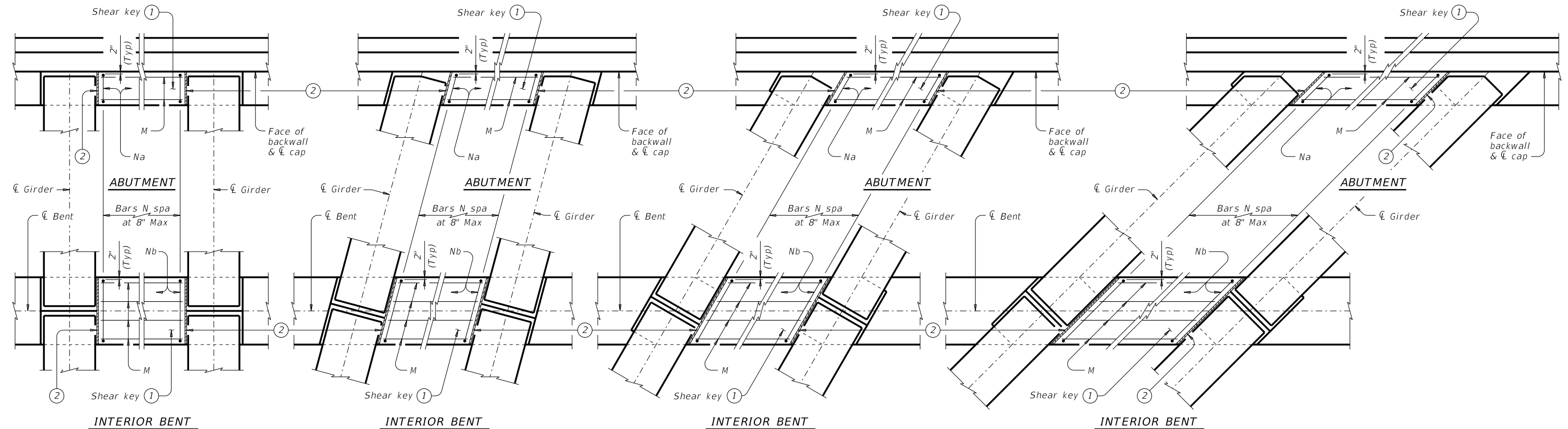


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PARTIAL PLANS WITH NO SKEW

Showing shear keys on 3'-6" wide caps. 4'-0" caps similar.

PARTIAL PLANS WITH 15° SKEW

Showing shear keys on 3'-6" wide caps. 4'-0" caps similar.

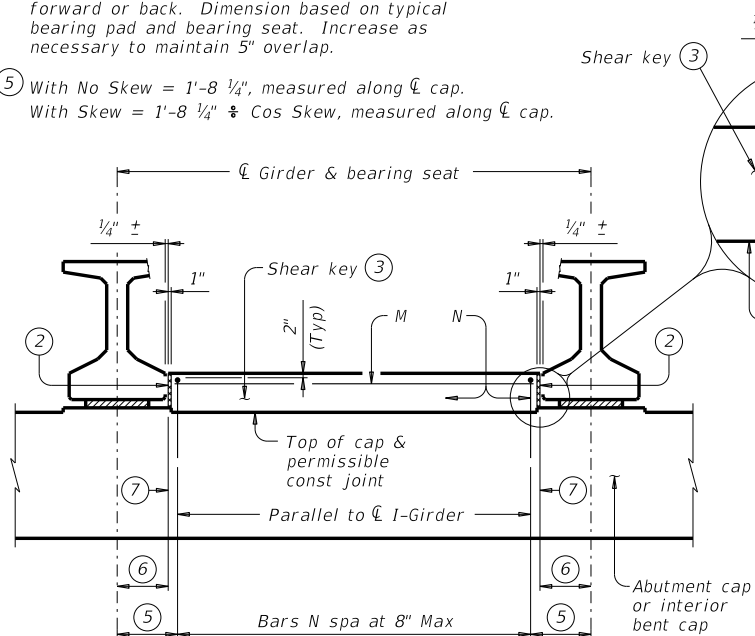
PARTIAL PLANS WITH 30° SKEW

Showing shear keys on 3'-6" wide caps. 4'-0" caps similar.

PARTIAL PLANS WITH 45° SKEW

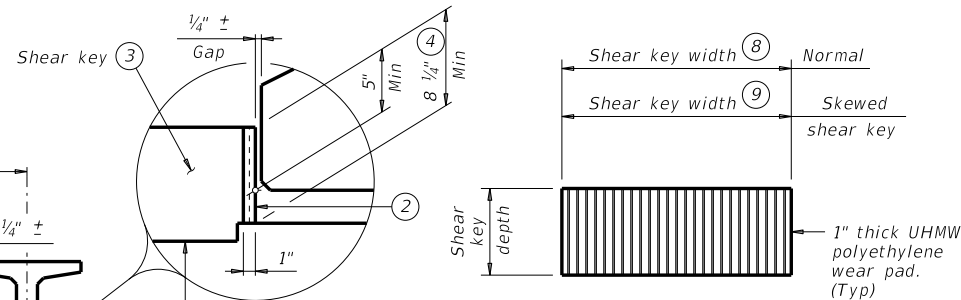
Showing shear keys on 3'-6" wide caps. 4'-0" caps similar.

- ① Place shear keys on the upstream side of structure between outside girder and next adjacent girder, unless shown otherwise on plans.
- ② UHMW polyethylene wear pad. (Typ)
- ③ Leave a 1/4" gap plus or minus between girder and face of wear pad. Cast wear pad with shear key, smooth side facing girder. Care must be taken to keep concrete from flowing under girder. Slope top of shear keys in accordance with Item 420.4.9, "Treatment and Finishing of Horizontal Surfaces."
- ④ Measure at higher bearing seat elevation forward or back. Dimension based on typical bearing pad and bearing seat. Increase as necessary to maintain 5" overlap.
- ⑤ With No Skew = 1'-8 1/4", measured along $\bar{\ell}$ cap. With Skew = $1'-8 \frac{1}{4} \div \cos \text{Skew}$, measured along $\bar{\ell}$ cap.
- ⑥ With No Skew = 1'-4 1/4", measured along $\bar{\ell}$ cap. With Skew = $1'-4 \frac{1}{4} \div \cos \text{Skew}$, measured along $\bar{\ell}$ cap.
- ⑦ Face of UHMW polyethylene wear pad. Smooth side of pad facing girder.
- ⑧ Abutments = 1/2 Cap width. Interior bents = Cap width.
- ⑨ Abutments = 1/2 Cap width $\div \cos \text{Skew}$. Interior bents = Cap width $\div \cos \text{Skew}$.

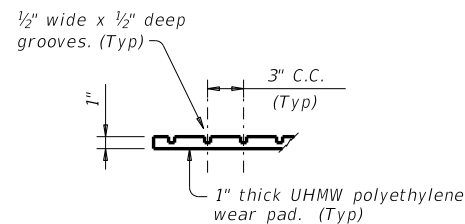


PARTIAL ELEVATION OF ABUTMENT OR INTERIOR BENT CAP

Showing shear key with girder Type Tx46. Other I-Girder types similar.

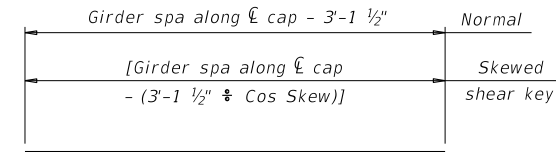


ELEVATION

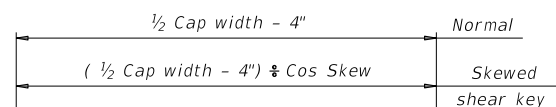


PART SECTION

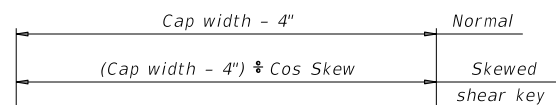
ULTRA HIGH MOLECULAR WEIGHT (UHMW) POLYETHYLENE WEAR PAD DETAILS



BARS M (#5)



BARS Na (#5) (For abutments)



BARS Nb (#5) (For interior bents)

CONSTRUCTION NOTES:

Provide Class "C" concrete ($f'c = 3,600$ psi). Provide Class "C" (HPC) if shown elsewhere on the plans. Provide Grade 60 reinforcing steel. Provide epoxy coated reinforcing steel for shear key if abutment or interior bent reinforcing steel is epoxy coated. Provide Ultra High Molecular Weight (UHMW) polyethylene wear pads in accordance with ASTM D6712.

GENERAL NOTES:

Designed according to AASHTO LRFD Bridge Design Specifications. Details showing skew are drawn showing right forward skew. See Bridge Layout for actual skew direction. These details are limited to bridges skewed 45 degrees and less. This standard is only applicable for I-Girders. Modify details for bearing conditions, and girder spacing not shown on this standard. Details do not account for sole plate or pedestal bearing seat. Include shear key concrete in abutment or bent concrete for payment. UHMW polyethylene wear pads are subsidiary to Class "C" concrete.

Cover dimensions are clear dimensions, unless noted otherwise. Reinforcing bar dimensions shown are out-to-out of bar.

		Bridge Division Standard	
SHEAR KEY DETAILS PRESTR CONCRETE I-GIRDERS			
IGSK			
FILE: IG-IGSK-17.dgn	DN: TxDOT	CK: TxDOT	DW: JTR
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