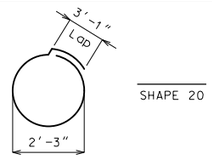
## BILL OF REINFORCING STEEL - EACH PILE

| NO. | SIZE & MARK | ACTUAL LENGTH | SHAPE | BENDING DIAGRAM |
|---|---|---|---|---|
| Varies | 4 P1 | 10'-0" | 16 | |
| | | | | |
| 8 | 5 V1 | Varies | 20 | |
| | | | | |
| | | | | |
| | | | | |




SHAPE 20

SHAPE 16

Notes:

All dimensions are out to out.

Hooks and bends shall be in accordance with the CRSI Manual of Standard Practice for Detailing Reinforced Concrete Structures. Stirrup and Tie Dimensions.

Actual lengths are measured along centerline of bar to the nearest inch.

All bars shall be epoxy coated.

All exposed surfaces of the existing structural steel piles and sway bracing shall be recoated with one 6-mil thickness of aluminum gray epoxy-mastic primer applied over an SSPC-SP3 surface preparation in accordance with Sec 1081. The bituminous coating shall be applied one foot above and below the existing ground line and in accordance with Sec 702. These protective coatings will not be required below the normal low water line. The cost of surface preparation will be considered completely covered by the contract lump sum price for Surface Preparation for Applying Epoxy-Mastic Primer. The cost of the aluminum gray epoxy-mastic primer and bituminous coating will be considered completely covered by the contract lump sum price for Aluminum Gray Epoxy-Mastic Primer. ①

General Notes:

All concrete for pile encasement shall be Class B (f'c = 3000 psi).

The reinforcing steel shall be epoxy coated Grade 60 with fy = 60,000 psi

Minimum clearance to reinforcing steel shall be 1 1/2", unless otherwise shown.

The exposed and accessible surfaces of the existing structural steel that will be encased in concrete shall be cleaned with a minimum of SSPC-SP-3 surface preparation and coated with a minimum of one coat of gray epoxy-mastic primer (non-aluminum) in accordance with Sec 1081 to produce a dry film thickness of not less than 3 mils before concrete is poured. The surface preparation and coating for piles shall extend a minimum of one foot outside the face of the pile encasement.

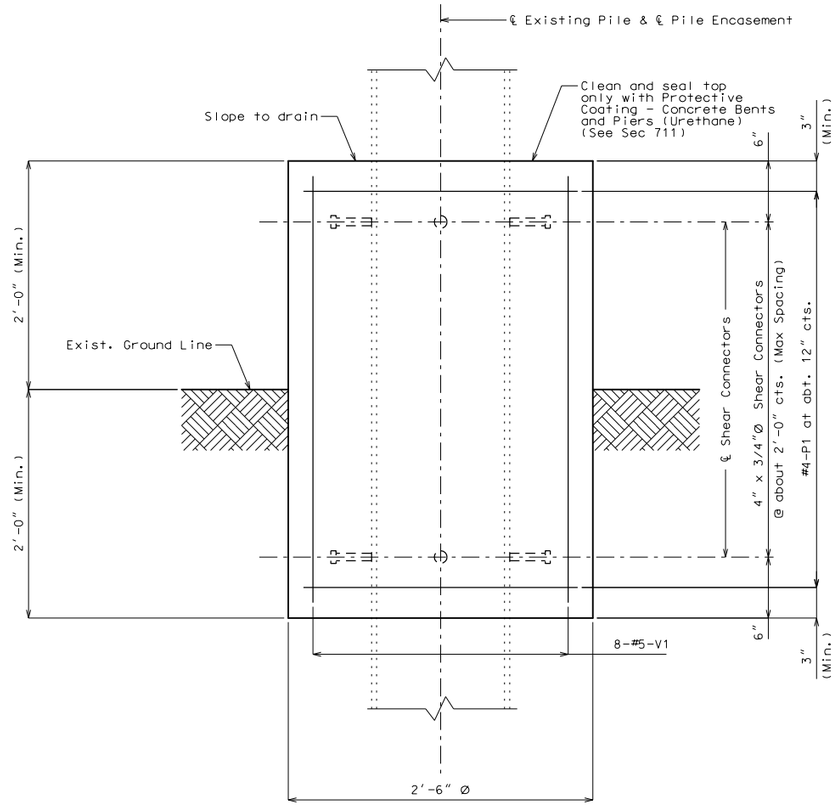
Cost of all concrete, reinforcement, shear connectors, surface preparation, coatings and any other incidental material or labor to complete pile encasement, complete in place, will be considered completely covered by the contract unit price for Pile Encasement.

Cost of all excavation will be considered completely covered by the contract lump sum price for Class 2 Excavation.

Cost of dewatering will be considered completely covered by the contract lump sum price for Dewatering. See special provisions.

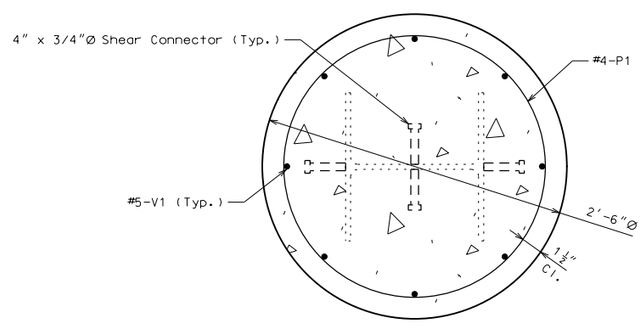
A FRP pile jacketing system may be used in lieu of pile encasement at the contractor's option. No additional payment will be made for this substitution. See special provisions.

Shear connectors shall be in accordance with Sec 712, 1037 and 1080.




PART ELEVATION SHOWING PILE ENCASEMENT

Note: Existing sway bracing not shown for clarity. Shift reinforcing steel in the field to clear existing sway bracing. ②




SECTION SHOWING PILE ENCASEMENT

# PILE ENCASEMENT

Detailed
Checked

Note: This drawing is not to scale. Follow dimensions.

Sheet No. of

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

| DATE PREPARED | |
|---|---|
| 7/7/2020 | |
| ROUTE | STATE |
| * | MO |
| DISTRICT | SHEET NO. |
| BR | * |
| COUNTY | |
| * | |
| JOB NO. | |
| * | |
| CONTRACT ID. | |
| PROJECT NO. | |
| BRIDGE NO. | |
| RHB17 | |

| DATE | DESCRIPTION |
|---|---|
| | |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

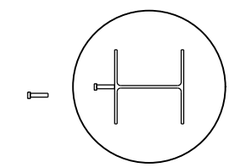
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

Standard Drawing Guidance
(do not show on plans):

① Use this note for coating any remaining piles or pile sections, and sway bracing not being repaired. Use this note on Front Sheet or Notes Sheet when no repair or no encasement is required. Include standard pay items "Surface Preparation for Applying Epoxy-Mastic Primer" and either "Aluminum Epoxy-Mastic Primer" or "Gray Epoxy-Mastic Primer".

"Aluminum" is preferred because it acts as both a barrier and corrosion protection where "Gray" only acts as a barrier. If for any reason coated pile is embedded in fresh concrete or "Gray" is being used elsewhere, "Aluminum" shall not be used.)

See EPG 751.40.1.2.1 for guidance on when coating, encasement or jacketing, and plating or partial replacement should be considered.

② Delete note if there is not any existing sway bracing.