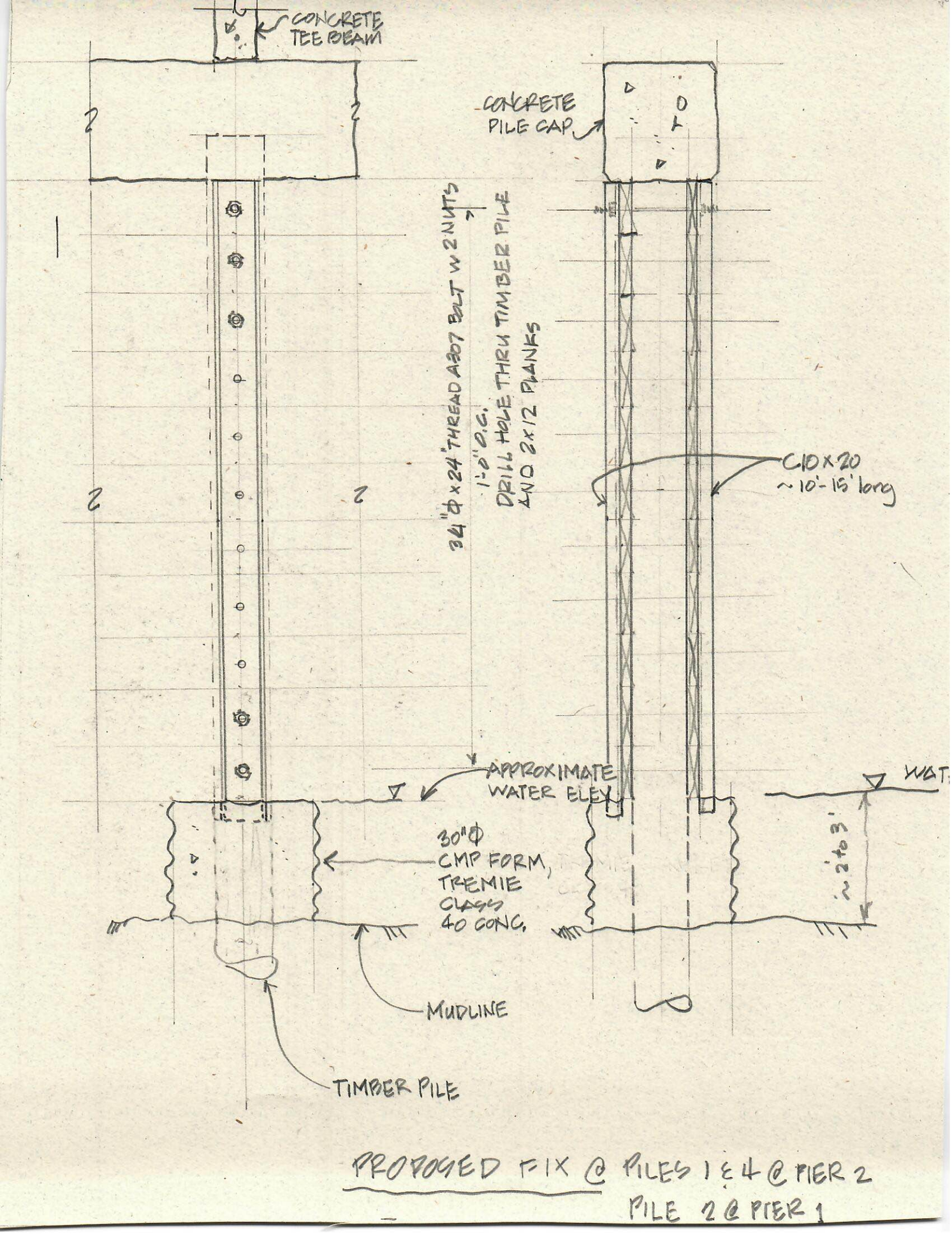
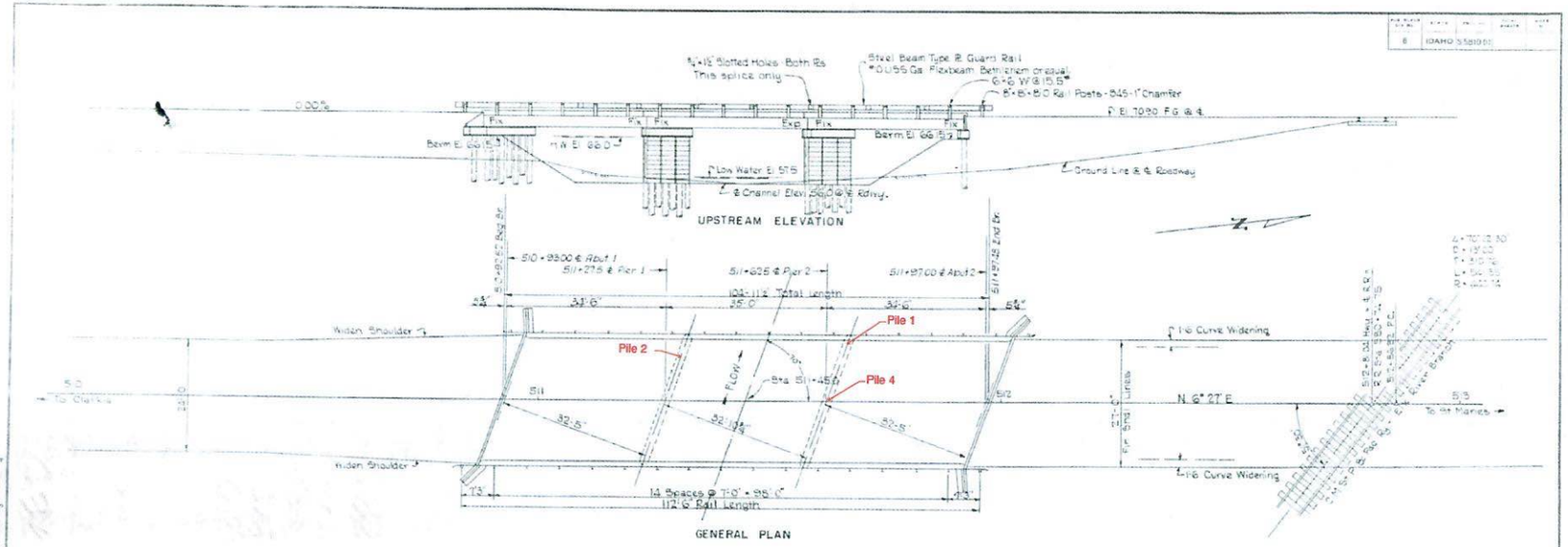



PROPOSED FIX @ PILES 1 & 4 @ PIER 2
PILE 2 @ PIER 1




## DESIGN NOTES

Structure designed in accordance with A.A.S.H.O. Specifications of 1953.

Live Load: H15-S12-44 loading, variable impact.

Roadway Slab designed for a future wearing surface of 25#/ft².

Abutment Walls and Wing Walls designed for a 90# live load surcharge.

Unit Stresses: Concrete f'c = 3000#/in² in 28 days; fc = 1200#/in²; Reinforcing Steel: fs = 20,000#/in².

Timber Piling shall be driven to a bearing value of not less than 18 tons per pile and to a minimum penetration of 15' below stream bed.

## GENERAL NOTES

Use Idaho Department of Highways Standard Specifications, 1950 Edition unless otherwise noted.

All concrete to be Class 'A' No. 1 coarse aggregate.

All reinforcing steel bars shall be deformed bars of intermediate grade and shall conform to A.A.S.H.O. Specification M-31 and A.S.T.M. Specification A-305-50.

All timber shall be Coast Douglas Fir and shall pass the requirements as defined in the Revised Grading Rules of the West Coast Lumbermens Association dated Nov. 1, 1948.

All reinforcing steel to have a 2" covering outside of bars unless otherwise noted. Dimensions shown are to rod centers.

Surfaces of steel bearing plates in contact with concrete shall not be painted.

Stringer stems may be precast away from the bridge site, but prior to handling or erecting, tests must indicate that the concrete has a strength of f'c = 3000#/in².

Precast stringers may be lifted only from a point 0.2 x length from each end.

Cost of furnishing and placing the following are to be included in the unit price bid for Item 506-A-2: Non-extruding joint filler, hot poured rubber joint filler, galvanized pipe drains and lead bearing plates.

Timber piling and pile bent enclosure planking shall be treated by the empty cell process to contain not less than 8 lbs. per cubic foot of creosote or 50-50 creosote-petroleum oil. End rail posts to be salts treated as per specifications.

Item 509-C shall include the cost of furnishing and installing the plate guard rail and its fastenings only.

Timber rail posts shall be painted: First coat - white guard rail paint #1; Second coat - light grey lead paint; Finish coat - Concrete grey lead paint.

Steel posts and plate guard rail shall be painted: Shop coat - red lead paint; First field coat - light grey lead paint; Finish coat concrete grey lead paint.

One test pile each shall be driven in Abut #1 and Abut #2 in a location so that they may be used as part of the finished structure.

Cost of furnishing and placing all hardware as shown in "Hardware Schedule" to be included in the unit price bid for Item 514-A-1.

Item 508-A shall include cost of furnishing and placing steel bearing plates and steel rail posts.

Contractor shall provide an approved method for supporting deck slab forms in precast stringers.

Approach Embankment above bottom of cut off wall (elevation 64.15) shall be brought up simultaneously on both sides of abutment and shall be thoroughly tamped for a distance of 5 feet each side of centerline of abutment. Mechanical tamping may be provided below Elev. 64.15 in lieu of Method B compaction Specified.

## QUANTITIES

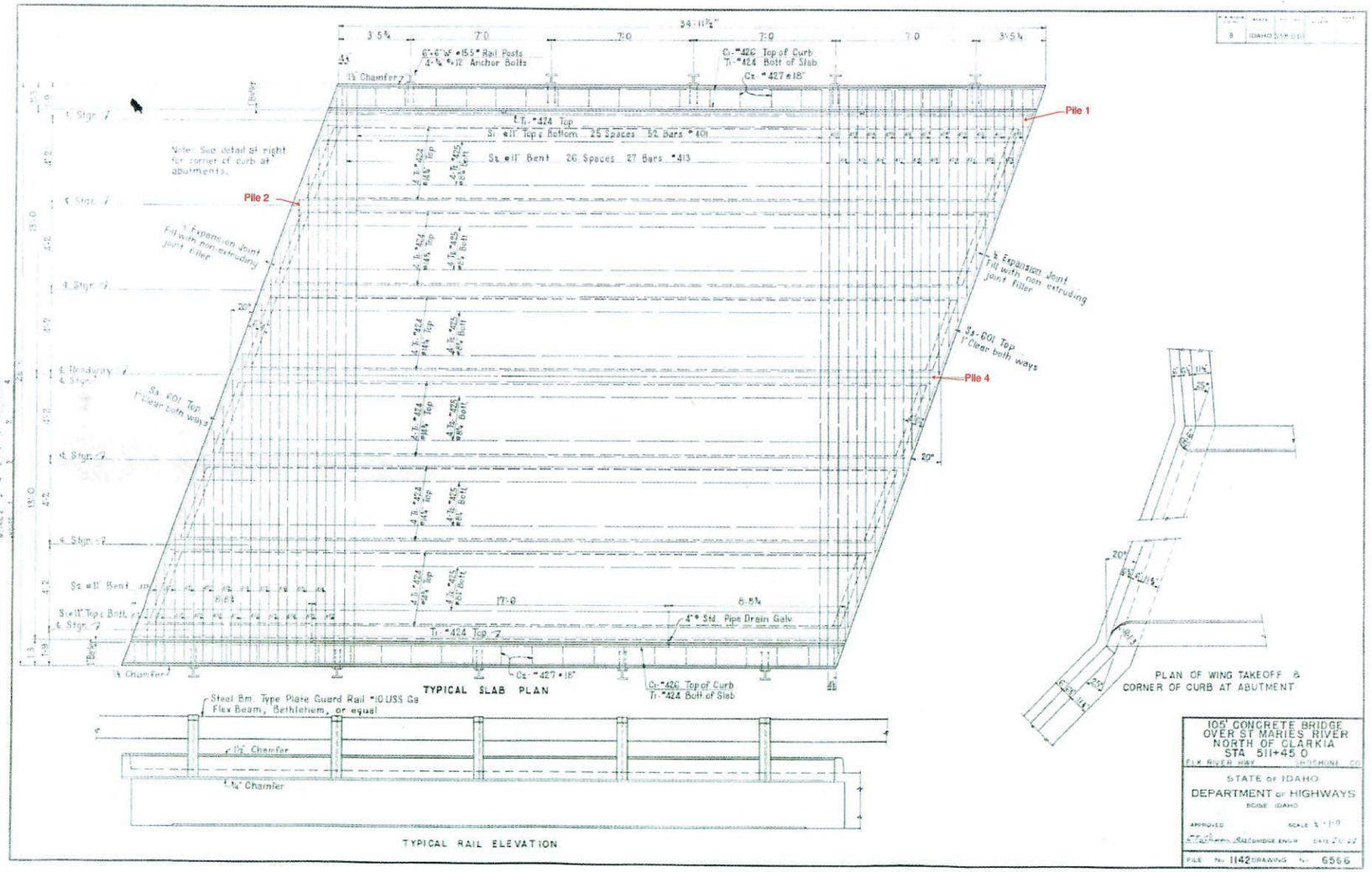
| | | | |
|---|---|---|---|
| 204-A | Removal of Bridge | 1 | Each |
| 214 | Mechanical Tamping | 107 | Cu Yds. |
| 506-A-1 | Concrete, Class 'A', for Precast Stringers | 45 | Cu Yds |
| 506-A-2 | Concrete, Class 'A', poured in place | 83 | Cu Yds |
| 507 | Metal Reinforcement | 3,2180 | Lbs. |
| 508-A | Structural Steel | 1506 | Lbs. |
| 509-C | Steel Beam Handrail for Concrete Structure (10 Ga.) | 225 | Lin. Ft. |
| 510-A | Furnishing Pile Driving Equipment | 1 | Lump Sum |
| 510-B | Furnishing Timber Piles, Treated | 980 | Lin. Ft. |
| 510-F | Driving Timber Piles, Treated | 900 | Lin. Ft. |
| 510-1 | Driving Test Piles (2) | 80 | Lin. Ft. |
| 514-A-1 | F-1706 6"x6" Dense No. 1 Coast Douglas Fir, Creosote Treated | 2240 | M.F.B.M. |
| 514-A-2 | F-1790 6"x6" Dense No. 1 Coast Douglas Fir, Salts Treated | 1170 | M.F.B.M. |

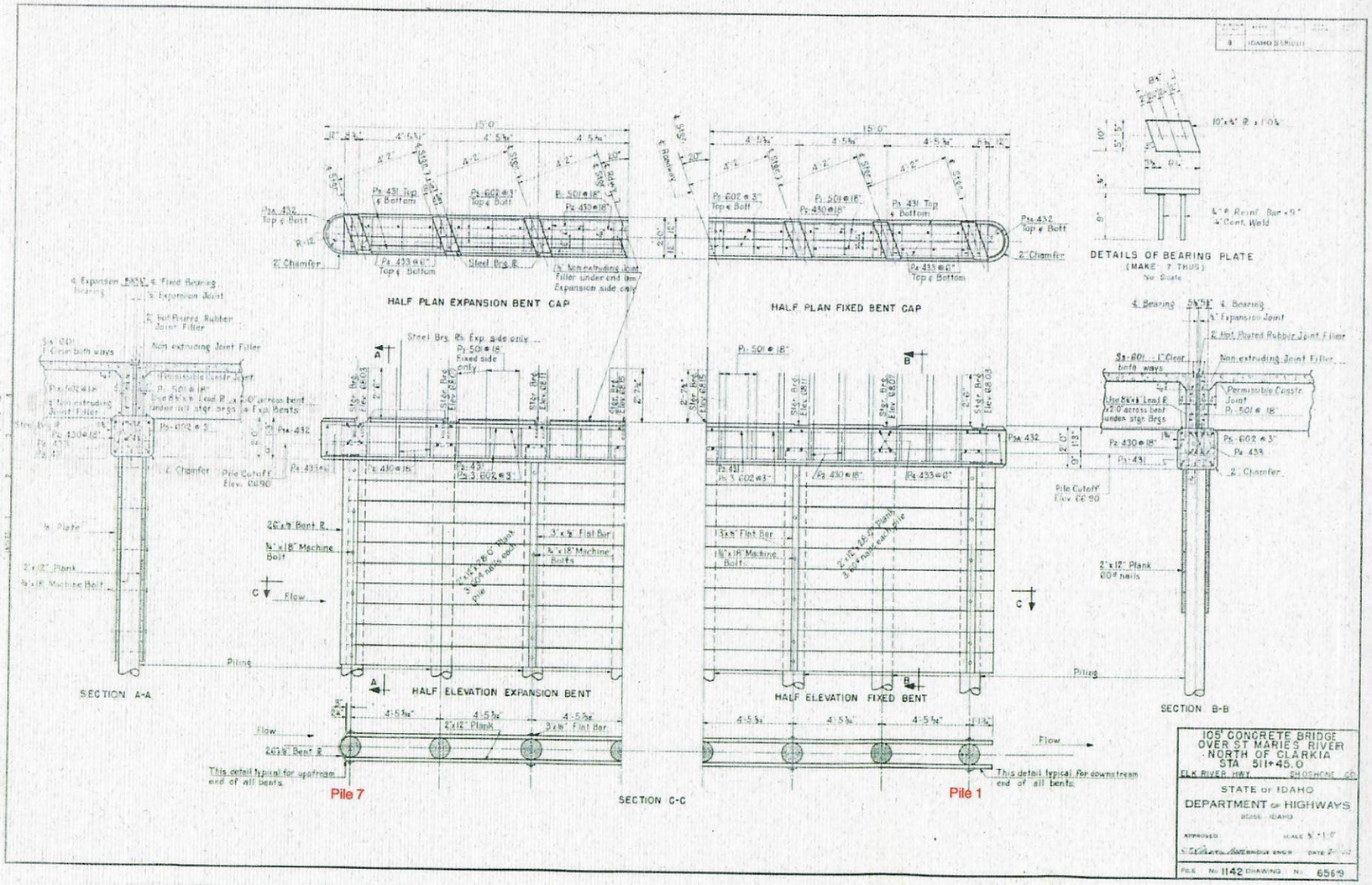
## DRAWINGS

| | | |
|---|---|---|
| General Plan, Elevation, Notes & Quantities | Drwg. No. | 6565 |
| Slab Plan & Rail Elevation | " " | 6566 |
| Rdwy. Section, Stringer Details, End Beam Details | " " | 6567 |
| Abutment Details | " " | 6568 |
| Bent Details | " " | 6569 |
| Contour Map & Location Sketch & ℄ Profile | " " | 6570 |
| Reinforcing Details, Lumber & Hardware Schedules | " " | 6571 |

Revised 3-3-54

| | |
|---|---|
| 105' CONCRETE BRIDGE OVER ST MARIES RIVER NORTH OF CLARKIA | |
| STA 511+45.0 | |
| ELK RIVER HWY. | SHOSHONE CO. |
| STATE OF IDAHO | |
| DEPARTMENT OF HIGHWAYS | |
| BOISE - IDAHO | |
| APPROVED | SCALE 1"=10' |
| Chas. Hazebridge ENGR. | DATE 7-11-53 |
| FILE No. 1142 | DRAWING No. 6565 |


Pile 1
Pile 2
Pile 4
Note: See detail at right for corner of curb at abutments.
½ Expansion Joint Fill with non extruding joint Filler
Sq. #01 Top 1" Clear both ways
Sq. #11 Bent
Sq. #11 Top & Bottom 25 Spaces 52 Bars #01
Sq. #11 Bent 26 Spaces 27 Bars #13
Tr. #424 Top
Tr. #424 Bott. of Slab
Cr. #426 Top of Curb
Cr. #427 #18"
6'-6" W #155 # Rail Posts 4'-¾ "x12" Anchor Bolts
1½ Chamfer
4" ø Std. Pipe Drain Galv.
Steel Bm. Type Plate Guard Rail #10 USS Ga Flex Beam, Bethlehem, or equal
¾" Chamfer
TYPICAL SLAB PLAN
TYPICAL RAIL ELEVATION
PLAN OF WING TAKEOFF & CORNER OF CURB AT ABUTMENT
105' CONCRETE BRIDGE OVER ST MARIES RIVER NORTH OF CLARKIA STA 511+45.0
ELK RIVER HWY SHOSHONE CO.
STATE OF IDAHO
DEPARTMENT OF HIGHWAYS
BOISE IDAHO
APPROVED
SCALE 3/4"=1'-0
STATE BRIDGE ENGR
DATE 7/6/53
FILE No. 1142 DRAWING No. 6566


HALF PLAN EXPANSION BENT CAP
HALF PLAN FIXED BENT CAP
DETAILS OF BEARING PLATE
(MAKE 7 THUS)
No Scale
HALF ELEVATION EXPANSION BENT
HALF ELEVATION FIXED BENT
SECTION A-A
SECTION B-B
SECTION C-C
Pile 7
Pile 1
This detail typical for upstream end of all bents.
This detail typical for downstream end of all bents.
Flow
Pilings
Steel Brg. Ps. Exp. side only
Fixed side only
Non-extruding Joint Filler
Permissible Constr. Joint
2" Chamfer
Pile Cutoff Elev. 6690
105' CONCRETE BRIDGE
OVER ST MARIES RIVER
NORTH OF CLARKIA
STA 511+45.0
ELK RIVER HWY
SHOSHONE CO.
STATE OF IDAHO
DEPARTMENT OF HIGHWAYS
BOISE, IDAHO
APPROVED
SCALE 3/4"=1'-0"
DATE 2-1-62
FILE No. 1142 DRAWING No. 6569