



FORM DQP 2.01-1
LEVEL 1 CHECK PRINT SIGN-OFF SHEET

Client Name: Ohio Department of Transportation
Job Title: Cleveland Innerbelt Design-Build Contract
Job Number: CUY-90-14.90
Document Title: Bulkhead Wall - RFI 87 Response

Check Level (Mark One): 1A 100% Document Check
 1B 100% Input Check

Enter description below:

	Print Name	Signature	Date
<input checked="" type="checkbox"/> Originator	<u>Larry Rolwes</u>	<u>Lawrence E. Rolwes JR</u>	<u>9/6/11</u>
<input checked="" type="checkbox"/> Checker	<u>Harold upshaw</u>	<u>Harold upshaw</u>	<u>9-6-11</u>
<input checked="" type="checkbox"/> Backchecker	<u>Larry Rolwes</u>	<u>Larry Rolwes</u>	<u>9/6/11</u>
<input checked="" type="checkbox"/> Updater	<u>Larry Rolwes</u>	<u>Larry Rolwes</u>	<u>9/6/11</u>
<input checked="" type="checkbox"/> Validator	<u>Harold Upshaw</u>	<u>Harold upshaw</u>	<u>9-6-11</u>

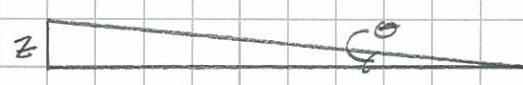
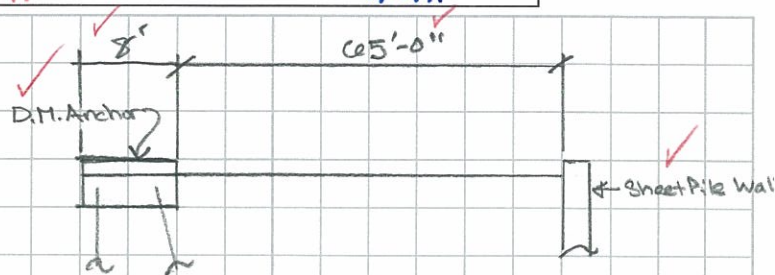
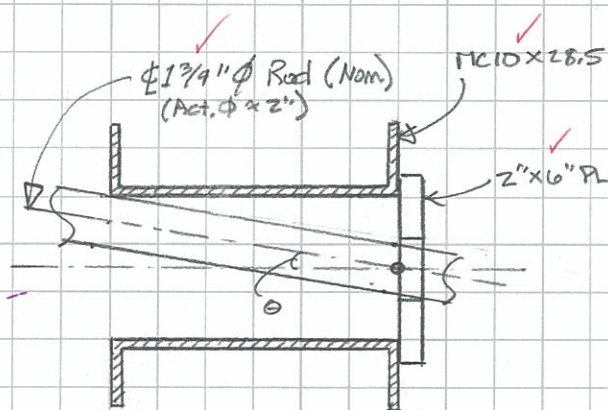
Insert an "X" in the box to indicate a required QC activity.

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West Bank Wall - DM Elev. Raise

Contractor has requested to raise the elevation of the deadman anchorage west of Pier 4 to minimize excavation.

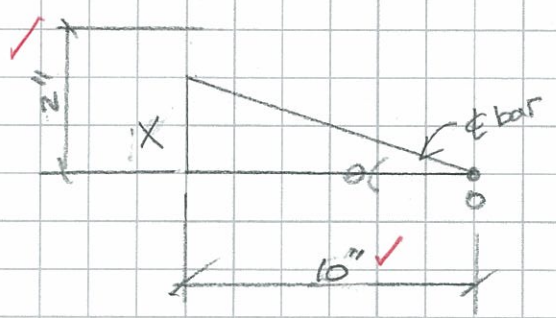
Determine the maximum increase in the anchorage elevation based on the geometry of the water anchorage.



$$z = 65 \tan 4 = 5.1$$

Say 5.0'

The dead man anchorage may be raised a maximum of 5'. The 4" phi conduit should be set at an inclination of approx 4'.



$$X = 2'' - 0.25'' (\text{CLR}) - 1/2(2'') = 0.75$$

$$\theta = \tan^{-1} (0.75/10) \approx 4^\circ$$