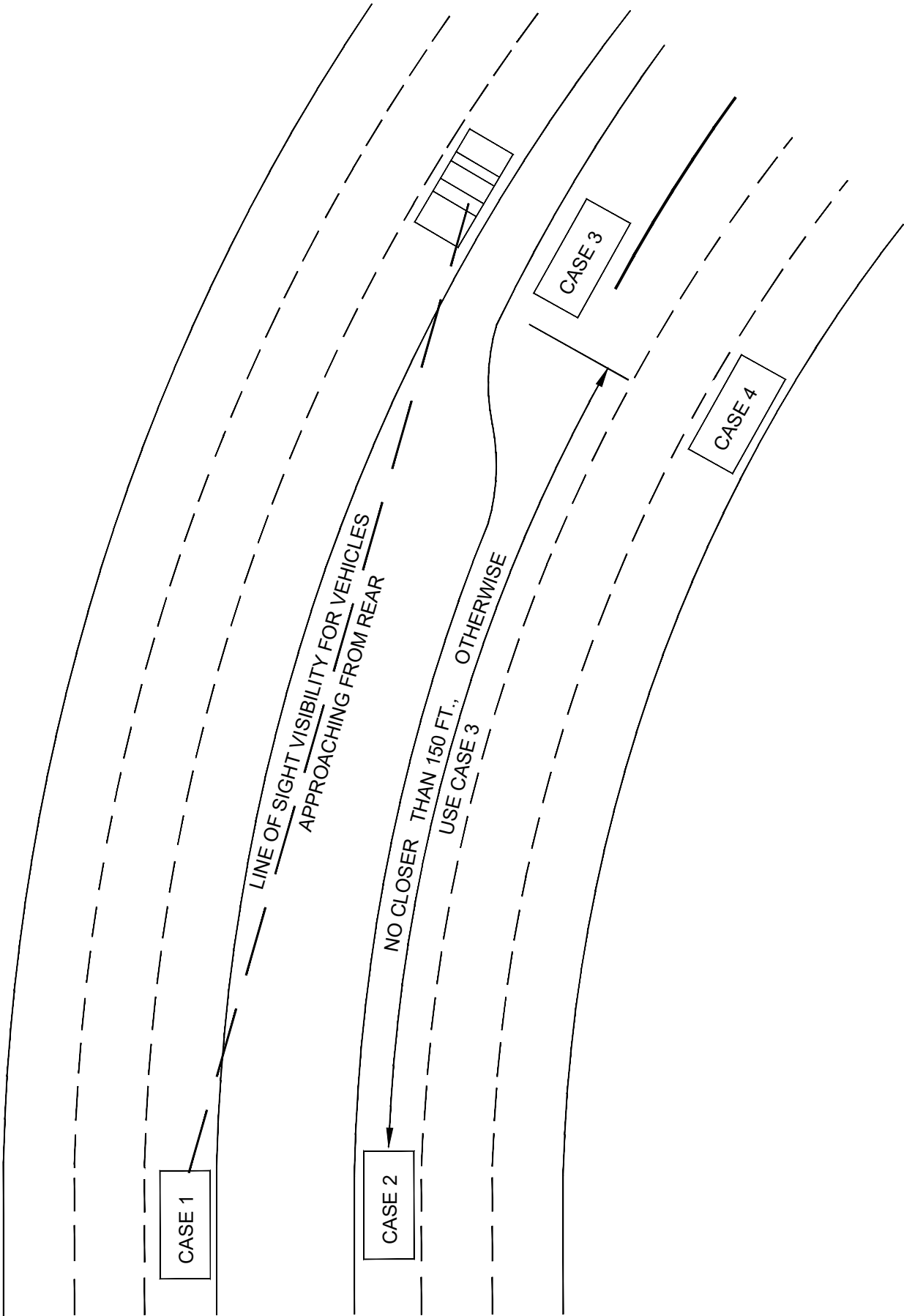
BOULDER CITY	293-9200	MESQUITE	346-5295
CLARK COUNTY	455-6100	NORTH LAS VEGAS	642-2462
HENDERSON	565-2140		
LAS VEGAS	229-6331		
 8. PEDESTRIANS SHOULD BE DIVERTED TO A SAFE AREA. DIVERSIONS SHALL BE AN ACCESSIBLE ROUTE AS DEFINED BY THE AMERICANS WITH DISABILITIES ACT (ADA).
 9. FOR NIGHT-TIME CLOSURES, TYPE A FLASHING LIGHTS MAY BE USED ON BARRICADES SUPPORTING SIGNS AND CLOSING WALKWAYS. TYPE C STEADY-BURN LIGHTS SHALL BE USED ON CHANNELIZING DEVICES SEPARATING THE TEMPORARY WALKWAY FROM VEHICULAR TRAFFIC.
 10. ACCESS FOR CAT TRANSIT SERVICE, PEDESTRIANS AND BICYCLES SHALL BE MAINTAINED THROUGHOUT DURATION OF CONSTRUCTION. IF RE-ROUTING OF ACCESS IS NECESSARY, THE CONTRACTOR SHALL PROVIDE THE ENTITY'S TRAFFIC ENGINEER WITH A MAP SHOWING THE PROPOSED RE-ROUTES FOR APPROVAL. IF CONSTRUCTION OPERATIONS AFFECT CAT BUS STOPS OR FACILITIES, THE CONTRACTOR SHALL NOTIFY THE REGIONAL TRANSPORTATION COMMISSION AT 455-4481 AT LEAST 3 NORMAL WORKING DAYS PRIOR TO BEGINNING SUCH OPERATIONS.

TRAFFIC CONTROL PLAN
FOR
HIGHWAY WORK ZONE

SPECIFICATION REFERENCE

TYPICAL APPLICATION FOR
CONTROLLING PEDESTRIAN TRAFFIC

AGENCY APPROVED		B	C	H	L	M	N
UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
DATE	1-9-97	DWG NO. 624					



STANDARD PROCEDURE ☐ CONDITIONS WHICH, WHEN MET, ELIMINATE THE NEED FOR INDIVIDUAL TRAFFIC CONTROL PLAN AND/OR PERMIT

DEVICE OR PARAMETER	SITUATION/CASE ☐			
	1	2	3	4
A. MINIMUM 60 IN. WIDE FLASHER BAR ATOP VEHICLE, WITH GREATER THAN 4 LIGHT ELEMENTS VISIBLE TO APPROACHING TRAFFIC	✓	✓	✓	✓
B. CONES SET OUT BEHIND VEHICLE	3, ACROSS BLOCKED LANE	3, ACROSS BLOCKED LANE	5, ACROSS BLOCKED LANE	NONE
C. TURN ON VEHICLE'S EMERGENCY HAZARD FLASHERS	✓	✓	✓	NOT REQUIRED
D. ALL PERSONNEL WEAR ORANGE VESTS OR SHIRTS WHEN OUTSIDE OF VEHICLE	ALWAYS	ALWAYS	ALWAYS	ALWAYS
E. O.K. FOR NIGHTTIME DEPLOYMENT ☐	NO	ONLY WHEN SPEED LIMIT ☐ 35 MPH	O.K., BUT USE REFLECTIVE VESTS	O.K., BUT USE REFLECTIVE VESTS
F. WATER-FILLED CRASH CUSHION, OR EQUIVALENT; TRUNK OR TRAILER-MOUNTED IMPACT ATTENUATORS	RECOMMENDED, BUT MANDATORY WHEN SPEED LIMIT EXCEEDS 45 MPH		NO	NO
G. NO STOPPING UNLESS STOPPED VEHICLE IS VISIBLE TO APPROACHING TRAFFIC GREATER THAN 10 SECONDS AT SPEED LIMIT	YES, APPLY THIS RULE	N/A - ON STRAIGHT-AWAY	NOT REQUIRED	DESIRED, BUT NOT REQUIRED
H. O.K. TO SET UP DURING PEAK TRAVEL HOURS: 7-9 AM, 4-6 PM	YES, BUT ONLY FOR EMERGENCY-TYPE REPAIR ACTIVITIES		O.K.	NOT RECOMMENDED

NOTE: TYPICAL APPLICATION IS FOR LANDSCAPE OR UTILITY ACTIVITIES.

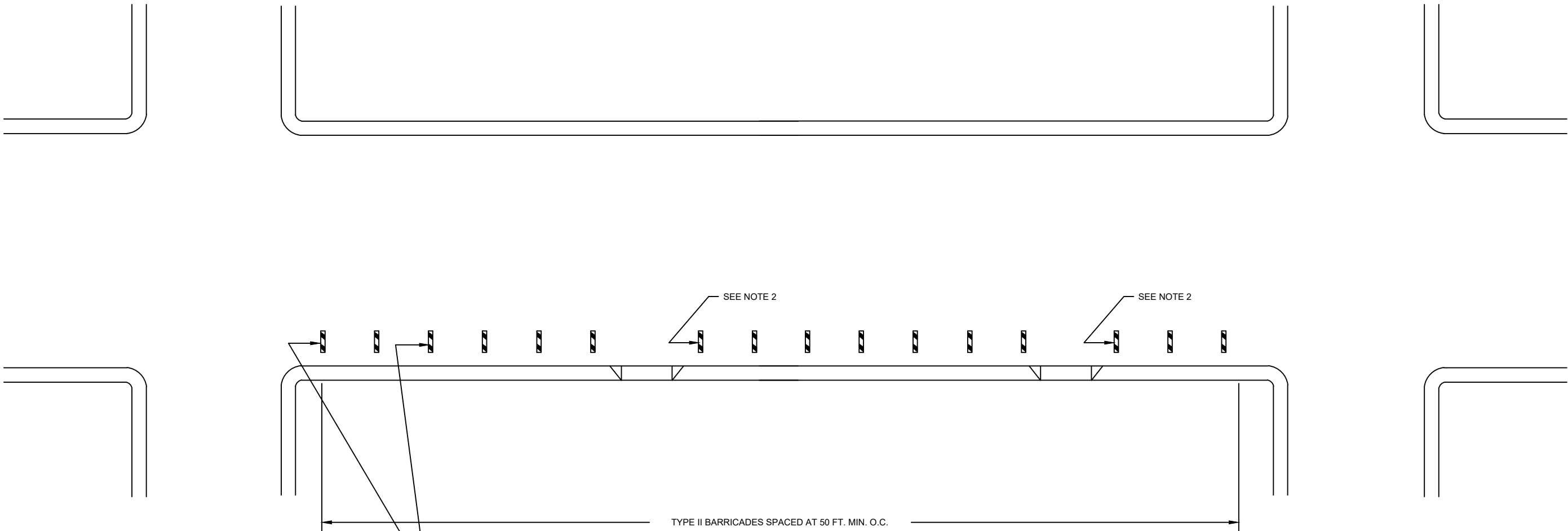
TRAFFIC CONTROL PLAN
FOR
HIGHWAY WORK ZONE

SPECIFICATION REFERENCE

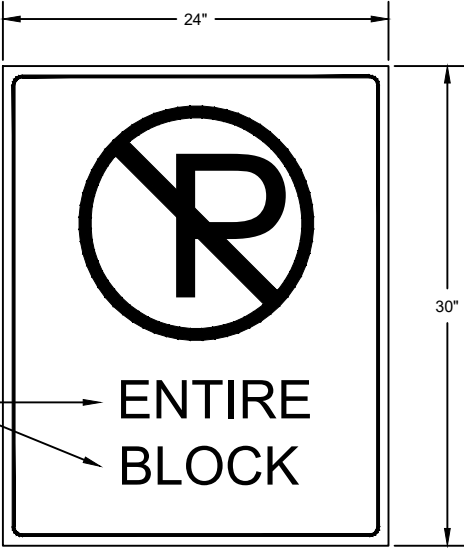
TYPICAL APPLICATION FOR
SLOW MOVING OR SHORT DURATION STOPPING IN A
MARKED TRAVEL LANE ON NON-LOCAL STREETS

AGENCY APPROVED	B	C	H	L	M	N
UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
DATE 1-9-97	DWG NO. 625					

Effective 12/10/2020 to 06/09/2021



SPECIAL
"NO PARKING" SIGN
SEE DETAIL □ NOTE 1



"NO PARKING" SIGN DETAIL

GENERAL NOTES:

1. SPECIAL "NO PARKING" SIGN SHALL BE PLACED ON FIRST BARRICADE AND ON EVERY OTHER BARRICADE THEREAFTER.
2. BARRICADES SHALL NOT BLOCK DRIVEWAYS OR ACCESSES PRIOR TO MAINTENANCE OPERATION. SPECIAL "NO PARKING" SIGN SHALL BE PLACED ON FIRST BARRICADE FOLLOWING SPACE PROVIDED FOR ACCESS.
3. BARRICADES MAY BE PLACED ON PAVEMENT OR ON SIDEWALK AT THE DISCRETION OF THE ENGINEER. "NO PARKING" SIGNS PLACED ON SIDEWALK SHALL NOT BE SET AT AN ANGLE NO GREATER THAN 30 DEGREES WITH THE LINE OF TRAFFIC FLOW TO BE VISIBLE TO APPROACHING TRAFFIC. A MINIMUM OF 36" CLEAR SPACE ON SIDEWALK SHALL BE MAINTAINED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT WHEN BARRICADES ARE PLACED ON SIDEWALKS.
4. "NO PARKING" SIGNS AND BARRICADES SHOULD BE PLACED IN AREA OF REHABILITATION AT LEAST 72 HOURS IN ADVANCE OF WORK BEGINNING. NOTIFICATION OF PERSONS AFFECTED BY STREET WORK SHALL BE PERFORMED AS REQUIRED BY RESPECTIVE ENTITY AND NEVADA REVISED STATUTES.
5. ALL BARRICADES AND "NO PARKING" SIGNS SHALL BE REMOVED AS SOON AS IMPROVED SURFACE IS READY FOR TRAFFIC AS DETERMINED BY THE ENGINEER.

SYMBOLS:



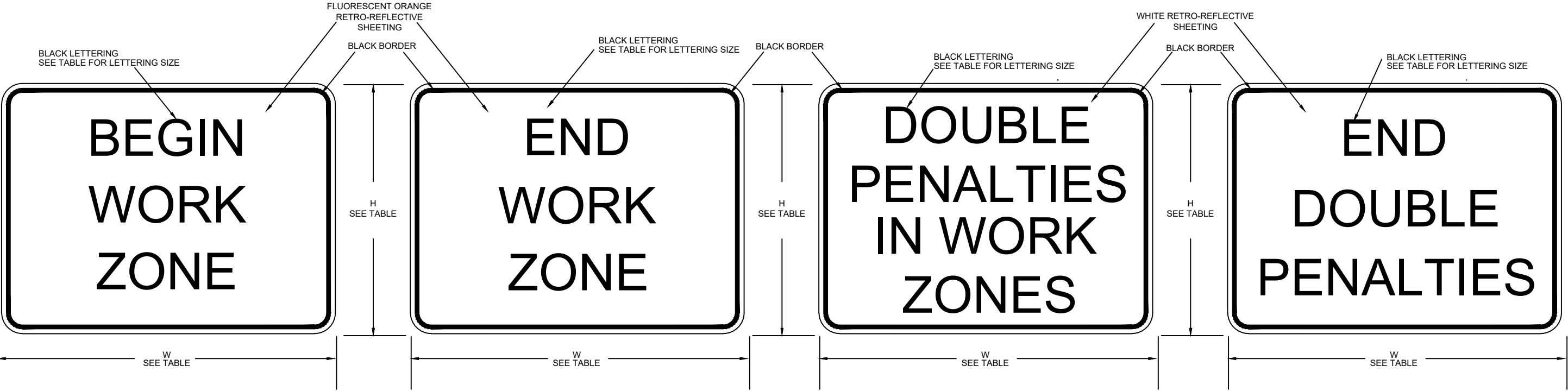
BARRICADE

TRAFFIC CONTROL PLAN
FOR
HIGHWAY WORK ZONE

SPECIFICATION REFERENCE

TYPICAL APPLICATION FOR
PLACEMENT OF "NO PARKING" SIGNS FOR SHORT-TERM
STREET REHABILITATION PROJECTS

AGENCY APPROVED	B	C	H	L	M	N
UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
DATE	1-9-97	DWG NO.	626 (1 OF 1)			



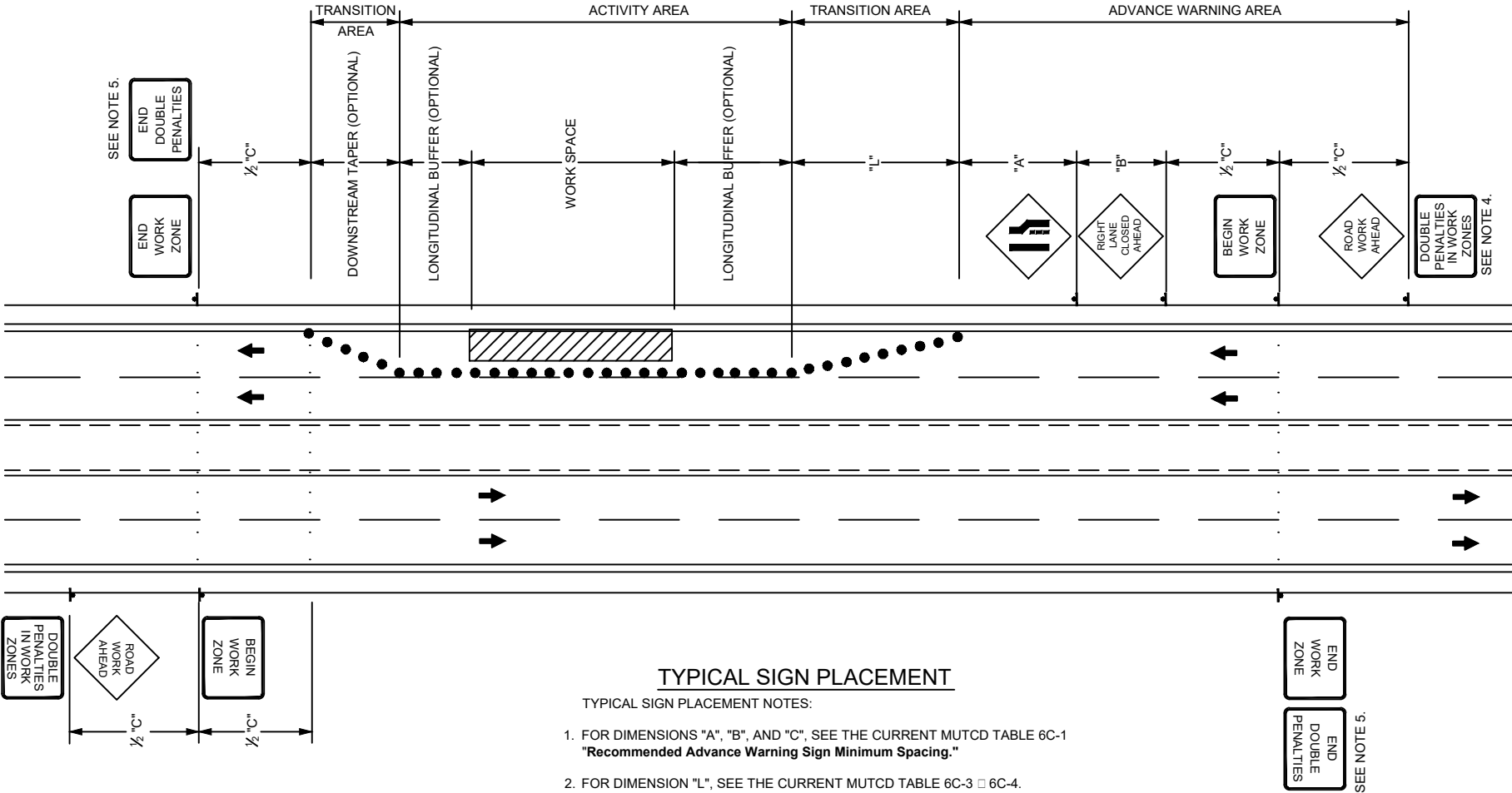
GENERAL NOTES:

- 1. RETRO-REFLECTIVE SIGN SHEETING SHALL CONFORM TO SECTION 716, LATEST REVISION, OF THE UNIFORM STANDARD SPECIFICATIONS.
- 2. SIGN LEGENDS AND BORDERS SHALL COMPLY WITH THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION.
- 3. SIGNS SHALL BE MOUNTED IN CONFORMANCE WITH PART 6, MUTCD, LATEST EDITION.
- 4. THE "DOUBLE PENALTIES IN WORK ZONES" SIGN SHOULD BE MOUNTED WITH THE FIRST SIGN IN THE ADVANCE WARNING SIGN SERIES, TYPICALLY THE "ROAD WORK AHEAD" SIGN.
- 5. "END WORK ZONE" SIGN SHALL BE MOUNTED AT THE END OF THE WORK ZONE WITH THE "END DOUBLE PENALTIES" SIGN, IF APPLICABLE, ON THE SAME DEVICE OR POST.
- 6. THE DESIGNATION OF WORK ZONE, INCLUDING MARKING OF THE DOUBLE PENALTIES, SHALL NOT BE REQUIRED ON STREETS POSTED AT 25 MILES PER HOUR OR LESS AND ARE THE ACCESS TO OR APPURTENANT TO A RESIDENTIAL AREA.

TYPICAL SIGN AND LETTERING SIZE TABLE

SPEED LIMIT	"DOUBLE PENALTIES IN WORK ZONE" SIGN			"BEGIN WORK ZONE" SIGN "END WORK ZONE" SIGN "END DOUBLE PENALTIES" SIGN		
	"H" (IN.)	"W" (IN.)	LETTERING	"H" (IN.)	"W" (IN.)	LETTERING
LESS THAN 45 MPH	24	24	4 INCH SERIES "C"	18	24	4 INCH SERIES "D"
45 MPH OR GREATER OR IF MULTI-LANE	36	36	6 INCH SERIES "C"	30	36	6 INCH SERIES "D"

SEE THE CURRENT EDITION OF THE "STANDARD HIGHWAY SIGNS" MANUAL FOR SERIES "C" AND SERIES "D" LETTERING DIMENSIONS.



TYPICAL SIGN PLACEMENT

TYPICAL SIGN PLACEMENT NOTES:

- 1. FOR DIMENSIONS "A", "B", AND "C", SEE THE CURRENT MUTCD TABLE 6C-1 "Recommended Advance Warning Sign Minimum Spacing."
- 2. FOR DIMENSION "L", SEE THE CURRENT MUTCD TABLE 6C-3 & 6C-4.
- 3. SIGNS MAY BE OMITTED IN THE DIRECTION WORK IS NOT BEING CONDUCTED IF THE ROADWAY IS PHYSICALLY SEPARATED BY A RAISED MEDIAN OR BARRIER WALL THROUGH THE COMPLETE WORK ZONE.

TRAFFIC CONTROL PLAN FOR HIGHWAY WORK ZONE	SPECIFICATION REFERENCE		TYPICAL APPLICATION FOR STANDARD FOR "DOUBLE PENALTIES" SIGNS FOR USE IN TEMPORARY TRAFFIC CONTROL ZONES	AGENCY APPROVED						UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
	716	SIGN MATERIALS								SUPPLEMENTAL DRAWING					
										DATE 07-01-12					
										DWG NO. 627					

PROPOSED EXISTING



PULL BOX



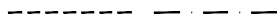
SIGNAL LUMINAIRE POLE, POST



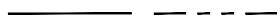
UTILITY POLE



CONTROL CABINET



CONDUIT RUN



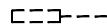
AERIAL CABLE



DETECTOR LOOP



PADMOUNT, ELECTRICAL SERVICE OR SPLICE BOX



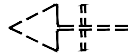
FLUORESCENT LUMINAIRE



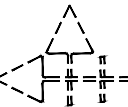
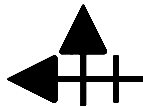
HIGH PRESSURE
SODIUM LUMINAIRE - 750 WATT



HIGH PRESSURE
SODIUM LUMINAIRE - 400 WATT



TRAFFIC SIGNAL INDICATION WITH BACKPLATE



TRAFFIC SIGNAL INDICATION WITH DIRECTIONAL
ARROW AND BACKPLATE



PEDESTRIAN INDICATION AND DIRECTION



HAZARD BEACON, ONE WAY

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

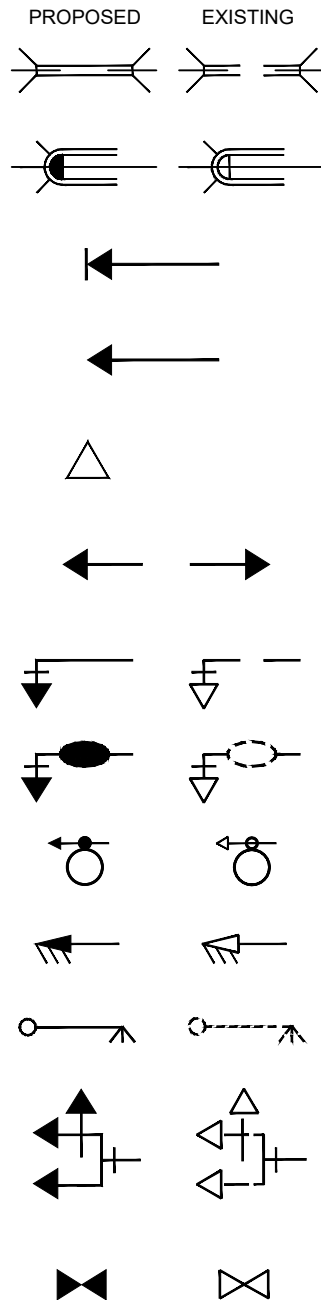
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

STANDARD SYMBOLS FOR
TRAFFIC SIGNAL DRAWINGS

DATE 12-12-96

DWG. NO. 701

SHEET 1 OF 2



STREET NAME SIGN
INTERNALLY ILLUMINATED

CURB FLASHER

VEHICLE MOVEMENT (STOPPED)

VEHICLE MOVEMENT (MOVING)

CONDUIT RUN NUMBER

PEDESTRIAN MOVEMENT

TRAFFIC SIGNAL ON MAST ARM

TRAFFIC SIGNAL AND LUMINAIRE
ON MAST ARMS

PEDESTRIAN PUSH BUTTON
INDICATING DIRECTION OF CONTROL

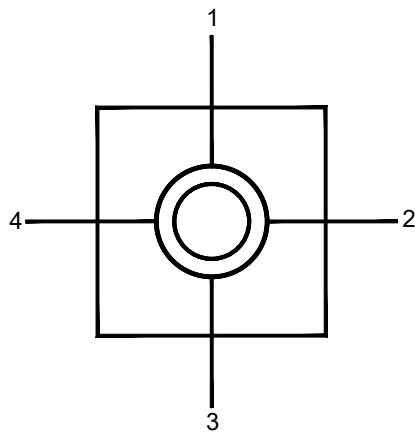
TRAFFIC SIGNAL WITH
ALL COLORS LOUVERED

SCHOOL FLASHER

5 SECTION SIGNAL HEAD WITH DIRECTIONAL
ARROW AND BACKPLATE

PRIORITY VEHICLE PREEMPTION OPTICAL DETECTOR
(OPTICOM OR APPROVED EQUAL)

SPECIFICATION REFERENCE		AGENCY APPROVED						
		B	C	H	L	M	N	
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
		STANDARD SYMBOLS FOR TRAFFIC SIGNAL DRAWINGS						
		DATE 12-12-96		DWG. NO. 701			SHEET 2 OF 2	

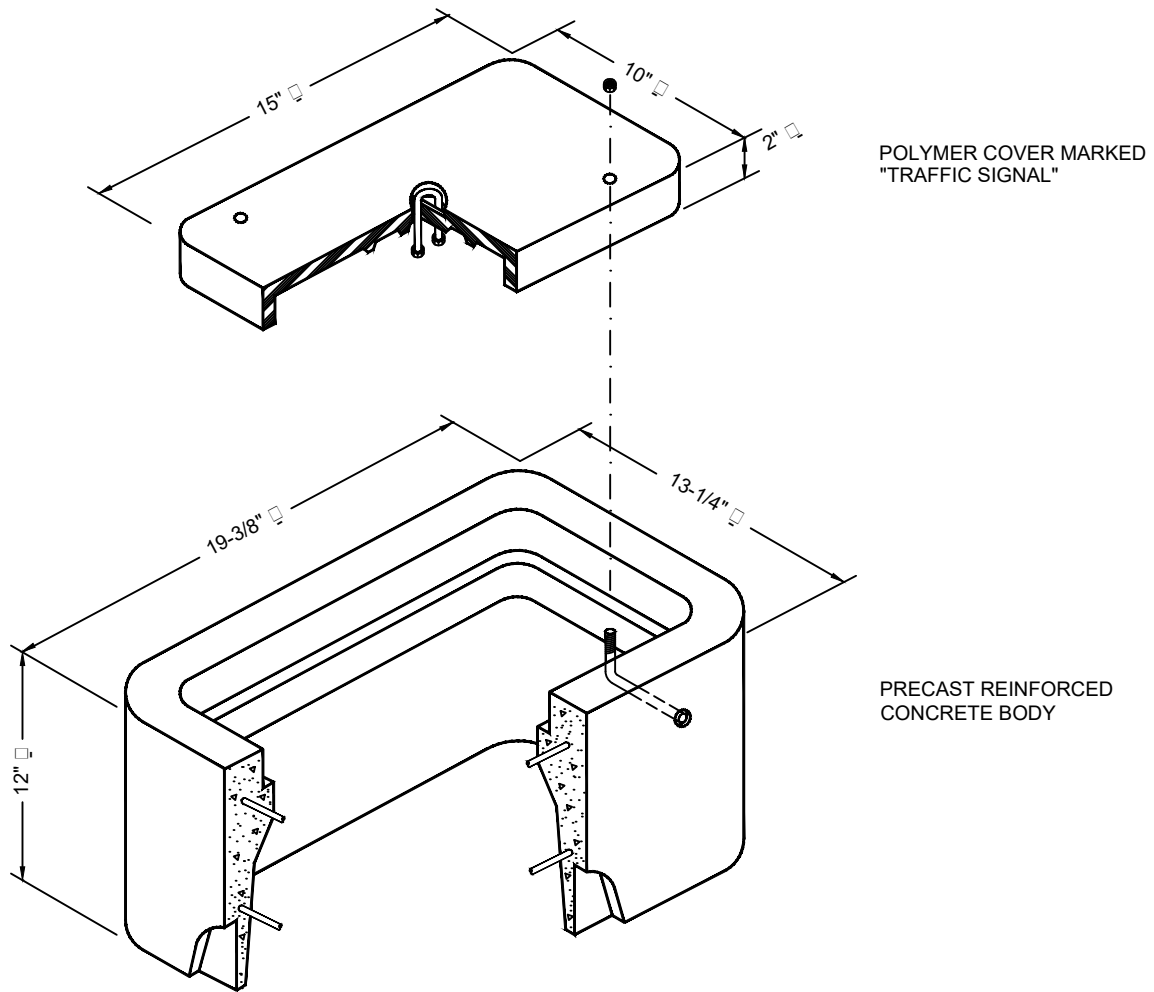


QUADRANT
ARM OR SIGNAL LOCATION
(TOP VIEW)

NOTE: QUADRANT IS IN RELATION WITH
SHEET - NOT WITH NORTH ARROW

Effective 12/10/2020 to 06/09/2021

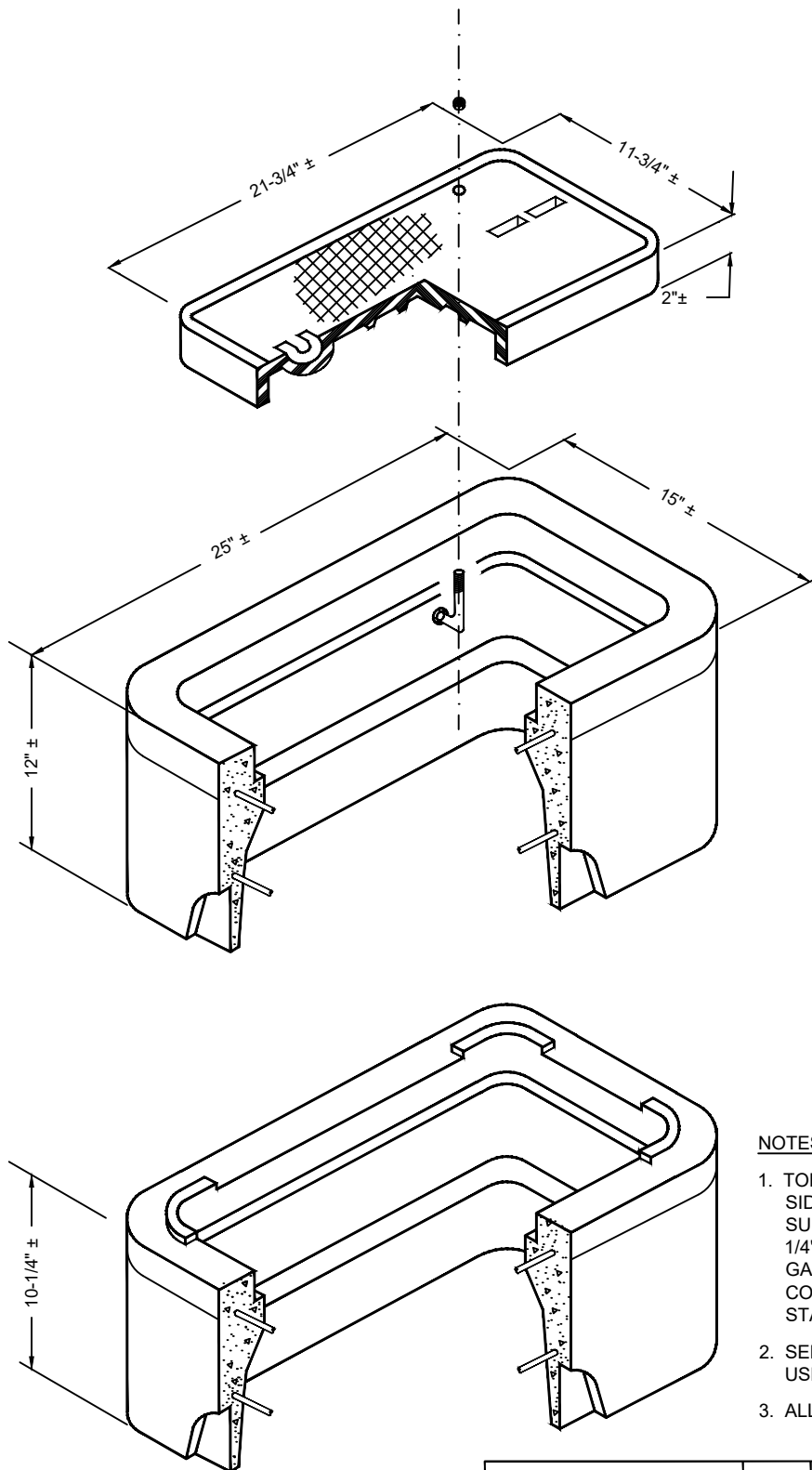
		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		QUADRANT DETAIL											
		DATE	DWG. NO. 702										



NOTES

1. THIS PULL BOX SHALL NOT BE USED IN TRAFFIC OR PARKING LANES.
2. ALL DIMENSIONS ARE NOMINAL.
3. TOP OF UTILITY BOXES INSTALLED IN SIDEWALK SHALL HAVE NO VERTICAL SURFACE DISCONTINUITIES GREATER THAN 1/4" WITH ADJACENT SIDEWALK, HAVE NO GAPS GREATER THAN 1/2", REGARDLESS OF CONSTRUCTION TOLERANCES, AND BE FIRM, STABLE, AND SLIP RESISTANT.

		AGENCY APPROVED							
		B	C	H	L	M	N	R	
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS							
		CLARK COUNTY AREA							
		NO. 3 1/2 PULL BOX							
		DATE 01-09-20		DWG. NO. 705					



POLYMER SIDEWALK COVER
MARKED "TRAFFIC SIGNAL"

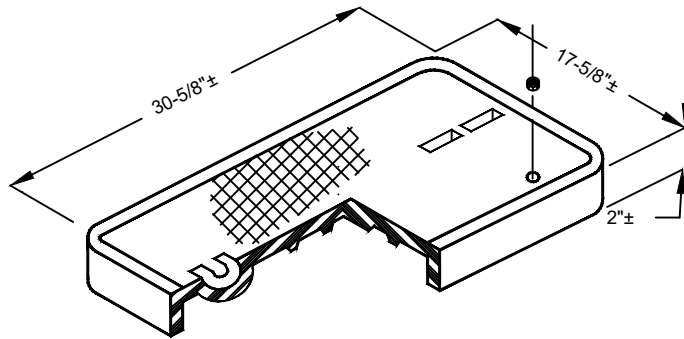
PRECAST REINFORCED
CONCRETE BODY

PRECAST REINFORCED CONCRETE
EXTENSION. (MUST NOT BE USED
UNLESS SPECIFIED.)

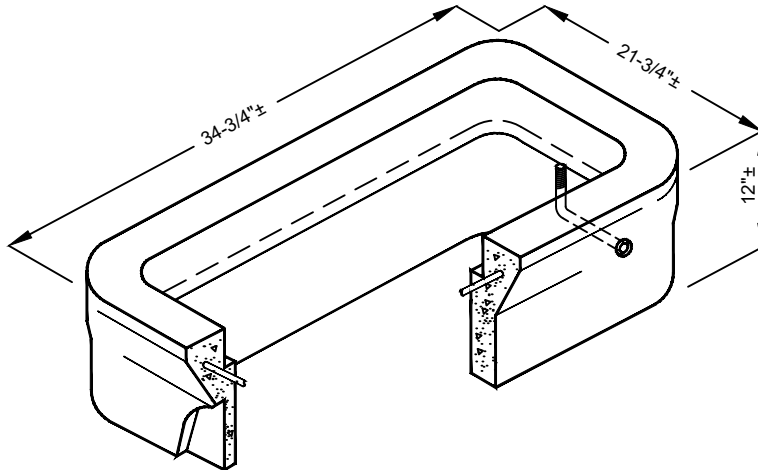
NOTES

1. TOP OF UTILITY BOXES INSTALLED IN SIDEWALK SHALL HAVE NO VERTICAL SURFACE DISCONTINUITIES GREATER THAN 1/4" WITH ADJACENT SIDEWALK, HAVE NO GAPS GREATER THAN 1/2", REGARDLESS OF CONSTRUCTION TOLERANCES, AND BE FIRM, STABLE, AND SLIP RESISTANT.
2. SEE DRAWING NO. 709 FOR COVER TO BE USED IN STREET AND UNDEVELOPED AREAS.
3. ALL DIMENSIONS ARE NOMINAL.

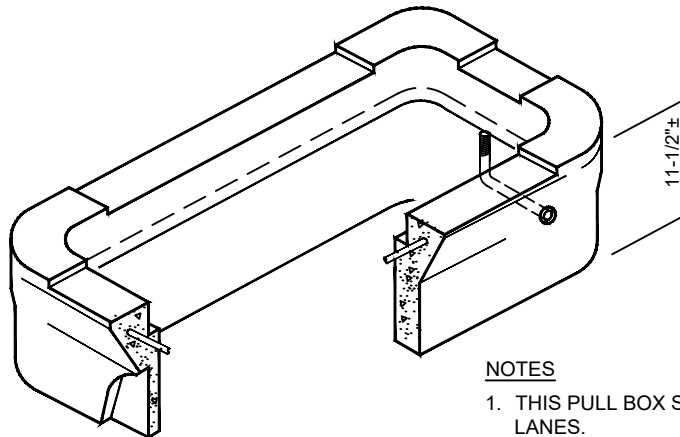
		AGENCY APPROVED		B	C	H	L	M	N	R
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA								
		NO. 5 PULL BOX								
*		DATE 01-09-20		DWG. NO. 706						



POLYMER COVER MARKED
"TRAFFIC SIGNAL" STEEL
PULL BOX COVER, DRAWING
NO. 709 IS PREFERRED FOR
ALL USES, THIS PULL BOX
ONLY.



PRECAST REINFORCED
CONCRETE BODY

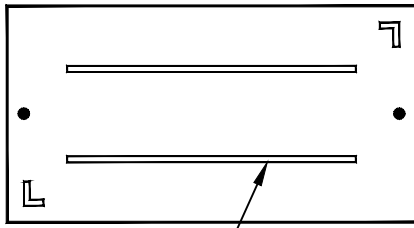


PRECAST REINFORCED CONCRETE
EXTENSION (MUST NOT BE USED
UNLESS SPECIFIED)

NOTES

1. THIS PULL BOX SHALL NOT BE USED IN TRAFFIC OR PARKING LANES.
2. SEE DRAWING NO. 709 FOR ALTERNATE COVER.
3. TOP OF UTILITY BOXES INSTALLED IN SIDEWALK SHALL HAVE NO VERTICAL SURFACE DISCONTINUITIES GREATER THAN 1/4" WITH ADJACENT SIDEWALK, HAVE NO GAPS GREATER THAN 1/2", REGARDLESS OF CONSTRUCTION TOLERANCES, AND BE FIRM, STABLE, AND SLIP RESISTANT.

AGENCY APPROVED		B	C	H	L	M	N	R
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
		NO. 7 PULL BOX						
DATE 01-09-20		DWG. NO. 707						



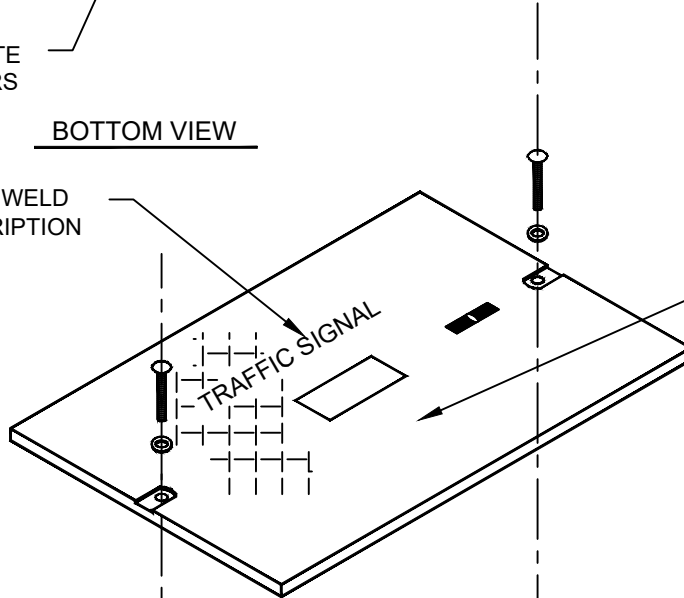
WELD PLATE
STIFFENERS

BOTTOM VIEW

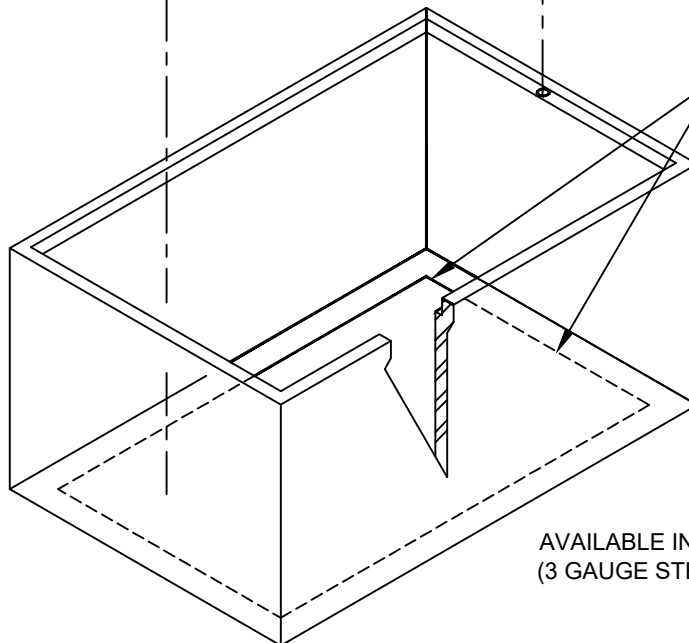


SIDE VIEW

BEAD WELD
INSCRIPTION



3/8" DIAMOND PLATE



2" LIP AROUND INSIDE OF
PULL BOX

NOTE:

1. THIS PULL BOX SHALL
BE USED IN VEHICLE
TRAVEL AREAS.

AVAILABLE IN 3, 5, 7 SIZES
(3 GAUGE STEEL)

Effective 12/10/2020 to 06/09/2021

		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
		STEEL PULL BOXES							
		DATE	DWG. NO.			708			

ACCESS HOLE TO PULL
BOX "L" BOLTS

BEAD WELD INSCRIPTION

TRAFFIC SIGNAL

STEEL FLOOR PLATE, 3/8" THICK,
ROUND CORNERS TO MATCH
EDGES OF PULL BOX

COVER

FINISHED GRADE

2"

SIDE

MOUNTING BRACKET,
WELDED TO COVER, TYP.
LOCATE TO MATCH PULL
BOX "L" BOLTS

1/4"
TYP.

15-1/4"

3/8" □ 16 COARSE THREAD
TAP, CENTERED BETWEEN
RIBS. FOR COVER GROUND
CONNECTION SEE SHEET 2 OF
THIS DRAWING NO.

17-1/4"

2-1/2"

1/4"

2-1/4" TYP.

2-1/4" TYP.

30-1/2"

NOTES:

BOTTOM

1. THIS COVER TO BE USED IN STREET AREAS AND UNDEVELOPED AREAS ONLY.
2. TYPICAL NO. 7 PULL BOX COVER SHOWN. SUBMIT OTHERS TO THE ENGINEER FOR APPROVAL.
3. ALL TRAFFIC AND OPEN AREA COVERS SHALL BE H 20 RATED.
4. GROUNDING OF STEEL PULL BOX COVERS IS NOT NECESSARY FOR PULL BOXES CONTAINING LOW VOLTAGE, POWER-LIMITED CONNECTIONS.

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

506

STEEL STRUCTURES

623

TRAFFIC SIGNALS □ STREETLIGHTING

PULL BOX STREET COVER

DATE 12-12-96

DWG. NO.

709

SHEET 1 OF 2

ACCESS HOLE TO PULL
BOX "L" BOLTS

BEAD WELD INSCRIPTION

TRAFFIC SIGNAL

STEEL FLOOR PLATE, 3/8" THICK,
ROUND CORNERS TO MATCH
EDGES OF PULL BOX

COVER

FINISHED GRADE

2"

SIDE

MOUNTING BRACKET,
WELDED TO COVER, TYP.
LOCATE TO MATCH PULL
BOX "L" BOLTS

1/4"
TYP.

15-1/4"

3/8" □ 16 COARSE THREAD
TAP, CENTERED BETWEEN
RIBS. FOR COVER GROUND
CONNECTION SEE SHEET 2 OF
THIS DRAWING NO.

17-1/4"

8-5/8"

2-1/2"

1/4"

2-1/4" TYP.

2-1/4" TYP.

30-1/2"

NOTES:

BOTTOM

1. THIS COVER TO BE USED IN STREET AREAS AND UNDEVELOPED AREAS ONLY.
2. TYPICAL NO. 7 PULL BOX COVER SHOWN. SUBMIT OTHERS TO THE ENGINEER FOR APPROVAL.
3. ALL TRAFFIC AND OPEN AREA COVERS SHALL BE H 20 RATED.
4. GROUNDING OF STEEL PULL BOX COVERS IS NOT NECESSARY FOR PULL BOXES CONTAINING LOW VOLTAGE, POWER-LIMITED CONNECTIONS.

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

506

STEEL STRUCTURES

623

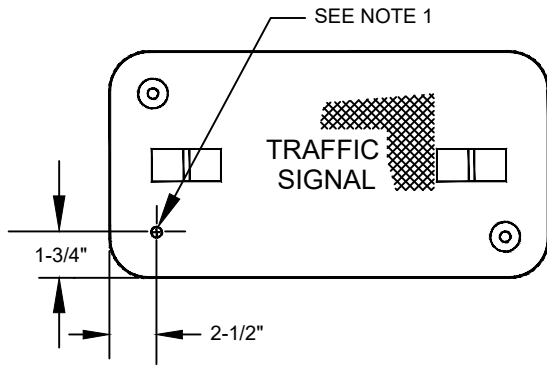
TRAFFIC SIGNALS □ STREETLIGHTING

PULL BOX STREET COVER

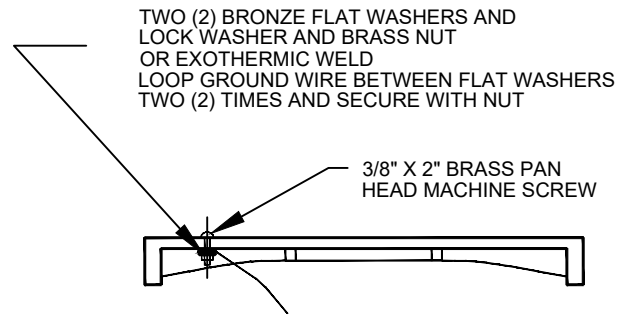
DATE 12-12-96

DWG. NO. 709

SHEET 1 OF 2

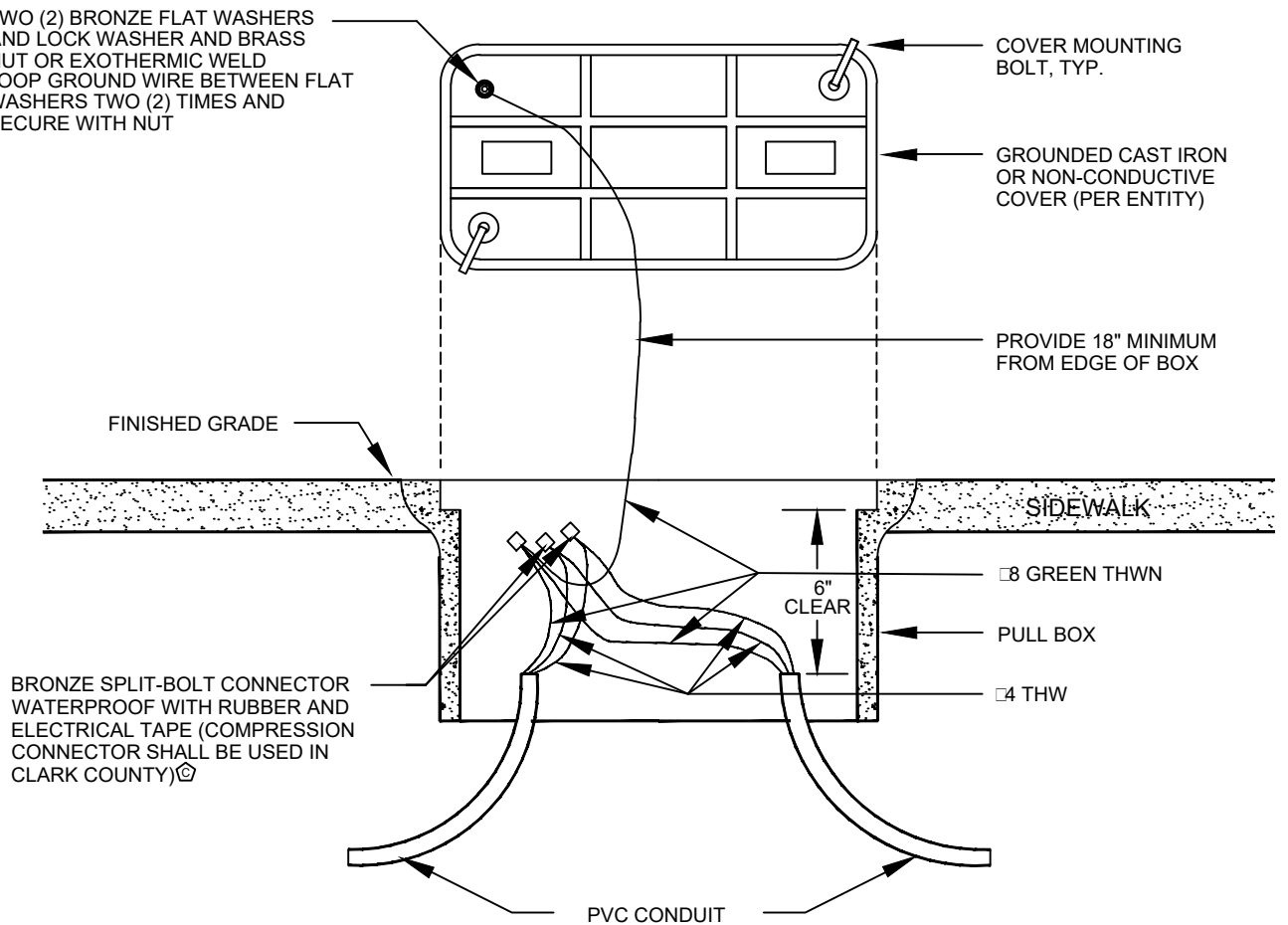


PULL BOX COVER - TOP VIEW



PULL BOX COVER - SIDE VIEW

TWO (2) BRONZE FLAT WASHERS AND LOCK WASHER AND BRASS NUT OR EXOTHERMIC WELD LOOP GROUND WIRE BETWEEN FLAT WASHERS TWO (2) TIMES AND SECURE WITH NUT



NOTES:

1. PULL BOX LID SHOULD BE TAPPED WITH A 3/8" X 16 COURSE THREAD TAP.
2. FOR TYPICAL NO. 7 PULL BOX COVER GROUNDING, SEE SHEET 1 OF THIS DRAWING NO.

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

623

TRAFFIC SIGNALS □ STREETLIGHTING

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

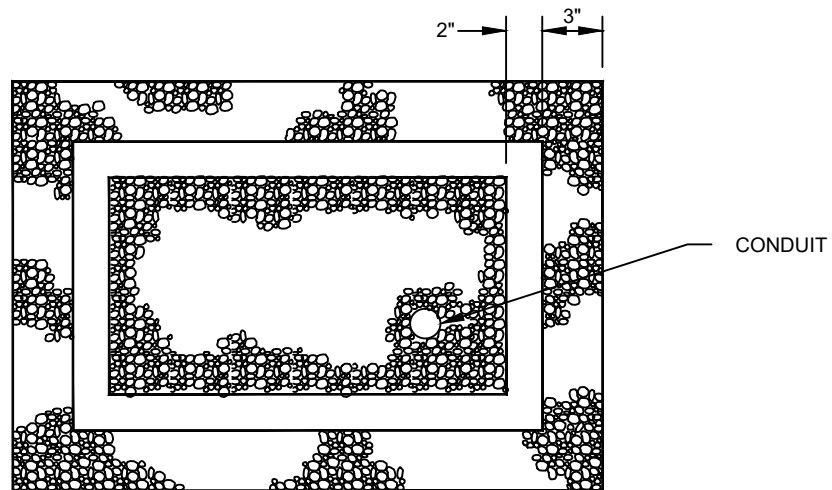
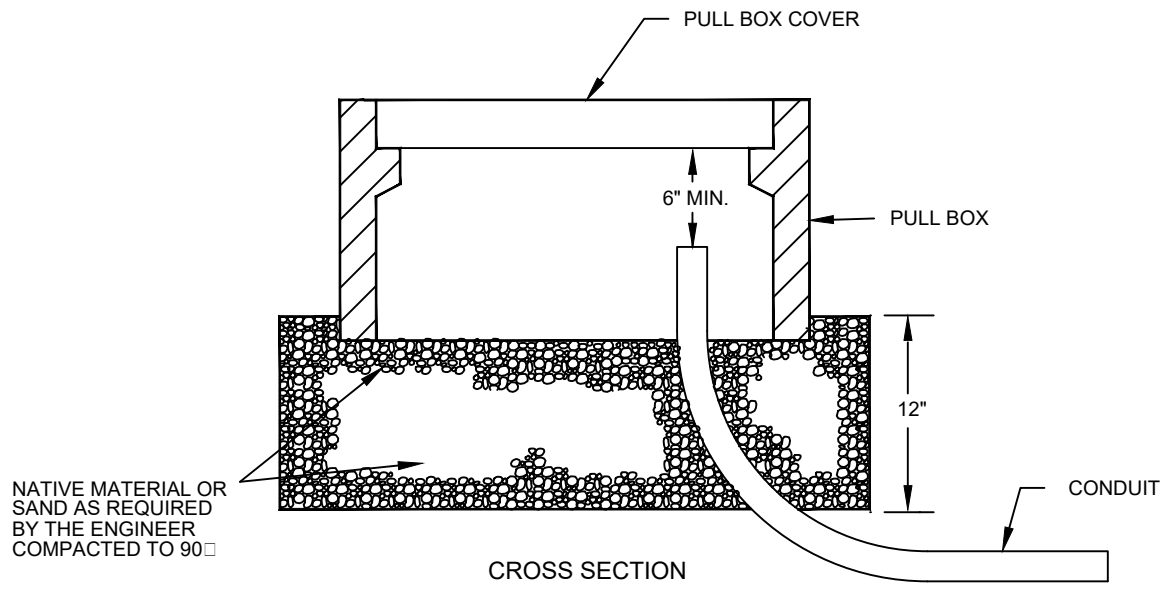
PULL BOX COVER
BONDING DETAIL

DATE 12-12-96

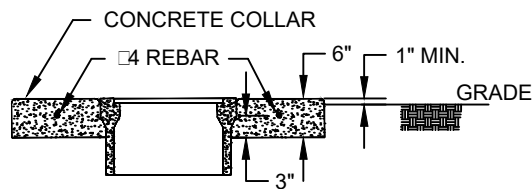
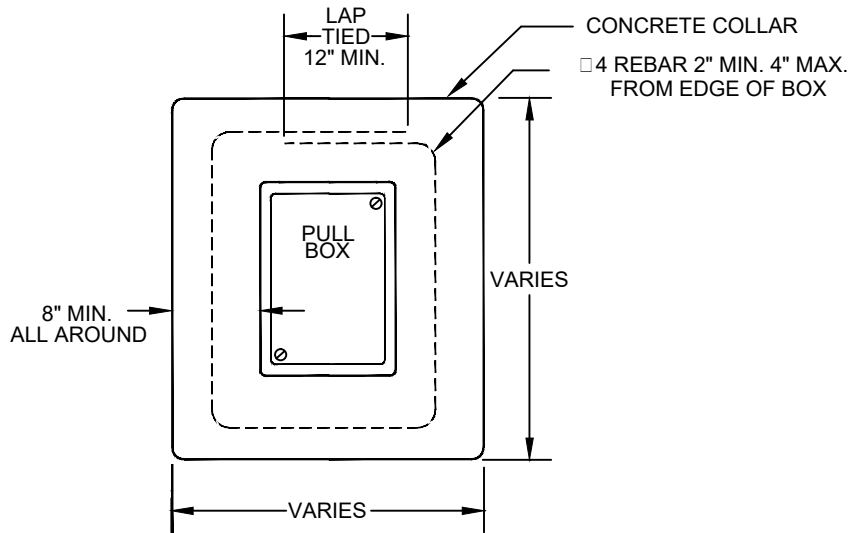
DWG. NO.

709

SHEET 2 OF 2



SPECIFICATION REFERENCE		AGENCY APPROVED						B	C	H	L	M	N
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		PULL BOX FOUNDATION											
		DATE 7-12-01		DWG. NO.		710							



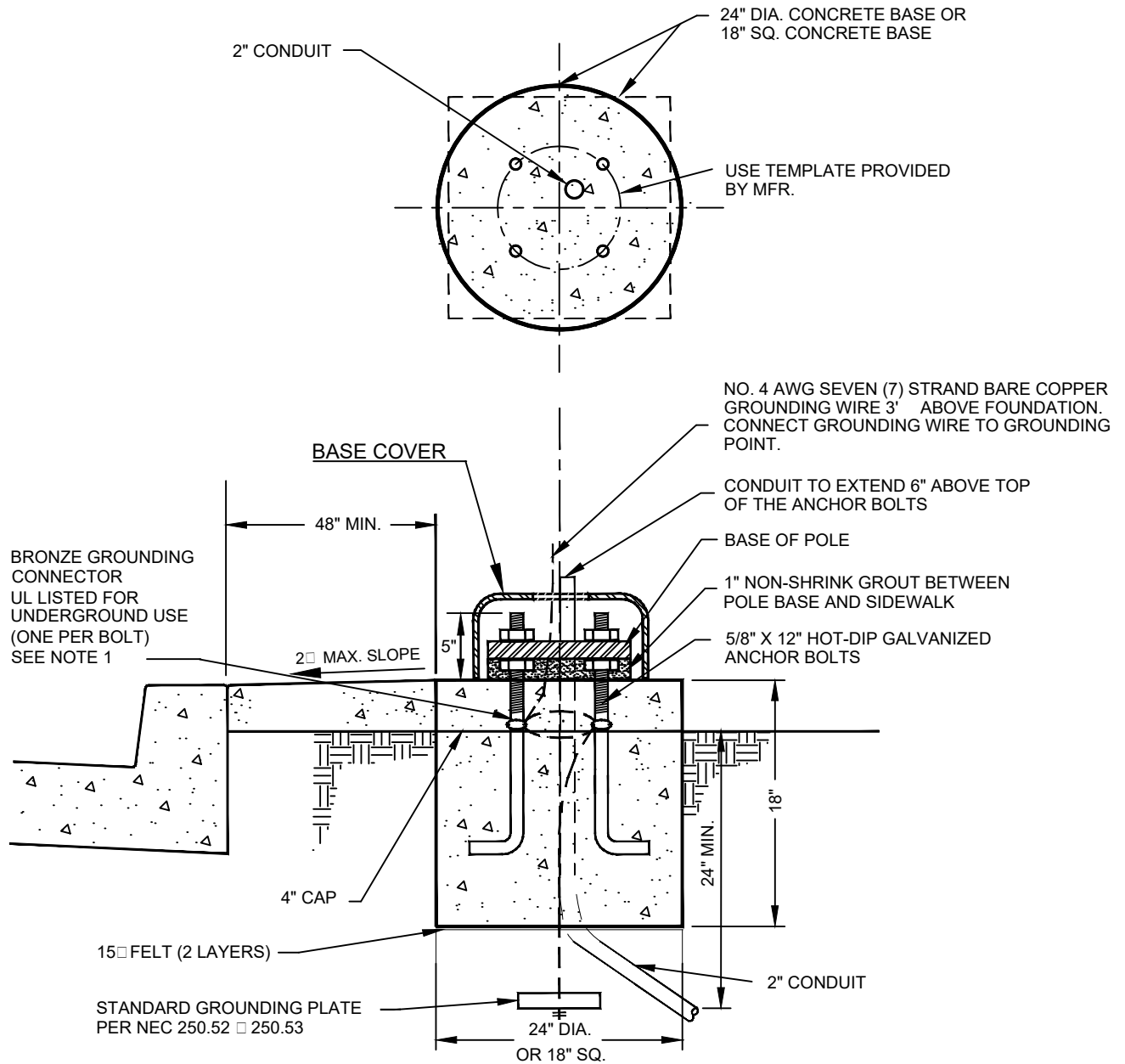
TYPICAL SECTION

**PULL BOX CONCRETE COLLAR
IN UNDEVELOPED AREAS**

NOTES:

1. P30 PULL BOXES SHALL BE INSTALLED FOR THE SIGNAL ITS COMMUNICATIONS PER APPLICABLE STANDARDS.
2. PULL BOX COVER SHALL BE INSCRIBED "FIBER OPTIC".
3. LOCATIONS OF THE PROPOSED P30 ITS COMMUNICATION PULL BOXES SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MARKING THE LOCATIONS IN THE FIELD AT APPROXIMATELY 500 FEET INTERVALS. THESE LOCATIONS SHALL BE SUBJECT TO APPROVAL BY THE ENGINEER BEFORE INSTALLATION.
4. DETAIL SHOWS METHOD OF INSTALLATION WHEN FIBER OPTIC CABLE IS REQUIRED.
5. CONDUIT SIZES SHALL BE PER UNIFORM STANDARD SPECIFICATIONS, SECTION 623.
6. ALL CONDUITS SHALL HAVE A CONTINUOUS RUN OF 6 PAIR PE39 22 AWG INTERCONNECT CABLE.
7. UNDERGROUND ORANGE MARKING TAPE SHALL BE PLACED 12 INCHES ABOVE THE INSTALLED CONDUIT AND MARKED WITH THE LEGEND "FIBER OPTIC".

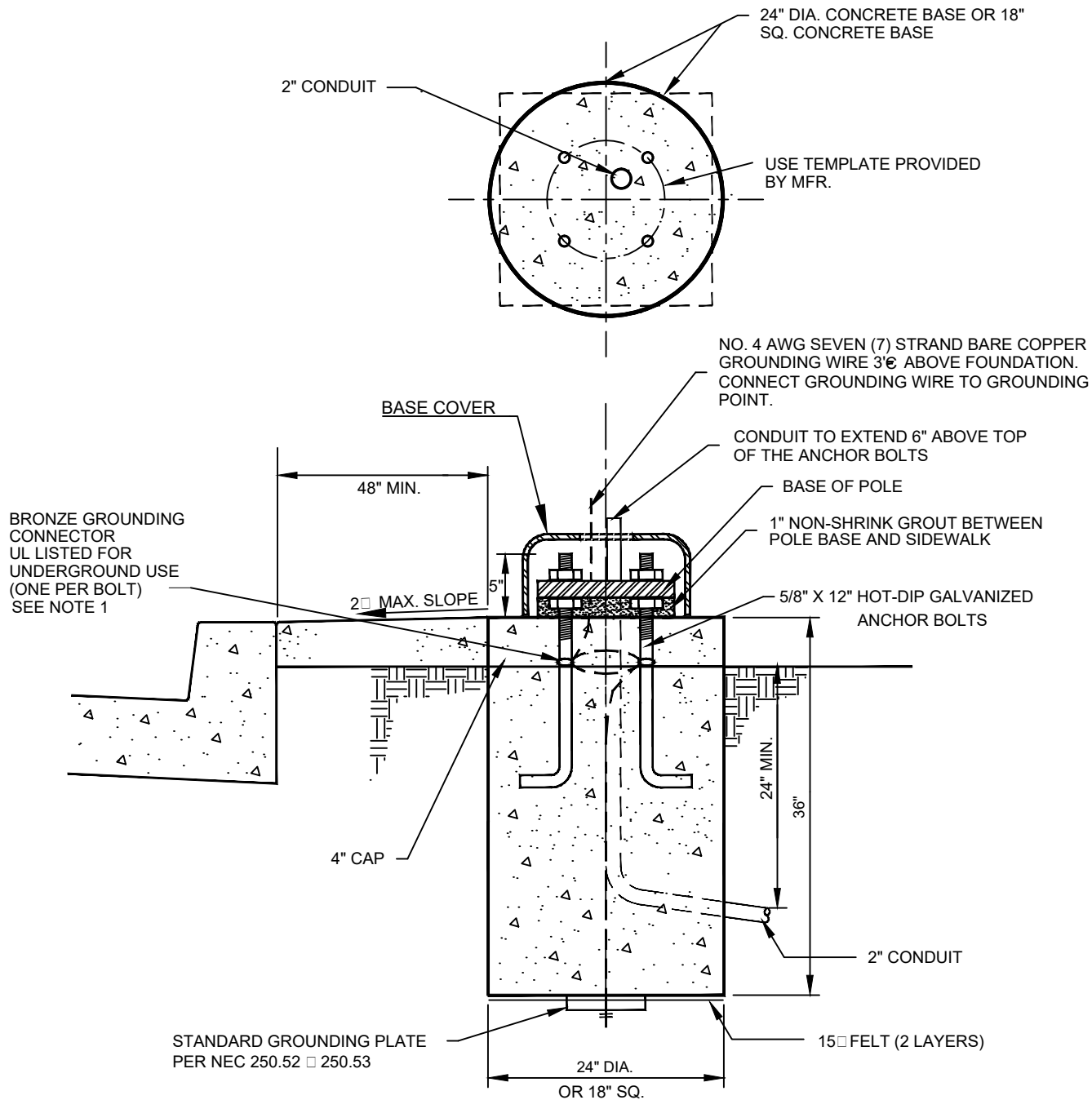
		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		PULL BOX CONCRETE COLLAR IN UNDEVELOPED AREAS											
		DATE 3-13-08			DWG. NO. 711								



NOTE:

1. CONTINUOUS BARE COPPER GROUNDING WIRE SHALL BE LOOPED AROUND ANCHOR BOLTS ONE TIME AND CONNECTED TO EACH ANCHOR BOLT BEFORE CONTINUING DOWN TO THE GROUNDING PLATE.

		AGENCY APPROVED					
		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
501	PORTLAND CEMENT CONCRETE	TYPE "A" FOUNDATION					
623	TRAFFIC SIGNALS □ STREETLIGHTING						
		DATE 07-01-15	DWG. NO.	715			



NOTE:

1. CONTINUOUS BARE COPPER GROUNDING WIRE SHALL BE LOOPED AROUND ANCHOR BOLTS ONE TIME AND CONNECTED TO EACH ANCHOR BOLT BEFORE CONTINUING DOWN TO THE GROUNDING PLATE.

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

501

PORTLAND CEMENT CONCRETE

623

TRAFFIC SIGNALS & STREETLIGHTING

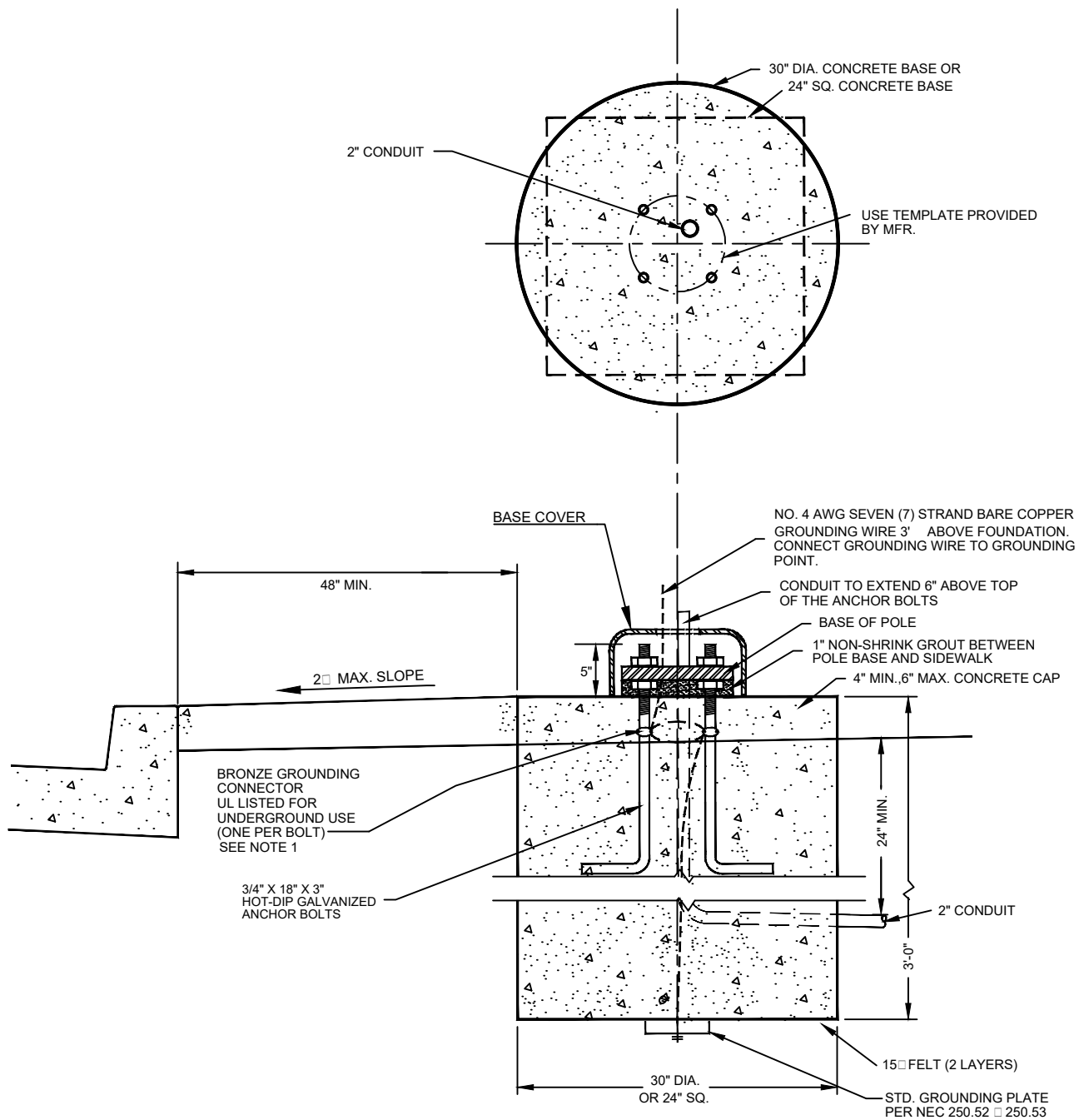
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPE "B" FOUNDATION

DATE 07-01-15

DWG. NO.

716



NOTE:

1. CONTINUOUS BARE COPPER GROUNDING WIRE SHALL BE LOOPED AROUND ANCHOR BOLTS ONE TIME AND CONNECTED TO EACH ANCHOR BOLT BEFORE CONTINUING DOWN TO THE GROUNDING PLATE.

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

501

PORTLAND CEMENT CONCRETE

623

TRAFFIC SIGNALS □ STREETLIGHTING

TYPE "C" FOUNDATION

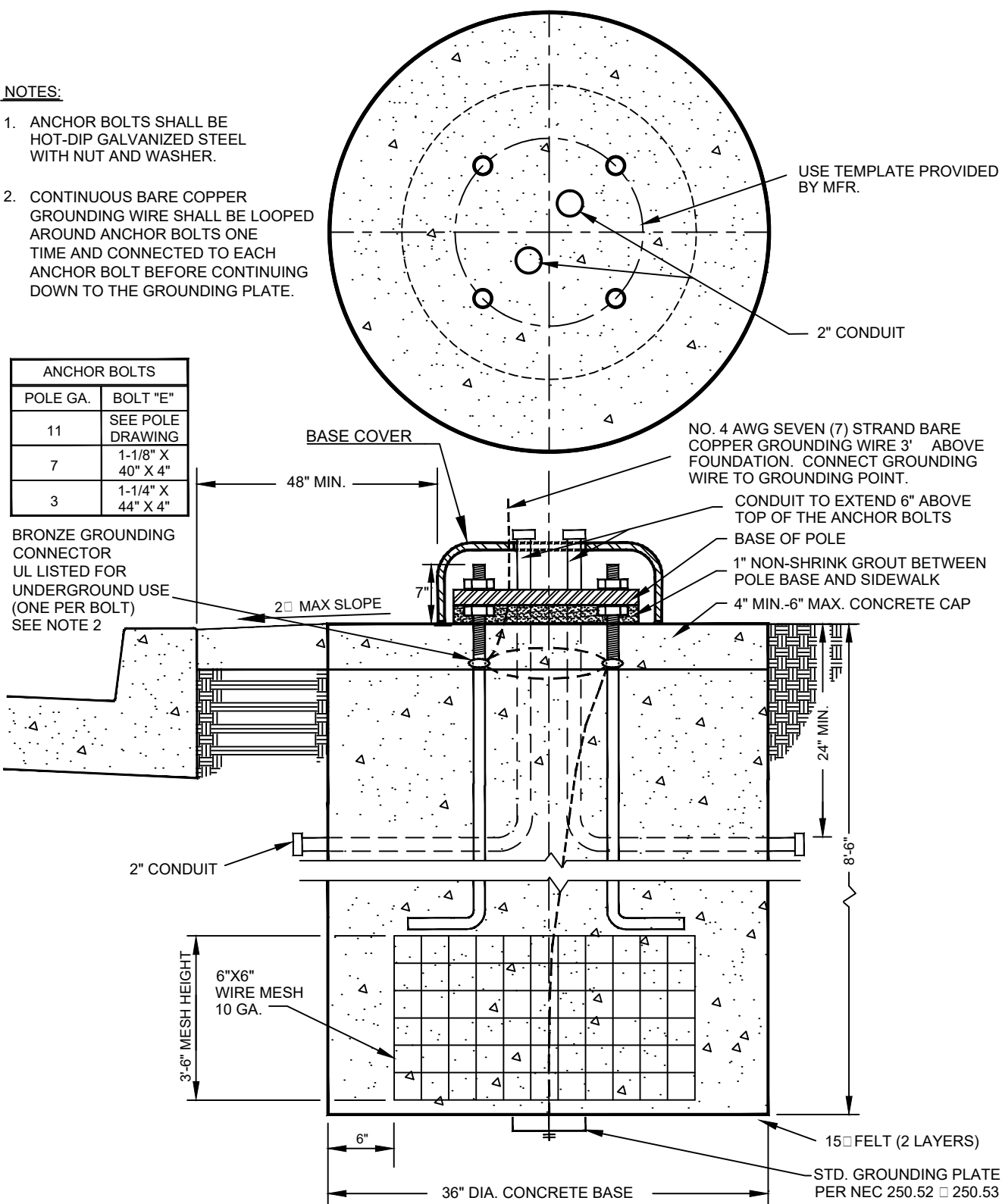
DATE 07-01-15

DWG. NO. 717

1. ANCHOR BOLTS SHALL BE HOT-DIP GALVANIZED STEEL WITH NUT AND WASHER.
2. CONTINUOUS BARE COPPER GROUNDING WIRE SHALL BE LOOPED AROUND ANCHOR BOLTS ONE TIME AND CONNECTED TO EACH ANCHOR BOLT BEFORE CONTINUING DOWN TO THE GROUNDING PLATE.

ANCHOR BOLTS	
POLE GA.	BOLT "E"
11	SEE POLE DRAWING
7	1-1/8" X 40" X 4"
3	1-1/4" X 44" X 4"

BRONZE GROUNDING
CONNECTOR
UL LISTED FOR
UNDERGROUND USE
(ONE PER BOLT)
SEE NOTE 2



N

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPE "E" FOUNDATION

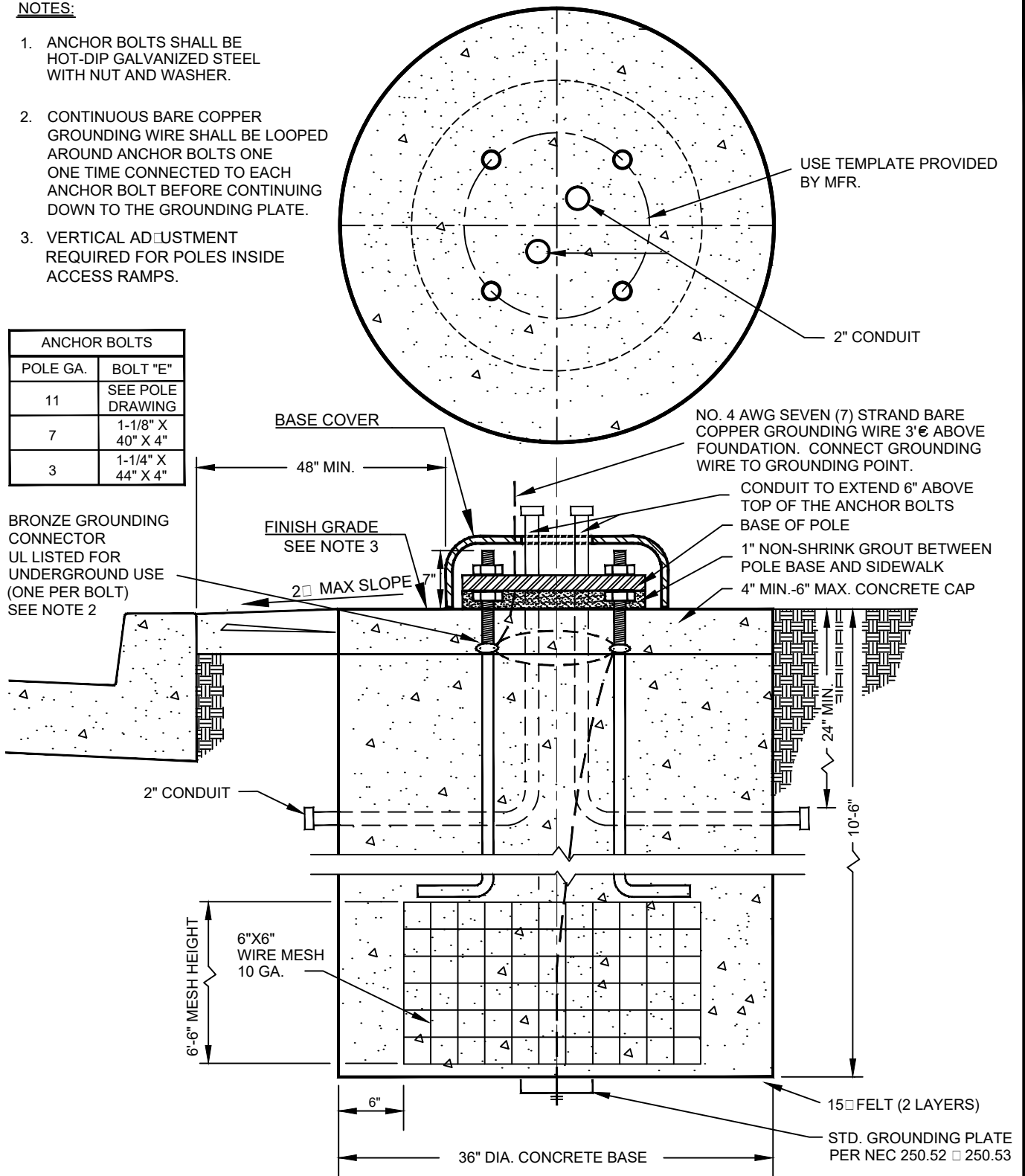
DATE 07-01-15	DWG. NO. 718

NOTES:

- ANCHOR BOLTS SHALL BE HOT-DIP GALVANIZED STEEL WITH NUT AND WASHER.
- CONTINUOUS BARE COPPER GROUNDING WIRE SHALL BE LOOPED AROUND ANCHOR BOLTS ONE TIME CONNECTED TO EACH ANCHOR BOLT BEFORE CONTINUING DOWN TO THE GROUNDING PLATE.
- VERTICAL ADJUSTMENT REQUIRED FOR POLES INSIDE ACCESS RAMPS.

ANCHOR BOLTS	
POLE GA.	BOLT "E"
11	SEE POLE DRAWING
7	1-1/8" X 40" X 4"
3	1-1/4" X 44" X 4"

BRONZE GROUNDING CONNECTOR UL LISTED FOR UNDERGROUND USE (ONE PER BOLT) SEE NOTE 2



PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

501	PORTLAND CEMENT CONCRETE
623	TRAFFIC SIGNALS & STREETLIGHTING

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPE "F" FOUNDATION

DATE 07-01-15

DWG. NO.

719

1. ANCHOR BOLTS SHALL BE HOT-DIP GALVANIZED STEEL WITH NUT AND WASHER.
2. CONTINUOUS BARE COPPER GROUNDING WIRE SHALL BE LOOPED AROUND ANCHOR BOLTS ONE ONE TIME CONNECTED TO EACH ANCHOR BOLT BEFORE CONTINUING DOWN TO THE GROUNDING PLATE.
3. VERTICAL ADJUSTMENT REQUIRED FOR POLES INSIDE ACCESS RAMPS.

ANCHOR BOLTS	
POLE GA.	BOLT "E"
11	SEE POLE DRAWING
7	1-1/8" X 40" X 4"
3	1-1/4" X 44" X 4"

NOTES:

1. ANCHOR BOLTS SHALL BE HOT-DIP GALVANIZED STEEL WITH NUT AND WASHER.
2. CONTINUOUS BARE COPPER GROUNDING WIRE SHALL BE LOOPED AROUND ANCHOR BOLTS ONE ONE TIME CONNECTED TO EACH ANCHOR BOLT BEFORE CONTINUING DOWN TO THE GROUNDING PLATE.
3. VERTICAL ADJUSTMENT REQUIRED FOR POLES INSIDE ACCESS RAMP.

ANCHOR BOLTS	
POLE GA.	BOLT "E"
11	SEE POLE DRAWING
7	1-1/8" X 40" X 4"
3	1-1/4" X 44" X 4"

BASE COVER

FINISH GRADE
SEE NOTE 3

2" MAX SLOPE

2" CONDUIT

NO. 4 AWG SEVEN (7) STRAND BARE COPPER GROUNDING WIRE 3' ABOVE FOUNDATION. CONNECT GROUNDING WIRE TO GROUNDING POINT.

CONDUIT TO EXTEND 6" ABOVE TOP OF THE ANCHOR BOLTS

BASE OF POLE

1" NON-SHRINK GROUT BETWEEN POLE BASE AND SIDEWALK

4" MIN., 6" MAX. CONCRETE CAP

24" MIN.

5'-0"

3'-6" MESH HEIGHT

6"X6" WIRE MESH 10 GA.

6"

36" DIA. CONCRETE BASE

15' FELT (2 LAYERS)

STD. GROUNDING PLATE PER NEC 250.52 & 250.53

I

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

623	TRAFFIC SIGNALS □ STREETLIGHTING

TYPE "G" FOUNDATION

DATE	07-01-15	DWG. NO.	720

1. ANCHOR BOLTS SHALL BE HOT-DIP GALVANIZED STEEL WITH NUT AND WASHER.
2. CONTINUOUS BARE COPPER GROUNDING WIRE SHALL BE LOOPED AROUND ANCHOR BOLTS ONE TIME AND CONNECTED TO EACH ANCHOR BOLT BEFORE CONTINUING DOWN TO THE GROUNDING PLATE.
3. VERTICAL ADJUSTMENT REQUIRED FOR POLES INSIDE ACCESS RAMPS.

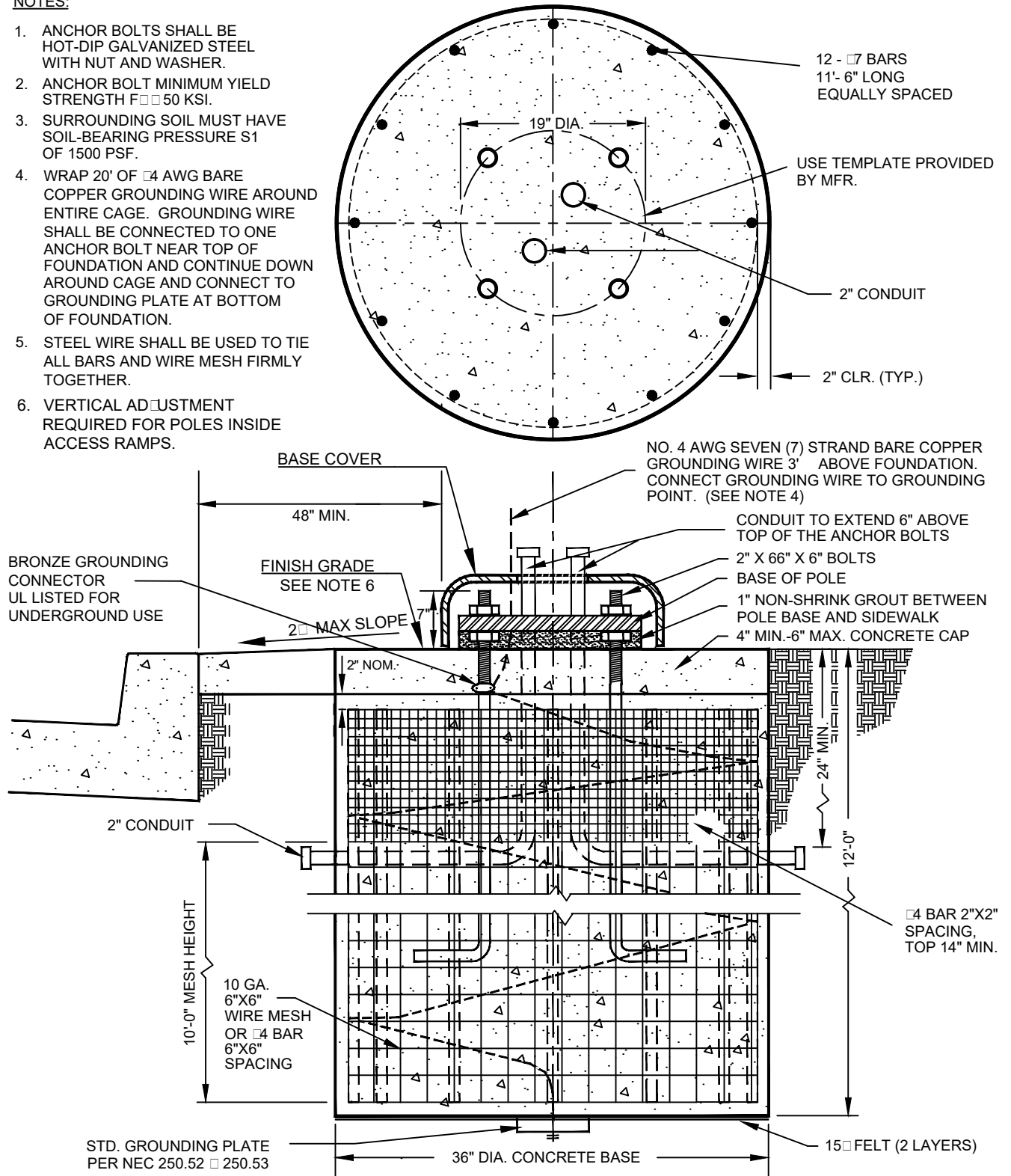


B	C	H	L	M	N

SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA		
501	PORTLAND CEMENT CONCRETE	TYPE "H" FOUNDATION		
623	TRAFFIC SIGNALS □ STREETLIGHTING			
		DATE 07-01-15	DWG. NO. 721	

NOTES:

1. ANCHOR BOLTS SHALL BE HOT-DIP GALVANIZED STEEL WITH NUT AND WASHER.
2. ANCHOR BOLT MINIMUM YIELD STRENGTH $F_{y} \geq 50$ KSI.
3. SURROUNDING SOIL MUST HAVE SOIL-BEARING PRESSURE S_1 OF 1500 PSF.
4. WRAP 20' OF #4 AWG BARE COPPER GROUNDING WIRE AROUND ENTIRE CAGE. GROUNDING WIRE SHALL BE CONNECTED TO ONE ANCHOR BOLT NEAR TOP OF FOUNDATION AND CONTINUE DOWN AROUND CAGE AND CONNECT TO GROUNDING PLATE AT BOTTOM OF FOUNDATION.
5. STEEL WIRE SHALL BE USED TO TIE ALL BARS AND WIRE MESH FIRMLY TOGETHER.
6. VERTICAL ADJUSTMENT REQUIRED FOR POLES INSIDE ACCESS RAMP.



PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

501	PORTLAND CEMENT CONCRETE
623	TRAFFIC SIGNALS & STREETLIGHTING

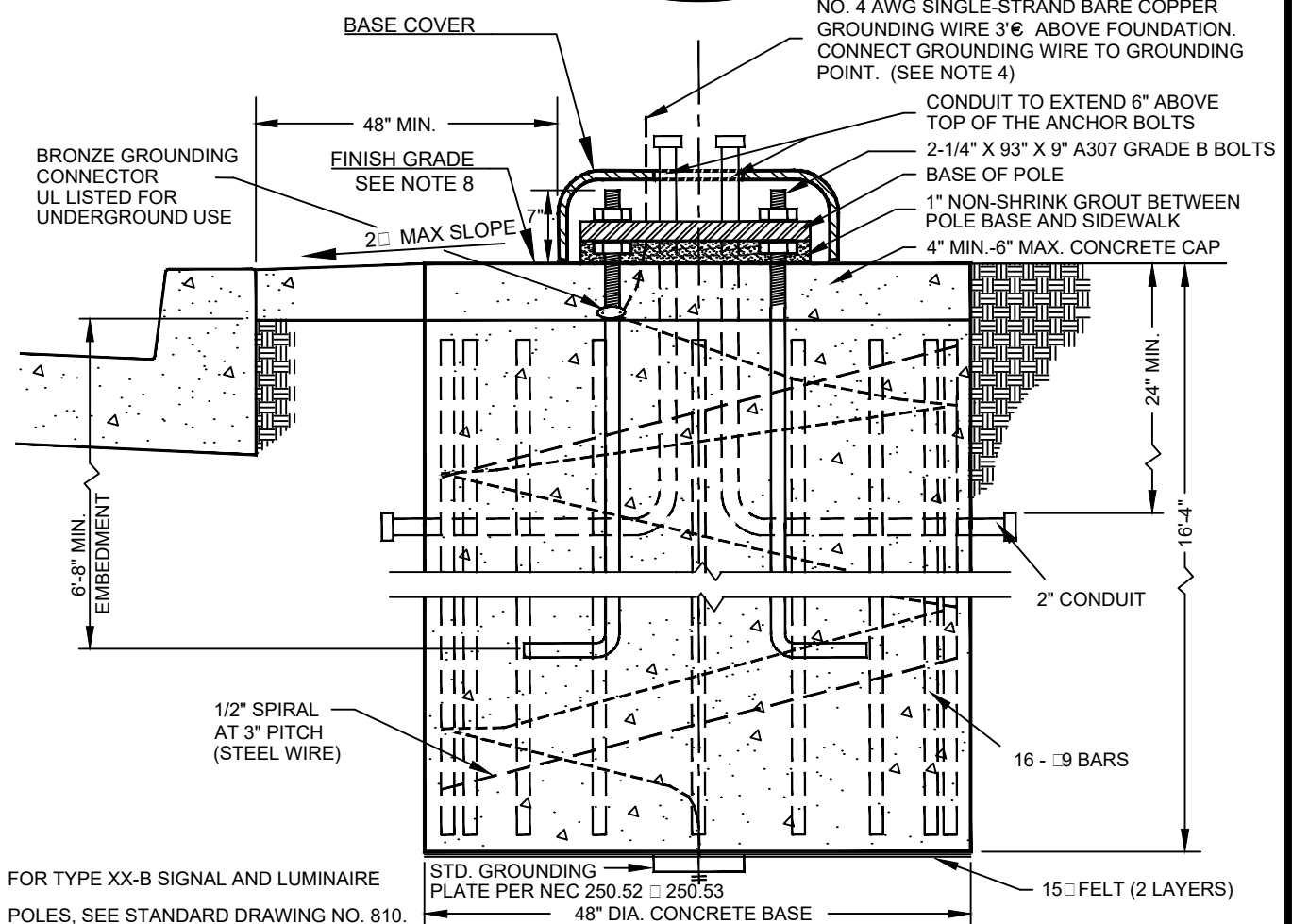
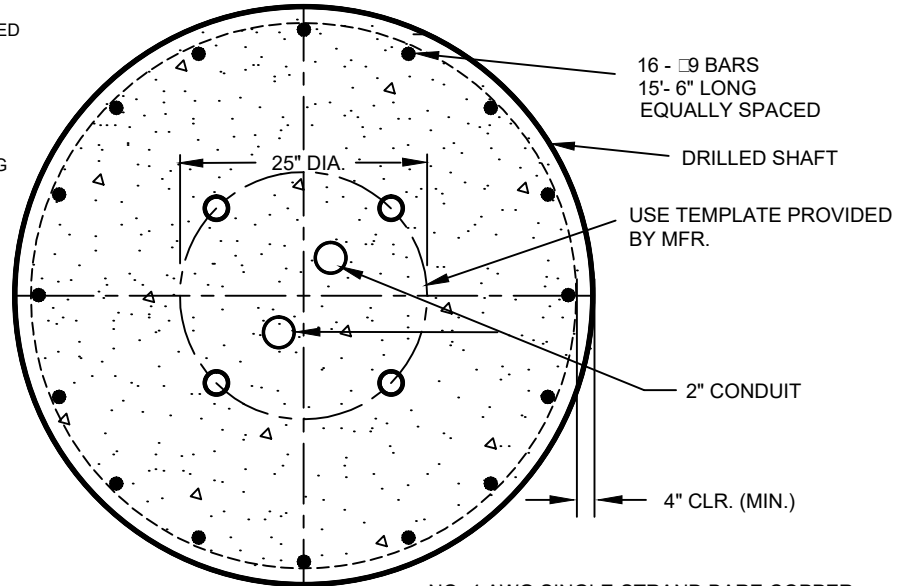
**UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA**

TYPE "L" FOUNDATION

DATE 07-01-15 DWG. NO. 722

NOTES:

1. ANCHOR BOLTS SHALL BE HOT-DIP GALVANIZED STEEL WITH NUT AND WASHER.
2. WRAP 20' OF #4 AWG BARE COPPER GROUNDING WIRE AROUND ENTIRE CAGE. GROUNDING WIRE SHALL BE CONNECTED TO ONE ANCHOR BOLT NEAR TOP OF FOUNDATION AND CONTINUE DOWN AROUND CAGE AND CONNECT TO GROUNDING PLATE AT BOTTOM OF FOUNDATION.
3. STEEL WIRE SHALL BE USED TO TIE ALL BARS AND SPIRAL FIRMLY TOGETHER.
4. 28 DAY STRENGTH - 4000 PSI MIN. ALL REINFORCING STEEL SHALL BE ASTM A615 GR 60.
5. MAXIMUM ALLOWABLE OVERTURNING MOMENT IS 180 FT-KIPS.
6. MAXIMUM ALLOWABLE TORSION IS 220 FT-KIPS.
7. THE FOUNDATION DESIGN SHOWN ASSUMES A NON-COHESIVE SOIL WITH A MINIMUM INTERNAL FRICTION ANGLE OF 30 DEGREES. IF ACTUAL SOIL CONDITIONS ARE LESSER QUALITY, THE FOUNDATION SHOULD BE DESIGNED FOR THE SPECIFIC SITE CONDITIONS.
8. VERTICAL ADJUSTMENT REQUIRED FOR POLES INSIDE ACCESS RAMPS.



AGENCY APPROVED	B	C	H	L	M	N

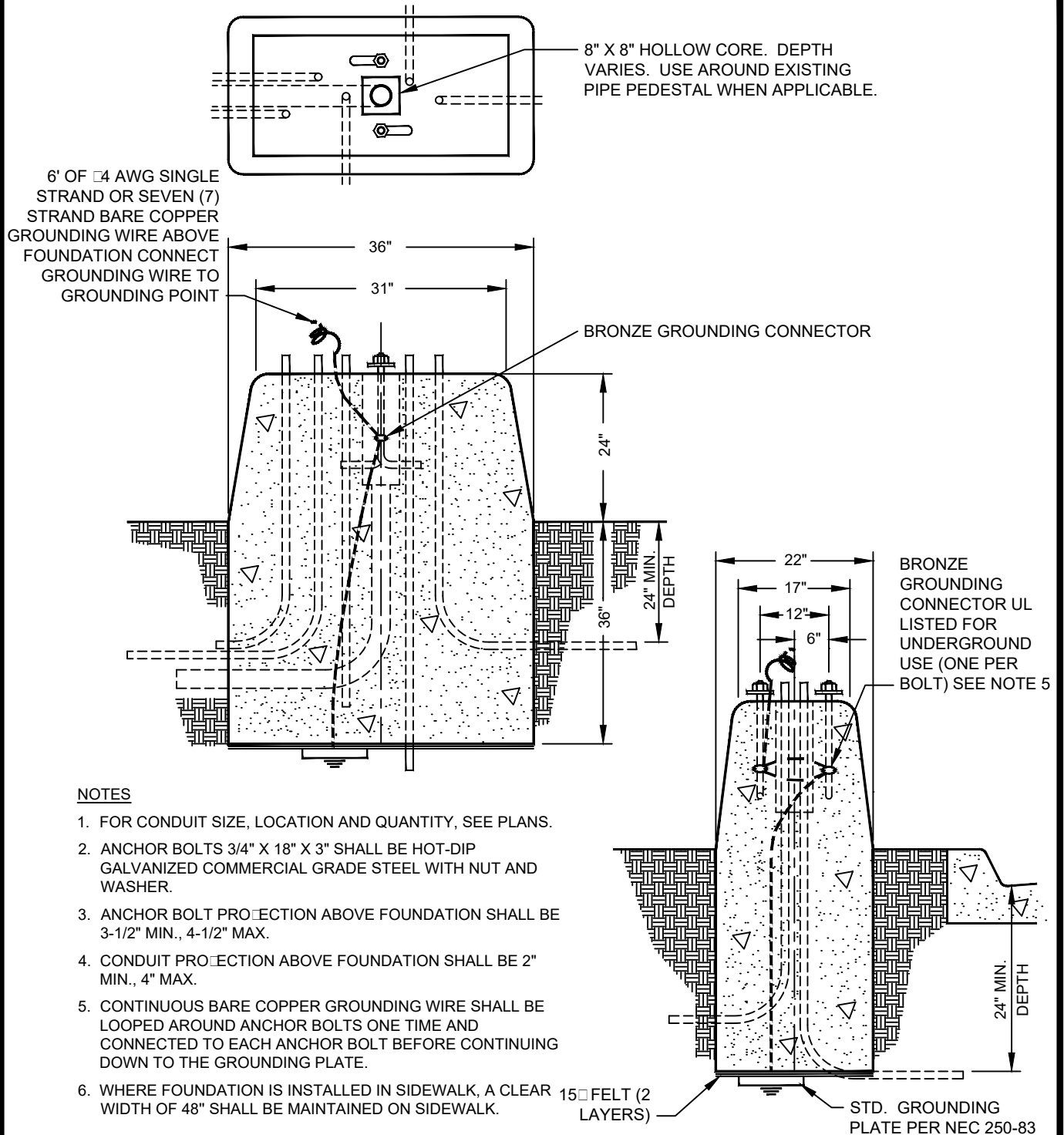
SPECIFICATION REFERENCE

501	PORTLAND CEMENT CONCRETE
623	TRAFFIC SIGNALS & STREETLIGHTING

**UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA**

TYPE "M" FOUNDATION

DATE 07-01-15	DWG. NO. 723



PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED B C H L M N R

SPECIFICATION REFERENCE

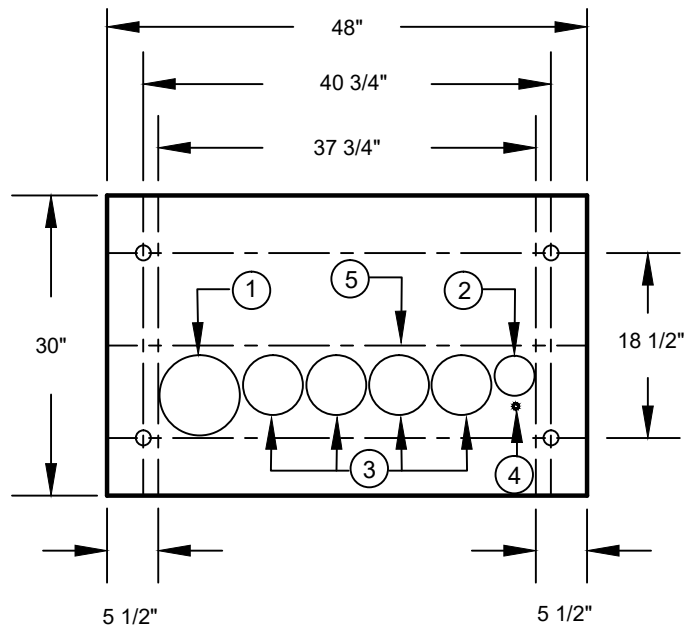
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

501 PORTLAND CEMENT CONCRETE
623 TRAFFIC SIGNALS & STREETLIGHTING

TYPE "I" FOUNDATION

DATE 12-10-20 DWG. NO. 724

BACK

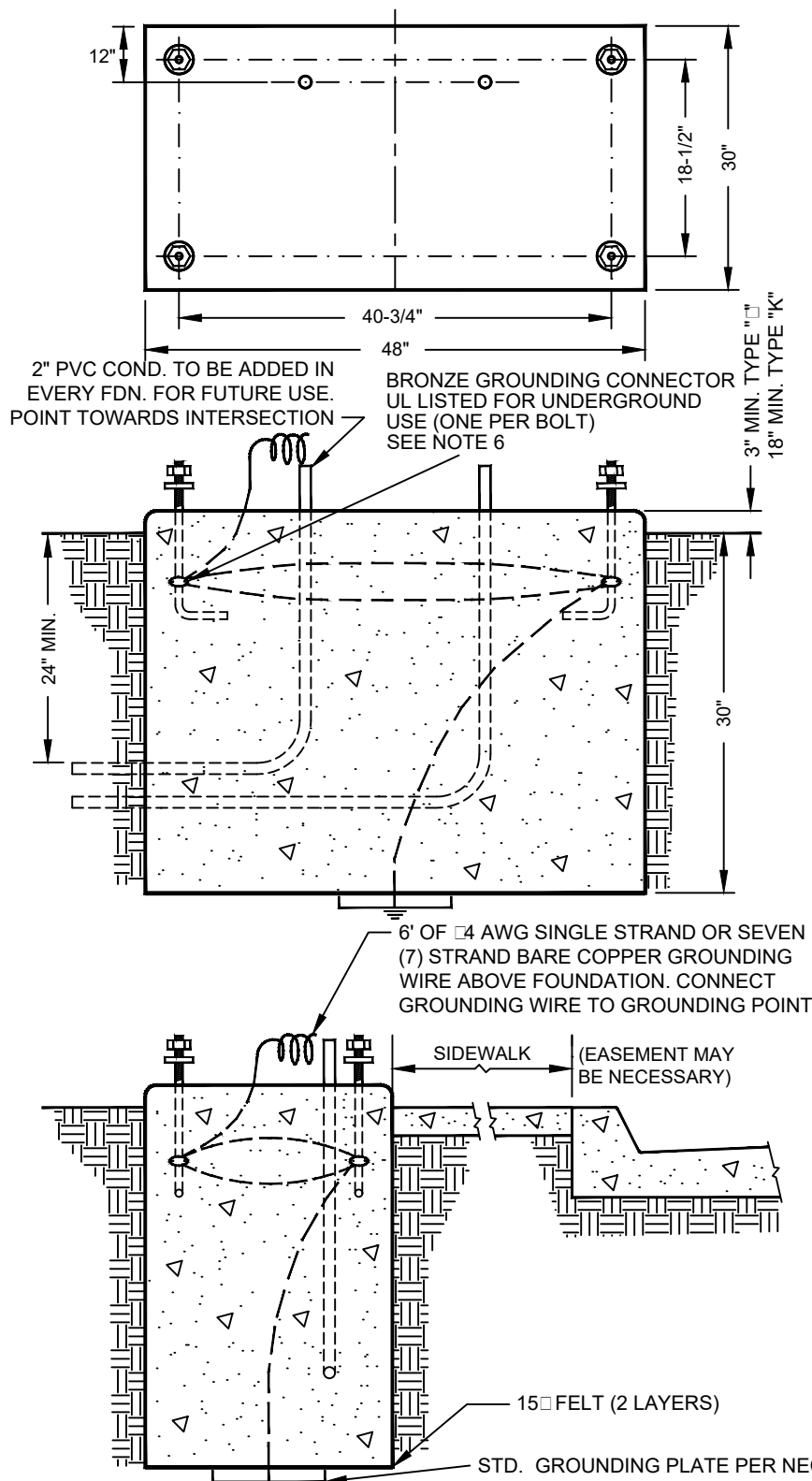


FRONT / DOOR SIDE
STREET SIDE

NOTES :

1. 3" OR 4" FIBER OR INTERCONNECT FROM TYPE 200 OR P-30 PULL BOX. REFER TO PLANS FOR INTERCONNECT/FIBER CONDUIT SIZE.
2. 2" CONDUIT FROM SERVICE PEDESTAL.
3. 3" CONDUITS FROM □7 TRAFFIC SIGNAL PULL BOX FOR SIGNAL POLES.
4. □4 SINGLE STRAND BARE COPPER WIRE SEE DRAWING 725 FOR DETAILS.
5. INSTALL CONDUITS 1" FRONT OF CENTER LINE.
6. REFER TO PLANS FOR ANY ADDITIONAL CONDUITS.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		CABINET CONDUIT LAYOUT TYPE "□" □ "K" FOUNDATIONS											
		DATE : 10-9-08			DWG. NO. 725.1								



NOTES

1. FOR CONDUIT SIZE, LOCATION, AND QUANTITY SEE PLANS REFER TO CONDUIT LAYOUT ON STANDARD DRAWING 725.1 FOR DETAILS.
2. 3/4" X 18" X 3" HOT-DIP GALVANIZED ANCHOR BOLTS. LOCATE WITH TEMPLATE.
3. ANCHOR BOLT PROTECTION ABOVE FOUNDATION SHALL BE 3-1/2" MIN., 4-1/2" MAX.
4. CONDUIT PROTECTION ABOVE FOUNDATION SHALL BE 1" MIN., 4" MAX.
5. LOCATION OF FOUNDATION MUST BE APPROVED BY ENGINEER IN FIELD.
6. CONTINUOUS BARE COPPER GROUNDING WIRE SHALL BE CONNECTED TO EACH ANCHOR BOLT WITH BRONZE GROUNDING CONNECTOR BEFORE CONTINUING DOWN TO THE GROUNDING PLATE.
7. WHERE FOUNDATION IS INSTALLED IN SIDEWALK, A CLEAR WIDTH OF 48" SHALL BE MAINTAINED ON SIDEWALK.

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED B C H L M N R

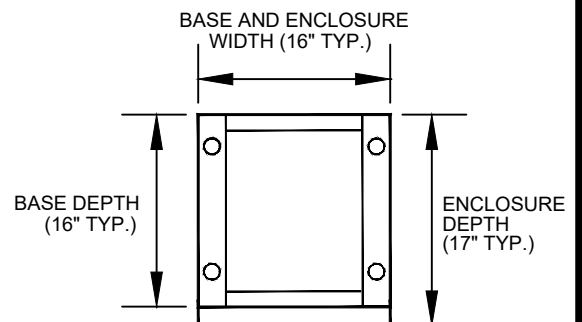
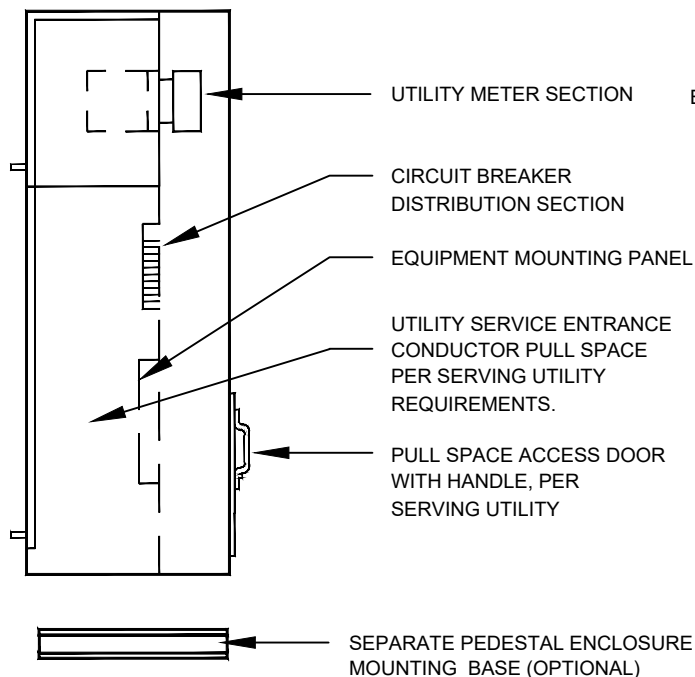
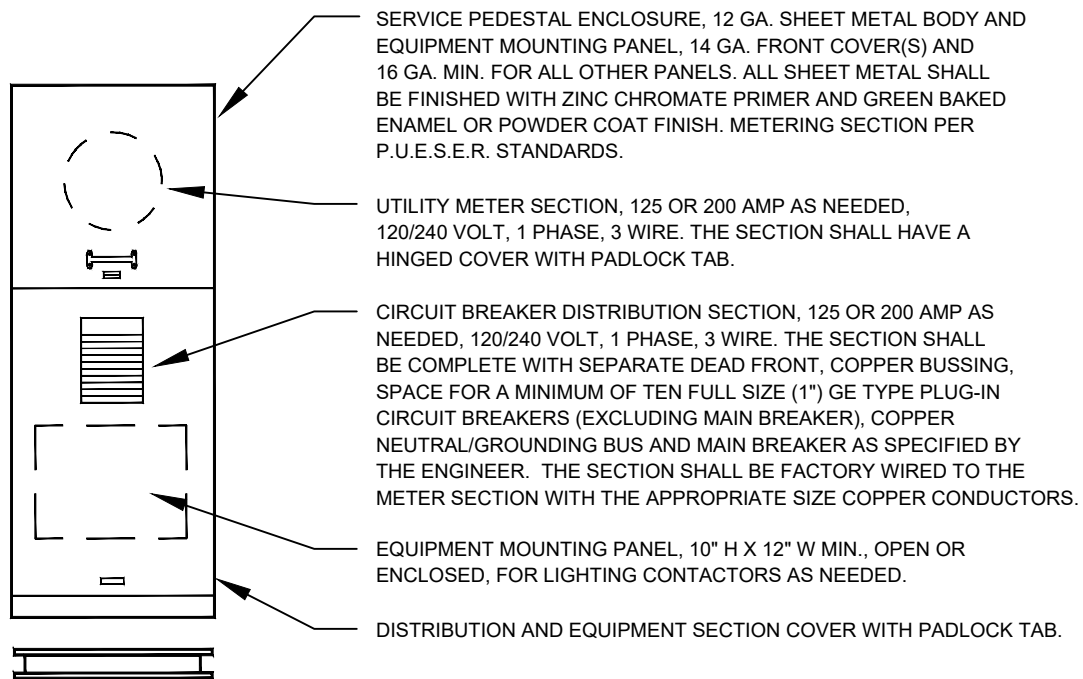
SPECIFICATION REFERENCE	
501	PORTLAND CEMENT CONCRETE
623	TRAFFIC SIGNALS □ STREETLIGHTING

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPE "□" □ "K" FOUNDATIONS

DATE 12-10-20

DWG. NO. 725



**TYPICAL MOUNTING
BASE DETAIL**
(DIMENSIONS MAY VARY DEPENDING
ON MANUFACTURER)

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

506

STEEL STRUCTURES

623

TRAFFIC SIGNALS ☐ STREETLIGHTING

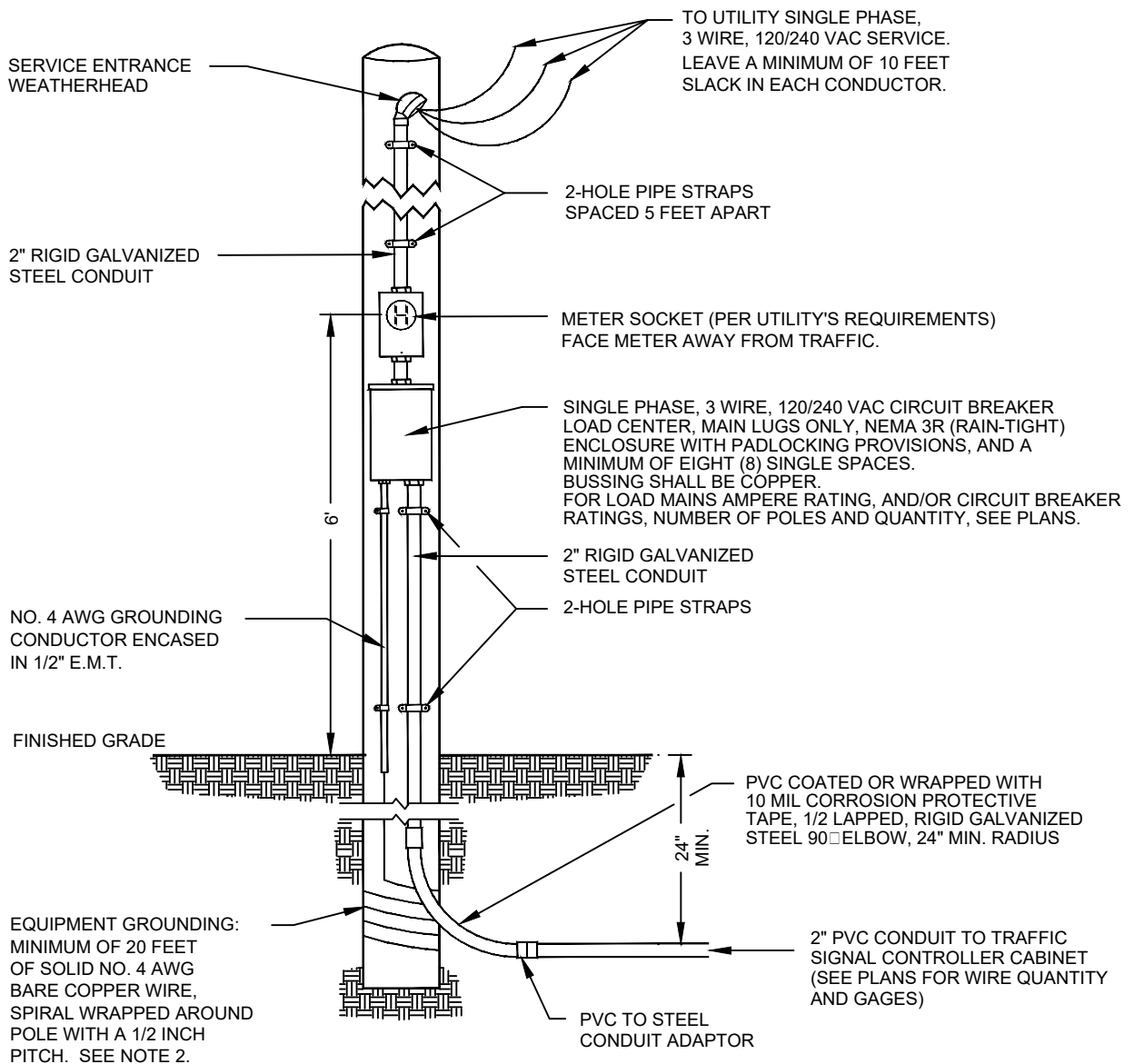
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SINGLE METER
SERVICE PEDESTAL

DATE 8-12-99

DWG. NO.

730



NOTES:

1. ALL WIRES TO BE COPPER; SEE PLANS FOR QUANTITY AND GAGES.
2. WITH ENGINEER'S APPROVAL, AN 8 FT. BY 5/8 IN. COPPER-CLAD GROUNDING ROD MAY BE USED.
3. ALL CONDUIT FITTINGS TO BE WATER-TIGHT.

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

B

C

H

L

M

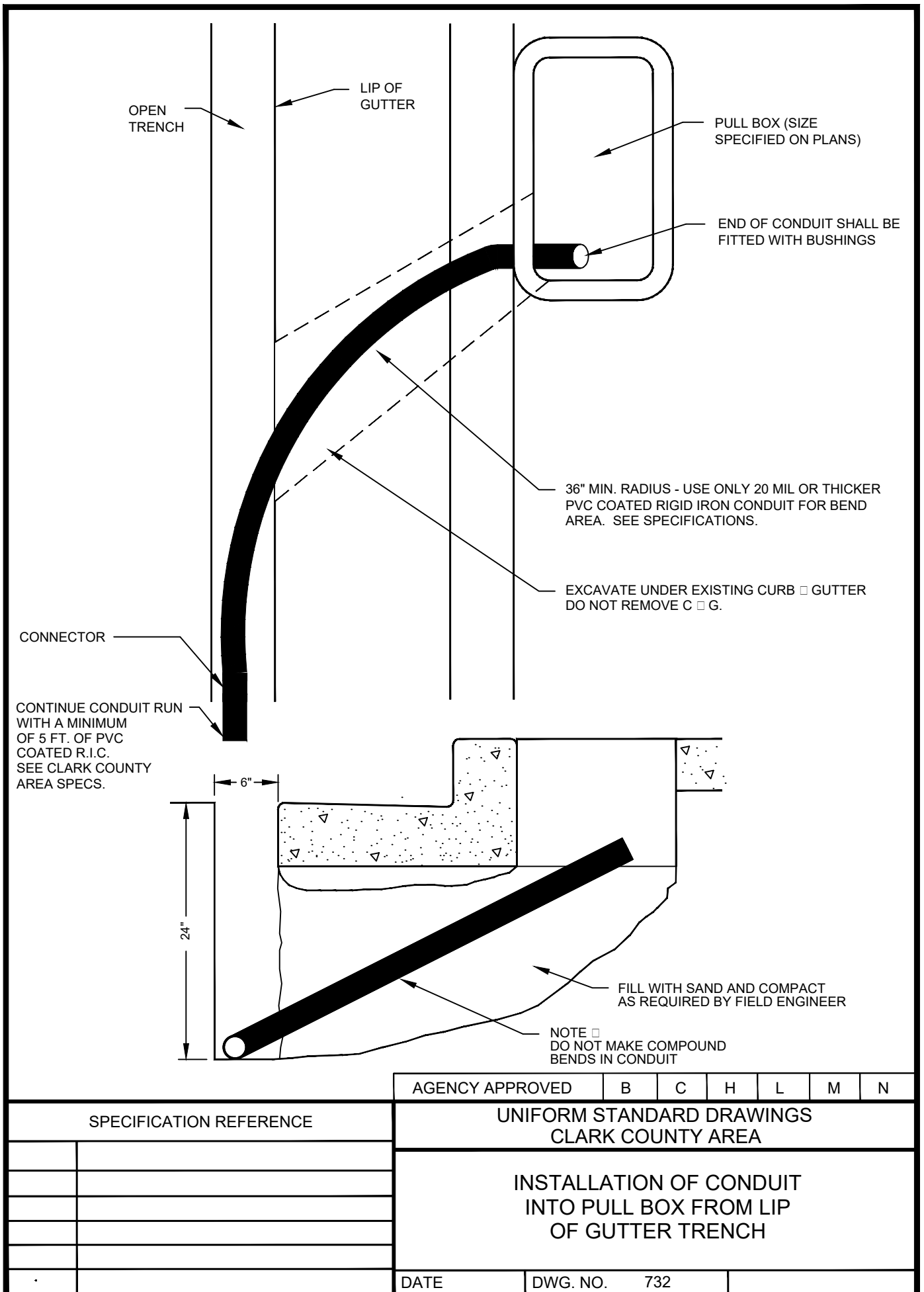
N

SPECIFICATION REFERENCE

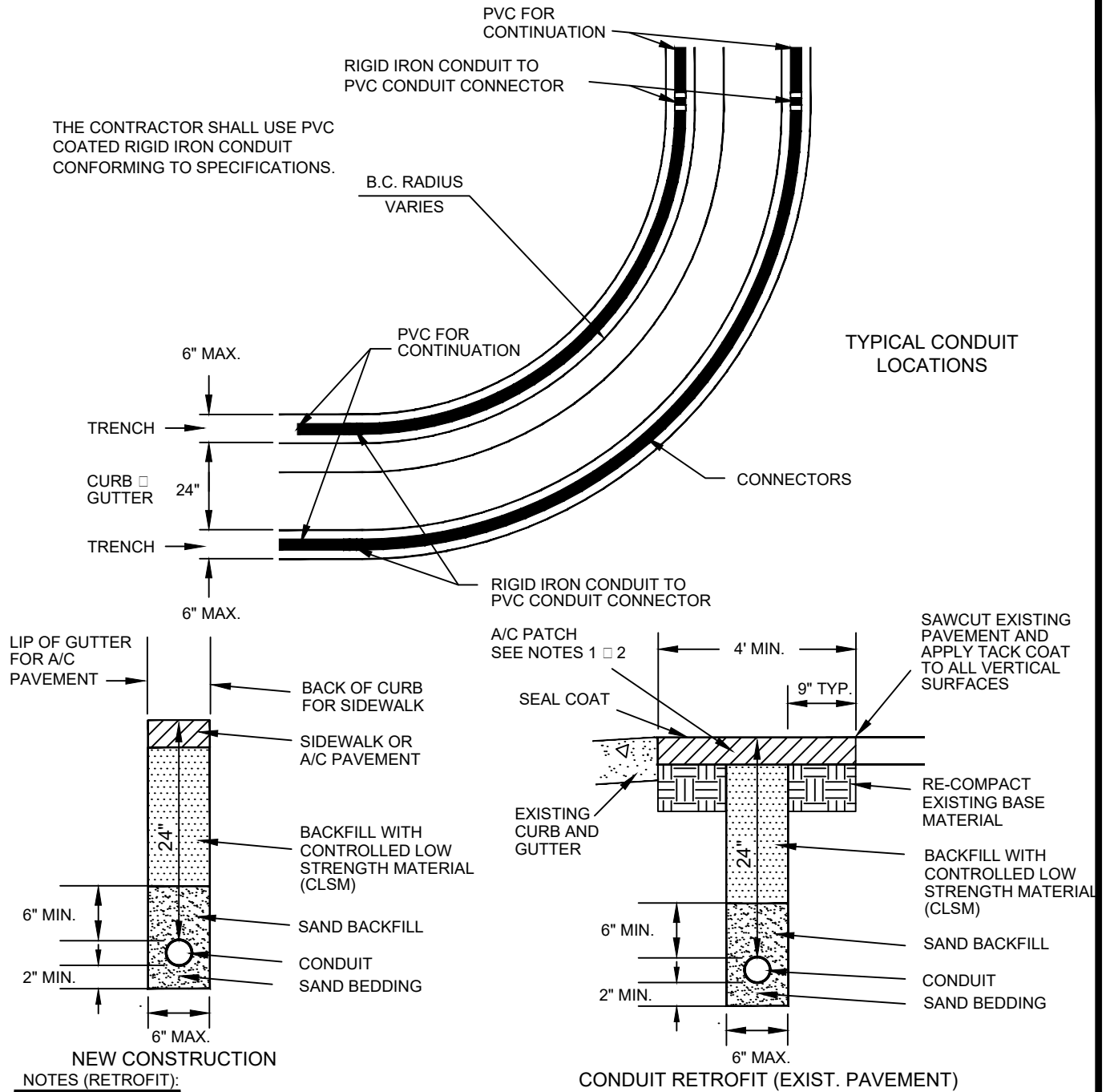
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

120/240 VAC SERVICE
ON WOOD POLE
OVERHEAD SERVICE

DATE 12-12-96 DWG. NO. 731



THE CONTRACTOR SHALL USE PVC COATED RIGID IRON CONDUIT CONFORMING TO SPECIFICATIONS.



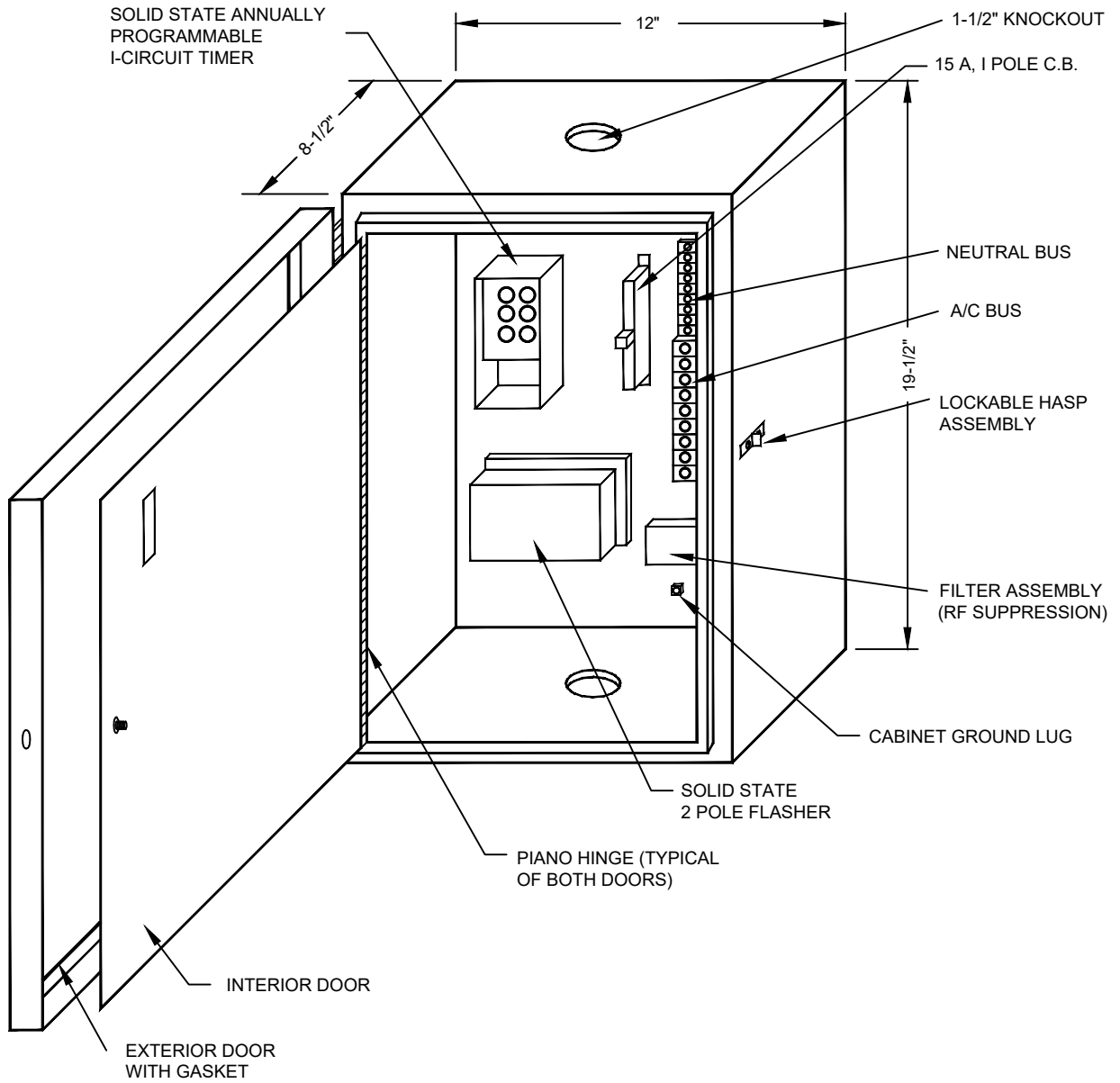
NEW CONSTRUCTION
NOTES (RETROFIT):

1. DEPTH TO MATCH EXISTING AC PAVEMENT, BUT NOT LESS THAN 4", PLACED IN MULTIPLE LIFTS OF EQUAL THICKNESS.
2. PATCH WIDTH SHALL BE SUFFICIENT TO ACCOMMODATE MECHANICAL PLACEMENT USING AGENCY APPROVED SPREADER BOX OR PAVING MACHINE, ROLLING AND COMPACTION PER UNIFORM STANDARD SPECIFICATION SECTION 401.03.11.
3. IF SAWCUT IS WITHIN 3 FEET OF EDGE OF EXISTING ASPHALT CONCRETE SURFACE OR OTHER PATCH, REMOVE EXISTING PAVEMENT TO THAT EDGE AND REPLACE ENTIRE SECTION.
4. IF 24" COVER IS NOT POSSIBLE, THEN RED CONCRETE ENCASEMENT MIN. 4" ABOVE CONDUIT REQUIRED.
5. CONTROLLED LOW STRENGTH MATERIAL (CLSM) MAY BE INSTALLED TO FINAL GRADE FOR TEMPORARY PATCHING.
6. PERMANENT PATCH MIX DESIGN SHALL BE AS REQUIRED BY ENGINEER.

AGENCY APPROVED	B	C	H	L	M	N
UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
INSTALLATION OF CONDUIT						
DATE	5-17-01	DWG. NO.	733			

SPECIFICATION REFERENCE	

FLASHING BEACON CONTROLLER CABINET

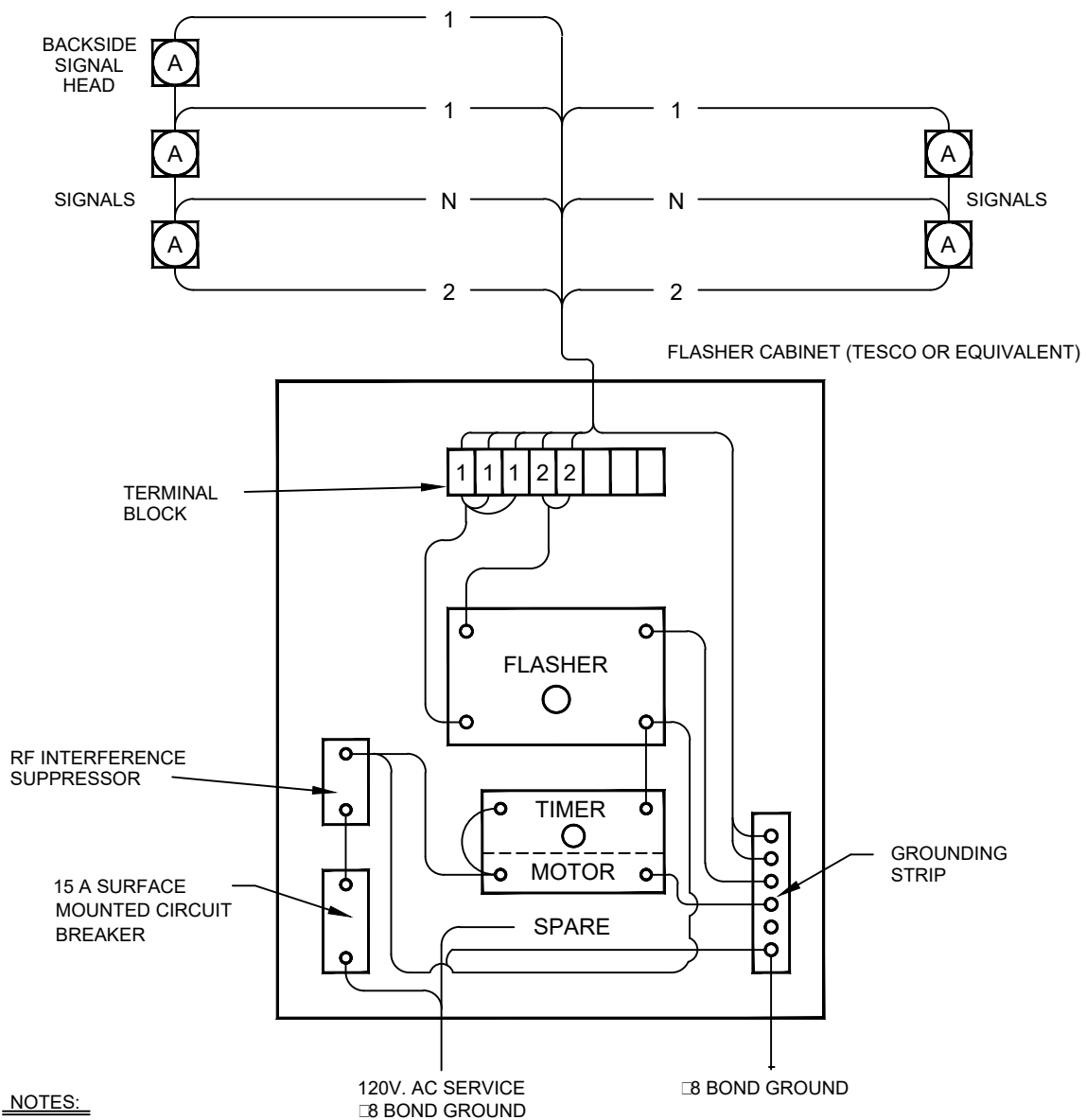


NOTES:

1. CONSTRUCT FROM MINIMUM 12-GUAGE STEEL.
2. THE TIMER SHALL BE RTC-AP21 OR EQUIVALENT.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		FLASHING BEACON CONTROLLER CABINET											
		DATE	12-12-96	DWG. NO.	741								

WIRING DIAGRAM FOR FLASHING BEACON TIMER CONTROLLED OPERATION



PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

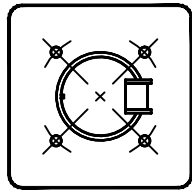
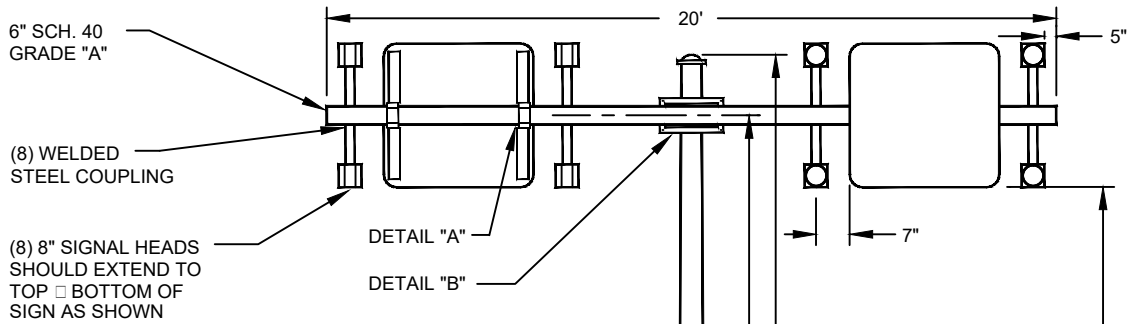
WIRING DIAGRAM FOR FLASHING BEACON
TIMER CONTROLLED OPERATION

DATE 12-12-96

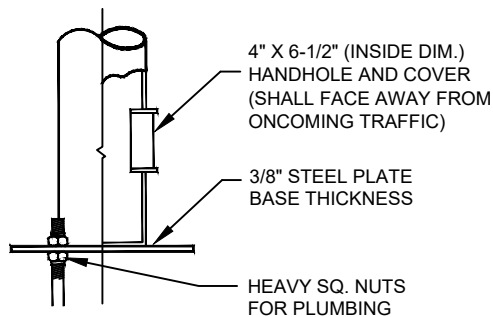
DWG. NO.

742

		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
		SCHOOL FLASHING SIGN ON TYPE III POLE							
-		DATE 12-12-96	DWG. NO.	743	SHEET	2 OF 2			

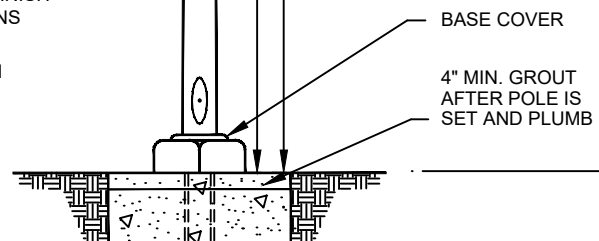


PLAN OF BASE



NOTES:

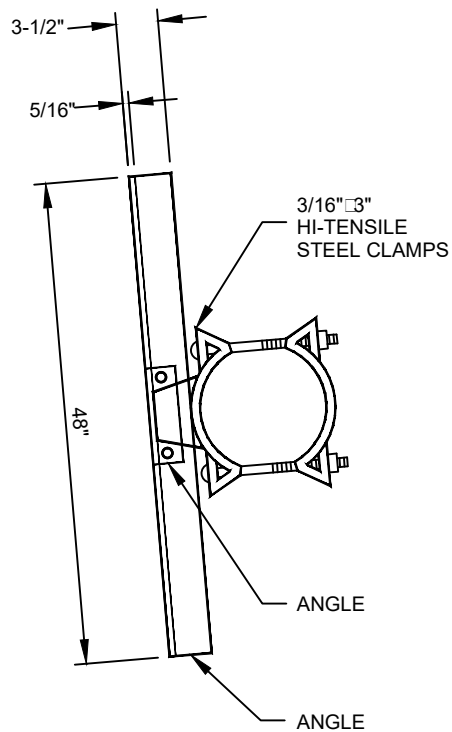
1. DRILL 1" HOLES IN STEEL PIPE WHERE 1-1/2" STEEL COUPLINGS ARE TO BE.
2. POLE TO BE HOT-DIP GALVANIZED BY MANUFACTURER OR PRIME PAINTED BY MANUFACTURER AND FINISH PAINTED BY CONTRACTOR PER SPECIFICATIONS AND AS REQUIRED BY THE ENTITY.
3. HANDHOLE COVERS SHALL BE MOUNTED WITH TAMPER-RESISTANT SCREWS.



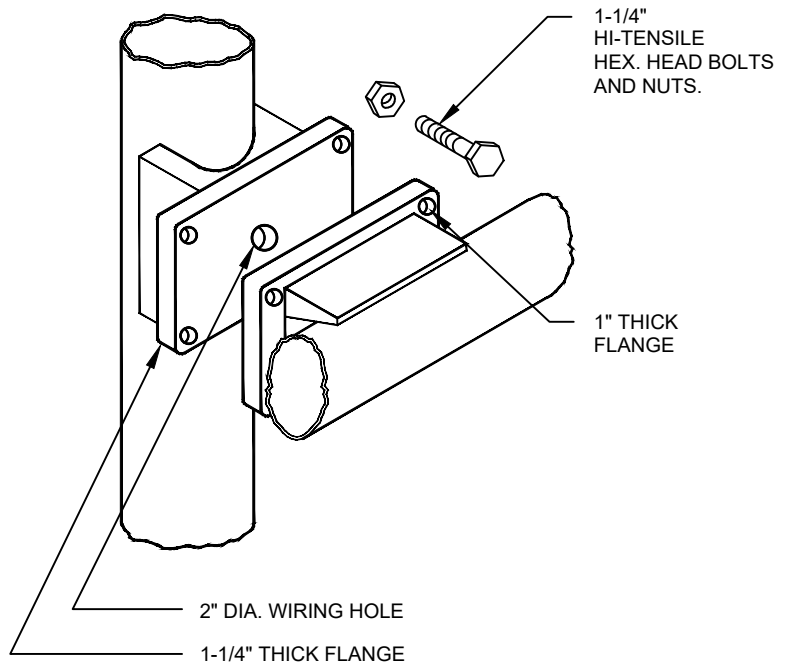
FOR TYPE "G" FOUNDATION SEE DRAWING NO. 720

AGENCY APPROVED		B	C	H	L	M	N
UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
SIGN POST WITH SCHOOL SIGN MOUNTED							
DATE	12-12-96	DWG. NO.	744	SHEET	1 OF 2		

SPECIFICATION REFERENCE	

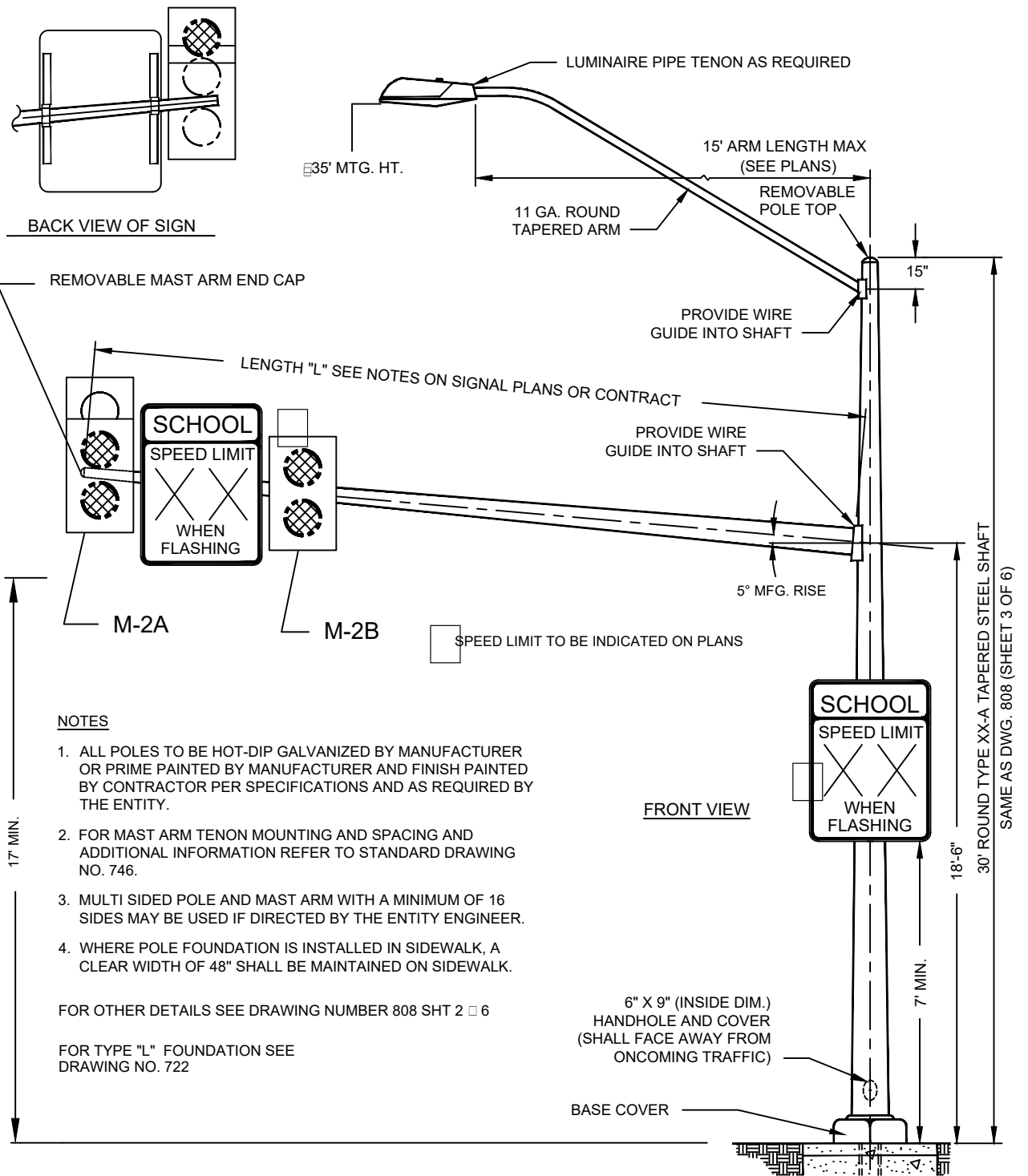


DETAIL A

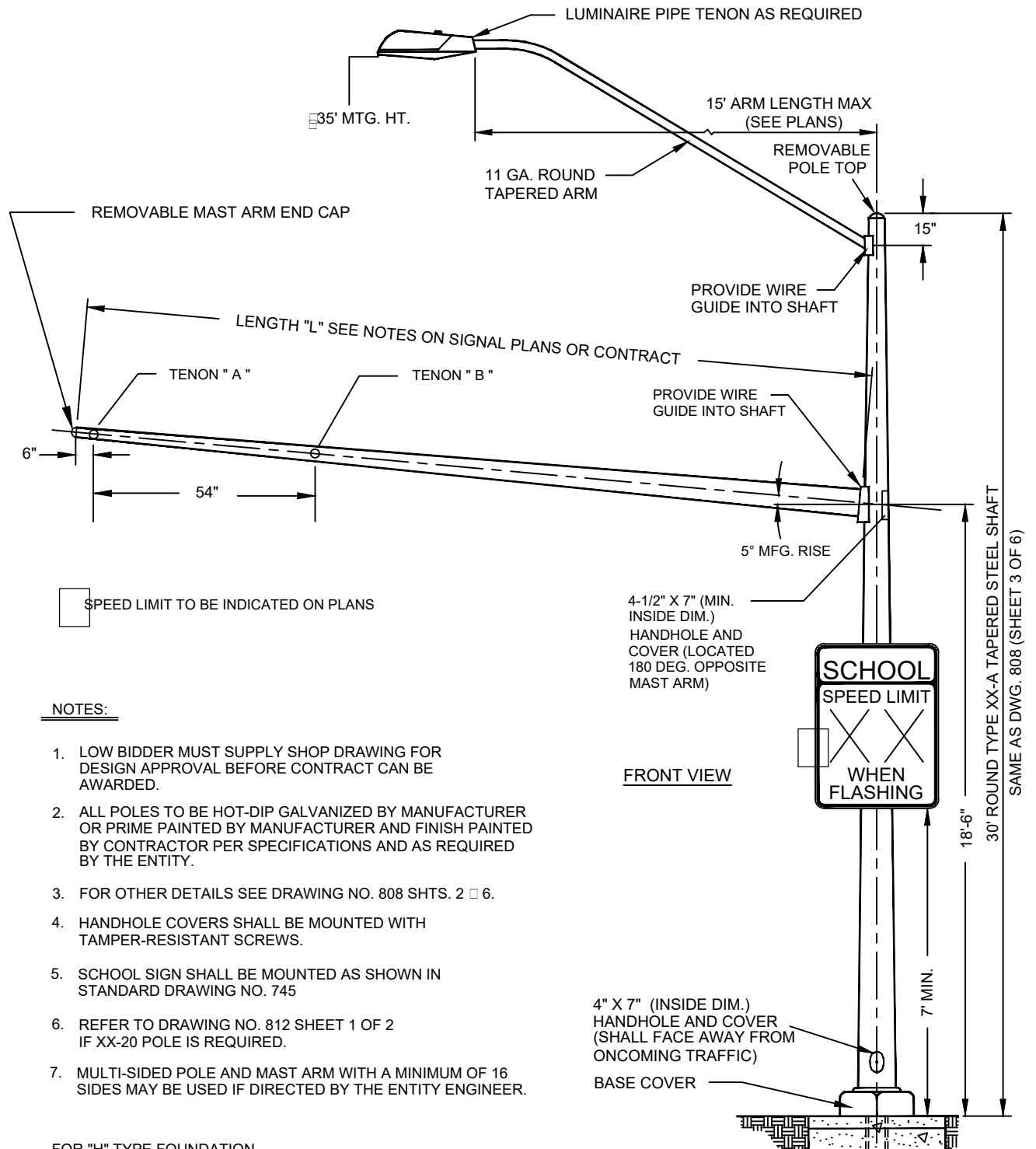


DETAIL B

SPECIFICATION REFERENCE		AGENCY APPROVED						
		B	C	H	L	M	N	
		UNIFORM STANDARD DRAWINGS						
		CLARK COUNTY AREA						
		SIGN POST WITH						
		SCHOOL SIGN MOUNTED						
		DETAILS						
DATE		DWG. NO.		744		SHEET		2 OF 2



AGENCY APPROVED		B	C	H	L	M	N	R
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
		30 FT. POLE WITH SCHOOL FLASHING SIGN						
DATE 12-10-20		DWG. NO. 745						



NOTES:

1. LOW BIDDER MUST SUPPLY SHOP DRAWING FOR DESIGN APPROVAL BEFORE CONTRACT CAN BE AWARDED.
2. ALL POLES TO BE HOT-DIP GALVANIZED BY MANUFACTURER OR PRIME PAINTED BY MANUFACTURER AND FINISH PAINTED BY CONTRACTOR PER SPECIFICATIONS AND AS REQUIRED BY THE ENTITY.
3. FOR OTHER DETAILS SEE DRAWING NO. 808 SHTS. 2 & 6.
4. HANDHOLE COVERS SHALL BE MOUNTED WITH TAMPER-RESISTANT SCREWS.
5. SCHOOL SIGN SHALL BE MOUNTED AS SHOWN IN STANDARD DRAWING NO. 745
6. REFER TO DRAWING NO. 812 SHEET 1 OF 2 IF XX-20 POLE IS REQUIRED.
7. MULTI-SIDED POLE AND MAST ARM WITH A MINIMUM OF 16 SIDES MAY BE USED IF DIRECTED BY THE ENTITY ENGINEER.

FOR "H" TYPE FOUNDATION
DRAWING NO. 721

IN THE CITY OF NORTH LAS VEGAS, USE ONLY XX-A POLE DWG.808 SHT 3 & 6
FOR "L" FOUNDATION SEE DWG.722

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

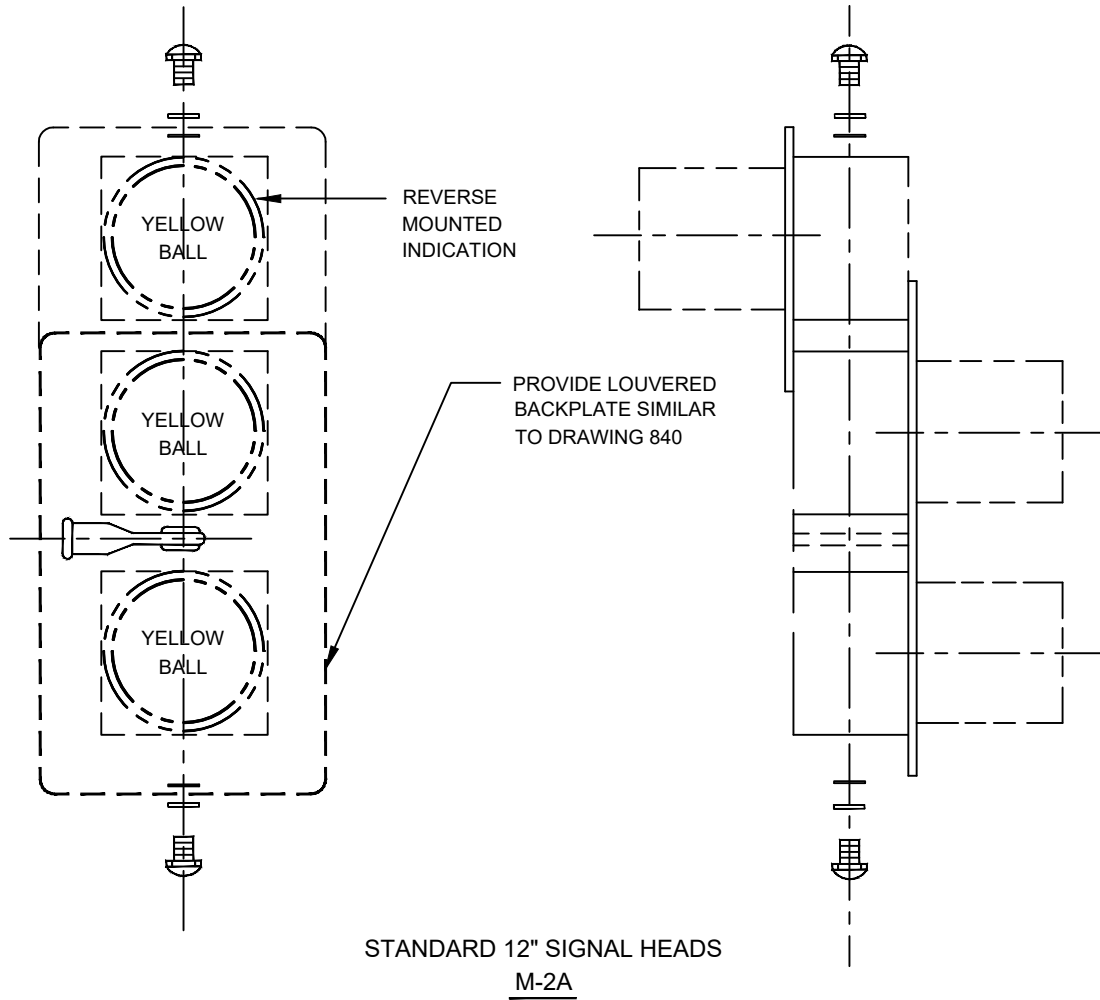
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SCHOOL SIGN POLE
TYPE XX-A

DATE 04-12-07

DWG. NO.

746

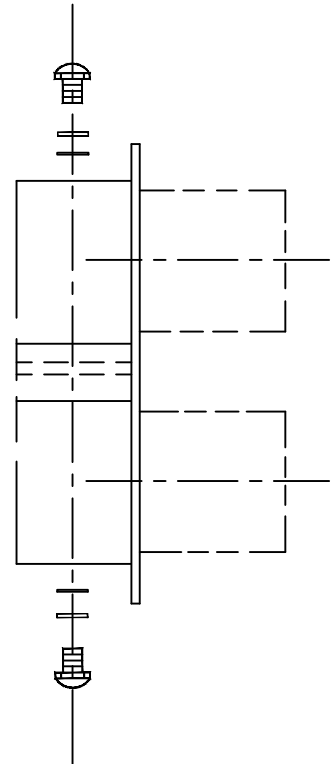
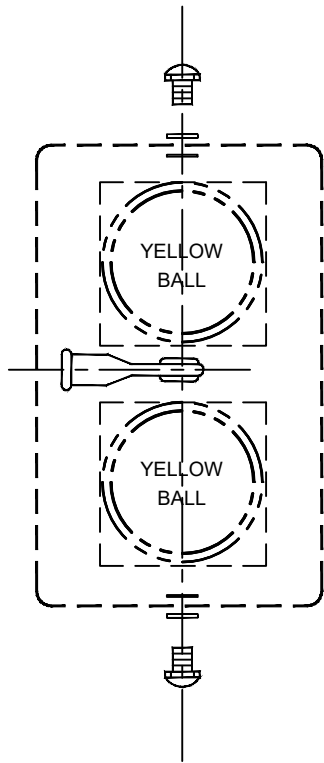


NOTES:

1. ALL INDICATIONS ARE TO BE YELLOW LED BALLS.
2. ALL M-2A INDICATIONS ARE 12" NOMINAL.
3. CIRCULAR VISORS TO BE INSTALLED ON ALL HEADS.
4. SEE SIGNAL PLANS FOR MAST ARM TENON LOCATIONS.
5. THIS HEAD ASSEMBLY SHALL BE USED ONLY ON THE END OF THE MAST ARM.

SPECIFICATION REFERENCE		AGENCY APPROVED						B	C	H	L	M	N
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		SCHOOL FLASHER MAST ARM SIGNAL ASSEMBLIES M-2A											
		DATE 3-10-05			DWG. NO. 747			SHEET			1 OF 2		

PROVIDE LOUVERED
BACKPLATE SIMILAR
TO DRAWING 840



STANDARD 12" SIGNAL HEADS
M-2B

NOTES:

1. ALL INDICATIONS ARE TO BE YELLOW LED BALLS.
2. ALL M-2B INDICATIONS ARE 12" NOMINAL.
3. CIRCULAR VISORS TO BE INSTALLED ON ALL HEADS.
4. SEE SIGNAL PLANS FOR MAST ARM TENON LOCATIONS.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		SCHOOL FLASHER MAST ARM SIGNAL ASSEMBLIES M-2B											
		DATE	3-10-05		DWG. NO.	747		SHEET		2 OF 2			

REINFORCED POLYMER
CONCRETE COVER
MARKED "FIBER OPTIC"

POLYMER COMPOSITE
BODY

NOTES:

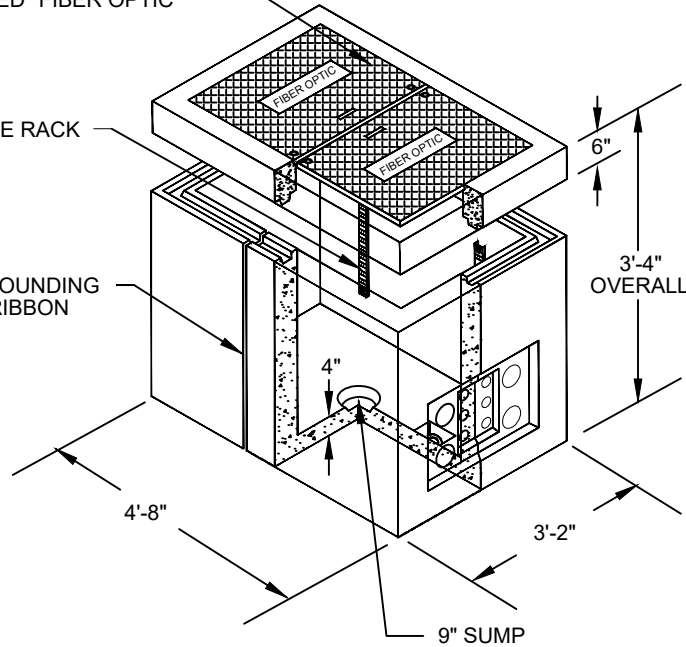
1. THIS PULL BOX SHALL NOT BE USED IN TRAVEL OR PARKING LANES
2. TAPERED SIDE WALLS ARE ALLOWED.

		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
		"P30" PULLBOX (FOR USE IN INTERCONNECT AND COMMUNICATIONS INSTALLATIONS)							
.		DATE 07-01-14	DWG. NO.		761				

ADJUSTABLE TORSION
SPRING ASSISTED STEEL
COVER MARKED "FIBER OPTIC"

CABLE RACK

GROUNDING
RIBBON



PRECAST CONCRETE
MATERIAL

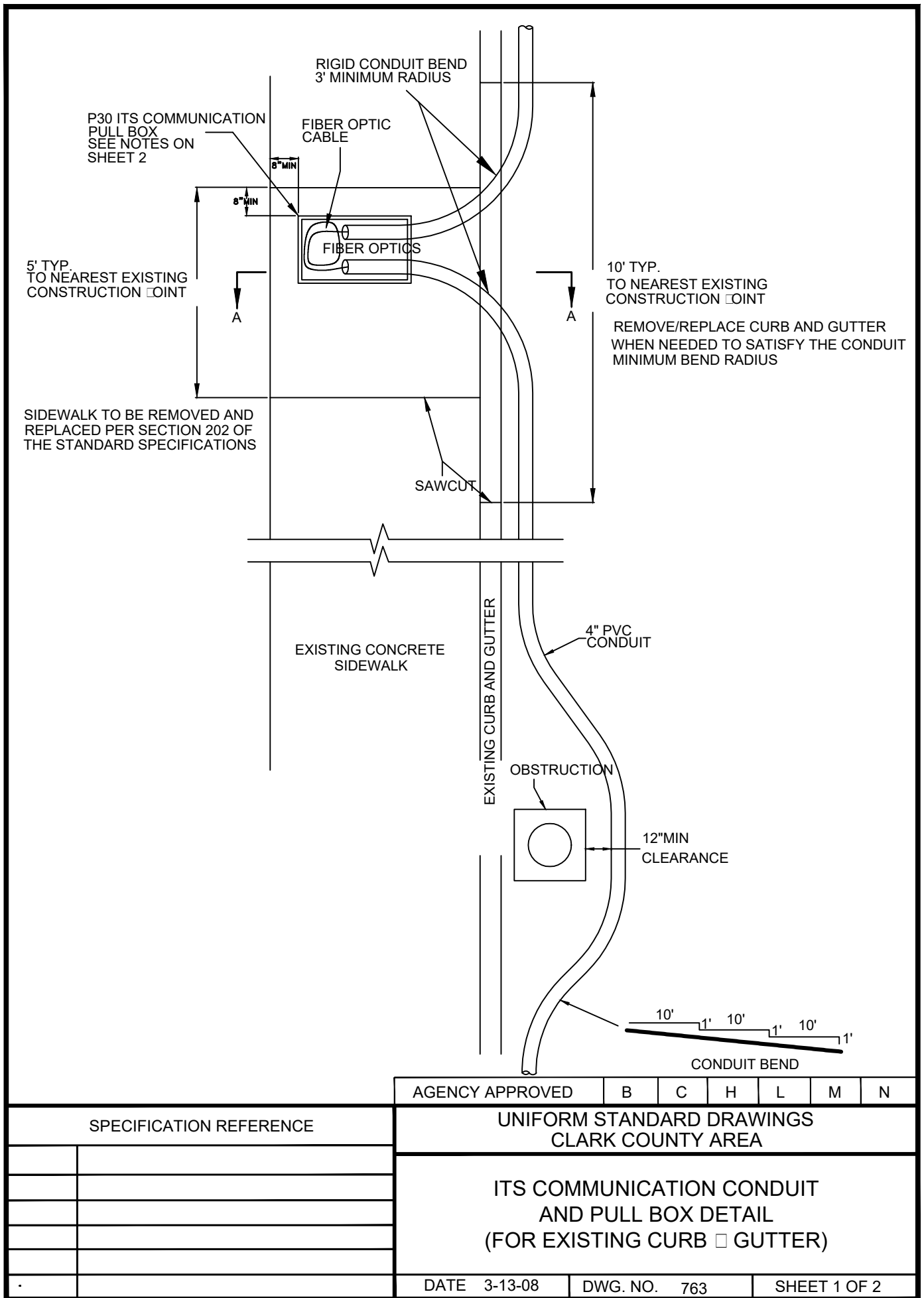
NOTES:

1. DESIGN LOAD: H-20 WHEEL LOADINGS.
2. SUITABLE FOR USE IN OFF STREET LOCATIONS WHERE NOT SUBJECT TO HIGH DENSITY TRAFFIC. IT SHALL NOT BE USED IN TRAVEL OR PARKING LANES.
3. INSIDE DIMENSIONS - 30"X48"X36"
4. FOR USE AT FIBER OPTIC SPLICE POINTS.

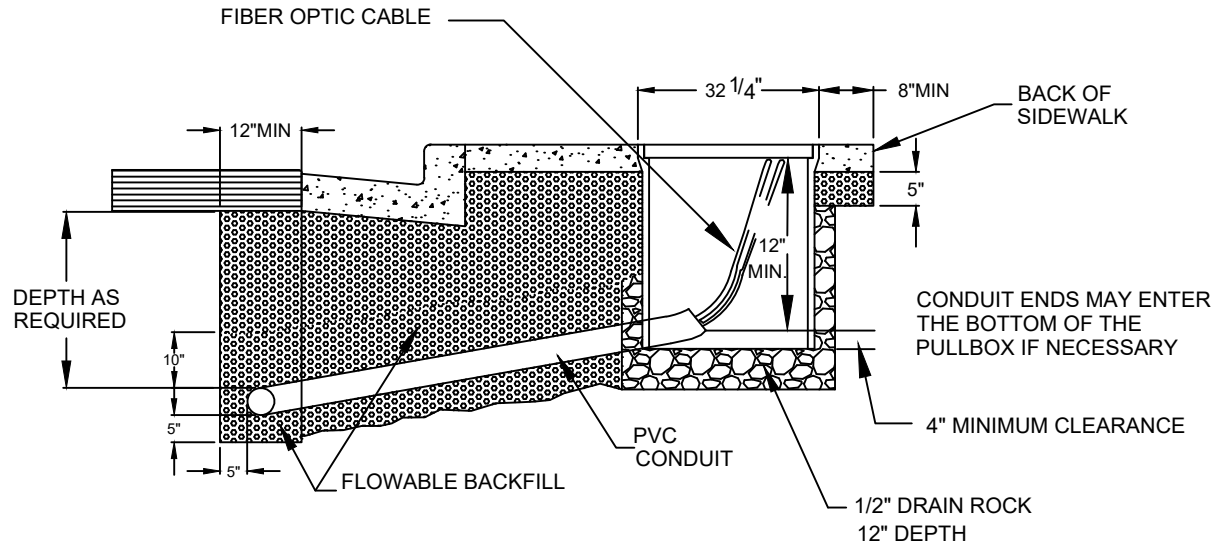
TYPE 200 VAULT

Effective 12/10/2020 to 06/09/2021

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		TYPE 200 VAULT (FOR USE AT FIBER OPTIC SPLICE POINTS)											
		DATE 3-13-08			DWG. NO. 762								



PULL BOX MAY ALSO BE PLACED
NEAR THE BACK OF CURB WITH
A MIN. 8" CLEARANCE

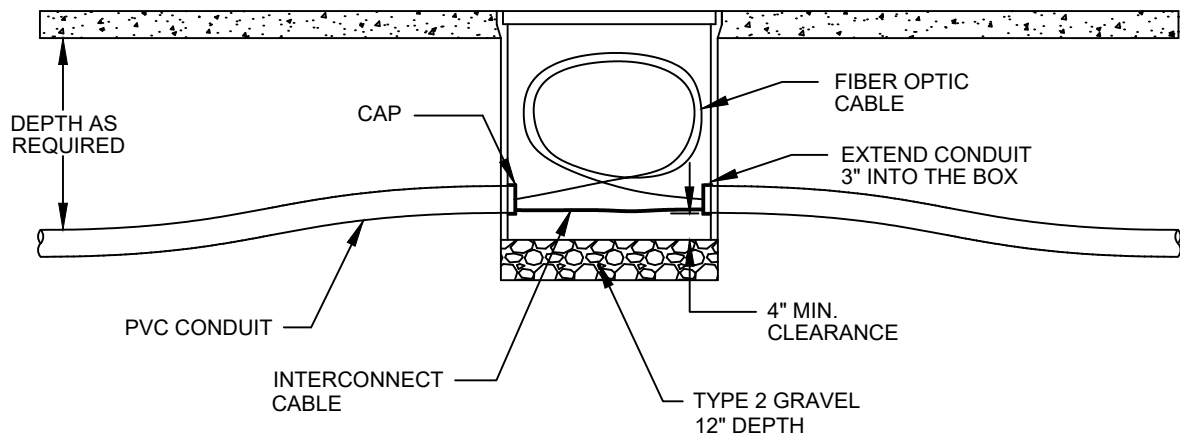
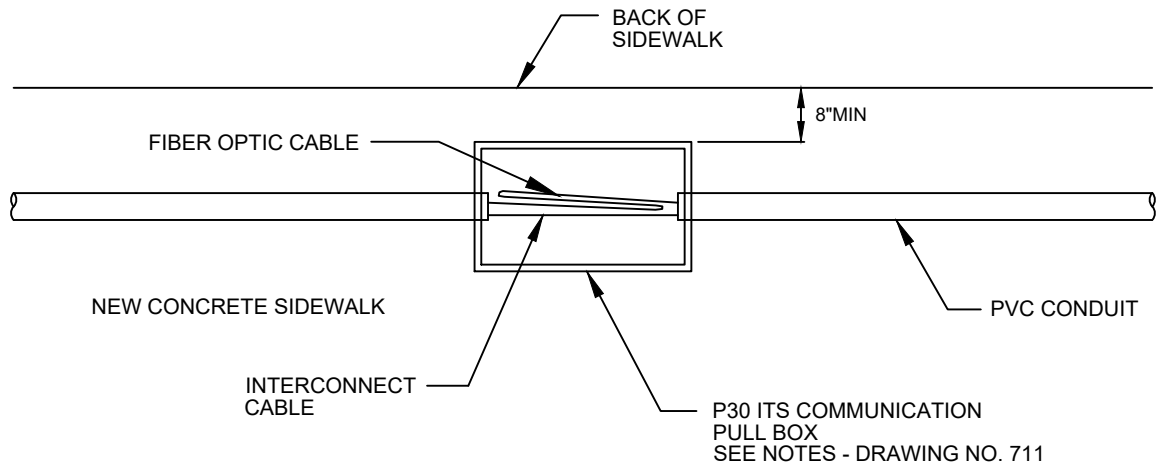


SECTION A-A

NOTES:

- 1 P30 PULL BOX SHALL BE INSTALLED FOR THE TRAFFIC SIGNAL ITS COMMUNICATIONS PER APPLICABLE STANDARDS.
- 2 PULL BOX COVER SHALL BE INSCRIBED "FIBER OPTICS".
- 3 APPROXIMATE LOCATIONS OF THE PROPOSED P30 ITS COMMUNICATION PULL BOXES ARE SHOWN ON THE PLANS.
THE CONTRACTOR SHALL BE RESPONSIBLE FOR MARKING THE LOCATIONS OF THE PROPOSED ITS COMMUNICATION PULL BOXES IN THE FIELD PER STANDARD STANDARD SPECIFICATION INTERVALS AND THESE LOCATIONS SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER BEFORE INSTALLATION.
- 4 DETAIL SHOWS METHOD OF INSTALLATION WHEN FIBER OPTIC CABLE IS REQUIRED.

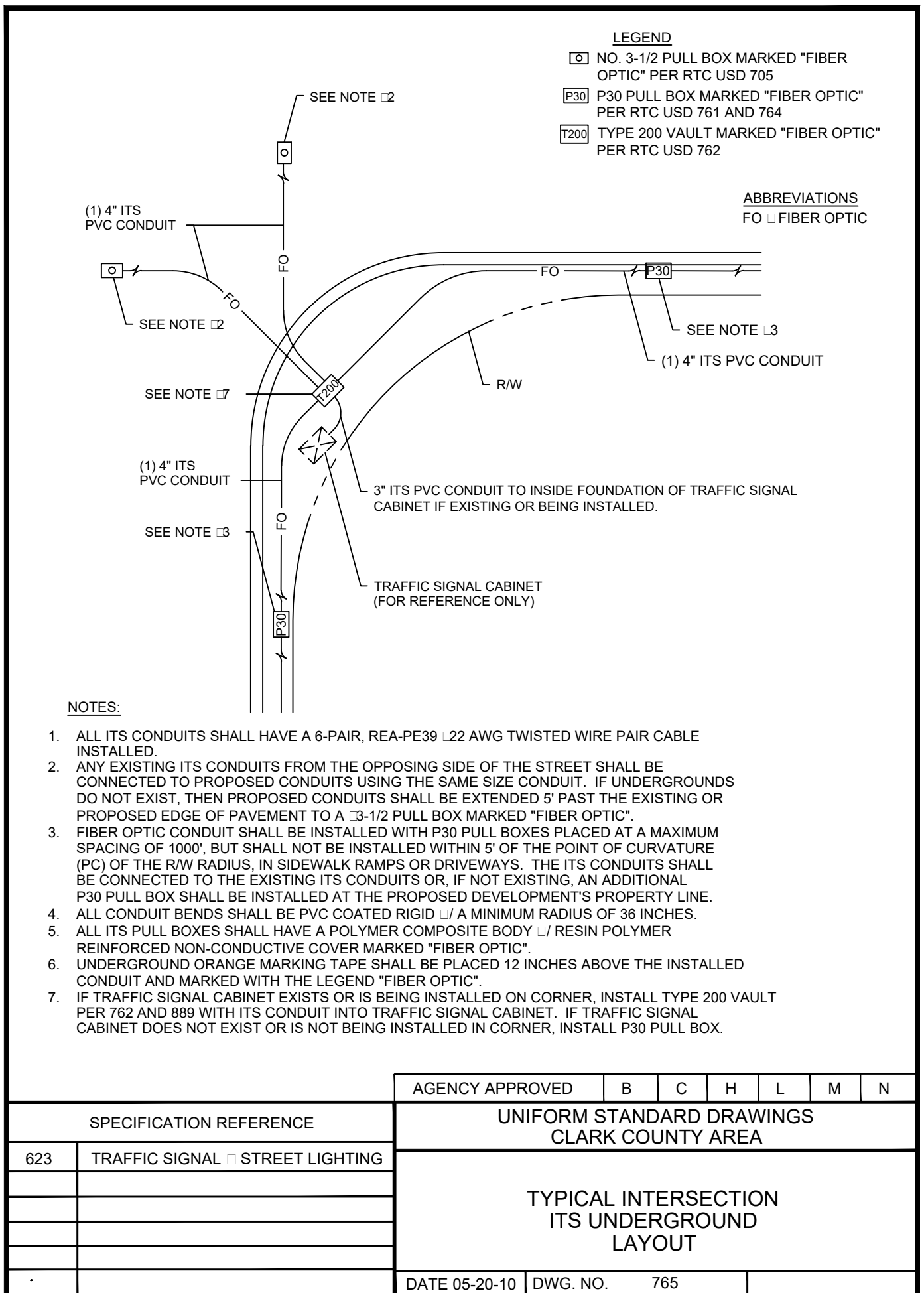
		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		ITS COMMUNICATION CONDUIT AND PULL BOX DETAIL (FOR EXISTING CURB □ GUTTER)											
		DATE	3-13-08	DWG. NO.	763	SHEET 2 OF 2							



NOTE

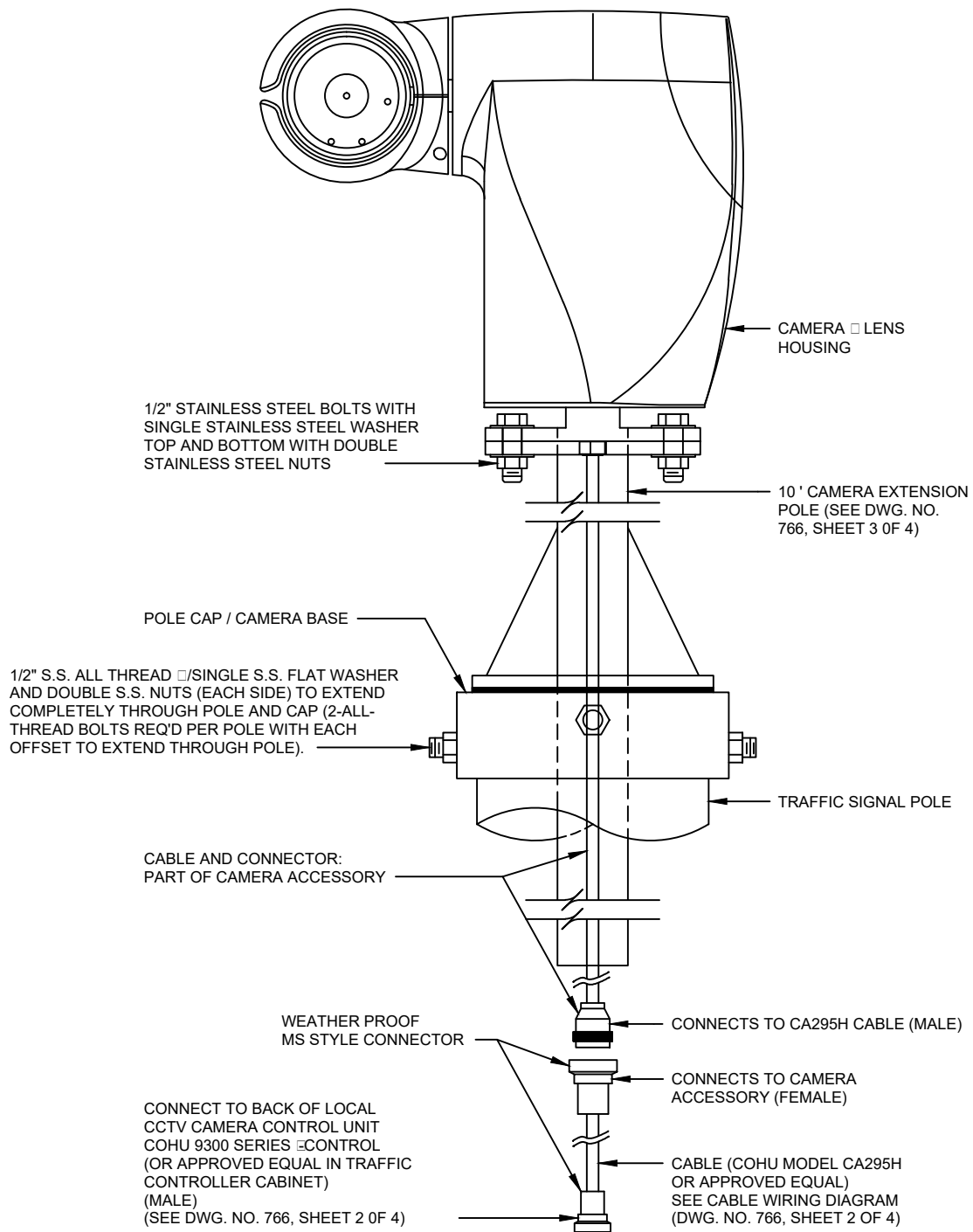
TOP OF UTILITY BOXES INSTALLED IN SIDEWALK SHALL HAVE NO VERTICAL SURFACE DISCONTINUITIES GREATER THAN 1/4" WITH ADJACENT SIDEWALK, HAVE NO GAPS GREATER THAN 1/2", REGARDLESS OF CONSTRUCTION TOLERANCES, AND BE FIRM, STABLE, AND SLIP RESISTANT.

		AGENCY APPROVED							
		B	C	H	L	M	N	R	
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS							
		CLARK COUNTY AREA							
		ITS COMMUNICATION CONDUIT							
		AND PULL BOX DETAIL							
		INSTALLED UNDER NEW SIDEWALK							
		DATE 12-10-20		DWG. NO. 764					



CCTV CAMERA

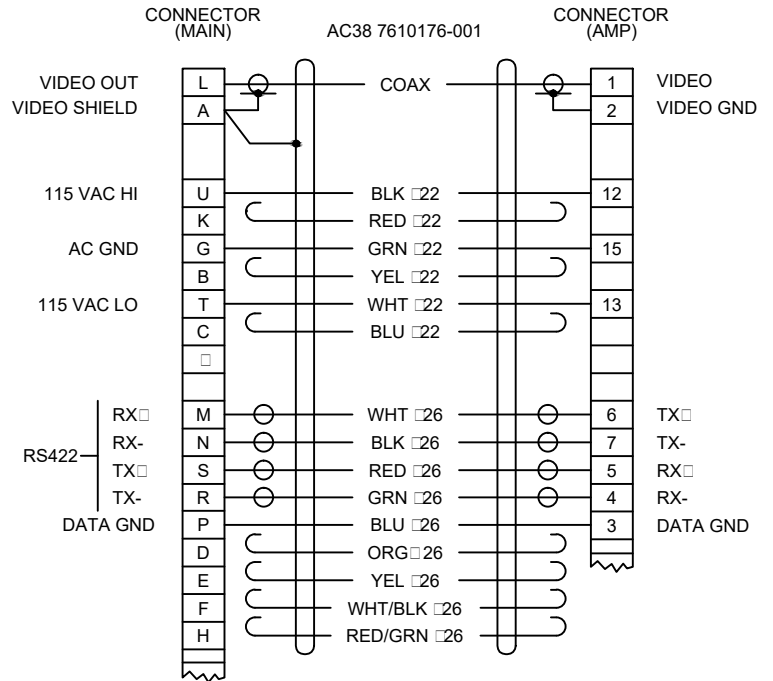
COHU 3965 - 4101
(OR APPROVED EQUAL)



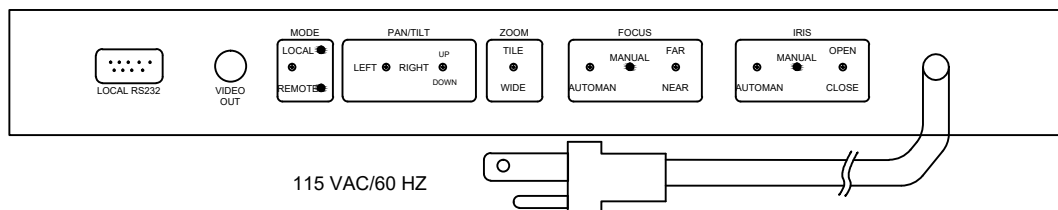
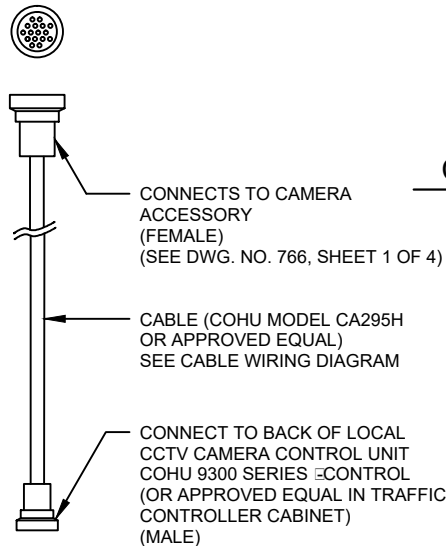
SPECIFICATION REFERENCE		AGENCY APPROVED						
685	VIDEO ENCODER	B						
686	VIDEO ENCODER	C						
687	CCTV FIELD EQUIPMENT	H						
		L						
		M						
		N						
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
		CLOSED CIRCUIT TELEVISION (CCTV) CAMERA						
		DATE	04-08-10	DWG. NO.	766	SHEET	1 OF 4	

NOTE:

1. IF PULLING CCTV CABLE IN EXISTING SIGNAL CONDUIT, AGENCY APPROVAL REQUIRED FOR METHOD OF INSTALLATION.



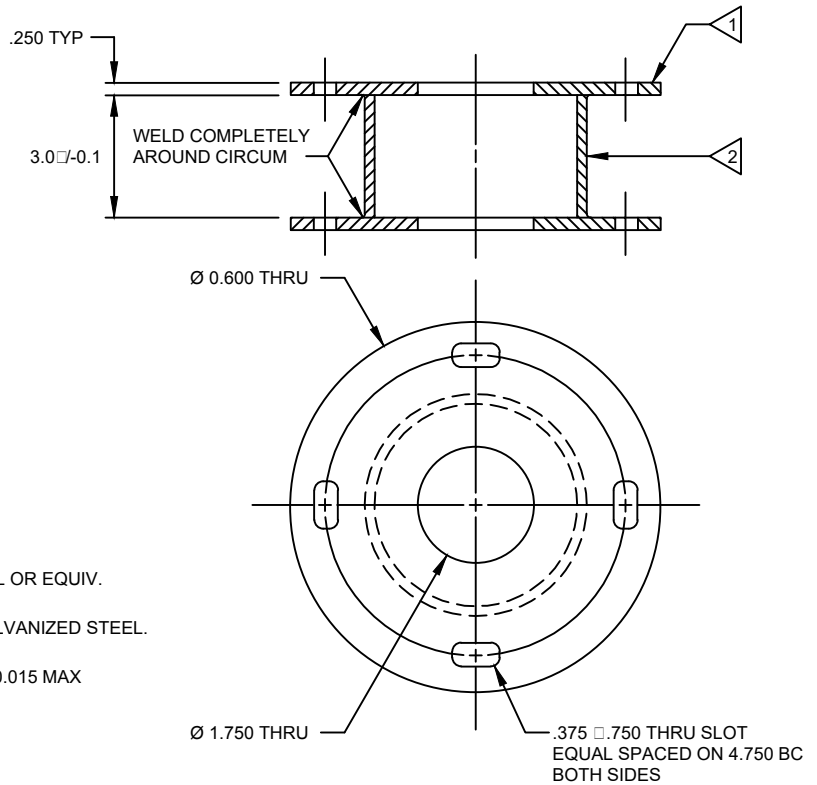
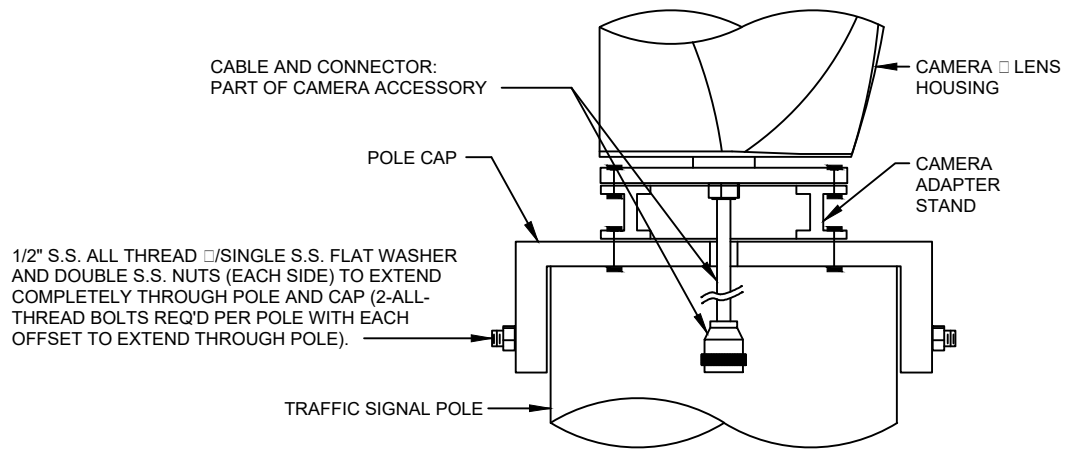
**CCTV CAMERA
CA295H CABLE WIRING DIAGRAM**



**LOCAL CCTV CAMERA CONTROL UNIT
COHU 9300 SERIES CONTROL
(OR APPROVED EQUAL)
(IN TRAFFIC CONTROLLER CABINET)**

SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
685	VIDEO ENCODER	CLOSED CIRCUIT TELEVISION CAMERA CONTROL UNIT AND CABLE WIRING DIGRAM						
686	VIDEO ENCODER							
687	CCTV FIELD EQUIPMENT							
		DATE	04-08-10	DWG. NO.	766	SHEET	2 OF 4	

CAMERA ADAPTER STAND (REQUIRED FOR POLE CAP MOUNTING)



- ▶ MAT'L (FLANGE): 1018 STEEL OR EQUIV.
- ▶ MAT'L (TUBE): Ø 3.5 X 1/8 WALL 1018 STEEL OR EQUIV.
- 3. ALL POLE AND CAP MATERIALS TO BE GALVANIZED STEEL.
- 4. REMOVE ALL BURRS AND SHARP EDGES 0.015 MAX

NOTE:

CAMERA STAND TO BE USED ONLY TO AVOID CONFLICT WITH OVERHEAD POWER LINES. AGENCY APPROVAL REQUIRED.

AGENCY APPROVED B C H L M N

SPECIFICATION REFERENCE

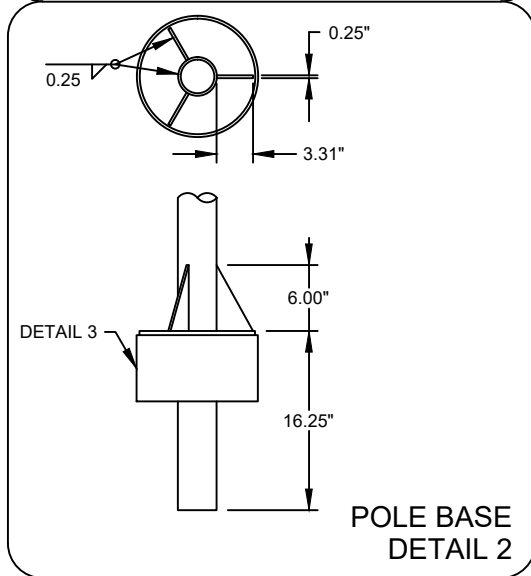
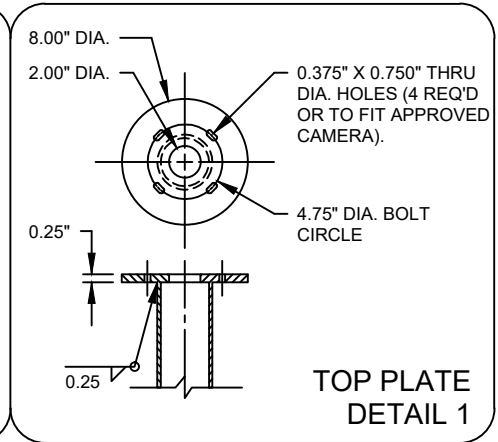
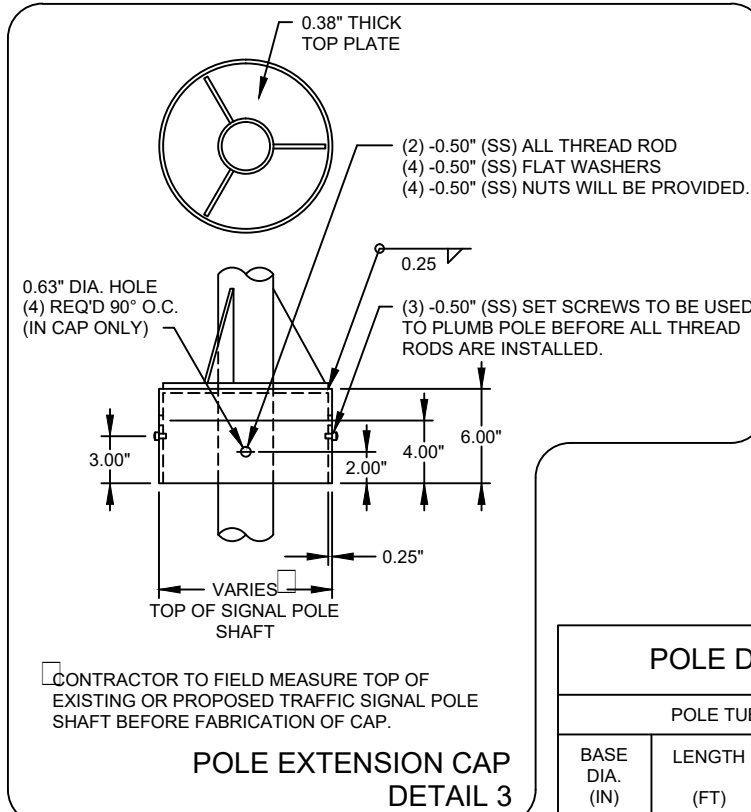
685	VIDEO ENCODER
686	VIDEO ENCODER
687	CCTV FIELD EQUIPMENT

UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA

CLOSED CIRCUIT TELEVISION CAMERA ADAPTOR STAND

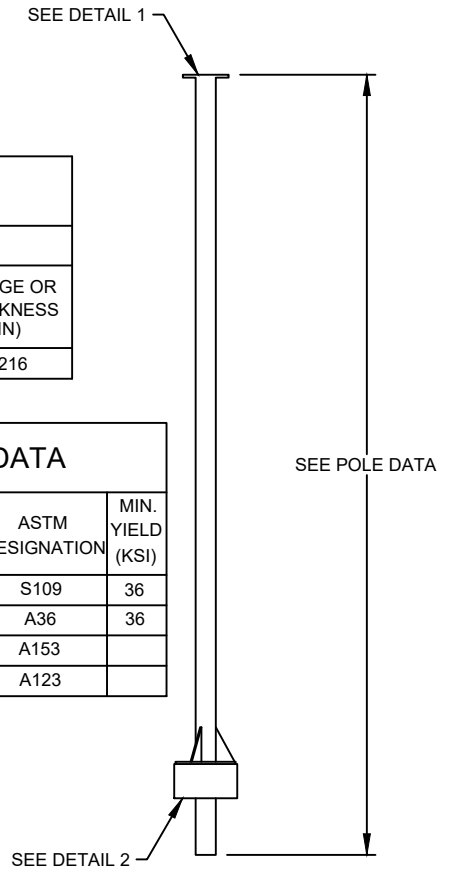
DATE 04-08-10 DWG. NO. 766 SHEET 3 OF 4

CAMERA EXTENSION POLE (REQUIRED FOR POLE CAP MOUNTING)

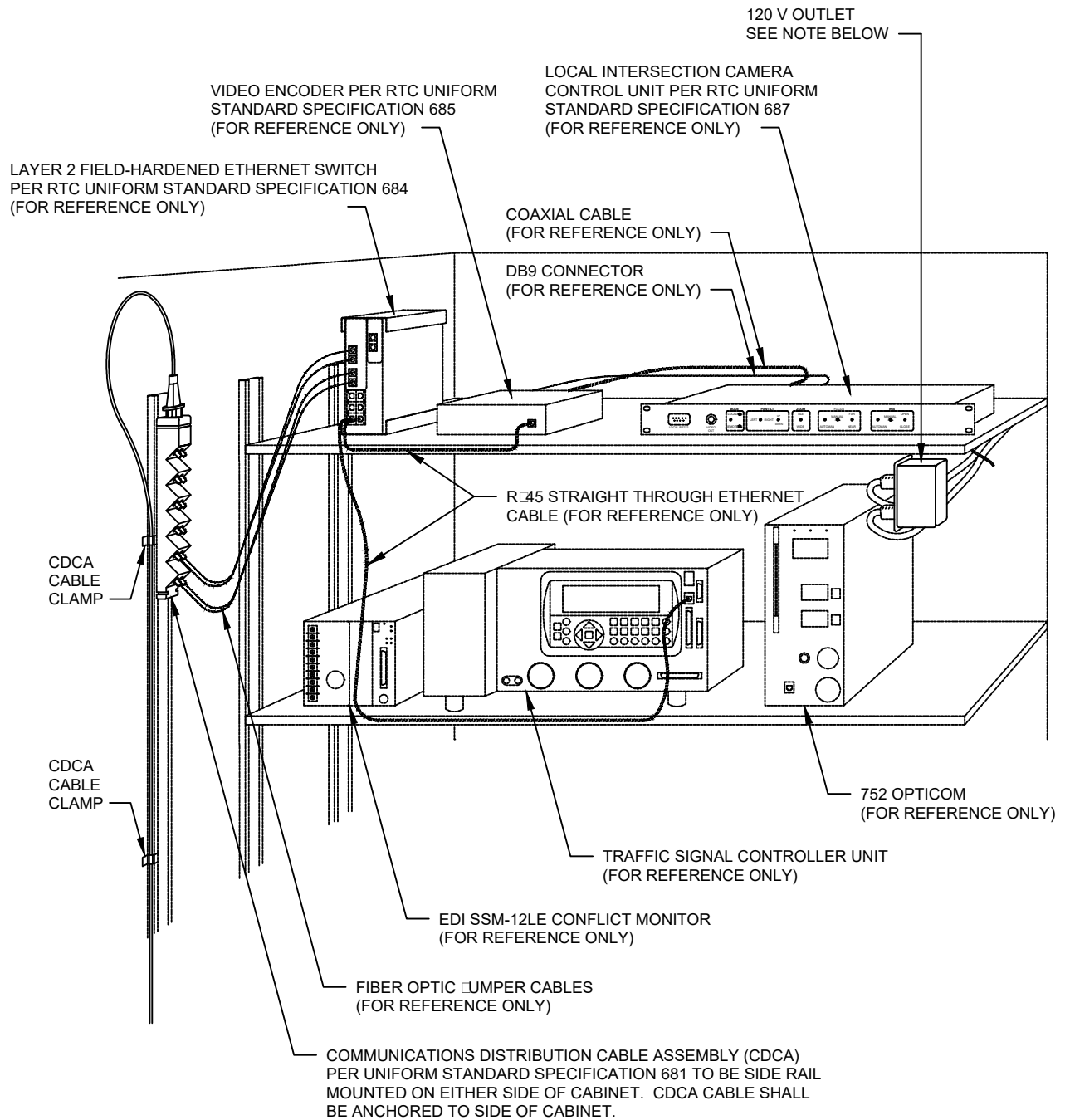


POLE DATA		
POLE TUBE		
BASE DIA. (IN)	LENGTH (FT)	GAUGE OR THICKNESS (IN)
3.50	11.35	0.216

MATERIAL DATA		
COMPONENT	ASTM DESIGNATION	MIN. YIELD (KSI)
POLE TUBE	S109	36
PLATES	A36	36
GALVANIZING - HARDWARE	A153	
GALVANIZING - STRUCTURE	A123	



AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
685	VIDEO ENCODER	CLOSED CIRCUIT TELEVISION CAMERA EXTENSION POLE					
686	VIDEO ENCODER						
687	CCTV FIELD EQUIPMENT						
DATE 04-08-10		DWG. NO. 766		SHEET		4 OF 4	

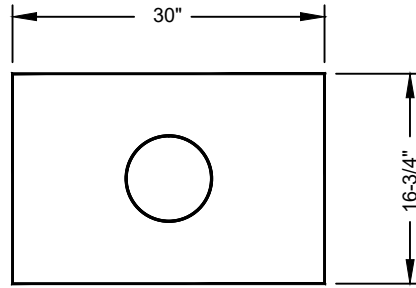


NOTE:

AN ADDITIONAL 120V OUTLET TO BE INSTALLED ON SIDE RAIL, NEAR TOP, FOR ITS EQUIPMENT ON EITHER SIDE OF CABINET. LOCATION TO BE APPROVED BY AGENCY ENGINEER BEFORE INSTALLATION. MAXIMUM OF FOUR OUTLETS PER CABINET.

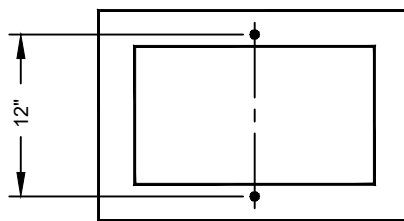
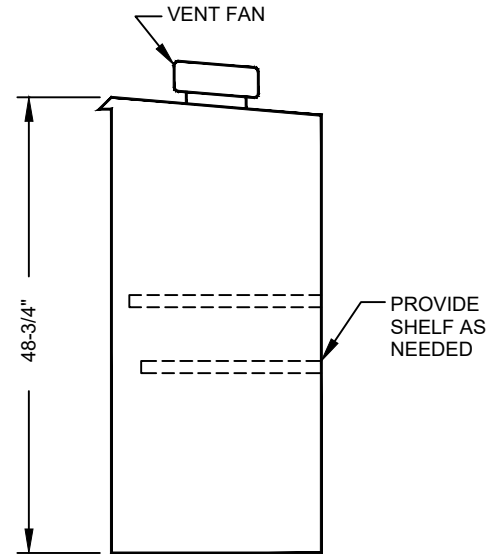
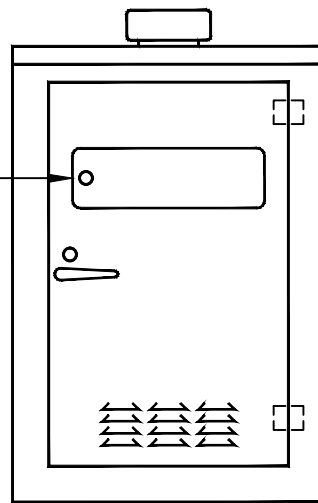
SPECIFICATION REFERENCE		AGENCY APPROVED						
		B	C	H	L	M	N	
681	FIBER OPTIC SPLICE AND	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
	DISTRIBUTION EQUIPMENT							
		COMMUNICATION DISTRIBUTION CABLE ASSEMBLY (CDCA) IN CABINET						
		DATE 04-8-10		DWG. NO. 767				

MOTOR: 1/125 HP-
3000 RPM NEMA CLASS
B INS. 0.65 AMPS AT
115 VAC.



VENT FAN SPECIFICATION:
134 C.F.M. RATING AT .160"
OF WATER STATIC PRESSURE.

POLICE
PANEL



PLAN AT BASE

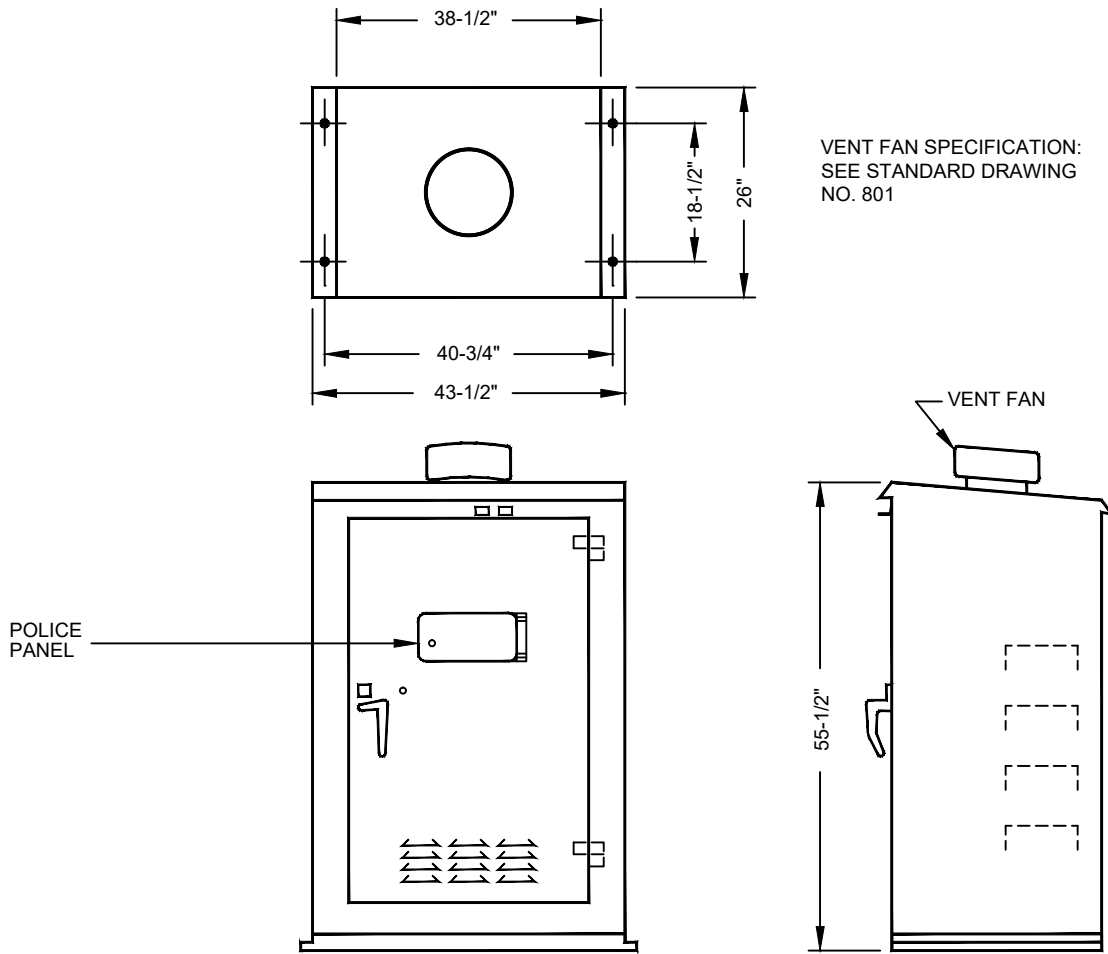
"M" CABINET

NOTES:

1. MATERIAL - 14 GA. SHEET STEEL, OR ALUMINUM EQUIVALENT.
2. PAINT OUTSIDE TWO COATS AND INSIDE TWO COATS WHITE ENAMEL OR AS APPROPRIATE.
3. DOOR SHALL LOCK AT THREE POINTS.
4. FOR FOUNDATION DETAILS AND ANCHOR BOLT LOCATION SEE DRAWING NO. 724.
5. INCLUDE 3/4" □ 18" □ 3" HOT-DIP GALVANIZED ANCHOR BOLTS WITH EACH CABINET.

AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		TYPE V CABINET					
DATE	12-12-96	DWG. NO.	801				

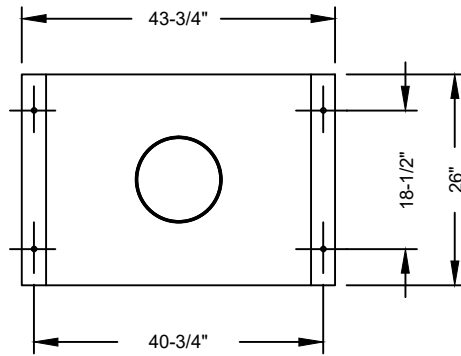
Effective 12/10/2020 to 06/09/2021



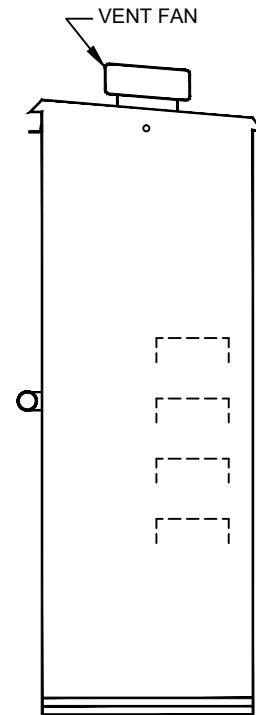
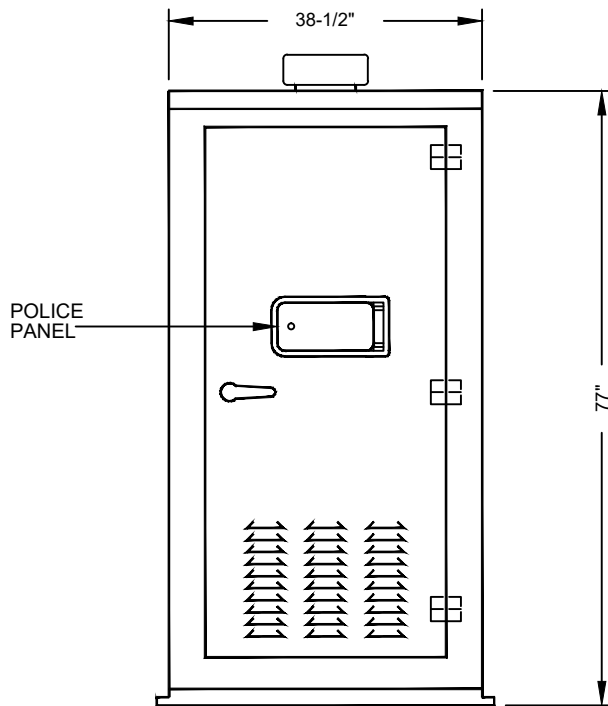
"P" CABINET

- NOTES:
1. MATERIAL - 14 GA. SHEET STEEL, OR ALUMINUM EQUIVALENT.
 2. PAINT OUTSIDE TWO COATS AND INSIDE TWO COATS WHITE ENAMEL OR AS APPROPRIATE.
 3. SHELVES SHALL BE REMOVABLE AND ADJUSTABLE FOR VERTICAL SPACING.
 4. DOOR SHALL LOCK AT THREE POINTS.
 5. FOR FOUNDATION DETAILS AND ANCHOR BOLT LOCATION SEE DRAWING NO. 725.
 6. INCLUDE 3/4" $\square$ 18" $\square$ 3" HOT-DIP GALVANIZED ANCHOR BOLTS WITH EACH CABINET.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		TYPE VI CABINET											
		DATE 12-12-96		DWG. NO.		802							



VENT FAN SPECIFICATION:
SEE STANDARD DRAWING
NO. 801

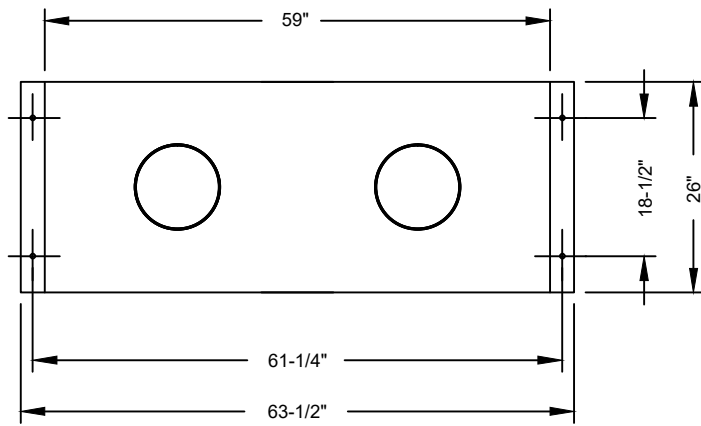


"R" CABINET

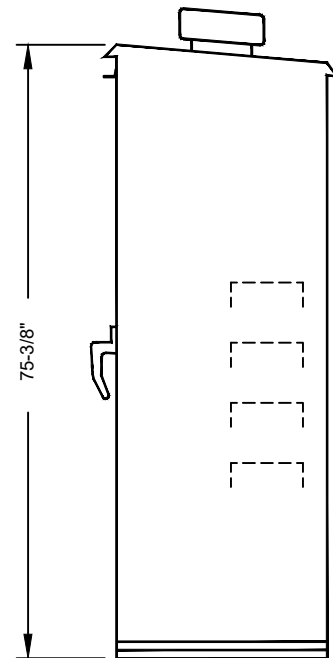
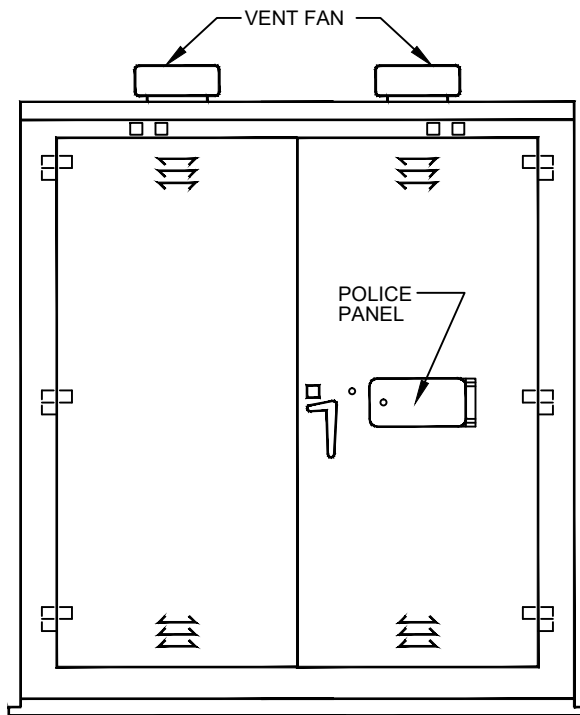
NOTES:

1. MATERIAL □ 14 GA. SHEET STEEL,
OR ALUMINUM EQUIVALENT.
2. PAINT OUTSIDE TWO COATS AND INSIDE
TWO COATS WHITE ENAMEL OR AS
APPROPRIATE.
3. FOR FOUNDATION DETAILS AND ANCHOR
BOLT LOCATION SEE DRAWING NO. 725.
4. INCLUDE 3/4" □ 18" □ 3" HOT-DIP GALVANIZED
ANCHOR BOLTS WITH EACH CABINET.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		TYPE VIII CABINET											
		DATE 12-12-96			DWG. NO. 803								



VENT FAN SPECIFICATION:
SEE STANDARD DRAWING
NO. 801



"RR" CABINET

NOTES:

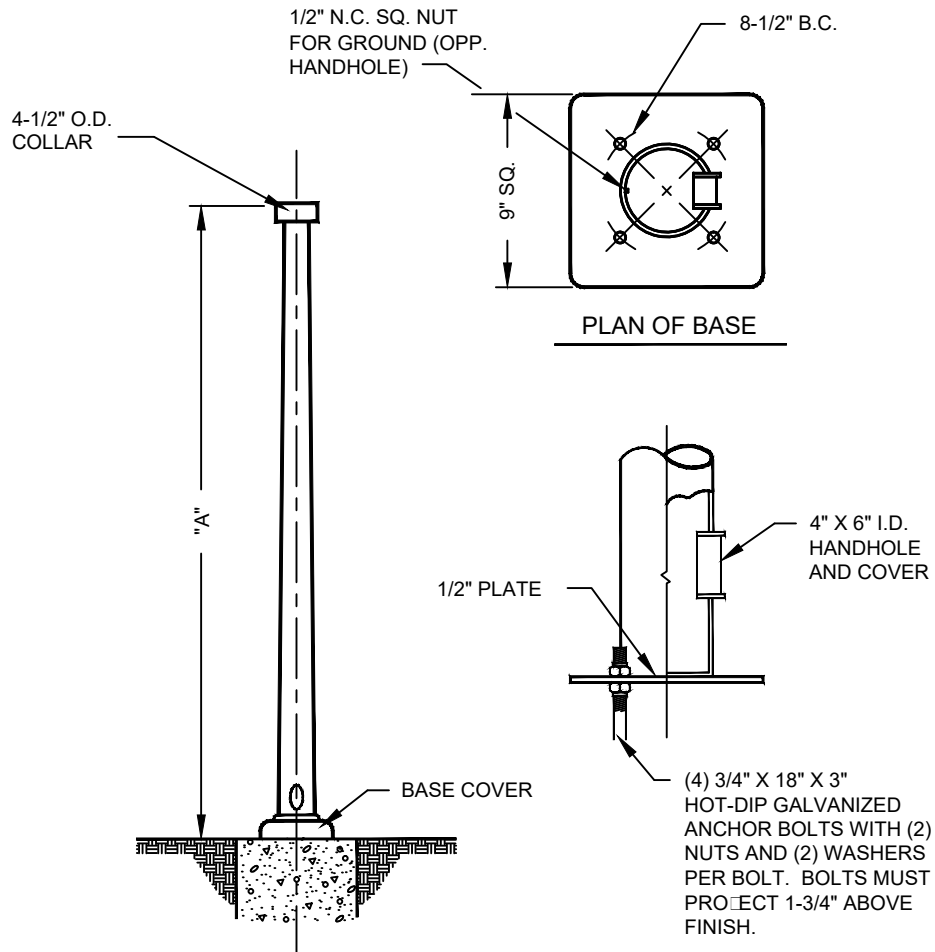
1. MATERIAL - 14 GA. SHEET STEEL,
OR ALUMINUM EQUIVALENT.
2. PAINT OUTSIDE TWO COATS AND INSIDE
TWO COATS WHITE ENAMEL OR AS
APPROPRIATE.
3. FOUNDATION DETAILS SHALL BE SPECIFIED
ON THE SIGNAL CONSTRUCTION PLANS.
4. INCLUDE 3/4" $\square$ 18" $\square$ 3" HOT-DIP GALVANIZED
ANCHOR BOLTS WITH EACH CABINET.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		TYPE IX CABINET											
		DATE 12-12-96		DWG. NO.		804							



1. FACE OF PEDESTRIAN PUSH BUTTON SHALL NOT BE LOCATED MORE THAN 10" FROM EDGE OF PUSH BUTTON CLEAR SPACE. PEDESTRIAN PUSH BUTTONS SHOULD BE MOUNTED 42" ABOVE THE FINISHED SURFACE BUT SHALL NOT BE MOUNTED MORE THAN 48" ABOVE THE FINISHED SURFACE.
2. THE FORCE REQUIRED TO ACTIVATE CONTROL SHALL BE 0.56 TO 0.81 LBF WITH A MINIMUM RELEASE FORCE OF 0.25 LBF.
3. POST SHALL BE HOT-DIP GALVANIZED BY MANUFACTURER OR PRIME PAINTED BY MANUFACTURER AND FINISH PAINTED BY CONTRACTOR PER SPECIFICATIONS AND AS REQUIRED BY THE AGENCY.

		AGENCY APPROVED		B	C	H		M	N	R
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA								
		PEDESTRIAN PUSH BUTTON POST FOR 2 1/2 INCHES POSTTOP MOUNTING								
.		DATE 12-10-20		DWG. NO. 805						



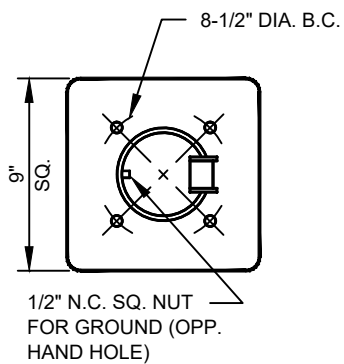
POLE TYPE	"A" NOM.	SHAFT SIZE	
1-A	10'-0"	11 GA. 5.5" X 4.1" X 10'-0"	NEAR RIGHTS □ ISL. POLES
1-B	7'-0"	11 GA. 5.5" X 4.1" X 7'-0"	PED. HEADS □ BUTTON ONLY

NOTES:

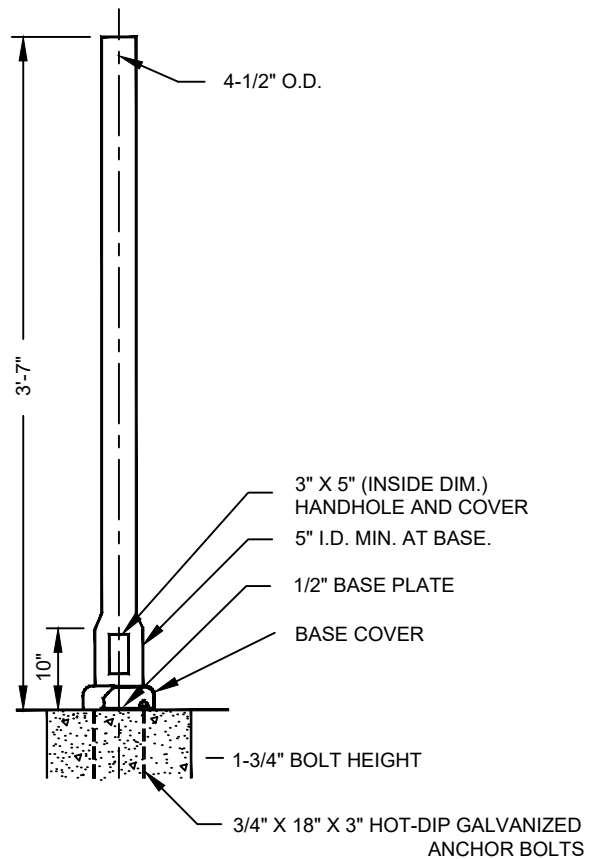
1. ALL POLES TO BE HOT-DIP GALVANIZED BY MANUFACTURER OR PRIME PAINTED BY MANUFACTURER AND FINISH PAINTED BY CONTRACTOR PER SPECIFICATIONS AND AS REQUIRED BY THE ENTITY.
2. HANDHOLE COVERS SHALL BE MOUNTED WITH TAMPER-RESISTANT SCREWS.

FOR TYPE "C" FOUNDATION SEE DRAWING NO. 717.

AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		SIGNAL STANDARD TYPE 1-A, 1-B					
DATE 07-01-17		DWG. NO.		806			



PLAN OF BASE



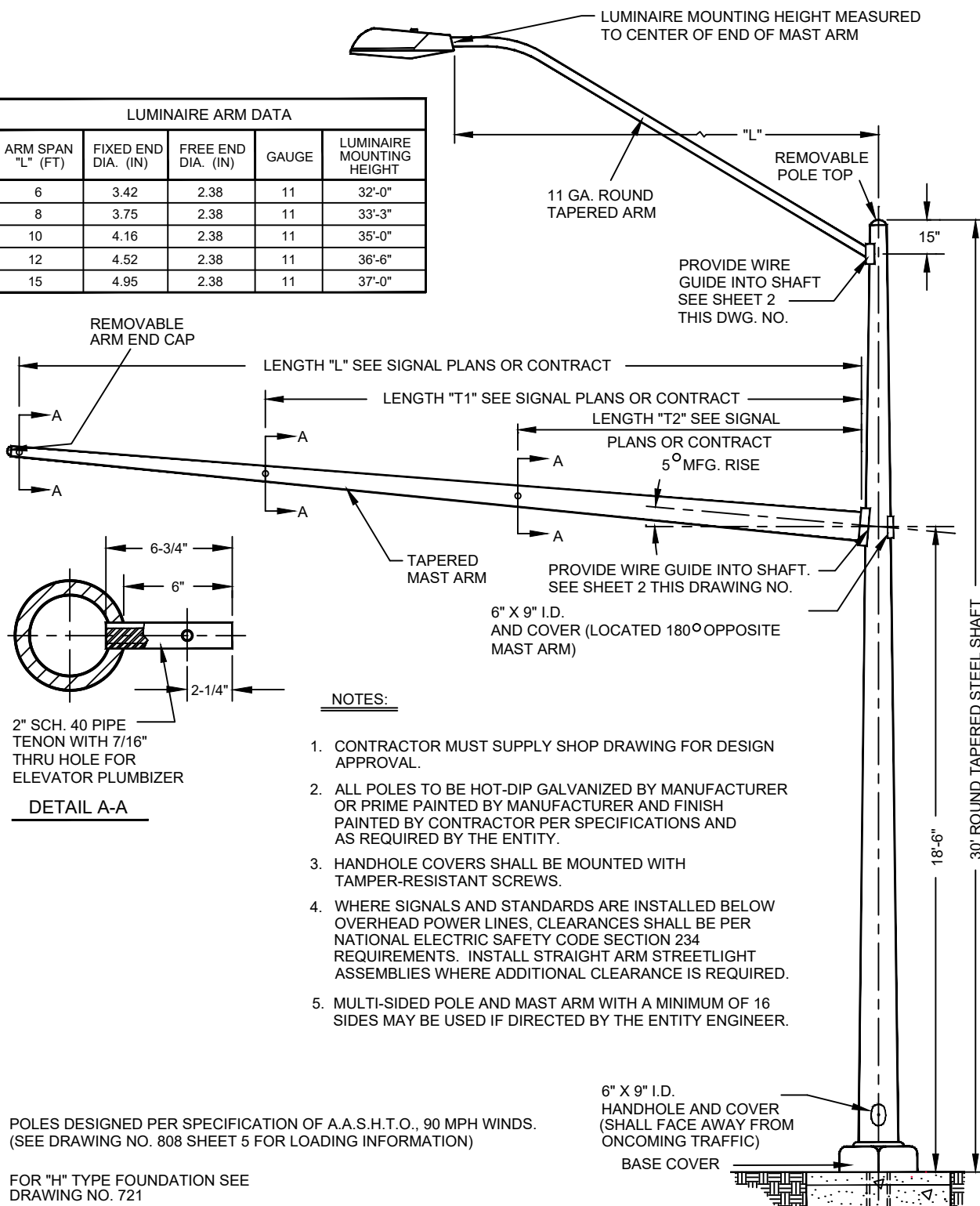
NOTES:

1. ALL POLES TO BE HOT-DIP GALVANIZED BY MANUFACTURER OR PRIME PAINTED BY MANUFACTURER AND FINISH BY PAINTED BY CONTRACTOR PER SPECIFICATIONS AND AS REQUIRED BY THE ENTITY.
2. HANDHOLE COVERS SHALL BE MOUNTED WITH TAMPER-RESISTANT SCREWS.

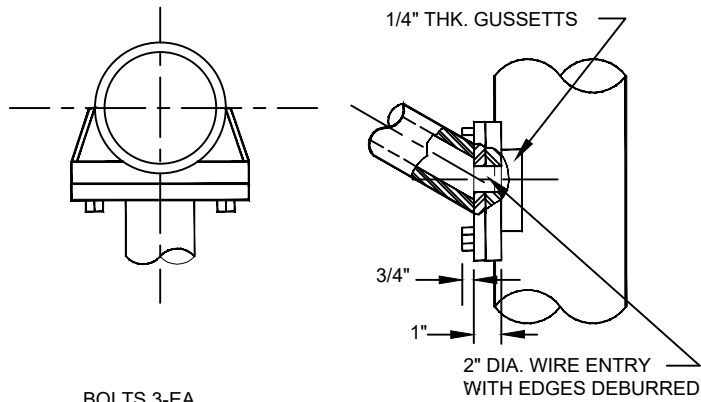
FOR TYPE "C" FOUNDATION SEE DRAWING NO.717.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		PEDESTAL FOR CONTROLLER CABINETS											
		DATE	12-12-96	DWG. NO.	807								

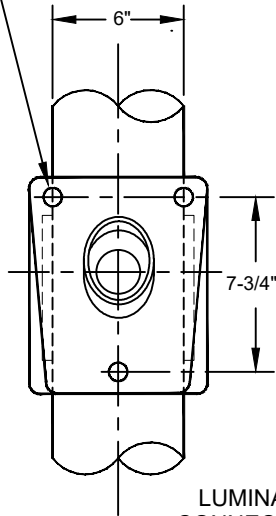
LUMINAIRE ARM DATA				
ARM SPAN "L" (FT)	FIXED END DIA. (IN)	FREE END DIA. (IN)	GAUGE	LUMINAIRE MOUNTING HEIGHT
6	3.42	2.38	11	32'-0"
8	3.75	2.38	11	33'-3"
10	4.16	2.38	11	35'-0"
12	4.52	2.38	11	36'-6"
15	4.95	2.38	11	37'-0"



AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		TYPE XX-30 FT. SIGNAL □ LUMINAIRE POLE (45 FT. OR LESS MAST ARMS)					
DATE 07-01-17		DWG. NO. 808		SHEET		1 OF 6	



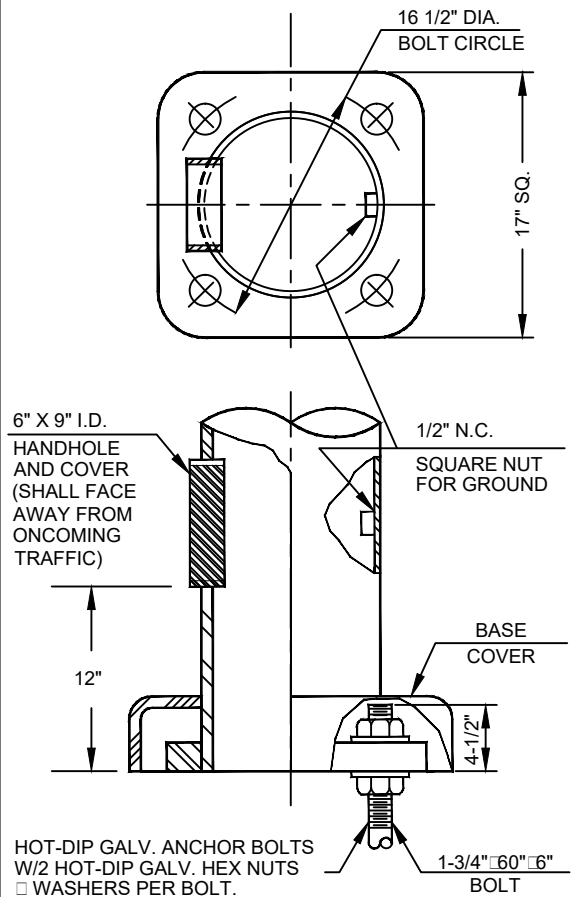
BOLTS 3-EA.
3/4" □ 1-3/4"
A325-X



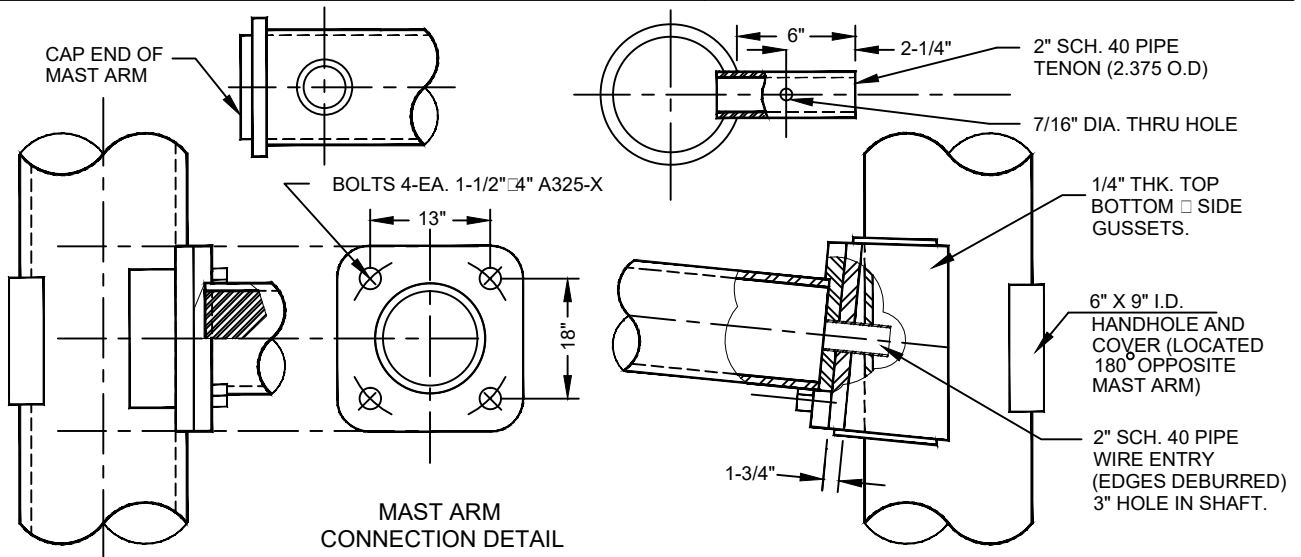
LUMINAIRE ARM
CONNECTION DETAIL

NOTES:

1. CONTRACTOR MUST SUPPLY SHOP DRAWING FOR DESIGN APPROVAL.
2. ALL POLES TO BE HOT-DIP GALVANIZED BY MANUFACTURER OR PRIME PAINTED BY MANUFACTURER AND FINISH PAINTED BY CONTRACTOR PER SPECIFICATIONS AND AS REQUIRED BY THE ENTITY.
3. HANDHOLE COVERS SHALL BE MOUNTED WITH TAMPER-RESISTANT SCREWS.
4. WHERE SIGNALS AND STANDARDS ARE INSTALLED BELOW OVERHEAD POWER LINES, CLEARANCES SHALL BE PER NATIONAL ELECTRIC SAFETY CODE SECTION 234 REQUIREMENTS. INSTALL STRAIGHT ARM STREETLIGHT ASSEMBLIES WHERE ADDITIONAL CLEARANCE IS REQUIRED.
5. MULTI-SIDED POLE AND MAST ARM WITH A MINIMUM OF 16 SIDES MAY BE USED IF DIRECTED BY THE ENTITY ENGINEER.



POLE MOUNTING DETAIL



MAST ARM
CONNECTION DETAIL

AGENCY APPROVED B C H L M N

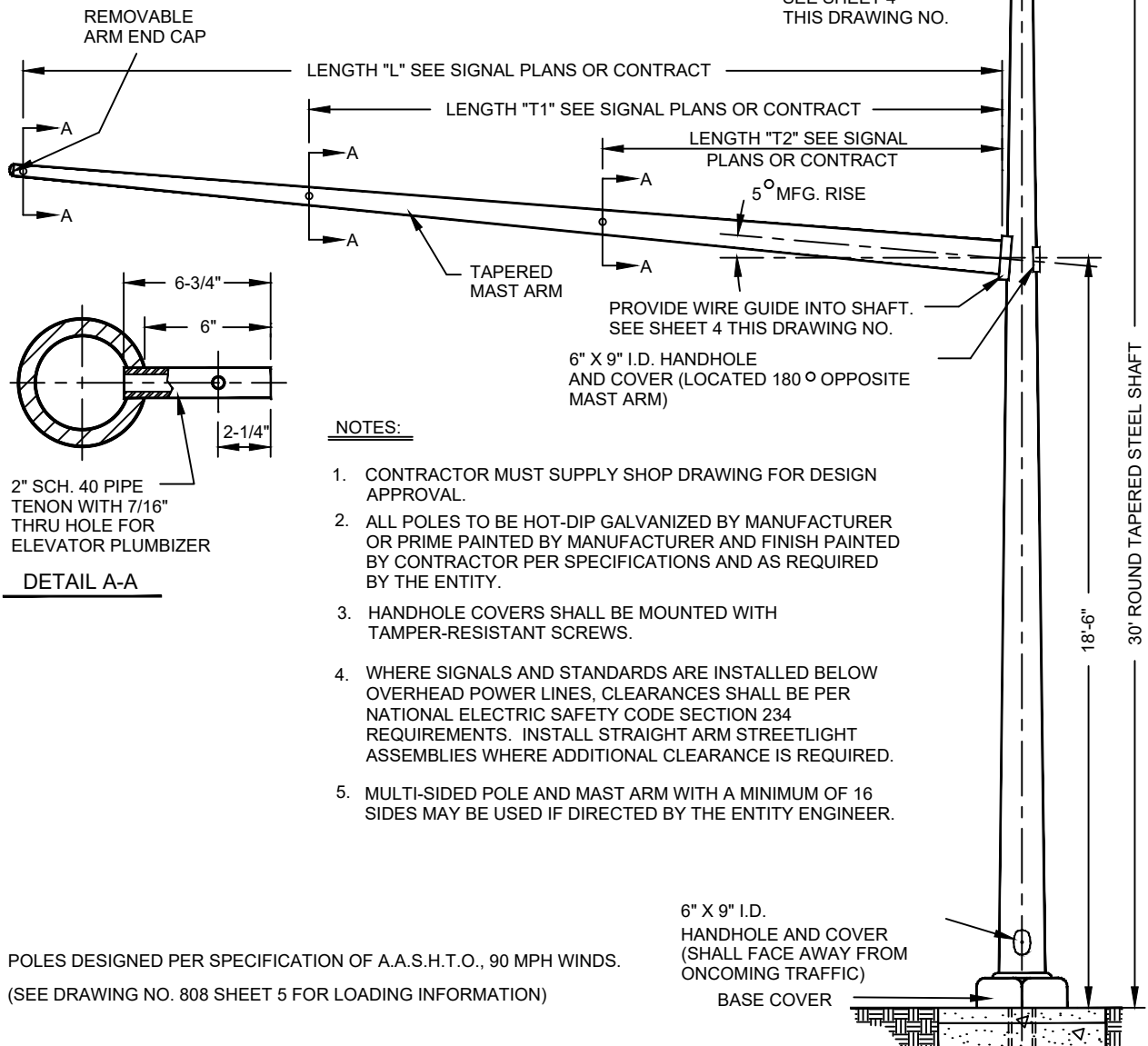
SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

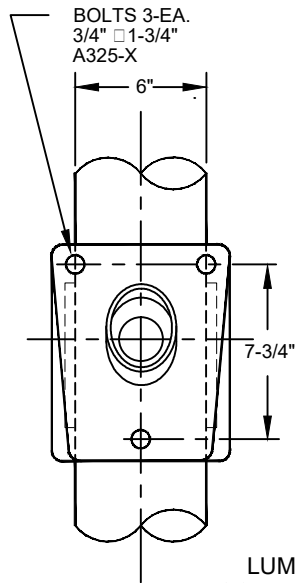
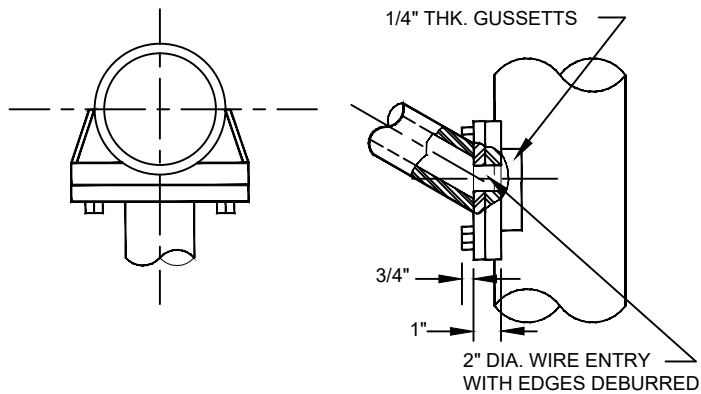
TYPE XX - 30 FT.
SIGNAL □ LUMINAIRE POLE
DETAILS

DATE 07-01-17 DWG. NO. 808 SHEET 2 OF 6

LUMINAIRE ARM DATA				
ARM SPAN "L" (FT)	FIXED END DIA. (IN)	FREE END DIA. (IN)	GAUGE	LUMINAIRE MOUNTING HEIGHT
6	3.42	2.38	11	32'-0"
8	3.75	2.38	11	33'-3"
10	4.16	2.38	11	35'-0"
12	4.52	2.38	11	36'-6"
15	4.95	2.38	11	37'-0"



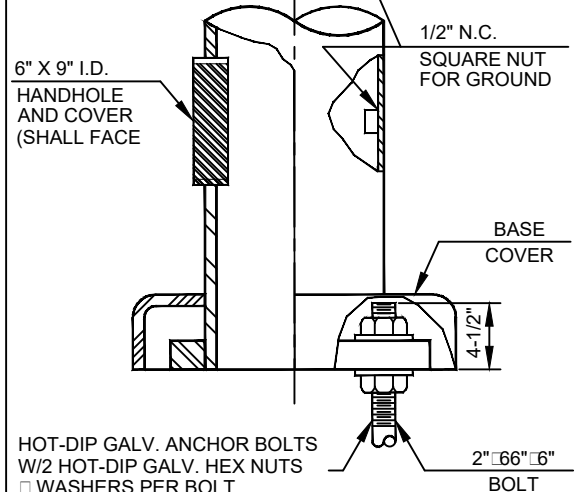
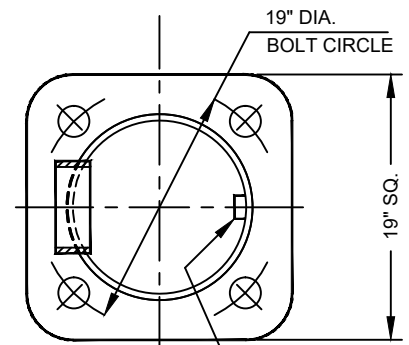
AGENCY APPROVED							B	C	H	L	M	N
SPECIFICATION REFERENCE							UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
							TYPE XX - A - 30 FT. SIGNAL □ LUMINAIRE POLE (50 FT. THRU 60 FT. MAST ARMS)					
							DATE 07-01-17	DWG. NO.	808	SHEET	3 OF 6	



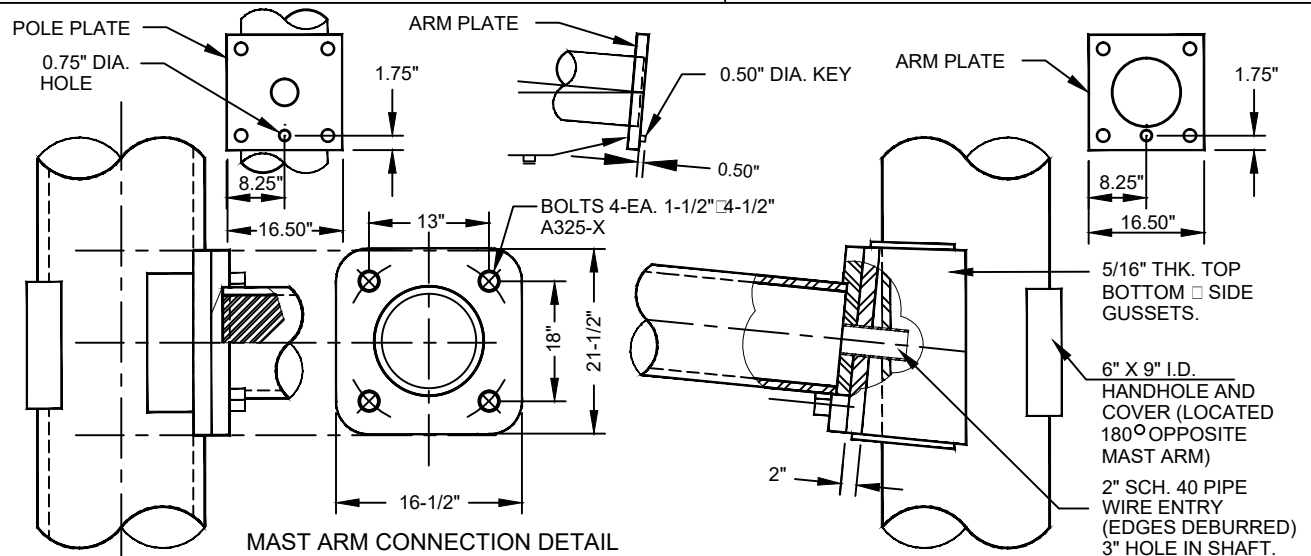
LUMINAIRE ARM
CONNECTION DETAIL

NOTES:

1. CONTRACTOR MUST SUPPLY SHOP DRAWING FOR DESIGN APPROVAL.
2. ALL POLES TO BE HOT-DIP GALVANIZED BY MANUFACTURER OR PRIME PAINTED BY MANUFACTURER AND FINISH PAINTED BY CONTRACTOR PER SPECIFICATIONS AND AS REQUIRED BY THE ENTITY.
3. HANDHOLE COVERS SHALL BE MOUNTED WITH TAMPER-RESISTANT SCREWS.
4. WHERE SIGNALS AND STANDARDS ARE INSTALLED BELOW OVERHEAD POWER LINES, CLEARANCES SHALL BE PER NATIONAL ELECTRIC SAFETY CODE SECTION 234. ADDITIONAL CLEARANCE IS REQUIRED.
5. MULTI-SIDED POLE AND MAST ARM WITH A MINIMUM OF 16 SIDES MAY BE USED IF DIRECTED BY THE ENTITY ENGINEER.



POLE MOUNTING DETAIL



MAST ARM CONNECTION DETAIL

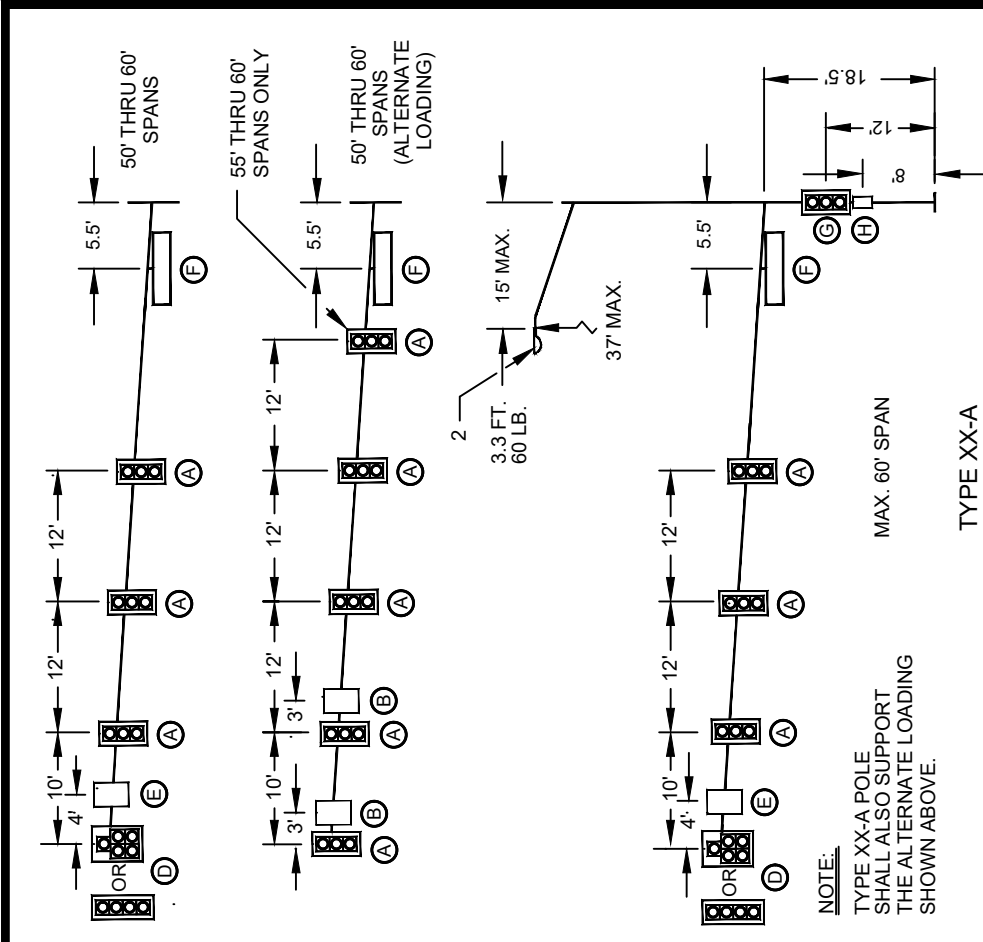
AGENCY APPROVED B C H L M N

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPE XX - A - 30 FT.
(50 FT. THRU 60 FT. MAST ARMS)
SIGNAL □ LUMINAIRE POLE DETAILS

DATE 07-01-17 DWG. NO. 808 SHEET 4 OF 6



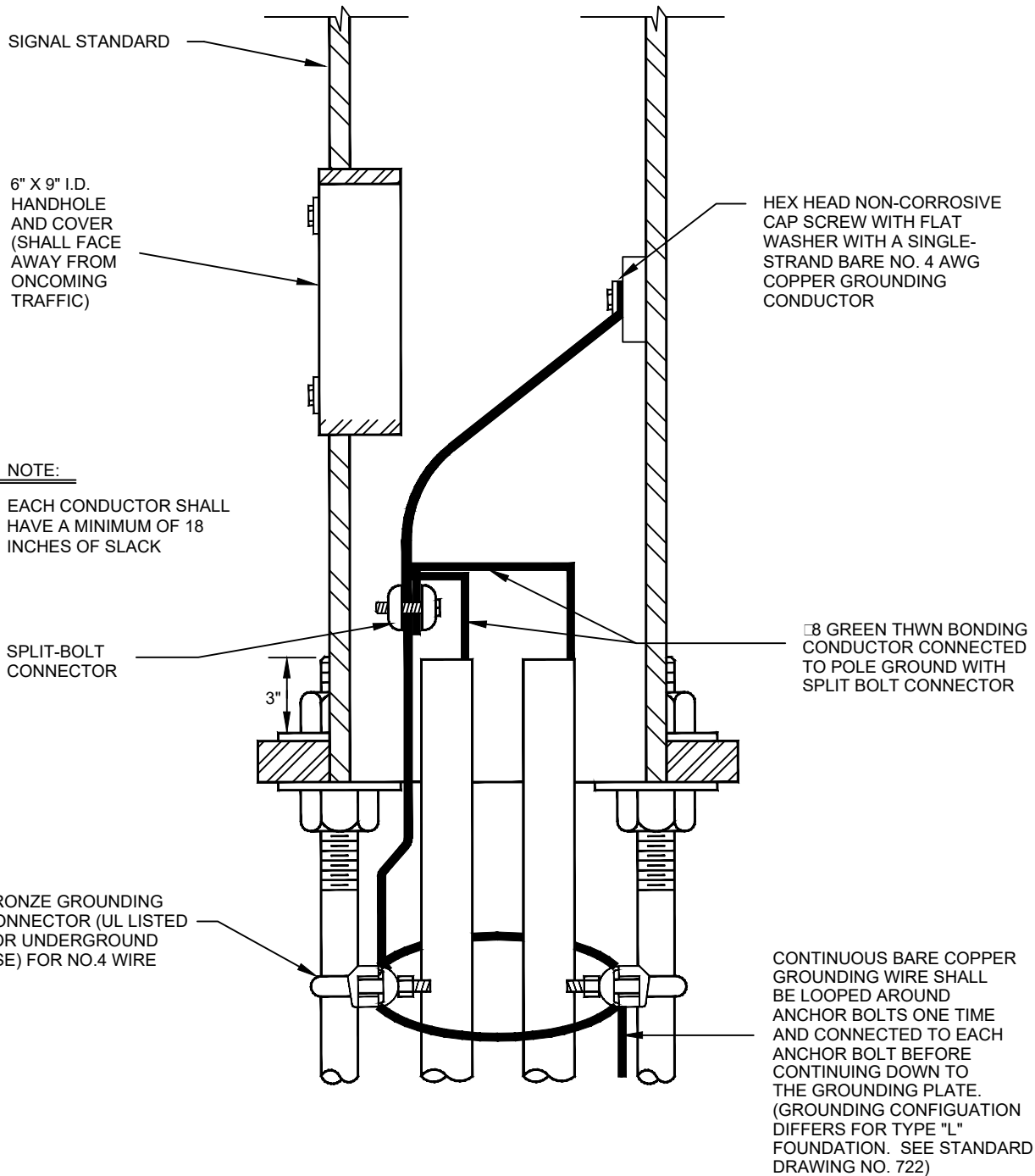
DESIGN CRITERIA:

AASHTO STANDARD SPECIFICATIONS
FOR STRUCTURAL SUPPORTS FOR HIGHWAY
SIGNS, LUMINAIRES AND TRAFFIC SIGNALS.
(FATIGUE LOADS SPECIFIED IN CHAPTER 11 NOT REQUIRED.)

MAXIMUM DESIGN MINIMUM YIELD STRENGTH
FOR TUBULAR MEMBERS SHALL BE LIMITED
TO 48,000 PSI FOR COLD WORKED
MATERIALS AND 50,000 PSI FOR NON-COLD
WORKED MATERIALS.

WIND VELOCITY:
90 MPH ISOTACH.

AGENCY APPROVED	B	C	H	L	M	N
UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
LOADING INFORMATION						
DATE 07-01-17	DWG. NO.		808	SHEET		5 OF 6



PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TRAFFIC SIGNAL POLE
GROUNDING

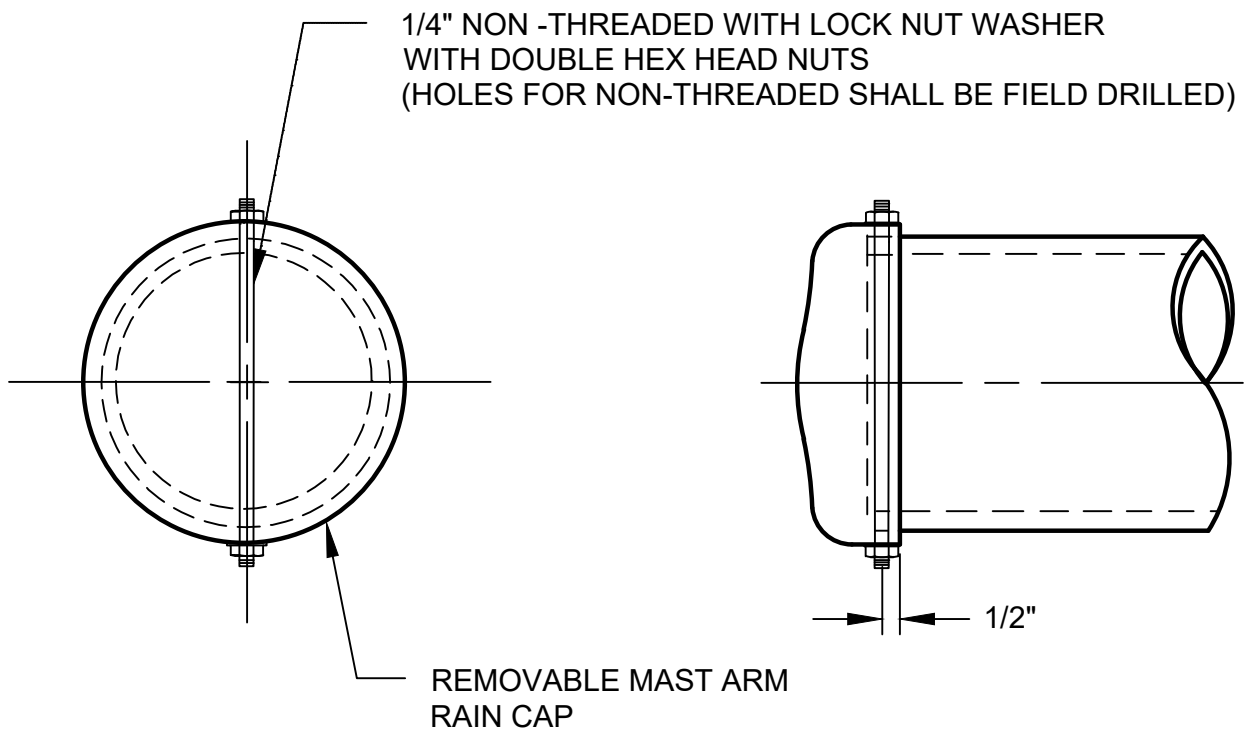
DATE 07-01-17

DWG. NO.

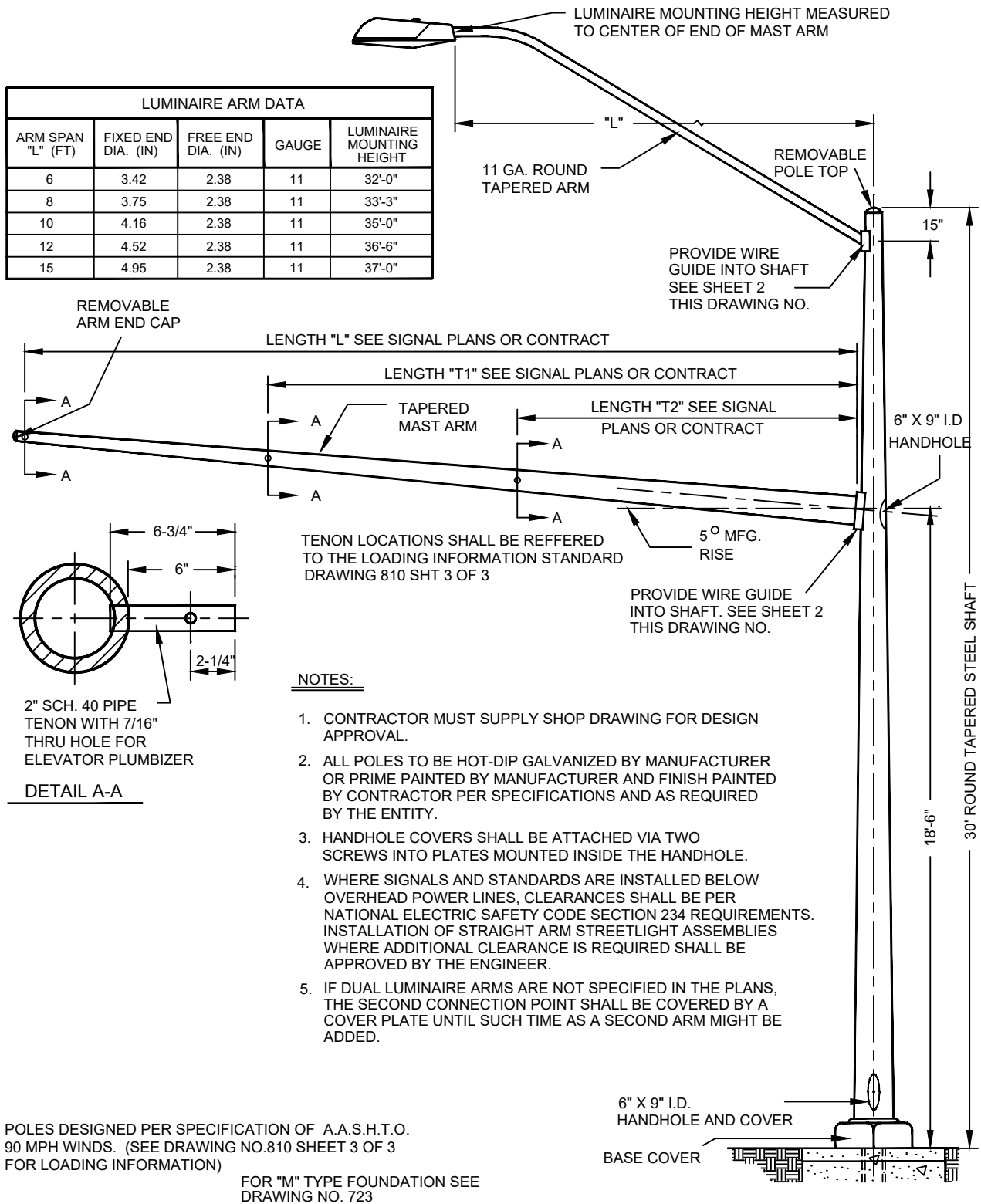
808

SHEET

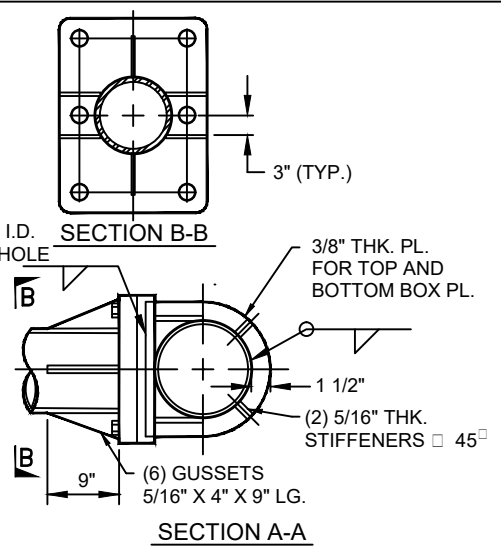
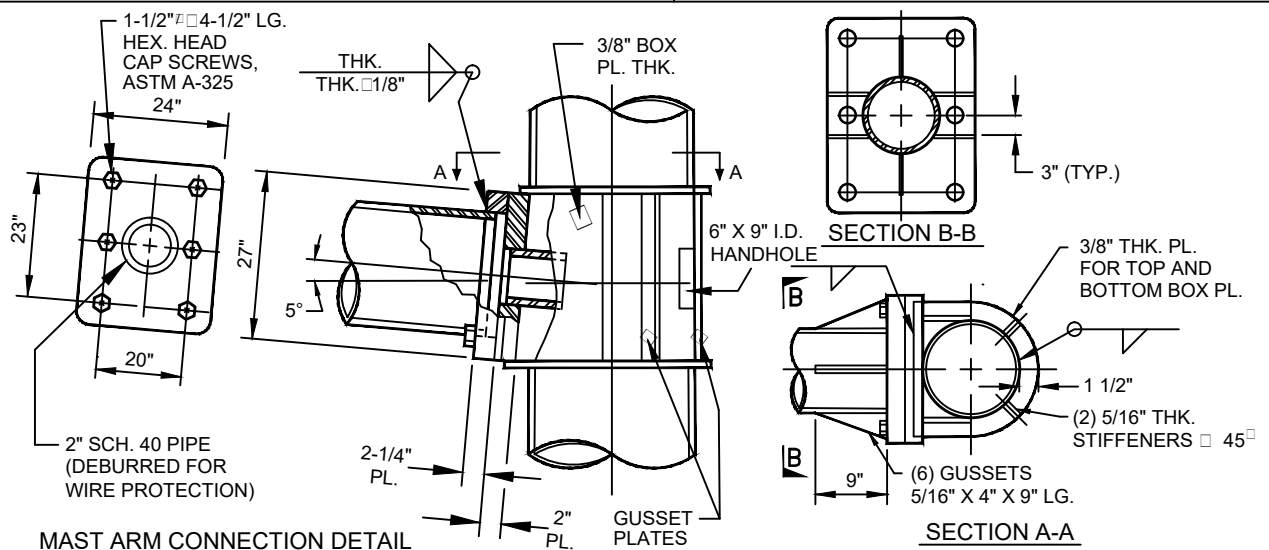
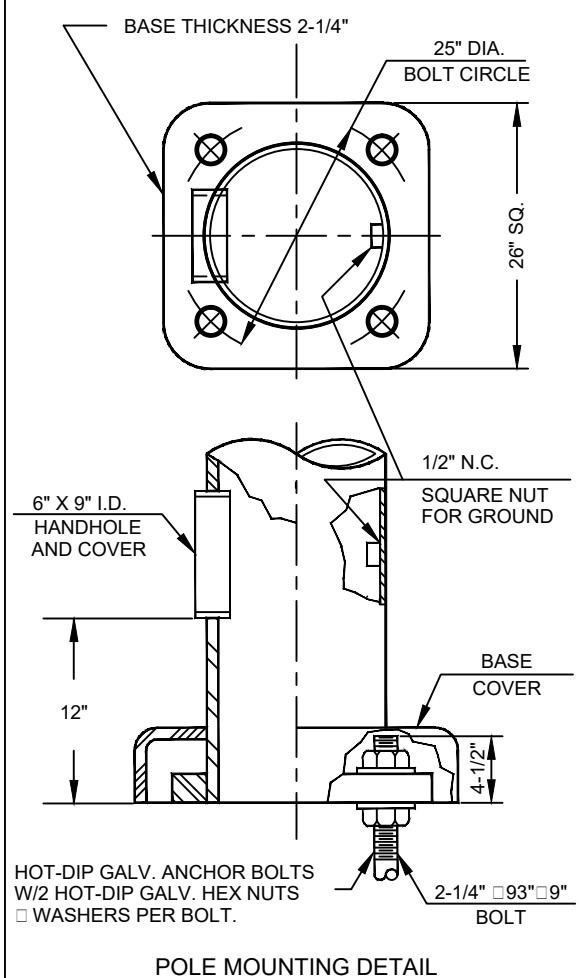
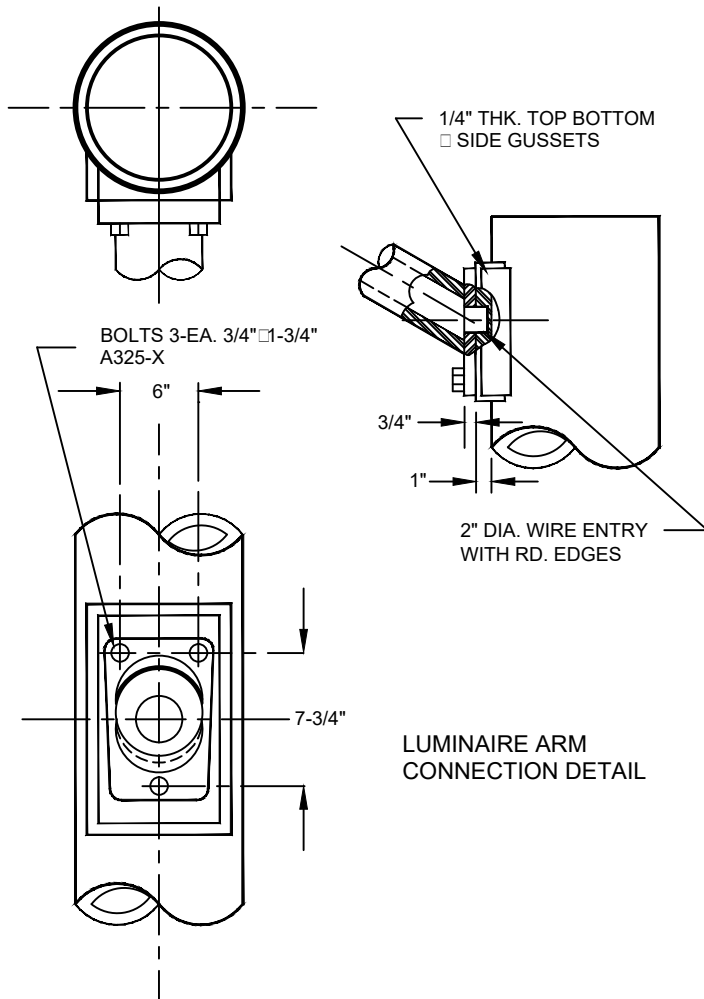
6 OF 6



		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
623	TRAFFIC SIGNALS ☐ STREET LIGHTING	REMOVABLE MAST ARM END CAP DETAIL											
		DATE 05-19-05		DWG. NO.		809							



		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
		TYPE XX - B - 30 FT. SIGNAL □ LUMINAIRE POLE (65 FT. THRU 85 FT. MAST ARMS)							
.		DATE 07-01-17	DWG. NO.	810	SHEET		1 OF 3		



AGENCY APPROVED	B	C	H	L	M	N

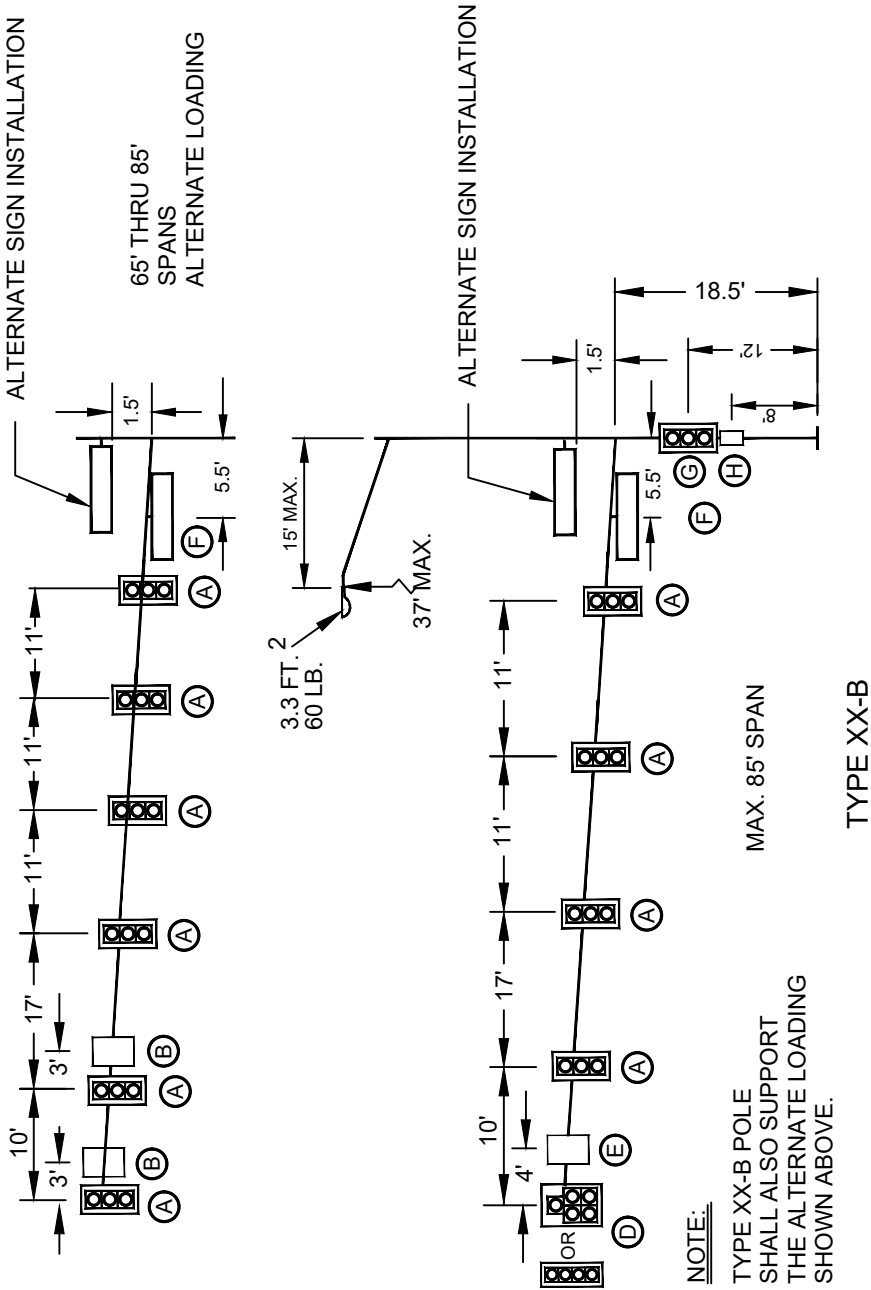
SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPE XX - B - 30 FT.
(65 FT. THRU 85 FT. MAST ARMS)
SIGNAL □ LUMINAIRE POLE DETAILS

DATE 07-01-17	DWG. NO.	810	SHEET	2 OF 3

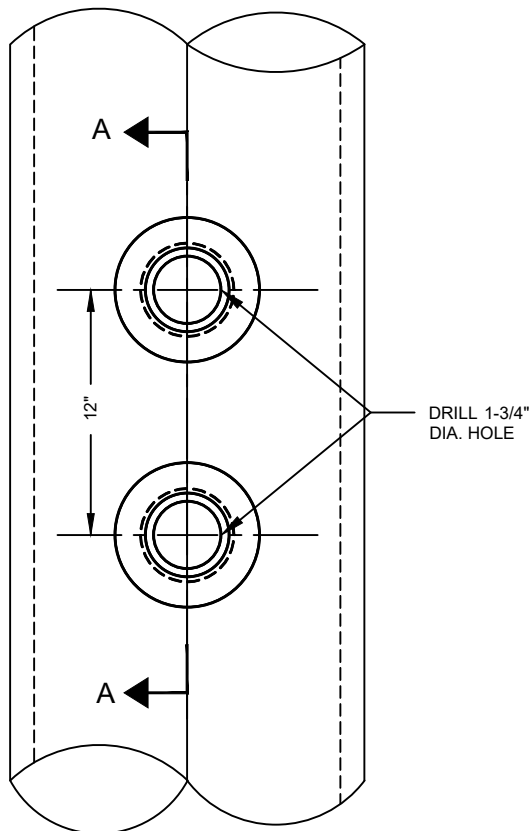
SPECIFICATION REFERENCE		AGENCY APPROVED					
		B					
		C					
		H					
		L					
		M					
		N					
UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
LOADING INFORMATION							
		DATE 07-01-17	DWG. NO.	810	SHEET	3 OF 3	



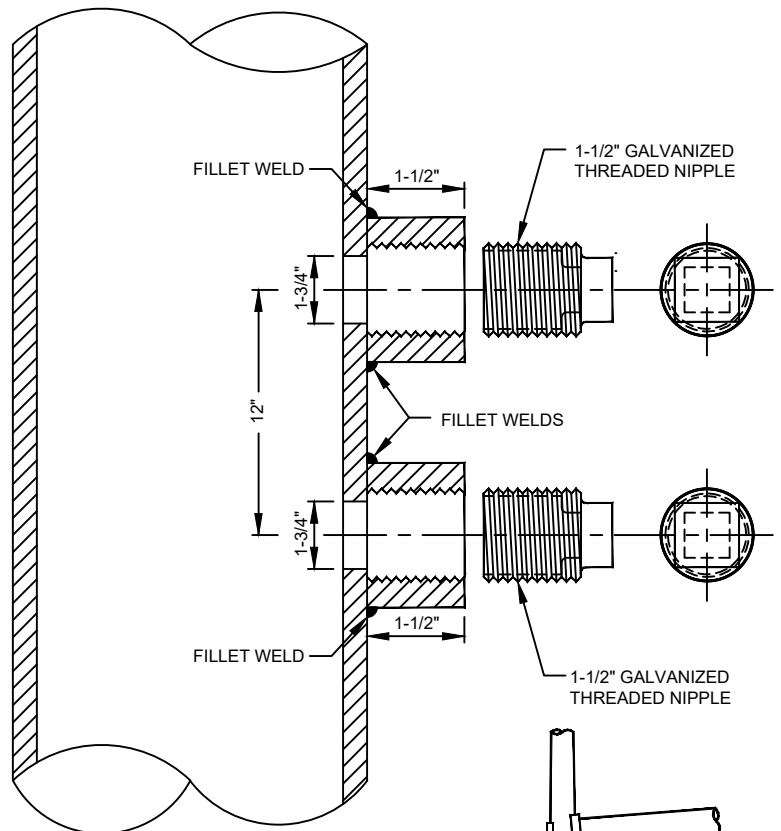
DESIGN CRITERIA:
AASHTO STANDARD SPECIFICATIONS
FOR STRUCTURAL SUPPORTS FOR HIGHWAY
SIGNS, LUMINAIRES AND TRAFFIC SIGNALS.
(FATIGUE LOADS SPECIFIED IN CHAPTER 11 NOT REQUIRED.)
DESIGN MINIMUM YIELD STRENGTH FOR
TUBULAR MEMBERS SHALL BE LIMITED
TO 48,000 PSI FOR COLD WORKED
MATERIALS AND 50,000 PSI FOR NON-COLD
WORKED MATERIALS.
WIND VELOCITY:
90 MPH ISOTACH.

DEVICE	DESCRIPTION	PROJ. AREA (FT ²)	WEIGHT (LBS)
(A) SIGNAL	12"- 3 SEC. W/ BACKPLATES (M-2)	9.80	40
(B) SIGN	R3-5 24" X 30"	5.00	15
(C) SIGN	R3-4 24" X 24"	4.00	10
(D) SIGNAL	12"- 4 OR 5 SEC. W/ BACKPLATES (M-4 OR M-5)	13.68	80
(E) SIGN	R10-12 OR R10-12F 30" X 36"	6.00	15
(F) SIGN	STREET NAME-FREE SWINGING-1.68' X 8'	13.44	100
(G) SIGNAL	DUAL-12"- 3 SEC. W/ BACKPLATES	17.34	80
(H) SIGNAL	DUAL-PEDESTRIAN	8.00	60

LOADING INFORMATION

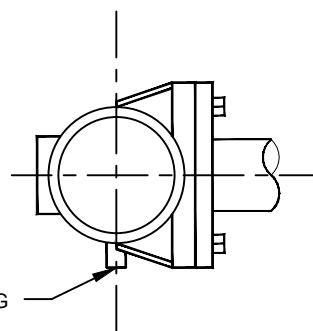


DRILLING DETAIL



NIPPLE DETAIL
SECTION A-A

PLACEMENT DETAIL
(TOP VIEW)

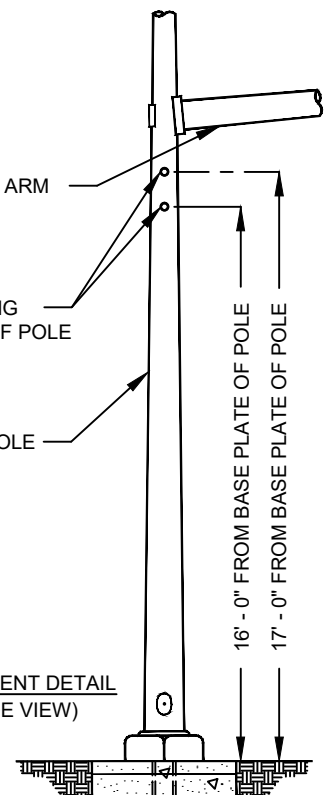


RED LIGHT RUNNING
INDICATOR

INSTALL RED LIGHT RUNNING
INDICATORS 90 DEGREES OF POLE
MAST ARM

TRAFFIC SIGNAL POLE

PLACEMENT DETAIL
(SIDE VIEW)



NOTES:

1. CONTRACTOR TO INSTALL RED LIGHT RUNNING INDICATORS, MCAIN MODELS M61385 (RED) □ M61448 (BLUE), OR APPROVED EQUAL AS INDICATED BY THE TRAFFIC ENGINEER.
2. RED (THRU) INDICATOR SHALL BE MOUNTED 16' ABOVE POLE BASE PLATE AND BLUE (LEFT) INDICATOR SHALL BE MOUNTED 17' ABOVE POLE BASE PLATE AND SHALL FACE AWAY FROM ONCOMING TRAFFIC.
3. RED LIGHT RUNNING INDICATOR L.E.D. HOUSING SHALL BE FIELD ADJUSTED. PLEASE CONTACT THE TRAFFIC ENGINEER FOR COORDINATION.
4. CONTRACTOR SHALL WIRE INDICATORS DIRECTLY TO BUSS IN "□" BOX PER CALL OUT PHASING IN POLE SCHEDULE ON TRAFFIC SIGNAL PLANS.

AGENCY APPROVED

C

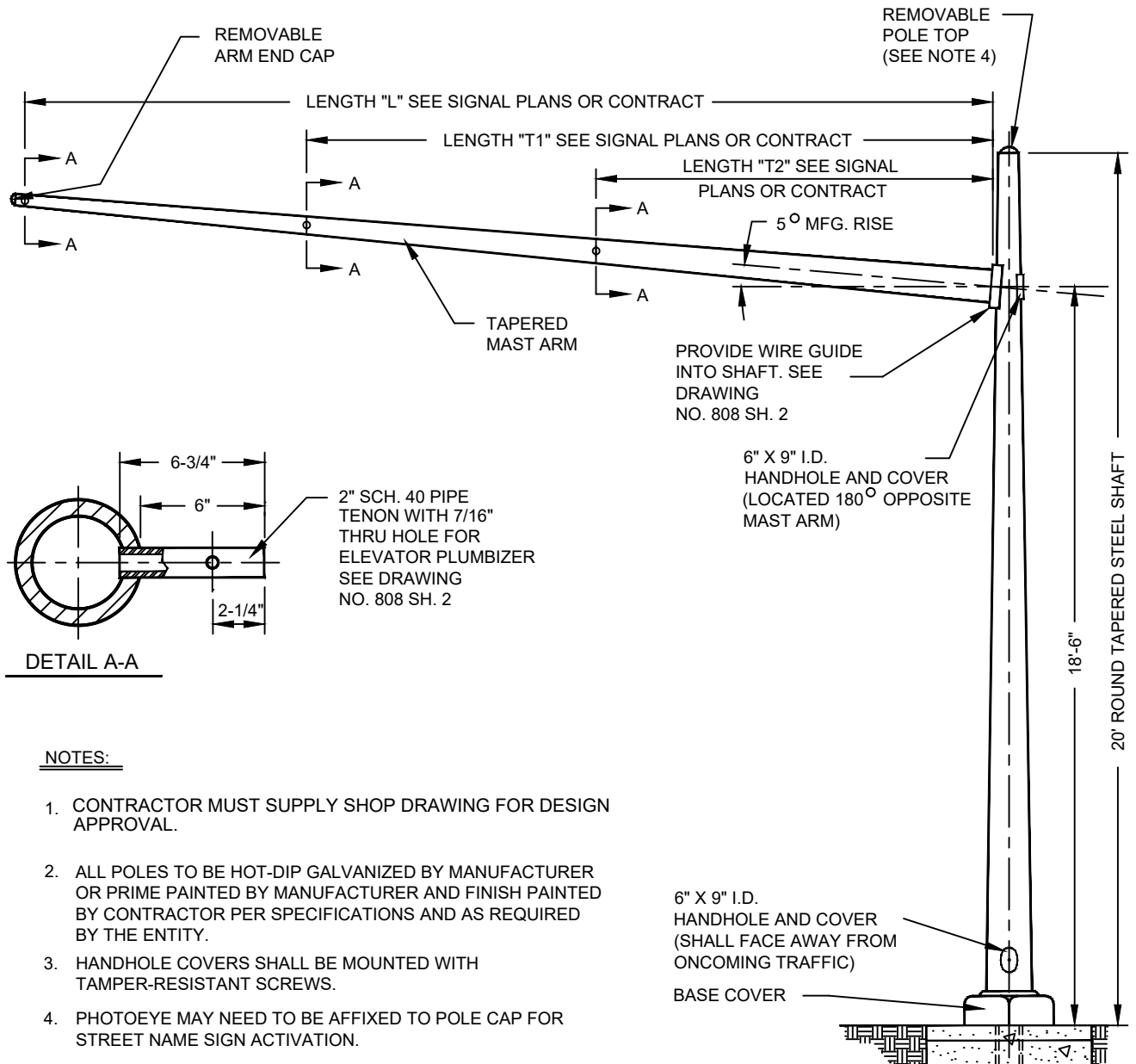
SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

RED LIGHT RUNNING INDICATOR
INSTALLATION DETAILS

DATE 9-14-06 DWG. NO. 811.S1



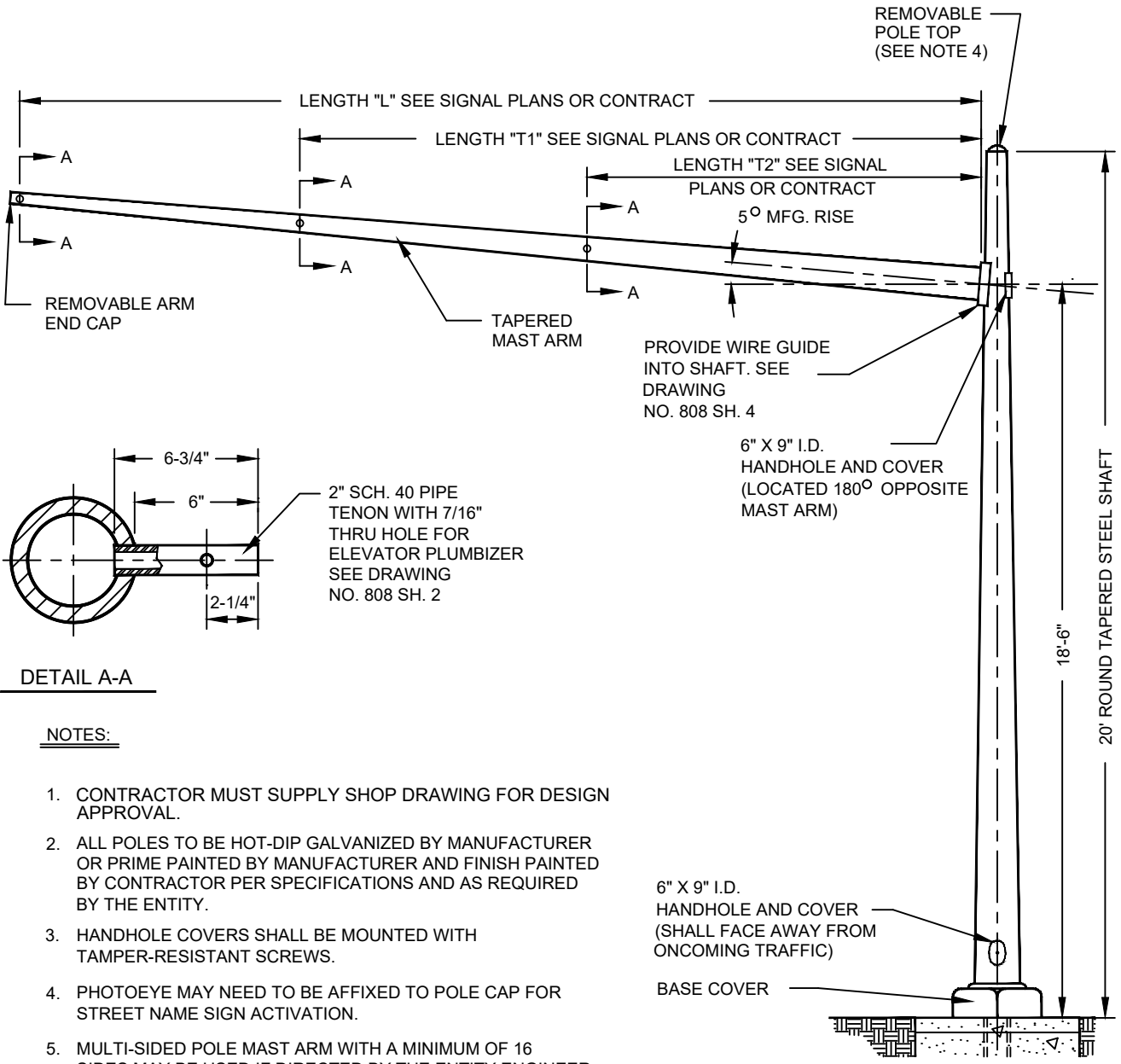
NOTES:

1. CONTRACTOR MUST SUPPLY SHOP DRAWING FOR DESIGN APPROVAL.
2. ALL POLES TO BE HOT-DIP GALVANIZED BY MANUFACTURER OR PRIME PAINTED BY MANUFACTURER AND FINISH PAINTED BY CONTRACTOR PER SPECIFICATIONS AND AS REQUIRED BY THE ENTITY.
3. HANDHOLE COVERS SHALL BE MOUNTED WITH TAMPER-RESISTANT SCREWS.
4. PHOTOEYE MAY NEED TO BE AFFIXED TO POLE CAP FOR STREET NAME SIGN ACTIVATION.
5. MULTI-SIDED POLE AND MAST ARM WITH A MINIMUM OF 16 SIDES MAY BE USED IF DIRECTED BY THE ENTITY ENGINEER.

POLES DESIGNED PER SPECIFICATION OF A.A.S.H.T.O., 90 MPH WINDS.
(SEE DRAWING NO. 808 SHEET 5 FOR LOADING INFORMATION)

FOR OTHER DETAILS SEE DRAWING NO. 808 SHTS. 2 □ 6.
FOR "H" TYPE FOUNDATION SEE DRAWING NO. 721.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		TYPE XX 20 FT. SIGNAL POLE (45 FT. OR LESS MAST ARMS)											
		DATE	07-01-17	DWG. NO.	812	SHEET		1 OF 2					



DETAIL A-A

NOTES:

1. CONTRACTOR MUST SUPPLY SHOP DRAWING FOR DESIGN APPROVAL.
2. ALL POLES TO BE HOT-DIP GALVANIZED BY MANUFACTURER OR PRIME PAINTED BY MANUFACTURER AND FINISH PAINTED BY CONTRACTOR PER SPECIFICATIONS AND AS REQUIRED BY THE ENTITY.
3. HANDHOLE COVERS SHALL BE MOUNTED WITH TAMPER-RESISTANT SCREWS.
4. PHOTOEYE MAY NEED TO BE AFFIXED TO POLE CAP FOR STREET NAME SIGN ACTIVATION.
5. MULTI-SIDED POLE MAST ARM WITH A MINIMUM OF 16 SIDES MAY BE USED IF DIRECTED BY THE ENTITY ENGINEER.

POLES DESIGNED PER SPECIFICATION OF A.A.S.H.T.O., 90 MPH WINDS.

(SEE DRAWING NO. 808 SHEET 5 FOR LOADING INFORMATION)

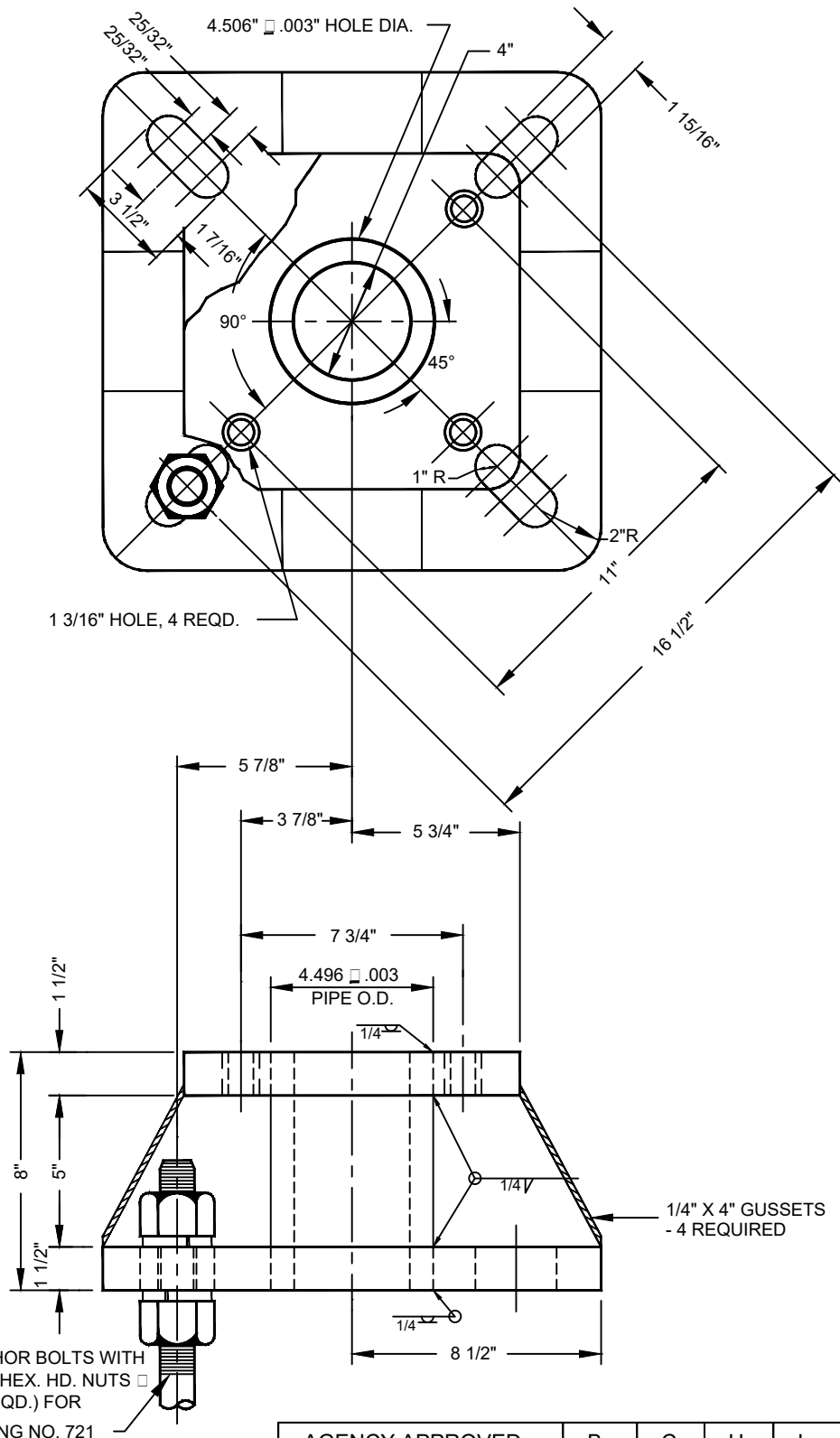
FOR OTHER DETAILS SEE DRAWING NO. 808 SHTS. 4 □ 6.

FOR "L" TYPE FOUNDATION SEE DRAWING NO.722.

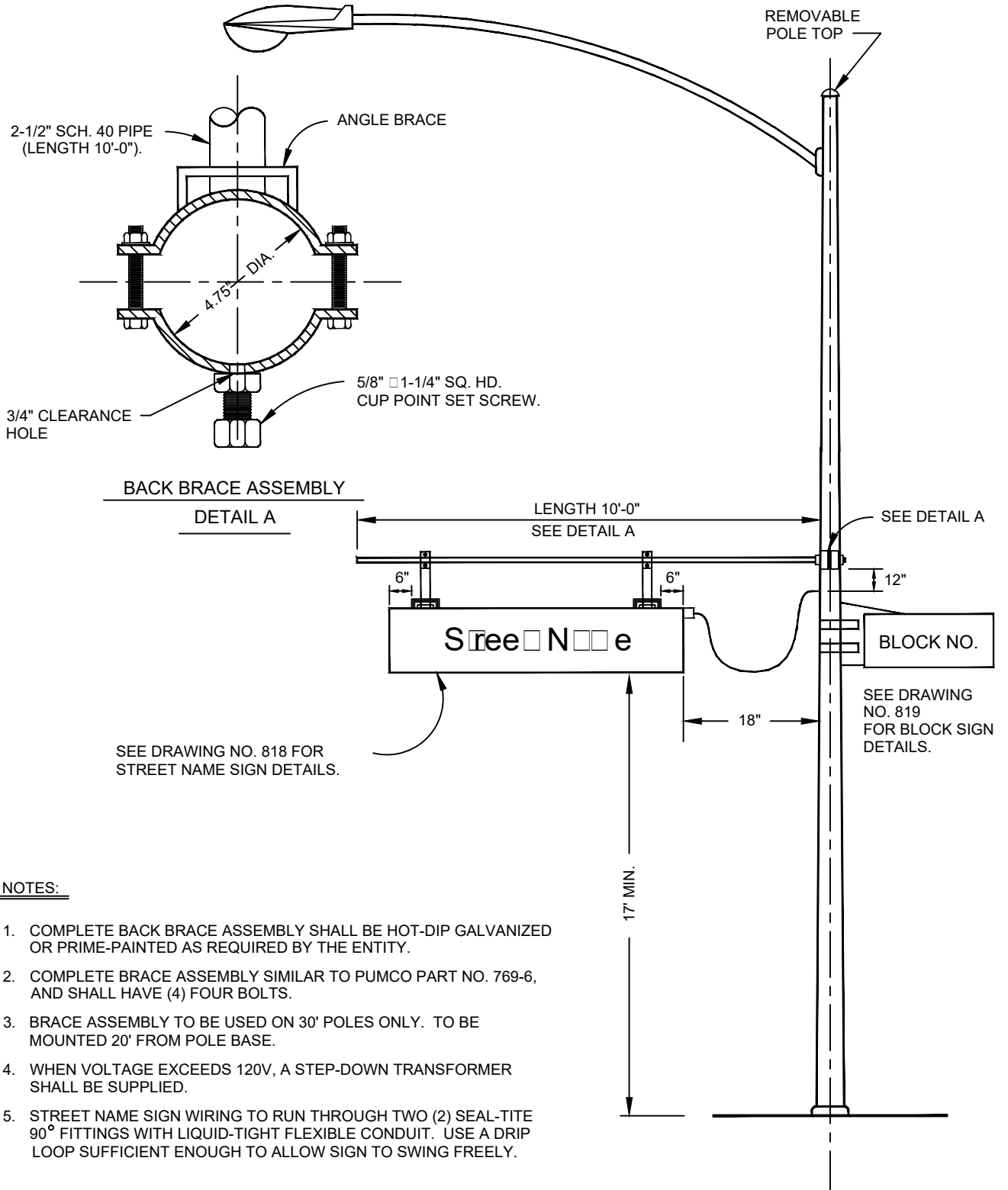
6" X 9" I.D.
HANDHOLE AND COVER
(SHALL FACE AWAY FROM
ONCOMING TRAFFIC)

BASE COVER

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		TYPE XX-A-20 FT. (50 FT. THRU 60 FT. MAST ARMS) SIGNAL POLE											
		DATE	07-01-17	DWG. NO.	812	SHEET	2 OF 2						



SPECIFICATION REFERENCE		AGENCY APPROVED						B	C	H	L	M	N
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		BASE ADAPTOR PLATE FOR TYPE "H" FOUNDATION											
		DATE 12-12-96	DWG. NO.		813		SHEET		1 OF 2				



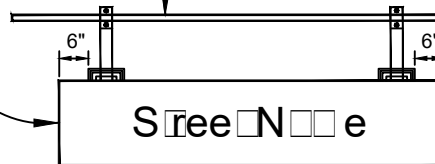
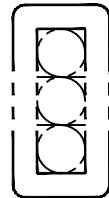
		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		STREETLIGHT POLE WITH ILLUMINATED STREET NAME SIGN											
		DATE 12-12-96		DWG. NO.		814							

SEE DRAWING NO. 818 FOR STREET NAME SIGN DETAILS.

SEE DETAIL A FOR PIPE LENGTH.

SEE DETAIL A

REMOVABLE POLE TOP

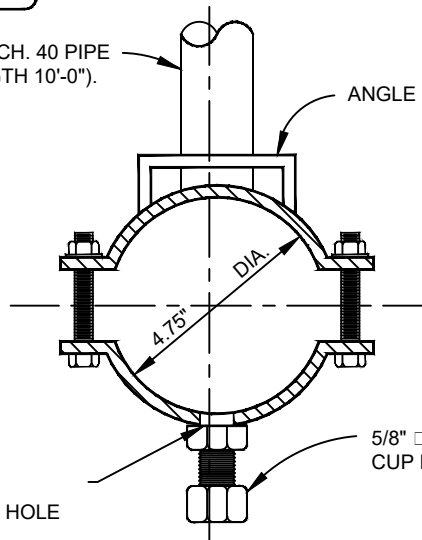


BLOCK NO.

SEE DRAWING NO. 819 FOR BLOCK SIGN DETAILS.

2-1/2" SCH. 40 PIPE (LENGTH 10'-0").

ANGLE BRACE



5/8" $\square$ 1-1/4" SQ. HD. CUP POINT SET SCREW.

3/4" CLEARANCE HOLE

BACK BRACE ASSEMBLY
DETAIL A

NOTES:

1. COMPLETE BACK BRACE ASSEMBLY SHALL BE HOT-DIP GALVANIZED OR PRIME-PAINTED AS REQUIRED BY THE ENTITY.
2. COMPLETE BRACE ASSEMBLY SIMILAR TO PUMCO PART NO. 769-6, AND SHALL HAVE (4) FOUR BOLTS.
3. BRACE ASSEMBLY TO BE USED ON 30' POLES ONLY. TO BE MOUNTED 24' FROM POLE BASE.
4. STREET NAME SIGN WIRING TO RUN THROUGH TWO (2) SEAL-TITE 90° FITTINGS WITH LIQUID-TIGHT FLEXIBLE CONDUIT. USE A DRIP LOOP SUFFICIENT ENOUGH TO ALLOW SIGN TO SWING FREELY.

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

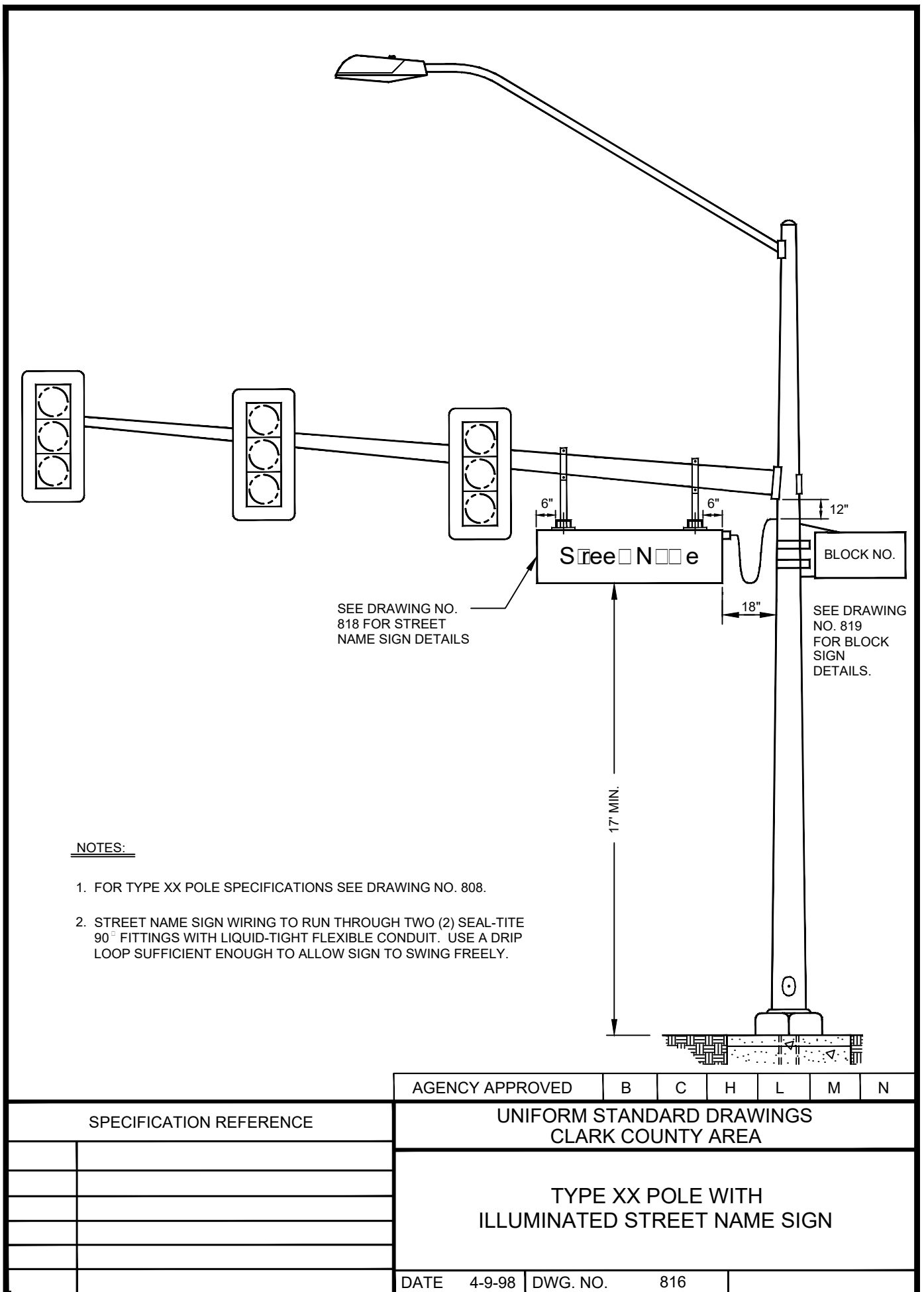
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

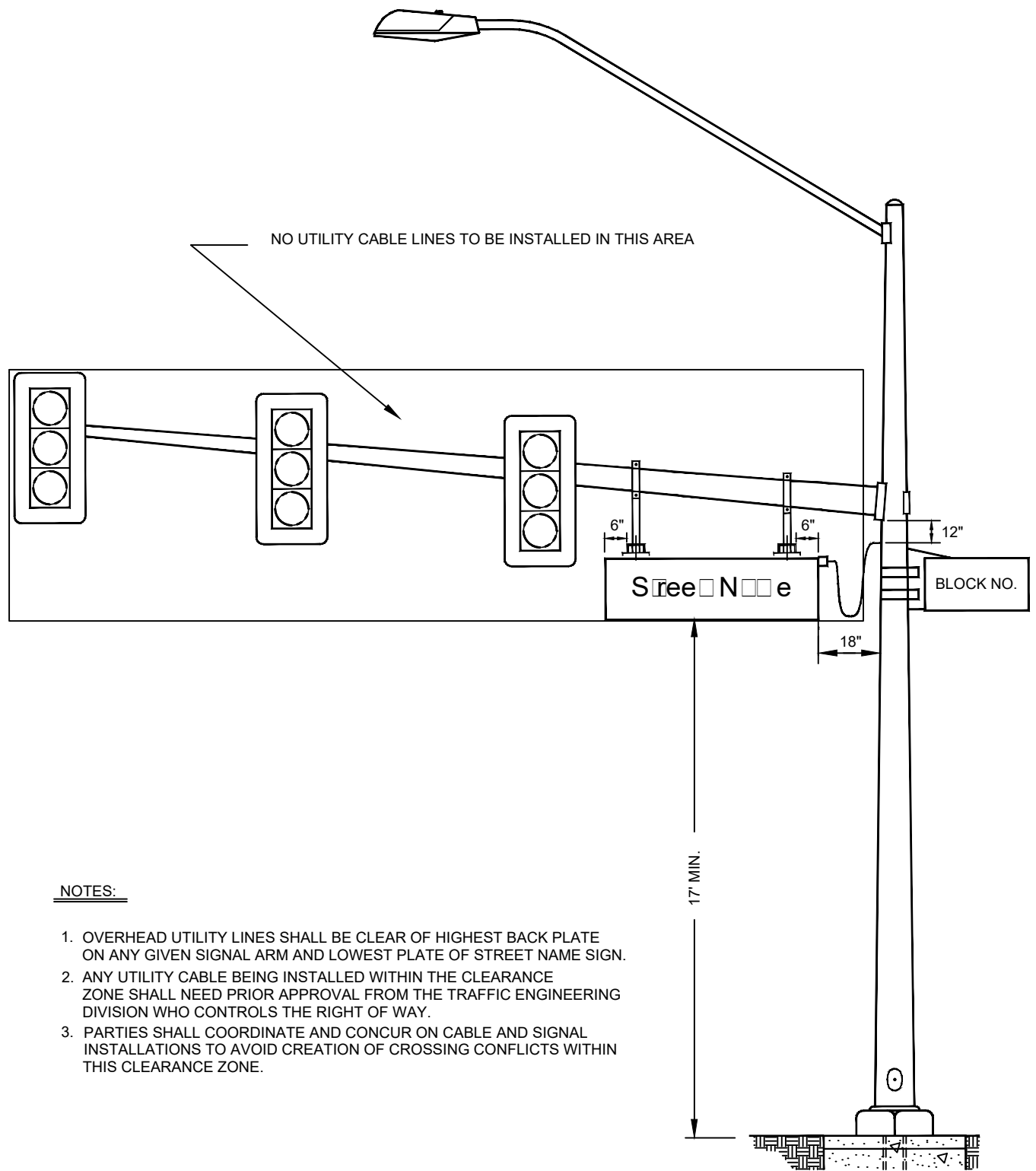
TYPE III POLE WITH
ILLUMINATED STREET NAME SIGN

DATE 12-12-96

DWG. NO.

815





NOTES:

1. OVERHEAD UTILITY LINES SHALL BE CLEAR OF HIGHEST BACK PLATE ON ANY GIVEN SIGNAL ARM AND LOWEST PLATE OF STREET NAME SIGN.
2. ANY UTILITY CABLE BEING INSTALLED WITHIN THE CLEARANCE ZONE SHALL NEED PRIOR APPROVAL FROM THE TRAFFIC ENGINEERING DIVISION WHO CONTROLS THE RIGHT OF WAY.
3. PARTIES SHALL COORDINATE AND CONCUR ON CABLE AND SIGNAL INSTALLATIONS TO AVOID CREATION OF CROSSING CONFLICTS WITHIN THIS CLEARANCE ZONE.

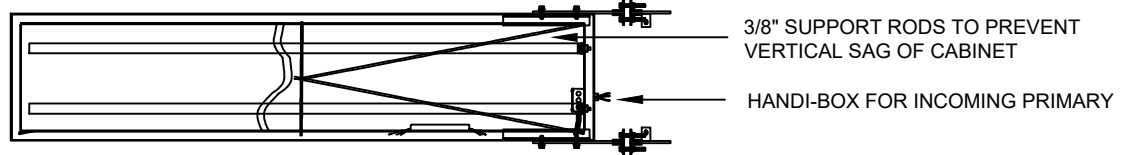
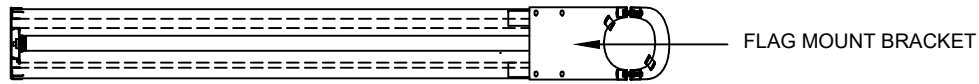
AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

UTILITY CABLE CLEARANCE OVER TRAFFIC
SIGNALS NEW INSTALLATION ONLY

DATE 2-08-07	DWG. NO. 817

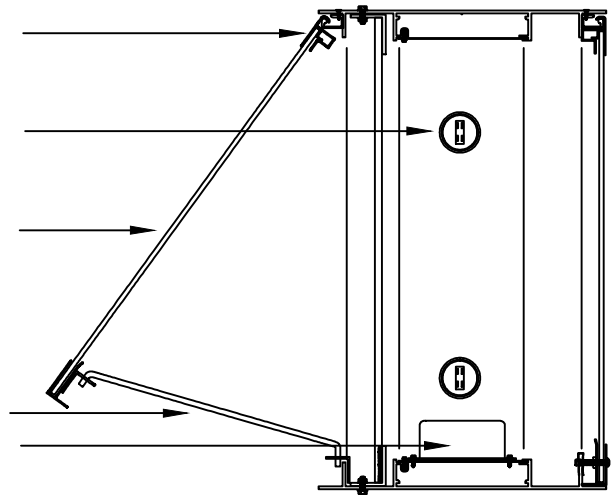


STD. 12" EXTRUSION WITH 1-1/2" TOP HINGE RETAINER SYSTEM

STD. 8'-0" CWHO LAMPS ON 10" CENTERS HORIZONTALLY

WHITE POLYCARBONATE FACE

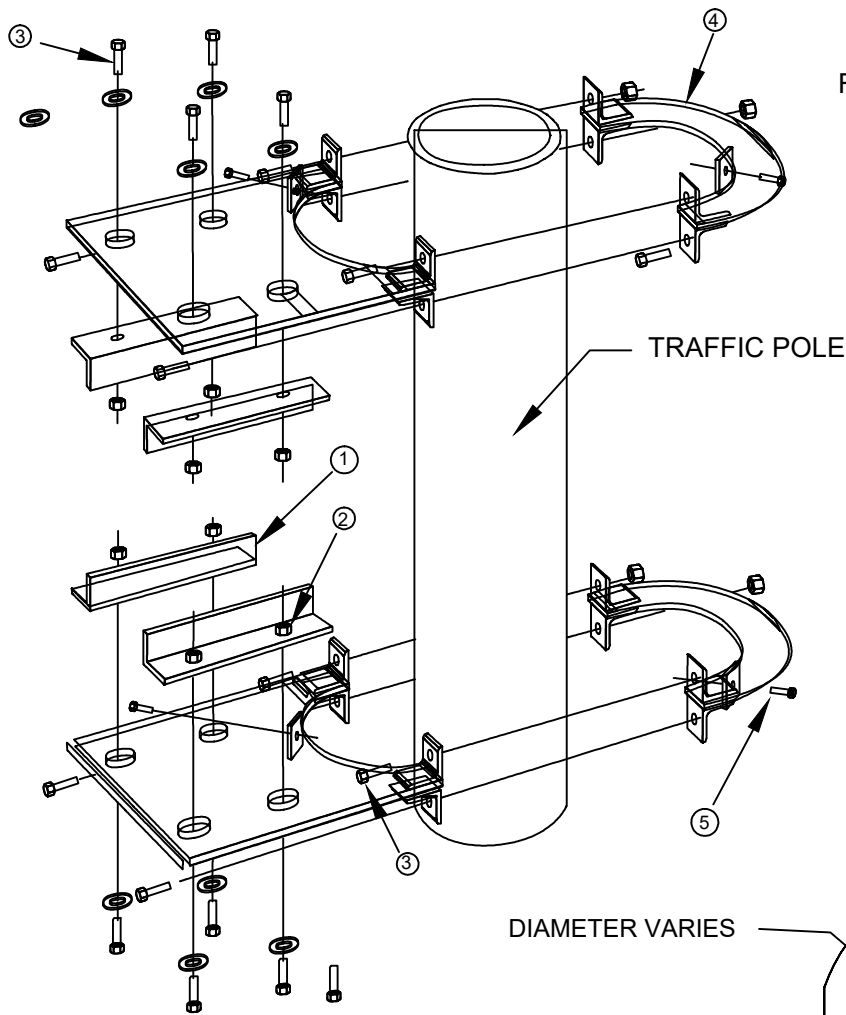
ALUMINUM PROP ROD FOR SERVICE BALLAST ATTACHED TO EXTRUDED WIREWAY



NOTES:

1. SIGN SHALL BE DOUBLE FACED.
2. ALUMINUM EXTRUSION CABINET 12" DEEP - MILL FINISH WITH ALL ALUMINUM INTERNAL STRUCTURE.
3. TOP-HINGED RETAINER SYSTEM WITH PROP ROD FOR ACCESS AND SERVICE.
4. T12 800MA CWHO FLUORESCENT ILLUMINATION INTERNALLY.
5. SIGN PANEL SHALL BE WHITE WIDE-ANGLE PRISMATIC TRANSLUCENT REFLECTIVE SHEETING, EITHER REVERSE-SCREENED WITH MANUFACTURER'S RECOMMENDED GREEN INK AND CLEAR COATING OR OVERLAYED WITH GREEN ELECTRONIC CUTTABLE TRANSPARENT OVERLAY FILM, APPLIED TO A POLYCARBONATE CLEAR SUBSTRATE, 0.177" THICK.
6. LETTERS SHALL BE 8" SERIES E AND UNLESS OTHERWISE SPECIFIED BY THE TRAFFIC ENGINEER, SHALL BE ALL UPPERCASE WITH NO STREET NAME SUFFIX. IF NECESSARY TO MAKE SPACING FIT, REDUCE TO 8" SERIES D. SPACING BETWEEN LETTERS MAY BE INCREASED BY UP TO 25% (MAX) TO ACHIEVE 4" END SPACES.
7. STEEL BRACKETS SHALL BE USED FOR FLAG MOUNT POLE ATTACHMENT.
8. THE USE OF THE POLE MOUNTED STREET NAME SIGN SHALL BE APPROVED BY THE ENTITY ENGINEER.

SPECIFICATION REFERENCE		AGENCY APPROVED						
		B	C	H	L	M	N	
		UNIFORM STANDARD DRAWINGS						
		CLARK COUNTY AREA						
		ALTERNATIVE POLE MOUNTED STREET						
		NAME SIGN INTERNALLY ILLUMINATED						
		DATE 11/10/05	DWG. NO.	818.1	SHEET	1 OF 3		

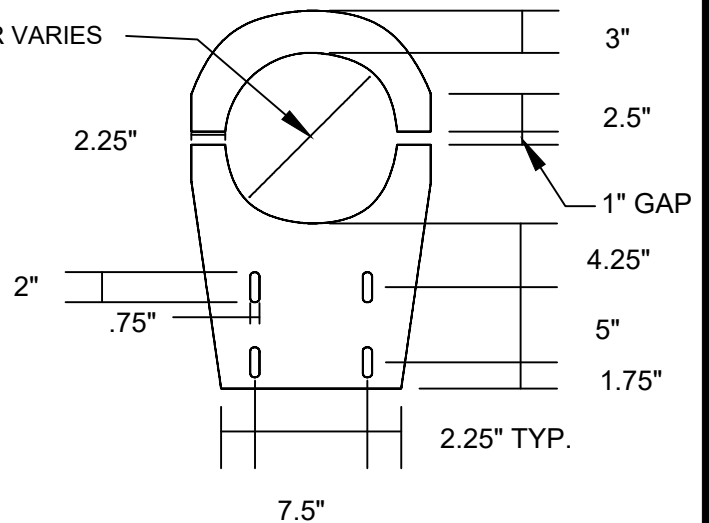


FLAG MOUNT ATTACHMENT DETAIL
NOT TO SCALE

- ① ALUMINUM ANGLE WELDED TO INSIDE OF EXTRUDED CABINET
- ② NUTS WELDED TO ANGLE
- ③ 1/2" X 1 1/2" BOLTS
- ④ BRACKET FABRICATED FROM 3/8" PLATE STEEL
- ⑤ 5/16" SET SCREWS INTO POLE

BRACKET DETAIL
NOT TO SCALE

DIAMETER VARIES



SPECIFICATION REFERENCE		AGENCY APPROVED						
		B						
		C						
		H						
		L						
		M						
		N						
		UNIFORM STANDARD DRAWINGS						
		CLARK COUNTY AREA						
		ALTERNATIVE POLE MOUNTED STREET						
		NAME SIGN INTERNALLY ILLUMINATED						
		ATTACHMENT DETAIL						
		DATE 11/10/05	DWG. NO.	818.1	SHEET	2 OF 3		

INSTALLATION INSTRUCTIONS

□ ATTACH BRACKETS ① TO CABINET END AT TOP AND BOTTOM WITH BOLTS PROVIDED LOSSELY TIGHTEN BOLTS (SNUG).

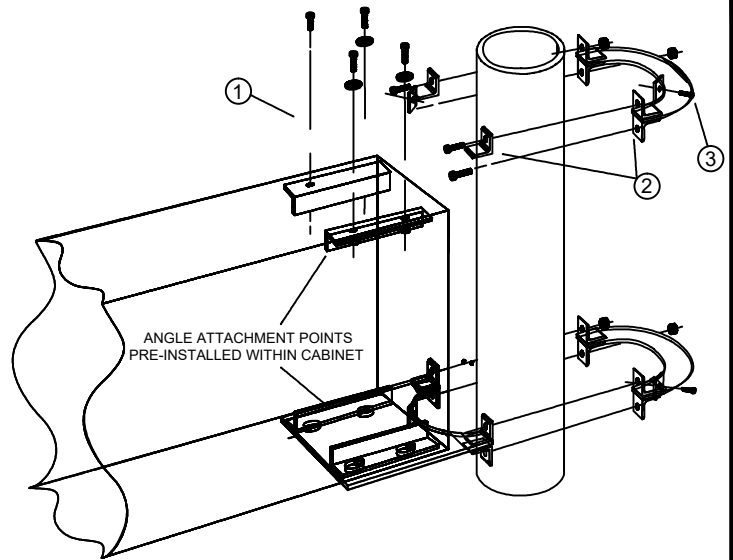
□ LIFT CABINET WITH BRACKETS TO POLE AT FINISHED HEIGHT USING A NYLON LIFTING SNAP NEAR THE BRACKETS (WHERE BALANCED).

□ ATTACH BRACKET HALVES ② TOGETHER AROUND POLE WITH PROVIDED HARDWARE AS SHOWN.

□ MOVE LIFTING STRIP TO CENTER OF CABINET □ LEVEL THEN TIGHTEN BOLTS INTO CABINET.

□ ATTACH SET SCREWS ③ THROUGH BRACKET INTO POLE AS SHOWN.

□ HOOK UP ELECTRICAL CONNECTION (SEE PAGE 2 FOR AN EXAMPLE).



WIRING RECOMMENDATIONS

□ LOCATE □ DRILL A 3/4" DIA. HOLE ① THRU POLE. THREAD HOLE WITH 1/2" PIPE THREAD TAP.

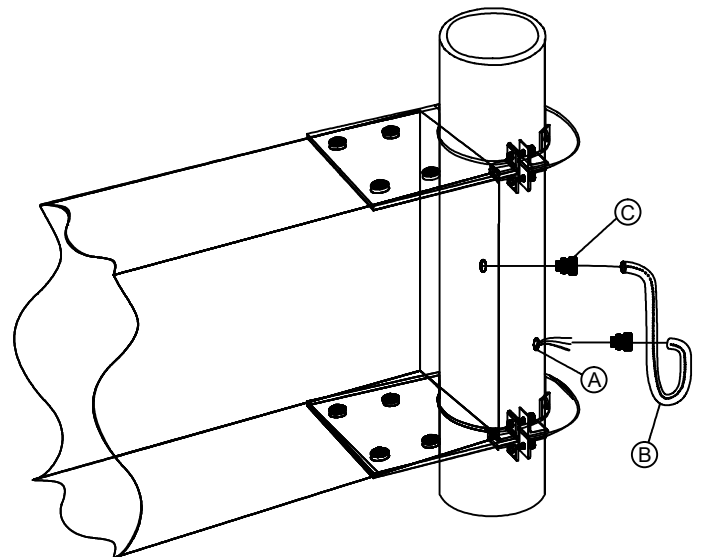
□ PULL WIRES FROM GROUND THRU TAPPED HOLE GUIDE WIRES TO AVOID SCRAPING INSULATION.

□ ASSEMBLE LIQUID TIGHT 1/2" CONDUIT ② □ FITTING ③ TO CONNECT POLE TO CABINET.

□ FEED WIRES THRU CONDUIT □ INTO CABINET, USE A 2X4 HANDY BOX INSIDE OF CABINET TO FACILITATE WIRE PULLING.

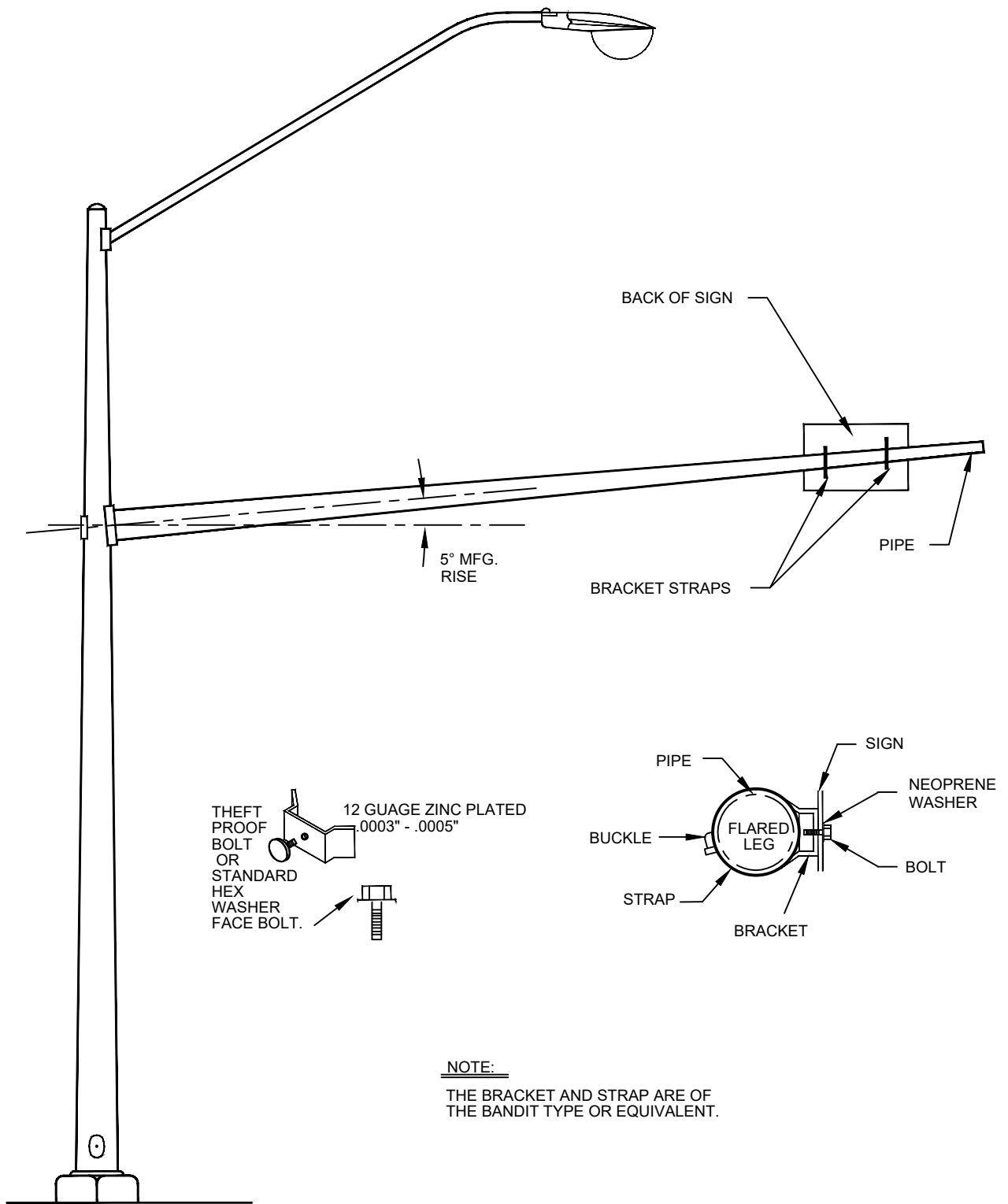
□ AFTER FEEDING WIRES, THEN THREAD FITTINGS INTO THREADED HOLE IN POLE □ CABINET.

□ WIRE BALLAST INSIDE CABINET AS REQUIRED.



NOTE: THE STREET NAME SIGN SHALL BE MOUNTED 18" ABOVE THE MAST ARM

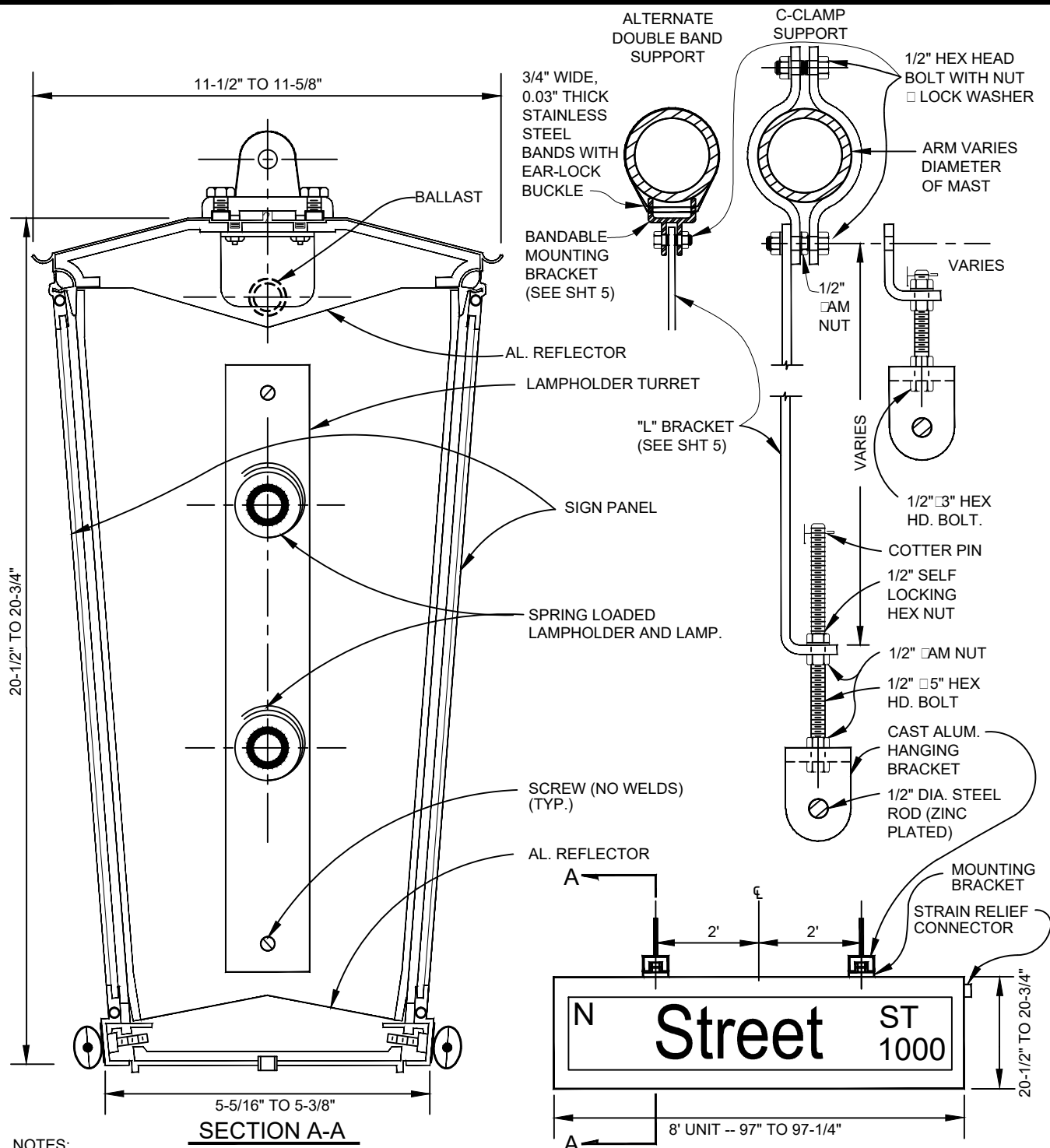
AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		ALTERNATIVE POLE MOUNTED STREET NAME SIGN INTERNALLY ILLUMINATED BRACKET DETAIL					
DATE 11/10/05	DWG. NO.	818.1	SHEET	3 OF 3			



NOTE:

THE BRACKET AND STRAP ARE OF THE BANDIT TYPE OR EQUIVALENT.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		SIGN MOUNTING ILLUSTRATION											
DATE		4-9-98		DWG. NO.		818.2							



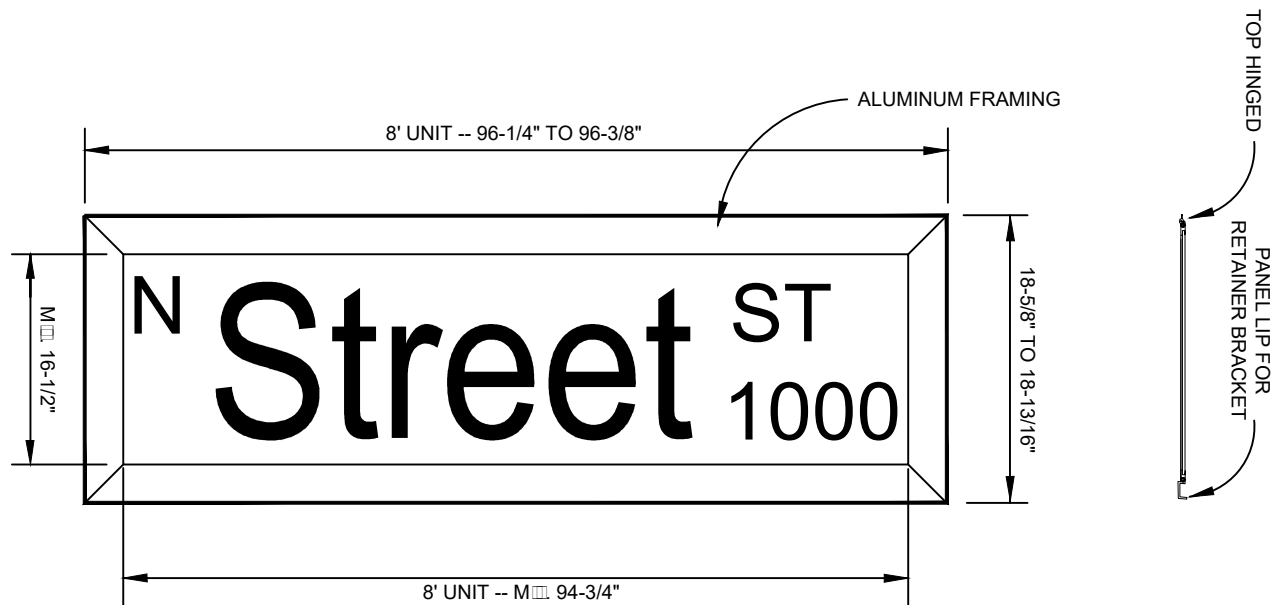
NOTES:

1. SIGN ASSEMBLY SHALL INCLUDE SIGN ENCLOSURE AND TWO SIGN PANELS.
2. TWO (2) ADVANCE BALLAST IOP-2P59-SC, OR AN APPROVED EQUIVALENT BY THE ENGINEER, SHALL BE INSTALLED FOR EACH SIGN ENCLOSURE.
3. SEE SHEETS 2 AND 3 FOR WIRING DIAGRAMS.
4. SEE SHEET 4 FOR SIGN PANEL DETAILS.
5. $\square$ AM NUT TO SECURE "L" BRACKET.

SPECIFICATION REFERENCE		AGENCY APPROVED	B	C	H	L	M
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		SUPPLEMENTAL DRAWING					
		ILLUMINATED STREET NAME SIGN - ENCLOSURE					
		DATE: 01-01-13	DWG. NO.	818.S1	SHEET 1 OF 5		

		AGENCY APPROVED		B	C	H	L	M	
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
		SUPPLEMENTAL DRAWING							
		ILLUMINATED STREET NAME SIGN - WIRING DIAGRAM - FLUORESCENT TUBE							
		DATE: 01-01-13	DWG. NO.	818.S1		SHEET 2 OF 5			

		AGENCY APPROVED		B	C	H	L	M	
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
		SUPPLEMENTAL DRAWING							
		ILLUMINATED STREET NAME SIGN - WIRING DIAGRAM - L.E.D. TUBE							
.		DATE: 01-01-13	DWG. NO.		818.S1		SHEET 3 OF 5		



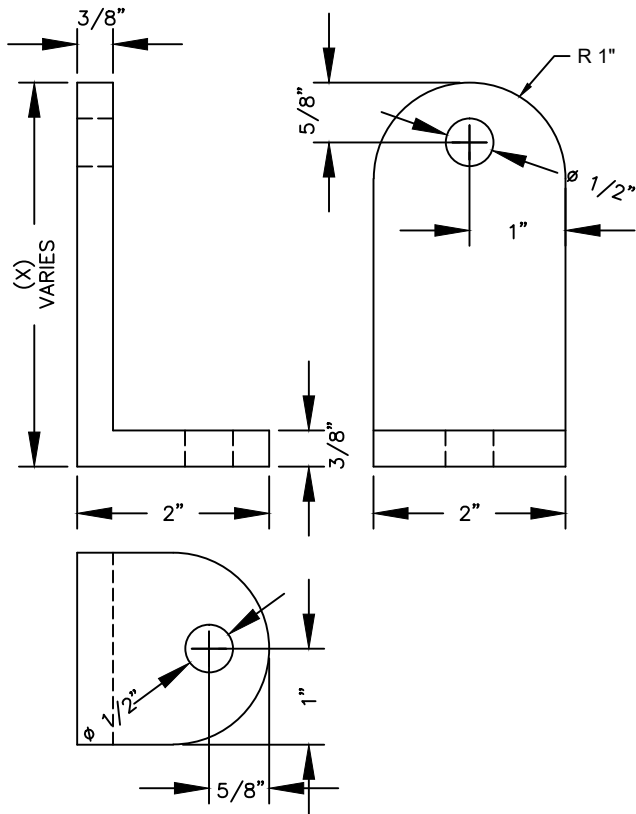
FRONT VIEW

SIDE VIEW

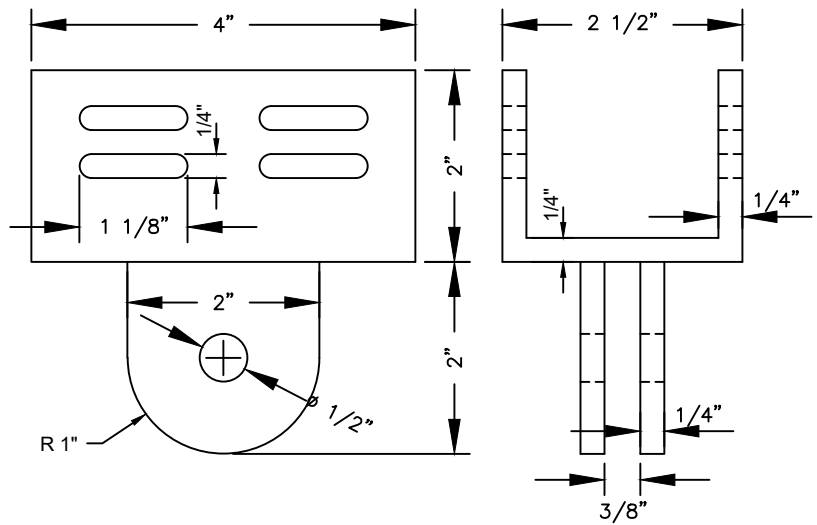
NOTES:

1. SIGN SHALL BE DOUBLE FACED.
2. SIGN PANELS SHALL BE FABRICATED OF CLEAR, IMPACT RESISTANT, ACRYLIC SHEETING WITH ALUMINUM FRAMING.
3. SIGN PANEL SHALL BE COVERED WITH WHITE, WIDE-ANGLE, TRANSLUCENT PRISMATIC TYPE XI REFLECTIVE SIGN FACE SHEETING, AND EITHER REVERSE-SCREENED WITH MANUFACTURER'S RECOMMENDED GREEN INK AND CLEAR COATING OR OVERLAID WITH GREEN ELECTRONIC CUTTABLE TRANSPARENT OVERLAY FILM.
4. SHEETING SHALL BE APPLIED IN A VERTICAL ORIENTATION IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION.
5. SIGN PANEL SHALL BE CAPABLE OF WITHSTANDING WINDS OF 90 MPH OR GREATER WITHOUT DAMAGE OR SEPARATION FROM THE SIGN ENCLOSURE.
6. LETTERS FOR STREET NAMES SHALL BE 12" SERIES D, UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, AND SHALL BE UPPER AND LOWERCASE. IF NECESSARY TO MAKE SPACING FIT, 12" SERIES C LETTERS MAY BE USED. LOWER CASE LETTERS SHALL BE 9" IN HEIGHT. LETTERS FOR CARDINAL DIRECTION, STREET NAME SUFFIX, AND BLOCK NUMBER SHALL BE 5" SERIES C, AND SHALL BE IN ALL UPPER CASE.
7. APPROVAL OF SHOP DRAWING OF SIGNFACE LAYOUT BY THE ENGINEER IS REQUIRED PRIOR TO FABRICATION OF SIGN PANELS.

		AGENCY APPROVED						B	C	H	L	M	
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		SUPPLEMENTAL DRAWING											
		ILLUMINATED STREET NAME SIGN - SIGN PANEL											
		DATE: 01-01-13		DWG. NO.		818.S1		SHEET 4 OF 5					

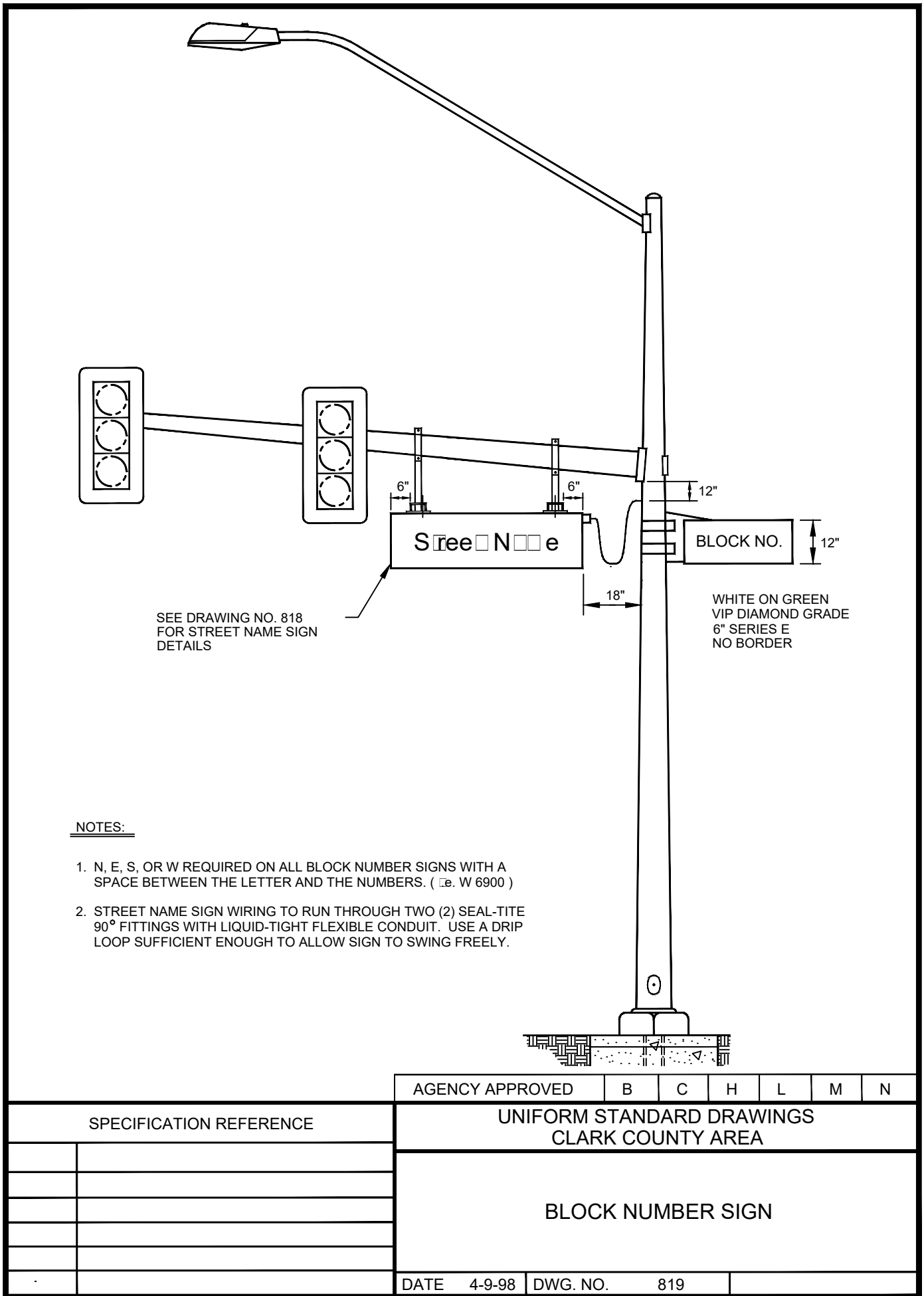


"L" BRACKET



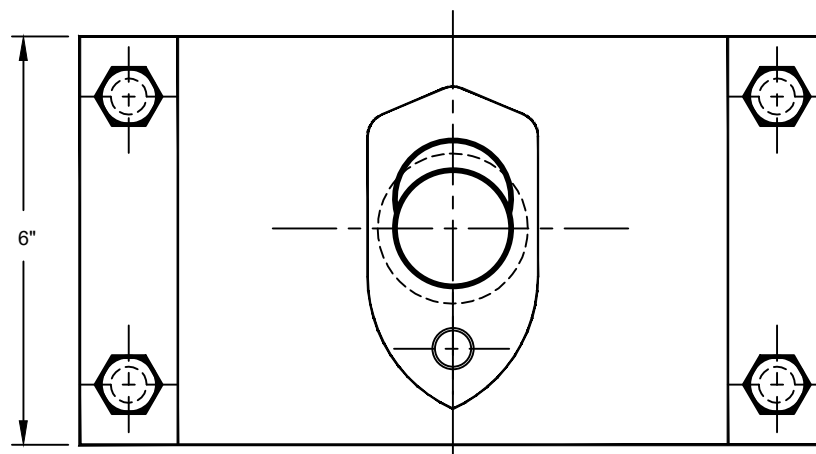
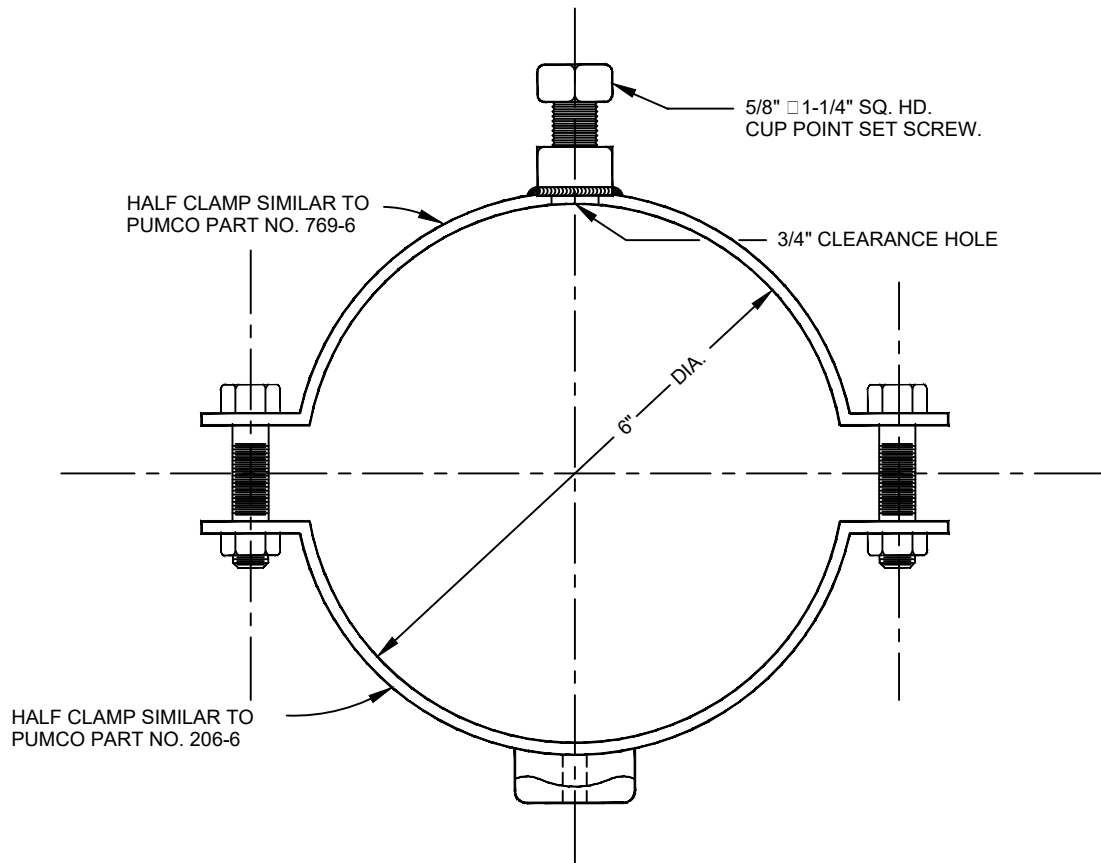
BANDABLE MOUNTING BRACKET

		AGENCY APPROVED		B	C	H	L	M		
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA								
		SUPPLEMENTAL DRAWING								
		ILLUMINATED STREET NAME SIGN - MOUNTING BRACKETS								
.		DATE: 01-01-13	DWG. NO.		818.S1		SHEET 5 OF 5			



Effective 12/10/2020 to 06/09/2021

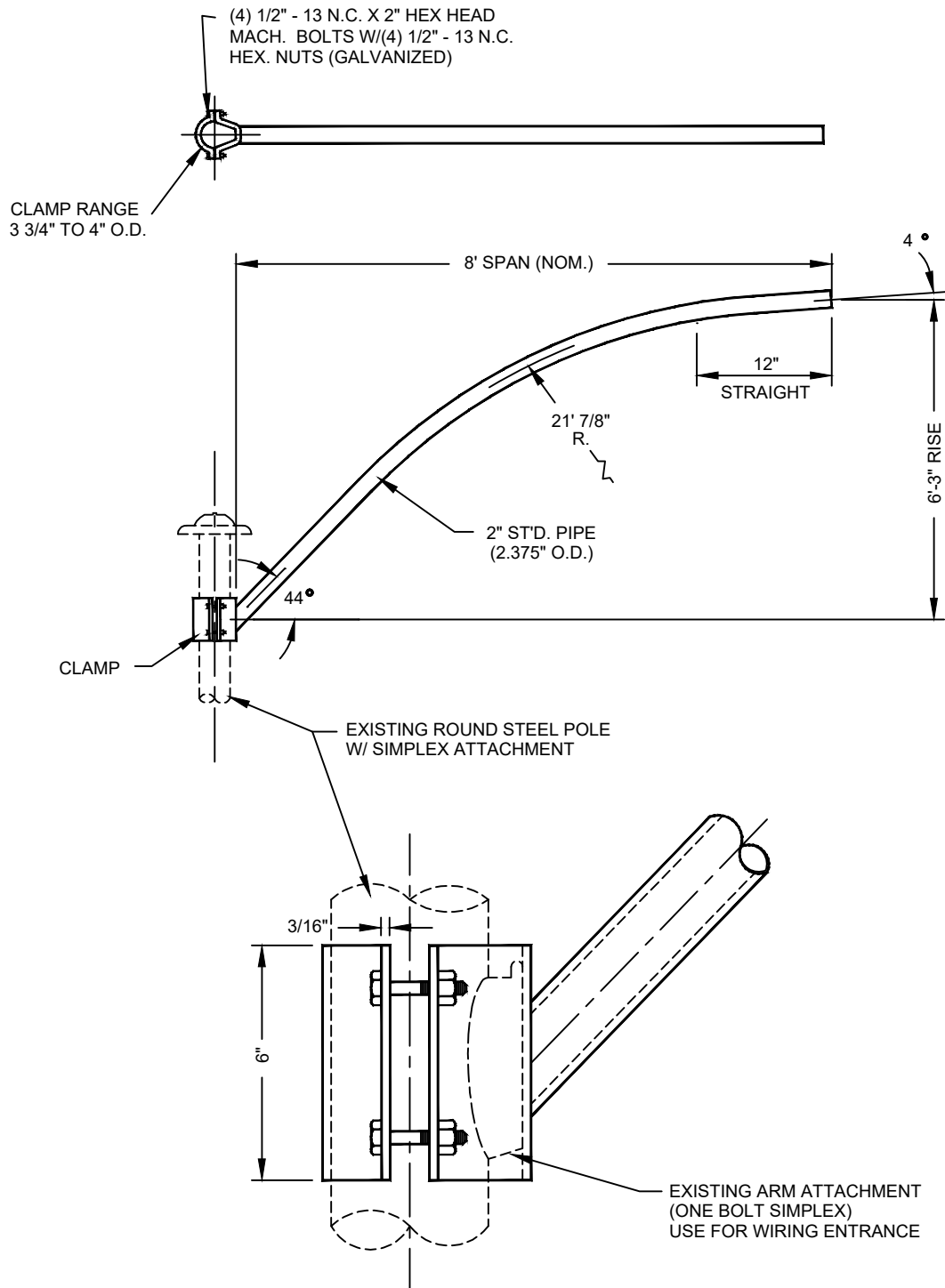
SPECIFICATION REFERENCE		AGENCY APPROVED					
		B C H L M N					
		UNIFORM STANDARD DRAWINGS					
		CLARK COUNTY AREA					
		BLOCK NUMBER SIGN					
		DATE		DWG. NO.			
		4-9-98		819			



NOTES:

1. COMPLETE ASSEMBLY SHALL BE HOT-DIP GALVANIZED OR PRIME-PAINTED AS REQUIRED BY THE ENTITY.
2. COMPLETE ASSEMBLY SIMILAR TO PUMCO PART NO. 207-769-6.
3. THIS ASSEMBLY TO BE USED ON EXISTING 30' POLES ONLY.

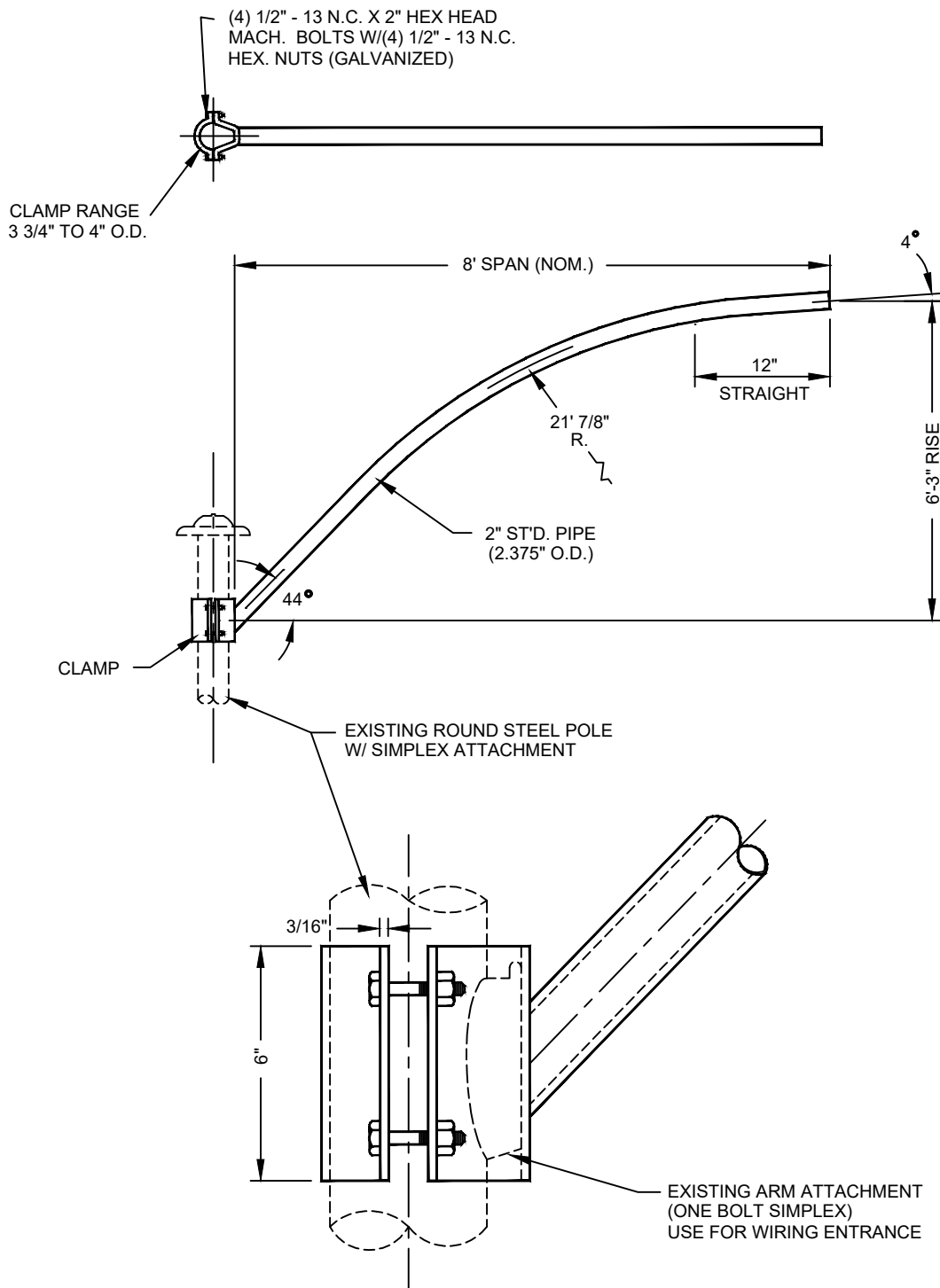
		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		ONE BOLT SIMPLEX ARM ATTACHMENT CLAMP ASSEMBLY											
		DATE	12-12-96	DWG. NO.	821	SHEET			1 OF 2				



BRACKET RATING

MAX. LUMINAIRE AREA □ 2.7 FT²
 MAX. LUMINAIRE WT. □ 57 LBS.

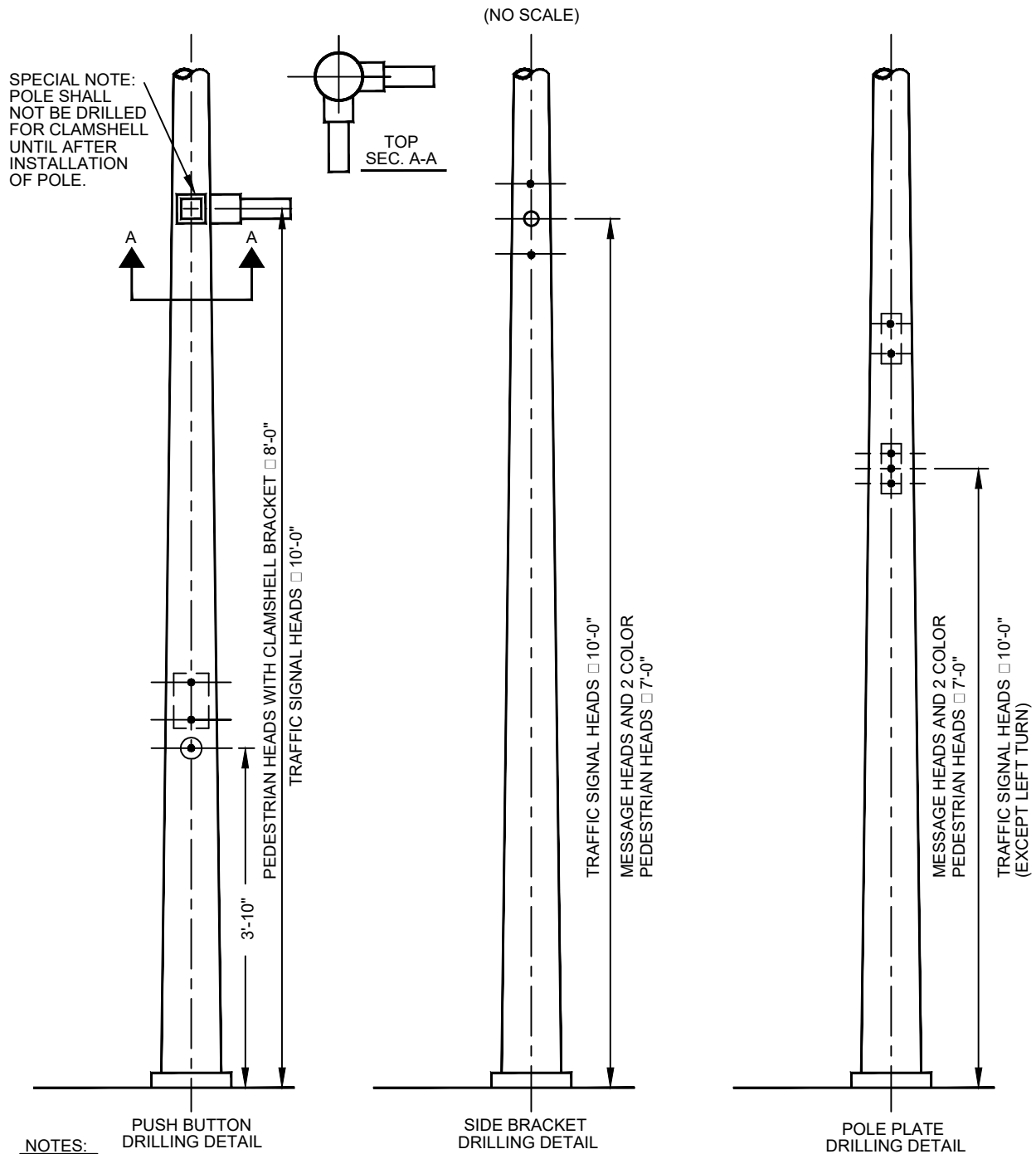
		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		RETROFIT STREETLIGHT MAST ARM											
DATE		DWG. NO.		821		SHEET		2 OF 2					



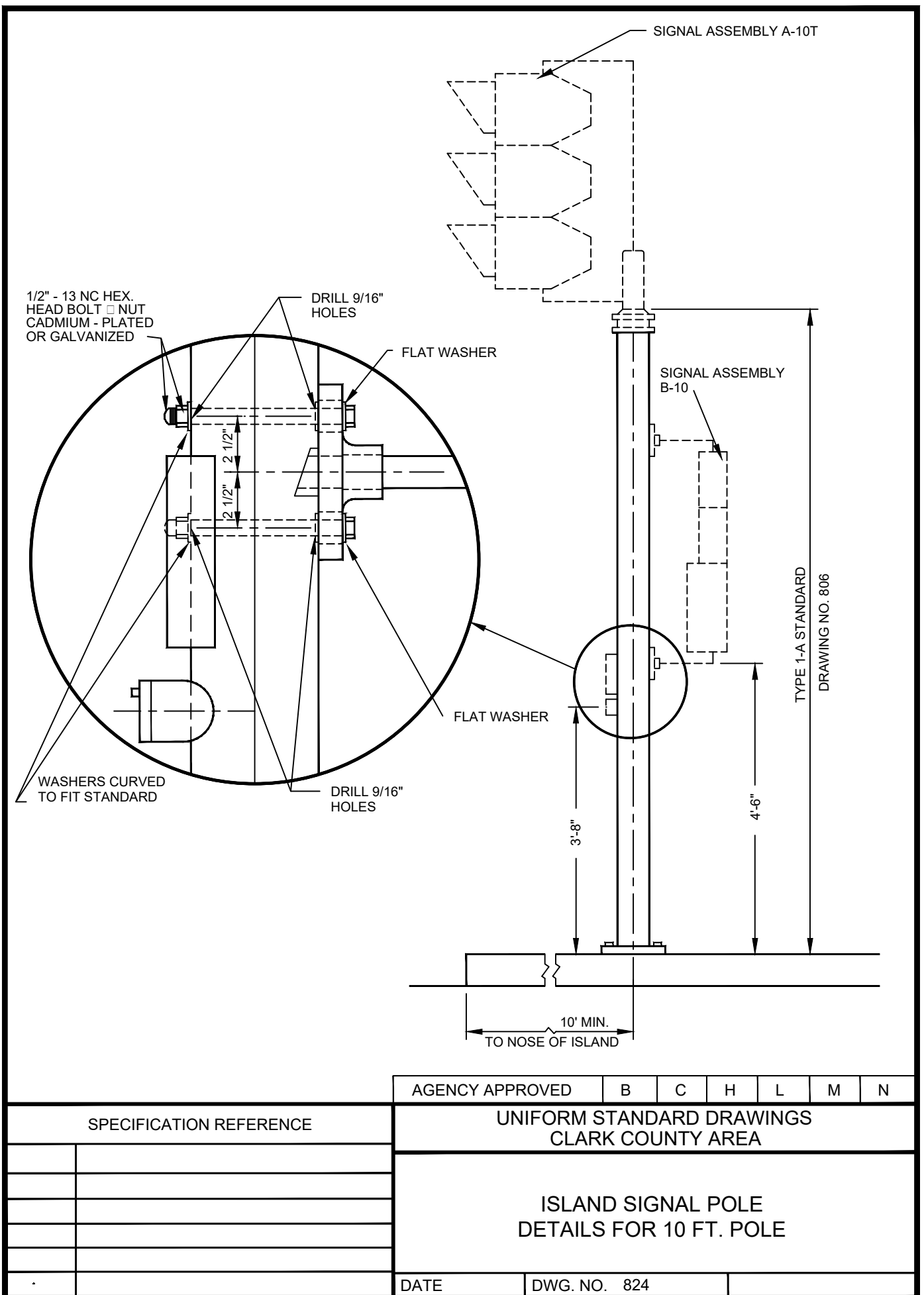
BRACKET RATING

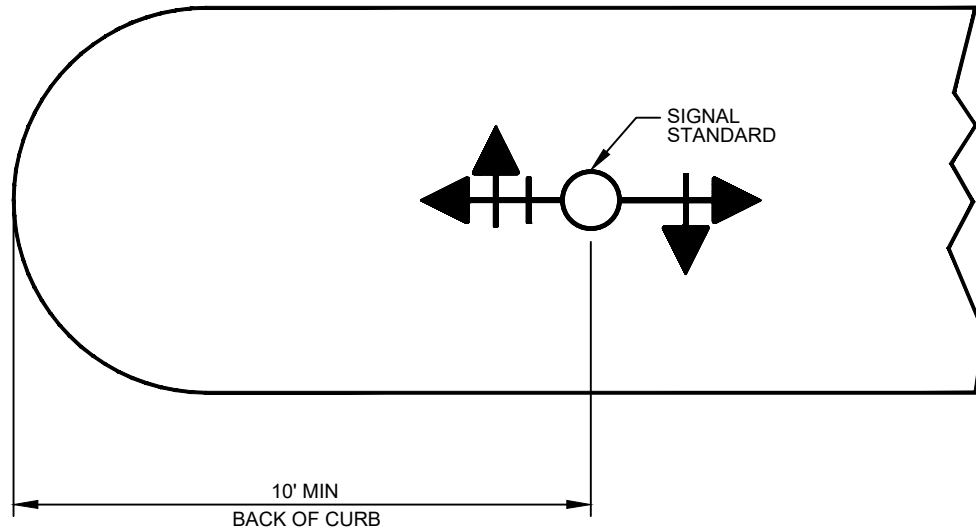
MAX. LUMINAIRE AREA $\square$ 2.7 FT²
 MAX. LUMINAIRE WT. $\square$ 57 LBS.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		RETROFIT STREETLIGHT MAST ARM											
		DATE	DWG. NO.		822								



		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		POLE DRILLING DETAILS											
		DATE		DWG. NO.		823							

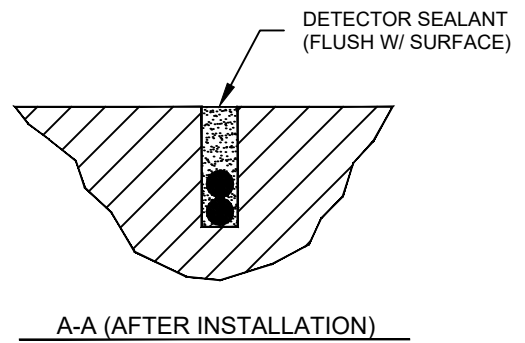
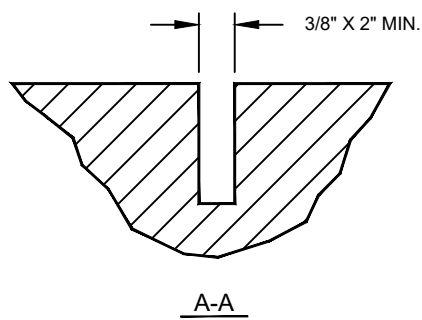
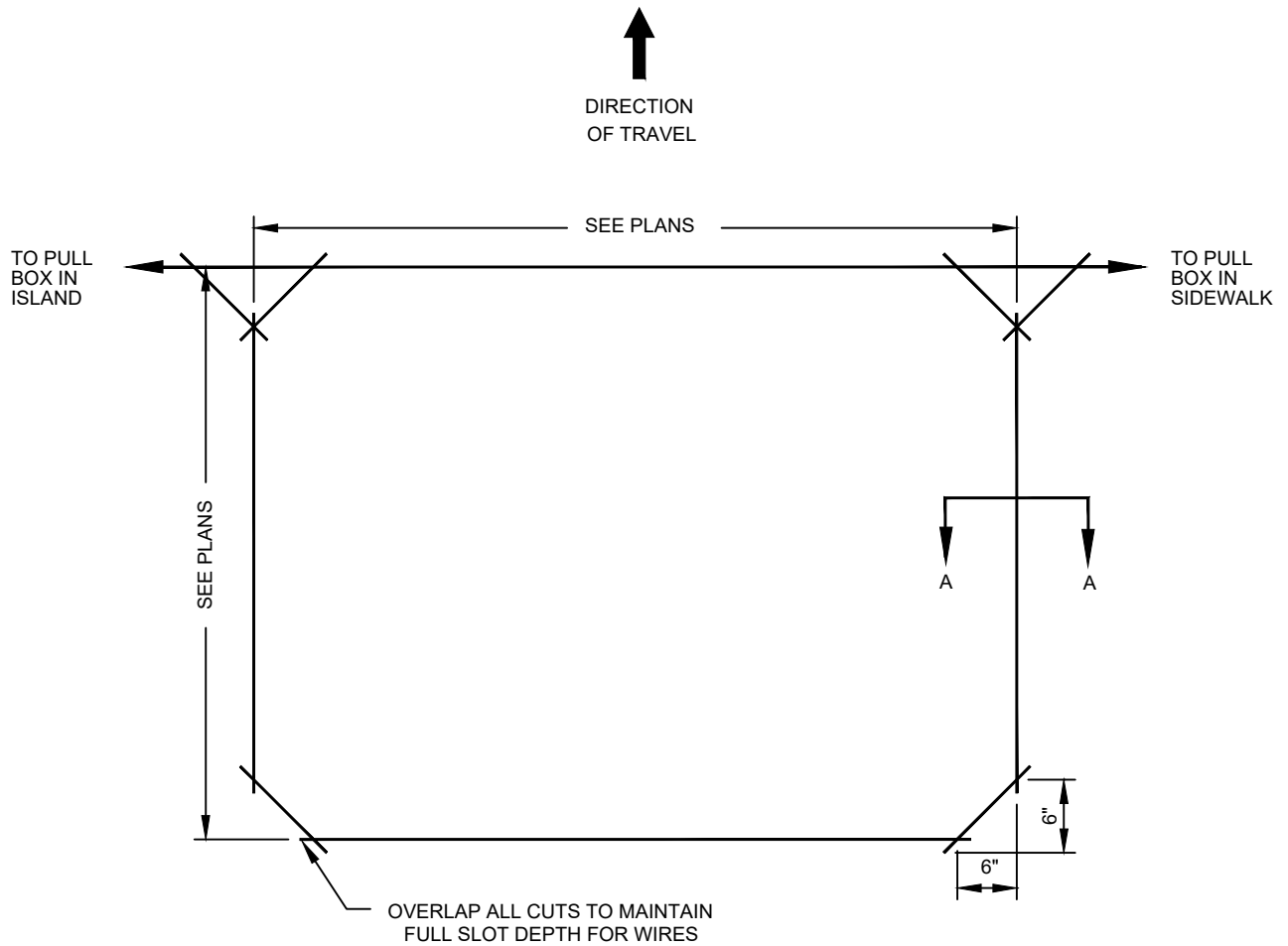




NOTE:

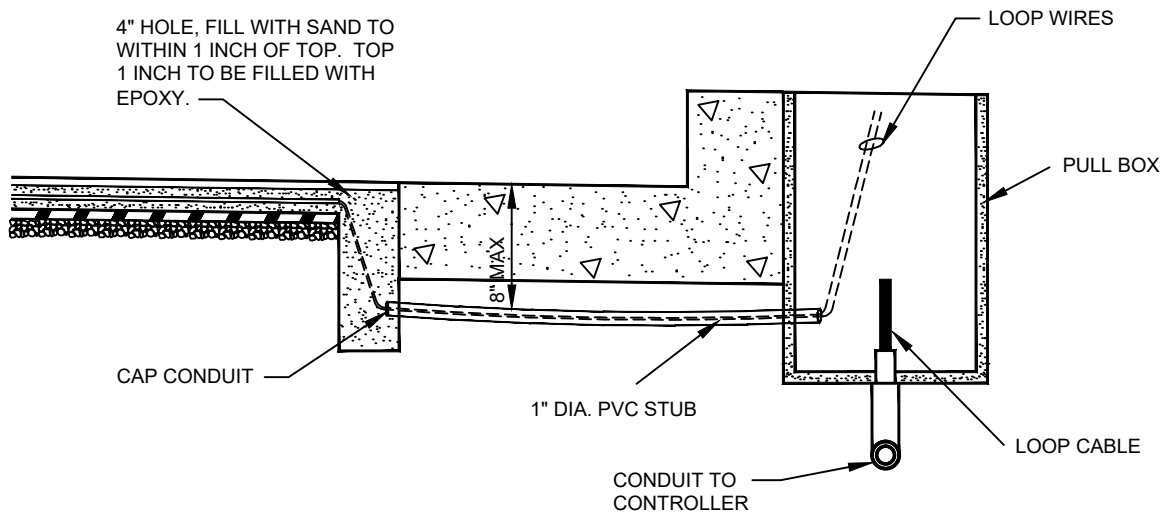
FOR POLE LOCATION ON RIGHT TURN ISLAND SEE
DRAWING NO. 887.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		MEDIAN ISLAND SIGNAL LOCATION											
		DATE	DWG. NO.		825								



Effective 12/10/2020 to 06/09/2021

SPECIFICATION REFERENCE		AGENCY APPROVED						B	C	H	L	M	N
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		SAWCUT DETAILS FOR INDUCTION LOOPS											
DATE		DWG. NO. 826											



NOTE:

PATCH SLOT AND HOLE WITH EPOXY, REMOVE OVERFLOW BEFORE IT HARDENS.

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

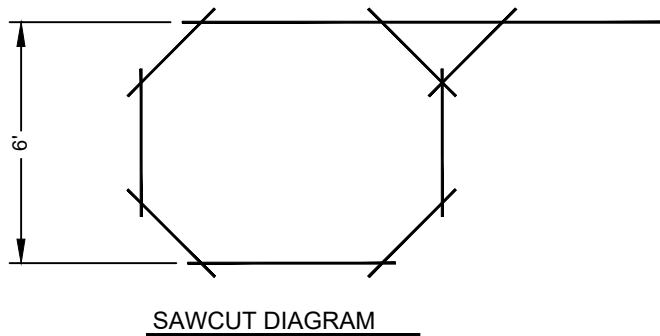
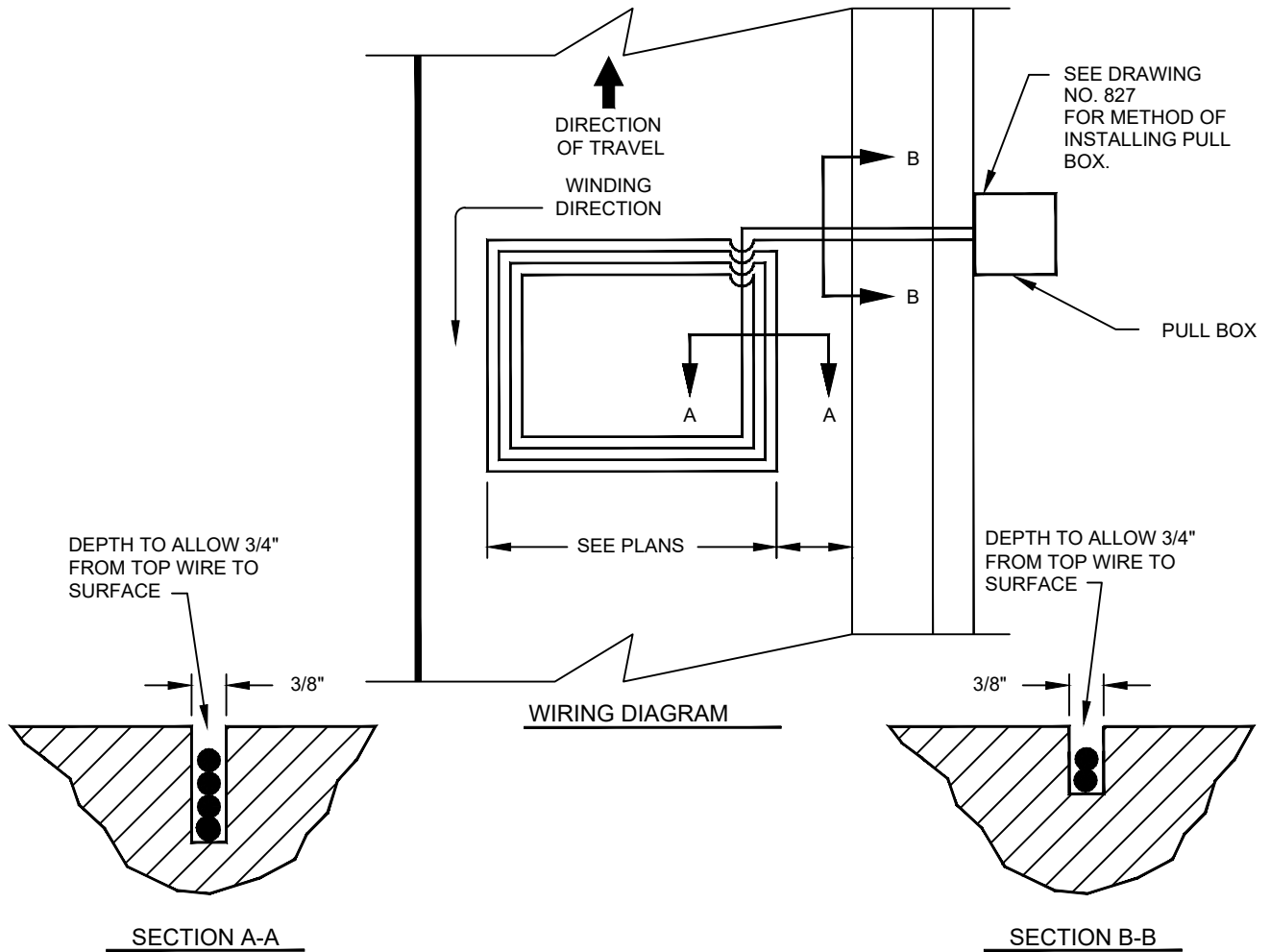
DETAILS AT PULL BOX
AND SAWCUTS

DATE

DWG. NO. 827

NOTE:

1. 4 TURNS OF WIRE SHOWN. ALWAYS INSTALL 4 TURNS OF CABLE IN DUCT UNLESS OTHERWISE SPECIFIED ON THE PLANS. WINDING DIRECTION SHALL BE INDICATED ON WIRE.



SEE DRAWING NO. 826 FOR SAWCUT DETAILS.

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

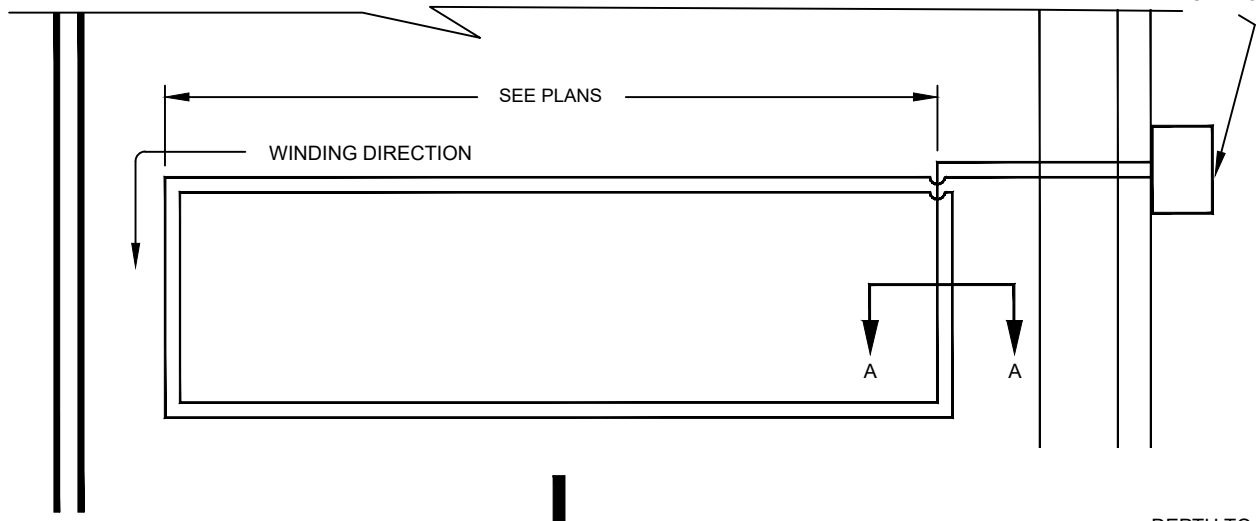
AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA				
		ONE INDUCTION LOOP FOR ONE TRAVEL LANE				
DATE		DWG. NO.		828		

NOTE:

2 TURNS OF WIRE SHOWN. ALWAYS INSTALL 2 TURNS OF CABLE IN DUCT UNLESS OTHERWISE SPECIFIED ON PLANS. WINDING DIRECTION SHALL BE INDICATED ON WIRE.

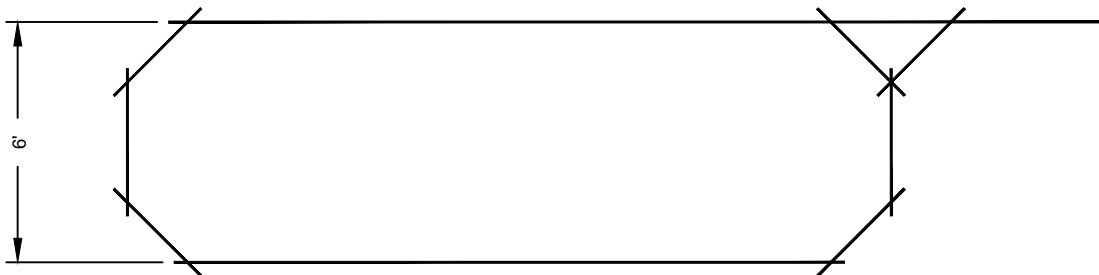
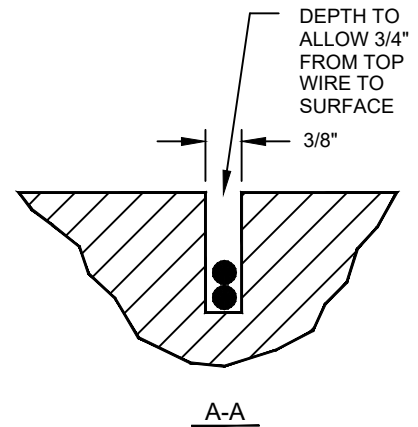
SEE DRAWING
NO. 827
FOR METHOD
OF INSTALLING
PULL BOX



↑
DIRECTION
OF TRAVEL

↑
DIRECTION
OF TRAVEL

WIRING DIAGRAM



SAWCUT DIAGRAM

SEE DRAWING NO. 826 FOR SAWCUT DETAILS.

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

ONE INDUCTION LOOP
FOR TWO TRAVEL LANES

DATE

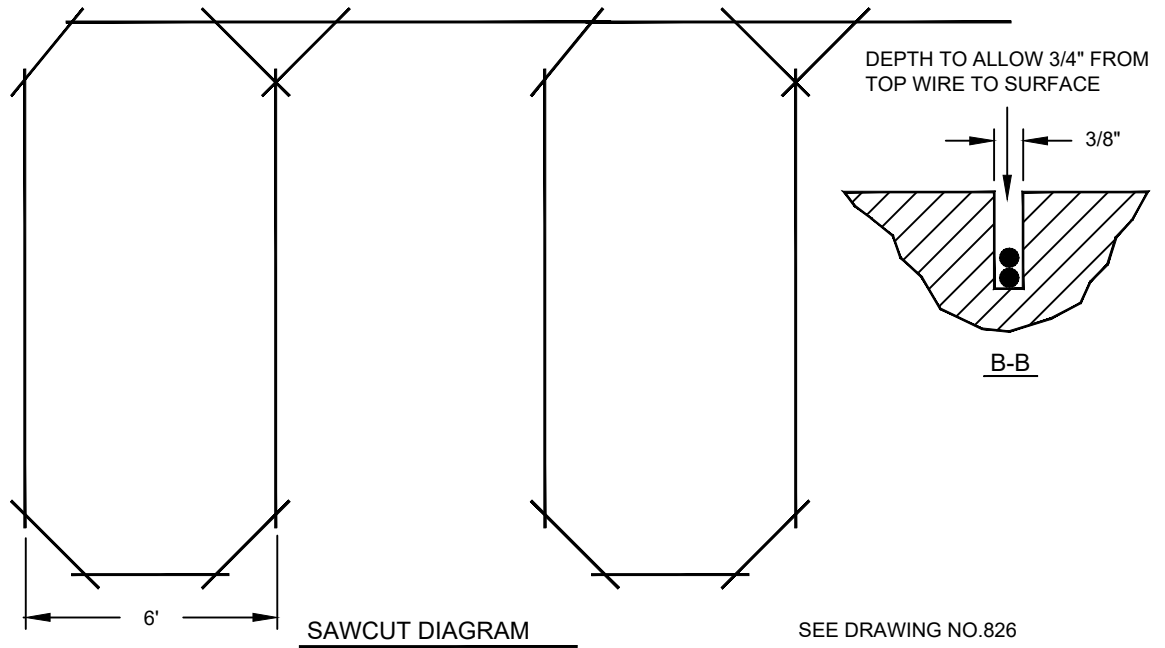
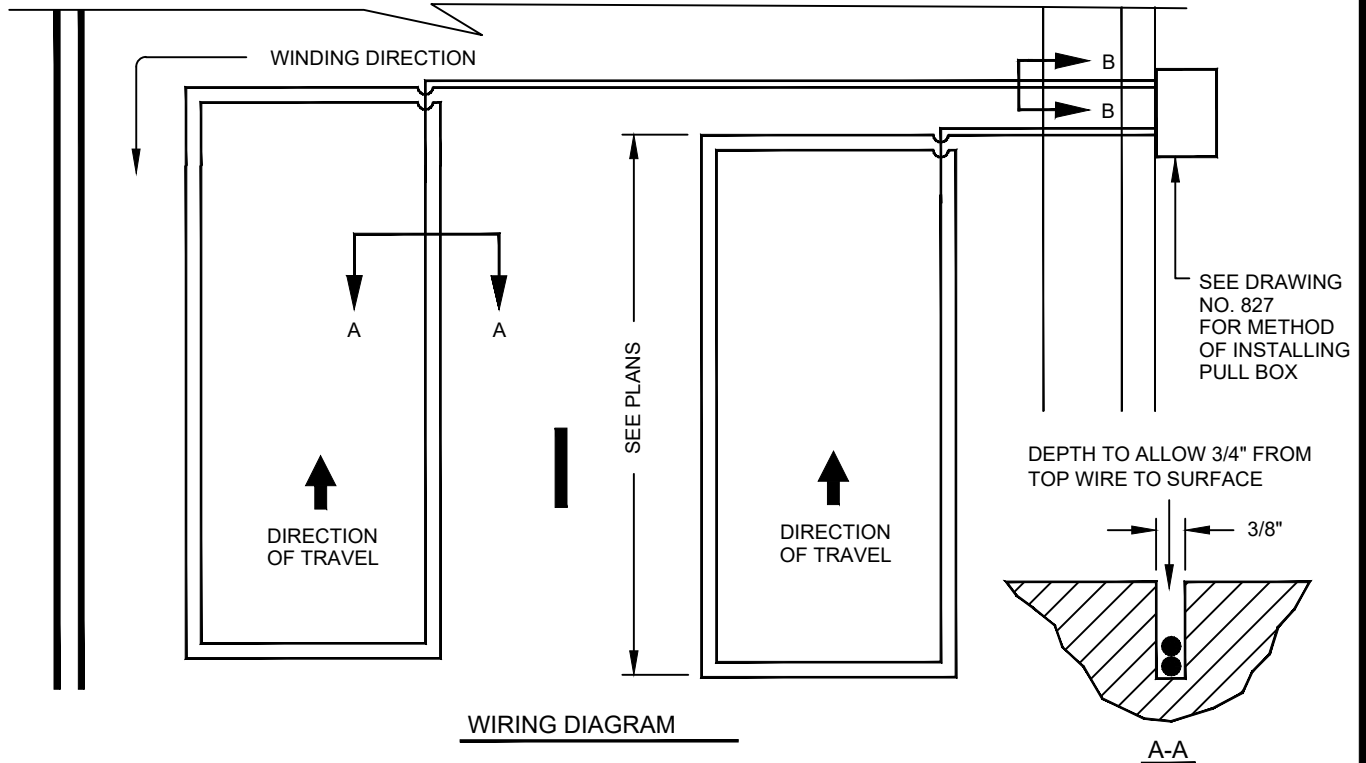
DWG. NO. 829

SHEET

1 OF 2

NOTE:

2 TURNS OF WIRE SHOWN. ALWAYS INSTALL 2 TURNS OF CABLE IN DUCT UNLESS OTHERWISE SPECIFIED ON PLANS. WINDING DIRECTION SHALL BE INDICATED ON WIRE.



SEE DRAWING NO. 826 FOR SAWCUT DETAILS.

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TWO INDUCTION LOOPS
FOR TWO TRAVEL LANES

DATE

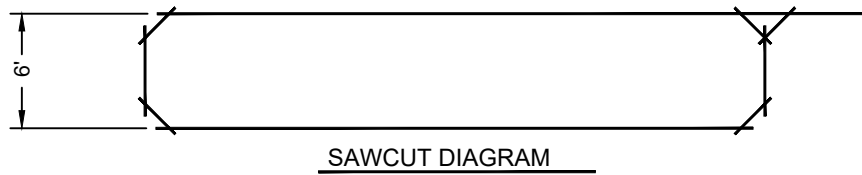
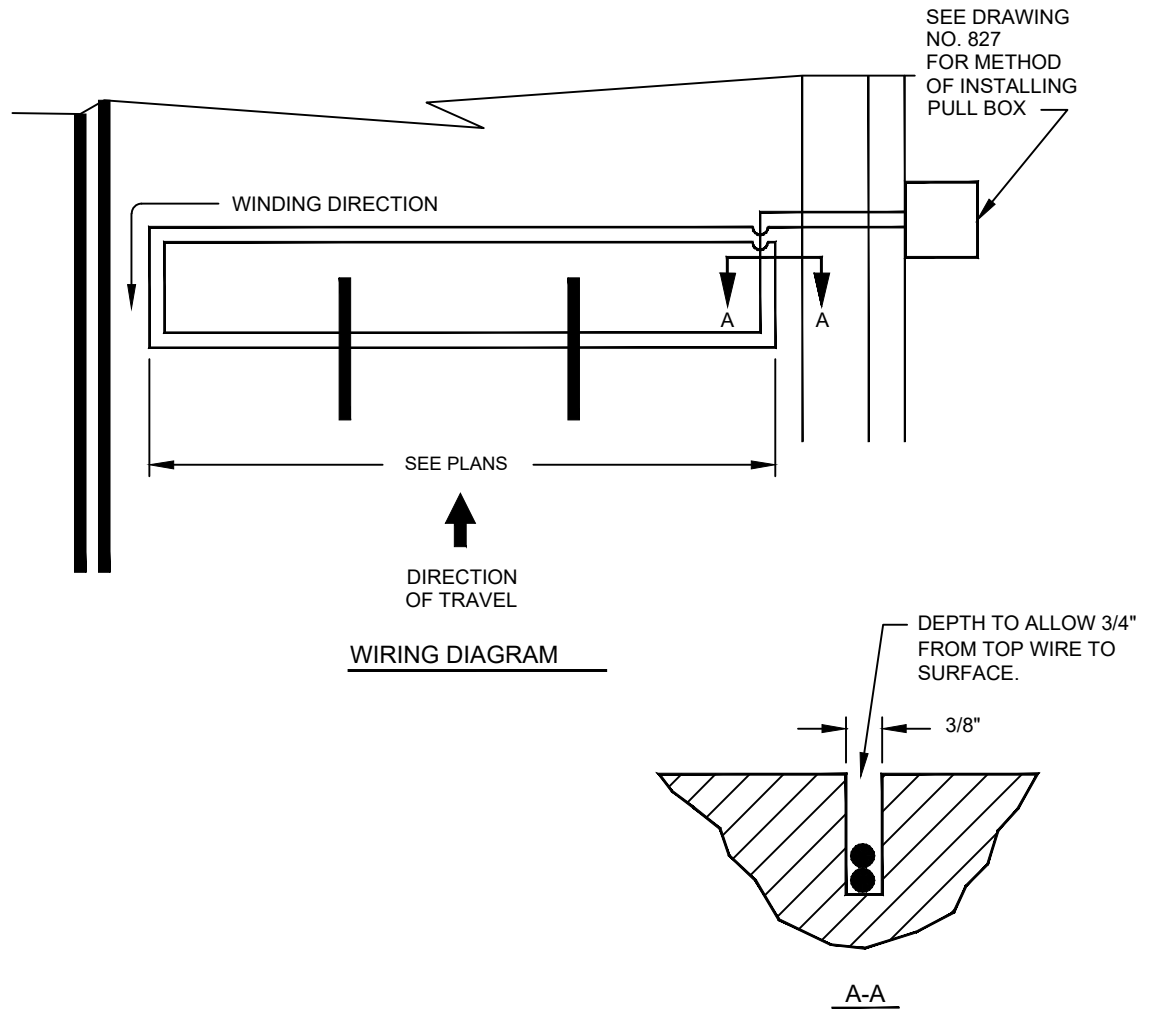
DWG. NO. 829

SHEET

2 OF 2

NOTE:

2 TURNS OF WIRE SHOWN. ALWAYS INSTALL 2 TURNS OF CABLE IN DUCT UNLESS OTHERWISE SPECIFIED ON PLANS. WINDING DIRECTION SHALL BE INDICATED ON WIRE.



SEE DRAWING NO. 826 FOR SAWCUT DETAILS.

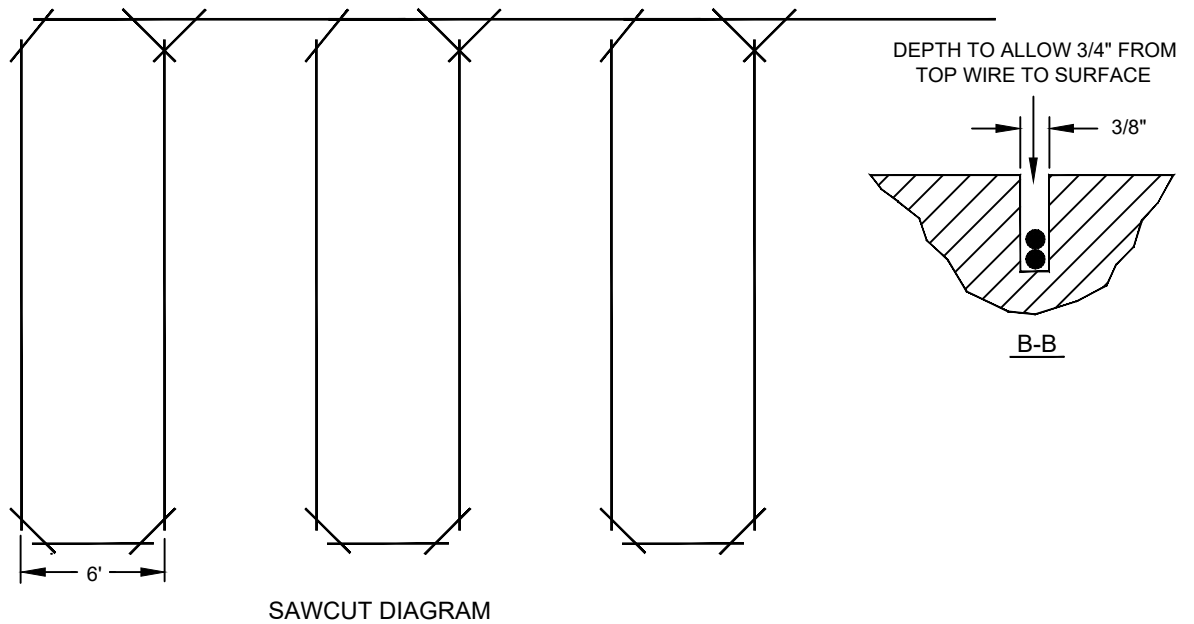
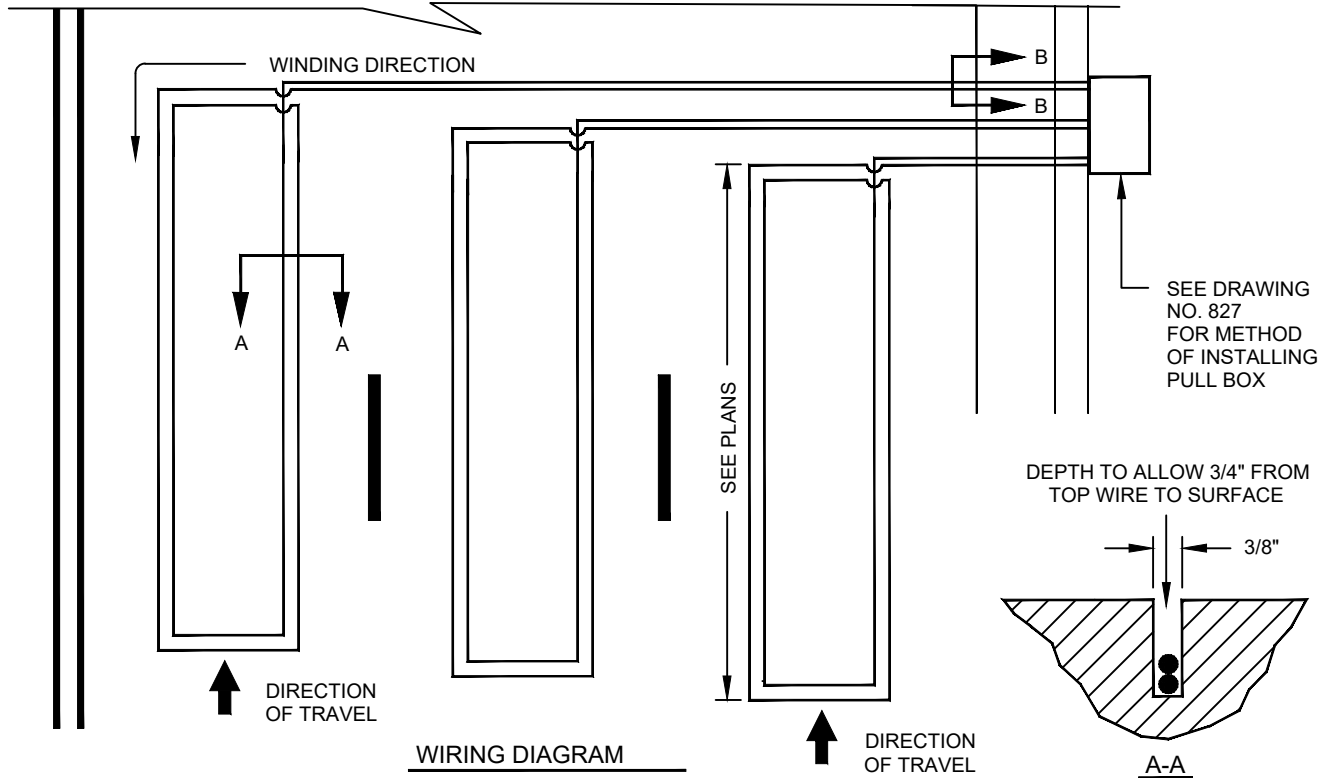
PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA				
		ONE INDUCTION LOOP FOR THREE TRAVEL LANES				
DATE		DWG. NO. 830		SHEET 1 OF 2		

NOTE:

2 TURNS OF WIRE SHOWN. ALWAYS INSTALL 2 TURNS OF CABLE IN DUCT UNLESS OTHERWISE SPECIFIED ON PLANS. WINDING DIRECTION SHALL BE INDICATED ON WIRE.



SEE DRAWING NO. 826 FOR SAWCUT DETAILS.

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

THREE INDUCTION LOOPS
FOR THREE TRAVEL LANES

DATE

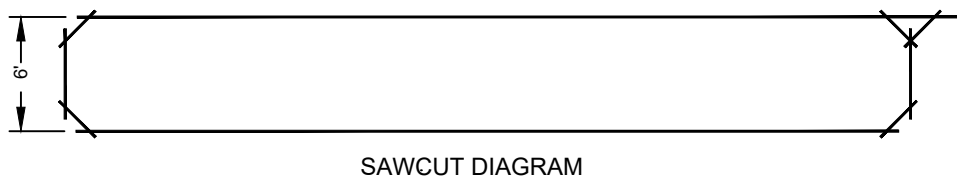
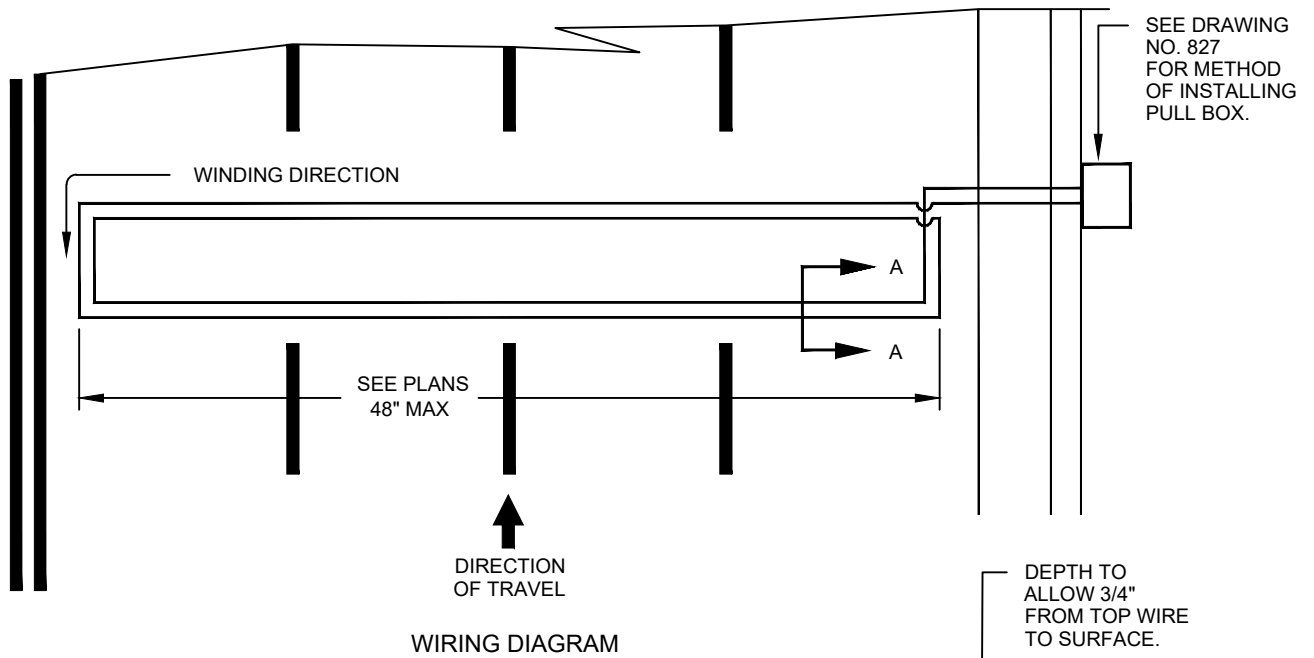
DWG. NO. 830

SHEET

2 OF 2

NOTE:

2 TURNS OF WIRE SHOWN. ALWAYS INSTALL 2 TURNS OF CABLE IN DUCT UNLESS OTHERWISE SPECIFIED ON PLANS. WINDING DIRECTION SHALL BE INDICATED ON WIRE.

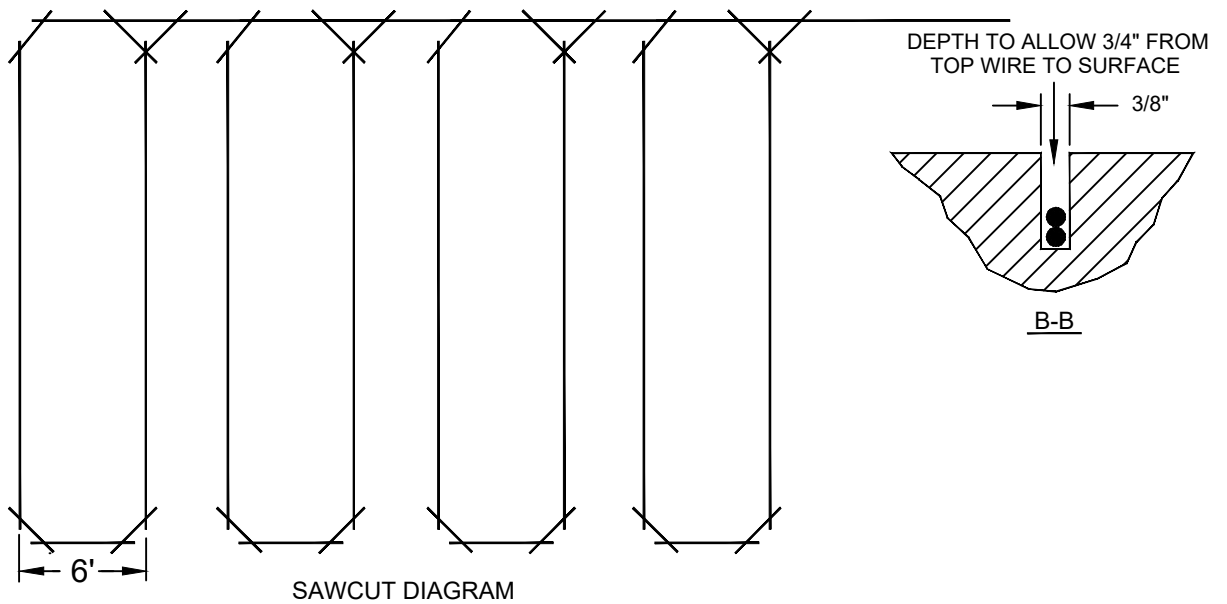
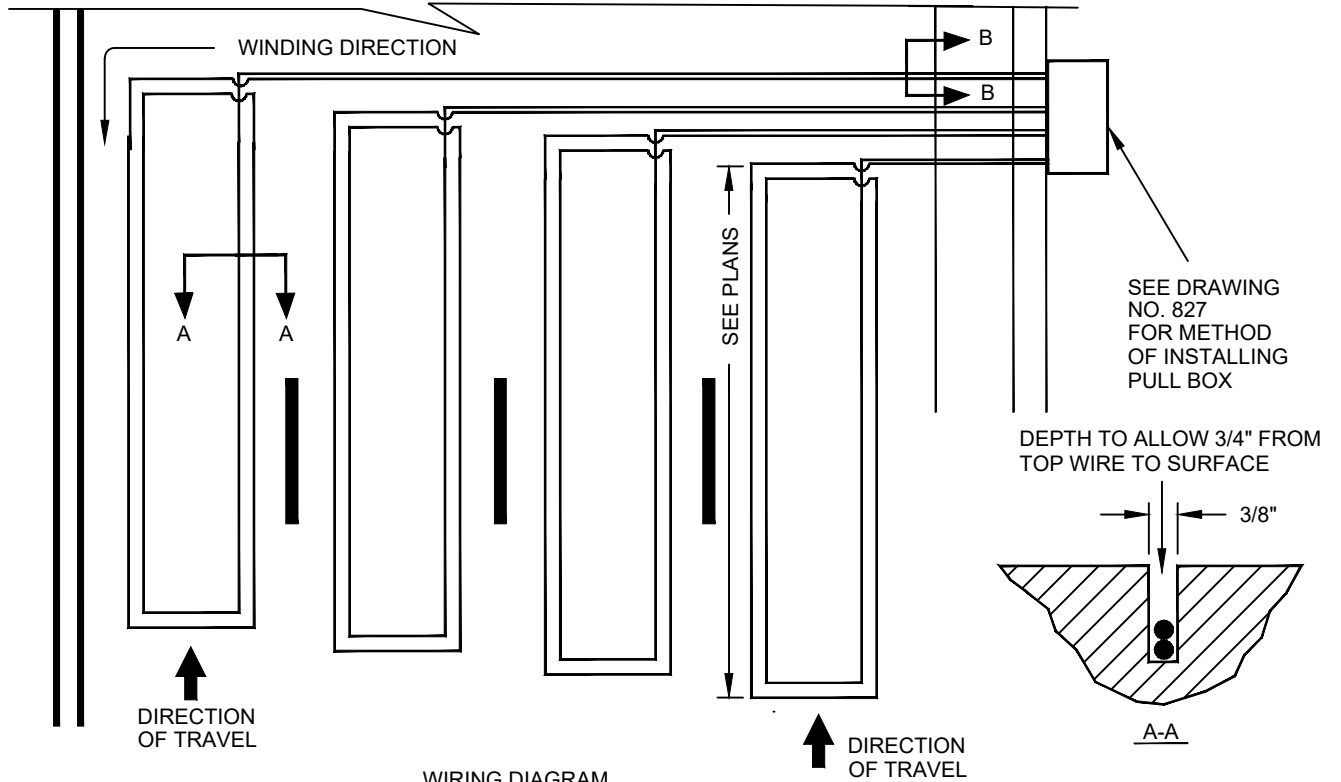


SEE DRAWING NO. 826 FOR SAWCUT DETAILS.

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
		ONE INDUCTION LOOP FOR FOUR TRAVEL LANES							
		DATE		DWG. NO. 831			SHEET 1 OF 2		

NOTE:

2 TURNS OF WIRE SHOWN. ALWAYS INSTALL 2 TURNS OF CABLE IN DUCT UNLESS OTHERWISE SPECIFIED ON PLANS. WINDING DIRECTION SHALL BE INDICATED ON WIRE.



SEE DRAWING NO. 826 FOR SAWCUT DETAILS.

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

FOUR INDUCTION LOOPS
FOR FOUR TRAVEL LANES

DATE

DWG. NO.

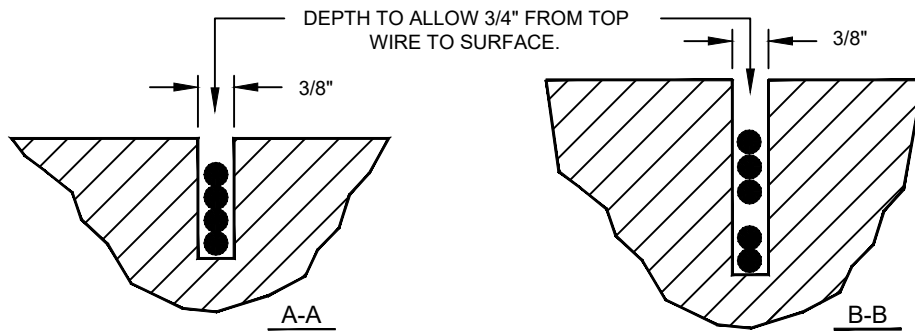
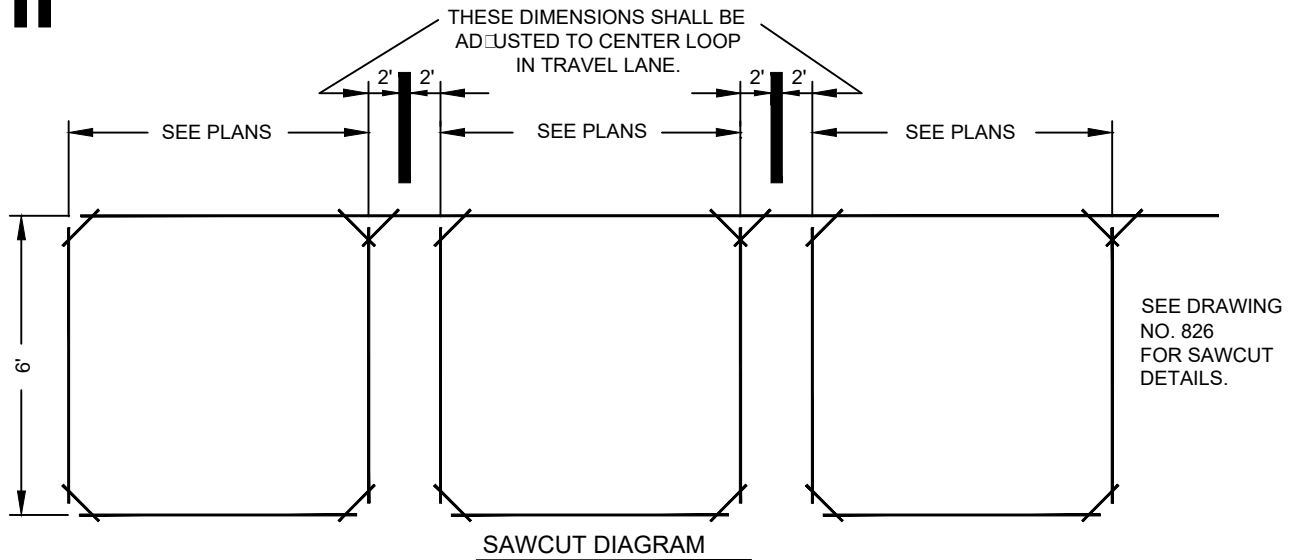
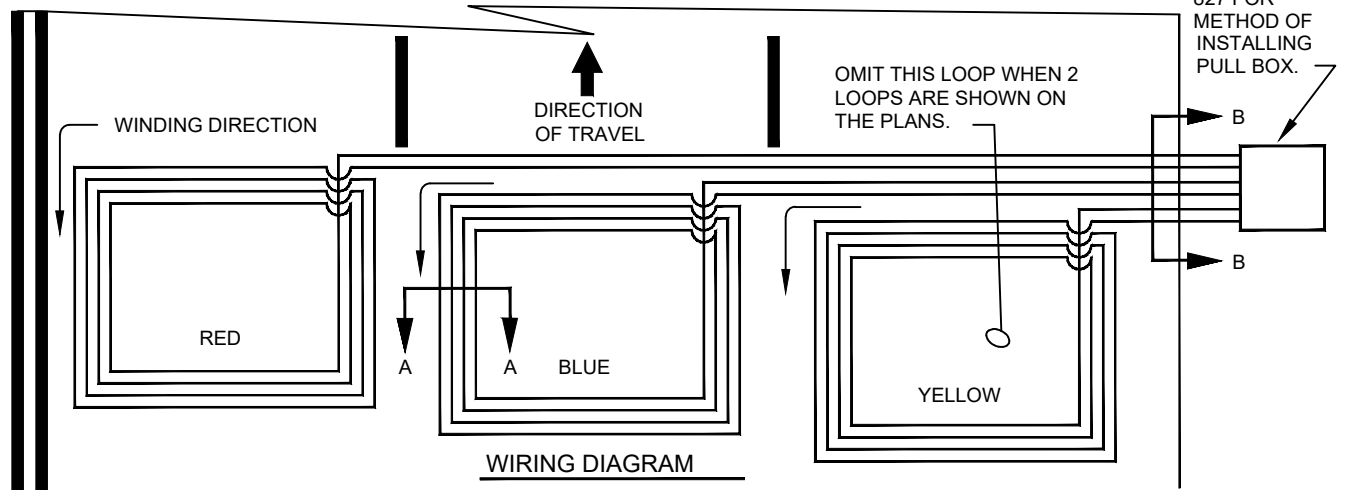
831

SHEET

2 OF 2

NOTES:

1. 4 TURNS OF WIRE SHOWN. ALWAYS INSTALL 4 TURNS OF CABLE IN DUCT UNLESS OTHERWISE SPECIFIED ON THE PLANS. WINDING DIRECTION SHALL BE INDICATED ON WIRE.
2. TRAFFIC ENGINEER SHALL ESTABLISH LATERAL LOCATIONS ON ROADS WITHOUT MARKED LANES.



PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

THREE INDUCTION LOOPS
FOR THREE TRAVEL LANES

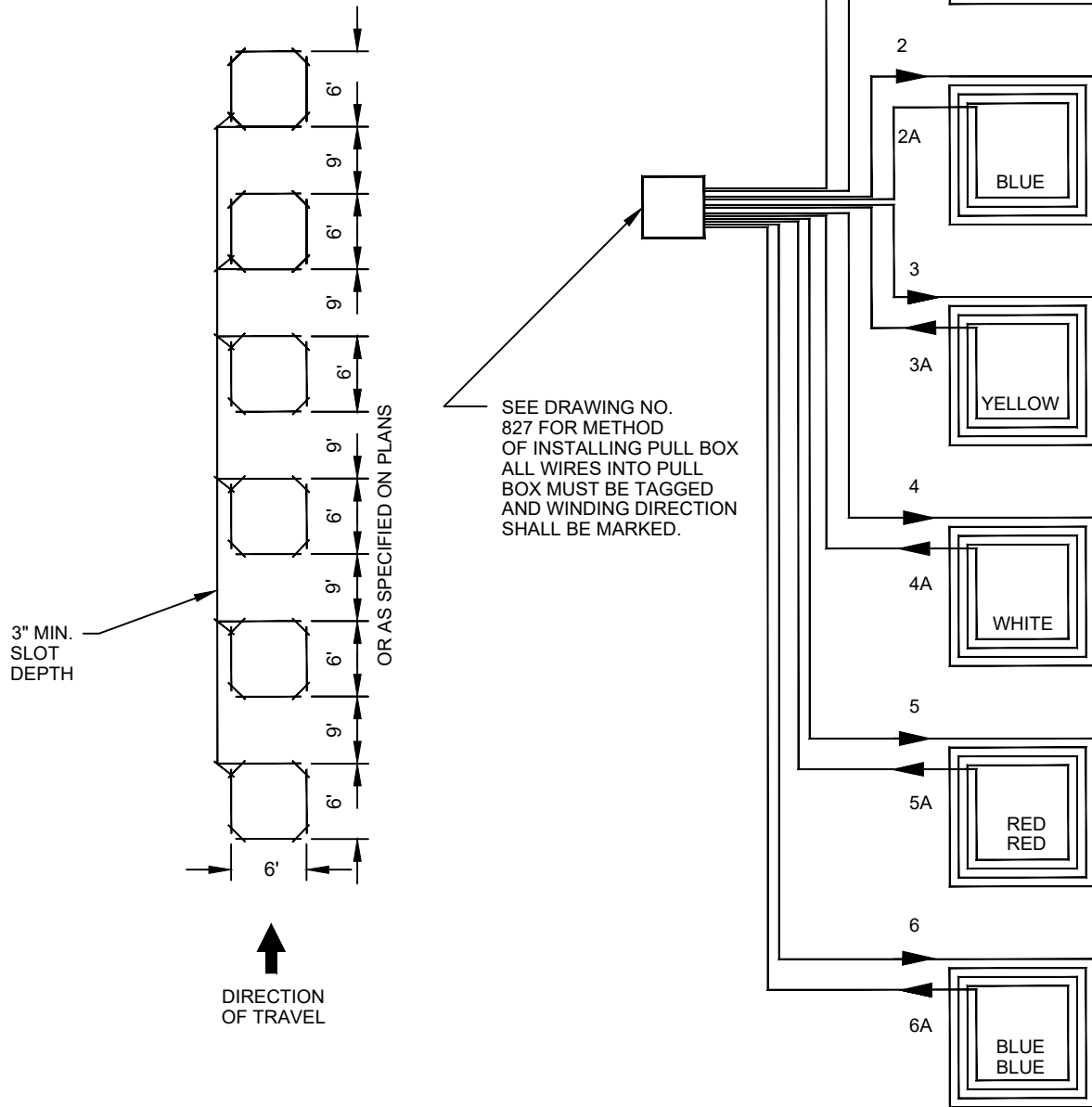
DATE

DWG. NO.

832

NOTES:

1. FRONT OF THE LOOP MUST EXTEND INTO THE CROSSWALK 2' TO 4'.
2. INSULATION TEST FOR EACH LOOP TO GROUND MUST NOT READ LESS THAN 50 MEG OHMS TO INFINITY. (USING MEGGER)
3. USE COLOR CODED 4 TURN CABLE IN DUCT AS SHOWN.
4. SEE DRAWING NO. 836 FOR WIRING CONNECTIONS.



SEE DRAWING NO. 836 FOR WIRE CONNECTIONS.
SEE DRAWING NO. 826 FOR SAWCUT DETAILS.

WIRING DIAGRAM

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

MULTIPLE LOOP SYSTEM FOR
THRU LANE

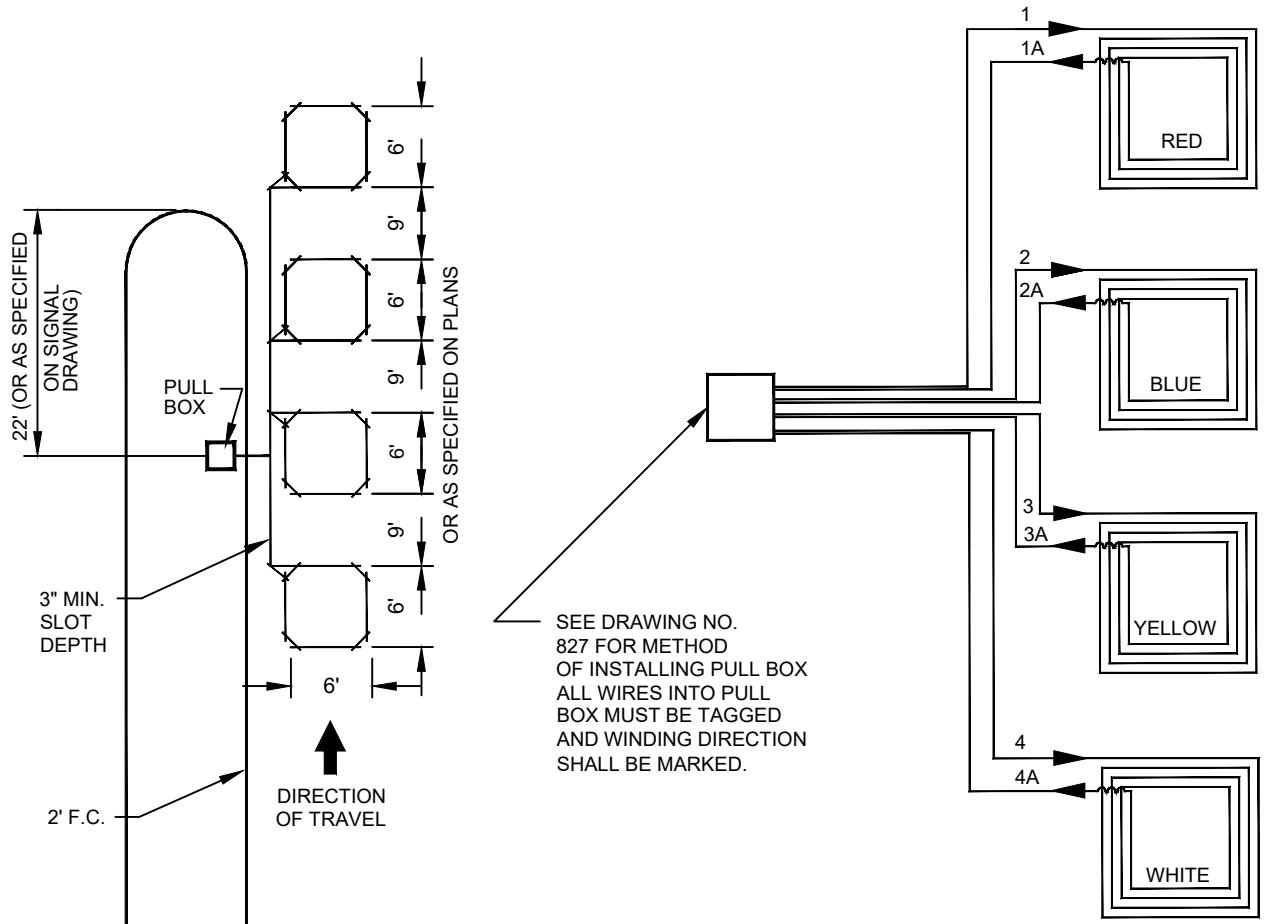
DATE 12-12-96

DWG. NO.

833

NOTES:

1. FRONT OF THE LOOP MUST EXTEND IN THE CROSSWALK 2' TO 4'.
2. INSULATION TEST FOR EACH LOOP TO GROUND MUST NOT READ LESS THAN 50 MEG OHMS TO INFINITY. (USING MEGGER)
3. USE COLOR CODED 4 TURN CABLE IN DUCT AS SHOWN.

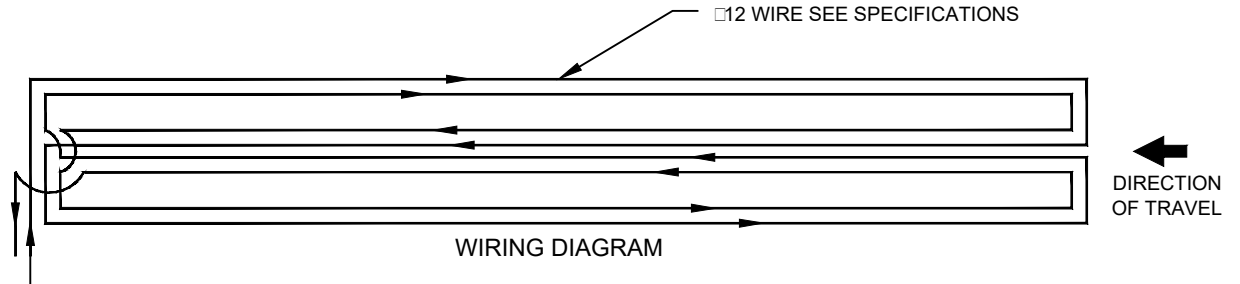


WIRING DIAGRAM

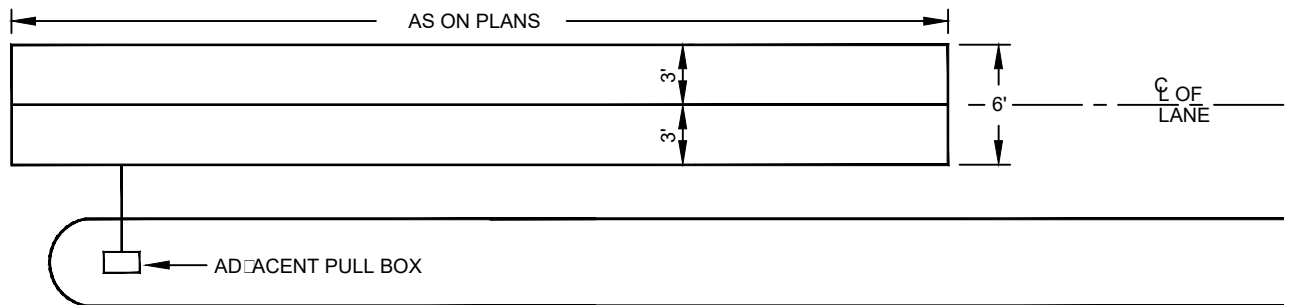
SEE DRAWING NO. 836 FOR WIRE CONNECTIONS.
SEE DRAWING NO. 826 FOR SAWCUT DETAILS.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		MULTIPLE LOOP SYSTEM FOR LEFT TURN POCKET											
		DATE		DWG. NO.		834							

TYPE "QUADRUPOLE" LOOP INSTALLATION



WHENEVER MORE THAN ONE LOOP TERMINATES IN A PULL BOX,
ALL LEADS MUST BE TAGGED AND IDENTIFIED.

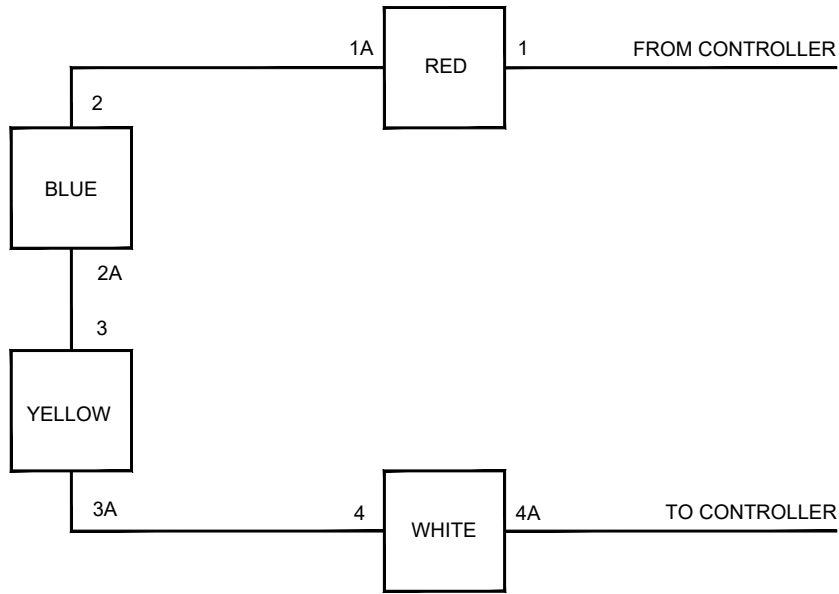


NOTES:

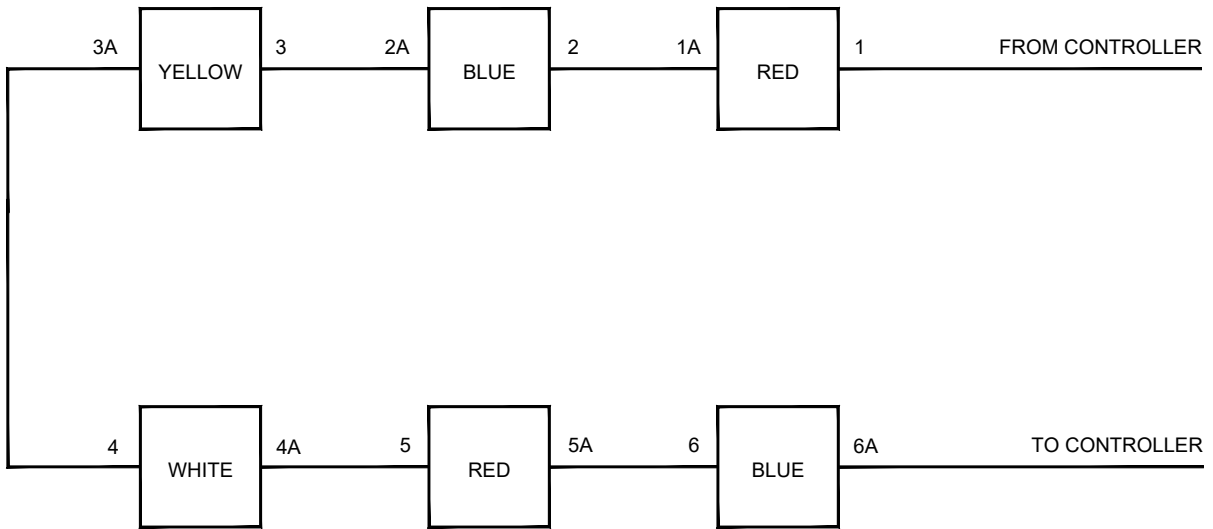
1. FOR ALL LOOPS, TWO TURNS ARE REQUIRED.
2. FRONT OF LOOP MUST EXTEND IN THE CROSSWALK 2' TO 4'.

SPECIFICATION REFERENCE		AGENCY APPROVED						B	C	H	L	M	N
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		TYPE "QUADRUPOLE" LOOP INSTALLATION											
		DATE		DWG. NO.		835							

SEE DRAWING NO. 834 FOR LOOP LAYOUT



SEE DRAWING NO. 833 FOR LOOP LAYOUT



PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

WIRE DIAGRAMS FOR MULTIPLE
LOOP SYSTEMS FOR LEFT TURN
POCKET AND THRU LANE

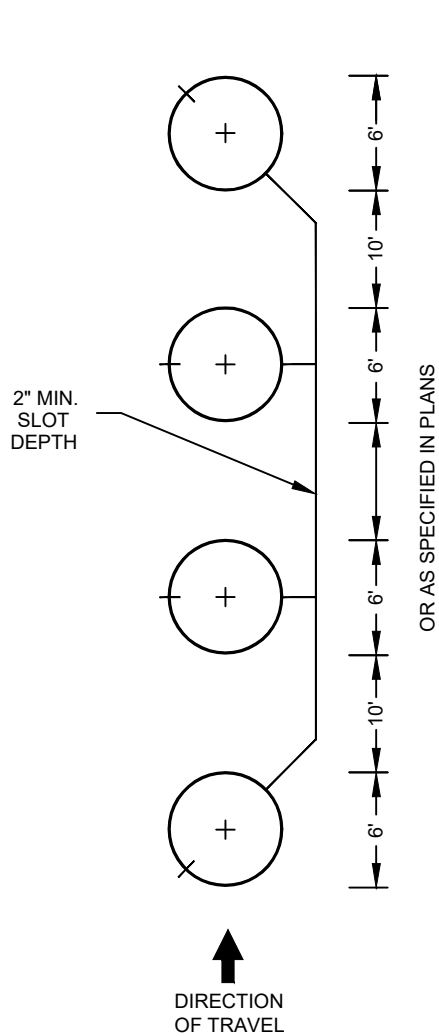
DATE 12-12-96

DWG. NO.

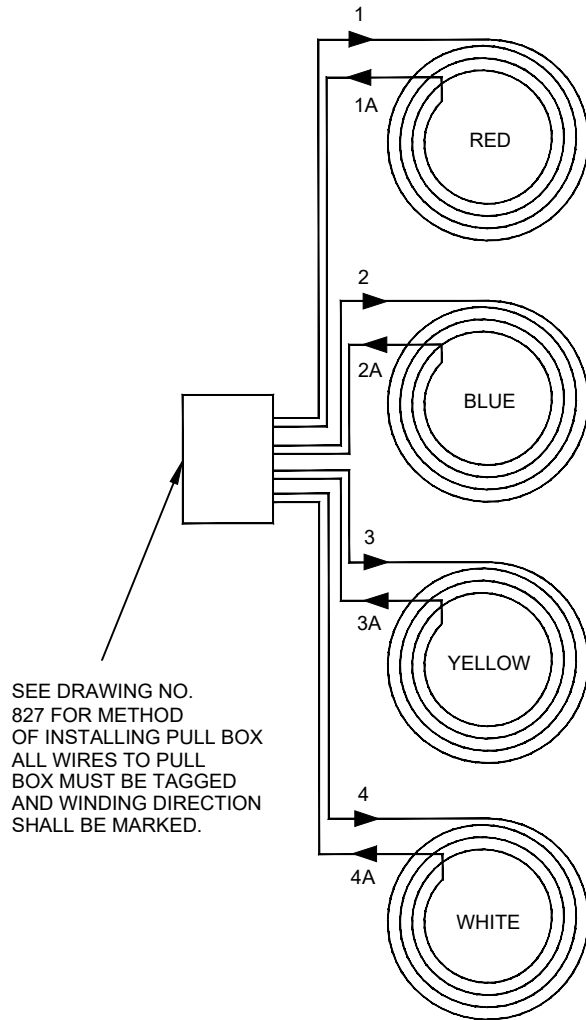
836

NOTES:

1. INSULATION FOR EACH LOOP MUST NOT READ LESS THAN 50 MEG OHMS TO INFINITY. (USING MEGGER)
2. USE COLOR CODED 4 TURN CABLE IN DUCT AS SHOWN.
3. FRONT OF LOOP MUST EXTEND IN THE CROSSWALK 2' TO 4'.



SAWCUT DIAGRAM

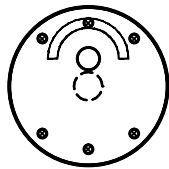
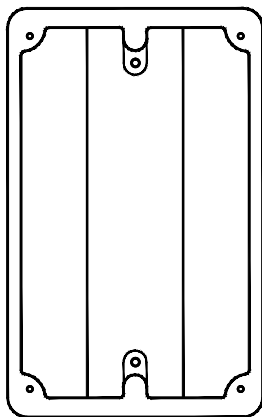


WIRING DIAGRAM

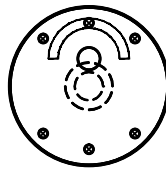
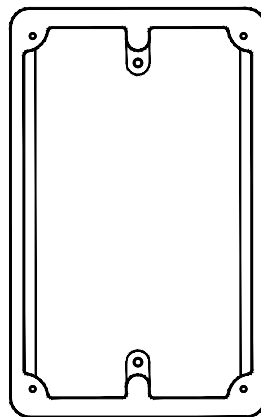
Effective 12/10/2020 to 06/09/2021

SPECIFICATION REFERENCE		AGENCY APPROVED						B	C	H	L	M	N
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		CIRCULAR INDUCTION LOOPS FOR TRAVEL LANES											
		DATE		DWG. NO.		837							

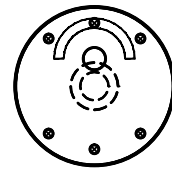
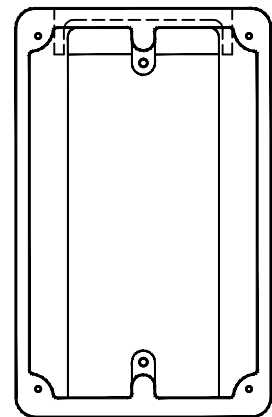
1. CAST ALUMINUM HOUSING.
2. PAINT COLOR SHALL MATCH SIGNAL HOUSING.



FOR FLAT SURFACE
MOUNTING



FOR SIGNAL
STANDARD MOUNTING



FOR 2-1/2" IPS
MOUNTING

1. AT LOCATIONS WHERE "WALK" "DON'T WALK" SIGNALS ARE PROVIDED, PROVIDE BLACK LETTERING ON A WHITE BACKGROUND ON PORCELAIN SIGNS.
2. AT LOCATIONS WHERE "SYMBOLIC" SIGNALS ARE PROVIDED, PROVIDE WHITE FIGURES ON A BLACK BACKGROUND.
3. MOUNTING SURFACE FOR THE SIGNS SHALL BE 9" X 12".



AGENCY APPROVED	B	C	H		M	N
UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
PEDESTRIAN PUSH BUTTON DETECTORS						
DATE 08-09-18	DWG. NO.		838			

PAINT: FLAT BLACK

DIMENSIONS AND ATTACHMENT METHODS
VARY PER MANUFACTURE.
BORDER WIDTH: 5-INCH (TYP.)

2" YELLOW RETROREFLECTIVE
BORDER LINE ADHESIVE SHEETING

1/2" CLEARANCE (MIN.)

3-SECTION ASSEMBLY

4-SECTION ASSEMBLY

NOTES:

1. ALL TRAFFIC SIGNAL BACKPLATES SHALL HAVE A 2-INCH RETROREFLECTIVE ADHESIVE SHEETING BORDER ON THE ENTIRE OUTER PERIMETER OF THE FRONT SIDE OF THE BACKPLATE.
2. RETROREFLECTIVE SHEETING SHALL BE FLUORESCENT YELLOW, ASTM D4956-13 TYPE XI OR BETTER.
3. THE RETROREFLECTIVE SHEETING BORDER SHALL HAVE A MINIMUM OF 0.5"
4. CLEARANCE FROM ALL LOUVERS. NO RETROREFLECTIVE SHEETING SHALL BE PLACED OVER ANY LOUVERED AREA.
5. RETROREFLECTIVE SHEETING BORDER SHALL BE INSTALLED BY THE MANUFACTURER, AND MODIFICATIONS SHALL NOT BE MADE BY THE CONTRACTOR.
6. THE BACK PLATE WITH RETROREFLECTIVE SHEETING BORDER SHALL BE FROM THE SAME MANUFACTURER AS THE SIGNAL HEAD ASSEMBLY. THE COMPLETE HEAD ASSEMBLY, INCLUDING THE BACKPLATE, SHALL BE CAPABLE OF WITHSTANDING WINDS OF 90 MPH WITHOUT DAMAGE OR SEPARATION OF ANY PARTS FROM THE SIGNAL HEAD ASSEMBLY.

SPECIFICATION REFERENCE		AGENCY APPROVED B C H L M N					
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		LOUVERED BACKPLATE FOR MAST ARM MOUNTED SIGNAL					
		DATE 07-01-17		DWG. NO. 840			

PAINT: FLAT BLACK

DIMENSIONS AND ATTACHMENT METHODS VARY PER MANUFACTURE.
BORDER WIDTH: 5-INCH (TYP.)

2" YELLOW RETROREFLECTIVE BORDER LINE ADHESIVE SHEETING

1/2" CLEARANCE (MIN.)

3-SECTION ASSEMBLY

4-SECTION ASSEMBLY

NOTES:

- ALL TRAFFIC SIGNAL BACKPLATES SHALL HAVE A 2-INCH RETROREFLECTIVE ADHESIVE SHEETING BORDER ON THE ENTIRE OUTER PERIMETER OF THE FRONT SIDE OF THE BACKPLATE.
- RETROREFLECTIVE SHEETING SHALL BE FLUORESCENT YELLOW, ASTM D4956-13 TYPE XI OR BETTER.
- THE RETROREFLECTIVE SHEETING BORDER SHALL HAVE A MINIMUM OF 0.5" CLEARANCE FROM ALL LOUVERS. NO RETROREFLECTIVE SHEETING SHALL BE PLACED OVER ANY LOUVERED AREA.
- RETROREFLECTIVE SHEETING BORDER SHALL BE INSTALLED BY THE MANUFACTURER, AND MODIFICATIONS SHALL NOT BE MADE BY THE CONTRACTOR.
- THE BACK PLATE WITH RETROREFLECTIVE SHEETING BORDER SHALL BE FROM THE SAME MANUFACTURER AS THE SIGNAL HEAD ASSEMBLY. THE COMPLETE HEAD ASSEMBLY, INCLUDING THE BACKPLATE, SHALL BE CAPABLE OF WITHSTANDING WINDS OF 90 MPH WITHOUT DAMAGE OR SEPARATION OF ANY PARTS FROM THE SIGNAL HEAD ASSEMBLY.

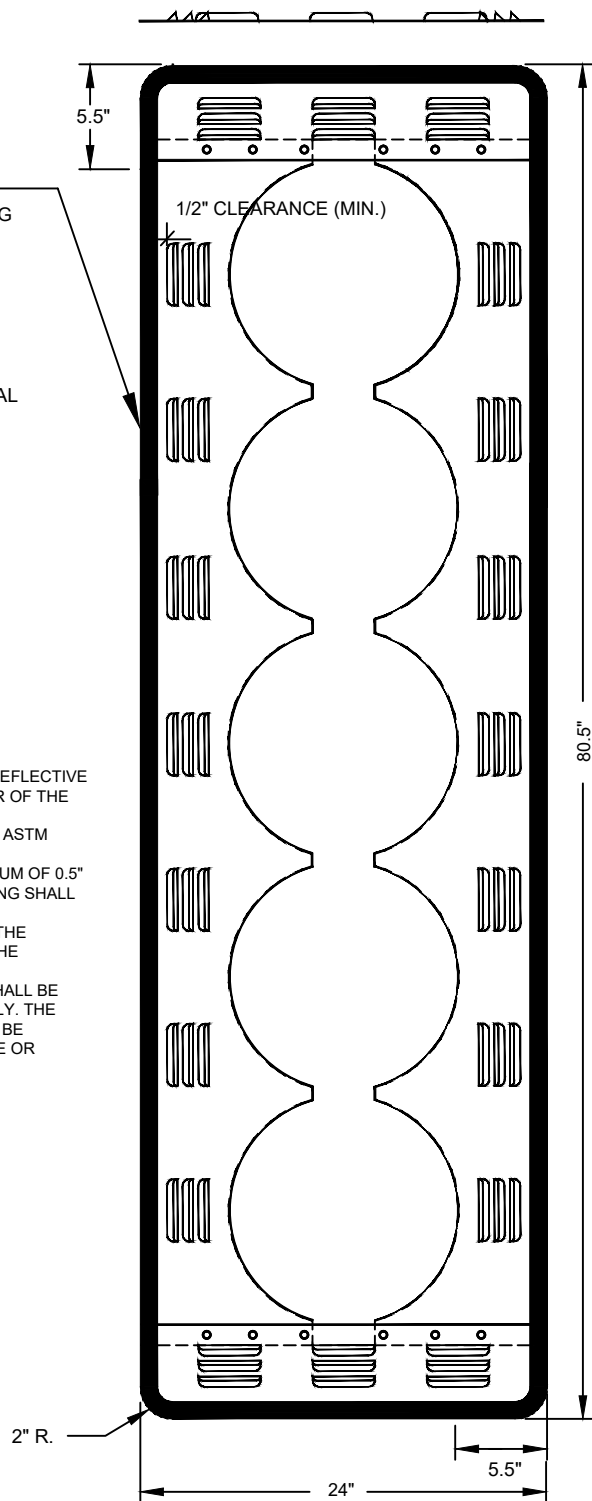
SPECIFICATION REFERENCE		AGENCY APPROVED B C H L M N					
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		LOUVERED BACKPLATE FOR POLE MOUNTED SIGNAL					
		DATE 07-01-17		DWG. NO. 841			

2" YELLOW RETROREFLECTIVE
BORDER LINE ADHESIVE SHEETING

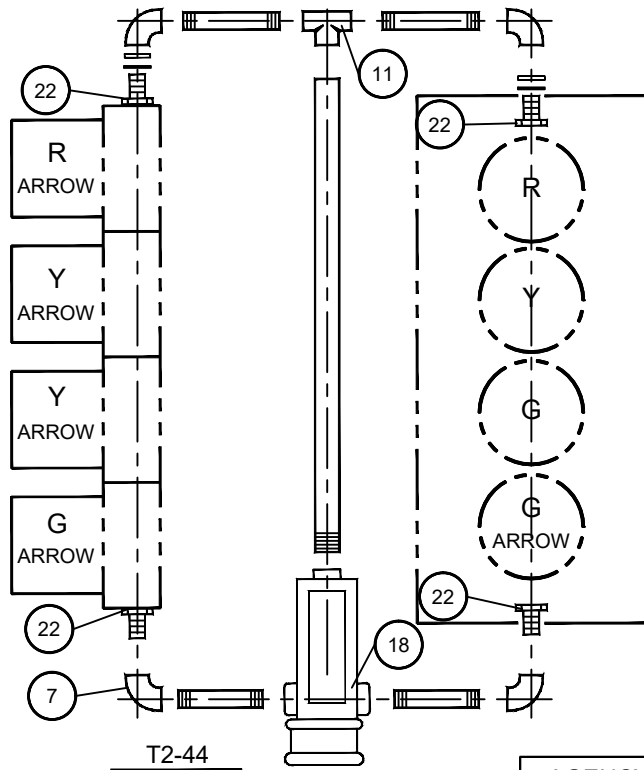
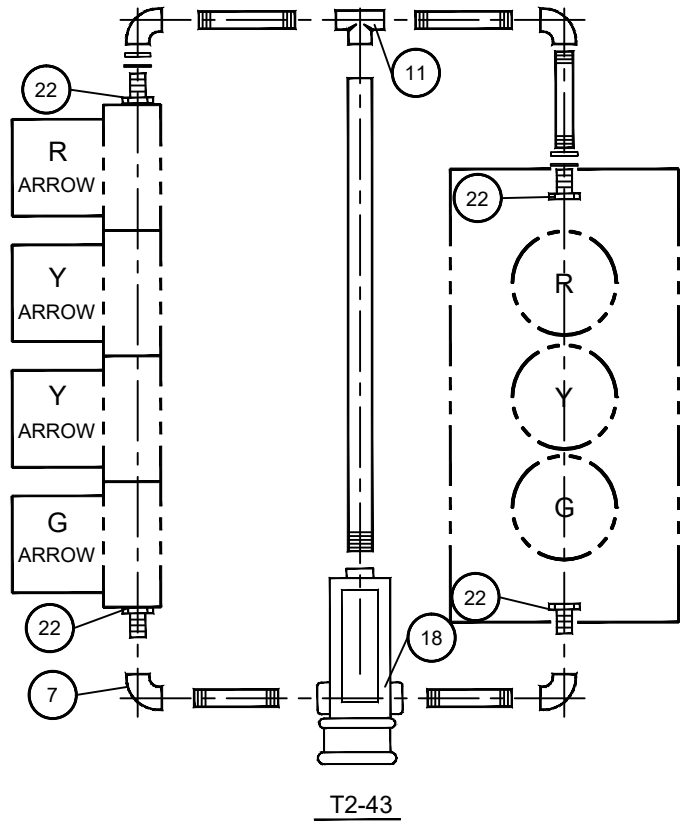
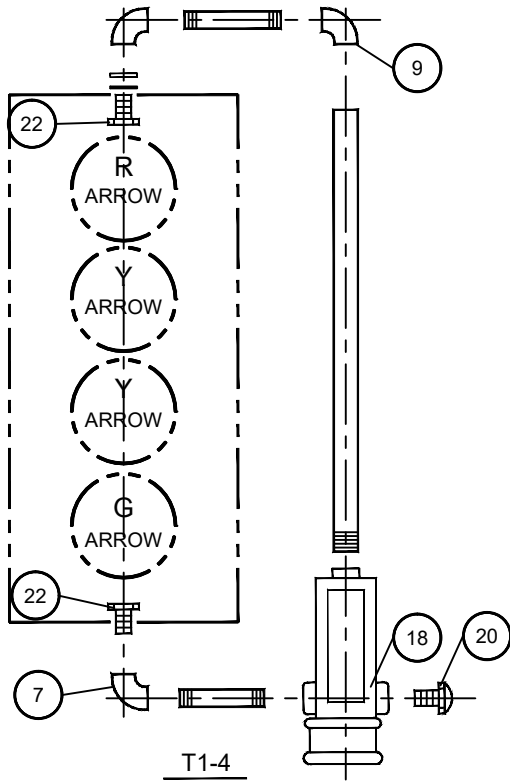
PAINT: FLAT BLACK
SHOWN 5 SECTION, 12" SIGNAL
HEAD BACKPLATE WITHOUT
ELEVATOR PLUMBIZER

NOTES:

1. ALL TRAFFIC SIGNAL BACKPLATES SHALL HAVE A 2-INCH RETROREFLECTIVE ADHESIVE SHEETING BORDER ON THE ENTIRE OUTER PERIMETER OF THE FRONT SIDE OF THE BACKPLATE.
2. RETROREFLECTIVE SHEETING SHALL BE FLUORESCENT YELLOW, ASTM D4956-13 TYPE XI OR BETTER.
3. THE RETROREFLECTIVE SHEETING BORDER SHALL HAVE A MINIMUM OF 0.5" CLEARANCE FROM ALL LOUVERS. NO RETROREFLECTIVE SHEETING SHALL BE PLACED OVER ANY LOUVERED AREA.
4. RETROREFLECTIVE SHEETING BORDER SHALL BE INSTALLED BY THE MANUFACTURER, AND MODIFICATIONS SHALL NOT BE MADE BY THE CONTRACTOR.
5. THE BACK PLATE WITH RETROREFLECTIVE SHEETING BORDER SHALL BE FROM THE SAME MANUFACTURER AS THE SIGNAL HEAD ASSEMBLY. THE COMPLETE HEAD ASSEMBLY, INCLUDING THE BACKPLATE, SHALL BE CAPABLE OF WITHSTANDING WINDS OF 90 MPH WITHOUT DAMAGE OR SEPARATION OF ANY PARTS FROM THE SIGNAL HEAD ASSEMBLY.



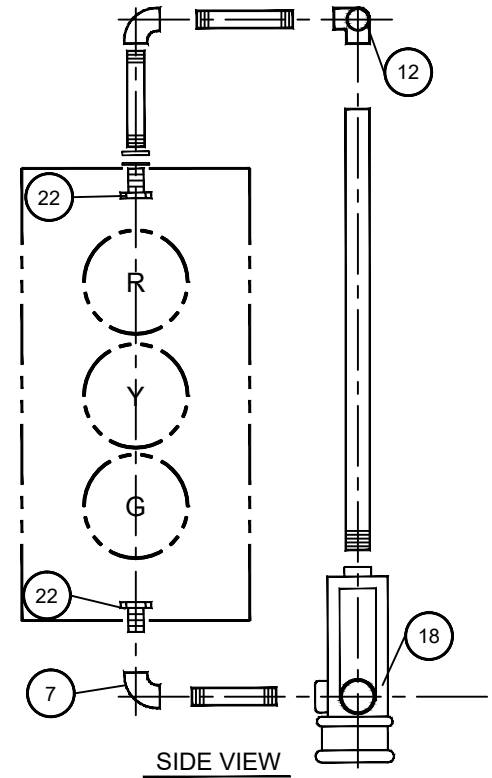
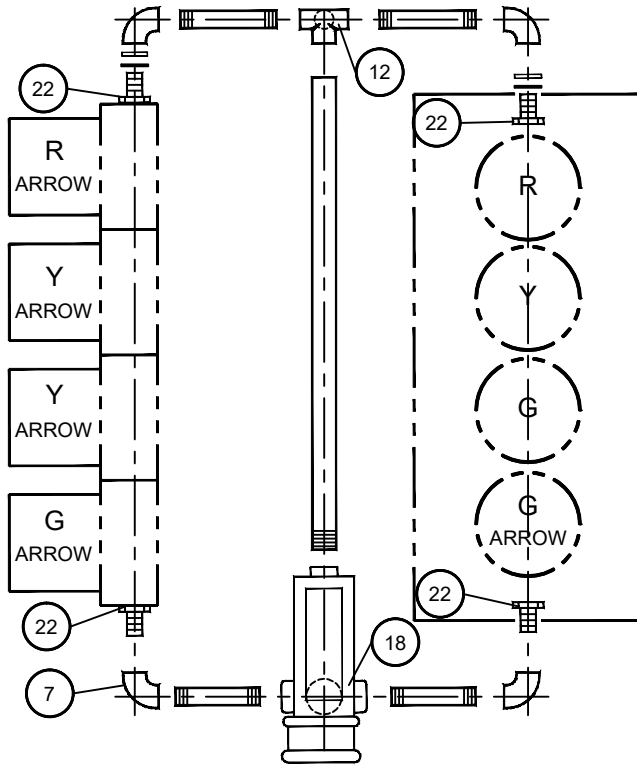
		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		LOUVERED BACKPLATE FOR 5 SECTION SIGNAL HEAD											
		DATE 07-01-17		DWG. NO.		842			SHEET 1 OF 2				



NOTES:

1. ALL SIGNALS ARE 12" NOMINAL.
2. FOR ITEMIZED PARTS, SEE DRAWING NO. 845.
3. FOR ARROW LENS SEE DRAWING NO. 890.

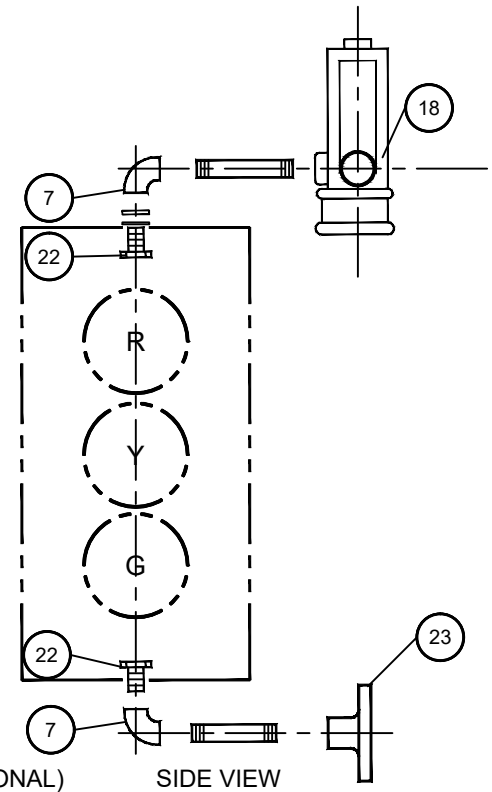
AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		SIGNAL ASSEMBLIES POST TOP MOUNT					
DATE 07-01-14		DWG. NO. 843		SHEET		1 OF 2	



T3-443

NOTES:

1. ALL SIGNALS ARE 12" NOMINAL.
2. FOR ITEMIZED PARTS, SEE DRAWING NO. 845.
3. FOR ARROW LENS SEE DRAWING NO. 890.

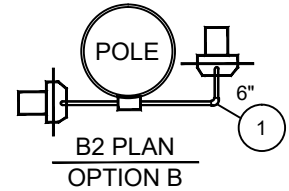
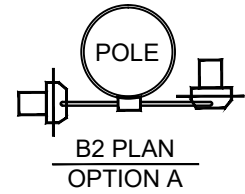
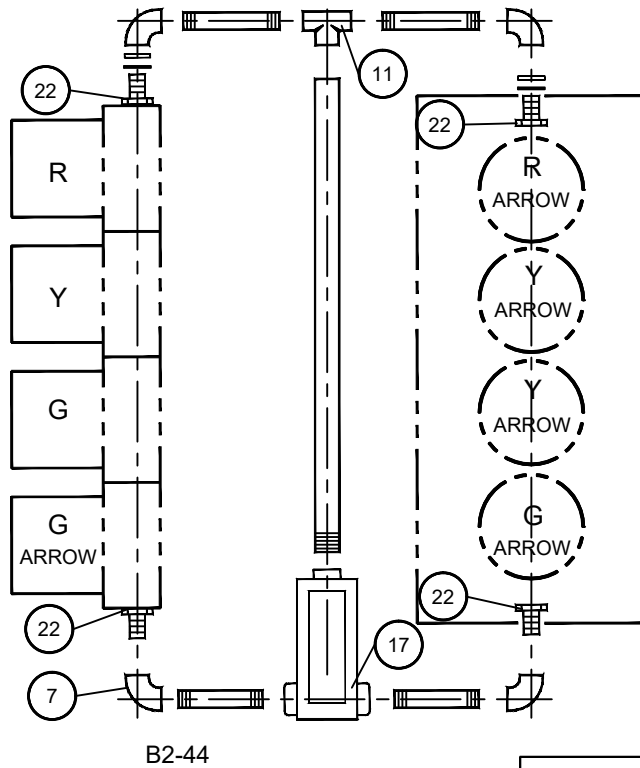
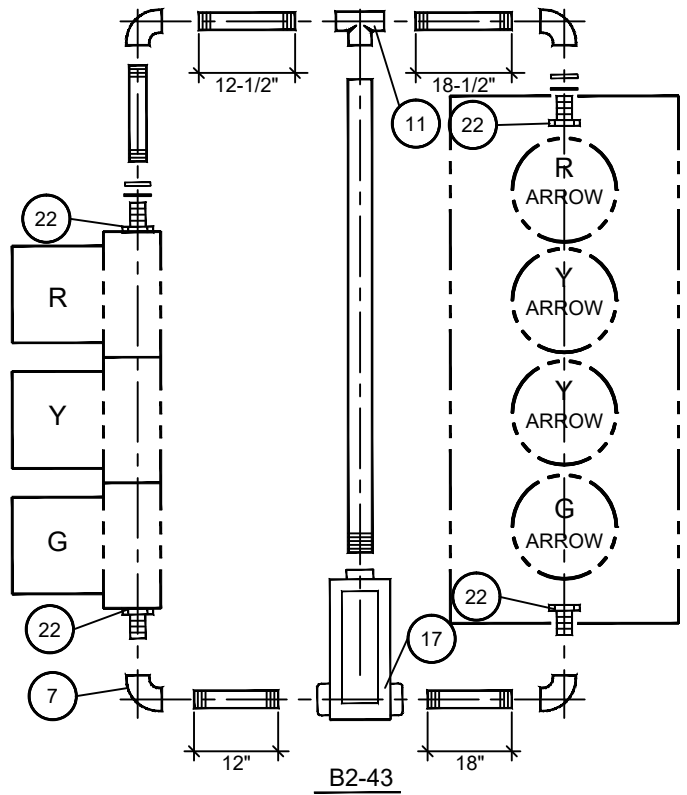
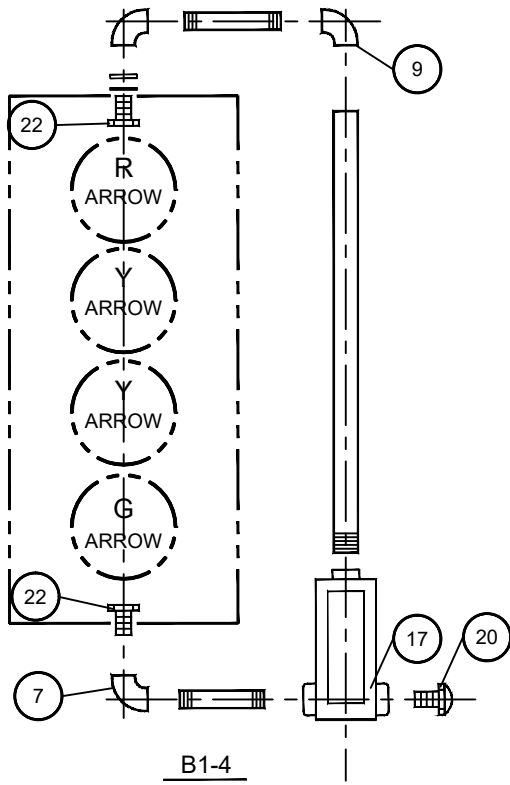


T3-443B (OPTIONAL)

SIDE VIEW

AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		SIGNAL ASSEMBLIES POST TOP MOUNT					
DATE	07-01-14	DWG. NO.	843	SHEET	2 OF 2		

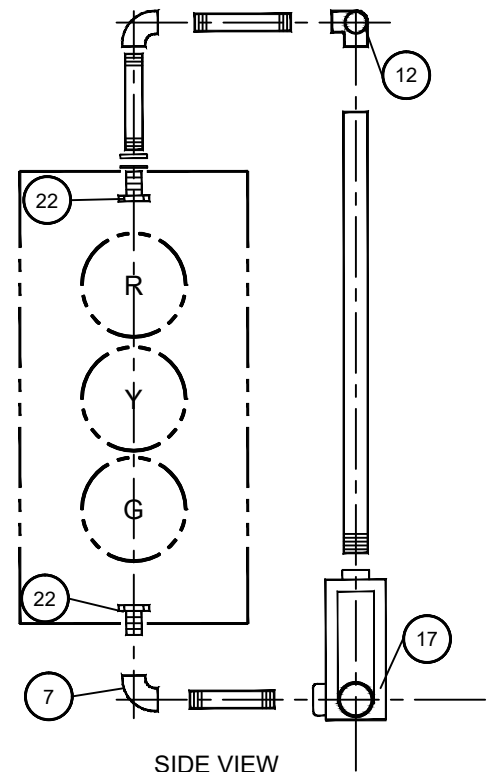
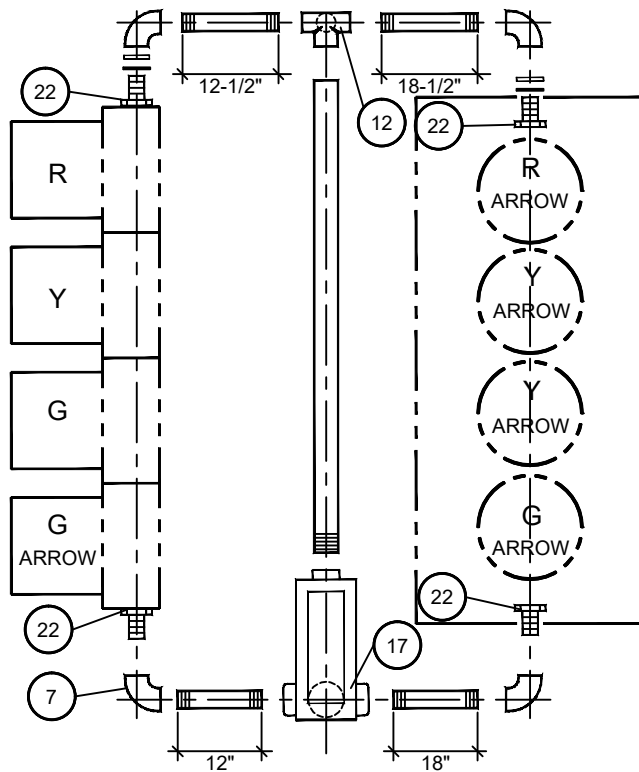
Effective 12/10/2020 to 06/09/2021



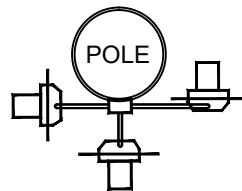
NOTES:

1. ALL SIGNALS ARE 12" NOMINAL.
2. FOR ITEMIZED PARTS, SEE DRAWING NO. 845.
3. FOR ARROW LENS SEE DRAWING NO. 890.

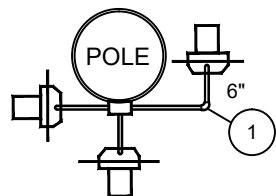
AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		SIGNAL ASSEMBLIES BRACKET MOUNT					
DATE 07-01-14		DWG. NO. 844		SHEET 1 OF 2			



SIDE VIEW



B3 PLAN
OPTION A

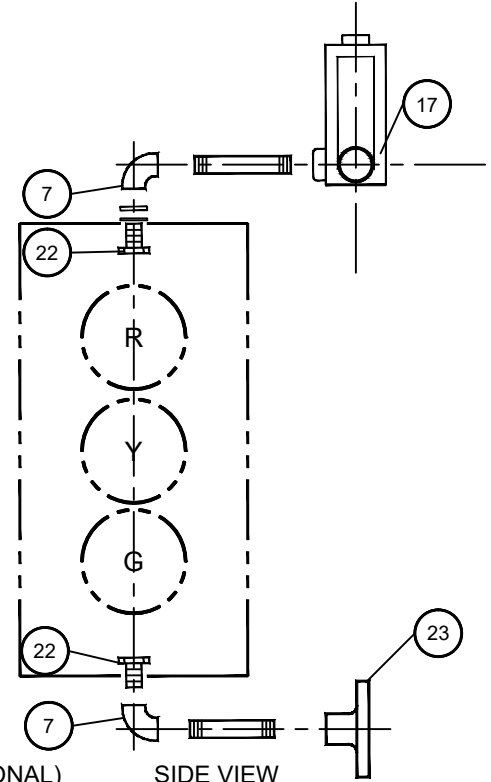


B3 PLAN
OPTION B

B3-443

NOTES:

1. ALL SIGNALS ARE 12" NOMINAL.
2. FOR ITEMIZED PARTS, SEE DRAWING NO. 845.
3. FOR ARROW LENS SEE DRAWING NO. 890.



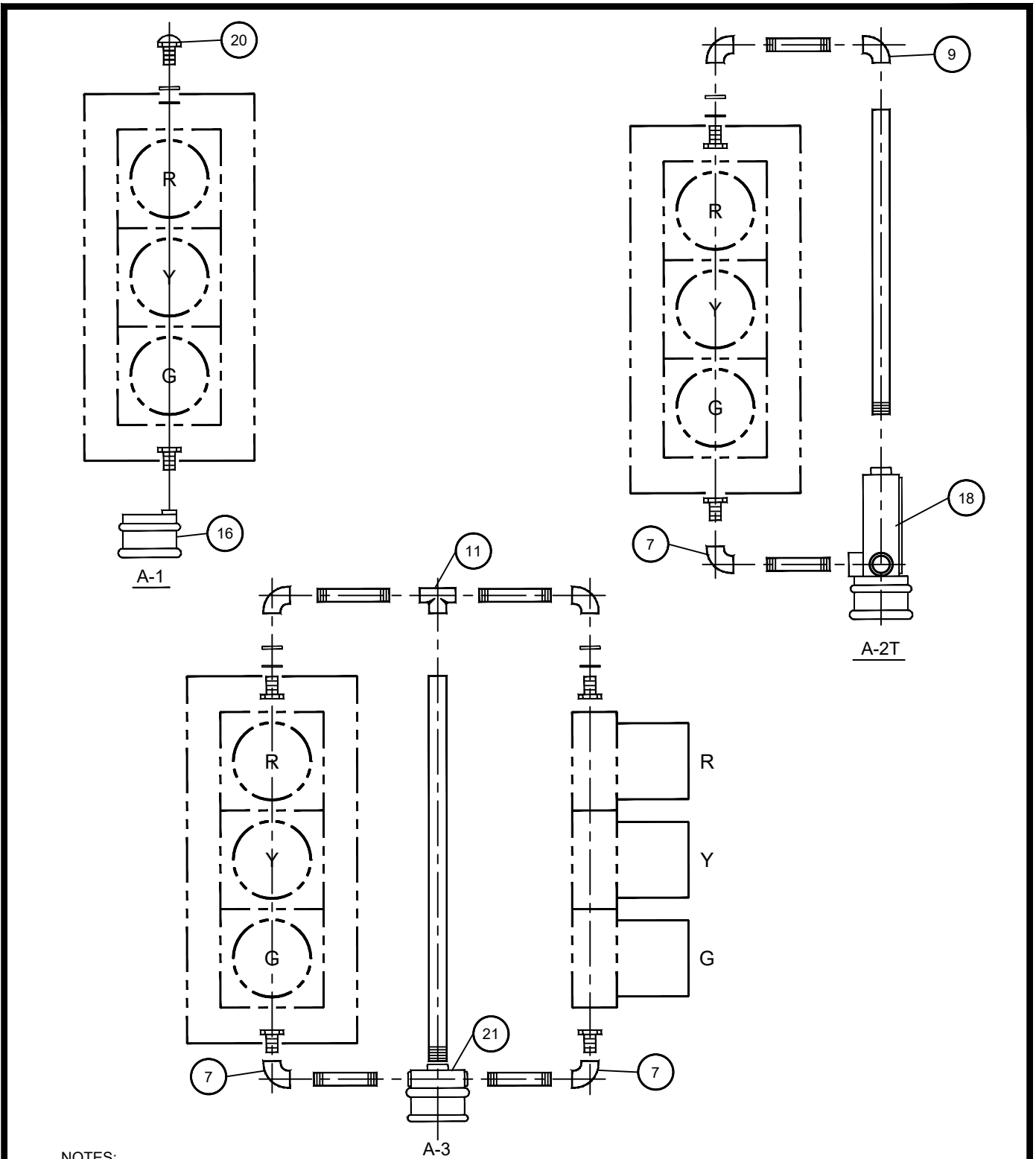
B3-443L (OPTIONAL)

SIDE VIEW

AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		SIGNAL ASSEMBLIES BRACKET MOUNT					
DATE 07-01-14		DWG. NO. 844		SHEET		2 OF 2	

ITEM	DESCRIPTION	STANDARD DWG. NO.
1.	DOGLEG	863
2.	ELEVATOR PLUMBIZER	875
3.	POLE PLATE WITH WIRE GUIDE	876
4.	2-WAY TIE BRACE	872
5.	3-WAY TIE BRACE	872
6.	4-WAY TIE BRACE	872
7.	SPECIAL ELBOW	874
8.	SPECIAL TEE	874
9.	MALLEABLE ELBOW-REAMED/SET SCREW	878
10.	MALLEABLE ELBOW/SIDE OUTLET/REAMED/SET SCREW	878
11.	MALLEABLE TEE, REAMED/SET SCREW	878
12.	MALLEABLE TEE/SIDE OUTLET, REAMED/SET SCREW	878
13.	MALLEABLE CROSS, REAMED/SET SCREW	878
14.	MALLEABLE CROSS/SIDE OUTLET, REAMED/SET SCREW	878
15.	4-WAY CENTER HUB	877
16.	POST TOP MOUNTED BRACKET	874
17.	SIDE BRACKET MOUNTED ADAPTER WITH TERMINAL COMPT.	880
18.	POST TOP MOUNTED ADAPTER WITH TERMINAL COMPT.	879
19.	LOCKING RING	872
20.	ORNAMENTAL CAP	872
21.	POST TOP MOUNTED ADAPTER WITH 3 PORTS	880
22.	LOCKING NIPPLE	872
23.	POLE PLATE	873
24.	1-1/2" MENERALLAC STRAP OR APPROVED EQUAL	863

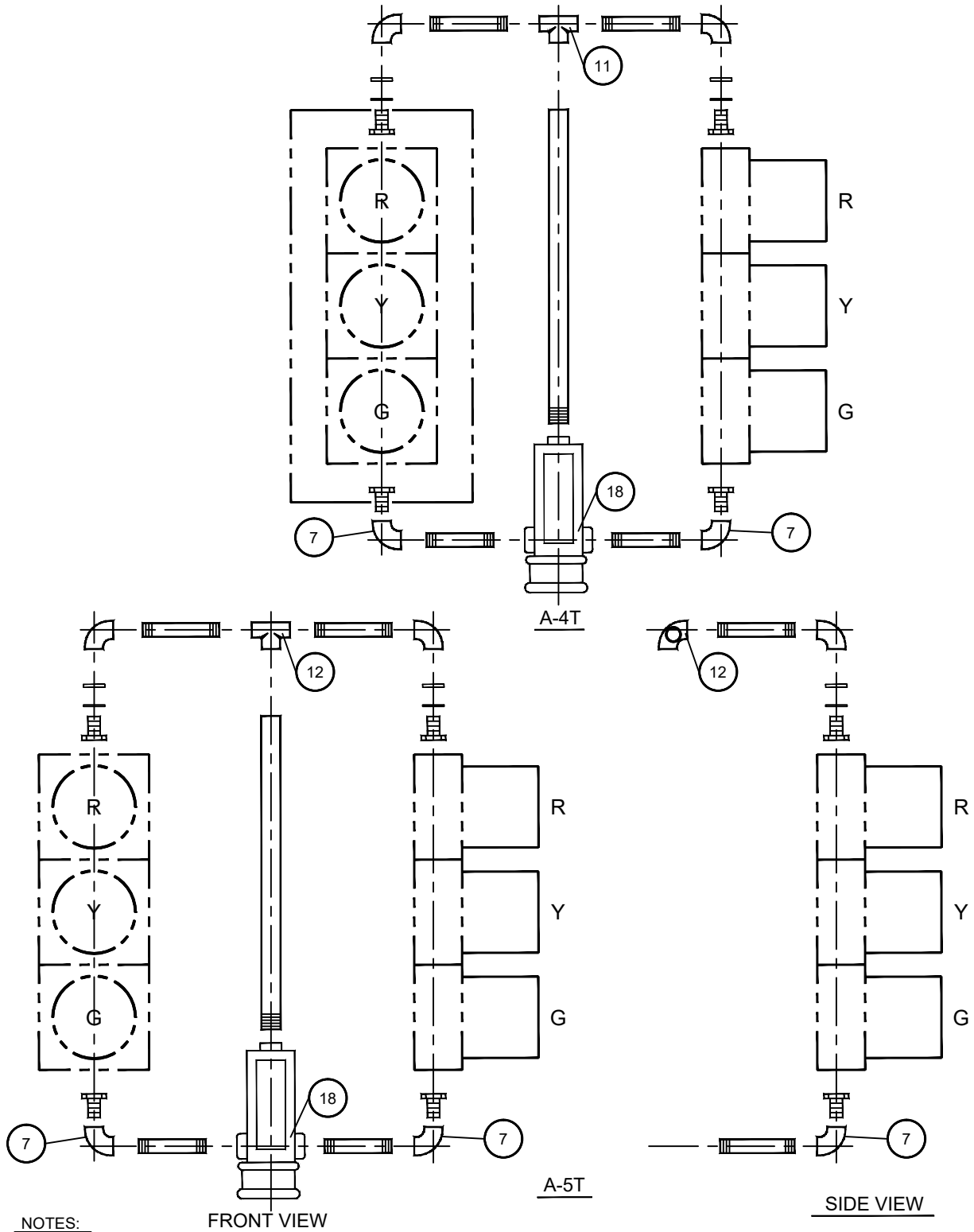
		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
		BILL OF MATERIALS SIGNAL ASSEMBLIES							
		DATE : 10-9-08		DWG. NO. 845					



NOTES:

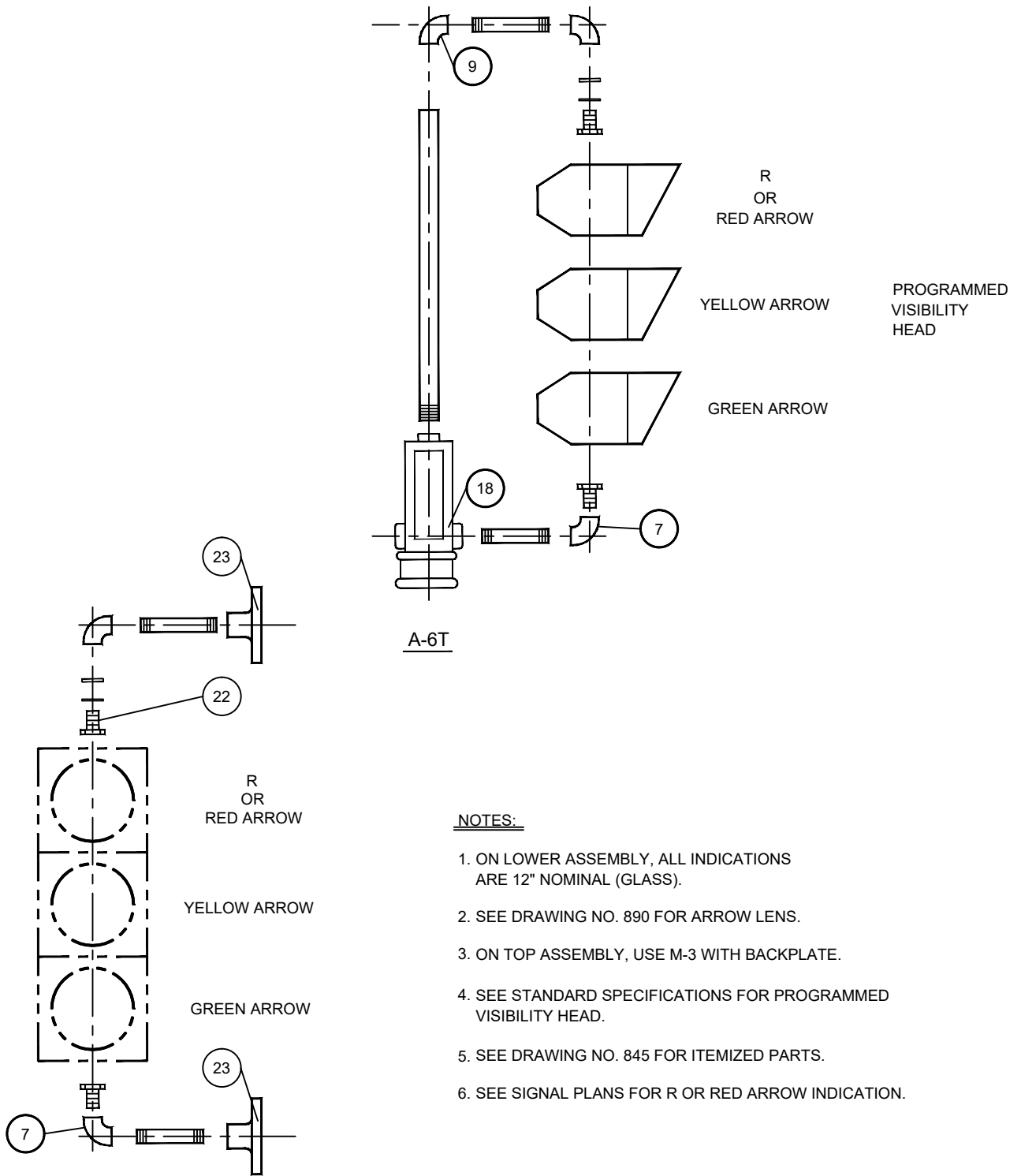
1. ALL SIGNALS ARE 12" NOMINAL (GLASS).
2. FOR ITEMIZED PARTS, SEE DRAWING NO. 845.

AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		SIGNAL ASSEMBLIES A-1, A-2T, A-3					
DATE		DWG. NO.		846			



- NOTES:
- 1. ALL SIGNALS ARE 12" NOMINAL (GLASS).
 - 2. FOR ITEMIZED PARTS, SEE DRAWING NO. 845.

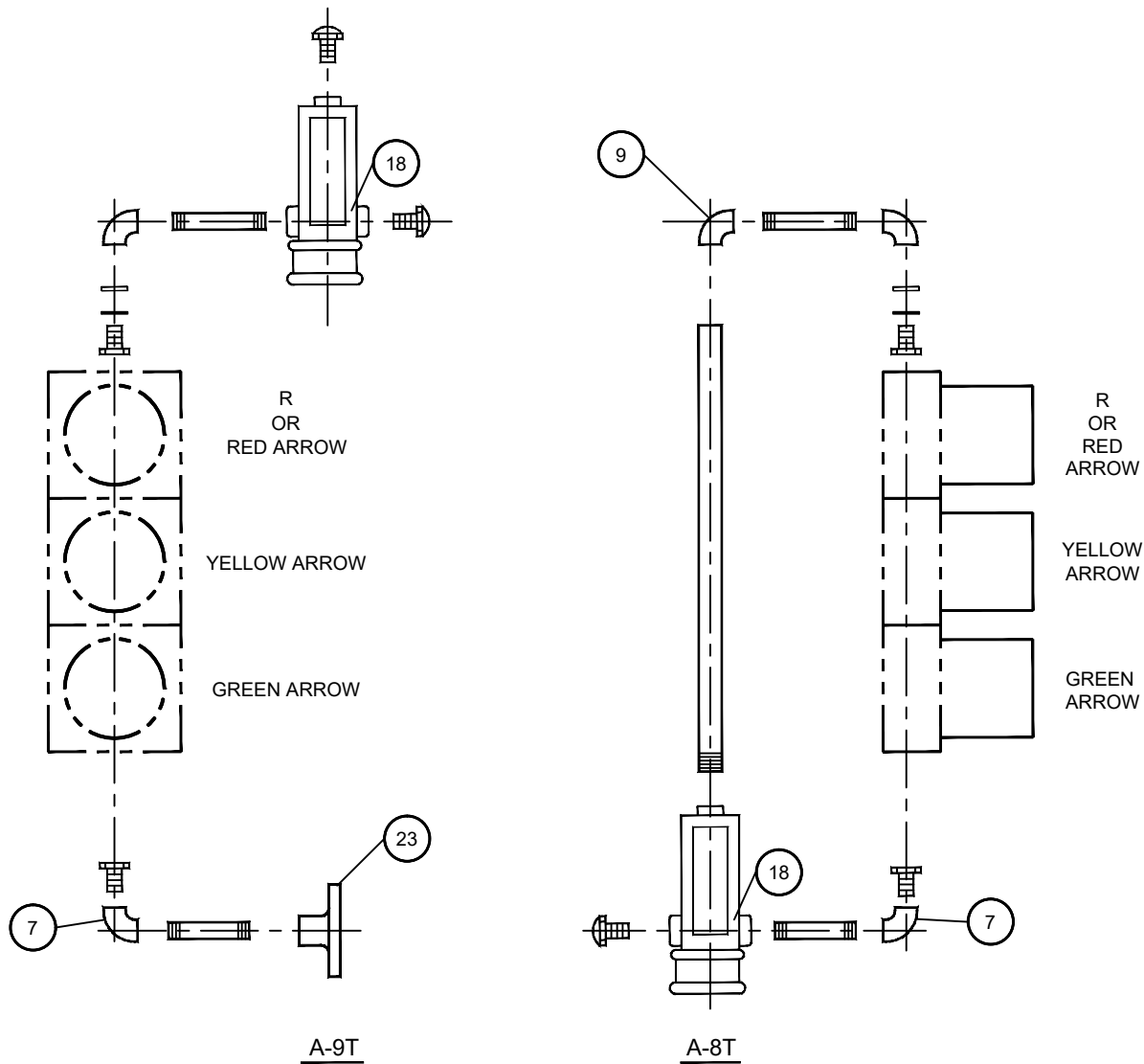
SPECIFICATION REFERENCE		AGENCY APPROVED						
		UNIFORM STANDARD DRAWINGS						
		CLARK COUNTY AREA						
		SIGNAL ASSEMBLIES						
		A-4T, A-5T						
		DATE		DWG. NO.		847		



NOTES:

1. ON LOWER ASSEMBLY, ALL INDICATIONS ARE 12" NOMINAL (GLASS).
2. SEE DRAWING NO. 890 FOR ARROW LENS.
3. ON TOP ASSEMBLY, USE M-3 WITH BACKPLATE.
4. SEE STANDARD SPECIFICATIONS FOR PROGRAMMED VISIBILITY HEAD.
5. SEE DRAWING NO. 845 FOR ITEMIZED PARTS.
6. SEE SIGNAL PLANS FOR R OR RED ARROW INDICATION.

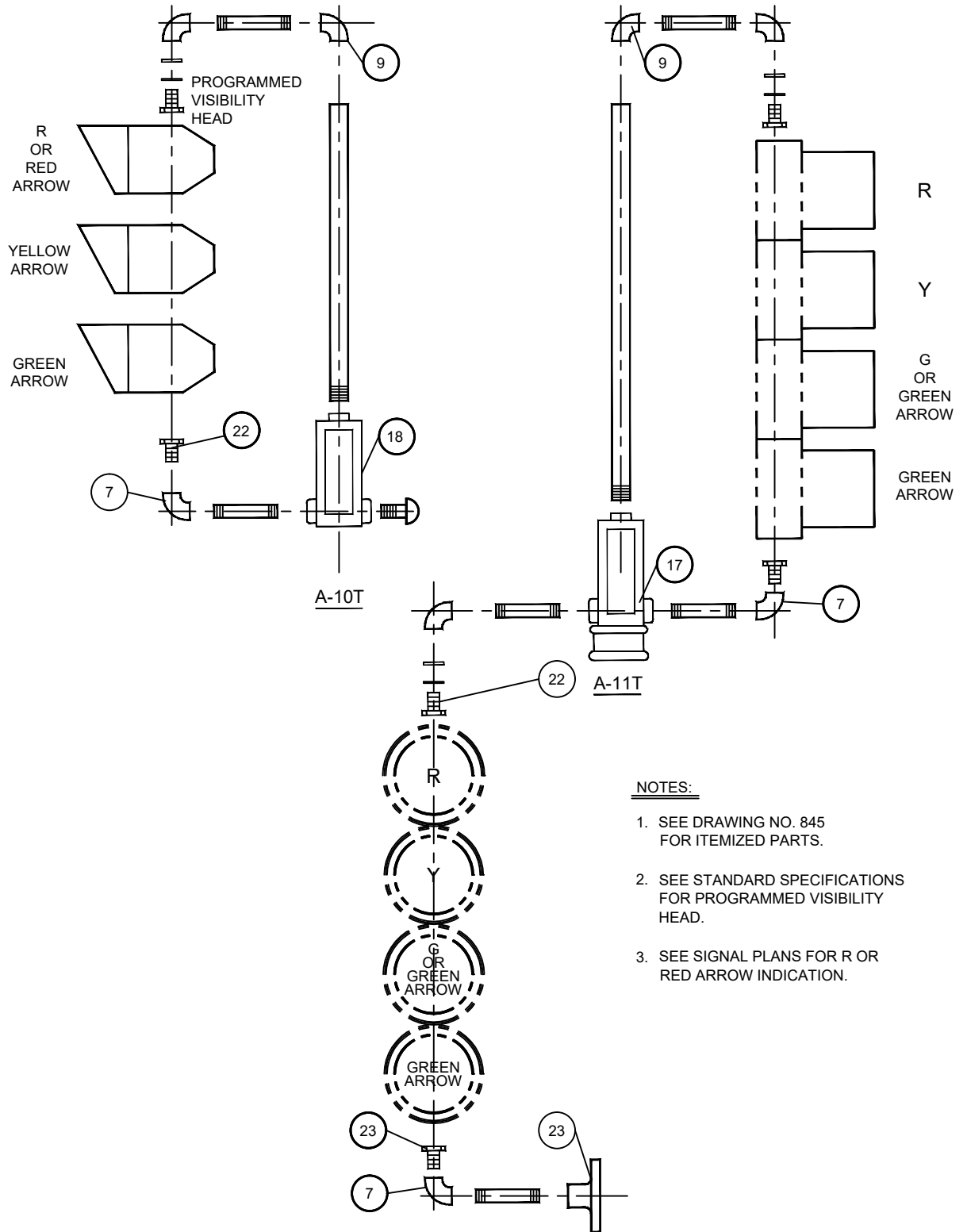
SPECIFICATION REFERENCE		AGENCY APPROVED						UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
								SIGNAL ASSEMBLIES A-6T					
		DATE 2-11-93						DWG. NO. 848					



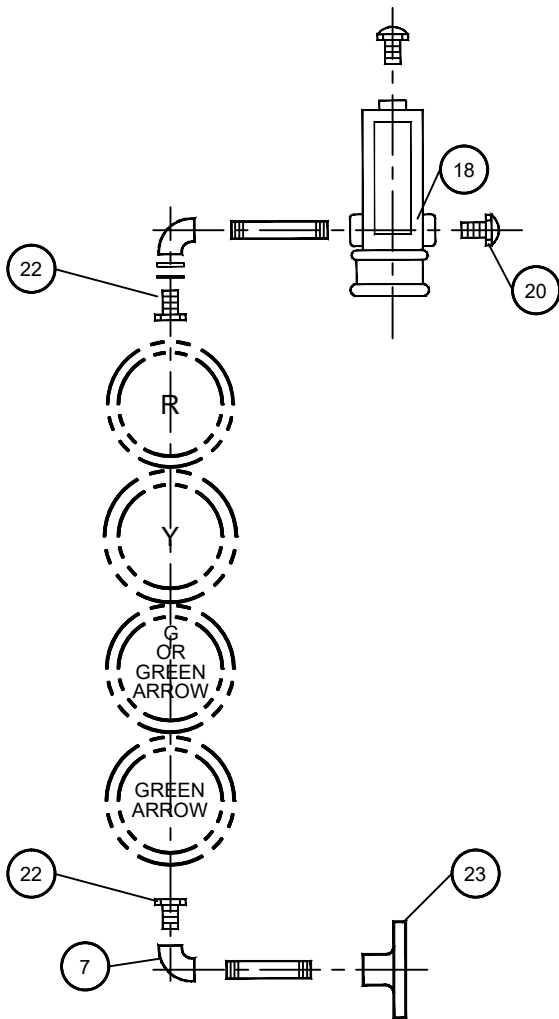
NOTES:

1. PROVIDE BACKPLATE ON A-8T.
2. ALL INDICATIONS ARE 12" NOMINAL (GLASS).
3. SEE DRAWING NO. 890 OR ARROW LENS.
4. SEE DRAWING NO. 845 FOR ITEMIZED PARTS.
5. SEE SIGNAL PLANS FOR R OR RED ARROW INDICATION.

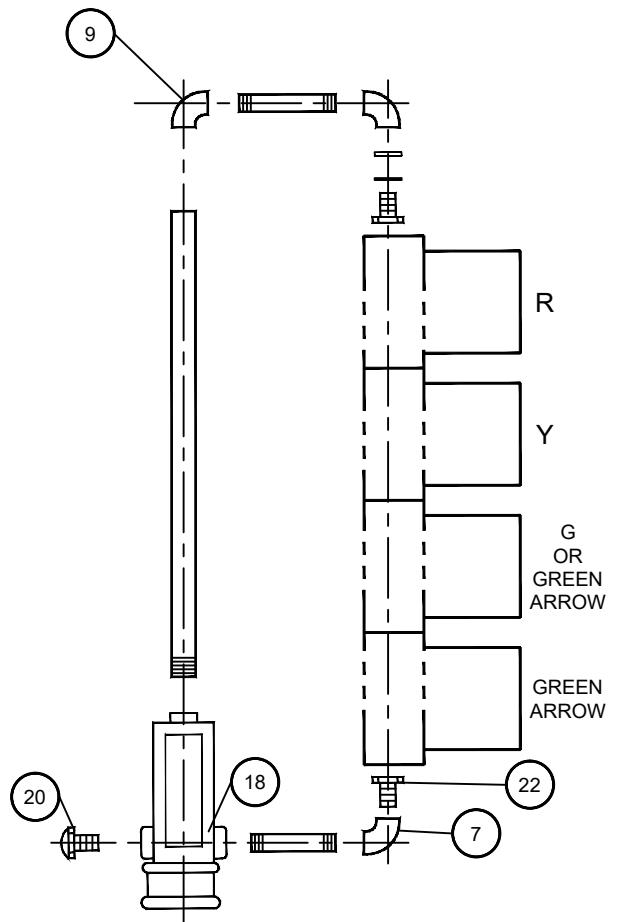
		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		SIGNAL ASSEMBLIES A-8T, A-9T											
DATE		2-11-93		DWG. NO.		849							



		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		SIGNAL ASSEMBLIES A-10T, A-11T											
		DATE 2-11-93			DWG. NO. 850								



A-12T

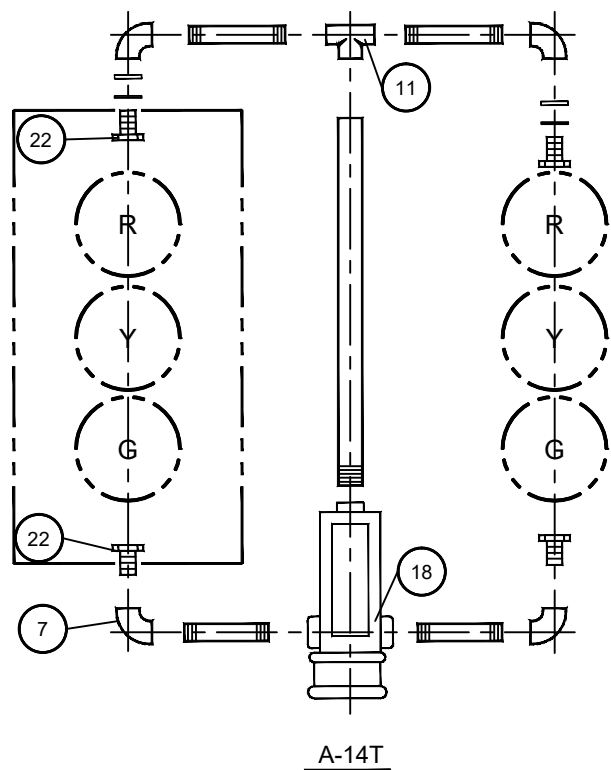
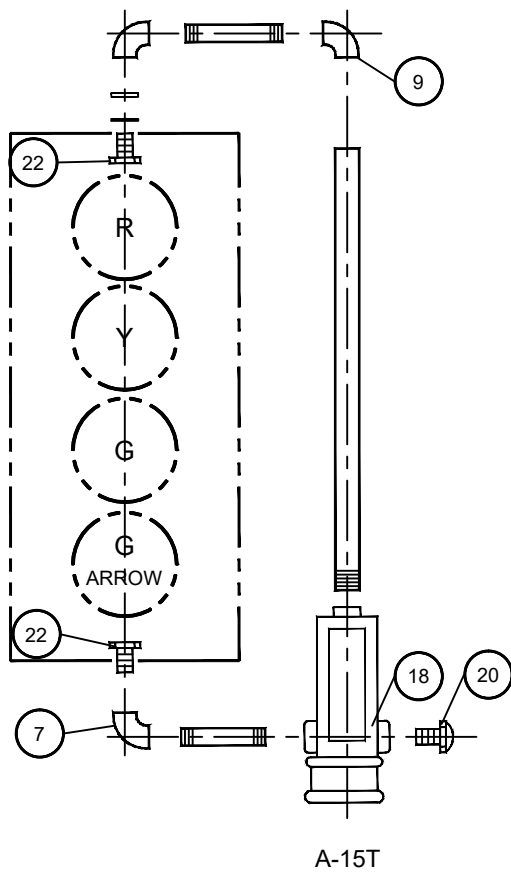


A-13T

NOTES:

1. FOR ITEMIZED PARTS SEE DRAWING NO. 845.
2. FOR ARROW LENS SEE DRAWING NO. 890.
3. PROVIDE BACKPLATE ON A-13T ONLY.
4. ALL SIGNALS ARE 12" NOMINAL (GLASS).

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		SIGNAL ASSEMBLIES A-12T, A-13T											
		DATE		2-11-93		DWG. NO.		851					

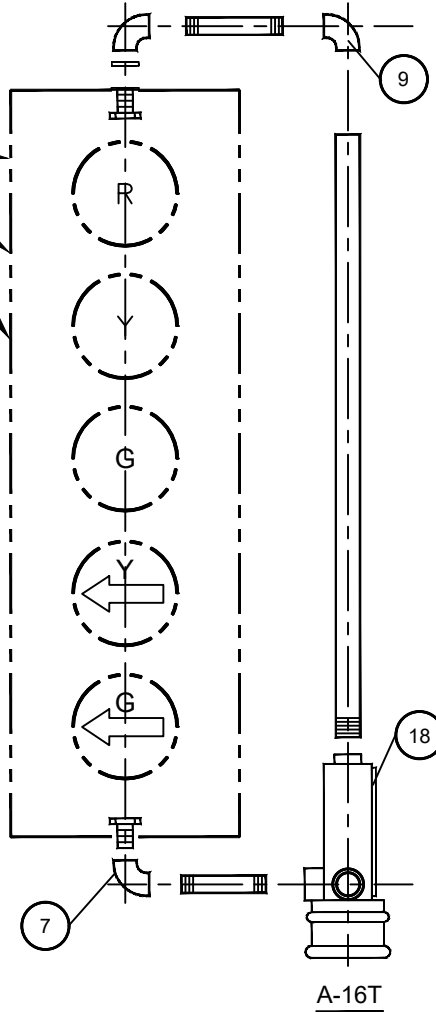


NOTES:

1. ALL SIGNALS ARE 12" NOMINAL (GLASS).
2. FOR ITEMIZED PARTS, SEE DRAWING NO. 845.
3. FOR ARROW LENS SEE DRAWING NO. 890.
4. SEE PLANS FOR BACKPLATE REQUIREMENTS.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		SIGNAL ASSEMBLIES A-14T, A-15T											
		DATE		DWG. NO.		852							

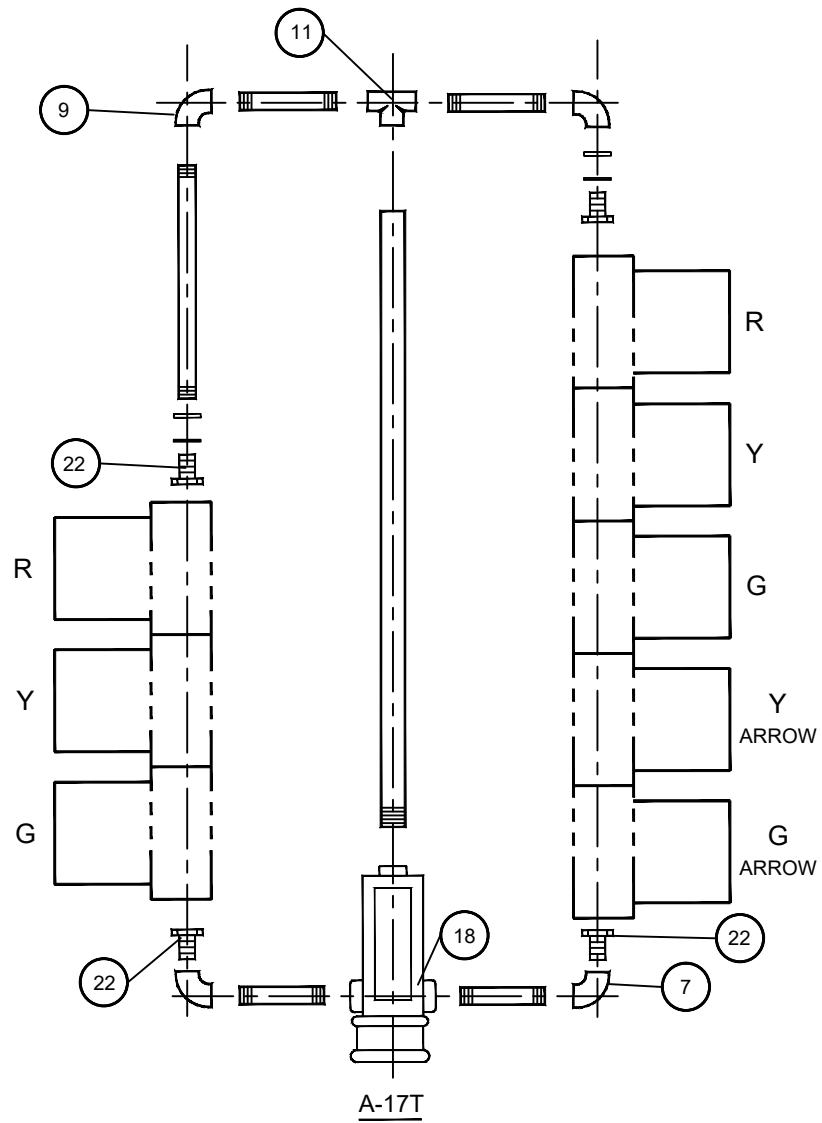
OPTIONAL
CUTOFF
LOUVERS
SEE NOTE 5



NOTES:

1. ALL SIGNALS ARE 12" NOMINAL (GLASS).
2. FOR ITEMIZED PARTS SEE DRAWING NO. 845.
3. FOR ARROW LENS SEE DRAWING NO. 890.
4. SEE PLANS FOR BACKPLATE REQUIREMENTS.
5. OPTIONAL 3° CUTOFF LOUVERS ON RED, YELLOW AND GREEN BALL INDICATIONS MAY BE PROVIDED AS DIRECTED BY THE TRAFFIC ENGINEER.

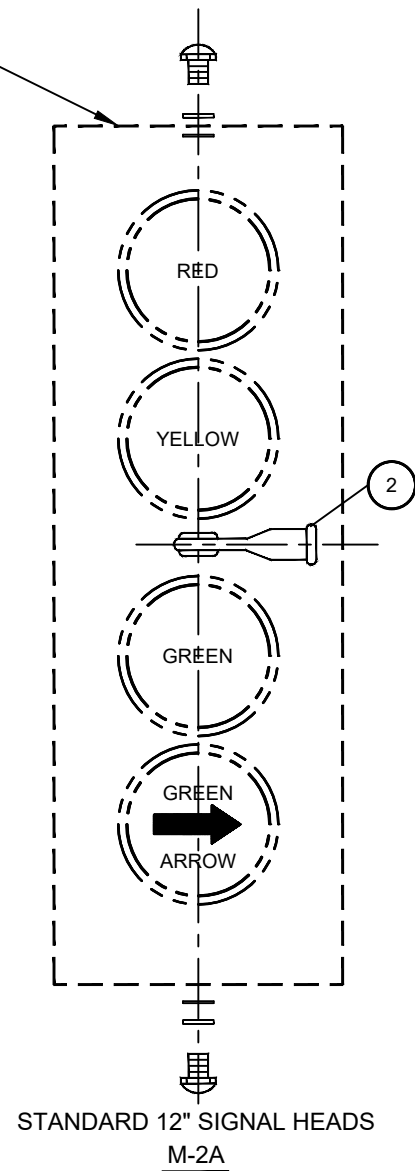
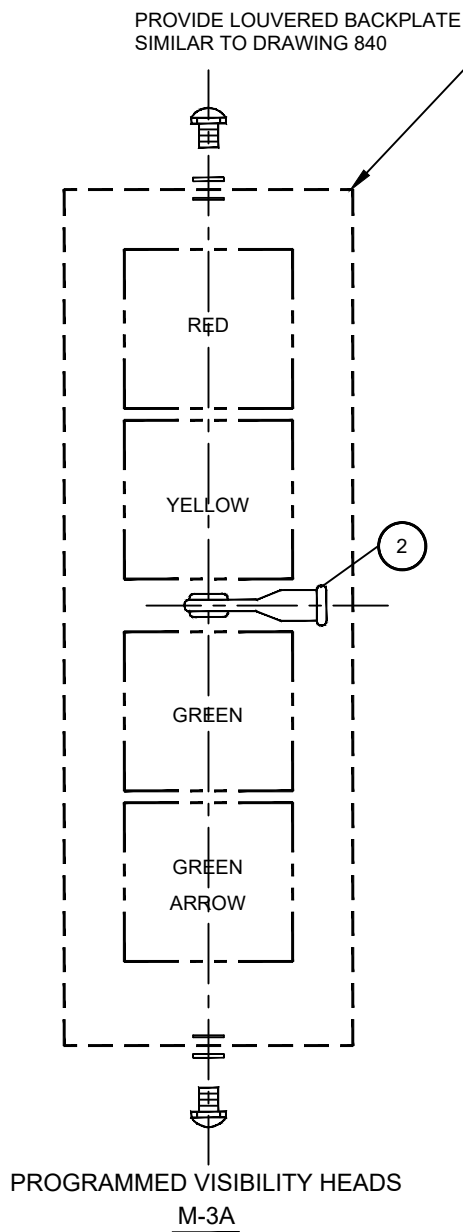
		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		SIGNAL ASSEMBLIES A-16T											
		DATE 5-12-94			DWG. NO. 853								



NOTES:

1. FOR ITEMIZED PARTS SEE DRAWING NO. 845.
2. FOR ARROW LENS SEE DRAWING NO. 890.
3. SEE PLANS FOR BACKPLATE REQUIREMENTS.
4. ALL SIGNALS ARE 12" NOMINAL (GLASS).

SPECIFICATION REFERENCE		AGENCY APPROVED						
		B	C	H	L	M	N	
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
		SIGNAL ASSEMBLIES A-17T						
		DATE	DWG. NO.		854			



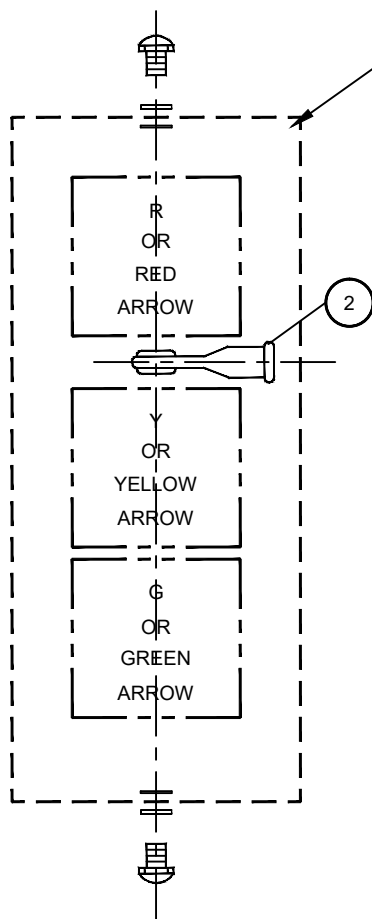
NOTES:

1. ALL SIGNALS ARE 12" NOMINAL (GLASS)
2. FOR ITEMIZED PARTS, SEE DRAWING 845.

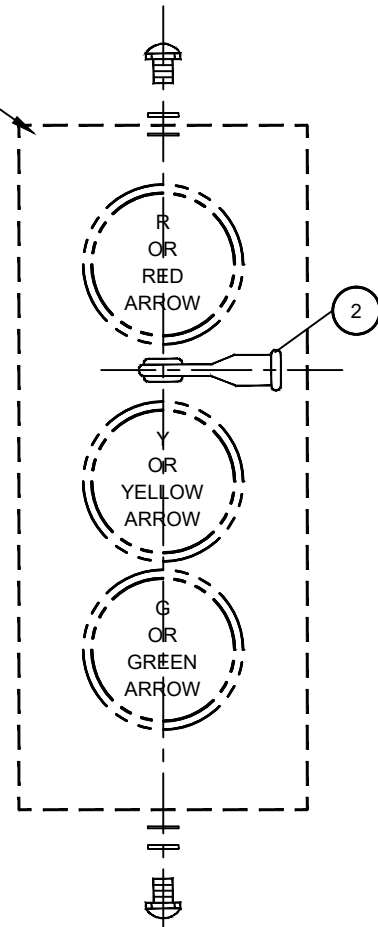
Effective 12/10/2020 to 06/09/2021

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		MAST ARM SIGNAL ASSEMBLIES M-2A, M-3A											
		DATE		DWG. NO.		855							

PROVIDE LOUVERED BACKPLATE
SIMILAR TO DRAWING 840



PROGRAMMED VISIBILITY HEADS
M-3

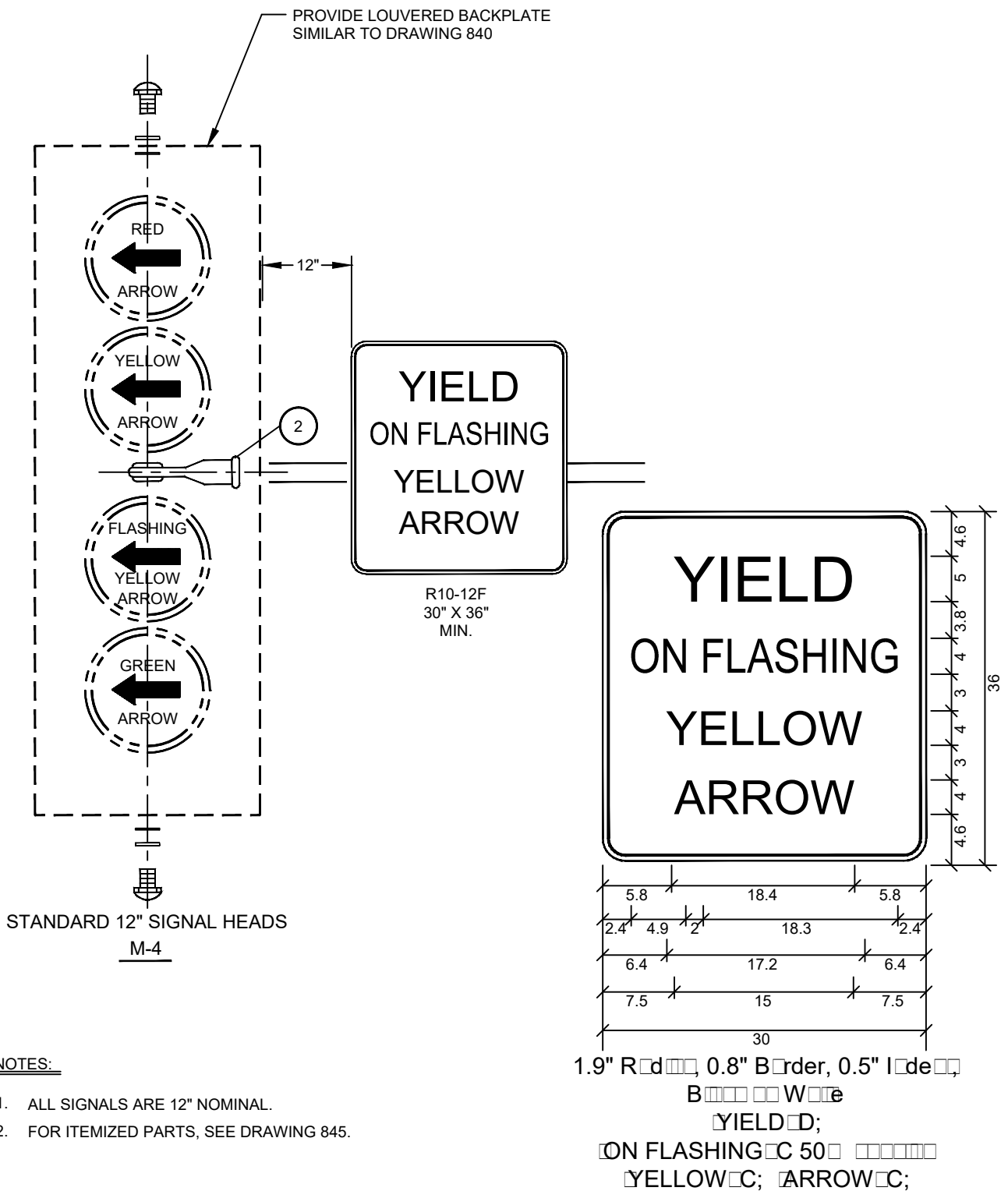


STANDARD 12" SIGNAL HEADS
M-2

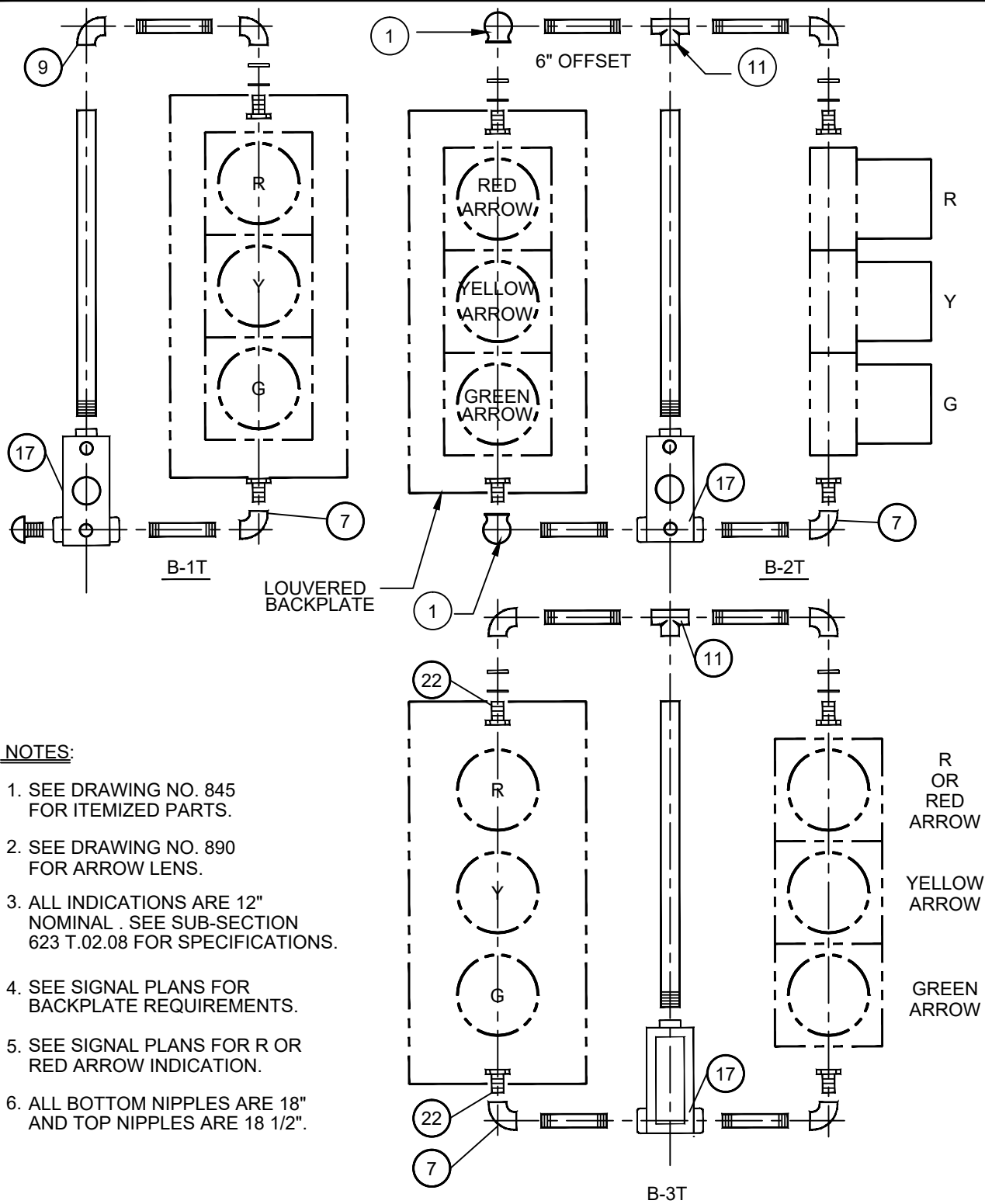
NOTES:

1. SEE STANDARD SPECIFICATIONS FOR PROGRAMMED VISIBILITY HEAD.
2. ALL M-2 INDICATIONS ARE 12" NOMINAL (GLASS).
3. SEE DRAWING NO. 845 FOR ITEMIZED PARTS.
4. SEE SIGNAL PLANS FOR BALL OR ARROW INDICATIONS.

		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
		MAST ARM SIGNAL ASSEMBLIES M-3, M-2							
		DATE 2-11-93		DWG. NO.		856			



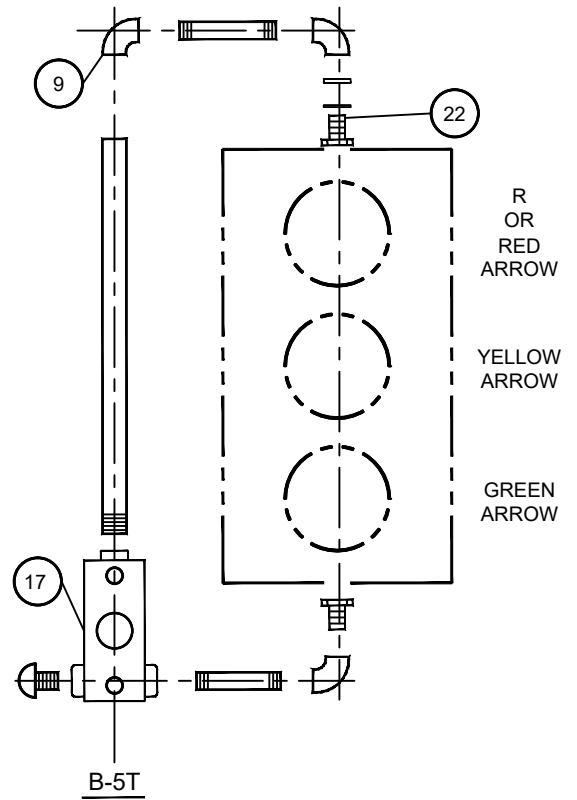
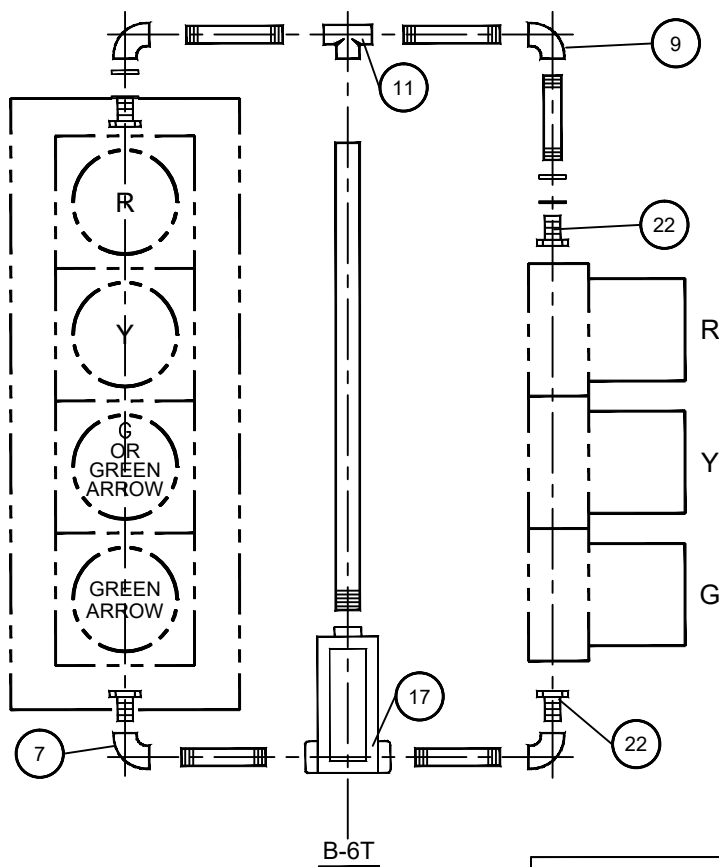
SPECIFICATION REFERENCE		AGENCY APPROVED					
		B	C	H	L	M	N
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		PROTECTED PERMISSIVE MAST ARM SIGNAL ASSEMBLY TYPE M-4					
		DATE 07-01-14		DWG. NO. 857			



NOTES:

1. SEE DRAWING NO. 845 FOR ITEMIZED PARTS.
2. SEE DRAWING NO. 890 FOR ARROW LENS.
3. ALL INDICATIONS ARE 12" NOMINAL . SEE SUB-SECTION 623 T.02.08 FOR SPECIFICATIONS.
4. SEE SIGNAL PLANS FOR BACKPLATE REQUIREMENTS.
5. SEE SIGNAL PLANS FOR R OR RED ARROW INDICATION.
6. ALL BOTTOM NIPPLES ARE 18" AND TOP NIPPLES ARE 18 1/2".

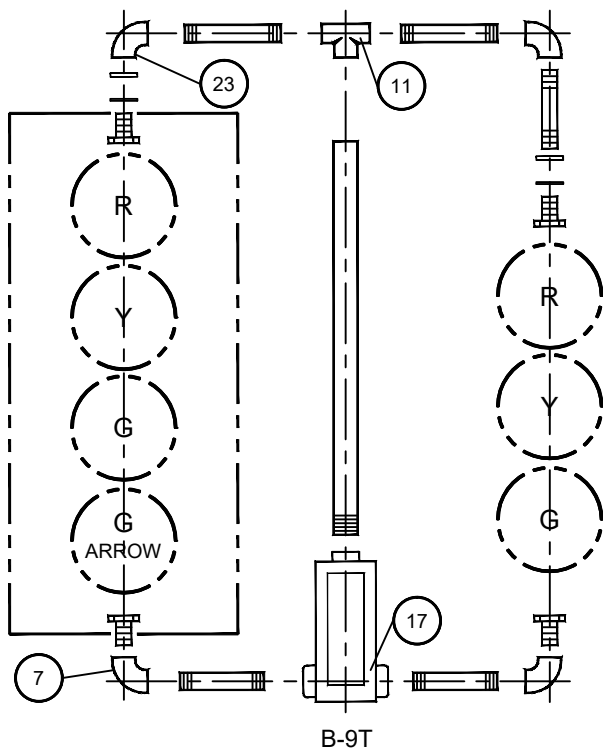
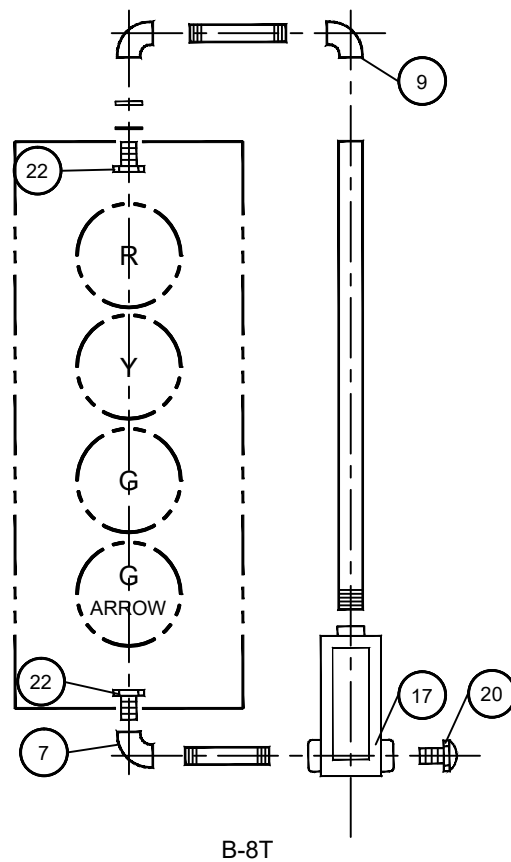
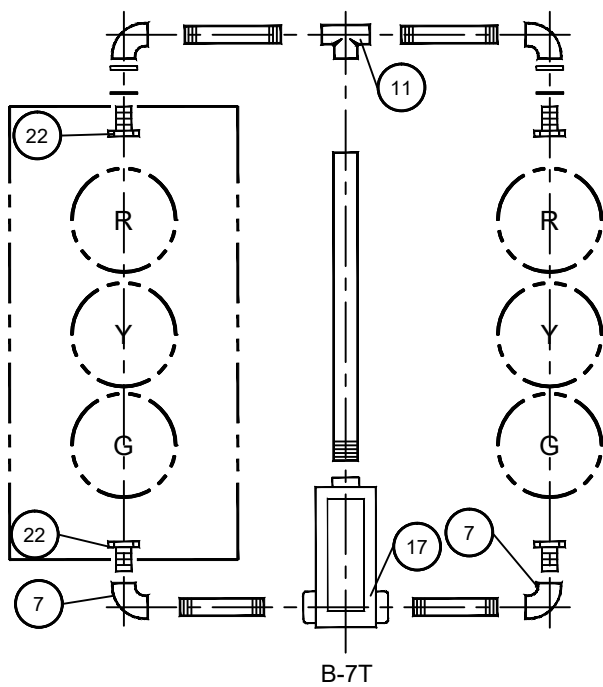
SPECIFICATION REFERENCE		AGENCY APPROVED						
		B C H L M N						
		UNIFORM STANDARD DRAWINGS						
		CLARK COUNTY AREA						
		SIGNAL ASSEMBLIES						
		B-1T, B-2T, B-3T						
		DATE:10-9-08		DWG. NO. 858				



NOTES:

1. SEE DRAWING NO. 845 FOR ITEMIZED PARTS.
2. SEE DRAWING NO. 890 FOR ARROW LENS.
3. ALL INDICATIONS ARE 12" NOMINAL (GLASS).
4. SEE SIGNAL PLANS FOR BACKPLATE REQUIREMENTS.
5. SEE SIGNAL PLANS FOR R OR RED ARROW INDICATION.
6. ALL BOTTOM NIPPLES ARE 18" AND TOP NIPPLES ARE 18 1/2".

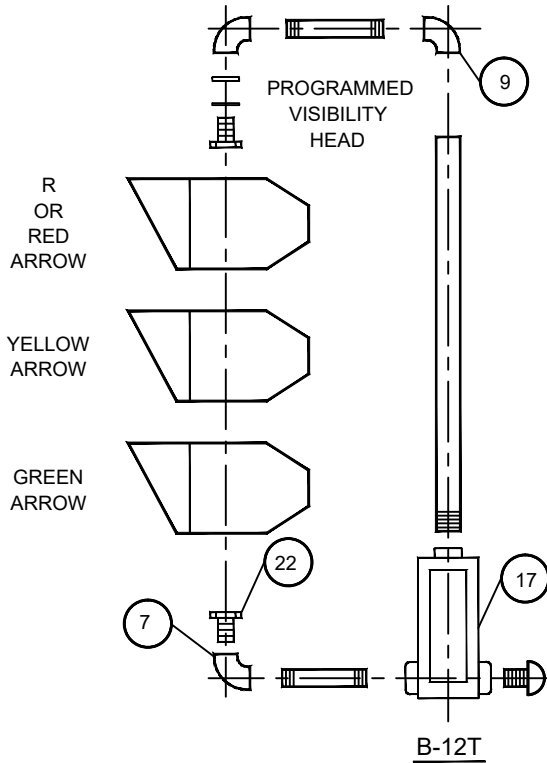
AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		SIGNAL ASSEMBLIES B-5T, B-6T					
DATE 2-11-93		DWG. NO.		859			



NOTES:

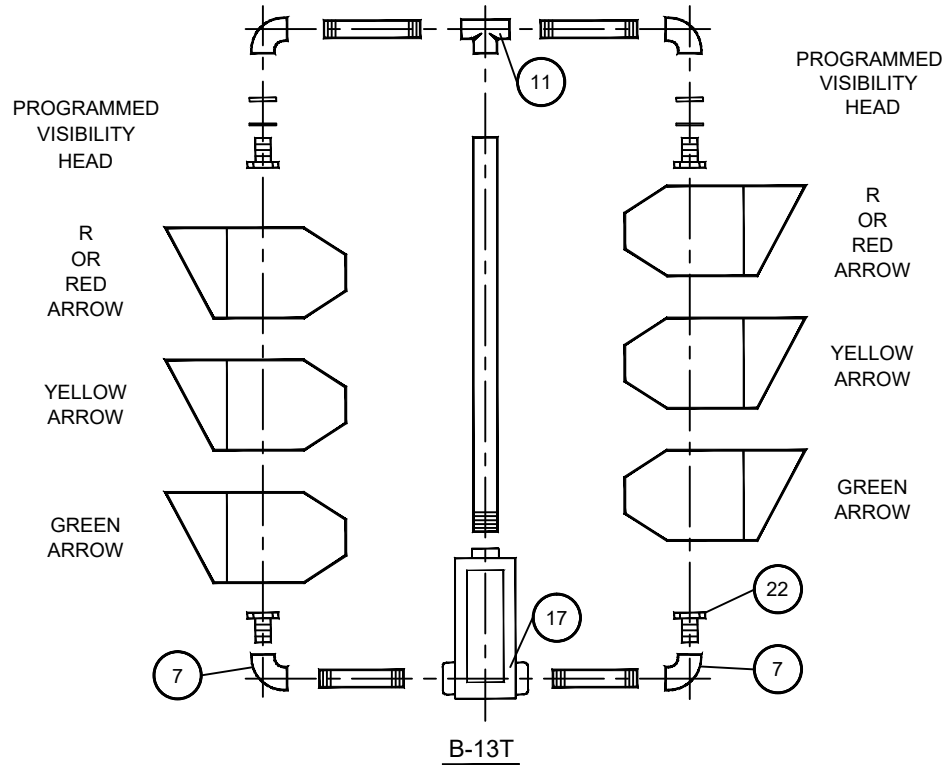
1. FOR ITEMIZED PARTS, SEE DRAWING NO. 845.
2. FOR ARROW LENS SEE DRAWING NO. 890.
3. ALL SIGNALS ARE 12" NOMINAL (GLASS) UNLESS NOTED.

		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
		SIGNAL ASSEMBLIES B-7T, B-8T, B-9T							
		DATE		DWG. NO. 860					

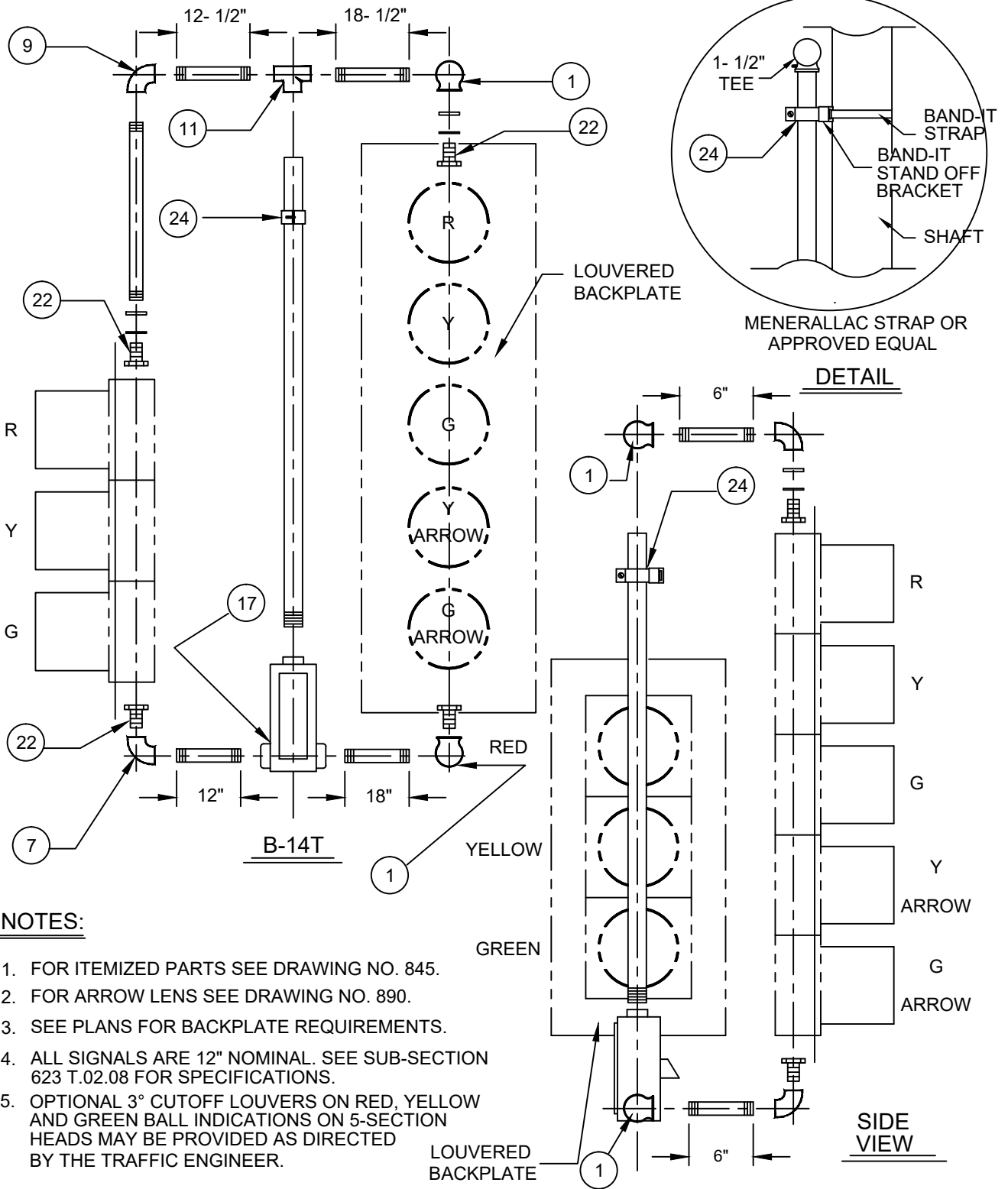


NOTES:

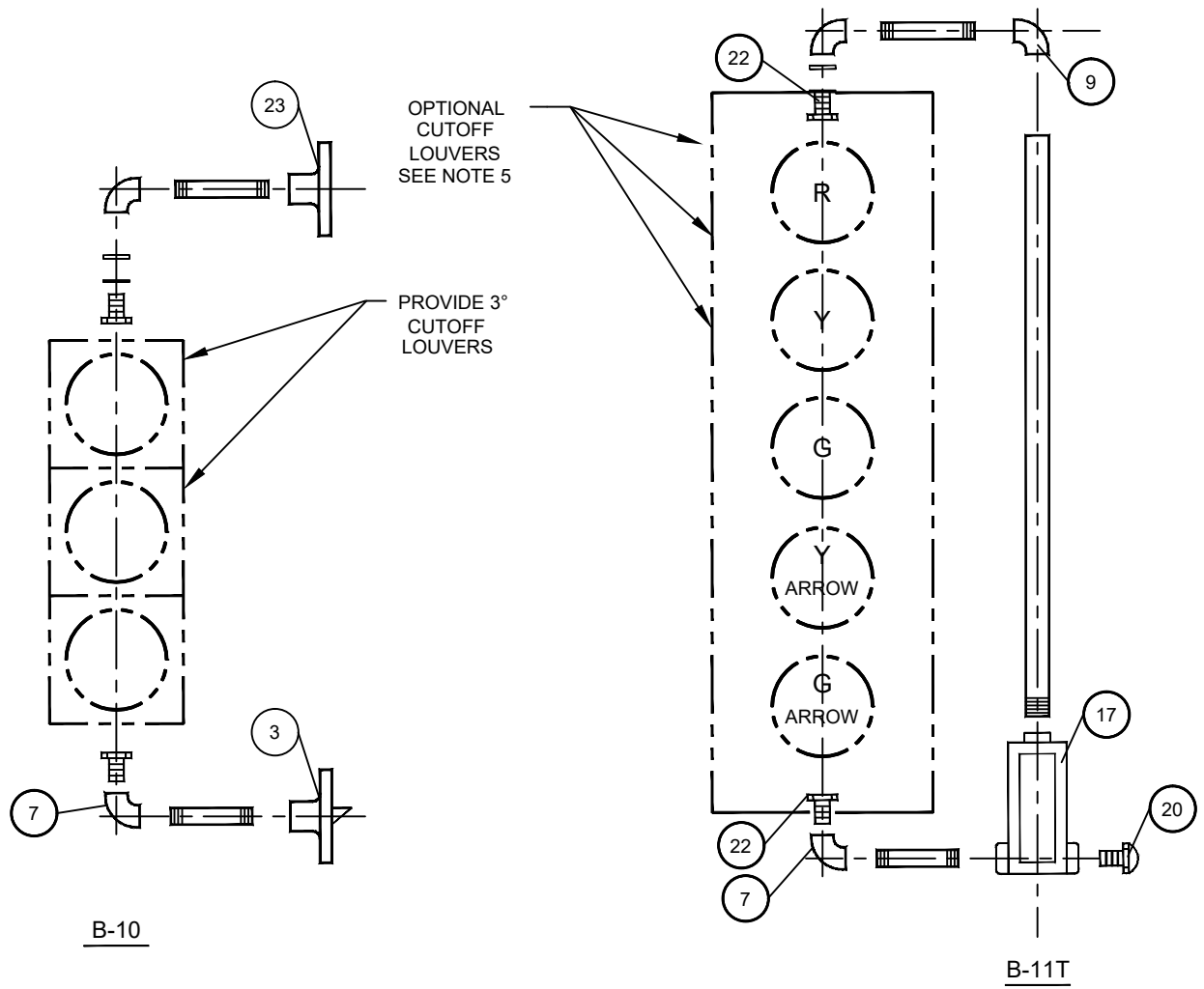
1. SEE DRAWING NO. 845 FOR ITEMIZED PARTS.
2. SEE STANDARD SPECIFICATIONS FOR PROGRAMMED VISIBILITY HEADS.
3. SEE SIGNAL PLANS FOR BACKPLATE REQUIREMENTS.
4. SEE SIGNAL PLANS FOR R OR RED ARROW INDICATION.
5. ALL BOTTOM NIPPLES ARE 18" AND TOP NIPPLES ARE 18 1/2".



AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		SIGNAL ASSEMBLIES B-12T, B-13T					
DATE 2-11-93		DWG. NO.		862			



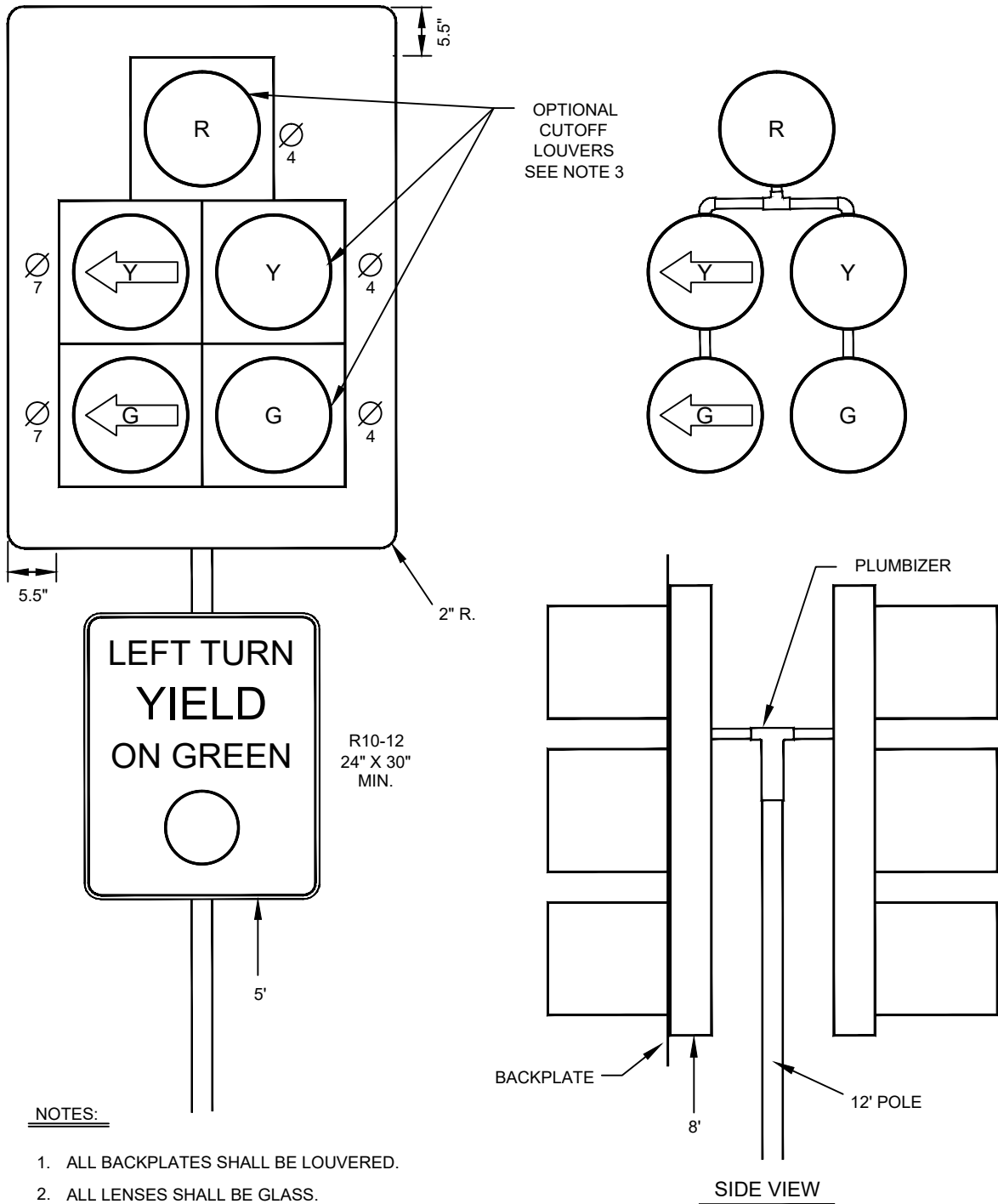
		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
		SIGNAL ASSEMBLIES B-14T							
		DATE : 10-9-08		DWG. NO. 863					



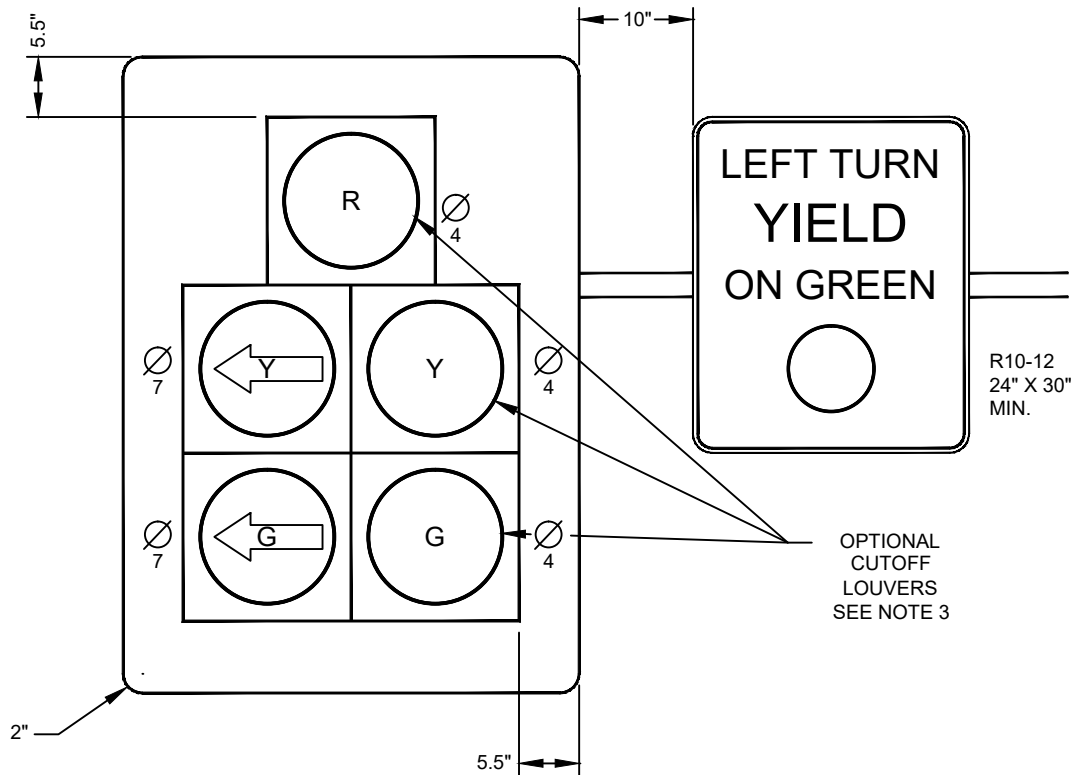
NOTES:

1. ALL SIGNALS ARE 12" NOMINAL (GLASS).
2. FOR ITEMIZED PARTS SEE DRAWING 845.
3. FOR ARROW LENS SEE DRAWING 890.
4. SEE PLANS FOR BACKPLATE REQUIREMENTS.
5. OPTIONAL 3° CUTOFF LOUVERS ON RED, YELLOW AND GREEN BALL INDICATIONS ON 5-SECTION HEADS MAY BE PROVIDED AS DIRECTED BY THE TRAFFIC ENGINEER.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		SIGNAL ASSEMBLIES B-10, B-11T											
		DATE		5-12-94		DWG. NO.		864					



SPECIFICATION REFERENCE		AGENCY APPROVED					
		B	C	H	L	M	N
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		PROTECTED / PERMISSIVE M-5 SIGNAL HEADS					
		DATE	5-12-94	DWG. NO.	865	SHEET	1 OF 4

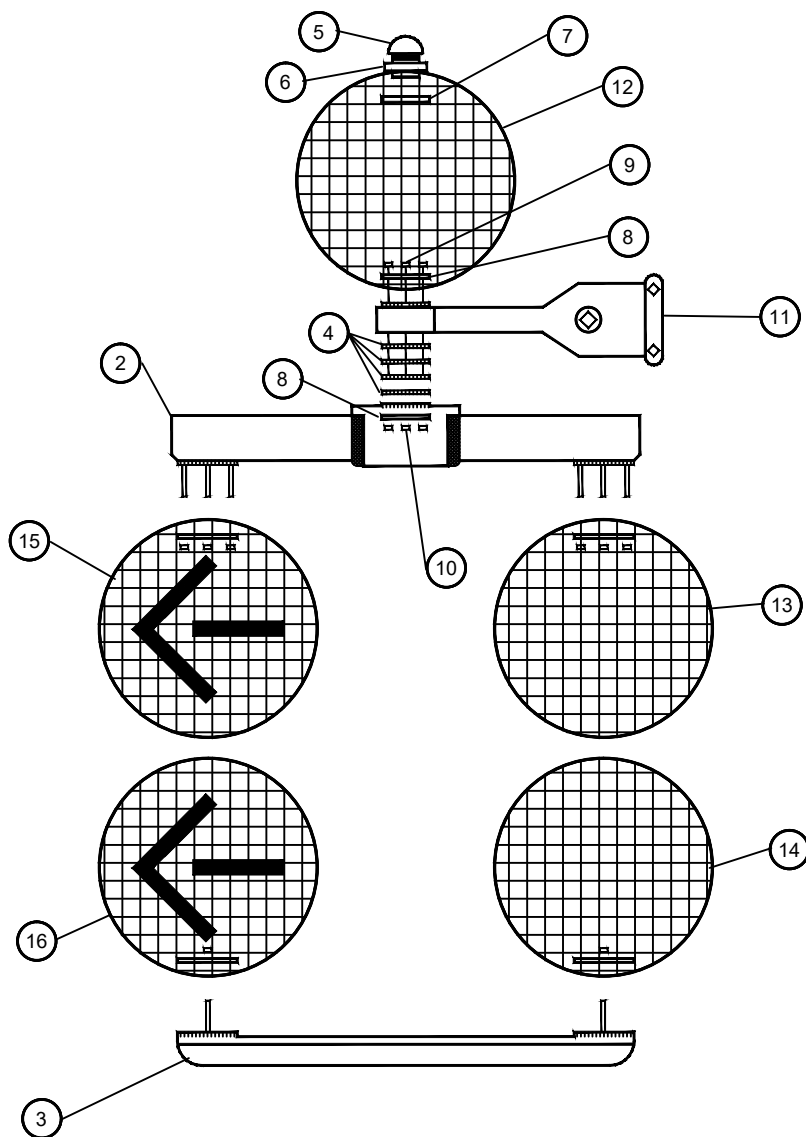


NOTES:

1. ALL BACKPLATES SHALL BE LOUVERED.
2. ALL LENSES SHALL BE GLASS.
3. OPTIONAL 3° CUTOFF LOUVERS ON RED, YELLOW AND GREEN BALL INDICATIONS MAY BE PROVIDED AS DIRECTED BY THE TRAFFIC ENGINEER.

MAST ARM MOUNTING

		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
		PROTECTED / PERMISSIVE M-5 SIGNAL HEADS							
		DATE	5-12-94	DWG. NO.	865	SHEET	2 OF 4		



BACKPLATE TO MATCH
ORDER PART NO. E 2074
NOTES:
UNLESS OTHERWISE SPECIFIED

1 ASSEMBLY

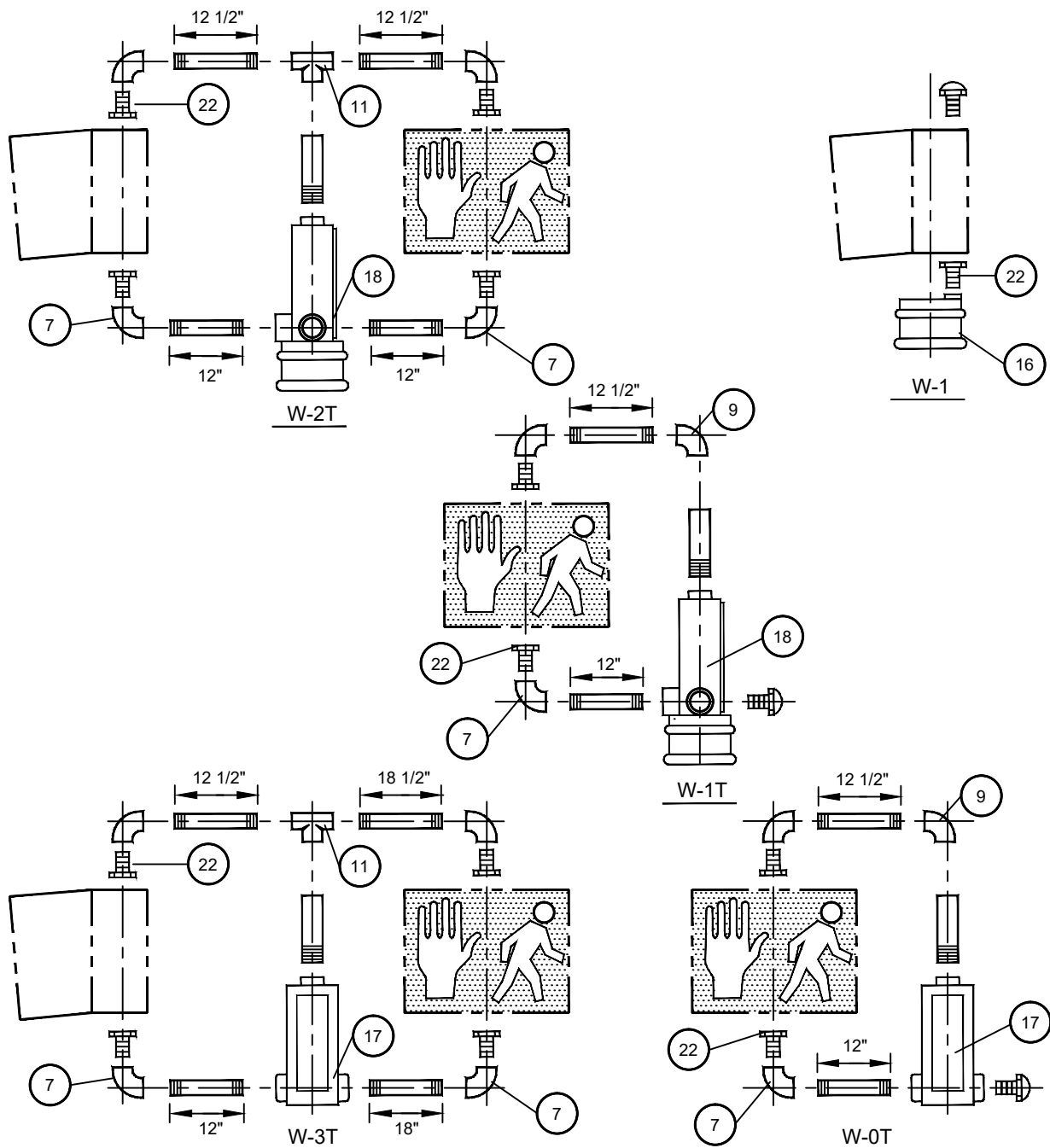
SPECIFICATION REFERENCE		AGENCY APPROVED						
		B	C	H	L	M	N	
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
		TYPE: M-5 ASSEMBLIES AND PARTS LIST						
		DATE	DWG. NO.	865	SHEET	3 OF 4		

FW 2933 AND SIGNAL ASSEMBLY

FRAMEWORK -- CLUSTER MOUNTING
1 WAY, 5 COL., 12" ALUMINUM SIGNAL
WITH ELEVATOR PLUMBIZER

REF □	PART NO.	DESCRIPTION	REQ.
1	FW2933	ASSEMBLY	X
2	E205P1	TOP BRACKET W/COVER	1
3	E2051P1	BOTTOM BRACKET	1
4	E1270P1	ADAPTOR RING	4
5	E1206P	ORNAMENT	1
6	E1251P1	WASHER, NEOPRENE	1
7	55712P6	CONDUIT LOCKNUT	1
8	E789P1	ATTACHING WASHER	2
9	E788P2	ATTACHING BOLT	3
10	N210P23C	ATTACHING NUT	3
11	FW0904G	ELEV. PLUMIZER, OLD STYLE (NO LONGER AVAILABLE)	1
12	E4955P1	RED BALL LENS	1
13	E4955P22	YELLOW BALL LENS	1
14	E4955P3	GREEN BALL LENS	1
15	E4960P2	YELLOW ARROW LENS	1
16	E4960P3	GREEN ARROW LENS	1
17	E2074G5	BACKPLATE	1

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		TYPE: M-5 ASSEMBLIES AND PARTS LIST											
		DATE	DWG. NO.	865	SHEET	4 OF 4							



NOTES:

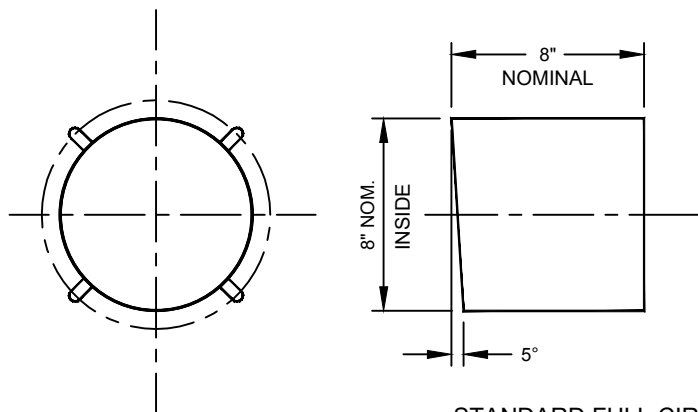
1. FOR GENERAL SPECIFICATIONS SEE TRAFFIC SIGNAL PLANS.
2. FOR ITEMIZED PARTS, SEE DRAWING NO. 845.
3. THE HAND SYMBOL (DON'T WALK) IS PORTLAND ORANGE AND HUMAN SYMBOL (WALK) IS LUNAR WHITE.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		PEDESTRIAN SIGNAL ASSEMBLIES W-0T, W-1, W-2T, W-3T, W-1T											
		DATE 12-12-96		DWG. NO.		866							

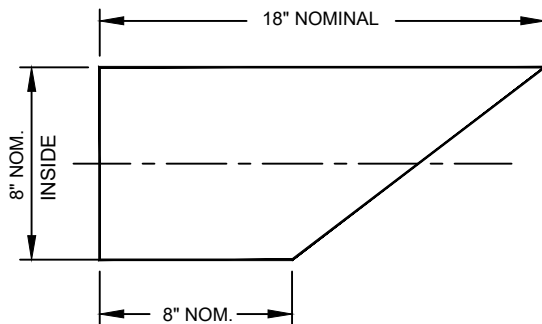
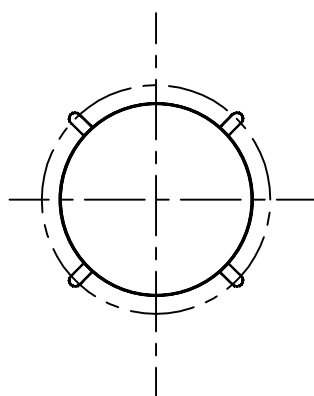
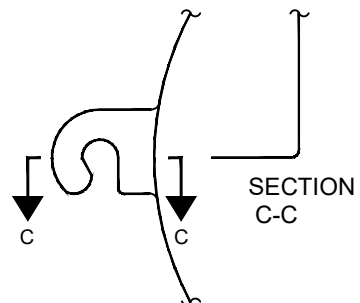
NOTE: TAMPER-PROOF SCREWS TO BE USED.



AGENCY APPROVED		B	C	H		M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		PEDESTRIAN PUSH BUTTON SIGN DETAIL					
DATE 08-09-18		DWG. NO. 867					

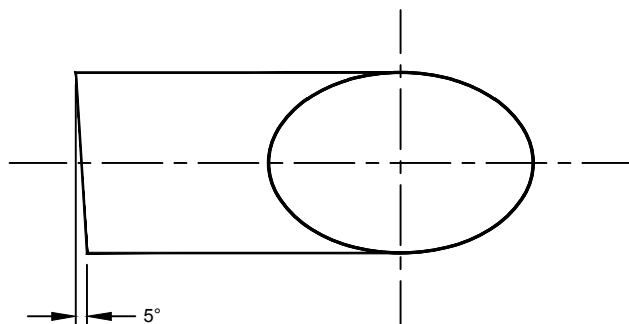


STANDARD FULL CIRCLE
VISOR



LEFT ANGLE-SHOWN
RIGHT ANGLE-REVERSE

STANDARD ANGLE VISOR



VISORS (FOR 8" HEADS)

PAINT: FLAT BLACK ON INSIDE,
OUTSIDE PAINT COLOR SHALL
MATCH SIGNAL HOUSING.

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

VISORS
FOR 8 INCH SIGNALS

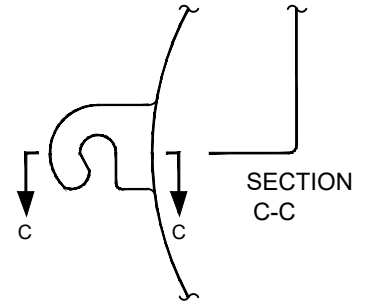
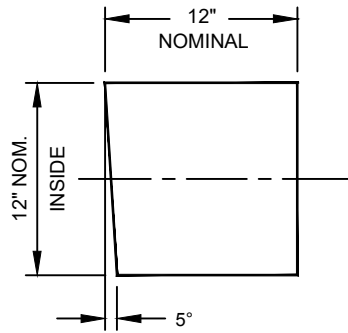
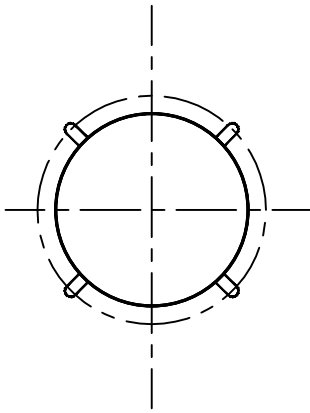
DATE

DWG. NO.

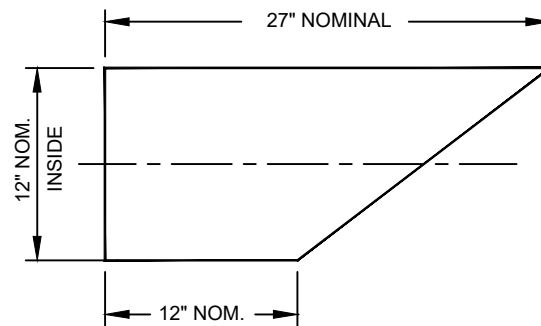
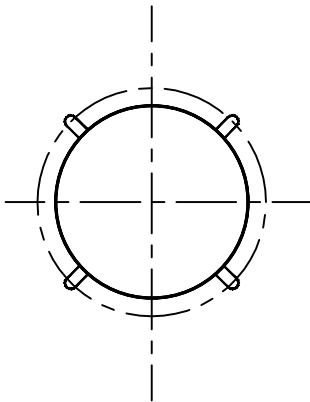
870

SHEET

1 OF 3

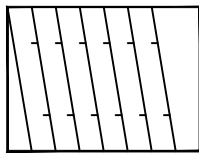


STANDARD FULL CIRCLE
VISOR

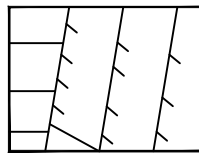


LEFT ANGLE-SHOWN
RIGHT ANGLE-REVERSE

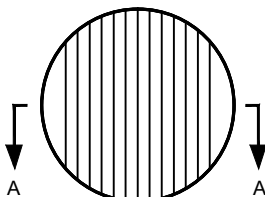
STANDARD ANGLE VISOR



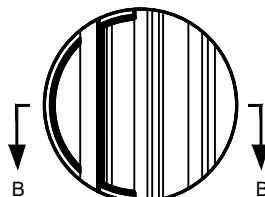
SECTION A-A



SECTION B-B

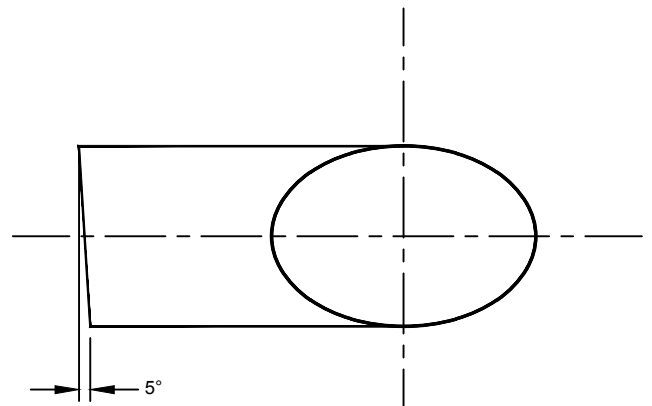


6 VANE
3° CUTOFF



3 VANE
7° CUTOFF

DIRECTIONAL LOUVERS
PAINT: FLAT BLACK



VISORS (FOR 12" HEADS)

PAINT: FLAT BLACK ON INSIDE,
OUTSIDE PAINT COLOR SHALL
MATCH SIGNAL HOUSING.

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

LOUVERS AND VISORS
FOR 12 INCH SIGNALS

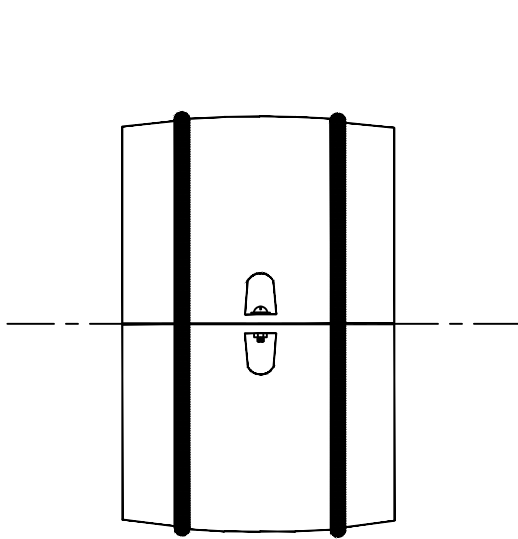
DATE

DWG. NO.

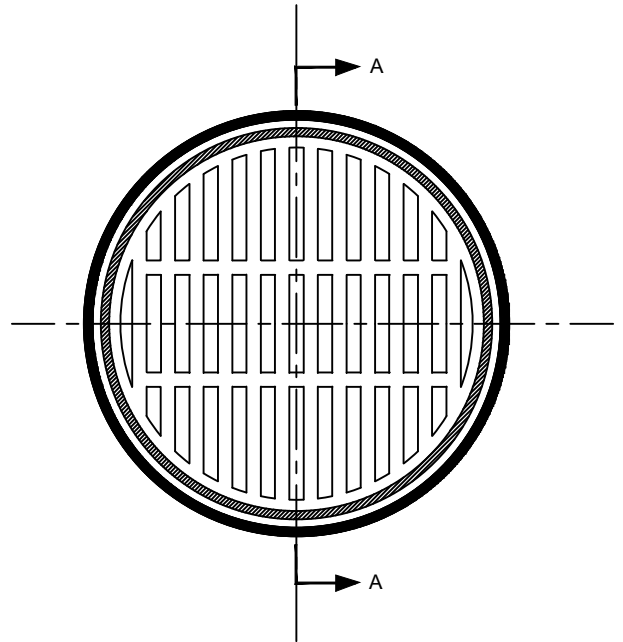
870

SHEET

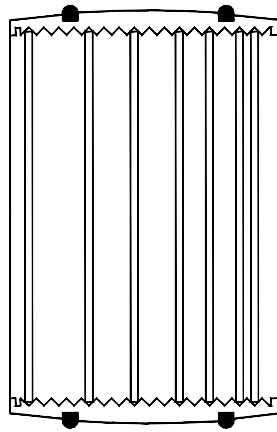
2 OF 3



SIDE VIEW



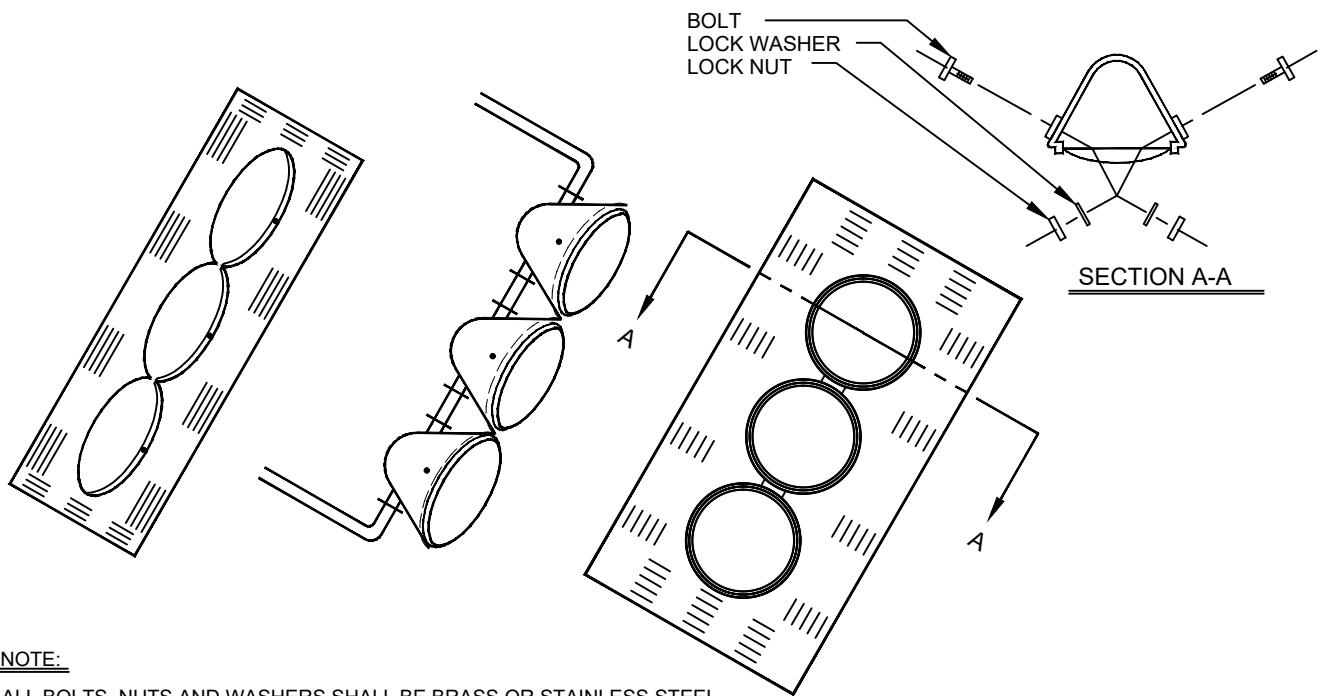
FRONT VIEW



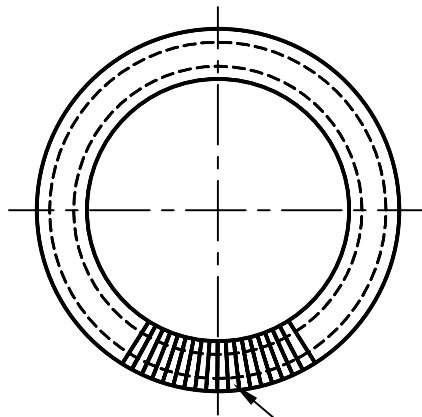
SECTION A-A

Effective 12/10/2020 to 06/09/2021

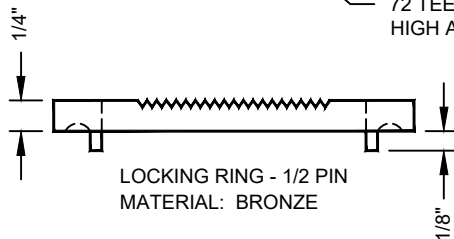
		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
		GEOMETRICALLY PROGRAMMED LOUVER							
.		DATE	DWG. NO.			870		SHEET	3 OF 3



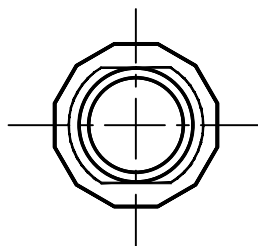
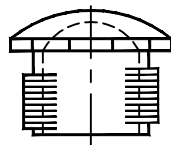
SPECIFICATION REFERENCE		AGENCY APPROVED						
		B C H L M N						
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA						
		BACKPLATE AND SIGNAL HEAD ASSEMBLY						
		DATE 12-12-96		DWG. NO. 871				



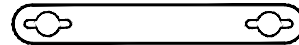
72 TEETH - 1/2"
HIGH ALL AROUND



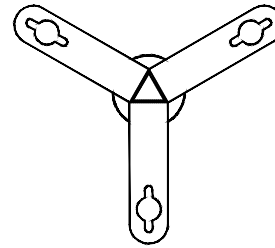
LOCKING RING - 1/2 PIN
MATERIAL: BRONZE



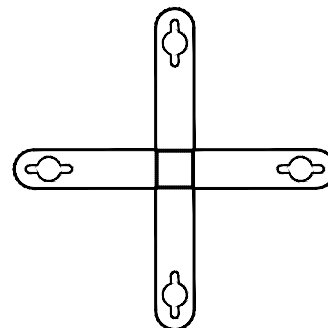
ORNAMENTAL CAP
DIE CAST ALUMINUM
PAINT COLOR SHALL MATCH
SIGNAL HOUSING



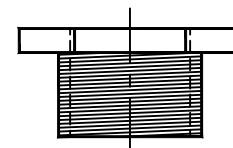
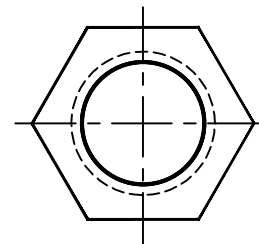
TIE BRACE, FERROUS, 2 WAY
PAINT COLOR SHALL MATCH
SIGNAL HOUSING



TIE BRACE, FERROUS, 3 WAY
PAINT COLOR SHALL MATCH
SIGNAL HOUSING

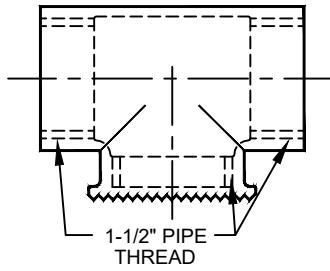


TIE BRACE, FERROUS, 4 WAY
PAINT COLOR SHALL MATCH
SIGNAL HOUSING

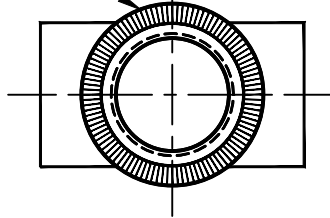


LOCKING NIPPLE

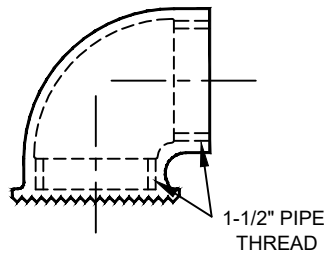
AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		MISCELLANEOUS SIGNAL MOUNTING HARDWARE					
DATE	DWG. NO.	872	SHEET		1 OF 2		



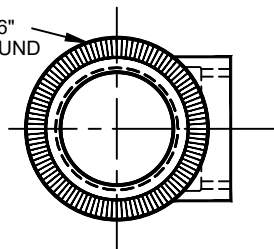
72 TEETH - 1/16"
HIGH ALL AROUND



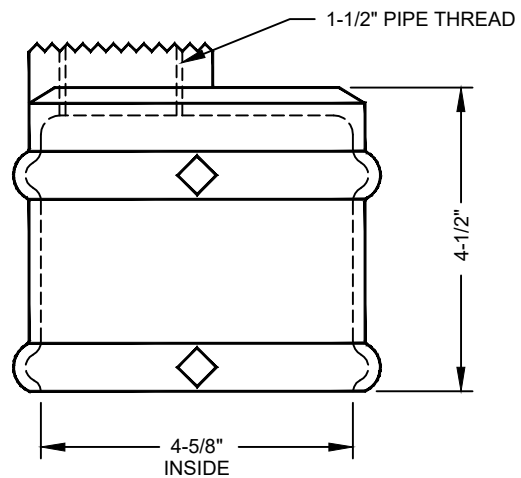
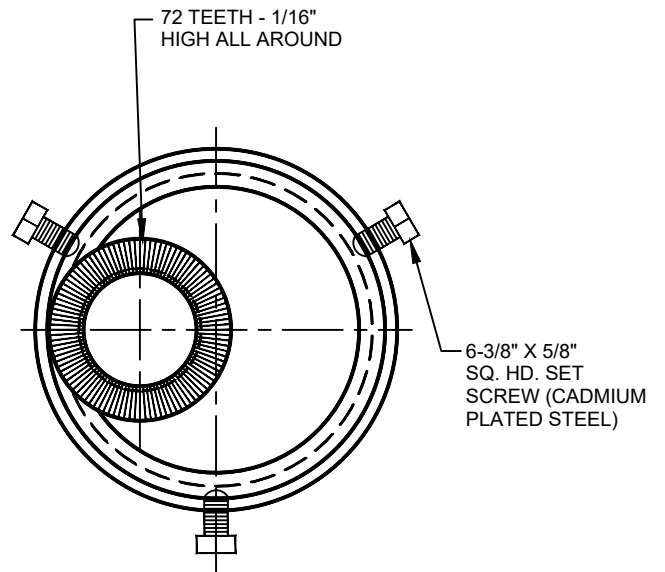
FERROUS SPECIAL TEE
PAINT COLOR SHALL MATCH
SIGNAL HOUSING



72 TEETH - 1/16"
HIGH ALL AROUND



FERROUS SPECIAL ELBOW
PAINT COLOR SHALL MATCH
SIGNAL HOUSING



POST TOP MOUNTED BRACKET WITH
SERRATED OFFSET MOUNT.

(USE FOR ALL POST TOP MOUNTINGS
NOT REQUIRING SIDE PORTS)

MATERIAL: BRONZE
PAINT COLOR SHALL MATCH
SIGNAL HOUSING

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

MISCELLANEOUS SIGNAL
MOUNTING HARDWARE

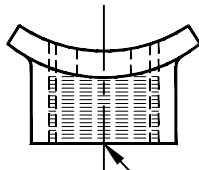
DATE

DWG. NO.

874

SHEET

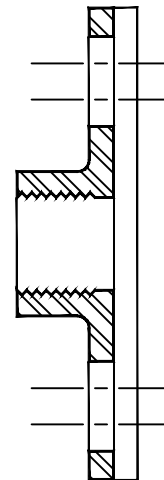
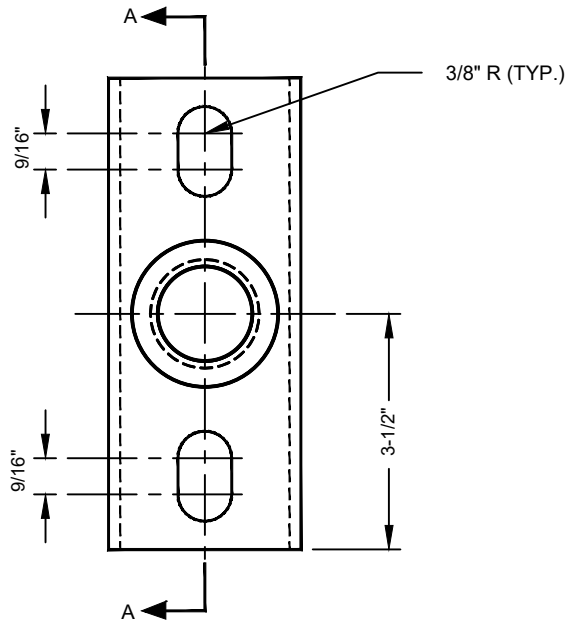
2 OF 2



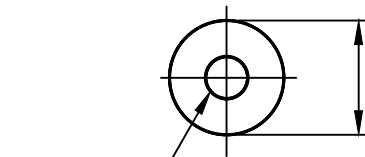
1-1/2" PIPE THREADS

NOTES:

1. MATERIAL-BRONZE
2. PAINT COLOR SHALL MATCH SIGNAL HOUSING
3. PROVIDE WASHERS SHOWN AND 1/2" PLATED BOLTS, LENGTH FOR STEEL POLE MOUNTING.

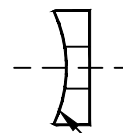


SECTION A-A



5/8" HOLE

CURVED WASHER



WASHER CURVED TO FIT STANDARD

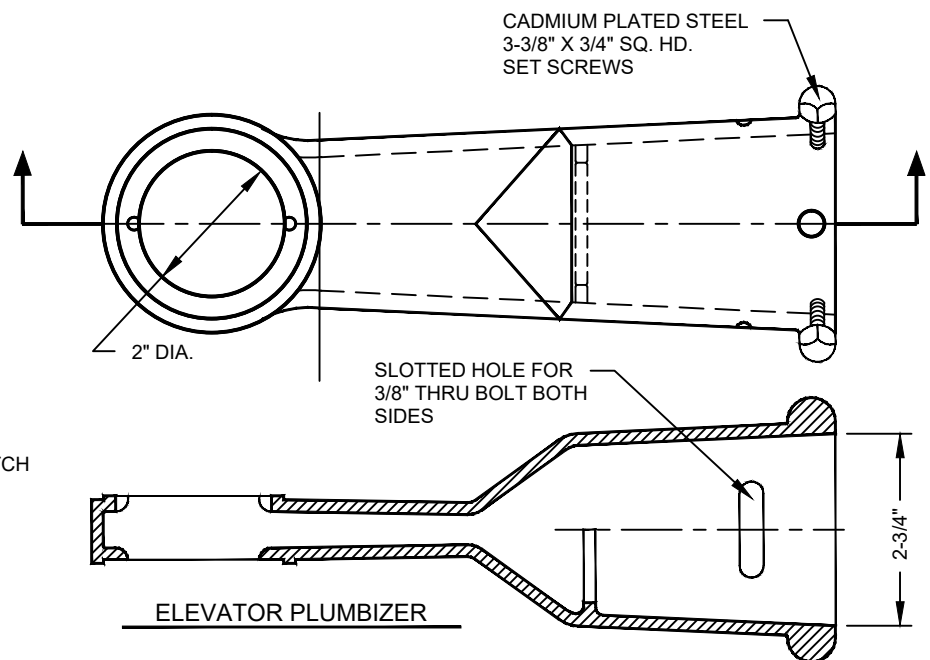
NOTES: DO NOT PROVIDE UNLESS SPECIFIED ON THE PLANS.

Effective 12/10/2020 to 06/09/2021

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		POLE PLATE DETAILS											
		DATE		DWG. NO.		873							

NOTES:

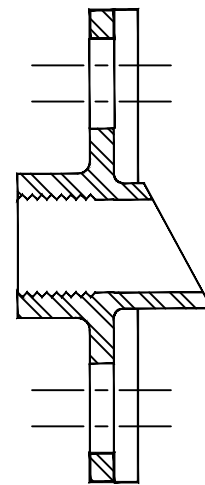
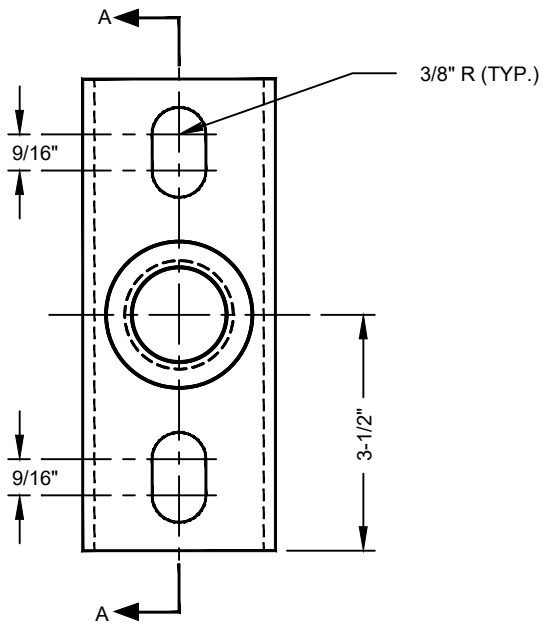
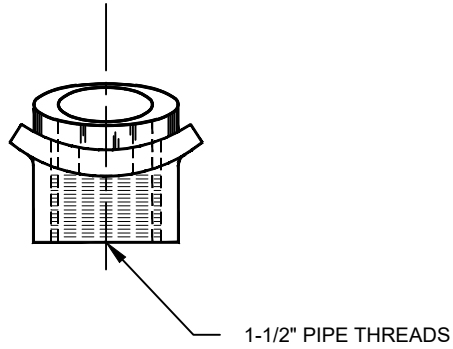
1. MATERIAL - BRONZE
2. PAINT COLOR SHALL MATCH SIGNAL HOUSING



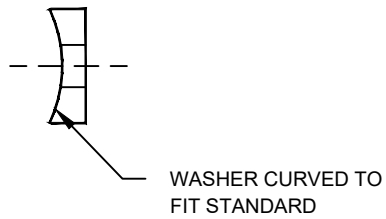
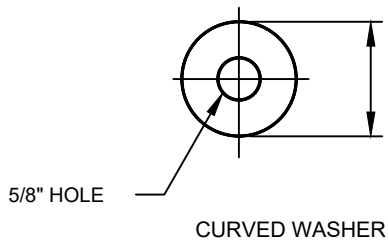
		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
		ELEVATOR PLUMBIZER							
		DATE		DWG. NO.		875			

NOTES:

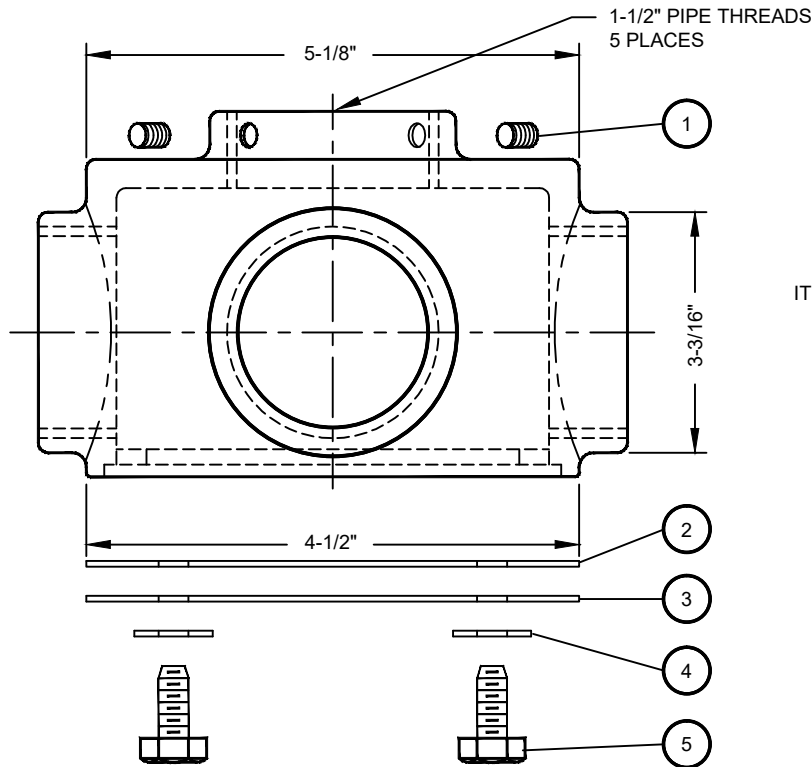
1. MATERIAL-BRONZE
2. PAINT COLOR SHALL MATCH SIGNAL HOUSING.
3. PROVIDE WASHERS SHOWN AND 1/2" PLATED BOLTS, LENGTH FOR STEEL POLE MOUNTING.



SECTION A-A

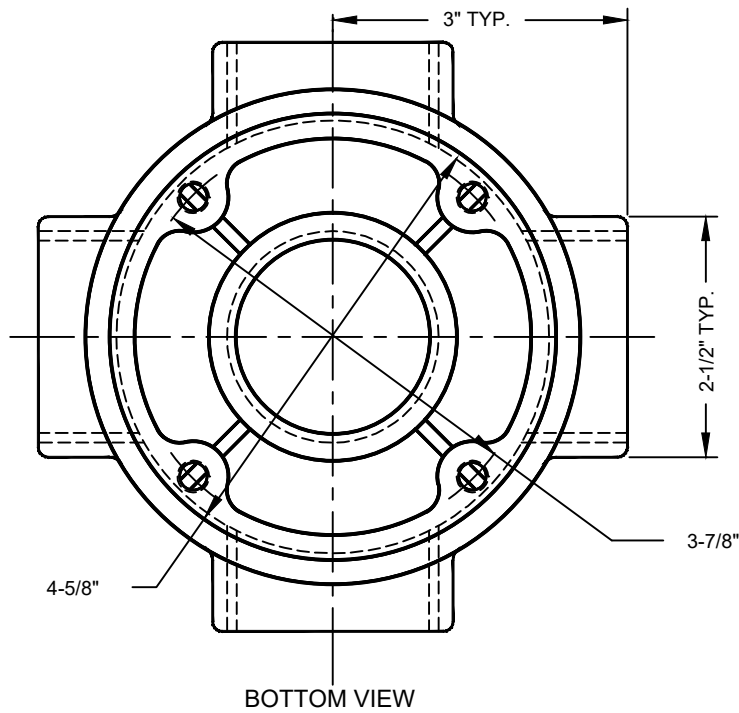


SPECIFICATION REFERENCE		AGENCY APPROVED						B	C	H	L	M	N
		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		POLE PLATE WITH WIRE GUIDE DETAILS											
		DATE		DWG. NO.		876							



LIST OF MATERIALS

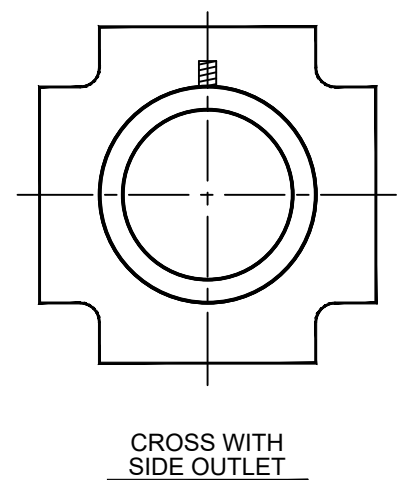
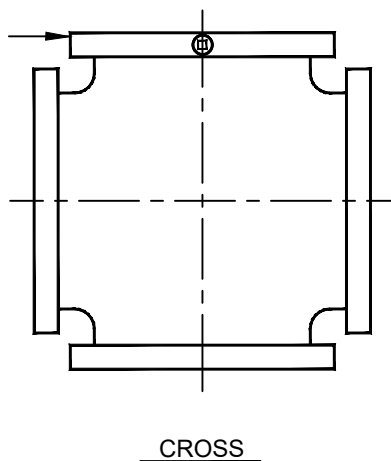
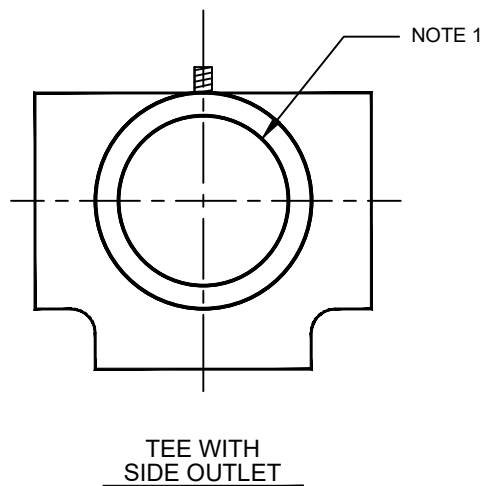
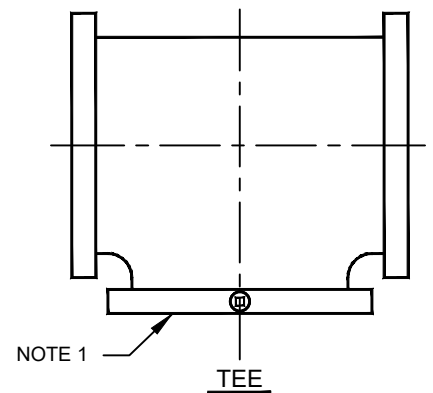
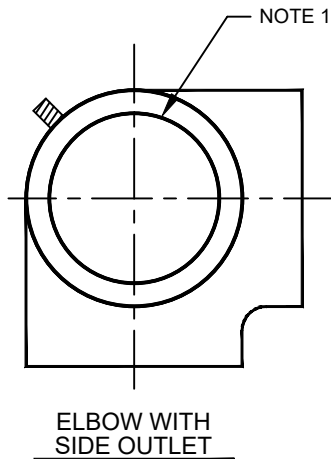
ITEM	QU.	DESCRIPTION
1.	2	1/4" - 20 UNC-2A X 3/8" SOCKET, CUP SET SCREW
2.	1	CORK GASKET TO MATCH COVER
3.	1	3/32" STEEL COVER WITH 2 BOLT HOLES OPPOSITE
4.	2	STANDARD LOCK WASHER
5.	5	3/8" - 16 UNC-2A X 1" BRASS HEX. HD CAP SCREW 2 REQ.



NOTES:

1. PAINT COLOR AND FINISHING SHALL MATCH SIGNAL HOUSING
2. MATERIAL: HIGH STRENGTH CAST ALUMINUM ALLOY

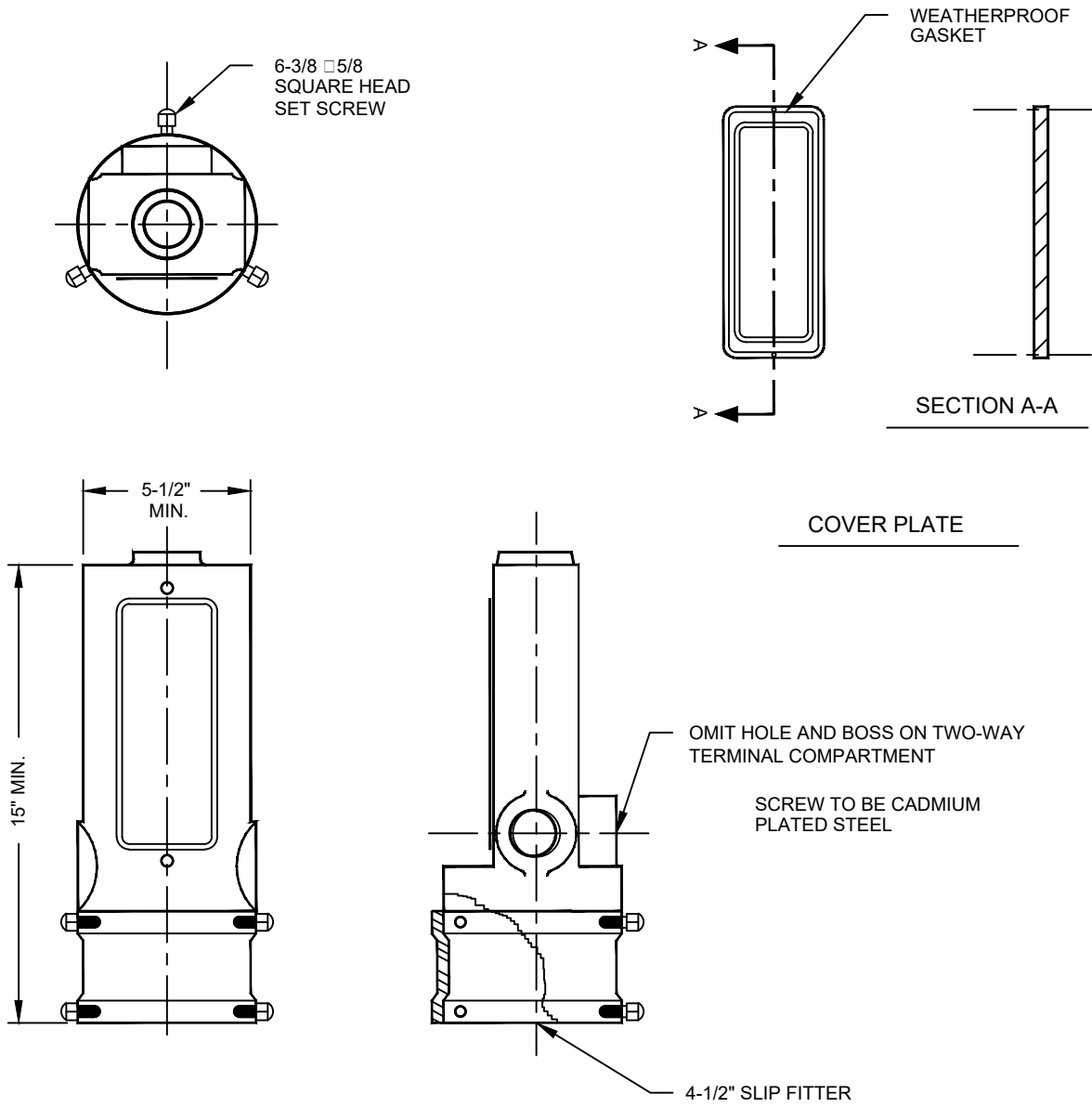
AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA					
		4 WAY CENTER HUB					
DATE		DWG. NO.		877			



NOTES:

1. REAM FOR 1-1/2" IPS. PROVIDE SET SCREW.
2. ALL OTHER OPENINGS SHALL BE THREADED.
3. PAINT COLOR SHALL MATCH SIGNAL HOUSING.

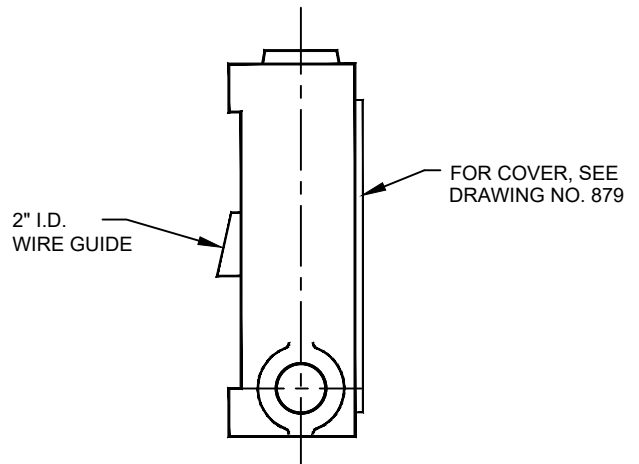
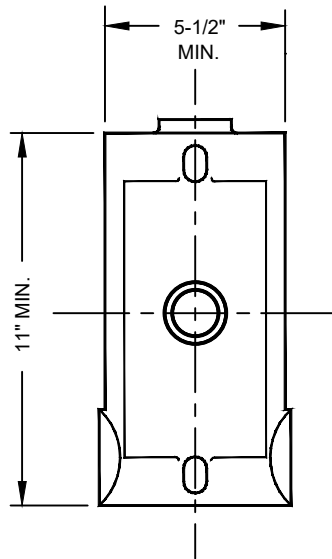
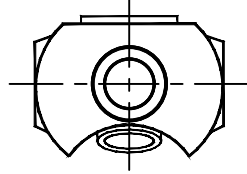
		AGENCY APPROVED		B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA							
		STANDARD MALLEABLE PIPE HARDWARE- 1-1/2 INCH IPS							
		DATE	DWG. NO.	878					



NOTES:

1. MATERIAL - ALUMINUM
2. PAINT COLOR SHALL MATCH SIGNAL HOUSING
3. PROVIDE 12 POSITION PRESSURE TYPE TERMINAL BLOCK MOUNTED INSIDE COMPARTMENT

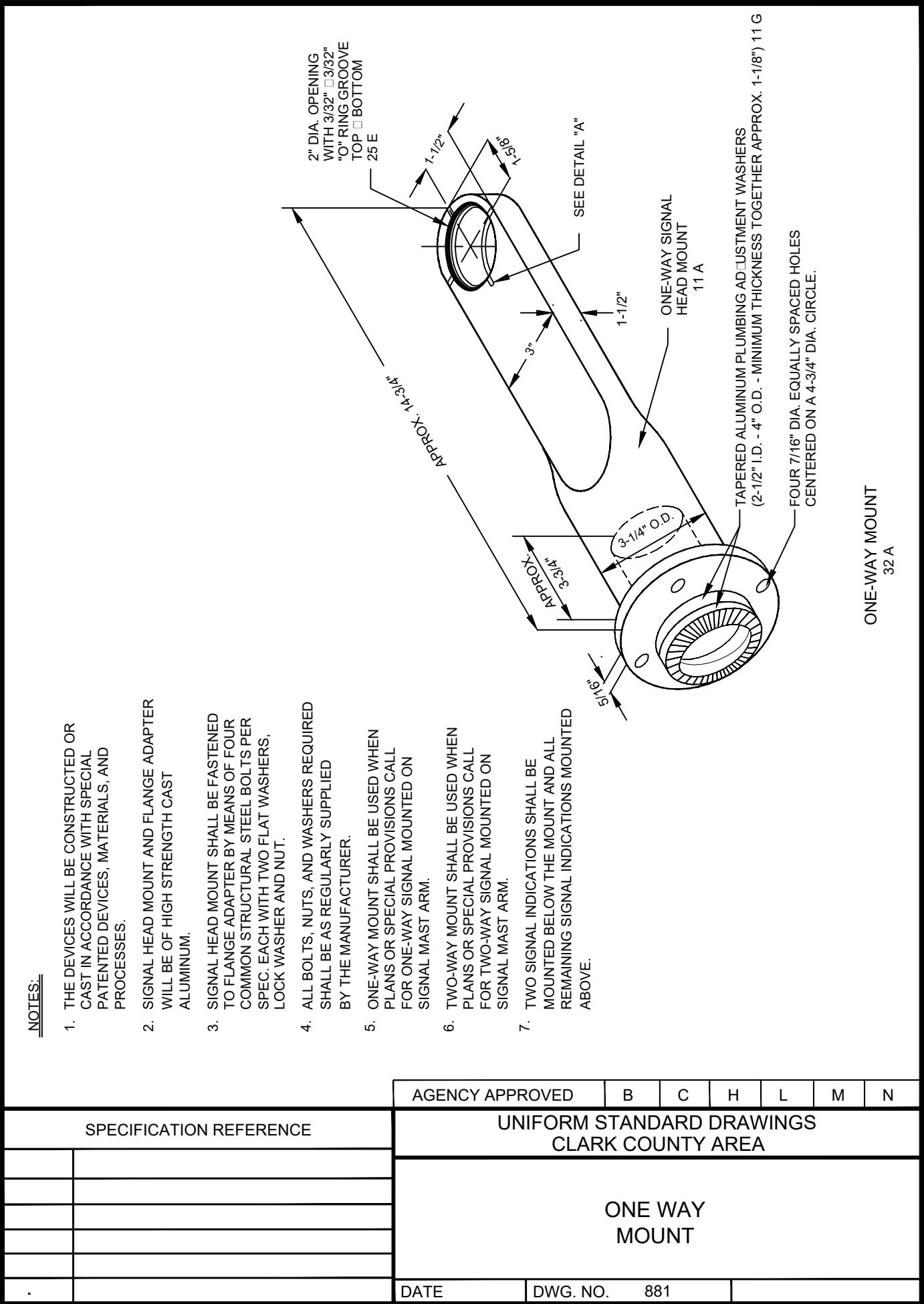
		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		POST TOP MOUNTED ADAPTER WITH TERMINAL COMPARTMENT											
		DATE		DWG. NO.		879							

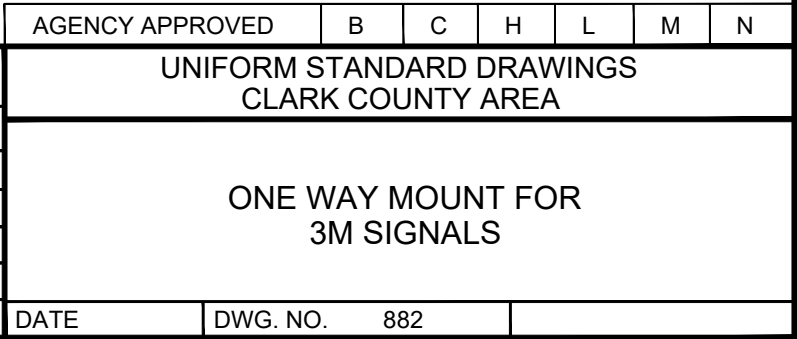


NOTES:

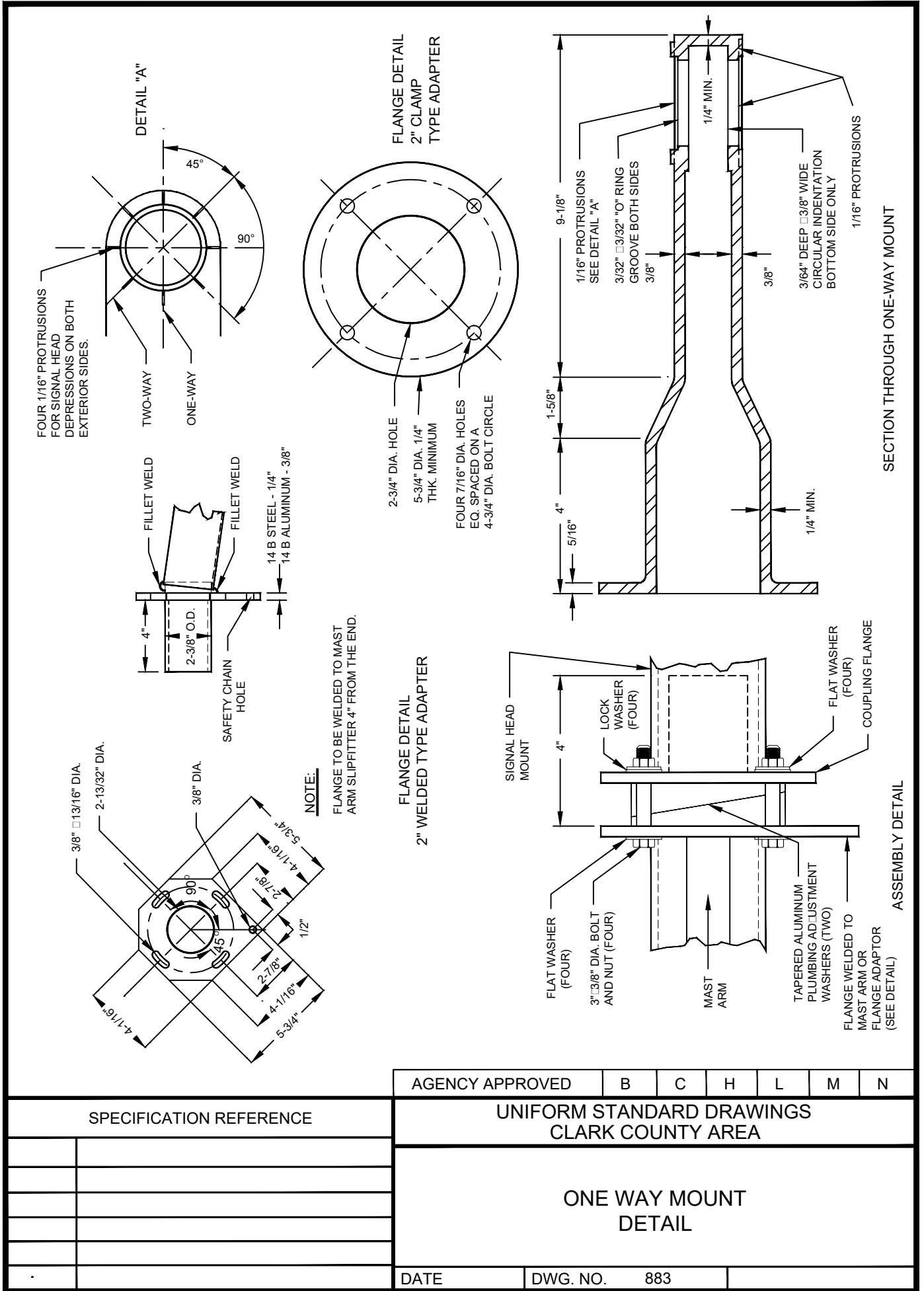
1. MATERIAL - ALUMINUM
2. PAINT COLOR SHALL MATCH SIGNAL HOUSING
3. PROVIDE 12 POSITION PRESSURE TYPE TERMINAL BLOCK MOUNTED INSIDE COMPARTMENT

		AGENCY APPROVED							B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA												
		SIDE BRACKET MOUNTED ADAPTER WITH WIRE GUIDE												
		DATE		DWG. NO.		880								

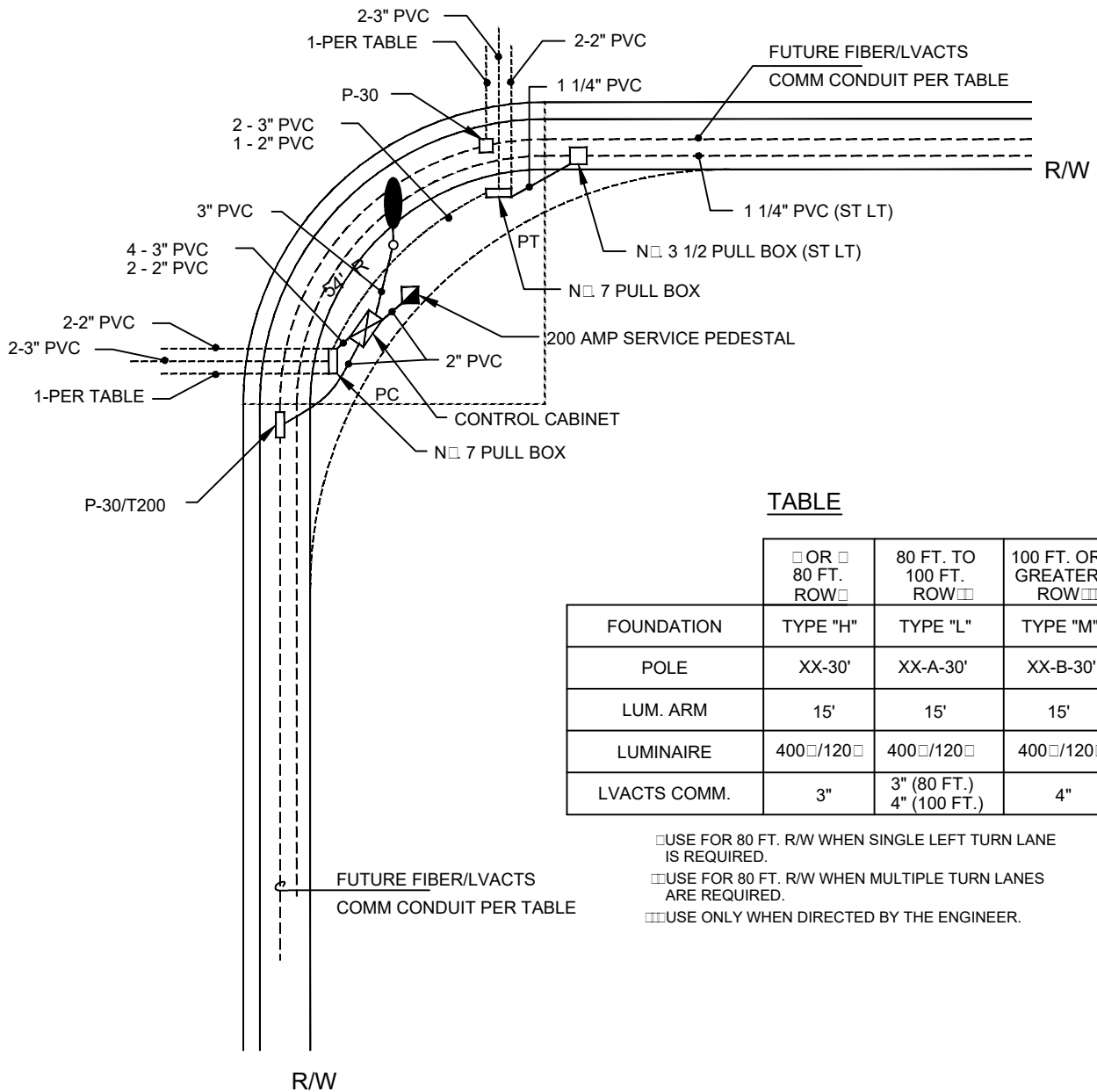




ONE-WAY MOUNT FOR 3M SIGNALS
32 H



SPECIFICATION REFERENCE		AGENCY APPROVED					
		B C H L M N					
		UNIFORM STANDARD DRAWINGS					
		CLARK COUNTY AREA					
		ONE WAY MOUNT					
		DETAIL					
		DATE	DWG. NO.		883		



TABLE

	☐ OR ☐ 80 FT. ROW ☐	80 FT. TO 100 FT. ROW ☐	100 FT. OR GREATER ROW ☐
FOUNDATION	TYPE "H"	TYPE "L"	TYPE "M"
POLE	XX-30'	XX-A-30'	XX-B-30'
LUM. ARM	15'	15'	15'
LUMINAIRE	400 ☐ /120 ☐	400 ☐ /120 ☐	400 ☐ /120 ☐
LVACTS COMM.	3"	3" (80 FT.) 4" (100 FT.)	4"

- ☐ USE FOR 80 FT. R/W WHEN SINGLE LEFT TURN LANE IS REQUIRED.
☐ USE FOR 80 FT. R/W WHEN MULTIPLE TURN LANES ARE REQUIRED.
☐ USE ONLY WHEN DIRECTED BY THE ENGINEER.

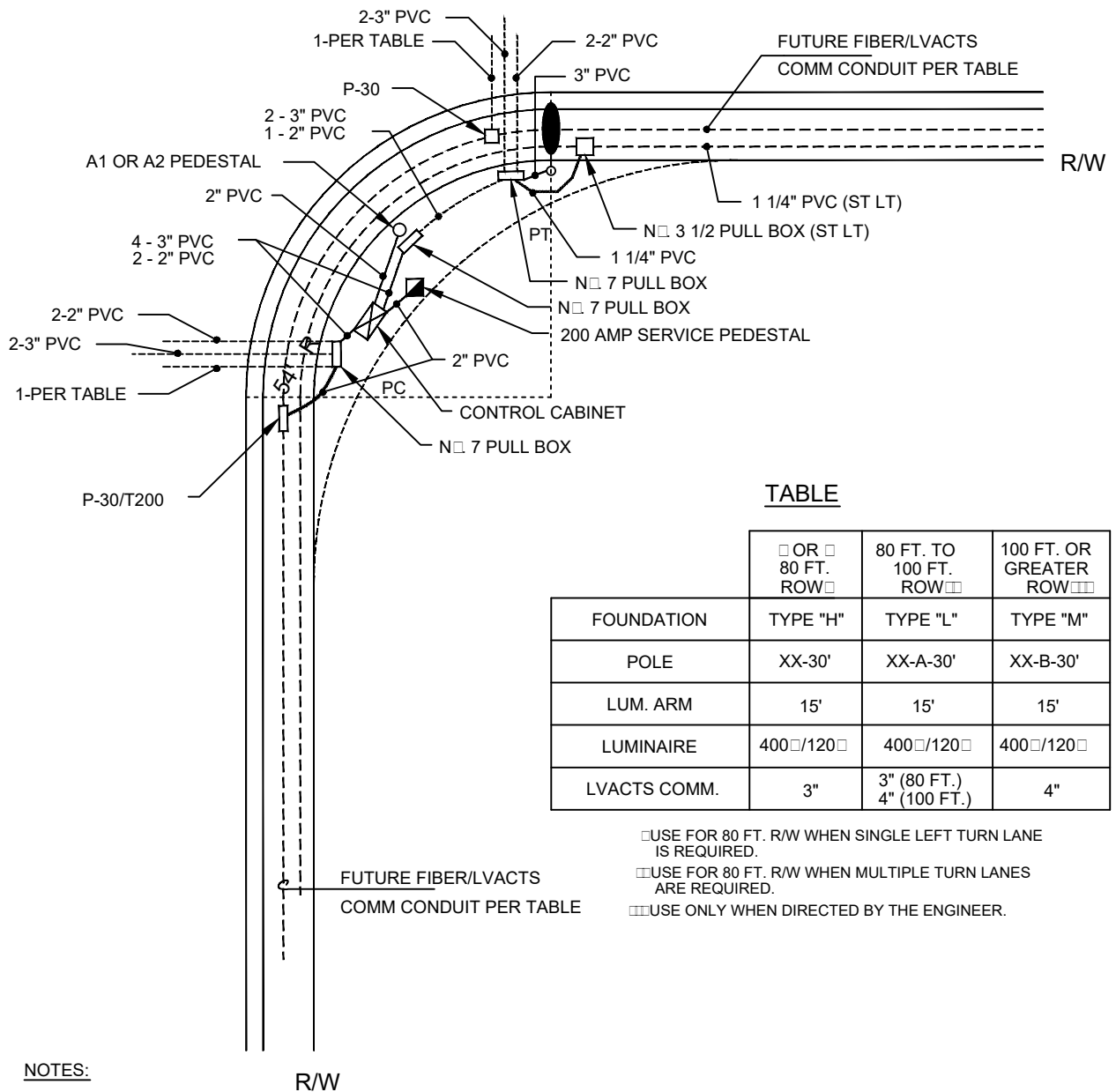
NOTES:

1. ALL TRAFFIC SIGNAL POLES SHALL BE GALVANIZED PER ASTM A.123.
2. ELECTRIC UTILITY TO SHOW FEEDER TO SERVICE PEDESTAL.
3. FOR POLE, POLE FOUNDATION, SERVICE PEDESTAL AND SERVICE PEDESTAL FOUNDATION DETAILS, SEE CLARK COUNTY AREA UNIFORM STANDARD DRAWINGS.
4. EXTEND THE 2-2" PVC, THE 2-3" AND THE 1-PER TABLE PVC SCHEDULE 40, 5 FEET PAST EDGE OF PAVEMENT STUB AND CAP OR CONNECT TO THE EXISTING TRAFFIC SIGNAL CONDUIT.
5. ALL EMPTY CONDUIT WILL CONTAIN A SINGLE N $\square$ 8 AWG THW OR BARE COPPER WIRE FOR THE PURPOSE OF LOCATING THE CONDUIT.

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED B C H L M N

SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA	
		TYPICAL TRAFFIC SIGNAL UNDERGROUND LAYOUT WITH INTERIM STREET LIGHTING AND SERVICE PEDESTAL (CENTER OF CURVE RADIUS)	
DATE	3-13-03	DWG. NO.	889
SHEET		1 OF 2	



TABLE

	□ OR □ 80 FT. ROW□	80 FT. TO 100 FT. ROW□	100 FT. OR GREATER ROW□□
FOUNDATION	TYPE "H"	TYPE "L"	TYPE "M"
POLE	XX-30'	XX-A-30'	XX-B-30'
LUM. ARM	15'	15'	15'
LUMINAIRE	400□/120□	400□/120□	400□/120□
LVACTS COMM.	3"	3" (80 FT.) 4" (100 FT.)	4"

□ USE FOR 80 FT. R/W WHEN SINGLE LEFT TURN LANE IS REQUIRED.

□ USE FOR 80 FT. R/W WHEN MULTIPLE TURN LANES ARE REQUIRED.

□□ USE ONLY WHEN DIRECTED BY THE ENGINEER.

NOTES:

1. ALL TRAFFIC SIGNAL POLES SHALL BE GALVANIZED PER ASTM A.123.
2. ELECTRIC UTILITY TO SHOW FEEDER TO SERVICE PEDESTAL.
3. FOR POLE, POLE FOUNDATION, SERVICE PEDESTAL AND SERVICE PEDESTAL FOUNDATION DETAILS, SEE CLARK COUNTY AREA UNIFORM STANDARD DRAWINGS.
4. EXTEND THE 2-2" PVC, THE 2-3" AND THE 1-PER TABLE PVC SCHEDULE 40, 5 FEET PAST EDGE OF PAVEMENT STUB AND CAP OR CONNECT TO THE EXISTING TRAFFIC SIGNAL CONDUIT.
5. ALL EMPTY CONDUIT WILL CONTAIN A SINGLE N□ 8 AWG THW OR BARE COPPER WIRE FOR THE PURPOSE OF LOCATING THE CONDUIT.

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED

B

C

H

L

M

N

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPICAL TRAFFIC SIGNAL UNDERGROUND
LAYOUT WITH INTERIM STREET LIGHTING
AND SERVICE PEDESTAL
(END OF CURVE RADIUS)

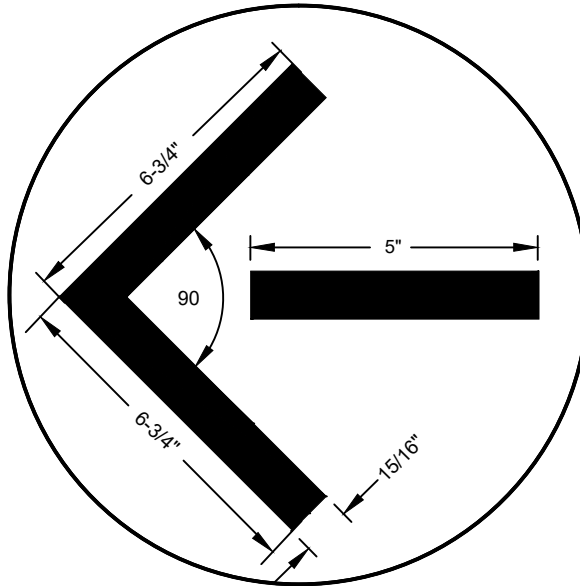
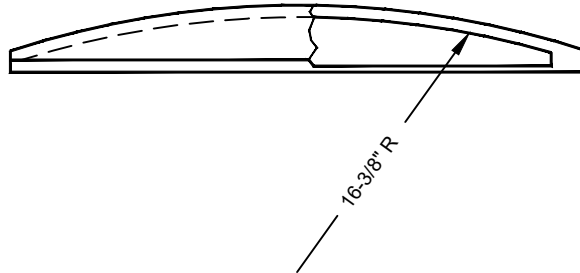
DATE 3-13-03

DWG. NO.

889

SHEET

2 OF 2



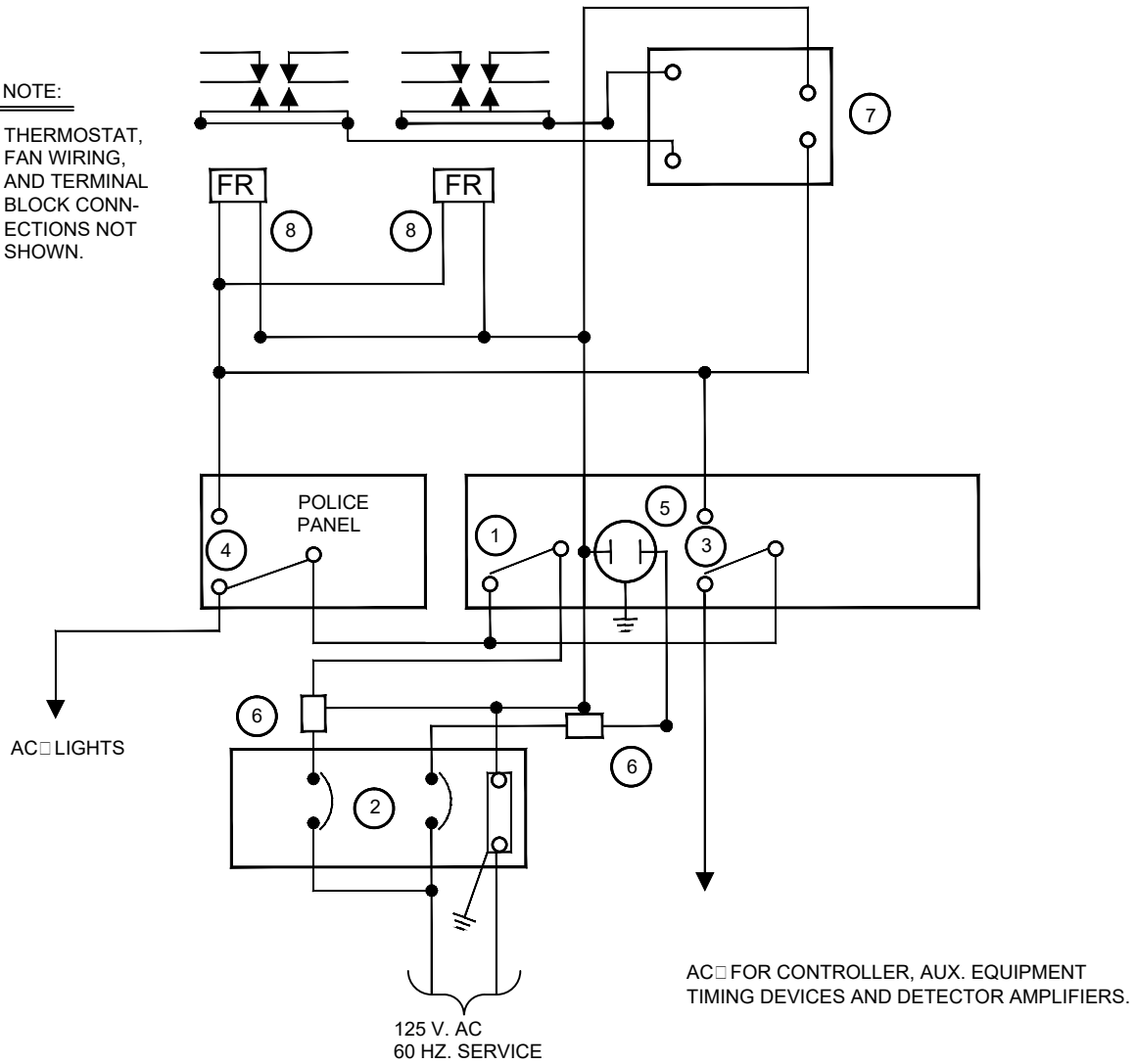
SPECIFICATIONS:

THE ARROW LENS SHALL BE GLASS AND CONFORM TO THE SPECIFICATIONS AS SET FORTH IN TECHNICAL REPORT NO. 1, REVISED 1966, BY THE INSTITUTE OF TRAFFIC ENGINEERS AND APPROVED AS A STANDARD BY THE UNITED STATES OF AMERICA STANDARD INSTITUTE. ANY FUTURE REVISIONS ACCEPTABLE AND ADOPTED BY THE U.S.A.S.I. SHALL AUTOMATICALLY BE PART OF THIS DRAWING SPECIFICATION.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		12 INCH ARROW LENS											
		DATE			DWG. NO. 890								

NOTE:

THERMOSTAT,
FAN WIRING,
AND TERMINAL
BLOCK CONN-
ECTIONS NOT
SHOWN.



NOTES:

1. MAIN SWITCH.
2. 30 AMP CIRCUIT BREAKERS.
3. SIGNAL FLASH SWITCH INSIDE CABINET.
4. AUXILIARY DOOR SIGNAL FLASH SWITCH.
5. NEMA STD. PLUG RECEPTACLE WITH GROUNDING CONTACT.
6. RADIO FREQUENCY INTERFERENCE SUPPRESSOR.
7. SOLID STATE SIGNAL FLASHER (CABINET MFR. TO DETERMINE
POLES AND CAPACITY, UNLESS OTHERWISE SPECIFIED)
8. SIGNAL FLASHING CONTROL RELAYS.

		AGENCY APPROVED						B	C	H	L	M	N
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA											
		AUXILIARY CABINET EQUIPMENT WIRING											
		DATE		DWG. NO.		891							