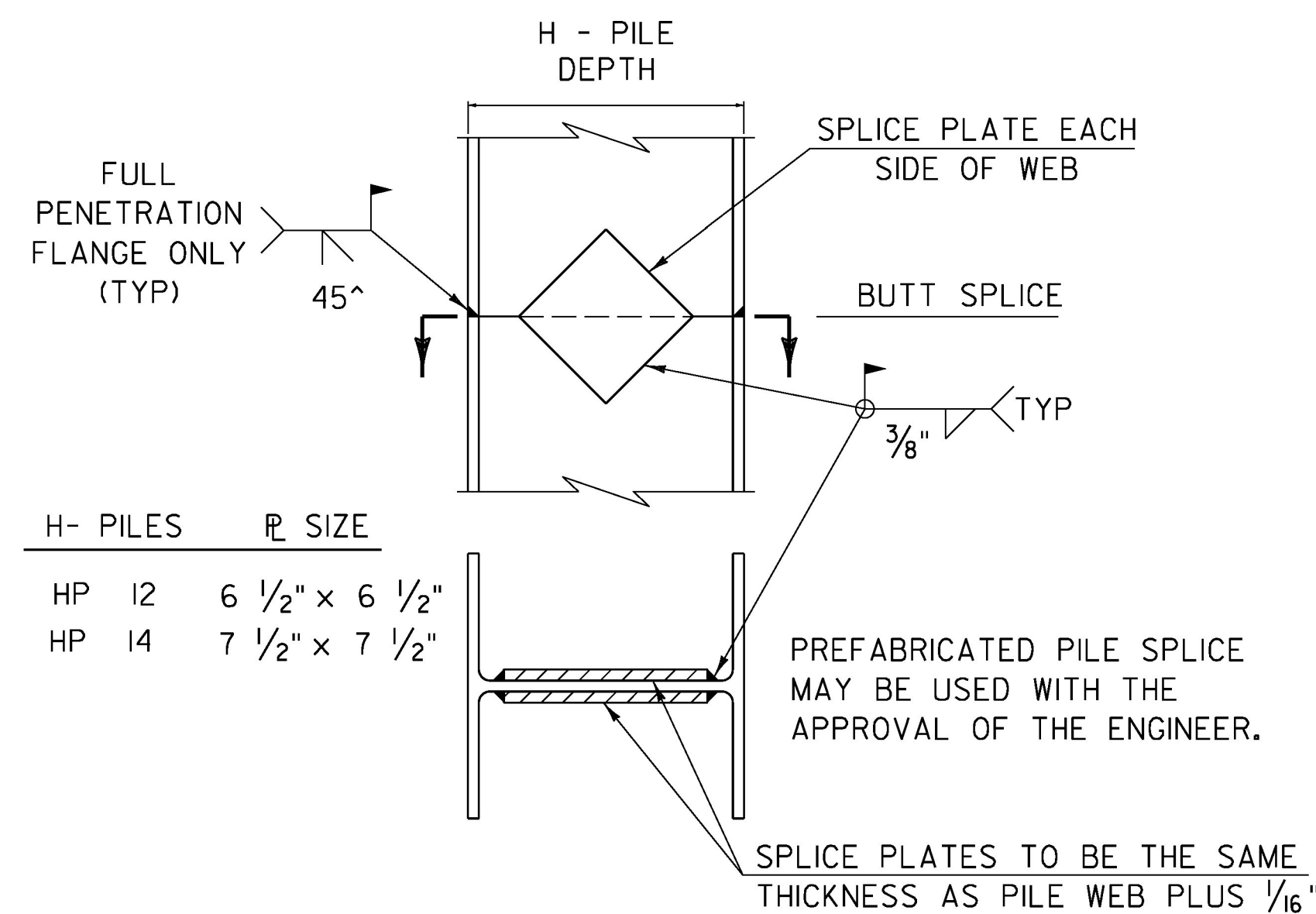


TYPICAL WINGWALL EXCAVATION DETAIL

SCALE: $\frac{3}{8}$ " = 1'-0"



DETAIL OF PILE SPLICE

SCALE: $\frac{3}{8}$ " = 1'-0"

NOTES:

1. ALL WINGWALLS SHALL BE SELECTED FROM THE LIST OF WALLS ON THE APPROVED RETAINING WALL DOCUMENT AVAILABLE FROM VAOT MATERIALS & RESEARCH WEB SITE. THE RETAINING WALL SHALL HAVE CONCRETE FACING.
2. THE WALL SHALL BE PAID FOR UNDER ITEM 900.670 "SPECIAL PROVISION (RETAINING WALL)".
3. THE BOTTOM OF WALL SHALL BE A MINIMUM OF 5 FEET BELOW THE FINISH GRADE IN THE FRONT OF WALL.
4. THE WALL SHALL BE DESIGNED IN ACCORDANCE WITH 2012 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS AND ITS LATEST REVISIONS. THE DESIGN SHALL INCLUDE THE EFFECT OF ALL LOADS INCLUDING BUT NOT LIMITED TO LIVE LOAD, VEHICLE IMPACT ON ADJACENT GUARDRAIL AND POSTS, EARTH SURCHARGE, AND HYDROSTATIC PRESSURE.
5. THE TYPE OF WALL SELECTED SHALL BE COMPATIBLE WITH ADJACENT OBSTRUCTIONS SUCH AS GUARD RAIL POSTS. ANY CHANGES TO THE REINFORCING OR ANCHORING SYSTEM SHALL BE DETAILED IN THE FABRICATION DRAWINGS.
6. THE FOLLOWING SOIL PROPERTIES SHALL BE USED IN THE DESIGN OF THE WINGWALLS:

FOUNDATION SOIL DESIGN VALUES
NOMINAL BEARING RESISTANCE: 13.5 KSF

FOUNDATION SOIL PARAMETERS
UNIT WEIGHT: 115 PCF
FRICTION ANGLE: 34°

GRANULAR BACKFILL FOR STRUCTURES
UNIT WEIGHT: 140 PCF
FRICTION ANGLE: 34°
ACTIVE EARTH PRESSURE COEFFICIENT, K_a : 0.28

BEARING RESISTANCE FACTORS (STRENGTH LIMIT STATE) 0.45

SLIDING RESISTANCE FACTORS
MSEW: 1.0
GRAVITY/SEMI-GRAVITY (PROPRIETARY SYSTEM): 1.0
NON-GRAVITY CANTILEVERED AND ANCHORED: 0.8

GEOSYNTHETIC RESISTANCE FACTORS (IF APPLICABLE)
TENSILE RESISTANCE OF GEOSYNTHETIC: 0.9
REINFORCEMENT AND CONNECTORS
PULLOUT RESISTANCE OF TENSILE REINFORCEMENT: 0.9

7. THE INTERFACE BETWEEN THE WINGWALL AND THE ABUTMENT STEM SHALL BE DESIGNED TO ALLOW 0.74 INCHES OF MOVEMENT. A JOINT DETAIL SHALL BE SUBMITTED TO THE PROJECT MANAGER FOR REVIEW AND APPROVAL. ALL COMPONENTS SHALL BE INCLUDED IN THE UNIT PRICE FOR ITEM 900.670 SPECIAL PROVISION (RETAINING WALL).

8. WATER REPELLENT, SILANE, SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES TO 1' BELOW GRADE. PAYMENT SHALL BE INCIDENTAL TO CONTRACT ITEM 900.670.

CLD 12-0120 MODEL: Pile Details



PROJECT NAME: STOWE
PROJECT NUMBER: BRF 0235(15)

FILE NAME: z88cl90sub.dgn
PROJECT LEADER: J. BYATT
DESIGNED BY: J. FRENCH
WINGWALL AND PILE DETAILS

PLOT DATE: 5/8/2015
DRAWN BY: M. SMITH
CHECKED BY: J. BYATT
SHEET 48 OF 79