06 - STRUCTURES - SPAN POLES
INDEX OF DRAWINGS

DRAWING NUMBER	DRAWING TITLE	DRAWING NUMBER	DRAWING TITLE
SP-1	INDEX OF DRAWINGS		
SP-2	STEEL SPAN POLE ELEVATION		
SP-3	STEEL SPAN POLE DETAILS		
SP-4	STEEL SPAN POLE FOUNDATION DETAILS		

DESIGNED BY:
BL COMPANIES

BL COMPANIES, INC.
100 CONSTITUTION PLAZA, 10TH FLOOR
HARTFORD, CT 06103

STATE OF CONNECTICUT
MICHAEL F. WOODS
No. 30950
LICENSED PROFESSIONAL ENGINEER

Michael Woods
2025.08.05
08:42:18-04'00'

REV. | DATE | REVISION DESCRIPTION

SIGNATURE BLOCK:

BL Companies
100 Constitution Plaza
10th Floor
Hartford, CT 06103

DESIGNER/DRAFTER: INSERT CHECKED BY: INSERT

CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE: REMOVAL OF I-84 EASTBOUND EXIT 21 OFF-RAMP

TOWN(S): WATERBURY

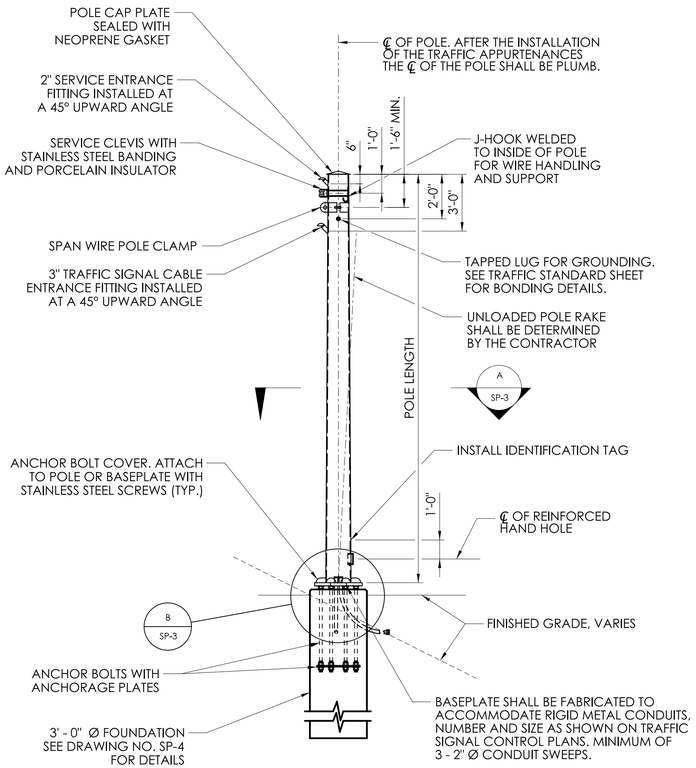
DRAWING TITLE: INDEX OF DRAWINGS

PROJECT NO.: 0151-0340

DRAWING NO.: SP-1

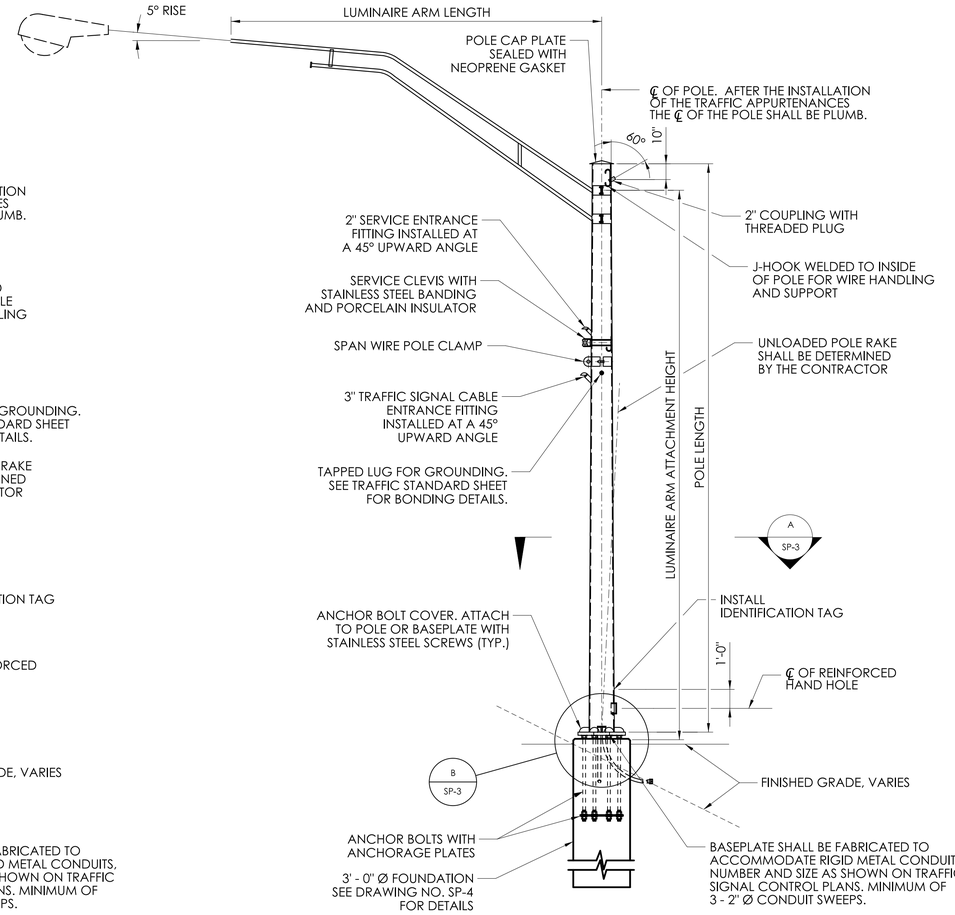
SHEET NO.: 06.01

LASTED SAVED BY:
FILE NAME:
PLOTTED DATE: 9/17/2024



ELEVATION - SPAN POLE

SCALE: 1/4" = 1'-0"



ELEVATION - COMBINATION SPAN POLE

SCALE: 1/4" = 1'-0"

SPAN POLE NOTES

THE SPAN POLE CONFIGURATION, INCLUDING THE ANCHORAGE TO THE FOUNDATION, SHALL BE DESIGNED, FABRICATED AND INSTALLED BY THE CONTRACTOR, IN ACCORDANCE WITH THE SPECIAL PROVISION "XX STEEL SPAN POLE" OR "COMBINATION STEEL SPAN POLE". SPAN WIRE(S) SHALL BE DESIGNED AND INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE SPECIAL PROVISION "SPAN WIRE".

THE SPAN WIRE CONFIGURATION, INCLUDING THE POLE HEIGHT, SPAN WIRE ORIENTATION, AND THE LOCATIONS OF TRAFFIC APPURTANENCES SUPPORTED BY THE STRUCTURE ARE SHOWN ON THE TRAFFIC CONTROL SIGNAL PLAN. PRIOR TO DESIGN OF EACH SPAN POLE CONFIGURATION, THE CONTRACTOR SHALL PREPARE A LAYOUT DRAWING BASED ON A FIELD SURVEY AND THE CONTRACT DOCUMENTS TO VERIFY THE SPAN POLES AND SPAN WIRES WHEN INSTALLED WILL MEET THE GEOMETRIC AND CLEARANCE REQUIREMENTS IN THE CONTRACT DOCUMENTS. IF THE REQUIREMENTS CANNOT BE MET, THE CONTRACTOR SHALL NOTIFY THE ENGINEER.

THE SPAN POLE CONFIGURATION SHALL BE DESIGNED IN ACCORDANCE WITH THE LATEST EDITION OF THE AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, INCLUDING THE LATEST INTERIM SPECIFICATIONS, AS AMENDED BY THE SPECIAL PROVISION "XX STEEL SPAN POLE" OR "COMBINATION STEEL SPAN POLE".

THE SPAN POLE CONFIGURATION SHALL BE DESIGNED TO SUPPORT TRAFFIC APPURTENANCES WITH PROPERTIES NO LESS THAN THOSE SHOWN ON THE TRAFFIC PLANS.

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK: BL Companies, 100 Constitution Plaza, 10th Floor, Hartford, CT 06103

DESIGNER/DRAFTER: CHECKED BY:

SCALE AS NOTED

CTDOT CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE: REMOVAL OF I-84 EASTBOUND EXIT 21 OFF-RAMP

TOWN(S): WATERBURY

DRAWING TITLE: STEEL SPAN POLE ELEVATION

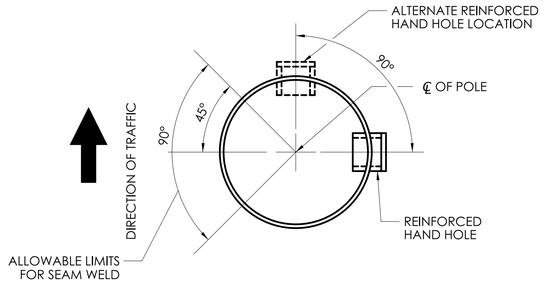
PROJECT NO.: 0151-0340

DRAWING NO.: SP-2

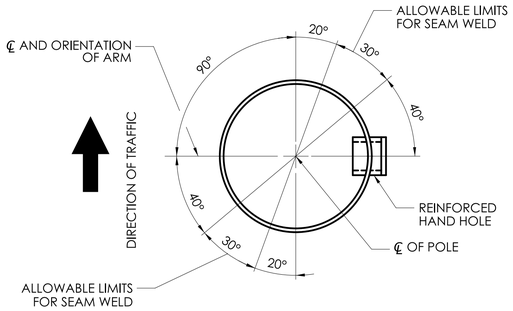
SHEET NO.: 06.02

LASTED SAVED BY: **FILE NAME:**

PLOTTED DATE: 9/17/2024

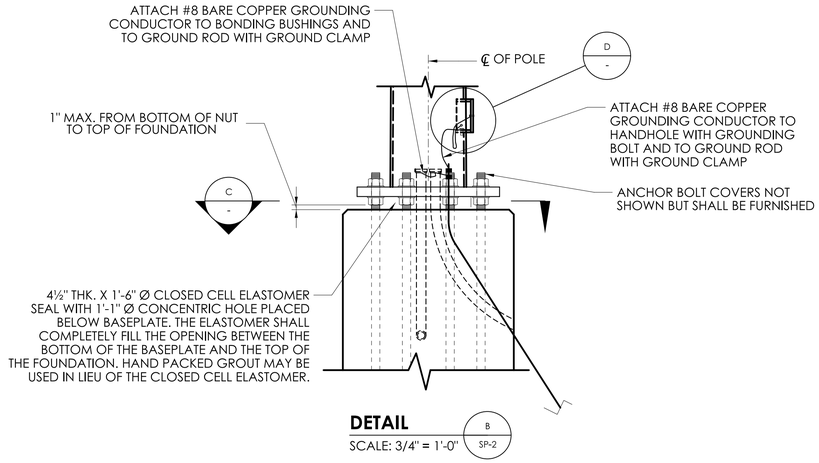


POLE WITH 1 SEAM WELD

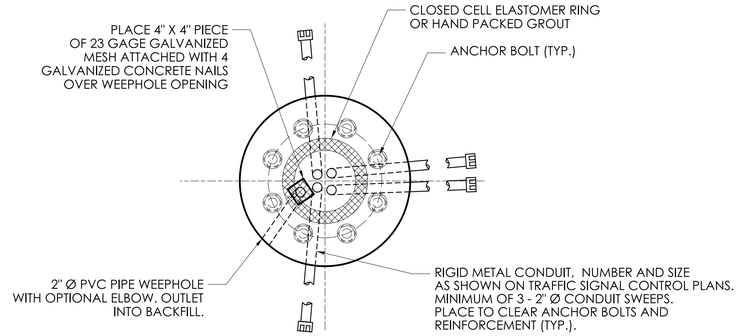


POLE WITH 2 SEAM WELDS

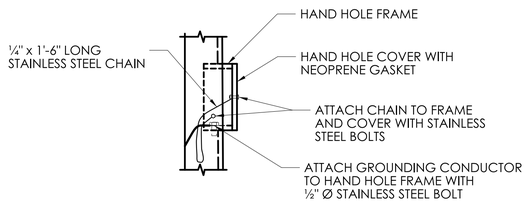
SECTION (A / SP-2)
SCALE: 1 1/2" = 1'-0"



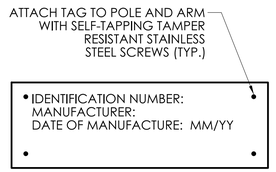
DETAIL (B / SP-2)
SCALE: 3/4" = 1'-0"



SECTION (C / -)
SCALE: 3/4" = 1'-0"



DETAIL (D / -)
SCALE: 1 1/2" = 1'-0"



IDENTIFICATION TAG - N.T.S.

REVISION DESCRIPTION | DATE | REV.

SIGNATURE BLOCK:
BL Companies
100 Constitution Plaza
10th Floor
Hartford, CT 06103

DESIGNER/DRAFTER: CHECKED BY:

SCALE AS NOTED

CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE: REMOVAL OF I-84 EASTBOUND EXIT 21 OFF-RAMP

TOWN(S): WATERBURY

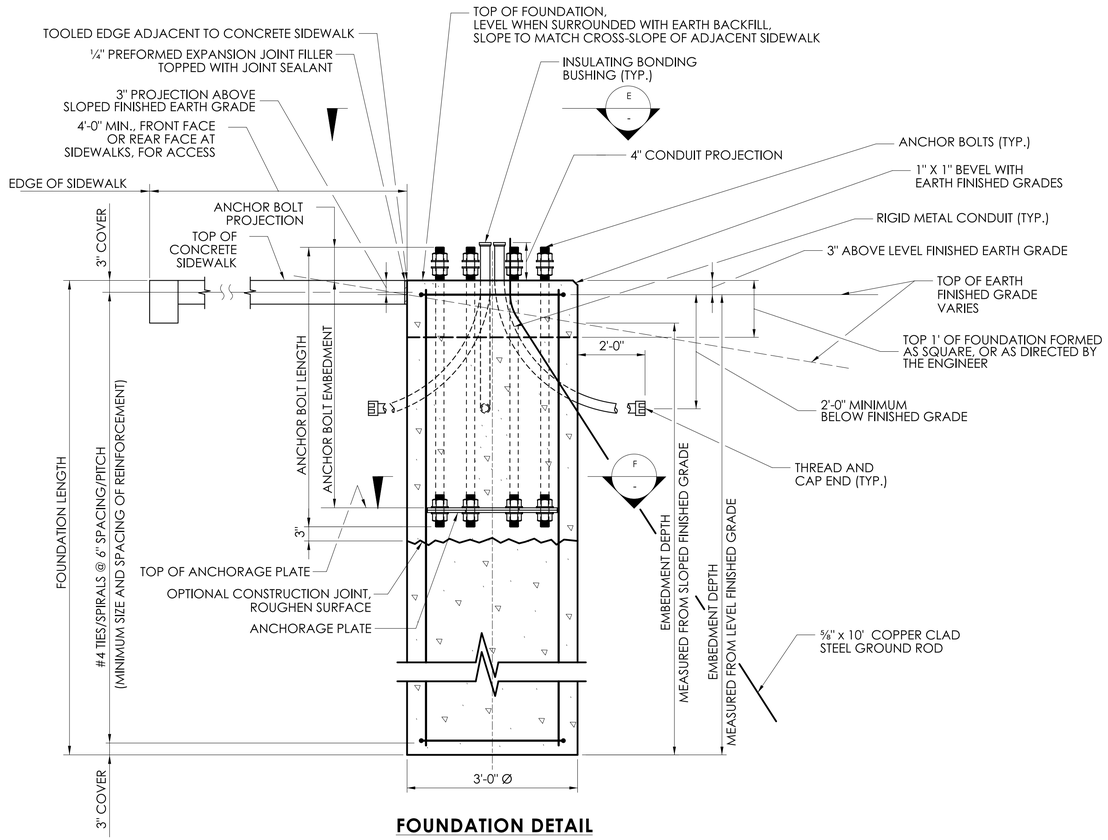
DRAWING TITLE: STEEL SPAN POLE DETAILS

PROJECT NO.: 0151-0340

DRAWING NO.: SP-3

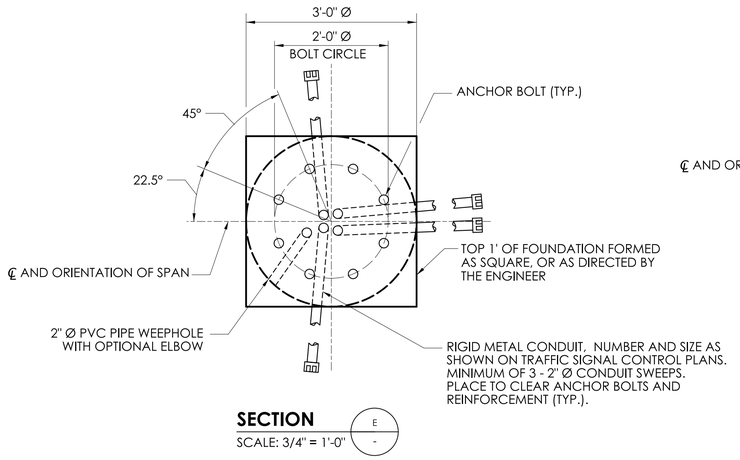
SHEET NO.: 06.03

LASTED SAVED BY: **FILE NAME:**
PLOTTED DATE: 9/17/2024



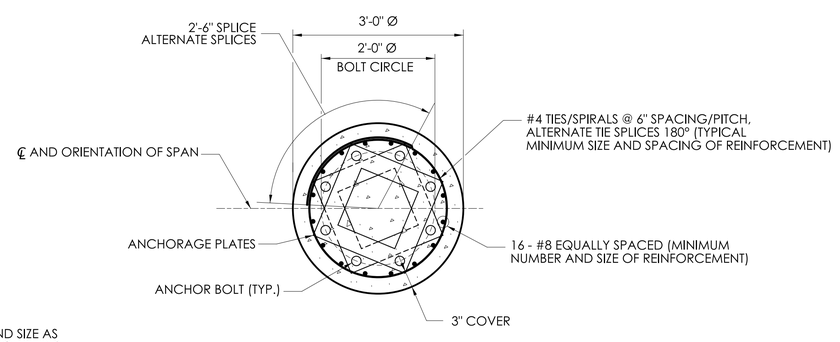
FOUNDATION DETAIL

SCALE: 3/4" = 1'-0"



SECTION (E)

SCALE: 3/4" = 1'-0"



SECTION (F)

SCALE: 3/4" = 1'-0"

FOUNDATION NOTES

THE DRILLED SHAFT FOUNDATION FOR THE SPAN POLE SHALL BE DESIGNED, FABRICATED, AND CONSTRUCTED BY THE CONTRACTOR IN ACCORDANCE WITH THE SPECIAL PROVISION "TRAFFIC CONTROL FOUNDATION-SPAN POLE".

THE FOUNDATION SHALL BE DESIGNED FOR THE SOILS AND ROCK PROPERTIES BASED ON THE SUBSURFACE CONDITIONS (CHARACTER OF THE SOIL AND ROCK, PRESENCE OF GROUND WATER, ETC.) IN THE LOCATION OF, ADJACENT TO AND BELOW THE DRILLED SHAFT FOUNDATION EXCAVATION. THE NEED AND EXTENT OF ALL SUBSURFACE EXPLORATIONS AND INVESTIGATIONS SHALL BE DETERMINED BY THE CONTRACTOR.

THE DESIGN OF THE FOUNDATION SHALL BE COORDINATED WITH THE SPAN POLE AND THE SPAN POLE ANCHORAGE TO ENSURE THAT THE FOUNDATION IS ADEQUATE FOR THE SPAN POLE REACTIONS AND TO AVOID CONFLICTS BETWEEN THE EMBEDDED SPAN POLE ANCHORAGE AND THE FOUNDATION REINFORCEMENT.

THE CONCRETE FOR THE FOUNDATION SHALL CONFORM TO CLASS PCC04460. THE COMPRESSIVE STRENGTH, f'c, USED IN DESIGN OF THE FOUNDATION SHALL BE 4,000 PSI. THE COMPRESSIVE STRENGTH OF THE CONCRETE IN THE CONSTRUCTED FOUNDATION SHALL CONFORM TO THE REQUIREMENTS OF 6.01 - CONCRETE FOR STRUCTURES AND M.03 - PORTLAND AND HYDRAULIC CEMENT CONCRETE.

THE REINFORCEMENT SHALL BE UNCOATED AND CONFORM TO ASTM A615, GRADE 60. THE REINFORCEMENT SHALL BE ASSEMBLED WITH WIRE TIES. WELDING TO ASSEMBLE REINFORCEMENT IS NOT PERMITTED. ALL REINFORCEMENT SHALL HAVE 3" COVER, UNLESS OTHERWISE NOTED.

THE CONCRETE SHALL BE PLACED IN THE EXCAVATION AGAINST UNDISTURBED EARTH.

THE SPAN POLE SHALL NOT BE ERECTED ON THE FOUNDATION UNTIL THE CONCRETE IN THE SHAFT HAS ATTAINED A COMPRESSIVE STRENGTH, f'c, GREATER THAN OR EQUAL TO 4000 PSI.

THE COST OF THE FOUNDATION, INCLUDING THE EXCAVATION, CONCRETE, REINFORCEMENT, CASING, WEEPHOLES, AND PREFORMED EXPANSION JOINT FILLER, INCLUDING THE DESIGN AND FABRICATION, TO BE INCLUDED FOR PAYMENT UNDER THE ITEM "TRAFFIC CONTROL FOUNDATION-SPAN POLE."

WHERE AN EXISTING CONCRETE SIDEWALK ABUTTING A FOUNDATION IS DAMAGED OR CUT DURING INSTALLATION, REPLACE THE ENTIRE SECTION. ALL SIDEWALK REPLACED DUE TO FOUNDATION INSTALLATION SHALL BE PAID FOR UNDER THE ITEM "CONCRETE SIDEWALK".

THE COST OF PREFORMED EXPANSION JOINT FILLER AND JOINT SEALANT SHALL BE INCLUDED FOR PAYMENT UNDER THE ITEM "CONCRETE SIDEWALK".

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK:

BL Companies
100 Constitution Plaza
10th Floor
Hartford, CT 06103

DESIGNER/DRAFTER: CHECKED BY:

SCALE AS NOTED

CTDOT CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE: REMOVAL OF I-84 EASTBOUND EXIT 21 OFF-RAMP

TOWN(S): WATERBURY

DRAWING TITLE: STEEL SPAN POLE FOUNDATION DETAILS

PROJECT NO.: 0151-0340

DRAWING NO.: SP-4

SHEET NO.: 06.04

LASTED SAVED BY: **FILE NAME:**
PLOTTED DATE: 9/17/2024