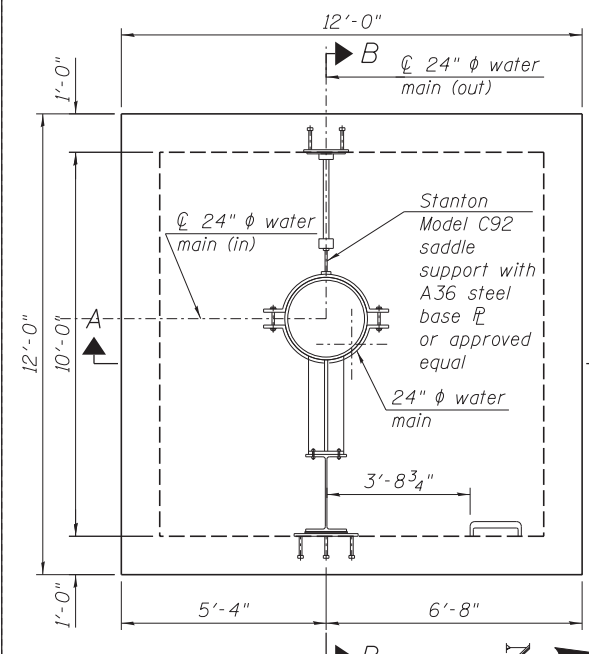
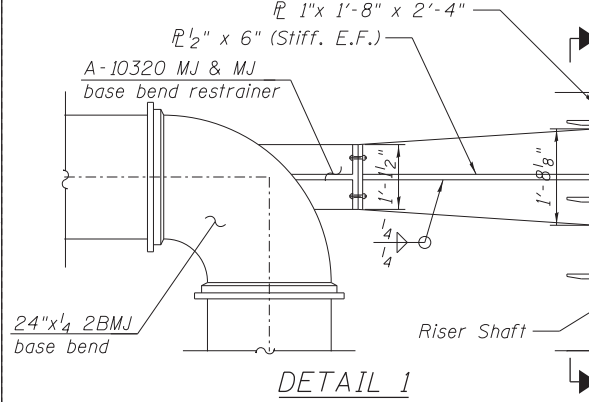


RISER PLAN



SECTIONAL PLAN

(Plan view of lateral pipe supports)

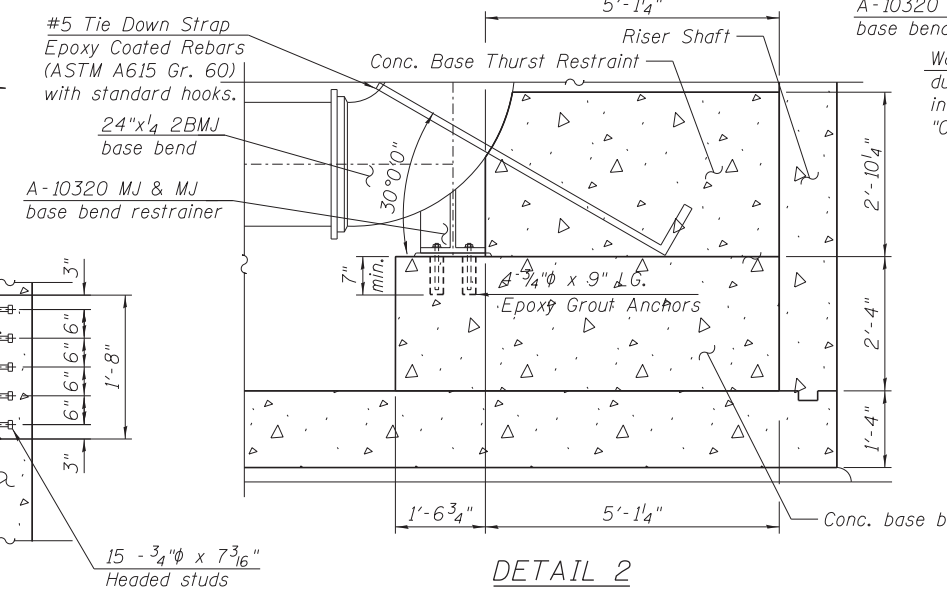


DETAIL 1

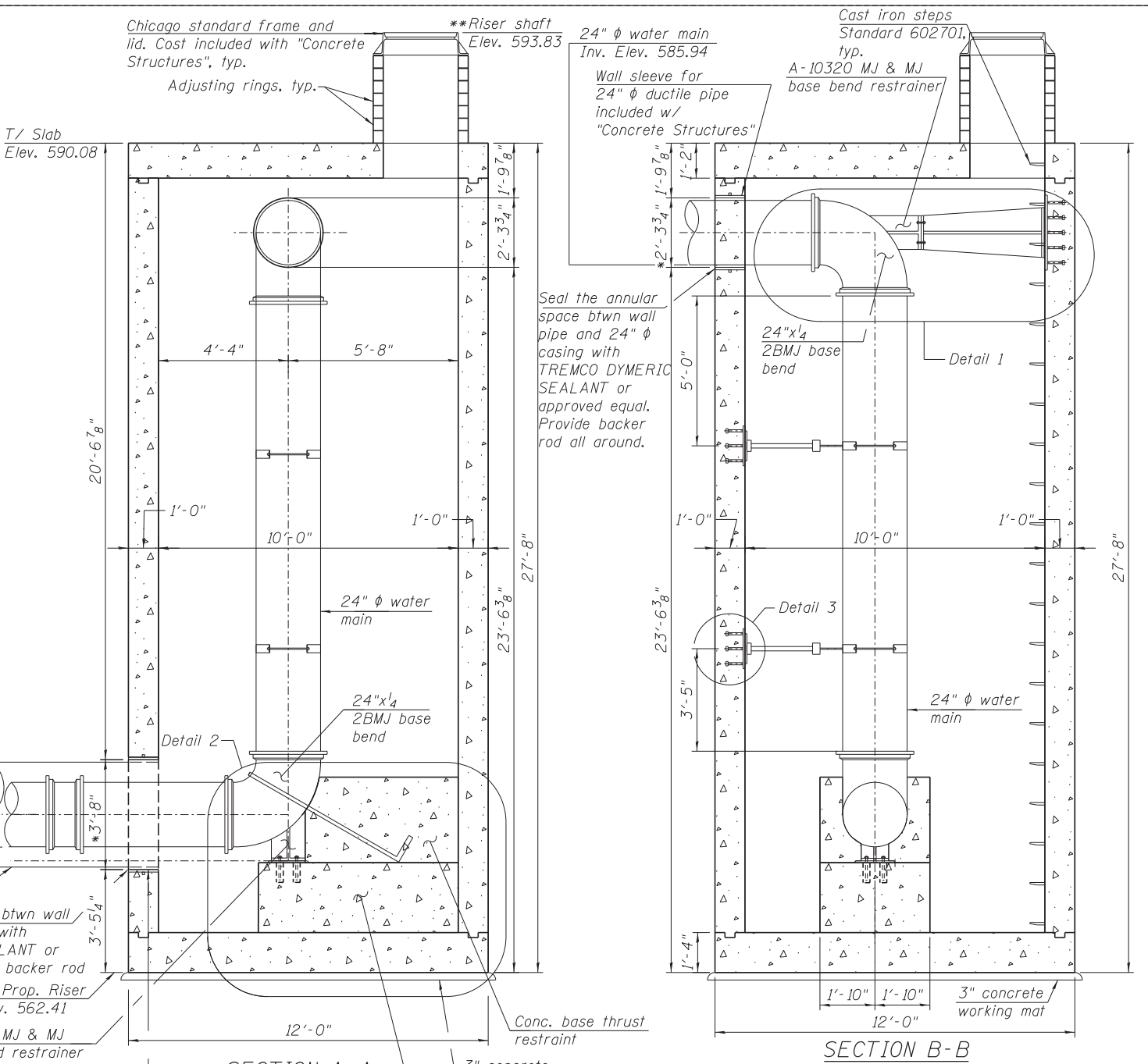
- GENERAL NOTES:**
1. The braced excavation support system for the riser shaft construction layout and details is a suggested option. The suggested construction sequence enables the Contractor to construct the braced excavation support system for existing riser shaft removal, existing water main connection removal and new riser shaft and new wall construction. The Contractor shall design the braced excavation consisting of drilled soldier piles, wood lagging and structural steel sections (struts and walers) to meet the City of Chicago Office of Underground Coordination (OUC) for maximum allowed deflection of 1/4". The design shall be performed and sealed by a Structural Engineer, licensed and registered for the State of Illinois, and shall be approved by the Engineer.
 2. The portion of the existing abandoned CTA water tunnel interfering with the new riser shaft construction shall be removed.
 3. If the 5' abandoned CTA water tunnel is encountered during drilling for the soldier piles for the braced excavation, concrete coring shall be used (if required).
 4. For water main location, layout and details, see the water main design plan sheets.
 5. The proposed retaining wall foundation locations may require adjustment based upon the field location of the water main and shall be determined by the Engineer.
 6. The proposed riser shaft location shall be adjusted as necessary to align with the water main location.
 7. Existing CTA foundations were most likely removed or partially removed when the existing retaining wall was originally constructed. Any existing foundation that is within the proposed excavation for the new retaining wall and riser shaft construction shall be paid for as FOUNDATION REMOVAL.
 8. Abandoned 5' Brick CTA Water Tunnel to be bulkheaded to the outside of the area of riser shaft construction (see civil sheets). In the area of the riser shaft construction, it will be necessary to remove any brick tunnel remnants. The removal of the existing tunnel is included as part of Braced Excavation as necessary, with proper disposal.
 9. Abandoned 5' Brick CTA Water Tunnel must be filled prior to the start of wall construction. The tunnel must be filled so that foundation construction will not be impacted by tunnel. A number of the braced excavation piles may be placed through this tunnel. Drilling operations must account for presence of debris, brick material, CLSM and bedding material in addition to soil and other expected materials to be encountered.

INDEX OF SHEETS

- S4-01 General Plan and Sections
- S4-02 Riser Shaft Sections and Details (Sheet 1 of 3)
- S4-03 Riser Shaft Sections and Details (Sheet 2 of 3)
- S4-04 Riser Shaft Sections and Details (Sheet 3 of 3)
- S4-05 Permanent Thrust Restrainers Plan, Sections and Details
- S4-06 Suggested Braced Excav. Sections and Details (Sheet 1 of 2)
- S4-07 Suggested Braced Excav. Sections and Details (Sheet 2 of 2)
- S4-08 Boring Log

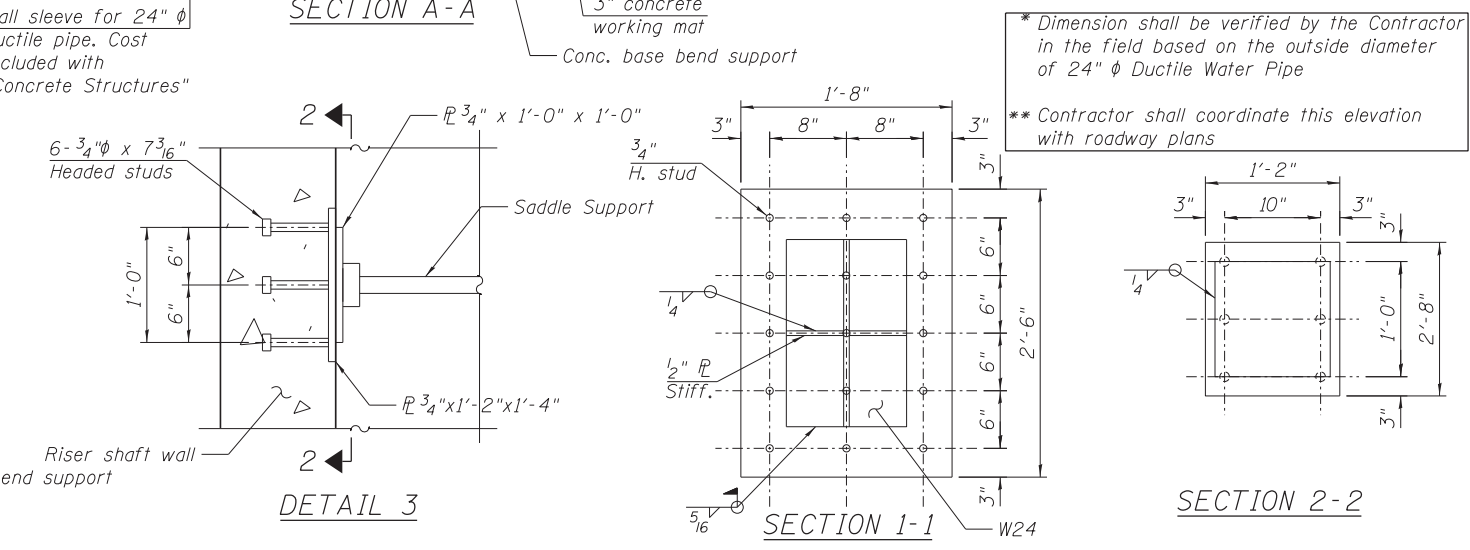


DETAIL 2



SECTION A-A

SECTION B-B



DETAIL 3

SECTION 1-1

SECTION 2-2

* Dimension shall be verified by the Contractor in the field based on the outside diameter of 24" ϕ Ductile Water Pipe

** Contractor shall coordinate this elevation with roadway plans

FILE PATH = C:\Users\will.mardous\Desktop\Riser_Sht\0160W25-Sht-RS02-Details.dgn

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PLOT SCALE = 2:6.0000 1" = 1'-0"	CHECKED -	MAI, MI, JJS	REVISED -
PLOT DATE = 6/14/2013	DATE -	6/17/2013	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**RISER SHAFT SECTIONS AND DETAILS (SHEET 1 OF 3)
RISER SHAFT AND BRACED EXCAVATION**

F.A.I. RE. 90/94/290	SECTION 2013-007R	COUNTY COOK	TOTAL SHEETS 317	SHEET NO. 226
CONTRACT NO. 60W25			ILLINOIS FED. AID PROJECT	

SCALE: SHEET S4-02 OF 8 SHEETS STA. TO STA.