

**SPECIFICATIONS**  
 DESIGN: AASHTO Specifications for Highway Bridges 1969 and Interim Specifications 1970, 1971 and 1972.  
 CONTRACT: State of Maine, State Highway Commission, Standard Specifications, Highways and Bridges, Revision of June 1968.

**DESIGN LOADING**  
 LIVE LOAD: HS20-44

**TRAFFIC**  
 AADT - 1975 - 990  
 AADT - 1995 - 1530  
 DHV - 306  
 T (%) - 5  
 D (%) - 60

**HYDROLOGY DATA**  
 Drainage Area - 13.5 sq. mi.  
 Q<sub>50</sub> - 300 c.f.s.  
 Design Head Water (Q<sub>50</sub>) = Elev. 295.00 ft.  
 Maximum Velocity (Q<sub>50</sub>) - 10 fps.



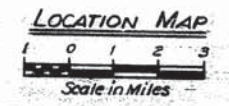
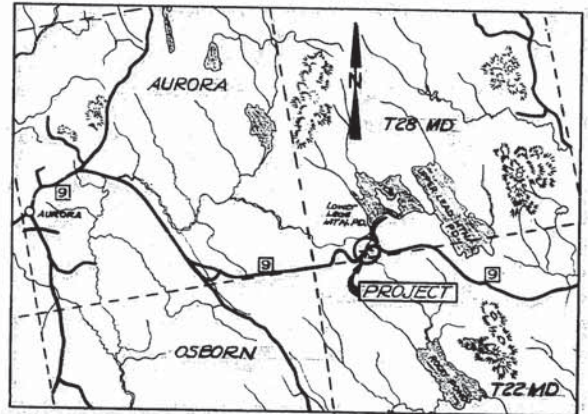
**TYPICAL CHANNEL SECTION**

Notes: Channel excavation to be paid for under Item 206.06, Str. Earth Excav. Drainage & Minor Str.

**Br. # 5486**

- NOTES:**
- Numerous surface boulders present both in brook and banks.
  - Current in this area - Moderate to Rapid.

DESIGN - DETAILED	BY	DATE
CHECKED	LLR	GRW
REVISIONS		7/75
FIELD CHANGES		
<b>PLANS</b>		



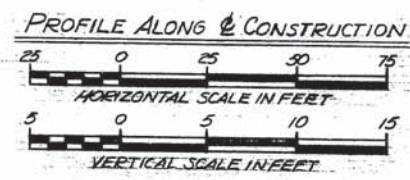
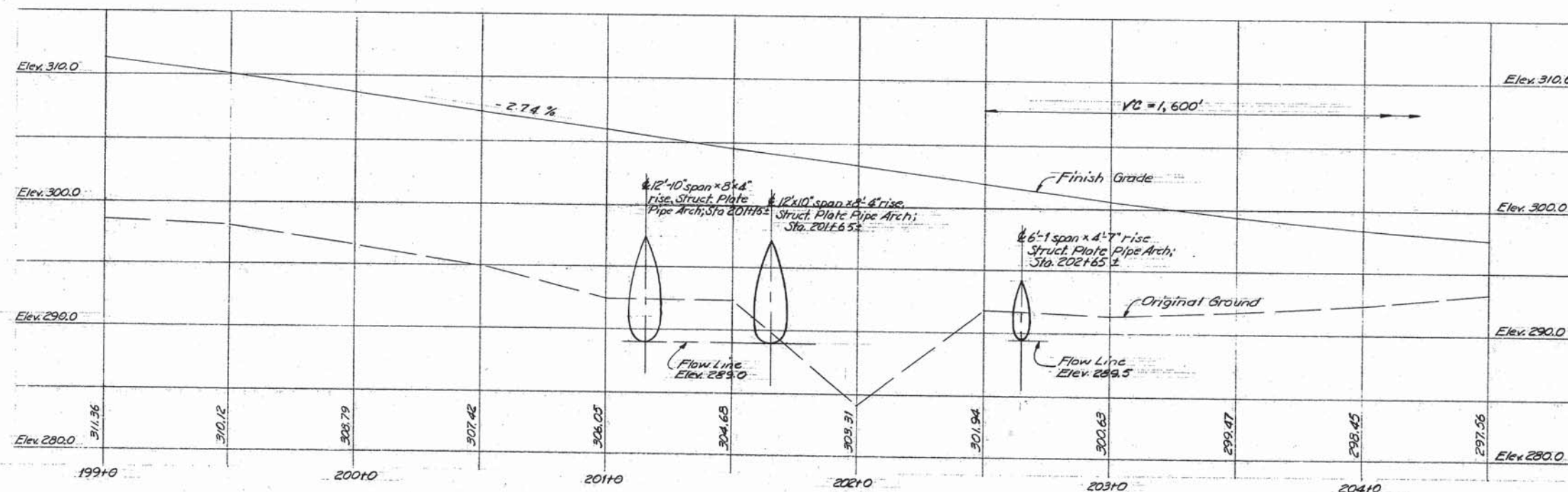
**NOTE:**  
 Proposed Project is located 800'± downstream from existing structure.

High Water line as observed by field survey crew (Typ.)

**R90-255**

STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION  
**ROUTE 9**  
 OVER  
**STARVATION BROOK**  
 IN THE TOWNSHIP OF  
**T28 MD.**  
**HANCOCK COUNTY**  
 SURVEY  
 AUGUSTA, MAINE

F.R.E.A. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	281(26)	14	65



DATE	BY

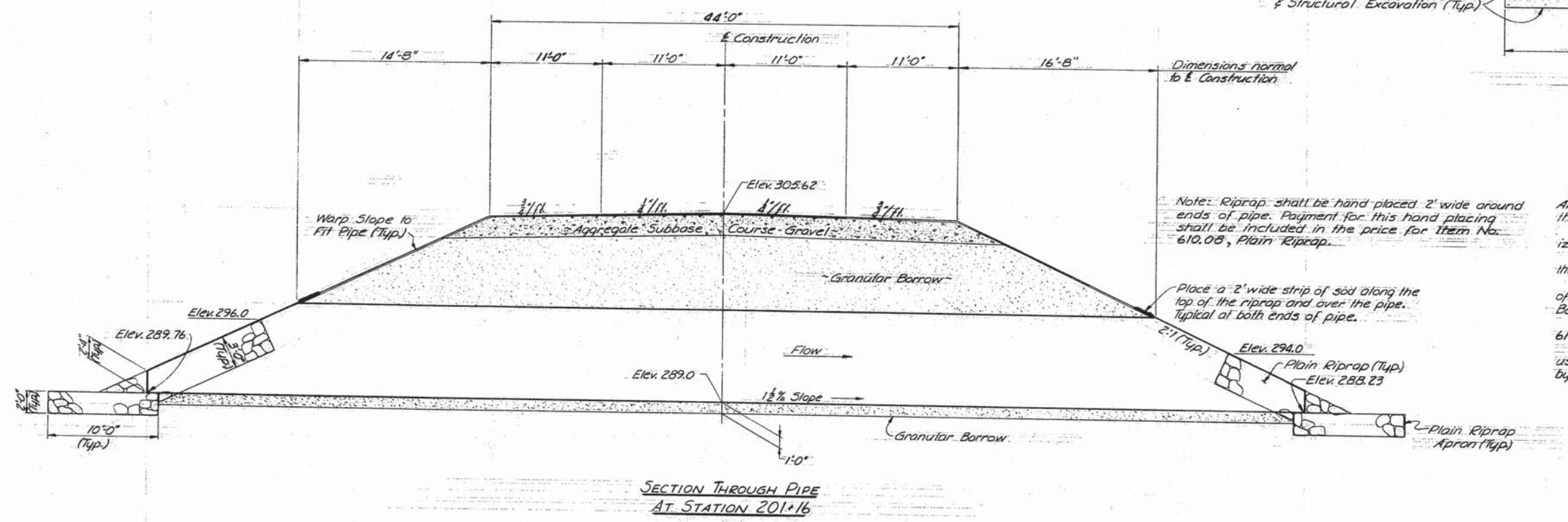
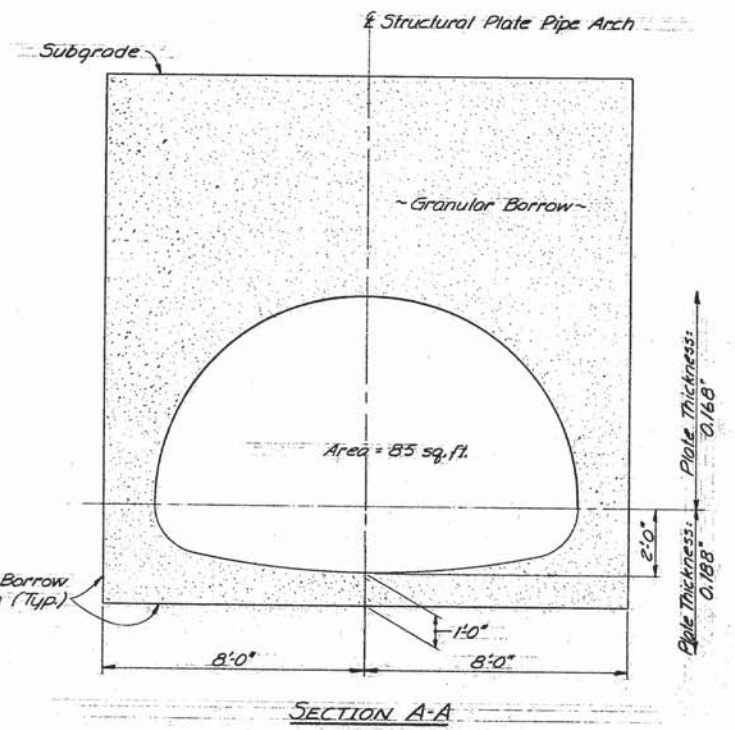
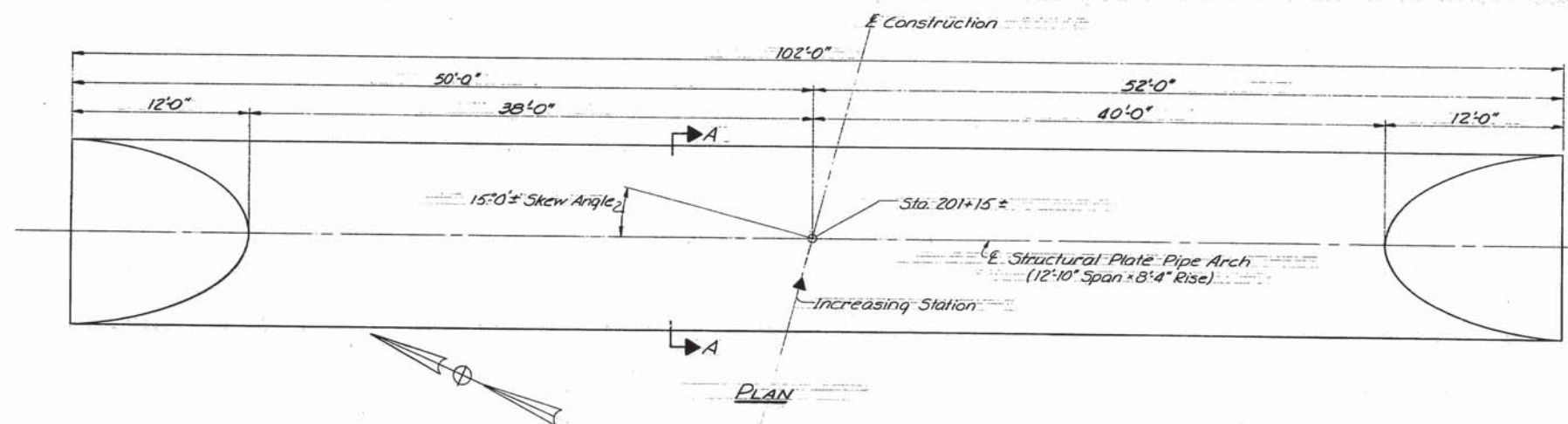
DESIGN - DETAILED	CHECKED	REVISIONS	FIELD CHANGES

PLANS

R90-256

STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION  
**ROUTE 9**  
 OVER  
**STARVATION BROOK**  
 IN THE TOWNSHIP OF  
**T28 M.D.**  
**HANCOCK COUNTY**  
 PROFILE  
 AUGUSTA, MAINE

F.S.E.A. DIST. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	281(26)	15	65



Note: Riprap shall be hand placed 2' wide around ends of pipe. Payment for this hand placing shall be included in the price for Item No. 610.08, Plain Riprap.

Place a 2' wide strip of sod along the top of the riprap and over the pipe. Typical at both ends of pipe.

**NOTES**

- One 154" span, 100" rise Structural Plate Pipe Arch required. Top plates shall be 8 gage and the bottom and corner plates shall be 7 gage.
- Assemble with 3/4" diameter hot dipped galvanized bolts (ASTM A325).
- Ends shall be cut to the slope as shown on the details.
- Granular Borrow shall meet the requirements of Subsection 703.19, Material for Underwater Backfill.
- Plain Riprap shall be paid for under Item 610.08, Plain Riprap.
- Granular Borrow under the pipe will not be used if the existing material is suitable as determined by the Engineer.

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**DESIGN LOADING**

Live Load: H-15-20-44

PROJECT DESIGN ENGINEER	BY	DATE
DESIGN - DETAILED	R.C.B. / R.C.B.	3/7/75
CHECKED		
REVISIONS		
FIELD CHANGES		

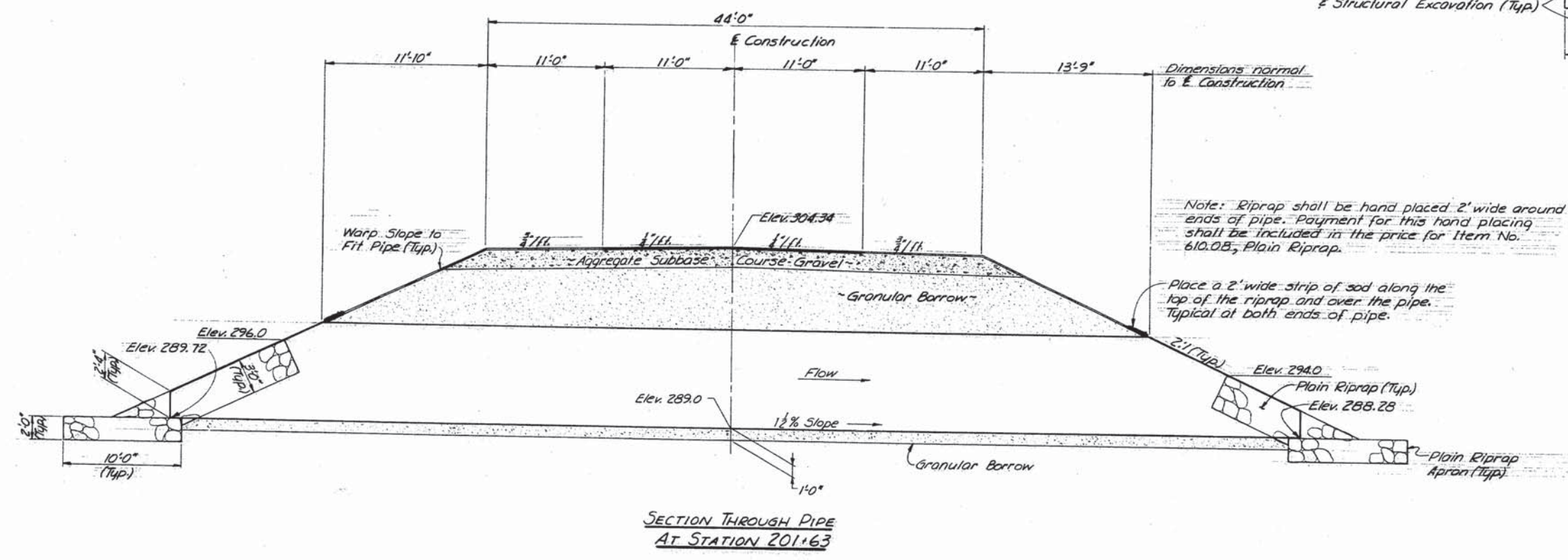
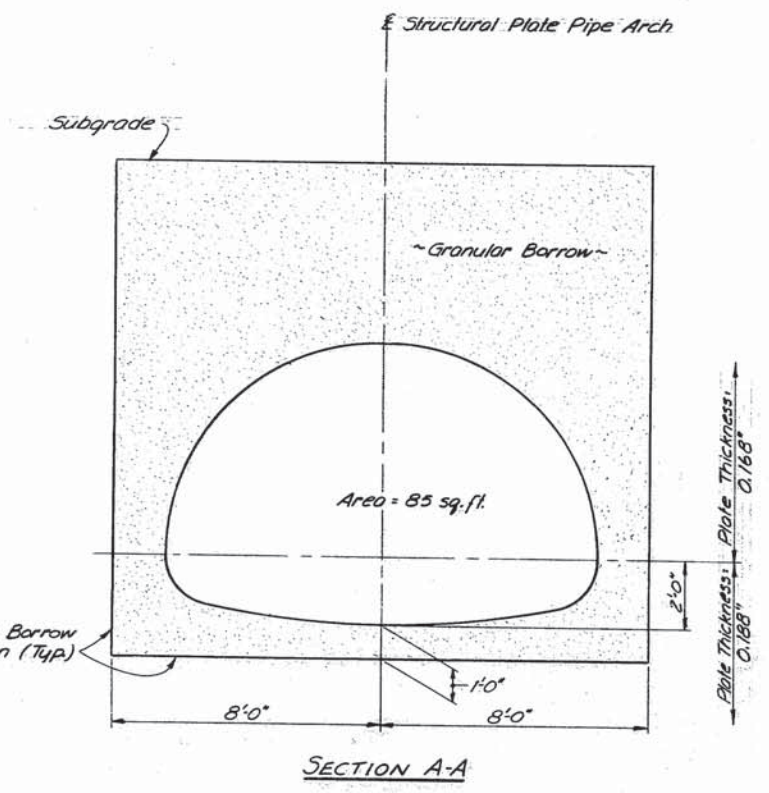
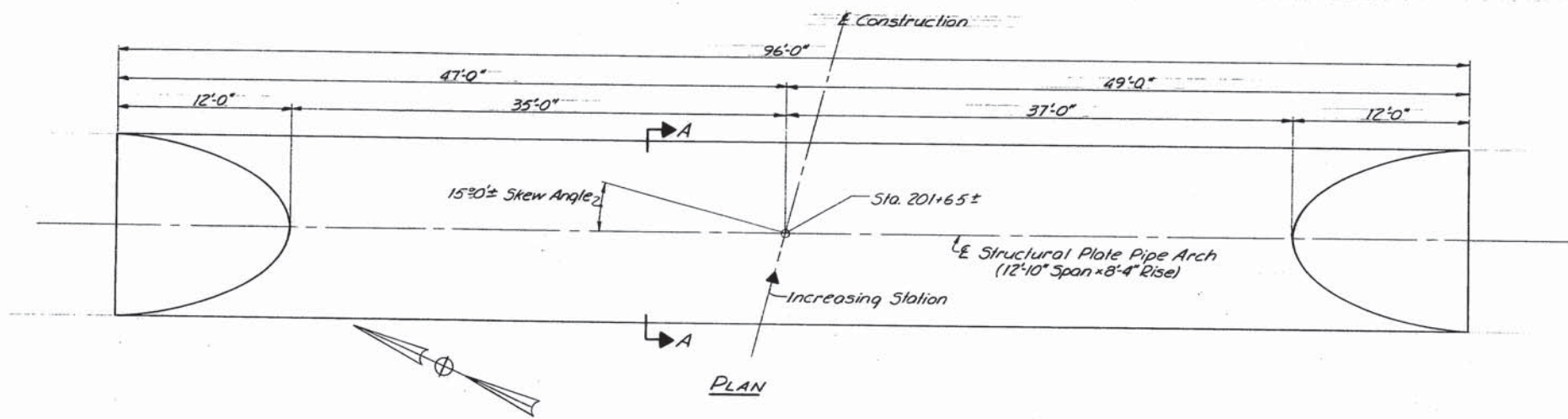
**R90-257**

STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION

**ROUTE 9  
 OVER  
 STARVATION BROOK  
 IN THE TOWNSHIP OF  
 T28MD.  
 HANCOCK COUNTY  
 PIPE ARCH DETAILS**

SHEET 3 OF 5 AUGUSTA, MAINE

F.S.A. DIST. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	281(26)	16	65



Note: Riprap shall be hand placed 2' wide around ends of pipe. Payment for this hand placing shall be included in the price for Item No. 610.08, Plain Riprap.

Place a 2' wide strip of sod along the top of the riprap and over the pipe. Typical at both ends of pipe.

**NOTES**

One 154" span, 100" rise Structural Plate Pipe Arch required. Top plates shall be 6 gage and the bottom and corner plates shall be 7 gage. Assemble with 3/4" diameter hot dipped galvanized bolts (ASTM A325). Ends shall be cut to the slope as shown on the details. Granular Borrow shall meet the requirements of Subsection 703.19, Material for Underwater Backfill. Plain Riprap shall be paid for under Item 610.08, Plain Riprap. Granular Borrow under the pipe will not be used if the existing material is suitable as determined by the Engineer.

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**DESIGN LOADING**

Live Load: HS 20-44

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

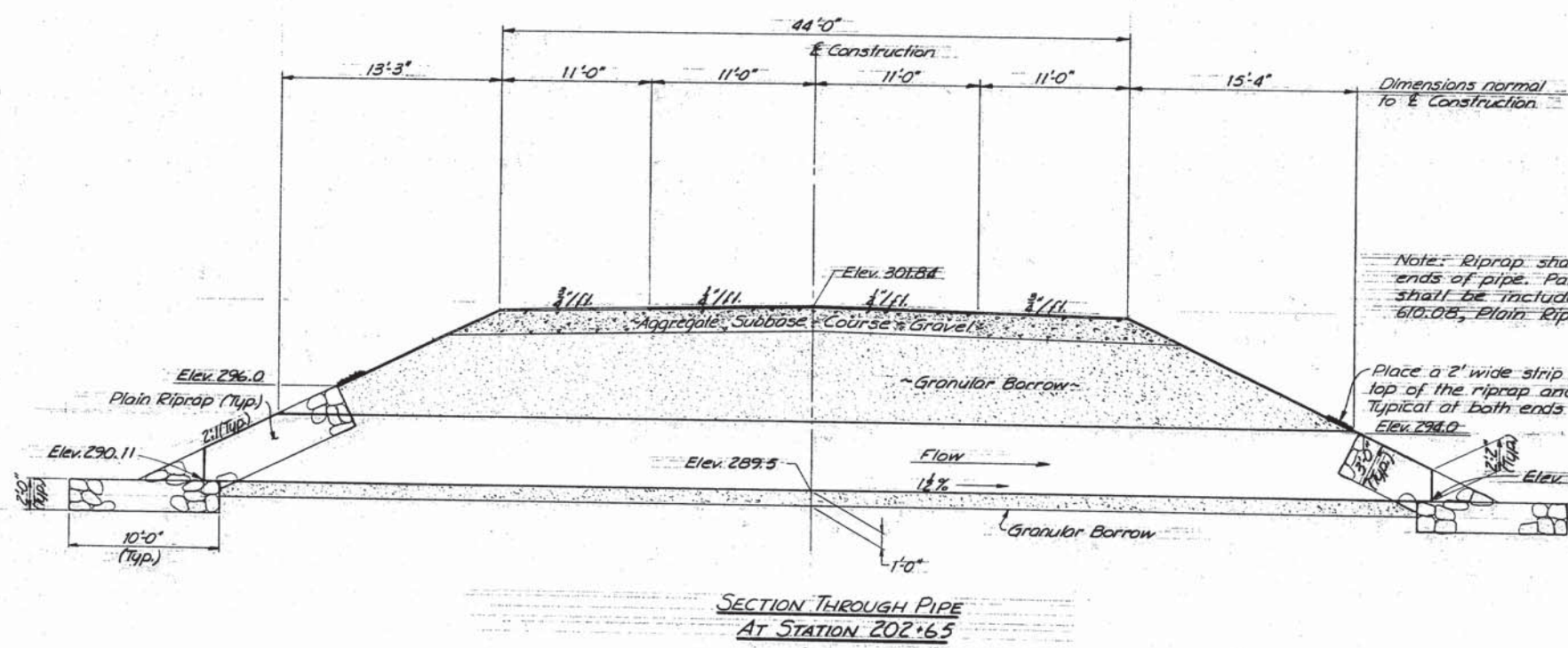
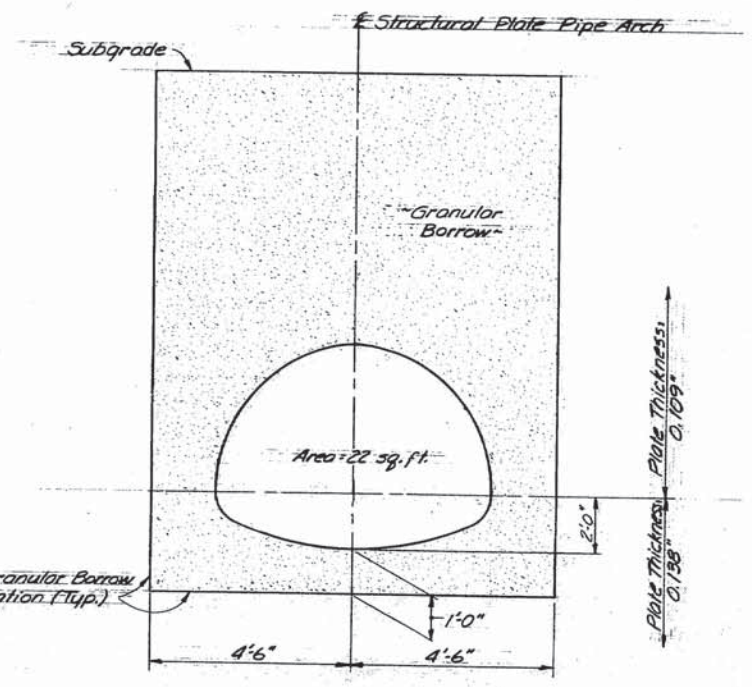
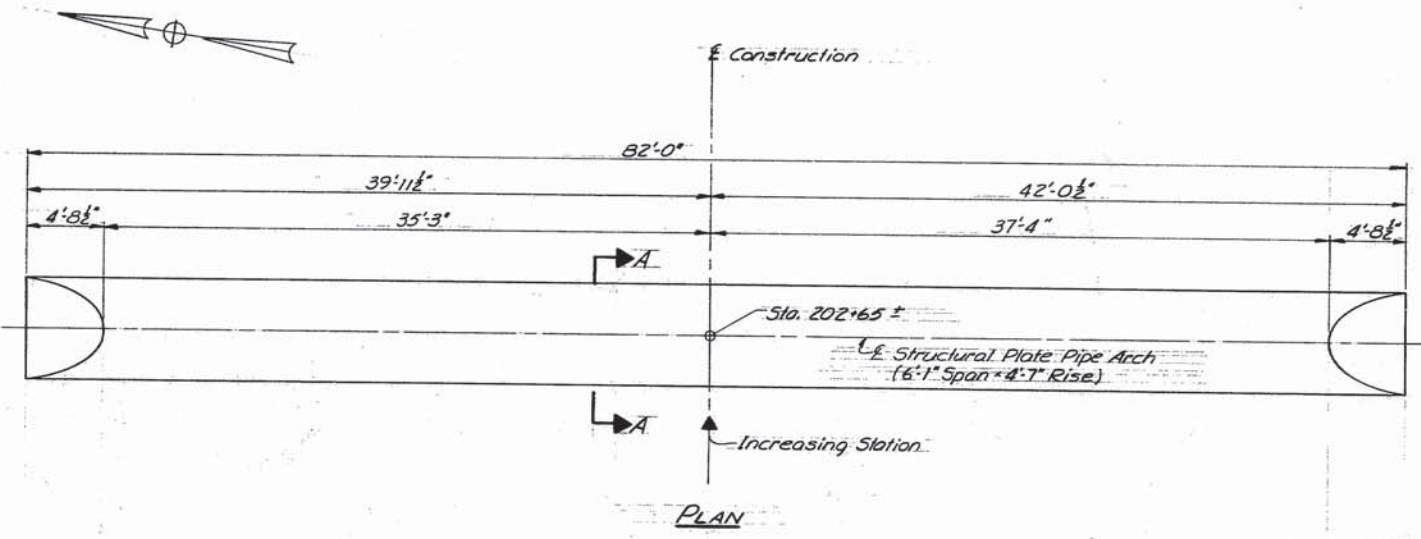
**ROUTE 9  
OVER  
STARVATION BROOK  
IN THE TOWNSHIP OF  
T28 M.D.  
HANCOCK COUNTY**

PIPE ARCH DETAILS

4 OF 5 AUGUSTA, MAINE

**R90-258**

PROJECT DESIGN ENGINEER	DATE
BY R.C.B. R.C.B. 4-75	
DESIGN - DETAILED	
CHECKED	
REVISIONS	
FIELD CHANGES	



Note: Riprap shall be hand placed 2' wide around ends of pipe. Payment for this hand placing shall be included in the price for Item No. 610.08, Plain Riprap.

Place a 2' wide strip of sod along the top of the riprap and over the pipe. Typical at both ends of pipe.

NOTES

One 73" span, 55" rise Structural Plate Pipe Arch required. Top plates shall be 12 gage and the bottom and corner plates shall be 10 gage. Assemble with 3/4" diameter hot dipped galvanized bolts (ASTM A325). Ends shall be cut to the slope as shown on the details.

Granular Borrow shall meet the requirements of Subsection 703.19, Material for Underwater Backfill.

Plain Riprap shall be paid for under Item 610.08, Plain Riprap.

Granular Borrow under the pipe will not be used if the existing material is suitable as determined by the Engineer.

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**DESIGN LOADING**  
 Live Load: HS 20-44

PROJECT DESIGN ENGINEER	BY	DATE
DESIGN - DETAILED	RCB	2-27-75
CHECKED		
REVISIONS		
FIELD CHANGES		
<b>PLANS</b>		

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

**ROUTE 9  
OVER  
STARVATION BROOK  
IN THE TOWNSHIP OF  
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HANCOCK COUNTY  
PIPE ARCH DETAILS**

SHEET 5 OF 5 AUGUSTA, MAINE