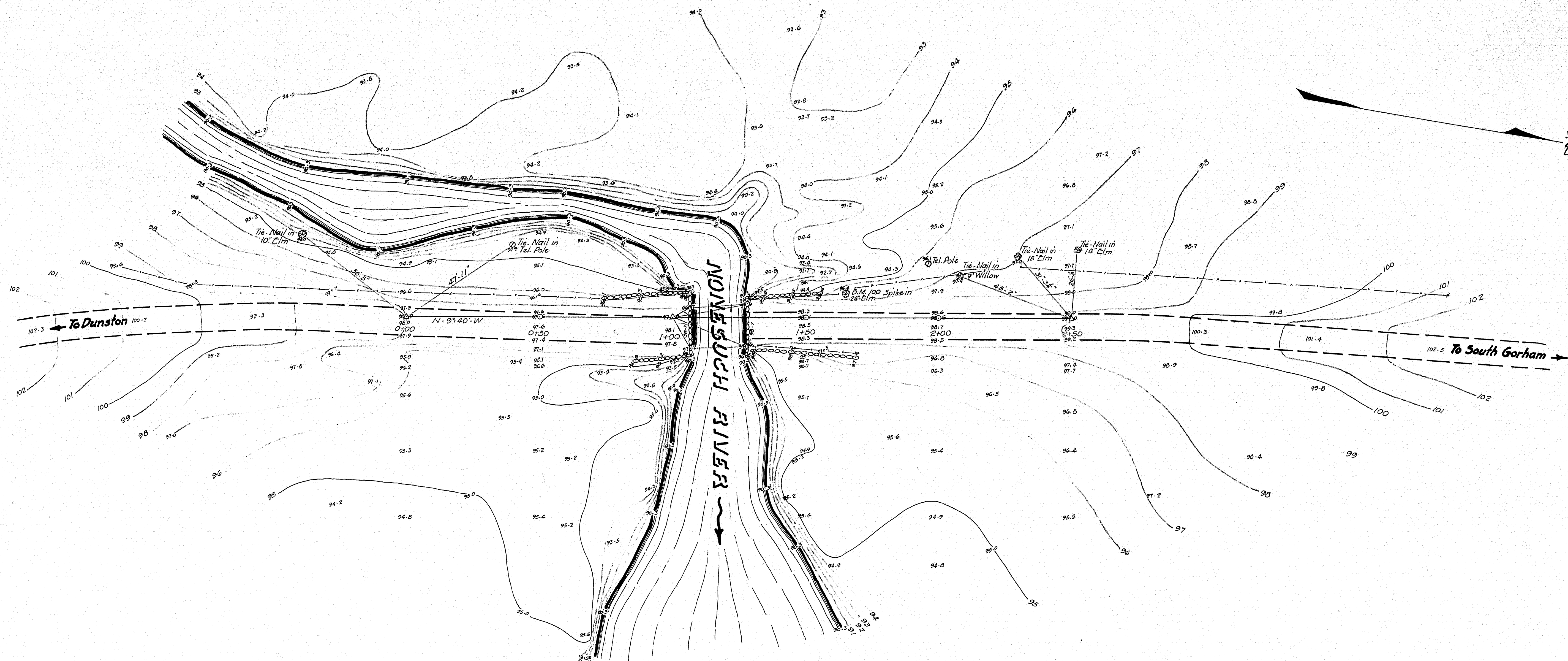
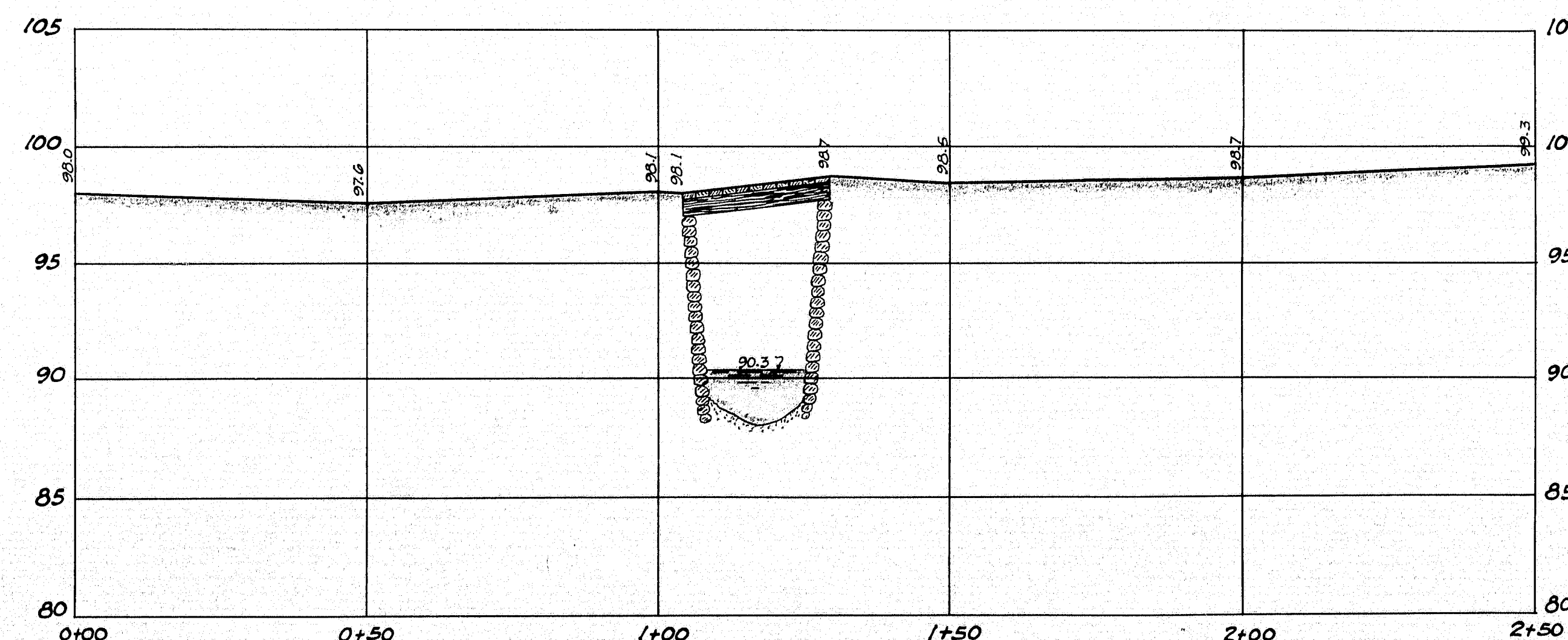




PLAN
Scale: 1" = 20'



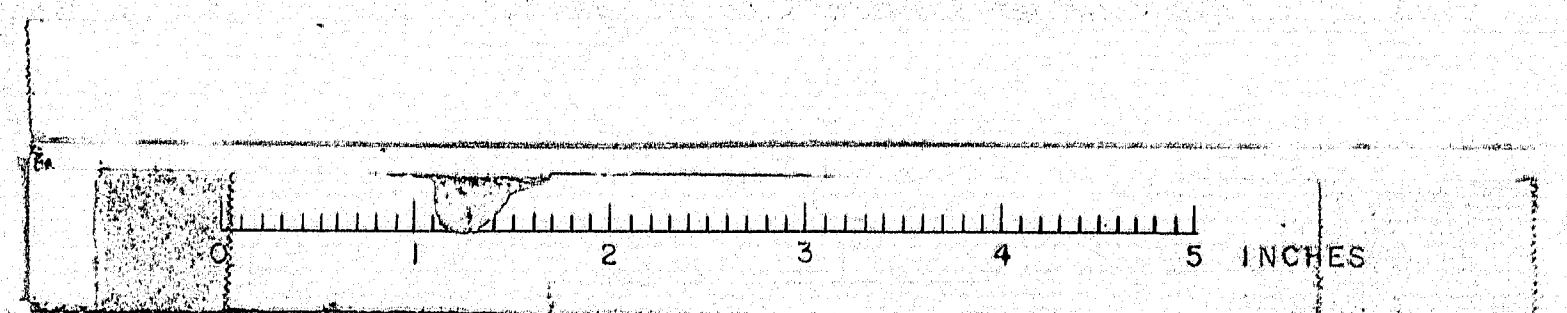
PROFILE
HORIZ. 1" = 20'
Scales: Vert. 1" = 5'

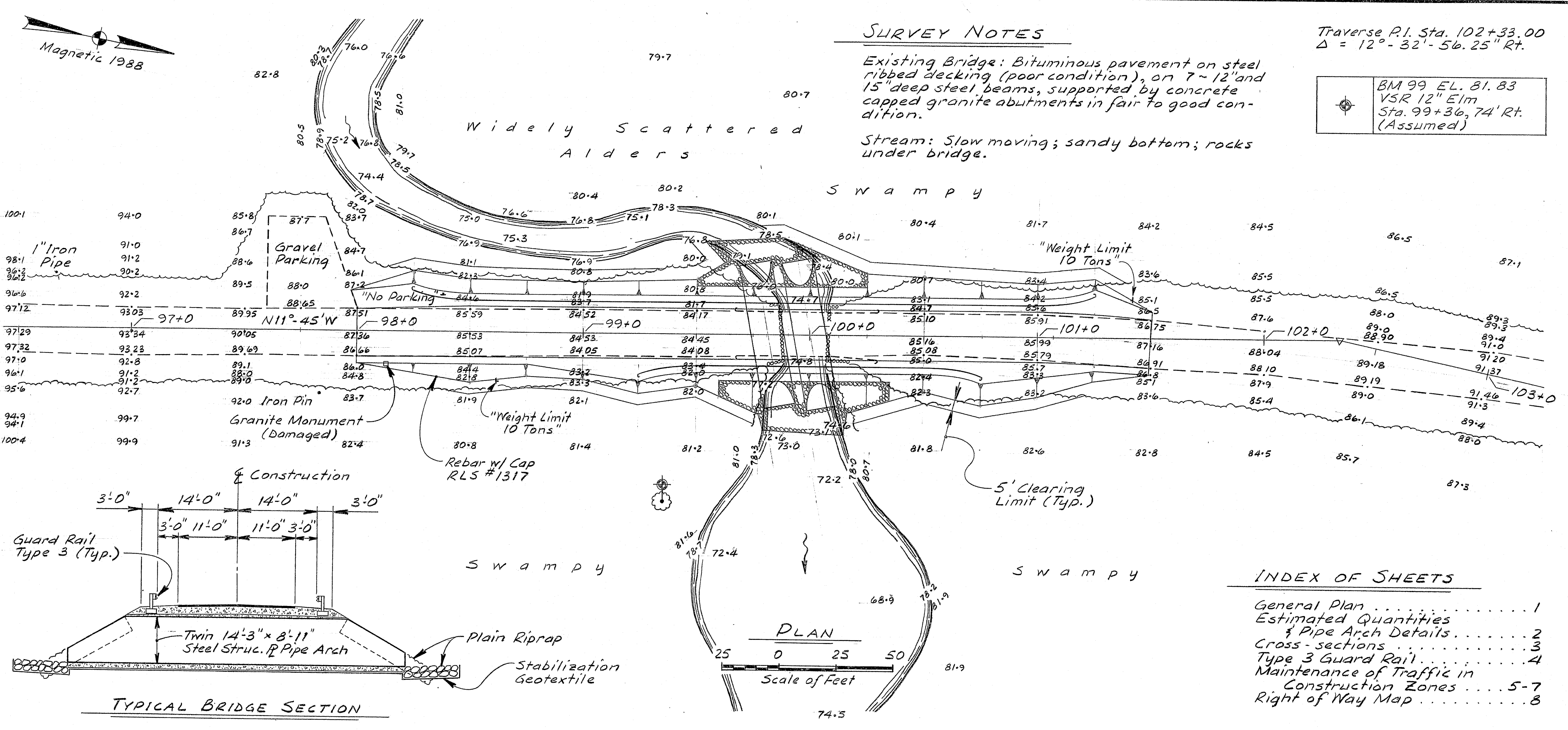
Substructure: Consists of fairly large stones laid dry and chinked with smaller stones. Both abutments in fair condition.
Superstructure: Consists of 3-lag and 3-6"x12" timber stringers, all resting on abutments and in decayed condition. One layer of 3" planking.
Stream Bed: Stiff clay foundation, maximum penetration 5 feet.
Ordinary high water about Elev. 94.5.
Best location for temporary bridge is downstream adjacent to present structure.

Survey by Thomas
Plan by Tarra

MAINE HIGHWAY COMMISSION
BRIDGE DIVISION
MITCHELL HILL BRIDGE
OVER
NONESUCH RIVER
IN THE TOWN OF
GORHAM
CUMBERLAND CO., MAINE.
SHEET OF AUGUSTA, ME. AUG. 24, '28.

DEAD 109-178





SURVEY NOTES

Existing Bridge: Bituminous pavement on steel ribbed decking (poor condition), on 7-12" and 15" deep steel beams, supported by concrete capped granite abutments in fair to good condition.

Stream: Slow moving; sandy bottom; rocks under bridge.

Traverse P.I. Sta. 102+33.00
 $\Delta = 12^\circ - 32' - 56.25''$ Rt.

BM 99 EL. 81.83
 VSR 12" Elm
 Sta. 99+36.74' Rt.
 (Assumed)

SPECIFICATIONS

DESIGN: Load Factor Design per AASHTO Standard Specifications for Highway Bridges 1983 and Interim specifications thru 1988.

CONTRACT: State of Maine, Department of Transportation, Standard Specifications, Highways and Bridges, Revision of July 1988.

DESIGN LOADING

LIVE LOAD HS 25

TRAFFIC DATA

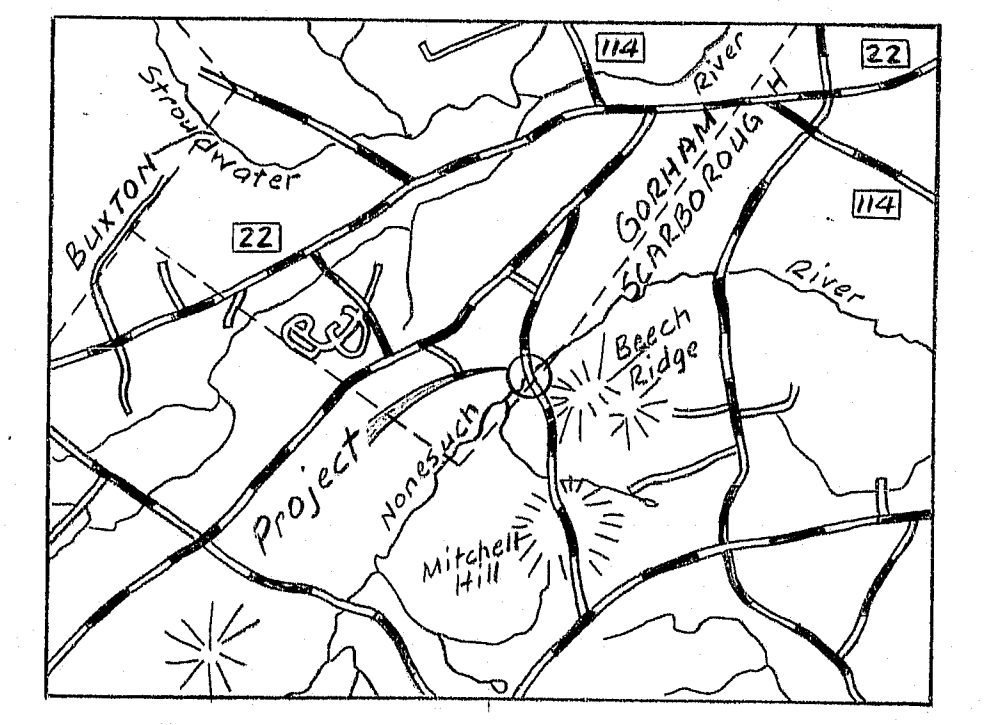
AADT 1988 690
 AADT 2008 1100
 Design Hourly Volume 132
 Percent Heavy Trucks 6
 Directional Distribution 60
 13 Kip Equivalent P2.0 12
 13 Kip Equivalent P2.5 12

HYDROLOGIC DATA

Drainage Area 12.5 sq. mi.
 Design Discharge 1200 cfs
 Check Discharge 1400 cfs
 Headwater @ 950 EL. 82.3
 Headwater @ 9100 EL. 82.9
 Discharge Vel. (950) 7.3 fps
 Discharge Vel. (9100) 8.3 fps

INDEX OF SHEETS

- General Plan 1
- Estimated Quantities & Pipe Arch Details 2
- Cross-sections 3
- Type 3 Guard Rail 4
- Maintenance of Traffic in Construction Zones 5-7
- Right of Way Map 8



LOCATION MAP

Scale of Miles
 0 1 2

Bridge No. 0216 Book No. 10633

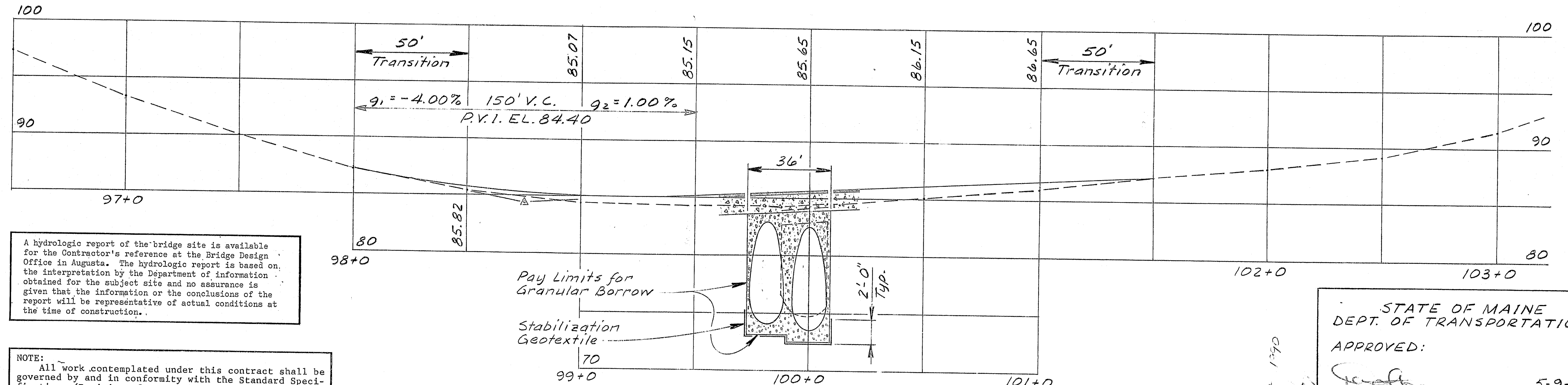
STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION

MITCHELL BRIDGE
 OVER
 NONESUCH RIVER
 IN THE TOWN OF
 GORHAM
 CUMBERLAND COUNTY
 GENERAL PLAN

STATE OF MAINE
 DEPT. OF TRANSPORTATION

APPROVED:

COMMISSIONER 5-9-89
 DATE
 CHIEF ENGINEER 5-9-89
 DATE



PROFILE

107-274

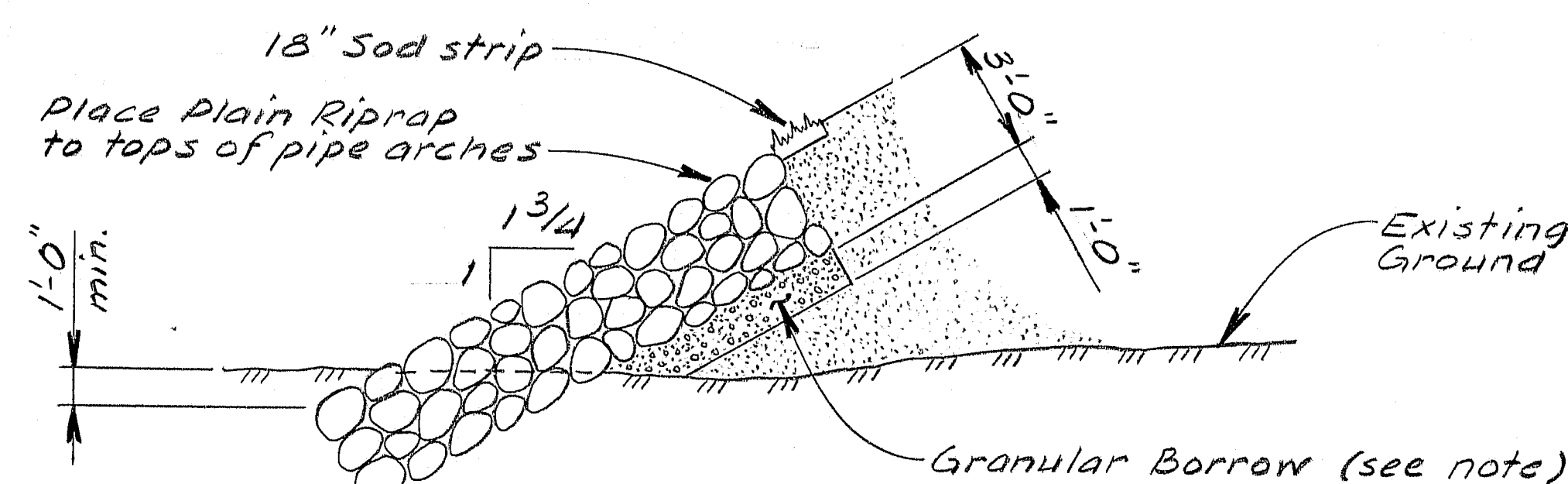
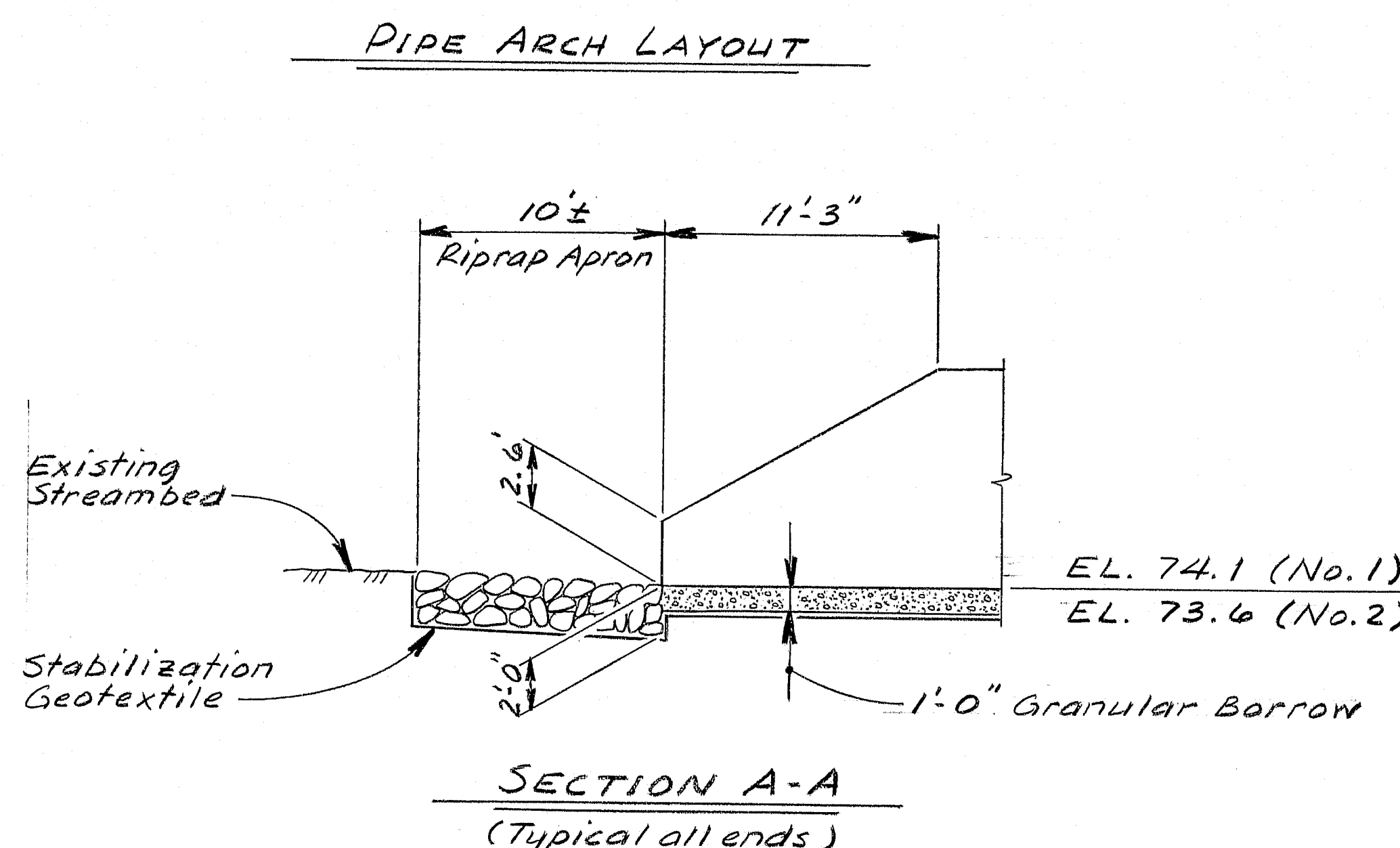
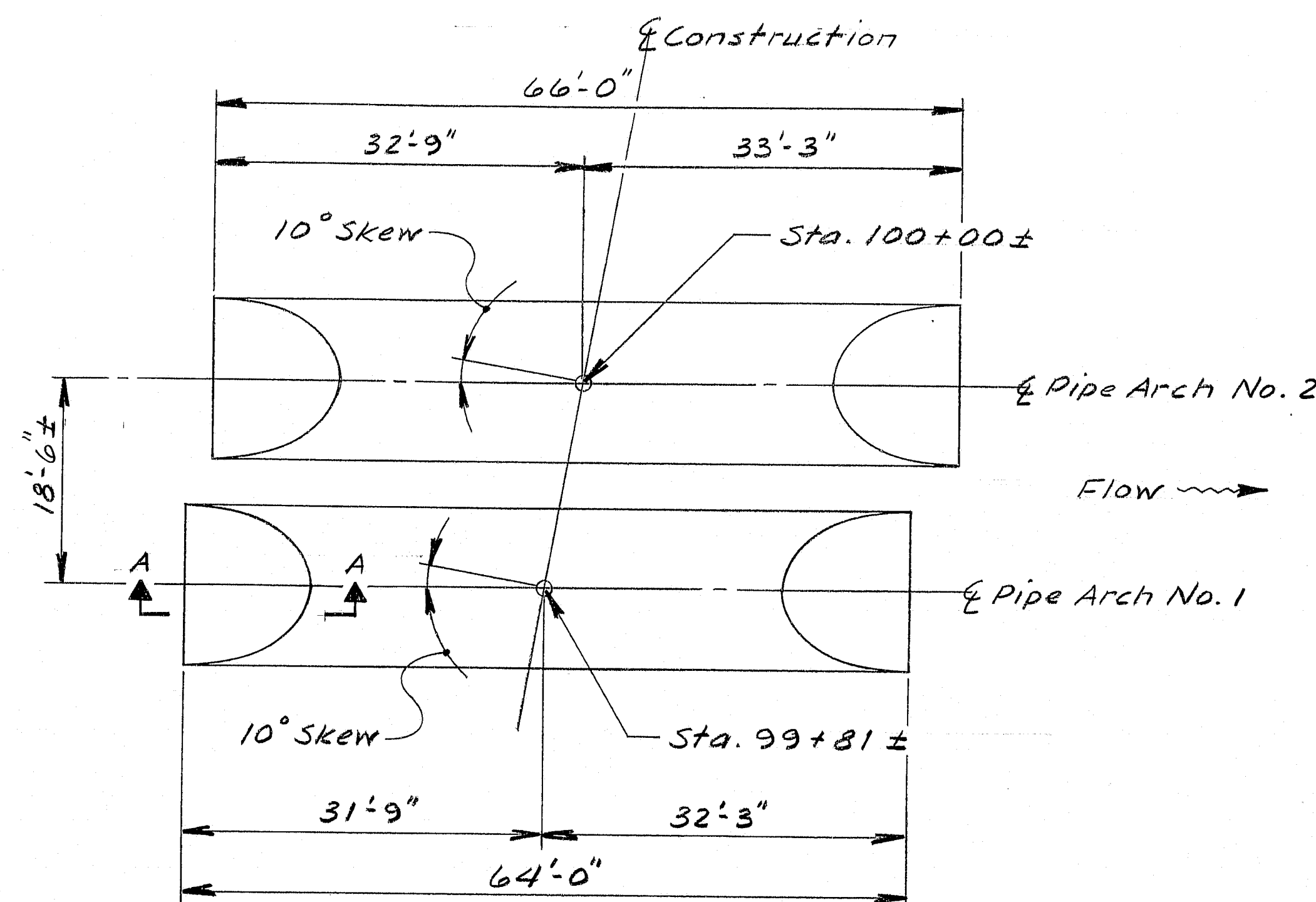
A hydrologic report of the bridge site is available for the Contractor's reference at the Bridge Design Office in Augusta. The hydrologic report is based on the interpretation by the Department of Information obtained for the subject site and no assurance is given that the information or the conclusions of the report will be representative of actual conditions at the time of construction.

NOTE:
 All work contemplated under this contract shall be governed by and in conformity with the Standard Specifications (Revision of July 1988) and supplementals thereto, except as modified on the plans and in the Special Provisions.

Plotted by BMD April 1988
 PROJECT DESIGN ENGINEER
 BY DATE
 DESIGN - DETAILED LRT 10/20/88
 CHECKED RTR 5-9-89
 REVISIONS
 FIELD CHANGES

ESTIMATED QUANTITIES

Item	Description	Quantity	Unit
202.19	Removing Existing Bridge	1	L.S.
203.20	Common Excavation	330	C.Y.
203.24	Common Borrow	10	C.Y.
203.25	Granular Borrow	400	C.Y.
304.10	Aggregate Subbase Course - Gravel	650	C.Y.
460.22	Hot Bituminous Pavement	95	Ton
509.1201	171-Inch Span x 107-Inch Rise Steel Structural Plate Pipe Arch (21,600 Lb.)	1	L.S.
509.1202	171-Inch Span x 107-Inch Rise Steel Structural Plate Pipe Arch (22,300 Lb.)	1	L.S.
606.265	Terminal End - Single Rail - Galvanized Steel	4	Each
606.35	Guard Rail Delineator Post	4	Each
606.55	Guard Rail Type 3 - Single Rail	400	L.F.
606.60	Guard Rail Type 3 - Over 15-Foot Radius	50	L.F.
610.08	Plain Riprap	230	C.Y.
615.07	Loam	26	C.Y.
616.08	Sodding	25	S.Y.
618.14	Seeding Method No. 2	5	Unit
618.15	Temporary Seeding	5	Lb.
619.12	Mulch	5	Unit
620.54	Stabilization Geotextile	410	S.Y.
627.63	4-Inch Solid Yellow Pavement Marking Line	750	L.F.
639.20	Field Office Type C	1	Each
652.31	Type I Barricade	5	Each
652.312	Type III Barricade	2	Each
652.33	Drum	5	Each
652.34	Cone	10	Each
652.35	Construction Signs	250	S.F.
652.361	Maintenance of Traffic Control Devices	1	L.S.
652.38	Flagger	25	M.H.
656.50	Baled Hay, In Place	5	Each
656.51	Sandbag, In Place	5	Each
656.63	Temporary Silt Fence	400	L.F.
659.10	Mobilization	1	L.S.



All granular borrow placed in the embankment slope under the riprap and within twelve inches of the back side of riprap areas shall consist of a material containing not more than 70 percent passing a 1/4-inch mesh sieve and not more than 10 percent passing a 200 mesh sieve. The cost of furnishing and placing the material will be paid for under the contract unit price per cubic yard of Granular Borrow.

CONSTRUCTION NOTES

- For easements, construction limits and right of way lines, refer to Right of Way Map.
- During construction the road will be closed to traffic for a period specified in the Special Provisions.
- Place an 18-inch wide strip of sod on the side slopes along the top of the riprap and over the pipe arches.
- All embankment material, except as otherwise shown, placed below EL. 78.0 shall be Granular Borrow meeting the requirements of Subsection 703.19, Material for Underwater Backfill.
- The clearing limits shown on the plans are approximate. The exact limits will be established in the field by the Engineer. Payment for clearing will be considered incidental to contract items.
- Do not excavate for Aggregate Subbase Course where the existing material is suitable as determined by the Engineer. Payment for shaping and compacting of the existing subbase and layers of new subbase six inches or less thick, in areas where the Engineer directs the Contractor not to excavate to the subgrade line shown on the plans, will be made in accordance with Subsection 104.03, Extra Work.
- Stones which can not be rolled or compacted into the surface of the shoulder shall be removed by hand raking. No separate payment will be made for hand raking and the cost will be considered incidental to Item 304.10, Aggregate Subbase Course - Gravel.
- One guard rail delineator post and one terminal end shall be installed at each guard rail end.
- Sodded gutters shall be constructed, after paving and shoulder work is completed, where it is evident that runoff will cause continual erosion.
- Two 14'-3" span x 8'-11" rise steel structural plate pipe arches are required. Top plates shall be 0.138-inch thick, and bottom and corner plates shall be 0.188-inch thick.
- Riprap adjacent to the pipe arches shall be carefully placed so as not to damage the pipe arches and so that the finished slope will match their ends. Any extra labor, materials or equipment used will be considered incidental to Item 610.08, Plain Riprap.
- Guard rail posts within the limits of the pipe arches shall be cut to length in the field, as required to clear the arches by a minimum of six inches. Cut posts shall be imbedded nine inches into a concrete base two feet square by one foot thick. The concrete mix shall be approved by the Engineer. Any costs for cutting posts and constructing bases will be considered incidental to the guard rail pay items.
- The existing bridge shall be removed in its entirety.

107-275

As Built 1990
Geo E. No. 1

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

MITCHELL BRIDGE
OVER
NONESUCH RIVER
IN THE TOWN OF
GORHAM
CUMBERLAND COUNTY
ESTIMATED QUANTITIES
& PIPE ARCH DETAILS

SHEET 2 OF 3 AUGUSTA, MAINE