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.rtcsnv.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.

Effective 8/10/2023 to 8/07/2024

SECTION LINE

CENTERLINE OR
SURVEY LINE

INTERSECTING CENTERLINE

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)

GAS CATHODE PROTECTION RECTIFIER

R

UTILITY BOX (INITIALS INDICATE OWNERSHIP AND / OR TYPE)

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

POLE WITH GUY ANCHOR

FIRE HYDRANT

FENCE

FLOW LINE OF DITCH OR CHANNEL

EXISTING UTILITY STUB-OUT

TRAFFIC CONTROL SIGN

STREET NAME SIGN

TEST HOLE

CONCRETE BLOCK WALL

FIRE ALARM BOX ON PEDESTAL

FA

CONCRETE MONUMENT

TREE (NO. INDICATES TRUCK DIA. IN INCHES)

NO.

MISCELLANEOUS SYMBOL (ABBREVIATION INDICATES TYPE)

ABBR.

HEDGE (NOTE SIZE & SPECIES)

STEPS (NOTE TYPE AND NO. OF RISERS)

EXISTING BUILDING

EXISTING BUILDING FOUNDATION

RETAINING WALL

(LOW SIDE)

(HIGH SIDE)

AGENCY APPROVED	B	C	H	L	M	N

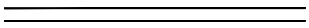
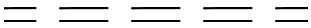
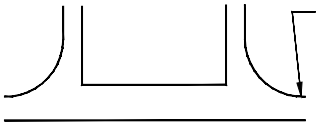
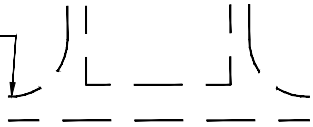
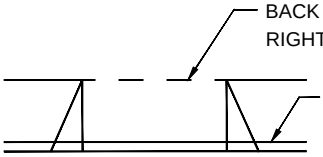
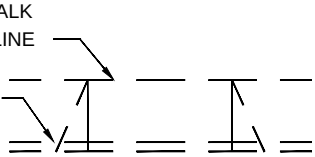
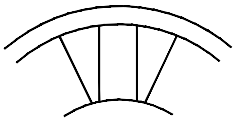
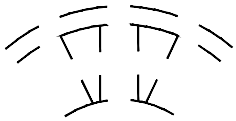
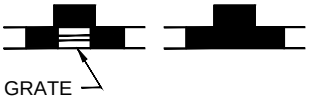
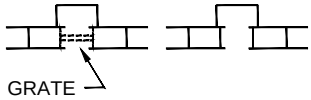
SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SYMBOLS

DATE	DWG. NO. 101	SHEET 1 OF 4

Effective 8/10/2023 to 8/07/2024

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

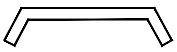
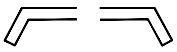
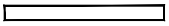
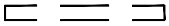
SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SYMBOLS

DATE	DWG. NO. 101	SHEET 2 OF 4

Effective 8/10/2023 to 8/07/2024

PLAN ONLY	PROPOSED CONSTRUCTION	EXISTING
WING TYPE HEADWALL		
VALLEY GUTTER		

UNDERGROUND UTILITY WITH MANHOLE AND CASING

OWNERSHIP INDICATED BY LINE LEGEND



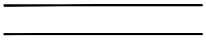
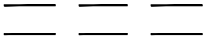
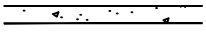
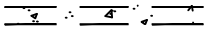


SIZE AND TYPE OF CONDUIT SHALL BE PLACED ON CONDUIT WHEN AVAILABLE

LEGEND

TSI	=	TRAFFIC SIGNAL INTERCONNECT	SS	=	SANITARY SEWER
E	=	ELECTRIC	SD	=	STORM DRAIN
FA	=	FIRE ALARM	W	=	WATER
SL	=	STREET LIGHT	S-G	=	STEEL GAS
CATV	=	CABLE TELEVISION	PL-G	=	PLASTIC GAS
			T	=	TELEPHONE

PROFILE ONLY

CENTERLINE GRADE		
TOP OF CURB OR FLOW LINE		
PIPE		
OR	OR	OR
		
OR	OR	OR
		

AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	
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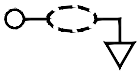
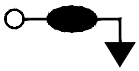
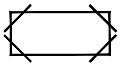
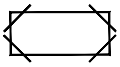
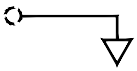
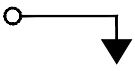
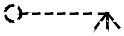
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SYMBOLS

DATE	DWG. NO. 101	SHEET 3 OF 4

Effective 8/10/2023 to 8/07/2024

MISCELLANEOUS ELECTRICAL SYMBOLS

PLAN ONLY	EXISTING	PROPOSED CONSTRUCTION
TRAFFIC SIGNAL CONTROLLER		
PULL BOX (INITIALS INDICATE OWNERSHIP AND NUMBER INDICATES 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) (H)		
LUMINAIRE 150 W (HPS) | 150 W (IND) (H)		
200 W LUMINARE		
LUMINAIRE 250 W (HPS) | 150 W (IND) (H)		
LUMINAIRE 400 W (HPS) | 250 W (IND) (H)		
750 W LUMINAIRE		
TRAFFIC SIGNAL POLE		
SCHOOL FLASHER		

AGENCY APPROVED	B	C	(H)	L	M	N

SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SYMBOLS

DATE 12-12-96	DWG. NO. 101	SHEET 4 OF 4

Effective 8/10/2023 to 8/07/2024

Aban	- Abandon
AIP	- Abandoned in Place
Agg	- Aggregate
Alt	- Alternate
A	- Anode, Gas
ACP	- Asbestos Cement Pipe
AC	- Asphaltic Concrete
Ave	- Avenue
BC	- Back of Curb
BCR	- Back of Curb Radius
BVC	- Beginning of Vertical Curve
BM	- Bench Mark
Bdry Line	- Boundary Line
CATV	- Cable Television
C-C	- Center to Center
$\mathbb{C}_L$	- Centerline
CBC	- City of Boulder City
CLV	- City of Las Vegas
COH	- City of Henderson
CM	- City of Mesquite
CNLV	- City of North Las Vegas
CC	- Clark County
CCSD	- Clark County Sanitation District
CO	- Clean Out, Sewer
Comm	- Commercial
Conc, PCC	- Concrete
Const	- Construction or Construct
Cor	- Corner
CMP	- Corrugated Metal Pipe
CSAP	- Corrugated Steel Arch Pipe
CSP	- Corrugated Steel Pipe
C&G	- Curb and Gutter
CIP	- Cast Iron Pipe
Col	- Column
Cu Yd, CY	- Cubic Yard
Cu Ft, CF	- Cubic Feet
Culv	- Culvert
CF	- Curb Face
Dept	- Department
Dia	- Diameter
Dwy	- Driveway
DI	- Drop Inlet
Esmt	- Easement
E/o	- East of
EP	- Edge of Pavement
EO	- Edge of Oil
E	- Electric
EM	- Electric Meter
Elev	- Elevation
Embk	- Embankment
ECR	- End of Curb Return
EC	- End of Curve
EBS	- Cathode Protection Bond Station
ETS	- Cathode Protection Test Station
EVC	- End of Vertical Curve
Exist	- Existing
Ft	- Feet or Foot
FG	- Finish Grade
FA	- Fire Alarm
FH	- Fire Hydrant
$\mathbb{F}_L$	- Flow Line
Galv	- Galvanized
GM	- Gas Meter
GR	- Gas Pressure Regulator
PL-G	- Plastic Gas
S-G	- Steel Gas
GB	- Grade Break
Gut	- Gutter
Hdwl	- Headwall
In	- Inch
INT	- Intersection
INV	- Invert
ISL	- Island
JB	- Junction Box
LOC	- Length of Curb
Lt	- Left
LF	- Linear Feet
LVVWD	- Las Vegas Valley Water Dictrict
MH	- Manhole
Max	- Maximum
Min	- Minimum
Mon	- Monolithic
N/o	- North of
NTS	- Not to Scale
OC	- On Center
OG	- Open-Graded Pavement, Original Ground
Pvmt	- Pavement
PI	- Point of Intersection
PRC	- Point of Reverse Curve
PC	- Point of Curve
PT	- Point of Tangency
PCC	- Point of Compound Curve
PCC, Conc	- Portland Cement Concrete

AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

ABBREVIATIONS

DATE	DWG. NO. 105	SHEET 1 OF 2

Effective 8/10/2023 to 8/07/2024

PP	- Power Pole
P	- Power
PL	- Property Line
Prop	- Proposed
PB	- Pull Box
RP	- Radius Point
R	- Radius
RR	- Railroad
Reinf	- Reinforced
RC	- Reinforced Concrete
RCB	- Reinforced Concrete Box
RCP	- Reinforced Concrete Pipe
Reloc	- Relocate
RT	- Right
R/W	- Right-of-way
RD	- Road
SS	- Sanitary Sewer
Sht	- Sheet
S/o	- South of
SW	- Sidewalk
SQ FT, SF	- Square foot
SQ YD, SY	- Square yard
Sta	- Station
SHP	- Steel Highpressure Pipe
SD	- Storm Drain
STD	- Standard
Struct	- Structural or Structure
Surv	- Survey
SL	- Streetlight
T	- Telephone
Temp	- Temporary
TBA	- To Be Adjusted
TBR	- To Be Removed
TC	- Top of Curb
TP	- Top of Pipe
TS	- Traffic Signal
TSI	- Traffic Signal Interconnect
Trans	- Transition
Typ	- Typical
UG	- Underground
Var	- Variable
Vert	- Vertical
VC	- Vertical Curve
VG	- Valley Gutter
VCP	- Vitrified Clay Pipe
W	- Water
WM	- Water Meter
W/o	- West of
Yd	- Yard

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

Effective 8/10/2023 to 8/07/2024

	MAJOR COLLECTOR								ARTERIAL							
	Normal Traffic (8.0)				Heavy Traffic (8.5)				Normal Traffic (9.0)				Heavy Traffic (9.5)			
R-Value	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 > 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	
401	PLANTMIX BITUMINOUS PAVEMENTS

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

PAVEMENT STRUCTURE DESIGN GUIDELINE CHART FOR MAJOR COLLECTOR AND ARTERIAL ROADWAYS

DATE 11-10-04 | DWG. NO. 200

Effective 8/10/2023 to 8/07/2024

	RESIDENTIAL								MINOR COLLECTOR							
	Normal Traffic (5.0)				Heavy Traffic (5.5)				Normal Traffic (6.0)				Heavy Traffic (6.5)			
R-Value	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.

AGENCY APPROVED	B	C	H	L	M	N

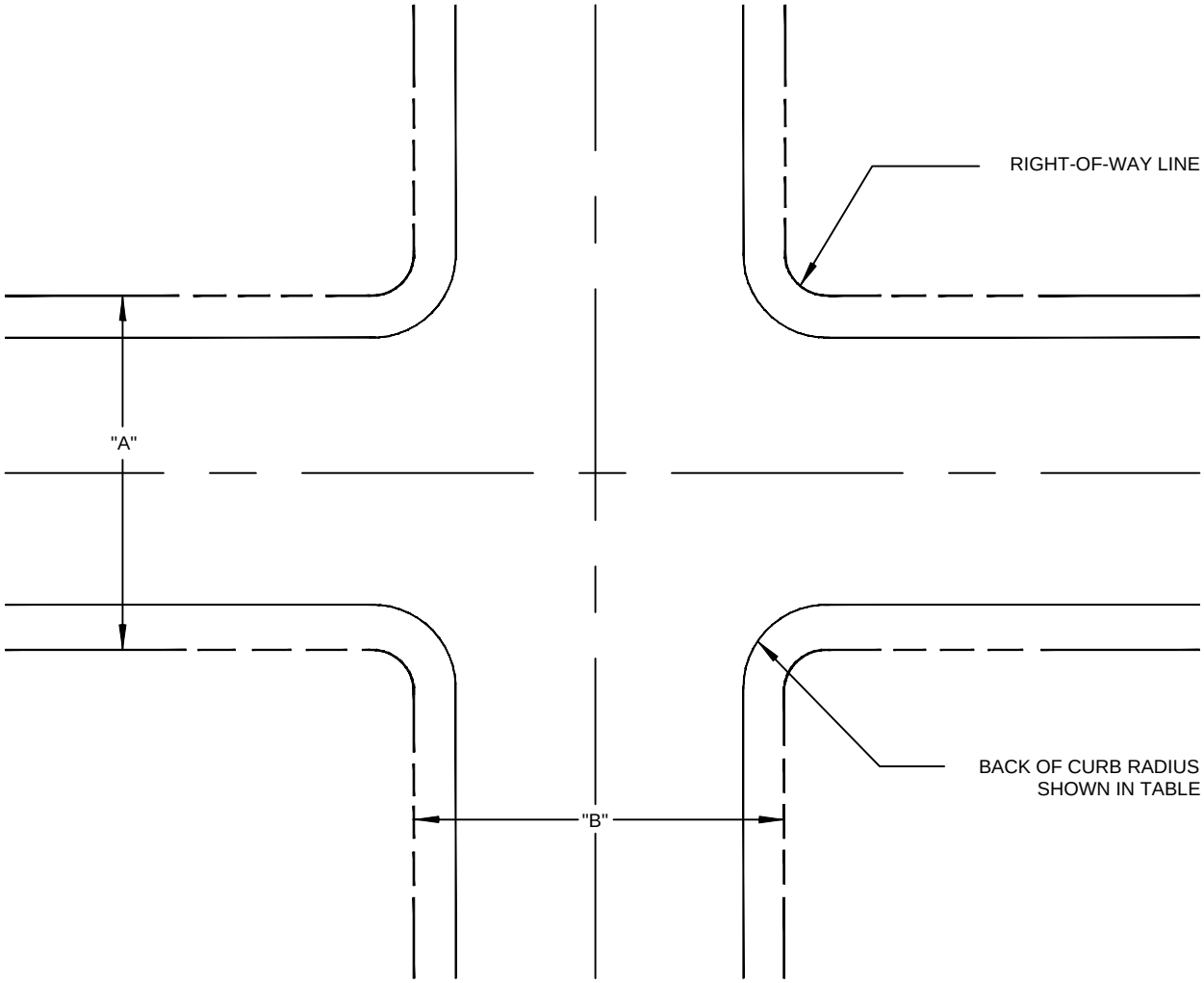
SPECIFICATION REFERENCE	
401	PLANTMIX BITUMINOUS PAVEMENTS
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

PAVEMENT STRUCTURE DESIGN GUIDELINE CHART FOR MINOR COLLECTOR AND RESIDENTIAL ROADWAYS

DATE 11-10-04 | DWG. NO. 200.1

Effective 8/10/2023 to 8/07/2024



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

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.

AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

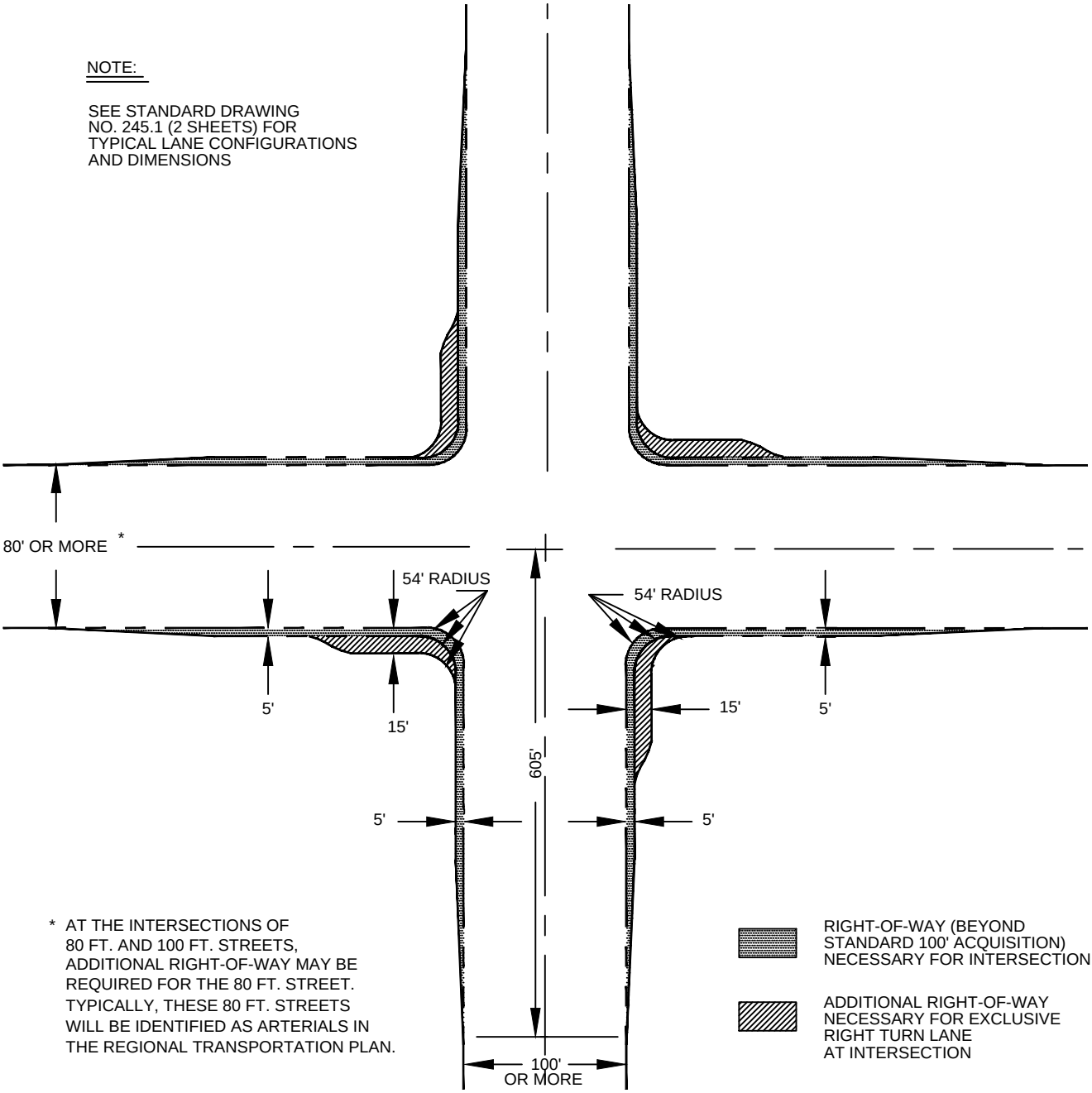
MINIMUM BACK OF CURB RADIUS

DATE 11-10-04	DWG. NO. 201	

Effective 8/10/2023 to 8/07/2024

NOTE:

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



* AT THE INTERSECTIONS OF 80 FT. AND 100 FT. STREETS, ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED FOR THE 80 FT. STREET. TYPICALLY, THESE 80 FT. STREETS WILL BE IDENTIFIED AS ARTERIALS IN THE REGIONAL TRANSPORTATION PLAN.

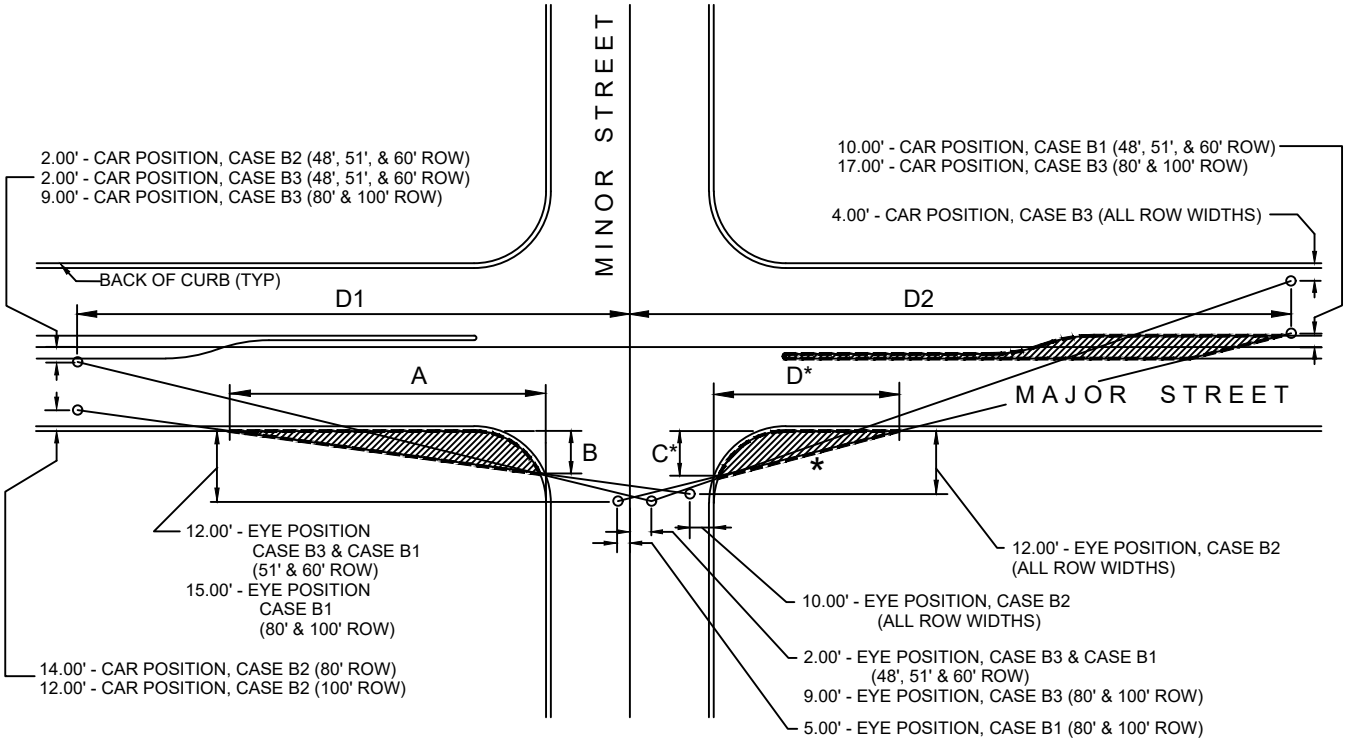
RIGHT-OF-WAY (BEYOND STANDARD 100' ACQUISITION) NECESSARY FOR INTERSECTION

ADDITIONAL RIGHT-OF-WAY NECESSARY FOR EXCLUSIVE RIGHT TURN LANE AT INTERSECTION

AGENCY APPROVED	B	C	H	L	M	N

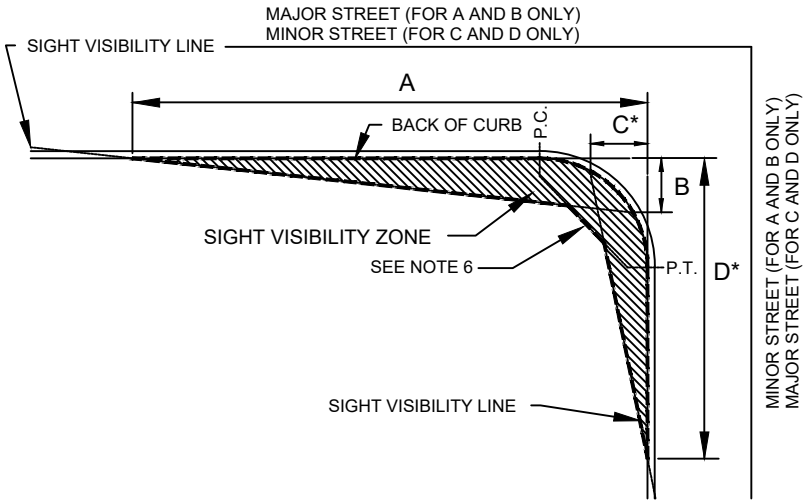
SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	ADDITIONAL RIGHT-OF-WAY REQUIRED AT MAJOR INTERSECTIONS
	DATE 7-10-03 / DWG. NO. 201.1

Effective 8/10/2023 to 8/07/2024



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.

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 1 OF 8

Effective 8/10/2023 to 8/07/2024

MAJOR ROW / MINOR ROW	48' D1=286'(B1) D1=286'(B2) D2=330'(B1) D2=286'(B3)	51' D1=286'(B1) D1=286'(B2) D2=330'(B1) D2=286'(B3)	60' D1=381'(B1) D1=381'(B2) D2=469'(B1) D2=440'(B3)	80' D1=411'(B1) D1=381'(B2) D2=499'(B1) D2=469'(B3)	100' D1=521'(B2) D1=605'(B3) D2=726'(B1) D2=726'(B3)
48' D1=286'(B1) D1=286'(B2) D2=330'(B1) D2=286'(B3)	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' D1=286'(B1) D1=286'(B2) D2=330'(B1) D2=286'(B3)	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' D1=381'(B1) D1=381'(B2) D2=469'(B1) D2=440'(B3)	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	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	N/A	A = 110' B = 10' C = 9' D = 62'	A = 181' B = 10' C = 10' D = 91'

SETBACK TABLE

GENERAL NOTES

1. EACH CORNER OF EVERY INTERSECTION SHALL HAVE A SIGHT VISIBILITY ZONE REGARDLESS OF RIGHT-OF-WAY WIDTH.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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' x 80' INTERSECTIONS OR GREATER.
7. 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.
8. 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.
9. 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.

AGENCY APPROVED	B	C	H	L	M	N	R

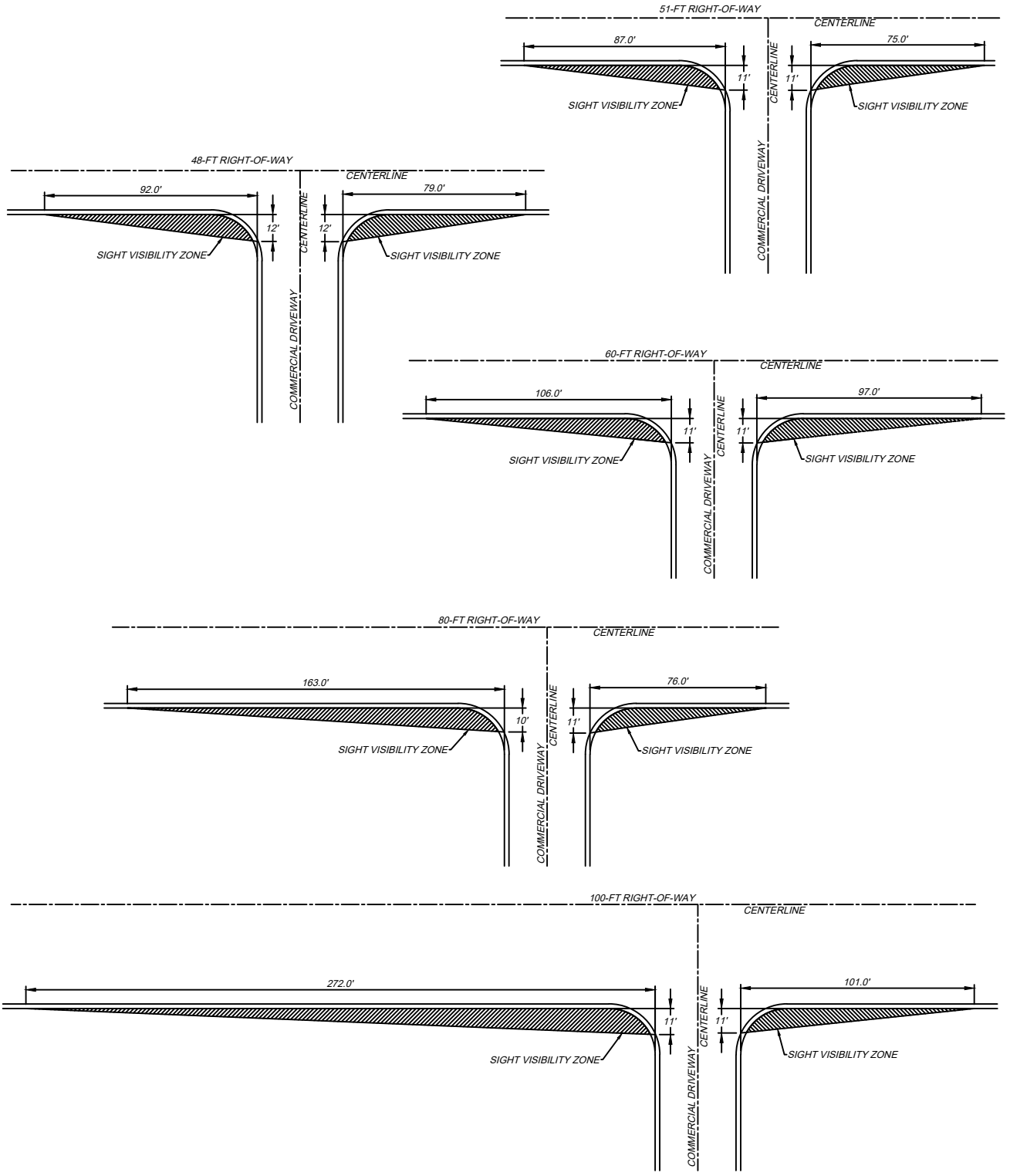
SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SIGHT VISIBILITY ZONES AT INTERSECTIONS

DATE 01-09-20	DWG. NO. 201.2	SHEET 2 OF 8

Effective 8/10/2023 to 8/07/2024



TYPICAL SIGHT VISIBILITY ZONES FOR COMMERCIAL DRIVEWAY APPROACHES

AGENCY APPROVED	B	C	H	L	M	N	R

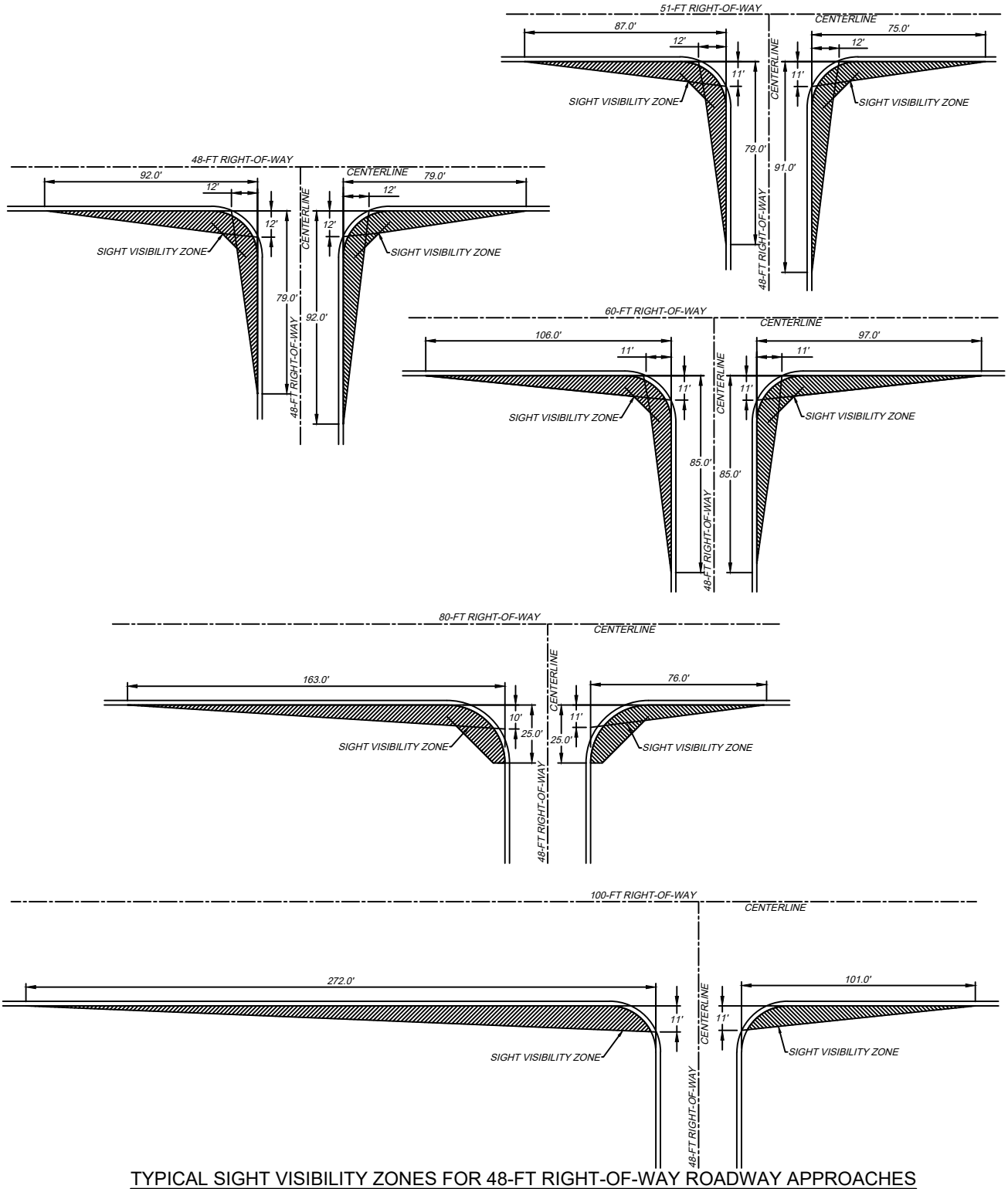
SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SIGHT VISIBILITY ZONES AT INTERSECTIONS

DATE 01-09-20	DWG. NO. 201.2	SHEET 3 OF 8

Effective 8/10/2023 to 8/07/2024

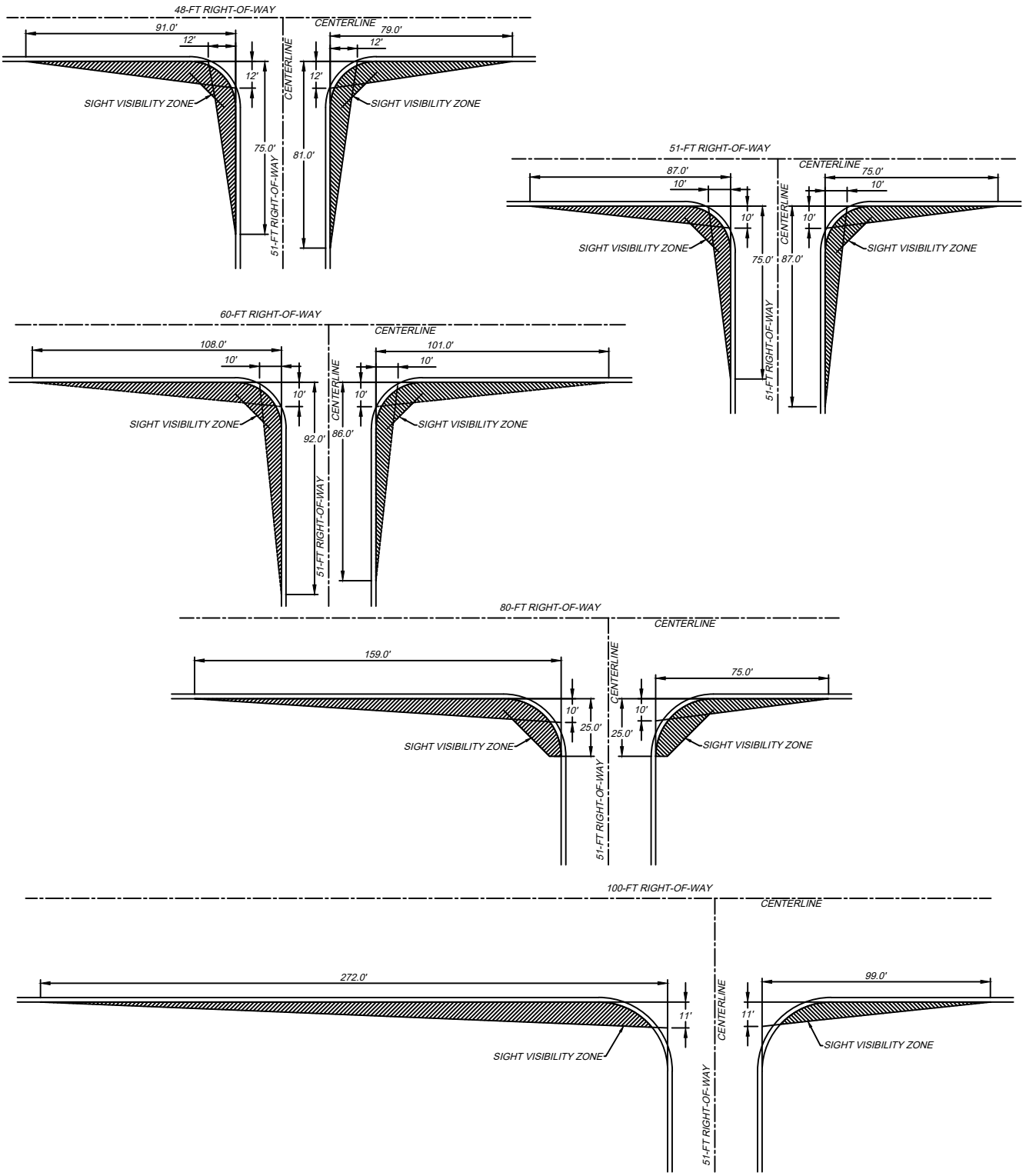


TYPICAL SIGHT VISIBILITY ZONES FOR 48-FT RIGHT-OF-WAY ROADWAY APPROACHES

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 4 OF 8

Effective 8/10/2023 to 8/07/2024



TYPICAL SIGHT VISIBILITY ZONES FOR 51-FT RIGHT-OF-WAY ROADWAY APPROACHES

AGENCY APPROVED	B	C	H	L	M	N	R

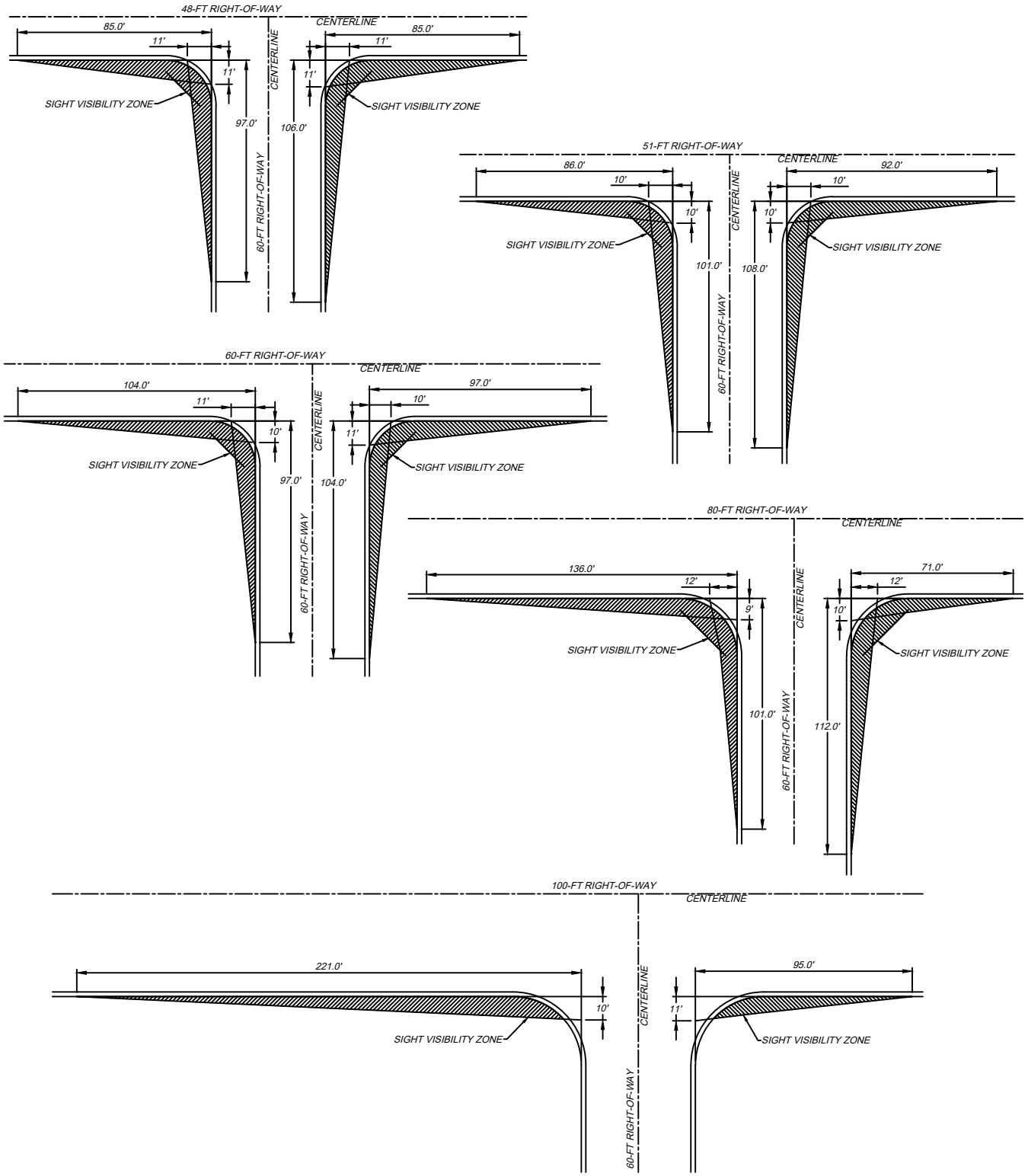
SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SIGHT VISIBILITY ZONES AT INTERSECTIONS

DATE 01-09-20	DWG. NO. 201.2	SHEET 5 OF 8

Effective 8/10/2023 to 8/07/2024

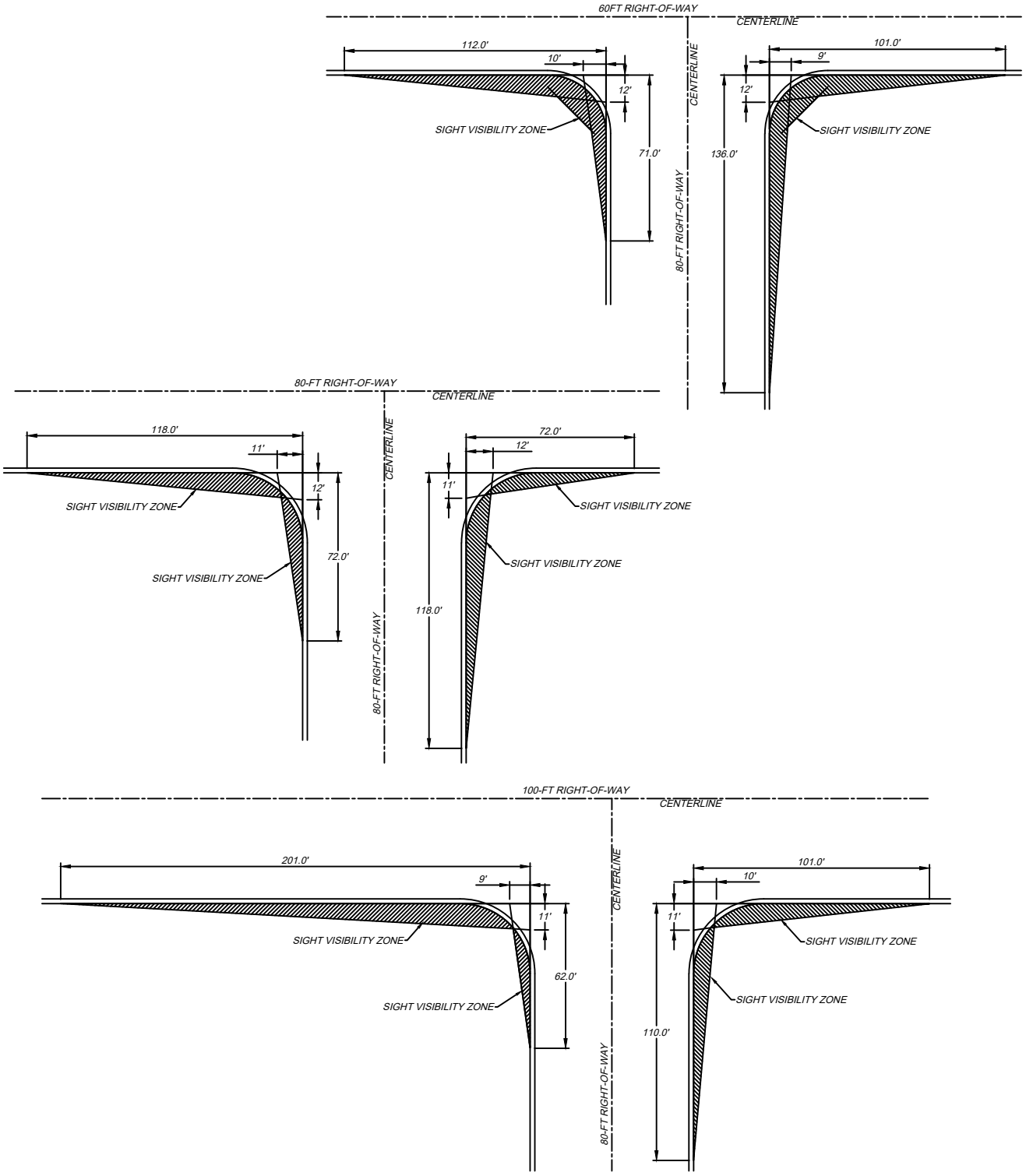


TYPICAL SIGHT VISIBILITY ZONES FOR 60-FT RIGHT-OF-WAY ROADWAY APPROACHES

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

Effective 8/10/2023 to 8/07/2024



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

AGENCY APPROVED	B	C	H	L	M	N	R

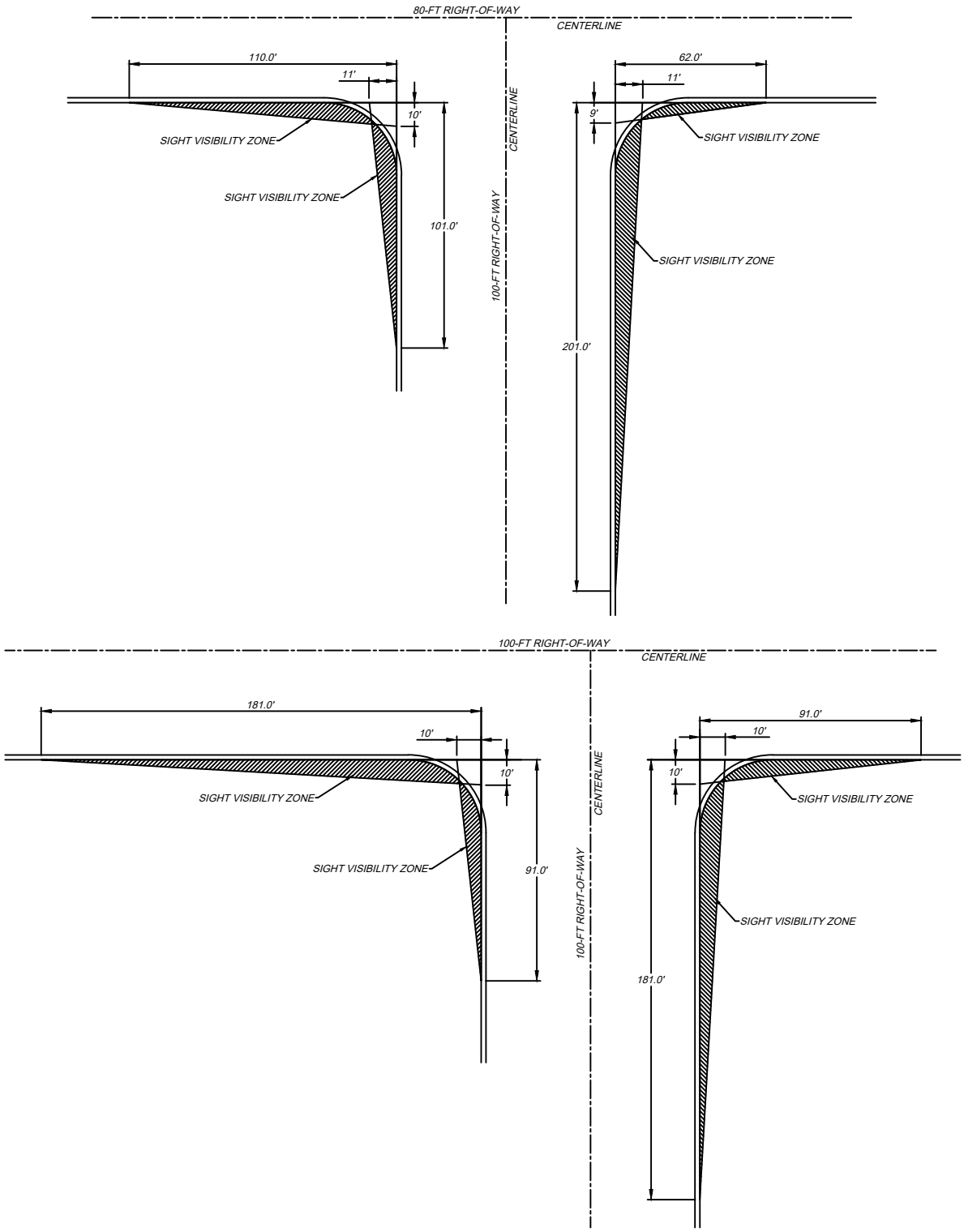
SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SIGHT VISIBILITY ZONES AT INTERSECTIONS

DATE 01-09-20	DWG. NO. 201.2	SHEET 7 OF 8

Effective 8/10/2023 to 8/07/2024



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

AGENCY APPROVED	B	C	H	L	M	N	R

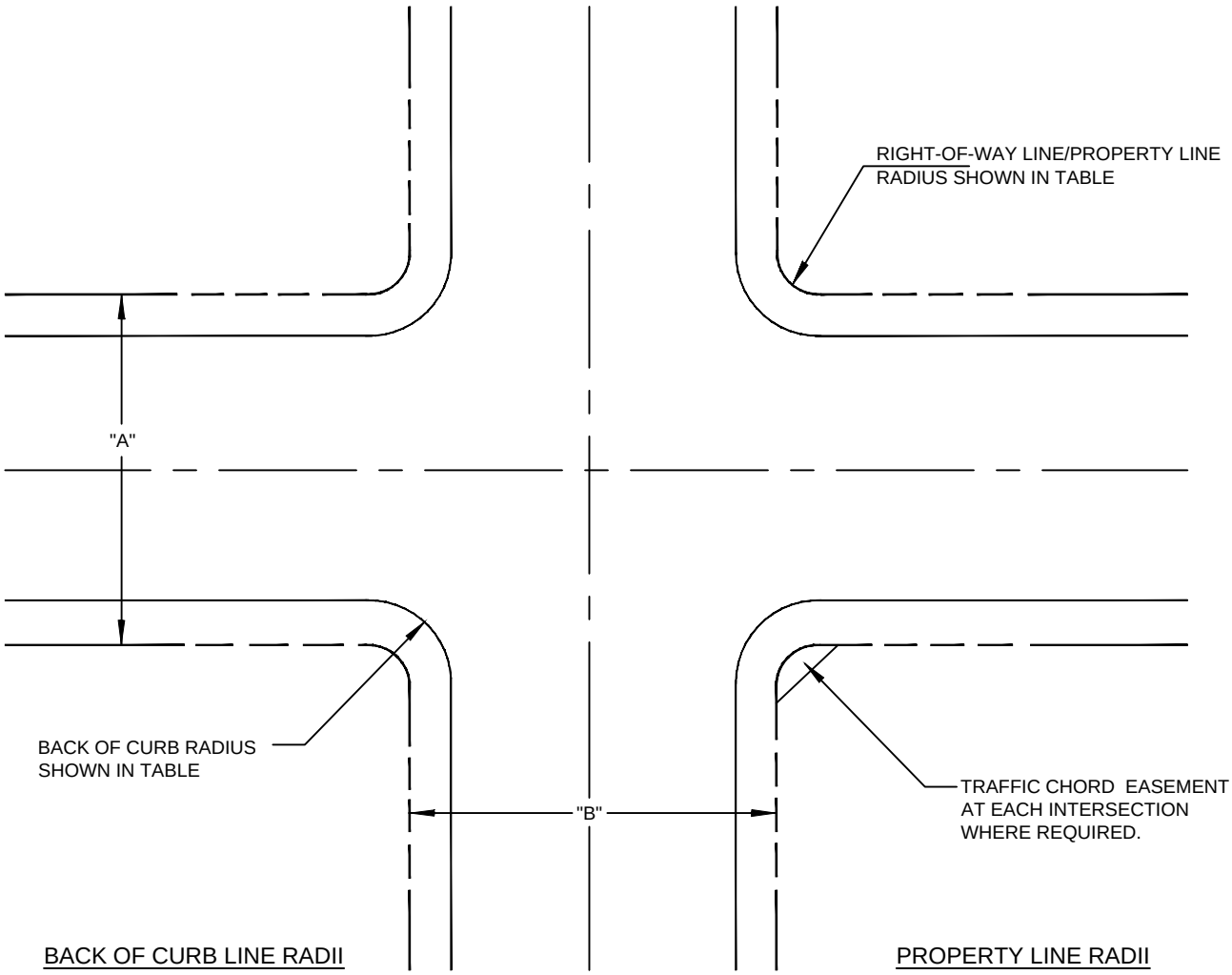
SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SIGHT VISIBILITY ZONES AT INTERSECTIONS

DATE 01-09-20	DWG. NO. 201.2	SHEET 8 OF 8

Effective 8/10/2023 to 8/07/2024



BACK OF CURB LINE RADII

"A" \ "B"	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.

PROPERTY LINE RADII

"A" \ "B"	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	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

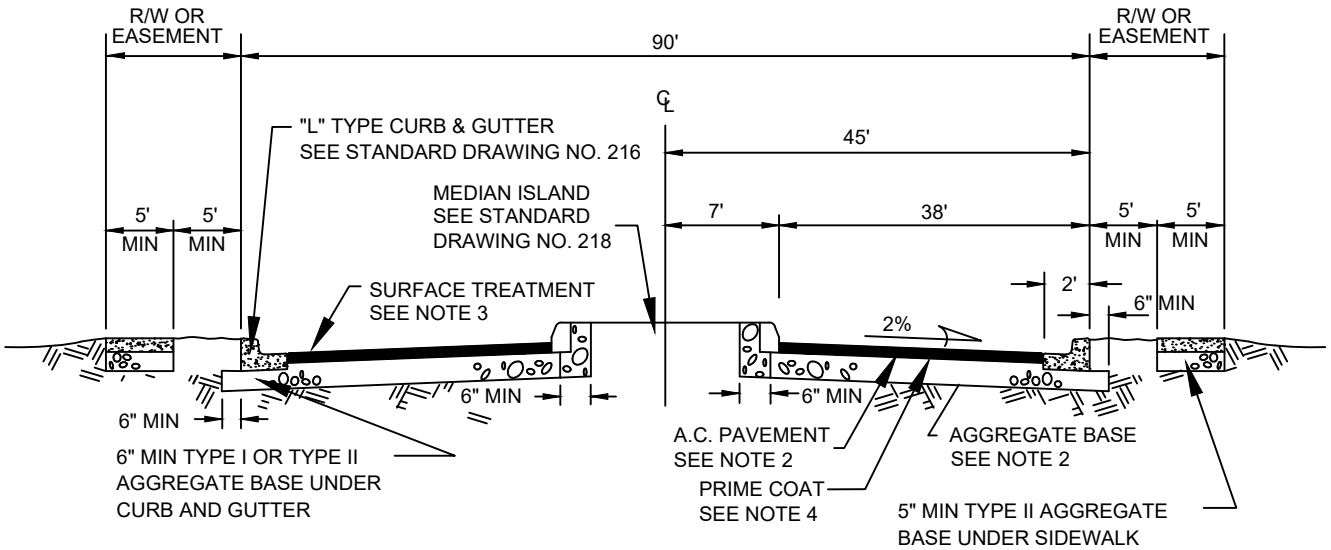
SUPPLEMENTAL DRAWING

MINIMUM PROPERTY LINE AND BACK OF CURB RADII

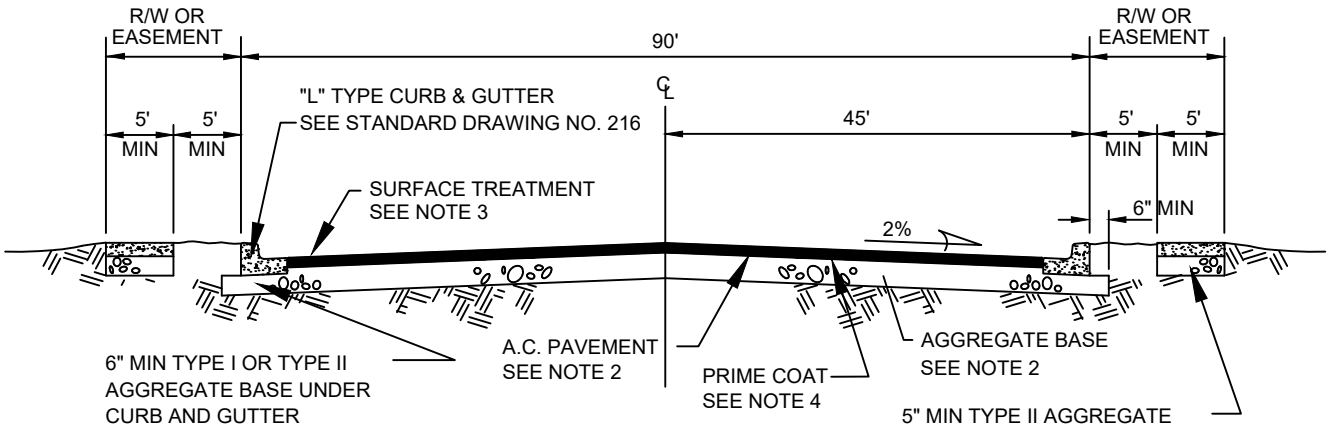
COMPLETE STREET ALTERNATIVE

DATE 07-01-12	DWG. NO. 201.3.S1	

Effective 8/10/2023 to 8/07/2024



ARTERIAL WITH MEDIAN ISLAND



ARTERIAL WITHOUT MEDIAN ISLAND

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

(B)(H)(L)(M) 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

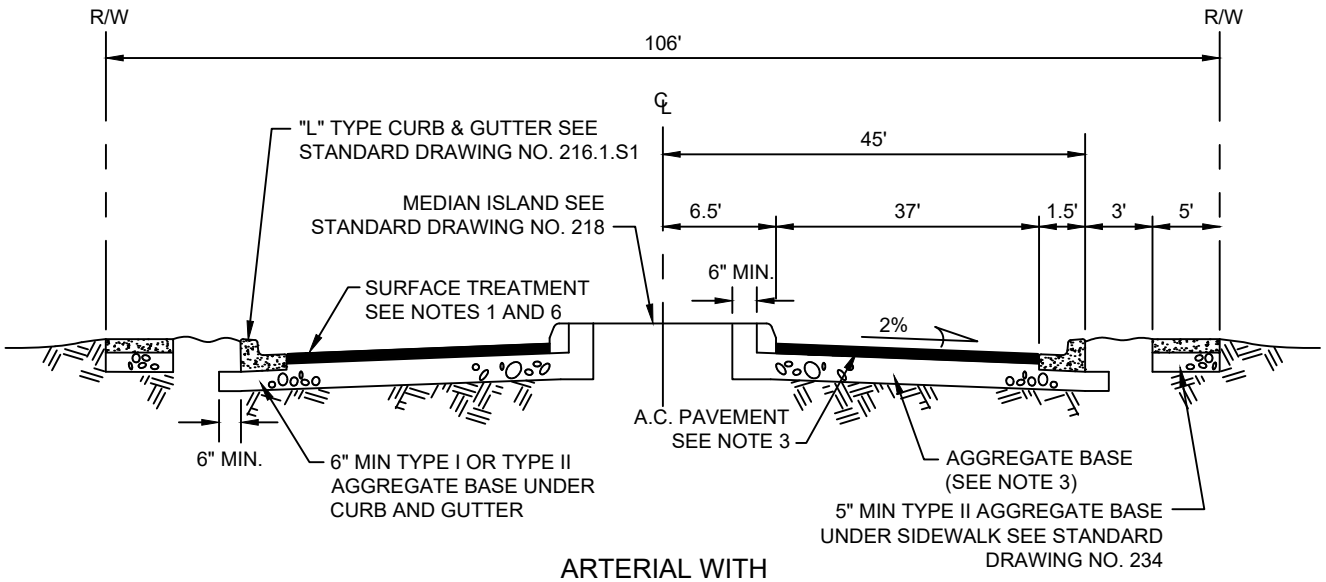
SPECIFICATION REFERENCE	
302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT
403	OPEN GRADE
413	BITUMINOUS GAP GRADED PAVEMENT
501	CONCRETE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

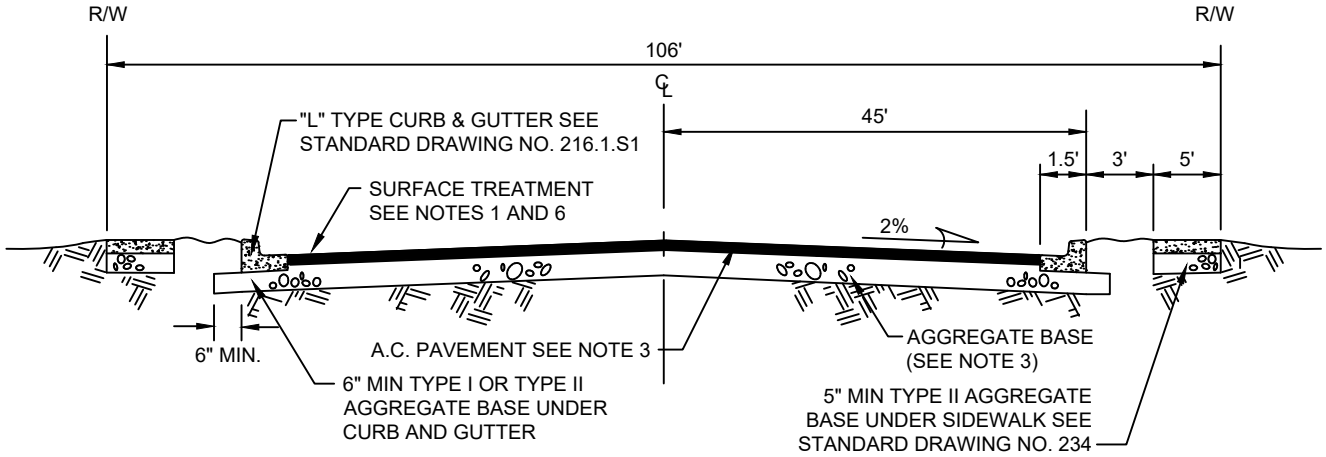
ARTERIAL
URBAN AREA STREET SECTIONS

DATE 01-09-20 | DWG. NO. 202

Effective 8/10/2023 to 8/07/2024



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.

AGENCY APPROVED	B	C	H	L	M	N	R

SPECIFICATION REFERENCE	
302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT
403	OPEN GRADE
501	CONCRETE
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

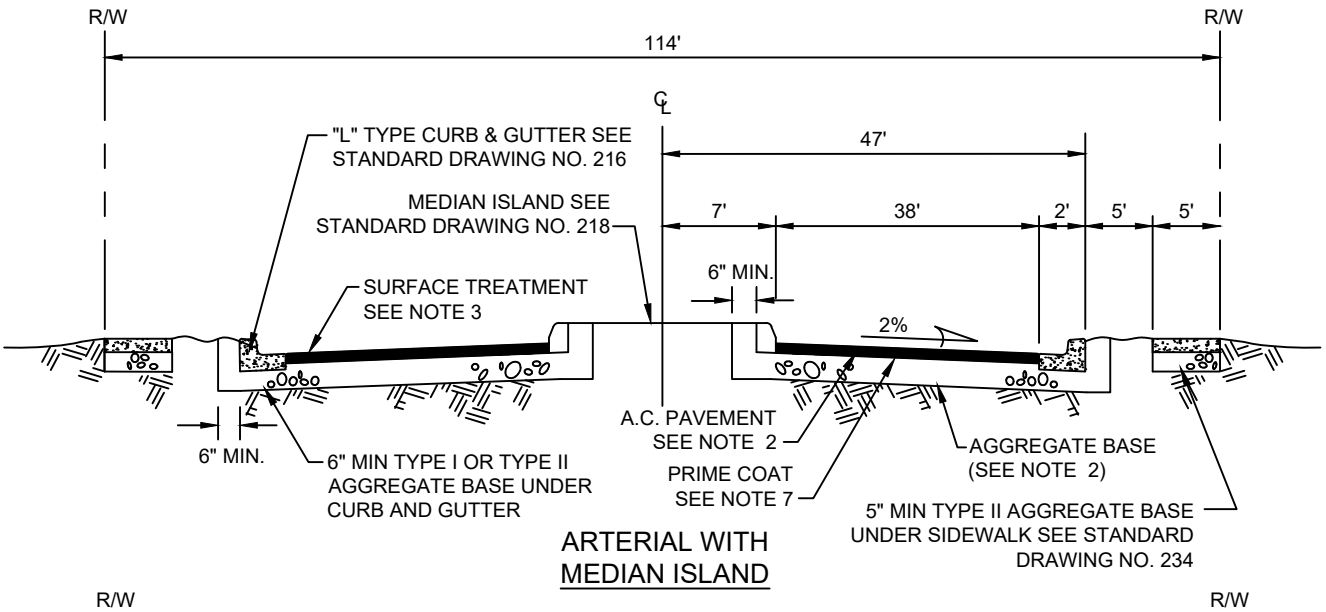
SUPPLEMENTAL DRAWING

PRIMARY ARTERIAL

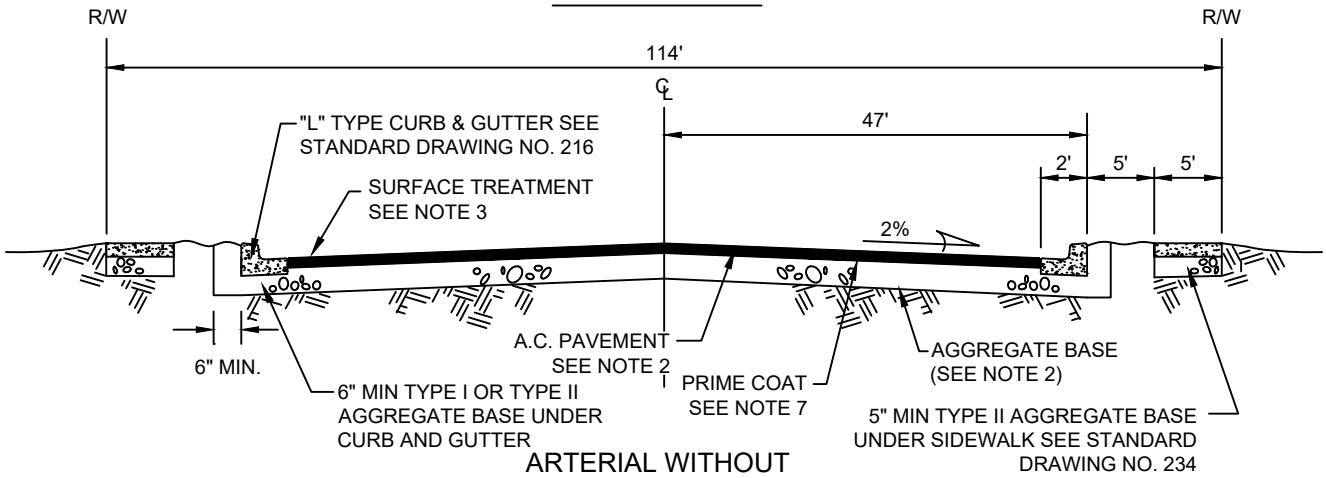
COMPLETE STREET ALTERNATIVE

DATE 01-09-20	DWG. NO. 203.1.S1	

Effective 8/10/2023 to 8/07/2024



ARTERIAL WITH MEDIAN ISLAND



ARTERIAL WITHOUT MEDIAN ISLAND

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. (B H L M) 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

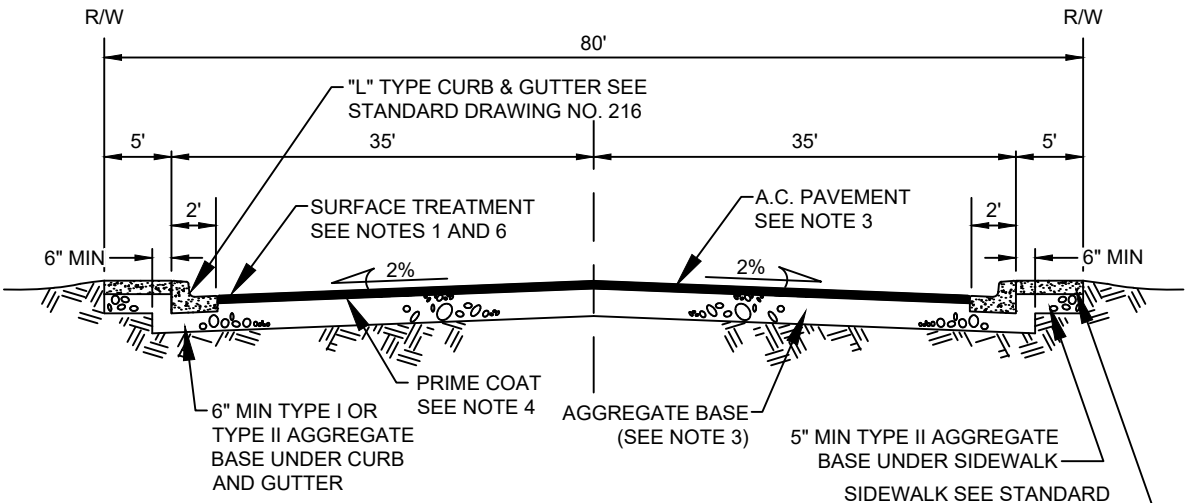
SPECIFICATION REFERENCE	
302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT
403	OPEN GRADE
413	BITUMINOUS GAP GRADED PAVEMENT
501	CONCRETE
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

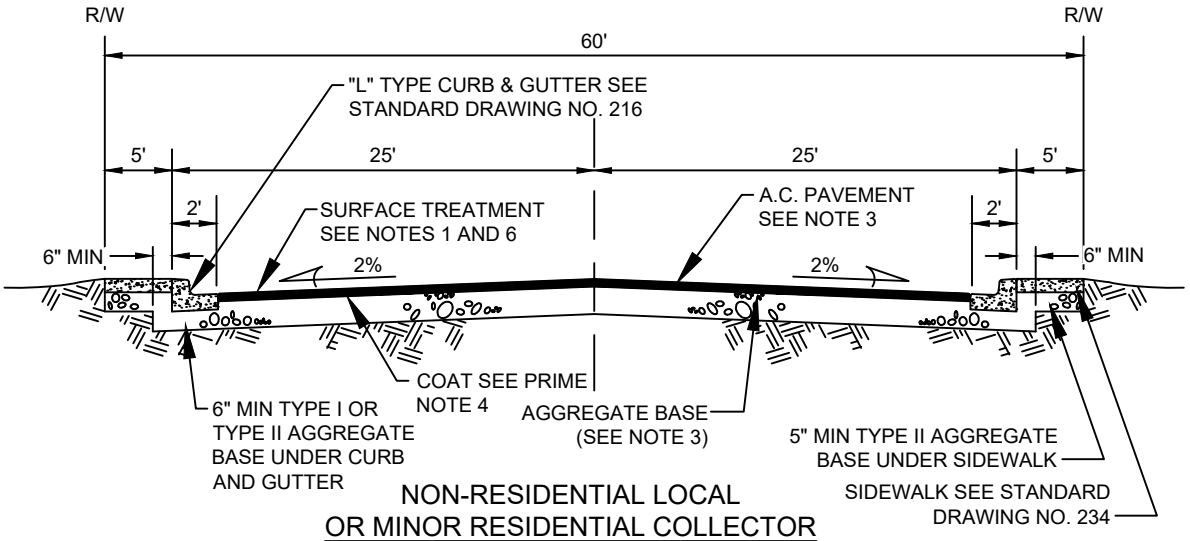
ARTERIAL
ALTERNATE URBAN AREA STREET SECTIONS WITH OFFSET SIDEWALK

DATE 01-09-20 | DWG. NO. 203

Effective 8/10/2023 to 8/07/2024



MAJOR COLLECTOR



NON-RESIDENTIAL LOCAL
OR MINOR RESIDENTIAL 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. (B)(H)(L)(M) PRIME COAT IS NOT REQUIRED IN LAS VEGAS, HENDERSON, MESQUITE OR BOULDER CITY WHEN A.C. THICKNESS ≥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

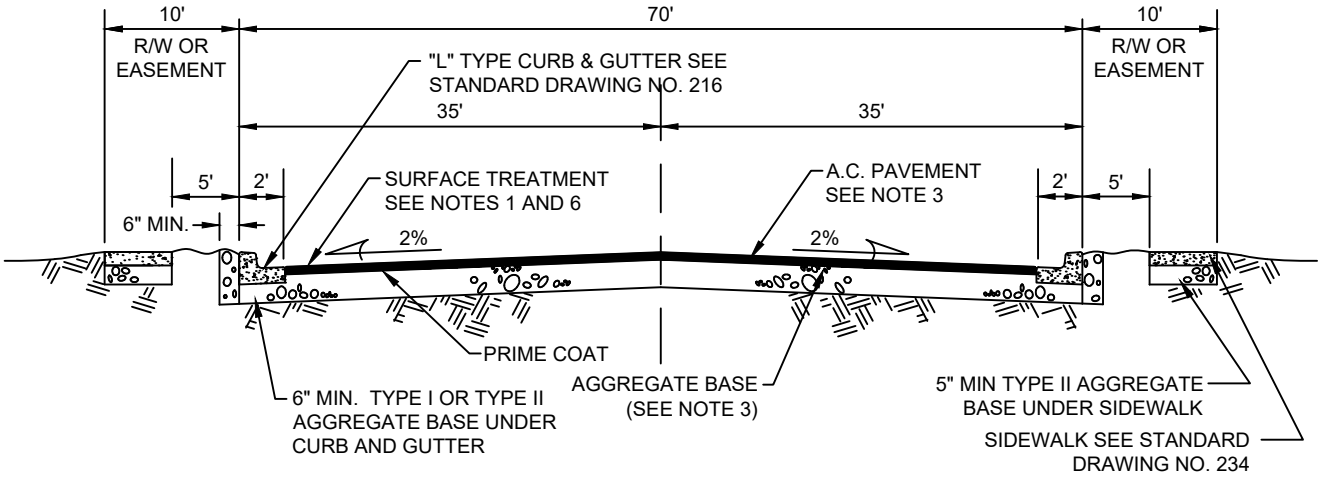
SPECIFICATION REFERENCE	
302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT
406	PRIME COAT
407	FOG COAT
413	BITUMINOUS GAP GRADED PAVEMENT
501	CONCRETE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

COLLECTOR
URBAN AREA STREET SECTIONS
WITH CURBSIDE SIDEWALK

DATE 01-09-20 | DWG. NO. 205

Effective 8/10/2023 to 8/07/2024



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

(B)(H)(L)(M) 7. PRIME COAT IS NOT REQUIRED IN LAS VEGAS, HENDERSON, MESQUITE, OR BOULDER CITY WHEN A.C. THICKNESS ≥5 IN.

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

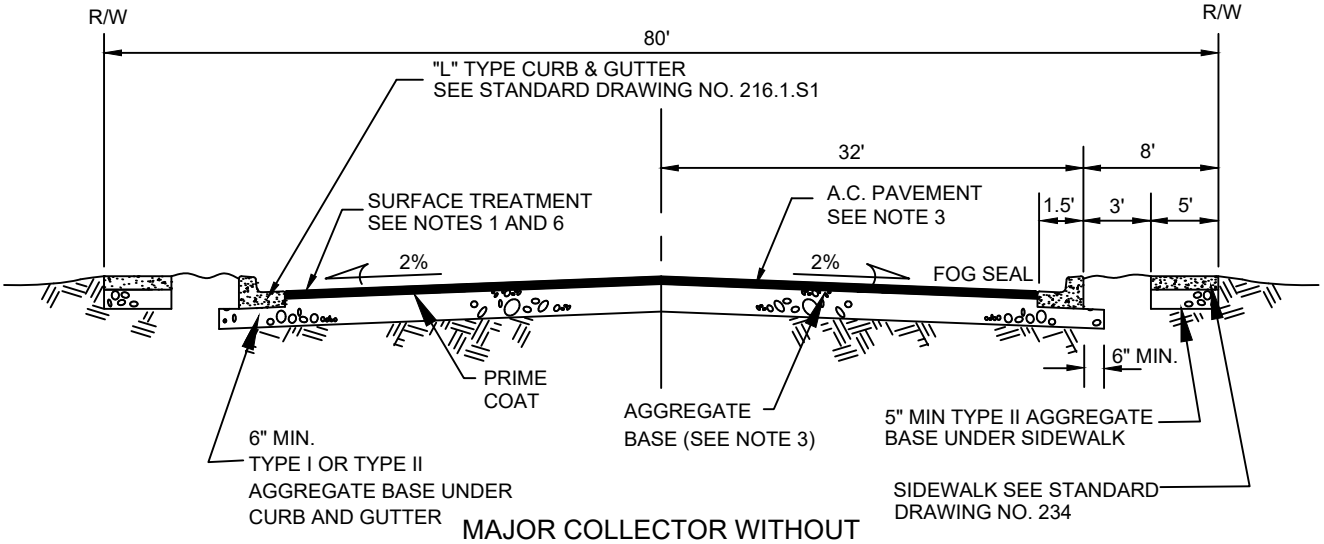
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

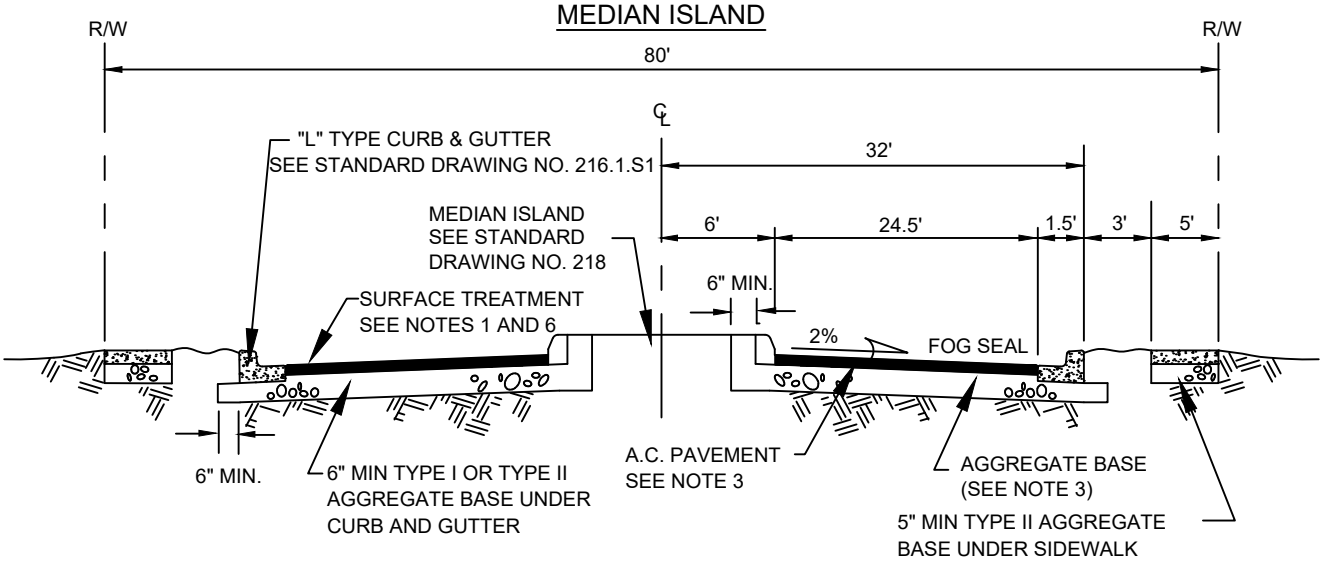
COLLECTOR
ALTERNATE URBAN AREA STREET SECTIONS WITH OFFSET SIDEWALK

DATE 01-09-20 | DWG. NO. 205.1.S1

Effective 8/10/2023 to 8/07/2024



MAJOR COLLECTOR WITHOUT
MEDIAN ISLAND



MAJOR COLLECTOR WITH
MEDIAN ISLAND

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. OVERLAY 1" UTACS UNLESS OTHERWISE REQUIRED BY THE AGENCY.

AGENCY APPROVED					L			

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

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

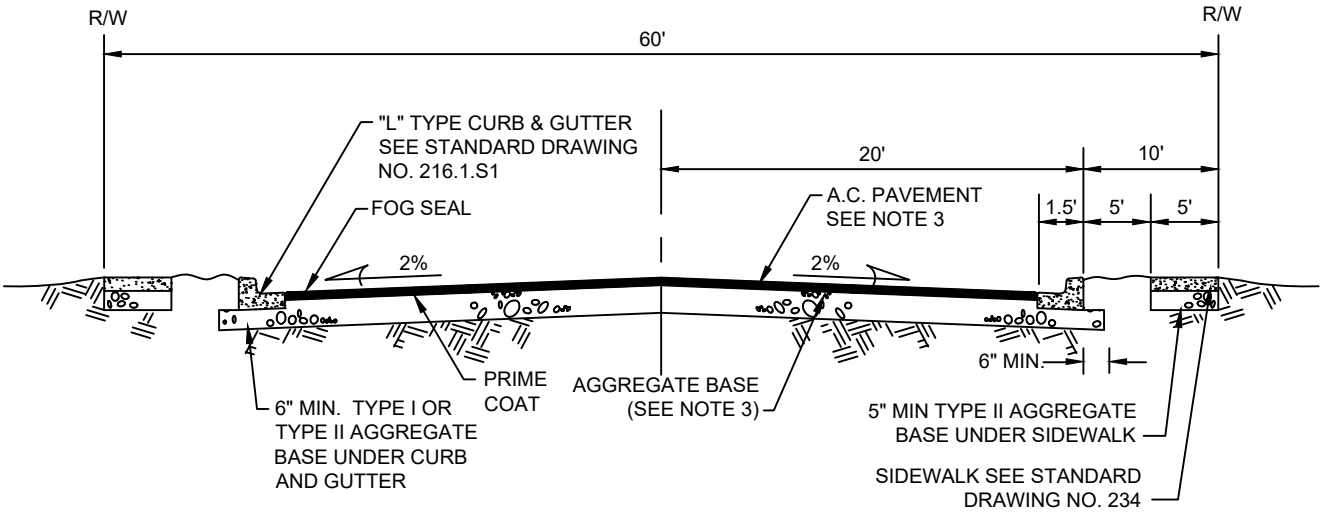
SUPPLEMENTAL DRAWING

MAJOR COLLECTOR

COMPLETE STREET ALTERNATIVE

DATE 01-09-20 | DWG. NO. 205.2.S1

Effective 8/10/2023 to 8/07/2024



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

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

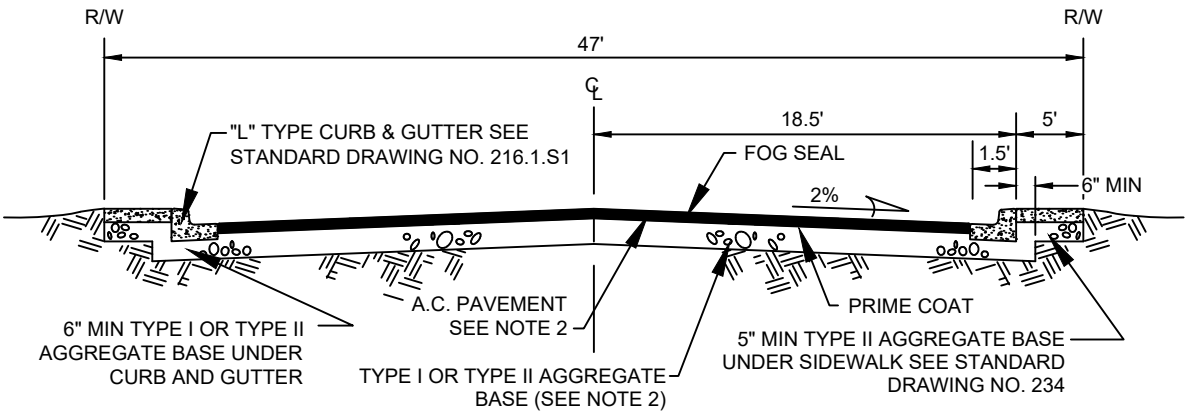
SUPPLEMENTAL DRAWING

MINOR COLLECTOR

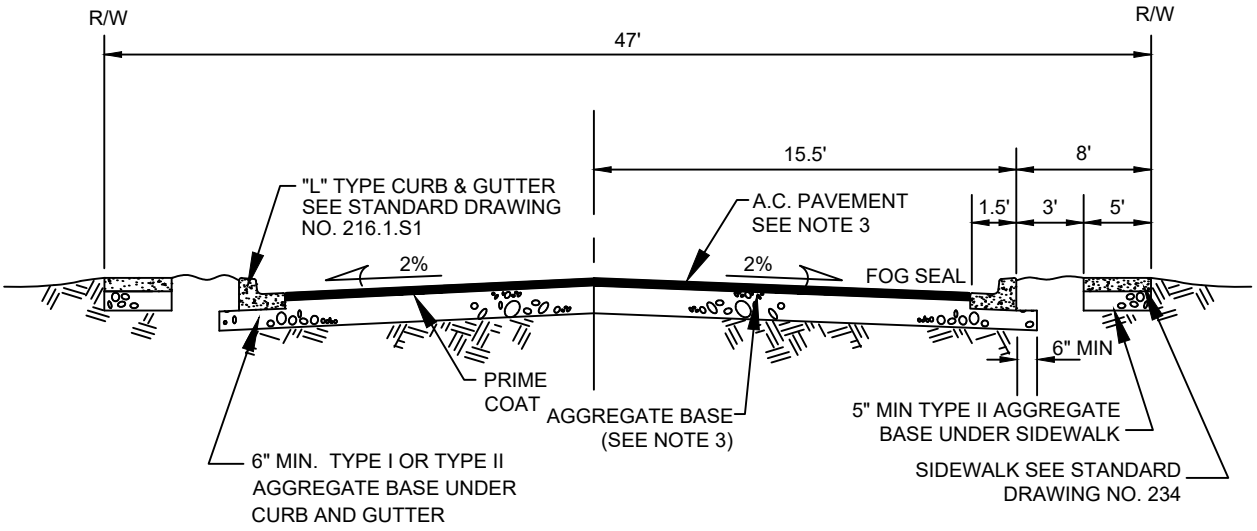
COMPLETE STREET ALTERNATIVE

DATE 01-09-20 | DWG. NO. 205.3.S1

Effective 8/10/2023 to 8/07/2024



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

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

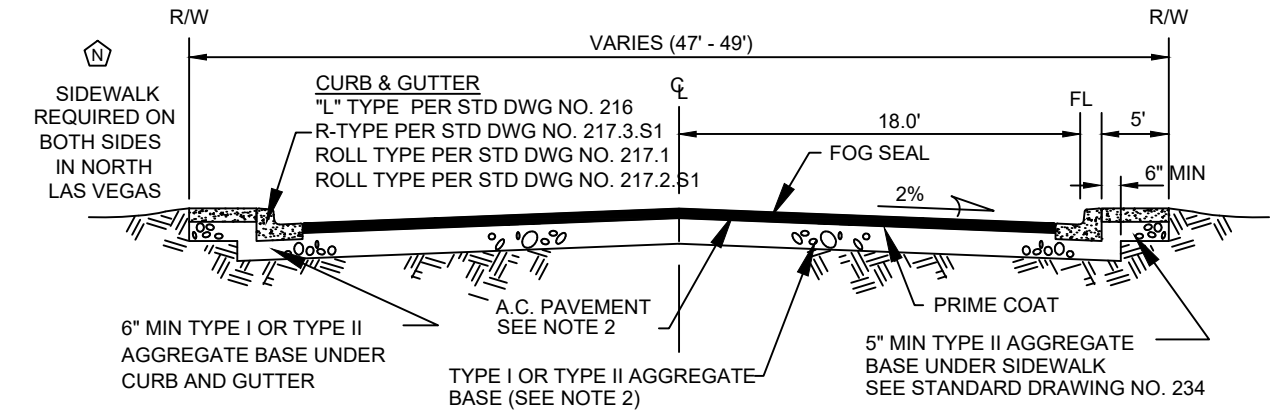
SUPPLEMENTAL DRAWING

LOCAL RESIDENTIAL

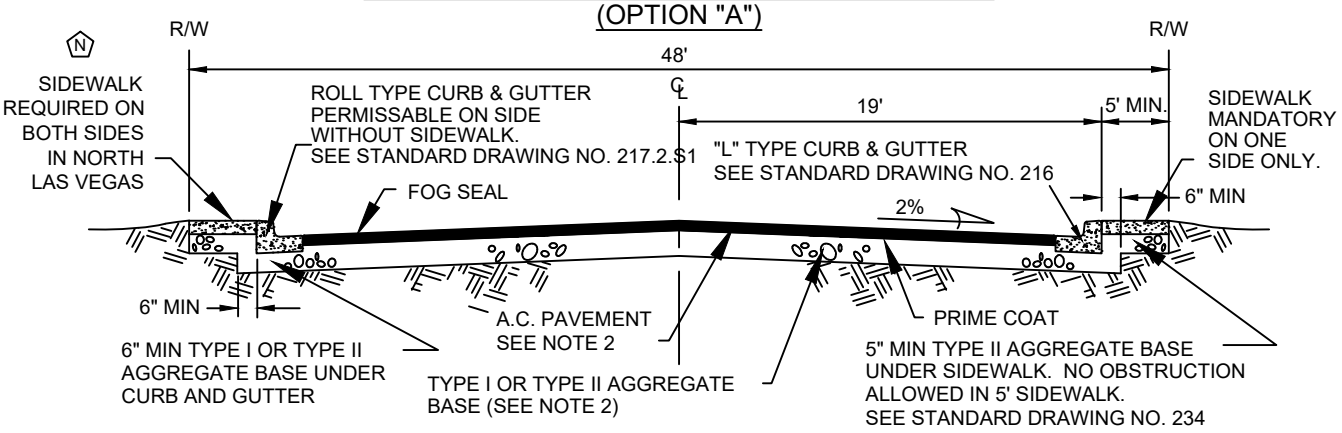
COMPLETE STREET ALTERNATIVES

DATE 01-09-20 | DWG. NO. 206.1.S1

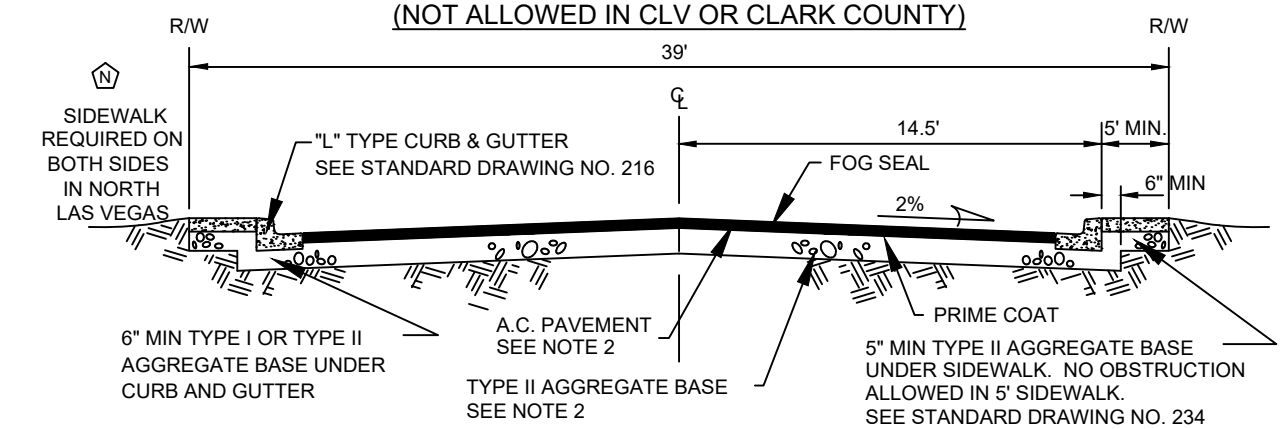
Effective 8/10/2023 to 8/07/2024



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
.	

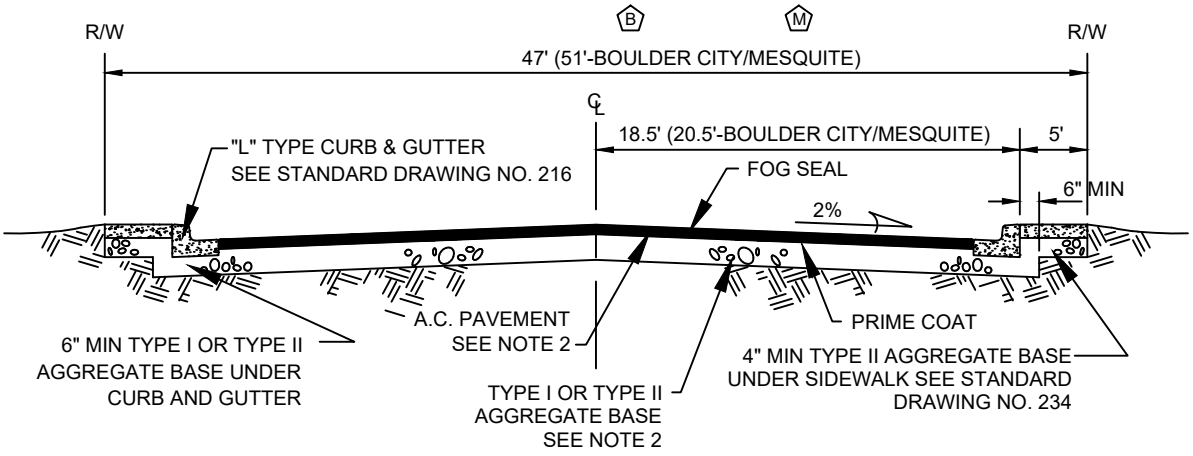
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

LOCAL RESIDENTIAL URBAN AREA STREET SECTIONS

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

Effective 8/10/2023 to 8/07/2024



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

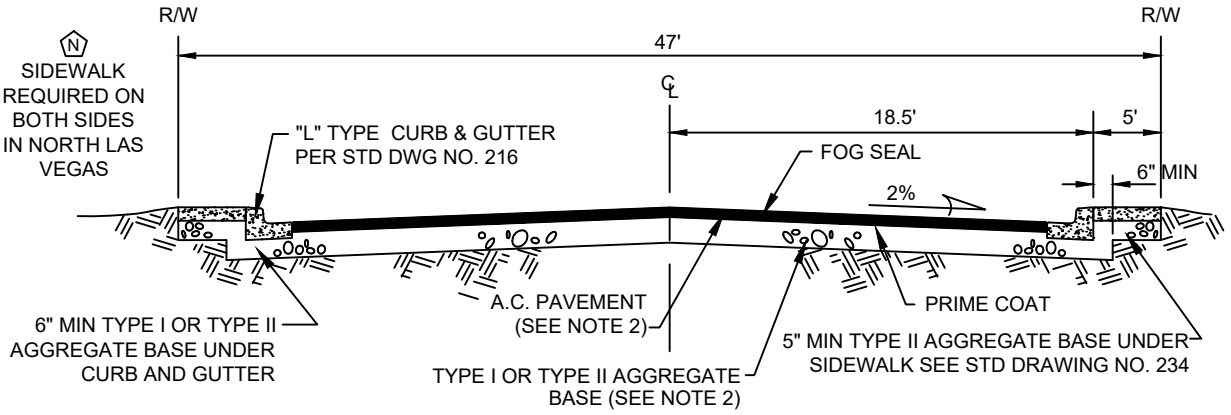
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

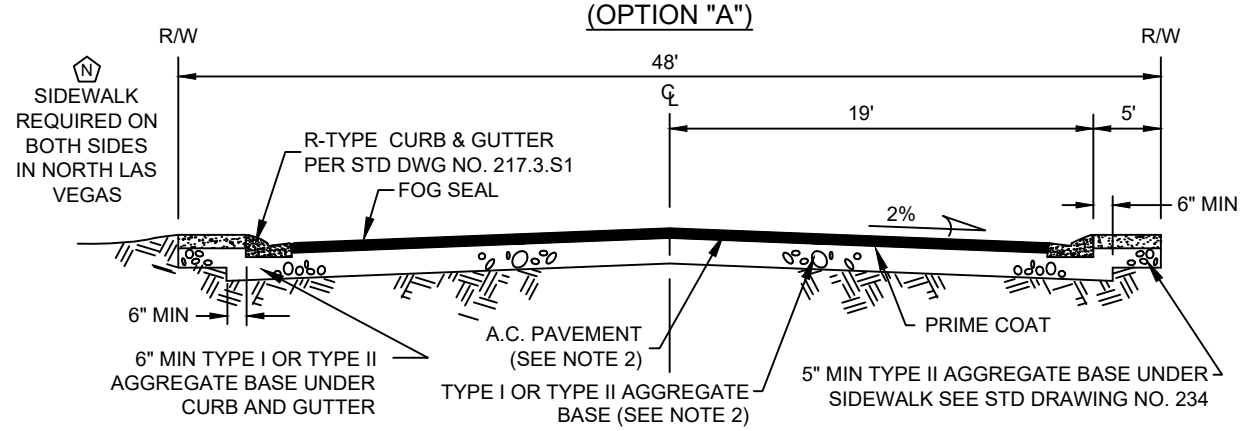
LOCAL RESIDENTIAL URBAN AREA STREET SECTION

DATE 01-09-20	DWG. NO. 206.S2	

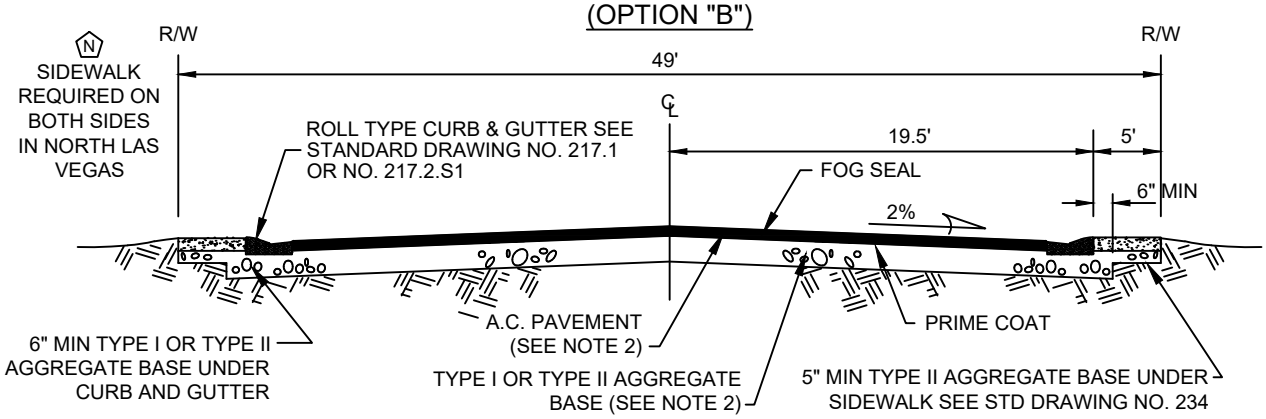
Effective 8/10/2023 to 8/07/2024



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		C		L		N	

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

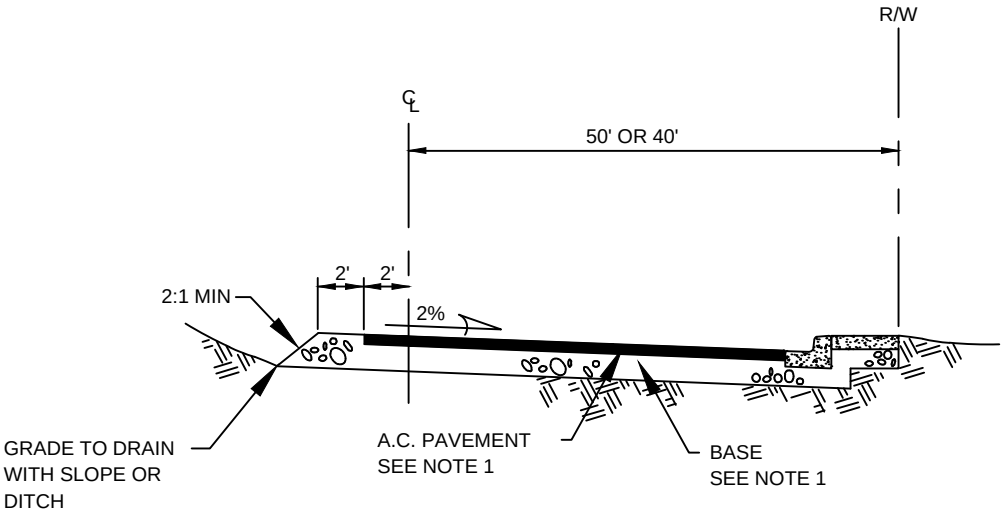
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

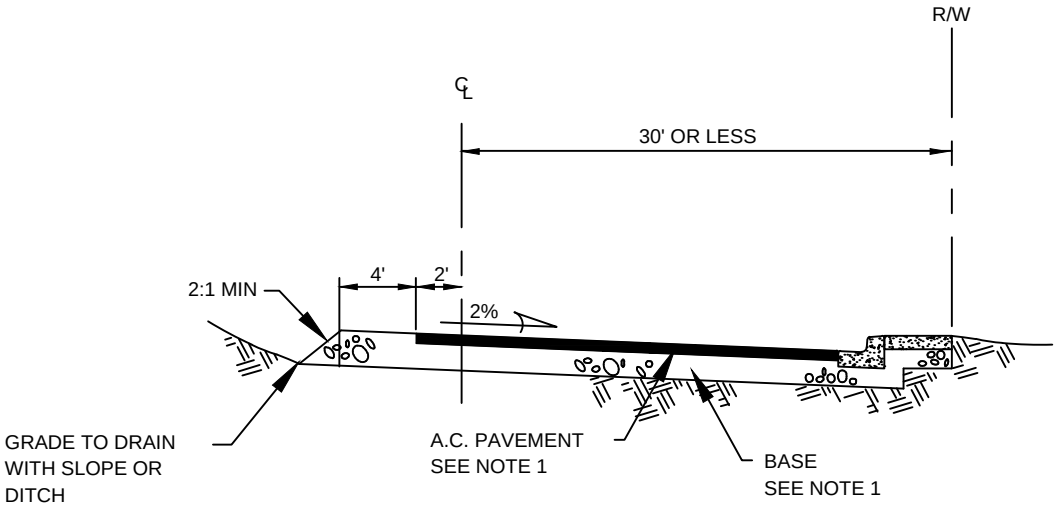
LOCAL RESIDENTIAL URBAN AREA STREET SECTION

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

Effective 8/10/2023 to 8/07/2024



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

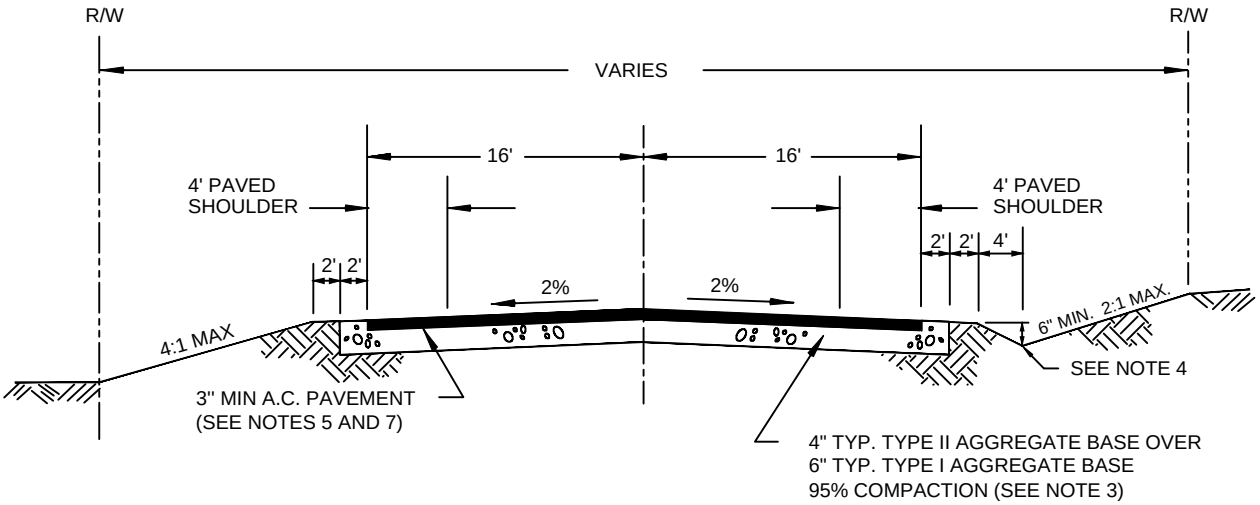
SPECIFICATION REFERENCE	
302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT
406	PRIME COAT
407	FOG SEAL
501	CONCRETE
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

HALF STREET CONSTRUCTION SECTIONS

DATE	DWG. NO. 208	

Effective 8/10/2023 to 8/07/2024



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	
302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT

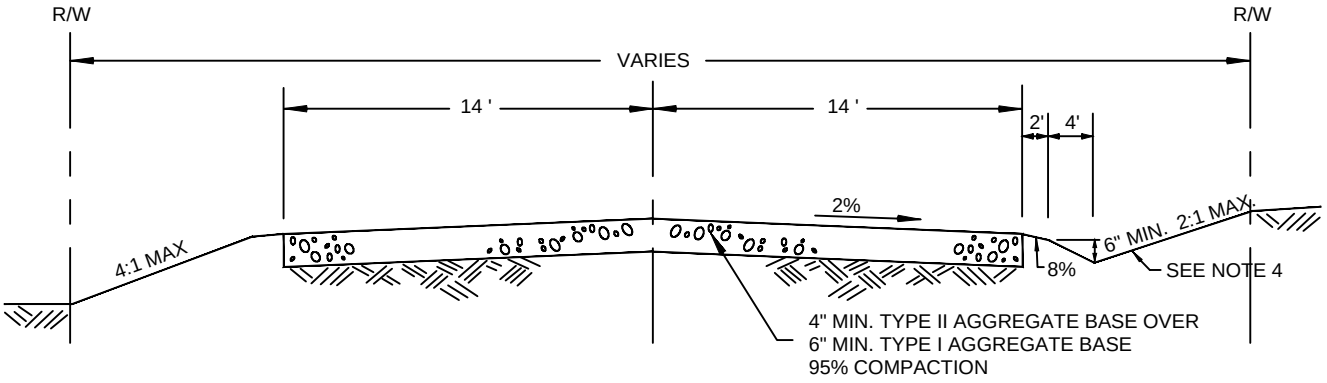
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

ACCESS ROADS

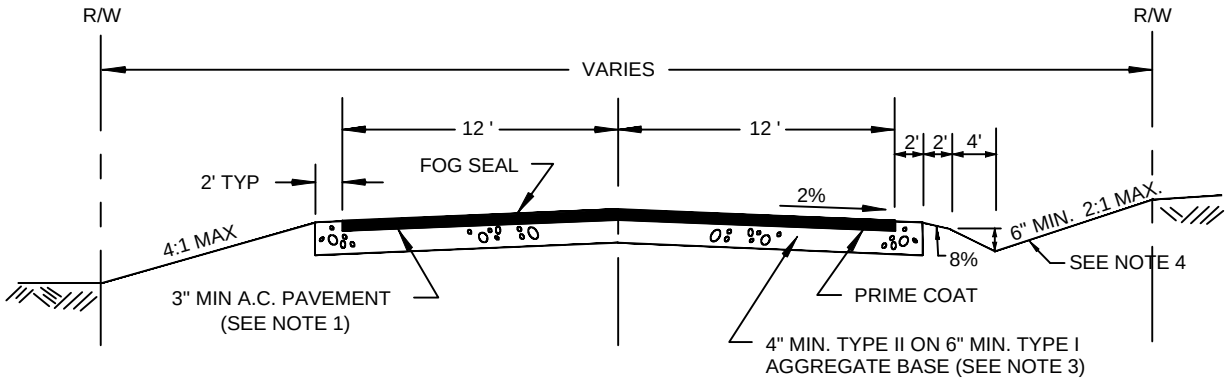
(FOR USE IN HYDROGRAPHIC BASIN NO. 212)
(PM-10 NON-ATTAINMENT AREAS)

DATE 5-20-04	DWG. NO. 209	

Effective 8/10/2023 to 8/07/2024



GRAVEL



PAVED

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	
302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT
406	PRIME COAT
407	FOG SEAL
.	

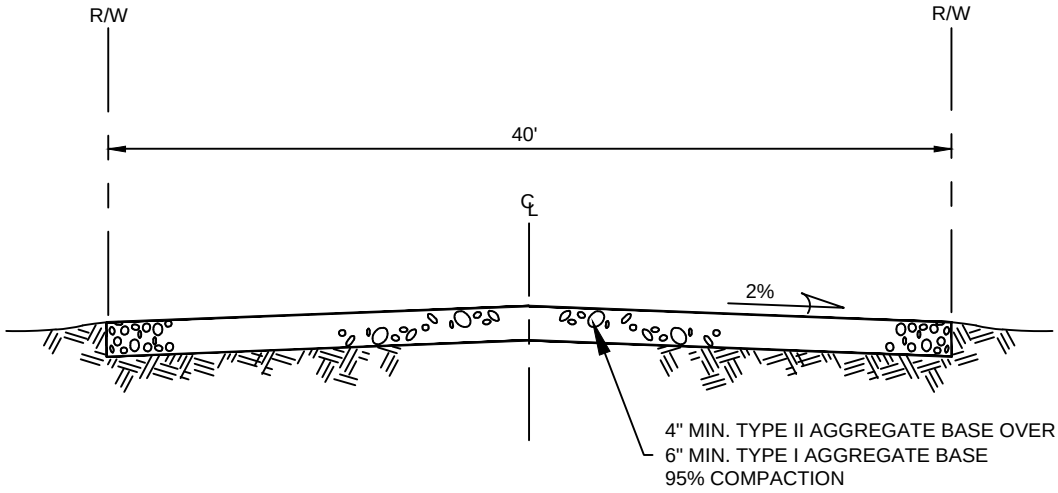
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

ACCESS ROADS

(FOR USE IN PM-10 COMPLIANT AREAS)

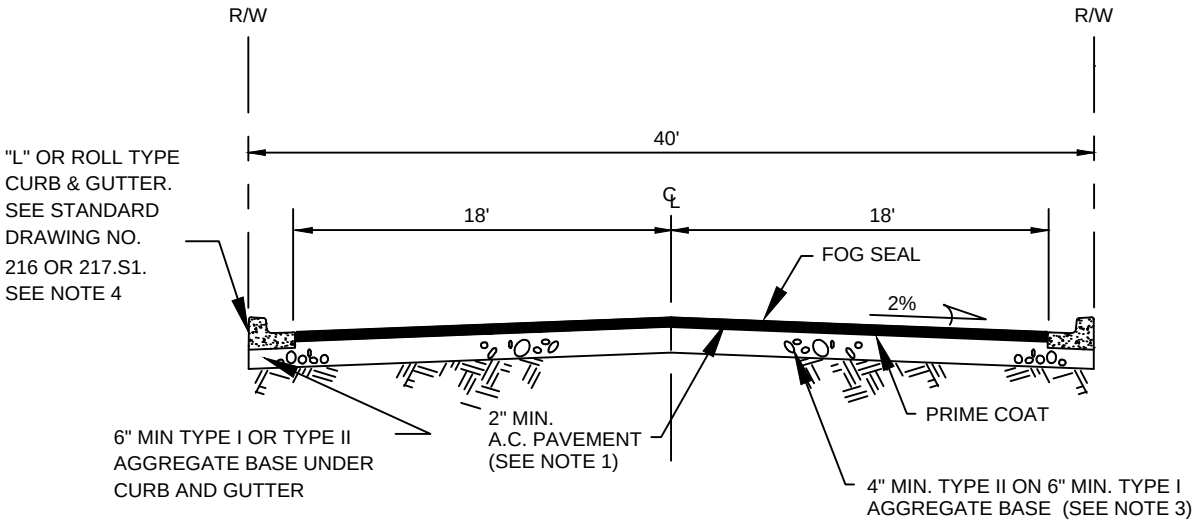
DATE 12-14-00	DWG. NO. 209.1	

Effective 8/10/2023 to 8/07/2024



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. (N) 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. (N) ALLOW IN CITY OF NORTH LAS VEGAS ONLY WITH EXPRESS WRITTEN PERMISSION FROM THE CITY ENGINEER.

AGENCY APPROVED	B	C	H	L	M	(N)

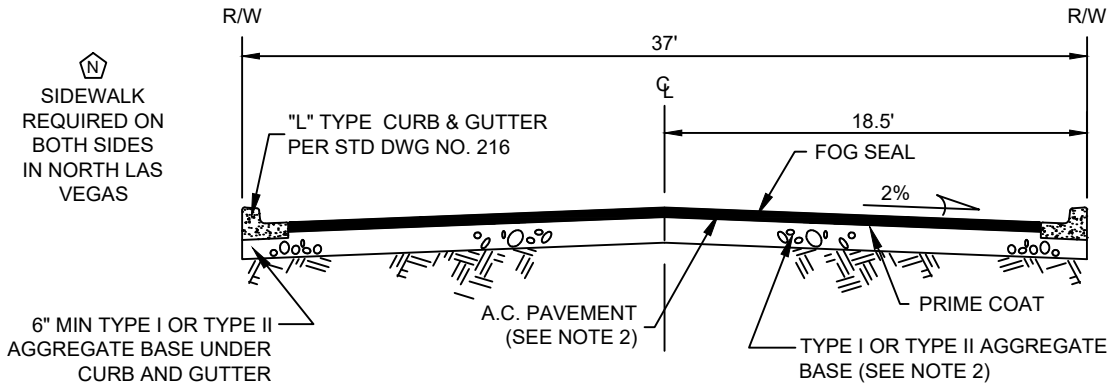
SPECIFICATION REFERENCE	
302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT
406	PRIME COAT
407	FOG SEAL
501	CONCRETE
-	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

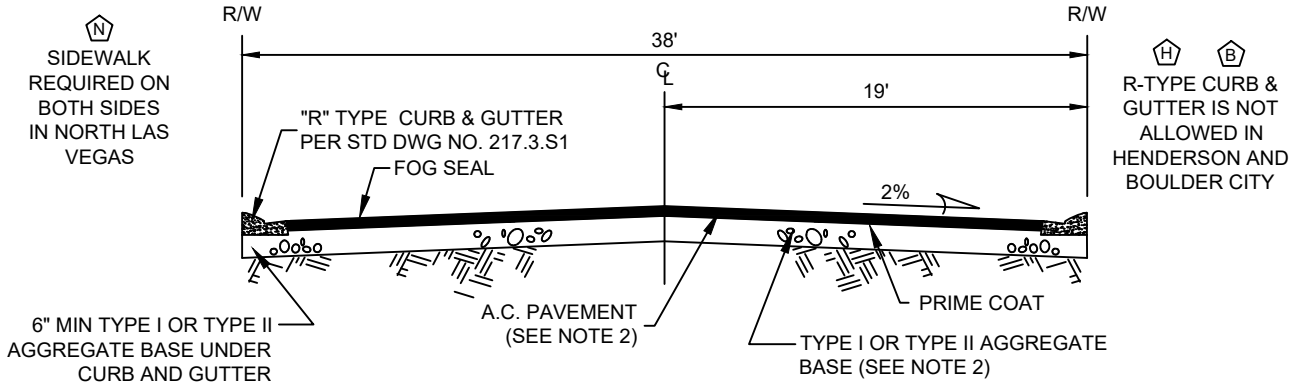
PRIVATE STREET SECTIONS

DATE 12-14-00	DWG. NO. 210	

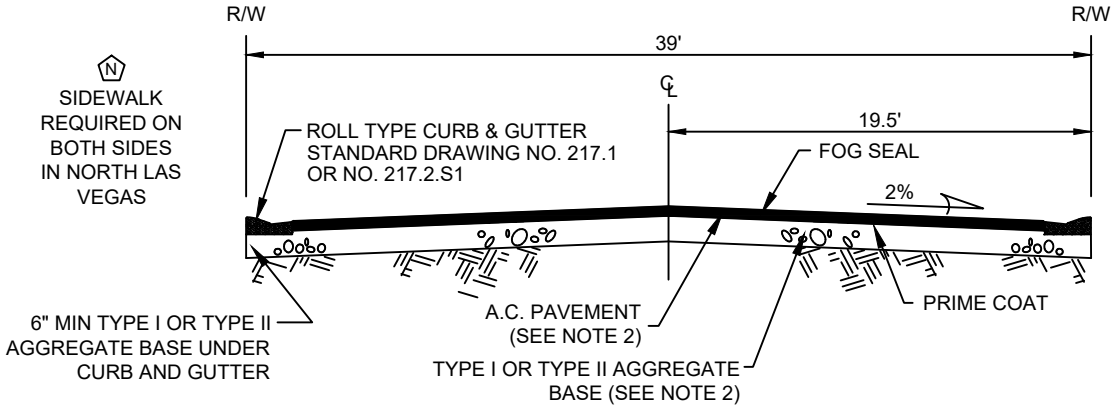
Effective 8/10/2023 to 8/07/2024



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	B	C	H	L	M	N	R

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

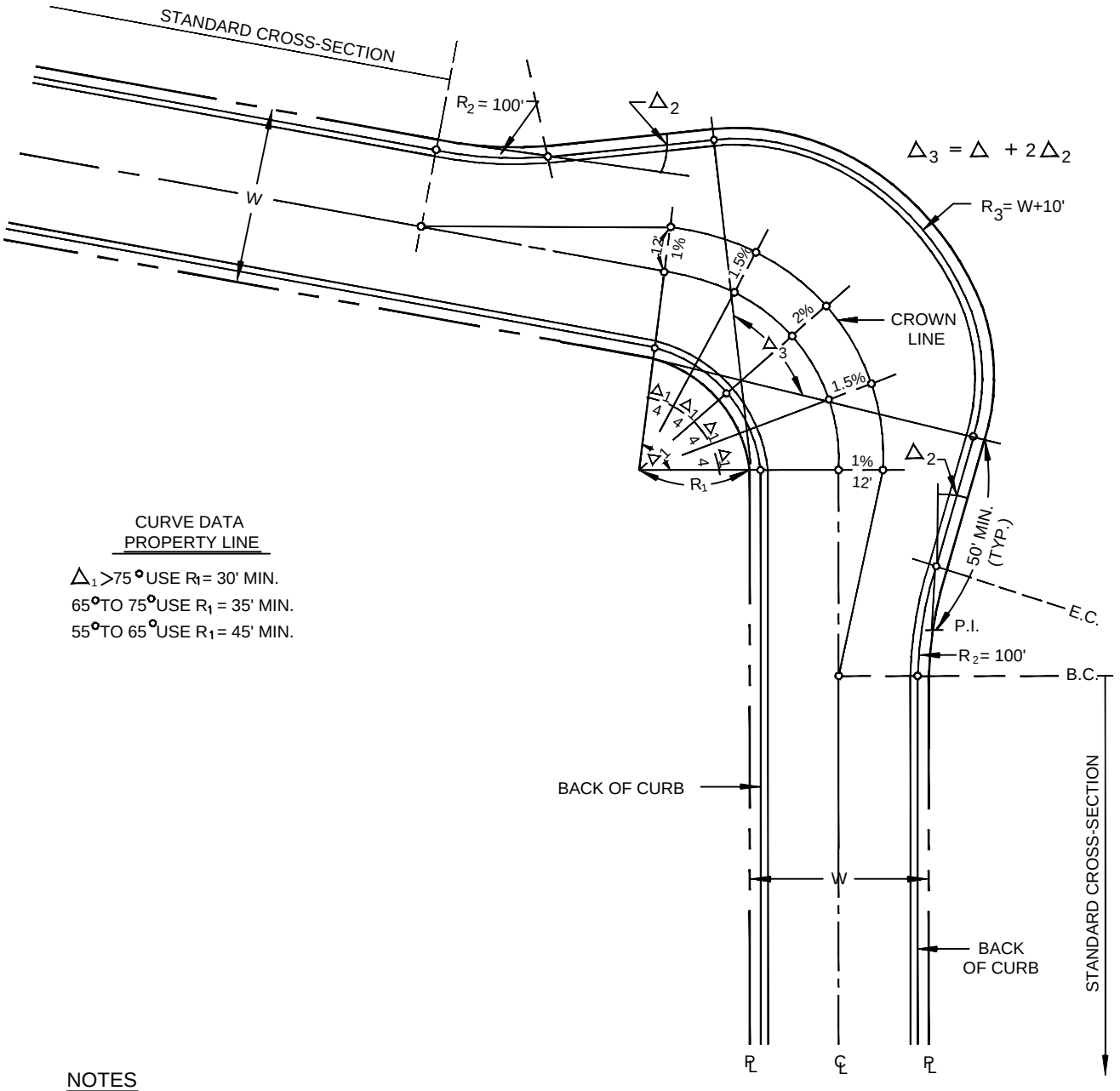
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

PRIVATE STREET SECTIONS

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

Effective 8/10/2023 to 8/07/2024



CURVE DATA
PROPERTY LINE

$\Delta_1 > 75°$ USE R_1 = 30' MIN.
65° TO 75° USE R_1 = 35' MIN.
55° TO 65° USE R_1 = 45' MIN.

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 ( ) ARE SHOWN.
5. KNUCKLES ARE NOT ALLOWED ON MAJOR COLLECTOR OR ARTERIAL STREETS.

AGENCY APPROVED	B	C	H	L	M	N

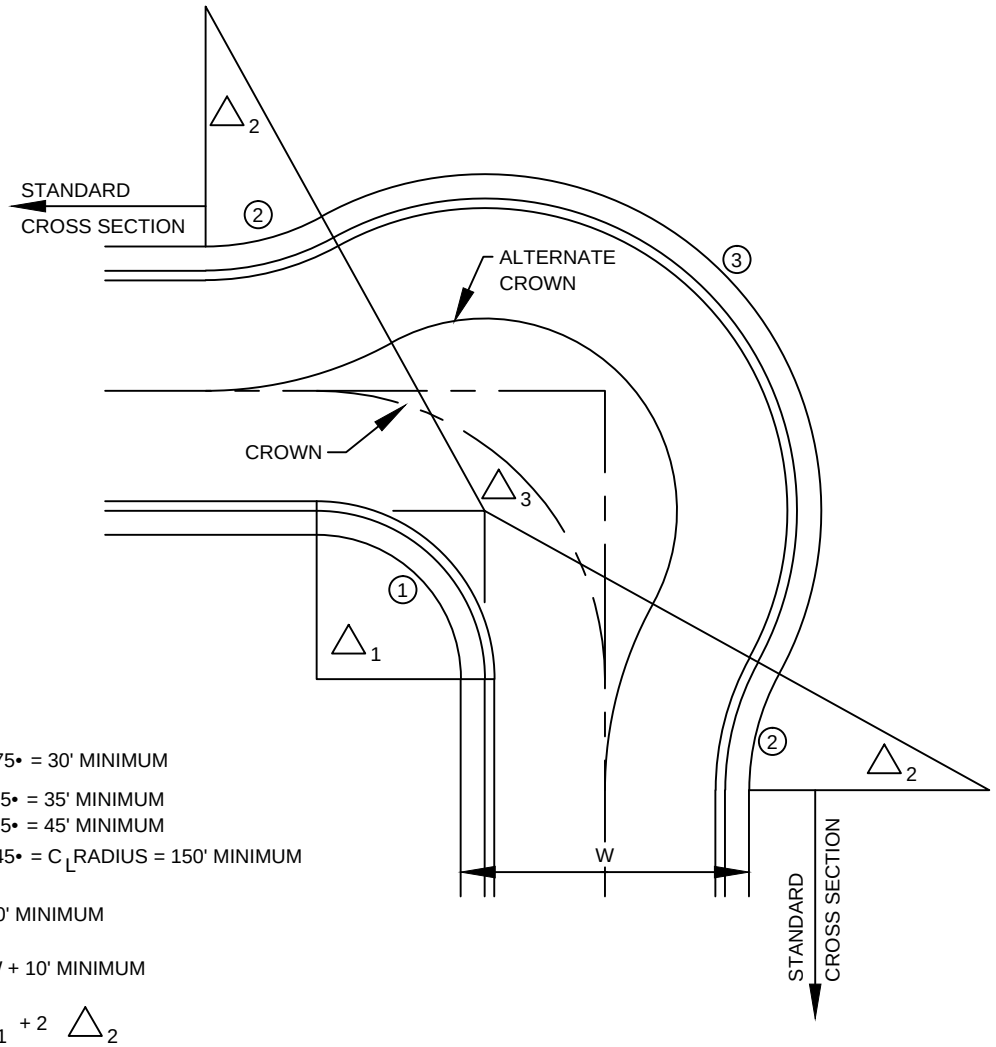
SPECIFICATION REFERENCE	
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

KNUCKLE

DATE	DWG. NO. 211	

Effective 8/10/2023 to 8/07/2024



① BCR

$\triangle_1$ > 75• = 30' MINIMUM

65• TO 75• = 35' MINIMUM

45• TO 65• = 45' MINIMUM

$\triangle_1$ < 45• = C_L RADIUS = 150' MINIMUM

② BCR = 50' MINIMUM

③ BCR = W + 10' MINIMUM

$\triangle_3 = \triangle_1 + 2\ \triangle_2$

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	
.	

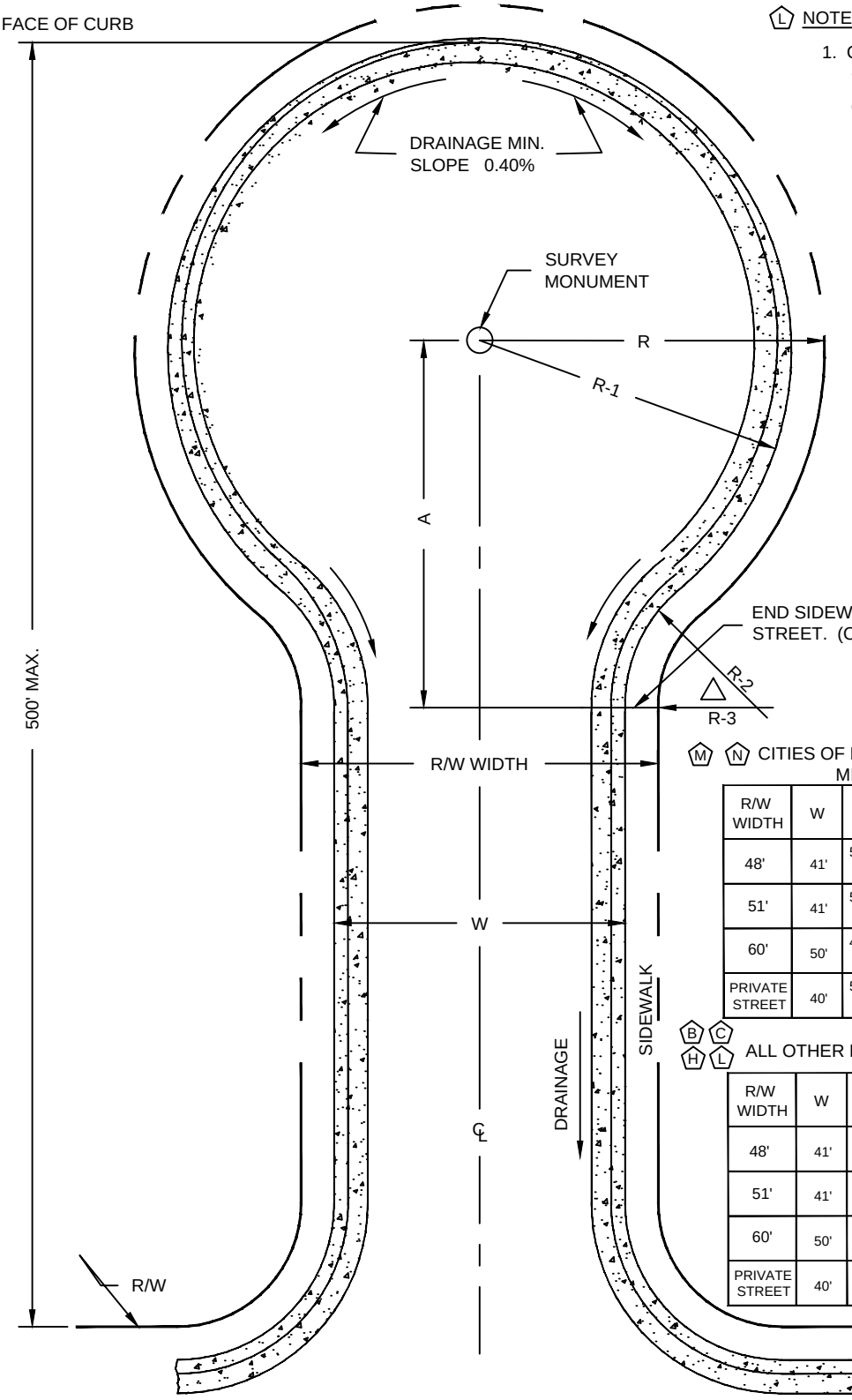
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

KNUCKLE - TYPE I

DATE 8-12-99	DWG. NO. 211.1.S1	

Effective 8/10/2023 to 8/07/2024



(L) NOTES:

1. ONLY 51' R/W AND PRIVATE STREET CUL-DE-SACS WILL BE ALLOWED IN THE CITY OF LAS VEGAS.

(M) (N) CITIES OF NORTH LAS VEGAS AND MESQUITE ONLY

R/W WIDTH	W	A	R	R-1	R-2	R-3
48'	41'	51.23' MIN.	49' MIN.	45.5' MIN.	19.5' MIN.	16' MIN.
51'	41'	51.23' MIN.	50.5' MIN.	45.5' MIN.	19.5' MIN.	14.5' MIN.
60'	50'	47.38' MIN.	50.5' MIN.	45.5' MIN.	19.5' MIN.	14.5' MIN.
PRIVATE STREET	40'	51.62' MIN.	45.5' MIN.	45.5' MIN.	19.5' MIN.	19.5' MIN.

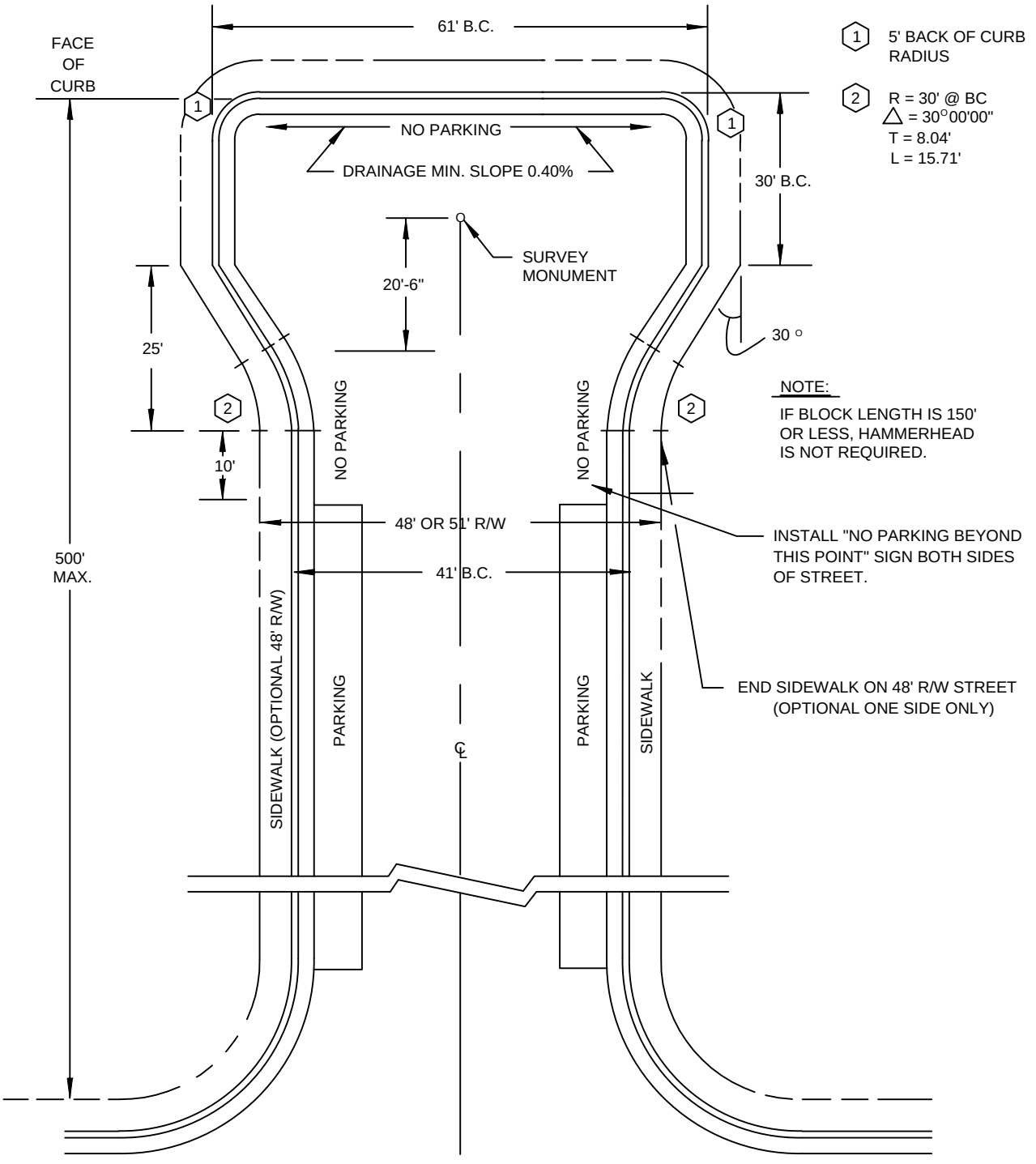
(B) (C) (H) (L) ALL OTHER ENTITIES (CC, CLV, HEN, BC)

R/W WIDTH	W	A	R	R-1	R-2	R-3
48'	41'	44.72' MIN.	44' MIN.	40.5' MIN.	19.5' MIN.	16' MIN.
51'	41'	44.72' MIN.	45.5' MIN.	40.5' MIN.	19.5' MIN.	14.5' MIN.
60'	50'	40.25' MIN.	45.5' MIN.	40.5' MIN.	19.5' MIN.	14.5' MIN.
PRIVATE STREET	40'	45.16' MIN.	40.5' MIN.	40.5' MIN.	19.5' MIN.	19.5' MIN.

AGENCY APPROVED	(B)	(C)	(H)	(L)	(M)	(N)

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	CUL-DE-SAC
DATE 6-8-00	DWG. NO. 212

Effective 8/10/2023 to 8/07/2024



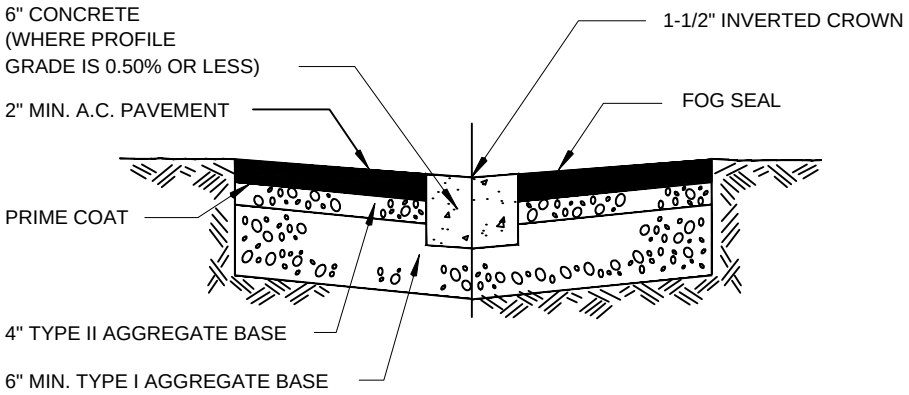
NOTE:

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

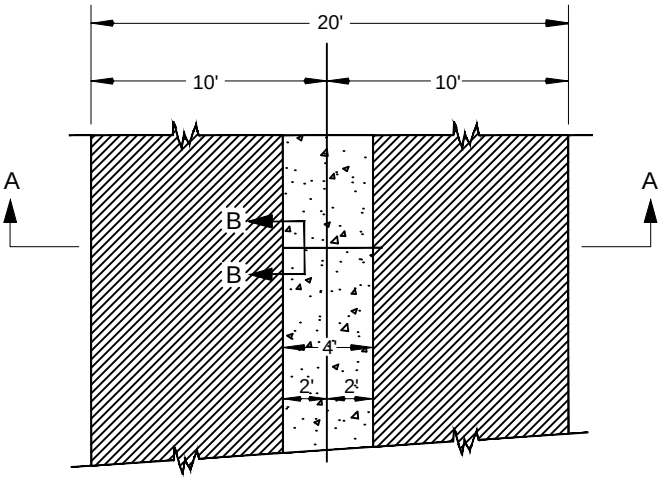
	AGENCY APPROVED		C				

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

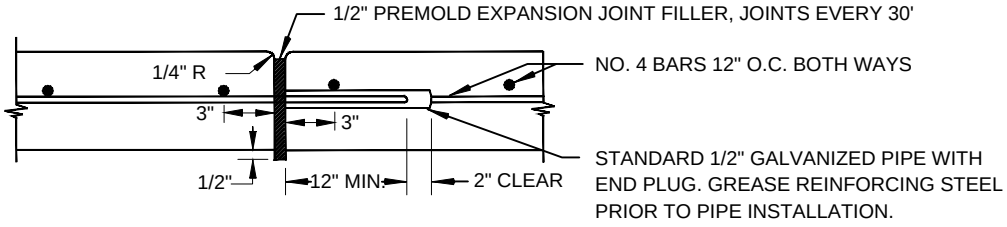
Effective 8/10/2023 to 8/07/2024



SECTION A-A



PLAN



SECTION B-B

AGENCY APPROVED	B		H	L	M	N

SPECIFICATION REFERENCE	
302	AGGREGATE BASE
501	CONCRETE
505	REINFORCING STEEL
707	JOINT MATERIAL
.	

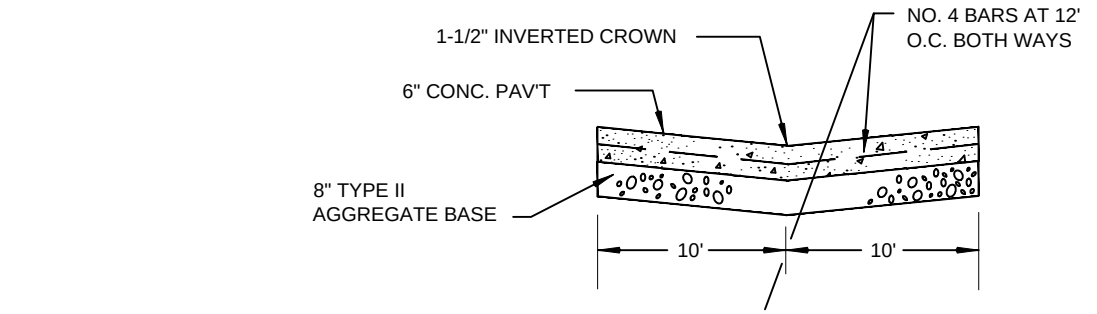
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

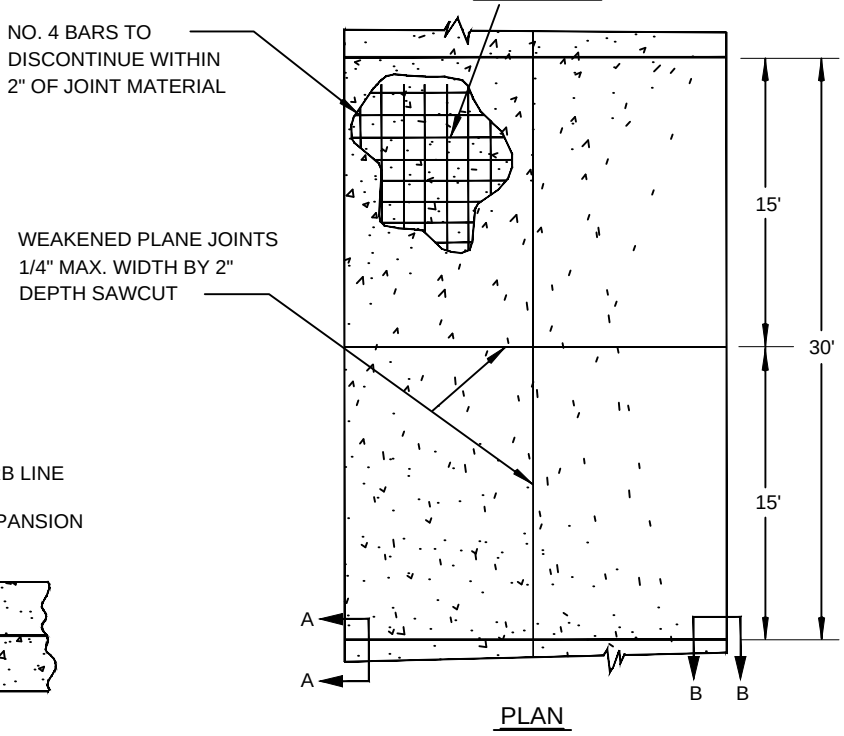
ALLEY

DATE 12-14-00	DWG. NO. 214.S1	

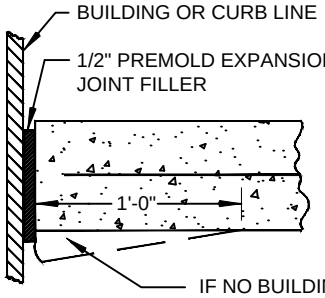
Effective 8/10/2023 to 8/07/2024



SECTION

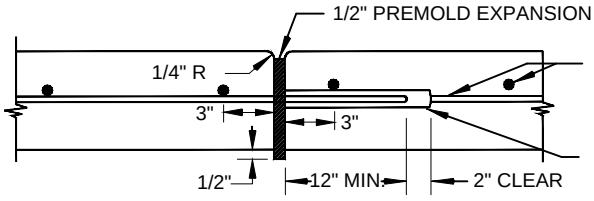


PLAN



IF NO BUILDING OR CURB EXISTS THICKEN EDGE TO 8" TOTAL DEPTH

SECTION B-B



SECTION A-A

AGENCY APPROVED	B		H	L	M	N

SPECIFICATION REFERENCE	
302	AGGREGATE BASE
501	CONCRETE
505	REINFORCING STEEL
707	JOINT MATERIAL
.	

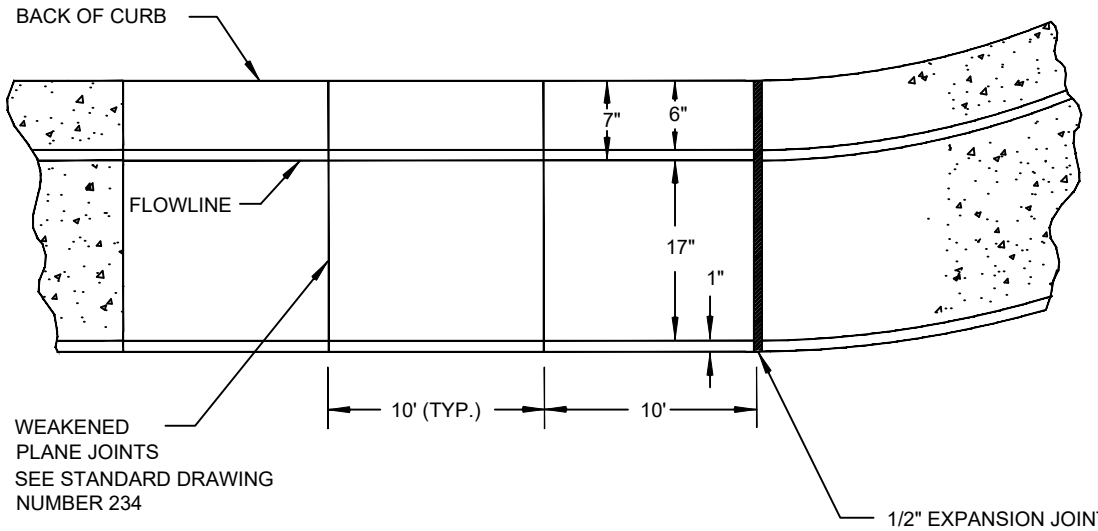
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

ALLEY, CONCRETE

DATE 12-14-00	DWG. NO. 215.S1	

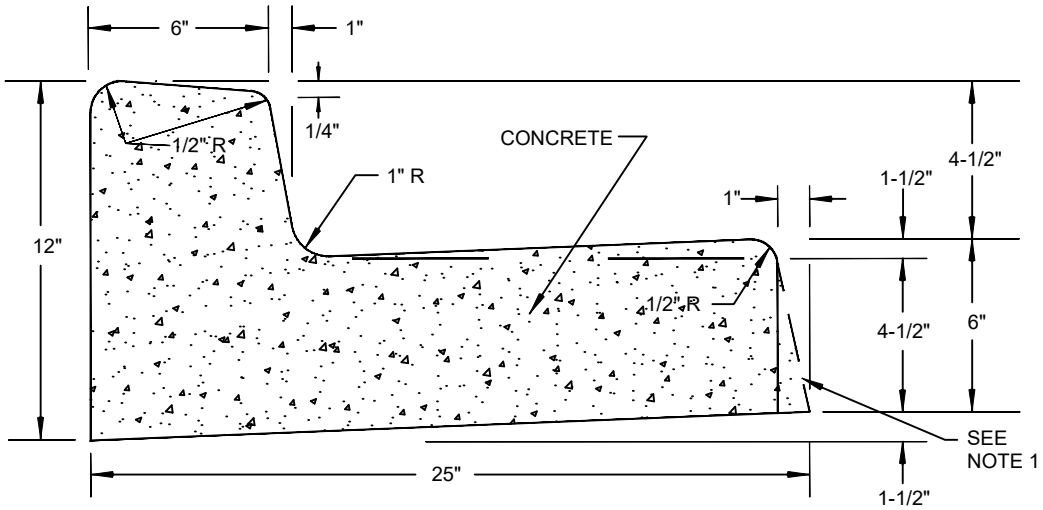
Effective 8/10/2023 to 8/07/2024



PLAN

NOTES:

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



TYPICAL SECTION

AGENCY APPROVED	B	C	H	L	M	N

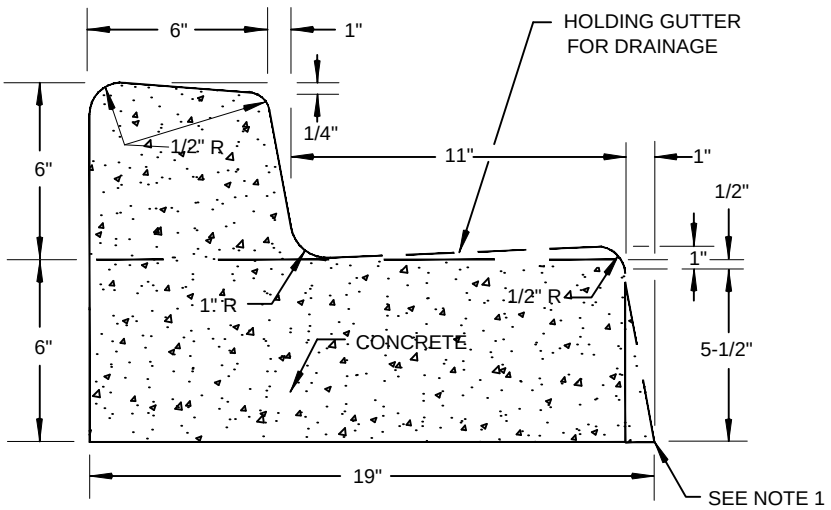
SPECIFICATION REFERENCE	
501	CONCRETE
502	CONCRETE STRUCTURES
707	JOINT MATERIAL
.	

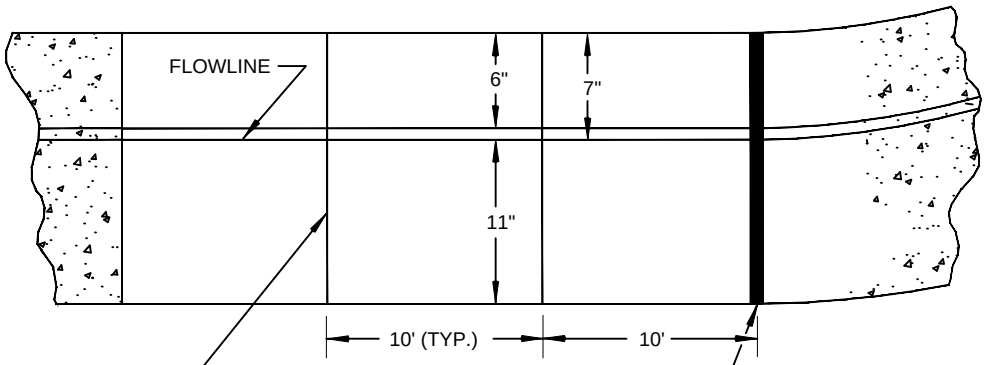
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

"L" TYPE
CURB AND GUTTER

DATE 12-14-00	DWG. NO. 216	

Effective 8/10/2023 to 8/07/2024





TYPICAL PLAN

NOTES:

1. 1" BATTER ON GUTTER FACE OPTIONAL.

AGENCY APPROVED				L		

SPECIFICATION REFERENCE	
302	AGGREGATE BASE COURSE
501	CONCRETE
707	JOINT MATERIAL

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

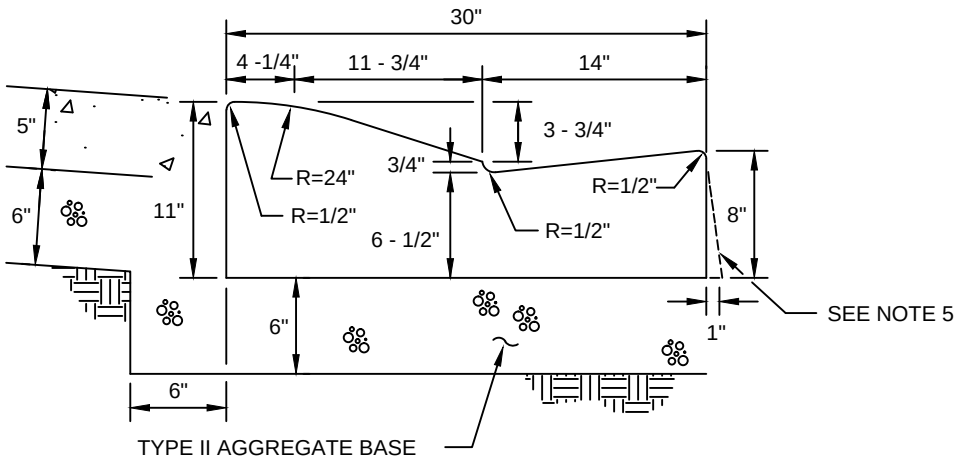
SUPPLEMENTAL DRAWING

"L" TYPE CURB AND GUTTER

COMPLETE STREET ALTERNATIVE

DATE 07-01-12 | DWG. NO. 216.1.S1

Effective 8/10/2023 to 8/07/2024



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

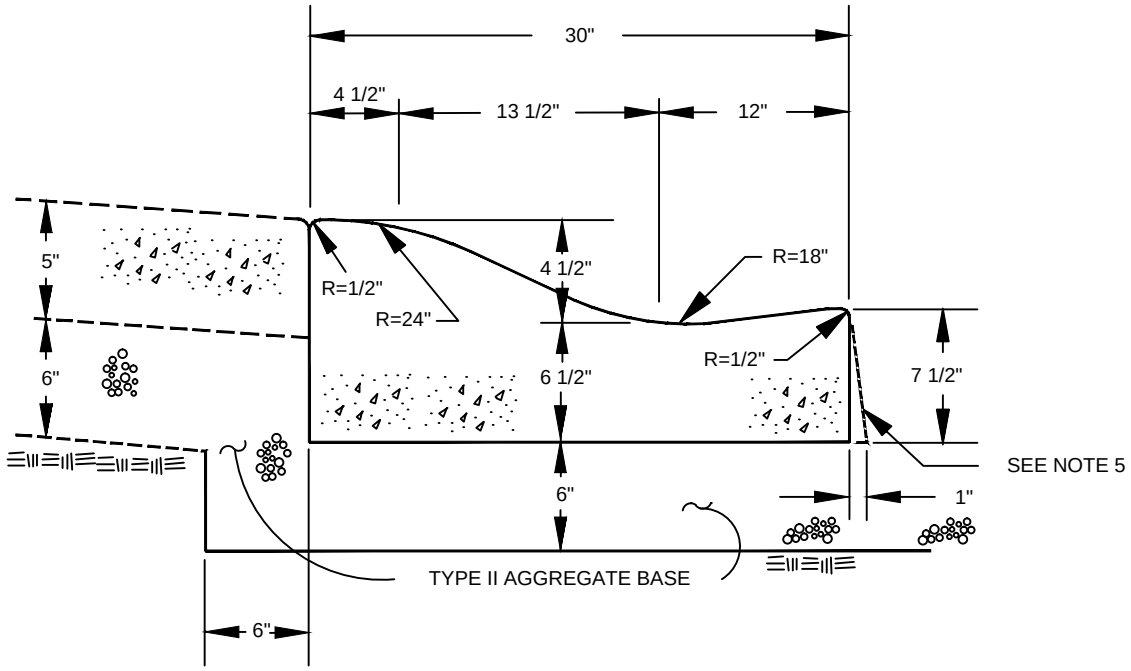
SPECIFICATION REFERENCE	
320	AGGREGATE BASE
501	CONCRETE
502	CONCRETE STRUCTURES
707	JOINT MATERIAL

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

30 INCH MODIFIED ROLL CURB AND GUTTER RESIDENTIAL AREA

DATE 01-01-17 | DWG. NO. 217.1

Effective 8/10/2023 to 8/07/2024



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. (L) CITY OF LAS VEGAS COUNCIL APPROVAL REQUIRED FOR USE OF 30" ROLL CURB IN THE CITY OF LAS VEGAS.
7. (N) 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	
320	AGGREGATE BASE
501	CONCRETE
502	CONCRETE STRUCTURES
707	JOINT MATERIAL

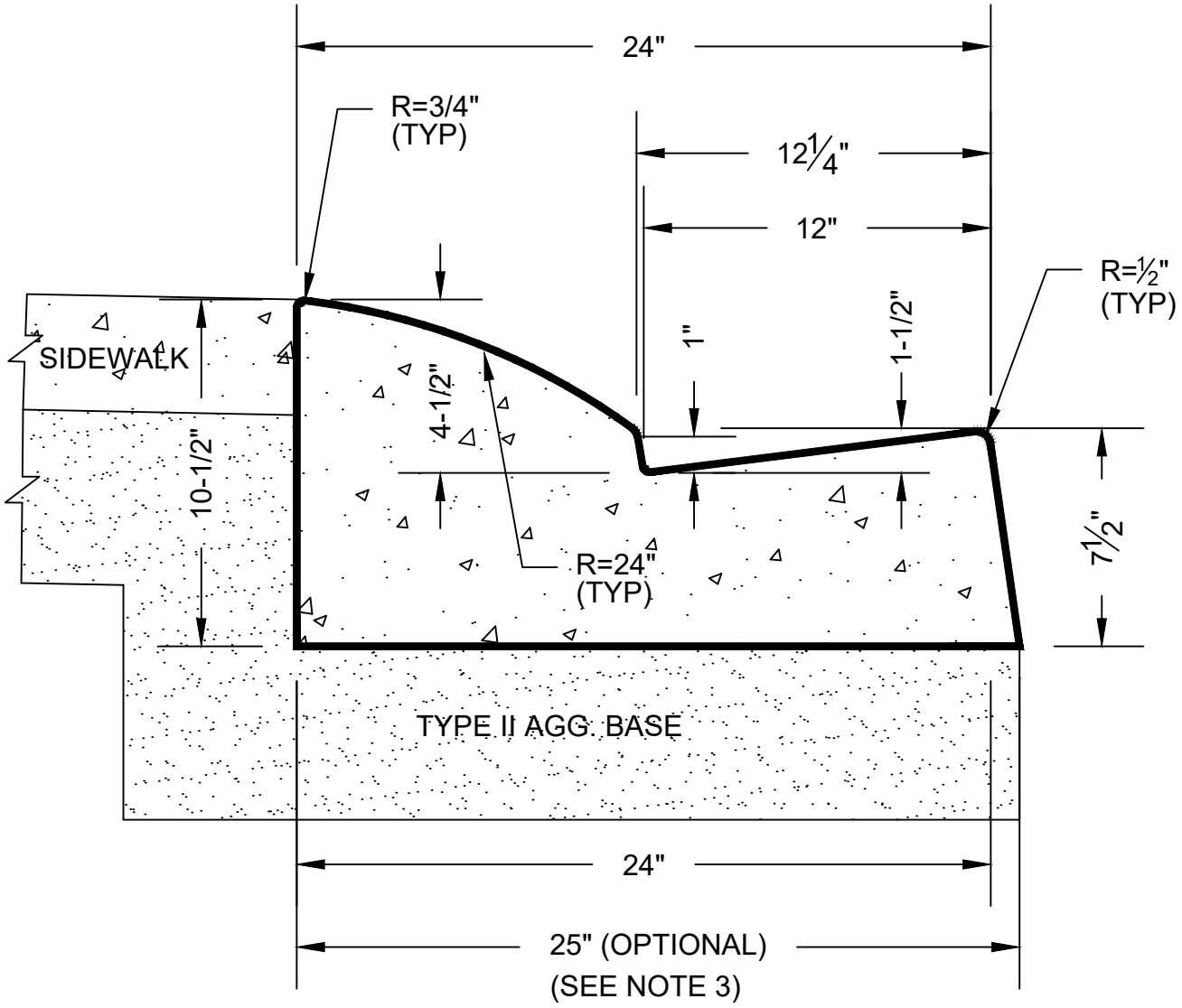
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

30 INCH ROLL CURB RESIDENTIAL AREA

DATE 01-01-17 | DWG. NO. 217.2.S1

Effective 8/10/2023 to 8/07/2024



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	
320	AGGREGATE BASE
501	CONCRETE
502	CONCRETE STRUCTURES
707	JOINT MATERIAL

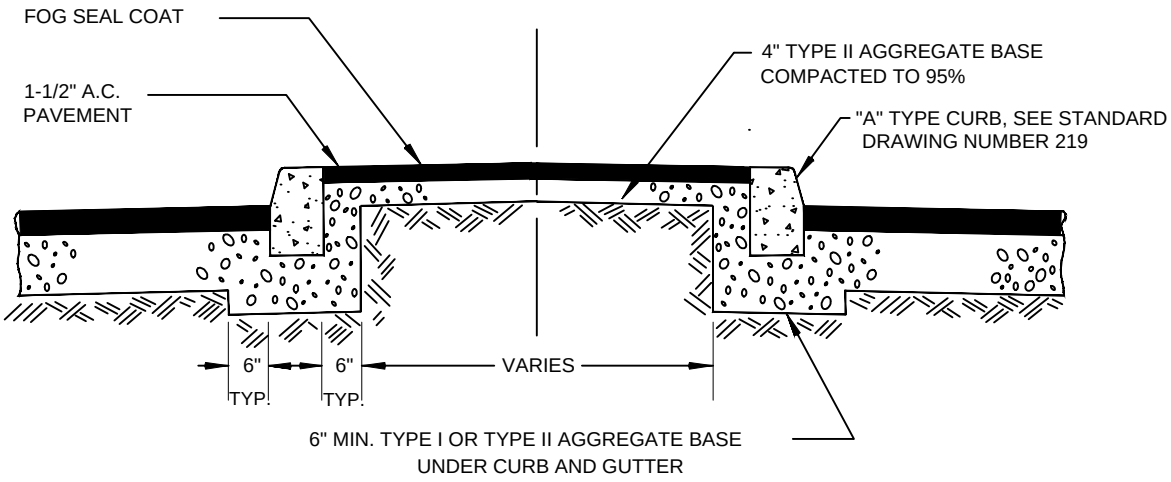
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

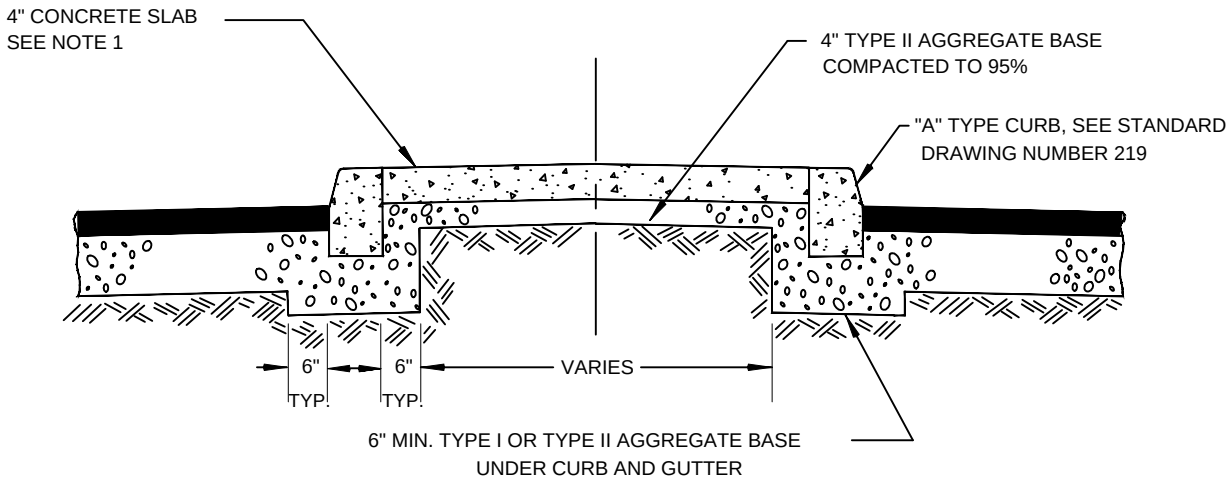
RESIDENTIAL CURB & GUTTER R-TYPE

DATE 12-10-20	DWG. NO. 217.3.S1	

Effective 8/10/2023 to 8/07/2024



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. (H) "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	(H)	L	M	N

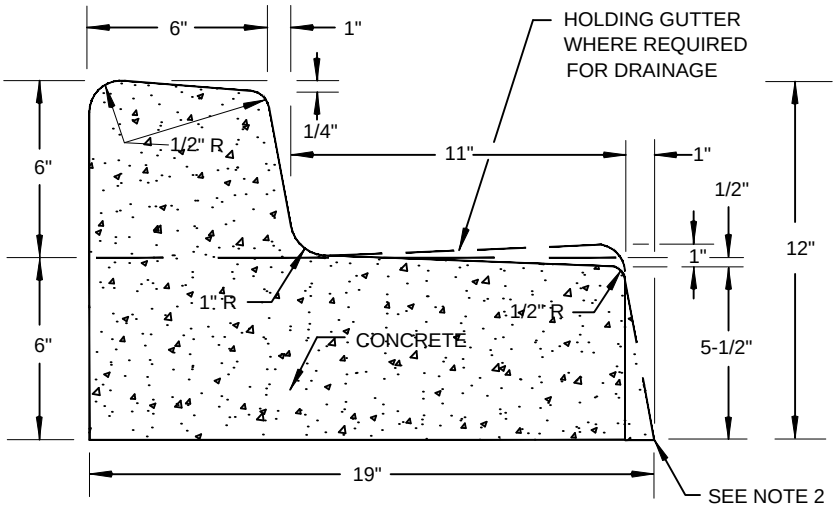
SPECIFICATION REFERENCE	
302	AGGREGATE BASE
501	CONCRETE
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

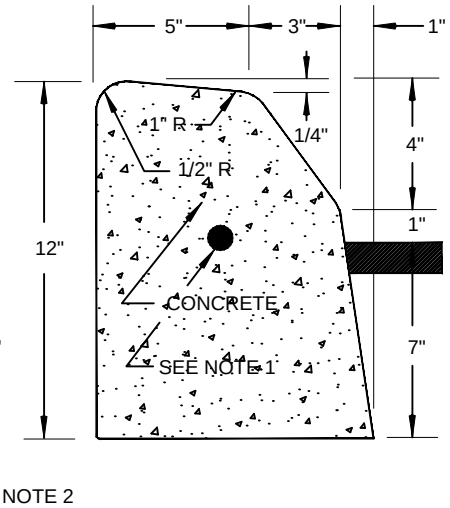
MEDIAN ISLAND TYPICAL SECTION

DATE 12-14-00	DWG. NO. 218	

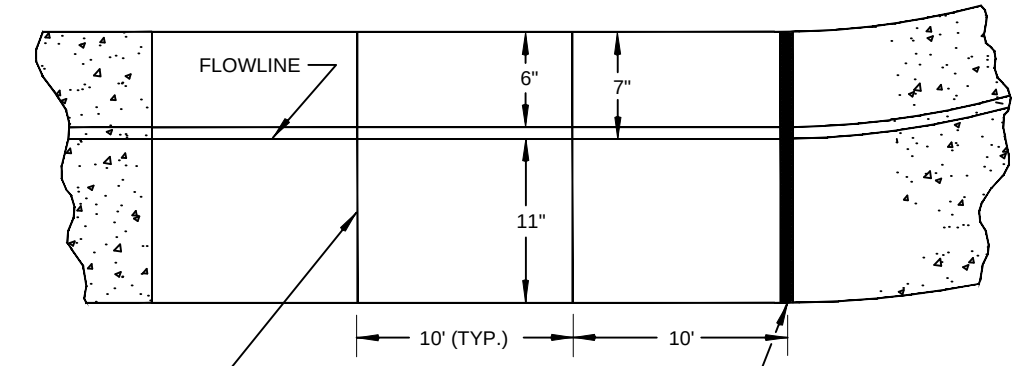
Effective 8/10/2023 to 8/07/2024



"L" CURB SECTION



"A" CURB SECTION



WEAKENED
PLANE JOINTS
SEE STANDARD DRAWING
NUMBER 234

TYPICAL PLAN

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

NOTES:

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

AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	
302	AGGREGATE BASE COURSE
501	CONCRETE
707	JOINT MATERIAL

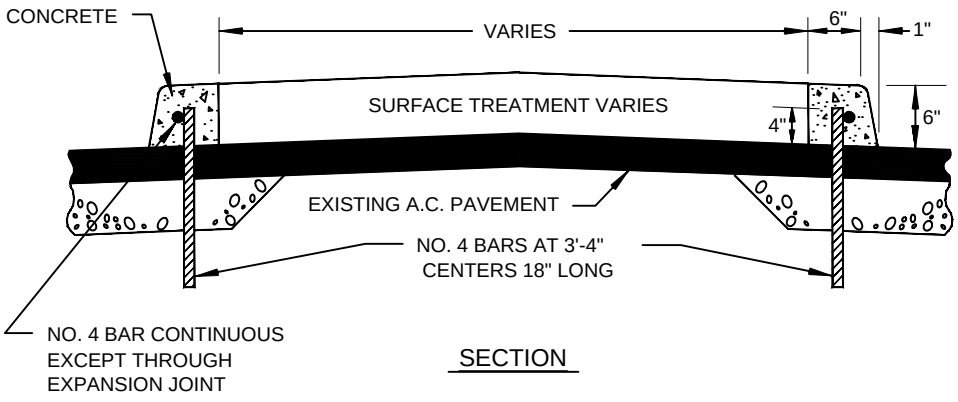
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

"A" AND "L" TYPE ISLAND CURB

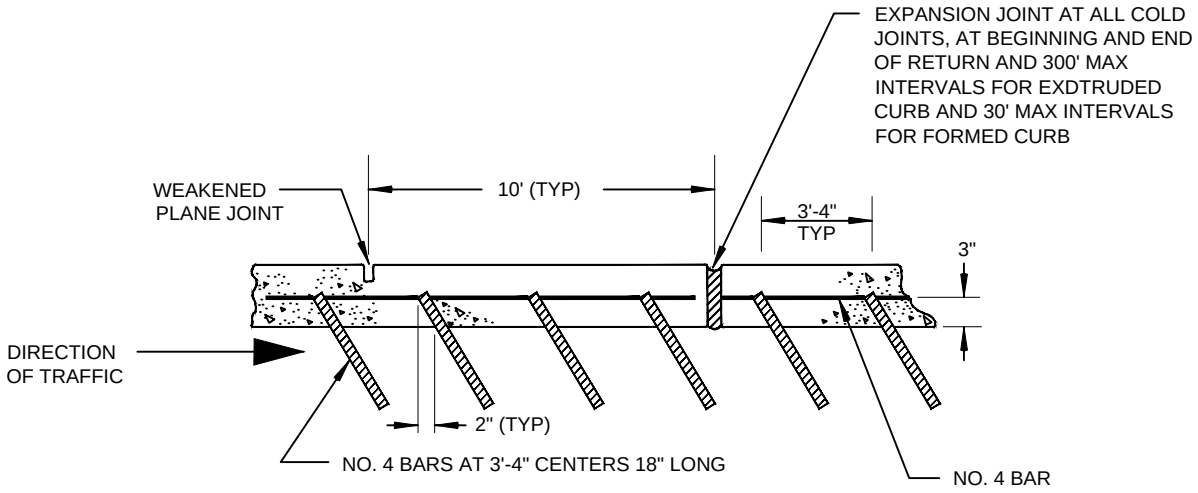
DATE 12-14-00	DWG. NO. 219	

Effective 8/10/2023 to 8/07/2024

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	
501	CONCRETE
505	REINFORCING STEEL
707	JOINT MATERIAL
-	

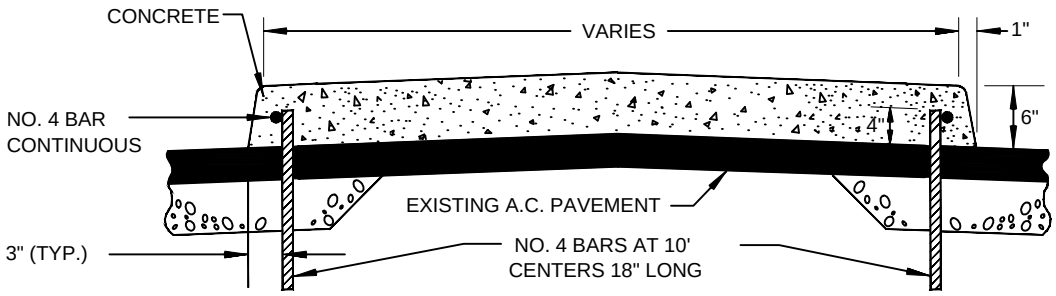
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TACK - ON ISLAND CURB

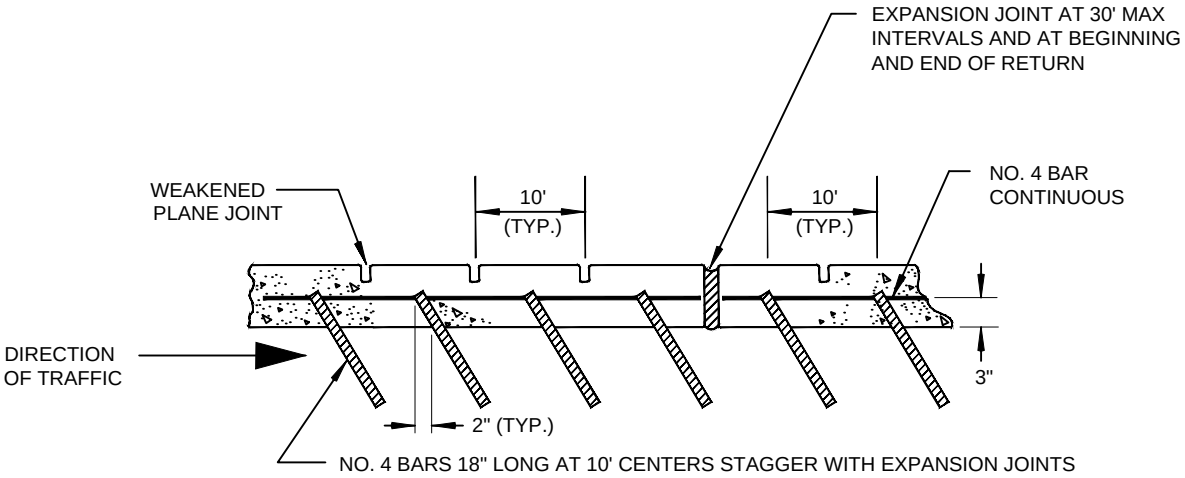
DATE 01-13-05	DWG. NO. 220	

Effective 8/10/2023 to 8/07/2024

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.

AGENCY APPROVED	B	C		L	M	N

SPECIFICATION REFERENCE	
501	CONCRETE
505	REINFORCING STEEL
707	JOINT MATERIAL
.	

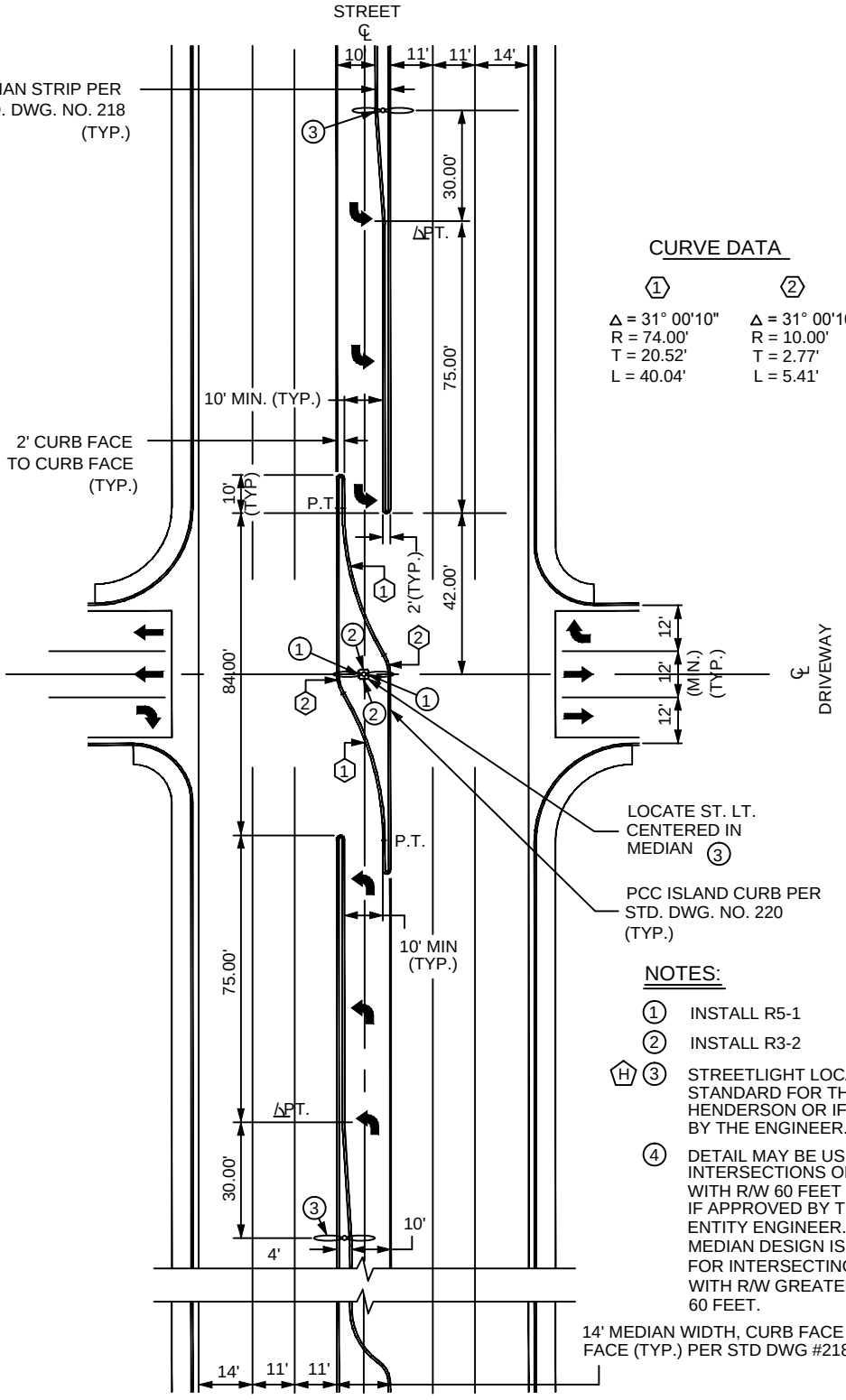
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

TACK - ON ISLAND

DATE 01-13-05 | DWG. NO. 220.1.S1

Effective 8/10/2023 to 8/07/2024



CURVE DATA

①	②
Δ = 31° 00'10"	Δ = 31° 00'10"
R = 74.00'	R = 10.00'
T = 20.52'	T = 2.77'
L = 40.04'	L = 5.41'

NOTES:

① INSTALL R5-1

② INSTALL R3-2

⬠ ③ STREETLIGHT LOCATION STANDARD FOR THE CITY OF HENDERSON OR IF SPECIFIED BY THE ENGINEER.

④ DETAIL MAY BE USED FOR INTERSECTIONS OF STREETS WITH R/W 60 FEET OR LESS IF APPROVED BY THE ENTITY ENGINEER. SPECIAL MEDIAN DESIGN IS REQUIRED FOR INTERSECTING STREETS WITH R/W GREATER THAN 60 FEET.

AGENCY APPROVED	B	C	⬠ H	L	M	N

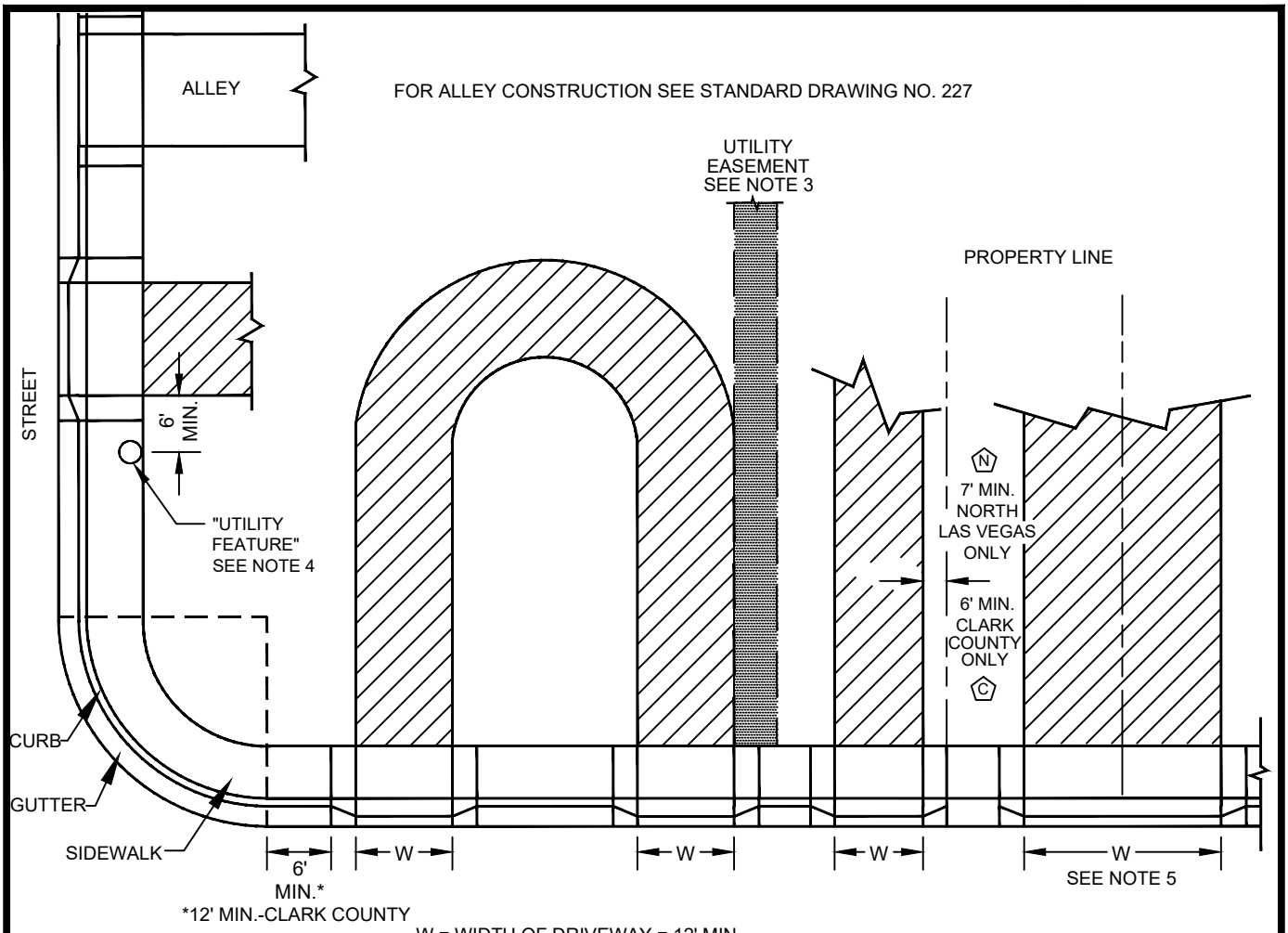
SPECIFICATION REFERENCE	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

CHANNELIZED MEDIAN DETAIL FOR COMMERCIAL DRIVEWAYS OR INTERSECTING STREETS

DATE 6-9-11	DWG. NO. 221	

Effective 8/10/2023 to 8/07/2024



W = WIDTH OF DRIVEWAY = 12' MIN.,
16' MAX. FOR 1 OR 2 CAR GARAGE, OR
28' MAX. FOR 3+ GARAGE

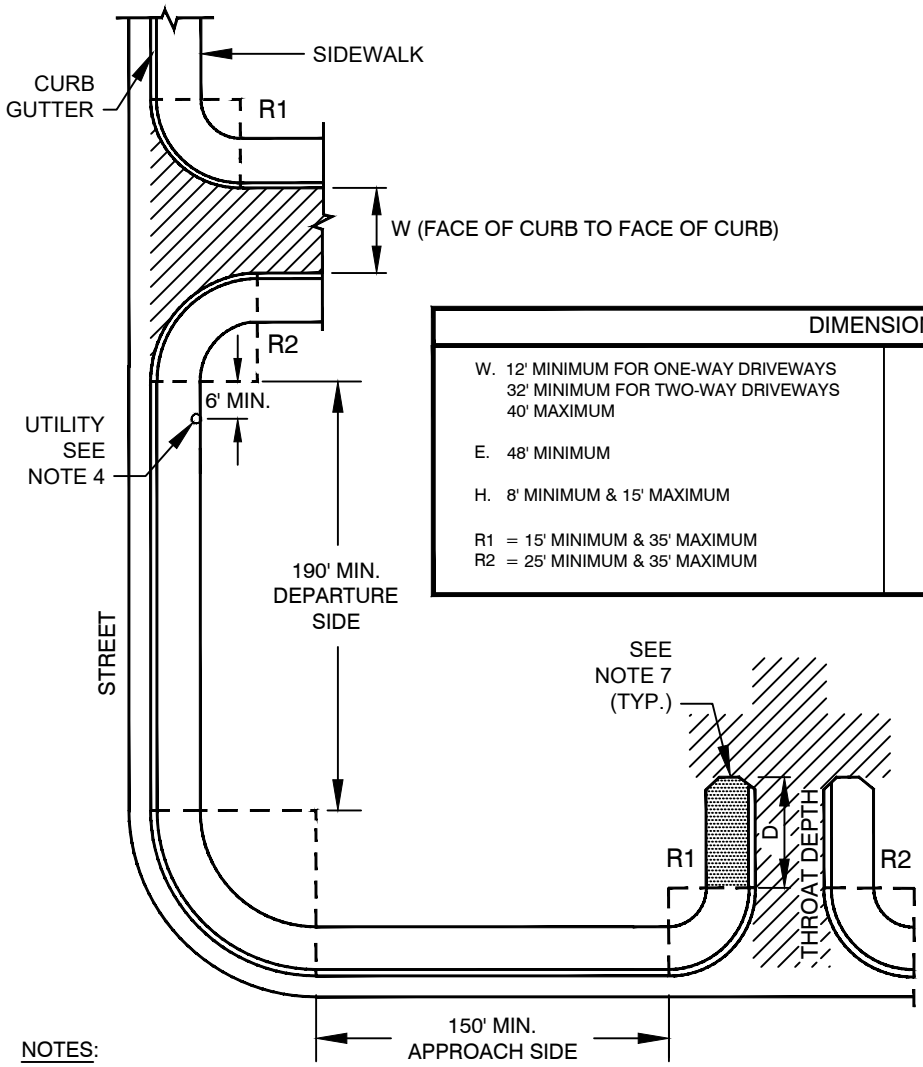
NOTES

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. (C) 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

Effective 8/10/2023 to 8/07/2024



DIMENSIONS	
W. 12' MINIMUM FOR ONE-WAY DRIVEWAYS 32' MINIMUM FOR TWO-WAY DRIVEWAYS 40' MAXIMUM	D. THROAT DEPTH 25' MINIMUM 50' MINIMUM FOR PARKING LOTS > 50 PARKING SPACES 75' MINIMUM FOR PARKING LOTS 51 TO 100 PARKING SPACES 100' MINIMUM FOR PARKING LOTS 101 TO 200 PARKING SPACES 150' MINIMUM FOR PARKING LOTS > 201 PARKING SPACES
E. 48' MINIMUM	
H. 8' MINIMUM & 15' MAXIMUM	
R1 = 15' MINIMUM & 35' MAXIMUM R2 = 25' MINIMUM & 35' MAXIMUM	

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.

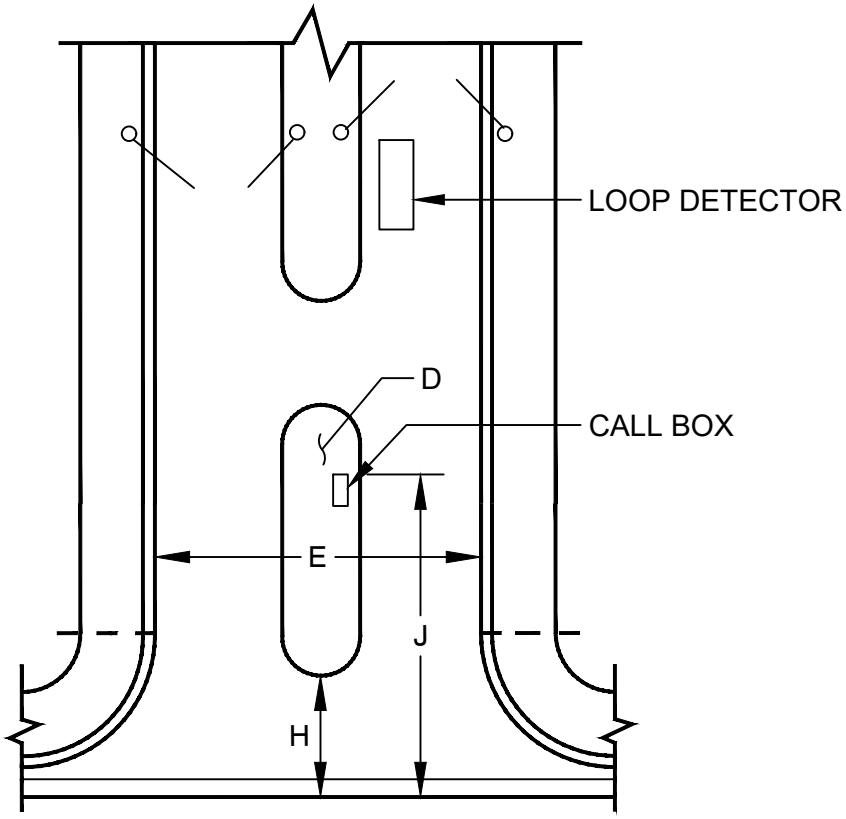
AGENCY APPROVED	B	C	H	L	M	N	R

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

Effective 8/10/2023 to 8/07/2024

DIMENSIONS
J. 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

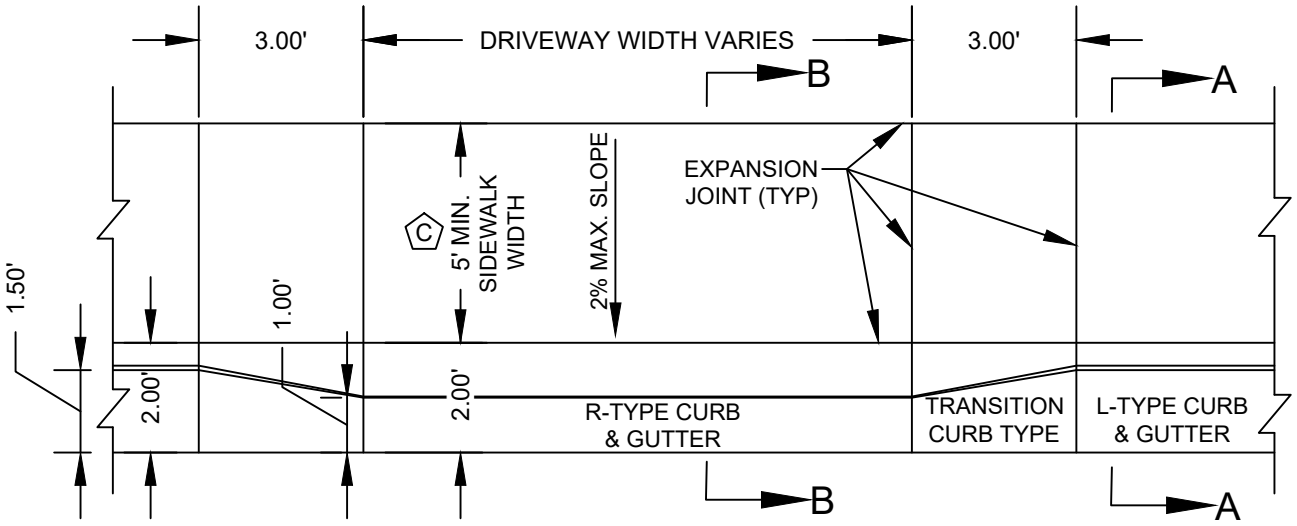


DETAIL FOR SECURITY GATE
CONTROLLED DRIVEWAYS

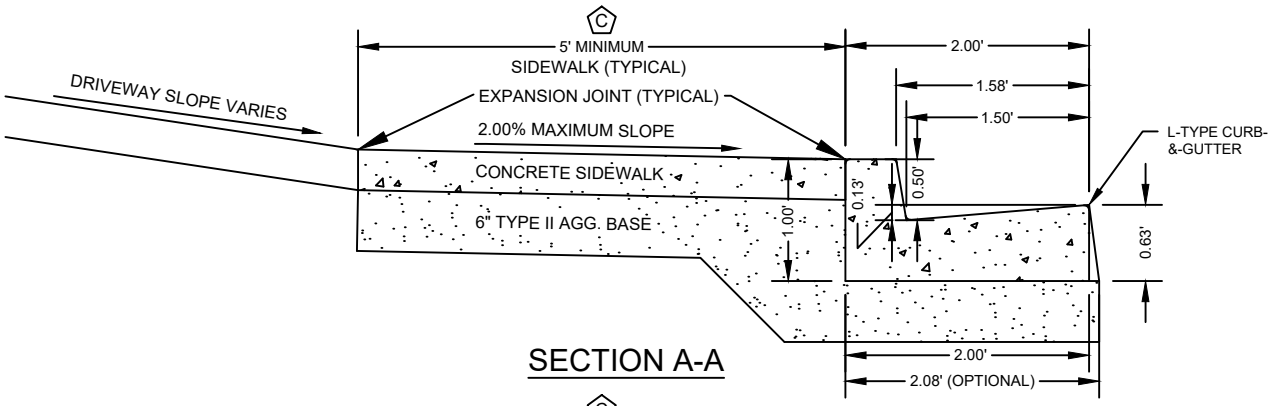
AGENCY APPROVED	B	C	H	L	M	N	R

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

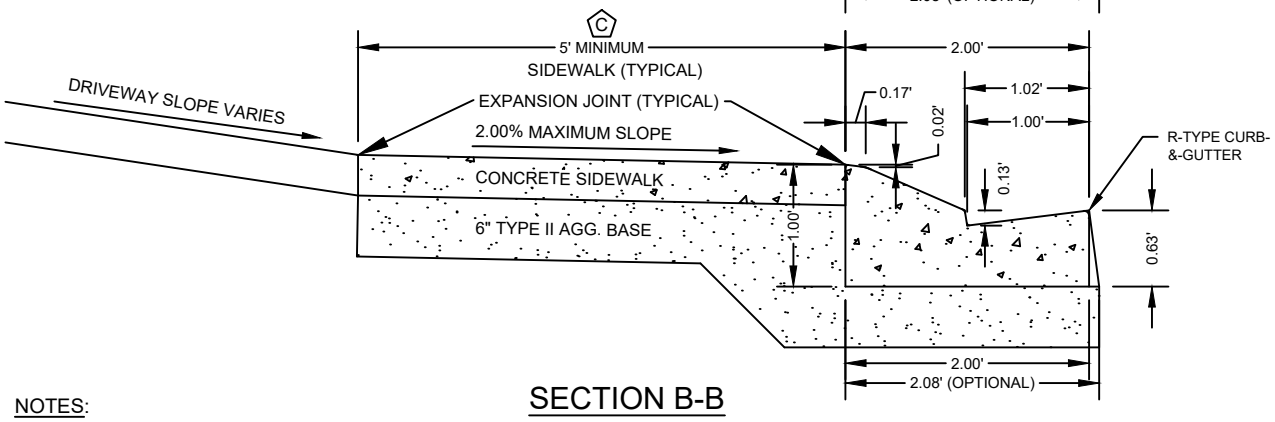
Effective 8/10/2023 to 8/07/2024



PLAN VIEW



SECTION A-A



SECTION B-B

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. (C) 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		C		L	M		R

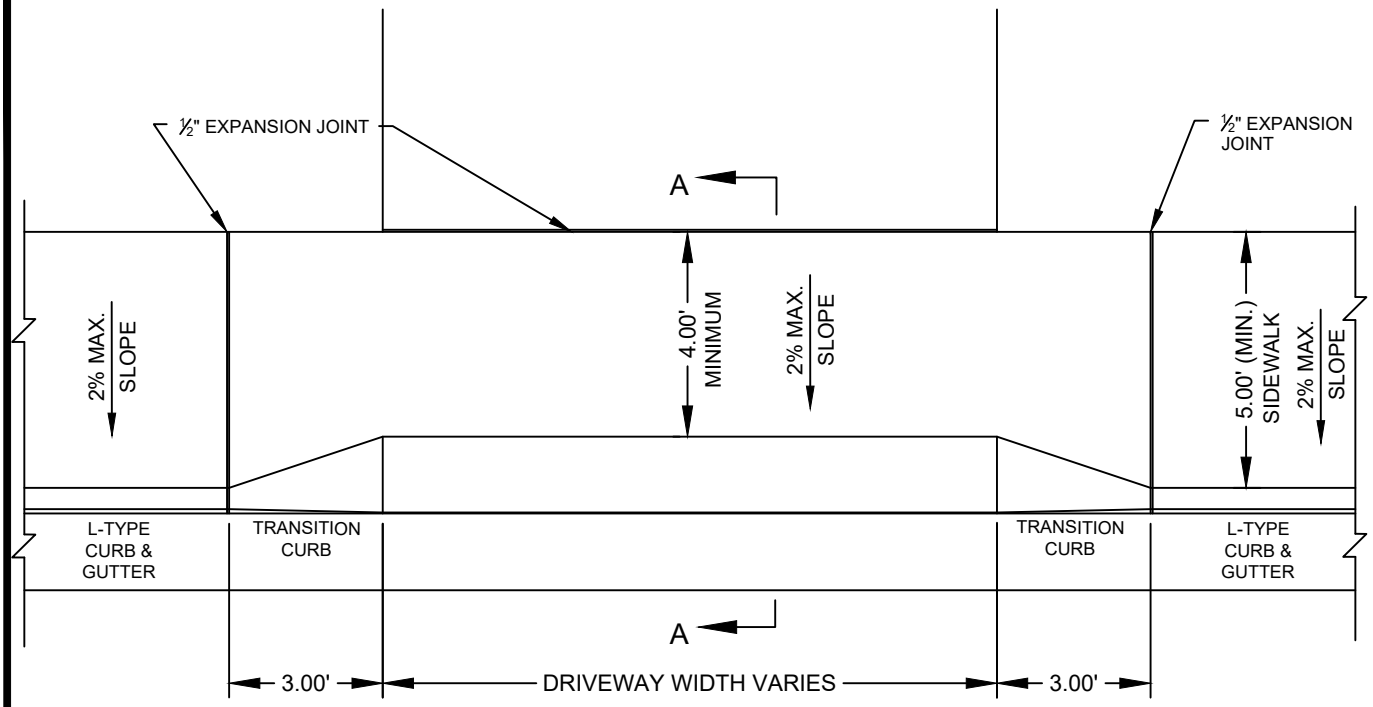
SPECIFICATION REFERENCE	
302	AGGREGATE BASE
501	CONCRETE
502	CONCRETE STRUCTURES
707	JOINT MATERIAL

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

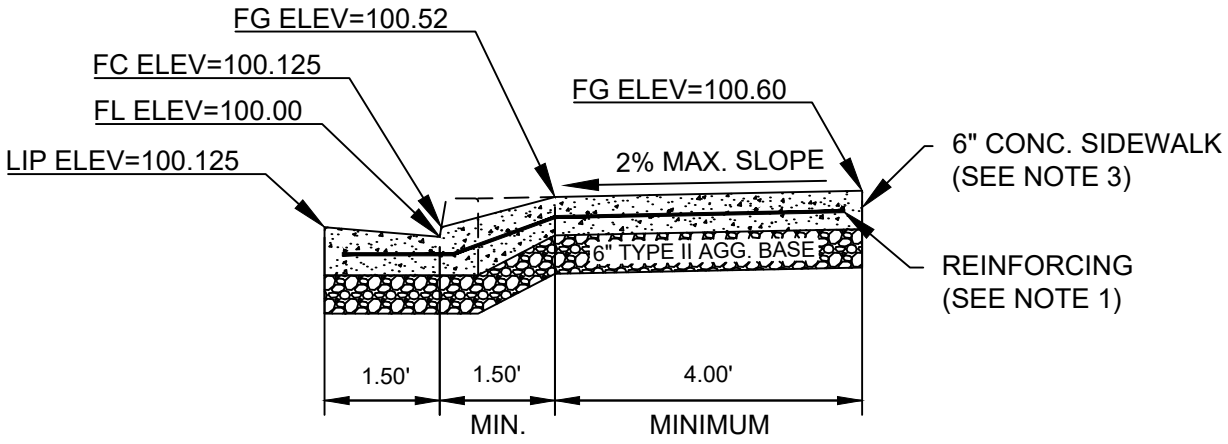
RESIDENTIAL DRIVEWAY

DATE 12-10-20	DWG. NO. 223	

Effective 8/10/2023 to 8/07/2024



PLAN VIEW



SECTION A-A

NOTE: ELEVATIONS SHOWN ARE TYPICAL

NOTES

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

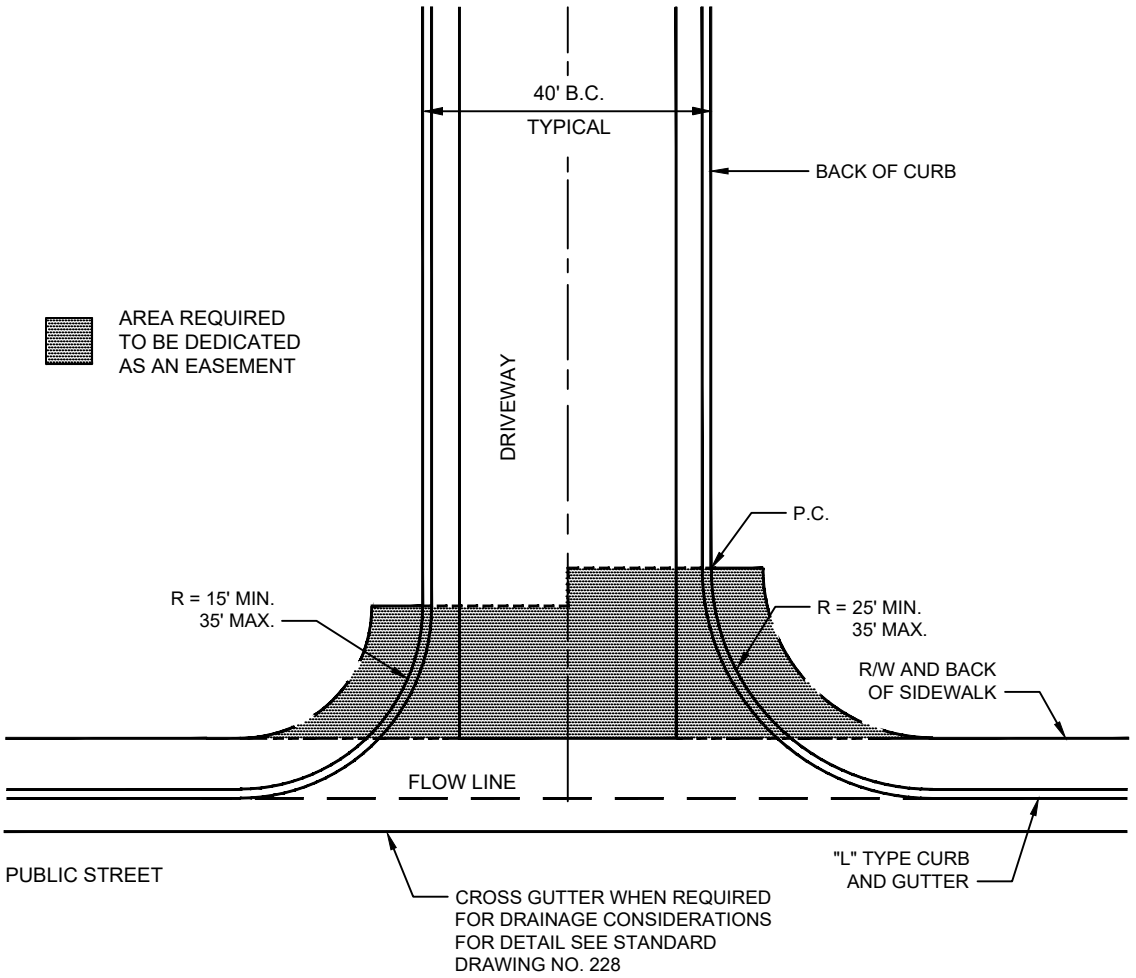
SPECIFICATION REFERENCE	
302	AGGREGATE BASE
501	CONCRETE
502	CONCRETE STRUCTURES
505	REINFORCING STEEL
707	JOINT MATERIAL
-	

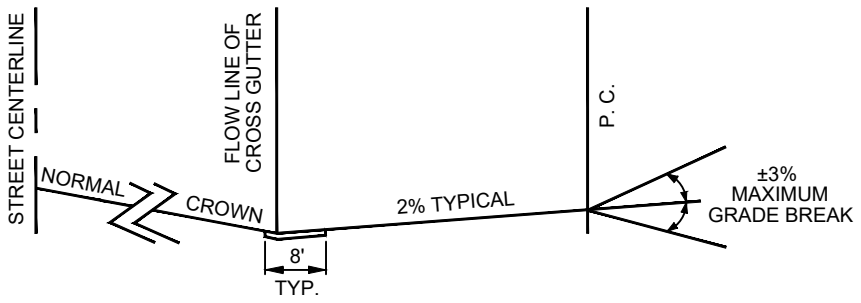
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

COMMERCIAL AND INDUSTRIAL DRIVEWAY (OPTION A)

DATE 05-21-20 | DWG. NO. 224

Effective 8/10/2023 to 8/07/2024





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.

AGENCY APPROVED	B	C	H	L	M	N	R

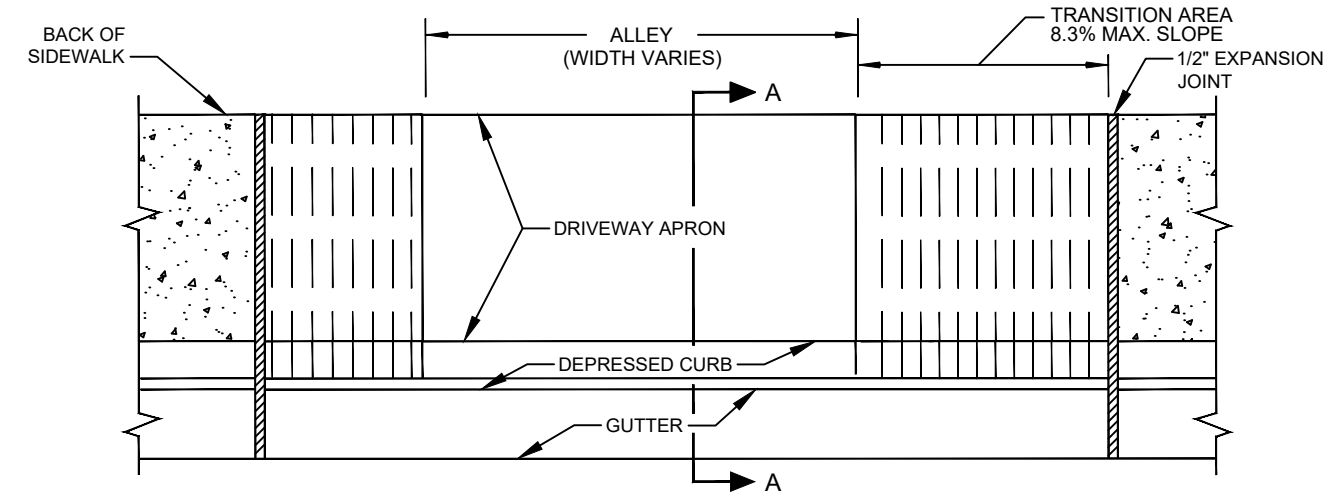
SPECIFICATION REFERENCE	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

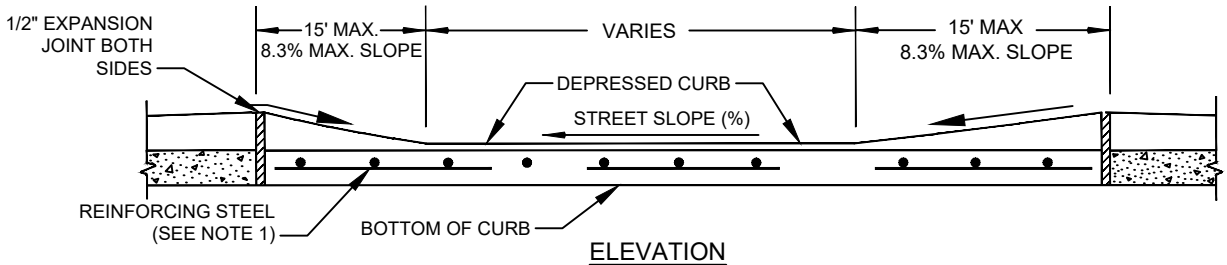
COMMERCIAL AND INDUSTRIAL DRIVEWAY (OPTION B)

DATE 05-21-20	DWG. NO. 225	

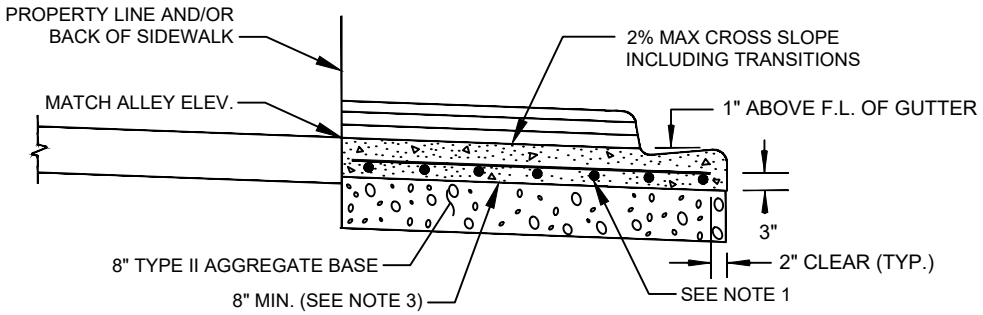
Effective 8/10/2023 to 8/07/2024



PLAN



ELEVATION



SECTION A-A

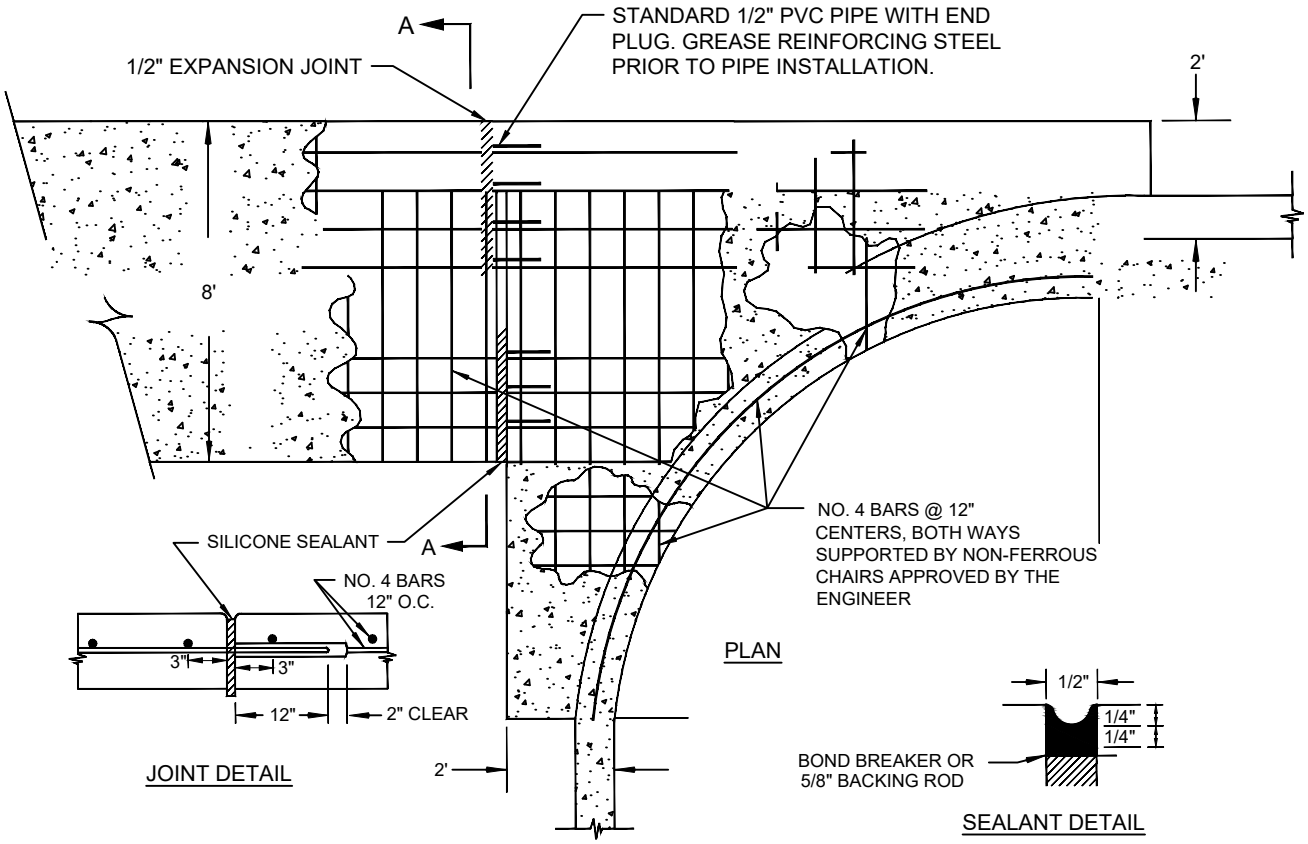
NOTES

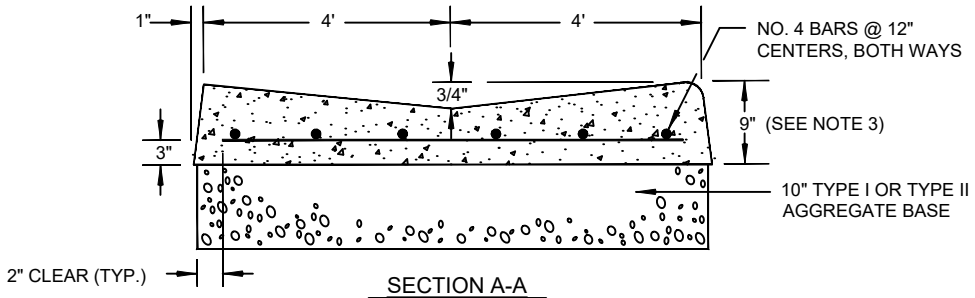
1. NO. 4 BARS AT 16" O.C. BOTH WAYS CONTINUOUS THROUGH GUTTER. NO. 4 BARS SHALL BE PLACED 3" ABOVE BOTTOM OF CONCRETE.
2. WHEN CONSTRUCTING DRIVEWAY WHERE CURB AND GUTTER EXISTS, COMPLETELY REMOVE INTERFERING PORTIONS OF EXISTING CURB AND GUTTER. DRIVEWAY SHALL BE MONOLITHIC TO A.C. LINE.
3. DRIVEWAY 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.

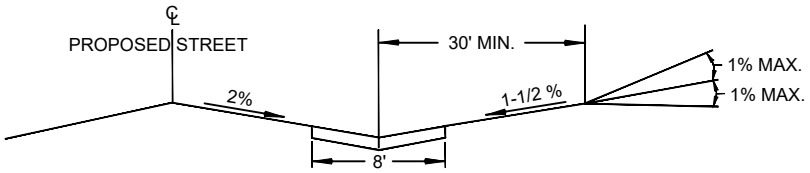
AGENCY APPROVED	B	C	H	L		N	R

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	SUPPLEMENTAL DRAWING
	DEPRESSED ALLEY DRIVEWAY
	DATE 05-21-20 | DWG. NO. 227.S1

Effective 8/10/2023 to 8/07/2024







TYPICAL PROFILE AT LOCAL RESIDENTIAL STREET INTERSECTIONS

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

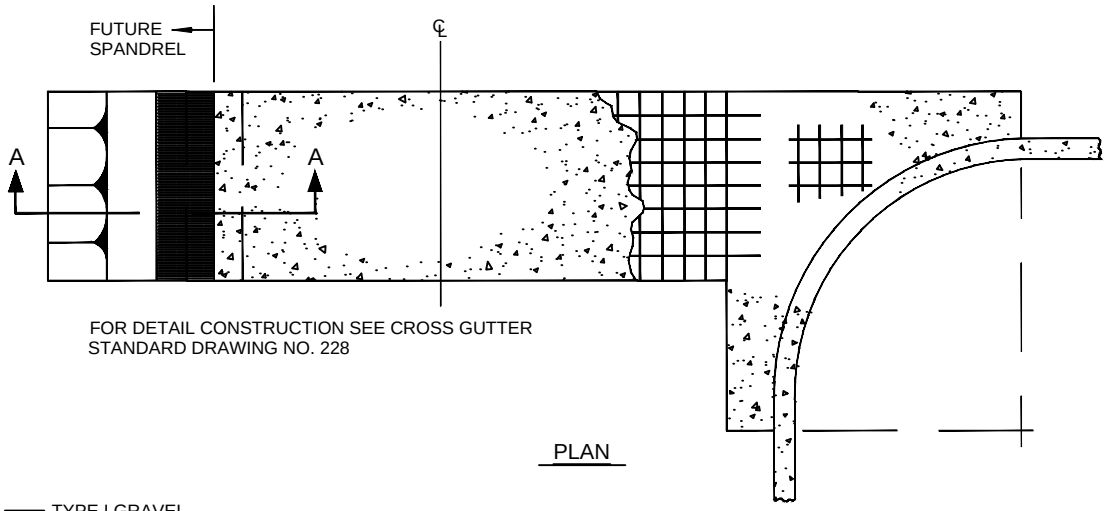
SPECIFICATION REFERENCE	
302	AGGREGATE BASE
501	CONCRETE
502	CONCRETE STRUCTURES
505	REINFORCING STEEL
707	EXPANSION JOINT MATERIAL
.	TT-S-00153A CLASS A SEALANT

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

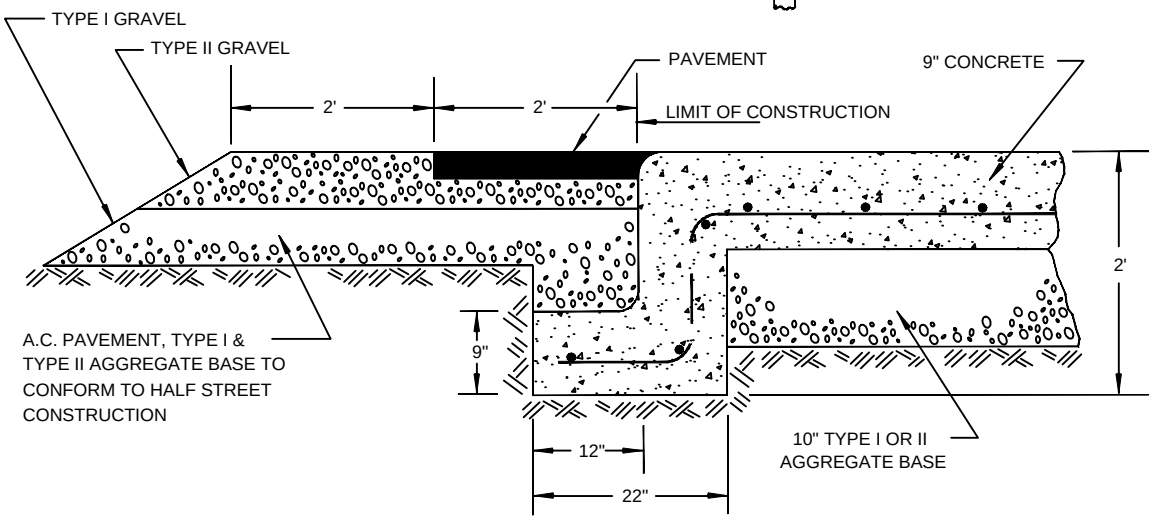
CROSS GUTTER

DATE 08-08-19	DWG. NO. 228	

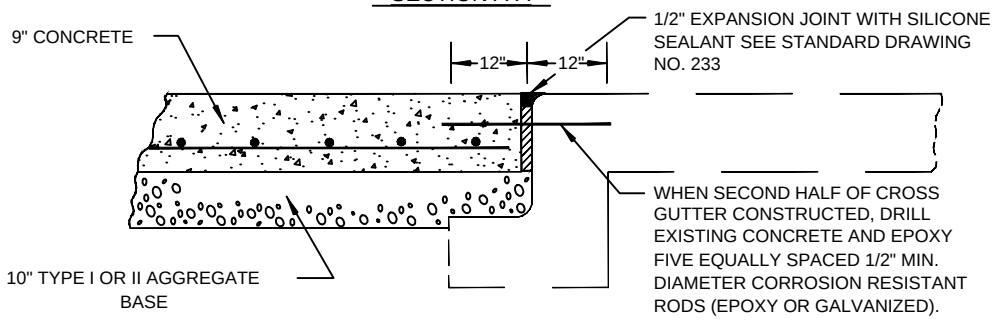
Effective 8/10/2023 to 8/07/2024



PLAN



SECTION A-A



DETAIL FOR FUTURE CONSTRUCTION

AGENCY APPROVED	B	C	H	L	M	N

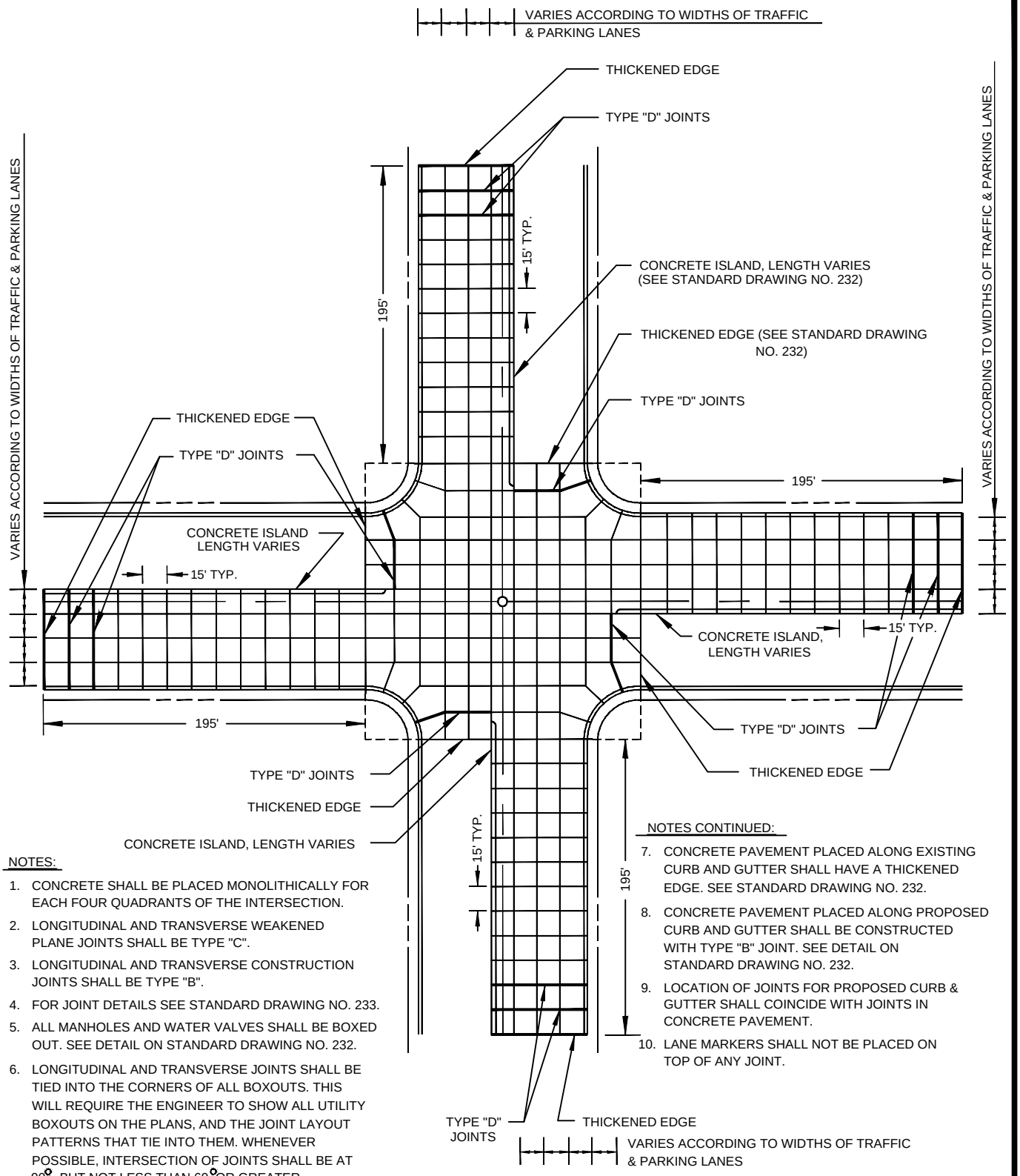
SPECIFICATION REFERENCE	
302	AGGREGATE BASE
501	CONCRETE
502	CONCRETE STRUCTURES
505	REINFORCING STEEL
707	EXPANSION JOINT MATERIAL
.	TT-S-00153A CLASS A SEALANT

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

HALF STREET CROSS GUTTER

DATE	DWG. NO. 229	

Effective 8/10/2023 to 8/07/2024



NOTES:

1. CONCRETE SHALL BE PLACED MONOLITHICALLY FOR EACH FOUR QUADRANTS OF THE INTERSECTION.
2. LONGITUDINAL AND TRANSVERSE WEAKENED PLANE JOINTS SHALL BE TYPE "C".
3. LONGITUDINAL AND TRANSVERSE CONSTRUCTION JOINTS SHALL BE TYPE "B".
4. FOR JOINT DETAILS SEE STANDARD DRAWING NO. 233.
5. ALL MANHOLES AND WATER VALVES SHALL BE BOXED OUT. SEE DETAIL ON STANDARD DRAWING NO. 232.
6. 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°.

NOTES CONTINUED:

7. CONCRETE PAVEMENT PLACED ALONG EXISTING CURB AND GUTTER SHALL HAVE A THICKENED EDGE. SEE STANDARD DRAWING NO. 232.
8. CONCRETE PAVEMENT PLACED ALONG PROPOSED CURB AND GUTTER SHALL BE CONSTRUCTED WITH TYPE "B" JOINT. SEE DETAIL ON STANDARD DRAWING NO. 232.
9. LOCATION OF JOINTS FOR PROPOSED CURB & GUTTER SHALL COINCIDE WITH JOINTS IN CONCRETE PAVEMENT.
10. LANE MARKERS SHALL NOT BE PLACED ON TOP OF ANY JOINT.

AGENCY APPROVED	B	C	H	L	M	N

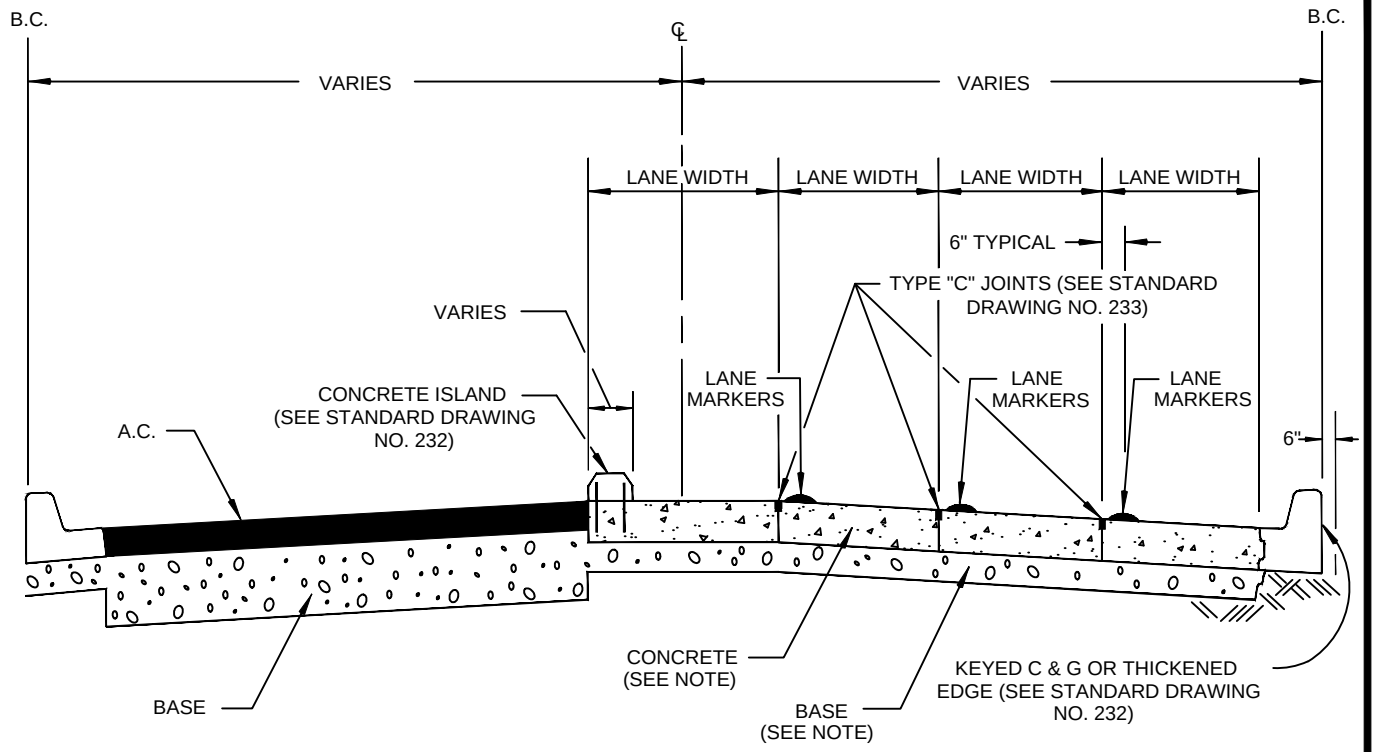
SPECIFICATION REFERENCE	
409	CONCRETE PAVEMENT
501	CONCRETE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

CONCRETE PAVEMENT INTERSECTION TYPICAL LAYOUT

DATE	DWG. NO. 230	

Effective 8/10/2023 to 8/07/2024



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

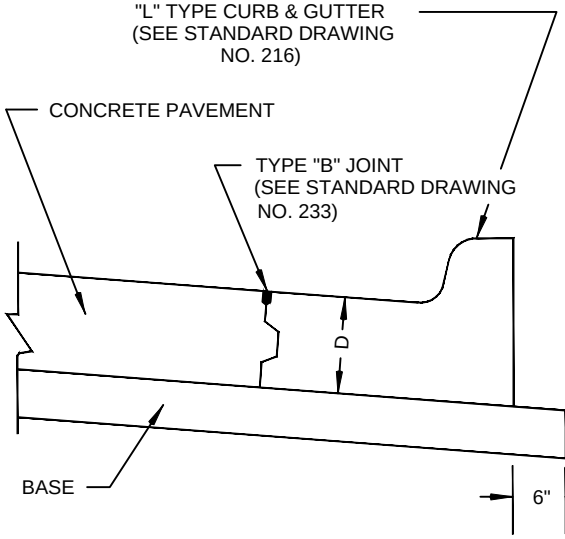
SPECIFICATION REFERENCE	
302	AGGREGATE BASE
409	CONCRETE PAVEMENT
501	CONCRETE
633	PAVEMENT MARKERS
707	JOINT MATERIAL
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

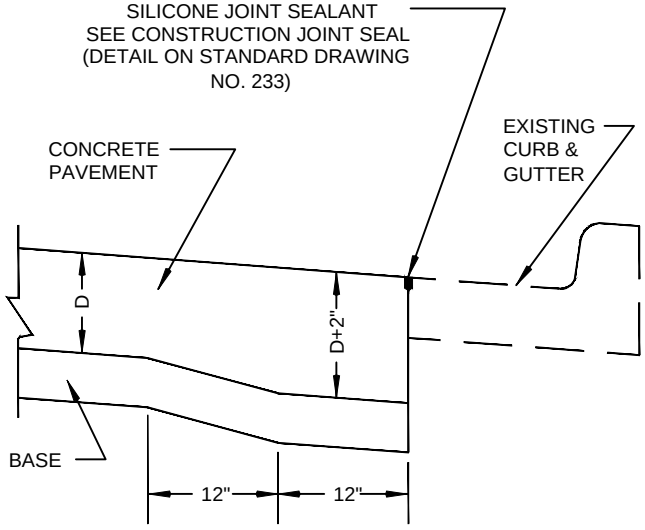
CONCRETE PAVEMENT
TYPICAL ROADWAY SECTION

DATE	DWG. NO. 231	

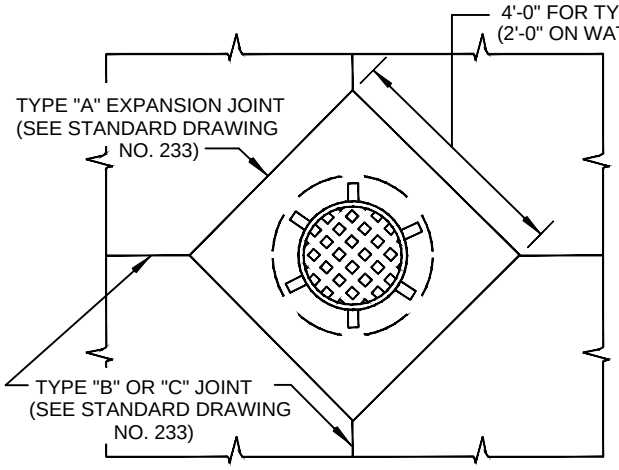
Effective 8/10/2023 to 8/07/2024



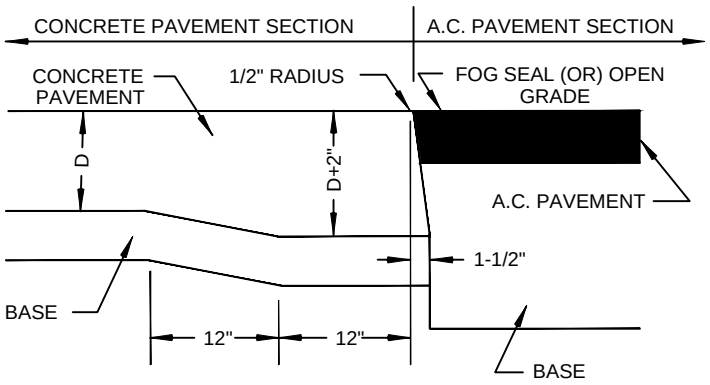
CURB & GUTTER JOINT DETAIL
PROPOSED CURB & GUTTER



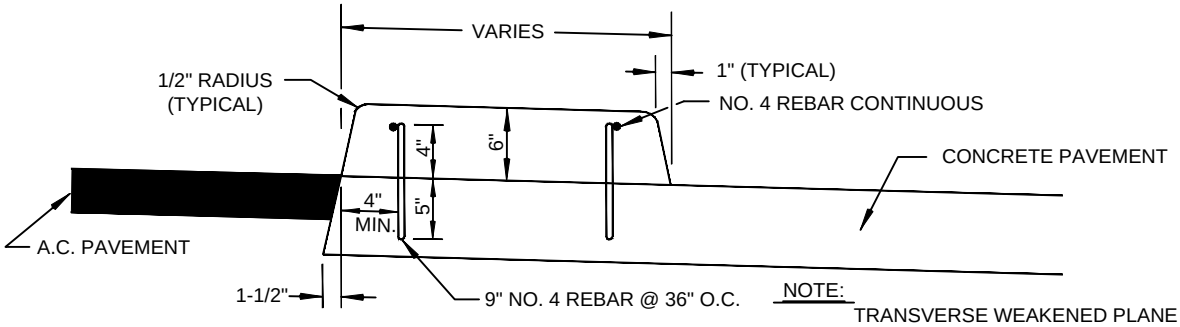
CURB & GUTTER JOINT DETAIL
EXISTING CURB & GUTTER



BOXOUT DETAIL



THICKENED EDGE DETAIL



TACK ON CONCRETE ISLAND DETAIL

NOTE:
TRANSVERSE WEAKENED PLANE JOINTS
TO MATCH JOINTS IN CONCRETE PAVEMENT
(SEE DETAIL STANDARD DRAWING NO. 234)

AGENCY APPROVED	B	C	H	L	M	N

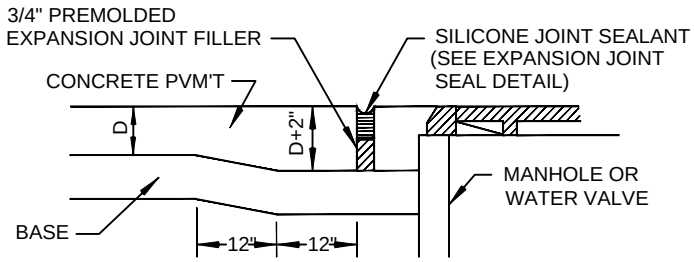
SPECIFICATION REFERENCE	
409	CONCRETE PAVEMENT
501	CONCRETE
505	REINFORCING STEEL
TT-S-00153A CLASS A SEALANT	
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

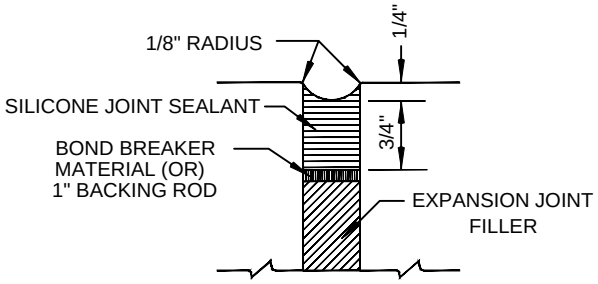
CONCRETE PAVEMENT CONSTRUCTION DETAILS

DATE	DWG. NO. 232	

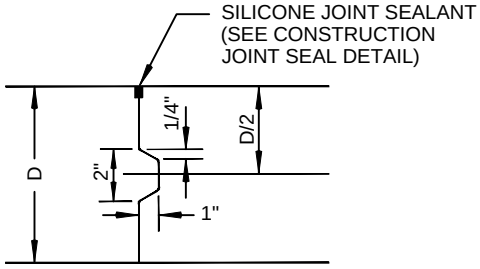
Effective 8/10/2023 to 8/07/2024



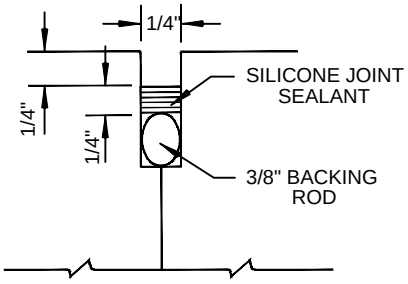
TYPE "A" EXPANSION JOINT DETAIL
BOXOUT



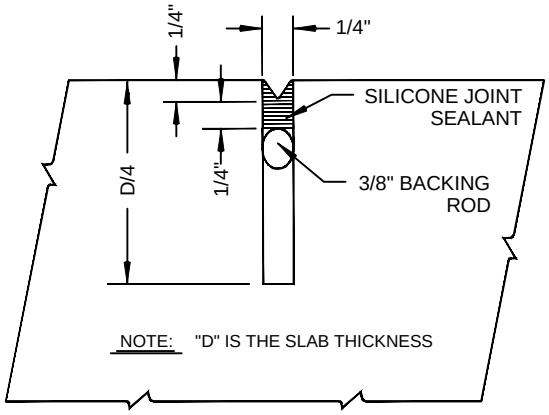
EXPANSION JOINT SEAL DETAIL



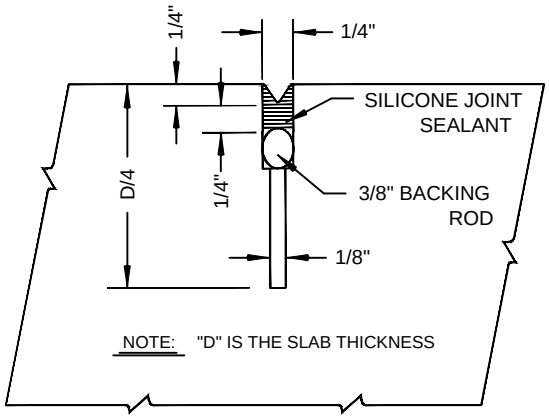
TYPE "B" CONSTRUCTION JOINT DETAIL
KEYWAY



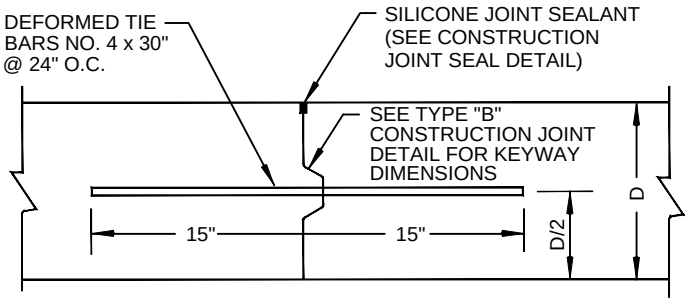
CONSTRUCTION JOINT SEAL DETAIL



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



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



TYPE "D" TIED CONSTRUCTION JOINT DETAIL

AGENCY APPROVED	B	C	H	L	M	N

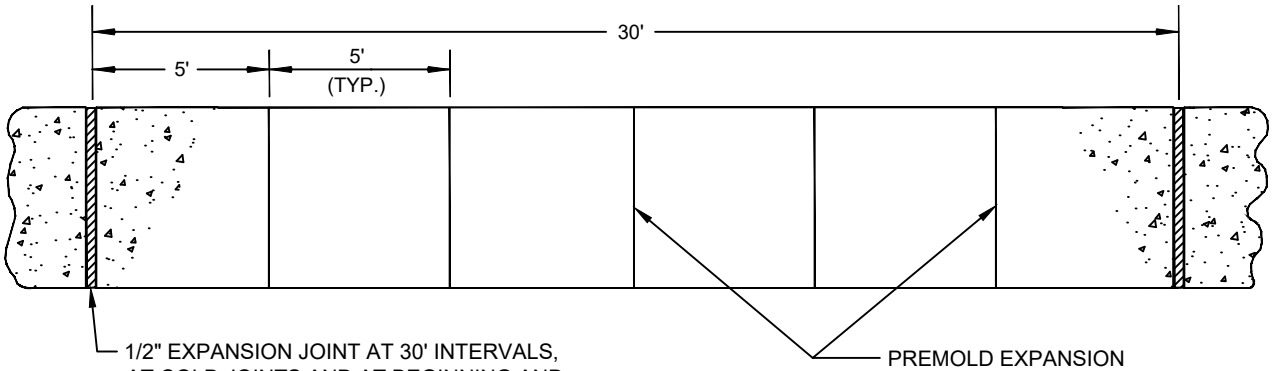
SPECIFICATION REFERENCE	
409	CONCRETE PAVEMENT
707	JOINT MATERIAL TT-S-00153A CLASS A SEALANT
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

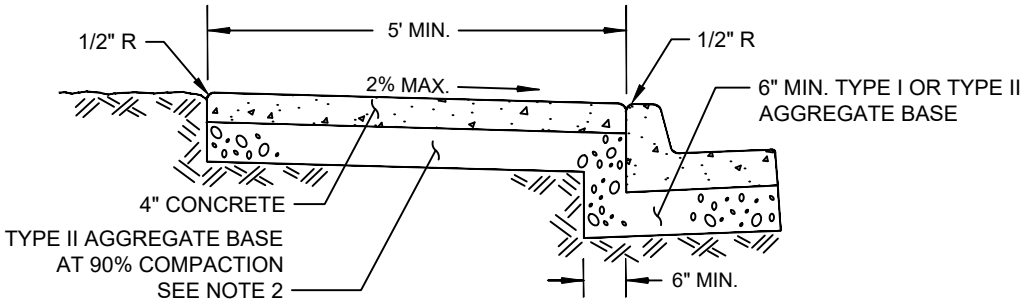
CONCRETE PAVEMENT JOINT DETAILS

DATE	DWG. NO. 233	

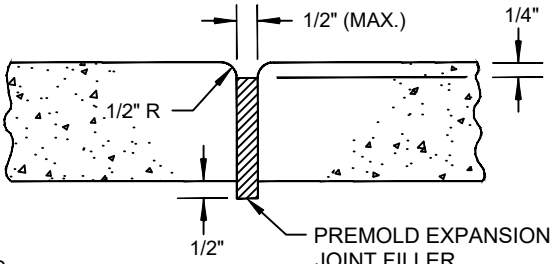
Effective 8/10/2023 to 8/07/2024



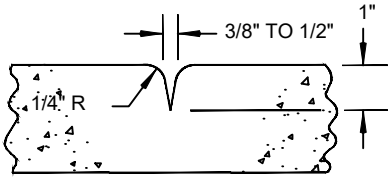
PLAN



TYPICAL SECTION



EXPANSION JOINT



WEAKENED PLANE JOINT (TOOL CUT)

NOTES

1. 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.
2. THE TYPE II AGGREGATE BASE THICKNESS IS SHOWN ON THE TYPICAL SECTION DRAWINGS 202 - 207.
3. LONGITUDINAL WEAKENED PLANE JOINT REQUIRED AT MIDPOINT OF SIDEWALK 10' OR WIDER.
4. WHEN INSTALLED WITHIN THE ROW, SIDEWALK GRADE IS PERMITTED TO EQUAL THE GENERAL GRADE ESTABLISHED FOR THE ADJACENT STREET OR HIGHWAY.
5. 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.
6. PEDESTRIAN ACCESS ROUTE SHALL HAVE A CROSS SLOPE OF 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
707	JOINT MATERIAL
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

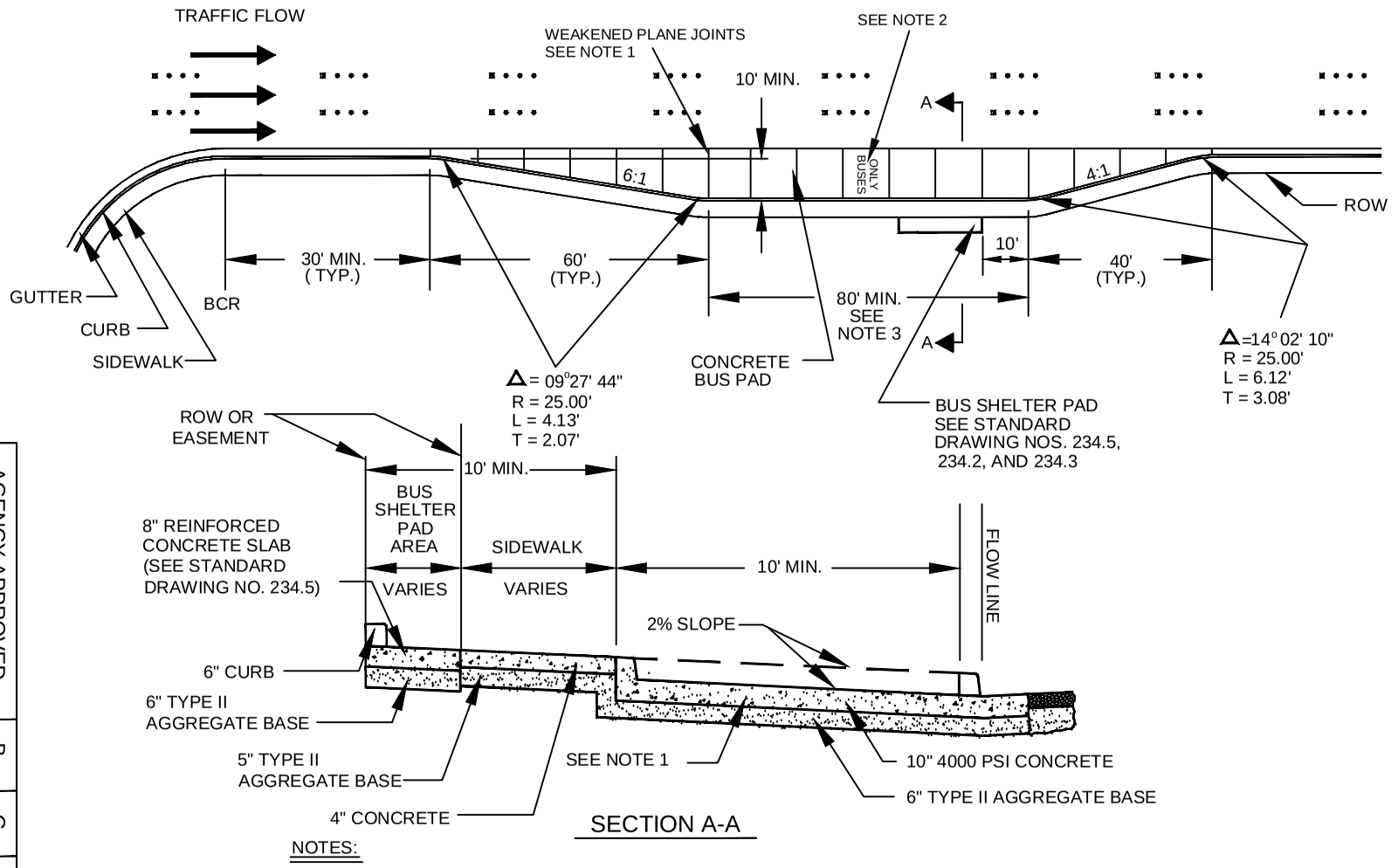
SIDEWALK

DATE 01-09-20	DWG. NO. 234	

Effective 8/10/2023 to 8/07/2024

Effective 8/10/2023 to 8/07/2024

SPECIFICATION REFERENCE	
302	AGGREGATE BASE
501	CONCRETE
502	CONCRETE STRUCTURES



NOTES:

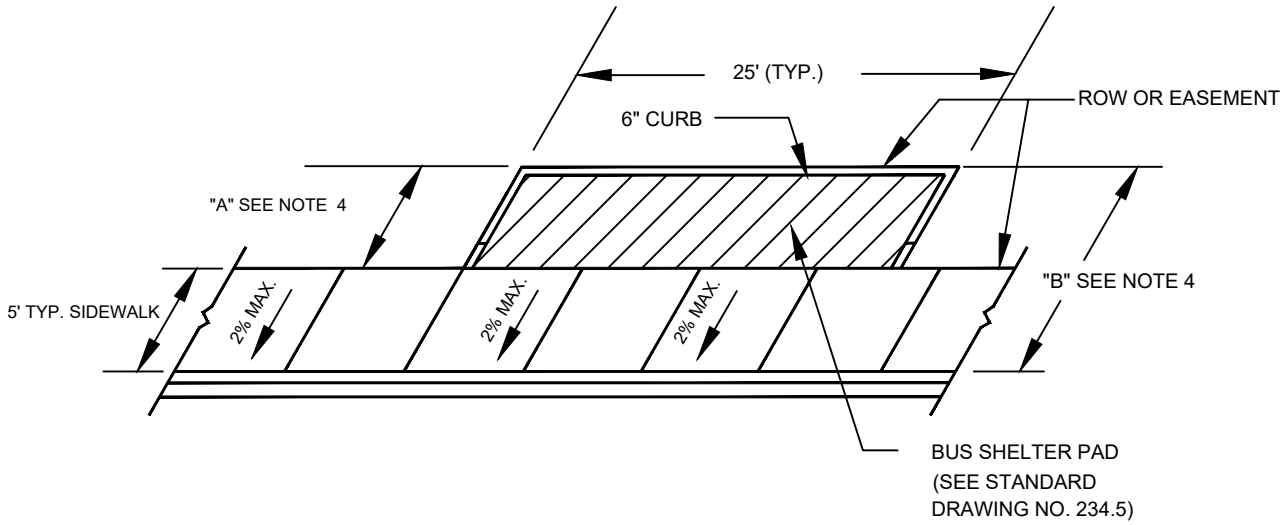
1. CONCRETE BUS PAD SHALL BE MONOLITHIC. TRANSVERSE WEAKENED PLANE JOINTS SHALL BE INSTALLED AT 10' INTERVALS AND AS DETAILED IN STANDARD DRAWING NO. 233, TYPE "C".
2. A MINIMUM OF ONE SET OF PAVEMENT MARKINGS CONTAINING THE "BUSES ONLY" SYMBOL SHALL BE PLACED IN THE TURN-OUT AREA. EXACT LOCATION TO BE DETERMINED BY THE ENGINEER.
3. ADDITIONAL STORAGE AREA WILL BE REQUIRED WHEN MORE THAN ONE BUS IS EXPECTED TO OCCUPY THE TURN-OUT AT THE SAME TIME.
4. ALTERNATE CONCRETE AND BASE THICKNESS MAY BE SUBSTITUTED, BUT MUST BE SUPPORTED BY ENGINEERING ANALYSIS AND APPROVED BY THE ENGINEER.
5. TURN-OUT SURFACE SHALL BE TEXTURED IN ACCORDANCE WITH UNIFORM STANDARD SPECIFICATION NO. 409.03.08. FLOW LINE SHALL NOT BE TEXTURED, BUT SHALL BE A TROWELED SURFACE.

TYPICAL BUS TURN-OUT

DATE	DWG. NO.
07-01-16	234.1

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

AGENCY APPROVED	B	C	H	L	M	N



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" = 10', "B" = 15' UNLESS BUS TURNOUT IS CONSTRUCTED PER STANDARD DRAWINGS 234.1 OR 234.4, THEN "A" = 5', "B" = 10'.
5. A 5' x 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

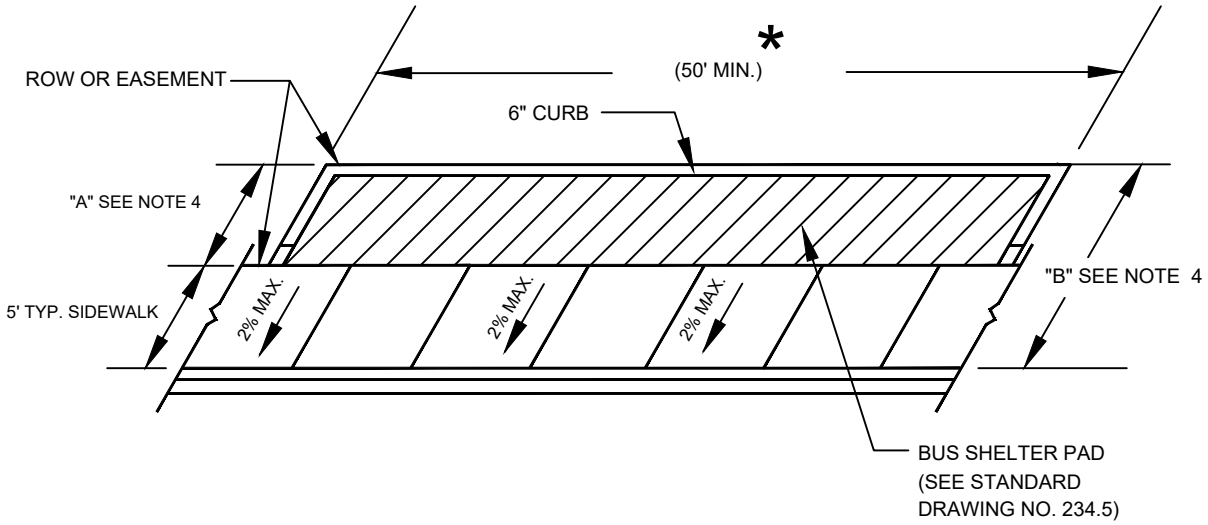
SPECIFICATION REFERENCE	
302	AGGREGATE BASE
501	CONCRETE
502	CONCRETE STRUCTURES

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPICAL BUS STOP PASSENGER LOADING WITH SHELTER PADS

DATE 01-09-20	DWG. NO. 234.2	

Effective 8/10/2023 to 8/07/2024



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" = 10', "B" = 15' UNLESS BUS TURNOUT IS CONSTRUCTED PER STANDARD DRAWINGS 234.1 OR 234.4, THEN "A" = 5', "B" = 10'.
5. A 5' x 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%, 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	
302	AGGREGATE BASE
501	CONCRETE
502	CONCRETE STRUCTURES
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPICAL DOUBLE BUS STOP PASSENGER LOADING WITH SHELTER PADS

DATE 01-09-20 | DWG. NO. 234.3

Effective 8/10/2023 to 8/07/2024

NOTES:

1. IF ARTICULATED BUSES ARE EXPECTED TO SERVICE BUS STOP, DISTANCE FROM END OF ENTRY TAPER TO THE END OF THE BUS STOP LOADING PAD SHALL BE INCREASED TO 70 FT. MIN. AND THE RIGHT TURN STORAGE LANE LENGTH SHALL BE INCREASED TO 120 FT. MIN.
2. WHERE ADDITIONAL MOTORIST GUIDANCE IS DEEMED NECESSARY BY THE ENGINEER, INSTALL ARROW AND "ONLY" SYMBOL PAVEMENT MARKINGS FOR THE LENGTH OF THE STORAGE LINE. SYMBOLS SHALL BE APPROVED TYPE II PAVEMENT MARKING FILM.
3. STORAGE LANE LINE SHALL BE APPROVED TYPE I PAVEMENT MARKING FILM, OR IF APPROVED BY THE ENGINEER, RAISED PAVEMENT MARKERS MAY BE USED.
4. REVERSE CURVE TRANSITION MAY BE USED SUBJECT TO THE APPROVAL OF THE ENGINEER.

AGENCY APPROVED	B	C	H	L	M	N

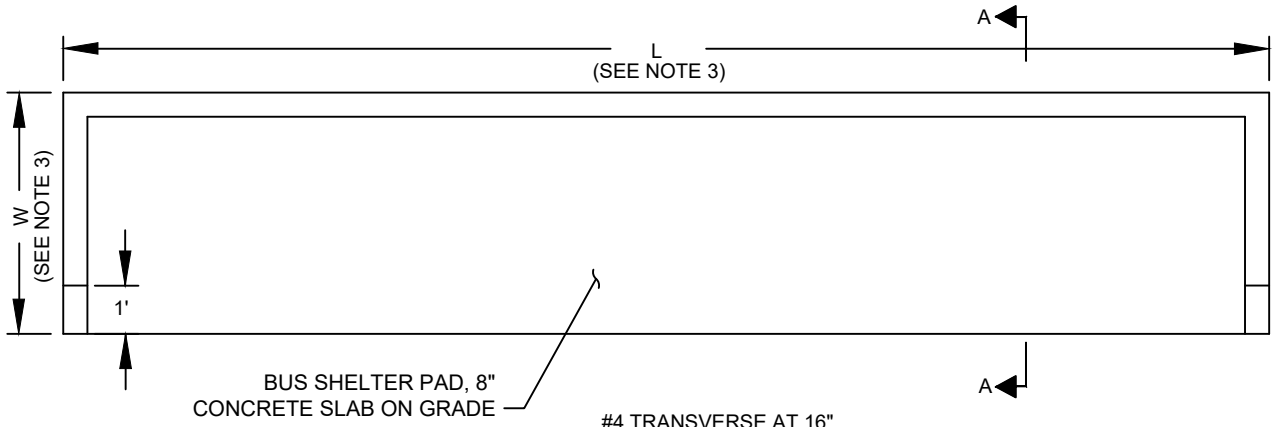
SPECIFICATION REFERENCE	
302	AGGREGATE BASE
501	CONCRETE
502	CONCRETE STRUCTURES
628	PAINTING TRAFFIC STRIPING,
	PAVEMENT MARKINGS
.	

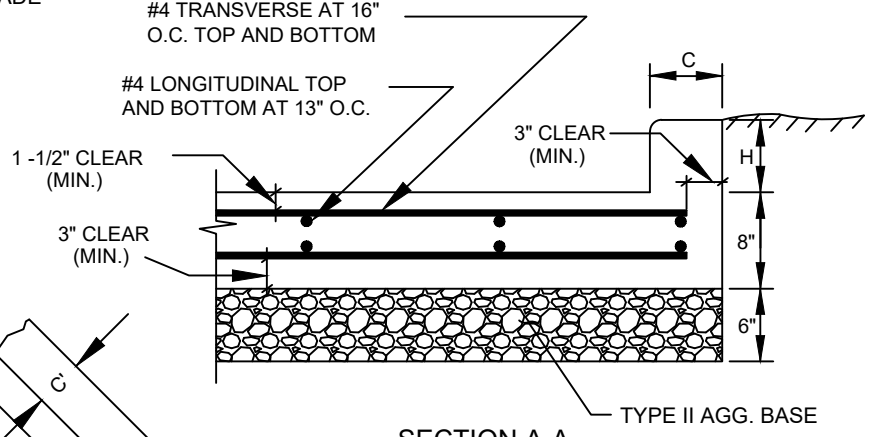
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

BUS STOP PLACEMENT WITHIN EXCLUSIVE RIGHT TURN LANE FOR COMMERCIAL PROPERTIES

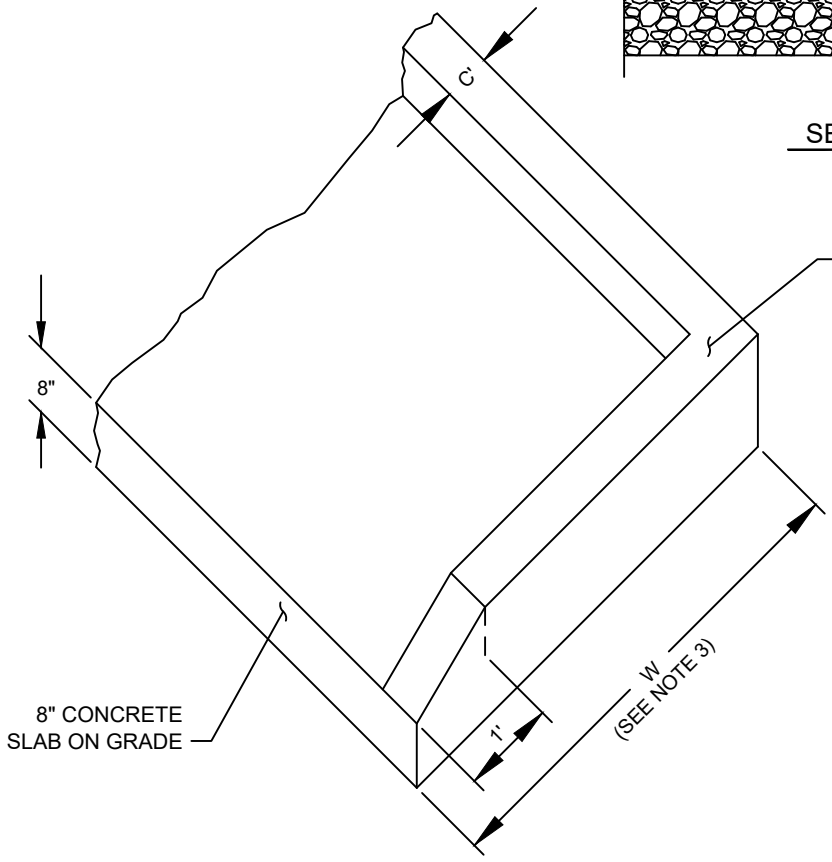
DATE 07-01-16	DWG. NO. 234.4	

Effective 8/10/2023 to 8/07/2024





SECTION A-A



ISOMETRIC

NOTES

1. MINIMUM 28 DAY CONCRETE STRENGTH = 4500 PSI.
2. LAP SPLICES OF REINFORCING STEEL SHALL BE 24". STAGGER LAP SPLICES A MINIMUM OF ONE LAP LENGTH.
3. L, W, H, AND C PER PLAN.
4. 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 GREATER THAN 2%, REGARDLESS OF CONSTRUCTION TOLERANCES.

AGENCY APPROVED	B	C	H	L	M	N	R

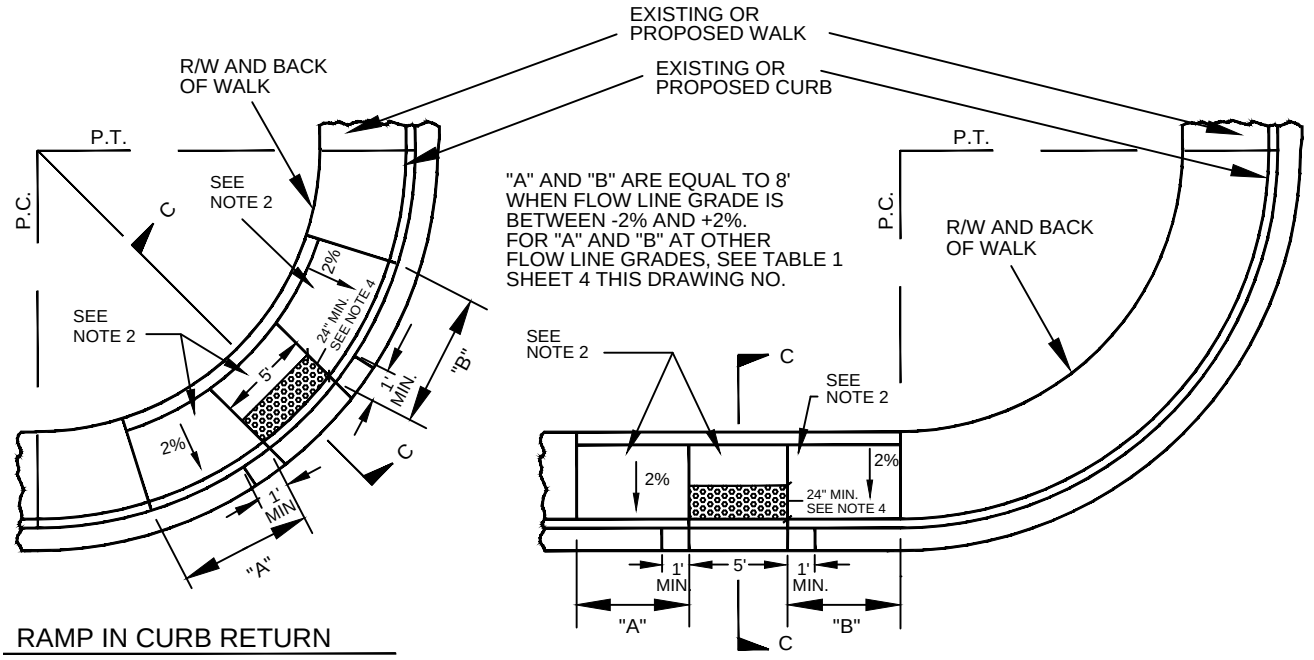
SPECIFICATION REFERENCE	
302	AGGREGATE BASE
501	CONCRETE
502	CONCRETE STRUCTURES

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

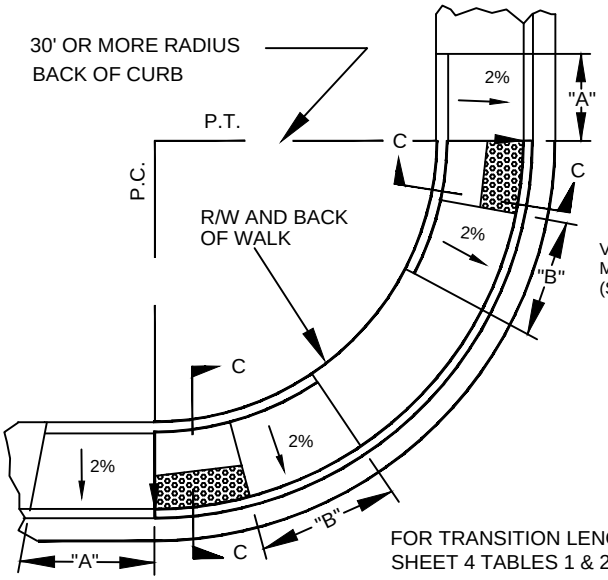
BUS SHELTER PAD DETAILS AND NOTES

DATE 01-09-20	DWG. NO. 234.5	

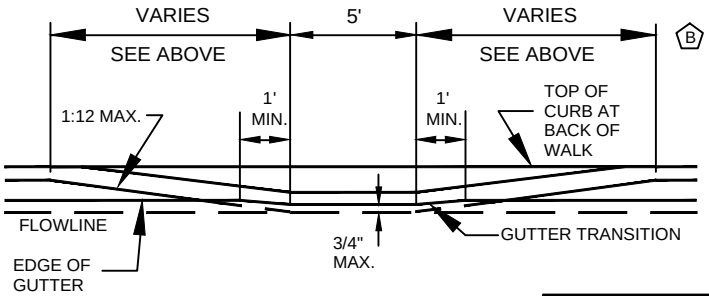
Effective 8/10/2023 to 8/07/2024



RAMP IN CURB RETURN

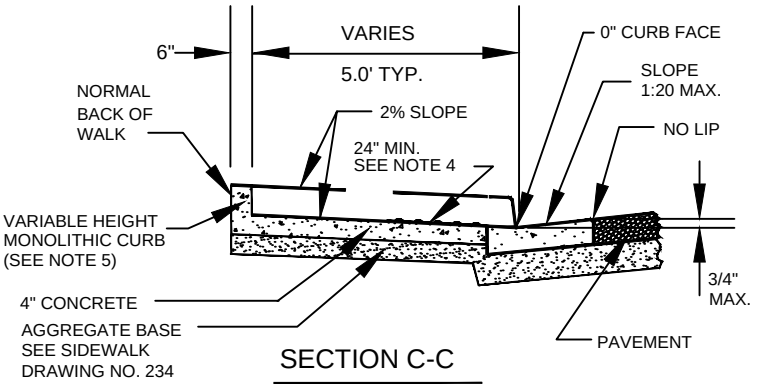


PAIRED RAMP IN CURB RETURN



PROFILE

RAMP OUTSIDE CURB RETURN



SECTION C-C

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. PAVER BLOCKS 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.

AGENCY APPROVED	B	C	H	L	M	N

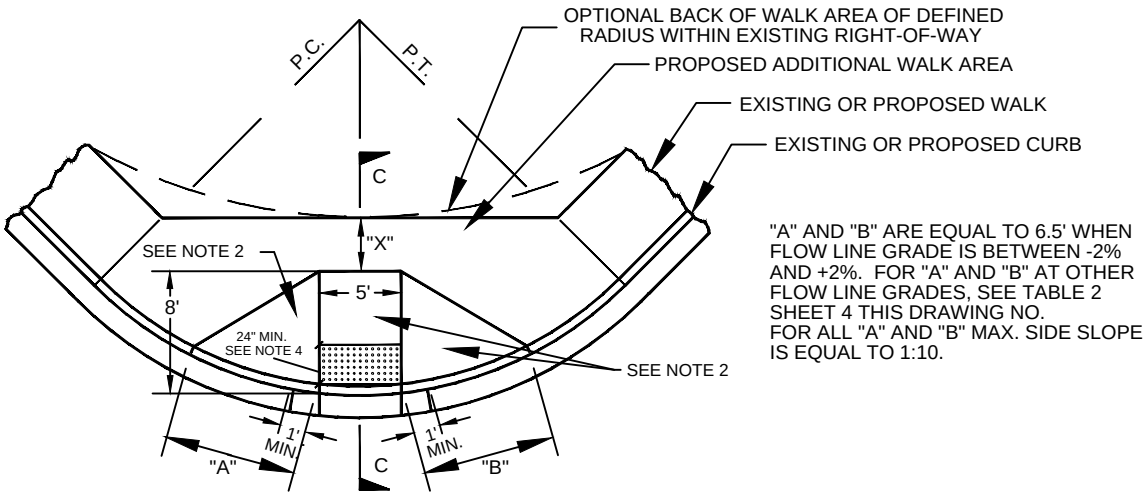
SPECIFICATION REFERENCE	
302	AGGREGATE BASE
501	CONCRETE
502	CONCRETE STRUCTURES
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SIDEWALK RAMP
CASE I

DATE 11-8-07	DWG. NO. 235	SHEET 1 OF 4

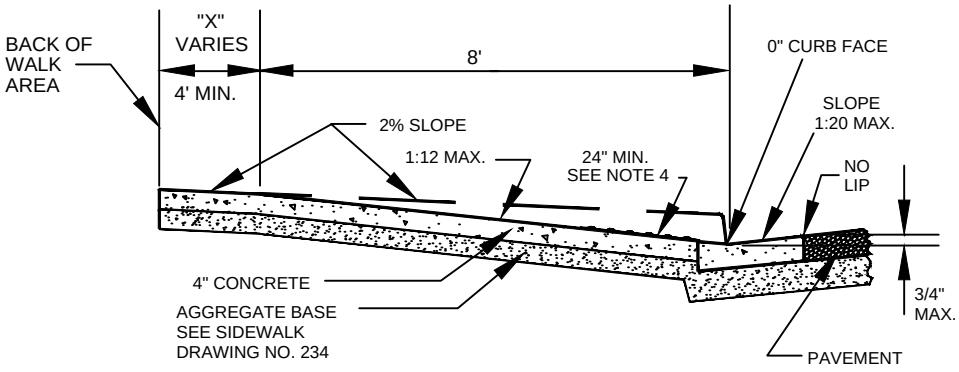
Effective 8/10/2023 to 8/07/2024



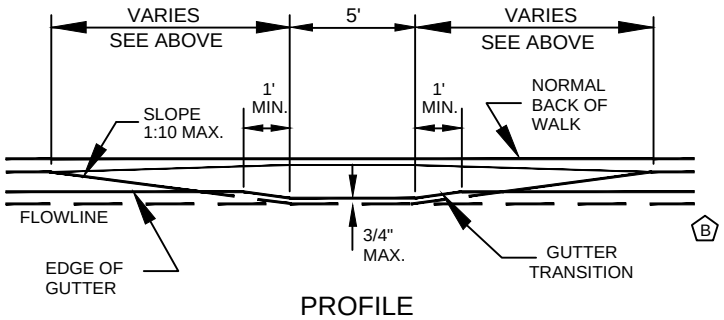
"A" AND "B" ARE EQUAL TO 6.5' WHEN FLOW LINE GRADE IS BETWEEN -2% AND +2%. FOR "A" AND "B" AT OTHER FLOW LINE GRADES, SEE TABLE 2 SHEET 4 THIS DRAWING NO.
FOR ALL "A" AND "B" MAX. SIDE SLOPE IS EQUAL TO 1:10.

RAMP IN CURB RETURN

(NO BACK OF WALK DEPRESSION)



SECTION C-C



PROFILE

NOTES:

1. SIDEWALK RAMP WITHIN CURB RETURN SHALL BE L0CATED 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 & 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. PAVER BLOCKS PERMITTED ONLY IN THE CITY OF BOULDER CITY FOR DETECTABLE WARNING AREAS.

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

AGENCY APPROVED	B	C	H	L	M	N

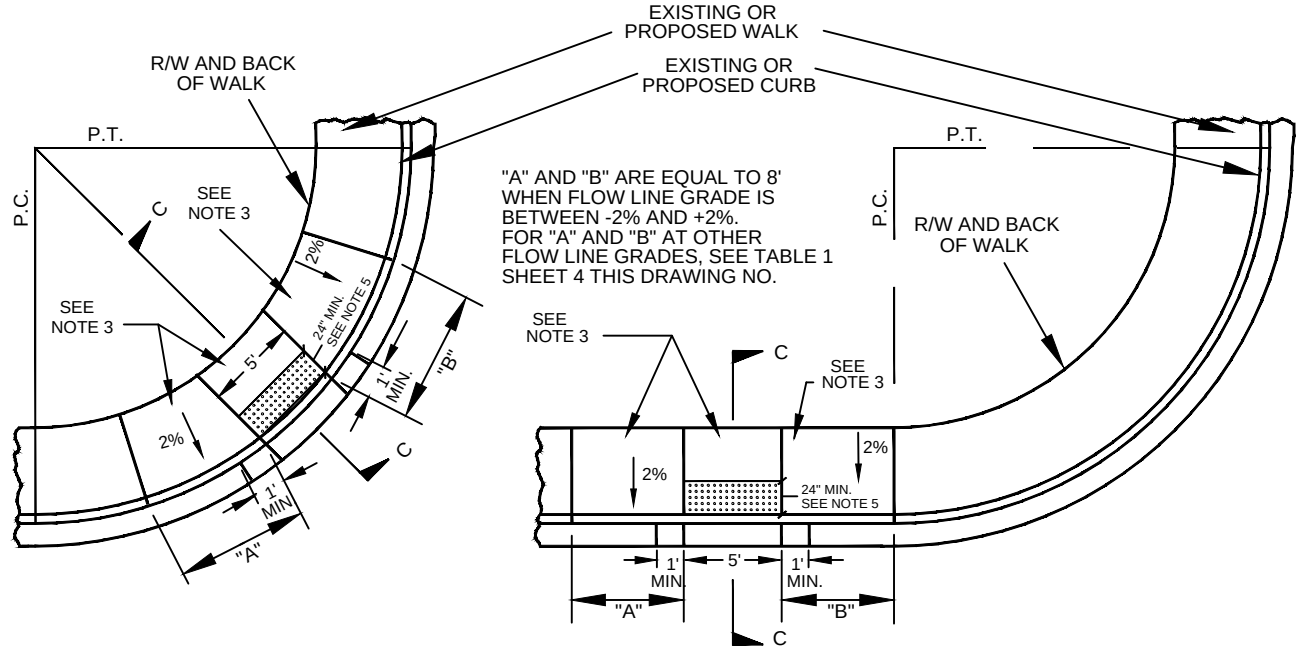
SPECIFICATION REFERENCE	
302	AGGREGATE BASE
501	CONCRETE
502	CONCRETE STRUCTURES
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SIDEWALK RAMP
CASE II

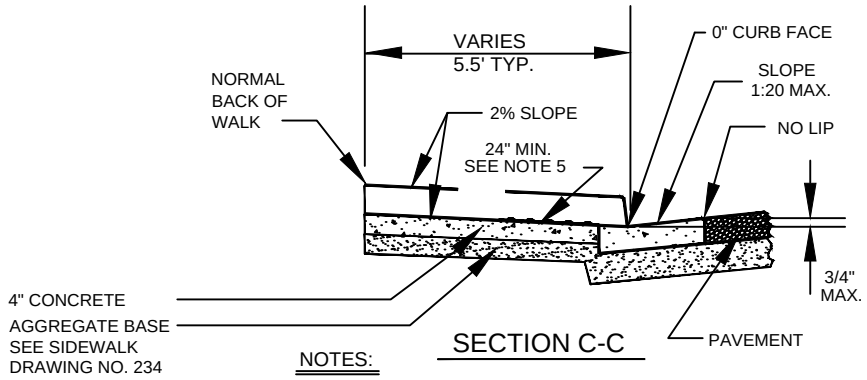
DATE 11-10-04	DWG. NO. 235	SHEET 2 OF 4

Effective 8/10/2023 to 8/07/2024

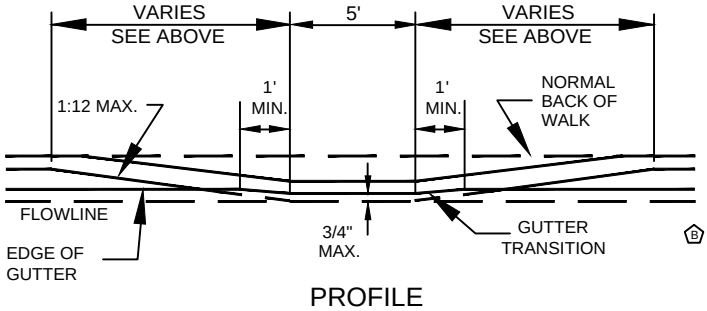


RAMP IN CURB RETURN

RAMP OUTSIDE CURB RETURN



SECTION C-C



PROFILE

NOTES:

1. SIDEWALK RAMP WITHIN CURB RETURN SHALL BE L0CATED 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. (B) 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.

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

AGENCY APPROVED	(B)	C	H	L	M	N

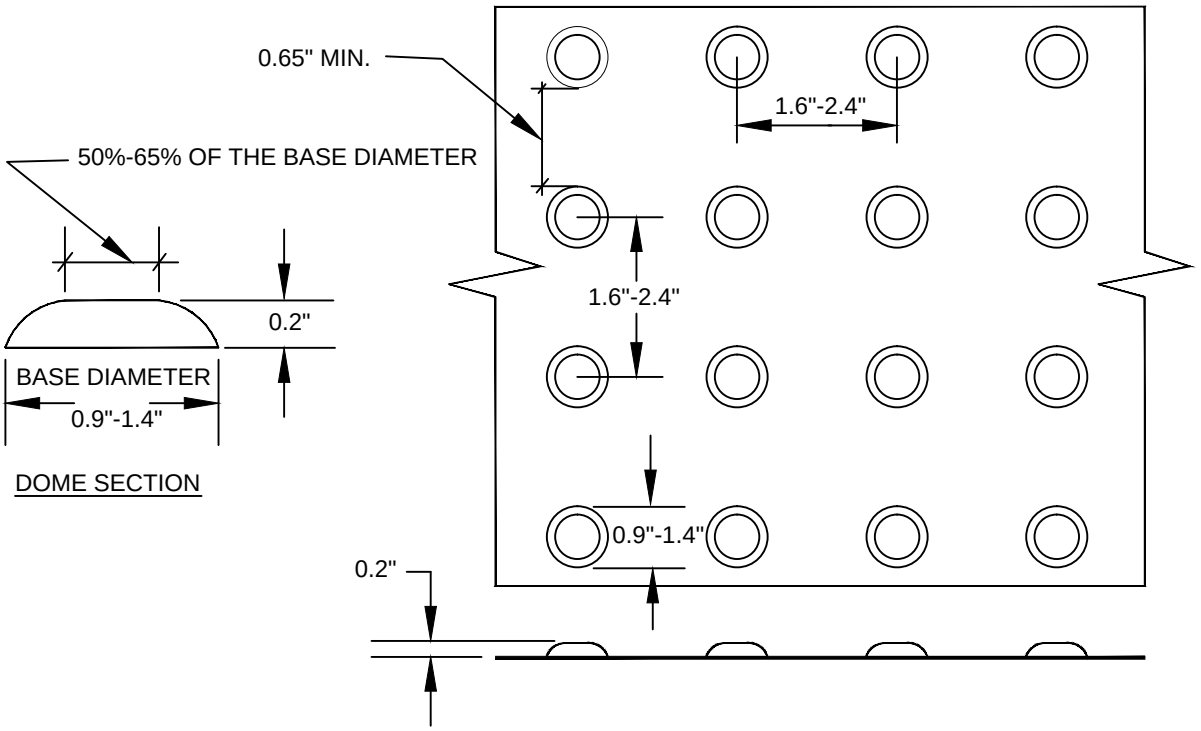
SPECIFICATION REFERENCE	
302	AGGREGATE BASE
501	CONCRETE
502	CONCRETE STRUCTURES
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SIDEWALK RAMP
CASE III

DATE 11-10-04	DWG. NO. 235	SHEET 3 OF 4

Effective 8/10/2023 to 8/07/2024



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.

AGENCY APPROVED	B	C	H	L	M	N

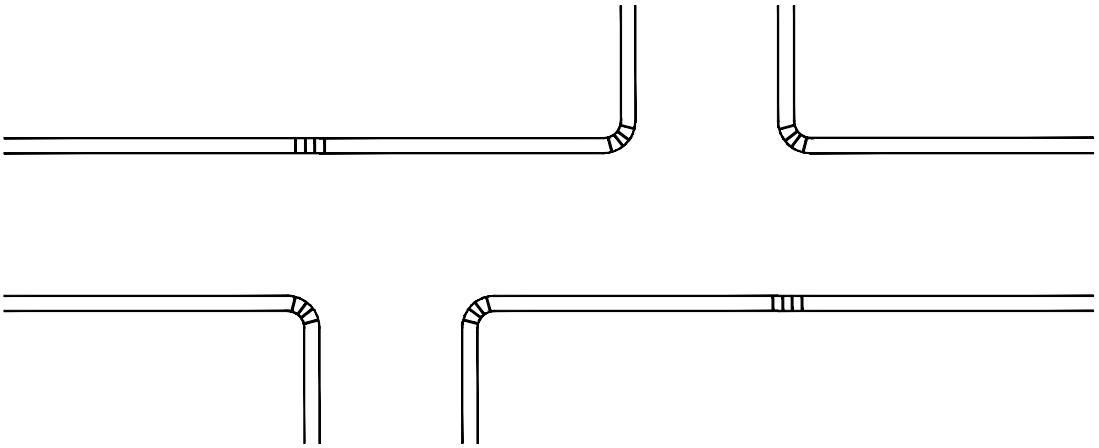
SPECIFICATION REFERENCE	
302	AGGREGATE BASE
501	CONCRETE
502	CONCRETE STRUCTURES
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

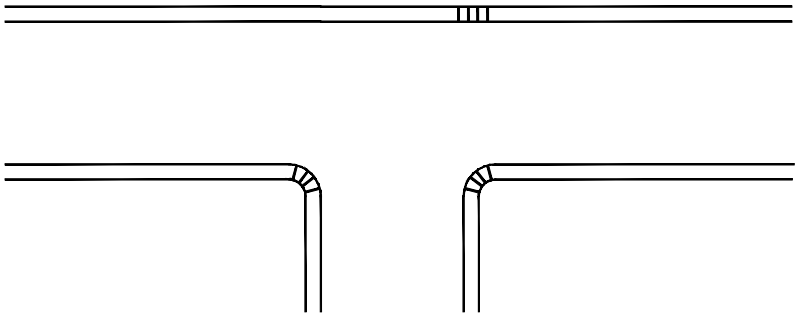
SIDEWALK RAMP DETAILS

DATE 6-8-06	DWG. NO. 235	SHEET 4 OF 4

Effective 8/10/2023 to 8/07/2024



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

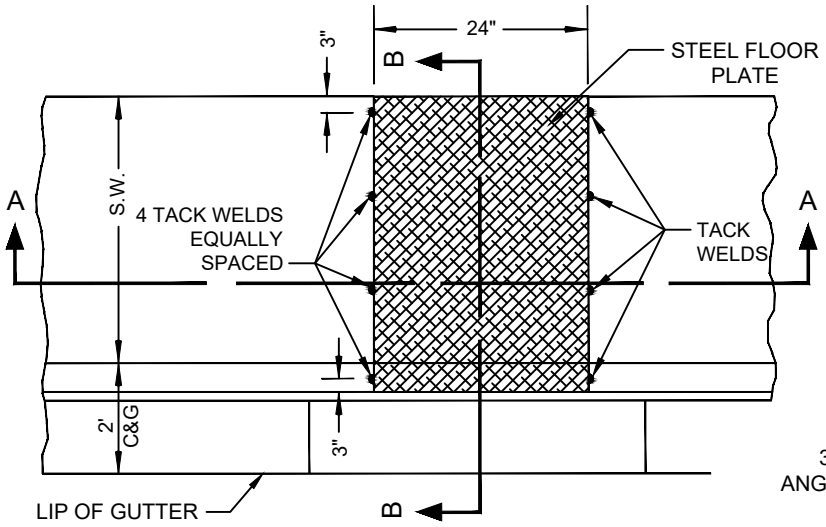
SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

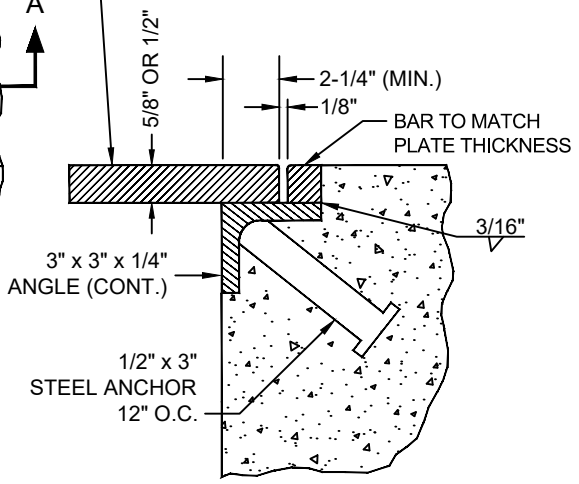
SIDEWALK RAMP LOCATION "T" INTERSECTIONS

DATE 6-13-96	DWG. NO. 235.1	

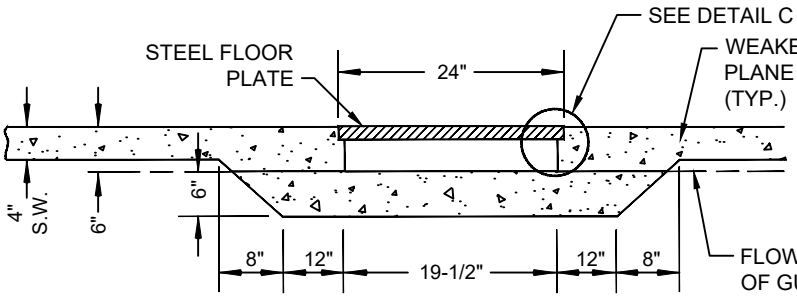
Effective 8/10/2023 to 8/07/2024



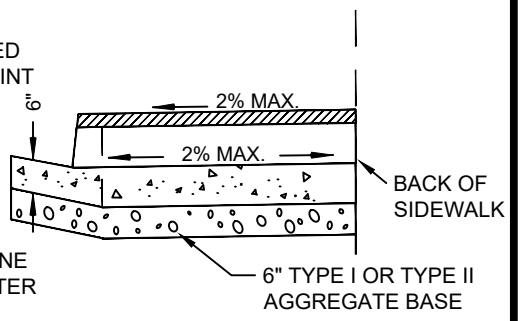
PLAN



DETAIL C



SECTION A-A



SECTION B-B

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

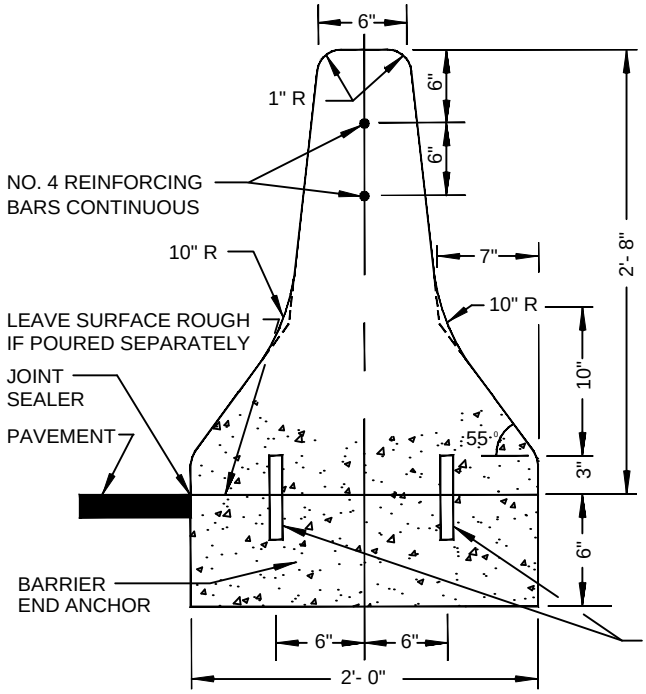
SPECIFICATION REFERENCE	
302	BASE AGGREGATES
501	CONCRETE
710	STRUCTURAL STEEL
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

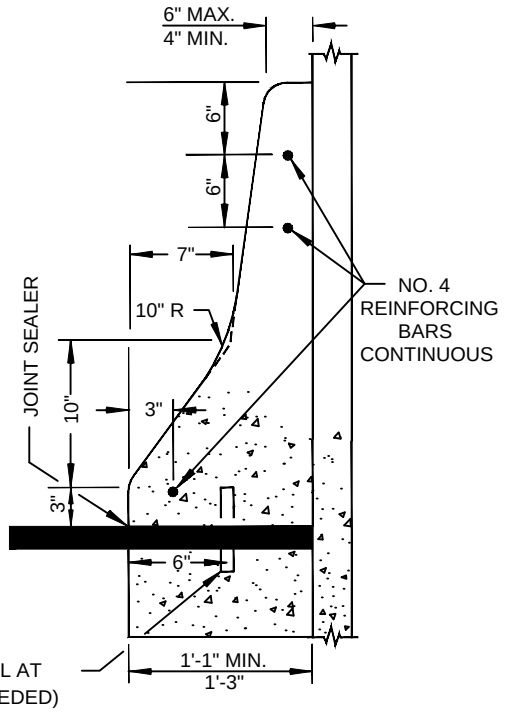
SIDEWALK DRAIN

DATE 08-10-23	DWG. NO. 236	

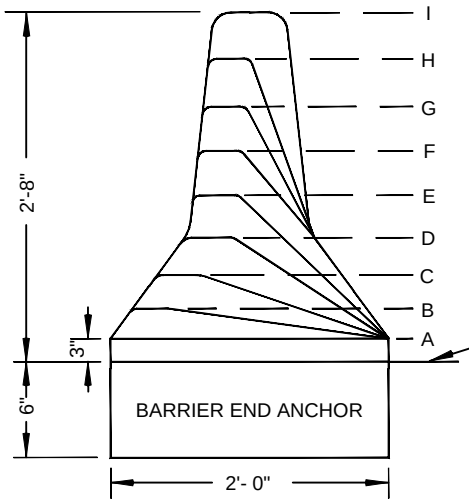
Effective 8/10/2023 to 8/07/2024



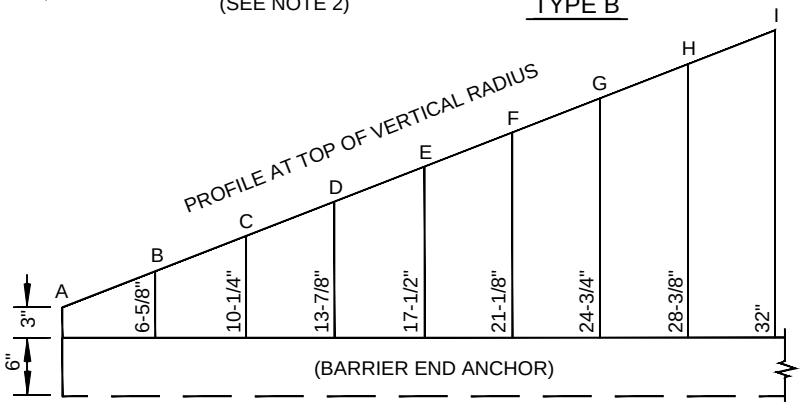
TYPE A



TYPE B



TRANSITION DETAIL



TRANSITION OF END OF BARRIER

TO BE USED ONLY IF END IS FLARED

CONCRETE BARRIER RAIL
FLARE RATES

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

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

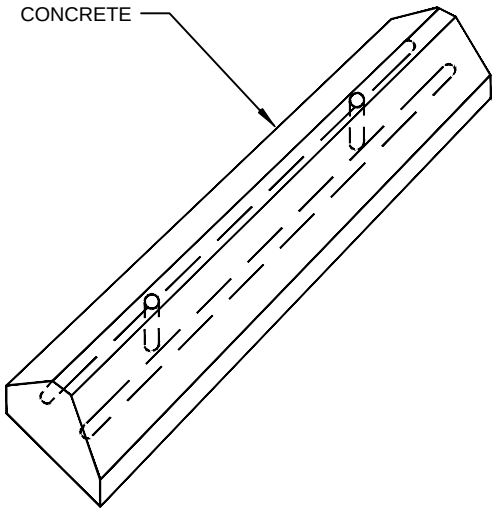
SPECIFICATION REFERENCE	
501	CONCRETE
502	CONCRETE STRUCTURES
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

CONCRETE BARRIER RAIL

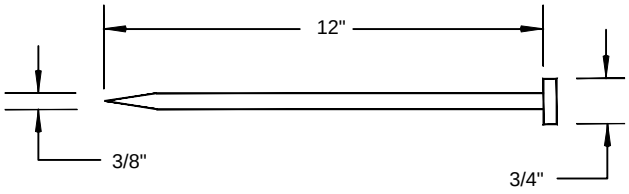
DATE 12-14-00	DWG. NO. 237	

Effective 8/10/2023 to 8/07/2024

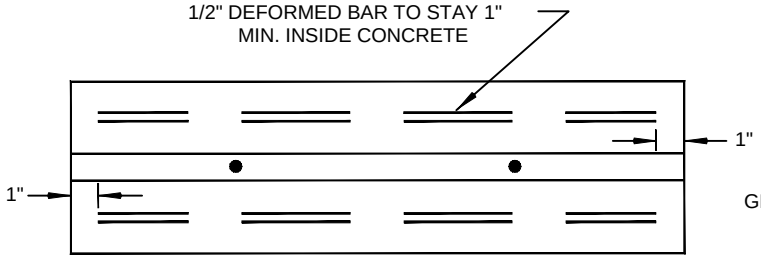


NOTES:

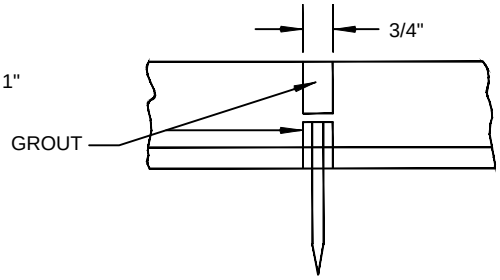
1. PRECAST BUMPER BLOCK TO BE USED IN PARKING LOTS ONLY.
2. GROUT HOLE BEFORE DRIVING SPIKE. AFTER DRIVING SPIKE, FILL HOLE WITH CONCRETE MORTAR AND FINISH FLUSH WITH TOP.



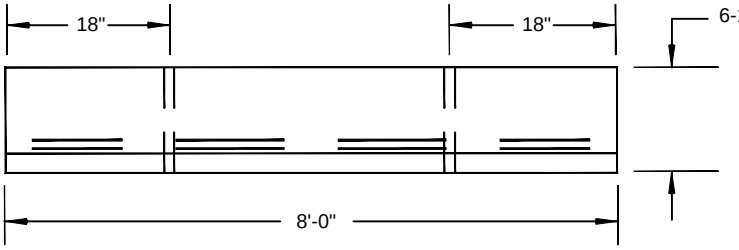
STEEL WIRE BRIDGE SPIKE



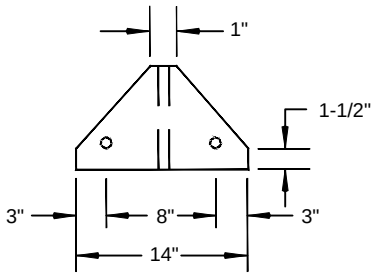
TOP VIEW



HOLE DETAIL



SIDE VIEW



END VIEW

AGENCY APPROVED	B	C	H	L	M	N

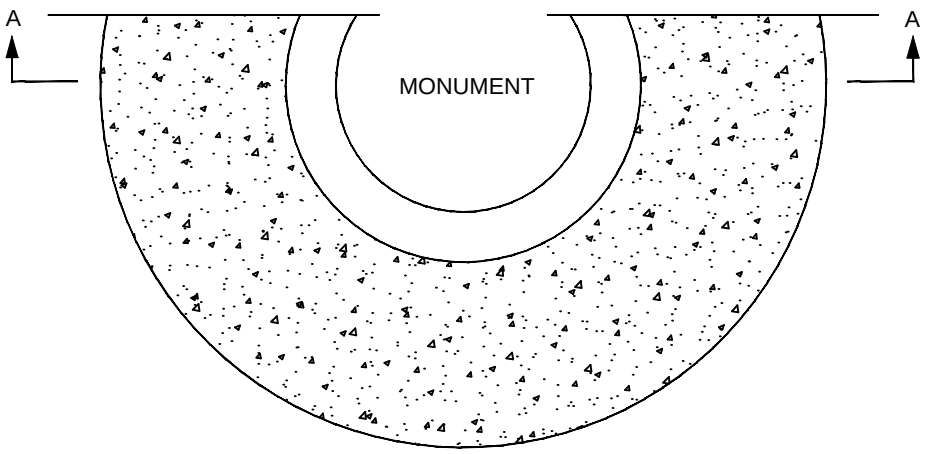
SPECIFICATION REFERENCE	
501	CONCRETE
505	REINFORCING STEEL
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

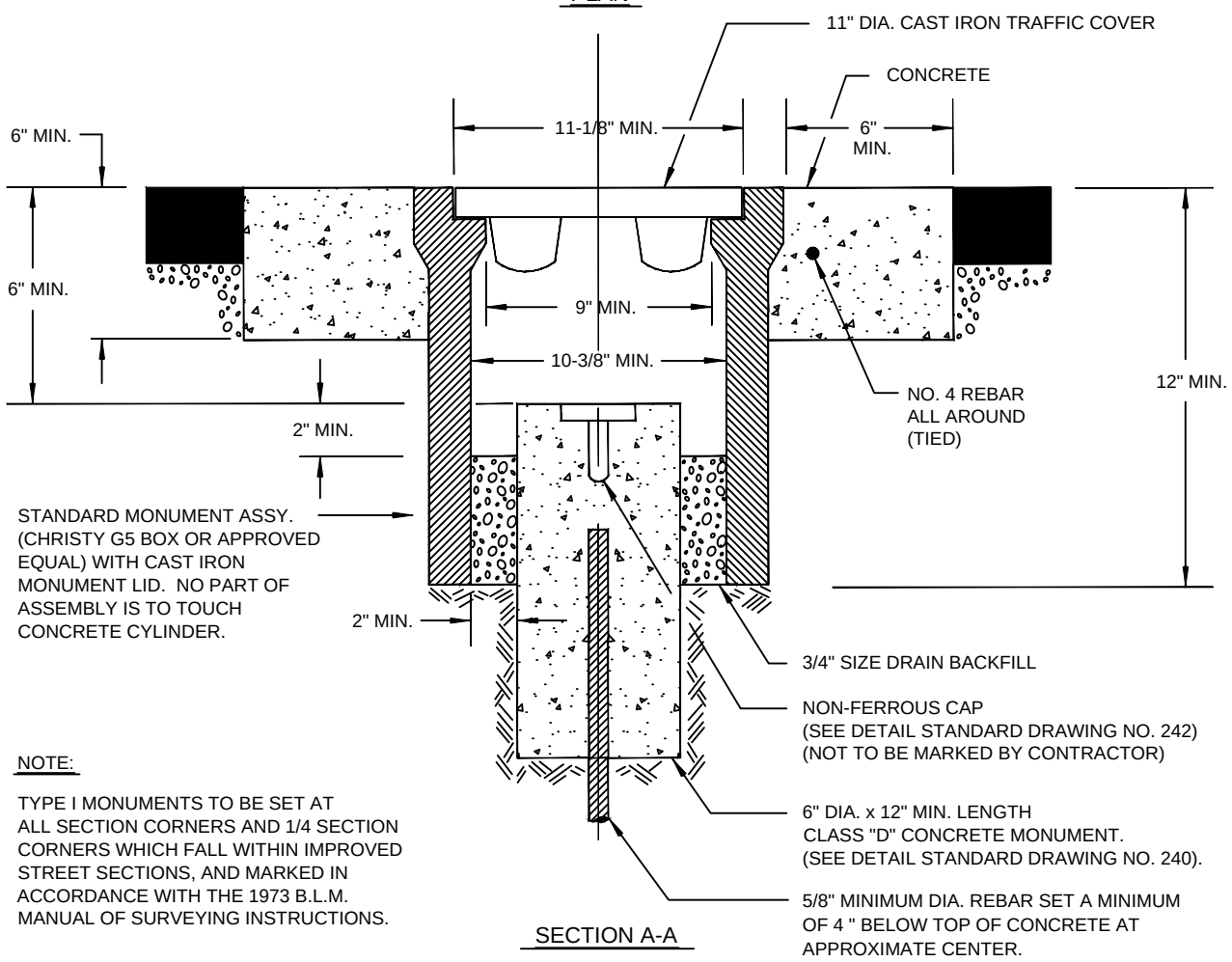
PRECAST BUMPER BLOCK

DATE 12-14-00	DWG. NO. 238	

Effective 8/10/2023 to 8/07/2024



PLAN



SECTION A-A

NOTE:

TYPE I MONUMENTS TO BE SET AT ALL SECTION CORNERS AND 1/4 SECTION CORNERS WHICH FALL WITHIN IMPROVED STREET SECTIONS, AND MARKED IN ACCORDANCE WITH THE 1973 B.L.M. MANUAL OF SURVEYING INSTRUCTIONS.

AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	
501	CONCRETE
621	MONUMENTS
704	BASE AGGREGATE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

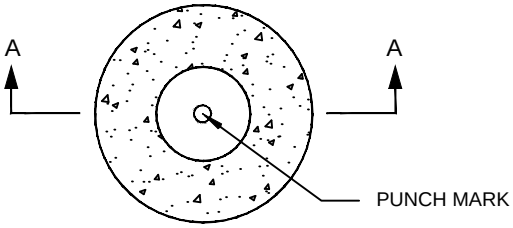
TYPE I MONUMENT

DATE 12-14-00	DWG. NO. 239	

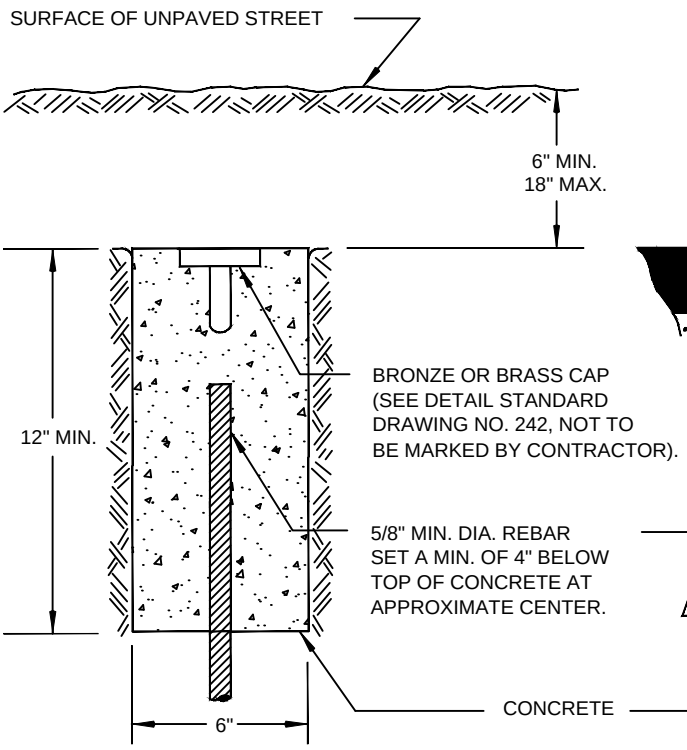
Effective 8/10/2023 to 8/07/2024

NOTES:

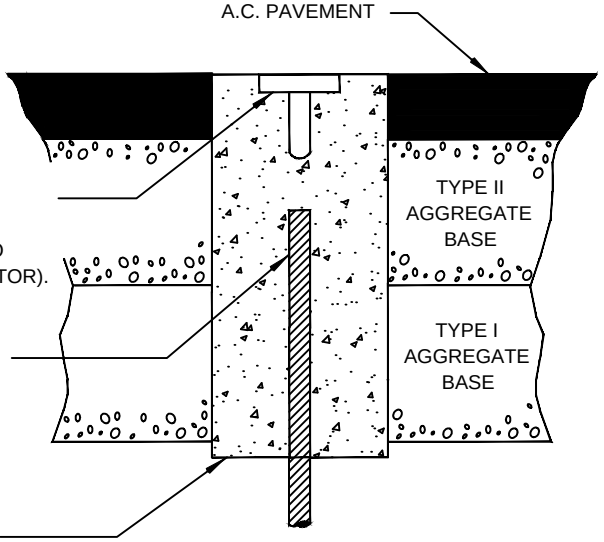
1. TYPE II-A MONUMENTS TO BE SET AT ALL SECTION CORNERS, 1/4 SECTION CORNERS AND 1/16 SECTION CORNERS WHICH FALL WITHIN UNIMPROVED STREET SECTIONS.
2. TYPE II-B MONUMENTS TO BE SET AT ALL 1/16 SECTION CORNERS WHICH FALL WITHIN IMPROVED STREET SECTIONS.
3. ALL TYPE II MONUMENTS ARE TO BE MARKED IN ACCORDANCE WITH THE 1973 B.L.M. MANUAL OF SURVEYING INSTRUCTIONS.
4. 6" x 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.



PLAN



SECTION A-A
TYPE II-A
UNPAVED STREET



SECTION A-A
TYPE II-B
PAVED STREET

AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	
501	CONCRETE
621	MONUMENTS
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPE II MONUMENT

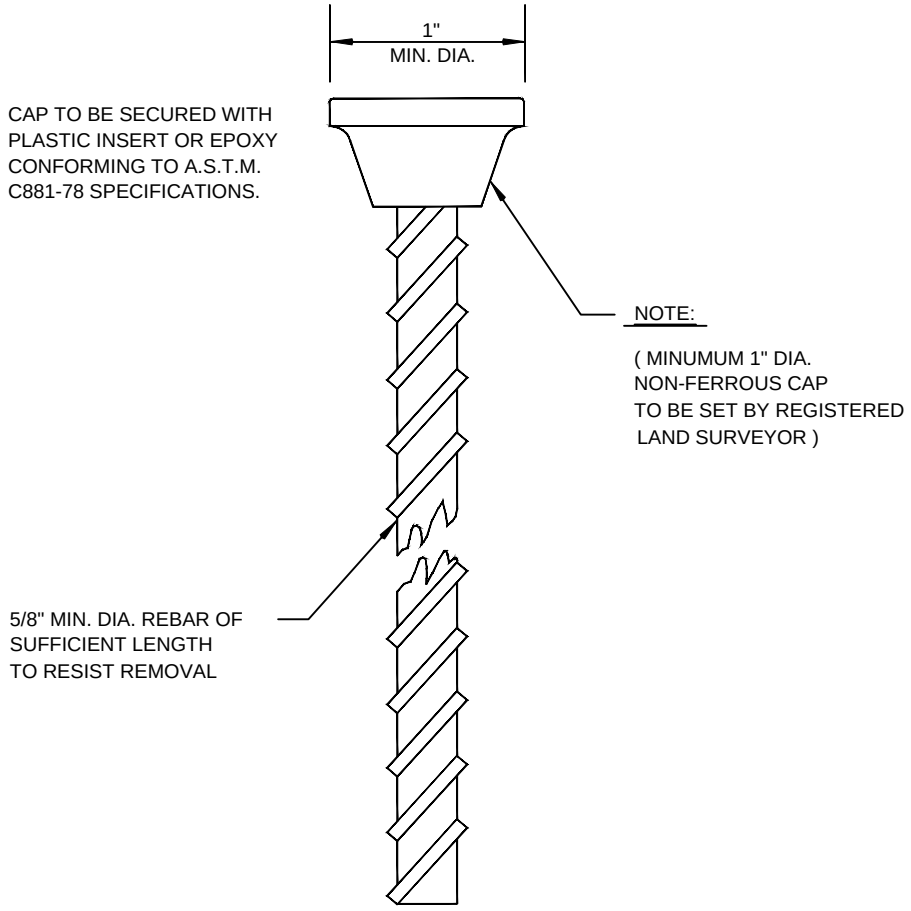
DATE 12-14-00	DWG. NO. 240	

Effective 8/10/2023 to 8/07/2024

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

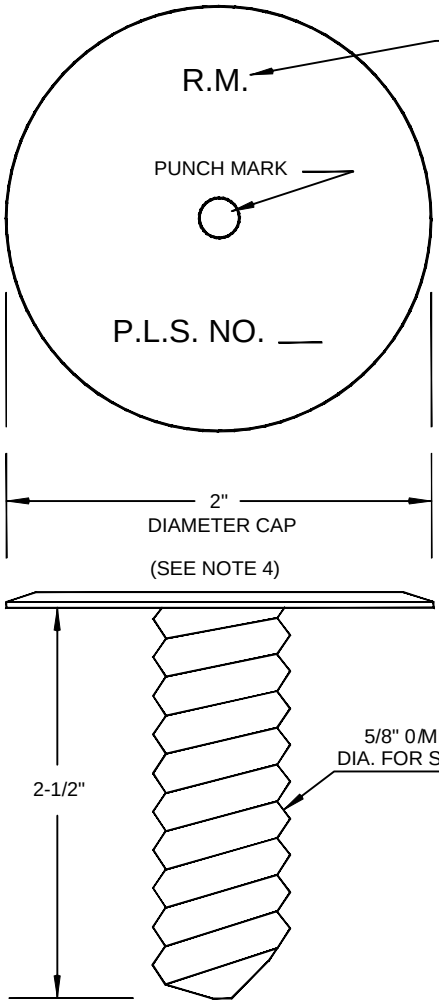
SPECIFICATION REFERENCE	
621	MONUMENTS
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPE III MONUMENT

DATE	DWG. NO. 241	

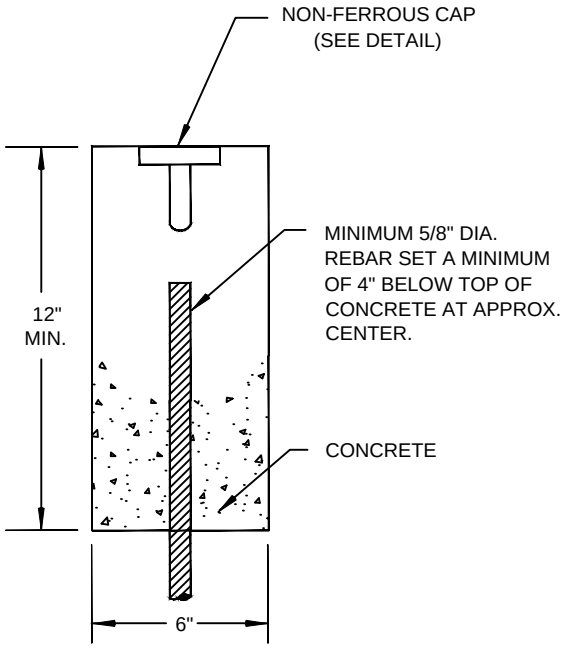
Effective 8/10/2023 to 8/07/2024



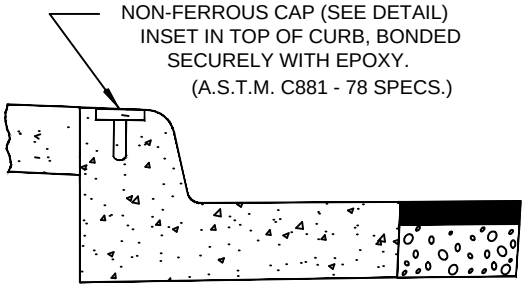
DETAIL
STANDARD CAP

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".



TYPE IV-B MONUMENT
NO CURB & GUTTER



TYPE IV-A MONUMENT
EXISTING CURB & GUTTER

AGENCY APPROVED	B	C	H	L	M	N

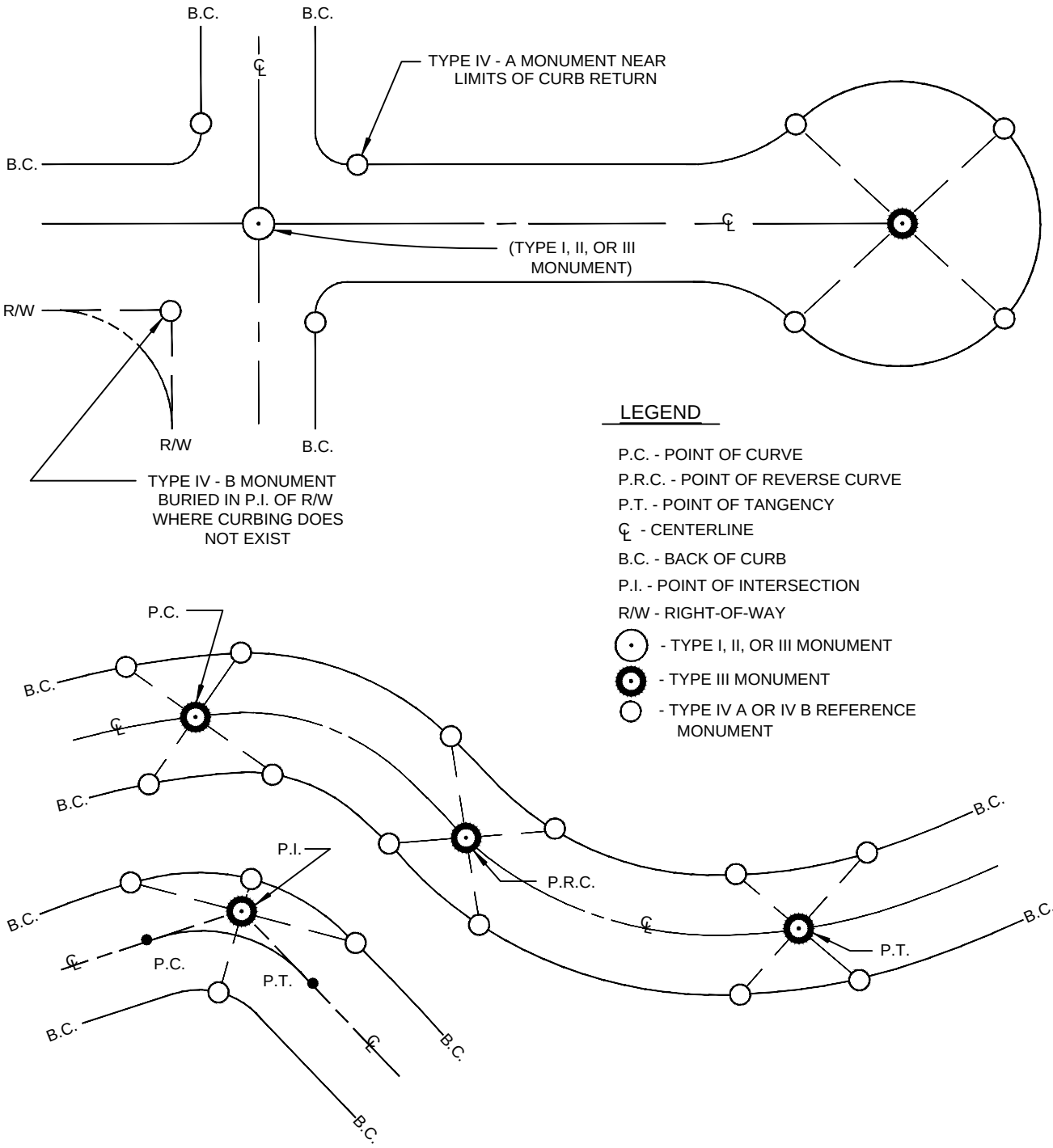
SPECIFICATION REFERENCE	
501	CONCRETE
621	MONUMENTS

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPE IV MONUMENT

DATE 12-14-00	DWG. NO. 242	

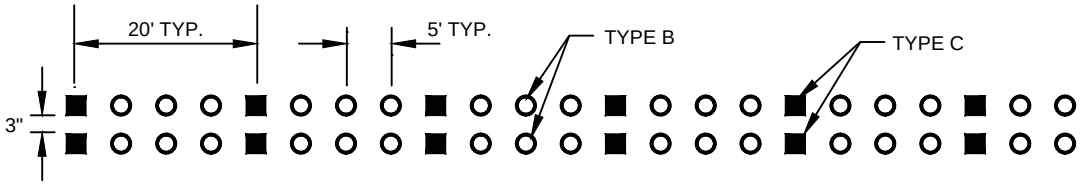
Effective 8/10/2023 to 8/07/2024



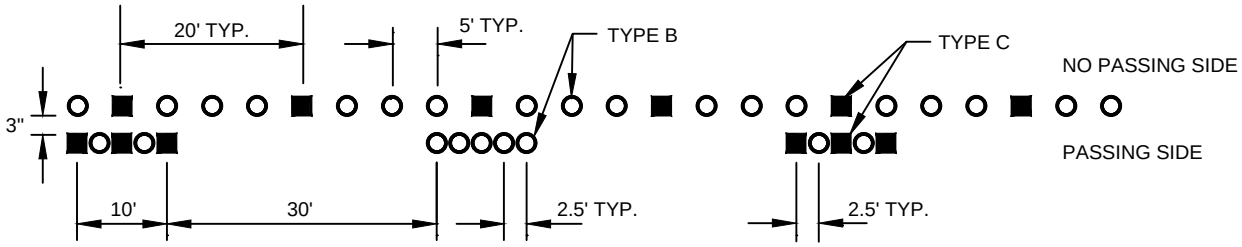
AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	TYPICAL MONUMENT LOCATION
DATE	DWG. NO. 243

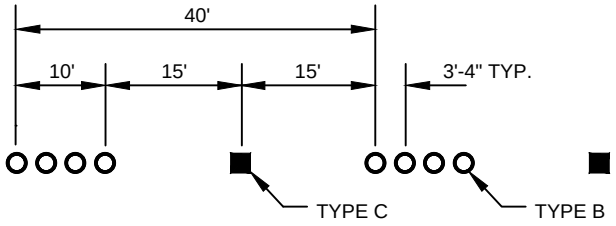
Effective 8/10/2023 to 8/07/2024



TYPE 1 CENTERLINE



TYPE 2 CENTERLINE



TYPE 3 CENTERLINE

AGENCY APPROVED	B	C	H	L	M	N

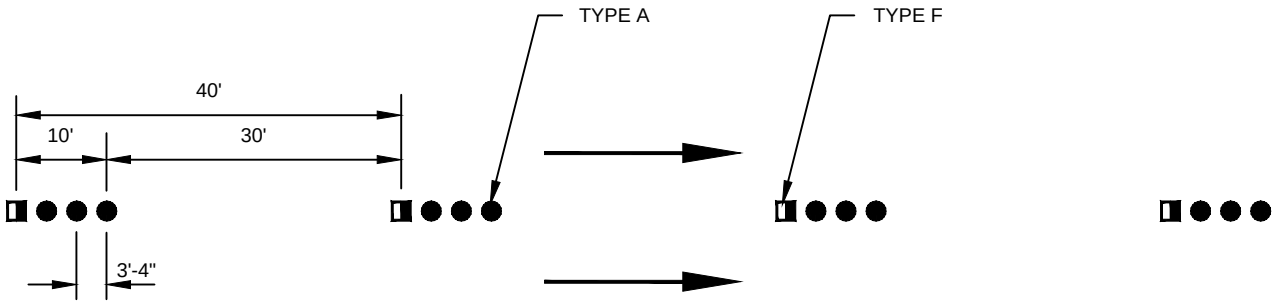
SPECIFICATION REFERENCE	
633	PAVEMENT MARKERS
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPICAL CENTERLINE DELINEATION

DATE 6-11-93	DWG. NO. 244	

Effective 8/10/2023 to 8/07/2024



TYPE 4 LANE LINE

(DIVIDED, UNDIVIDED OR ONE-WAY ROADWAY)

AGENCY APPROVED	B	C	H	L	M	N

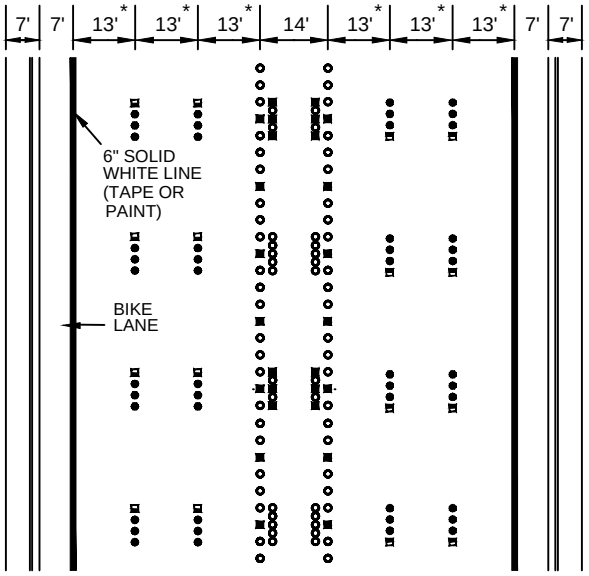
SPECIFICATION REFERENCE	
633	PAVEMENT MARKERS
-	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

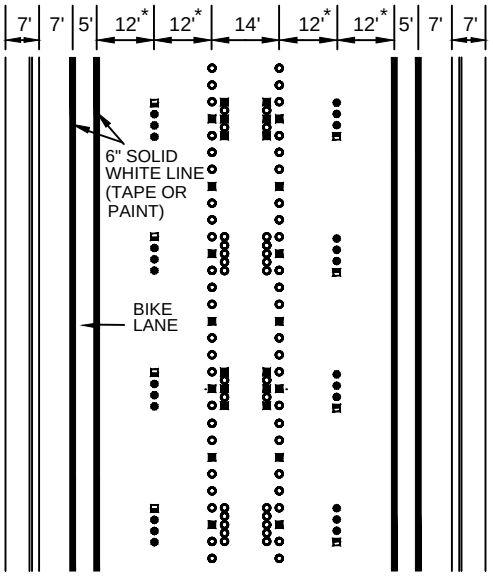
TYPICAL LANE LINE
DELINEATION

DATE 4-8-99	DWG. NO. 244.1	

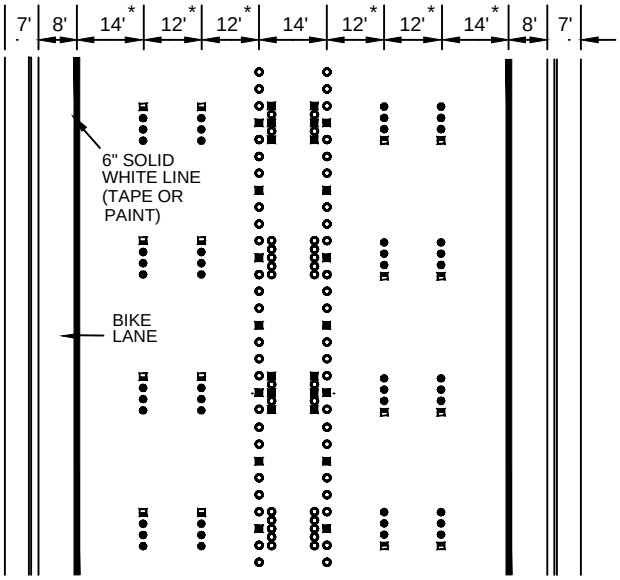
Effective 8/10/2023 to 8/07/2024



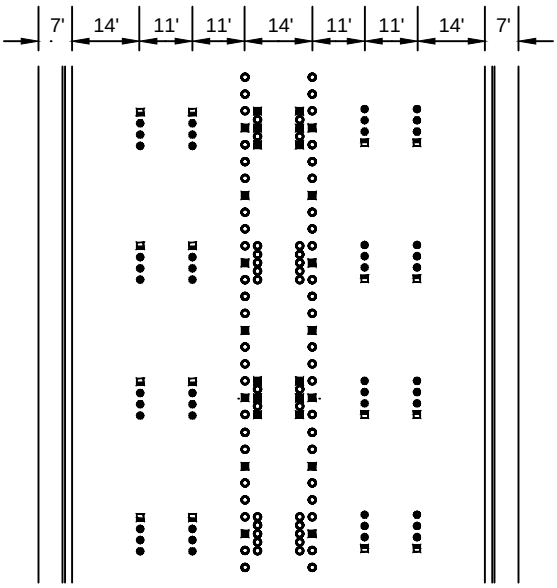
120 FT. STREET WITH BIKE LANE
(WITHOUT PARKING)



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)

* 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.

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.

AGENCY APPROVED	B	C	H	L	M	N

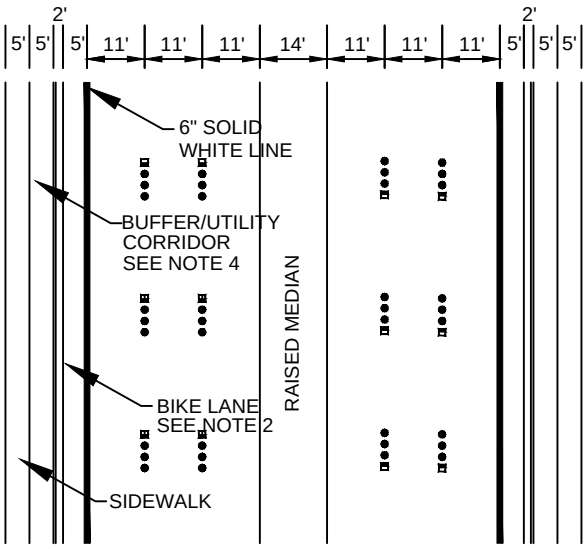
SPECIFICATION REFERENCE	
628	PAINTING TRAFFIC STRIPING
633	PAVEMENT MARKERS
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

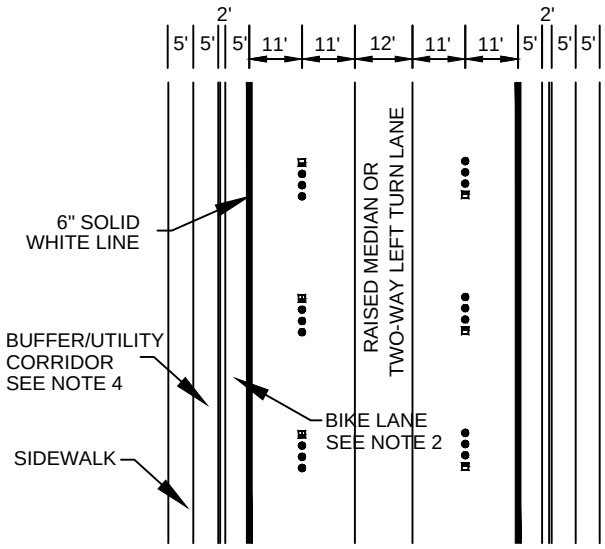
TYPICAL DELINEATION FOR ROADWAYS 100 FT. OR GREATER RIGHT-OF-WAY WITH CURBSIDE SIDEWALK

DATE 7-10-03	DWG. NO. 244.2	

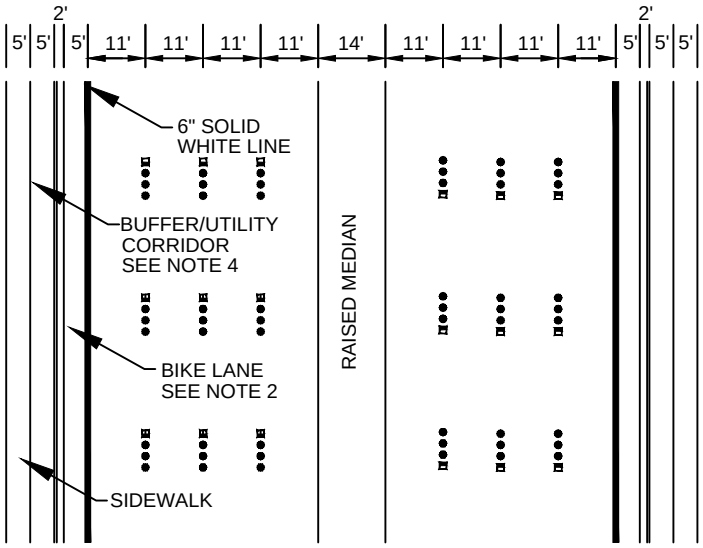
Effective 8/10/2023 to 8/07/2024



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

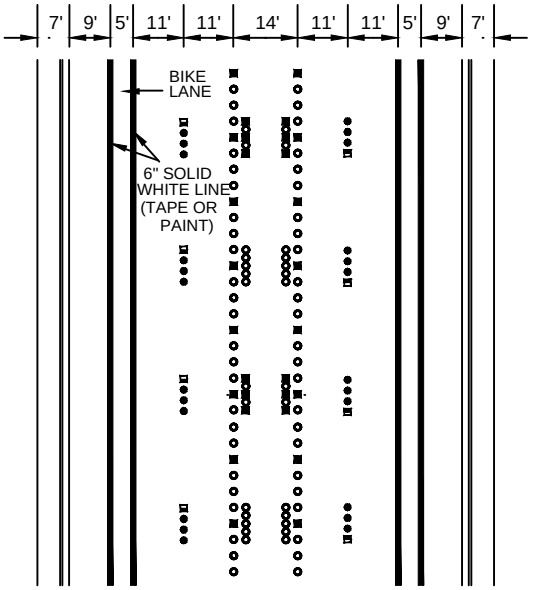
SPECIFICATION REFERENCE	
628	PAINTING TRAFFIC STRIPING
633	PAVEMENT MARKERS
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

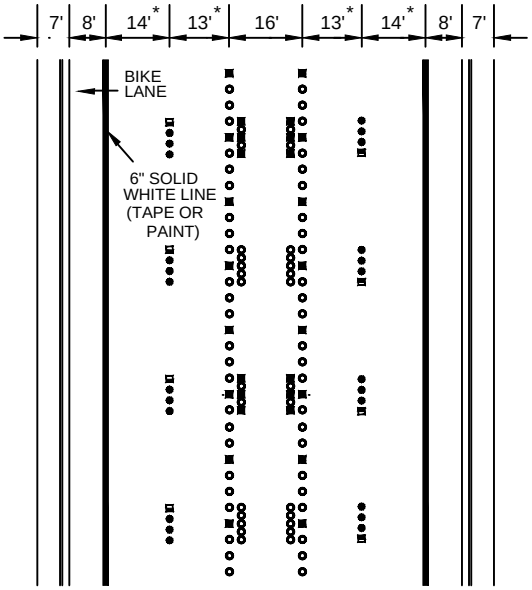
TYPICAL DELINEATION FOR ALTERNATE ROADWAYS WITH OFFSET SIDEWALK

DATE 7-10-03 | DWG. NO. 244.3

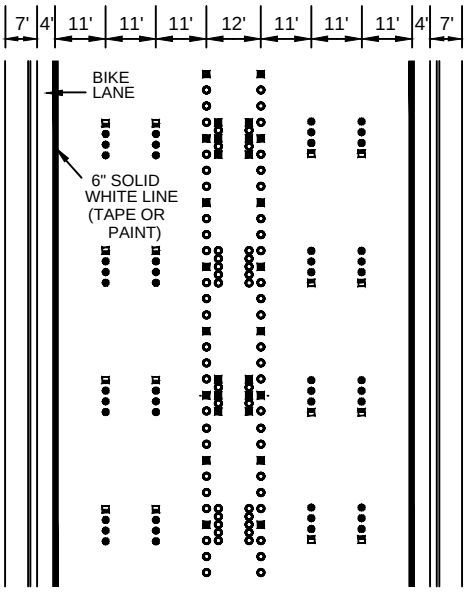
Effective 8/10/2023 to 8/07/2024



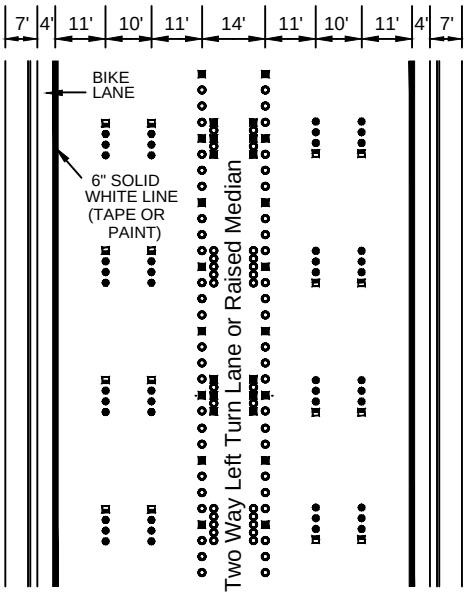
100 FT. STREET WITH BIKE LANE
(WITH PARKING/EMERGENCY LANE)



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

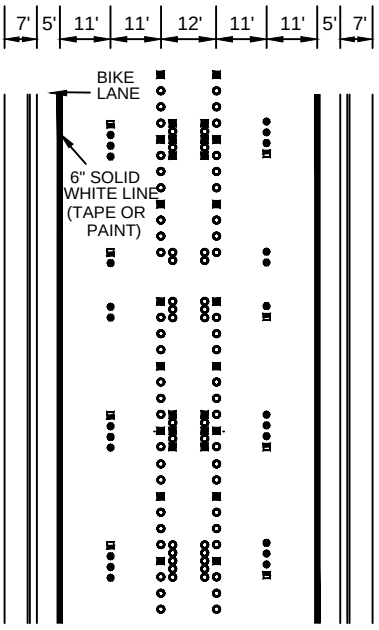
SPECIFICATION REFERENCE	
628	PAINTING TRAFFIC STRIPING
401	PAVEMENT MARKERS
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

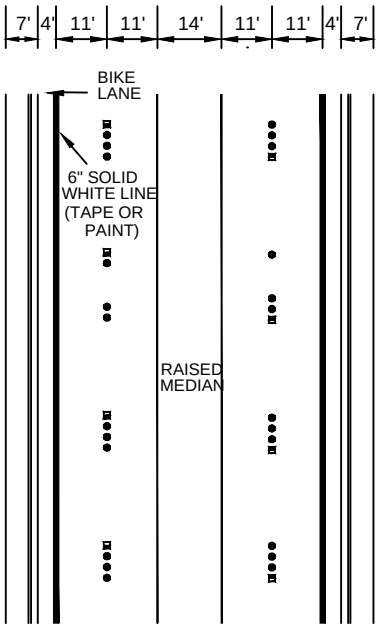
TYPICAL DELINEATION FOR ROADWAYS 100 FT. RIGHT-OF-WAY WITH CURBSIDE SIDEWALK

DATE 3-9-06	DWG. NO. 244.4	

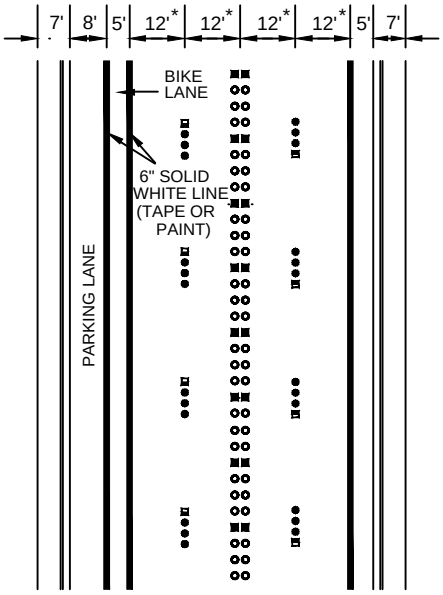
Effective 8/10/2023 to 8/07/2024



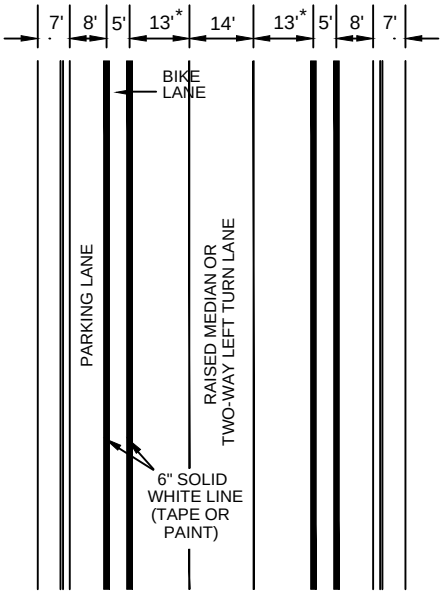
80 FT. STREET WITH BIKE LANE
(WITHOUT PARKING/EMERGENCY LANE)



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)

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

NOTES:

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

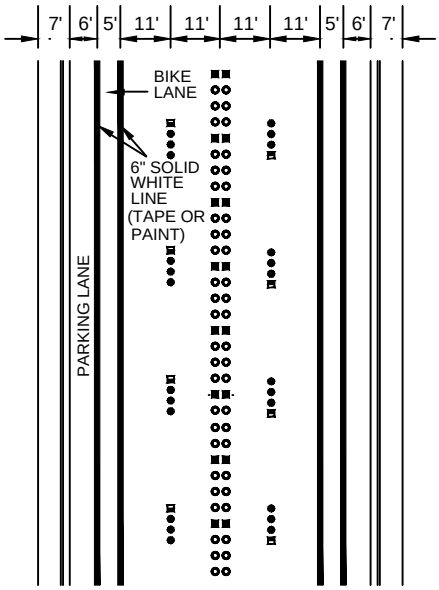
SPECIFICATION REFERENCE	
628	PAINTING TRAFFIC STRIPING
633	PAVEMENT MARKERS
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

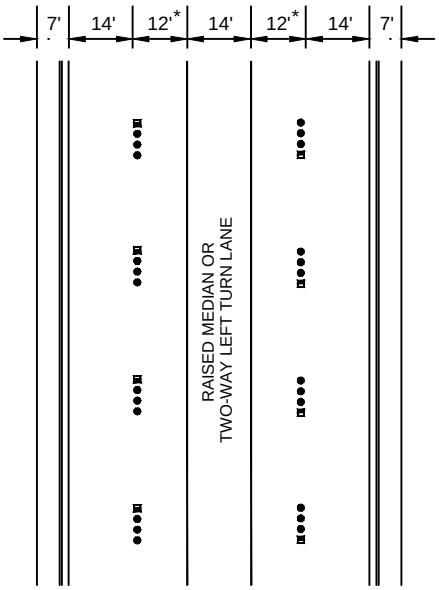
TYPICAL DELINEATION FOR ROADWAYS 80 FT. RIGHT-OF-WAY WITH CURBSIDE SIDEWALK

DATE 7-10-03	DWG. NO. 244.5	SHEET 1 OF 2

Effective 8/10/2023 to 8/07/2024



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



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

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

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

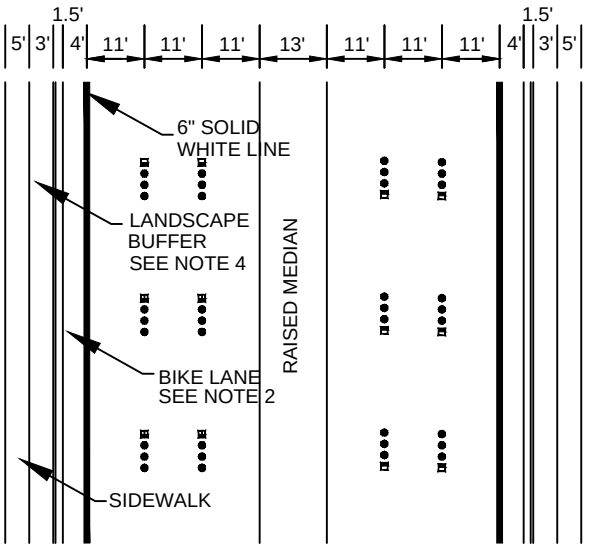
SPECIFICATION REFERENCE	
628	PAINTING TRAFFIC STRIPING
633	PAVEMENT MARKERS
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

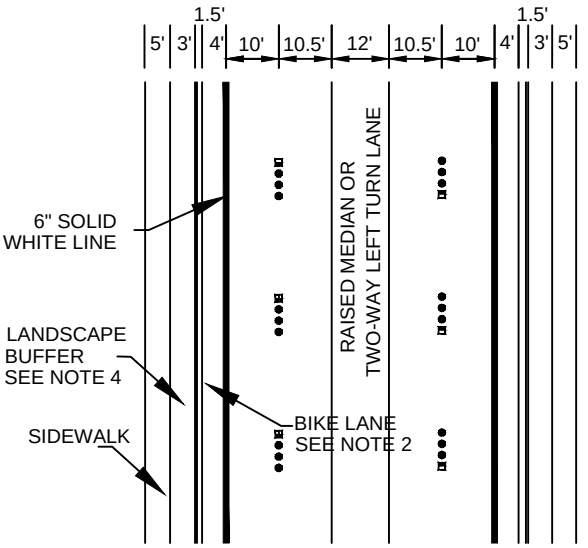
TYPICAL DELINEATION FOR ROADWAYS 80 FT. RIGHT-OF-WAY WITH CURBSIDE SIDEWALK

DATE 7-10-03	DWG. NO. 244.5	SHEET 2 OF 2

Effective 8/10/2023 to 8/07/2024



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				L		

SPECIFICATION REFERENCE	
628	PAINTING TRAFFIC STRIPING
633	PAVEMENT MARKERS
-	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

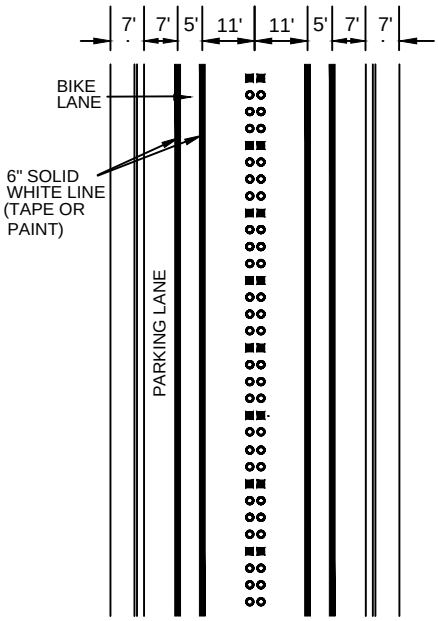
SUPPLEMENTAL DRAWING

TYPICAL DELINEATION FOR ROADWAYS

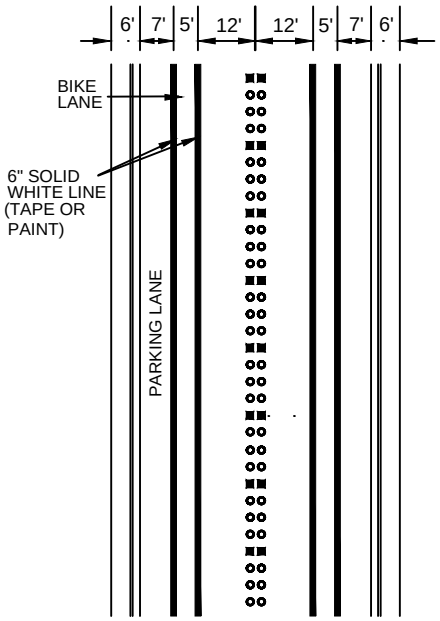
COMPLETE STREET ALTERNATIVE

DATE 07-01-12 | DWG. NO. 244.6.S1

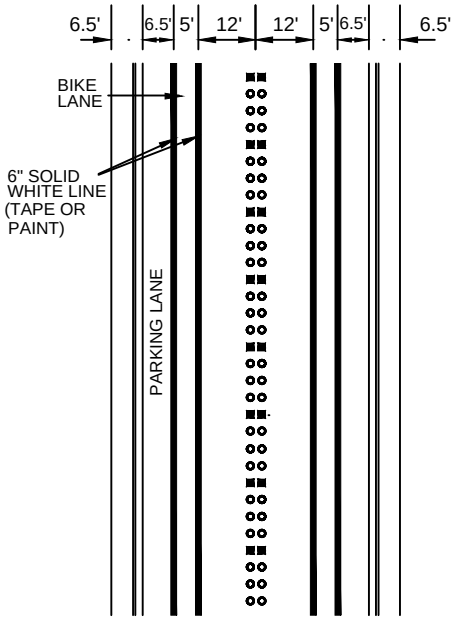
Effective 8/10/2023 to 8/07/2024



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

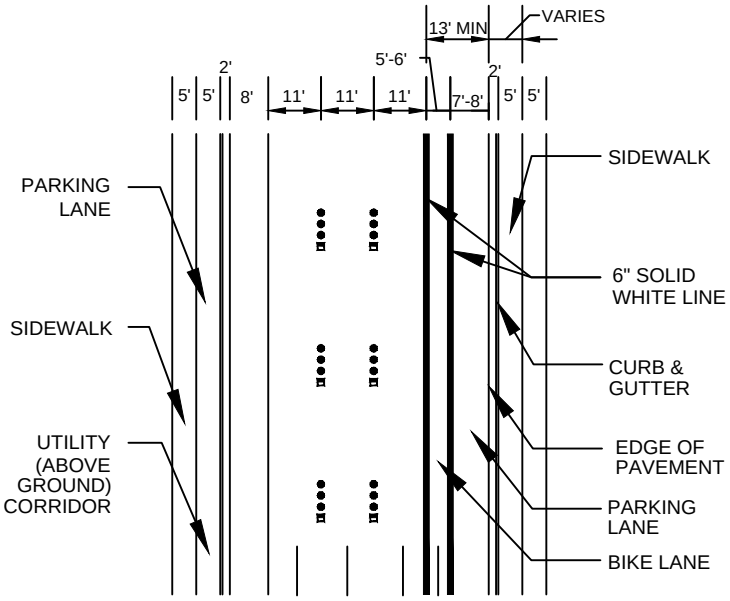
SPECIFICATION REFERENCE	
628	PAINTING TRAFFIC STRIPING
633	PAVEMENT MARKERS

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

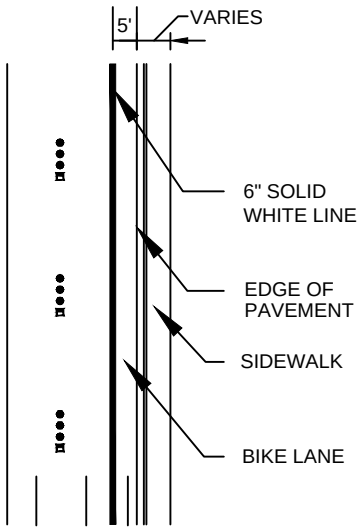
TYPICAL DELINEATION FOR BIKE FACILITIES 60 FT. RIGHT-OF-WAY (PARKING ON BOTH SIDES)

DATE 6-8-95	DWG. NO. 244.7	

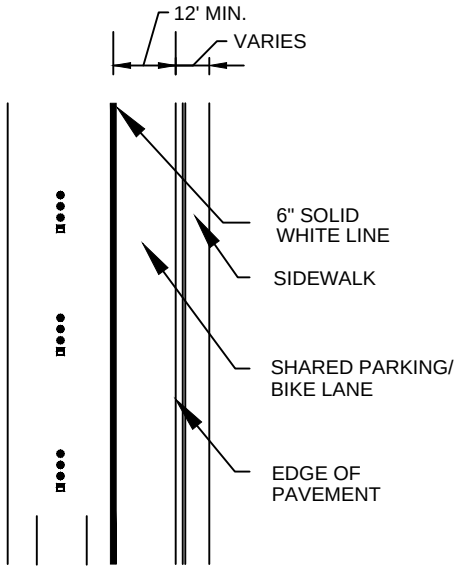
Effective 8/10/2023 to 8/07/2024



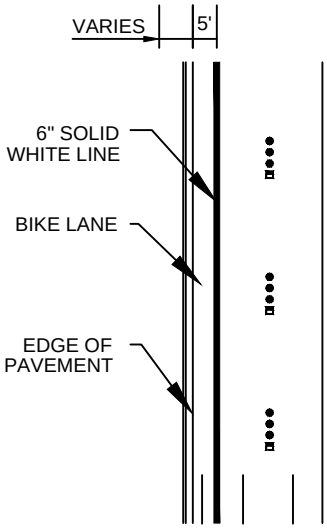
ONE-WAY STREET WITH BIKE LANE
(WITH PARKING ON RIGHT SIDE)



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.

AGENCY APPROVED	B	C	H	L	M	N

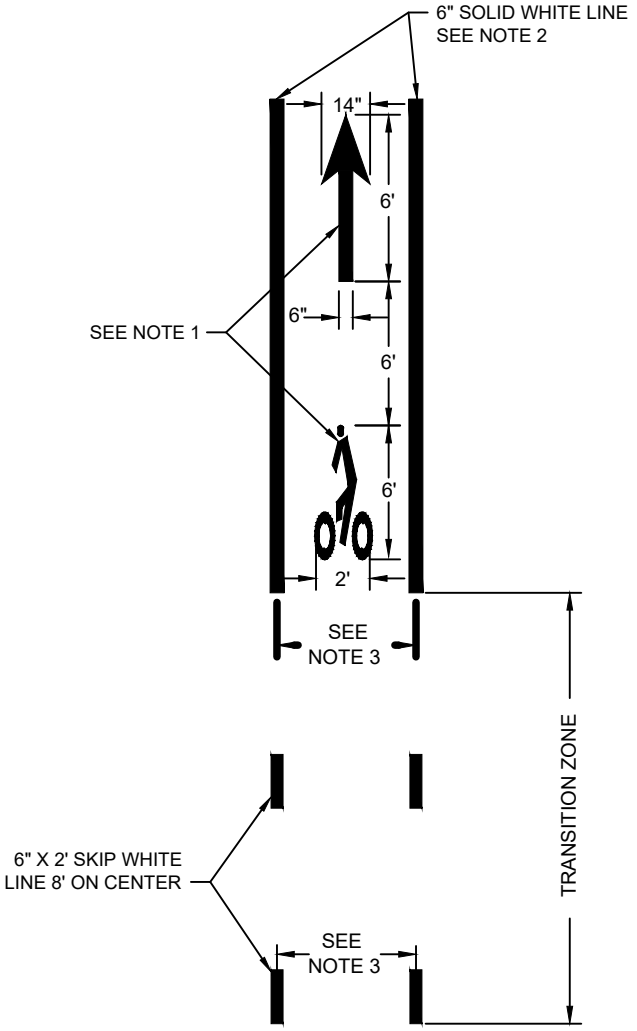
SPECIFICATION REFERENCE	
628	PAINTING TRAFFIC STRIPING
633	PAVEMENT MARKERS
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

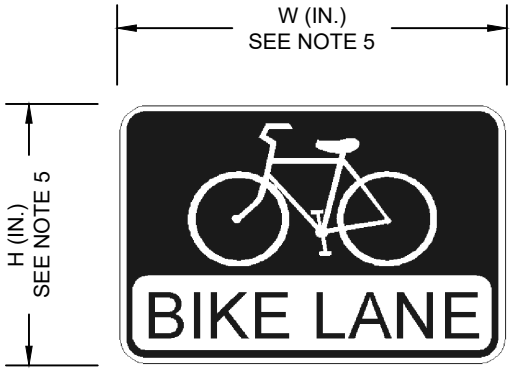
BICYCLE LANE DELINEATION ON ONE-WAY STREET

DATE	7-10-03	DWG. NO.	244.8	

Effective 8/10/2023 to 8/07/2024



BIKE LANE DELINEATION AND LEGEND



R3-17
(BLACK AND WHITE)

BIKE LANE SIGNAGE

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

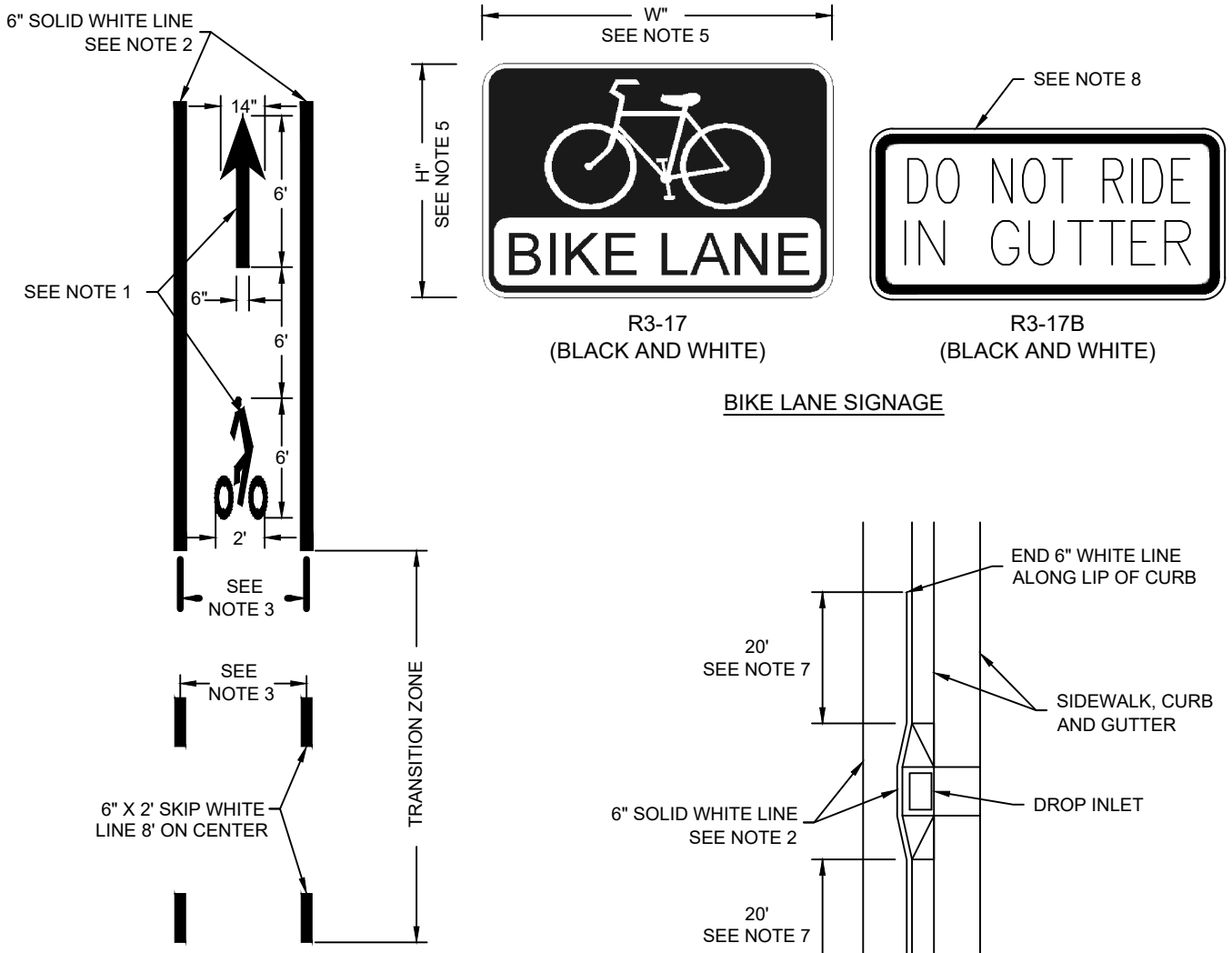
SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

BICYCLE LANE DELINEATION, LEGEND, AND SIGNAGE

DATE 03-12-20 | DWG. NO. 244.9

Effective 8/10/2023 to 8/07/2024



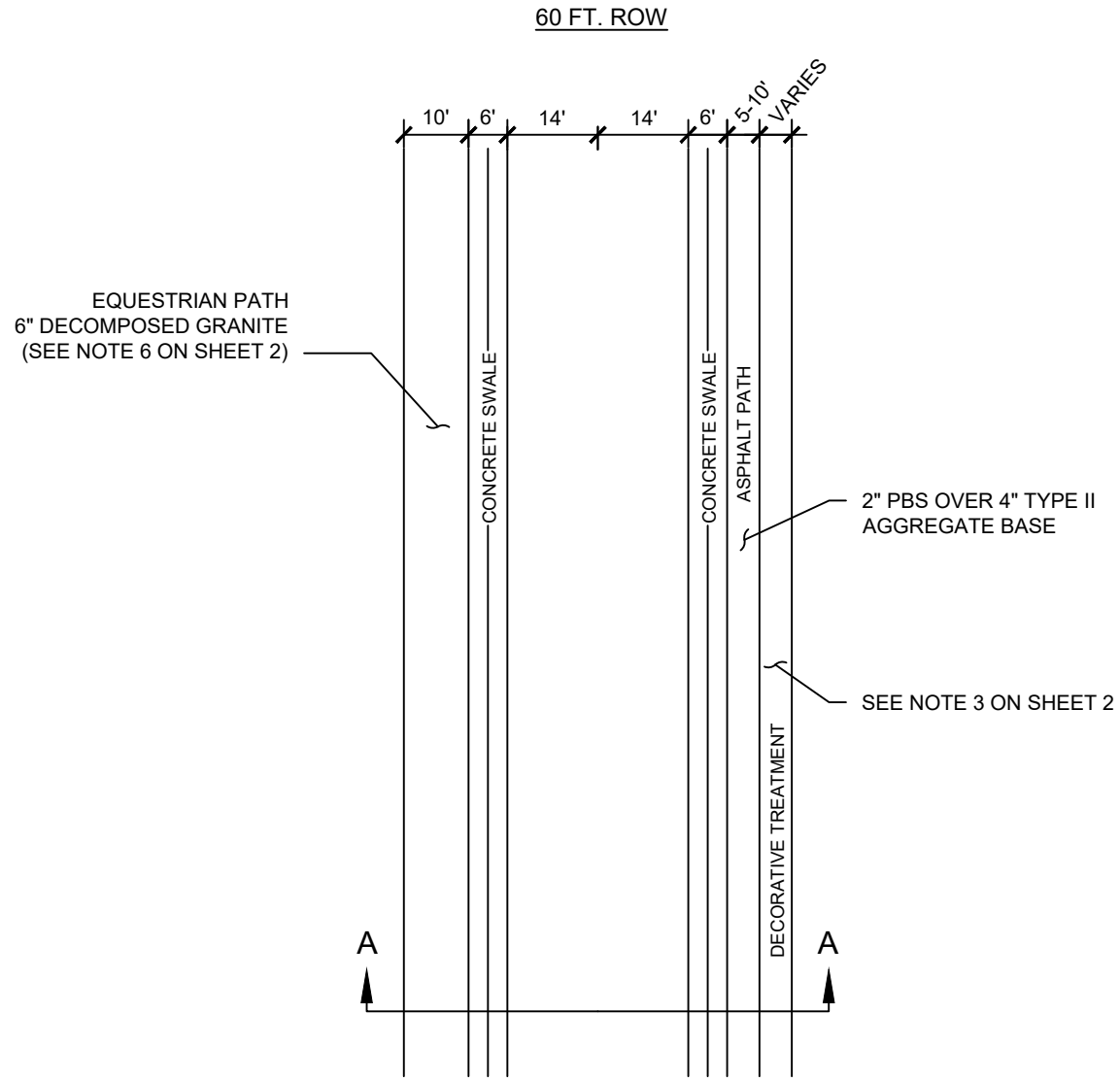
NOTES

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

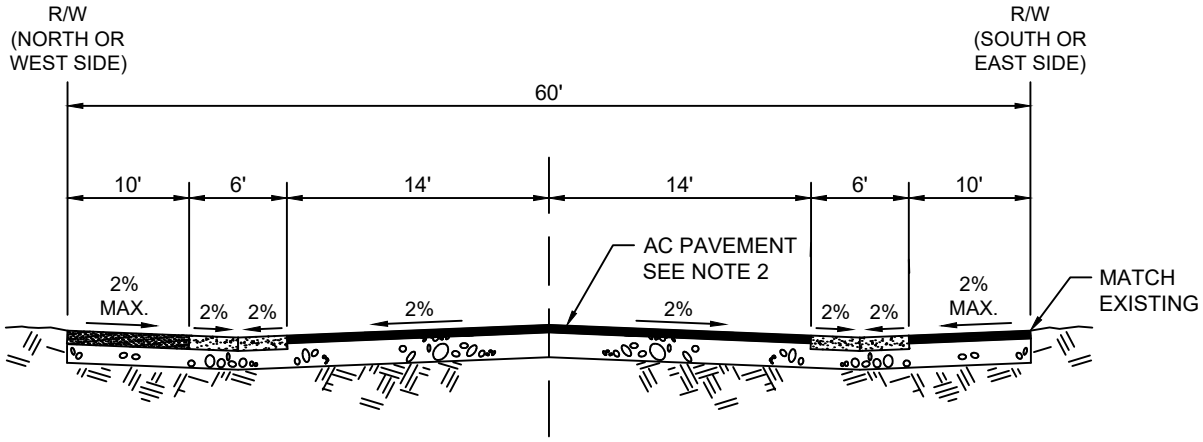
Effective 8/10/2023 to 8/07/2024



AGENCY APPROVED		C		L			

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 1 OF 2

Effective 8/10/2023 to 8/07/2024



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.

(L) 7. STREET LIGHTS REQUIRED ONLY AT INTERSECTIONS.

8. UTILITY PLACEMENT MUST BE APPROVED BY THE APPROVING AGENCY.

AGENCY APPROVED		C		(L)			

SPECIFICATION REFERENCE	
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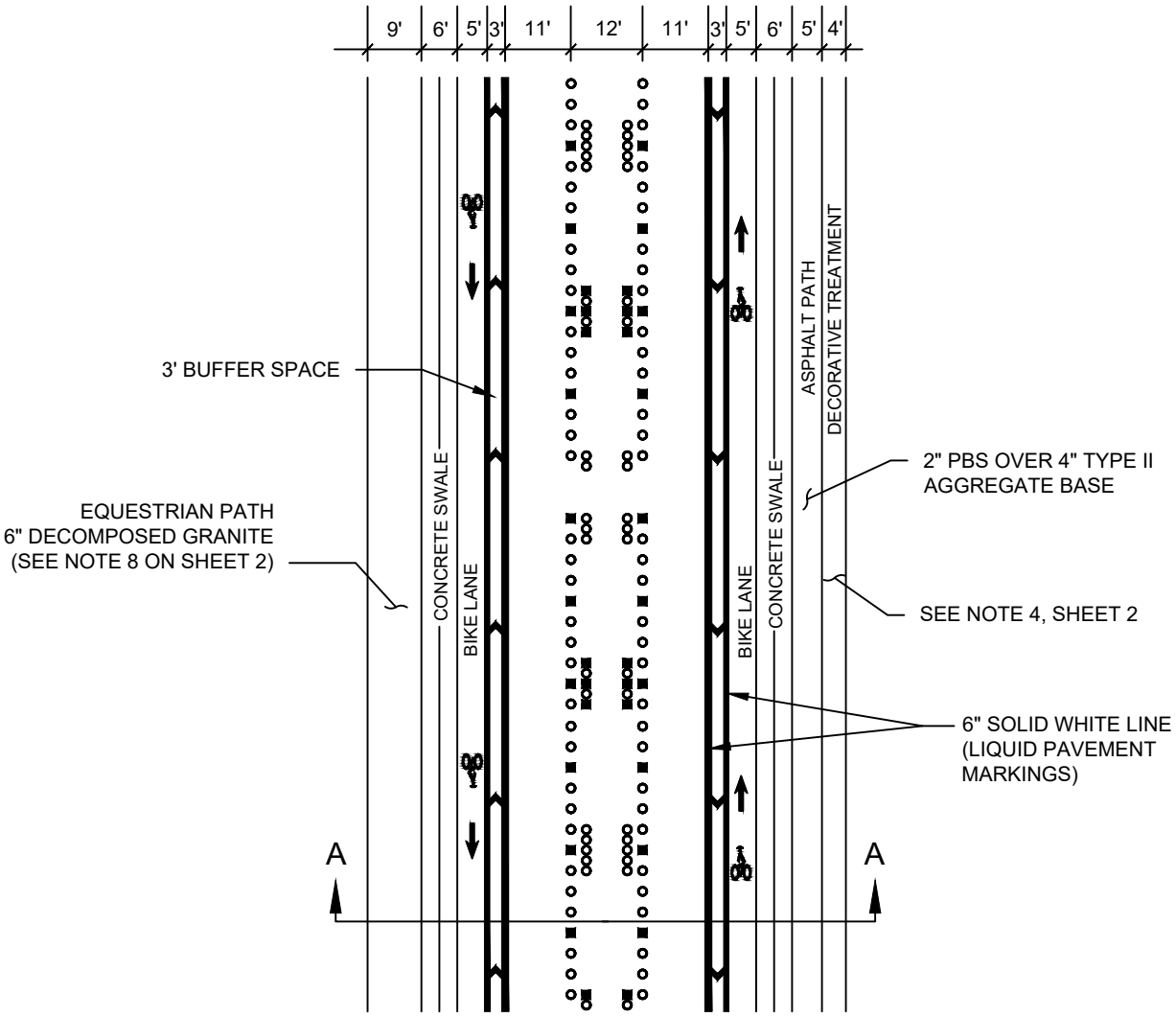
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPICAL CONFIGURATION FOR RURAL ROADWAYS 60 FT. RIGHT-OF-WAY

DATE 12-12-19	DWG. NO. 244.10	SHEET 2 OF 2

Effective 8/10/2023 to 8/07/2024

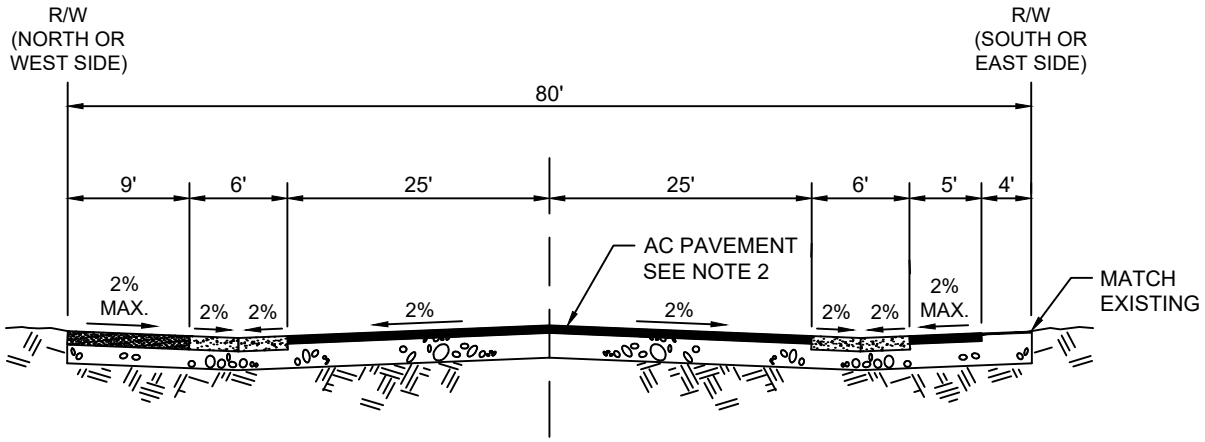
80 FT. ROW



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 1 OF 2

Effective 8/10/2023 to 8/07/2024



SECTION A-A

NOTES

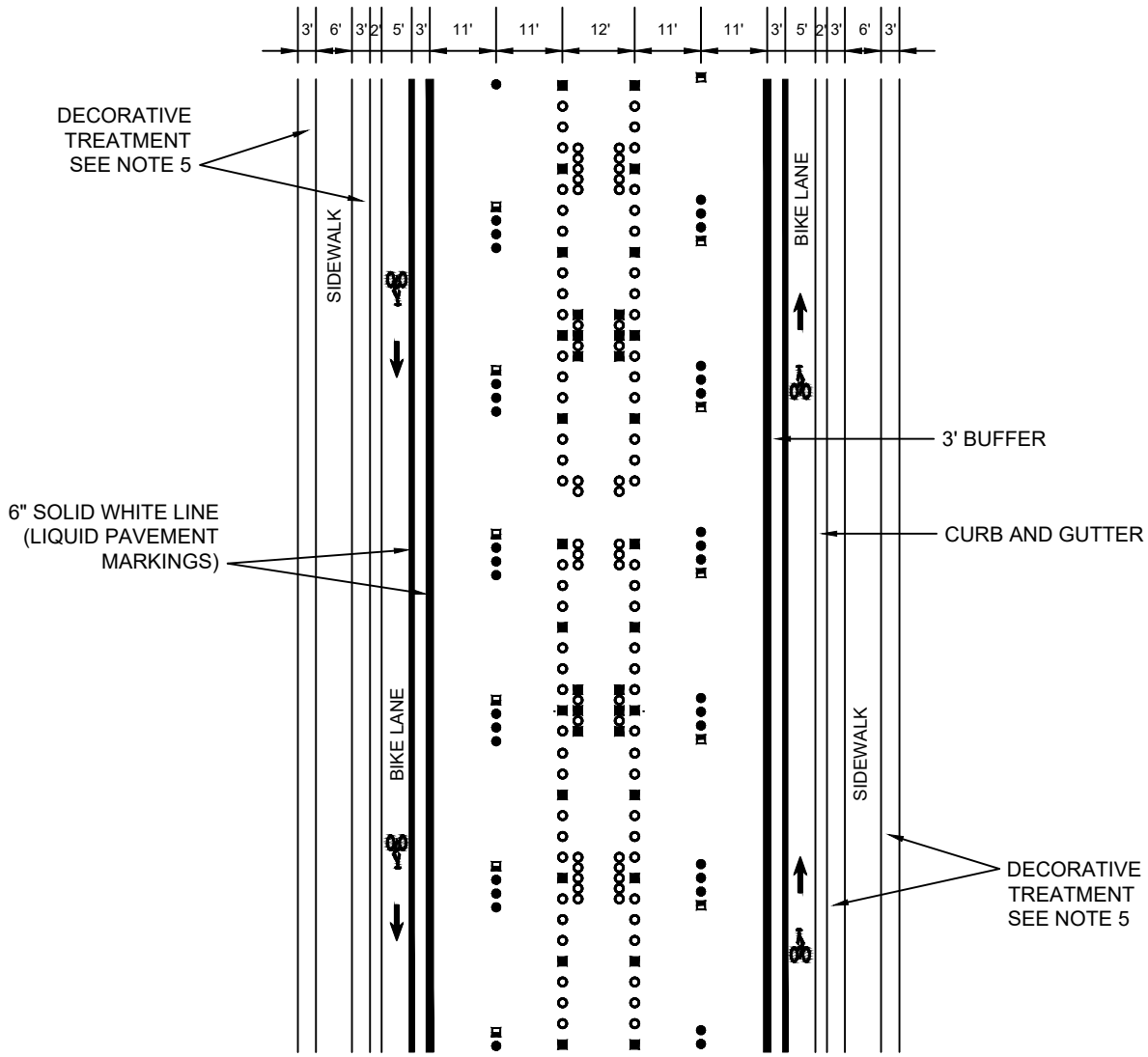
1. DRAWING IS ONLY APPLICABLE TO THE CITY OF LAS VEGAS AND UNINCORPORATED AREA OF CLARK COUNTY, IN THE AREA BOUNDED BY CLARK COUNTY 215 BRUCE WOODBURY BELTWAY ON THE WEST AND NORTH, ALEXANDER ROAD ON THE SOUTH, AND DURANGO DRIVE ON THE EAST, OR IN OTHER AREAS APPROVED BY THE AGENCY.
2. LANE LINE DELINEATION 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. (L) 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

Effective 8/10/2023 to 8/07/2024

100 FT. ROW



NOTES:

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			

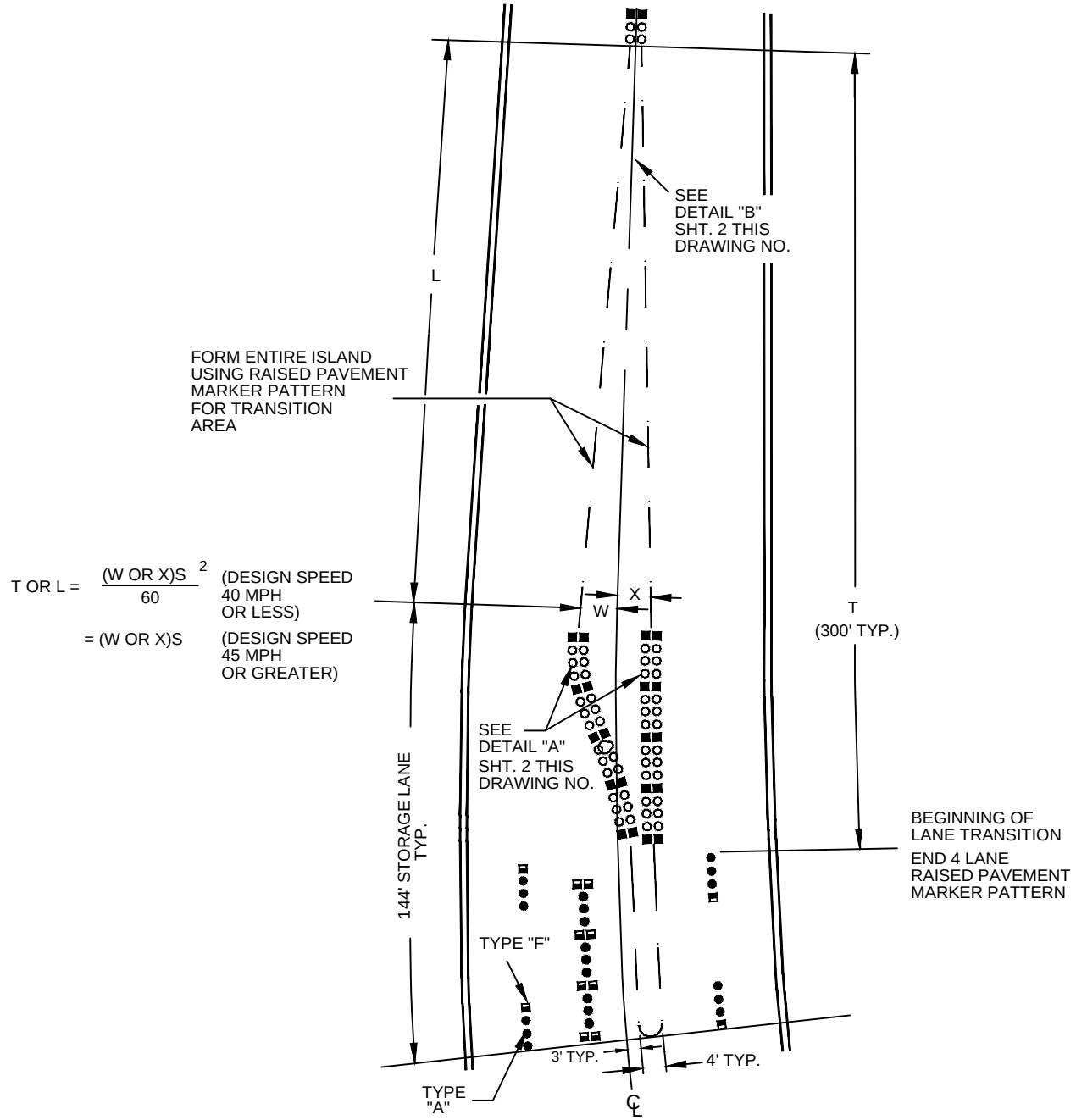
SPECIFICATION REFERENCE	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPICAL CONFIGURATION FOR RURAL ROADWAYS 100 FT. RIGHT-OF-WAY

DATE 09-12-19	DWG. NO. 244.12	

Effective 8/10/2023 to 8/07/2024



NOTE:

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

AGENCY APPROVED	B	C	H	L	M	N

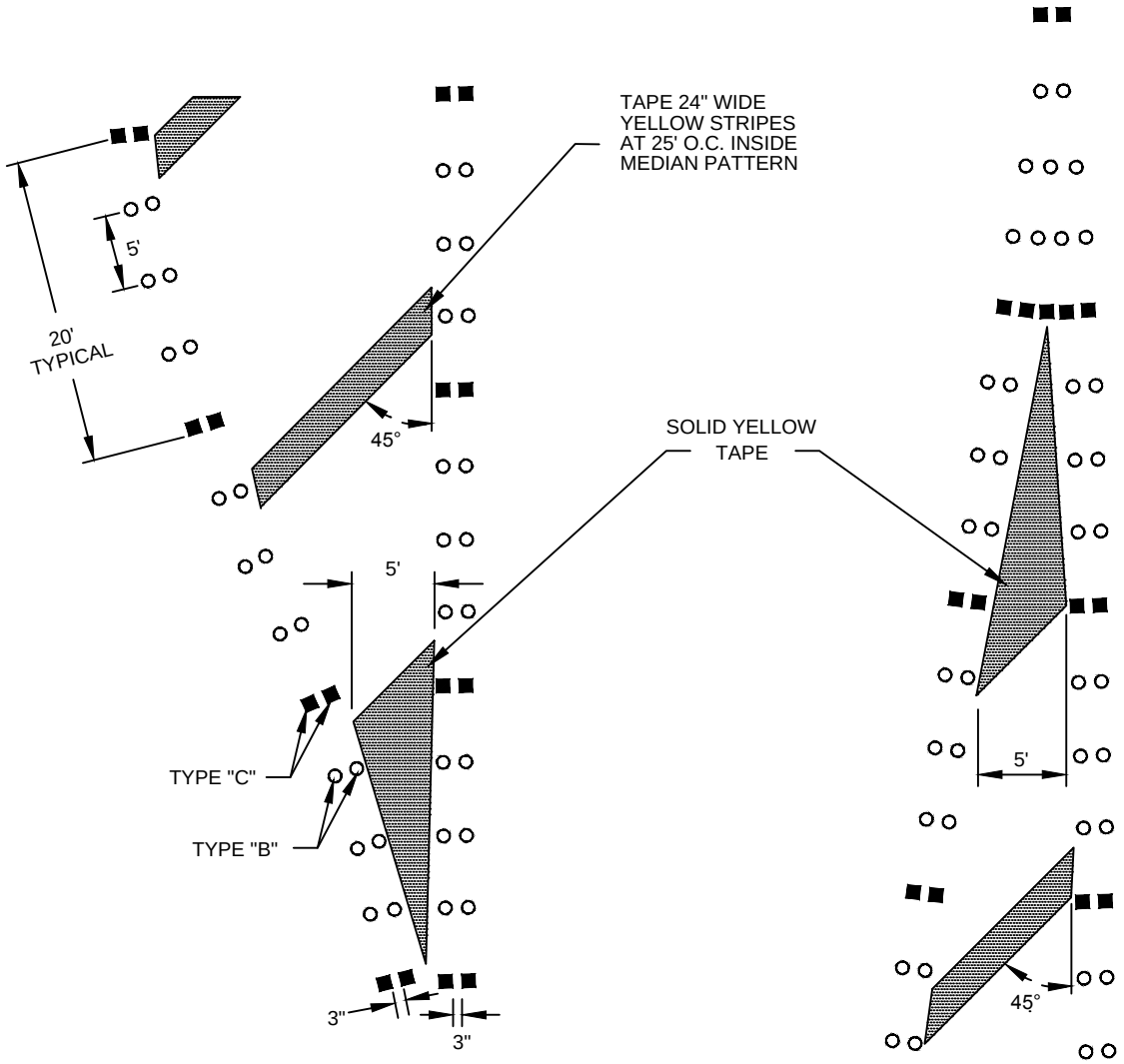
SPECIFICATION REFERENCE	
628	PAINTING TRAFFIC STRIPING
633	PAVEMENT MARKERS
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPICAL LANE DELINEATION IN TRANSITION SECTIONS

DATE 6-11-93	DWG. NO. 245	SHEET 1 OF 3

Effective 8/10/2023 to 8/07/2024



DETAIL "A"

DETAIL "B"

NOTE:

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

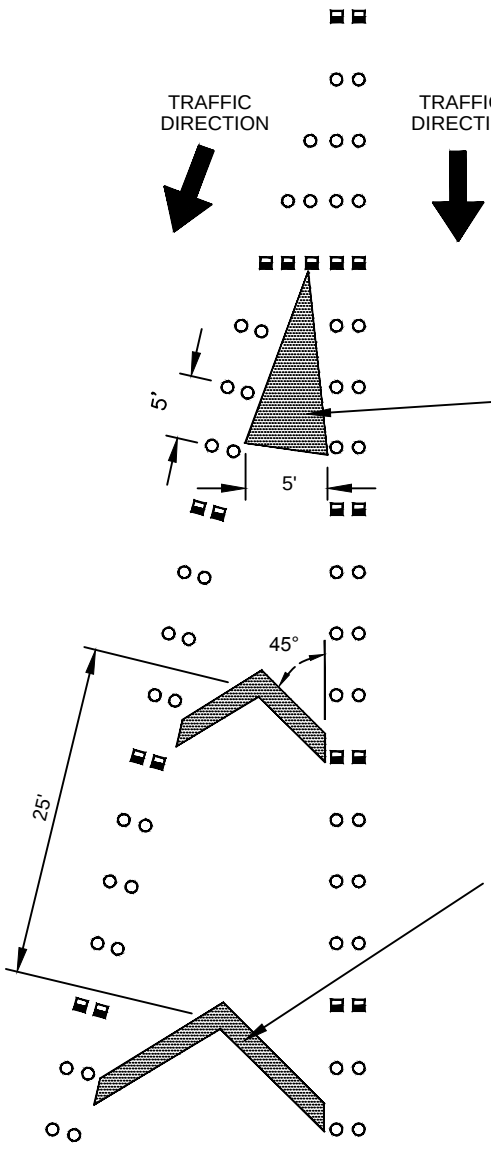
SPECIFICATION REFERENCE	
628	PAINTING TRAFFIC STRIPING
633	PAVEMENT MARKERS

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

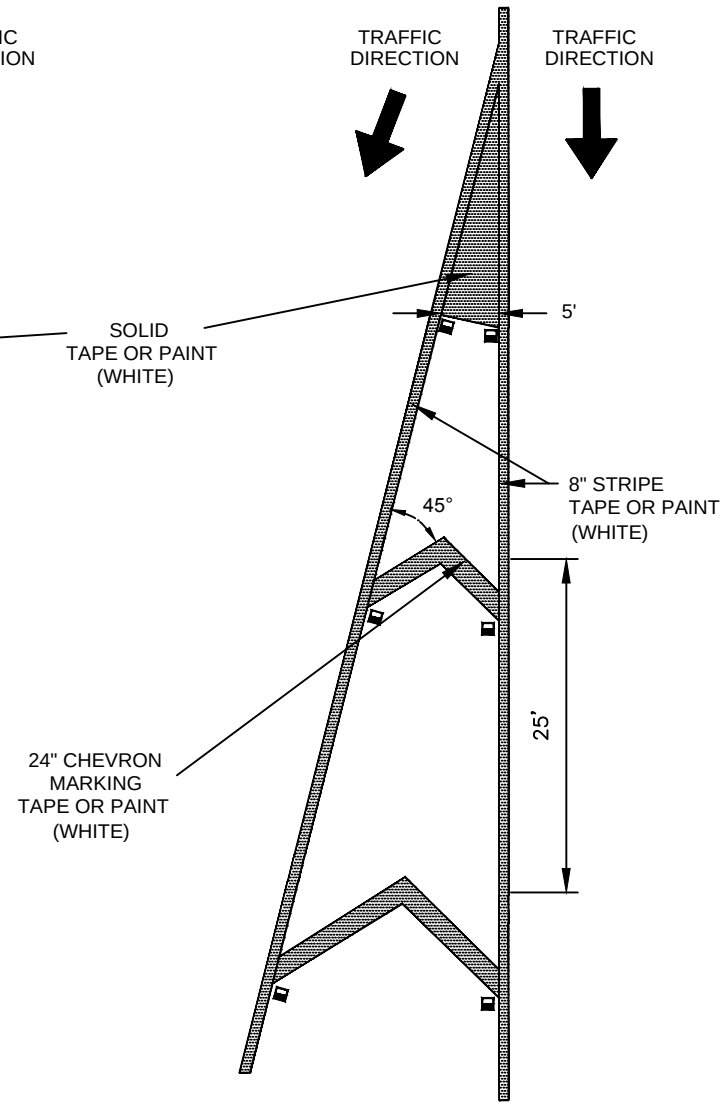
DETAILS FOR TYPICAL LANE DELINEATION IN TRANSITION SECTIONS

DATE 6-11-93	DWG. NO. 245	SHEET 2 OF 3

Effective 8/10/2023 to 8/07/2024



PAVEMENT MARKER DETAIL



TAPE OR PAINT DETAIL

AGENCY APPROVED	B	C	H	L	M	N

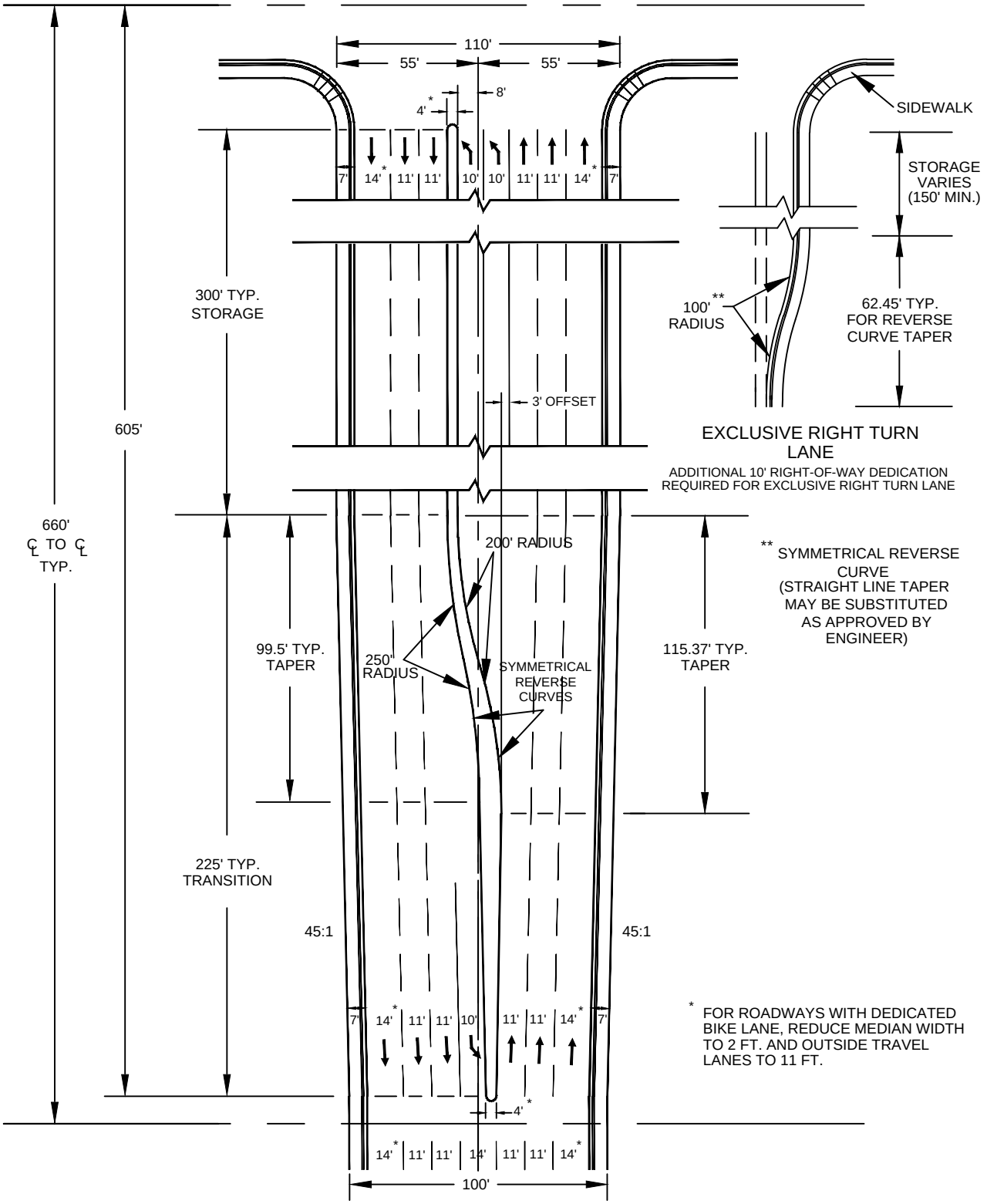
SPECIFICATION REFERENCE	
628	PAINTING TRAFFIC STRIPING
633	PAVEMENT MARKERS
.	

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

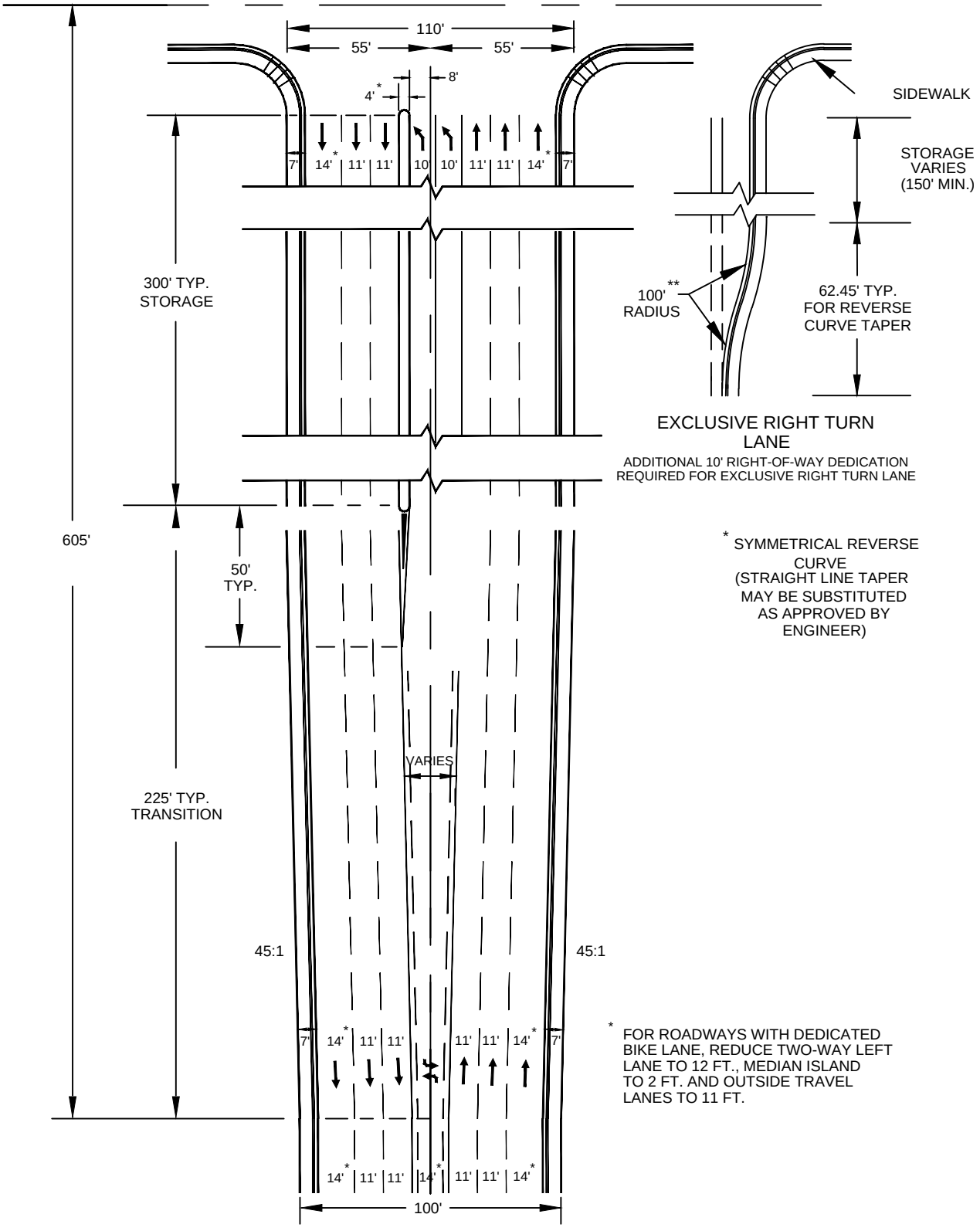
Effective 8/10/2023 to 8/07/2024



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

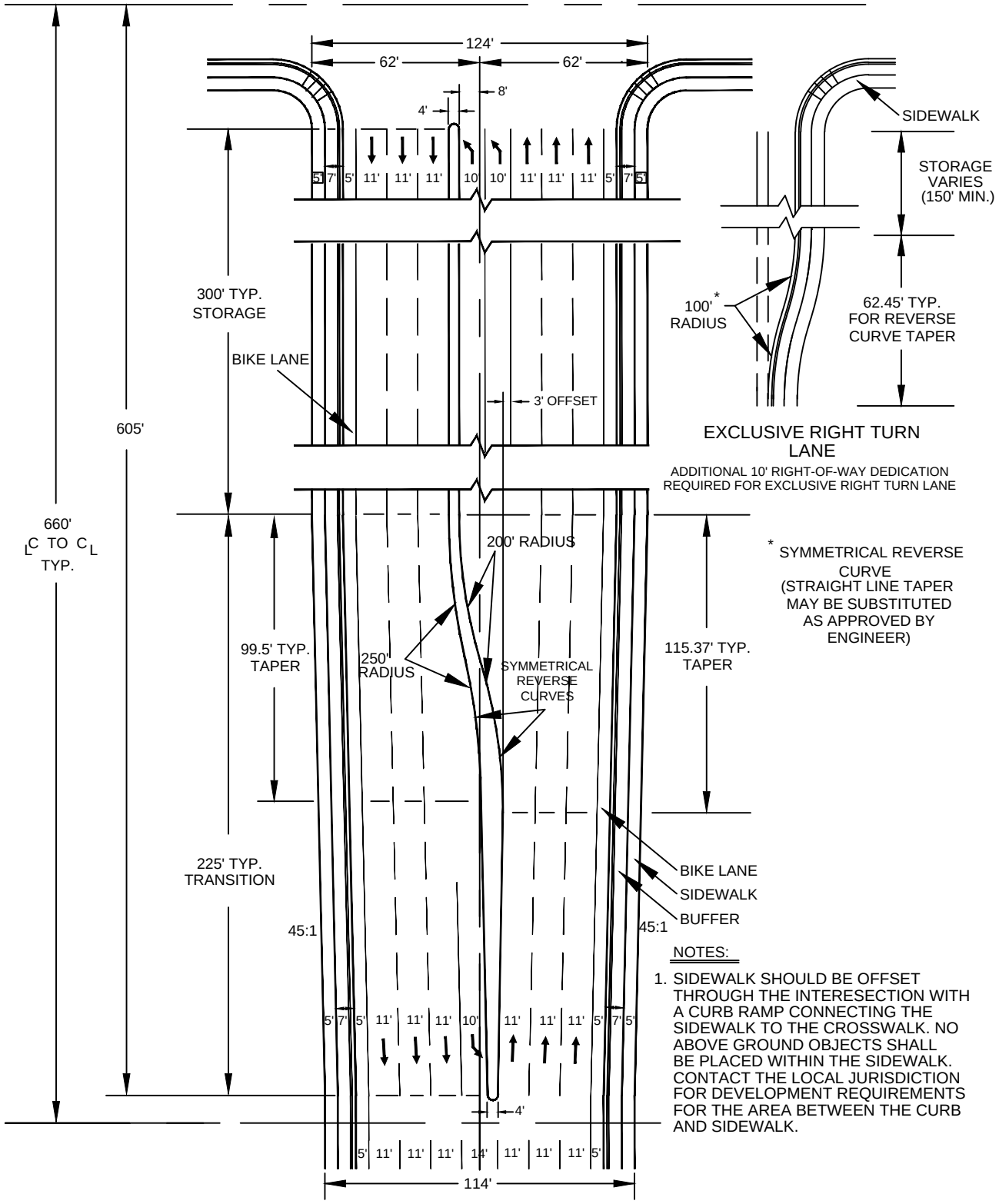
Effective 8/10/2023 to 8/07/2024



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 CURBSIDE SIDEWALK
	DATE 7-10-03 / DWG. NO. 245.1 / SHEET 2 OF 2

Effective 8/10/2023 to 8/07/2024



NOTES:

1. SIDEWALK SHOULD BE OFFSET THROUGH THE INTERESECTION WITH A CURB RAMP CONNECTING THE SIDEWALK TO THE CROSSWALK. NO ABOVE GROUND OBJECTS SHALL BE PLACED WITHIN THE SIDEWALK. CONTACT THE LOCAL JURISDICTION FOR DEVELOPMENT REQUIREMENTS FOR THE AREA BETWEEN THE CURB AND SIDEWALK.

AGENCY APPROVED	B	C	H	L	M	N

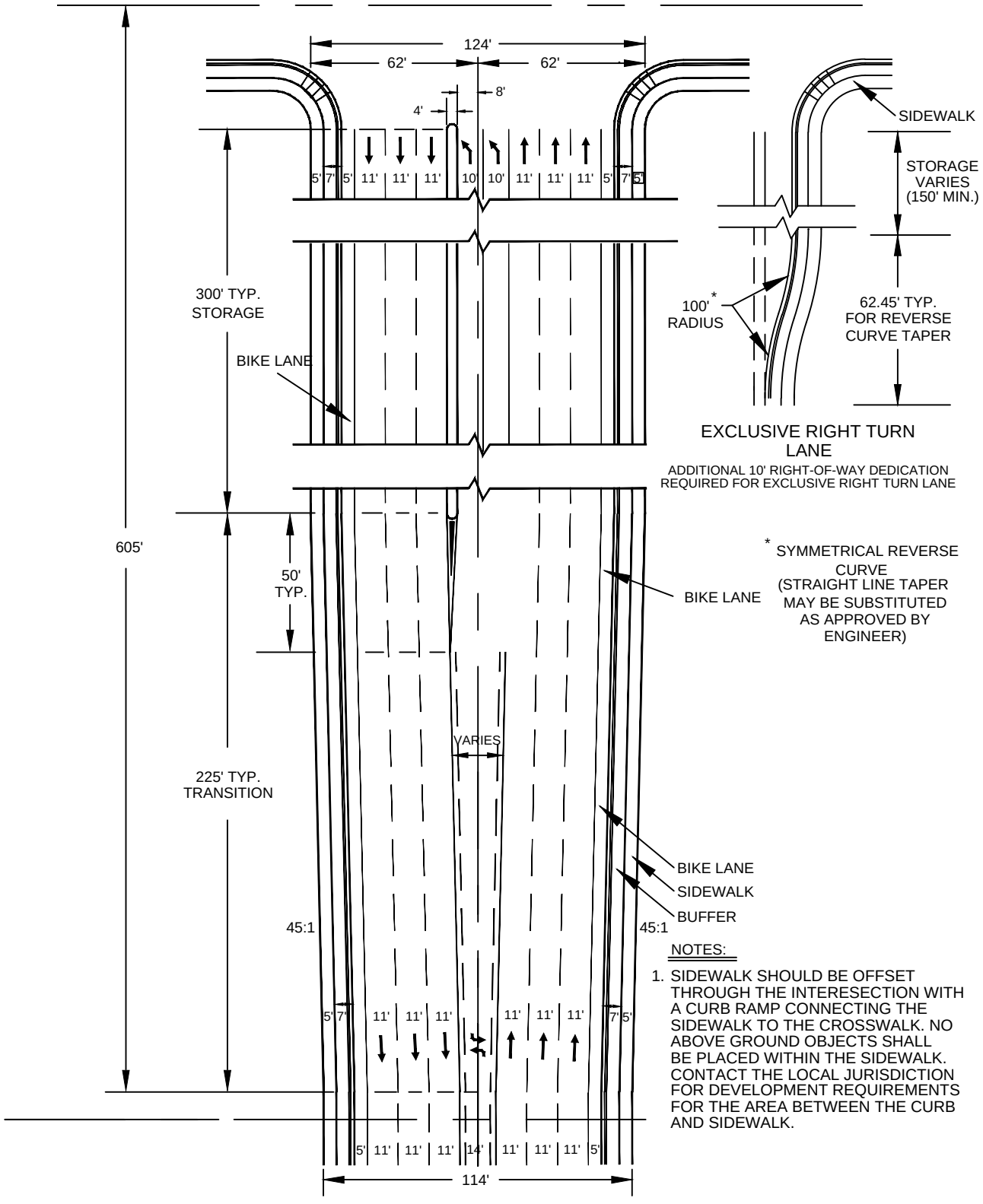
SPECIFICATION REFERENCE	
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPICAL LANE CONFIGURATION FOR MAJOR STREET INTERSECTIONS AND MEDIAN DETAIL CASE I - WITH OFFSET SIDEWALK

DATE 7-10-03	DWG. NO. 245.2	SHEET 1 OF 2

Effective 8/10/2023 to 8/07/2024



NOTES:

1. SIDEWALK SHOULD BE OFFSET THROUGH THE INTERESECTION WITH A CURB RAMP CONNECTING THE SIDEWALK TO THE CROSSWALK. NO ABOVE GROUND OBJECTS SHALL BE PLACED WITHIN THE SIDEWALK. CONTACT THE LOCAL JURISDICTION FOR DEVELOPMENT REQUIREMENTS FOR THE AREA BETWEEN THE CURB AND SIDEWALK.

AGENCY APPROVED	B	C	H	L	M	N

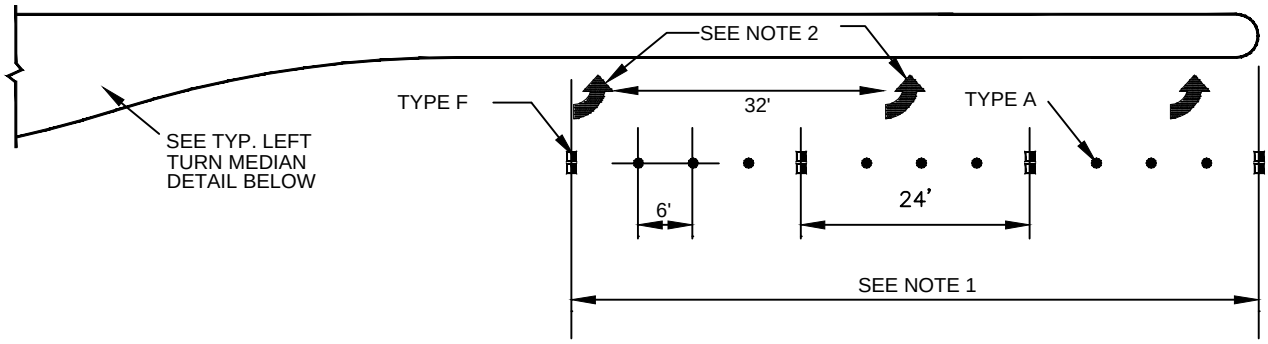
SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

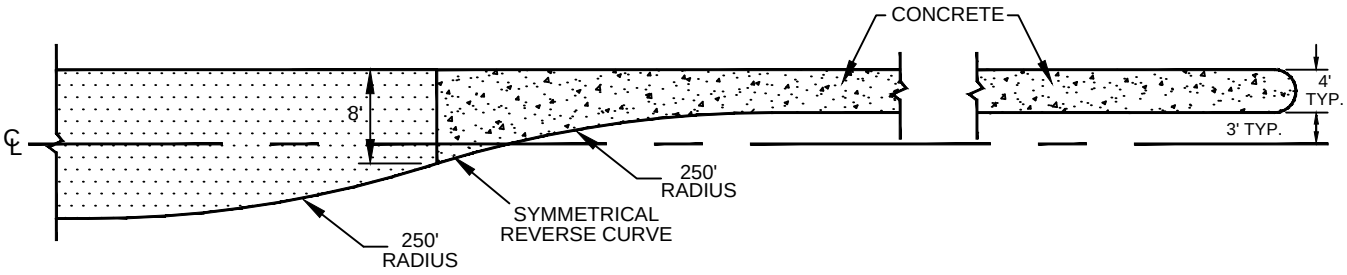
TYPICAL LANE CONFIGURATION FOR MAJOR STREET INTERSECTIONS AND MEDIAN DETAIL CASE II - WITH OFFSET SIDEWALK

DATE 7-10-03	DWG. NO. 245.2	SHEET 2 OF 2

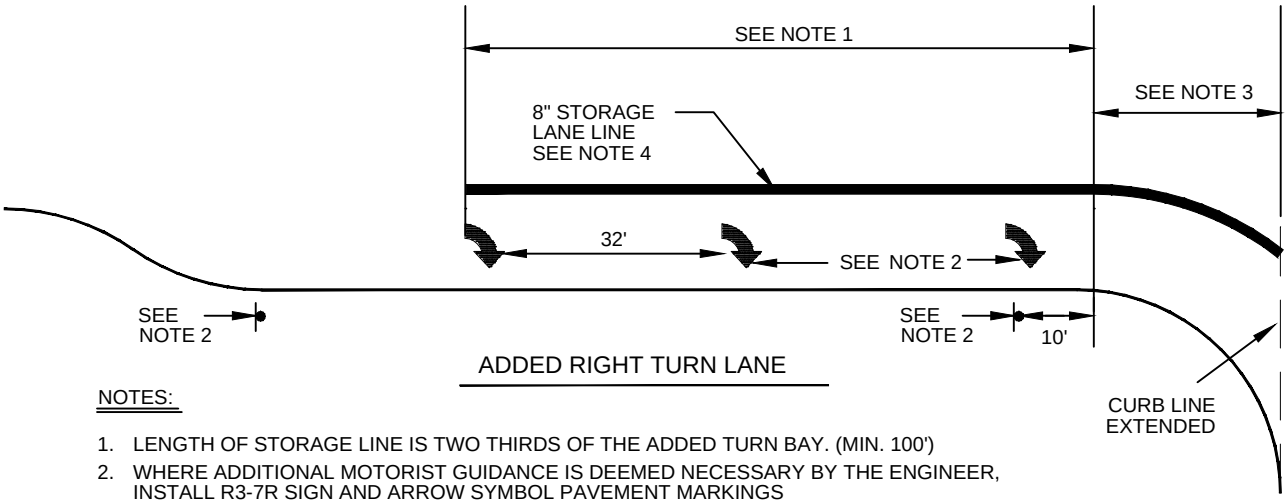
Effective 8/10/2023 to 8/07/2024



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.

AGENCY APPROVED	B	C	H	L	M	N

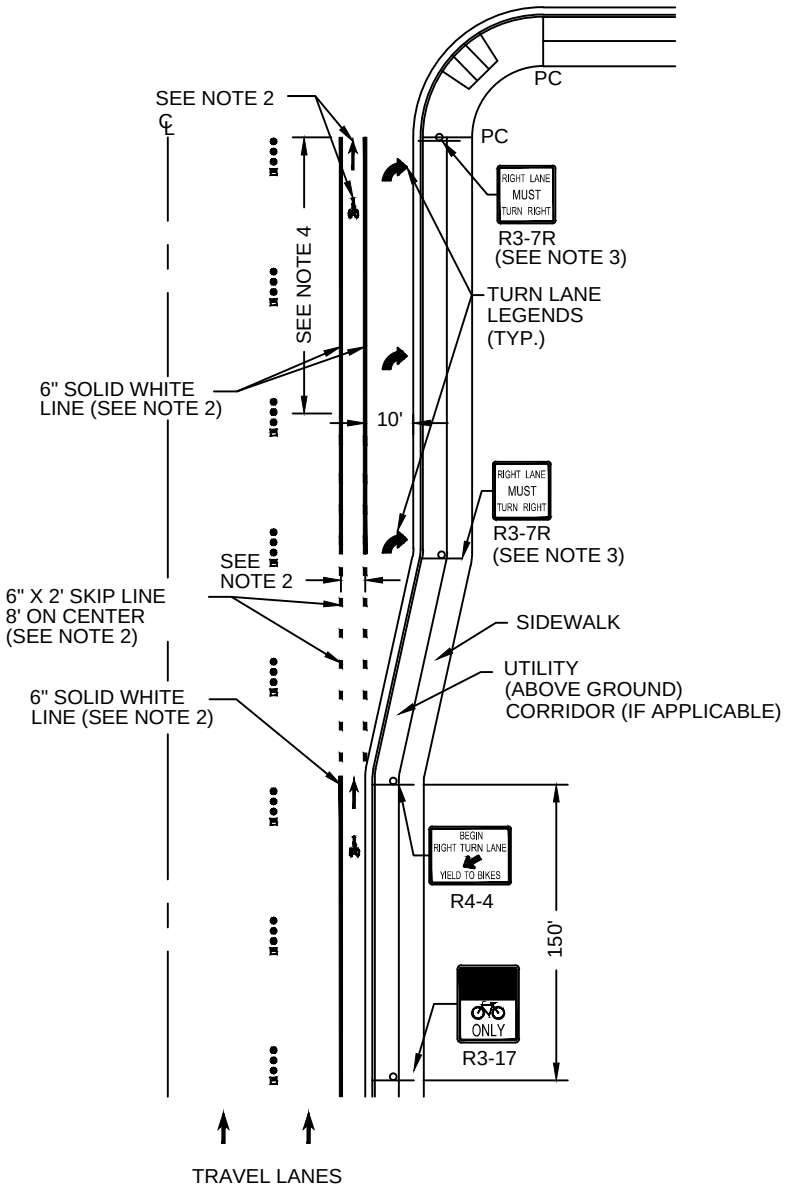
SPECIFICATION REFERENCE	
633	PAVEMENT MARKERS
628	PAINTING TRAFFIC STRIPING,
	PAVEMENT MARKINGS...

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

STANDARD PAVEMENT MARKERS ADDED TURN LANE

DATE 06-09-11 | DWG. NO. 246

Effective 8/10/2023 to 8/07/2024



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

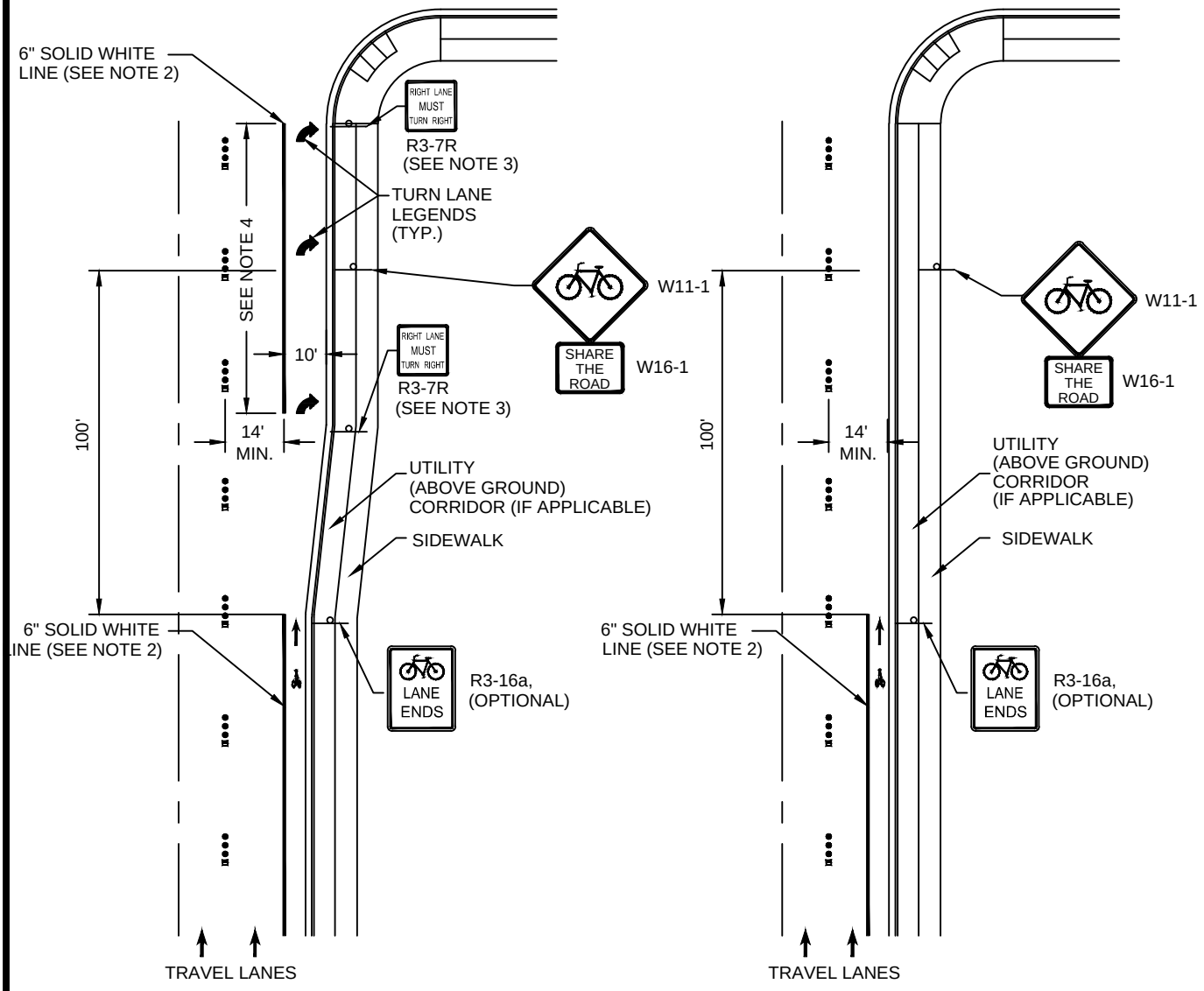
SPECIFICATION REFERENCE	
628	PAINTING TRAFFIC STRIPING
633	PAVEMENT MARKERS

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

BICYCLE LANE APPROACH TO INTERSECTION WITH EXCLUSIVE RIGHT TURN LANE

DATE 06-09-11 | DWG. NO. 246.1

Effective 8/10/2023 to 8/07/2024



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

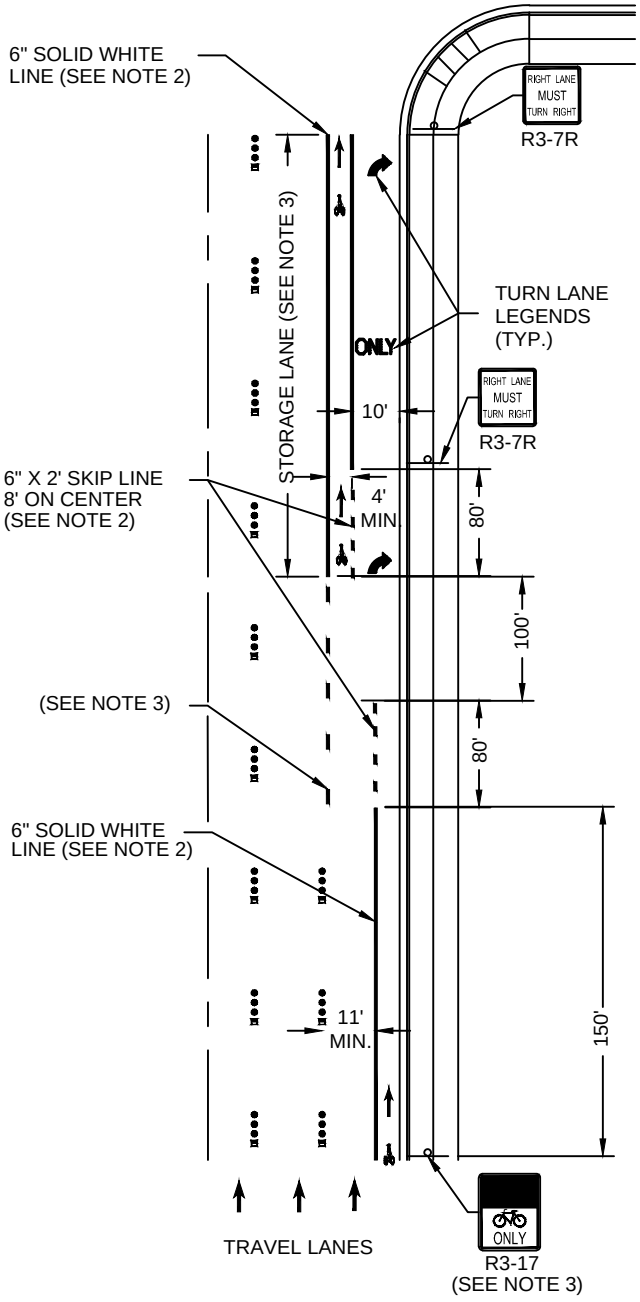
SPECIFICATION REFERENCE	
628	PAINTING TRAFFIC STRIPING
633	PAVEMENT MARKERS

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

BICYCLE LANE TRANSITION TO SHARED LANE AT INTERSECTION

DATE 06-09-11 | DWG. NO. 246.2

Effective 8/10/2023 to 8/07/2024



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

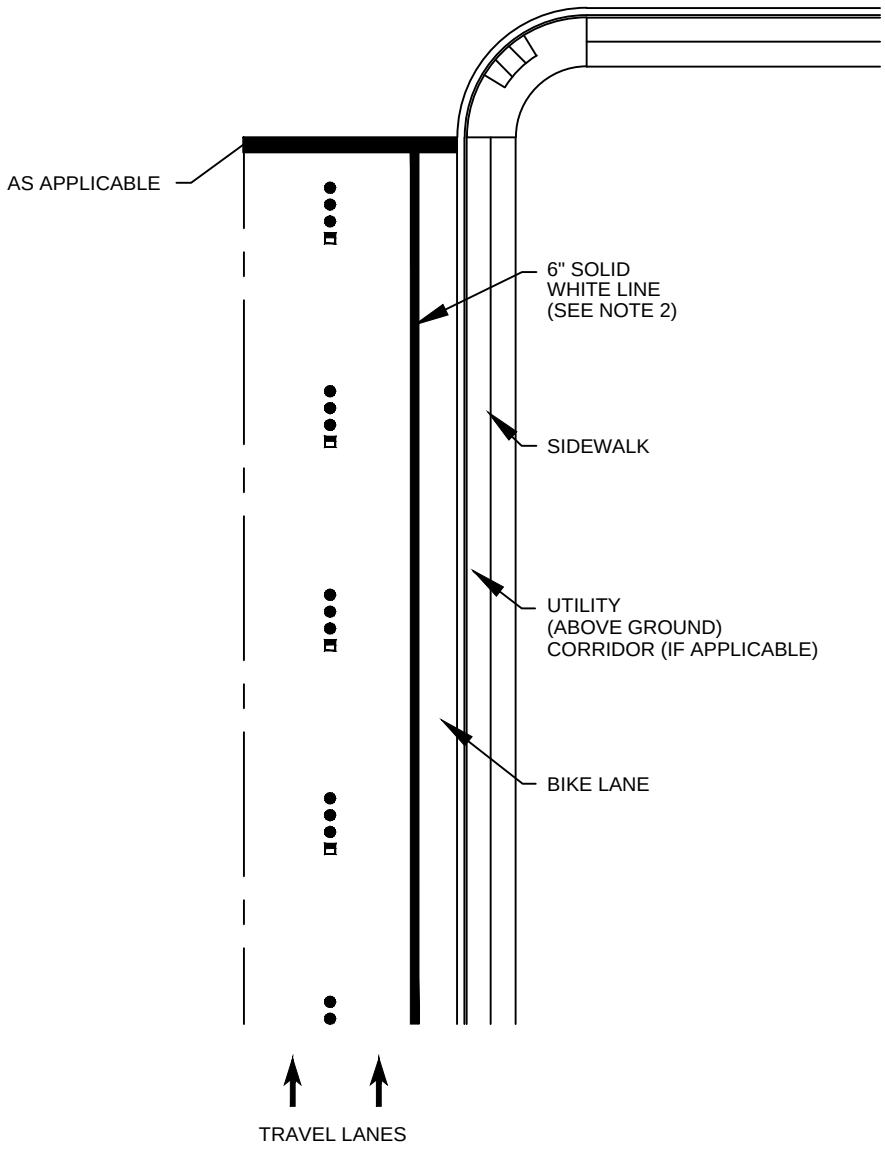
SPECIFICATION REFERENCE	
628	PAINTING TRAFFIC STRIPING
633	PAVEMENT MARKERS

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

BICYCLE LANE AT A RIGHT TURN DROP LANE

DATE	7-10-03	DWG. NO.	246.3	

Effective 8/10/2023 to 8/07/2024



NOTES:

1. A SOLID BICYCLE LANE STRIPE SHOULD CONTINUE ACROSS DRIVEWAY ACCESS POINTS.
2. SEE DRAWING NO. 244.9 FOR BIKE LANE LEGEND AND SIGNAGE DETAILS.

AGENCY APPROVED	B	C	H	L	M	N

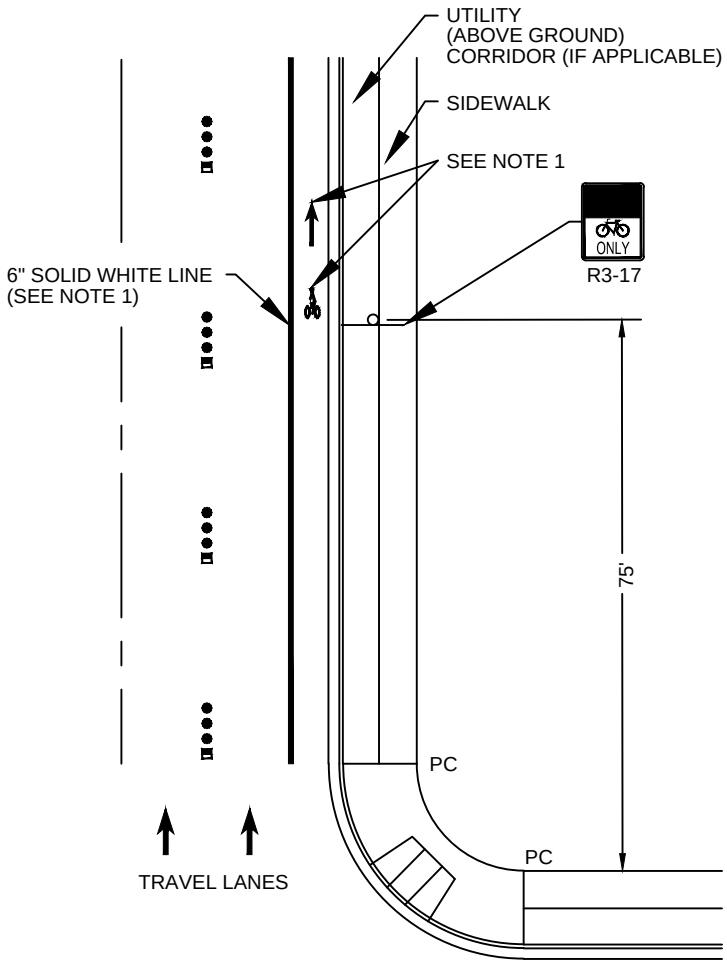
SPECIFICATION REFERENCE	
628	PAINTING TRAFFIC STRIPING
633	PAVEMENT MARKERS

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

BICYCLE LANE DELINEATION AT APPROACH TO INTERSECTION WITHOUT EXCLUSIVE RIGHT TURN LANE

DATE	7-10-03	DWG. NO.	246.4	

Effective 8/10/2023 to 8/07/2024



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

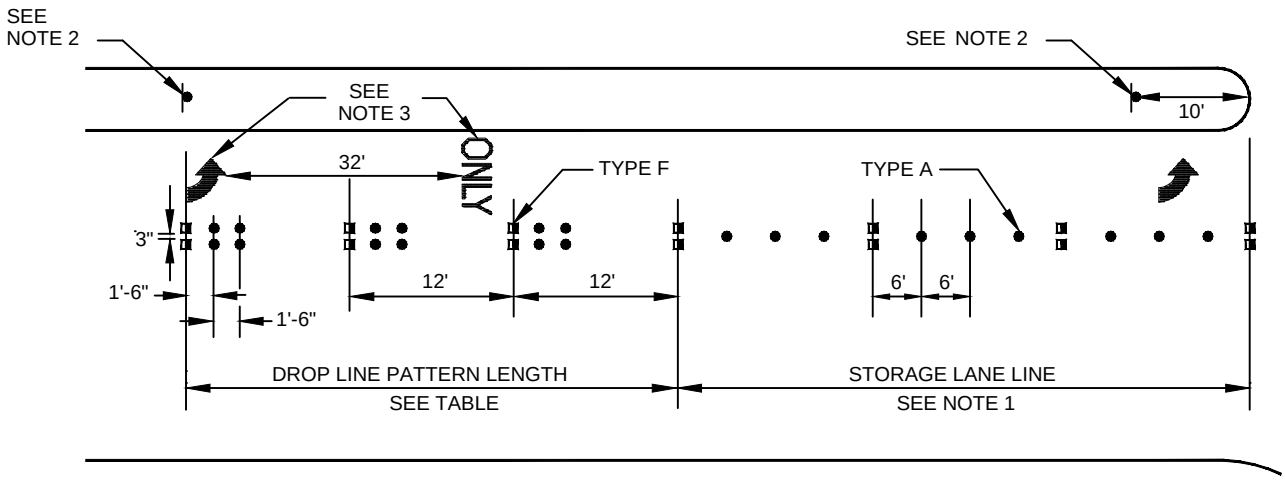
SPECIFICATION REFERENCE	
628	PAINTING TRAFFIC STRIPING
633	PAVEMENT MARKERS

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

BICYCLE LANE DEPARTURE FROM INTERSECTIONS

DATE 7-10-03	DWG. NO. 246.5	

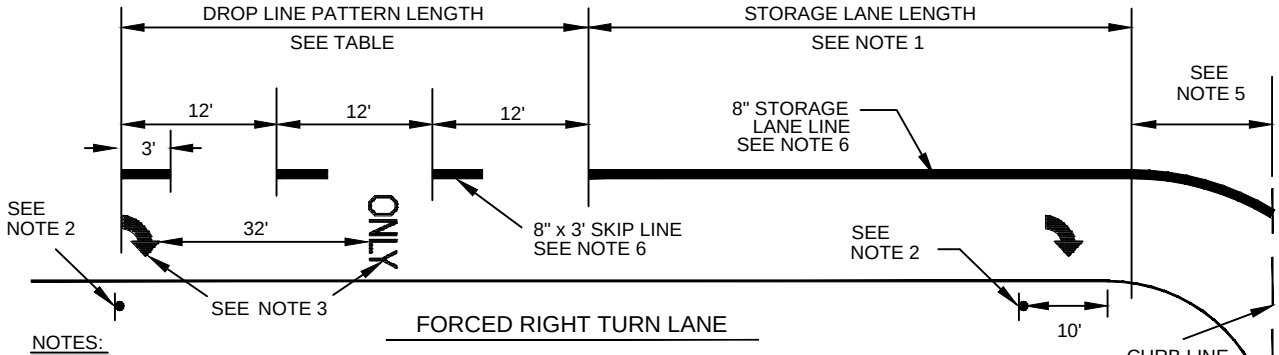
Effective 8/10/2023 to 8/07/2024



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



FORCED RIGHT 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

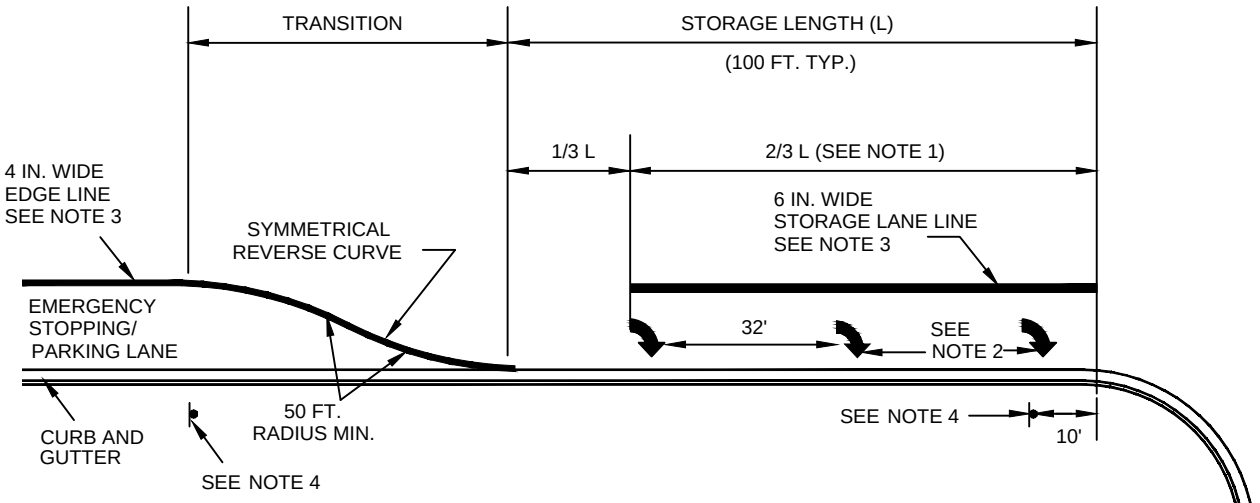
SPECIFICATION REFERENCE	
633	PAVEMENT MARKERS
628	PAINTING TRAFFIC STRIPING, PAVEMENT MARKINGS

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

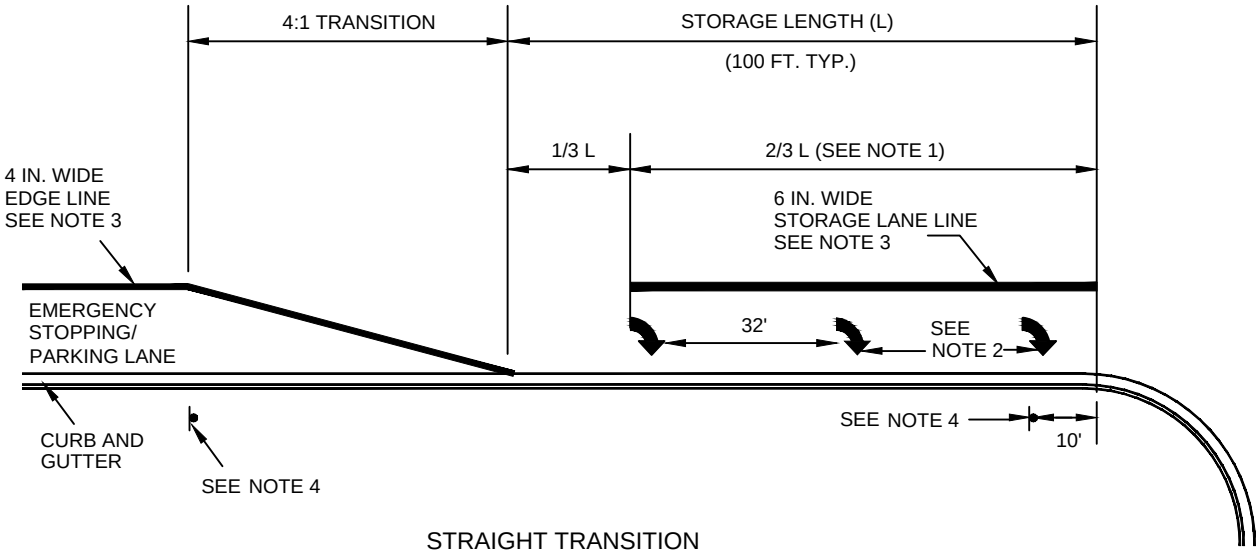
STANDARD PAVEMENT MARKERS FORCED TURN LANE

DATE 07-01-16 | DWG. NO. 246.6

Effective 8/10/2023 to 8/07/2024



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

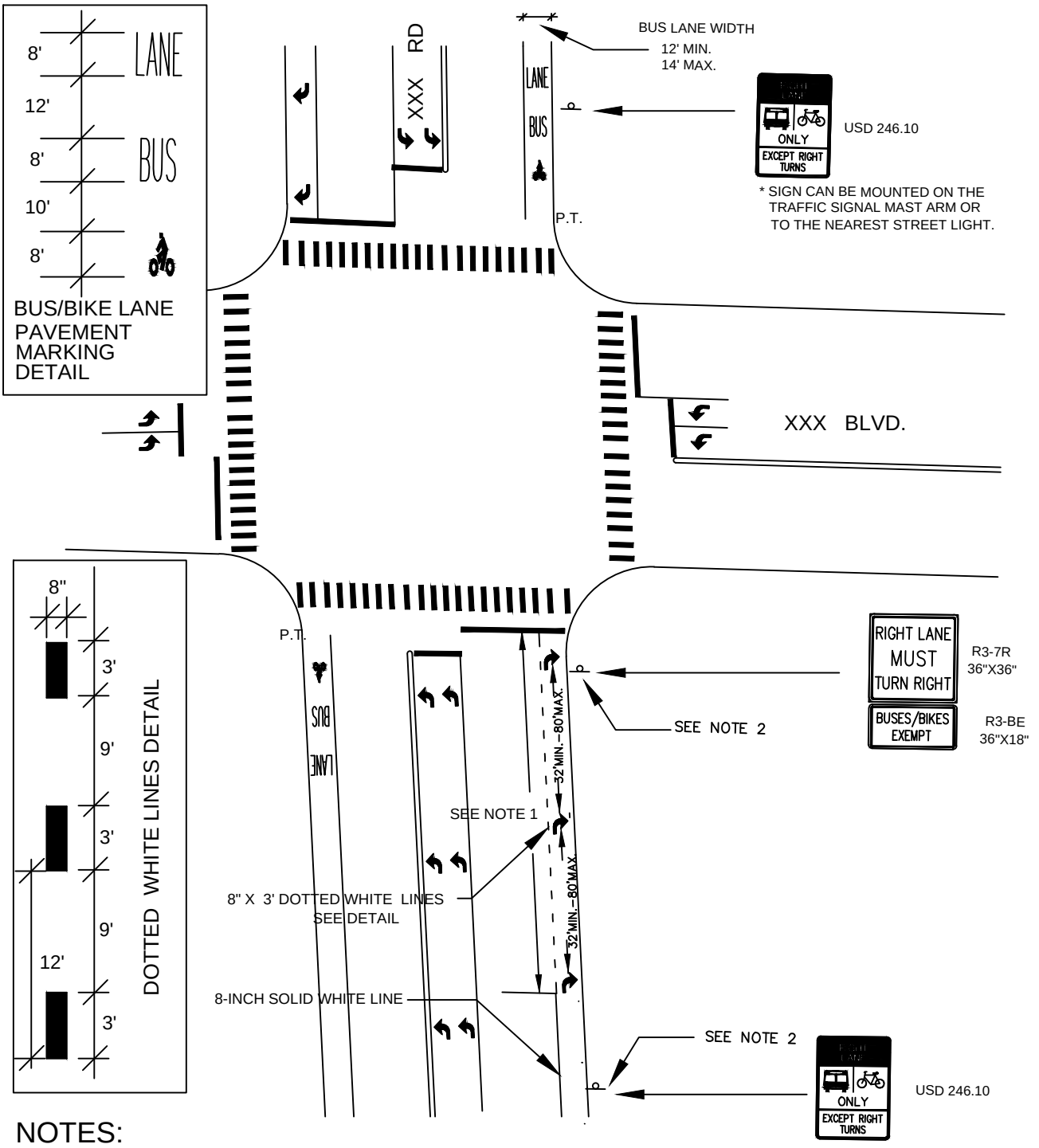
SPECIFICATION REFERENCE	
633	PAVEMENT MARKERS

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

PAVEMENT MARKING AND SIGNAGE
RIGHT TURN LANE AT MINOR INTERSECTIONS
(ARTERIALS WITH EMERGENCY/PARKING LANE)

DATE 06-09-11	DWG. NO. 246.7	

Effective 8/10/2023 to 8/07/2024



NOTES:

1. THE MINIMUM LENGTH OF DOTTED LINES IS 150' FT. ON MAJOR/MAJOR INTERSECTION.
2. A MINIMUM OF 1@ R3-7R AND R3-BE; 1 @ USD 246.10 SIGNS SHALL BE INSTALLED IN ADVANCE OF THE INTERSECTION AT DISTANCES APPROVED BY THE ENGINEER. RECOMMENDED LOCATIONS ARE SHOWN ABOVE.
3. DOTTED WHITE LINES SHALL NOT BE RAISED PAVEMENT MARKERS.

AGENCY APPROVED	B	C	H	L	M	N

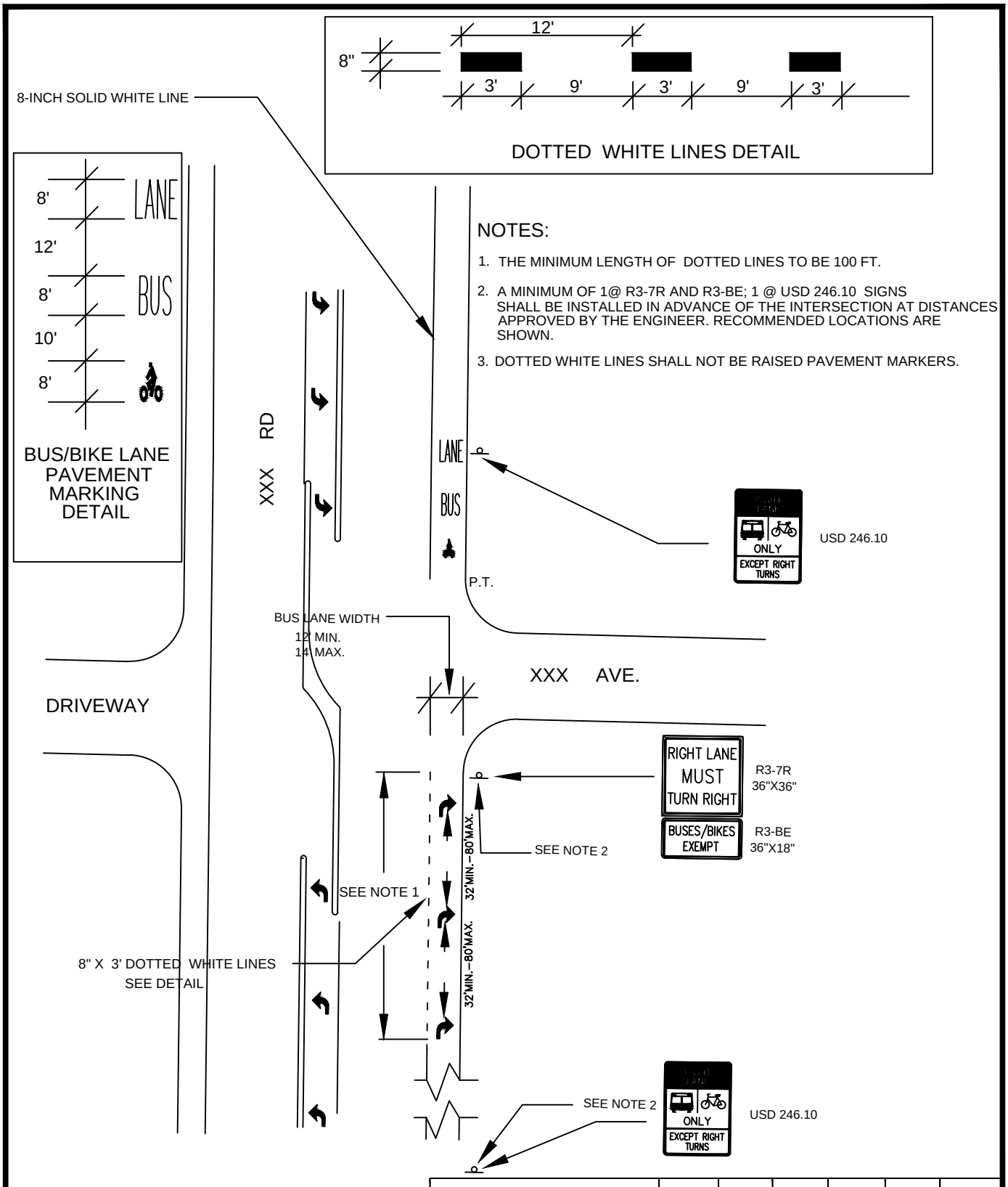
SPECIFICATION REFERENCE	
628	PAINTING TRAFFIC STRIPING
633	PAVEMENT MARKERS
716	SIGN MATERIALS

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

EXCLUSIVE BUS/BIKE LANE MAJOR/MAJOR INTERSECTION SIGN INSTALLATION AND PAVEMENT MARKING DETAIL

DATE 07-01-18	DWG. NO. 246.8	

Effective 8/10/2023 to 8/07/2024



NOTES:

1. THE MINIMUM LENGTH OF DOTTED LINES TO BE 100 FT.
2. A MINIMUM OF 1@ R3-7R AND R3-BE; 1 @ USD 246.10 SIGNS SHALL BE INSTALLED IN ADVANCE OF THE INTERSECTION AT DISTANCES APPROVED BY THE ENGINEER. RECOMMENDED LOCATIONS ARE SHOWN.
3. DOTTED WHITE LINES SHALL NOT BE RAISED PAVEMENT MARKERS.

AGENCY APPROVED	B	C	H	L	M	N

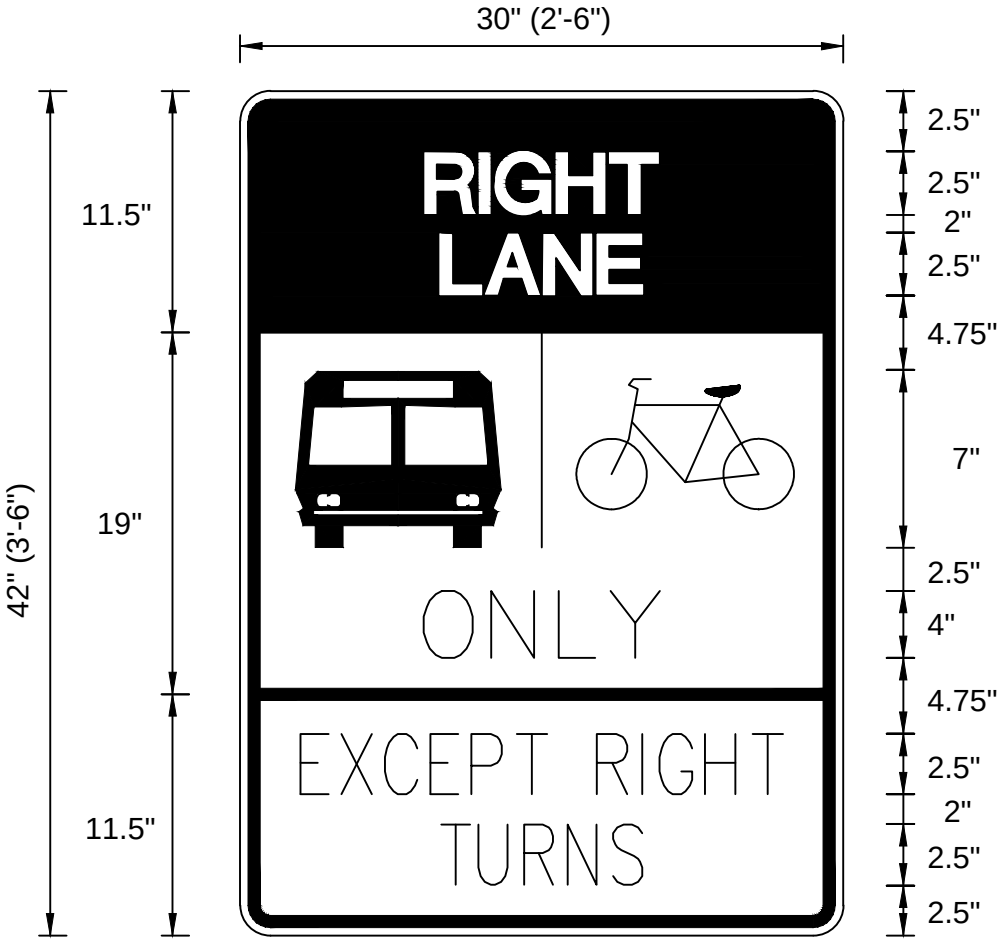
SPECIFICATION REFERENCE	
628	PAINTING TRAFFIC STRIPING
633	PAVEMENT MARKERS
716	SIGN MATERIALS
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

EXCLUSIVE BUS/BIKE LANE MAJOR/MINOR INTERSECTION SIGN INSTALLATION AND PAVEMENT MARKING DETAIL

DATE 07-01-18	DWG. NO. 246.9	

Effective 8/10/2023 to 8/07/2024



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

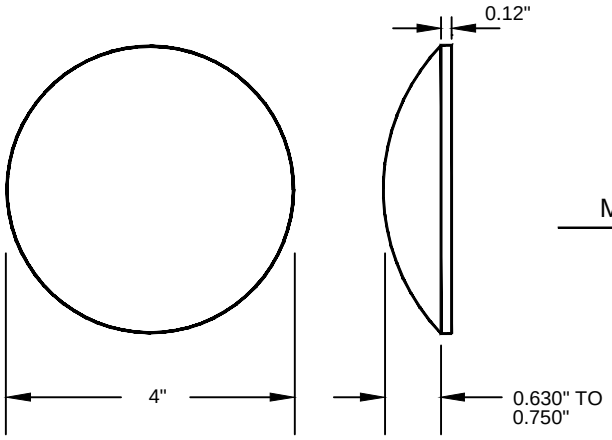
SPECIFICATION REFERENCE	
716	SIGN MATERIALS
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

EXCLUSIVE BUS/BIKE LANE SPECIAL SIGN DETAIL

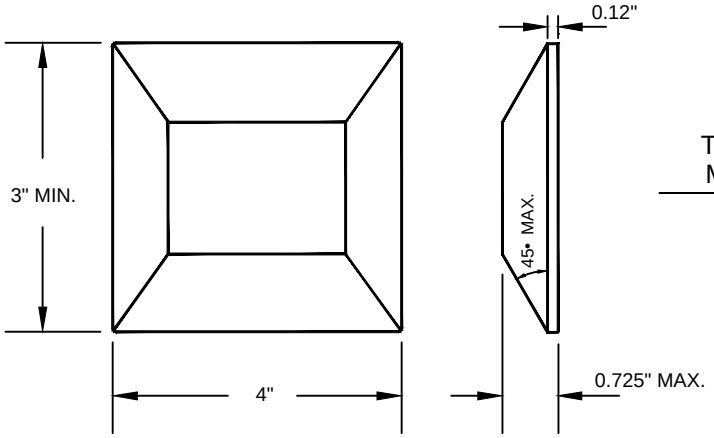
DATE 01-01-18 | DWG. NO. 246.10

Effective 8/10/2023 to 8/07/2024



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

AGENCY APPROVED	B	C	H	L	M	N

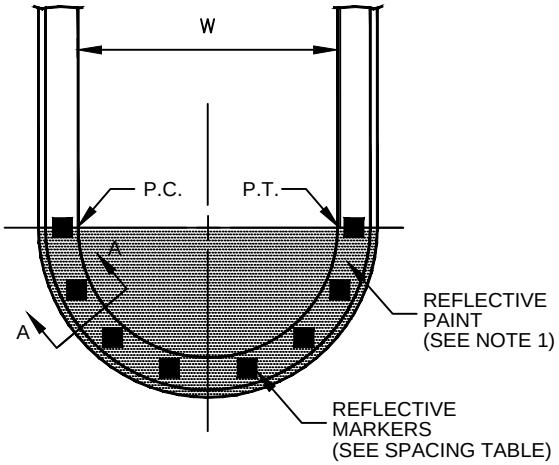
SPECIFICATION REFERENCE	
633	PAVEMENT MARKERS

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

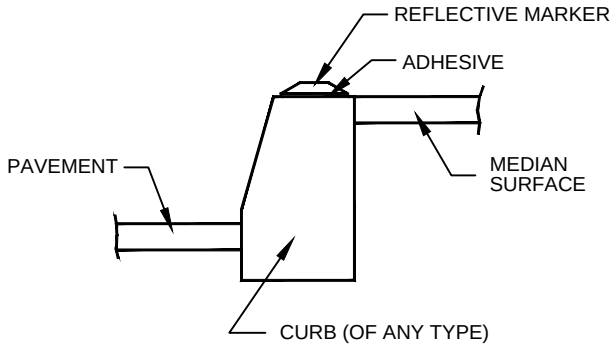
MARKER DETAILS AND LANE MARKER SCHEDULE

DATE 5-13-99	DWG. NO. 247	

Effective 8/10/2023 to 8/07/2024



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

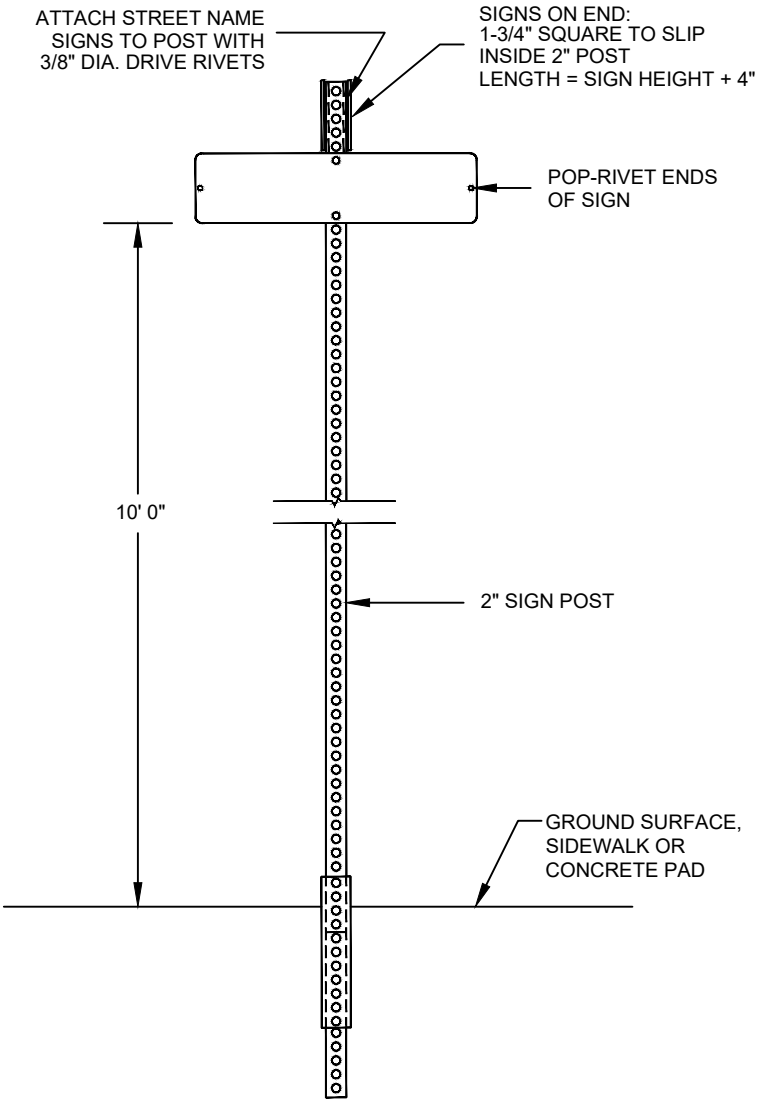
SPECIFICATION REFERENCE	
628	PAINTING TRAFFIC STRIPING
633	REFLECTIVE PAVEMENT MARKERS

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

MEDIAN NOSE MARKINGS

DATE 6-11-93	DWG. NO. 248	

Effective 8/10/2023 to 8/07/2024



NOTES

1. REFER TO STD. DWG. NO. 249.1 FOR FOUNDATION DETAILS.
2. (M) ALL STREET NAME SIGNS SHALL BE 9 INCH STANDARD IN THE CITY OF MESQUITE ONLY.
3. 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.

AGENCY APPROVED	B	C	H	L	(M)	N	R

SPECIFICATION REFERENCE	
631	STREET NAME SIGNS

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

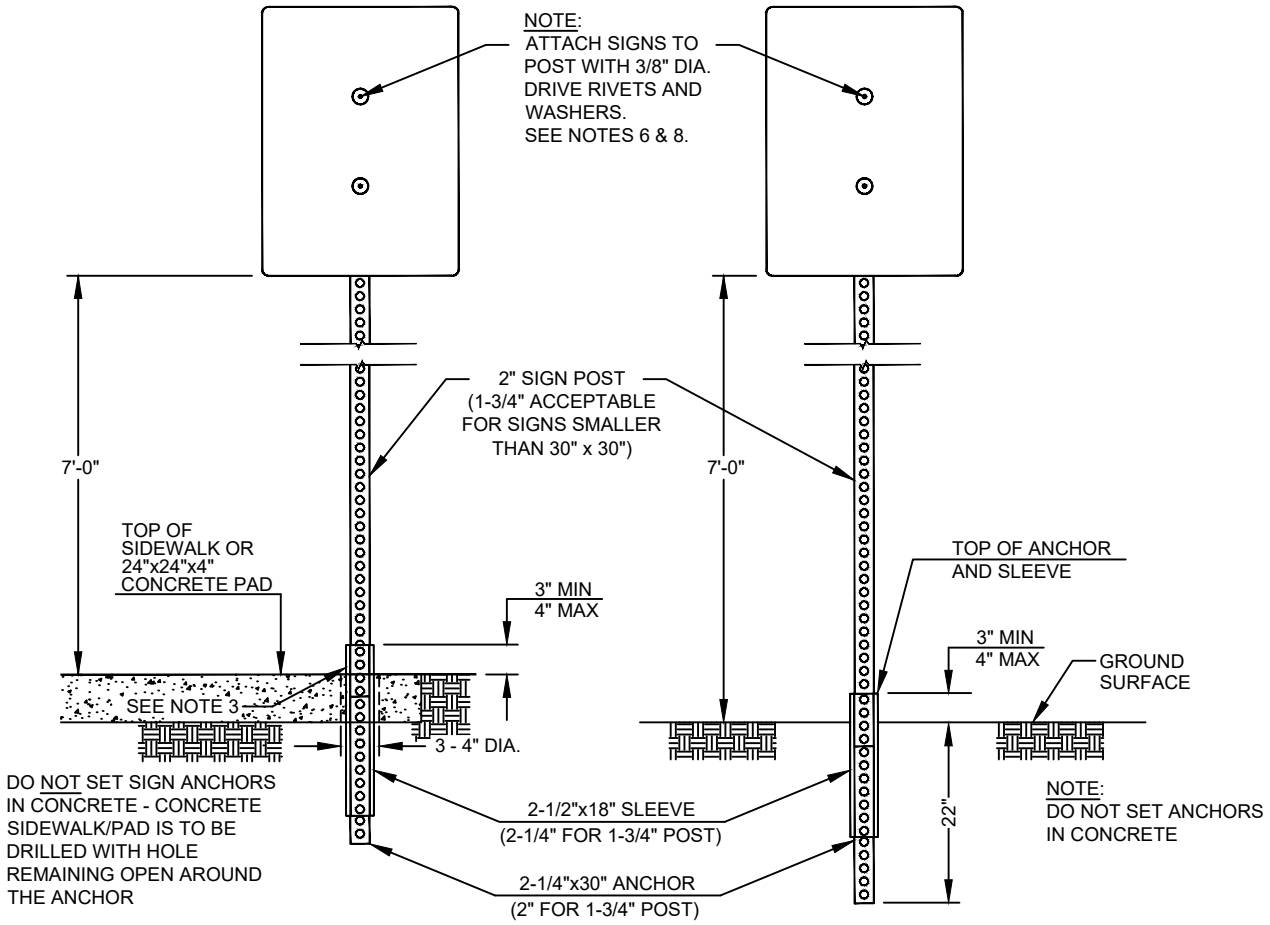
STANDARD STREET NAME SIGN POST INSTALLATION

DATE 12-10-20 | DWG. NO. 249

Effective 8/10/2023 to 8/07/2024

URBAN INSTALLATIONS
SEE NOTE 9

RURAL INSTALLATIONS
(NO LANDSCAPING)



NOTES

1. 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.
2. 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.
3. 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.
4. ATTACH POST TO ANCHORING SYSTEM BY USING AT LEAST TWO 3/8" DIA. DRIVE RIVETS.
5. PROVIDE 4" MINIMUM LAP BETWEEN BOTTOM OF POST AND THE BOTTOM OF THE ANCHOR/SLEEVE ASSEMBLY.
6. SIGNS LARGER THAN 24"x30" REQUIRE 3/8" x 1-1/2" FENDER WASHERS UNDER DRIVE RIVETS.
7. "U-CHANNEL" POSTS ARE NOT ACCEPTABLE.
8. BOLTS IN LIEU OF DRIVE RIVETS ARE NOT ACCEPTABLE.
9. ALL URBAN SIGN INSTALLATIONS ARE TO BE INSTALLED IN A CONCRETE SIDEWALK, OR IN A CONCRETE PAD (24"x24"x4") WHEN NO SIDEWALK EXISTS.
10. 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.
11. 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

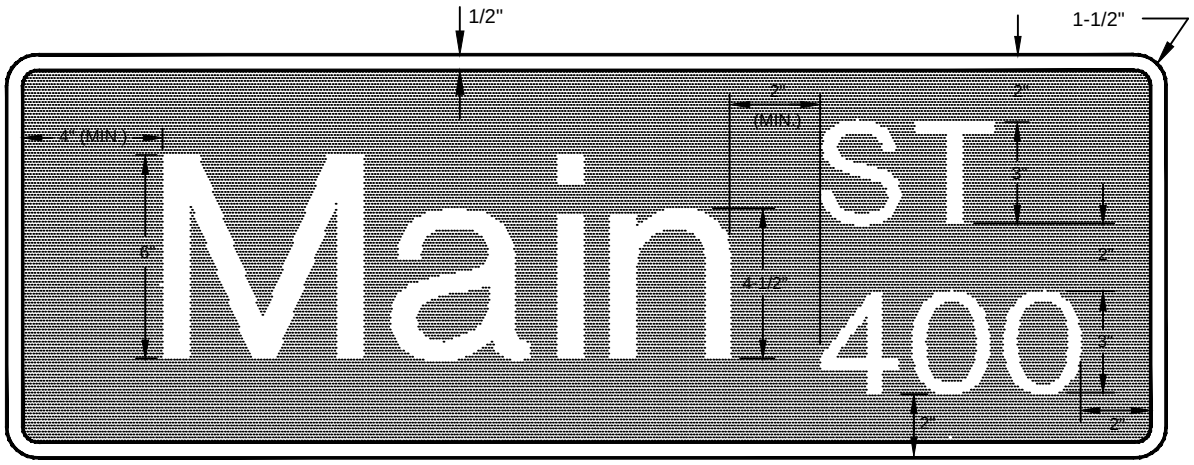
SPECIFICATION REFERENCE	
631	STREET NAME SIGNS

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

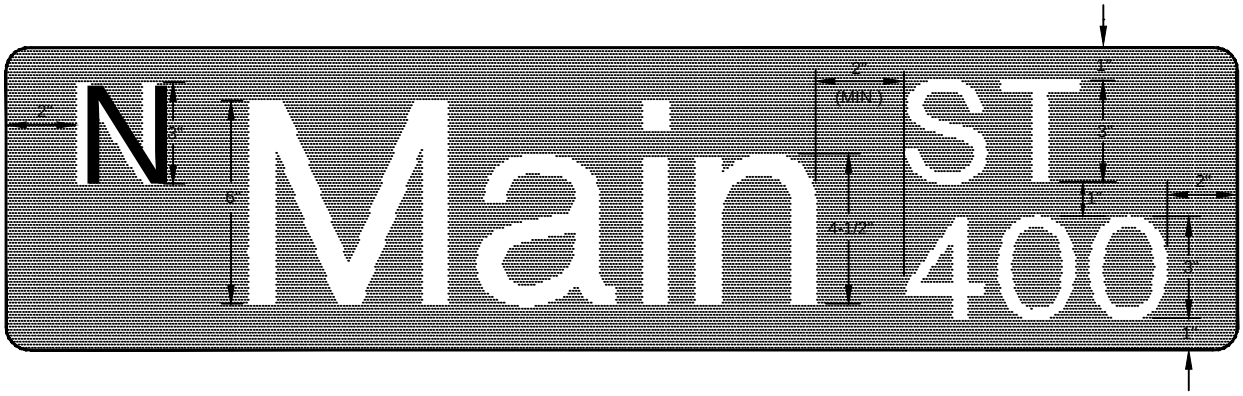
SIGN INSTALLATION DETAIL

DATE 12-10-20 | DWG. NO. 249.1

Effective 8/10/2023 to 8/07/2024



12" (MAJOR STREETS)



9" (MINOR STREETS)

NOTES:

(N) 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	
631	STREET NAME SIGNS
716	SIGN MATERIALS

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

STREET NAME SIGNS
FACE COPY

DATE 07/01/12	DWG. NO. 250	SHEET 1 OF 2

Effective 8/10/2023 to 8/07/2024

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

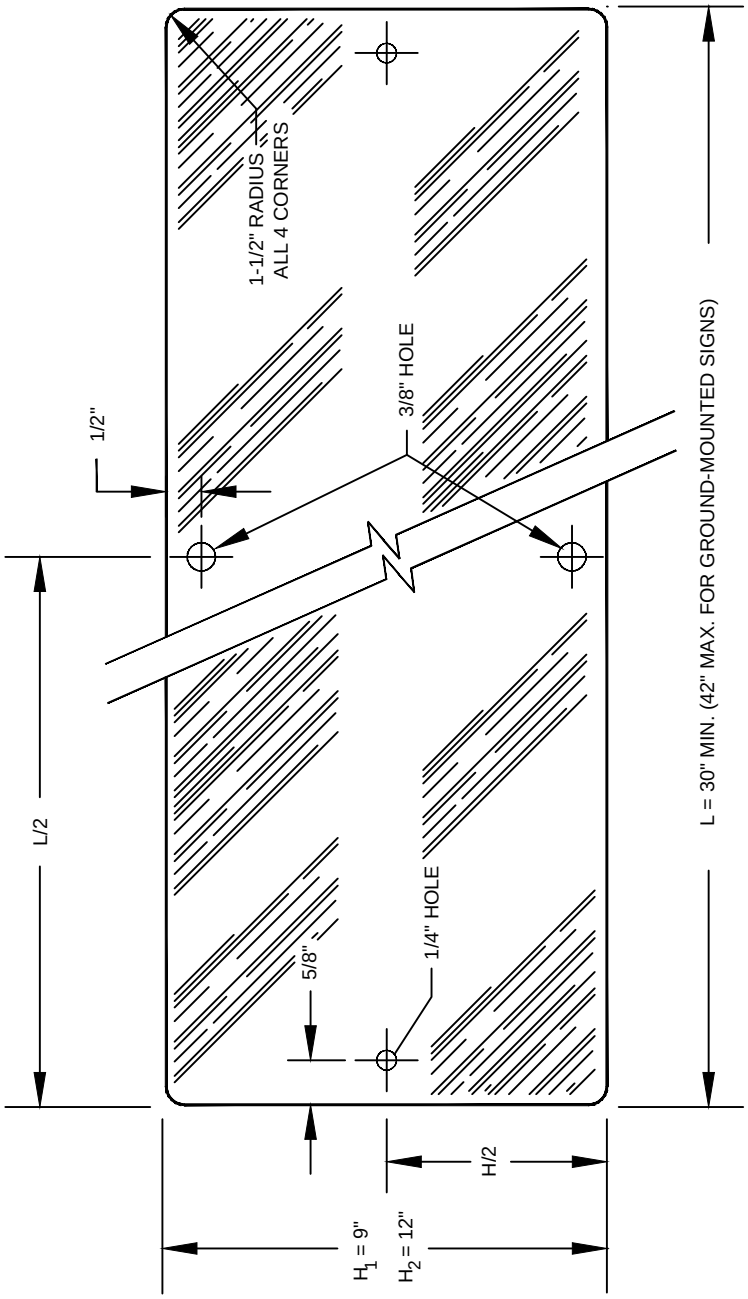
SPECIFICATION REFERENCE	
631	STREET NAME SIGNS
716	SIGN MATERIALS
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

STREET NAME SIGNS
LETTER SPACING

DATE 6-12-97	DWG. NO. 250	SHEET 2 OF 2

Effective 8/10/2023 to 8/07/2024



ALUMINUM BLANK

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.

AGENCY APPROVED	B	C	H	L	M	N

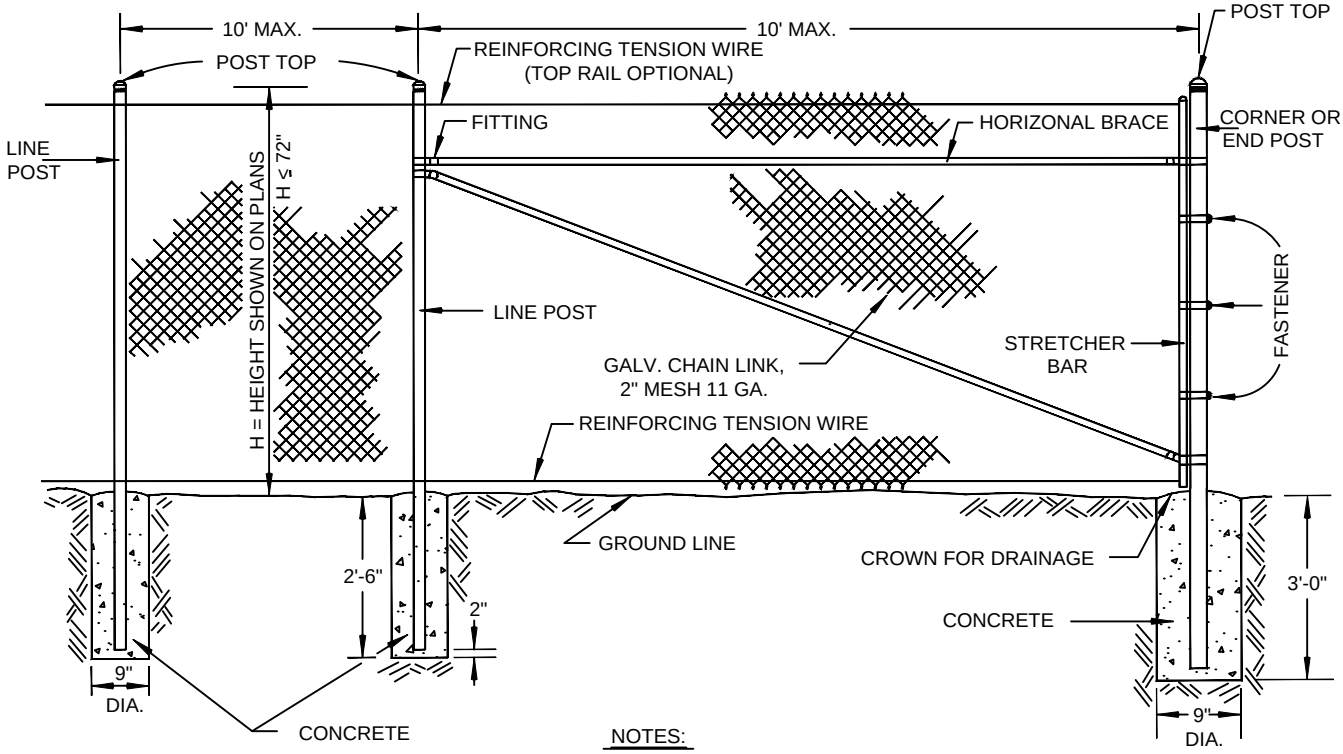
SPECIFICATION REFERENCE	
631	STREET NAME SIGNS
716	SIGN MATERIALS

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

STREET NAME SIGN BLANKS

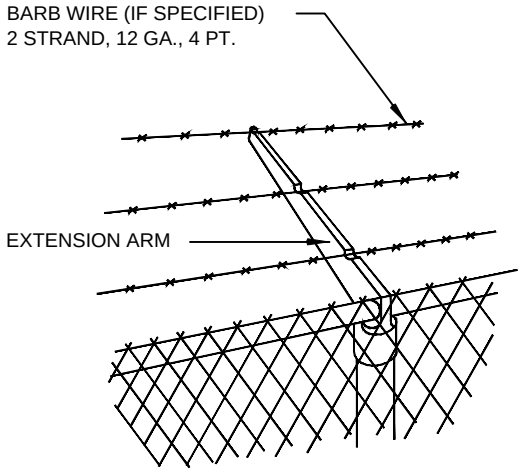
DATE 6-8-06	DWG. NO. 251	

Effective 8/10/2023 to 8/07/2024



NOTES:

1. FENCING SHALL BE CHAIN LINK AND SHALL CONSIST OF GALVANIZED CHAIN LINK FABRIC ON STEEL POSTS.
   - (A) ALL POSTS TOPS SHALL BE FITTED WITH SUITABLE FINIALS.
   - (B) 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.
   - (C) ALL FITTINGS SHALL BE HOT-DIPPED GALVANIZED MALLEABLE, CAST IRON, OR PRESSED STEEL.
   - (D) TOP AND BOTTOM SELVAGES OF THE FENCE SHALL HAVE A TWISTED AND BARBED FINISH.
2. 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.



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

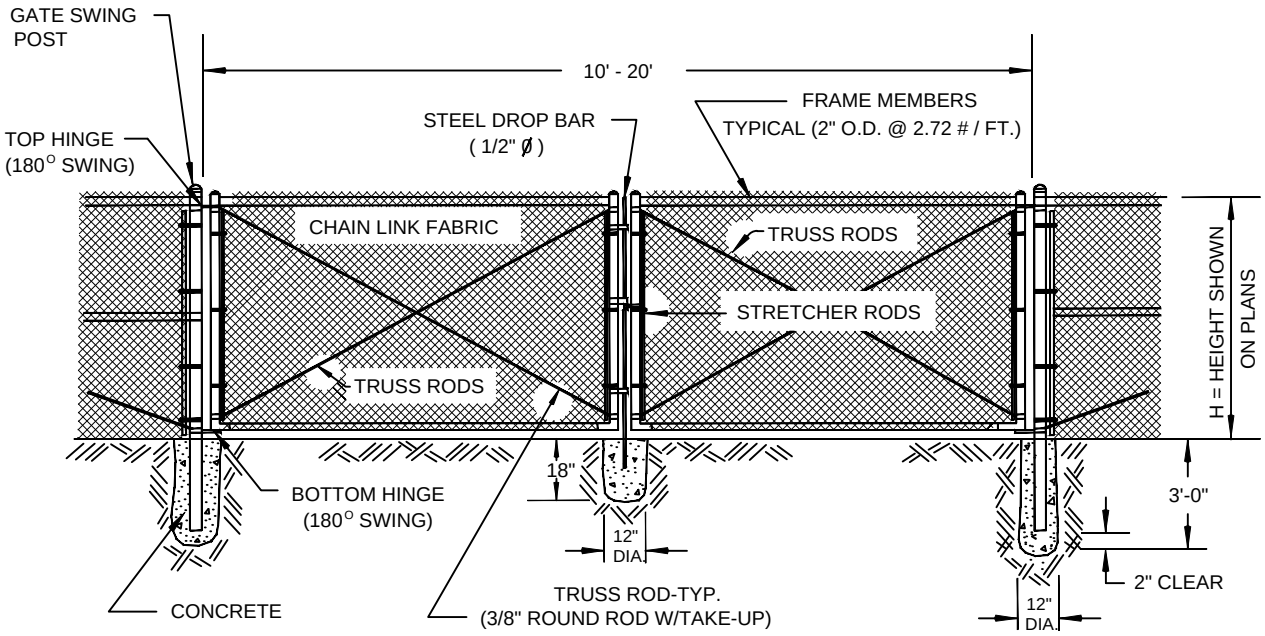
SPECIFICATION REFERENCE	
501	CONCRETE
616	FENCING

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

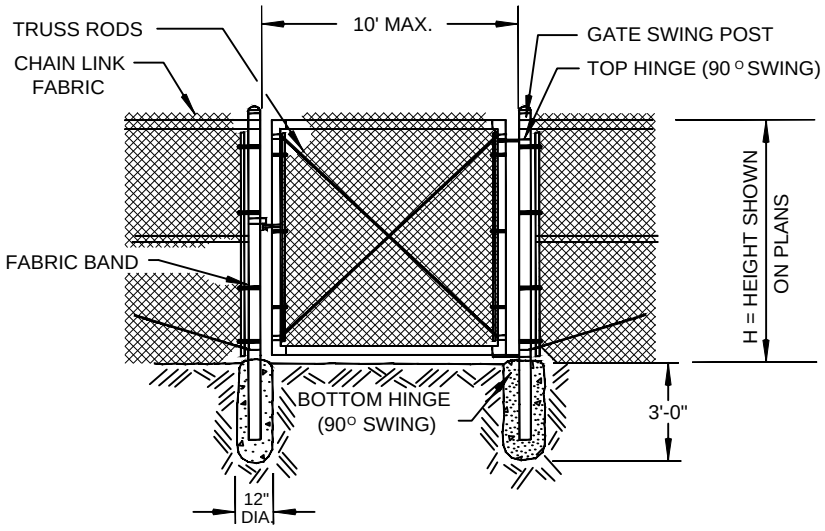
CHAIN LINK FENCE (72 INCH HIGH OR LESS)

DATE 12-14-00 | DWG. NO. 252

Effective 8/10/2023 to 8/07/2024



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.

AGENCY APPROVED	B	C	H	L	M	N

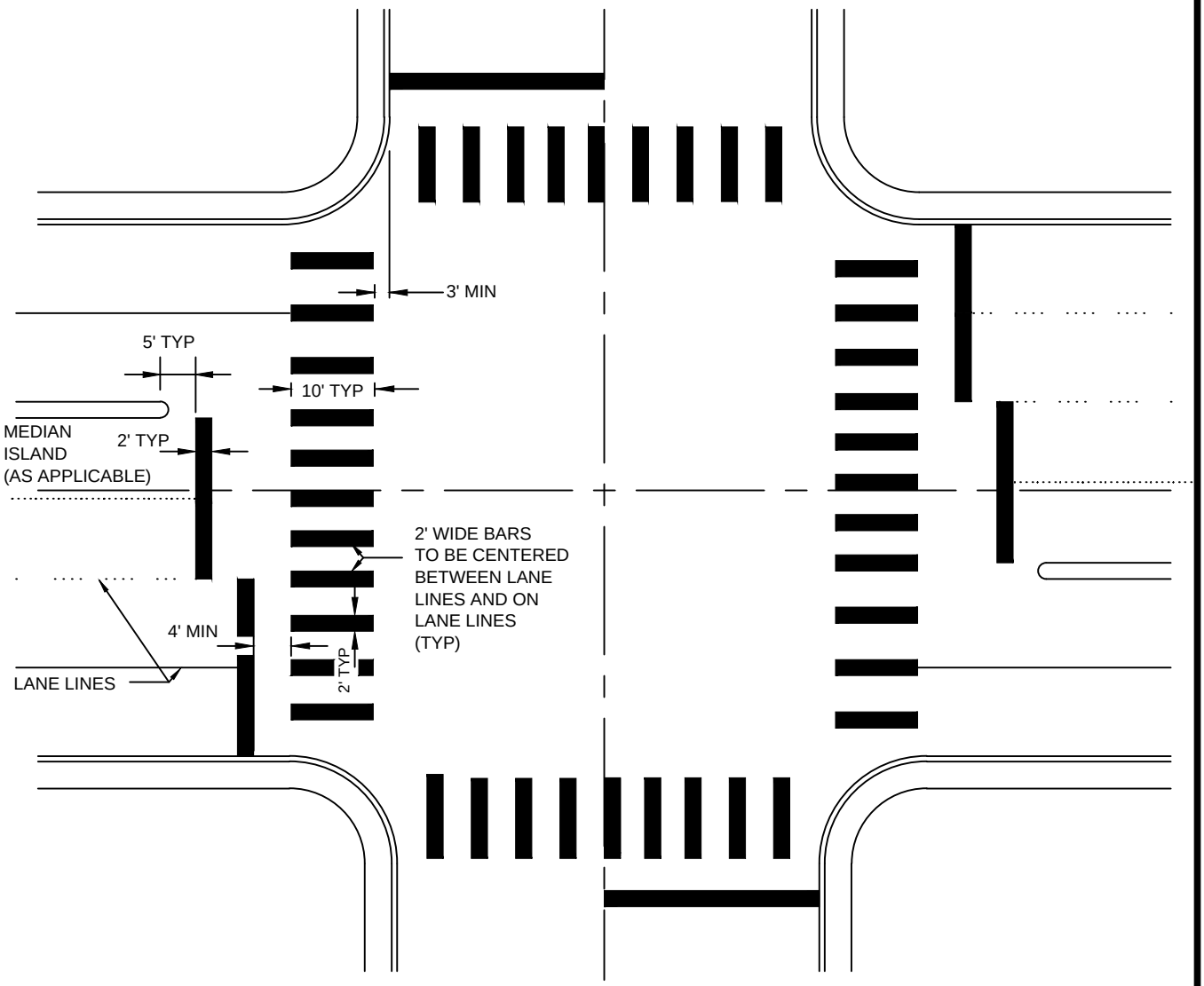
SPECIFICATION REFERENCE	
501	CONCRETE
616	FENCING

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

CHAIN LINK GATES

DATE 12-14-00	DWG. NO. 253	

Effective 8/10/2023 to 8/07/2024

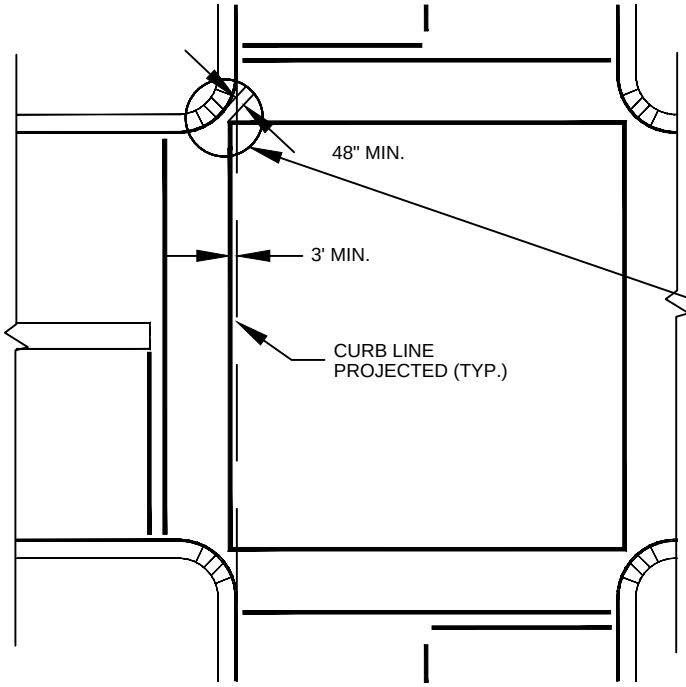


TYPICAL CROSSWALK
STRIPING DETAIL

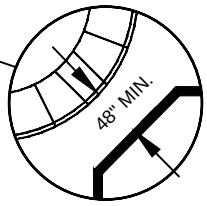
AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	CROSSWALK MARKINGS - TYPE I
	DATE 11-12-09 / DWG. NO. 254

Effective 8/10/2023 to 8/07/2024



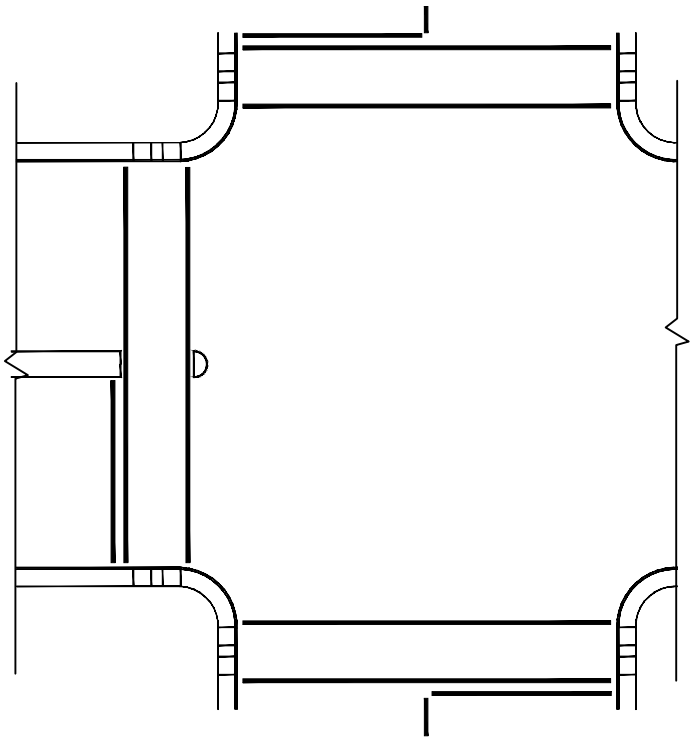
TYPICAL MARKING
CURB RAMP IN
MIDDLE OF
CURB RETURN



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

AGENCY APPROVED	B		H	L	M	N

SPECIFICATION REFERENCE	
.	

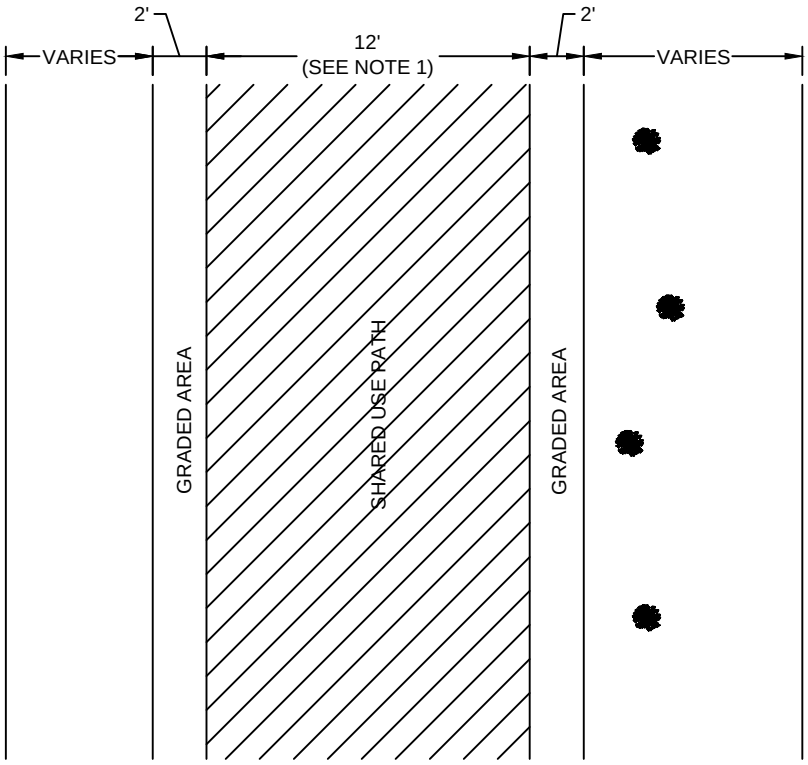
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

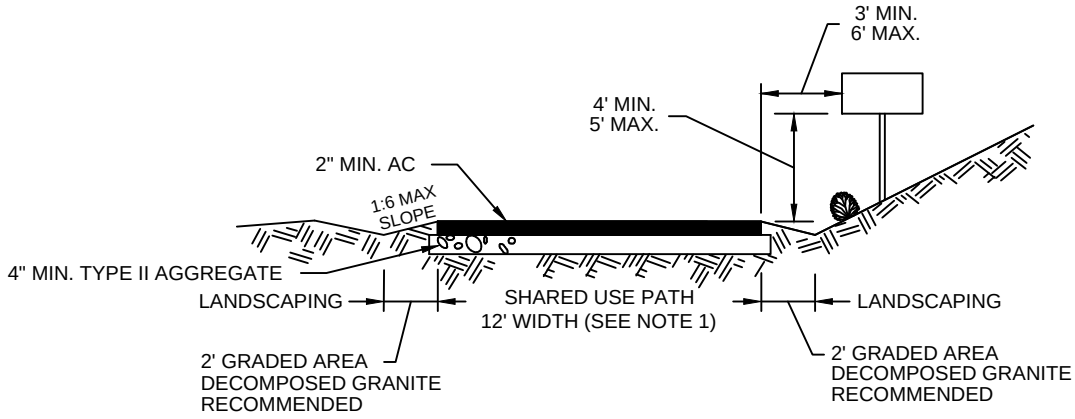
SUPPLEMENTAL DRAWING

CROSSWALK MARKINGS - TYPE II

DATE 8-12-99	DWG. NO. 254.1.S1	

Effective 8/10/2023 to 8/07/2024





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

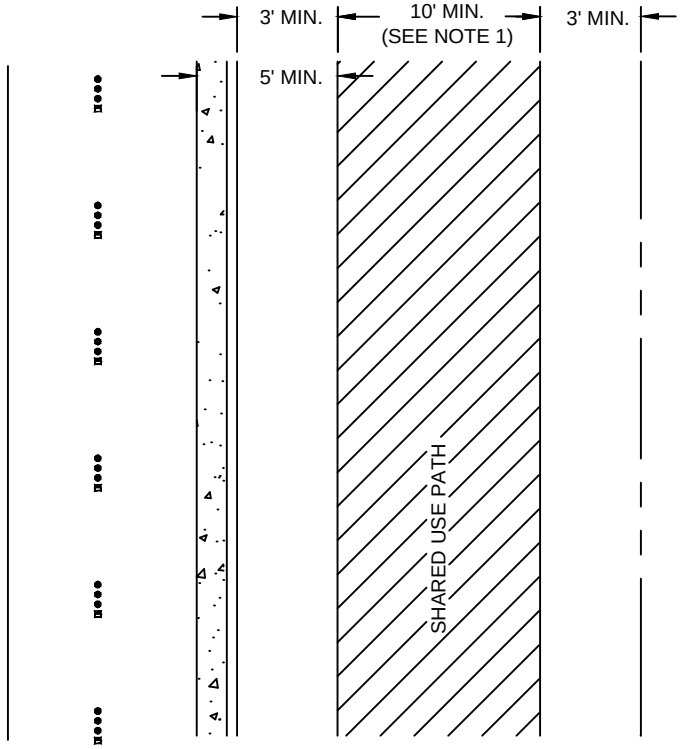
SPECIFICATION REFERENCE	
628	PAINTING TRAFFIC STRIPING
633	PAVEMENT MARKERS

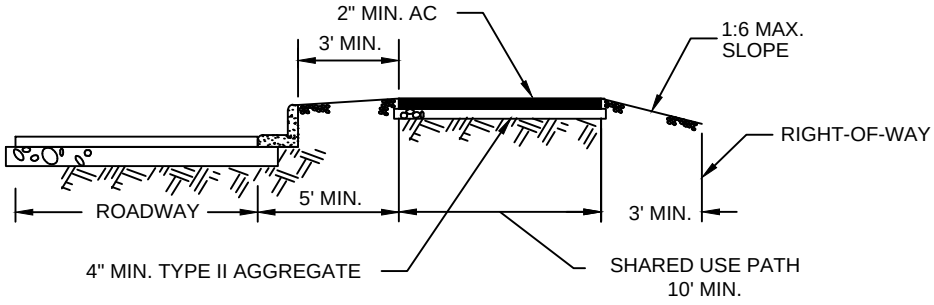
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SHARED USE PATH

DATE 7-10-03	DWG. NO. 255	

Effective 8/10/2023 to 8/07/2024





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 RECOMMEDNED 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	
628	PAINTING TRAFFIC STRIPING
633	PAVEMENT MARKERS

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SHARED USE PATH ALONG A ROADWAY

DATE 7-10-03	DWG. NO. 255.1	

Effective 8/10/2023 to 8/07/2024

SIGN SIZES FOR SHARED-USE PATHS

MUTCD CODE	SIGN	MINIMUM SIGN SIZE (IN)
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

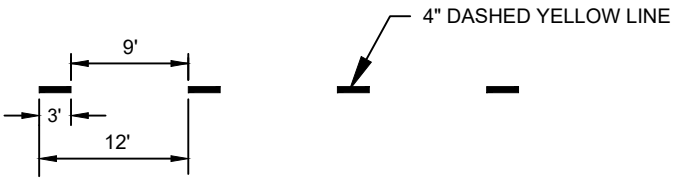
SPECIFICATION REFERENCE	
628	PAINTING TRAFFIC STRIPING
633	PAVEMENT MARKERS

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SIGN SIZES FOR
SHARED USE PATH

DATE 7-10-03	DWG. NO. 255.3	

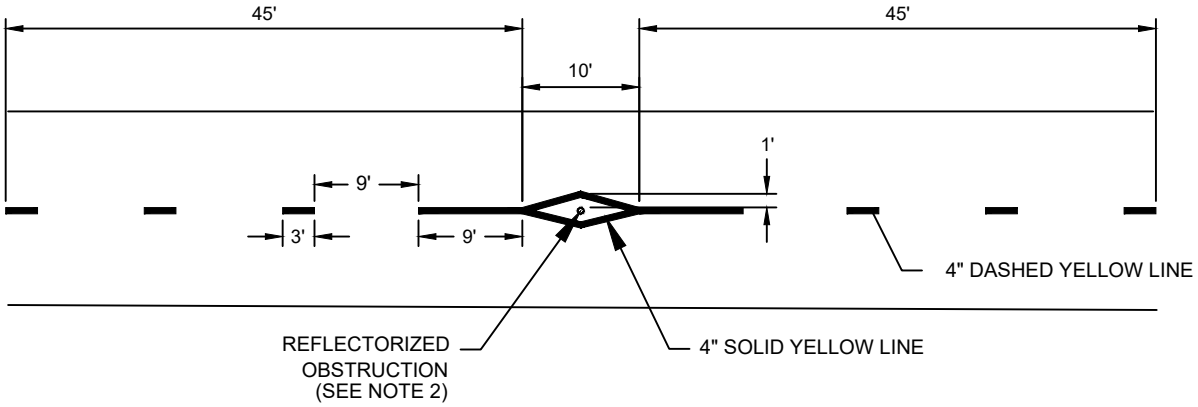
Effective 8/10/2023 to 8/07/2024



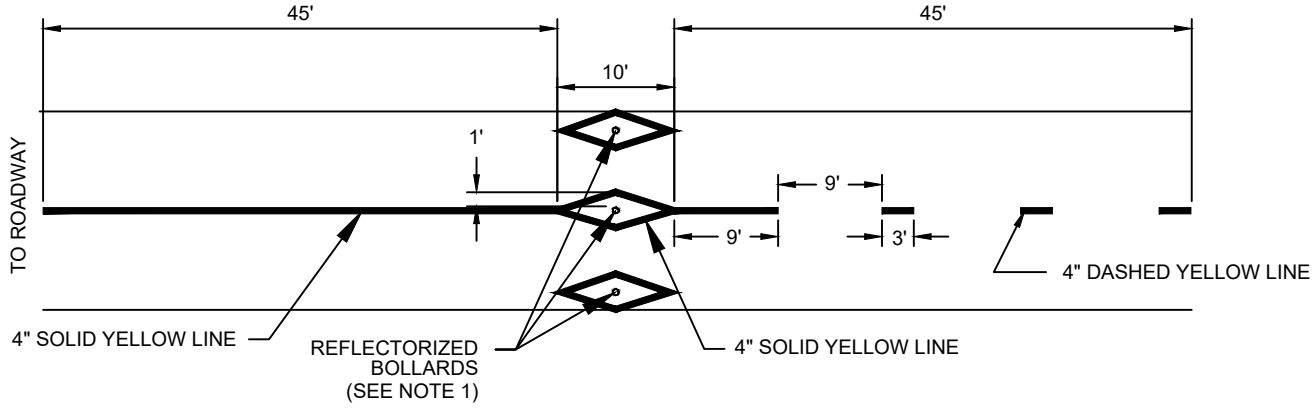
CENTERLINE DELINEATION
PASSING PERMITTED
(SEE NOTE 3)



CENTERLINE DELINEATION
PASSING PROHIBITED
(SEE NOTE 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

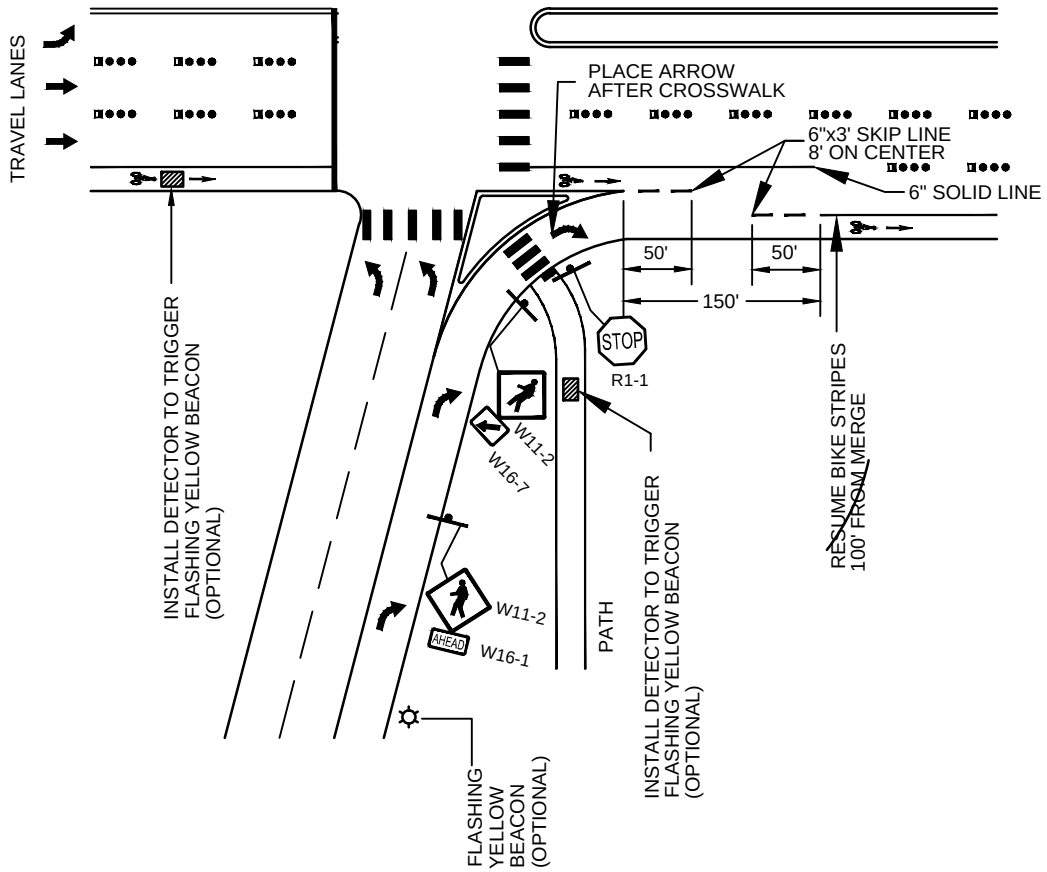
SPECIFICATION REFERENCE	
628	TRAFFIC STRIPING
633	PAVEMENT MARKERS

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

DELINEATION AND BOLLARD USAGE ON SHARED USE PATH

DATE 03-12-20 | DWG. NO. 255.4

Effective 8/10/2023 to 8/07/2024



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	
628	PAINTING TRAFFIC STRIPING
633	PAVEMENT MARKERS
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SHARED USE PATH CROSSING OF FREE RIGHT TURN LANE

DATE	7-10-03	DWG. NO.	256	

Effective 8/10/2023 to 8/07/2024

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) (C) 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) (C)	0.84 FC	4:1
MINOR COLLECTOR	60'	150W 100W (CC) (C)	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.

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. LUMINARE 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	
623	TRAFFIC SIGNALS & STREETLIGHTING
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

STREETLIGHT LOCATION INDUCTION LIGHTING STANDARDS AND GENERAL NOTES

DATE 07-01-13 | DWG. NO. 300.S2

Effective 8/10/2023 to 8/07/2024

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, E 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

8. FOR EACH FIXUTRE 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 LUMINIARE 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	
623	TRAFFIC SIGNALS & STREETLIGHTING

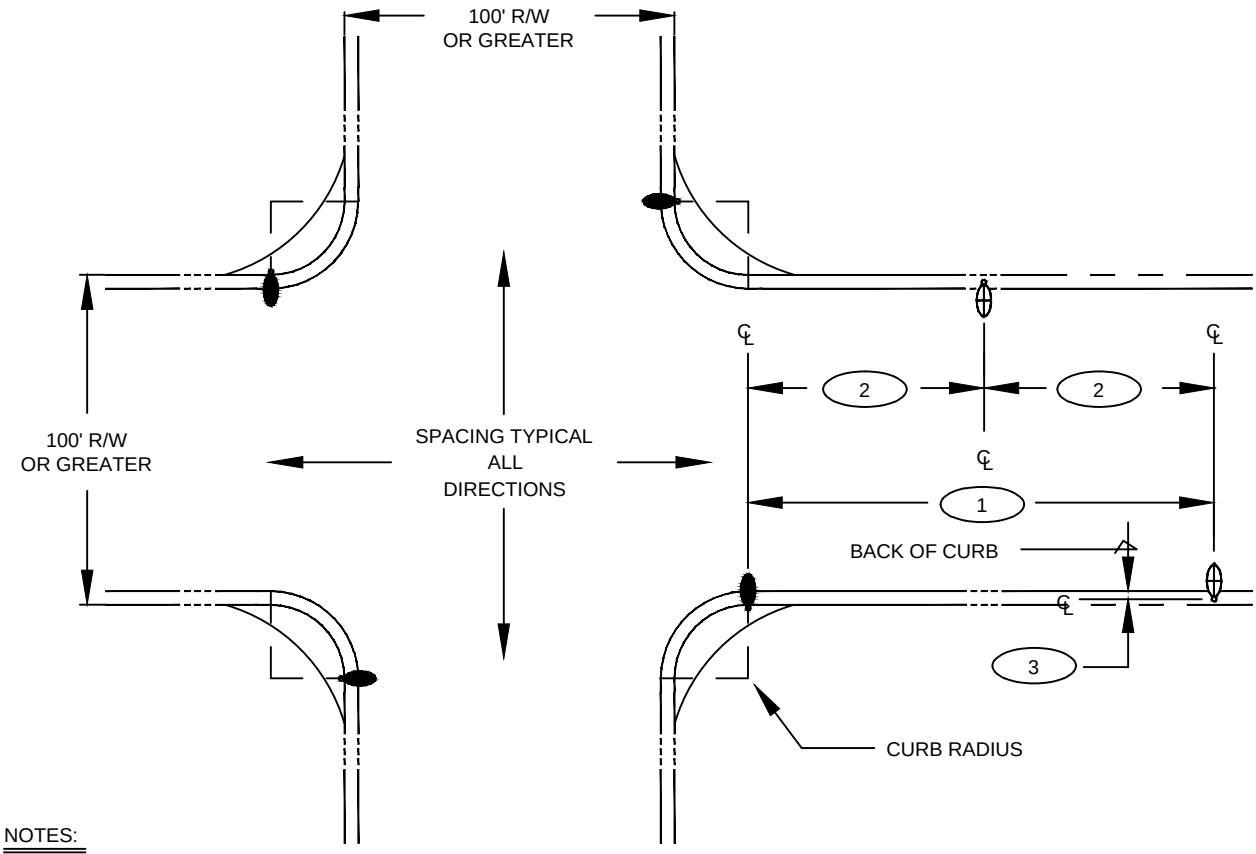
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

STREETLIGHT LOCATION L.E.D. LIGHTING STANDARDS AND GENERAL NOTES

DATE 07-01-14	DWG. NO. 300.S3	SHEET 2 OF 2

Effective 8/10/2023 to 8/07/2024



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. (B)(H) 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	
623	TRAFFIC SIGNALS & STREETLIGHTING
-	

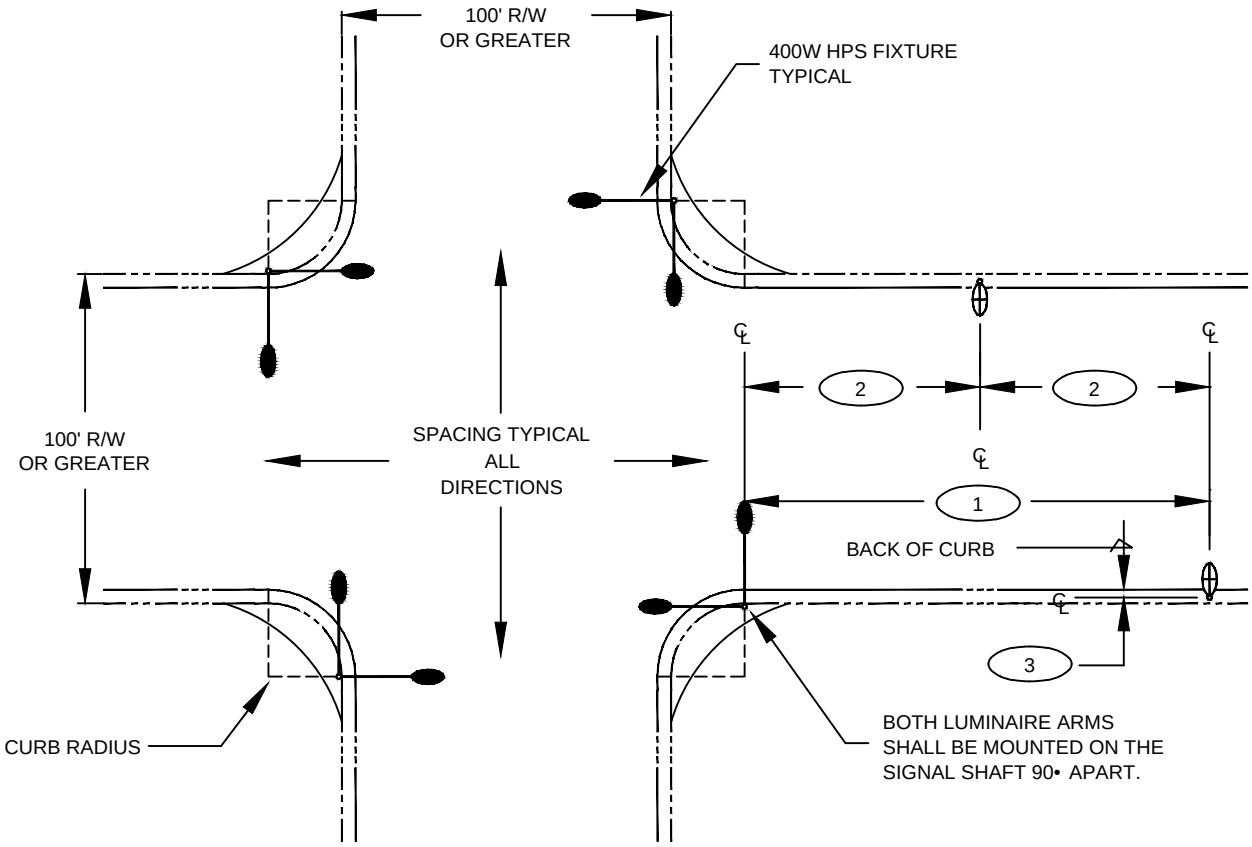
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

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.

Effective 8/10/2023 to 8/07/2024



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	CC
1		120'
2		60'
3		(SEE DRAWING NO. 320)

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED		C				

SPECIFICATION REFERENCE	
623	TRAFFIC SIGNALS & STREETLIGHTING

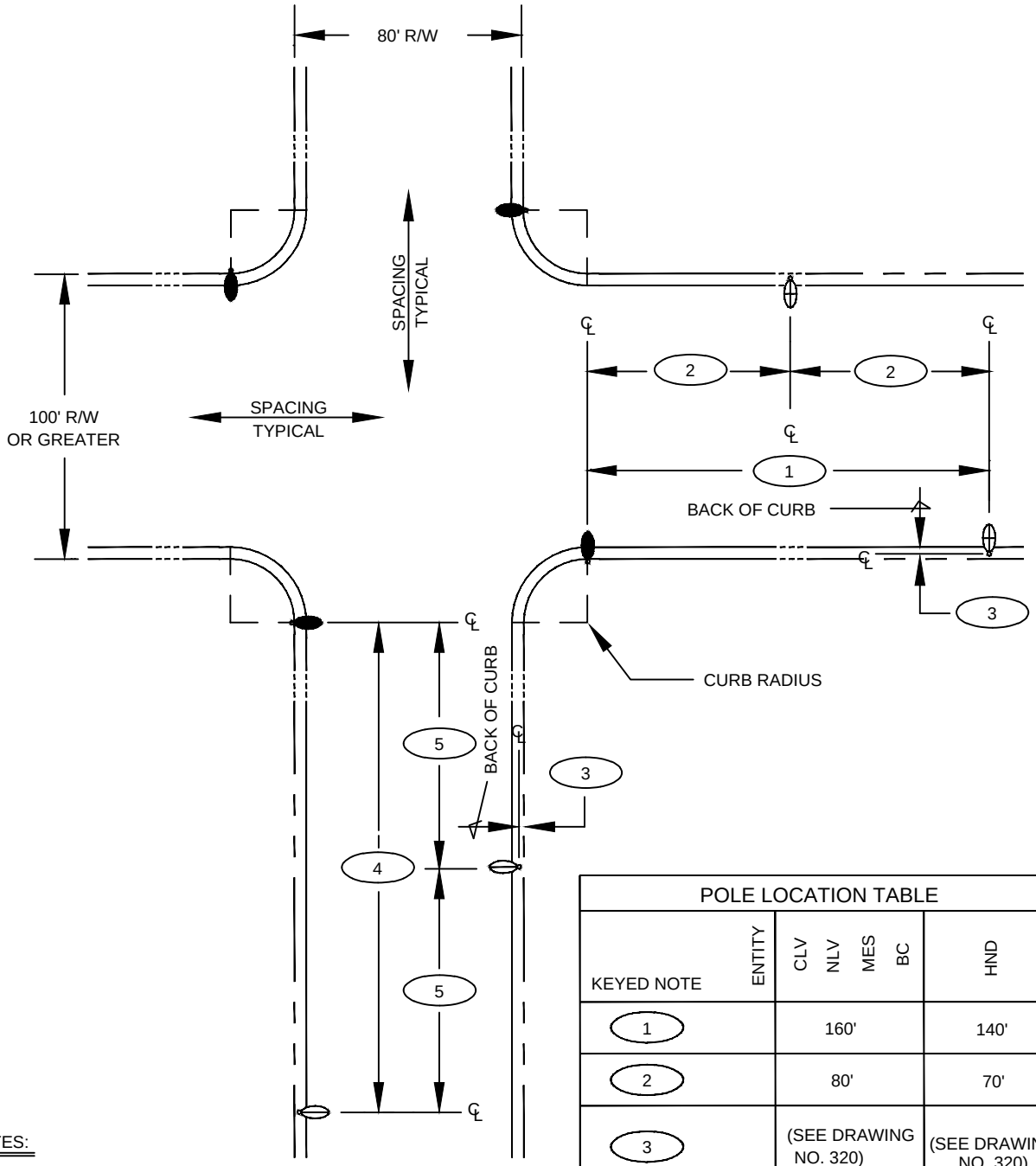
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

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

Effective 8/10/2023 to 8/07/2024



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 (H) AND BOULDER CITY (B) 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	HND
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

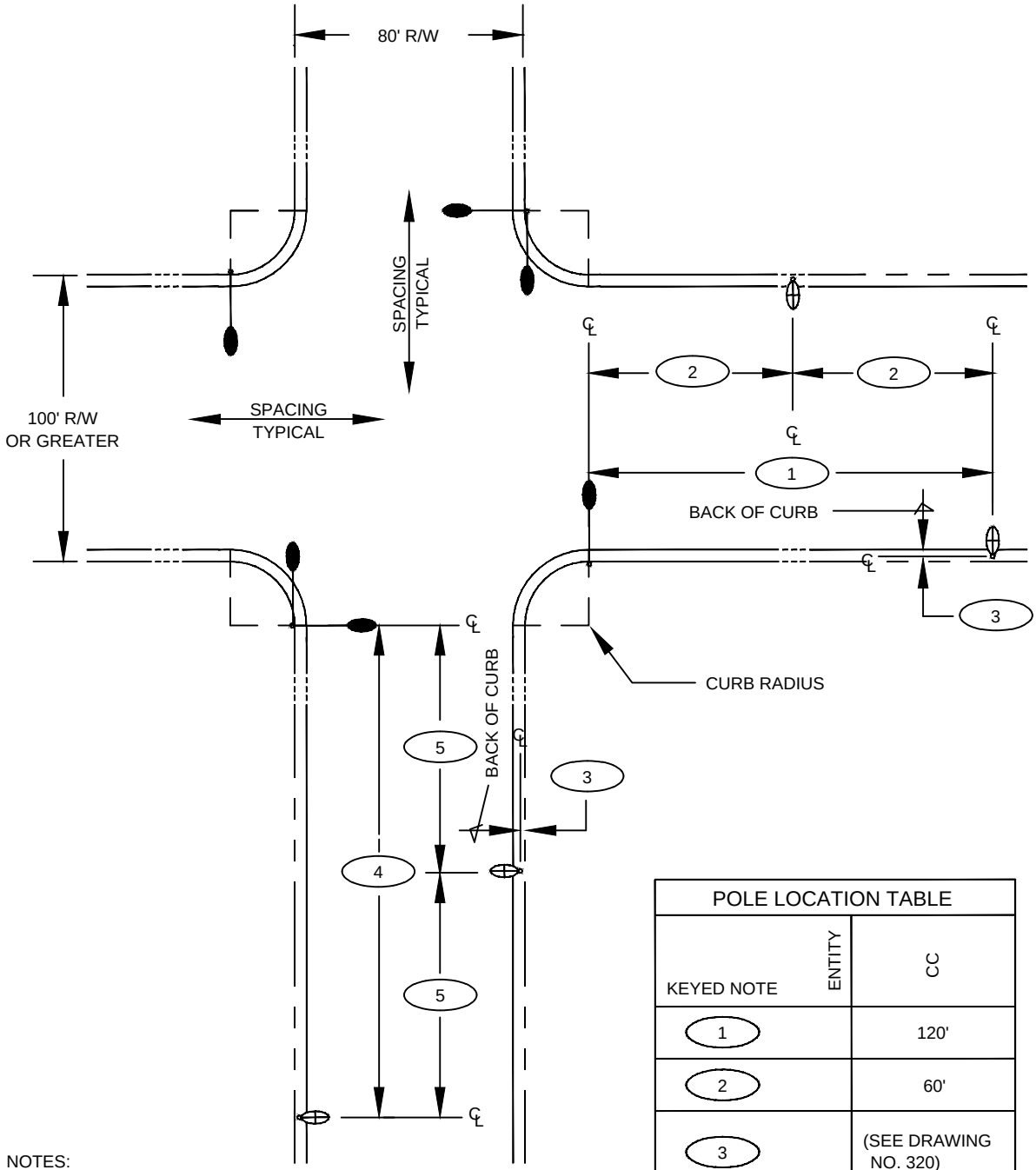
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

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

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

Effective 8/10/2023 to 8/07/2024



POLE LOCATION TABLE	
KEYED NOTE / ENTITY	CC
1	120'
2	60'
3	(SEE DRAWING NO. 320)
4	170'
5	85'

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. ALL LUMINAIRE MAST ARMS FOR 400W FIXTURES SHALL BE 15 FT. LONG AND INSTALLED PER STANDARD DRAWING NO. 808 UNLESS OTHERWISE APPROVED BY THE ENGINEER.

AGENCY APPROVED		C				

SPECIFICATION REFERENCE	
623	TRAFFIC SIGNALS & STREETLIGHTING
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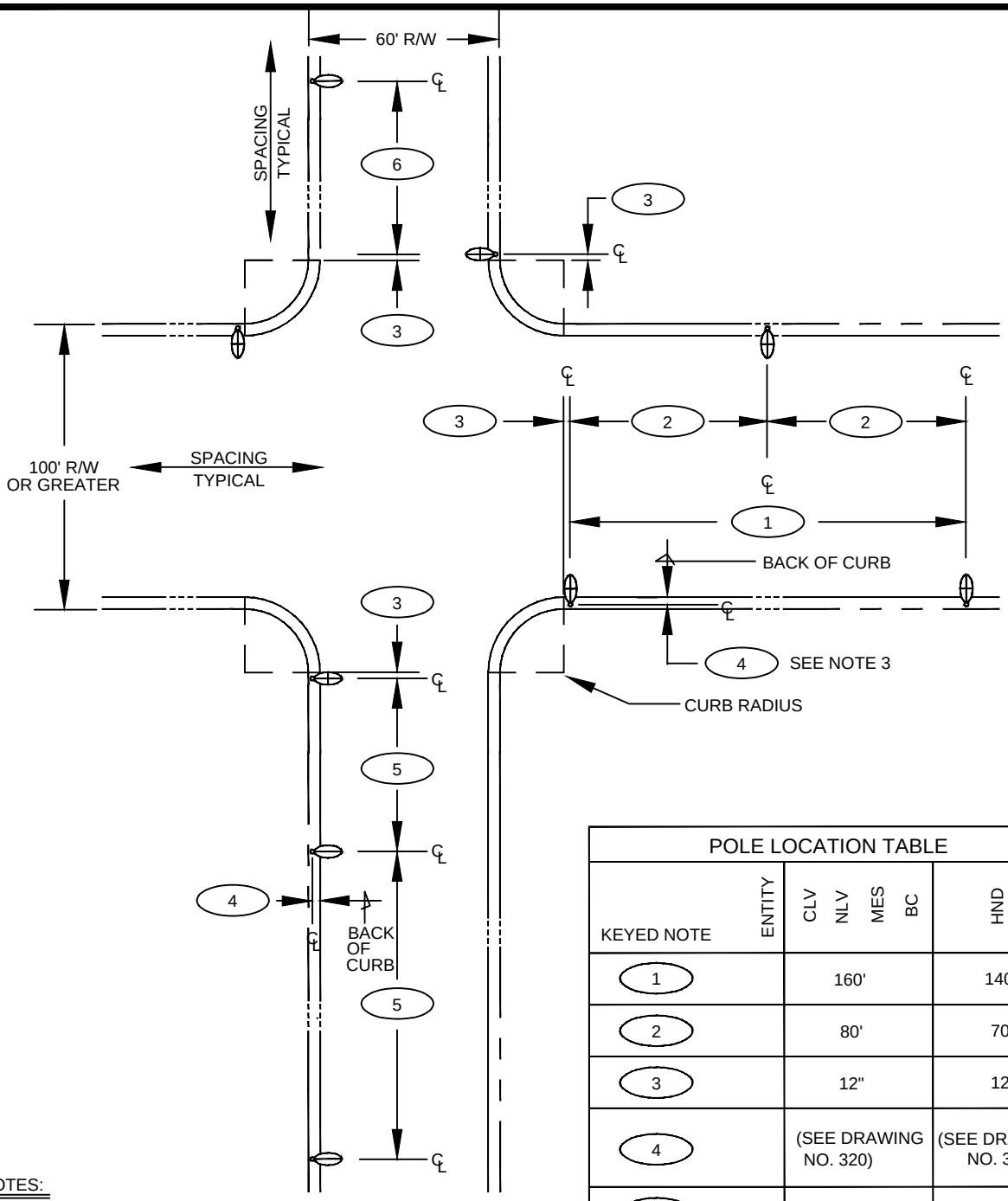
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

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

DATE 07-01-13	DWG. NO. 302.S2	PAGE NO.

Effective 8/10/2023 to 8/07/2024



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	180'	170'
6	90'	170'
INTERSECTION LUMINAIRE TYPE	250W HPS	150W IND

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. (H) (B) 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.

AGENCY APPROVED	(B)		(H)	L	M	N

SPECIFICATION REFERENCE	
623	TRAFFIC SIGNALS & STREETLIGHTING
.	

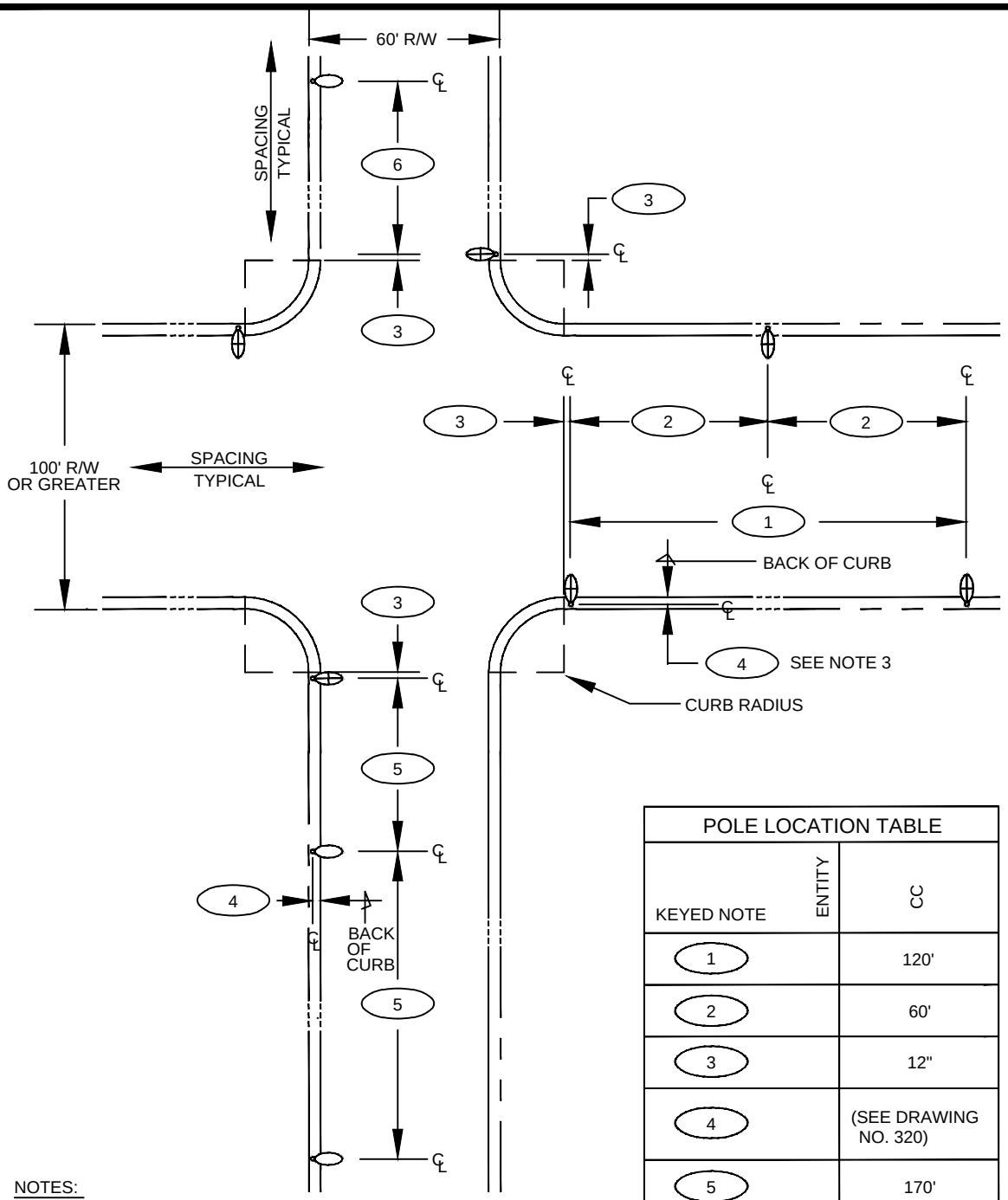
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

STREETLIGHT LOCATIONS AT INTERSECTIONS 100' OR GREATER/60' RIGHT-OF-WAY

DATE 07-01-13 | DWG. NO. 303.S1

Effective 8/10/2023 to 8/07/2024



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

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.

AGENCY APPROVED		C				

SPECIFICATION REFERENCE	
623	TRAFFIC SIGNALS & STREETLIGHTING
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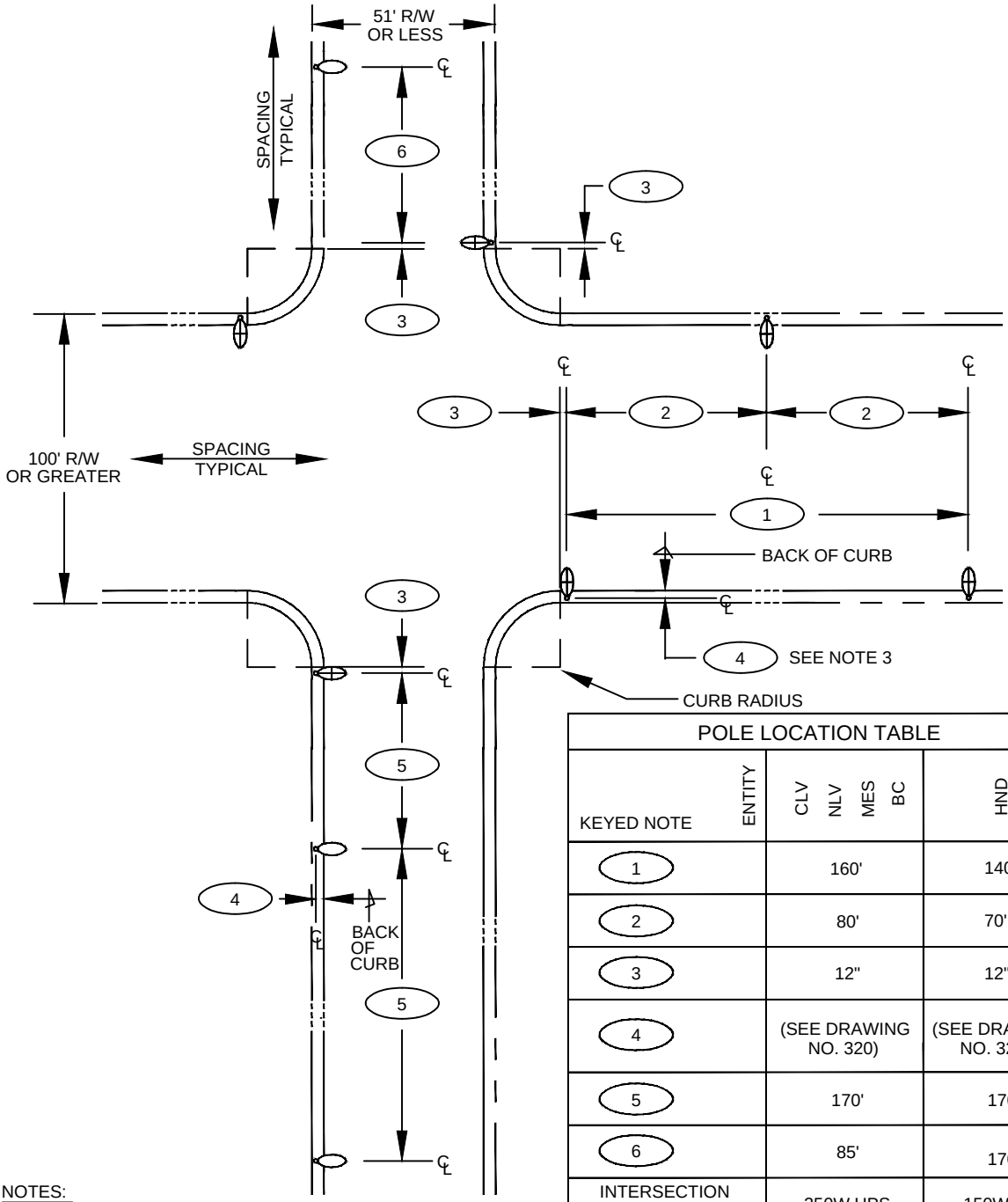
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

STREETLIGHT LOCATIONS AT INTERSECTIONS 100' OR GREATER/60' RIGHT-OF-WAY

DATE 07-01-13 | DWG. NO. 303.S2

Effective 8/10/2023 to 8/07/2024



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

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. (H) (B) 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.

AGENCY APPROVED	(B)		(H)	L	M	N

SPECIFICATION REFERENCE	
623	TRAFFIC SIGNALS & STREETLIGHTING
-	

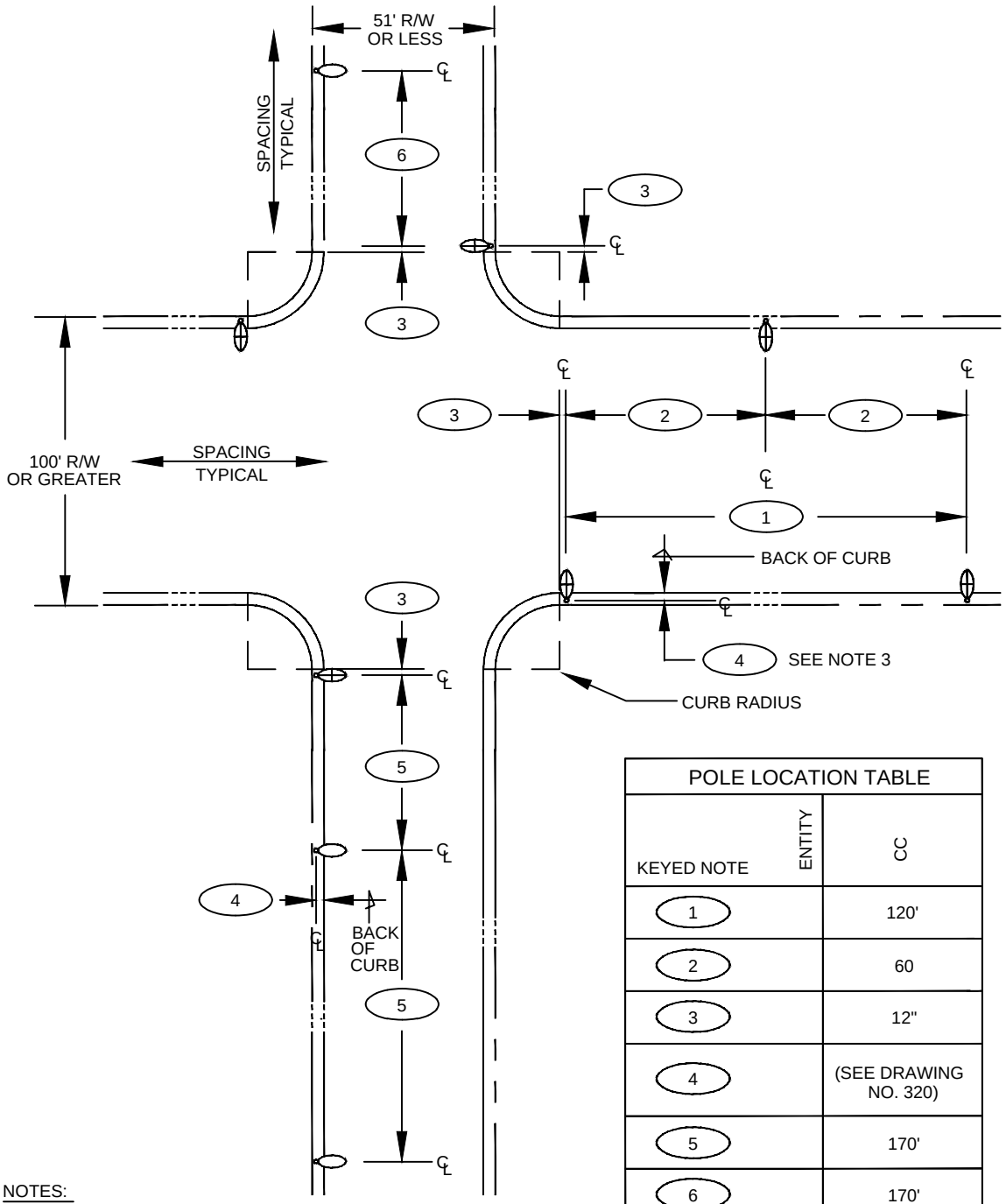
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

STREETLIGHT LOCATIONS AT INTERSECTIONS 100' OR GREATER/51' OR LESS RIGHT-OF-WAY

DATE 07-01-13 | DWG. NO. 304.S1

Effective 8/10/2023 to 8/07/2024



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

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	
623	TRAFFIC SIGNALS & STREETLIGHTING

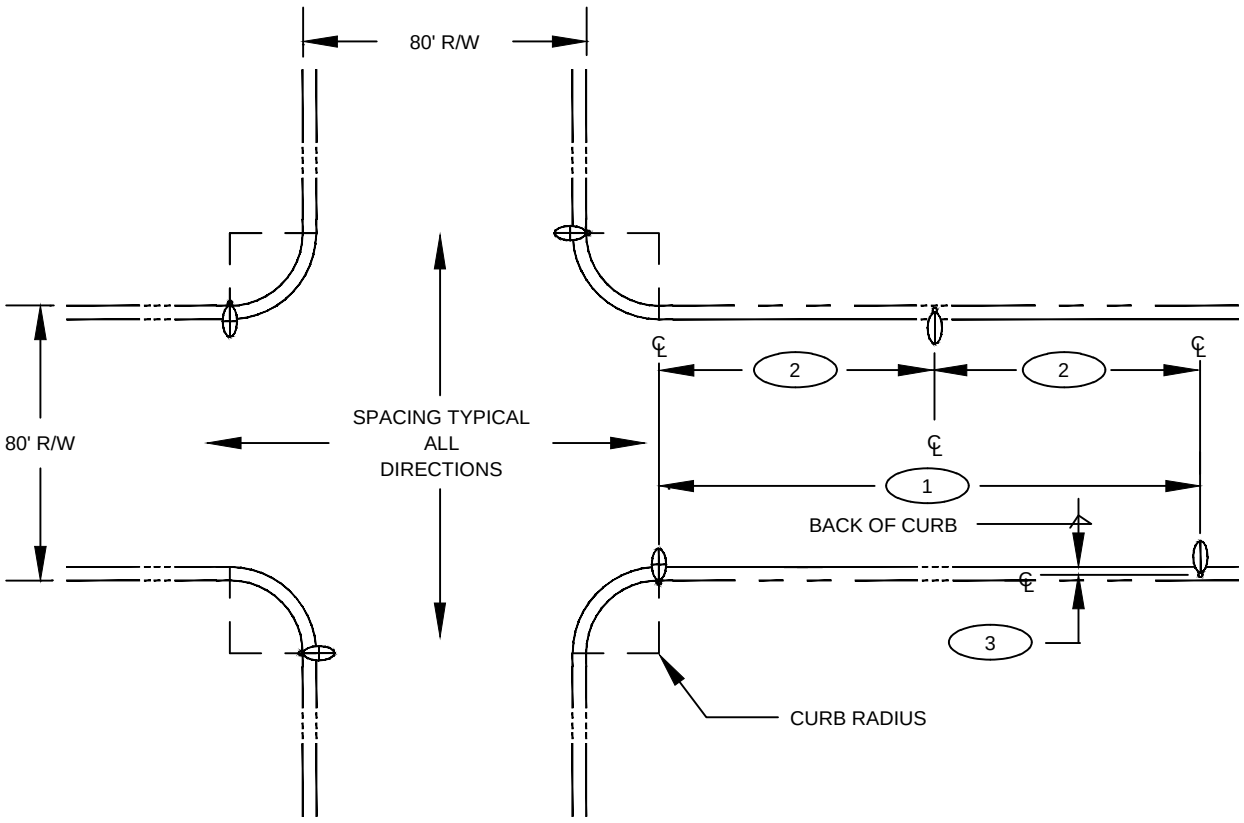
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

STREETLIGHT LOCATIONS AT INTERSECTIONS 100' OR GREATER/51' OR LESS RIGHT-OF-WAY

DATE 07-01-13 | DWG. NO. 304.S2

Effective 8/10/2023 to 8/07/2024



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	
623	TRAFFIC SIGNALS & STREETLIGHTING
.	

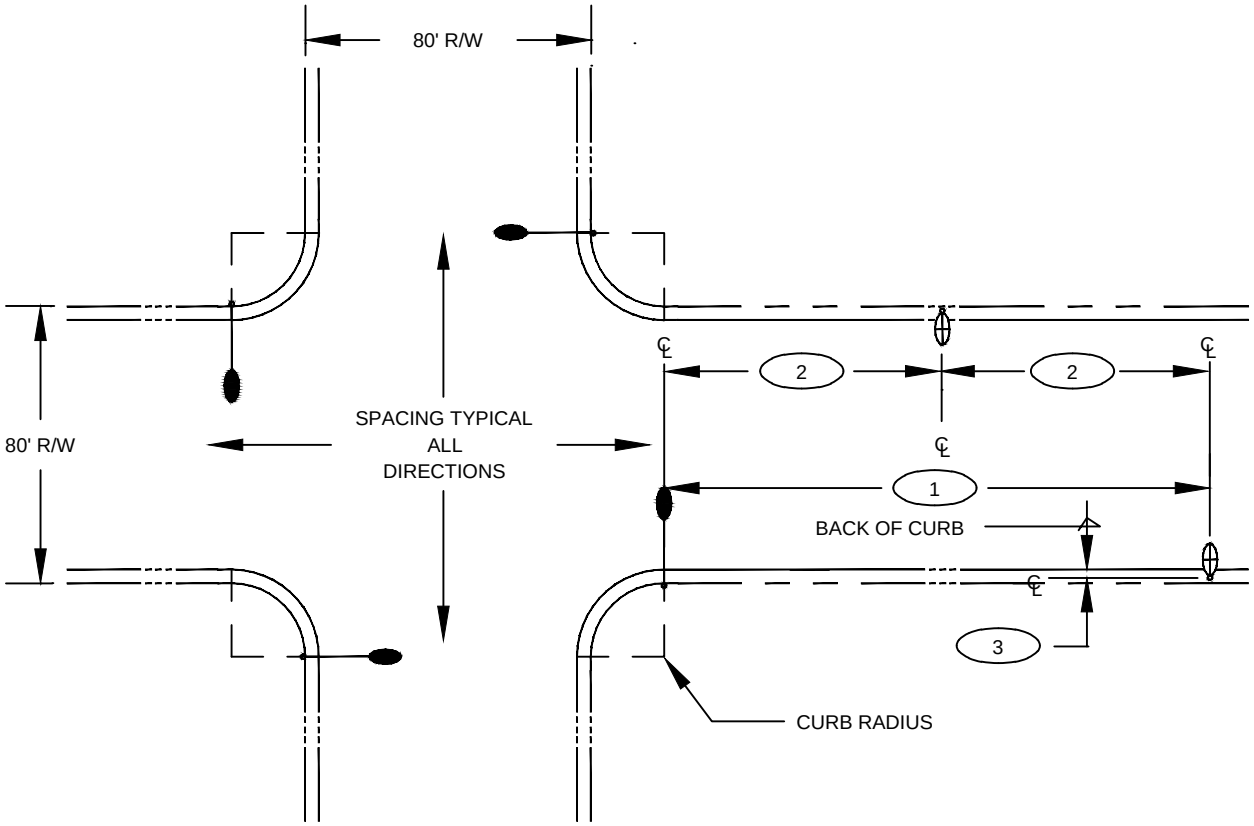
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

STREETLIGHT LOCATIONS AT INTERSECTIONS 80'/80' RIGHT-OF-WAY

DATE 07-01-13	DWG. NO. 305.S1	PAGE NO.

Effective 8/10/2023 to 8/07/2024



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)

AGENCY APPROVED		C				

SPECIFICATION REFERENCE	
623	TRAFFIC SIGNALS & STREETLIGHTING

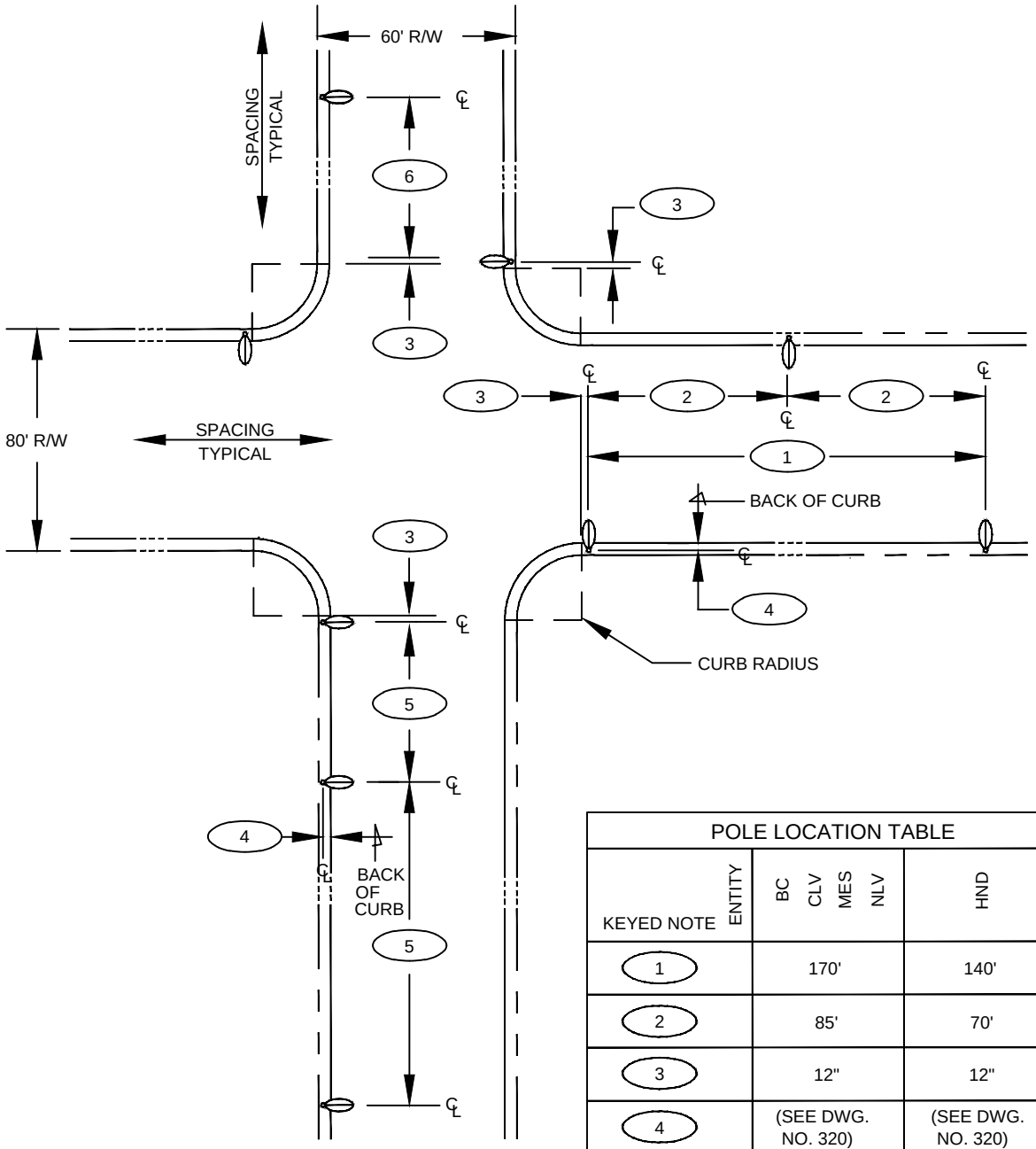
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

STREETLIGHT LOCATIONS AT INTERSECTIONS 80'/80' RIGHT-OF-WAY

DATE 07-01-13	DWG. NO. 305.S2	PAGE NO.

Effective 8/10/2023 to 8/07/2024



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	180'	170'
6	90'	85'
INTERSECTION LUMINAIRE TYPE	150W HPS	150W IND

NOTE:

SEE GENERAL NOTES STANDARD DRAWING NO. 300.

AGENCY APPROVED	B		H	L	M	N

SPECIFICATION REFERENCE	
623	TRAFFIC SIGNALS & STREETLIGHTING

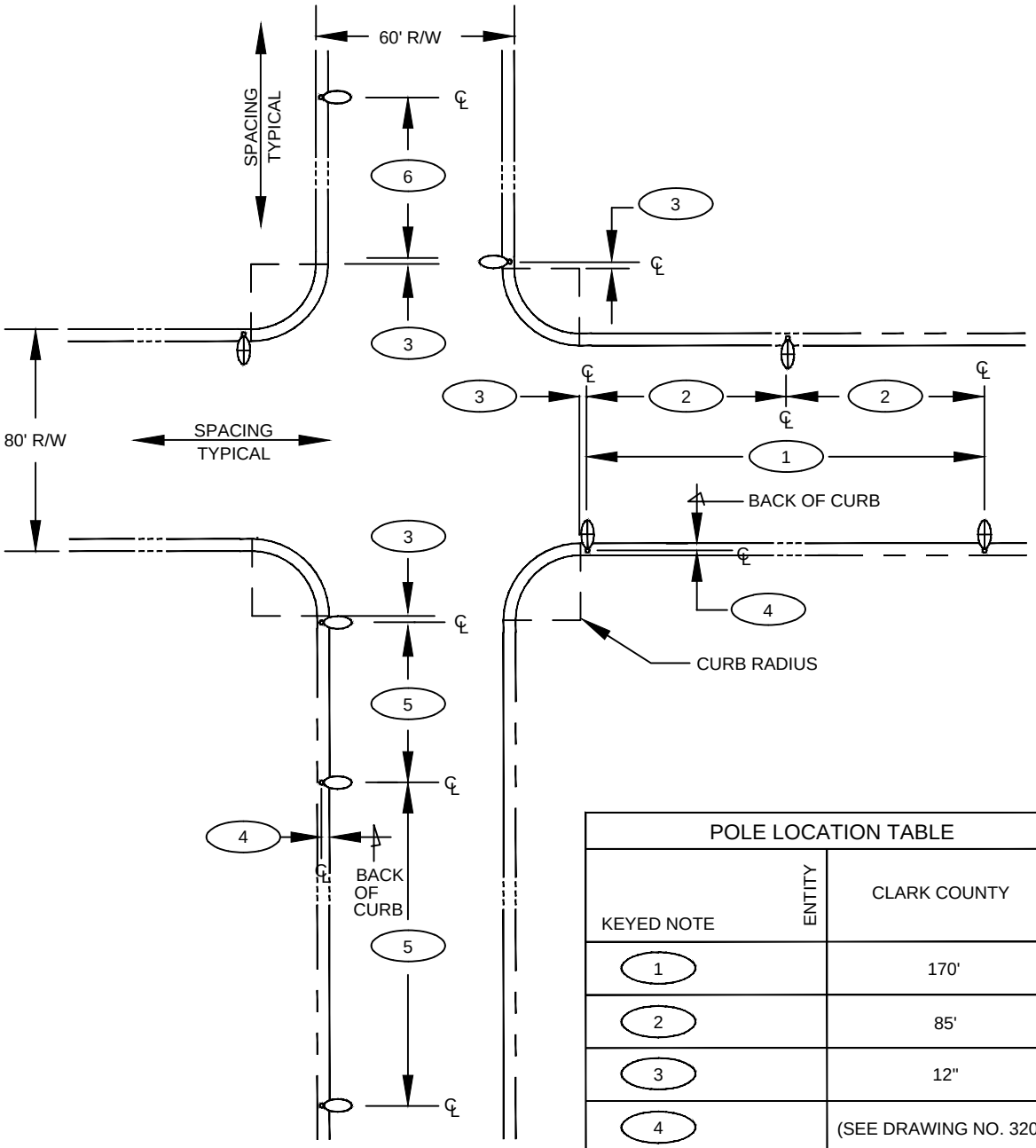
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

STREETLIGHT LOCATIONS AT INTERSECTIONS 80'/60' RIGHT-OF-WAY

DATE 07-01-13 | DWG. NO. 306.S1

Effective 8/10/2023 to 8/07/2024



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	
623	TRAFFIC SIGNALS & STREETLIGHTING
.	

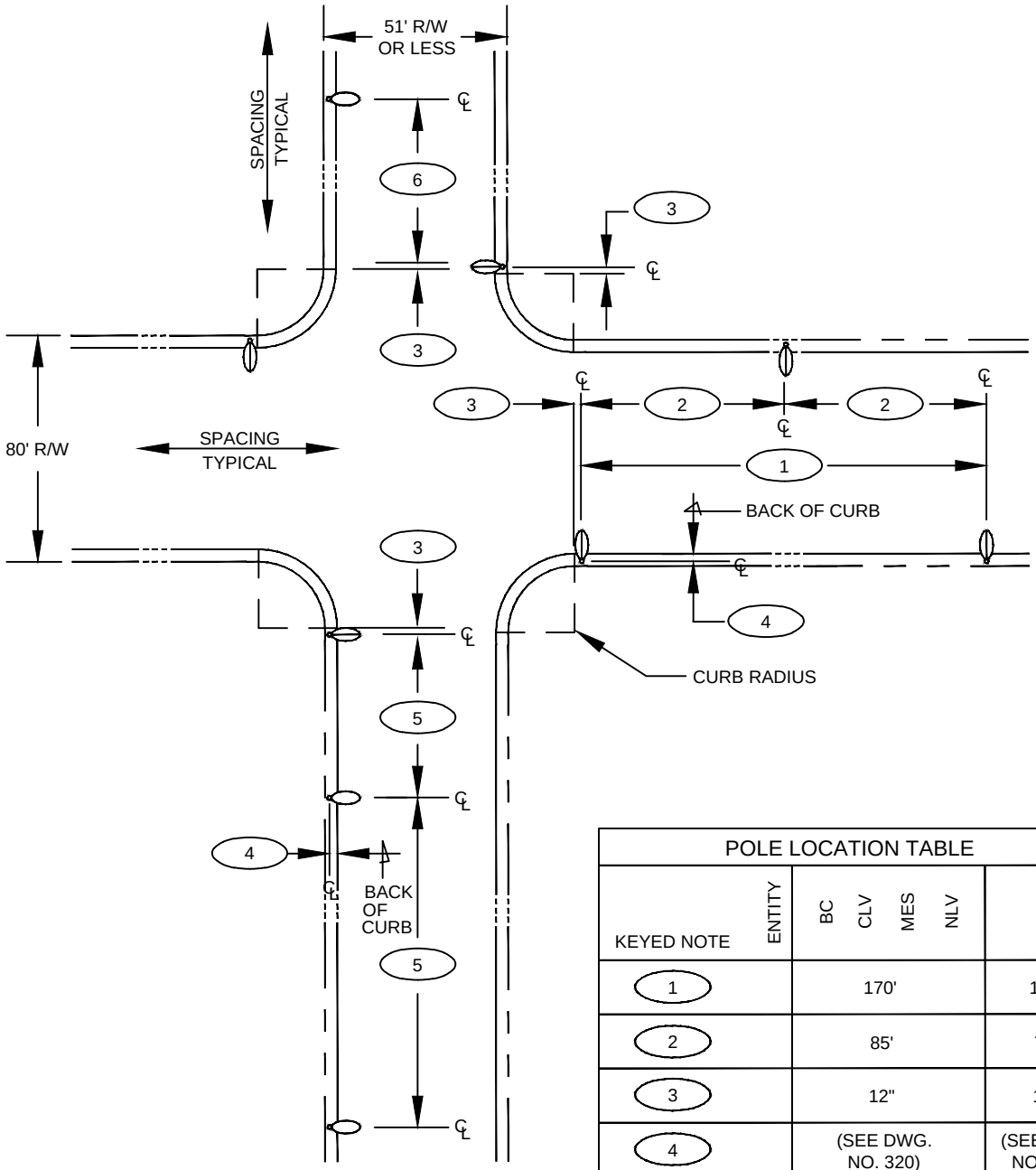
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

STREETLIGHT LOCATIONS AT INTERSECTIONS 80'/60' RIGHT-OF-WAY

DATE 07-01-13 | DWG. NO. 306.S2

Effective 8/10/2023 to 8/07/2024



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

NOTE:

SEE GENERAL NOTES STANDARD DRAWING NO. 300.

AGENCY APPROVED	B		H	L	M	N

SPECIFICATION REFERENCE	
623	TRAFFIC SIGNALS & STREETLIGHTING
.	

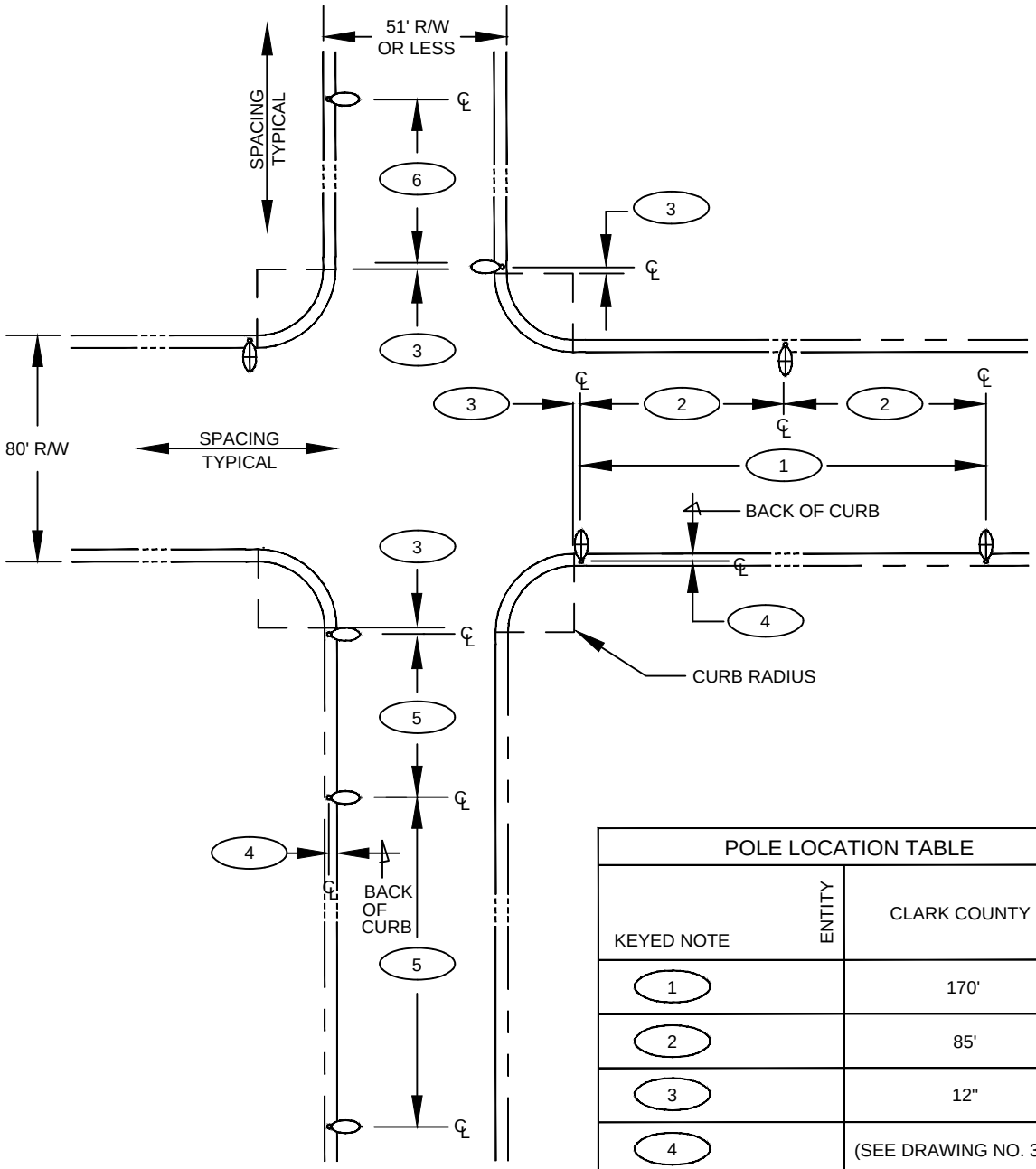
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

STREETLIGHT LOCATIONS AT INTERSECTIONS 80'/51' OR LESS RIGHT-OF-WAY

DATE 07-01-13 | DWG. NO. 307.S1

Effective 8/10/2023 to 8/07/2024



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	
623	TRAFFIC SIGNALS & STREETLIGHTING

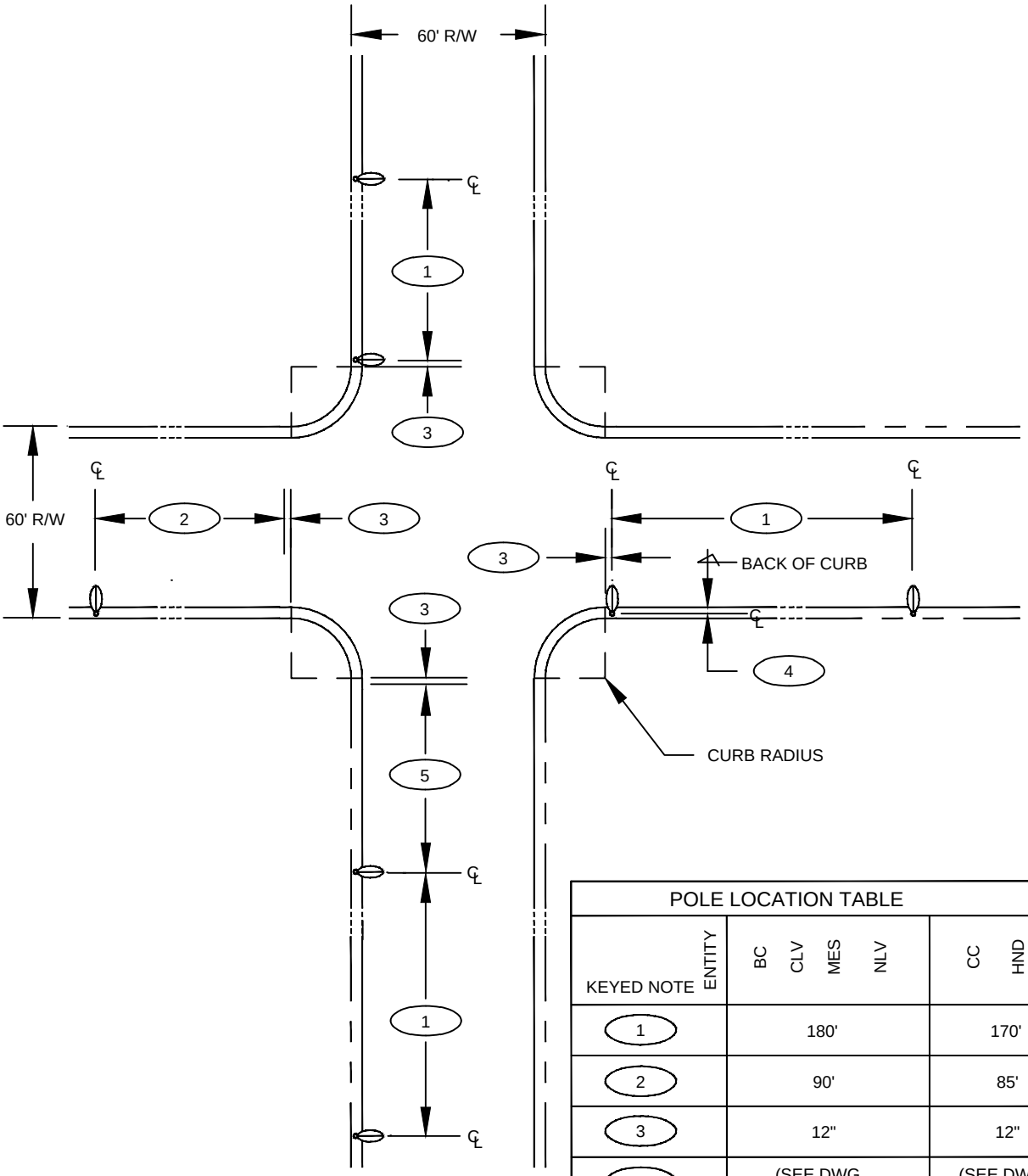
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

STREETLIGHT LOCATIONS AT INTERSECTIONS 80'/51' OR LESS RIGHT-OF-WAY

DATE 07-01-13 | DWG. NO. 307.S2

Effective 8/10/2023 to 8/07/2024



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'

NOTE:

SEE STANDARD DRAWING NO. 300 FOR LUMINAIRE TYPE.

AGENCY APPROVED	B	C	H	L	M	N

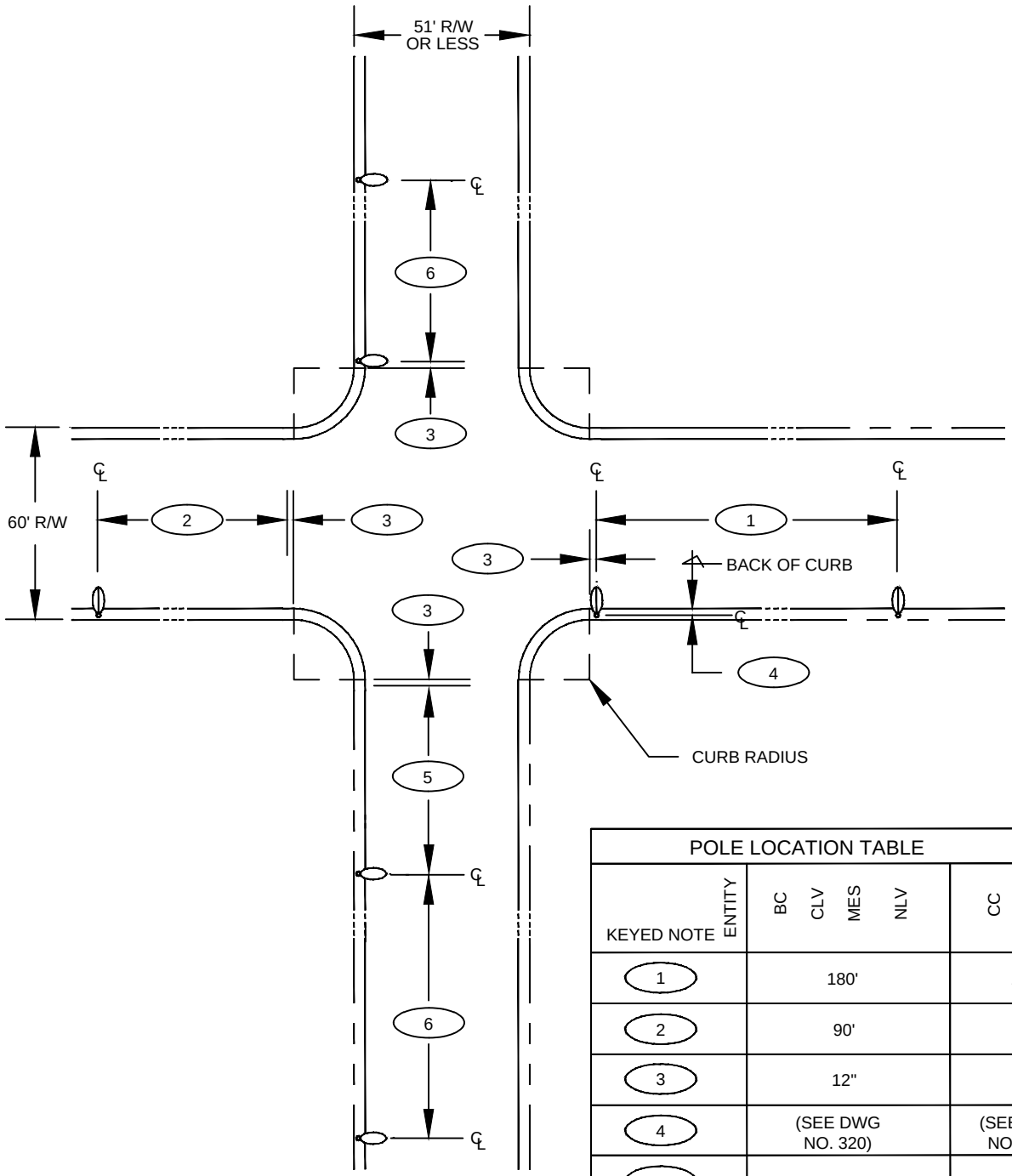
SPECIFICATION REFERENCE	
623	TRAFFIC SIGNALS & STREETLIGHTING
-	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

STREETLIGHT LOCATIONS AT INTERSECTIONS 60'/60' RIGHT-OF-WAY

DATE 07-01-13 | DWG. NO. 308

Effective 8/10/2023 to 8/07/2024



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	85'	85'
6	170'	170'

NOTE:

SEE STANDARD DRAWING NO. 300 FOR LUMINAIRE TYPE.

AGENCY APPROVED	B	C	H	L	M	N

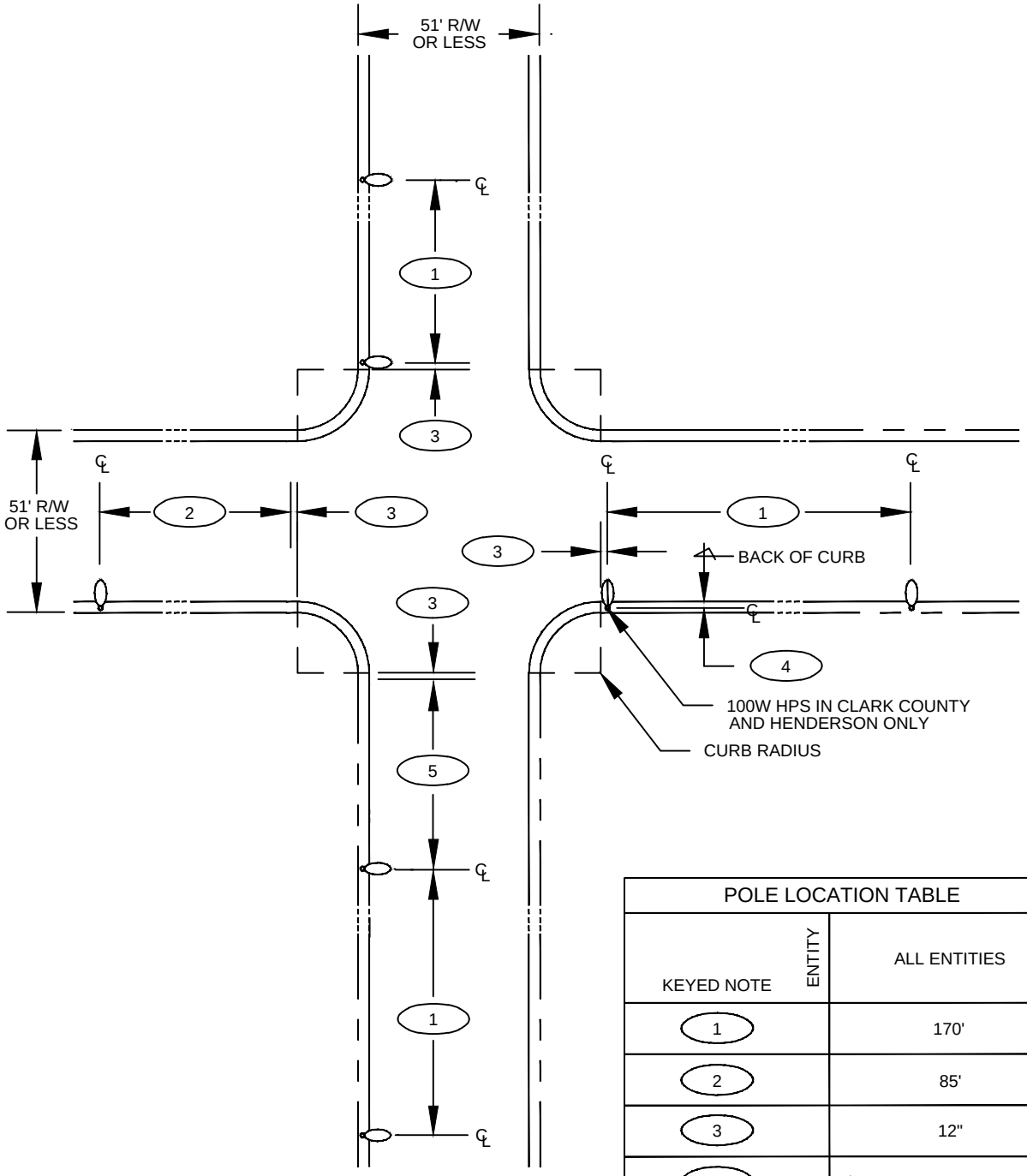
SPECIFICATION REFERENCE	
623	TRAFFIC SIGNALS & STREETLIGHTING
-	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

STREETLIGHT LOCATIONS AT INTERSECTIONS 60'/51' OR LESS RIGHT-OF-WAY

DATE 07-01-13 | DWG. NO. 309

Effective 8/10/2023 to 8/07/2024



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

NOTE:

SEE GENERAL NOTES STANDARD DRAWING NO. 300.

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED | B | C | H | L | M | N

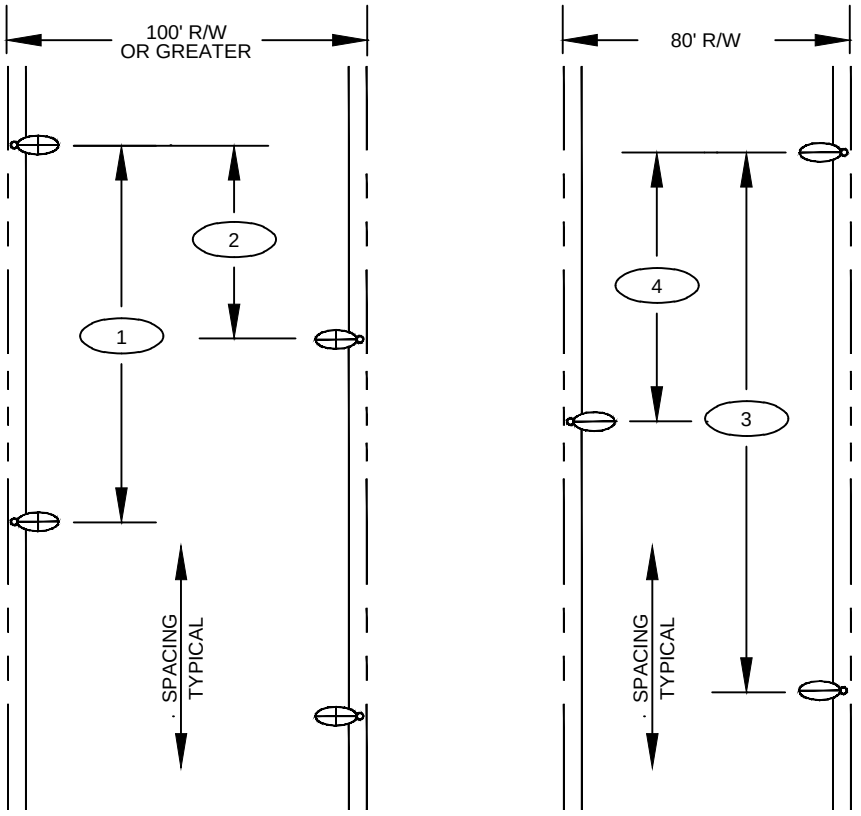
SPECIFICATION REFERENCE	
623	TRAFFIC SIGNALS & STREETLIGHTING
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

STREETLIGHT LOCATIONS AT INTERSECTIONS 51 FT. OR LESS/51 FT. OR LESS RIGHT-OF-WAY

DATE 2-08-07 | DWG. NO. 310

Effective 8/10/2023 to 8/07/2024



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

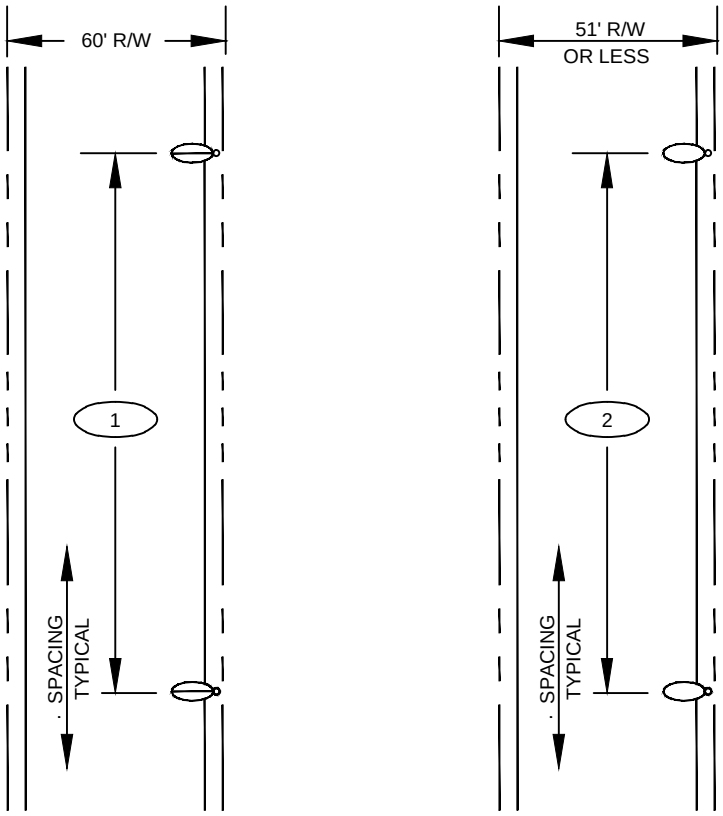
SPECIFICATION REFERENCE	
623	TRAFFIC SIGNALS & STREETLIGHTING
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

STREETLIGHT STANDARDS MAXIMUM SPACING (80 FT. OR GREATER RIGHT-OF-WAY)

DATE 07-01-13	DWG. NO. 311	PAGE NO.

Effective 8/10/2023 to 8/07/2024



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

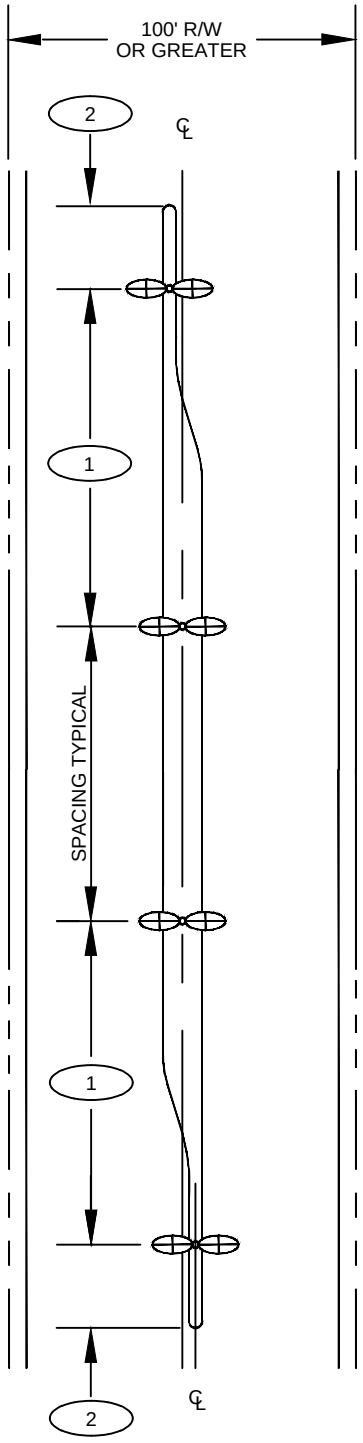
SPECIFICATION REFERENCE	
623	TRAFFIC SIGNALS & STREETLIGHTING
.	

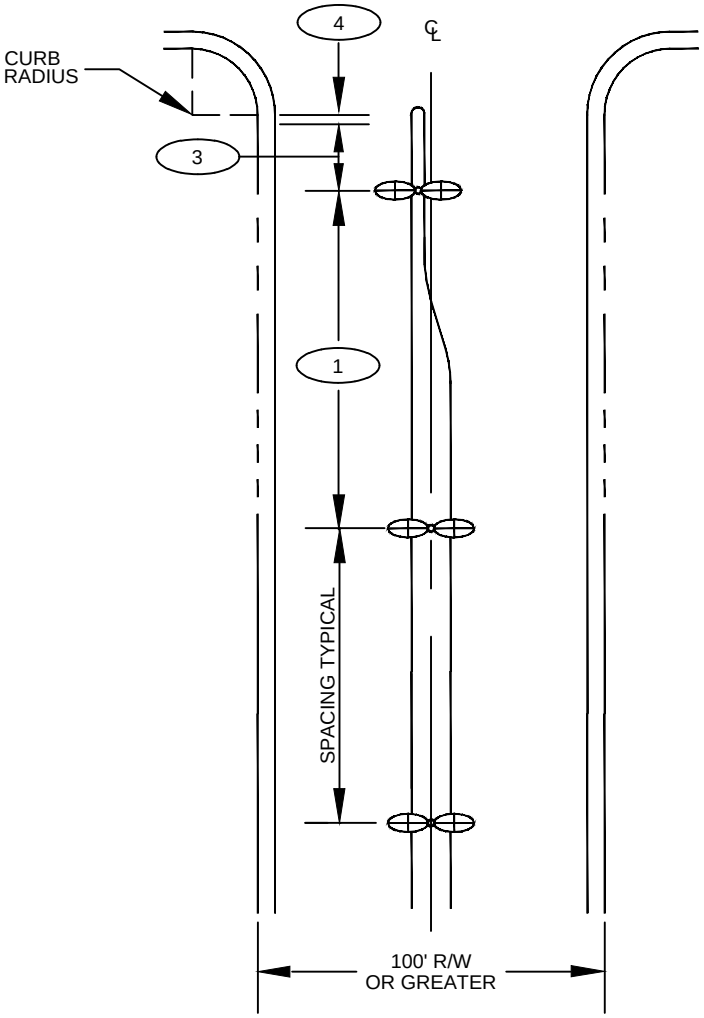
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

STREETLIGHT STANDARDS
MAXIMUM SPACING
(60 FT. OR LESS RIGHT-OF-WAY)

DATE 07-01-13 | DWG. NO. 311.1

Effective 8/10/2023 to 8/07/2024





SPACING FOR SIGNALIZED INTERSECTIONS

POLE LOCATION TABLE		
KEYED NOTE / ENTITY (BC, CLV, MES, NLV)		CC
* 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.

AGENCY APPROVED	B	C		L	M	N

SPECIFICATION REFERENCE	
623	TRAFFIC SIGNALS & STREETLIGHTING
.	

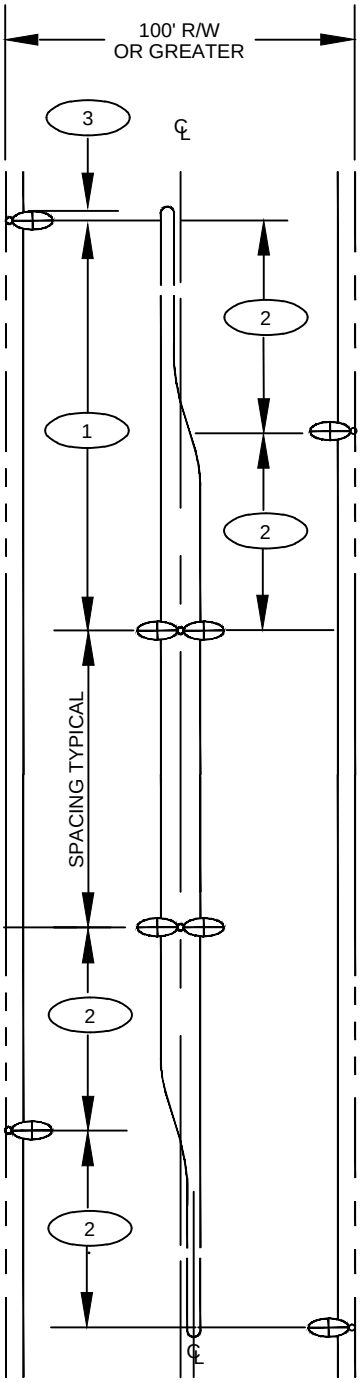
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

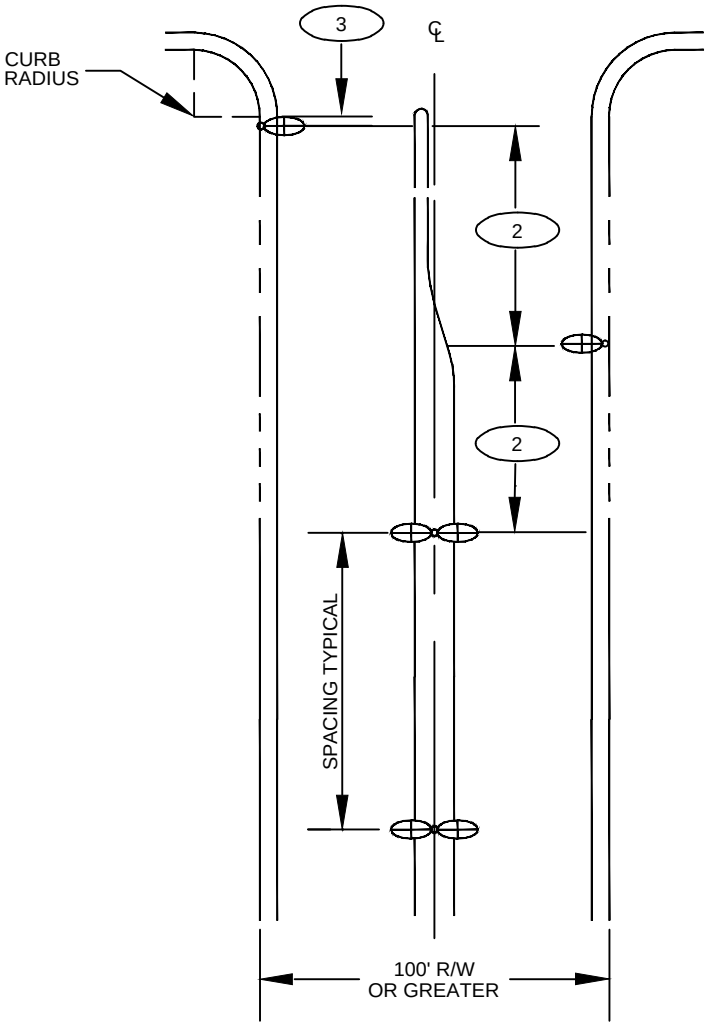
SUPPLEMENTAL DRAWING

STREETLIGHT LOCATIONS ON TRAFFIC ISLANDS 100' OR GREATER RIGHT-OF-WAY

DATE 07-01-13	DWG. NO. 312.S1	PAGE NO.

Effective 8/10/2023 to 8/07/2024





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.

AGENCY APPROVED			H			

SPECIFICATION REFERENCE	
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.

Effective 8/10/2023 to 8/07/2024

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

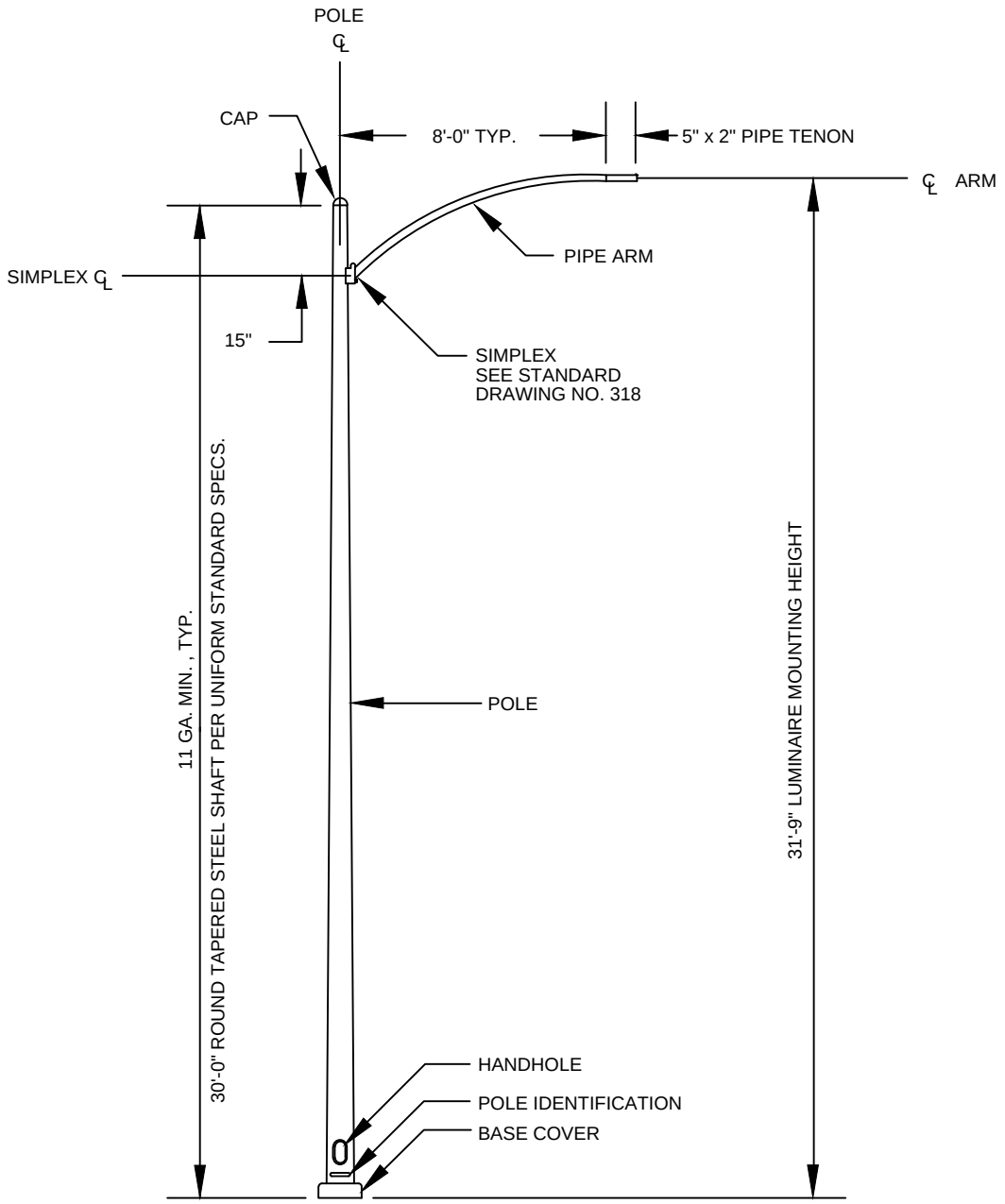
SPECIFICATION REFERENCE	
623	TRAFFIC SIGNALS & STREETLIGHTING
-	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

STREETLIGHT STANDARD GENERAL NOTES

DATE 7-8-04	DWG. NO. 313	

Effective 8/10/2023 to 8/07/2024



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

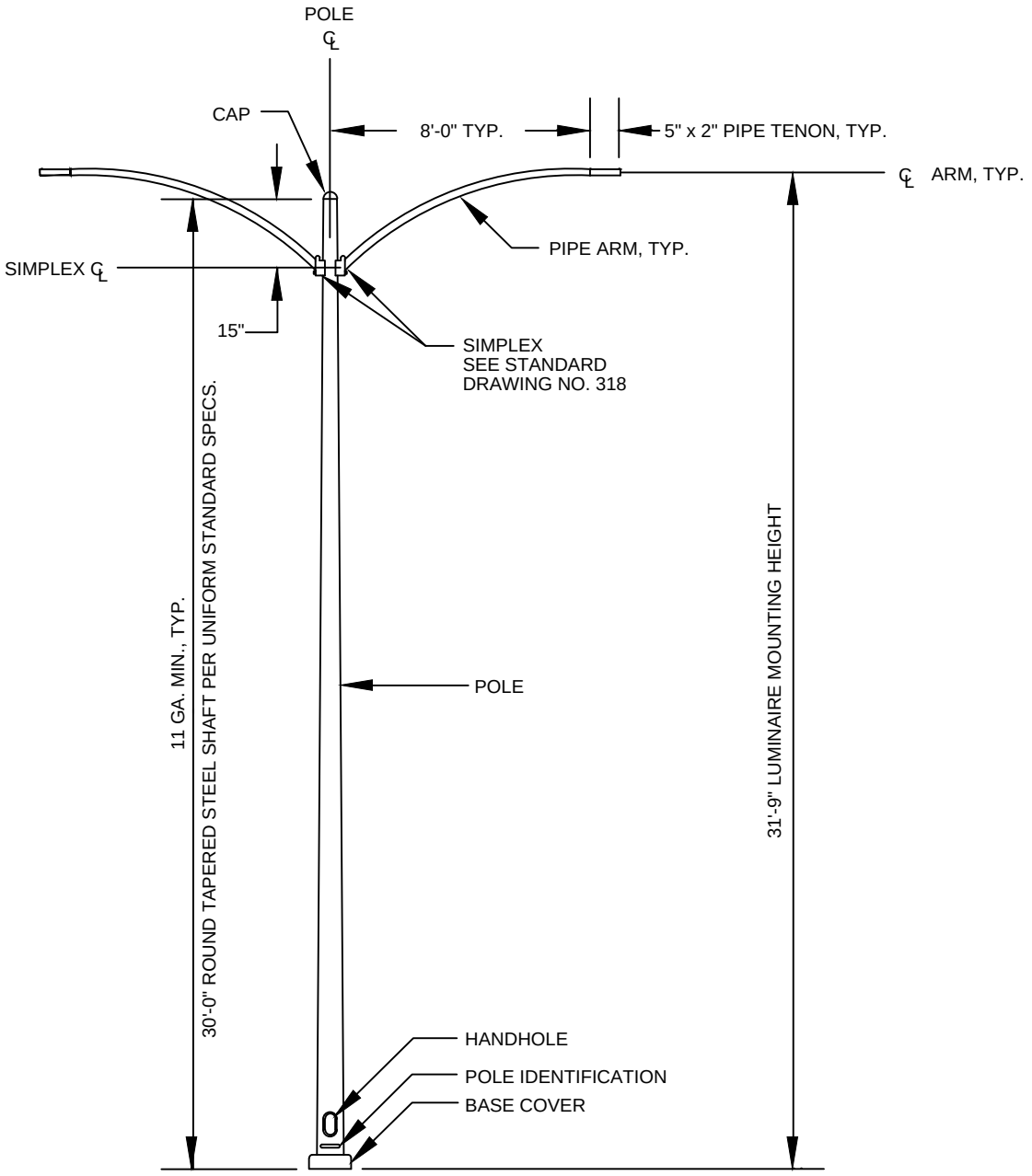
SPECIFICATION REFERENCE	
506	STEEL STRUCTURES
623	TRAFFIC SIGNALS & STREETLIGHTING
715	GALVANIZING

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

STREETLIGHT STANDARD WITH 2 INCH PIPE ARM

DATE 12-12-96	DWG. NO. 314	

Effective 8/10/2023 to 8/07/2024



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

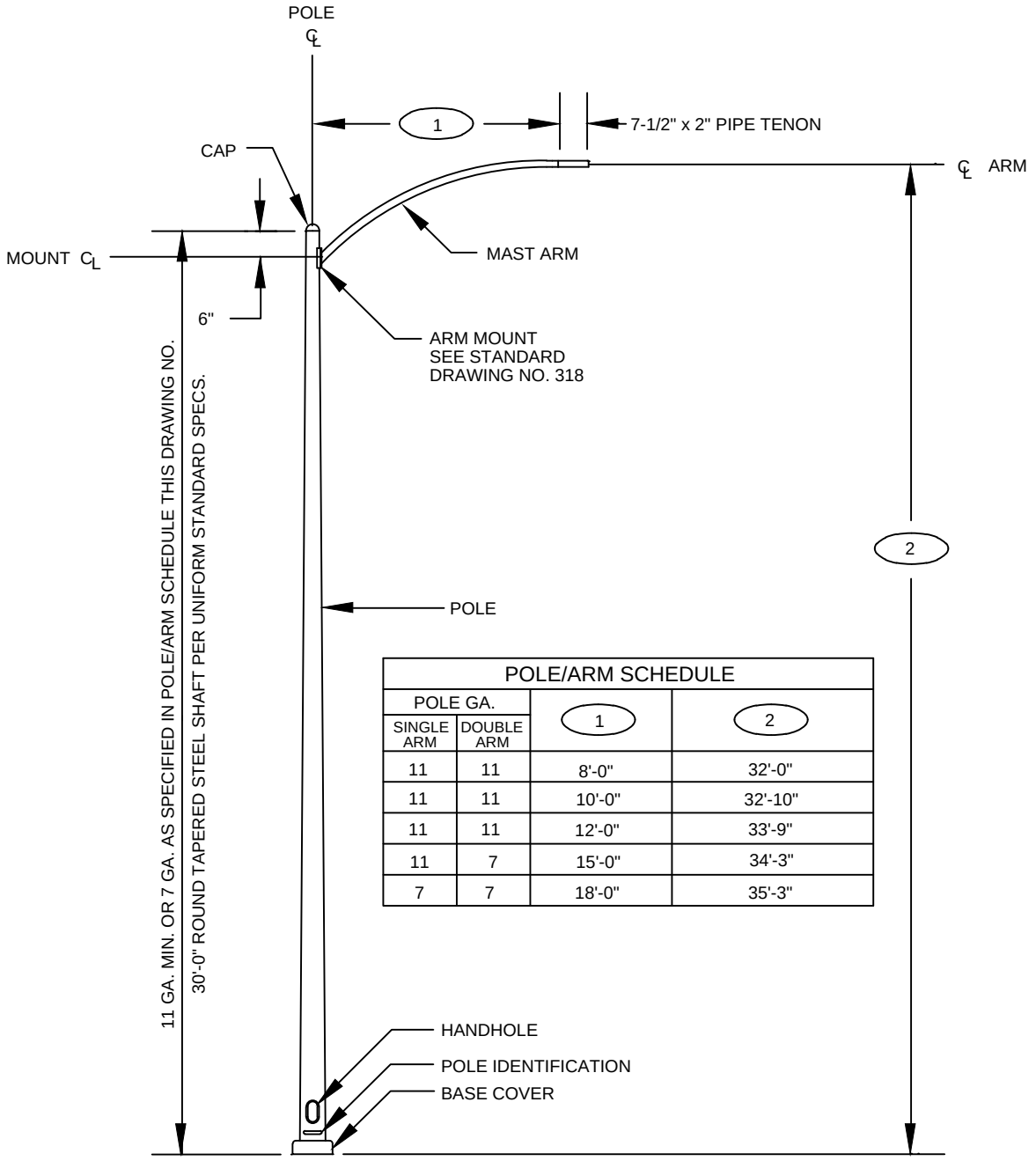
SPECIFICATION REFERENCE	
506	STEEL STRUCTURES
623	TRAFFIC SIGNALS & STREETLIGHTING
715	GALVANIZING

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

STREETLIGHT STANDARD WITH DOUBLE 2 INCH PIPE ARM

DATE 12-12-96	DWG. NO. 315	

Effective 8/10/2023 to 8/07/2024



POLE/ARM SCHEDULE			
POLE GA.		1	2
SINGLE ARM	DOUBLE ARM		
11	11	8'-0"	32'-0"
11	11	10'-0"	32'-10"
11	11	12'-0"	33'-9"
11	7	15'-0"	34'-3"
7	7	18'-0"	35'-3"

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

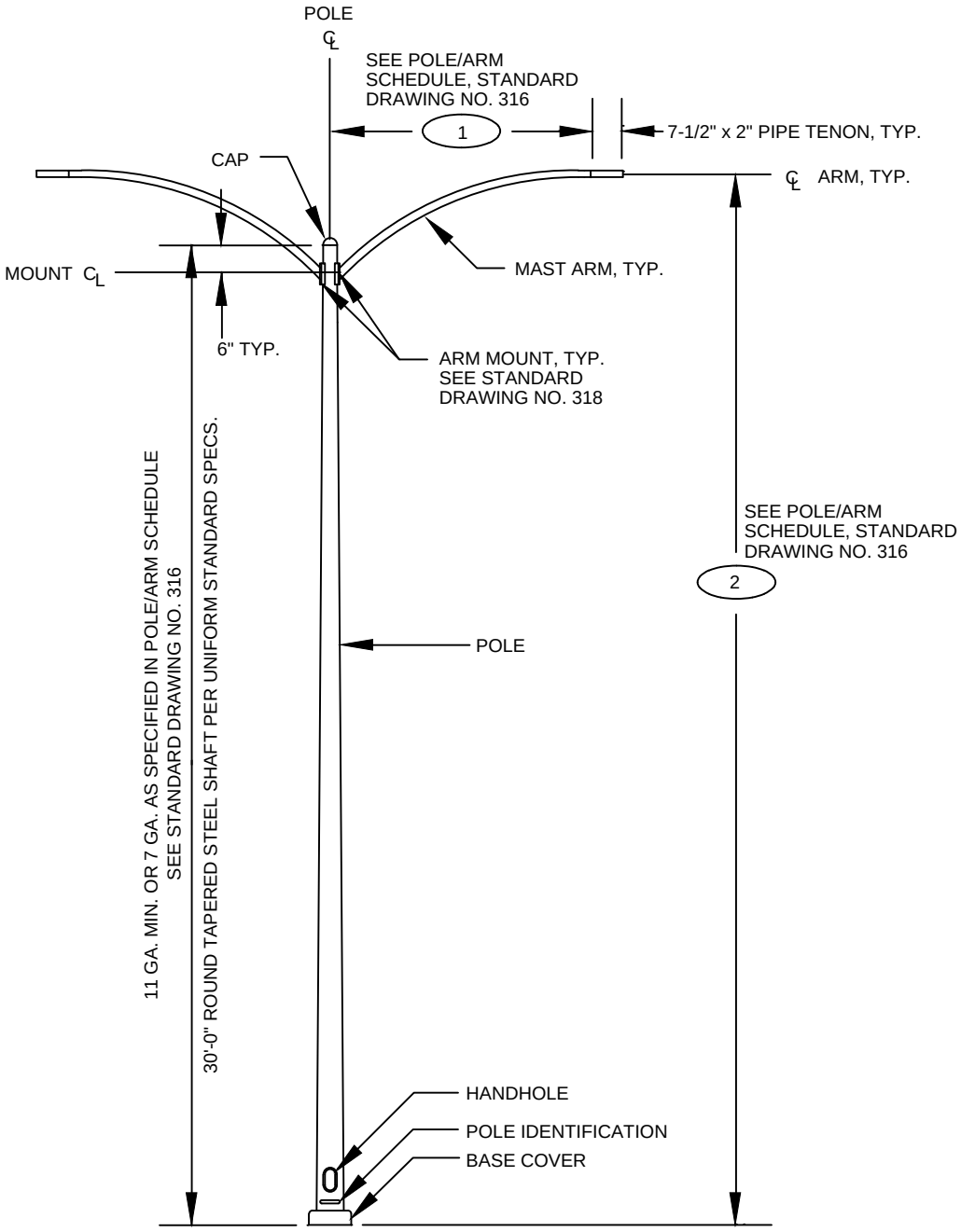
SPECIFICATION REFERENCE	
506	STEEL STRUCTURES
623	TRAFFIC SIGNALS & STREETLIGHTING
715	GALVANIZING
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

STREETLIGHT STANDARD WITH TAPERED MAST ARM

DATE 12-12-96 | DWG. NO. 316

Effective 8/10/2023 to 8/07/2024



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

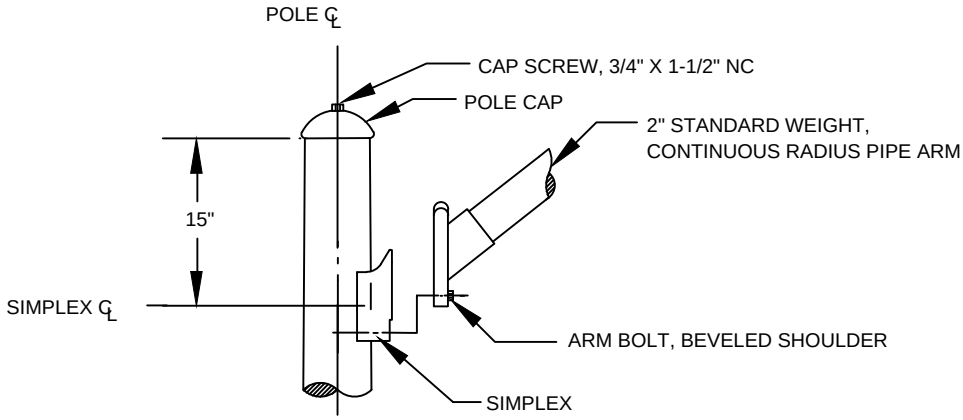
SPECIFICATION REFERENCE	
506	STEEL STRUCTURES
623	TRAFFIC SIGNALS & STREETLIGHTING
715	GALVANIZING
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

STREETLIGHT STANDARD WITH DOUBLE TAPERED MAST ARM

DATE 12-12-96 | DWG. NO. 317

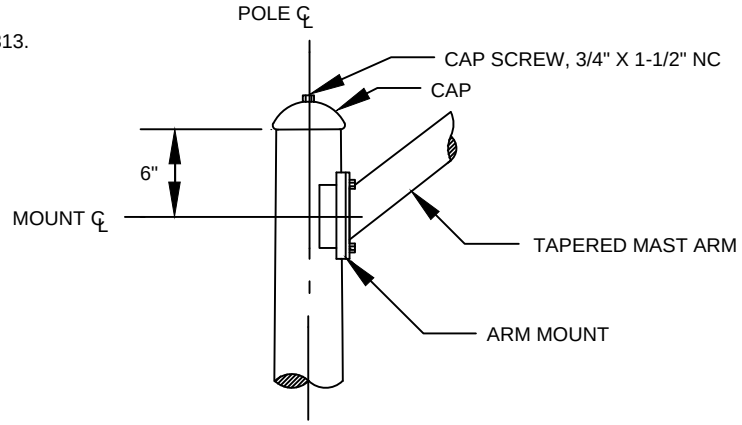
Effective 8/10/2023 to 8/07/2024

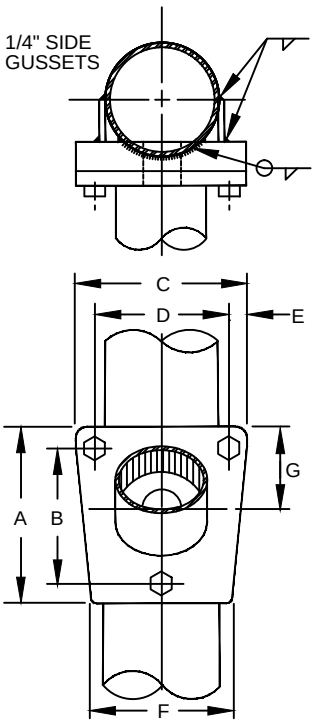


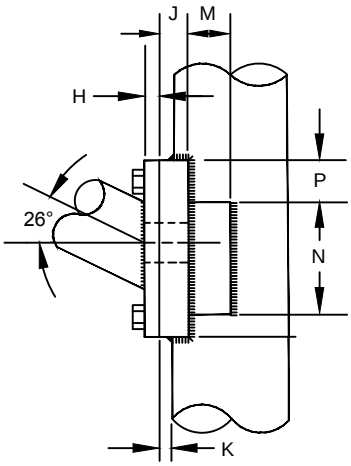
PIPE ARM

NOTE:

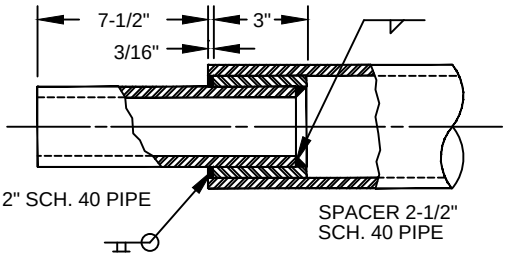
SEE GENERAL NOTES
STANDARD DRAWING NO. 313.







MAST ARM AND DETAILS



TENON DETAIL

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	J	K	L	M	N	N
8'-15' INCL.	1/2"	1"	5/16"	5/8"-11x1/2"	1-1/2"	5"	1-5/8"
15'-18' INCL.	3/4"	1"	5/16"	3/4"-10x1-3/4"	2"	5"	1-3/4"

AGENCY APPROVED	B	C	H	L	M	N

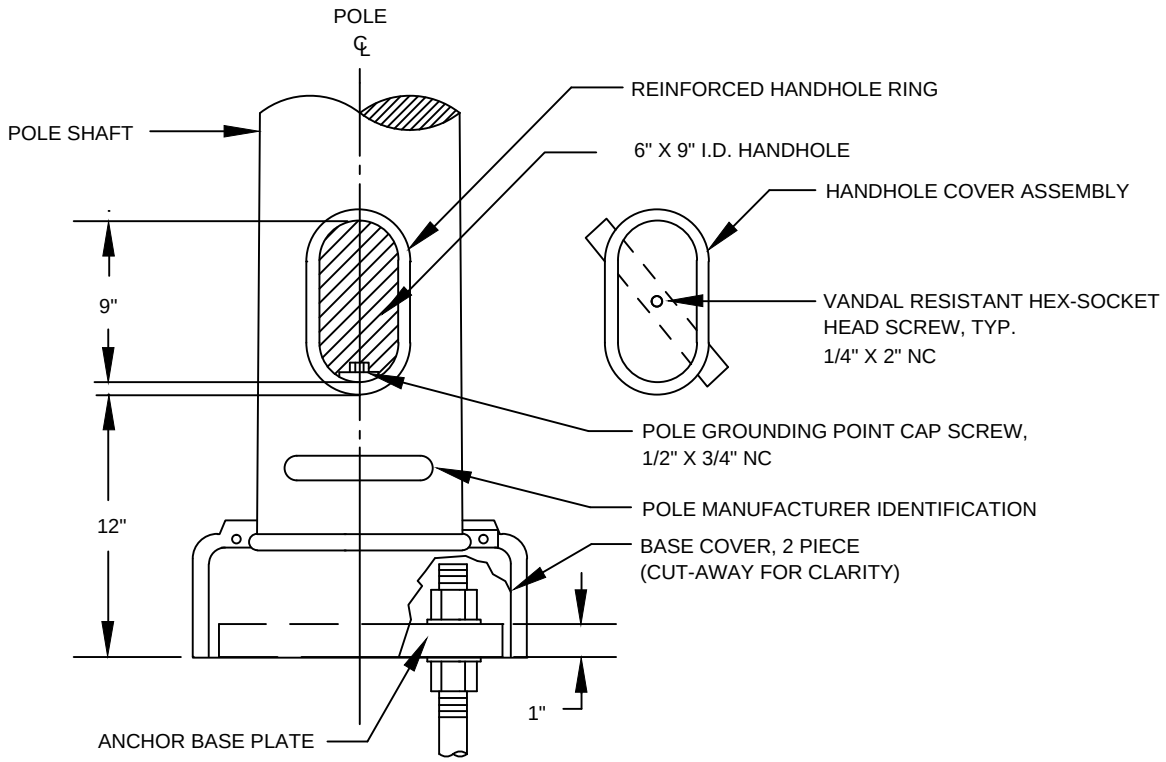
SPECIFICATION REFERENCE	
506	STEEL STRUCTURES
623	TRAFFIC SIGNALS & STREETLIGHTING
715	GALVANIZING
-	

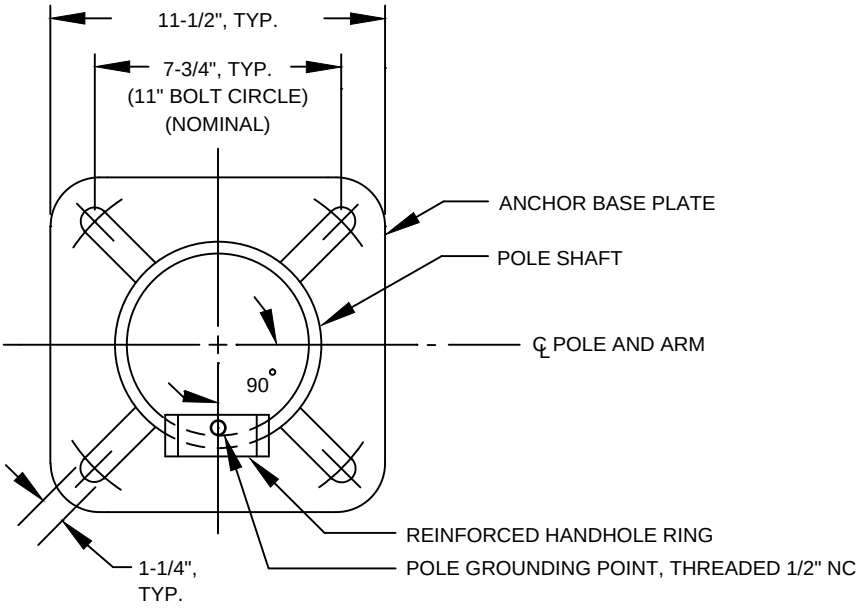
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

POLE TOP AND ARM MOUNTING DETAILS

DATE 12-12-96 | DWG. NO. 318

Effective 8/10/2023 to 8/07/2024





NOTES:

1. SEE GENERAL NOTES STANDARD DRAWING NO. 313
2. HANDHOLE SHALL FACE AWAY FROM ONCOMING TRAFFIC.
3. (C)(L) 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

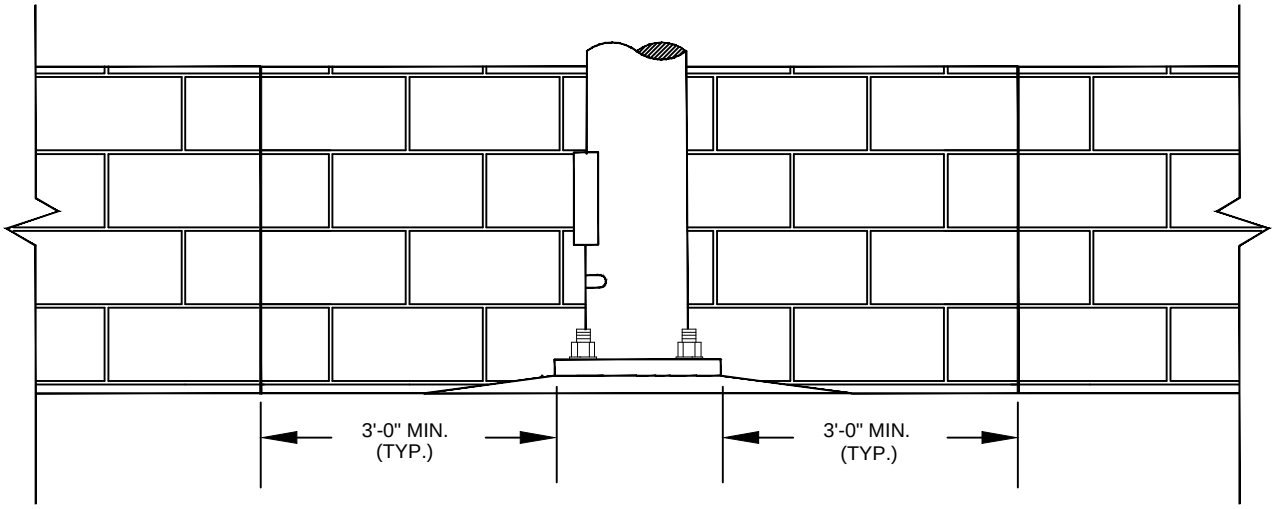
SPECIFICATION REFERENCE	
506	STEEL STRUCTURES
623	TRAFFIC SIGNALS & STREETLIGHTING
715	GALVANIZING

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

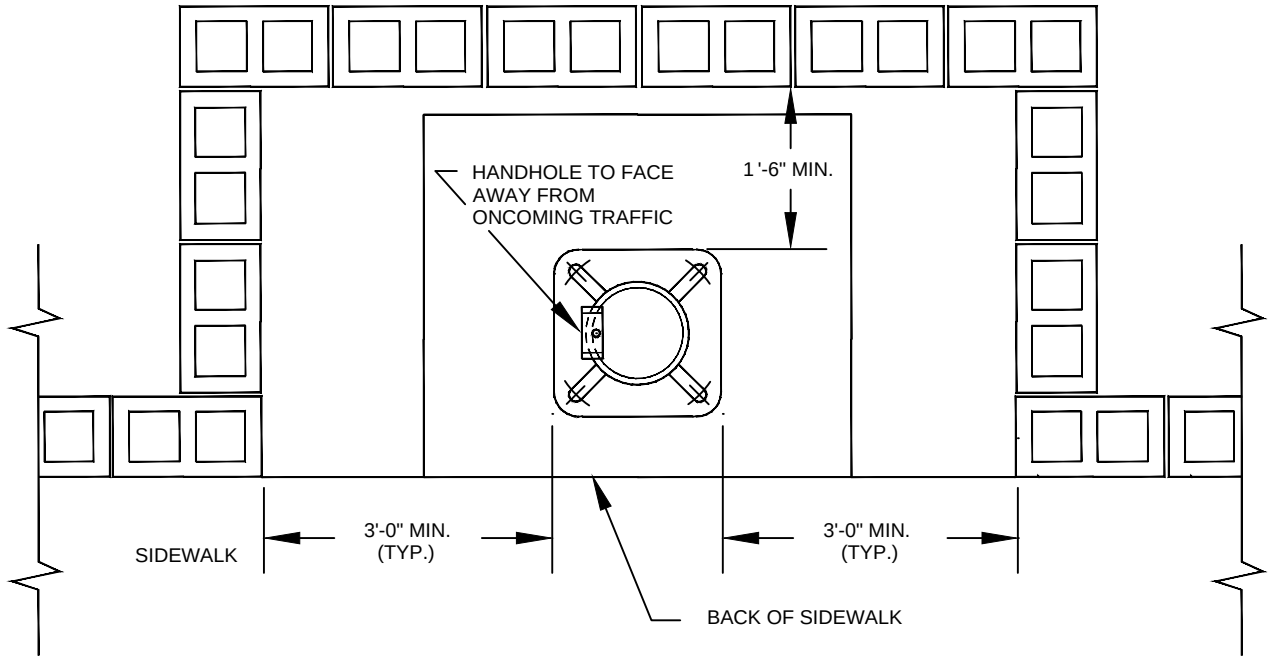
LOWER POLE DETAILS FOR PIPE AND MAST ARM POLES

DATE 07-01-17 | DWG. NO. 319

Effective 8/10/2023 to 8/07/2024



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

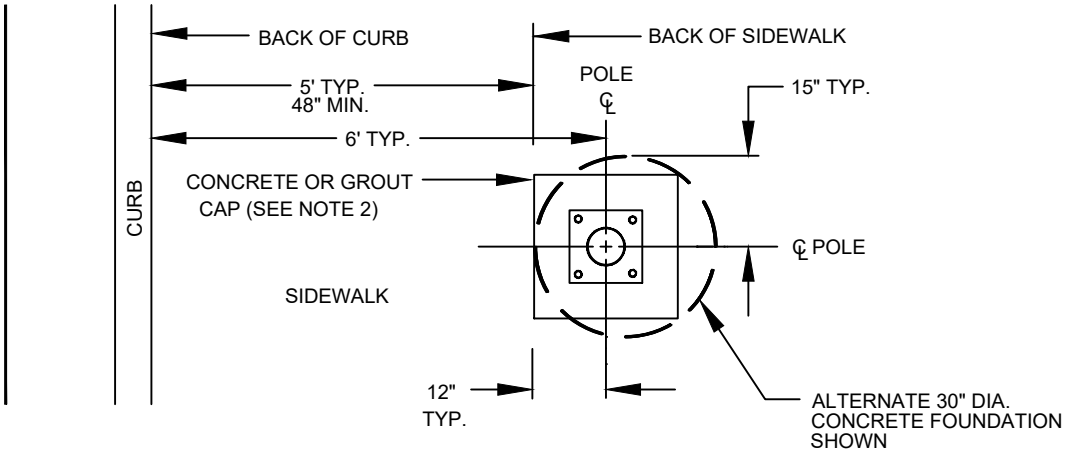
SPECIFICATION REFERENCE	
623	TRAFFIC SIGNALS & STREETLIGHTING
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

LIGHTING STANDARD SETBACK FROM BLOCK WALL

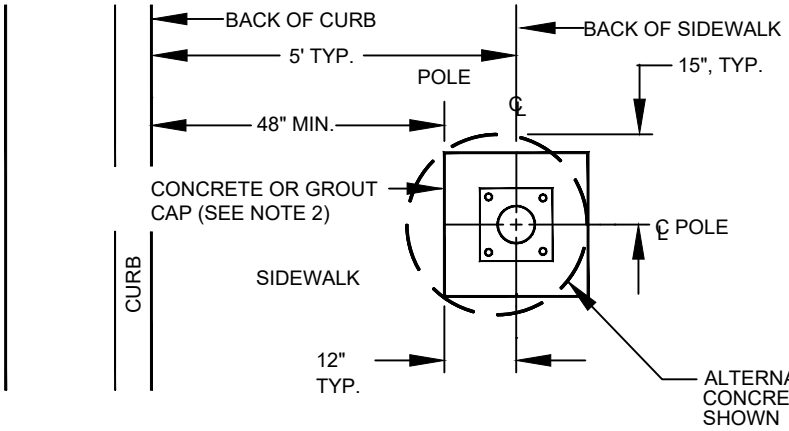
DATE 5-13-99	DWG. NO. 320.1	

Effective 8/10/2023 to 8/07/2024



BEHIND CURBSIDE SIDEWALK

(EASEMENT MAY BE REQUIRED)
(SEE USD 320.1)

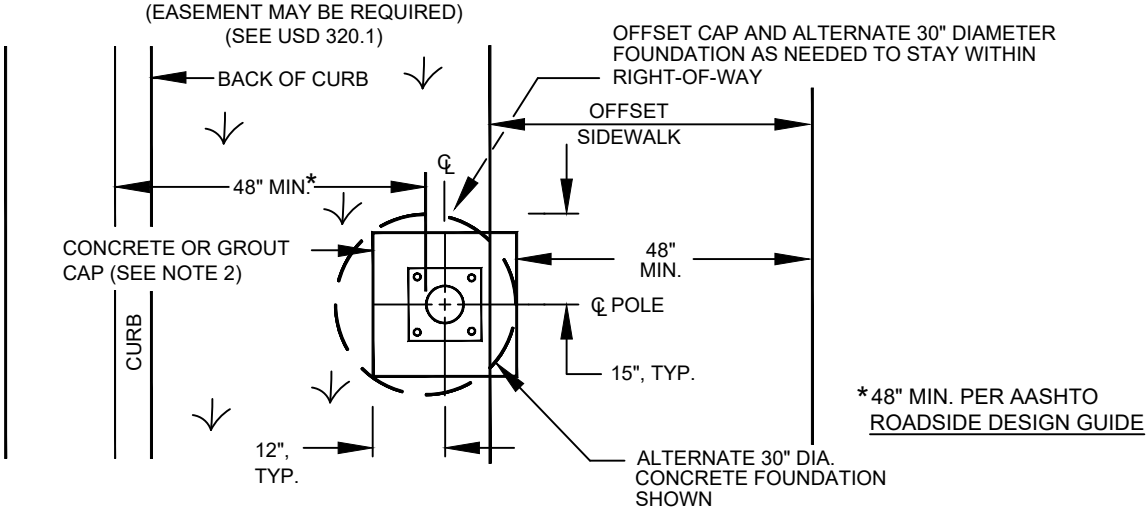


NOTES

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)



*48" MIN. PER AASHTO ROADSIDE DESIGN GUIDE

OPEN AREA OR BETWEEN CURB AND SIDEWALK

AGENCY APPROVED	B	C	H	L	M	N	R

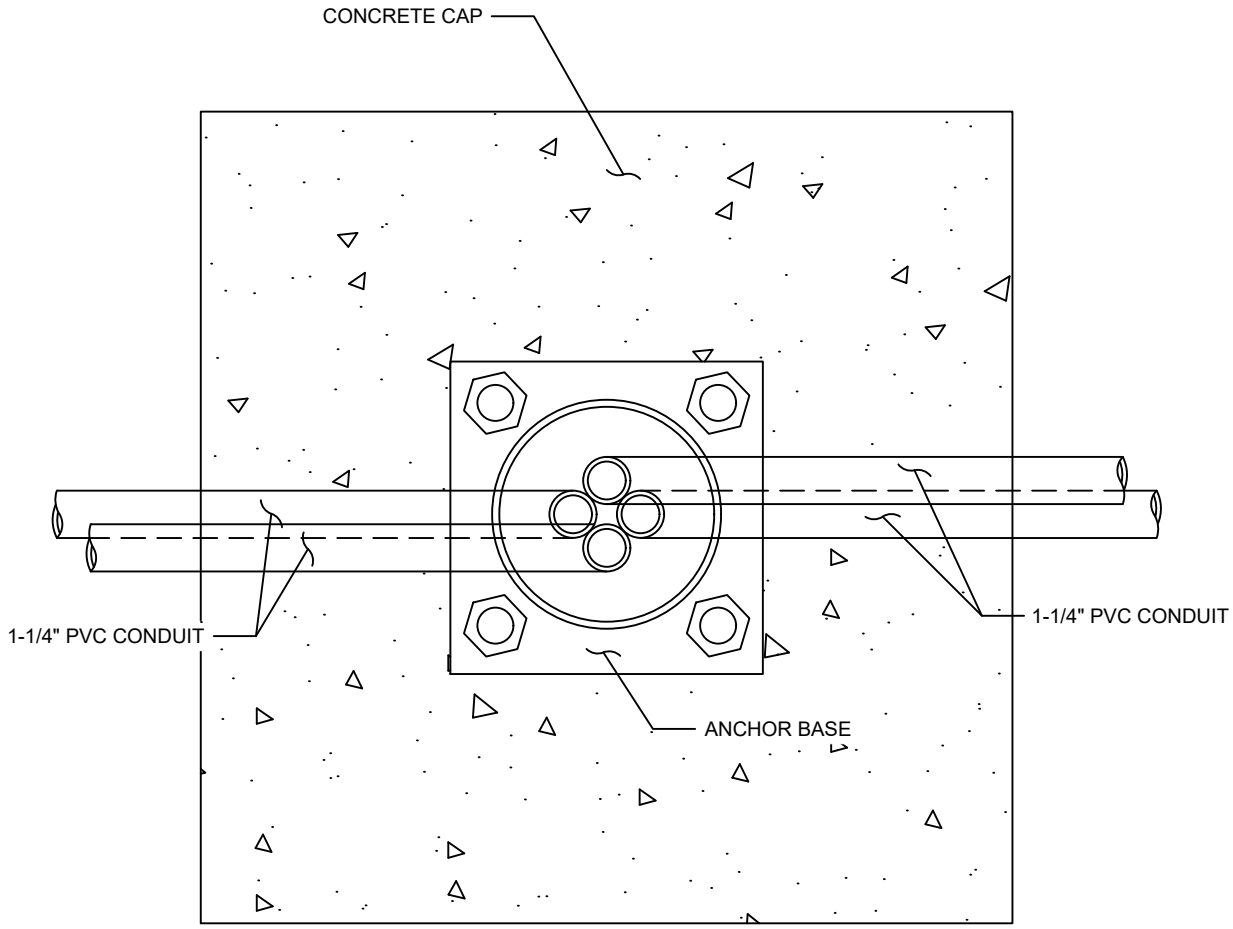
SPECIFICATION REFERENCE	
501	PORTLAND CEMENT CONCRETE
623	TRAFFIC SIGNALS & STREETLIGHTING
-	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

LIGHTING STANDARD SETBACK

DATE 03-12-20 | DWG. NO. 320

Effective 8/10/2023 to 8/07/2024



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

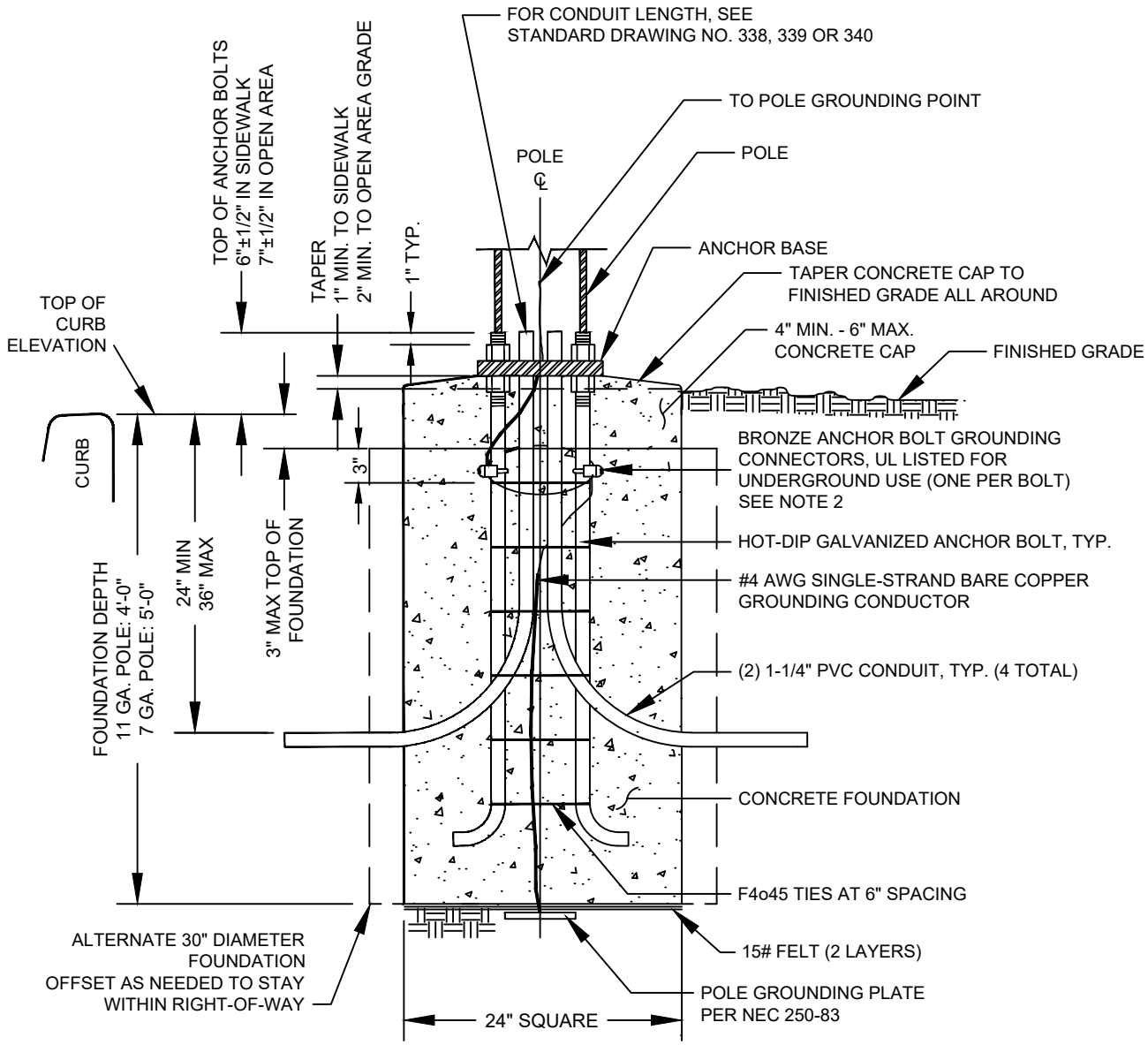
SPECIFICATION REFERENCE	
501	PORTLAND CEMENT CONCRETE
623	TRAFFIC SIGNALS & STREETLIGHTING
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

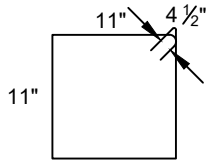
LIGHTING STANDARD
FOUNDATION

DATE 01-09-20	DWG. NO. 321	SHEET 1 OF 2

Effective 8/10/2023 to 8/07/2024



SECTION



F4o45

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED	B	C	H	L	M	N	R

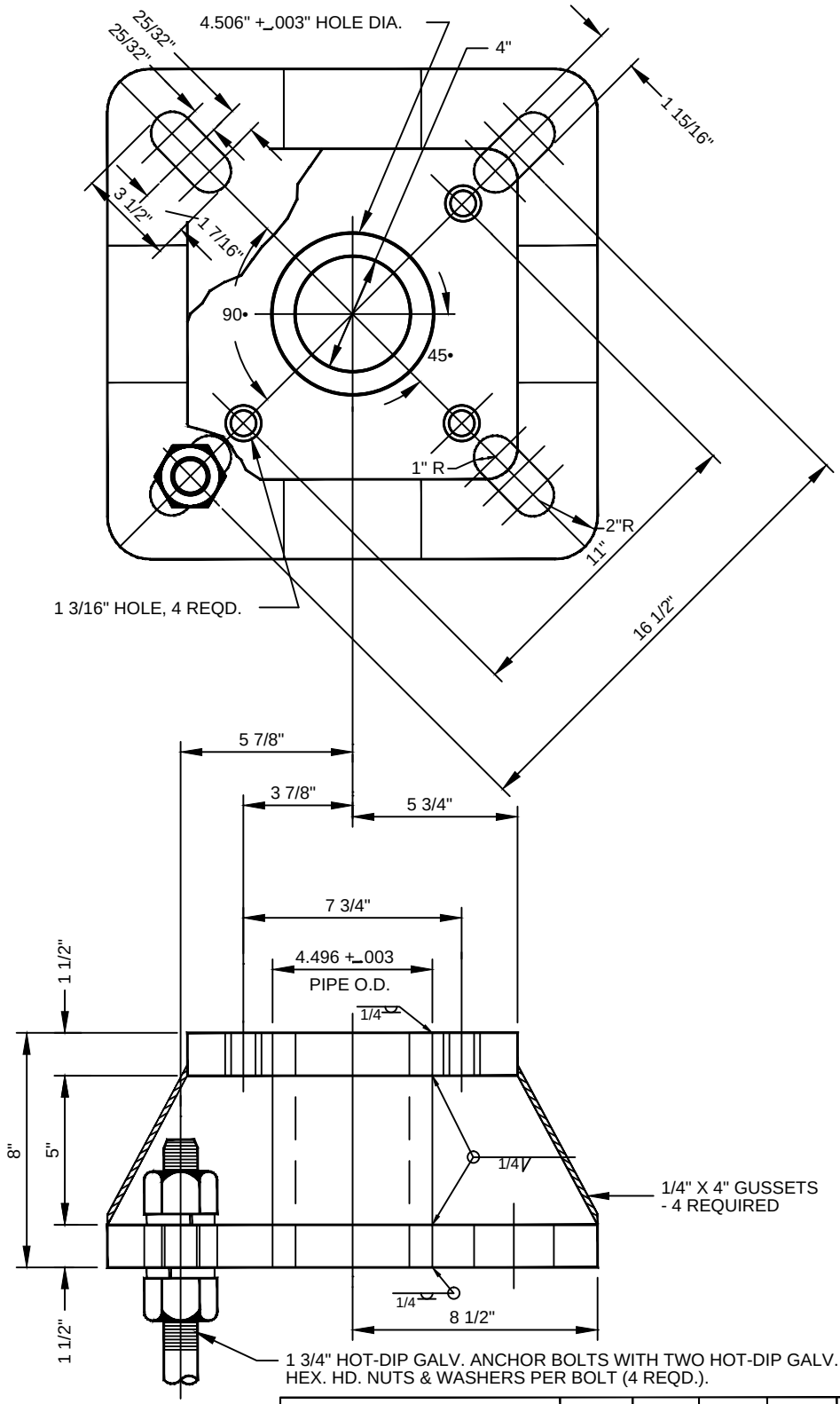
SPECIFICATION REFERENCE	
501	PORTLAND CEMENT CONCRETE
623	TRAFFIC SIGNALS & STREETLIGHTING
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

LIGHTING STANDARD FOUNDATION

DATE 01-09-20	DWG. NO. 321	SHEET 2 OF 2

Effective 8/10/2023 to 8/07/2024



AGENCY APPROVED	B	C	H	L	M	N

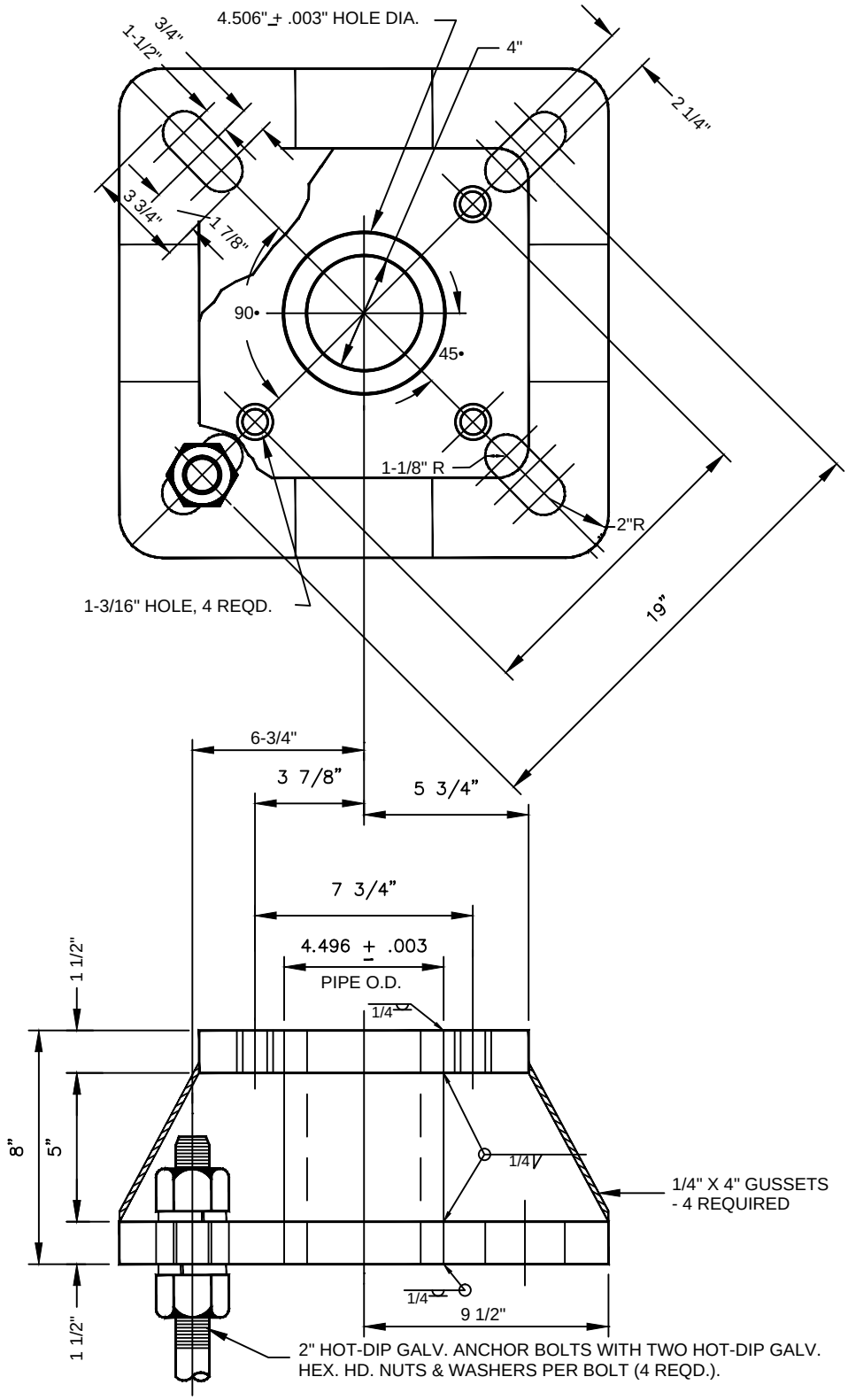
SPECIFICATION REFERENCE	
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

BASE ADAPTOR PLATE
FOR 16-1/2 INCH BOLT CIRCLE FOUNDATION

DATE 12-12-96	DWG. NO. 322	

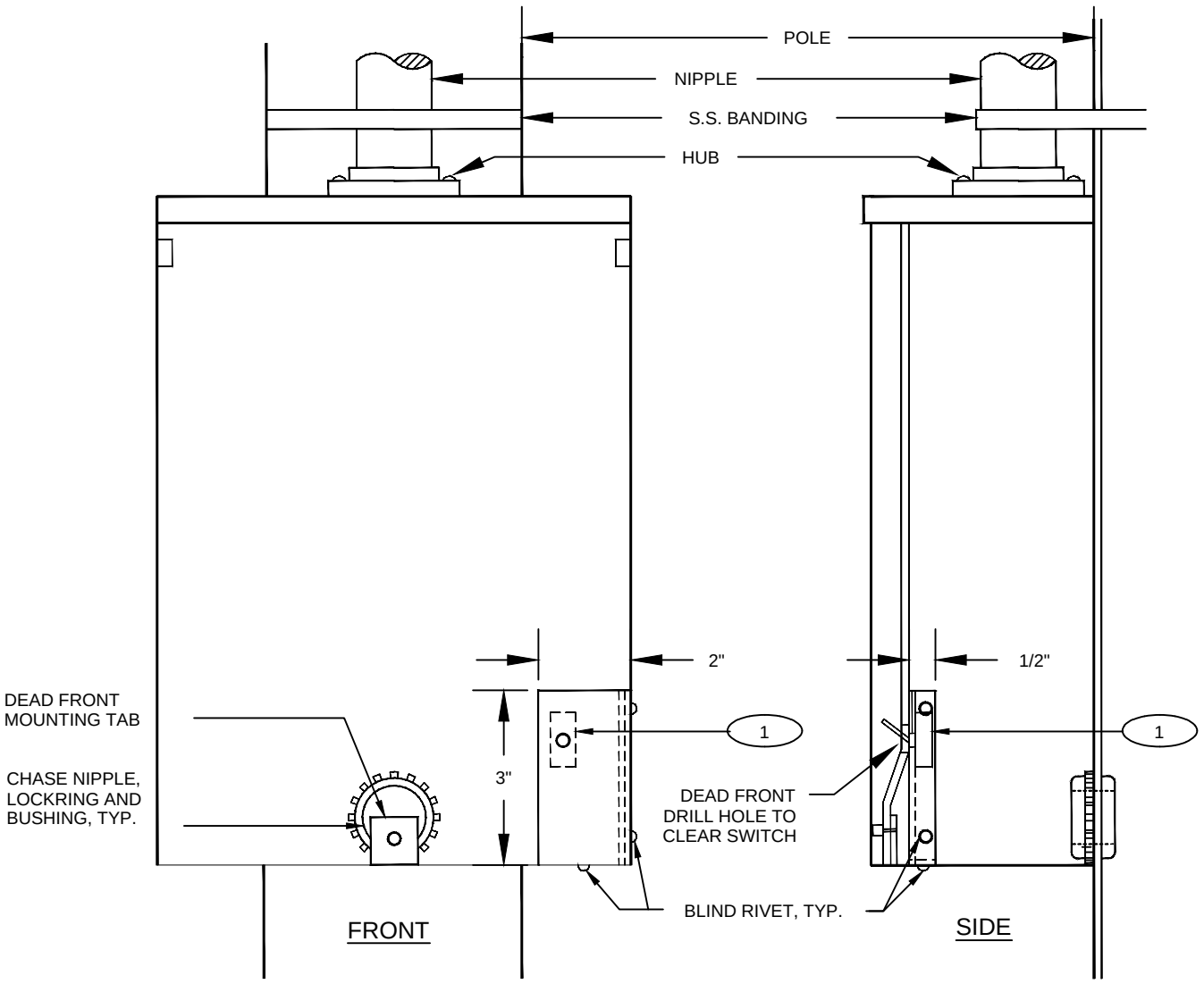
Effective 8/10/2023 to 8/07/2024

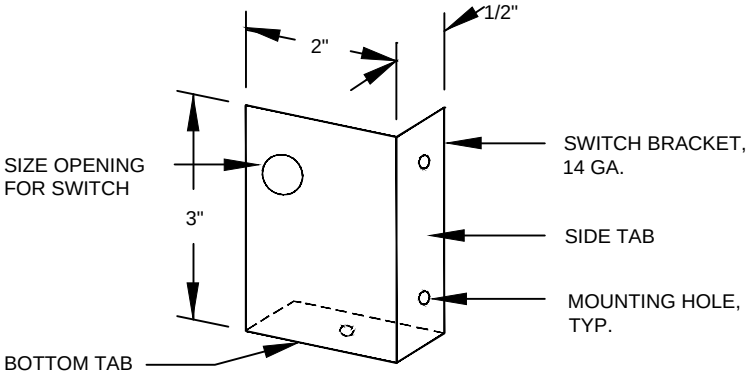


AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	BASE ADAPTOR PLATE FOR 19 INCH BOLT CIRCLE FOUNDATION
	DATE 12-12-96 / DWG. NO. 322.1

Effective 8/10/2023 to 8/07/2024





SWITCH BRACKET

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	
623	TRAFFIC SIGNALS & STREETLIGHTING
.	

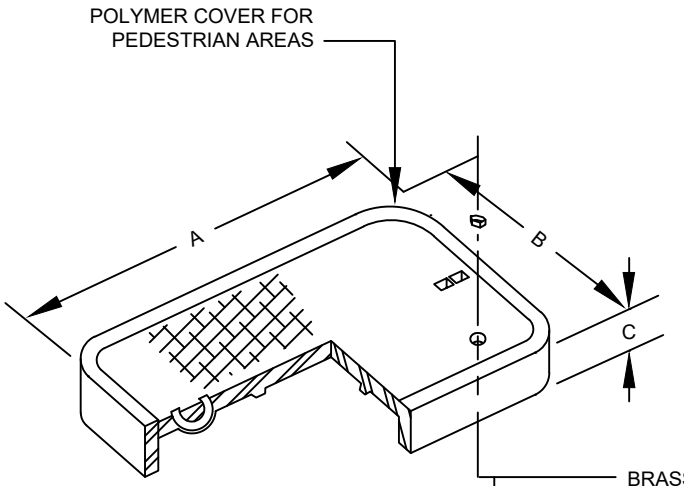
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

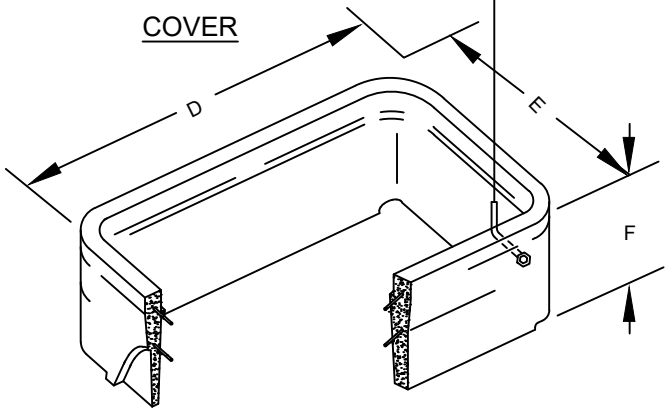
BYPASS SWITCH BRACKET FOR POLE MOUNTED STREET LIGHTING SERVICE

DATE 4-13-00 | DWG. NO. 324.S1

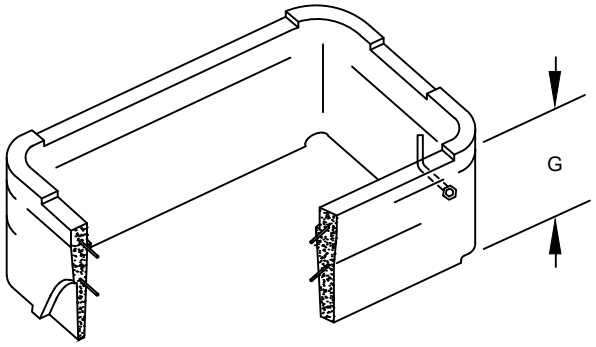
Effective 8/10/2023 to 8/07/2024



COVER



BODY



EXTENSION

AS SPECIFIED BY THE ENGINEER

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

1. COVERS INSTALLED IN TRAFFIC AND OPEN AREAS ACCESSIBLE TO TRAFFIC SHALL BE PER STANDARD DRAWING NO. 327.
2. SEE STANDARD DRAWING NO. 323 FOR COVER GROUNDING.
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

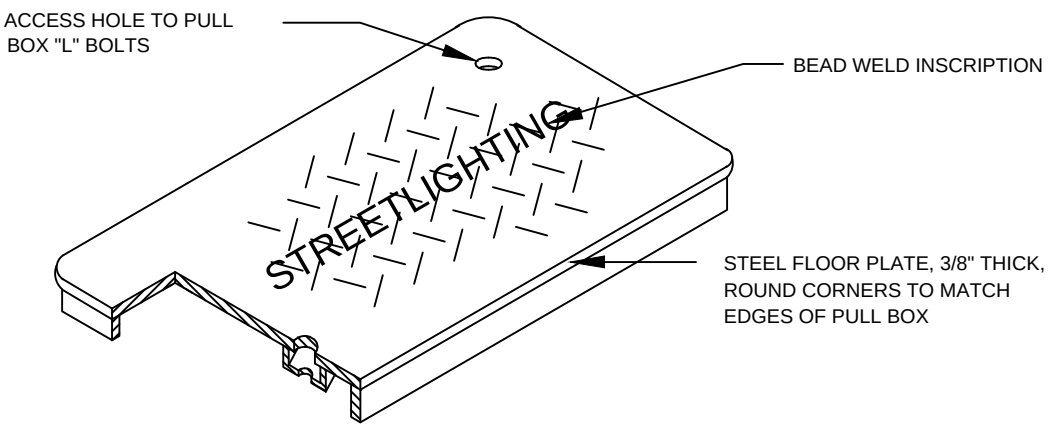
SPECIFICATION REFERENCE	
503	PRECAST PRESTRESSED CONCRETE
	MEMBERS
623	TRAFFIC SIGNALS & STREETLIGHTING

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

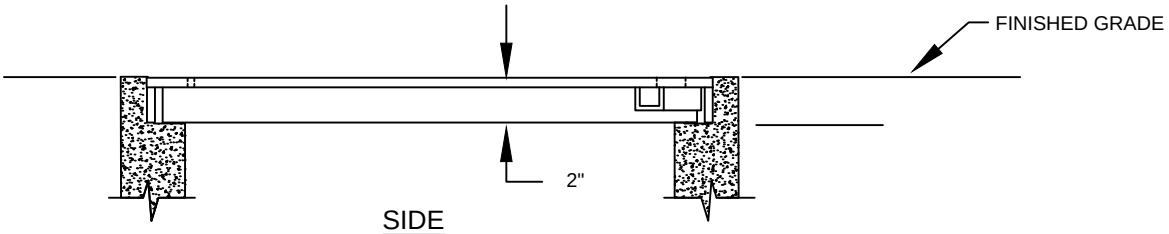
PRECAST REINFORCED CONCRETE PULL BOX

DATE 01-09-20 | DWG. NO. 326

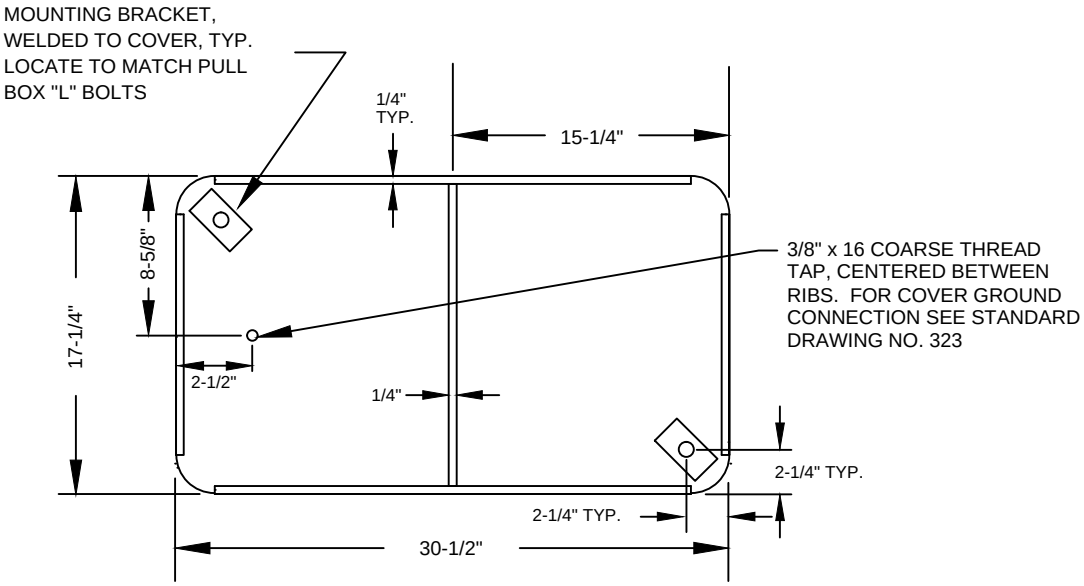
Effective 8/10/2023 to 8/07/2024



COVER



SIDE



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

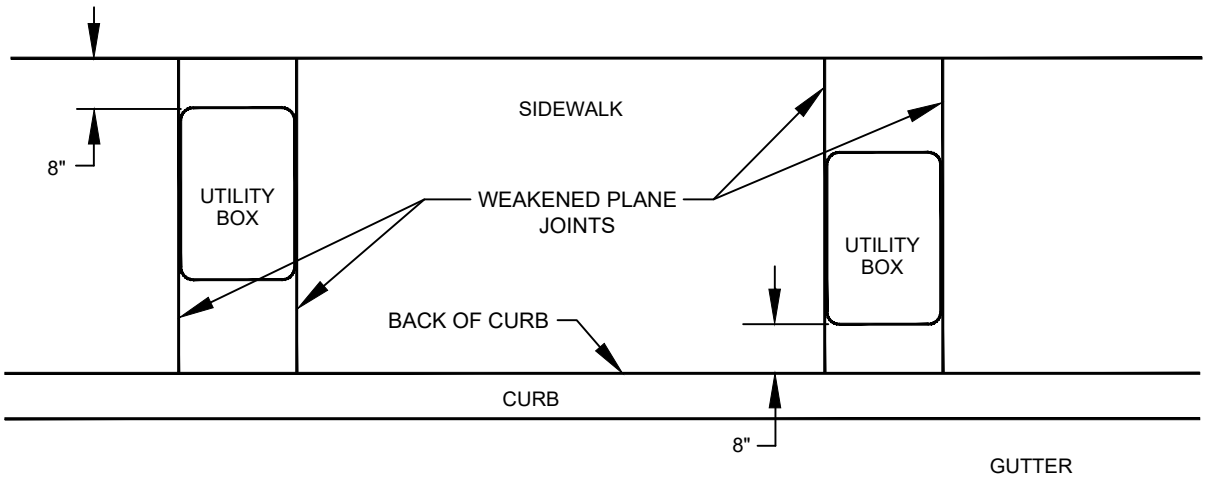
SPECIFICATION REFERENCE	
506	STEEL STRUCTURES
623	TRAFFIC SIGNALS & STREETLIGHTING

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

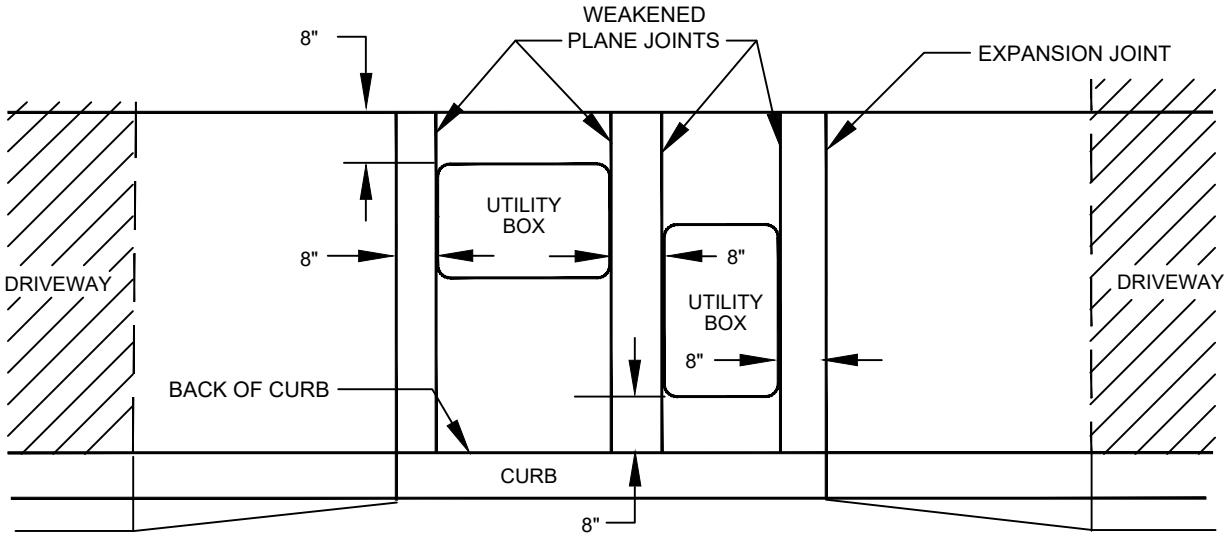
PULL BOX STREET COVER

DATE 12-12-96	DWG. NO. 327	

Effective 8/10/2023 to 8/07/2024



UTILITY BOXES IN SIDEWALK

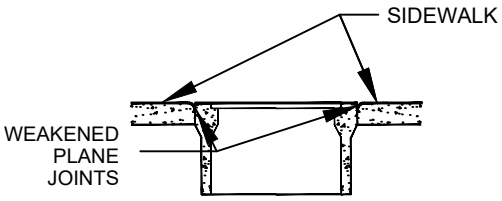


UTILITY BOXES BETWEEN DRIVEWAYS

GUTTER

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

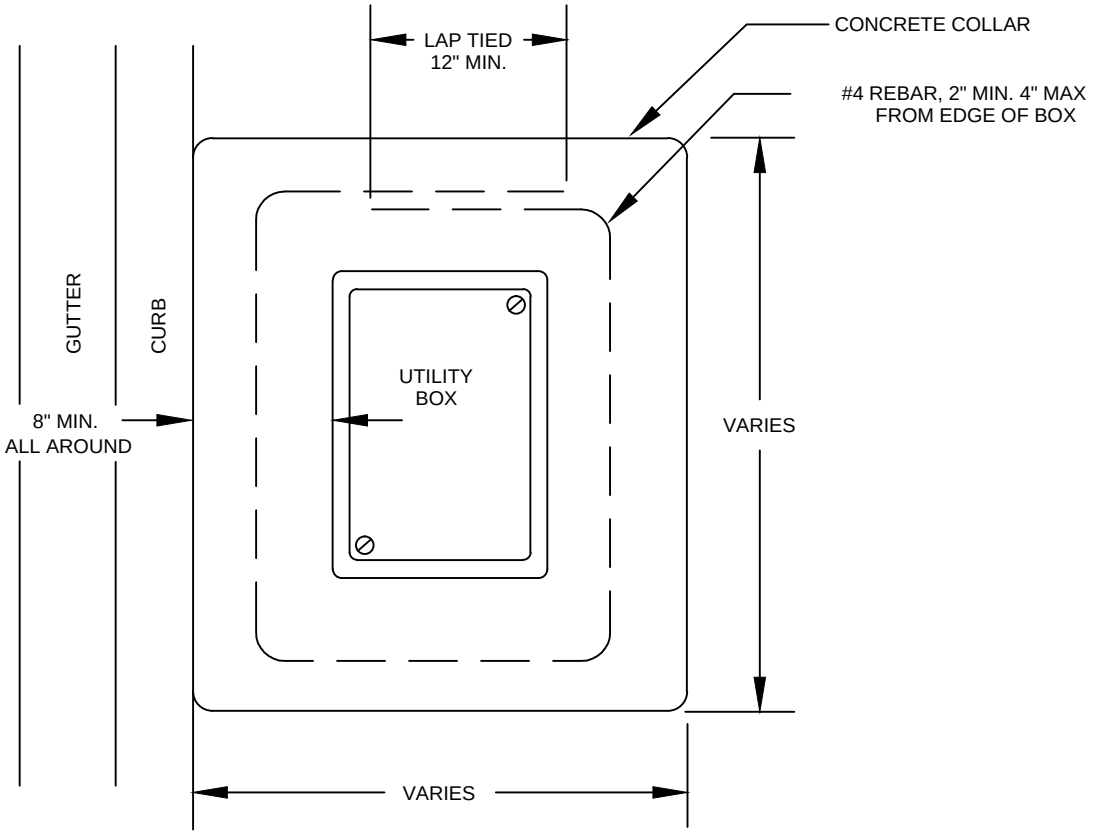
SPECIFICATION REFERENCE	
505	REINFORCING STEEL
623	TRAFFIC SIGNALS & STREETLIGHTING
.	

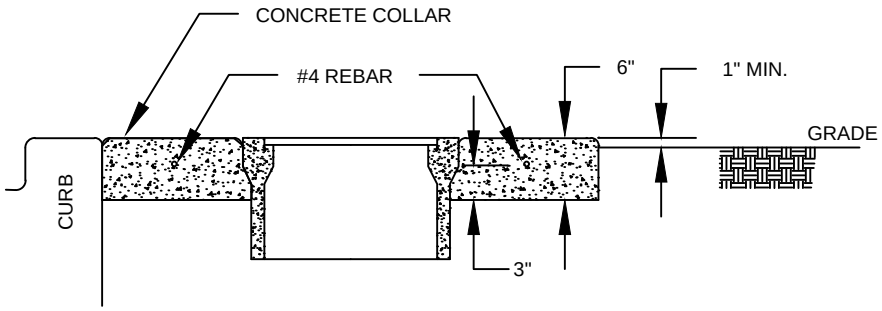
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

UTILITY PULL BOX LOCATIONS SIDEWALK AND BETWEEN DRIVEWAYS

DATE 01-09-20 | DWG. NO. 328

Effective 8/10/2023 to 8/07/2024





TYPICAL SECTION

AGENCY APPROVED	B	C	H	L	M	N

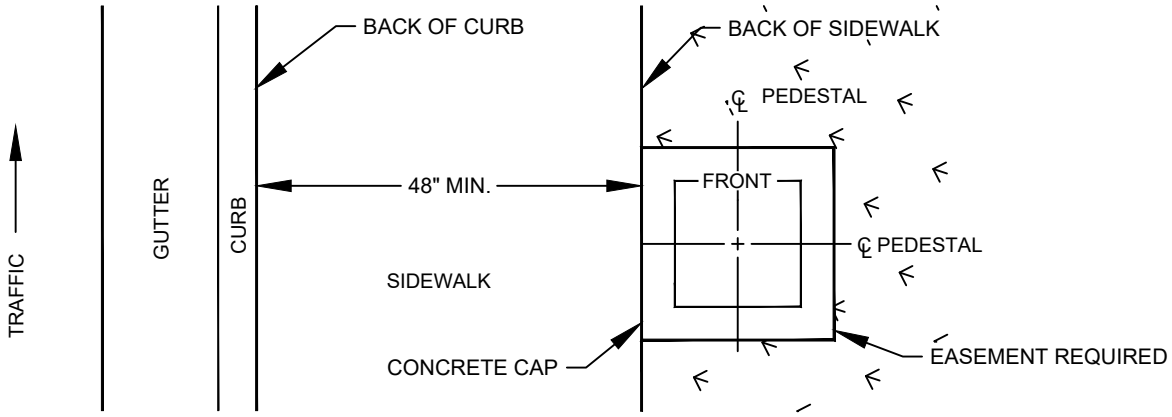
SPECIFICATION REFERENCE	
501	PORTLAND CEMENT CONCRETE
505	REINFORCING STEEL
623	TRAFFIC SIGNALS & STREETLIGHTING
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

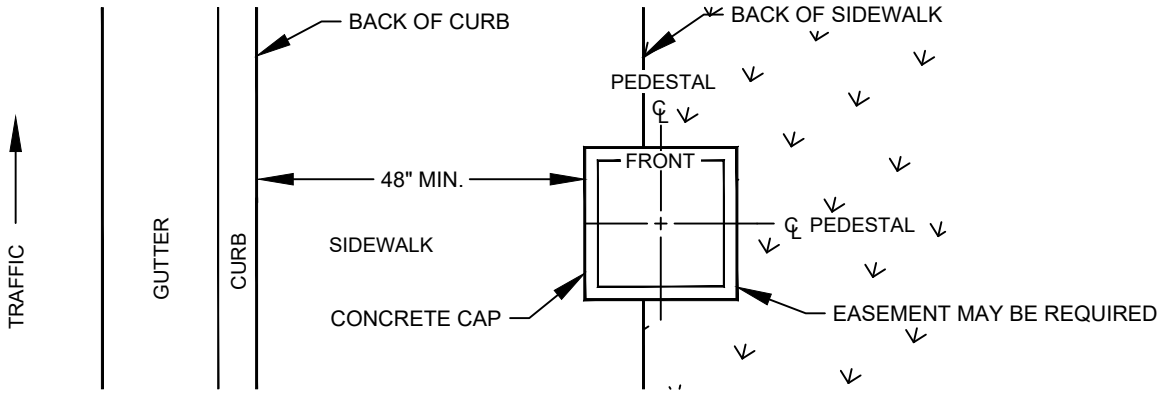
CONCRETE AROUND PULL BOXES IN UNDEVELOPED AREAS

DATE 12-12-96	DWG. NO. 329	

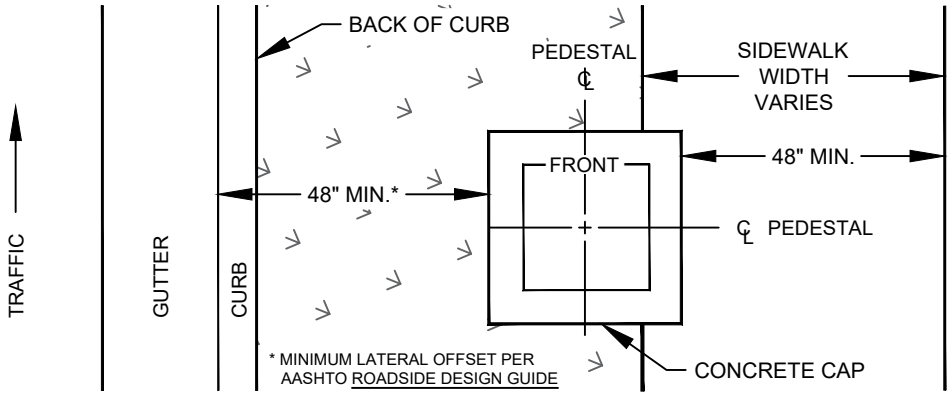
Effective 8/10/2023 to 8/07/2024



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.

AGENCY APPROVED	B	C	H	L	M	N	R

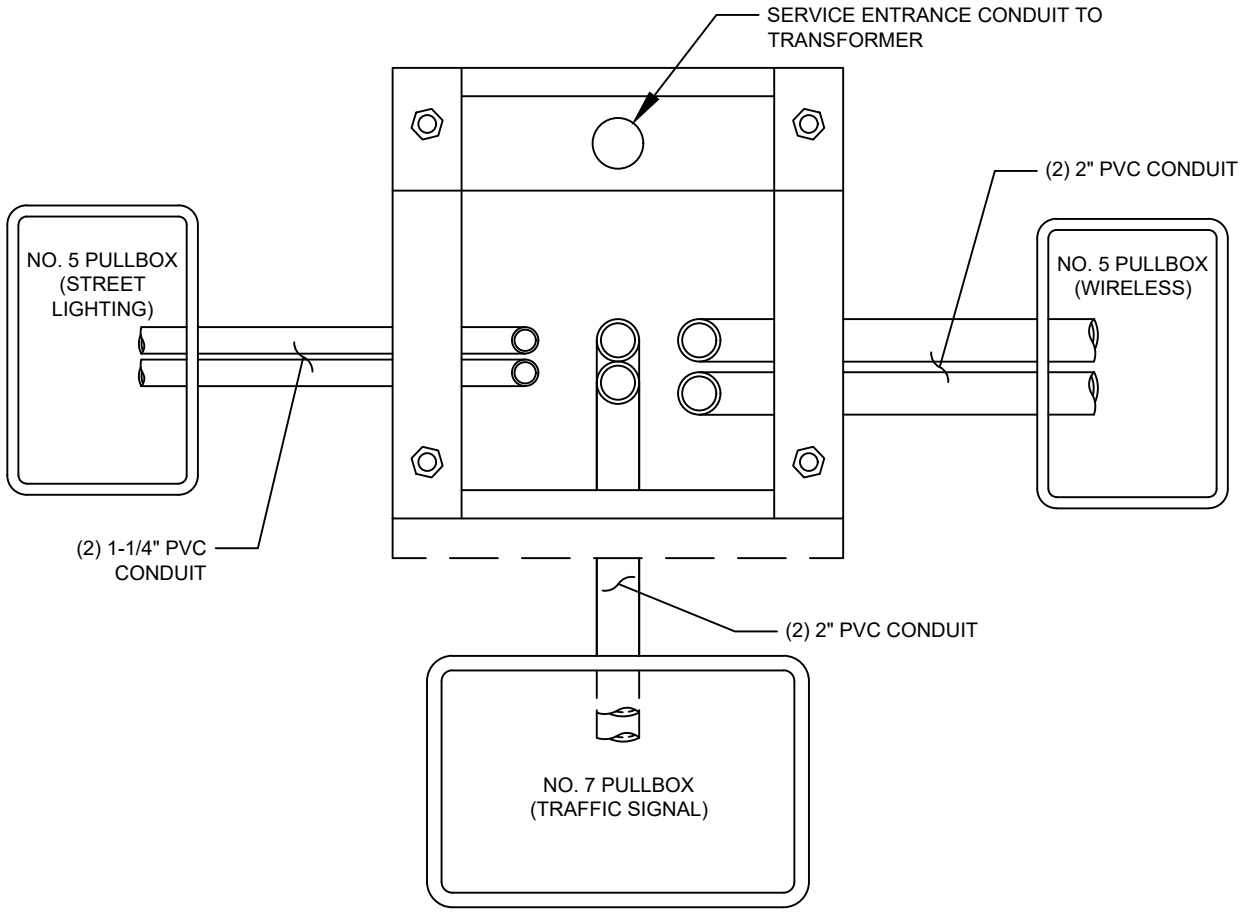
SPECIFICATION REFERENCE	
501	PORTLAND CEMENT CONCRETE
623	TRAFFIC SIGNALS & STREETLIGHTING
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SERVICE PEDESTAL SETBACK AND ORIENTATION

DATE 08-08-19 | DWG. NO. 331

Effective 8/10/2023 to 8/07/2024



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

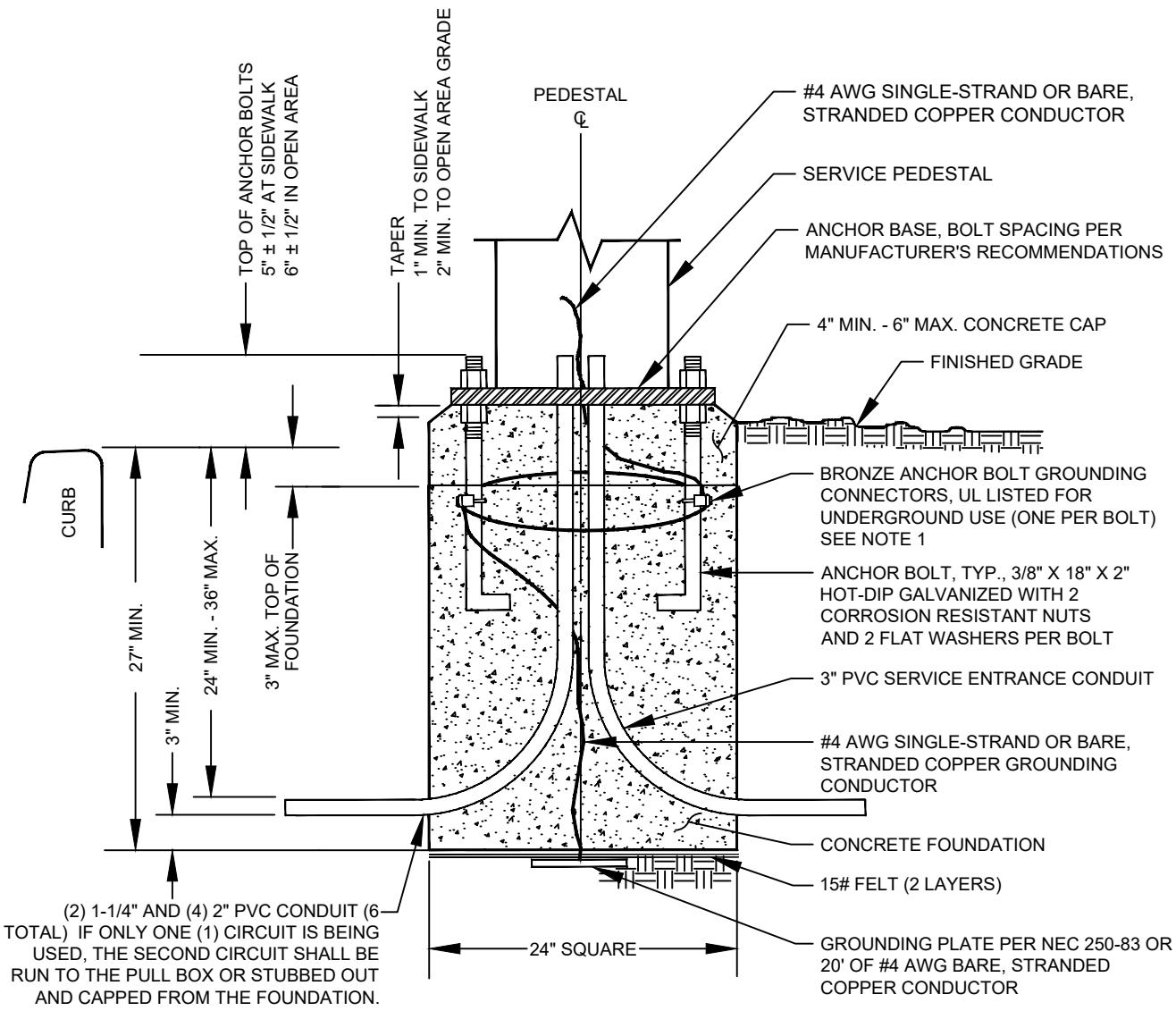
SPECIFICATION REFERENCE	
501	PORTLAND CEMENT CONCRETE
623	TRAFFIC SIGNALS & STREET LIGHTING
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SERVICE PEDESTAL FOUNDATION STREET LIGHTING AND/OR TRAFFIC SIGNAL

DATE 03-12-20	DWG. NO. 332	SHEET 1 OF 2

Effective 8/10/2023 to 8/07/2024



SECTION

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED	B	C	H	L	M	N	R

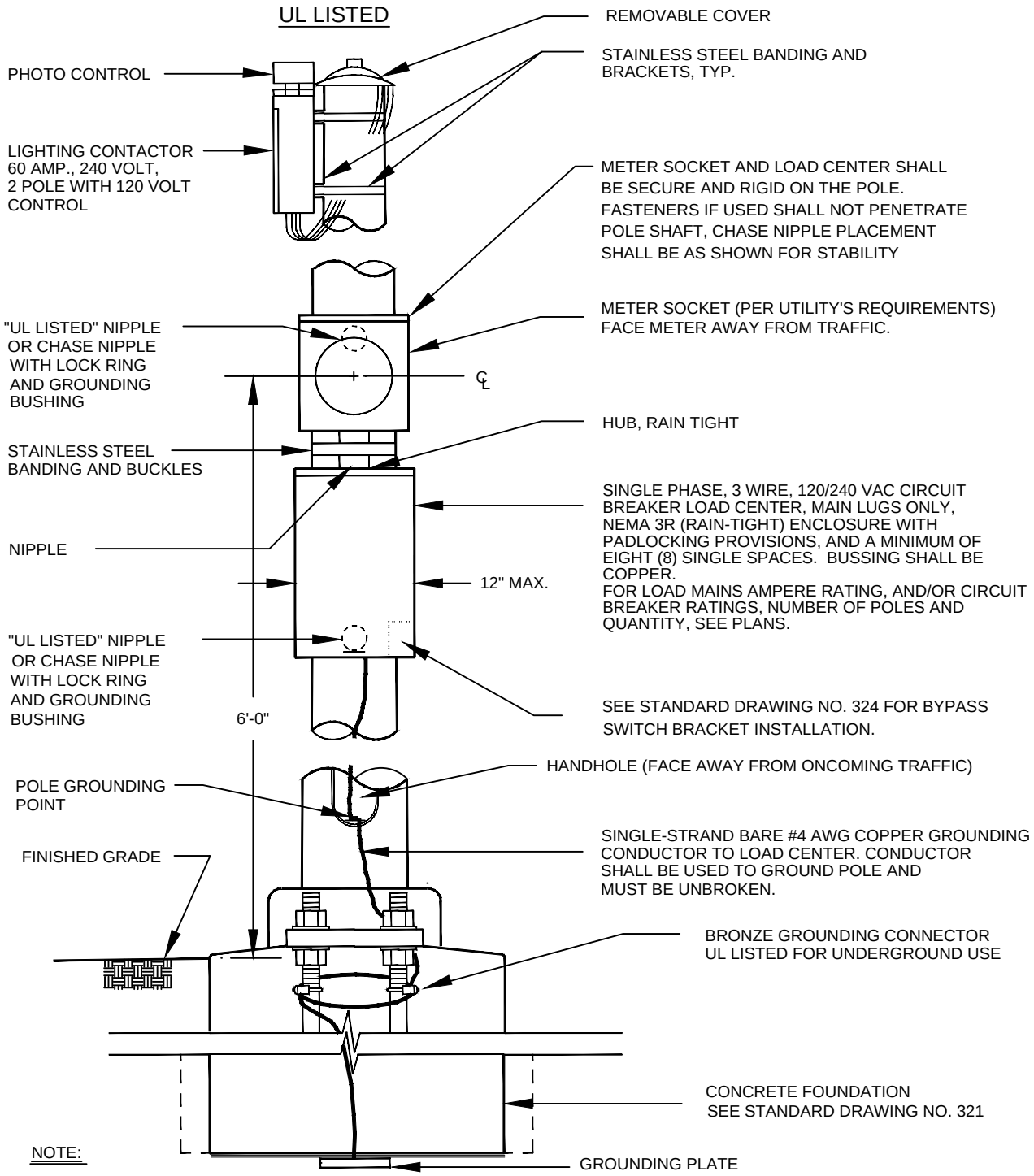
SPECIFICATION REFERENCE	
501	PORTLAND CEMENT CONCRETE
623	TRAFFIC SIGNALS & STREET LIGHTING
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SERVICE PEDESTAL FOUNDATION STREET LIGHTING AND/OR TRAFFIC SIGNAL

DATE 03-12-20	DWG. NO. 332	SHEET 2 OF 2

Effective 8/10/2023 to 8/07/2024



NOTE:

RECOMMEND LOCATING SERVICE POINT AS CLOSE TO THE CENTER OF THE STREETLIGHTING CIRCUIT AS POSSIBLE.

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED					M	

SPECIFICATION REFERENCE	
623	TRAFFIC SIGNALS & STREETLIGHTING

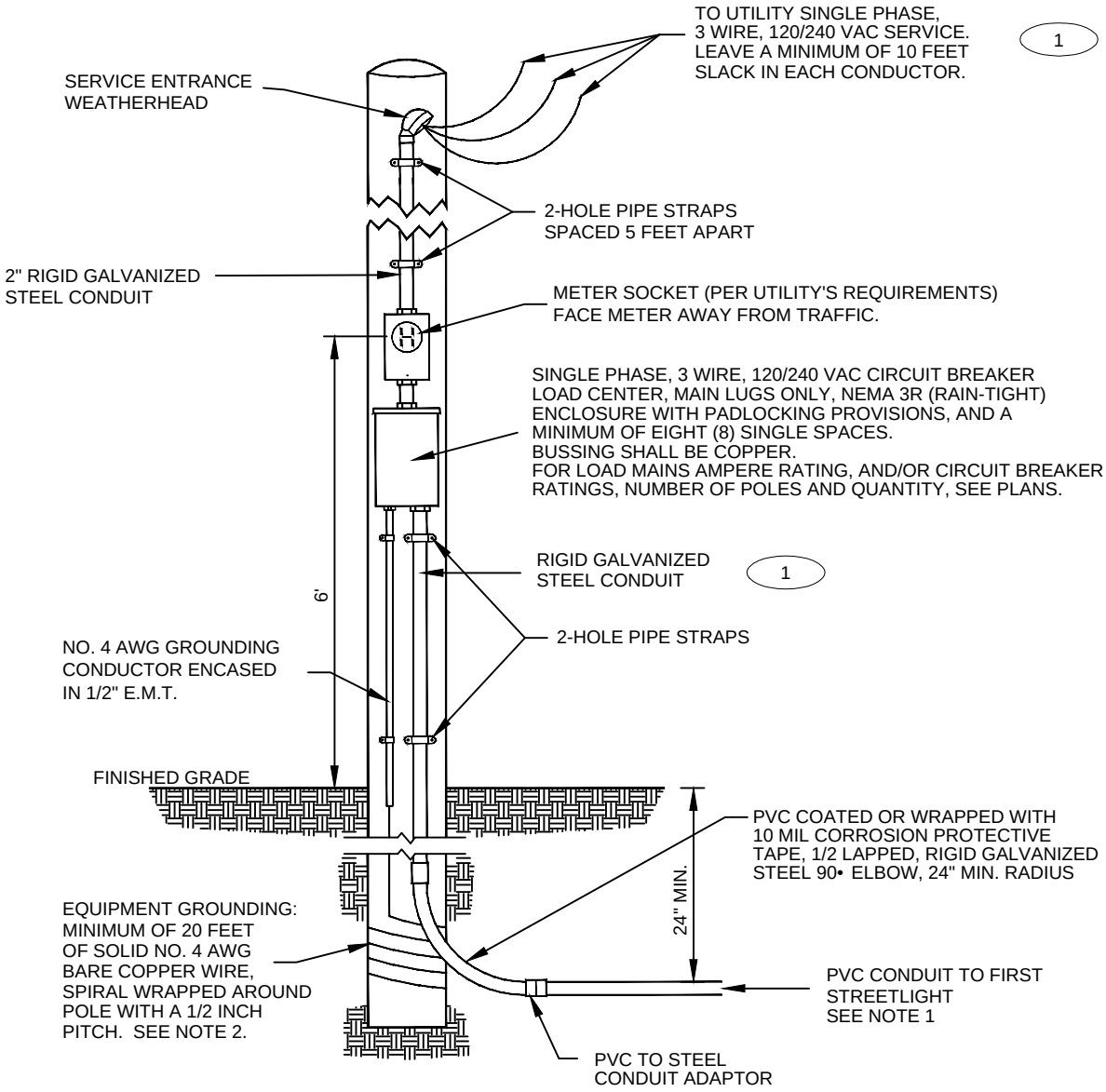
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

STREET LIGHTING SERVICE POINT LOCATED ON STREETLIGHT STANDARD

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

Effective 8/10/2023 to 8/07/2024



(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

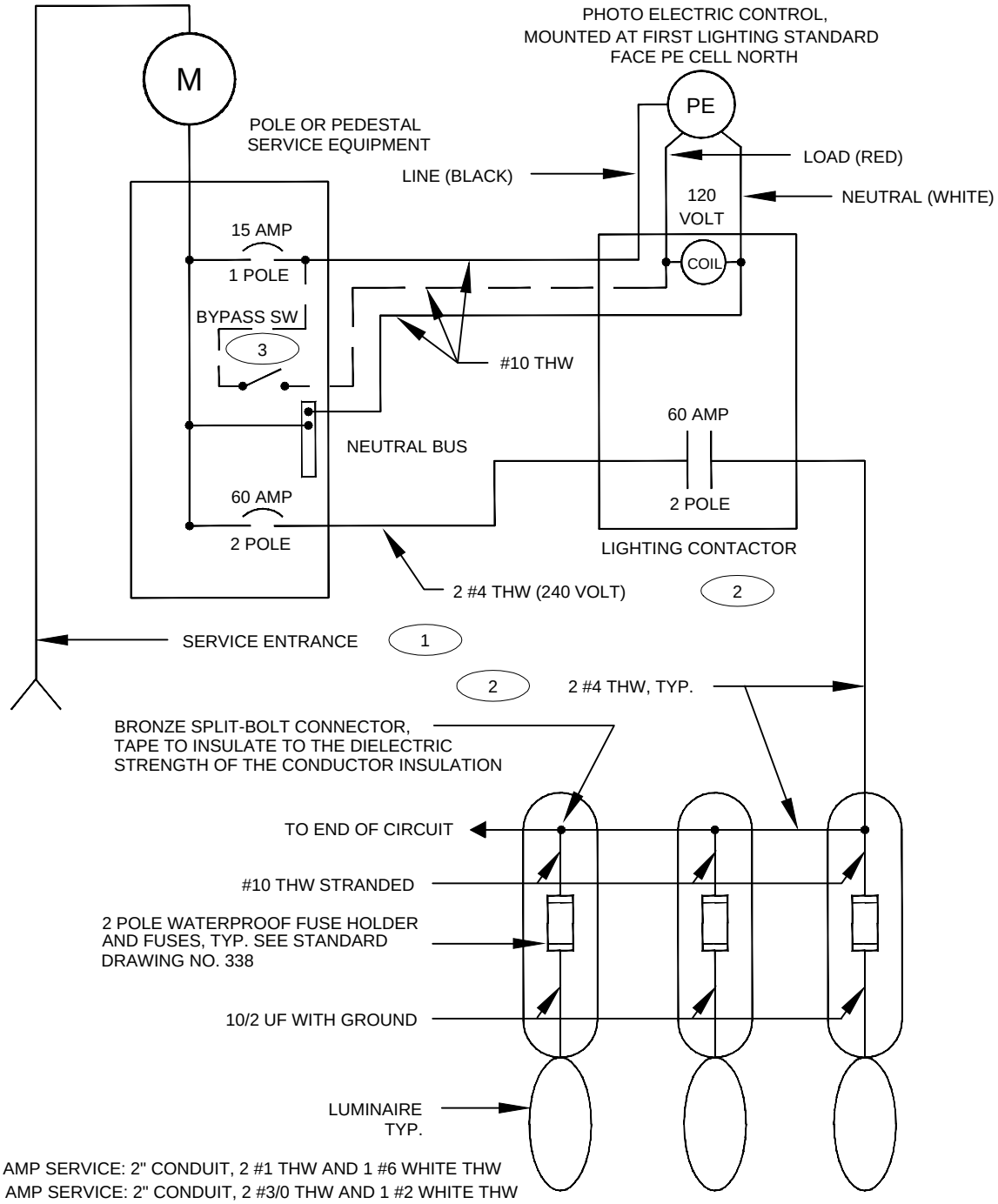
SPECIFICATION REFERENCE	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TEMPORARY APPLICATION 120/240 VAC SERVICE ON WOOD POLE OVERHEAD SERVICE

DATE 8-12-99	DWG. NO. 334	

Effective 8/10/2023 to 8/07/2024



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

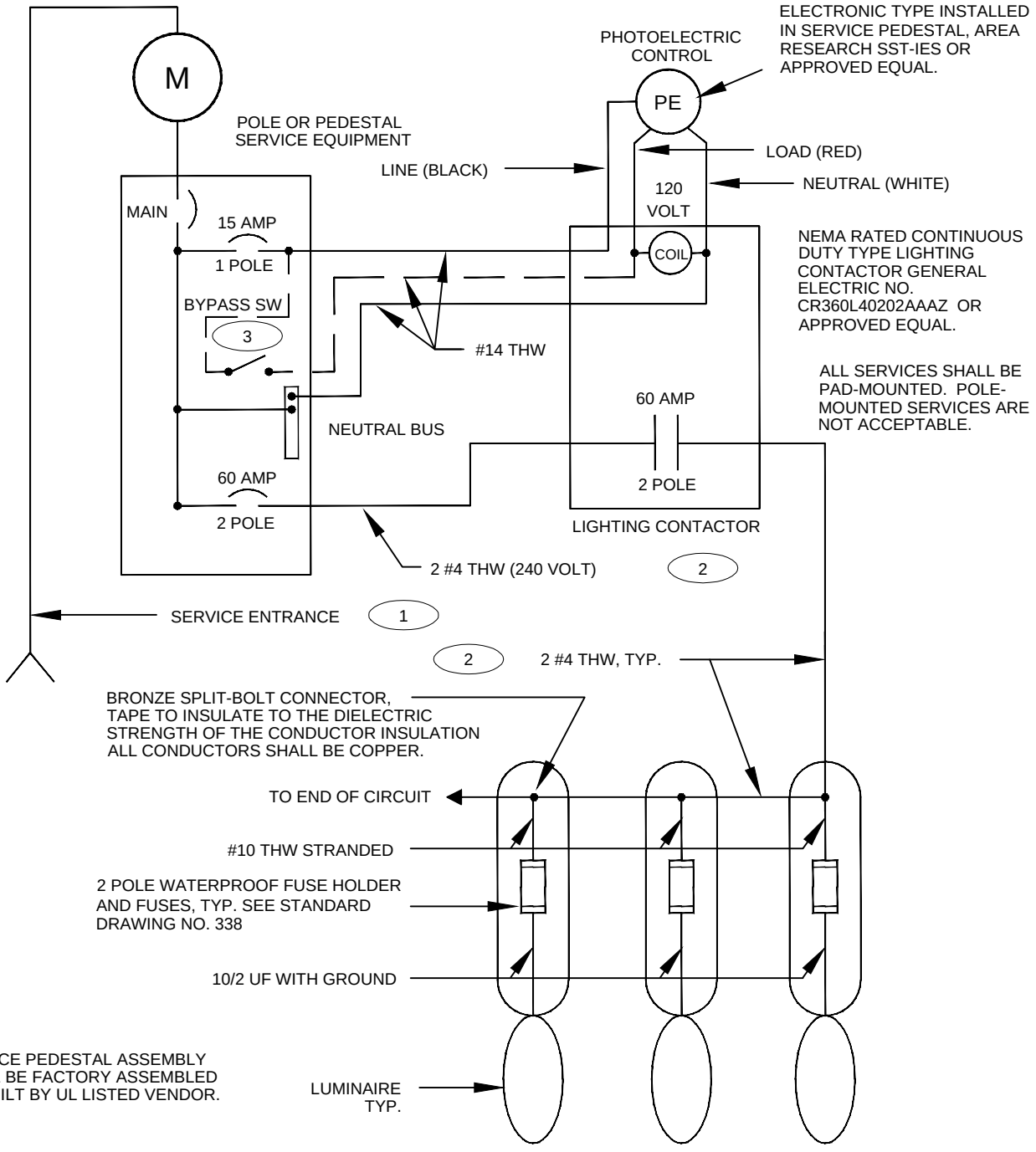
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

STREETLIGHT CIRCUIT ONE LINE DIAGRAM

DATE 2-10-00	DWG. NO. 335.S1	

Effective 8/10/2023 to 8/07/2024



NOTE:

SERVICE PEDESTAL ASSEMBLY SHALL BE FACTORY ASSEMBLED OR BUILT BY UL LISTED VENDOR.

1. FOR CONDUIT SIZE AND WIRING REQUIREMENTS FOR STREETLIGHT SERVICE, SEE STANDARD DRAWING NO. 332.S2.
2. GROUNDING AND BONDING CONDUCTORS OMITTED FOR CLARITY, SEE STANDARD DRAWING NOS. 336 AND 337.
3. SINGLE POLE, SINGLE THROW, ON-OFF, 15 AMP, 125 VAC SWITCH, SEALED, WITH 5 IN. LEADS

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED		C		L		

SPECIFICATION REFERENCE	
623	TRAFFIC SIGNALS & STREETLIGHTING

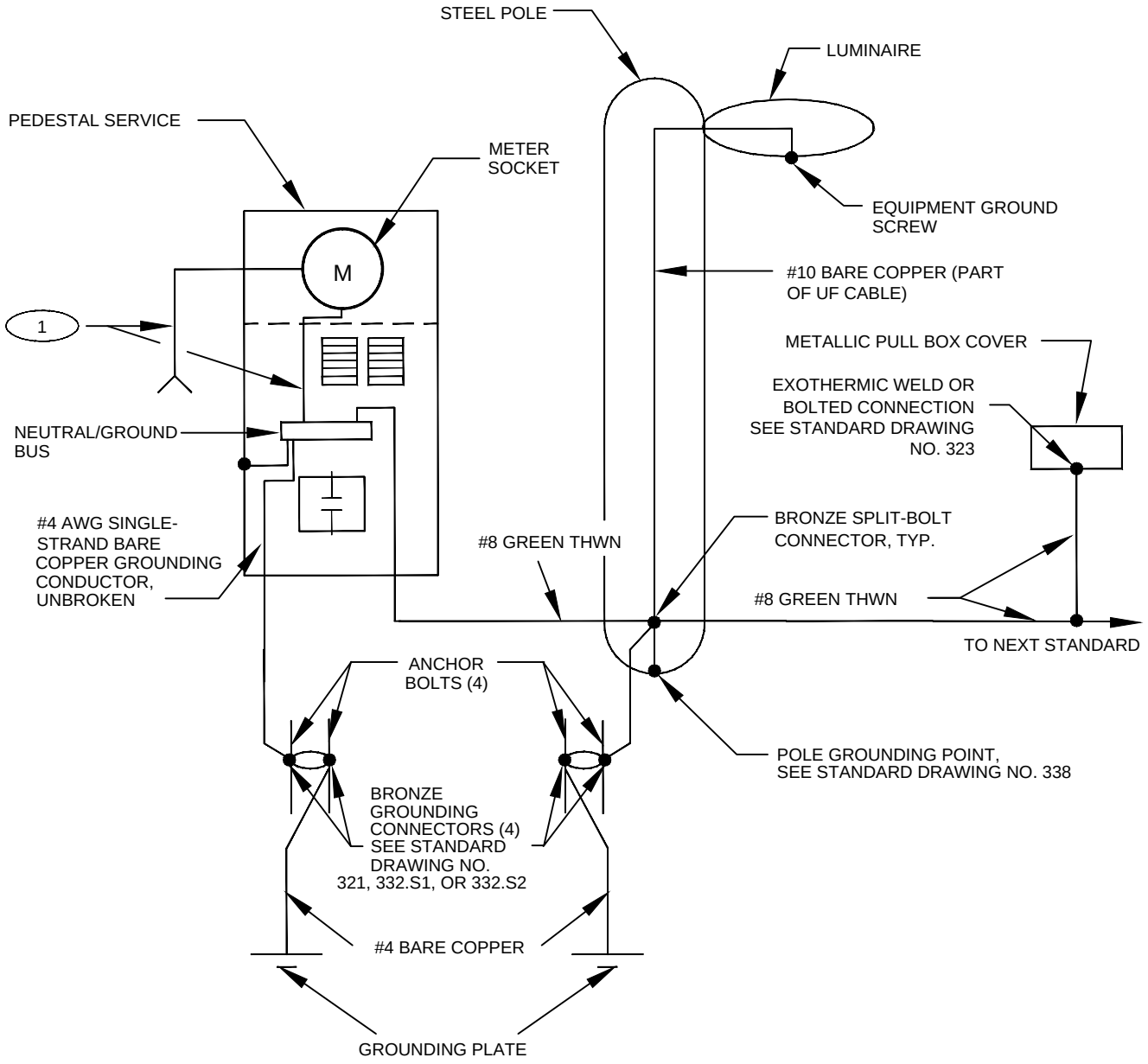
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

STREETLIGHT CIRCUIT ONE LINE DIAGRAM

DATE 2-10-00	DWG. NO. 335.S2	

Effective 8/10/2023 to 8/07/2024



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

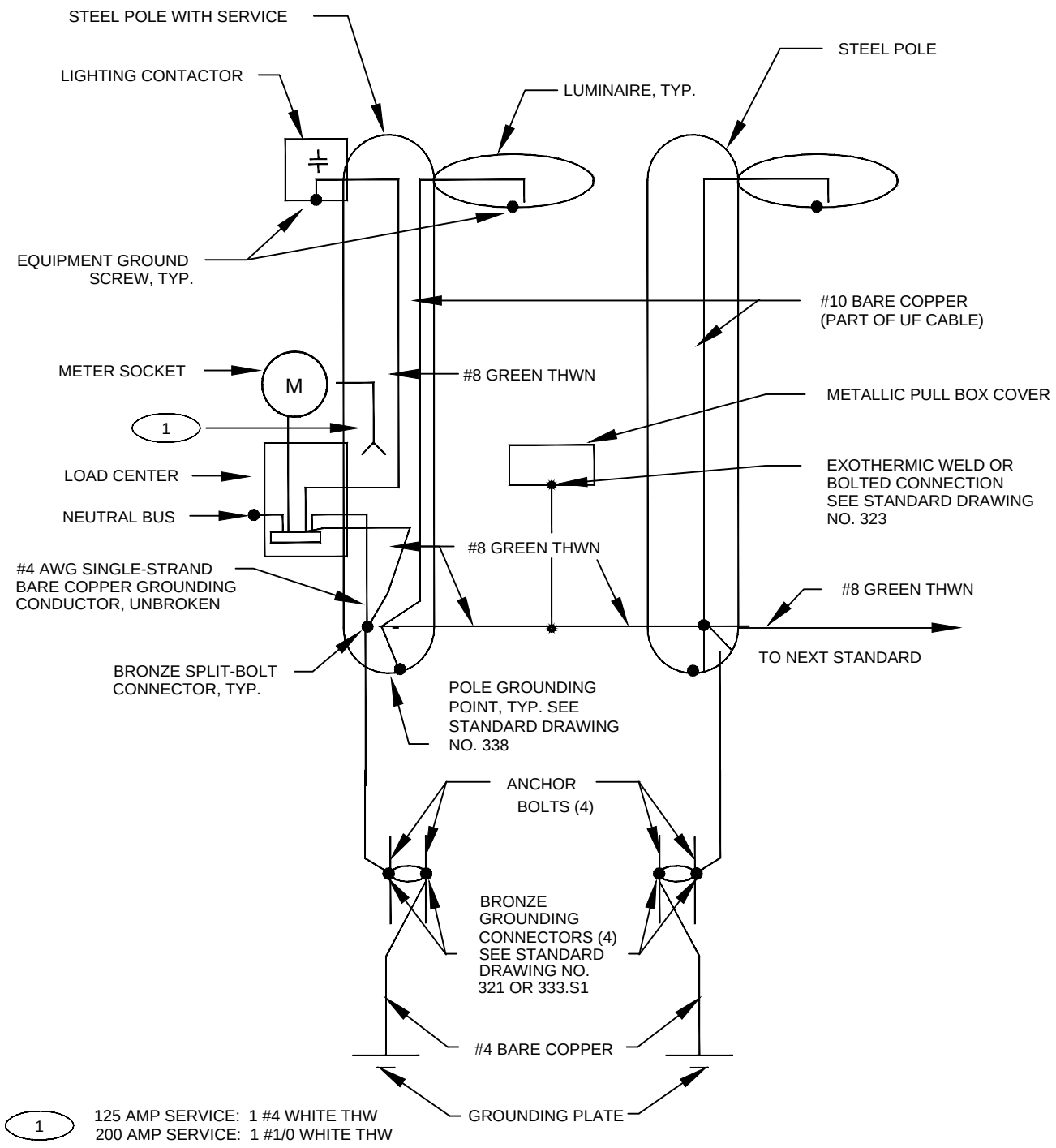
SPECIFICATION REFERENCE	
623	TRAFFIC SIGNALS & STREETLIGHTING

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SYSTEM GROUNDING PLAN WITH PEDESTAL SERVICE

DATE 2-10-00 | DWG. NO. 336

Effective 8/10/2023 to 8/07/2024



PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED	B	C	H	L	M	N

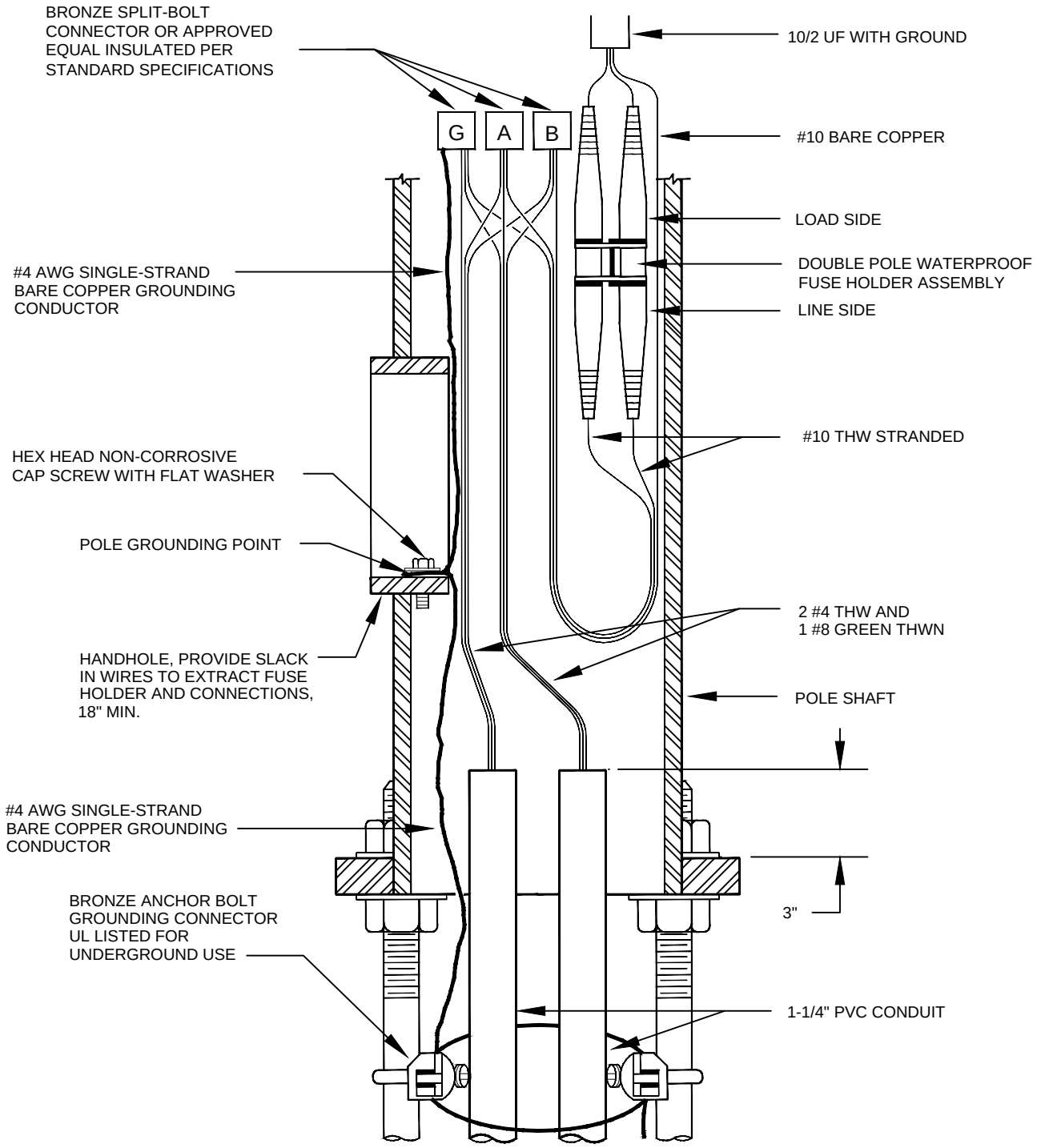
SPECIFICATION REFERENCE	
623	TRAFFIC SIGNALS & STREETLIGHTING

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SYSTEM GROUNDING PLAN WITH POLE MOUNTED SERVICE

DATE 8-12-99	DWG. NO. 337	

Effective 8/10/2023 to 8/07/2024



PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED	B	C	H	L	M	N

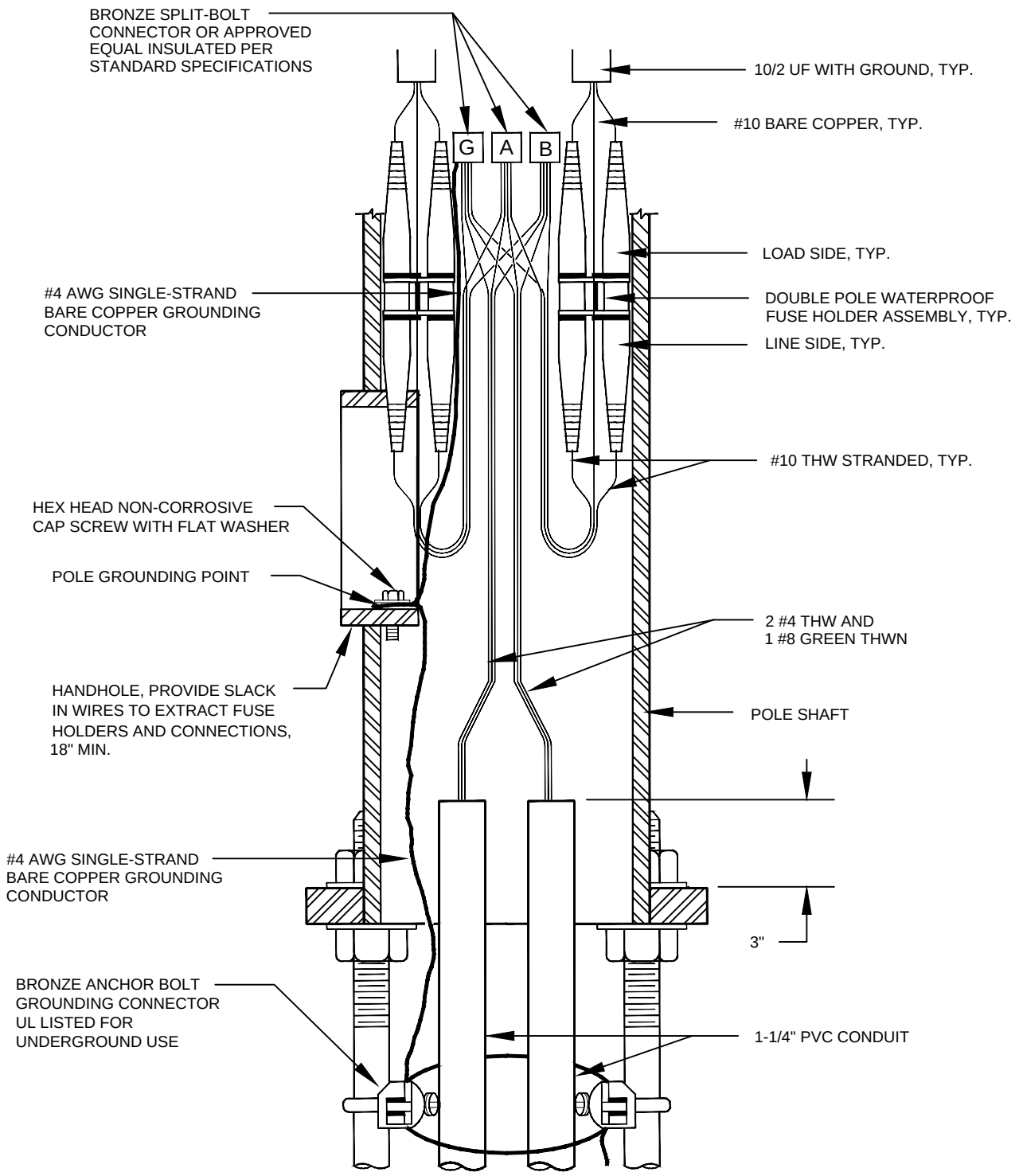
SPECIFICATION REFERENCE	
623	TRAFFIC SIGNALS & STREETLIGHTING

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

LIGHTING STANDARD WIRING DIAGRAM, 240 VOLT, TWO WIRE

DATE 12-12-96 | DWG. NO. 338

Effective 8/10/2023 to 8/07/2024



PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED	B	C	H	L	M	N

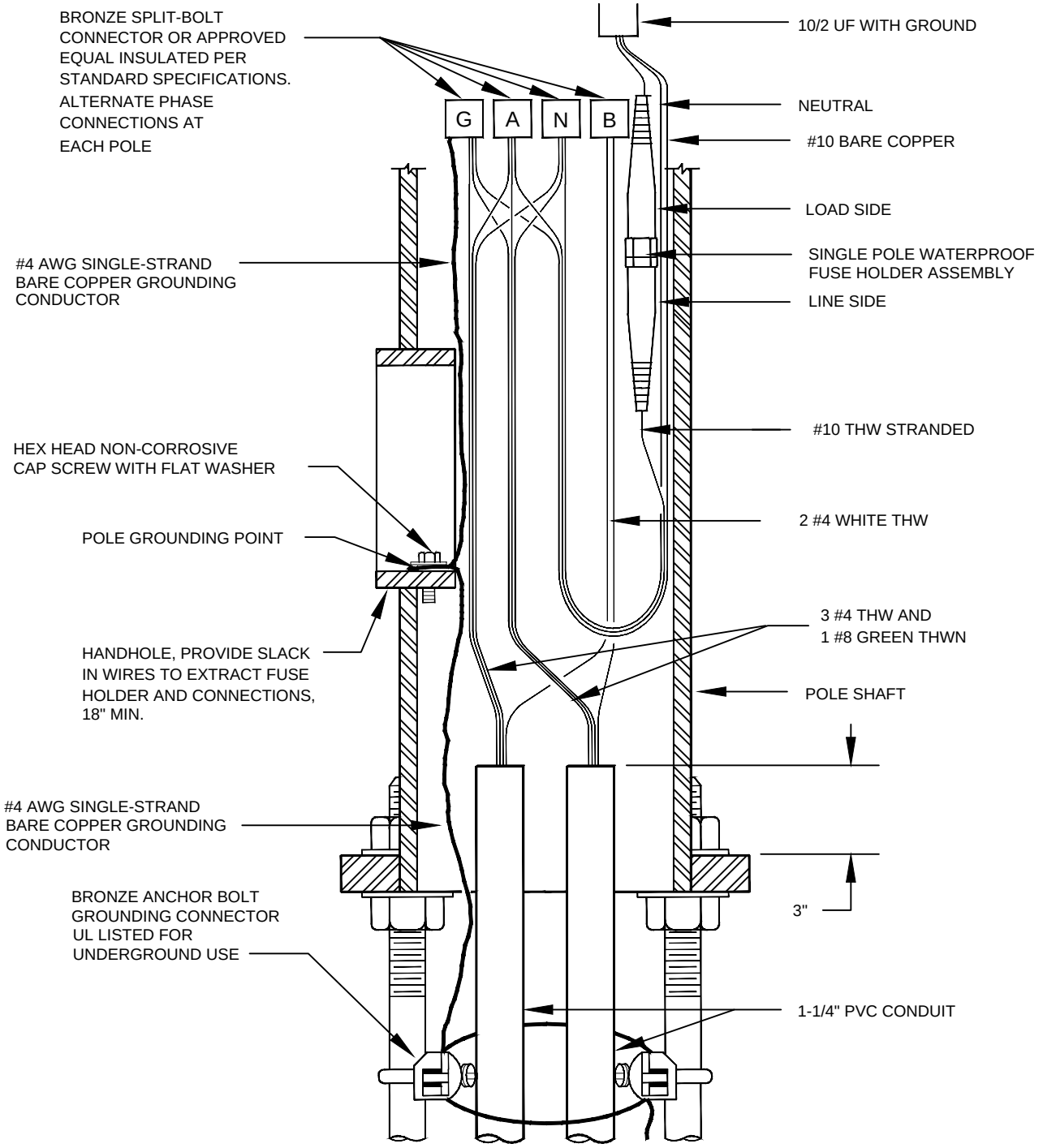
SPECIFICATION REFERENCE	
623	TRAFFIC SIGNALS & STREETLIGHTING

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TWIN LIGHTING STANDARD WIRING DIAGRAM, 240 VOLT, TWO WIRE

DATE 12-12-96	DWG. NO. 339	

Effective 8/10/2023 to 8/07/2024



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

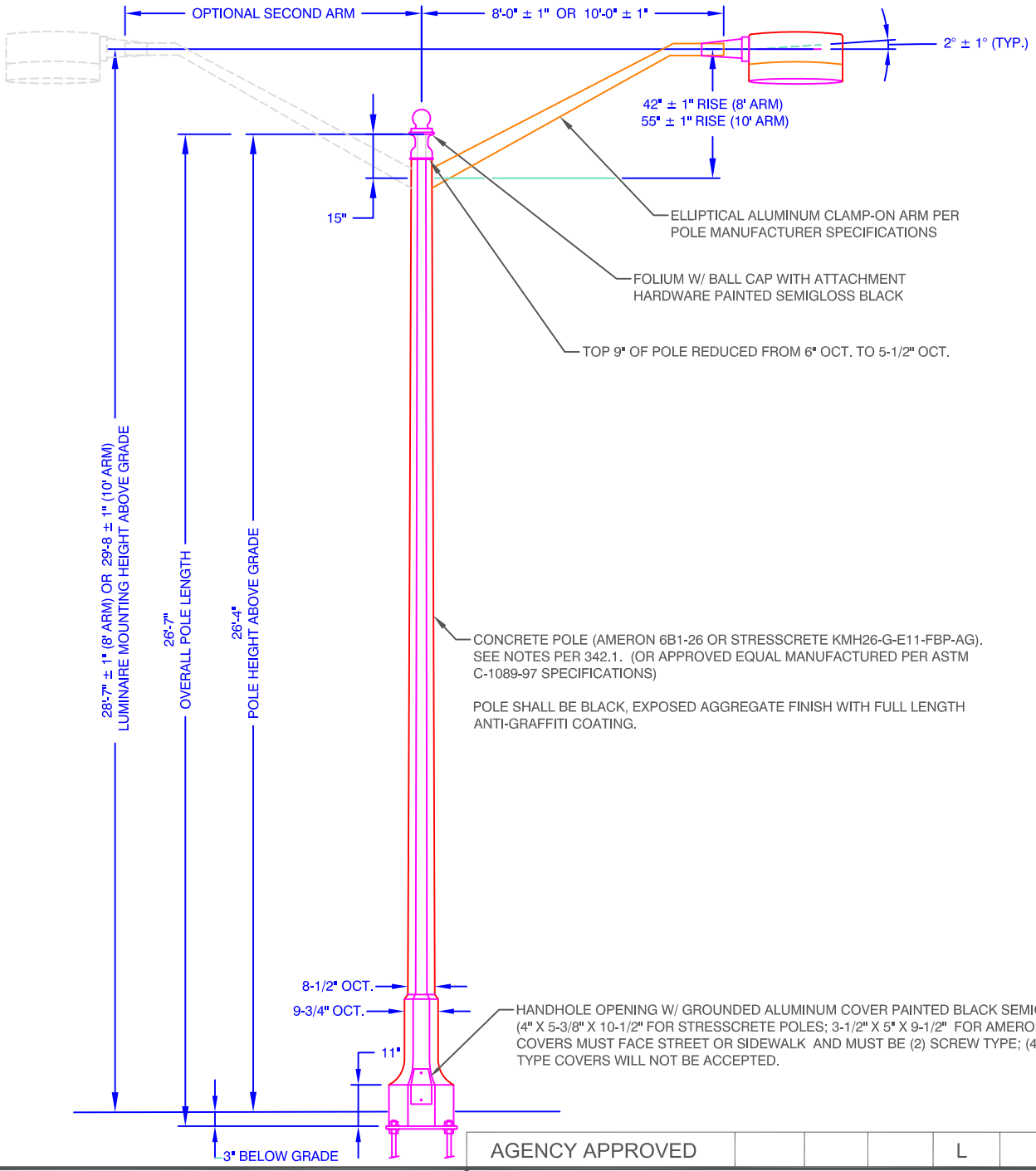
LIGHTING STANDARD WIRING DIAGRAM
120 VOLT, ONE PHASE, THREE WIRE

DATE 12-12-96	DWG. NO. 340	

Effective 8/10/2023 to 8/07/2024

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	
623	TRAFFIC SIGNALS & STREET LIGHTING

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

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

DATE 08-09-18 | DWG. NO. 341

Effective 8/10/2023 to 8/07/2024

AMERON NOTES AND SPECIFICATIONS:

"F" LEVEL CONFIG CODES		
OPTION CLASS	ENTRY	INFO.
COATING	1	-
HH COVER	43436PA	"LV"
DOOR SCRS	TMP	-
DRILL-IN MOD	MODEBEB	-

"P" LEVEL CONFIG CODES		
OPTION CLASS	ENTRY	INFO.
MIX	12	-
FINISH	3	-
BASEPLATE	45042	NOTE #8
POLE TOP CON.	MOD90	-

DECORATIVE BASE OCTAGONAL BASE PLATE POLE

POLE DESIG-NATION	POLE HEIGHT ABOVE GRADE	OVERALL POLE LENGTH	BOLT CIRCLE	BASE O.D.	ULTIMATE G.I. 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.

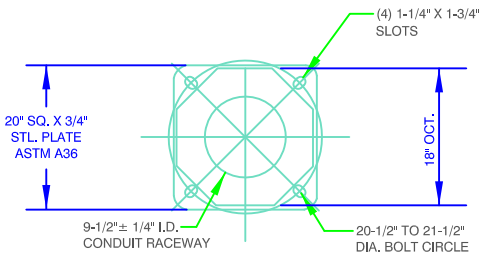
5. BASEPLATE ASTM A-36 FULLY PRESTRESSED WITH (8) 5/16" DIA. A-416 WIRES (7-STRAND CABLES).

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

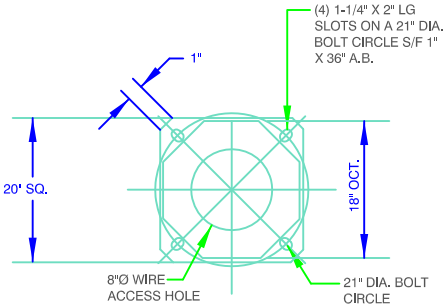
7. LMA IS DESIGNED TO ROTATE TO ANY OCTAGONAL FLATS PER CUSTOMER'S REQUIREMENTS.

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 DECASPHERE 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-GRAFFITTI
FULL LENGTH

NOTES:

1. MIX ECLIPSE BLACK, EXPOSED AGGREGATE FINISH WITH JONES BLAIR ANT GRAFFITI COATING.
2. FC @ 28 DAYS = 8,000 PSI, USING ASTM C-31 CYLINDER TEST.
3. POLES MANUFACTURED PER ASTM C-1089-06 SECIFICATIONS.
4. BASEPLATES ASTM A-36 WELDED BY CERTIFIED WELDER.
5. PROTECTIVE COAT EXPOSED P.C. WIRES AT POLE ENDS.
6. LMA IS DESIGNED TO ROTATE TO ANY OCTAGONAL FLATS PER CUSTOMERS REQUIREMENTS.
7. POLE SHOWN IS SUPPLIED WITH GALV. STEEL BASEPLATE FOR CAPPED OR NON-CAPPED INSTALLATION.
8. THE 8' DOUBLE TOP MOUNT ALUMINUM DECORATIVE S-ARM PIPE LMA ASSEMBLY (NOT TO RXCEED UP TO, 1.74 SQ. FT. EPA, 12 LBSW. 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).
9. STRESSCRETE POLE WARRANTY - LIFETIME.

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 NOTES AND SPECIFICATIONS
(AMERON AND STRESSCRETE)

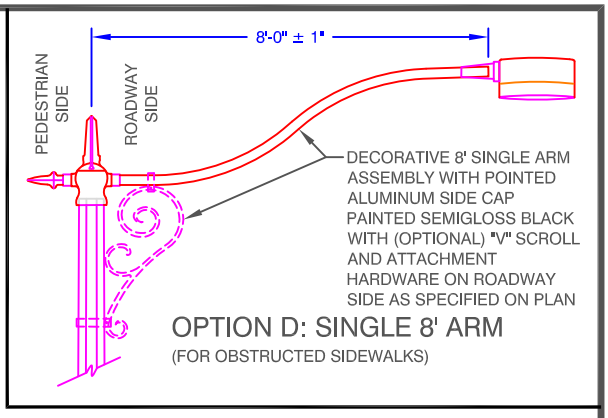
DATE 08-09-18 | DWG. NO. 342.1

Effective 8/10/2023 to 8/07/2024

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

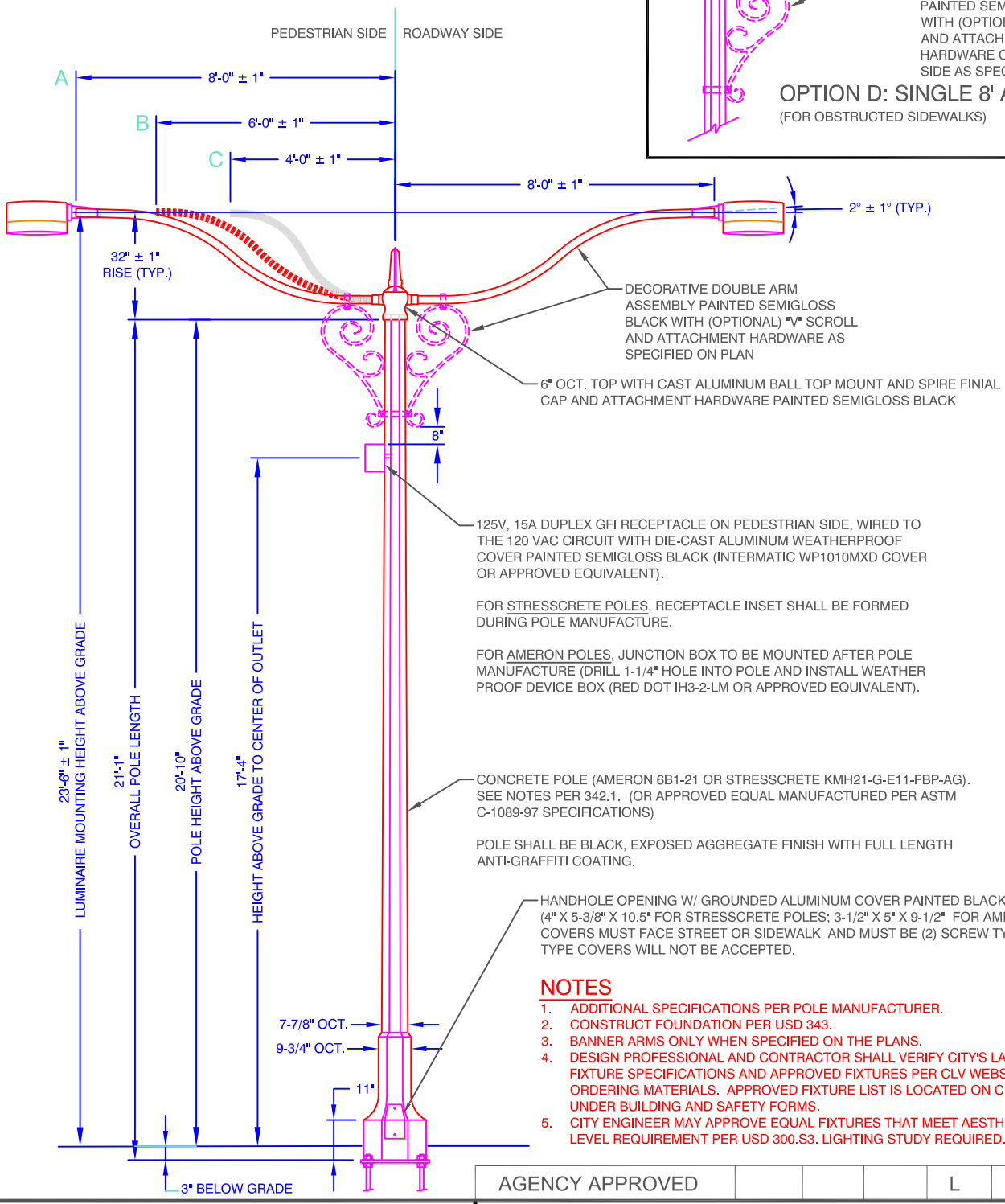
OPTION B: 6' + 8' ARMS (FOR 15' SIDEWALKS, INCLUDING AMENITY ZONE)

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



OPTION D: SINGLE 8' ARM

(FOR OBSTRUCTED SIDEWALKS)



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		

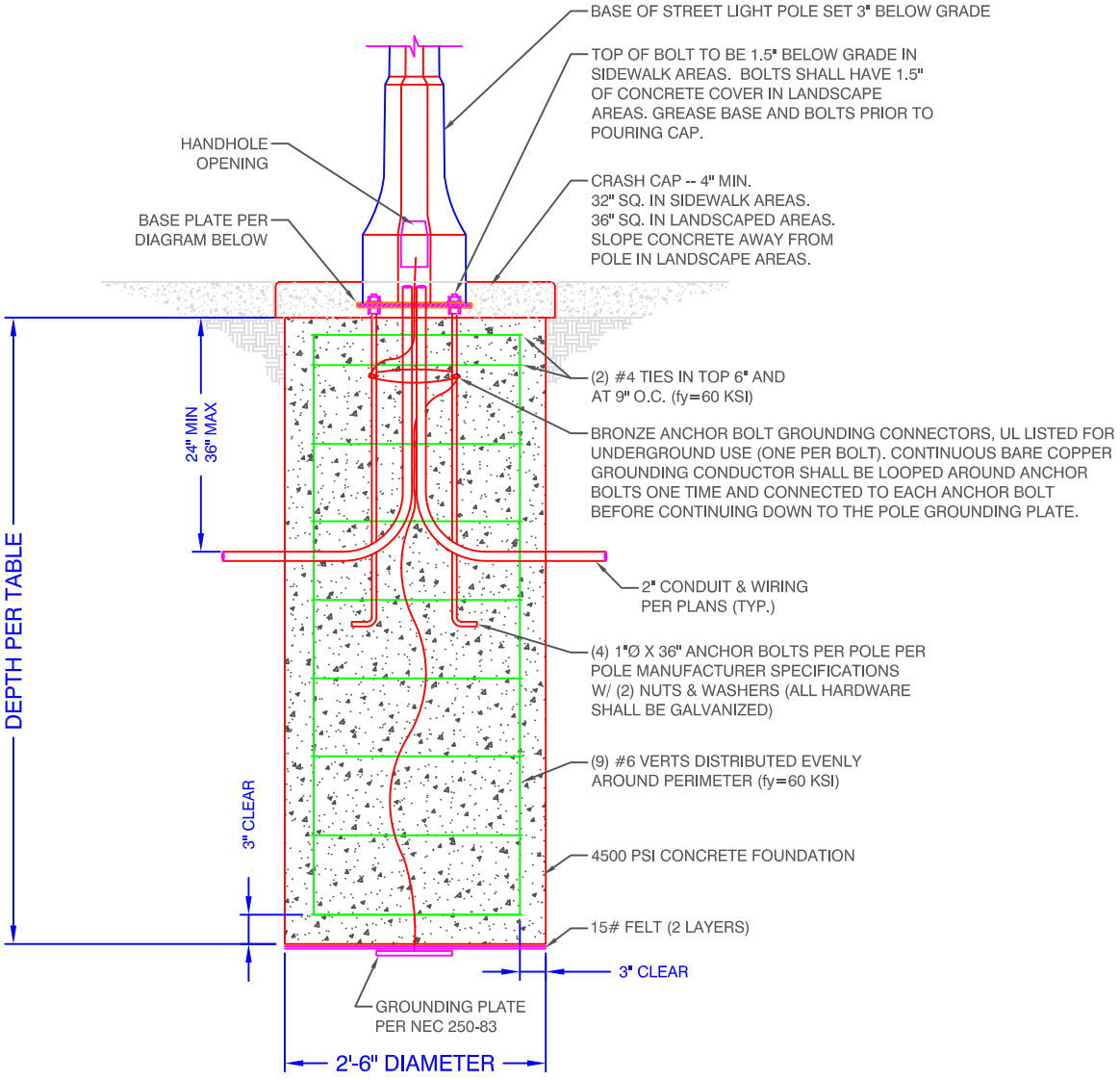
SPECIFICATION REFERENCE	
623	TRAFFIC SIGNALS & STREET LIGHTING

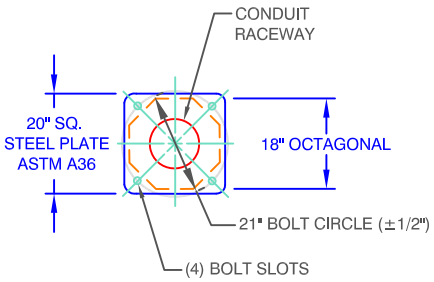
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

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

DATE 08-09-18 | DWG. NO. 342

Effective 8/10/2023 to 8/07/2024





BASE DIAGRAM

BASE PLATES SHALL BE PER POLE MANUFACTURER SPECIFICATIONS

FOUNDATION DEPTH

POLE & ARM CONFIGURATION	SOIL TYPE			
	SAND/GRAVEL (ϕ=30°, γ=110pcf)	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 8/10/2023 to 8/07/2024

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	
501	CONCRETE
609	CATCH BASINS, MANHOLES &
	INLETS

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

STORM DRAIN
MANHOLES GENERAL NOTES

DATE 2-9-06	DWG. NO. 401	SHEET 1 OF 2

Effective 8/10/2023 to 8/07/2024

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	
501	CONCRETE
609	CATCH BASINS, MANHOLES &
	INLETS

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

STORM DRAIN
MANHOLES GENERAL NOTES

DATE 2-9-06	DWG. NO. 401	SHEET 2 OF 2

Effective 8/10/2023 to 8/07/2024

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	
501	CONCRETE
609	CATCH BASINS, MANHOLES & INLETS

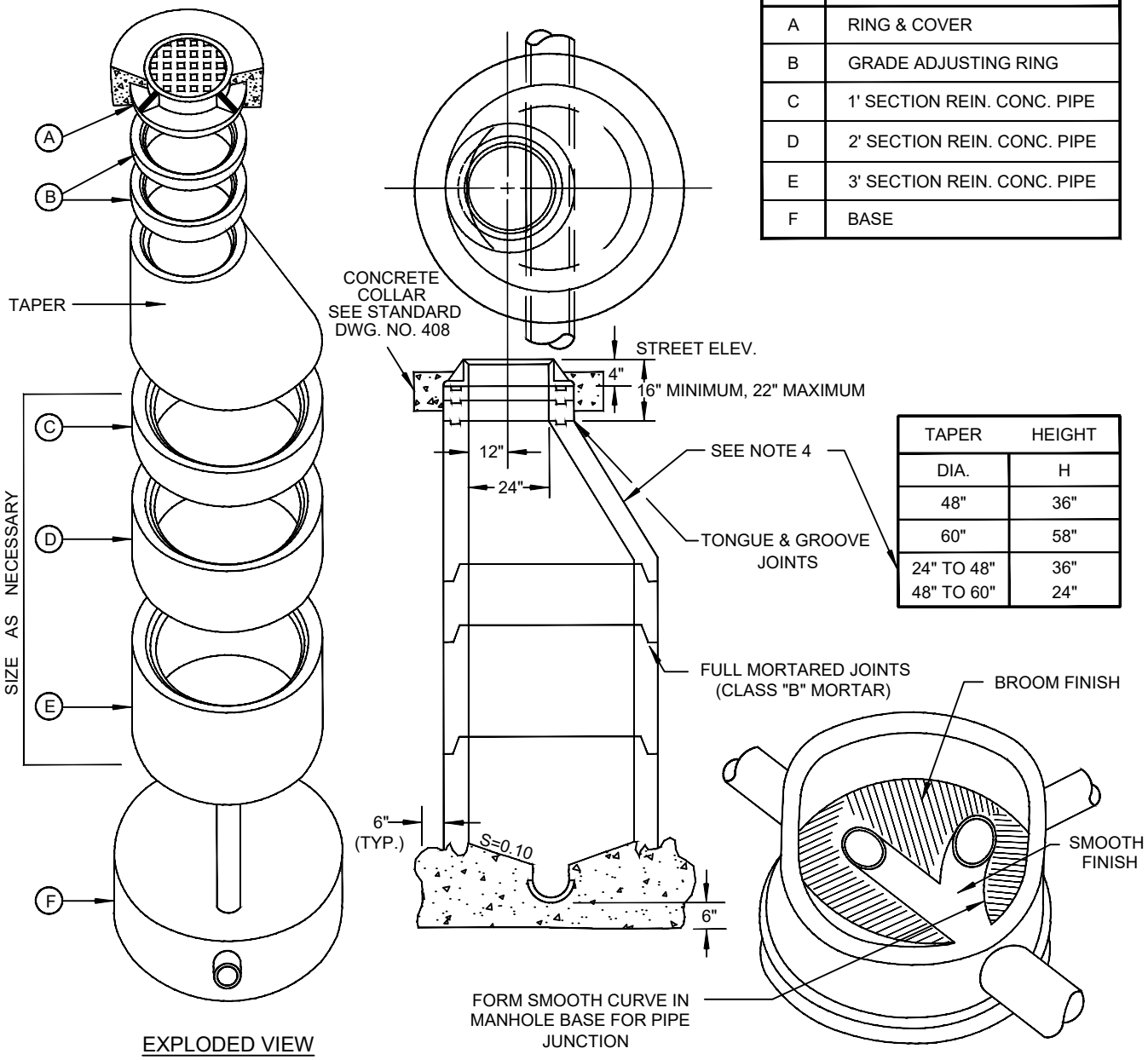
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

STORM DRAIN DROP INLET GENERAL NOTES

DATE 01-09-20	DWG. NO. 402	

Effective 8/10/2023 to 8/07/2024

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



TAPER	HEIGHT
DIA.	H
48"	36"
60"	58"
24" TO 48"	36"
48" TO 60"	24"

EXPLODED VIEW

ISOMETRIC VIEW

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.

AGENCY APPROVED	B	C	H	L	M	N	R

SPECIFICATION REFERENCE	
501	CONCRETE & MORTAR
609	CATCH BASINS, MANHOLES & INLETS

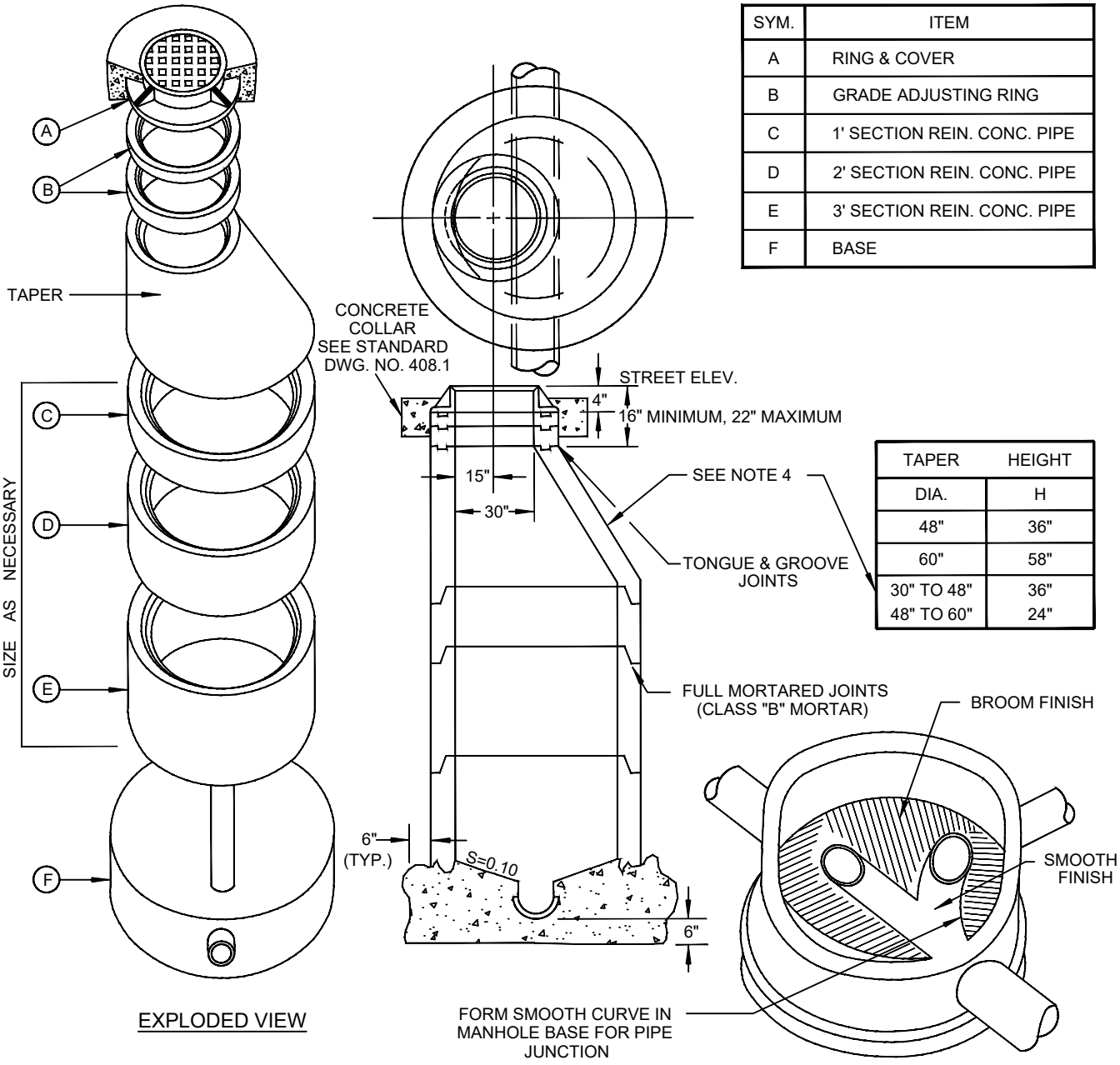
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPE I MANHOLE

DATE 01-09-20 | DWG. NO. 403

Effective 8/10/2023 to 8/07/2024

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



TAPER DIA.	HEIGHT H
48"	36"
60"	58"
30" TO 48"	36"
48" TO 60"	24"

EXPLODED VIEW

ISOMETRIC VIEW

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.

AGENCY APPROVED	B	C	H	L	M	N	R

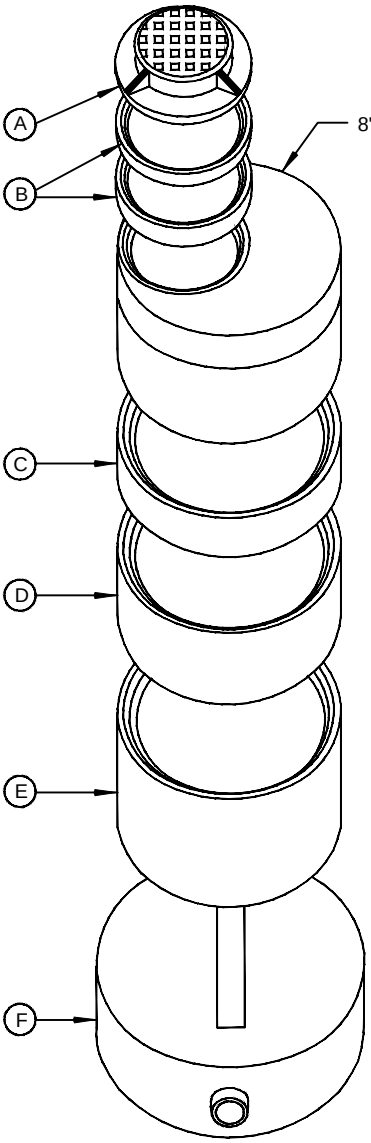
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501	CONCRETE & MORTAR
609	CATCH BASINS, MANHOLES & INLETS

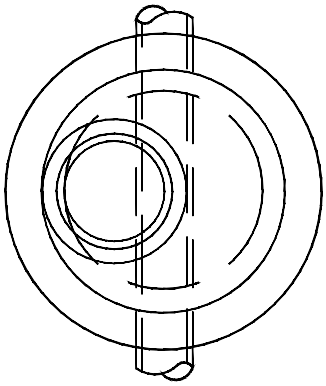
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

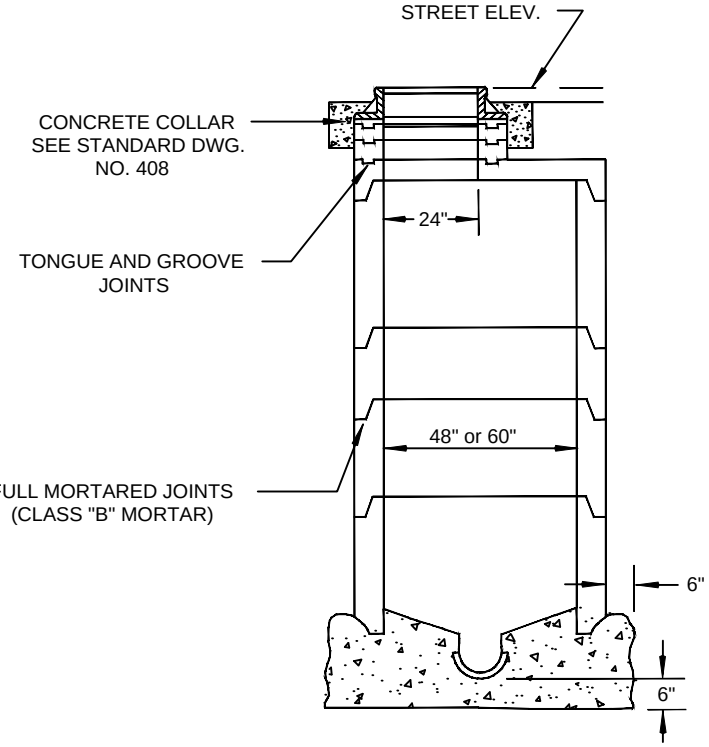
TYPE I MANHOLE
30 INCH RING AND COVER

DATE 01-09-20 | DWG. NO. 403.1

Effective 8/10/2023 to 8/07/2024







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.

AGENCY APPROVED	B	C	H	L	M	N

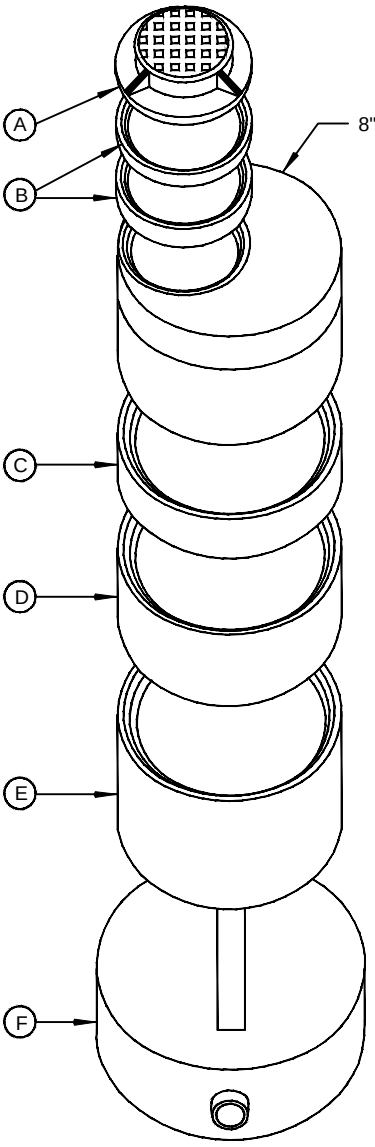
SPECIFICATION REFERENCE	
501	CONCRETE & MORTAR
609	CATCH BASINS, MANHOLES & INLETS
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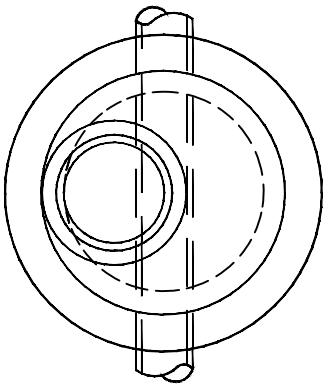
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

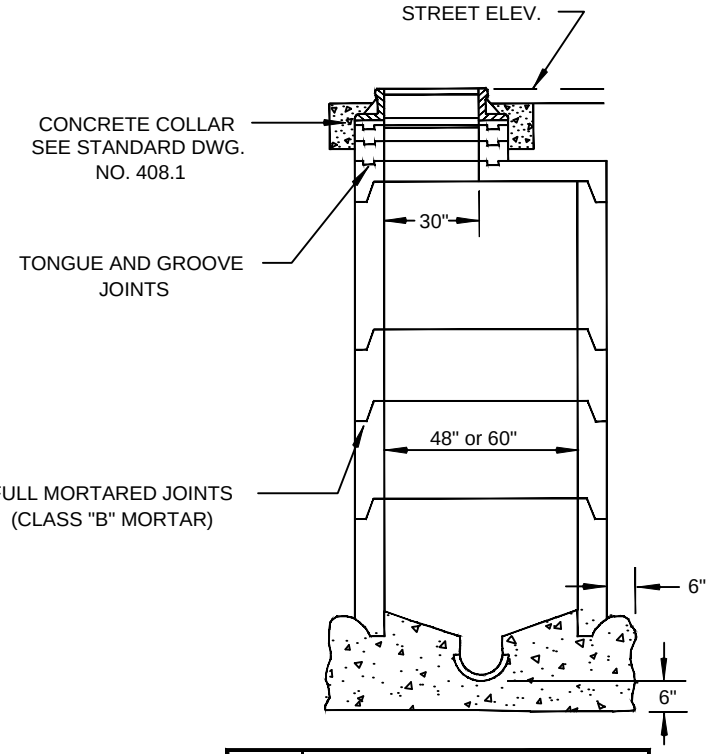
TYPE IA MANHOLE

DATE 11-10-05	DWG. NO. 404	

Effective 8/10/2023 to 8/07/2024







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.

AGENCY APPROVED	B	C	H	L	M	N

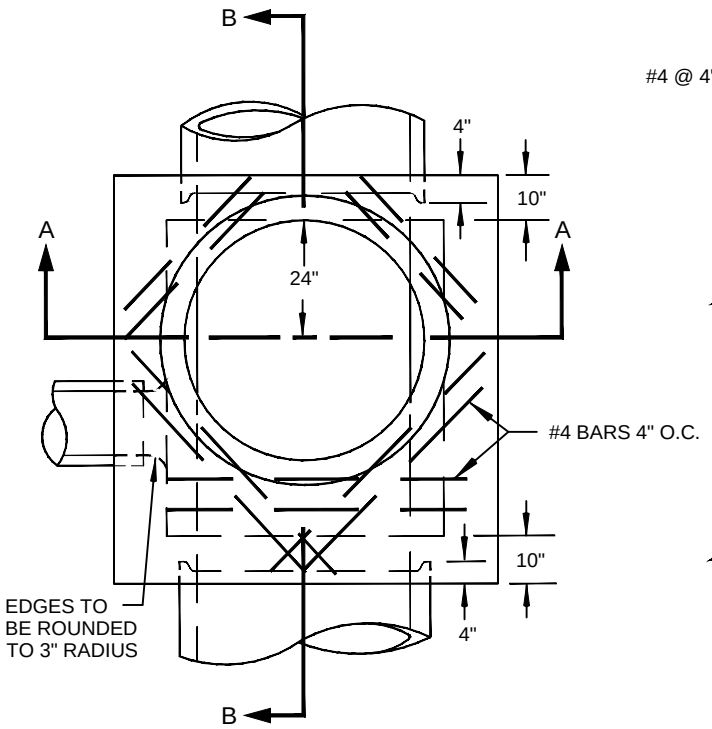
SPECIFICATION REFERENCE	
501	CONCRETE & MORTAR
609	CATCH BASINS, MANHOLES & INLETS
-	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

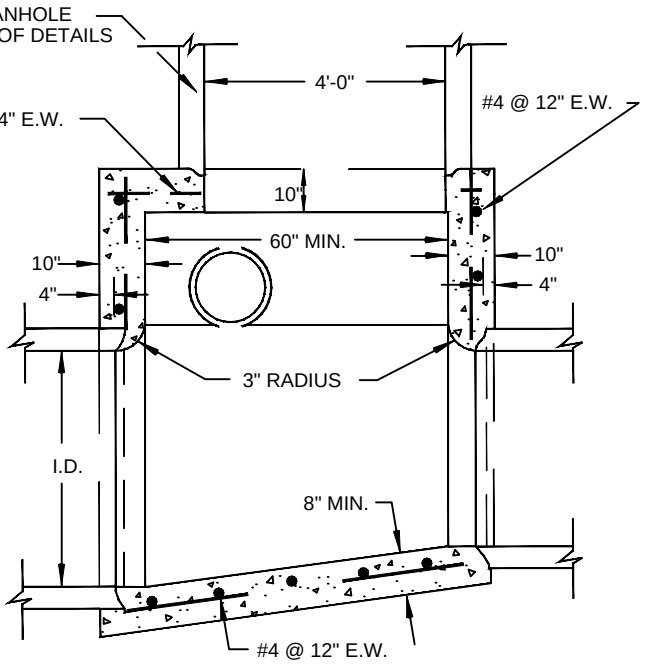
TYPE IA MANHOLE
30 INCH RING AND COVER

DATE 11-10-05	DWG. NO. 404.1	

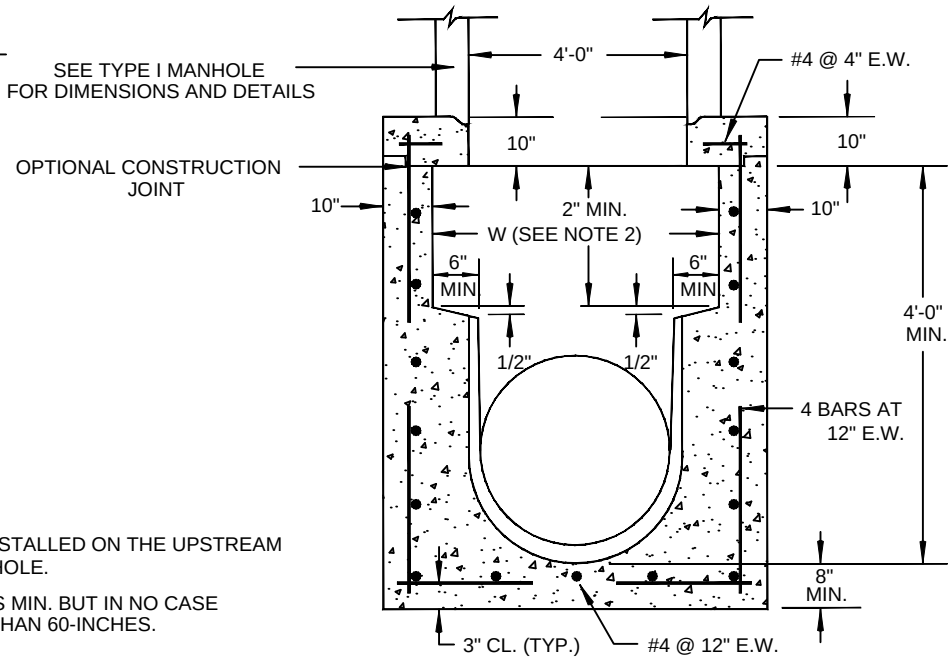
Effective 8/10/2023 to 8/07/2024



PLAN



SECTION B-B



SECTION A-A

NOTES:

1. STEPS SHALL BE INSTALLED ON THE UPSTREAM WALL OF THE MANHOLE.
2. W = I.D. + 12-INCHES MIN. BUT IN NO CASE SHALL W BE LESS THAN 60-INCHES.

AGENCY APPROVED	B	C	H	L	M	N

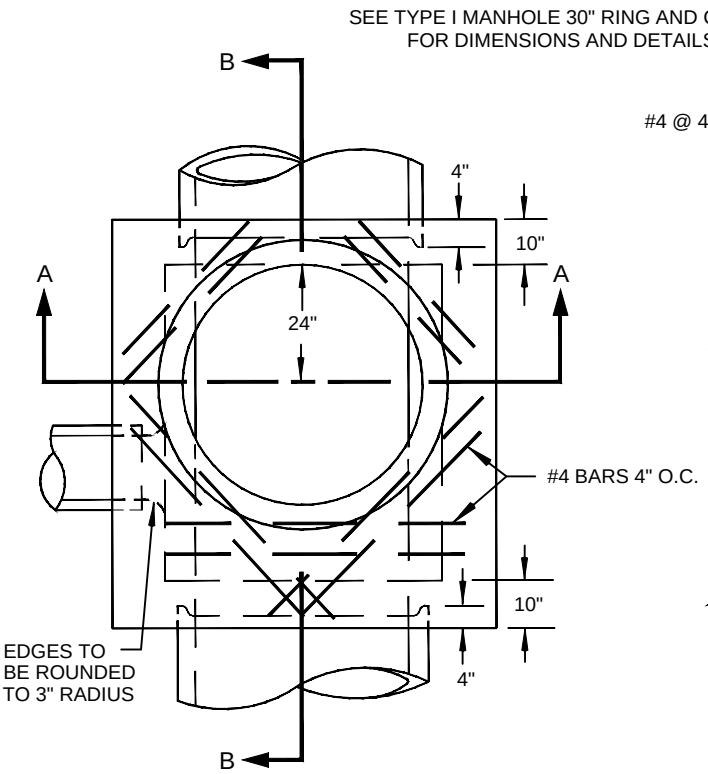
SPECIFICATION REFERENCE	
501	CONCRETE AND MORTAR
505	REINFORCING STEEL
609	CATCH BASINS, MANHOLES & INLETS
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

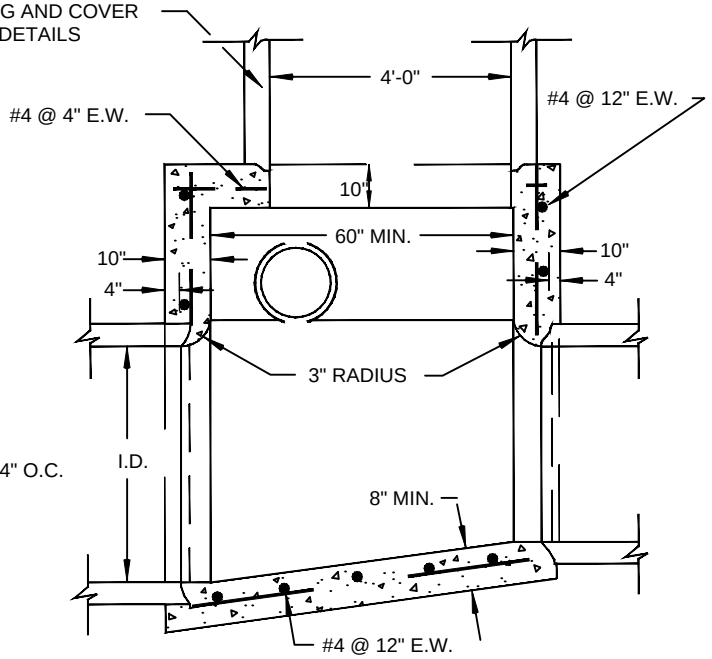
TYPE II MANHOLE

DATE	DWG. NO. 405	

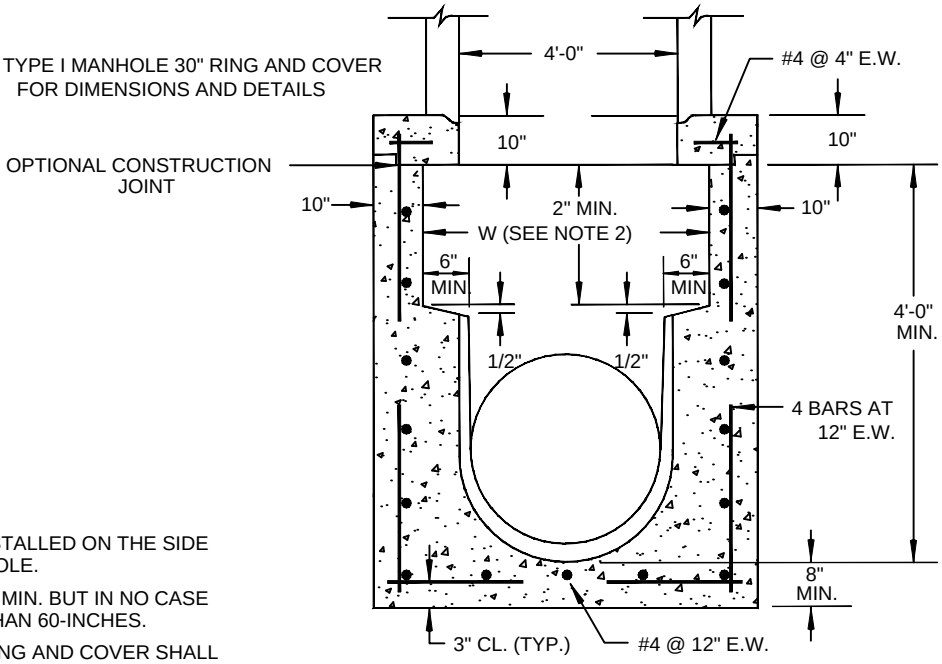
Effective 8/10/2023 to 8/07/2024



PLAN



SECTION B-B



SECTION A-A

NOTES:

1. STEPS SHALL BE INSTALLED ON THE SIDE WALL OF THE MANHOLE.
2. W = I.D. + 12-INCHES MIN. BUT IN NO CASE SHALL W BE LESS THAN 60-INCHES.
3. THE USE OF A 30" RING AND COVER SHALL BE APPROVED BY THE ENTITY ENGINEER.

AGENCY APPROVED	B	C	H	L	M	N

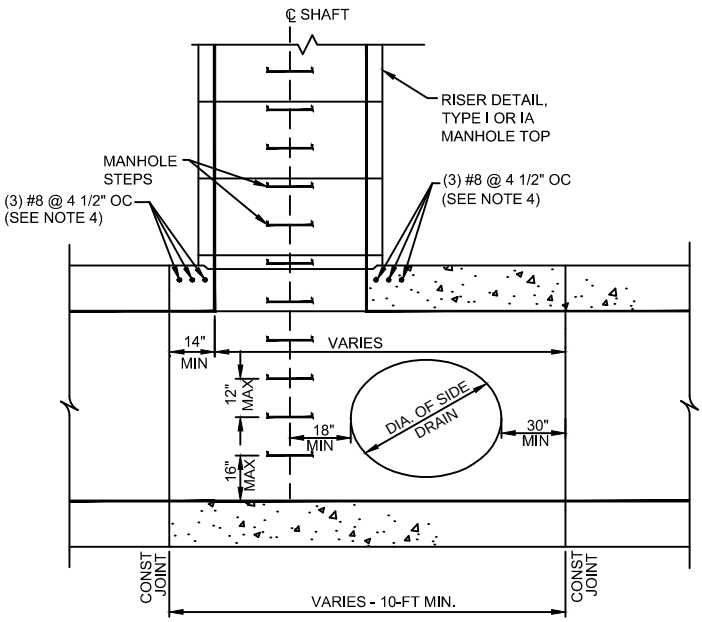
SPECIFICATION REFERENCE	
501	CONCRETE AND MORTAR
505	REINFORCING STEEL
609	CATCH BASINS, MANHOLES & INLETS
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

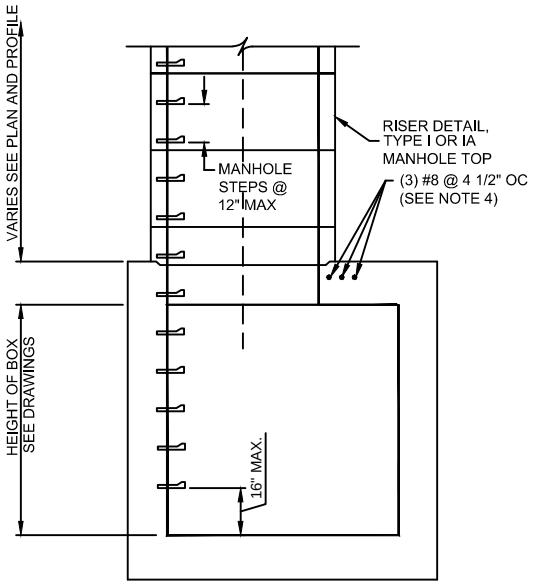
TYPE II MANHOLE
30 INCH RING AND COVER

DATE 11/10/05	DWG. NO. 405.1	

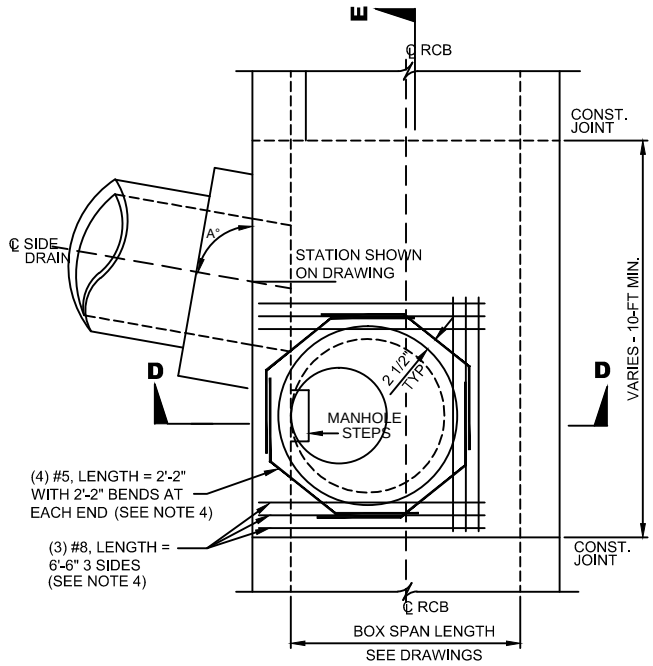
Effective 8/10/2023 to 8/07/2024



SECTION E-E
N.T.S.



SECTION D-D
N.T.S.



PLAN - MANHOLE - RCB
N.T.S.

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.

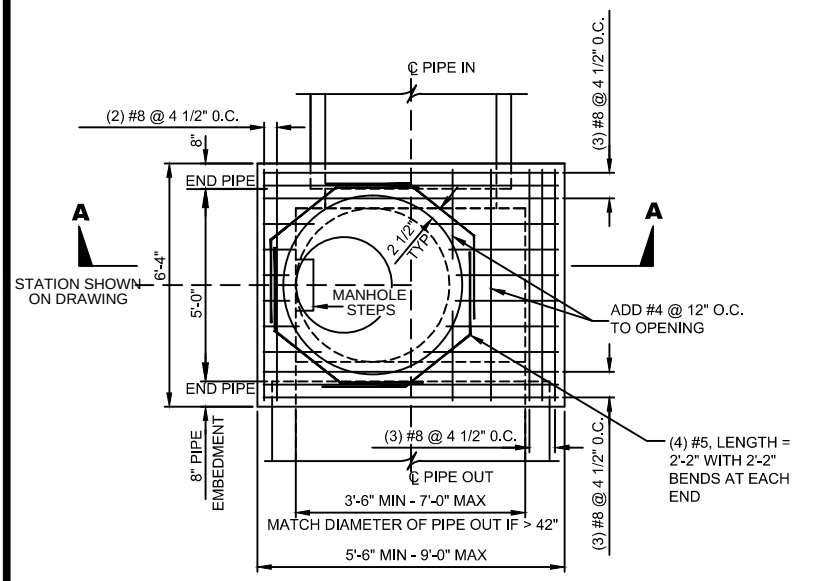
4. FOR PRECAST RCB, THE REINFORCING SHALL BE IN ACCORDANCE WITH MANUFACTURER DESIGN, AS APPROVED BY THE ENGINEER.

TYPE II-SD MANHOLE - RCB

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 1 OF 3

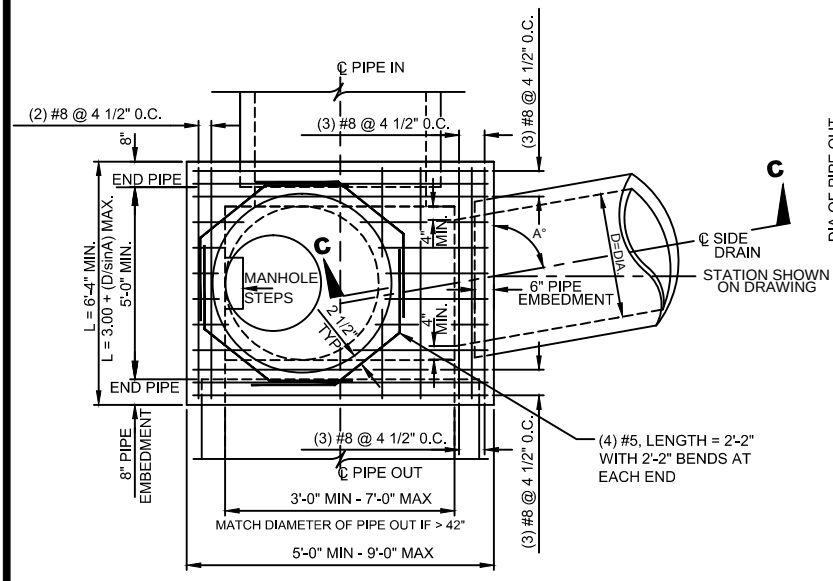
Effective 8/10/2023 to 8/07/2024



PLAN - NO SIDE DRAIN

N.T.S.

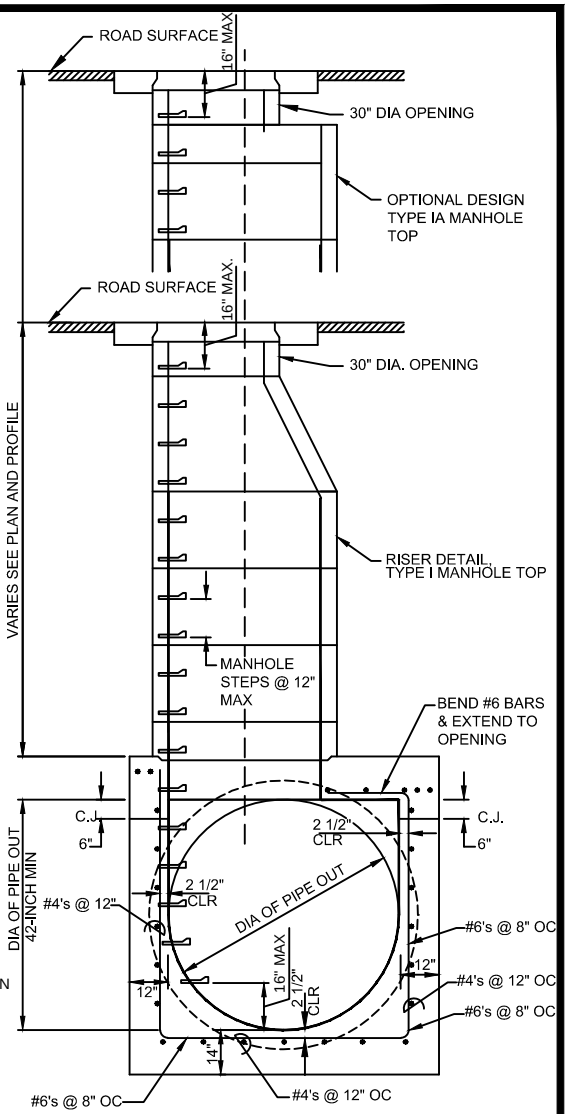
POSITION MANHOLE ON EITHER SIDE



PLAN - SINGLE SIDE DRAIN

N.T.S.

POSITION MANHOLE ON OPPOSITE SIDE FROM THE SIDE DRAIN



SECTION A-A

N.T.S.

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. THIS DESIGN IS FOR PIPE SIZES 36-INCH TO 72-INCH. LARGER PIPE SIZES REQUIRES SPECIAL DESIGN.

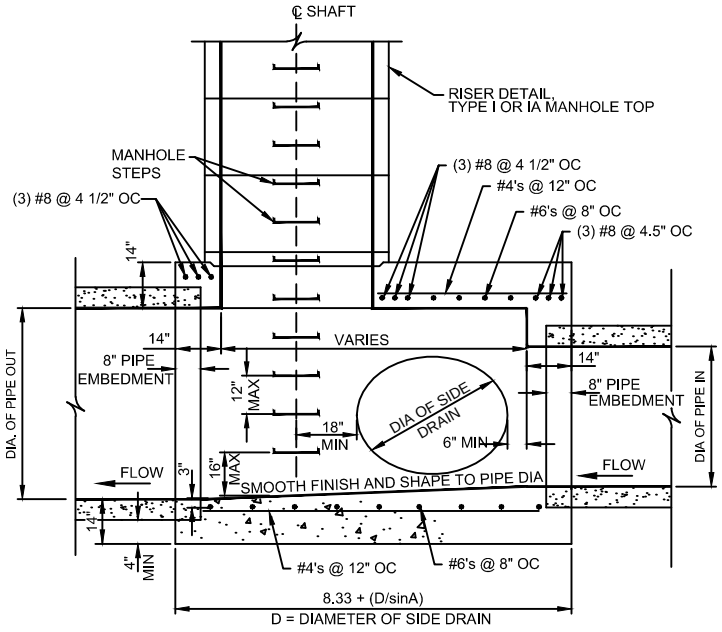
TYPE II-SD MANHOLE - PIPE

AGENCY APPROVED	B	C	H	L	M	N

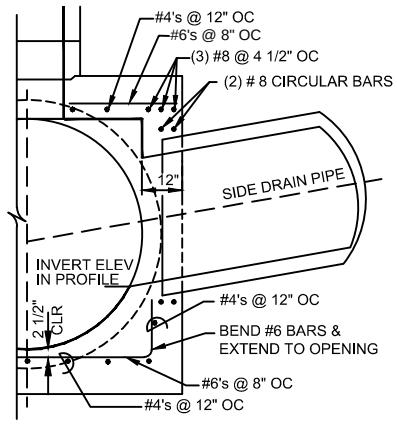
SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	TYPE II-SD MANHOLE

DATE 07-01-14	DWG. NO. 405.2	SHEET 2 OF 3

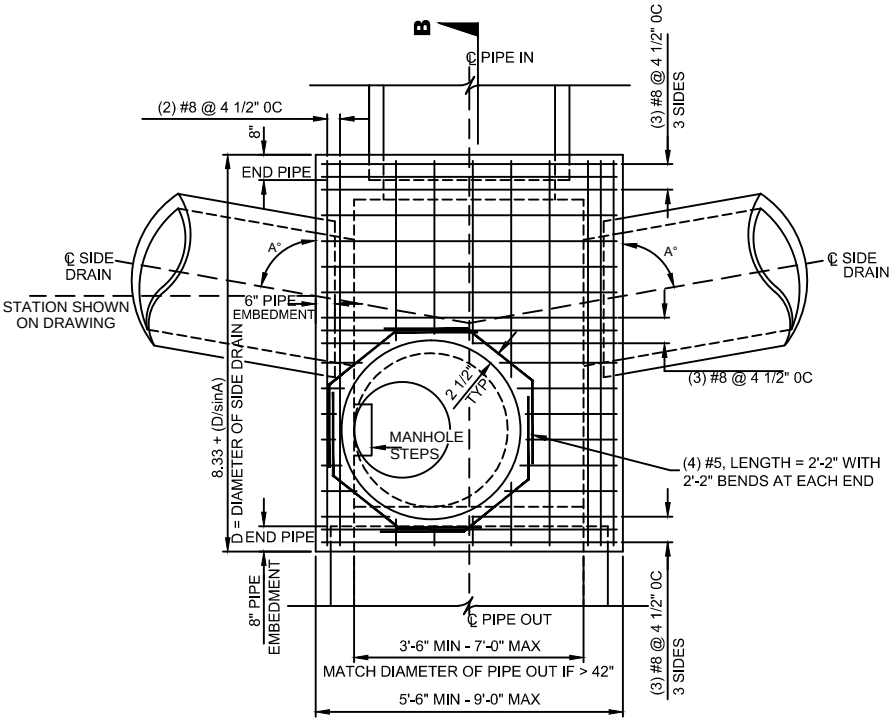
Effective 8/10/2023 to 8/07/2024



SECTION B-B
NTS



SECTION C-C
N.T.S.



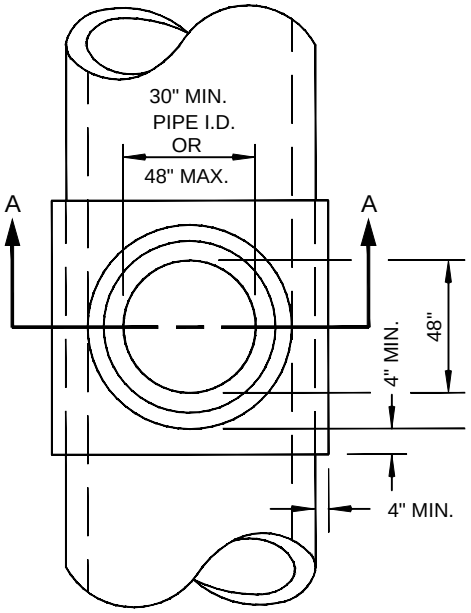
PLAN - DOUBLE SIDE DRAIN
N.T.S.

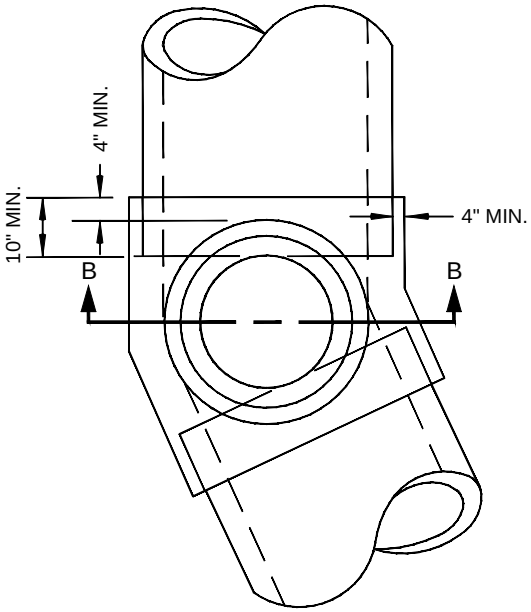
AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	TYPE II-SD MANHOLE

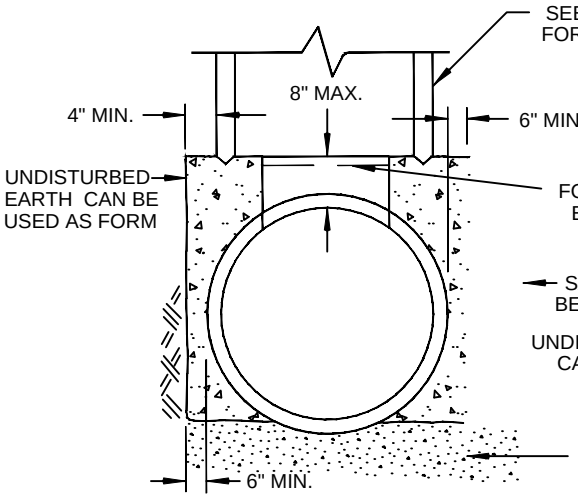
DATE 07-01-14	DWG. NO. 405.2	SHEET 3 OF 3

Effective 8/10/2023 to 8/07/2024



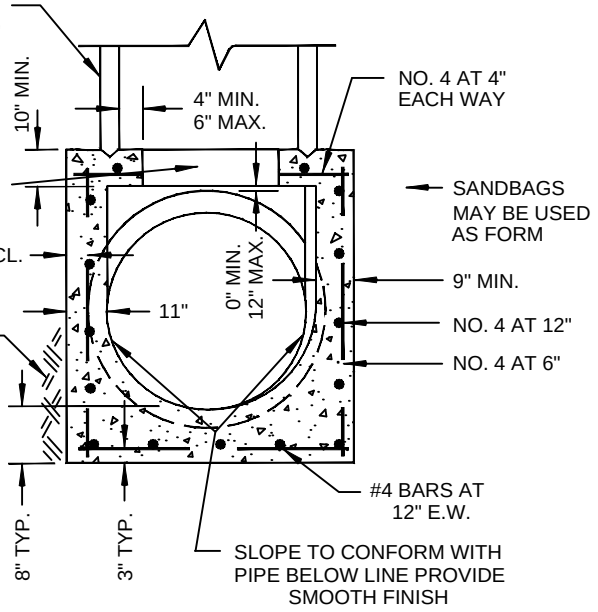


PLAN



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.

AGENCY APPROVED	B	C	H	L	M	N

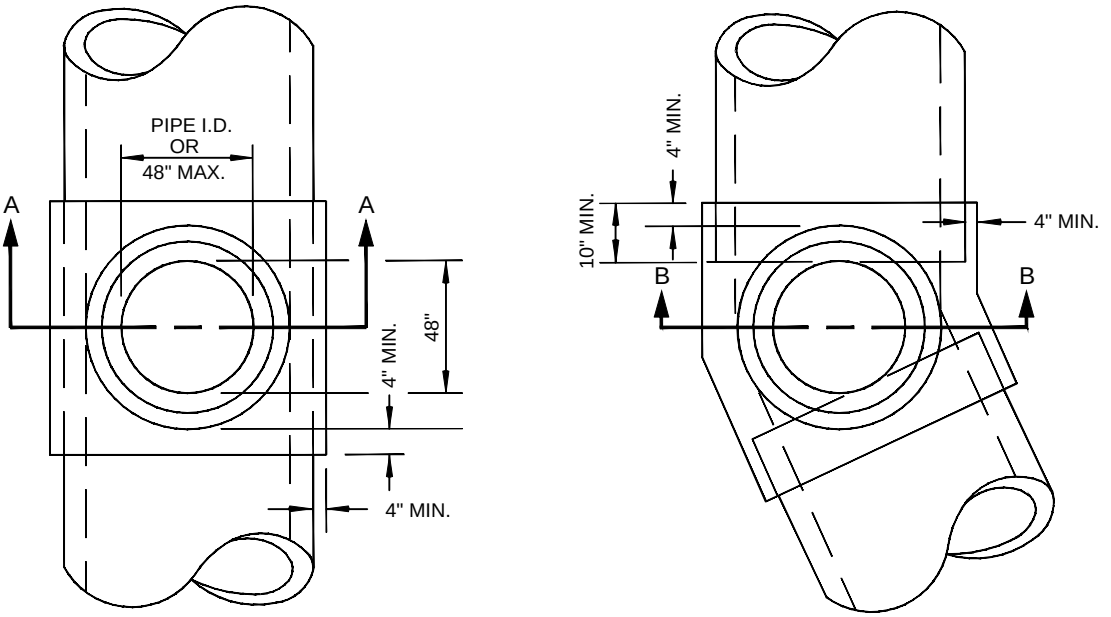
SPECIFICATION REFERENCE	
501	CONCRETE
505	REINFORCING STEEL
609	CATCH BASINS, MANHOLES & INLETS
-	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

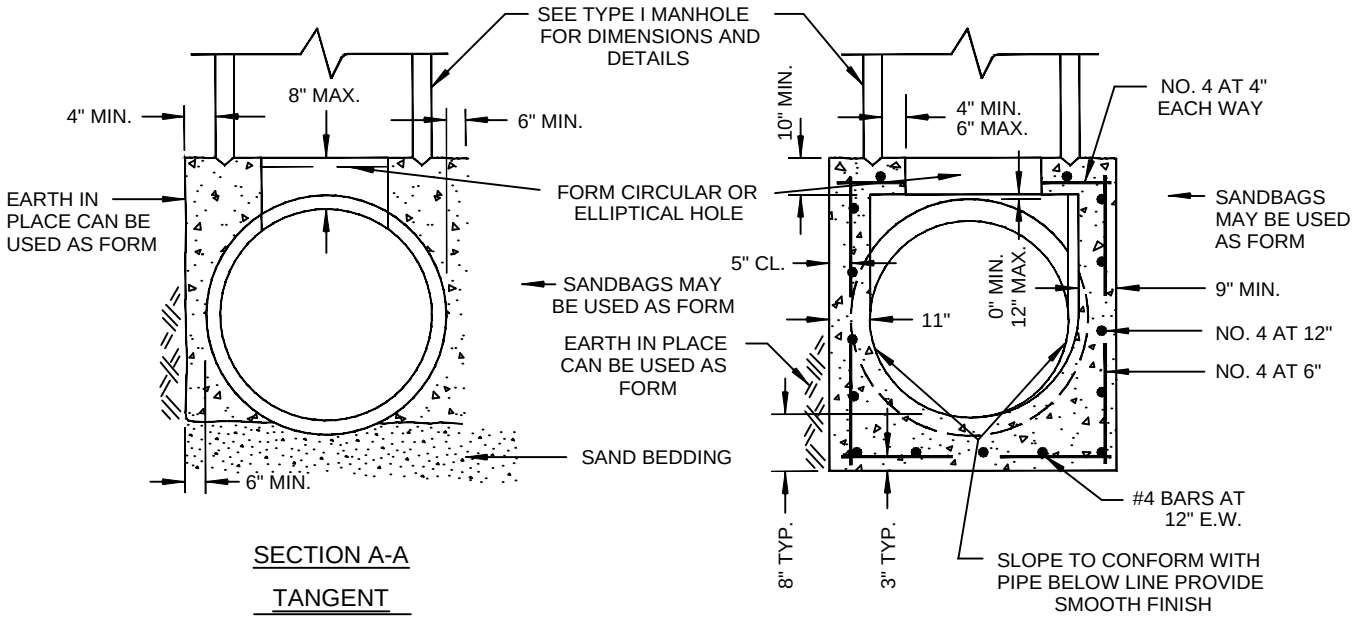
TYPE III MANHOLE
30 INCH RING AND COVER

DATE 11-10-05	DWG. NO. 406.1	

Effective 8/10/2023 to 8/07/2024



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

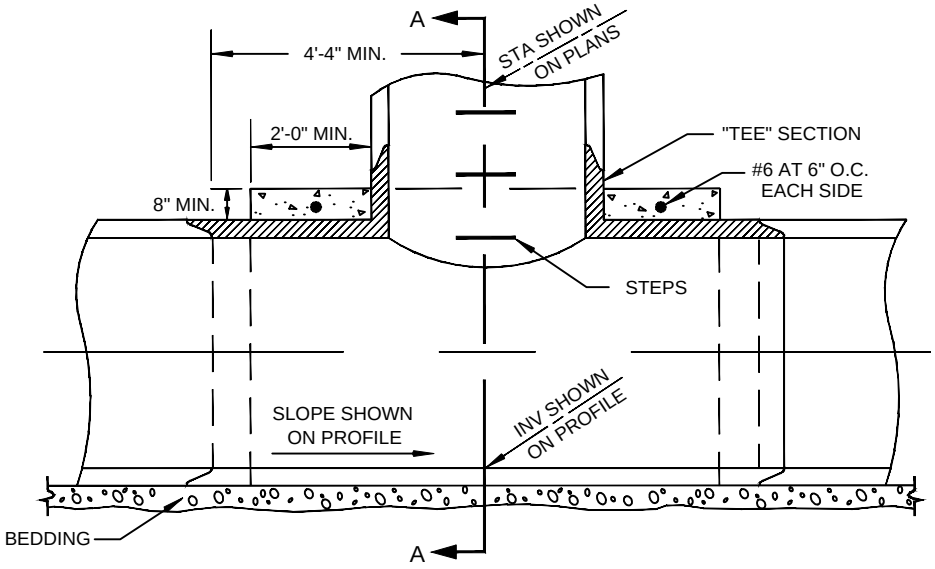
SPECIFICATION REFERENCE	
501	CONCRETE
505	REINFORCING STEEL
609	CATCH BASINS, MANHOLES & INLETS
.	

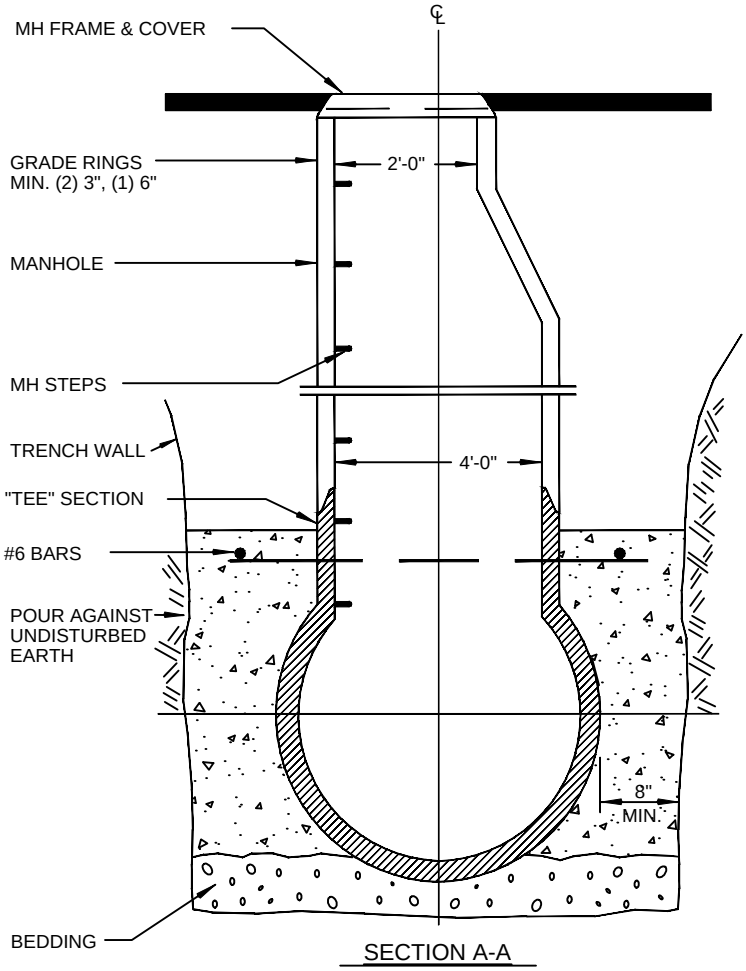
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPE III MANHOLE

DATE	DWG. NO. 406	

Effective 8/10/2023 to 8/07/2024





SECTION A-A

AGENCY APPROVED	B	C	H	L	M	N

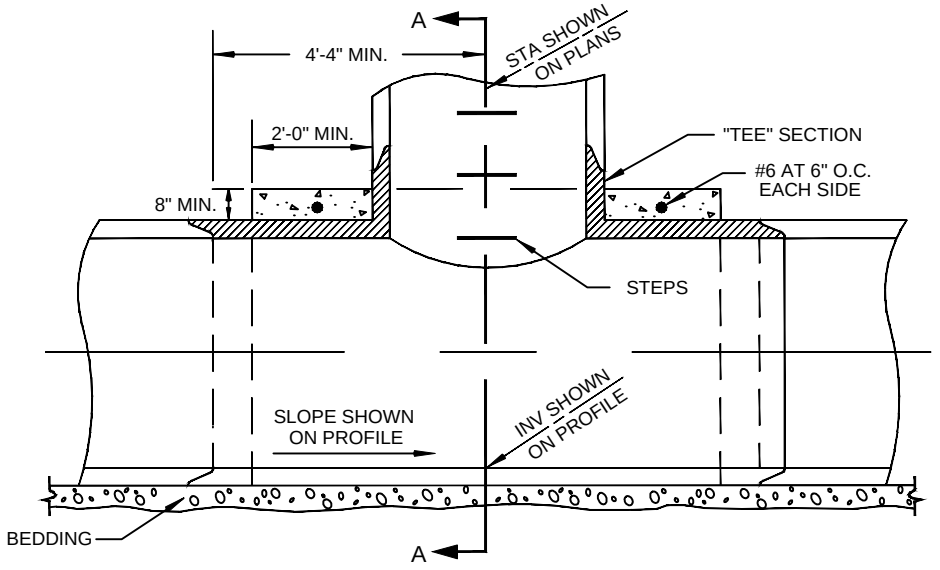
SPECIFICATION REFERENCE	
501	CONCRETE
609	CATCH BASINS, MANHOLES & INLETS

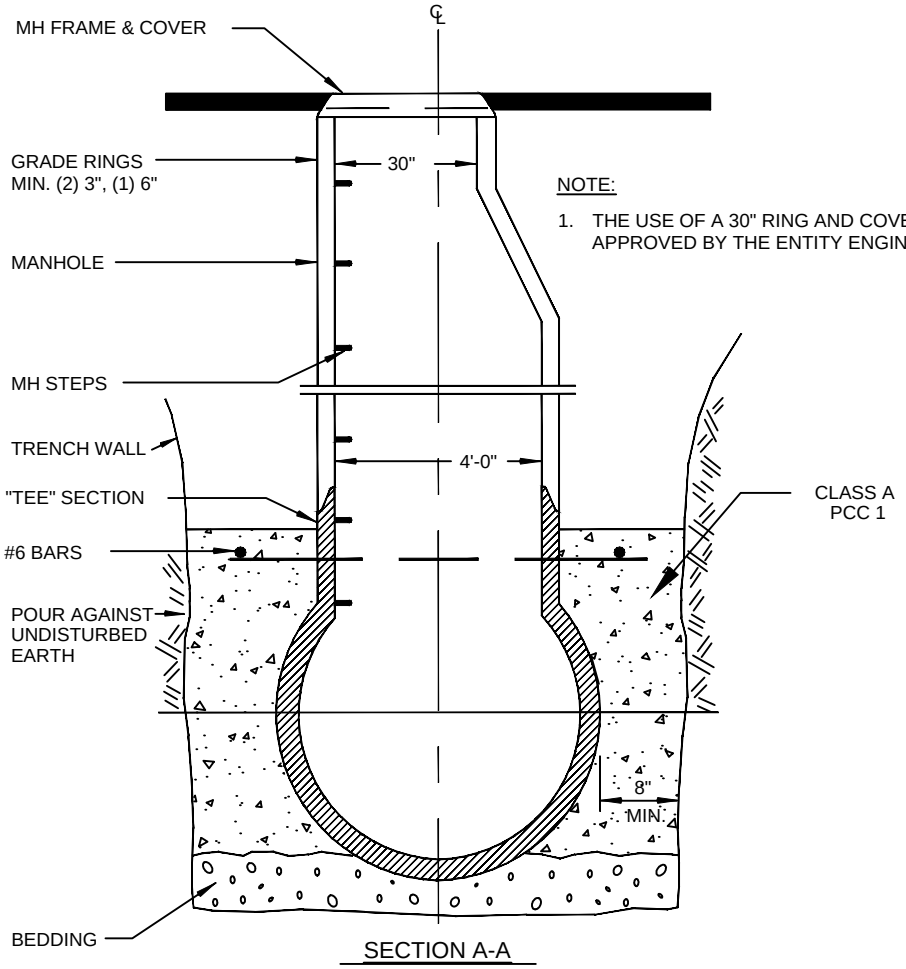
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

PRECAST MANHOLE TEES

DATE	DWG. NO. 407	

Effective 8/10/2023 to 8/07/2024





NOTE:

1. THE USE OF A 30" RING AND COVER SHALL BE APPROVED BY THE ENTITY ENGINEER.

SECTION A-A

AGENCY APPROVED	B	C	H	L	M	N

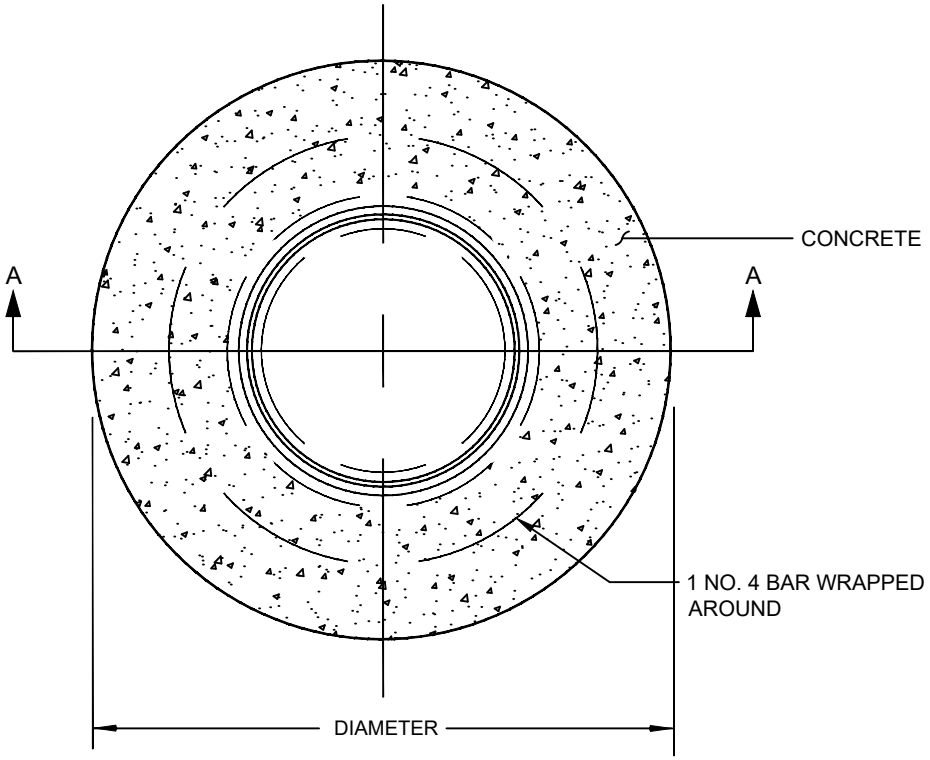
SPECIFICATION REFERENCE	
501	CONCRETE
609	CATCH BASINS, MANHOLES & INLETS

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

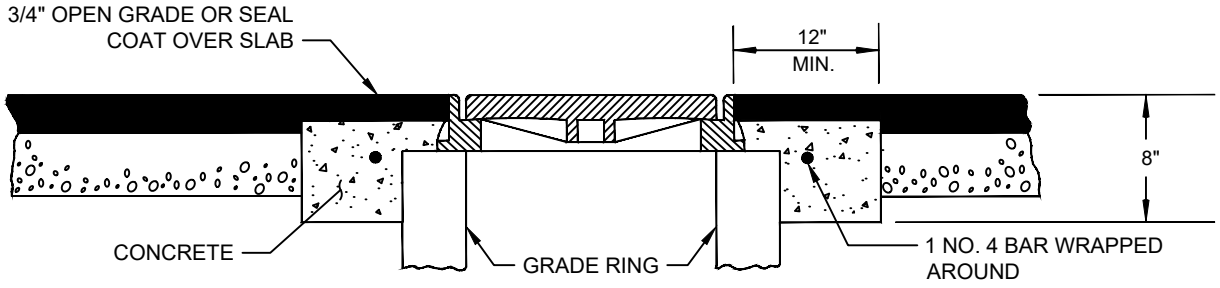
PRECAST MANHOLE TEES 30 INCH RING AND COVER

DATE 11-10-05	DWG. NO. 407.1	

Effective 8/10/2023 to 8/07/2024



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

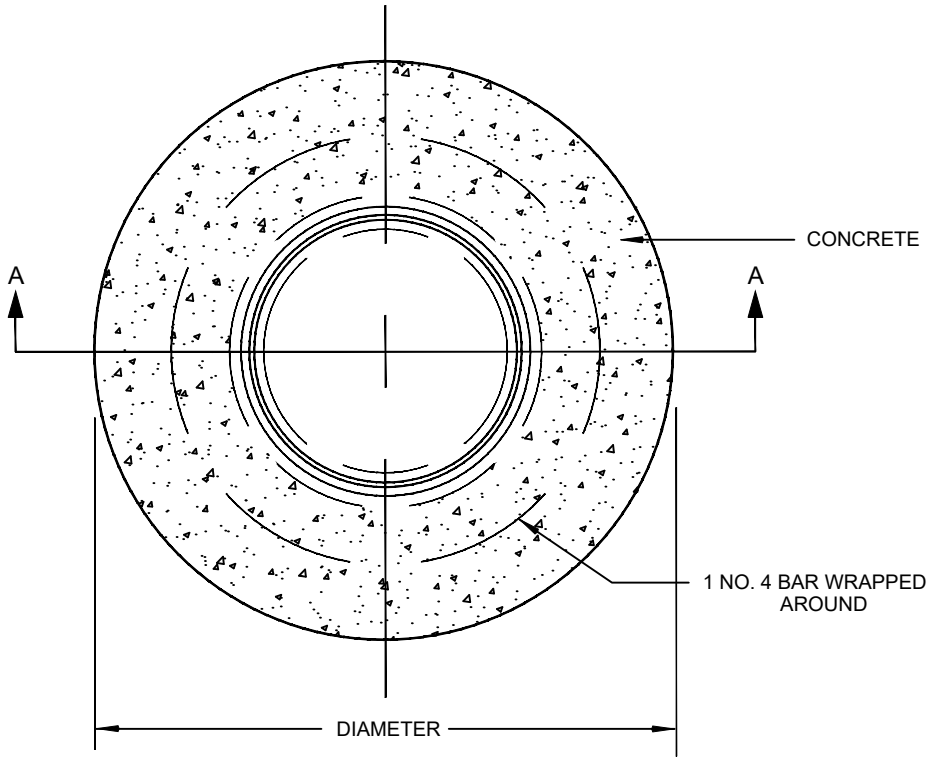
SPECIFICATION REFERENCE	
501	CONCRETE
505	REINFORCING STEEL
-	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

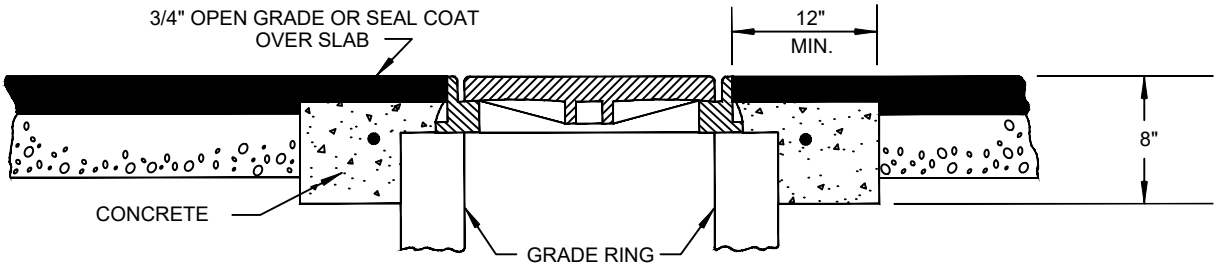
CONCRETE COLLAR AROUND MANHOLES

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

Effective 8/10/2023 to 8/07/2024



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. (C)
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	C	H	L	M	N	R

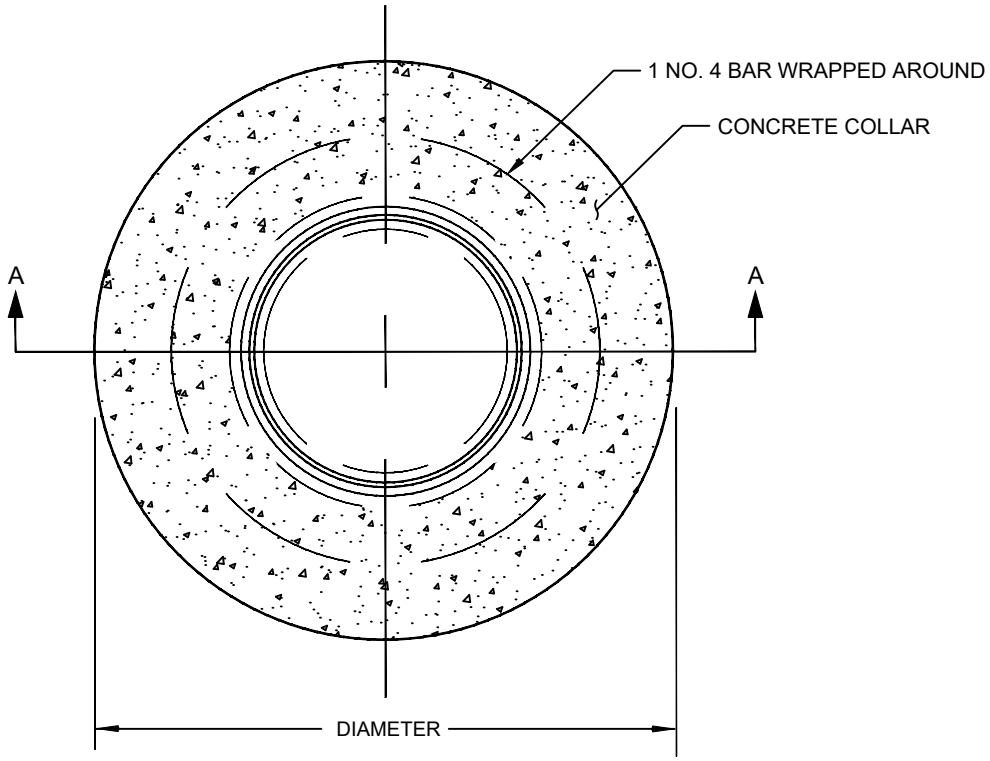
SPECIFICATION REFERENCE	
501	CONCRETE
505	REINFORCING STEEL
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

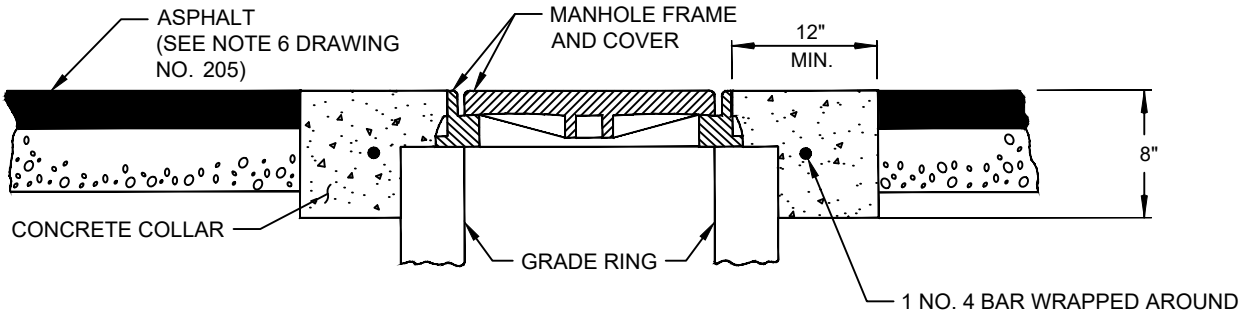
CONCRETE COLLAR AROUND MANHOLES 30 INCH RING AND COVER

DATE 01-09-20	DWG. NO. 408.1	

Effective 8/10/2023 to 8/07/2024



PLAN



SECTION A-A

NOTES

1. CONCRETE COLLAR, FRAME, AND COVER SHALL BE CONSTRUCTED 1/8" BELOW THE ADJACENT SURFACE, ±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	
501	CONCRETE
505	REINFORCING STEEL

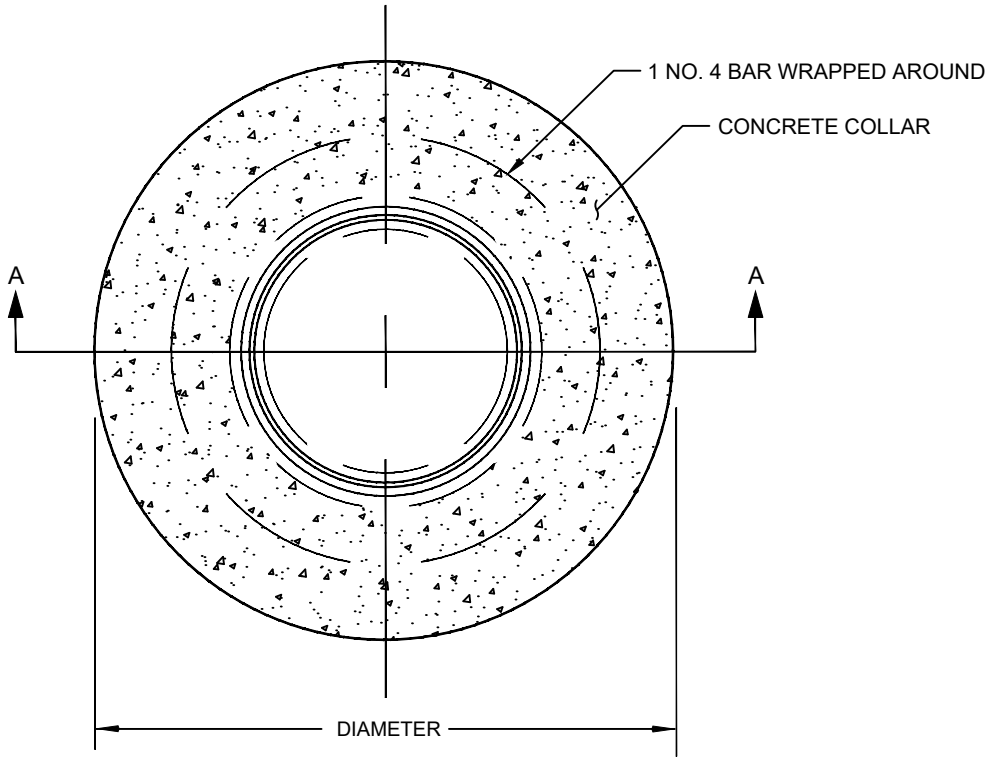
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

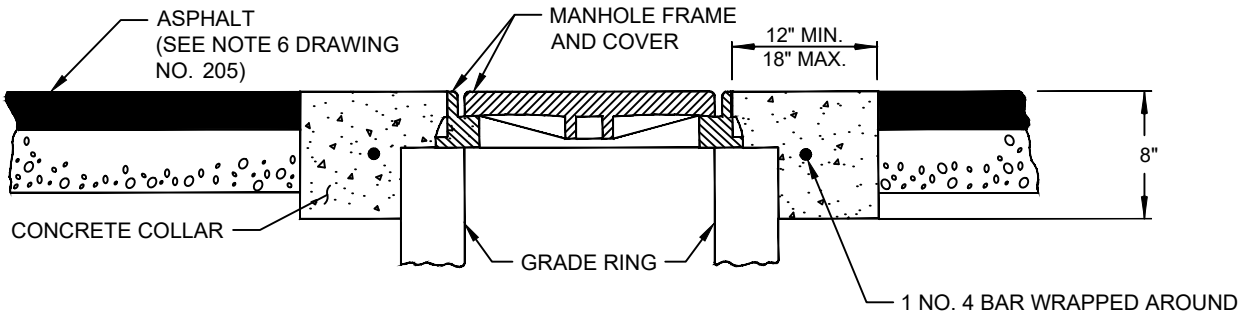
CONCRETE COLLAR AROUND MANHOLES 30 INCH RING AND COVER

DATE 01-09-20 | DWG. NO. 408.1.S1

Effective 8/10/2023 to 8/07/2024



PLAN



SECTION A-A

NOTES

1. CONCRETE COLLAR, FRAME, AND COVER SHALL BE CONSTRUCTED 1/8" BELOW THE ADJACENT SURFACE, ±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	
501	CONCRETE
505	REINFORCING STEEL
.	

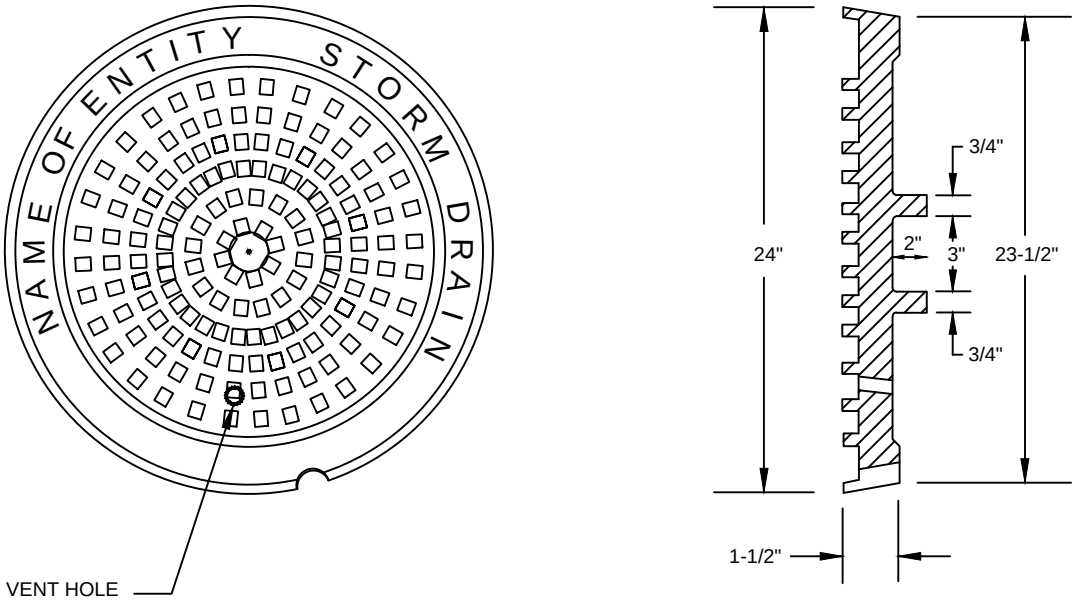
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

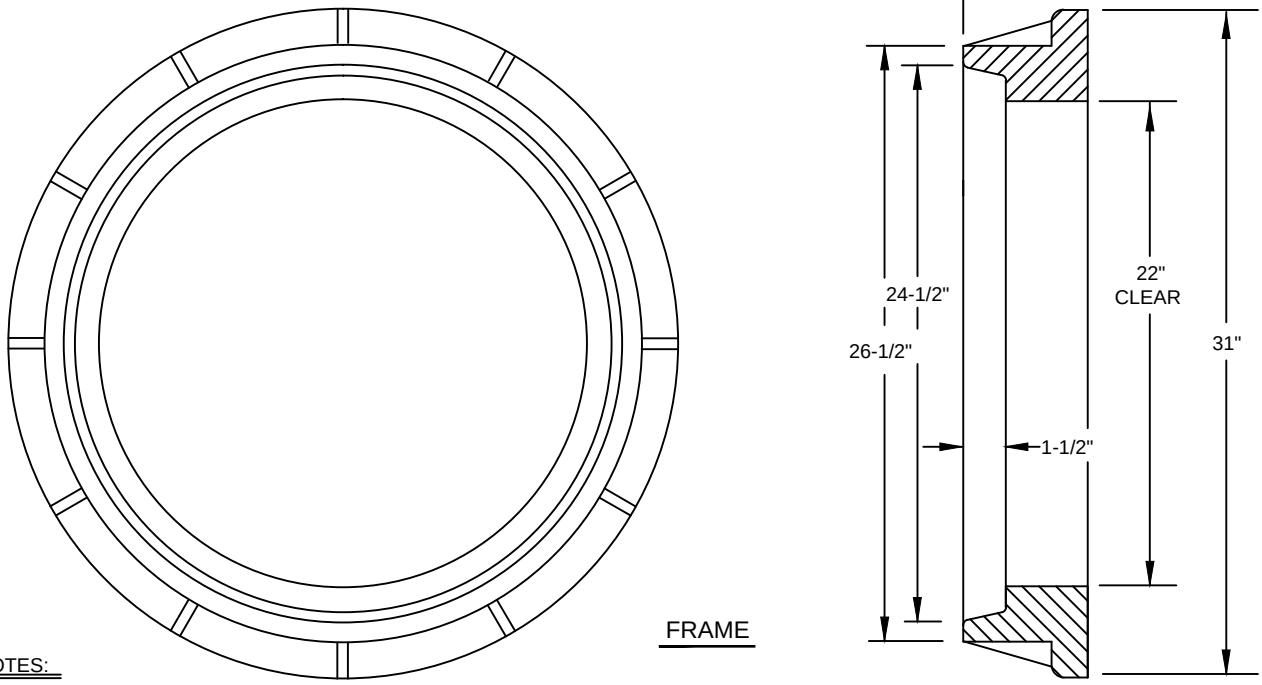
CONCRETE COLLAR AROUND MANHOLES

DATE 06-10-21 | DWG. NO. 408.S1

Effective 8/10/2023 to 8/07/2024



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 MINUMUM 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

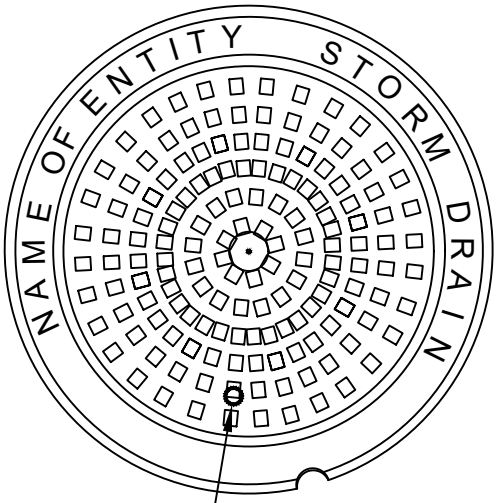
SPECIFICATION REFERENCE	
712	MISCELLANEOUS METALS
.	

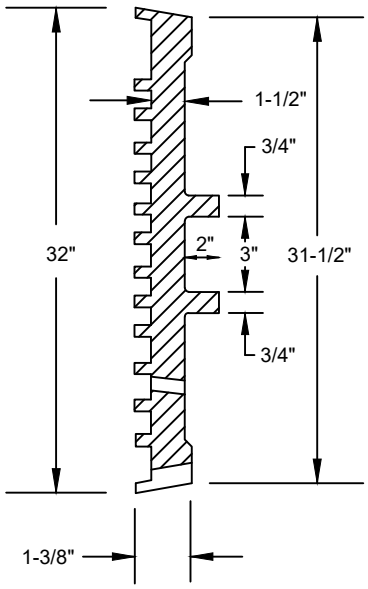
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

STANDARD MANHOLE COVER AND RING

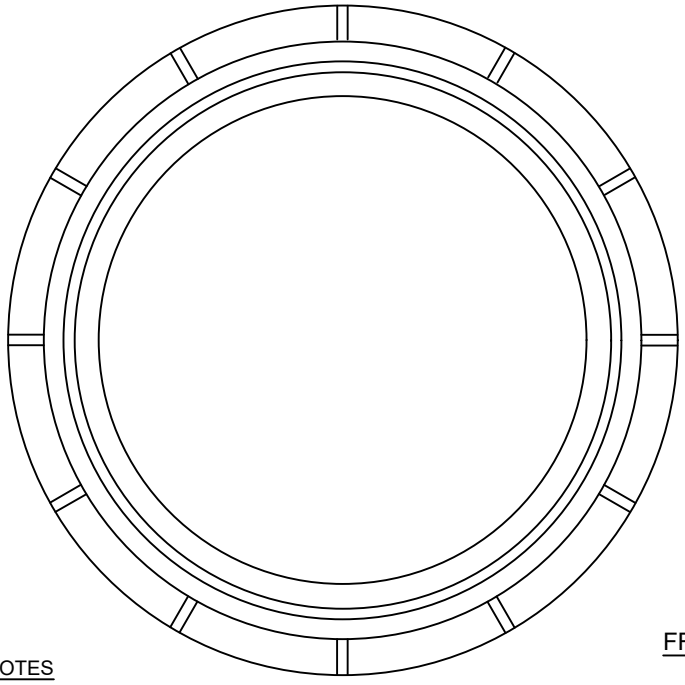
DATE	DWG. NO. 409	

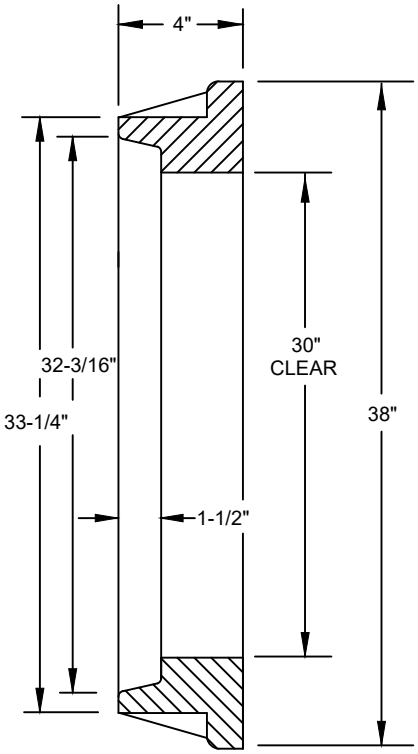
Effective 8/10/2023 to 8/07/2024





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

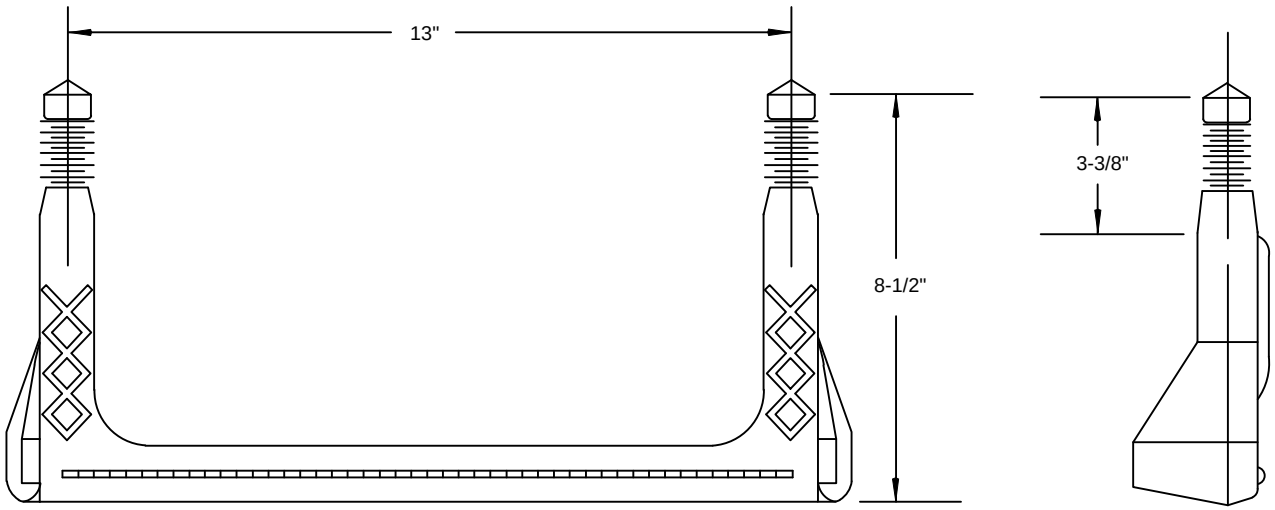
SPECIFICATION REFERENCE	
712	MISCELLANEOUS METALS

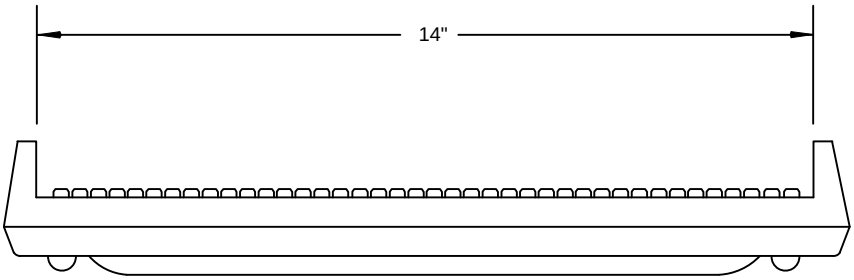
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

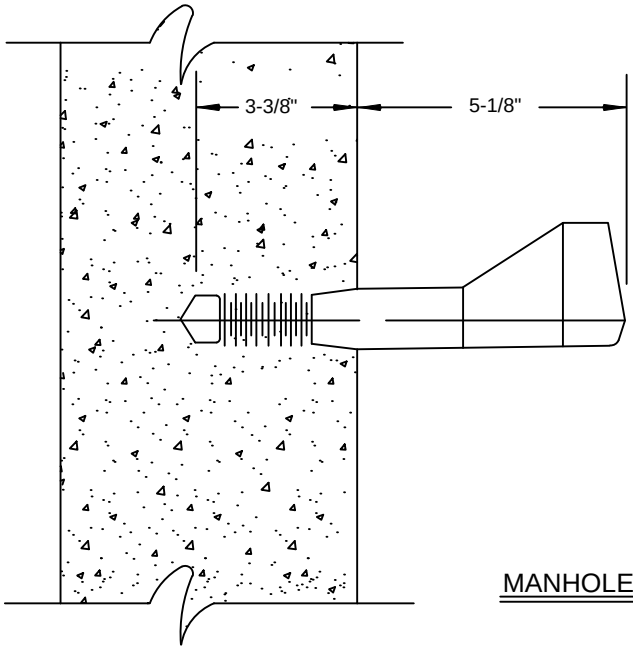
STANDARD MANHOLE
30 INCH COVER AND RING

DATE 10/08/20 | DWG. NO. 409.1

Effective 8/10/2023 to 8/07/2024







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

AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	

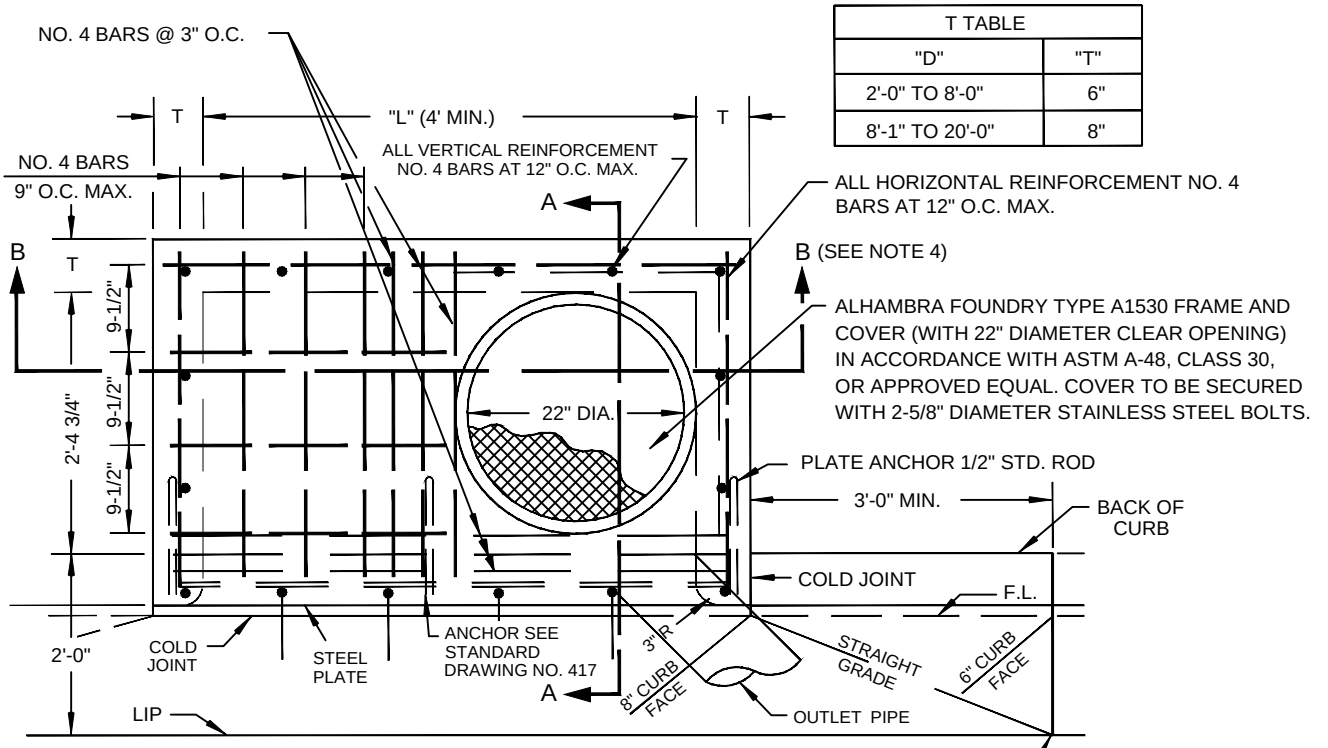
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

STANDARD MANHOLE STEPS

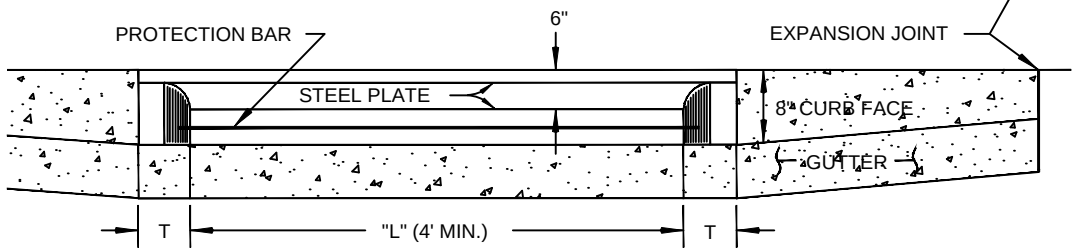
DATE 3-11-04	DWG. NO. 410	

Effective 8/10/2023 to 8/07/2024

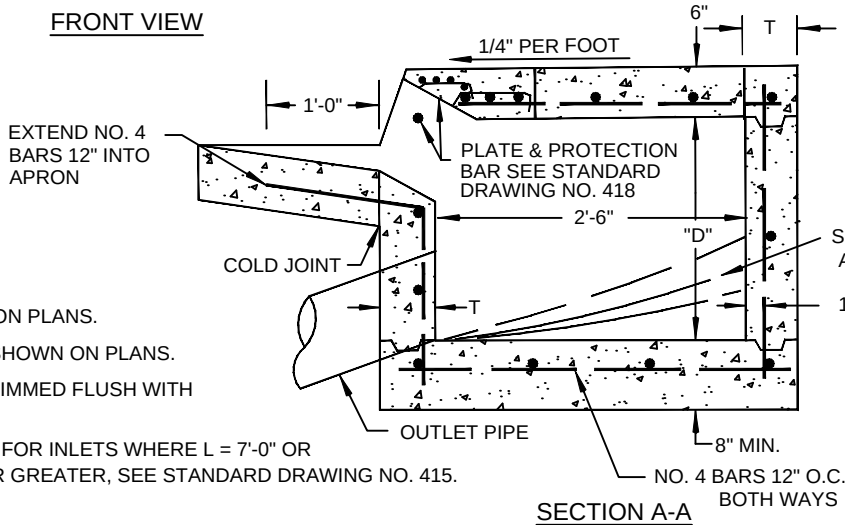
T TABLE	
"D"	"T"
2'-0" TO 8'-0"	6"
8'-1" TO 20'-0"	8"



TOP VIEW



FRONT VIEW



SECTION A-A

NOTES:

1. DEPTH "D" TO BE SHOWN ON PLANS.
2. OUTLET PIPE SIZE TO BE SHOWN ON PLANS.
3. OUTLET PIPE SHALL BE TRIMMED FLUSH WITH INSIDE FACE OF INLET.
4. SECTION B-B IS OPTIONAL FOR INLETS WHERE L = 7'-0" OR GREATER, AND D = 5'-0" OR GREATER, SEE STANDARD DRAWING NO. 415.

AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	
501	CONCRETE
502	CONCRETE STRUCTURES
505	REINFORCING STEEL
713	STEEL

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

DROP INLET
TYPE "A"

DATE 4-11-02	DWG. NO. 411	

Effective 8/10/2023 to 8/07/2024

Effective 8/10/2023 to 8/07/2024

SPECIFICATION REFERENCE

501	CONCRETE
501	CONCRETE STRUCTURES
501	REINFORCING STEEL
501	STEEL

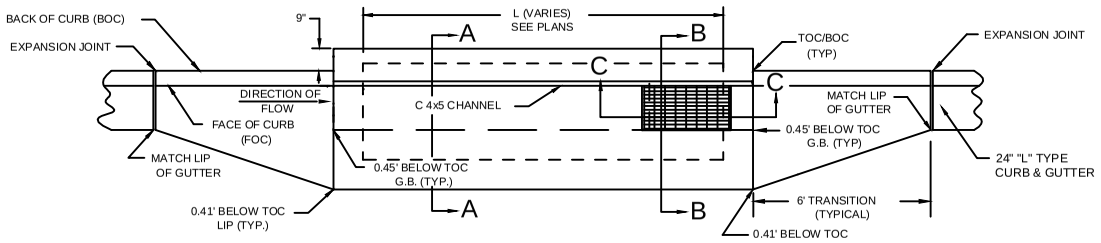
AGENCY APPROVED

B C H L M N

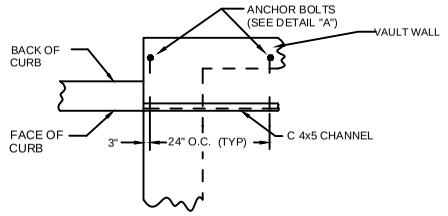
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

MODIFIED TYPE "A"
DROP INLET

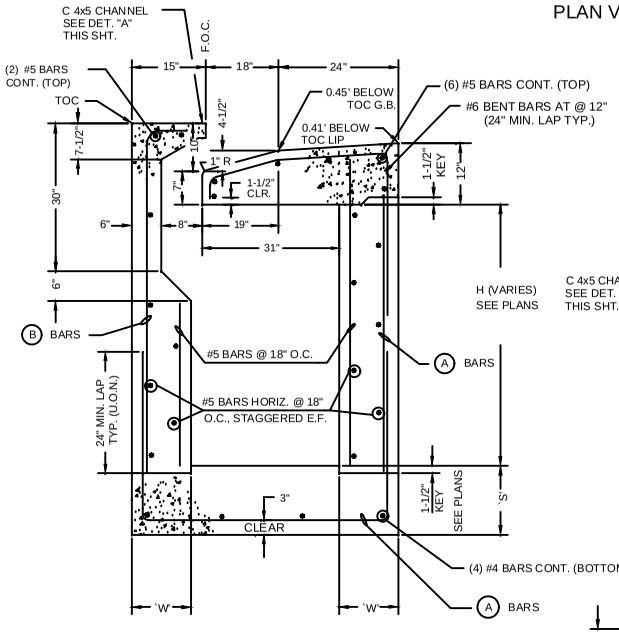
DATE 9-14-06 | DWG. NO. 411.1



PLAN VIEW

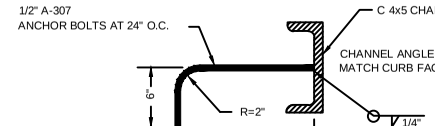


DETAIL "B"

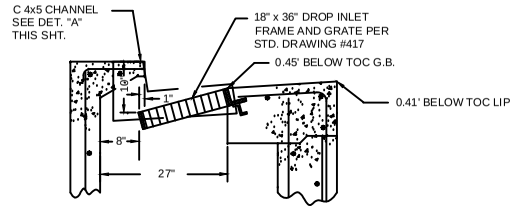


H (MAX)	SLAB	WALLS		
	DIM. `S'	DIM. `W'	Ⓐ BARS	Ⓑ BARS
4'-0"	8"	8"	#4 @ 10" O.C.	#5 @ 12" O.C.
6'-0"	8"	8"	#5 @ 12" O.C.	#5 @ 12" O.C.
8'-0"	8"	9"	#5 @ 12" O.C.	#5 @ 12" O.C.
10'-0"	8"	9"	#6 @ 12" O.C.	#5 @ 12" O.C.

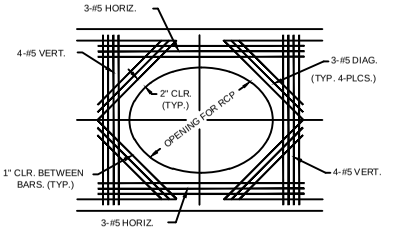
SECTION A-A



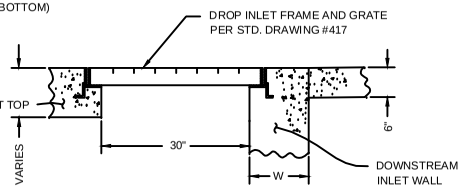
DETAIL "A"



SECTION B-B



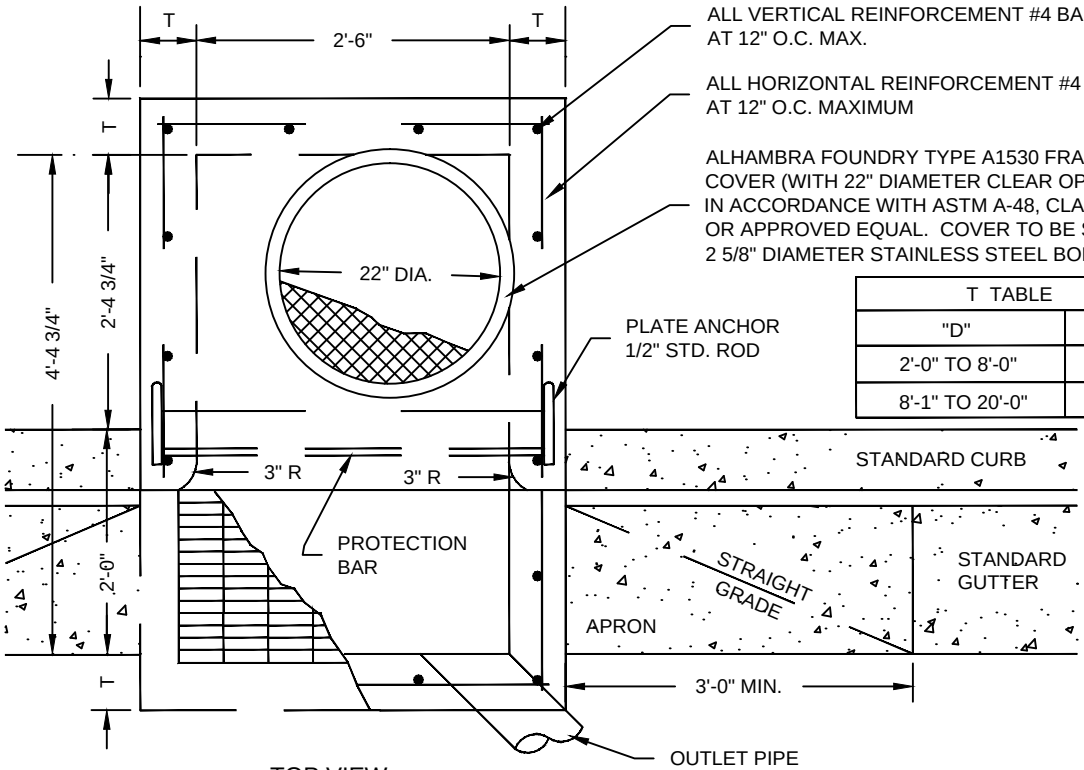
PIPE AND DROP INLET JUNCTION WALL DETAIL



SECTION C-C

NOTES:

1. ALL REBAR SHALL HAVE 2-1/2" COVER U.O.N.
2. ALL CONCRETE SHALL BE CLASS DA 4000 PSI.
3. SEE PLANS FOR LENGTH (L) AND DEPTH (H) OF EACH INLET.
4. SEE PLANS FOR SIZE AND LOCATION OF OUTLET PIPE.
5. ALL EXPOSED STEEL SHALL BE HOT DIPPED GALVANIZED.
6. ALL DAMAGED GALVANIZED STEEL SHALL BE PAINTED WITH A MINIMUM 3.5 MIL. COAT OF ONE OF THE FOLLOWING ZINC RICH PAINTS:
   GALVONOX TYPE I
   LPS COLD GALVANIZE
   SHERWIN-WILLIAMS "ZINC CLAD I"
7. ALL REBAR SHALL BE GRADE 60.
8. ALL STRUCTURAL STEEL SHALL BE A36.
9. ALL ANCHOR BOLTS SHALL BE A-307.
10. BEDDING FOR DROP INLET SHALL BE 6" MIN. OF TYPE II AGGREGATE BASE COMPACTED TO 95% MAXIMUM DENSITY PER ASTM D1557.



ALL VERTICAL REINFORCEMENT #4 BARS AT 12" O.C. MAX.

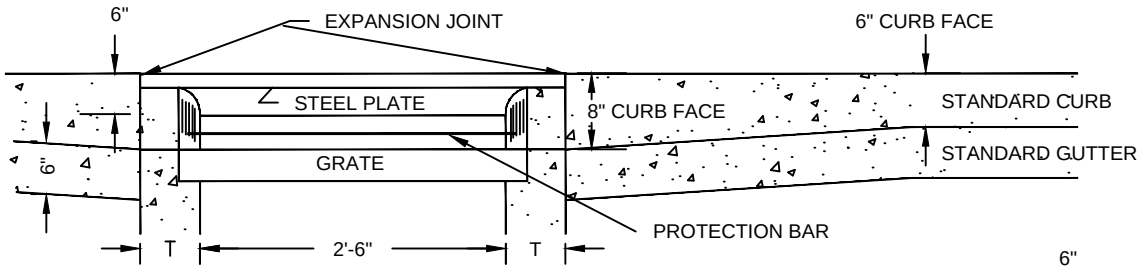
ALL HORIZONTAL REINFORCEMENT #4 BARS AT 12" O.C. MAXIMUM

ALHAMBRA FOUNDRY TYPE A1530 FRAME & COVER (WITH 22" DIAMETER CLEAR OPENING) IN ACCORDANCE WITH ASTM A-48, CLASS 30, OR APPROVED EQUAL. COVER TO BE SECURED WITH 2 5/8" DIAMETER STAINLESS STEEL BOLTS.

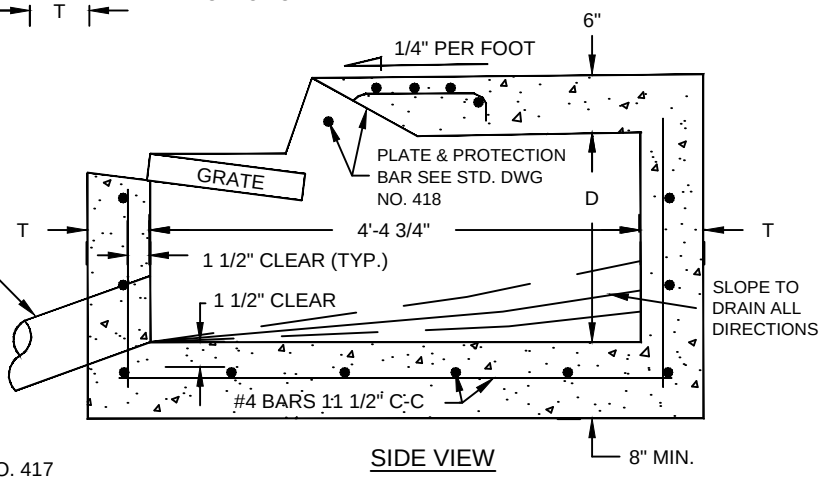
PLATE ANCHOR 1/2" STD. ROD

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

TOP VIEW



FRONT VIEW



SIDE VIEW

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

AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	
501	CONCRETE
502	CONCRETE STRUCTURES
505	REINFORCING STEEL
713	STEEL

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

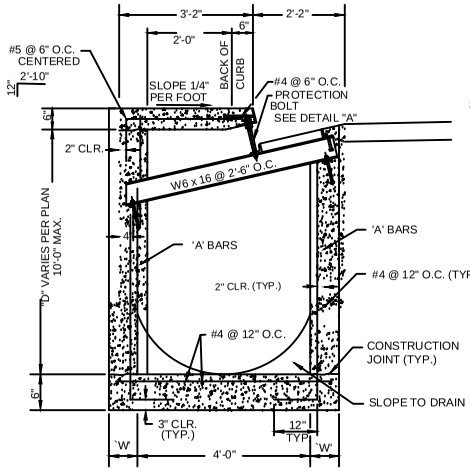
DROP INLET TYPE "B"

DATE 4-11-02 | DWG. NO. 412

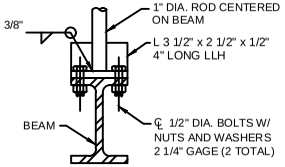
Effective 8/10/2023 to 8/07/2024

Effective 8/10/2023 to 8/07/2024

SPECIFICATION REFERENCE	
501	CONCRETE
501	CONCRETE STRUCTURES
501	REINFORCING STEEL
501	STEEL

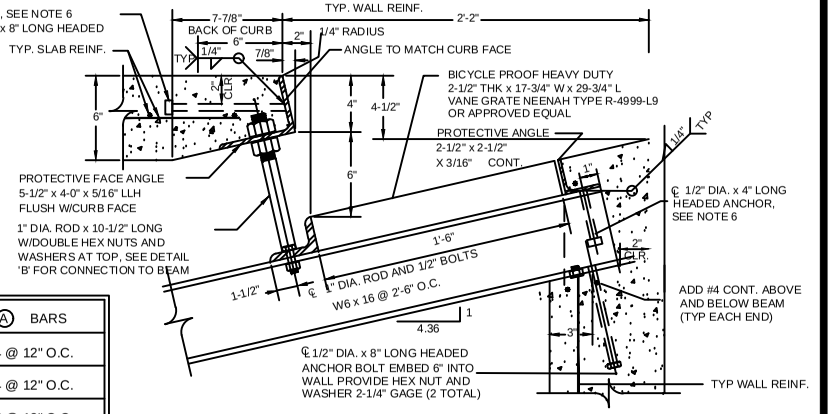


TYPE "CM2" DROP INLET SECTION

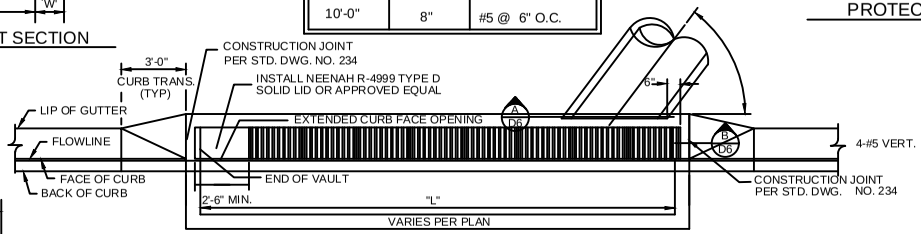


DETAIL "B"

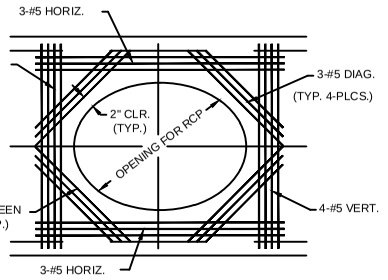
D (MAX)	DIM. `W'	Ⓐ BARS
4'-0"	6"	#4 @ 12" O.C.
6'-0"	6"	#4 @ 12" O.C.
8'-0"	8"	#5 @ 12" O.C.
10'-0"	8"	#5 @ 6" O.C.



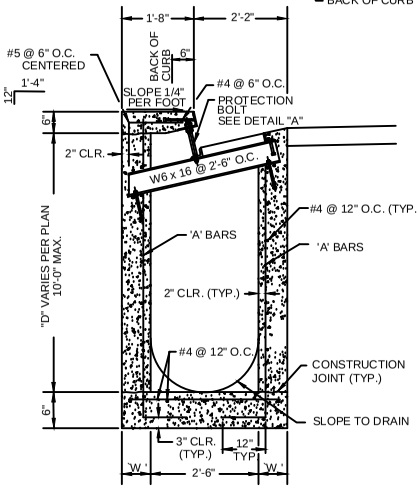
PROTECTIVE FACE & ROD - DETAIL "A"



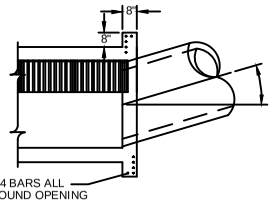
DROP INLET LAYOUT PLAN



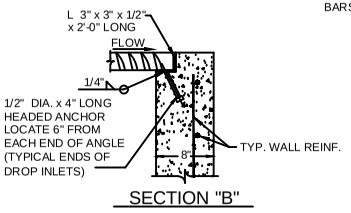
SECTION "A"



TYPE "DM2" DROP INLET SECTION



ALTERNATE CONNECTION DETAIL



SECTION "B"

NOTES:

1. ALL EXPOSED METALS SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.
2. PROVIDE 1/2" (MIN.) CLEARANCE ALL AROUND THE STEEL BEAM, DRY PACK AFTER INSTALLATION.
3. WHEN REQUIRED BY LENGTH OF OPENING, PLATE ANGLE MAY BE DELIVERED IN SECTIONS AND BUTT WELDED IN PLACE.
4. ALL GALVANIZED DAMAGED BY WELDING SHALL RECEIVE TWO COATS OF GALVALLOY OR EQUAL.
5. CONCRETE SHALL BE MODIFIED CLASS DA 4000 PSI, SEE SPECIAL PROVISIONS SECTION 501.
6. ANGLE ANCHORS SHALL BE EMBEDDED MIDPOINT IN EACH ENDWALL AND EVENLY SPACED, (MAXIMUM SPACING OF 2').

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

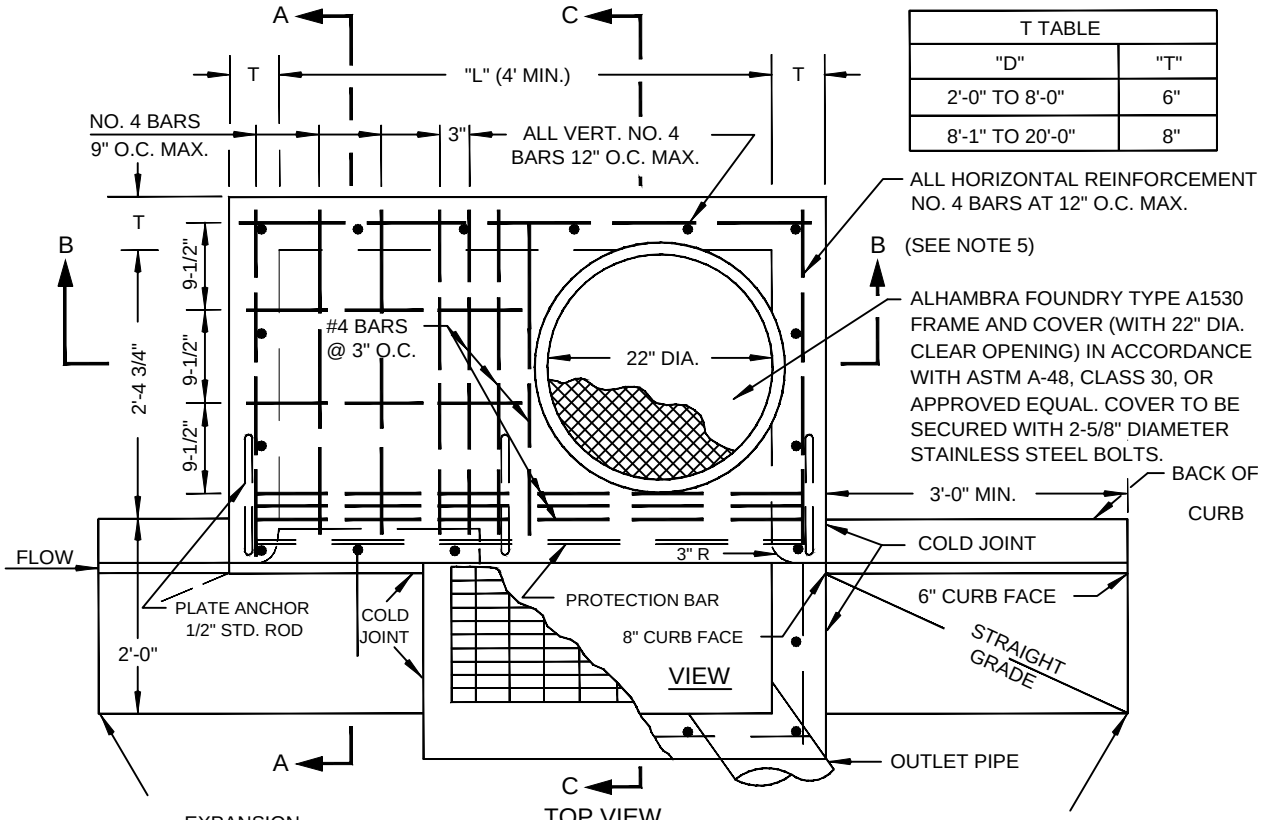
TYPE "C-D" MODIFIED
DROP INLET

DATE 9-14-06 | DWG. NO. 412.1

AGENCY APPROVED

B C H L M N

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. 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 > 7'-0" AND D > 5'-0", SEE STANDARD DRAWING NO. 415.

AGENCY APPROVED	B	C	H	L	M	N

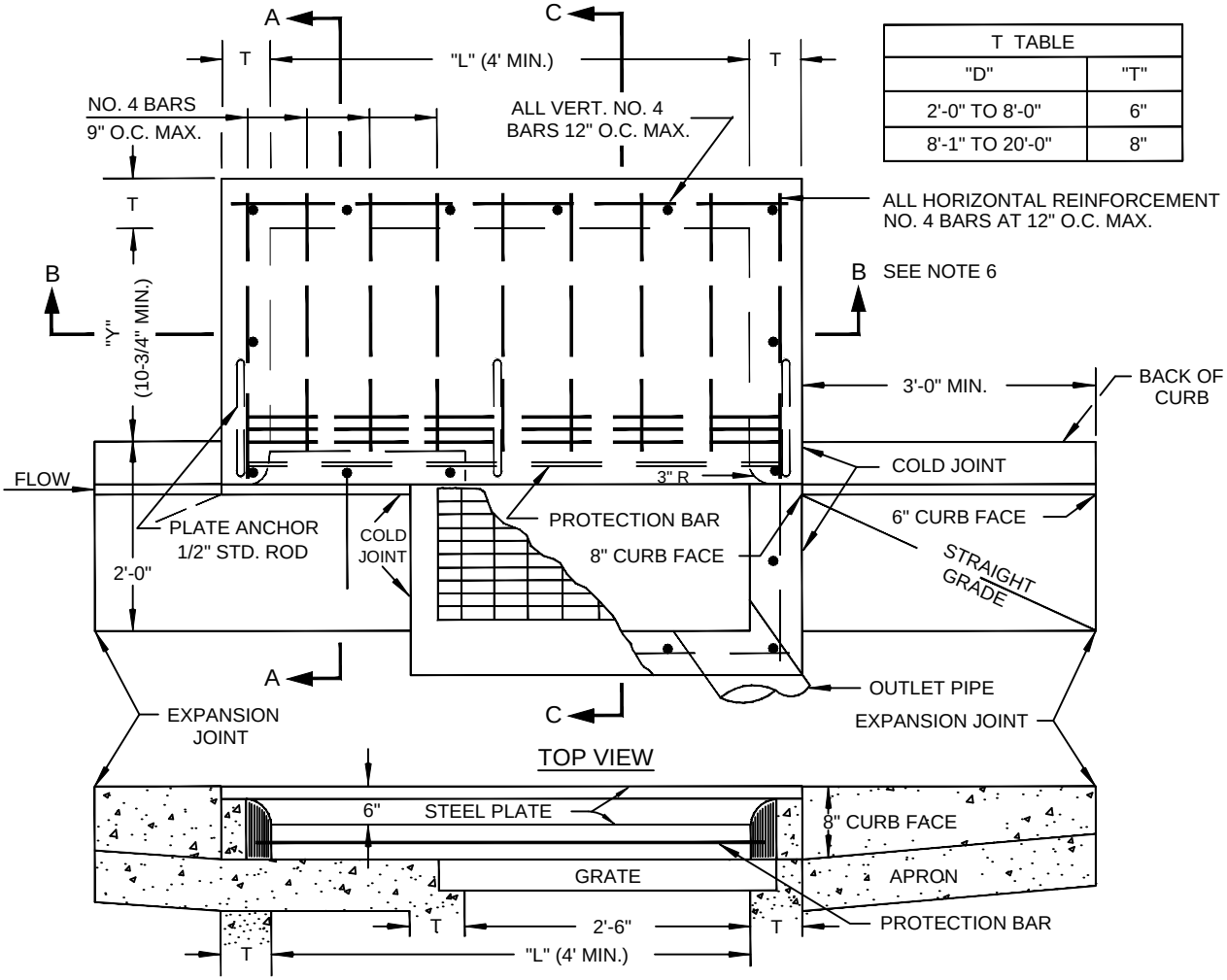
SPECIFICATION REFERENCE	
501	CONCRETE
502	CONCRETE STRUCTURES
505	REINFORCING STEEL
713	STEEL

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

DROP INLET TYPE "C"

DATE 4-11-02	DWG. NO. 413	

Effective 8/10/2023 to 8/07/2024



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

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 > 7'-0" AND D > 5'-0", SEE STANDARD DRAWING NO. 415.

AGENCY APPROVED	B	C	H	L	M	N

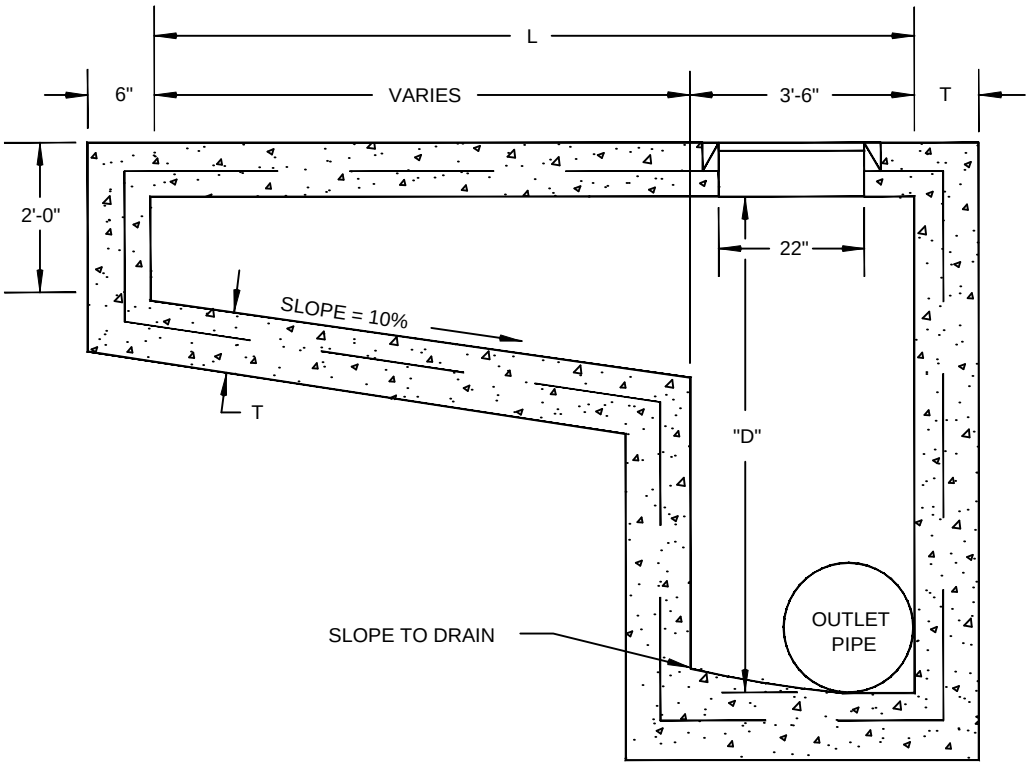
SPECIFICATION REFERENCE	
501	CONCRETE
502	CONCRETE STRUCTURES
505	REINFORCING STEEL
713	STEEL

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

DROP INLET TYPE "D"

DATE 4-11-02 | DWG. NO. 414

Effective 8/10/2023 to 8/07/2024



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.

AGENCY APPROVED	B	C	H	L	M	N

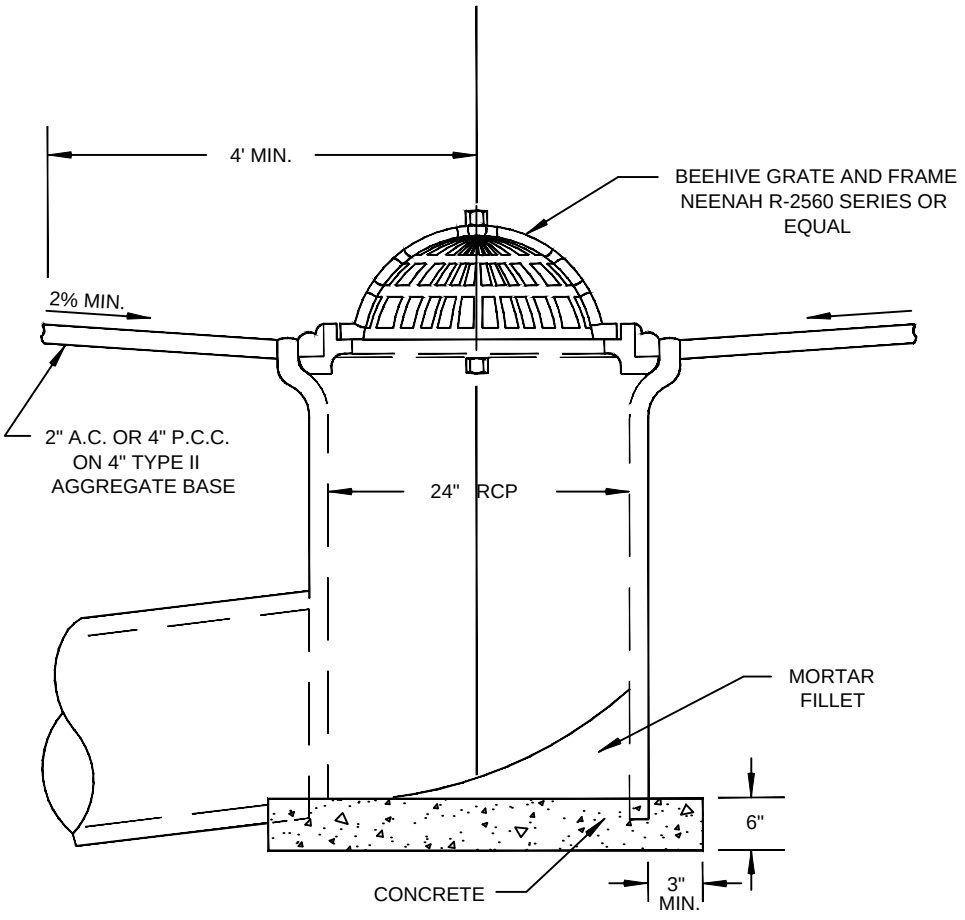
SPECIFICATION REFERENCE	
501	CONCRETE
502	CONCRETE STRUCTURES

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

DROP INLET TYPES "A" AND "B"
SPECIAL DESIGN

DATE	DWG. NO. 415	

Effective 8/10/2023 to 8/07/2024



NOTE:

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

AGENCY APPROVED	B	C	H	L	M	N

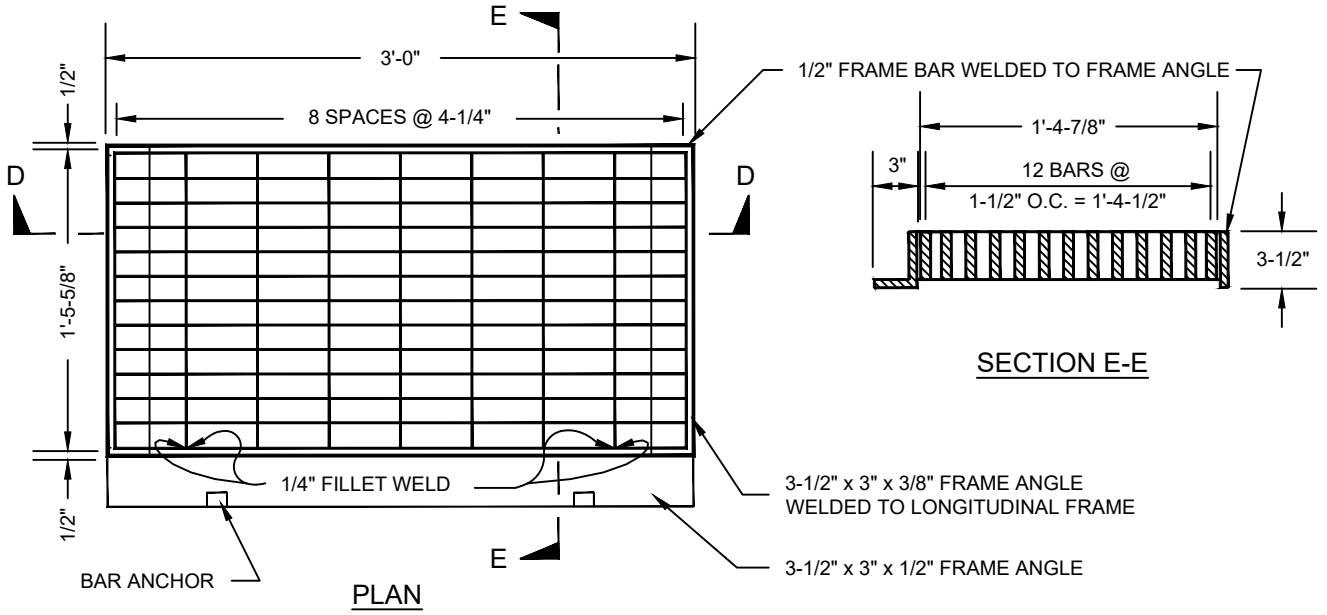
SPECIFICATION REFERENCE	
603	REINFORCED CONCRETE PIPE
712	MISCELLANEOUS METAL
-	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

BEEHIVE DROP INLET

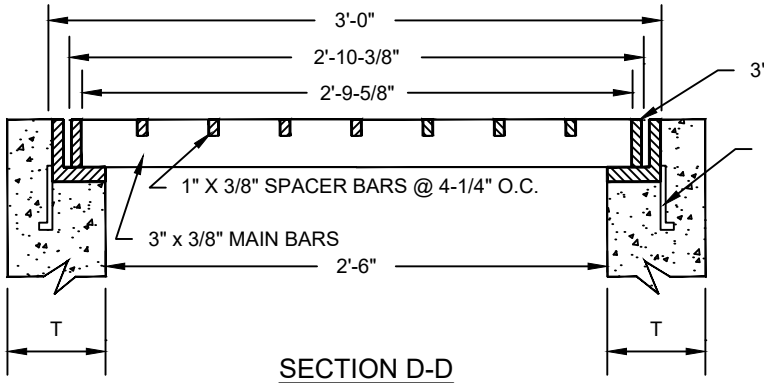
DATE 12-14-00 | DWG. NO. 416

Effective 8/10/2023 to 8/07/2024



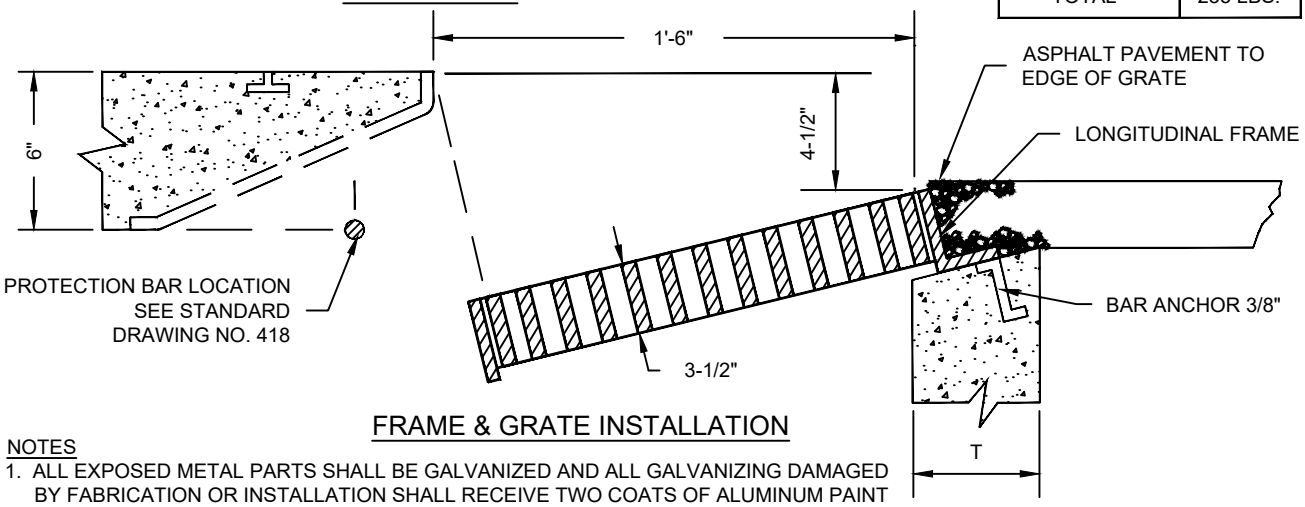
PLAN

SECTION E-E



SECTION D-D

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



FRAME & GRATE INSTALLATION

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

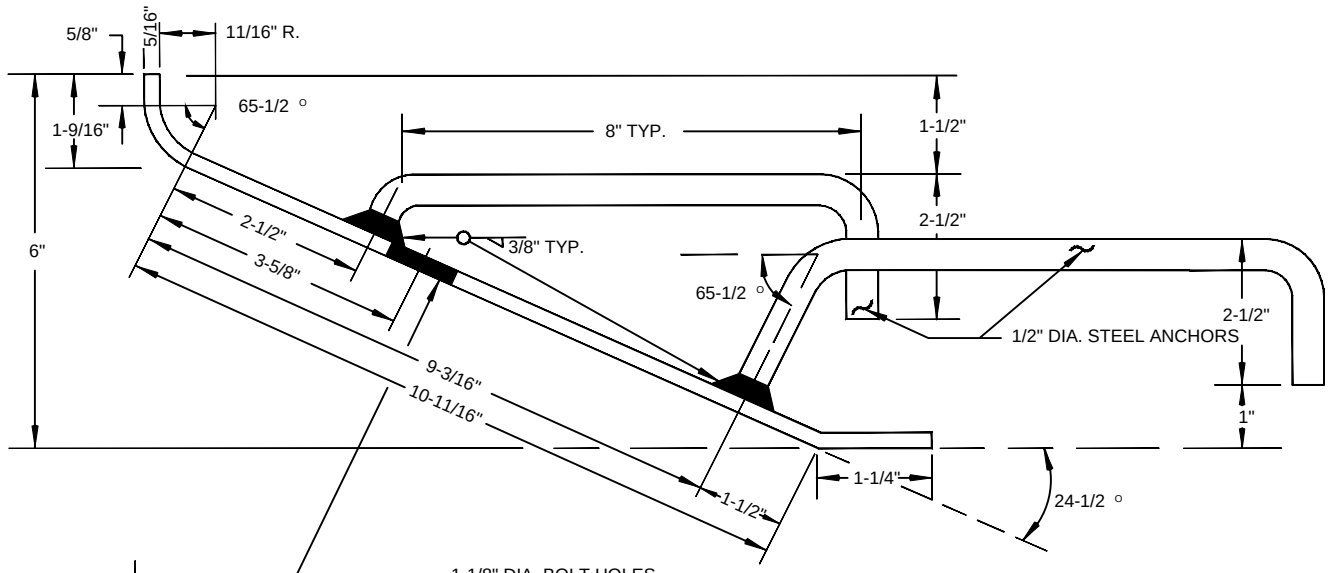
SPECIFICATION REFERENCE	
712	MISCELLANEOUS METAL
714	PAINT
715	GALVANIZING
.	

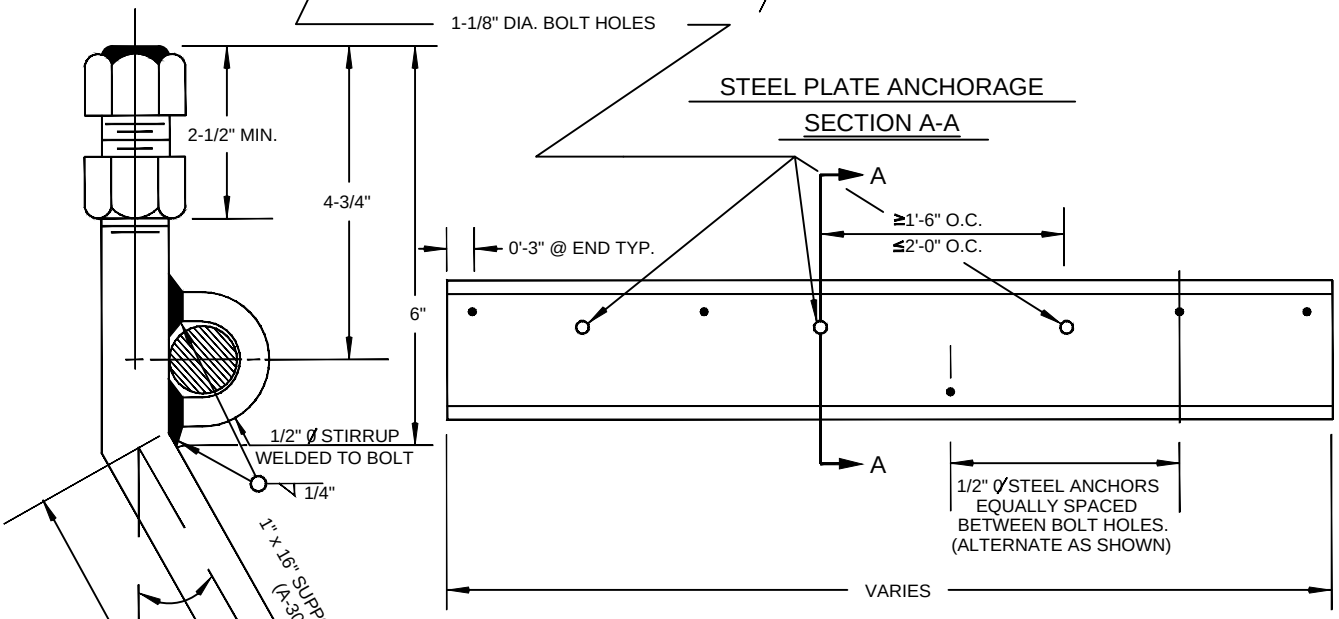
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

DROP INLET
FRAME AND GRATE

DATE 01-09-20	DWG. NO. 417	

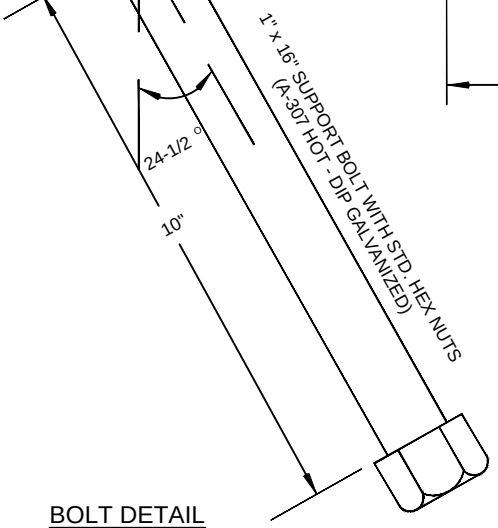
Effective 8/10/2023 to 8/07/2024





STEEL PLATE ANCHORAGE
SECTION A-A

BOLT HOLE AND BAR SPACING DETAIL



BOLT DETAIL

NOTE:

FOR STEEL PLATE AND PROTECTION BAR DETAILS, SEE STANDARD DRAWING NO. 419.

AGENCY APPROVED	B	C	H	L	M	N

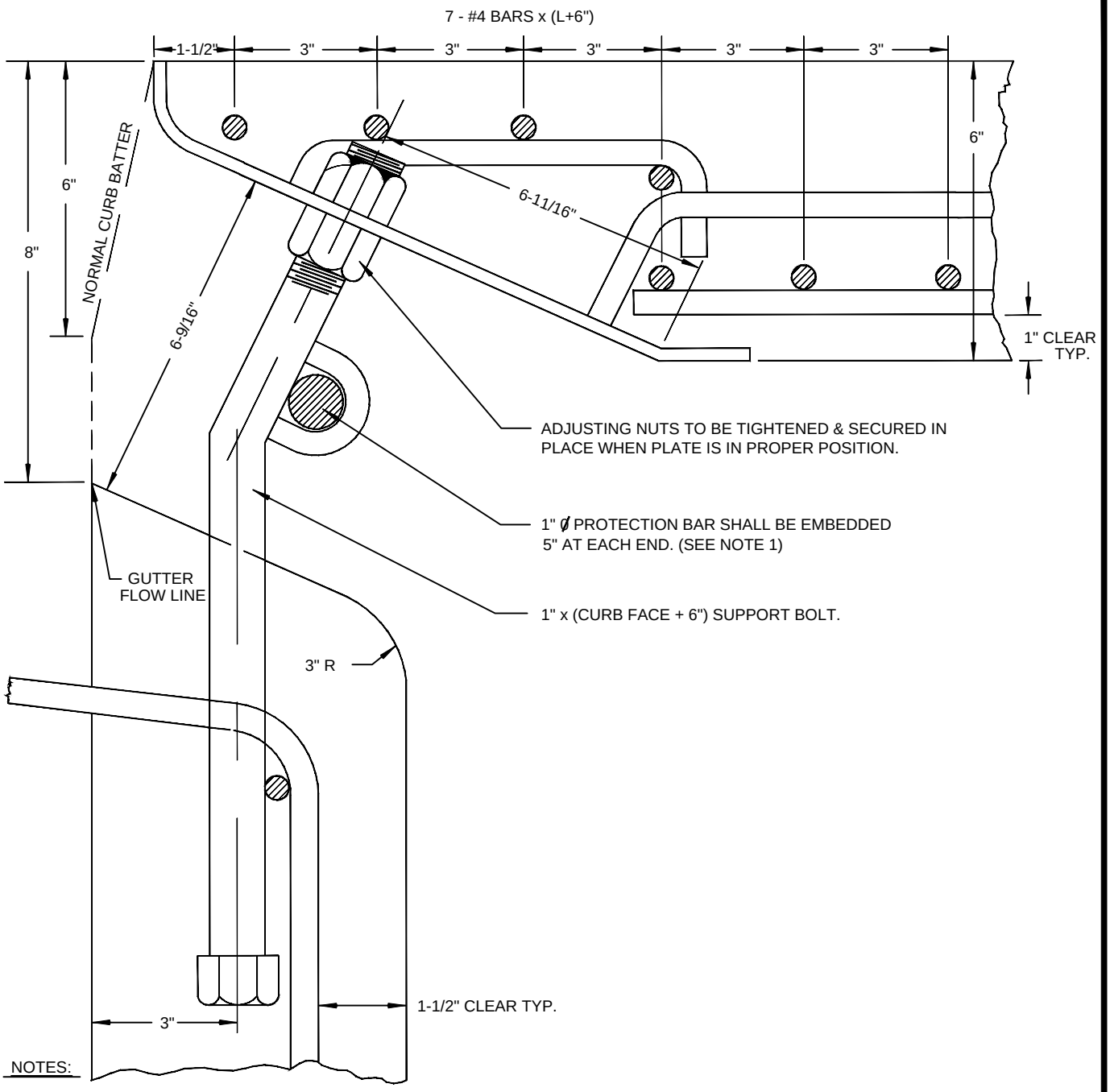
SPECIFICATION REFERENCE	
710	STRUCTURAL STEEL
713	REINFORCEMENT STEEL
715	GALVANIZING

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

DROP INLET
STEEL PLATE ANCHORAGE

DATE	DWG. NO. 418	

Effective 8/10/2023 to 8/07/2024



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 x (L+6") SHALL BE IN ADDITION TO REINFORCING STEEL PER APPLICABLE DROP INLET STANDARD PLAN.

AGENCY APPROVED	B	C	H	L	M	N

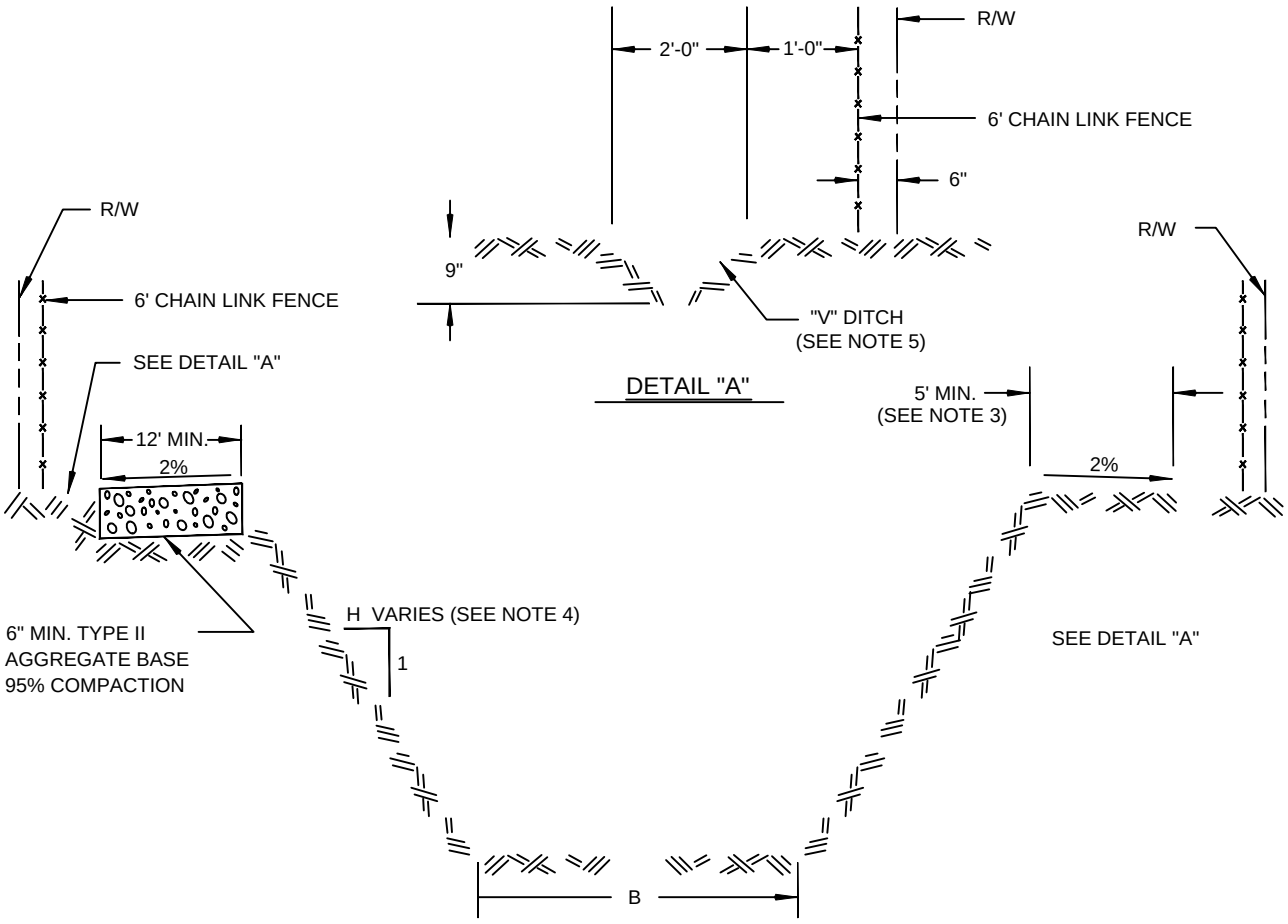
SPECIFICATION REFERENCE	
713	REINFORCEMENT PLATES
714	PAINT
715	GALVANIZING

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

DROP INLET
STEEL PLATE AND PROTECTION BAR

DATE	DWG. NO. 419	

Effective 8/10/2023 to 8/07/2024



NOTES:

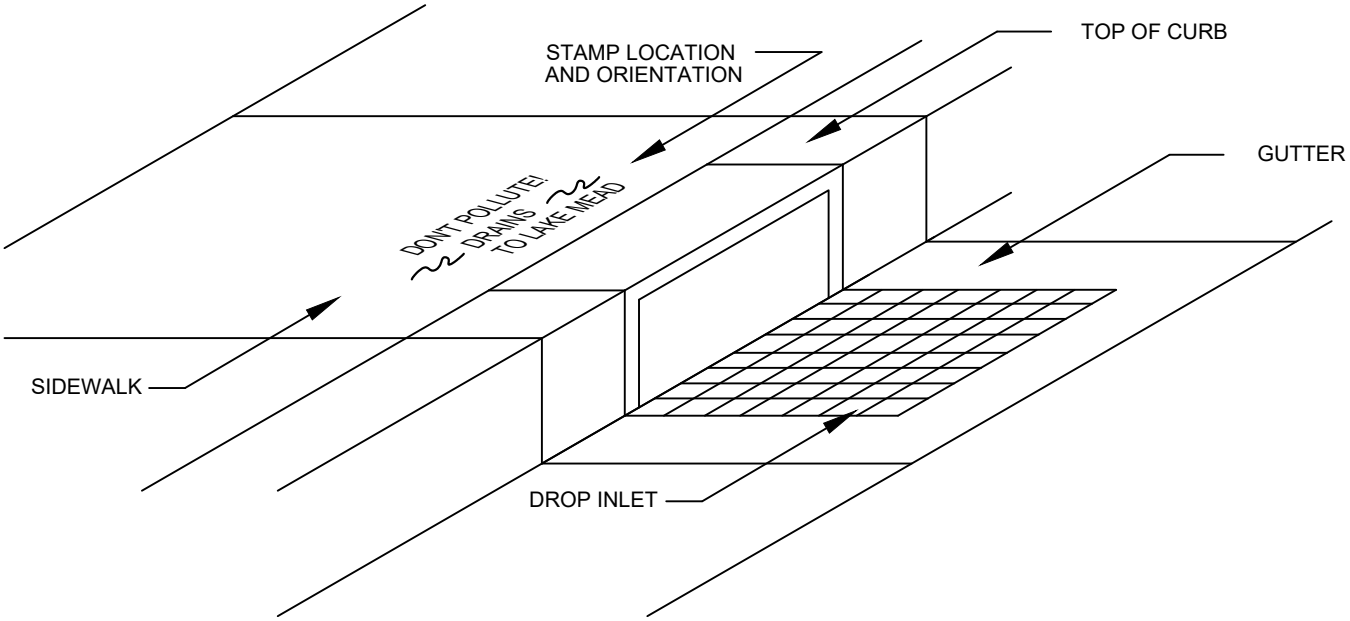
1. CONSTRUCT 14-FOOT WIDE CHAIN LINK GATE AT ALL STREET ACCESS POINTS, FOR ACCESS ONTO 12-FOOT ACCESS ROADS.
2. CONSTRUCT 3-FOOT WIDE CHAIN LINK GATE AT ALL STREET ACCESS POINTS FOR ACCESS ON THE 5-FOOT WIDTH ACCESS SIDE.
3. CONSTRUCT SECOND ACCESS ROAD (12-FOOT MINIMUM WIDTH WITH 6-INCH MIN. TYPE II AGGREGATE BASE) IF B EXCEEDS 30'.
4. FOR UNLINED CHANNELS H 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

Effective 8/10/2023 to 8/07/2024

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	
.	

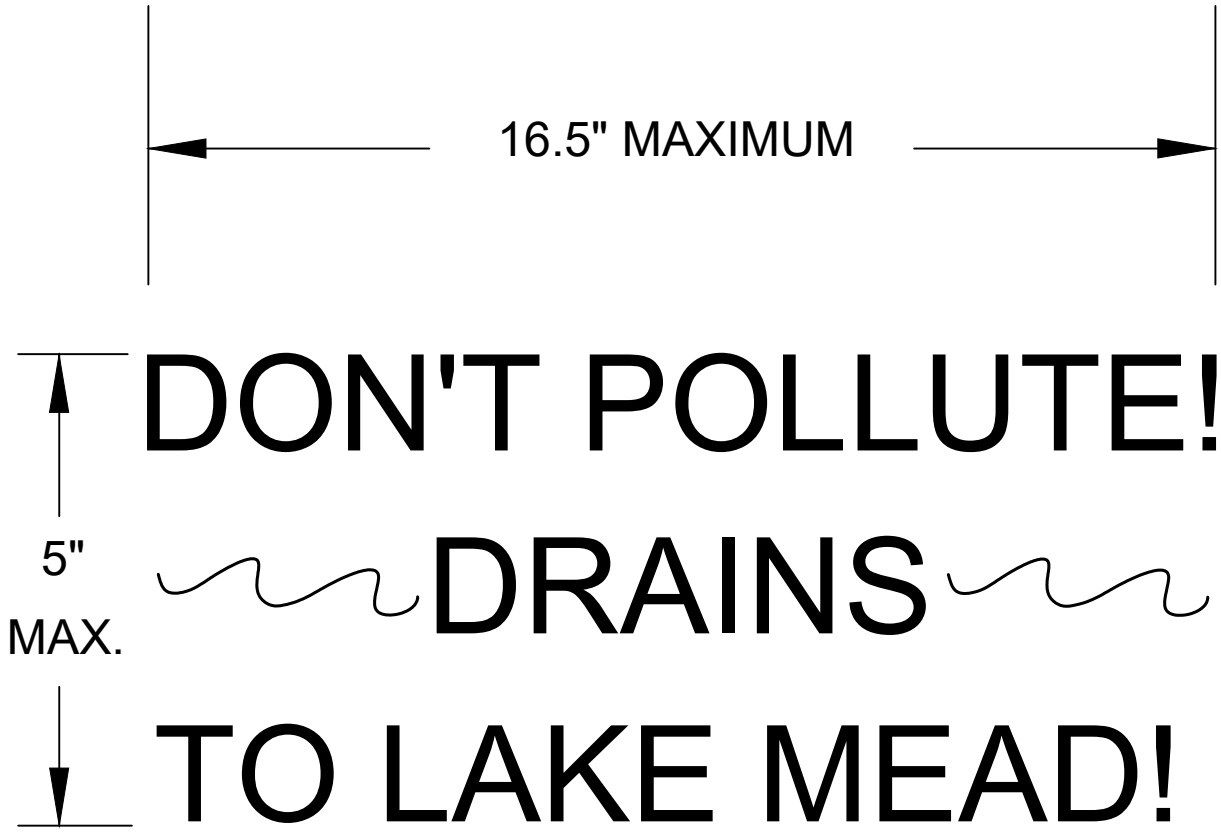
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

STORM WATER QUALITY MANAGEMENT
STAMP AND SIGN DETAIL

DATE 12-09-10	DWG. NO. 421	SHEET 1 OF 3

Effective 8/10/2023 to 8/07/2024

STAMP MESSAGES AND SYMBOLS



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

Effective 8/10/2023 to 8/07/2024



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

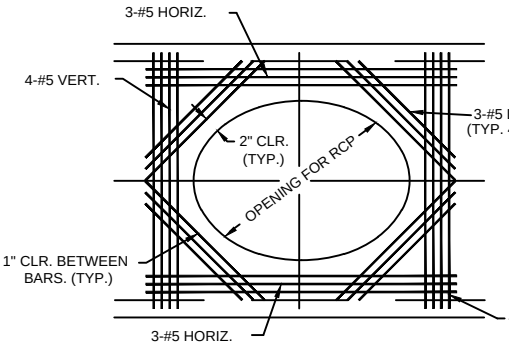
SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

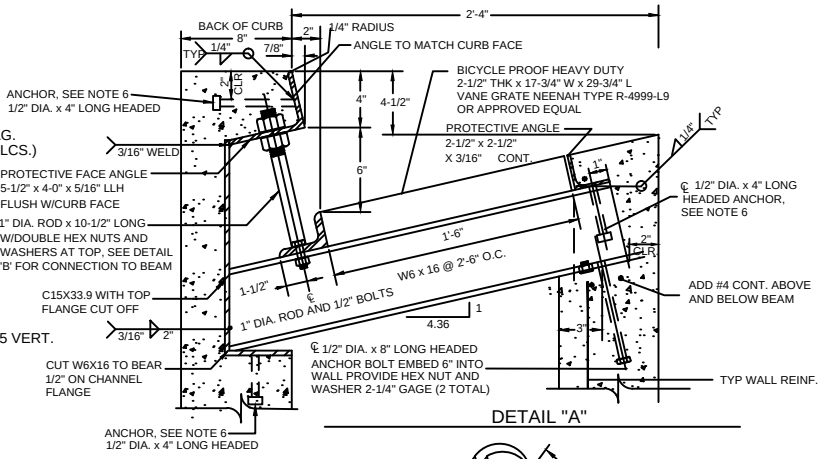
STORM WATER QUALITY MANAGEMENT
STAMP AND SIGN DETAIL

DATE 12-09-10	DWG. NO. 421	SHEET 3 OF 3

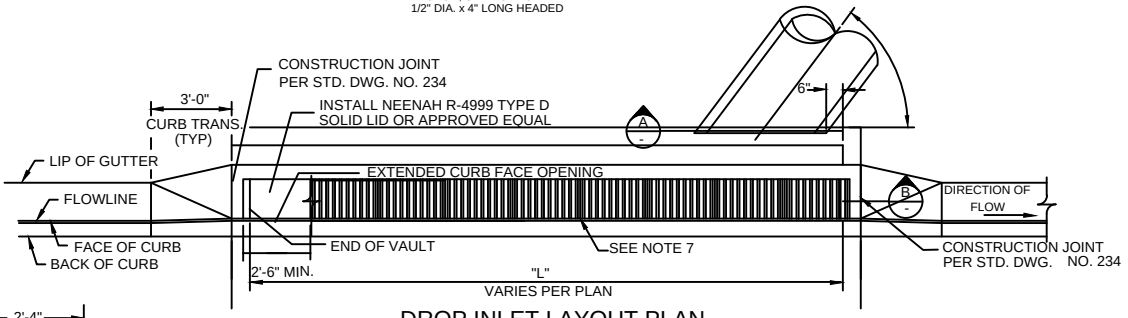
Effective 8/10/2023 to 8/07/2024



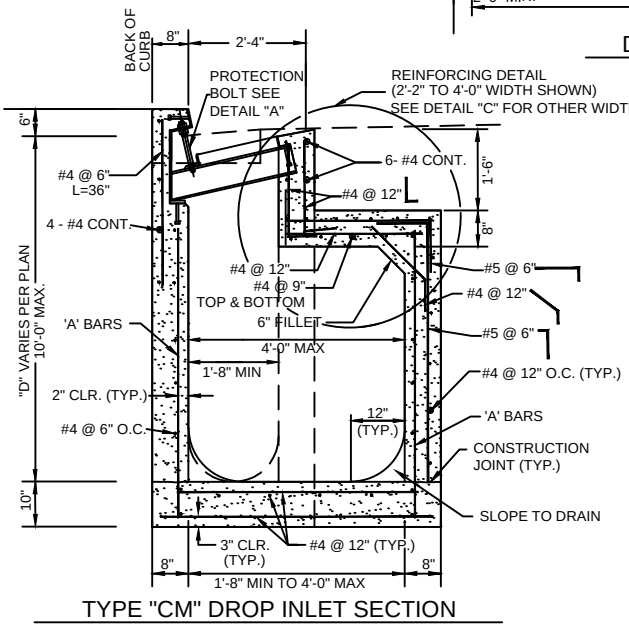
SECTION "A"



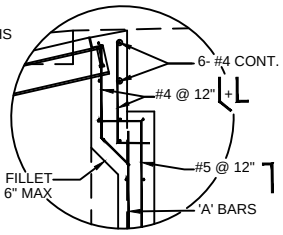
DETAIL "A"



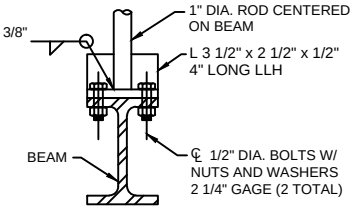
DROP INLET LAYOUT PLAN



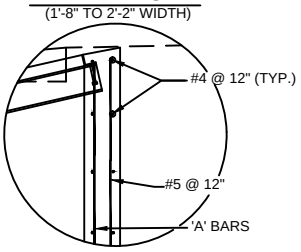
TYPE "CM" DROP INLET SECTION



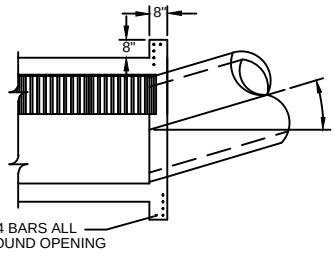
DETAIL "C"
(1'-8" TO 2'-2" WIDTH)



DETAIL "B"



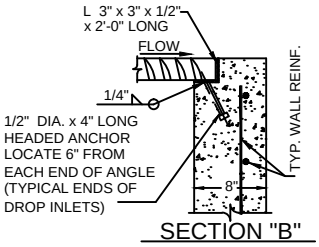
DETAIL "C"
(1'-8" WIDTH)



ALTERNATE CONNECTION DETAIL

NOTES:

1. ALL EXPOSED METALS SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.
2. PROVIDE 1/2" (MIN.) CLEARANCE ALL AROUND THE STEEL BEAM, DRY PACK AFTER INSTALLATION.
3. WHEN REQUIRED BY LENGTH OF OPENING, PLATE ANGLE MAY BE DELIVERED IN SECTIONS AND BUTT WELDED IN PLACE.
4. ALL GALVANIZED DAMAGED BY WELDING SHALL RECEIVE TWO COATS OF GALVALLOY OR EQUAL.
5. CONCRETE SHALL BE MODIFIED CLASS DA 4000 PSI, SEE SPECIAL PROVISIONS SECTION 501.
6. ANGLE ANCHORS SHALL BE EMBEDDED MIDPOINT IN EACH ENDWALL AND EVENLY SPACED, (MAXIMUM SPACING OF 2').
7. THE GAP BETWEEN THE GRATES MUST BE 1/2-INCH OR LESS.



SECTION "B"

TYP. WALL REINF.

D (MAX)	DIM. `W'	Ⓐ BARS
4'-0"	8"	#5 @ 12" O.C.
6'-0"	8"	#5 @ 12" O.C.
8'-0"	8"	#5 @ 9" O.C.
10'-0"	8"	#5 @ 6" O.C.

AGENCY APPROVED	B	C	H	L	M	N

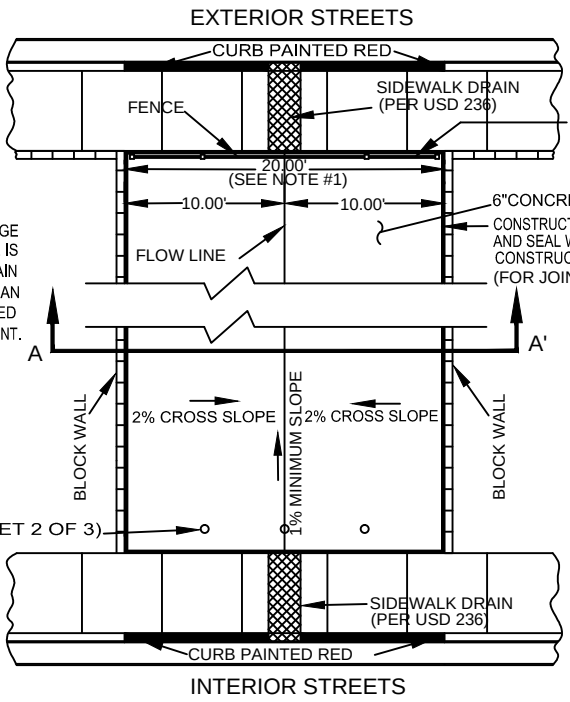
SPECIFICATION REFERENCE	
501	CONCRETE
501	CONCRETE STRUCTURES
501	REINFORCING STEEL
501	STEEL
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPE "CM" DROP INLET

DATE 07-01-14	DWG. NO. 422	

Effective 8/10/2023 to 8/07/2024



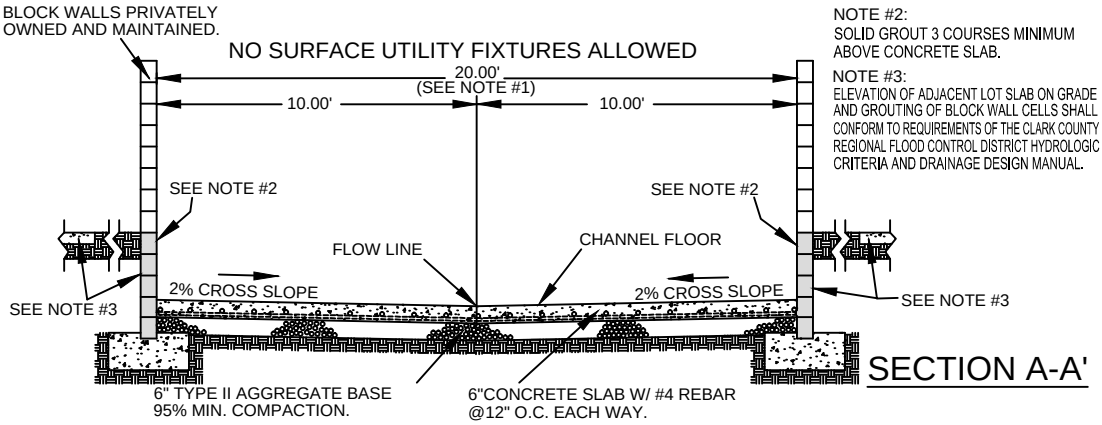
ONE PERCENT MINIMUM SLOPE THROUGH DRAINAGE SLAB IS REQUIRED. WHERE A STORM DRAIN LINE IS AVAILABLE IN THE EXTERIOR STREET, A STORM DRAIN INLET AT THE BEGINNING OF THE EASEMENT AND AN 18-INCH MINIMUM STORM DRAIN PIPE IS REQUIRED TO CONVEY NUISANCE WATER THROUGH THE EASEMENT.

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.

PLAN VIEW



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

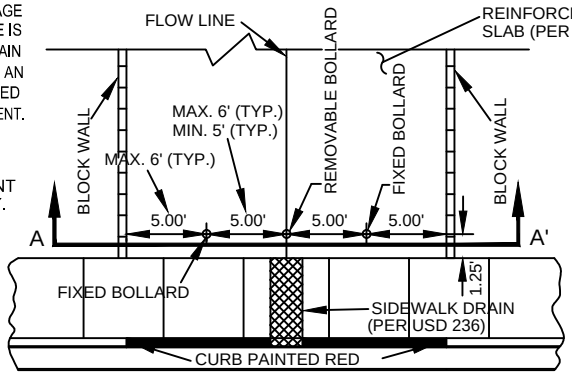
AGENCY APPROVED				L		

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

Effective 8/10/2023 to 8/07/2024

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.

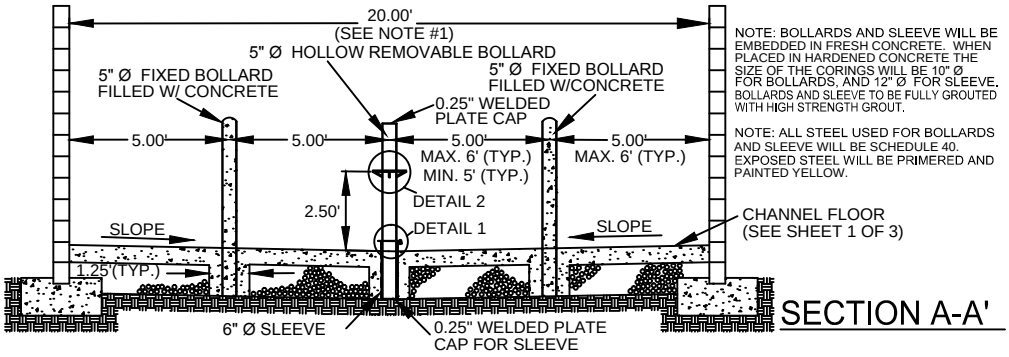


INTERIOR STREETS

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.

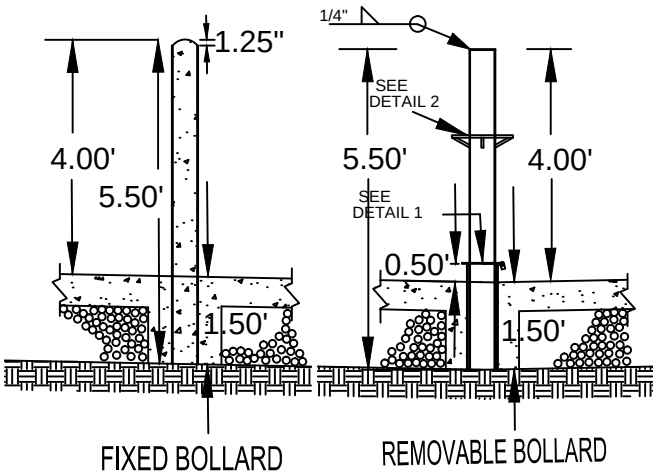
PLAN VIEW

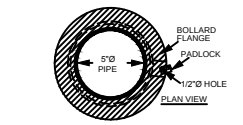


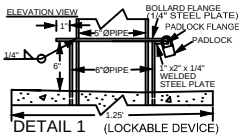
NOTE: BOLLARDS AND SLEEVE WILL BE EMBEDDED IN FRESH CONCRETE. WHEN PLACED IN HARDENED CONCRETE THE SIZE OF THE CORINGS WILL BE 10" Ø FOR BOLLARDS, AND 12" Ø FOR SLEEVE. BOLLARDS AND SLEEVE TO BE FULLY GROUTED WITH HIGH STRENGTH GROUT.

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

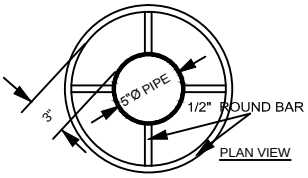
SECTION A-A'

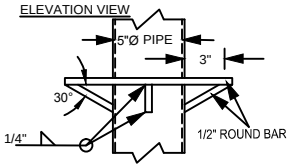






DETAIL 1 (LOCKABLE DEVICE)





DETAIL 2 (HANDLE)

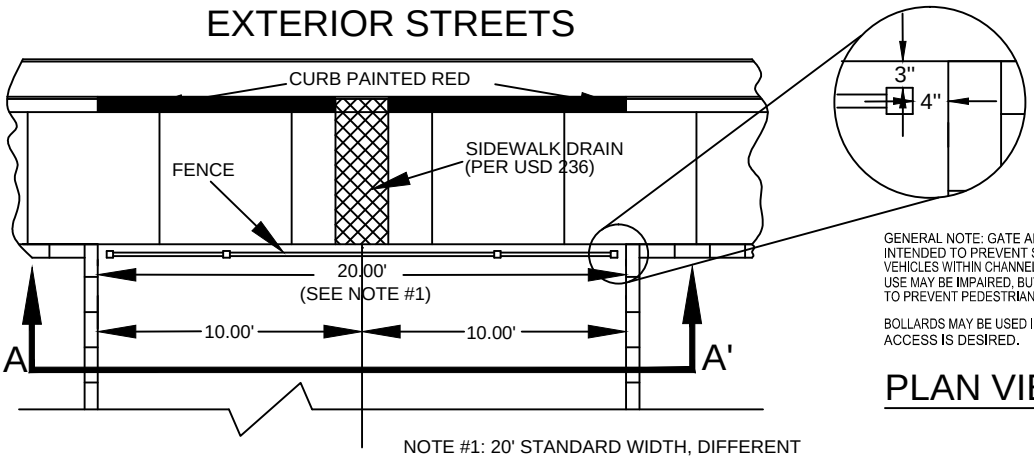
NOT FOR USE IN EMERGENCY ACCESS

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 2 OF 3

Effective 8/10/2023 to 8/07/2024

EXTERIOR STREETS

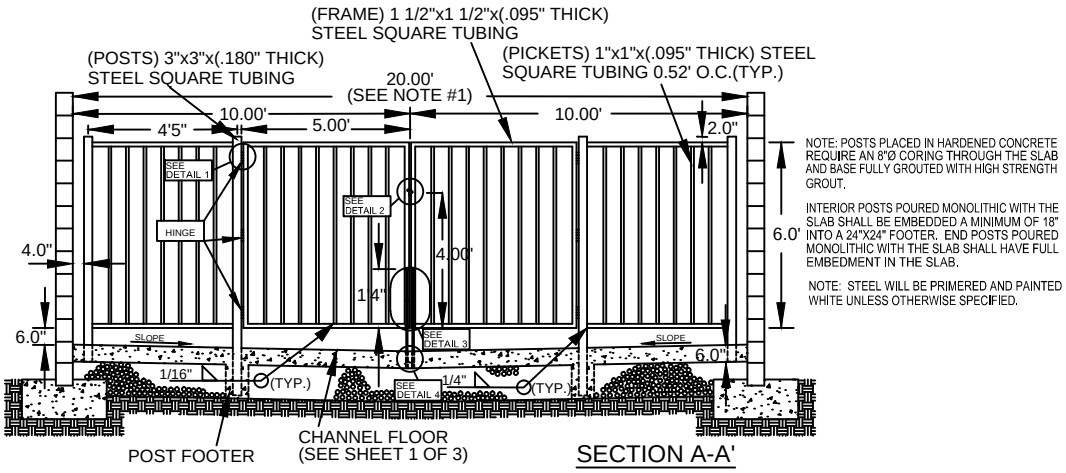


NOTE #1: 20' STANDARD WIDTH, DIFFERENT WIDTHS TO BE DESIGNED ACCORDINGLY.

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

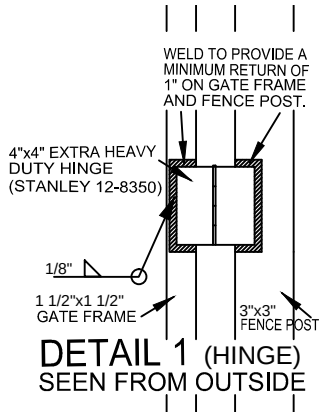


NOTE: POSTS PLACED IN HARDENED CONCRETE REQUIRE AN 8"Ø CORING THROUGH THE SLAB AND BASE FULLY GROUTED WITH HIGH STRENGTH GROUT.

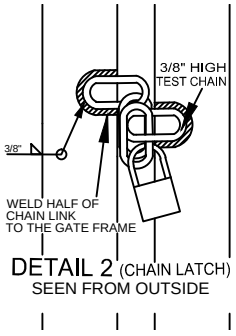
INTERIOR POSTS POURED MONOLITHIC WITH THE SLAB SHALL BE EMBEDDED A MINIMUM OF 18" INTO A 24"X24" FOOTER. END POSTS POURED MONOLITHIC WITH THE SLAB SHALL HAVE FULL EMBEDMENT IN THE SLAB.

NOTE: STEEL WILL BE PRIMERED AND PAINTED WHITE UNLESS OTHERWISE SPECIFIED.

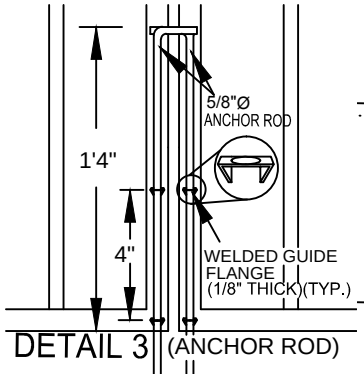
SECTION A-A'



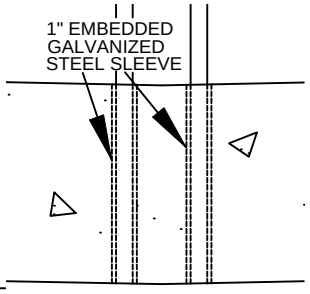
DETAIL 1 (HINGE)
SEEN FROM OUTSIDE



DETAIL 2 (CHAIN LATCH)
SEEN FROM OUTSIDE



DETAIL 3 (ANCHOR ROD)



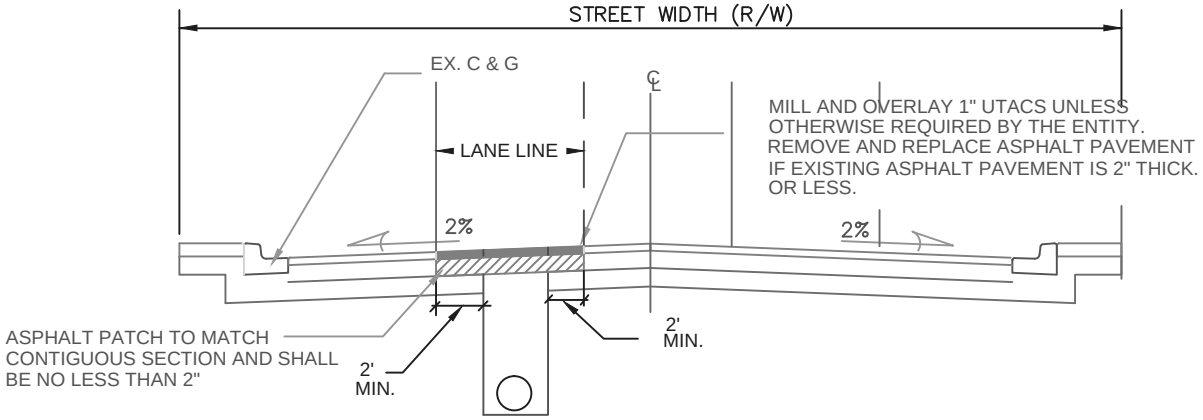
DETAIL 4 (SLEEVE)

NOT FOR USE IN EMERGENCY ACCESS

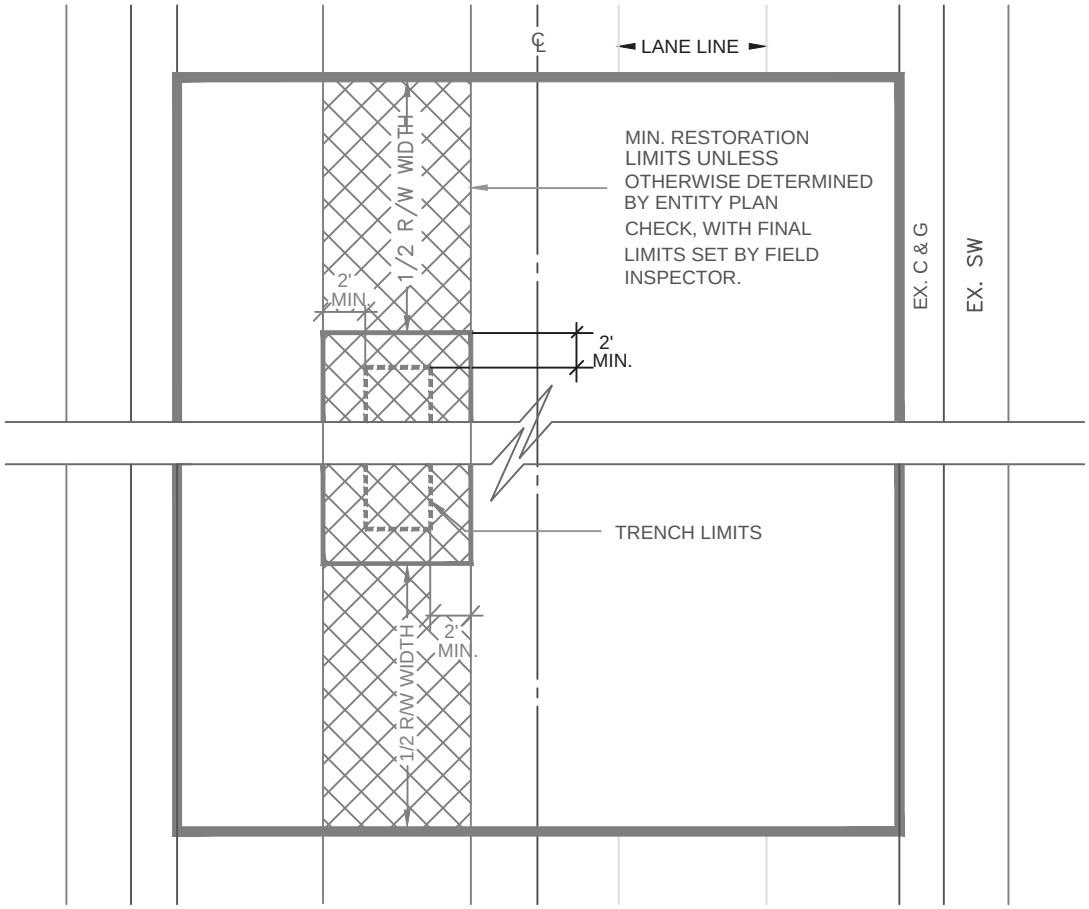
AGENCY APPROVED					L		

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

Effective 8/10/2023 to 8/07/2024



LONGITUDINAL CUT RESTORATION



PLAN VIEW

NOTES:

SEE DWG. 500.1 SHEET 2 OF 2

AGENCY APPROVED	B	C	H	L	M	N

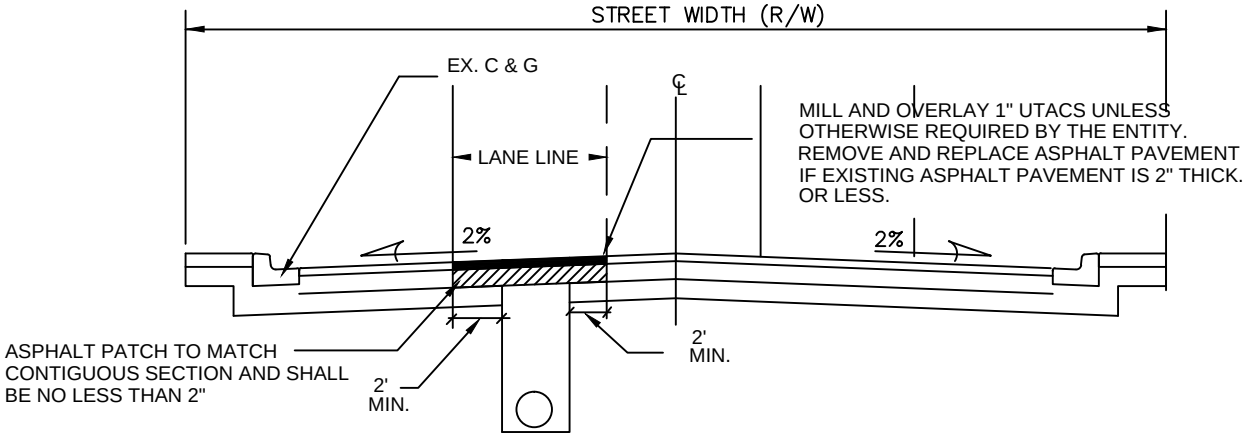
SPECIFICATION REFERENCE	
302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT
406	PRIME COAT
407	FOG SEAL
501	CONCRETE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

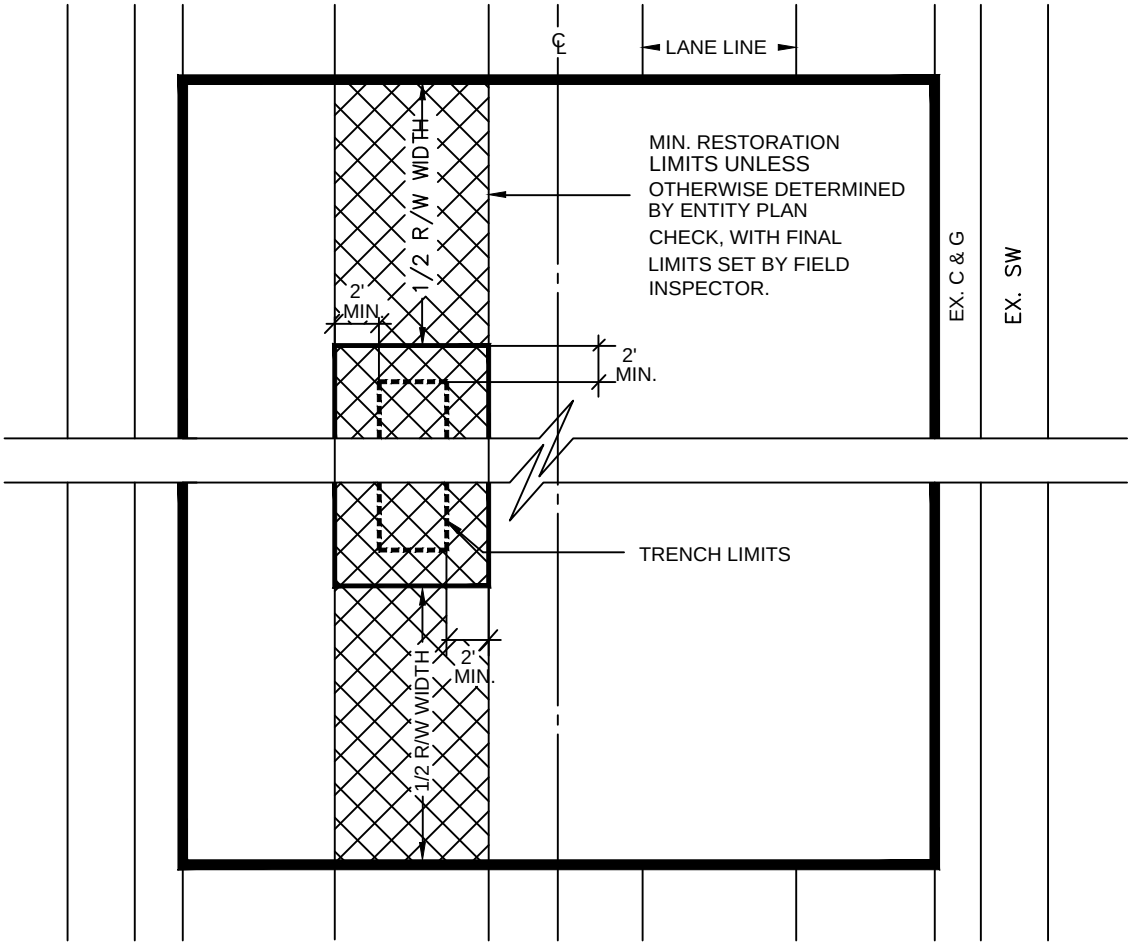
0 TO 5 YEARS PAVEMENT RESTORATION LONGITUDINAL CUT

DATE 6-12-08	DWG. NO. 500.1	SHEET 1 OF 2

Effective 8/10/2023 to 8/07/2024



LONGITUDINAL CUT RESTORATION



PLAN VIEW

NOTES:

SEE DWG. 500.1 SHEET 2 OF 2

AGENCY APPROVED	B	C	H	L	M	N

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

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

0 TO 5 YEARS PAVEMENT RESTORATION LONGITUDINAL CUT

DATE 6-12-08	DWG. NO. 500.1	SHEET 1 OF 2

Effective 8/10/2023 to 8/07/2024

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

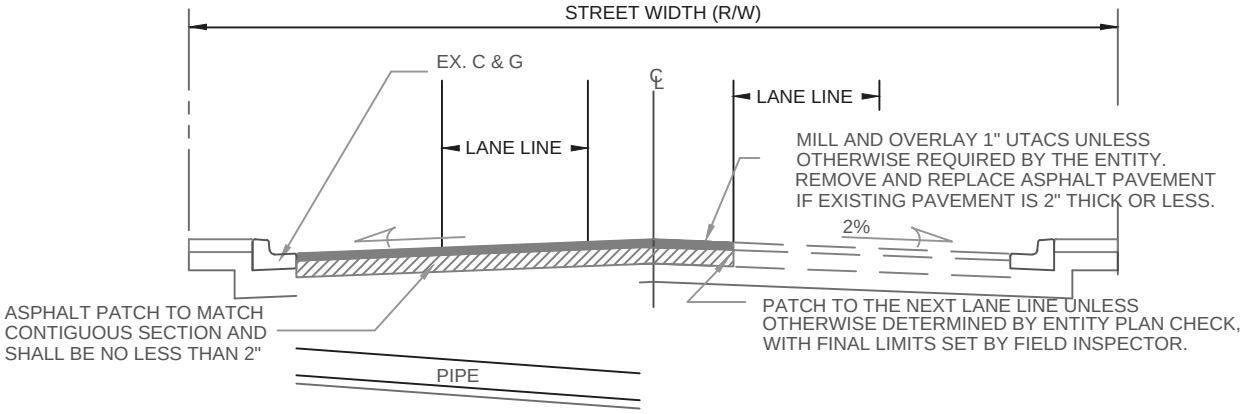
SPECIFICATION REFERENCE	
302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT
406	PRIME COAT
407	FOG SEAL
501	CONCRETE
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

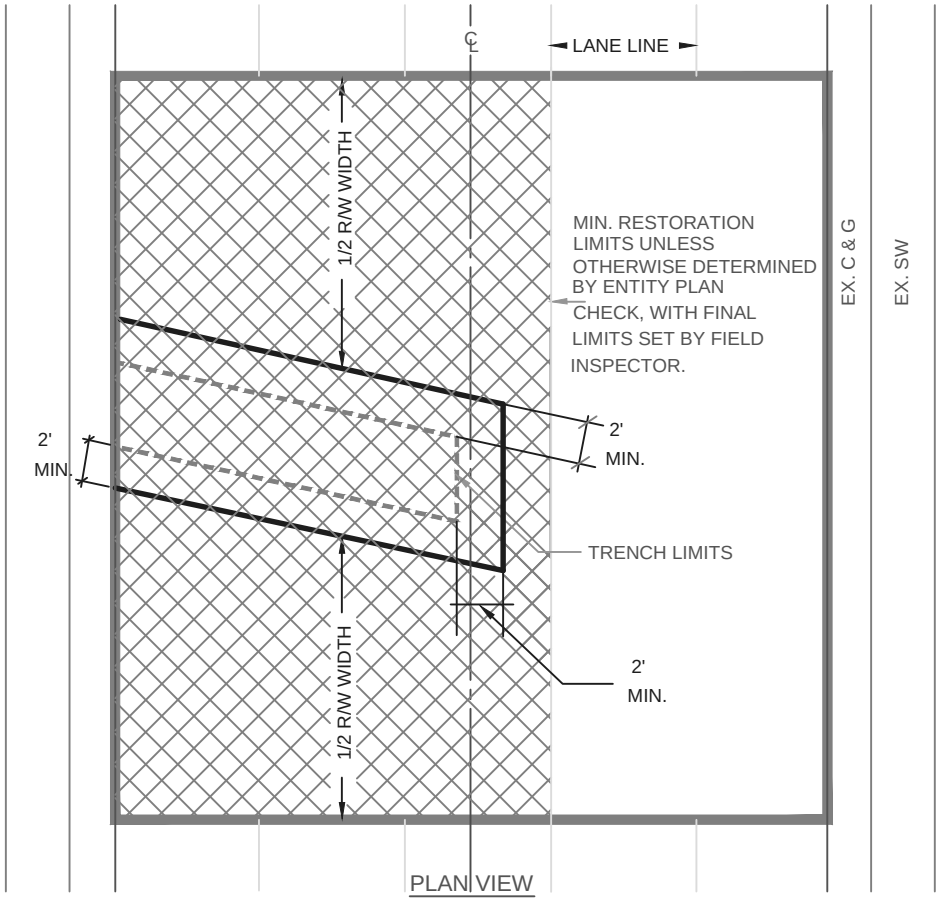
0 TO 5 YEARS
PAVEMENT RESTORATION
LONGITUDINAL CUT

DATE 6-12-08	DWG. NO. 500.1	SHEET 2 OF 2

Effective 8/10/2023 to 8/07/2024



TRANSVERSE CUT RESTORATION



PLAN VIEW

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

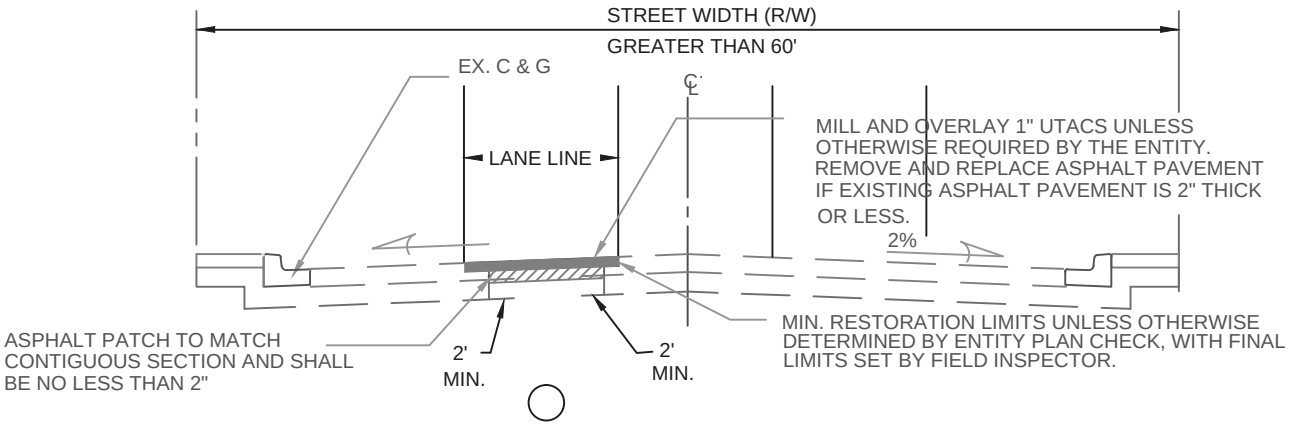
SPECIFICATION REFERENCE	
302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT
406	PRIME COAT
407	FOG SEAL
501	CONCRETE
-	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

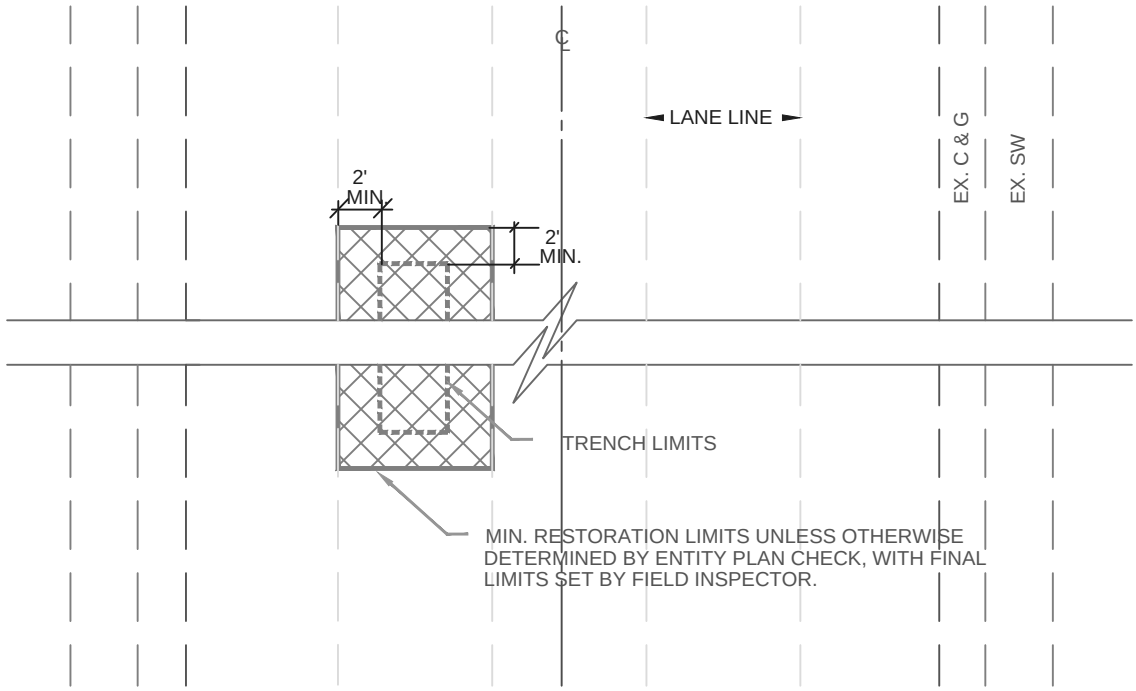
0 TO 5 YEARS
PAVEMENT RESTORATION
TRANSVERSE CUT

DATE 6-12-08 | DWG. NO. 500.2

Effective 8/10/2023 to 8/07/2024



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

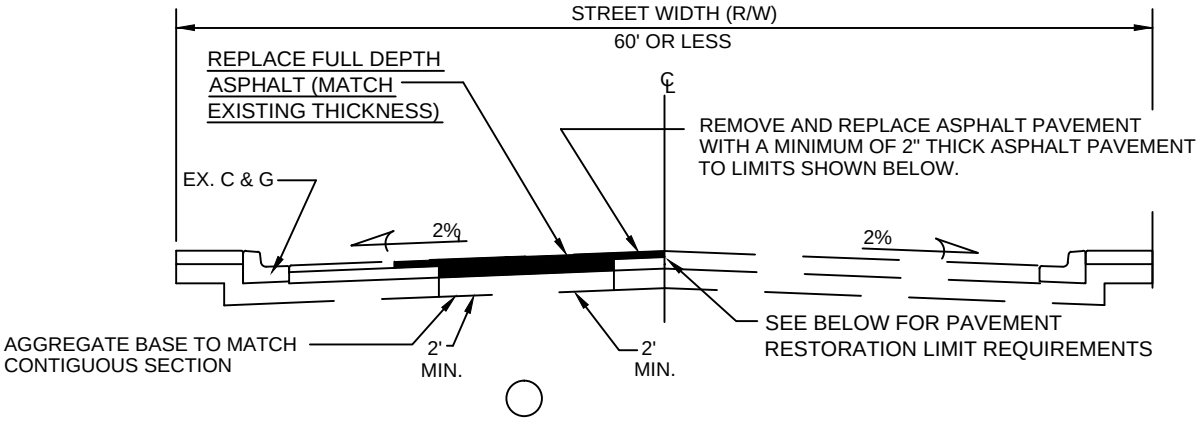
SPECIFICATION REFERENCE	
302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT
406	PRIME COAT
407	FOG SEAL
501	CONCRETE
-	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

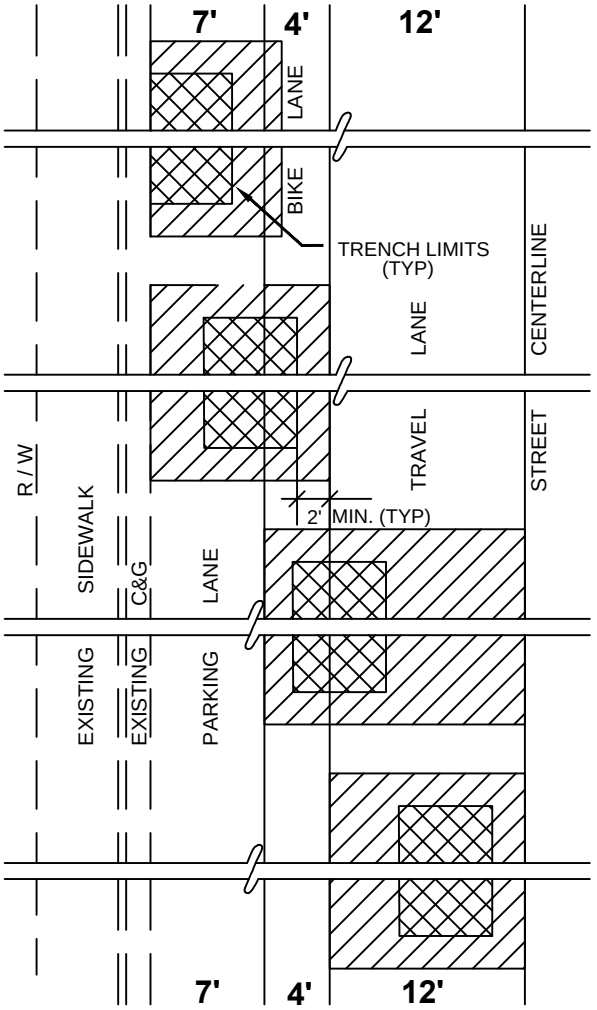
OVER 5 YEARS PAVEMENT RESTORATION - LONGITUDINAL CUT- GREATER THAN 60 FT. RIGHT-OF-WAY

DATE 6-12-08 | DWG. NO. 500.3

Effective 8/10/2023 to 8/07/2024



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

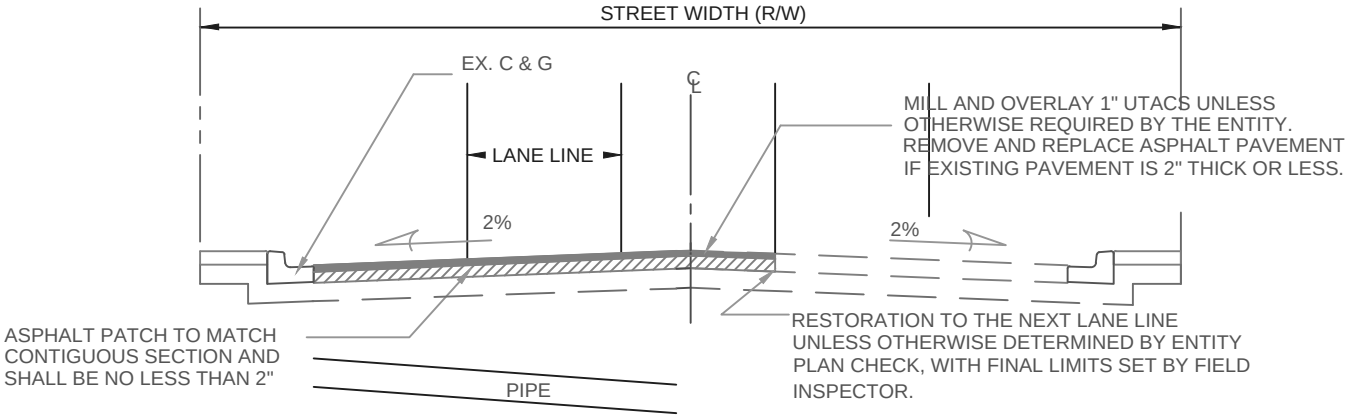
SPECIFICATION REFERENCE	
302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT
406	PRIME COAT
407	FOG SEAL
501	CONCRETE
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

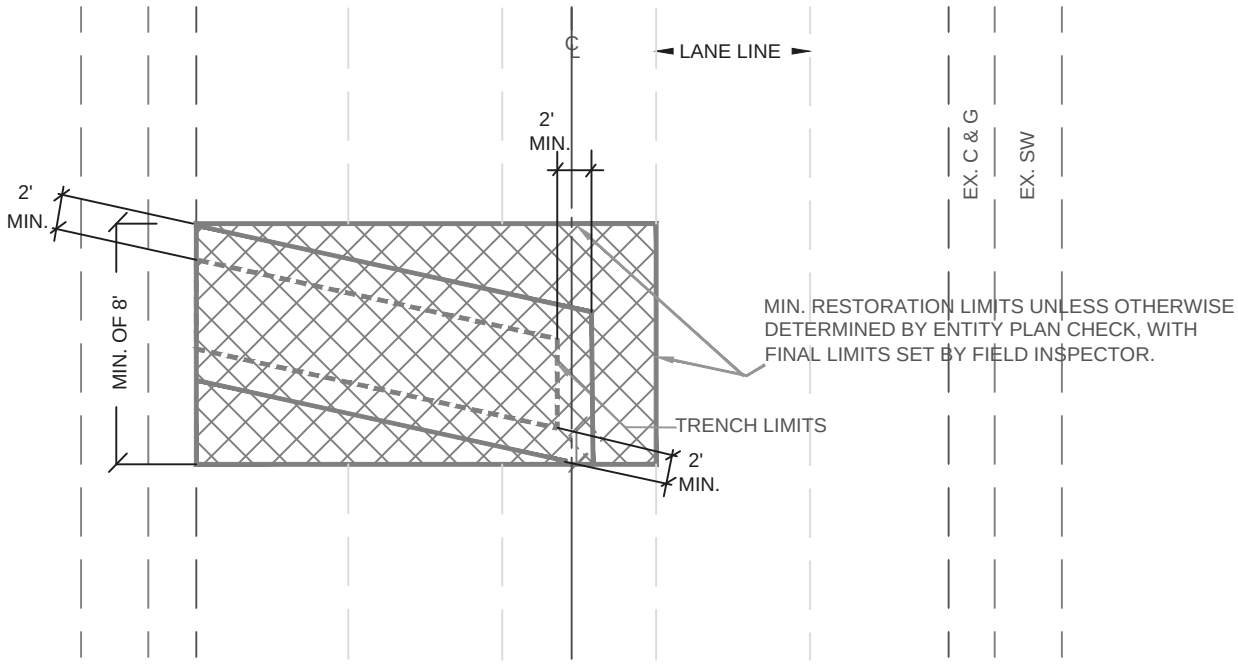
OVER 5 YEARS PAVEMENT RESTORATION LONGITUDINAL CUT - 60' R/W OR LESS

DATE 6-12-08	DWG. NO. 500.4	

Effective 8/10/2023 to 8/07/2024



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.

AGENCY APPROVED	B	C	H	L	M	N

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

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

OVER 5 YEARS
PAVEMENT RESTORATION
TRANSVERSE CUT
ALL RIGHT-OF-WAY WIDTHS

DATE 6-12-08 | DWG. NO. 500.5

Effective 8/10/2023 to 8/07/2024

Effective 8/10/2023 to 8/07/2024

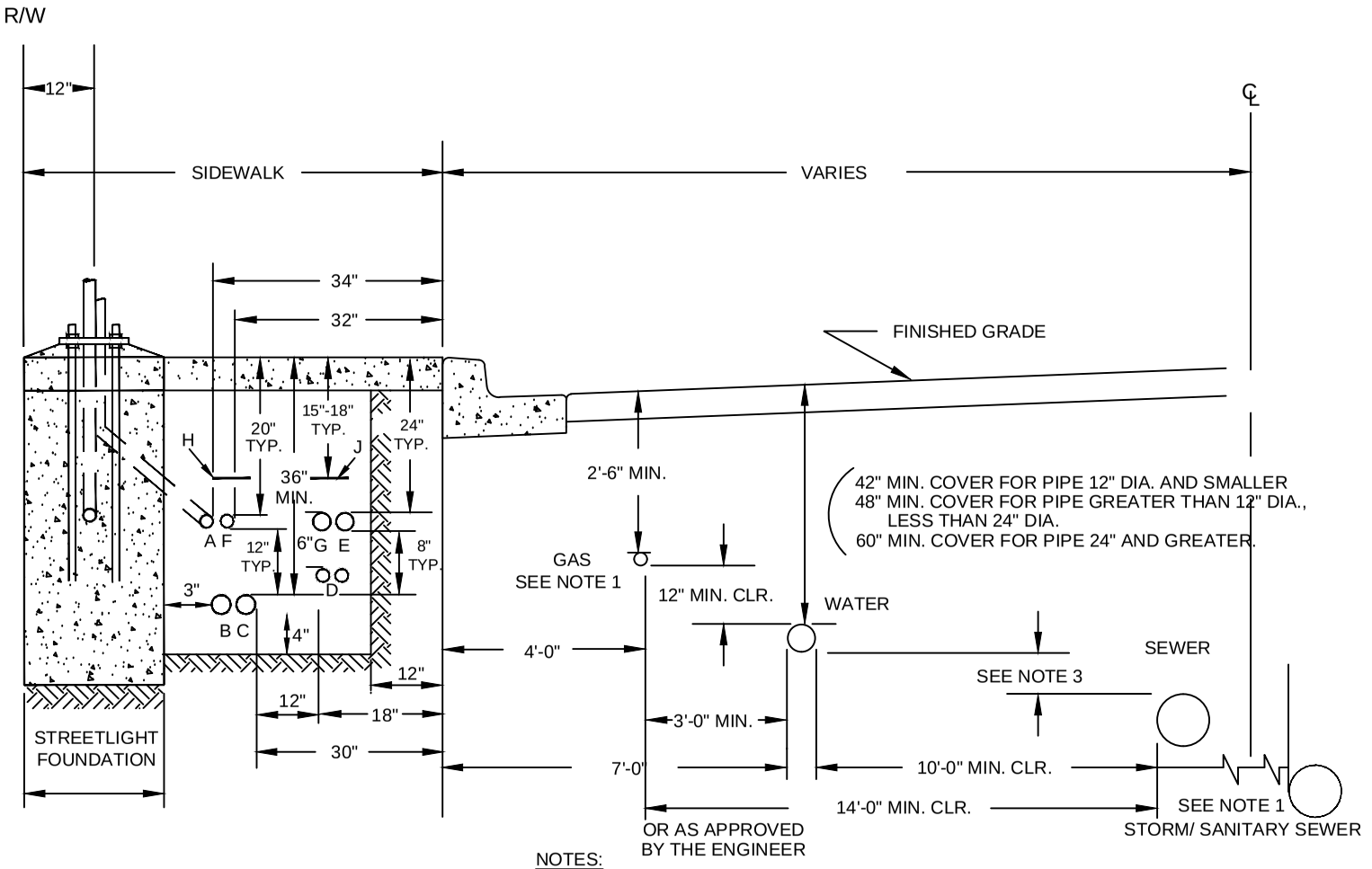
SPECIFICATION REFERENCE

TYPICAL UNDERGROUND UTILITY LOCATIONS IN RESIDENTIAL STREETS WITH 60 FT. OR LESS RIGHT-OF-WAY

DATE 08-09-18 | DWG. NO. 501

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

AGENCY APPROVED | B | C | H | L | M | N



NOTES:

A. STREETLIGHT CONDUIT
B. POWER COMPANY SECONDARY
C. POWER COMPANY PRIMARY
D. TELEPHONE CONDUITS
E. CABLE T.V. CONDUIT
F. TRAFFIC SIGNAL CONDUIT
G. OTHER COMMUNICATIONS CONDUIT
H. POWER MARKING TAPE
J. TELEPHONE MARKING TAPE

1. STORM/SANITARY SEWER AND GAS MAY BE LOCATED ON OTHER SIDE OF CENTERLINE AS TERRAIN AND/OR SEPARATIONS DICTATES.
2. STREETLIGHT FOUNDATIONS SHALL BE LOCATED BEHIND SIDEWALK FOR SIDEWALK WIDTHS LESS THAN 5 FEET PER STANDARD DRAWING NO. 320.
3. SEPARATION DISTANCE SHALL CONFORM TO UTILITY STANDARDS ADOPTED BY THE GOVERNING AGENCY FOR SEWER AND WATER FACILITIES.
4. STREET CONSTRUCTION SHALL CONFORM TO THE DESIGNED PLANS.
5. UTILITY CONSTRUCTION BACKFILL SHALL CONFORM TO SECTION 208.
6. UTILITY LINES SHALL BE RE-ROUTED IF DROP INLET IS IN CONFLICT.
7. WATER TRANSMISSION MAIN SEPARATION SHALL BE REFFERRED TO WATER PURVEYOR GUIDELINES.

Effective 8/10/2023 to 8/07/2024

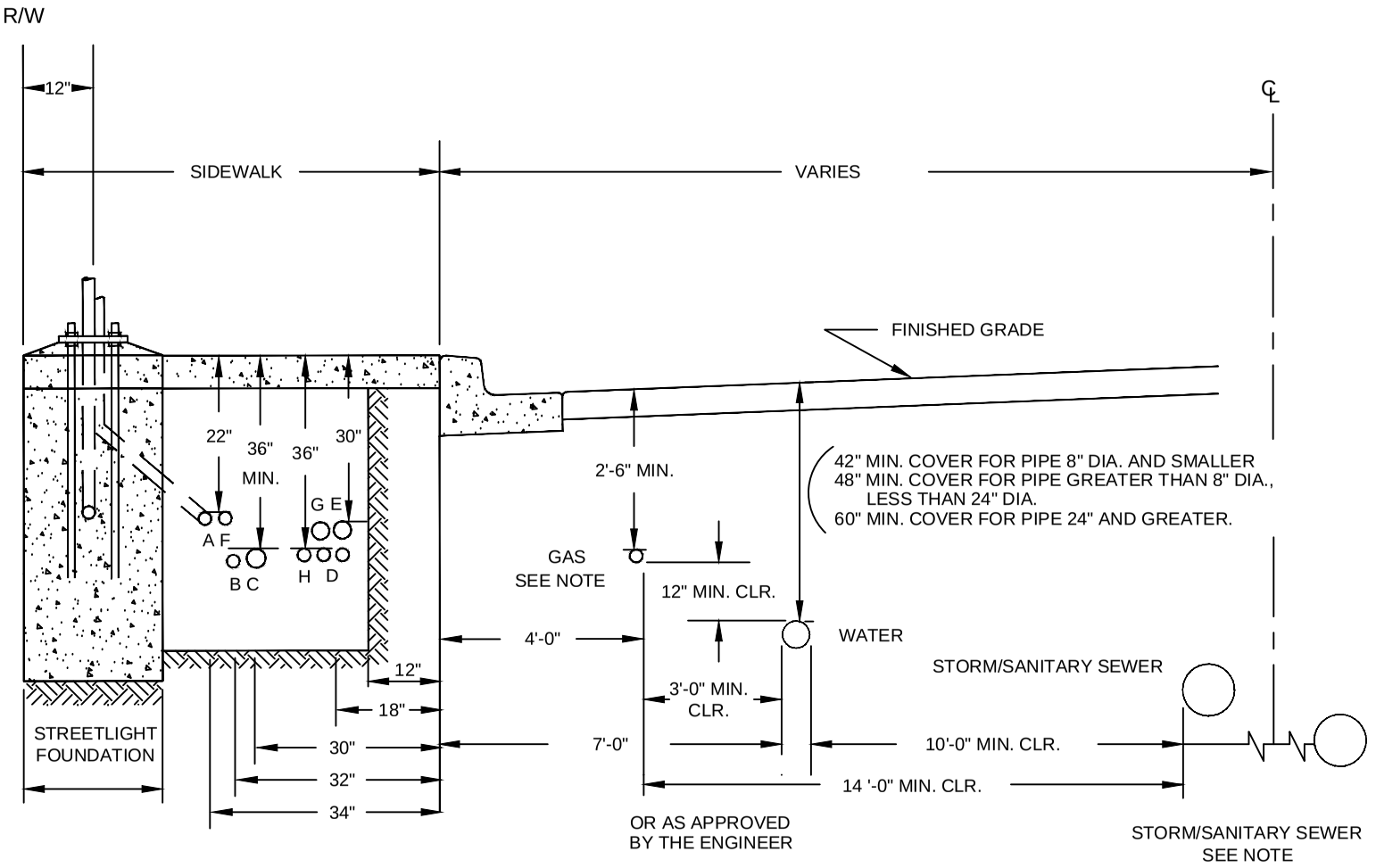
SPECIFICATION REFERENCE

TYPICAL UNDERGROUND
UTILITY LOCATIONS IN STREETS
WITH GREATER THAN 60 FT. RIGHT-OF-WAY

DATE 08-09-18 | DWG. NO. 501.1

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

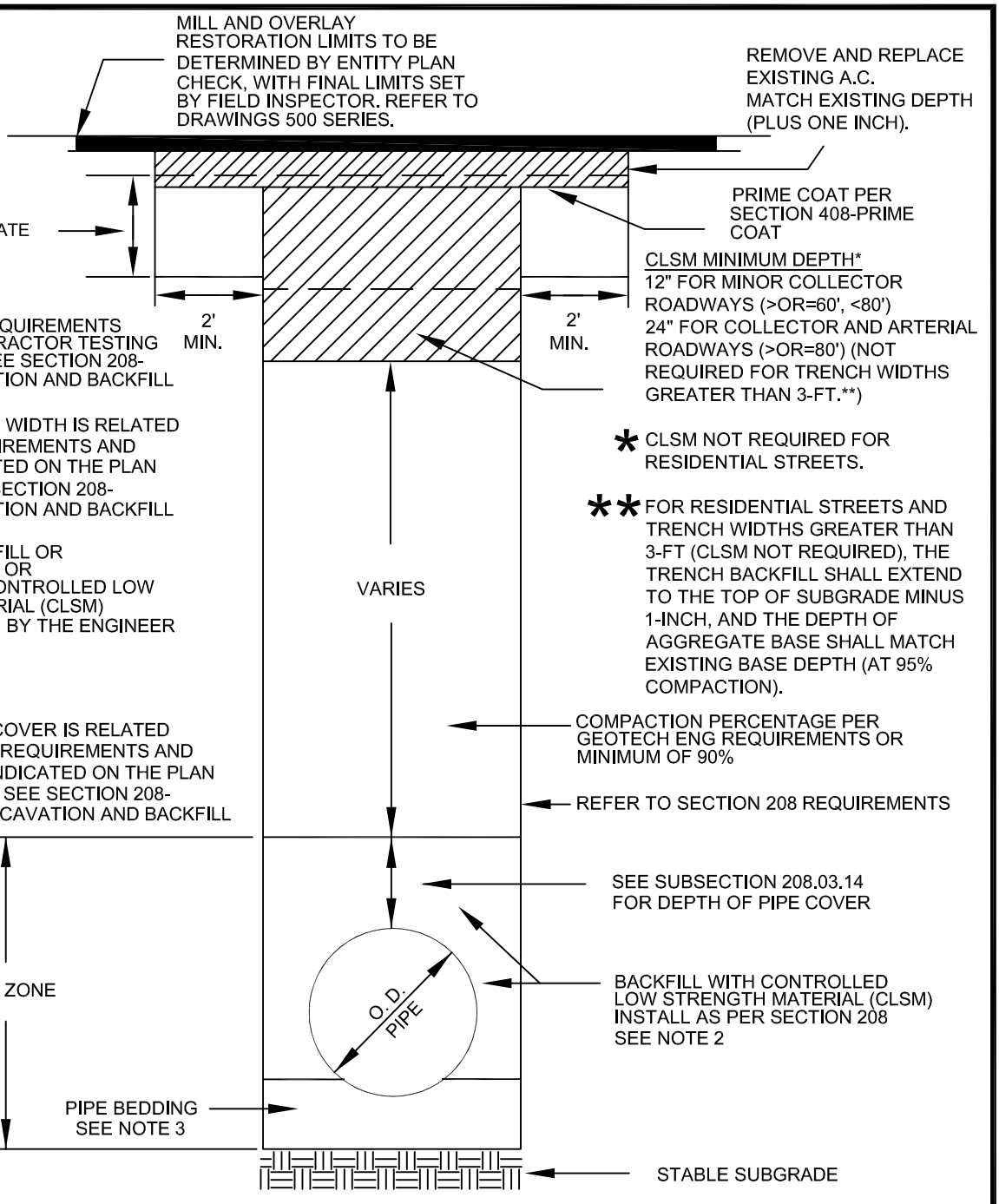
AGENCY APPROVED | B | C | H | L | M | N



A. STREETLIGHT CONDUIT
B. POWER COMPANY SECONDARY
C. POWER COMPANY PRIMARY
D. TELEPHONE CONDUITS
E. CABLE T.V. CONDUIT
F. TRAFFIC SIGNAL CONDUIT
G. OTHER COMMUNICATIONS CONDUIT
H. FAST ITS COMMUNICATIONS CONDUIT

NOTE:

STORM/SANITARY SEWER AND GAS MAY BE INSTALLED ON THE ON THE OTHER SIDE OF CENTERLINE AS TERRAIN AND OR SEPARATIONS DICTATES.



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

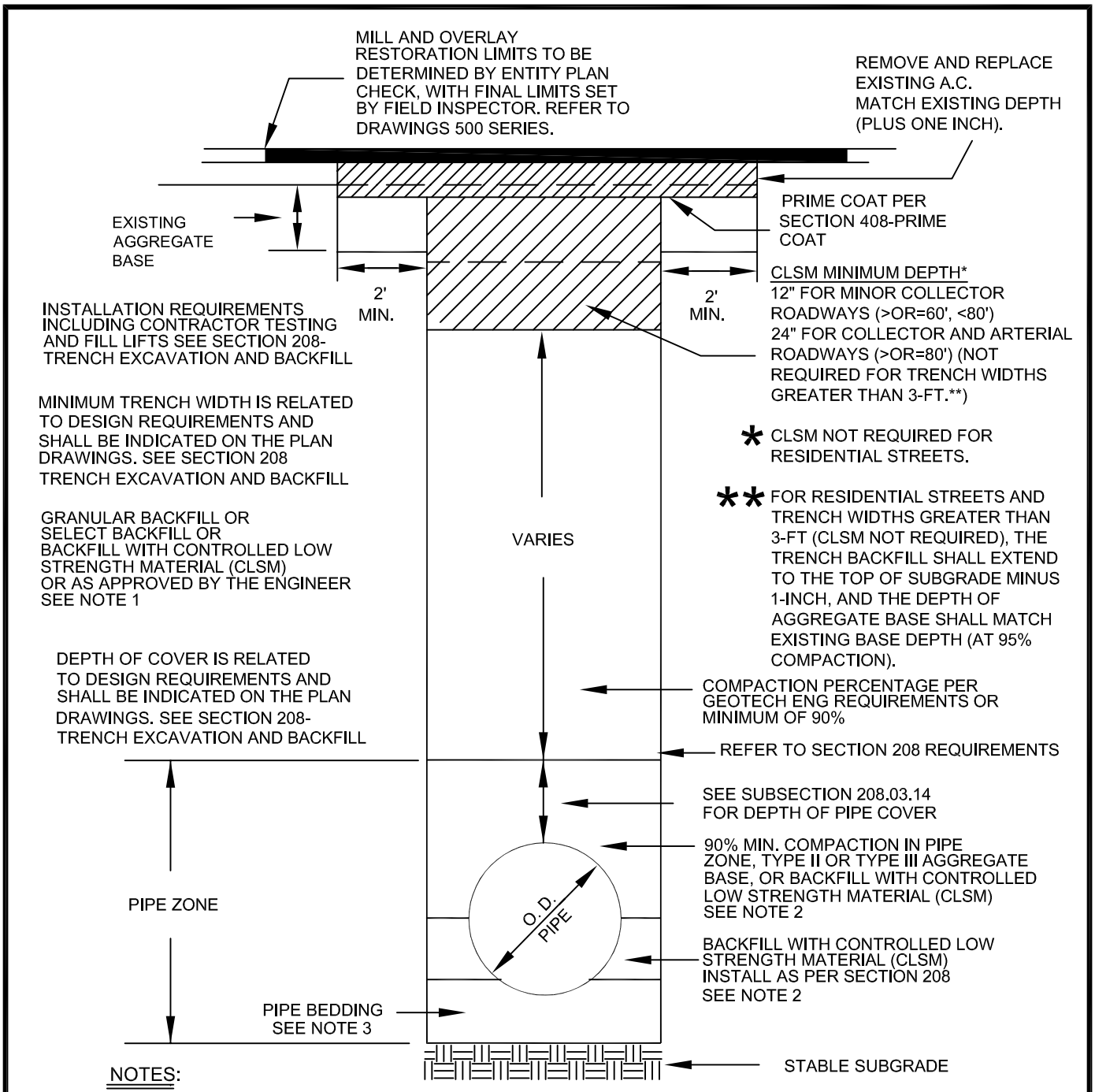
SPECIFICATION REFERENCE	
208	TRENCH EXCAVATION & BACKFILL
302	AGGREGATE BASE COURSES
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

METHOD A FOR FLEXIBLE PIPE TRENCH BACKFILL - PAVED AREAS

DATE 01-01-12	DWG. NO. 503.1	

Effective 8/10/2023 to 8/07/2024



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

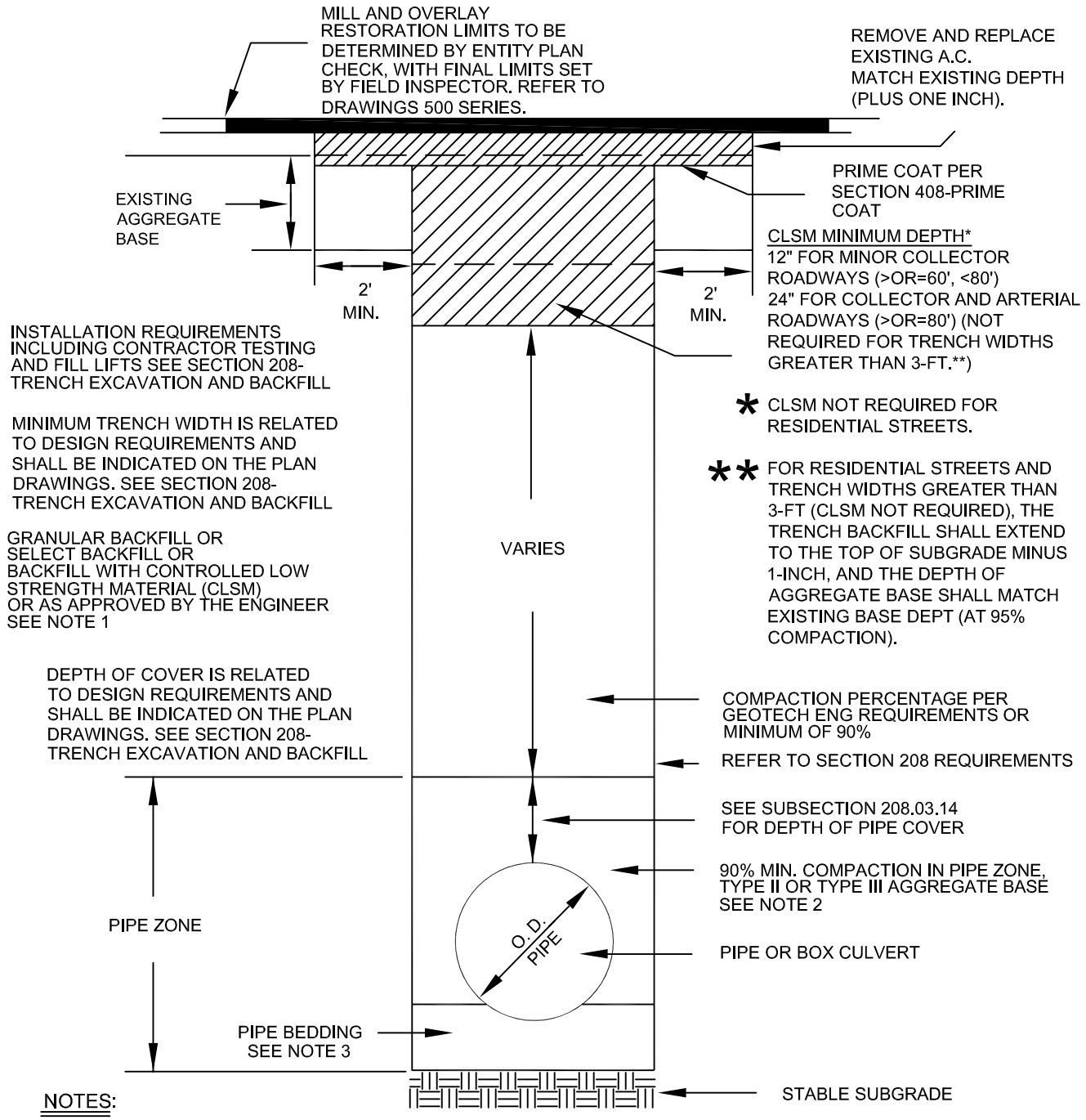
SPECIFICATION REFERENCE	
208	TRENCH EXCAVATION & BACKFILL
302	AGGREGATE BASE COURSES
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

METHOD A FOR RIGID PIPE TRENCH BACKFILL - PAVED AREAS

DATE 01-01-12	DWG. NO. 503.2	

Effective 8/10/2023 to 8/07/2024



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

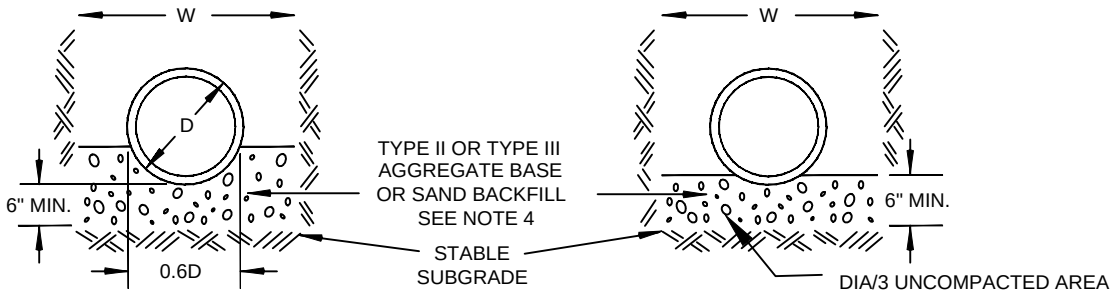
SPECIFICATION REFERENCE	
208	TRENCH EXCAVATION & BACKFILL
302	AGGREGATE BASE COURSES
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

METHOD B FOR RIGID AND FLEXIBLE PIPE TRENCH BACKFILL - PAVED AREAS

DATE 01-01-12	DWG. NO. 503	

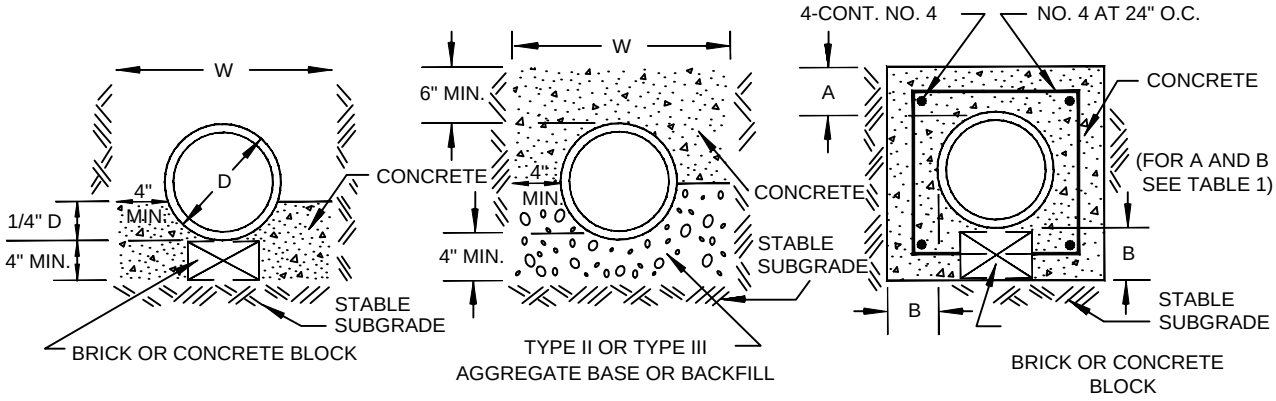
Effective 8/10/2023 to 8/07/2024



SHAPED GRANULAR FOUNDATION

FLAT GRANULAR FOUNDATION

NORMAL BEDDING



CONCRETE CRADLE

CONCRETE CAP

CONCRETE ENCASEMENT

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:

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

AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	
208	TRENCH EXCAVATION & BACKFILL
302	AGGREGATE BASE COURSES
501	CONCRETE
505	REINFORCEMENT STEEL

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

PIPE TRENCH BEDDING METHODS

DATE 11-9-06	DWG. NO. 505	

Effective 8/10/2023 to 8/07/2024

Effective 8/10/2023 to 8/07/2024

SPECIFICATION REFERENCE

215 KEYHOLE POTHOLE EXCAVATION AND BACKFILL

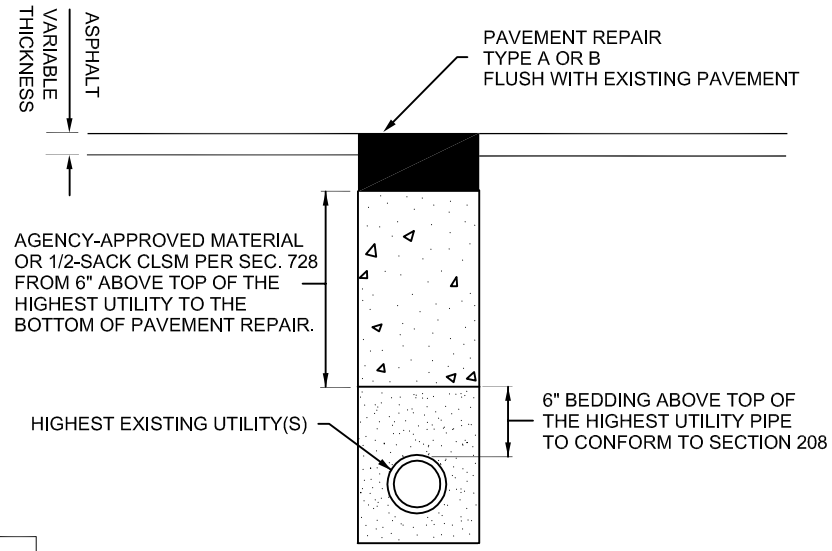
UTILITY POTHOLE REPAIR

DATE 01-01-12 DWG. NO. 506

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

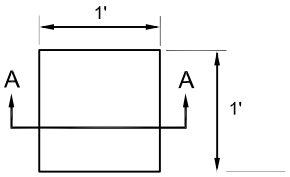
AGENCY APPROVED

B C H L M N



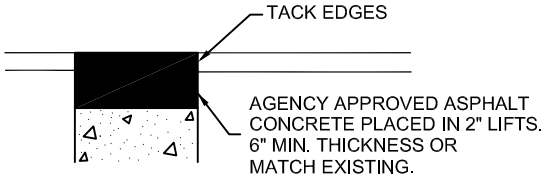
SECTION A-A

TYPE A - CUT & PATCH REPAIR
OPTIONAL FOR ROW WIDTH 60' OR LESS



NOTE: EDGES SHALL BE CUT TO A NEAT VERTICAL FACE.

POTHOLE PLAN VIEW
(NOMINAL DIMENSIONS)

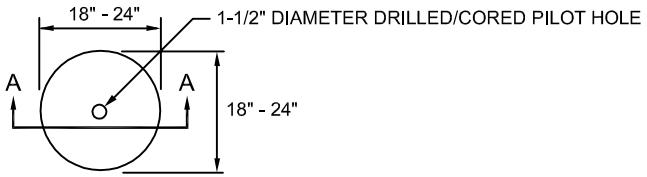


POTHOLE PROFILE

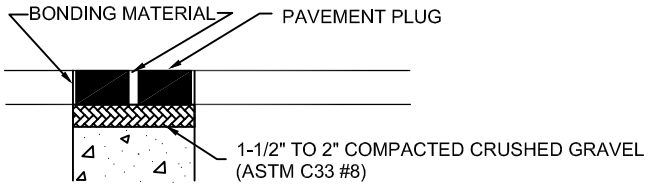
TYPE B - KEYHOLE REPAIR
REQUIRED FOR ROW WIDTH GREATER THAN 60'
OPTIONAL FOR ROW WIDTH 60' OR LESS

NOTES:

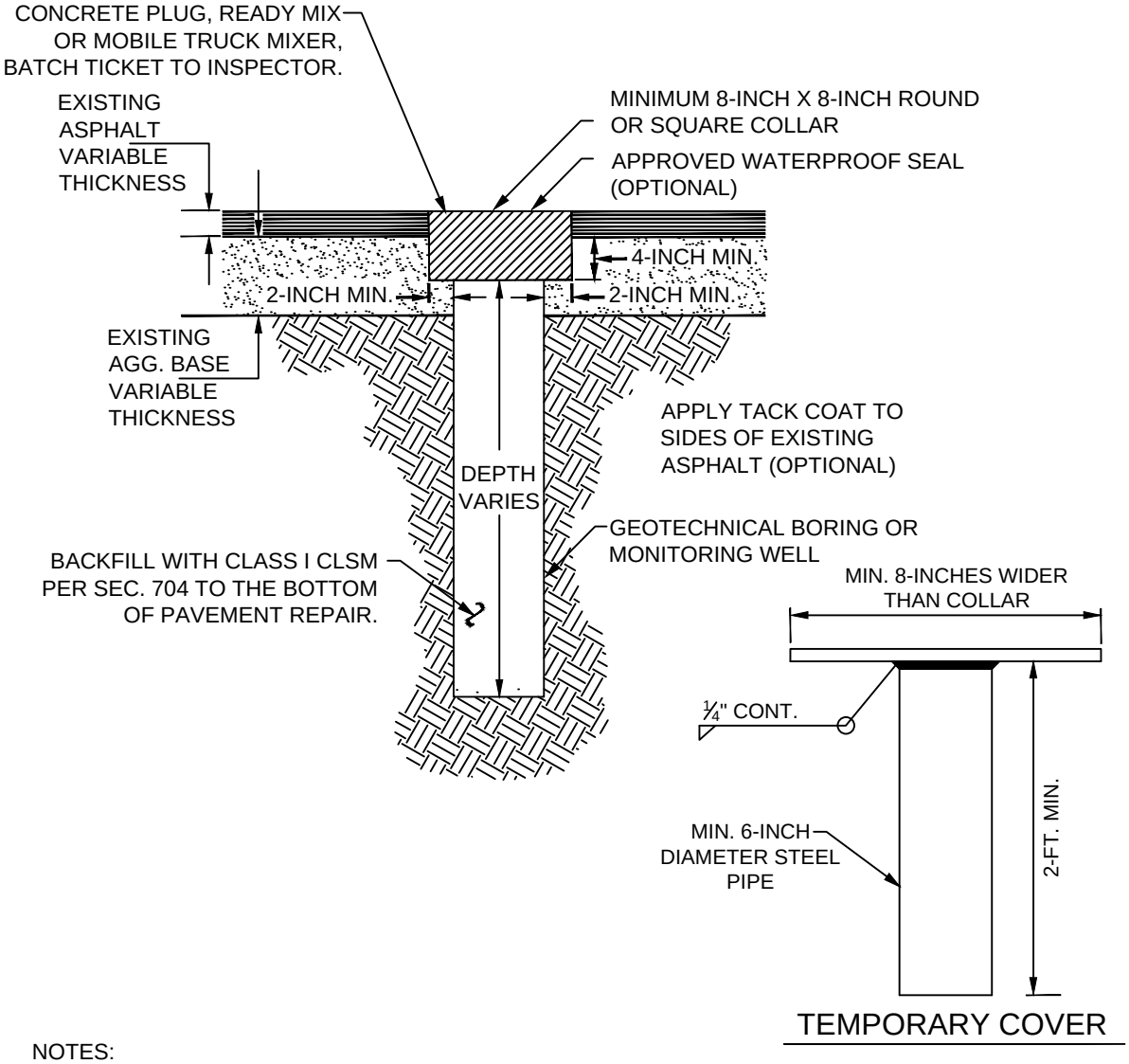
1. CUT AND REMOVE PAVEMENT PLUG WITH AN APPROVED KEYHOLE CORING DEVICE. PAVEMENT TO BE CORED SHALL CONTAIN NO CRACKS AND SHALL BE AT LEAST 4" THICK. IF PLUG IS DAMAGED OR IS LESS THAN 4" THICK, REPLACE PLUG WITH A "FARMED" ASPHALT PLUG FROM AN APPROVED SITE. FARMED PLUGS SHALL BE AT LEAST 4" THICK AND AT LEAST ONE INCH THICKER THAN EXISTING ASPHALT.
2. BONDING MATERIAL SHALL BE A SINGLE COMPONENT CEMENTITIOUS RAPID HARDENING, HIGH STRENGTH, WATERPROOF BONDING AGENT THAT ALLOWS THE CORE TO SUPPORT AT LEAST THREE TIMES AASHTO H-25 LOADING WITHIN 30 MINUTES OF APPLICATION. BOND AGENT MUST SHOW A MINIMUM 20 PSI BOND STRENGTH (ASTM C882) AND A MINIMUM 200 PSI COMPRESSIVE STRENGTH (ASTM C109) IN 30 MINUTES.
3. AGENCY-APPROVED BACKFILL BELOW REPAIR SHALL BE PER SECTION 215.
4. FILL KEYHOLE WITH BONDING MATERIAL DURING REPAIR.
5. PRIOR AGENCY APPROVAL IS REQUIRED FOR MULTIPLE KEYHOLE REPAIRS WITHIN A GIVEN ROADWAY SEGMENT.
6. A 5 YEAR WARRANTY IS REQUIRED ON ALL REPAIRS.



POTHOLE PLAN VIEW
(NOMINAL DIMENSIONS)



POTHOLE PROFILE



TEMPORARY COVER

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	
208	TRENCH EXCAVATION AND BACKFILL
.	

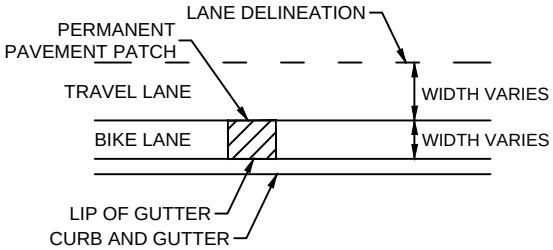
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

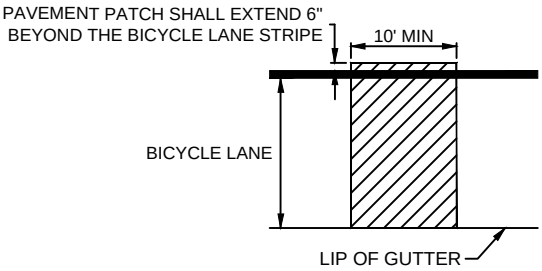
METHOD FOR GEOTECHNICAL BORING AND MONITORING WELL BACKFILL AND PATCH FOR BORINGS 12-INCHES OR LESS IN DIAMETER

DATE 07-01-14	DWG. NO. 507.S1	

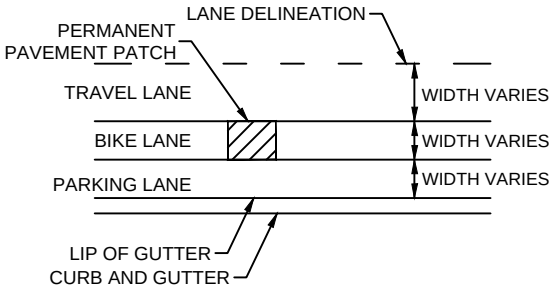
Effective 8/10/2023 to 8/07/2024



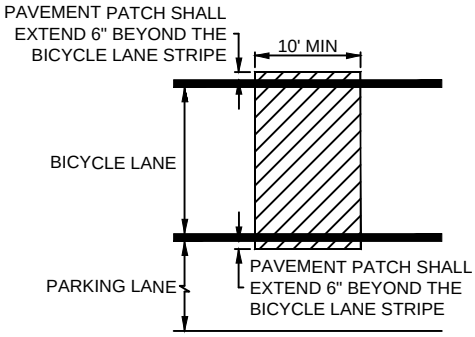
ROADWAY WITH DESIGNATED BICYCLE LANE



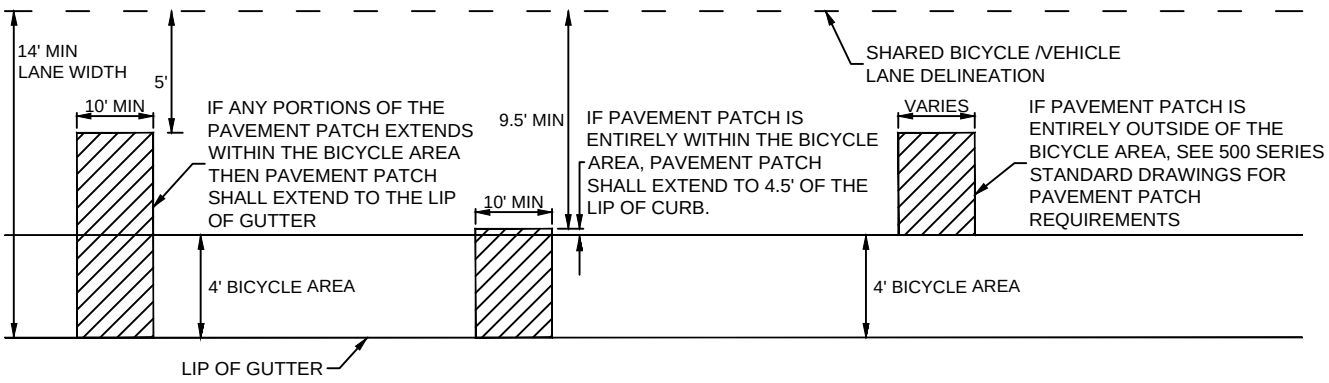
PERMANENT PAVEMENT PATCH DETAIL



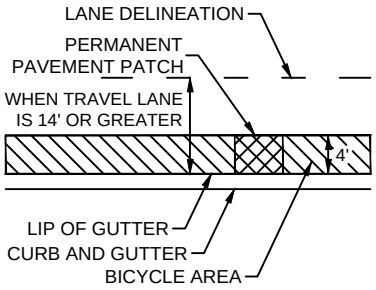
ROADWAY WITH DESIGNATED BICYCLE AND PARKING LANE



PERMANENT PAVEMENT PATCH DETAIL



PERMANENT PAVEMENT PATCH DETAIL



ROADWAY WITH SHARED
BICYCLE/VEHICLE LANE

AGENCY APPROVED				L		

SPECIFICATION REFERENCE	
208	TRENCH EXCAVATION & BACKFILL
302	AGGREGATE BASE COURSES
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

BICYCLE LANE PERMANENT PAVEMENT PATCH

DATE 01-01-16	DWG. NO. 508.S1	SHEET 1 OF 2

Effective 8/10/2023 to 8/07/2024

GENERAL NOTES:

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 CONTRACTORS 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.

AGENCY APPROVED				L		

SPECIFICATION REFERENCE	
208	TRENCH EXCAVATION & BACKFILL
302	AGGREGATE BASE COURSES

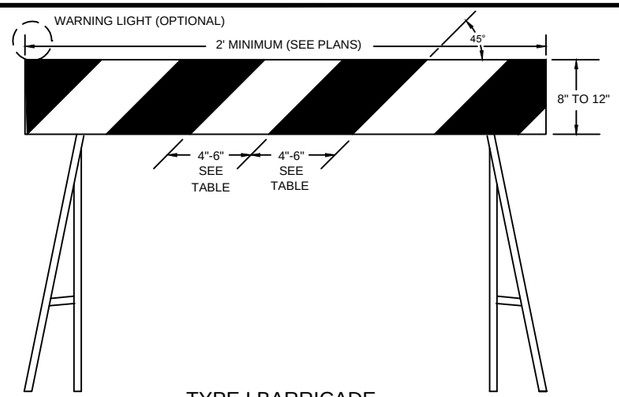
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

BICYCLE LANE PERMANENT PAVEMENT PATCH

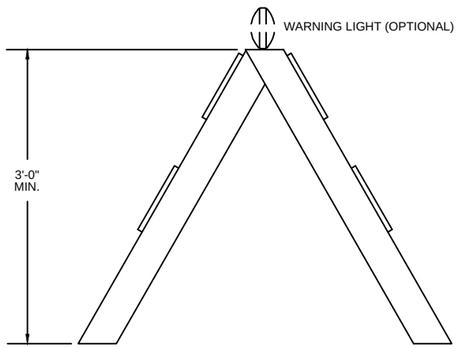
DATE 01-01-16	DWG. NO. 508.S1	SHEET 2 OF 2

Effective 8/10/2023 to 8/07/2024



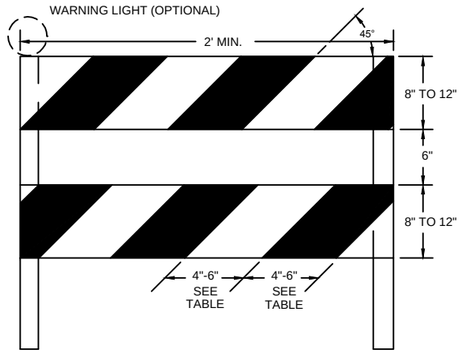
TYPE I BARRICADE

WARNING LIGHT (OPTIONAL)



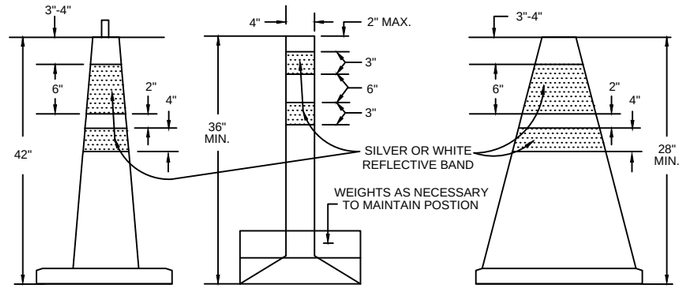
TYPE II BARRICADE

(FRAMEWORK TO BE WHITE OR ORANGE)



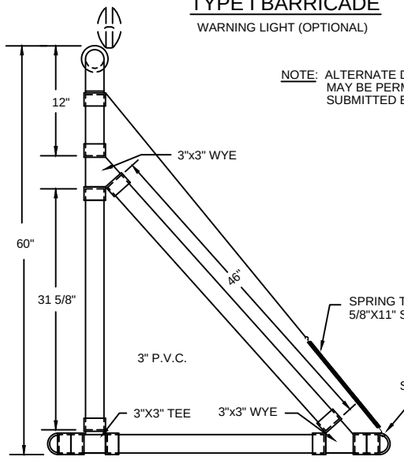
BARRICADE NOTES

1. 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.
2. 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.
3. WARNING LIGHTS MAY BE PLACED ON ALL BARRICADES WHEN USED DURING NIGHTTIME HOURS.
4. 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.
5. THE SIDES OF BARRICADES FACING TRAFFFIC SHALL HAVE RETROREFLECTIVE SURFACE.



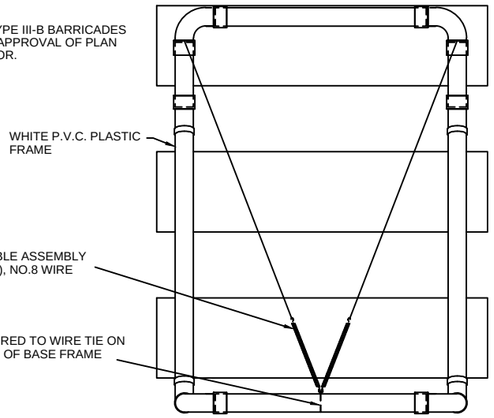
TRAFFIC CONES

1. CONES TO BE PREDOMINATELY ORANGE.
2. CONES TO BE USED DURING HOURS OF DARKNESS SHALL BE REFLECTORIZED AS SHOWN ABOVE.
3. CONES, DRUMS AND VERTICAL PANEL POST SHALL HAVE WEIGHTED BASES; HOWEVER IF THE 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.

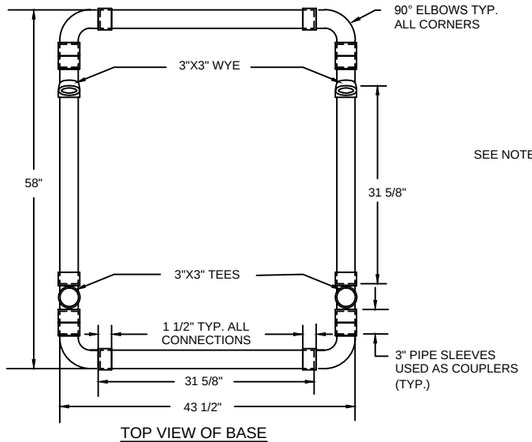


SIDE VIEW

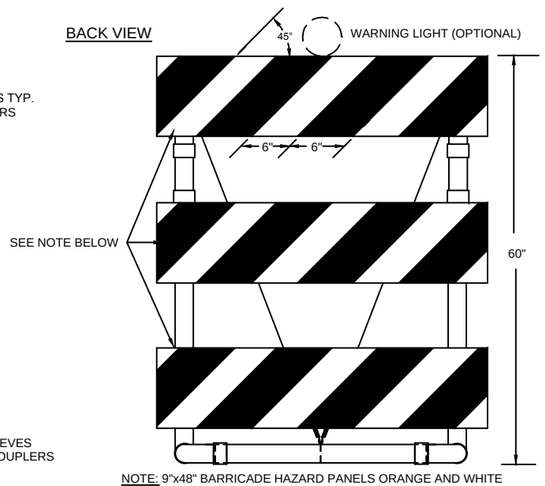
NOTE: ALTERNATE DESIGNS OF TYPE III-B BARRICADES MAY BE PERMITTED UPON APPROVAL OF PLAN SUBMITTED BY CONTRACTOR.



BACK VIEW



TOP VIEW OF BASE



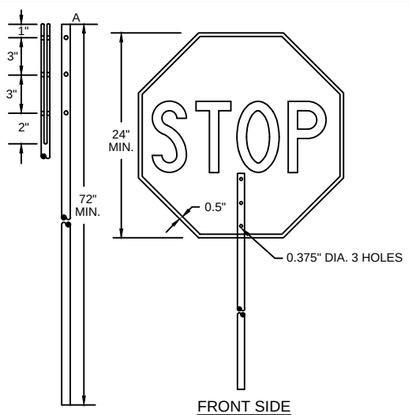
NOTE: 9"x48" BARRICADE HAZARD PANELS ORANGE AND WHITE RIGHT OR LEFT. (0.025 ANODIZED ALUMINUM OR 3/4" WOOD) PANELS ATTACHED WITH 1" NO.14 PAN HEAD METAL SCREW.

FRONT VIEW

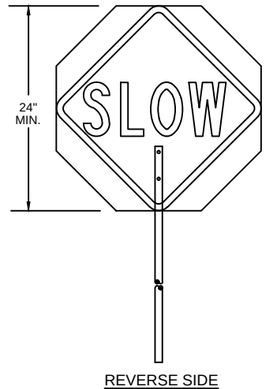
TYPE IIIB BARRICADE

(BARRICADE TO BE WEIGHTED DOWN WITH SANDBAGS)

BARRICADE CHARACTERISTICS			
TYPE	I	II	IIIB
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



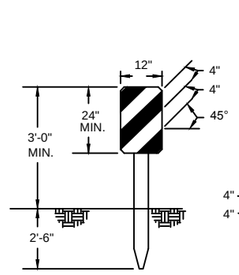
FRONT SIDE



REVERSE SIDE

FLAGGER SIGN

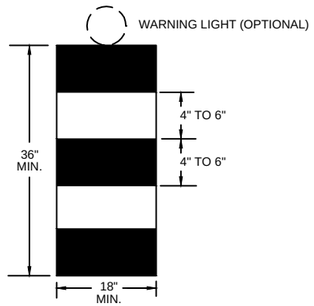
1. THE STOP FACE SHALL CONSIST OF WHITE LETTERS AND BORDER ON A RED REFLECTORIZED BACKGROUND.
2. THE SLOW FACE SHALL CONSIST OF BLACK LETTERS AND BORDER ON AN ORANGE REFLECTORIZED BACKGROUND.
3. BOTH FACES SHALL BE MADE OF MATERIALS CONFORMING TO SECTION 716.03.01 OF THE UNIFORM STANDARD SPECIFICATIONS.
4. AREAS OUTSIDE SIGN BORDERS SHALL BE BLACK.
5. THE SIGN BLANK SHALL BE OCTAGONAL.
6. THE PORTION OF THE STAFF WITHIN THE SIGN FACE SHALL MATCH THE SIGN COLORS.
7. ALL COLORS AND LETTERS SHALL MEET APPLICABLE FEDERAL STANDARDS.
8. 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.
9. THIS SIGN SHALL BE FURNISHED BY THE CONTRACTOR AND SHALL BE USED BY THE FLAGGER IN LIEU OF FLAGS OR OTHER SIGNALING DEVICES.
10. STOP - SIX (6) INCH SERIES C LETTERS. SLOW - SIX (6) INCH SERIES B LETTERS.
11. PADDLES SHALL CONFORM TO SECTION 6E-4 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
12. THE PADDLE MAY BE SUPPLEMENTED BY ONE OR TWO SYMMETRICALLY POSITIONED ALTERNATELY FLASHING WHITE HIGH INTENSITY LAMPS ON EACH SIDE.



VERTICAL PANEL

FRONT & BACK SIDE

VERTICAL PANEL POST



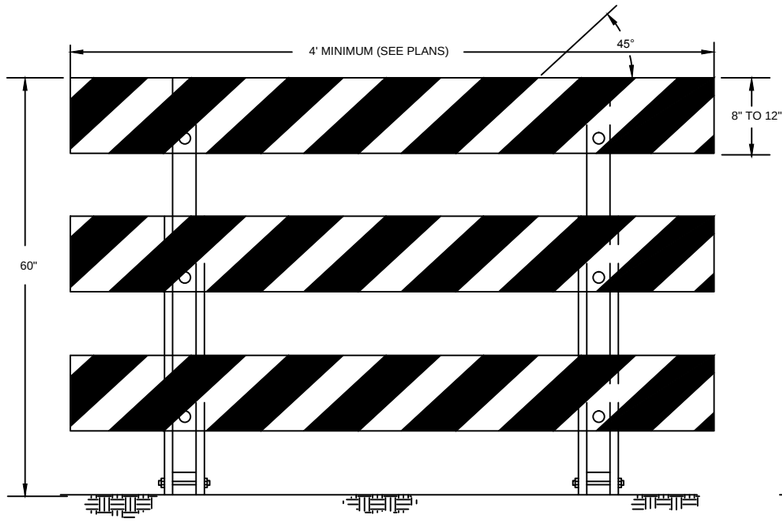
TRAFFIC DRUM

AGENCY APPROVED	B	C	H	L	M	N

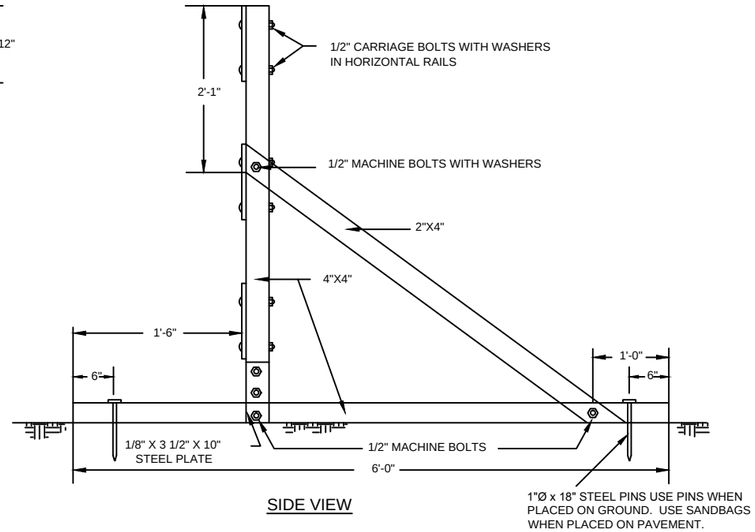
Effective 8/10/2023 to 8/07/2024

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 1 OF 2

TYPE IIIA BARRICADE
N.T.S.

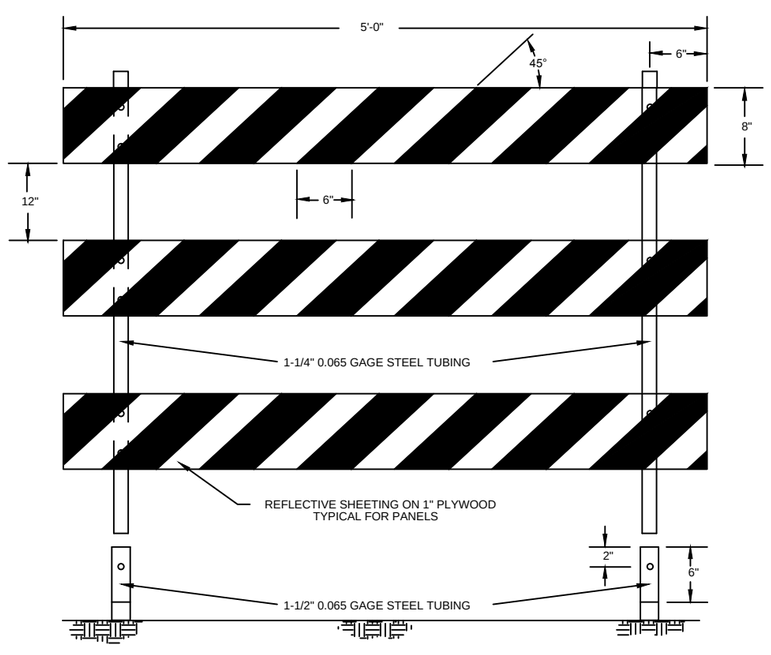


FRONT VIEW

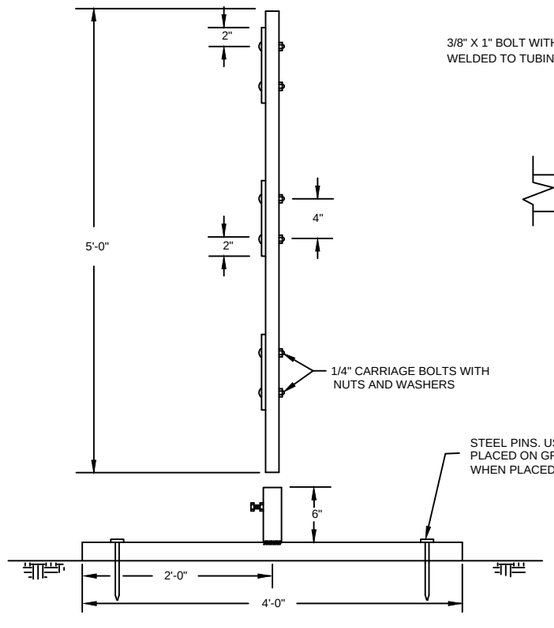


SIDE VIEW

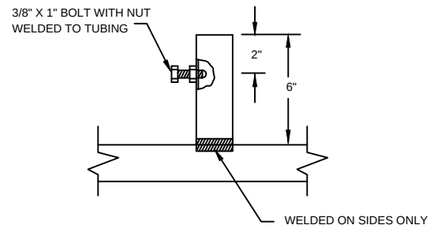
PORTABLE TYPE IIIA BARRICADE
N.T.S.



FRONT VIEW



SIDE VIEW



FOOT DETAIL

Effective 8/10/2023 to 8/07/2024

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

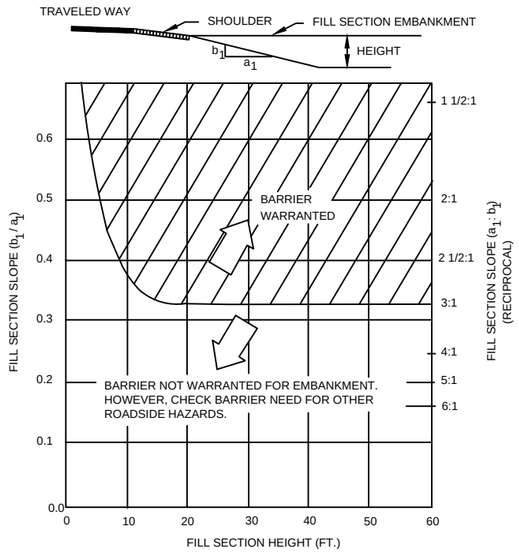


FIGURE A. WARRANTS FOR FILL SECTION EMBANKMENTS

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.

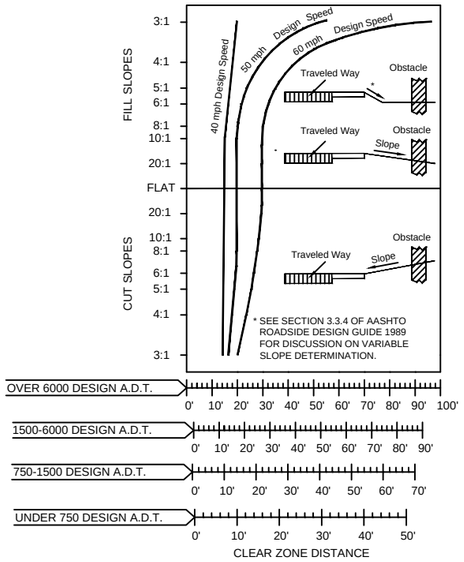


FIGURE B. CLEAR ZONE DISTANCE CURVES

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

TABLE 1. CLEAR ZONE DISTANCES (IN FEET FROM EDGE OF DRIVING LANE)

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

* 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

1 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.

2 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.

3 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.

4 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

DEGREE OF CURVE	K_{CZ} (CURVE CORRECTION FACTOR) 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						

$CZ_C = (L_C)(K_{CZ})$

WHERE: CZ_C = CLEAR ZONE ON OUTSIDE OF CURVATURE, FT.

L_C = CLEAR ZONE DISTANCE, FT., FIGURE B.

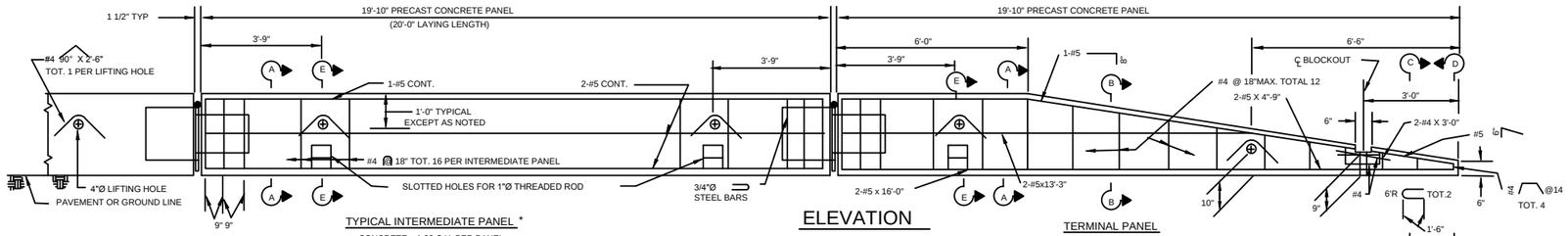
K_{CZ} = CURVE CORRECTION FACTOR

NOTE: CLEAR ZONE CORRECTION FACTOR IS APPLIED TO OUTSIDE CURVES ONLY. CURVES FLATTER THAN 2° DO NOT REQUIRE AN ADJUSTED CLEAR ZONE.

Effective 8/10/2023 to 8/07/2024

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



TYPICAL INTERMEDIATE PANEL *

CONCRETE: 1.93 C.Y. PER PANEL
REINFORCING: 169 LBS. PER PANEL
WEIGHT: 3.9 TONS PER PANEL

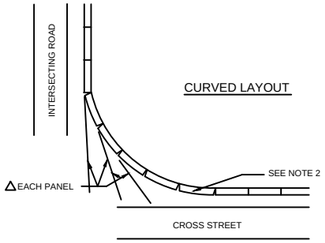
* ALTERNATE LENGTHS MAY BE USED IF APPROVED BY THE ENGINEER.

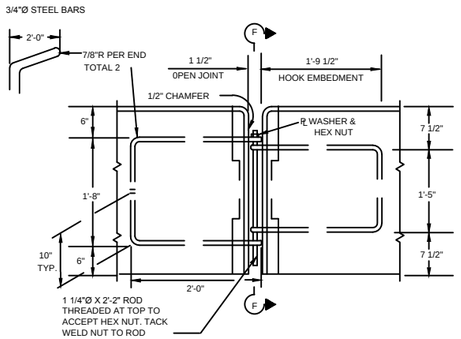
ELEVATION

TERMINAL PANEL

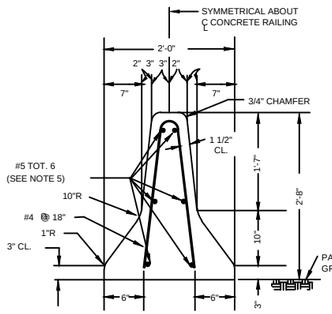
CONCRETE: 1.55 C.Y. PER PANEL
REINFORCING: 144 LBS. PER PANEL
WEIGHT: 3.1 TONS PER PANEL

NOTE:#4 @ 18" AND #4 @14" MAY BE REPLACED BY WELDED WIRE FABRIC OF EQUIVALENT CROSS-SECTIONAL AREA. FOR DETAILS NOT SHOWN IN SECTIONS B-B, C-C, & D-D, SEE SECTION A-A

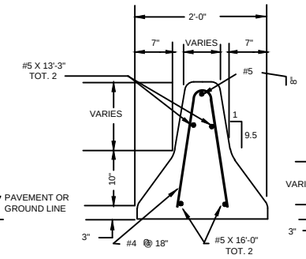




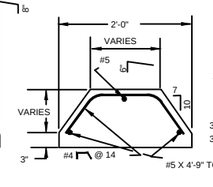
CONNECTION DETAIL



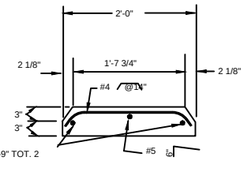
SECTION A-A



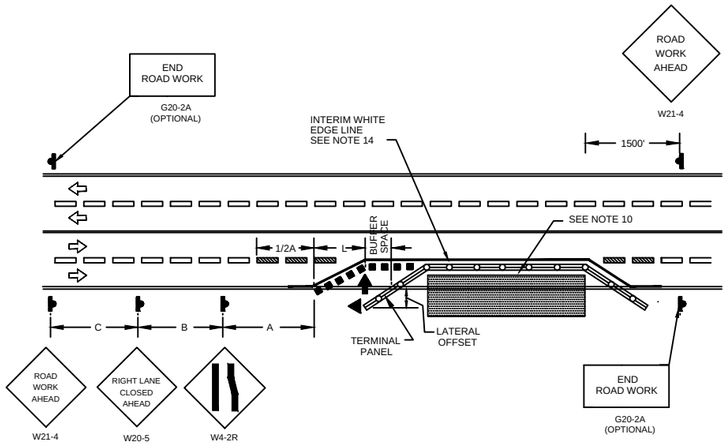
SECTION B-B

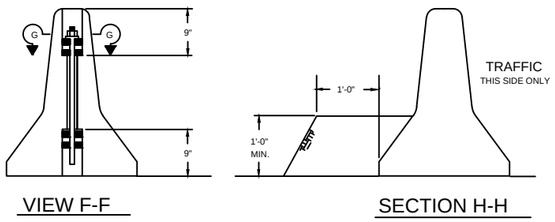


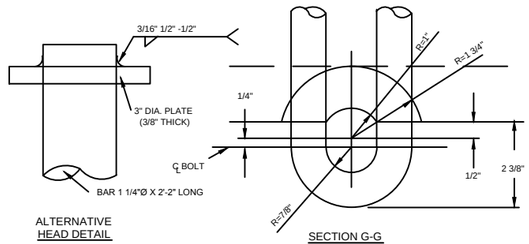
SECTION C-C



SECTION D-D







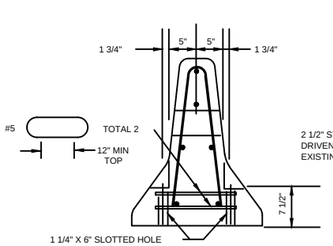
PIN CONNECTION DETAIL

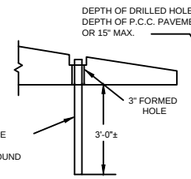
TAPER LENGTHS FOR LANE CLOSURES - DISTANCE L					
SPEED	TAPER LENGTH LANE WIDTH IN FEET			NUMBER OF CHANNELIZING DEVICES FOR TAPER	MAX. SPACING OF DEVICES ALONG TAPER IN FEET
MILES PER HOUR 85th PERCENTILE	10	11	12		
20	70	75	80	5	20
25	105	115	125	6	25
30	150	165	180	7	30
35	205	225	245	8	35
40	270	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.

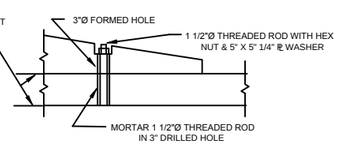
PANEL ALIGNMENT		
SPEED (M.P.H.)	MAXIMUM TAPER	MINIMUM LATERAL OFFSET (FT.)
70	15:1	10.0
65	14:1	9.0
60	13:1	8.0
55	12:1	7.25
50	11:1	6.5
45	10:1	5.75
40	9:1	5.0
35	8:1	4.25
30	7:1	3.5
25	6:1	2.75
20	5:1	2.0





A.C. PAVEMENT OR GROUND ANCHORAGE

(SEE NOTE 4)



P.C.C. PAVEMENT ANCHORAGE

(SEE NOTES 3 & 4)

NOTES:

1. THE MINIMUM LENGTH OF PORTABLE BARRIER SYSTEM SHOULD BE 100 FT. IN ACCORDANCE WITH CURRENT EDITION AASHTO ROADSIDE DESIGN GUIDE.
2. WHERE BARRIERS ARE PLACED ON CURVES AND RADII THAT ARE TOO SEVERE TO MATCH UP JOINTS, BARRIERS ARE TO BE BACKED CONTINUOUSLY WITH EARTH FILL. SEE SECTION H-H.
3. BOLT UNITS TO DECK SLABS WHEN REQUIRED BY BRIDGE PLANS.
4. ATTACH UNITS TO PAVEMENT WHEN REQUIRED IN THE PLANS.
5. THE TWO #5 BARS SHALL BE EQUALLY SPACED FROM THE VERTEX OF THE STIRRUP BARS. ONE #5 BAR SHALL BE TIGHTLY WIRED TO THE STIRRUP BARS AND THE SECOND #5 BAR SHALL BE TACK WELDED TO THE STIRRUP BARS. EACH PROCESS SHALL BE CONTINUOUS FOR EACH #5 BAR.
6. THE USE OF A BARRIER SHALL BE BASED ON THE NEED DETERMINED IN SHEET 1 OF THIS DRAWING, IN CONJUNCTION WITH THE ROADSIDE DESIGN GUIDE, CURRENT EDITION, OR WHEN CALLED FOR ON THE PLANS.
7. BARRIERS SHALL BE FLARED BEYOND THE SHOULDER OR HAVE A CRASH CUSHION TO PROTECT TRAFFIC FROM THE END OF THE BARRIER. TERMINAL PANELS MAY BE USED AT ENDS ON PORTABLE BARRIER SYSTEM WHICH FACE ONCOMING TRAFFIC FOR SPEEDS LESS THAN 40 MPH.
8. ALTERNATE STRUCTURAL DETAILS MAY BE PERMITTED IF DOCUMENTED WITH DRAWINGS SUBMITTED BY THE CONTRACTOR AND APPROVED BY THE TRAFFIC ENGINEER.
9. EVERY PRECAST CONCRETE PANEL SHALL BE JOINED WITH EACH PANEL ADJACENT TO IT. THE CONNECTION DETAILS TO CONFORM WITH THOSE SHOWN ABOVE, OR CONFORMING WITH ALTERNATE DETAIL DESIGN SUBMITTED BY THE CONTRACTOR & APPROVED BY THE TRAFFIC ENGINEER. OPENINGS IN BARRIER SHOULD BE AVOIDED.
10. PROVIDE AT LEAST 3 FT. BETWEEN THE BARRIER AND THE WORK AREA. IF LESS THAN 3 FT., BARRIER SHALL BE ANCHORED IN ACCORDANCE WITH CURRENT EDITION OF AASHTO ROADSIDE DESIGN GUIDE.
11. CORNERS OF BARRIERS MAY BE BEVELED TO ALLOW PLACEMENT ON CURVES AND SHOULD BE FREE FROM JAGGED EDGES TO AVOID SNAGGING OF VEHICLES.
12. WHEN TEMPORARY BARRIERS ARE INSTALLED ON BOTH SIDES OF TRAFFIC, BEGINNINGS OF BARRIERS SHOULD BE STAGGERED.
13. FOR BETTER NIGHT VISIBILITY, STEADY BURN LIGHTS MAY BE MOUNTED ALONG BARRIER.
14. AN INTERIM WHITE REFLECTORIZED EDGE LINE, 6" WIDE MINIMUM SHOULD BE INSTALLED FROM THE START OF THE TAPER TO A POINT BEYOND THE WORK AREA, REJOINING THE PERMANENT EDGE LINE. THE EDGE LINE SHALL BE REMOVEABLE, NON-FOIL TAPE.
15. THE BARRIER SHALL NOT BE PLACED ALONG MERGING TAPER. THE LANE SHALL FIRST BE CLOSED USING CHANNELIZING DEVICES AND PAVEMENT MARKINGS. THE BARRIER IS THEN PLACED ON A FLARE BEGINNING BEYOND THE DOWNSTREAM END OF THE MERGING TAPER.
16. 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.
17. WATER-FILLED BARRIER RAIL MAY BE USED ON SHORT TERM MOVING OPERATIONS WHEN APPROVED BY THE TRAFFIC ENGINEER.
18. TYPE "B" HIGH INTENSITY FLASHING WARNING LIGHTS MAY BE INSTALLED ABOVE EACH WORK ZONE CONSTRUCTION SIGN FOR USE DURING HOURS OF DARKNESS.

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

TRAFFIC DIRECTION
WORK AREA
CHANNELIZING DEVICES
STEADY BURN LIGHTS
BARRIER
ARROW PANEL
CRASH CUSHION

PAVEMENT MARKINGS THAT SHOULD BE REMOVED FOR LONG TERM PROJECT OF 72 CONTINUOUS HOURS OR MORE. PAINT NOT ALLOWED. MASK WITH APPROVED BLACK OUT TAPE OPTIONAL OR OBLITERATION AS APPROVED BY THE ENGINEER. TEMPORARY MARKINGS TO BE PLACED AS NEEDED.

AGENCY APPROVED	B	C	H	L	M	N

TRAFFIC CONTROL PLAN FOR HIGHWAY WORK ZONE

SPECIFICATION REFERENCE

TYPICAL APPLICATION FOR

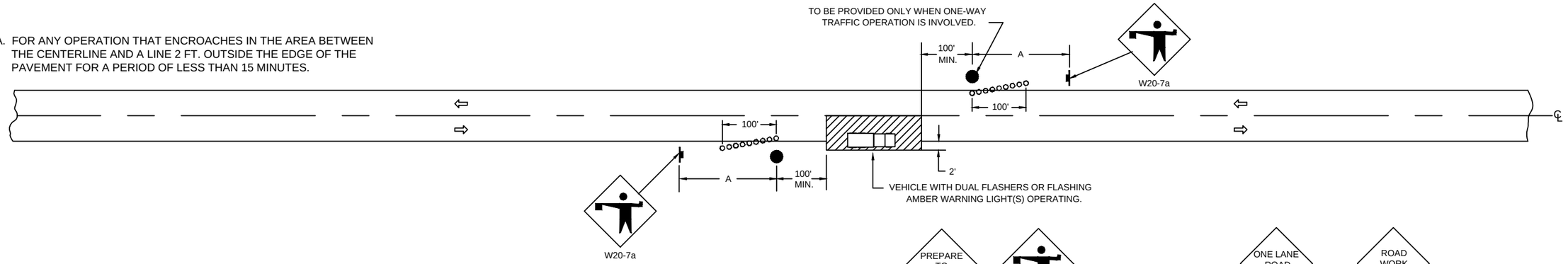
PORTABLE CONCRETE BARRIER RAIL

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

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

Effective 8/10/2023 to 8/07/2024

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.

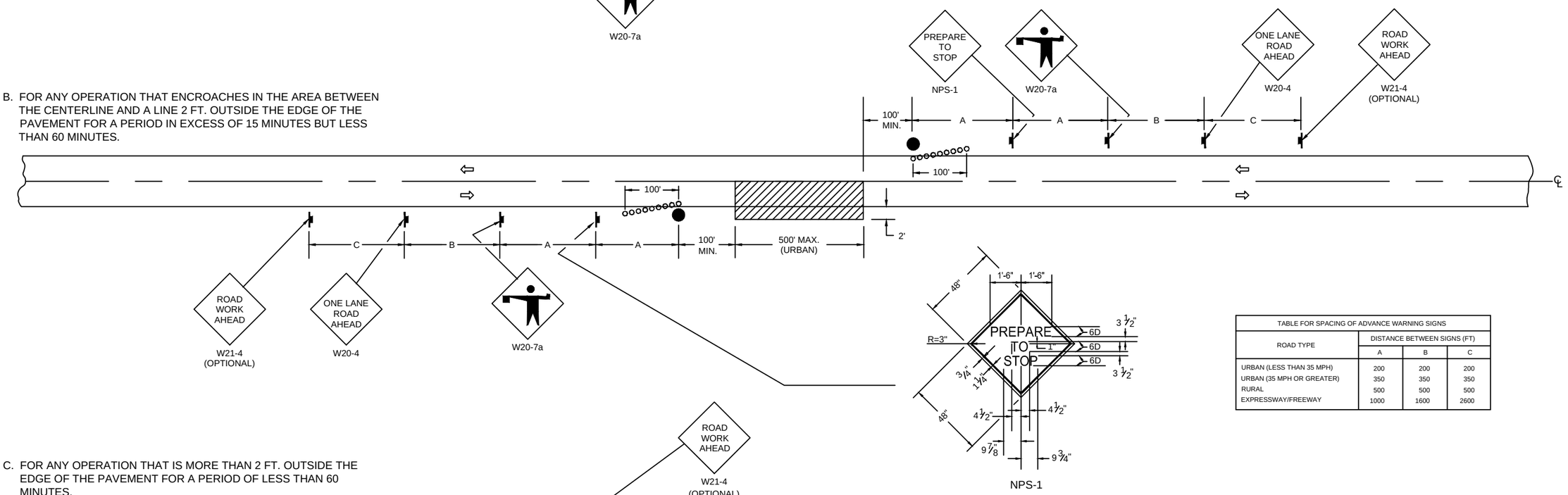
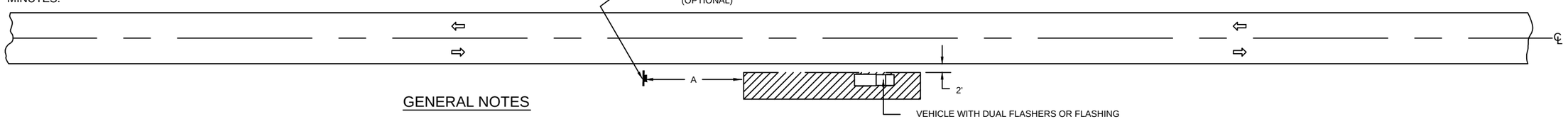


TABLE FOR SPACING OF ADVANCE WARNING SIGNS			
ROAD TYPE	DISTANCE BETWEEN SIGNS (FT)		
	A	B	C
URBAN (LESS THAN 35 MPH)	200	200	200
URBAN (35 MPH OR GREATER)	350	350	350
RURAL	500	500	500
EXPRESSWAY/FREEWAY	1000	1600	2600

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



GENERAL NOTES

TYPICAL APPLICATIONS

MARKING PATCHES

FIELD SURVEY

STRING LINE

UTILITY OPERATION

CLEANING UP DEBRIS ON PAVEMENT

1. 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.
2. THE FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES.
3. ALL SIGNS ARE TO BE REMOVED AT COMPLETION OF EACH OPERATION.
4. 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.
5. 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.
6. 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.
7. 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.
8. 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

9. 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.
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.
11. FLOODLIGHTS SHOULD BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT AS NEEDED.
12. 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

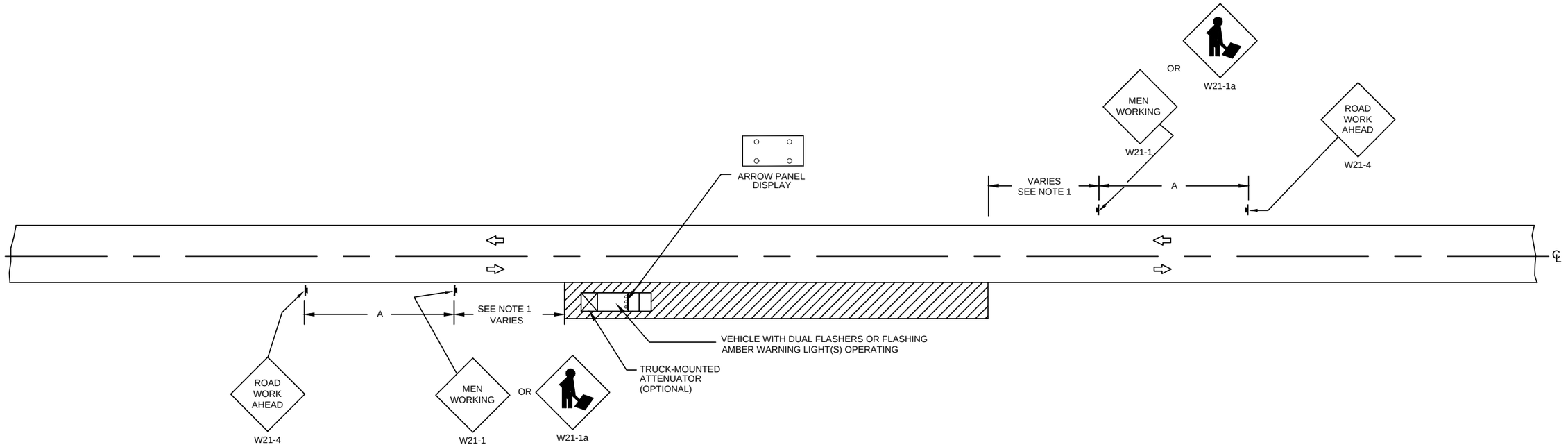
TRAFFIC CONES

TRAFFIC DIRECTION

AGENCY APPROVED	B	C	H	L	M	N

TRAFFIC CONTROL PLAN FOR HIGHWAY WORK ZONE	SPECIFICATION REFERENCE	TYPICAL APPLICATION FOR SHORT TIME, DAY OR NIGHT OPERATIONS	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
			DATE 1-9-97 / DWG NO. 603

Effective 8/10/2023 to 8/07/2024



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.

TAPER LENGTHS FOR LANE CLOSURES - DISTANCE L					
SPEED MILES PER HOUR 85th PERCENTILE	TAPER LENGTH LANE WIDTH IN FEET 10	11	12	NUMBER OF CHANNELIZING DEVICES FOR TAPER	MAX. SPACING OF DEVICES ALONG TAPER IN FEET
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

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.
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	MESQUITE	346-5295
CLARK COUNTY	455-6100	NORTH LAS VEGAS	642-2462
HENDERSON	565-2140		
LAS VEGAS	229-6331		

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.

TYPICAL APPLICATIONS

SHOULDER WORK

MOWING

UTILITY OPERATIONS

SYMBOLS

WORK AREA

SIGN ON PORTABLE OR PERMANENT SUPPORT

TRAFFIC DIRECTION

Effective 8/10/2023 to 8/07/2024

AGENCY APPROVED | B | C | H | L | M | N

TRAFFIC CONTROL PLAN FOR HIGHWAY WORK ZONE

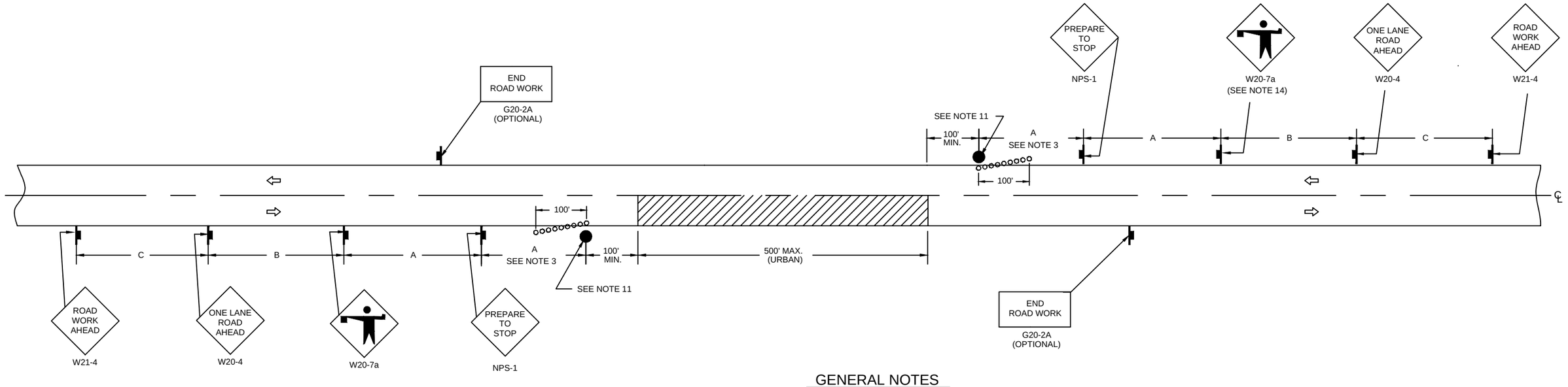
SPECIFICATION REFERENCE

TYPICAL APPLICATION FOR

RURAL MOVING DAY OPERATIONS WHERE ACTIVITIES ENCROACH ON THE SHOULDER

UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA

DATE 1-9-97 | DWG NO. 604



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

GENERAL NOTES

1. CONSTRUCTION OPERATIONS SHALL BE CONFINED TO ONE TRAFFIC LANE, LEAVING THE OPPOSITE LANE OPEN TO TRAFFIC. AT LEAST 500ft. 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.
2. THE FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIME.
3. 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.
4. IF THE WORK OPERATION DOES NOT EXCEED 60 MINUTES, TRAFFIC CONTROL WILL BE IN CONFORMANCE WITH STANDARD DRAWING NO. 603.
5. ALL SIGNS ARE TO BE REMOVED AT COMPLETION OF THE DAY'S OPERATIONS.
6. FOR DIVIDED ROADWAYS THE REQUIRED ADVANCE WARNING SIGNS SHALL BE POSTED ON BOTH THE RIGHT AND LEFT SIDE OF THE AFFECTED APPROACH.
7. 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.
8. 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.
9. 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.
10. "ONE LANE ROAD AHEAD" AND FLAGGER SIGNS SHALL BE REMOVED OR COVERED WHEN NO WORK IS BEING PERFORMED.
11. 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.).
12. 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.
13. 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.
14. 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.
15. 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

16. 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

17. 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.

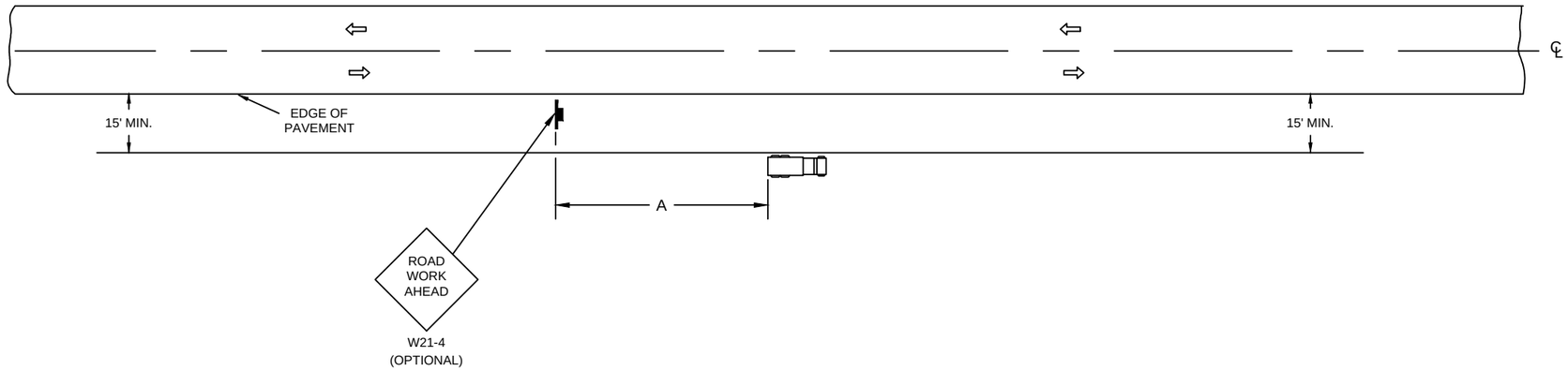
SYMBOLS

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

Effective 8/10/2023 to 8/07/2024

AGENCY APPROVED | B | C | H | L | M | N

TRAFFIC CONTROL PLAN FOR HIGHWAY WORK ZONE	SPECIFICATION REFERENCE	TYPICAL APPLICATION FOR RURAL MOVING DAY OPERATIONS WHERE ACTIVITIES ENCROACH ON THE PAVEMENT	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.

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

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

TYPICAL APPLICATIONS

LANDSCAPING WORK

UTILITY WORK

FENCING CONTRACTS AND MAINTENANCE

CLEANING CULVERTS

SYMBOLS

SIGN ON PORTABLE OR PERMANENT SUPPORT

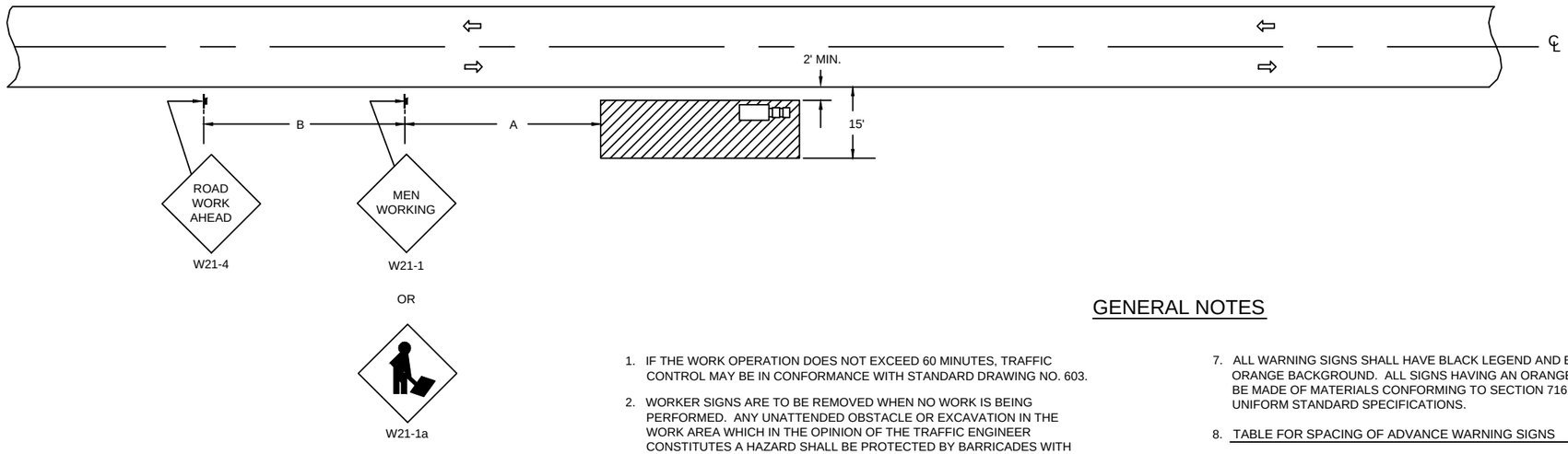
TRAFFIC DIRECTION

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

Effective 8/10/2023 to 8/07/2024

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 ARE MORE THAN 15 FT. FROM EDGE OF PAVEMENT	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

1. IF THE WORK OPERATION DOES NOT EXCEED 60 MINUTES, TRAFFIC CONTROL MAY BE IN CONFORMANCE WITH STANDARD DRAWING NO. 603.
2. 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	TAPER LENGTH LANE WIDTH IN FEET			NUMBER OF CHANNELIZING DEVICES FOR TAPER	MAX. SPACING OF DEVICES ALONG TAPER IN FEET
MILES PER HOUR 85th PERCENTILE	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

3. TYPE "B" HIGH INTENSITY FLASHING WARNING LIGHTS MAY BE INSTALLED ABOVE EACH WORK ZONE CONSTRUCTION SIGN FOR USE DURING HOURS OF DARKNESS.
4. 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.
5. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS BY THE TRAFFIC ENGINEER.
6. 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.
7. 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.
8. 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

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.

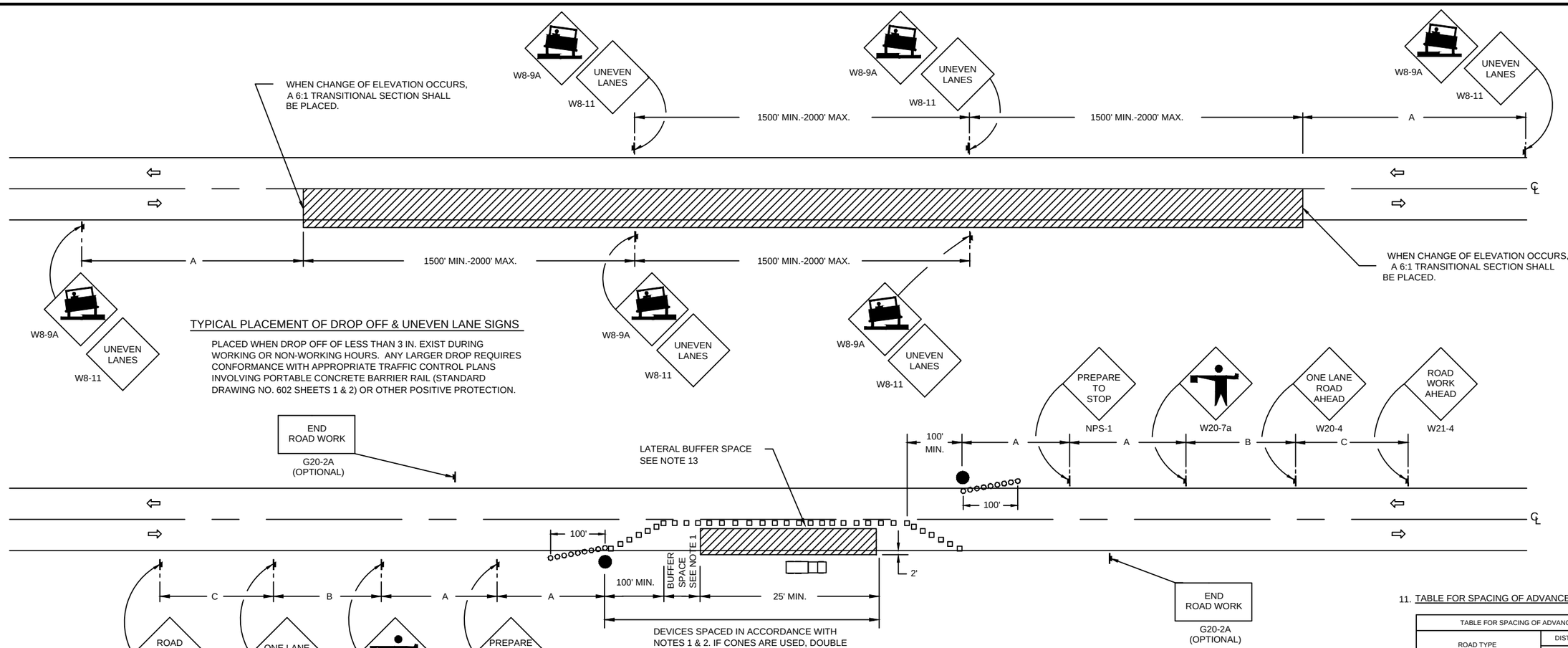
BOULDER CITY	293-9200	LAS VEGAS	229-6331
CLARK COUNTY	455-6100	MESQUITE	346-5295
HENDERSON	565-2140	NORTH LAS VEGAS	642-2462

10. FLOODLIGHTS SHOULD BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT AS NEEDED.
11. 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.
12. 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.

Effective 8/10/2023 to 8/07/2024

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 15 FT. & 2 FT. OUTSIDE OF PAVEMENT EDGE	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.

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

TYPICAL APPLICATIONS

UTILITY OPERATIONS
PAVEMENT PATCH

SYMBOLS

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

1.

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 85th PERCENTILE	TAPER LENGTH LANE WIDTH IN FEET 10	11	12	NUMBER OF CHANNELIZING DEVICES FOR TAPER	MAX. SPACING OF DEVICES ALONG TAPER IN FEET
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. ALL DEVICES ESTABLISHING A TAPER OR A TANGENT LINE SHALL BE OF ONE TYPE; DEVICES SHALL NOT BE MIXED BY TYPE.

GENERAL NOTES

3. 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.
4. IF THE WORK OPERATION DOES NOT EXCEED 60 MINUTES, TRAFFIC CONTROL MAY BE IN CONFORMANCE WITH STANDARD DRAWING NO. 603.
5. THE FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES.
6. 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.
7. ALL SIGNS, CONES, BARRICADES, AND DRUMS SHALL BE REMOVED AT COMPLETION OF OPERATIONS DURING DAYLIGHT AND THE WORK AREA OPEN TO TRAFFIC.
8. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS BY THE TRAFFIC ENGINEER. THE LATERAL PLACEMENT OF THE FLAGGER MAY BE VARIED FROM SHOWN.
9. 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.
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.
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.

AGENCY APPROVED	B	C	H	L	M	N

TRAFFIC CONTROL PLAN FOR HIGHWAY WORK ZONE

SPECIFICATION REFERENCE

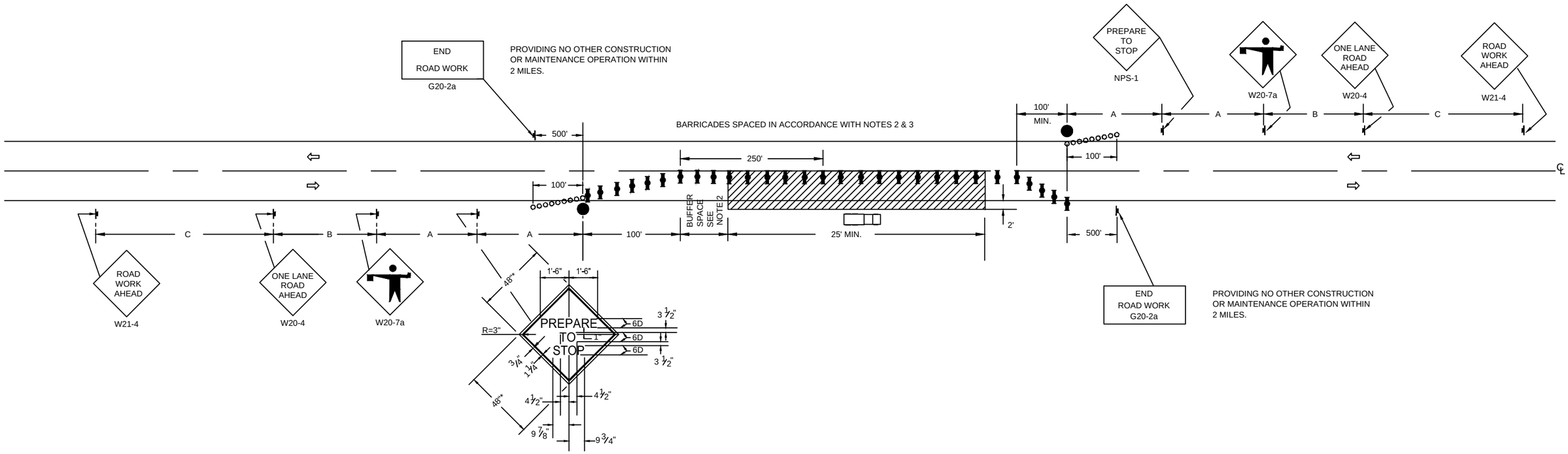
TYPICAL APPLICATION FOR

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

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

DATE 1-9-97 | DWG NO. 608

Effective 8/10/2023 to 8/07/2024



TYPICAL APPLICATIONS

ISOLATED PATCH

INSTALLATION OF DRAINAGE STRUCTURE

UTILITY OPERATIONS

SYMBOLS

WORK AREA

SIGN ON PORTABLE OR PERMANENT SUPPORT

FLAGGER WITH TRAFFIC CONTROL SIGN

TRAFFIC CONE

TRAFFIC DIRECTION

BARRICADE OR DRUM WITH STEADY BURNING LIGHT

1. CONSTRUCTION OPERATIONS SHALL BE CONFINED TO ONE TRAFFIC LANE, LEAVING THE OPPOSITE LANE OPEN TO TRAFFIC.
2.

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	TAPER LENGTH LANE WIDTH IN FEET			NUMBER OF CHANNELIZING DEVICES FOR TAPER	MAX. SPACING OF DEVICES ALONG TAPER IN FEET
MILES PER HOUR 85th PERCENTILE	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

GENERAL NOTES

3. ALL DEVICES ESTABLISHING A TAPER OR TANGENT LINE SHALL BE OF ONE TYPE; DEVICES SHALL NOT BE MIXED BY TYPE.
4. THE FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES.
5. FLAGGERS SHALL BE REQUIRED AT ALL ENTRY POINTS INTO THE WORK AREA.
6. ALL SIGNS SHALL BE GROUND-MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS AND AS REQUIRED BY SECTION 625 OF THE UNIFORM STANDARD SPECIFICATIONS.
7. TYPE "B" HIGH INTENSITY FLASHING WARNING LIGHTS MAY BE INSTALLED ABOVE EACH WORK ZONE CONSTRUCTION SIGN FOR USE DURING HOURS OF DARKNESS.
8. 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.
9. 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.
10. ALL BARRICADE LIGHTS SHALL BE BIDIRECTIONAL, EXCEPT LIGHTS ON TAPER BARRICADES, WHICH SHALL BE MONODIRECTIONAL.
11. ALL WARNING SIGNS SHALL HAVE BLACK LEGEND AN 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 ADVANCE WARNING SIGNS

TABLE FOR SPACING OF ADVANCE WARNING SIGNS			
ROAD TYPE	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.

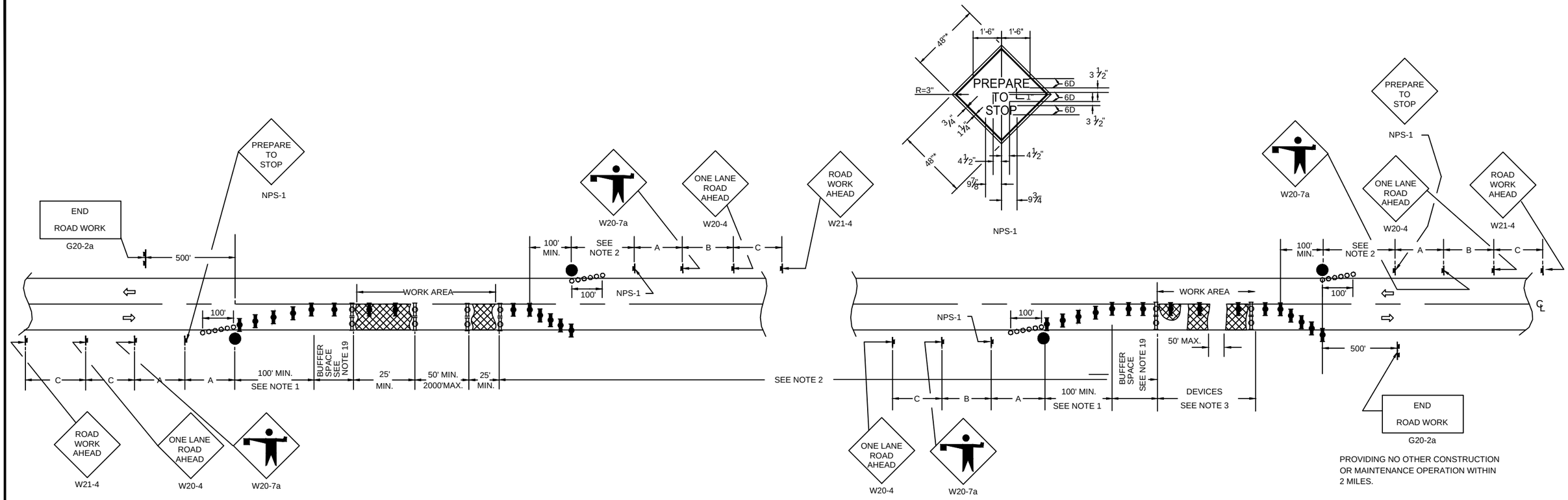
BOULDER CITY	293-9200	MESQUITE	346-5295
CLARK COUNTY	455-6100	NORTH LAS VEGAS	642-2462
HENDERSON	565-2140		
LAS VEGAS	229-6331		

14. FLOODLIGHTS SHOULD BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT AS NEEDED.
15. A LATERAL BUFFER SPACE MAY BE REQUIRED TO SEPARATE WORK SPACE FROM TRAFFIC SPACE. THE WIDTH SHALL BE DETERMINED BY THE TRAFFIC ENGINEER.
16. 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.

AGENCY APPROVED	B	C	H	L	M	N

Effective 8/10/2023 to 8/07/2024

TRAFFIC CONTROL PLAN FOR HIGHWAY WORK ZONE	SPECIFICATION REFERENCE	TYPICAL APPLICATION FOR TWO-LANE, TWO-WAY, RURAL 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. 609



PROVIDING NO OTHER CONSTRUCTION OR MAINTENANCE OPERATION WITHIN 2 MILES.

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

1. ALL DEVICES ESTABLISHING A TAPER OR TANGENT LINE SHALL BE OF ONE TYPE; DEVICES SHALL NOT BE MIXED BY TYPE.
2. 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.
3. 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.
4. 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.
5. FLAGGERS SHALL BE REQUIRED AT ALL ENTRY POINTS INTO THE WORK AREA.
6. 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.
7. LIGHTS WILL NOT BE REQUIRED ON BARRICADES FOR DAY OPERATIONS.
8. 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.
9. ALL SIGNS SHALL BE GROUND-MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS AND AS REQUIRED BY SECTION 625 OF THE UNIFORM STANDARD SPECIFICATIONS.
10. TYPE "B" HIGH INTENSITY FLASHING LIGHTS MAY BE INSTALLED ABOVE EACH WORK ZONE CONSTRUCTION SIGN FOR USE DURING HOURS OF DARKNESS.
11. 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.
12. 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.
13. ALL BARRICADE LIGHTS SHALL BE BIDIRECTIONAL, EXCEPT LIGHTS ON TAPER BARRICADES, WHICH SHALL BE MONODIRECTIONAL.
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. 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.
16. DURING DAYTIME OPERATIONS, CONES MAY BE SUBSTITUTED FOR BARRICADES AT HALF THE BARRICADE SPACING.
17. 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

18. 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 * (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.

20. A LATERAL BUFFER SPACE MAY BE REQUIRED TO SEPARATE WORK SPACE FROM TRAFFIC SPACE. THE WIDTH SHALL BE DETERMINED BY THE TRAFFIC ENGINEER.
21. FLOODLIGHTS SHOULD BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT AS NEEDED.
22. 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	TAPER LENGTH LANE WIDTH IN FEET			NUMBER OF CHANNELIZING DEVICES FOR TAPER	MAX. SPACING OF DEVICES ALONG TAPER IN FEET
MILES PER HOUR 85th PERCENTILE	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

Effective 8/10/2023 to 8/07/2024

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
		TWO-LANE, TWO-WAY, RURAL DAY OR NIGHT OPERATIONS WHERE ACTIVITIES WILL ENCROACH BETWEEN CENTERLINE & 2 FT. OUTSIDE OF PAVEMENT EDGE	DATE 1-9-97 / DWG NO. 610

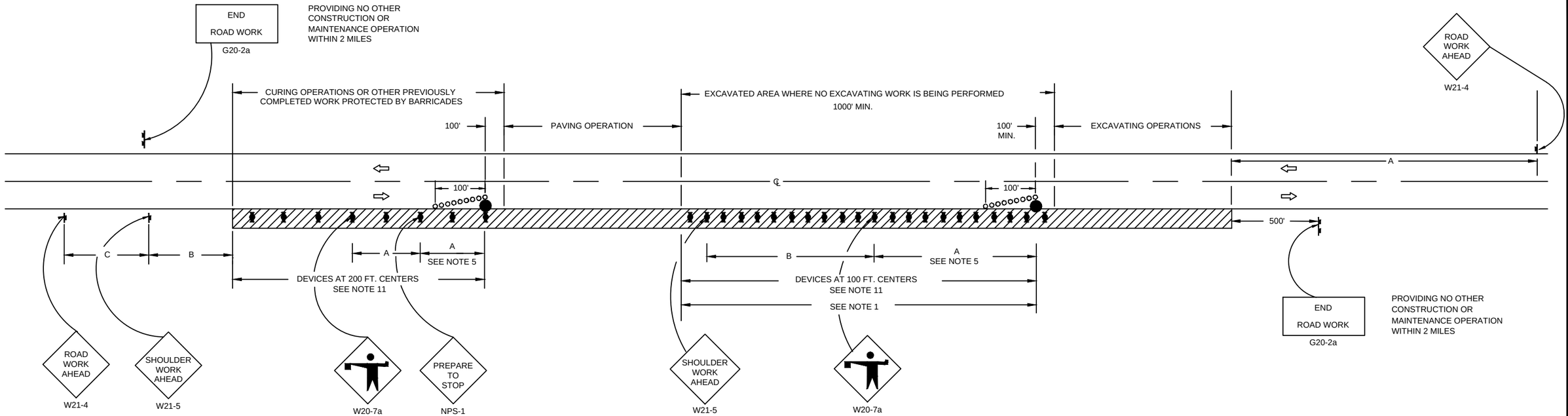


TABLE FOR SPACING OF ADVANCE WARNING SIGNS

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

1. 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.
2. 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.
3. THE FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES.
4. NO PAVING OR EXCAVATING OPERATIONS SHALL BE PERFORMED AT NIGHT UNLESS AUTHORIZED BY THE TRAFFIC ENGINEER.
5. MAXIMUM DISTANCE TO BE DETERMINED BY THE TRAFFIC ENGINEER BUT IN NO CASE TO EXCEED THE LENGTH OF 1/2 DAY'S NORMAL OPERATION.
6. ALL SIGNS SHALL BE GROUND-MOUNTED IF THE WORKING TIME EXCEEDS FOUR DAYS AND AS REQUIRED BY SECTION 625 OF THE UNIFORM STANDARD SPECIFICATIONS.

GENERAL NOTES

7. TYPE "B" HIGH INTENSITY FLASHING WARNING LIGHTS MAY BE INSTALLED ABOVE EACH WORK ZONE CONSTRUCTION SIGN FOR USE DURING HOURS OF DARKNESS.
8. 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.
9. 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.
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.
11. ALL DEVICES ESTABLISHING A TAPER OR TANGENT LINE SHALL BE OF ONE TYPE; DEVICES SHALL NOT BE MIXED BY TYPE.
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	LAS VEGAS	229-6331
CLARK COUNTY	455-6100	MESQUITE	346-5295
HENDERSON	565-2140	NORTH LAS VEGAS	642-2462

SYMBOLS

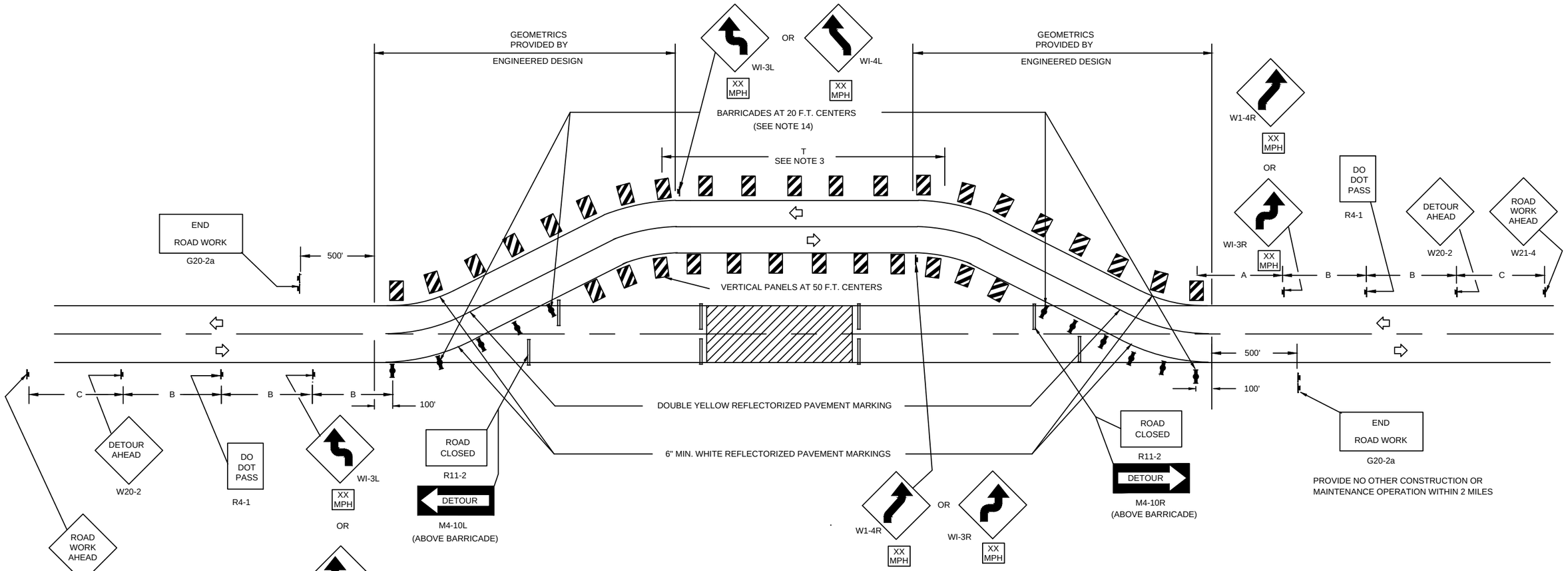
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH TRAFFIC CONTROL SIGN
- BARRICADE OR DRUM WITH STEADY BURNING LIGHT
- TRAFFIC CONE
- TRAFFIC DIRECTION

13. FLOODLIGHTS SHOULD BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT AS NEEDED.
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.

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
		TWO-LANE, TWO-WAY, RURAL OR SUBURBAN, DAY OR NIGHT PAVEMENT WIDENING	DATE 1-9-97 / DWG NO. 611

Effective 8/10/2023 to 8/07/2024



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

GENERAL NOTES

1. 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.
2. 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.
3. 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).
4. A CURVE SIGN WILL BE REQUIRED AT EXIT END OF THE BYPASS IF (T) IS EQUAL TO OR GREATER THAN 1,000 FEET.
5. 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.
6. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES FOR DAY OPERATIONS.
7. CONES MAY BE SUBSTITUTED FOR BARRICADES AT HALF THE SPACING DURING DAY OPERATIONS.
8. ALL SIGNS SHALL BE GROUND-MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS AND AS REQUIRED BY SECTION 625 OF THE UNIFORM STANDARD SPECIFICATIONS.
9. TYPE "B" HIGH INTENSITY FLASHING WARNING LIGHTS MAY BE INSTALLED ABOVE EACH WORK ZONE CONSTRUCTION SIGN FOR USE DURING HOURS OF DARKNESS.
10. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS BY THE TRAFFIC ENGINEER.
11. ALL BARRICADE LIGHTS SHALL BE BIDIRECTIONAL.
12. 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. 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

14. ALL DEVICES INDICATED SHALL BE OF ONE TYPE; DEVICES SHALL NOT BE MIXED.
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.

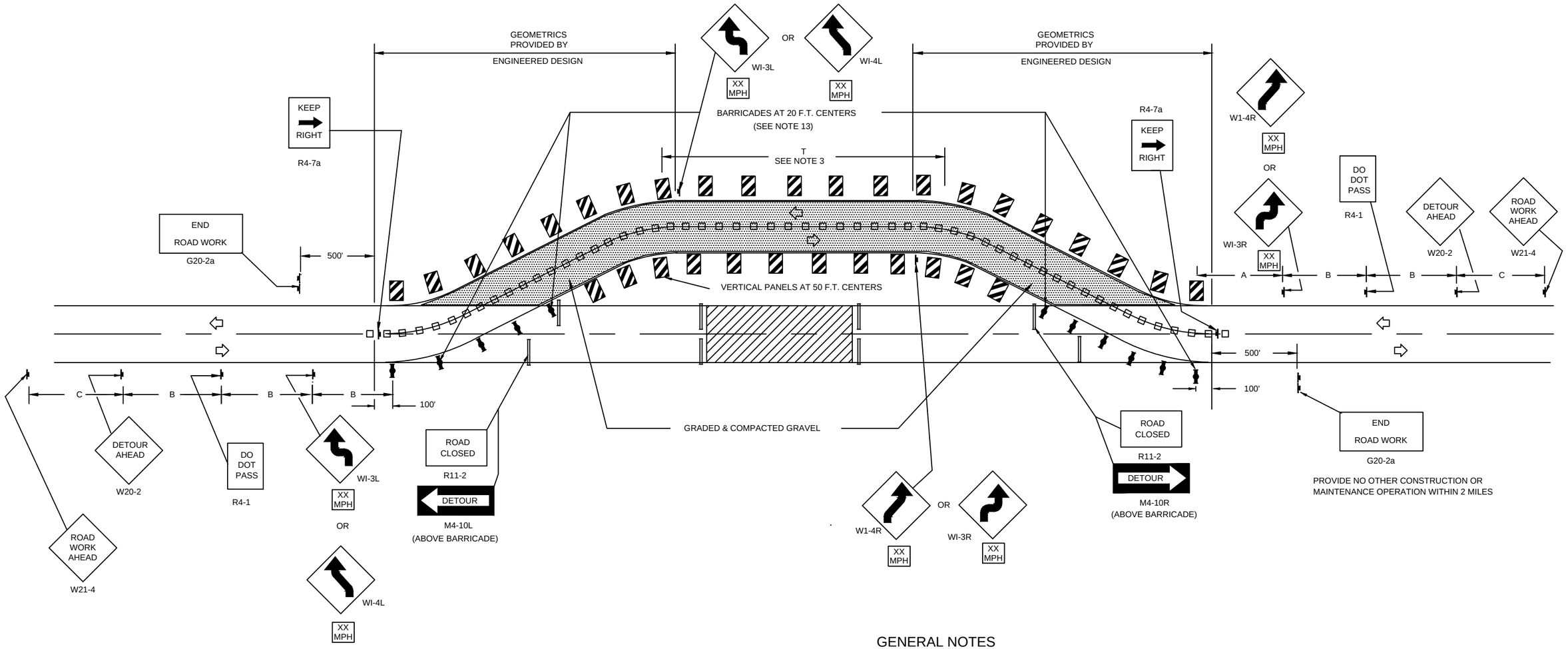
BOULDER CITY	293-9200	MESQUITE	346-5295
CLARK COUNTY	455-6100	NORTH LAS VEGAS	642-2462
HENDERSON	565-2140		
LAS VEGAS	229-6331		

16. 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.
17. 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.
18. IF THE DETOUR IS SHORT AND HAS SHARP CURVES (30 MPH OR LESS), REVERSE TURN (W1-3) SIGN SHOULD BE USED.
19. PAVEMENT MARKINGS THAT ARE NO LONGER APPLICABLE SHALL BE MASKED WITH APPROVED BLACKOUT TAPE OR OBLITERATED AS APPROVED BY THE TRAFFIC ENGINEER.

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 OR SUBURBAN, DAY OR NIGHT TEMPORARY PAVED BYPASS	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
			DATE 1-9-97 / DWG NO. 612 / SHEET 1 OF 2

Effective 8/10/2023 to 8/07/2024



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 CONE OR VERTICAL PANEL (SEE NOTE 2)

1. TEMPORARY UNPAVED BYPASSES SHALL BE GRADED AND COMPACTED GRAVEL AND ARE ACCEPTABLE FOR TIME LIMITS ESTABLISHED BY THE ENTITY.
2. REFLECTORIZED 28 IN. MIN. TRAFFIC CONES OR VERTICAL PANELS SHALL BE USED FOR CENTERLINE DELINEATION FOR SHORT-TERM PROJECTS. FOR LONG TERM PROJECTS OF 72 CONTINUOUS HOURS OR MORE AND PROJECTS PERFORMED AT NIGHT, VERTICAL PANELS SHALL BE USED. SEE STANDARD DRAWING 601 SHEET 1 FOR DETAILS OF CONES AND PANELS.
3. A CURVE SIGN WILL BE REQUIRED AT EXIT END OF THE BYPASS IF (T) IS EQUAL TO OR GREATER THAN 1,000 FEET.
4. 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.
5. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES FOR DAY OPERATIONS.
6. CONES MAY BE SUBSTITUTED FOR BARRICADES AT HALF THE SPACING DURING DAY OPERATIONS.
7. ALL SIGNS SHALL BE GROUND-MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS AND AS REQUIRED BY SECTION 625 OF THE UNIFORM STANDARD SPECIFICATIONS.

GENERAL NOTES

8. TYPE "B" HIGH INTENSITY FLASHING WARNING LIGHTS MAY BE INSTALLED ABOVE EACH WORK ZONE CONSTRUCTION SIGN FOR USE DURING HOURS OF DARKNESS.
9. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS BY THE TRAFFIC ENGINEER.
10. ALL BARRICADE LIGHTS SHALL BE BIDIRECTIONAL.
11. 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.
12. 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

13. ALL DEVICES INDICATED SHALL BE OF ONE TYPE; DEVICES SHALL NOT BE MIXED.
14. 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		

15. 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.
16. IF THE DETOUR IS SHORT AND HAS SHARP CURVES (30 MPH OR LESS), REVERSE TURN (W1-3) SIGN SHOULD BE USED.
17. PAVEMENT MARKINGS THAT ARE NO LONGER APPLICABLE SHALL BE MASKED WITH APPROVED BLACKOUT TAPE OR OBLITERATED AS APPROVED BY THE TRAFFIC ENGINEER.

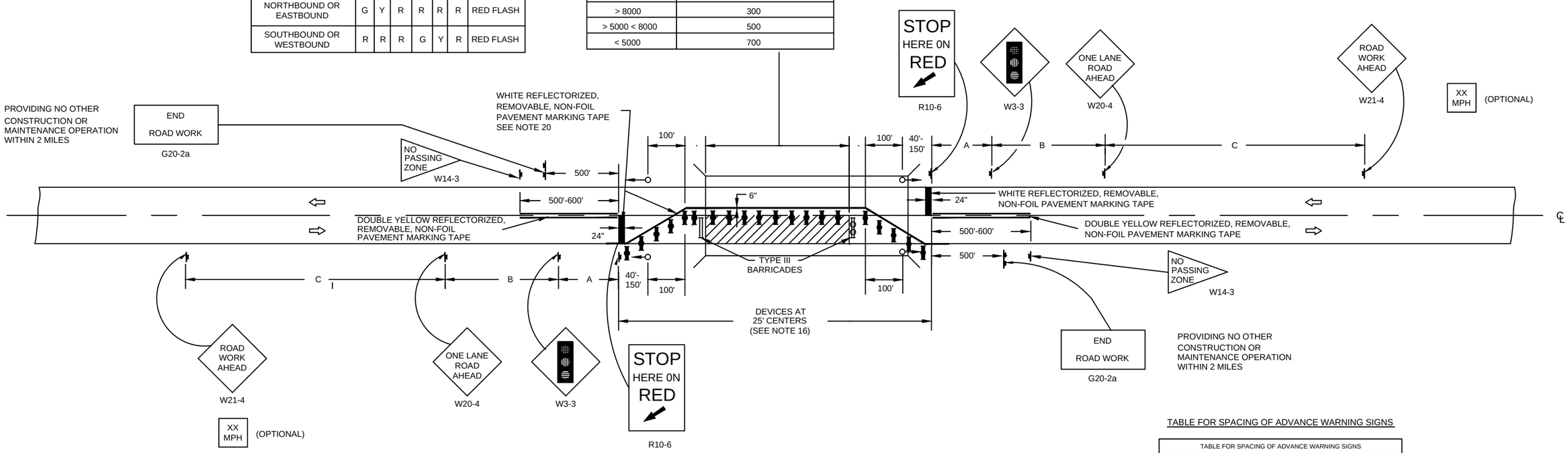
Effective 8/10/2023 to 8/07/2024

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 OR SUBURBAN, DAY OR NIGHT TEMPORARY UNPAVED BYPASS	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
			DATE 1-9-97 / DWG NO. 612 / SHEET 2 OF 2

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



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

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

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.

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 WITH ONE LANE CLOSED	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
			DATE 1-9-97 / DWG NO. 613

Effective 8/10/2023 to 8/07/2024

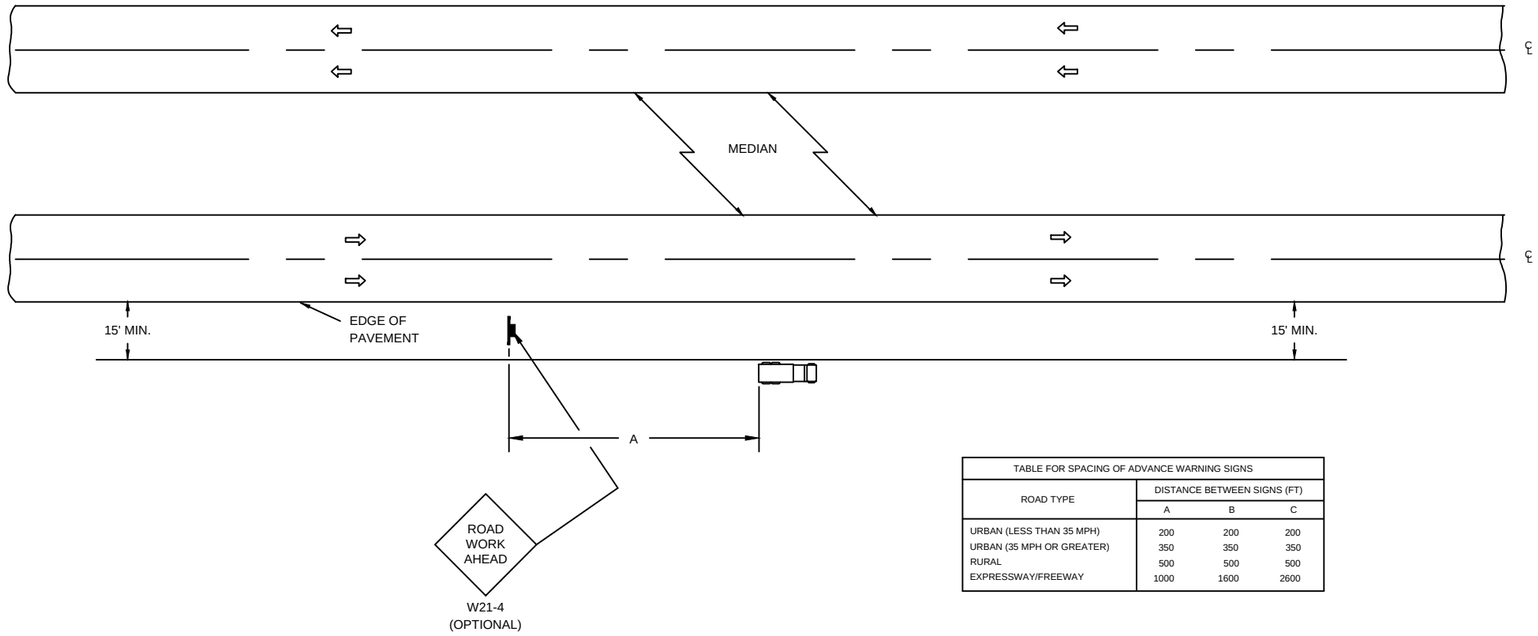


TABLE FOR SPACING OF ADVANCE WARNING SIGNS			
ROAD TYPE	DISTANCE BETWEEN SIGNS (FT)		
	A	B	C
URBAN (LESS THAN 35 MPH)	200	200	200
URBAN (35 MPH OR GREATER)	350	350	350
RURAL	500	500	500
EXPRESSWAY/FREEWAY	1000	1600	2600

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

Effective 8/10/2023 to 8/07/2024

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

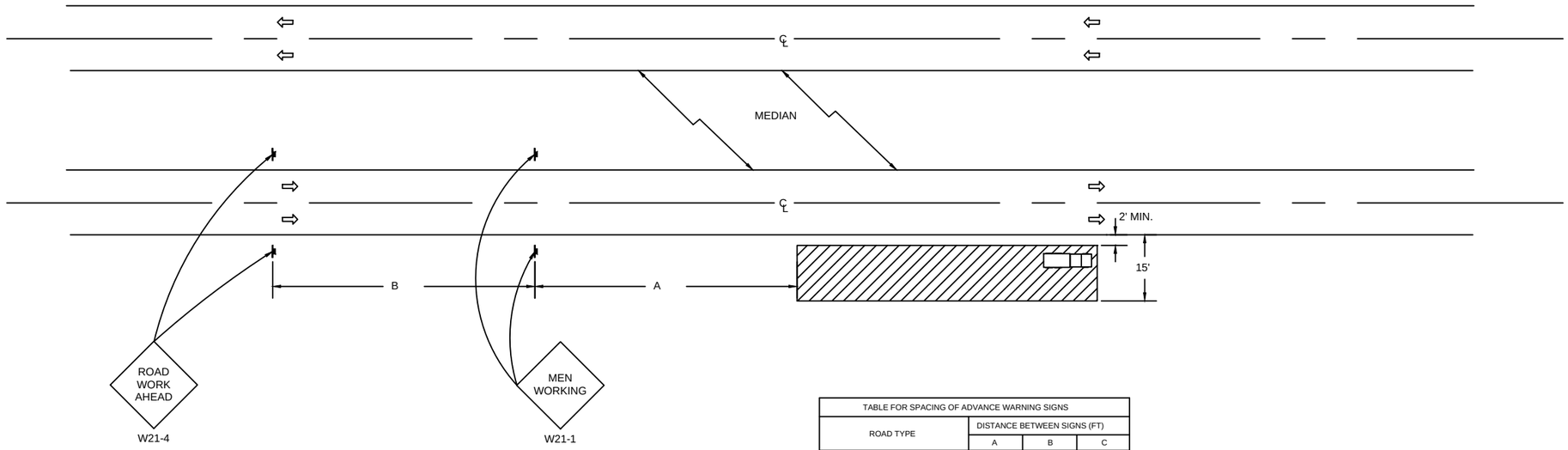


TABLE FOR SPACING OF ADVANCE WARNING SIGNS			
ROAD TYPE	DISTANCE BETWEEN SIGNS (FT)		
	A	B	C
URBAN (LESS THAN 35 MPH)	200	200	200
URBAN (35 MPH OR GREATER)	350	350	350
RURAL	500	500	500
EXPRESSWAY/FREEWAY	1000	1600	2600

SYMBOLS

WORK AREA

SIGN ON PORTABLE OR PERMANENT SUPPORT

SIGN ON PORTABLE OR PERMANENT SUPPORT

TYPICAL APPLICATIONS

UTILITY OPERATIONS
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

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	TAPER LENGTH LANE WIDTH IN FEET			NUMBER OF CHANNELIZING DEVICES FOR TAPER	MAX. SPACING OF DEVICES ALONG TAPER IN FEET
MILES PER HOUR 85th PERCENTILE	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

GENERAL NOTES

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		

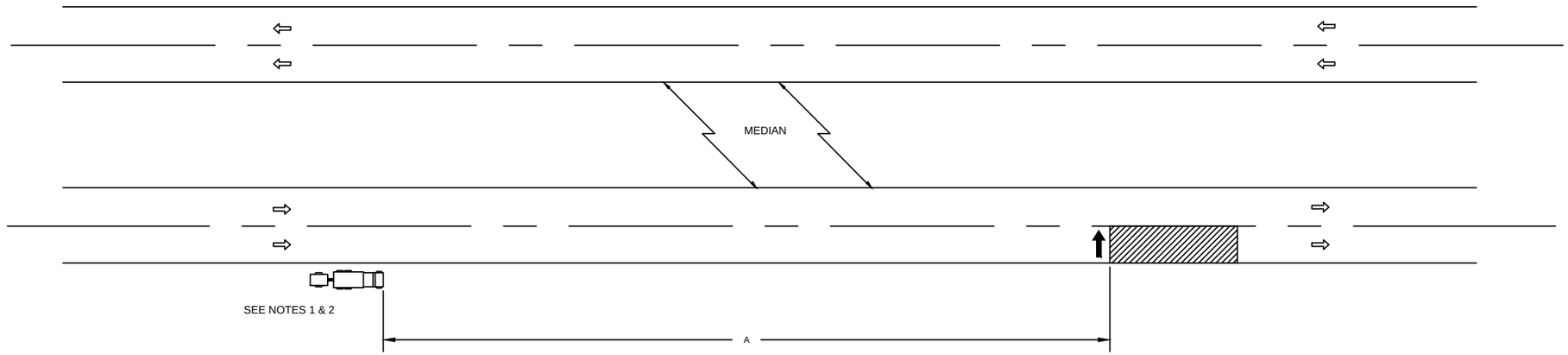
10. IF THE WORK SPACE IS IN THE MEDIAN OF A DIVIDED HIGHWAY, AN ADVANCE WARNING SIGN SHOULD ALSO BE PLACED ON THE LEFT SIDE OF THE DIRECTIONAL ROADWAY.

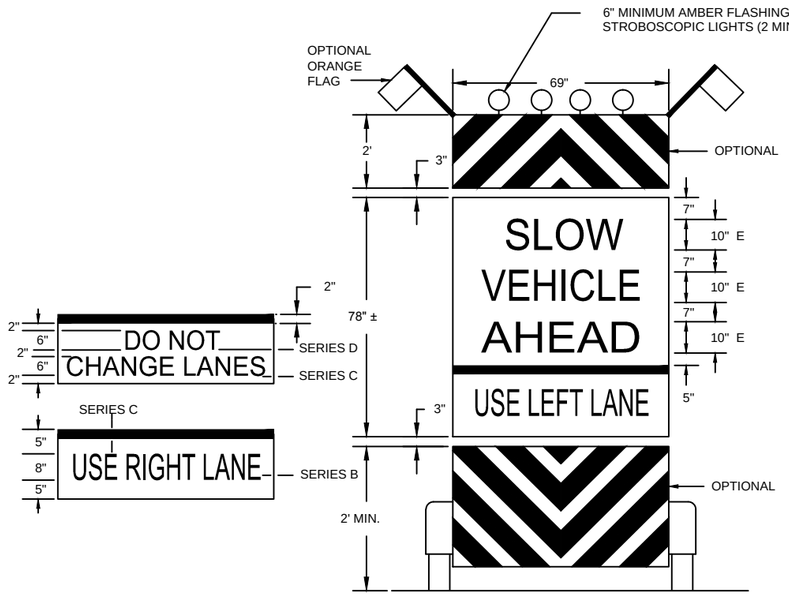
11. ACCESS FOR CAT TRANSIT SERVICE, PEDESTRIANS AND

Effective 8/10/2023 to 8/07/2024

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".

2. 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.
3. THE LIGHTS ON THE TRAILER SHALL FLASH IN PAIRS ALTERNATING BETWEEN THE TWO OUTSIDE LIGHTS AND THE TWO INSIDE LIGHTS OR SEQUENTIAL FLASHING.
4. ALL STRIPING SHALL HAVE ALTERNATING WHITE AND ORANGE STRIPES AT 45° FROM THE VERTICAL. ALL STRIPES SHALL BE 6" IN WIDTH.
5. 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.
6. PAVEMENT STRIPING AND CONE PICKUP WILL BE CONSIDERED AS TWO SEPARATE OPERATIONS.
7. WHERE WORK OPERATIONS ARE MORE THAN 2 FT. FROM THE EDGE OF THE PAVEMENT, PROTECTION VEHICLES MAY BE OMITTED.
8. 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.
9. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS BY THE TRAFFIC ENGINEER.
10. 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.
11. 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

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

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

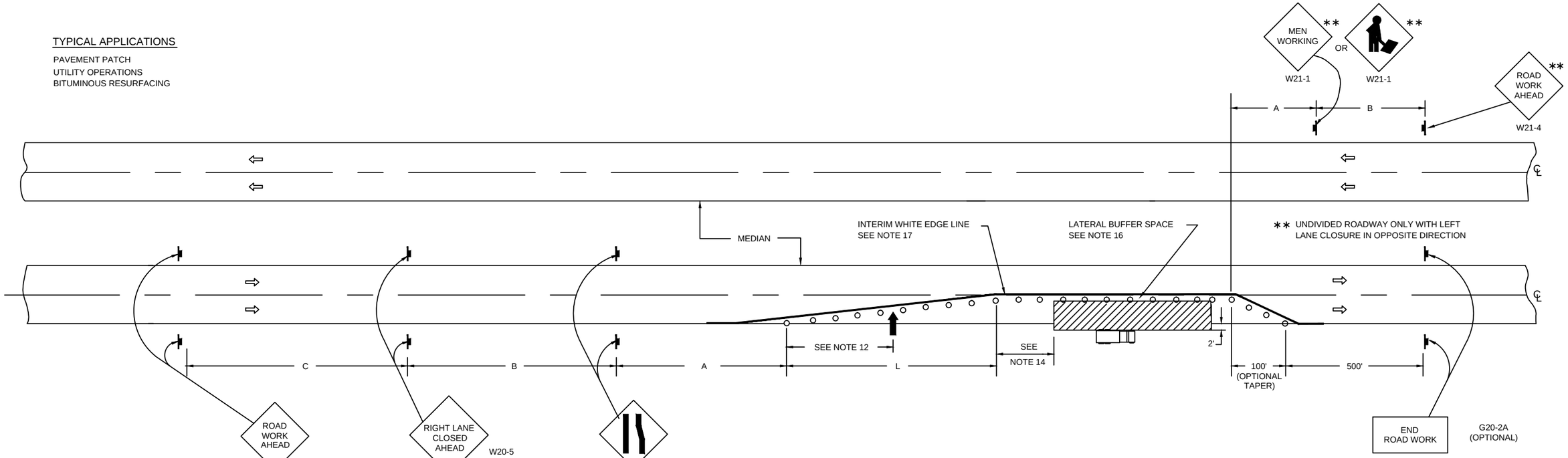
Effective 8/10/2023 to 8/07/2024

AGENCY APPROVED	B	C	H	L	M	N

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	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	$L = WS^2/60$
40 M.P.H. OR OVER	$L = WS$

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 85th PERCENTILE	TAPER LENGTH LANE WIDTH IN FEET 10	11	12	NUMBER OF CHANNELIZING DEVICES FOR TAPER	MAX. SPACING OF DEVICES ALONG TAPER IN FEET
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. 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.

3. 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.

4. ALL SIGNS, CONES, BARRICADES AND DRUMS ARE TO BE REMOVED AT COMPLETION OF THE DAY'S OPERATIONS AND THE WORK AREA OPENED TO TRAFFIC.

5. 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.

6. CONES SHALL BE A MINIMUM OF 28 IN. IN HEIGHT.

7. 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

8. 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.

9. 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.

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

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. 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.

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	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.

15. WHEN A SIDE ROAD INTERSECTS THE HIGHWAY WITHIN THE TEMPORARY TRAFFIC CONTROL ZONE, ADDITIONAL TRAFFIC CONTROL DEVICES SHALL BE ERECTED, AS NEEDED.

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

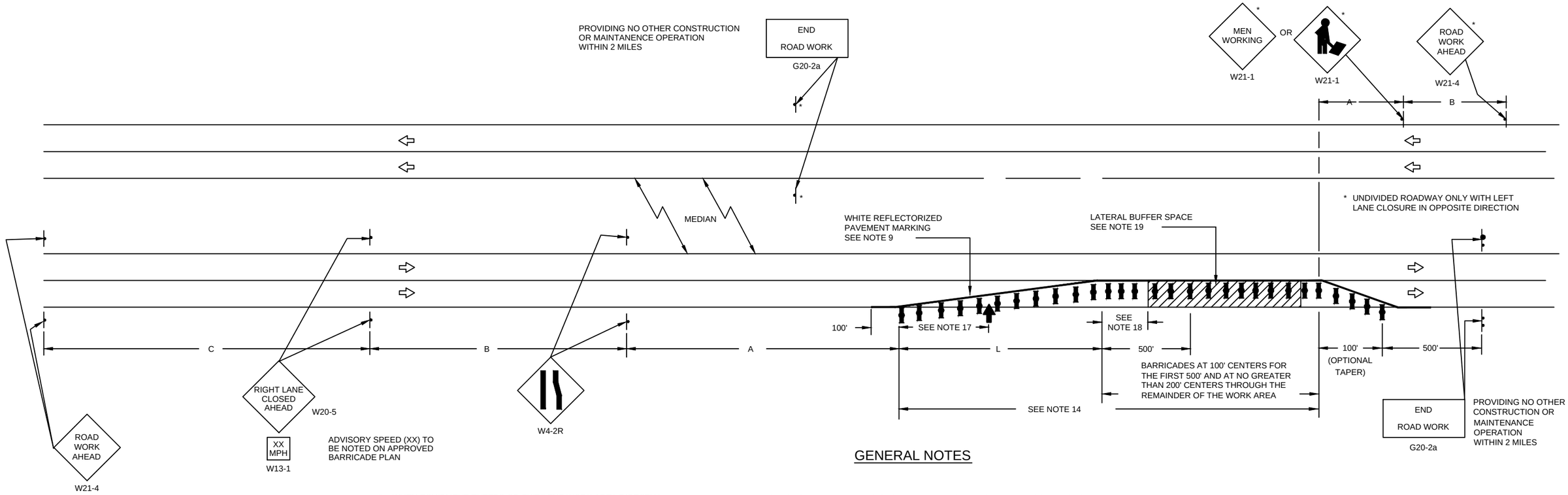
17. FOR LONG TERM PROJECTS OF 72 CONTINUOUS HOURS OR MORE, A 6 IN. WIDE INTERIM WHITE EDGE LINE SHOULD BE INSTALLED FROM THE START OF THE TAPER TO A POINT BEYOND THE WORK AREA, REJOINING THE PERMANENT EDGE LINE. INTERIM EDGE LINE SHALL BE REMOVABLE, NON-FOIL PAVEMENT MARKING TAPE. FOR LEFT LANE CLOSURE, 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.

18. 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.

AGENCY APPROVED	B	C	H	L	M	N

Effective 8/10/2023 to 8/07/2024

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 OPERATIONS WHERE ACTIVITIES WILL ENCROACH ON LANE ABUTTING SHOULDER OR ON THE SHOULDER WITHIN 2 FT. OUTSIDE THE PAVEMENT EDGE	DATE 1-9-97 / DWG NO. 617



SYMBOLS

- WORK AREA
- ARROW BOARD (IN LINE OF LANE)
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TRAFFIC DIRECTION
- BARRICADE OR DRUM WITH STEADY BURNING LIGHT

1. FORMULAS FOR TAPER LENGTH

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

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

TAPER LENGTHS FOR LANE CLOSURES - DISTANCE L

SPEED MILES PER HOUR 85th PERCENTILE	TAPER LENGTH LANE WIDTH IN FEET 10	11	12	NUMBER OF CHANNELIZING DEVICES FOR TAPER	MAX. SPACING OF DEVICES ALONG TAPER IN FEET
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

GENERAL NOTES

2. 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 THE FLAGGER SIGN. FLOODLIGHTS SHOULD BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT AS NEEDED. A 100 FT. CONE TAPER SHALL BE PROVIDED PRIOR TO STATION TO PROTECT THE FLAGGER. FLAGGERS SHALL NOT BE REQUIRED FOR SPEEDS OF 25 MPH OR LESS.
3. 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 UNDIVIDED HIGHWAYS, SIGNS SHALL BE ADDED IN OPPOSITE DIRECTION AS SHOWN.
4. 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.
5. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS CONES SHALL BE A MINIMUM OF 28" IN HEIGHT.
6. STEADY BURNING LIGHTS SHALL NOT BE REQUIRED ON BARRICADES FOR DAY OPERATIONS.
7. ALL SIGNS SHALL BE GROUND-MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS AND AS REQUIRED BY SECTION 625 OF THE UNIFORM STANDARD SPECIFICATIONS.
8. TYPE "B" HIGH INTENSITY FLASHING WARNING LIGHTS MAY BE INSTALLED ABOVE EACH WORK ZONE CONSTRUCTION SIGN FOR USE DURING HOURS OF DARKNESS.
9. 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.
10. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS BY THE TRAFFIC ENGINEER. THE LATERAL PLACEMENT OF THE FLAGGER, IF NECESSARY, MAY BE VARIED.
11. 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.
12. ALL BARRICADE LIGHTS SHALL BE MONODIRECTONAL IF THE ROADWAY IS UNDIVIDED.
13. 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.
14. ALL DEVICES ESTABLISHING A TAPER OR TANGENT LINE SHALL BE OF ONE TYPE; DEVICES SHALL NOT BE MIXED BY TYPE.
15. 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

16. 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		

17. 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.
18. 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.

19. A LATERAL BUFFER SPACE MAY BE REQUIRED TO SEPARATE WORK SPACE FROM TRAFFIC SPACE. THE WIDTH SHALL BE DETERMINED BY THE TRAFFIC ENGINEER.
20. WHEN A SIDE ROAD INTERSECTS THE HIGHWAY WITHIN THE TEMPORARY TRAFFIC CONTROL ZONE, ADDITIONAL TRAFFIC CONTROL DEVICES SHALL BE ERECTED, AS NEEDED.
21. 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.

Effective 8/10/2023 to 8/07/2024

AGENCY APPROVED	B	C	H	L	M	N

TRAFFIC CONTROL PLAN FOR HIGHWAY WORK ZONE

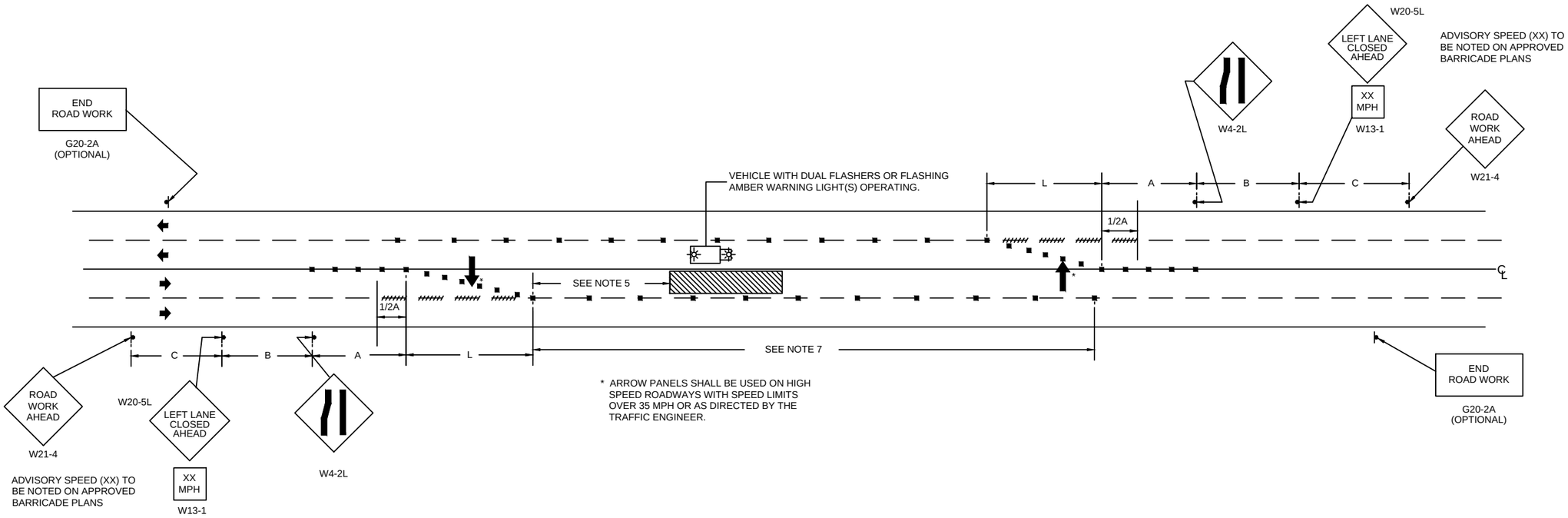
SPECIFICATION REFERENCE

TYPICAL APPLICATION FOR

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

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

DATE 1-9-97 | DWG NO. 618



GENERAL NOTES

1. TAPER FORMULA: $L = S \times W$ FOR SPEEDS OF 45 MPH OR MORE

   $L = \frac{WS^2}{60}$ 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	TAPER LENGTH LANE WIDTH IN FEET			NUMBER OF CHANNELIZING DEVICES FOR TAPER	MAX. SPACING OF DEVICES ALONG TAPER IN FEET
MILES PER HOUR 85th PERCENTILE	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. THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A TAPER SHALL BE AS SPECIFIED IN TABLE IN NOTE 1.
3. TYPE "B" HIGH INTENSITY FLASHING WARNING LIGHTS MAY BE INSTALLED ABOVE EACH WORK ZONE CONSTRUCTION SIGN FOR USE DURING HOURS OF DARKNESS.
4. 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.
5. A BUFFER SPACE SHOULD BE REQUIRED AS FOLLOWS:

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.

6. 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

7. ALL DEVICES ESTABLISHING A TAPER OR TANGENT LINE SHALL BE OF ONE TYPE; DEVICES SHALL NOT BE MIXED BY TYPE.
8. 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		

9. 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.
10. DURING HOURS OF DARKNESS, STEADY BURNING WARNING LIGHTS SHALL BE USED ON ALL CHANNELIZING DEVICES.

SYMBOLS

- ARROW PANEL
- FLASHING VEHICLE LIGHT
- 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.
- BARRICADE, DRUM, VERTICAL PANEL OR CONE.
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TRAFFIC DIRECTION
- WORK AREA

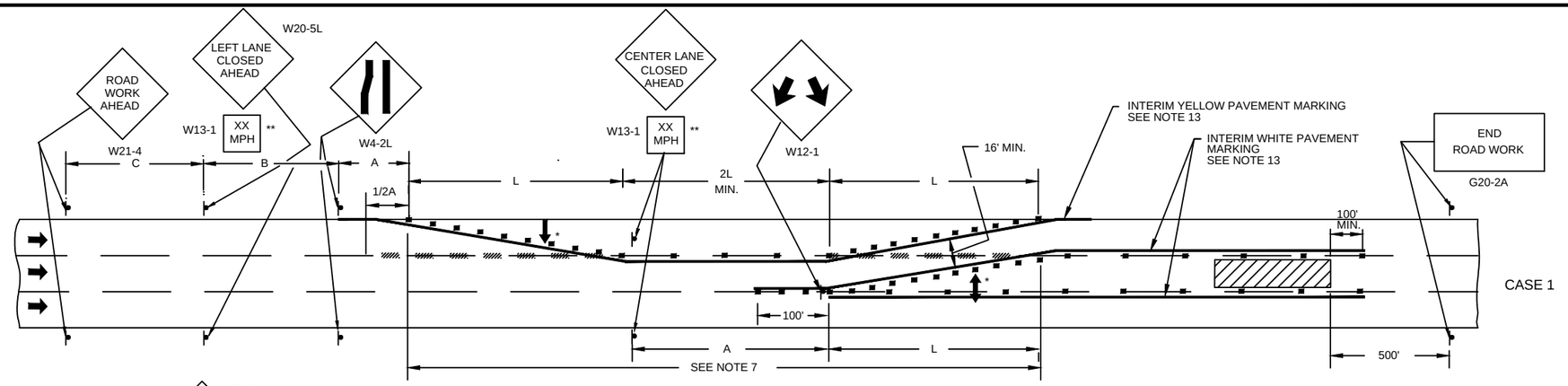
Effective 8/10/2023 to 8/07/2024

AGENCY APPROVED	B	C	H	L	M	N

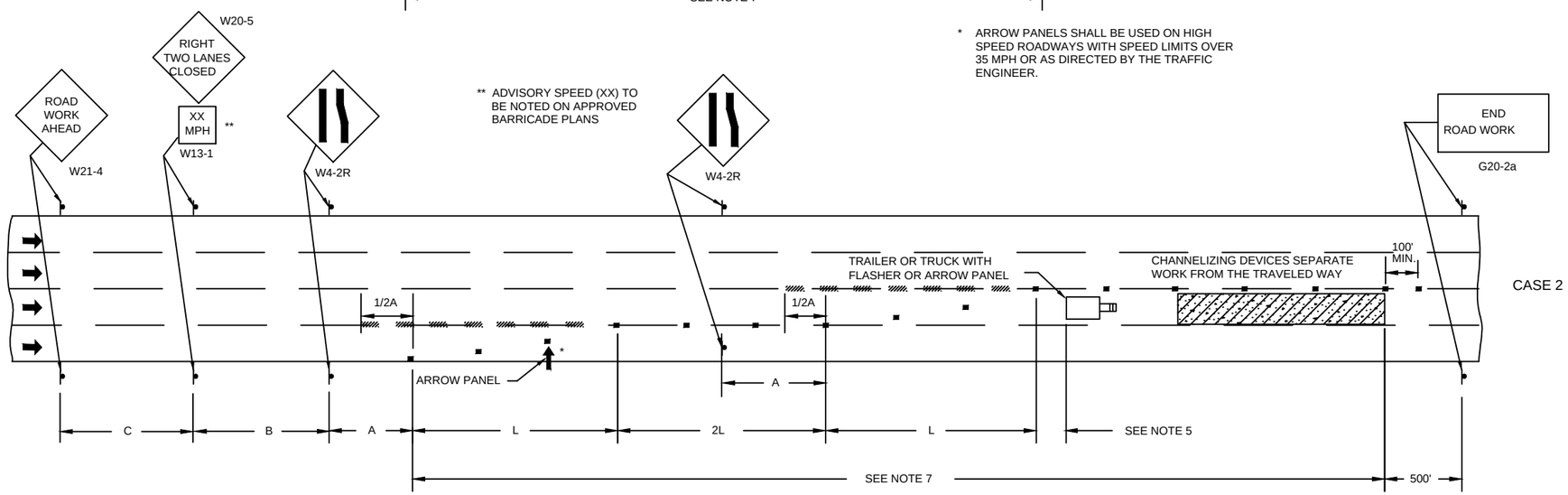
TRAFFIC CONTROL PLAN FOR HIGHWAY WORK ZONE	SPECIFICATION REFERENCE	TYPICAL APPLICATION FOR	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
		MULTILANE, UNDIVIDED, RURAL OR SUBURBAN, DAY OR NIGHT OPERATIONS WITH A WORK AREA IN THE LEFT LANE, ALLOWING WORK ACCESS FROM ADJACENT LANE	DATE 1-9-97 / DWG NO. 619

SYMBOLS

- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- ARROW BOARD
- BARRICADE DRUM, VERTICAL PANEL OR CONE
- 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



* ARROW PANELS SHALL BE USED ON HIGH SPEED ROADWAYS WITH SPEED LIMITS OVER 35 MPH OR AS DIRECTED BY THE TRAFFIC ENGINEER.



GENERAL NOTES

1. TAPER FORMULA: L = S X W FOR SPEEDS OF 45 MPH OR MORE
   $L = \frac{WS^2}{60}$ 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 10	11	12	NUMBER OF CHANNELIZING DEVICES FOR TAPER	MAX. SPACING OF DEVICES ALONG TAPER IN FEET
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. THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A TAPER SHALL BE AS SPECIFIED IN THE TABLE IN NOTE 1.

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

4. 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.

5. A BUFFER SPACE SHOULD BE REQUIRED AS FOLLOWS:

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.

6. DURING HOURS OF DARKNESS, STEADY BURNING WARNING LIGHTS SHALL BE REQUIRED ON ALL CHANNELIZING DEVICES.

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

8. 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

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. FOR CASE 1, A BUFFER SPACE SHOULD BE USED AT THE UPSTREAM END OF THE CLOSED INTERIOR LANE. FOR LONG-TERM OPERATIONS OF 72 CONTINUOUS HOURS OR MORE, A BARRIER SHOULD BE USED TO PROTECT THE OPERATION IN THE CLOSED INTERIOR LANE.

11. WHEN A SIDE ROAD INTERSECTS THE HIGHWAY WITHIN THE TEMPORARY TRAFFIC CONTROL ZONE, ADDITIONAL TRAFFIC CONTROL DEVICES SHALL BE ERECTED, AS NEEDED.

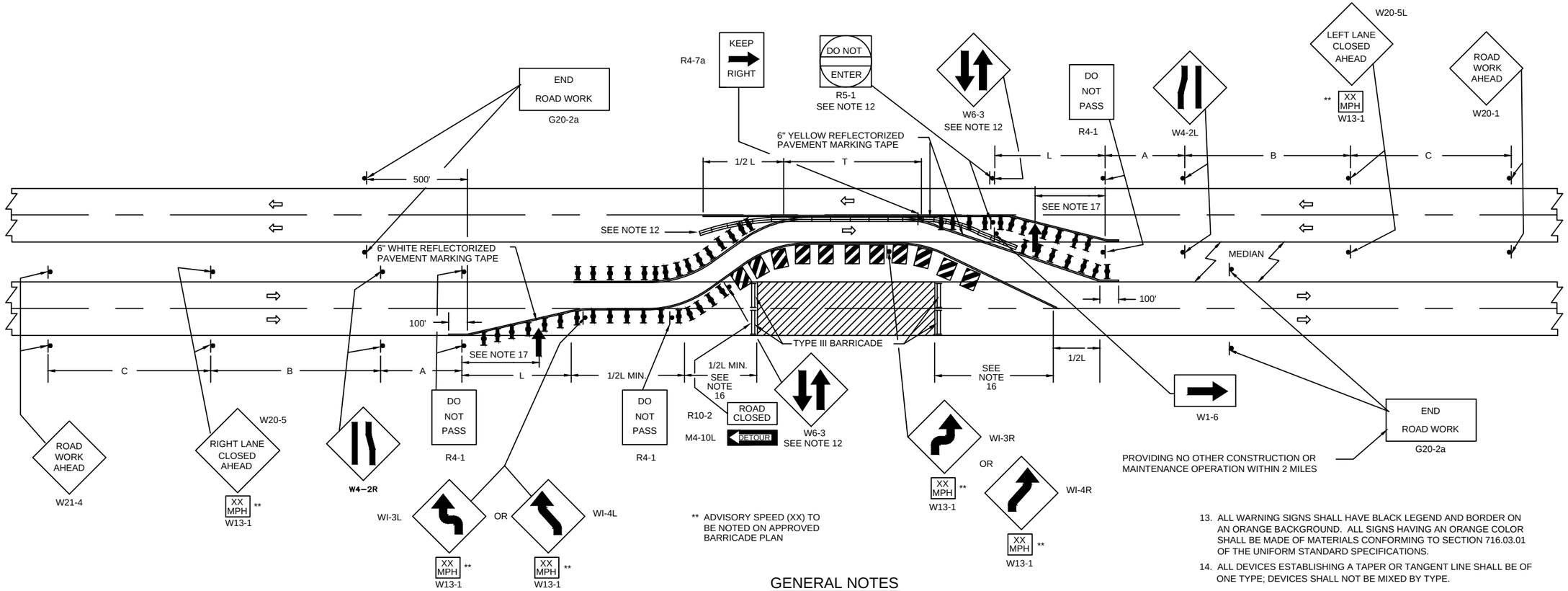
12. ACCESS FOR CAT TRANSIT SERVICE, PEDESTRIANS AND BICYCLES SHALL BE MAINTAINED THROUGHOUT DURATION OF CONSTRUCTION. IF RE-ROUTING OF ACCESS IS NECESSARY, THE CONTRACTOR SHALL PROVIDE THE ENTITY'S TRAFFIC ENGINEER WITH A MAP SHOWING THE PROPOSED RE-ROUTES FOR APPROVAL. IF CONSTRUCTION OPERATIONS AFFECT 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.

13. INTERIM PAVEMENT MARKINGS SHALL BE REFLECTORIZED, REMOVABLE, NON-FOIL TAPE AND A MINIMUM OF 6 IN. WIDE AND SHOULD BE REQUIRED FOR OPERATIONS OF 72 CONTINUOUS HOURS OR MORE.

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, ONE-WAY OR DIVIDED, RURAL OR SUBURBAN, DAY OR NIGHT OPERATIONS WHERE CENTER LANE(S) ARE CLOSED	DATE 1-9-97 / DWG NO. 620

Effective 8/10/2023 to 8/07/2024



** ADVISORY SPEED (XX) TO BE NOTED ON APPROVED BARRICADE PLAN

SYMBOLS

- ARROW BOARD
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- BARRICADE OR DRUM WITH STEADY BURNING LIGHT
- VERTICAL PANEL
- PORTABLE CONCRETE BARRIER RAIL
- TRAFFIC DIRECTION

1. THE "L" DISTANCE EQUALS:

FORMULAS FOR TAPER LENGTH

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

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

TAPER LENGTHS FOR LANE CLOSURES - DISTANCE L

SPEED MILES PER HOUR 85th PERCENTILE	TAPER LENGTH LANE WIDTH IN FEET 10	11	12	NUMBER OF CHANNELIZING DEVICES FOR TAPER	MAX. SPACING OF DEVICES ALONG TAPER IN FEET
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. TWO WAY TRAFFIC SIGN(S) SHALL BE REPEATED EVERY ONE-QUARTER MILE IN EACH DIRECTION THROUGH THE TANGENT DISTANCE.
3. WHEN (T) IS GREATER THAN 500 FT., 4-FOOT LENGTHS OF DOUBLE YELLOW REFLECTORIZED, REMOVABLE, NON-FOIL PAVEMENT MARKING TAPE AT 40 FOOT CENTERS MAY BE USED.

GENERAL NOTES

4. A CURVE SIGN SHALL BE REQUIRED AT THE EXIT END OF THE BYPASS IF (T) IS EQUAL TO OR GREATER THAN 1,000 FEET.
5. ON PAVED CROSSOVERS, REFLECTIVE EDGE LINES AND A CENTERLINE SHALL BE USED WHEN THE CLOSURE TIME IS 72 CONTINUOUS HOURS OR MORE OR WHEN THE NORMAL POSTED SPEED OUTSIDE THE AREA OF OPERATIONS EXCEEDS 50 M.P.H. REFLECTORIZED, REMOVABLE, NON-FOIL PAVEMENT MARKING TAPE SHALL BE USED FOR MARKING THE EDGE LINES AND CENTER LINE ON THE EXISTING PAVEMENT. REFLECTORIZED PAVEMENT MARKING PAINT MAY BE USED FOR MARKINGS ON PAVED CROSSOVERS. RAISED REFLECTIVE PAVEMENT MARKERS CONFORMING TO UNIFORM STANDARD SPECS. & DRAWINGS 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 MARKINGS 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.
6. CONES MAY BE SUBSTITUTED FOR BARRICADES AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 IN. IN HEIGHT.
7. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES FOR DAY OPERATIONS.
8. ALL SIGNS SHALL BE GROUND-MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS AND AS REQUIRED BY SECTION 625 OF THE UNIFORM STANDARD SPECIFICATIONS.
9. TYPE "B" HIGH INTENSITY FLASHING WARNING LIGHTS MAY BE INSTALLED ABOVE EACH WORK ZONE CONSTRUCTION SIGN FOR USE DURING HOURS OF DARKNESS.
10. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS BY THE TRAFFIC ENGINEER.
11. ALL BARRICADE LIGHTS SHALL BE MONODIRECTIONAL.
12. PORTABLE CONCRETE BARRIER RAIL SHOULD BE REQUIRED FOR LONG-TERM PROJECTS OF 72 CONTINUOUS HOURS OR MORE, SHALL CONFORM WITH STANDARD DRAWING NO. 602, AND BE USED WHEN CALLED UPON THEREIN. WHEN PORTABLE CONCRETE BARRIER RAIL IS REQUIRED, THE W6-3 & R5-1 SIGNS MAY BE OMITTED THROUGH THE TANGENT DISTANCE (T).
13. 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.
14. ALL DEVICES ESTABLISHING A TAPER OR TANGENT LINE SHALL BE OF ONE TYPE; DEVICES SHALL NOT BE MIXED BY TYPE.
15. 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

16. ENGINEERED GEOMETRIC DESIGN TO BE PROVIDED BY ENGINEER.
17. ARROW BOARD SHOULD BE PLACED AS CLOSE TO THE BEGINNING OF THE TAPER AS POSSIBLE, AS SOON AS THERE IS ADEQUATE SPACE.
18. 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

19. WHEN A SIDE ROAD INTERSECTS THE HIGHWAY WITHIN THE TEMPORARY TRAFFIC CONTROL ZONE, ADDITIONAL TRAFFIC CONTROL DEVICES SHALL BE ERECTED, AS NEEDED.
20. 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.

AGENCY APPROVED	B	C	H	L	M	N

Effective 8/10/2023 to 8/07/2024

TRAFFIC CONTROL PLAN FOR HIGHWAY WORK ZONE

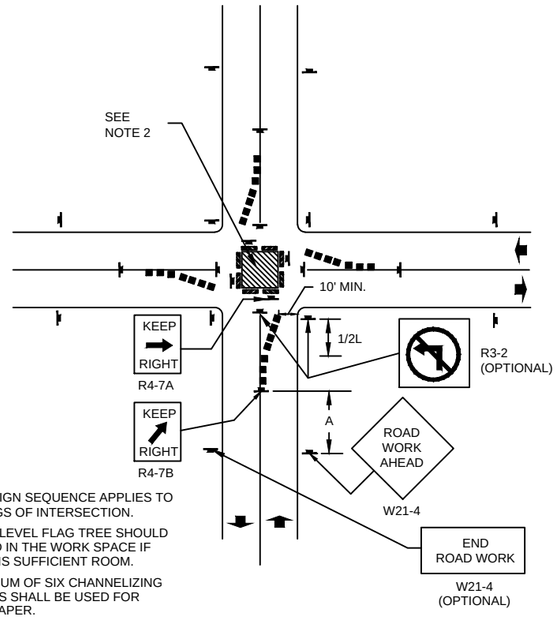
SPECIFICATION REFERENCE

TYPICAL APPLICATION FOR

MULTILANE, DIVIDED, RURAL OR SUBURBAN, DAY OR NIGHT OPERATIONS WHERE ACTIVITIES REQUIRE CLOSING TWO ADJACENT LANES & AN OPPOSING LANE IS USED FOR A TEMPORARY CROSSOVER

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

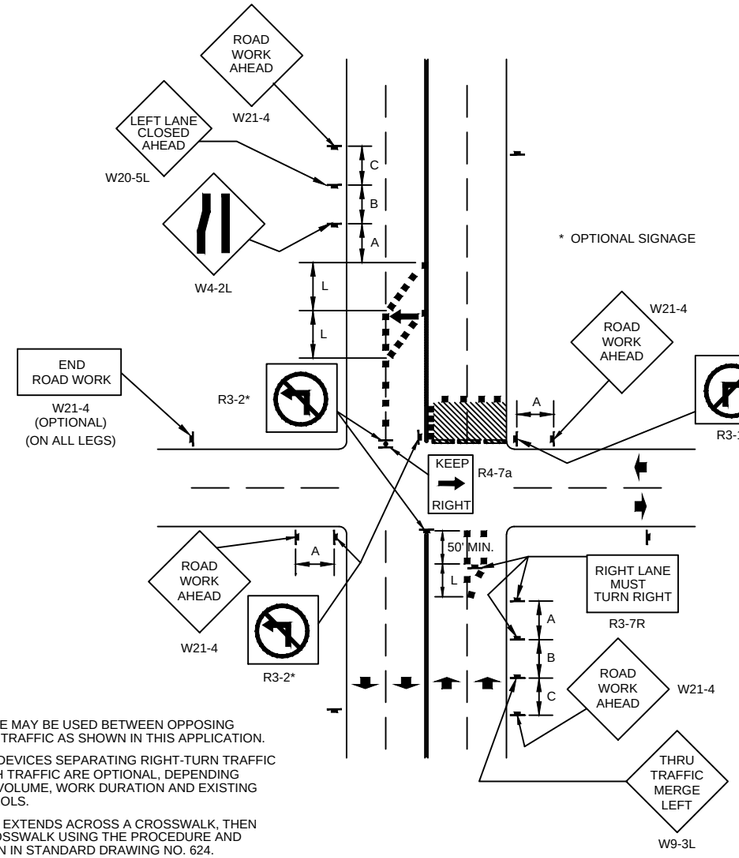
DATE 1-9-97 | DWG NO. 621



NOTE:

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

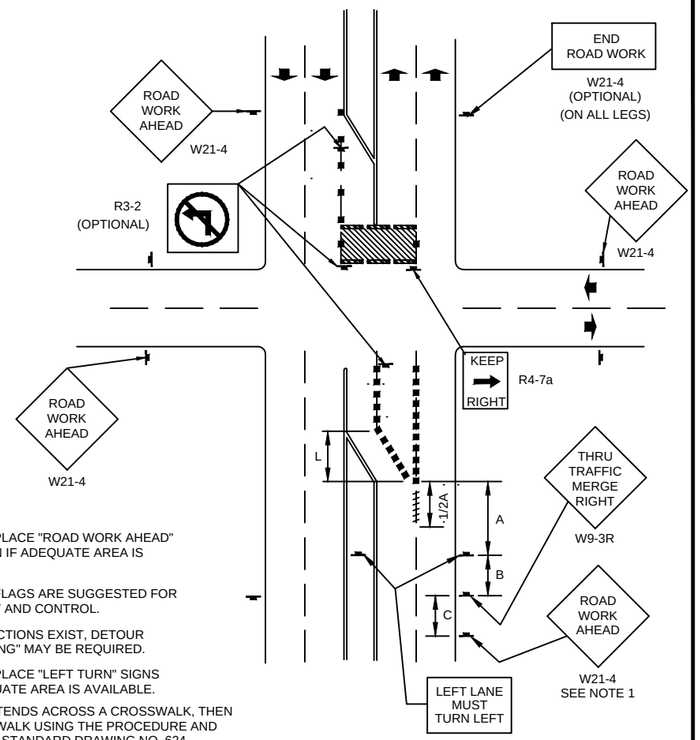
A. WORK AREA IS IN THE CENTER OF AN INTERSECTION



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.

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



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.

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

GENERAL NOTES

1. FORMULAS FOR TAPER LENGTH

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

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 85th PERCENTILE	TAPER LENGTH LANE WIDTH IN FEET 10	11	12	NUMBER OF CHANNELIZING DEVICES FOR TAPER	MAX. SPACING OF DEVICES ALONG TAPER IN FEET
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. ADDITIONAL ADVANCE WARNING MAY BE NECESSARY
3. PROHIBIT TURNS AS REQUIRED BY TRAFFIC CONDITIONS

4. 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

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.

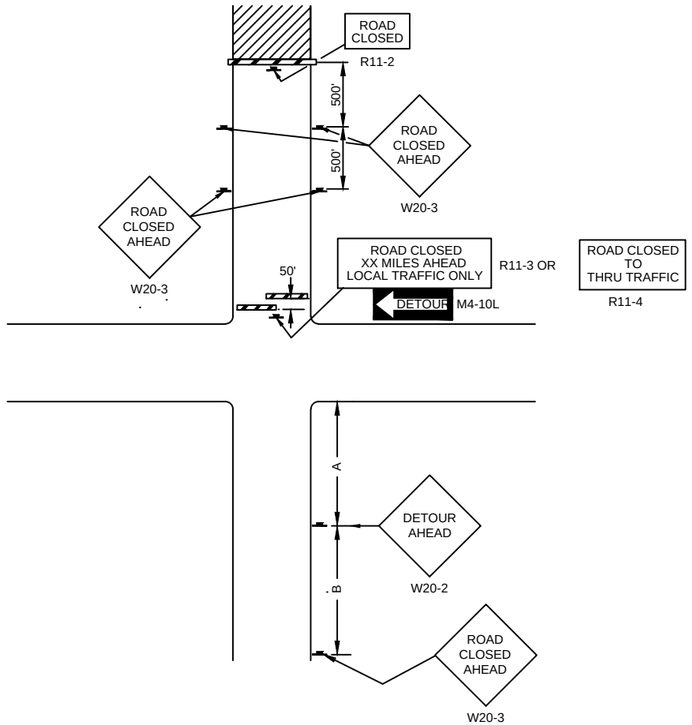
SYMBOLS

- 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

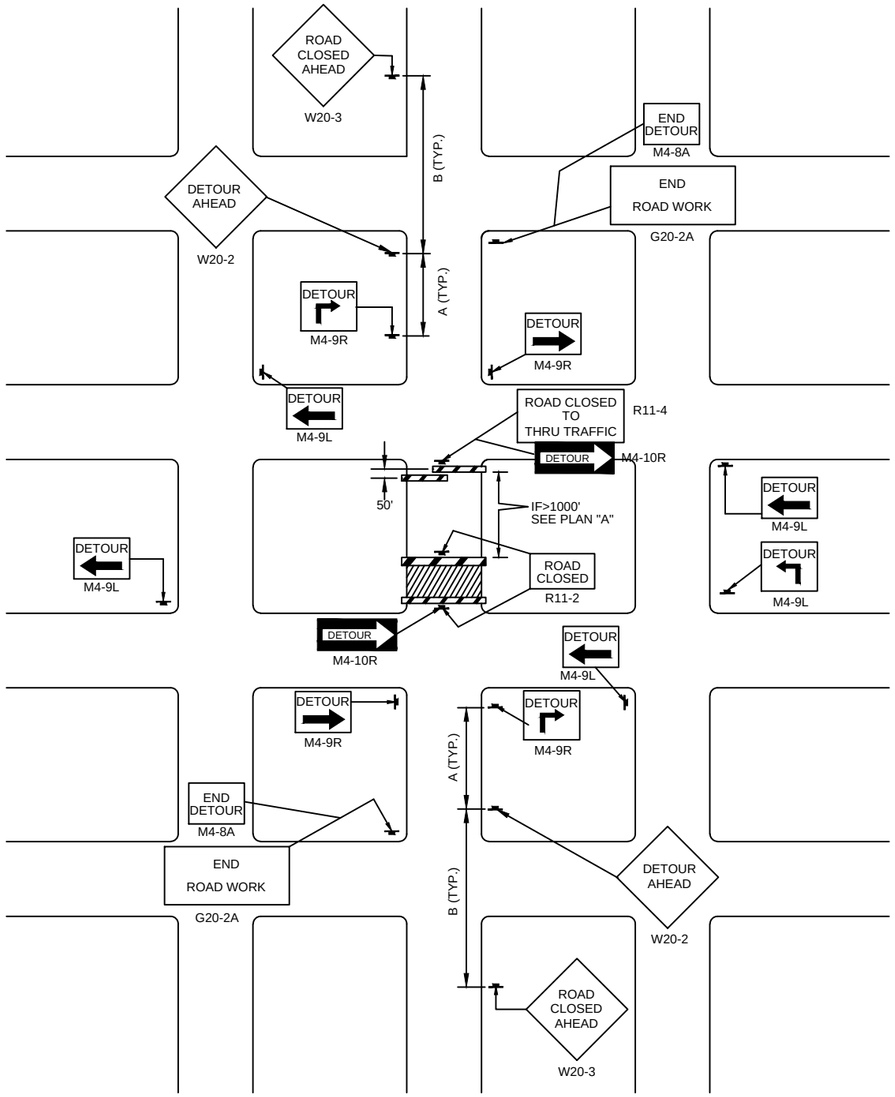
Effective 8/10/2023 to 8/07/2024

AGENCY APPROVED	B	C	H	L	M	N

TRAFFIC CONTROL PLAN FOR HIGHWAY WORK ZONE	SPECIFICATION REFERENCE	TYPICAL APPLICATION FOR WORK AREAS WITHIN OR NEAR SUBURBAN INTERSECTIONS	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
			DATE 1-9-97 / DWG NO. 622



A. TYPICAL APPLICATION-ROADWAY CLOSED BEYOND DETOUR POINT.



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

SYMBOLS

WORK AREA

TYPE III BARRICADES, PLACED END-TO-END FOR WIDTH OF ROADWAY DEPICTED.

SIGN ON PORTABLE OR PERMANENT SUPPORT

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.
8. M4-9 DETOUR SIGNS MAY BE LOCATED ON THE FAR SIDE OF THE INTERSECTIONS.
9. TABLE FOR SPACING OF ADVANCE WARNING SIGNS

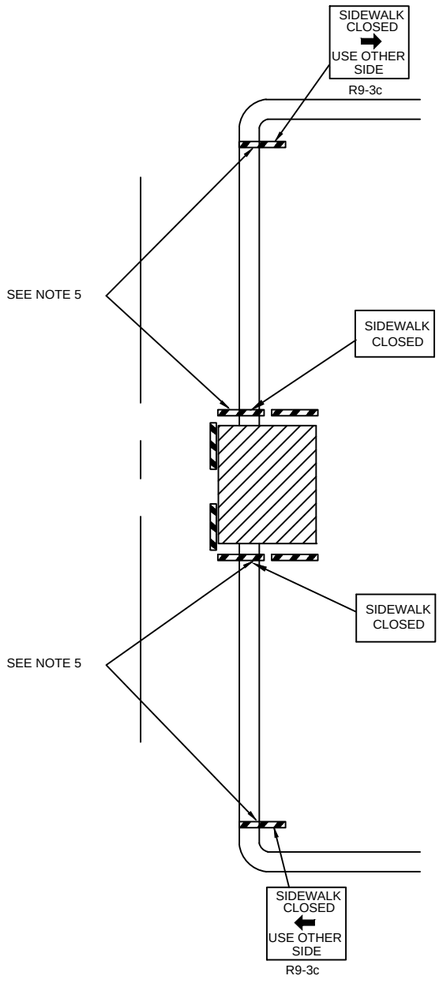
TABLE FOR SPACING OF ADVANCE WARNING SIGNS			
ROAD TYPE	DISTANCE BETWEEN SIGNS (FT)		
	A	B	C
URBAN (LESS THAN 35 MPH)	200	200	200
URBAN (35 MPH OR GREATER)	350	350	350
RURAL	500	500	500
EXPRESSWAY/FREEWAY	1000	1600	2600

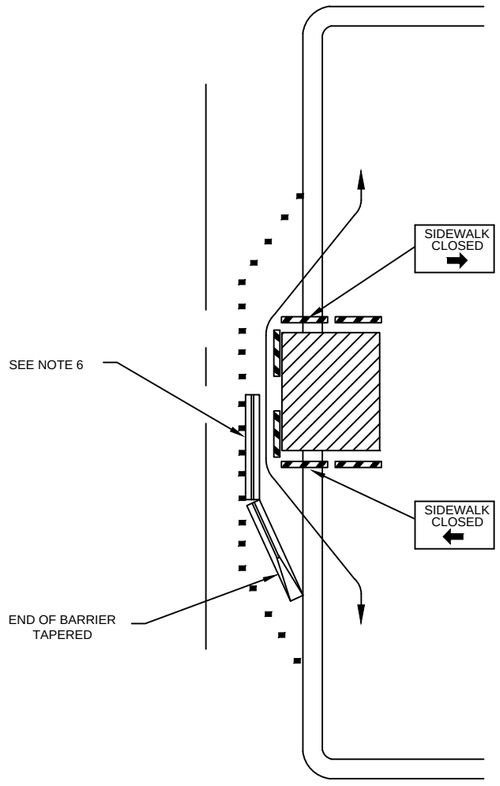
10. ACCESS FOR CAT TRANSIT SERVICE, PEDESTRIANS AND BICYCLES SHALL BE MAINTAINED THROUGHOUT DURATION OF CONSTRUCTION. IF RE-ROUTING OF ACCESS IS NECESSARY, THE CONTRACTOR SHALL PROVIDE THE ENTITY'S TRAFFIC ENGINEER WITH A MAP SHOWING THE PROPOSED RE-ROUTES FOR APPROVAL. IF CONSTRUCTION OPERATIONS AFFECT 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.

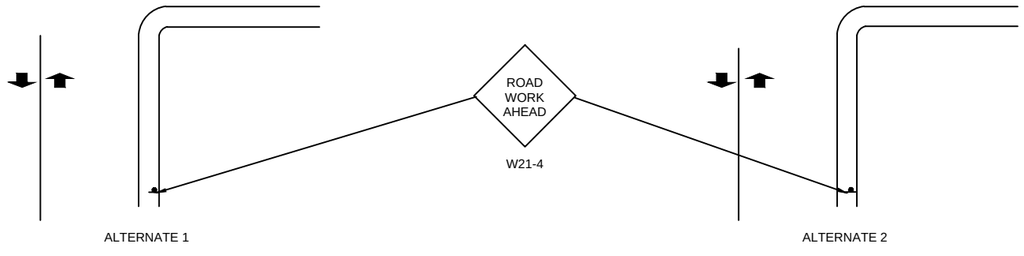
AGENCY APPROVED	B	C	H	L	M	N

Effective 8/10/2023 to 8/07/2024

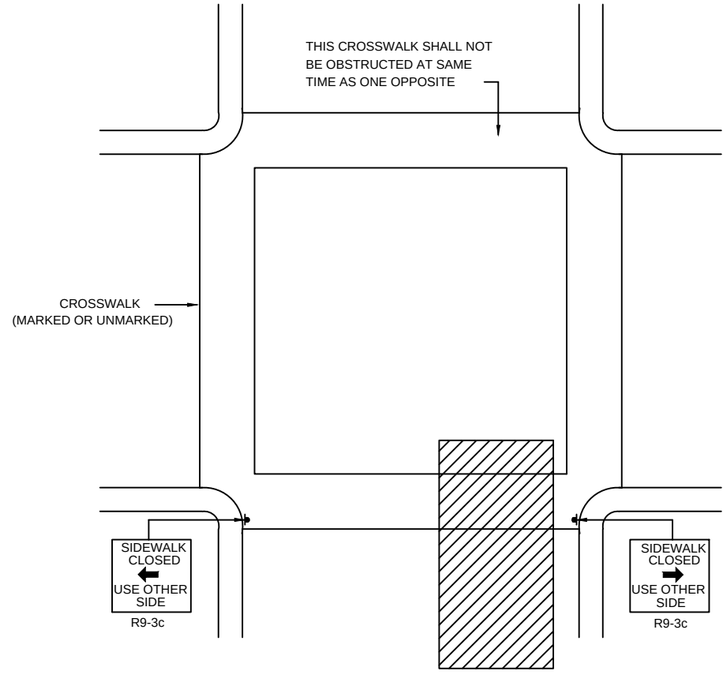
TRAFFIC CONTROL PLAN FOR HIGHWAY WORK ZONE	SPECIFICATION REFERENCE	TYPICAL APPLICATION FOR TWO-LANE, TWO-WAY, RURAL OR SUBURBAN, DAY OR NIGHT ROAD CLOSURE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
			DATE 1-9-97 / DWG NO. 623







WITHIN BLOCK



AT INTERSECTION

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.
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.

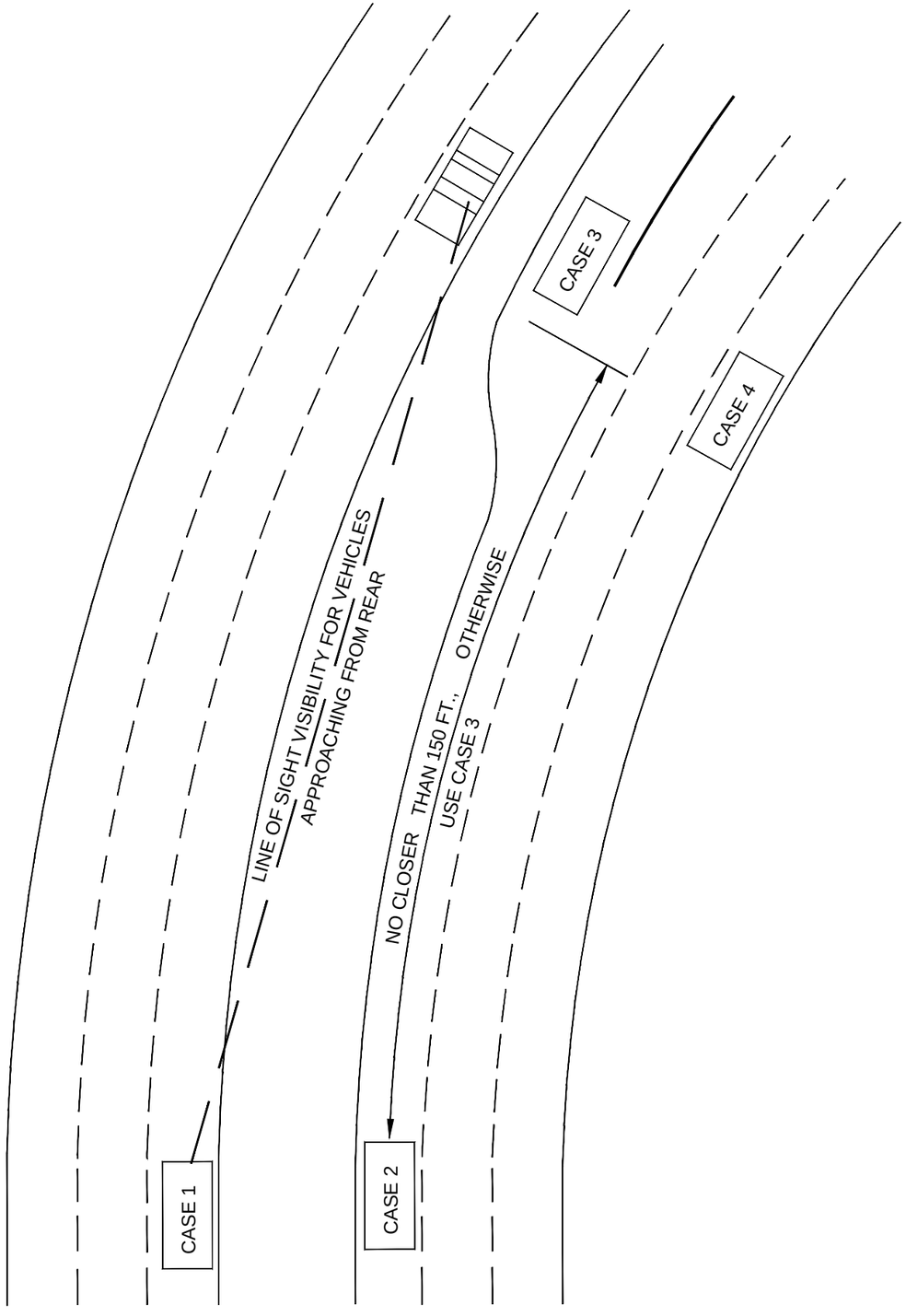
BOULDER CITY	293-9200	MESQUITE	346-5295
CLARK COUNTY	455-6100	NORTH LAS VEGAS	642-2462
HENDERSON	565-2140		
LAS VEGAS	229-6331		

8. PEDESTRIANS SHOULD BE DIVERTED TO A SAFE AREA. DIVERSIONS SHALL BE AN ACCESSIBLE ROUTE AS DEFINED BY THE AMERICANS WITH DISABLITIES 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.

AGENCY APPROVED	B	C	H	L	M	N

TRAFFIC CONTROL PLAN FOR HIGHWAY WORK ZONE	SPECIFICATION REFERENCE	TYPICAL APPLICATION FOR CONTROLLING PEDESTRIAN TRAFFIC	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
			DATE 1-9-97 / DWG NO. 624

Effective 8/10/2023 to 8/07/2024



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

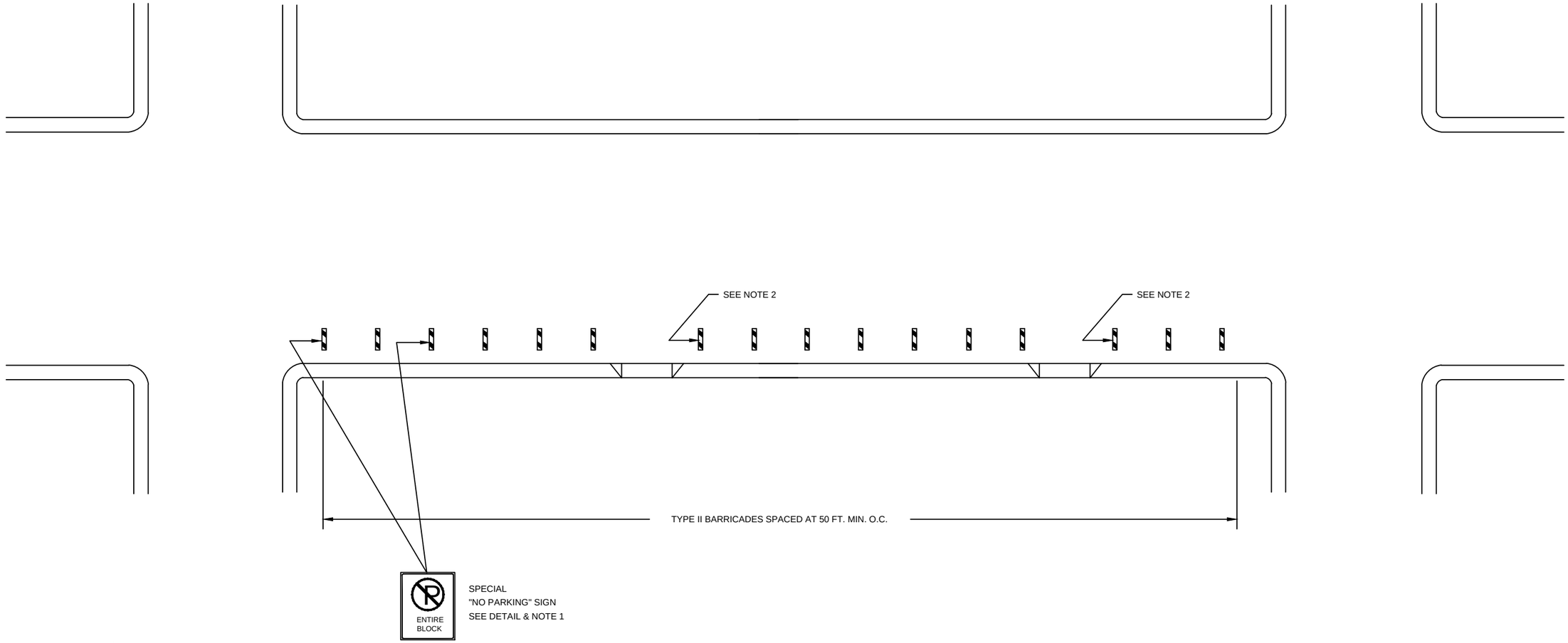
DEVICE OR PARAMETER	SITUATION/CASE # 1	2	3	4
A. MINIMUM 60 IN. WIDE FLASHER BAR ATOP VEHICLE, WITH GREATER THAN 4 LIGHT ELEMENTS VISIBLE TO APPROACHING TRAFFIC	✓	✓	✓	✓
B. CONES SET OUT BEHIND VEHICLE	3, ACROSS BLOCKED LANE	3, ACROSS BLOCKED LANE	5, ACROSS BLOCKED LANE	NONE
C. TURN ON VEHICLE'S EMERGENCY 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

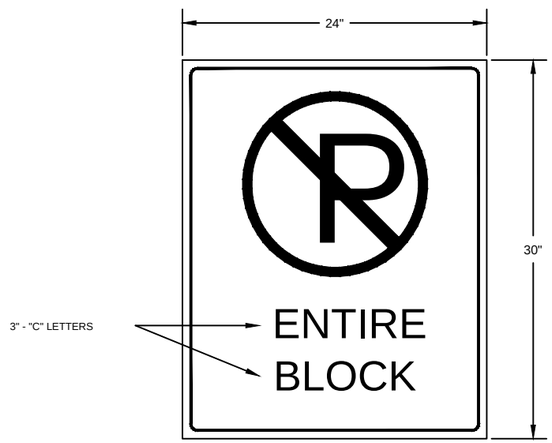
NOTE: TYPICAL APPLICATION IS FOR LANDSCAPE OR UTILITY ACTIVITIES.

Effective 8/10/2023 to 8/07/2024

AGENCY APPROVED	B	C	H	L	M	N

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	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
			DATE 1-9-97 / DWG NO. 625





"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.

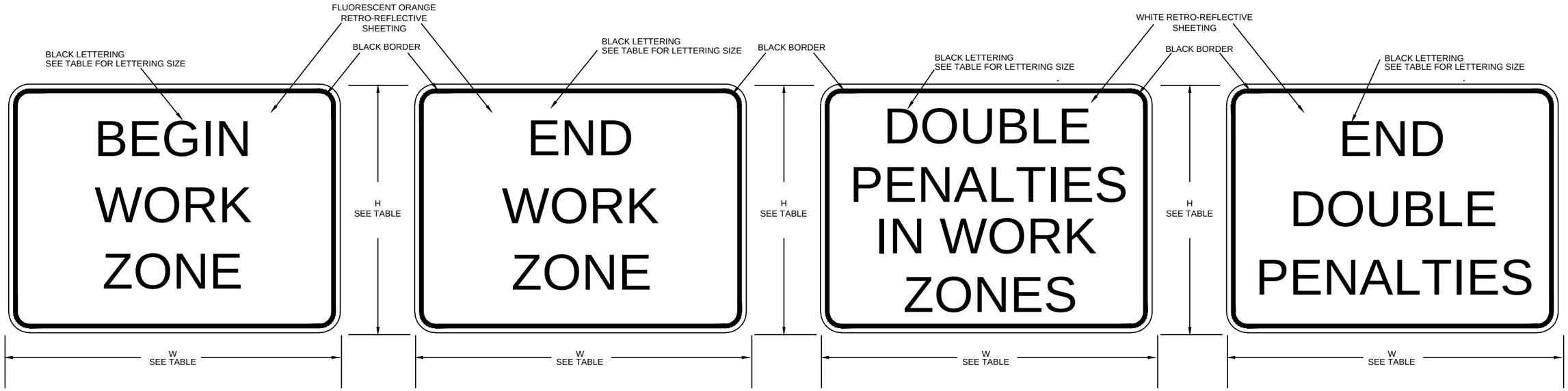
SYMBOLS:

BARRICADE

Effective 8/10/2023 to 8/07/2024

AGENCY APPROVED	B	C	H	L	M	N

TRAFFIC CONTROL PLAN FOR HIGHWAY WORK ZONE	SPECIFICATION REFERENCE	TYPICAL APPLICATION FOR PLACEMENT OF "NO PARKING" SIGNS FOR SHORT-TERM STREET REHABILITATION PROJECTS	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
			DATE 1-9-97 | DWG NO. 626 (1 OF 1)



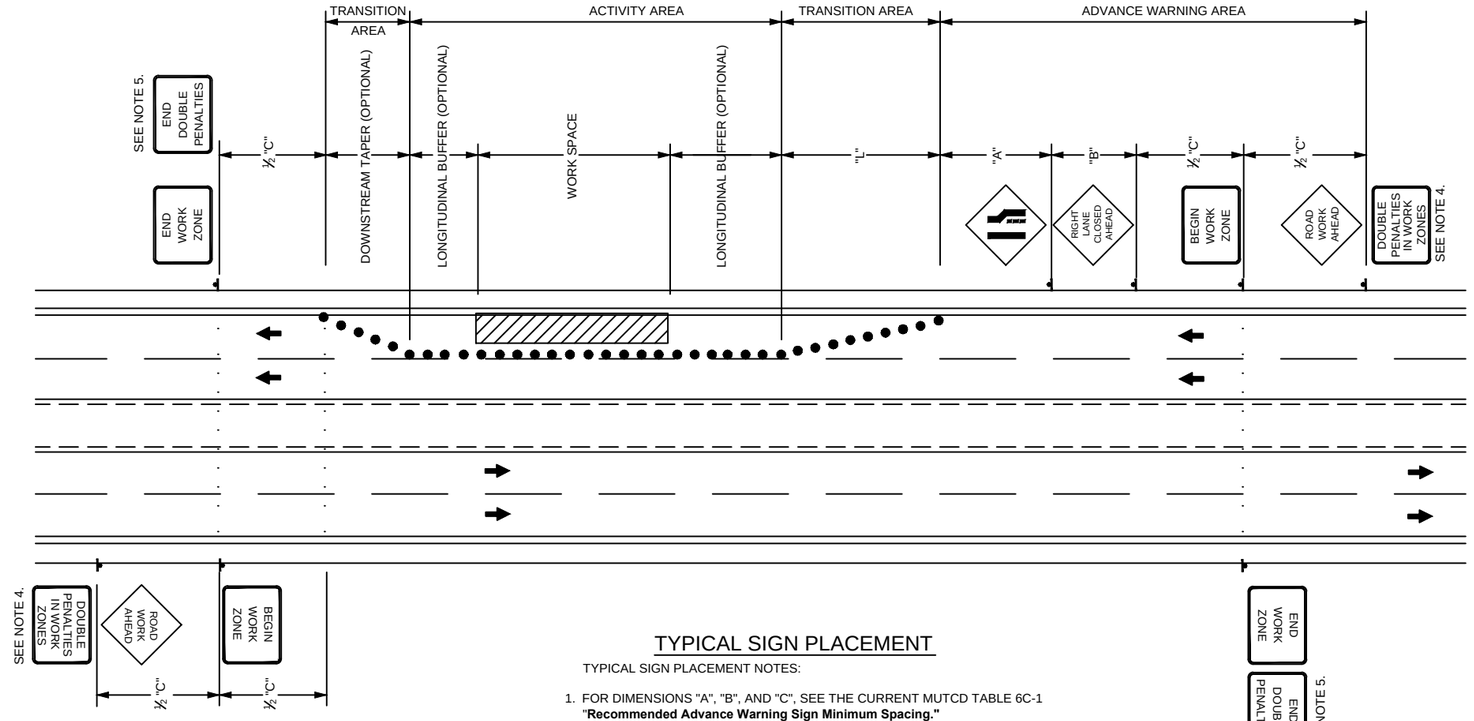
GENERAL NOTES:

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

	"DOUBLE PENALTIES IN WORK ZONE" SIGN			"BEGIN WORK ZONE" SIGN "END WORK ZONE" SIGN "END DOUBLE PENALTIES" SIGN		
SPEED LIMIT	"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.

Effective 8/10/2023 to 8/07/2024

AGENCY APPROVED	B	C	H	L	M	N

TRAFFIC CONTROL PLAN FOR HIGHWAY WORK ZONE	SPECIFICATION REFERENCE	
	716	SIGN MATERIALS

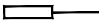
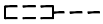
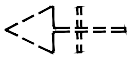
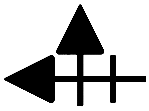
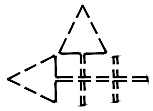
TYPICAL APPLICATION FOR

STANDARD FOR "DOUBLE PENALTIES" SIGNS FOR USE IN TEMPORARY TRAFFIC CONTROL ZONES

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

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

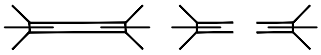
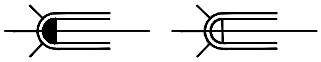
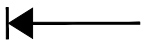
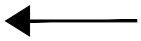
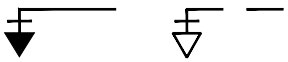
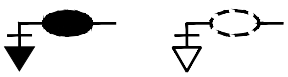
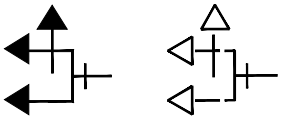
SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

STANDARD SYMBOLS FOR TRAFFIC SIGNAL DRAWINGS

DATE 12-12-96	DWG. NO. 701	SHEET 1 OF 2

Effective 8/10/2023 to 8/07/2024

PROPOSED	EXISTING	
		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)

AGENCY APPROVED	B	C	H	L	M	N

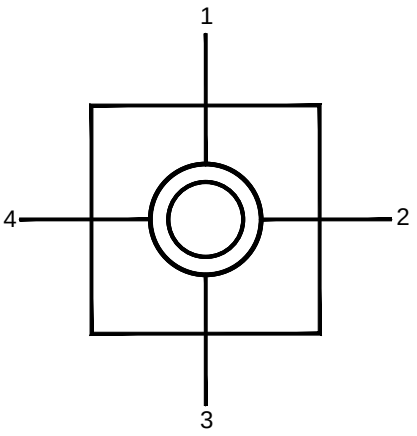
SPECIFICATION REFERENCE	
-	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

STANDARD SYMBOLS FOR TRAFFIC SIGNAL DRAWINGS

DATE 12-12-96	DWG. NO. 701	SHEET 2 OF 2

Effective 8/10/2023 to 8/07/2024



QUADRANT

ARM OR SIGNAL LOCATION

(TOP VIEW)

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

AGENCY APPROVED	B	C	H	L	M	N

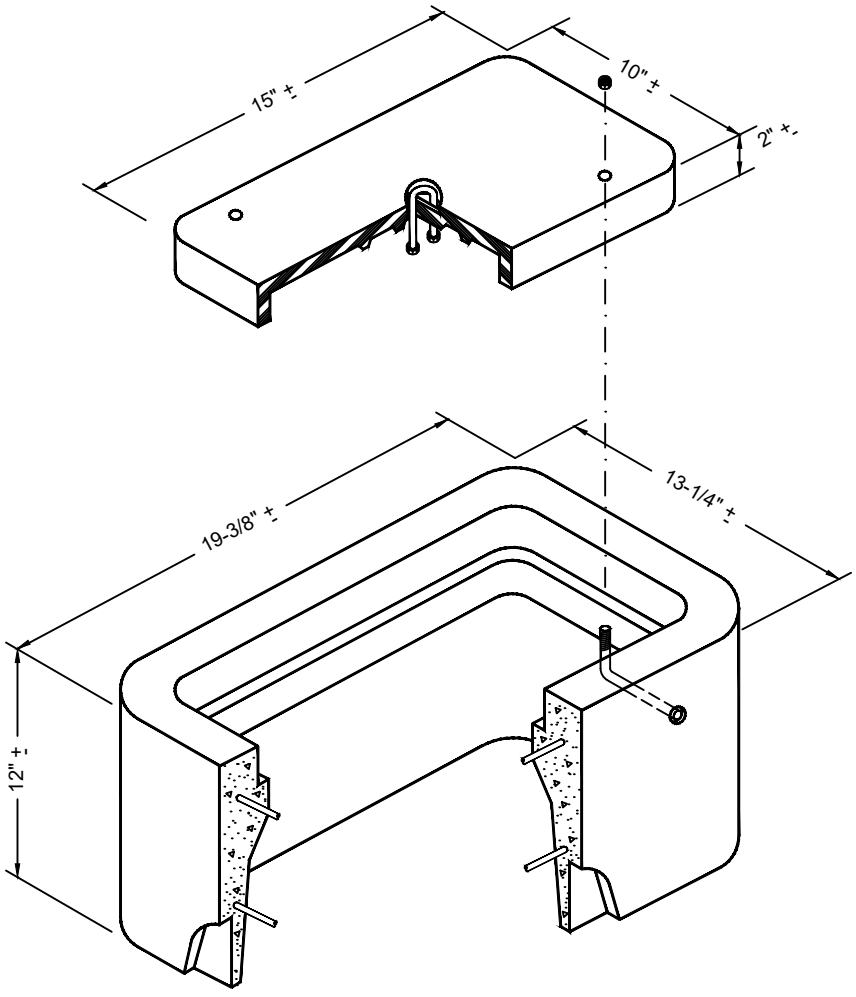
SPECIFICATION REFERENCE	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

QUADRANT DETAIL

DATE	DWG. NO. 702	

Effective 8/10/2023 to 8/07/2024



POLYMER COVER MARKED
"TRAFFIC SIGNAL"

PRECAST REINFORCED
CONCRETE BODY

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

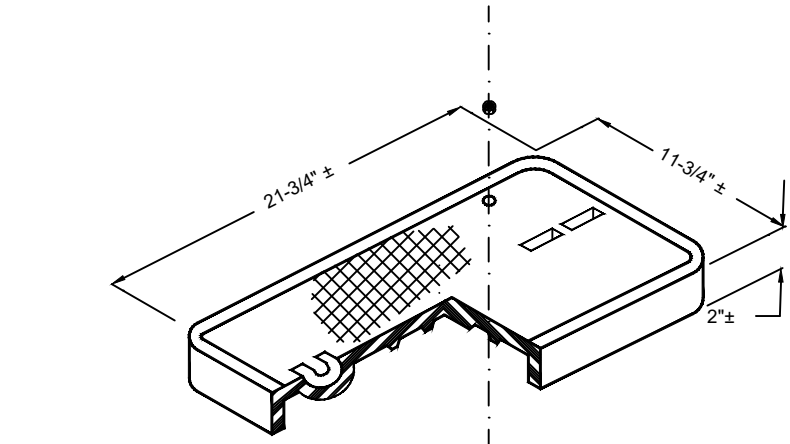
SPECIFICATION REFERENCE	
-	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

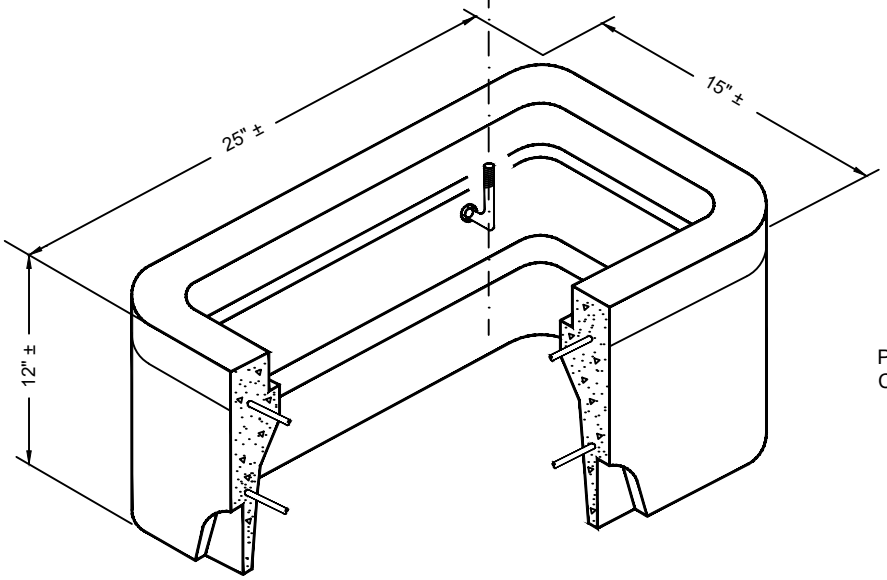
NO. 3 1/2 PULL BOX

DATE 01-09-20	DWG. NO. 705	

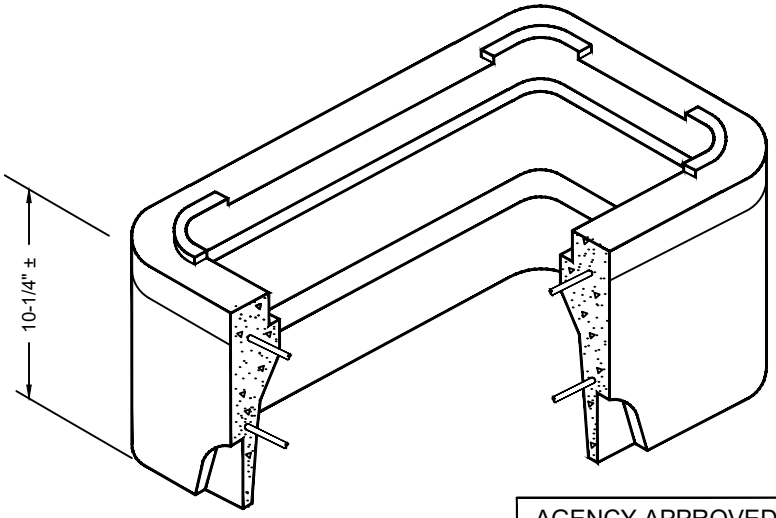
Effective 8/10/2023 to 8/07/2024



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

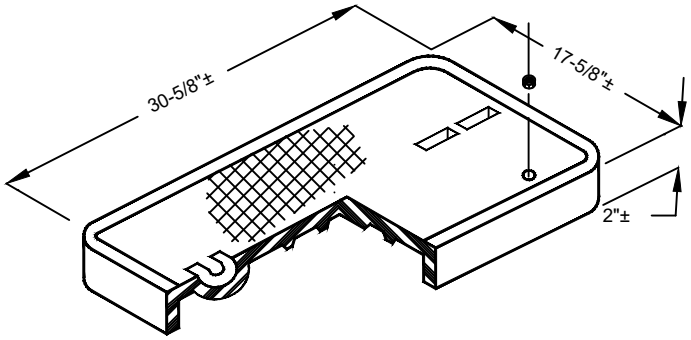
SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

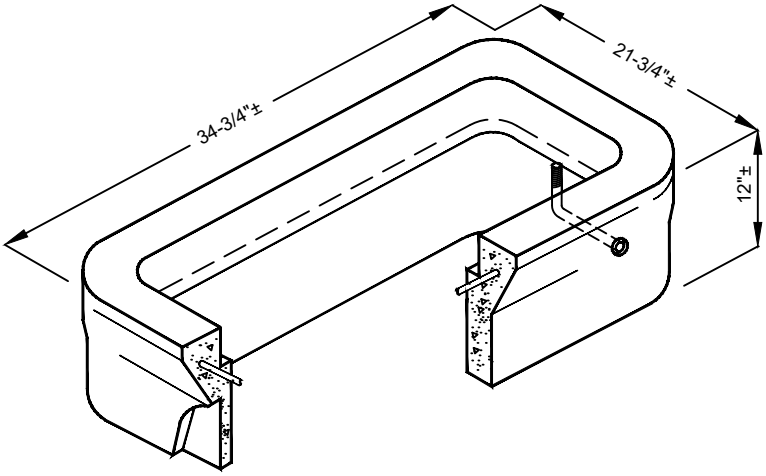
NO. 5 PULL BOX

DATE 01-09-20	DWG. NO. 706	

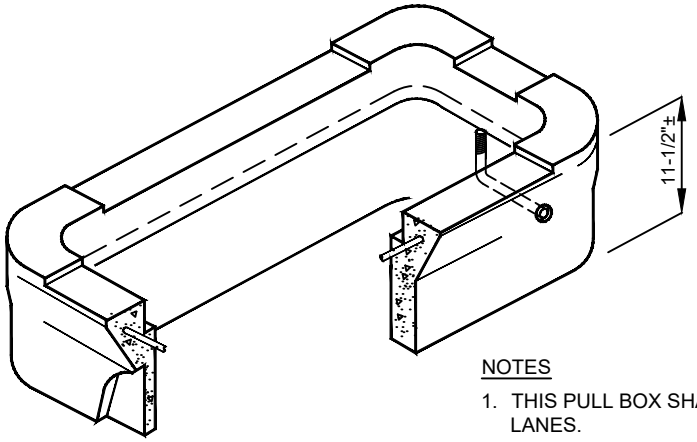
Effective 8/10/2023 to 8/07/2024



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

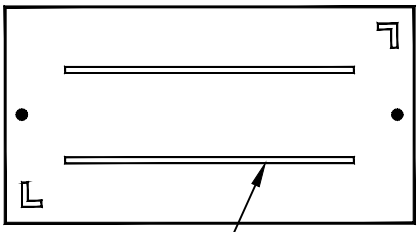
SPECIFICATION REFERENCE	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

NO. 7 PULL BOX

DATE 01-09-20	DWG. NO. 707	

Effective 8/10/2023 to 8/07/2024

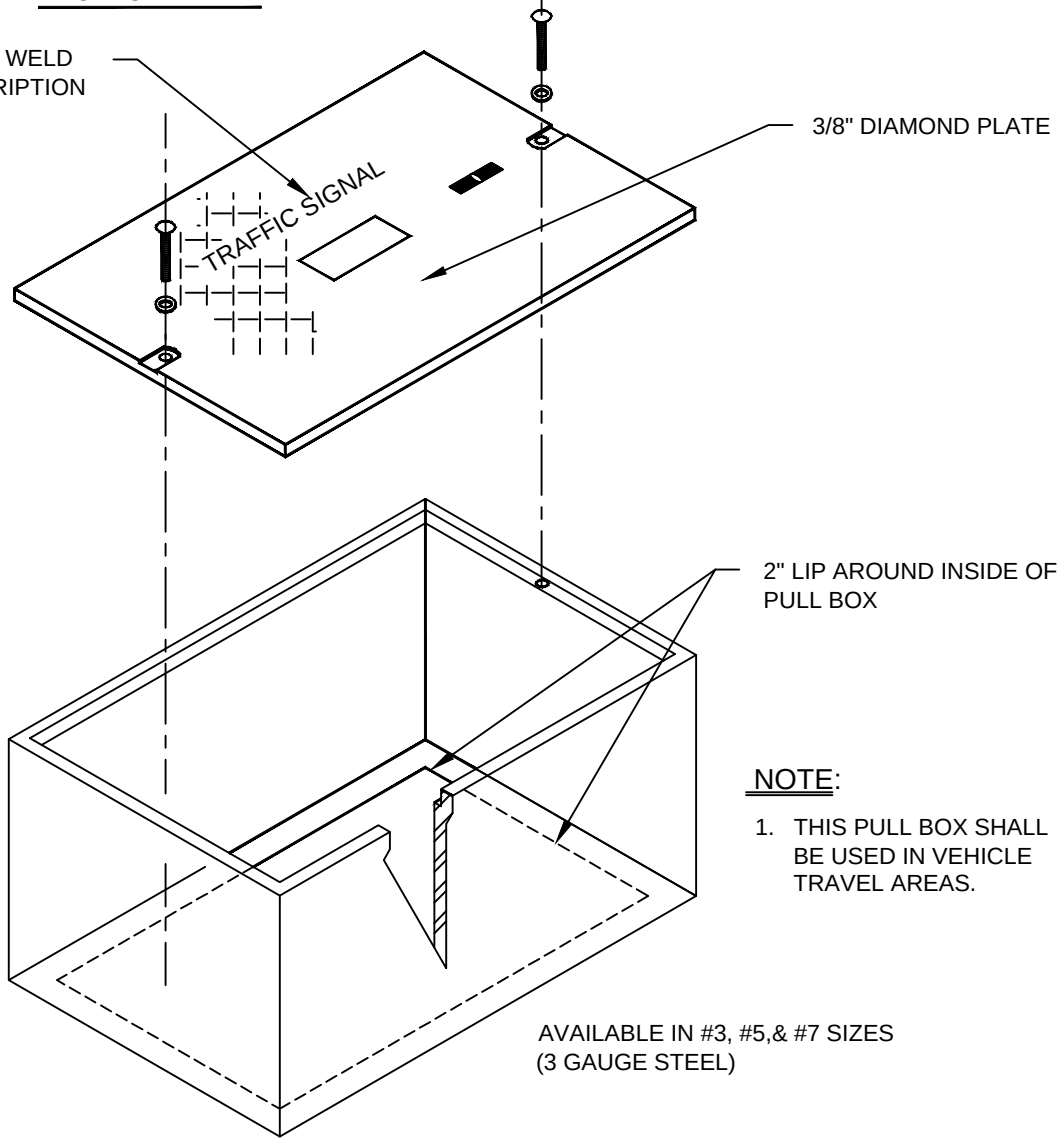


WELD PLATE STIFFENERS

BOTTOM VIEW



SIDE VIEW



NOTE:

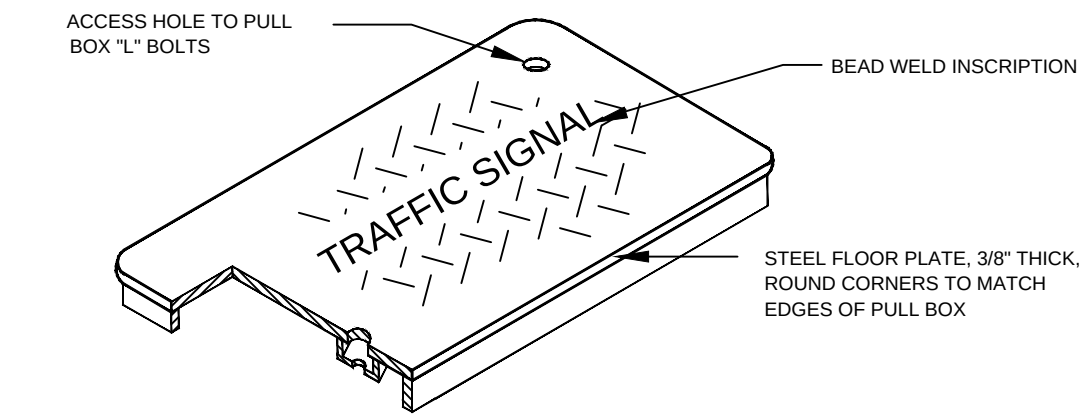
1. THIS PULL BOX SHALL BE USED IN VEHICLE TRAVEL AREAS.

AVAILABLE IN #3, #5,& #7 SIZES
(3 GAUGE STEEL)

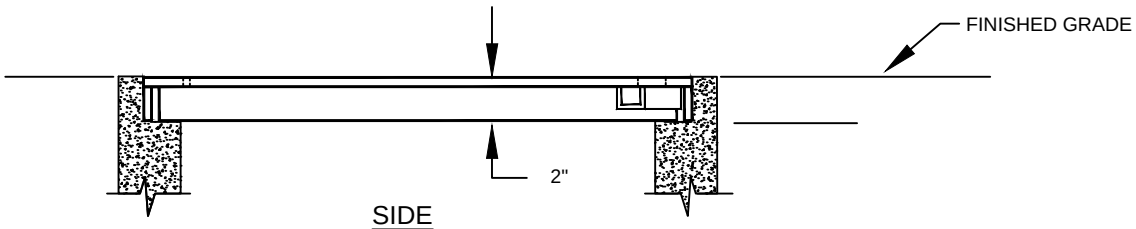
AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	STEEL PULL BOXES
	DATE / DWG. NO. 708

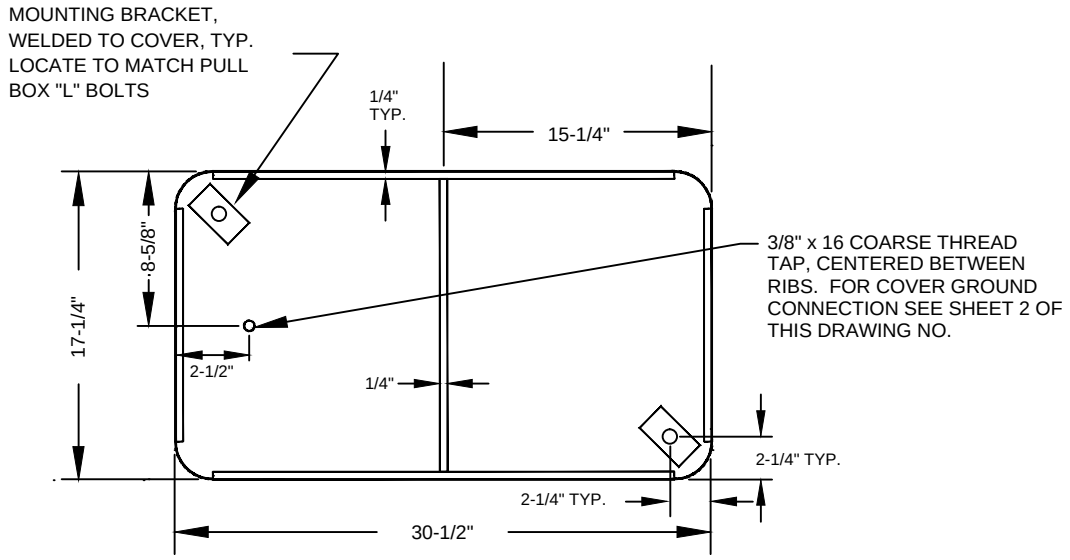
Effective 8/10/2023 to 8/07/2024



COVER



SIDE



BOTTOM

NOTES:

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

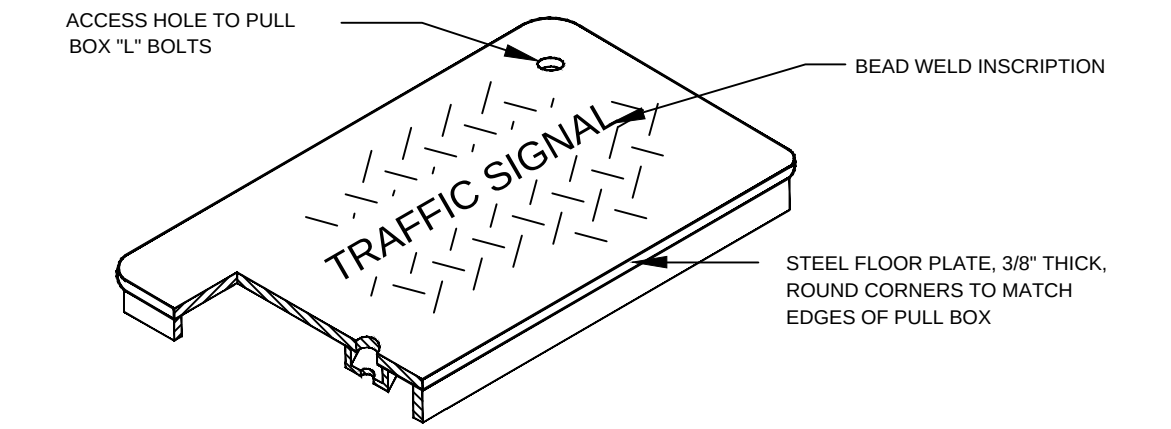
SPECIFICATION REFERENCE	
506	STEEL STRUCTURES
623	TRAFFIC SIGNALS & STREETLIGHTING

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

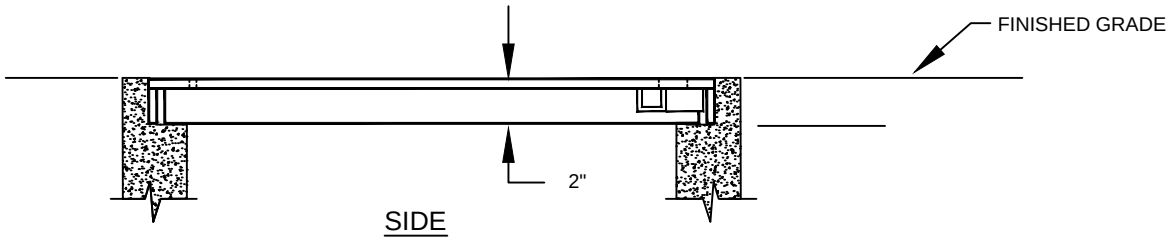
PULL BOX STREET COVER

DATE 12-12-96	DWG. NO. 709	SHEET 1 OF 2

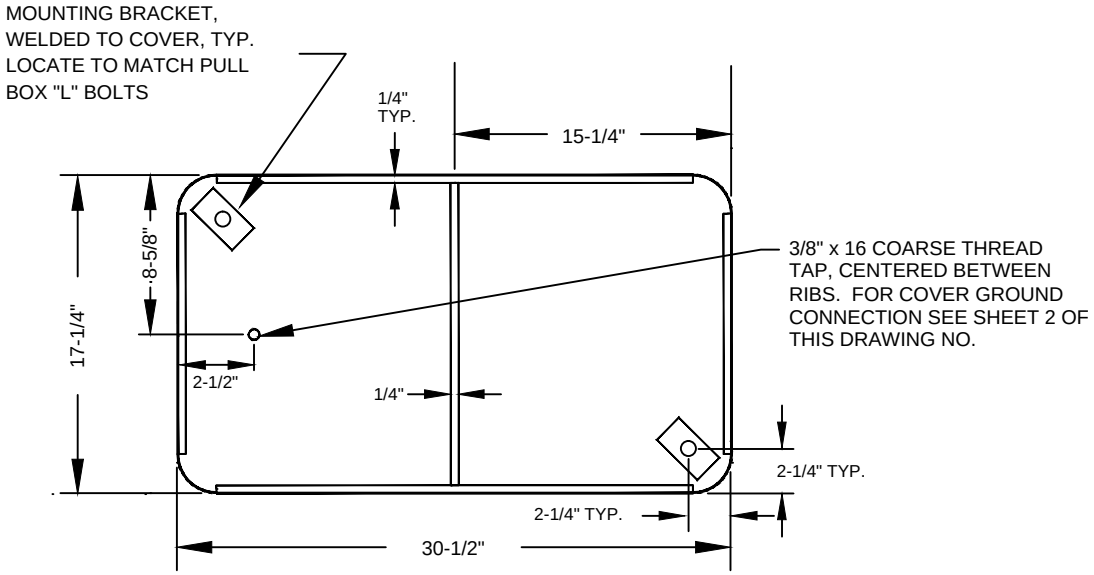
Effective 8/10/2023 to 8/07/2024



COVER



SIDE



BOTTOM

NOTES:

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

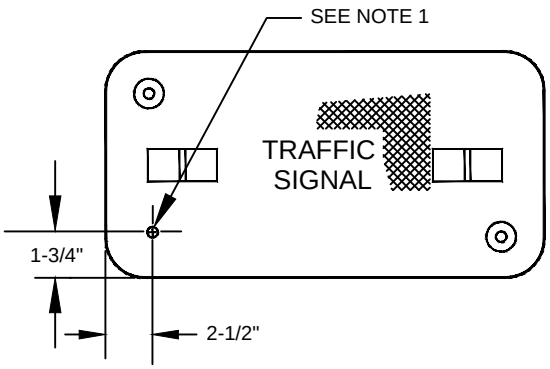
SPECIFICATION REFERENCE	
506	STEEL STRUCTURES
623	TRAFFIC SIGNALS & STREETLIGHTING
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

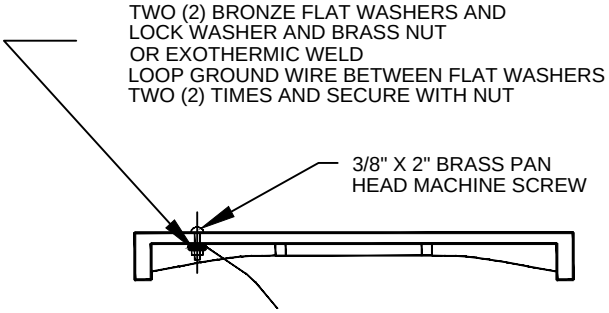
PULL BOX STREET COVER

DATE 12-12-96	DWG. NO. 709	SHEET 1 OF 2

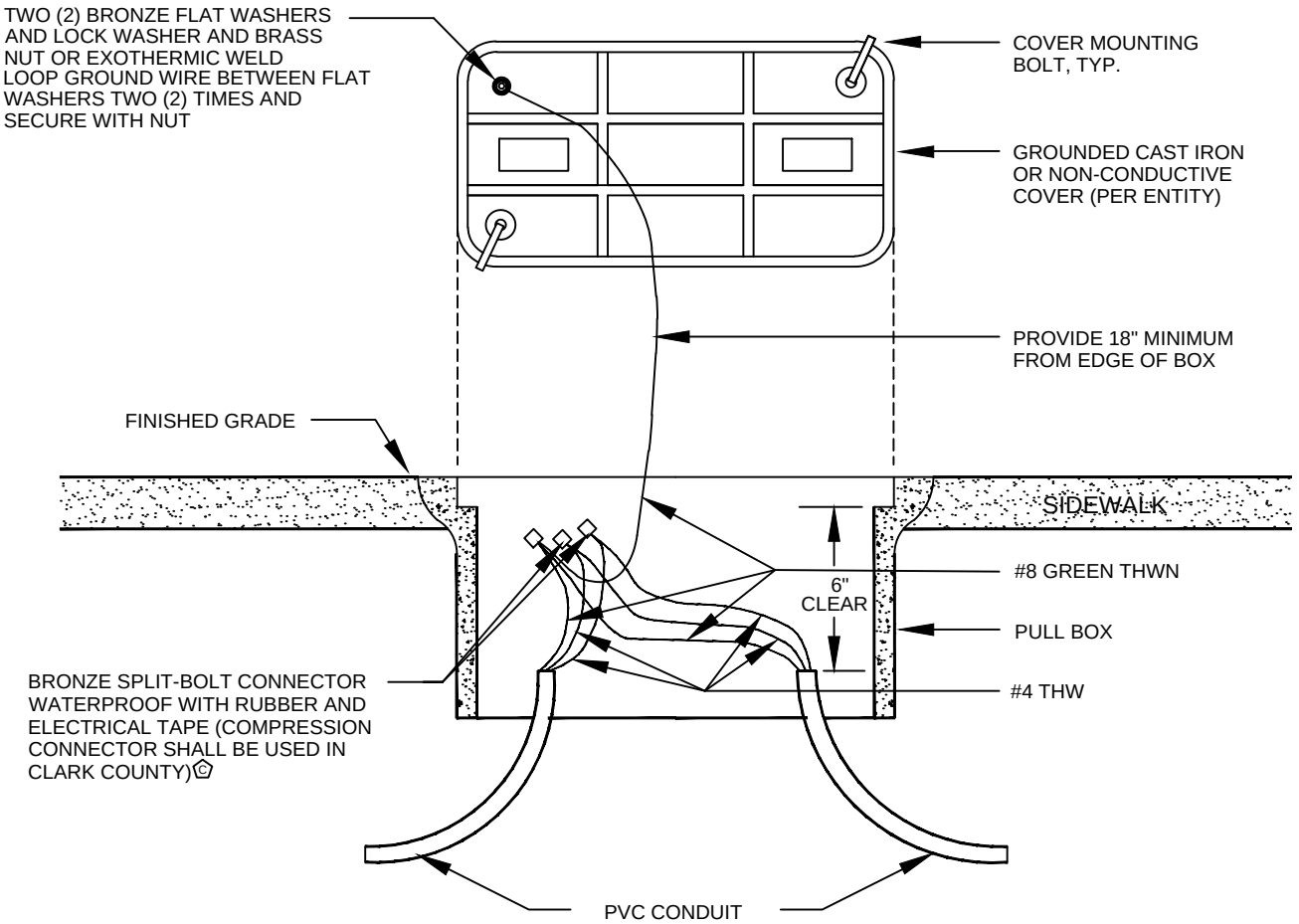
Effective 8/10/2023 to 8/07/2024



PULL BOX COVER - TOP VIEW



PULL BOX COVER - SIDE VIEW



(TYPICAL CAST IRON
LID SHOWN)

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

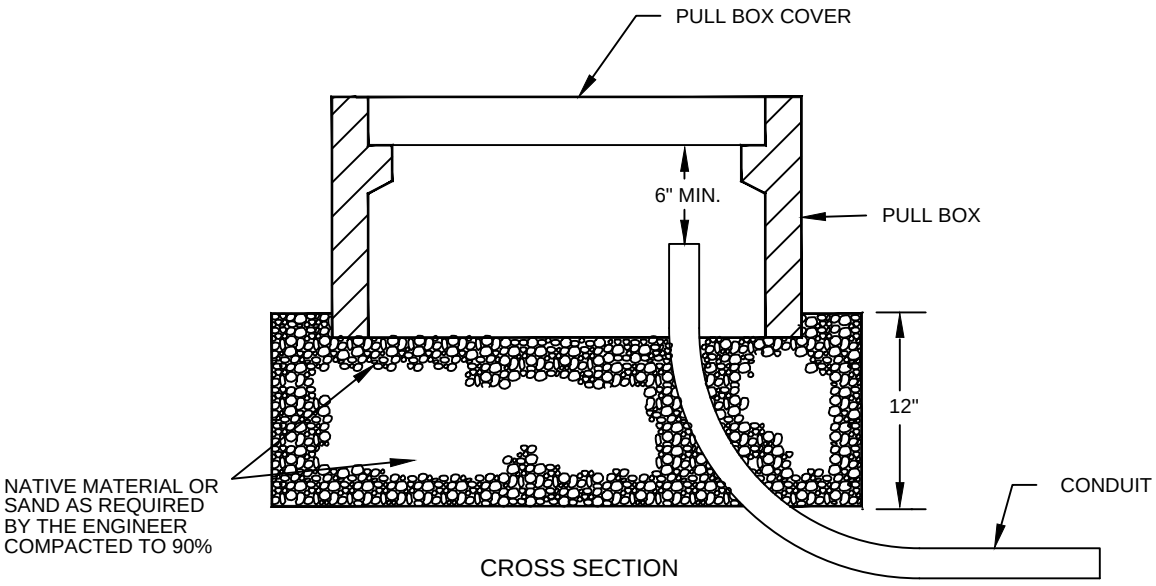
SPECIFICATION REFERENCE	
623	TRAFFIC SIGNALS & STREETLIGHTING
-	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

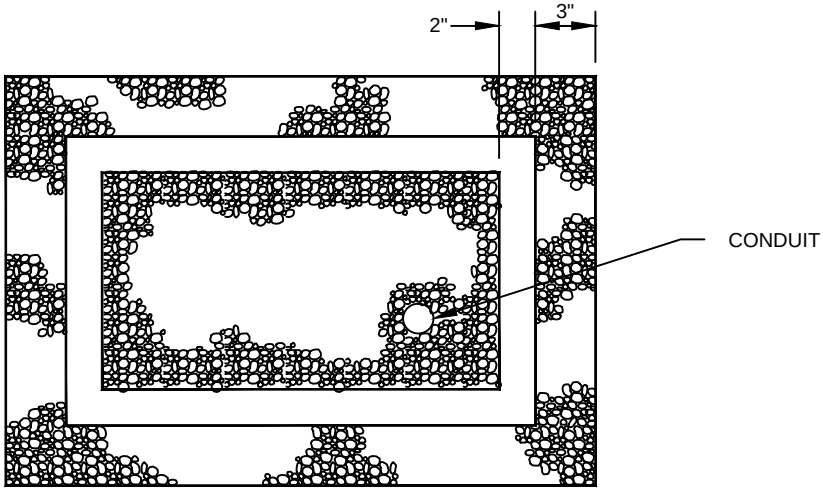
PULL BOX COVER BONDING DETAIL

DATE 12-12-96	DWG. NO. 709	SHEET 2 OF 2

Effective 8/10/2023 to 8/07/2024



CROSS SECTION



TOP VIEW

AGENCY APPROVED	B	C	H	L	M	N

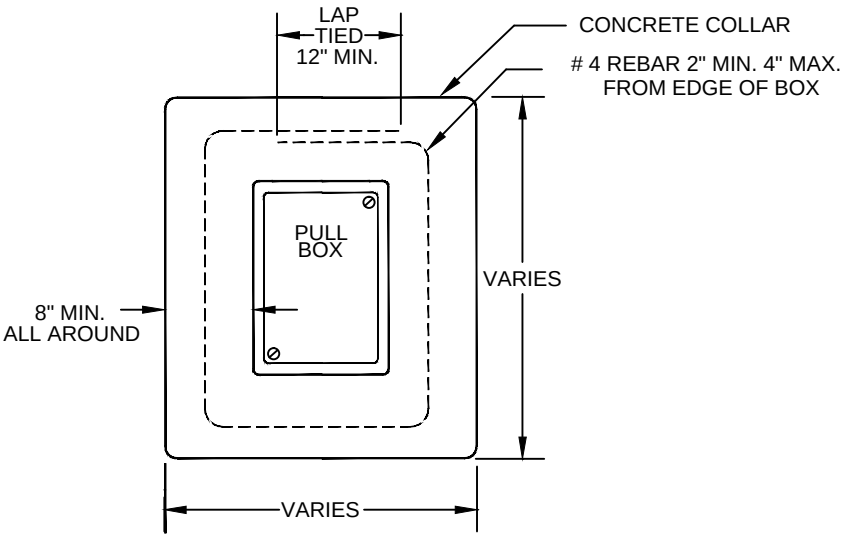
SPECIFICATION REFERENCE	
-	

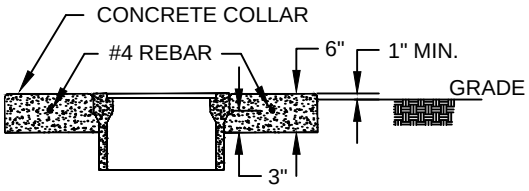
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

PULL BOX FOUNDATION

DATE 7-12-01	DWG. NO. 710	

Effective 8/10/2023 to 8/07/2024





TYPICAL SECTION

PULL BOX CONCRETE COLLAR
IN UNDEVELOPED AREAS

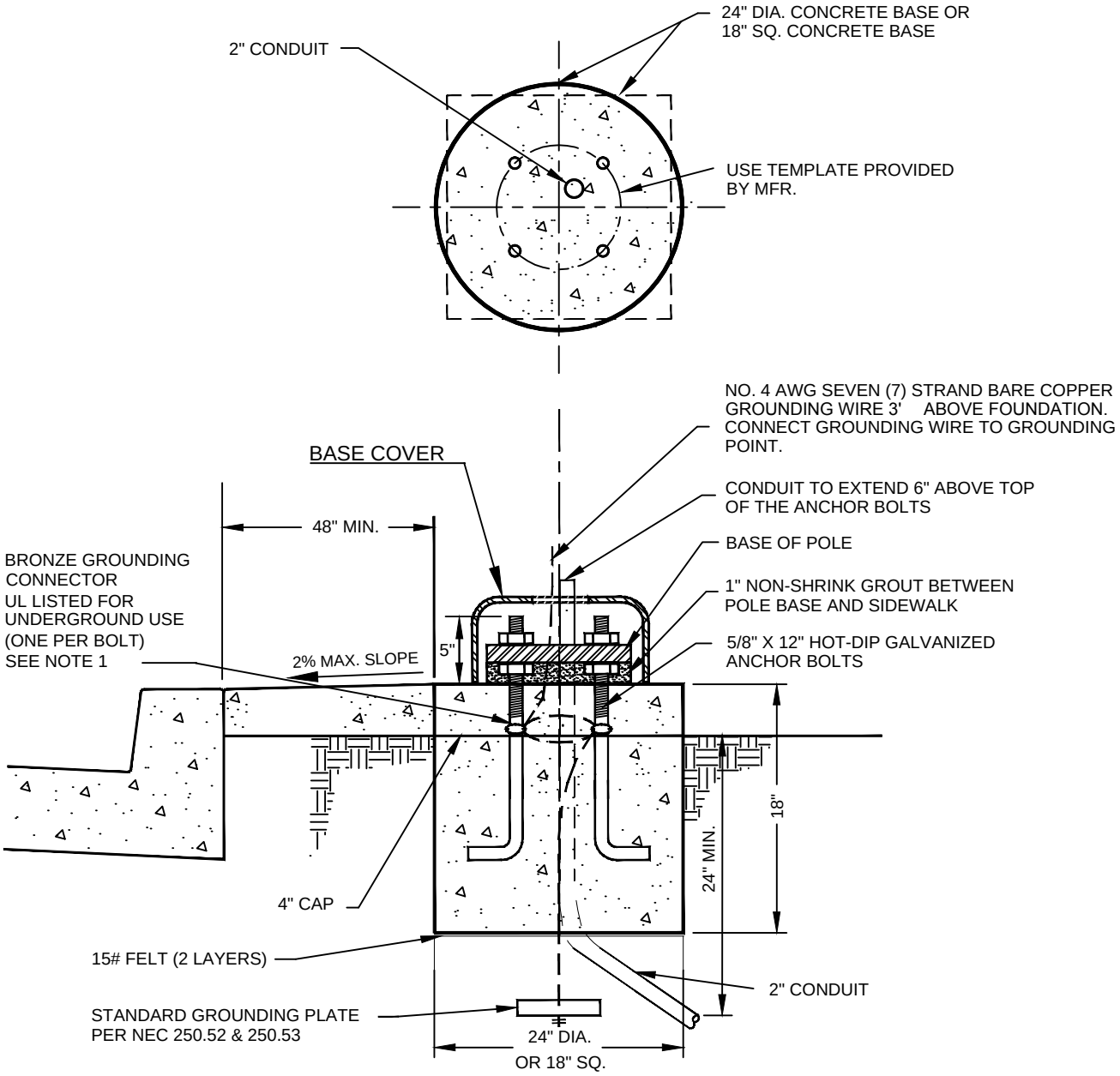
NOTES:

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

Effective 8/10/2023 to 8/07/2024



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

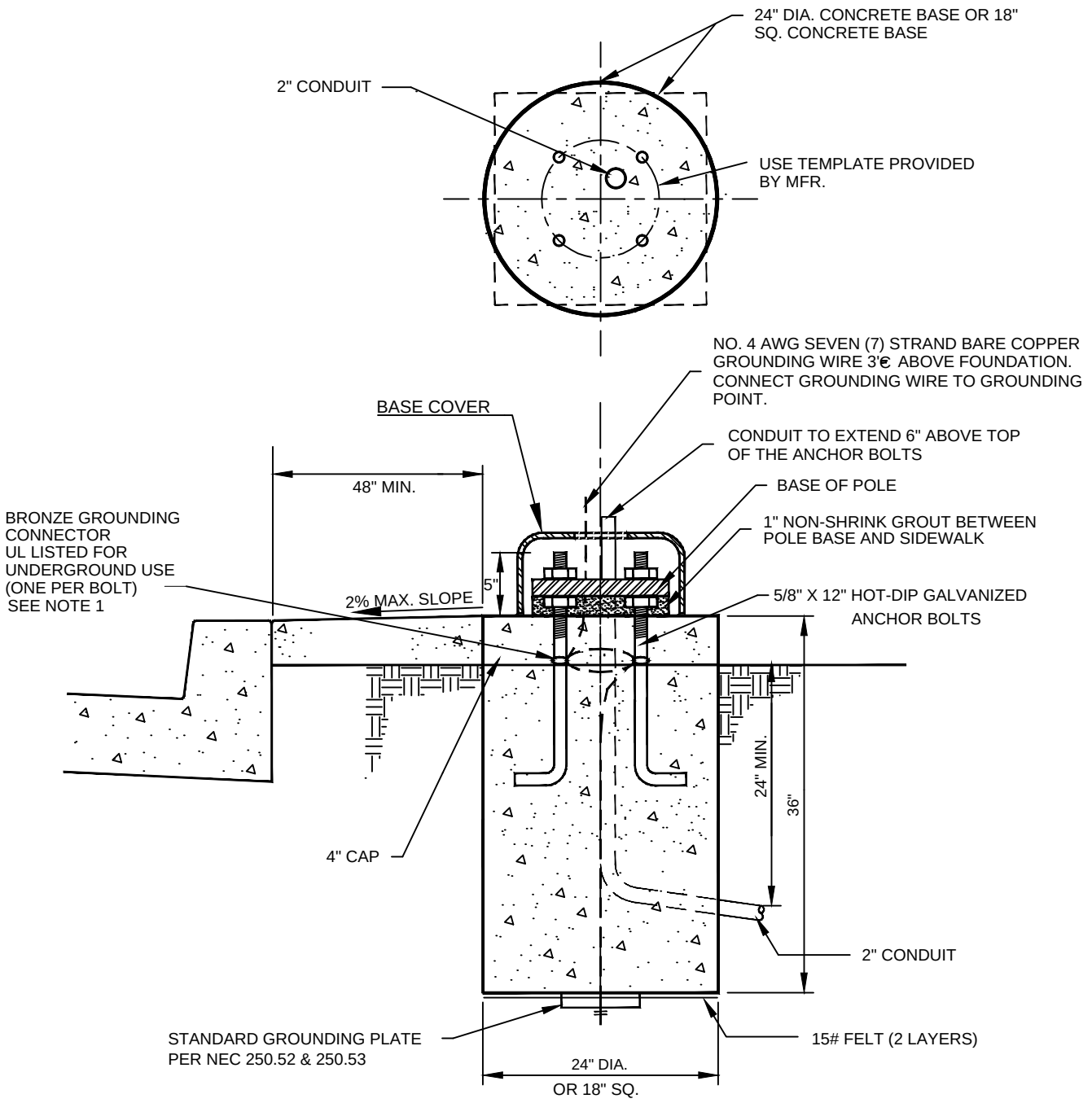
SPECIFICATION REFERENCE	
501	PORTLAND CEMENT CONCRETE
623	TRAFFIC SIGNALS & STREETLIGHTING

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPE "A" FOUNDATION

DATE 07-01-15	DWG. NO. 715	

Effective 8/10/2023 to 8/07/2024



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

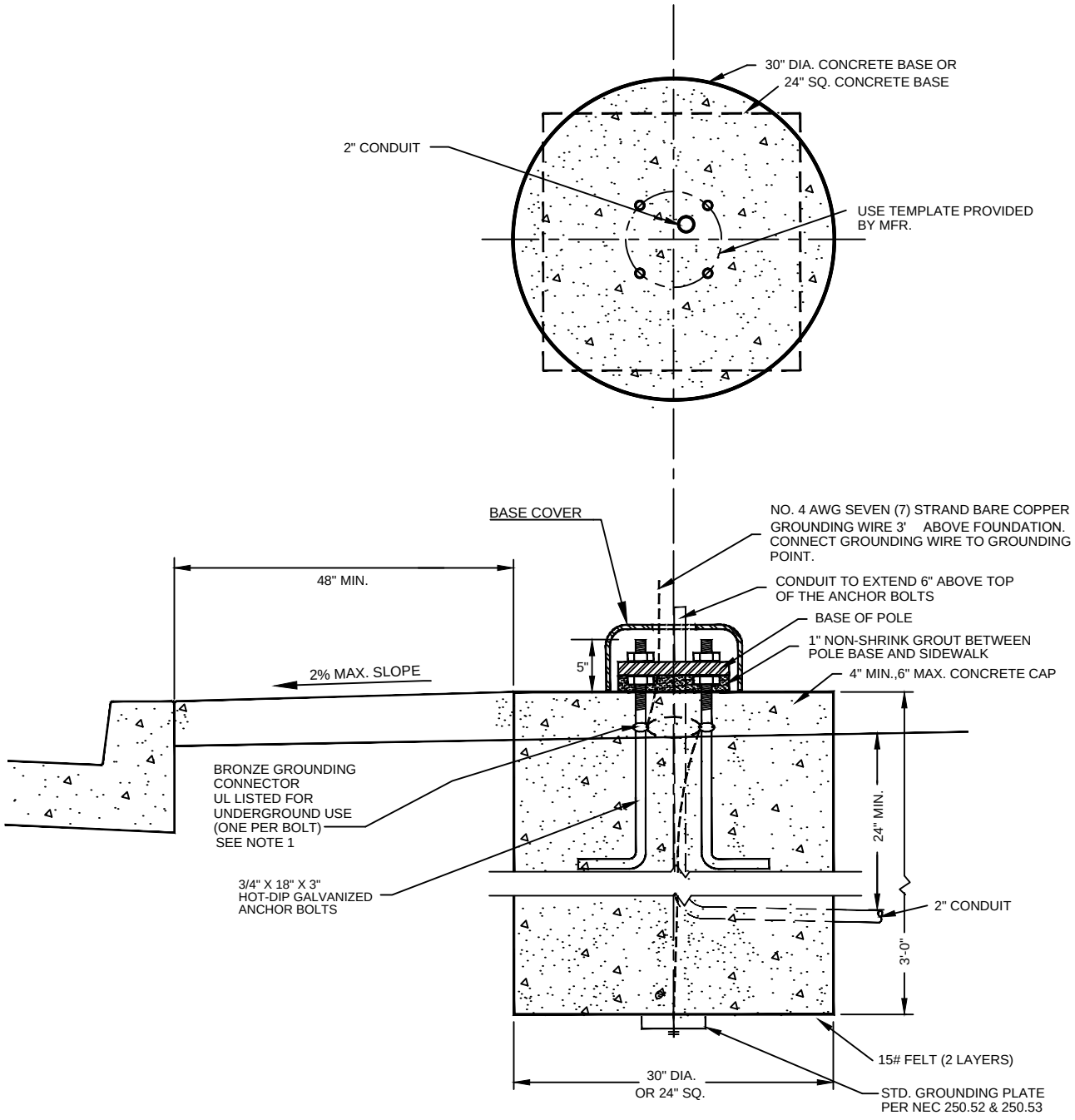
SPECIFICATION REFERENCE	
501	PORTLAND CEMENT CONCRETE
623	TRAFFIC SIGNALS & STREETLIGHTING

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPE "B" FOUNDATION

DATE 07-01-15 | DWG. NO. 716

Effective 8/10/2023 to 8/07/2024



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

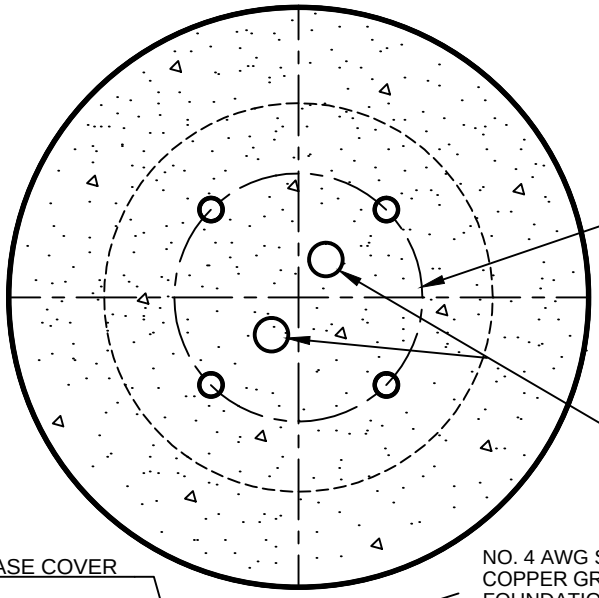
TYPE "C" FOUNDATION

DATE 07-01-15	DWG. NO. 717	

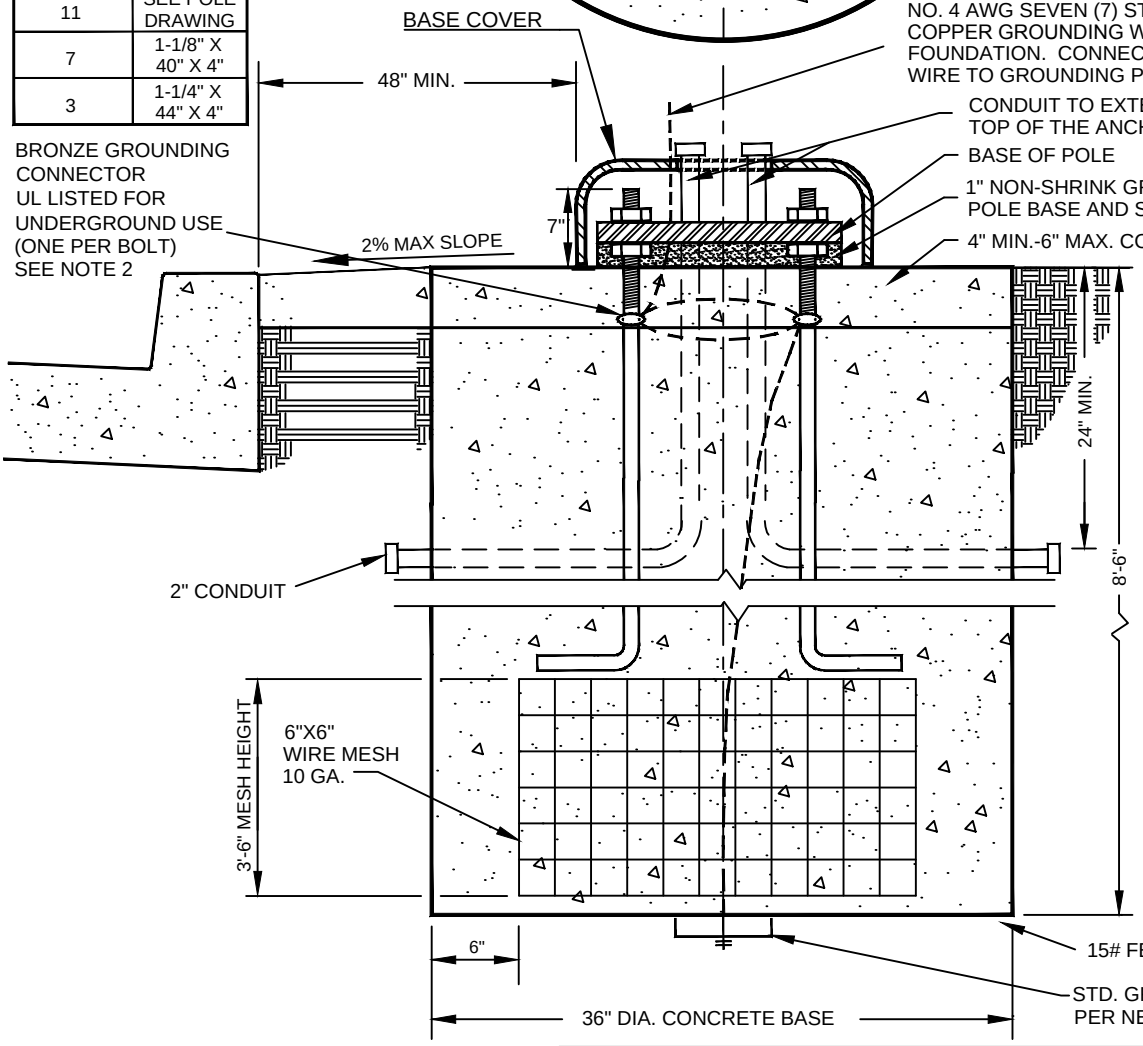
Effective 8/10/2023 to 8/07/2024

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 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"



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 "E" FOUNDATION

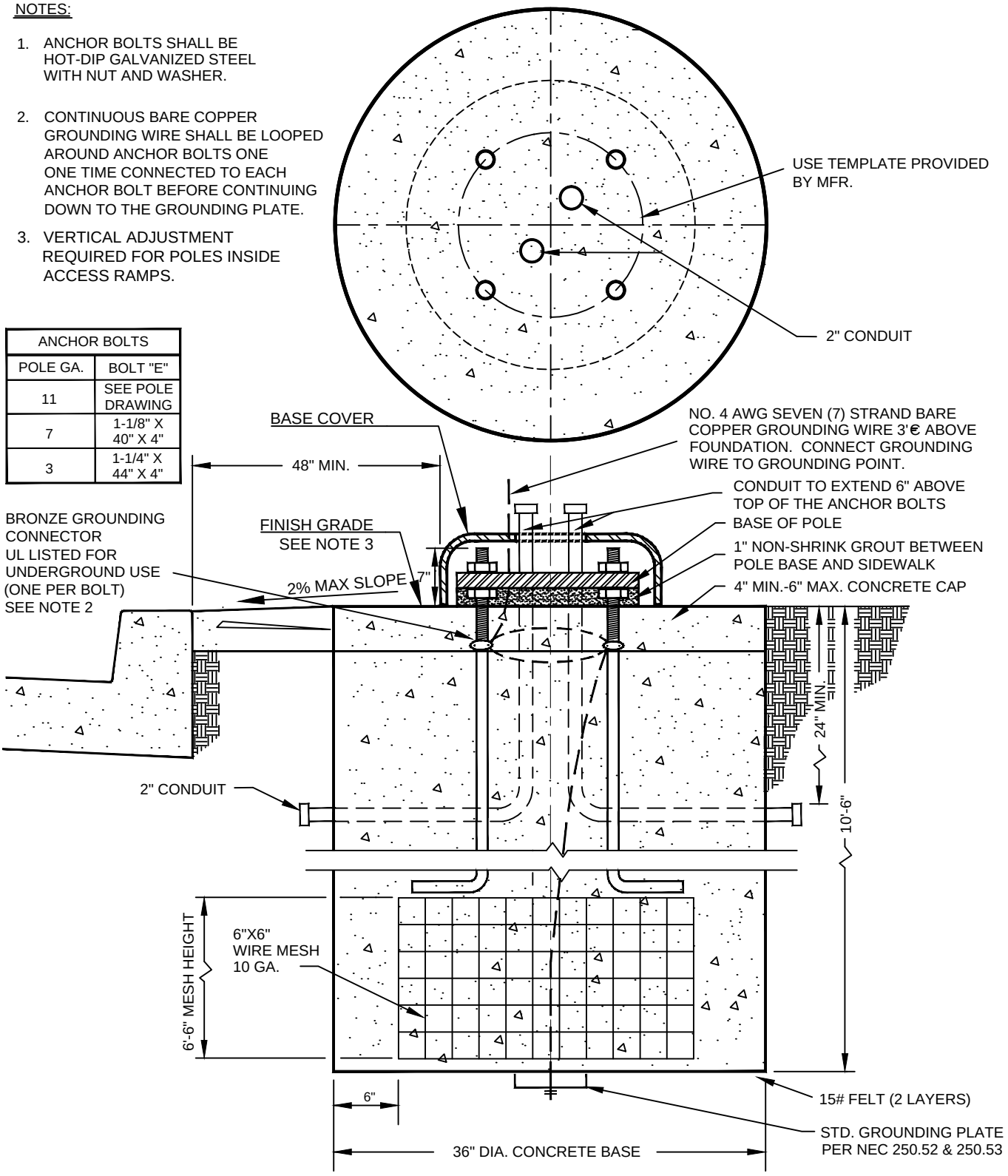
DATE 07-01-15 | DWG. NO. 718

Effective 8/10/2023 to 8/07/2024

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 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"



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

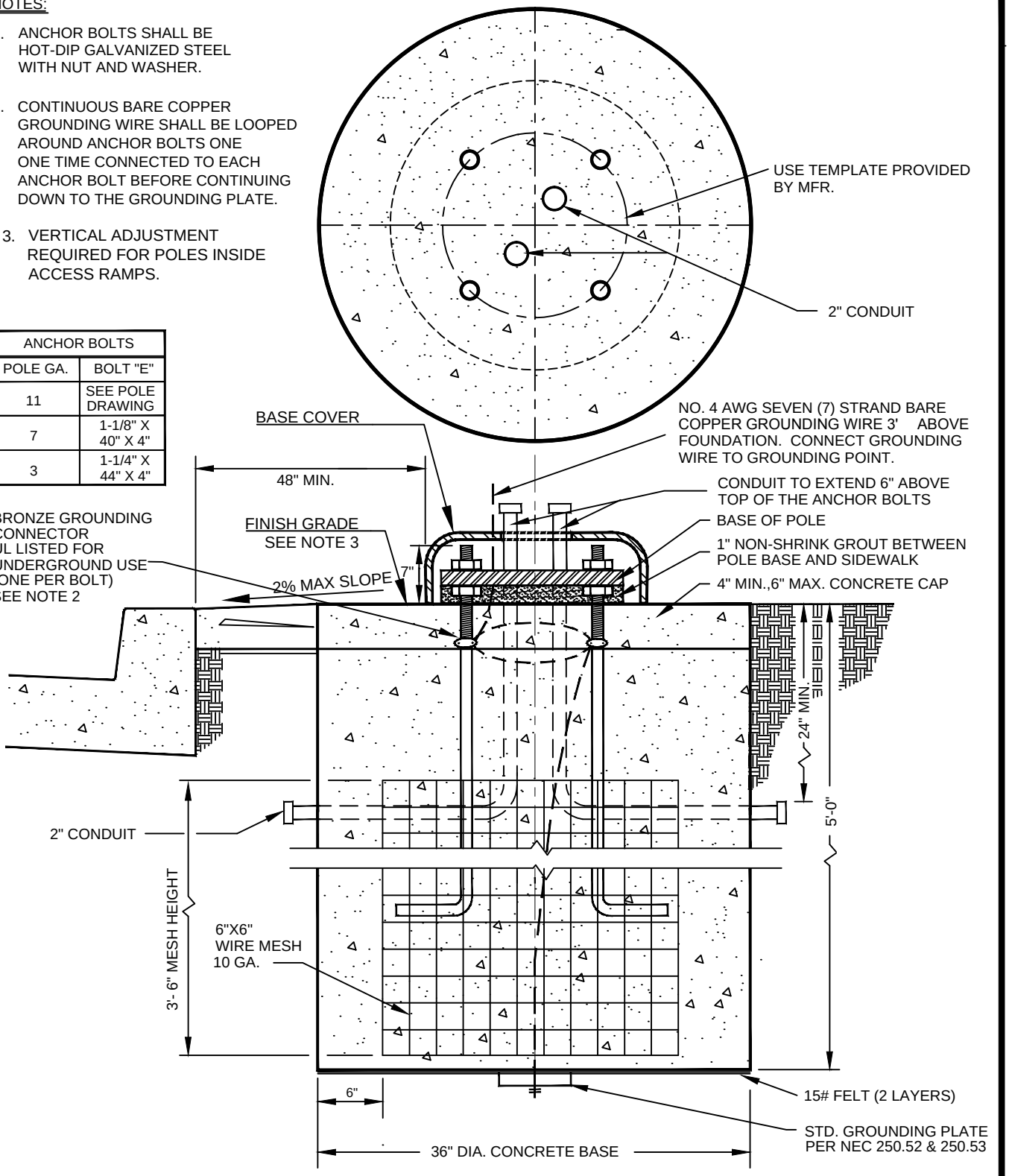
DATE 07-01-15 | DWG. NO. 719

Effective 8/10/2023 to 8/07/2024

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 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"



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

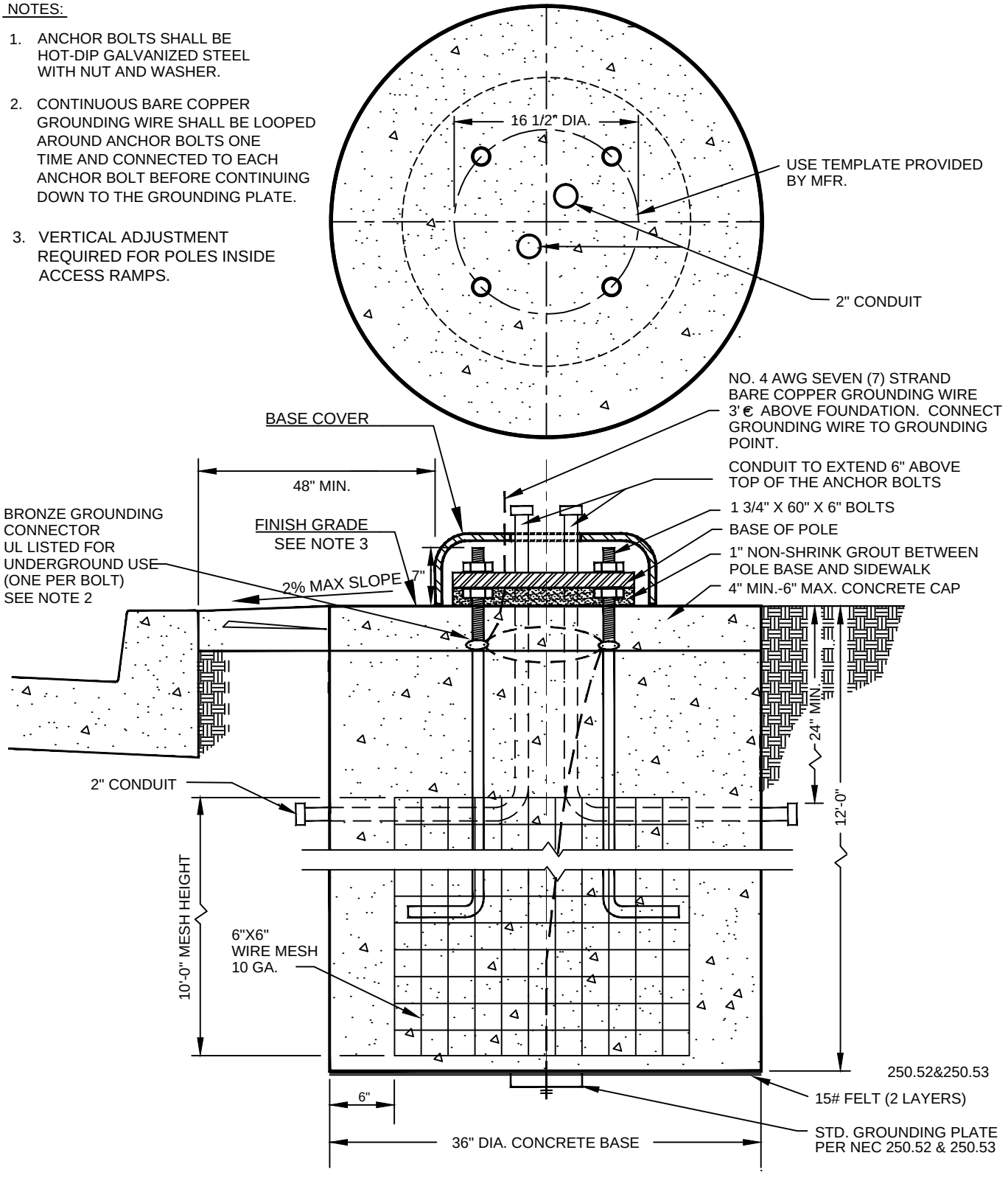
TYPE "G" FOUNDATION

DATE 07-01-15 | DWG. NO. 720

Effective 8/10/2023 to 8/07/2024

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 TIME AND CONNECTED TO EACH ANCHOR BOLT BEFORE CONTINUING DOWN TO THE GROUNDING PLATE.
3. VERTICAL ADJUSTMENT REQUIRED FOR POLES INSIDE ACCESS RAMPS.



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

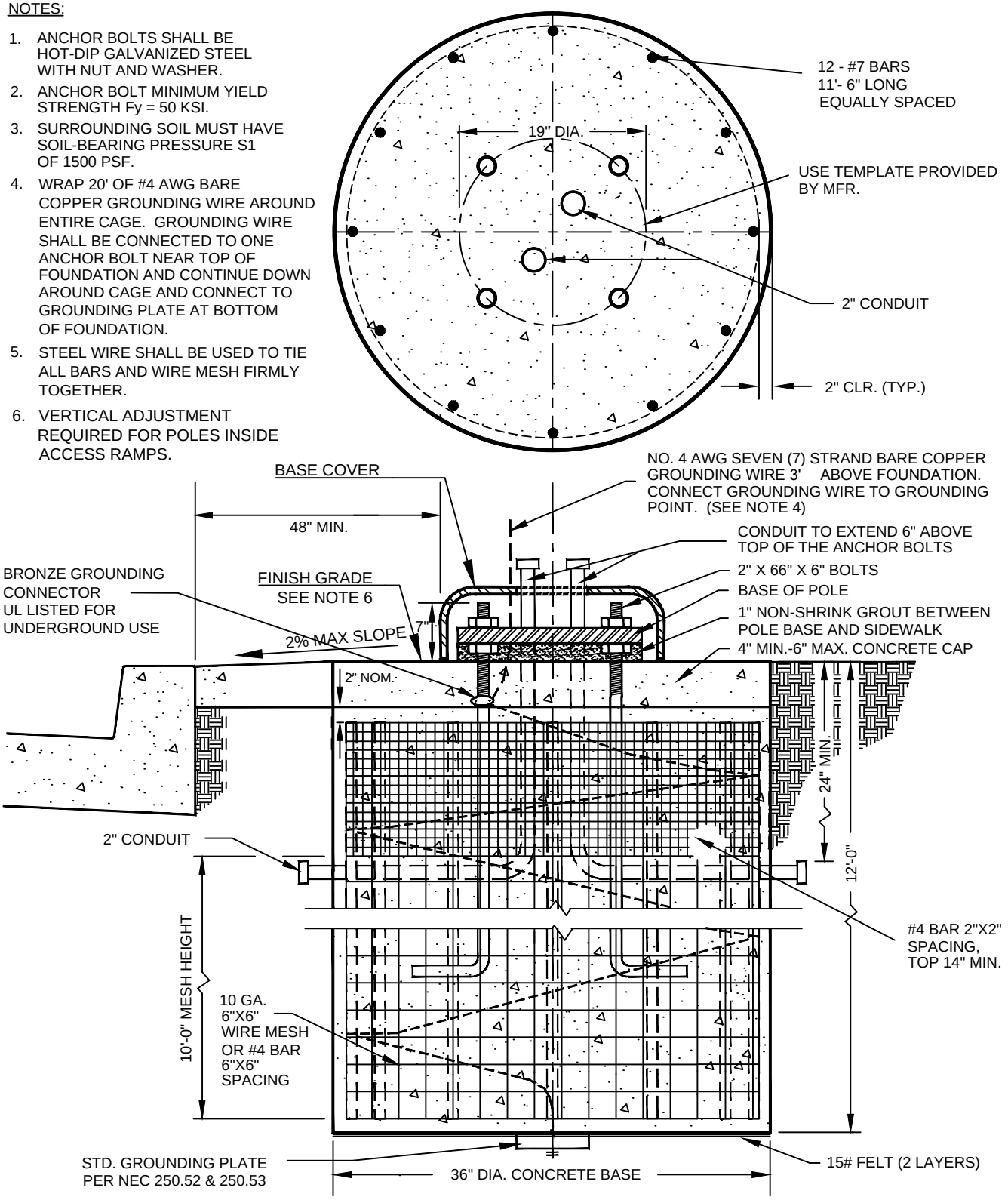
TYPE "H" FOUNDATION

DATE 07-01-15 | DWG. NO. 721

Effective 8/10/2023 to 8/07/2024

NOTES:

1. ANCHOR BOLTS SHALL BE HOT-DIP GALVANIZED STEEL WITH NUT AND WASHER.
2. ANCHOR BOLT MINIMUM YIELD STRENGTH Fy = 50 KSI.
3. SURROUNDING SOIL MUST HAVE SOIL-BEARING PRESSURE S1 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 RAMPS.



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

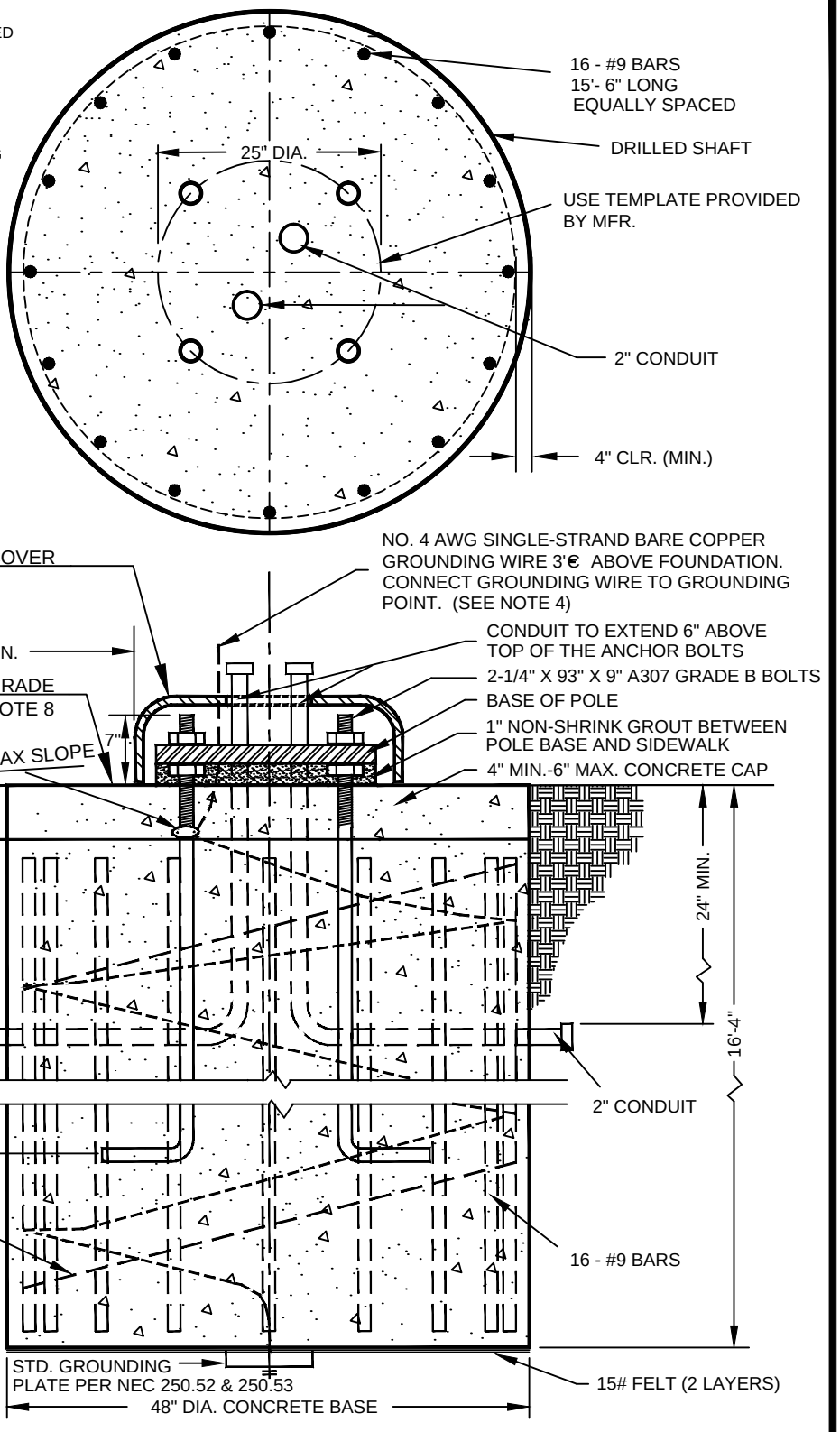
TYPE "L" FOUNDATION

DATE 07-01-15	DWG. NO. 722	

Effective 8/10/2023 to 8/07/2024

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.



FOR TYPE XX-B SIGNAL AND LUMINAIRE POLES, SEE STANDARD DRAWING NO. 810.

AGENCY APPROVED	B	C	H	L	M	N

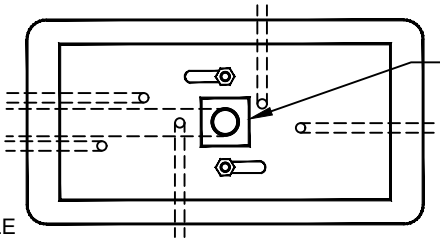
SPECIFICATION REFERENCE	
501	PORTLAND CEMENT CONCRETE
623	TRAFFIC SIGNALS & STREETLIGHTING

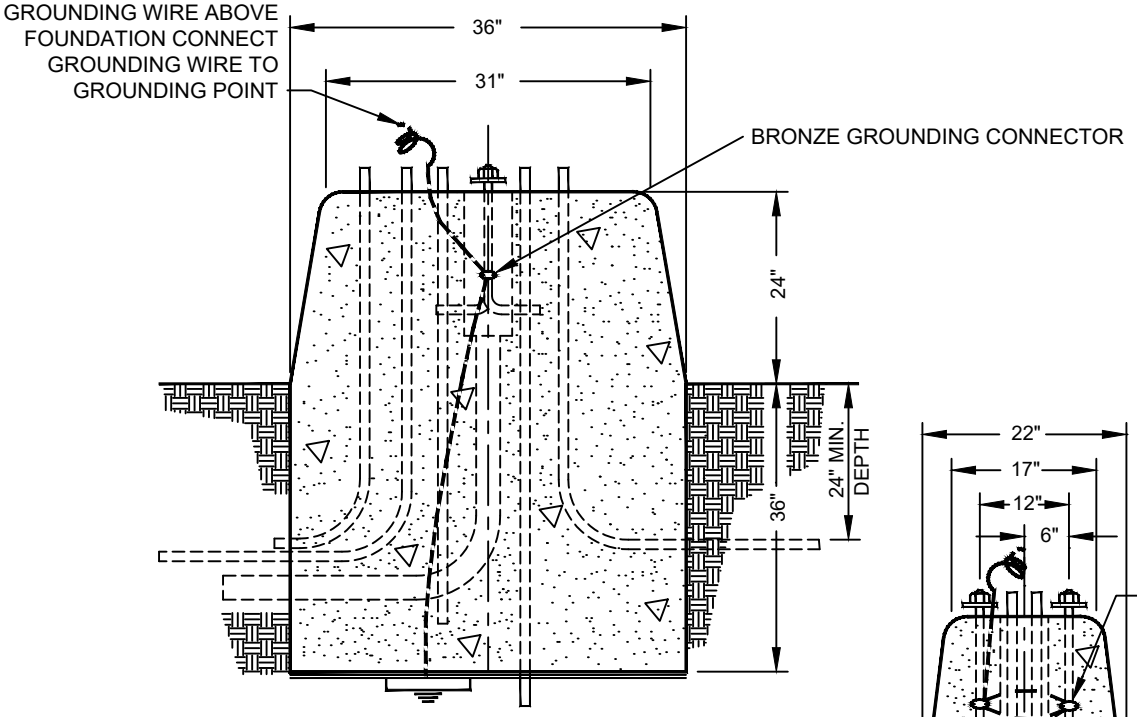
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

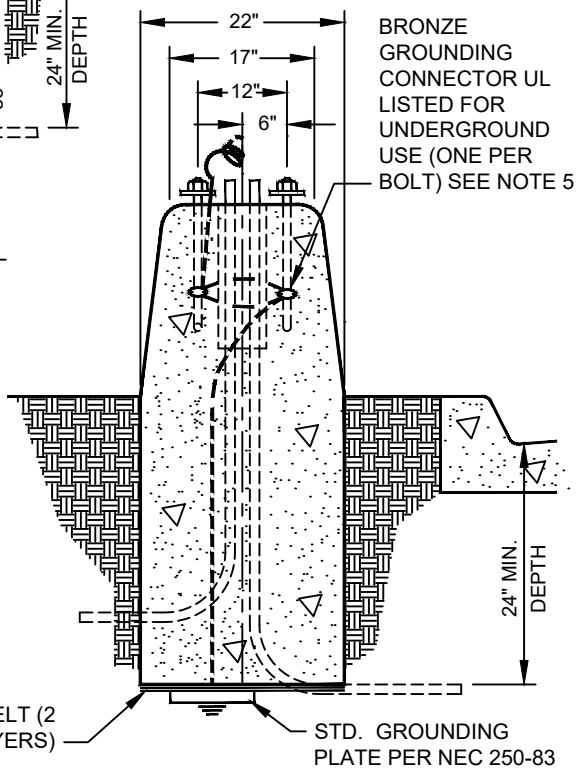
TYPE "M" FOUNDATION

DATE 07-01-15	DWG. NO. 723	

Effective 8/10/2023 to 8/07/2024







NOTES

1. FOR CONDUIT SIZE, LOCATION AND QUANTITY, SEE PLANS.
2. ANCHOR BOLTS 3/4" X 18" X 3" SHALL BE HOT-DIP GALVANIZED COMMERCIAL GRADE STEEL WITH NUT AND WASHER.
3. ANCHOR BOLT PROJECTION ABOVE FOUNDATION SHALL BE 3-1/2" MIN., 4-1/2" MAX.
4. CONDUIT PROJECTION ABOVE FOUNDATION SHALL BE 2" MIN., 4" MAX.
5. 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.
6. 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

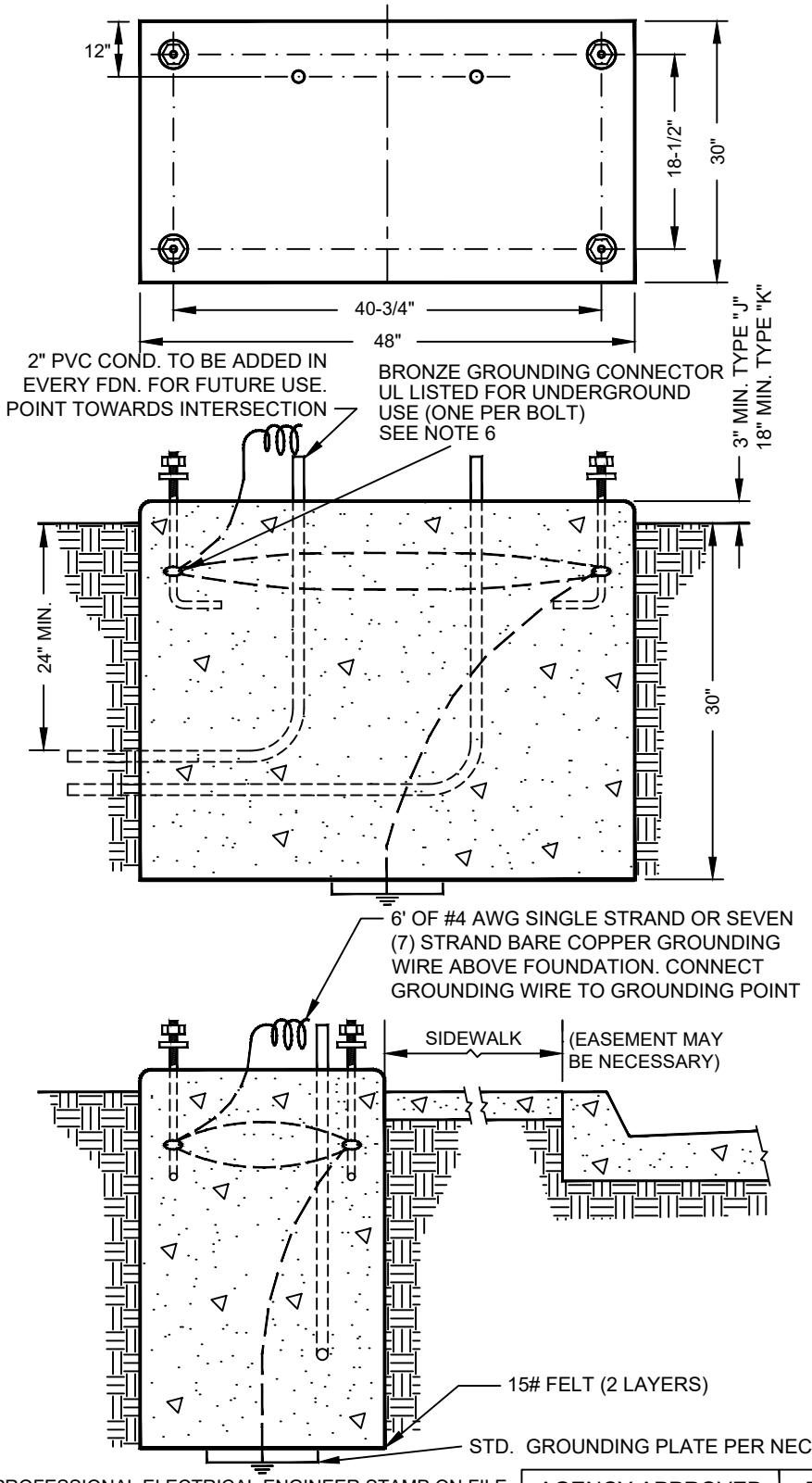
SPECIFICATION REFERENCE	
501	PORTLAND CEMENT CONCRETE
623	TRAFFIC SIGNALS & STREETLIGHTING
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPE "I" FOUNDATION

DATE 12-10-20 | DWG. NO. 724

Effective 8/10/2023 to 8/07/2024



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 PROJECTION ABOVE FOUNDATION SHALL BE 3-1/2" MIN., 4-1/2" MAX.
4. CONDUIT PROJECTION 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

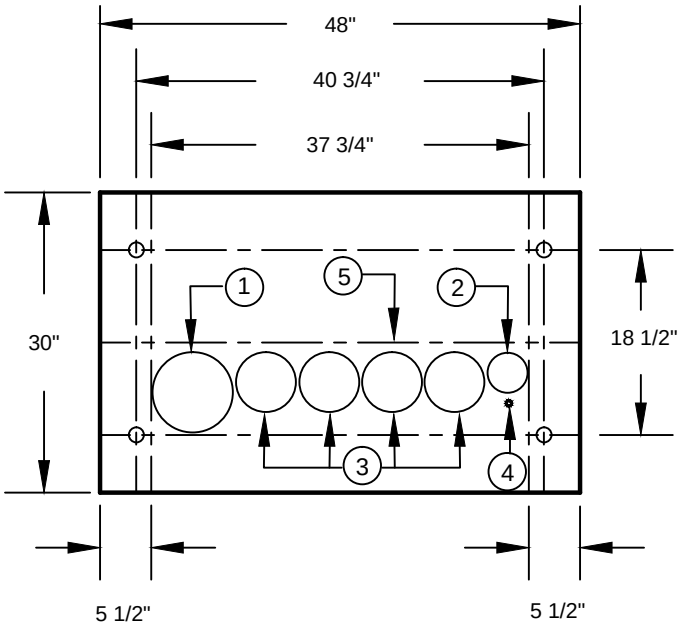
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPE "J" & "K" FOUNDATIONS

DATE 12-10-20 | DWG. NO. 725

Effective 8/10/2023 to 8/07/2024

BACK



FRONT / DOOR SIDE
STREET SIDE

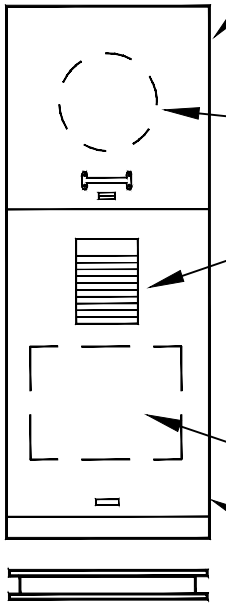
NOTES :

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 "J" & "K" FOUNDATIONS
	DATE : 10-9-08 / DWG. NO. 725.1

Effective 8/10/2023 to 8/07/2024



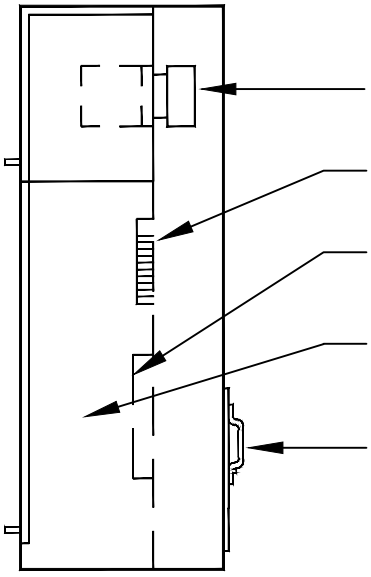
SERVICE PEDESTAL ENCLOSURE, 12 GA. SHEET METAL BODY AND EQUIPMENT MOUNTING PANEL, 14 GA. FRONT COVER(S) AND 16 GA. MIN. FOR ALL OTHER PANELS. ALL SHEET METAL SHALL BE FINISHED WITH ZINC CHROMATE PRIMER AND GREEN BAKED ENAMEL OR POWDER COAT FINISH. METERING SECTION PER P.U.E.S.E.R. STANDARDS.

UTILITY METER SECTION, 125 OR 200 AMP AS NEEDED, 120/240 VOLT, 1 PHASE, 3 WIRE. THE SECTION SHALL HAVE A HINGED COVER WITH PADLOCK TAB.

CIRCUIT BREAKER DISTRIBUTION SECTION, 125 OR 200 AMP AS NEEDED, 120/240 VOLT, 1 PHASE, 3 WIRE. THE SECTION SHALL BE COMPLETE WITH SEPARATE DEAD FRONT, COPPER BUSSING, SPACE FOR A MINIMUM OF TEN FULL SIZE (1") GE TYPE PLUG-IN CIRCUIT BREAKERS (EXCLUDING MAIN BREAKER), COPPER NEUTRAL/GROUNDING BUS AND MAIN BREAKER AS SPECIFIED BY THE ENGINEER. THE SECTION SHALL BE FACTORY WIRED TO THE METER SECTION WITH THE APPROPRIATE SIZE COPPER CONDUCTORS.

EQUIPMENT MOUNTING PANEL, 10" H X 12" W MIN., OPEN OR ENCLOSED, FOR LIGHTING CONTACTORS AS NEEDED.

DISTRIBUTION AND EQUIPMENT SECTION COVER WITH PADLOCK TAB.



UTILITY METER SECTION

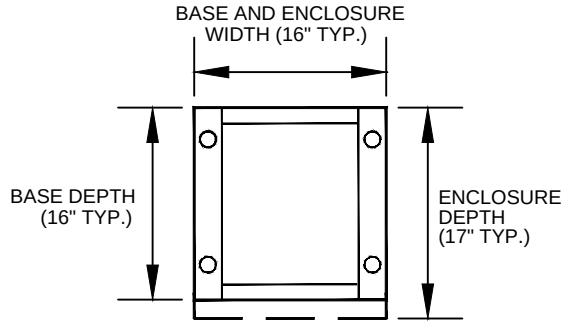
CIRCUIT BREAKER DISTRIBUTION SECTION

EQUIPMENT MOUNTING PANEL

UTILITY SERVICE ENTRANCE CONDUCTOR PULL SPACE PER SERVING UTILITY REQUIREMENTS.

PULL SPACE ACCESS DOOR WITH HANDLE, PER SERVING UTILITY

SEPARATE PEDESTAL ENCLOSURE MOUNTING BASE (OPTIONAL)



TYPICAL MOUNTING BASE DETAIL

(DIMENSIONS MAY VARY DEPENDING ON MANUFACTURER)

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED	B	C	H	L	M	N

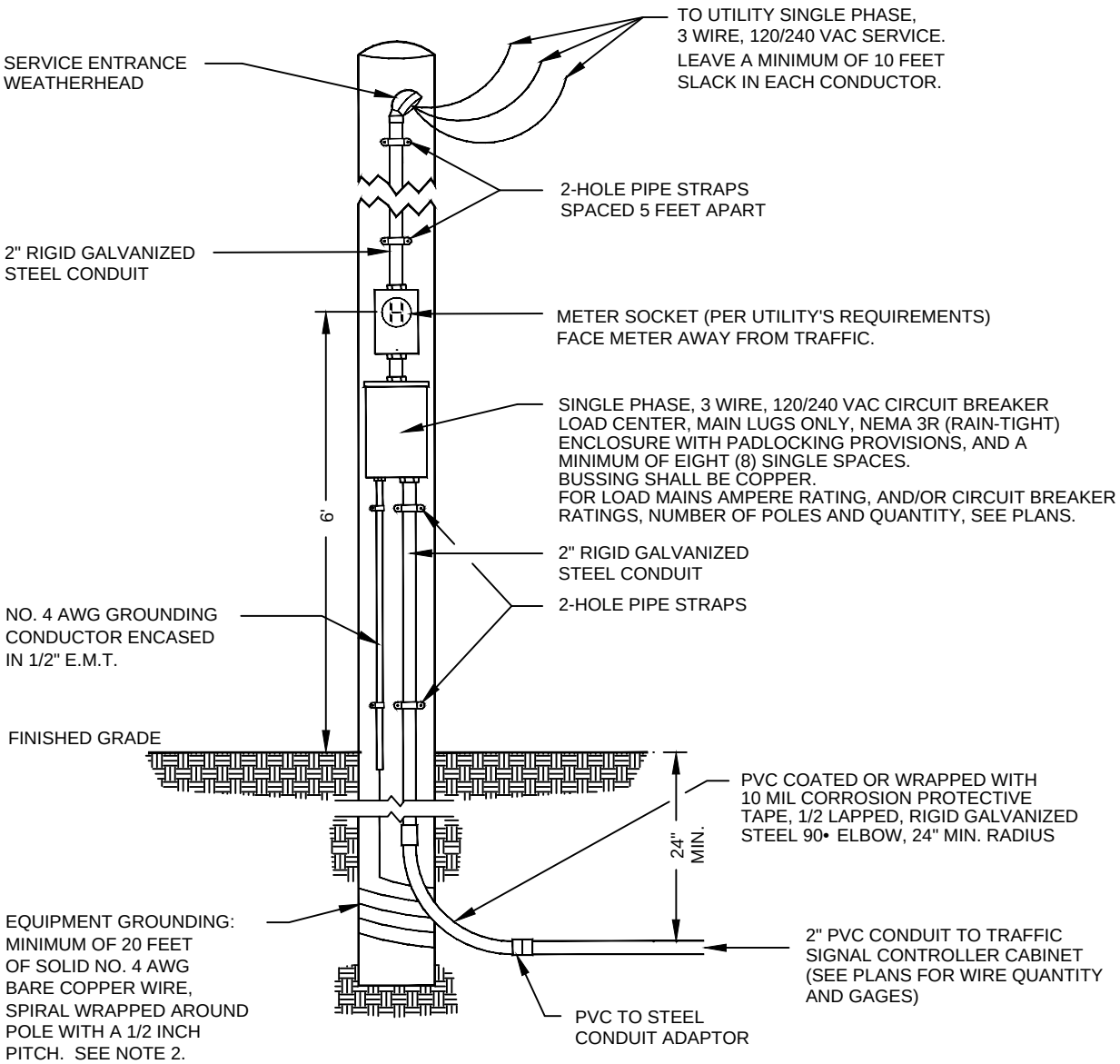
SPECIFICATION REFERENCE	
506	STEEL STRUCTURES
623	TRAFFIC SIGNALS & STREETLIGHTING
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SINGLE METER SERVICE PEDESTAL

DATE 8-12-99	DWG. NO. 730	

Effective 8/10/2023 to 8/07/2024



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

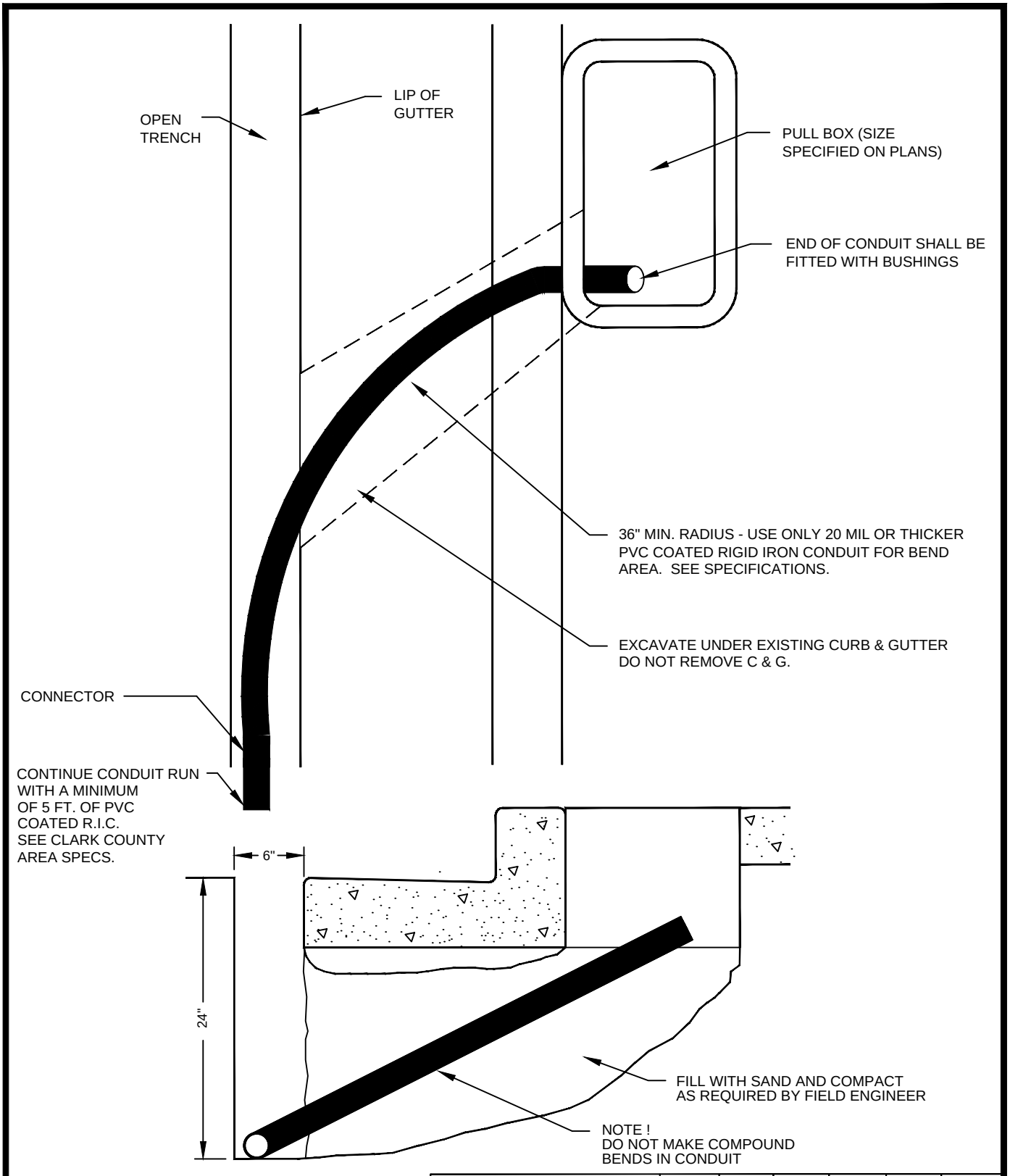
SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

120/240 VAC SERVICE ON WOOD POLE OVERHEAD SERVICE

DATE 12-12-96	DWG. NO. 731	

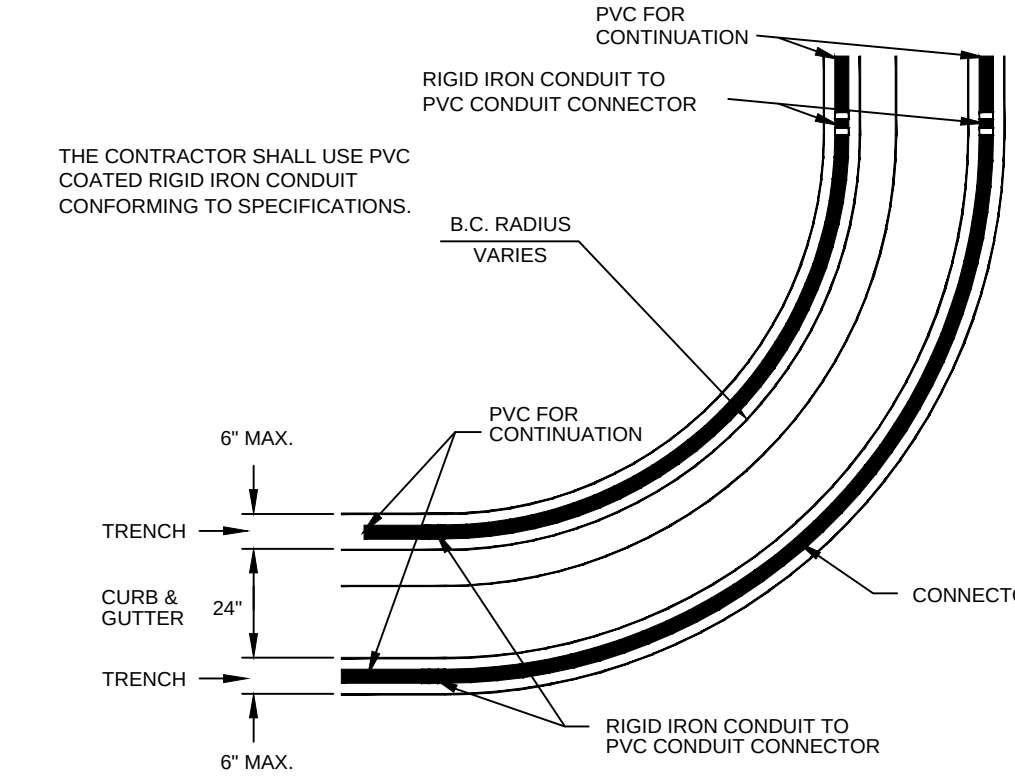
Effective 8/10/2023 to 8/07/2024



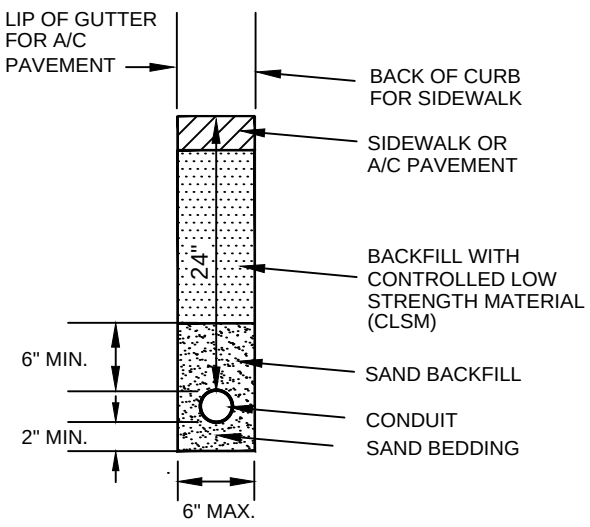
AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	INSTALLATION OF CONDUIT INTO PULL BOX FROM LIP OF GUTTER TRENCH
DATE	DWG. NO. 732

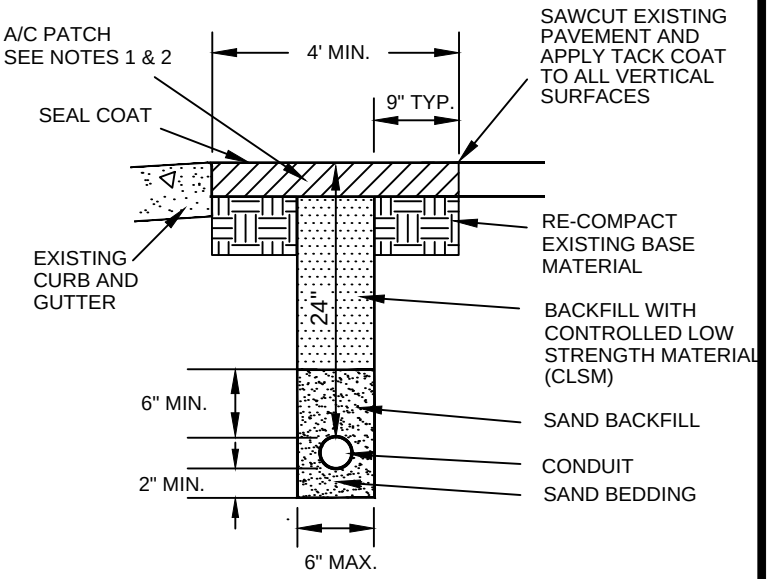
Effective 8/10/2023 to 8/07/2024



TYPICAL CONDUIT LOCATIONS



NEW CONSTRUCTION



CONDUIT RETROFIT (EXIST. PAVEMENT)

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 AGNCY 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

SPECIFICATION REFERENCE	

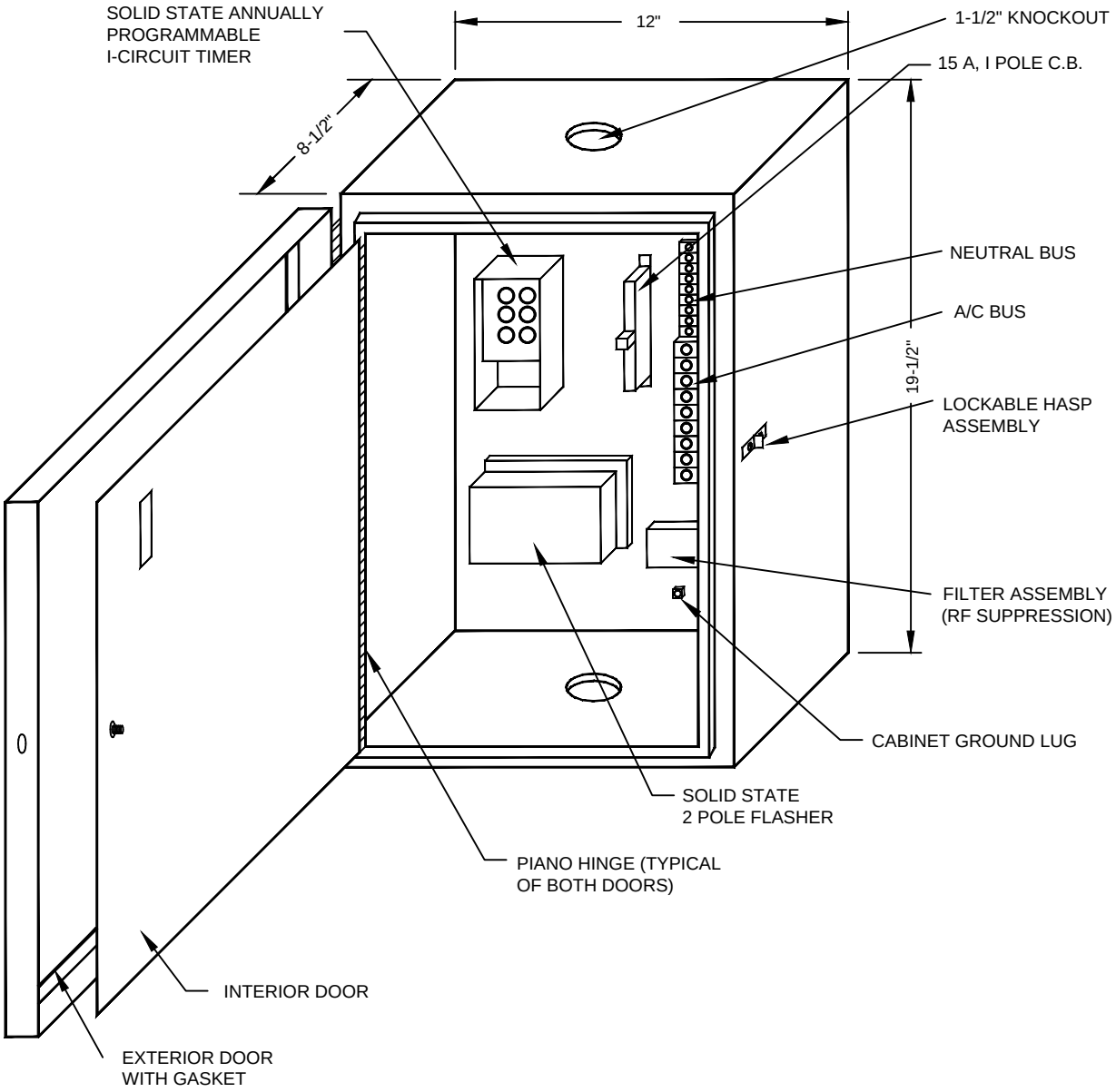
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

INSTALLATION OF CONDUIT

DATE 5-17-01	DWG. NO. 733	

Effective 8/10/2023 to 8/07/2024

FLASHING BEACON
CONTROLLER CABINET



NOTES:

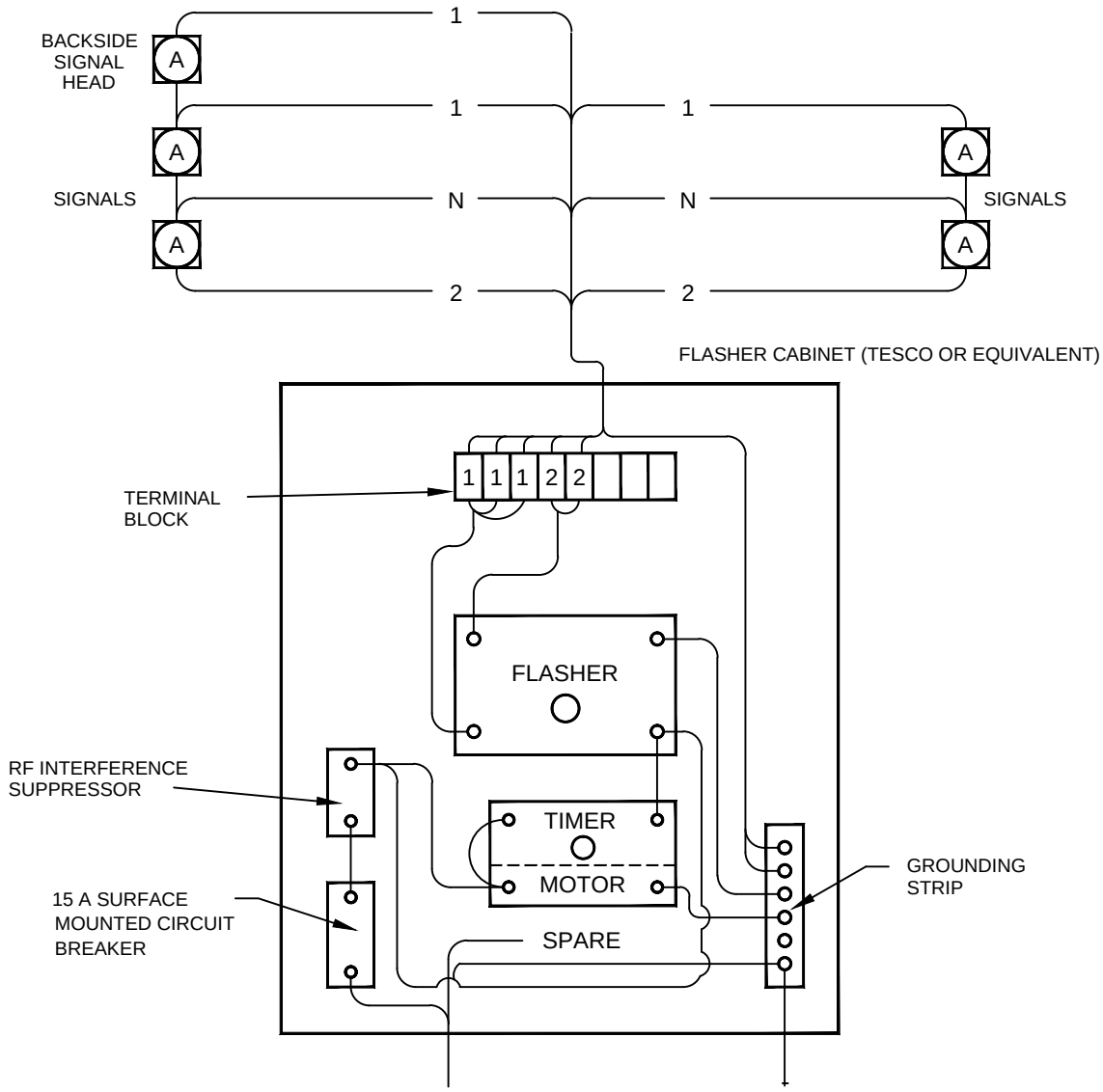
1. CONSTRUCT FROM MINIMUM 12-GUAGE STEEL.
2. THE TIMER SHALL BE RTC-AP21 OR EQUIVALENT.

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

Effective 8/10/2023 to 8/07/2024

WIRING DIAGRAM FOR FLASHING BEACON
TIMER CONTROLLED OPERATION



NOTES:

1. ALL WIRING INSIDE THE CABINET SHALL BE #14 THW.
2. ALL FIELD WIRE TO THE SIGNAL SHALL BE #14 SOLID COPPER.
3. THE SERVICE WIRE SHALL BE 2-#4 THW & 1-#6 THW.
   PROVIDE #10 PIGTAIL FOR CONNECTION TO BREAKER.
4. THE TIMER SHALL BE RTC-AP21 OR EQUIVALENT.
5. TWO POLE SOLID STATE FLASHER.
6. THERE SHALL BE A 1" MINIMUM CLEARANCE BETWEEN INDIVIDUAL COMPONENTS.
7. ALL SERVICE POINTS SHALL BE AS FOR STREET LIGHTING.
8. FLASHING PATTERN OF LIGHTS TO BE SPECIFIED BY THE ENTITY.

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED	B	C	H	L	M	N

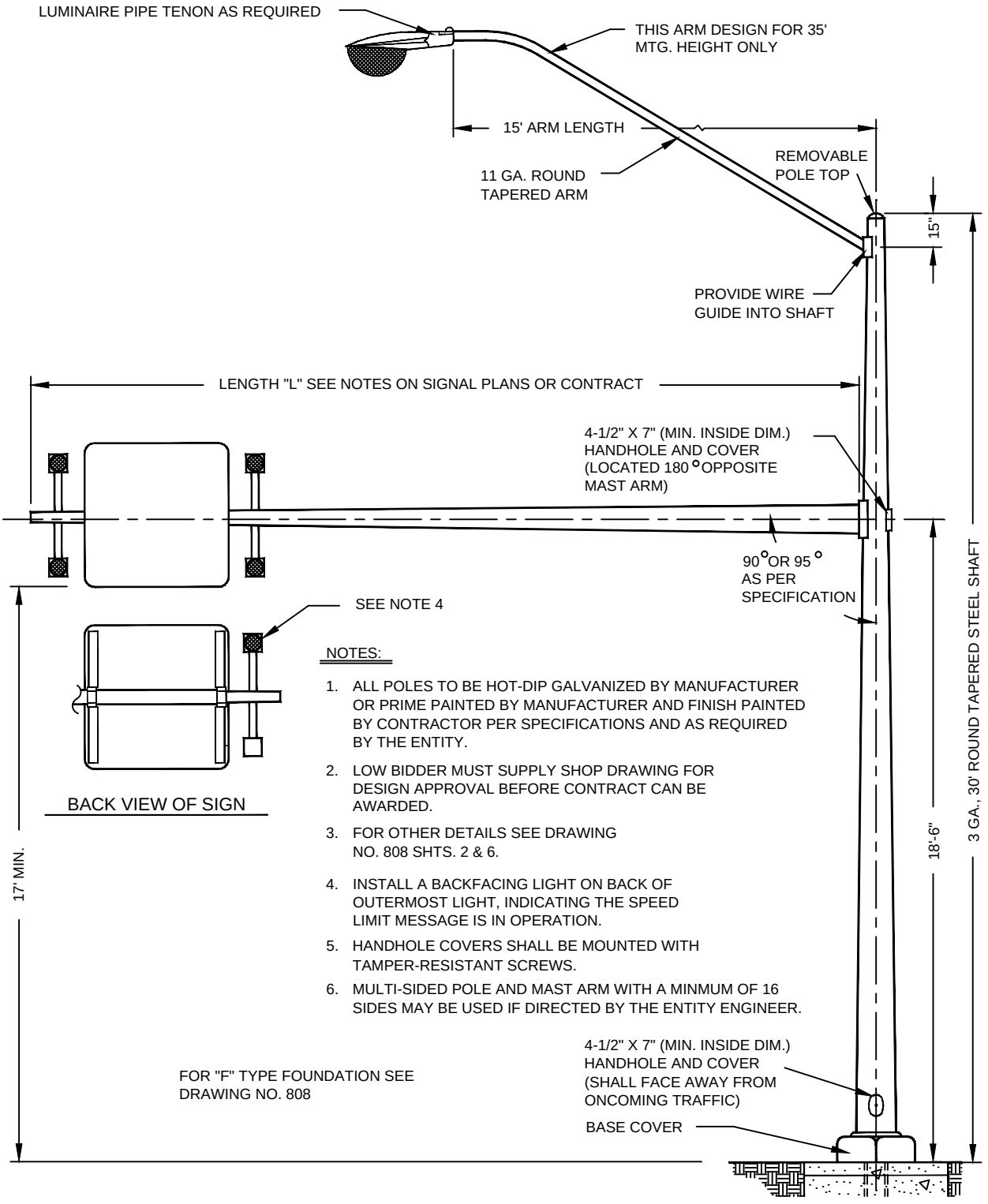
SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

WIRING DIAGRAM FOR FLASHING BEACON
TIMER CONTROLLED OPERATION

DATE 12-12-96	DWG. NO. 742	

Effective 8/10/2023 to 8/07/2024



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. LOW BIDDER MUST SUPPLY SHOP DRAWING FOR DESIGN APPROVAL BEFORE CONTRACT CAN BE AWARDED.
3. FOR OTHER DETAILS SEE DRAWING NO. 808 SHTS. 2 & 6.
4. INSTALL A BACKFACING LIGHT ON BACK OF OUTERMOST LIGHT, INDICATING THE SPEED LIMIT MESSAGE IS IN OPERATION.
5. HANDHOLE COVERS SHALL BE MOUNTED WITH TAMPER-RESISTANT SCREWS.
6. MULTI-SIDED POLE AND MAST ARM WITH A MINMUM OF 16 SIDES MAY BE USED IF DIRECTED BY THE ENTITY ENGINEER.

AGENCY APPROVED	B	C	H	L	M	N

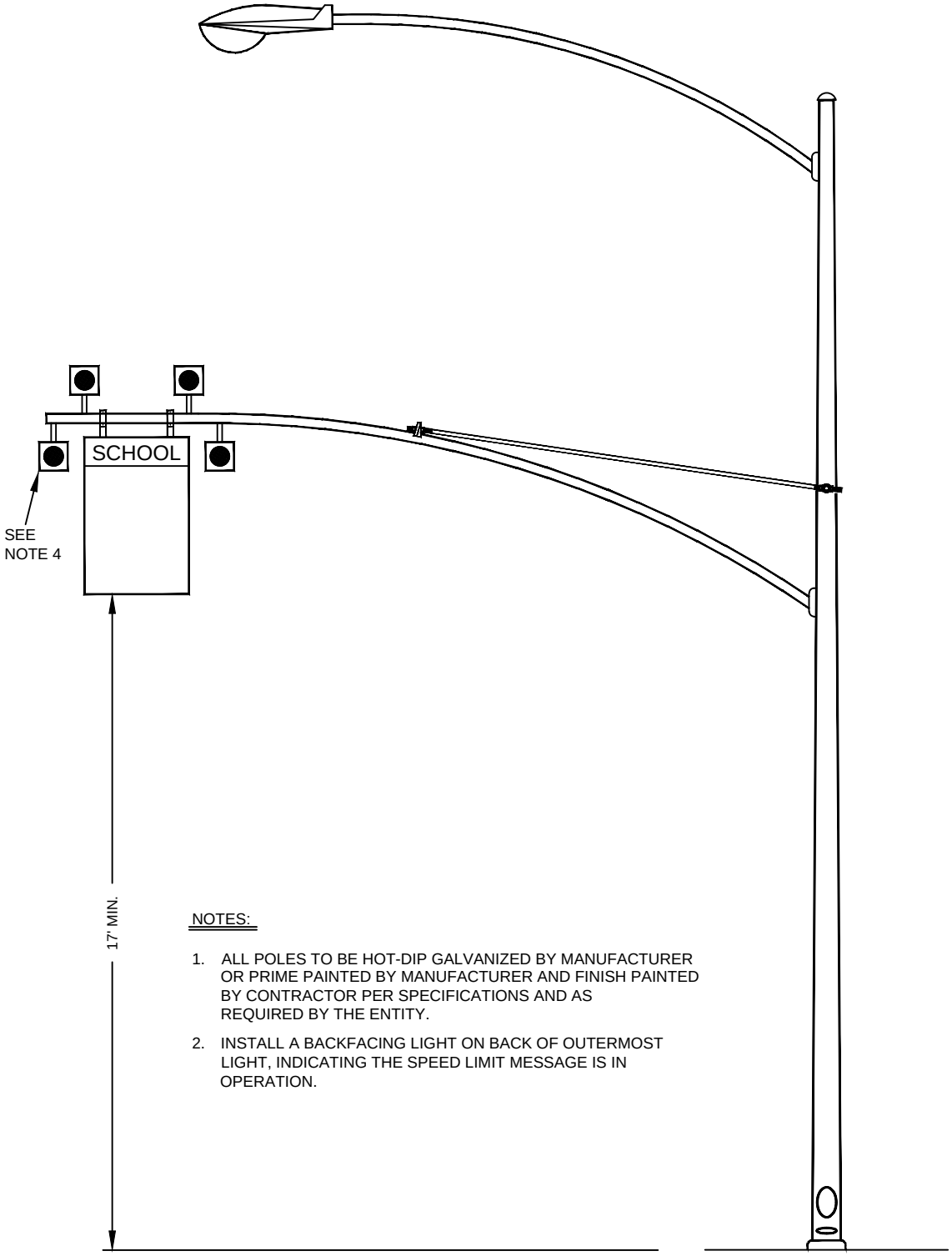
SPECIFICATION REFERENCE	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SCHOOL FLASHING SIGN ON POLE WITH LUMINAIRE

DATE	9-14-06	DWG. NO.	743	SHEET	1 OF 2

Effective 8/10/2023 to 8/07/2024



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. INSTALL A BACKFACING LIGHT ON BACK OF OUTERMOST LIGHT, INDICATING THE SPEED LIMIT MESSAGE IS IN OPERATION.

AGENCY APPROVED	B	C	H	L	M	N

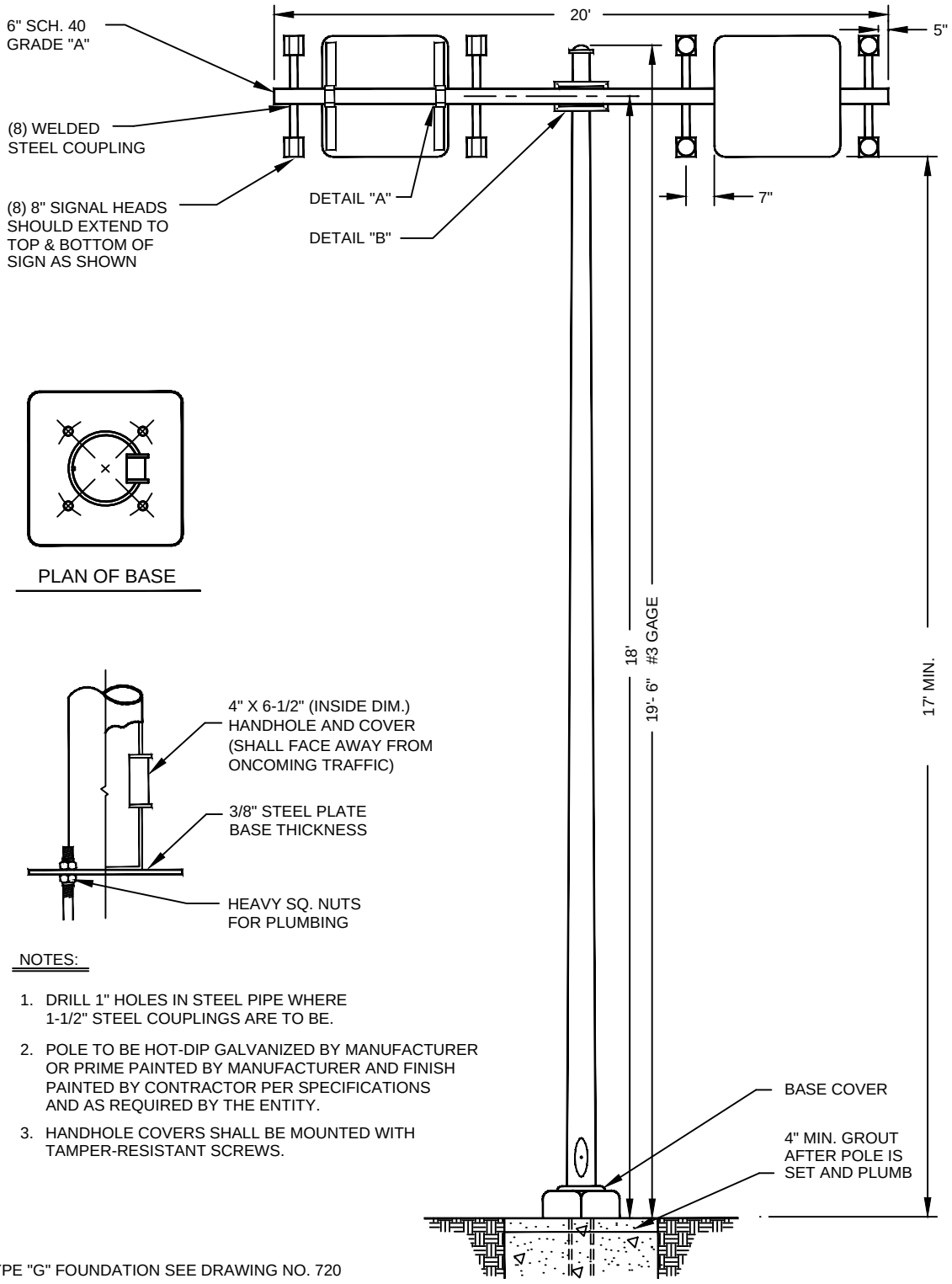
SPECIFICATION REFERENCE	
-	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SCHOOL FLASHING SIGN ON TYPE III POLE

DATE 12-12-96	DWG. NO. 743	SHEET 2 OF 2

Effective 8/10/2023 to 8/07/2024



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

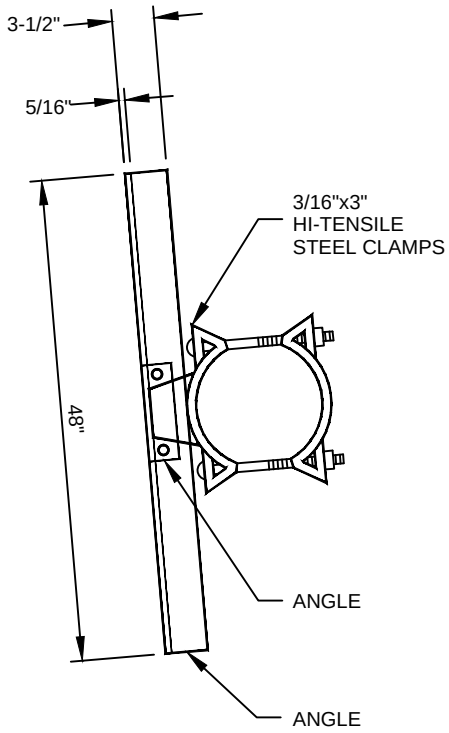
SPECIFICATION REFERENCE	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

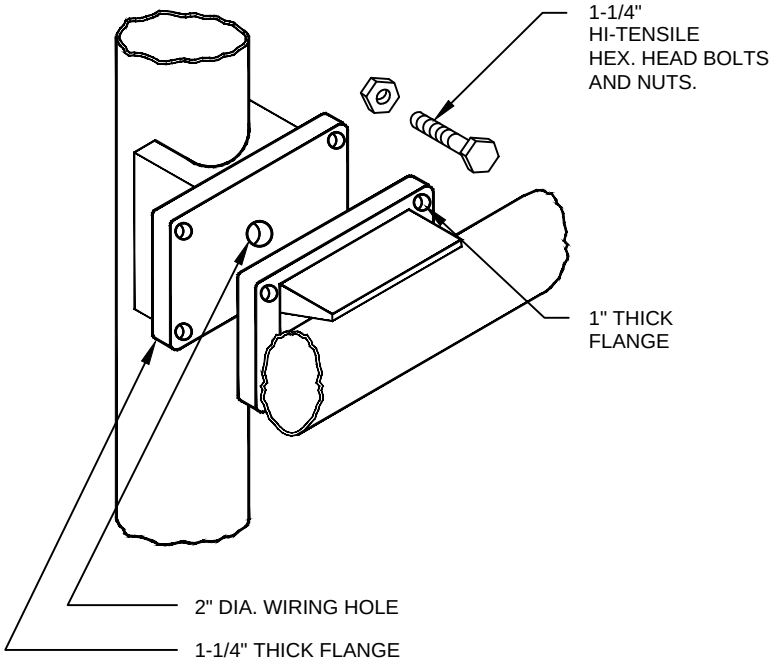
SIGN POST WITH SCHOOL SIGN MOUNTED

DATE 12-12-96	DWG. NO. 744	SHEET 1 OF 2

Effective 8/10/2023 to 8/07/2024



DETAIL A



DETAIL B

AGENCY APPROVED	B	C	H	L	M	N

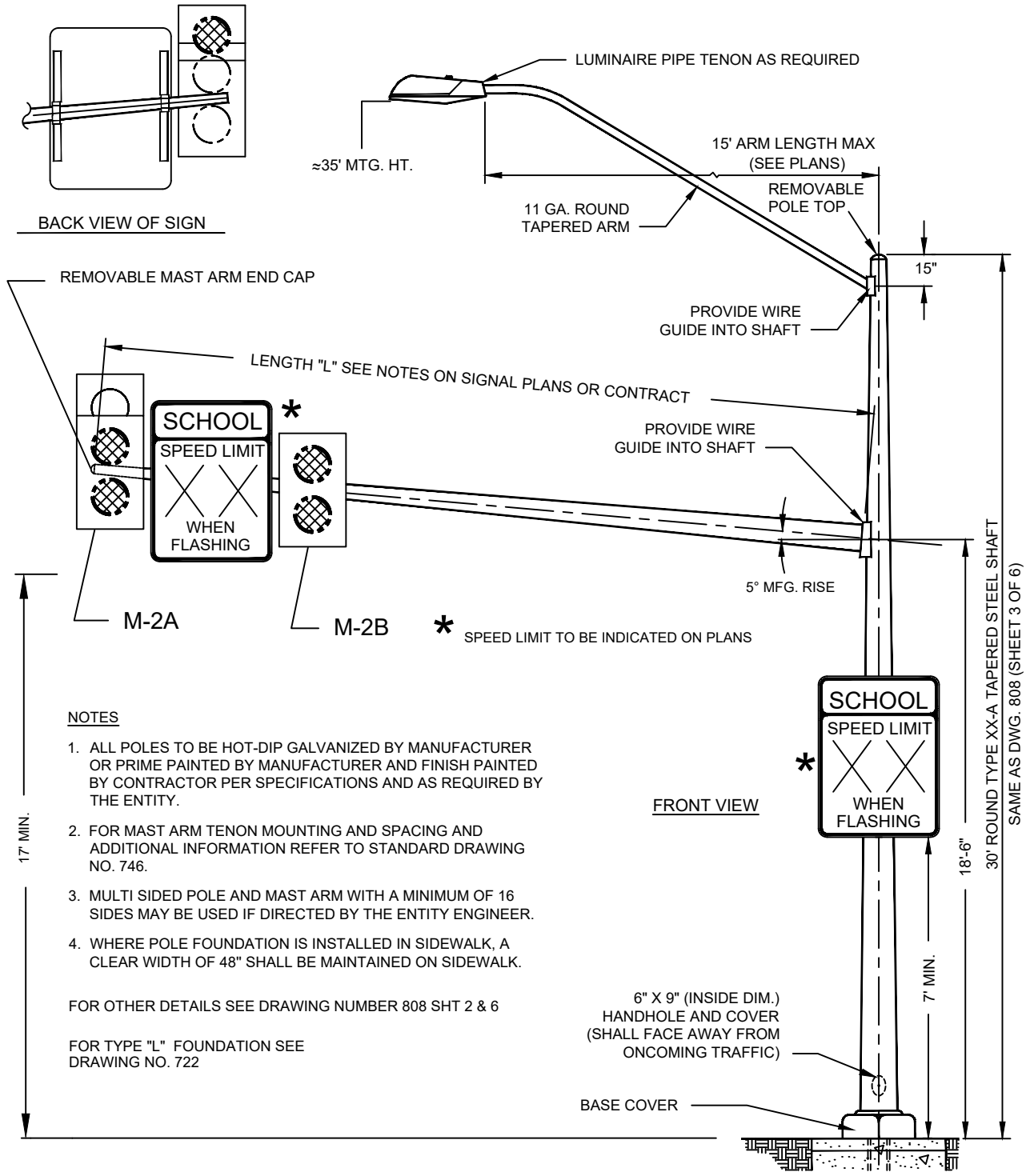
SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SIGN POST WITH SCHOOL SIGN MOUNTED DETAILS

DATE	DWG. NO. 744	SHEET 2 OF 2

Effective 8/10/2023 to 8/07/2024



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. FOR MAST ARM TENON MOUNTING AND SPACING AND ADDITIONAL INFORMATION REFER TO STANDARD DRAWING NO. 746.
3. MULTI SIDED POLE AND MAST ARM WITH A MINIMUM OF 16 SIDES MAY BE USED IF DIRECTED BY THE ENTITY ENGINEER.
4. WHERE POLE FOUNDATION IS INSTALLED IN SIDEWALK, A CLEAR WIDTH OF 48" SHALL BE MAINTAINED ON SIDEWALK.

FOR OTHER DETAILS SEE DRAWING NUMBER 808 SHT 2 & 6

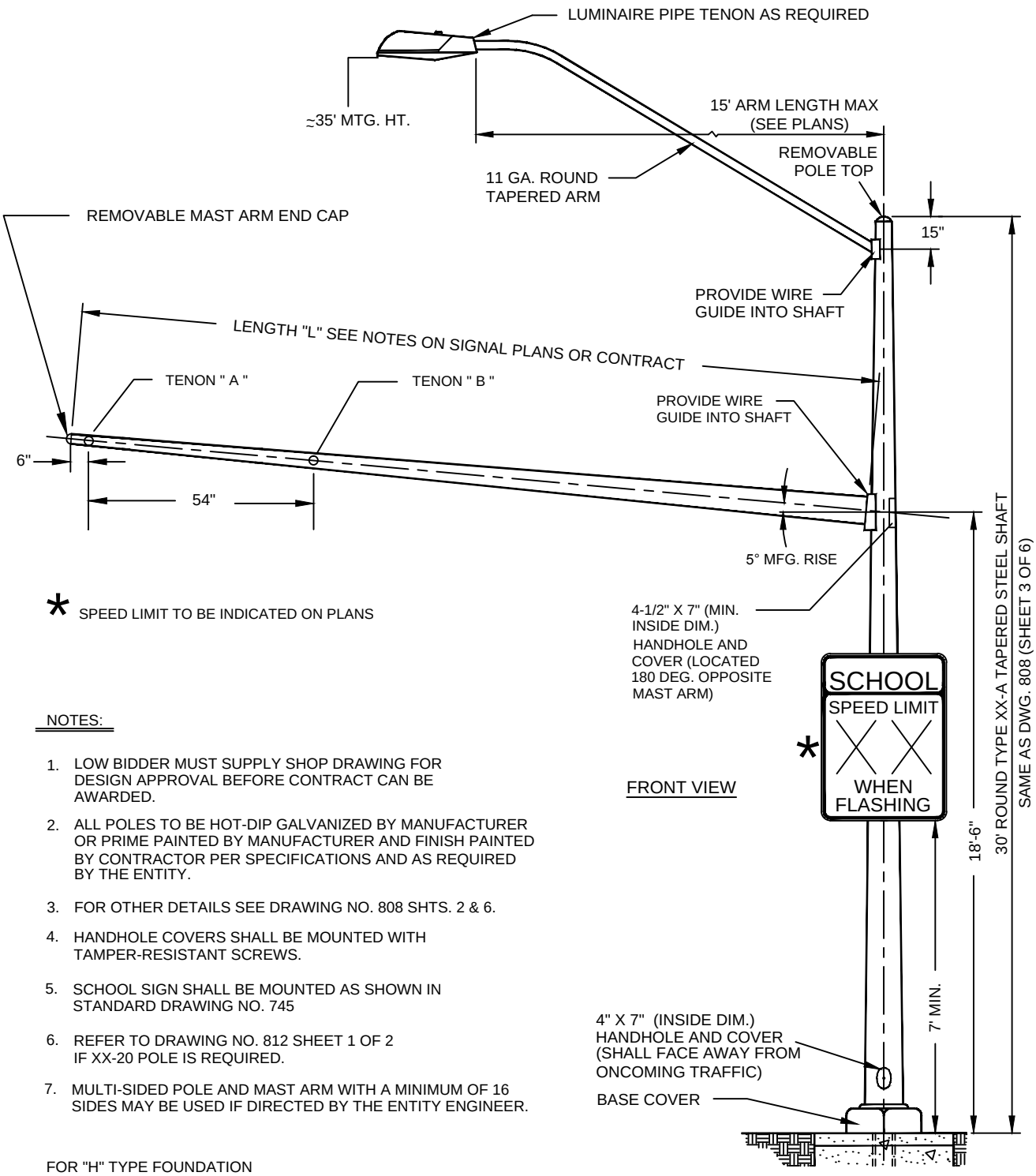
FOR TYPE "L" FOUNDATION SEE DRAWING NO. 722

IN CLARK COUNTY AND 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	R

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	30 FT. POLE WITH SCHOOL FLASHING SIGN
DATE 12-10-20	DWG. NO. 745

Effective 8/10/2023 to 8/07/2024



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

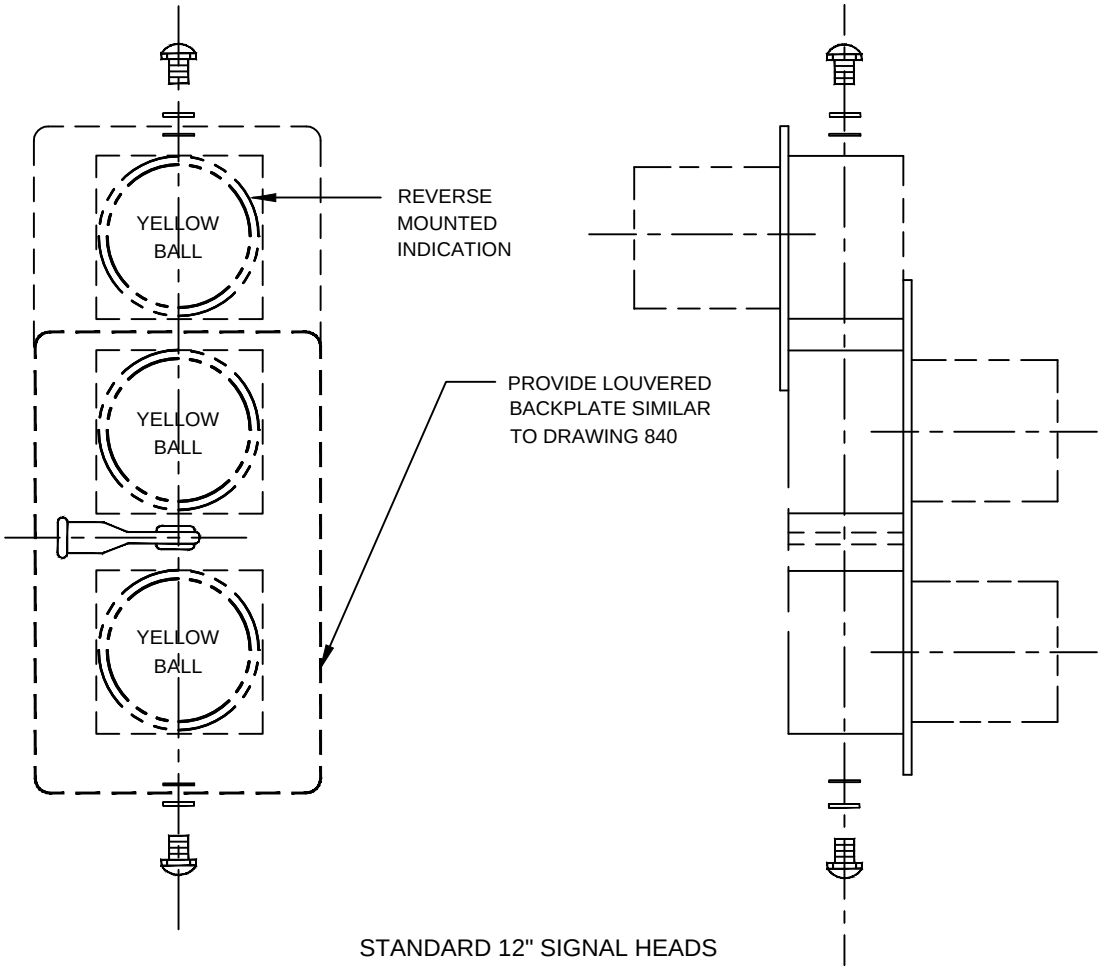
SPECIFICATION REFERENCE	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SCHOOL SIGN POLE
TYPE XX-A

DATE 04-12-07	DWG. NO. 746	

Effective 8/10/2023 to 8/07/2024



STANDARD 12" SIGNAL HEADS
M-2A

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.

AGENCY APPROVED	B	C	H	L	M	N

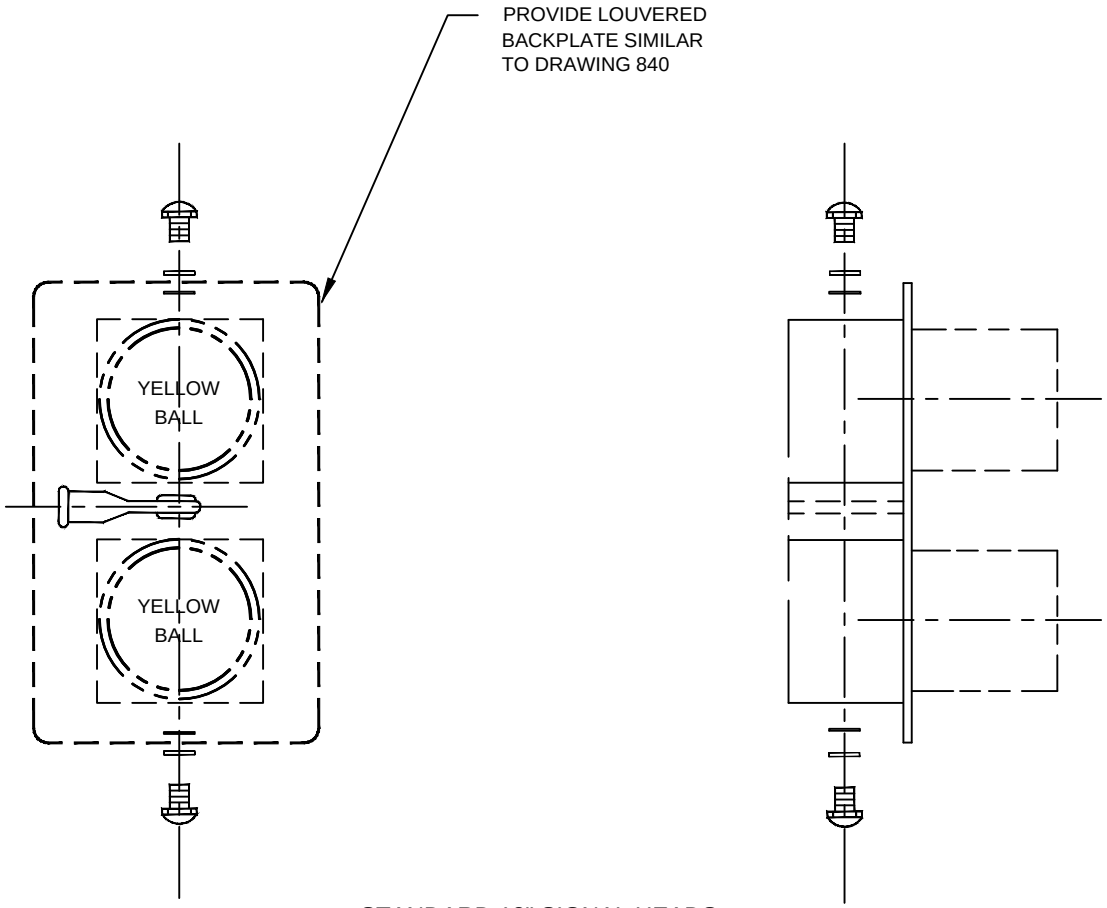
SPECIFICATION REFERENCE	

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

Effective 8/10/2023 to 8/07/2024



STANDARD 12" SIGNAL HEADS
M-2B

NOTES:

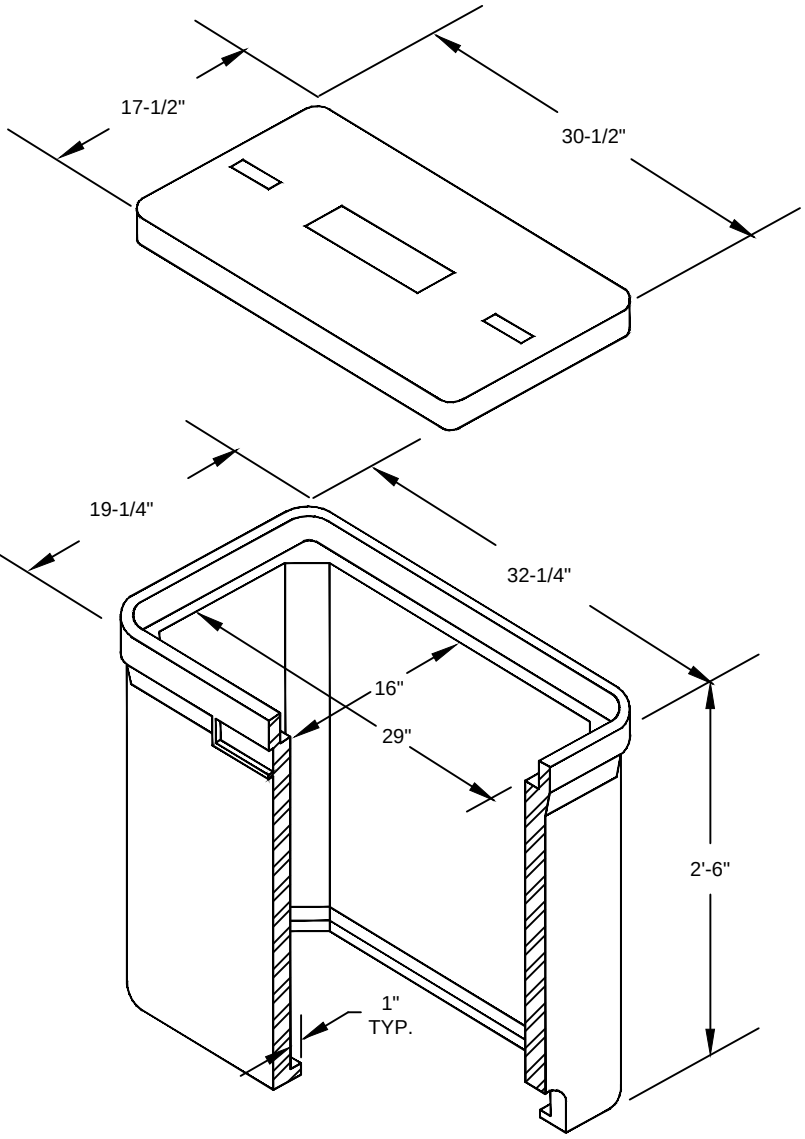
1. ALL INDICATIONS ARE TO BE YELLOW LED BALLS.
2. ALL M-2B INDICATIONS ARE 12" NOMINAL.
3. CIRCULAR VISORS TO BE INSTALLED ON ALL HEADS.
4. SEE SIGNAL PLANS FOR MAST ARM TENON LOCATIONS.

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

Effective 8/10/2023 to 8/07/2024



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	
.	

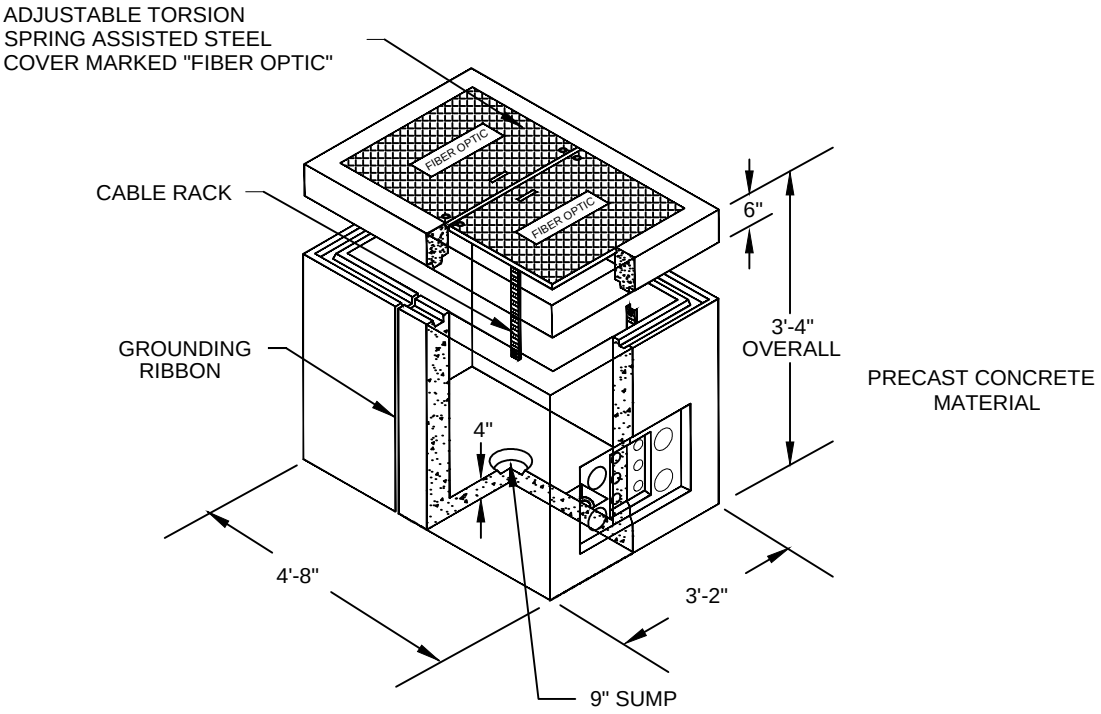
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

"P30" PULLBOX

(FOR USE IN INTERCONNECT AND COMMUNICATIONS INSTALLATIONS)

DATE 07-01-14	DWG. NO. 761	

Effective 8/10/2023 to 8/07/2024



NOTES:

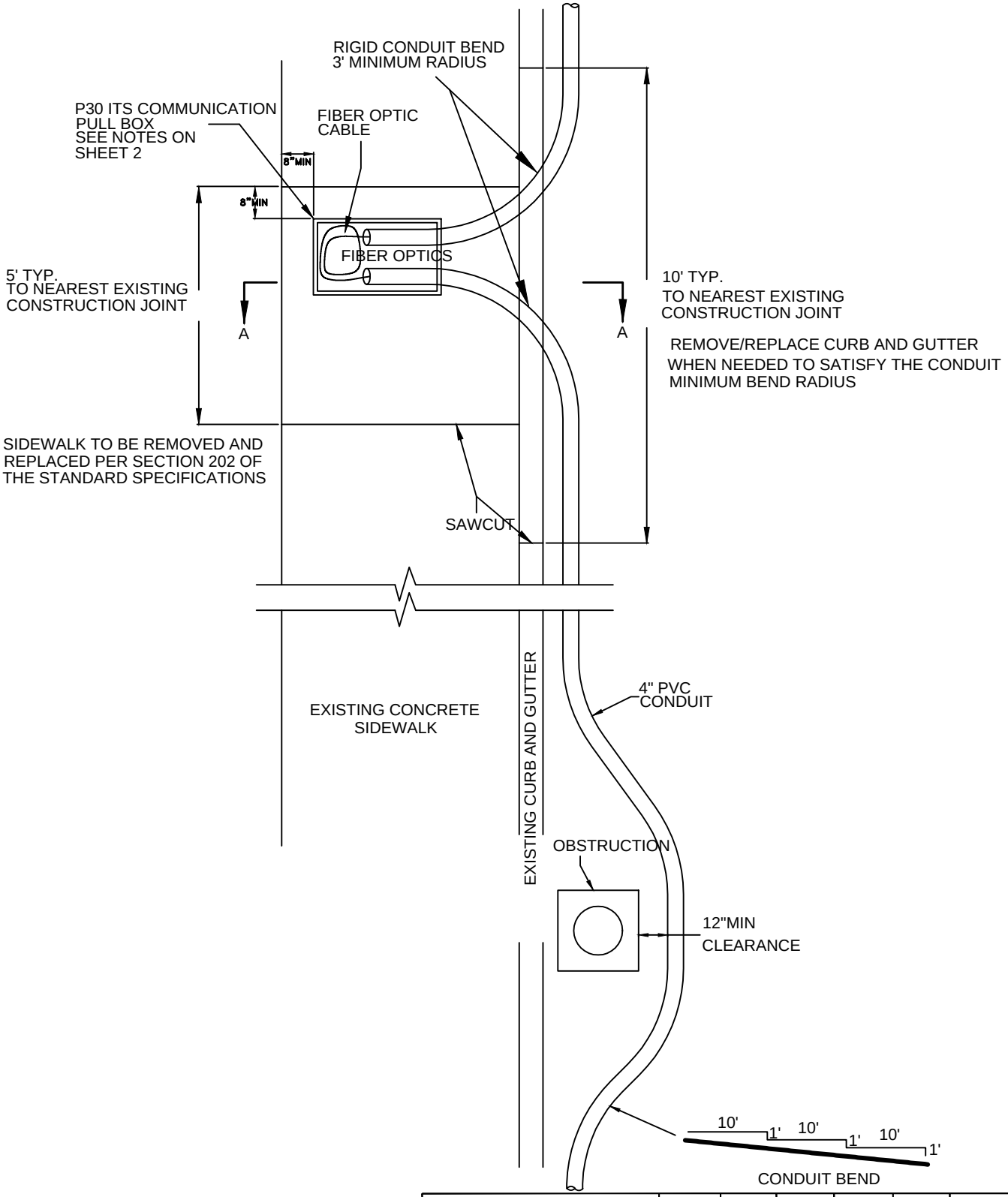
1. DESIGN LOAD: H-20 WHEEL LOADINGS.
2. SUITABLE FOR USE IN OFF STREET LOCATIONS WHERE NOT SUBJECT TO HIGH DENSITY TRAFFIC. IT SHALL NOT BE USED IN TRAVEL OR PARKING LANES.
3. INSIDE DIMENSIONS - 30"X48"X36"
4. FOR USE AT FIBER OPTIC SPLICE POINTS.

TYPE 200 VAULT

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

Effective 8/10/2023 to 8/07/2024

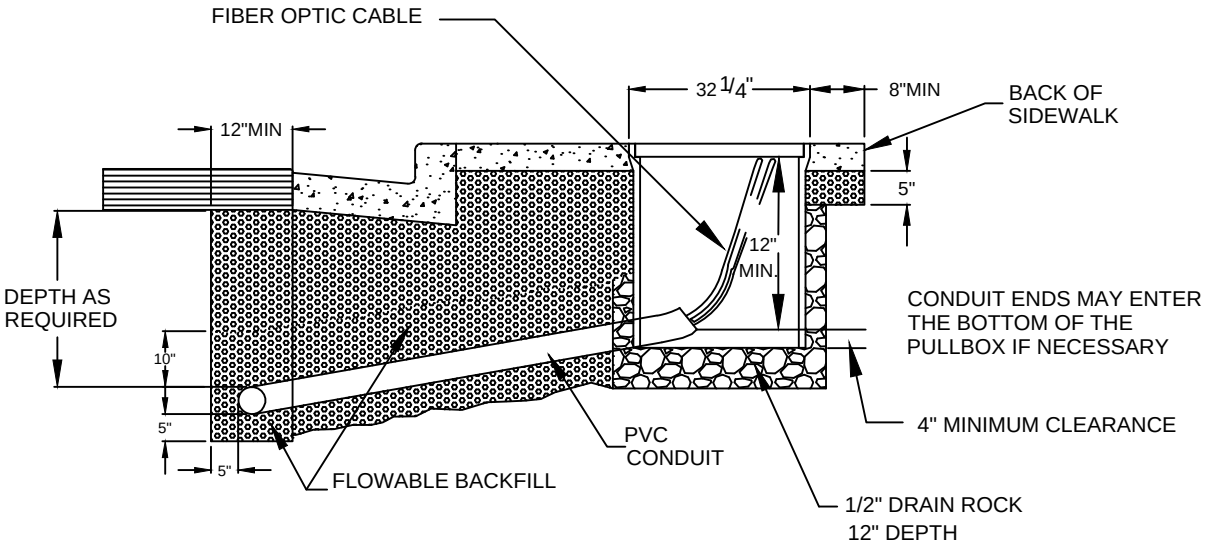


AGENCY APPROVED	B	C	H	L	M	N

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 1 OF 2

Effective 8/10/2023 to 8/07/2024

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

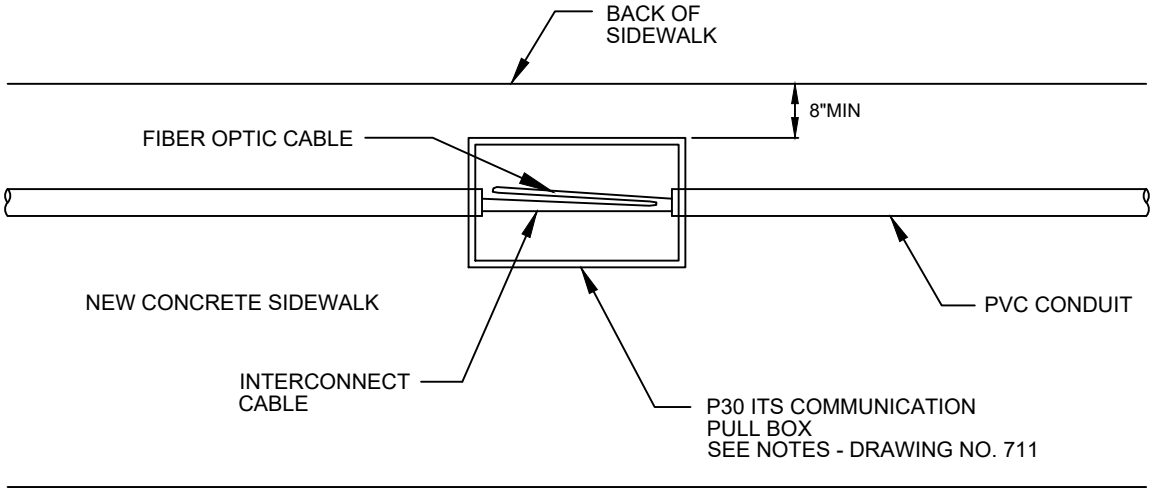
SPECIFICATION REFERENCE	
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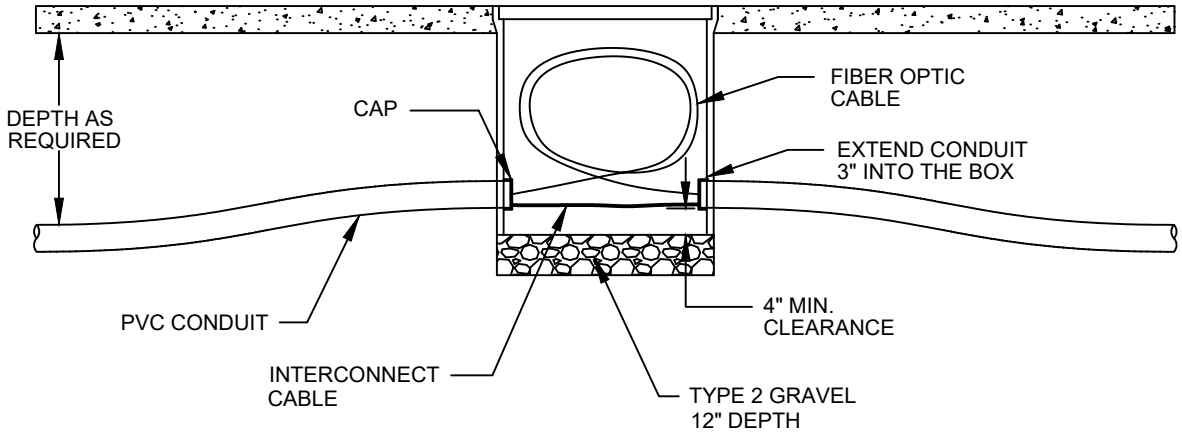
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

ITS COMMUNICATION CONDUIT AND PULL BOX DETAIL (FOR EXISTING CURB & GUTTER)

DATE 3-13-08	DWG. NO. 763	SHEET 2 OF 2

Effective 8/10/2023 to 8/07/2024





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	

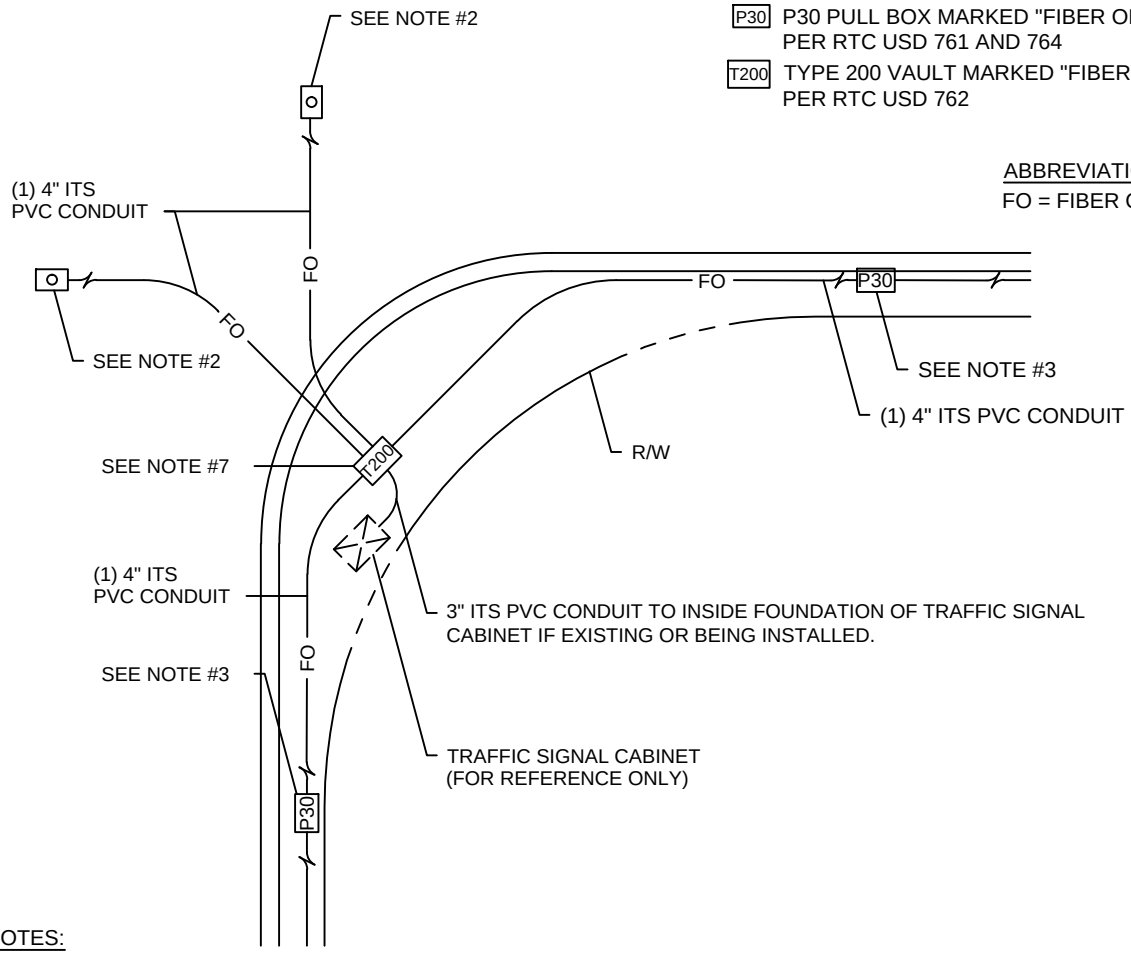
Effective 8/10/2023 to 8/07/2024

LEGEND

- NO. 3-1/2 PULL BOX MARKED "FIBER OPTIC" PER RTC USD 705
- P30 — P30 PULL BOX MARKED "FIBER OPTIC" PER RTC USD 761 AND 764
- T200 — TYPE 200 VAULT MARKED "FIBER OPTIC" PER RTC USD 762

ABBREVIATIONS

FO = FIBER OPTIC



NOTES:

1. ALL ITS CONDUITS SHALL HAVE A 6-PAIR, REA-PE39 #22 AWG TWISTED WIRE PAIR CABLE INSTALLED.
2. ANY EXISTING ITS CONDUITS FROM THE OPPOSING SIDE OF THE STREET SHALL BE CONNECTED TO PROPOSED CONDUITS USING THE SAME SIZE CONDUIT. IF UNDERGROUNDS DO NOT EXIST, THEN PROPOSED CONDUITS SHALL BE EXTENDED 5' PAST THE EXISTING OR PROPOSED EDGE OF PAVEMENT TO A #3-1/2 PULL BOX MARKED "FIBER OPTIC".
3. FIBER OPTIC CONDUIT SHALL BE INSTALLED WITH P30 PULL BOXES PLACED AT A MAXIMUM SPACING OF 1000', BUT SHALL NOT BE INSTALLED WITHIN 5' OF THE POINT OF CURVATURE (PC) OF THE R/W RADIUS, IN SIDEWALK RAMPS OR DRIVEWAYS. THE ITS CONDUITS SHALL BE CONNECTED TO THE EXISTING ITS CONDUITS OR, IF NOT EXISTING, AN ADDITIONAL P30 PULL BOX SHALL BE INSTALLED AT THE PROPOSED DEVELOPMENT'S PROPERTY LINE.
4. ALL CONDUIT BENDS SHALL BE PVC COATED RIGID w/ A MINIMUM RADIUS OF 36 INCHES.
5. ALL ITS PULL BOXES SHALL HAVE A POLYMER COMPOSITE BODY w/ RESIN POLYMER REINFORCED NON-CONDUCTIVE COVER MARKED "FIBER OPTIC".
6. UNDERGROUND ORANGE MARKING TAPE SHALL BE PLACED 12 INCHES ABOVE THE INSTALLED CONDUIT AND MARKED WITH THE LEGEND "FIBER OPTIC".
7. IF TRAFFIC SIGNAL CABINET EXISTS OR IS BEING INSTALLED ON CORNER, INSTALL TYPE 200 VAULT PER 762 AND 889 WITH ITS CONDUIT INTO TRAFFIC SIGNAL CABINET. IF TRAFFIC SIGNAL CABINET DOES NOT EXIST OR IS NOT BEING INSTALLED IN CORNER, INSTALL P30 PULL BOX.

AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	
623	TRAFFIC SIGNAL & STREET LIGHTING

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

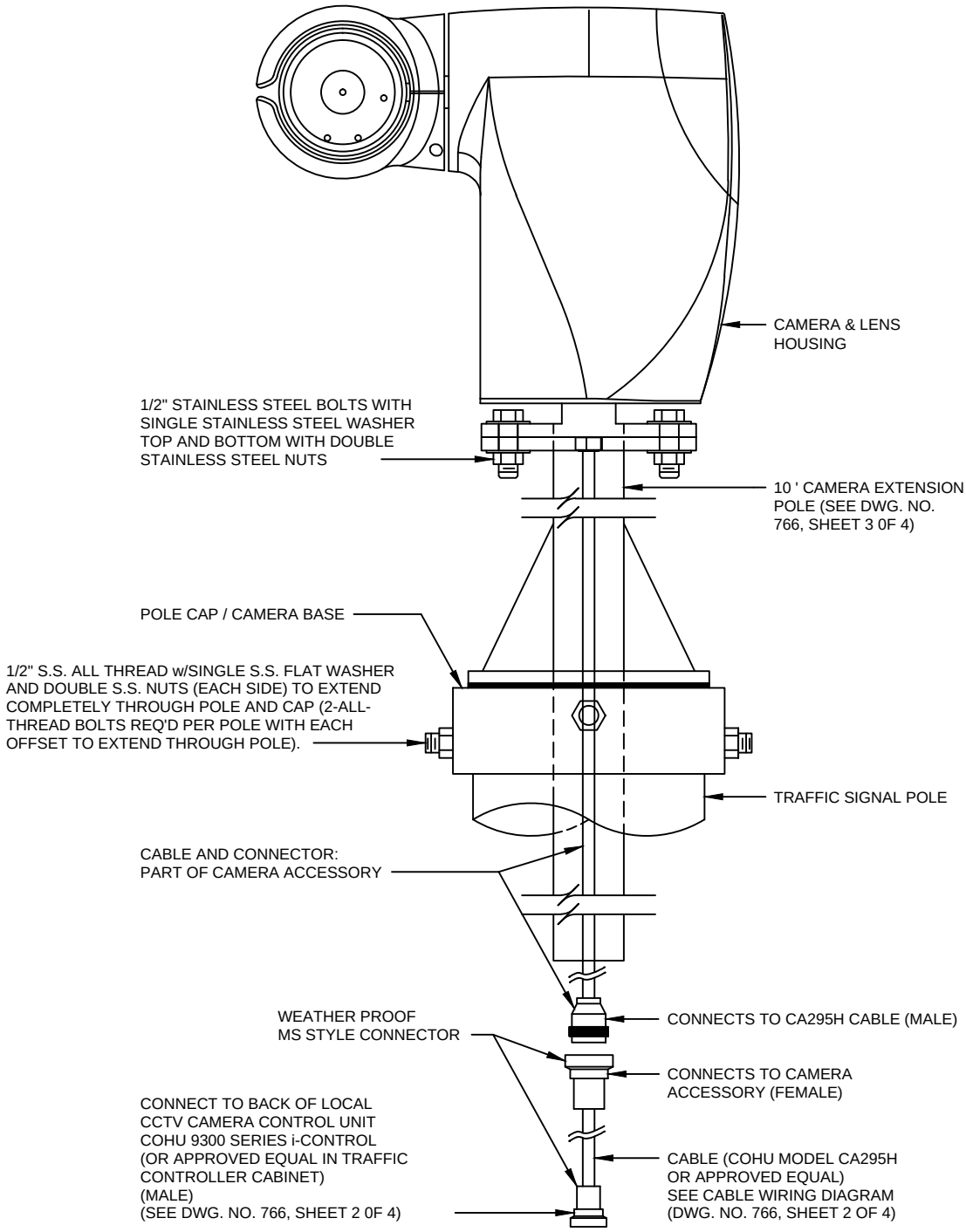
TYPICAL INTERSECTION ITS UNDERGROUND LAYOUT

DATE 05-20-10	DWG. NO. 765	

Effective 8/10/2023 to 8/07/2024

CCTV CAMERA

COHU 3965 - 4101
(OR APPROVED EQUAL)



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

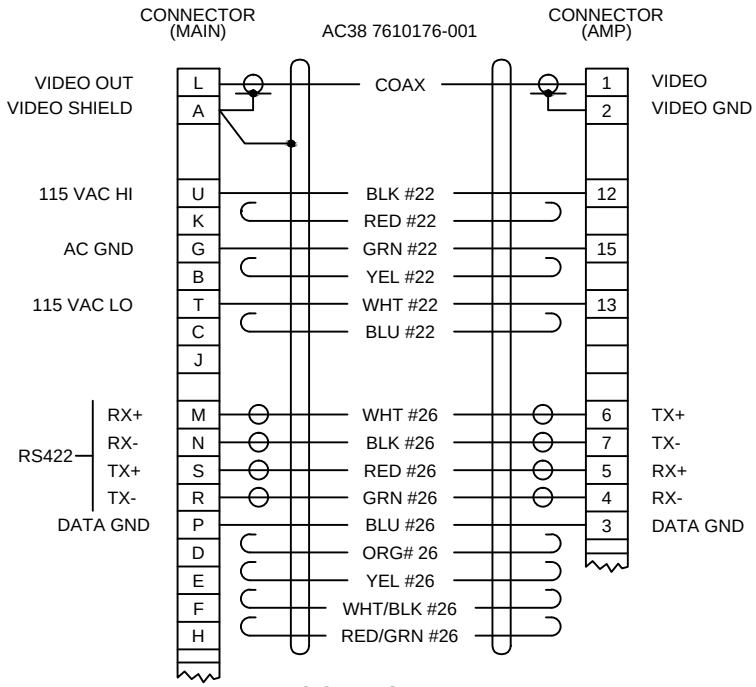
CLOSED CIRCUIT TELEVISION (CCTV) CAMERA

DATE 04-08-10	DWG. NO. 766	SHEET 1 OF 4

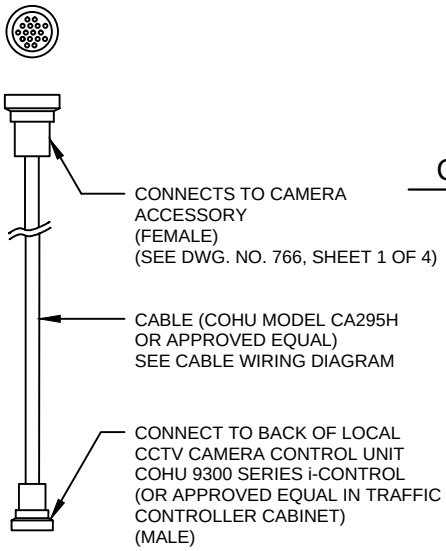
Effective 8/10/2023 to 8/07/2024

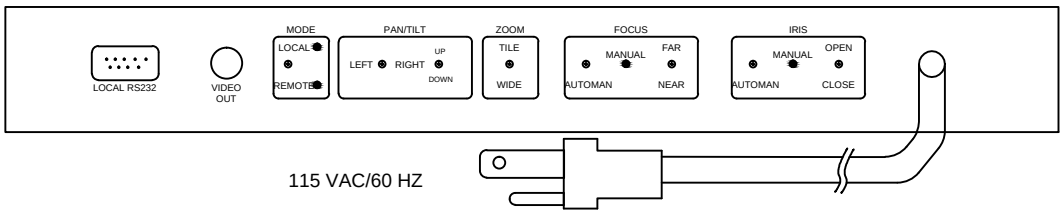
NOTE:

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 i-CONTROL (OR APPROVED EQUAL) (IN TRAFFIC CONTROLLER CABINET)

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

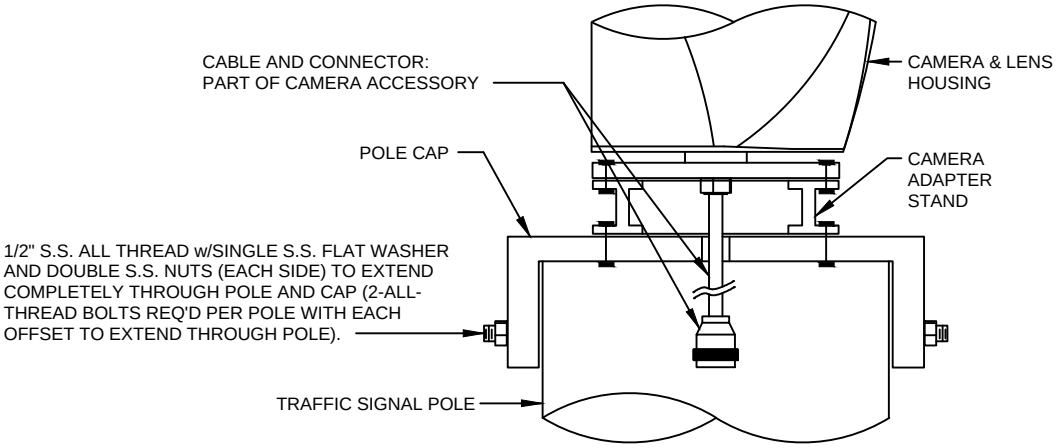
CLOSED CIRCUIT TELEVISION CAMERA CONTROL UNIT AND CABLE WIRING DIGRAM

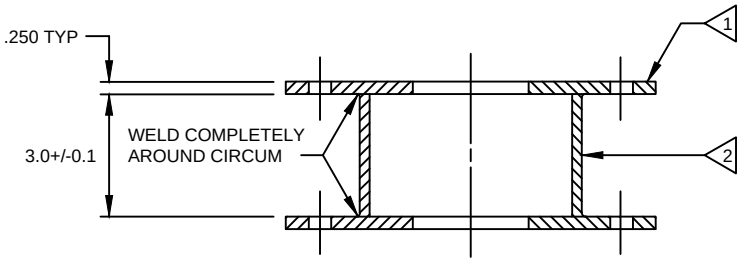
DATE 04-08-10	DWG. NO. 766	SHEET 2 OF 4

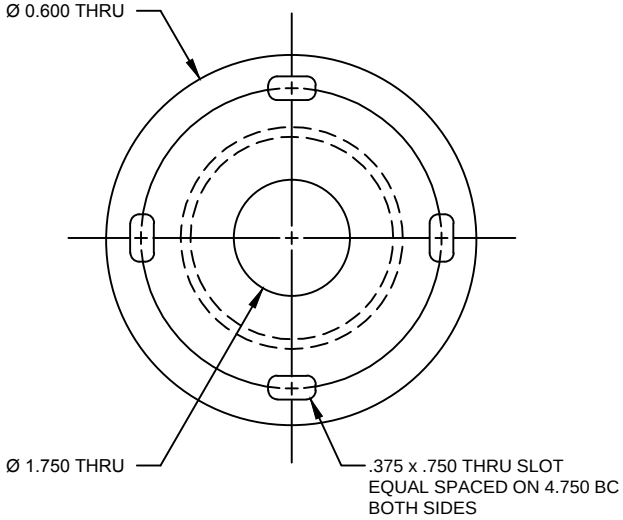
Effective 8/10/2023 to 8/07/2024

CAMERA ADAPTER STAND

(REQUIRED FOR POLE CAP MOUNTING)







1. MAT'L (FLANGE): 1018 STEEL OR EQUIV.
2. 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

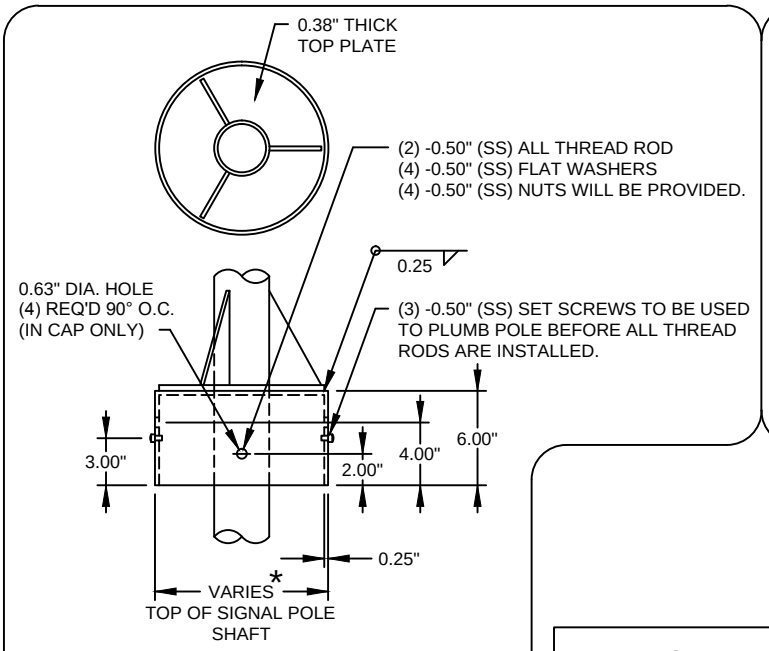
CLOSED CIRCUIT TELEVISION CAMERA
ADAPTOR STAND

DATE 04-08-10	DWG. NO. 766	SHEET 3 OF 4

Effective 8/10/2023 to 8/07/2024

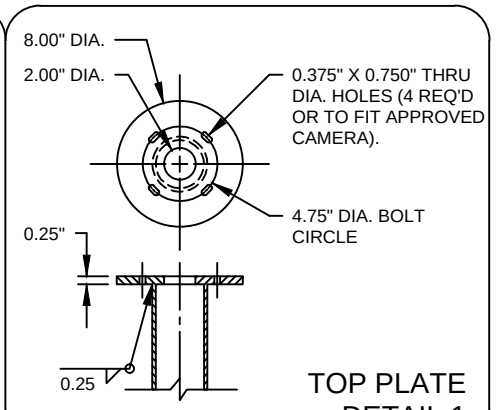
CAMERA EXTENSION POLE

(REQUIRED FOR POLE CAP MOUNTING)

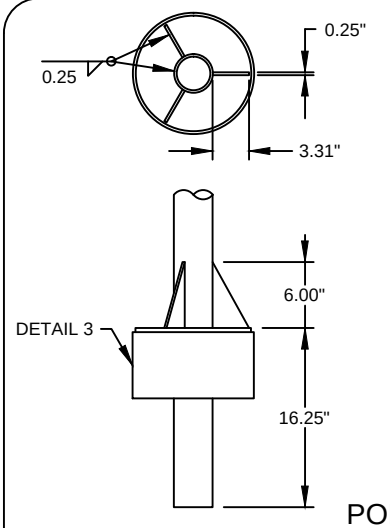


* CONTRACTOR TO FIELD MEASURE TOP OF EXISTING OR PROPOSED TRAFFIC SIGNAL POLE SHAFT BEFORE FABRICATION OF CAP.

POLE EXTENSION CAP
DETAIL 3



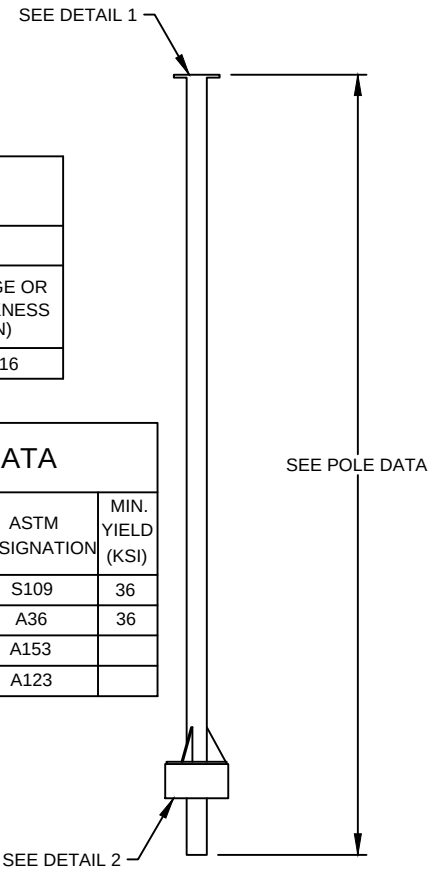
TOP PLATE
DETAIL 1



POLE BASE
DETAIL 2

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

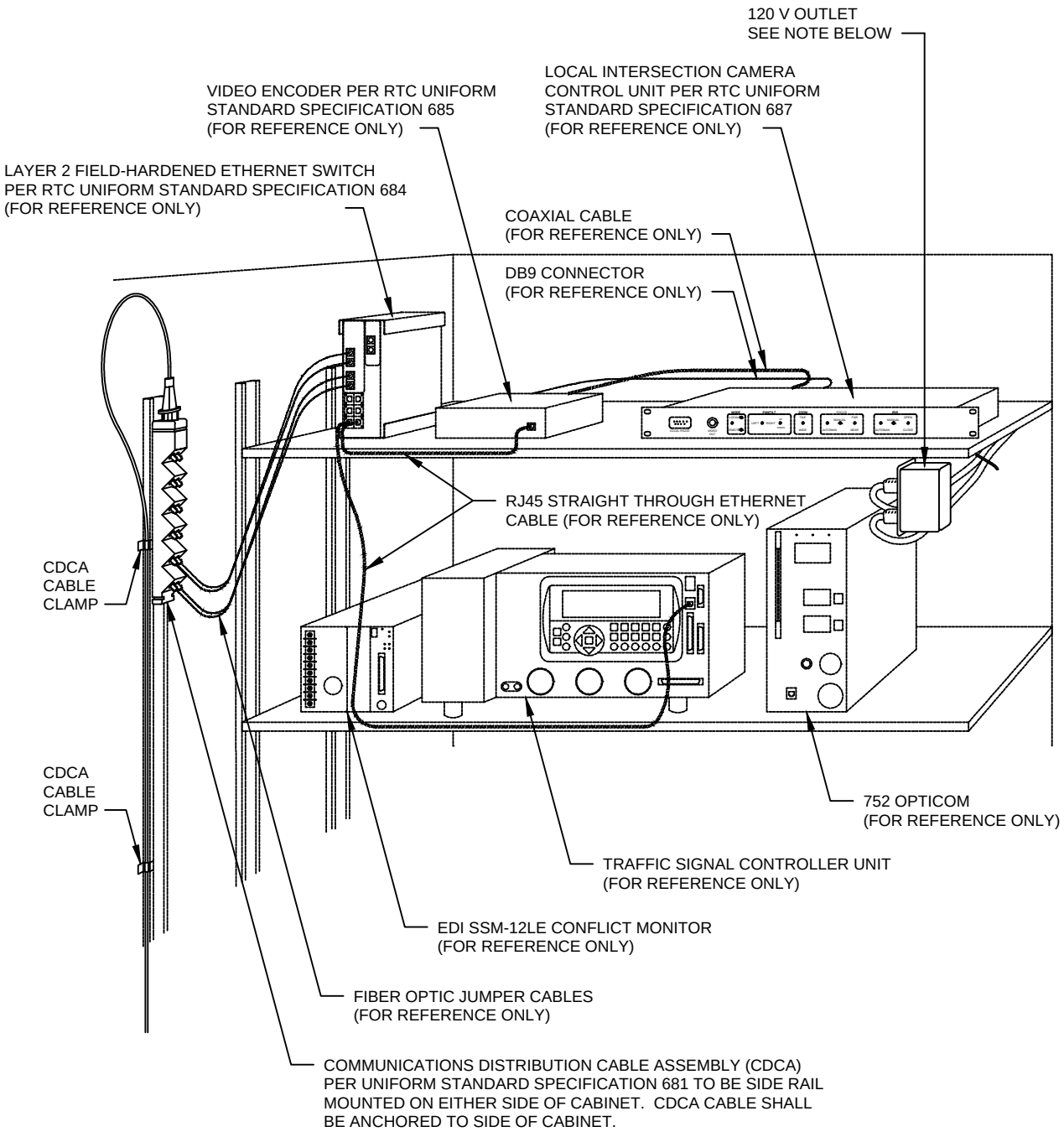
SPECIFICATION REFERENCE	
685	VIDEO ENCODER
686	VIDEO ENCODER
687	CCTV FIELD EQUIPMENT
-	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

CLOSED CIRCUIT TELEVISION CAMERA EXTENSION POLE

DATE 04-08-10	DWG. NO. 766	SHEET 4 OF 4

Effective 8/10/2023 to 8/07/2024



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.

AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	
681	FIBER OPTIC SPLICE AND
	DISTRIBUTION EQUIPMENT
-	

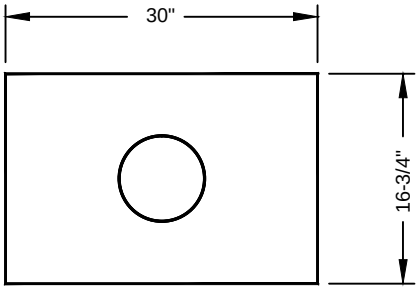
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

COMMUNICATION DISTRIBUTION CABLE ASSEMBLY (CDCA) IN CABINET

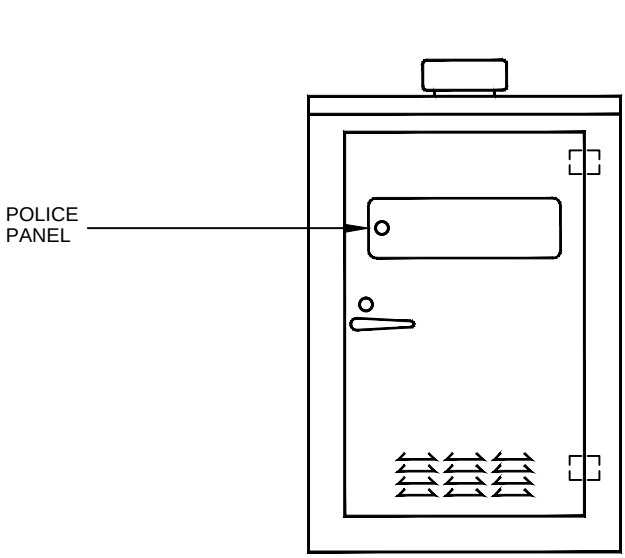
DATE 04-8-10	DWG. NO. 767	

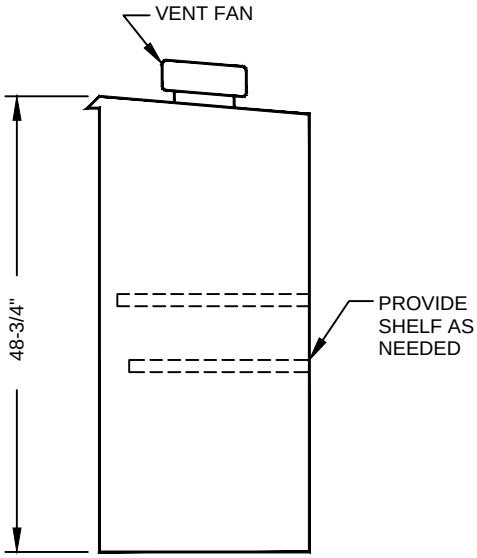
Effective 8/10/2023 to 8/07/2024

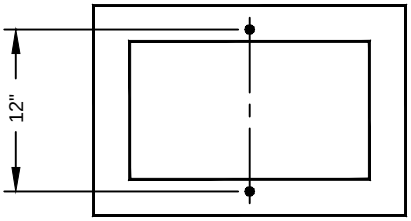
MOTOR: 1/125 HP-
3000 RPM NEMA CLASS
B INS. 0.65 AMPS AT
115 VAC.



VENT FAN SPECIFICATION:
134 C.F.M. RATING AT .160"
OF WATER STATIC PRESSURE.







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" x 18" x 3" HOT-DIP GALVANIZED ANCHOR BOLTS WITH EACH CABINET.

AGENCY APPROVED	B	C	H	L	M	N

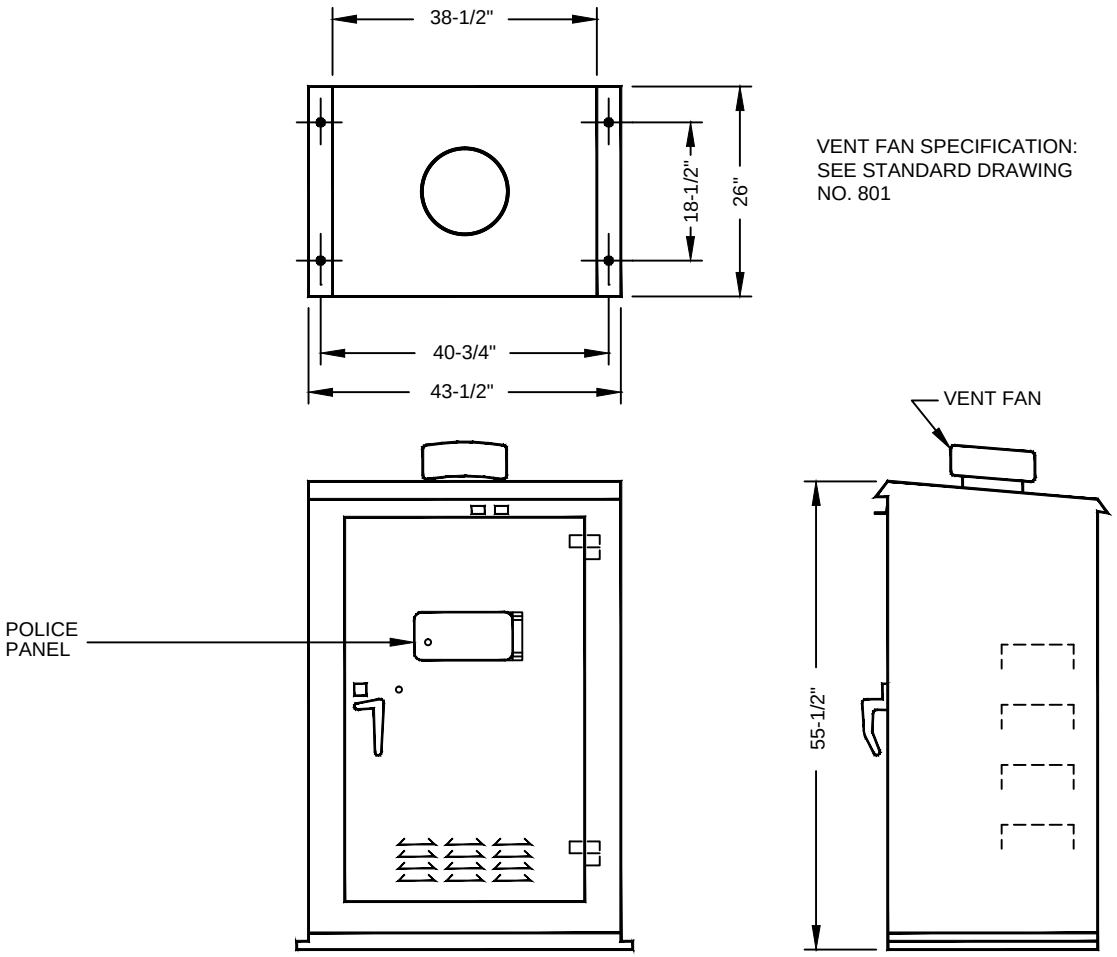
SPECIFICATION REFERENCE	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPE V
CABINET

DATE 12-12-96	DWG. NO. 801	

Effective 8/10/2023 to 8/07/2024



"P" CABINET

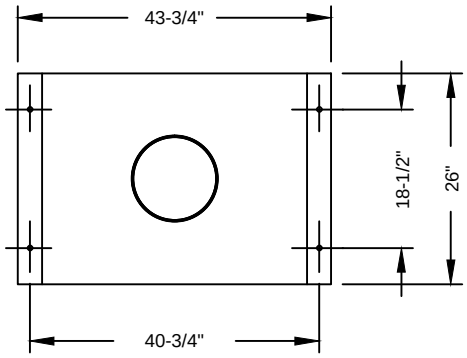
NOTES:

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" x 18" x 3" HOT-DIP GALVANIZED ANCHOR BOLTS WITH EACH CABINET.

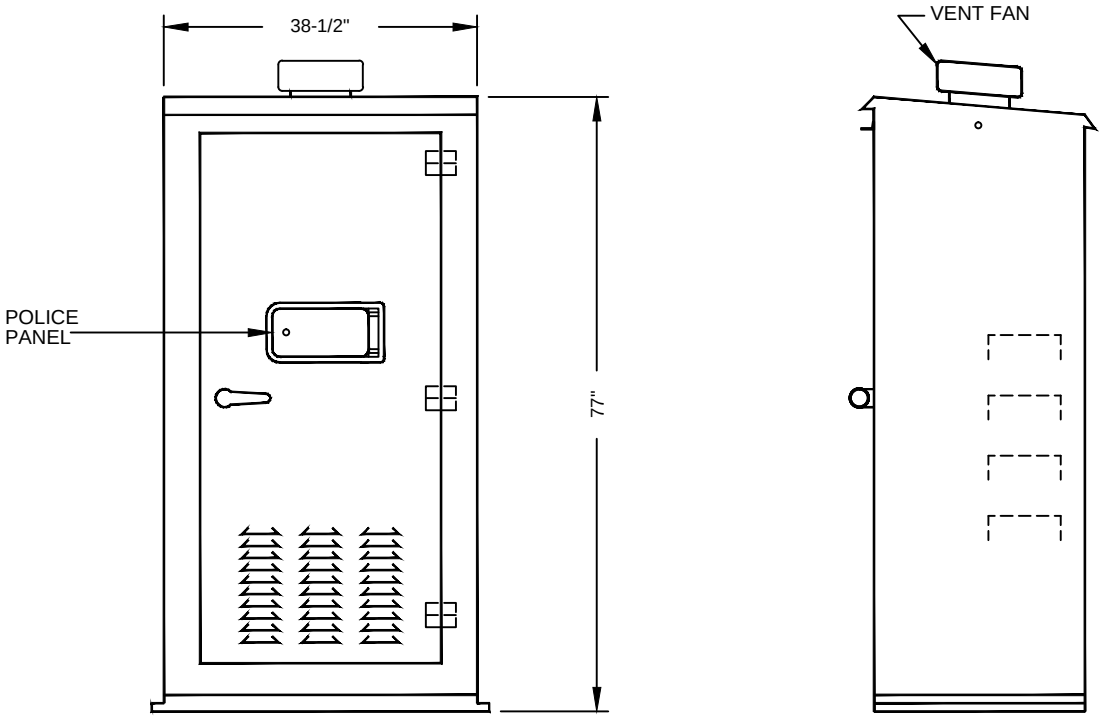
AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	TYPE VI CABINET
	DATE 12-12-96 / DWG. NO. 802

Effective 8/10/2023 to 8/07/2024



VENT FAN SPECIFICATION:
SEE STANDARD DRAWING
NO. 801



"R" CABINET

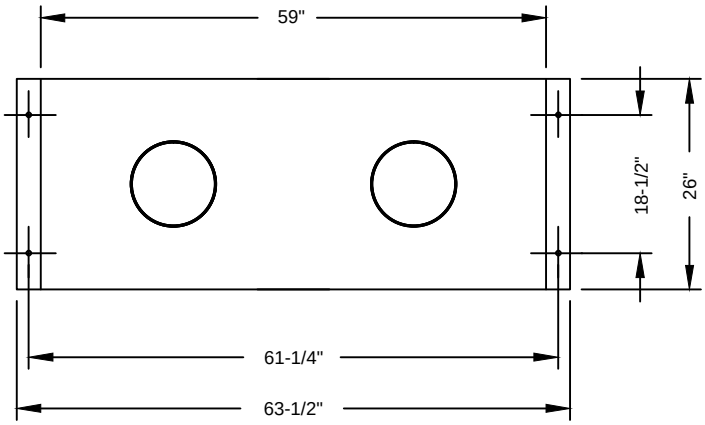
NOTES:

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" x 18" x 3" HOT-DIP GALVANIZED ANCHOR BOLTS WITH EACH CABINET.

AGENCY APPROVED	B	C	H	L	M	N

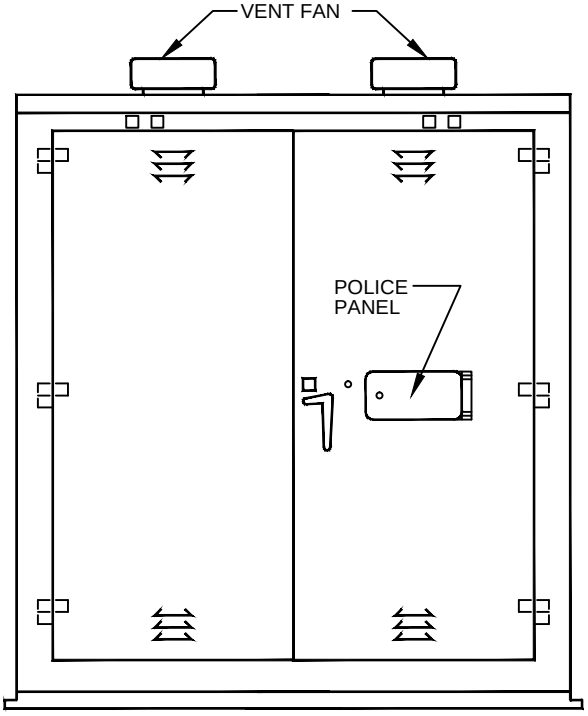
SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	TYPE VIII CABINET
	DATE 12-12-96 / DWG. NO. 803

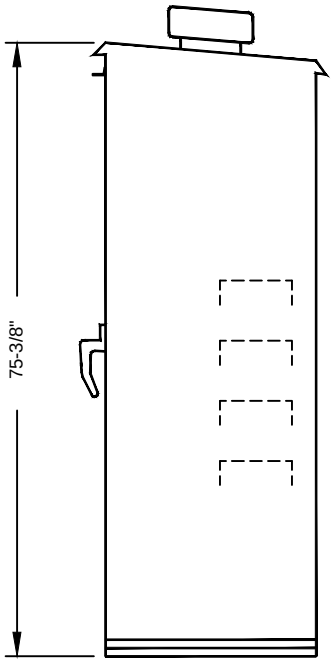
Effective 8/10/2023 to 8/07/2024



VENT FAN SPECIFICATION:

SEE STANDARD DRAWING NO. 801





"RR" CABINET

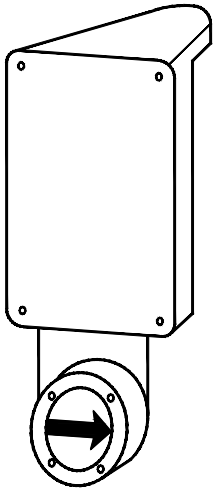
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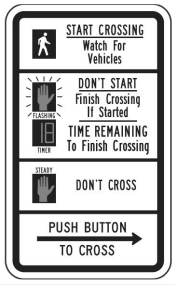
1. MATERIAL - 14 GA. SHEET STEEL, OR ALUMINUM EQUIVALENT.
2. PAINT OUTSIDE TWO COATS AND INSIDE TWO COATS WHITE ENAMEL OR AS APPROPRIATE.
3. FOUNDATION DETAILS SHALL BE SPECIFIED ON THE SIGNAL CONSTRUCTION PLANS.
4. INCLUDE 3/4" x 18" x 3" HOT-DIP GALVANIZED ANCHOR BOLTS WITH EACH CABINET.

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

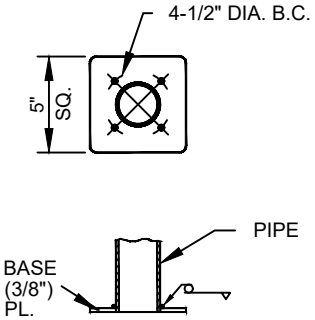
Effective 8/10/2023 to 8/07/2024





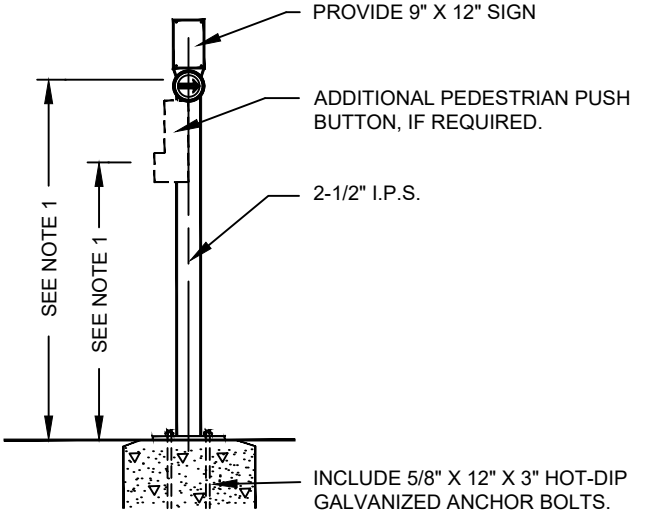
R10-3e
9" X 12"

PEDESTRIAN PUSHBUTTON
FOR 2 1/2" POSTTOP MOUNTING



PLAN OF BASE

PEDESTRIAN PUSH BUTTON



NOTES

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

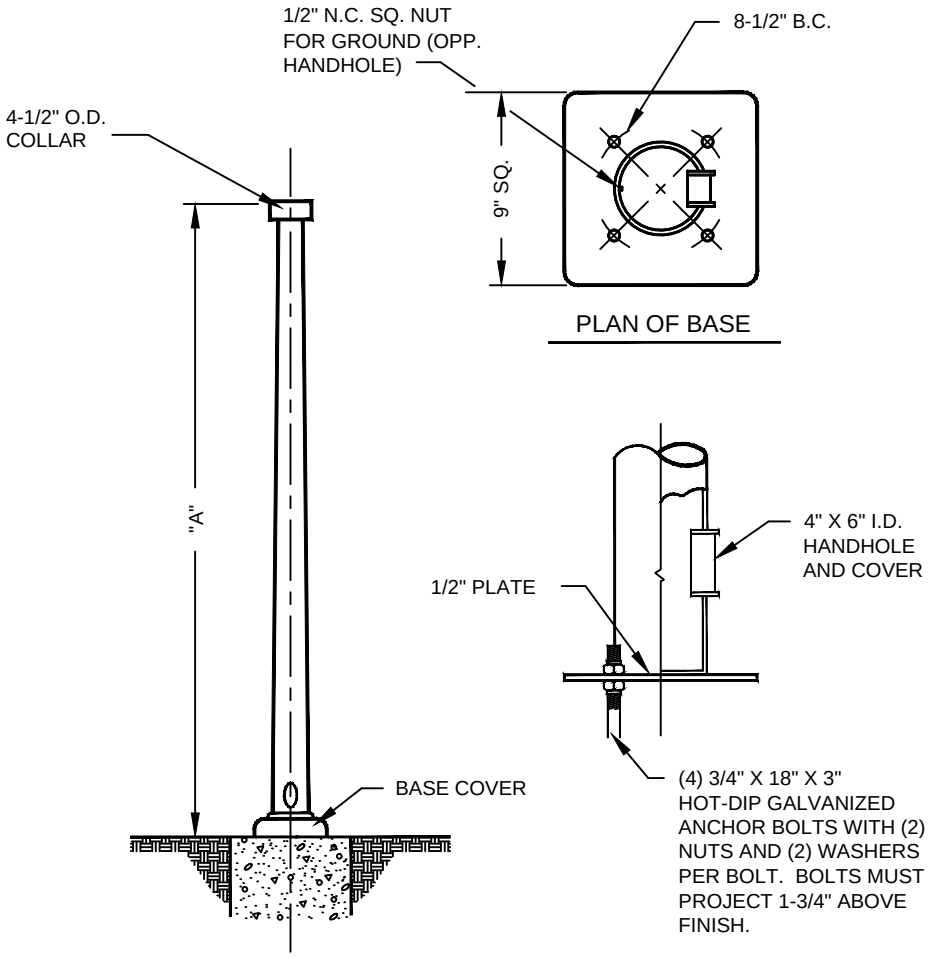
SPECIFICATION REFERENCE	
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

PEDESTRIAN PUSH BUTTON POST FOR 2 1/2 INCHES POSTTOP MOUNTING

DATE 12-10-20	DWG. NO. 805	

Effective 8/10/2023 to 8/07/2024



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

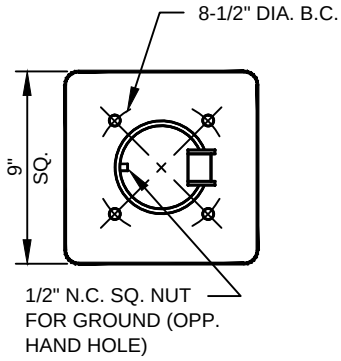
SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

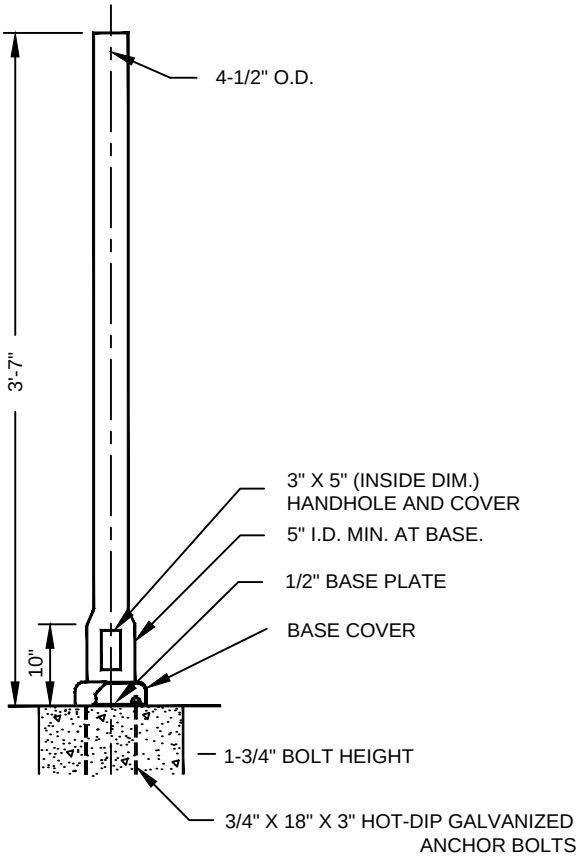
SIGNAL STANDARD
TYPE 1-A, 1-B

DATE 07-01-17 | DWG. NO. 806

Effective 8/10/2023 to 8/07/2024



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.

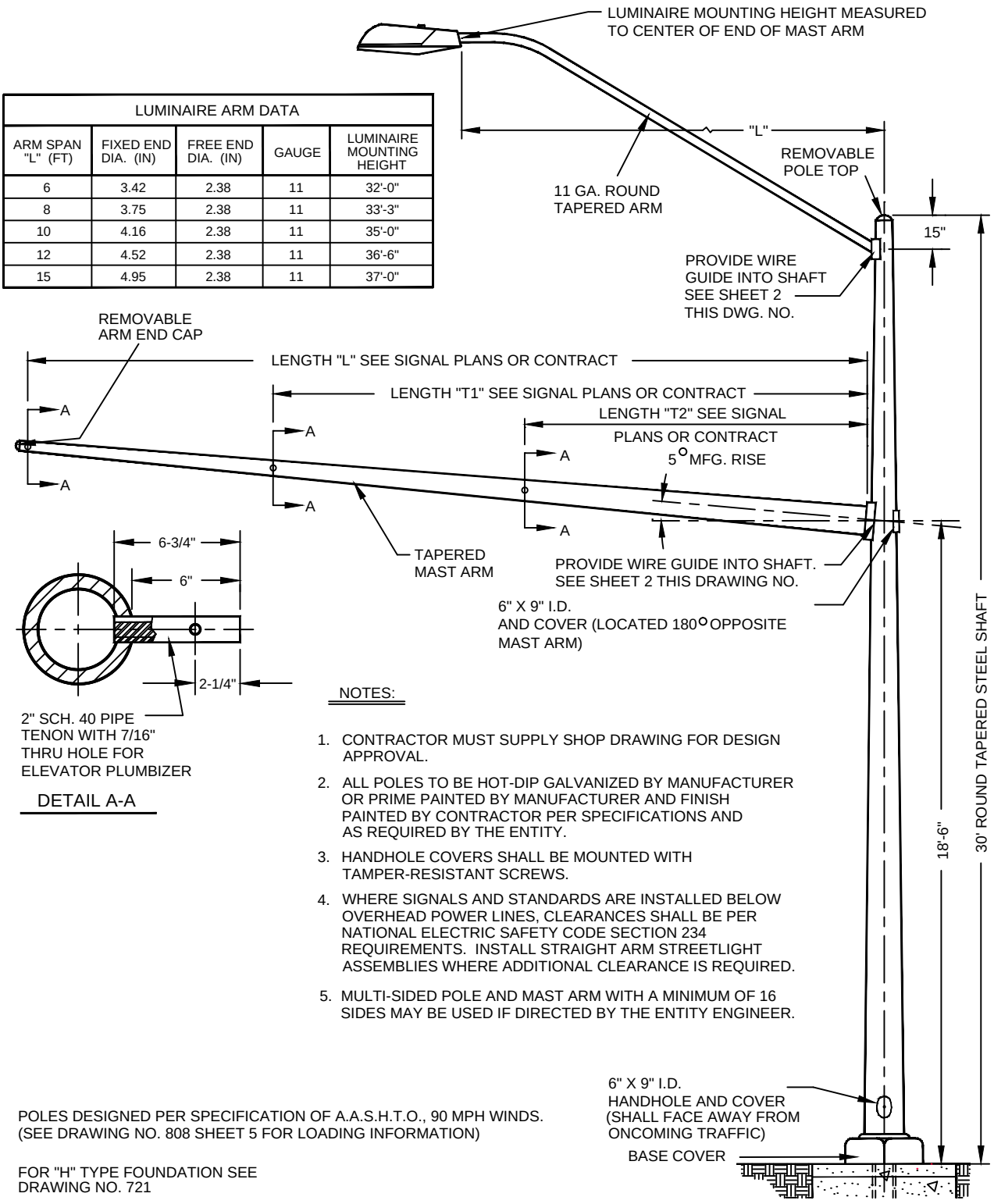
FOR TYPE "C" FOUNDATION SEE DRAWING NO.717.

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

Effective 8/10/2023 to 8/07/2024

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"



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.

POLES DESIGNED PER SPECIFICATION OF A.A.S.H.T.O., 90 MPH WINDS. (SEE DRAWING NO. 808 SHEET 5 FOR LOADING INFORMATION)

FOR "H" TYPE FOUNDATION SEE DRAWING NO. 721

AGENCY APPROVED	B	C	H	L	M	N

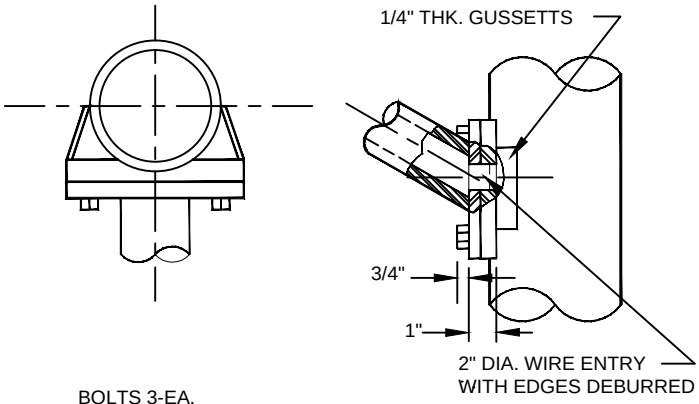
SPECIFICATION REFERENCE	
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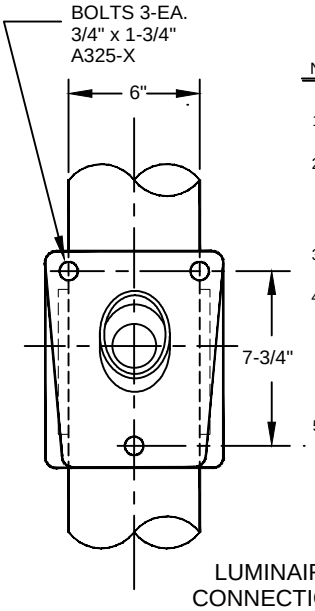
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPE XX-30 FT. SIGNAL & LUMINAIRE POLE (45 FT. OR LESS MAST ARMS)

DATE 07-01-17	DWG. NO. 808	SHEET 1 OF 6

Effective 8/10/2023 to 8/07/2024

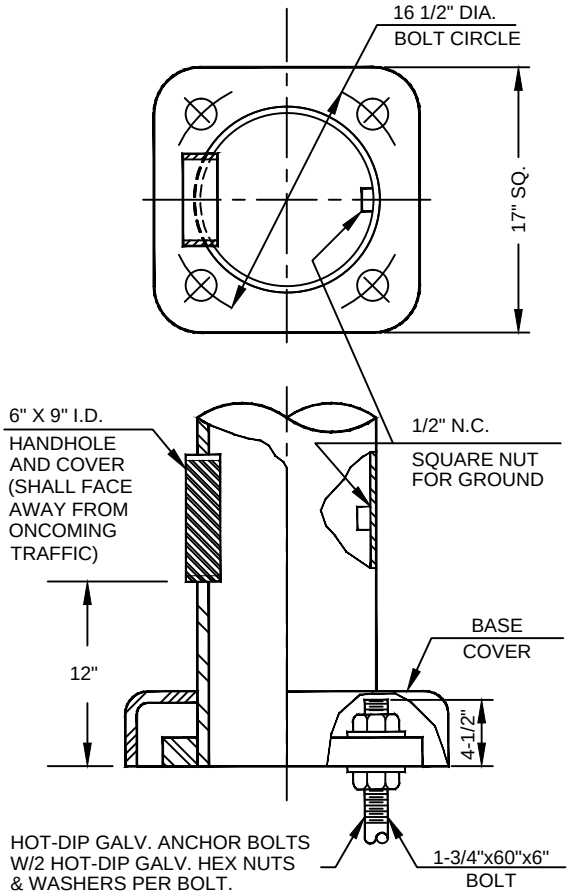




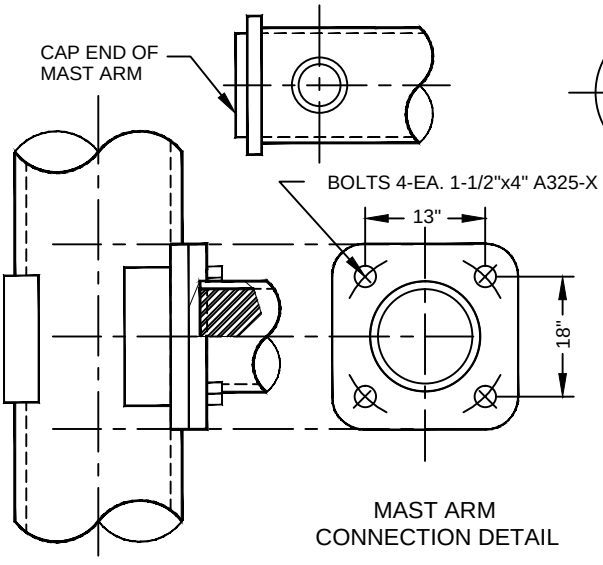
LUMINAIRE ARM
CONNECTION DETAIL

NOTES:

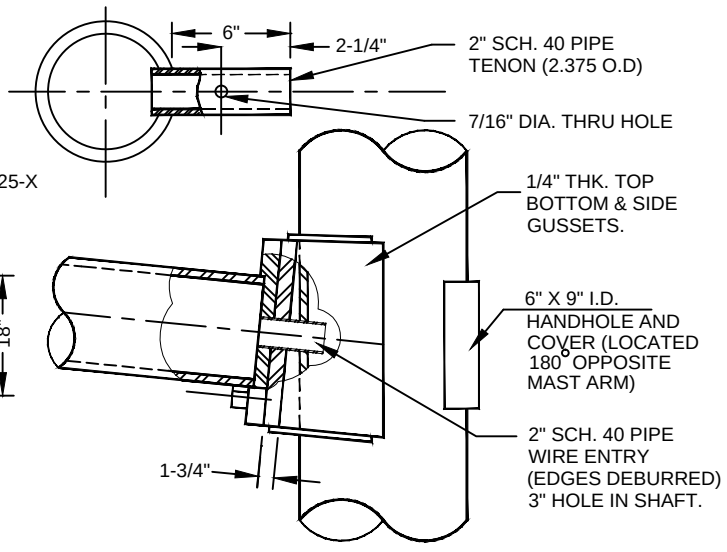
1. CONTRACTOR MUST SUPPLY SHOP DRAWING FOR DESIGN APPROVAL.
2. ALL POLES TO BE HOT-DIP GALVANZED BY MANUFACTURER OR PRIME PAINTED BY MANUFACTURER AND FINISH PAINTED BY CONTRACTOR PER SPECIFICATIONS AND AS REQUIRED BY THE ENTITY.
3. HANDHOLE COVERS SHALL BE MOUNTED WITH TAMPER-RESISTANT SCREWS.
4. WHERE 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 MINUMUM 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	

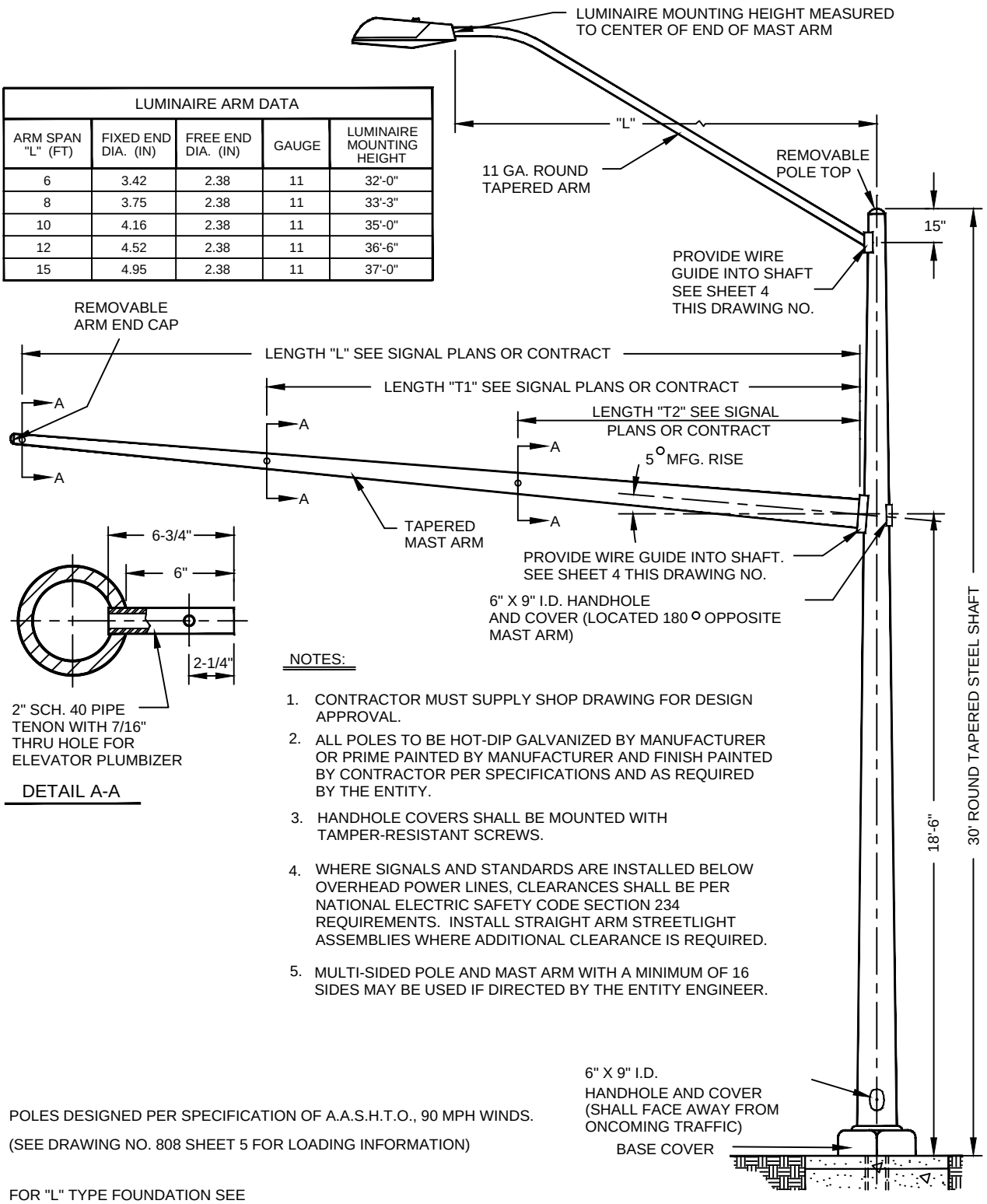
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPE XX - 30 FT.
SIGNAL & LUMINAIRE POLE
DETAILS

DATE 07-01-17	DWG. NO. 808	SHEET 2 OF 6

Effective 8/10/2023 to 8/07/2024

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"



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.

POLES DESIGNED PER SPECIFICATION OF A.A.S.H.T.O., 90 MPH WINDS.

(SEE DRAWING NO. 808 SHEET 5 FOR LOADING INFORMATION)

FOR "L" TYPE FOUNDATION SEE DRAWING NO. 722

AGENCY APPROVED	B	C	H	L	M	N

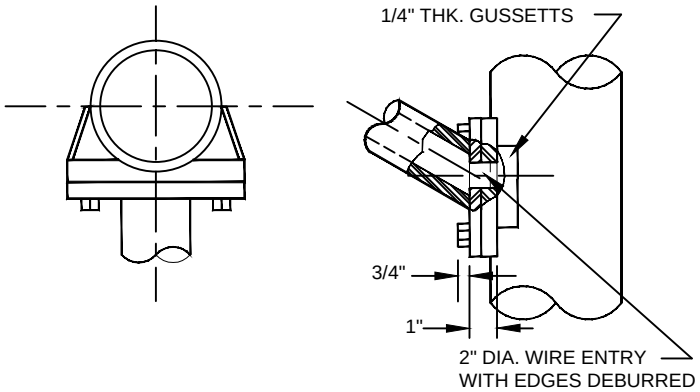
SPECIFICATION REFERENCE

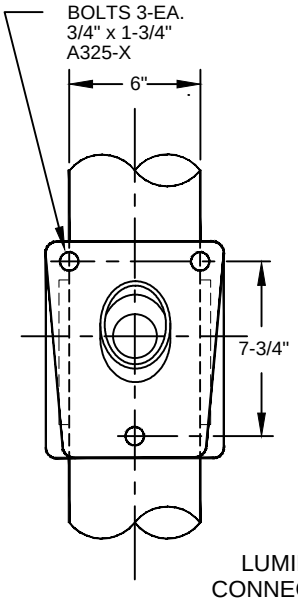
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

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

Effective 8/10/2023 to 8/07/2024

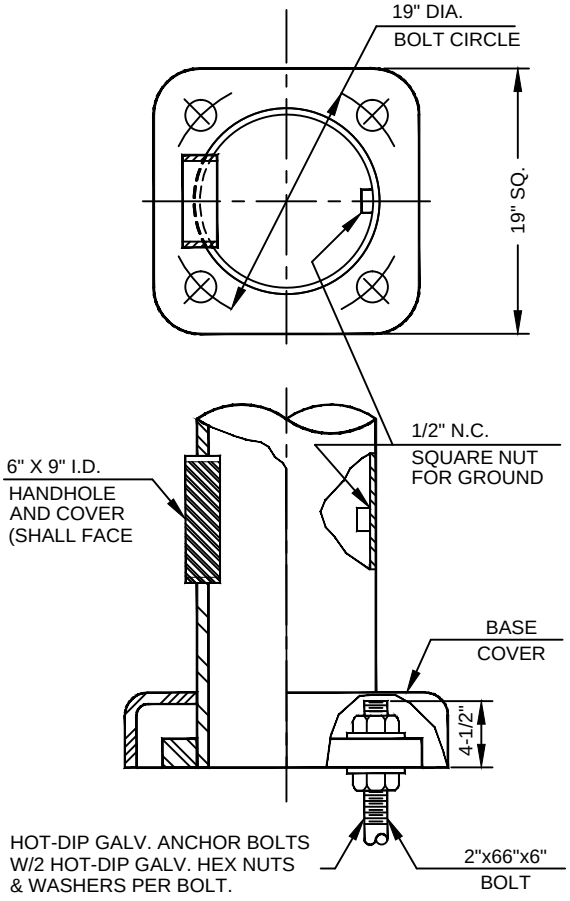




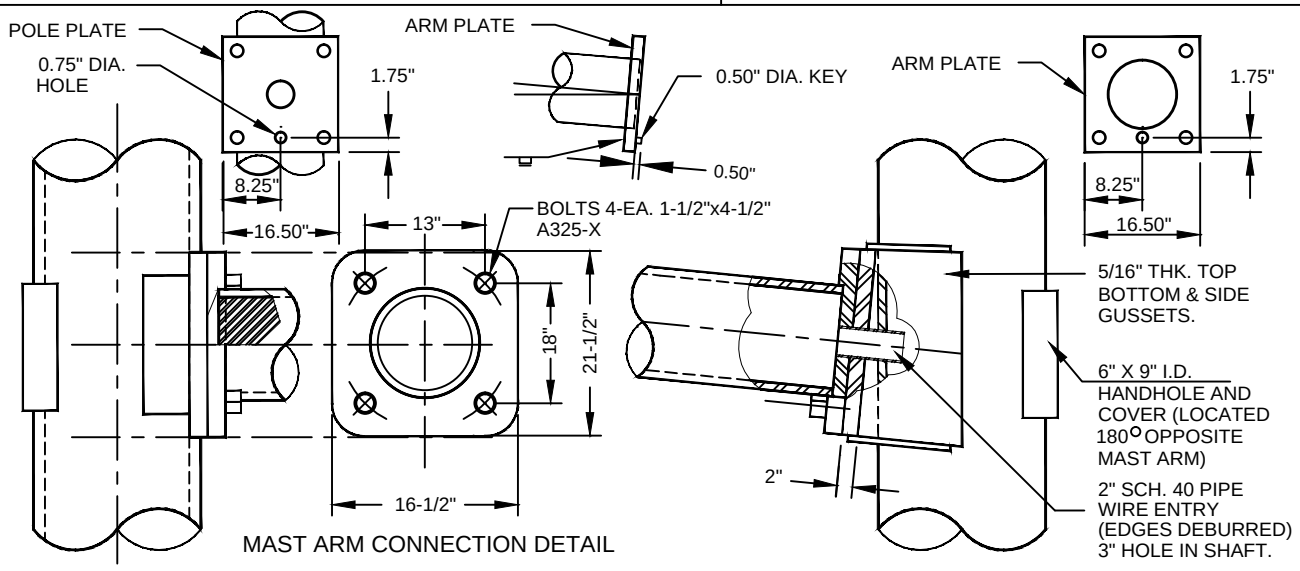
LUMINAIRE ARM
CONNECTION DETAIL

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 MINUMUM 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

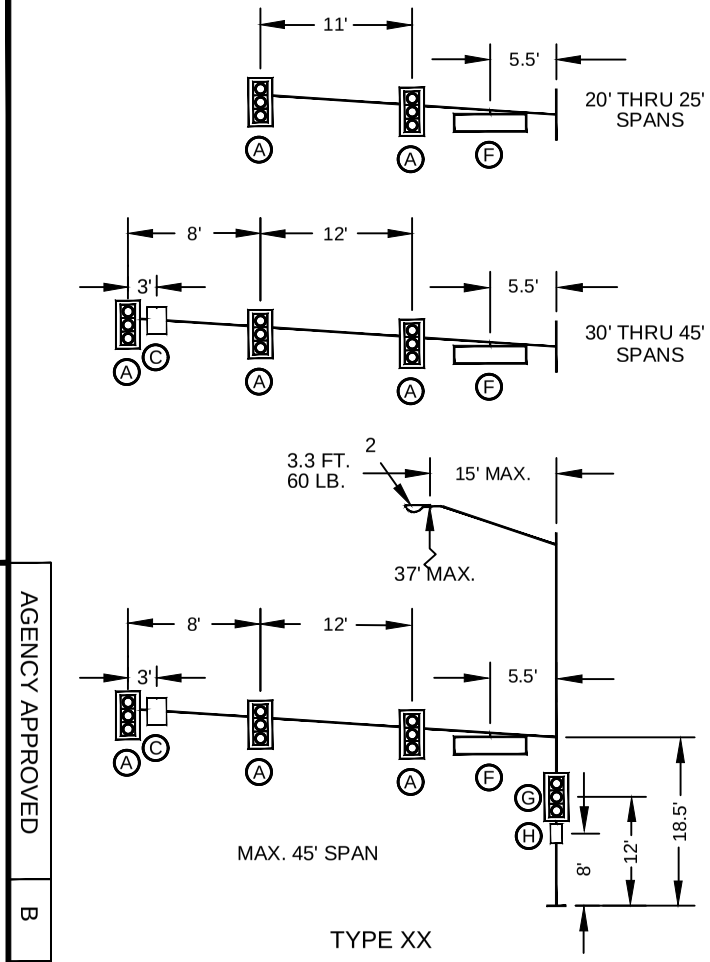
TYPE XX - A - 30 FT.
(50 FT. THRU 60 FT. MAST ARMS)
SIGNAL & LUMINAIRE POLE DETAILS

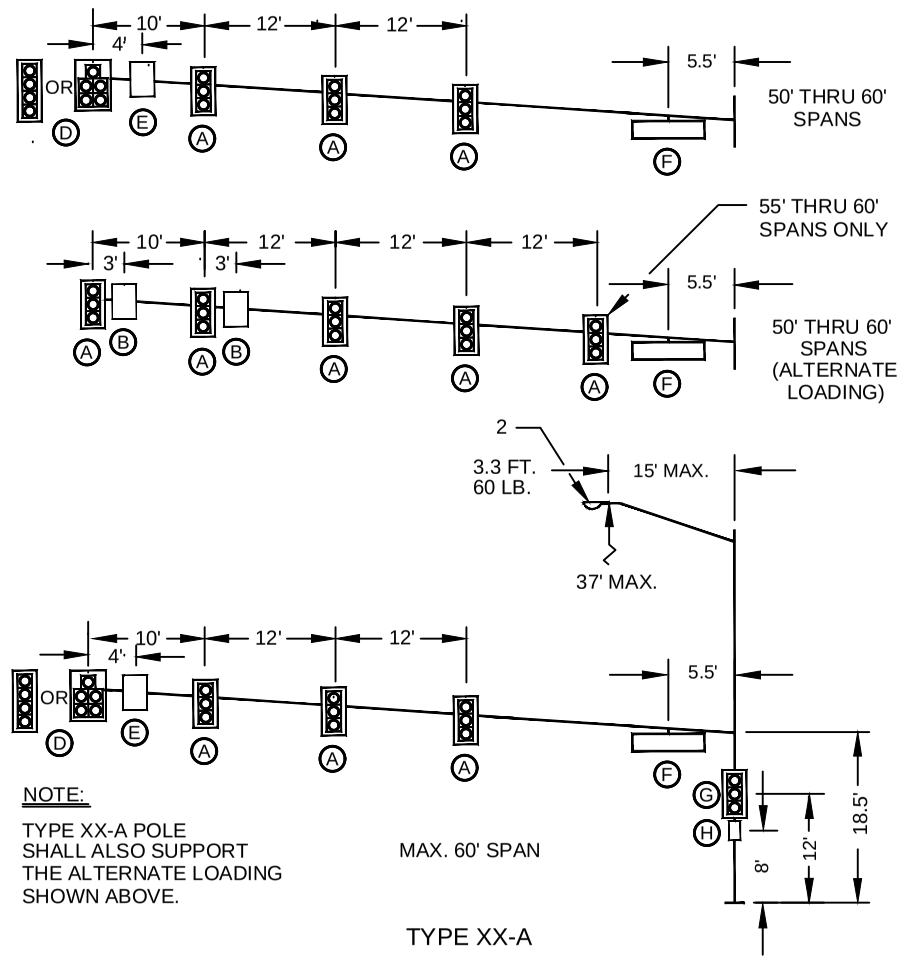
DATE 07-01-17	DWG. NO. 808	SHEET 4 OF 6

Effective 8/10/2023 to 8/07/2024

Effective 8/10/2023 to 8/07/2024

SPECIFICATION REFERENCE





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"	11.25	30
(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

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.

LOADING INFORMATION

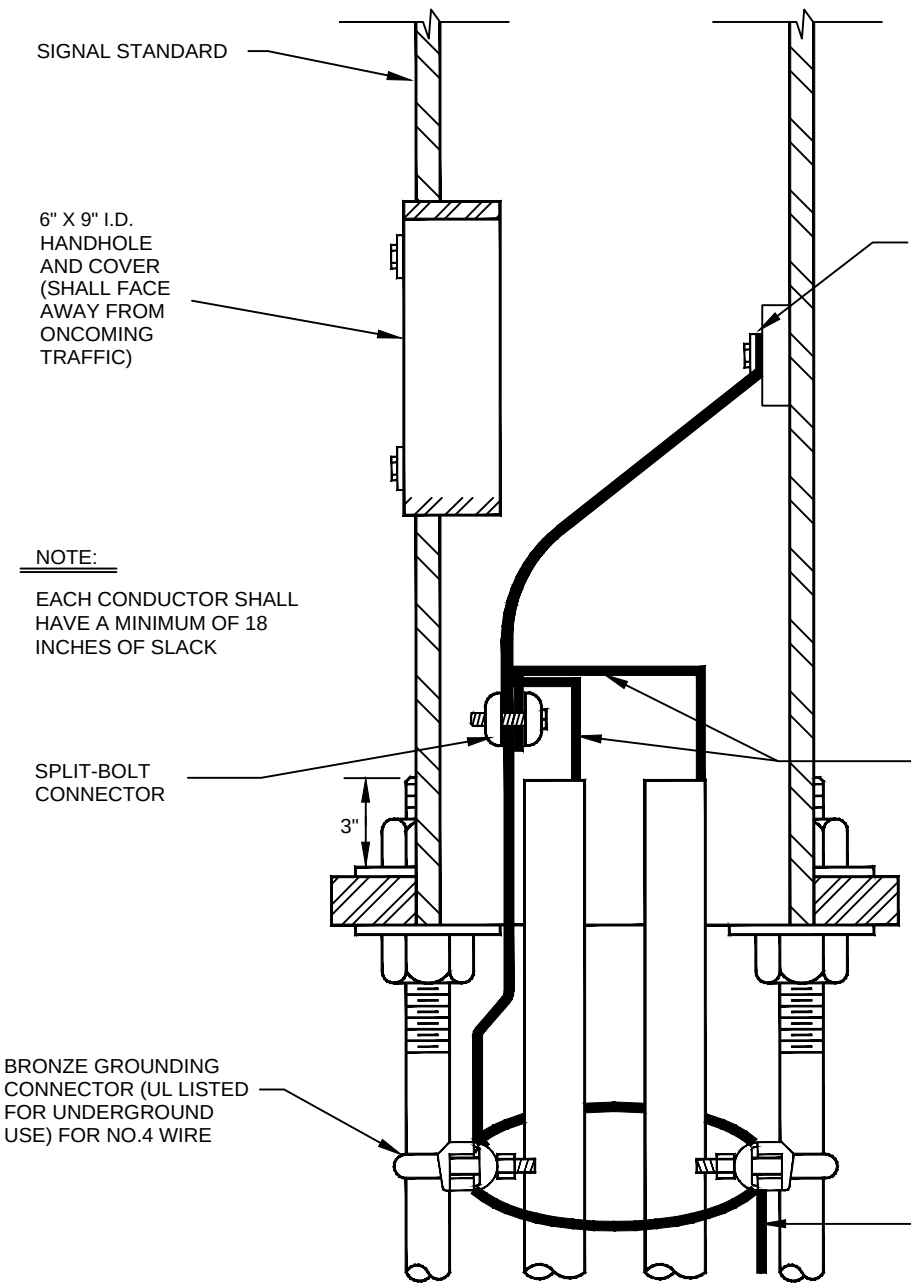
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

AGENCY APPROVED

B C H L M N

DATE 07-01-17
DWG. NO. 808
SHEET 5 OF 6

LOADING INFORMATION



PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED	B	C	H	L	M	N

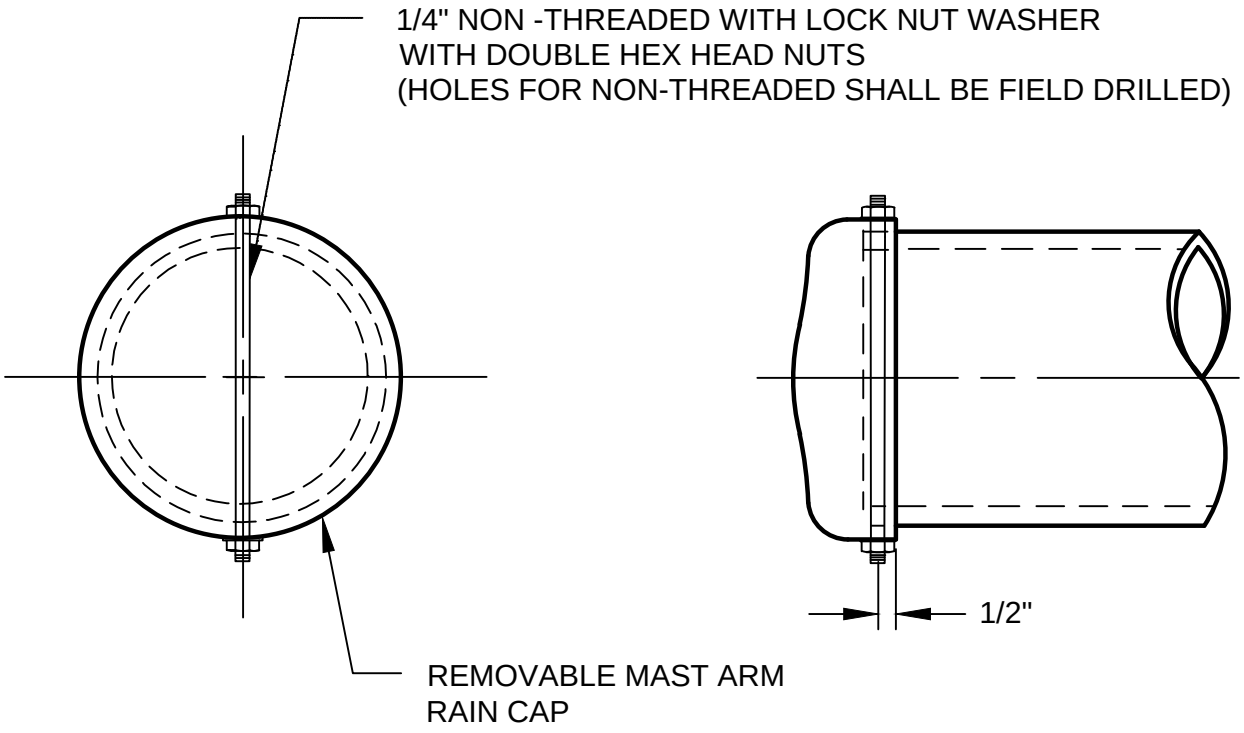
SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TRAFFIC SIGNAL POLE GROUNDING

DATE 07-01-17	DWG. NO. 808	SHEET 6 OF 6

Effective 8/10/2023 to 8/07/2024



AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	
623	TRAFFIC SIGNALS & STREET LIGHTING
.	

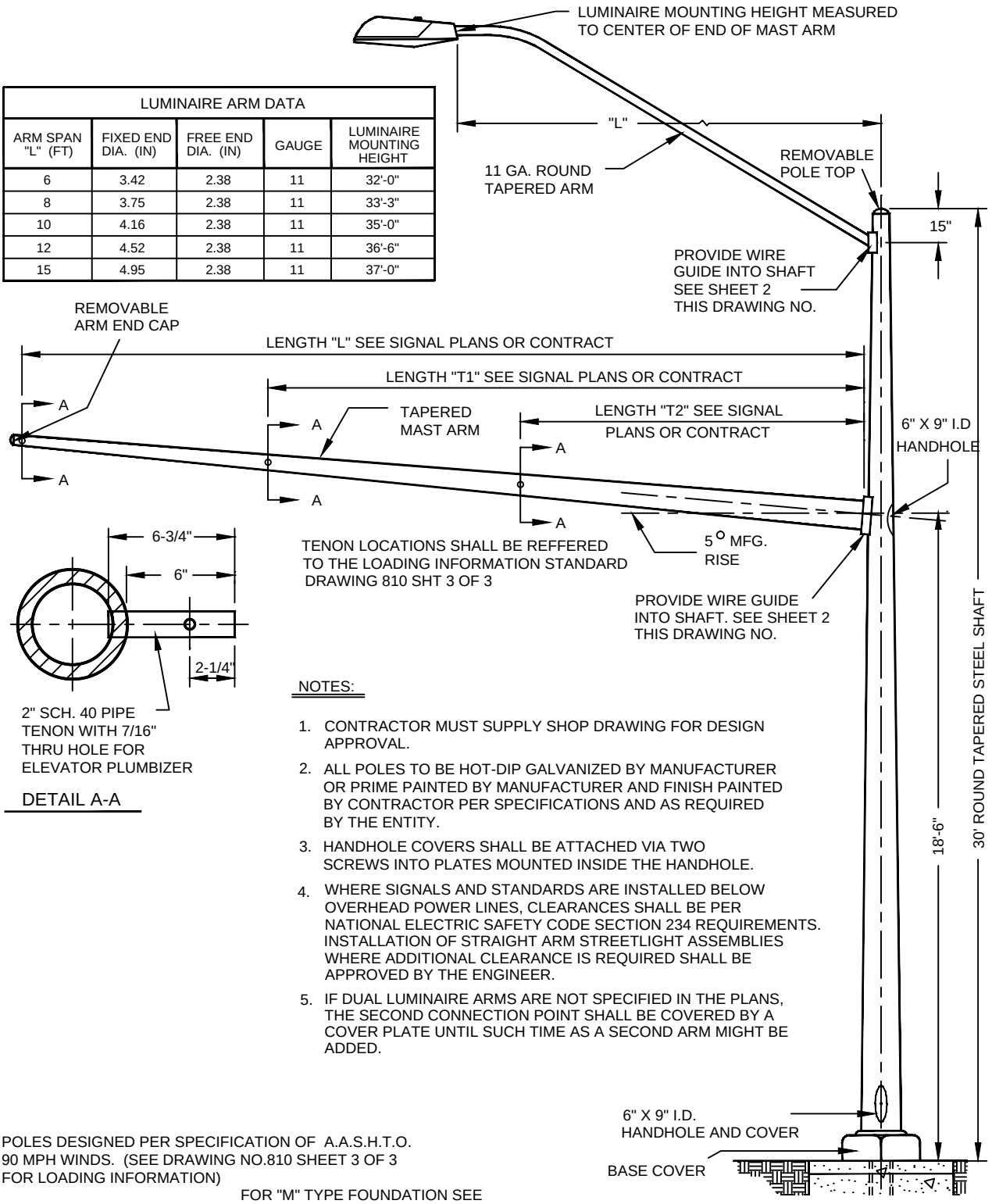
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

REMOVABLE MAST ARM END CAP DETAIL

DATE 05-19-05	DWG. NO. 809	

Effective 8/10/2023 to 8/07/2024

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"



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 ATTACHED VIA TWO SCREWS INTO PLATES MOUNTED INSIDE THE HANDHOLE.
4. WHERE SIGNALS AND STANDARDS ARE INSTALLED BELOW OVERHEAD POWER LINES, CLEARANCES SHALL BE PER NATIONAL ELECTRIC SAFETY CODE SECTION 234 REQUIREMENTS. INSTALLATION OF STRAIGHT ARM STREETLIGHT ASSEMBLIES WHERE ADDITIONAL CLEARANCE IS REQUIRED SHALL BE APPROVED BY THE ENGINEER.
5. IF DUAL LUMINAIRE ARMS ARE NOT SPECIFIED IN THE PLANS, THE SECOND CONNECTION POINT SHALL BE COVERED BY A COVER PLATE UNTIL SUCH TIME AS A SECOND ARM MIGHT BE ADDED.

POLES DESIGNED PER SPECIFICATION OF A.A.S.H.T.O. 90 MPH WINDS. (SEE DRAWING NO.810 SHEET 3 OF 3 FOR LOADING INFORMATION)

FOR "M" TYPE FOUNDATION SEE DRAWING NO. 723

AGENCY APPROVED	B	C	H	L	M	N

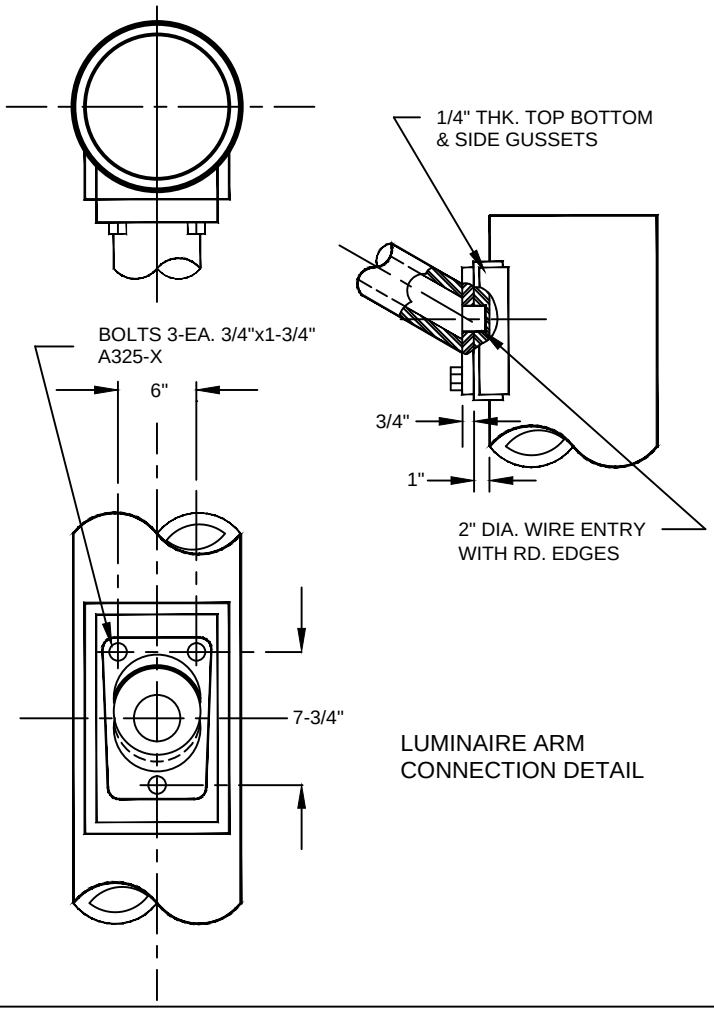
SPECIFICATION REFERENCE	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

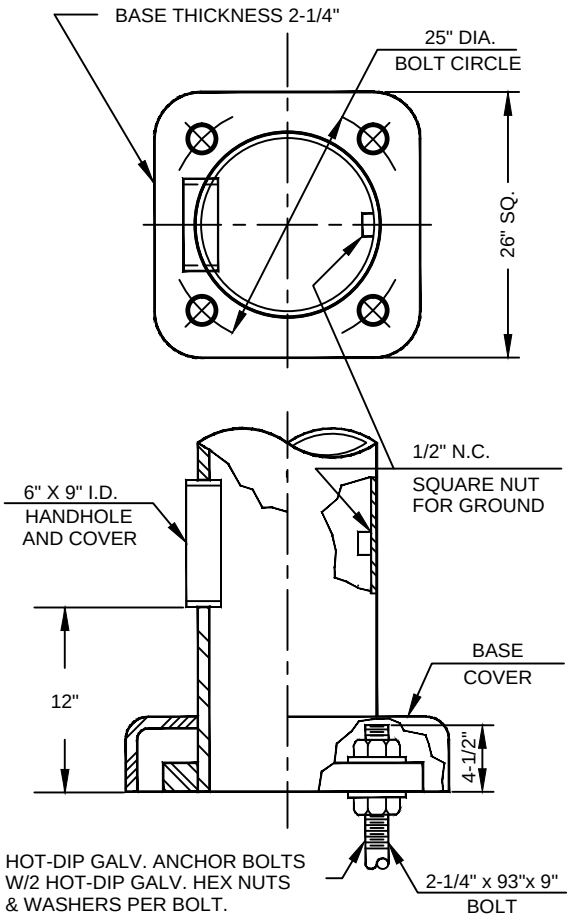
TYPE XX - B - 30 FT.
SIGNAL & LUMINAIRE POLE
(65 FT. THRU 85 FT. MAST ARMS)

DATE 07-01-17	DWG. NO. 810	SHEET 1 OF 3

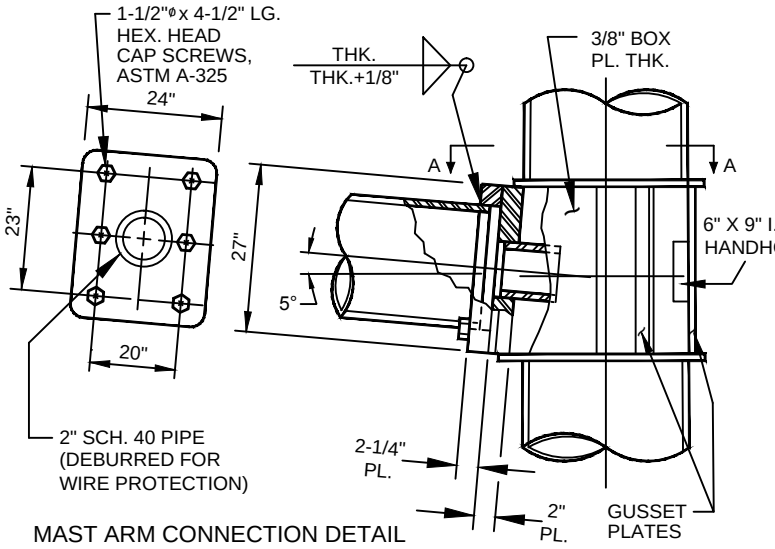
Effective 8/10/2023 to 8/07/2024



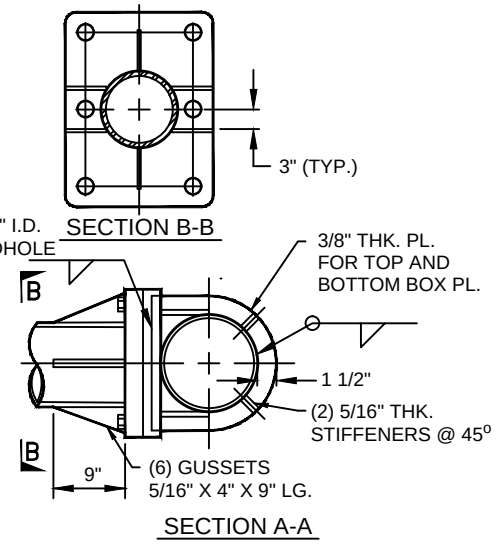
LUMINAIRE ARM
CONNECTION DETAIL



POLE MOUNTING DETAIL



MAST ARM CONNECTION DETAIL



SECTION A-A

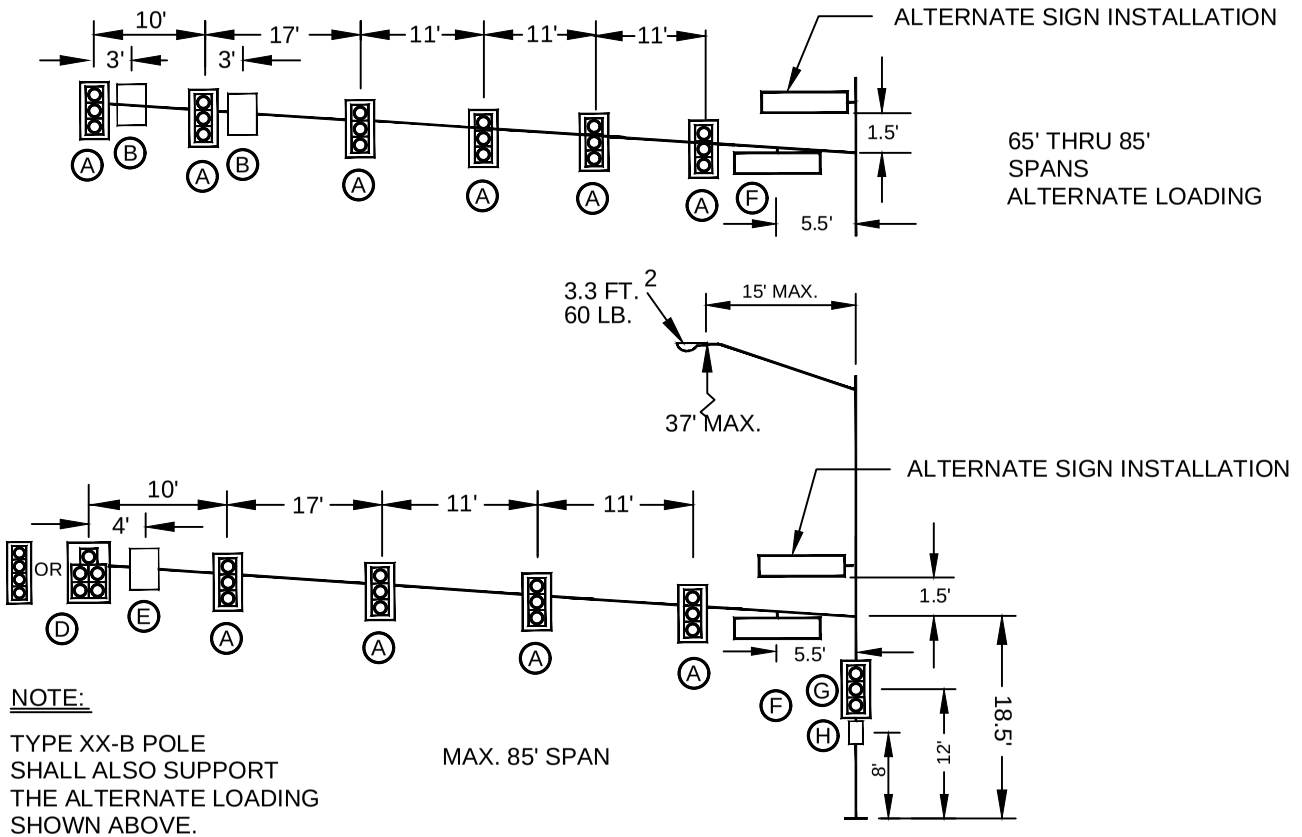
AGENCY APPROVED	B	C	H	L	M	N

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

Effective 8/10/2023 to 8/07/2024

Effective 8/10/2023 to 8/07/2024

SPECIFICATION REFERENCE



TYPE XX-B

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

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.

LOADING INFORMATION

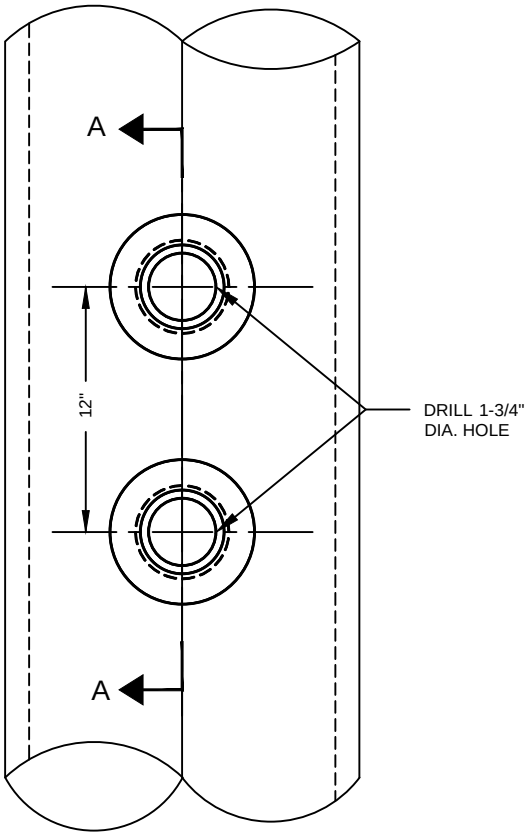
AGENCY APPROVED

B	C	H	L	M	N

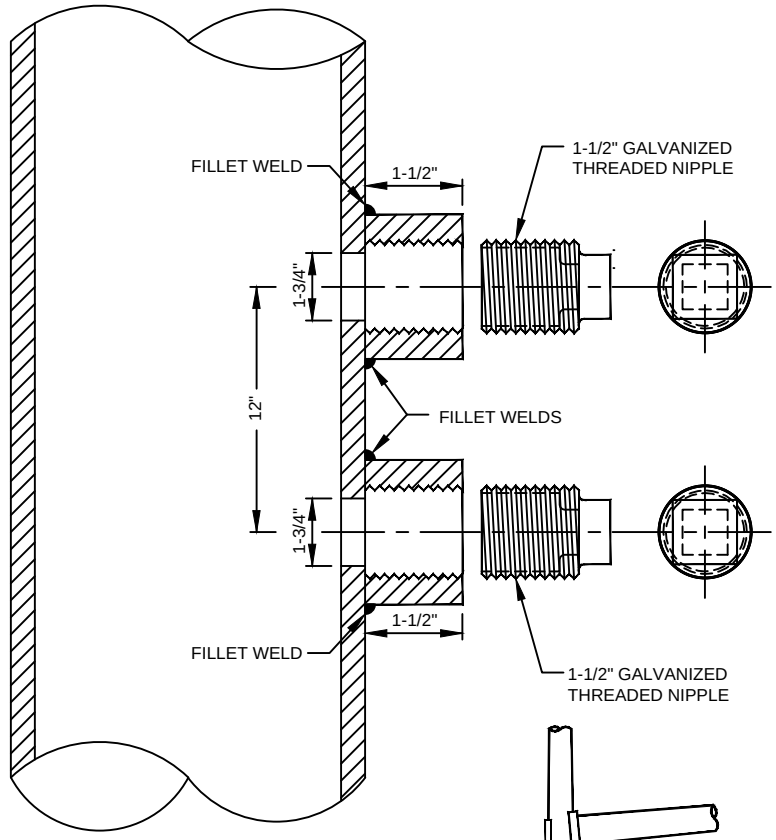
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

LOADING INFORMATION

DATE 07-01-17 | DWG. NO. 810 | SHEET 3 OF 3

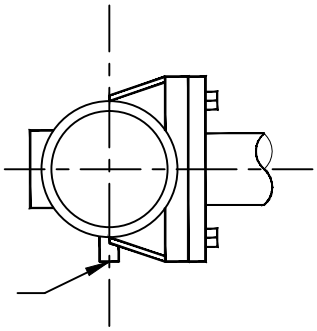


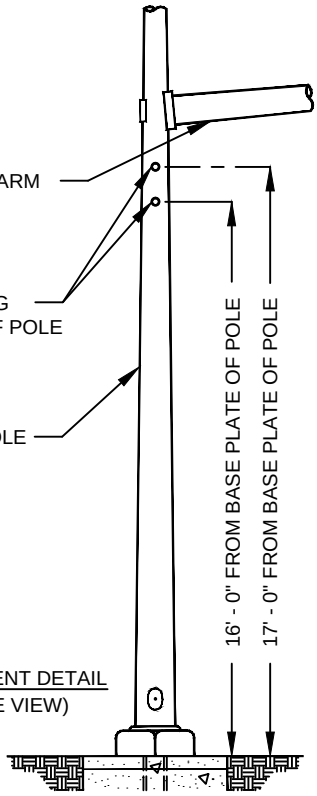
DRILLING DETAIL



NIPPLE DETAIL
SECTION A-A

PLACEMENT DETAIL
(TOP VIEW)





PLACEMENT DETAIL
(SIDE VIEW)

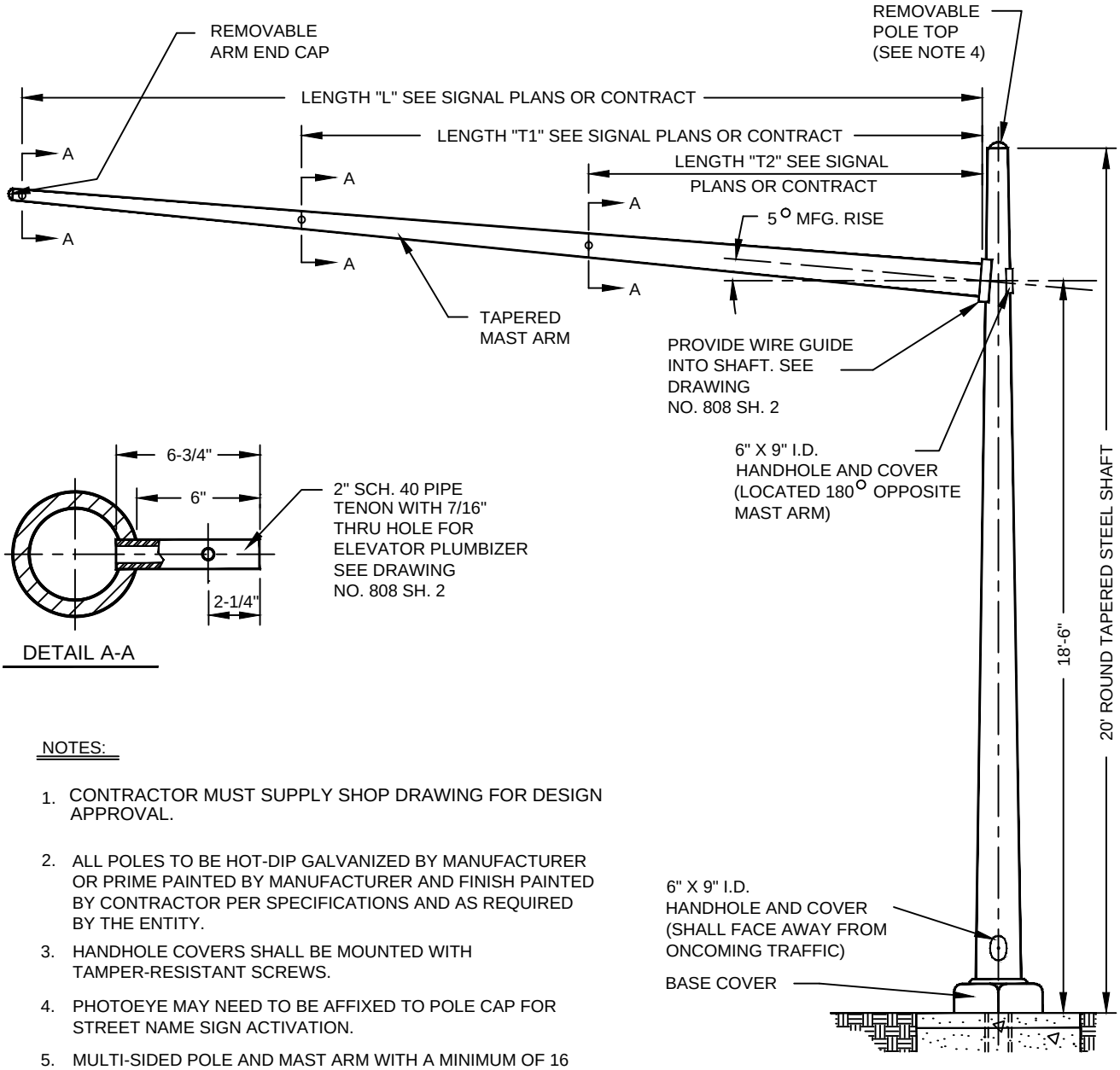
NOTES:

1. CONTRACTOR TO INSTALL RED LIGHT RUNNING INDICATORS, McCAIN 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 "J" 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

Effective 8/10/2023 to 8/07/2024



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 AND MAST ARM WITH A MINIMUM OF 16 SIDES MAY BE USED IF DIRECTED BY THE ENTITY ENGINEER.

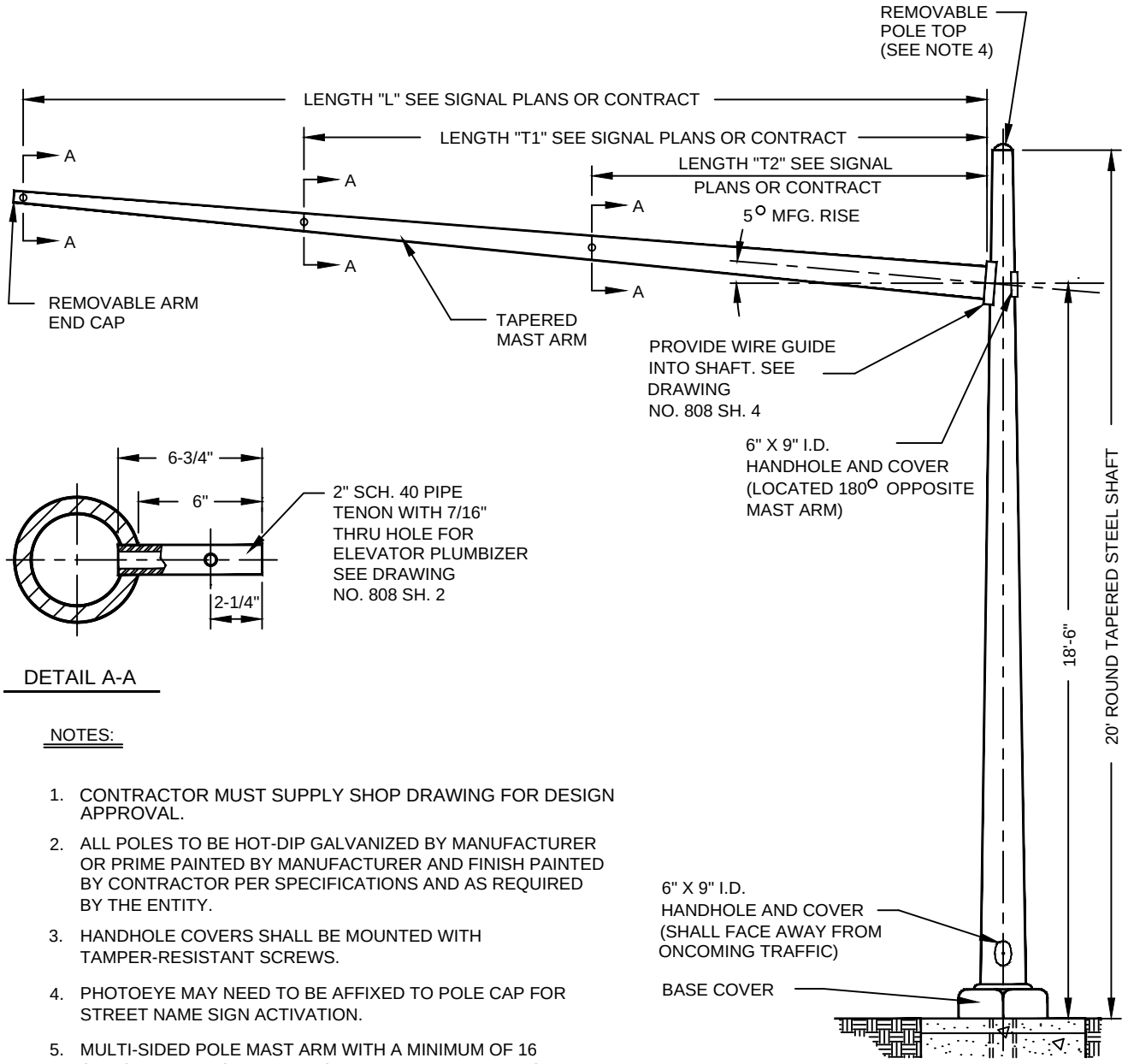
POLES DESIGNED PER SPECIFICATION OF A.A.S.H.T.O., 90 MPH WINDS.
(SEE DRAWING NO. 808 SHEET 5 FOR LOADING INFORMATION)

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

Effective 8/10/2023 to 8/07/2024



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.

AGENCY APPROVED	B	C	H	L	M	N

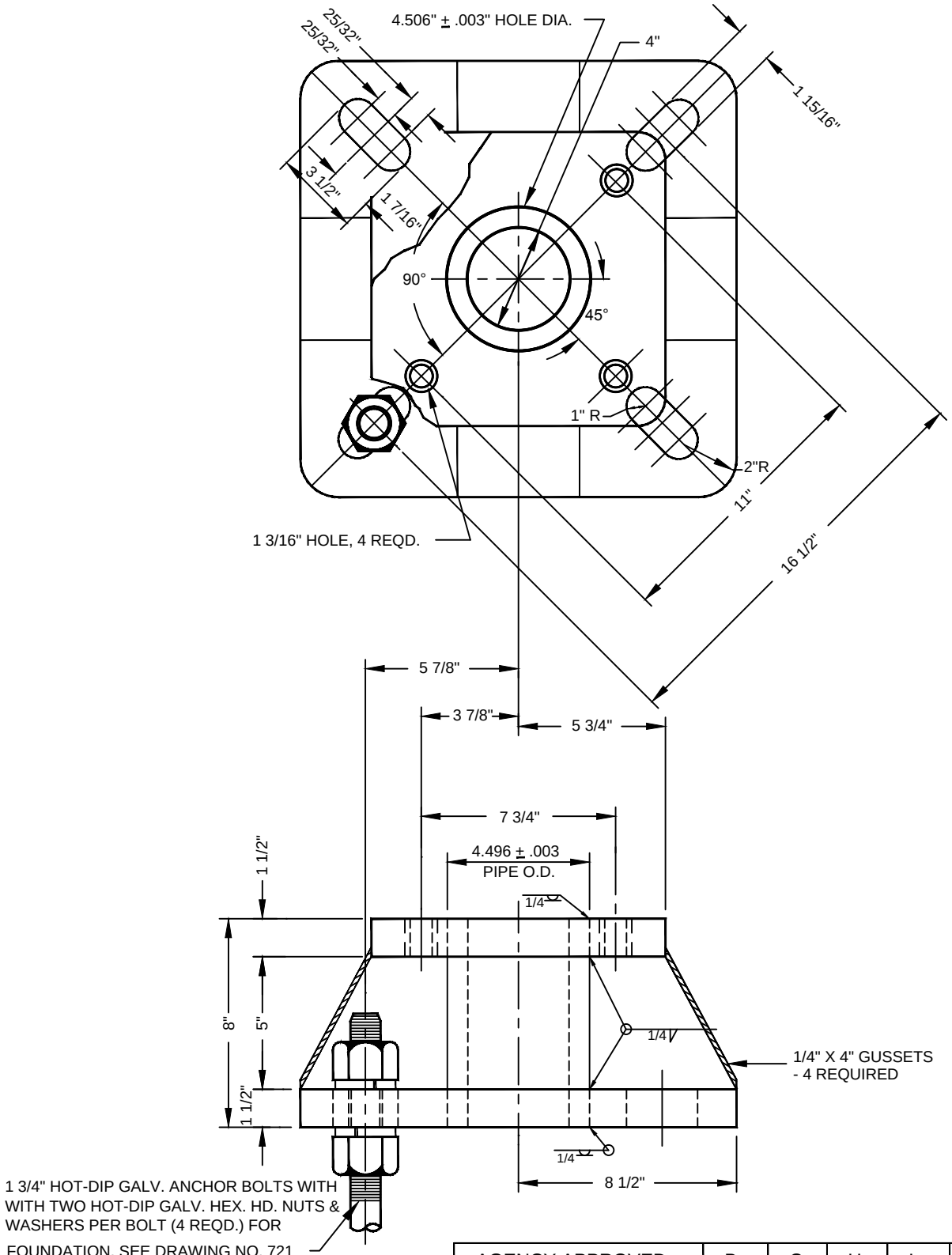
SPECIFICATION REFERENCE	

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

Effective 8/10/2023 to 8/07/2024



AGENCY APPROVED	B	C	H	L	M	N

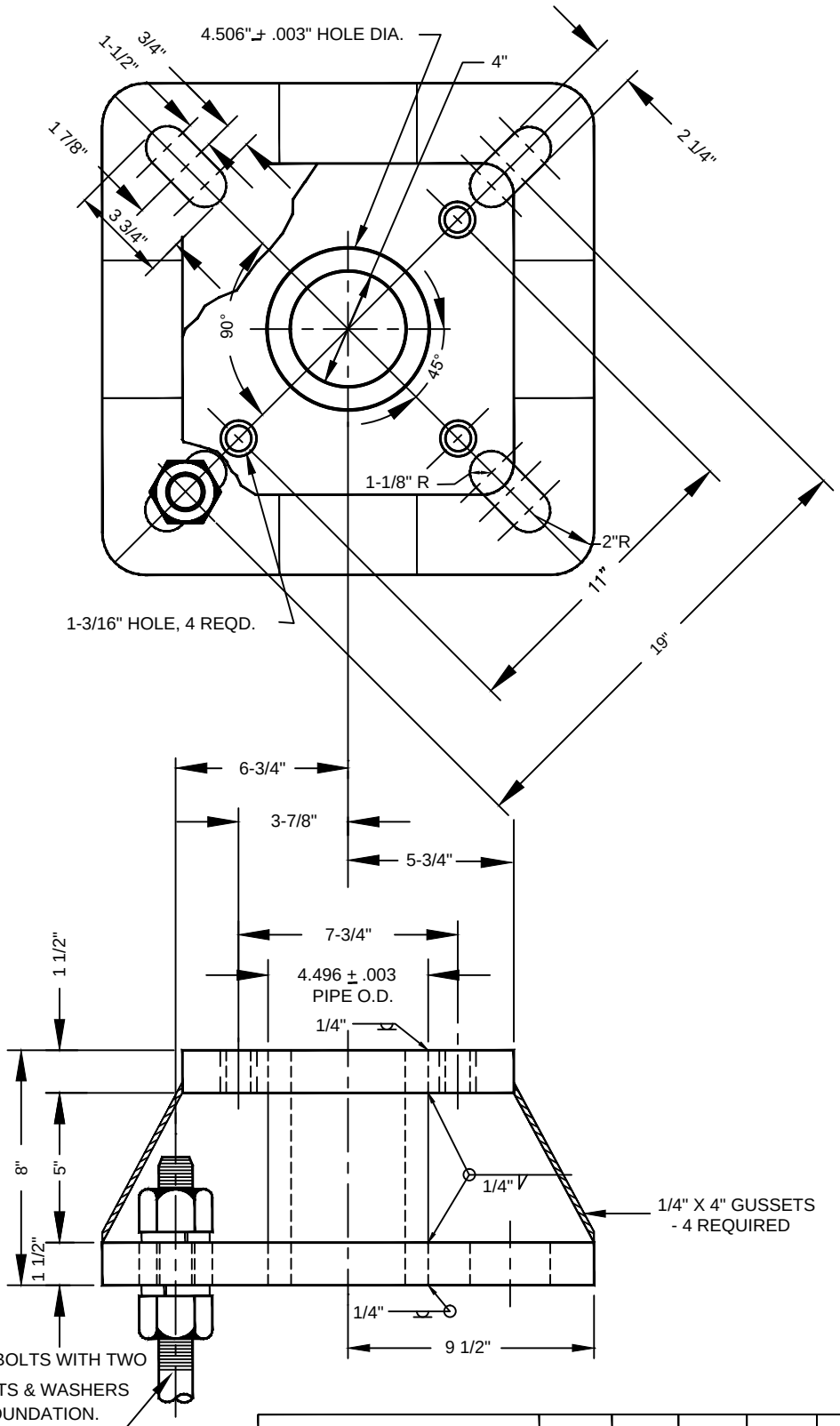
SPECIFICATION REFERENCE	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

BASE ADAPTOR PLATE FOR TYPE "H" FOUNDATION

DATE 12-12-96	DWG. NO. 813	SHEET 1 OF 2

Effective 8/10/2023 to 8/07/2024



AGENCY APPROVED	B	C	H	L	M	N

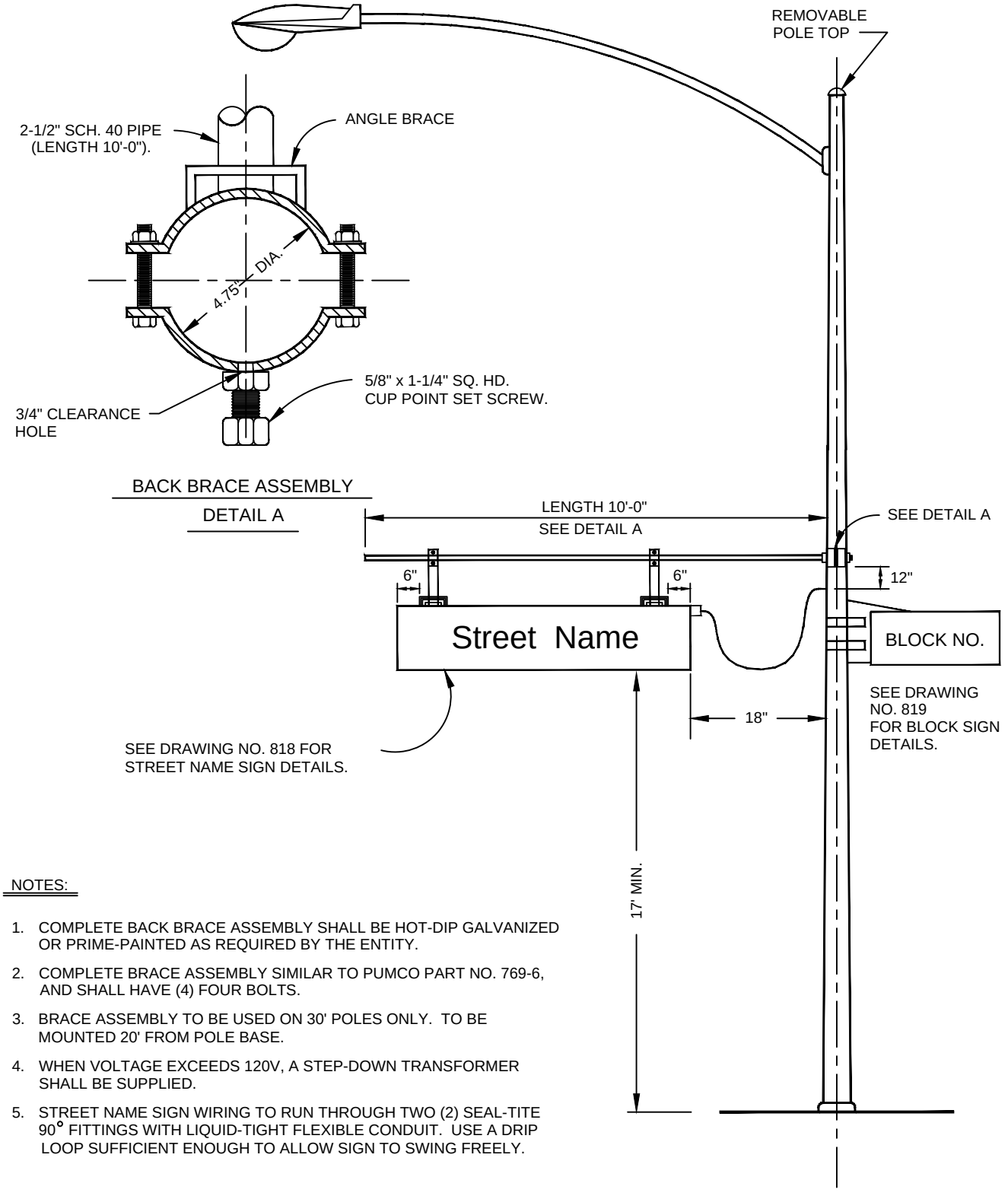
SPECIFICATION REFERENCE	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

BASE ADAPTOR PLATE FOR TYPE "L" FOUNDATION

DATE 12-12-96	DWG. NO. 813	SHEET 2 OF 2

Effective 8/10/2023 to 8/07/2024



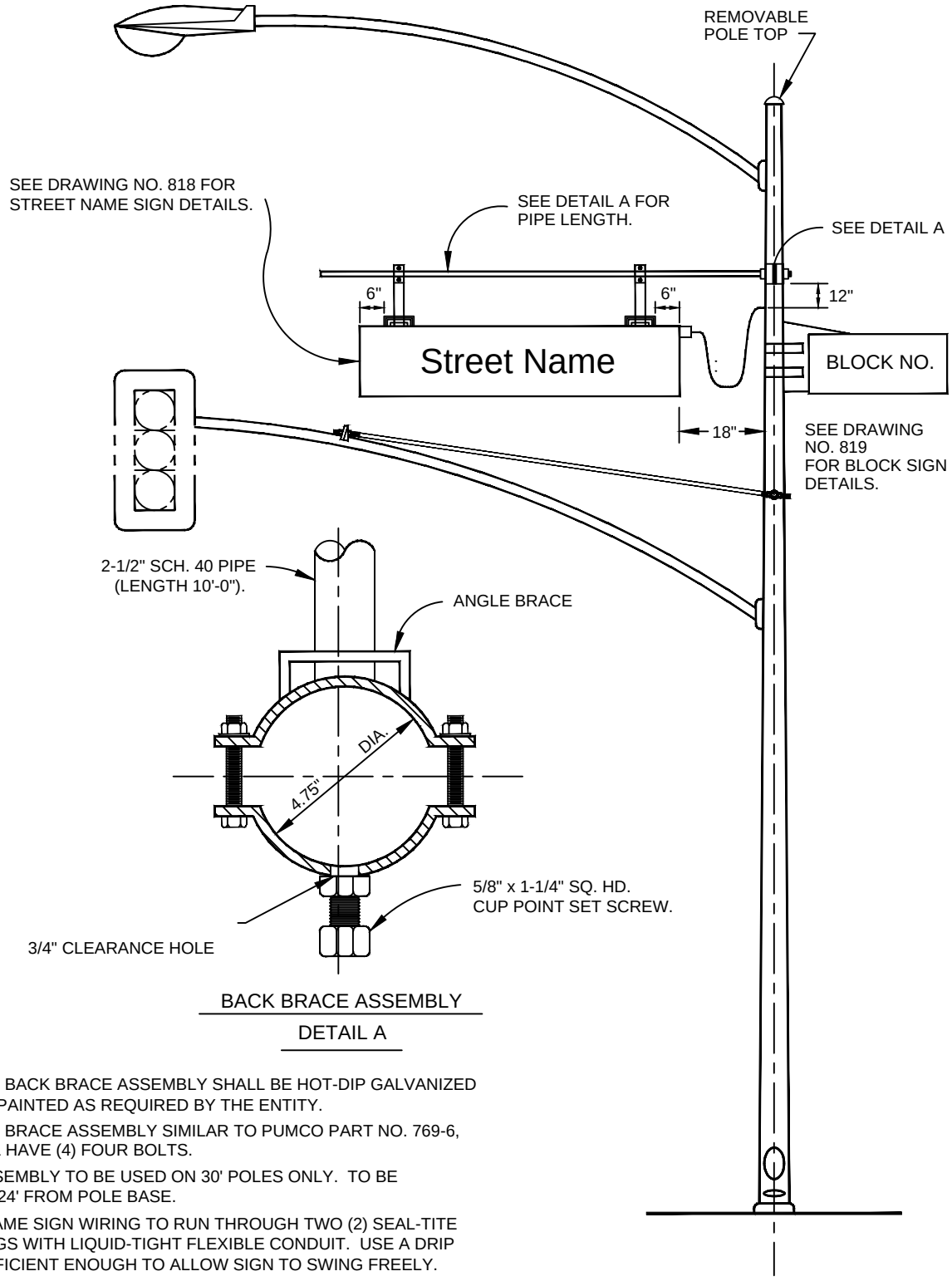
NOTES:

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 20' FROM POLE BASE.
4. WHEN VOLTAGE EXCEEDS 120V, A STEP-DOWN TRANSFORMER SHALL BE SUPPLIED.
5. 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
	STREETLIGHT POLE WITH ILLUMINATED STREET NAME SIGN
DATE 12-12-96	DWG. NO. 814

Effective 8/10/2023 to 8/07/2024



BACK BRACE ASSEMBLY

DETAIL A

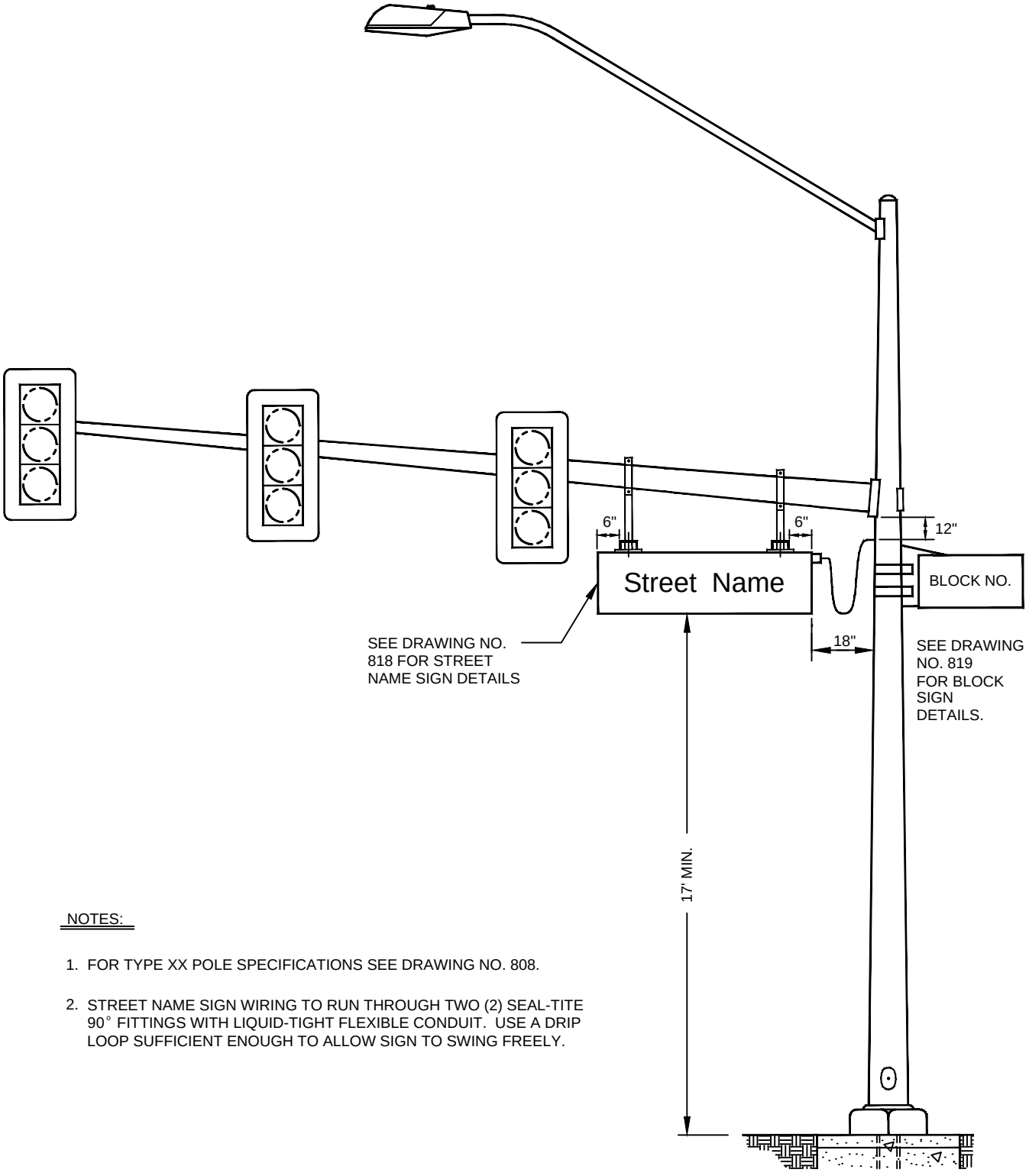
NOTES:

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

Effective 8/10/2023 to 8/07/2024



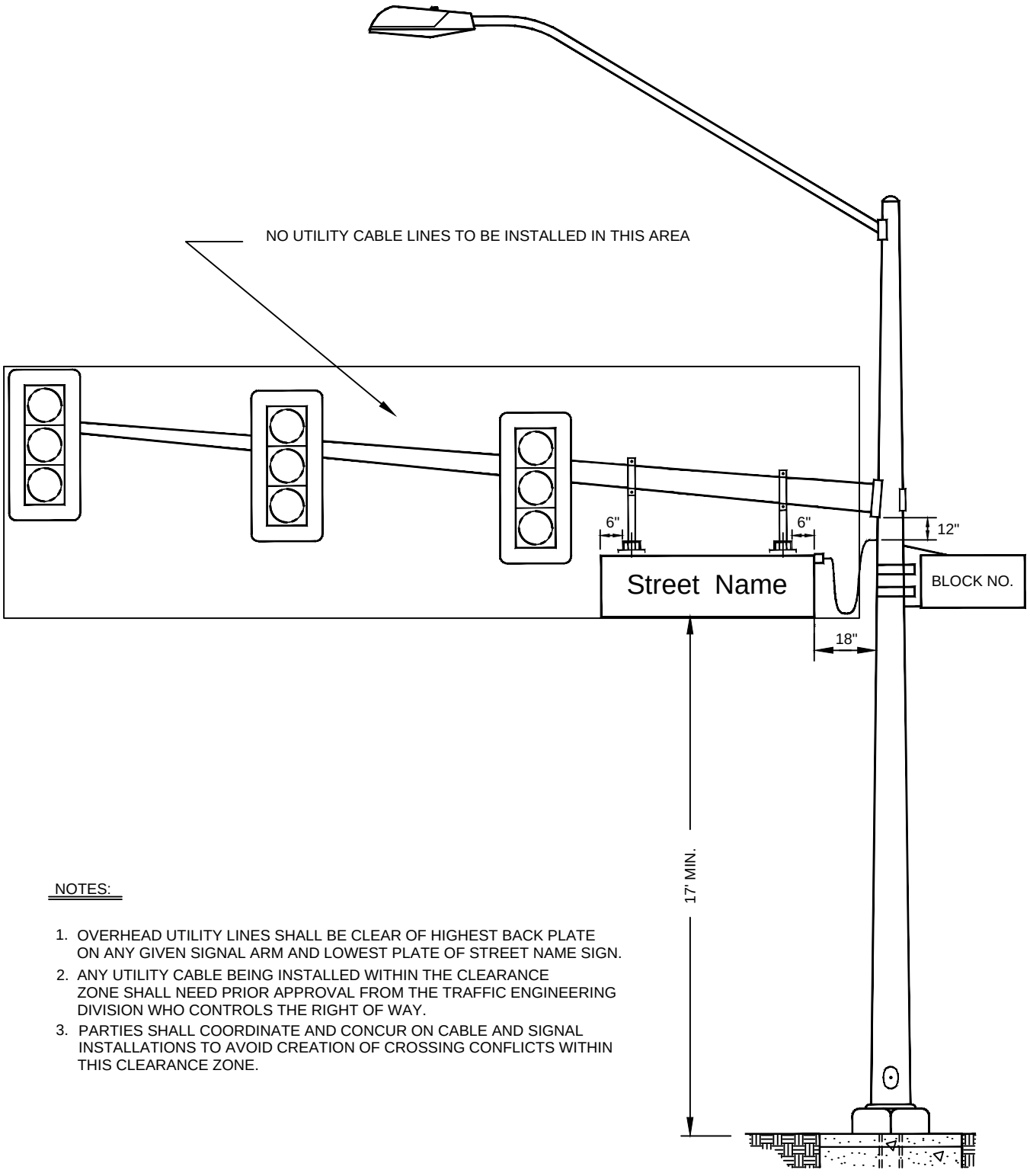
NOTES:

1. FOR TYPE XX POLE SPECIFICATIONS SEE DRAWING NO. 808.
2. 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 XX POLE WITH ILLUMINATED STREET NAME SIGN
	DATE 4-9-98 / DWG. NO. 816

Effective 8/10/2023 to 8/07/2024



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

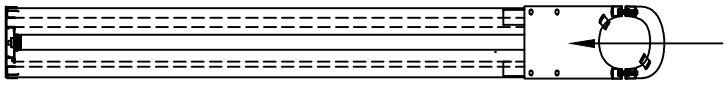
SPECIFICATION REFERENCE	

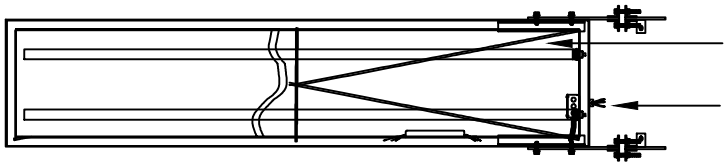
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

UTILITY CABLE CLEARANCE OVER TRAFFIC SIGNALS NEW INSTALLATION ONLY

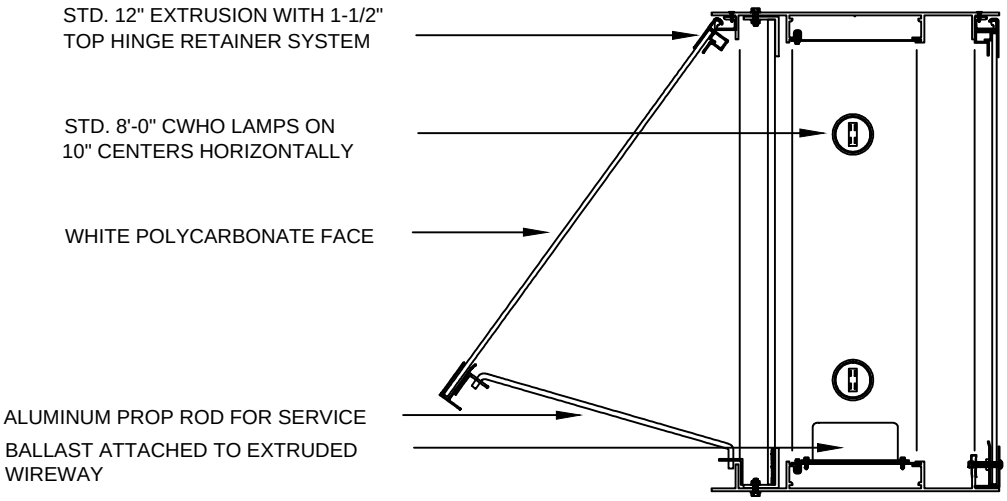
DATE 2-08-07	DWG. NO. 817	

Effective 8/10/2023 to 8/07/2024









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.

AGENCY APPROVED	B	C	H	L	M	N

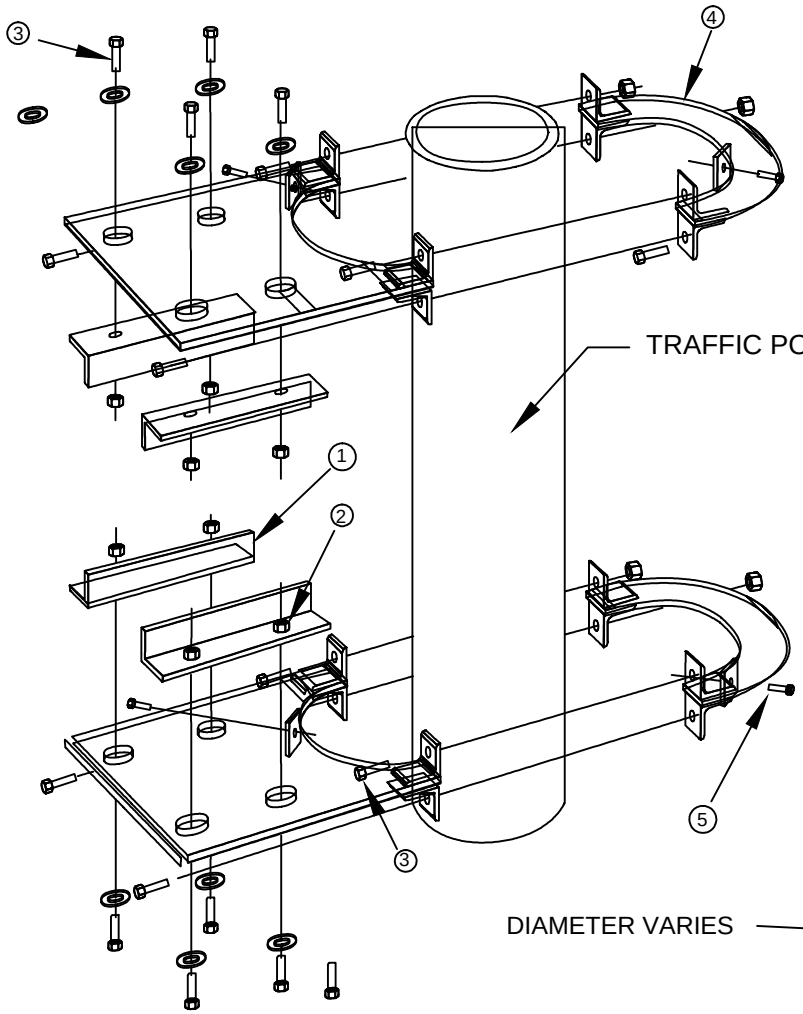
SPECIFICATION REFERENCE	

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

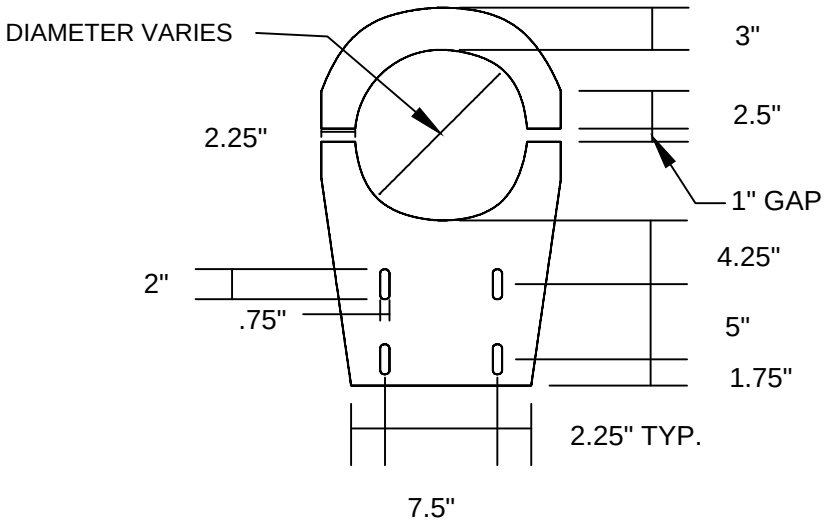
Effective 8/10/2023 to 8/07/2024



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



AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	

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

Effective 8/10/2023 to 8/07/2024

INSTALLATION INSTRUCTIONS

* ATTACH BRACKETS (1) TO CABINET END AT TOP AND BOTTOM WITH BOLTS PROVIDED LOSSELY TIGHTEN BOLTS (SNUG).

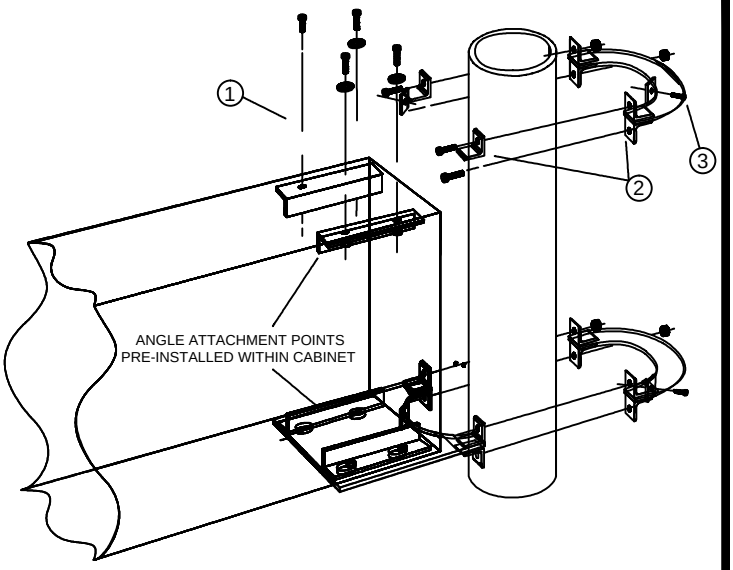
* LIFT CABINET WITH BRACKETS TO POLE AT FINISHED HEIGHT USING A NYLON LIFTING SNAP NEAR THE BRACKETS (WHERE BALANCED).

* 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 (A) THRU POLE. THREAD HOLE WITH 1/2" PIPE THREAD TAP.

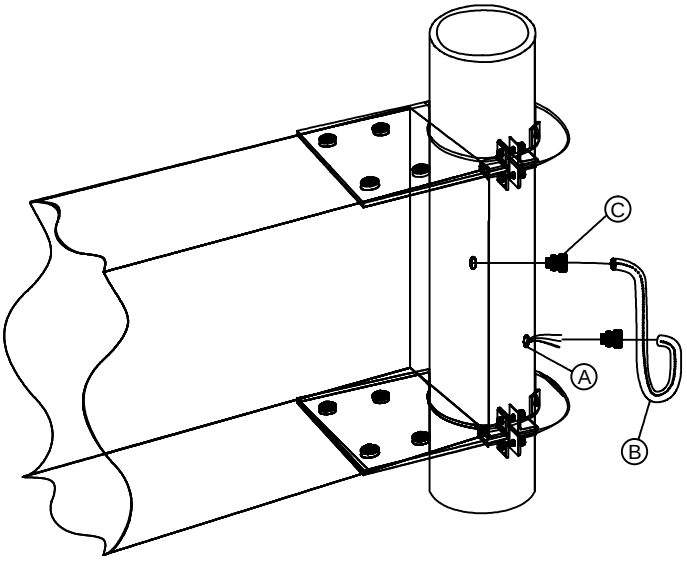
* PULL WIRES FROM GROUND THRU TAPPED HOLE GUIDE WIRES TO AVOID SCRAPING INSULATION.

* ASSEMBLE LIQUID TIGHT 1/2" CONDUIT (B) & FITTING (C) 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

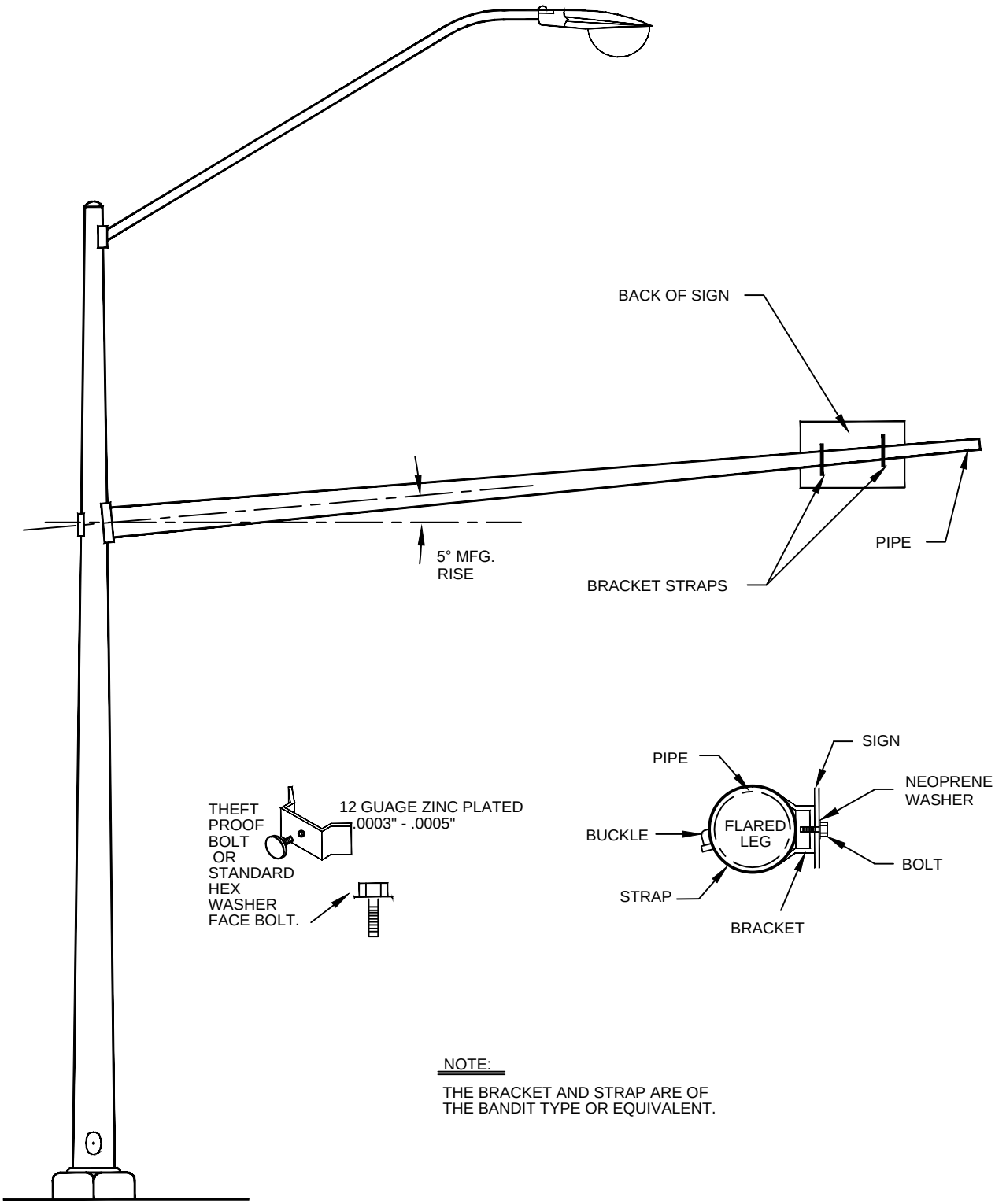
SPECIFICATION REFERENCE	

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

Effective 8/10/2023 to 8/07/2024



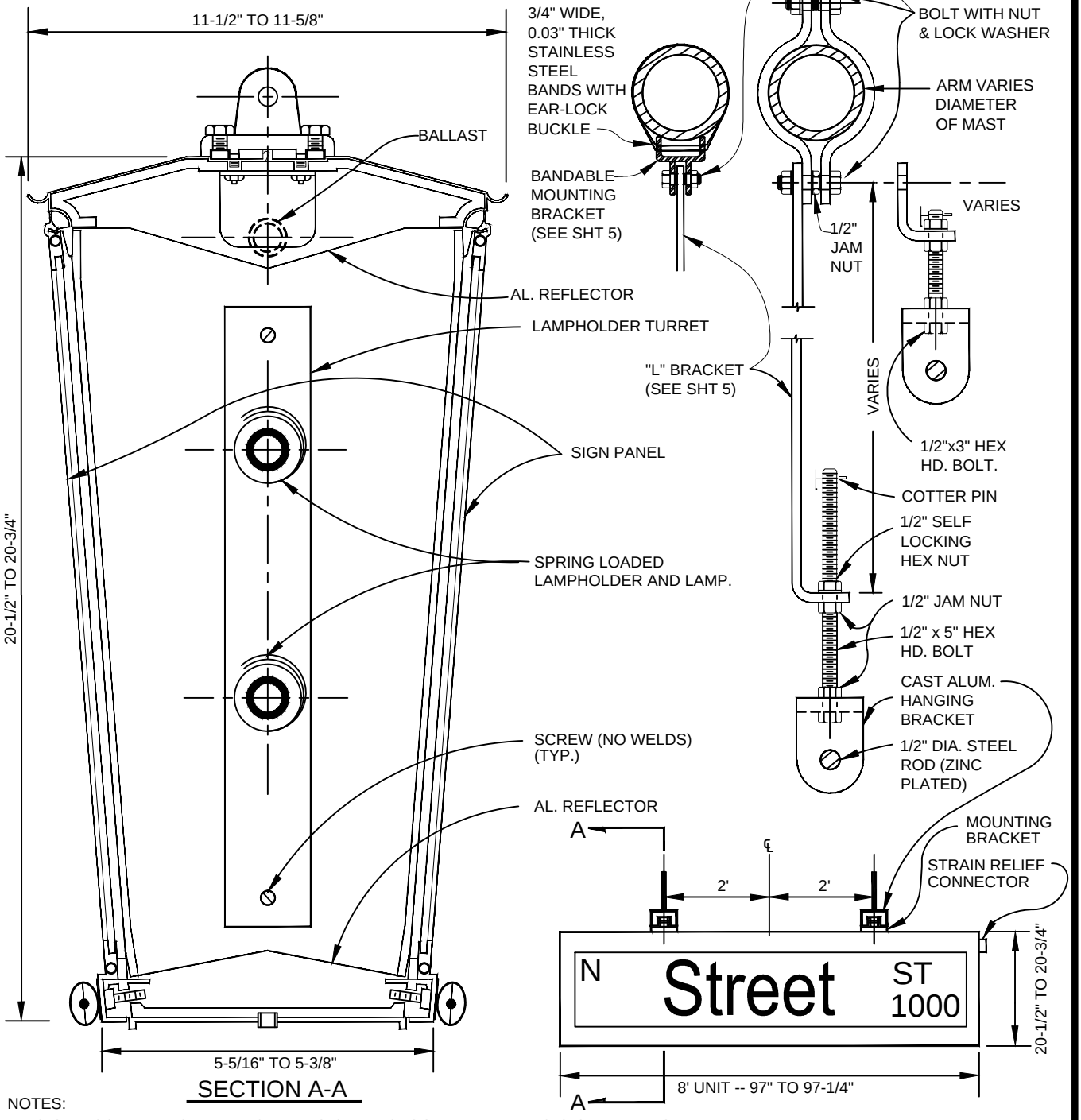
NOTE:

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

Effective 8/10/2023 to 8/07/2024



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. JAM NUT TO SECURE "L" BRACKET.

AGENCY APPROVED	B	C	H	L	M	

SPECIFICATION REFERENCE	
-	

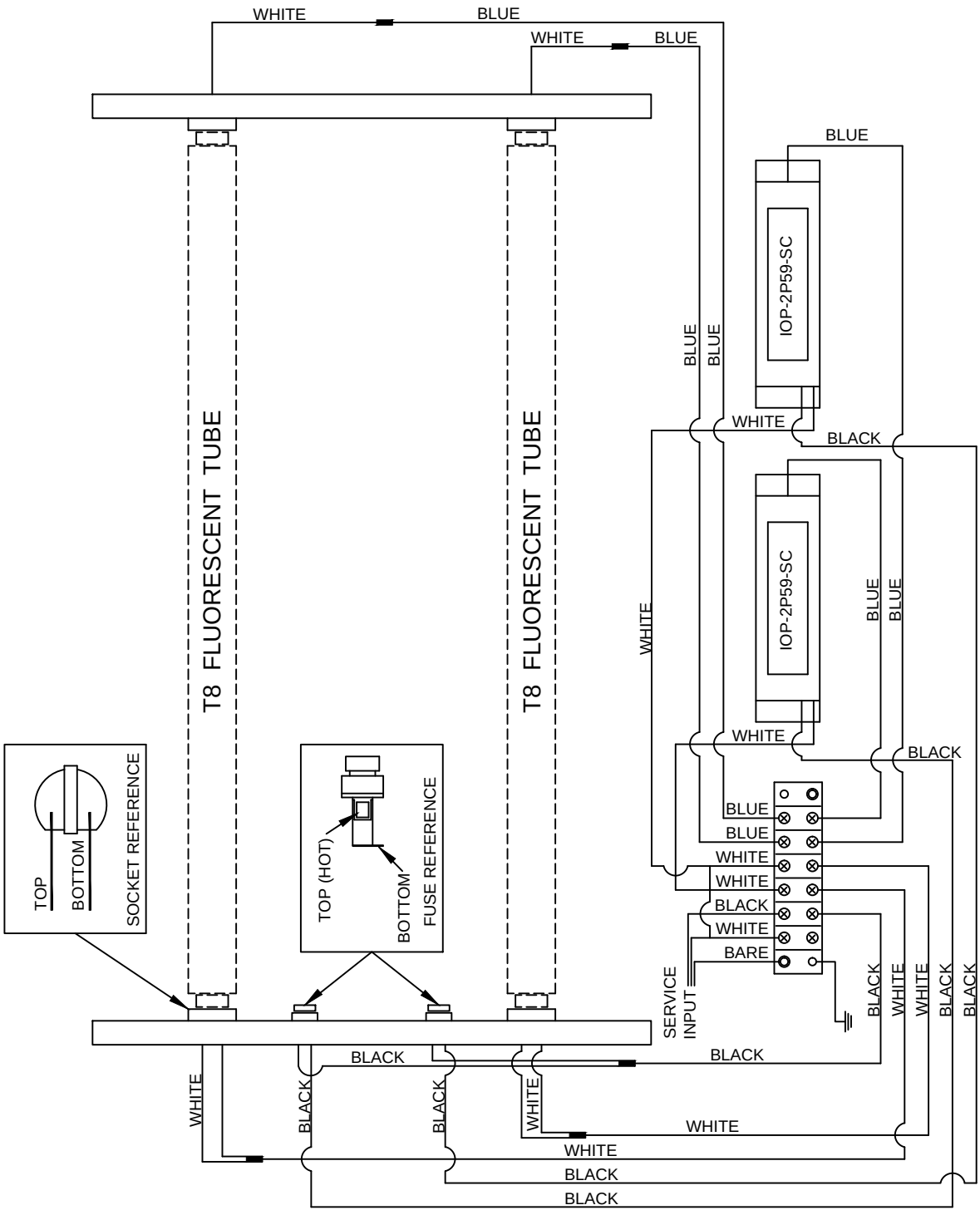
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

ILLUMINATED STREET NAME SIGN - ENCLOSURE

DATE: 01-01-13	DWG. NO. 818.S1	SHEET 1 OF 5

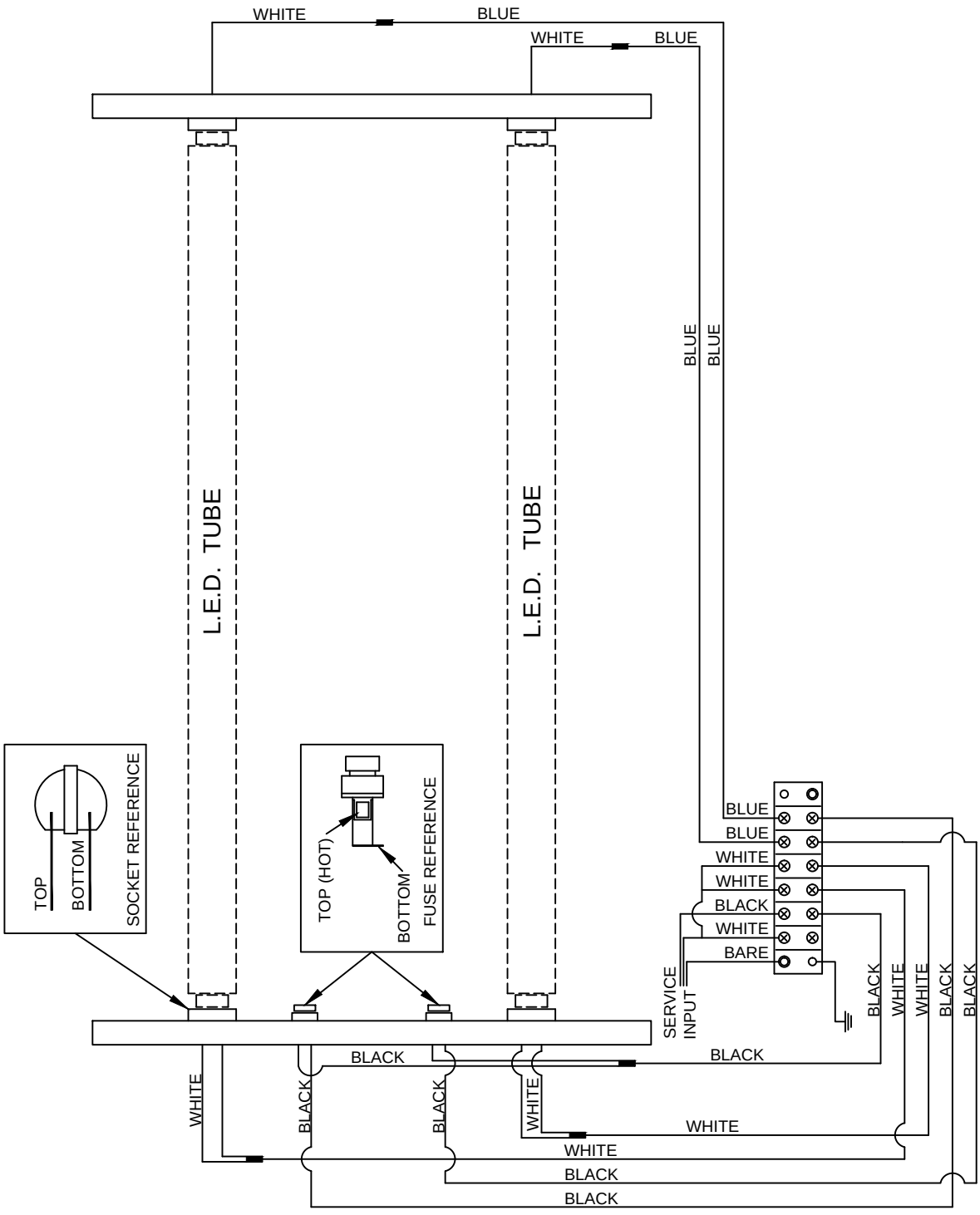
Effective 8/10/2023 to 8/07/2024



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

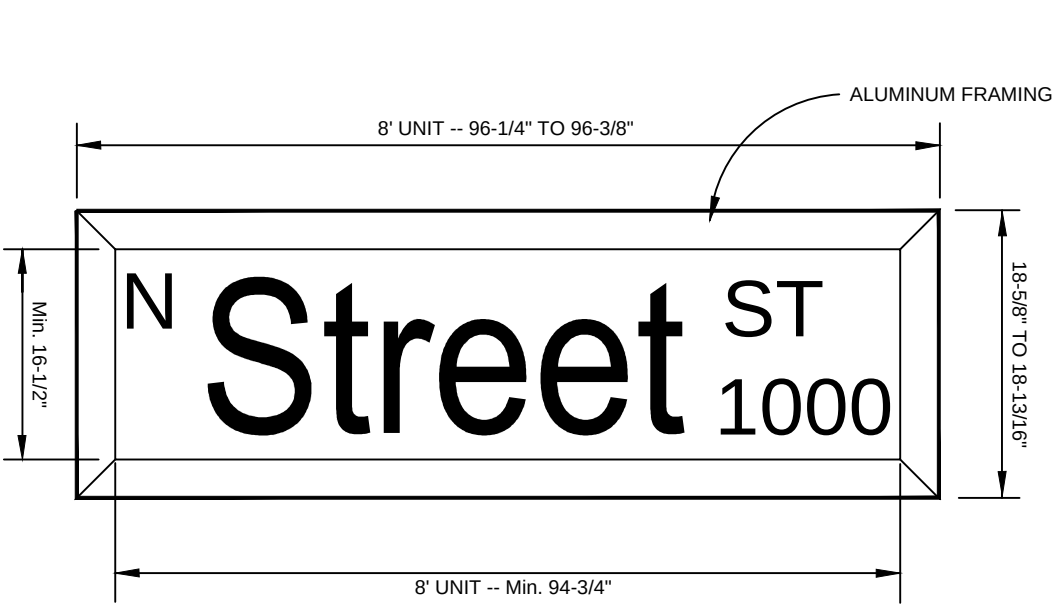
Effective 8/10/2023 to 8/07/2024



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

Effective 8/10/2023 to 8/07/2024



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	
.	

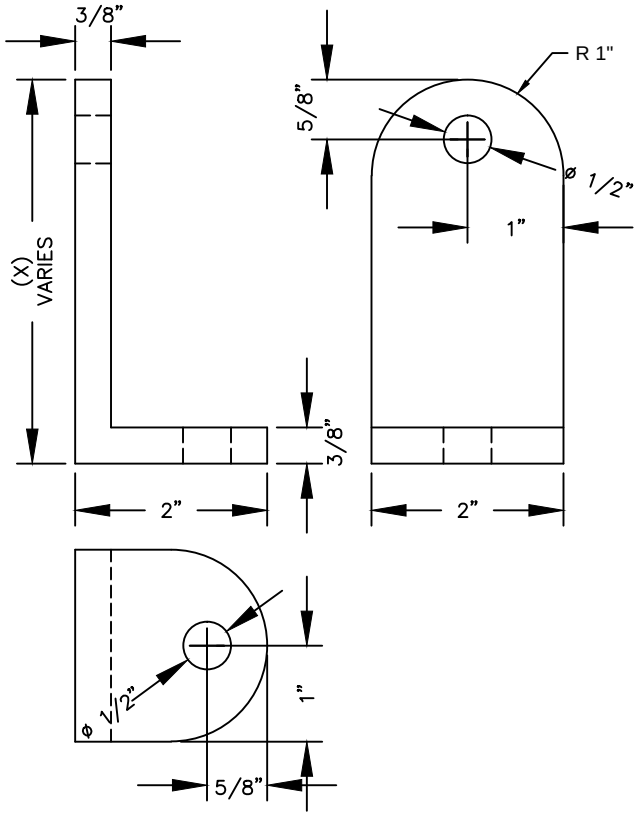
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

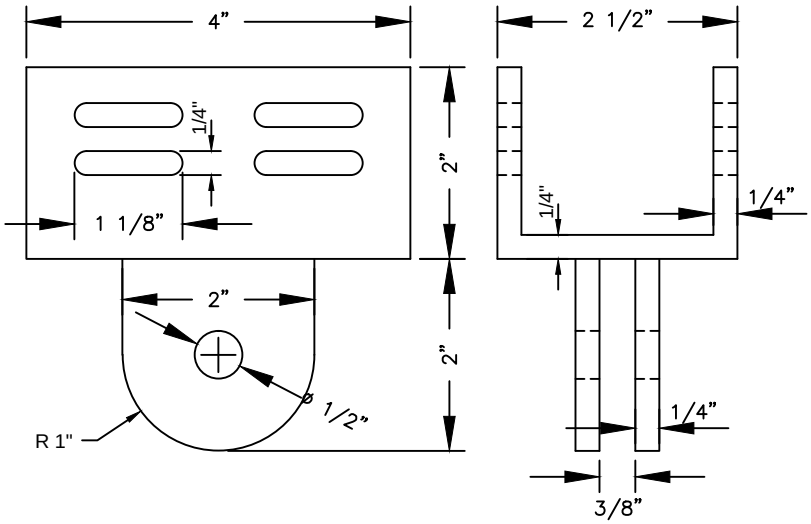
ILLUMINATED STREET NAME SIGN - SIGN PANEL

DATE: 01-01-13	DWG. NO. 818.S1	SHEET 4 OF 5

Effective 8/10/2023 to 8/07/2024



"L" BRACKET



BANDABLE MOUNTING BRACKET

AGENCY APPROVED	B	C	H	L	M	

SPECIFICATION REFERENCE	
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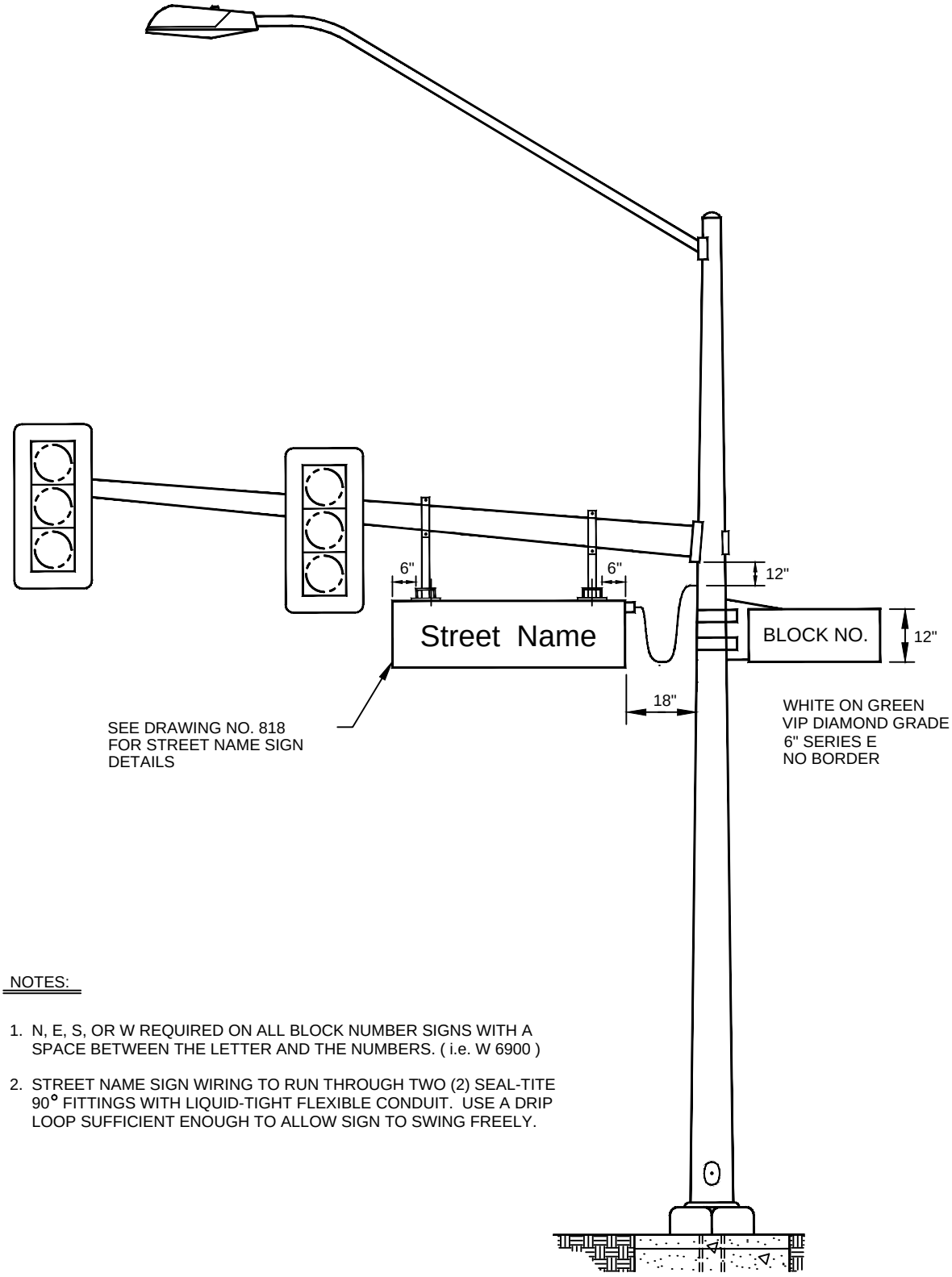
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

ILLUMINATED STREET NAME SIGN
- MOUNTING BRACKETS

DATE: 01-01-13	DWG. NO. 818.S1	SHEET 5 OF 5

Effective 8/10/2023 to 8/07/2024



NOTES:

1. N, E, S, OR W REQUIRED ON ALL BLOCK NUMBER SIGNS WITH A SPACE BETWEEN THE LETTER AND THE NUMBERS. (i.e. W 6900)
2. 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

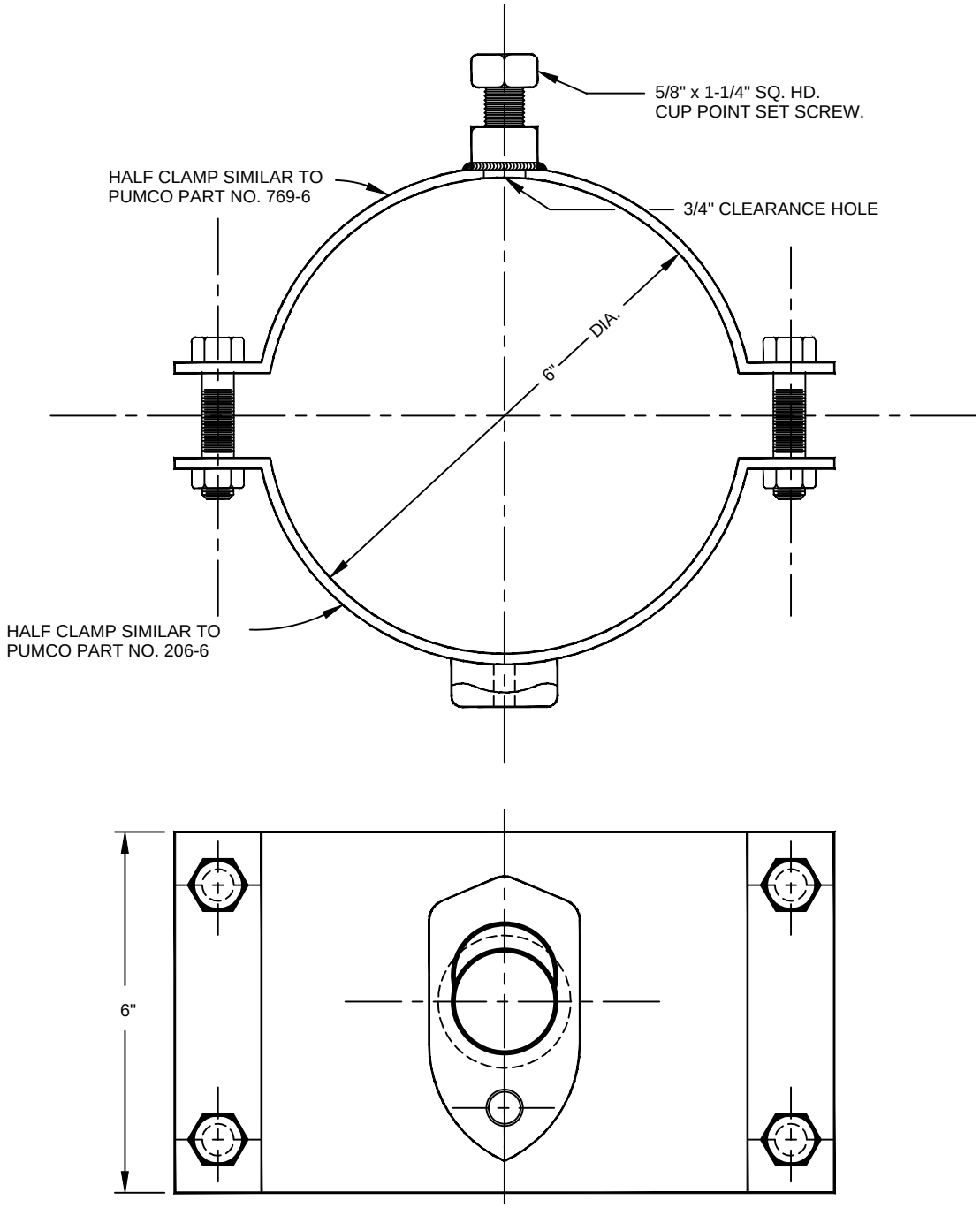
SPECIFICATION REFERENCE	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

BLOCK NUMBER SIGN

DATE 4-9-98	DWG. NO. 819	

Effective 8/10/2023 to 8/07/2024



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

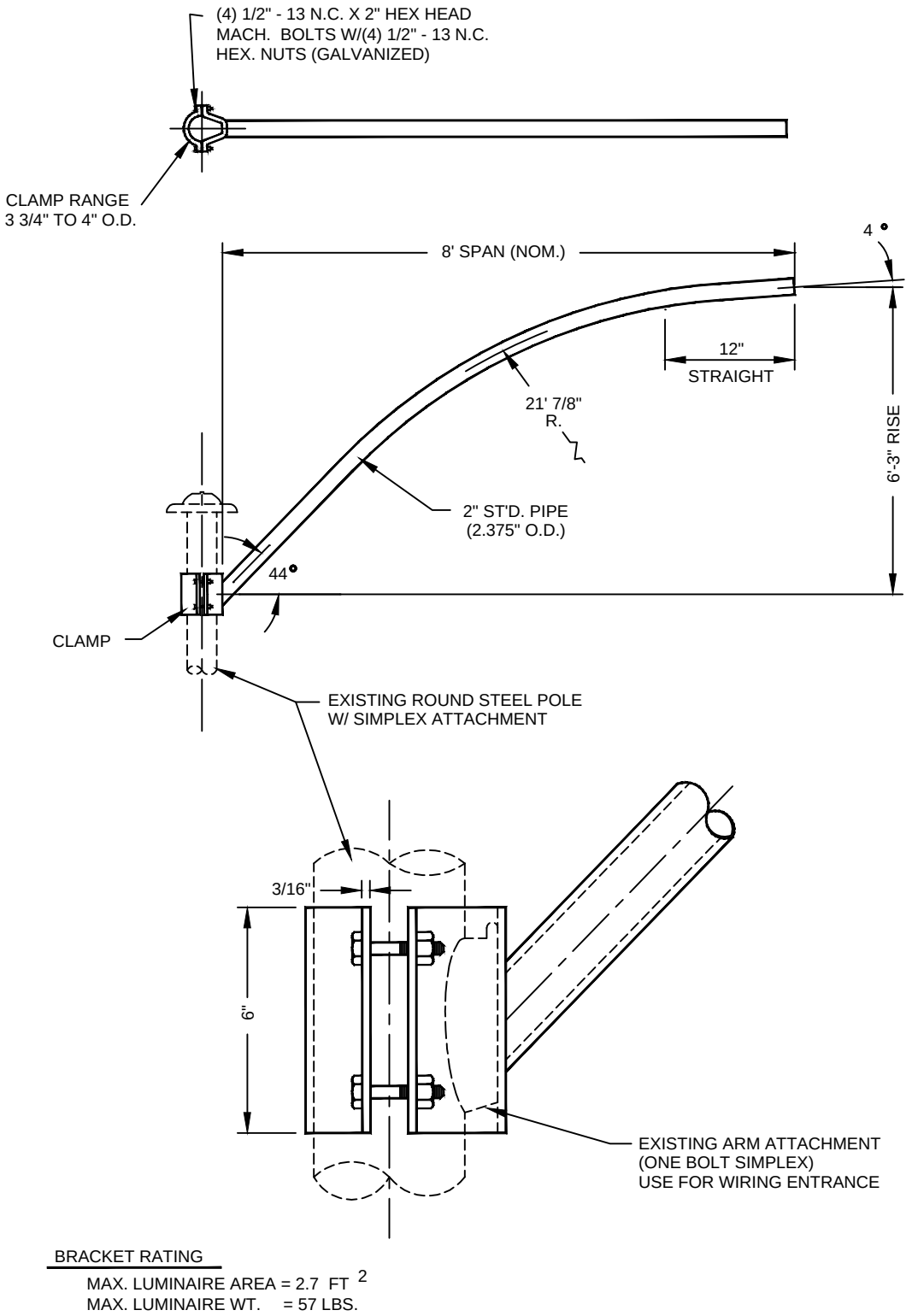
SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

ONE BOLT SIMPLEX ARM ATTACHMENT CLAMP ASSEMBLY

DATE 12-12-96	DWG. NO. 821	SHEET 1 OF 2

Effective 8/10/2023 to 8/07/2024



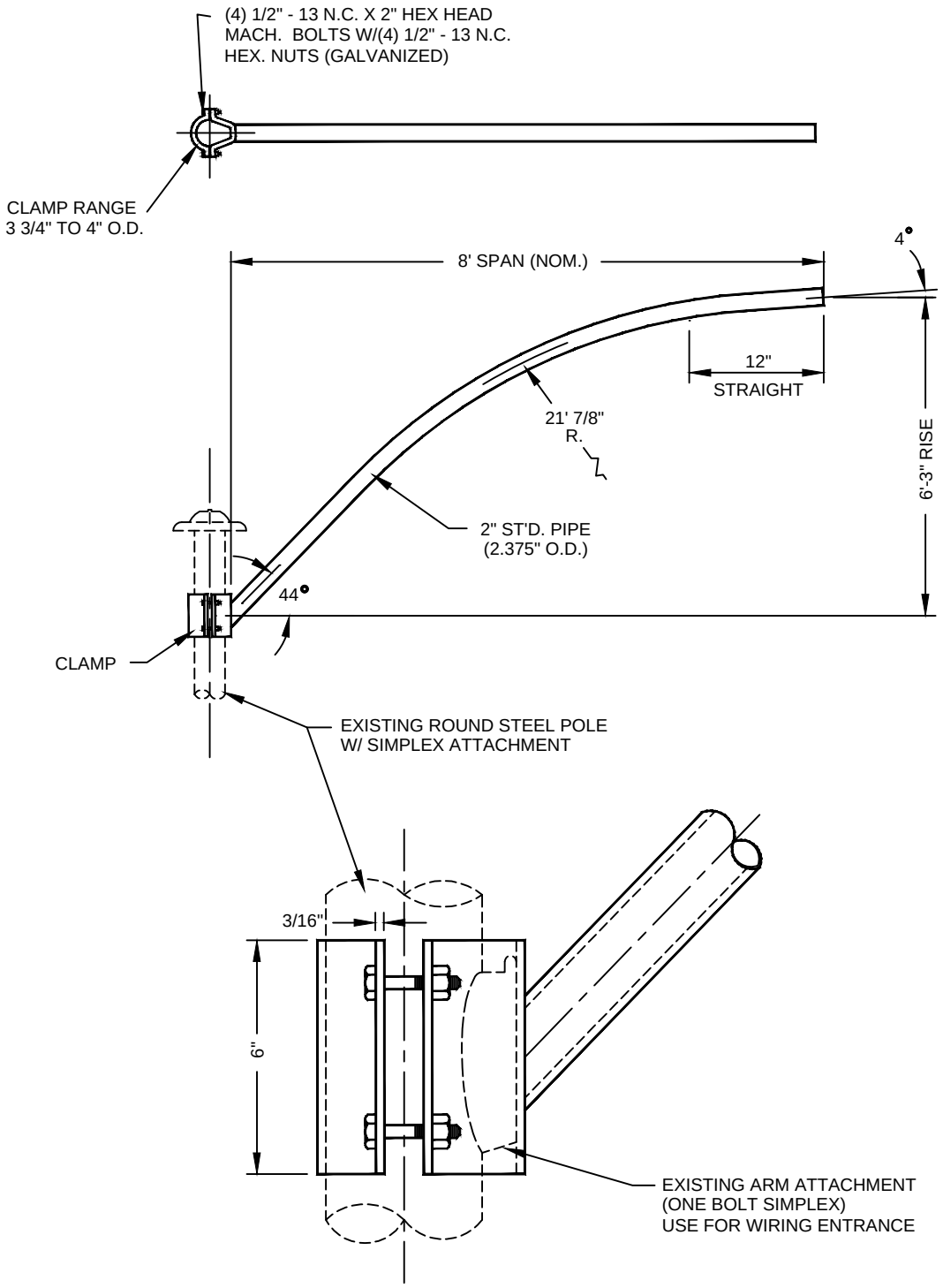
BRACKET RATING

MAX. LUMINAIRE AREA = 2.7 FT ^{2}
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

Effective 8/10/2023 to 8/07/2024



BRACKET RATING

MAX. LUMINAIRE AREA = 2.7 FT ^{2}
MAX. LUMINAIRE WT. = 57 LBS.

AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	
-	

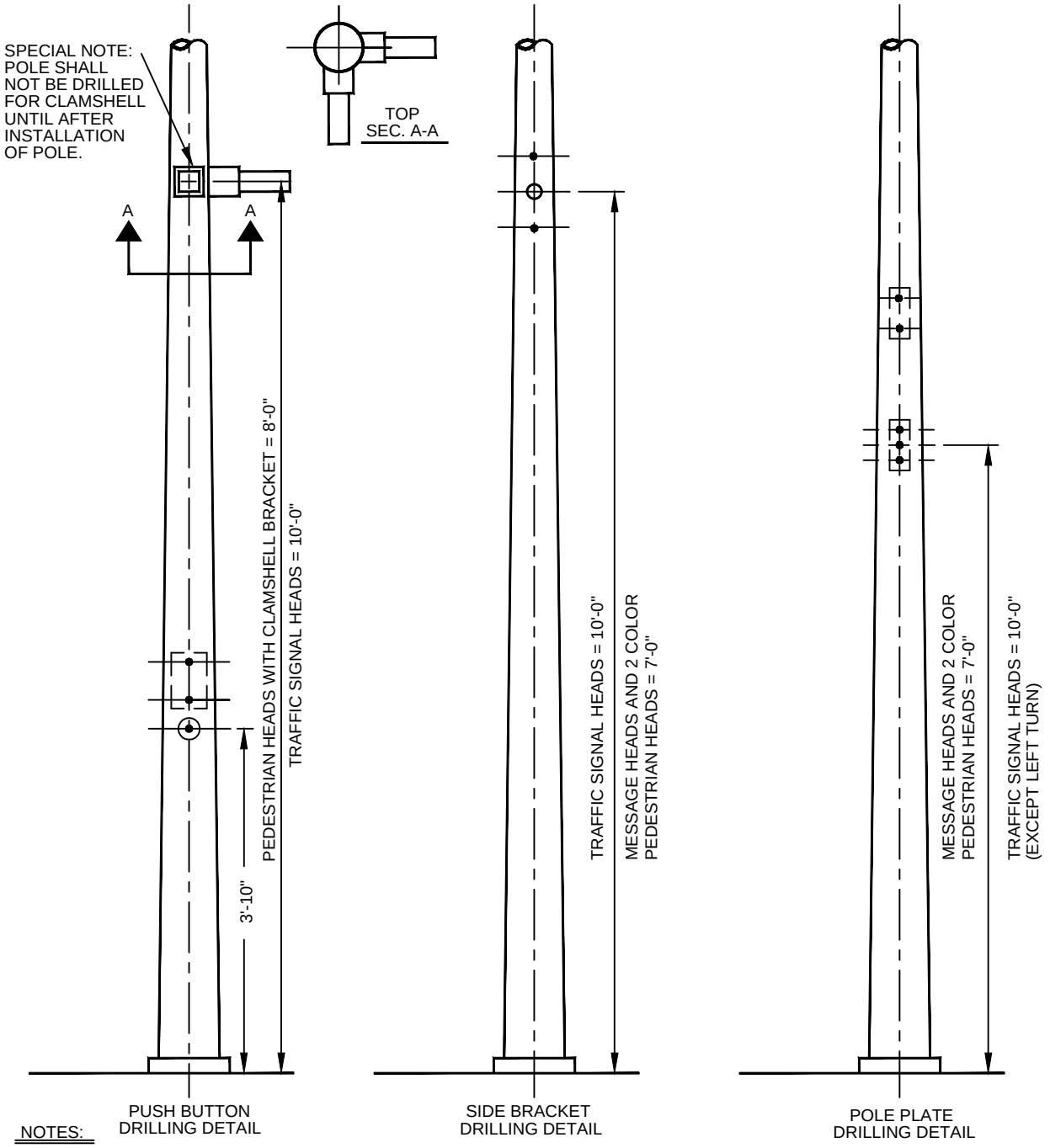
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

RETROFIT STREETLIGHT MAST ARM

DATE	DWG. NO. 822	

Effective 8/10/2023 to 8/07/2024

(NO SCALE)



PUSH BUTTON DRILLING DETAIL

SIDE BRACKET DRILLING DETAIL

POLE PLATE DRILLING DETAIL

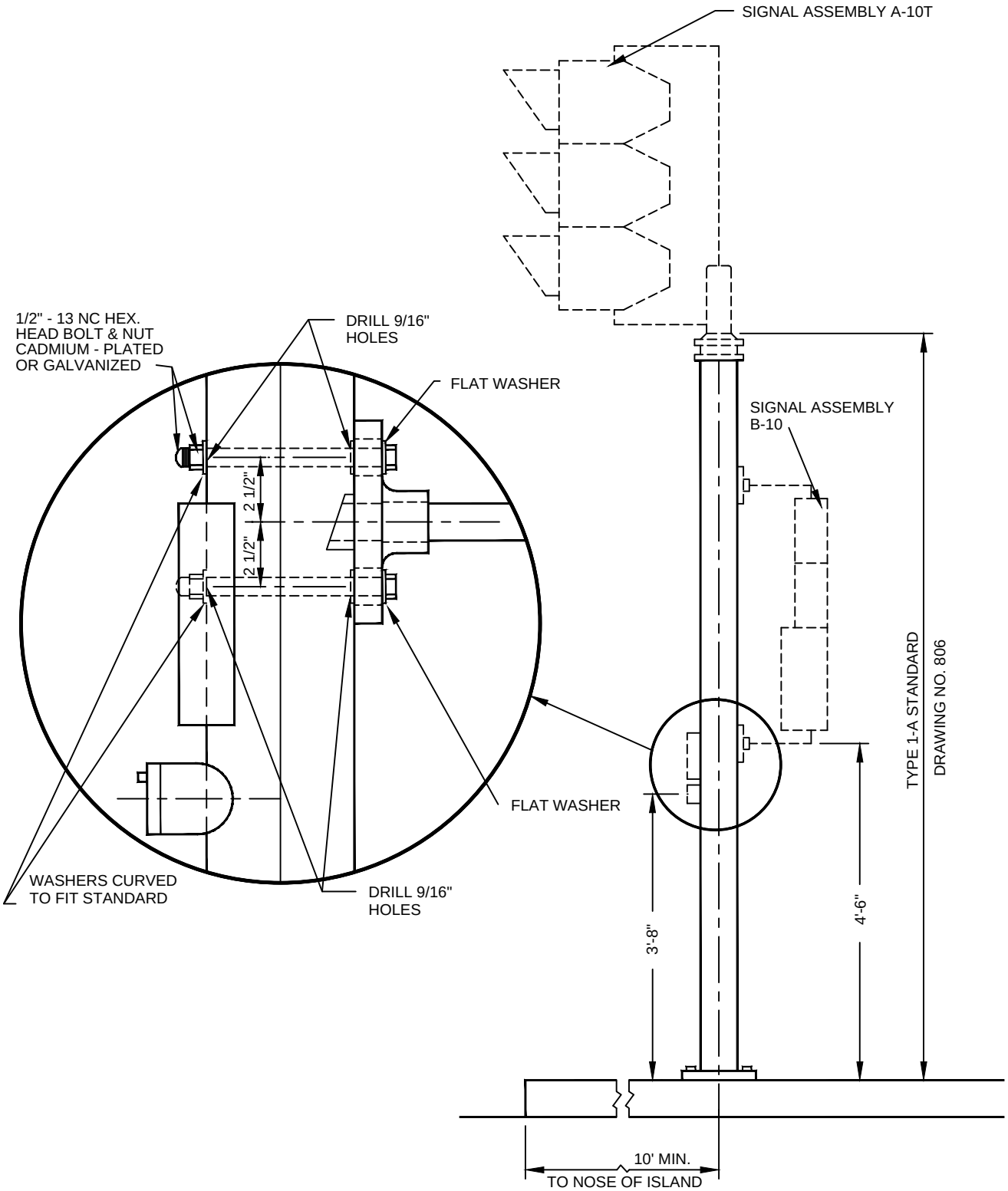
NOTES:

1. DRILLING OF POLE TO BE ORIENTED ACCORDING TO POLE LAYOUT, SPECIFICATIONS, AND AND ENGINEER.
2. DIMENSIONS ARE FROM CURB LEVEL.
3. DIMENSIONS ARE TO WIRE INLET HOLE ONLY. USE MANUFACTURER'S TEMPLATE TO LOCATE ALL OTHER HOLES.
4. ALL HOLES ARE TO CONFORM TO MANUFACTURER'S RECOMMENDATIONS.

AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	POLE DRILLING DETAILS
DATE	DWG. NO. 823

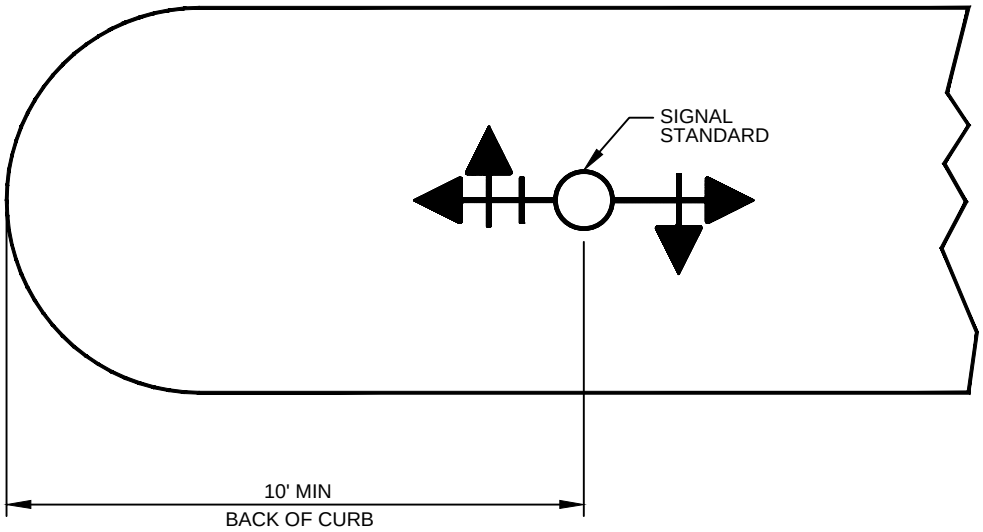
Effective 8/10/2023 to 8/07/2024



AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	ISLAND SIGNAL POLE DETAILS FOR 10 FT. POLE
DATE	DWG. NO. 824

Effective 8/10/2023 to 8/07/2024



NOTE:

FOR POLE LOCATION ON RIGHT TURN ISLAND SEE DRAWING NO. 887.

AGENCY APPROVED	B	C	H	L	M	N

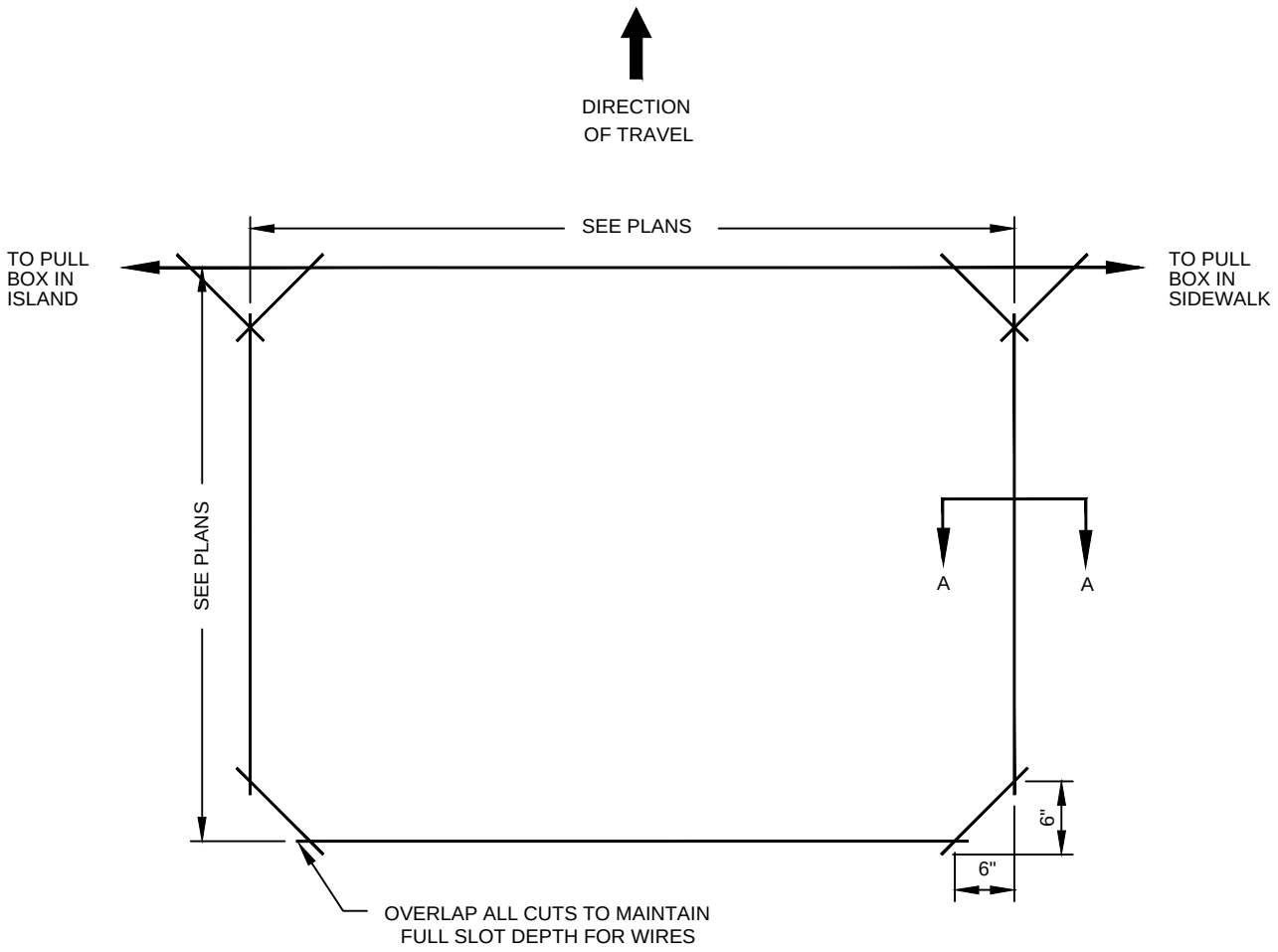
SPECIFICATION REFERENCE	
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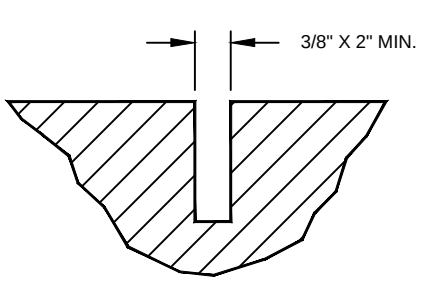
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

MEDIAN ISLAND SIGNAL LOCATION

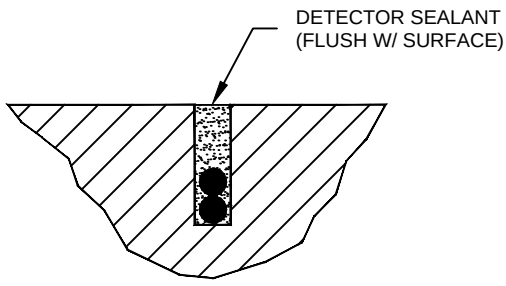
DATE	DWG. NO. 825	

Effective 8/10/2023 to 8/07/2024





A-A

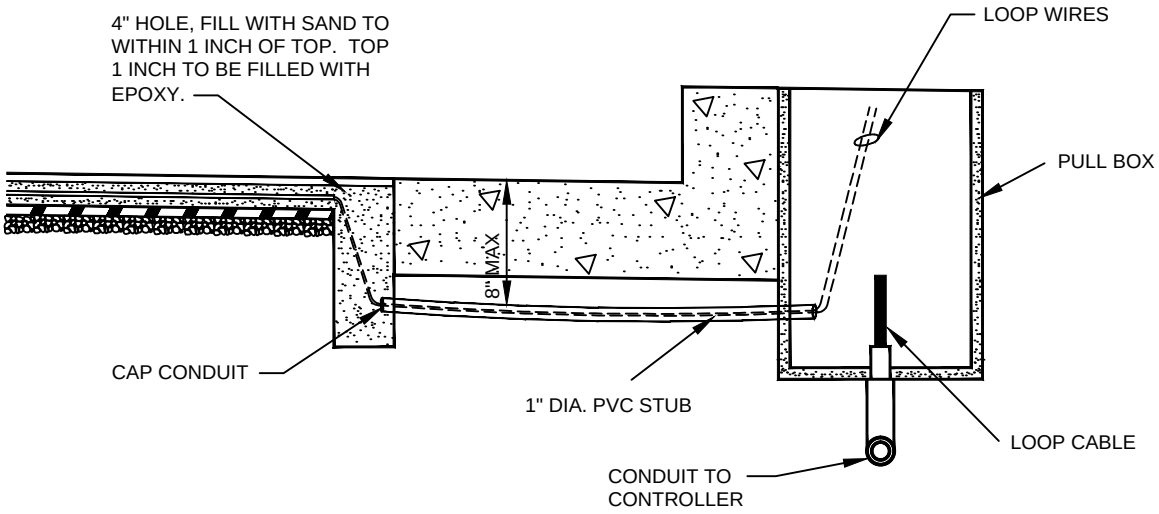


A-A (AFTER INSTALLATION)

AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	SAWCUT DETAILS FOR INDUCTION LOOPS
DATE	DWG. NO. 826

Effective 8/10/2023 to 8/07/2024



NOTE:

PATCH SLOT AND HOLE WITH EPOXY, REMOVE OVERFLOW BEFORE IT HARDENS.

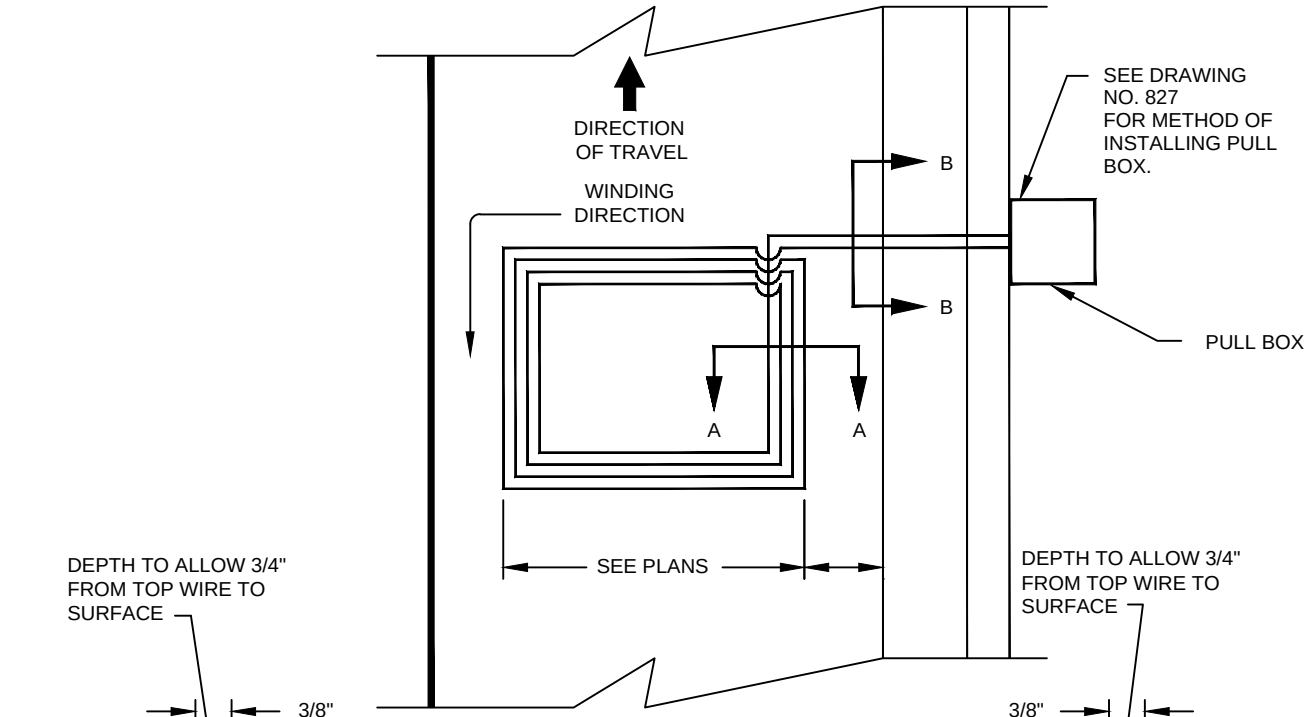
PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE	AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
		DETAILS AT PULL BOX AND SAWCUTS
DATE	DWG. NO. 827	

Effective 8/10/2023 to 8/07/2024

NOTE:

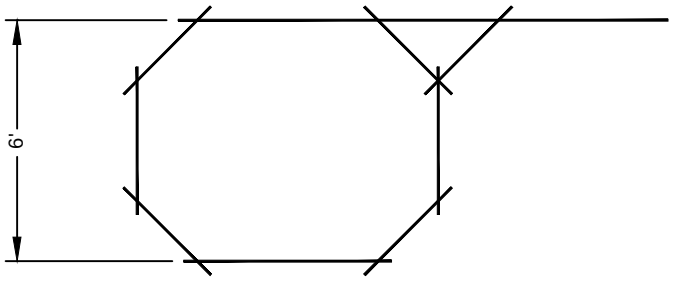
1. 4 TURNS OF WIRE SHOWN. ALWAYS INSTALL 4 TURNS OF CABLE IN DUCT UNLESS OTHERWISE SPECIFIED ON THE PLANS. WINDING DIRECTION SHALL BE INDICATED ON WIRE.



WIRING DIAGRAM

SECTION A-A

SECTION B-B



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

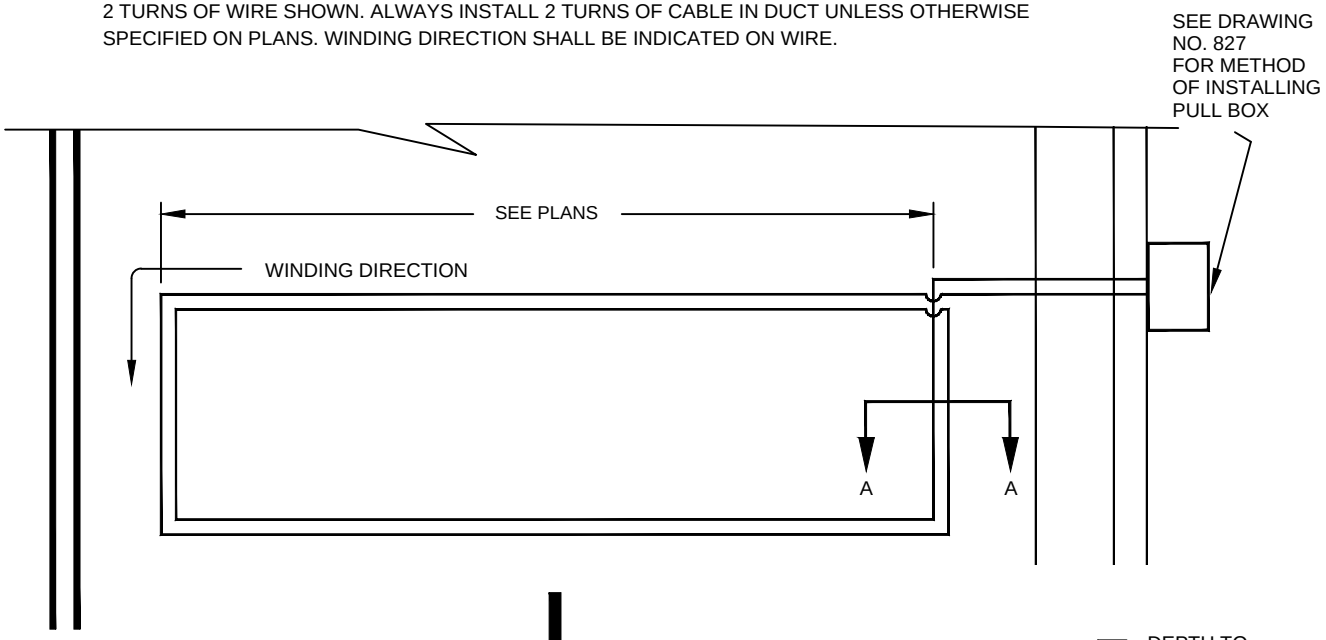
ONE INDUCTION LOOP FOR ONE TRAVEL LANE

DATE	DWG. NO. 828	

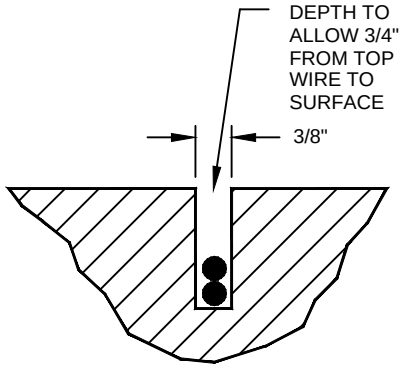
Effective 8/10/2023 to 8/07/2024

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.



WIRING DIAGRAM



A-A



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

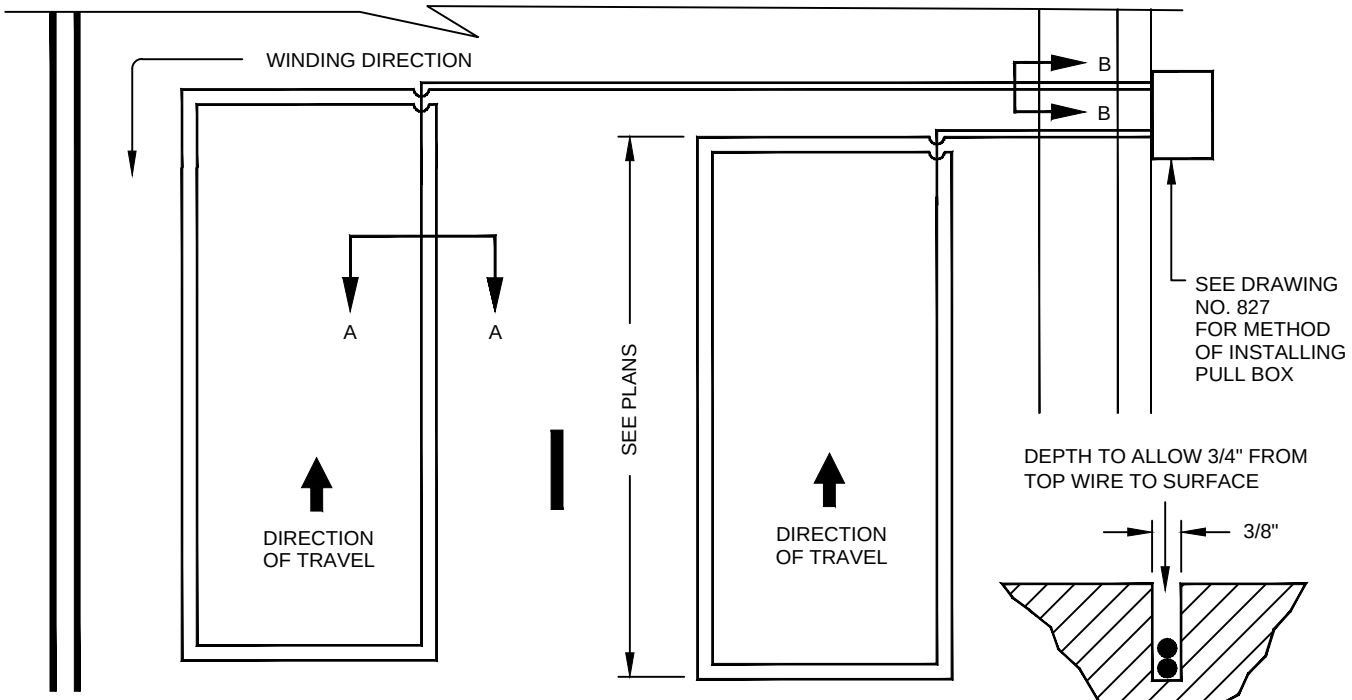
ONE INDUCTION LOOP FOR TWO TRAVEL LANES

DATE	DWG. NO. 829	SHEET 1 OF 2

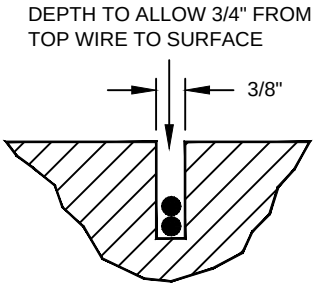
Effective 8/10/2023 to 8/07/2024

NOTE:

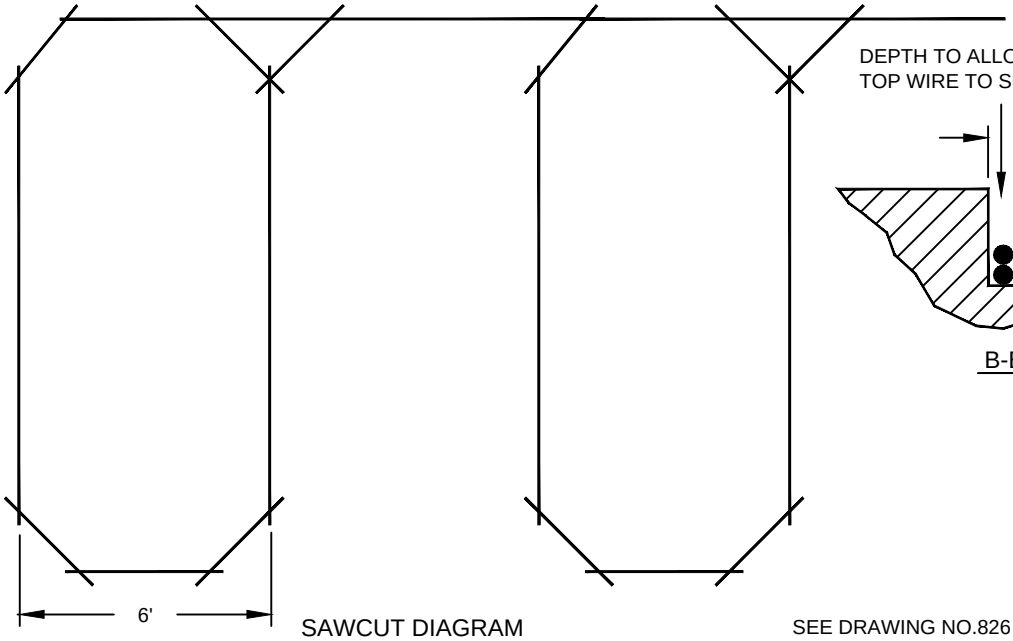
2 TURNS OF WIRE SHOWN. ALWAYS INSTALL 2 TURNS OF CABLE IN DUCT UNLESS OTHERWISE SPECIFIED ON PLANS. WINDING DIRECTION SHALL BE INDICATED ON WIRE.



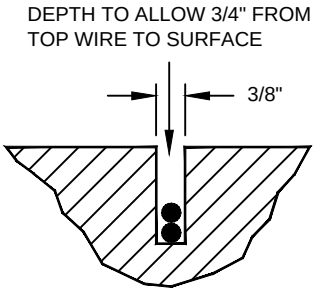
WIRING DIAGRAM



A-A



SAWCUT DIAGRAM



B-B

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

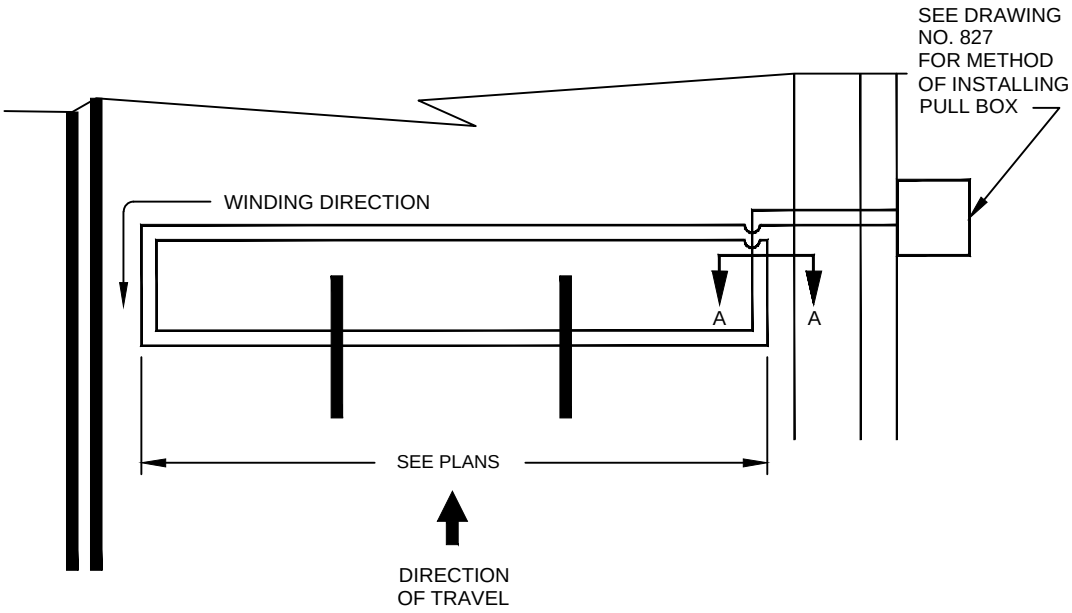
TWO INDUCTION LOOPS FOR TWO TRAVEL LANES

DATE	DWG. NO. 829	SHEET 2 OF 2

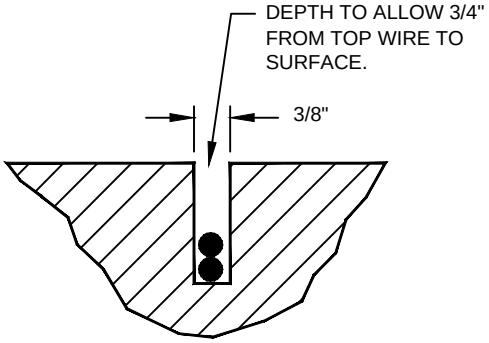
Effective 8/10/2023 to 8/07/2024

NOTE:

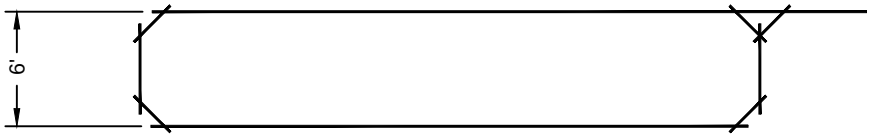
2 TURNS OF WIRE SHOWN. ALWAYS INSTALL 2 TURNS OF CABLE IN DUCT UNLESS OTHERWISE SPECIFIED ON PLANS. WINDING DIRECTION SHALL BE INDICATED ON WIRE.



WIRING DIAGRAM



A-A



SAWCUT DIAGRAM

SEE DRAWING NO. 826 FOR SAWCUT DETAILS.

PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

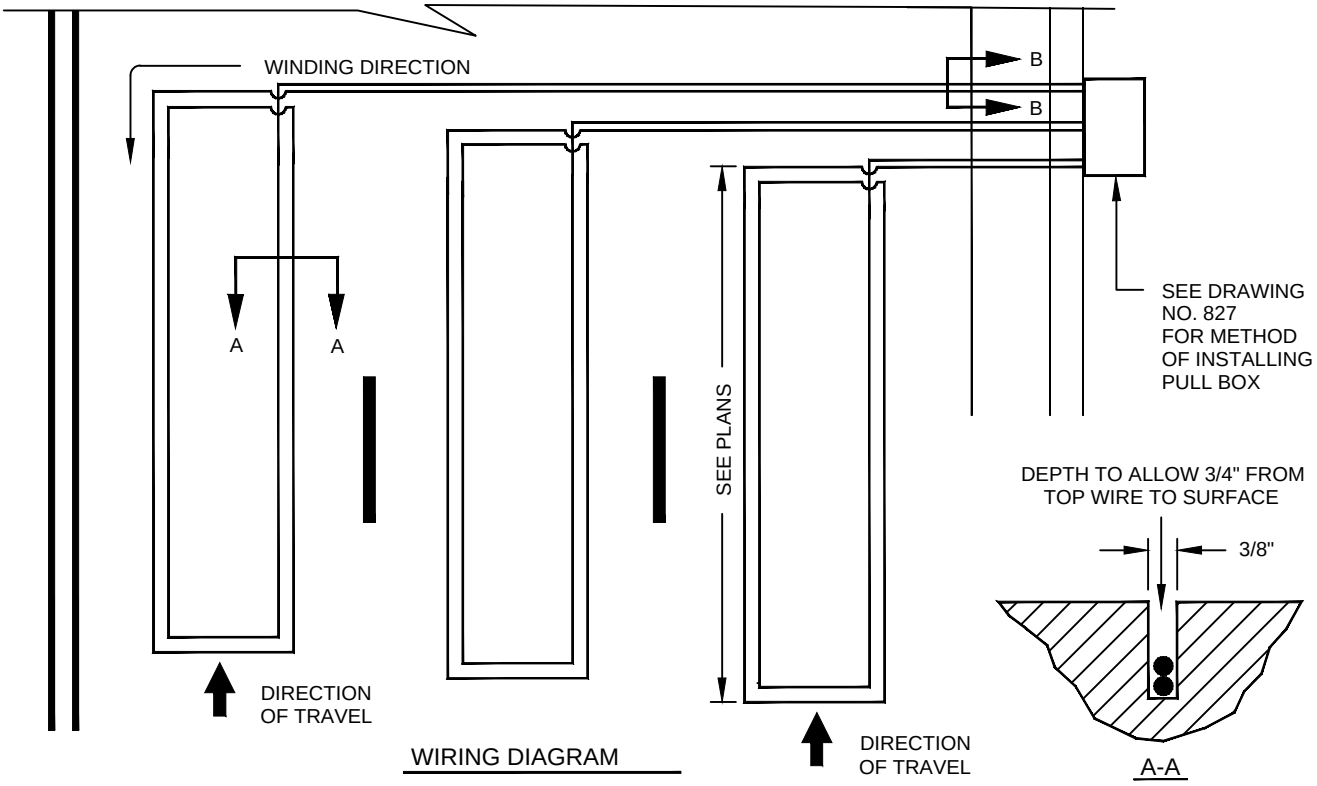
AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA		
		ONE INDUCTION LOOP FOR THREE TRAVEL LANES		
		DATE	DWG. NO. 830	SHEET 1 OF 2

Effective 8/10/2023 to 8/07/2024

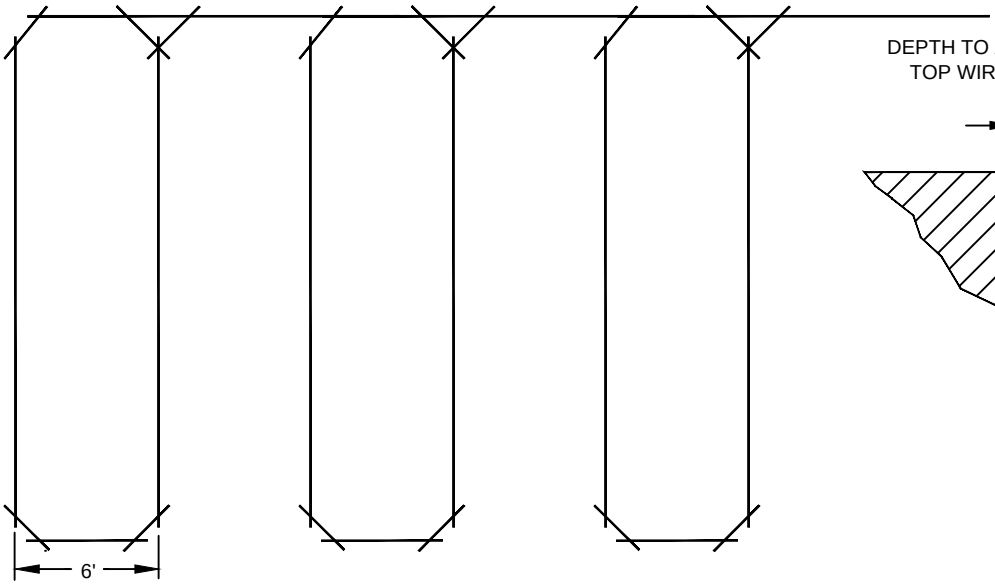
NOTE:

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.

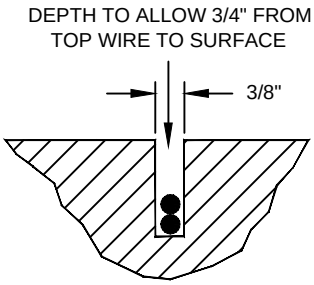


WIRING DIAGRAM

A-A



SAWCUT DIAGRAM



B-B

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

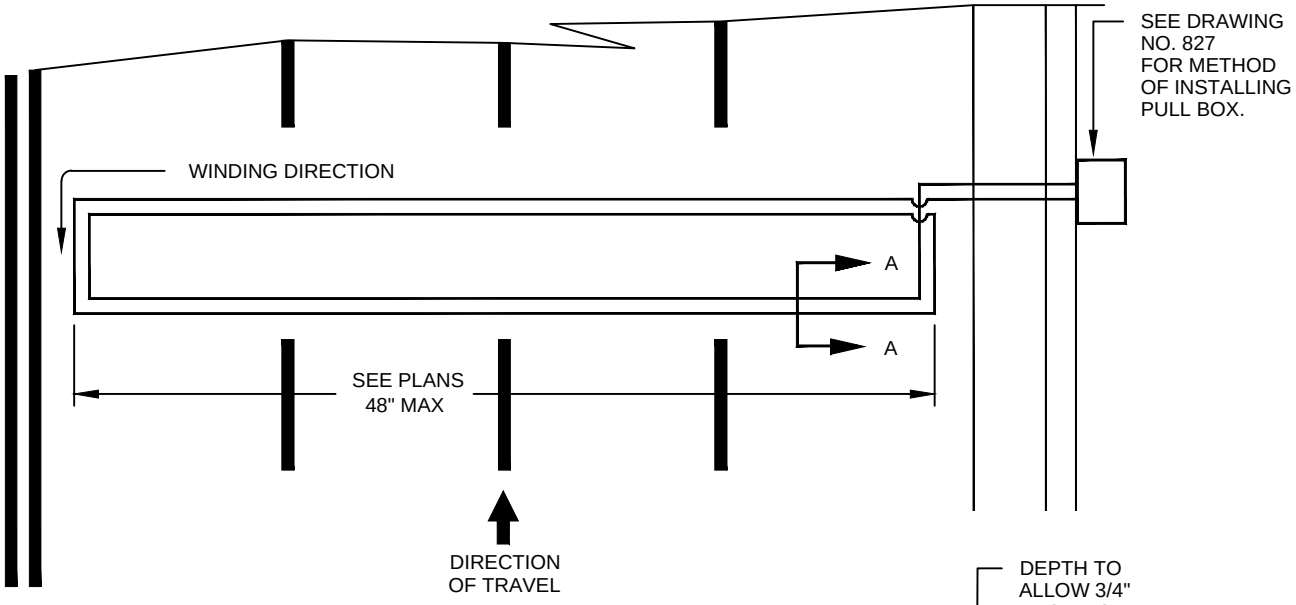
THREE INDUCTION LOOPS FOR THREE TRAVEL LANES

DATE	DWG. NO. 830	SHEET 2 OF 2

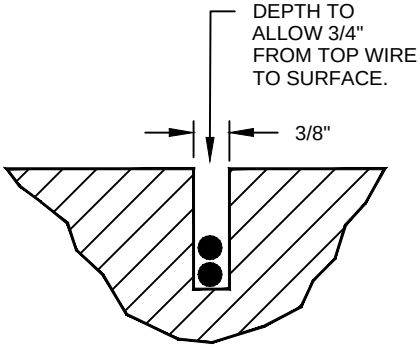
Effective 8/10/2023 to 8/07/2024

NOTE:

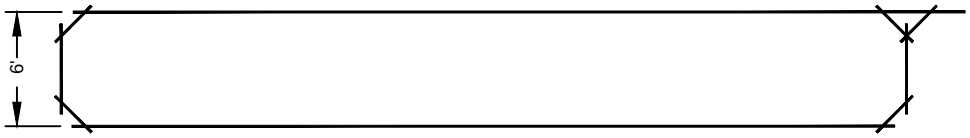
2 TURNS OF WIRE SHOWN. ALWAYS INSTALL 2 TURNS OF CABLE IN DUCT UNLESS OTHERWISE SPECIFIED ON PLANS. WINDING DIRECTION SHALL BE INDICATED ON WIRE.



WIRING DIAGRAM



A-A



SAWCUT DIAGRAM

SEE DRAWING NO. 826 FOR SAWCUT DETAILS.

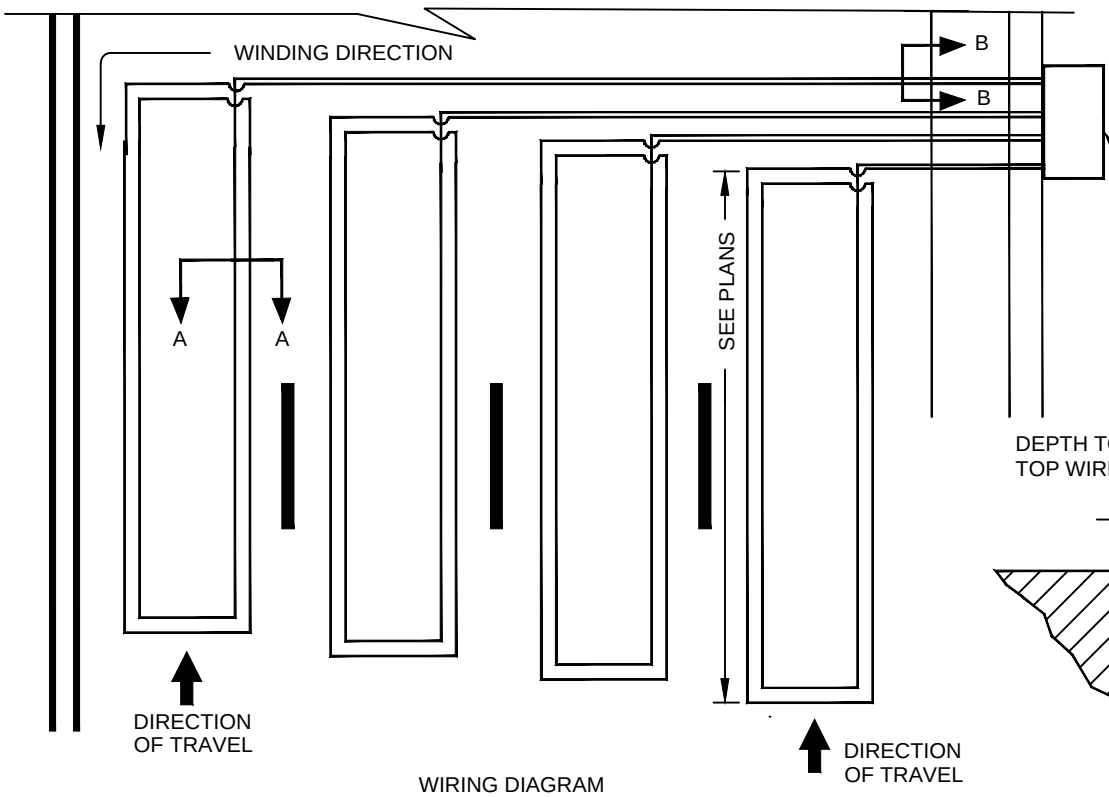
PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE	AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	ONE INDUCTION LOOP FOR FOUR TRAVEL LANES
	DATE / DWG. NO. 831 / SHEET 1 OF 2

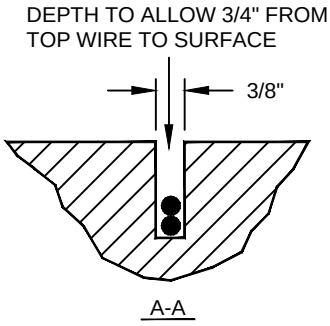
Effective 8/10/2023 to 8/07/2024

NOTE:

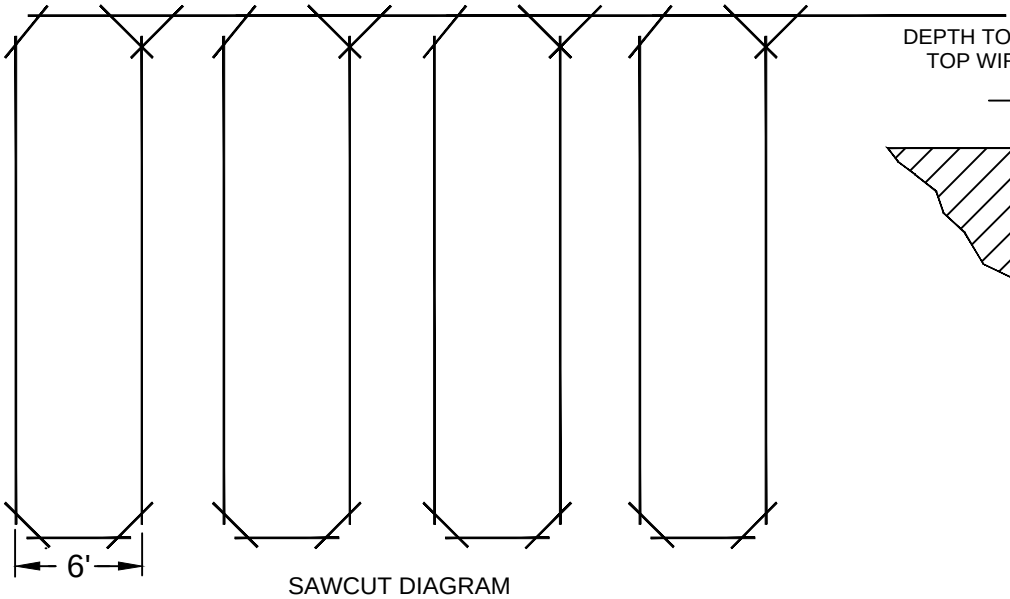
2 TURNS OF WIRE SHOWN. ALWAYS INSTALL 2 TURNS OF CABLE IN DUCT UNLESS OTHERWISE SPECIFIED ON PLANS. WINDING DIRECTION SHALL BE INDICATED ON WIRE.



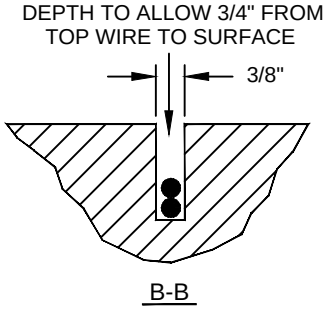
WIRING DIAGRAM



A-A



SAWCUT DIAGRAM



B-B

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

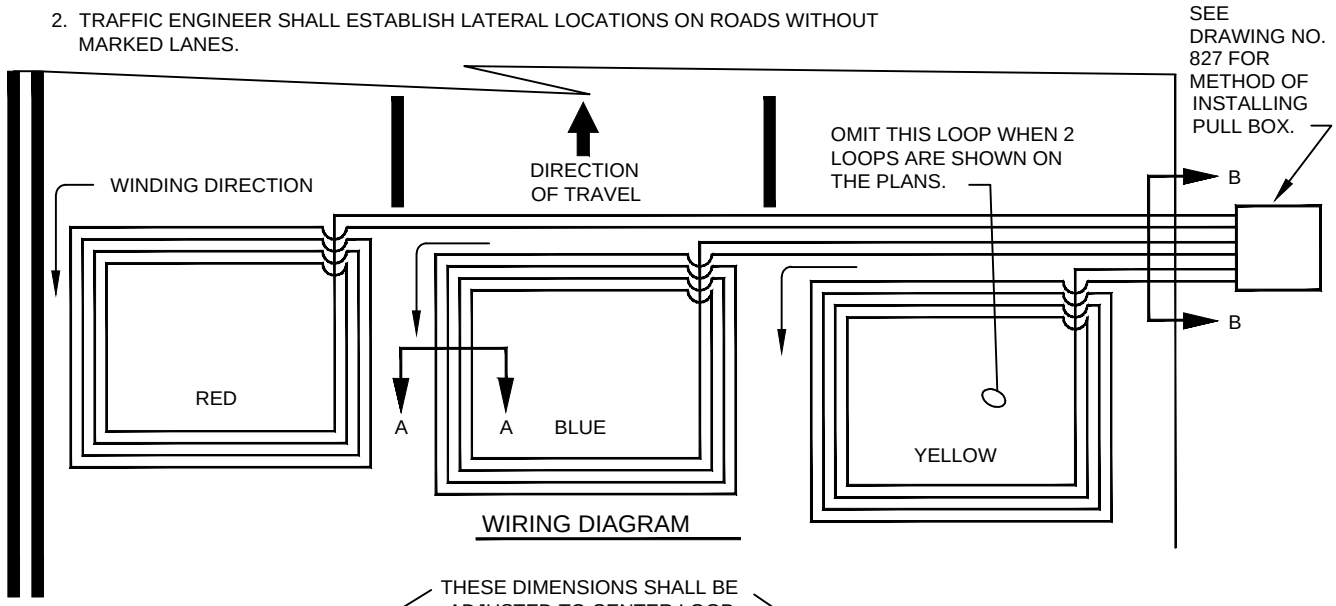
FOUR INDUCTION LOOPS FOR FOUR TRAVEL LANES

DATE	DWG. NO. 831	SHEET 2 OF 2

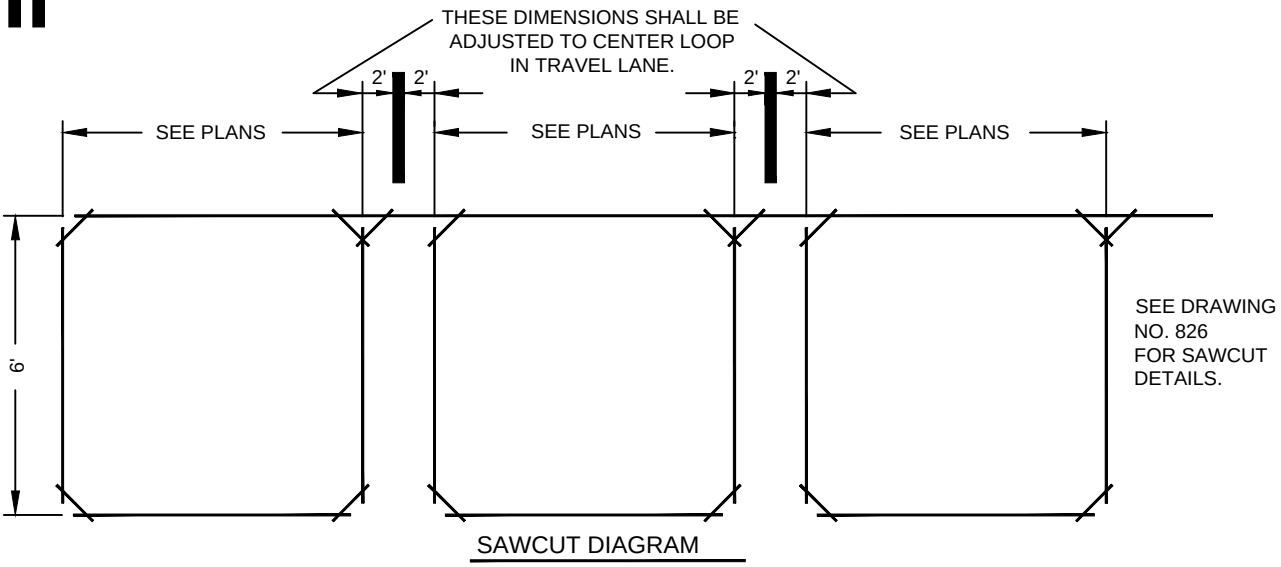
Effective 8/10/2023 to 8/07/2024

NOTES:

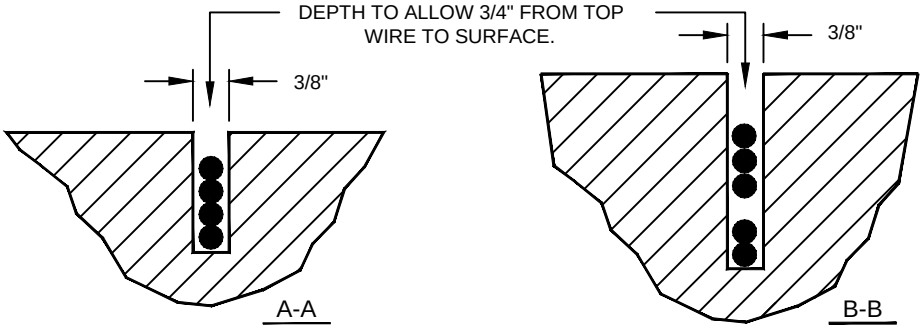
1. 4 TURNS OF WIRE SHOWN. ALWAYS INSTALL 4 TURNS OF CABLE IN DUCT UNLESS OTHERWISE SPECIFIED ON THE PLANS. WINDING DIRECTION SHALL BE INDICATED ON WIRE.
2. TRAFFIC ENGINEER SHALL ESTABLISH LATERAL LOCATIONS ON ROADS WITHOUT MARKED LANES.



WIRING DIAGRAM



SAWCUT DIAGRAM



PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

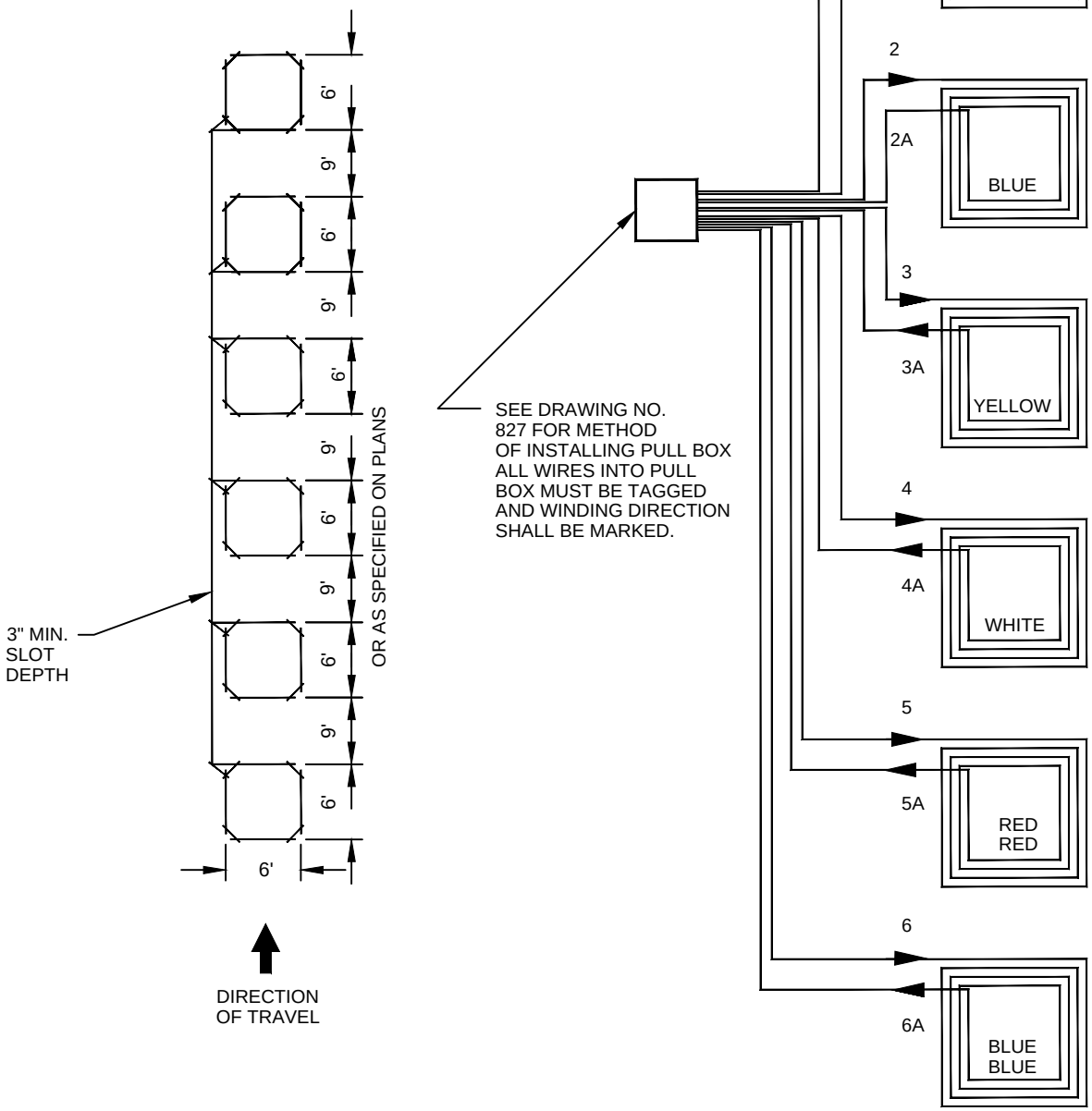
THREE INDUCTION LOOPS FOR THREE TRAVEL LANES

DATE	DWG. NO. 832	

Effective 8/10/2023 to 8/07/2024

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

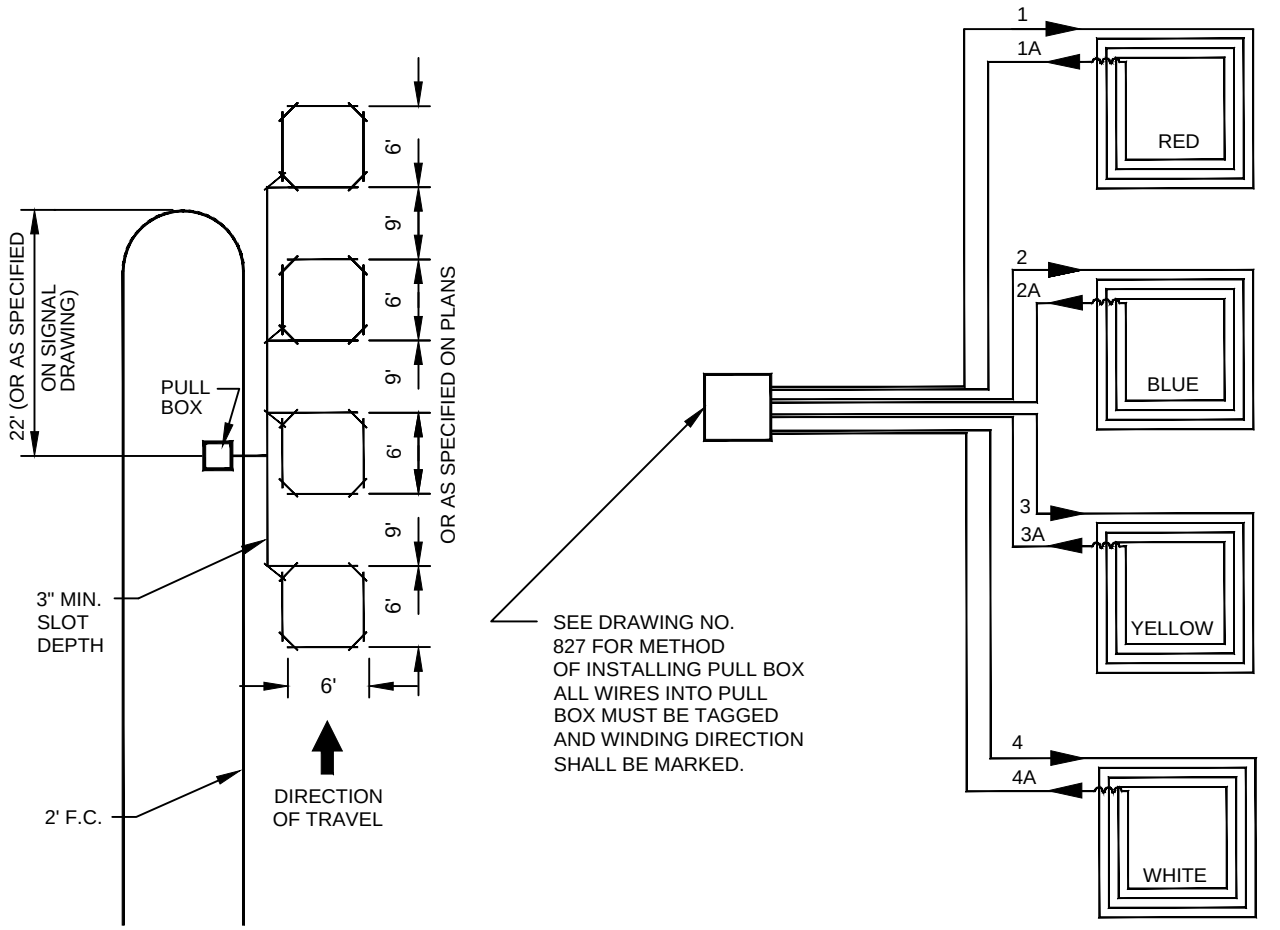
AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	MULTIPLE LOOP SYSTEM FOR THRU LANE
	DATE 12-12-96 / DWG. NO. 833

Effective 8/10/2023 to 8/07/2024

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

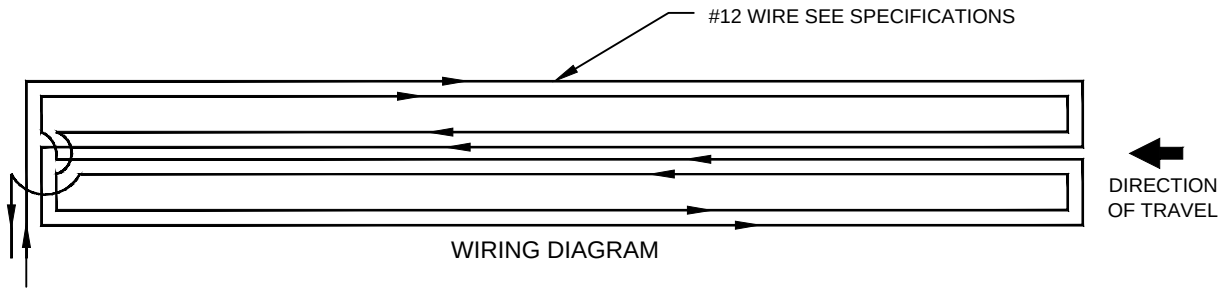
SEE DRAWING NO. 836 FOR WIRE CONNECTIONS.
SEE DRAWING NO. 826 FOR SAWCUT DETAILS.

AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	MUTIPLE LOOP SYSTEM FOR LEFT TURN POCKET
	DATE / DWG. NO. 834

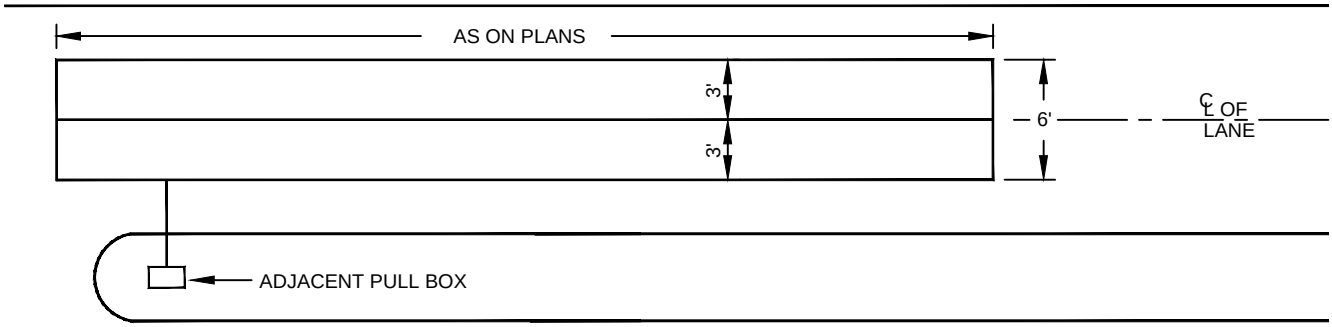
Effective 8/10/2023 to 8/07/2024

TYPE "QUADRUPOLE" LOOP INSTALLATION



WIRING DIAGRAM

WHENEVER MORE THAN ONE LOOP TERMINATES IN A PULL BOX,
ALL LEADS MUST BE TAGGED AND IDENTIFIED.



NOTES:

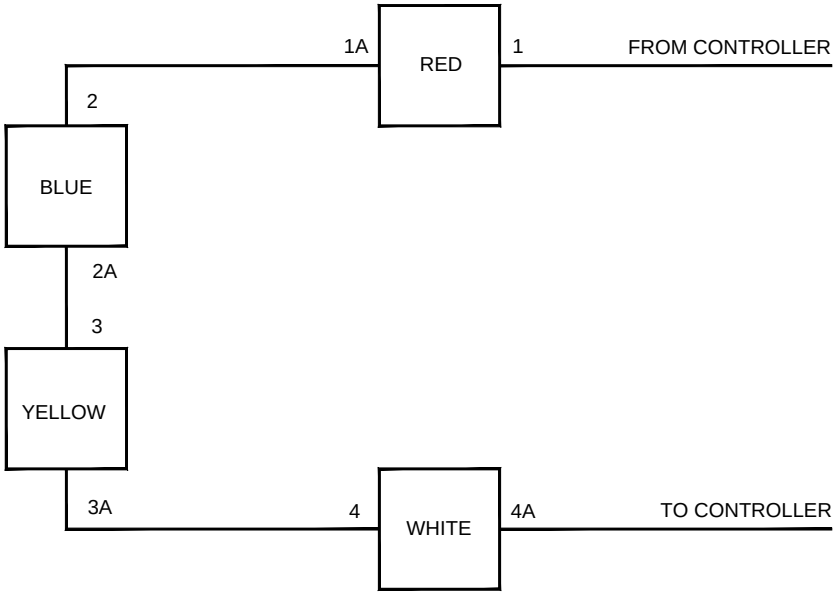
1. FOR ALL LOOPS, TWO TURNS ARE REQUIRED.
2. FRONT OF LOOP MUST EXTEND IN THE CROSSWALK 2' TO 4'.

AGENCY APPROVED	B	C	H	L	M	N

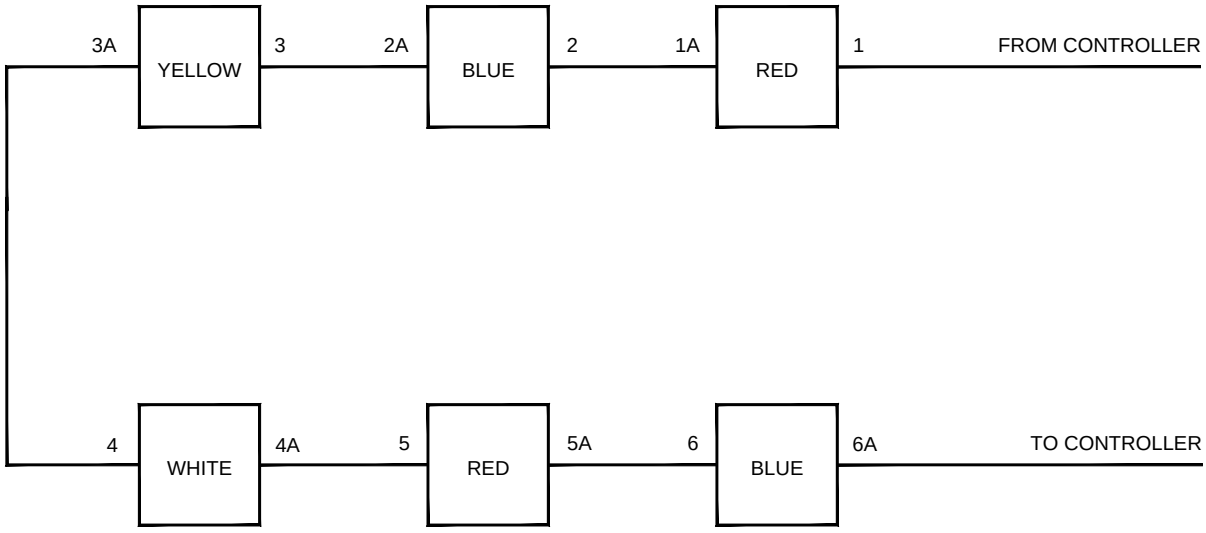
SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	TYPE "QUADRUPOLE" LOOP INSTALLATION
DATE	DWG. NO. 835

Effective 8/10/2023 to 8/07/2024

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

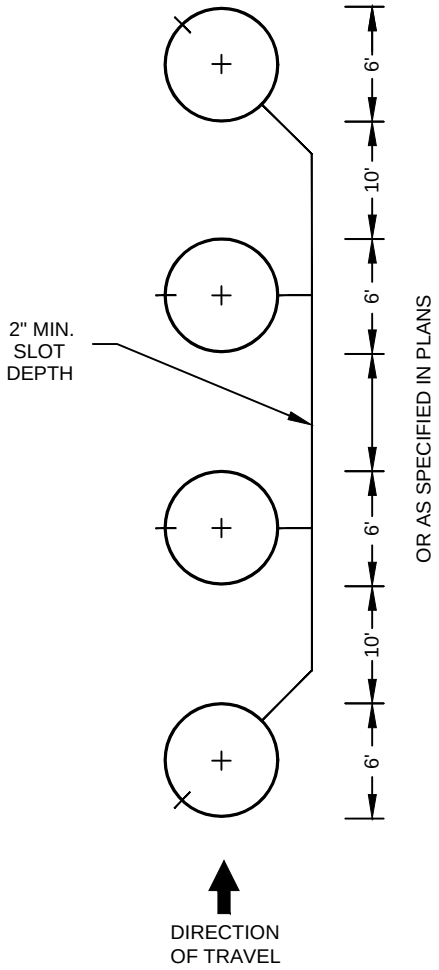
WIRE DIAGRAMS FOR MULTIPLE LOOP SYSTEMS FOR LEFT TURN POCKET AND THRU LANE

DATE 12-12-96	DWG. NO. 836	

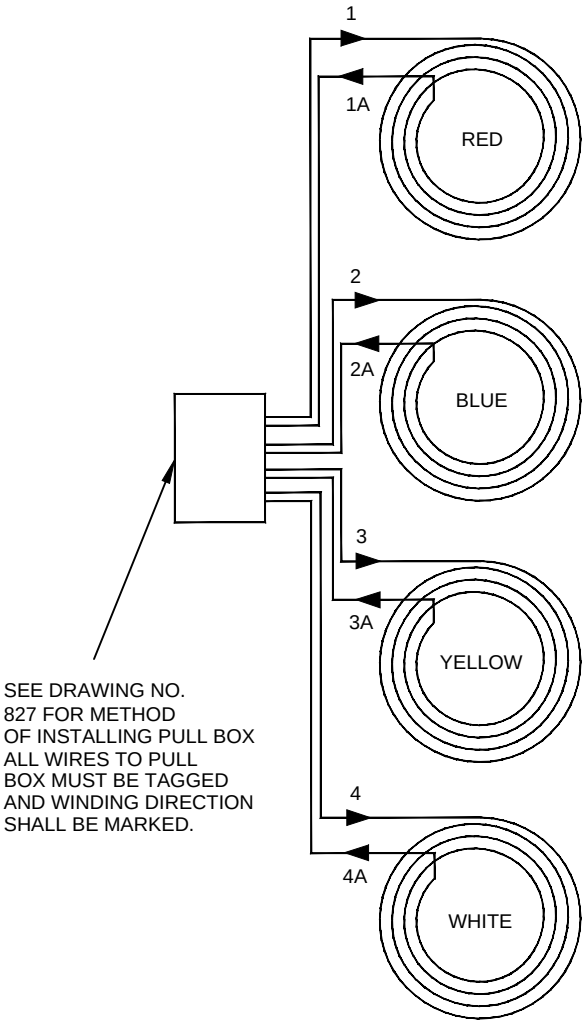
Effective 8/10/2023 to 8/07/2024

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

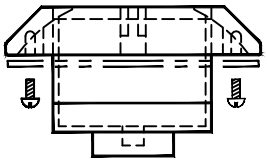


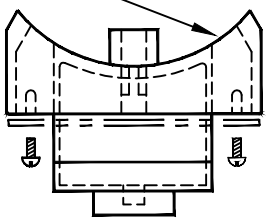
WIRING DIAGRAM

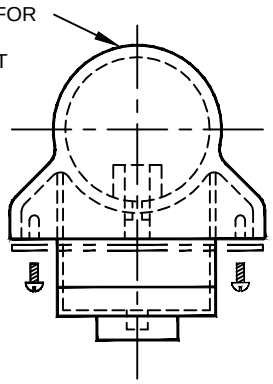
AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	CIRCULAR INDUCTION LOOPS FOR TRAVEL LANES
	DATE / DWG. NO. 837

Effective 8/10/2023 to 8/07/2024

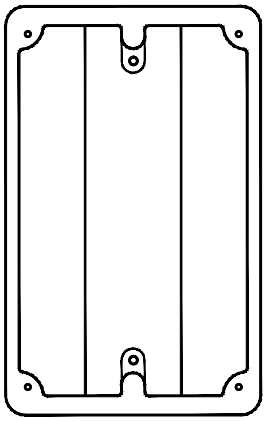




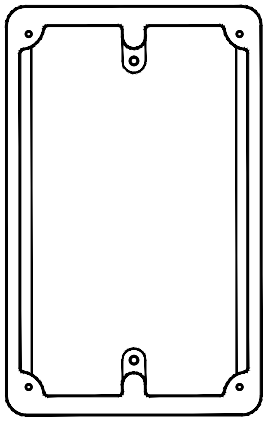


NOTES:

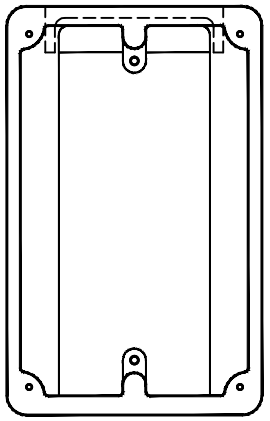
1. CAST ALUMINUM HOUSING.
2. PAINT COLOR SHALL MATCH SIGNAL HOUSING.



FOR FLAT SURFACE MOUNTING



FOR SIGNAL STANDARD MOUNTING



FOR 2-1/2" IPS MOUNTING

NOTES:

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

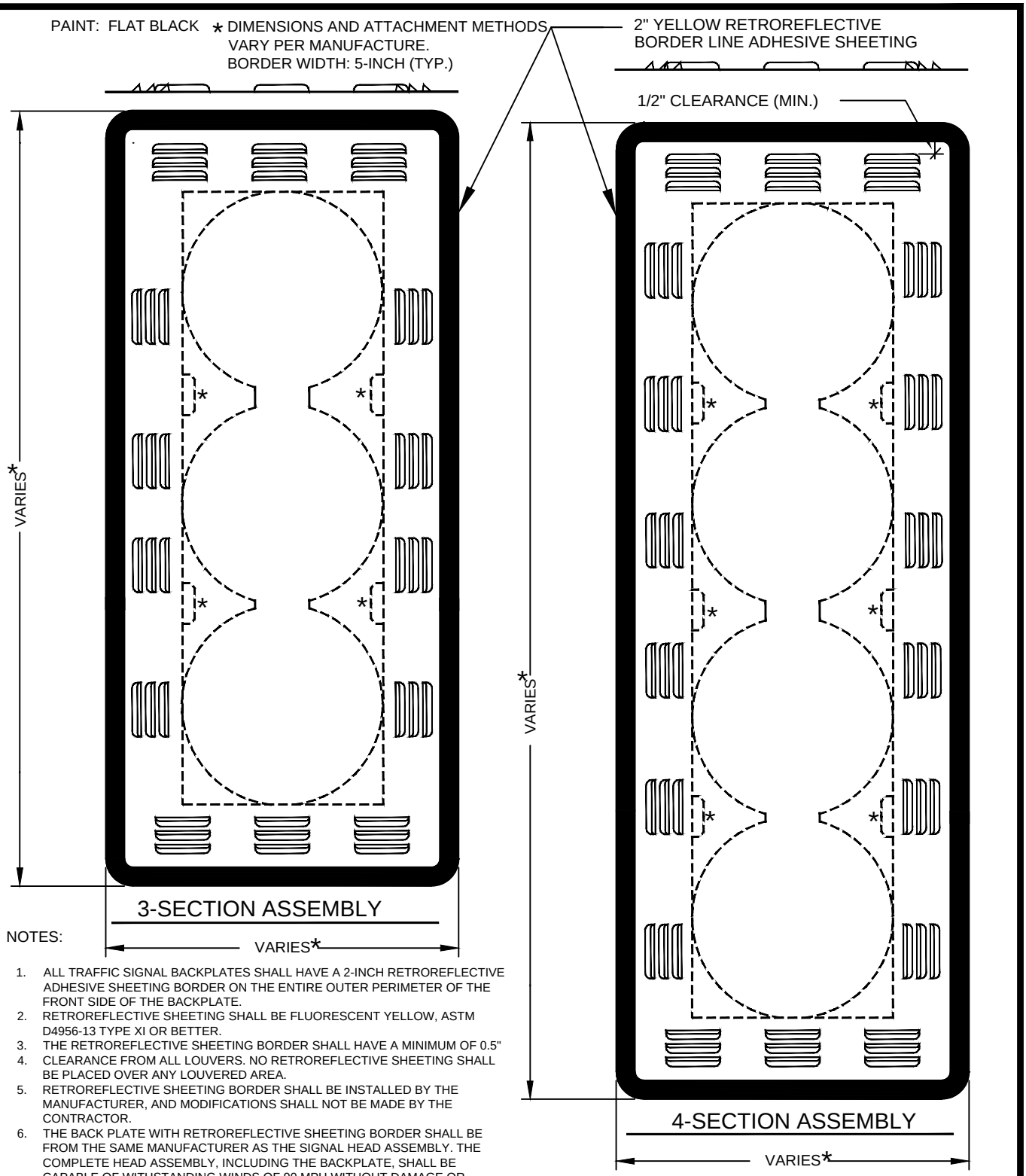
SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

PEDESTRIAN PUSH BUTTON DETECTORS

DATE 08-09-18	DWG. NO. 838	

Effective 8/10/2023 to 8/07/2024



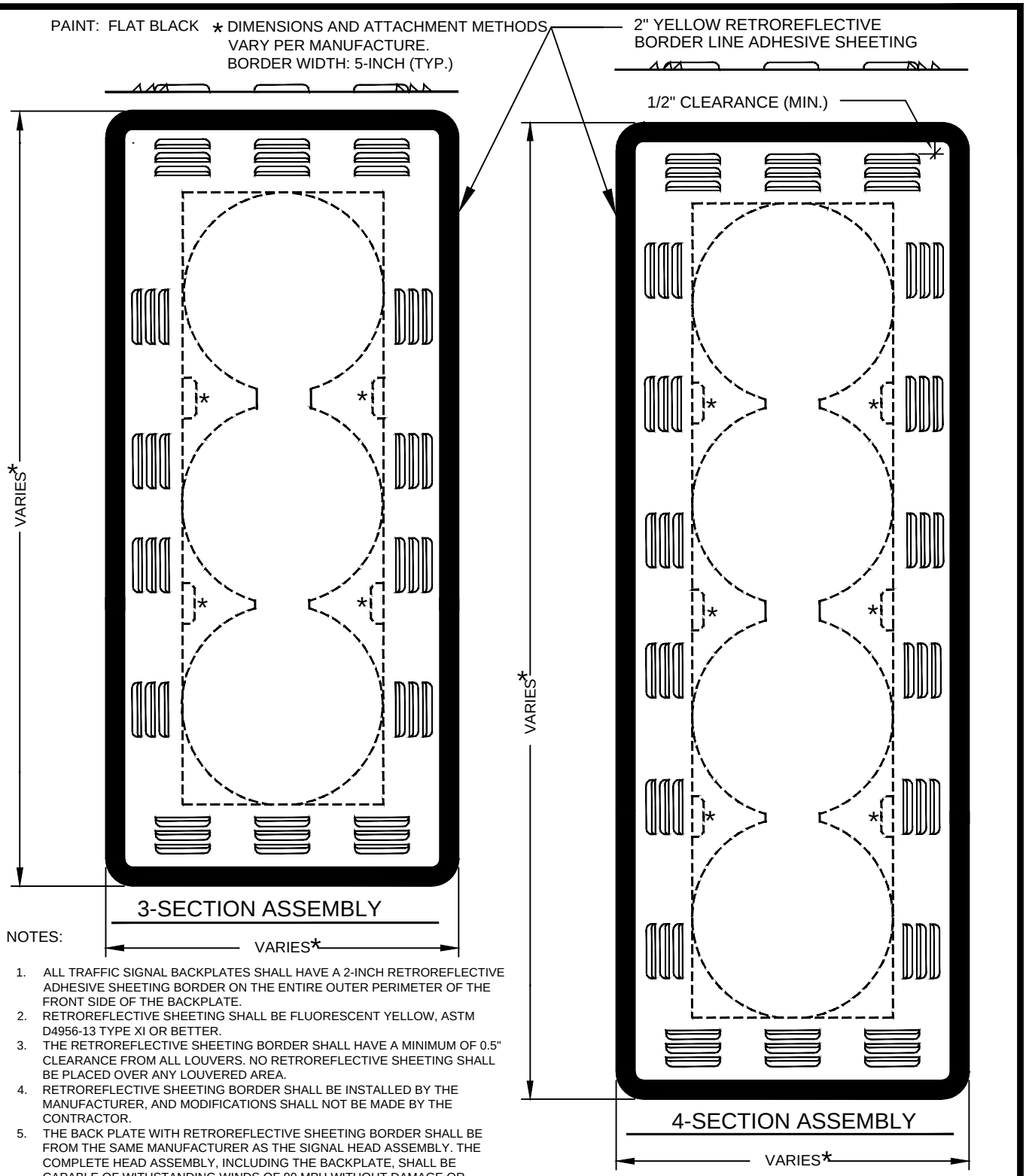
NOTES:

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.

AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	LOUVERED BACKPLATE FOR MAST ARM MOUNTED SIGNAL
	DATE 07-01-17 / DWG. NO. 840

Effective 8/10/2023 to 8/07/2024



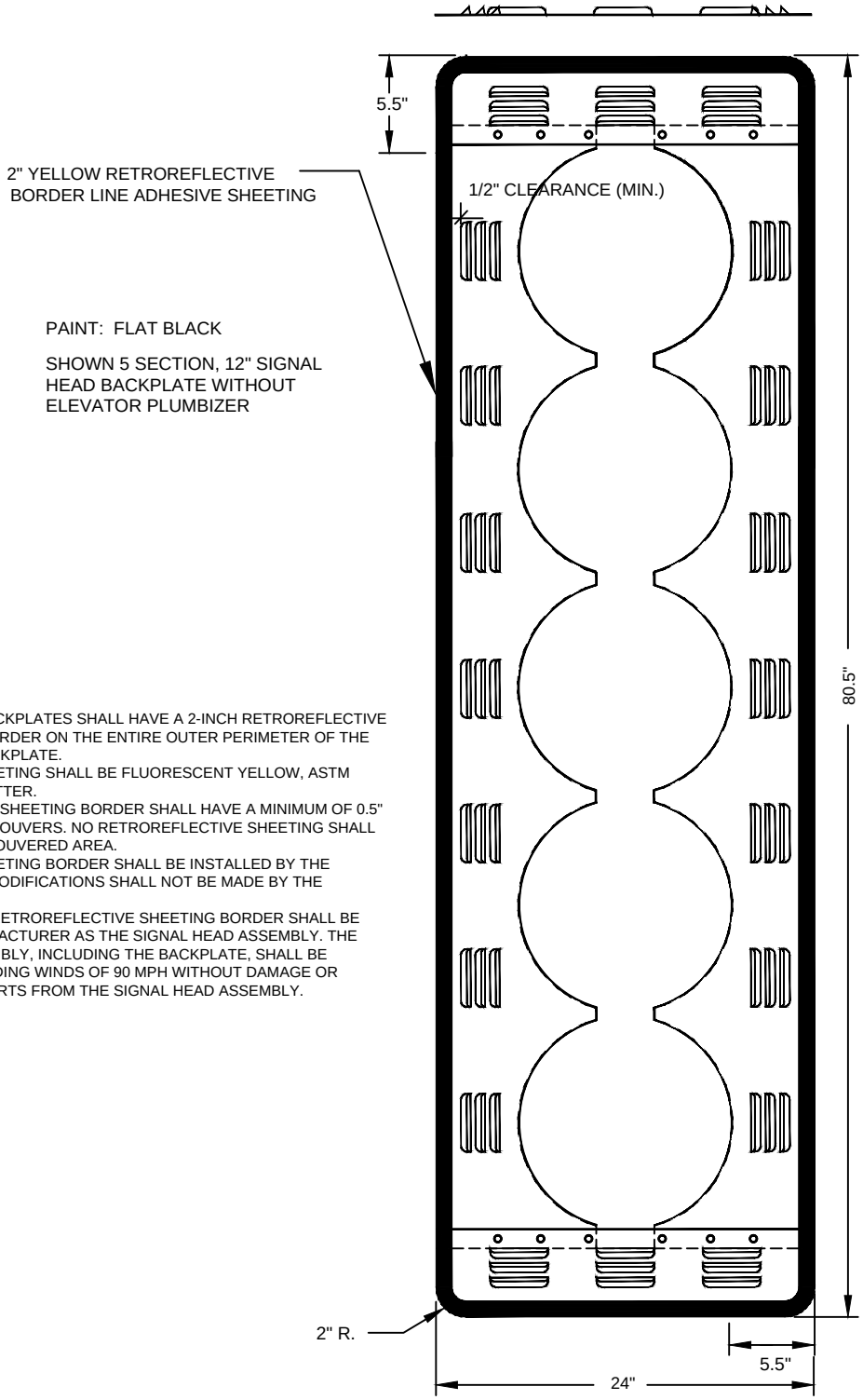
NOTES:

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 POLE MOUNTED SIGNAL
	DATE 07-01-17 / DWG. NO. 841

Effective 8/10/2023 to 8/07/2024



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

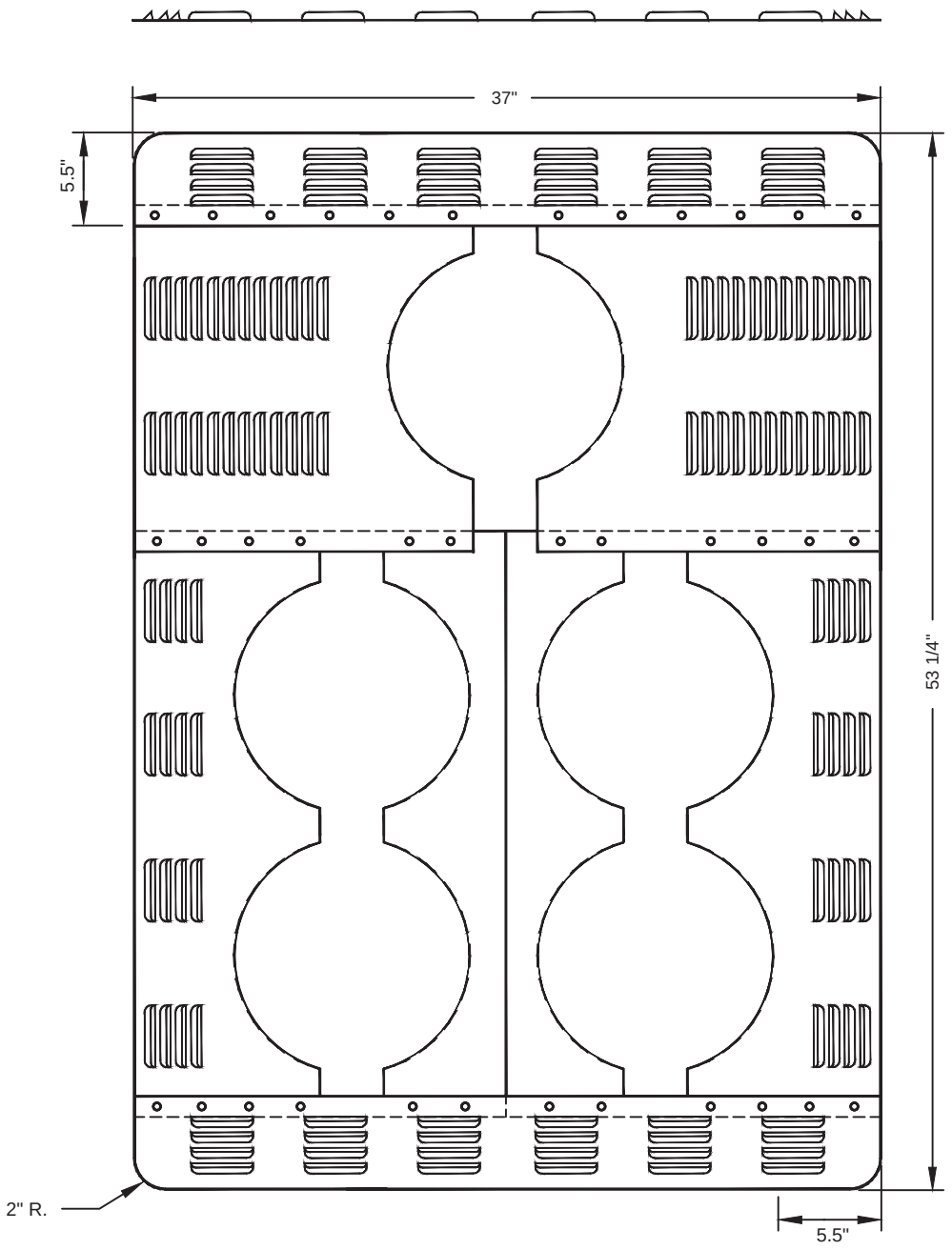
SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

LOUVERED BACKPLATE FOR 5 SECTION SIGNAL HEAD

DATE 07-01-17	DWG. NO. 842	SHEET 1 OF 2

Effective 8/10/2023 to 8/07/2024



PAINT: FLAT BLACK

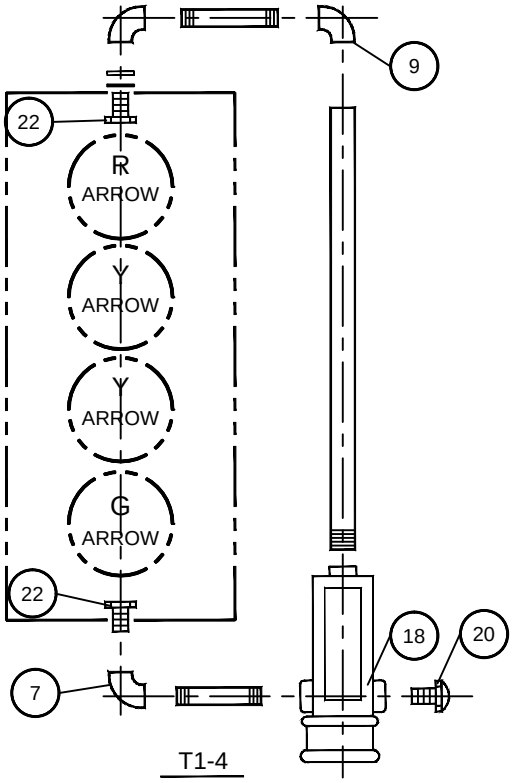
SHOWN 5 SECTION, 12" SIGNAL
HEAD BACKPLATE WITH
ELEVATOR PLUMBIZER

REFER TO DRAWING NO. 863

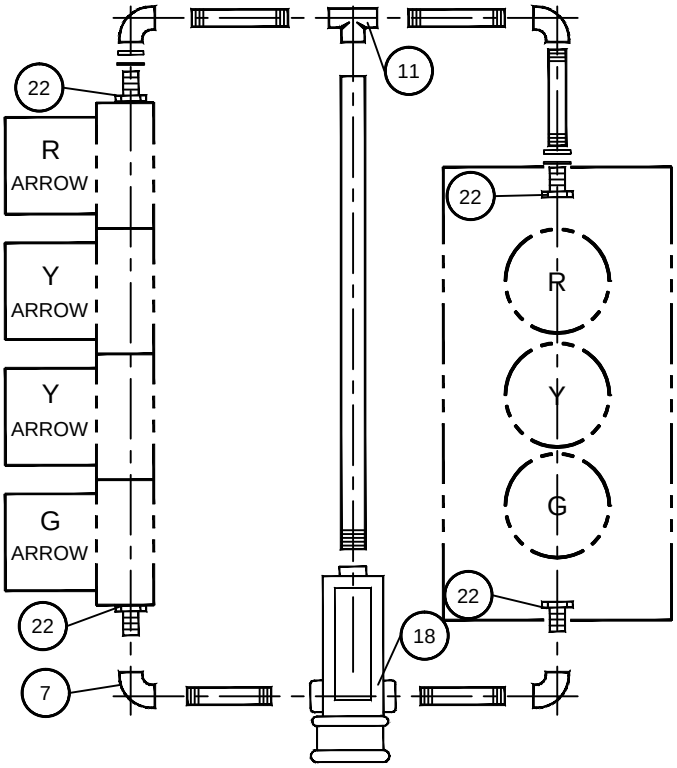
AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	LOUVERED BACKPLATE FOR 5 SECTION SIGNAL HEAD
	DATE / DWG. NO. 842 / SHEET 2 OF 2

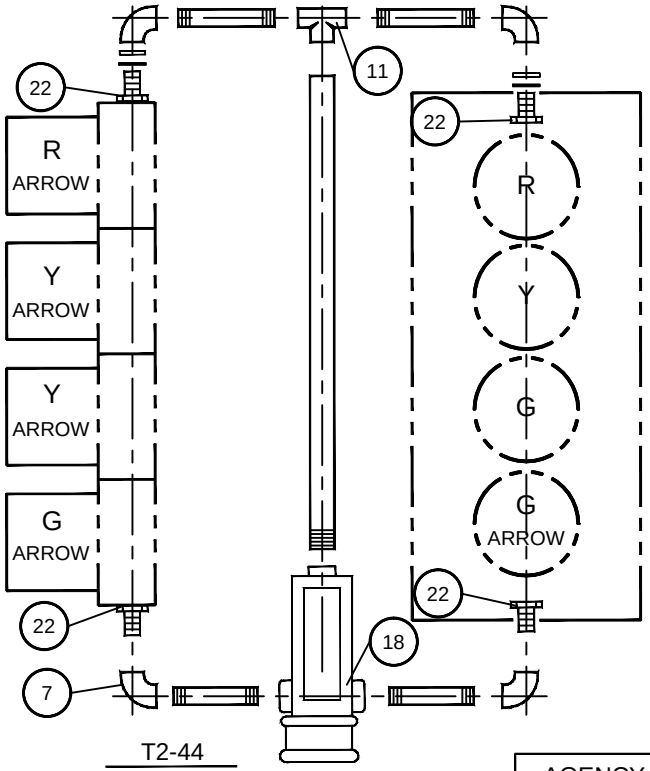
Effective 8/10/2023 to 8/07/2024



T1-4



T2-43



T2-44

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

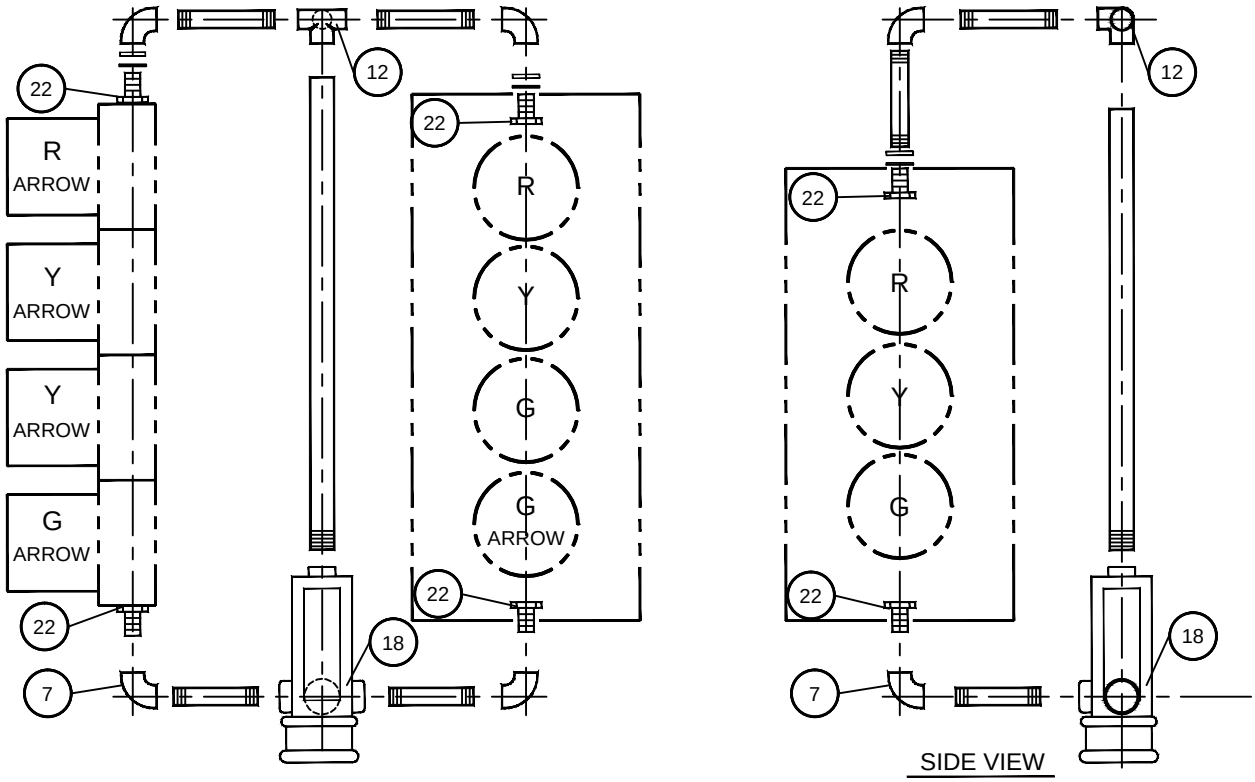
SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

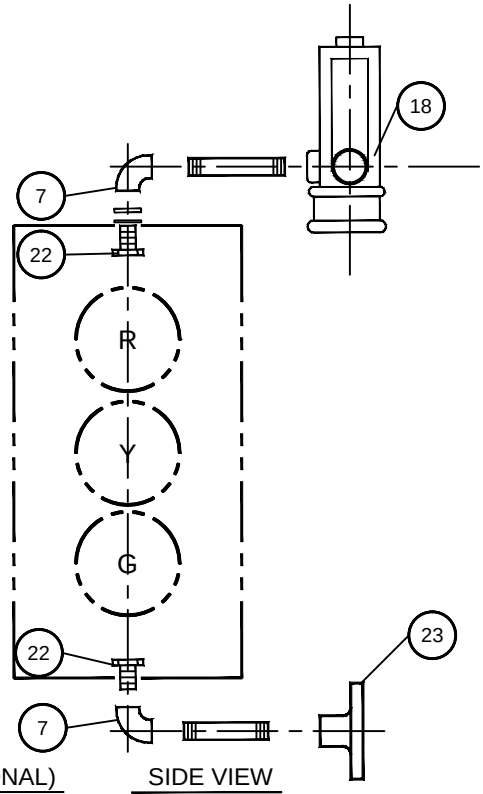
SIGNAL ASSEMBLIES
POST TOP MOUNT

DATE 07-01-14	DWG. NO. 843	SHEET 1 OF 2

Effective 8/10/2023 to 8/07/2024



T3-443



T3-443B (OPTIONAL) SIDE VIEW

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

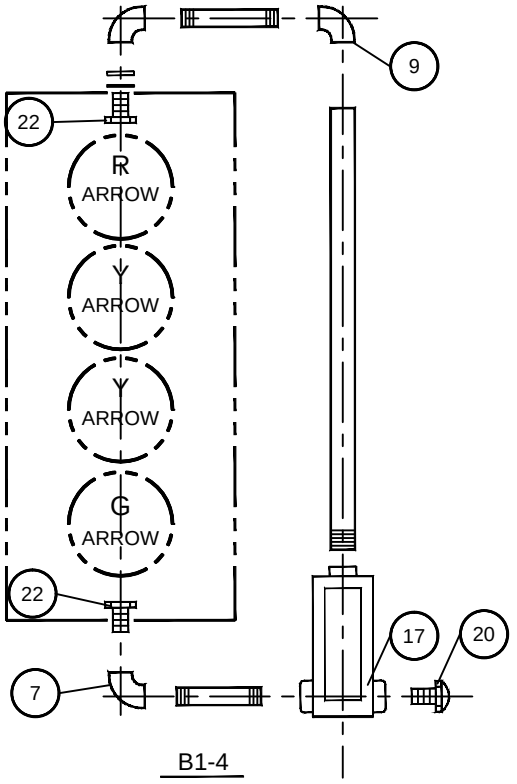
SPECIFICATION REFERENCE	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

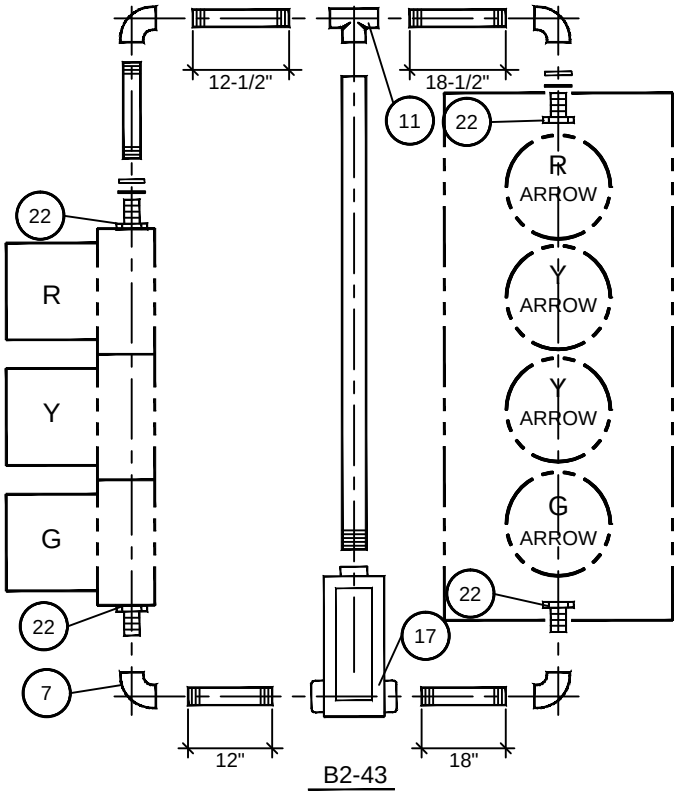
SIGNAL ASSEMBLIES
POST TOP MOUNT

DATE 07-01-14	DWG. NO. 843	SHEET 2 OF 2

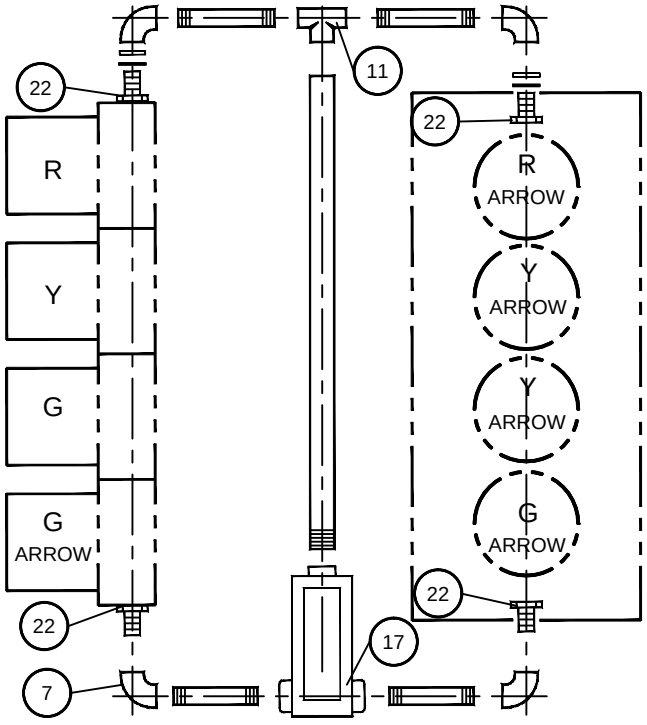
Effective 8/10/2023 to 8/07/2024



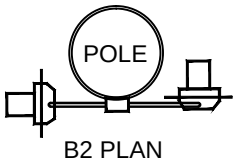
B1-4



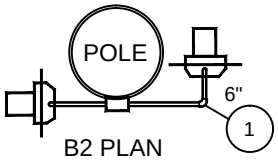
B2-43



B2-44



B2 PLAN
OPTION A



B2 PLAN
OPTION B

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

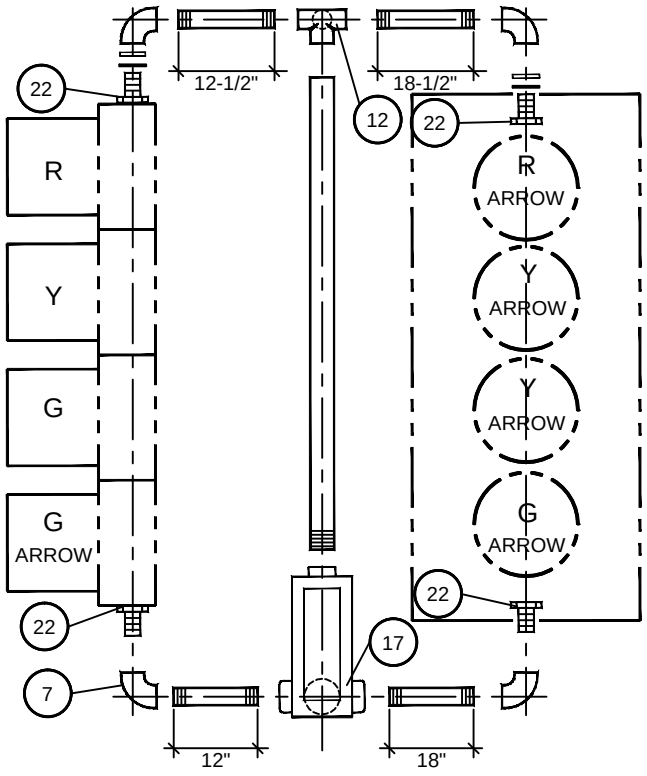
SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

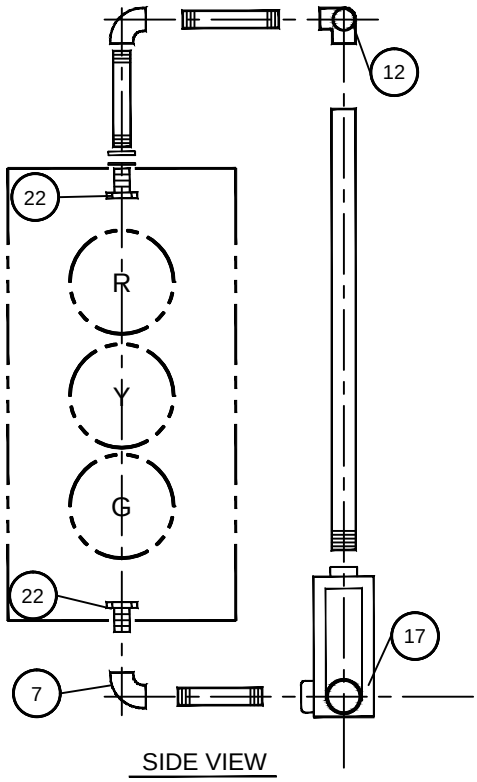
SIGNAL ASSEMBLIES
BRACKET MOUNT

DATE 07-01-14	DWG. NO. 844	SHEET 1 OF 2

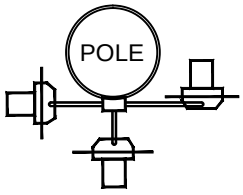
Effective 8/10/2023 to 8/07/2024



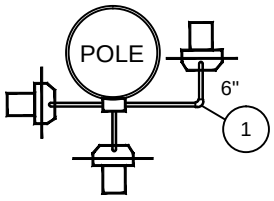
B3-443



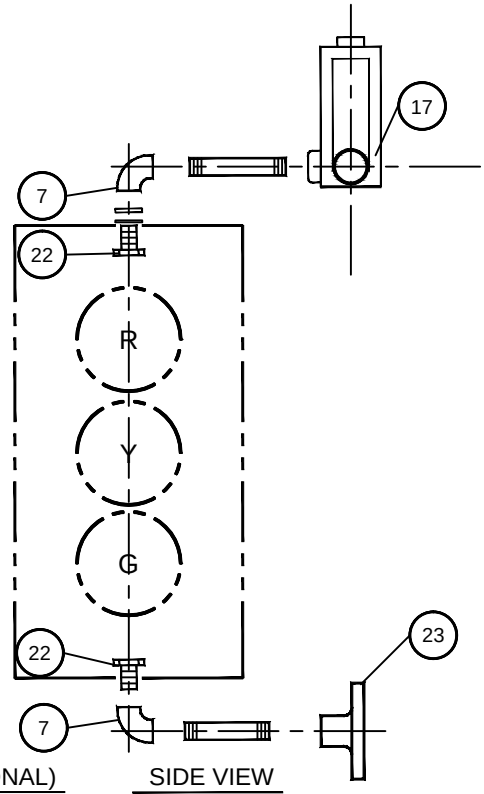
SIDE VIEW



B3 PLAN
OPTION A



B3 PLAN
OPTION B



B3-443L (OPTIONAL)

SIDE VIEW

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 2 OF 2

Effective 8/10/2023 to 8/07/2024

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

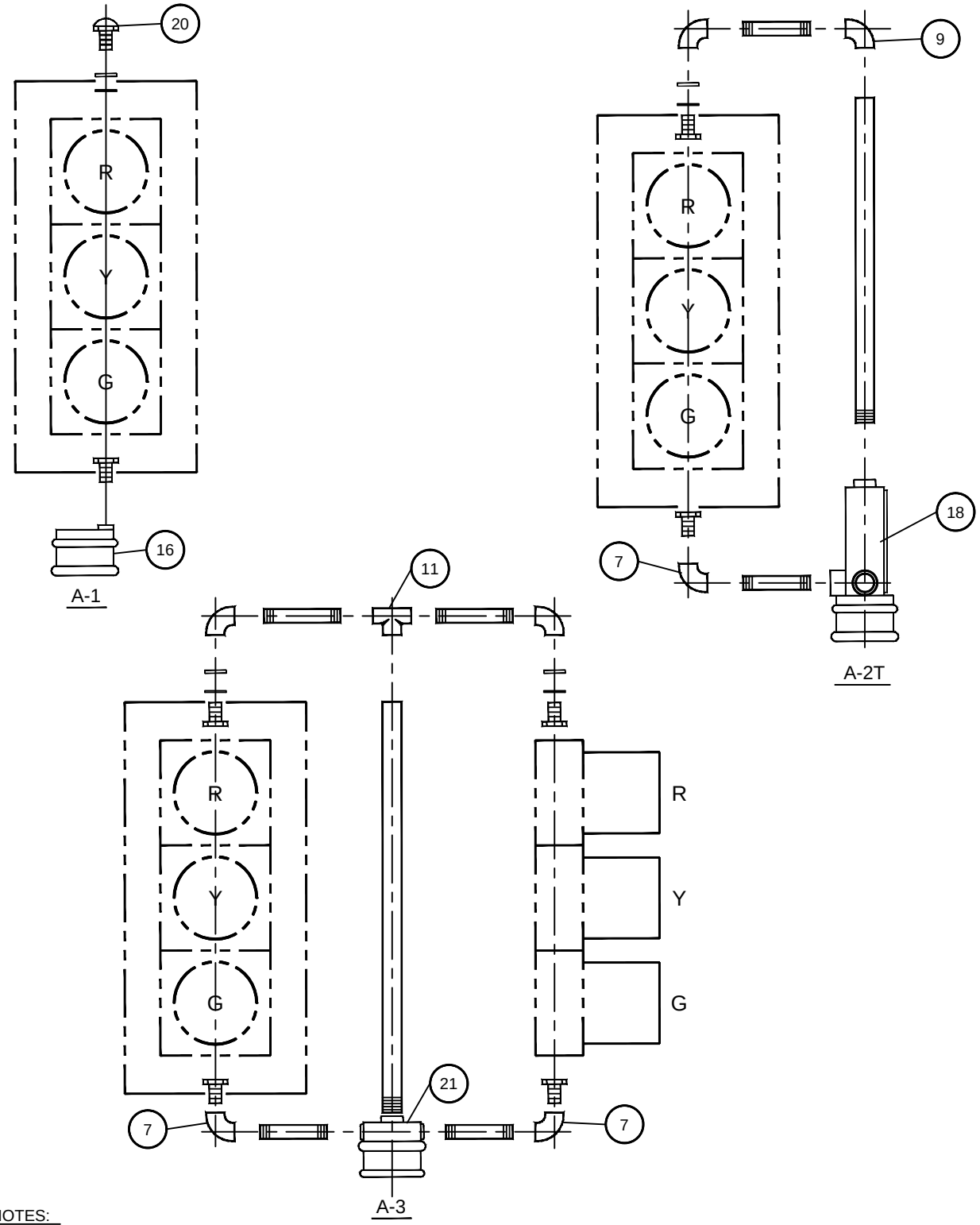
SPECIFICATION REFERENCE	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

BILL OF MATERIALS
SIGNAL ASSEMBLIES

DATE : 10-9-08	DWG. NO. 845	

Effective 8/10/2023 to 8/07/2024



NOTES:

1. ALL SIGNALS ARE 12" NOMINAL (GLASS).
2. FOR ITEMIZED PARTS, SEE DRAWING NO. 845.

AGENCY APPROVED	B	C	H	L	M	N

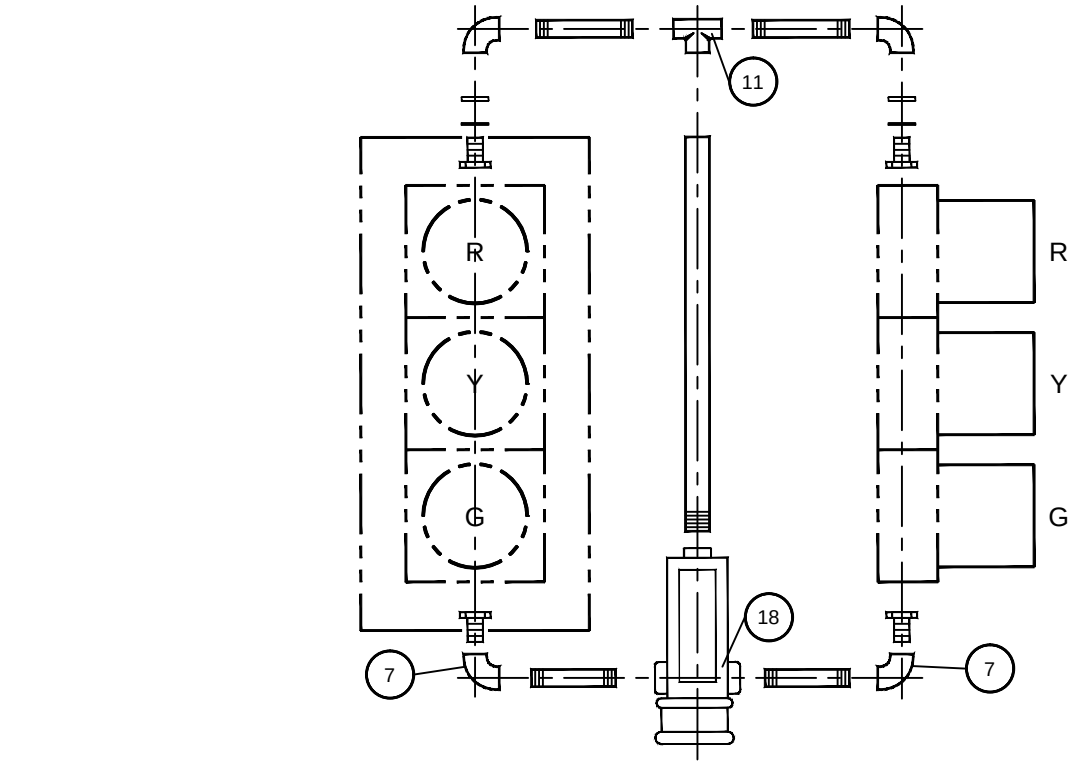
SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

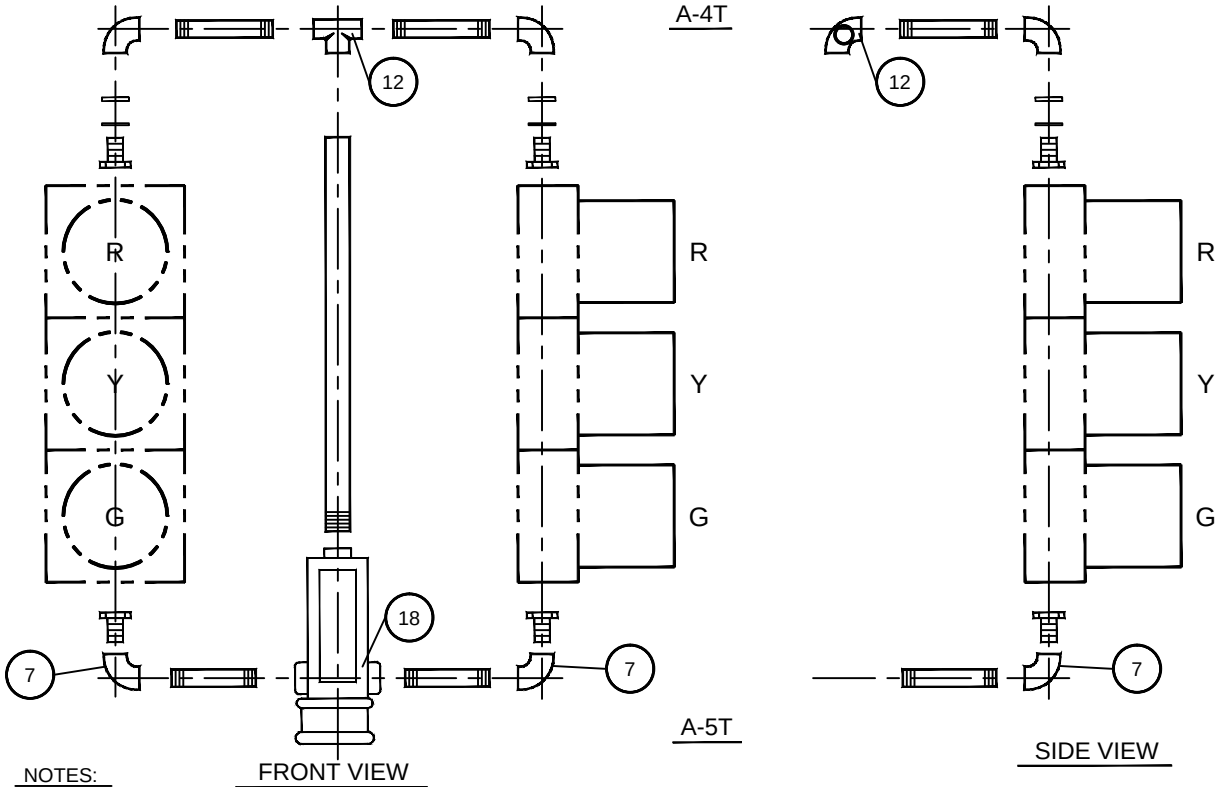
SIGNAL ASSEMBLIES
A-1, A-2T, A-3

DATE	DWG. NO. 846	

Effective 8/10/2023 to 8/07/2024



A-4T



A-5T

FRONT VIEW

SIDE VIEW

NOTES:

1. ALL SIGNALS ARE 12" NOMINAL (GLASS).
2. FOR ITEMIZED PARTS, SEE DRAWING NO. 845.

AGENCY APPROVED	B	C	H	L	M	N

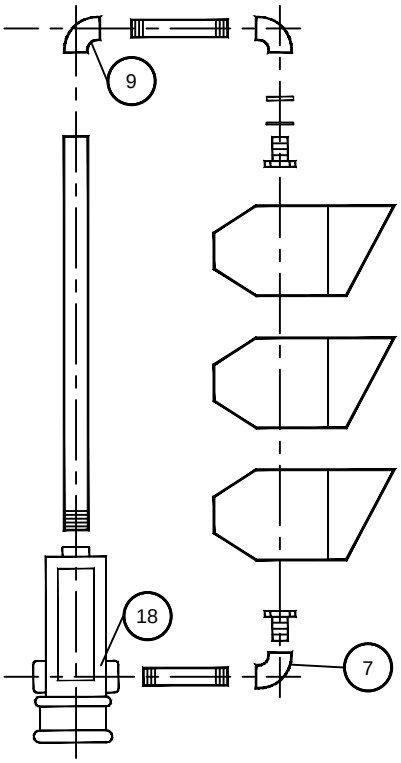
SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SIGNAL ASSEMBLIES
A-4T, A-5T

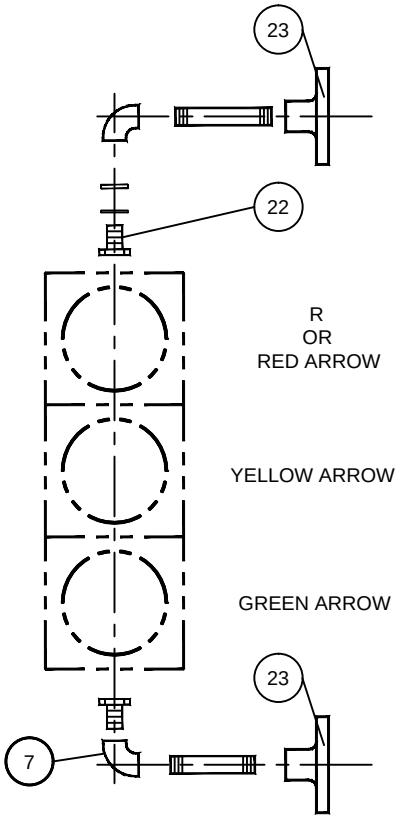
DATE	DWG. NO. 847	

Effective 8/10/2023 to 8/07/2024



PROGRAMMED
VISIBILITY
HEAD

A-6T



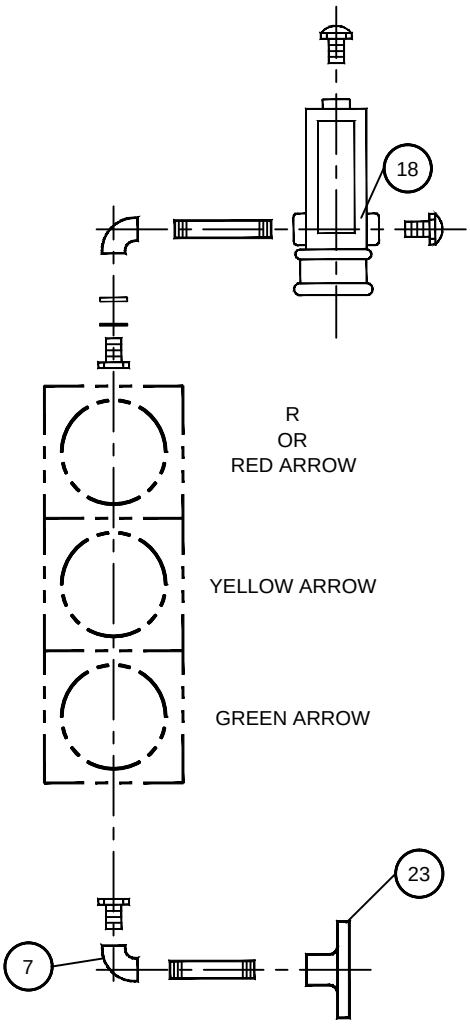
NOTES:

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.

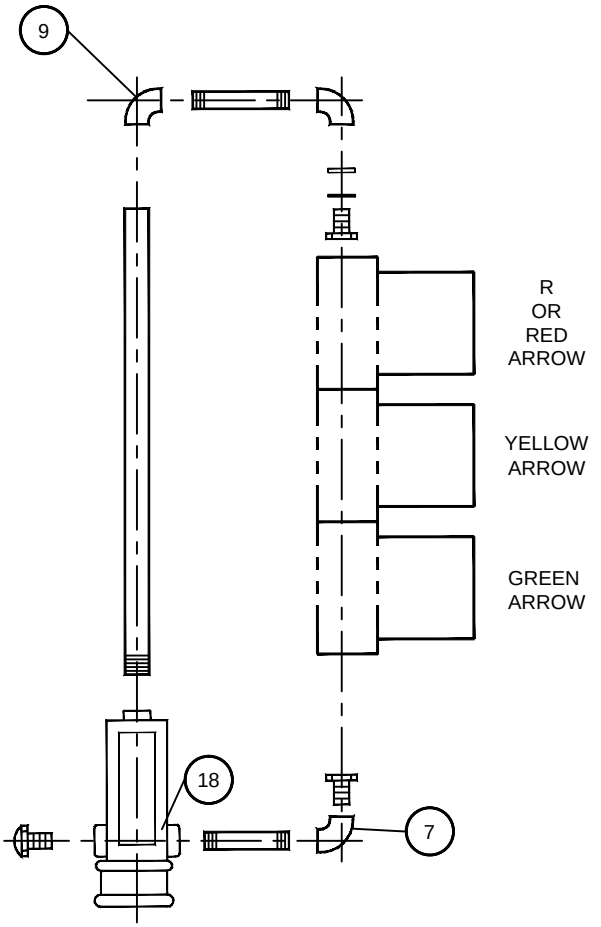
AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	SIGNAL ASSEMBLIES A-6T
	DATE 2-11-93 | DWG. NO. 848

Effective 8/10/2023 to 8/07/2024



A-9T



A-8T

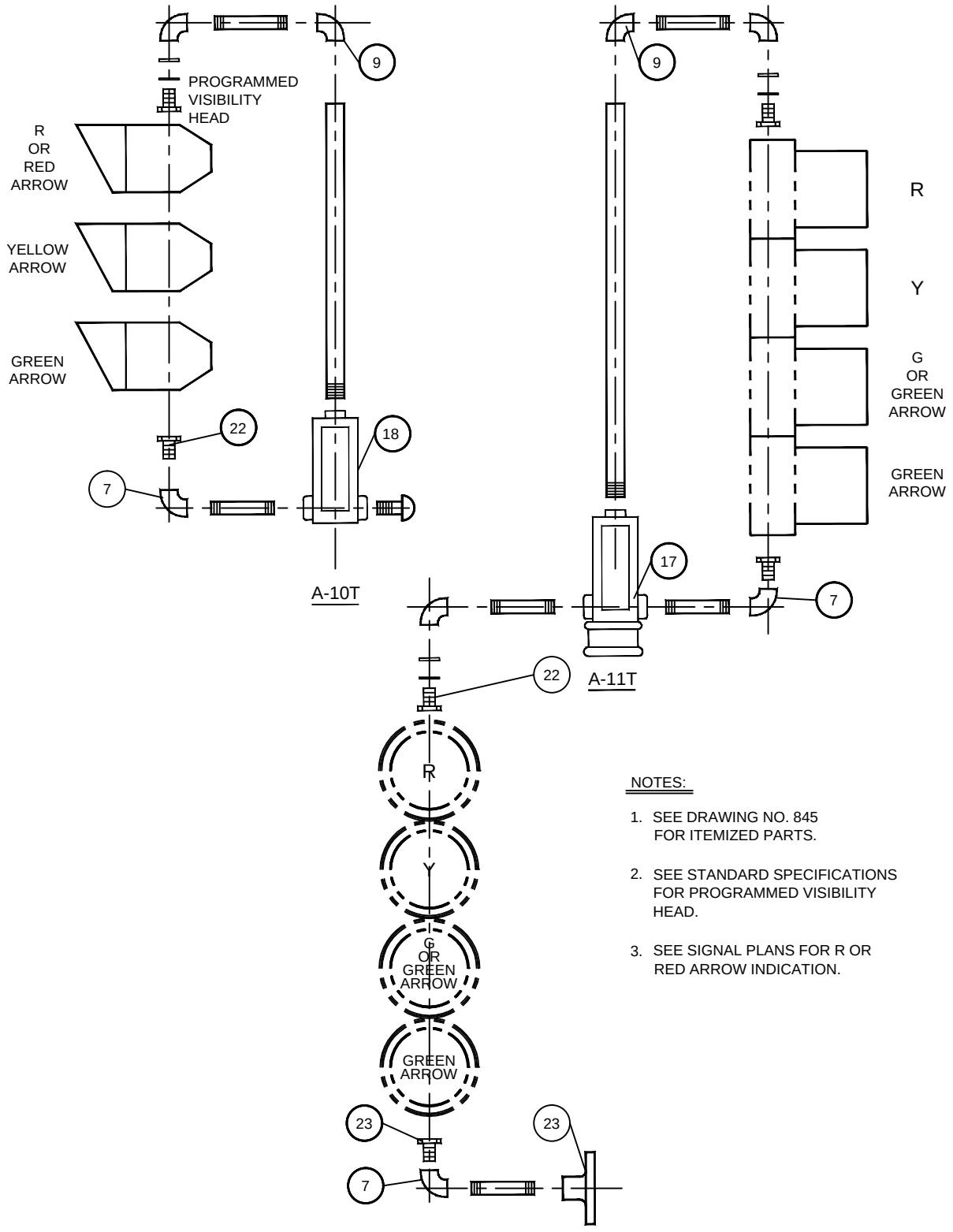
NOTES:

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

Effective 8/10/2023 to 8/07/2024



NOTES:

1. SEE DRAWING NO. 845 FOR ITEMIZED PARTS.
2. SEE STANDARD SPECIFICATIONS FOR PROGRAMMED VISIBILITY HEAD.
3. SEE SIGNAL PLANS FOR R OR RED ARROW INDICATION.

AGENCY APPROVED	B	C	H	L	M	N

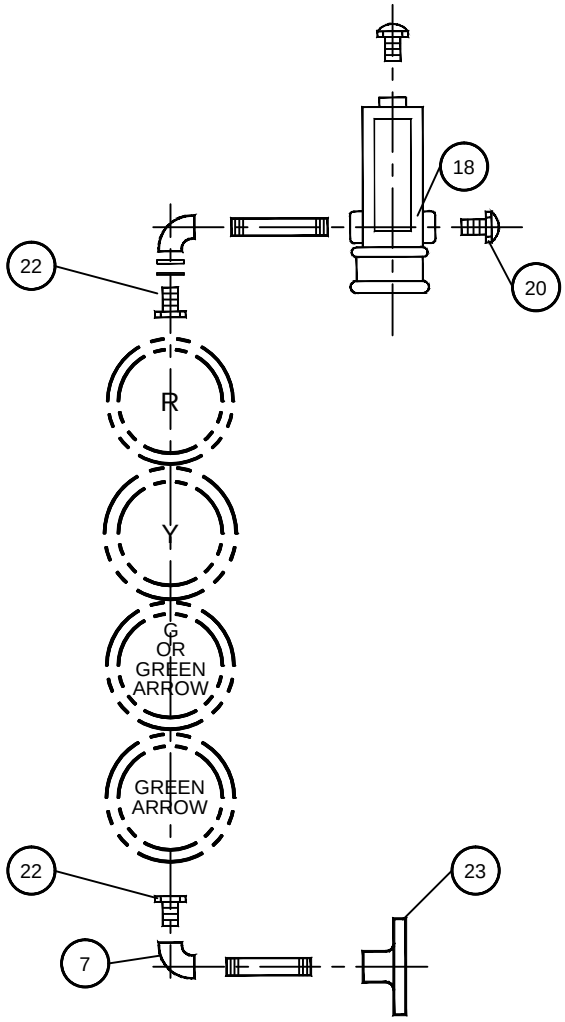
SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

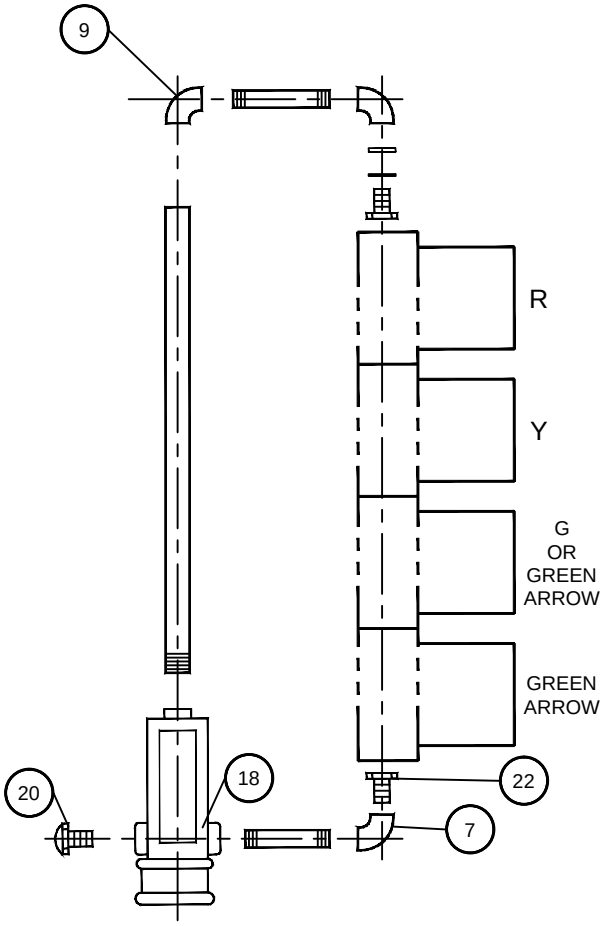
SIGNAL ASSEMBLIES
A-10T, A-11T

DATE 2-11-93	DWG. NO. 850	

Effective 8/10/2023 to 8/07/2024



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

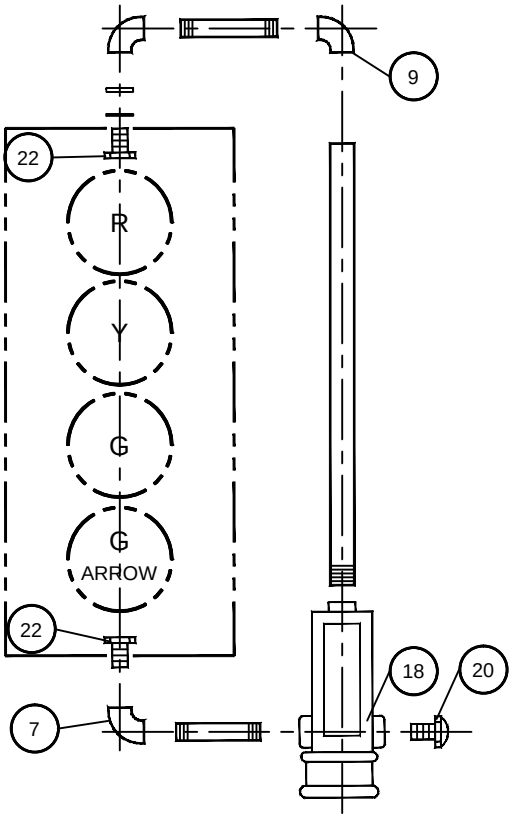
SPECIFICATION REFERENCE	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

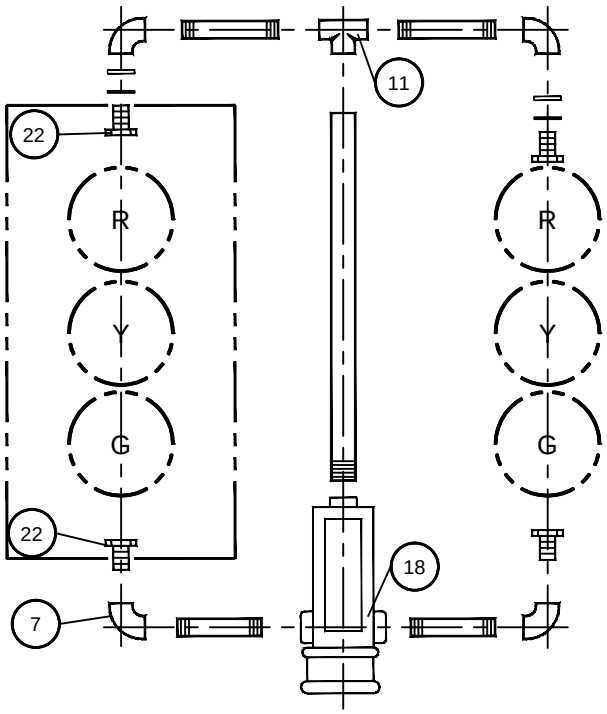
SIGNAL ASSEMBLIES
A-12T, A-13T

DATE 2-11-93	DWG. NO. 851	

Effective 8/10/2023 to 8/07/2024



A-15T



A-14T

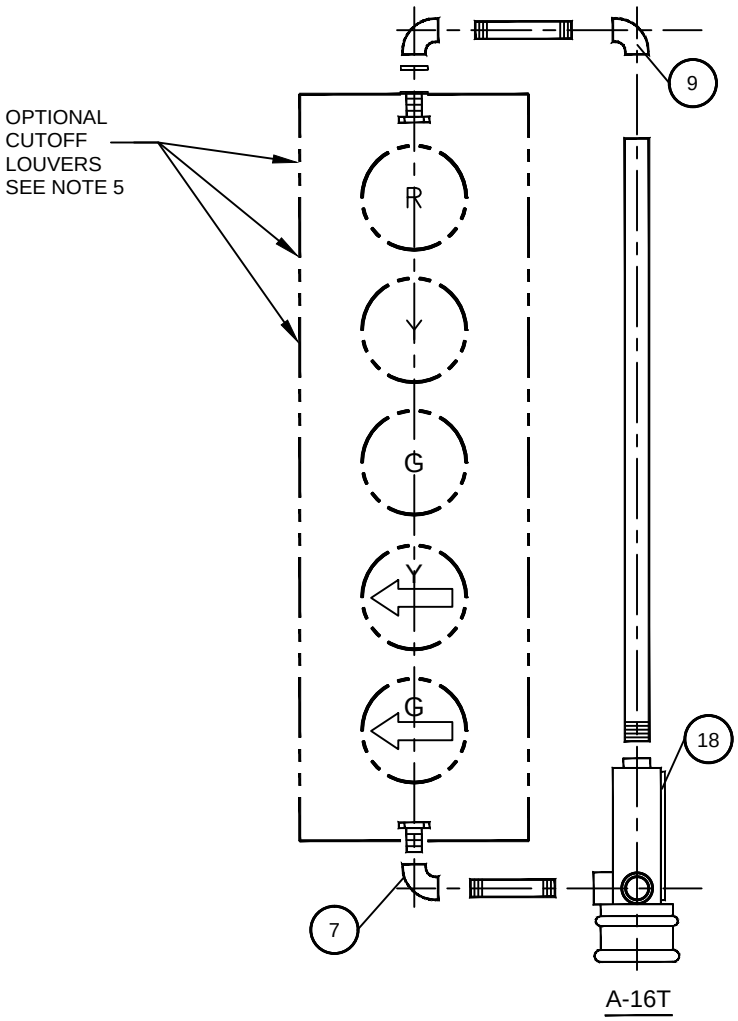
NOTES:

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

Effective 8/10/2023 to 8/07/2024



A-16T

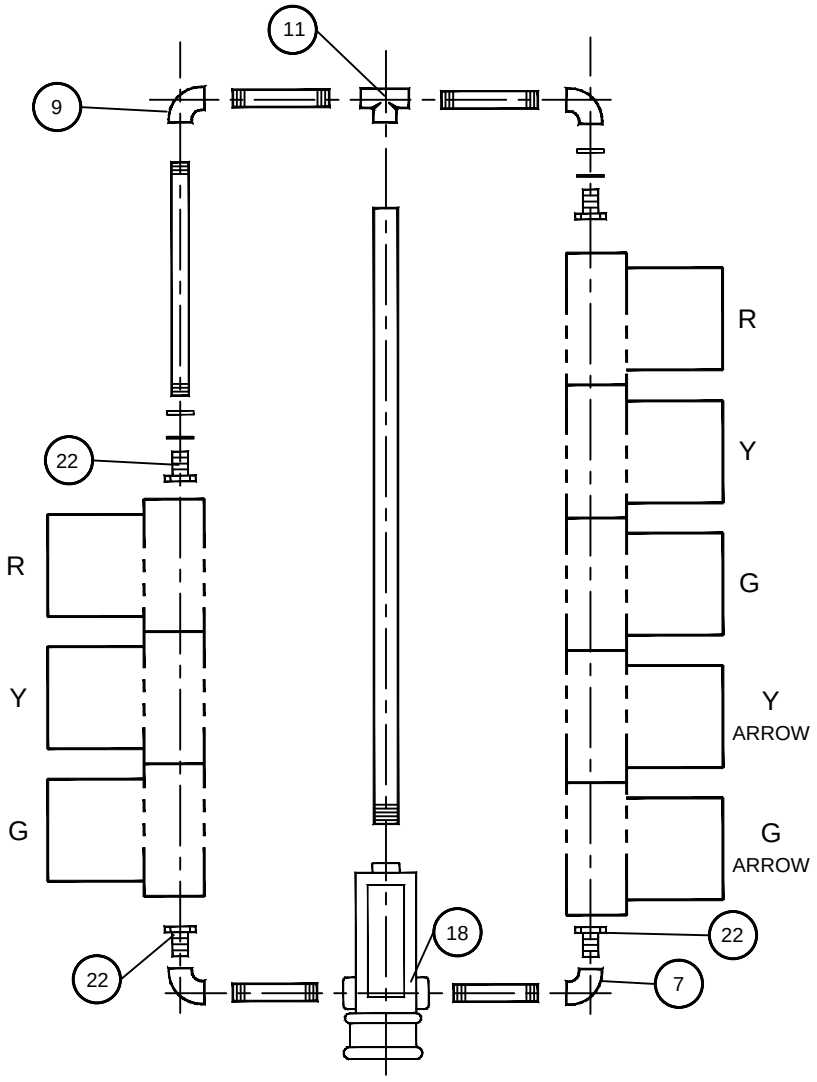
NOTES:

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

Effective 8/10/2023 to 8/07/2024



A-17T

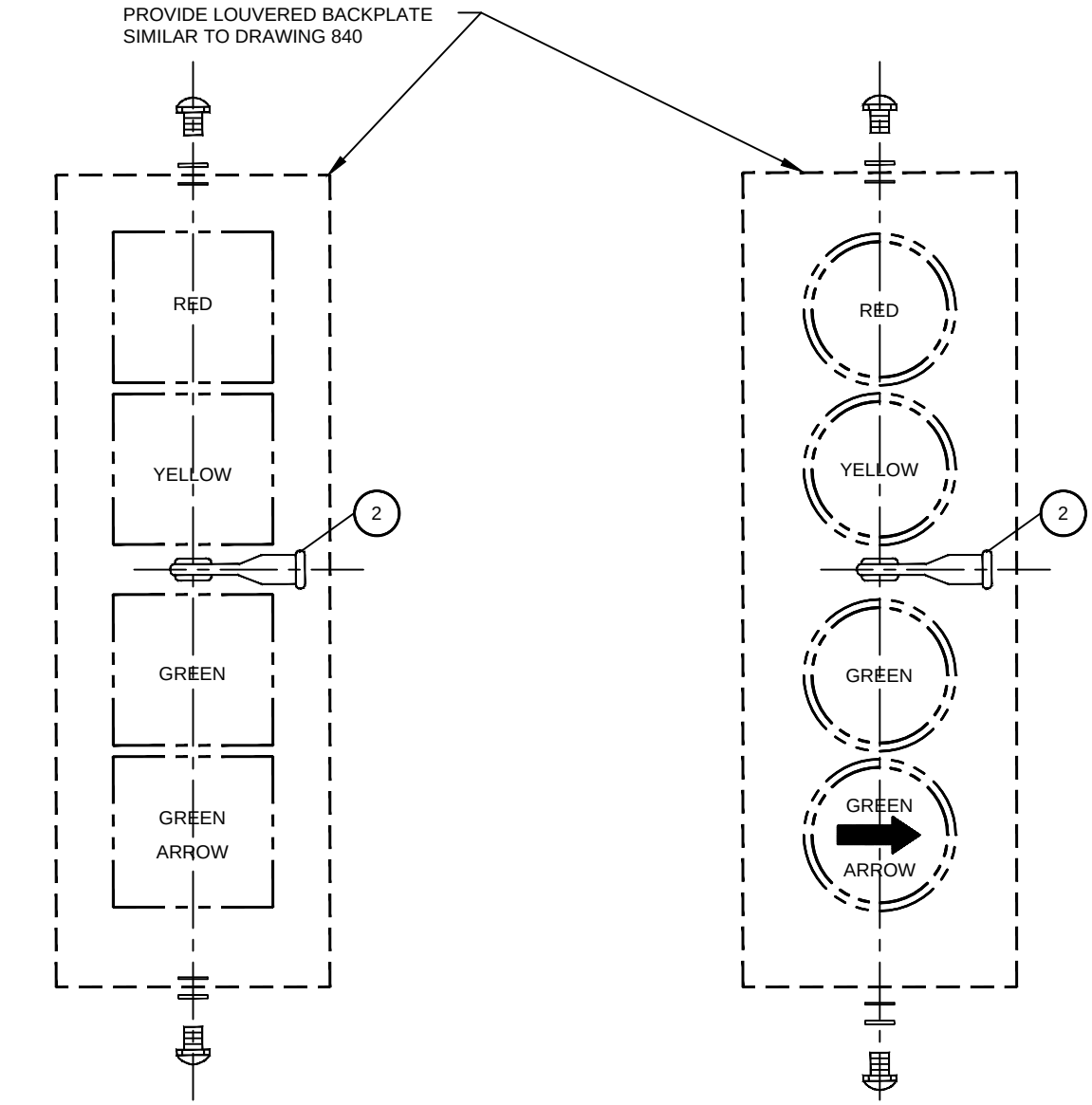
NOTES:

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).

AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	SIGNAL ASSEMBLIES A-17T
	DATE / DWG. NO. 854

Effective 8/10/2023 to 8/07/2024



PROGRAMMED VISIBILITY HEADS
M-3A

STANDARD 12" SIGNAL HEADS
M-2A

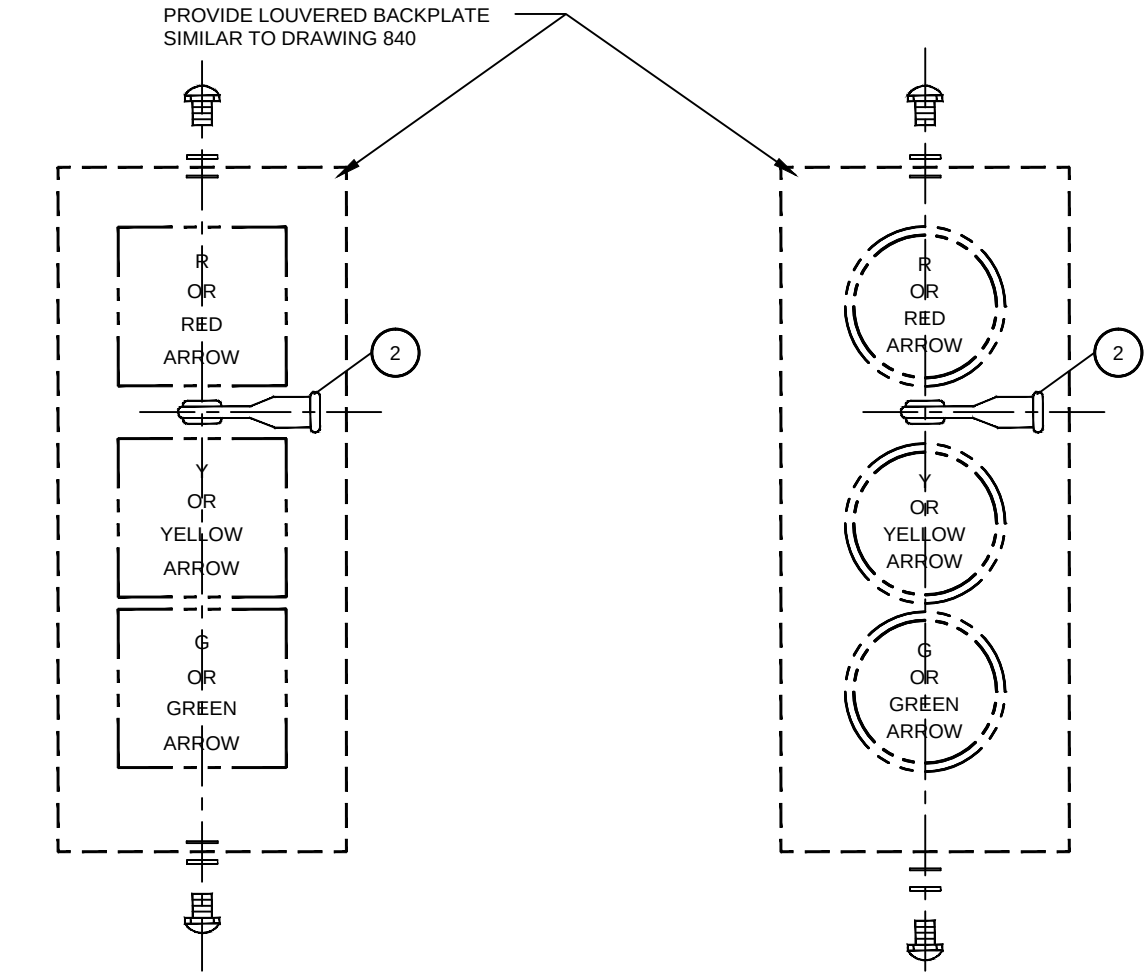
NOTES:

1. ALL SIGNALS ARE 12" NOMINAL (GLASS)
2. FOR ITEMIZED PARTS, SEE DRAWING 845.

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

Effective 8/10/2023 to 8/07/2024



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

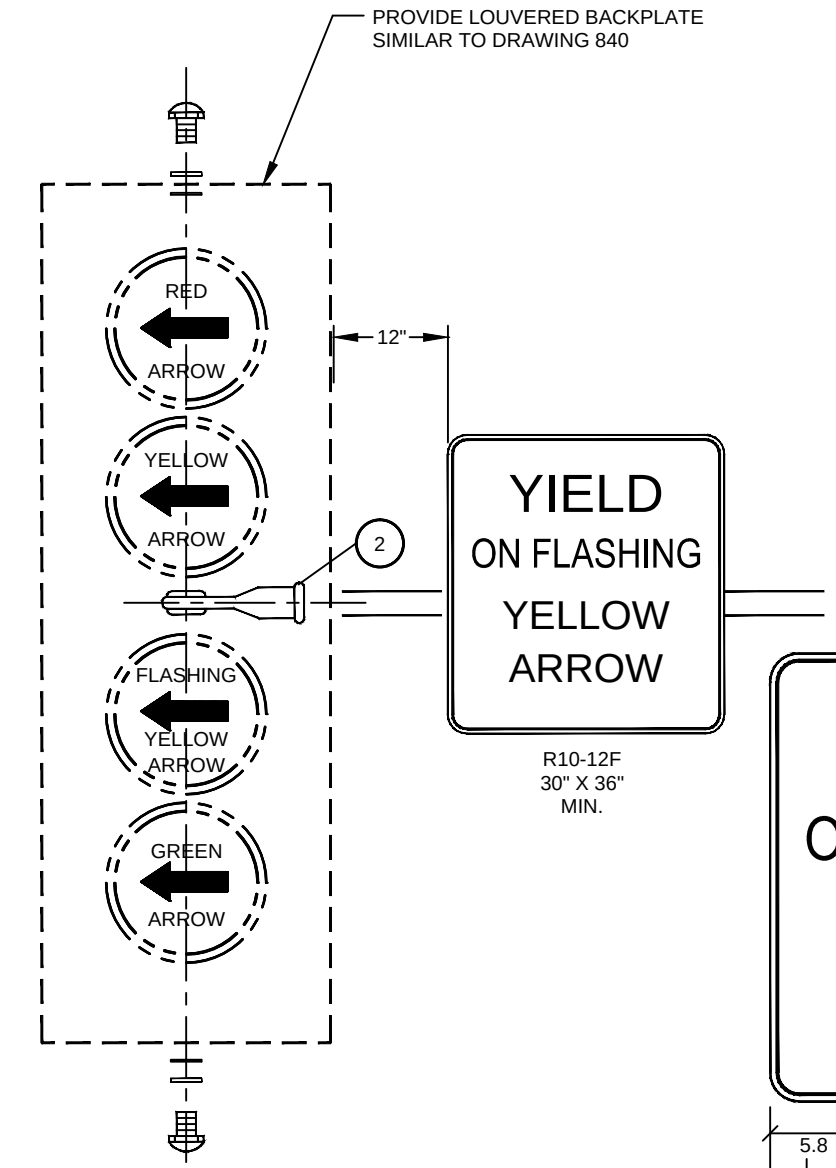
SPECIFICATION REFERENCE	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

MAST ARM SIGNAL ASSEMBLIES
M-3, M-2

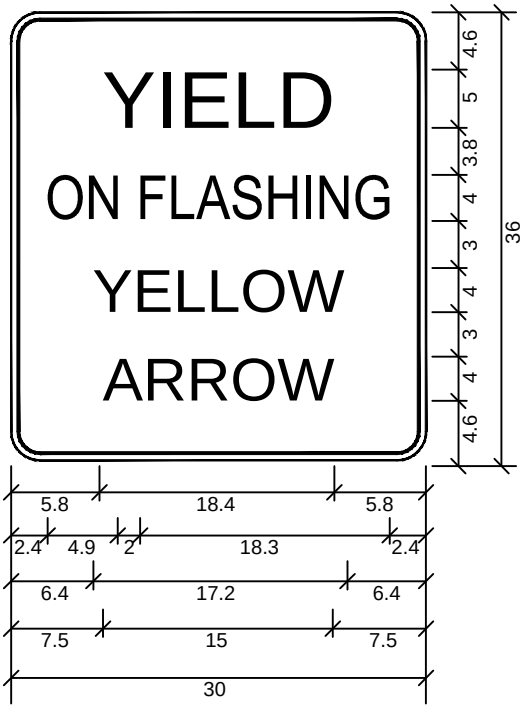
DATE 2-11-93	DWG. NO. 856	

Effective 8/10/2023 to 8/07/2024



STANDARD 12" SIGNAL HEADS

M-4



1.9" Radius, 0.8" Border, 0.5" Indent,
Black on White
[YIELD] D;
[ON FLASHING] C 50% spacing
[YELLOW] C; [ARROW] C;

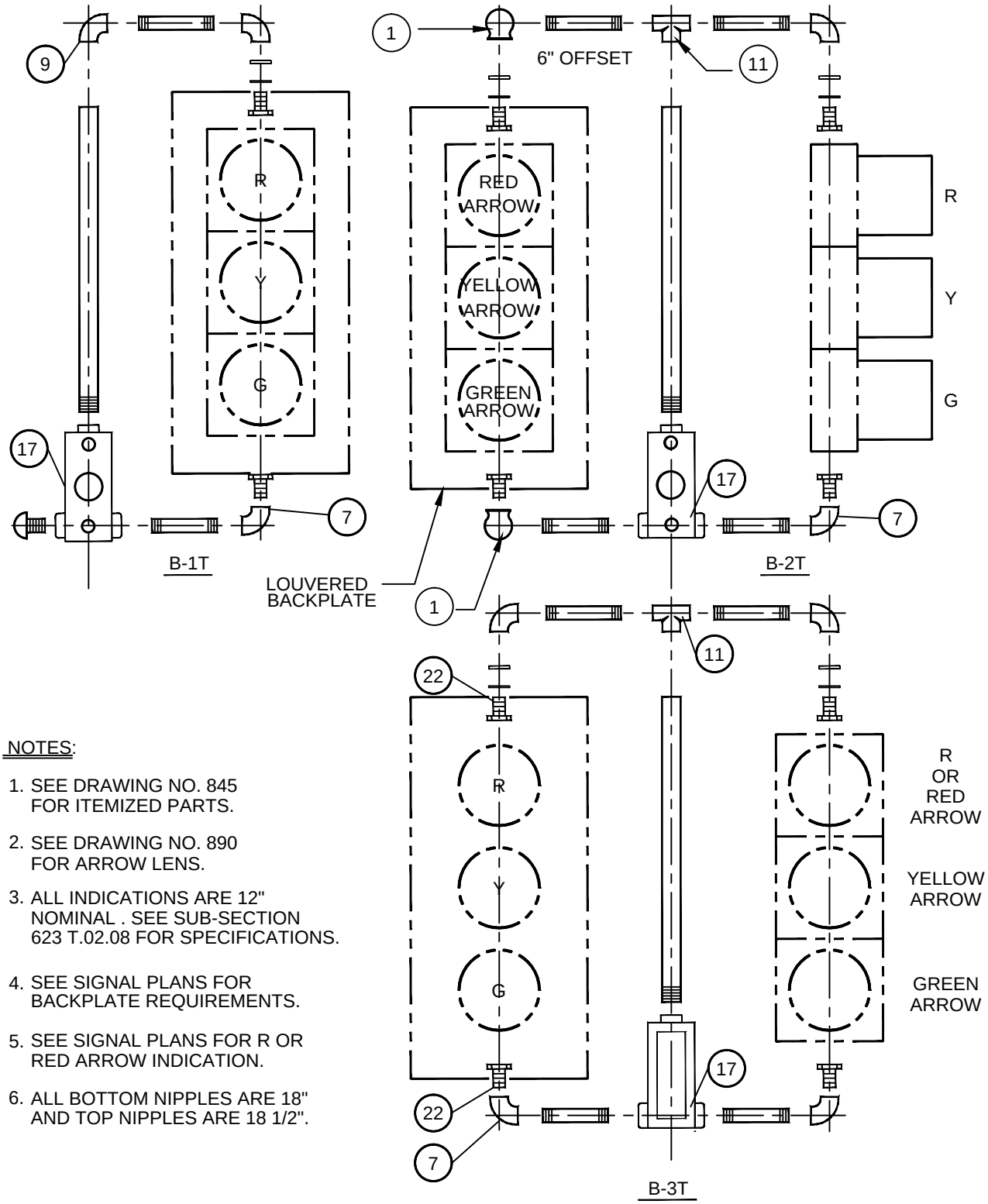
NOTES:

1. ALL SIGNALS ARE 12" NOMINAL.
2. FOR ITEMIZED PARTS, SEE DRAWING 845.

AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	PROTECTED PERMISSIVE MAST ARM SIGNAL ASSEMBLY TYPE M-4
	DATE 07-01-14 DWG. NO. 857

Effective 8/10/2023 to 8/07/2024



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".

AGENCY APPROVED	B	C	H	L	M	N

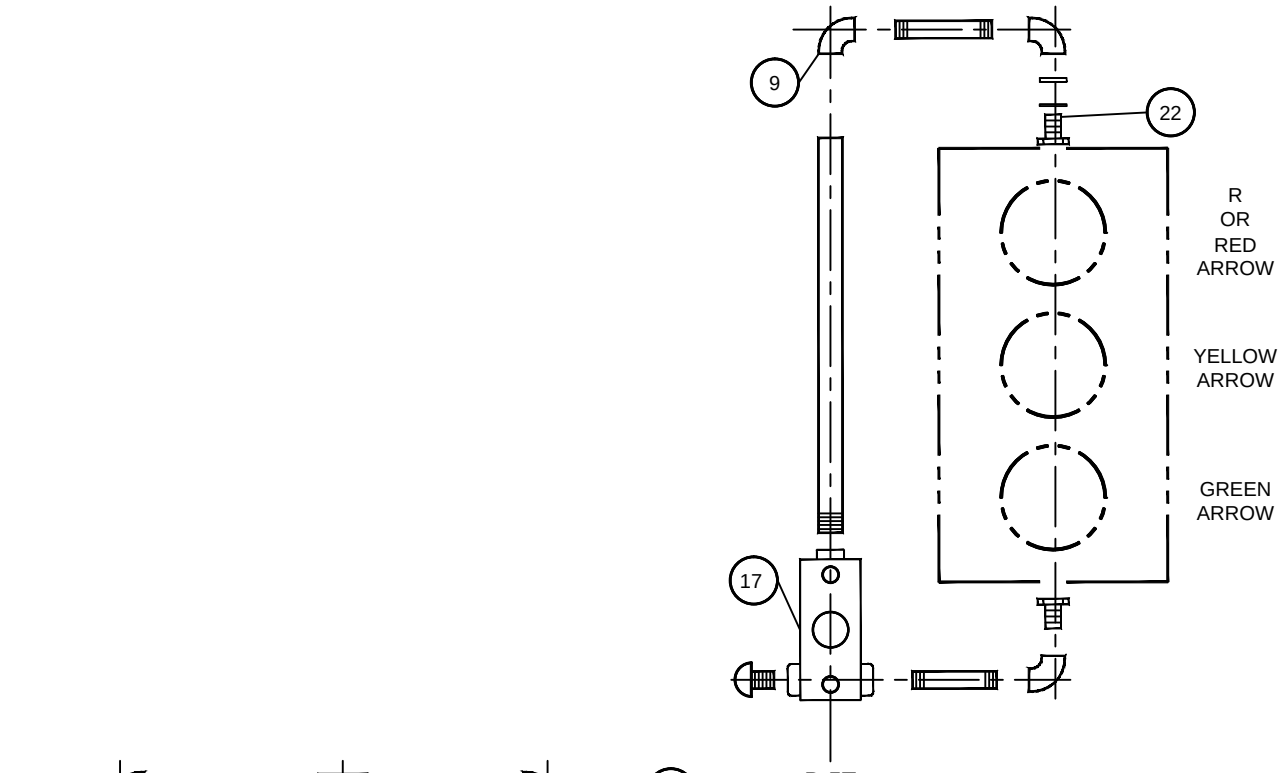
SPECIFICATION REFERENCE	

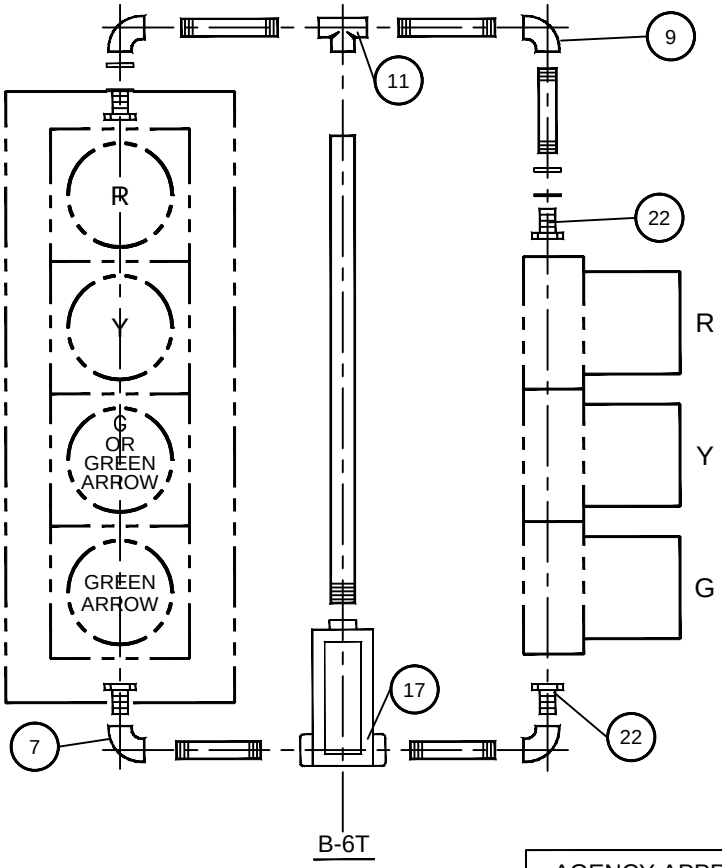
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SIGNAL ASSEMBLIES
B-1T, B-2T, B-3T

DATE:10-9-08	DWG. NO. 858	

Effective 8/10/2023 to 8/07/2024





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

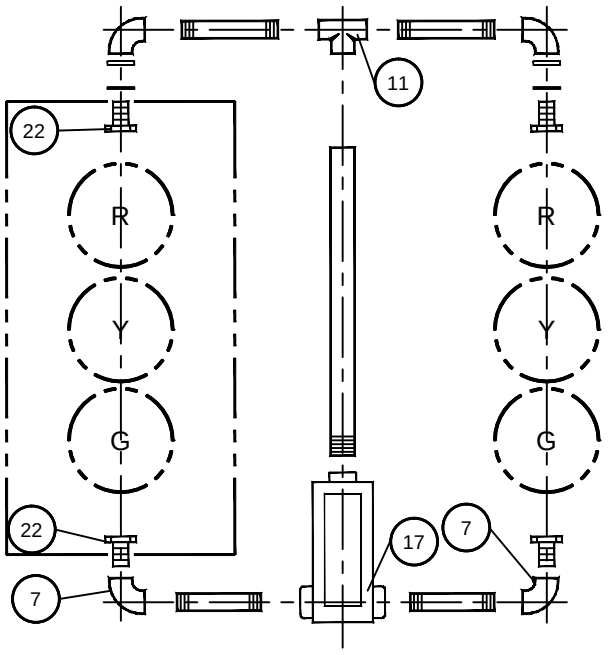
SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

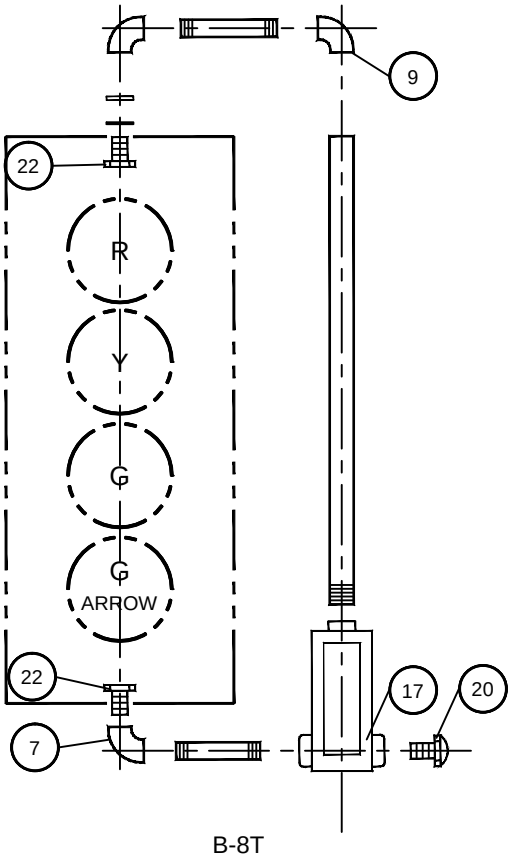
SIGNAL ASSEMBLIES
B-5T, B-6T

DATE 2-11-93	DWG. NO. 859	

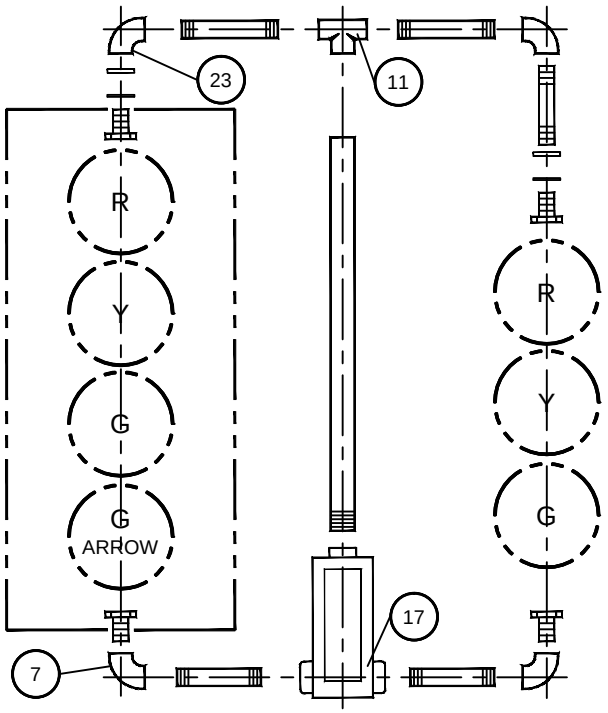
Effective 8/10/2023 to 8/07/2024



B-7T



B-8T



B-9T

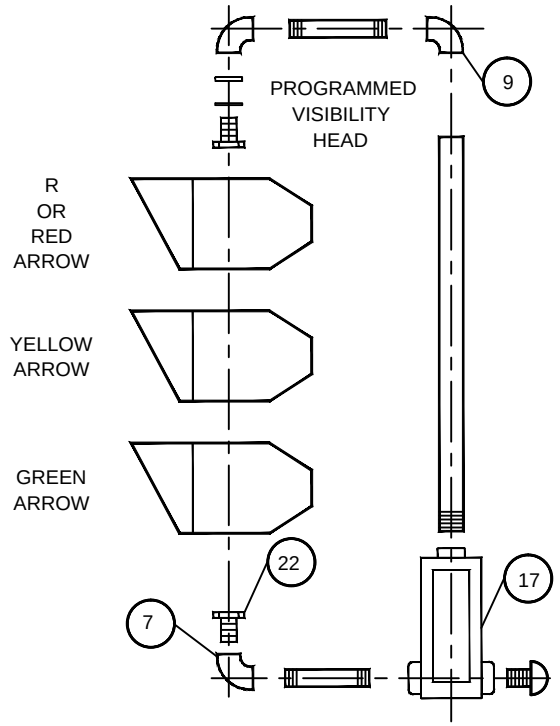
NOTES:

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

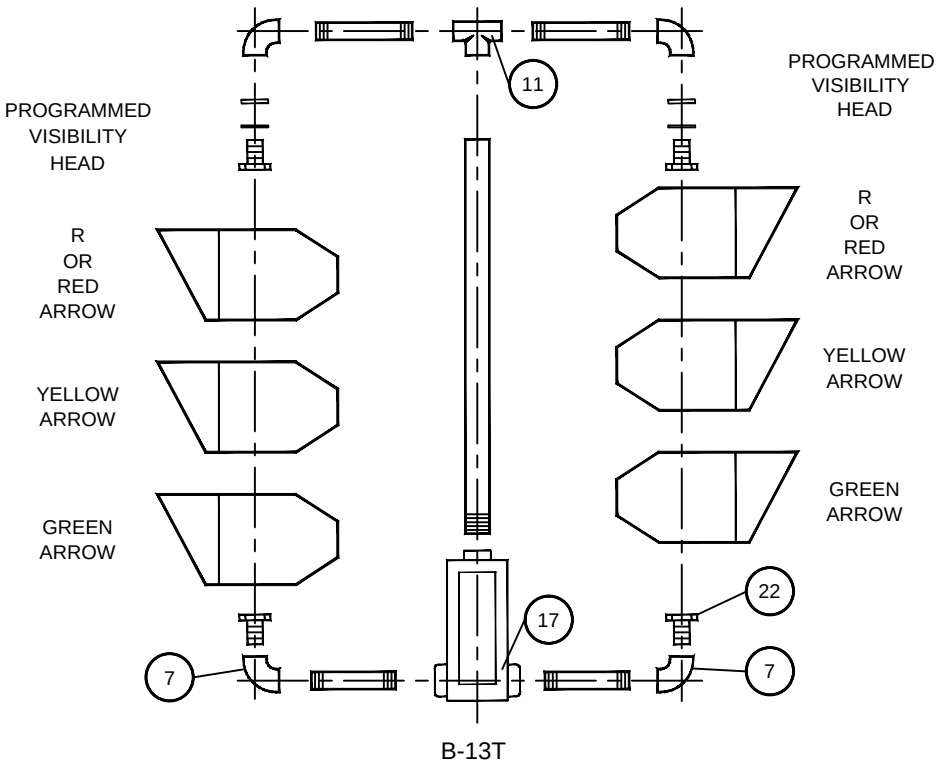
Effective 8/10/2023 to 8/07/2024



B-12T

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".

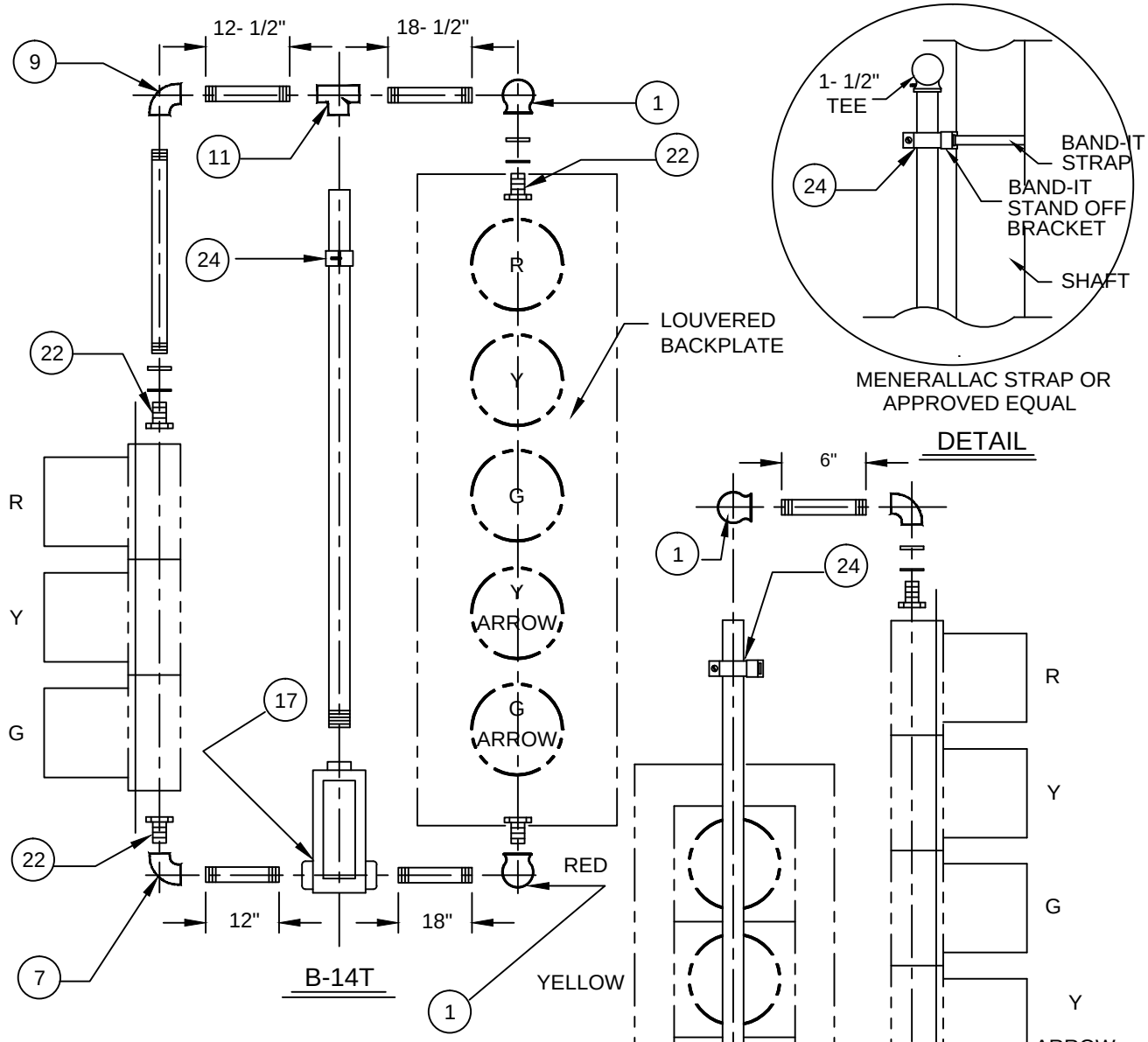


B-13T

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

Effective 8/10/2023 to 8/07/2024



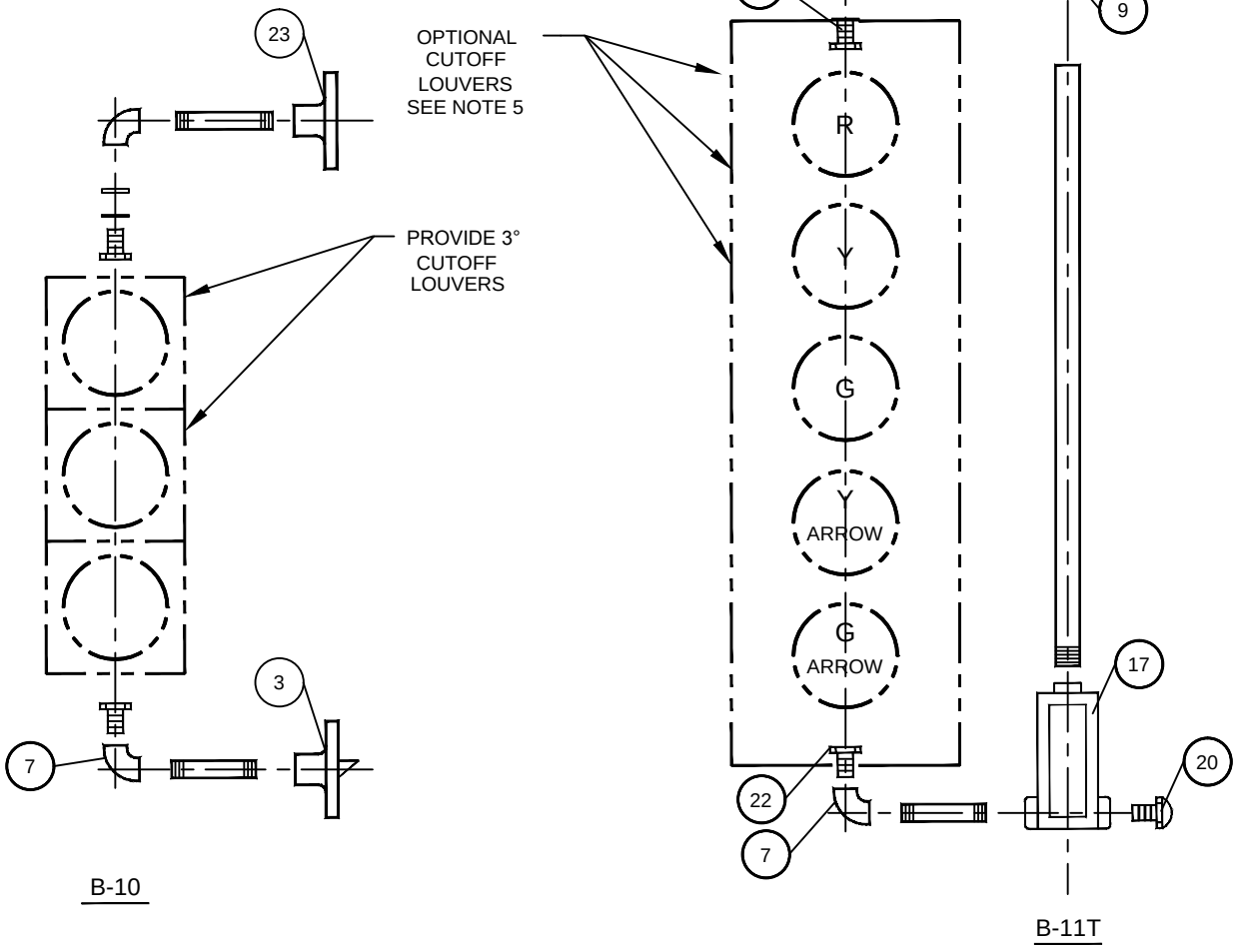
NOTES:

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. SEE SUB-SECTION 623 T.02.08 FOR SPECIFICATIONS.
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-14T
	DATE : 10-9-08 / DWG. NO. 863

Effective 8/10/2023 to 8/07/2024



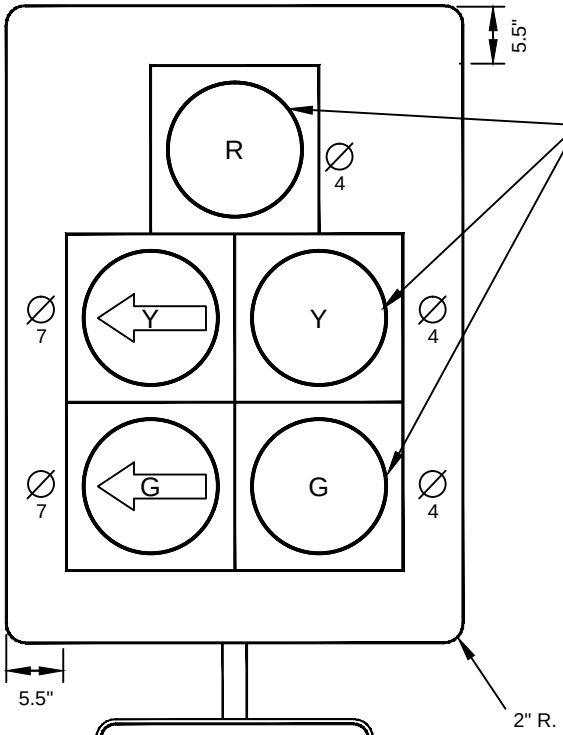
NOTES:

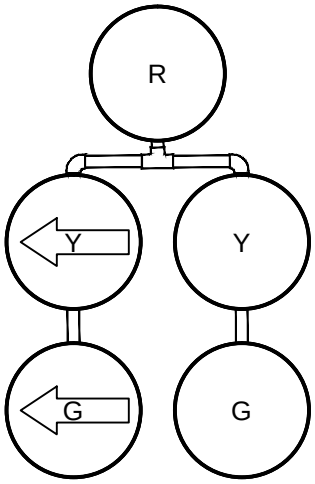
1. ALL SIGNALS ARE 12" NOMINAL (GLASS).
2. FOR ITEMIZED PARTS SEE DRAWING 845.
3. FOR ARROW LENS SEE DRAWING 890.
4. SEE PLANS FOR BACKPLATE REQUIREMENTS.
5. OPTIONAL 3° CUTOFF LOUVERS ON RED, YELLOW AND GREEN BALL INDICATIONS ON 5-SECTION HEADS MAY BE PROVIDED AS DIRECTED BY THE TRAFFIC ENGINEER.

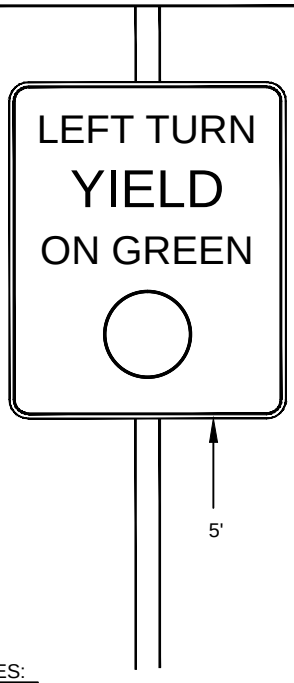
AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	SIGNAL ASSEMBLIES B-10, B-11T
	DATE 5-12-94 / DWG. NO. 864

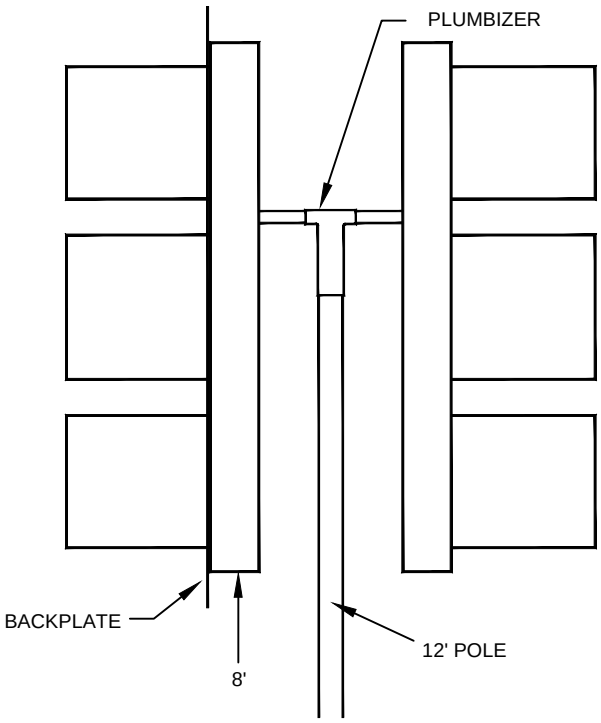
Effective 8/10/2023 to 8/07/2024







R10-12
24" X 30"
MIN.



SIDE VIEW

NOTES:

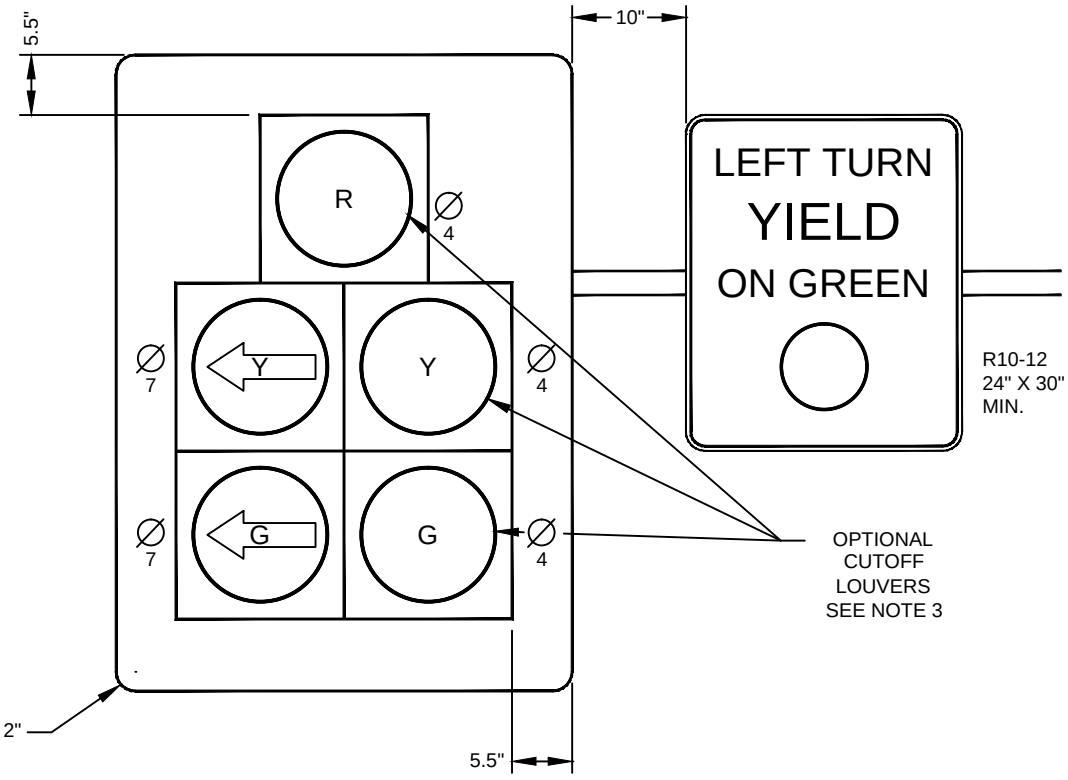
1. ALL BACKPLATES SHALL BE LOUVERED.
2. ALL LENSES SHALL BE GLASS.
3. OPTIONAL 3° CUTOFF LOUVERS ON RED, YELLOW AND GREEN BALL INDICATIONS MAY BE PROVIDED AS DIRECTED BY THE TRAFFIC ENGINEER.

POST 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 1 OF 4

Effective 8/10/2023 to 8/07/2024



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.

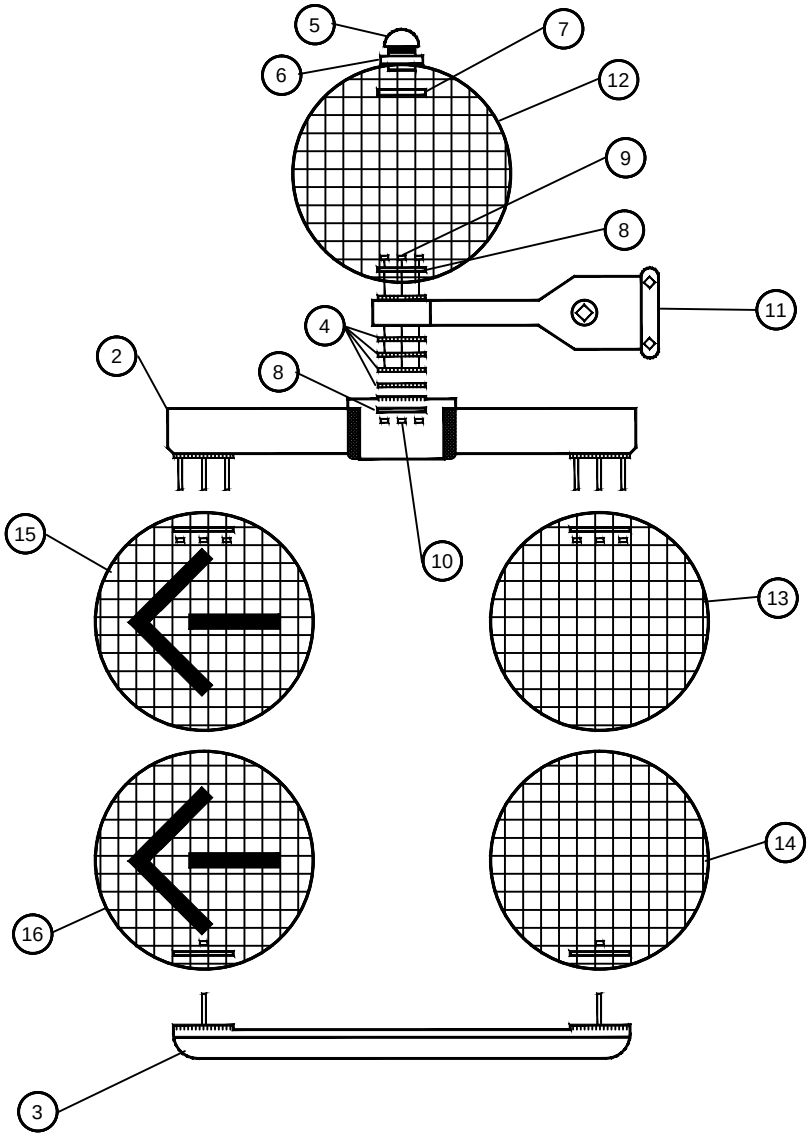
MAST ARM MOUNTING

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

Effective 8/10/2023 to 8/07/2024



BACKPLATE TO MATCH
ORDER PART NO. E 2074
NOTES:
UNLESS OTHERWISE SPECIFIED

1 ASSEMBLY

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 3 OF 4

Effective 8/10/2023 to 8/07/2024

FW 2933 AND SIGNAL ASSEMBLY

FRAMEWORK -- CLUSTER MOUNTING
1 WAY, 5 COL., 12" ALUMINUM SIGNAL
WITH ELEVATOR PLUMBIZER

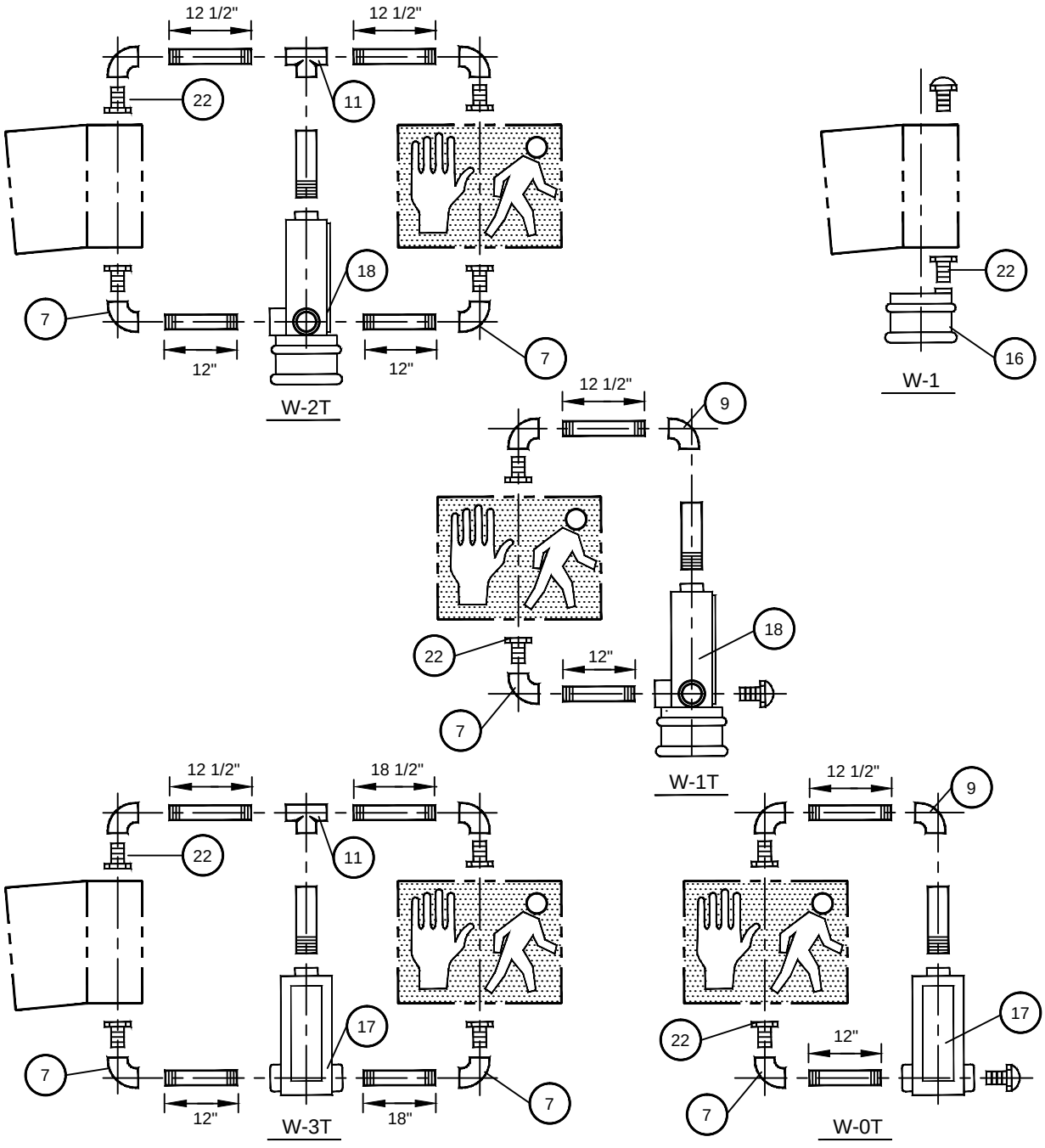
REF #	PART NO.	DESCRIPTION	REQ.
1	FW2933	ASSEMBLY	X
2	E205P1	TOP BRACKET W/COVER	1
3	E2051P1	BOTTOM BRACKET	1
4	E1270P1	ADAPTOR RING	4
5	E1206P	ORNAMENT	1
6	E1251P1	WASHER, NEOPRENE	1
7	55712P6	CONDUIT LOCKNUT	1
8	E789P1	ATTACHING WASHER	2
9	E788P2	ATTACHING BOLT	3
10	N210P23C	ATTACHING NUT	3
11	FW0904G	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

Effective 8/10/2023 to 8/07/2024



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

Effective 8/10/2023 to 8/07/2024

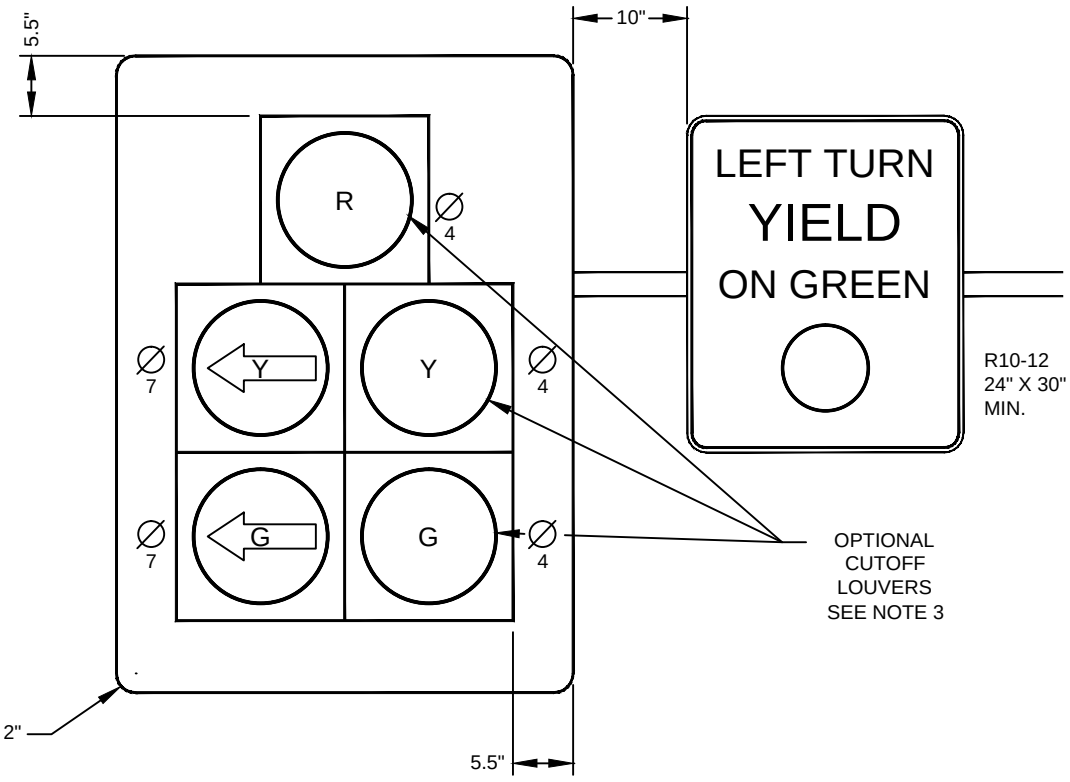
NOTE: TAMPER-PROOF SCREWS TO BE USED.



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

Effective 8/10/2023 to 8/07/2024



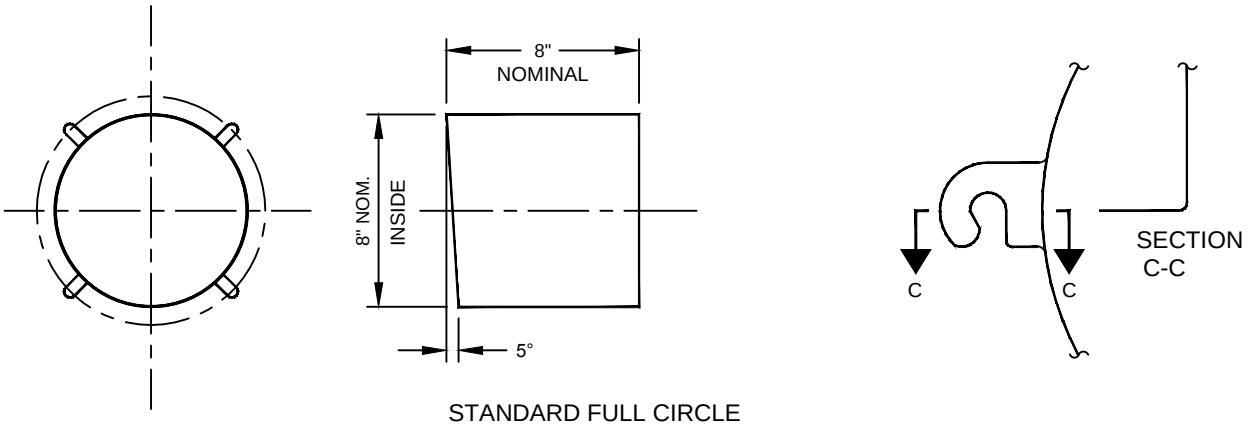
NOTES:

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.

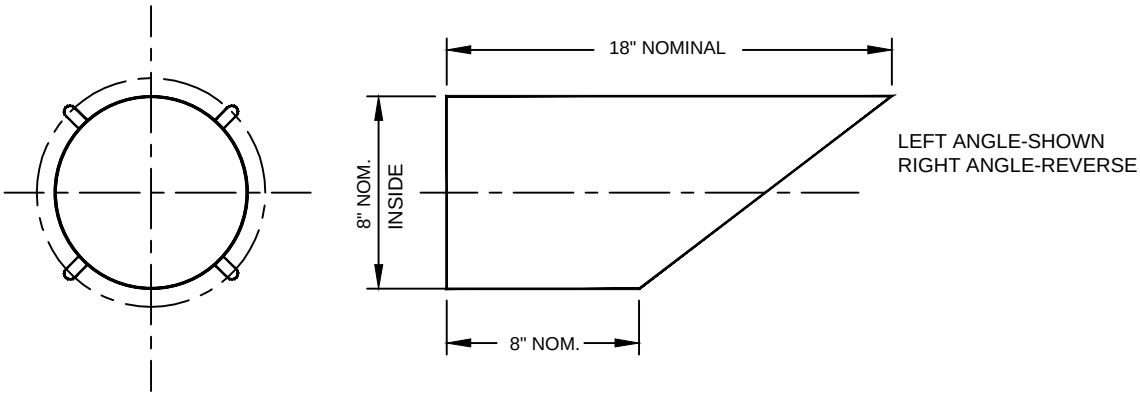
AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	PROTECTED / PERMISSIVE M-5 SIGNAL HEADS
	DATE 5-12-94 / DWG. NO. 868

Effective 8/10/2023 to 8/07/2024

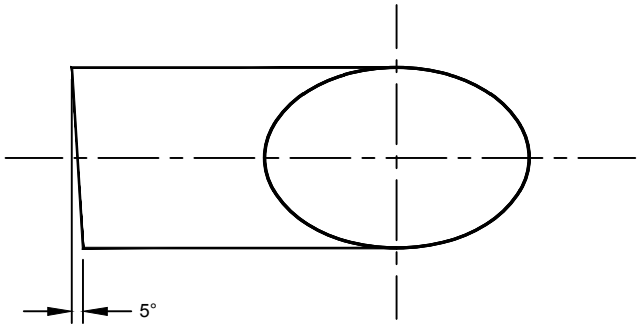


STANDARD FULL CIRCLE
VISOR



LEFT ANGLE-SHOWN
RIGHT ANGLE-REVERSE

STANDARD ANGLE VISOR



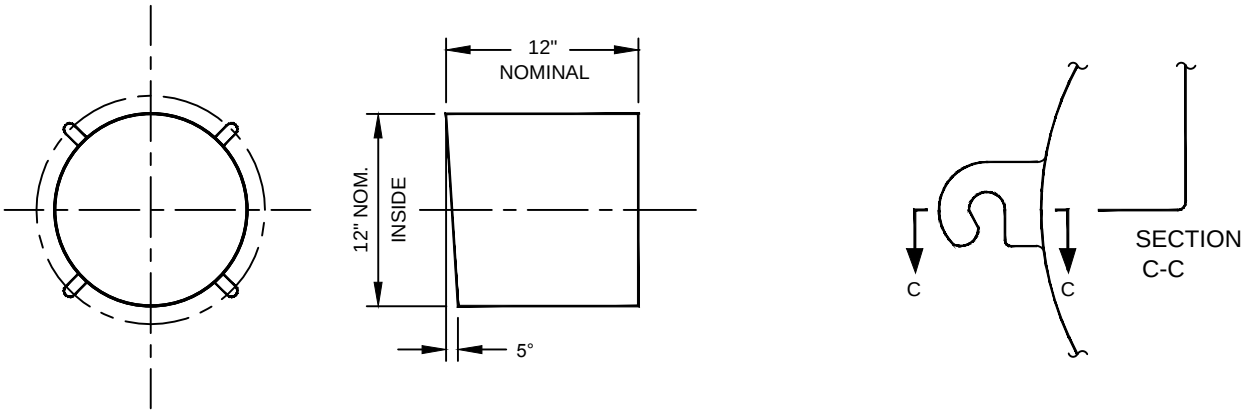
VISORS (FOR 8" HEADS)

PAINT: FLAT BLACK ON INSIDE,
OUTSIDE PAINT COLOR SHALL
MATCH SIGNAL HOUSING.

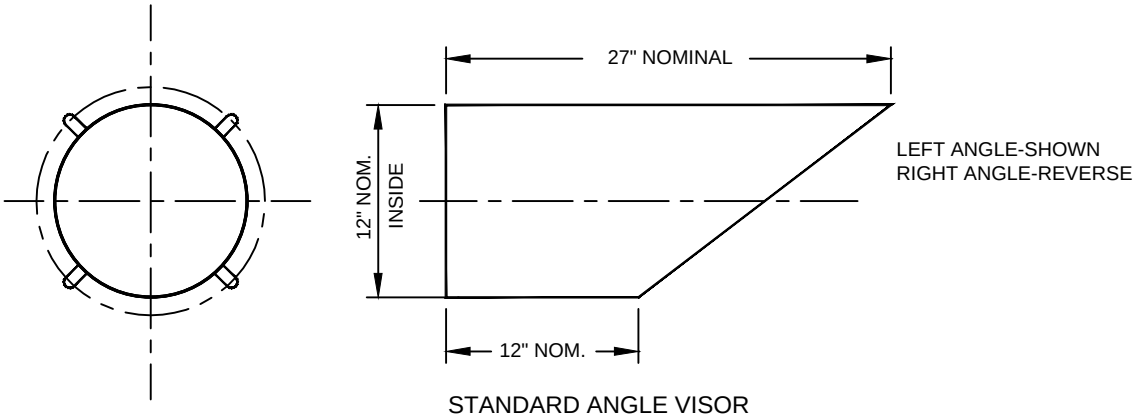
AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	VISORS FOR 8 INCH SIGNALS
	DATE / DWG. NO. 870 / SHEET 1 OF 3

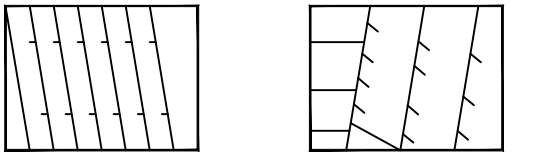
Effective 8/10/2023 to 8/07/2024



STANDARD FULL CIRCLE
VISOR

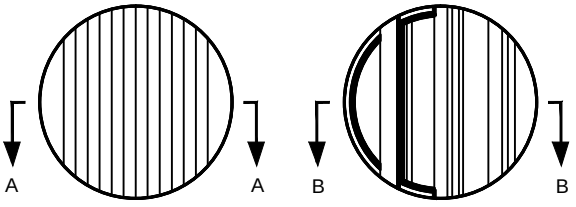


STANDARD ANGLE VISOR



SECTION A-A

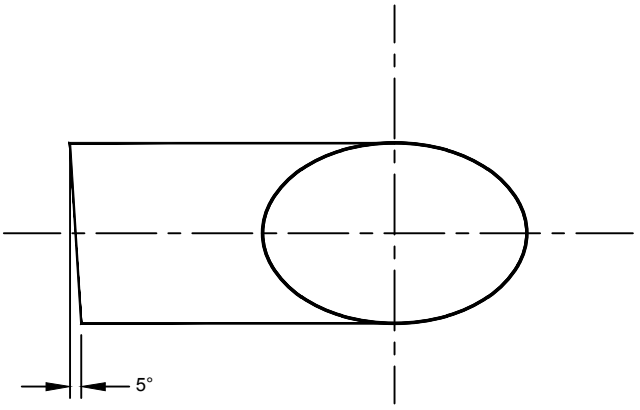
SECTION B-B



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

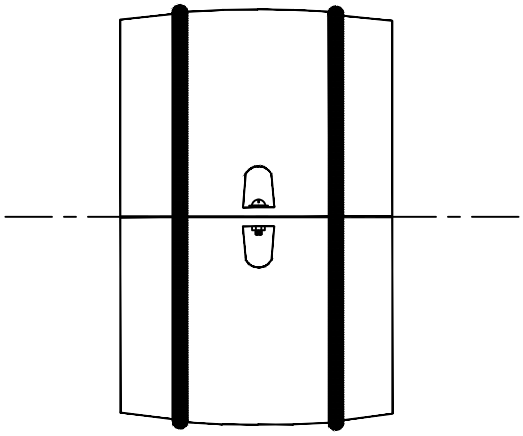
SPECIFICATION REFERENCE	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

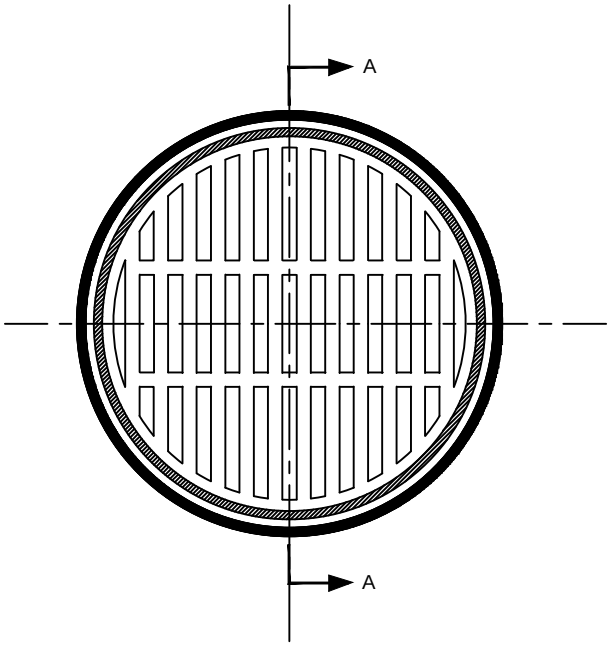
LOUVERS AND VISORS FOR 12 INCH SIGNALS

DATE	DWG. NO. 870	SHEET 2 OF 3

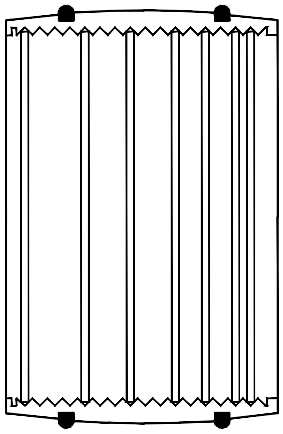
Effective 8/10/2023 to 8/07/2024



SIDE VIEW



FRONT VIEW



SECTION A-A

AGENCY APPROVED	B	C	H	L	M	N

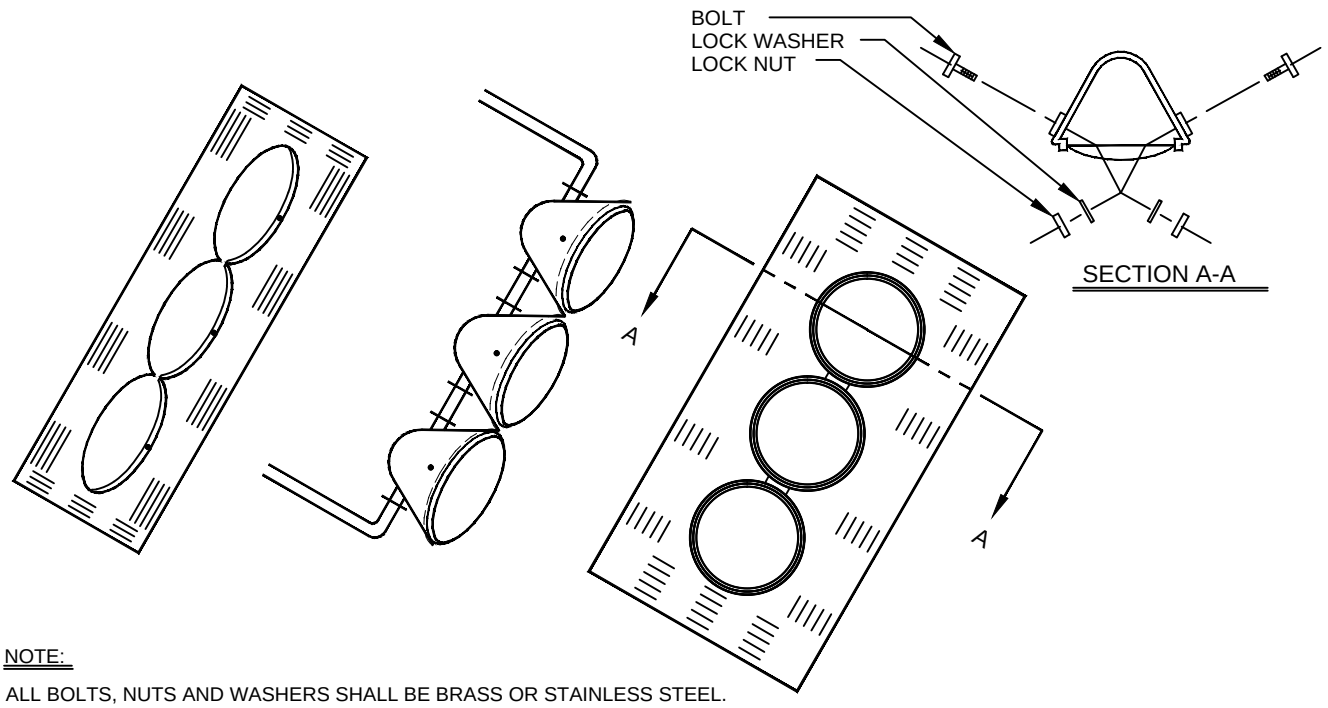
SPECIFICATION REFERENCE	
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

GEOMETRICALLY PROGRAMMED LOUVER

DATE	DWG. NO. 870	SHEET 3 OF 3

Effective 8/10/2023 to 8/07/2024



NOTE:

ALL BOLTS, NUTS AND WASHERS SHALL BE BRASS OR STAINLESS STEEL.

AGENCY APPROVED	B	C	H	L	M	N

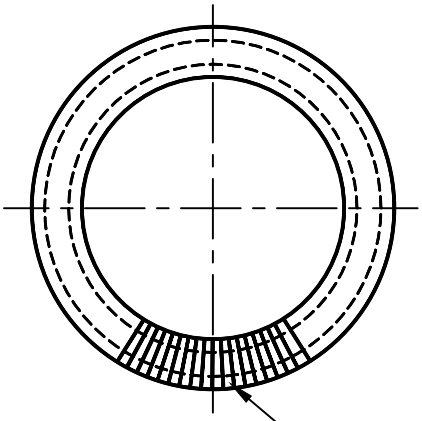
SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

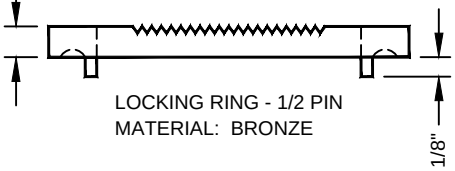
BACKPLATE AND SIGNAL HEAD ASSEMBLY

DATE 12-12-96	DWG. NO. 871	

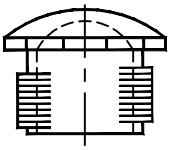
Effective 8/10/2023 to 8/07/2024

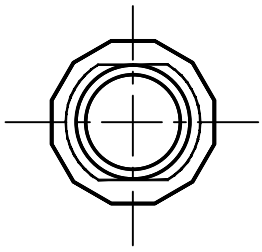


72 TEETH - 1/2"
HIGH ALL AROUND

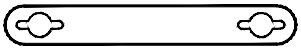


LOCKING RING - 1/2 PIN
MATERIAL: BRONZE

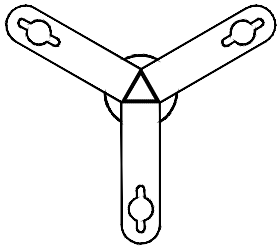




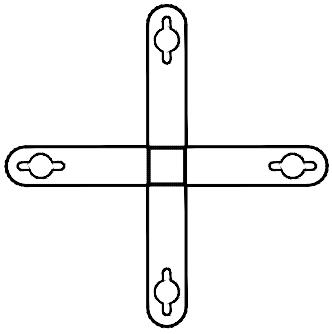
ORNAMENTAL CAP
DIE CAST ALUMINUM
PAINT COLOR SHALL MATCH
SIGNAL HOUSING



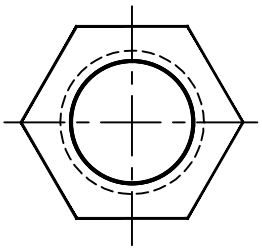
TIE BRACE, FERROUS, 2 WAY
PAINT COLOR SHALL MATCH
SIGNAL HOUSING

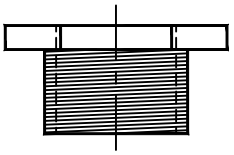


TIE BRACE, FERROUS, 3 WAY
PAINT COLOR SHALL MATCH
SIGNAL HOUSING



TIE BRACE, FERROUS, 4 WAY
PAINT COLOR SHALL MATCH
SIGNAL HOUSING





LOCKING NIPPLE

AGENCY APPROVED	B	C	H	L	M	N

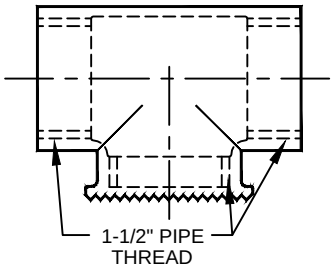
SPECIFICATION REFERENCE	
-	

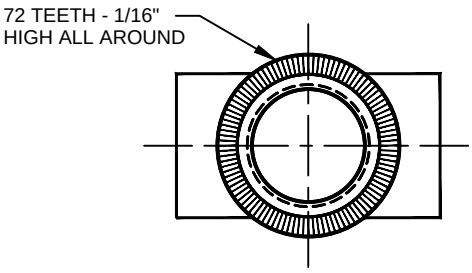
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

MISCELLANEOUS SIGNAL MOUNTING HARDWARE

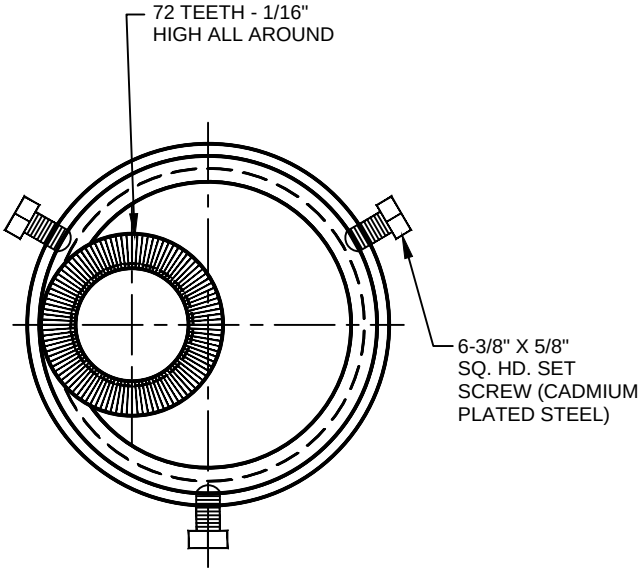
DATE	DWG. NO. 872	SHEET 1 OF 2

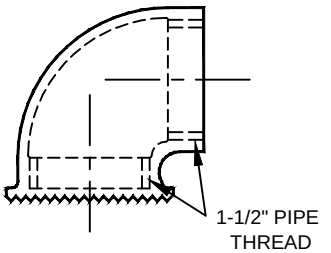
Effective 8/10/2023 to 8/07/2024

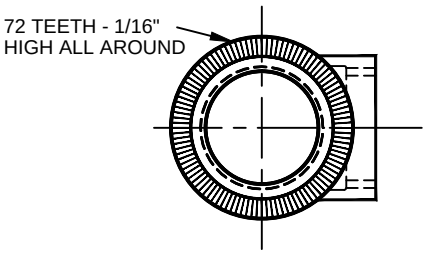




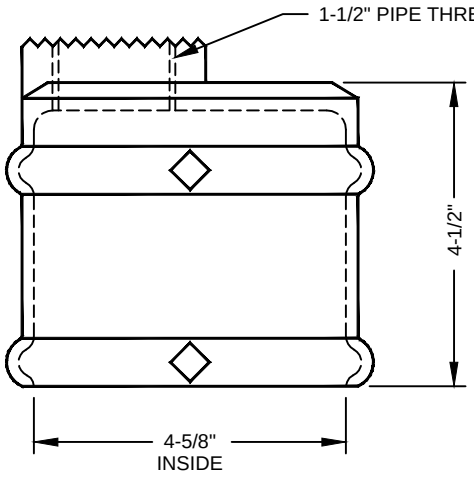
FERROUS SPECIAL TEE
PAINT COLOR SHALL MATCH
SIGNAL HOUSING







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

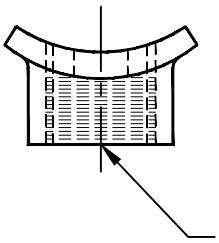
SPECIFICATION REFERENCE	
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

MISCELLANEOUS SIGNAL MOUNTING HARDWARE

DATE	DWG. NO. 874	SHEET 2 OF 2

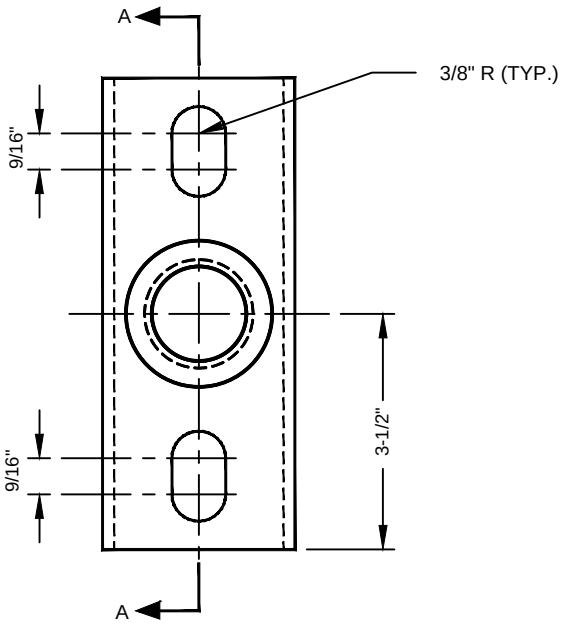
Effective 8/10/2023 to 8/07/2024

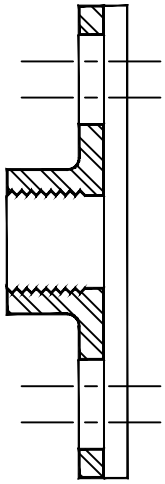


1-1/2" PIPE THREADS

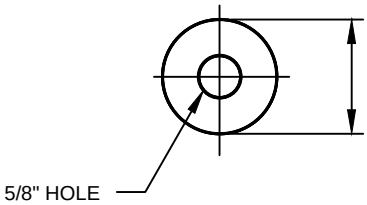
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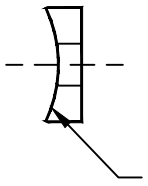
1. MATERIAL-BRONZE
2. PAINT COLOR SHALL MATCH SIGNAL HOUSING
3. PROVIDE WASHERS SHOWN AND 1/2" PLATED BOLTS, LENGTH FOR STEEL POLE MOUNTING.





SECTION A-A





CURVED WASHER

NOTES: DO NOT PROVIDE UNLESS SPECIFIED ON THE PLANS.

AGENCY APPROVED	B	C	H	L	M	N

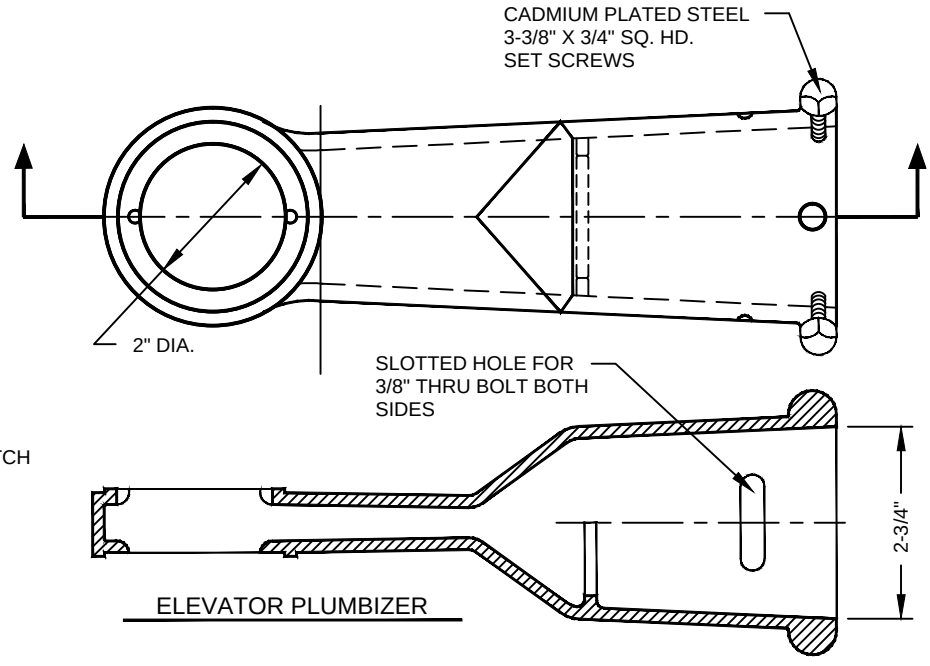
SPECIFICATION REFERENCE	
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UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

POLE PLATE DETAILS

DATE	DWG. NO. 873	

Effective 8/10/2023 to 8/07/2024



NOTES:

1. MATERIAL - BRONZE
2. PAINT COLOR SHALL MATCH SIGNAL HOUSING

ELEVATOR PLUMBIZER

AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

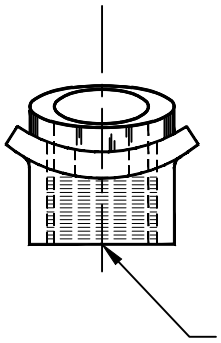
ELEVATOR PLUMBIZER

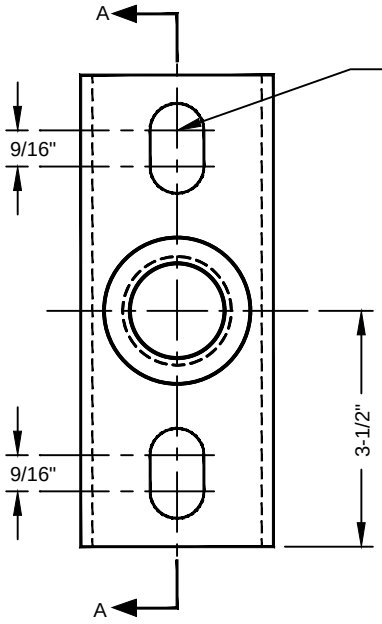
DATE	DWG. NO. 875	

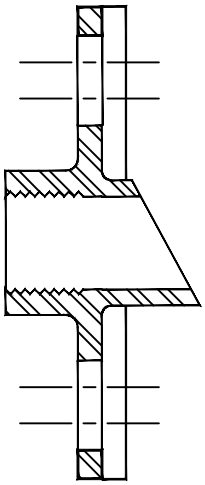
Effective 8/10/2023 to 8/07/2024

NOTES:

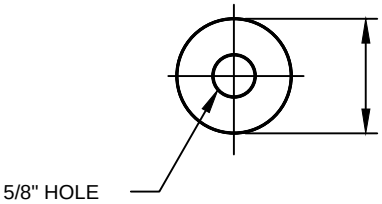
1. MATERIAL-BRONZE
2. PAINT COLOR SHALL MATCH SIGNAL HOUSING.
3. PROVIDE WASHERS SHOWN AND 1/2" PLATED BOLTS, LENGTH FOR STEEL POLE MOUNTING.



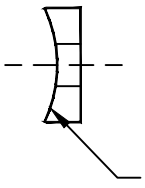




SECTION A-A



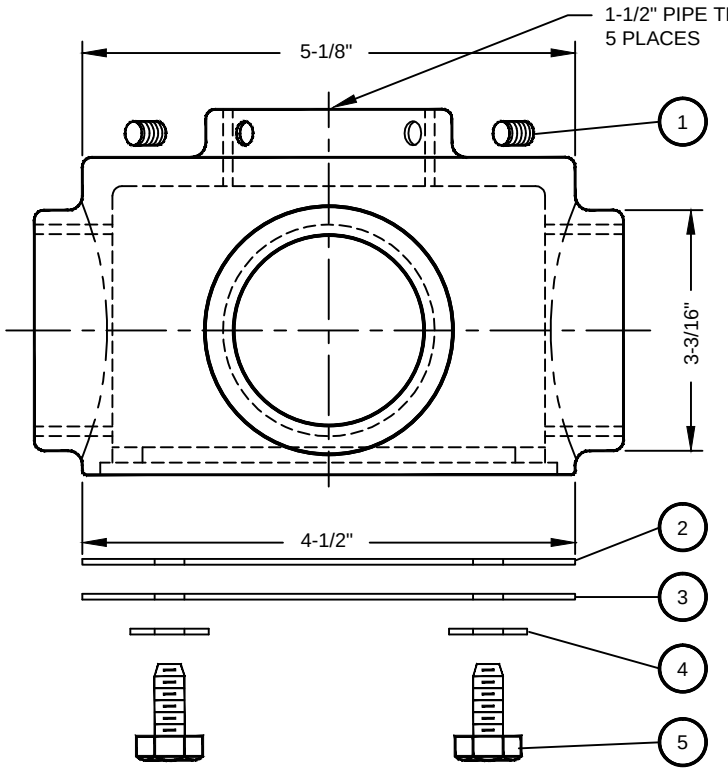
CURVED WASHER



AGENCY APPROVED	B	C	H	L	M	N

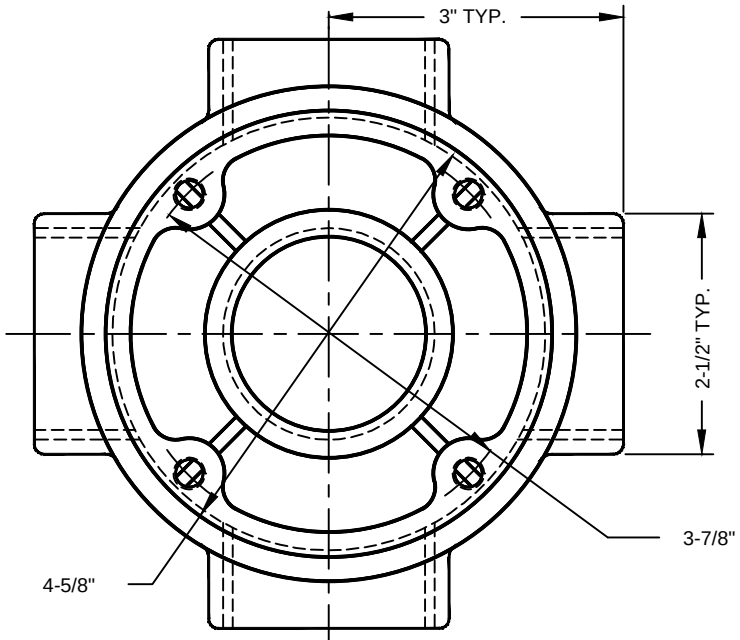
SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	POLE PLATE WITH WIRE GUIDE DETAILS
	DATE / DWG. NO. 876

Effective 8/10/2023 to 8/07/2024



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.



BOTTOM VIEW

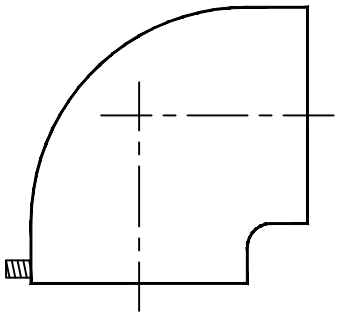
NOTES:

1. PAINT COLOR AND FINISHING SHALL MATCH SIGNAL HOUSING
2. MATERIAL: HIGH STRENGTH CAST ALUMINUM ALLOY

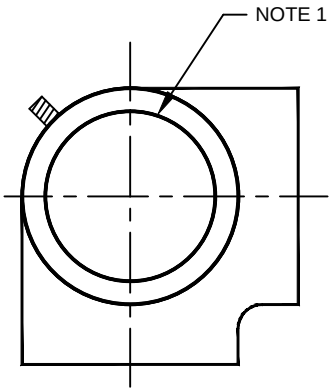
AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	4 WAY CENTER HUB
DATE	DWG. NO. 877

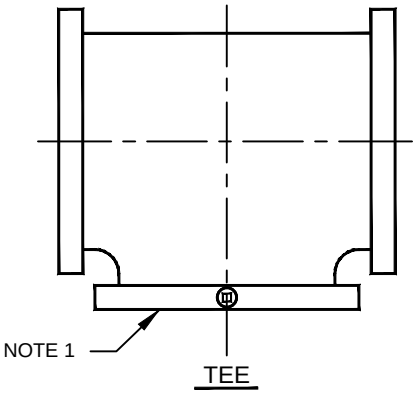
Effective 8/10/2023 to 8/07/2024



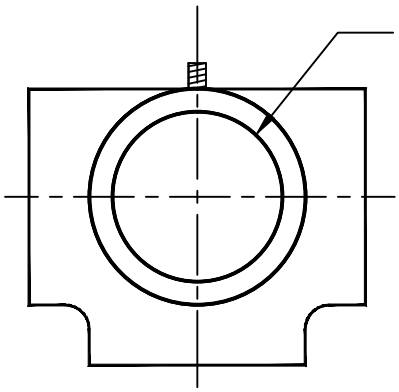
ELBOW



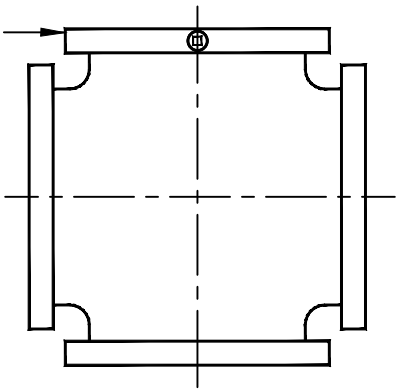
ELBOW WITH
SIDE OUTLET



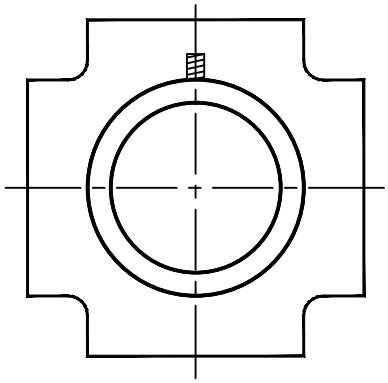
TEE



TEE WITH
SIDE OUTLET



CROSS



CROSS WITH
SIDE OUTLET

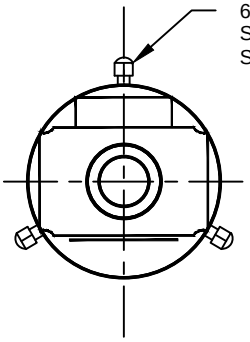
NOTES:

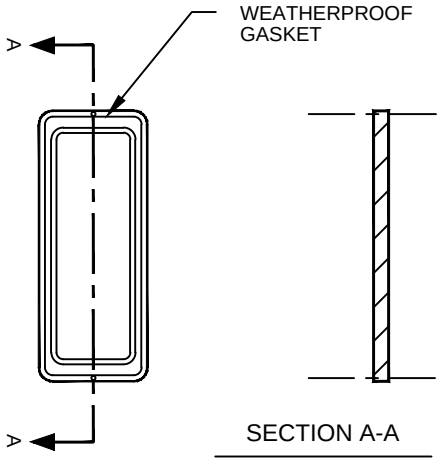
1. REAM FOR 1-1/2" IPS. PROVIDE SET SCREW.
2. ALL OTHER OPENINGS SHALL BE THREADED.
3. PAINT COLOR SHALL MATCH SIGNAL HOUSING.

AGENCY APPROVED	B	C	H	L	M	N

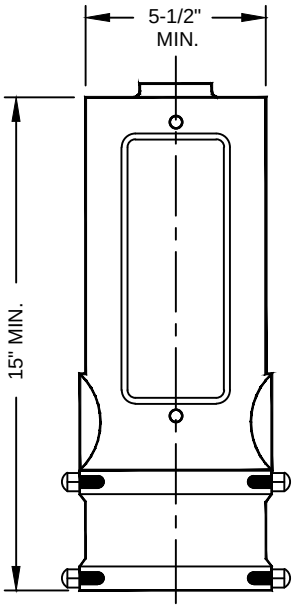
SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	STANDARD MALLEABLE PIPE HARDWARE- 1-1/2 INCH IPS
	DATE / DWG. NO. 878

Effective 8/10/2023 to 8/07/2024

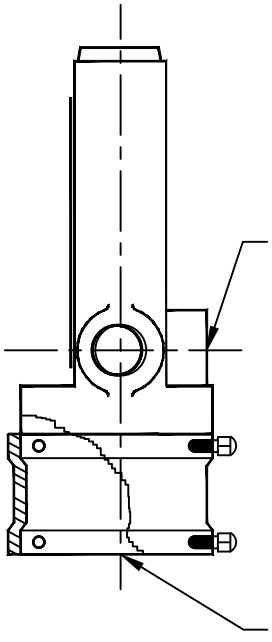




SECTION A-A



COVER PLATE



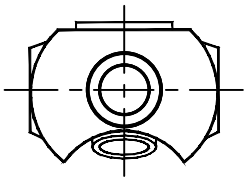
NOTES:

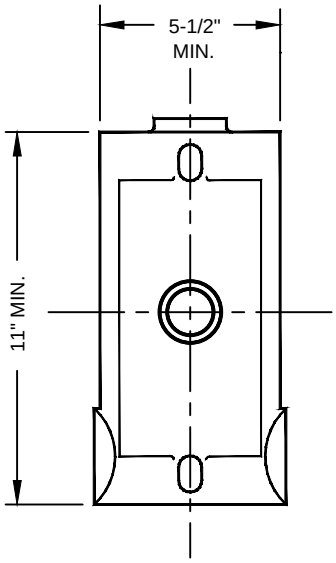
1. MATERIAL - ALUMINUM
2. PAINT COLOR SHALL MATCH SIGNAL HOUSING
3. PROVIDE 12 POSITION PRESSURE TYPE TERMINAL BLOCK MOUNTED INSIDE COMPARTMENT

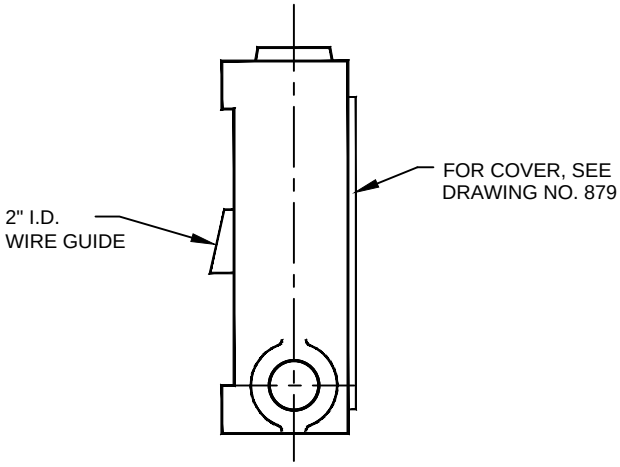
AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
	POST TOP MOUNTED ADAPTER WITH TERMINAL COMPARTMENT
	DATE / DWG. NO. 879

Effective 8/10/2023 to 8/07/2024







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	

Effective 8/10/2023 to 8/07/2024

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

ONE WAY
MOUNT

DWG. NO. 881

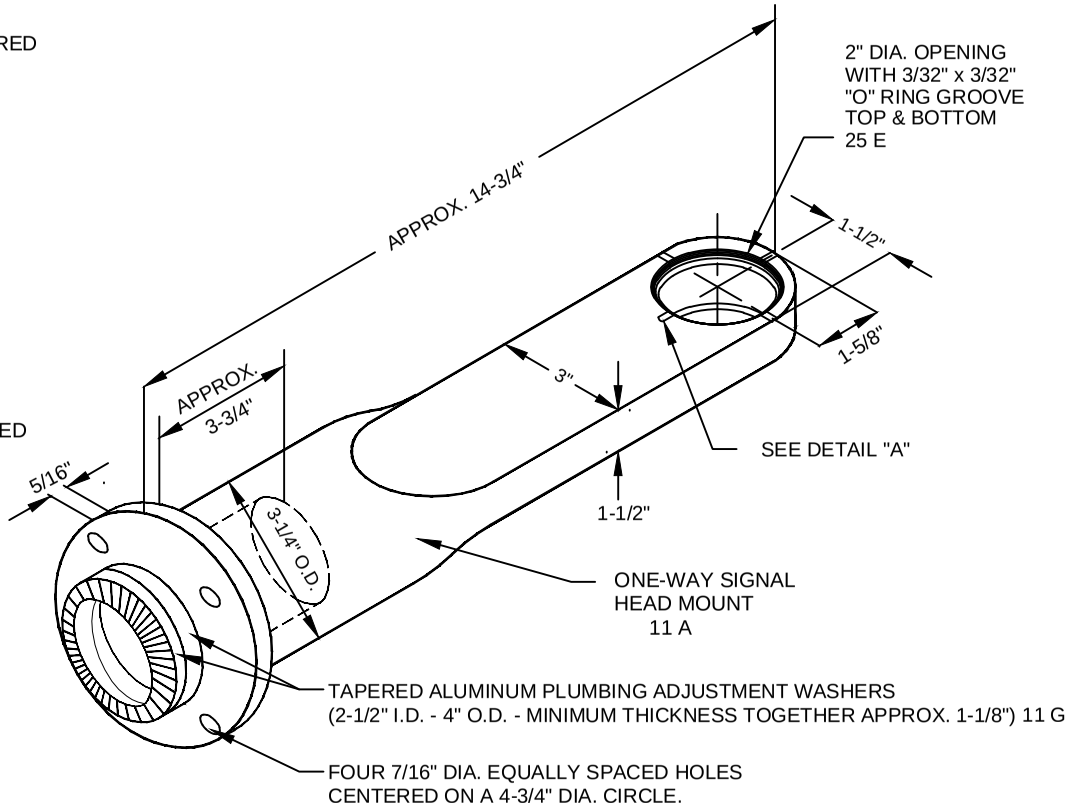
DATE

AGENCY APPROVED

B C H L M N

NOTES:

1. THE DEVICES WILL BE CONSTRUCTED OR CAST IN ACCORDANCE WITH SPECIAL PATENTED DEVICES, MATERIALS, AND PROCESSES.
2. SIGNAL HEAD MOUNT AND FLANGE ADAPTER WILL BE OF HIGH STRENGTH CAST ALUMINUM.
3. SIGNAL HEAD MOUNT SHALL BE FASTENED TO FLANGE ADAPTER BY MEANS OF FOUR COMMON STRUCTURAL STEEL BOLTS PER SPEC. EACH WITH TWO FLAT WASHERS, LOCK WASHER AND NUT.
4. ALL BOLTS, NUTS, AND WASHERS REQUIRED SHALL BE AS REGULARLY SUPPLIED BY THE MANUFACTURER.
5. ONE-WAY MOUNT SHALL BE USED WHEN PLANS OR SPECIAL PROVISIONS CALL FOR ONE-WAY SIGNAL MOUNTED ON SIGNAL MAST ARM.
6. TWO-WAY MOUNT SHALL BE USED WHEN PLANS OR SPECIAL PROVISIONS CALL FOR TWO-WAY SIGNAL MOUNTED ON SIGNAL MAST ARM.
7. TWO SIGNAL INDICATIONS SHALL BE MOUNTED BELOW THE MOUNT AND ALL REMAINING SIGNAL INDICATIONS MOUNTED ABOVE.



ONE-WAY MOUNT
32 A

Effective 8/10/2023 to 8/07/2024

SPECIFICATION REFERENCE

ONE WAY MOUNT FOR
3M SIGNALS

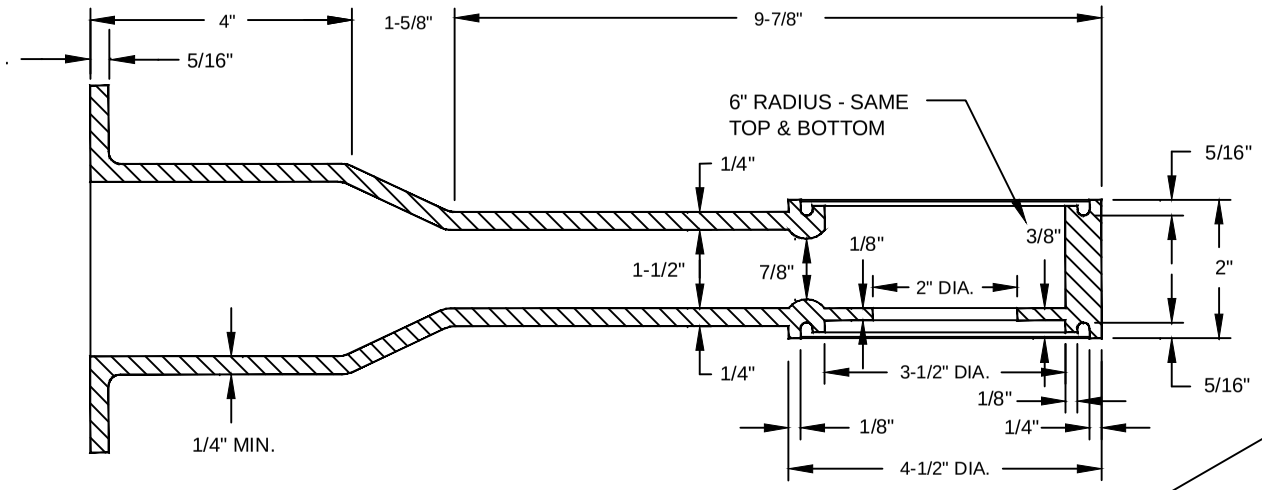
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

DATE

DWG. NO. 882

AGENCY APPROVED

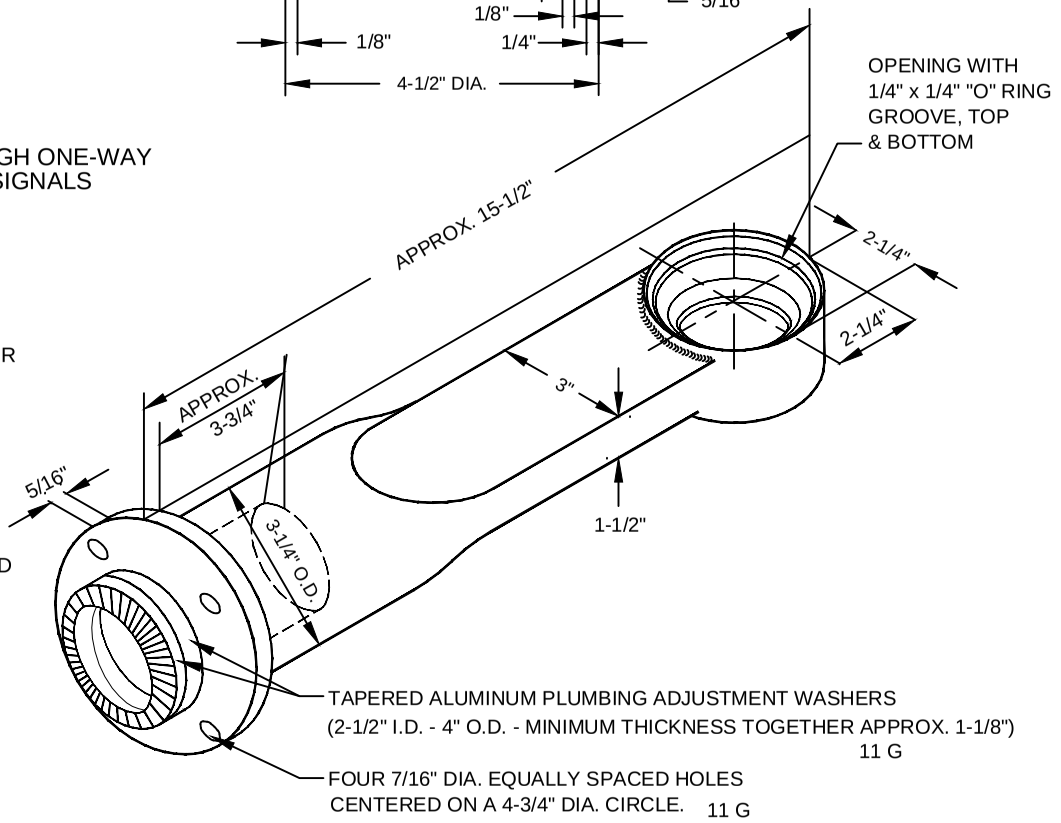
B C H L M N



SECTION THROUGH ONE-WAY
MOUNT FOR 3M SIGNALS

NOTES:

1. THE DEVICES WILL BE CONSTRUCTED OR CAST IN ACCORDANCE WITH SPECIAL PATENTED DEVICES, MATERIALS, AND PROCESSES.
2. SIGNAL HEAD MOUNT AND FLANGE ADAPTER WILL BE OF HIGH STRENGTH CAST ALUMINUM.
3. SIGNAL HEAD MOUNT SHALL BE FASTENED TO FLANGE ADAPTER BY MEANS OF FOUR COMMON STRUCTURAL STEEL BOLTS PER SPEC. EACH WITH TWO FLAT WASHERS, LOCK WASHER AND NUT.
4. ALL BOLTS, NUTS, AND WASHERS REQUIRED SHALL BE AS REGULARLY SUPPLIED BY THE MANUFACTURER.
5. ONE-WAY MOUNT SHALL BE USED WHEN PLANS OR SPECIAL PROVISIONS CALL FOR ONE-WAY SIGNAL MOUNTED ON SIGNAL MAST ARM.
6. TWO-WAY MOUNT SHALL BE USED WHEN PLANS OR SPECIAL PROVISIONS CALL FOR TWO-WAY SIGNAL MOUNTED ON SIGNAL MAST ARM.
7. TWO SIGNAL INDICATIONS SHALL BE MOUNTED BELOW THE MOUNT AND ALL REMAINING SIGNAL INDICATIONS MOUNTED ABOVE.



ONE-WAY MOUNT FOR 3M SIGNALS

32 H

Effective 8/10/2023 to 8/07/2024

SPECIFICATION REFERENCE

ONE WAY MOUNT
DETAIL

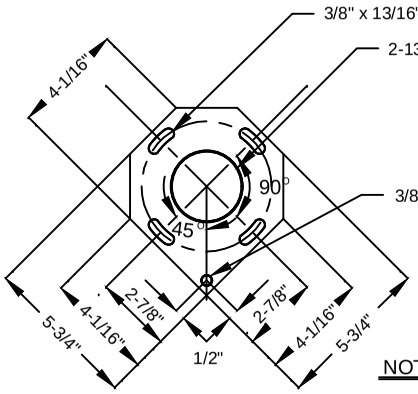
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

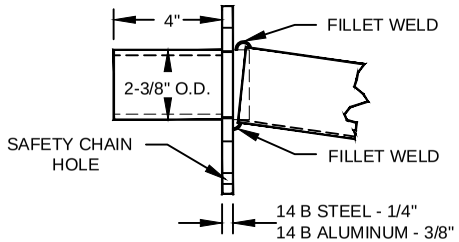
DWG. NO. 883

DATE

AGENCY APPROVED

B C H L M N

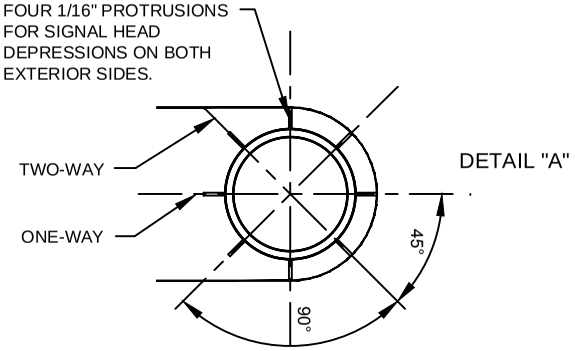


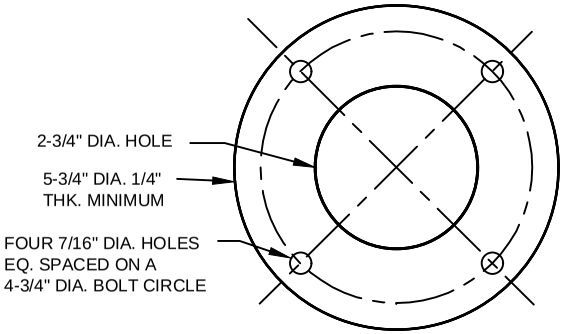


NOTE:

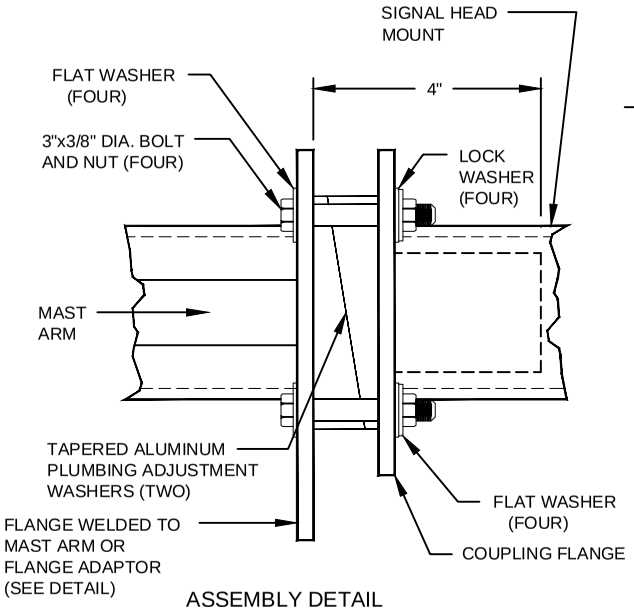
FLANGE TO BE WELDED TO MAST ARM SLIPFITTER 4" FROM THE END.

FLANGE DETAIL
2" WELDED TYPE ADAPTER

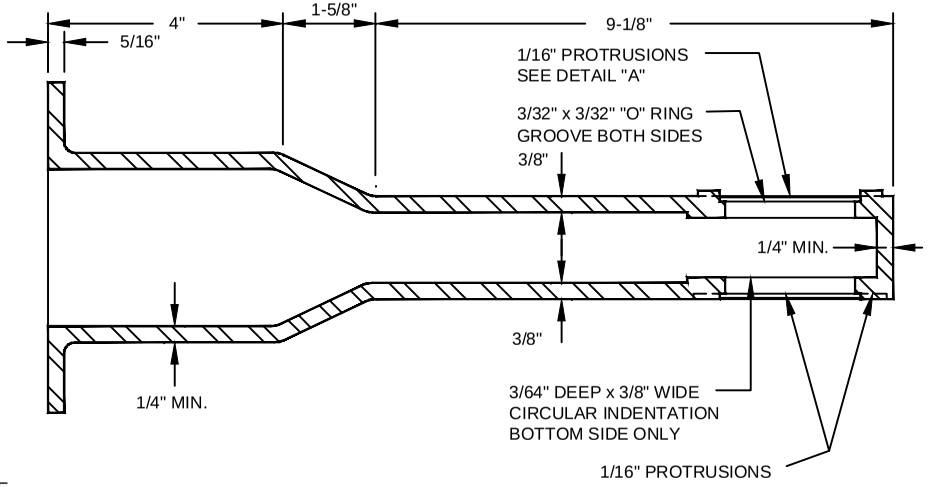




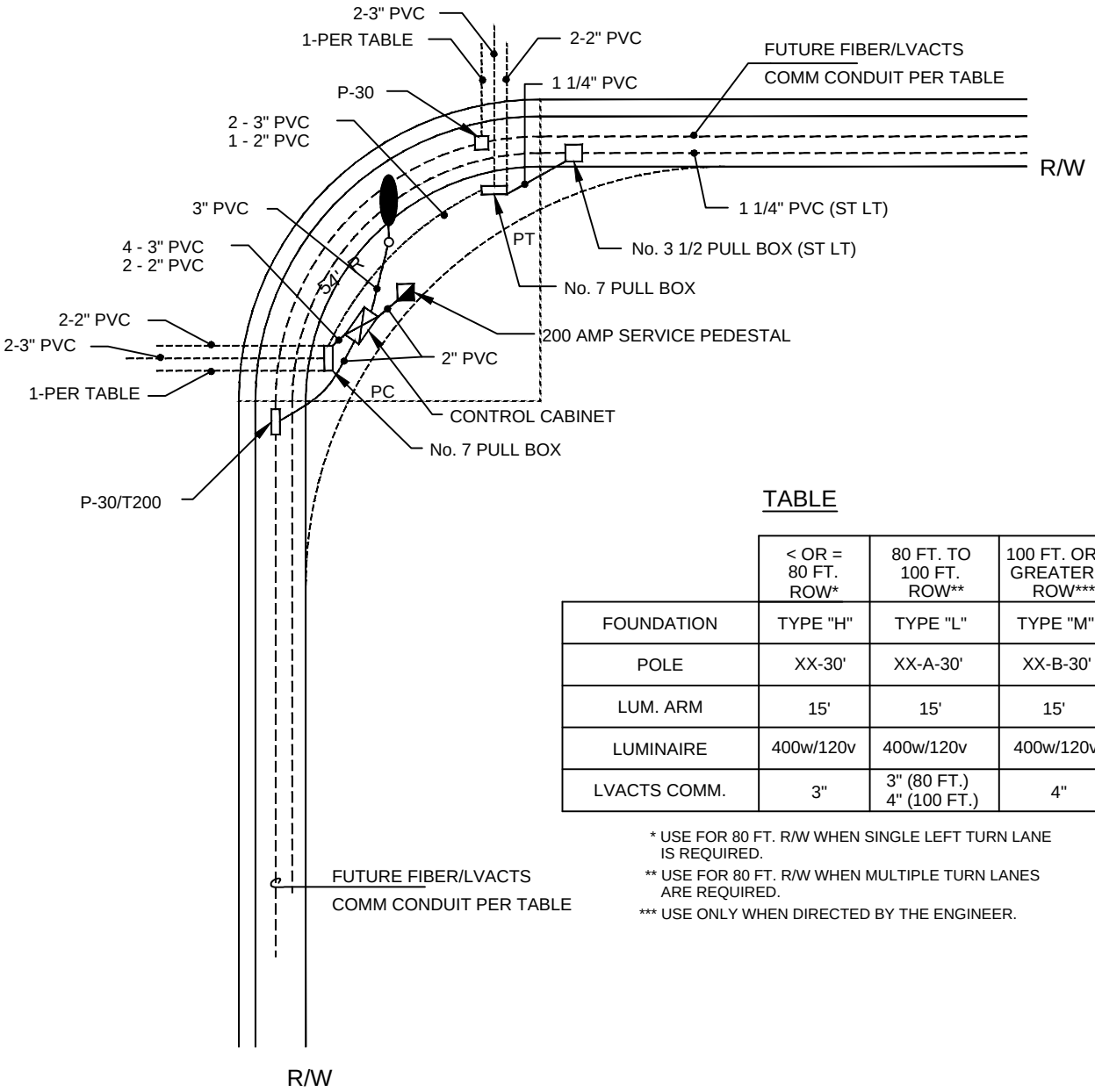
FLANGE DETAIL
2" CLAMP
TYPE ADAPTER



ASSEMBLY DETAIL



SECTION THROUGH ONE-WAY MOUNT



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	400w/120v	400w/120v	400w/120v
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 No. 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

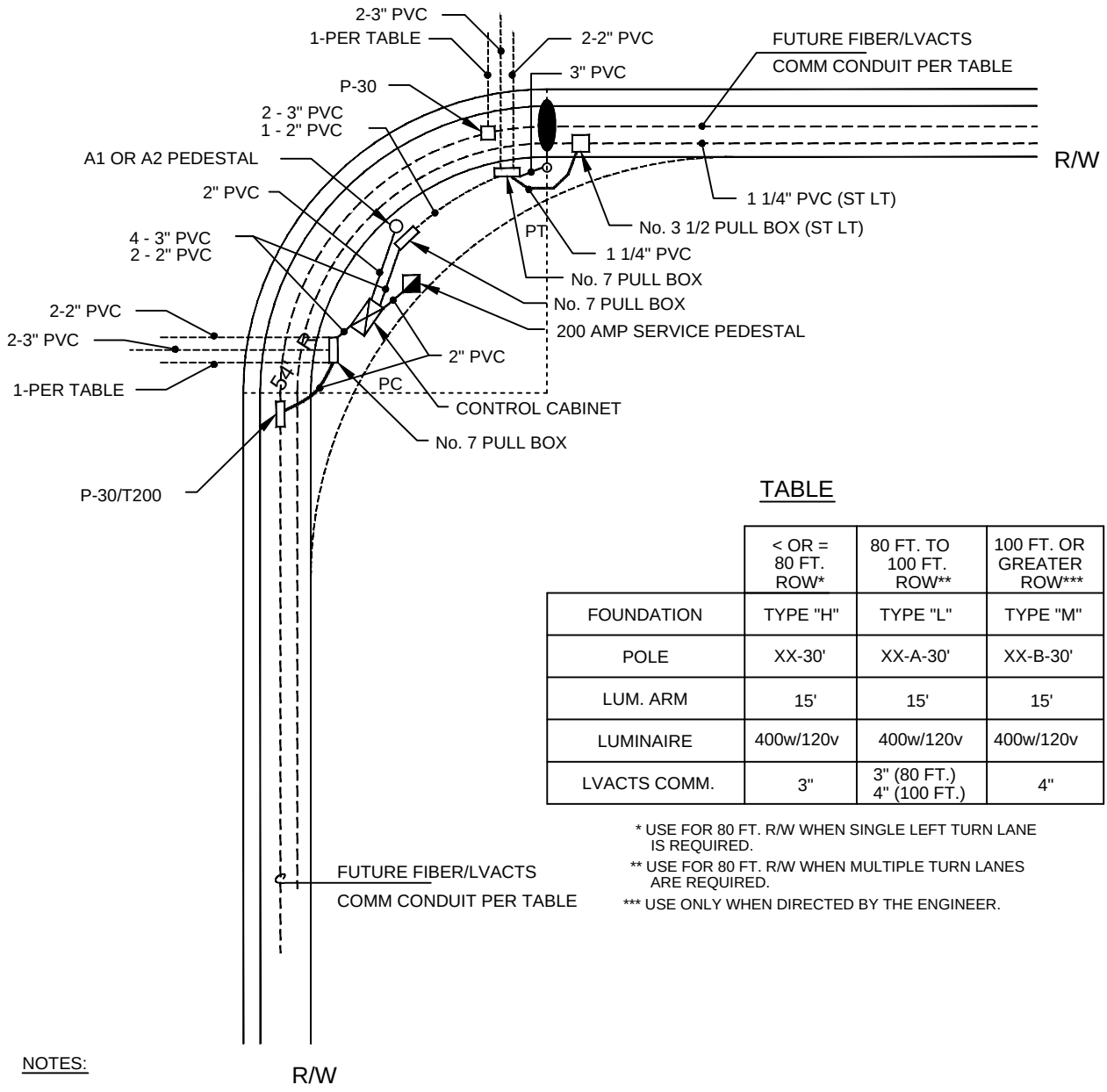
SPECIFICATION REFERENCE	

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

Effective 8/10/2023 to 8/07/2024



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	400w/120v	400w/120v	400w/120v
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.
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PROFESSIONAL ELECTRICAL ENGINEER STAMP ON FILE

AGENCY APPROVED	B	C	H	L	M	N

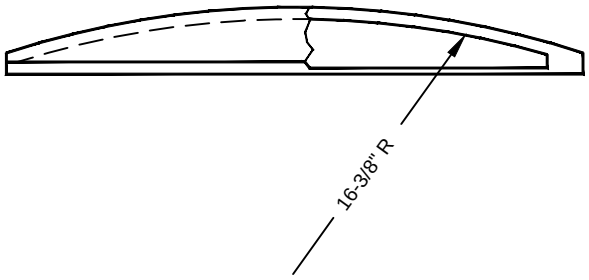
SPECIFICATION REFERENCE

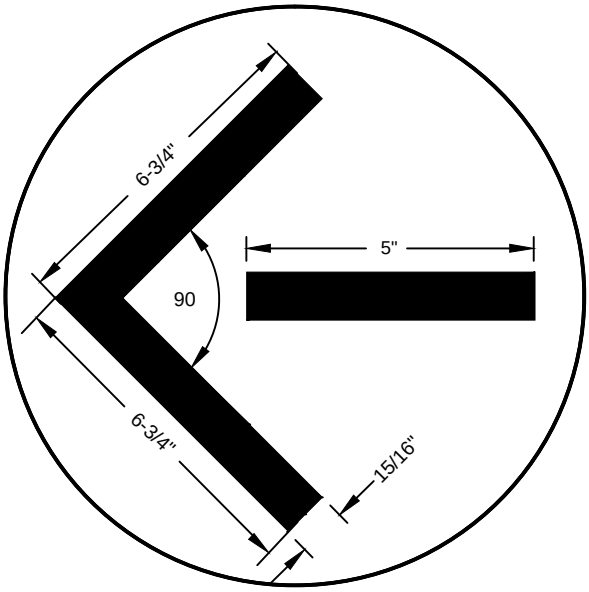
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

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

Effective 8/10/2023 to 8/07/2024





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.

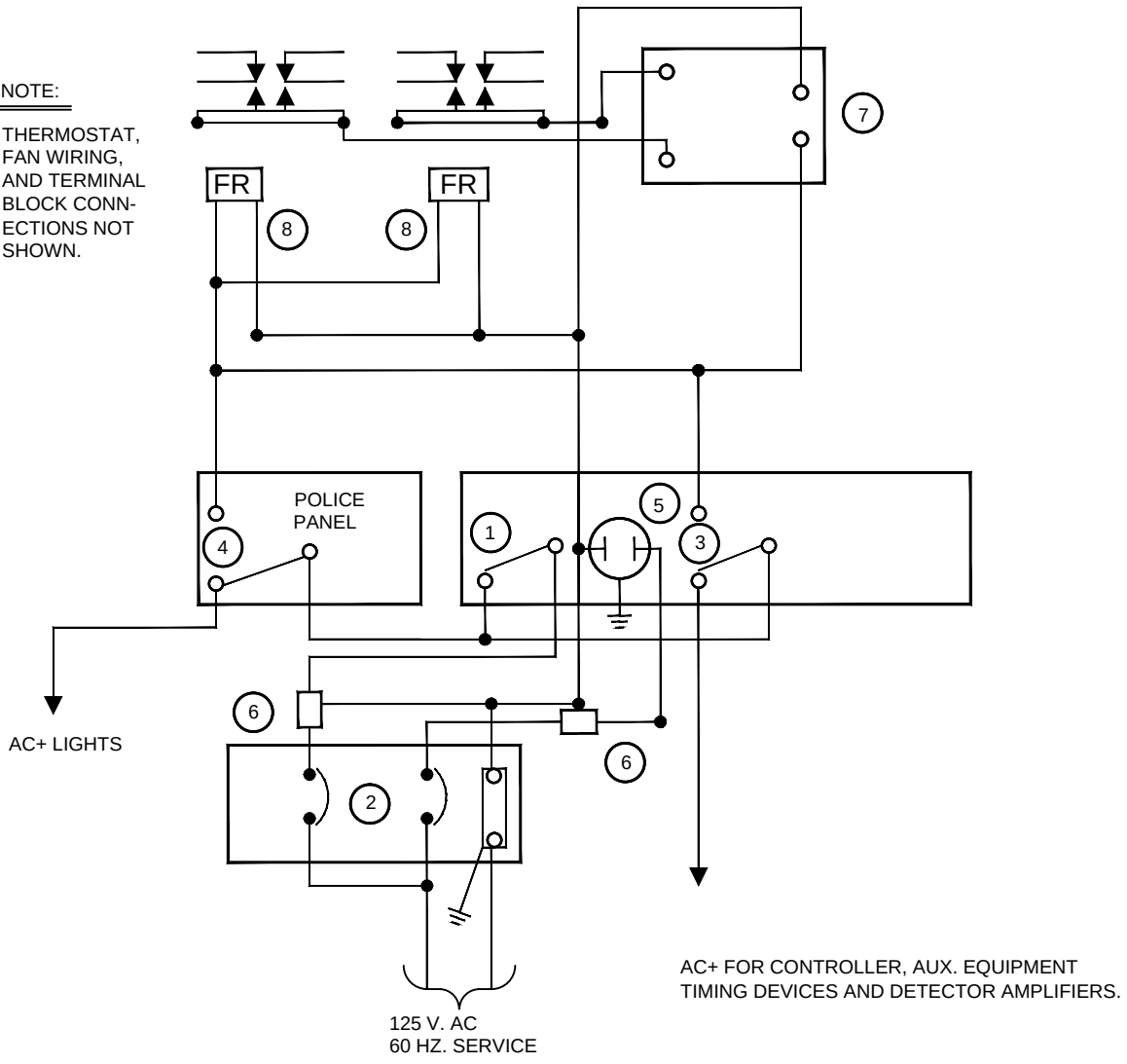
AGENCY APPROVED	B	C	H	L	M	N

SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
		12 INCH ARROW LENS
.		DATE / DWG. NO. 890

Effective 8/10/2023 to 8/07/2024

NOTE:

THERMOSTAT, FAN WIRING, AND TERMINAL BLOCK CONN-ECTIONS NOT SHOWN.



NOTES:

1. MAIN SWITCH.
2. 30 AMP CIRCUT BREAKERS.
3. SIGNAL FLASH SWITCH INSIDE CABINET.
4. AUXILARY 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	

Effective 8/10/2023 to 8/07/2024