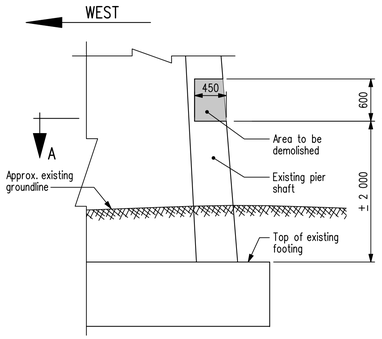
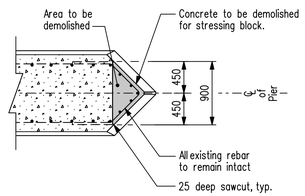


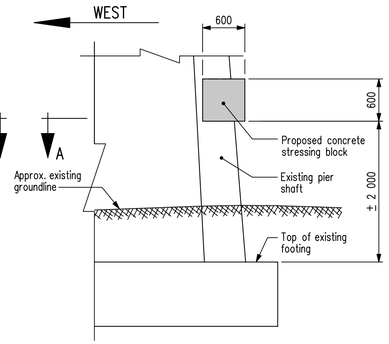
ELEVATION
Shown normal to face of pier.
Existing reinforcing not shown for clarity



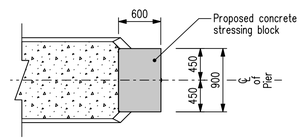
SECTION A-A

STRESSING BLOCK CONCRETE DEMOLITION

Showing existing concrete removal
Scale 1 : 40



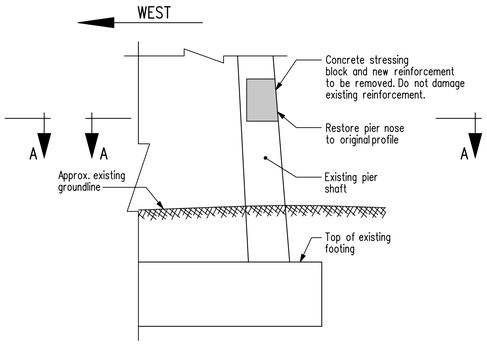
ELEVATION
Shown normal to face of pier.



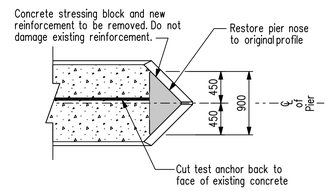
SECTION A-A

STRESSING BLOCK CONCRETE DETAILS

Showing proposed concrete placement
Reinforcing not shown for clarity
Scale 1 : 40



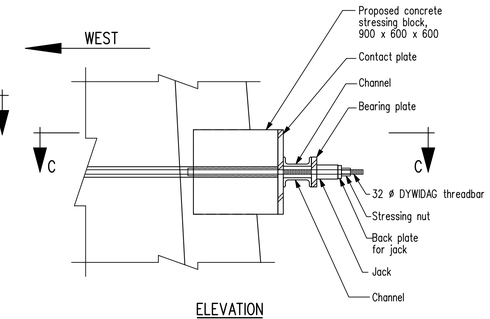
ELEVATION
Shown normal to face of pier.
Existing reinforcing not shown for clarity



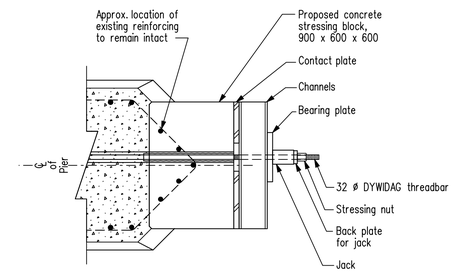
SECTION A-A

STRESSING BLOCK REMOVAL DETAILS

Showing pier after restoration of pier nose
Scale 1 : 40



ELEVATION
Shown normal to face of pier.



SECTION C-C

STRESSING DETAILS

NOTES:

1. Contractor shall install test anchor as close to ℄ of pier as possible ensuring that 75 ø drilled hole for 32 ø DYWIDAG threadbar misses existing pier reinforcing.
2. Stressing jack shown not representative of actual size

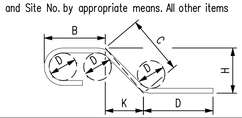
BILL OF REINFORCING FOR TEST ANCHOR — SITE No. 2924-00

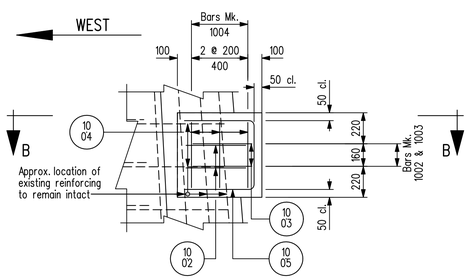
MARK	TYPE	PIN DIAMETER	LENGTH	No.	MASS	BENDING DIAGRAM
1002	BENT	60	1 030	4	3.23	440, 590
1003	BENT	60	1 660	2	2.61	440, 440, 780
1004	BENT	60	1 680	6	7.91	600, 600, 480
1005	BENT	60	1 500	4	4.71	500, 500, 500

Total mass of reinforcing steel	18.46	kg
Total volume of structural concrete	0.32	m³

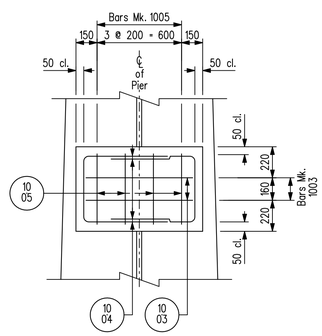
NOTES:

1. All dimensions given in bending diagram are out to out, except radii and extensions on 90°, 135° & 180° hooks. Extensions on 90°, 135° & 180° hooks are the "A" or "G" dimensions for the standard 90°, 135° & 180° hooks referenced from the RSIC "Manual of Standard Practice". Radii are inside dimensions. All reinforcing steel bends and hooks shall conform to Clause 6.6.2 of C.S.A. A23.1-04, unless noted otherwise in the BILL OF REINFORCING STEEL.
2. All reinforcing steel shall be deformed steel, unless noted otherwise in the BILL OF REINFORCING STEEL.
3. All reinforcing steel shall conform to CSA G30.18-M92 "Billet Steel Bars for Concrete Reinforcement" Grade 400W, unless noted otherwise in the BILL OF REINFORCING STEEL.
4. Like bars shall be bundled, securely tied and identified as to Mark and Site No. by appropriate means. All other items to be identified in a similar fashion.
5. All bars shall be bent in accordance with the following detail:

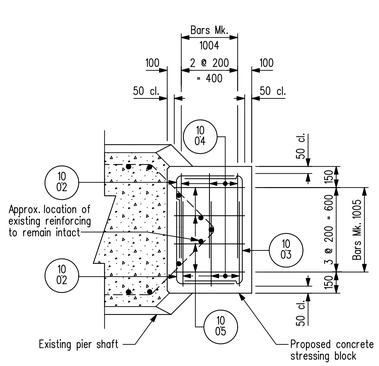




SIDE ELEVATION
Shown normal to face of pier

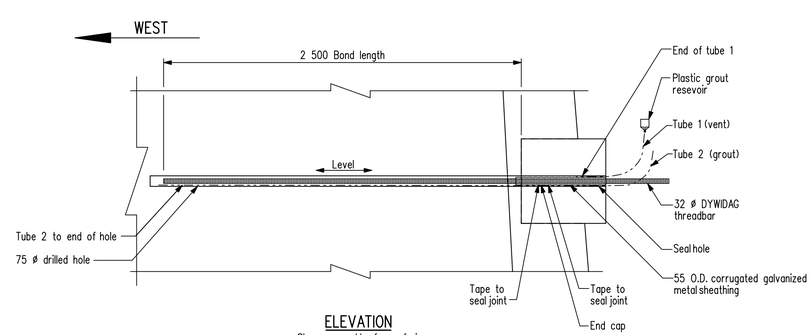


END ELEVATION
Existing reinforcing not shown for clarity

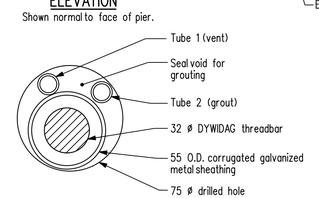


SECTION B-B

STRESSING BLOCK REINFORCING DETAILS



ELEVATION
Shown normal to face of pier.



SECTION
Not to scale.

GROUTING DETAILS

NOTES:

1. Proposed Test Anchor to be located at east end of Pier 1 or Pier 4.
2. The purpose of the test anchor is to confirm the assumed bond strength of the full length anchors. The testing of the test anchor is to be completed before final fabrication of the full length threadbar anchors.
3. The same drilling equipment shall be used for the test anchor as for the full length threadbar anchors.
4. Threadbar shall be DYWIDAG 32 mm diameter Grade 1030 MPa threadbar conforming to CAN/CSA G279.
5. Threadbar stressing:
   - Threadbar Test Anchor working load = P_w = 0.6 P_u = 500.4 kN
   - Threadbar Test Anchor test load = P_t = 1.25 P_w = 626.0 kN.
6. The new concrete stressing block shall attain a minimum compressive strength of 30 MPa before stressing the threadbar test anchor.

REVISIONS

DATE	BY	DESCRIPTION
10/03/04	J.J.	As built

PROVINCE OF MANITOBA — Original signed by M. B. CHISLETT 09/04/20 — REGISTERED PROFESSIONAL ENGINEER

TEST ANCHOR DETAILS

RECONSTRUCTION AND STRENGTHENING OF EXISTING BRIDGE
OVER ASSINIBOINE RIVER - CONTRACT ONE
ON P.T.H. No. 100 IN R.L.'S 72, 73 & 94
PARISH OF ST. CHARLES

CITY OF WINNIPEG

Manitoba — Infrastructure and Transportation
Water Control & Structures

RELEASED FOR CONSTRUCTION BY:
Original signed by Ruth J. Eden 09/05/01
DIRECTOR — DATE
STRUCTURES, DESIGN AND CONSTRUCTION BRANCH

DESIGN	BY: M.B.C.	SCALE: 1 : 20	SHEET No. 11
	CHECKED: M.B.C.		
DETAILS	BY: M.S.	or as shown	SITE No. 2924-00
	CHECKED: M.B.C.		