



West Fraser

FRASER LAKE SAWMILLS

P.O. BOX 100

FRASER LAKE, B.C.

V0J 1S0

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FAX-250-847-4160

FAX COVER SHEET

TO: McElhanney FROM: Tom Olson

ATTENTION: Scott Lopsten DATE: October 20, 2003

NUMBER OF PAGES (INCLUDING THIS ONE): 20

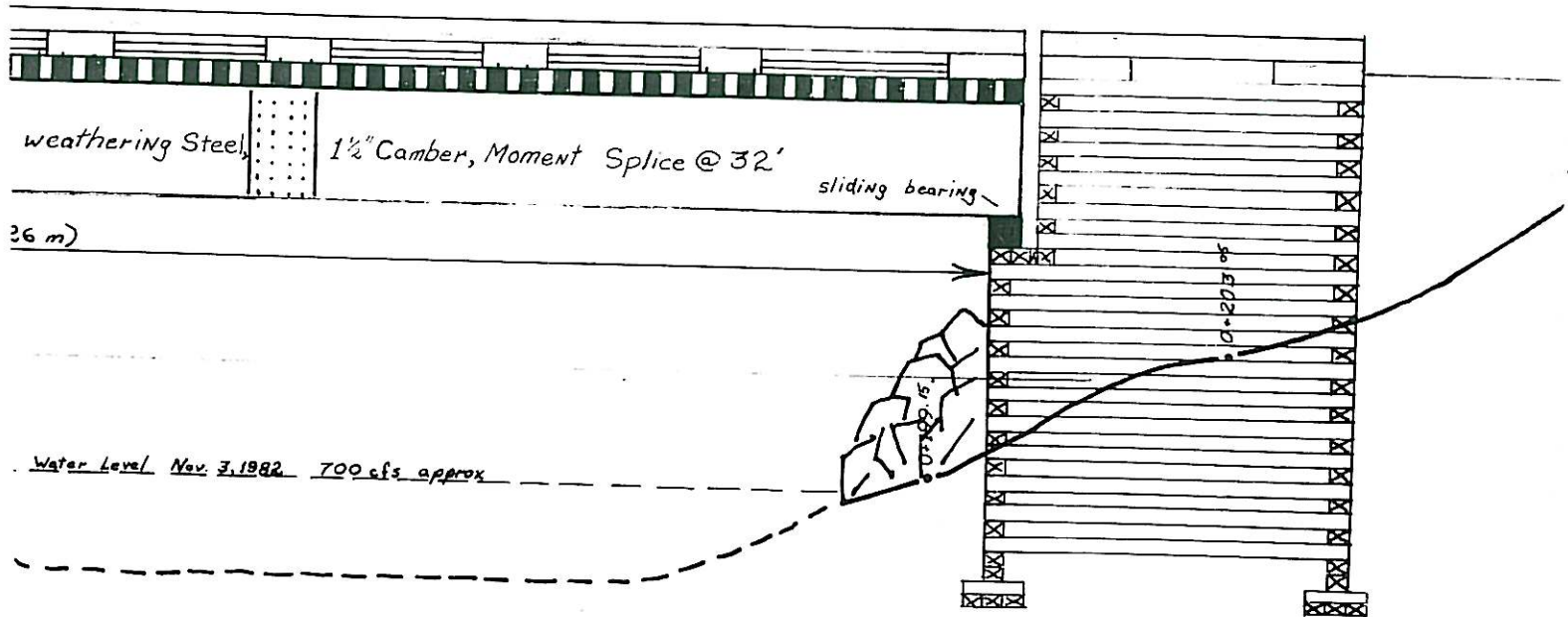
PLEASE CONTACT above IF YOU HAVE ANY PROBLEMS WITH THIS FAX.

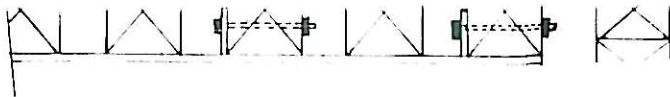
MESSAGE

Attached plans of Chelastie River
Bridge, Bridge Inspection Reports and
photos.

Chelastie Bridge

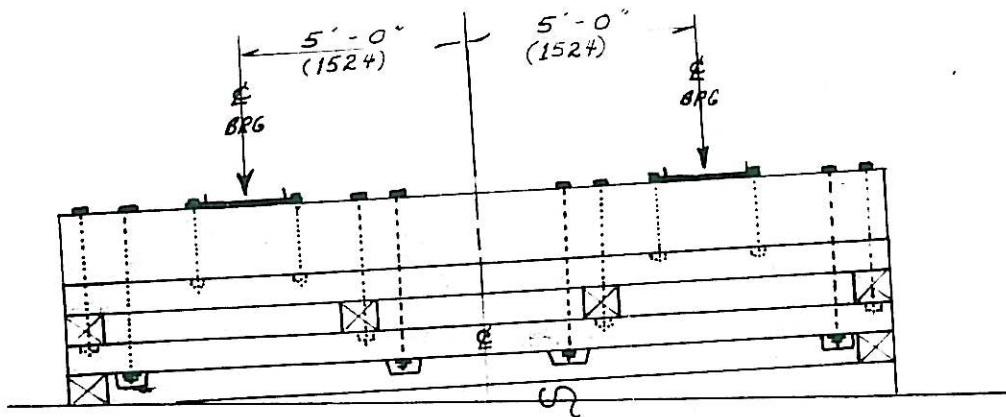
North Side





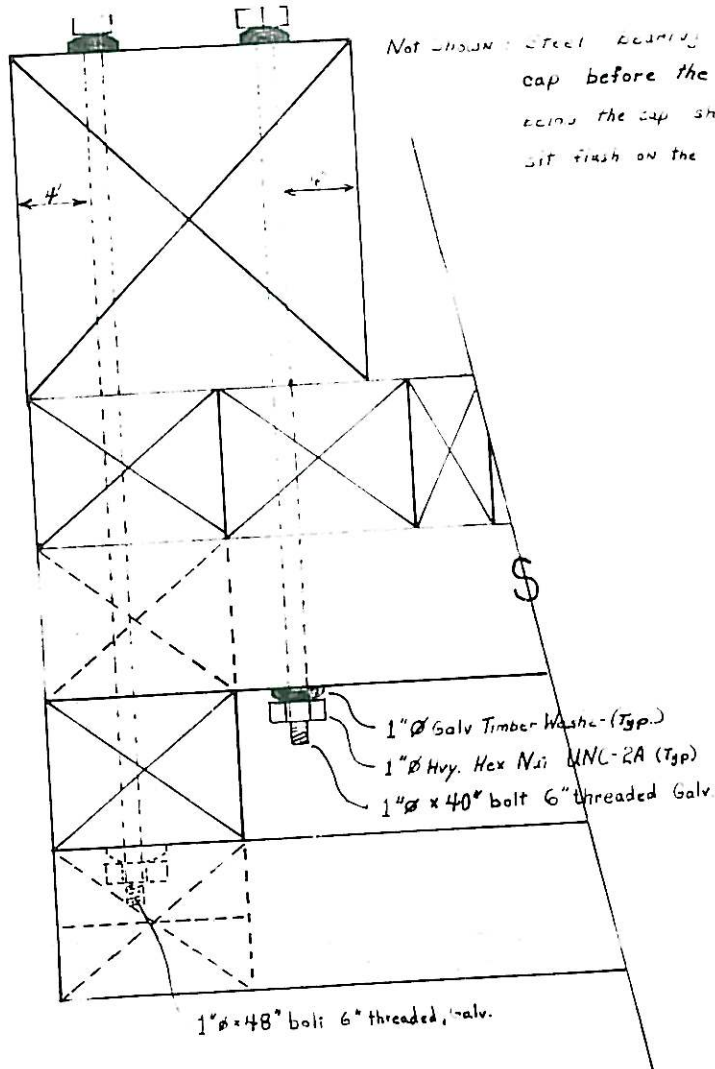
Shim as reqd.

Chelak Bridge



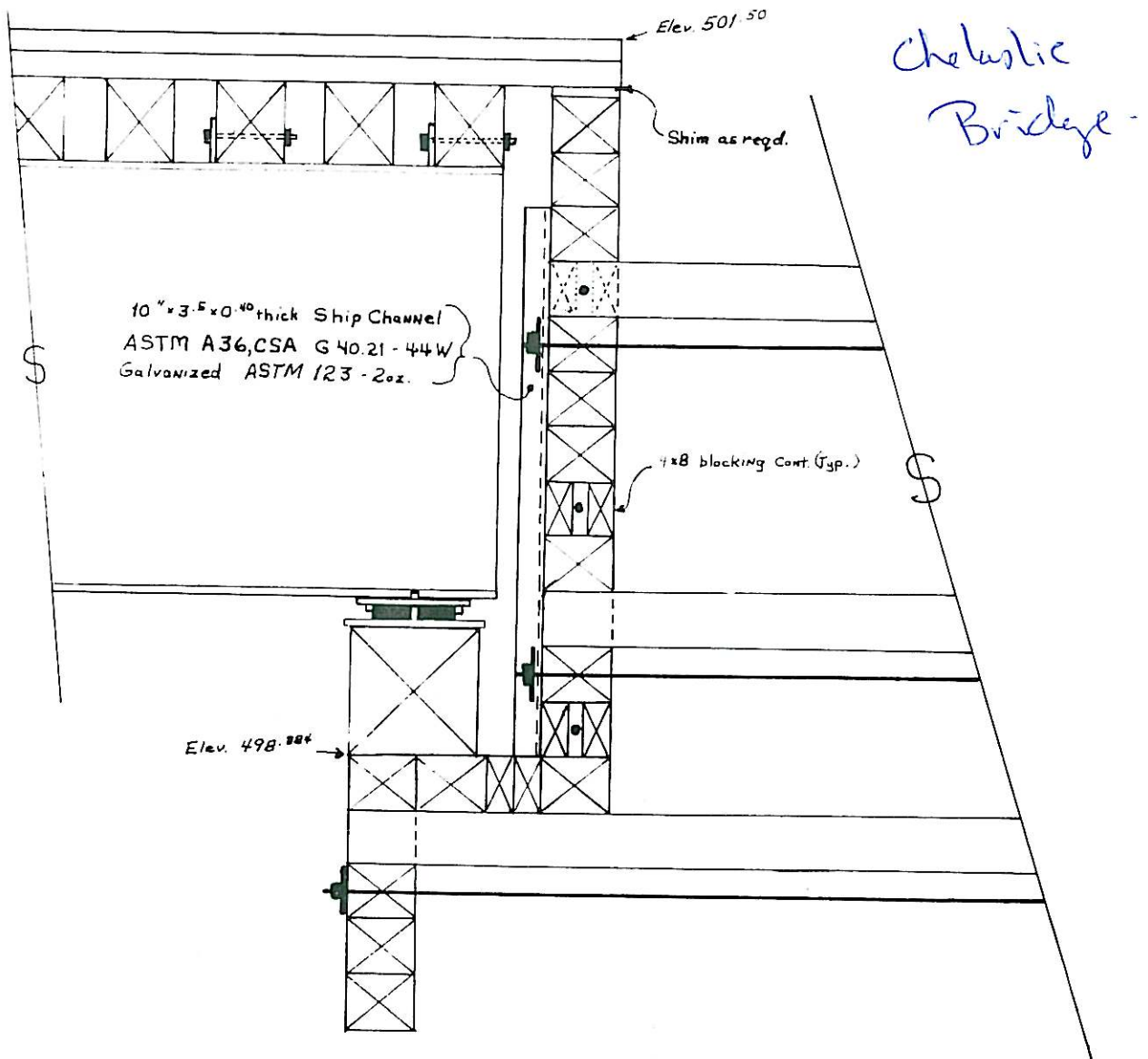
— CAP FRONT VIEW DETAIL —
Scale: 1:50

Chelmsford Bridge



CAP DETAIL

Scale; 1:10



— UPPER CRIB DETAIL —

Scale: 1:25

1) Timber crib for top off-highway

DESIGN

Scale 1:50

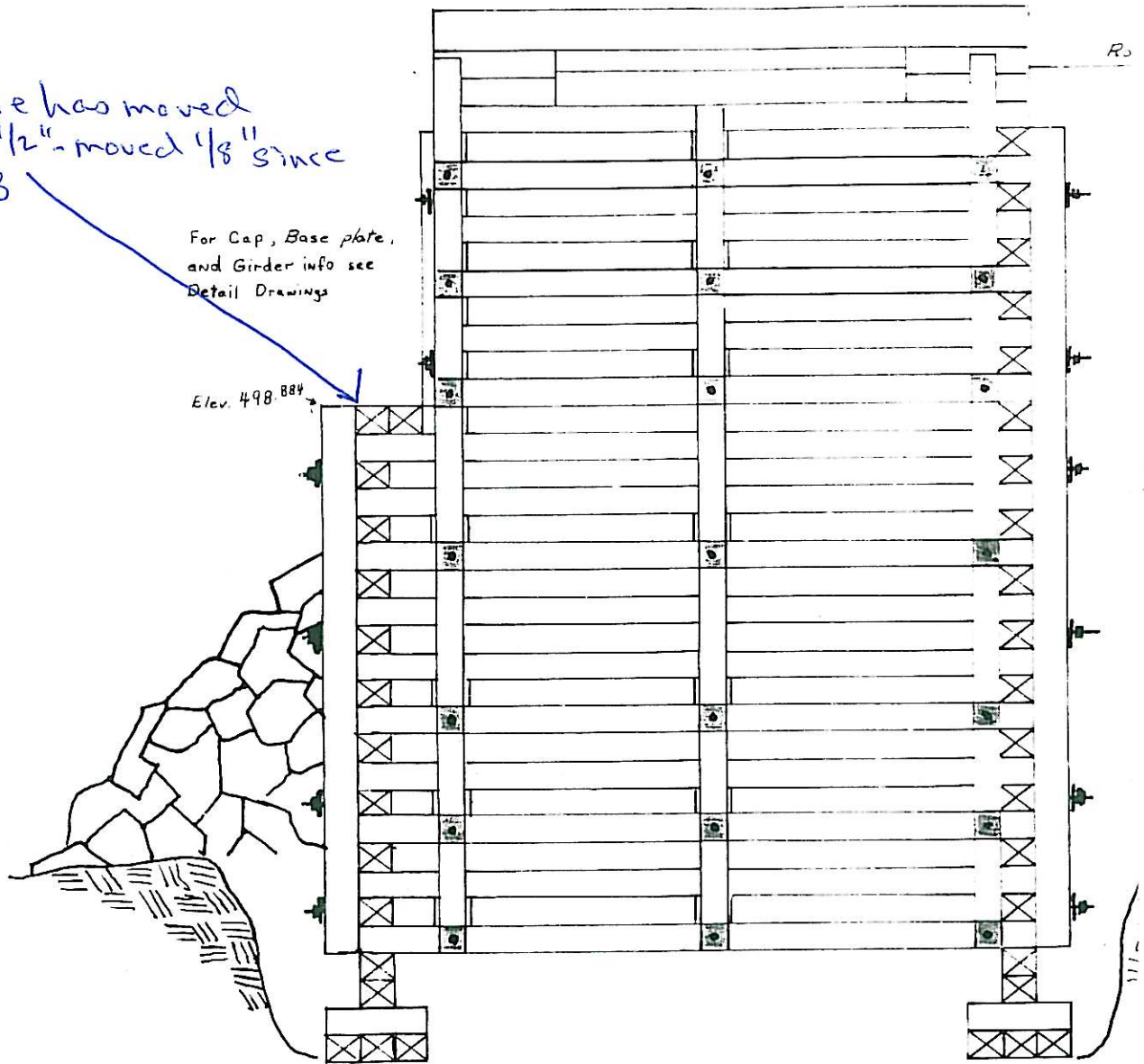
CRIB DESIGN

Chelakke Bridge.

vertical tie has moved
out by $2\frac{1}{2}$ " - moved $\frac{1}{8}$ " since
May, 2003

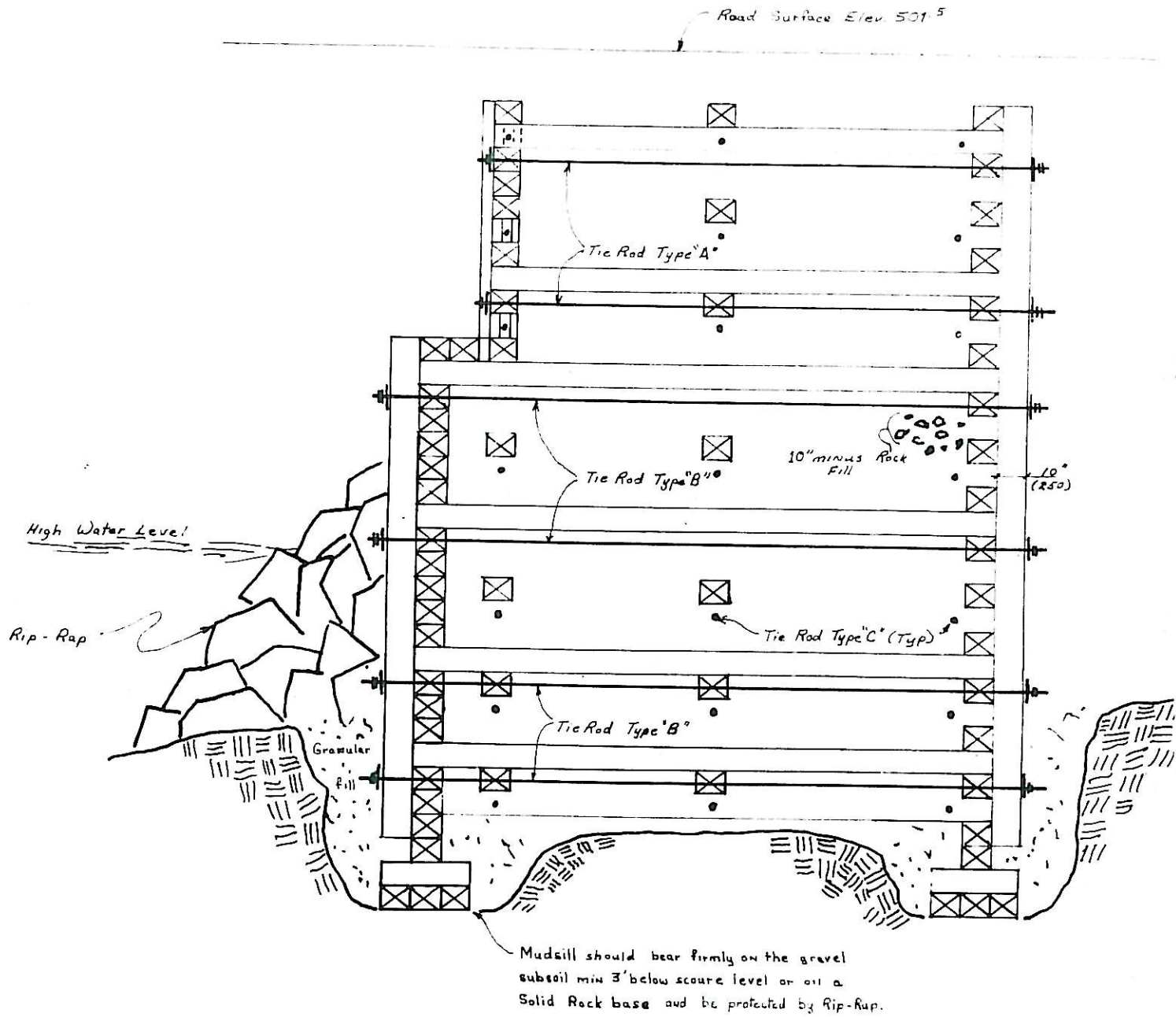
For Cap, Base plate,
and Girder info see
Detail Drawings

Elev. 498 884



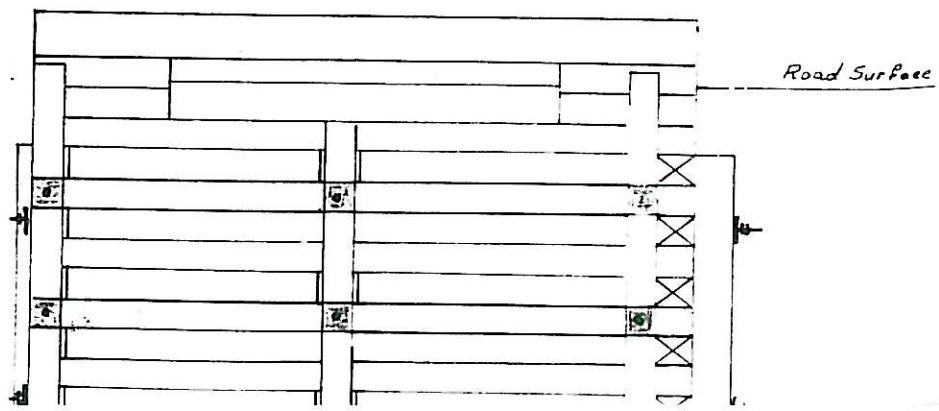
— SIDE WALL —

Chelastek Bridge

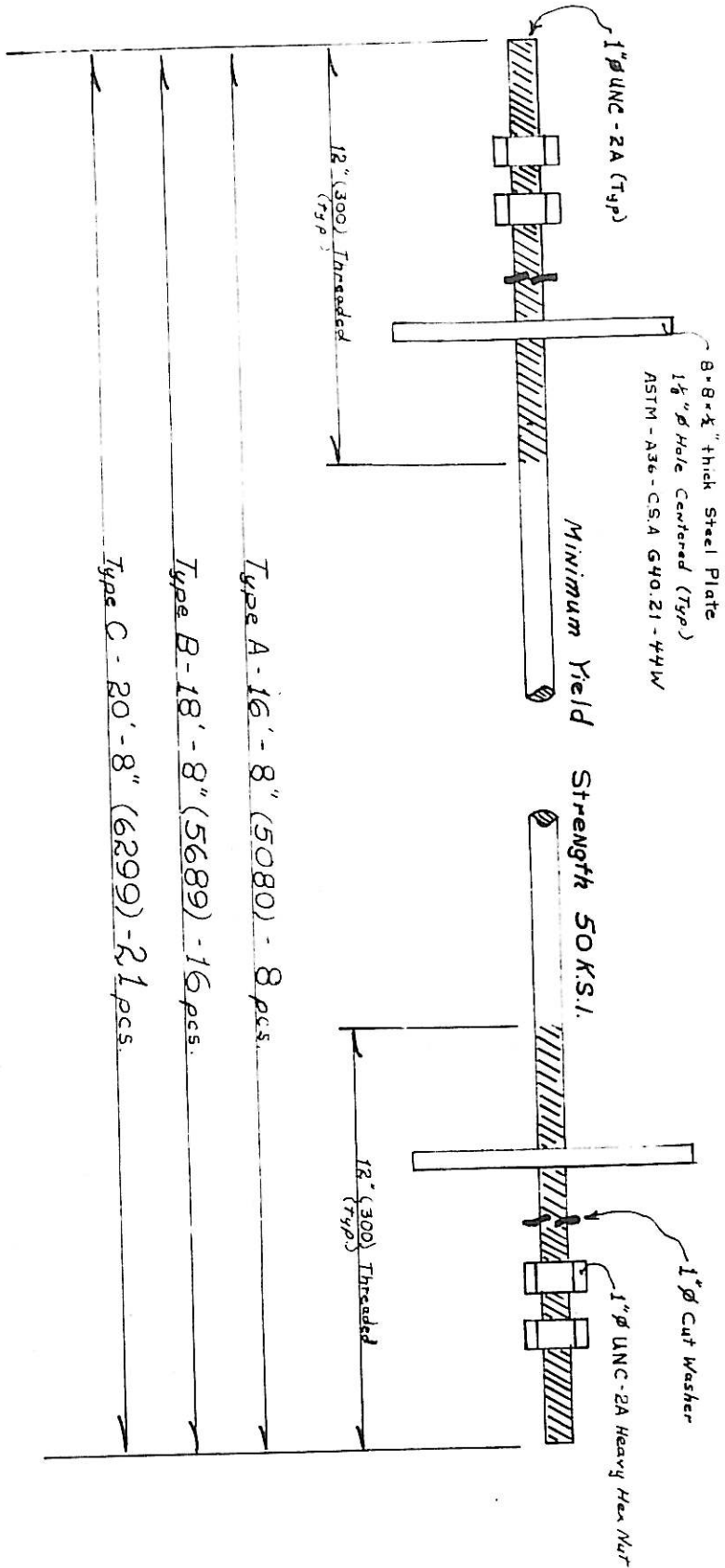


— SIDE VIEW X-SECTION —

For Cap, Base plate, and Girder info see Detail Drawings

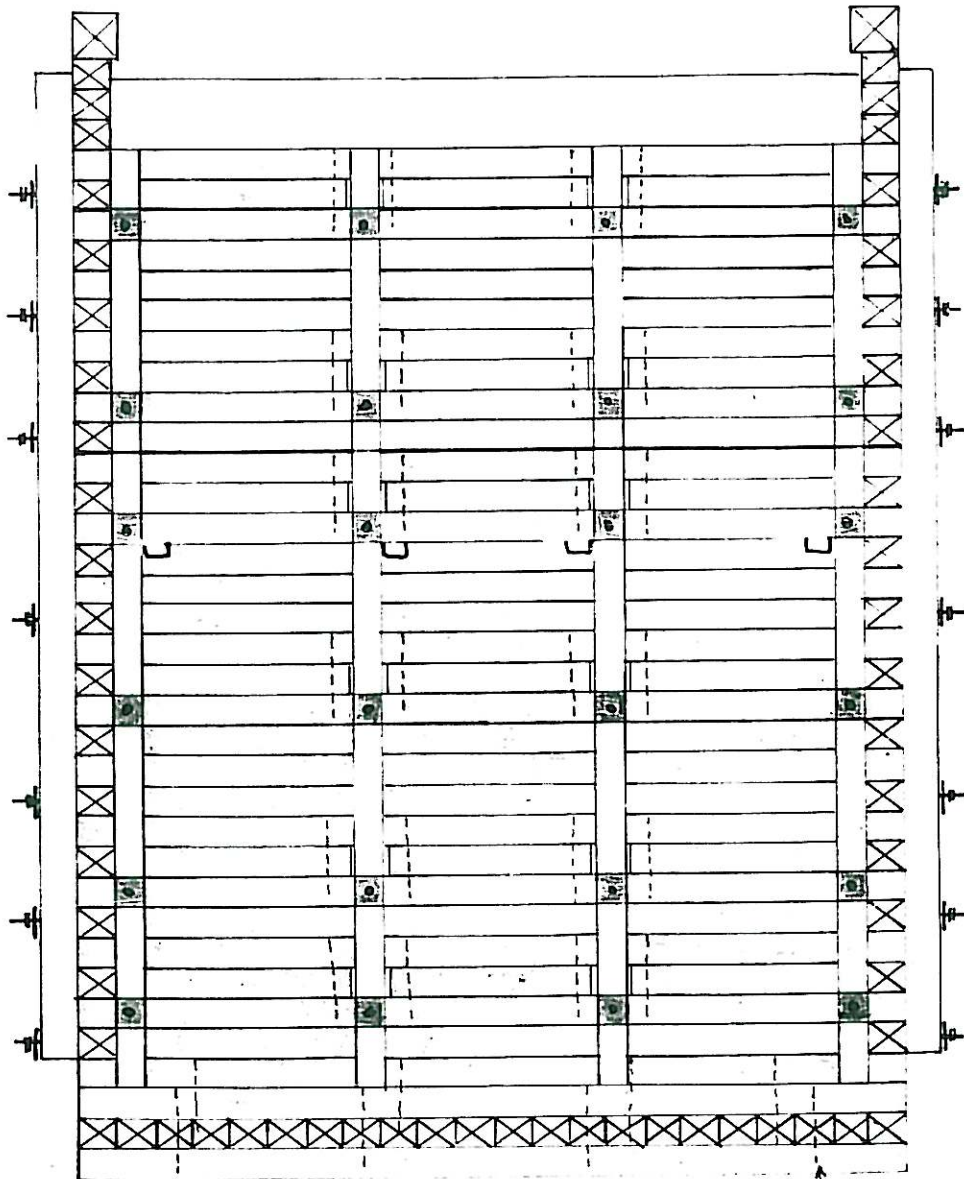


All Pieces Galvanized to ASTM. 123, 2 oz.



— TIE - ROD DETAIL —

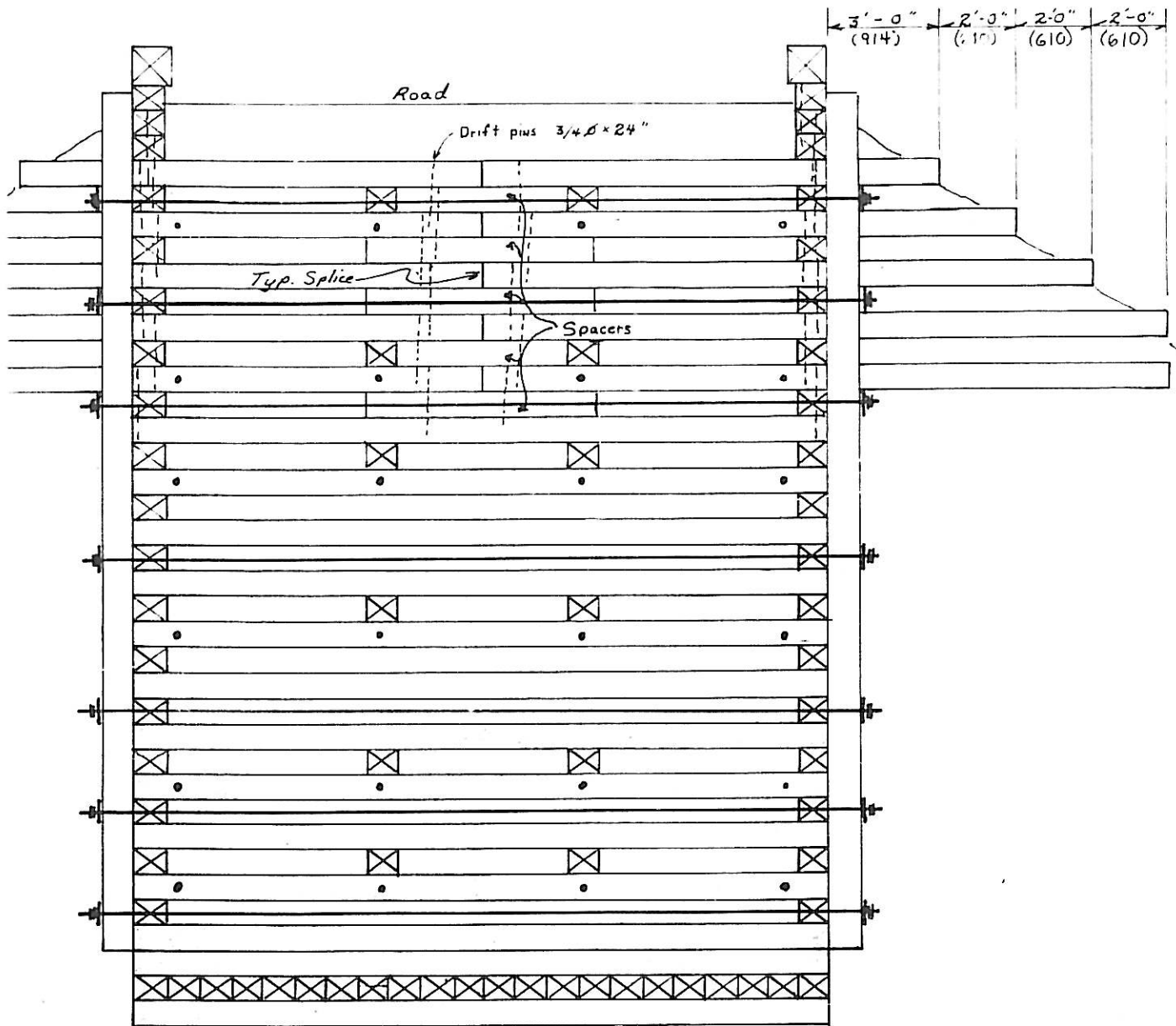
Chelasic
Bridge



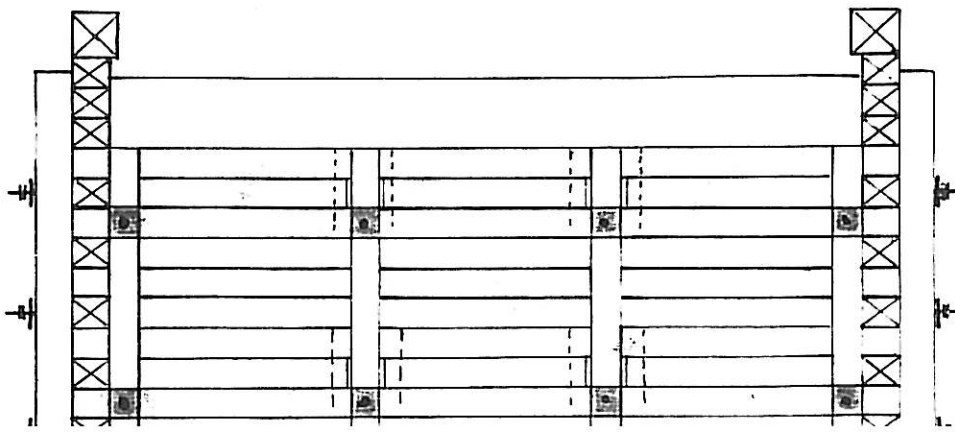
All corners to be nailed with 12" spikes

— FRONT WALL —

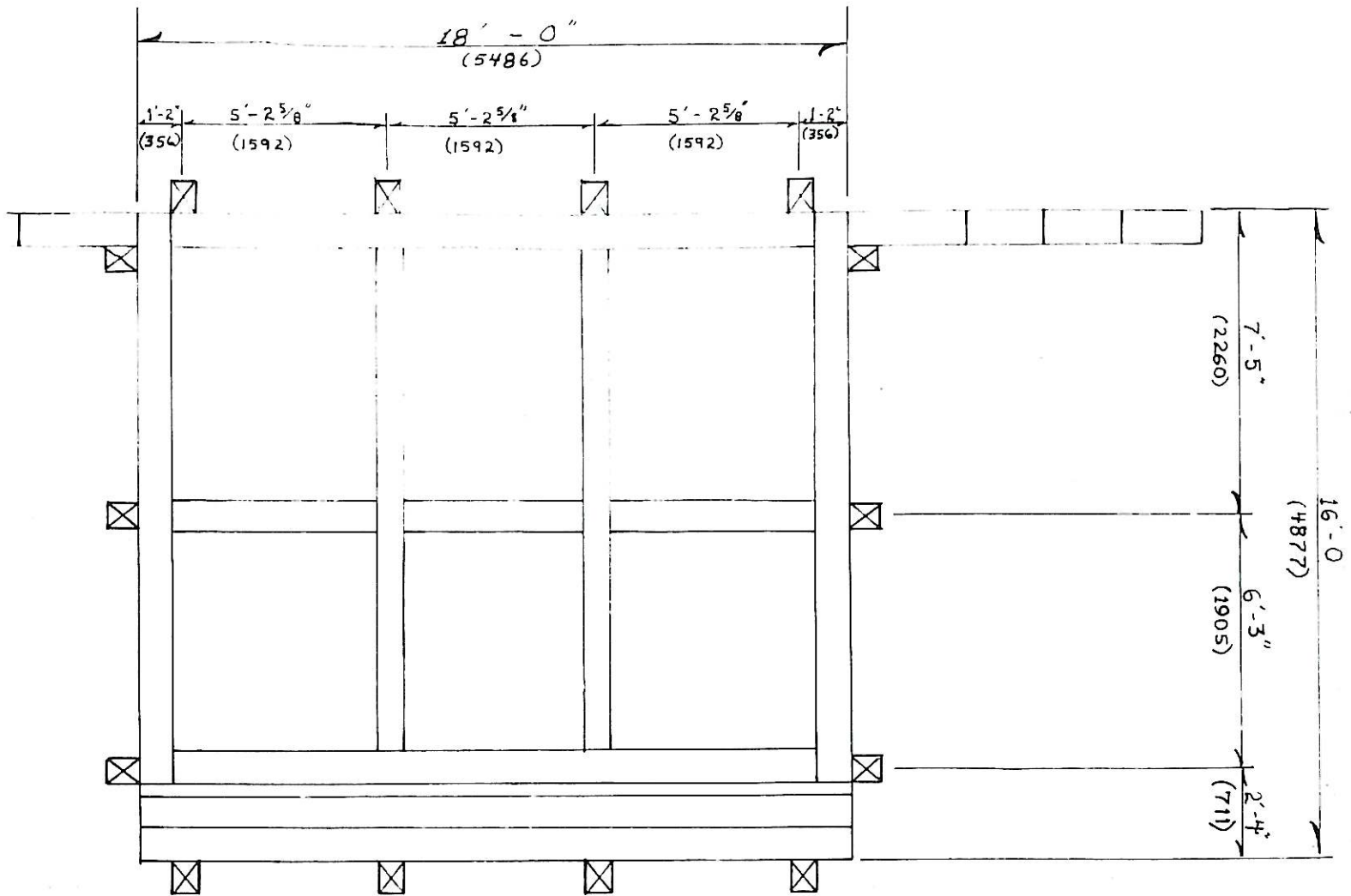
3/4 x 24" Drift Pins



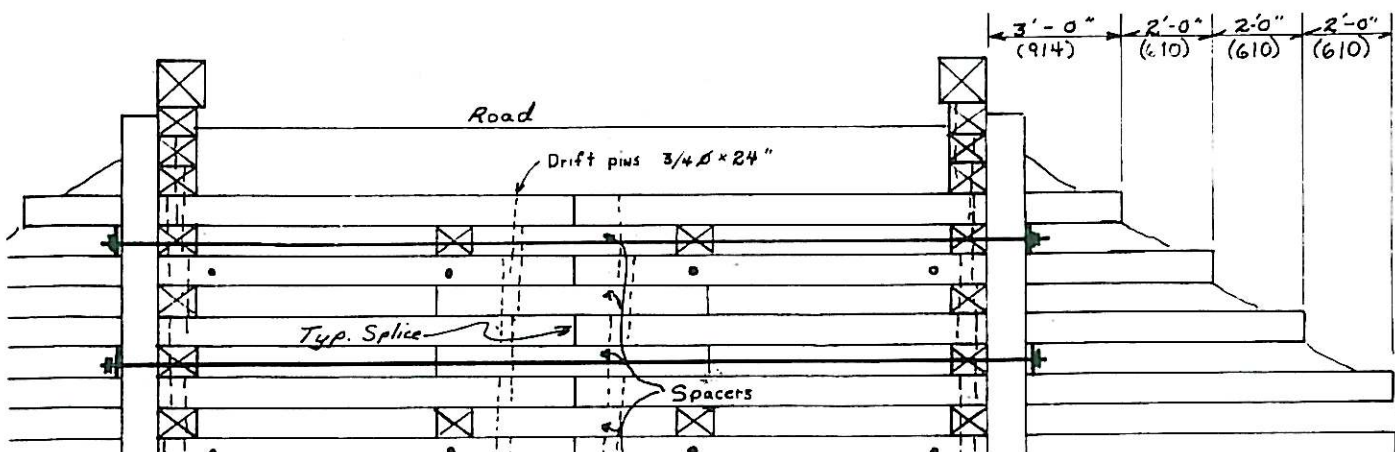
— BACK WALL —

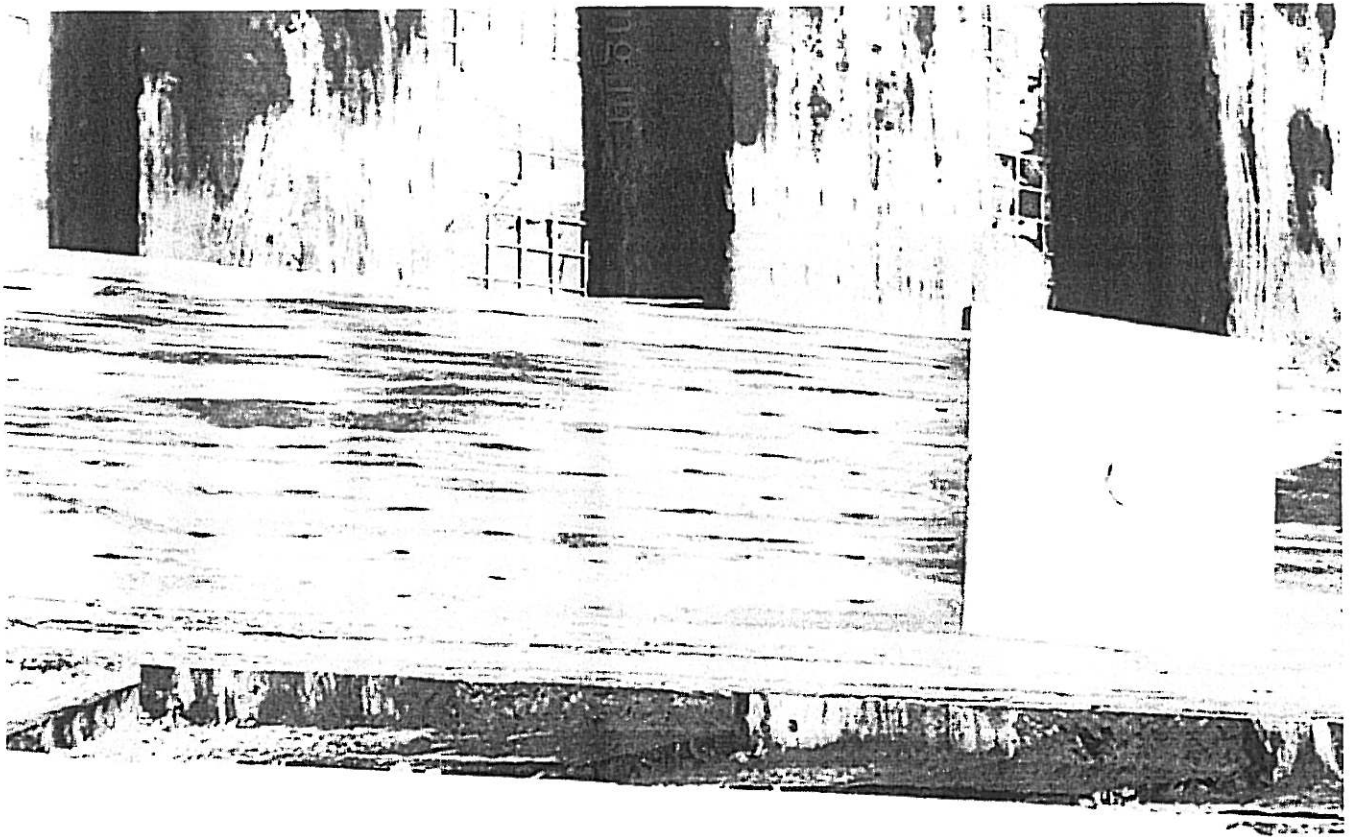
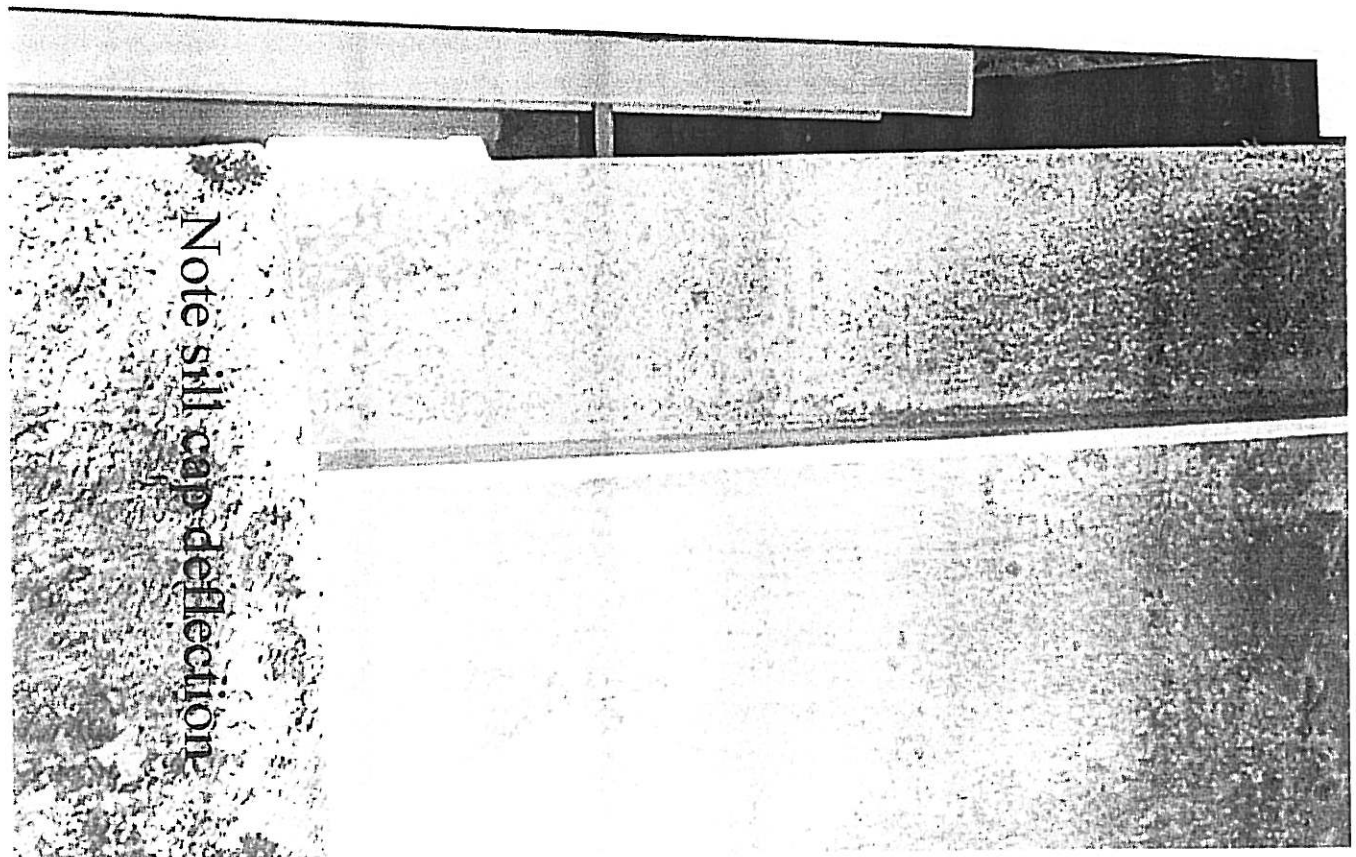


Cholaskie
Bridge



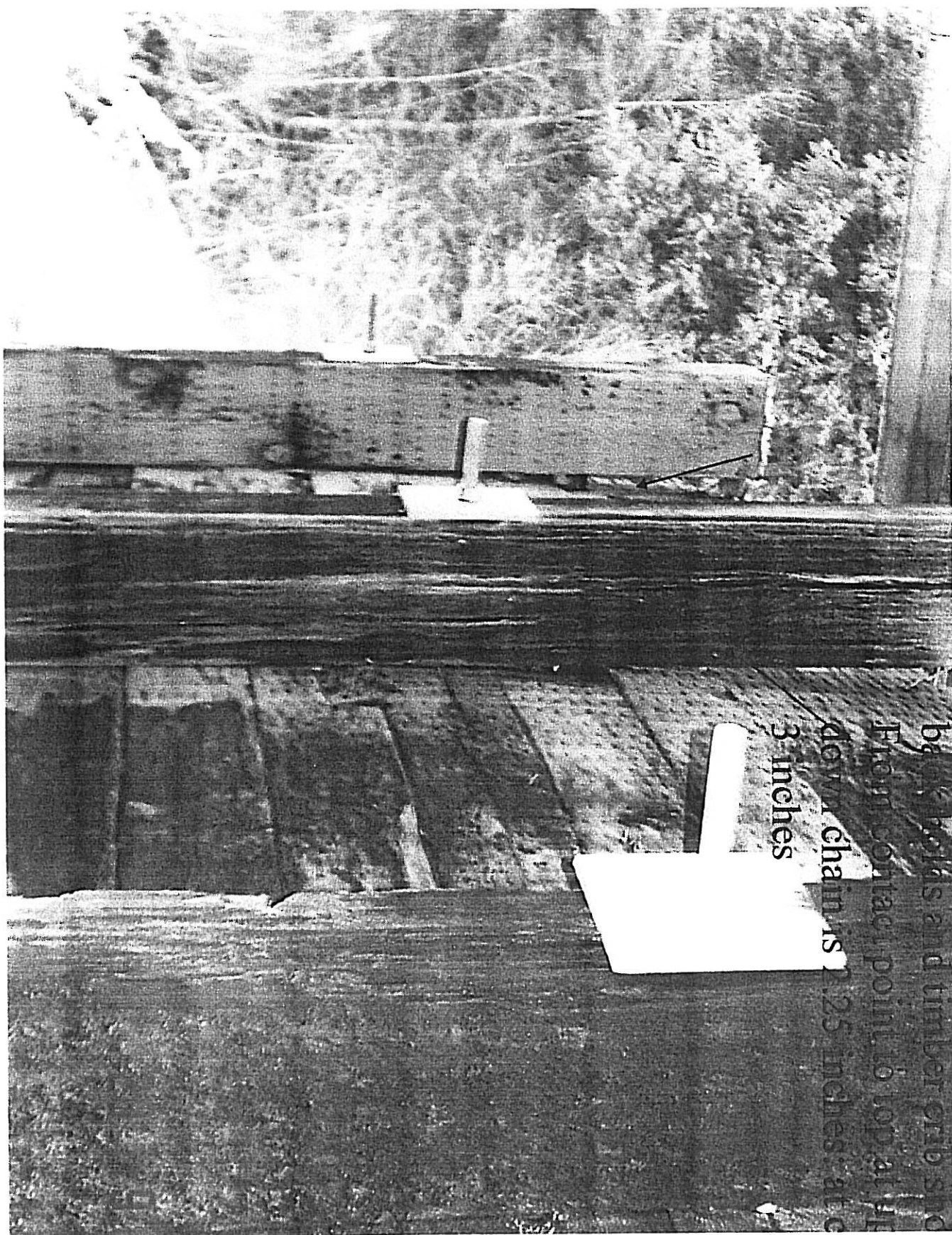
— TOP VIEW —





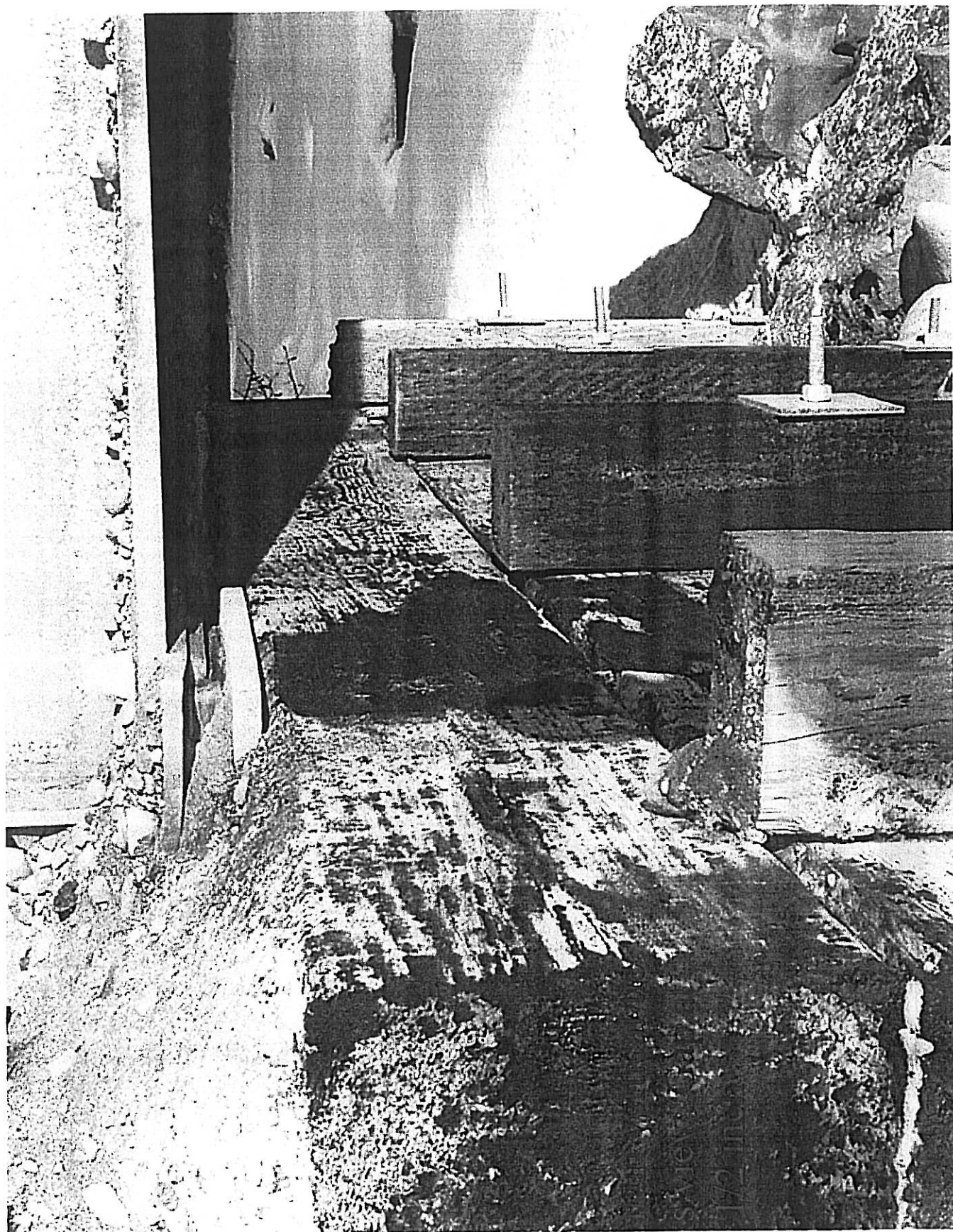
Note sill cap deflection

by bolts and timber crib and
From contact point to top of
down chain is 2.25 inches at c
3 inches



Note deflection in
horizontal timbers and roll
in cross ties

20 9:06





ALLNORTH CONSULTANTS LIMITED

#301 - 1777 Third Avenue, Prince George, B.C. V2L 3G7

Phone (250) 562-7291 • Fax (250) 562-1133

28 February 2001

File: 01-C-072

Mr. Bill Verrigan
West Fraser Timber Co. Ltd.
Fraser Lake Sawmills Ltd.
PO Box 100
Fraser Lake, BC V0J 1S0

Chelaslie River and Michelle Creek Bridge Inspections

The Chelaslie River bridge is a 28.0m steel girder, timber deck bridge with a load rating of L-100. The foundation is a treated timber crib complete with a tensioning system. The steel girders, deck and rail are in good condition. As well, the timbers and tensioning components in each abutment are sound and in good condition. The low chainage abutment has a void in the fill due to soil migration through the timber face which poses a maintenance concern. The fines in the soil at the road surface will eventually pipe through the void and cause large pot holes immediately adjacent to the bridge. We recommend that the void in the abutment be monitored semi-annually for sign of increasing size and the road surface be monitored monthly for pot holes increasing in size and frequency. If significant change is encountered, fill encompassing all voids must be removed from within the crib and replaced. A narrow bridge ahead sign on the high chainage side of the structure is missing and must be replaced.

The Michelle Creek bridge is a 16.8m steel girder, timber deck bridge with a load rating of L-100. The bridge is founded on steel pipe towers and concrete spread footings and is equipped with a concrete ballast wall. The bridge is generally in good condition, however, we noticed the lower portion of each concrete ballast wall is bowed approximately 30mm. We recommend the ballast wall be monitored annually for any increase in the deflected shape and any associated distress. Narrow bridge ahead signs for both approaches and four delineators are required. A fender system should be considered for this structure if long term hauling is planned for the future.

If you have any questions please do not hesitate to call.

Yours truly,
ALLNORTH CONSULTANTS LIMITED

Per. Craig Smith, E.I.T.

Reviewed by,

Per. Don D. Williams, P.Eng.



ALLNORTH CONSULTANTS LIMITED

#301 - 1777 Third Avenue, Prince George, B.C. V2L 3G7

Phone (250) 562-7291 • Fax (250) 562-1133

20 July 1999

File: 99-C-188

West Fraser Timber Co. Ltd.
Fraser Lake Sawmills Ltd.
PO Box 100
Fraser Lake, BC
V0J-1S0

Attention: Bill Verrigan

Dear Sir:

Re: Bridge Inspections

Inspection of eight bridges was completed on June 3, 1999. Please find attached a summary of our findings and recommendations.

Location: 226 Road km 3

Crossing: Nithie River

The structure is a 22.3m, composite structure with a binwall foundation. The bridge appears to be new and is structurally sound; however, the river channel appears to be migrating toward the low chainage, upstream bank. The condition of the aforementioned bank should be monitored next year and rip-rap installed if the bank has significantly eroded from its present condition.

Location: 1100 Road km 9

Crossing: Unnamed Creek *AUG 10/99 DELINEATORS*

The structure is a 8.4m log stringer structure. There are six peeled fir stringers with an average diameter of 590mm complete with a 600mm diameter needle beam and non-structural curbs. The foundation is comprised of 5 load bearing creosote treated timber piles with an average diameter of 300mm. Given the bridge configuration and using the Ministry of Forests Guidelines for Sizing Log Stringer Bridges, the structure can be load rated as L-100. The timber deck, wear surface and curbs are in good condition.

A fender system should be installed for safety purposes and the bridge requires one new delineator.

20 July 1999
File: 99-C-188
Page 3

Location: Bird Lake M/L km 2.7 *Aug 26/99 - New Ballast Walls*
Crossing: Unnamed Creek *AUG 11/99 DELINEATORS*

The structure is a 15.24m, non-composite structure with a lock block foundation. The timber deck and curbs are in good condition and there is no wearing surface. The structure has not been backfilled. The existing ballast walls are not adequate as constructed. The wings on the low chainage ballast wall will not provide restraint to lateral earth pressure when the structure is backfilled. The high chainage ballast wall is not wide enough to prevent road fill from spilling around the high chainage abutment. New ballast walls are required on both sides of the structure and shall be constructed using 150x300 SPF#2 or better. There are 1 @ 18', 1 @ 21' and 1 @ 24' required each side.

Location: Marilla M/L - km M12

Crossing: Unnamed Creek *AUG 11/99 DELINEATORS*

The structure is a 13.7m, non-composite structure with a pile foundation. The timber deck including wear surface and curbs are in good condition. The superstructure and substructure are in good condition.

A fender system should be installed for safety purposes and the bridge requires one new delineator.

Location: Chelaslie F.S.R. - km 18

Crossing: Chelaslie River

The structure is a 28.9m, non-composite structure with a treated timber binwall foundation. The timber deck including wear surface, curbs, and fenders are in good condition. The superstructure and substructure are in good condition.

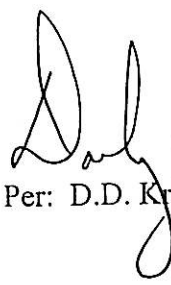
If you have any questions please call.

Yours truly,
Allnorth Consultants Limited



Per. Craig Smith, E.I.T.

Reviewed by,



Per: D.D. Kreitz, P. Eng.



TYPICAL ABUTMENT

ALLNORTH CONSULTANTS LIMITED

301-1777 THIRD AVE. PRINCE GEORGE B.C. PH. 562-7291

F.S.R. CHELASIE M/L

Km 18

CROSSING CHELASIE RIVER

SIZE 28.9m

DISTRICT LAKE

JOB# 99-C-188

DATE INSPECTED: 03/06/99

INSPECTED BY:
C. SMITH

SPAN NO.:

SHEET NO:

1

4 OF 4