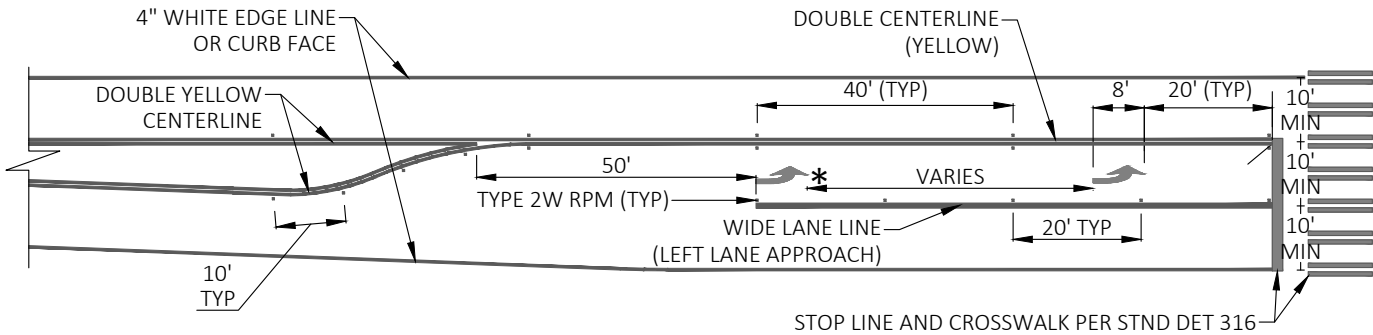
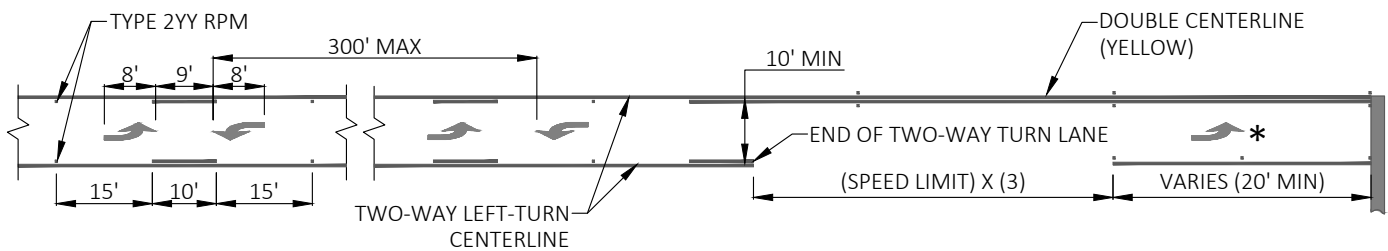


STANDARD MARKINGS FOR TWO-LANE, TWO-WAY TRAFFIC



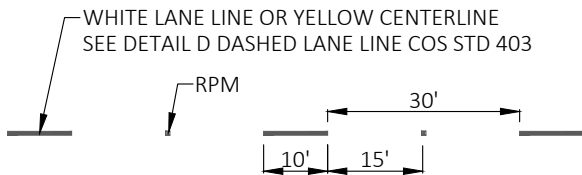
STANDARD MARKINGS FOR LEFT TURN LANE



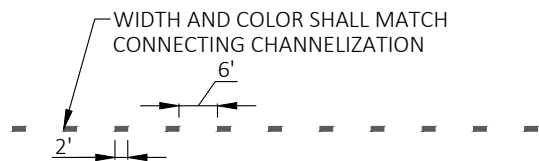
STANDARD MARKINGS FOR TWO-WAY TURN LANE

* NUMBER OF TRAFFIC ARROWS BASED ON APPROACH LANE LINE LENGTH

APPROACH LANE LINE LENGTH	NUMBER OF TYPE 2L TRAFFIC ARROWS
LESS THAN 50'	1 LEGEND, 20' BEHIND STOP LINE
50' - 120'	2 LEGENDS, AS SHOWN
GREATER THAN 120'	SPACED AT EVEN INTERVALS - MAX SPACING 150'



CENTERLINE AND LANE LINE MARKINGS

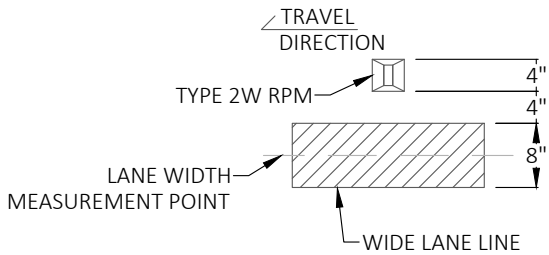


DOTTED EXTENSION LANE MARKING

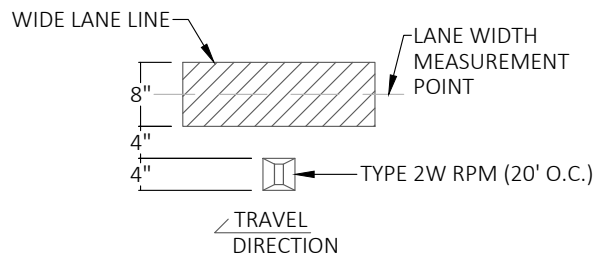


PUBLICATION DATE:	REVISION DATE: 09/06/2023
STANDARD DETAIL NUMBER: 401	SCALE: NOT TO SCALE

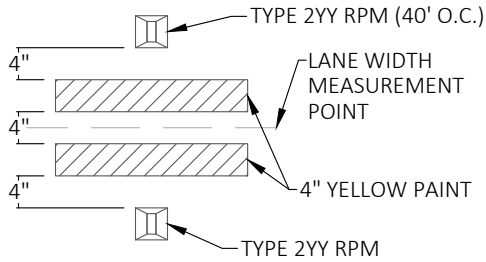
PAVEMENT MARKINGS



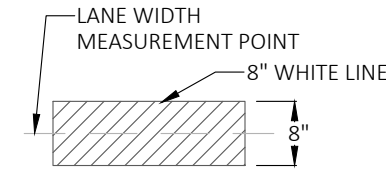
DETAIL A1 - WIDE LANE LINE (RIGHT TURN APPROACH)



DETAIL A2 - WIDE LANE LINE (LEFT TURN APPROACH)

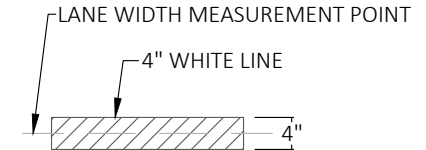


DETAIL B - DOUBLE CENTERLINE

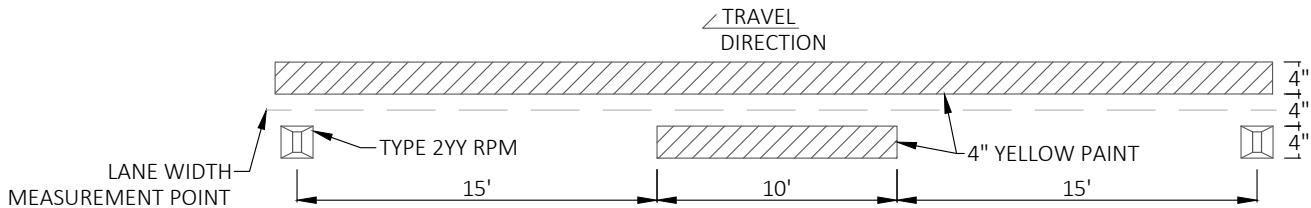


* SEE PROJECT MANUAL FOR MATERIAL TYPE

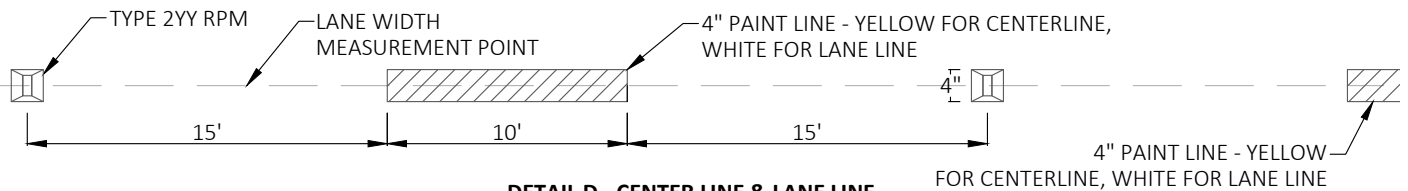
DETAIL F - BIKE LANE LINE



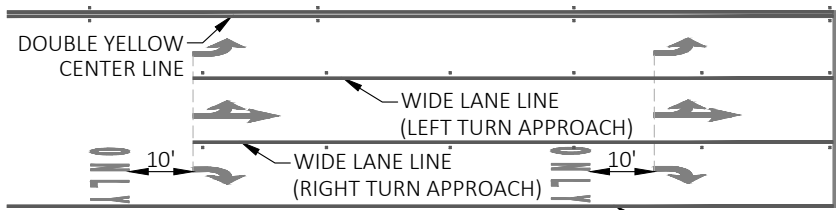
DETAIL E - SOLID LANE LINE/ EDGE LINE



DETAIL C - TWO-WAY LEFT TURN LANE LINE



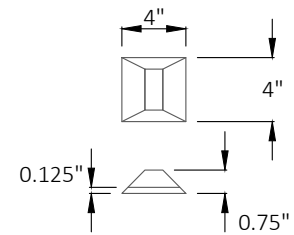
DETAIL D - CENTER LINE & LANE LINE



NOTES:

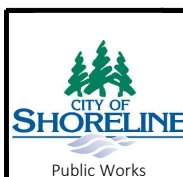
1. "ONLY" LEGENDS ARE OPTIONAL
2. TRAFFIC ARROWS SHOULD BE ALIGNED BY THE BASE OF THE LEGEND AND CENTERED IN THE LANE
3. TRAFFIC ARROWS SHALL BE PER WSDOT STD PLAN M-24.40-02 (LOW SPEED)
4. TRAFFIC LETTERS AND NUMBERS SHALL BE PER WSDOT STD PLAN M-80.10-01 - LOW SPEED APPLICATIONS

DETAIL G - LANE LEGENDS



DETAIL H - TYPE 2 RPM

TYPE 2 RPM RAISED FACE COLORS	
TYPE 2YY	REFLECTORIZED YELLOW AND YELLOW
TYPE 2W	RELECTORIZED WHITE - FACING TRAFFIC ONLY
TYPE 2Y	RELECTORIZED YELLOW - FACING TRAFFIC ONLY



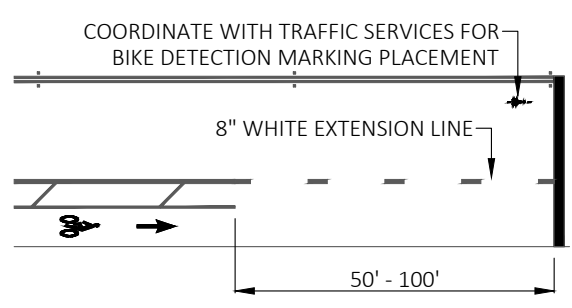
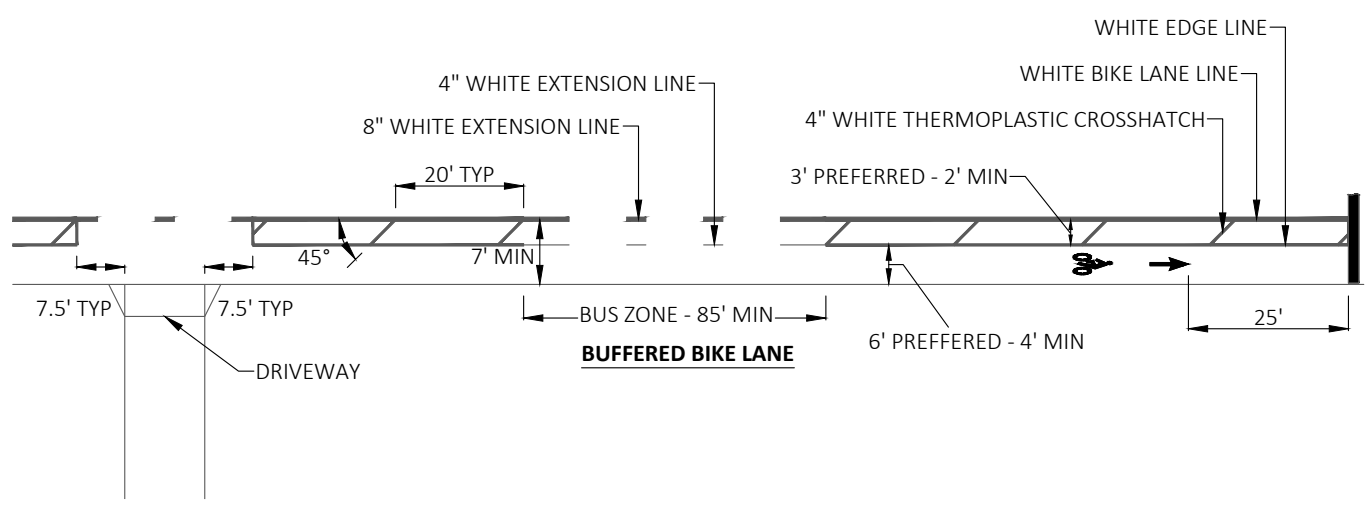
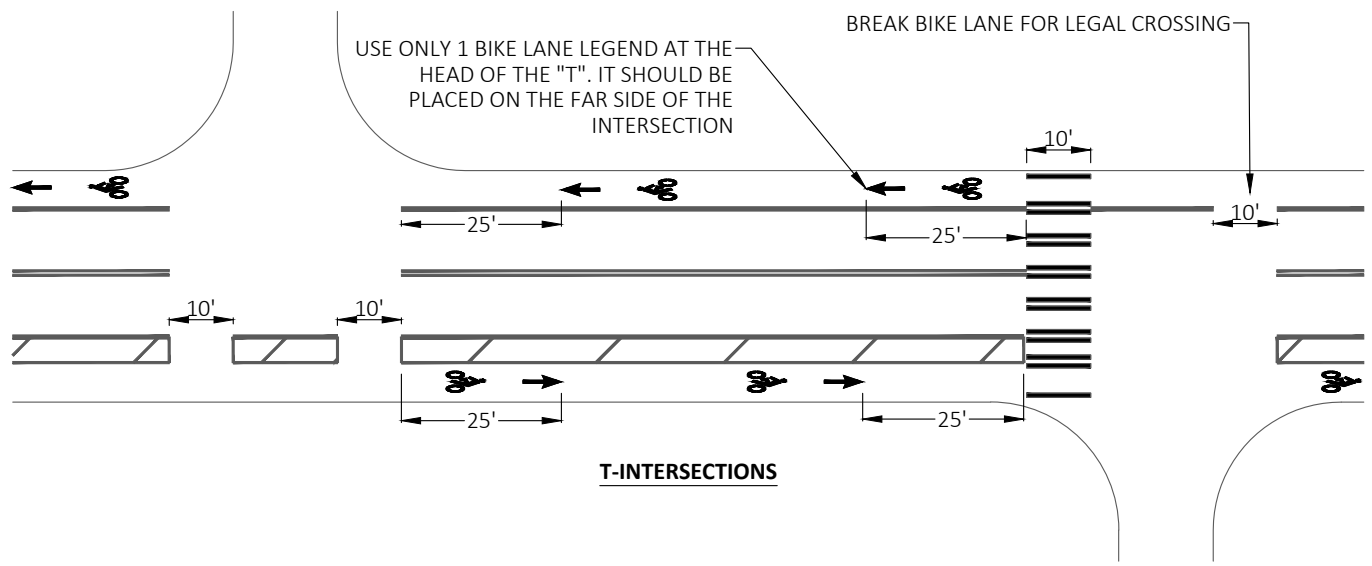
PUBLICATION DATE:

REVISION DATE: **07/17/2023**

STANDARD DETAIL NUMBER: **403**

SCALE: **NOT TO SCALE**

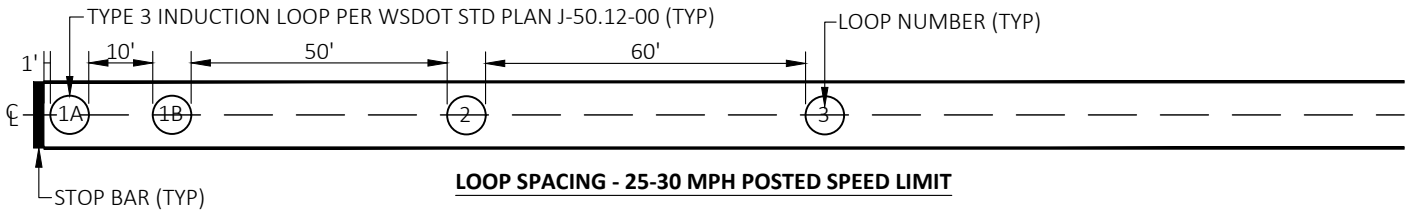
PAVEMENT MARKING DETAILS



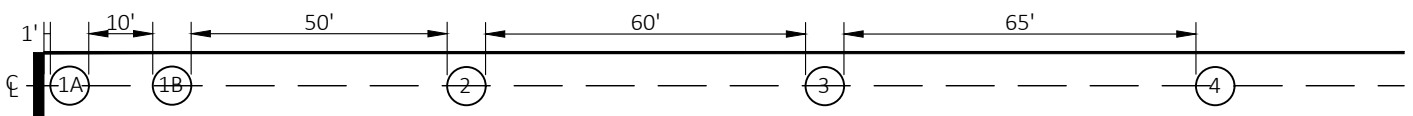
FOR BUFFERED OR NON-BUFFERED BIKE LANE

SIGNAL APPROACH - SINGLE LANE

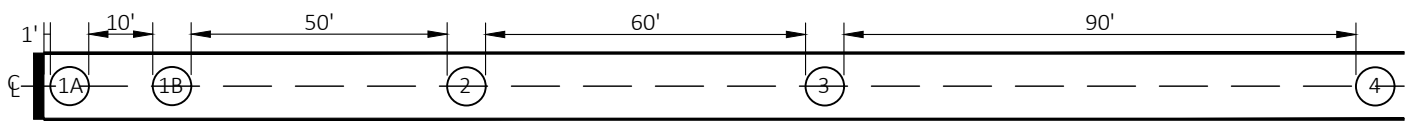
	PUBLICATION DATE:	REVISION DATE: 08/22/2023
	STANDARD DETAIL NUMBER: 410	SCALE: NOT TO SCALE
	BIKE LANE MARKINGS, SHEET 2 OF 2	



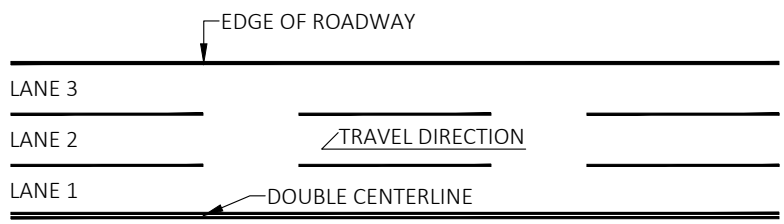
LOOP SPACING - 25-30 MPH POSTED SPEED LIMIT



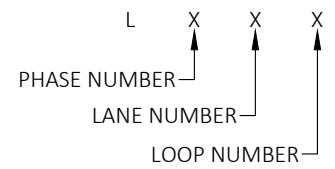
LOOP SPACING - 35 MPH POSTED SPEED LIMIT



LOOP SPACING - 40 MPH POSTED SPEED LIMIT




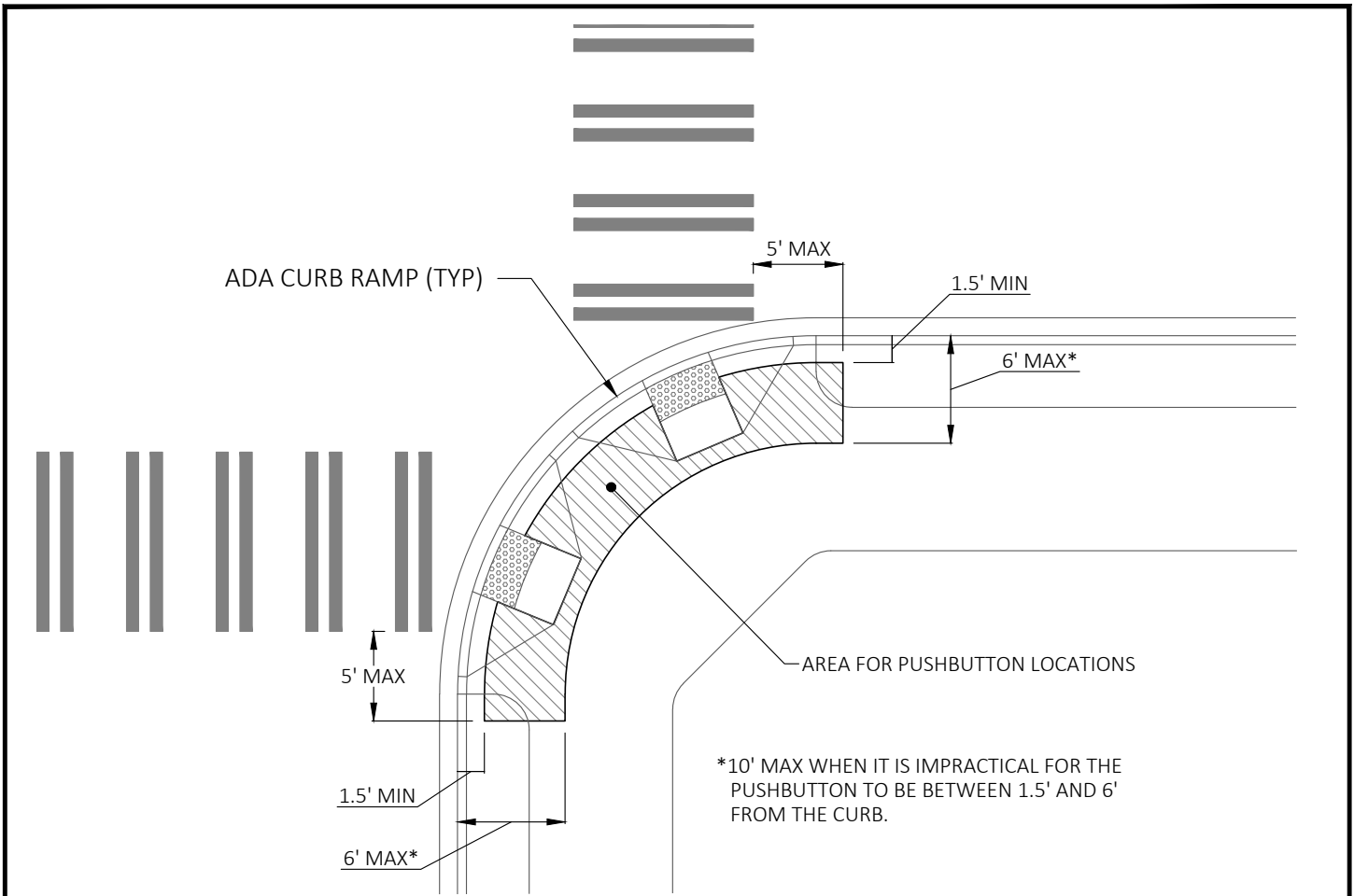
LANE NUMBERING



LOOP NUMBERING

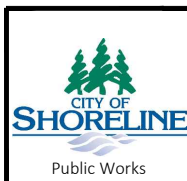
- NOTES:**
1. SEE WSDOT STD PLAN J-50.12-00 FOR WIRING PLAN.
 2. ADVANCED LOOPS SHOULD NOT BE IN SERIES WITH STOP BAR LOOPS.
 3. LOOP SHOULD BE SEPARATED BY LANE.

	PUBLICATION DATE:	REVISION DATE: 02/11/2020
	STANDARD DETAIL NUMBER: 420	SCALE: NOT TO SCALE
TRAFFIC SIGNAL LOOP		



NOTES:

1. TWO PEDESTRIAN PUSHBUTTONS ON A CORNER SHOULD BE SEPARATED BY 10'.
2. PUSH BUTTON FACE SHOULD BE ORIENTED PARALLEL TO THE CROSSING DIRECTION.
3. PUSH BUTTON SHALL HAVE A 4' X 4' LANDING WITH LESS THAN A 2% CROSS-SLOPE IN ALL DIRECTIONS. PUSH BUTTON LANDING CAN OVERLAP WITH ADA RAMP LANDING.
4. CURB RAMPS SHOWN FOR REFERENCE ONLY. PUSH BUTTONS SHALL NOT BE LOCATED IN CURB RAMP LANDINGS OR FLARES.



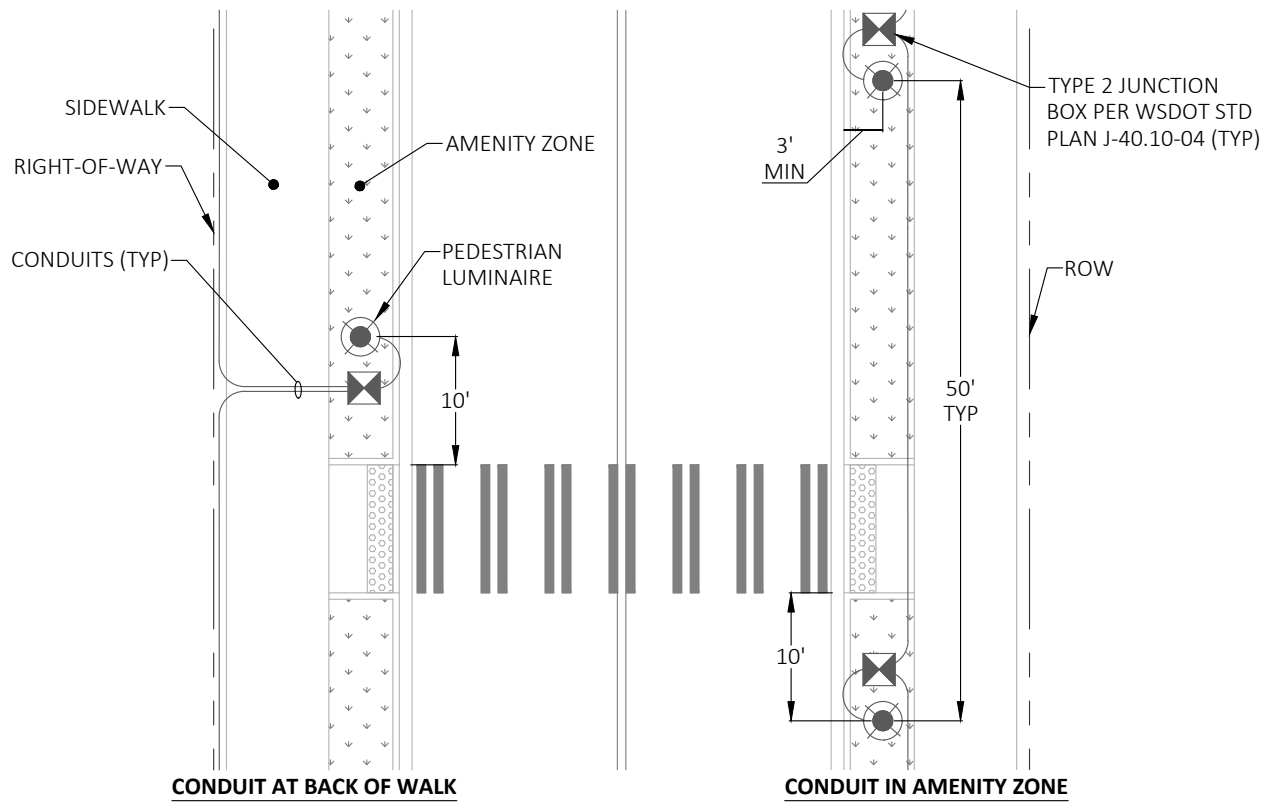
PUBLICATION DATE:

REVISION DATE: **10/06/2021**

STANDARD DETAIL NUMBER: **430**

SCALE: **NOT TO SCALE**

**PEDESTRIAN PUSHBUTTON
LOCATION**

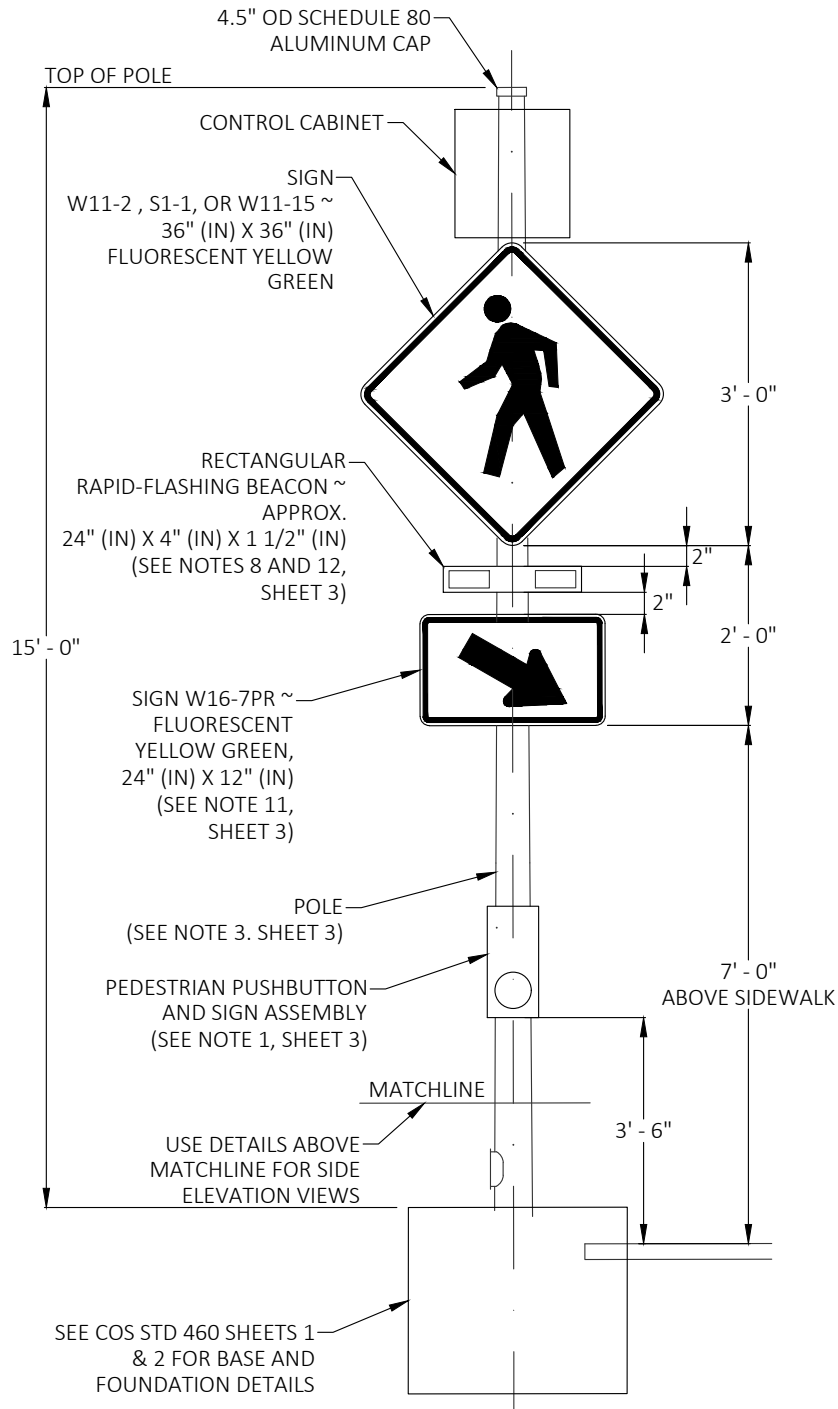


NOTES:

1. PEDESTRIAN SCALE LIGHTING SHOULD BE DIRECTED TOWARD THE SIDEWALK, AND CAN BE USED IN COMBINATION WITH ROADWAY SCALE LIGHTING.
2. ALL FIXTURES SHALL BE FROM TABLE 1 AND REQUIRE APPROVAL FROM THE CITY TRAFFIC ENGINEER.
3. INTERSECTION STREET LIGHTING SHOULD BE PLACED DOWNSTREAM OF CURB RAMPS, PERPENDICULAR TO THE CURB. FOLLOWING FHWA GUIDANCE, LUMINAIRES SHOULD BE LOCATED AT LEAST 10 FEET FROM THE CROSSWALK AND POSITIONED TO LIGHT THE SIDE OF THE PEDESTRIAN FACING THE APPROACHING VEHICLE.
4. WHERE FEASIBLE, LIGHTING SHOULD BE PLACED ON THE APPROACH SIDE OF A MID-BLOCK PEDESTRIAN CROSSING TO ENHANCE VISIBILITY OF PEDESTRIANS.
5. LIGHTING SHALL COMPLY WITH SECTION 7.9 OF THE ENGINEERING DEVELOPMENT MANUAL.
6. LIGHTING DESIGN AND CONSTRUCTION SHALL BE CONSISTENT WITH THE FOLLOWING CITY OF SEATTLE STANDARD PLANS AND CONSTRUCTION STANDARDS:
 - 6.1. STD PLAN 543B - PED LIGHT POLE FOUNDATION DETAIL
 - 6.2. STD PLAN 563A - POLE MOUNTING AND GROUT DETAIL
 - 6.3. STD PLAN 563B - FESTOON OUTLET DETAIL
 - 6.4. CONSTRUCTION STANDARD 1714.50 - UNDERGROUND STREETLIGHT SYSTEMS
 - 6.5. CONSTRUCTION STANDARD 1716.34 - STREETLIGHT POLE MOUNTING & GROUTING

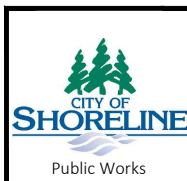
TABLE 1: MATERIAL STANDARD NUMBERS (FROM SEATTLE CITY LIGHT CATALOG)			
TYPE	LIGHT	POLE	BASE COVER
STANDARD PEDESTRIAN LIGHT	5723.25 - STOCK NUMBER 014967 - DARK BRONZE ARIETA SIDE MOUNT LED LUMINAIRE	5754.07 - STOCK NUMBER 013418 - 20-FT DARK BRONZE FIXED	N/A
DECORATIVE PEDESTRIAN LIGHT	5723.15 - STOCK NUMBER 014357 - GRAY URBANSCAPE POST-TOP LED LUMINAIRE	5756.09 STOCK NUMBER 013426 - POLE, 14-FT MOUNTING HEIGHT, ROUND SHAFT LIGHT GRAY	5756.09 - STOCK NUMBER 014249 BASE COVER, SHORT SHROUD LIGHT GRAY
AURORA AVE N	CHECK WITH TRAFFIC		
NORTH CITY	CHECK WITH TRAFFIC		

 <p>CITY OF SHORELINE Public Works</p>	PUBLICATION DATE:	REVISION DATE: 08/22/2023
	STANDARD DETAIL NUMBER: 440	SCALE: NOT TO SCALE
PEDESTRIAN LIGHTING		



FRONT ELEVATION VIEW

CONCRETE SQUARE FOUNDATION (SEE NOTE 2 ON
STANDARD DETAIL 460)



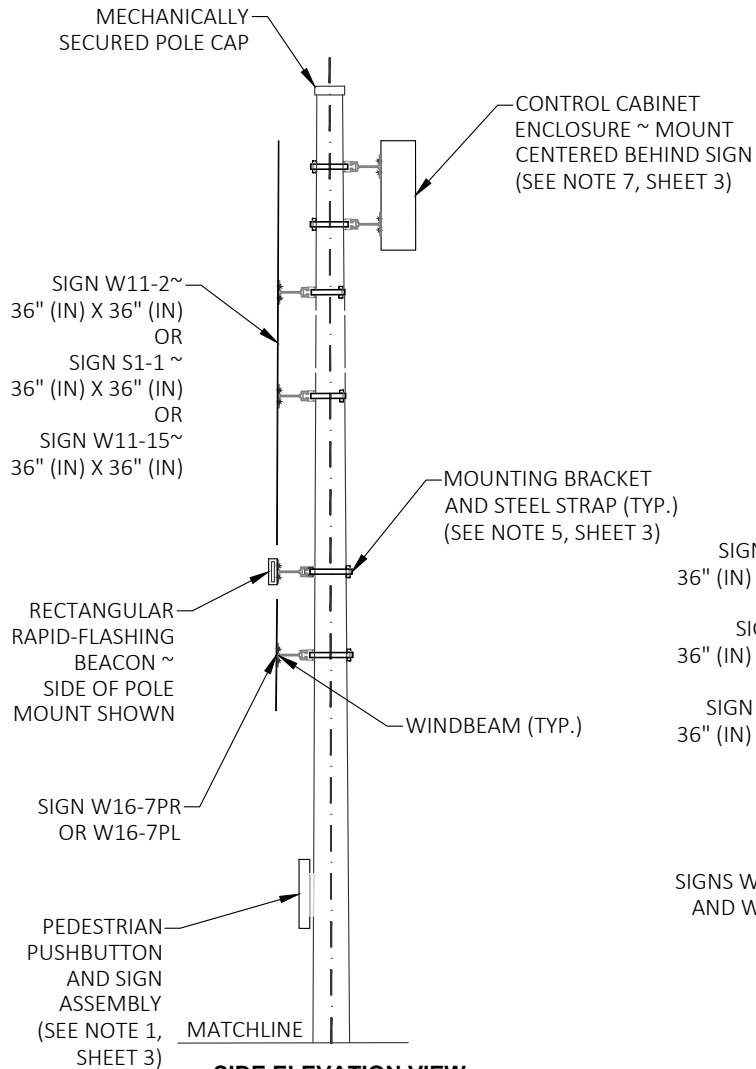
PUBLICATION DATE:

REVISION DATE: **08/23/2023**

STANDARD DETAIL NUMBER: **450**

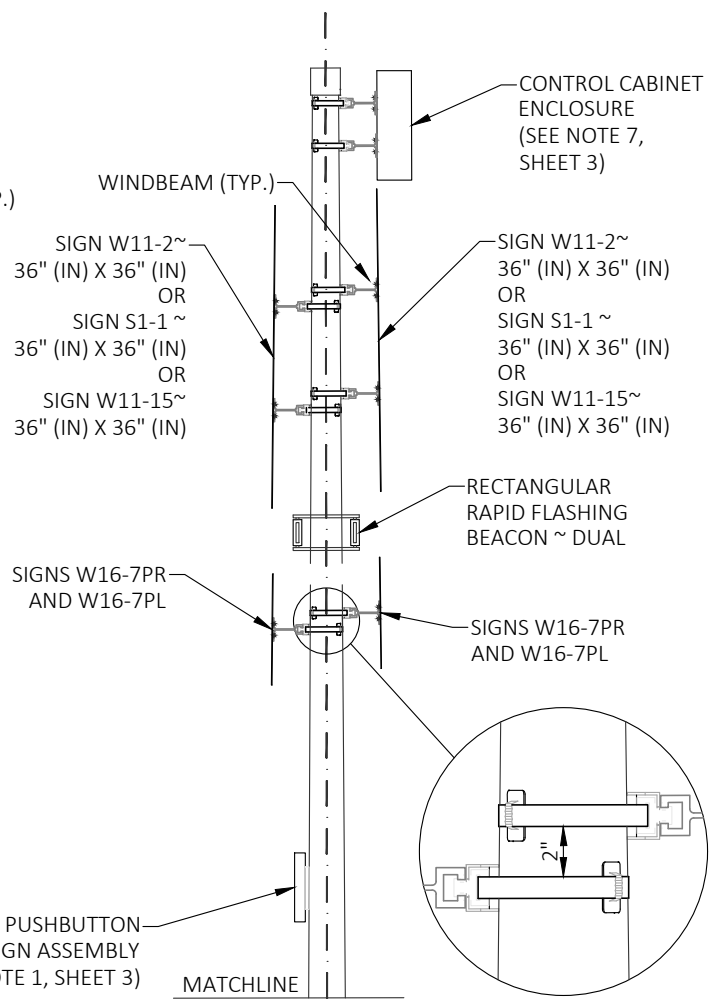
SCALE: **NOT TO SCALE**

**RECTANGULAR RAPID-FLASHING
BEACON 1 OF 3**



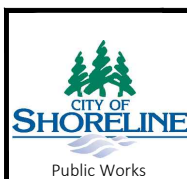
SIDE ELEVATION VIEW

UNI-DIRECTIONAL RAPID RECTANGULAR FLASHING BEACON, AD POWERED



SIDE ELEVATION VIEW

BI-DIRECTIONAL RAPID RECTANGULAR FLASHING BEACON, AD POWERED.



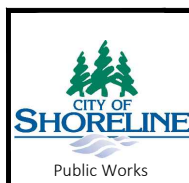
PUBLICATION DATE: REVISION DATE: **08/23/2023**

STANDARD DETAIL NUMBER: **450** SCALE: **NOT TO SCALE**

RECTANGULAR RAPID-FLASHING BEACON 2 OF 3

NOTES

1. PEDESTRIAN PUSHBUTTON AND SIGN ASSEMBLY - POLARA MODEL INX9WNO-Y WITH FRAME BDSP-014-B FOR PED PUSHBUTTON AND R10-25 SIGN. PUSHBUTTON ARROW SHALL FACE THE CROSSWALK. PUSHBUTTON SHALL BE 0" TO MAXIMUM 10" SIDE REACH FROM LEVEL SURFACE.
2. SEE COS STD 460 SHEETS 1 & 2 FOR BASE AND FOUNDATION DETAILS
3. 4" SCHEDULE 80 ALUMINUM PIPE.
4. SEE WSDOT STANDARD PLAN J-21.17, DETAIL C FOR WIRING DETAILS NOT SHOWN.
5. SEE WSDOT STANDARD PLAN G-30.10 FOR SIGN INSTALLATION ON SIGNAL STANDARD DETAILS.
6. TERMINATE RRFB CONNECTIONS PER MANUFACTURER'S RECOMMENDATION.
7. CONTROL CABINET ENCLOSURE SHALL BE SIZED BY THE RRFB MANUFACTURER WITH 'BEST' BLUE CORE PADLOCK. THE CONTROL CABINET SHALL BE MANUFACTURED PER TERMINAL CABINET REQUIREMENTS OF WSDOT STANDARD SPECIFICATION SECTION 9-29.25.
8. BEACON ASSEMBLY TO BE MOUNTED ON THE SIDE OF THE POLE. A SOLAR POWER UNIT MAY BE INSTALLED ON TOP OF THE MOUNT WITH APPROVAL FROM CITY TRAFFIC ENGINEER.
9. RRFB DISPLAYS SHALL BE LED TYPE MEETING THE INTENSITY REQUIREMENTS OF SAE J595 FOR CLASS 1 YELLOW, BUT SHALL NOT EXCEED 1000 CANDELAS DURING DAYLIGHT AND 500 CANDELAS AFTER DARK.
10. FOR POSTED SPEEDS OF 35 MPH OR LOWER, THE W11-2 SIGNS SHALL BE 36" x 36". FOR POSTED SPEEDS OF 40 MPH OR HIGHER, THE W11-2 SIGNS SHALL BE 48" x 48".
11. W16-7PR SHALL BE 24" X 12" UNLESS SIZE 30" X 18" IS APPROVED BY CITY TRAFFIC ENGINEER.
12. TWO W11-2 OR S1-1 CROSSING WARNING SIGNS (EACH WITH RRFB AND W16-7P PLAQUE) SHALL BE INSTALLED AT THE CROSSING, ONE ON THE RIGHT-HAND SIDE OF THE ROADWAY AND ONE ON THE LEFT-HAND SIDE OF EACH APPROACHING DRIVER. IF A MEDIAN EXISTS, THE LEFT-HAND SIDE ASSEMBLY SHOULD BE INSTALLED ON THE MEDIAN.



PUBLICATION DATE:

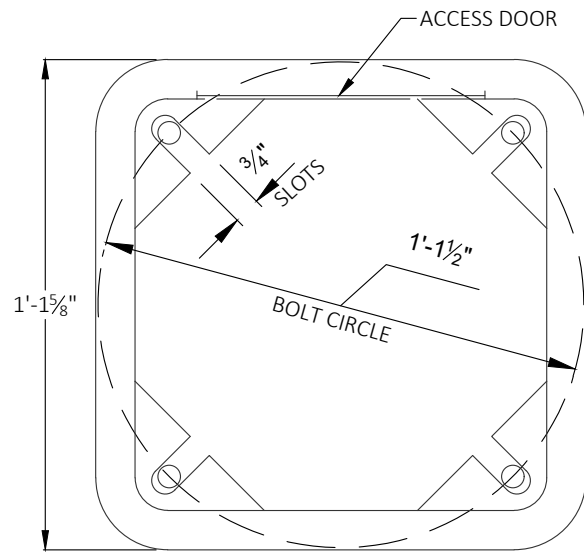
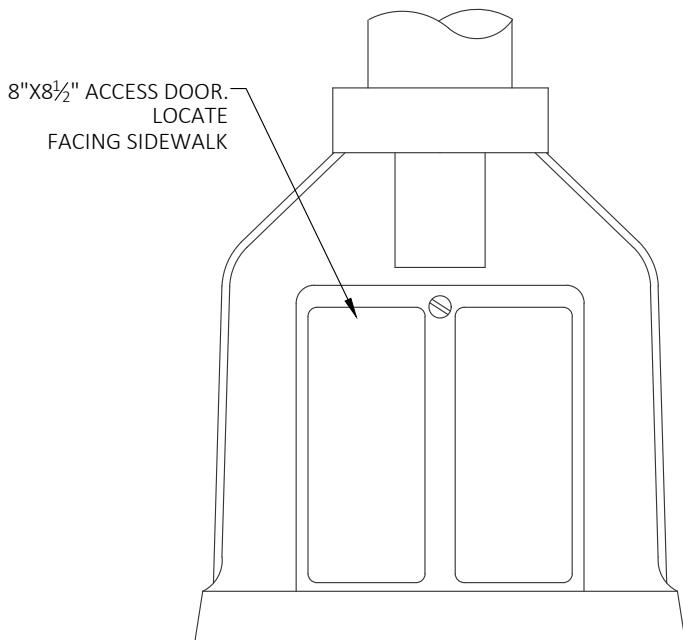
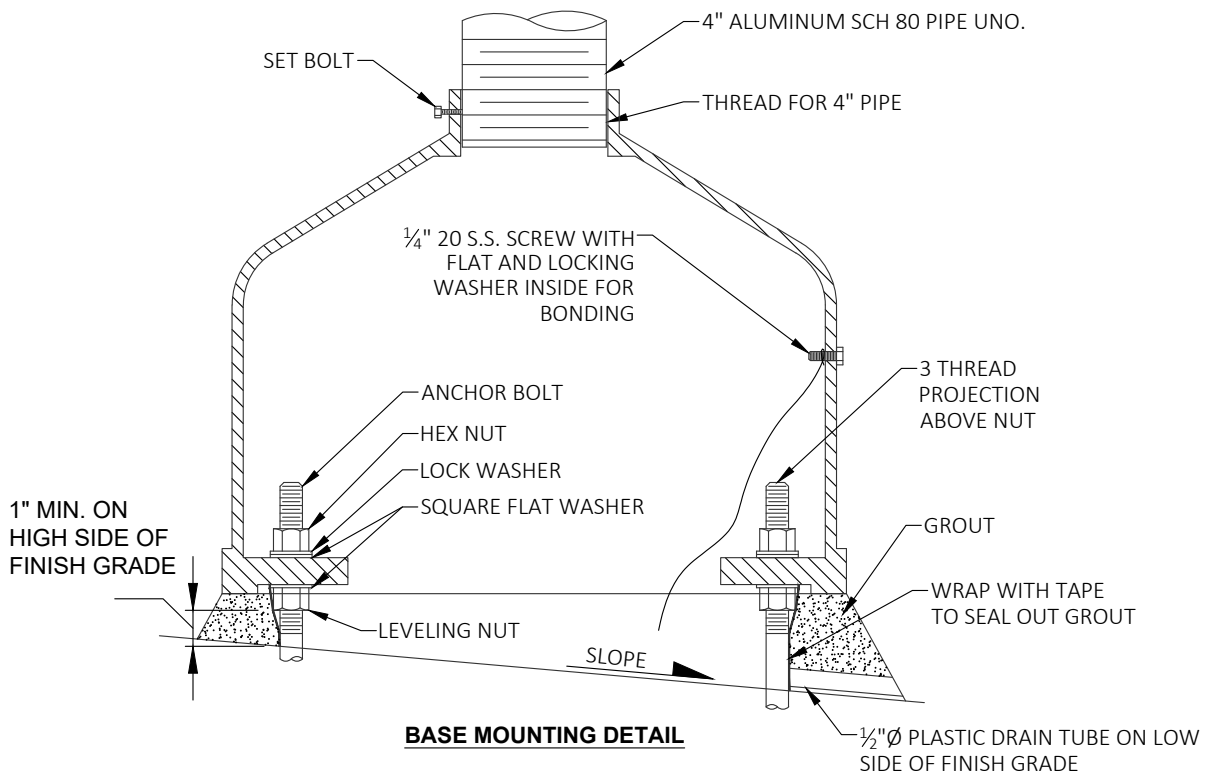
REVISION DATE: **08/23/2023**

STANDARD DETAIL NUMBER: **450**

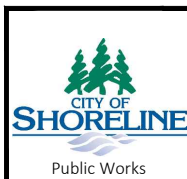
SCALE: **NOT TO SCALE**

**RECTANGULAR RAPID-FLASHING
BEACON 3 OF 3**

BASE - 1'-1 1/2" BOLT CIRCLE



NOTE: BASE SHALL MEET AASHTO BREAKAWAY REQUIREMENTS



PUBLICATION DATE:

REVISION DATE: **09/07/2023**

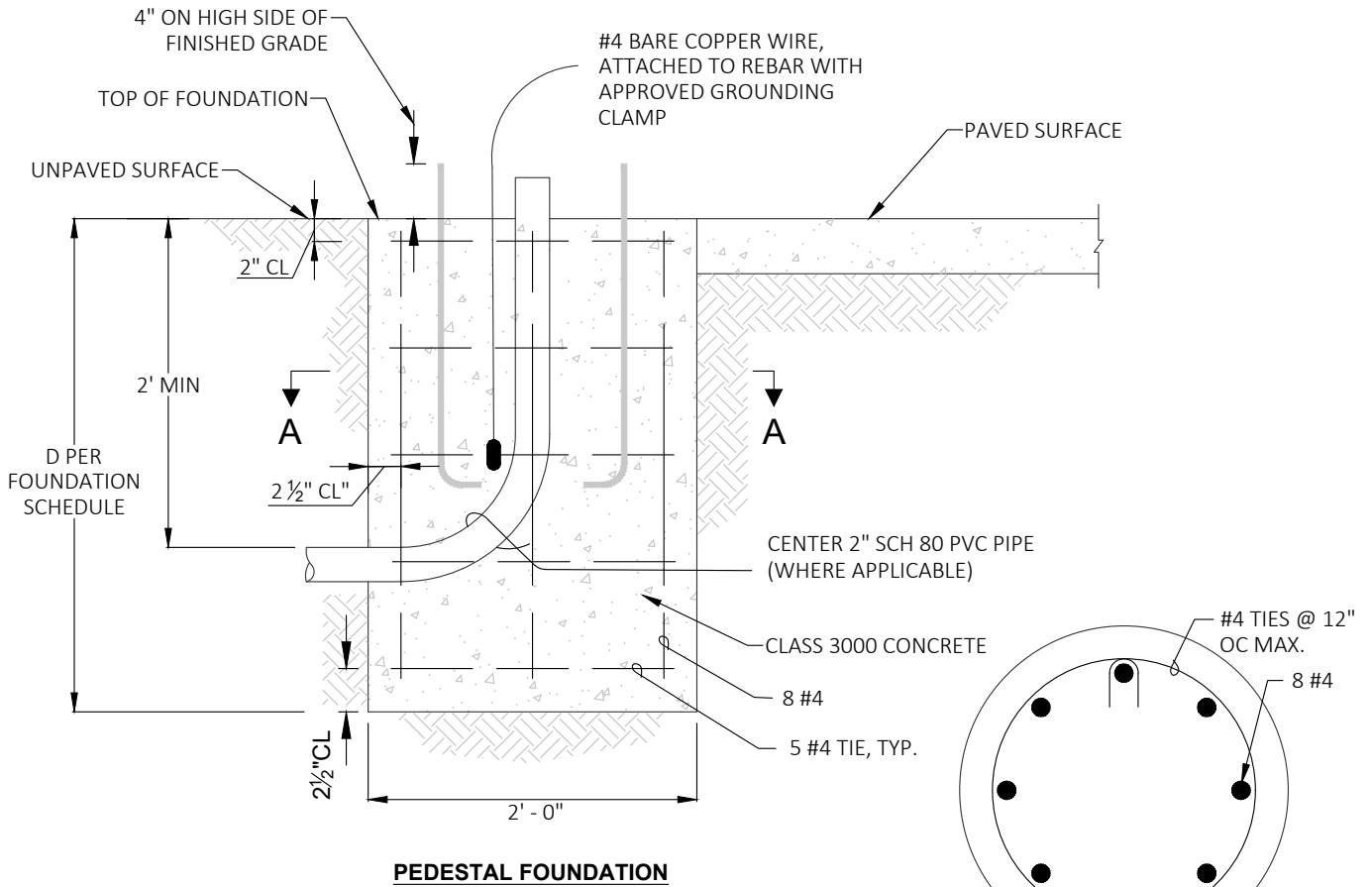
STANDARD DETAIL NUMBER: **460**

SCALE: **NOT TO SCALE**

**4 INCH ALUMINUM POLE
FOUNDATION 1 OF 2**

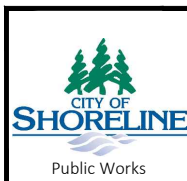
NOTES

1. THIS FOUNDATION HAS BEEN DESIGN ACCORDING TO THE AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS, FIRST EDITION, 2015. ULTIMATE WIND SPEED IS 100 MPH.
2. FLAT GROUND CONDITION SHOULD BE USED IF SLOPE IS 4H: 1V OR LESS.
3. SLOPED GROUND CONDITION SHOULD BE USED IF SLOPE IS GREATER THAN 4H: 1V BUT LESS THAN 2H: 1V.
4. FOUNDATION DEPTHS PROVIDED ASSUME SOIL CAN BE CLASSIFIED AS SAND. FOR PREDOMINANTLY CLAY SOILS A PROJECT SPECIFIC DESIGN WILL BE REQUIRED.



FOUNDATION SCHEDULE

LOADING AT BASE M	GROUND CONDITION (SEE NOTES)	FOUNDATION DEPTH D
M < 8500 FT-LB	FLAT SLOPED	4'-0" 5'-0"
8500 FT-LB < M < 12,000 FT-LB	FLAT SLOPED	5'-0" 6'-0"



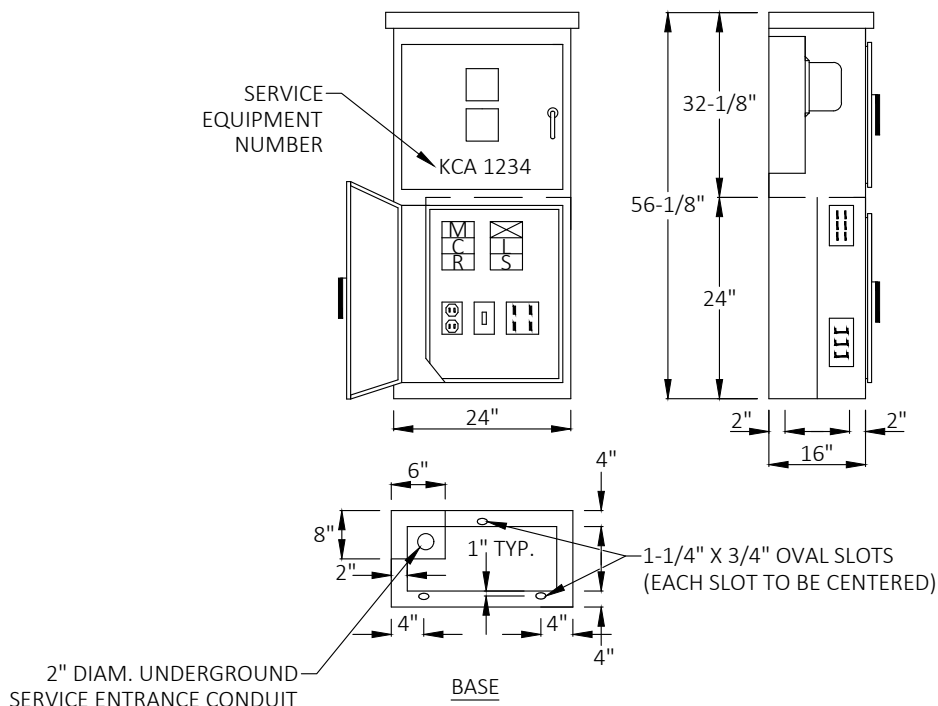
PUBLICATION DATE: _____ REVISION DATE: **09/07/2023**

STANDARD DETAIL NUMBER: **460** SCALE: **NOT TO SCALE**

**4 INCH ALUMINUM POLE
FOUNDATION 2 OF 2**

ES - 2EU

120 / 240 VOLT ELECTRICAL CABINET FOR SIGNAL & ILLUMINATION



CABINET

NEMA 3R, PADMOUNT, 1/8" MIN. GRADE 5052 H-32 ALUMINUM CONSTRUCTION, REMOVABLE EQUIPMENT MOUNTING PAN, Z SCREENED & GASKETTED VENTS.

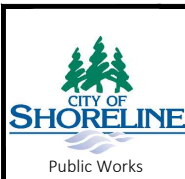
HINGED DEADFRONT.

DOORS: HEAVY DUTY CONCEALED HINGE, LIFT-OFF TYPE, STAINLESS STEEL, PADLOCKABLE VAULT HANDLE, BEST LOCK, CLOSED CELL NEOPRENE GASKET, POLISHED WIRE GLASS WINDOWS (4" BY 4") IN REVERSIBLE METER DOOR

FINISH: UNPAINTED MILL FINISH ALUMINUM OUTSIDE, WHITE INSIDE

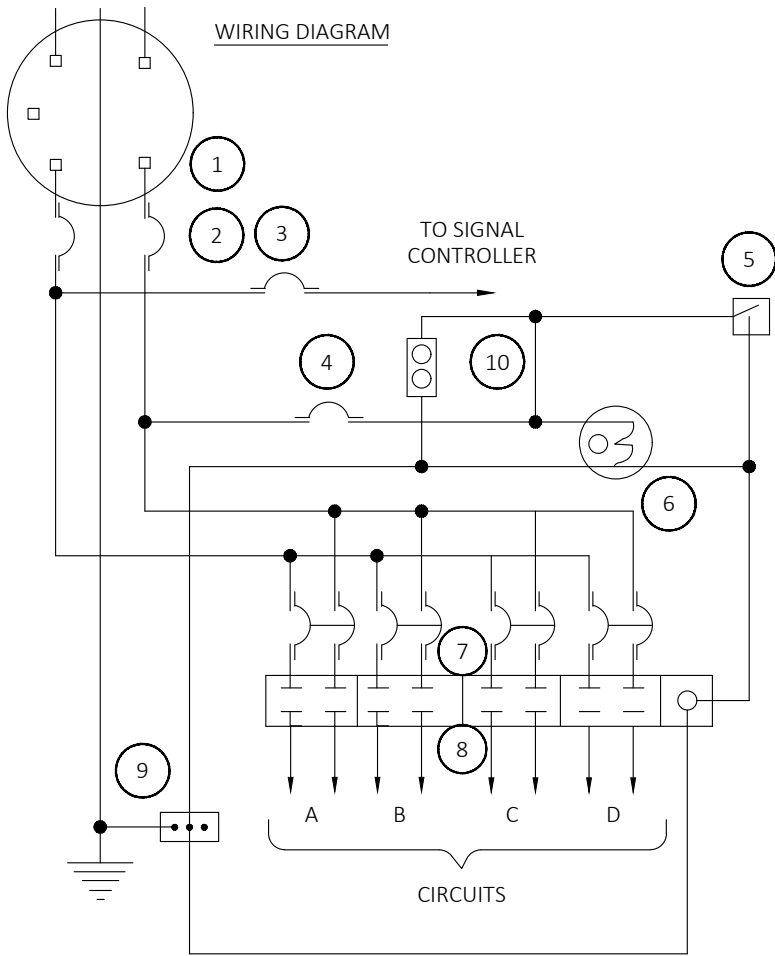
WIRED AND LABELED PER UL STANDARD #508A, SUITABLE FOR USE AS SERVICE EQUIPMENT, AND MEETING CURRENT EUSERC REQUIREMENTS.

CONTRACTOR SHALL
CONSTRUCT FOUNDATION, AND
SUPPLY AND INSTALL
ELECTRICAL SERVICE CABINET



PUBLICATION DATE:	REVISION DATE: 08/23/2023
STANDARD DETAIL NUMBER: 470	SCALE: NOT TO SCALE

STANDARD SERVICE CABINET 1 OF 3



WIRING SCHEMATIC LEGEND

1. METERBASE 200A
2. MAIN BREAKER (SEE BREAKER SCHEDULE)
3. SIGNAL SYSTEM BREAKER (50 AMP)
4. CONTROL BREAKER (SP-20 AMP)
5. TEST SWITCH (SPST-15 AMP-125 VOLT-"T" RATED)
6. PHOTOELECTRIC CONTROL (TERMINAL BLOCK)
7. BRANCH BREAKER (SEE BREAKER SCHEDULE)
8. CONTACTOR (SEE BREAKER SCHEDULE)
9. NEUTRAL BUS
10. GROUND FAULT RECEPTACLE

COMPONENT SCHEDULE

1. METERBASE: 200 AMP, 5 JAW, AW #U121314 OR MILBANK MS-24-TB, WITH BYPASS BLOCKS, 5TH JAW AT 9:00 POSITION (CONTRACTOR TO VERIFY WITH SERVING UTILITY)
2. PANELBOARD: 120/240 VAC, 100 AMP, 1 PHASE, 3 WIRE, COPPER BUS WESTINGHOUSE #BAB 2100 MAIN BREAKER, 100 AMP, 2 POLE WESTINGHOUSE TYPE BAB BOLT-ON BRANCH BREAKERS
4 - 20/2 ILLUMINATION BRANCH
1 - 20/1 GROUND FAULT RECEPTACLE BRANCH & CONTROL BRANCH
1 - 50/1 SIGNAL BRANCH
3. LIGHTING CONTACTOR RATED: 30 A, 120 VAC COIL, 4 REQUIRED
4. PHOTO ELECTRIC CELL: 1800 WATT, 120 VAC, TWIST LOCK, ALR #SST-IES (REMOTE-MOUNTED)
5. PHOTO-CELL BYPASS SWITCH: SPST, 15 AMP, 277 VAC
6. GROUND FAULT RECEPTAVLE: 20 AMP, 120 VAC, DUPLEX
7. BYPASS BLOCKS (NOT LINKS)
8. SAFETY SOCKET IN METER SECTION

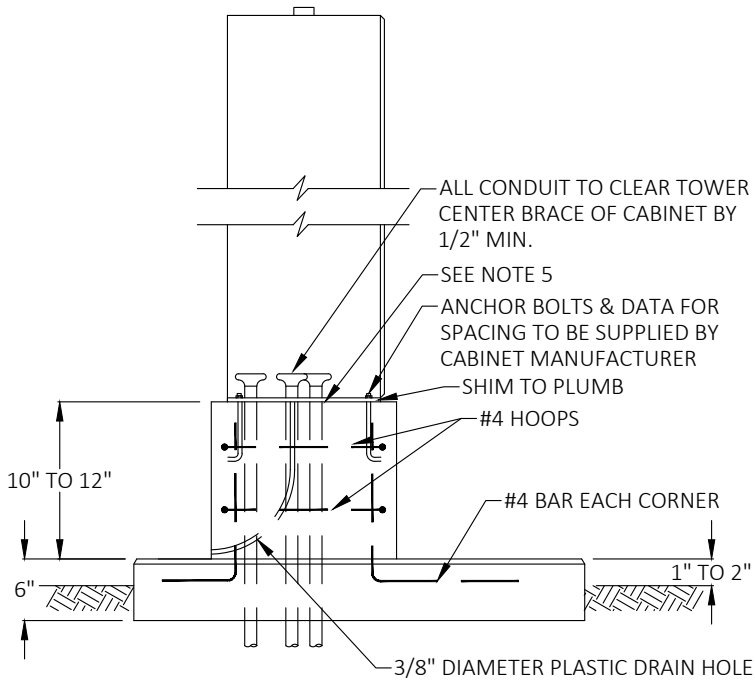
BREAKER SCHEDULE

SERVICE & CIRCUITS	MAIN BREAKER AMPS	BRANCH BREAKER AMPS	CONTACTOR AMPS	VOLTS
SERVICE	100			240
SIGNAL		50	NA	120
CONTROL & GFR		20	NA	120
CIRCUIT A		20	30	240
CIRCUIT B		20	30	240
CIRCUIT C		20	30	240
CIRCUIT D		20	30	240



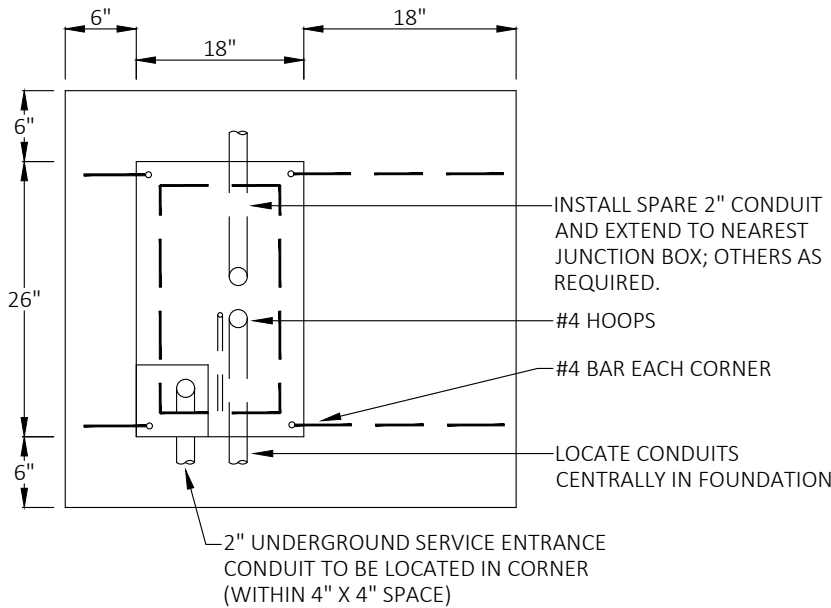
PUBLICATION DATE:	REVISION DATE: 08/23/2023
STANDARD DETAIL NUMBER: 470	SCALE: NOT TO SCALE

STANDARD SERVICE CABINET 2 OF 3



CABINET FOUNDATION NOTES

1. PAD MOUNT SHALL BE CLASS 300 CONCRETE UNLESS OTHERWISE NOTED ON THE PLANS.
2. WHERE PAD MOUNT IS LOCATED IN SIDEWALK, CONSTRUCT MOUNT TOP FLUSH WITH SIDEWALK GRADE, OMITTING CHAMFER WHERE TOP AND SIDEWALK ABUT.
3. PAD MOUNT DESIGN IS TYPICAL: CONTRACTOR SHALL USE CABINET MANUFACTURER'S SPECIFICATIONS TO ASSURE PROPER FIT OF CABINET ON BASE WITH RESPECT TO CONDUIT PLACEMENT. CONTRACTOR SHALL SUBMIT FOR APPROVAL A PROPOSED DESIGN WITH PLAN, ELEVATION AND ANY RELEVANT SECTION VIEW.
4. CABINET SHALL BE ATTACHED WITH AASHTO M-164 CHEMICALLY BONDED ANCHORS TO EXISTING PAD MOUNTS. ANCHOR INSTALLATION SHALL BE ASTM A-307, HOT DIP GALVANIZED 1/2" X 8" X 2".
5. PLACE SILICONE SEAL BETWEEN THE CABINET FOUNDATION AND THE CABINET.



UNDERGROUND SERVICE CONNECTION

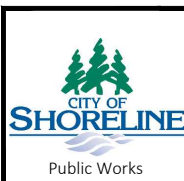
CONTRACTOR SHALL COORDINATE WITH POWER COMPANY RE: SERVICE LOCATION AND CONNECTION PRIOR TO COMMENCING WORK.

METER BASE REQUIRED BY CITY LIGHT.

SERVICE SHALL ENTER SERVICE CABINET BASE IN INDEPENDENT CONDUIT. MINIMUM 2" CONDUIT (RIGID OR PVC). INSTALL THROUGH FOUNDATION FOR UNFUSED SERVICE CONNECTION.

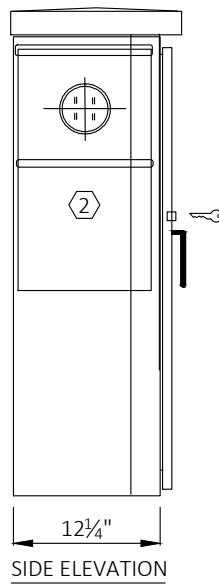
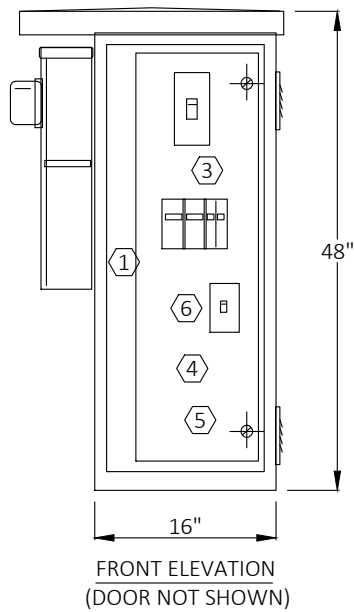
POLE FOUNDATION NOTE

CONTRACTOR SHALL ARRANGE FOR A KING COUNTY MATERIALS LAB REPRESENTATIVE TO BE PRESENT ON-SITE DURING EXCAVATION TO VERIFY SUBGRADE CONDITIONS. IN AREAS OF LOOSE FILLS, SIGNAL POLE FOUNDATIONS SHALL BE EXTENDED INTO UNDERLYING COMPETENT NATIVE MINERAL SOILS.

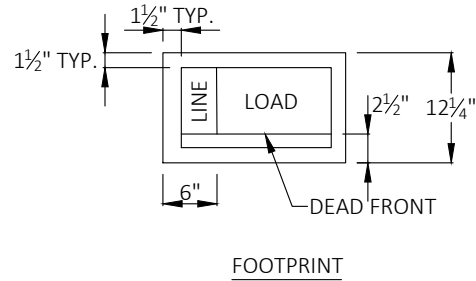


PUBLICATION DATE:	REVISION DATE: 08/23/2023
STANDARD DETAIL NUMBER: 470	SCALE: NOT TO SCALE

STANDARD SERVICE CABINET 3 OF 3



SERVICE CABINET DETAIL
 UL LISTED PER STANDARD #508A SUITABLE
 FOR USE AS SERVICE ENTRANCE.



CABINET

CONSTRUCTION:

SKYLINE SERIES #65348, NEMA TYPE 3R, OUTDOOR PADMOUNT, 1/8" 5052-H32 ALUMINUM CONSTRUCTION, 2 SCREENED AND GASKETED VENTS, REMOVABLE EQUIPMENT MOUNTING PAN, CABINET GROUND WITH MINIMUM BONDING WIRE TO NEUTRAL.

DOORS:

HEAVY-DUTY CONCEALED HINGES (LIFT-OFF TYPE),
 STAINLESS STEEL VAULT HANDLE WITH ROLLER RODS THAT PROVIDE 3-POINT COMPRESSION ON CLOSED CELL NEOPRENE GASKET, "BEST" LOCK AND PADLOCK TABS ON DOOR

DEADFRONT:

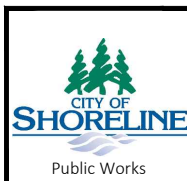
HINGED AND SECURED WITH QUARTER-TURN FASTENERS

FINISH:

MILL FINISH ALUMINUM, DEADFRONT AND WIREWAY COVER WHITE

COMPONENT SCHEDULE

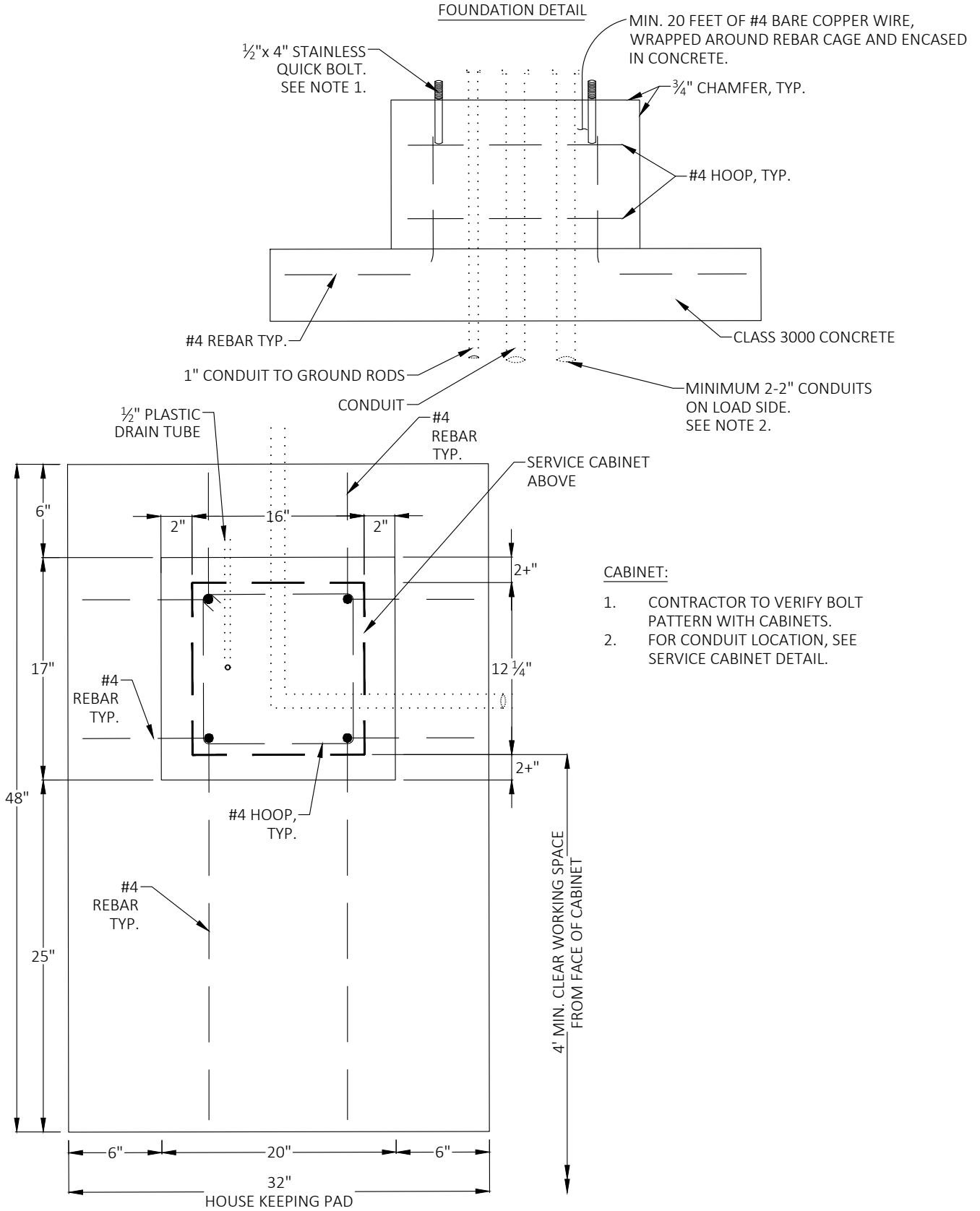
- ① SERVICE WIREWAY
- ② METER BASE: 200A, 4 JAW, MANUAL BYPASS, B-LINE U264, W/ 5TH JAW
- ③ PANELBOARD: 120/240 VAC, 125 AMP COPPER BUS, 1 PHASE, 3 WIRE, 6 CKT, FULLY RATED AT 10K AIC, WITH ENGRAVED NAME PLATES
 MAIN BREAKER: 100 AMP, 2 POLE, EATON QC2100
 BRANCH BREAKERS, BOLT ON, EATON TYPE BAB:
 2-20/2 LIGHTING 1, 2
 1-20/1 RRFB
 1-15/1 CONTROL
- ④ CONTACTOR: LIGHTING RATED, 30A, 4 POLE, 120V COIL, SQD 8910DPA34V02U1
- ⑤ TERMINAL BLOCK FOR FIELD WIRE CONNECTION TO REMOTE PHOTO CELL
- ⑥ PHOTO-CELL BYPASS SWITCH



PUBLICATION DATE:	REVISION DATE: 08/23/2023
STANDARD DETAIL NUMBER: 471	SCALE: NOT TO SCALE


SMALL SERVICE CABINET 1 OF 2

FOUNDATION DETAIL



CABINET:

1. CONTRACTOR TO VERIFY BOLT PATTERN WITH CABINETS.
2. FOR CONDUIT LOCATION, SEE SERVICE CABINET DETAIL.

	PUBLICATION DATE:	REVISION DATE: 08/23/2023
	STANDARD DETAIL NUMBER: 471	SCALE: NOT TO SCALE
SMALL SERVICE CABINET 2 OF 2		