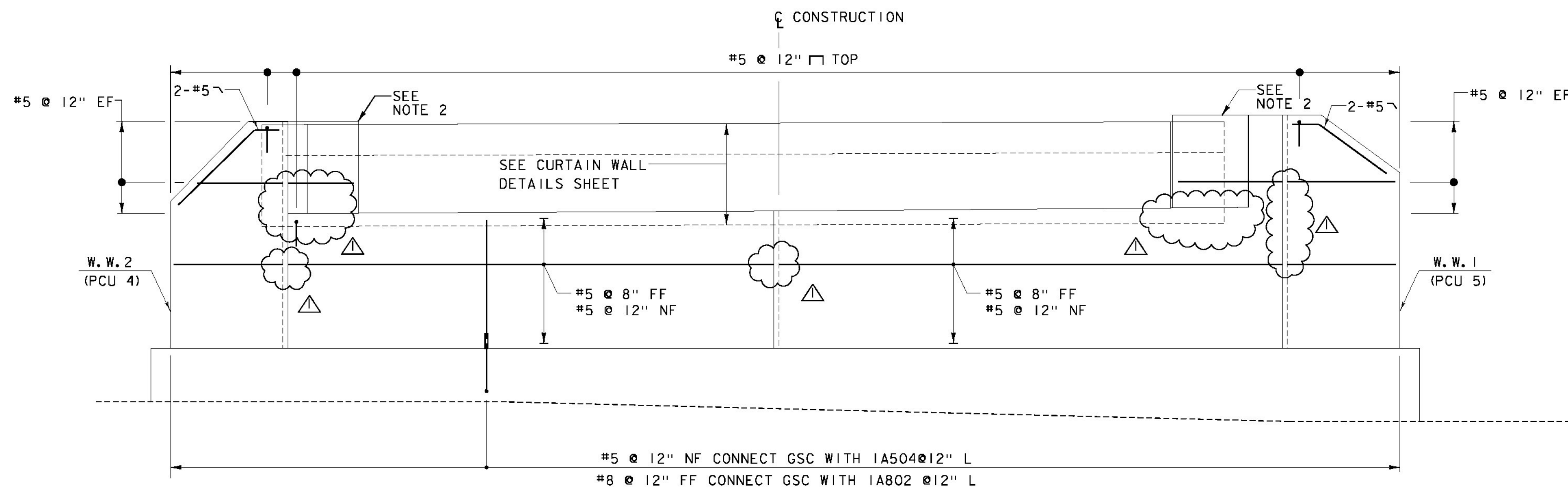


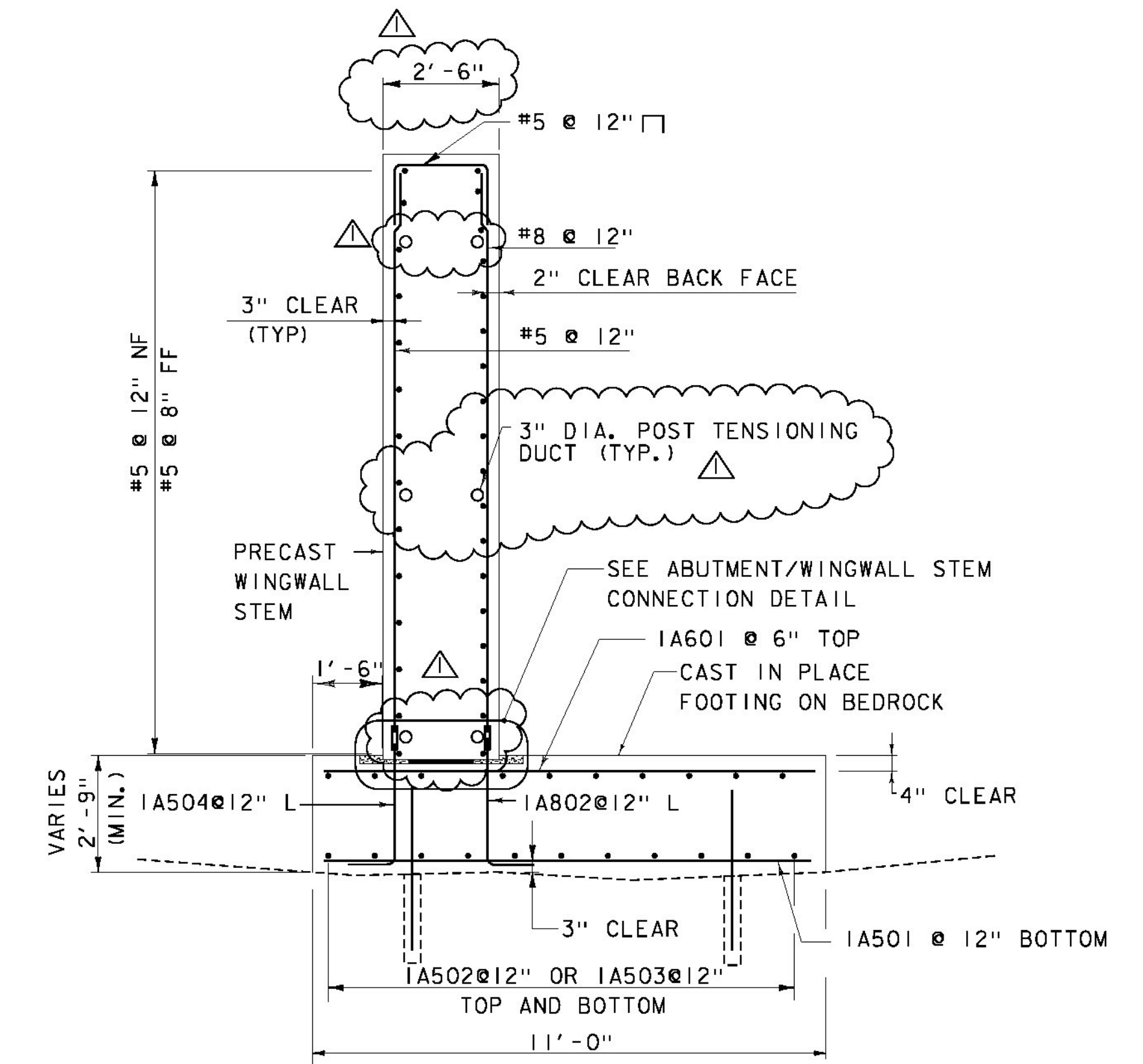
ABUTMENT #1 REINFORCING PLAN (PCU 1)

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



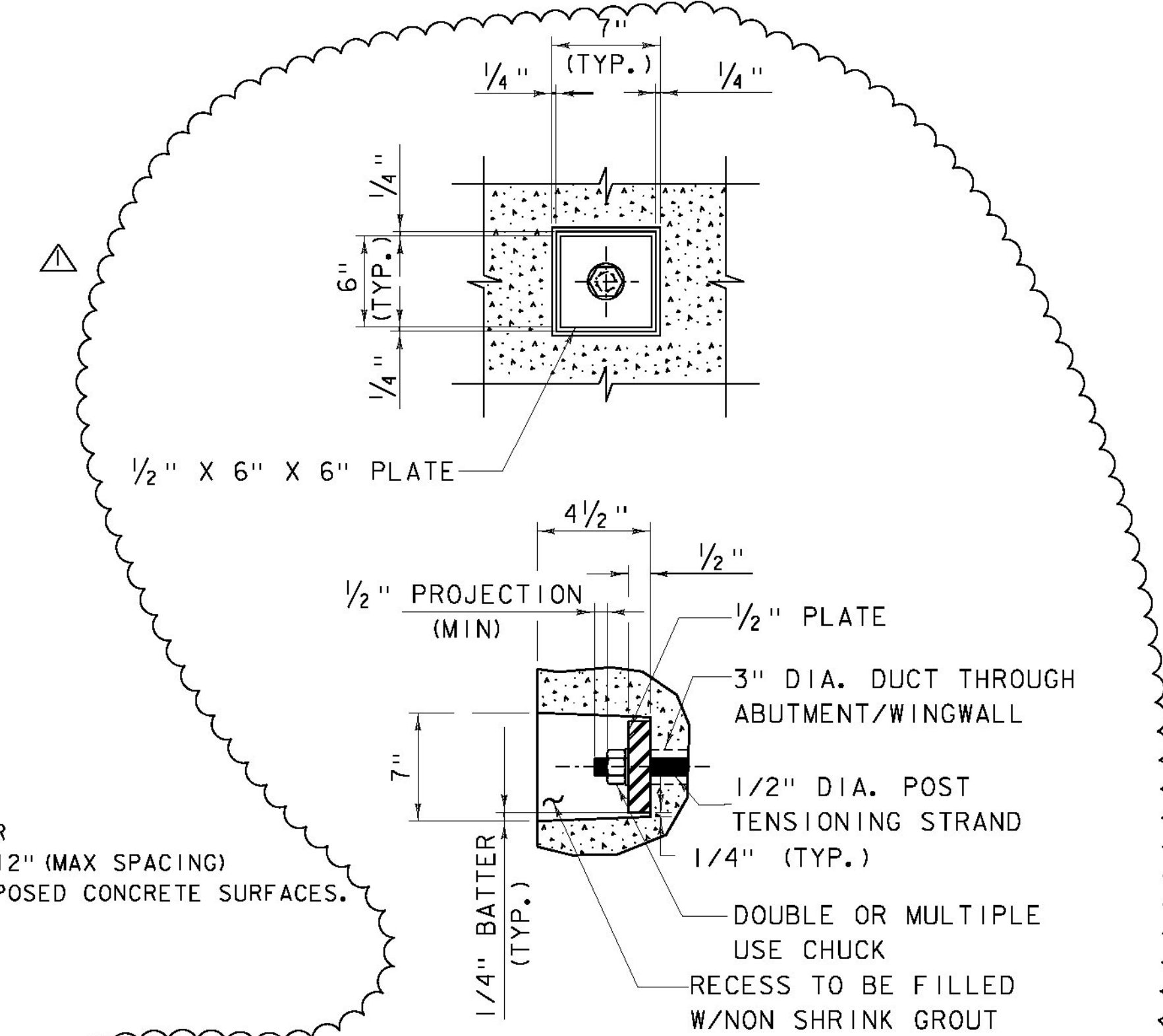
ABUTMENT #1 REINFORCING ELEVATION (PCU 1)

(POST TENSIONING DUCTS NOT SHOWN FOR CLARITY)
SCALE: 1/4" = 1'-0"



SECTION A-A (W.W. 1 AND W.W. 2 SECTION)

SCALE: 3/8" = 1'-0"



POST-TENSIONING TENDON DETAIL

NOT TO SCALE

PRECAST ABUTMENTS AND POST-TENSIONING

- POST-TENSIONING AND ASSOCIATED ITEMS ARE ONLY REQUIRED IF THE PRECAST ABUTMENT IS CONSTRUCTED OF MORE THAN ONE UNIT. ANY POST-TENSIONING STRANDS AND CONDUIT SHALL ADHERE TO THE REQUIREMENTS OF SECTION 510 PRESTRESSED CONCRETE. GALVANIZED ANCHOR ASSEMBLIES, CONDUIT, AND POST-TENSIONING STRANDS SHALL BE INCLUDED UNDER THE APPROPRIATE PRECAST CONCRETE ABUTMENT PAY ITEM. POST-TENSIONING STRANDS SHALL BE COVERED WITH A SEAMLESS POLYPROPYLENE SHEATH (WITH CORROSION INHIBITOR GREASE BETWEEN SHEATH AND STRAND) FOR THE LENGTH OF THE STRAND, EXCEPT AT ANCHORAGE LOCATIONS.
- GALVANIZE ANCHOR ASSEMBLIES AFTER FABRICATION ACCORDING TO AASHTO M232M/M232.
- DESIGN VALUES:
 - CONCRETE COMPRESSIVE STRENGTH: f_c' : 5,000 PSI.
 - POST-TENSIONING STRANDS: 0.5 INCH DIAMETER, 270 KSI, LOW RELAXATION 7-WIRE STRANDS.
 - ASSUMED MODULUS OF ELASTICITY IS 28,500 KSI.
 - THERE SHALL BE TWO STRANDS PER CONDUIT.
 - JACKING FORCE PER STRAND: 32 KIPS
- MORTAR FOR EXTERIOR POCKETS SHALL BE THE SAME COLOR AND TEXTURE AS THE ABUTMENT/WINGWALL CONCRETE.
- OTHER ANCHORAGE SYSTEMS MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER. ALTERNATE ANCHORAGE SYSTEMS SHALL BE WATER TIGHT AND CORROSION PROOF.
- GROUT SPLICE COUPLERS AFTER INSTALLATION OF ALL POST-TENSIONING STRANDS.
- INSTALL POST-TENSIONING STRANDS AT WW4 AFTER INSTALLATION OF ALL ABUTMENT 2 POST-TENSIONING STRANDS.
- PROPOSED SEQUENCE OF CONSTRUCTION:
 - PLACE PRECAST ABUTMENTS AND INSTALL POST-TENSIONING STRANDS (IF MORE THAN ONE UNIT IS USED).
 - APPLY EPOXY BONDING COMPOUND TO MATCH CAST FACES OF VERTICAL CONSTRUCTION JOINT.
 - USE A CALIBRATED JACK TO TENSION TO 3 KIPS TO REMOVE SAG IN STRANDS.
 - CHECK ALIGNMENT OF PRECAST ABUTMENT ELEMENTS.
 - STRESS POST-TENSIONING STRANDS USING A CALIBRATED JACK.
- ALTERNATE SEQUENCE OF CONSTRUCTION MAY BE SUBMITTED TO THE VTRANS PROJECT MANAGER FOR APPROVAL.

NOTES:

- NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
GSC = GROUTED SPLICE COUPLER
- CHEEK WALLS SHALL HAVE A #5 @ 12" (MAX SPACING) REINFORCING GRID FOR ALL EXPOSED CONCRETE SURFACES.

△ REVISED PRECAST ABUTMENT CONNECTORS - 1/22/2015



PROJECT NAME: LINCOLN
PROJECT NUMBER: BRF 0188 (8)

FILE NAME: z10j066sub4.dgn
PROJECT LEADER: K DONINGTON
DESIGNED BY: K JAMES
ABUTMENT 1 REINFORCEMENT PLAN

PLOT DATE: 8-DEC-2014
DRAWN BY: W GERHOLD
CHECKED BY: R GAUDREAU
SHEET 29 OF 62