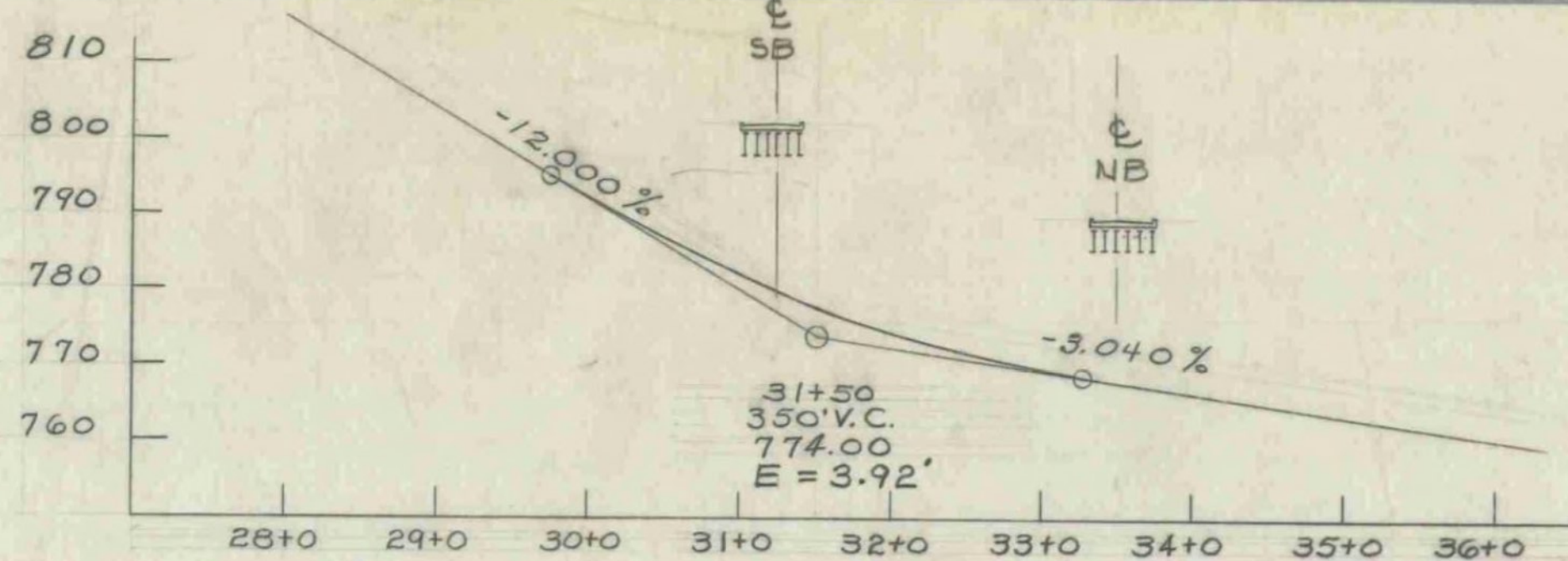


Normal Section T.H. #29
Scale: 1" = 10'-0"

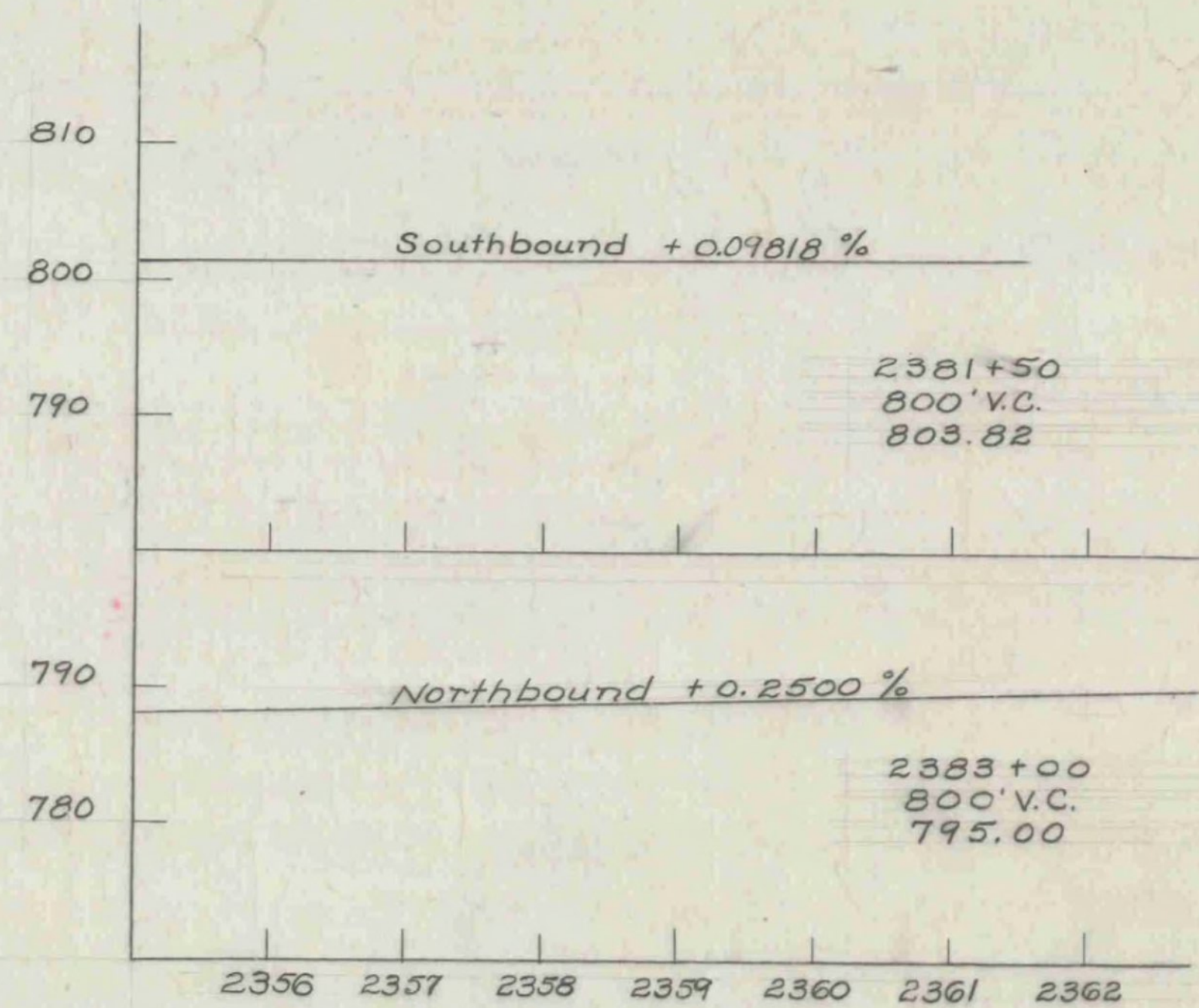
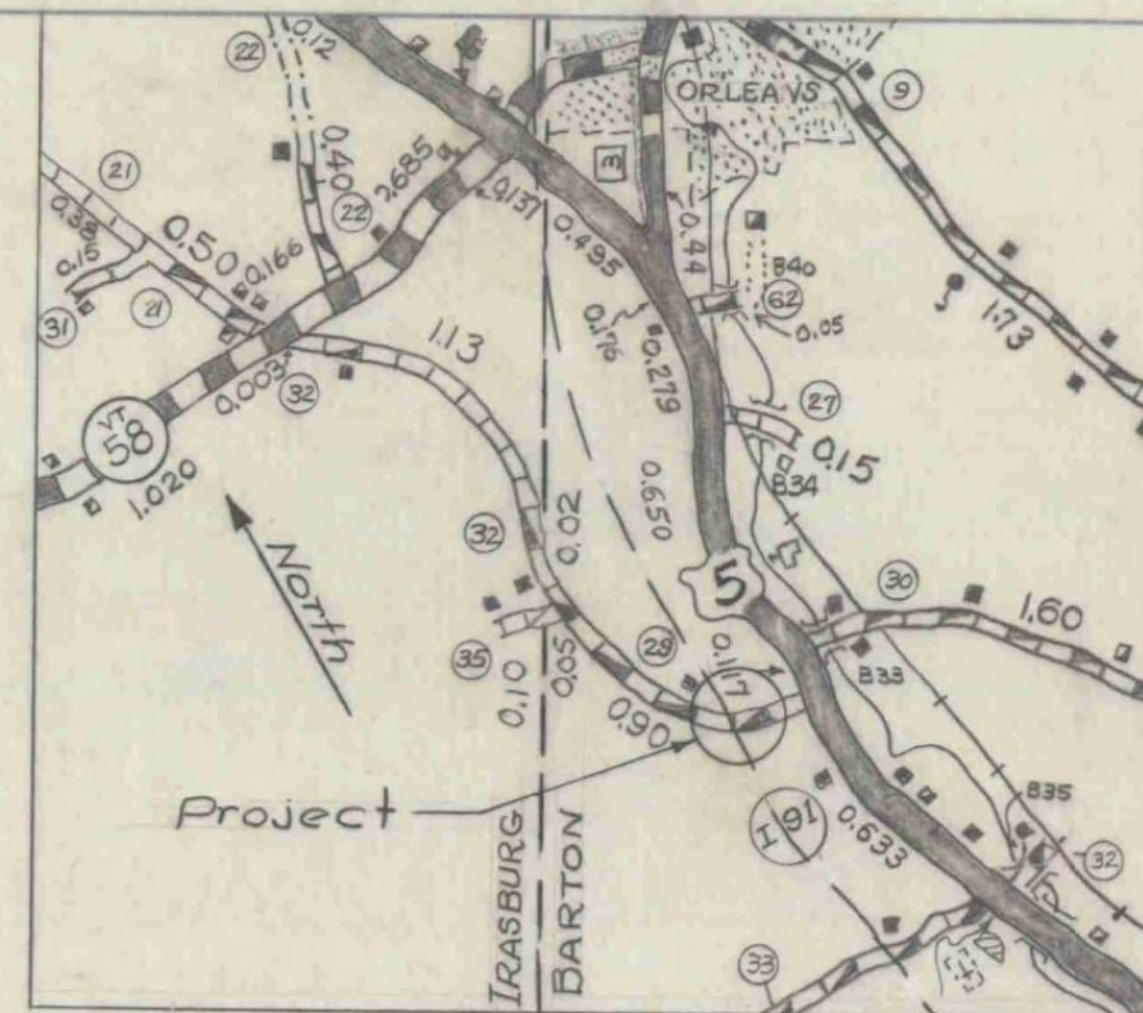


Profile of T.H. #29
Scale: 1" = 100' Horiz. - 1" = 20' Vert.

HIGHWAY NO. I91 NAME OF HIGHWAY INTERSTATE
 STRUCTURE NO. S4-B6 COUNTY ORLEANS TOWN BARTON
 PROJECT NO. I91-3(II) LOCATION BARTON
I91 over T.H. #29

- EXISTING STRUCTURE
- 1 RATED LOADING OF EXISTING STRUCTURE _____
 - 2 TYPE OF EXISTING STRUCTURE NONE
 - 3 UNDERCLEARANCE ELEVATION OF EXISTING STRUCTURE _____
 - 4 WHAT DISPOSITION SHOULD BE MADE OF EXISTING STRUCTURE? COST OF REMOVAL _____
 - 5 SHOULD EXISTING STRUCTURE BE USED TO MAINTAIN TRAFFIC DURING CONSTRUCTION OF NEW STRUCTURE? _____
 - 6 SHOULD NEW TEMPORARY STRUCTURE BE BUILT? _____
 - 7 ORDINARY HIGH WATER SURFACE ELEV. AT EXISTING STRUCTURE _____ WATERWAY TO ORDINARY H.W. _____
 - 8 EXTREME HIGH WATER AT EXISTING STRUCTURE _____
 - 9 SPAN OF EXISTING BRIDGE UPSTREAM _____ WATERWAY TO EXTREME H.W. _____
 - 10 SPAN OF EXISTING BRIDGE DOWNSTREAM _____ WATERWAY TO EXTREME H.W. _____
 - 11 TYPE OF FOUNDATION UNDER EXISTING ABUTMENTS _____
 - 12 DOES ALL WATER AT FLOOD ELEVATION PASS THROUGH EXISTING STRUCTURE? _____
 - 13 IF NOT AT WHAT ELEVATION IS RELIEF AFFORDED? _____
 - 14 ADDITIONAL WATERWAY AREA PROVIDED _____

- NEW STRUCTURE
- 1 RECOMMENDED TYPE OF STRUCTURE single span - composite - W Beam
 - 2 RECOMMENDED Overall Bridge Lengths Southbound 89'-0" Northbound 89'-0"
Span Lengths center to center of Bys. Southbound 86'-10" Northbound 86'-10"
Clear Span Lengths normal to Roadway Southbound 78.37' Northbound 79.06'
 - 3 ARE THERE OBJECTIONS TO A PIER IN THE STREAM? ANSWER YES OR NO _____
 - 4 ORDINARY HIGH WATER ELEVATION AT NEW STRUCTURE _____
 - 5 EXTREME HIGH WATER ELEVATION AT NEW STRUCTURE _____ SOURCE OF INFORMATION _____
 - 6 IS ALL WATER INTENDED TO PASS THROUGH NEW STRUCTURE? _____
 - 7 DOES STREAM REACH ITS MAXIMUM HIGH WATER ELEVATION RAPIDLY? _____ IS ORDINARY RISE RAPID? _____
 - 8 LOW WATER ELEVATION AT NEW STRUCTURE _____
 - 9 DRAINAGE AREA IN ACRES ABOVE STRUCTURE _____ CHARACTER OF TERRAIN _____
 - 10 IS STREAM EVER DRY _____
 - 11 VELOCITY OF STREAM AT HIGH WATER STAGE _____ ESTIMATED DISCHARGE _____
 - 12 AREA FULL OPENING _____ AREA BELOW ORDINARY H.W. _____
 - 13 CHARACTER OF SCOUR _____ DRIFT _____ ICE _____
 - 14 ESTIMATED DRAINAGE AREA ABOVE NATURAL OR ARTIFICIAL STORAGE _____
 - 15 VERTICAL CLEARANCE ABOVE STREAM ELEVATION _____
 - 16 ARE SIDEWALKS REQUIRED? IF SO ON WHAT SIDE? NONE BOTH SIDES _____
 - 17 RECOMMENDED TYPE OF PAVEMENT 2" Bituminous Concrete Pavement
 - 18 TRAFFIC TO BE MAINTAINED UNDER ITEM NO. _____ ONE OR TWO WAYS _____ PROBABLE COST _____
 - 19 PROBABLE COST OF CLEARING AND GRUBBING STREAM CHANNEL AT STRUCTURE SITE _____
 - 20 SHOULD PROVISIONS BE MADE FOR PUBLIC UTILITIES? No
 - 21 ESTIMATED ALLOWABLE LOAD ON FOUNDATIONS 58 tons SHOULD PILES BE USED? Yes EST. LGTH. 59' per pile



Interstate Profile
Scale: 1" = 100' Horiz. - 1" = 10' Vert.

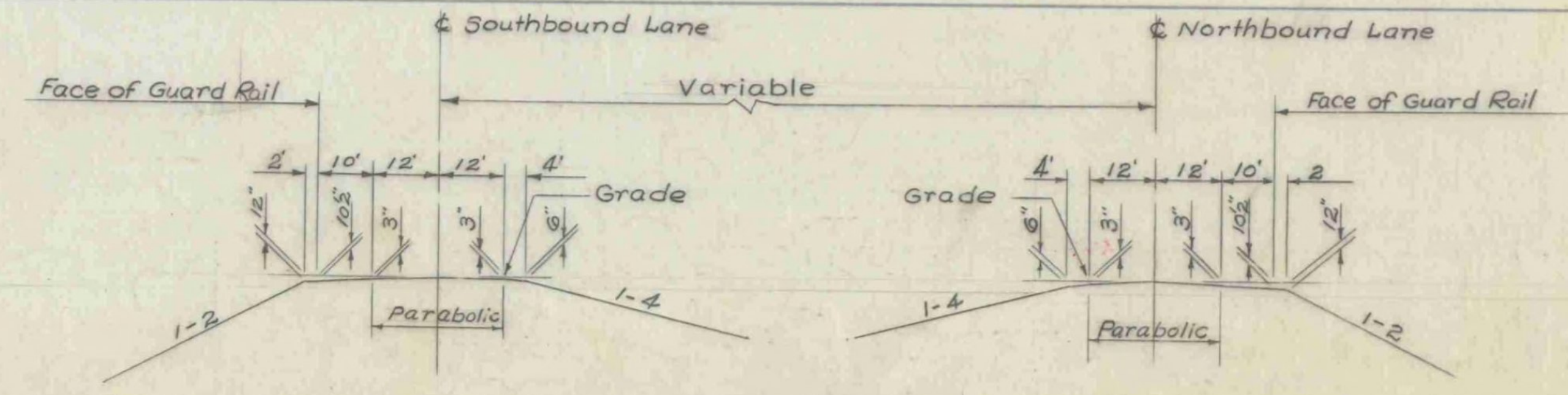
Allowable Design Stresses:
 Concrete: $f'_c = 3000$ psi $f'_t = 1200$ psi $n = 10$
 Structural Steel: A36 $f_s = 20,000$ psi
 Reinforcing Steel: $f_s = 20,000$ psi tension
 Design Loading: HS 20-44

FOUNDATION INFORMATION
 OBTAINED FOR DESIGN PURPOSES ONLY, AND THE STATE ASSUMES NO RESPONSIBILITY WHATSOEVER FOR THE SUFFICIENCY OR ACCURACY OF THE INFORMATION SHOWN. BOULDERS MAY BE ENCOUNTERED AT ANY PIER OR ABUTMENT LOCATION.

For Boring Logs see Sheets BR-603 and BR-604.

TABLE OF ESTIMATED PILE LENGTHS

LOCATION	FOOTING ELEV.		PILE LENGTH	
	Rear	Main	Rear	Main
Abutment No. 1	786.00	777.50	40'	30'
Abutment No. 2	787.00	778.50	25'	20'
Abutment No. 3	774.50	766.50	45'	35'
Abutment No. 4	775.00	767.00	40'	40'



Typical Interstate Section
Scale: 1" = 20'-0"

LYNDON-IRASBURG
 IM MEMB(29)
 SHEET 41 OF 55
 BRIDGE NO. 105N & 105S
 FOR REFERENCE ONLY

RECOMMENDED FOR APPROVAL
 CONSTRUCTION ENGINEER [Signature] 11/18/66 DATE
 RECOMMENDED FOR APPROVAL
 BRIDGE ENGINEER [Signature] 11/18/66 DATE
 RECOMMENDED FOR APPROVAL
 ASST. CHIEF ENGINEER [Signature] 11/21/66 DATE
 APPROVED BY: [Signature] 11/21/66 DATE
 CHIEF ENGINEER

PROJECT: BARTON Stage 2 Construction

STATE OF VERMONT
 DEPARTMENT OF HIGHWAYS

INTERSTATE _____ IN THE TOWN OF
BARTON **BR 105**

ROUTE NO. I91 I91 STA. 2359+25
I91 over T.H. #29 Class 2nd b

PRELIMINARY INFORMATION
 SURVEYED BY [Signature] CHECKED BY [Signature] SCALE AS NOTED
 DRAWN BY [Signature] IN CHARGE [Signature] DATE 11/17/66
 PROJECT NO. I91-3(II) SHEET 189 OF 189
 EMP I91-3(19) BR-600 75 114