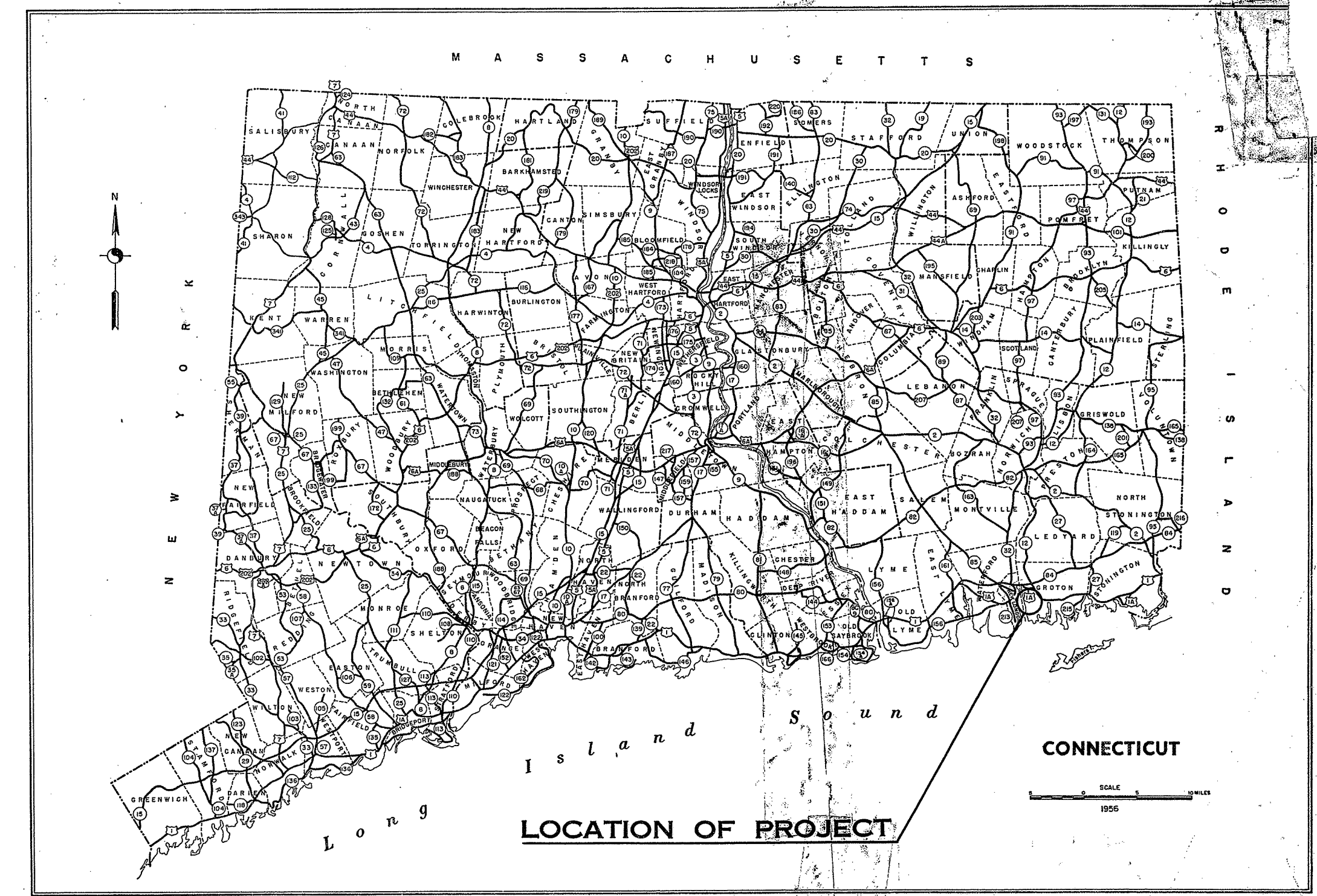


CONNECTICUT STATE HIGHWAY DEPARTMENT PLAN FOR CONSTRUCTION OF GROTON DEFENSE ACCESS HIGHWAY (S.R.649) IN THE TOWN OF GROTON

FROM STA. SEE BELOW TO STA. SEE BELOW
 LENGTH SEE BELOW FT.

HIGHWAY DESIGN SCALES
 PLAN 1 IN. = 40 FT.
 PROFILE HOR. 1 IN. = 40 FT. VERT. 1 IN. = 4 FT.
 CROSS SECTIONS 1 IN. = 5 & 10 FT.
 OTHER SCALES AS NOTED

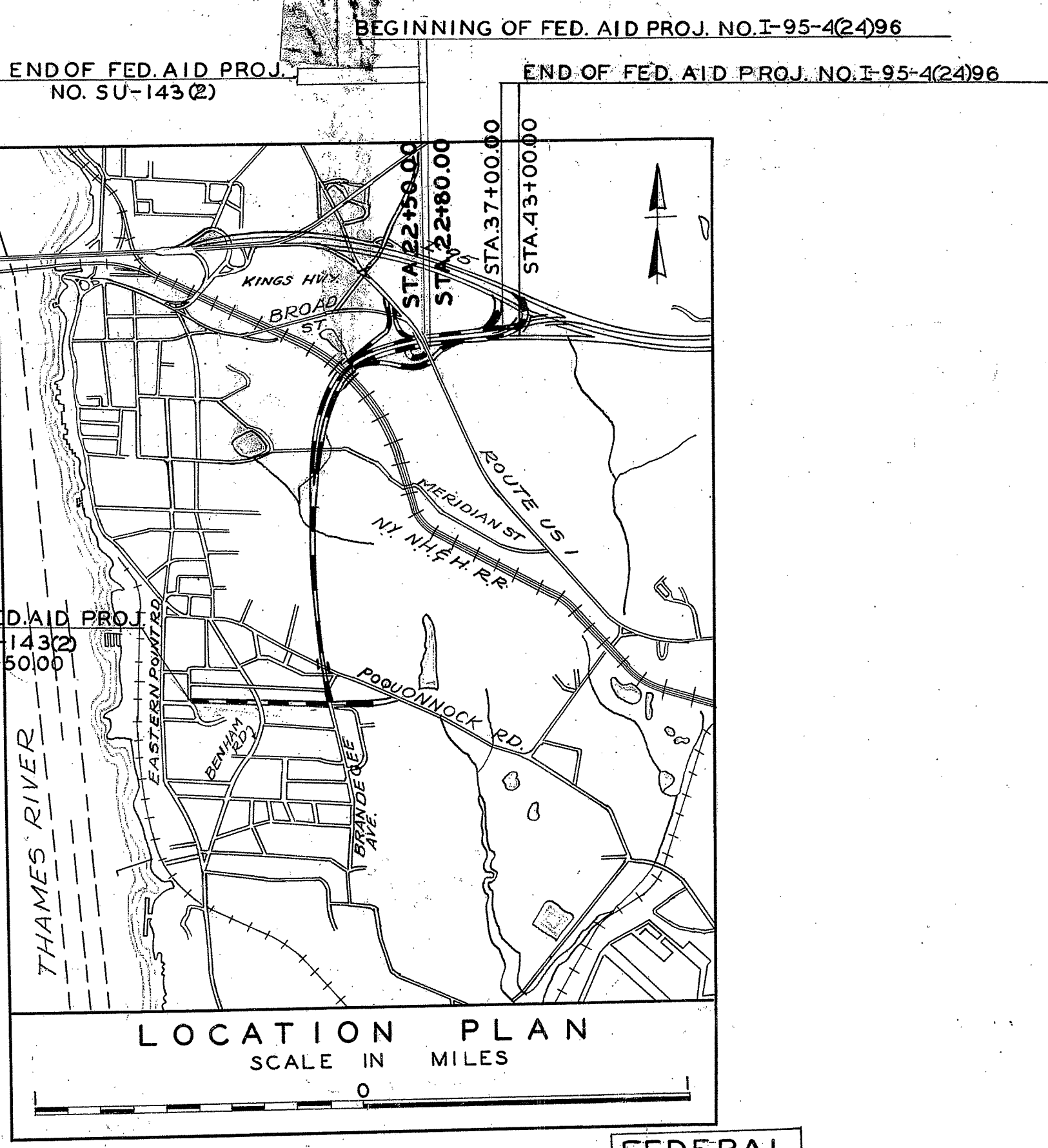
TO BE MAINTAINED BY THE STATE
FEDERAL AID PROJECT NO. SU-143 (2)
FEDERAL AID PROJECT NO. I-95-4(24)96



1963 SPECIFICATIONS, FORM NO. 809, INCLUDING SUPPLEMENT THERETO DATED APRIL 1963 GOVERN TOWN NO. 58 58
 ALL ELEVATIONS ON THIS PROJECT PROJECT NO. 117 119
 BASED ON U. S. C & G. S. DATUM

1963 GEOMETRIC HIGHWAY DESIGN STANDARDS
FED. AID SECONDARY SYSTEM
 Intersection of Chester & Mumford Sts. to Meridian Street.
 Design Classification - Urban Street Limited Access
 Assumed Design Speed - 60 M.P.H.
 A.D.T. 1990 - 11,900
 D.D.H.V. 1990 - 3500
FED. AID INTERSTATE SYSTEM
 Design Classification - "F" Urban (Residential) Modified Limited Access
 Assumed Design Speed - 60 M.P.H.
 A.D.T. 1990 - 13,300
 D.D.H.V. 1990 - 3600

Construction Started 4-12-65
 Construction Completed 3-27-67
 Plans Revised By F.M.H. 8-9-71
 Plans Checked By G.A.R. 8-9-71



STATE PROJECT NO.	FED. AID PROJECT NO.	STA. TO STA.	FEDERAL AID LENGTH OF PROJECT	LENGTH OF PROJECT
58-117	SU-143(2)	N.B. 22+80.00 S.B. 22+50.00	9228.06 Ft.	9228.06 Ft. ✓
58-119	I-95-4(24)96	N.B. 22+80.00-43+00.00 S.B. 22+50.00-37+00.00	00.00 Ft.	1735.00 Ft. ✓

LIST OF DRAWINGS				B.P.R. APPROVAL DATE
SHEET NO.	TITLE	SHEET NO.	STANDARD SHEETS	
1	Title Sheet	217-B	Two-Cable Guide Railing (C & Comp. Anchor, Single Post)	5-7-62
2-6	Index Plans, Index Profiles, Traffic Movements	217-C	Three-Cable Guide Railing (A-3 & B-3 Anchorages)	5-7-62
7-8	Turf Establishment Plans	217-D	Wire Rope Railing-Three-Cable (Wood Posts) A-3W & B-3W Anchorages	5-7-62
9-14	Detailed Estimate Sheets	217-E	Standard Fittings for Three-Cable Guide Railing & Wire Rope Railing-Three-Cable (Wood Posts)	5-7-62
15-23	Typical Cross Sections	220-A	Metal Beam Type Rail (Type E-B) & (Type MD-B)	5-7-62
24-78	Plan and Profile Sheets	221-F	Stand. Endwalls, Wing Type Endwalls, Slope Paved Inlets & Outlets	5-7-62
79-85	Bridge Plans- Main Line over Poquonnock Road	221-G	DG, L Endwalls, Reinforced Concrete Pipe	5-7-62
86-103	Bridge Plans- NB & S.B. over R.R.	221-H	Foundation U'drain, U'drain & Perforated Pipe	9-28-62
104-113	Bridge Plans- Relocation Route U.S. 1 over N.B. & S.B.	222-B	Concrete Sidewalk, Paved Ditch	5-7-62
114-129	Bridge Plans- Line B over Line H & E.B. I-95	222-C	curbing	5-7-62
130-246	Cross Sections	223-A	Manhole, Frame & Cover	5-7-62
247-252	City of Groton- Dept of Utilities	226-A	A.G.C.M. Pipe, Elbow	5-7-62
253-254	Town of Groton- Utilities	228-A	Type "C" Catch Basin	5-7-62
255	Federal Aid Construction- Identification	228-B	Type "C-G" Catch Basin	5-7-62
255A SUPP.	Cross Sections	228-C	Type "C-L" Catch Basin	5-7-62
255B SUPP.	Southern New England Telephone Co	228-D	Frame & Grate for Type "C", "C-G" & "C-L" catch Basin	5-7-62
B1-B5	City of Groton- Dept of Utilities	712-B	Fences	5-7-62
C1-C6	New York, New Haven & Hartford Railroad	712-C	Barricades, Service Bridges	5-7-62
D1				
SHEET NO.	DESCRIPTION	DATE		
13A	Added For Change order	2/1/65		
24A-27A	" " " " " "	" " " " " "		
35A	" " " " " "	" " " " " "		
131A-132A	" " " " " "	" " " " " "		
52A	" " " " " "	3/15/65		
26B-39A-41A	" " " " " "	9/1/65		
32C-135A	" " " " " "	" " " " " "		
136B	" " " " " "	" " " " " "		
SH 107A	" " " " " "	11-19-65		
SH 106A	" " " " " "	1-10-66		
28A, 30C	" " " " " "	5-16-66		
39C, 52D	" " " " " "	" " " " " "		
53B-54A	" " " " " "	" " " " " "		
751-759	Added For Traffic Signal Install	6-31-66		
30D-1394	Added For Change Order	8-10-66		
39D-42A-41A-40A-66A	" " " " " "	9-21-66		

Please Note -
 These sheets added 9/1/65

STANDARD CONVENTIONS

Hedge	Picket Fence	Present Culvert
Guide Rail	Board Fence	Proposed Culvert
Curb	Retaining Wall	House
Stones	Open Ditch	Barn
Concrete Walk	Open Ditch	Buildings
Walkway	Telephone, Telephone, or Electric Light Poles	Swamp
Present Tracks	Trolley Poles	Random Stone
Proposed Tracks	Ledge or Rock	Highway Man. C.M.D. Marker
Taking Line	Tree Hydrant	Present C.B.
Property Line	Pole M.H.	Proposed C.B.
Town Line	Rivers, Lakes etc.	Present Travel Path
Wire Fence		

DEPARTMENT OF COMMERCE
 BUREAU OF PUBLIC ROADS
 APPROVED: _____
 DIVISION ENGINEER DATE

SUBMITTED October 28th 1964
 Wesley J. Brandt.
 ENGINEER OF DESIGN
 APPROVAL RECOMMENDED October 28 1964
 CHIEF OF DESIGN
 APPROVED Oct 28 1964
 Donald S. Johnson
 DIRECTOR OF PLANNING & DESIGN

354 01

PUB. ROAD DIV. NO.	STATE	TOWN	FED. AID PROJ. NO.	PROJ. NO.	YEAR	ROUTE NO.	SHEET NO.	TOTAL SHEETS
1	CONN.	Groton	SU-143-(2)	58-117	1964	649	86	255

QUANTITY		
Structure Excavation Earth (Complete)	c.y.	830
Soil Loading Test	ea.	1
Temporary Steel Sheet Piles	l.f.	161
Steel Sheet Piling Material Left in Place	l.f.	161
Class "A" Concrete	c.y.	595
Class "C" Concrete	c.y.	280
1/2" Pref. Expan. Joint Filler for Bridges	s.f.	130
Deformed Steel Bars	lb.	126,500
Membrane Waterproofing (woven glass fabric)	s.y.	835
Dampproofing	s.y.	185
Metal Bridge Rail (9" high)	l.f.	382
Compacted Gravel Fill	c.y.	3500
Pervious Structure Backfill	c.y.	378
Bituminous Concrete Wearing Surface	ton	112
6"x12" Granite Stone Curbing for Bridges	l.f.	385
Elastomeric Bearing Pads	c.i.	11,925
Neoprene Plate for Bridge Expan. Jt.	l.f.	210
2" Rigid Steel Conduit in Structure	l.f.	200
1/2" Wrought Iron Pipe	l.f.	12
Prestressed Beams - Pretensioned Type III	l.f.	1,110
Protective Compound for Bridges	s.y.	24

GENERAL NOTES

SPECIFICATIONS: Connecticut State Highway Department Form 809 (Jan. 1963) and Special Provisions.

DESIGN SPECIFICATIONS: Standard Specifications for Highway Bridges (A.A.S.H.O. 1961) as supplemented by the Connecticut State Highway Department Bridge Manual (July 1961).

LIVE LOAD: HS 20-44

FUTURE PAVING ALLOWANCE: None

CLASS "A" CONCRETE: Class "A" Concrete shall be used for entire substructure and the parapets of the U-Type wings.

CLASS "C" CONCRETE: Class "C" Concrete shall be used for bridge slab including concrete parapets.

JOINT SEAL: See Special Provisions.

PARAFFIN: The cost of furnishing and applying paraffin and caulking paraffin joints is included in the item for Class "C" Concrete.

EXPOSED EDGES: Exposed edges shall be beveled 1"x1" unless dimensioned otherwise.

FOUNDATION PRESSURE: The various Group Loadings noted on the substructure plan sheets refer to the Group Loads as given in subsection 1.4.1 of the A.A.S.H.O. Standard Specifications for Highway Bridges.

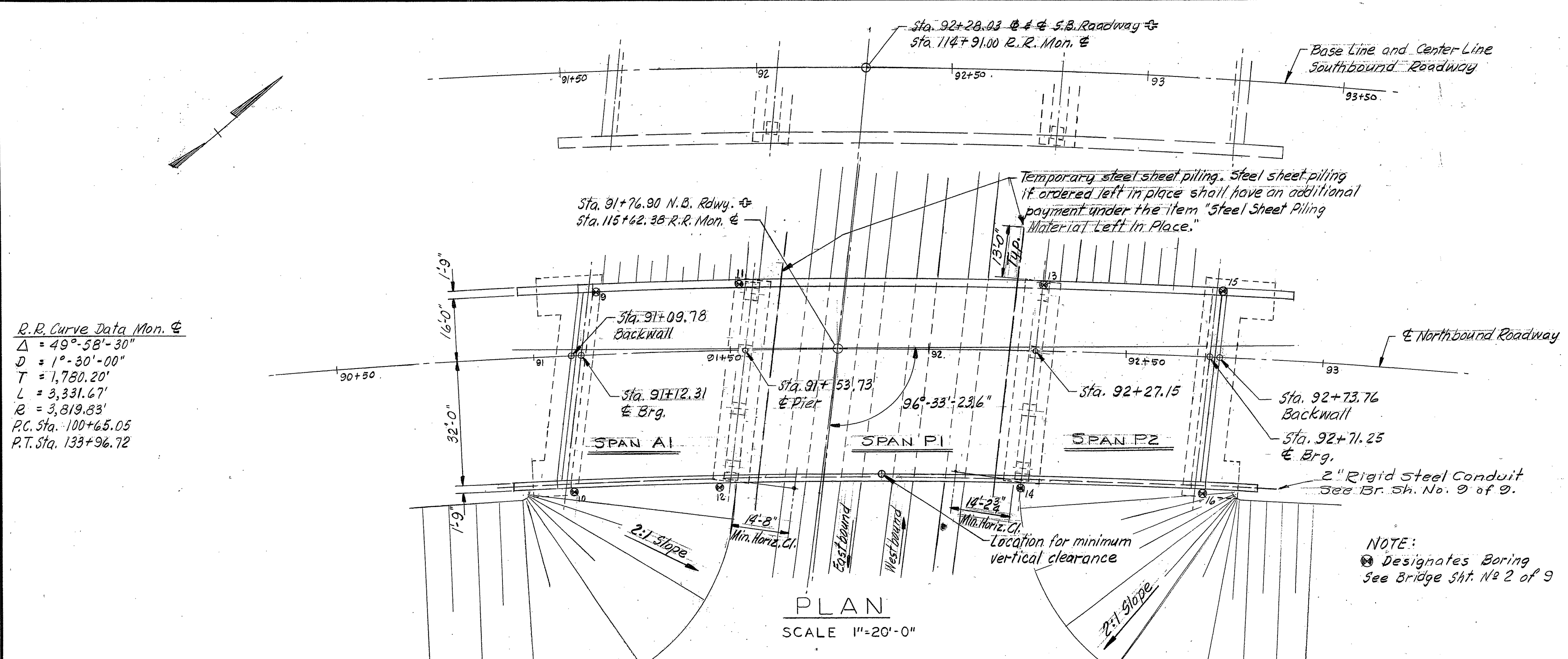
COMPOSITE CONSTRUCTION: No temporary intermediate supports shall be used prior to and during the pouring and setting of the concrete deck slab. Live and superimposed dead loads will be permitted when directed by the Engineer, but not less than 10 days after the slab has been poured.

PRESTRESSED CONCRETE: Materials and construction for Prestressed Concrete shall conform to the requirements of the Special Provisions.

CONSTRUCTION JOINTS: Construction joints, other than those shown on the plans, will not be permitted without prior approval of the Engineer.

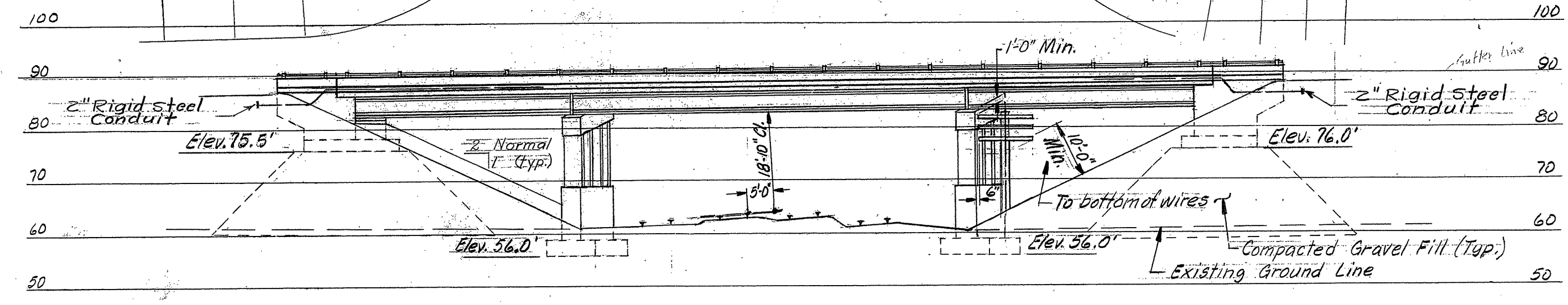
INSPECTION OF FIELD WELDS		
METHOD	UNIT	QUANTITY
Radiographic	in.	0.0
Magnetic Particle	l.f.	0.0

CONCRETE DISTRIBUTION		
Substructure	C.Y.	280
Substructure	C.Y.	410
Footings	C.Y.	185
TOTAL	C.Y.	875

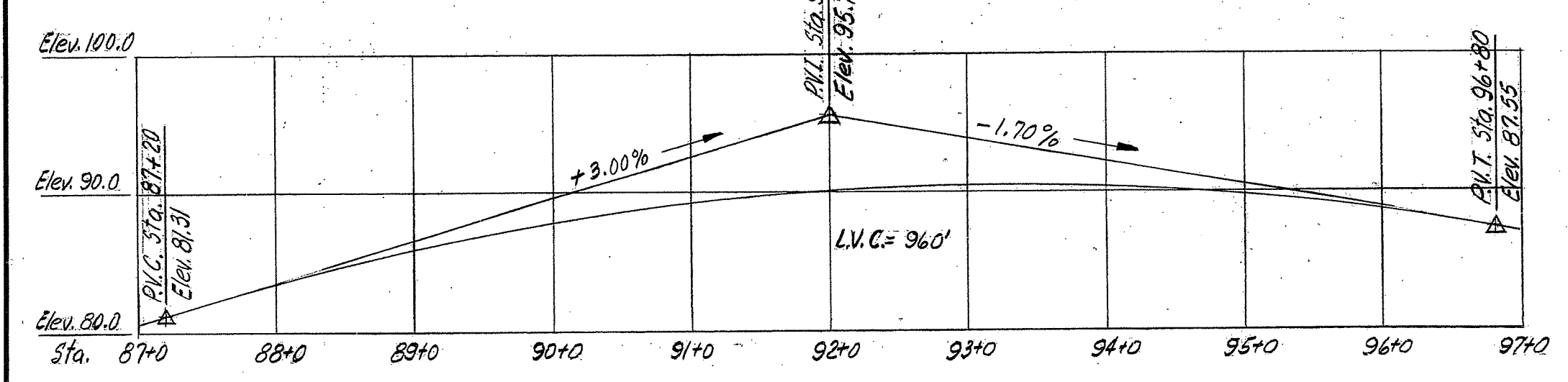


R.R. Curve Data Mon. E
 $\Delta = 49^\circ 58' 30''$
 $D = 1^\circ 30' 00''$
 $T = 1,780.20'$
 $L = 3,331.67'$
 $R = 3,819.83'$
 $P.C. Sta. 100+65.05$
 $P.T. Sta. 133+96.72$

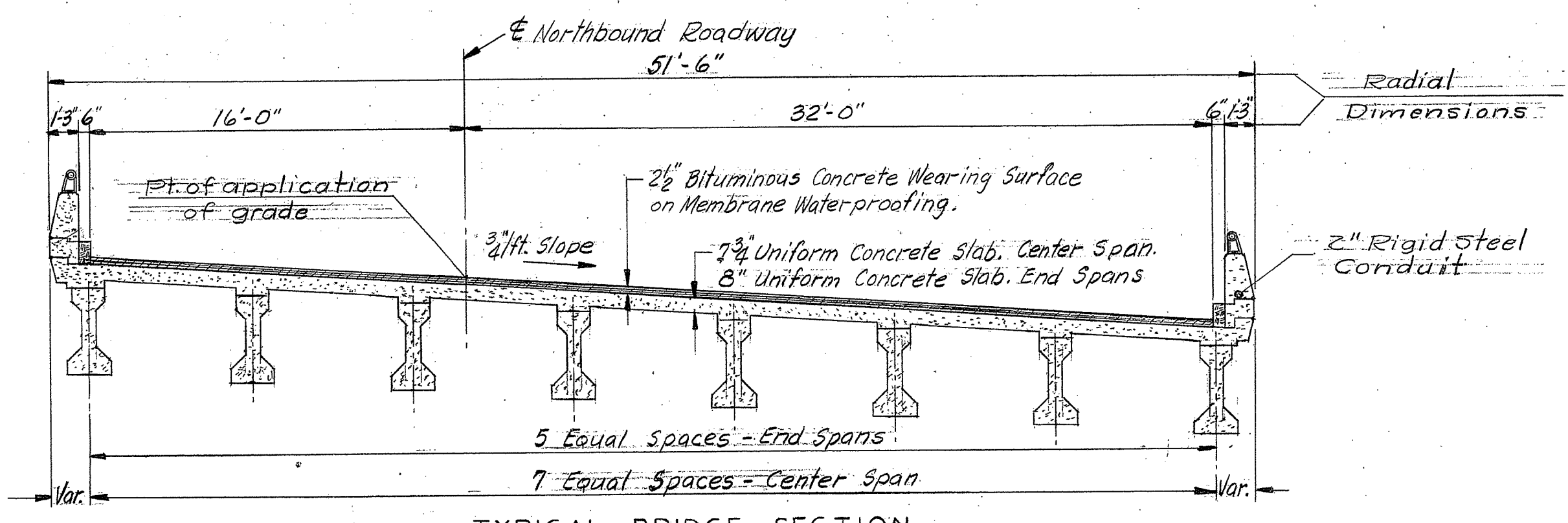
Northbound Centerline Curve Data
 $\Delta = 34^\circ 59' 45.0''$
 $D = 3^\circ 39' 31.2''$
 $T = 815.148'$
 $L = 1503.160'$
 $R = 1566.023'$
 $E = 199.450'$
 $P.C.C. = 89+00.756$



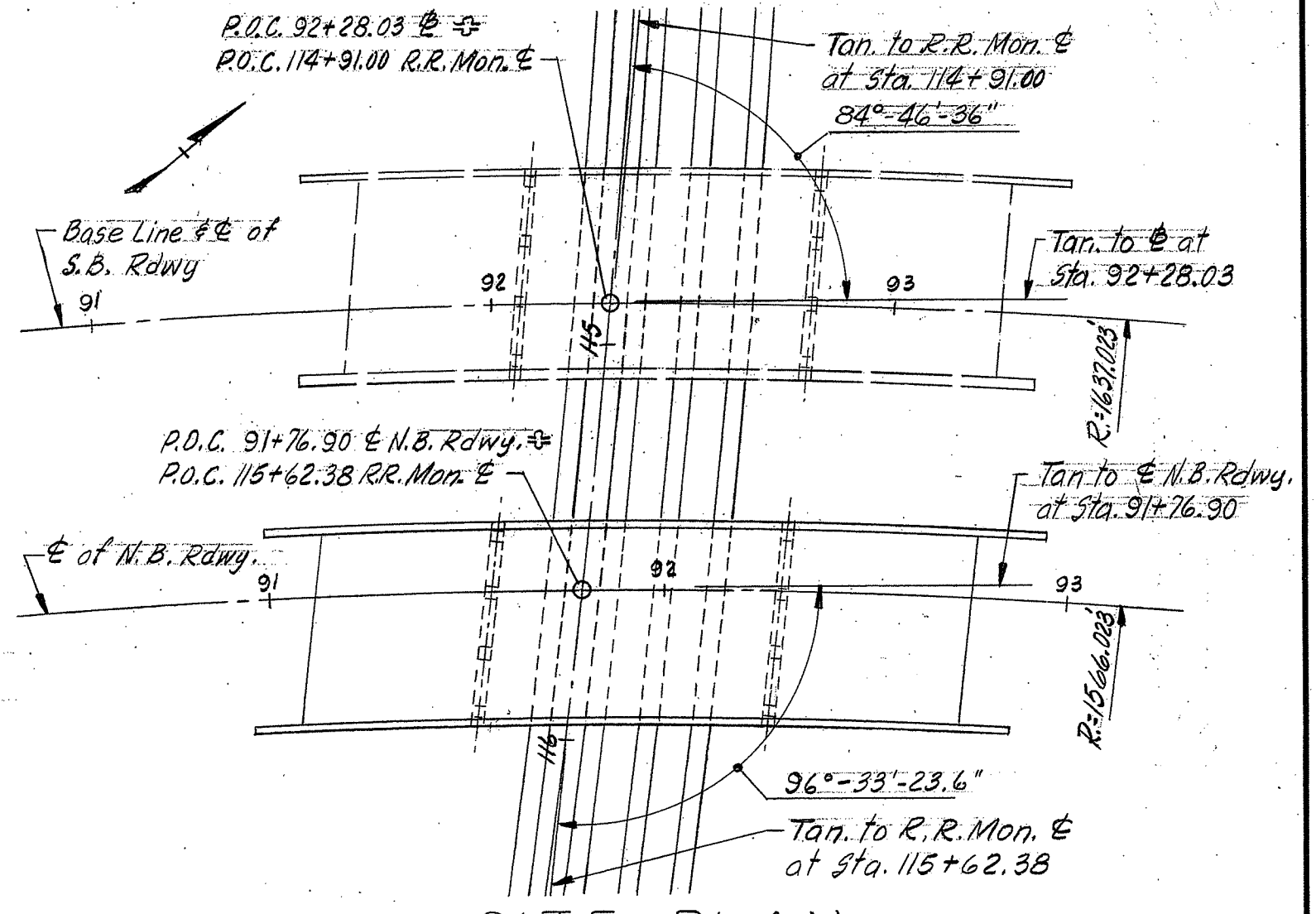
ELEVATION
SCALE 1"=20'-0"



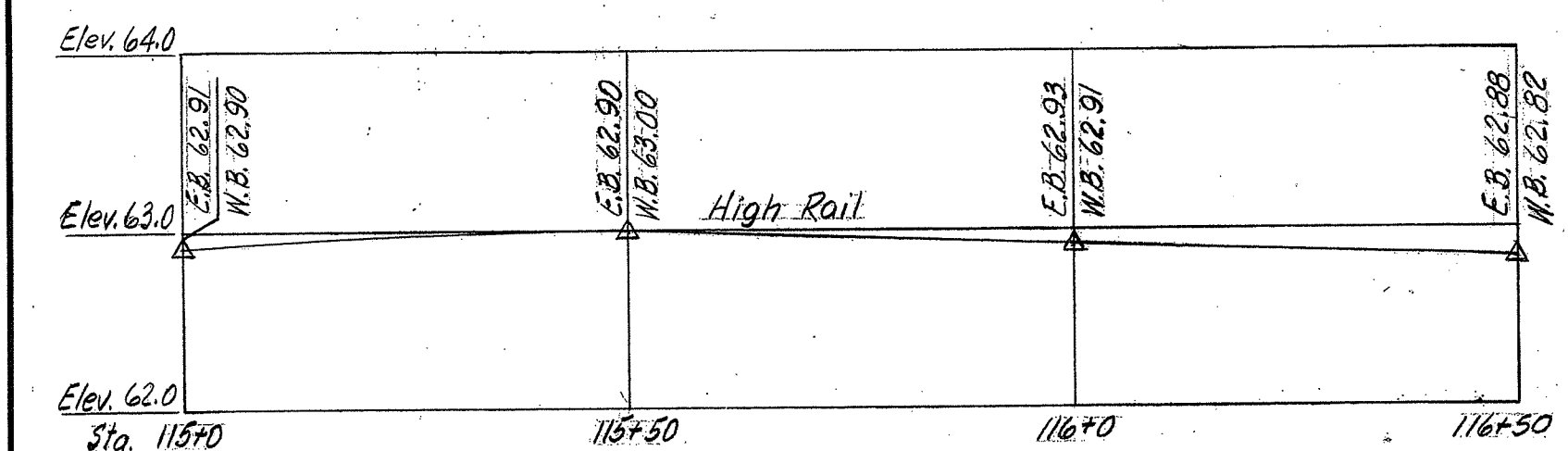
PROFILE & NORTHBOUND ROADWAY
 HORIZ. 1"=100'-0"
 VERT. 1"=10'-0"



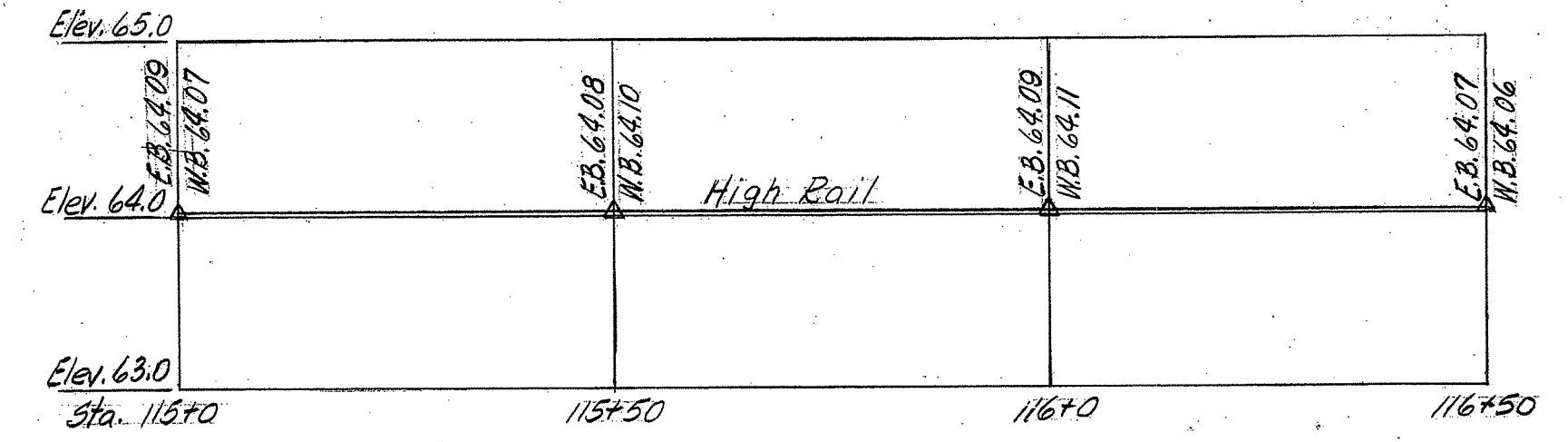
TYPICAL BRIDGE SECTION
SCALE 3/16"=1'-0"



SITE PLAN
SCALE 1"=40'-0" BR. No. 03331



PROFILE - SIDE RAILROAD TRACKS
 HORIZ. 1"=20'-0"
 VERT. 1"=1'-0"



PROFILE - MAIN RAILROAD TRACKS
 HORIZ. 1"=20'-0"
 VERT. 1"=1'-0"

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE TRUE CONDITIONS OR ACTUAL QUANTITIES OR DISTRIBUTION OF QUANTITIES OF WORK WHICH WILL BE REQUIRED.

REVISIONS		
NO.	DATE	DESCRIPTION

CONNECTICUT STATE HIGHWAY DEPARTMENT
 TOWN OF GROTON
 GROTON DEFENSE ACCESS HWY.
 NORTHBOUND ROADWAY OVER
 N.Y. N.H. & H. R.R.
 STA. 91+76.90
GENERAL PLAN

DESIGNED BY W.R.P.

SCALES As noted

MADE BY wd DATE 4-20-64

CHECKED BY W.R.P. DATE 4/23/64

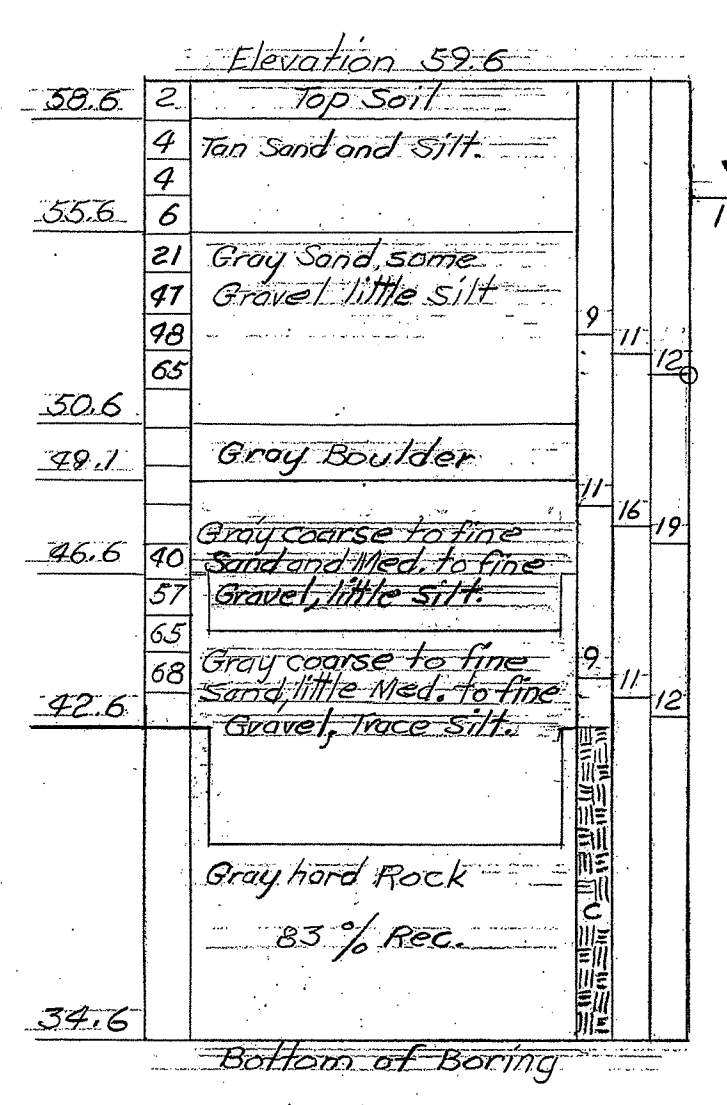
APPROVED E. J. Rooney DATE 5/7/64

PROJECT NO. 58-117-03A

BRIDGE SHEET NO. 1 OF 9

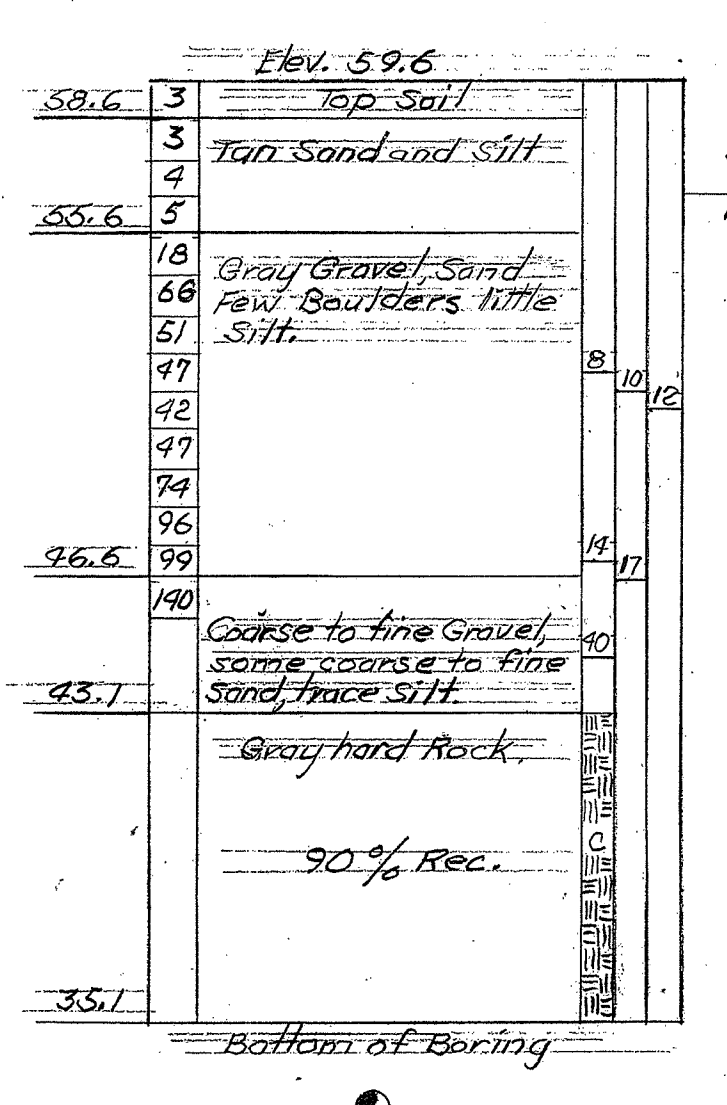
PUB. ROAD DIV. NO.	STATE	TOWN	FED. AID PROJ. NO.	PROJ. NO.	YEAR	ROUTE NO.	SHEET NO.	TOTAL SHEETS
1	CONN.	Groton	50-143(A)	58-117	1964	649	87	235

HOLE 9
STA. 91+59
OFFSET 16' LT.



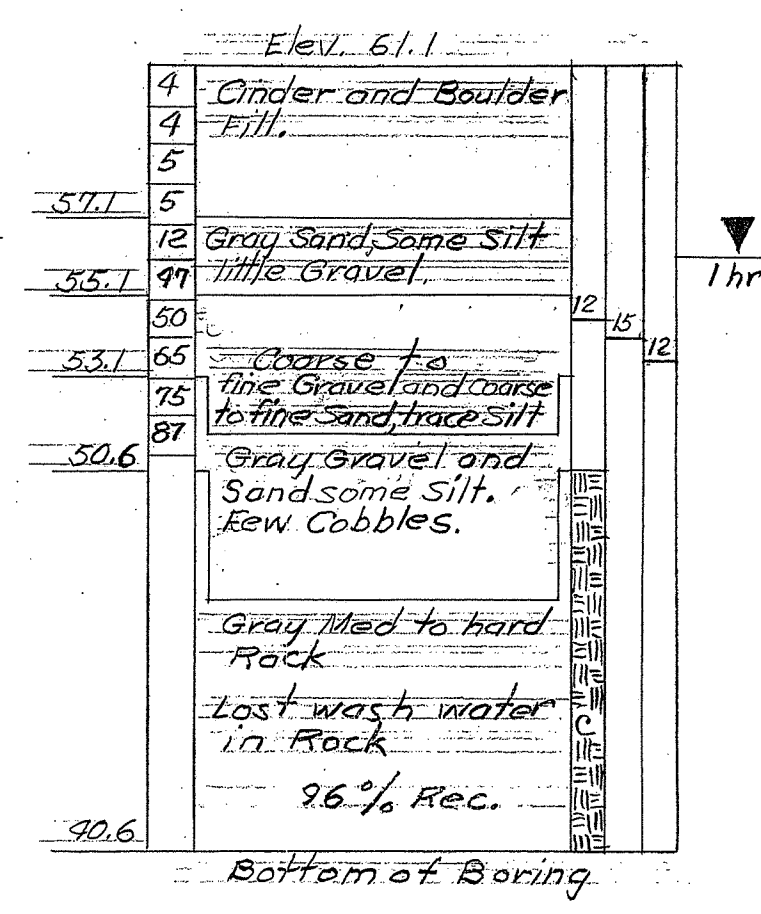
Ground surface to 17' used 2 1/2" casing

HOLE 10
STA. 91+52
OFFSET 34' RT.



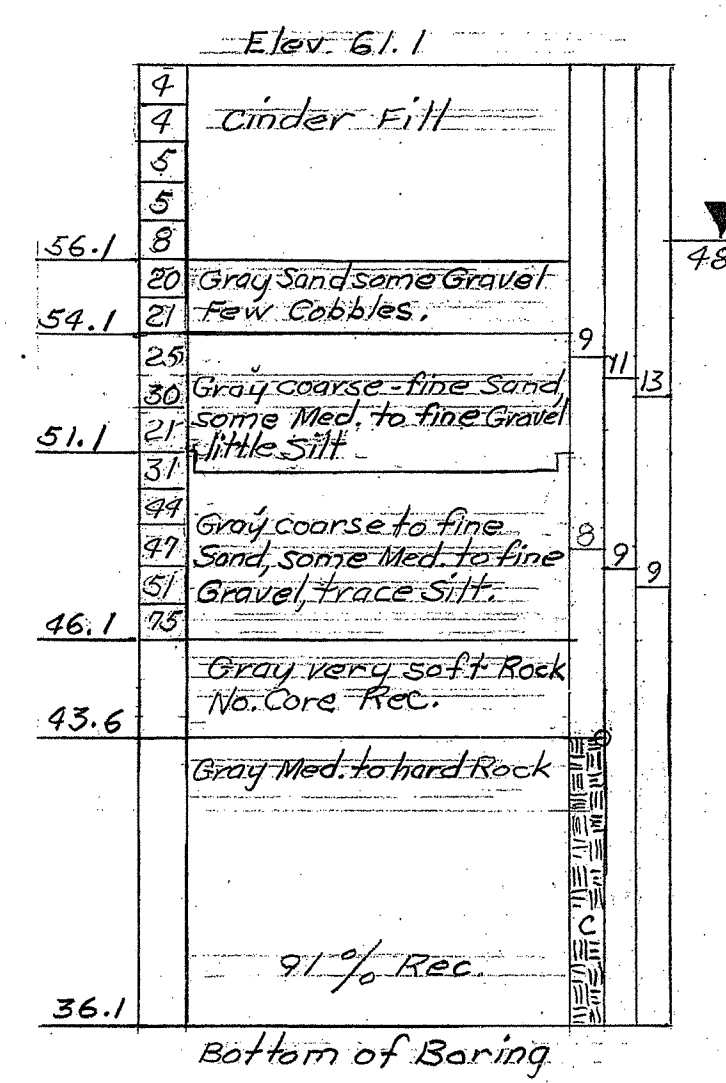
Ground surface to 16 1/2' used 2 1/2" casing

HOLE 11
STA. 91+96
OFFSET 17' LT.



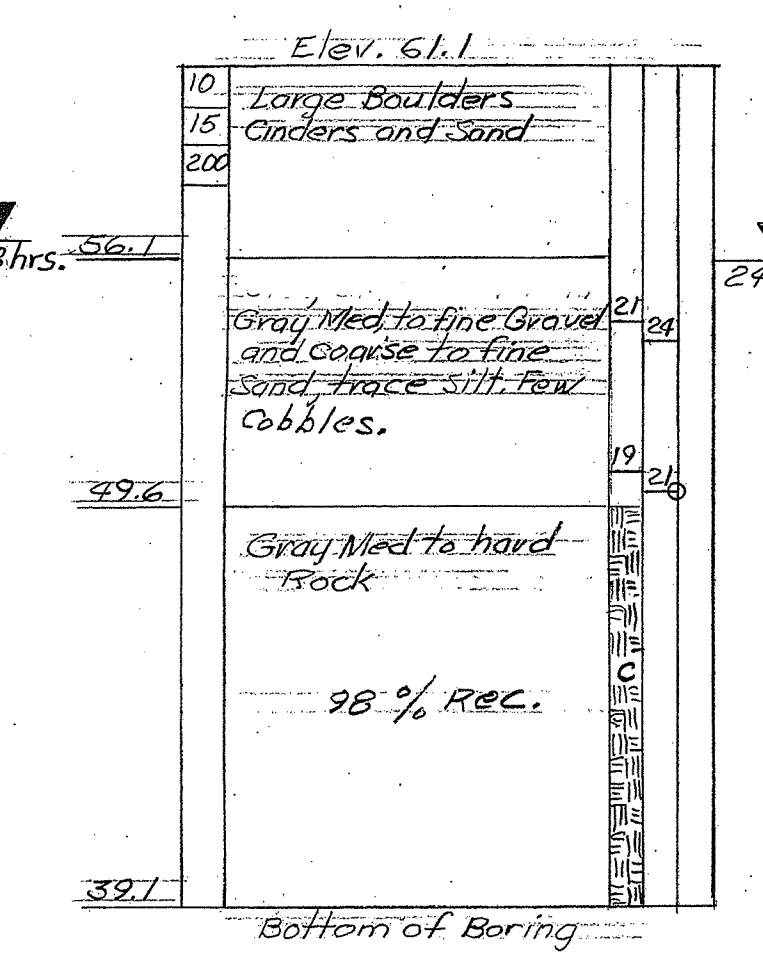
Ground surface to 10 1/2' used 2 1/2" casing

HOLE 12
STA. 91+90
OFFSET 35' RT.



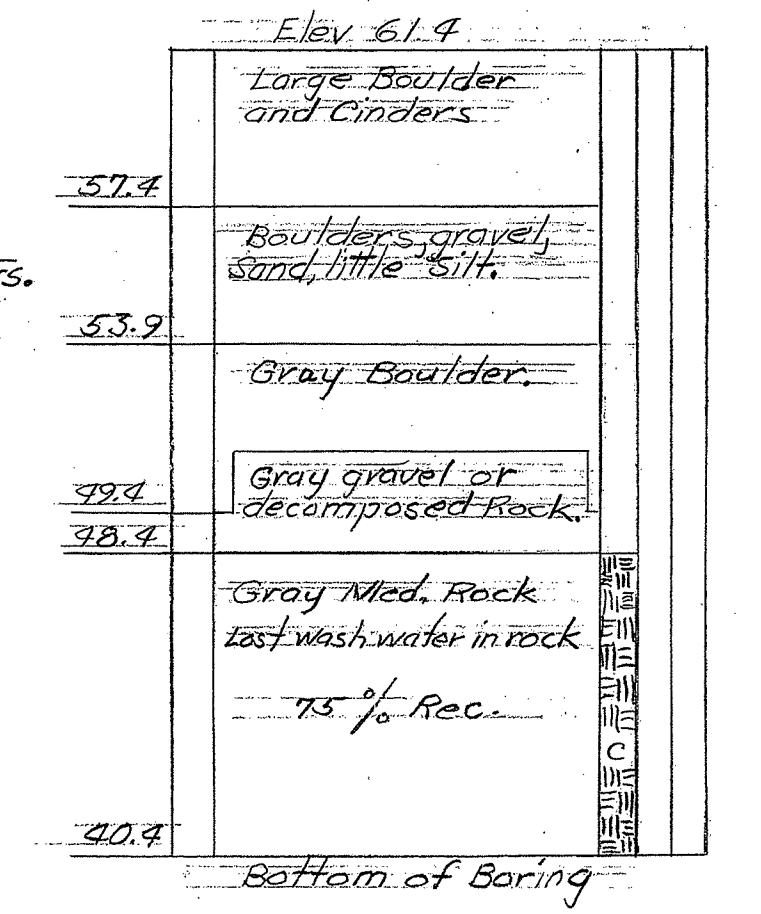
Ground surface to 15' used 2 1/2" casing

HOLE 13
STA. 92+75
OFFSET 17' LT.



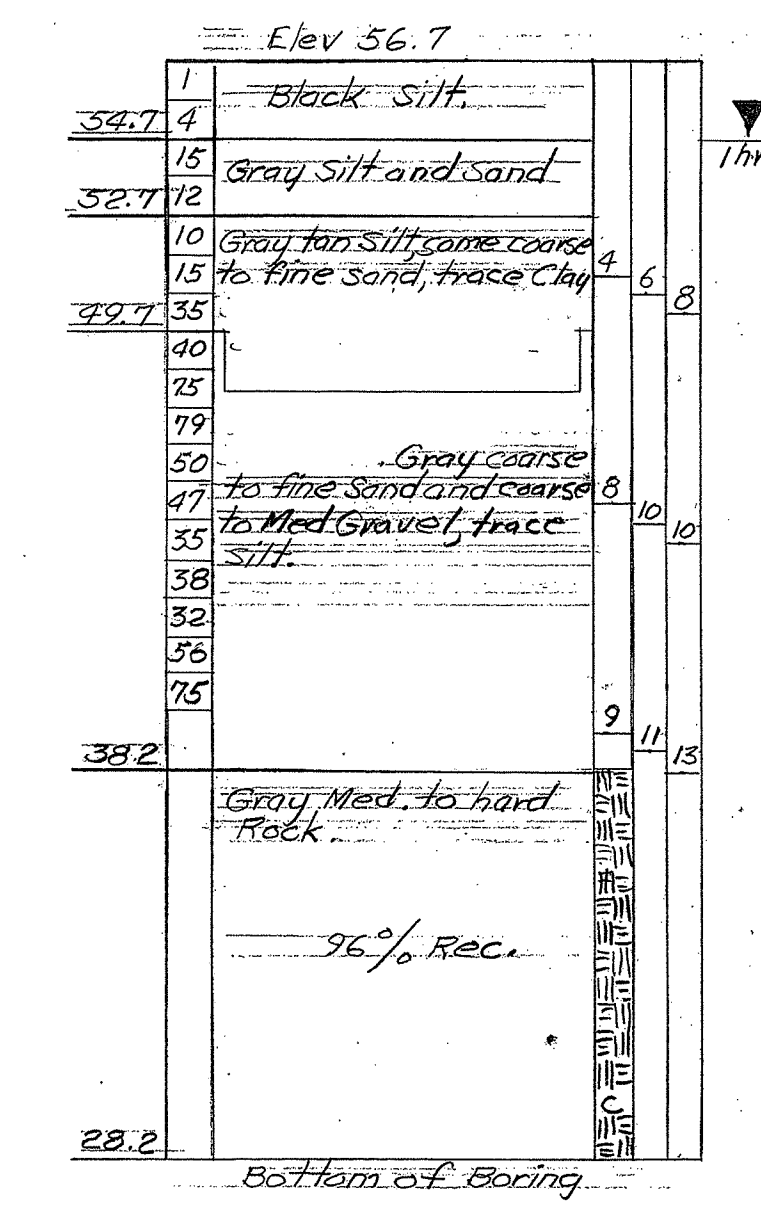
Ground surface to 11 1/2' used 2 1/2" casing

HOLE 14
STA. 92+72
OFFSET 35' RT.



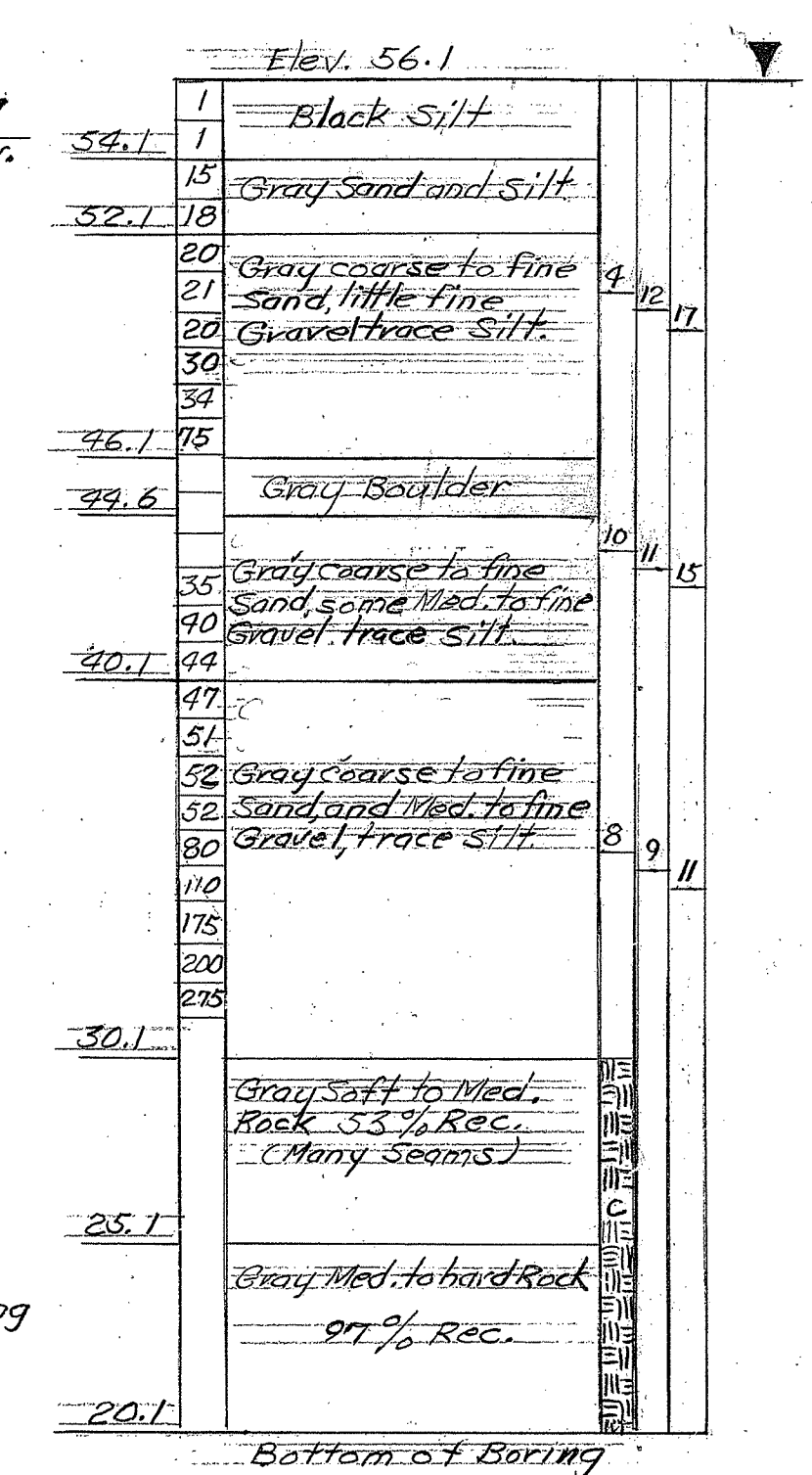
Ground surface to 1 1/2' used 2 1/2" casing

HOLE 15
STA. 93+22
OFFSET 17' LT.

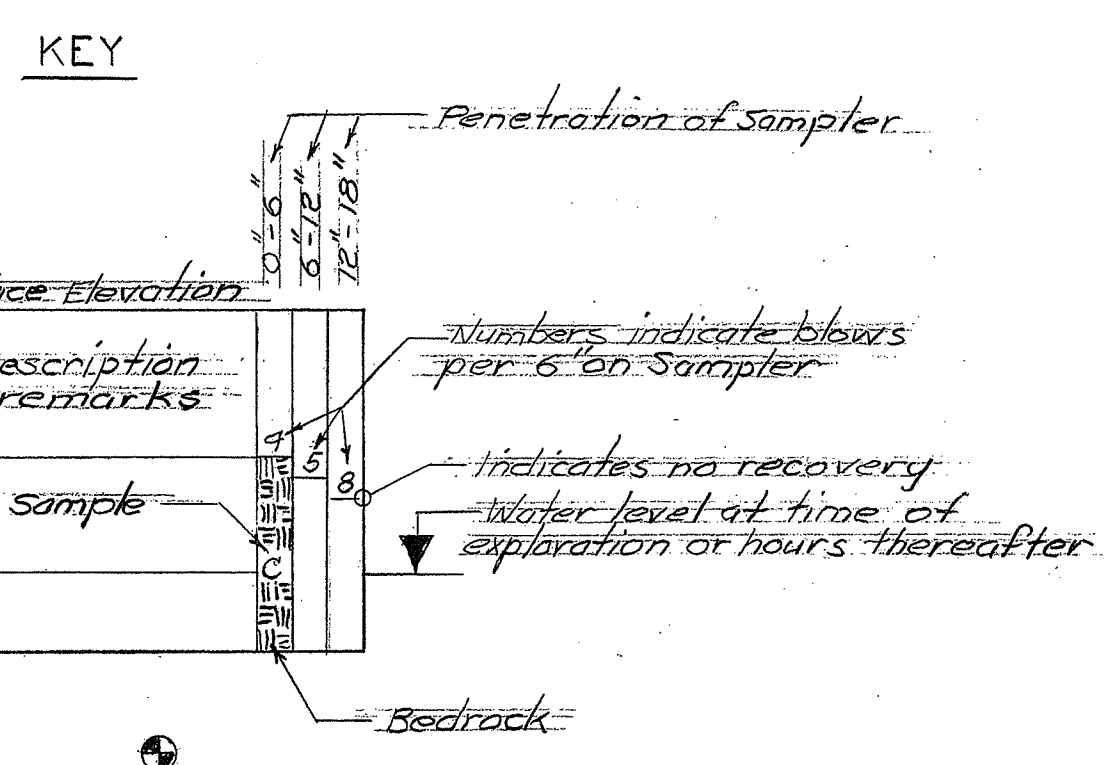


Ground surface to 18 1/2' used 2 1/2" casing

HOLE 16
STA. 93+21
OFFSET 35' RT.

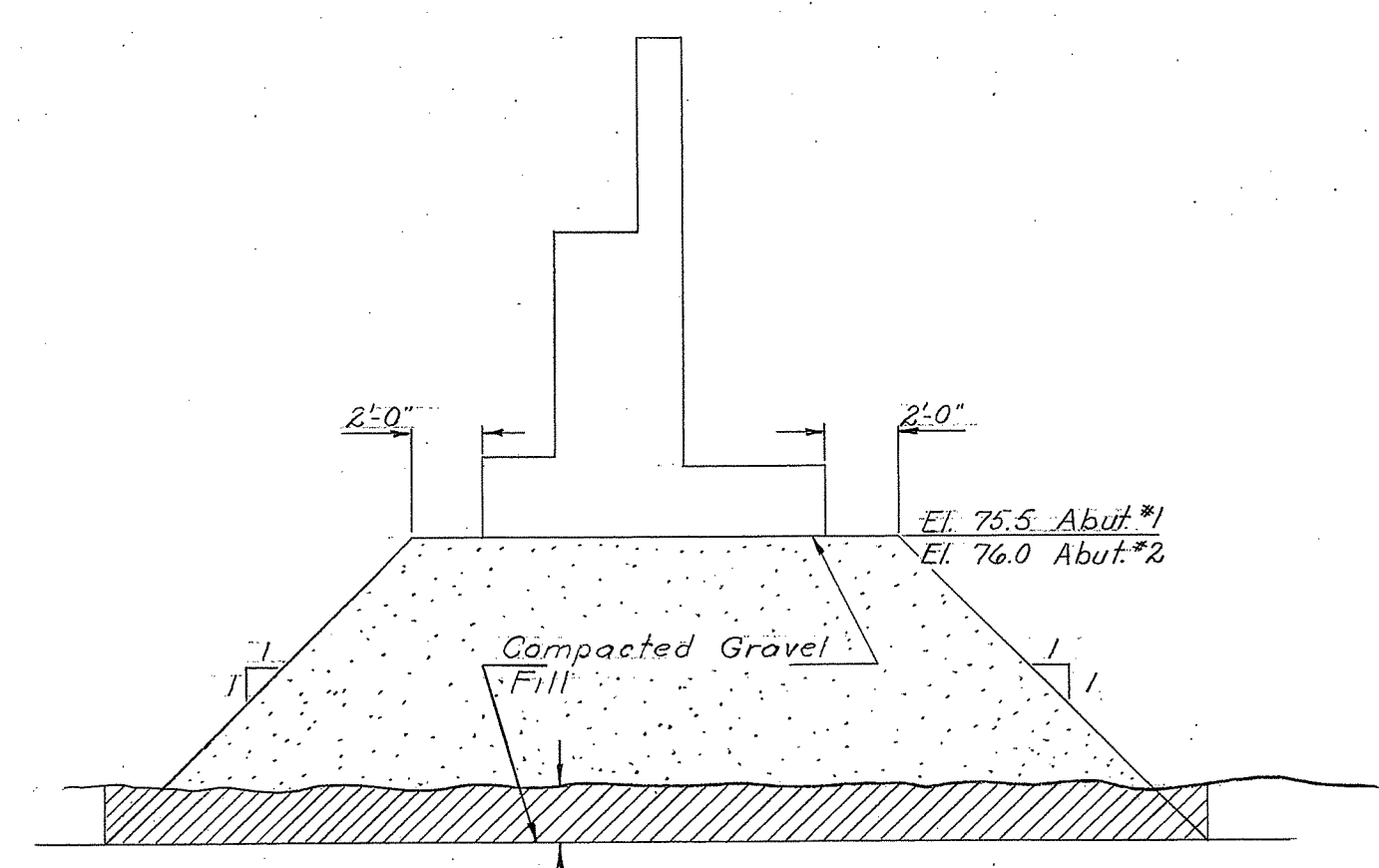


Ground surface to 26' used 2 1/2" casing



Type	Size T.D.	Hammer Wt.	Hammer Fall
Casing	2 1/2"	300#	24"
Sampler	1 3/8"	300#	14"
Core Bar	1 3/8"	8#	Diamond

Abbreviations
Rec. Recovery
Med. Medium



COMPACTED GRAVEL FILL & STRUCTURE EXCAVATION LIMITS
Scale 3/4" = 1'-0"

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REVISIONS		
NO.	DATE	DESCRIPTION

CONNECTICUT STATE HIGHWAY DEPARTMENT

TOWN OF GROTON
GROTON DEFENSE ACCESS HWY.
NORTHBOUND ROADWAY OVER
N.Y. N.H. & H.R.R.
STA. 91+76.90
BORINGS

DESIGNED BY <u>W.R.P.</u>	PROJECT NO. <u>58-117-235A</u>
MADE BY <u>E.G.M.</u>	DATE <u>4/20/64</u>
CHECKED BY <u>R.A.C.</u>	DATE <u>4/21/64</u>
APPROVED <u>E.J. Keeney</u>	DATE <u>5/4/64</u>

BRIDGE SHEET NO. 2 OF 2

NORTHBOUND ROADWAY COORDINATES

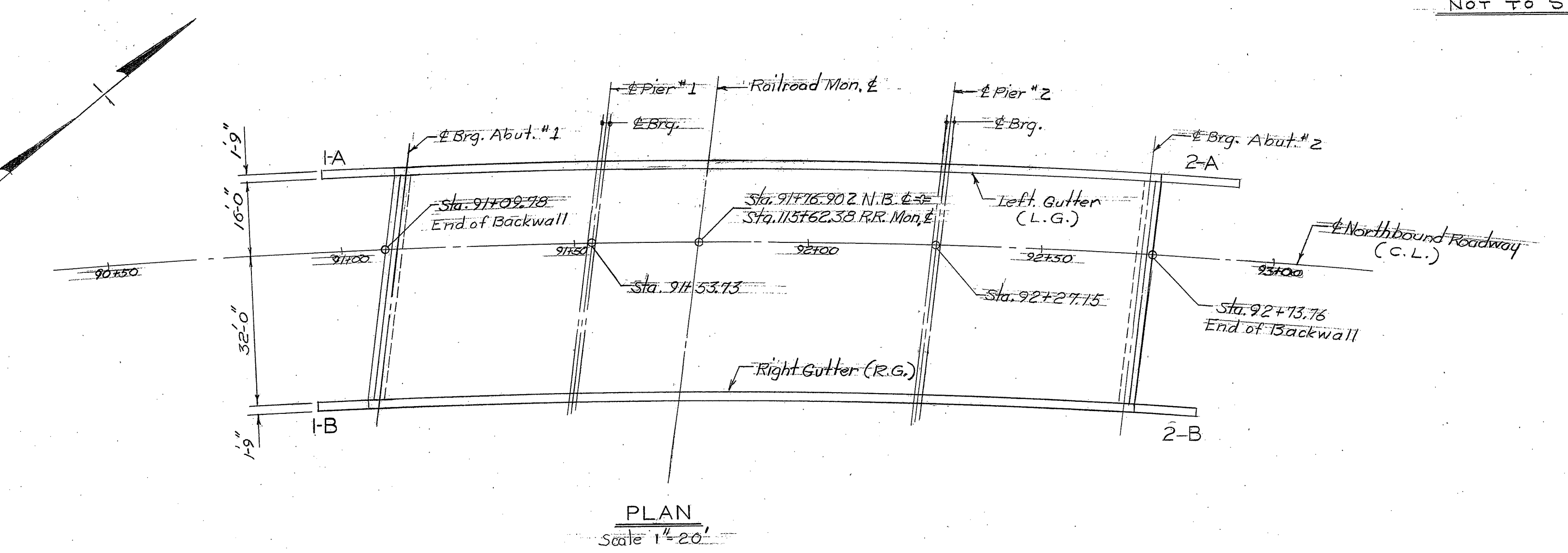
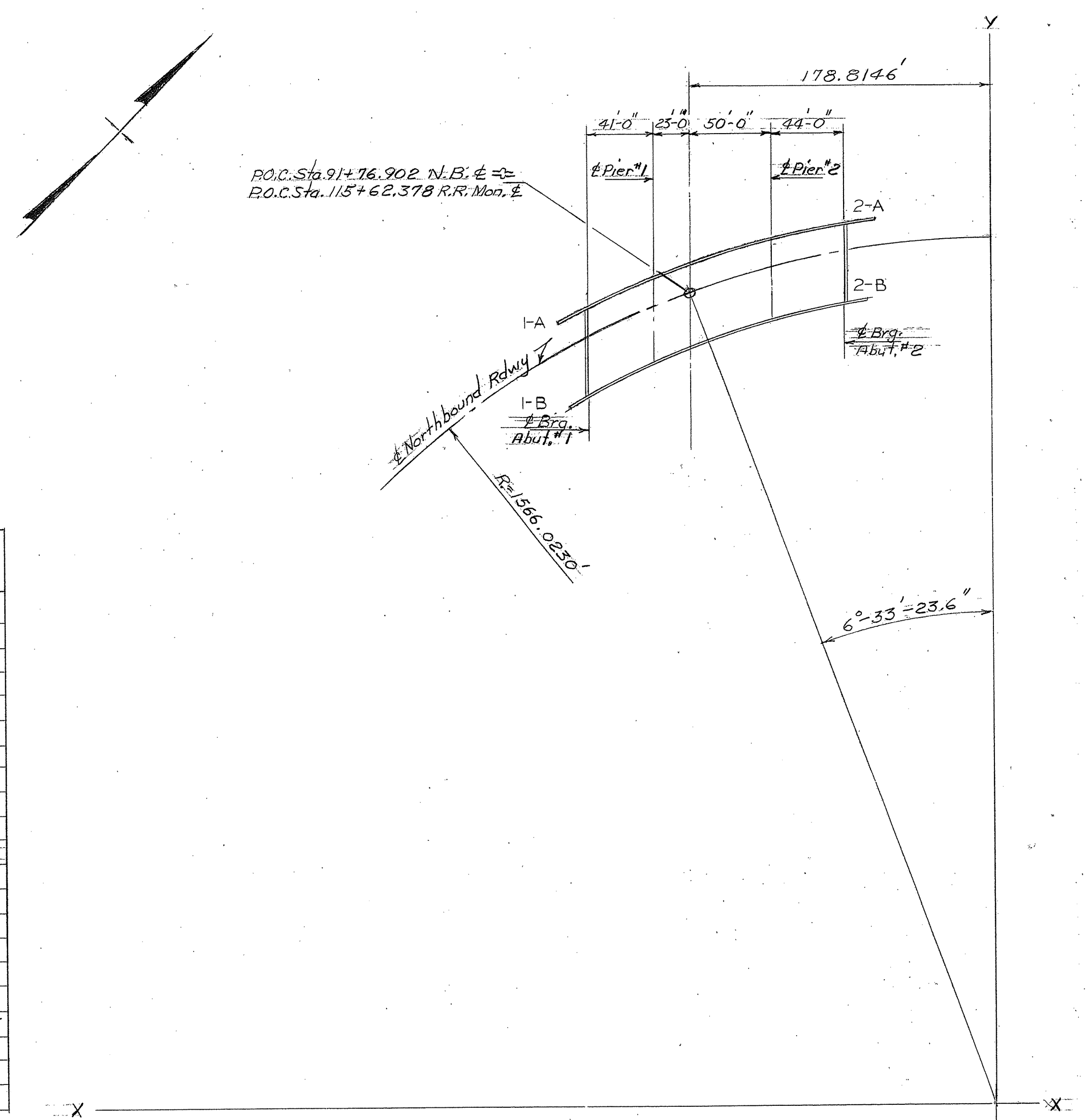
LOCATION	STATION	ELEVATION	Y-Y AXIS	X-X AXIS
L.G. End Wing 1A	90+96.75	90.138	1560.3758	260.8146
End Backwall Abut.#1	91+12.29	90.311	1562.8875	245.3146
End Pier #1	91+55.79	90.735	1569.0977	201.8146
End Pier #2	92+28.45	91.235	1576.1700	128.8146
End Backwall Abut.#2	92+74.59	91.918	1579.8801	82.3146
L.G. End Wing 2A	92+91.44	91.439	1580.6742	65.3146
C.L. End Backwall Abut.#1	91+09.78	89.284	1546.6896	245.3146
End Slab Abut.#1	91+11.17	89.299	1546.9071	243.9396
End Brq. Abut.#1	91+12.31	89.312	1547.0841	242.8146
End Pier #1	91+53.73	89.717	1552.9645	201.8146
End N.B. Rdwy. & R.R.	91+76.90	89.907	1556.7806	178.8146
End Pier #2	92+27.15	90.228	1560.7161	128.8146
End Brq. Abut.#2	92+71.25	90.909	1563.7246	84.8146
End Slab Abut.#2	92+72.38	90.412	1563.7852	83.6896
C.L. End Backwall Abut.#2	92+73.76	90.416	1563.8582	82.3146
R.G. End Wing 1B	90+93.21	87.097	1512.4581	256.3146
End Backwall Abut.#1	91+04.60	87.227	1514.2811	245.3146
End Pier #1	91+49.48	87.679	1520.6898	201.8146
End Pier #2	92+24.45	88.214	1528.8050	128.8146
End Backwall Abut.#2	92+72.04	88.471	1531.8129	82.3146
R.G. End Wing 2B	92+85.32	88.446	1532.4562	69.3146
AI-1 End Brq. Abut.#1	91+14.72	90.306	1562.7684	242.8146
AI-1 End Brq. Pier #1	91+54.98	90.706	1568.6518	202.5757
PI-1 End Brq. Pier #1	91+56.52	90.719	1568.8450	201.0349
PI-1 End Brq. Pier #2	92+27.65	91.208	1576.3449	129.5943
P2-1 End Brq. Pier #2	92+29.19	91.217	1576.4807	128.0426
P2-1 End Brq. Abut.#2	92+72.10	91.326	1579.5003	84.8146
AI-6 End Brq. Abut.#1	91+07.26	87.288	1515.1920	242.8146
AI-6 End Brq. Pier #1	91+48.77	87.703	1521.0754	202.5757
PI-8 End Brq. Pier #1	91+50.35	87.716	1521.2686	201.0349
PI-8 End Brq. Pier #2	92+23.67	88.224	1528.7685	129.5943
P2-6 End Brq. Pier #2	92+25.26	88.233	1528.9043	128.0426
P2-6 End Brq. Abut.#2	92+69.49	88.479	1531.9239	84.8146
L.G.1	90+90.00	90.059		
L.G.2	91+05.00	90.232		
L.G.3	91+20.00	90.393		
L.G.4	91+35.00	90.544		
L.G.5	91+50.00	90.684		
L.G.6	91+65.00	90.813		
L.G.7	91+80.00	90.930		
L.G.8	91+95.00	91.037		
L.G.9	92+10.00	91.133		
L.G.10	92+25.00	91.217		
L.G.11	92+40.00	91.291		
L.G.12	92+55.00	91.354		
L.G.13	92+70.00	91.405		
L.G.14	92+85.00	91.446		
L.G.15	93+00.00	91.475		
C.L.1	90+90.00	89.059		
C.L.2	91+05.00	89.232		
C.L.3	91+20.00	89.393		
C.L.4	91+35.00	89.544		
C.L.5	91+50.00	89.684		
C.L.6	91+65.00	89.813		
C.L.7	91+80.00	89.930		
C.L.8	91+95.00	90.037		
C.L.9	92+10.00	90.133		
C.L.10	92+25.00	90.162		
C.L.11	92+40.00	90.291		
C.L.12	92+55.00	90.354		
C.L.13	92+70.00	90.405		
C.L.14	92+85.00	90.446		
C.L.15	93+00.00	90.475		

NORTHBOUND ROADWAY COORDINATES

LOCATION	STATION	ELEVATION
R.G.1	90+90.00	87.059
R.G.2	91+05.00	87.232
R.G.3	91+20.00	87.393
R.G.4	91+35.00	87.544
R.G.5	91+50.00	87.684
R.G.6	91+65.00	87.813
R.G.7	91+80.00	87.930
R.G.8	91+95.00	88.037
R.G.9	92+10.00	88.133
R.G.10	92+25.00	88.217
R.G.11	92+40.00	88.291
R.G.12	92+55.00	88.354
R.G.13	92+70.00	88.405
R.G.14	92+85.00	88.446
R.G.15	93+00.00	88.475

**SLAB ELEVATIONS ALONG E OF BEAM
- WITH INCREASING STATIONING -**

BEAM	CL BRG.	1 ₈ SPAN	2 ₈ SPAN	3 ₈ SPAN	4 ₈ SPAN	5 ₈ SPAN	6 ₈ SPAN	7 ₈ SPAN	CL BRG.
AI-1	90.306		90.407		90.508		90.607		90.706
AI-2	89.703		89.805		89.906		90.006		90.106
AI-3	89.099		89.202		89.304		89.405		89.505
AI-4	88.496		88.600		88.702		88.804		88.905
AI-5	87.892		87.997		88.100		88.202		88.304
AI-6	87.288		87.393		87.498		87.601		87.703
PI-1	90.719	90.783	90.846	90.908	90.969	91.030	91.090	91.150	91.208
PI-2	90.290	90.354	90.418	90.480	90.542	90.603	90.664	90.723	90.782
PI-3	89.862	89.926	89.990	90.052	90.114	90.176	90.237	90.297	90.356
PI-4	89.433	89.497	89.561	89.625	89.687	89.749	89.810	89.870	89.930
PI-5	89.004	89.069	89.133	89.197	89.260	89.322	89.383	89.444	89.504
PI-6	88.575	88.640	88.705	88.769	88.832	88.895	88.956	89.017	89.077
PI-7	88.146	88.211	88.277	88.341	88.405	88.467	88.529	88.590	88.651
PI-8	87.716	87.783	87.848	87.913	87.977	88.040	88.102	88.164	88.224
P2-1	91.217		91.263		91.308		91.353		91.396
P2-2	90.620		90.667		90.712		90.757		90.800
P2-3	90.024		90.071		90.117		90.161		90.205
P2-4	89.427		89.474		89.521		89.566		89.610
P2-5	88.830		88.878		88.924		88.970		89.014
P2-6	88.233		88.282		88.328		88.374		88.419



**CONNECTICUT
STATE HIGHWAY DEPARTMENT**

TOWN OF GROTON
GROTON DEFENSE ACCESS HWY.
NORTHBOUND ROADWAY OVER
N.Y. N.H. & H.R.R.
STA. 91+76.90
COORDINATES

NO.	DATE	DESCRIPTION
Δ	7/2/65	El. 89.016 changed to 89.202, El. 88.932 to 89.304, El. 88.848 to 89.405.

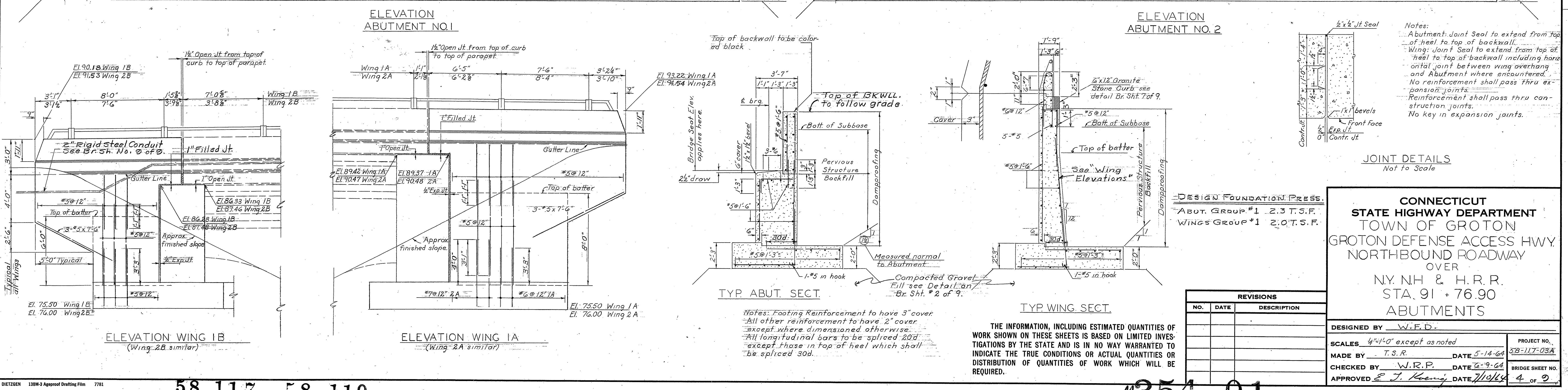
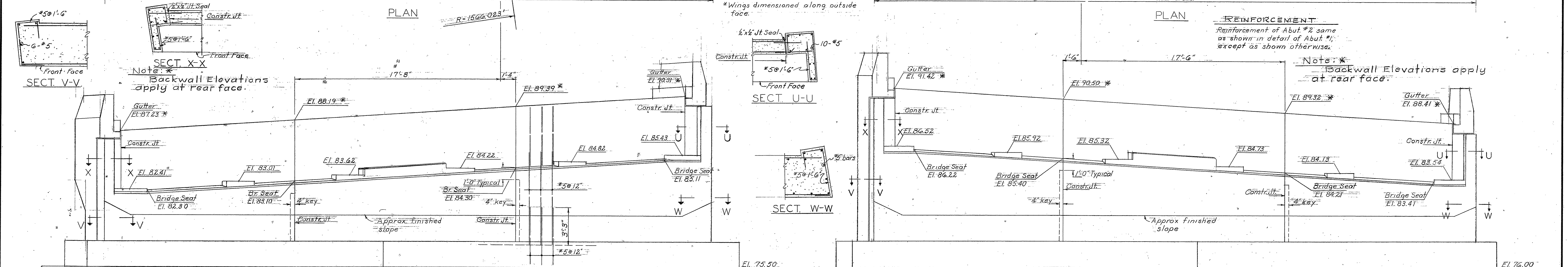
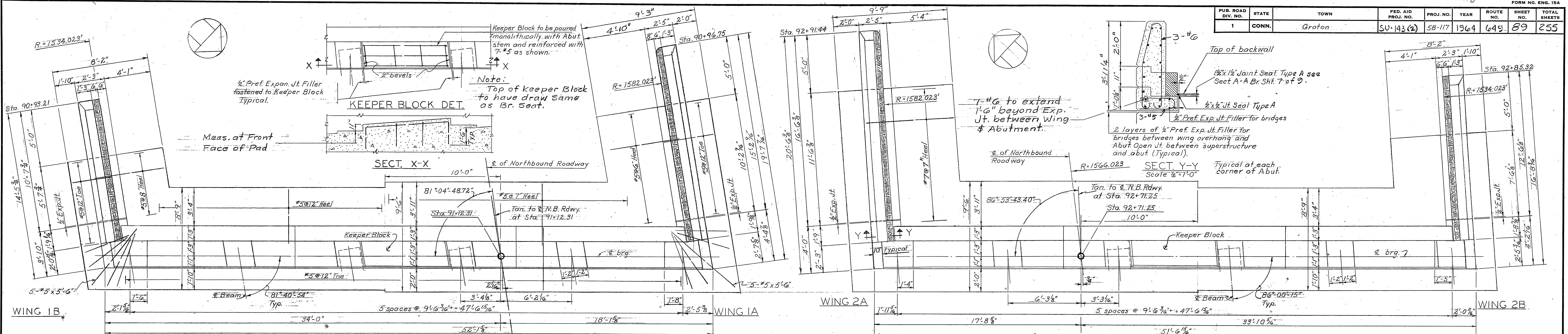
DESIGNED BY: W.R.P. PROJECT NO. 58-117-05A

SCALES: AS NOTED MADE BY: F.G.M. DATE: 6/19/64

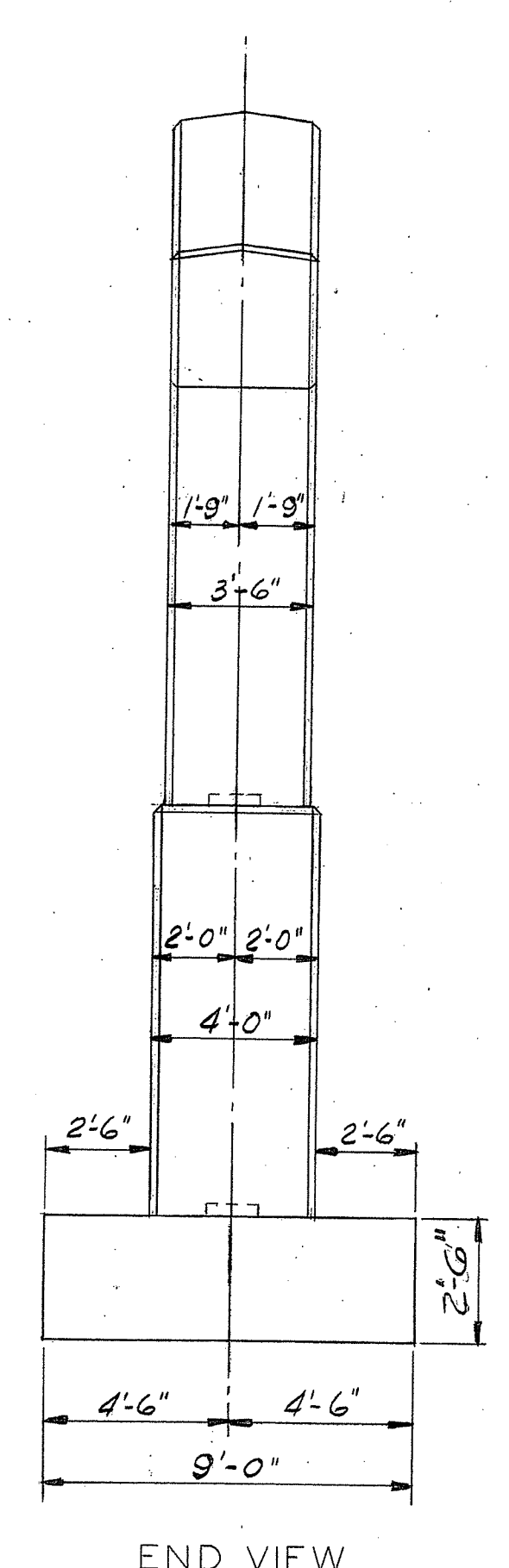
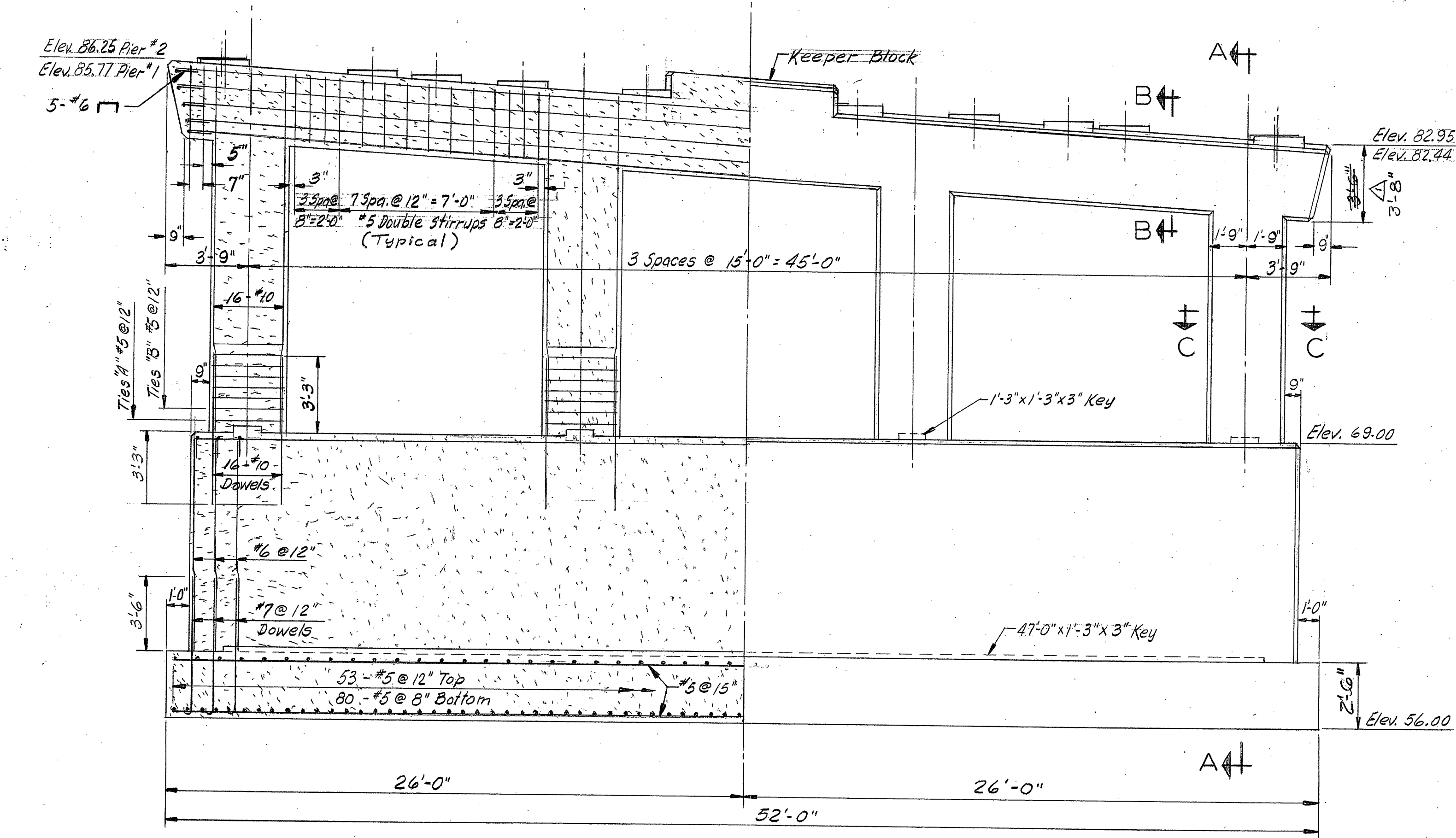
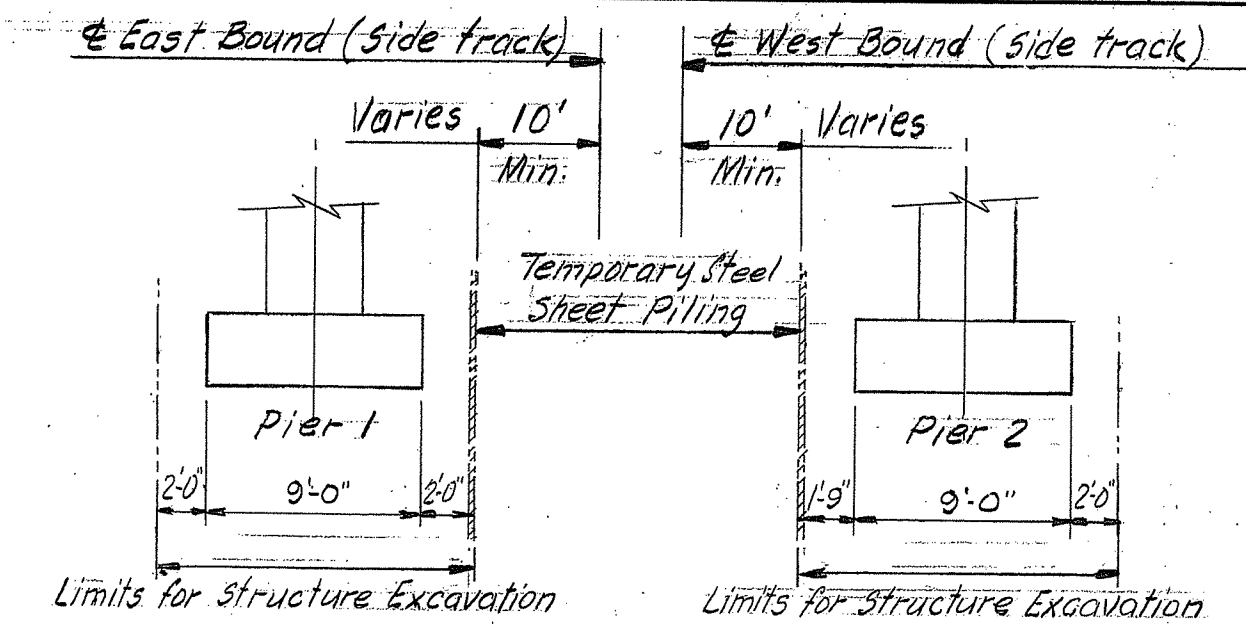
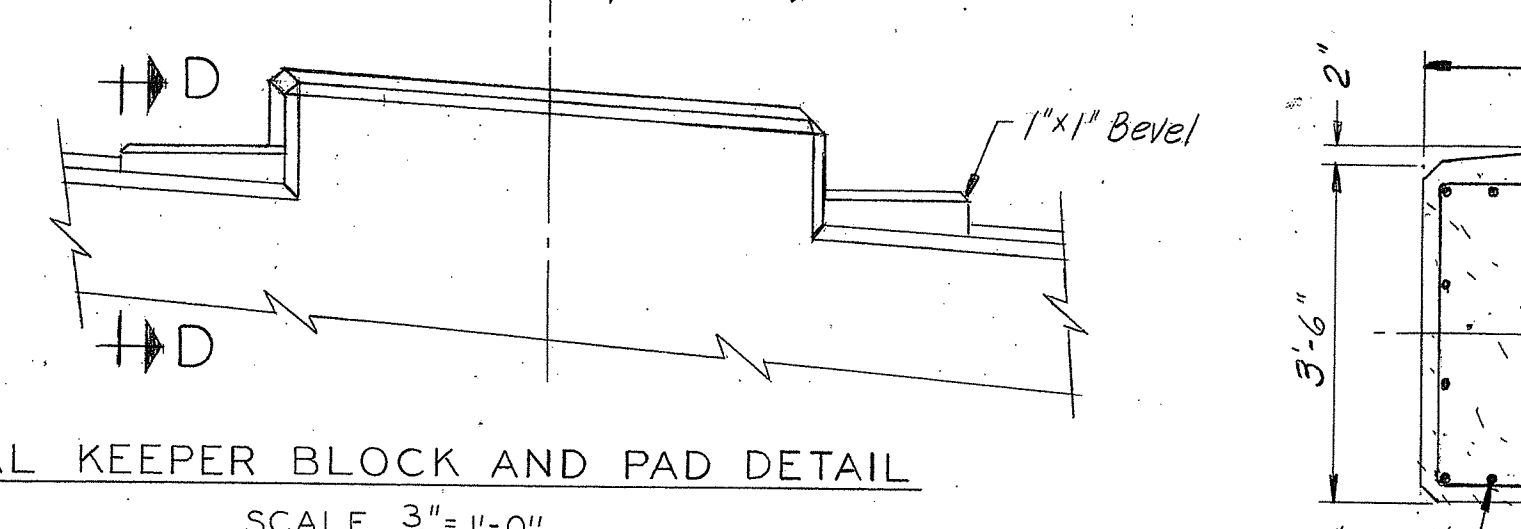
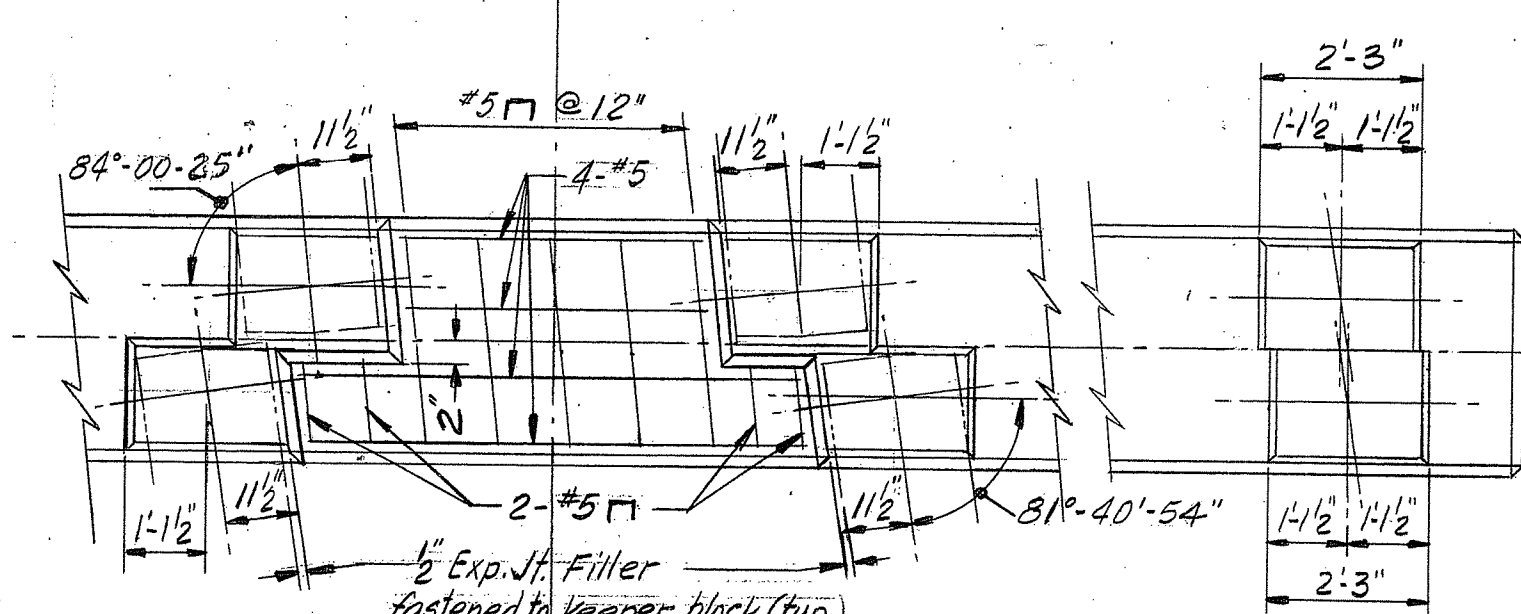
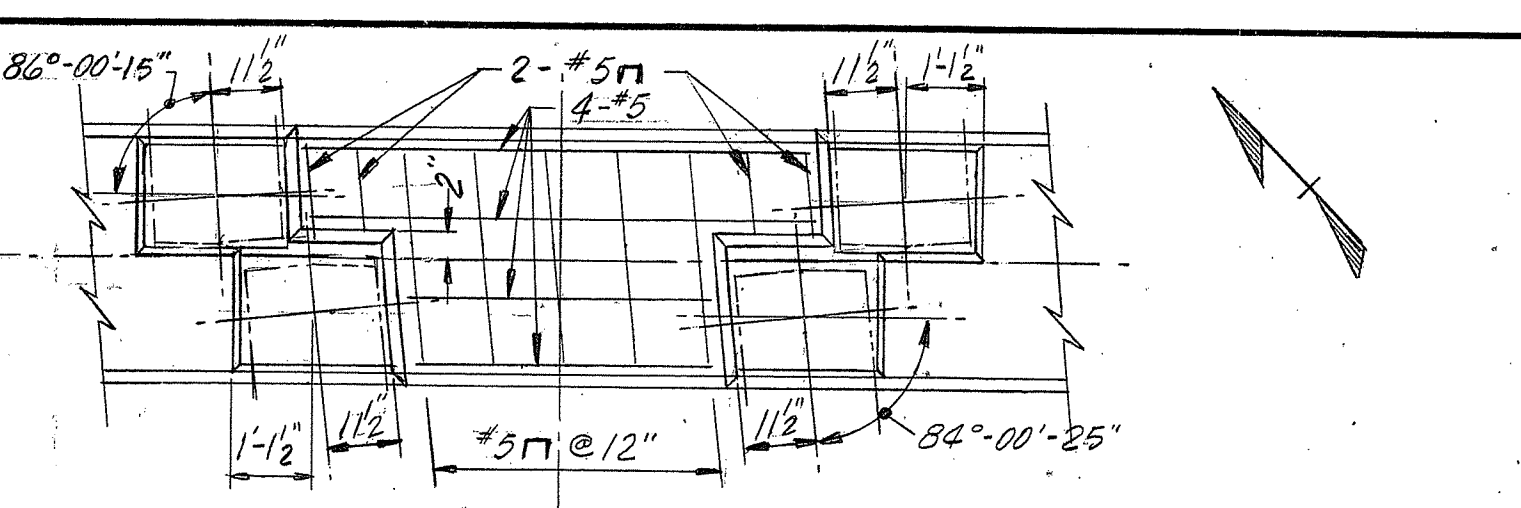
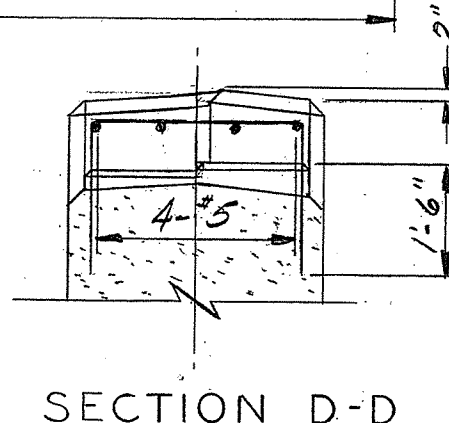
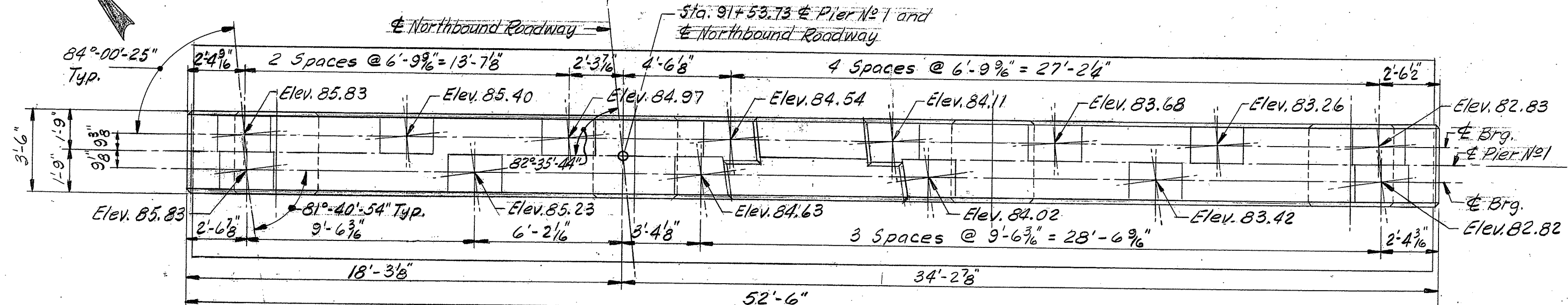
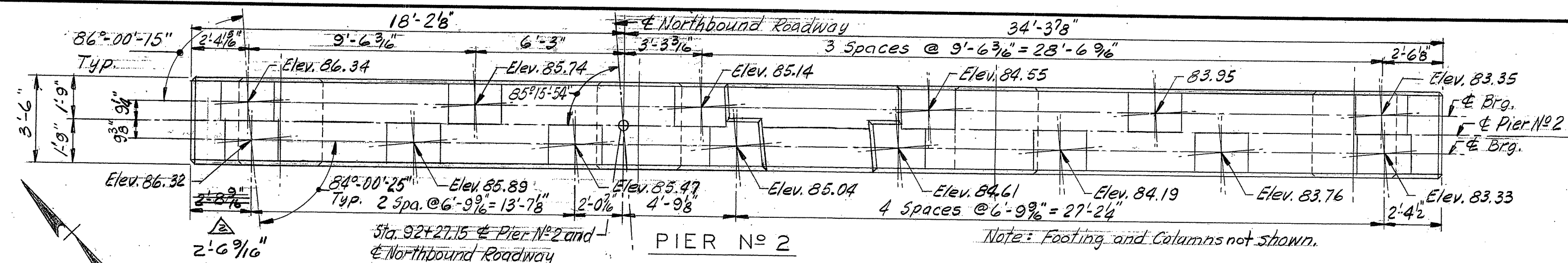
CHECKED BY: W.R.P. DATE: 7/2/64 BRIDGE SHEET NO. 3 of 9

APPROVED: P.J. Kennedy DATE: 7/14/64

PUB. ROAD DIV. NO.	STATE	TOWN	FED. AID PROJ. NO.	PROJ. NO.	YEAR	ROUTE NO.	SHEET NO.	TOTAL SHEETS
1	CONN.	Groton	SU-143(2)	58-117	1964	649	89	255

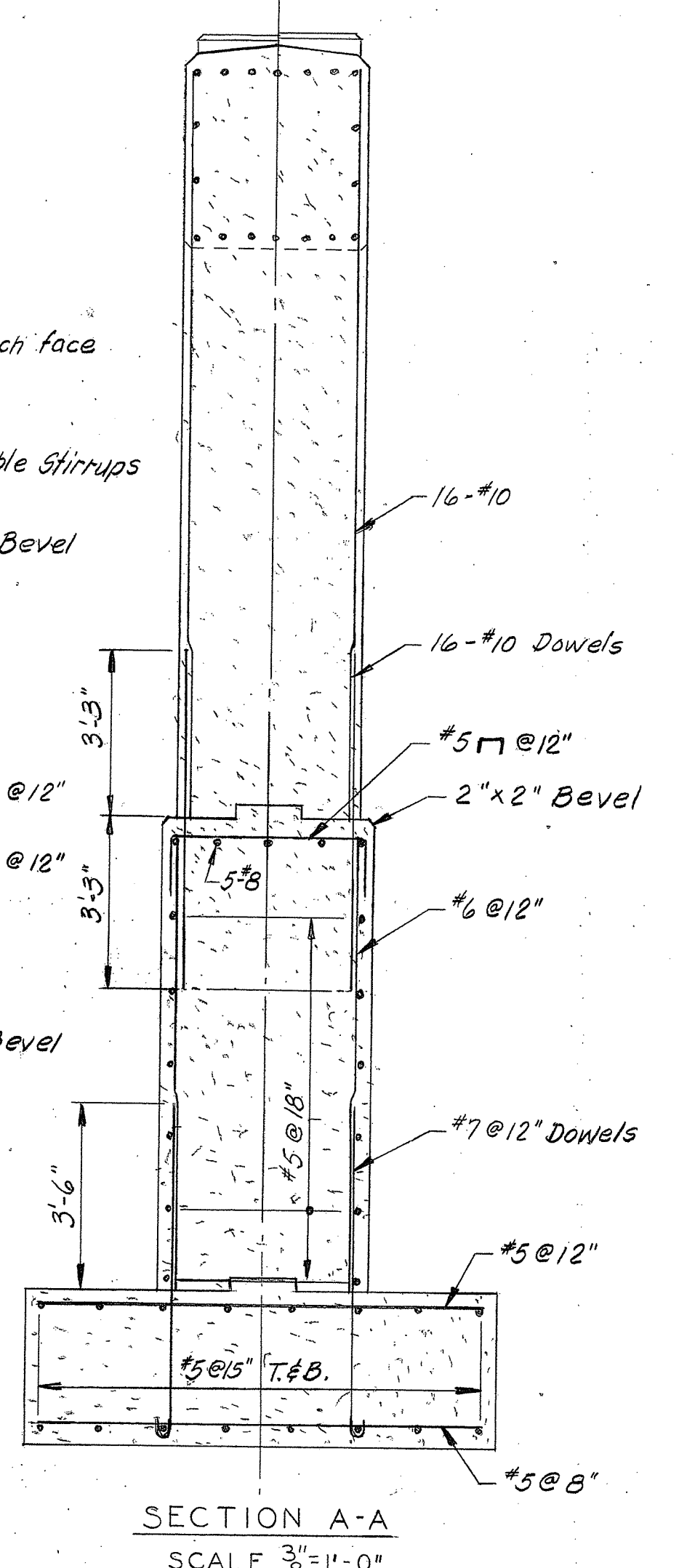


PUB. ROAD DIV. NO.	STATE	TOWN	FED. AID PROJ. NO.	PROJ. NO.	YEAR	ROUTE NO.	SHEET NO.	TOTAL SHEETS
1	CONN.	Groton	SU-141(2)	58-117	1964	649	90	255



NOTES:
 Footing reinforcement to have 3" cover.
 All other reinforcement to have 2" cover
 except where dimensioned otherwise.

Design Foundation Pressures
 Group #1 2.3 T.S.F.
 Group #3 2.8 T.S.F.

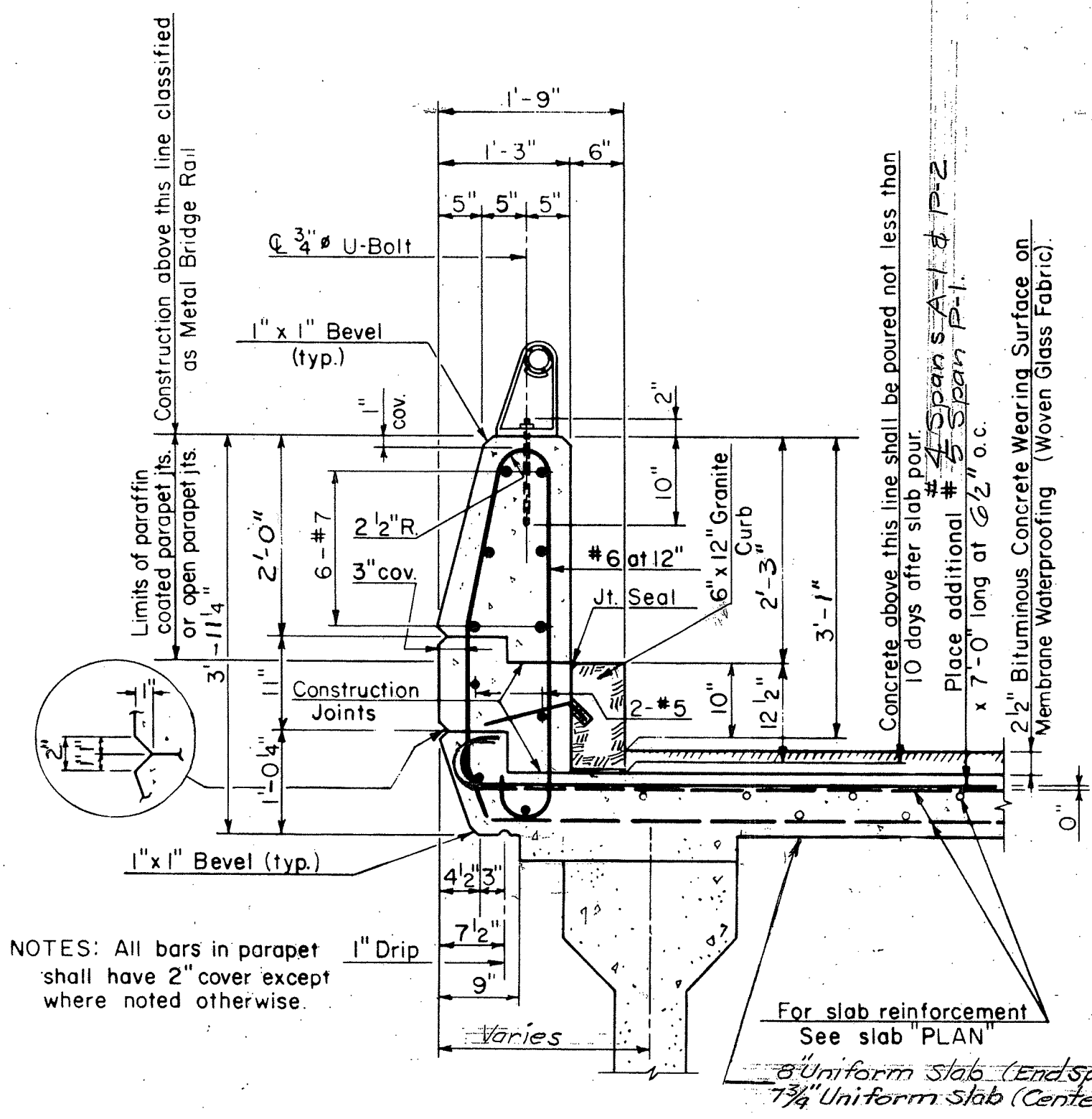


CONNECTICUT
 STATE HIGHWAY DEPARTMENT
 TOWN OF GROTON
 GROTON DEFENSE ACCESS HWY.
 NORTHBOUND ROADWAY
 OVER
 N.Y., N.H. & H.R.R.
 STA. 91 + 76.90
 PIERS 1 & 2

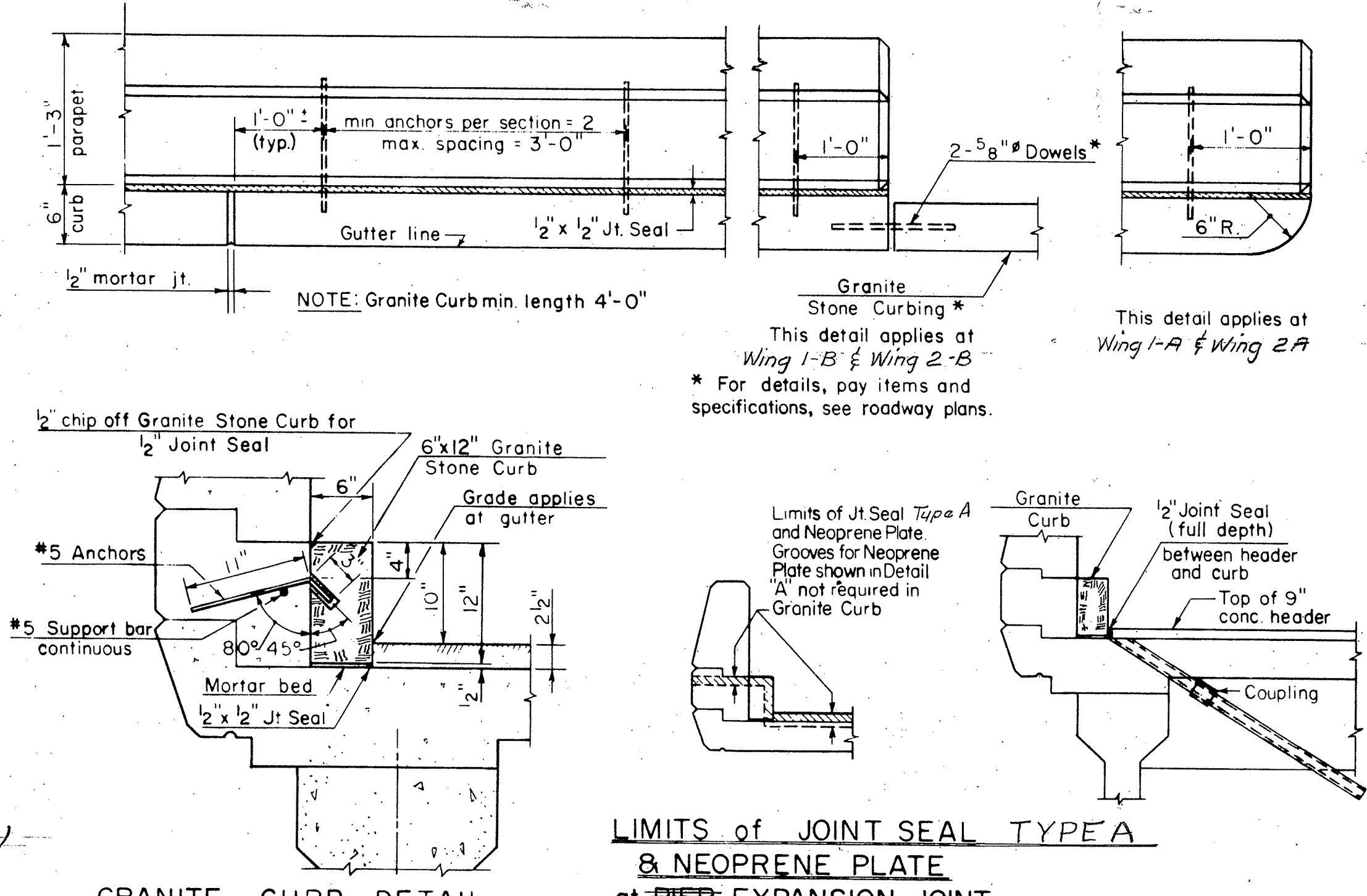
DESIGNED BY	B.N.	PROJECT NO.	58-117-03A
SCALES	As Noted	DATE	5-15-64
M.A.D.E. BY	Wd.	DATE	6-2-64
CHECKED BY	W.R.P.	DATE	7-10-64
APPROVED	E.J. Reany	DATE	7-10-64

REVISIONS		
NO.	DATE	DESCRIPTION
1	7/23/65	3'-6" changed to 3'-8"
2	7/23/65	2'-8 3/16" changed to 2'-6 3/16"

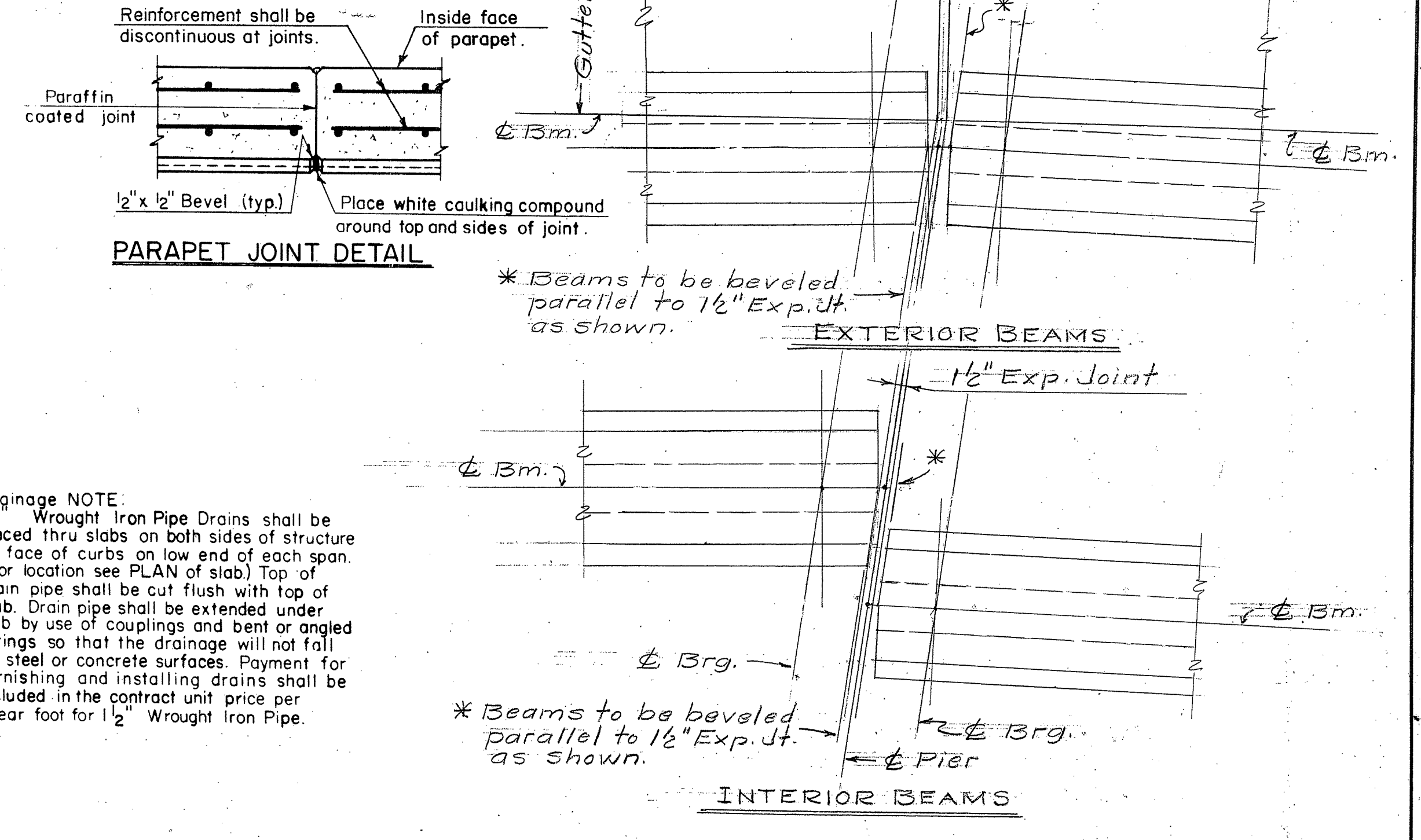
THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE TRUE CONDITIONS OR ACTUAL QUANTITIES OR DISTRIBUTION OF QUANTITIES OF WORK WHICH WILL BE REQUIRED.



PARAPET and BRUSH CURB DETAIL

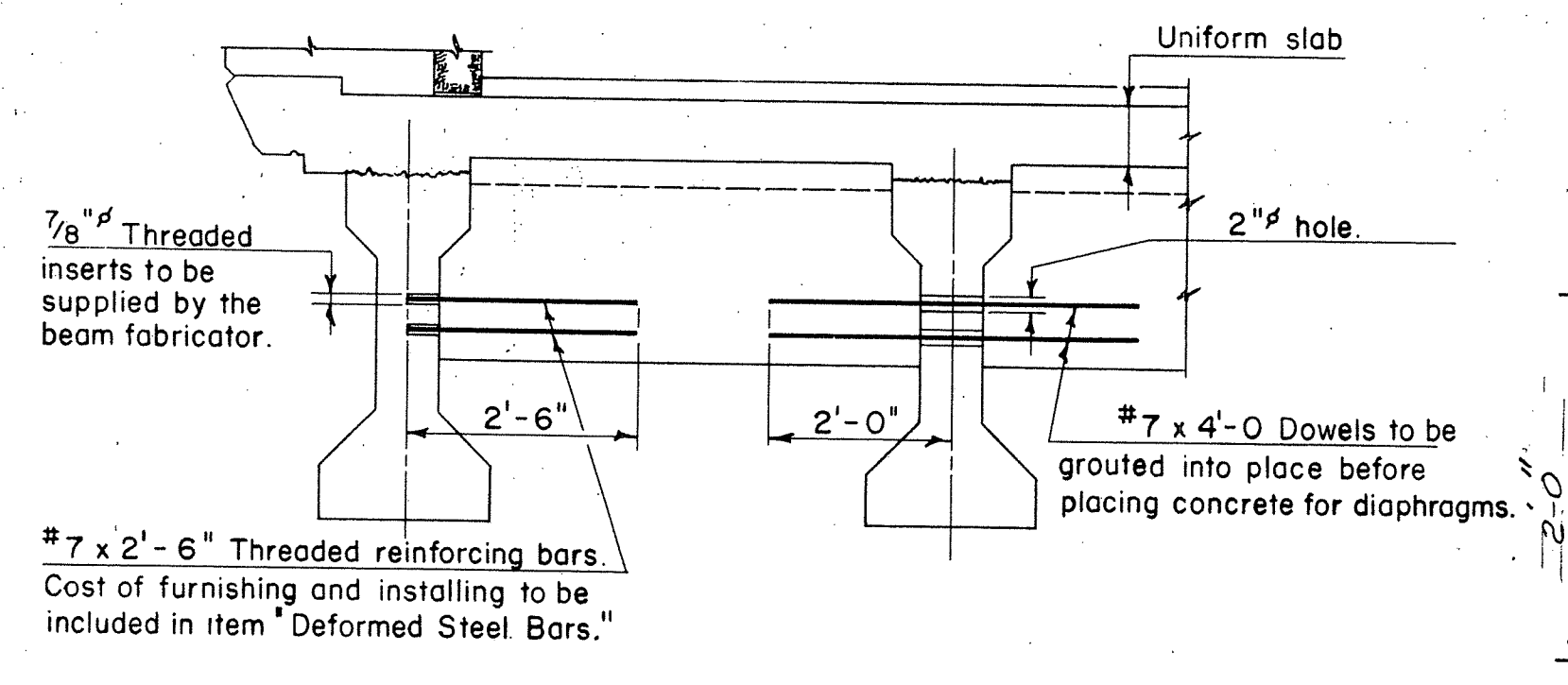


GRANITE CURB DETAIL

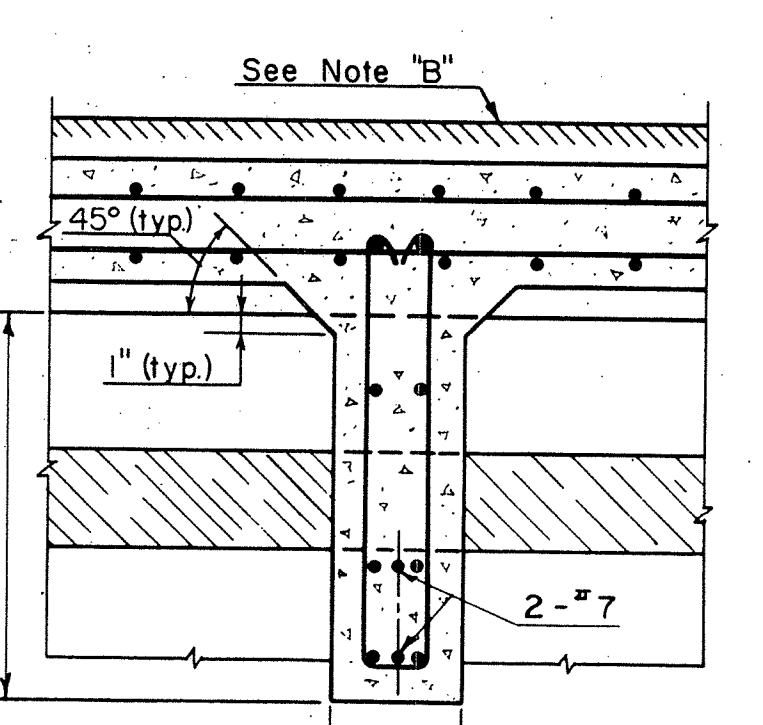


DRAINAGE DETAIL

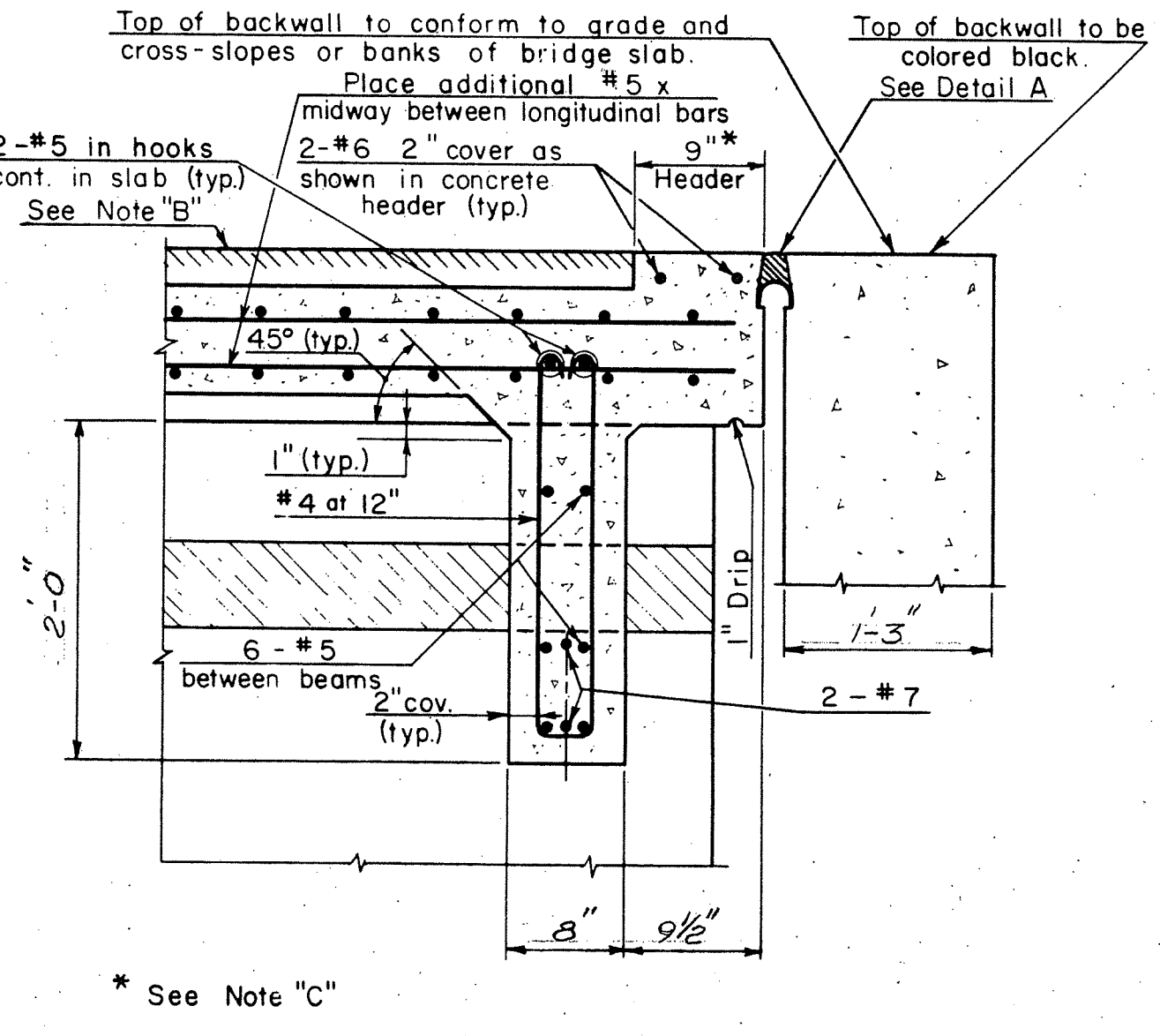
TYP. DETAIL - BEAMS AT PIER.



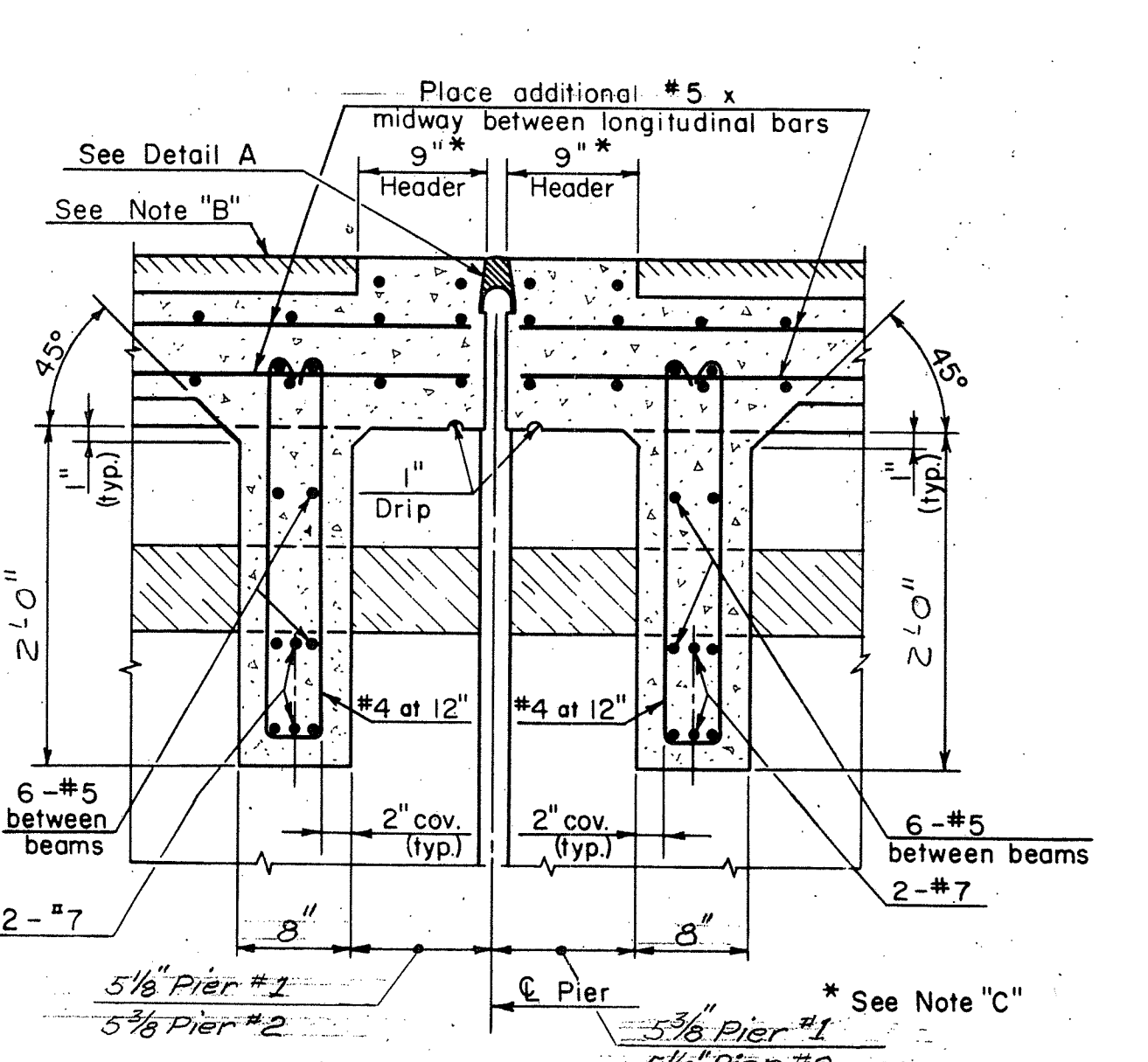
SECTION THRU DIAPHRAGMS



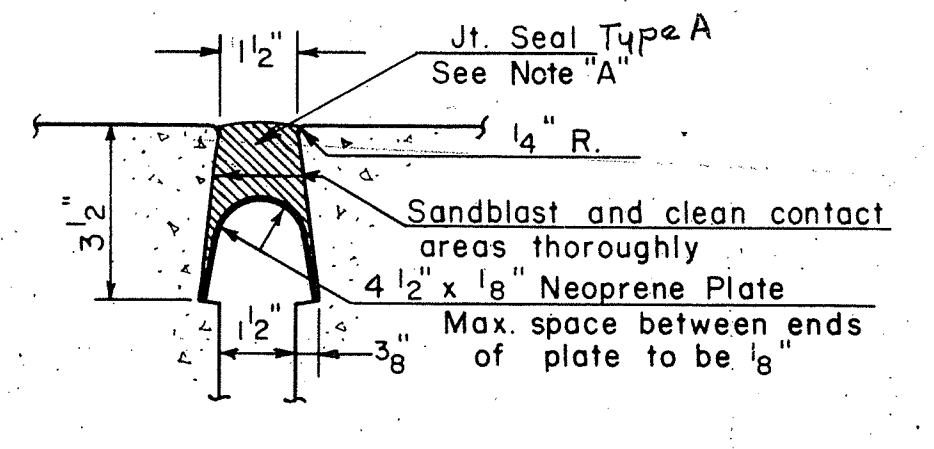
SECTION - C-C



SECTION - A-A



SECTION - B-B

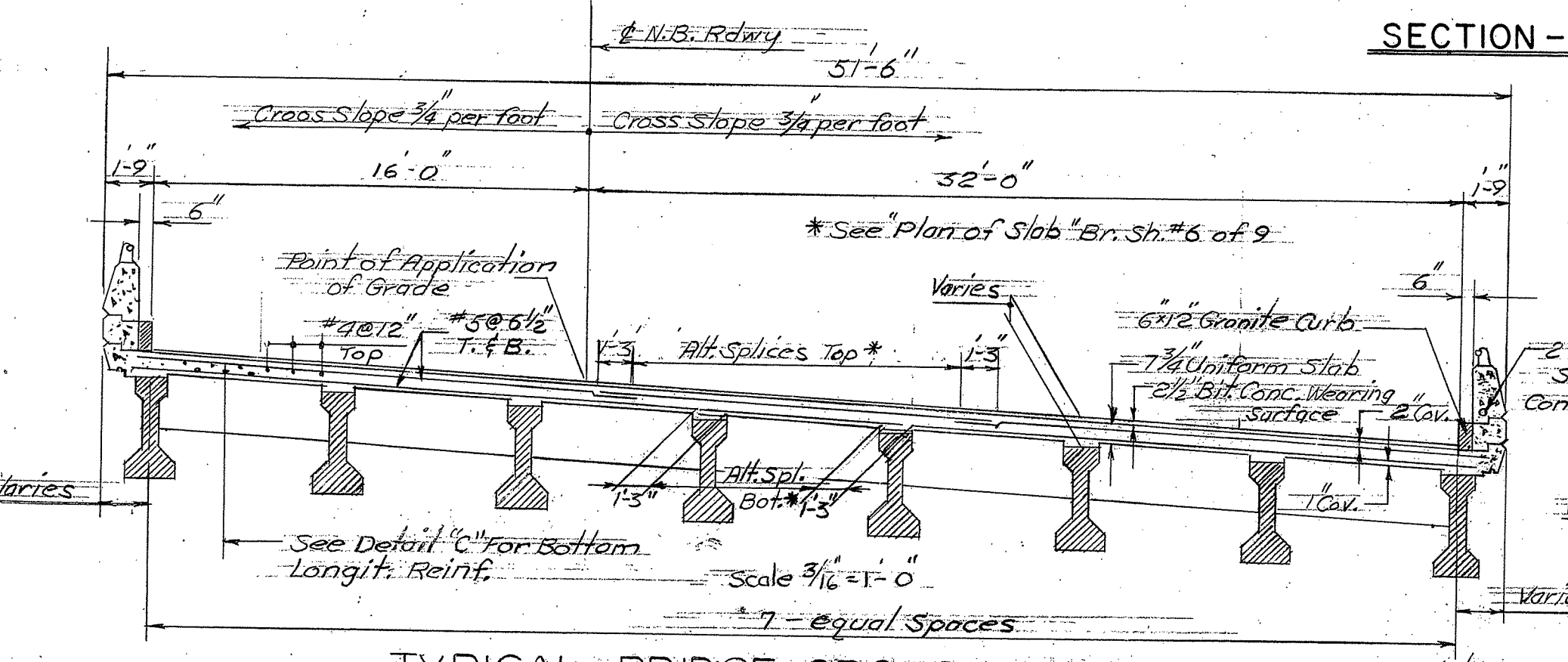


DETAIL A

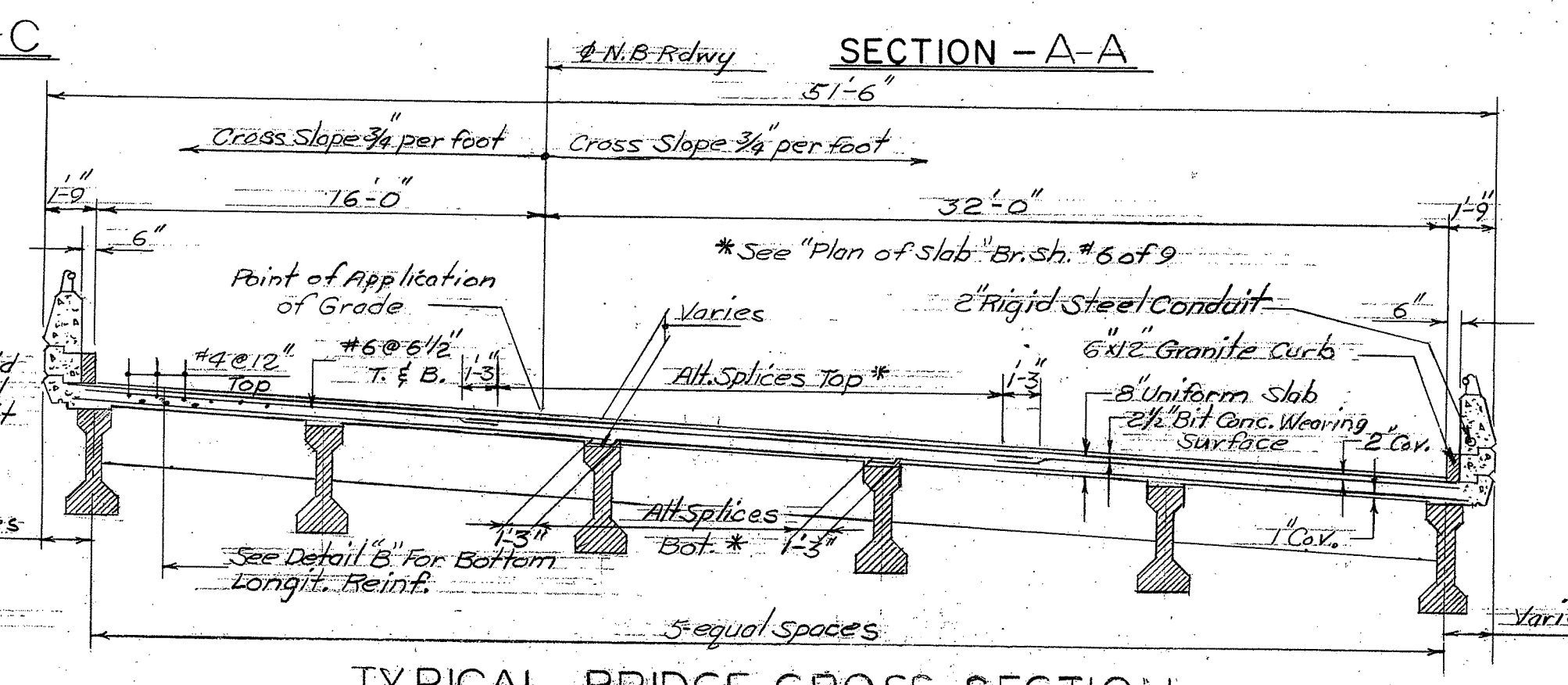
NOTE "A": After Joint Seal has been applied, vehicles will be prohibited from running directly on joint until after the joint seal has set.

NOTE "B": 2 1/2" Bituminous Concrete Wearing Surface on Membrane Waterproofing (Woven Glass Fabric).

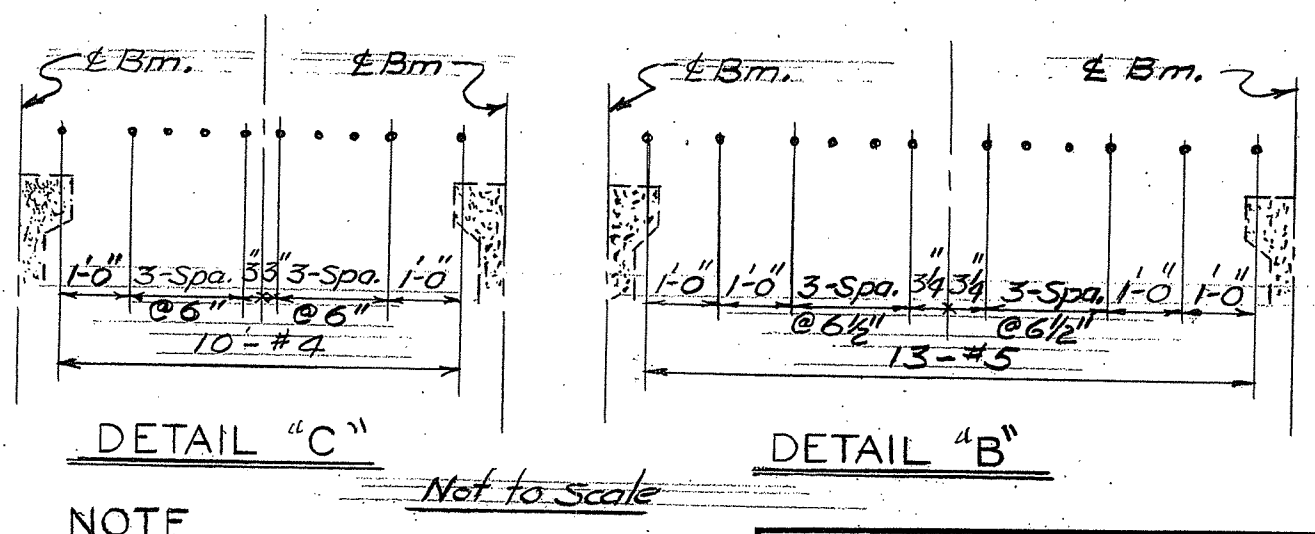
NOTE "C": Concrete Header shall extend full width of Roadway and shall be colored black.



TYPICAL BRIDGE CROSS SECTION CENTER SPAN



TYPICAL BRIDGE CROSS SECTION END SPAN



NOTE: Details "B" and "C" show typical longitudinal reinforcing pattern for bottom of slab.

REVISIONS		
NO.	DATE	DESCRIPTION
Δ	5/15/64	Word "PIER" deleted

CONNECTICUT STATE HIGHWAY DEPARTMENT

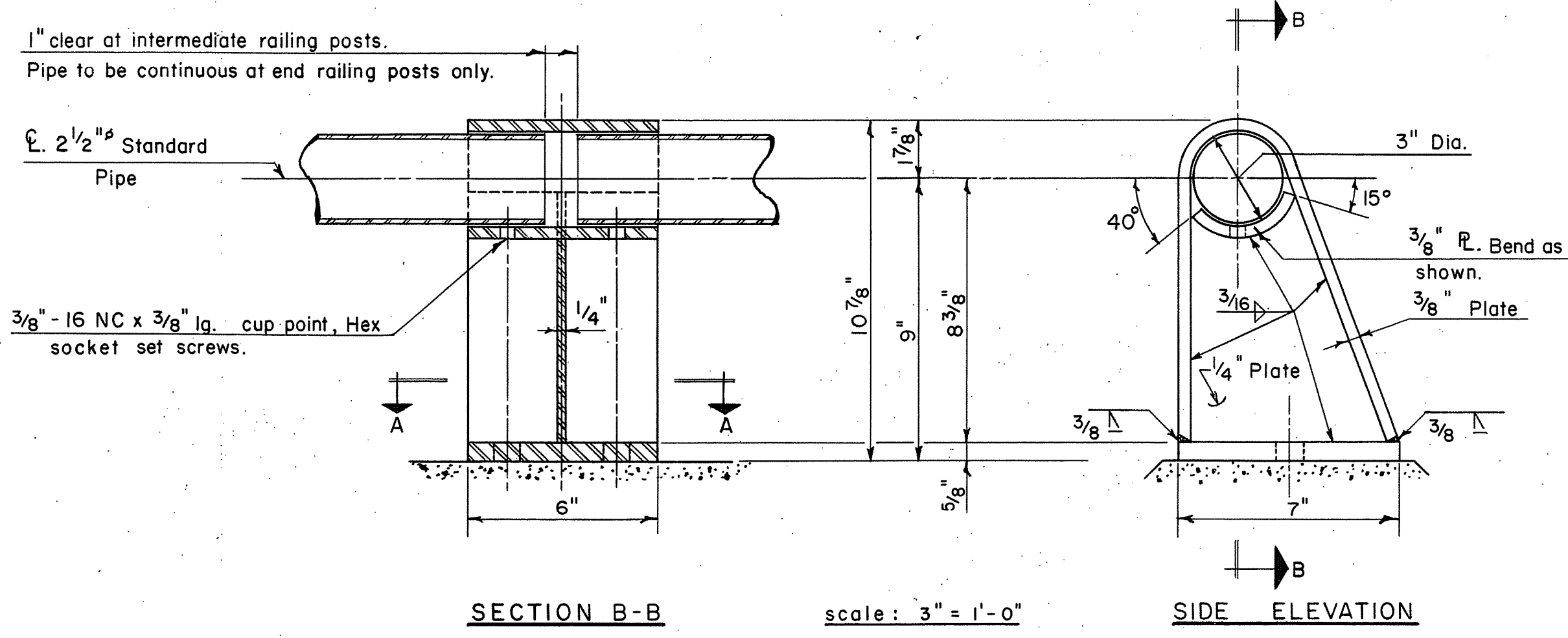
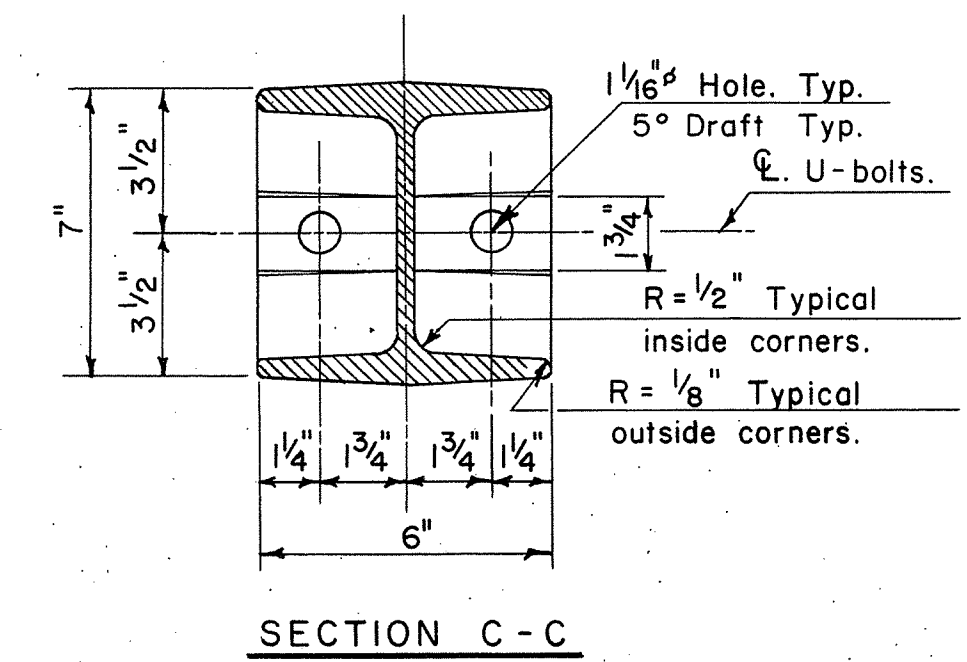
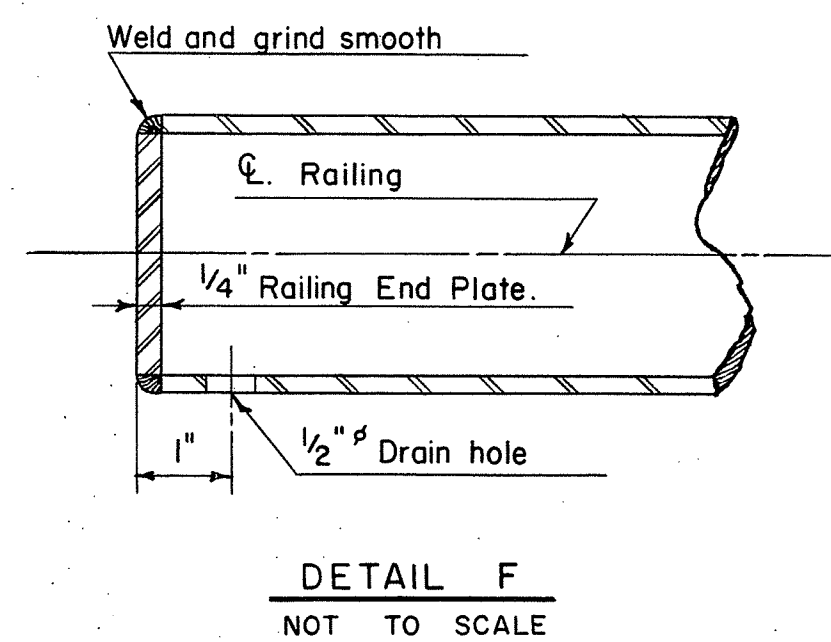
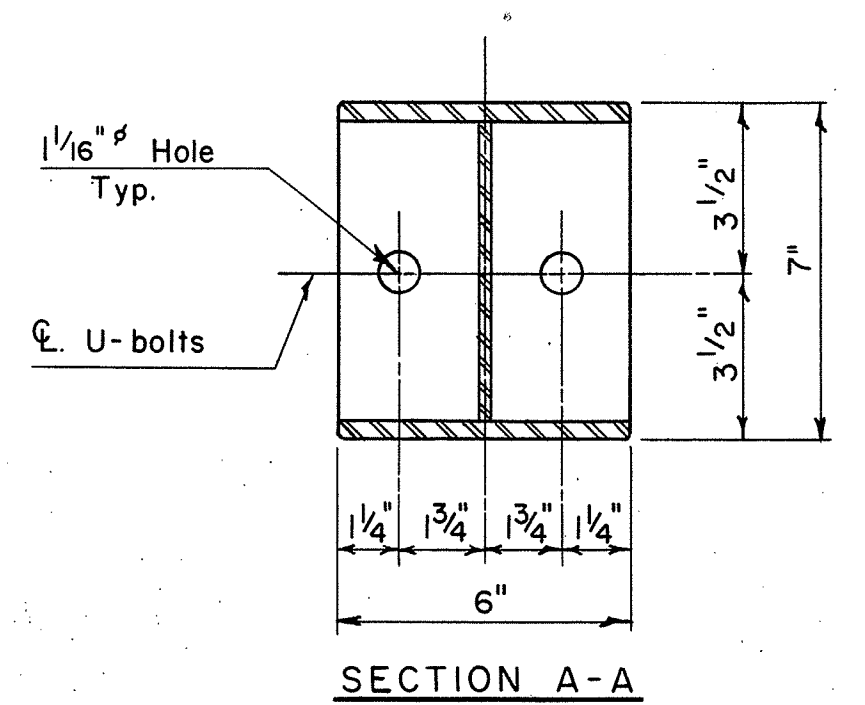
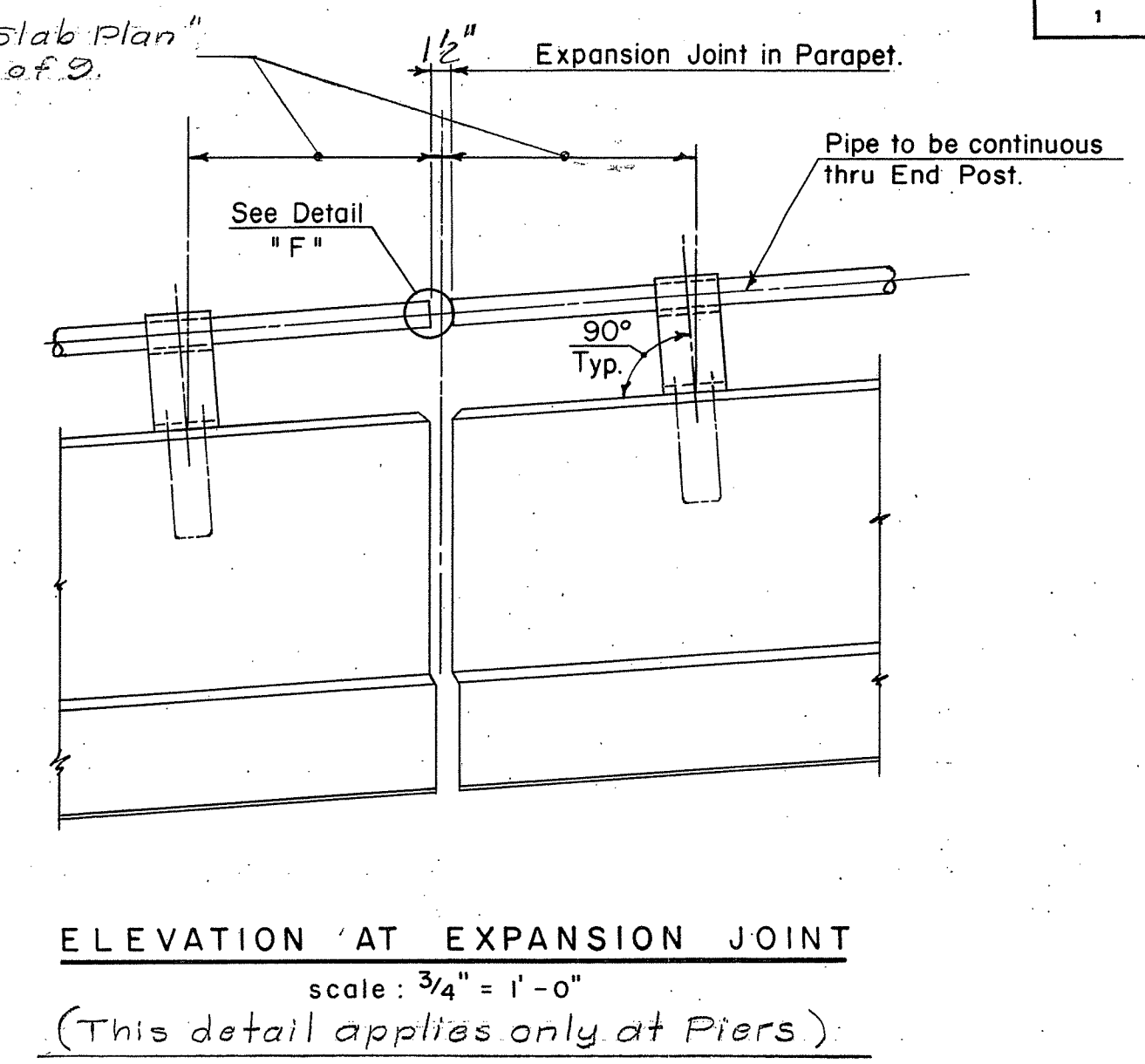
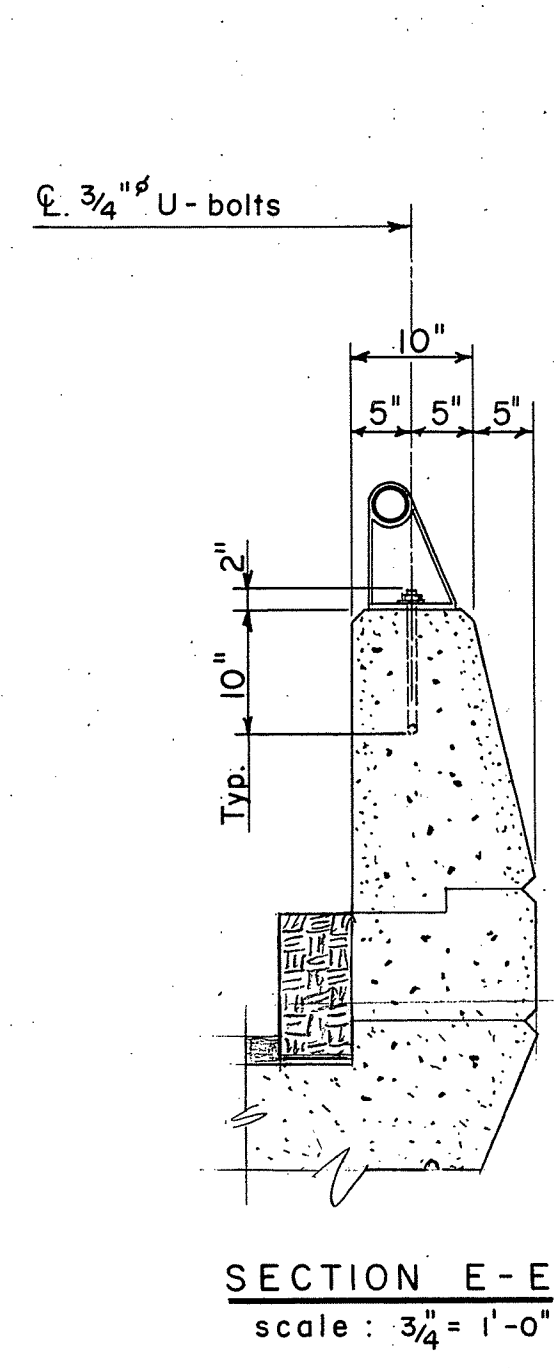
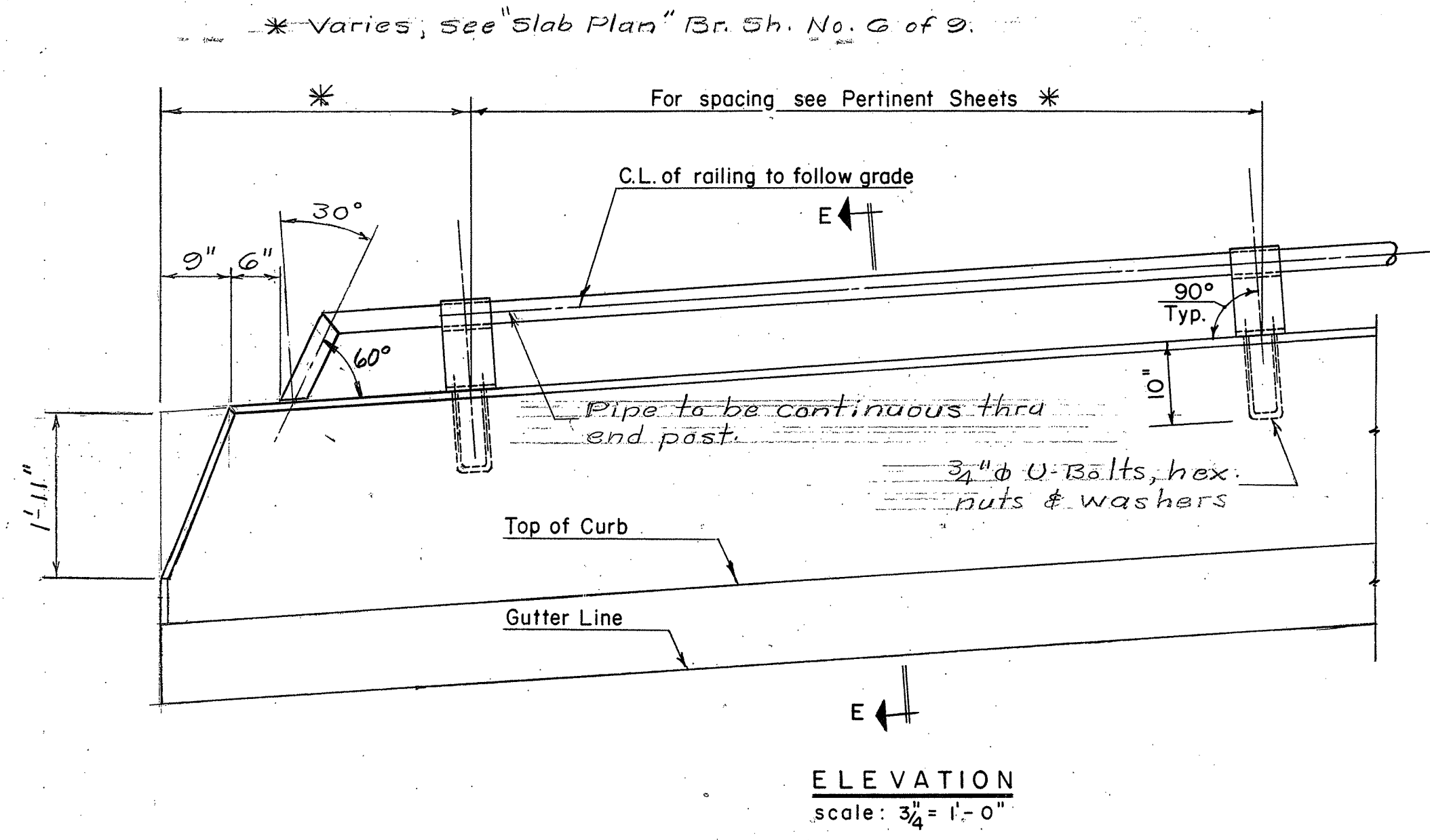
TOWN OF GROTON
GROTON DEFENSE ACCESS HWY.
N.Y. N.H. & H.R.R.
STA. 91 + 76.90
SLAB DETAILS

DESIGNED BY: C.H.D.

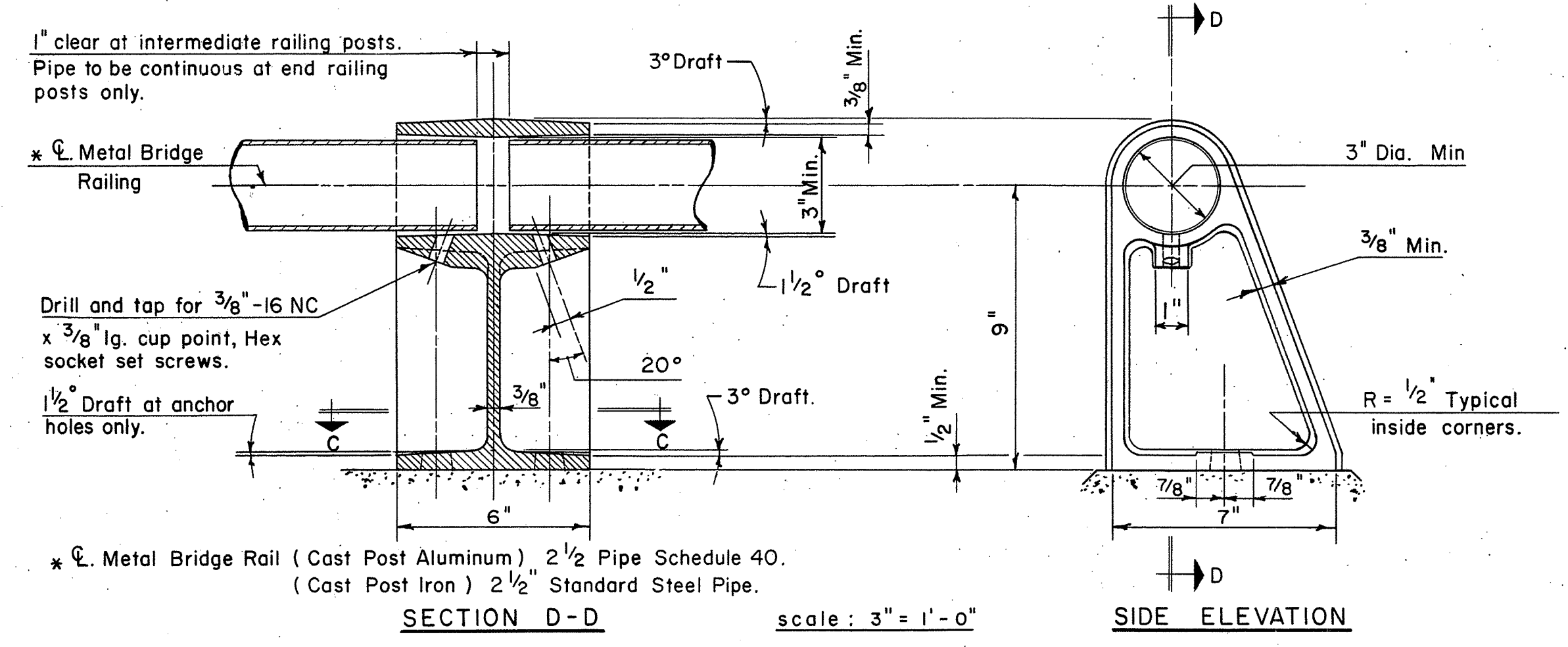
SCALES: Not to Scale	PROJECT NO. 58-117-03A
MADE BY: D.C. & D.S. E.G.M.	DATE: 5-28-63
CHECKED BY: R.G.L. & W.R.P.	DATE: 5-29-63
APPROVED: E.J. Rooney	DATE: 7/10/64

BRIDGE SHEET NO. 7 OF 9

PUB. ROAD DIV. NO.	STATE	TOWN	FED. AID PROJ. NO.	PROJ. NO.	YEAR	ROUTE NO.	SHEET NO.	TOTAL SHEETS
1	CONN.	GROTON	50-143(2)	58-117	1964	649	93	255



METAL BRIDGE RAIL (9" HIGH)
STRUCTURAL STEEL POST DETAILS
All Rails to be 2 1/2" Standard Steel Pipe.



METAL BRIDGE RAIL (9" HIGH)
CAST POST ALUMINUM
All Posts to be cast of Aluminum.
All Rails to be 2 1/2" Pipe Schedule 40.
Aluminum Railing and Posts shall not be painted.

METAL BRIDGE RAIL (9" HIGH)
CAST POST IRON
All Posts to be malleable Iron castings or ductile Iron castings.
All Rails to be 2 1/2" Standard Steel Pipe.

GENERAL NOTES

Unless otherwise specified on the plans or in the Special Provisions, Metal Bridge Rail (9" High) may be: Metal Bridge Rail (9" High), (Structural Steel), Metal Bridge Rail (9" High), (Cast Post-Iron) or Metal Bridge Rail (9" High), (Cast Post-Aluminum)
Cost of furnishing and setting 3/4" U-bolts, hex nuts and washers shall be included in Item "Metal Bridge Rail (9" High)".

CONNECTICUT STATE HIGHWAY DEPARTMENT
TOWN OF GROTON
GROTON DEFENSE ACCESS HWY.
NORTHBOUND ROADWAY OVER
N.Y., N.H. & H.R.R.
STA. 91 + 76.90
METAL BRIDGE RAIL (9" HIGH)

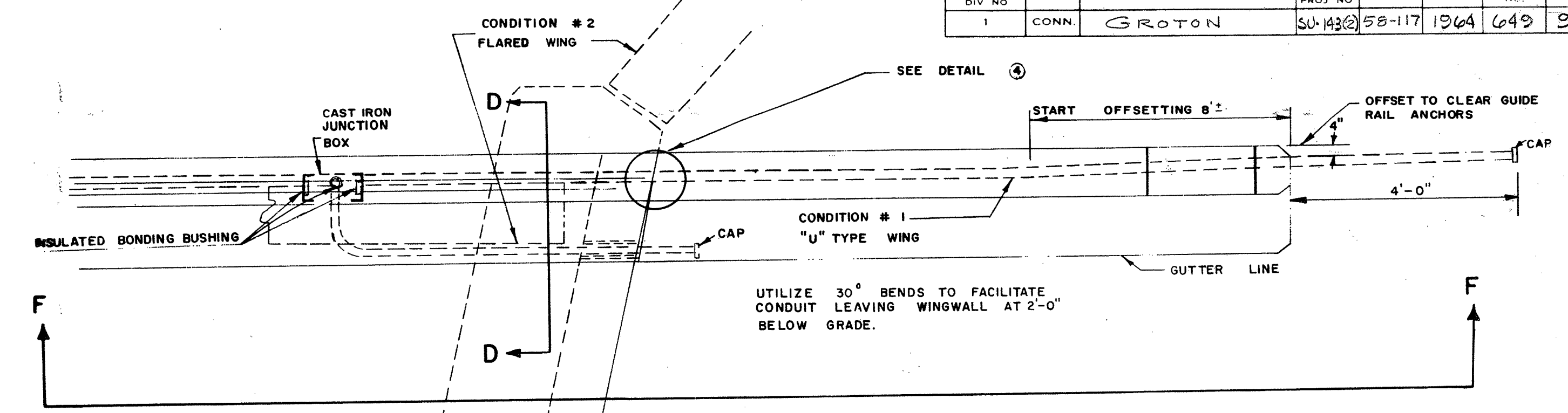
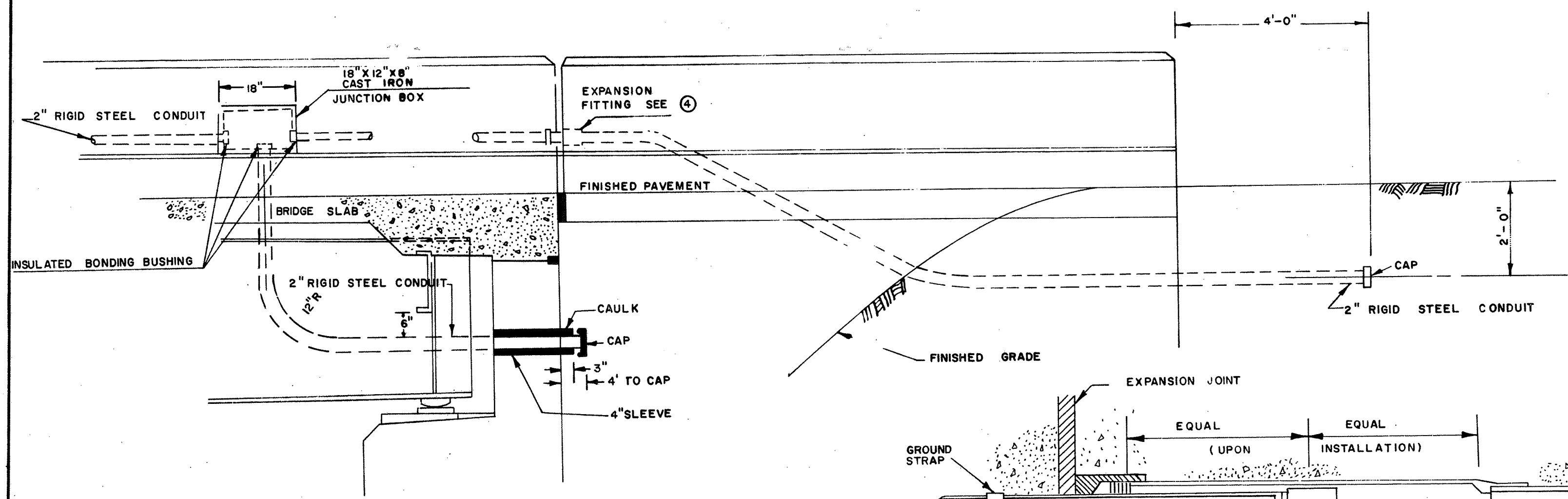
DESIGNED BY C.H.D.

REVISIONS		
NO.	DATE	DESCRIPTION

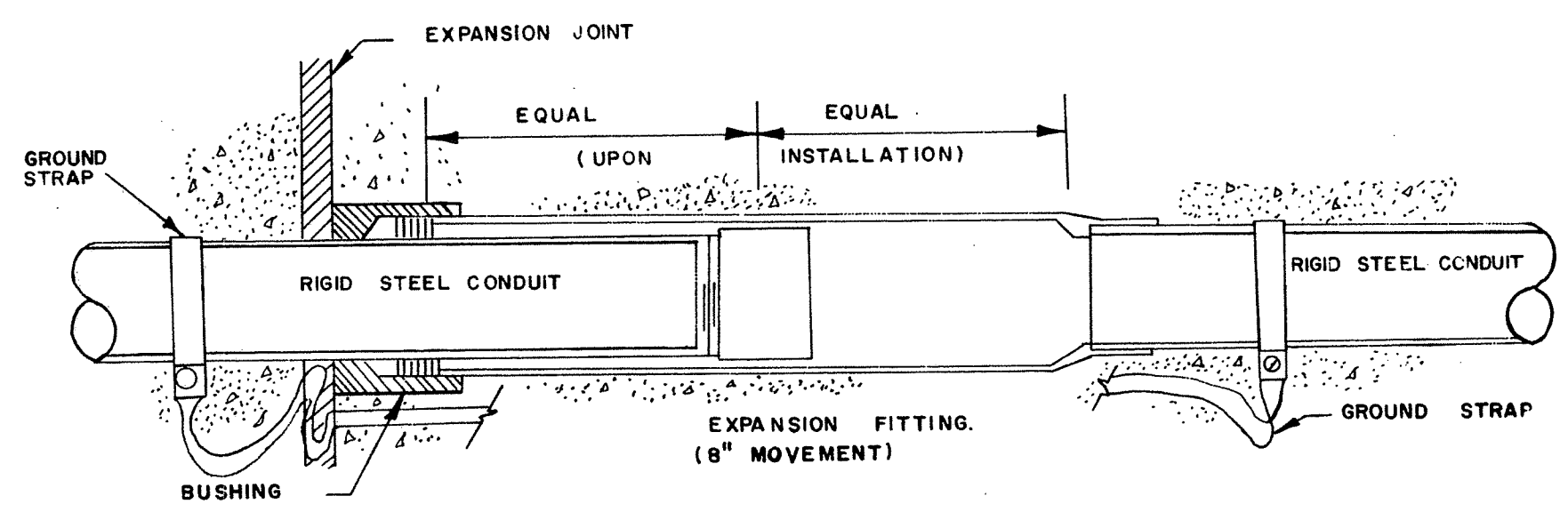
SCALES as noted
MADE BY R.G. Langer DATE 5-23-63
CHECKED BY J.F.C. & W.R.P. DATE 5-27-63
APPROVED: E.J. Keany DATE 7/14/64

PROJECT NO. 58-117-03A
BRIDGE SHEET NO. 8 OF 9

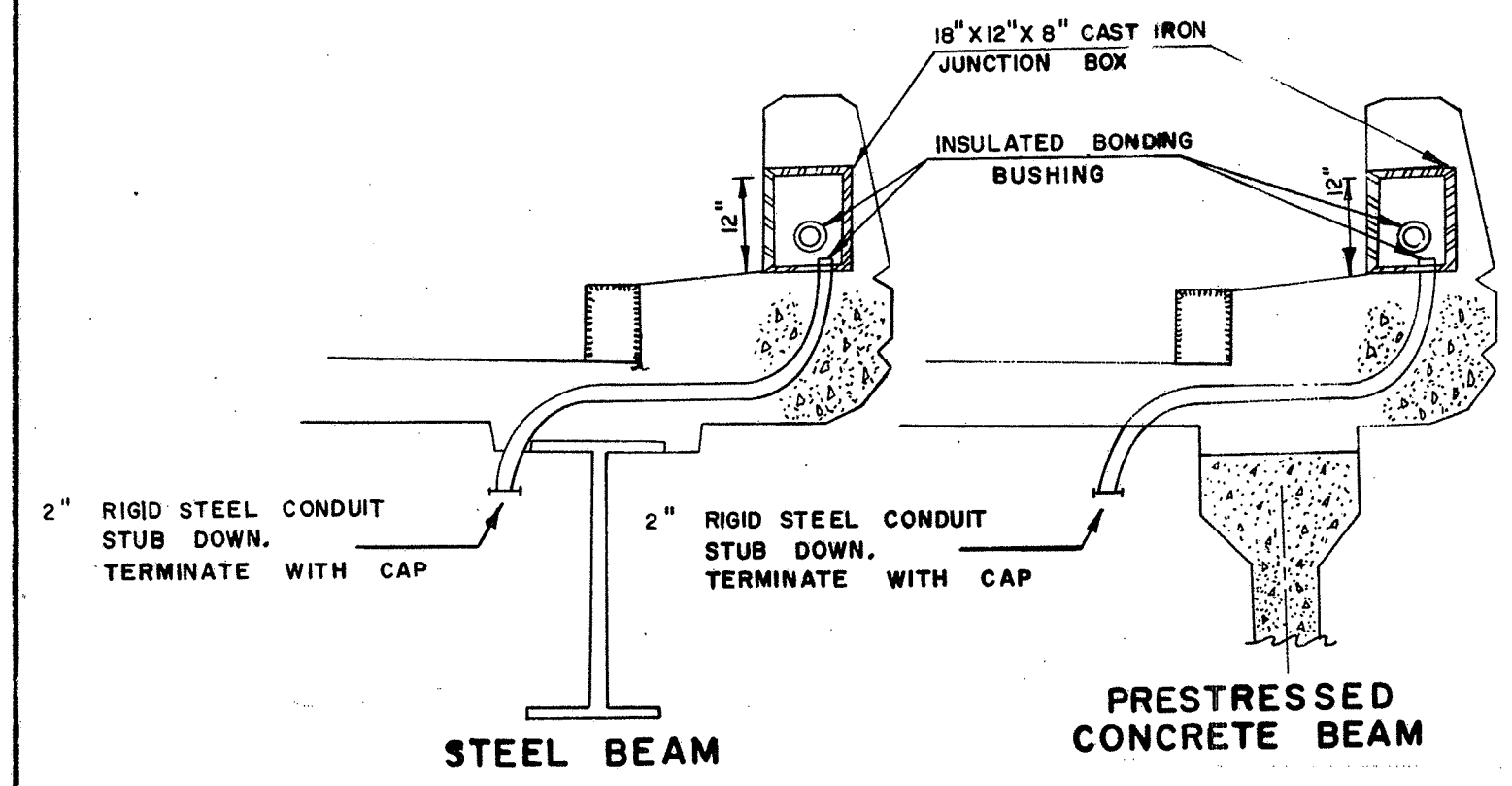
PUB ROAD DIV NO	STATE	TOWN	FED AID PROJ NO	PROJ NO	YEAR	ROUTE NO.	SHEET NO.	TOTAL SHEETS
1	CONN.	GROTON	SU-143(2)	58-117	1964	649	94	255



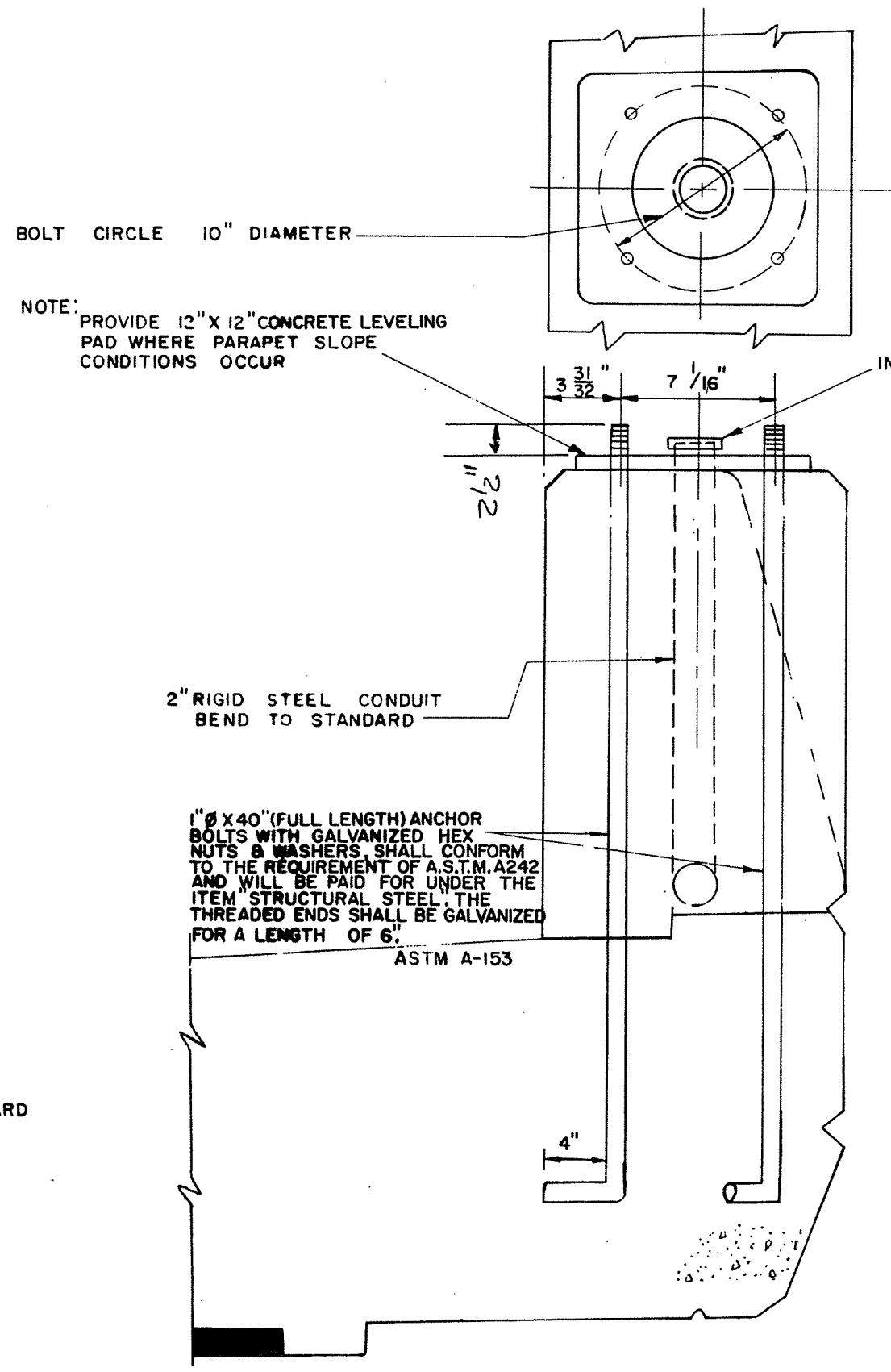
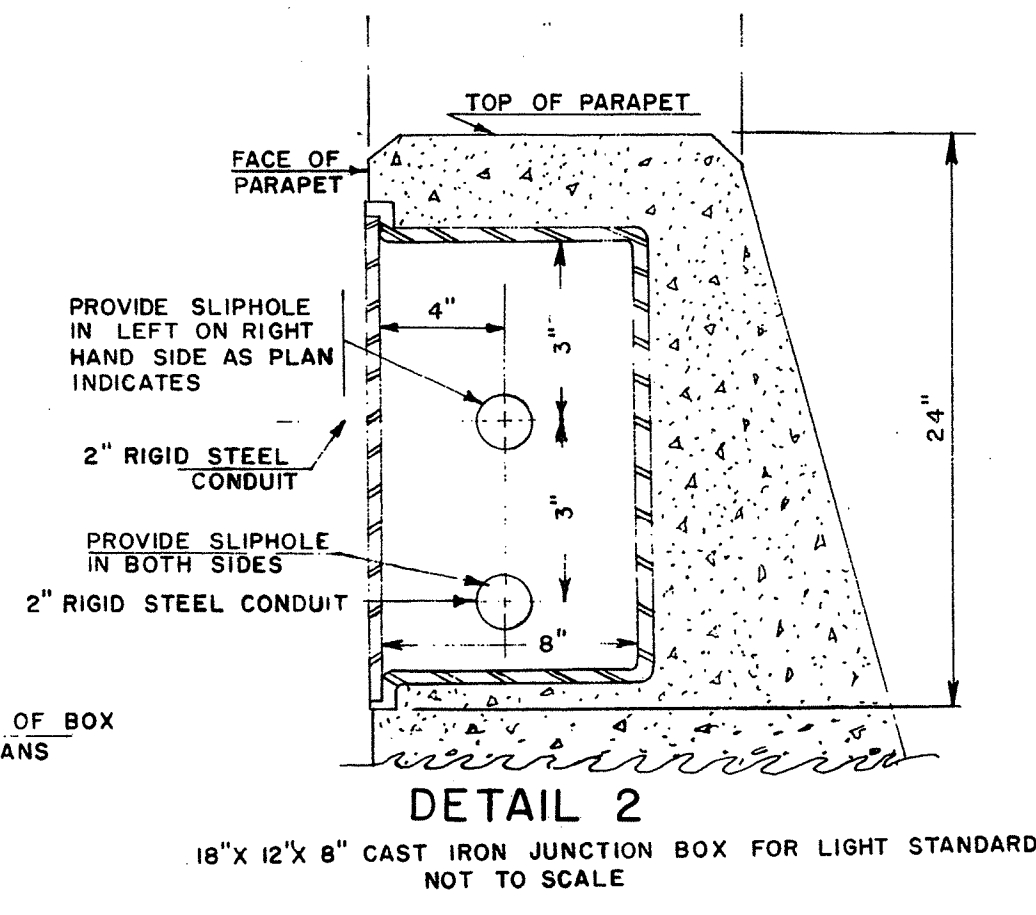
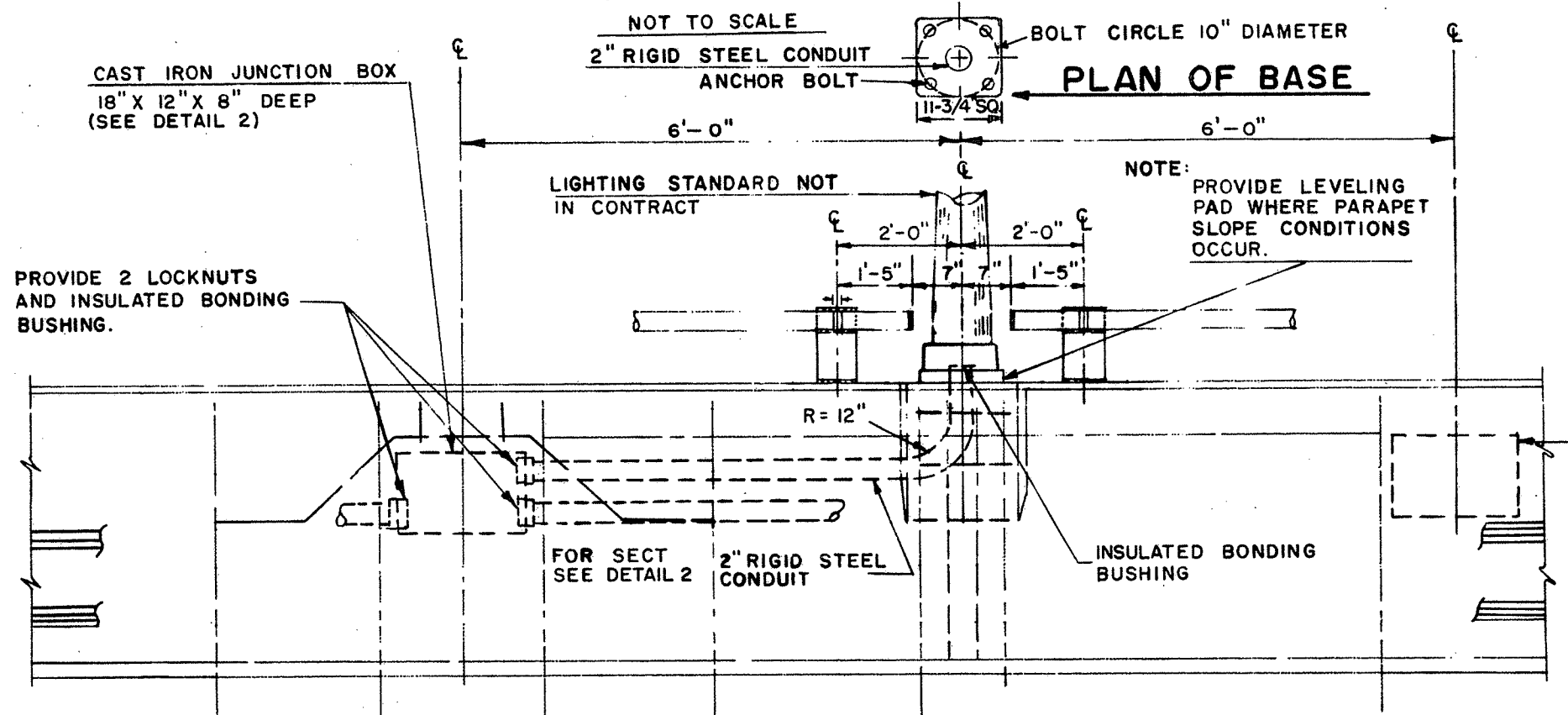
SECT. F-F
CONDUIT PARAPET TO FILL ③
(TREATMENT AT STEEL BEAM SHOWN, PRESTRESSED BEAM SIMILAR)



DETAIL OF EXPANSION FITTING ④
USE AT ALL EXPANSION JOINTS
NOT TO SCALE

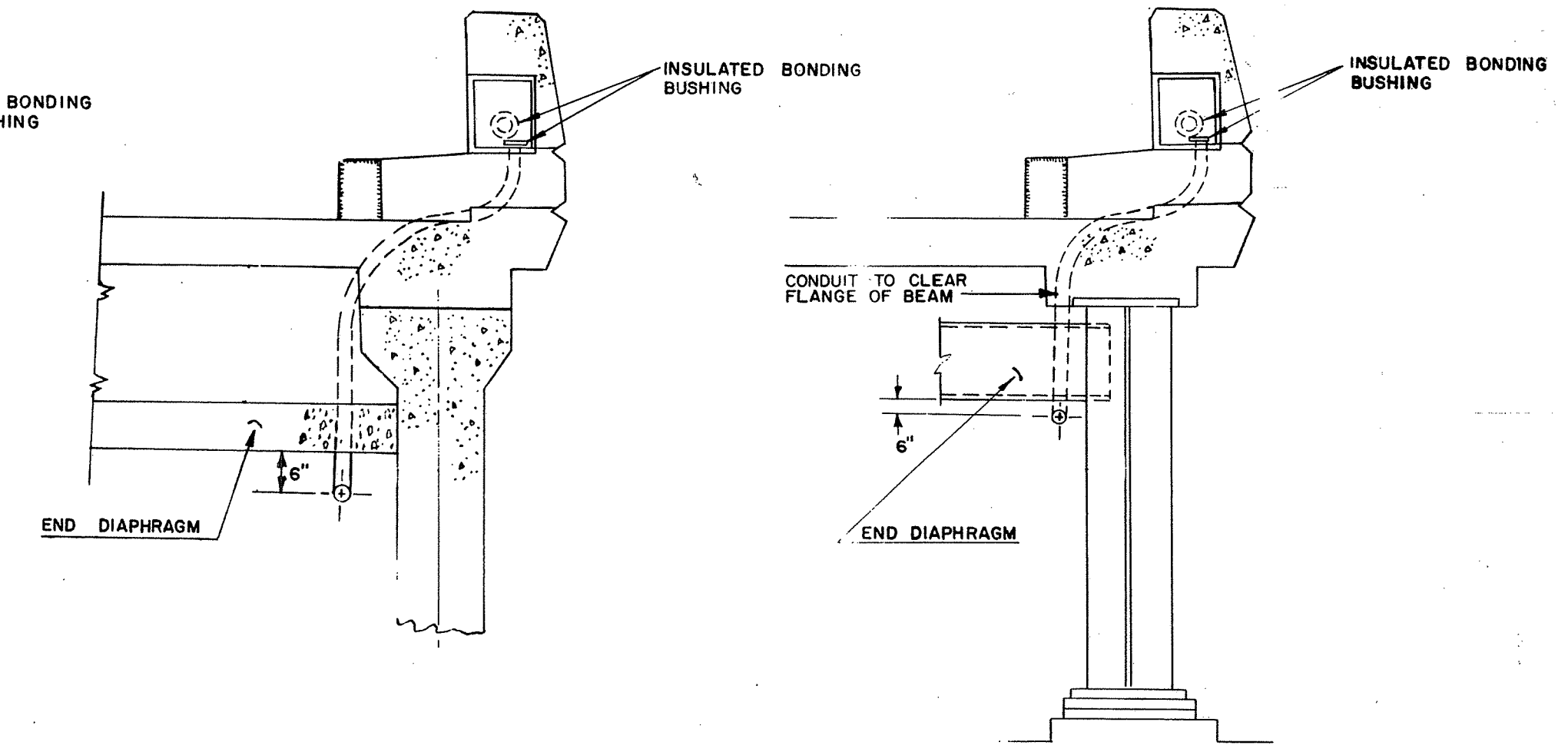


⑥ SERVICE TO LUMINAIRE UNDER STRUCTURE (USE APPLICABLE DETAIL)



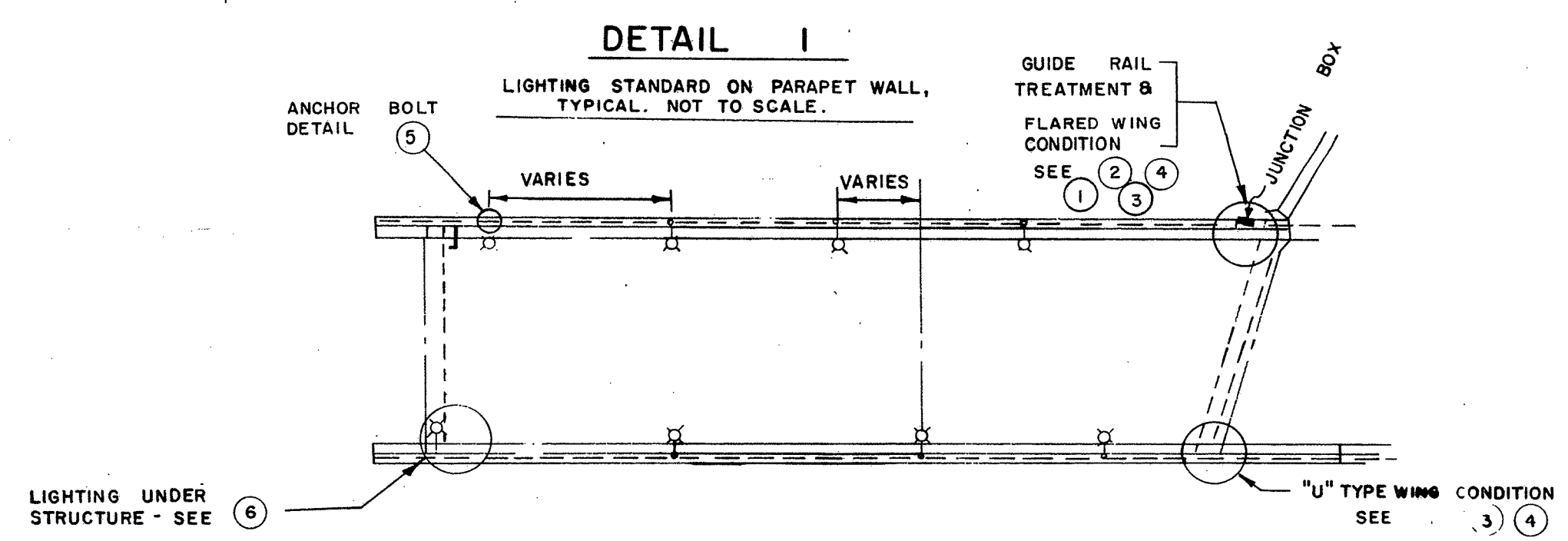
ANCHOR BOLT DETAIL ⑤
SCALE 1/2" = 1'-0"

GENERAL NOTE:
FOR REINFORCING ROD DETAILS AT JUNCTION BOXES & LIGHT STANDARDS SEE APPROPRIATE STRUCTURES SHEET.



SECTION D-D ②
NOT TO SCALE
(USE APPLICABLE DETAIL)

NOTE: DRILLING, OR THE USE OF POWER ACTUATED TOOLS, FOR ATTACHING SUPPORT HARDWARE TO PRESTRESSED BEAMS IS STRICTLY PROHIBITED.



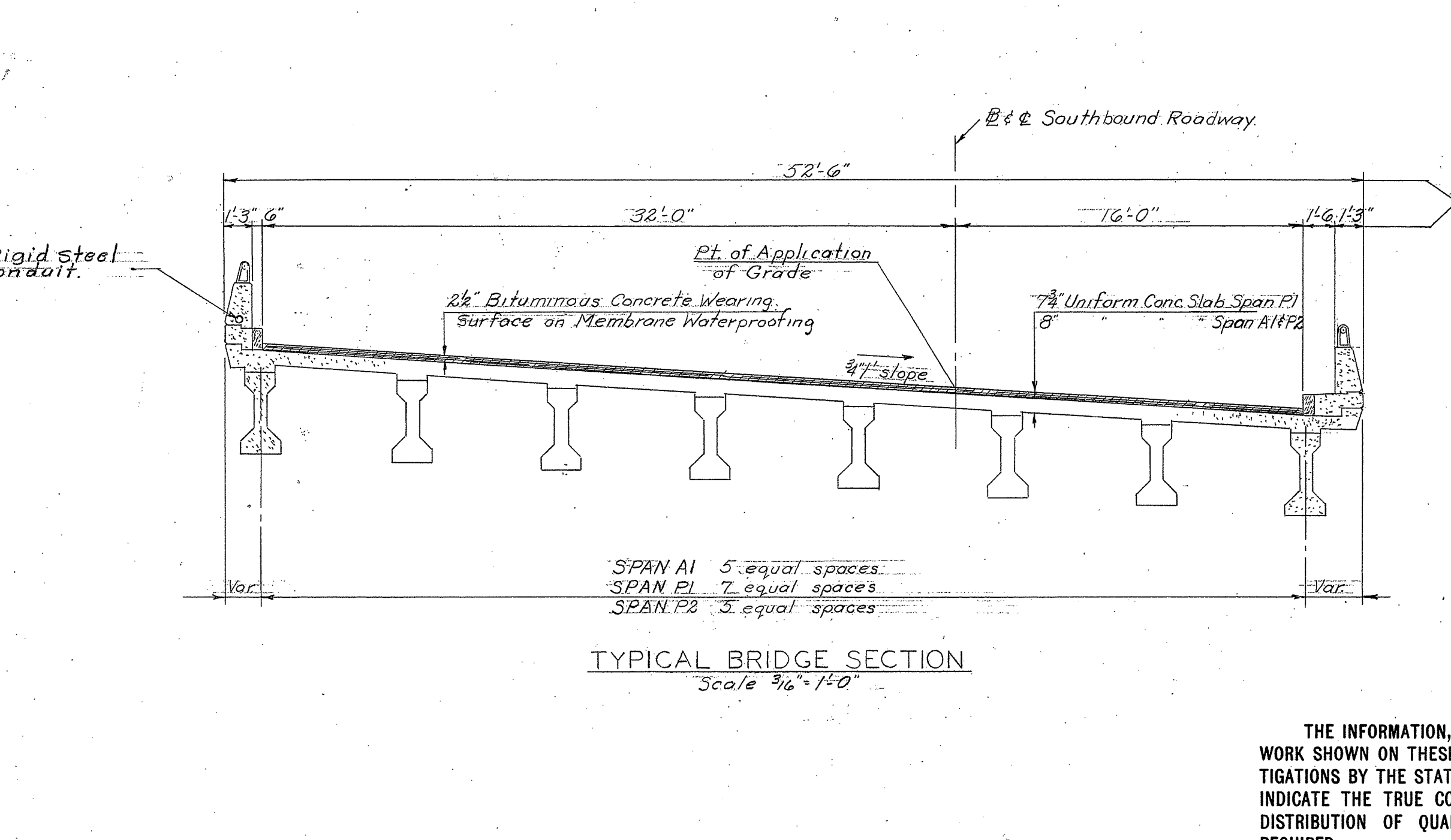
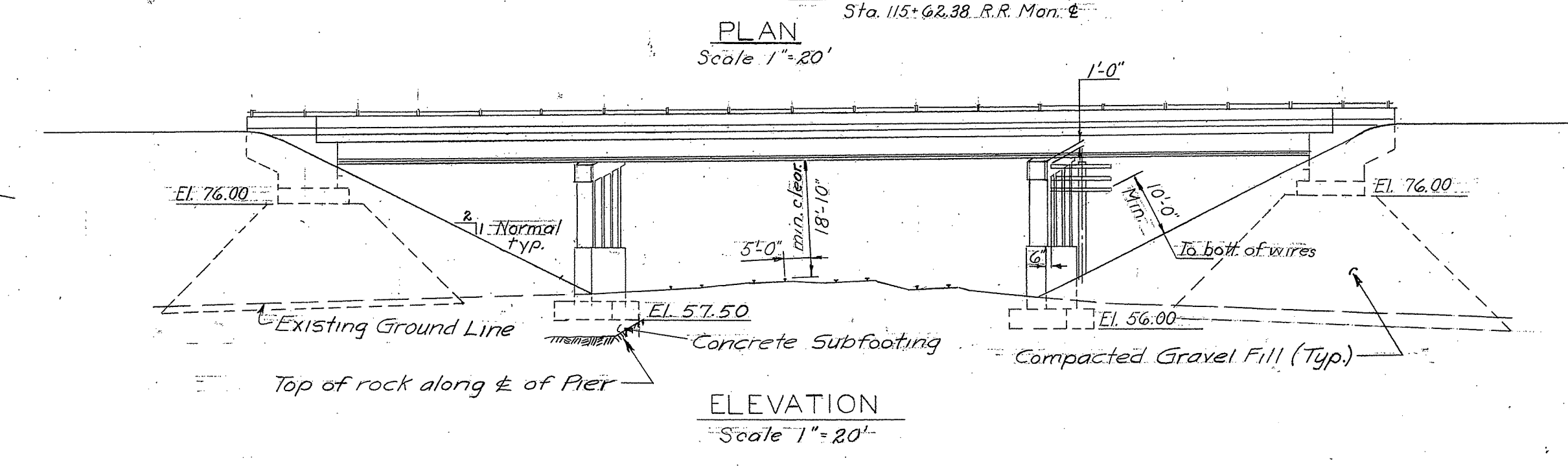
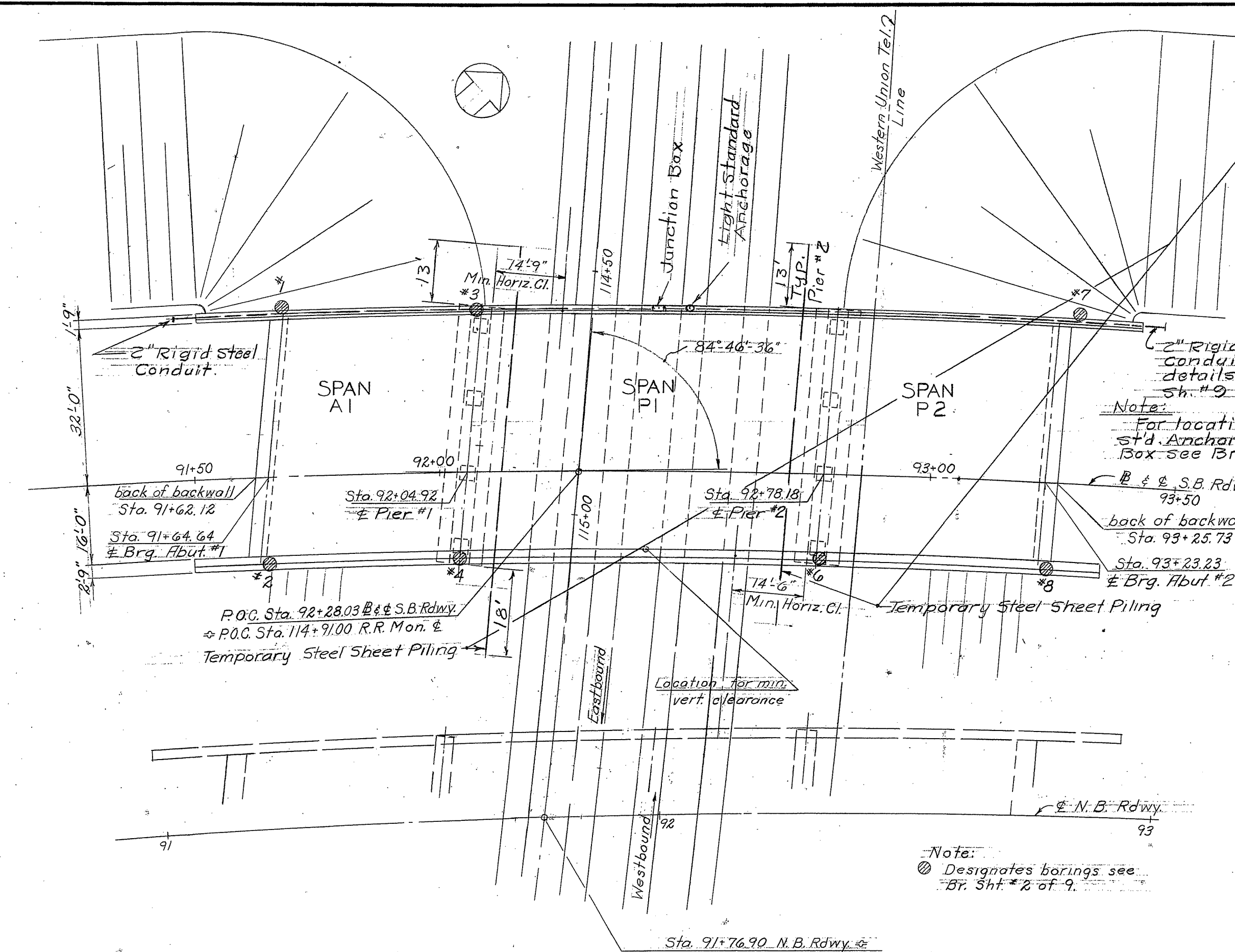
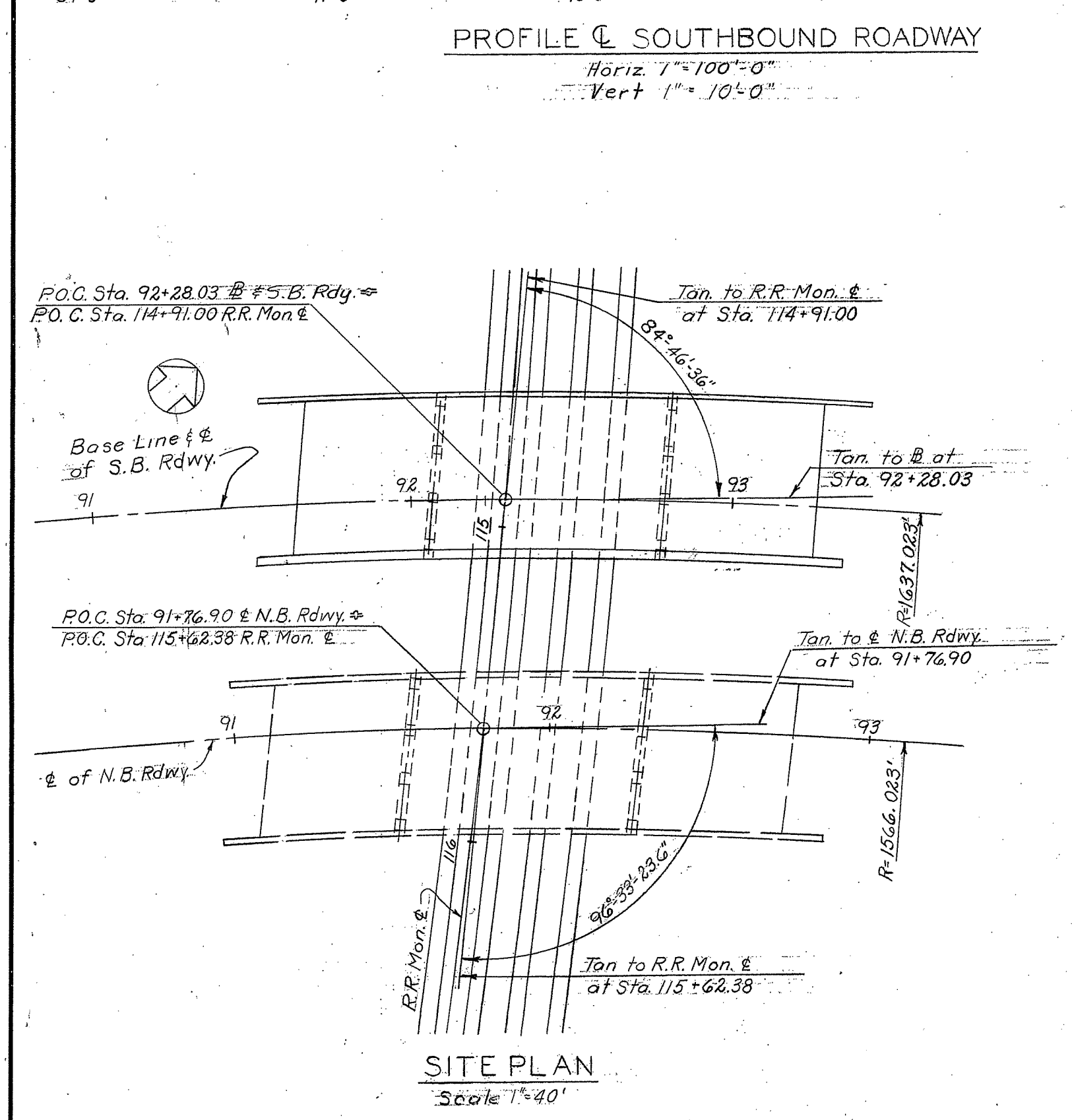
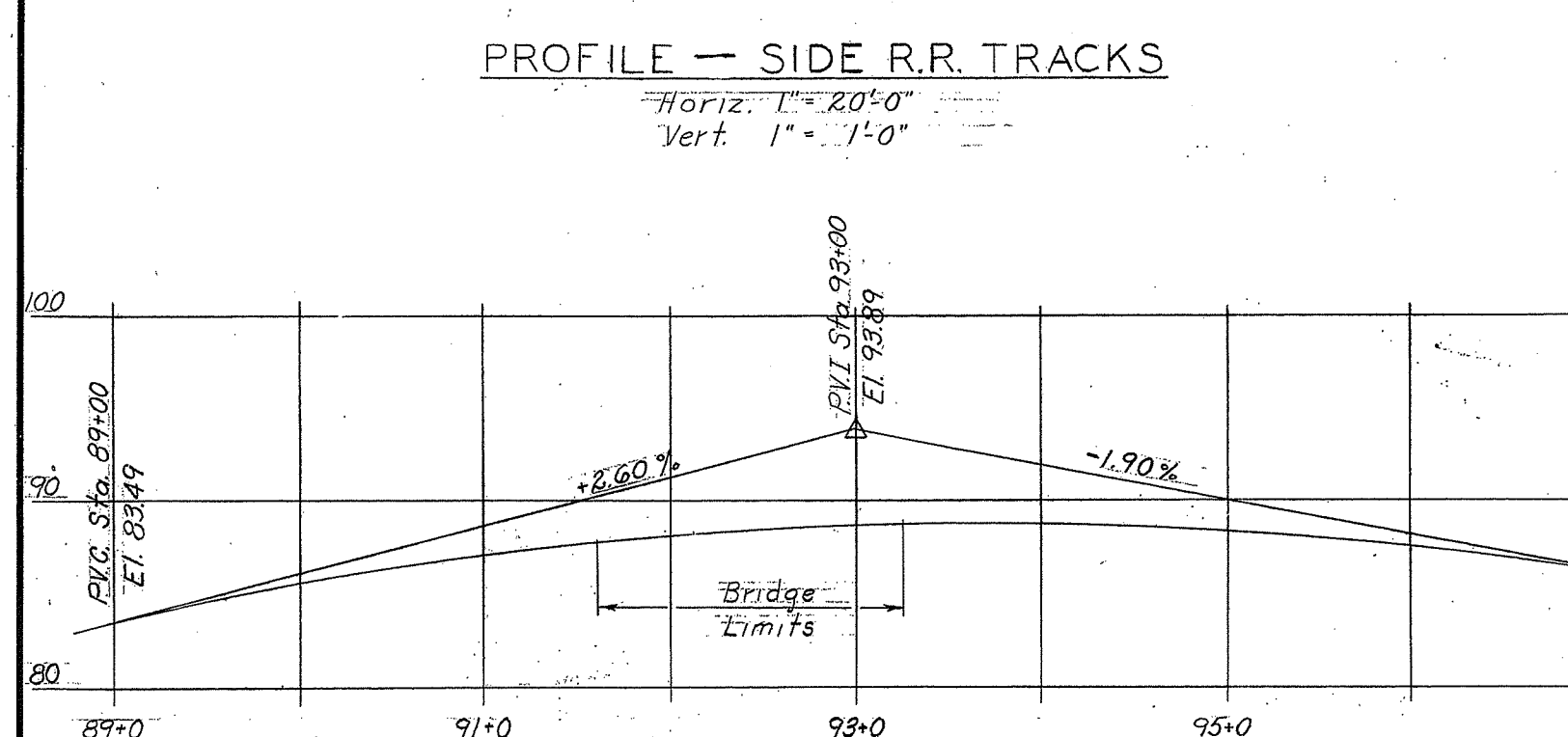
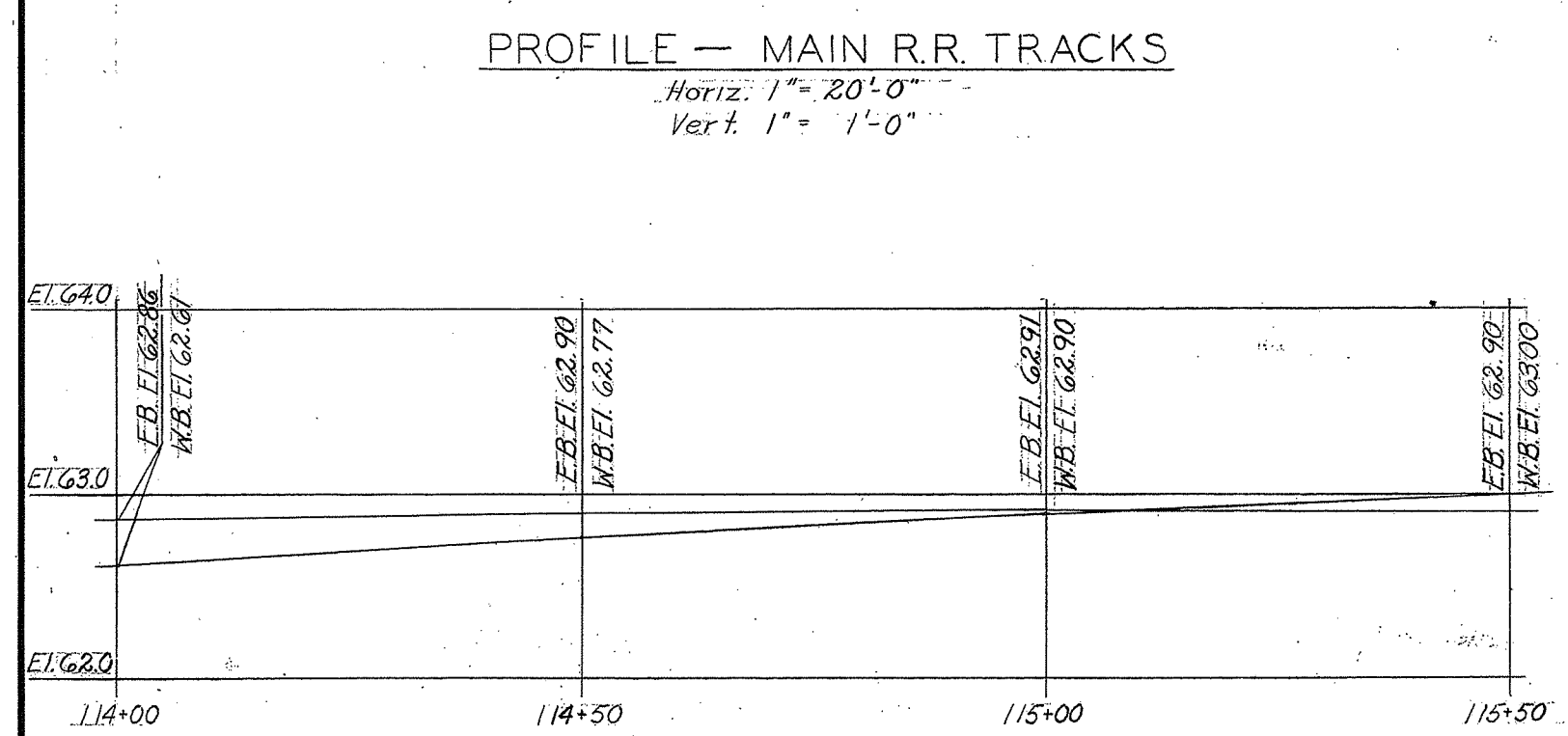
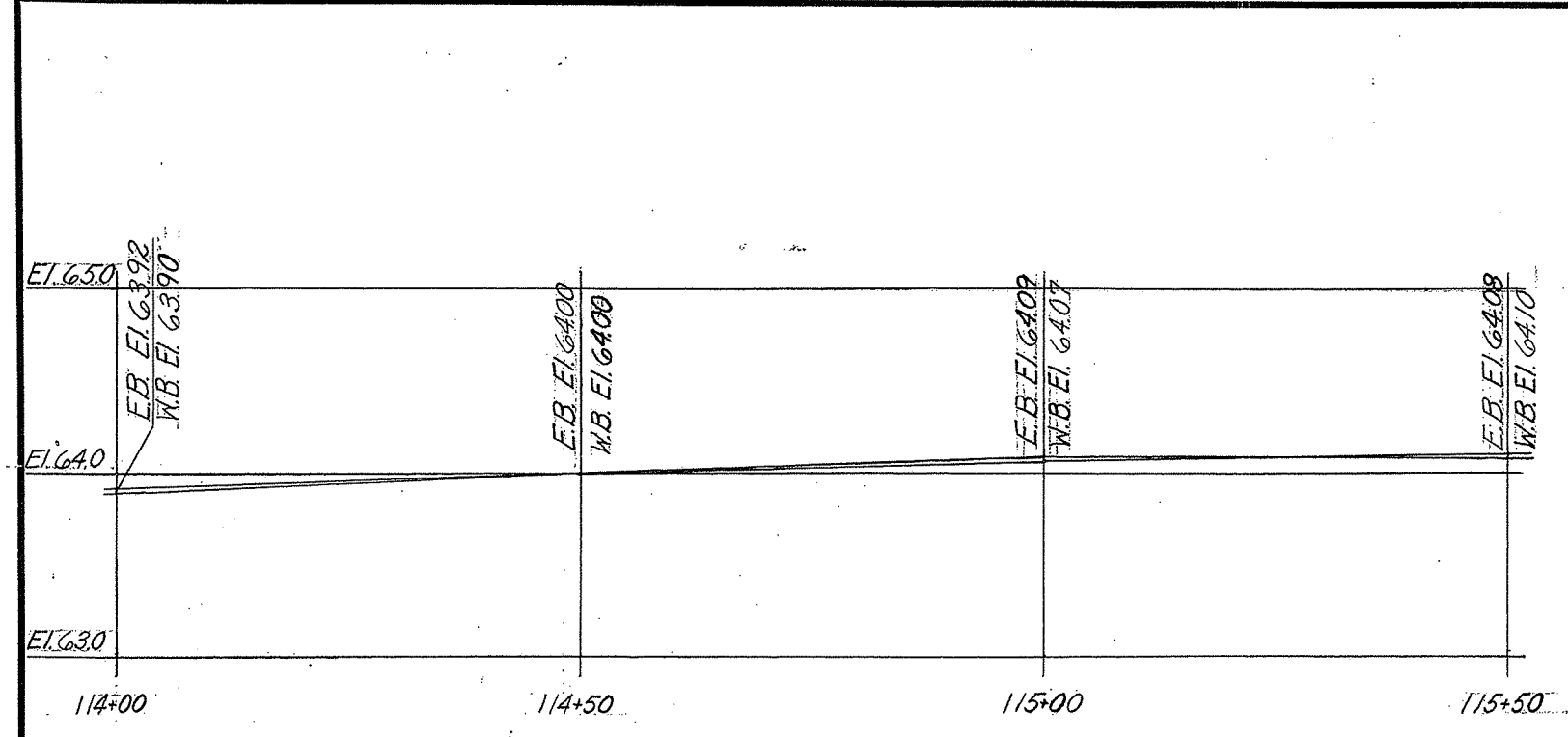
INDEX TO DETAILS

CONNECTICUT
STATE HIGHWAY DEPARTMENT
TOWN OF GROTON
GROTON DEFENSE ACCESS HWY.
NORTHBOUND ROADWAY OVER
N.Y. N.H. & H.R.R.
STA. 91 + 76.90
ELECTRICAL DETAILS

REVISIONS		
NO.	DATE	DESCRIPTION

SCALE AS NOTED	ELECTRICAL	PROJECT NO.
DESIGNED BY		58-117-03A
MADE BY		BRIDGE SH. NO.
SUBMITTED BY		2 OF 2
APPROVED BY	<i>R. M. ...</i>	CHIEF-HIGHWAY TRAFFIC

PUB. ROAD DIV. NO.	STATE	TOWN	FED. AID PROJ. NO.	PROJ. NO.	YEAR	ROUTE NO.	SHEET NO.	TOTAL SHEETS
1	CONN.	Groton	SU-143(2)	58-117	1964	649	95	255



Note:
Temporary steel sheet piling. Steel sheet piling if ordered left in place shall have an additional payment under the item "Steel Sheet Piling Material Left In Place."

R.R. Curve Data Mon. E.
A = 49°-58'-30"
D = 1°-30'-00"
T = 1780.20'
L = 3331.67'
R = 3819.83'
P.C. Sta. 100+65.05
P.T. Sta. 133+96.72

Southbound Center Line Curve Data
A = 59°-30'-28"
D = 3°-30'-00"
T = 937.279'
L = 1703.079'
R = 1637.023'
E = 249.531'

Specifications: Connecticut State Highway Department Form 809 (1963) and Special Provisions.
Design Specifications: Standard Specifications for Highway Bridges (AASHTO-1961) as supplemented by the Connecticut State Highway Department Bridge Manual (1966).
Live Load: HS-20-44.
Future Paving Allowance: None.
Composite Construction: No temporary intermediate supports shall be used prior to and during the pouring and setting of the concrete deck slab. Live and superimposed dead loads will be permitted when directed by the Engineer but not less than 10 days after the slab has been poured.
Class "A" Concrete: Class "A" Concrete shall be used for the entire substructure and the safety walks and parapets of the U-Type wings.
Class "C" Concrete: Class "C" Concrete shall be used for bridge slabs including concrete safety walks and parapets.
Prestressed Concrete: Materials and construction for Prestressed Concrete shall conform to the requirements of the Special Provisions.
Joint Seal: See Special Provisions.
Paraffin: The cost of furnishing and applying paraffin and caulking paraffin joints is included in the item for Class "C" Concrete.
Exposed Edges: Exposed edges shall be beveled 1"x1" unless dimensioned otherwise.
Foundation Pressures: The various Group Loadings noted on the substructure plan sheets refer to the Group Loads as given in subsection 1.4.1 of the AASHTO Standard Specifications for Highway Bridges.
Construction Joints: Construction joints, other than those shown on the plans, will not be permitted without prior approval of the Engineer.

Structure Excavation Earth (complete)	c.y.	726
Structure Excavation Rock (complete)	c.y.	10
Soil Loading Test	ea.	1
Temporary Steel Sheet Piling	l.f.	161
Steel Sheet Piling Material Left in Place	l.f.	161
Class "A" Concrete	c.y.	595
Class "C" Concrete	c.y.	288
2" Preformed Expansion Joint Filler for Bridges	s.f.	160
Deformed Steel Bars	lb.	128000
Membrane Waterproofing (woven glass fabric)	sq.	846
Dampproofing	sq.	171
Metal Bridge Rail (9" high)	l.f.	375
Compacted Gravel Fill	c.y.	3810
Pervious Structure Backfill	c.y.	396
Bituminous Concrete Wearing Surface	ton	114
6"x12" Granite Stone Curbing for Bridges	l.f.	380
Elastomeric Bearing Pads	sq.	11925
Neoprene Plate for Bridge Expansion Joint	l.f.	209
2" Rigid Steel Conduit in Structure	l.f.	210
18"x12"x8" Cast Iron Junction Box	ea.	1
1/4" Wrought Iron Pipe	l.f.	72
Prestressed Beams - Prestensioned - Type III	l.f.	1103
Protective Compound for Bridges	sq.	45

INSPECTION OF FIELD WELDS			CONCRETE DISTRIBUTION		
Method	Unit	Quantity	Footings	c.y.	2.07
Magnetic Particle	l.f.	0.0	Substructure	c.y.	388
Radiographic	in.	0.0	Superstructure	c.y.	288
			Total	c.y.	883

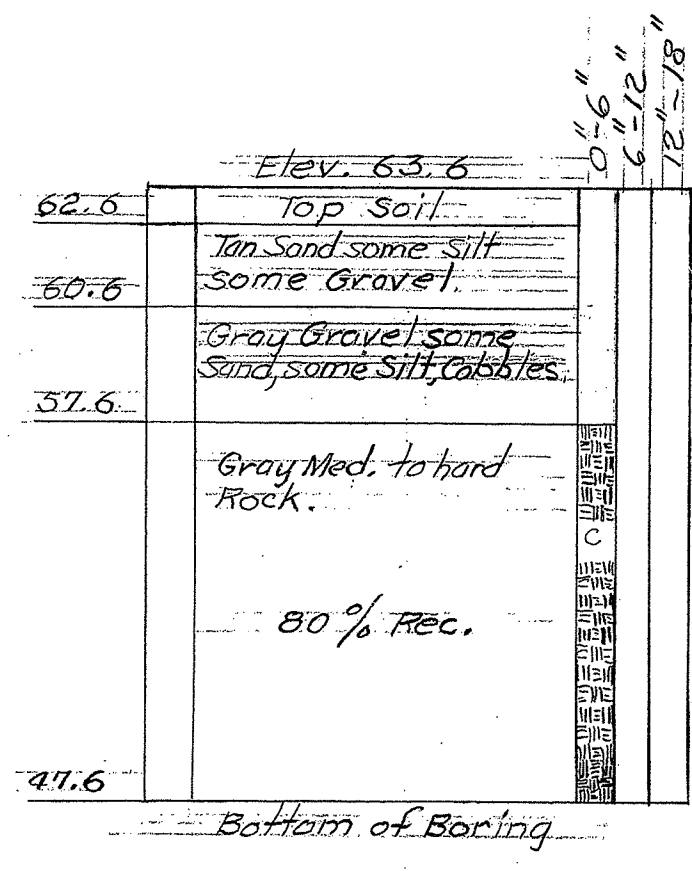
Br. No. 03330
CONNECTICUT STATE HIGHWAY DEPARTMENT
TOWN OF GROTON
GROTON DEFENSE ACCESS HWY.
SOUTHBOUND ROADWAY
OVER
N.Y., N.H. & H.R.R.
STA. 92+28.03
GENERAL PLAN

REVISIONS		
NO.	DATE	DESCRIPTION

DESIGNED BY W.F.D.
SCALES as noted
MADE BY T.S.R. DATE 4-23-64
CHECKED BY W.F.D. DATE 5-4-64
APPROVED E.J. Kearney DATE 5/4/64

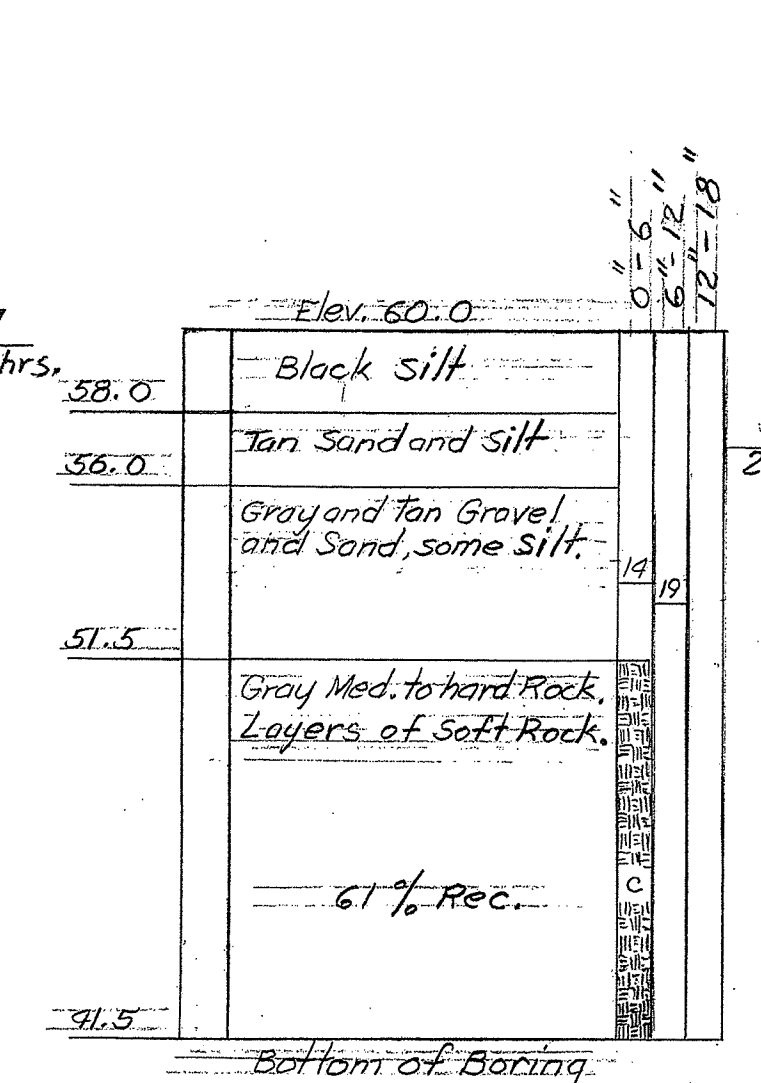
THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE TRUE CONDITIONS OR ACTUAL QUANTITIES OR DISTRIBUTION OF QUANTITIES OF WORK WHICH WILL BE REQUIRED.

HOLE 1
STA. 91+70
OFFSET 34' LT.



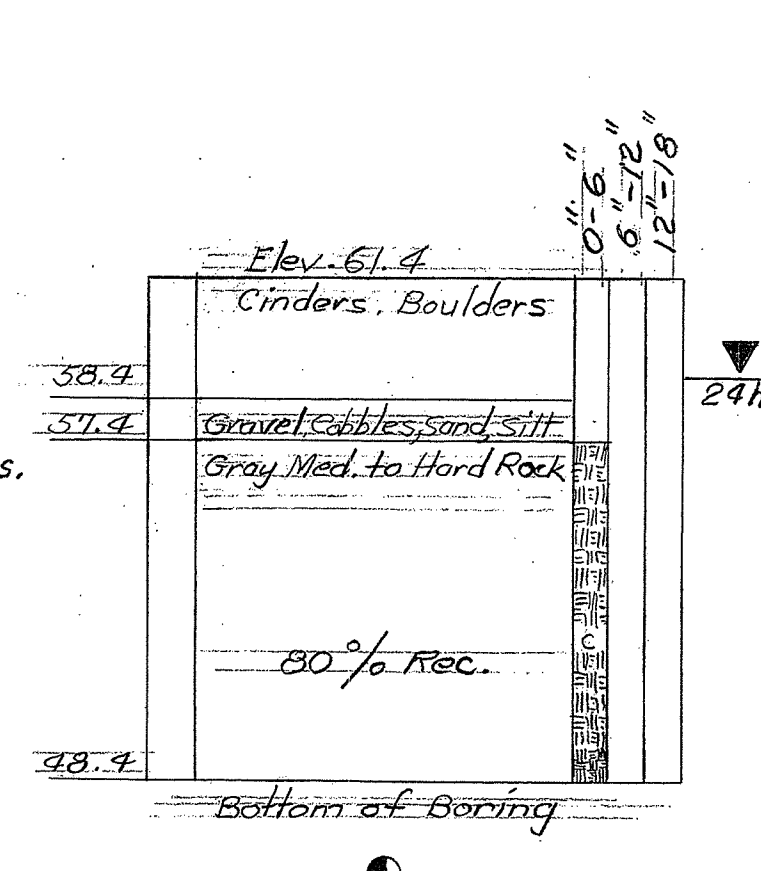
Ground surface to 6' used 2 1/2" casing

HOLE 2
STA. 91+65
OFFSET 18' RT.



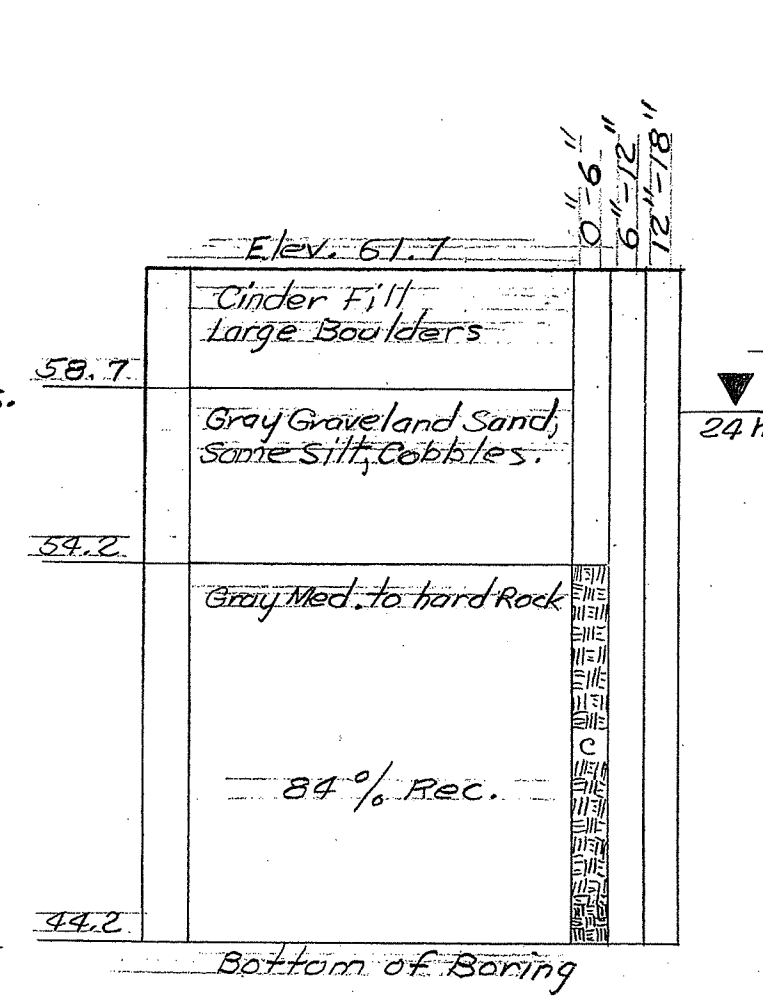
Ground surface to 8 1/2' used 2 1/2" casing

HOLE 3
STA. 92+08
OFFSET 33' LT.



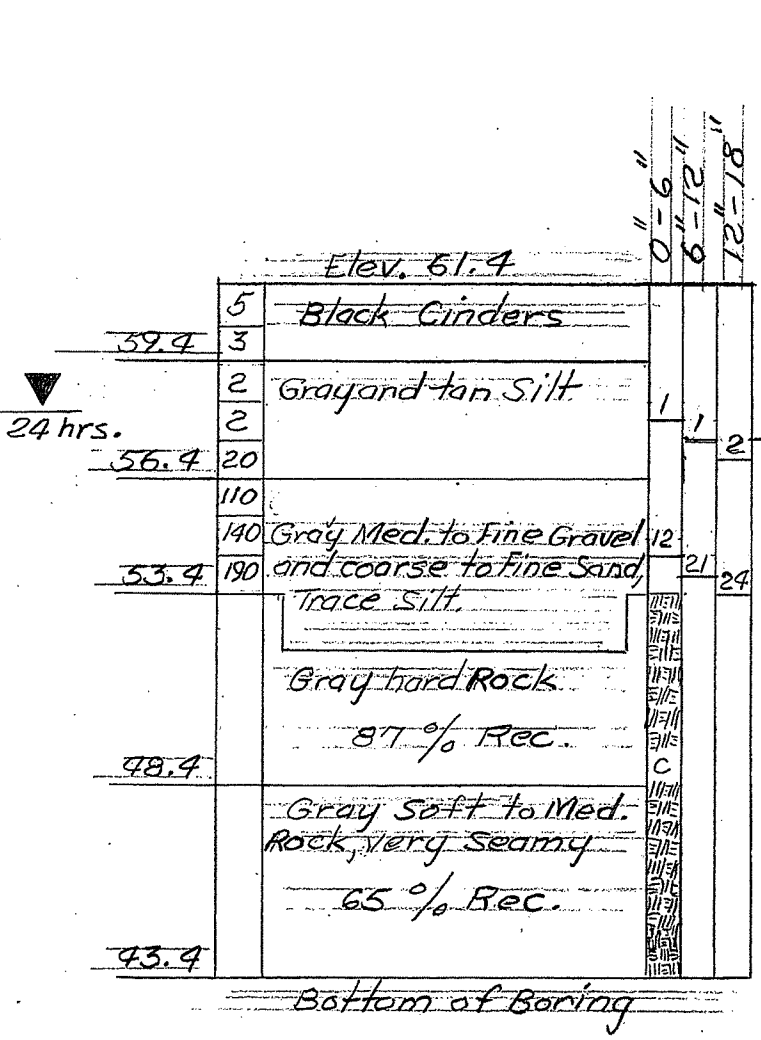
Ground surface to 4' used 2 1/2" casing

HOLE 4
STA. 92+04
OFFSET 13' RT.



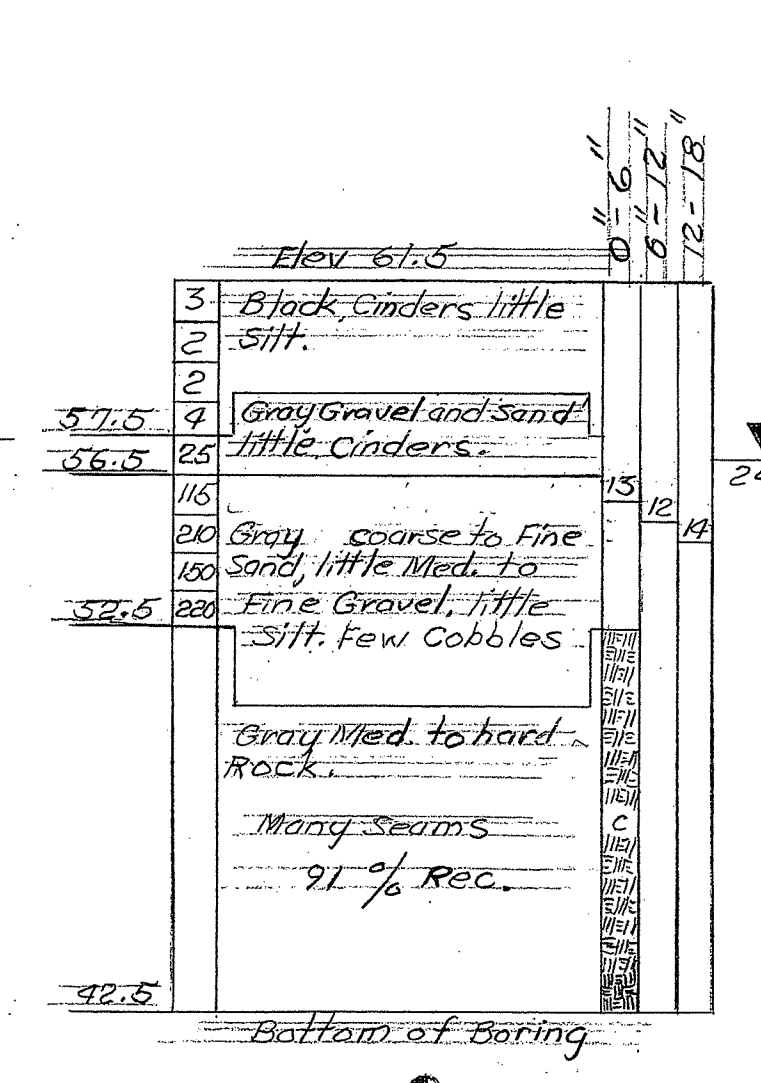
Ground surface to 7 1/2' used 2 1/2" casing

HOLE 5
STA. 92+80
OFFSET 34' LT.



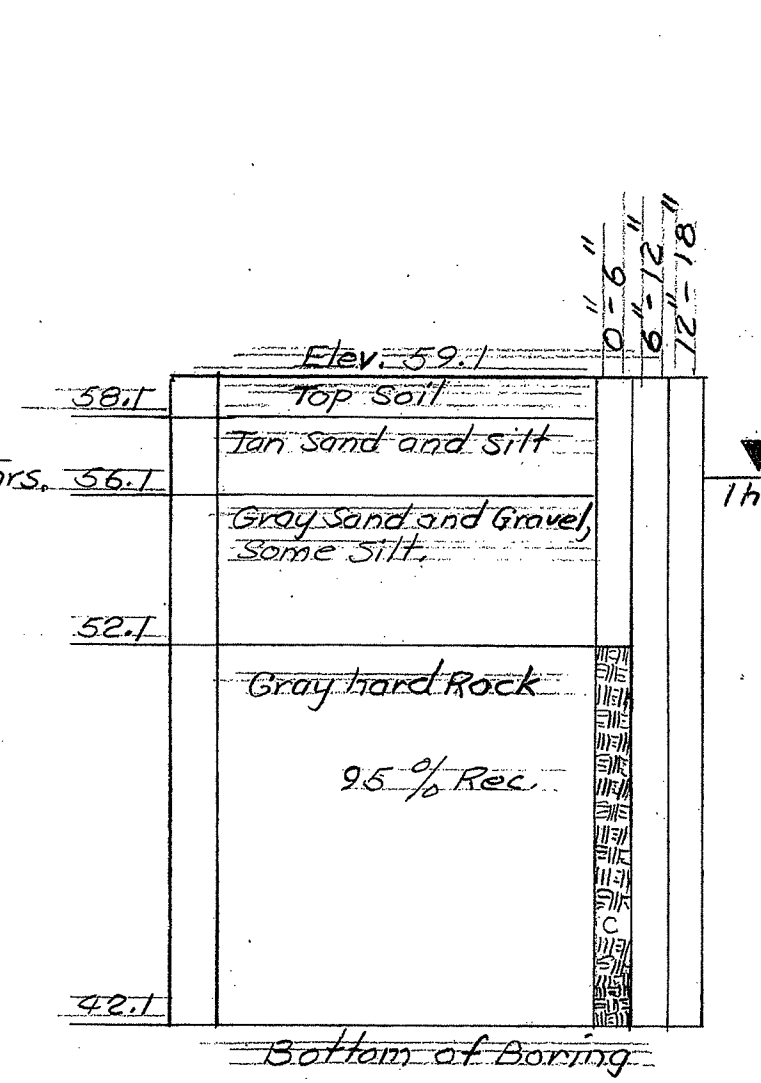
Ground surface to 8' used 2 1/2" casing

HOLE 6
STA. 92+77
OFFSET 17' RT.



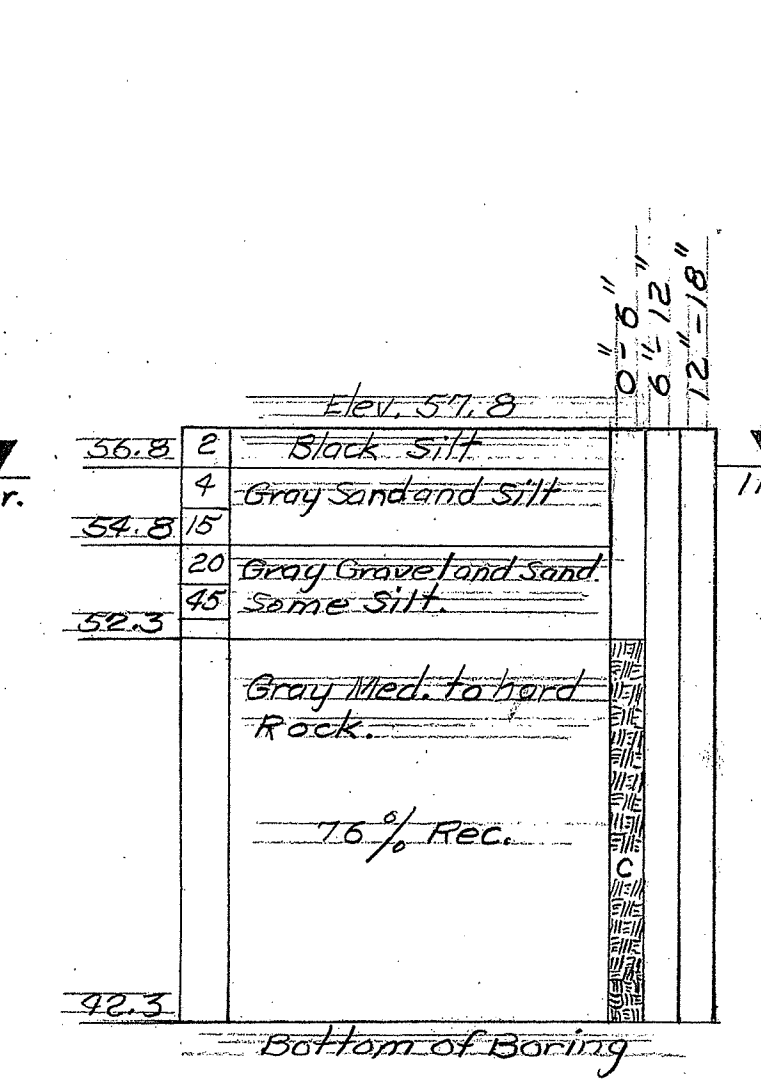
Ground surface to 9' used 2 1/2" casing

HOLE 7
STA. 93+27
OFFSET 35' LT.



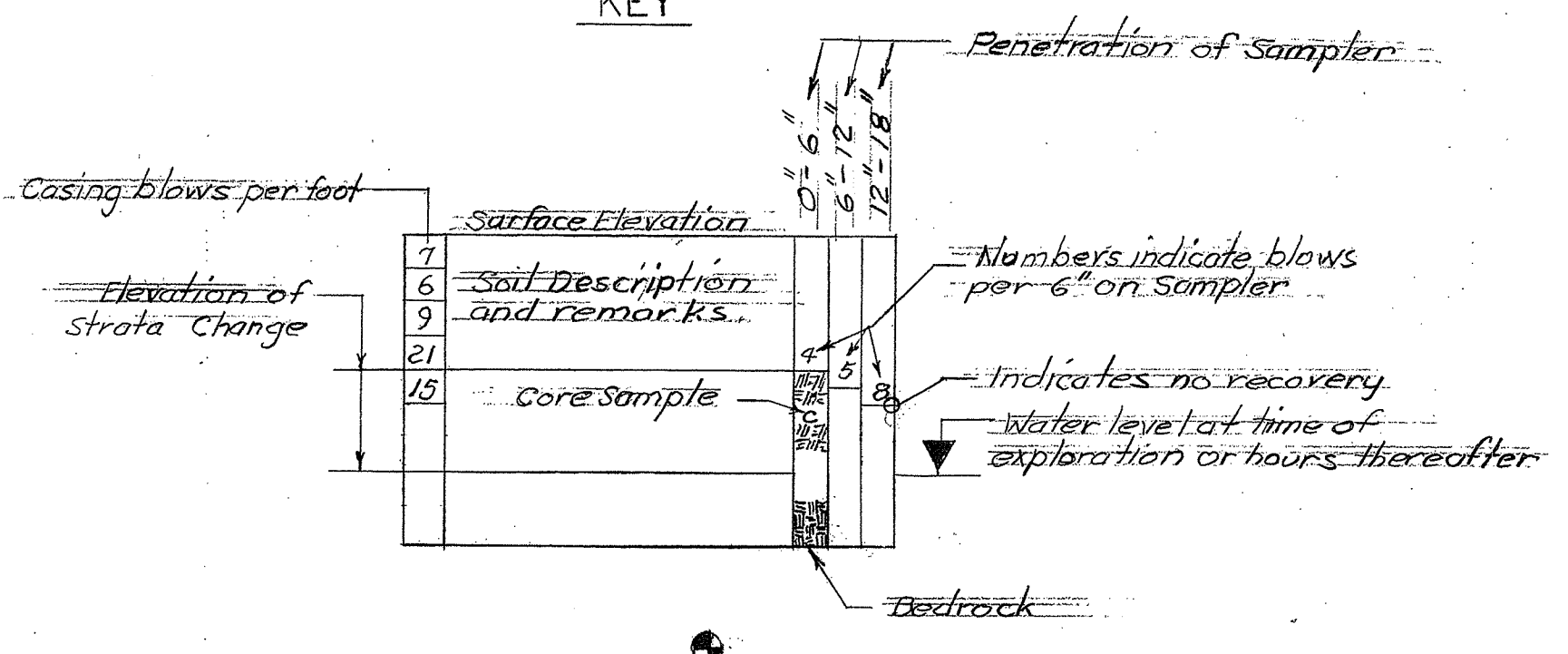
Ground surface to 7' used 2 1/2" casing

HOLE 8
STA. 93+25
OFFSET 17' RT.



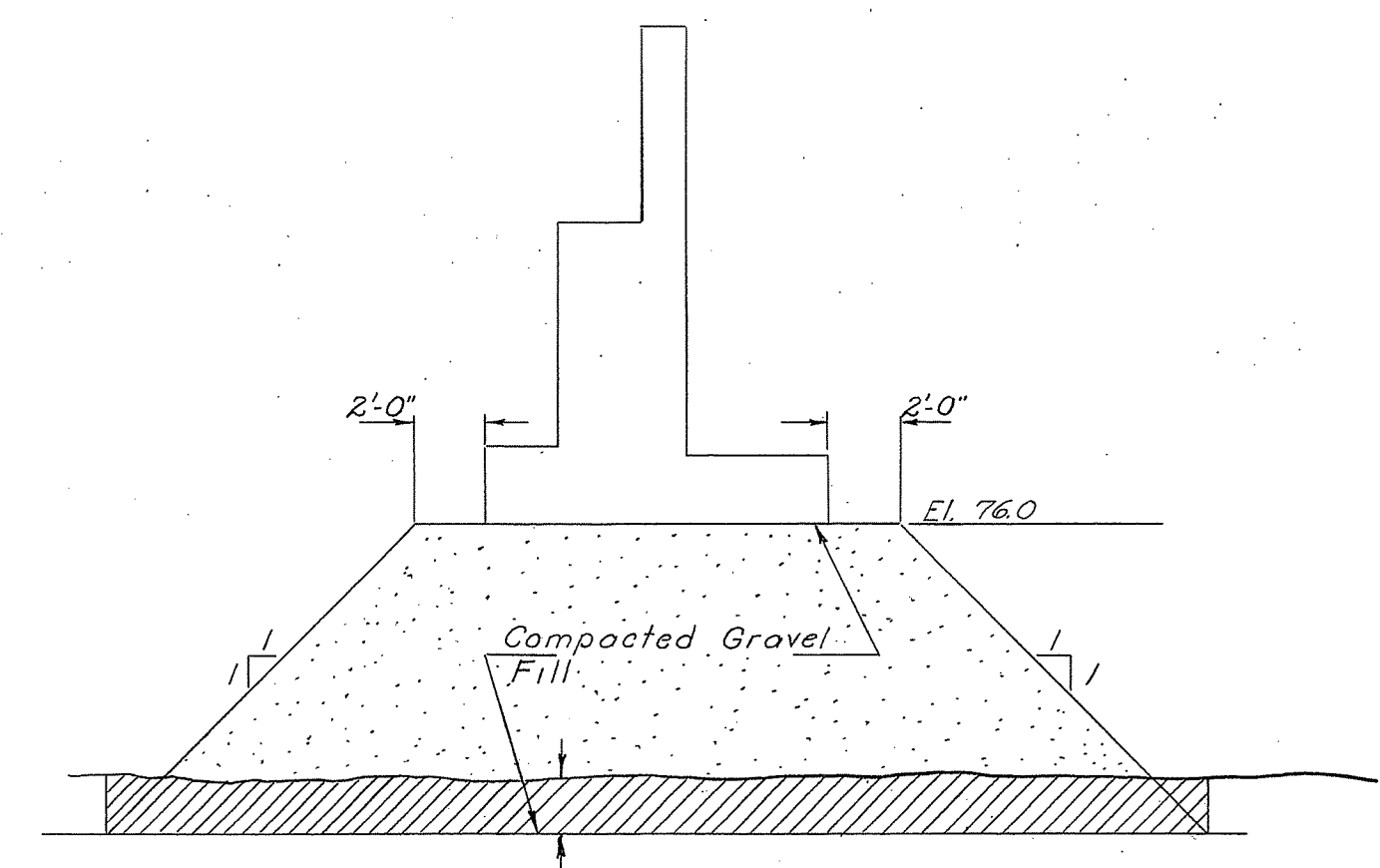
Ground surface to 5 1/2' used 2 1/2" casing

KEY



Type	Casing	Sampler	Core Bar
Size 1-D	Steel	Split tube	Single
Hammer with	300'	300'	128'
Hammer Fall	24"	14"	Diamond

Abbreviations
Rec. Recovery
Med. Medium



COMPACTED GRAVEL FILL & STRUCTURE EXCAVATION LIMITS

Abut. 1 & Wings 1A & 1B. Remove 1'-0" to 2'-0" of organic cover and replace with Compacted Gravel Fill to footing El. 76.0

Abut. 2 & Wings 2A & 2B. Remove 1'-0" of existing top soil and replace with Compacted Gravel Fill to footing El. 76.0.

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REVISIONS		
NO.	DATE	DESCRIPTION

CONNECTICUT STATE HIGHWAY DEPARTMENT

TOWN OF GROTON
GROTON DEFENSE ACCESS HWY.
SOUTHBOUND ROADWAY OVER
N.Y. N.H. & H.R.R.
STA. 92 + 28.03
BORINGS

DESIGNED BY W.F.D.

SCALES: 1"=5'-0" vertical

MADE BY F.G.M. DATE 4/20/64

CHECKED BY R.A.C. DATE 4/21/64

APPROVED E.J. Koenig DATE 5/4/64

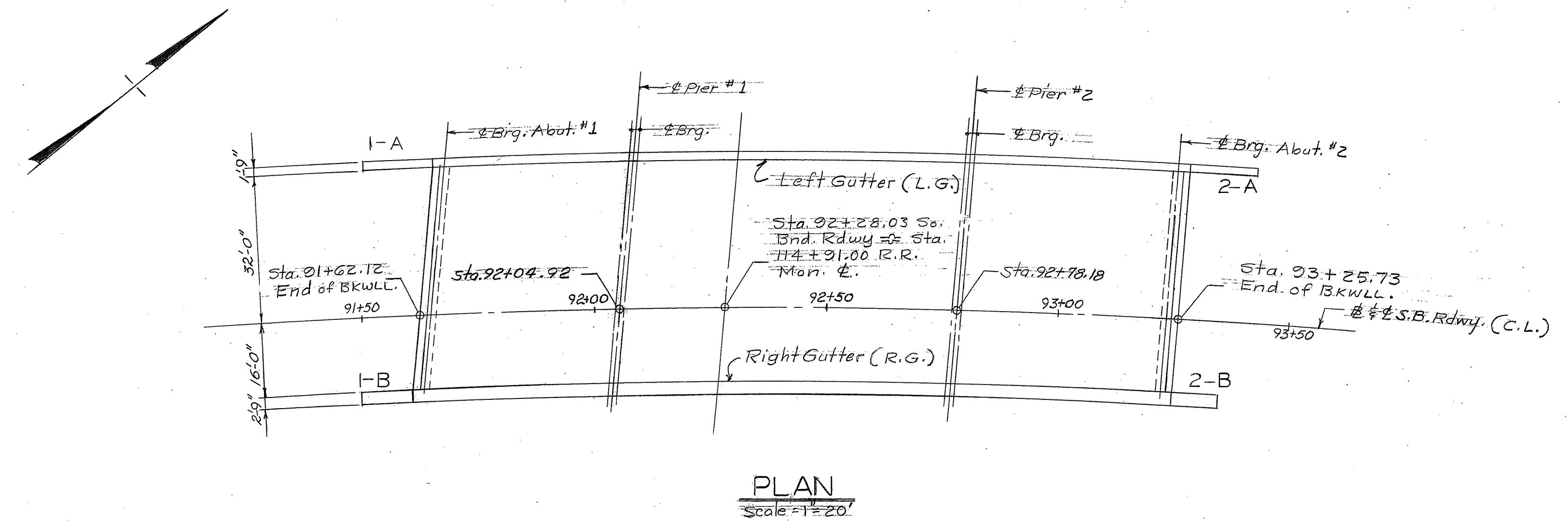
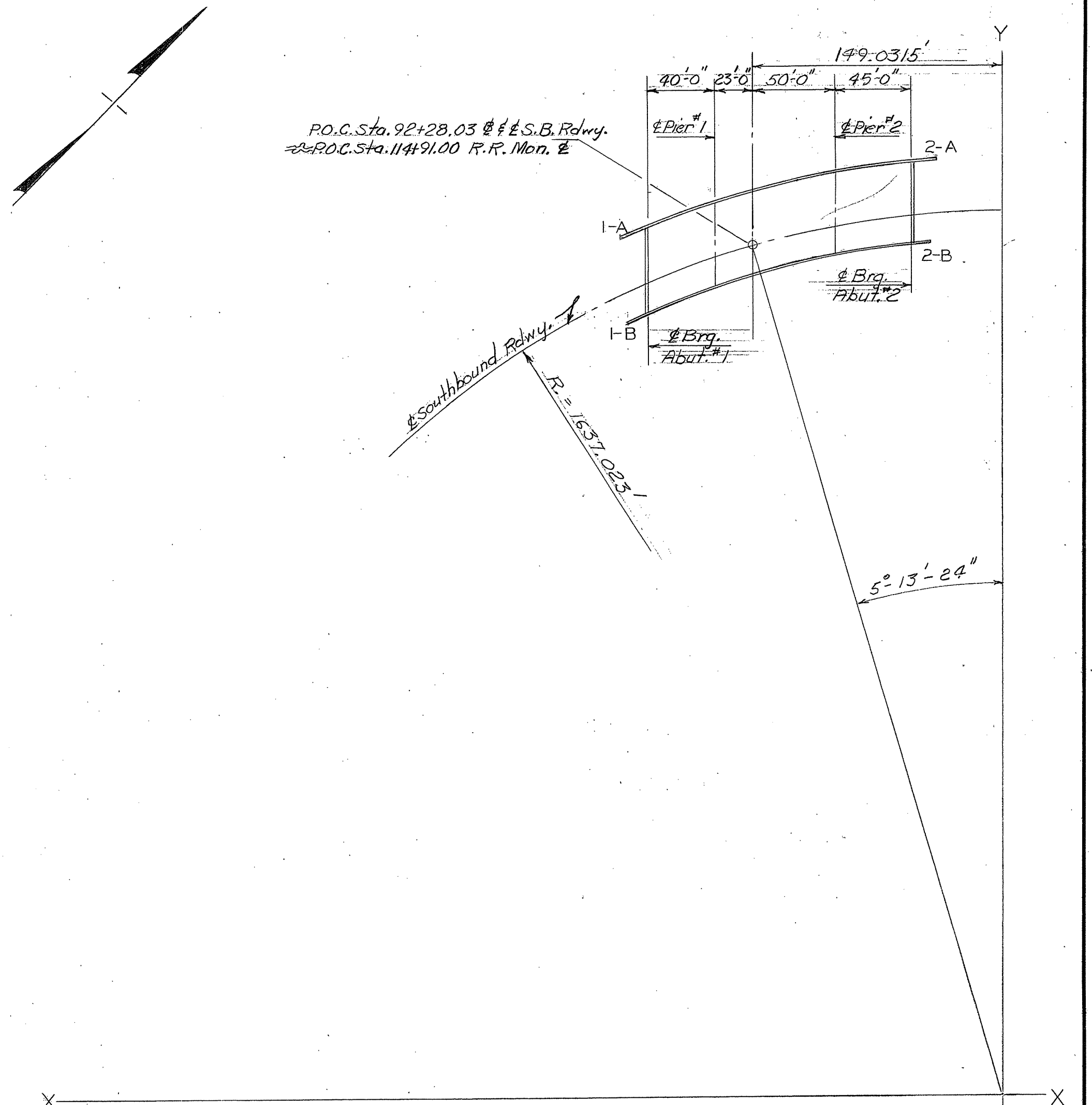
PROJECT NO. 58-117-03G

BRIDGE SHEET NO. 2 of 2

SOUTHBOUND ROADWAY COORDINATES					
	LOCATION	STATION	ELEVATION	X-X AXIS	
L.G.	End Wing 1A	91+51.42	90.249	1653.1645	
	End Backwall Abut.#1	91+66.27	90.419	1655.1779	
	± Pier #1	92+08.23	90.832	1660.1334	
	± Pier #2	92+80.08	91.309	1666.0824	
	End Backwall Abut.#2	93+26.72	91.463	1668.2273	
L.G.	End Wing 2A	93+40.94	91.486	1668.6121	57.0315
C.L.	End Backwall Abut.#1	91+62.12	88.373	1622.9050	214.5315
	End Slab Abut.#1	91+63.51	88.388	1623.0861	215.1565
	± Brq. Abut.#1	91+64.64	88.401	1623.2335	212.0315
	± Pier #1	92+04.92	88.803	1627.9537	172.0315
	± S.B. Rdwy. ± R.R.	92+28.03	88.992	1630.2251	149.0315
	± Pier #2	92+78.18	89.300	1634.0248	99.0315
	± Brq. Abut.#2	93+23.23	89.456	1636.1311	54.0315
	End Slab Abut.#2	93+24.35	89.459	1636.1680	52.9065
C.L.	End Backwall #2	93+25.73	89.461	1636.2117	51.5315
R.G.	End Wing 1B	91+48.77	87.218	1605.2573	225.5315
	End Backwall Abut.#1	91+59.98	87.349	1606.7644	214.5315
	± Pier #1	92+03.21	87.788	1611.8687	172.0315
	± Pier #2	92+77.20	88.296	1617.2952	99.0315
	End Backwall Abut.#2	93+25.22	88.461	1620.2037	51.5315
R.G.	End Wing 2B	93+35.32	88.479	1620.4909	41.5315
AI-1	± Brq. Abut.#1	91+68.71	90.430	1655.2479	212.0315
AI-1	± Brq. Pier #1	92+07.46	90.809	1659.7938	172.7919
PI-1	± Brq. Pier #1	92+08.28	90.822	1659.9458	171.2503
PI-1	± Brq. Pier #2	92+79.30	91.289	1665.7683	99.8127
P2-1	± Brq. Pier #2	92+80.84	91.296	1665.8683	98.2398
P2-1	± Brq. Abut.#2	93+24.26	91.443	1667.8980	54.0315
AI-6	± Brq. Abut.#1	91+62.55	87.388	1607.2360	212.0315
PI-8	± Brq. Pier #1	92+04.44	87.782	1611.8019	172.7919
PI-8	± Brq. Pier #2	92+04.00	87.795	1611.9539	171.2503
PI-8	± Brq. Pier #2	92+76.40	88.281	1617.7764	99.8127
P2-6	± Brq. Pier #2	92+77.99	88.289	1617.8764	98.2398
P2-6	± Brq. Abut.#2	93+22.69	88.441	1619.9061	54.0315
L.G.1		91+45.00	90.172		
L.G.2		91+60.00	90.349		
L.G.3		91+75.00	90.513		
L.G.4		91+90.00	90.665		
L.G.5		92+05.00	90.804		
L.G.6		92+20.00	90.930		
L.G.7		92+35.00	91.044		
L.G.8		92+50.00	91.145		
L.G.9		92+65.00	91.233		
L.G.10		92+80.00	91.309		
L.G.11		92+95.00	91.372		
L.G.12		93+10.00	91.422		
L.G.13		93+25.00	91.450		
L.G.14		93+40.00	91.485		
L.G.15		93+55.00	91.497		
CL.1		91+45.00	88.172		
CL.2		91+60.00	88.349		
CL.3		91+75.00	88.513		
CL.4		91+90.00	88.665		
CL.5		92+05.00	88.804		
CL.6		92+20.00	88.930		
CL.7		92+35.00	89.044		
CL.8		92+50.00	89.145		
CL.9		92+65.00	89.233		
CL.10		92+80.00	89.309		
CL.11		92+95.00	89.372		
CL.12		93+10.00	89.422		
CL.13		93+25.00	89.450		
CL.14		93+40.00	89.485		
CL.15		93+55.00	89.497		

SOUTHBOUND ROADWAY COORDINATES			
	LOCATION	STATION	ELEVATION
R.G.1		91+45.00	87.172
R.G.2		91+60.00	87.349
R.G.3		91+75.00	87.513
R.G.4		91+90.00	87.665
R.G.5		92+05.00	87.804
R.G.6		92+20.00	87.930
R.G.7		92+35.00	88.044
R.G.8		92+50.00	88.145
R.G.9		92+65.00	88.233
R.G.10		92+80.00	88.309
R.G.11		92+95.00	88.372
R.G.12		93+10.00	88.422
R.G.13		93+25.00	88.450
R.G.14		93+40.00	88.485
R.G.15		93+55.00	88.498

SLAB ELEVATIONS ALONG ± OF BEAM - WITH INCREASING STATIONING -									
BEAM	± BRG.	1 st SPAN	2 nd SPAN	3 rd SPAN	4 th SPAN	5 th SPAN	6 th SPAN	7 th SPAN	± BRG.
AI-1	90.430		90.527		90.623		90.717		90.809
AI-2	90.455	89.822	89.920		90.016		90.111		90.204
AI-3	89.214		89.312		89.409		89.505		89.598
AI-4	88.605		88.705		88.803		88.899		88.993
AI-5	87.997		88.097		88.196		88.293		88.388
AI-6	87.388		87.489		87.588		87.686		87.782
PI-1	90.822	90.885	90.947	91.007	91.066	91.124	91.180	91.235	91.289
PI-2	90.390	90.453	90.515	90.576	90.635	90.693	90.750	90.805	90.859
PI-3	89.957	90.021	90.084	90.145	90.205	90.263	90.320	90.375	90.430
PI-4	89.525	89.589	89.652	89.714	89.774	89.832	89.890	89.946	90.000
PI-5	89.093	89.157	89.221	89.283	89.343	89.402	89.459	89.516	89.570
PI-6	88.660	88.725	88.789	88.851	88.912	88.972	89.029	89.086	89.141
PI-7	88.228	88.293	88.357	88.420	88.481	88.541	88.599	88.656	88.711
PI-8	87.795	87.861	87.926	87.989	88.050	88.110	88.169	88.226	88.281
P2-1	91.296		91.356		91.414		91.470		91.524
P2-2	90.695		90.755		90.813		90.869		90.924
P2-3	90.093		90.154		90.212		90.268		90.324
P2-4	89.492		89.553		89.611		89.668		89.724
P2-5	88.891		88.952		89.011		89.067		89.124
P2-6	88.289		88.351		88.410		88.467		88.524



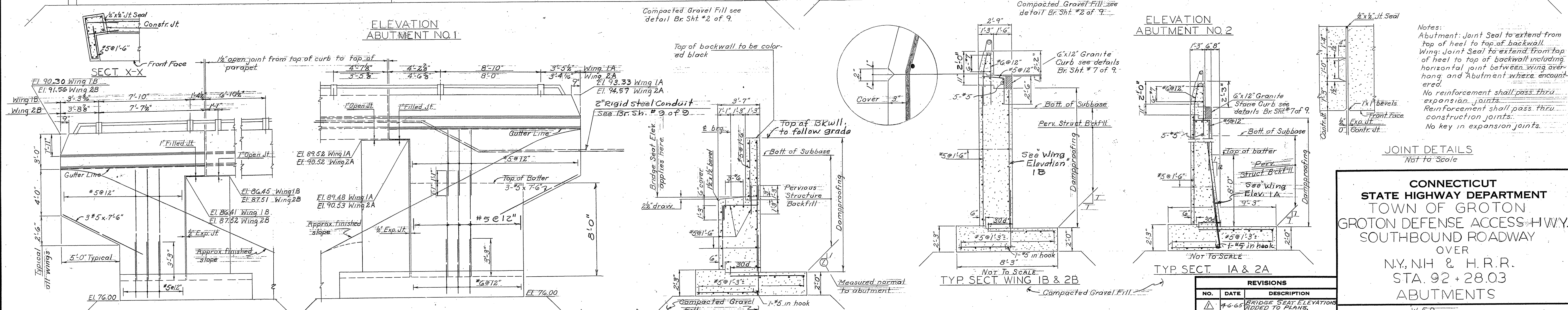
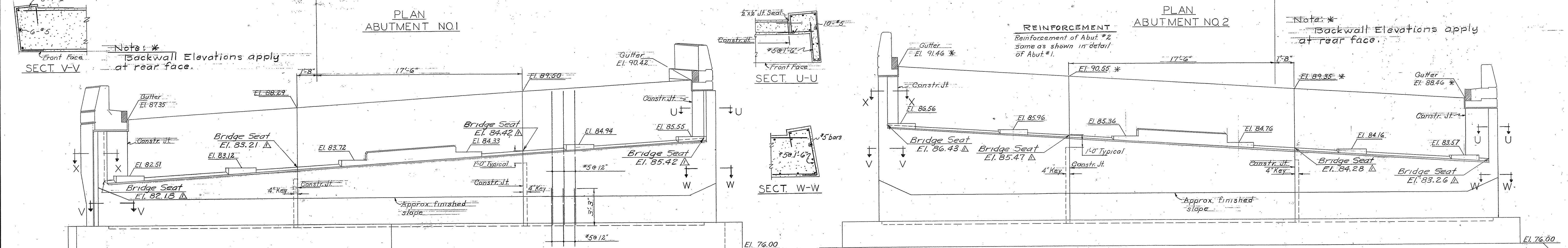
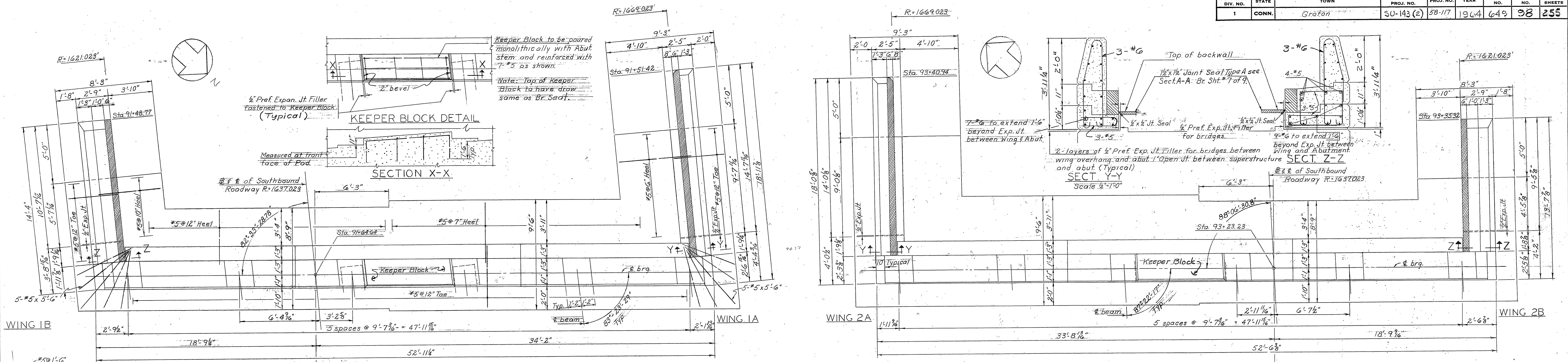
LAYOUT PLAN
NOT TO SCALE

CONNECTICUT STATE HIGHWAY DEPARTMENT
 TOWN OF GROTON
 GROTON DEFENSE ACCESS HWY.
 SOUTHBOUND ROADWAY OVER
 N.Y. N.H. & H.R.R.
 STA. 92+28.03
 COORDINATES

REVISIONS	
NO.	DATE
Δ	9/23/65

DESIGNED BY: W.F.D.
 SCALES: As Noted
 MADE BY: E.G.M. DATE: 6/23/64
 CHECKED BY: W.R.P. DATE: 7/1/64
 APPROVED: E.J. Rooney DATE: 7/16/64

PROJECT NO. 58-117-030
 BRIDGE SHEET NO. 3 OF 9



CONNECTICUT
STATE HIGHWAY DEPARTMENT
TOWN OF GROTON
GROTON DEFENSE ACCESS HWY.
SOUTHBOUND ROADWAY
OVER
N.Y., N.H. & H.R.R.
STA. 92 + 28.03
ABUTMENTS

REVISIONS		
NO.	DATE	DESCRIPTION
1	4-6-65	BRIDGE SEAT ELEVATIONS ADDED TO PLANS.

DESIGNED BY W.F.D.

SCALES 1/4" = 1'-0" except as noted

MADE BY T.S.R. DATE 6/24/64

CHECKED BY W.R.P. DATE 7/2/64

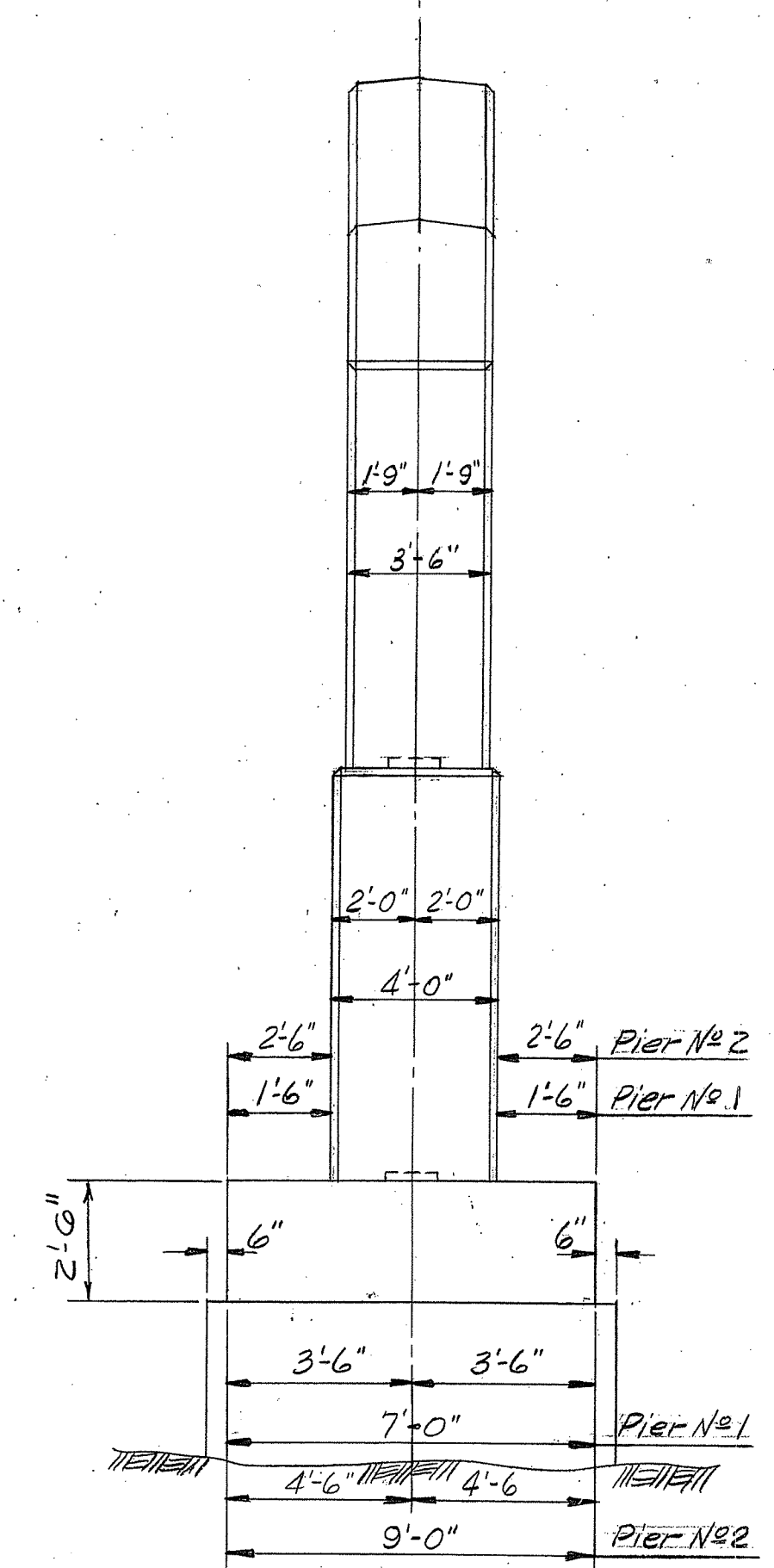
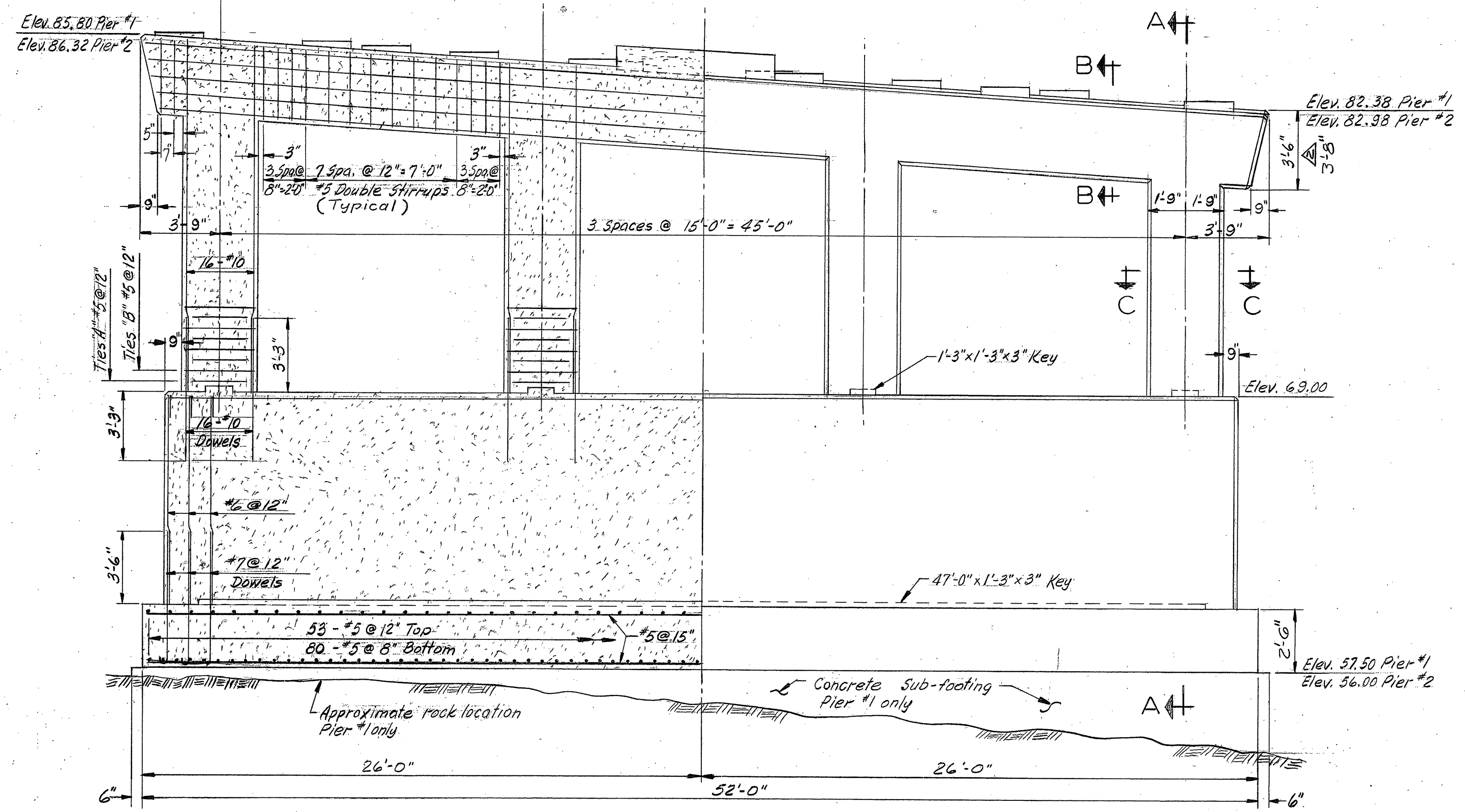
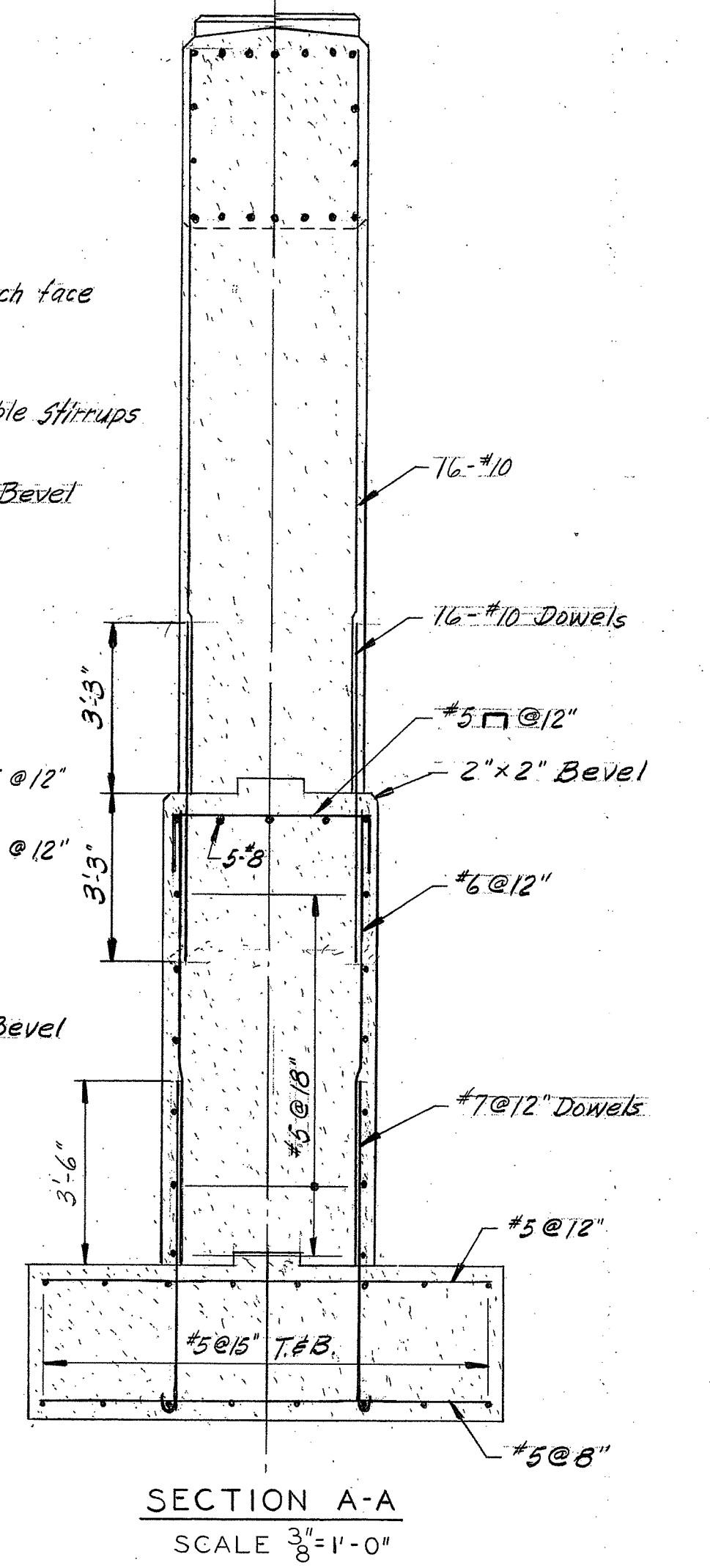
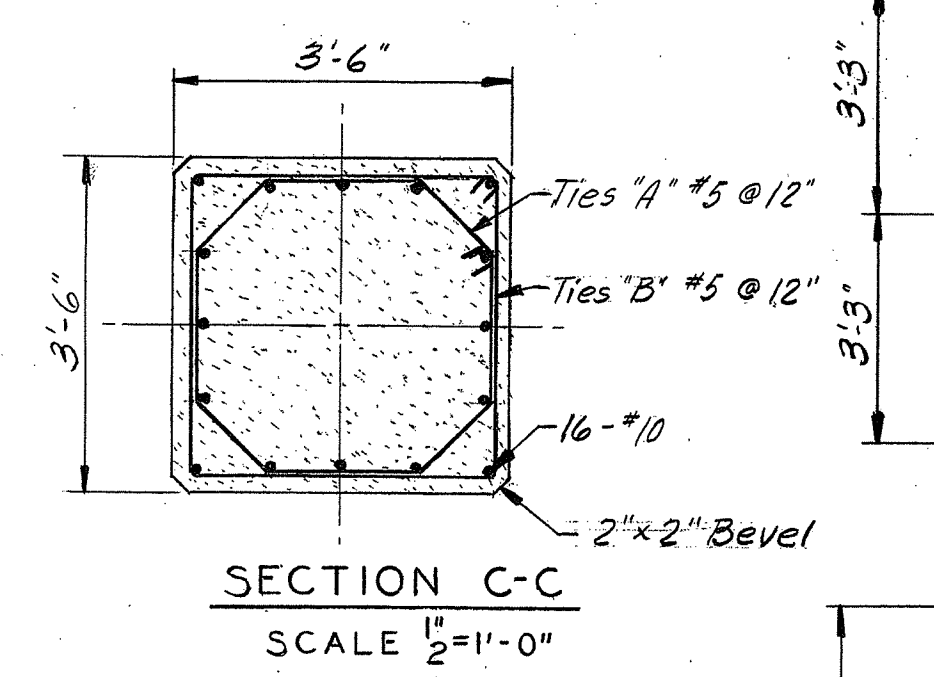
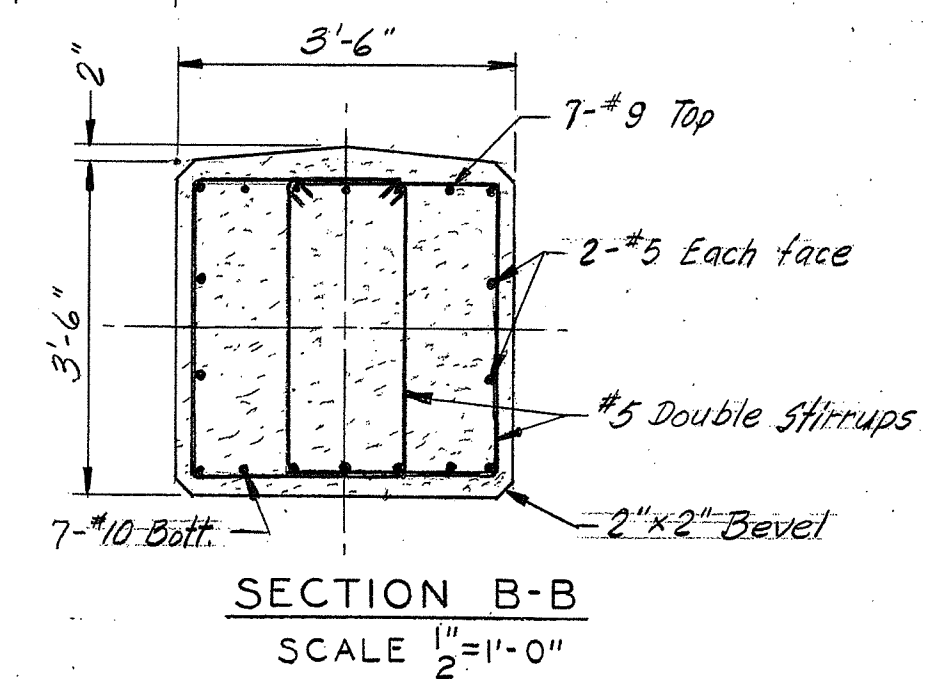
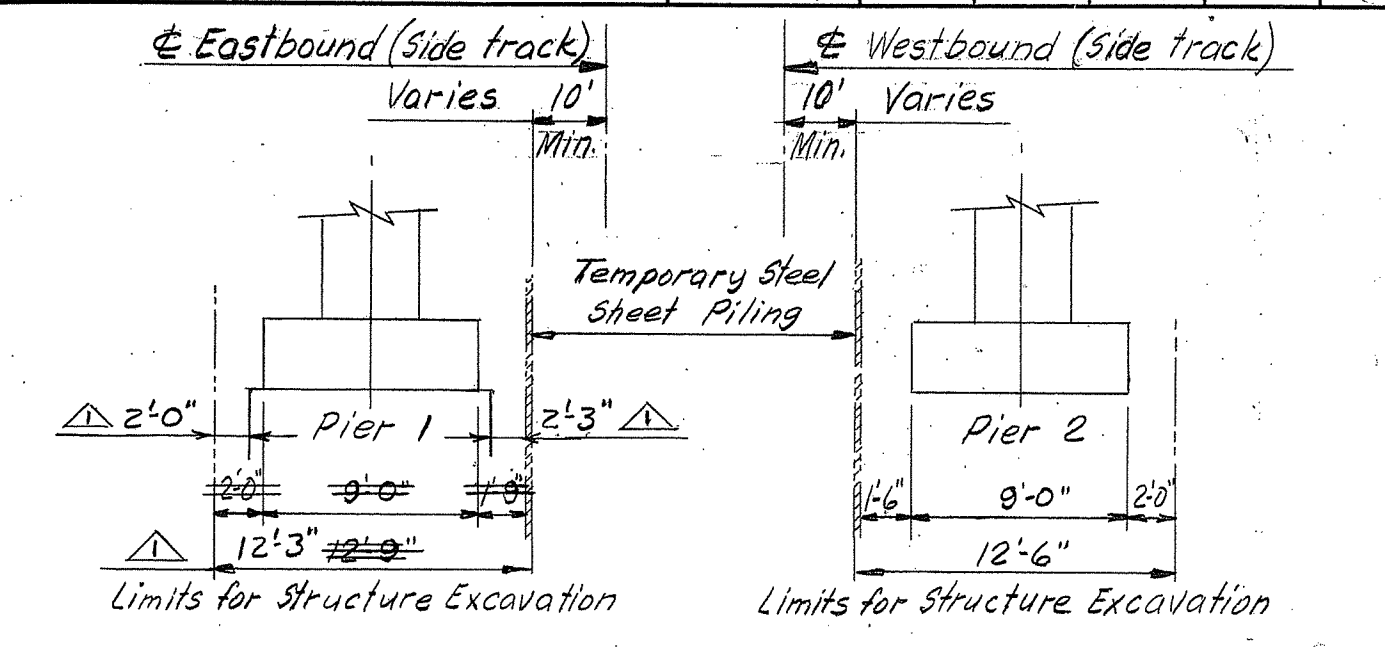
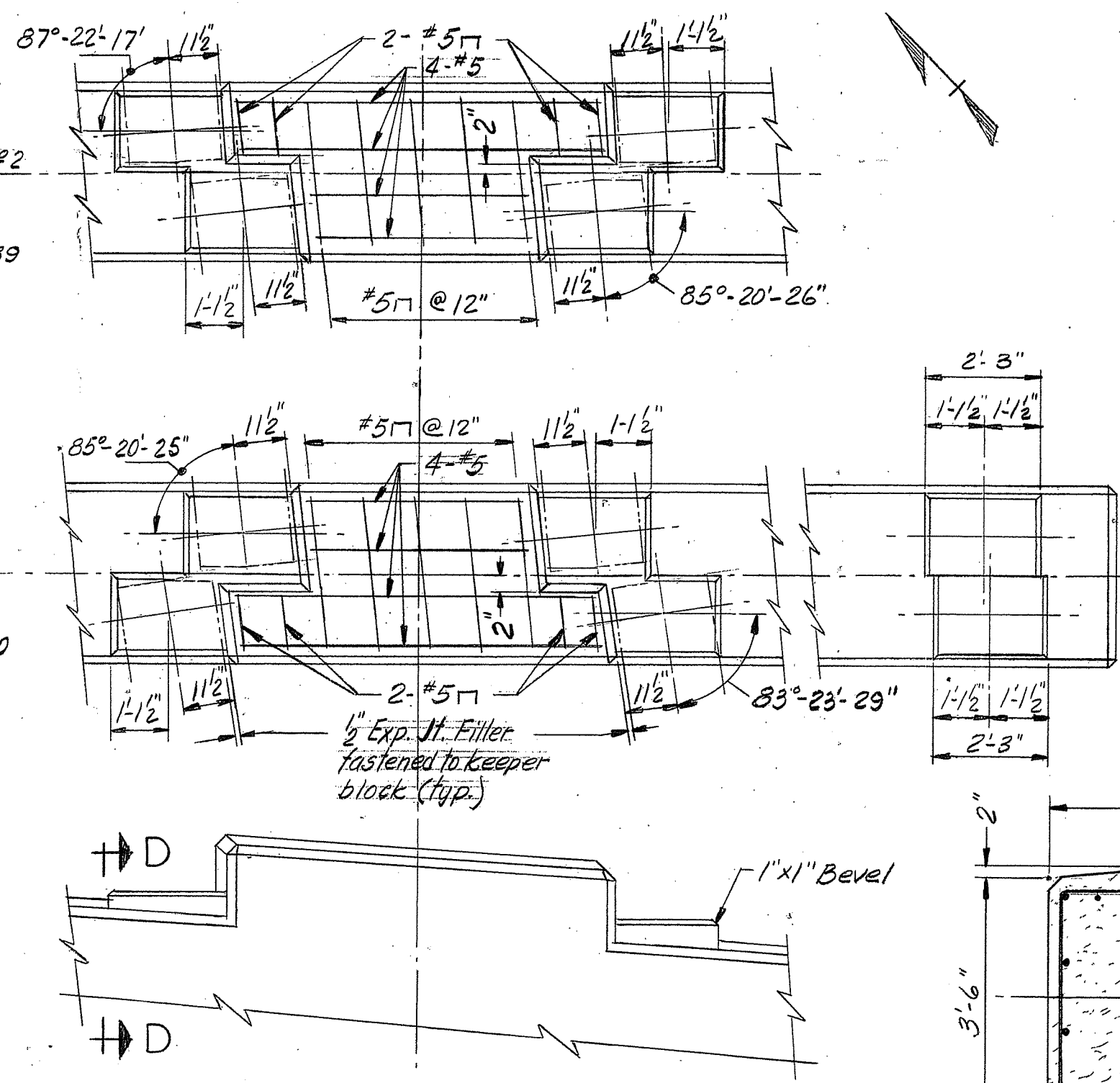
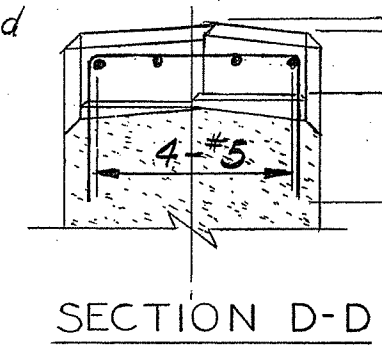
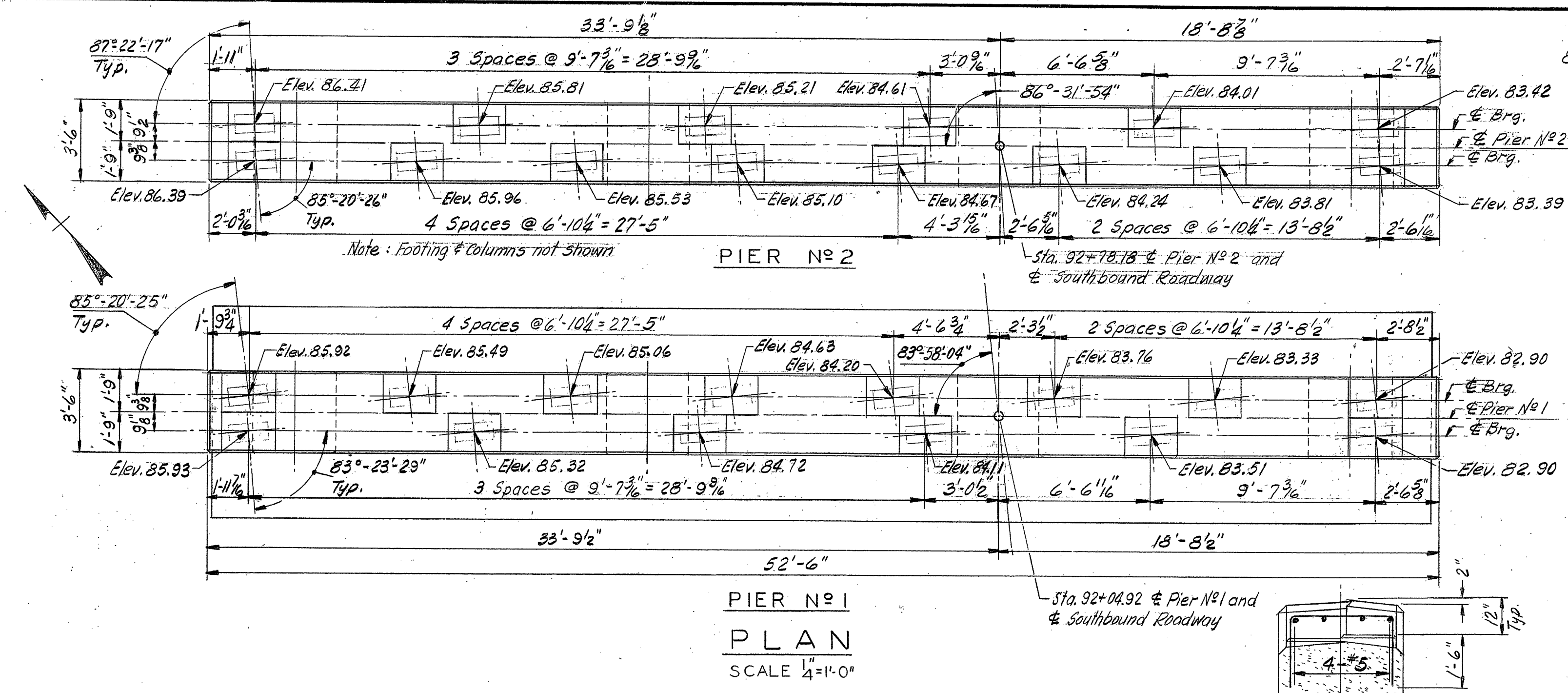
APPROVED E.J. Reany DATE 7/10/64

PROJECT NO. 58-117-03C

BRIDGE SHEET NO. 4 OF 9

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE TRUE CONDITIONS OR ACTUAL QUANTITIES OR DISTRIBUTION OF QUANTITIES OF WORK WHICH WILL BE REQUIRED.

PUB. ROAD DIV. NO.	STATE	TOWN	FED. AID PROJ. NO.	PROJ. NO.	YEAR	ROUTE NO.	SHEET NO.	TOTAL SHEETS
1	CONN.	Groton	50-143(2)	58-117	1964	649	99	255



NOTES:
Footing reinforcement to have 3" cover. All other reinforcement to have 2" cover except where dimensioned otherwise.

Design Foundation Pressure
Pier No 1
Group 1 2.6 T.S.F.
Group 3 4.3 T.S.F.
Pier No 2
Group 1 2.3 T.S.F.
Group 3 2.8 T.S.F.

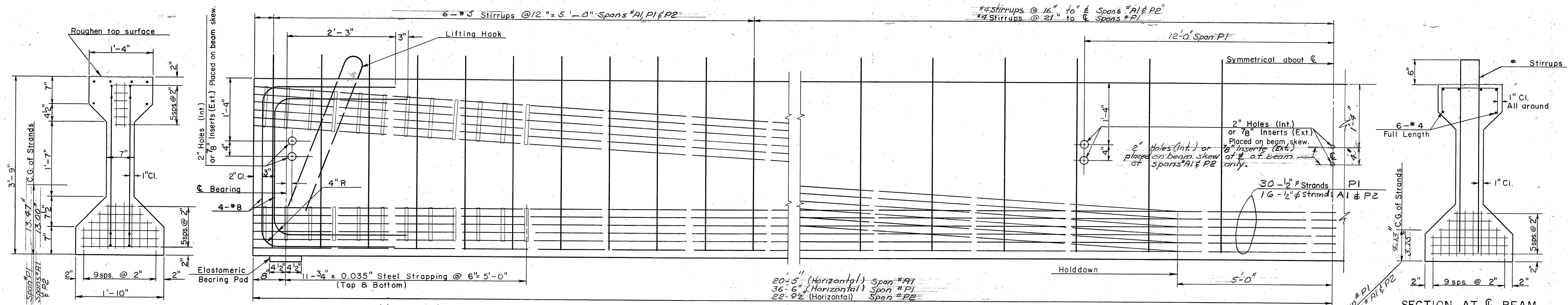
CONNECTICUT STATE HIGHWAY DEPARTMENT
TOWN OF GROTON
GROTON DEFENSE ACCESS HWY.
SOUTHBOUND ROADWAY
OVER
N.Y. N.H. & H. RR
STA. 92+28.03
PIERS 1 & 2

REVISIONS		
NO.	DATE	DESCRIPTION
1	4/6/65	Revision of Sheet
2	9/24/65	3'-6" changed to 3'-8"

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE TRUE CONDITIONS OR ACTUAL QUANTITIES OR DISTRIBUTION OF QUANTITIES OF WORK WHICH WILL BE REQUIRED.

DESIGNED BY B.N.
MADE BY wd DATE 5-7-64
CHECKED BY WP DATE 6/2/64
APPROVED E. J. Keeney DATE 10/6/64

PROJECT NO. 58-117-030
BRIDGE SHEET NO. 5 OF 9

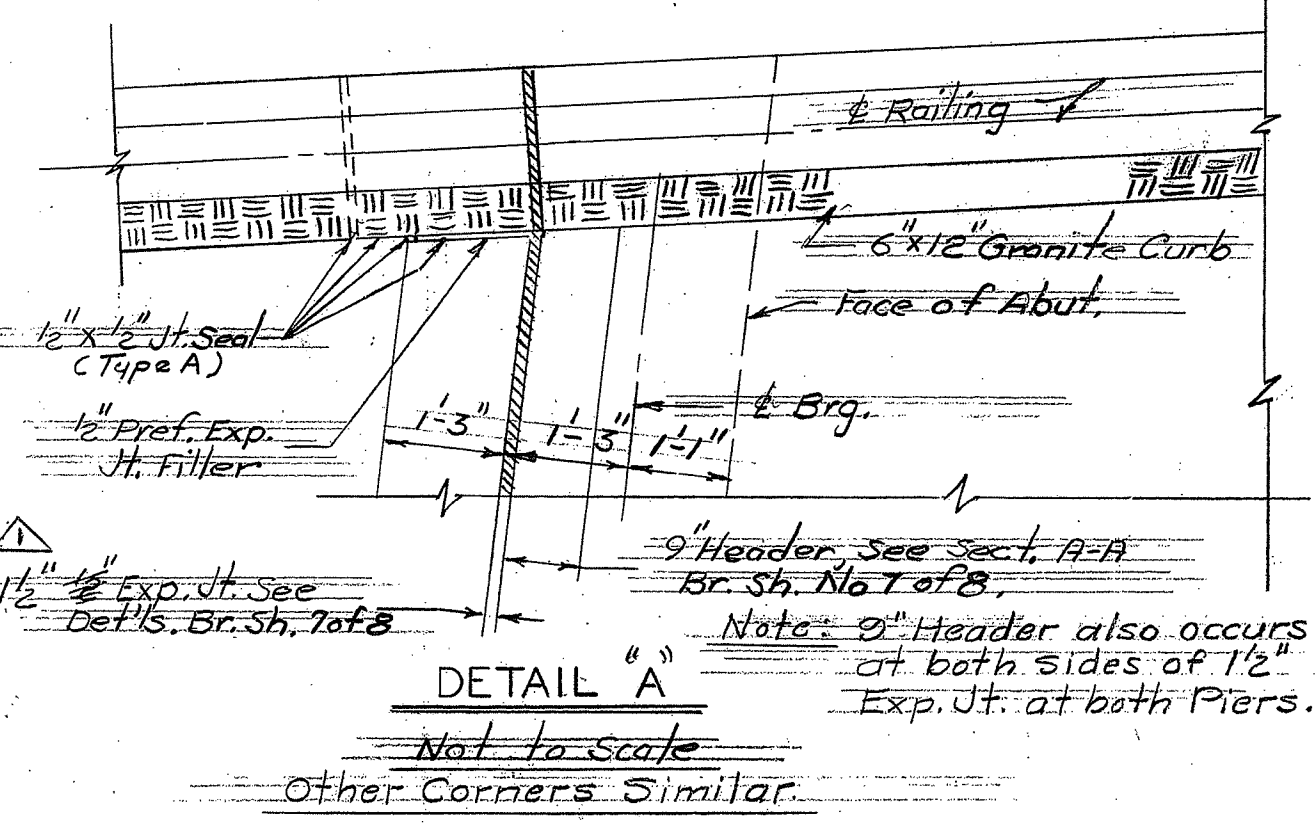


NOTE: Location of strands shown nominal
SECTION AT BEARING
 Scale: 1" = 1'-0"

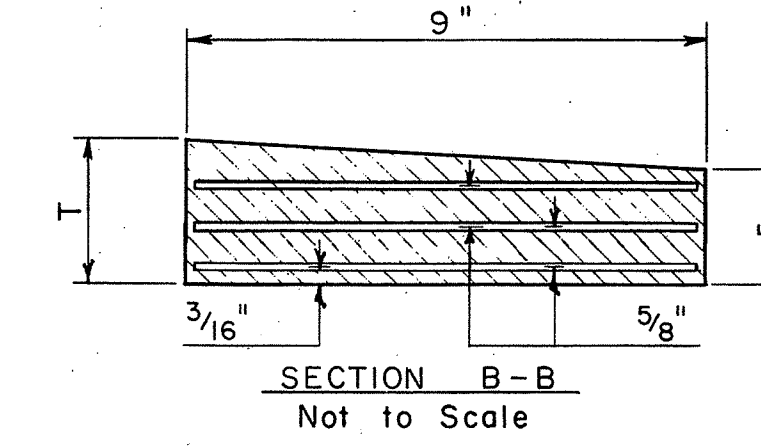
NOTE WELL
 Ends of Beams at Piers are beveled.
 See "TYP. DETAIL - BEAMS AT PIER"
 Bridge Sheet No. 7 of 9.

PRESTRESSED BEAM-PRETENSIONED-TYPE III

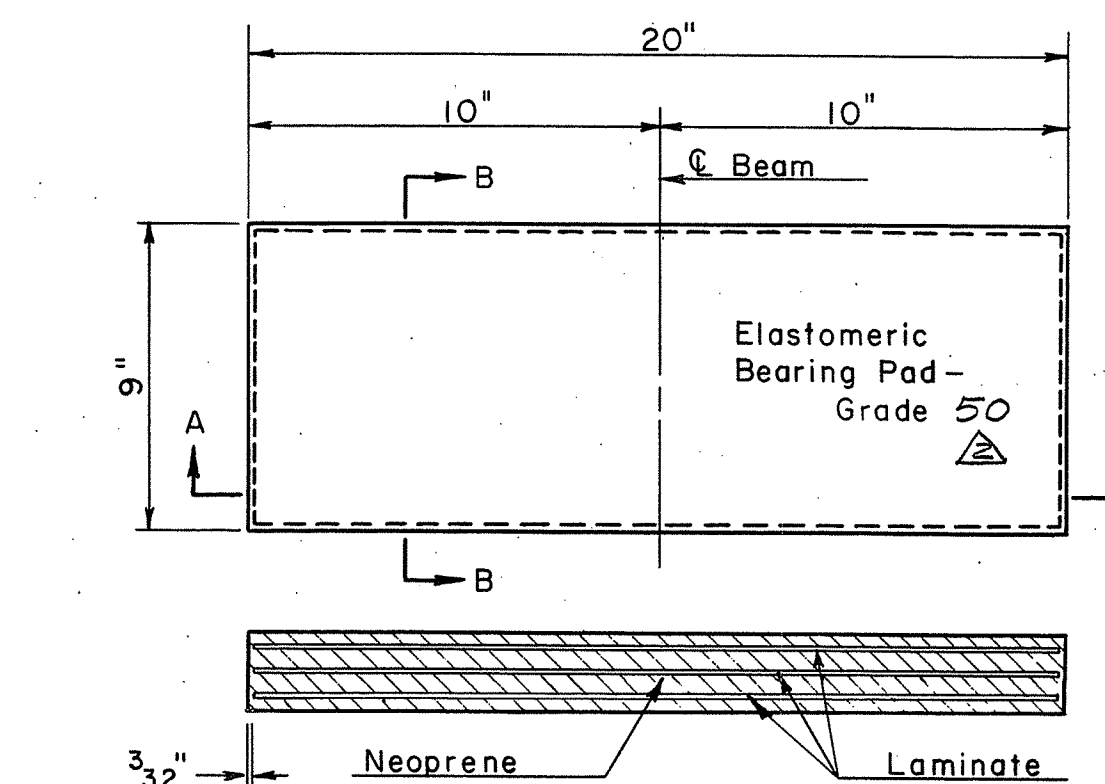
SECTION AT C BEAM
 Scale: 1" = 1'-0"



Stringer No.	Dead Load Deflections					Camber		Elastomeric Bearing Pad D.L. Deflection
	conc. slab and diaphragm	safety curb and parapet	sidewalk and parapet	bit. wearing surface	future wearing surface	total dead load deflec.	estimated net	
A1-1 & A1-6	1/16"					1/16"	3/8"	1/16"
A1-2 & A1-5	1/16"					1/16"	3/8"	1/16"
P1-1 & P1-8	1/16"	1/16"		1/16"		1/16"	1 3/8"	1/16"
P1-2 & P1-7	3/16"	1/16"		1/16"		3/8"	1 3/8"	1/16"
P2-1 & P2-6	1/16"					1/16"	3/8"	1/16"
P2-2 & P2-5	1/16"					1/16"	3/8"	1/16"



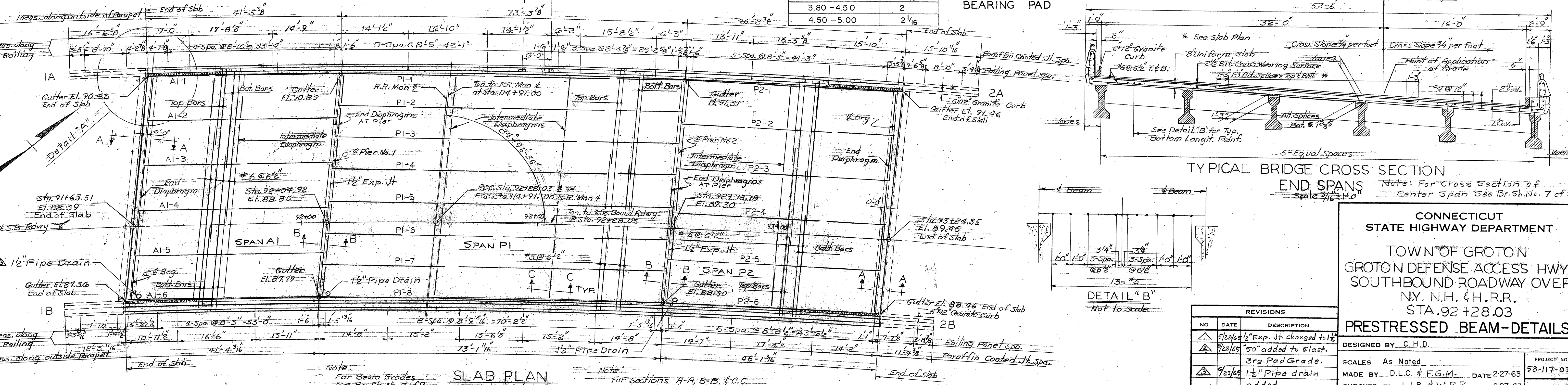
Beam Grade (%)	T (in.)
0 - 0.30	1 5/8
0.30 - 1.00	1 11/16
1.00 - 1.70	1 3/4
1.70 - 2.40	1 13/16
2.40 - 3.10	1 7/8
3.10 - 3.80	1 15/16
3.80 - 4.50	2
4.50 - 5.00	2 1/16



ELASTOMERIC BEARING PAD

SECTION A-A
 Scale: 1" = 5"

NOTES
 Prestressed Beams shall conform to the following requirements:
 $f_c = 5000$ psi
 $f_{ci} = 4000$ psi
 Initial Tension = 25,200 lbs. per strand.
 See Special Provisions for specifications on fabrication.
 Elastomeric Bearing Pads shall be set level on a thin bed of neat-cement grout. The grout shall be allowed to harden before the beams are erected.
 Ends of beams shall be vertical after application of full dead load.
 The drilling of holes, or the use of power actuated tools, for the purpose of attaching supports to prestressed beams will not be permitted.



SLAB PLAN
 Scale: 1" = 10"

TYPICAL BRIDGE CROSS SECTION END SPANS
 Scale: 3/16" = 1'-0"

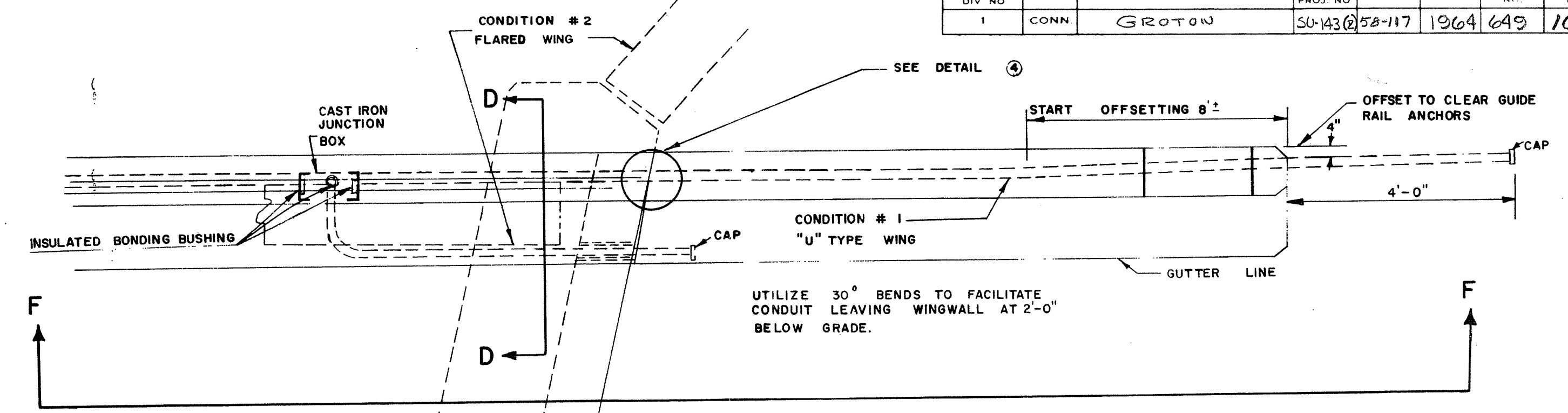
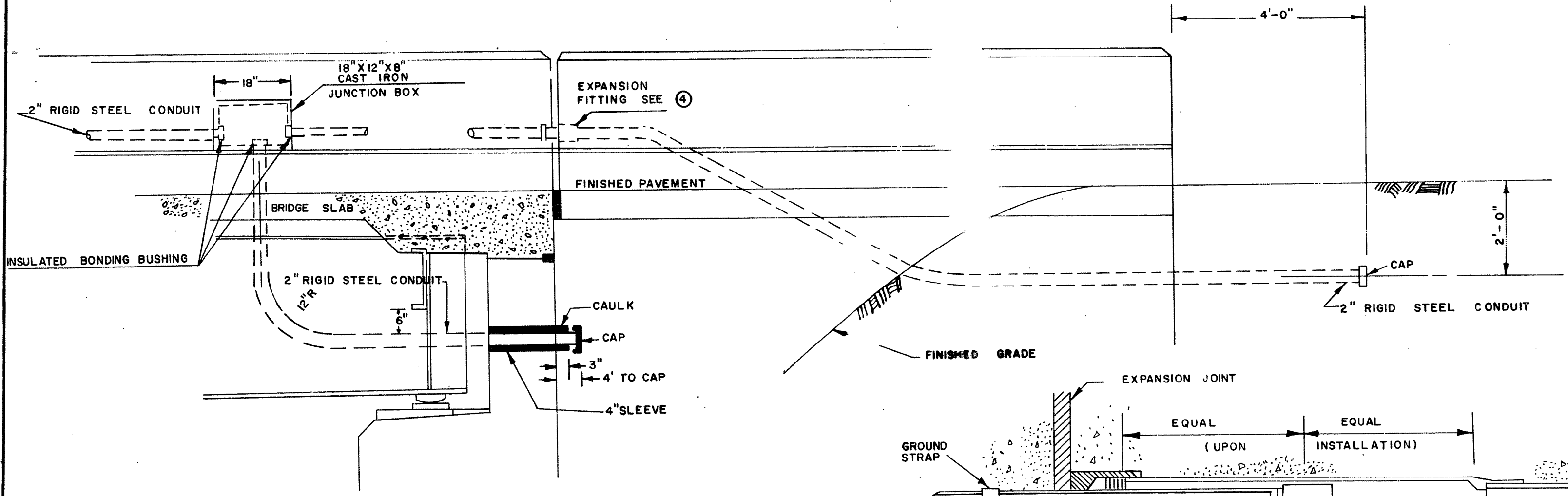
DETAIL B
 Not to scale

CONNECTICUT STATE HIGHWAY DEPARTMENT
 TOWN OF GROTON
 GROTON DEFENSE ACCESS HWY.
 SOUTHBOUND ROADWAY OVER
 N.Y. N.H. & H.R.R.
 STA. 92 + 28.03
PRESTRESSED BEAM-DETAILS

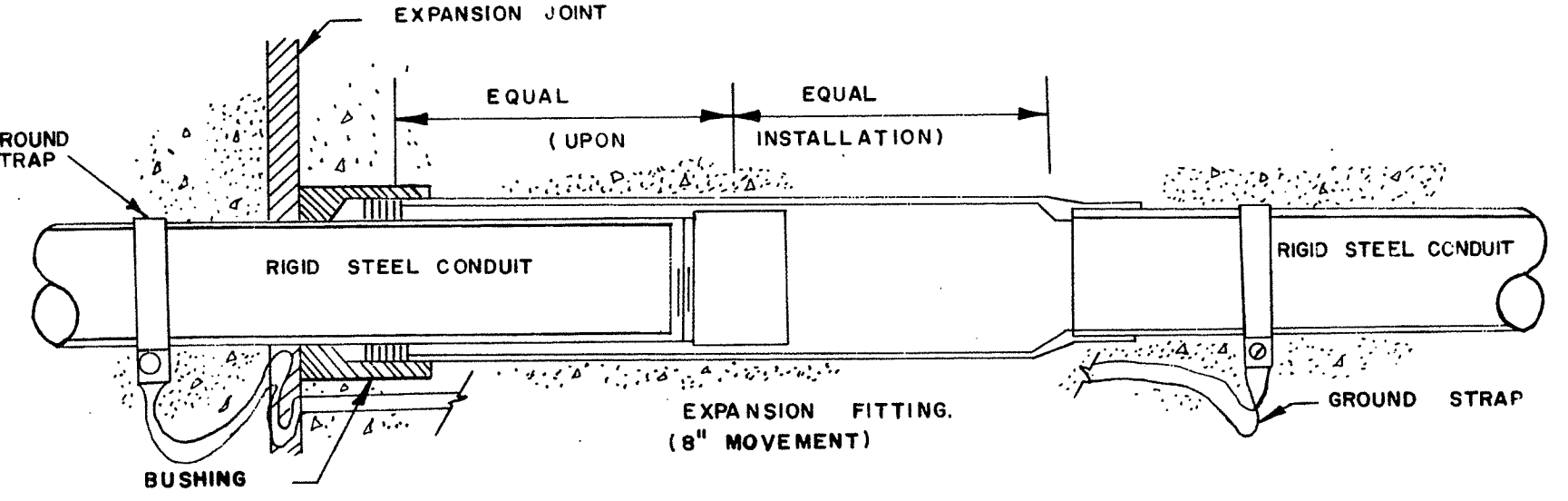
REVISIONS		
NO.	DATE	DESCRIPTION
1	5/20/64	Exp. Jt. changed to 1 1/2"
2	7/23/65	50" added to Elast. Brg. Pad Grade.
3	7/23/65	1 1/2" Pipe drain added.

DESIGNED BY C.H.D.
 SCALES As Noted
 MADE BY D.L.C. & F.G.M. DATE 2-27-63
 CHECKED BY J.J.B. & W.R.P. DATE 2-27-63
 APPROVED [Signature] DATE 7/14/64

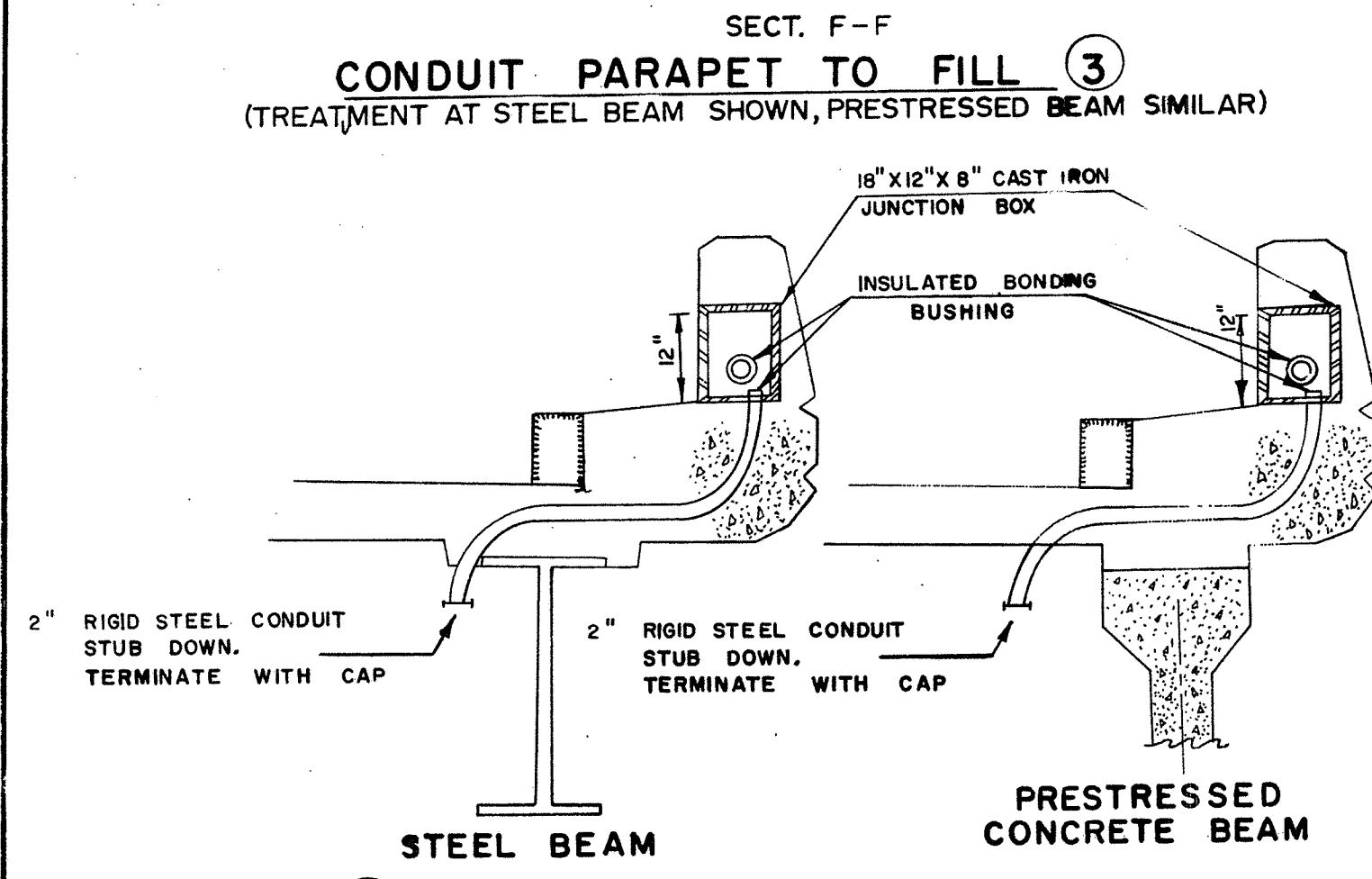
PUB. ROAD DIV. NO.	STATE	TOWN	FED. AID PROJ. NO.	PROJ. NO.	YEAR	ROUTE NO.	SHEET NO.	TOTAL SHEETS
1	CONN	GROTON	50-143(2)	58-117	1964	649	103	235



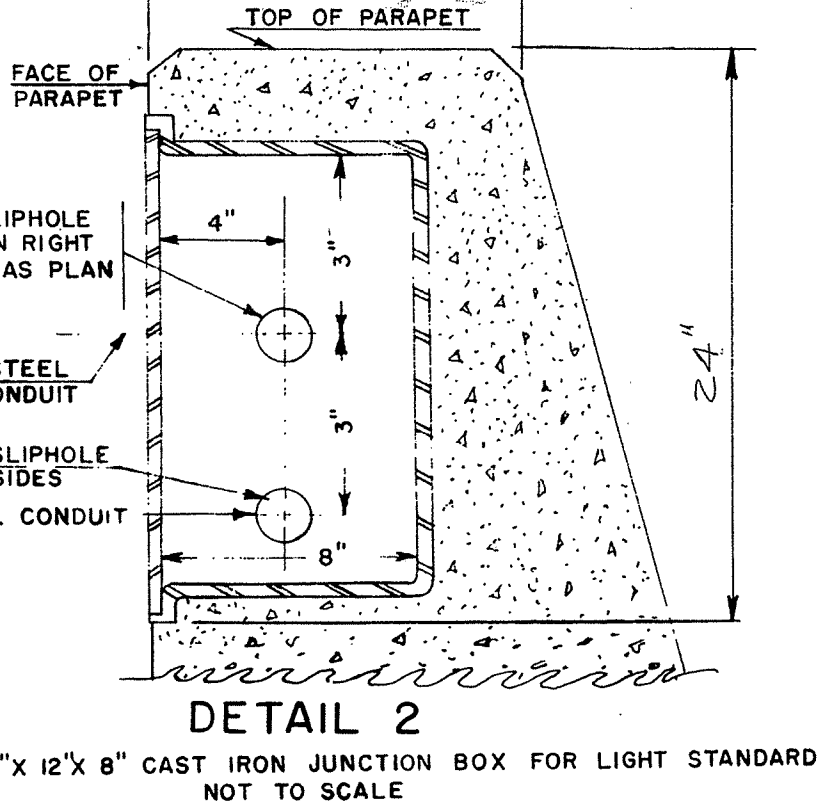
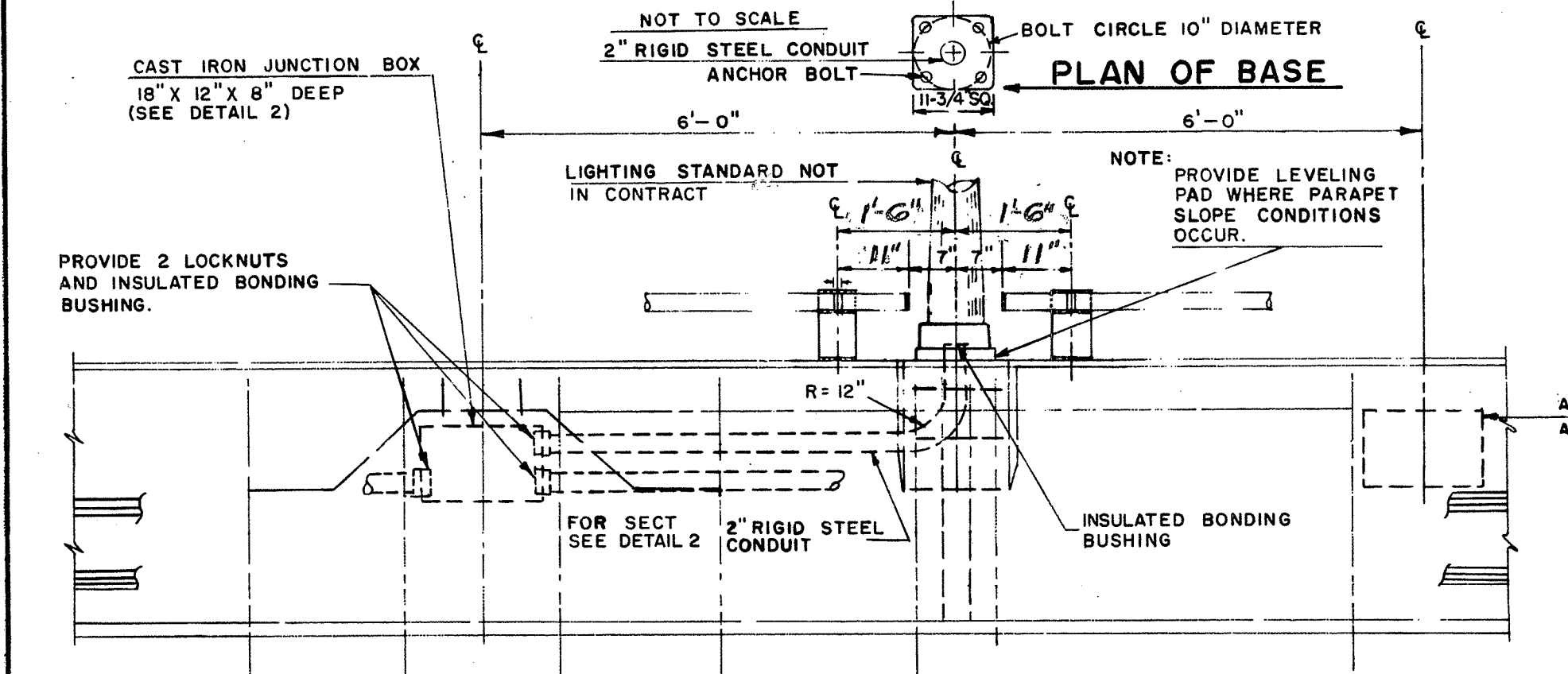
CONDUIT PARAPET TO FILL ①



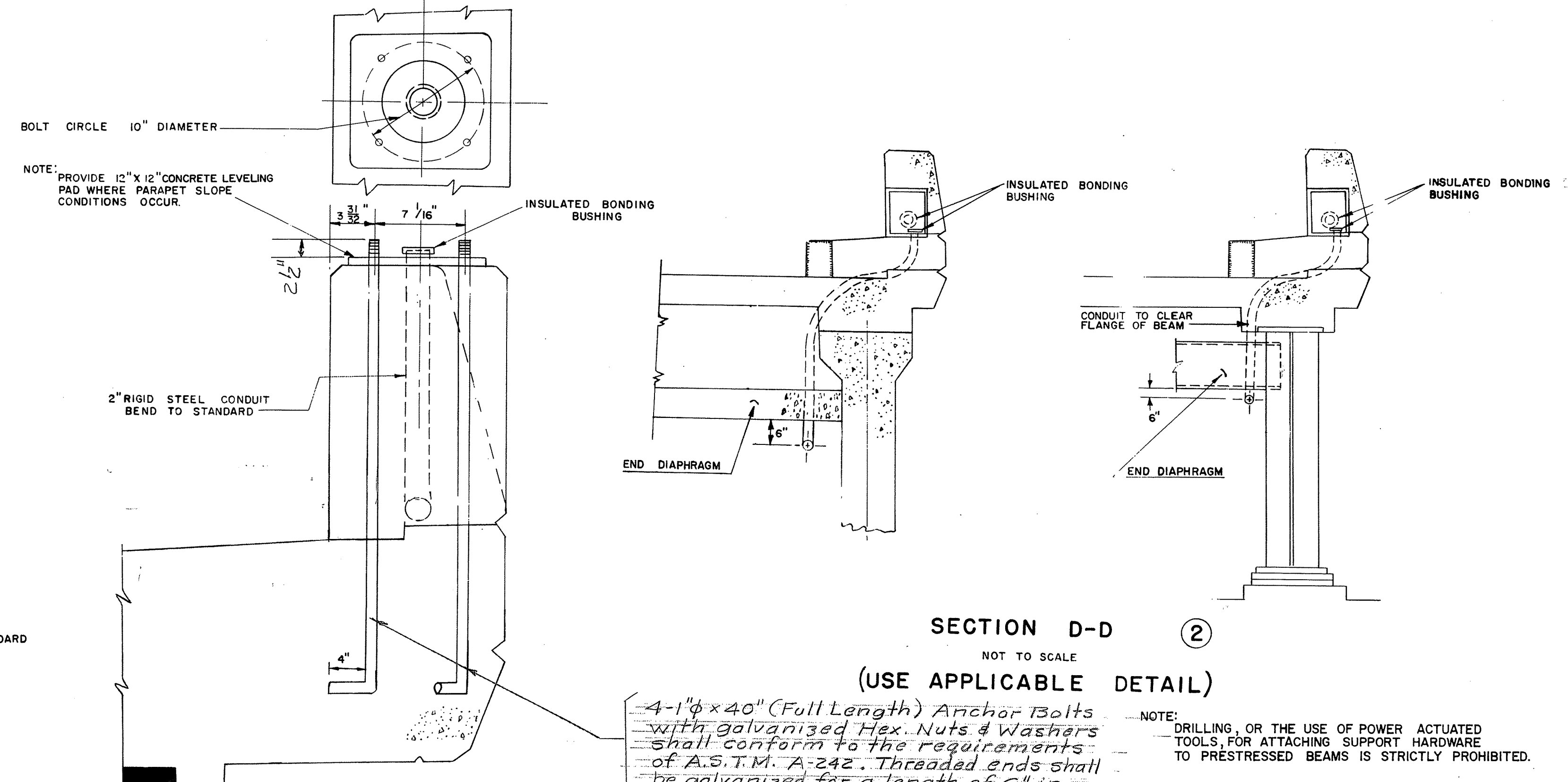
DETAIL OF EXPANSION FITTING ④
USE AT ALL EXPANSION JOINTS
NOT TO SCALE



⑥ SERVICE TO LUMINAIRE UNDER STRUCTURE (USE APPLICABLE DETAIL)



DETAIL 2
18" X 12" X 8" CAST IRON JUNCTION BOX FOR LIGHT STANDARD
NOT TO SCALE



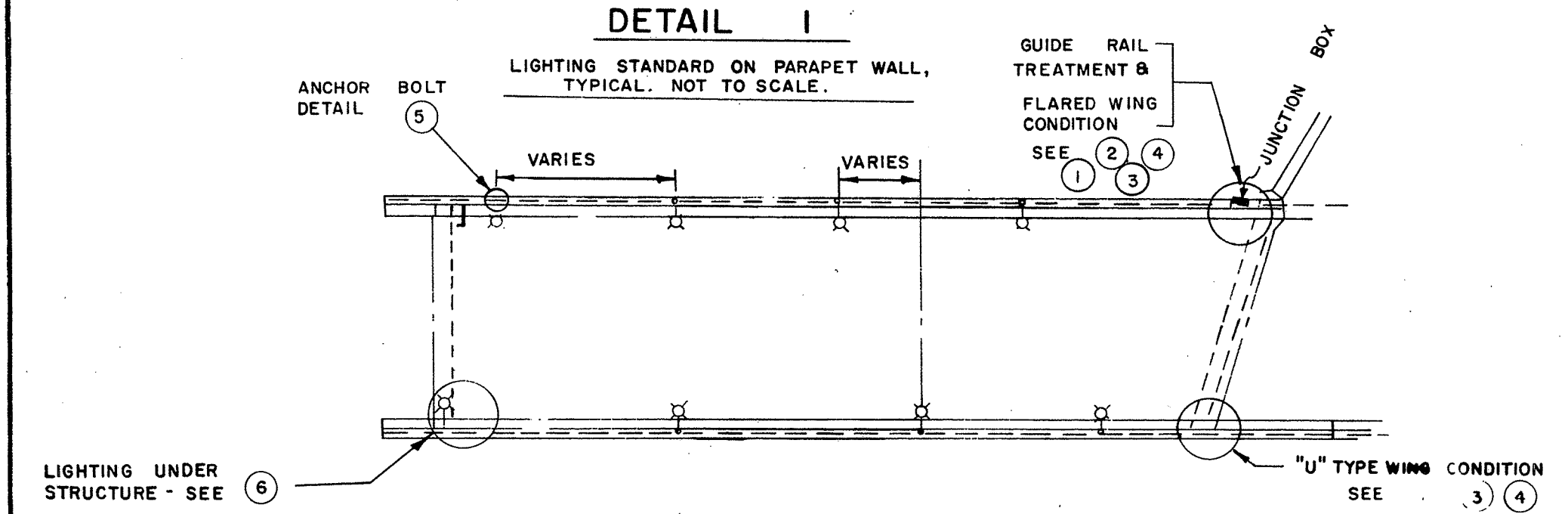
ANCHOR BOLT DETAIL ⑤
SCALE 1/2" = 1'-0"

GENERAL NOTE:
FOR REINFORCING ROD DETAILS AT JUNCTION BOXES & LIGHT STANDARDS SEE APPROPRIATE STRUCTURES SHEET.

4-1/2 x 40 (Full Length) Anchor Bolts with galvanized Hex. Nuts & Washers shall conform to the requirements of A.S.T.M. A-242. Threaded ends shall be galvanized for a length of 6" in conformance with A.S.T.M. A-153. Payment for furnishing and installing Anchor Bolts shall be included in the unit price bid for "Deformed Steel Bars."

NOTE:
DRILLING, OR THE USE OF POWER ACTUATED TOOLS, FOR ATTACHING SUPPORT HARDWARE TO PRESTRESSED BEAMS IS STRICTLY PROHIBITED.

SECTION D-D ②
NOT TO SCALE
(USE APPLICABLE DETAIL)



INDEX TO DETAILS

CONNECTICUT
STATE HIGHWAY DEPARTMENT
TOWN OF GROTON
GROTON DEFENSE ACCESS HWY.
SOUTHBOUND ROADWAY OVER
N.Y., N.H. & H. R.R.
STA. 92 + 28.03
ELECTRICAL DETAILS

REVISIONS		
NO.	DATE	DESCRIPTION

SCALE AS NOTED	ELECTRICAL	PROJECT NO.
DESIGNED BY		58-117-03C
MADE BY		BRIDGE SH. NO.
SUBMITTED BY		2 OF 2
APPROVED BY: <i>R. M. Alcega</i>	CHIEF-HIGHWAY TRAFFIC	