

NOTE TO USER: NOTES IN "[.....]" ARE GUIDANCE TO THE USER AND GENERALLY ARE REMOVED FROM THE FINAL PLANS BASED ON DESIGN SPECIFIC BEAM DETAILS.

NOTES:

CS:

JN:

USE 0.6" NOMINAL DIAMETER PRESTRESSING STRAND MEETING THE REQUIREMENTS OF AASHTO M203 (ASTM A416), GRADE 270, LOW RELAXATION STRAND.

TENSION 0.6" DIA. PRESTRESSING STRANDS TO AN INITIAL PRESTRESS OF 44.000 LBS.

PROVIDE CONCRETE INSERTS FOR DRAIN CASTING ASSEMBLY BRACKETS ACCORDING TO STANDARD PLAN B-101-SERIES. CAST INSERTS WITH THE BEAMS. DO NOT FIELD INSTALL INSERTS.

END BLOCKS ARE (REQUIRED) (OPTIONAL).

TOTAL ESTIMATED CHANGE OF LENGTH OF BOTTOM FLANGE AT TRANSFER OF PRESTRESS FORCE IS ____".

THE ESTIMATED BEAM CAMBER AT RELEASE IS ___". THIS CAMBER IS DUE TO PRESTRESS AND DEAD LOAD OF THE BEAM ONLY AND IS MEASURED IN THE ERECTED POSITION.

BEAMS IN SPAN(S) ___ MAY BE LATERALLY UNSTABLE. TAKE PRECAUTIONS TO ENSURE THAT BEAMS ARE NOT DAMAGED DURING HANDLING AND TRANSPORTATION. [USE WHEN FACTOR OF SAFETY FOR LATERAL BUCKLING IS 1.2 OR LESS.]

THREADING OF REINFORCEMENT AND INSTALLATION INTO CONCRETE INSERTS IS INCLUDED IN THE BID ITEM ("PREST CONC I BEAM, FURN, $_$ INCH").

REMOVE LIFTING DEVICES AFTER BEAMS ARE ERECTED. REMOVAL IS INCLUDED IN THE BID ITEM ("PREST CONC I BEAM, FURN, $_$ INCH").

AT THE LOCATIONS SHOWN ON THE PLANS, APPLY SILANE TO THE BEAM ENDS FOR A DISTANCE OF ____FEET, STARTING FROM THE BEAM END AT THE JOINT, COATING BOTH SIDES, BOTTOM AND ENDS OF BEAMS (DO NOT COAT OUTSIDE AND BOTTOM OF FASCIA BEAMS.). [USE ON PRESTRESSED I-BEAM PROJECTS WITH EXPANSION JOINTS. SHOW THE LOCATIONS TO BE COATED ON THE ERECTION DIAGRAM, IF CONCRETE SURFACE COATING IS BEING APPLIED TO FASCIA BEAMS, DO NOT APPLY SILANE IN AREAS THAT WILL RECEIVE CONCRETE SURFACE COATING. INCLUDE SPECIAL PROVISION FOR SILANE TREATMENT FOR BRIDGE CONCRETE.]

APPLY CONCRETE SURFACE COATING TO THE ENTIRE OUTSIDE AND BOTTOM OF THE FASCIA BEAMS. (USE CONCRETE SURFACE COATING AMS-STD-595 COLOR NUMBER [INSERT NUMBER]. [INSERT COLOR].) [USE ON PRESTRESSED I-BEAM BRIDGES WHERE COATING FASCIA BEAMS WILL NOT SIGNIFICANTLY AFFECT THE MAINTAINING TRAFFIC AND WHEN REQUESTED BY THE REGION OR ROADSIDE DEVELOPMENT SECTION.]

PROVIDE GRADE 60 (KSI) BEAM STEEL REINFORCEMENT, INCLUDING STIRRUPS.

FIELD DRILLING IS ALLOWED FOR SIGN SUPPORT ANCHORS ONLY. LOCATION OF ANCHORS IS AS DETAILED ON TRAFFIC & SAFETY SIGN SUPPORT SPECIAL DETAILS. REPAIR ANY DAMAGE TO THE BEAMS AT THE CONTRACTOR'S EXPENSE AS APPROVED BY THE ENGINEER.

GALVANIZE OR EPOXY COAT ITEMS CAST INTO THE BEAMS TO FACILITATE BRIDGE CONSTRUCTION (FORMING, FINISHING, ETC.).

USE (34") (1") DIAMETER CONCRETE INSERTS: DAYTON SUPERIOR, TYPE B-1 TWO STRUT COIL TIE - (HEAVY) [34"] (STANDARD) [1"] OR TYPE B18 SINGLE FLARED COIL LOOP INSERT; WILLIAMS FORM, TYPE C12 TWO STRUT COIL TIE OR TYPE C19 FLARED COIL LOOP INSERT; MEADOW BURKE, TYPE CX-4 COIL LOOP INSERT-FLARED; OR ENGINEER APPROVED EQUAL. ELECTROPLATE GALVANIZE COIL INSERTS IN ACCORDANCE WITH ASTM B633, SERVICE CONDITION 4. CAST INSERTS WITH THE BEAMS. DO NOT FIELD INSTALL INSERTS. [USE FOR I-BEAMS AT BACKWALLS OR CONCRETE DIAPHRAGMS.]

USE 7 8" BOLT DIAMETER CONCRETE INSERTS; DAYTON SUPERIOR, F42 OR F64 FERRULE LOOP INSERT; WILLIAMS FORM, F15 OR F16 FERRULE LOOP INSERT; MEADOW BURKE, FX-2 OR FX-5 FERRULE INSERT - LOOP; OR ENGINEER APPROVED EQUAL. ELECTROPLATE GALVANIZE FERRULE INSERTS AND BOLTS IN ACCORDANCE WITH ASTM B633, SERVICE CONDITION 4. CAST INSERTS WITH THE BEAMS. DO NOT FIELD INSTALL INSERTS. [USE WITH TYPE III & IV BEAMS WITH STEEL DIAPHRAGMS.]

USE $^{7}8''$ BOLT DIAMETER, $4^{1}2''$ ($4^{5}8''$) LONG CONCRETE INSERTS; DAYTON SUPERIOR, F42 OR F64 LOOP FERRULE INSERT; WILLIAMS FORM, F15 OR F16 FERRULE LOOP INSERT; MEADOW BURKE, FX-2 OR FX-5 FERRULE INSERT LOOP; OR ENGINEER APPROVED EQUAL. ELECTROPLATE GALVANIZE FERRULE INSERTS AND BOLTS IN ACCORDANCE WITH ASTM B633, SERVICE CONDITION 4. CAST INSERTS WITH THE BEAMS. DO NOT FIELD INSTALL INSERTS. [USE FOR TYPE I & II BEAMS WITH STEEL DIAPHRAGMS.]

	PLAN REVISIONS								
NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH	DESCRIPTION		

Michigan Department of Transportation

NO SCALE

DRAWN BY		DATE:
CHK'D BY:	CORR BY:	DESIGN UNIT:
FILE:		TSC:

PRESTRESSED CONCRETE	DRAWING	SHEET
I-BEAM DETAILS		
PC-1N (11-28-2022)		