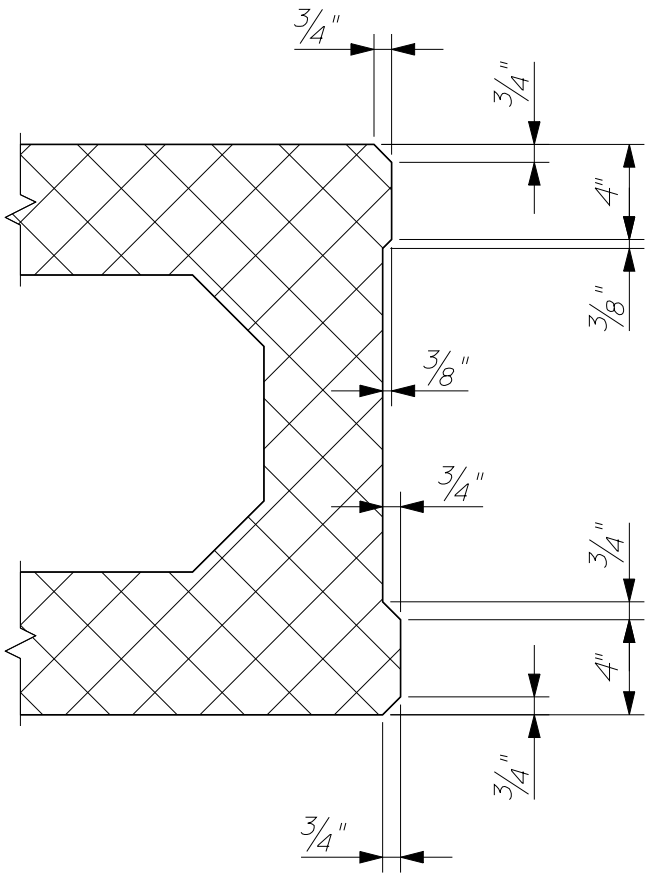
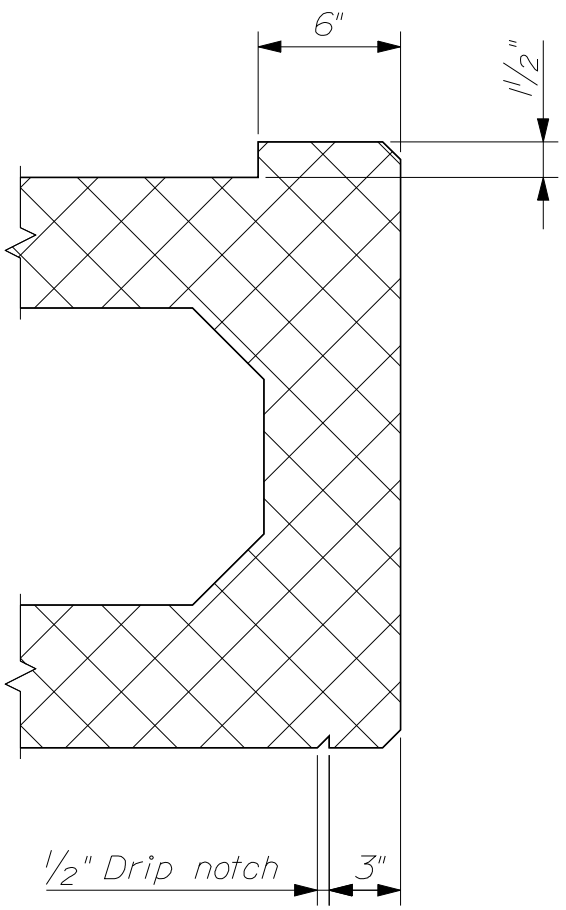
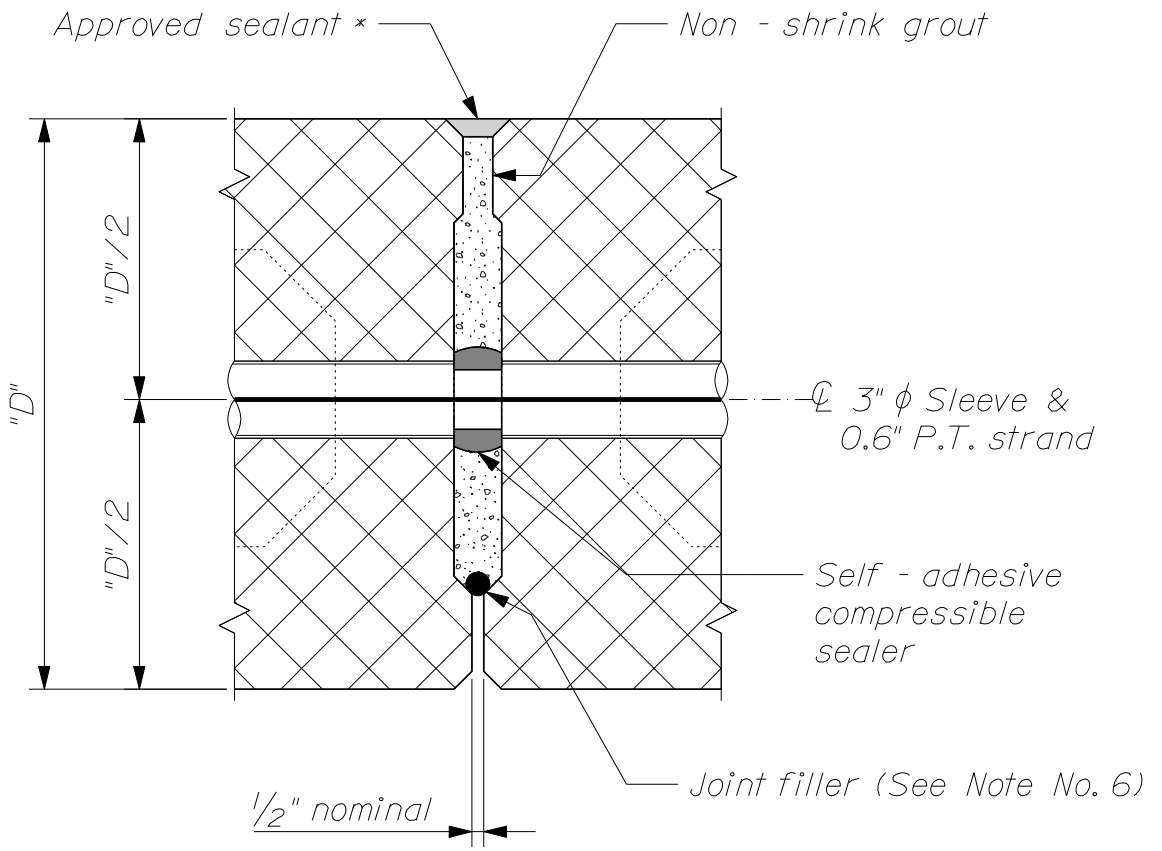


-- SHEAR KEY DIMENSIONS --
(Typical for all precast slabs and box beams)



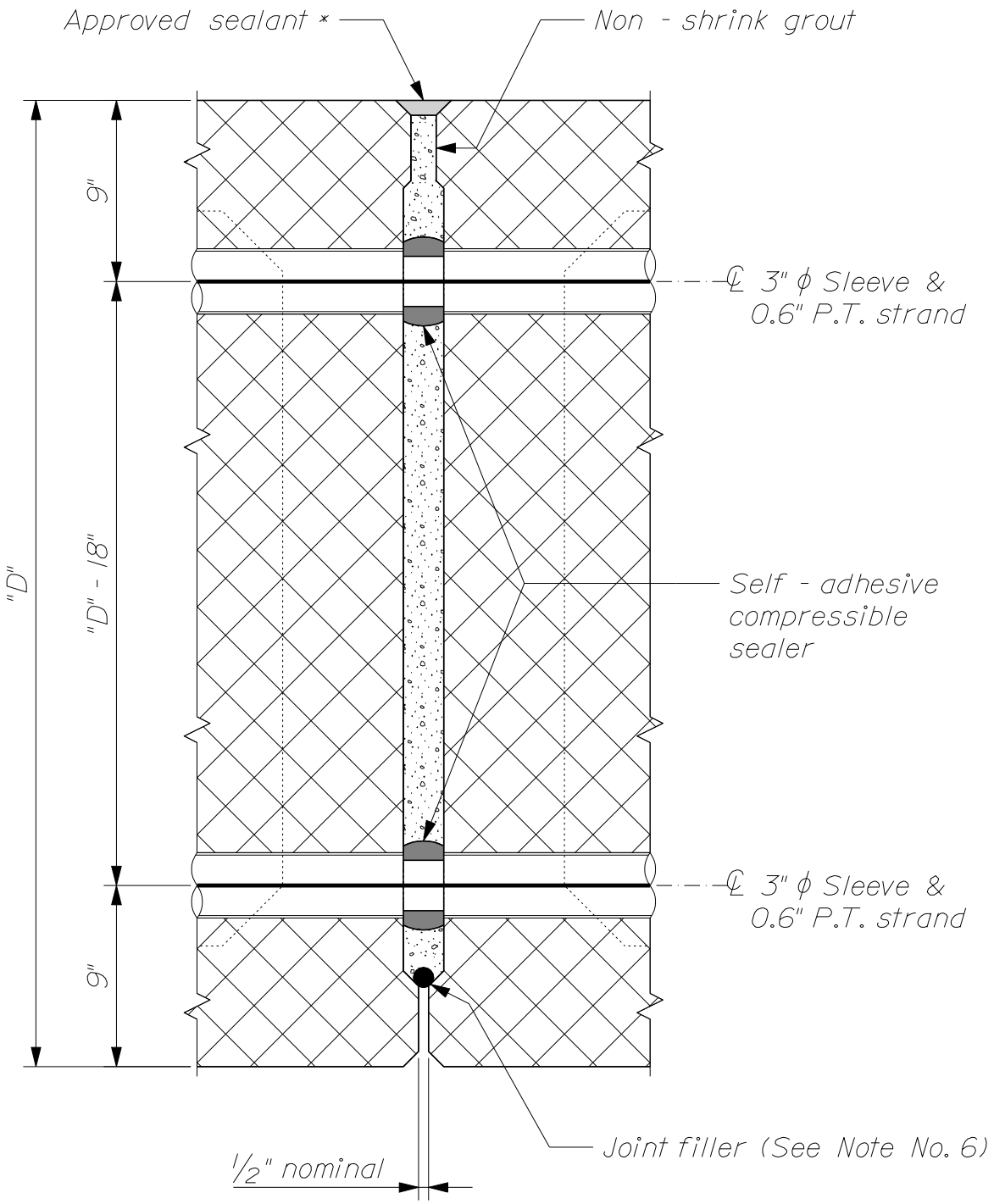
-- CURB KEY & DRIP NOTCH DETAILS --
(Exterior units only)
(Curb key not required with reinforced C.I.P. slab))

* When a high - performance waterproofing membrane is to be applied directly to the top of the precast units, eliminate the sealant and fill the shear key to the top of the unit with non - shrink grout.



-- SHEAR KEY DETAIL --
(For precast slabs and box beams where "D" ≤ 24")

* When a high - performance waterproofing membrane is to be applied directly to the top of the precast units, eliminate the sealant and fill the shear key to the top of the unit with non - shrink grout.



-- SHEAR KEY DETAIL --
(For precast box beams where "D" ≥ 27")

Supplemental Standard Detail

PRECAST SUPERSTRUCTURE

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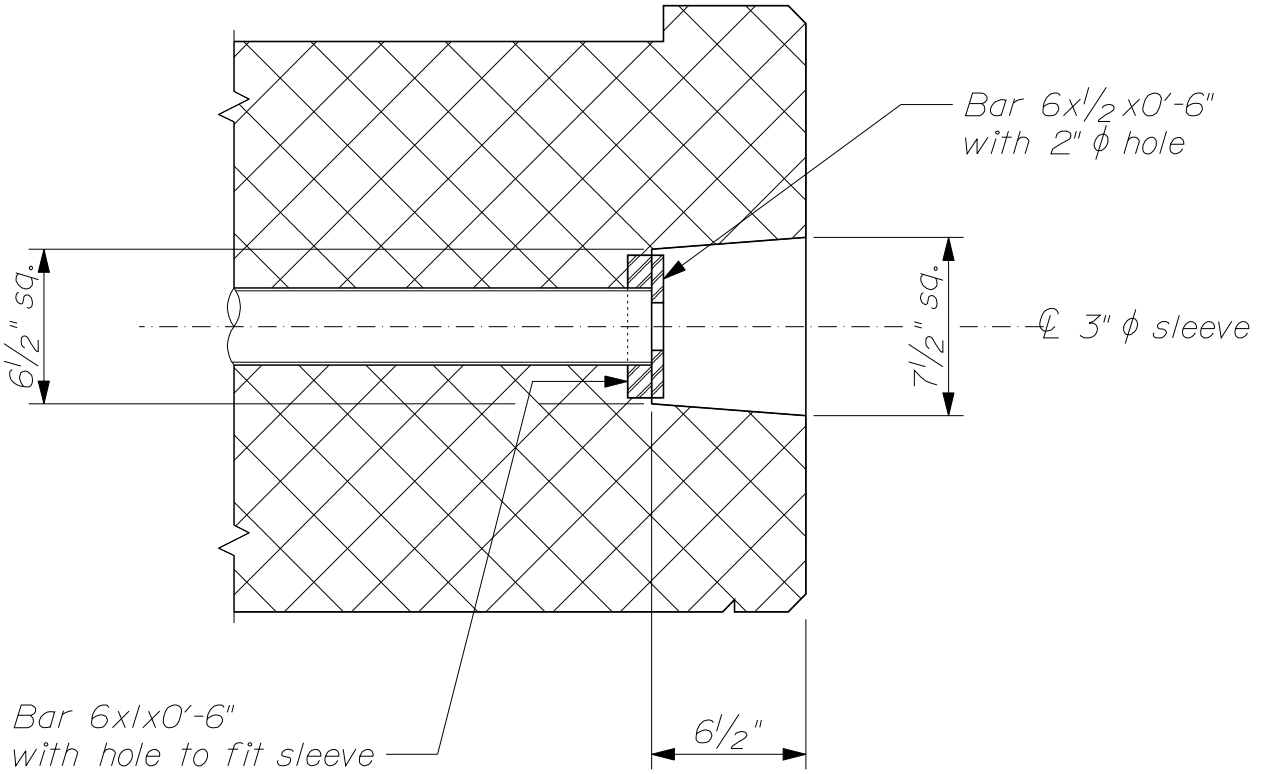
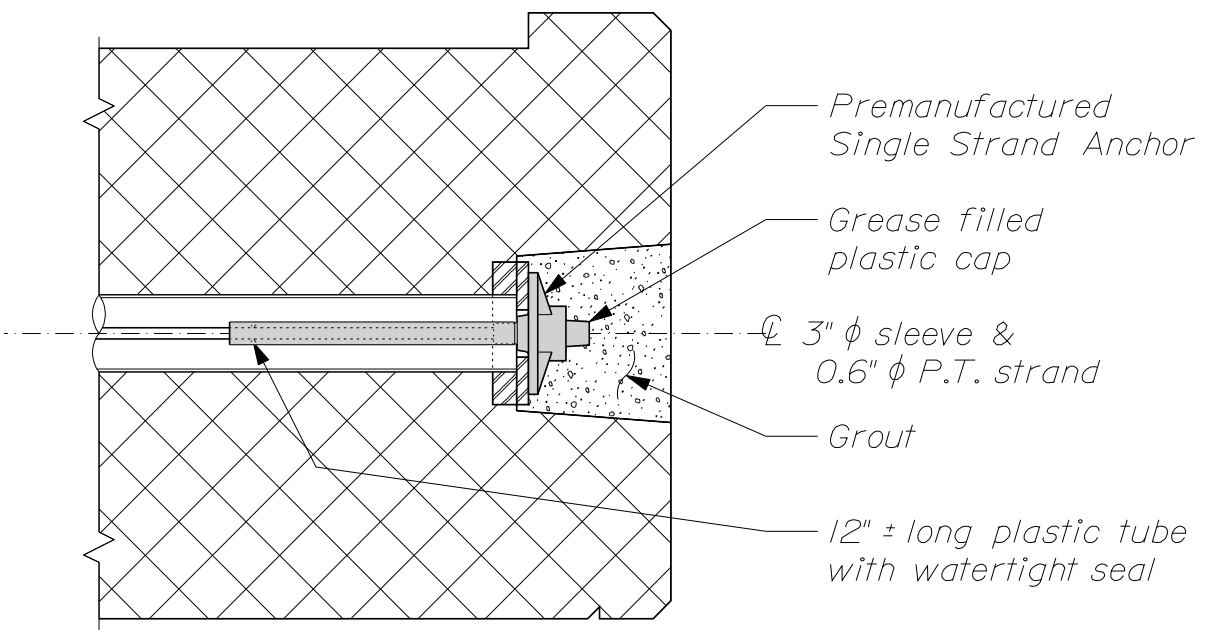
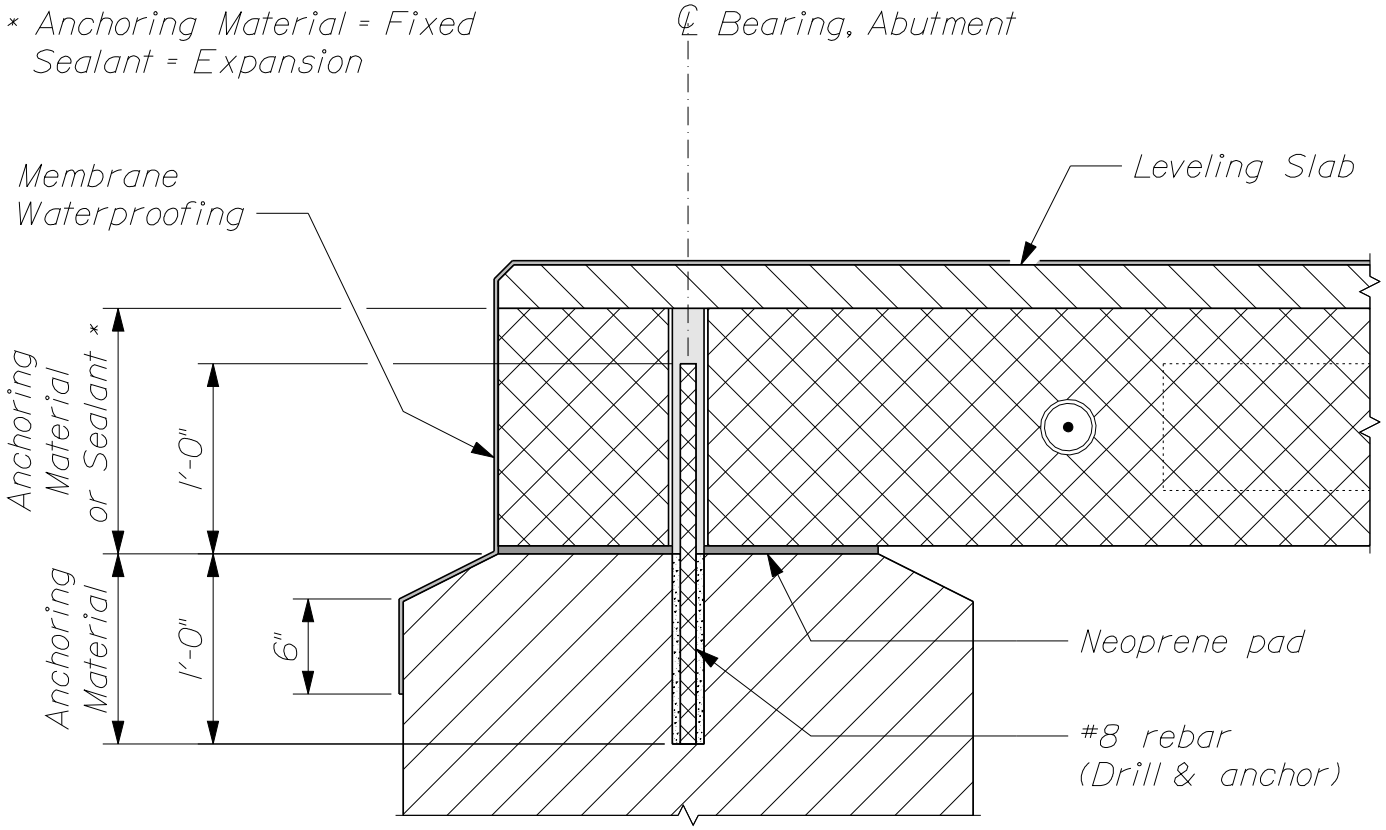


-- POST - TENSIONING BLOCK - OUT DETAIL --

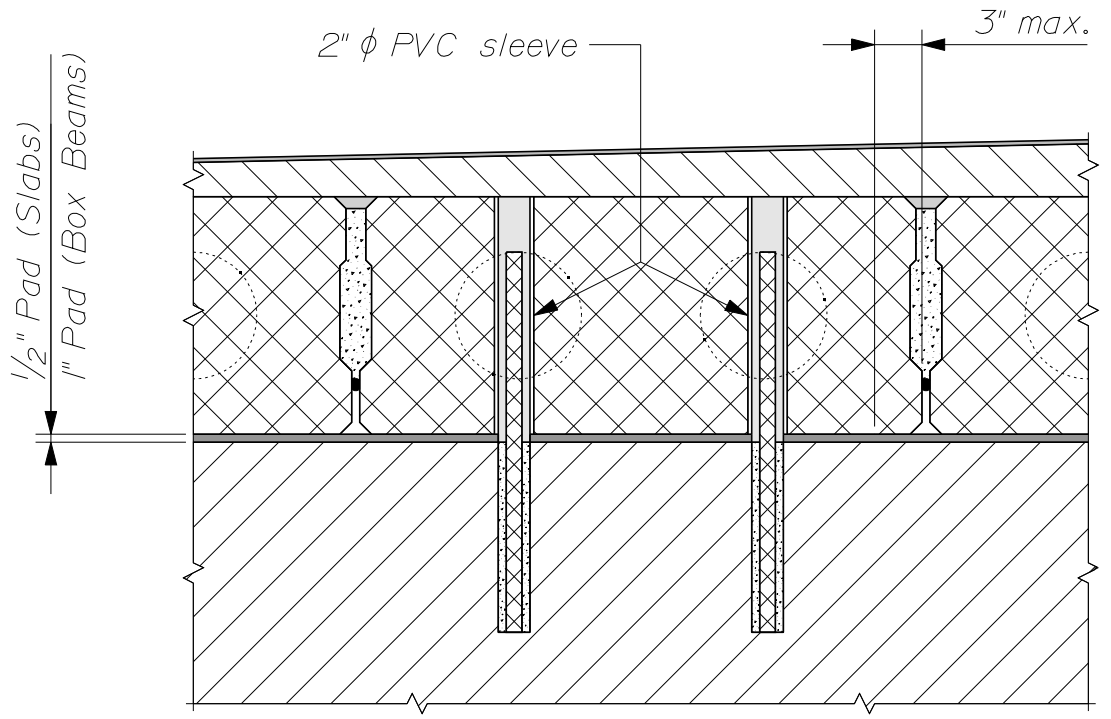


-- POST - TENSIONING ANCHORAGE DETAIL --

* Anchoring Material = Fixed
Sealant = Expansion



-- LONGITUDINAL SECTION --



-- TRANSVERSE SECTION --

PRECAST SUPERSTRUCTURE

Supplemental Standard Detail

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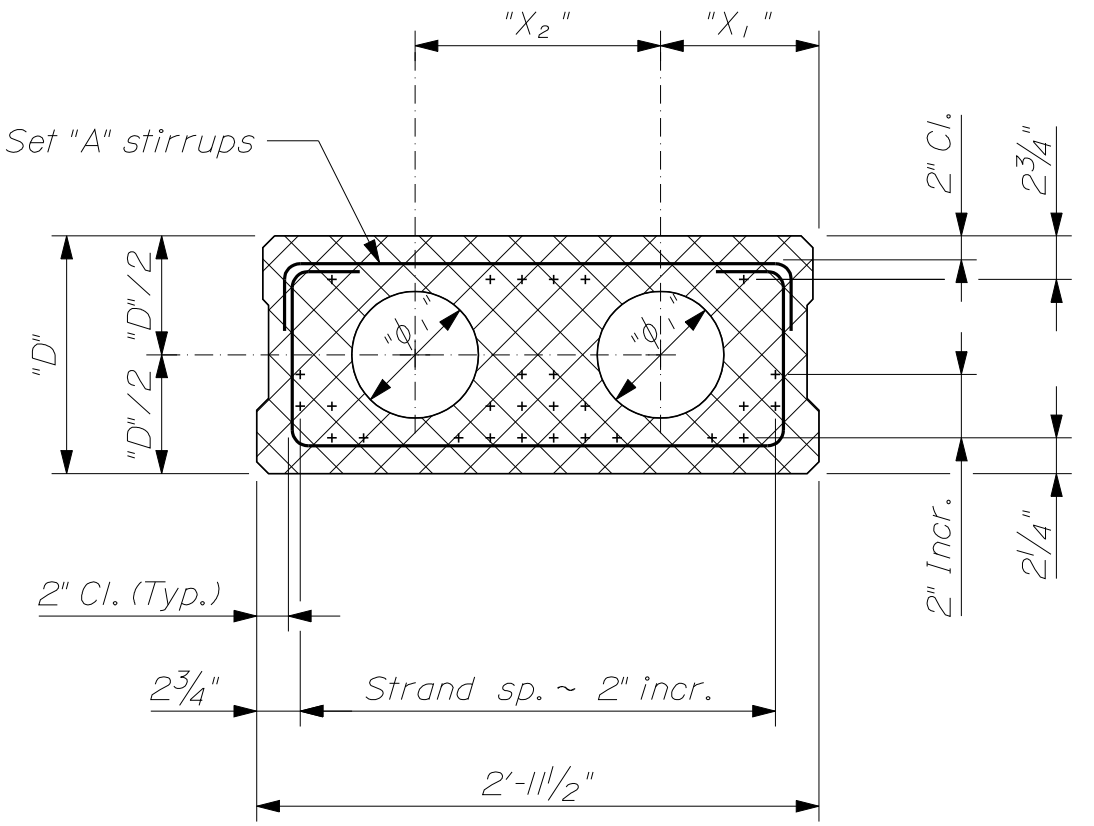
PRECAST SLABS

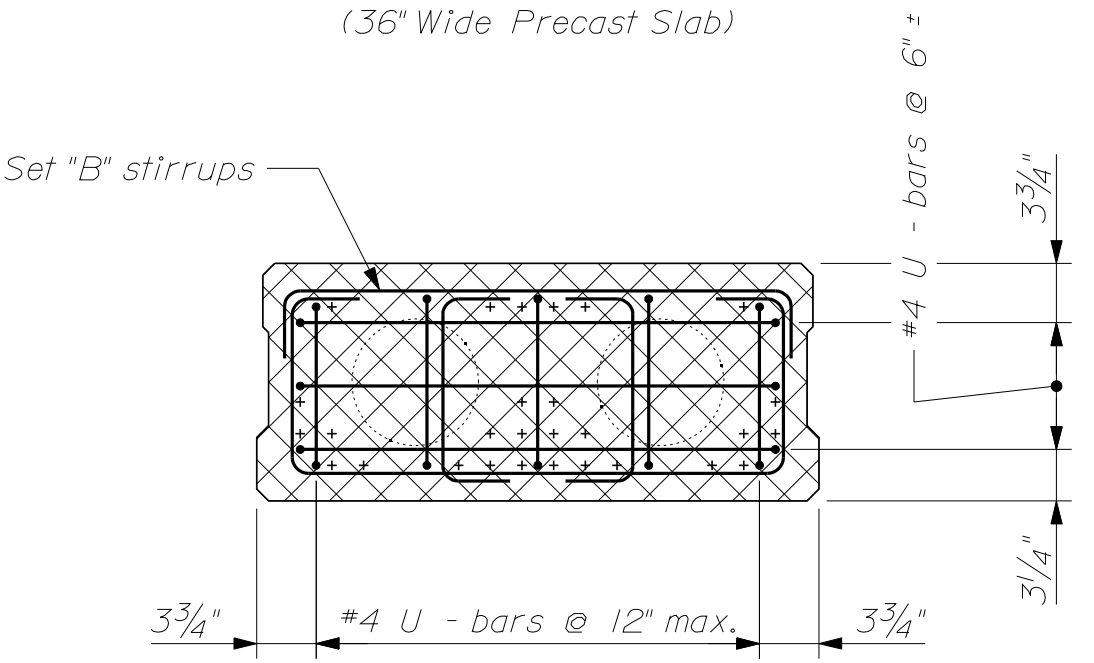
Slab Type	Nom. Width	Depth "D"	Void "ϕ_1"	Void "ϕ_2"	Spacing "X_1"	Spacing "X_2"
S36-12	36"	12"	--	--	--	--
S36-15	36"	15"	8"	--	10"	15 1/2"
S36-18	36"	18"	10"	--	10"	15 1/2"
S36-21	36"	21"	12"	--	10"	15 1/2"
S48-12	48"	12"	--	--	--	--
S48-15	48"	15"	8"	8"	10"	13 3/4"
S48-18	48"	18"	10"	10"	9 1/2"	14 1/4"
S48-21	48"	21"	12"	10"	9 1/2"	14 1/4"

PRECAST BOX BEAMS

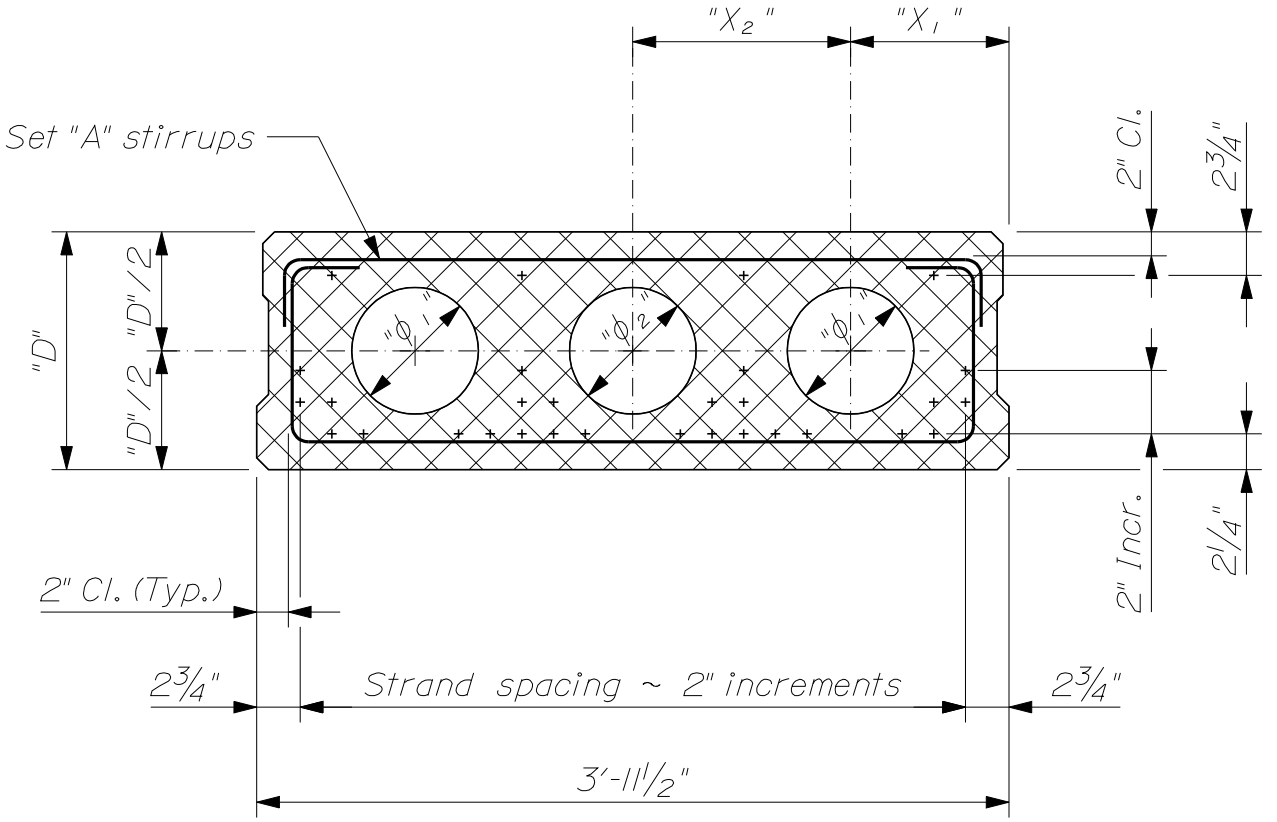
Box Type	Nom. Width	Depth "D"	Box Type	Nom. Width	Depth "D"
B36-24	36"	24"	B48-24	48"	24"
B36-27	36"	27"	B48-27	48"	27"
B36-30	36"	30"	B48-30	48"	30"
B36-33	36"	33"	B48-33	48"	33"
B36-36	36"	36"	B48-36	48"	36"
B36-39	36"	39"	B48-39	48"	39"
B36-42	36"	42"	B48-42	48"	42"
B36-45	36"	45"	B48-45	48"	45"
B36-48	36"	48"	B48-48	48"	48"



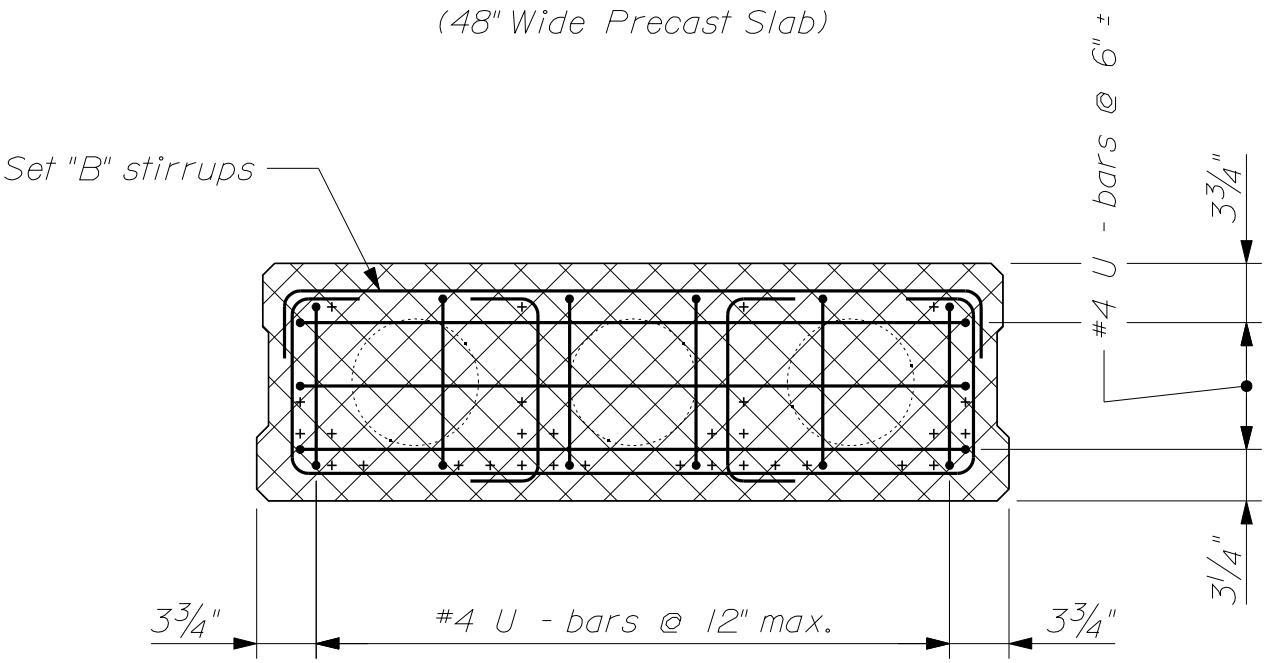
-- TYPICAL SECTION --
(36" Wide Precast Slab)



-- END BLOCK SECTION --
(36" Wide Precast Slab)



-- TYPICAL SECTION --
(48" Wide Precast Slab)



-- END BLOCK SECTION --
(48" Wide Precast Slab)

Supplemental Standard Detail

PRECAST SUPERSTRUCTURE

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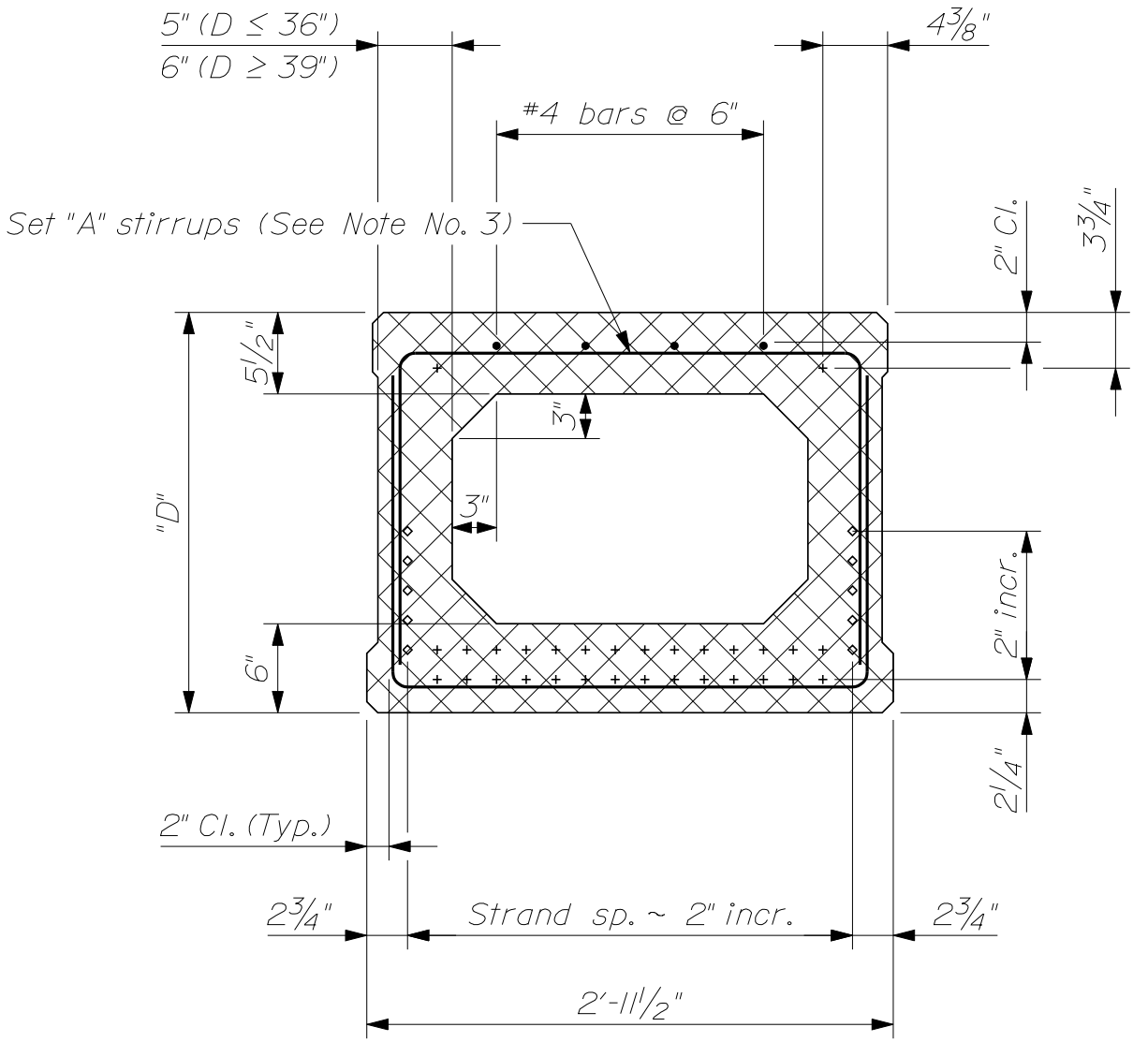
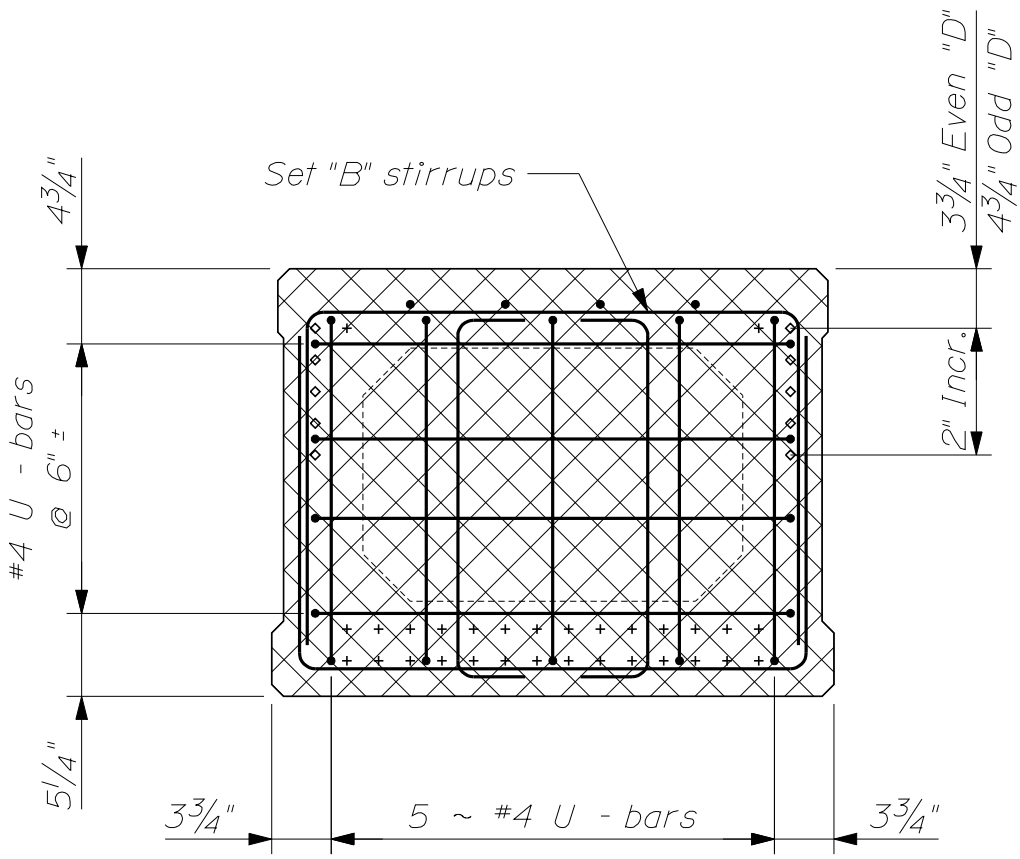


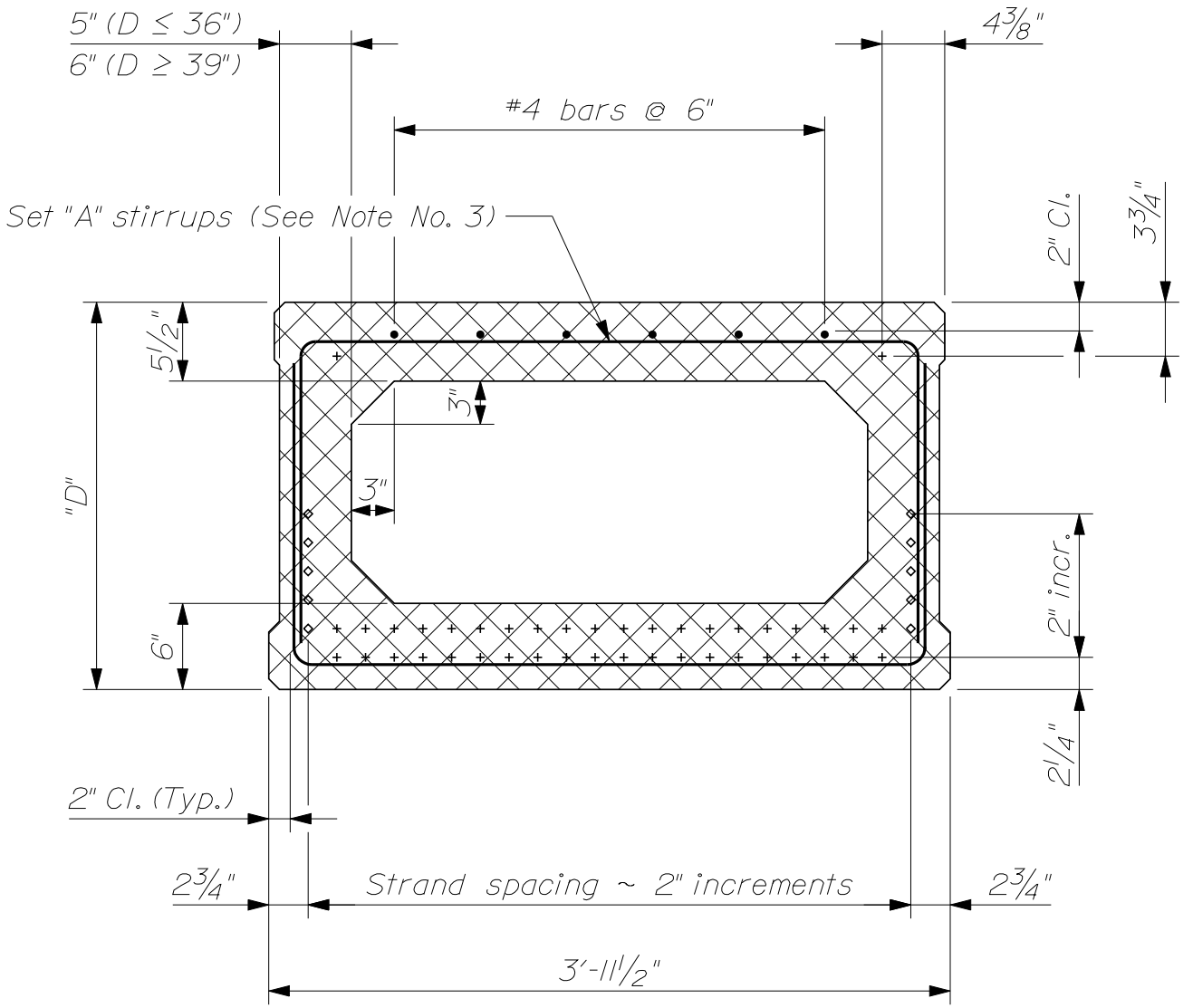
-- TYPICAL SECTION --
(36" Wide Precast Box Beam)

+ Straight Strands
◇ Draped Strands



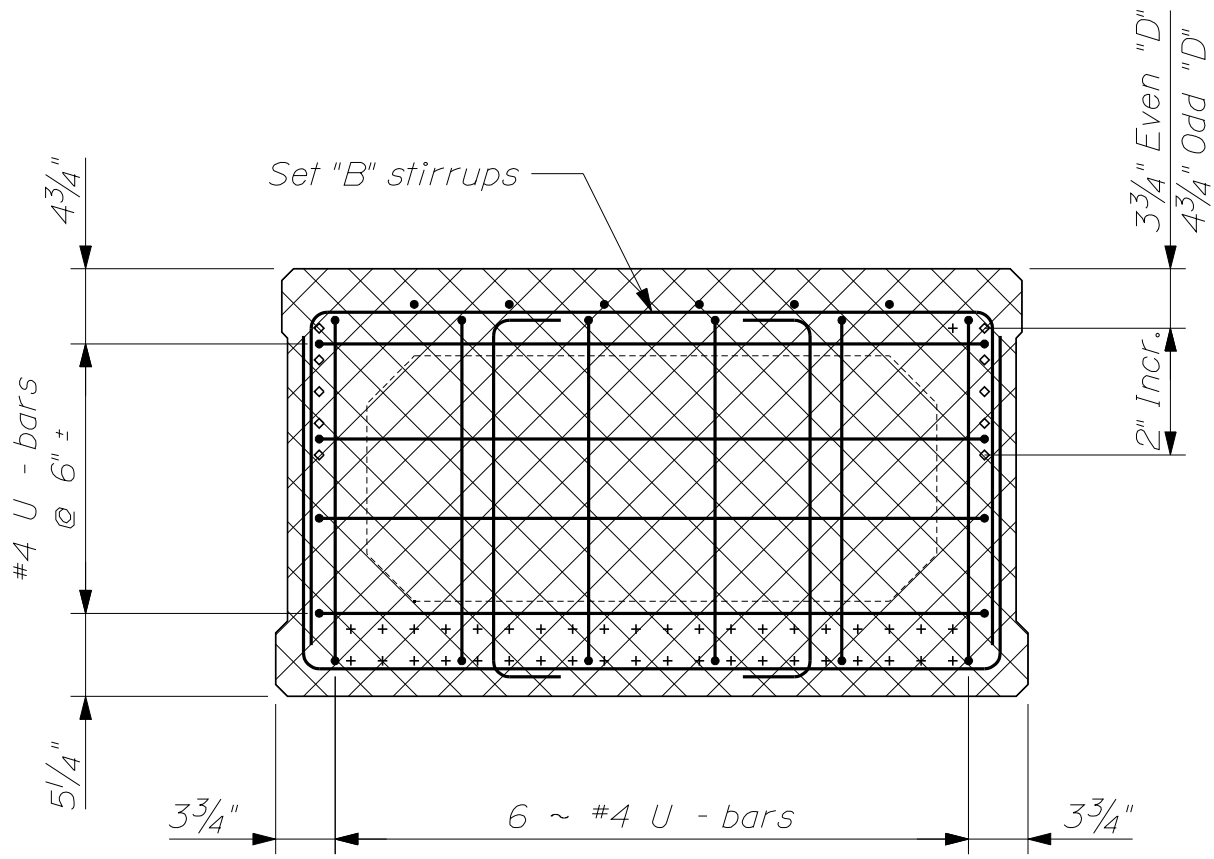
-- END BLOCK SECTION --
(36" Wide Precast Box Beam)

+ Straight Strands
◇ Draped Strands



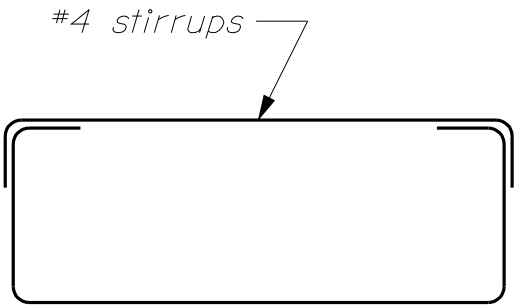
-- TYPICAL SECTION --
(48" Wide Precast Box Beam)

+ Straight Strands
◇ Draped Strands

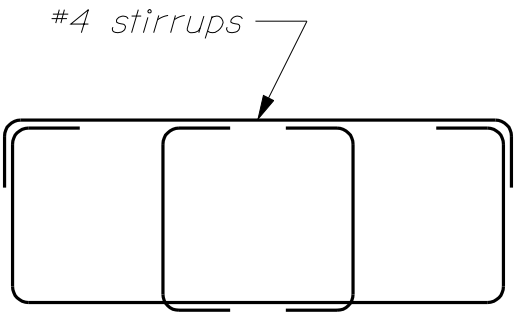


-- END BLOCK SECTION --
(48" Wide Precast Box Beam)

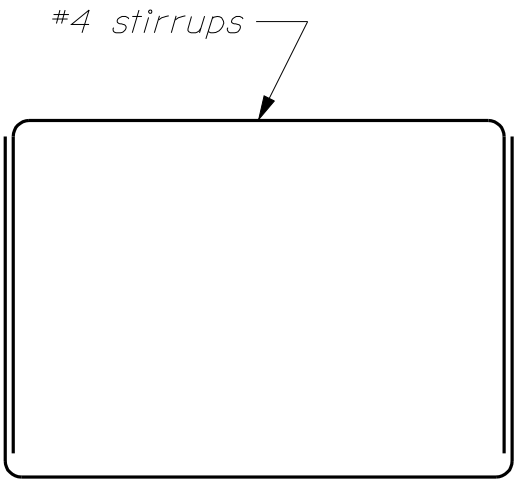
+ Straight Strands
◇ Draped Strands



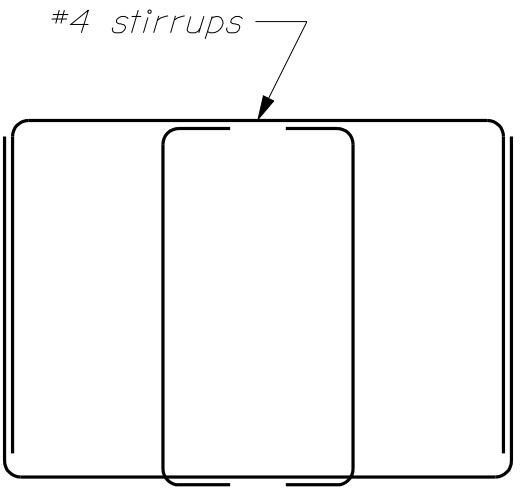
-- SET "A" STIRRUPS --
(Precast Slab)



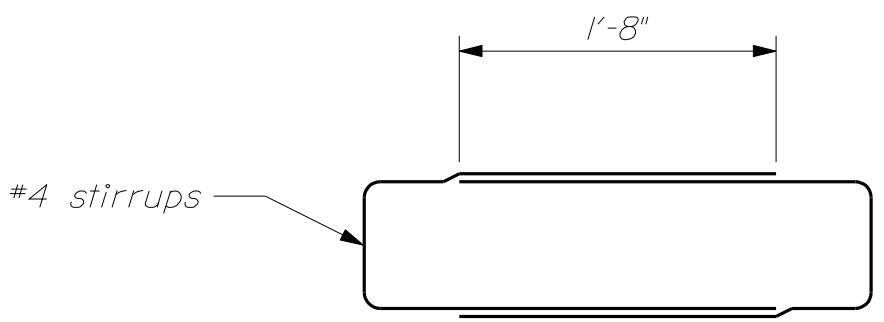
-- SET "B" STIRRUPS --
(Precast Slab)



-- SET "A" STIRRUPS --
(Precast Box Beam)



-- SET "B" STIRRUPS --
(Precast Box Beam)



-- ALTERNATE STIRRUP CONFIGURATION --
(Always use for S36-12 and S48-12 slabs)

Supplemental Standard Detail

PRECAST SUPERSTRUCTURE

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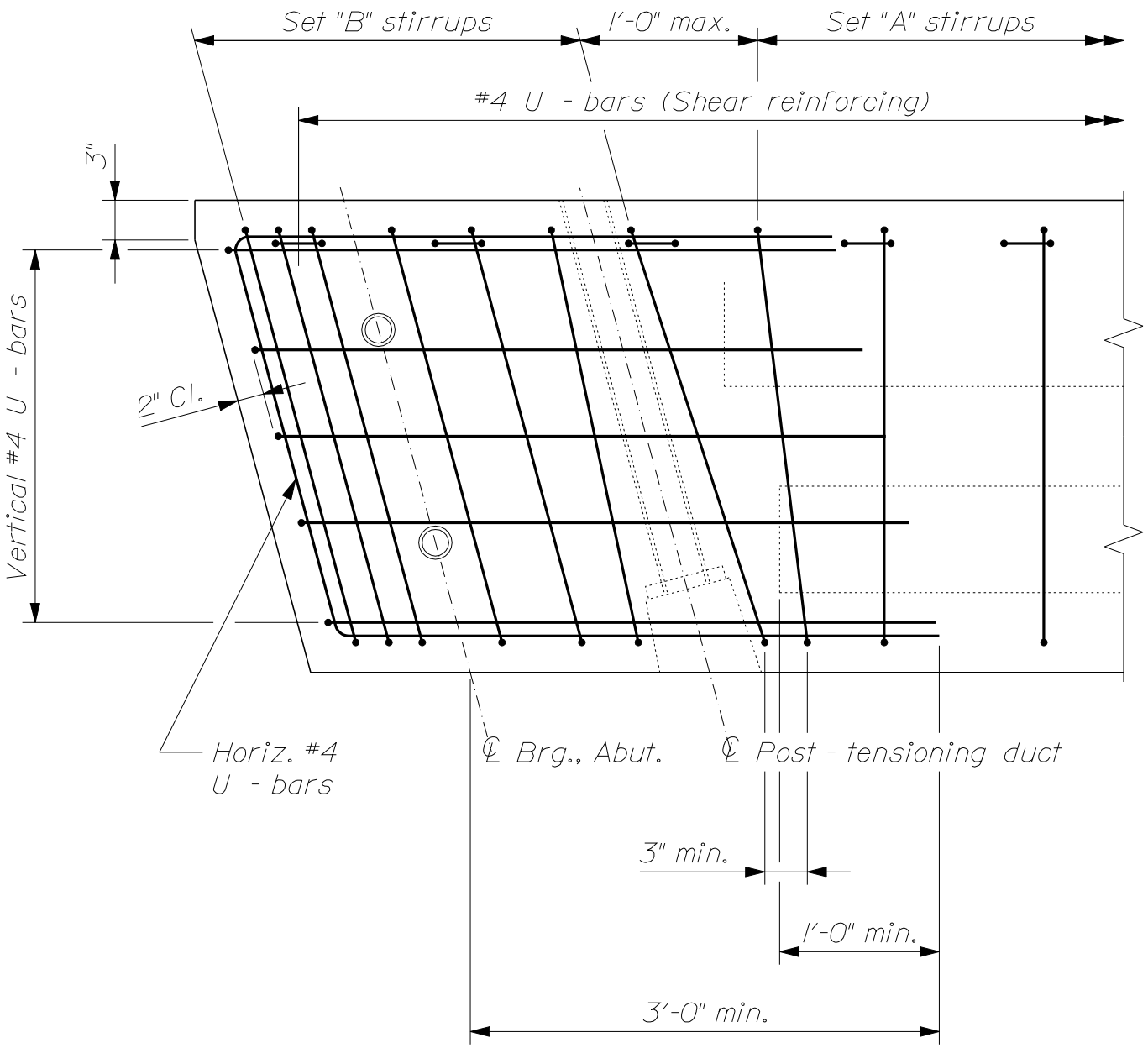

-- TYPICAL PRECAST UNIT PLAN --
(Voided Slab shown; Box Beam similar)

Supplemental
Standard Detail

PRECAST SUPERSTRUCTURE

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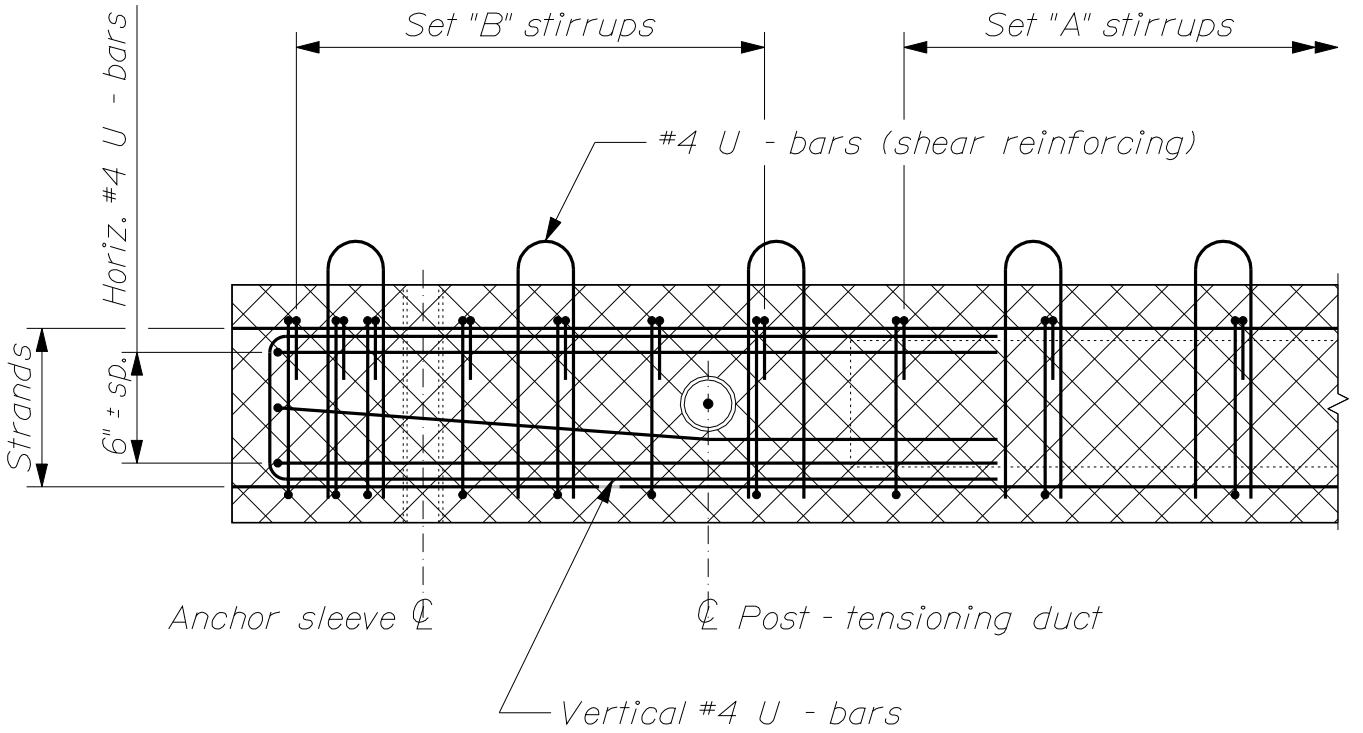
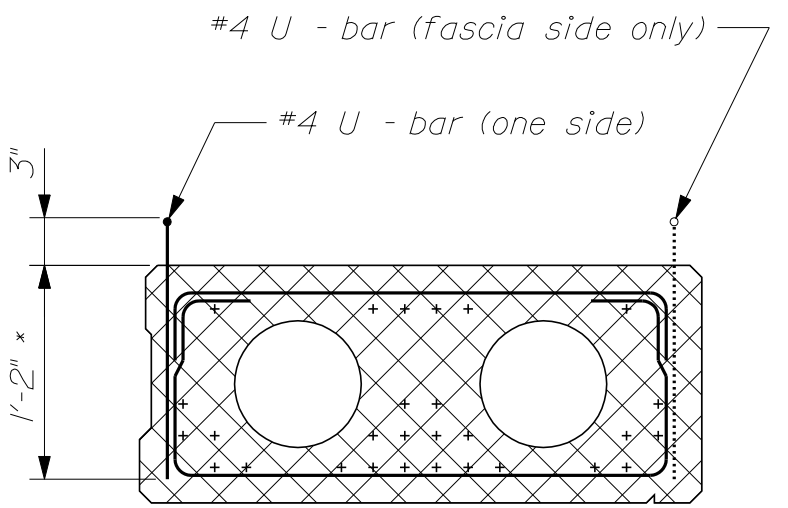


-- TYPICAL LONGITUDINAL SECTION --



-- SHEAR REINFORCING --
(For use with reinforced C.I.P. slab)

* 10" for S12 slabs
12" for S15 slabs

Supplemental Standard Detail

PRECAST SUPERSTRUCTURE

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NOTES:

1. Prestressing strands shown in the various details are schematic in nature and do not represent any specific design requirements.

2. Reinforcing steel shown is the required minimum. Individual designs may vary. Bending details and hooks shall conform to the recommendations of the current revision of ACI Standards 315 and 318.

3. For box beams, unless the design drawings specify a separate reinforced concrete slab to be constructed over the box beams, additional upper #4 stirrups shall be provided such that the maximim spacing of the upper stirrups over the voided areas is 12 inches.

4. Concrete around lifting devices shall be recessed a minimum of one inch below the surface. The recess shall be patched with an approved grout after removal of the lifting device.

5. For bridge skew angles up to 15°, the neoprene pad at the bearing area shall cover the entire bridge seat. Seams perpendicular to the centerline of bearing will be allowed provided that the seam occurs near the center of a precast unit with the unit bearing approximately equally on both pad pieces. For bridge skew angles greater than 15°, other bearing area treatment may be shown on the design drawings.

6. The Contractor will be responsible for providing a joint filler system adequate to contain the keyway grout during placement. No extra payment will be made for such system or for necessary repairs or other extra work if the joint filler system fails.

7. If there is a conflict between these Standard Details and the Design Drawings, the requirements of the Design Drawings shall be followed.