

STATE OF OHIO DEPARTMENT OF HIGHWAYS DAR-127-9.64

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	STATE

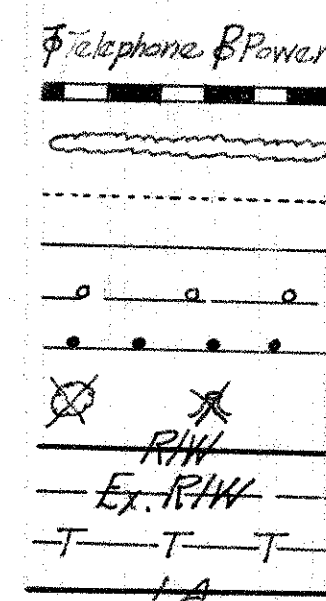
465

DARKE COUNTY
DAR-127-9.64

CONVENTIONAL SIGNS

COUNTY LINE
TOWNSHIP LINE
SECTION LINE
CORPORATION LINE
PROPERTY LINE
FENCE LINE
CENTER LINE
POLE LINE
RAILROAD
HEDGE
DRAIN PIPE (OLD)
DRAIN PIPE (NEW)
GUARD RAIL (OLD)
GUARD RAIL (NEW)
TREES AND STUMPS TO BE REMOVED
R/W LINE (PROPOSED)
R/W LINE (EXISTING)
R/W LINE (TEMPORARY)
LIMITED ACCESS LINE

MICROFILMED
MAR 21 1983



LINE DATA

BEGIN WORK STA 493+00
BEGIN PROJECT STA 508+86.05
SUSPEND PROJECT STA 587+33.90
RESUME PROJECT STA 587+43.42
END PROJECT STA 715+00
END WORK STA 716+10

Deduct for R.R. = -9.52 LIN.FT.
Length of Project = 20604.43 LIN.FT.
Length of Work = 22300.48 LIN.FT.

ADD FOR APPROACHES

HUNT ROAD BEGIN WORK STA 15+00 END WORK STA 19+56 456.00 LIN.FT.
S.R. 49 BEGIN WORK STA 729+65 END WORK STA 711+50 118.00 LIN.FT.

WARNER ROAD BEGIN WORK STA 12+80 END WORK STA 24+50 1076.36 LIN.FT.
S.R. 571 BEGIN WORK STA 710+47.50 END WORK STA 730+50 2002.09 LIN.FT.
APPROACH A BEGIN WORK STA 718+85 END WORK STA 723+05.98 420.98 LIN.FT.
U.S.R. 36 BEGIN WORK STA 652+40.00 END WORK STA 707+58 5539.50 LIN.FT.
OHIO STREET BEGIN WORK STA 0+48 END WORK STA 6+15 516.76 LIN.FT.
APPROACH TO U.S.R. 36 BEGIN WORK STA 637+35.50 END WORK STA 701+15 341.50 LIN.FT.
NET LENGTH OF PROJECT 20604.43 LIN.FT. OR 3.902 MI.
NET LENGTH OF WORK 22300.48 LIN.FT. OR 3.977 MI.

INDEX OF SHEETS

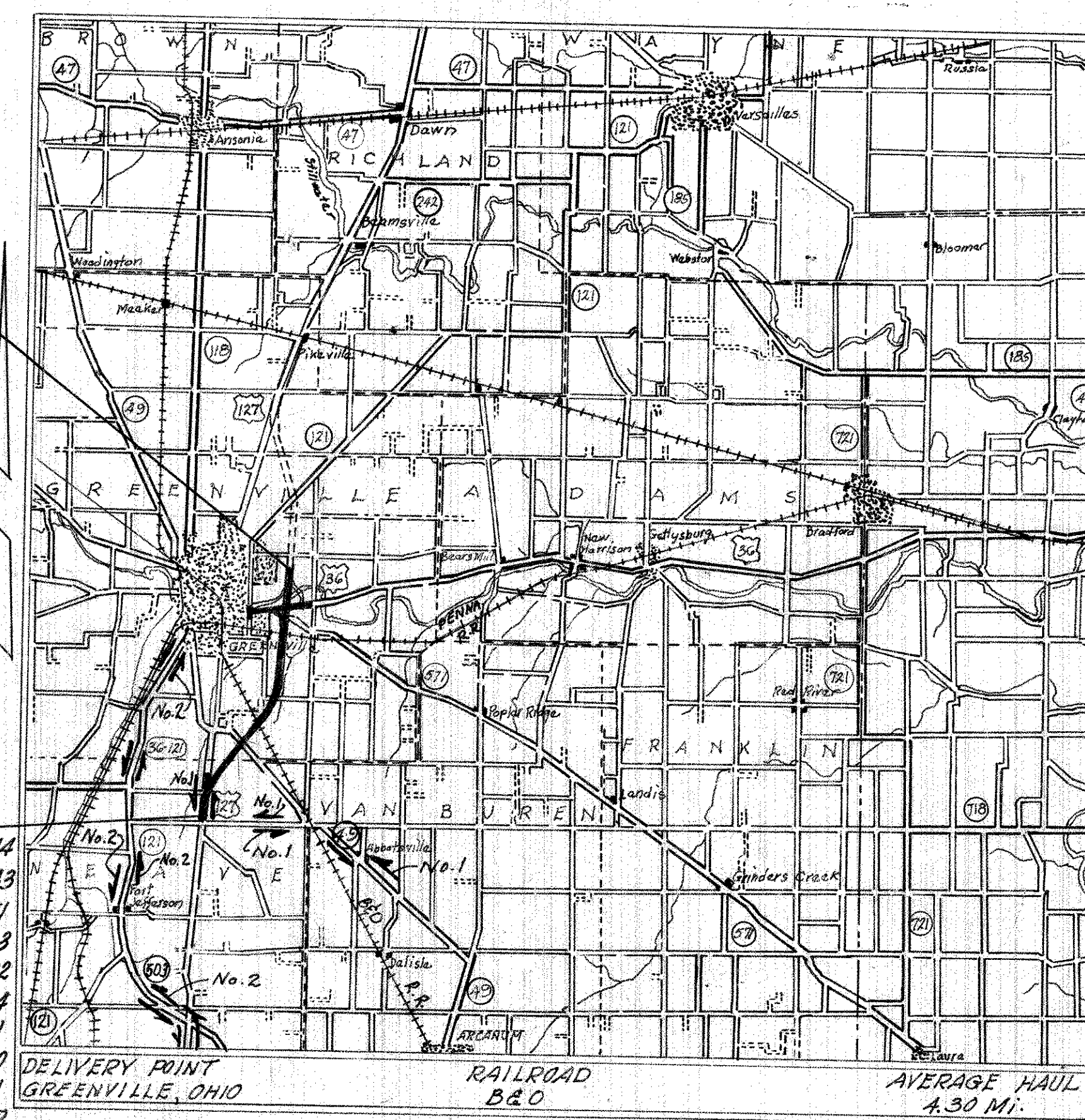
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APPROACHES (CON'T.)
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CORNING GLASS DRIVE
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S.R. 571
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STRUCTURES OVER 20' SPAN

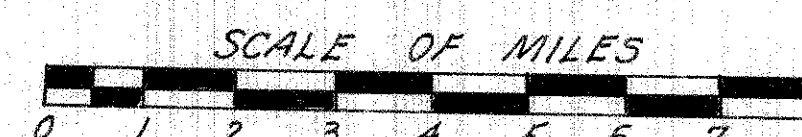
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END
PROJECT
STA 715+00

BEGIN
PROJECT
Sta 508+86.05



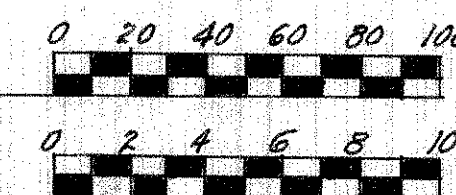
LOCATION MAP



PORTION TO BE IMPROVED
STATE HIGHWAYS
OTHER ROADS
DETOUR

SCALES

PLAN
PROFILE HORIZONTAL
PROFILE VERTICAL
CROSS SECTIONS



LIMITED ACCESS FROM STATION 500+50 TO STATION 715+00 THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR OF HIGHWAYS IN ACCORDANCE WITH THE PROVISIONS OF SEC. 5511.02 OF THE REVISED CODE OF OHIO.

1967 SPECIFICATIONS
THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF HIGHWAYS, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

THE RIGHT OF WAY FOR THIS IMPROVEMENT WILL BE PROVIDED BY THE STATE OF OHIO.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS NOTED ON SHEET NO. 24. AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED DATE 10-3-66 Olin M. Leight
DIVISION DEPUTY DIRECTOR

APPROVED DATE 6-26-67 C. H. Allerton
ENGINEER OF BRIDGES

APPROVED DATE 7-11-67 R. E. Lattin
ENGINEER OF LOCATION AND DESIGN

APPROVED DATE 7-11-67 R. E. Shultz
DEPUTY DIRECTOR OF DESIGN AND CONSTRUCTION

APPROVED DATE 7-18-67 T. H. Board
DEPUTY DIRECTOR OF RIGHT OF WAY

APPROVED DATE 7-18-67 Thomas M. Make
DEPUTY DIRECTOR OF PLANNING AND PROGRAMMING

APPROVED DATE First Assistant Director

APPROVED DATE 7-18-67 P. E. Masterson
DIRECTOR OF HIGHWAYS

STANDARD	DRAWING
No. Date	No. Date
B.P.1 6-1-65	GA-5B 6-1-65
B.P.2 1-10-67	GR-6 6-1-65
B.P.3 1-10-67	HW-E 6-1-65
B.P.4 1-10-67	I-1 6-1-65
B.P.5 6-1-65	I-2 6-1-65
B.P.6 6-1-65	MC-1 6-1-65
B.P.7 1-1-66	MC-2 6-1-65
CB-2-2A-1B 6-1-65	MC-3 5-1-66
CB-2-3A-2-A 6-1-65	MC-4 6-1-65
CB-2-3A-2-B 6-1-65	MC-6 6-1-65
CB-3A 6-1-65	MC-7 3-1-66
CB-6 6-1-65	
CB-8 6-1-65	
F-1 6-1-65	SP-53 6-30-61
F-3 10-1-66	AS-1-34 8-10-65
GR-1 1-1-67	
GR-2A 1-1-67	MH-1 6-1-65
	MH-1A 8-1-66

DAR-127-9.64

FILE
NUMBER
DARKE COUNTY
DAR-127-9.64
DATE OF LETTING
CONTRACT NO.

NO.	DATE	1001	3-21-66
801	1-1-67	811	1-1-67
815	1-1-67	825	1-1-67
816	8-6-65	828	1-1-67
808	1-1-67		

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FIELD OFFICE: The Contractor shall, in addition to the requirements of 105.152, provide a suitable field office having a minimum of 400 sq. ft. of floor space. The Contractor shall have a telephone installed and maintained in this field office during the construction of this project. The Contractor shall also provide and maintain sanitary provisions as per 107.06. All the above is included in the lump sum price bid for Field Office.

ROUNDING OF CORNERS SHOWN ON CROSS SECTIONS: The rounded corners shown on Standard Drawing MC-1 apply to all cross sections, even though otherwise shown on these plans.

UNDERGROUND UTILITIES: The locations of the underground utilities shown on the plans have been obtained by diligent field checks and searches of available records. It is believed that they are essentially correct, but the State of Ohio does not guarantee their accuracy or completeness.

CONSTRUCTION LAYOUT STAKES: See note in proposal describing the work included in this lump sum pay item.

ITEM 310 SUBBASE, AS PER PLAN: Material for this item shall contain not more than 12% passing the No. 200 sieve at the time of incorporation in the work.

CONTRACTOR'S MAINTENANCE RESPONSIBILITY: On this project, the Contractor's responsibility for maintenance of the existing pavement per Item 614 shall be limited to those portions of the existing pavement lying within the proposed work limits.

REMOVAL OF EXISTING PIPE: The removal of all existing pipe drains which would normally be removed in various excavation items shall be included for payment in the unit prices bid for the respective excavation items, unless otherwise itemized in the plans.

REMOVAL OF TREES AND STUMPS: All trees and stumps specifically marked for removal within the construction limits of this project shall be removed under the lump sum price bid for Item 201 Clearing and Grubbing, except that those trees for which protection and preservation work is indicated elsewhere in these plans shall not be removed.

The following is an approximate estimate of the number of trees and stumps to be removed.

SIZES	N° TREES	N° STUMPS	SIZES	N° TREES	N° STUMPS
18"	125	8	48"	4	0
30"	30	3	60"	0	0

The above estimate is approximate and the State of Ohio reserves the right to order the removal of additional trees or stumps outside of the limits of construction but within the right-of-way and/or easement lines. Payment for the removal of these additional trees or stumps shall be included in the lump sum price bid for Item 201 Clearing and Grubbing.

PAVEMENT REMOVAL OUTSIDE NORMAL CONSTRUCTION LIMITS: After the existing pavement as indicated on the plans has been removed, the old roadway shall be graded to the level of the surrounding ground, the old ditches filled and the disturbed areas sloped to drain and left in a neat condition ready for seeding. Seeding shall be measured and paid for in accordance with Item 659 Seeding and Mulching.

If the existing pavement to be removed is flexible, it shall not be paid for separately but shall be removed as Item 203 Excavation. Earthwork required to complete the grading shall be paid for as Item 203 Excavation and/or Embankment. If the existing pavement is rigid, it shall be removed as Item 202 Existing Pavement Removed and Disposed of. Earthwork required to complete the grading shall be paid for as Item 203 Excavation and/or Embankment.

ITEM 605 AGGREGATE DRAINS: Aggregate drains shall be placed at fifty (50) foot intervals on each side of normal crowned sections and at twenty-five (25) foot intervals on the low side only of superelevated sections, except where Item 605 Pipe Underdrains have been provided. An aggregate drain shall be placed at the low point of each sag vertical curve. This note applies to Bituminous Pavements; for 451 Reinforced Portland Cement Concrete Pavement see note on this Sheet.

CENTERLINE REFERENCE MONUMENTS, AS PER PLAN: Monuments shall be constructed of Class "C" concrete, cast in place in a circular hole eight (8) inches in diameter and forty-four (44) inches in depth. Top of concrete shall be finished at a depth of two (2) inches below ground level and the upper six (6) inch portion of the concrete shall be formed. One-half (1/2) inch steel rod six (6) inches long shall be imbedded in the wet concrete as directed by the Engineer to mark the centerline and station.

For locations, See Sheet No. 42.

BITUMINOUS PAVING ON U.S. 36: See Notes "401.10, Bituminous Pavers" and "401.16, Spreading and Surface Tolerances" in the Proposal.

SEEDING: Quantities for seeding are calculated for the soil areas between lines ten (10) feet outside the work limits, as shown on the cross sections, or to the right-of-way line if such line is less than ten (10) feet from the work limits. This applies to the following: Darke 127, Darke 49, S.R. 571, U.S.R. 36. Quantities for seeding are calculated for the soil areas between the work limits, as shown on the cross sections. This applies to the following: Hunt Road & Warner Road. See Note Below.

ITEM SPECIAL, DRILLED WELL ABANDONED: The existing concrete or stone slab well cover and pumping equipment shall be removed and disposed of. The casing shall be cut off at least two (2) feet below the proposed finished grade outside proposed pavement areas or at least two (2) feet below the proposed subgrade elevation inside proposed pavement areas and capped with Class E concrete or a standard threaded pipe cap. The unit price bid for each "Drilled Well Abandoned" shall include payment for all labor, tools, materials, and incidentals necessary to complete this item.

ITEM 203 PROOF ROLLING: A estimated quantity for this item has been provided in the general summary for use in proof rolling of subgrade for the mainline and ramp pavements, and for paved shoulders, in accordance with Supplemental Specification 801.

CONNECTIONS TO EXISTING PIPE: At places where the plans provide for proposed pipe to be connected to existing pipe, it shall be the responsibility of the Contractor to locate the existing pipe both as to line and grade before he starts to lay the proposed pipe. The cost of this operation shall be included in the unit price bid for the pertinent 603 conduit item.

SPECIAL SEEDING PREPARATION AREAS: The reference in the first paragraph of 659.09 to preparation of the seed bed in front of residences, etc., shall on this project be considered to be particularly applicable to all areas listed in 659.09 in addition to the following areas:

U.S.R. 127	Sta. 506+00	to	Sta. 507+63	Lt.
S.R. 49	Sta. 731+00	to	Sta. 733+00	Lt.
S.R. 49	Sta. 734+50	to	Sta. 736+30	Lt.
S.R. 49	Sta. 737+50	to	Sta. 739+30	Rt.
Warner Rd.	Sta. 14+35	to	Sta. 15+30	Rt.

U.S.R. 36	Sta. 652+18.5	to	Sta. 654+65	Lt.
	Sta. 652+18.5	to	Sta. 654+70	Rt.
	Sta. 655+00	to	Sta. 660+70	Lt.
	Sta. 656+05	to	Sta. 662+25	Rt.
	Sta. 696+00	to	Sta. 707+58	Lt.
	Sta. 700+20	to	Sta. 703+00	Rt.
	Sta. 706+60	to	Sta. 707+58	Rt.

Ohio Street - Complete
Corning Glass Drive - Complete
Appr. to U.S.R. 36 Sta. 674+60 - Complete

ITEM 604 STANDARD NO. 1 SIDE DITCH INLET (MODIFIED): The grate shall be similar to the #33 Crown Top Sewer grate casting as manufactured by the Treaty Company of Greenville, Ohio or the R-4040 Lightweight Bar Grate manufactured by the Neenah Foundry Company of Neenah, Wisconsin, or equal. The grate shall weigh approximately 28-34 pounds.

FARM DRAINS: All farm drains which are encountered during construction shall be provided with unobstructed outlets under the direction of the Engineer. Existing collectors which are located below the roadway ditch elevations and which cross the roadway shall be replaced within the construction limits by Item 603 Conduit, Type B with Class B Bedding, one commercial size larger than the existing conduit. Existing collectors and isolated farm drains which are encountered above the elevation of the roadway ditches shall be outletted into the roadway ditch by 603 Type F Conduit. The optimum outlet elevation shall be, if possible, one foot above the flowline elevation of the ditch. Lateral tile fields which cross the roadway shall be intercepted by 603 Type E Conduit and carried in a longitudinal direction to an adequate outlet or roadway crossing. The location, type, size and grade of required replacements shall be determined by the Engineer during construction and payment shall be made on final measurements.

The following estimated quantities have been included in the General Summary for the work noted above:

8" Conduit, Type B, with Class B Bedding = 100 Lin. Ft.

10" Conduit, Type B, with Class B Bedding = 100 Lin. Ft.

21" Conduit, Type B, with Class B Bedding = 100 Lin. Ft.

24" Conduit, Type B, with Class B Bedding = 100 Lin. Ft.

10" Conduit, Type E = 100 Lin. Ft.

18" Conduit, Type E = 100 Lin. Ft.

21" Conduit, Type E = 100 Lin. Ft.

24" Conduit, Type E = 100 Lin. Ft.

18" Conduit, Type F = 100 Lin. Ft.

21" Conduit, Type F = 100 Lin. Ft.

24" Conduit, Type F = 100 Lin. Ft.

All necessary Pipe Specials shall be included for payment in the pertinent conduit item. None of the above materials shall be ordered by the Contractor until requested by the Engineer.

ITEM 605 AGGREGATE DRAINS FOR 451 REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT: Aggregate drains shall be placed prior to placing surface treated shoulders at forty (40) foot intervals on each side of normal crowned sections

and at forty (40) foot intervals on the low side only of superelevated sections with spacing such that drains are placed at the transverse pavement joints. Aggregate drains shall not be placed where Item 605 Pipe Underdrains have been provided. An aggregate drain shall be placed at the low point of each sag vertical. MAINTENANCE OF SEWER FLOWS: The Contractor shall conduct his operations so as to maintain at all times sewer flows through existing facilities to remain in place and through existing facilities to be replaced until new facilities are completed and placed into use. Payment for any additional costs involved in maintaining these flows by pumping or by any other means approved by the Engineer shall be included in the unit prices bid for the respective items of 603 Conduit.

SANITARY FLOW INTO HIGHWAY DRAINAGE SYSTEMS: This plan makes no provision for connecting, nor shall the Engineer or Contractor connect, any existing or new drainage into the highway drainage system when such drains carry flow from any plumbing fixtures including floor drains and sink drains or drains from livestock lots or barns or polluted water of any kind. Existing pipe carrying flow which comes within the category outlined above shall be plugged with Class E concrete at the right-of-way line. Payment for said plugging shall be included in the unit price bid for Item 203 Excavation.

CONTRACTION AND EXPANSION JOINTS: Although specific locations of certain expansion and contraction joints have been detailed on this plan, no waiver of the specifications is intended. Provisions of expansion joints at all major structures and the maximum spacing between contraction joints shall in all cases be in accordance with Standard Construction Drawings and the Specifications.

DESIGN SPEED: The geometrics for this project have been planned for a design speed of seventy (70) miles per hour for U.S.R. 127 and S.R. 36. The geometrics for this project have been planned for a design speed of sixty (60) miles per hour for S.R. 49. The geometrics for this project have been planned for a design speed of fifty (50) miles per hour for S.R. 571.

GENERAL

NOTES

(CONT)

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TRAFFIC SIGNAL COOPERATION NOTE: The City of Greenville will remove and replace the Traffic Signal at the intersection of U.S.R. 36 and Ohio Street. The Contractor shall cooperate with the City and so arrange his operations to minimize the period of time the traffic signal is out of operation.

ACCESS TO OHIO POULTRY AND LIVESTOCK CORPORATION PROPERTY:~

The existing drive crossing proposed U.S.R. 127 at Sta. 528+38 shall remain in place and open to traffic until the proposed access road at Sta. 738+32 on S.R. 49 is opened to traffic or other means of ingress and egress to said property is provided by the owner. These provisions shall not extend beyond June 30, 1968 unless otherwise directed by the Engineer.

ELEVATION DATUM: All elevations are based on U.S.G.S. datum.

LOCATION AND SIZE OF PIPE: The location, type, depth and size of all existing pipe are shown as near exact as the available information will permit. The State of Ohio will not be responsible for any variation during construction.

ITEM SPECIAL ~ CLEANING AND DISPOSAL OF SEPTIC TANKS: This item shall include cleaning, backfilling and removal of all or any portion of existing septic tanks. All septic tanks lying within the proposed right-of-way limits shall be cleaned and emptied. Material removed from these tanks shall be classified as unsuitable and disposed of outside the right-of-way or easement lines. When the septic tanks are located above the finished pavement or ground lines, they shall be entirely removed and disposed of in accordance with 202.02. When the tanks are located below the finished pavement or ground lines, the tops of the tanks shall be removed, and the walls shall be removed to a depth of three (3) feet below the finished subgrade or ground lines. The removed material shall be disposed of as explained above. The tanks shall be backfilled with suitable soil or granular material in accordance with 203.07 - 203.12. This item shall be paid for at the unit price bid per each for "Item Special, Cleaning and Disposing of Septic Tanks," which price and payment shall constitute full compensation for cleaning, removing, and disposing of excess materials, backfilling, and for all labor, tools, equipment, and incidentals necessary to complete the item including incidental excavation.

EROSION CONTROL: Item 601 is provided in these plans for erosion control. Rock of a stable nature will not be removed in order to place any of these items. The Engineer shall check and non-perform quantities or adjust locations and quantities for these items where indicated by field conditions during construction.

TRENCH FOR WIDENING: Trench excavation for base widening shall be performed only on one side of the pavement at a time. The open trench shall be adequately maintained and protected with temporary guide markers or barricades at all times. Placement of proposed subbase and base material shall follow as closely as possible behind the excavation operations. The length of widening trench which is open at any one time shall be held to a minimum and shall at all times be subject to approval of the Engineer.

ITEM 202 - EXISTING SIDEWALK REMOVED AND DISPOSED OF AS PER PLAN: The removal and disposal of existing steps shall be included in the price bid for existing sidewalk removed and disposed of and shall be paid for at the price bid per horizontal square foot for Item 202 - Existing sidewalk Removed and Disposed of as per plan.

TEMPORARY RAILROAD CROSSING ~:

If the contractor desires a temporary railroad crossing over the B.&O. R.R. and/or Penn. R.R. Tracks to be used in conjunction with the construction of this project, he shall make all arrangements with the railroad and assume all costs for such crossing. The contractor shall not use the proposed new crossing as a part of his haul road during construction of this project.

ITEM SPECIAL - REMOVAL AND DISPOSAL OF EXISTING UNDERGROUND STORAGE TANKS: This item shall consist of the removal and disposal of 2 underground gasoline storage tanks at 41' left of Sta. 679+57.8 and 41' left of Sta. 679+74.1. The above quantity is approximate. Any additional tanks discovered shall be removed at the unit price bid for this item.

The tanks shall be removed in their entirety and shall become the property of the Contractor and shall be disposed of by him unless otherwise shown on the plans. The backfilling and compaction of the excavated area shall be done in accordance with the provisions of Sec. 203.

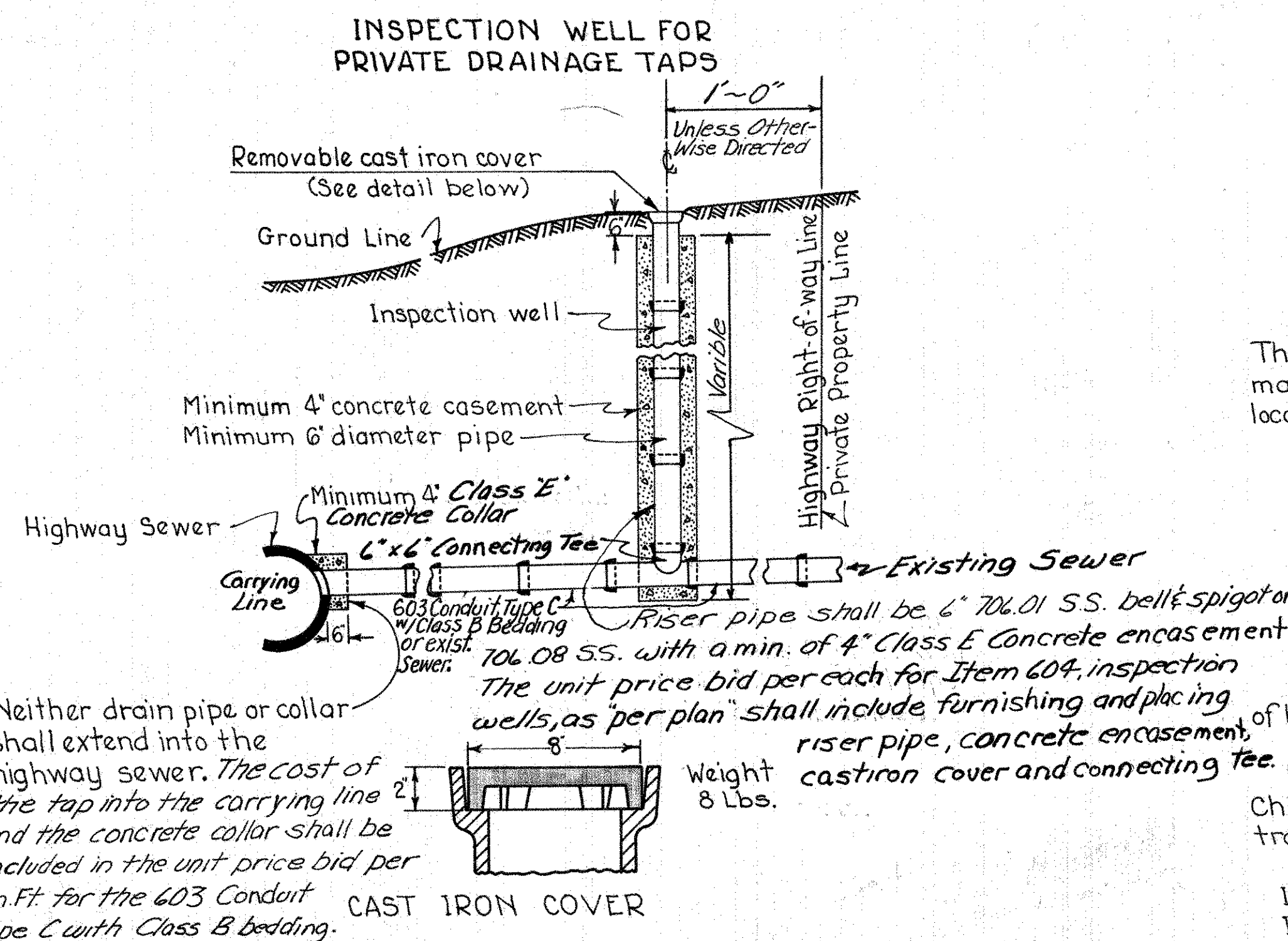
This item, , shall be paid for at the price bid each for "Item Special, Removal and Disposal of Existing Underground Storage Tanks," which price and payment shall constitute full compensation for performing all of the requirements of this item, including all labor, equipment, tools and incidentals necessary to complete this item.

SANITARY FLOW INTO HIGHWAY DRAINAGE SYSTEMS: Treated sanitary flow may be discharged into the highway drainage system provided the owner has secured the approval of the local authorities and has acquired from the State Highway Department, the official permit to have the connection made.

In each case where a permit has been issued for a sanitary connection to be made into a highway drainage conduit, it shall be provided with an inspection well, in accordance with the details shown below, located approximately 1 (one) foot inside the right-of-way line. No inspection well is required if effluent is discharged into an open ditch, channel, catch basin or manhole. The following estimated quantities have been included in the general summary for use as directed by the Engineer, in making the above described connections:

Item 603 6" Conduit, Type 'C' with Class 'B' Bedding	200 Lin. Ft.
Item 604 Inspection Wells	4 Each

Pipe bends shall be included for Payment in the pertinent conduit item.
None of the above materials shall be ordered by the Contractor until authorized by the Engineer.



TRAFFIC NOTE

EXISTING U.S.R. 127 (South End): Two-way traffic shall be maintained at all times by the use of either the existing pavement or the proposed pavement except that a detour will be provided as shown on Sheet No. 1 for a period not to exceed 60 days. Detour No. 2.

HUNT ROAD: Hunt Road shall be closed to traffic for a period not to exceed sixty (60) consecutive calendar days. During this time, all earthwork, drainage, and pavement construction shall be completed. Any work not completed shall be completed with traffic maintained.

S.R. 49: Two-way traffic shall be maintained at all times by the use of either the existing pavement or the proposed pavement except a detour will be provided as shown on Sheet No. 1 for a period not to exceed 90 days. (Detour No. 1) S.R. 49 & U.S.R. 127 shall not be detoured concurrently.

MEEKER ROAD: Two-way traffic shall be maintained at all times by the use of either the existing pavement, the proposed pavement, or temporary roads surfaced with 410 Aggregate and stabilized with 616 Calcium Chloride.

WARNER ROAD: Warner Road shall be closed to traffic for a period not to exceed sixty (60) consecutive calendar days. During this time, all earthwork, drainage, and pavement construction on relocated Warner Road shall be completed. Any work not completed shall be completed with traffic maintained.

OHIO STREET: Ohio Street shall be closed to traffic for a period not to exceed sixty (60) consecutive calendar days. During this time, all earthwork, drainage, and pavement construction on Ohio Street shall be completed. Any work not completed shall be completed with traffic maintained.

U.S.R. 36 & S.R. 571: Two-way traffic shall be maintained at all times by the use of either the existing pavement, the proposed pavement, or temporary roadways surfaced with 410 Aggregate and stabilized with 616 Calcium Chloride.

Throughout the life of the contract the provisions of Item 614 Maintaining Traffic and 104.04 shall be in force. Traffic control shall be in accordance with Section 614.03 of the specifications except that:

1. Pavement marking in all traffic maintained areas, as referred to in second paragraph under (c) shall be done by the contractor instead of the department.
2. The contractor shall furnish all labor, equipment, and materials, including signs, to perform and complete traffic control items for which he is responsible. The department will not loan signs and other traffic control devices as inferred under paragraph (e).
3. The contractor shall notify the engineer at least three working days prior to beginning any work which will require the placing, or changing, by the department, of regulatory signs, or route guide and information signs, as reference to in the second paragraph under (c).

The contractor shall in addition to the general requirements of Item 614, provide, erect, and maintain standard 48" x 30" size 'Road Closed' signs, sign supports and lights at the following locations during periods in which the affected roads are closed to traffic.

1. On Hunt Road just east of S.R. 121 intersection.
2. On S.R. 49 just east of existing U.S.R. 127 intersection.
3. On S.R. 49 just northwest of Folkert Road Intersection.
4. On Warner Road just south of Katzebarger Road Intersection.
5. On Warner Road just west of Jaysville - St. Johns Road Intersection.
6. On Ohio St. just south of Eastwood Drive.
7. On Ohio St. just north of Twelfth Street.

Sign supports and lights for 'Road Closed' signs shall be as detailed in the 'Ohio Manual of Uniform Traffic Control Devices,' as currently in effect at the effective date of this contract.

Estimated Quantities of Item 410 Traffic Compacted Surface, Type A or B, Item 616 Calcium Chloride and Item 616 Water are provided in the plans for the maintenance of traffic. They shall be applied where directed and in the amounts requested by the engineer.

~ Estimated Quantities ~

Item 410 Traffic Compacted Surface, Type A or B =	420 Cu. Yds.
Item 616 Calcium Chloride =	11 Tons
Item 616 Water =	210 M. Gals.

Materials indicated to be used as directed by the engineer shall not be delivered until requested by the engineer.

Payment for all the above, except the items in the 'Estimated Quantities,' including providing, erecting, maintaining, and removing lights, signs and sign supports, shall be included in the lump sum price bid for Item 614 Maintaining Traffic. Rev. 8-2-67

GENERAL

SUMMARY

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DAR. ~ 127 ~ 9.64

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SUMMARY

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GENERAL SUMMARY

SUMMARY

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		



DARKE COUNTY
DAR~127~9.64

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GENERAL SUMMARY

SUMMARY



GENERAL SUMMARY

SUMMARY

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GENERAL SUMMARY

SUMMARY



DESCRIPTION

GENERAL SUMMARY

SUMMARY

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DESCRIPTION

GENERAL SUMMARY

SUMMARY

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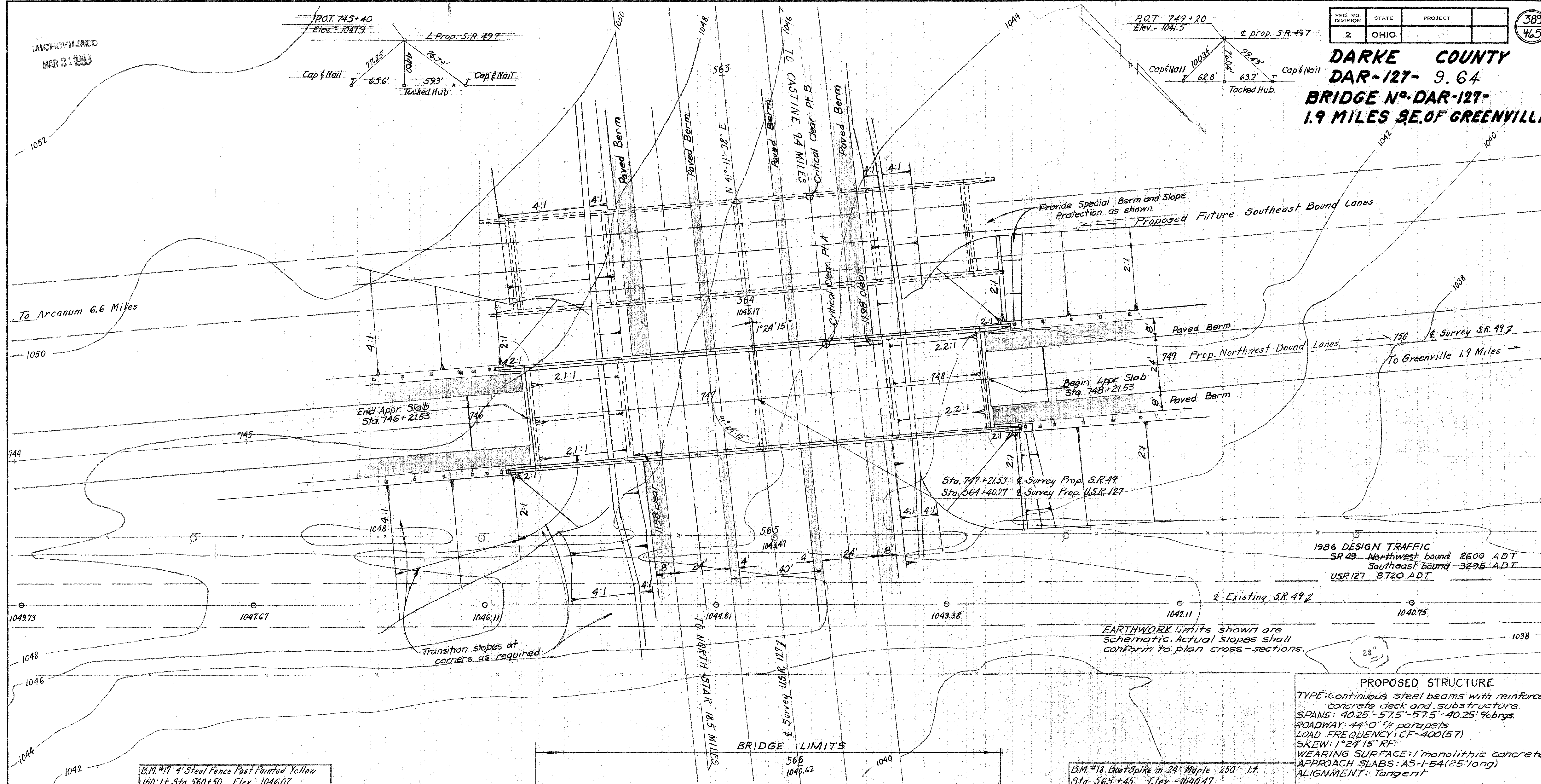
GENERAL SUMMARY

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FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

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DARKE COUNTY
DAR-127- 9.64
BRIDGE NO. DAR-127-
1.9 MILES S.E. OF GREENVILLE



1986 DESIGN TRAFFIC
SR 49 Northwest bound 2600 ADT
Southeast bound 3295 ADT
USR 127 8720 ADT

EARTHWORK limits shown are
schematic. Actual slopes shall
conform to plan cross-sections.

PROPOSED STRUCTURE

TYPE: Continuous steel beams with reinforced
concrete deck and substructure.
SPANS: 40.25'-57.5'-57.5'-40.25' brgs.
ROADWAY: 44'-0" /r parapets
LOAD FREQUENCY: CF=400(57)
SKEW: 1°24'15" RF
WEARING SURFACE: 1" monolithic concrete
APPROACH SLABS: AS-1-54(25' long)
ALIGNMENT: Tangent

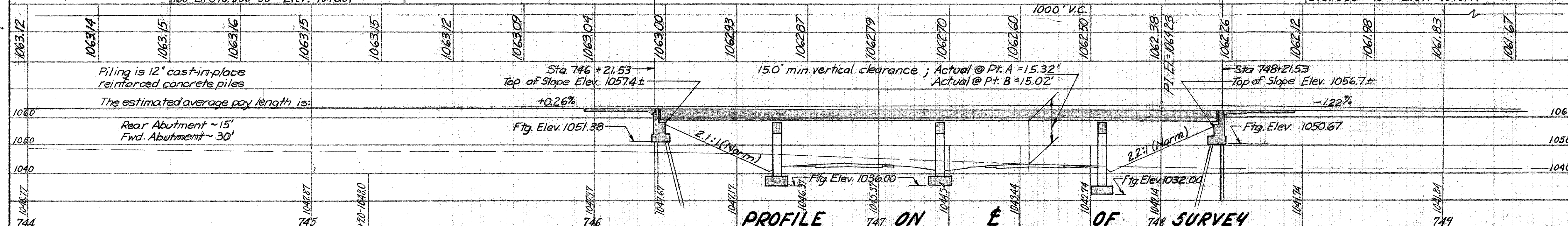
STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

SITE PLAN

BRIDGE NO. DAR-127-1069
DARKE CO. USR 127 Under S.R. 49
SEC. STA 564+40.27

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
Field	K.E.L.	D.H.S.	D.H.S.	B.O.H.	P.E.S.
Survey					

BFG 10-6-66



DAR-127-9.64

GENERAL NOTES

REFERENCE shall be made to Standard Drawings BR-1-65 sheet 1, revised 11-24-65, RB-1-55 revised 2-2-59 and SD-1-65 dated 11-8-65, and to Supplemental Specifications 811, 825 and 828 dated 1-1-67 and 808 dated 1-13-67.

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 9-1-57, together with current revisions thereof.

DESIGN DATA:
 Design Loading - CF 400 (57)
 Concrete Class C - basic unit stress 1,333 p.s.i.
 Concrete Class E - basic unit stress 1,333 p.s.i.
 Structural Steel - ASTM A36 - basic unit stress 20,000 p.s.i.
 Reinforcing Steel - ASTM A15, A16, A60 Deformed, Intermediate or Hard Grade. Basic unit stress 20,000 p.s.i. Except spiral reinforcement shall be plain and may be Structural Grade with basic unit stress of 18,000 p.s.i.

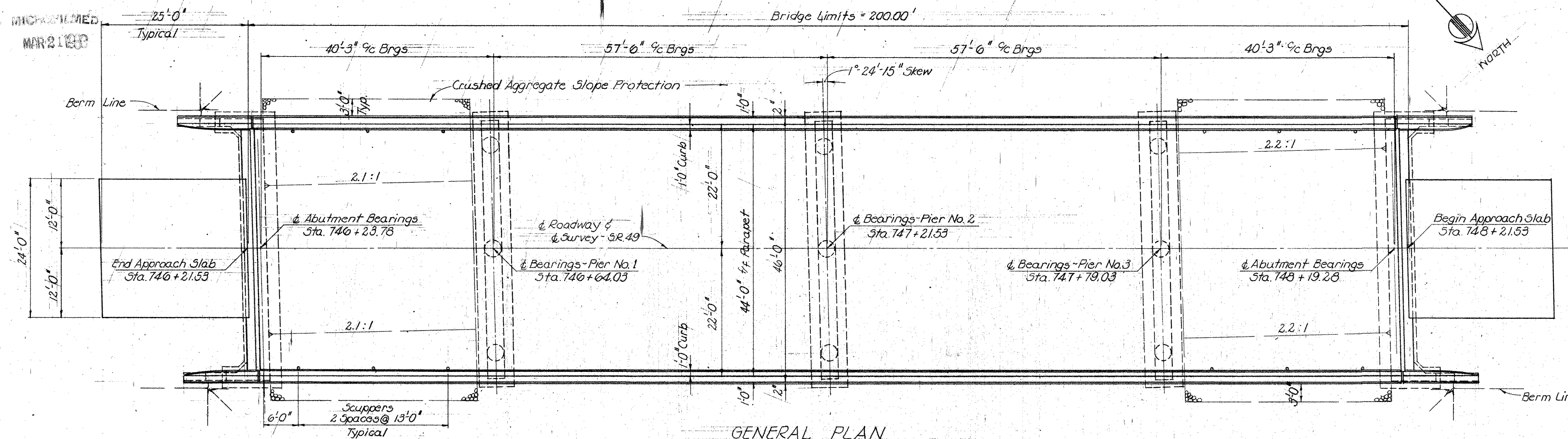
PROCEDURE: The embankment shall be placed and compacted up to the finished spill-thru slope and to the level of the subgrade for a distance of 200 feet back of the abutments, after which excavation shall be made for the abutments and piers No. 1 and No. 3 and abutment piles driven.

EXCAVATION QUANTITY includes the removal of fill material required for construction of the abutments and piers.

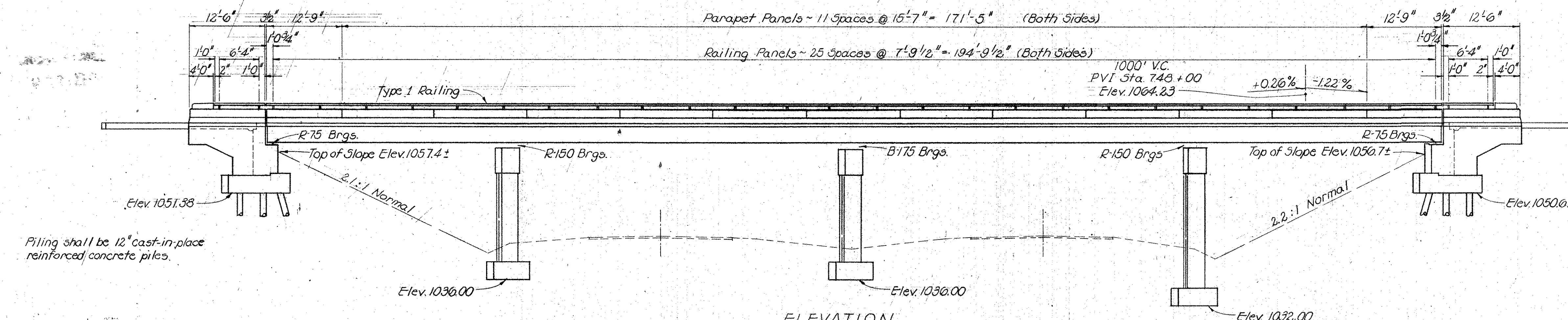
PILES shall be driven to a minimum bearing capacity of 30 tons per pile.

FOUNDATION BEARING PRESSURE: Pier footings are designed for a maximum bearing pressure of 2.2 tons per sq. ft.

WELDS on secondary stress carrying members are shown thus:



GENERAL PLAN



ELEVATION

ESTIMATED QUANTITIES

Item	Total	Unit	Description	Super.	Piers	Abuts	Gen'l.	As Built
503	1ump	sum	Cofferdams, cribs and sheeting				1ump	
503	572	cu. yds.	Unclassified excavation		297	275		
505	1ump	sum	First test pile				1ump	
507	590	lin. ft.	12" Cast-in-place reinforced concrete piles			590		
509	119,358	lbs.	Reinforcing steel	77,448	3,064	10,846		
511	260	cu. yds.	Class "C" concrete, superstructure	260				
511	100	cu. yds.	Class "C" concrete, pier caps and columns		100			
511	170	cu. yds.	Class "E" concrete, abutments			170		
511	99	cu. yds.	Class "E" concrete, pier footings		99			
513	197,300	lbs.	Structural steel	197,300				
514	197,300	lbs.	Field painting of structural steel	197,300				
517	44,383	lin. ft.	Railing Type 1	393.83		50.00		
518	33	cu. yds.	Porous backfill			33		
518	78	lin. ft.	6" perforated, helical C.M.P., including specials 707.06				78	
518	66	lin. ft.	6" non-perforated, helical C.M.P., 707.06				66	
518	12	each	Scuppers including supports	12				
601	434	sq. yds.	Crushed aggregate slope protection				434	
808	260	units	Water-reducing, set-retarding admixture	260				
825	1146	sq. yds.	Concrete surface treatment	1100		46		
828	84	lin. ft.	Joint sealer			84		

STATE OF OHIO DEPARTMENT OF HIGHWAYS DIVISION OF DESIGN AND CONSTRUCTION BUREAU OF BRIDGES						
GENERAL PLAN & ELEVATION, ESTIMATED QUANTITIES AND NOTES BRIDGE No. DAR-127-1069 UNDER 3R 49						
DARKE COUNTY STA. 504+40.27						
DESIGNED J.E.F.	DRAWN J.E.F.	TRACED	CHECKED J.D.R. 10-4-66	REVIEWED BFG	DATE 10-6-66	REVISED

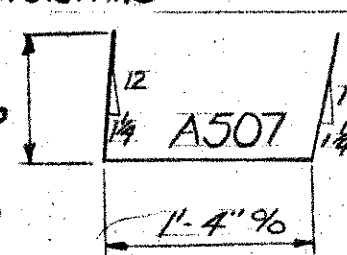
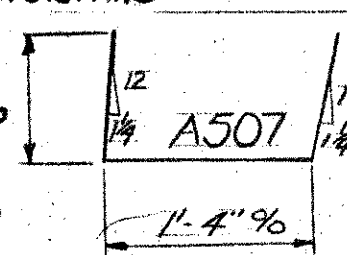
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FED. RD. DIVISION	STATE	PROJECT
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REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	SHR	BENDING DIAGRAMS
Piers					
P1101	24	20'-10"	2656	S	Varies by increments of 1" from 1'-0" to 1'-8" 
P1001	84	7'-0"	2530	B	
P1002	28	18'-0"	2169	S	
P1003	28	17'-7"	2118	S	
P1004	28	21'-7"	2600	S	
P1005	21	20'-6"	1852	S	
P901	42	23'-8"	3380	S	
P902	48	16'-3"	2652	S	
P903	42	25'-3"	3606	S	
P801	42	18'-1"	2028	B	

P601	50	7'-0"	526	B
P602	25	7'-6"	282	B
P501	12	23'-2"	290	S
P502	156	7'-9"	1261	B
P503	50	5'-8"	296	S
P504	25	6'-2"	161	S

MARK	NO.	CORE DIA.	LENGTH	PITCH	NO. TURNS	WEIGHT
SP401	3	32	14'-11"	4 1/2	43	833
SP402	3	32	14'-7"	4 1/2	42	813
SP403	3	32	18'-8"	4 1/2	52	1011

Replacement Bars

RE1001	1	7'-6"	—	S
RE1001	1	7'-2"	—	S
RE901	1	6'-10"	—	S
RE801	1	6'-6"	—	S
RE601	4	5'-11"	—	S
RE501	2	5'-7"	—	S
RE401	1	5'-3"	—	B

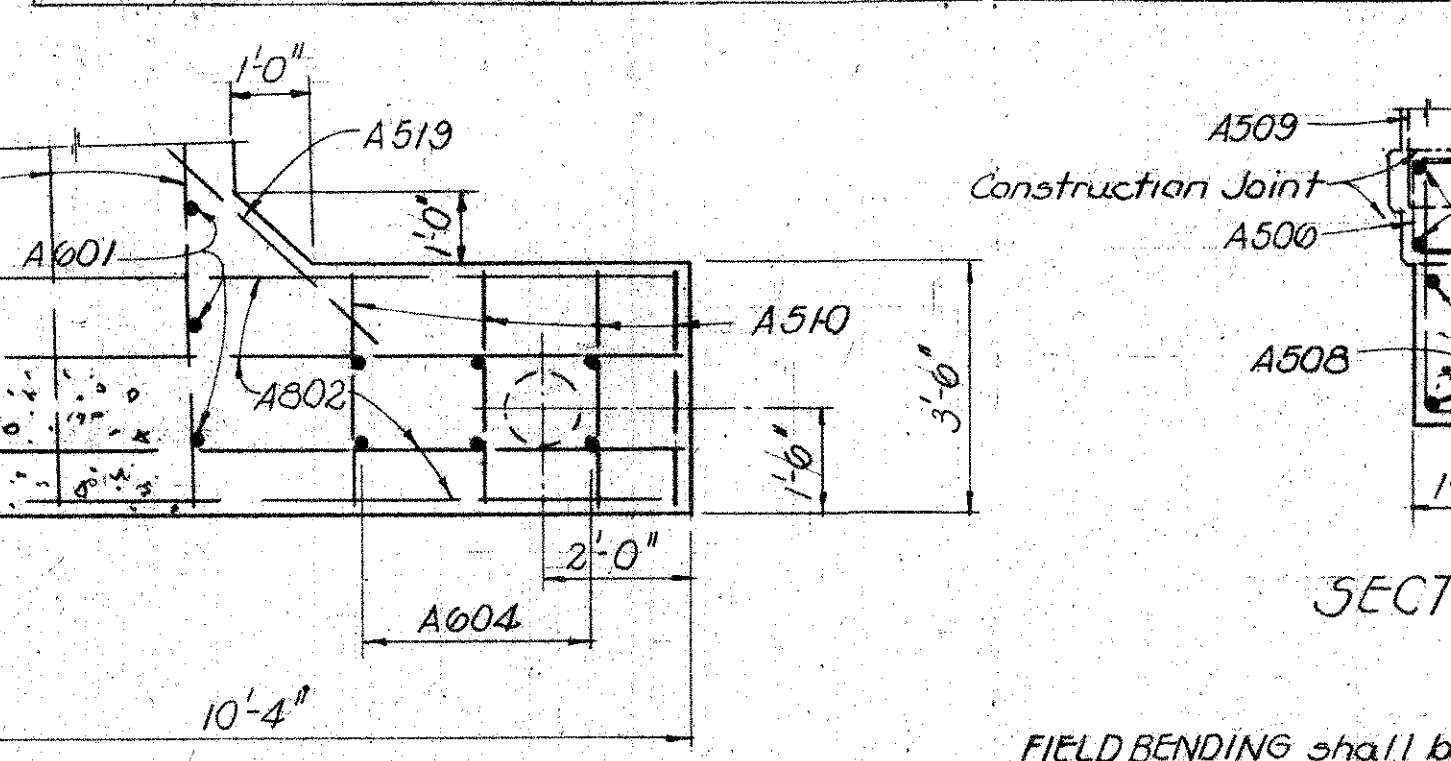
NOTES: Spiral Reinforcing Bars: The "Length" as shown in the steel list for spiral bars is the distance from the top of the footing to the bottom of the pier cap.

The "No. of turns" shown is the "Length" divided by the pitch, plus 3 turns (total number of closed coils) expressed as the nearest whole number. Spiral reinforcing bars shall not have deformations but shall in other respects conform to item 503. 1/2 closed coils shall be provided at the ends of each spiral unit.

Four steel channel, tee or angle spacers weighing approx. 0.68 lb. per lin. ft. of spacers shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers based on 0.68 lb. per lin. ft. will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.

BAR SIZE is indicated in the bar mark. The first digit where three digits are used the first two digits where four are used, indicate the bar size number. For example A700 is a No. 7 size bar and A1014 is a No. 10 size bar.

REINFORCING STEEL LIST						
Mark	NO.	Length	Weight	Shp	Bending Diagrams	
Superstructure						
S601	363	19'-6"	10,632	S		
S602	448	27'-10"	18,729	S		
S603	510	30'-0"	22,981	S		
S604	102	23'-0"	3,524	S		
S501	726	23'-8"	17,921	S		
S502	264	2'-6"	688	B		
S503	264	4'-11"	1,354	B		
S504	278	5'-7"	1,619	B		
S501	16	12'-5"	included with railing	S		
S502	88	15'-3"	included with railing	S		
S503	12	4'-2"	railing	B		
S504	8	5'-4"	for	B		
S505	16	12'-2"	payment	S		
Abutments						
A801	28	24'-10"	1857	S		
A802	24	10'-0"	641	S		
A601	64	13'-8"	1314	B		
A602	48	14'-9"	1063	B		
A603	44	12'-7"	832	B		
A604	12	18'-0"	324	B		
A501	64	9'-4"	623	B		
A502	64	7'-0"	467	B		
A503	64	6'-4"	423	B		
A504	56	23'-5"	1368	S		
A505	4	10'-6"	44	S		
A506 series 70 141 B						
A507 series 70 141 B						
A508 32 12'-6" 417 S						
A509 36 3'-7" 210 B						
A510 32 7'-7" 236 B						
A511 16 7'-0" 117 S						
A512 8 8'-0" 67 S						
A513 32 4'-8" 156 S						
A514 8 8'-2" 68 B						
A515 12 7'-11" 99 B						
A516 4 8'-11" 37 B						
A517 4 10'-5" 43 B						
A518 20 6'-0" 125 S						
A519 8 4'-0" 33 S						

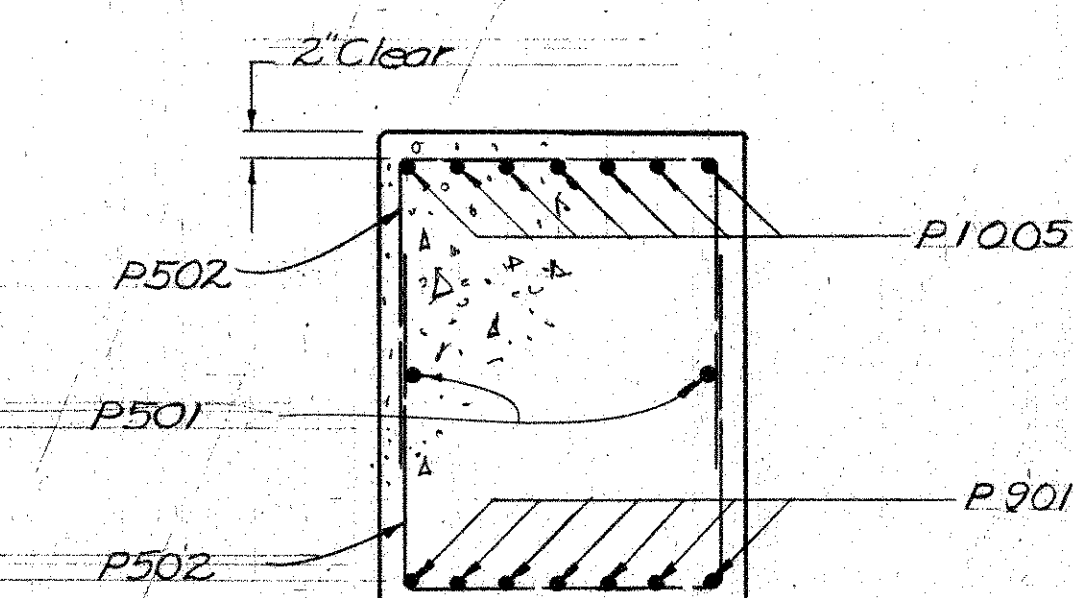
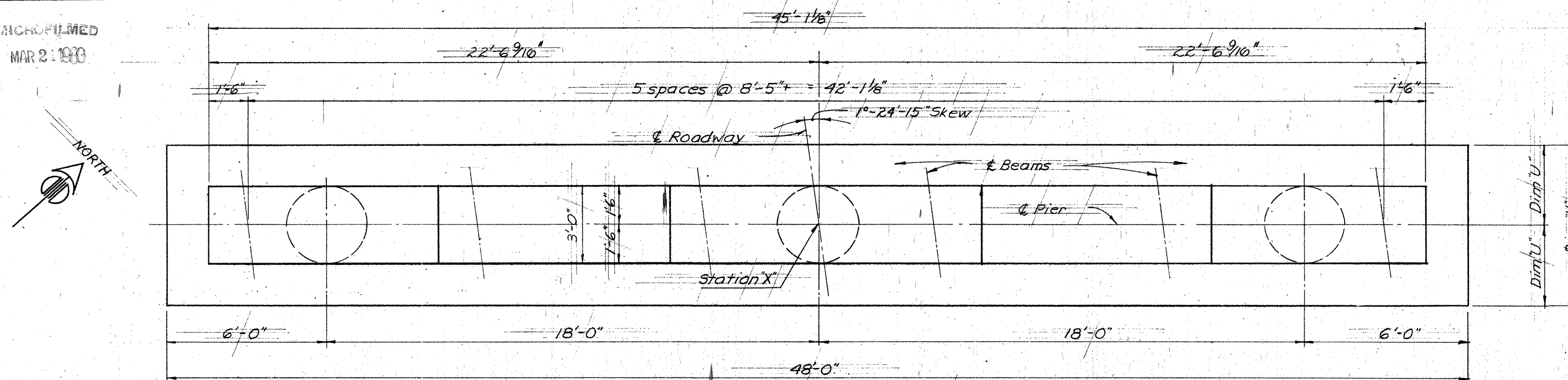


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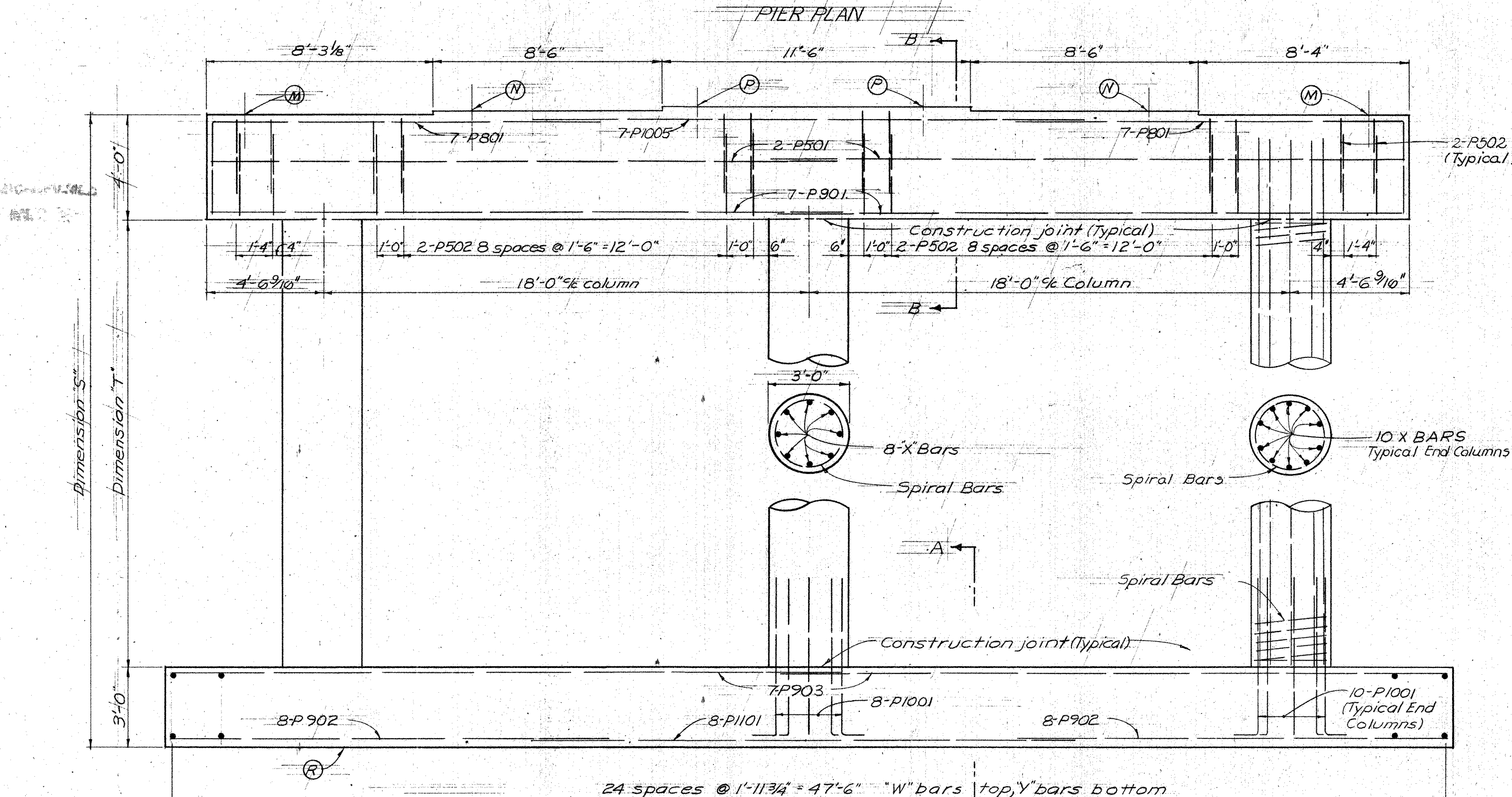
FED. RD. DIVISION	STATE	PROJECT
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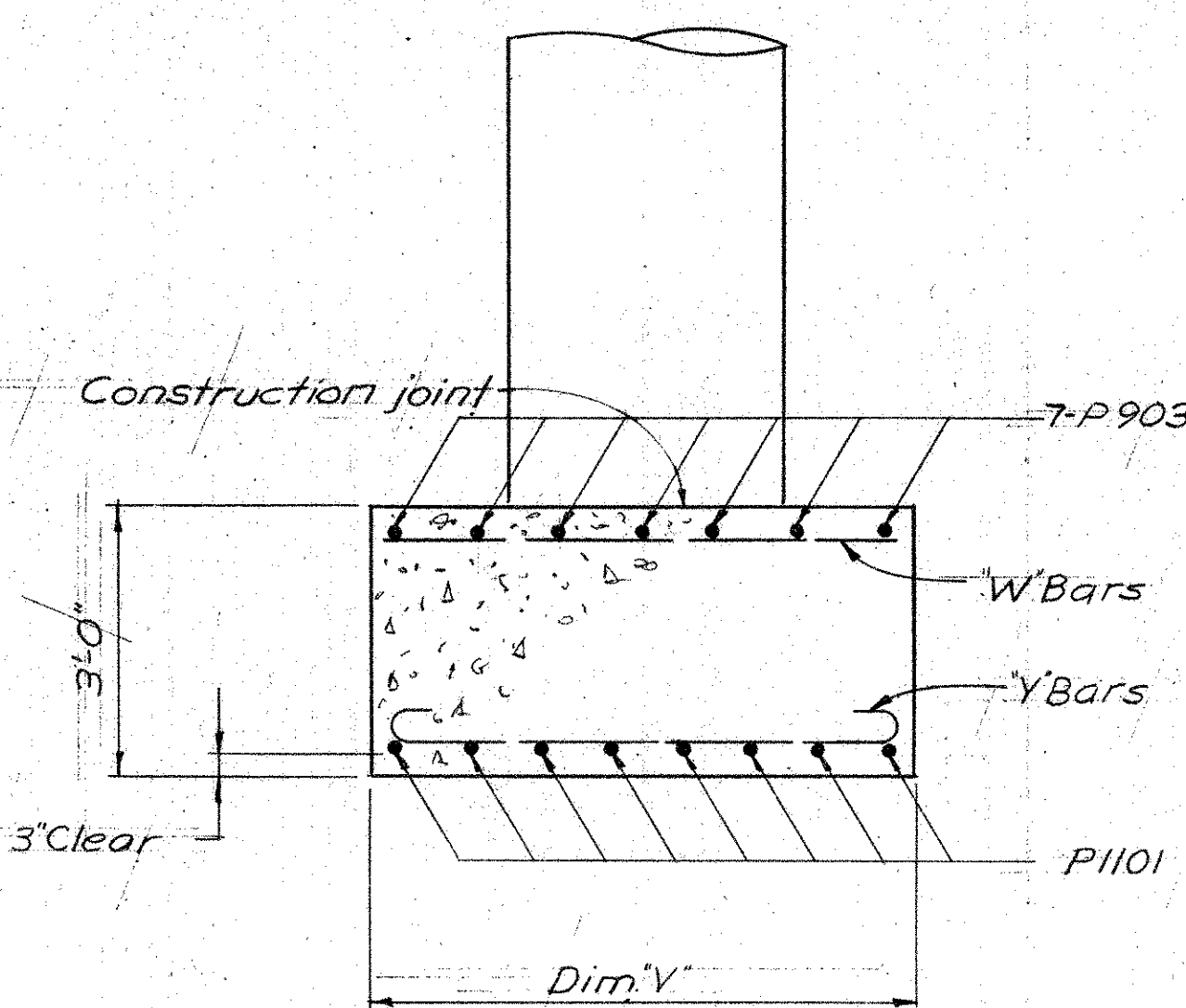
DAR-127-9.64



SECTION B-B



PIER ELEVATION



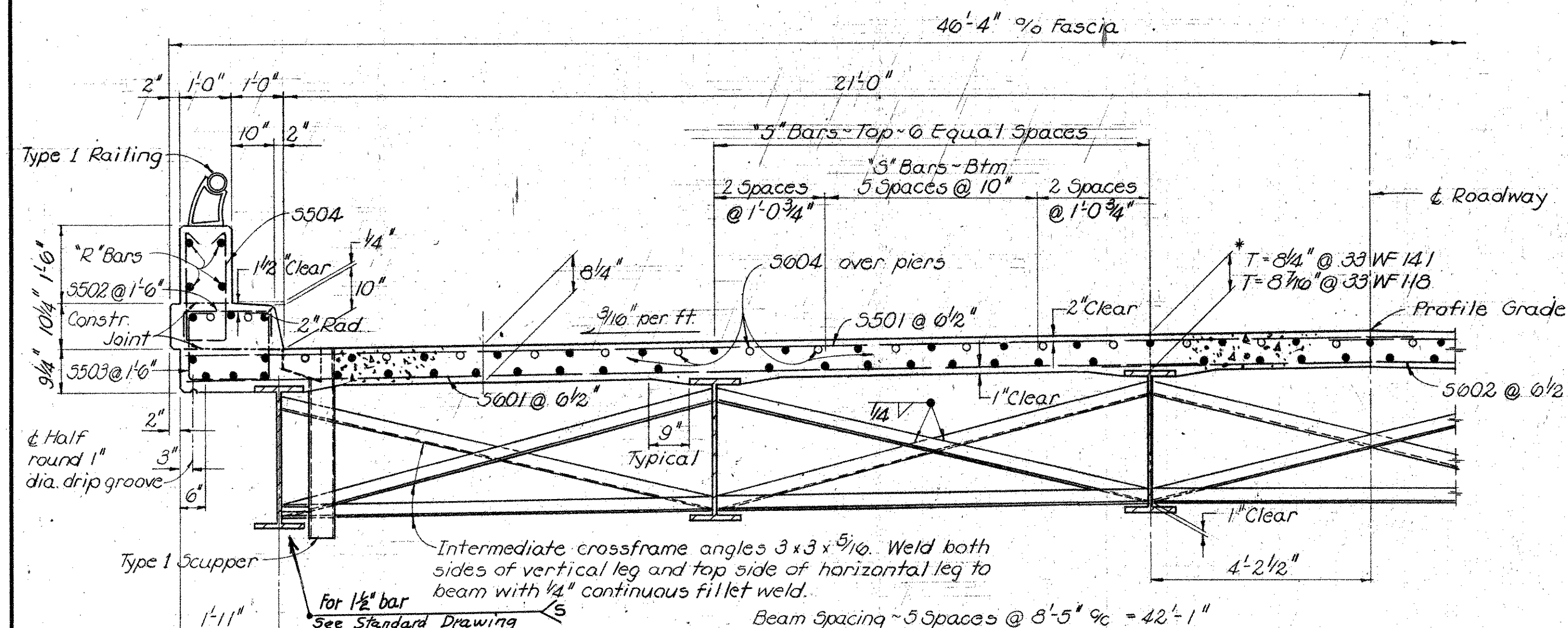
SECTION A-A

LOCATIONS		ELEVATIONS				DIMENSIONS				REINFORCING			
Pier No.	Station X	M	N	P	R	S	T	U	V	WBars	XBars	YBars	SPIRAL BARS
Pier 1	746+64.03	1057.96	1058.09	1058.22	1036.00	21'-11 1/2"	14'-11 1/2"	3'-0"	6'-0"	P503	P1002	P601	SP401
Pier 2	747+21.53	1057.61	1057.74	1057.87	1036.00	21'-7 3/8"	14'-7 3/8"	3'-0"	6'-0"	P503	P1003	P601	SP402
Pier 3	747+79.03	1057.54	1057.67	1057.80	1032.00	25'-6 1/2"	18'-6 1/2"	3'-3"	6'-6"	P504	P1004	P602	SP403

BRIDGE SEAT REINFORCING: Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat at pier number 2 so as to avoid interference with the drilling of anchor bar holes.

STATE OF OHIO DEPARTMENT OF HIGHWAYS DIVISION OF DESIGN AND CONSTRUCTION BUREAU OF BRIDGES							
PIER DETAILS							
BRIDGE No. DAR-127-1069 UNDER S.R. 49							
DESIGNED J.E.F.	DRAWN R.R.B.	TRACED	CHECKED J.D.R.	REVIEWED B.F.G.	DATE 10-6-66	REVISED	

DAR-127-9.64



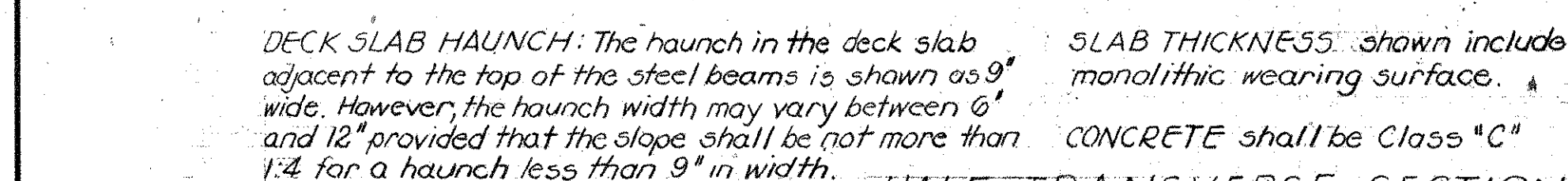
"5" BARS: All longitudinal bars are "5" bars except as otherwise shown. Each longitudinal line shall be set as 6:5003 and 1:5002. Lap bars 1'-11" minimum.

REINFORCING STEEL PLACEMENT: Longitudinal steel shall be placed parallel to the ~~to~~ Roadway and transverse steel parallel to the substructure elements, spacing measured along ~~to~~ Roadway.

SUPERSTRUCTURE details are symmetrical about the C Roadway.

Station	Elevation
740+25	1062.67
740+50	1062.62
740+75	1062.54
747+00	1062.47
747+25	1062.37
747+50	1062.29
747+75	1062.17
748+00	1062.00

* Elevation given for right and left curb

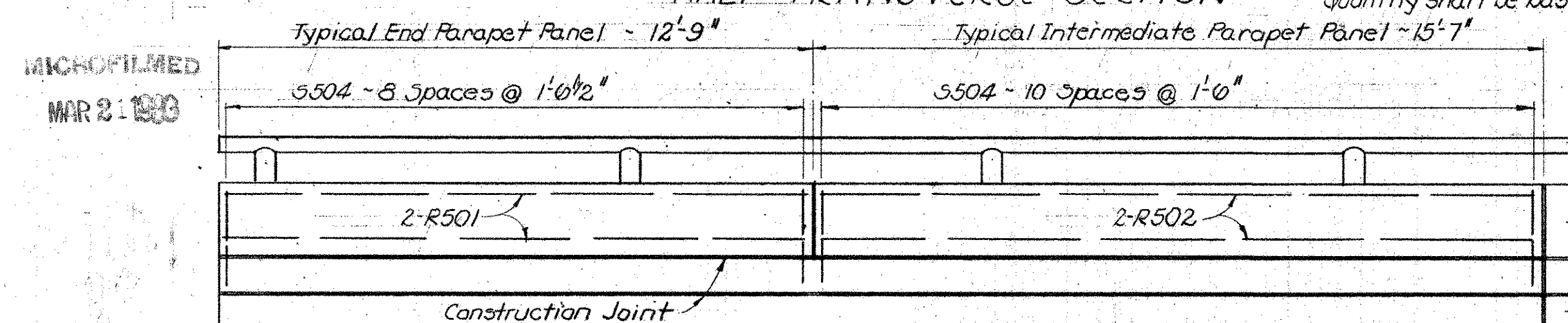


SLAB THICKNESS shown includes 1" monolithic wearing surface.

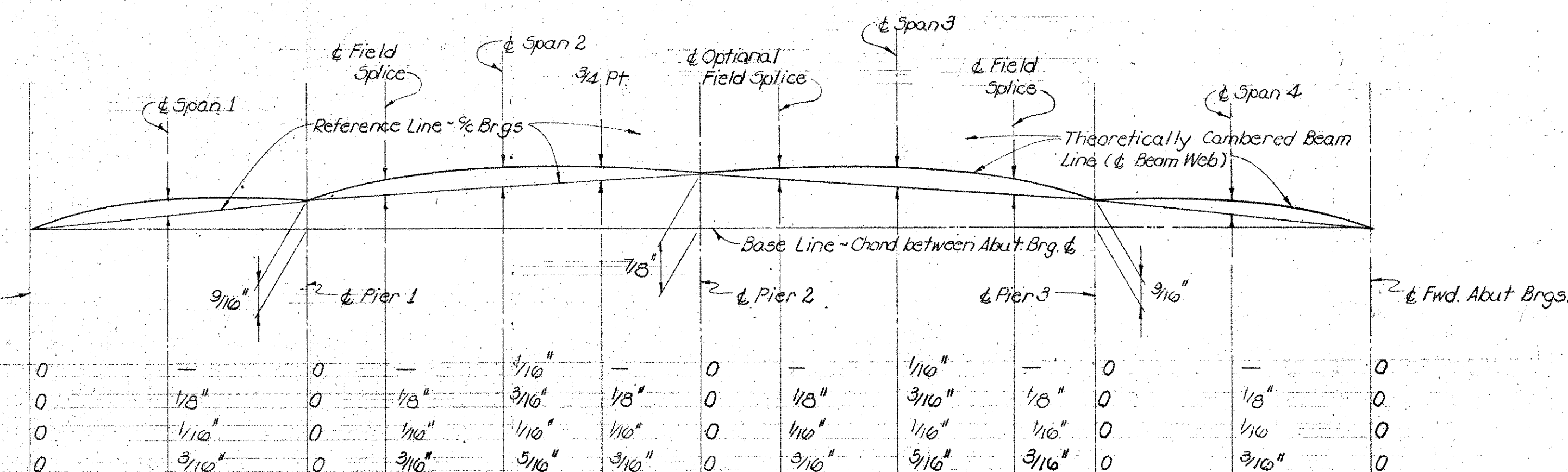
CONCRETE shall be Class "C"

* QUANTITY OF DECK CONCRETE to be paid for shall be based upon these nominal dimensions even though deviation from them may be necessary because the top flange of the beams may not have the exact camber or conformation required to place it parallel to the finished roadway surface. Quantity shall be based on the 9" width of haunch.

HALF-TRANSVERSE SECTION



- Deflection due to weight of steel
- Deflection due to remaining dead load
- Convexity due to vertical curve
- Sum of deflection and convexity = Camber



CAMBER DETAILS

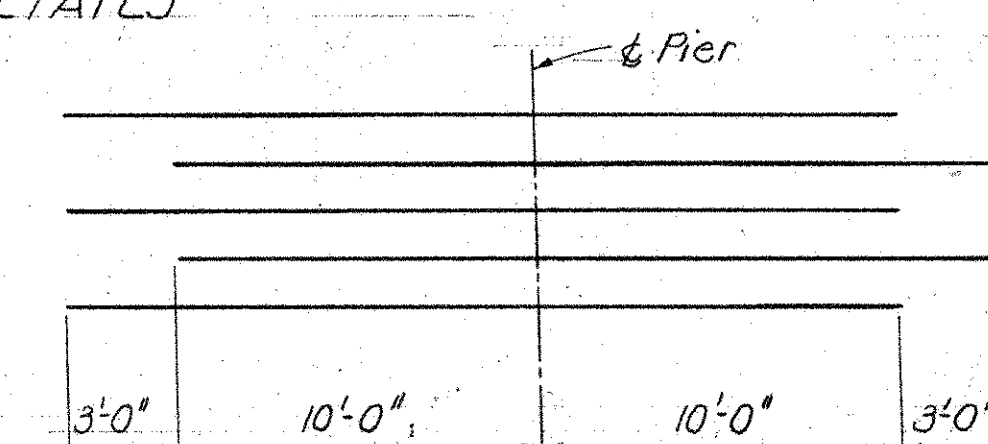
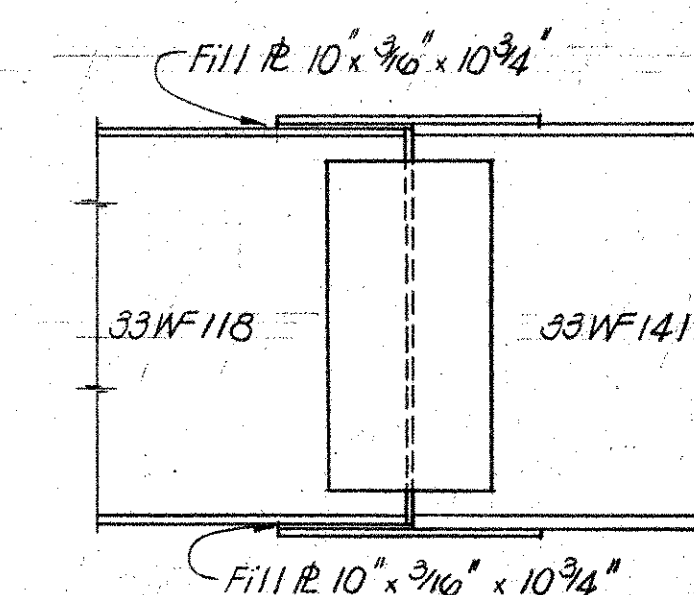
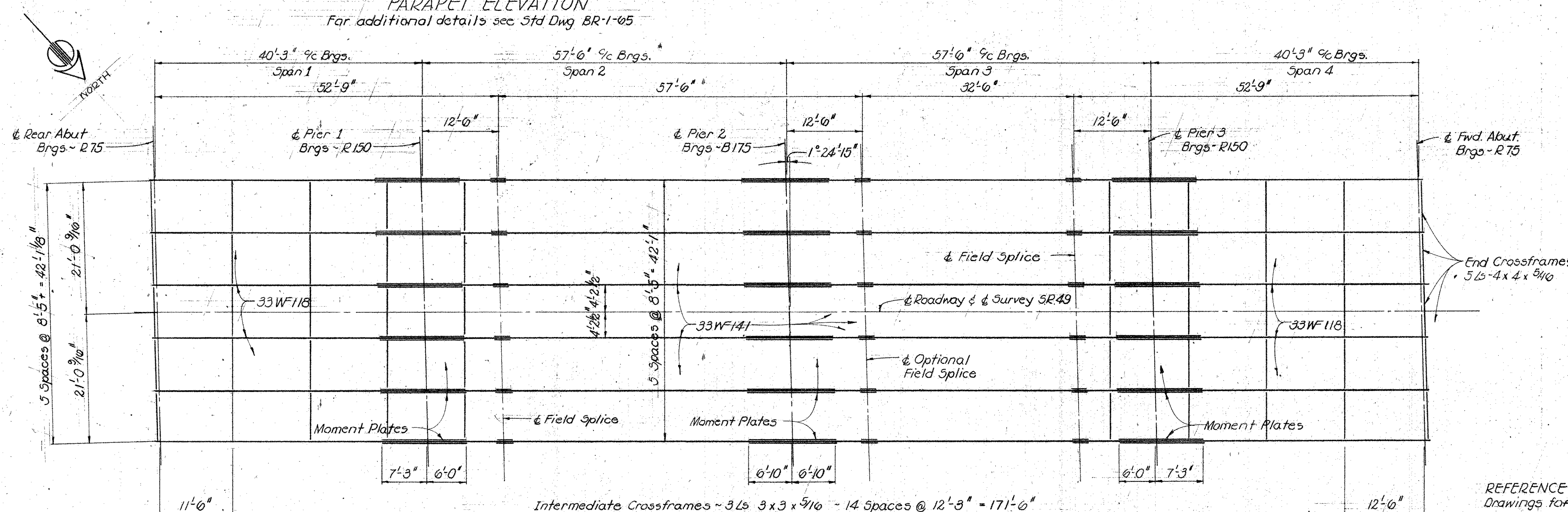


DIAGRAM SHOWING STAGGER OF 5004 BARS



SPLICE ADJACENT TO PIERS 1 & 3
For details not shown see 3rd Dwg. SD-1-65



MOMENT PLATES		
LOCATION	Top Plate	Bottom Plate
Piers 1 & 3	10" $\frac{7}{16}$ " x 13'-3"	13" $\frac{1}{2}$ " x 13'-3"
Pier 2	10" $\frac{7}{16}$ " x 13'-8"	13" $\frac{1}{2}$ " x 13'-8"

STEEL FRAMING PLAN

REFERENCE shall be made to the following Standard Drawings for details not shown hereon.

BR-1-65, Sheet 1 ~ Railing and parapet details.

RB-1-55 - Bearings

SD-1-05

Moment plate welding procedure.
End crossframes and end dam.
Scuppers and supports.
Curb plates.

SUPERSTRUCTURE DETAILS

BRIDGE No. DAR-127-1069
UNDER SR49

DESIGNED JEF	DRAWN JEF	TRACED	CHECKED J.D.R.	REVIEWED BFG	DATE 10-6-66	REVISED
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