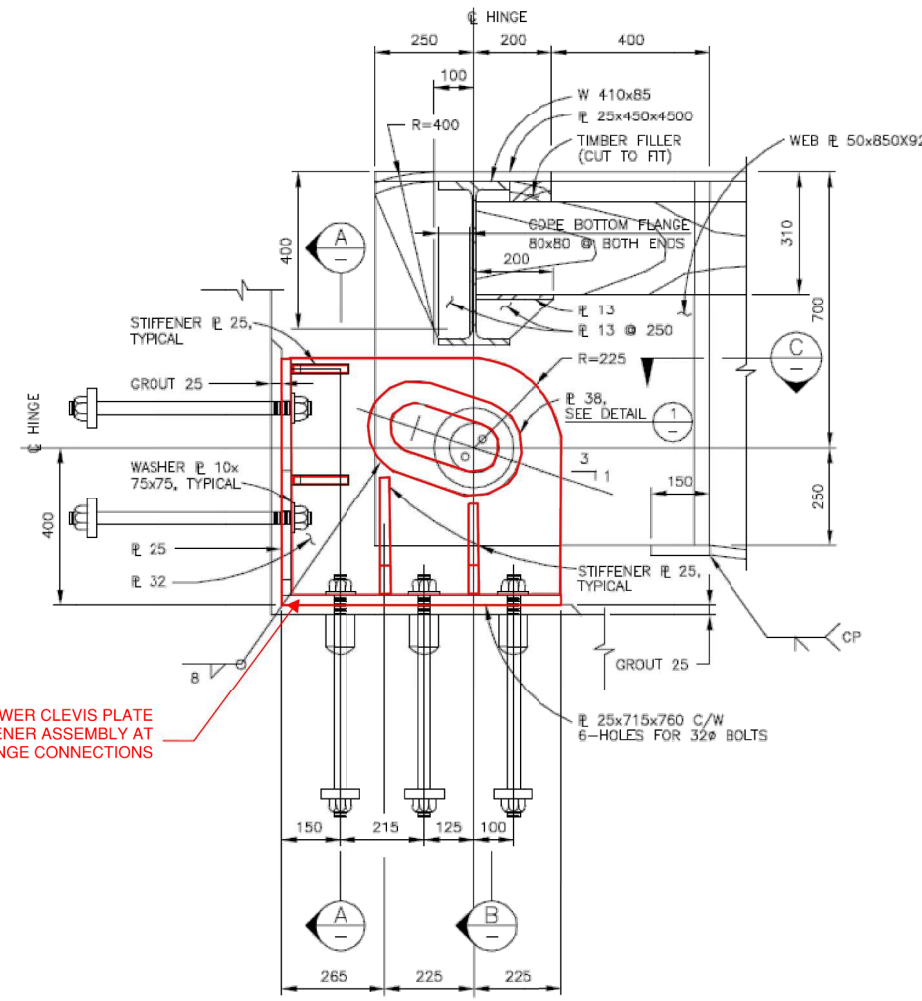


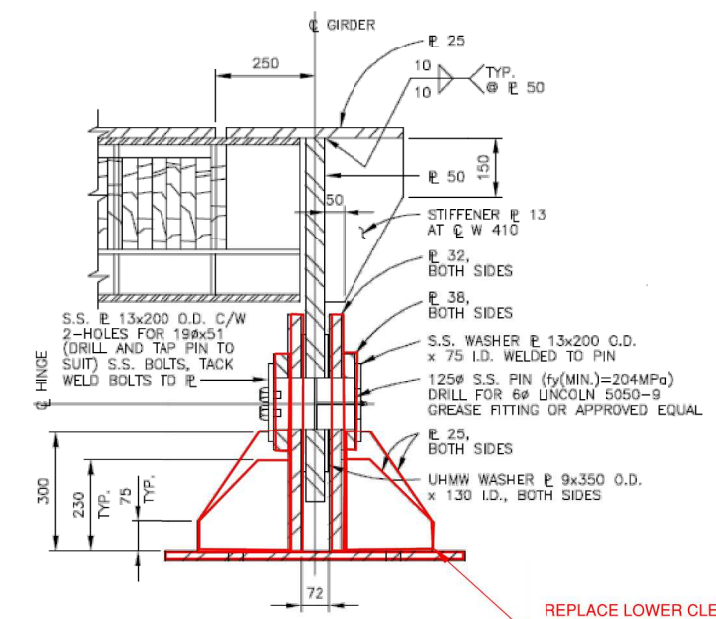


REPLACE HINGE PLATE AT NORTH SIDE
REPLACE HINGE PLATE AT SOUTH SIDE

PHOTO - BARGE RAMP REPAIR LOCATIONS

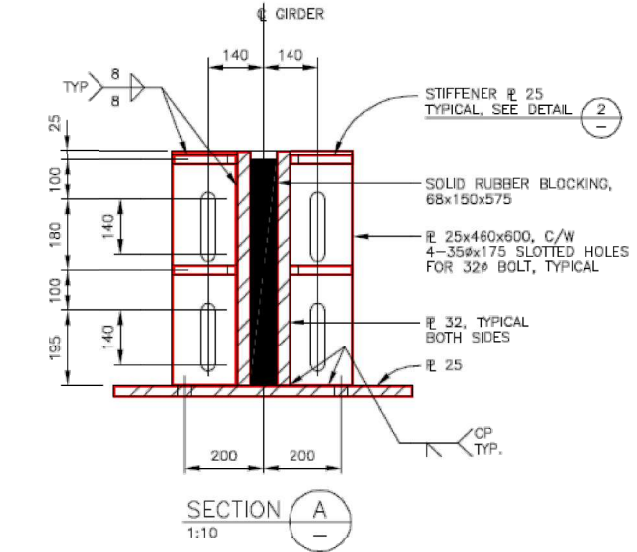
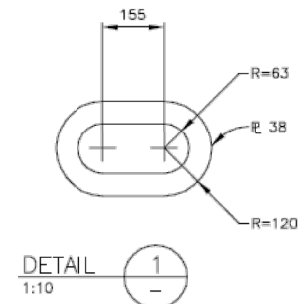


REPLACE LOWER CLEVIS PLATE AND STIFFENER ASSEMBLY AT BOTH HINGE CONNECTIONS



REPLACE LOWER CLEVIS PLATE AND STIFFENER ASSEMBLY AT BOTH HINGE CONNECTIONS

SECTION B
1:10
NOTE: BORE SLOTTED PIN HOLES AFTER SIDE PLATES ARE WELDED IN PLACE.



SECTION A
1:10

GENERAL NOTES:

1. The design intent is to repair the barge ramp inshore hinge connections with severe wearing to the clevis plates.
2. All units are in millimeters unless noted otherwise. All units of elevation are in metres.
3. The intended repair design life is 10 to 15 years subject to regularly scheduled inspections.
4. Contractor is responsible for verifying all geometries in the field prior to ordering/fabrication of structural components and construction. All members and dimensions shown in black are taken from original record drawings.
5. In the event of any discrepancy between the field conditions and this sketch, the contractor shall bring this to the attention of the Engineer for evaluation and direction.
6. All steel shall be grade 350W in accordance with CAN/CSA G40.21M.
7. All welding shall be in accordance with CAN/CSA W59.

RECOMMENDED REPAIR PROCEDURE:

1. Ensure the offshore end of the ramp is supported on the lock-out chains.
2. Temporarily jack and support the girders to remove bearing load at the hinges
3. Remove hinge pin cover plates and remove the hinge pin. Inspect pin for evidence of damage or distress.
4. Remove the lower clevis plates assembly and inspect the upper clevis plate for evidence of damage or distress.
5. If damage or distress is noted at the hinge pins or upper clevis plates, report findings to Engineer for further evaluation.
6. Install prefabricated lower clevis plates and secure to abutment using existing bolted connections
7. Install hinge pin and cover plates.
8. Remove jack and complete full range motion checks.



Rev	Date	Description	GC	MF	MF
PA	2019-01-30	ISSUED FOR DISCUSSION			
Rev			Drawn	Design	App'd

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NOT TO SCALE
ORIGINAL DWG SIZE: A3 (297 x 420mm)

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CITY OF NORTH VANCOUVER
NORTH VANCOUVER, BC
BARGE RAMP HINGE REPAIR
GENERAL NOTES AND
REPAIR DETAILS

Drawing No. **SK01**
Project Number 2211-70466-T2001
Rev. PA