



**OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION**  
**682 Prospect Street**  
**Berea, Ohio 44017**  
**(440) 971-2081**

**LOI NO. 14-2021**

**REQUEST FOR LETTERS OF INTEREST (LOIS) TO PERFORM  
PROFESSIONAL ENGINEERING SERVICES FOR:**

**BRIDGE DECK REHABILITATION**

**PROJECT NO. 71-21-03**

**DECK OVERLAY OF MAINLINE BRIDGE OVER STATE ROUTE 420/I-280  
AT MILEPOST 71.4 IN WOOD COUNTY, OHIO**

**ISSUE DATE: August 27, 2021**

**INQUIRY END DATE: 5:00 PM (Eastern) on September 10,  
2021**

**LETTERS OF INTEREST DUE 5:00 P.M. (Eastern) on September 17,  
DATE: 2021**

**COMMISSION MEETING: October 18, 2021 (anticipated meeting for  
contract award; subject to change)**

**The SBE goal for this project is 20%**

In lieu of taking exceptions to the Request for Letters of Interests requirements, including but not limited to terms and conditions, scope of work statements, service levels requirements, etc., or providing assumptions that may be unacceptable to the Commission, Respondents are strongly encouraged to use the inquiry process in PART VI of this Request for Letters of Interest.

SUBMITTED BY:

COMPANY NAME \_\_\_\_\_

CONTACT NAME \_\_\_\_\_

STREET ADDRESS \_\_\_\_\_

CITY AND STATE \_\_\_\_\_

ZIP CODE \_\_\_\_\_ TELEPHONE NUMBER \_\_\_\_\_

EMAIL ADDRESS \_\_\_\_\_

## TABLE OF CONTENTS

PART I.	BACKGROUND INFORMATION .....	1
PART II.	ASSISTANCE FROM COMMISSION PERSONNEL.....	1
PART III.	LOI REQUIREMENTS .....	1
PART IV.	FORM CONTRACT FOR PROFESSIONAL.....	2
	SERVICES FOR A CONSTRUCTION PROJECT REQUIREMENTS.....	2
PART V.	SUBMISSION REQUIREMENTS .....	3
PART VI.	INQUIRY SUBMISSION INSTRUCTIONS.....	3
PART VII.	LOI SUBMISSION INSTRUCTIONS .....	4
PART VIII.	EVALUATION OF LOIs.....	4
PART IX.	OFFICE OF EQUITY AND INCLUSION.....	5
PART X.	DEVIATIONS, EXCEPTIONS AND ADDENDA TO REQUEST FOR LOIs.....	5
PART XI.	LEGAL REQUIREMENTS.....	6
PART XII.	INQUIRY AND LOI SUBMISSION INSTRUCTIONS .....	7
PART XIII.	ONLINE NOTARY PUBLIC SERVICES.....	7
PART XIV.	APPEAL PROCESS.....	7

APPENDIX A- Scope of Services

APPENDIX B – Form of Contract for Professional Services for a Construction Project

APPENDIX C – Non-Collusion Affidavit

APPENDIX D – Ethics Policy

APPENDIX E –Affirmation and Disclosure of Public Funds Expenditure on Offshore Services

APPENDIX F – Office of Equity and Inclusion Forms

APPENDIX G – As-Built Drawings

**REQUEST FOR LETTERS OF INTEREST (LOIs) TO PERFORM  
PROFESSIONAL ENGINEERING SERVICES FOR PROJECT NO. 71-21-03**

**PART I. BACKGROUND INFORMATION**

The Ohio Turnpike and Infrastructure Commission (“Commission”), a body corporate and politic constituting an instrumentality of the State of Ohio, is responsible for operating and maintaining the Ohio Turnpike, a toll road officially known as the James W. Shocknessy Ohio Turnpike. The Ohio Turnpike is a limited access highway extending 241 miles across northern Ohio. Additional information regarding the Commission and the Ohio Turnpike can be found at <https://www.ohioturnpike.org/home>.

The Commission issues this Request for Letters of Interest seeking to select a qualified consultant (“Consultant”) to perform professional engineering services (Phase I – Site Inspection/Engineering Report/Design/Plan Preparation; Phase II – Engineering Support During Construction), as further described in Appendix A, for Project No. 71-21-03, Bridge Deck Rehabilitation, Deck Overlay of Mainline Bridge over State Route 420 / I-280 at Milepost 71.4 in Wood County, Ohio (the “Project”).

As-Built drawings of the bridge are attached to this LOI as Appendix G.

Letters of Interest shall serve to provide information for the Commission to evaluate the Respondent’s qualifications to perform the services required for the Project. The Commission intends to select one consultant to enter into a contract for the Project based on the LOI submittals.

Those firms interested in responding to the Request for Letters of Interest must have a completed “Request for Qualifications” (“RFQ”) package for calendar years 2021-2022 on file with the Commission to be considered as a potential Respondent. If a firm has not already responded to the RFQ, the RFQ package may be obtained through the inquiry process and its response submitted simultaneously with the LOI.

Any person responding (a “Respondent”) must clearly demonstrate depth of experience in providing construction administration and inspection services, including familiarity with the various methodologies and industry best practices for performing the required tasks. Demonstrated experience in providing the necessary services is required.

**PART II. ASSISTANCE FROM COMMISSION PERSONNEL**

Commission personnel will be assigned to assist, as needed, with the coordination of the various aspects of any assignments. Commission personnel will also make available all documents in the Commission’s possession to the Consultant required for completion of its duties. Generally, the Commission’s Chief Engineer will administer and manage the contract for the Consultant’s services.

**PART III. LOI REQUIREMENTS**

The general nature and scope of work for the Project are set forth in Appendix A (“Scope of Services”). The Commission expects that Respondents will have experience in providing the services of this nature and should understand the general scope of the services necessary to successfully fulfill the Commission’s



requirements. Respondents should prepare Letters of Interest that are concise and that include an explicit response to the items listed below:

1. Plainly identify the Consultant's legal name, contact person(s) and their email, phone number and physical address. Describe your organizational structure, staffing of the project, and specify the number of professional personnel by discipline based in the Ohio office(s) in which a bulk of the services will be performed.
2. List the types/categories of services for which the Consultant has a current Qualifications Statement on file with the Commission in response to the 2021-2022 RFQ and all ODOT Prequalifications.
3. List the Project Manager and other key staff members including key subconsultant staff. Address the experience of the key staff members on similar projects. Provide a one (1) page résumé of the proposed Project Manager. The proposed Project Manager must be a professional engineer registered in the State of Ohio. Additionally, provide an organizational chart and no more than half-page resumes for each staff member assigned to the Project, which shall not exceed five (5) pages. Resumes should include the qualifications of the key staff and descriptions of work performed on similar projects.
4. Describe your firm's approach to quality control and any programs for providing technical direction and administrative control to assure conformance with industry-accepted standards of quality for the Project.
5. List significant subconsultants, their categories of service, qualifications, and the percentage of work to be performed by each proposed subconsultant.
6. Provide a description of your Project approach, not to exceed two (2) pages. Confirm the firm's understanding of the project, proposed technical approach, cost containment practices, innovative ideas for this type of project and any other relevant information concerning your firm's qualifications to perform the services contemplated under the project.
7. Describe the capacity of your firm's staff and its ability to perform the work in a timely manner relative to present workload and the availability of assigned staff.
8. Provide references from three (3) organizations other than the Ohio Turnpike and Infrastructure Commission for similar projects and services completed in the past three (3) years. For each reference, provide a contact name and phone number.
9. List all services performed for the Ohio Turnpike and Infrastructure Commission over the last five (5) years.

Items 1 through 9 must be included in the LOI on single sided 8 1/2" x 11" sheets of paper. Items 1 through 9 shall not exceed fifteen (15) pages and Item 6 shall not exceed two (2) pages and shall be in no smaller than size 11 font. The Letter of Interest shall not exceed fifteen (15) pages. Items B, C, D and E listed in PART V below are excluded from the page limit. A one (1) page cover letter and a Table of Contents may be included and will not be considered as part of the fifteen (15) page limit.

#### **PART IV. FORM CONTRACT FOR PROFESSIONAL SERVICES FOR A CONSTRUCTION PROJECT REQUIREMENTS**

In submitting a Letter of Interest, the Respondent agrees to sign the Contract for Professional Services for a Construction Project attached as Appendix B, incorporating the Scope of Services, within ten (10) days of the Commission's delivering of a notice of award.

## PART V. SUBMISSION REQUIREMENTS

For Respondent's Letter of Interest to be responsive, Respondent must submit the following:

- A. A Letter of Interest addressing the items listed in PART III, and limited to 15-pages, not including items B, C, D and E listed below.
- B. An explanation of any concerns, requested information or exceptions related to the Request for LOIs, Scope of Services or the Contract for Professional Services for a Construction Project (attached as Appendix B).
- C. A completed, signed, and notarized Non-interest/Non-collusion Affidavit (see Appendix C attached hereto; see also, Ethics Policy attached as Appendix D which is referenced in the affidavit).
- D. Completed and Signed Disclosure and Acknowledgement Governing the Expenditure of Public Funds on Offshore Services (see Appendix E attached hereto).
- E. Completed Small Business Enterprise ("SBE") Utilization Certification and Plan demonstrating the commitment and means for achieving SBE participation on the Respondent's team (see Appendix F attached hereto). If the Certification and Plan fails to meet or exceed the **20% Goal**, the Respondent is required to demonstrate that it used Good Faith Efforts to attain SBE participation that meets or exceeds the Goal. As described in Appendix F, the Commission recognizes SBEs that are certified with the Commission or ODOT as SBE and considers DBEs certified with ODOT and firms certified as EDGE through DAS as eligible for SBE certification. Contact the Commission's Office of Equity and Inclusion with any questions concerning the SBE Program.

## PART VI. INQUIRY SUBMISSION INSTRUCTIONS

All interested parties are welcome to submit specific questions or requests for clarifications of the LOI requirements. Respondents are expected to raise any questions, exceptions, or additions they have concerning the LOI prior to the end of the Inquiry Period indicated on the cover page. These questions shall be addressed in writing and **emailed to [purchasing@ohioturnpike.org](mailto:purchasing@ohioturnpike.org)**. **Do not contact the Commission by phone. Do not direct questions regarding the Request for LOIs to anyone other than through the email address provided.** At the completion of the Inquiry Period, a summary of all questions and answers will be compiled, posted on the Commission's website (<https://www.ohioturnpike.org/business/doing-business-with-us/rfps>), and provided via email to the interested parties on file. In the event that it becomes necessary to provide additional clarifying data or information or to revise any part of this Request for Letters of Interest, addenda will be posted publicly (at the same link as answers) and provided directly to all recipients of this Request for Letters of Interest.

## **PART VII. LOI SUBMISSION INSTRUCTIONS**

Respondents must timely submit its Letters of Interest electronically to [purchasing@ohioturnpike.org](mailto:purchasing@ohioturnpike.org) in pdf format by the deadline specified on the cover page of this Request for Letters of Interest. Paper copies received will be considered non-responsive.

## **PART VIII. EVALUATION OF LOIs**

The Commission will form an Evaluation Team consisting of members of the Commission Engineering staff to review the Letters of Interest. Respondents may be required to make a presentation to the Evaluation Team. A Consulting Services Contract will be awarded, if any award be made, to the Respondent determined to be the most qualified to perform the required services. In determining whether a Respondent is responsive, the Commission will consider the Respondent's experience, conduct and performance on previous contracts (if any) and ability to execute the Contract properly. Factors that may be considered by the Commission are:

- A. Competence to perform the required professional design services as indicated by the technical training, education, and experience of the firm's personnel, especially the technical training, education, and experience of the employees within the firm who would be assigned to perform the services; 20 points
- B. Ability of the responding firm in terms of its workload and the availability of qualified personnel, equipment, and facilities to perform the required professional design services or design-build services competently and expeditiously; 15 points
- C. Past performance of the responding firm as reflected by the evaluations of previous clients with respect to such factors as control of costs, quality of work, and meeting of deadlines; 15 points
- D. Any other relevant factors as determined by the Commission, including but not limited to completion and submission of all items required under this Request for Letters of Interest, and any exceptions or requested deviations; 20 points
- E. Committing to a plan for meeting or exceeding the SBE Goal or satisfactorily demonstrating use of Good Faith Efforts to attain SBE certified firms' participation on the Project – pass/fail;
- F. Fostering competition and economic development – pass/fail; and
- G. Disclosure of any conflict of interest – pass/fail.

Following the ranking of the Letters of Interest submitted, a "Scope of Services" meeting will be held with the top-ranked Respondent to ensure the Respondent's understanding of the contract requirements and fee negotiations may commence. Following this meeting, the Respondent shall submit to the Commission its proposed hourly billing rates and classifications for all permanent employees in accordance with the Ohio Turnpike and Infrastructure Commission Professional Services Method of Compensation – Hourly Billing FY 2021 Summary, and a fee proposal for all tasks defined at the Scope of Services meeting. The top-ranked Respondent's fee will be compared to the Commission's estimates. If necessary, the Commission will attempt to negotiate a mutually acceptable fee. If those negotiations

are unsuccessful, the process will be repeated with the Respondent that submitted the next ranked Letter of Interest. Following successful negotiations, a contract (see [Appendix B](#) for form of Contract) will be entered into based on the Scope of Services. Furthermore, the Commission will not agree to pay or reimburse for the successful Respondent's travel time and mileage to and from the work site, nor overnight lodging and/or per diems in connection with providing those services as set forth in the Scope of Services.

## **PART IX. OFFICE OF EQUITY AND INCLUSION**

The Commission adopted its Small, Minority Business Inclusion Program in 2016 to ensure that businesses certified as a Small Business Enterprise (SBE), Minority Business Enterprise (MBE), and/or Disadvantaged Business Enterprise (LDBEs) have the fullest possible opportunity to participate in contracts involving the expenditure of Commission funds. The program is administered by the Commission's Office of Equity and Inclusion (OEI), which reviews each proposed contract and determines if opportunities exist and if so, applies a goal to the proposed contract. In some cases, no goal is applied to a proposed contract due to a lack of opportunity and availability of certified businesses.

The Commission's Office of Equity and Inclusion Standards and Practice Manual for the Small, Minority and Disadvantaged Business Inclusion Program is available on the Commission's website at <https://www.ohioturnpike.org/business/oei>.

When a goal is identified in an LOI, the respondent must submit the documentation provided by the Commission to show how the respondent will meet the goal. When the goal is waived, the program standards still require respondents to use "good faith efforts" or necessary and reasonable actions that would reasonably be expected to attain SBE or MBE or LDBE participation in the respondent's performance of the scope of work.

Additionally, whether the Commission applies a goal to a proposed contract or not, the program standards provide that the Commission may apply an evaluation credit of five percent (5%) to the total points awarded for responses received from SBEs, or MBEs and LDBEs consultants to perform the personal or professional services set forth in the Scope of Services. The Commission may apply this credit in the evaluation process for responses submitted in response to this LOI.

For questions about the Commission's Small, Minority and Disadvantaged Business Inclusion Program, please visit the Commission's website at <https://www.ohioturnpike.org/business/oei>.

## **PART X. DEVIATIONS, EXCEPTIONS AND ADDENDA TO REQUEST FOR LOIs**

Respondents should raise any questions, exceptions or requested changes they have concerning the Request for LOIs during the Inquiry Period. If a Respondent discovers any ambiguity, error, conflict, discrepancy, omission or other deficiency in this Request for LOIs, that Respondent should immediately notify the Commission of such error and request modification or clarification of the Request for LOIs in accordance with the procedures outlined in PART VI. In the event that it becomes necessary to provide additional clarifying data or information or to revise any part of this Request for LOIs, addenda will be issued and posted on the Commission's website (<https://www.ohioturnpike.org/business/doing-business-with-us/rfps>) to modify the necessary provisions of the Request for LOIs.

Respondents should specify in the Proposals whether they take exception to any of the Scope of Services or the Consulting Services Contract. If a Respondent fails to notify the Commission of a known error in

the Request for LOIs, and a Consulting Services Contract is awarded to that Respondent, that Consultant shall not be entitled to additional compensation or time by reason of the error or its later correction.

The Commission reserves the right to make changes to the scope of this Request for LOIs and to clarify any of the requirements, information and/or provisions of this Request for LOIs as it deems necessary. Any changes to the Request for LOIs will be made via addenda issued prior to the submission deadline. The Commission further reserves the right, if necessary, to extend the submission deadline.

## **PART XI. LEGAL REQUIREMENTS**

The Respondent is required to adhere to the rules and regulations promulgated by the Commission and the State of Ohio, and all terms and conditions set forth in this Request for LOIs. Additionally, the Respondent agrees to the following:

- A. A Respondent may withdraw or modify its proposal only if notice of such withdrawal or modification is prior to the Letter of Interest due date as identified on the front cover of this Request for LOIs.
- B. Once opened, the Respondent agrees that its Letter of Interest cannot be altered, modified, or withdrawn.
- C. By submitting a Letter of Interest, the Respondent acknowledges it has read this Request for LOIs, understands it, and agrees to be bound by the terms and conditions set forth herein.
- D. The Commission is not responsible for the accuracy of any information regarding this Request for LOIs that was gathered through a source other than the Commission's website or the inquiry process described above.

The Commission reserves the right to:

- A. Reject any and all Letters of Interest in whole or in part;
- B. Require any Respondent to submit additional written or oral clarification of their Letter of Interest and to meet with any, but not necessarily all, of the Respondents to obtain additional information and/or clarification and/or to negotiate terms of any Letter of Interest submitted;
- C. May consider financial information other than any financial information required by this Request for Letters of Interest (if any) as part of the evaluation process, including but not limited to credit reports from third-party reporting agencies.
- D. Enter into a Contract with the Consultant on the basis of the Letter of Interest submitted, without written or oral modifications thereto; and
- E. Waive minor irregularities noted in a Letter of Interest when in the best interest of the Commission.

Under no circumstances will the Commission be responsible for any costs incurred by any Respondent in submitting a Letter of Interest.

## **PART XII. INQUIRY AND LOI SUBMISSION INSTRUCTIONS**

Respondents must timely submit one electronic version of its Letter of Interest electronically to [purchasing@ohioturnpike.org](mailto:purchasing@ohioturnpike.org) in pdf format before the deadline specified on the cover page of this RFP.

## **PART XIII. ONLINE NOTARY PUBLIC SERVICES**

The Commission has the capability to provide online notary public services which are available to any respondent without access to a notary public for documents that must be notarized and submitted with a bid. Please allow at least 3 business days to process any request for online notary public services. Requesting party must have computer internet access and a webcam. Please contact the Commission at [purchasing@ohioturnpike.org](mailto:purchasing@ohioturnpike.org) for online notary public information and services.

## **PART XIV. APPEAL PROCESS**

Any aggrieved Respondent desiring to challenge the award of a contract as a result of this Request for Letters of Interest must state its complaint in writing, through electronic submission in pdf format to [purchasing@ohioturnpike.org](mailto:purchasing@ohioturnpike.org) within five (5) calendar days of notification of the contract award. Upon receipt of a timely challenge, one or more representative(s) of the Commission shall meet with the protesting party to hear its objections. ORC Chapter 119 shall not be applicable to such meeting. No final award shall be made until the Commission either affirms or reverses its earlier determination for such contract award.

**APPENDIX A**  
**LOI NO. 14-2021**  
**DRAFT SCOPE OF SERVICES**  
**PROJECT NO. 71-21-03**

**A. PROJECT OVERVIEW**

Project 71-21-03 includes, but is not limited to:

- a. Design of a deck overlay for the **MP 71.4 – Mainline Bridge over the State Route 420 and I-280** and also includes all necessary substructure and superstructure repairs, as well as approach work to provide proper transition to the bridge.
- b. Performance of a site inspection and engineering investigation of the structural components of the bridges listed above for the purpose of determining required construction work.
- c. Preparation of an engineering report summarizing the site inspection and engineering investigation.
- d. Preparation of maintenance of traffic plans to construct the proposed work while maintaining traffic on the Ohio Turnpike for the bridges in each respective Project.
- e. Communication and coordination with all stakeholders, including obtaining the necessary approvals and access required concerning the property interests of others.
- f. Consultation with the Commission staff on the recommendations.
- g. Preparation of final Construction Plans and Specifications for bidding.
- h. Provide for engineering support during construction.
- i. Prepare record drawings and final load rating reflecting the as-built condition of the structure.

**B. SITE INSPECTION/ENGINEERING REPORT/DESIGN/PLAN PREPARATION– PHASE I**

The complete scope of this Phase will be further refined at a “Scope of Work” meeting with the Consultant. A partial scope of this phase is as follows:

1. Site inspections and engineering investigation shall be performed to determine all deficiencies, estimated quantities, repair recommendations, removal limits, removal procedures and project staging. The Consultant is to determine the project limits, subject to the approval of the Chief Engineer.
2. Preparation of an engineering report summarizing the site inspection and engineering investigation, including all deficiencies and repair recommendations, as well as removal limits,

removal procedures, and project staging recommendations for the bridges. The Consultant shall also provide a recommended design and construction schedule.

3. Preparation of Construction Drawings and Contract Documents for bidding. The Construction Drawings and Contract Documents items shall address, but not be limited to, those items listed in the Project Overview.
4. Additional Specifications and Special Provisions shall be prepared if not covered by ODOT Specifications and the Ohio Turnpike & Infrastructure Commission's Special Provisions. Specifications and Special Provisions submitted by the Consultant shall include reference to any and all required permits to complete the Project.
5. Preparation of all required Temporary Traffic Control Plans on the Turnpike. The Consultant shall coordinate with the Ohio Department of Transportation and Wood County as appropriate for the Project.
6. Communication and coordination with all stakeholders during the design and construction activities to prevent conflicts with other planned projects and to address concerns of the stakeholders and to facilitate timely design completion.
7. Preparation of a construction cost estimate for the project.
8. Review and evaluation of construction bids received for the Project and submission of a recommendation concerning award to the Chief Engineer.
9. Plans shall be prepared for anticipated 2024 construction, with final Plans, Specifications, and Estimate due to the Commission on April 1, 2023.

#### **C. ENGINEERING SUPPORT DURING CONSTRUCTION– PHASE II**

The Consultant is to provide engineering support during construction operations as designated by the Commission. Construction services are to include, but not be limited to, the following:

1. Consulting with the Commission on all questions of engineering with regard to construction of the Project.
2. Reviewing the Contractor's fabrication Plans, material and products submittals and brochures and shop drawing submittals. Advising the Commission on the acceptability of such submittals.



3. Preparing Record Plans of the completed construction from information provided by the construction contractor and field records of construction activity. Revisions are to be noted on the original Project AutoCAD drawings.
4. Updating the Bridge Load Rating for the rehabilitated condition (if required), utilizing AASHTO's AASHTOWARE software.

#### **D. GENERAL**

The Commission expects three stages of design review to occur. In addition to the Commission's Engineering staff performing reviews at each stage, the Commission anticipates causing a third-party engineering consultant to review each deliverable. The three design review stages are anticipated upon the following milestones: (1) completion of the investigation and evaluation phase; (2) completion of preliminary plans (approximately 30%); (3) completion of 90% plans. Consultants shall incorporate review time of at least two weeks for each stage into its design schedule.

The Commission's Sample Specifications, Standard Drawings, Standard Conditions for Public Improvement Contracts, and original Construction Plans are available for download through .ftp site system upon request from any interested firm with a 2021-2022 Biennial Statement of Qualifications on file with the Commission.

## APPENDIX B

### CONTRACT FOR PROFESSIONAL SERVICES FOR A CONSTRUCTION PROJECT for Project No. 71-21-03

This Contract, entered into as of the last date of the signature below, is between the **Ohio Turnpike and Infrastructure Commission**, a body corporate and politic constituting an instrumentality of the State of Ohio, located at 682 Prospect Street, Berea, Ohio 44017 (the “Commission”), through its Executive Director under the authority of Section 5537.04(A)(12), Article V, Section 1.00 of its Code of Bylaws, and Resolution No. \_\_\_\_\_, adopted \_\_\_\_\_, 2021, and [**Consultant**], an Ohio [*corporation, limited liability company, etc.*], located at [*insert address*] (“Consultant”), through its authorized representative.

This Contract pertains to architectural/engineering design services during construction for the following: Project No. 71-21-03, **Bridge Deck Rehabilitation**, Deck Overlay of Mainline Bridge over State Route 420 / I-280 at Milepost 71.4 in Wood County, Ohio (the “Project”).

#### RECITALS

WHEREAS, on \_\_\_\_\_, 2021, the Commission issued Request for Letters of Interest No. 14-2021 (“Request for LOIs”) to select a consultant to provide architectural/engineering design services during needed for the Project;

WHEREAS, the Consultant submitted a Letter of Interest dated \_\_\_\_\_, 2021 to perform the necessary consulting services described in the Request for LOIs; and

WHEREAS, the Commission’s Engineering staff reviewed the Letters of Interest received to perform the consulting services for the Project, and among those submitting letters of interest, determined that the Consultant was the most qualified firm to perform the necessary services;

WHEREAS, on \_\_\_\_\_, 2021, the Consultant submitted a fee proposal to perform the professional consulting services required for the Project (the “Fee Proposal”);

WHEREAS, the Commission’s Engineering staff reviewed the fee proposal and deemed it reasonable and appropriate;

WHEREAS, the Executive Director approved the Chief Engineer’s recommendation to award this Contract to Consultant; and,

WHEREAS, the Commission authorized the award of the Contract to Consultant under Resolution No. \_\_\_\_\_, adopted \_\_\_\_\_, 2021.

NOW, THEREFORE, in consideration of the mutual promises set forth herein, the Commission agrees to pay for, and the Consultant agrees to provide the professional services identified herein on the terms and conditions set forth below.

## APPENDIX B

### ARTICLE 1 GOVERNING DOCUMENTS

- 1.1 Contract Documents.** The documents that comprise this Contract include this Contract, the Consultant's Fee Proposal, dated \_\_\_\_\_, 2021 (attached hereto as Exhibit A) and the Final Project Scope, if any (attached hereto as Exhibit B) (the "Contract Documents"). In the event of a conflict, the terms and conditions of this Contract control.
- 1.2 Designated Personnel.** Prior to performing any services, the Consultant shall provide to the Commission for approval a list of personnel designated to perform the services along with their resumes and certifications, as required. Only those designated personnel may perform those services unless Consultant obtains the Commission's approval of any substitutions or additions in advance of any change.
- 1.3 Specifications.**
- 1.3.1** Unless otherwise instructed in writing, any inspection, test or sampling to be performed by the Consultant, shall be in accordance with the Contract Documents of the Commission's Public Improvement Contract, as well as the Specifications for the inspection or testing as most recently published by the American Society for Testing Materials ("ASTM"), the American Association of State Highway and Transportation Officials ("AASHTO"), or the current edition of the State of Ohio Department of Transportation ("ODOT") manual entitled, Construction and Material Specifications, whichever is applicable, unless other standards and requirements are applicable, in which case the current publications containing such standards or specifications shall be followed.
- 1.3.2** If assigned to perform inspection services, the Consultant shall inspect the work of each contractor for Defective Work in accordance with the duties and responsibilities described in the Contract Documents of the Commission's Public Improvement Contract, which is incorporated by reference into any assignment issued to the Consultant for inspection services. If, through inspection or otherwise, the Consultant shall become aware of any Defective Work on the Project, the Consultant shall report all Defective Work to the Commission, together with recommendations for the correction thereof. Upon completion of any inspection services assigned to the Consultant, it shall provide certification, in writing, to the Commission that the inspections were completed in strict accordance with the specifications set forth in the Contract Documents for that particular project. Such certification shall be on behalf of both the Consultant as an entity and the individual inspector assigned to perform the inspection services.

## APPENDIX B

### ARTICLE 2 TERM, CONTRACT FEES AND PAYMENT

- 2.1 Term.** This Contract shall become effective upon the last date written below and, subject to the termination provisions of this Contract, continue to be in full force and effect until the work required under the Contract is completed by the Consultant to the satisfaction of the Commission.
- 2.2 Contract Fee.** The Commission shall pay the Consultant for its proper performance under this Contract an amount up to the not-to-exceed amount of \$ *[insert]* as set forth in Exhibit A, to perform the services. The Commission may amend the Contract in writing, prior to the performance of any modified or additional work, in order to incorporate additional Fee Proposals as sought by the Commission. Should the Commission authorize an amendment of this Contract for the performance of any additional services on this Project, any unexpended funds allocated for compensation to the Consultant for a phase within the Project shall not be allocated or added to the not-to-exceed amount established for the performance of any other phases or services. The Commission will not pay for travel time to and from the work site.
- 2.3 Billing Rates.** The Commission shall compensate the Consultant based upon the actual effort expended performing the necessary services and Approved Billing Rates derived from actual wage rates, overhead rate and fixed fee using the following formula:

Billing Rate = [Hourly Rate + (Hourly Rate)(Approved Overhead Rate) ] x 1.10 with the following definitions:

- 2.3.1 Hourly Rates.** Hourly Rates shall mean the direct cost of salaries and/or wages of the personnel of the Consultant, as applicable, including professional, technical, management, administrative and clerical employees, and principals engaged on the Project as related to their time devoted to the Project. All hourly rates are subject to the approval of the Commission's Chief Engineer. The Commission also reserves the right to "cap" the hourly billing rates for any individual assigned to a project in accordance with the document entitled Ohio Turnpike and Infrastructure Commission Professional Services Method of Compensation – Hourly Billing FY 2021 Summary. (Attachment G of the 2021-2022 Biennial Request for Qualifications) This document will be updated annually.
- 2.3.2 Approved Overhead Rate.** The Consultant's overhead rate shall be reviewed by the Commission in accordance with the ODOT Consultant Audit Guide. The overhead rate for this Contract shall be approved by the Chief Engineer but shall not exceed 160.00%. The rate may only be amended by mutual agreement of the parties in writing.
- 2.3.3 Fee.** The Consultant shall be entitled to receive a profit as a part of the Approved Billing Rate described in Subsection 2.3.4 below attributable to the approved

## APPENDIX B

personnel on the Project. The profit allowance shall be ten percent (10%), and thus the profit multiplier for any given assignment will be 1.10.

**2.3.4 Billing Rate Approval.** The Consultant, prior to beginning work on the Project, must submit and obtain written approval from the Commission of the Billing Rate for each individual it expects to work on the Project, including their job classification. Prior to assignment of any new personnel to the Project, the proposed Billing Rates and résumés must be submitted for prior written approval by the Commission. Overtime rates will only be paid as approved by the Commission. The Commission reserves the right to cap billing rates for any personnel assigned to the Project. The Consultant shall invoice its personnel expenses based on its Approved Billing Rates. Compensation for any services not specifically provided for shall be determined by prior agreement between the Executive Director or the Chief Engineer of the Commission and the Consultant; otherwise the Commission agrees to compensate the Consultant in accordance with rates submitted. The schedule of rates include all overhead costs except as hereinafter modified. Overtime must have prior approval of the Executive Director or the Chief Engineer of the Commission. Overtime rates will only be in effect after 40 (forty) hours of regular time is worked unless this provision is in conflict with other labor agreements to which the Consultant is a party. The time period for the assessment of regular time shall be from Monday through Friday of a standard work week, and for purposes of overtime, said personnel must have worked on the assigned Turnpike project or at another Ohio Turnpike location on another Commission project. Time in excess of forty (40) hours for this period as well as Saturday and Sunday will be considered as overtime.

**2.4 Reimbursable Expenses.** No extra charges will be assessed for preparation of invoices, computer time, travel time to and from the job site, or for incidental material, services or equipment, except as hereinafter provided. The Commission agrees to pay the actual costs of telephone, printing, postage and other similar incidental expenses incurred by the Consultant in connection with any services performed pursuant to this Contract when such expenses are fully documented. In the event that specialized materials or equipment is required, they shall be provided by the Consultant at the expense of the Commission provided that the Chief Engineer has given prior approval to such expenditure.

**2.4.1 Vehicles.** The Commission also agrees to reimburse the Consultant for the use of Consultant's vehicles (or vehicles of Consultant's employees) at the rate the Consultant reimburses its employees, when such vehicles are used pursuant to this Contract, up to the current IRS mileage allowance rate. Mileage to and from the work site shall not be reimbursed. . The approved mileage charges shall not exceed \$43.00 per day per vehicle, unless previously authorized in writing by the Chief Engineer. Furthermore, mileage logs shall be completed daily by the Consultant's employees and submitted with monthly invoices as supporting documentation for mileage reimbursement. If mileage logs are not completed daily, no reimbursement will be made.

## APPENDIX B

**2.4.2 Toll Free Access.** The Consultant and its employees shall have toll-free passage on the Ohio Turnpike in performing work pursuant to this Contract. However, such toll-free passage shall be strictly prohibited for any personal use by the Consultant's employees. Non-Revenue transponders will be issued to the Consultant upon the submittal of a written request for the requested number of transponders. These transponders are for assigned project use only and it shall be the responsibility of the Consultant to manage and monitor the proper usage of these transponders. The Commission will audit these transponders on a regular basis and should unauthorized activity be detected, the authorization for non-revenue privilege may be revoked. These transponders shall be returned at the completion of the assignment. Should the Consultant return less than the number of transponders issued, there shall be a charge of \$100.00 per transponder for each one not returned.

**2.4.3 Meals and Lodging.** During performance of said professional services, overnight lodging will be provided for Consultant's employees only when it is deemed advantageous to the assignment, and prior approval in writing is granted by the Commission's Executive Director or Chief Engineer. In the event said overnight lodging has been approved by the Executive Director or the Chief Engineer, the cost of meals and lodging shall be reimbursed at a rate the Consultant reimburses its employees, but not in amounts that exceed the Federal CONUS (Continental United States) rates established by the Federal Government and published at <https://www.gsa.gov/travel/plan-book/per-diem-rates>. CONUS rates will dictate the maximum reimbursement a traveler will receive for lodging and meals (excluding incidentals) by city. Travel reimbursement is based on the location of the work activities and not the accommodations. The location of the work activities shall be the city/county where a majority of the work is being performed for the Project. Reimbursement for lodging and meals (excluding taxes) will be provided on an actual costs basis up to the maximum CONUS rates. Documentation of actual expenditures for lodging and meals is required. For meals, the per diem rates may be used for reimbursement with verification of travel status – refer to the CONUS rules concerning partial days. The Commission agrees to reimburse the Consultant for meals up to the maximum CONUS per diem rates, or at the actual rate the Consultant reimburses its employees, whichever is less.

**2.5 Reporting.** The Consultant shall provide, and shall require all sub-consultants to provide, any requested data to determine compliance with the representations made in the approved SBE Participation Certification, Utilization Plan, Demonstration of Good Faith Efforts and Statements of Intent to Contract and Perform for each invoice through the Commission's online diversity compliance portal: <https://ohioturnpike.diversitycompliance.com/Default.asp>. The Consultant and all sub-consultants shall timely submit all required data prior to any reasonable due dates, and to check the online diversity compliance portal on a regular basis to manage contact information and contract records. The Consultant shall require all sub-consultants to have completed all requested items and maintain contact information on record that is accurate and up to date. The Consultant shall include these disclosure and reporting requirements in all subcontracts under the Contract and further require that all subcontractors place the same obligation in each of their lower tier contracts.

## APPENDIX B

The Commission may require additional information related to compliance at any time before, during, or after contract award.

- 2.6 Taxes.** The Commission is a tax-exempt entity and will provide the Consultant a copy of the Commission's tax exemption certificate.
- 2.7 Invoices and Payment.** The Consultant shall submit invoices no more frequently than once a month in a form agreeable to the Commission. The Consultant shall render its invoices to the Commission on or about the 10th day of the month after any such services are performed. Undisputed invoices shall be due and payable by the Commission within thirty (30) days from the date of receipt thereof. Invoices for any other amounts will be submitted to the Commission as the amounts come due. For any services performed on a time and materials basis, the invoice will also state the total number of hours worked by each individual performing services during the preceding month. Invoices shall be accompanied by such supporting documentation as required by the Commission. The Commission may withhold payment for services that have not been properly performed or completed, and shall not be responsible for cost overruns incurred by the Consultant due to errors and omissions by the Consultant made during the performance of its services on any Turnpike project.
- 2.8 Audit.** The Consultant shall keep full and detailed records and accounts related to its rates, fee and reimbursable expenses and exercise such controls as may be necessary for proper financial management and to substantiate all costs incurred by implementing the accounting and control systems generally followed by consultants in the area or projects similar in nature. The accounting and control systems shall be satisfactory to the Commission. The Commission and the Commission's auditors shall, during regular business hours and upon reasonable notice, be afforded access to, and shall be permitted to audit and copy, the Consultant's records and accounts, including complete documentation supporting accounting entries, books, correspondence, instructions, drawings, receipts, subcontracts, Subcontractor's proposals, purchase orders, vouchers, memoranda and other data relating to this Contract. The Consultant shall preserve these records for a period of three years after final payment, or for such longer period as may be required by law.

## ARTICLE 3 TIME FOR COMPLETION

- 3.1 Time for Completion.** Time is the essence of this Contract. The Consultant is to complete its work [*describe*], unless the Chief Engineer grants a request for an extension from the Consultant. Such extension request must be made in writing to the Chief Engineer no later than seven (7) days following the date upon which any event occurs that gives rise to the need for additional time. The extension request must include a description of the event, the reasons why that event justifies an extension, the duration of the extension sought, and any other documentation requested by the Chief Engineer.
- 3.2 Authorization to Proceed.** The Consultant is to proceed with the required services upon the execution of this Contract.

## APPENDIX B

### ARTICLE 4 THIRD PARTIES

- 4.1 Assignment.** Consultant may not assign, transfer, convey or otherwise transfer or dispose of its rights, title, interest in, or its duty to perform or supervise the performance of any of its obligations hereunder, to any other person, company, corporation or entity without the prior written approval of the Commission. Any purported assignment in violation of the preceding sentence will be void. Any approved assignment shall not relieve the Consultant from any of its responsibilities under the Contract or imply a willingness on the part of the Commission to give any subsequent or other consent, nor stop the Commission from refusing same; nor shall any such consent confer upon any assignee or transferee any right to assign or transfer any rights conferred upon such transferee.
- 4.2 Subcontracting.** The Consultant shall not sublet or subcontract, nor shall any approved sub-consultant commence performance of, any part of the work or services included in this Contract without the previous written approval of the Commission. Subcontracting, if permitted, shall not relieve the Consultant of any of its obligations under this Contract. The Consultant shall be and remain solely responsible to the Commission for the acts or faults of any sub-consultant and of such sub-consultant's officers, agents and employees, each of whom shall for this purpose, be considered an agent or employee of the Consultant to the extent of its subcontract. The Consultant shall file a conformed copy of the applicable subcontract with the Commission. The Consultant and any sub-consultant shall jointly and severally agree that the Commission is not obligated to pay or to be liable for the payment of any sums due any sub-consultant. References to the Consultant in this Contract include authorized sub-consultants of the Consultant.
- 4.3 Waiver of Defense.** The Consultant covenants for the benefit of the Commission that it will not defend against any claim, suit or action brought against the Consultant or the Commission on account of any tortious act or contractual liability alleged to have been committed or incurred in the Consultant's performance of the Contract during the term thereof, on the ground that said performance, or that any duty or obligation of the Consultant hereunder was in fact being discharged by any person, firm or corporation other than the Consultant, unless the alleged cause of action occurred subsequent to an assignment or transfer of the entire Contract, which assignment or transfer was duly consented to by the Commission in writing.
- 4.4 Beneficiaries.** There are no intended third-party beneficiaries of any provision of this Contract.
- 4.5 Independent Contractor.** The Consultant is an independent contractor for all purposes under this Contract. This is not an agreement of partnership or employment of the Consultant or any of the Consultant's employees by the Commission for the purpose of the Public Employees Retirement System ("PERS"), Workers' Compensation, or for any other purpose. The Consultant shall not pledge or attempt to pledge the credit of Commission or in any other way attempt to act on the Commission's behalf in an effort to bind the



## APPENDIX B

Commission to any additional agreements. The Consultant agrees to indemnify the Commission for any and all sums that are due and owing to the Internal Revenue Service (IRS) for withholding FICA and unemployment or other state and federal taxes. The Consultant further agrees to make such payments to the IRS and appropriate state authorities for withholding FICA and unemployment taxes.

- 4.6 Representations and Warranties.** The Consultant represents and warrants that: (1) so far as the Consultant knows, no member, employee, or agent of the Commission has any interest, either direct or indirect, in the Contract; (2) the Consultant has not employed or procured the employment of anyone to solicit or secure the Contract with the Commission other than those disclosed in the Proposal; and (3) the Consultant will fulfill the representations in its Small Business Utilization Certification and Plan submitted with its Letter of Interest, which the Commission relied upon in selecting the Consultant for contract award; and (4) all materials, including their use by the Commission in unaltered form, will not infringe any third party copyrights, patents or trade secrets that exist as of the date of this Contract and that arise or are enforceable under the laws of the United States of America. If the Commission shall hereafter determine that any of the foregoing representations is false, it may, upon written notice to the Consultant, immediately terminate the Contract and thereafter refuse to make payments thereunder, whether or not such payments are for Services already performed, and may also recover its damages, if any, for breach of warranty; or in the event such false representation was as to the existence of any agreement providing for a bonus, fee, commission, percentage, or other form of contingent compensation, the Commission may, in its discretion, elect to continue the Contract in force by deducting from the payments to be made thereunder to the Consultant the amount of such bonus, fee, commission, percentage, or other contingent payment.

## ARTICLE 5 INDEMNIFICATION

- 5.1 Generally.** The Consultant shall defend, indemnify and hold harmless the Commission, its Commission members, Executive Director, officers and employees ("Indemnified Parties"), from and against any and all liability, including claims, demands, losses, damages, settlements, judgments, costs and expenses (including reasonable attorney's fees and any costs of defense) of every kind and description arising out of or in connection with, or occurring during the course of, performance of the Contract, whether directly or indirectly, including but not limited to where such liability is:
- 5.1.1** founded upon or grows out of, directly or indirectly, the acts, errors, omissions, undertakings, representations or warranties of the Consultant, its officers, employees, agents, independent consultants, or sub-consultants;
  - 5.1.2** founded upon, or grows out of, directly or indirectly, the breach by Consultant of any term or condition of this Contract, including but not limited to the breach of any representations or warranties and in particular the breach of its express representation that it is an independent contractor and in compliance with all applicable laws related to work as an independent contractor; or,

## APPENDIX B

- 5.1.3** founded upon claims of violation of United States patents, trademark, trade secrets, proprietary information, copyrights or other intellectual property rights in existence on the date of this Contract resulting from the Consultant's or the Commission's use of any equipment, software, technology, documentation, and/or data developed in connection with the services and products described in the Contract.
- 5.2 Application.** Nothing herein contained shall require the Consultant to reimburse the Commission for acts or omissions caused by the sole negligence of the Commission. The Consultant shall waive and shall not assert any claim against the Commission for any injury to persons, whether or not resulting in death, or any loss or damage to property occurring from any cause unless such injury, loss or damage is due solely to the negligence of the Commission, its agents or employees.
- 5.2.1** If a regulatory body or court of competent jurisdiction finds that the Consultant is not an independent contractor or is not in compliance with applicable laws related to work as an independent contractor, based on the Consultant's own actions, the Consultant will assume full responsibility and liability for all taxes, assessments, and penalties imposed against the Consultant or the Commission resulting from that contrary interpretation, including taxes, assessments, and penalties that would have been deducted from the Consultant's earnings if the Consultant had been on the Commission's payroll and employed as a Commission employee.
- 5.2.2** If a third-party claim causes the Commission's quiet enjoyment or use of any product supplied by the Consultant to be seriously endangered or disrupted, or, should a court order be issued against the Commission restricting its use of any product and should the Consultant determine not to further appeal the claim issue, at the Commission's sole option, the Consultant shall provide at its sole expense, the following: Purchase for the Commission the rights to continue using the contested product(s); or Provide substitute products to the Commission which are, in the Commission's sole opinion, of equal or greater quality, or Refund all monies paid to the Consultant for the product(s) subject to the court action. The Consultant shall also pay to the Commission all reasonable related losses related to the product(s) and for all reasonable expenses related to the installation and conversion to the new product(s).
- 5.2.3** Should the Commission elect to have the Consultant defend one or more of the Indemnified Parties, the Commission shall have the right, but not the obligation, to select the counsel that will provide that defense, to determine all points of control on behalf of the Commission, and to approve or disapprove of any settlement.
- 5.2.4** The indemnity obligations of the Consultant shall not be limited by the types, terms, conditions, or limits of liability of any insurance purchased and maintained by Consultant.
- 5.3** This agreement to defend, hold harmless and indemnify shall survive expiration or termination of this Contract.

## APPENDIX B

### ARTICLE 6 INSURANCE

- 6.1 General.** Except for the Consultant's indemnification obligations with respect to infringement, the Consultant shall, at its expense, at all times during the performance of services hereunder, and for a period of ten (10) years thereafter, maintain liability insurance insuring themselves against the indemnification obligations throughout the term of the Contract and claims arising from wrongful acts, negligent acts, errors or omissions of the Consultant, its employees, agents, sub-consultants, or any other representatives of the Consultant involved in the work. The Consultant shall name the Commission as an additional insured as set forth in more detail below and shall be responsible for any retentions or deductibles due under the policies in the event of a claim. The Consultant shall require its sub-consultants to obtain insurance and shall be responsible for enforcement of its sub-consultants' obligation to obtain insurance, at limits appropriate to the exposures of the sub-consultant's work to satisfy the requirements hereunder. The policies the Consultant and its sub-consultants maintain shall be with companies authorized to do business in Ohio and rated "A" or above by A.M. Best Company or equivalent and carry the following coverages and limits:
- 6.1.1** Comprehensive Commercial General Liability that includes the Commission as an additional insured for amount not less than \$1,000,000, including those resulting in death to any one person or persons and/or property damage arising from any one (1) accident and \$2,000,000 in the aggregate, including coverage for: property damage, premises operations, liability for independent consultants, products liability, valuable papers, contractual liability and personal injury. The policy or policies shall be primary and non-contributory, provide coverage for on-going and completed operations, and shall not contain a provision that eliminates coverage for damages arising out of the negligence of the additional insured.
  - 6.1.2** Comprehensive Automobile Liability Insurance for bodily injury and property damage that includes the Commission as an additional insured for an amount not less than \$1,000,000 combined single limit. The policy or policies shall be primary and non-contributory and shall not contain a provision that eliminates coverage for damages arising out of the negligence of the additional insured.
  - 6.1.3** Professional Liability Insurance for not less than \$2,000,000 for any one incident, and if not written on an occurrence basis, shall be maintained for a period of not less than two (2) years following the completion of the services under this Contract.
  - 6.1.4** Umbrella/Excess Liability Insurance Policy over primary general liability and automobile liability following the same terms as the underlying policies and in an amount not less than \$3,000,000.
- 6.2 Certificate of Insurance.** Upon execution of this Contract, the Consultant shall submit to the Commission a certificate(s) of insurance and related additional insured endorsements

## APPENDIX B

with respect to the required policies. If the additional insured endorsements required above are not available at the execution date, the Consultant shall submit to the Commission a notation of the endorsement together with either a binder or an advice with respect to such endorsement. The endorsement shall be submitted no later than thirty (30) days after the execution date hereof. The Consultant shall provide written notification to the Commission at least 30 days in advance of any cancellation or modification of the Consultant's insurance policy terms or coverage as set forth herein.

- 6.3 Copy of Insurance Policy.** Upon the execution of this Contract, the Consultant shall provide a copy of the insurance policy or policies required under this Contract after redacting proprietary or confidential information if applicable.
- 6.4 Workers' Compensation.** The Consultant shall also procure and maintain until the Contract has been fully and completely performed, Ohio Worker's Compensation Insurance covering all employees who engage in any work in connection with the performance of the Contract except employees hired in a state other than Ohio who will not engage in any work in the State of Ohio.
- 6.5 Notice.** Within twenty-four (24) hours after the occurrence of any accident or other event that results in or might result in injury to the person or property of any person, which allegedly arises in any manner from the performance under the Contract or occurs in the area(s) for which the Consultant is responsible, the Consultant shall send written notice thereof to the Commission's General Counsel setting forth a full and precise statement of the facts pertaining thereto, and send a copy of any summons, subpoena, notice or other documents served upon or received by the Consultant, or any agent, employee or representative of the Consultant, arising in any manner from the performance of the Contract or any part thereof.

## ARTICLE 7 PERFORMANCE AND SAFETY STANDARDS

- 7.1** The Consultant shall provide professional services as set forth in this Contract. The Consultant represents that it is properly licensed in the jurisdiction where the Project is located to provide the services required by this Contract or shall cause such services to be performed by appropriately licensed professionals.
- 7.2** The Consultant shall perform its services consistent with the professional skill and care ordinarily provided by Consultants practicing in the same or similar locality under the same or similar circumstances. The Consultant shall perform its services as expeditiously as is consistent with such professional skill and care and the orderly progress of the Project.
- 7.3** The representative of the Commission that is authorized to act on behalf of the Commission with respect to the Project is the Chief Engineer. The representative authorized to act on behalf of the Consultant with respect to the Project is:

## APPENDIX B

[Name  
Address  
Address  
Telephone  
Fax  
Email]

- 7.4 Reasonable Behavior.** Each party will act in good faith in the performance of its respective responsibilities under the Contract and will not unreasonably delay, condition or withhold the giving of any consent, decision or approval that is either requested or reasonably required by the other party in order to perform its responsibilities under the Contract.
- 7.5 Public Records Act.** The Consultant acknowledges that the Commission is required to respond to all Public Record requests under Ohio law. The Consultant shall comply with the Public Record Act in all respects and shall not restrict or otherwise inhibit the Commission from complying.
- 7.6 Ownership of Materials.** Drawings, plans and other documents prepared by, or with the cooperation of, the Consultant pursuant to the Contract, including all copyrights, are works for hire under the United States Copyright Act and shall, upon payment therefore, become the property of the Commission, whether or not the project for which they are prepared is commenced or completed. If for any reason the product of the Consultant's services hereunder are determined at any time not to be a work made for hire, the Consultant irrevocably transfers and assigns to the Commission all right, title and interest therein, including all copyrights, as well as all renewals and extensions thereto. Any materials prepared, created, produced by, or with the cooperation of, the Consultant pursuant to the Contract, including all copyrights, are the property of the Commission. The Consultant may retain copies, including reproducible copies of such drawings and other documents for information and reference. The Commission may use such drawings or other documents, or others employed by the Commission for reference in any completion, construction, correction, remodeling, renovation, reconstruction, alteration, modification of or addition to a project, without additional compensation to the Consultant.
- 7.7 Non-Collusion.** The Consultant covenants that it presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of services required to be performed under this Contract. The Consultant further covenants that no person having any such interest shall be employed in the performance of this Contract.
- 7.8 Safety.**
- 7.8.1** Consultant shall be responsible for the safety of its personnel related to and during the performance of Services required by this Contract and will take reasonable measures to ensure that it and its sub-consultants provide and maintain a safe working environment. Consultant shall ensure that its employees and the employees of its sub-consultants, before they begin and throughout their

## APPENDIX B

employment at any Project site, are made aware of the requirements of all applicable safety and health regulations including, but not limited to, Applicable Laws and are notified that compliance therewith is a condition of their continued employment. Consultant shall remove from the site any employees or sub-consultants that fail to abide by applicable health and safety regulations. Consultant shall not knowingly permit a hazardous, unsafe, unhealthy, or environmentally unsound condition or activity to be conducted at any Project site.

**7.8.2** If Consultant becomes aware of any hazardous, unsafe, unhealthy or environmentally unsound condition at any Project site, it shall notify the Commission and take reasonable steps to eliminate, terminate, abate or rectify any condition over which Consultant has control. The Commission may, but is not obligated to, inspect at reasonable times, the Project site and Consultant's facilities and appropriate Project records to ascertain Consultant's and its sub-consultants' compliance with the requirements of this Contract; provided however, neither the existence nor exercise of such right will relieve Consultant of its responsibility for its own and its sub-consultants' compliance with this Contract, to always use due care in the performance of services and for fulfilling all of its other obligations hereunder with respect to health and safety.

**7.8.3** Consultant shall promptly notify the Commission of any injury, death, loss or damage to persons, animals, or property, which is in any way related to Services performed under the Contract, even though such occurrence was not caused or consented to by Consultant, its employees, sub-consultants or agents. Smoking is prohibited at the Project site. Consultant shall monitor the Commission's no smoking rule with respect to its employees and sub-consultants while they are working at the Project site.

## ARTICLE 8 SUSPENSION, DEFAULT, AND TERMINATION

**8.1 Suspension.** The Commission may at any time prior to completion of the Contract temporarily suspend any Contract when it is determined to be in the Commission's interest. Such suspension shall be provided by written notice. If such Suspension is not lifted within 120 days from the notice of Suspension, the Consultant may request that the Contract be terminated.

**8.2 Default.** Each of the following shall constitute an event of default by the Consultant:

**8.2.1** If the Consultant becomes insolvent, makes a general assignment for the benefit of creditors, or files a voluntary petition in bankruptcy or consents to the appointment of a receiver, trustee, or liquidator of all or substantially all of its property;

**8.2.2** If by order or decree of a court, the Consultant is adjudged bankrupt or an order is made approving a petition filed by any creditors or, if the Consultant is a corporation, by any of the stockholders of the Consultant, seeking its reorganization

## APPENDIX B

or the readjustment of its indebtedness under the federal bankruptcy laws or any law or statute of the United States or of any state thereof;

- 8.2.3 If a petition under any part of the federal bankruptcy laws or an action under any present or future insolvency law or statute is filed against the Consultant and is not dismissed within ninety (90) days after the filing thereof;
- 8.2.4 If any lien is filed against the Commission's property because of any act or omission of the Consultant and is not released or discharged by obtaining a bond at Consultant sole expense and cost within twenty (20) days;
- 8.2.5 If the Consultant voluntarily abandons, deserts, vacates, or discontinues its operations;
- 8.2.6 If the Consultant fails duly and punctually to pay any monies required hereunder within twenty (20) days after written notice;
- 8.2.7 If the Consultant fails to keep, perform and observe any promise set forth herein on its part to be kept, performed or observed within five (5) days after receipt of notice of default from the Commission, except where fulfillment of its obligation requires activity over a period of time and Consultant has commenced whatever may be required to cure the failure to the satisfaction of the Commission within five (5) days after notice and continues such performance without interruption.

**8.3 Remedies for Default.** Upon occurrence of any Default or any time thereafter during the continuance thereof, the Commission may, at its option, exercise concurrently or successively any one or more of the following rights and remedies:

- 8.3.1 Upon five (5) days' notice, terminate this Contract.
- 8.3.2 Without waiving any default, pay any sum required to be paid by the Consultant to others than the Consultant and which the Consultant has failed to pay, and perform any obligation required to be performed by the Consultant hereunder, and any amounts to paid or expended by the Commission in fulfilling the obligations of Consultant hereunder, including all interest, costs, damages, attorneys' fees and penalties, shall be repaid by the Consultant to the Commission on demand with interest thereon at the rate of twelve percent (12%) per annum from the date of such payment or expenditure plus a twenty percent (20%) administrative fee.
- 8.3.3 Invoke the dispute resolution provisions of this Contract.

**8.4 Convenience Termination.** In addition to the termination upon five (5) days' notice after an occurrence of default as provided above, the Commission may unilaterally terminate the Contract at any time for any reason by giving thirty (30) calendar days prior written notice to the Consultant. If the Commission unilaterally terminates the Contract pursuant to this Section, the Consultant shall be paid all amounts due up to the termination date. The

## APPENDIX B

Commission and the Consultant may also mutually agree to terminate this Contract in writing.

- 8.5 Waiver.** No waiver by the Commission at any time of any of the terms or conditions of this Contract shall be deemed or taken as a waiver at any time thereafter of the same or any other term or condition herein or of the strict and prompt performance thereof. No delay, failure or omission of the Commission to exercise any right, power, privilege or option arising from any default, or subsequent payment then or thereafter accrued shall impair or be construed to impair any such right, power, privilege or option to waive any such default or relinquishment thereof, or acquiescence therein and no notice by the Commission shall be required to restore or revive any option, right, power, remedy or privilege after waiver by the Commission of default in one or more instances. No waiver shall be valid against the Commission unless reduced to writing and signed by an officer of the Commission duly empowered to execute same.
- 8.6 Force Majeure.** Neither party shall have liability to the other if it becomes unable to timely perform its obligations under this Contract due to labor disputes, fire, acts of God, tornados, flood, hurricane, earthquake, tidal wave, blizzard, or other natural disasters, acts of the state or federal government in their sovereign capacity, riots, civil commotion, quarantine restrictions, war, terrorism, incidence of disease or other illness that reaches outbreak, epidemic or pandemic proportions, unavoidable casualties, or other causes beyond their control.

### ARTICLE 9 NON-DISCRIMINATION

- 9.1 Non-discrimination:** The Consultant, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, national origin, sex, age, disability, low-income status, or limited English proficiency in the selection and retention of sub-consultants, including procurements of materials and leases of equipment. The Consultant will not participate directly or indirectly in the discrimination prohibited by applicable federal, state, and local laws.
- 9.2 Solicitations of Sub-consultants, including procurement of materials and equipment:** In all solicitations, either by competitive bidding or negotiation, made by the Consultant for work to be performed under a subcontract, including procurements of materials, or leases of equipment, the Consultant will notify each potential sub-consultant or supplier of the Consultant's obligations under this Contract. The Consultant shall also include the provisions of this Article 9 in every sub-consulting agreement, subcontract, purchase order, lease or other such document.

### ARTICLE 10 LAW AND DISPUTES

- 10.1 Choice of Law.** The Contract shall be subject to the laws of the State of Ohio. All duties of either party shall be deemed performable and performed in the State of Ohio.



## APPENDIX B

- 10.2 Informal Dispute Resolution.** At the written request of either party, the parties will attempt to resolve any dispute arising under, or relating to, the Contract through the informal means. Each party will appoint a senior management representative who does not devote substantially all of his or her time to performance under the Contract. The representatives will furnish to each other all non-privileged information with respect to the dispute that the parties believe to be appropriate and germane. The representatives will negotiate in an effort to resolve the dispute without the necessity of any formal proceeding.
- 10.3 Mediation.** If the parties do not resolve their differences through Informal Dispute Resolution, the Commission may, at its sole discretion and election, choose to proceed with mediation governed by the most recently published Construction Arbitration Rules and Mediation Procedures of the American Arbitration Association, and the Consultant hereby agrees to engage in that process in accordance with those rules and procedures. The parties shall have 90-days from the date that a party serves notice of its claim on the other party to attempt to resolve their differences through mediation.
- 10.4 Formal Dispute Resolution - Litigation.** If the parties do not resolve their differences through mediation, the dispute shall be resolved through litigation. Litigation may take place only in Cuyahoga County Court of Common Pleas or the United States District Court for the Northern District of Ohio.

## ARTICLE 11 GENERAL

- 11.1 Notices.** All notices or communications required or permitted as a part of the Contract shall be in writing (unless another verifiable medium is expressly authorized) and shall be deemed delivered when:
- 11.1.1** Actually received, or
  - 11.1.2** If not actually received, 3 days after transmittal through electronic mail receipt with a carbon copy sent through the United States Postal Service with proper postage affixed and addressed to the respective other party at the address set out below or such other address as the party may have designated by notice to the other party, or
  - 11.1.3** Upon delivery by the Commission of the notice to a representative of the Consultant while on the Commission property.

## APPENDIX B

The addresses of the parties to this Contract are as follows:

In the case of the Commission:	with a copy to:
Ohio Turnpike and Infrastructure Commission Chief Engineer Attn: Anthony Yacobucci, P.E. 682 Prospect Street Berea, Ohio 44017 <a href="mailto:tony.yacobucci@ohioturnpike.org">tony.yacobucci@ohioturnpike.org</a>	Ohio Turnpike and Infrastructure Commission General Counsel Attn: Jennifer L. Stueber, Esq. 682 Prospect Street Berea, Ohio 44017 <a href="mailto:jennifer.stueber@ohioturnpike.org">jennifer.stueber@ohioturnpike.org</a>
In the case of the Consultant:	
[Name Address Address Telephone Fax Email]	

- 11.2 Integration and Amendment.** The Contract constitutes the entire agreement between the parties and supersedes all other prior or contemporaneous communications between the parties (whether written or oral), and all other communications relating to the subject matter of the Contract. The Contract may be modified or extended by formal amendment of the Contract signed by the parties and made a permanent part of the Contract.
- 11.3 Severability.** The provisions of the Contract will be deemed severable, and the unenforceability of any one or more provisions will not affect the enforceability of any other provisions. In addition, if any provision of the Contract, for any reason, is declared to be unenforceable, the parties will substitute an enforceable provision that, to the maximum extent possible under applicable law, preserves the original intentions and economic positions of the parties.
- 11.4 Publicity.** Neither party may use the name or any data, pictures, or other representation of the other party in connection with any advertising or publicity materials or activities without the prior written consent of the other party. However, the Consultant may include the Commission's name on its client list and may describe briefly, and in general terms, the nature of the work performed by the Consultant for the Commission. The parties further agree that, within a reasonable time following final acceptance, the parties may work toward developing a mutually agreeable statement for public use by the parties such as in marketing materials and in their reports to stockholders.
- 11.5 Video and Audio Recordings.** The Commission has the right to video and/or audiotape any and all meetings, whether held at a Commission site, Consultant site, or via teleconference.

## APPENDIX B

- 11.6 Confidentiality.** If the Consultant or Commission receives information specifically designated as “confidential” or “business proprietary,” the receiving party shall keep such information strictly confidential and shall not disclose it to any other person. The receiving party may disclose “confidential” or “business proprietary” information after seven (7) days’ notice to the other party or when required by law, arbitrator’s order, or court order, including a subpoena or other form of compulsory legal process issued by a court or governmental entity, or to the extent such information is reasonably necessary for the receiving party to defend itself in any dispute. The receiving party may also disclose such information to its employees, consultants, or contractors in order to perform services or work solely and exclusively for the Project, provided those employees, consultants and contractors are subject to the restrictions on the disclosure and use of such information as set forth in this paragraph.
- 11.7 Construction of this Contract.** All terms and words used in this Contract, regardless of the number and gender in which they are used, shall be deemed and construed to include any other number, singular or plural, and any other gender, masculine, feminine, or neuter, as the context or sense of this Contract or any paragraph or clause in the Contract may require, the same as if such words have been fully and properly written in the number and gender. Any act to be performed under the Contract by the “Commission” may be performed by the Executive Director or by such of its employees or such other persons, corporations or firms as the Executive Director may designate. “Executive Director” when used herein, shall refer to the Executive Director of the Commission and include the Chief Engineer, the Deputy Executive Director and the CFO/Comptroller. The headings of Articles and Paragraphs, to the extent used herein, are for reference only, and in no way define, limit, or describe the scope or intent of any provision hereof.
- 11.8 Counterparts.** This Contract may be executed in any number of counterparts, each of which, when so executed and delivered, shall be deemed an original, but such counterparts together shall constitute but one and the same instrument.
- 11.9 Authority.** The undersigned signatory for the Consultant hereby represents and warrants that he or she has full and complete authority to execute the Contract on behalf of the Consultant. This representation and warranty is made for the purpose of inducing the Commission to execute the Contract.
- 11.10 Electronic Signatures.** The parties agree that for purposes of facilitating the signing of this Contract, an electronic signature or an electronic or facsimile transmission of a signature shall be an original signature for all purposes.

[SIGNATURES ON NEXT PAGE]

## APPENDIX B

**IN WITNESS WHEREOF**, the parties have caused this Contract to be executed as of the last date written below.

**[CONSULTANT]**

**OHIO TURNPIKE AND  
INFRASTRUCTURE COMMISSION**

By: \_\_\_\_\_

By: \_\_\_\_\_

Ferzan M. Ahmed, P.E.  
Executive Director

Printed: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

APPROVED AS TO FORM:

By: \_\_\_\_\_

Jennifer L. Stueber, Esq.  
General Counsel

Date: \_\_\_\_\_

## **APPENDIX B**

### **Exhibit A Consultant's Fee Proposal**

## **APPENDIX B**

### **Exhibit B Final Project Scope**

APPENDIX C  
**NON-COLLUSION AFFIDAVIT**

**OHIO TURNPIKE AND  
INFRASTRUCTURE COMMISSION**

State of \_\_\_\_\_ }  
                                      } **SS:**  
County of \_\_\_\_\_ }

The undersigned, being first duly sworn as provided by law, deposes and says:

1. Their name is \_\_\_\_\_,  
and their office is located at \_\_\_\_\_.

2. They make this Affidavit with the knowledge and intent that it is to be filed with the Ohio Turnpike and Infrastructure Commission and with the expectation that it will be relied upon by said Commission as consideration and any action which it may take with respect to the bid or proposal accompanying this Affidavit.

3. The undersigned serves in the capacity of \_\_\_\_\_.  
(Sole Owner, Partner, President, etc.)

and in that capacity makes and authorized to make representations and this Affidavit on behalf of:

\_\_\_\_\_  
Name of Corporation, Partnership, Limited Liability Company, etc...)

a \_\_\_\_\_  
(Sole Proprietorship, Partnership, Corporation, Limited Liability Company, etc...)

organized under the laws of \_\_\_\_\_, and registered to do business in Ohio.  
(Name of State)

4a. **Sole Proprietorship Only:** The undersigned states that the following is a complete and accurate list of the names and addresses of all individuals having an interest in the contract contemplated under the bid or proposal accompanying this Affidavit: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

4b. **Partnership Only:** The undersigned states that the following is a complete and accurate list of the names of the general partners of the partnership and all other individuals having an interest in the contract contemplated under the bid or proposal accompanying this Affidavit, including any partners with a five percent (5%) or more equity interest in the partnership (attach additional pages if necessary): \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**AFFIDAVIT**

**4c. Corporation or Limited Liability Company Only:** The undersigned states that the following is a complete and accurate list of the chief executive officer and all individuals that are expected to have an interest in the contract contemplated under the bid or proposal accompanying this Affidavit, including anyone owning five percent (5%) or more equity interests in the entity submitting the bid or proposal (attach additional pages as necessary):

President (or similar chief executive): \_\_\_\_\_

Owners with 5% or more equity interest: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Additional individuals with an expected interest in the contemplated contract: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5. The undersigned represents that no person, firm, agent or employee of the entity identified in paragraph 3, nor anyone else to the knowledge of the undersigned, has retained anyone to solicit or secure affirmative or favorable action by the Commission with respect to the bid or proposal accompanying this Affidavit (except a regularly employed salesman paid for services on a regular schedule of commissions and serving in the usual course of business in soliciting such consideration or action by the Commission without promise or expectation of receiving consideration other than the standard and normal fee, commission, or percentage) under any agreement providing for a bonus, fee, commission, percentage, or other form of payment whatsoever which is in any way contingent upon the action to be taken by the Commission with respect to the bid or proposal.

6. The undersigned represents that no person or firm associated with the entity identified in paragraph 3 has any interest, direct or indirect, in any other proposal or bid submitted with respect to the contract contemplated in the bid or proposal accompanying this Affidavit, except the subcontractors, material suppliers, truckers/haulers disclosed in the SBE Utilization Plan.

7. The undersigned states that the bid or proposal accompanying this Affidavit is a genuine and earnest attempt to contract with the Commission, and is not made in the interest or on behalf of any undisclosed individual, person, partnership, company, association, organization or corporation; that the bid or proposal is not collusive or a sham; that the entity identified in paragraph 3 has not, directly or indirectly, induced or solicited any other entity to submit a false or sham bid or proposal, and has not directly or indirectly, colluded, conspired, connived or agreed with any other respondent to submit a collusive or sham bid or proposal, or to refrain from submitting a bid or proposal; and has not in any manner, directly or indirectly, sought by agreement or collusion, or communication or conference with any person, firm or corporation, to fix the prices of any other responding entity, or to secure any advantage against the Commission or any person, firm or corporation interested in the proposed contract;



**AFFIDAVIT**

8. The undersigned states that the entity identified in paragraph 3 has received the Commission's Ethics Policy; the Ethics Policy has been reviewed by its managerial staff; the terms and conditions of the Policy are understood; and the entity agrees to comply and assist the Commission in complying with the Policy. Insofar as undersigned knows, no member of the Commission and no employee or agent of the Commission has or will have any interest, either direct or indirect, in the prospective contract contemplated under the bid or proposal accompanying this Affidavit.

---

**(Affiant)**

---

**(Printed)**

Sworn to before me and subscribed in my presence this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

---

**(Notary Public)**



## **OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION**

### **ETHICS POLICY**

#### **I. PURPOSE**

##### **A. POLICY STATEMENT**

It is the policy of the Ohio Turnpike and Infrastructure Commission (“Commission”) to carry out its mission in accordance with the strictest ethical guidelines and to ensure that Commission members and employees conduct themselves in a manner that fosters public confidence in the integrity of the Commission, its processes, and its accomplishments.

##### **B. GENERAL STANDARDS OF ETHICAL CONDUCT**

Commission members and employees must, at all times, abide by protections to the public embodied in Ohio’s ethics laws, as found in Chapters 102 and 2921, of the Ohio Revised Code, and as interpreted by the Ohio Ethics Commission and Ohio courts. Members and employees must conduct themselves, at all times, in a manner that avoids favoritism, bias, and the appearance of impropriety.

A general summary of the restraints upon the conduct of all members and employees include, but are not limited to, those listed below. Members and employees shall not:

- Solicit anything of value from anyone doing business with the Commission;
- Accept anything of value from anyone doing business with the Commission;
- Solicit or accept employment from anyone doing business with the Commission, unless able to completely withdraw from Commission activity regarding the party offering employment, and the Commission approves the withdrawal;
- Use public position to obtain benefits for the official or employee, a family member, or anyone with whom the official or employee has a business or employment relationship;
- Accept any form of compensation for personal services rendered on a matter before any state agency, or sell goods or services to any state agency, unless the official or employee qualifies for the exception, and files the statement, described in the Ethics Law;

## APPENDIX D - ETHICS POLICY

Ohio Turnpike and Infrastructure Commission Ethics Policy  
Page 2 of 3

- Hold or benefit from a contract with, authorized by, or approved by, the Commission, unless one of the exceptions in the Ethics Law and related statutes applies;
- Vote, authorize, recommend, or in any other way use his or her position to secure approval of a Commission contract (including employment or personal services) in which the official or employee, a family member, or anyone with whom the official or employee has a business or employment relationship, has an interest;
- Use, or authorize the use of, his or her title, the name “Ohio Turnpike and Infrastructure Commission,” or “Commission,” or “OTIC,” or the Commission’s logo in a manner that suggests impropriety, favoritism, or bias by the Commission or the official or employee;
- Solicit or accept honoraria prohibited by the Ethics Law;
- Use or disclose confidential information protected by law, unless appropriately authorized; and
- During public service, and for one year after leaving public service, represent any person, in any fashion, before any public agency, with respect to a matter in which the official or employee personally participated while serving with the Commission.

For purposes of this policy:

- “Anything of value” includes anything of monetary value, including, but not limited to, money, gifts, food or beverages, social event tickets and expenses, travel expenses, golf outings, consulting fees, compensation, or employment. “Value” means worth greater than de minimis or nominal.
- “Anyone doing business with the Commission” includes, but is not limited to, any person, corporation, or other party that is doing or seeking to do business with, regulated by, or has interests before the Commission.

### **C. FINANCIAL DISCLOSURE STATEMENTS**

Every Commission member or employee required to file a financial disclosure statement by law, or Ethics Commission rule, must file a complete and accurate statement with the Ethics Commission by April 15 of each year. Any member or employee appointed or employed after February 15 shall file a statement within ninety days of appointment or employment.

## APPENDIX D - ETHICS POLICY

Ohio Turnpike and Infrastructure Commission Ethics Policy  
Page 3 of 3

### **D. ETHICS EDUCATION**

All Commission members and employees subject to the financial disclosure requirement must participate in the annual ethics education required pursuant to Executive Order 2019-11D, and some form of annual ethics instruction shall be provided to all Commission employees. In addition to participating in Executive Order training, the Ethics Commission sponsors educational sessions throughout Ohio.

### **E. PUBLICATION OF THE COMMISSION'S ETHICS POLICY**

The Commission's Ethics Policy shall be published on the Commission's website, [www.ohioturnpike.org](http://www.ohioturnpike.org). Persons, corporations or other parties seeking to conduct business with the Commission in amounts in excess of \$10,000 shall be provided with a copy of the policy and shall be required to acknowledge receipt of the policy in writing in a form to be prescribed by the Commission's General Counsel.

### **F. ASSISTANCE**

The Ethics Commission is available to provide advice and assistance regarding the Ethics Law and related statutes. The Ethics Commission can be contacted at (614) 466-7090. The Ethics Commission's web site address is: [www.ethics.state.oh.us](http://www.ethics.state.oh.us). The Commission's General Counsel and counsel for the Governor's Office are available to answer questions involving this policy.

### **G. PENALTIES**

Failure of any Commission official or employee to abide by this Ethics policy, or to comply with the Ethics Law and related statutes, will result in discipline, which may include dismissal, as well as any potential civil or criminal sanctions under the law.

AFFIRMATION AND DISCLOSURE FORM  
EXECUTIVE ORDER 2019-12D  
Governing the Expenditure of Public Funds on Offshore Services

By the signature affixed to this response, the Respondent affirms, understands and will abide by the requirements of Executive Order 2019-12D issued by Ohio Governor Mike DeWine. If awarded a contract, the Respondent affirms on behalf of itself and any of its Subcontractors to perform no services under the Contract outside of the United States. The Executive Order is attached and is available at the following website: (<https://governor.ohio.gov/wps/portal/gov/governor/media/executive-orders/2019-12d>).

The Respondent shall provide all the name(s) and location(s) where services under this Contract will be performed in the spaces provided below or by attachment. Failure to provide this information may subject the Contractor to sanctions. If the Respondent will not be using subcontractors, indicate "Not Applicable" in the appropriate spaces. Attach any additional pages as necessary

1. Principal location of business of Contractor:

\_\_\_\_\_  
(Address)

\_\_\_\_\_  
(City, State, Zip)

2. Location where services will be performed by the Respondent:

\_\_\_\_\_  
(Address)

\_\_\_\_\_  
(City, State, Zip)

3. Name/Principal location of business of subcontractor(s):

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Address, City, State, Zip)

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Address, City, State, Zip)

4. Name/Location where services will be performed by subcontractor(s):

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Address, City, State, Zip)

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Address, City, State, Zip)

5. Location(s) where Commission data will be stored, accessed, tested, maintained or backed-up, by Respondent:

\_\_\_\_\_  
(Address, City, State, Zip)

\_\_\_\_\_  
(Address, City, State, Zip)

Name/Location(s) where Commission data will be stored, accessed, tested, maintained or backed-up by subcontractor(s):

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Address, City, State, Zip)

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Address, City, State, Zip)

The undersigned Respondent also affirms, understands and agrees that the Respondent and its subcontractors are under a duty to disclose to the Commission any change or shift in location of services performed by the Respondent or its subcontractors before, during and after execution of any Contract with the Commission. Respondent agrees it shall so notify the Commission immediately of any such change or shift in location of its services.

The Commission has the right to immediately terminate the contract for material breach if any services are performed overseas unless the Commission has issued the Respondent a waiver to perform the specific services outside the United States. The Commission has the sole and unlimited discretion to determine waiving some or all of the requirements of the Executive Order is necessary based on the (1) nature of and risk arising from the services being performed overseas; (2) the porportion of off-shore services compared to those performed domestically; (3) the cost savings resulting from granting the waiver; (4) the justification to perform the services overseas; and (5) the need to procure the services from the Respondent.

The undersigned represents and warrants to be authorized to execute this Affirmation and Disclosure Form on behalf of the Respondent and agree that this form is a part of any Contract that Respondent may enter into with the Commission and is incorporated therein.

Respondent: \_\_\_\_\_

By: \_\_\_\_\_  
(Signature)

Printed: \_\_\_\_\_  
(Name) (Title)

Date: \_\_\_\_\_

**APPENDIX F**

**SMALL BUSINESS ENTERPRISE UTILIZATION CERTIFICATION**

To be eligible for selection to award this contract, each respondent must complete and submit this Small Business Enterprise (SBE) Utilization Certification with its Proposal. The Commission may consider as non-responsive and reject any Proposal that does not contain a Certification (page 1) and Utilization Plan (page 2) that properly demonstrates that the respondent's commitments with SBEs for participation on the project if awarded the contract. The successful respondent's SBE Utilization Certification and Utilization Plan shall be incorporated as part of the resulting Contract. If the Certification and Plan fail to demonstrate a commitment to meeting or exceeding the Goal stated in the Request for Letters of Interest, the respondent is required to complete and submit a Good Faith Efforts Demonstration (page 4 and page 5). **To count towards the goal, the participants must be certified as SBEs with the Commission or as SBEs or DBEs with ODOT or EDGE certified with the Ohio Department of Administrative Services at the time of bid.**

The undersigned authorized agent of the respondent represents to the Ohio Turnpike and Infrastructure Commission, as part of its Proposal, that it will perform the duties of the respondent having: (check one)

<input type="checkbox"/>	<p>attained commitments to meet or exceed the contract's SBE goal, and has documented SBE participation in the attached Utilization Plan for the project summarized as follows:</p> <p>SBE Participation Commitment:   \$ _____ Total Dollar Value       _____ %   Percent of Total Bid</p> <p>Attached is the Utilization Plan evidencing commitments with each SBE that will participate in the project in a manner that meets or exceeds the goal and affirming the availability and planned participation of each business identified.</p>
<input type="checkbox"/>	<p>failed to meet the contract's SBE goal despite its Good Faith Efforts to attain commitments to meet or exceed the goal, and has documented its efforts to achieve the goal in the attached Demonstration of Good Faith Efforts (page 4 and page 5) and documented commitments in the attached Utilization Plan to SBE participation on the project summarized as follows:</p> <p>SBE Participation Commitment:   \$ _____ Total Dollar Value       _____ %   Percent of Total Bid</p> <p>1. Attached is the Utilization Plan evidencing commitments with each SBE that will participate in the project and affirming the availability and planned participation of each business identified; and</p> <p>2. Attached is the Good Faith Efforts Demonstration evidencing those Efforts that were unsuccessful in attaining SBE participation commitments that meet or exceed the goal.</p>

\_\_\_\_\_  
Respondent

By: \_\_\_\_\_  
                    Signature

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Submit the Utilization Plan (page 2) and (if necessary) the Good Faith Efforts Demonstration (page 4 and page 5) with the Proposal using the templates and instructions that follow.

**Respondent's SBE Utilization Plan**  
(Complete and Submit with Utilization Certification)

**BOX 1:**

("Respondent")

certifies that the SBEs listed below have been engaged to participate on this project, and if the Respondent is selected for award of the Contract, it shall assure that its self-performance, subcontracts or other agreements are executed as follows:

Column 1 <b>Name of SBE</b> (See instructions)	Column 2 <b>Project Role</b> (See instructions)	Column 3 <b>Description of Work</b> (See instructions)	Column 4 <b>Amount Subcontracted to SBE</b> (See instructions)	Column 5 <b>Amount to be Applied Towards Goal</b> (See instructions)

**BOX 2:**

Small Business Enterprise  
Contract Goal in Dollars:

**BOX 3:**

Total SBE Credit Commitment:

If Box 2 is greater than Box 3, proceed to complete and submit the Good Faith Efforts Documentation Form (page 4 and page 5)



### **Instructions for Small Business Enterprise Utilization Plan**

Box 1: Name of Respondent submitting Proposal.

Column 1: Name of the Small Business Enterprise (“SBE”) participating on the project. To receive credit towards contract goal, SBEs must be certified with the Commission at time of bid, or eligible for fast track certification (i.e., certified as DBE or SBE with ODOT or EDGE certified with Ohio DAS). If a SBE is performing multiple scopes, repeat the name of the SBE for each scope that will be performed and the respective amount.

Column 2: The Project Role that the SBE will be performing as follows:

- Prime Contractor
- Manufacturer or Regular Dealer
- Broker
- Subcontractor
- Trucking/Hauler

List each project role to be performed by a single SBE individually on a separate row(s). The role is used to determine what portion of the amount to be subcontracted (Column 4) may be applied toward meeting the goal (Column 5).

Column 3: A description of the Work to be performed by the SBE must be consistent with the industry used for its certification. The Respondent may rely upon the descriptors listed in the Commission’s Certification List.

For example: <http://www.ohioturnpike.org/business/mbe-fbe>, or those eligible for Fast Track certification as DBE see: <http://www.dot.state.oh.us/Divisions/ODI/SDBE/Pages/DBE-Directory.aspx> as SBE, see: <http://www.dot.state.oh.us/Divisions/ODI/SDBE/Pages/SBE.aspx>

A respondent subletting a portion of a bid item shall state “Partial” and describe the Work that is included (e.g., “Surveying (Partial) – Site Plan”).

Column 4: List the total amount to be subcontracted to each SBE for the services they are performing.

Column 5: This is the total dollar amount of the project each line listed in the certification that the prime intends to apply towards meeting the Contract goal. It may be that only a portion of the amount subcontracted to a SBE in Column 4 is eligible to be credited toward meeting the goal. See Notes below. The Commission will utilize the sum of this column (Box 3) to determine whether or not the respondent has met the goal. In the event of an arithmetic error in summing column 5 or an error in making appropriate reductions in the amounts in Column 4, then the sum will be corrected and the total (Box 3) will be revised accordingly.

**Notes:** (A) For Work self-performed by a SBE bidding as a prime contractor, the respondent may claim only 20% of the amount self-performed (Column 4) towards meeting the goal (Column 5). (B) For Work performed by SBE subcontractors, the respondent may claim 100% of the Commercially Useful Functions performed by subcontractors (i.e., the subcontractor must perform or exercises responsibility for at least 30% of the total cost of its subcontract using its own workforce, and have responsibility, for negotiating prices to purchase its materials and supplies, determining quality and quantity, ordering the material, and installing and paying for the material itself). (C) For materials supplied by a Manufacturer or a Regular Dealer, the Respondent may claim 100% of the cost of the materials or supplies (Column 4) towards meeting the goal (Column 5). (D) SBE credited for the total value of the trucking services provided using its own trucks and employees and the total value of transportation services SBE provides using non-SBE trucks that do not to exceed the value provided by SBE-owned trucks operated by its employees (i.e., no more than one non-SBE truck for each SBE truck). (E) For work contracted out to a broker, the respondent may only claim the fees paid to a broker towards meeting the goal (Column 4).

Box 2: Box 2 is the Contract goal for SBE participation goal appearing on the Request for Letters of Interest.

Box 3: Box 3 is the sum of the values in Column 5. This value must equal or exceed the Contract goal amount written in Box 2, or Good Faith Effort Demonstration is required if insufficient SBE Participation has been achieved. See the following pages (page 4 and page 5) for the materials necessary for demonstrating the Respondent’s Good Faith Efforts.

**DEMONSTRATION OF GOOD FAITH EFFORTS**

(Complete and Submit if Utilization Certification and Plan Fail to Meet Contract Goal)

Project Name \_\_\_\_\_

Project Number \_\_\_\_\_

Respondent Name \_\_\_\_\_

Federal Tax I.D. \_\_\_\_\_

1. **Opportunities:** Indicate how the Respondent subdivided portions of the work or services to increase the likelihood of participation by firms certified as SBE with the Commission (or SBE or DBE with ODOT and/or EDGE with DAS) in the Project. (Attach additional pages if needed, and all supporting documentation.)
2. **Availability:** Indicate the services or organizations that provided assistance to you in identifying and recruiting firms certified as SBE (or DBE and EDGE) in preparing the Proposal response. (Attach additional pages if needed, and notes of each contact listed.)
- A. Organization: \_\_\_\_\_ Date(s) of Contact: \_\_\_\_\_ Contact Means: \_\_\_\_\_  
Subject of Inquiry: \_\_\_\_\_
- B. Organization: \_\_\_\_\_ Date(s) of Contact: \_\_\_\_\_ Contact Means: \_\_\_\_\_  
Subject of Inquiry: \_\_\_\_\_
- C. Organization: \_\_\_\_\_ Date(s) of Contact: \_\_\_\_\_ Contact Means: \_\_\_\_\_  
Subject of Inquiry: \_\_\_\_\_
3. **Efforts:** List all SBEs (including all DBEs and/or EDGE firms) that you supplied adequate and timely information about the scopes of work and requirements of the project. (Attach additional pages if needed, and copies of all transmittals, any shipping receipts or documentation of providing info. etc.)

A. Business _____	Contact Name _____	Date _____
B. Business _____	Contact Name _____	Date _____
C. Business _____	Contact Name _____	Date _____
D. Business _____	Contact Name _____	Date _____
E. Business _____	Contact Name _____	Date _____
F. Business _____	Contact Name _____	Date _____

4. **Efforts:** List all interested SBEs (including all DBE and EDGE entities), which you rejected to perform the Work of the Contract. Please provide the specific reason(s) for the decision to reject. (Attach additional pages if needed.)

A. Business: \_\_\_\_\_

Reason(s) for rejection: \_\_\_\_\_

B. Business: \_\_\_\_\_

Reason(s) for rejection: \_\_\_\_\_

C. Business: \_\_\_\_\_

Reason(s) for rejection: \_\_\_\_\_

5. **Efforts:** List the names, dates and telephone numbers of all SBEs (including DBEs and EDGE firms) with which you entered into negotiations for its participation on the project and the general scope of work negotiated, and the reason why negotiations were not successful. (Attach additional pages if needed.)

A. Business: \_\_\_\_\_

Contact: \_\_\_\_\_

Phone: \_\_\_\_\_

Date(s) of contact: \_\_\_\_\_

Scope of Work: \_\_\_\_\_

Reasons for ending negotiations: \_\_\_\_\_

B. Business: \_\_\_\_\_

Contact: \_\_\_\_\_

Phone: \_\_\_\_\_

Date(s) of contact: \_\_\_\_\_

Scope of Work: \_\_\_\_\_

Reasons for ending negotiations: \_\_\_\_\_

C. Business: \_\_\_\_\_

Contact: \_\_\_\_\_

Phone: \_\_\_\_\_

Date(s) of contact: \_\_\_\_\_

Scope of Work: \_\_\_\_\_

Reasons for ending negotiations: \_\_\_\_\_

D. Business: \_\_\_\_\_

Contact: \_\_\_\_\_

Phone: \_\_\_\_\_

Date(s) of contact: \_\_\_\_\_

Scope of Work: \_\_\_\_\_

Reasons for ending negotiations: \_\_\_\_\_

E. Business: \_\_\_\_\_

Contact: \_\_\_\_\_

Phone: \_\_\_\_\_

Date(s) of contact: \_\_\_\_\_

Scope of Work: \_\_\_\_\_

Reasons for ending negotiations: \_\_\_\_\_

F. Business: \_\_\_\_\_

Contact: \_\_\_\_\_

Phone: \_\_\_\_\_

Date(s) of contact: \_\_\_\_\_

Scope of Work: \_\_\_\_\_

Reasons for ending negotiations: \_\_\_\_\_

## **GUIDANCE FOR DEMONSTRATING GOOD FAITH EFFORTS TO ACHIEVE OR EXCEED THE CONTRACT GOAL**

If the SBE Utilization Certification and Plan fail to document commitment to achieving the SBE Goal set forth in the Request for Letters of Interest, complete the Good Faith Effort Demonstration Form to document necessary and reasonable actions that, by their scope, intensity, and appropriateness, would reasonably be expected to attain SBE participation that meets or exceeds the goal.

The Commission's determination of Good Faith Efforts is based on consideration of the quality, quantity, and intensity of the different kinds of actions taken. The activities or efforts undertaken to when making a Good Faith Effort must be those that one could reasonably expect to deploy when seriously, actively and aggressively attempting to obtain SBE participation in relative proportion to those that are Available to capably perform Commercially Useful Functions under the Opportunities presented in given contract.

The analysis for determining whether the respondent fulfilled its obligation to use Good Faith Efforts, the Commission will consider the demonstration of the following, which the form is intended to illicit from the respondents:

1. **“Opportunities”** means the subcomponents of the project that are identifiable as economically viable scopes of work that may interest subcontractors in responding to the respondent's solicitations to participate in the Project. The unique opportunities each project presents is determined based on the nature of the project using in-house expertise and the aggregation of those that the respondents may identify.
2. **“Availability”** means the degree of ready, willing and able SBEs available to capitalize on the opportunities presented under each project. The availability consideration examines the amount of SBEs in the relevant marketplace using (1) the Commission's list of certified SBEs (available at <http://www.ohioturnpike.org/business/doing-business-with-us/mbe-fbe>); (2) the Unified Certification Program's DBE Directory (<http://www.dot.state.oh.us/DBE/pages/DBE-Directory.aspx>); (3) the Department of Administrative Service's directory of EDGE certified businesses: <http://eodreporting.oit.ohio.gov/searchEDGE.aspx>; the Ohio Department of Transportation's registry of SBEs: [http://odotexttrpt.dot.state.oh.us/ViewReport.aspx?reportPath=%2fprd%2fpconstruction%2fpublic%2fsbe\\_vendor\\_list](http://odotexttrpt.dot.state.oh.us/ViewReport.aspx?reportPath=%2fprd%2fpconstruction%2fpublic%2fsbe_vendor_list); and (5) any other Ohio-centric database that the Commission recognizes as using standards that are substantially similar to the requirements for certification with the Commission.
3. **“Efforts”** means the documented attempt to meaningfully and earnestly solicit the interest of available SBEs to fulfill the opportunities presented to perform on the Project, including making a sufficient number of contacts to follow up with any available but non-responsive SBEs and negotiating in good faith with available SBEs to reach reasonably agreeable terms for their participation.
4. **“Commitments”** means the respondent representations in the Utilization Certification and Plan to have successfully achieved commitment(s) to utilize verified SBEs to perform on the project.

The determination that a given respondent satisfactorily used and demonstrated its Good Faith Efforts is based on the holistic review of the Opportunities, Availability, Effort and Commitment documented in the bid or proposal documents.

### **D. Opportunities and Availability**

This assessment of opportunities and availability compiles those SBEs that the respondents may identify in their Utilization Plan and Good Faith Efforts Demonstration forms, but also may go outside the form to identify additional possible opportunities under the project and recognized certification registries for possible untapped available firms.

A respondent can demonstrate fulfilling the Opportunity component by documenting that the respondent performed actions that include the following:

- a. Selected and packaged portions of the work in order to increase the likelihood that the SBEs will respond to solicitations expressing interest in participating on the project. This includes, where appropriate, breaking out contract work into economically feasible units to facilitate participation through subcontracting.
- b. Soliciting the interest of all SBE entities available to perform on the project through reasonable, meaningful, and available means and providing a reasonable and meaningful time to respond.

The means for a respondent to fulfill the Availability component of demonstrating good faith efforts includes the following:

- a. Searching recognized registries identifying certified SBEs that potentially could fulfill the opportunities under the project.
- b. Identifying other possible ready, willing and able SBEs through the effective use of the services of available from plan rooms, community organizations, contractors' groups, local, state, and Federal minority/women business assistance offices, and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and utilization of SBE entities.

### **E. Efforts and Commitment**

Respondents must document level of exertion used to engage the Availability pool on the Opportunities presented under the project. The Efforts component considers the active attempts to successfully reach terms with interested SBE firms, which may include the following:

- a. Negotiating in good faith with interested SBE entities so as to facilitate their participation on the Project.
- b. Not rejecting SBE entities without sound reasons based on a thorough investigation of their capabilities.
- c. Assisting SBE entities in obtaining bonding, lines of credit, or insurance as required.

The Commitment component provides a cross-check on the identified and documented Opportunities, Availability and Efforts. Unless the analyses under the Opportunities, Availability and Efforts prongs demonstrate otherwise, the utilization of Good Faith Efforts is expected to result in the respondent successfully representing its achievement of SBE participation goal for the contract. The respondent must provide justification for any lack of Commitment by showing that the failure occurred despite its Good Faith Efforts through the demonstration under the Opportunity, Availability and Efforts prongs of the test.

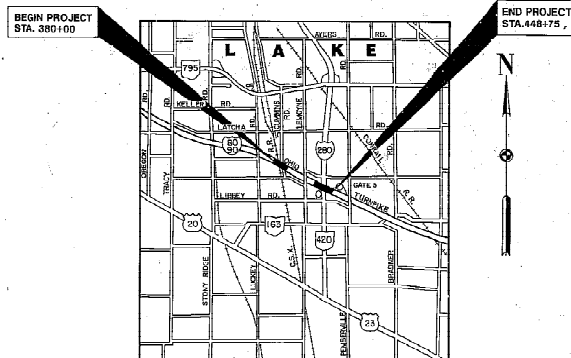
# OHIO TURNPIKE COMMISSION

THE JAMES W. SHOCKNESSY OHIO TURNPIKE  
**CONTRACT CIP 43 - 89 - 11**  
**DECK REPLACEMENT AND WIDENING**  
**C.S.X. RAILWAY BRIDGE , MP.70.2**  
**CUMMINS ROAD BRIDGE , MP.70.3**  
**S.R.420 AND I-280 BRIDGE , MP.71.4**

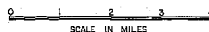
ORIGINAL CONTRACT SECTIONS C-43 , AND C-44  
 WOOD COUNTY

## INDEX OF SHEETS

ROADWAY PLANS	1	COVER SHEET
	2	GENERAL NOTES
	3	GENERAL SUMMARY
	4-5	USUALLY TYPICAL SECTIONS
	6-10	PLAN AND QUANTITIES
	11-22	CROSS SECTIONS
	23	BARRIER DETAILS
	24	CATCH BASIN AND SLOPE DRAIN DETAILS
	25	18"x36" CATCH BASIN AS PER PLAN
	26	CRACK AND JOINT DETAILS
STRUCTURE PLANS	27	REINFORCED CONCRETE APPROACH SLAB DETAILS
	28-29	GENERAL NOTES
	30	ESTIMATED QUANTITIES
	31	GENERAL STEEL DETAILS
	32	DECK JOINT DETAILS
	33	GENERAL PLAN AND ELEVATION
	34-36	ABUTMENT DETAILS
	37	PIER DETAILS
	38	FRAMING PLAN AND DETAILS
	39-40	DECK DETAILS
C.S.X. RAILWAY	41-43	REINFORCING SCHEDULES
	44	GENERAL PLAN AND ELEVATION
	45-47	ABUTMENT DETAILS
	48	PIER DETAILS
	49	FRAMING PLAN AND DETAILS
	50-51	DECK DETAILS
	52-54	REINFORCING SCHEDULES
	55	GENERAL PLAN
	56-58	ABUTMENT DETAILS
	59	PIER DETAILS
SHEET 1-280	60	FRAMING PLAN AND DETAILS
	61-62	DECK DETAILS
	63-65	REINFORCING SCHEDULES
	66-70	TRAFFIC CONTROL (OHIO TURNPIKE)
	71	NEW CROSSOVER CONSTRUCTION PLAN (STA. 450+25)
	72	CROSSOVER CONSTRUCTION PLAN
	73	TRAFFIC CONTROL (CUMMINS ROAD)
74	BARRICADES AND GATES	
75-76	TRAFFIC CONTROL (S.R. 420 - 1-280)	



LOCATION PLAN



## OHIO DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS

BP-1	SUBGRADE TEMPLATES	06-01-65
BP-2	PAVEMENT REINFORCING	01-11-65
BP-3	LONGITUDINAL PAVEMENT JOINTS	12-06-75
BP-4	TRANSVERSE PAVEMENT JOINTS	10-01-67
BP-5	RESURFACING	10-01-67
BP-7	CONCRETE CURBS AND COMBINED CURB AND GUTTER	10-01-67
BR-1	BRIDGE RAILING, REFLECTOR PARAPET TYPE	05-29-79
F-2	WOVEN WIRE FENCE	05-01-76
F-3	FENCE DETAILS AT BRIDGES	05-01-76
F6	FENCE DETAILS	05-01-76
GR-1	GUARDRAIL DETAILS	01-11-65
GR-20	GUARDRAIL TYPE 5	02-05-82
GR-2	BRIDGE TERMINAL ASSEMBLIES	01-21-85
GR-4	TYPE A ANCHOR ASSEMBLY	02-05-82
MC-4	DRAINS AND SEWERS	07-26-76
MC-6	CONCRETE BARRIER	01-30-84
MC-11	TEMPORARY EROSION CONTROL	06-01-76
RD-1-55R	ROCKERS AND HOLSTERS	02-02-89
SD-1-69	SUPERSTRUCTURE DETAILS (SHEET 4 OF 4)	06-12-69
TC-35.10	FLASHING ARROW PANEL	08-29-84

Plan Prepared By:  
 HOWARD, NEEDLES, TAMMEN & BERGENDOFF  
 ARCHITECTS ENGINEERS PLANNERS  
 CLEVELAND, OHIO

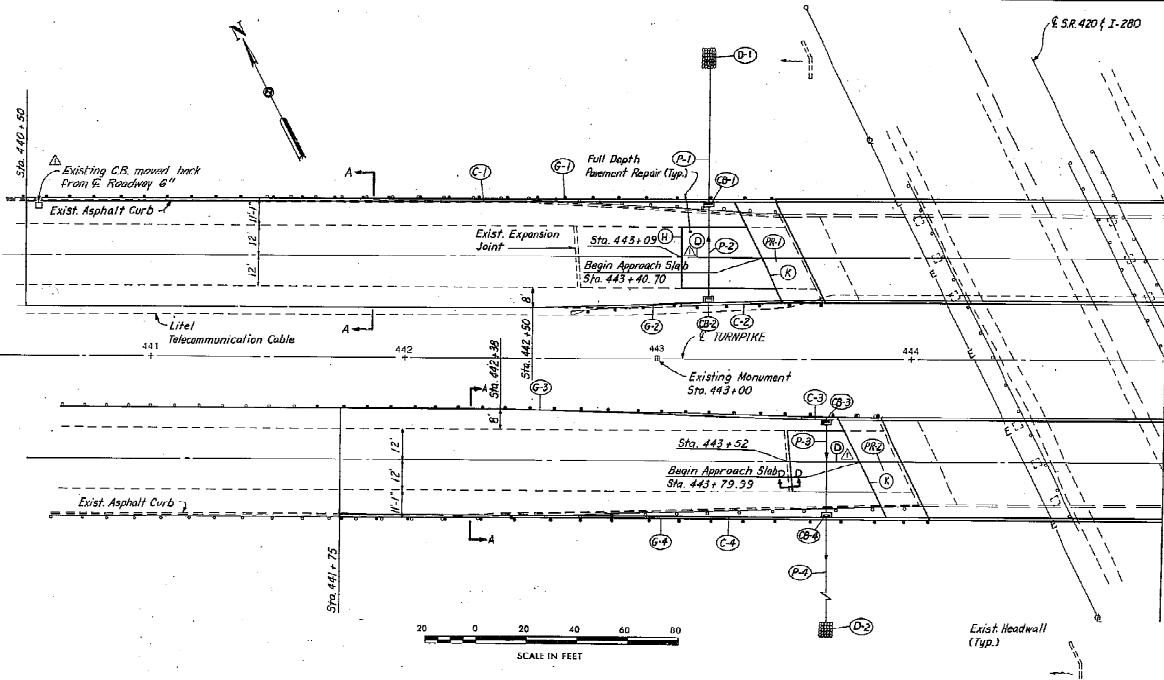
**HNTB**

*Ralph E. Robison*  
 RALPH E. ROBISON



APPROVED FOR  
 THE OHIO TURNPIKE COMMISSION  
 BY

*Ralph E. Robison*  
 CHIEF ENGINEER  
 2-7-89  
 DATE



SITE BENCHMARK	
LOCATION	ELEVATION
MONUMENT ON BRASS DISC AT STA. 443+00 CENTERLINE OHIO TURNPIKE	645.09

REF. NO.	CENTERLINE STATION FROM TO	ROADWAY TO OR AT	DRAINAGE 601 RUCK CHANNEL PROTECTION TYPE C W/O FILTER	603 15" CONDUIT 15" CONCRETE TYPE B	604 SP604 15" CONCRETE CATCH BASIN
CR-1	430+20	WB-LT	57		
CR-2	430+20	WB-RT			
CR-3	433+67	EB-LT			
CR-4	433+67	EB-RT			
P-1	443+20	WB-LT			
P-2	443+20	WB			
P-3	443+67	EB			
P-4	443+67	EB-RT			
D-1	443+20	WB-LT	0.9		
D-2	443+67	EB-RT	0.9		
TOTALS			1.8	320	77

REF. NO.	CENTERLINE STATION FROM TO	ROADWAY TO OR AT	GUARDRAIL 202 GUARDRAIL REMOVED FOR REUSE	SP606 606 GUARDRAIL REBUILD TYPE 5	608 608 GUARDRAIL REBUILD TYPE 5	609 609 GUARDRAIL REBUILD TYPE 5	610 610 GUARDRAIL REBUILD TYPE 5
G-1	440+47	443+47	WB-LT	300	300	1	
G-2	442+66	443+66	WB-RT				
G-3	443+74.50	443+87	EB-LT	212.50	212.50	1	75
G-4	443+95.50	444+97	EB-RT	237.50	237.50	1	
TOTALS				750	750	4	75

REF. NO.	CENTERLINE STATION FROM TO	ROADWAY TO OR AT	SP612 612 REINFORCED CONCRETE APPROACH SLAB (1'-10")	SP614 614 SUBGRADE CONSTRUCTION	203 203 SUBGRADE CONSTRUCTION
443+40.70	443+57.41	WB	16.71	39.5	73.2
443+79.99	443+96.70	EB	16.71	39.5	73.2
TOTALS			33.42	79.0	146.4

\* Approach Slabs to be 30'-6" wide (b/o Curb) and edges parallel to E roadway.

REF. NO.	CENTERLINE STATION FROM TO	ROADWAY TO OR AT	SP612 612 REINFORCED CONCRETE APPROACH SLAB (1'-10")	SP614 614 SUBGRADE CONSTRUCTION	203 203 SUBGRADE CONSTRUCTION
PR-1	443+40.70	443+57.41	WB	16.71	39.5
PR-2	443+79.99	443+96.70	EB	16.71	39.5
TOTALS				33.42	79.0

Note: See Sheet 26 for Joint Details (R) (R)

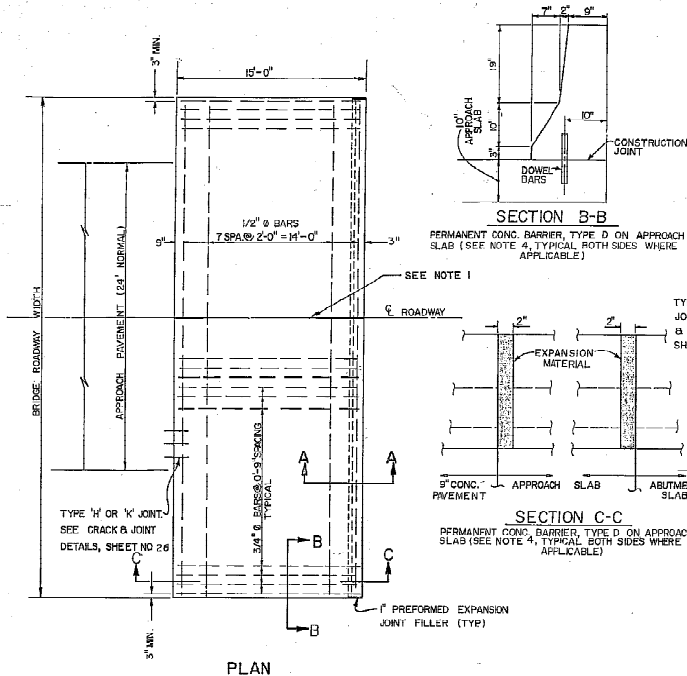
PAVEMENT QUANTITIES														
CENTERLINE STATION FROM TO	ROADWAY TO OR AT	LENGTH (AVG)	WIDTH (AVG)	EXISTING SURFACE	4" ASPHALT BASE	ASPHALT CONCRETE DEPTH	1" ASPHALT COAT	PRIME COAT	AGGREGATE FOR SHOULDER TREATMENT	BITUMINOUS FOR SHOULDER TREATMENT	SHOULDER PREPARATION	SP612 612 REINFORCED CONCRETE APPROACH SLAB (1'-10")	SP614 614 SUBGRADE CONSTRUCTION	203 203 SUBGRADE CONSTRUCTION
440+40	443+32.09	WB-LT	297	4	38.6				121.5					
440+50	443+32.35	WB-LT	282.09	11.00										
440+50	443+32.35	WB-LT	282.35	10										
440+50	443+09	WB	259	24	690.7									
440+50	443+40.70	WB	200.70	24										
443+09	443+40.70	WB	31.70	24										
440+50	442+50	WB-RT	200	0										
442+50	443+09	WB-RT	59	6.94										
443+09	443+47.95	WB-RT	38.96	6.27										
443+09	443+47.70	WB-RT	38.70	5.19										
440+50	442+66	WB-RT	216	4										
442+66	443+66	WB-RT	100	4										
441+75	443+98	EB-LT	212	4										
441+75	442+38	EB-LT	63	8										
442+38	443+57	EB-LT	119	6.46										
443+57	443+72.73	EB-LT	15.78	5.79										
443+57	443+72.99	EB-LT	15.99	5.71										
441+75	443+52.50	EB	177.50	24	473.3									
441+75	443+79.99	EB	204.99	24										
443+52.50	443+79.99	EB	27.49	24										
441+75	443+88.34	EB-RT	213.34	10										
441+75	443+88.53	EB-RT	213.63	11.08										
441+75	444+07	EB-RT	232	4										
TOTALS			1164.0	112.6	123.1	168.6	36.7	92.8	354.2	949.1	378.4	96.0	10.7	1177.8

REF. NO.	CENTERLINE STATION FROM TO	ROADWAY TO OR AT	SP609 609 ASPHALT CONCRETE CURB	SP610 610 ASPHALT CONCRETE CURB	SP611 611 ASPHALT CONCRETE CURB
C-1	440+50	448+30	WB-LT	280	
C-2	443+09	443+49	WB-RT	40	
C-3	443+57	443+92	EB-LT	16	
C-4	441+75	443+91	EB-RT	216	
TOTALS				551	

AS BUILT	REVISIONS	DATE
OHIO TURNPIKE COMMISSION		
PLAN AND QUANTITIES		
HOWARD NEEDLES TAMMEN AND BERGENDOFF ARCHITECTS ENGINEERS PLANNERS OHIO		
DESIGNED BY: J.M.W. DRAWN BY: J.S.-GB CHECKED BY: J.M.W. DATE: 11-5-88 SHEET: 9 OF 76		







**APPROACH SLAB FOR SKEWED BRIDGE**

GENERAL: THIS DRAWING PROVIDES DESIGN AND GENERAL CONSTRUCTION DETAILS. THE PROJECT PLANS WILL SHOW SKEW, CURBS (IF ANY), ESTIMATED QUANTITY (SQ. YDS.), AND SPECIAL NOTES AND DETAILS, WHERE NECESSARY FOR CONDITIONS OTHER THAN THOSE INDICATED HEREON. THE APPROACH SLAB SHALL BE ADAPTED TO FIT THE ENDS OF THE BRIDGE AND THE APPROACH PAVEMENT.

**DESIGN DATA**

CONCRETE: CLASS 3 USING SHRINKAGE COMPENSATING CEMENT  
 REINFORCING STEEL: A.S.T.M. A615, A616 OR A617 - GRADE 60 MIN. YIELD STRENGTH 60,000 P.S.I.

PREFORMED EXPANSION JOINT FILLER AND SEALER AT THE CORNERS AND SIDES OF THE APPROACH SLAB SHALL BE INCLUDED IN THE PRICE BID PER SQ. YARD FOR THE APPROACH SLAB.

GROOVE AND JOINT SEAL SHOWN AT THE BRIDGE LIMIT END OF THE APPROACH SLAB SHALL BE INCLUDED IN THE PRICE BID PER SQ. YARD FOR THE APPROACH SLAB.

TYPE A WATERPROOFING SHOWN AT THE ABUTMENT SLAB SHALL BE INCLUDED IN THE PRICE BID PER SQ. YARD FOR THE APPROACH SLAB.

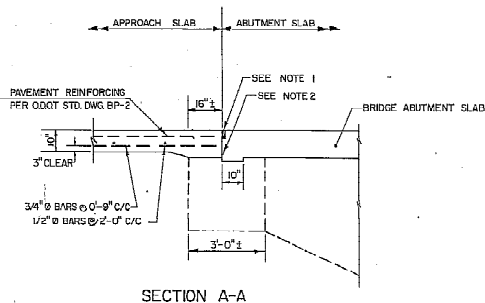
LONGITUDINAL CONSTRUCTION JOINTS REQUIRED FOR STAGE CONSTRUCTION SHALL BE AS PER S1109.

CURBS, BRIDGES WITH SIDEWALKS: FOR BRIDGES CONSTRUCTED WITH RAISED SIDEWALKS, DEFLECTOR PARAPETS OR OTHER TYPES OF CONSTRUCTION WHICH RETAIN ROADWAY SURFACE DRAINAGE, THE APPROACH SLABS SHALL EITHER INCLUDE INTEGRAL CURBS OR BE CONSTRUCTED IN CONJUNCTION WITH BRIDGE CURBS. CURB HEIGHT SHALL BE TRANSITIONED UNIFORMLY BETWEEN BRIDGE CURB HEIGHT AND APPROACH CURB HEIGHT IN LENGTH AS FOLLOWS: WHERE WINGWALL EXTENDS BEYOND END OF APPROACH SLAB, USE A MINIMUM LENGTH OF 10 FT. BEYOND END OF WINGWALL WHERE THE APPROACH SLAB EXTENDS BEYOND THE END OF WINGWALL, TRANSITION IN THIS LENGTH, HOWEVER, THE TRANSITION LENGTH SHALL NOT BE LESS THAN 10 FT. AND THE TRANSITION SHALL EXTEND BEYOND THE END OF THE APPROACH SLAB IF NECESSARY CURB PLACEMENT SHALL BE IN ACCORDANCE WITH O.D.O.T. STANDARD CONSTRUCTION DRAWING BR-1.

APPROACH SLAB WITH APPROACH SLAB FOR 36'-0" BRIDGE WIDTH SHALL BE 36'-0" WIDE WHEN CURBS ARE NOT INCLUDED; 36'-3" WHEN CURB IS INCLUDED ON ONE SIDE ONLY; 39'-0" WHEN CURBS ARE INCLUDED ON BOTH SIDES; 40'-3" WHEN CONCRETE BARRIER IS INCLUDED ON BOTH SIDES.

CROWN SHALL CONFORM TO THAT OF THE APPROACH PAVEMENT AND BRIDGE DECK IF THE RATE OF CROWN OF THE BRIDGE DECK DIFFERS FROM THAT OF THE APPROACH PAVEMENT, A SMOOTH TRANSITION SHALL BE PROVIDED WITHIN THE LIMITS OF THE APPROACH SLAB.

TRANSVERSE JOINT DETAILS AT THE APPROACH PAVEMENT END OF THE APPROACH SLAB SHALL BE EITHER TYPE 'K' OR 'H' AS DETAILED ON THE PLANS. PAYMENT FOR THE TRANSVERSE JOINT SHALL BE AT THE UNIT PRICE BID PER LIN. FT. FOR THE JOINT FURNISHED.

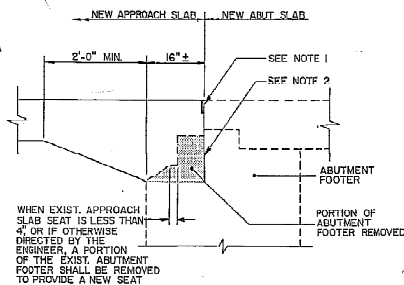


NOTE 1: GROOVE AND SEAL AS PER C.D.O.T. STD. CONST. DWG. BP-3.

NOTE 2: TYPE A WATERPROOFING SHALL NOT EXTEND ABOVE THE BOTTOM OF THE GROOVE INTO WHICH THE JOINT SEALER IS TO BE PLACED. IT SHALL BE APPLIED TO THE ENTIRE AREA OF THE ABUTMENT OR SUPERSTRUCTURE WHICH COMES INTO CONTACT WITH THE APPROACH SLAB.

NOTE 3: REPAIR OF BROKEN APPROACH SLAB SEAT SHALL BE CONSTRUCTED BY THE CONTRACTOR AS PER DETAIL OR AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE MADE ON THE BASIS OF "DIRECT COSTS" PLUS 15% FOR OVERTIME AND PROFIT. "DIRECT COSTS" SHALL BE DEFINED UNDER SECTION G-9.01(5) OF THE GENERAL CONDITIONS.

NOTE 4: A) SEE SHEET 7 FOR LOCATION OF BARRIER  
 B) ROUNDOFF OF BARRIER CORNERS AS PER ODOT MC-9 STANDARD DRAWING.  
 C) DOWEL BARS ARE TO BE NO. 8 DEFORMED STEEL BARS, 12" LONG SPACED ON 4' CENTERS  
 D) EXPANSION MATERIAL SHALL BE WILL-SEAL PRECOMPRESSED EXPANDING SEALANT MATERIAL AS MANUFACTURED BY ILLBRUCK/USA OR APPROVED EQUAL.



2	ADDED IMPRESSED JOINT & CHANGED TYPE OF CEMENT	DFC	11/28/99
1	ADDED SEAT REPAIR DETAIL	DFC	10/26/99
NO.	REVISION	BY	DATE

**OHIO TURNPIKE COMMISSION**

**REINFORCED CONCRETE**  
**APPROACH SLABS**

DATE: OCTOBER 1983 SCALE: N.T.S.  
 CIP: 43-89-11 SHEET 27 OF 76

# 1. PROPOSED WORK

THE DECKS OF THE OHIO TURNPIKE BRIDGES OVER CUMMINS ROAD, THE CSX RAILWAY AND STATE ROUTE 420 AND I-280 SHALL BE REPLACED WITH WIDENED DECKS UNDER THIS CONTRACT. A GENERAL SUMMARY OF THE WORK FOR THE BRIDGES AT EACH SITE IN CONNECTION WITH THE DECK REPLACEMENT AND WIDENING IS LISTED BELOW. DETAILS OF WORK ARE COVERED IN THE PLANS AND SPECIFICATIONS.

## A. EASTBOUND AND WESTBOUND BRIDGES OVER CUMMINS ROAD

- 1) REMOVE AND DISPOSE OF THE EXISTING REINFORCED CONCRETE DECK INCLUDING PARAPETS, RAILS, DECK JOINTS AND SCUFPERS.
- 2) AT EACH ABUTMENT, REMOVE THE EXISTING STRUCTURAL SLAB AND PARAPETS. WIDEN THE ABUTMENT BY CONSTRUCTING A NEW MINOR WALL ON THE RIGHT SIDE AND A NEW STRUCTURAL SLAB.
- 3) AT EACH PIER, CONSTRUCT A NEW OUTSIDE EXTERIOR FOOTING AND COLUMN AND EXTEND THE EXISTING CAP BEAMS TO THE NEWLY CONSTRUCTED COLUMN.
- 4) INSTALL A NEW LINE OF EXTERIOR BEAMS INCLUDING DIAPHRAGMS AT THE RIGHT SIDE OF THE ROADWAYS.
- 5) INSPECT EXISTING RIVETS FOR TIGHTNESS IN FATIGUE CRITICAL AREAS.
- 6) INSTALL NEW DECK JOINTS.
- 7) CONSTRUCT A NEW CAST-IN-PLACE REINFORCED CONCRETE DECK AND SAFETY BARRIERS.
- 8) SEAL THE NEW CONCRETE DECK, ABUTMENT SLABS AND SAFETY BARRIERS WITH CONCRETE WEATHERPROOFING.
- 9) ABANDON THE DRAINAGE DOWNSPOUTS AT ABUTMENTS AND EXTEND THE EXISTING CRUSHED AGGREGATE SLOPE PROTECTION.
- 10) CONSTRUCT NEW APPROACH SLABS AND MODIFY THE APPROACH ROADWAY (SEE ROADWAY PLANS).

## B. EASTBOUND AND WESTBOUND BRIDGES OVER THE CSX RAILWAY

- 1) REMOVE AND DISPOSE OF THE EXISTING REINFORCED CONCRETE DECK INCLUDING PARAPETS, RAILS, DECK JOINTS AND SCUFPERS.
- 2) AT EACH ABUTMENT, REMOVE THE EXISTING STRUCTURAL SLAB AND PARAPETS. WIDEN THE ABUTMENT BY CONSTRUCTING A NEW MINOR WALL ON THE RIGHT SIDE AND A NEW STRUCTURAL SLAB. REPAIR THE EXPOSED SURFACES OF THE EXISTING ABUTMENTS.
- 3) AT EACH PIER, CONSTRUCT A COLUMN ATOP A 20 FOOT SECTION OF REPLACED CRASHMALL ON THE RIGHT SIDE AND EXTEND THE EXISTING CAP BEAMS. REPAIR THE EXPOSED SURFACES OF THE EXISTING PIER CRASHMALLS.
- 4) INSTALL A NEW LINE OF EXTERIOR BEAMS INCLUDING DIAPHRAGMS ON THE RIGHT SIDE OF THE ROADWAYS.
- 5) INSPECT EXISTING RIVETS FOR TIGHTNESS IN FATIGUE CRITICAL AREAS.
- 6) INSTALL NEW DECK JOINTS.
- 7) CONSTRUCT A NEW CAST-IN-PLACE REINFORCED CONCRETE DECK AND SAFETY BARRIERS WITH CONCRETE COUNTERWEIGHTS AT EACH ABUTMENT.
- 8) SEAL THE NEW CONCRETE DECK, ABUTMENT SLABS AND SAFETY BARRIERS WITH CONCRETE WEATHERPROOFING.
- 9) ABANDON THE DRAINAGE DOWNSPOUTS AT ABUTMENTS.
- 10) CONSTRUCT NEW APPROACH SLABS AND MODIFY THE APPROACH ROADWAY (SEE ROADWAY PLANS).

## C. EASTBOUND AND WESTBOUND BRIDGES OVER STATE ROUTE 420 AND I-280

- 1) REMOVE AND DISPOSE OF THE EXISTING REINFORCED CONCRETE DECK INCLUDING PARAPETS, RAILS, DECK JOINTS AND SCUFPERS.
- 2) AT EACH ABUTMENT, REMOVE THE EXISTING STRUCTURAL SLAB AND PARAPETS. WIDEN THE ABUTMENT BY CONSTRUCTING A NEW MINOR WALL ON THE RIGHT SIDE AND A NEW STRUCTURAL SLAB.

3) AT EACH PIER, CONSTRUCT A NEW OUTSIDE EXTERIOR FOOTING AND COLUMN AND EXTEND THE EXISTING CAP BEAMS TO THE NEWLY CONSTRUCTED COLUMN.

- 4) INSTALL A NEW LINE OF EXTERIOR BEAMS INCLUDING DIAPHRAGMS AT THE RIGHT SIDE OF THE ROADWAYS.
- 5) INSPECT EXISTING RIVETS FOR TIGHTNESS IN FATIGUE CRITICAL AREAS.
- 6) INSTALL NEW DECK JOINTS.
- 7) CONSTRUCT A NEW CAST-IN-PLACE REINFORCED CONCRETE DECK AND SAFETY BARRIERS WITH CONCRETE COUNTERWEIGHTS AT EACH ABUTMENT.
- 8) SEAL THE NEW CONCRETE DECK, ABUTMENT SLABS AND SAFETY BARRIERS WITH CONCRETE WEATHERPROOFING.
- 9) ABANDON THE DRAINAGE DOWNSPOUTS AT ABUTMENTS AND EXTEND THE EXISTING CRUSHED AGGREGATE SLOPE PROTECTION.
- 10) CONSTRUCT NEW APPROACH SLABS AND MODIFY THE APPROACH ROADWAY (SEE ROADWAY PLANS).

## 2. DESIGN SPECIFICATIONS

THE PROPOSED REMEDIATION WORK FOR THESE STRUCTURES CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1993, INCLUDING INTERIM SPECIFICATIONS THRU 1990, AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

## 3. DESIGN LOADING

HS20-44 CASE 1, THE ALTERNATE MILITARY LOADING, AND A 30 P.S.F. FUTURE WEARING SURFACE.

## 4. DESIGN STRESSES

CONCRETE CLASS 5 - COMPRESSIVE STRENGTH	4,500 PSI
CONCRETE CLASS C - COMPRESSIVE STRENGTH	4,000 PSI
REINFORCING STEEL - ASTM A615, AG6, AG7	
GRADE 60 MINIMUM YIELD STRENGTH	60,000 PSI
EXISTING STRUCTURAL STEEL ASTM A7	
(ASSUMED) - UNIT STRESS	18,000 PSI
NEW STRUCTURAL STEEL ASTM A36 - UNIT STRESS	20,000 PSI

## 5. REFERENCE

REFERENCE SHALL BE MADE TO THE FOLLOWING OHIO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING(S):  
 BR-1-65 DATED 2-2-60  
 BR-1 DATED 5-29-70 AND  
 SD-1-69 DATED 6-12-60 (SHEET 4 OF 4)

## 6. DECK PROTECTION METHOD

DECK PROTECTION METHOD FOR ABUTMENT SLAB AND SUPERSTRUCTURE DECK IS EPOXY COATED REINFORCING STEEL IN TOP AND BOTTOM MATS AND CONCRETE WEATHERPROOFING SEALER ON TOP SURFACE.

## 7. MONOLITHIC WEARING SURFACE

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1/2" THICK.

## 8. EXISTING STRUCTURE PLANS

THE ORIGINAL DESIGN PLANS MAY BE EXAMINED BY PROSPECTIVE BIDDERS AT THE COMMISSION'S PRINCIPAL OFFICE, 602 PROSPECT STREET, CLEVELAND, OHIO. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE DRAWINGS.

## 9. EXISTING STRUCTURE VERIFICATION

DETAILS, DIMENSIONS AND ELEVATIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND/OR FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTION 512.02 AND D.T.C. GENERAL CONDITIONS G-2.04 AND G-5.02.

CONTRACT BID PRICES SHALL BE BASED UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PRELIMINARY EXAMINATION OF THE EXISTING STRUCTURE BY THE CONTRACTOR. HOWEVER, ALL PROJECT WORK SHALL BE BASED UPON ACTUAL DETAILS, DIMENSIONS, ELEVATIONS, AND SKEW ANGLES WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD. THE STRUCTURAL STEEL AND STRUCTURAL STEEL DECK JOINTS SHALL NOT BE FABRICATED UNTIL THE ACTUAL DETAILS, DIMENSIONS, ELEVATIONS, AND SKEW ANGLES HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

ANY ADDITIONAL COST RESULTING FROM VARIATIONS FROM PLAN DIMENSIONS IS THE RESPONSIBILITY OF THE CONTRACTOR AND NO ADDITIONAL PAYMENT OVER THE UNIT PRICE BID WILL BE AWARDED BY THE COMMISSION.

## 10. DIMENSIONS

DIMENSIONS GIVEN ARE MEASURED HORIZONTALLY AND AT 60 DEGREES FAN-REMIET, UNLESS OTHERWISE NOTED.

## 11. REPLACEMENT OF EXISTING REINFORCING STEEL

ANY EXISTING REINFORCING BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND WHICH ARE NOT UNSALEABLE BY THE CONTRACTOR'S CONCRETE REMOVAL OPERATIONS SHALL BE REPLACED WITH NEW STEEL AT HIS COST. ANY EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNSALEABLE BECAUSE OF CORROSION SHALL BE REPLACED WITH NEW STEEL. AN ALLOWANCE IS INCLUDED IN ITEM 509 FOR THIS PURPOSE.

DRILLING DOWN HOLE, FINISHING AND PLACING SP956 NONSHRINKING EPOXY MORTAR, AND REINFORCING BAR BOWELS, WHERE NEEDED TO REPLACE EXISTING REINFORCEMENT DAMAGED BY THE CONTRACTOR, SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

## 12. ITEM 5234 CONCRETE WEATHERPROOFING

WEATHERPROOFING SHALL BE APPLIED TO THE FOLLOWING EXPOSED CONCRETE SURFACES OF THE BRIDGE:

- THE TOPS OF ABUTMENT AND SUPERSTRUCTURE SLABS.
  - ALL PARAPET SURFACES AND SLAB SIDE EDGES.
  - THE BOTTOM SURFACE OF THE SUPERSTRUCTURE SLAB FROM THE SLAB SIDE EDGE TO THE EXTERIOR STRINGER FLANGE.
  - APPROACH SLABS.
  - NEW EXPOSED CONCRETE SURFACES OF ALL ABUTMENTS AND PIERS.
- SEALING SHALL NOT BE DONE UNTIL ANY CONCRETE PATCHING REPAIRS HAVE BEEN COMPLETED AND CURED.

CARE SHALL BE TAKEN NOT TO APPLY WEATHERPROOFING ON CONSTRUCTION JOINT SURFACES, SURFACES TO RECEIVE JOINT SEALER, AND FASCIA BEAM PAINT.

## 13. CONCRETE INSECT ASSEMBLIES

AS SHOWN ON STANDARD CONSTRUCTION DRAWING DR-1 AND GR-3, SHALL BE PROVIDED AT ALL WINGWALL TERMINALS FOR ATTACHMENT OF GUARDRAIL TERMINAL CONNECTORS. THE WINGWALLS IN THE AREA BETWEEN THE CSX RAILWAY AND CUMMINS ROAD STRUCTURES SHALL BE EXCLUDED FROM THIS REQUIREMENT. INCLUDE WITH ITEM 5011 FOR PAYMENT.

## 14. PATCHING CONCRETE STRUCTURES

AS A CONTINGENCY 30 SQ. FT. OF SP519 PATCHING CONCRETE STRUCTURES HAS BEEN INCLUDED ON EACH OF THE STRUCTURE'S SUMMARY OF QUANTITIES FOR USE AS DIRECTED BY THE ENGINEER.

## 15. ABUTMENT BACKFILL

BACKFILL SHALL BE PLACED IN ACCORDANCE WITH 503 BETWEEN THE EXISTING WINGWALLS AND THE NEW WINGWALLS, EXTENDING FROM THE EXISTING GROUND LINE TO THE BOTTOM OF THE DECK SLAB. THE CONTRACTOR SHALL PROVIDE AND PLACE BACKFILL BETWEEN EXISTING WINGWALLS AS REQUIRED TO BRING THE FILL TO THE LEVEL OF THE PROPOSED SLAB PRIOR TO PLACING THE NEW DECK SLAB. INCLUDE WITH ITEM 503, ABUTMENT BACKFILL, AS PER 503.10 FOR PAYMENT.

## 16. EPOXY BONDING COMPOUND

EPOXY BONDING COMPOUND (SP520) SHALL BE PLACED ON THE SURFACE AREAS OF EXISTING CONCRETE WHICH WILL BE IN CONTACT WITH NEW CONCRETE. PRICE INCLUDED IN THE CONTRACT BID PRICE FOR THE PERTINENT CONCRETE ITEMS.

## 17. PILE DRIVING

IF EQUIPMENT FOR PILE DRIVING OPERATIONS OCCUPIES ANY PORTION OF THE EXISTING OR PROPOSED STRUCTURE, STRESS CALCULATIONS BY A REGISTERED STRUCTURAL ENGINEER SHALL BE SUBMITTED TO THE ENGINEER IN ACCORDANCE WITH CMS 501.09.

NO.	REVISIONS	BY DATE

<b>OHIO TURNPIKE COMMISSION</b>	
GENERAL NOTES	
OHIO TURNPIKE OVER C.S.X. RAILWAY, CUMMINS ROAD, S.R. 420 AND I-280	
HOWARD NEEDLES TAMMEN AND BERGENDOFF ARCHITECTS ENGINEERS PLANNERS	
CLEVELAND	OHIO
DESIGNED DRAWN DATE: 12-19-88	C.E.B. IN CHARGE SCALE
CIP: 43-89-11	SHEET 26 OF 76

# 18. BRIDGE DECK ELEVATIONS, SLAB THICKNESS, AND APPROACH PROFILES

IN ORDER TO MEET ROADWAY GRADES, TO ASSURE THE CONSTRUCTION OF THE REQUIRED THICKNESS OF DECK SLABS, AND TO ASSURE THE PROPER LOCATION OF THE REINFORCING STEEL, IN THE DECK SLABS; THE CONTRACTOR SHALL OBTAIN THE ELEVATIONS OF THE TOP OF THE NEW AND EXISTING STEEL BEAMS, AFTER THE COMPLETE REMOVAL OF THE EXISTING DECK SLAB, AT THE LOCATIONS SHOWN IN THE TABLES ON SHEET 40 OF 76, 51 OF 76, AND 62 OF 76 FOR THE FINAL PAVEMENT ELEVATIONS. THE CONTRACTOR SHALL COMPUTE THE DECK SCREED ELEVATIONS UTILIZING THE DEAD LOAD DEFLECTIONS. THEN, THE CONTRACTOR SHALL CALCULATE THE DECK THICKNESS OVER THE BEAMS USING THE DECK SCREED ELEVATIONS AND THE TOP OF BEAM ELEVATIONS. IF THE COMPUTED DECK THICKNESS IS FOUND TO BE LESS THAN THE MINIMUM THICKNESS REQUIRED, THE FINAL PAVEMENT ELEVATIONS SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER.

THE QUANTITY OF BULK CONCRETE TO BE PAID FOR SHALL BE BASED UPON 8-1/2 IN. THICK CONCRETE OUTSIDE THE HAUNCH AREAS, AND THE AVERAGE THICKNESS OF CONCRETE PLACED OVER THE EXISTING AND NEW BEAMS AT THE HAUNCHES. A TYPICAL HAUNCH WIDTH OF 9 IN. SHALL BE USED FOR COMPUTING THE QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6 IN. AND 12 IN., PROVIDED THAT THE SLOPE SHALL NOT BE MORE THAN 1:4 FOR A HAUNCH LESS THAN 9 IN. IN WIDTH.

PLACEMENT OF THE ABUTMENT SLAB PRIOR TO THE DECK SLAB WILL NOT BE PERMITTED. HOWEVER, THE ABUTMENT SLAB AND THE DECK SLAB MAY BE POURED AT THE SAME TIME. UPON THE COMPLETION OF THESE POURS AND PRIOR TO POURING THE CONCRETE APPROACH SLAB, THE ENGINEER WILL PROVIDE THE CONTRACTOR WITH FINISH GRADES AND ELEVATIONS REQUIRED TO PROVIDE A SMOOTH TRANSITION FROM THE ASPHALT ROADWAY AND APPROACH SLABS TO THE CONCRETE ABUTMENT AND DECK SLABS.

UPON REMOVAL OF THE EXISTING ASPHALT SURFACE AND THE COMPLETION OF THE FULL DEPTH PAVEMENT REPAIRS, THE CONTRACTOR SHALL PROVIDE THE ENGINEER ELEVATIONS OF THE EXISTING AND REPAIRED CONCRETE SURFACE ALONG THE CENTERLINE AND BOTH EDGES OF PAVEMENT AT INTERVALS OF 25 FT. ELEVATIONS OF THE EXISTING ASPHALT, AT 25 FT INTERVALS, FOR A DISTANCE OF 100 FT BEYOND THE PAVING LIMITS, AND AS BUILT ELEVATIONS OF THE ABUTMENT AND DECK SLABS SHALL ALSO BE PROVIDED. AFTER RECEIPT OF THESE ELEVATIONS, THE ENGINEER WILL CALCULATE AND PROVIDE TO THE CONTRACTOR FINAL ELEVATIONS FOR THE CONCRETE APPROACH SLABS AND FOR BOTH ITEM 102, ASPHALT CONCRETE BASE COURSE AND ITEM 501A, ASPHALT CONCRETE SURFACE COURSE. NO APPROACH SLABS SHALL BE POURED NOR SHALL ASPHALT PAVING COMMENCE UNTIL RECEIPT OF THESE FINAL ELEVATIONS.

PAYMENT FOR THE ABOVE MENTIONED WORK SHALL BE INCLUDED WITH THE LUMP SUM PRICE BID FOR ITEM SP623.

# 19. CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE ESTIMATED QUANTITIES FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED AT THE ENGINEER'S DISCRETION SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

# 20. EPOXY COATED REINFORCING STEEL SUPPORT

IN ACCORDANCE WITH THE REQUIREMENTS OF SP824 AND 509.09, THE TOP AND BOTTOM MATS OF ALL LONGITUDINAL AND TRANSVERSE EPOXY COATED REINFORCING STEEL SHALL BE SUPPORTED BY APPROVED EPOXY COATED DEVICES WITH SPACING NOT EXCEEDING 3-FT 0-IN. CENTERS IN EACH DIRECTION. BROKEN CONCRETE, BRICKS, ETC., SHALL NOT BE USED FOR SUPPORT OF EPOXY COATED REINFORCING STEEL.

# 21. RIVET INSPECTION

THE CONTRACTOR SHALL COOPERATE AND PROVIDE ACCESS FOR THE ENGINEER TO ALL RIVETS SHOWN ON THE DETAILS ON SHEET 21 OF 76, FOR THE PURPOSE OF INSPECTION AND SOUNDING. PAYMENT FOR ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO PERFORM THE ABOVE DESCRIBED WORK SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM SP 227 - FALSEWORK, TEMPORARY BRACING AND PROTECTIVE STRUCTURES.

22. ITEM SP228A REPLACE EXISTING RIVET WITH NEW HIGH STRENGTH BOLT AS A CONTINGENCY. 50 RIVET REPLACEMENTS HAVE BEEN INCLUDED IN EACH OF THE STRUCTURES ESTIMATED QUANTITIES FOR USE AS DIRECTED BY THE ENGINEER.

# 23. UTILITIES

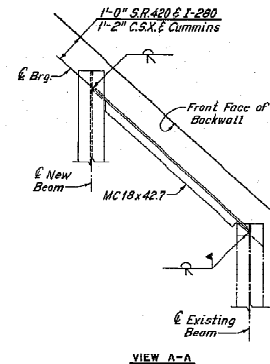
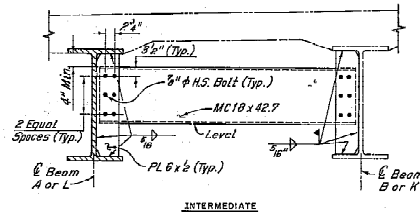
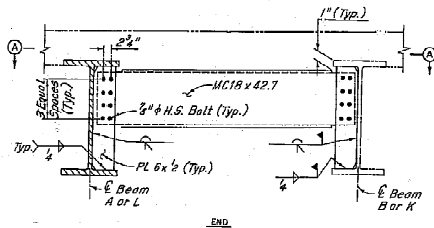
ALL EXPENSES INVOLVED IN RELOCATING AFFECTED UTILITIES SHALL BE BORNE BY THE OWNER(S). THE CONTRACTOR AND OWNER(S) ARE REQUESTED TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INTERFERENCE TO EITHER WILL BE HELD TO A MINIMUM.

# 24. ITEMS NOT INCLUDED IN BRIDGE PLANS

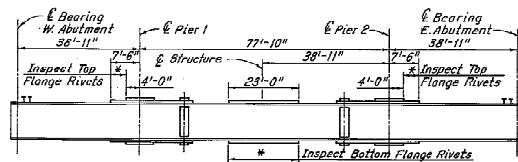
THE FOLLOWING ITEMS ARE NOT INCLUDED IN THE BRIDGE PLANS. SEE ROADWAY PLANS FOR DETAILS.

- (1) APPROACH SLABS
- (2) APPROACH ROADWAYS

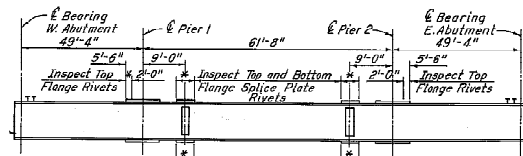
NO.	REVISIONS	BY	DATE
<b>OHIO TURNPIKE COMMISSION</b> GENERAL NOTES OHIO TURNPIKE OVER C.S.X. RAILWAY, CUMMINGS ROAD, S.R. 420 AND I-280 HOWARD NEEDLES TAMMEN AND BERGENDOFF ARCHITECTS ENGINEERS PLANNERS CLEVELAND OHIO			
DESIGNED	BY	CHECKED	IN CHARGE
DRAWN	R.H.W.	C.A.B.	R.H.W.
DATE: 12-19-88		SCALE:	
CIP: 43-89-11		SHEET	29 OF 76



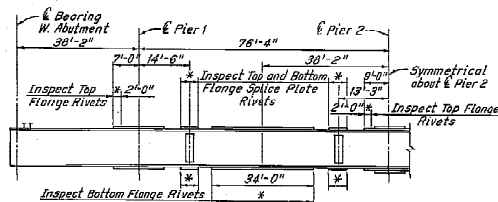
DIAPHRAGM DETAILS



EXISTING BEAM ELEVATION  
C.S.X. Railway  
(No Scale)

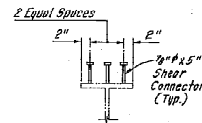


EXISTING BEAM ELEVATION  
Cummins Road  
(No Scale)



EXISTING BEAM ELEVATION  
S.R. 420 & I-280  
(No Scale)

\*RIVET INSPECTION  
(See General Note 21, Item SP52P)

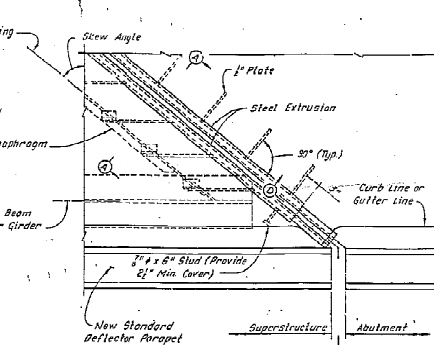
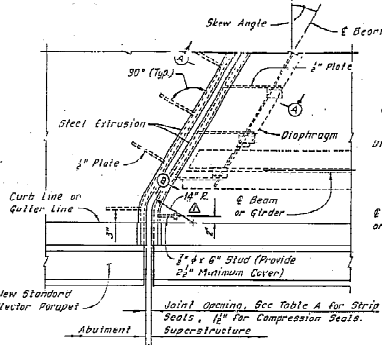
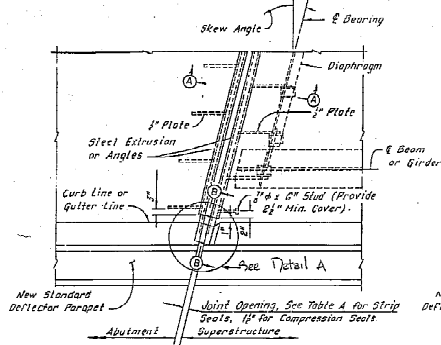


TYPICAL STUD PLACEMENT

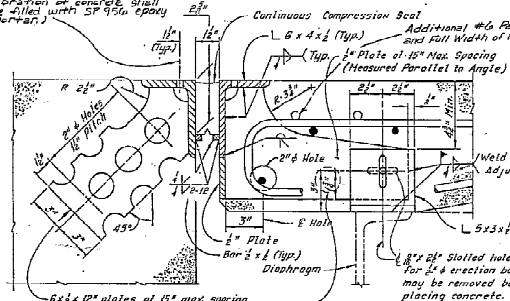
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# OHIO TURNPIKE COMMISSION

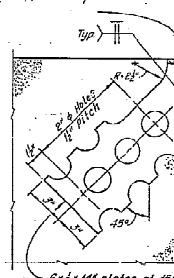
DESIGNED	CHECKED
R.H.W.	R.H.W.
DRAWN	IN CHARGE
G.A.B.	R.H.W.
DATE	SCALE
12-19-88	
CIP	SHEET
43-89-11	31 OF 76



6" x 12" Holes @ 12" (TYP)  
(Any voids remaining after vibration or ramming shall be filled with SP-950 epoxy mortar.)

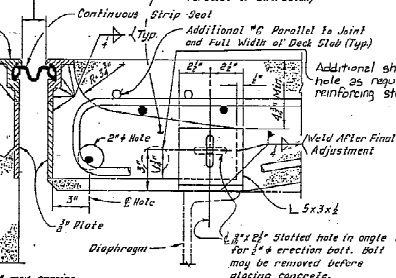


Steel Extrusion (Welded to Type M, D.S. Brown Type 550, or approved equal)



Note: When skew angle is greater than 45°, supply joint assemblies in two sections and provide a field splice at the center line of roadway.

See Table A  
1" Plate at 15" Max. Spacing (Measured Parallel to Extrusion)



Note: For joint details in sidewalk see sheet 2

# GENERAL NOTES

INSTALLATION OF SEAL DURING INSTALLATION OF SUBP/ADMISSOR FOR THE SUPERSTRUCTURE SIDE OF THE JOINT SEAL, THE SEATING OF BEAMS OR GIRDERS SHALL BE CAREFULLY OBSERVED TO ASSURE THAT POSITIVE BEARING IS MAINTAINED. SHOULD NOTICE AT THE SUPPORT/ADMISSOR ON THE BEAMS SHALL BE ACHIEVED BY POSITIONING OF THE SUPPORT ANGLES RATHER THAN BY CLAMPING FORCE.

ELASTOMERIC COMPRESSION SEALS SHALL BE USED AT FIXED JOINTS ONLY, AND AT SKEWS LESS THAN 45°.

STUD ANCHORS SHALL BE LOW CARBON STEEL ASTM A-108.

ALL WELDING SHALL CONFORM WITH A.W.S. AND AASHTO SPECIFICATIONS FOR WELDED HIGHWAY AND RAILWAY BRIDGES.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.

ELASTOMERIC COMPRESSION SEAL SHALL BE WABO-WJ-2000, D.S. BROWN C-W 2000 OR APPROVED EQUAL.

CONTINUOUS STRIP SEAL SHALL BE AS MANUFACTURED BY WABO-ACHE, D.S. BROWN, OR APPROVED EQUAL, AND SHALL BE THE SIZE AS SPECIFIED

DETAILS AT DIAPHRAGMS SHOWN. DETAILS AT BEAMS OR GIRDERS SIMILAR.

TABLE A

STRIP SEAL SIZE	STRIP SEAL JOINT OPENING INSTALLATION SKEW							
	TEMPERATURE °F							
	30	40	50	60	70	80	90	
3"	2-1/4"	2-1/8"	2"	1-7/8"	1-3/4"	1-5/8"	1-1/2"	
4"	2-5/8"	2-1/2"	2-1/2"	2-3/8"	2-1/4"	2-1/8"	2"	
5"	2-7/8"	2-3/4"	2-3/4"	2-5/8"	2-5/8"	2-1/2"	2-3/8"	

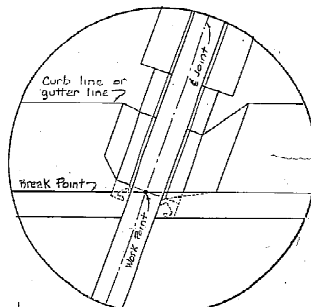
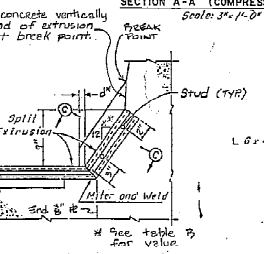


TABLE B

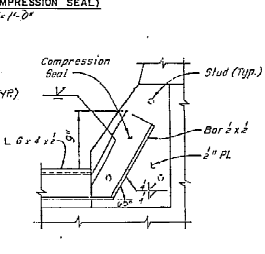
SKEW ANGLE	
< 10°	10° - 45°
3/4" Min.	3/4"
5/8" Min.	5/8"

6" x 12" plates at 15" max spacing except near joints in the angle where the plates shall be placed within 6" of each side of the joint. The holes may be burned in the plate.

ABUTMENT



SECTION B-B (STRIP SEAL)  
Scale: 1/2" = 1'-0"



SECTION C-C  
No Scale

SECTION D-D  
Scale: 1/2" = 1'-0"

SECTION E-E  
No Scale

Extrusion Radius Revision: 1-24-80

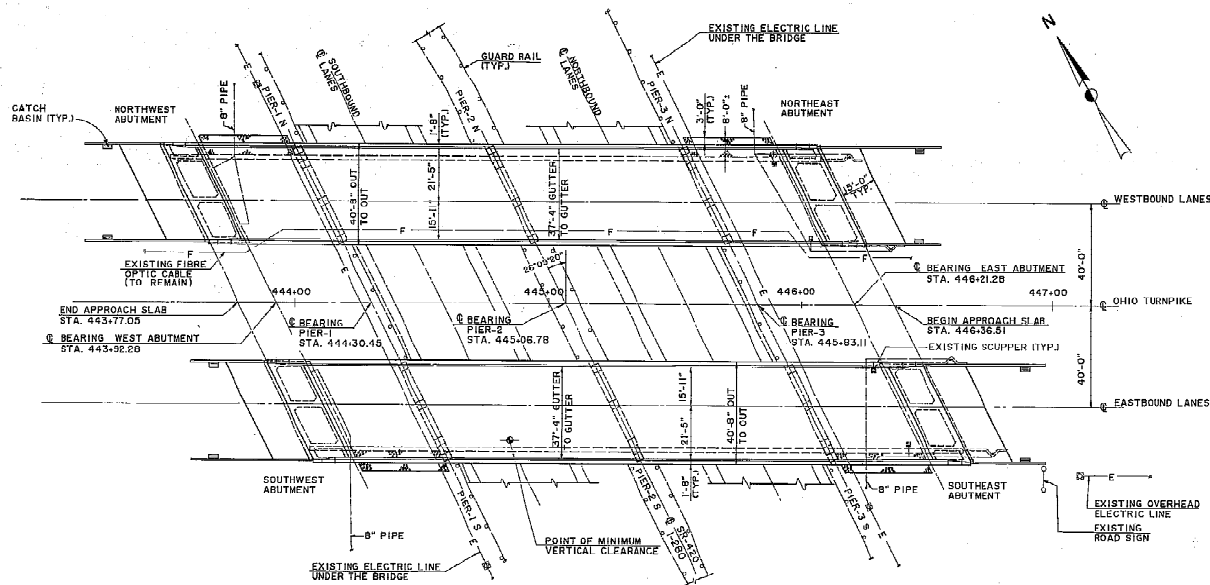
REVISED 10-81

OHIO TURNPIKE COMMISSION

DECK JOINT DETAILS

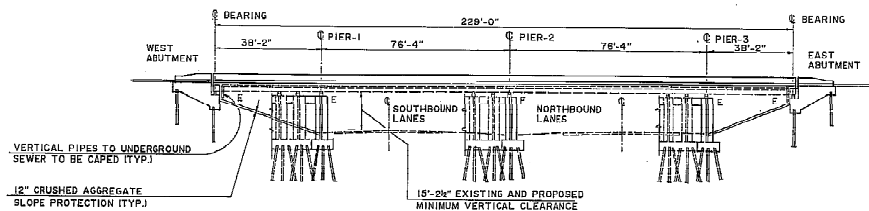
DATE: JANUARY 1985 SCALE: AS NOTED

DP: 43-89-11 SHEET 32 OF 76



**GENERAL PLAN**

**PROPOSED PROFILE GRADE**  
 (ONLY WITHIN BRIDGE LIMITS. SEE ROADWAY PLANS FOR PAVEMENT ELEVATIONS BEYOND BRIDGE LIMITS)



**FOUNDATION DATA:**

THE ABUTMENT AND PIER FOUNDATIONS SHALL BE FOUNDED ON HP10X42 PILING DRIVEN TO REFUSAL ON BEDROCK OR A MINIMUM BEARING CAPACITY OF 40 TONS PER PILE. REFUSAL SHALL BE CONSIDERED AS ATTAINED BY PENETRATING SOFT BEDROCK WITH A MINIMUM RESISTANCE OF 20 BLOWS PER INCH, OR REFUSAL SHALL BE CONSIDERED AS ATTAINED AFTER THE PILE HAS CONTACTED HARD BEDROCK AND THE PILE HAS THEN RECEIVED AT LEAST 20 BLOWS. THE PILES HAVE THE FOLLOWING ESTIMATED PAY LENGTHS PER PILE.

**WEST ABUTMENTS**

FRONT WALL	50 FT
GRADE DEAM	55 FT

**EAST ABUTMENTS**

FRONT WALL	50 FT
GRADE DEAM	55 FT

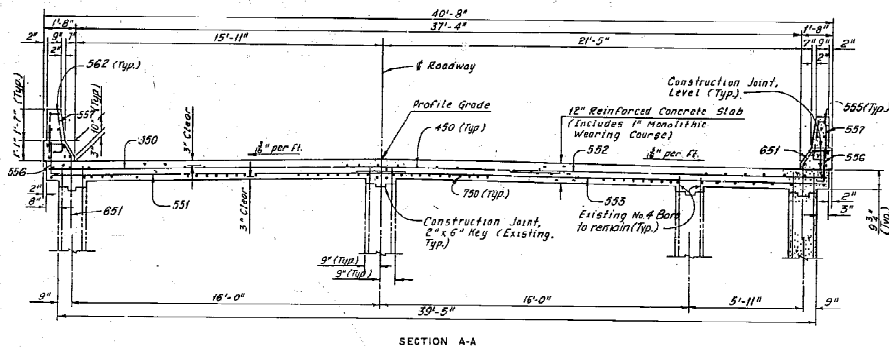
PIERS	38 FT
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**BENCH MARK**

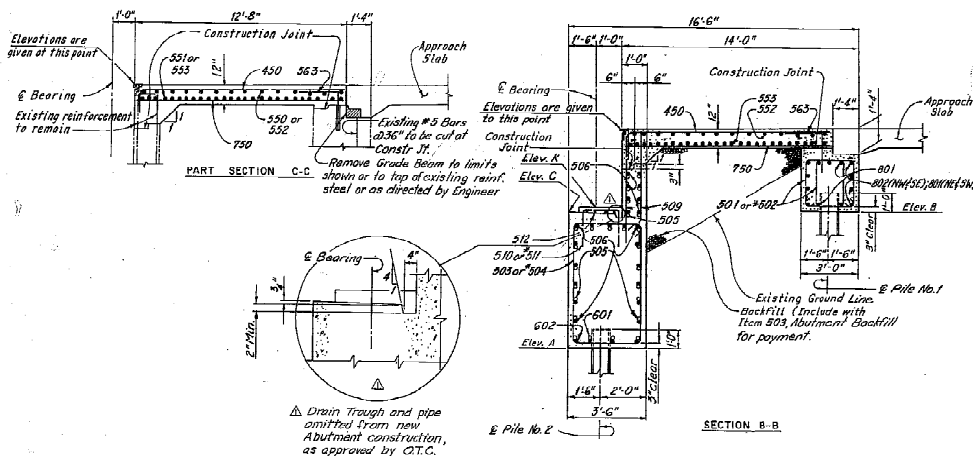
PERMANENT MONUMENT  
 STA. 443+00 CENTERLINE  
 OHIO TURNPIKE  
 ELEV. 645.09

NO.	REVISIONS	BY	DATE
<b>OHIO TURNPIKE COMMISSION</b>			
GENERAL PLAN AND ELEVATION			
OHIO TURNPIKE OVER S.R. 420 & I-280			
HOWARD NEEDLES TAMMEN AND BERGENDOFF			
ARCHITECTS ENGINEERS PLANNERS			
CLEVELAND			OHIO
DESIGNED		CHECKED	R.H.W.
DRAWN	SNA	IN CHARGE	R.H.W.
DATE:	12-19-88	SCALE:	
CIP: 43-89-11		SHEET	55 OF 76





SECTION A-A



△ Drain Trough and pipe omitted from new Abutment construction, as approved by C.T.C.

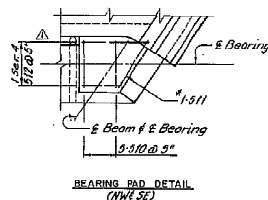
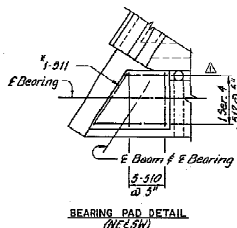


TABLE OF ELEVATIONS			
ELEV.	NORTHWEST ABUTMENT	SOUTHEAST ABUTMENT	
A	638.47 ±	638.29 ±	
B	645.31 ±	645.10 ±	
C	644.91 ±	644.73 ±	
D	650.05	649.90	
E	650.29	650.13	
F	649.92	649.76	
G	650.02	649.86	
H	650.28	650.00	
J	649.90	649.71	
K	645.37	645.20	
L	640.31	640.10	

TABLE OF ELEVATIONS			
ELEV.	SOUTHWEST ABUTMENT	NORTHEAST ABUTMENT	
A	638.46 ±	638.30 ±	
B	645.31 ±	645.22 ±	
C	644.96 ±	644.89 ±	
D	650.06	649.97	
E	650.35	650.21	
F	650.02	649.92	
G	650.07	649.93	
H	650.33	650.20	
J	650.01	649.89	
K	645.46	645.36	
L	640.37	640.22	

Note: All reinforcing bar marks shall be prefixed as follows:			
Bar Mark	Northwest Abutment	Southeast Abutment	
501 to 525	AA	AB	
601 to 625			
801 to 802			
450			
530 to 563	EAA	EAB	
651 to 655			
750			

Note: All reinforcing bar marks shall be prefixed as follows:			
Bar Mark	Southwest Abutment	Northeast Abutment	
501 to 525	AA	AB	
601 to 625			
801			
450			
550 to 563	EAC	EAD	
651 to 655			
750			

Notes: ———— Indicates existing structure

▨ Indicates removal (to be included with Item SP222 Portions of Structure Removed for Payment.

All piles are HP10x42 steel piles with a design load of 40 tons per pile.

Provide concrete insert assemblies at all wingwall terminals.

For location of Sections, see Sheet 56 of 76.

For Reinforcement Schedule see Sheets 63 thru 76 of 76.

The following abbreviations are used:

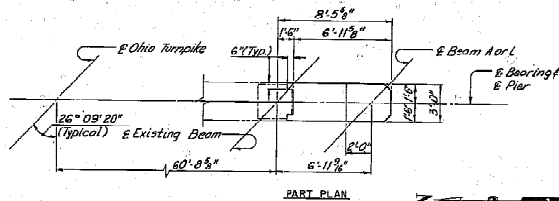
n.f. = Near Face  
f.f. = Far Face  
e.f. = Each Face  
Elev = Elevation  
NW = Northwest Abutment  
NE = Northeast Abutment  
SW = Southwest Abutment  
SE = Southeast Abutment  
Typ = Typical  
T = Top  
B = Bottom  
Abt = Abutment

\* Bar shall be placed parallel to wingwall

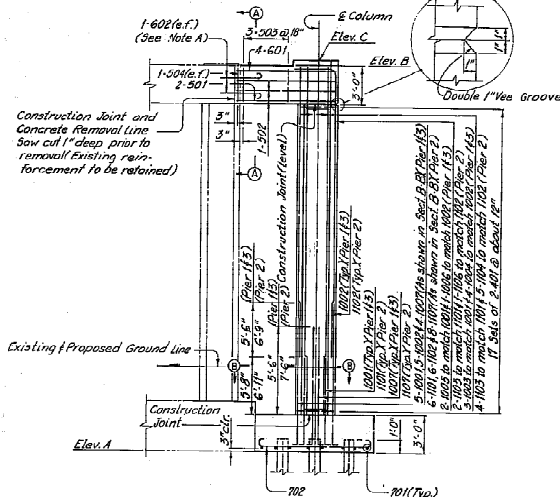
NO.	As Built	REVISIONS	BY DATE
<b>OHIO TURNPIKE COMMISSION</b> ABUTMENT MODIFICATIONS OHIO TURNPIKE OVER S.R. 420 & I-280 HOWARD NEEDLES TAMMEN AND BERENDSON ARCHITECTS ENGINEERS PLANNERS CLEVELAND DESIGNED R.H.W. DRAWN J.L.V. DATE: 12-19-88 CIP: 43-69-11			
CHECKED R.A.F. IN CHARGE P.H.W. SCALE: None SHEET 57 OF 76			GCA/TPM BY DATE



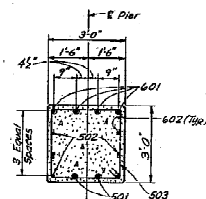
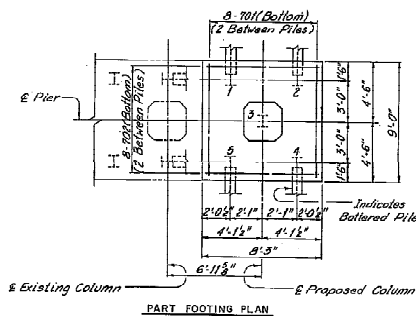




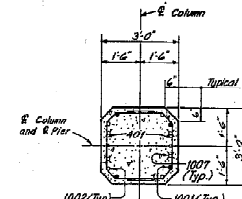
Note A:  
Bar No. 602 shall be doweled into the existing structure and have an embedment length of 1'-3".



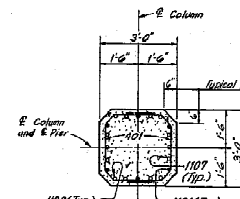
PART ELEVATION  
(Existing Piles not shown)



SECTION A-A



SECTION B-B (PIER 1 AND 3)  
(Column Reinforcement not shown)



SECTION C-C (PIER 2)  
(Column Reinforcement not shown)

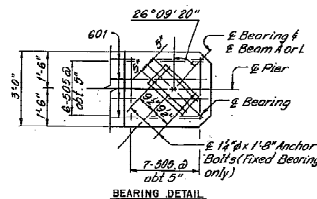


TABLE OF ELEVATIONS									
ELEV.	PIER 1N	PIER 1S	PIER 2N	PIER 2S	PIER 3N	PIER 3S	PIER 4N	PIER 4S	PIER 5N
A	621.540	623.539	622.154	623.154	623.514	623.514	623.514	623.514	623.514
B	644.487	644.517	644.467	644.467	644.447	644.447	644.447	644.447	644.447
C	645.08	645.12	644.99	644.95	645.07	645.07	645.07	645.07	645.07

Note:  
All reinforcing bar marks shall be prefixed as follows:

Pier 1N and Pier 1S = PA  
Pier 2N and Pier 2S = PB  
Pier 3N and Pier 3S = PC

#### NOTES:

--- Indicates existing structure.

All piles are HP10x42 steel piles with a design load of 35 tons per pile.

All battered piles shall be inclined 3 in 12 in the direction shown. Subject to the approval of the Engineer the pile batter for pile #5 may be adjusted as required to allow pile driving equipment to clear the existing deck.

Pile layout dimensions are measured along the bottom of footing.

At the option of the Contractor, bearing anchors (or torqued holes), located and supported by templates, may be cast-in-place.

Reinforcing steel in the vicinity of the bridge seat shall be accurately placed to avoid interference with the drilling of bearing anchor holes or the pre-setting of bearing anchors.

For anchor bolt details, see Ohio Standard Drawing BB-1-55.

For reinforcement schedule, see Sheets 63 thru 65 of 76.

The following abbreviations are used:

Elev. = Elevation  
Typ. = Typical  
e.f. = each face  
abt. = about

NO.	REVISIONS	BY	DATE
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OHIO TURNPIKE COMMISSION

PIER MODIFICATIONS

OHIO TURNPIKE OVER S.R. 420 & I-280

HOWARD NEEDLES TAMMEN AND BERGENDOFF

ARCHITECTS ENGINEERS PLANNERS

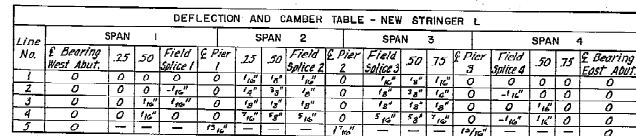
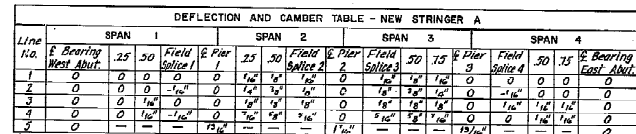
CLEVELAND OHIO

DESIGNED N.A.F. CHECKED J.T.T.

BY JOHN H.A.F. IN CHARGE C.H.W.

DATE: 12-19-88 SCALE: AS SHOWN

CIP: 43-89-11 SHEET 59 OF 76



**Notes :**

Negative values for deflections indicate deflections above chord line. Deflections and adjustments required for vertical curve are given to the nearest 1/16 inch.

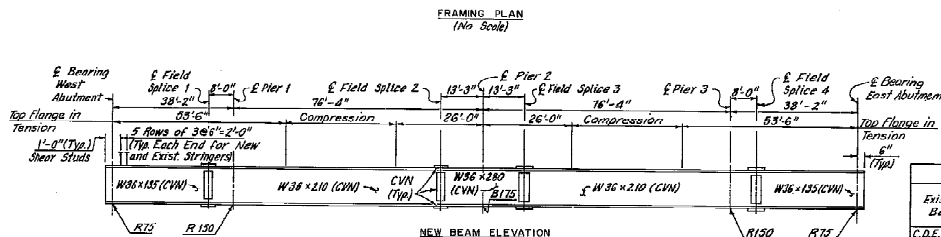
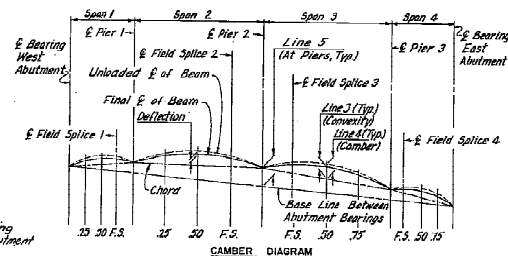
Line 1 Denotes deflection due to weight of steel.

Line 2 Denotes deflection due to remaining dead load.

Line 3 Denotes adjustment required for vertical curve

Line 4 Denotes abn gambler.

Line 5 Denotes vertical off



**Notes:**

All new steel: shall be ASTM A36.

Where a shape or plate is labeled "CVN", the material shall meet minimum notch toughness requirements in accordance with 711.01.

All bolts shall be 7/8"Ø ASTM A325 high strength bolts, except as shown.

**WELDED ATTACHMENTS** for supports of concrete deck finishing machine or any other purpose is prohibited. Only those welds shown on the plans for attachment of shear stud connectors, bearings, and stiffeners shall be permitted.

Shear studs shall be placed perpendicular to centerline of beam.

For Diaphragm, *Steel* Placement and Rivet Inspection  
Details, see Sheet 31 of 76.

For details of Rockers and Bolsters, see Ohio Standard Drawing R8-1-55, revised 2-2/59.

For Field Splice Details, see Ohio Standard Drawing SD-1-69 Sheet 4 of 4. Splice details for W36x210 beam shall be similar to those shown for W36x194 except as follows:

Outside Flange Plates: 11"x11/16"x3'-6 1/2"  
Inside Flange Plates: 4 1/2"x13/16"x3'-6 1/2"  
Number of Flange Plate Bolt spaces: N=5

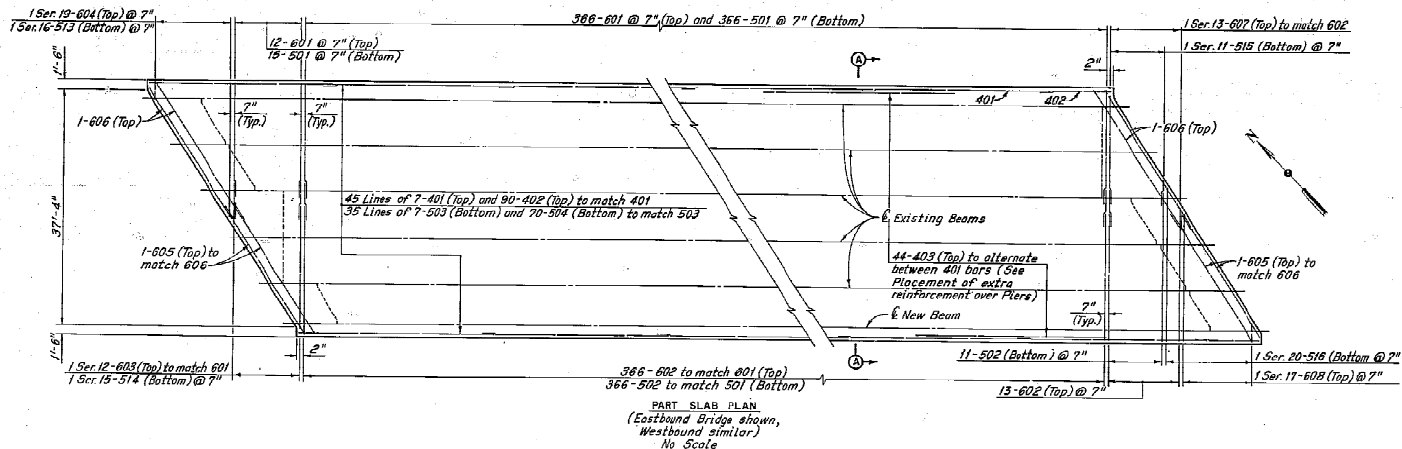
The following abbreviations are used:

Typ. = Typical

Indicates existing structure

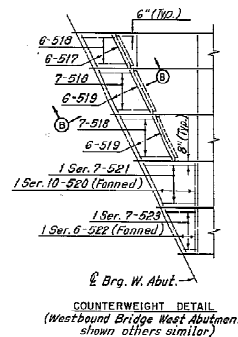
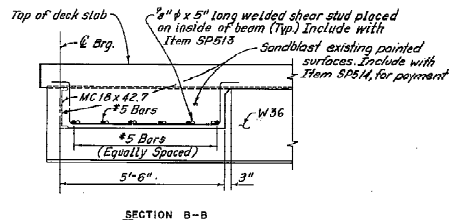
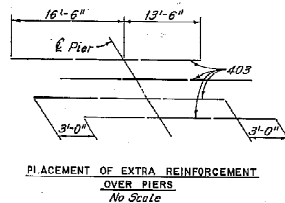
\_\_\_\_\_ Indicates new structural members

NO.	REVISONS	BY	DATE
OHIO TURNPIKE COMMISSION			
FRAMING PLAN			
AND BEAM DETAILS			
OHIO TURNPIKE OVER S.R. 120 & I-280			
HOWARD NEEDLES TAMMEN AND BERGENDOFF			
ARCHITECTS ENGINEERS PLANNERS			
CLEVELAND			OHIO
DESIGNED DRAWN	<i>D.H.S. G.A.A.</i>	CHECKED	<i>D.H.S. R.H.W.</i>
DATE:	<i>12-19-88</i>	IN CHARGE	
		SCALE:	
CIP:	<i>43-89-11</i>	SHEET	<i>60 OF 76</i>



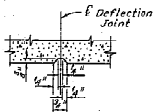
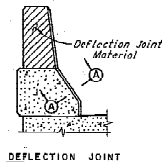
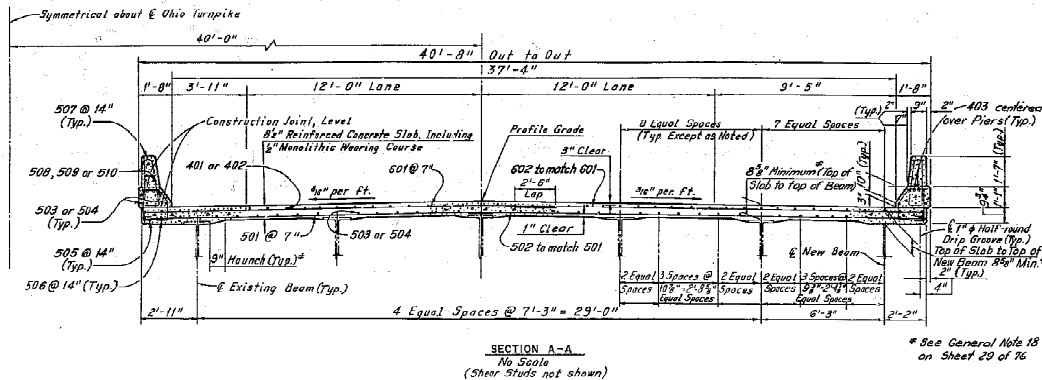
REQUIRED LAP LENGTHS	
No. 4 Bar	= 1'-0" Minimum
No. 5 Bar	= 2'-0" Minimum
No. 6 Bar	= 2'-6" Minimum

Note:  
All reinforcing bar marks  
shall be prefixed ES.



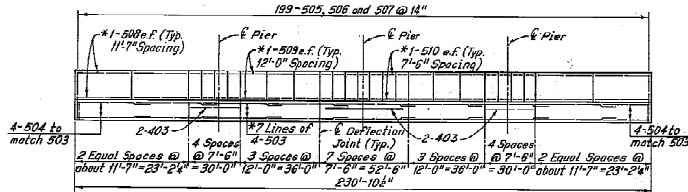
Notes:  
For Section A-A see Sheet 62 of 76.  
For additional notes see Sheet 62 of 76.

OHIO TURNPIKE COMMISSION		
DECK DETAILS		
OHIO TURNPIKE OVER S.R. 420 & I-280		
HOWARD NEEDLES TAMMEN AND BERGENOFF		
ARCHITECTS ENGINEERS PLANNERS		
CLEVELAND OHIO		
DESIGNED BY R.H.W.	CHECKED BY R.H.W.	
DRAWN BY R.H.W.		
DATE: 12-19-88	SCALE: None	
CIP: 43-89-11	SHEET 61 OF 76	



CONCRETE BARRIER AND DEFLECTION JOINT  
No Scale

Notes:  
The deflection joints in the barrier curb may be either 1" gray sponge rubber or 1" gray cellular polyvinyl chloride (PVC) sponge. Either material shall meet the requirements of MASH10 M-153, type 1, except the density of the PVC sponge shall not be less than 20 lbs. per cu. ft.  
Include with item SPAS1A, Class 3 Concrete, Superstructure Deck and Barriers, for payment.



REQUIRED LAP LENGTHS	
No. 4 Bar = 1'-0" Minimum	
No. 5 Bar = 2'-1" Minimum	
No. 6 Bar = 2'-5" Minimum	

		TOP OF PAVEMENT ELEVATIONS											
Location	CL BRG W. ABUT	SPAN 1			SPAN 2			SPAN 3			SPAN 4		
		1/2	1/2	1/2	1/4	1/2	1/2	1/4	1/2	1/2	1/2	1/2	1/2
WESTBOUND BRIDGE	BRAN A	649.35	649.38	650.01	650.03	650.05	650.06	650.05	650.06	650.04	650.02	649.97	649.93
	BRAN B	650.05	650.09	650.11	650.13	650.15	650.18	650.16	650.15	650.14	650.12	650.08	650.03
	BRAN C	650.17	650.20	650.23	650.25	650.26	650.27	650.27	650.26	650.25	650.23	650.20	650.13
	BRAN D	650.29	650.32	650.35	650.37	650.38	650.38	650.38	650.38	650.36	650.34	650.31	650.24
	BRAN E	650.18	650.21	650.24	650.26	650.27	650.27	650.27	650.26	650.24	650.22	650.19	650.16
	BRAN F	650.08	650.11	650.13	650.15	650.15	650.16	650.15	650.14	650.13	650.10	650.07	649.99
	BRAN G	650.11	650.14	650.15	650.16	650.16	650.15	650.14	650.12	650.09	650.05	650.02	649.93
	BRAN H	650.23	650.25	650.26	650.27	650.27	650.28	650.25	650.23	650.20	650.17	650.13	650.03
	BRAN I	650.19	650.17	650.18	650.18	650.18	650.17	650.16	650.14	650.11	650.07	650.03	649.93
	BRAN J	650.24	650.26	650.27	650.27	650.27	650.26	650.24	650.22	650.19	650.15	650.11	650.05
EASTBOUND BRIDGE	BRAN K	650.13	650.15	650.16	650.16	650.15	650.14	650.13	650.10	650.07	650.03	649.99	649.98
	BRAN L	650.04	650.05	650.06	650.06	650.05	650.04	650.02	650.00	649.97	649.93	649.88	649.77

Notes:  
For location of Section A-A see Sheet 61 of 76.  
Longitudinal or Transverse Construction Joints shall not be permitted in the deck slab.  
Finish Pavement Elevations: The elevations shown are finished pavement elevations. Proper allowance shall be made for the dead load deflections caused by the weight of the concrete.  
For Reinforcement Schedules, see Sheets 63 thru 65 of 76.  
The following abbreviations are used:  
Typ. = Typical  
e.f. = each face  
ft. = foot  
--- indicates existing structure.

NO.	REVISIONS	BY	DATE

**OHIO TURNPIKE COMMISSION**

DECK DETAILS

OHIO TURNPIKE OVER S.R. 420 & I-280

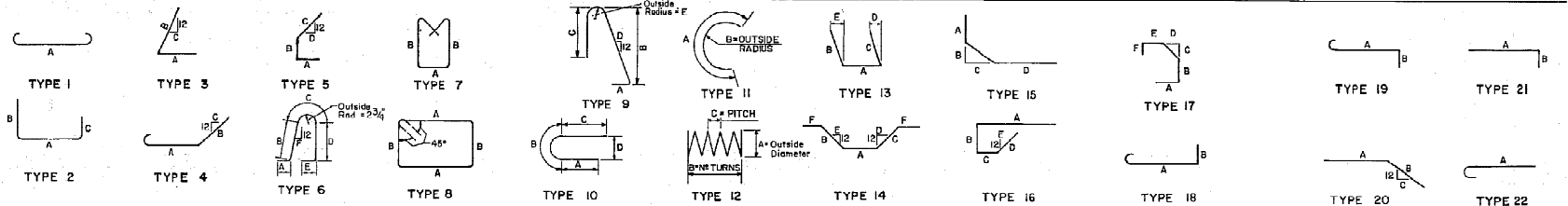
HOWARD NEEDLES TAMMEN AND BERGENOFF  
ARCHITECTS ENGINEERS PLANNERS

CLEVELAND OHIO

DESIGNED R.W. CHANES R.H.M.  
CHECKED R.W. CHANES R.H.M.

DATE: 12-19-88 SCALE: As Shown

CIP: 43-89-11 SHEET 62 OF 76



MARK	NUMBER REQUIRED	LENGTH ft in	TYPE	DIM A ft in	DIM B ft in	DIM C ft in	DIM D ft in	DIM E ft in	DIM F ft in	SERIES INCREMENT ft in	WEIGHT (lbs)
NORTHWEST ABUTMENT EKW EPOXY COATED											
IAA 501	12	10 3	8	3	0	2	10				128
IAA 502	2	10 9	8	2	3	2	10				22
IAA 503	6	18 4	8	3	2	5	9				115
IAA 504	1	19 0	8	3	6	5	9				29
IAA 505	23	4 0	1STR								96
IAA 506	23	6 4	1STR								153
IAA 507	7	5 0	20	2	6	2	6		5.87		37
IAA 508	4	4 11	2	0	2	2	6				21
IAA 509	12	6 9	1STR								84
IAA 510	5	5 9	2	1	10	2	1	2	1		30
IAA 511	5	6 11	2	0	2	2	1	2	1		6
IAA 512	1 SER	5 11	2	2	0	2	1	2	1		27
IAA 513	4	7 2	2	3	2	1	2	1			21
IAA 514	3	6 9	21	0	10						10
IAA 515	2 SER	3 11	9	21	11	0					27
IAA 516	11	8 10	1STR								13
IAA 517	2	6 0	3	3	7	2	6		5.87		96
IAA 518	2 SER	5 12	6 STR								128
IAA 519	8	15 4	1STR								27
IAA 520	8	3 3	1STR								22
IAA 521	4	6 3	1STR								58
IAA 522	11	5 11	2	1	2	2	6	2	6		26
IAA 523	4	6 3	3	3	2	3	2		5.87		29
IAA 524	2	14 0	1STR								10
IAA 525	1	9 9	1STR								21
IAA 601	4	3 6	1STR								21
IAA 602	4	6 3	1STR								38
IAA 603	4	15 9	1STR								94
IAA 801	9	7 9	1STR								186
IAA 802	4	9 0	1STR								96
SEE NOTES											100
TOTAL											1904

NORTHWEST ABUTMENT EPOXY COATED											
IEA 450	41	14 10	21	13	8	1	3				406
IEA 550	14	29	6 STR								431
IEA 551	14	20	6 STR								556
IEA 552	18	17	9 STR								259
IEA 553	26	26	9 STR								725
IEA 554	13	10	0 STR								136
IEA 555	8	12	0 STR								98
IEA 556	12	2 4	21	1	7		10.5				28
IEA 557	12	5 2	9		7.5	2	2	2	1.25	2.75	39
IEA 558	3	7 21	2	10							45
IEA 559	5	11 21	3	2		10.5					22
IEA 560	16	2 8	22	2	1		10.5				78
IEA 561	6	3 7	21	2	10						38
IEA 562	16	4 6	STR								45
IEA 563	8	11	9 STR								25
IEA 564	29	9 9	21	1	11	1	11				113
IEA 565	12	4 1	15		9		8.5	3	0		83
IEA 566	4	1 15		9		2	8.5	3	0		33
IEA 567	3	4 1	15		9		8.5	3	0		18
IEA 568	3	4 1	15		9		8.5	3	0		21
IEA 569	2	8 17		10.5		9	0.5	2	7	—	13
IEA 570	5	2 11	17		10.5		9	0.5	2	7	—
IEA 571	3	2 8	17		10.5		9	8.5	2	7	—
IEA 750	70	13	9 STR								1967
TOTAL											5253

NORTHWEST ABUTMENT NON-EPOXY COATED											
IAA 501	12	10 5	8	2	0	2	11				130
IAA 502	2	10 11	8	2	3	2	11				23
IAA 503	6	18 9	8	3	2	5	11				117
IAA 504	1	18 7	8	3	1	5	11				19
IAA 505	23	4 0	1STR								96
IAA 506	23	6 4	1STR								152
IAA 507	11	6 1	5	3	2		6	2	6	5.87	70
IAA 508	2	5 6	1STR								11
IAA 509	12	6 9	1STR								84
IAA 510	5	5 7	2	1	10	2	1	2	1		30
IAA 511	5	5 10	2	1	11	2	1	2	1		6
IAA 512	1 SER	5 11	2	2	0	2	1	2	1		27
IAA 513	4	7 2	2	3	3	2	1	2	1		21
IAA 514	3	6 11	21	6	2	10					10
IAA 515	2 SER	4 8	1STR								27
IAA 516	11	8 11	1STR								13
IAA 517	4	5 0	21	4	3	10					96
IAA 518	2 SER	5 12	6 STR						5.87		128
IAA 519	8	14	6 STR								27
IAA 520	8	4 9	1STR								22
IAA 521	6	5 3	1STR								58
IAA 522	11	5 11	2	1	2	2	6	2	6		26
IAA 523	4	4 11	20	2	6	2	6		5.87		29
IAA 601	4	3 6	1STR								21
IAA 602	4	6 3	1STR								38
IAA 603	4	15 9	1STR								94
IAA 801	13	7 9	1STR								186
TOTAL											1805

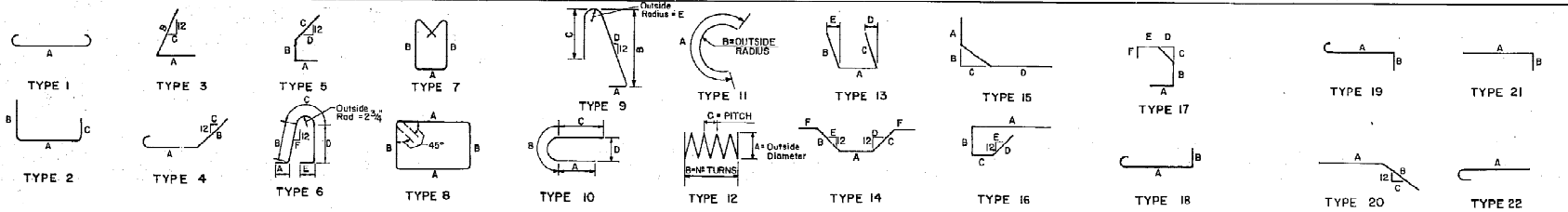
NORTHWEST ABUTMENT EPOXY COATED											
IEA 450	41	14 10	21	13	8	1	3				406
IEA 550	14	29	6 STR								431
IEA 551	14	20	6 STR								556
IEA 552	14	17	9 STR								259
IEA 553	26	26	9 STR								725
IEA 554	13	10	0 STR								136
IEA 555	8	11	9 STR								98
IEA 556	12	2 4	21	1	7		10.5				28
IEA 557	12	5 2	9		7.5	2	2	2	1.25	2.75	39
IEA 558	3	7 21	2	10			10.5				45
IEA 559	5	11 21	3	2		10.5					22
IEA 560	16	2 8	22	2	1		10.5				78
IEA 561	6	3 7	21	2	10						38
IEA 562	16	4 6	STR								45
IEA 563	8	11	9 STR								25
IEA 564	29	9 9	21	1	11	1	11				113
IEA 565	12	4 1	15		9		8.5	3	0		83
IEA 566	4	1 15		9		2	8.5	3	0		33
IEA 567	3	4 1	15		9		8.5	3	0		18
IEA 568	3	4 1	15		9		8.5	3	0		21
IEA 569	2	8 17		10.5		9	0.5	2	7	—	13
IEA 570	5	2 11	17		10.5		9	0.5	2	7	—
IEA 571	3	2 8	17		10.5		9	8.5	2	7	—
IEA 750	70	13	9 STR								1967
TOTAL											5253

Reinforcing Steel Samples  
Refer to OTC General Conditions 06.02 and CMS Section 700.709.01 through 709.05 and 709.06. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structure with the additional steel, spliced in accordance with 509.08.

An allowance of 100 lbs. for replacement of existing reinforcing steel to be used as directed by the Engineer has been included in Item 509.

NO.	REVISIONS	BY	DATE

**OHIO TURNPIKE COMMISSION**  
REINFORCEMENT SCHEDULE  
OHIO TURNPIKE OVER S.R. 420 & I-280  
CLEVELAND  
DESIGNED: J.E.B. IN CHARGE: J.E.B.  
DRAWN: H.E.B. SCALE: 1/2"=1'-0"  
DATE: 12-19-88  
CIP: 43-89-11 SHEET 63 OF 76

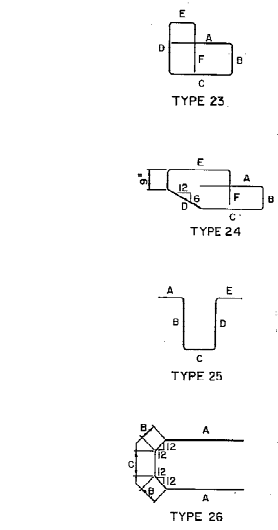


MARK	NUMBER REQUIRED	LENGTH ft in	TYPE	DIM A ft in	DIM B ft in	DIM C ft in	DIM D ft in	DIM E ft in	DIM F ft in	SERIES INCREMENT in	WEIGHT (lbs)
SOUTHWEST ABUTMENT NON-EPOXY COATED											
IAC 501	12	10 3	8	2	0	2	10				128
IAC 502	2	10 9	8	2	3	2	10				22
IAC 503	4	18 7	8	3	2	5	10				114
IAC 504	1	18 5	8	3	1	5	10				19
IAC 505	23	4 0	1STR								96
IAC 506	23	4 0	1STR								152
IAC 507	11	6 1	5	3	2	6		5.87			70
IAC 508	2	5 6	1STR								11
IAC 509	13	6 7	1STR								84
IAC 510	5	5 7	1STR								18
IAC 511	1	5 10	2	1	11	2	1				27
IAC 512	1 SER	5 11	2	0	2	1	2	1			5
IAC 513	5	6 10	21	6	1		10				46
IAC 514	13	8 1STR									29
IAC 515	1 SER	4 7	2	1	2	1					27
IAC 516	11	8 10	1STR								154
IAC 517	4	5 0	21	4	3	10					12
IAC 518	2 SER	3 5	1STR								5.87
IAC 519	5	11 10	1STR								80
IAC 520	8	14 6	1STR								121
IAC 521	6	5 3	1STR								40
IAC 522	11	5 11	2	1	2	2	6				33
IAC 523	4	4 11	20	2	6	2	6				68
IAC 601	4	1 6	1STR								21
IAC 602	4	6 3	1STR								95
IAC 603	4	15 9	1STR								263
IAC 801	13	7 9	1STR								1799
TOTAL											1799

SOUTHWEST ABUTMENT EPOXY COATED											
IAC 450	41	14 10	21	13	8	1	3				406
IAC 550	14	29	6	1STR							431
IAC 551	26	20	6	1STR							556
IAC 552	14	17	9	1STR							259
IAC 553	26	26	9	1STR							725
IAC 554	13	10	0	1STR							136
IAC 555	8	11	9	1STR							29
IAC 556	12	2 4	21	1	7		10.5				65
IAC 557	12	5 2	9	7.5	2	4	2	2	1.25	3.75	100
IAC 558	2 SER	3 7	21	2	10		10.5				39
IAC 559	5	3 11	21	3	2		10.5				1
IAC 560	6	3 7	21	2	10		10.5				1
IAC 561	16	4	6	1STR							75
IAC 562	9	12	0	1STR							100
IAC 563	29	8 9	11	11	11						12
IAC 564	12	4 7	15	9	6	8.5	3	0			83
IAC 565	1 SER	4 1	15	7	2	8.5	3	0			1.5
IAC 566	1	4 7	15	9	6	8.5	3	0			0.75
IAC 567	3	4 1	15	7	2	8.5	3	0			1967
IAC 568	5	2 8	17	10.5	9	8.5	2				12
IAC 569	2	11	17	10.5	9	8.5	1				12
IAC 570	3	2 8	17	10.5	9	8.5	2				12
IAC 750	70	13	9	1STR							1967
TOTAL											5238

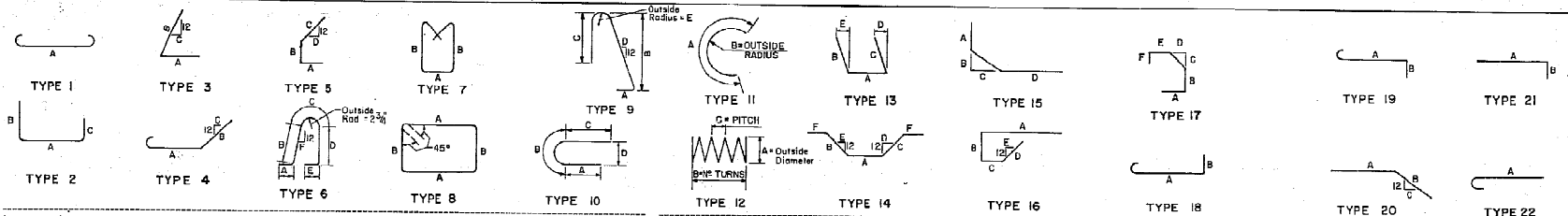
MARK	NUMBER REQUIRED	LENGTH ft in	TYPE	DIM A ft in	DIM B ft in	DIM C ft in	DIM D ft in	DIM E ft in	DIM F ft in	SERIES INCREMENT in	WEIGHT (lbs)
SOUTHWEST ABUTMENT NON-EPOXY COATED											
IAB 501	12	10 3	8	2	0	2	10				128
IAB 502	2	10 9	8	2	3	2	10				22
IAB 503	6	18 4	8	3	2	5	9				115
IAB 504	1	19 0	8	3	6	5	9				20
IAB 505	23	4 0	1STR								96
IAB 506	23	4 0	1STR								152
IAB 507	7	5 0	20	2	6	2	6				70
IAB 508	4	4 11	21	2	6	2	6				11
IAB 509	12	6 9	1STR								84
IAB 510	5	5 9	2	1	10	2	1				18
IAB 511	1	5 11	2	2	0	2	1				27
IAB 512	1 SER	4 7	2	2	0	2	1				5
IAB 513	4	7 2	2	2	1	2	1				27
IAB 514	3	11 9	21	11	0		10				27
IAB 515	2 SER	4 7	1STR								154
IAB 516	11	8 10	1STR								12
IAB 517	2	6 0	3	3	7	2	6				5.87
IAB 518	1	4 3	1STR								80
IAB 519	5	12 7	1STR								121
IAB 520	8	15 4	1STR								40
IAB 521	6	3 0	1STR								33
IAB 522	11	5 11	2	1	2	2	6				68
IAB 523	4	6 3	3	2	3	2					21
IAB 524	2	14 0	1STR								95
IAB 525	1	9 3	1STR								263
IAB 601	4	3 6	1STR								1799
IAB 602	4	6 3	1STR								1
IAB 603	4	15 9	1STR								1
IAB 801	9	7 9	1STR								186
IAB 802	4	9 0	1STR								96
TOTAL											1807

SOUTHWEST ABUTMENT EPOXY COATED											
IAB 450	41	14 10	21	13	8	1	3				406
IAB 550	14	29	6	1STR							431
IAB 551	26	20	6	1STR							556
IAB 552	14	17	9	1STR							259
IAB 553	26	26	9	1STR							725
IAB 554	13	10	0	1STR							136
IAB 555	8	12	0	1STR							29
IAB 556	12	2 4	21	1	7		10.5				65
IAB 557	12	5 2	9	7.5	2	4	2	2	1.25	3.75	100
IAB 558	2 SER	3 7	21	2	10		10.5				39
IAB 559	5	3 11	21	3	2		10.5				1
IAB 560	6	3 7	21	2	10		10.5				1
IAB 561	16	4 6	1STR								75
IAB 562	9	12	0	1STR							100
IAB 563	29	8 9	11	11	11						12
IAB 564	12	4 7	15	9	6	8.5	3	0			83
IAB 565	1 SER	4 1	15	7	2	8.5	3	0			1.5
IAB 566	1	4 7	15	9	6	8.5	3	0			0.75
IAB 567	3	4 1	15	7	2	8.5	3	0			1967
IAB 568	5	2 8	17	10.5	9	8.5	2				12
IAB 569	2	11	17	10.5	9	8.5	1				12
IAB 570	3	2 8	17	10.5	9	8.5	2				12
IAB 750	70	13	9	1STR							1967
TOTAL											5238



Note: For notes see Sheet 63 of 76.

NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
REINFORCEMENT SCHEDULE			
OHIO TURNPIKE OVER S.R. 420 & I-280			
HOWARD NEEDLES TAMMEN AND BERGENDOFF			
ARCHITECTS ENGINEERS PLANNERS			
CLEVELAND OHIO			
DESIGNED	W.E.B.	CHECKED	J.L.B.
DRAWN	W.E.B.	IN CHARGE	R.H.W.
DATE:	12-19-88	SCALE	
CIP:	43-89-11	SHEET	64 OF 76



MARK	NUMBER REQUIRED	LENGTH ft in	DIM A ft in	DIM B ft in	DIM C ft in	DIM D ft in	DIM E ft in	DIM F ft in	SERIES INCREMENT ft in	WEIGHT (lbs)
PIER 1 NORTH & SOUTH NON-EPOXY COATED										
PA 401	68	6 6 26	1 10	7	1 10					295
PA 501	4	6 8 STR								28
PA 502	6	15 11 26	6 9	7	1 6					100
PA 503	6	11 3 8	2 8	2 8						11
PA 504	4	2 8 STR								188
PA 505	26	6 11 2	2 8	2 3	2 3					80
PA 601	8	6 8 STR								47
PA 602	8	3 11 22	3 3							332
PA 701	16	10 2 1	8 6							308
PA 702	16	9 5 1	7 9							423
PA 1001	10	9 10 21	8 4	1 10						660
PA 1002	10	15 4 21	13 10	1 10						455
PA 1003	6	18 0 STR								425
PA 1004	8	12 4 STR								367
PA 1005	4	21 0 21	17 10	3 6						132
PA 1006	2	15 4 21	12 3	3 6						333
PA 1007	8	9 8 21	8 2	1 10						
TOTAL										4269

MARK	NUMBER REQUIRED	LENGTH ft in	DIM A ft in	DIM B ft in	DIM C ft in	DIM D ft in	DIM E ft in	DIM F ft in	SERIES INCREMENT ft in	WEIGHT (lbs)
PIER 2 NORTH & SOUTH NON-EPOXY COATED										
PB 401	68	6 6 26	1 10	7	1 10					295
PB 501	4	6 8 STR								28
PB 502	6	15 11 26	6 9	7	1 6					100
PB 503	6	11 3 8	2 8	2 8						11
PB 504	4	2 8 STR								188
PB 505	26	6 11 2	2 8	2 3	2 3					80
PB 601	8	6 8 STR								47
PB 602	8	3 11 22	3 3							332
PB 701	16	10 2 1	8 6							308
PB 702	16	9 5 1	7 9							423
PB 1101	12	11 3 21	9 7	2 0						1148
PB 1102	12	18 0 21	16 4	2 0						618
PB 1103	9	12 4 STR								455
PB 1104	10	12 4 STR								471
PB 1105	4	22 3 21	19 1	3 6						163
PB 1106	2	15 4 21	12 3	3 6						1006
PB 1107	16	11 10 21	10 2	2 0						
TOTAL										6439

MARK	NUMBER REQUIRED	LENGTH ft in	DIM A ft in	DIM B ft in	DIM C ft in	DIM D ft in	DIM E ft in	DIM F ft in	SERIES INCREMENT ft in	WEIGHT (lbs)
PIER 3 NORTH & SOUTH NON-EPOXY COATED										
PC 401	68	6 6 26	1 10	7	1 10					295
PC 501	4	6 8 STR								28
PC 502	6	15 11 26	6 9	7	1 6					100
PC 503	6	11 3 8	2 8	2 8						11
PC 504	4	2 8 STR								188
PC 505	26	6 11 2	2 8	2 3	2 3					80
PC 601	8	6 8 STR								47
PC 602	8	3 11 22	3 3							332
PC 701	16	10 2 1	8 6							308
PC 702	16	9 5 1	7 9							423
PC 1001	10	9 10 21	8 4	1 10						660
PC 1002	10	15 4 21	13 10	1 10						455
PC 1003	6	17 10 STR								425
PC 1004	8	12 4 STR								367
PC 1005	4	20 10 21	17 8	3 6						132
PC 1006	2	15 2 21	12 0	3 6						333
PC 1007	8	9 8 21	8 2	1 10						
TOTAL										4244

MARK	NUMBER REQUIRED	LENGTH ft in	DIM A ft in	DIM B ft in	DIM C ft in	DIM D ft in	DIM E ft in	DIM F ft in	SERIES INCREMENT ft in	WEIGHT (lbs)
SUPERSTRUCTURE R.B. & W.B. EPOXY COATED										
RS 401	630	30 0 STR								12625
RS 402	180	18 5 22	17 11							2314
RS 403	276	30 0 STR								5557
RS 501	762	18 4 STR								14571
RS 502	754	23 9 STR								18678
RS 503	602	30 0 STR								18877
RS 504	172	18 9 STR								3364
RS 505	796	3 2 21	10.5	16.5	9					1868
RS 506	796	3 0 17	10.5	16.5	9					2491
RS 507	796	5 2 1	7.5	2	2 2	1.25	2.75			4290
RS 508	64	11 4 STR								757
RS 509	94	11 9 STR								1177
RS 510	240	7 3 STR								1825
RS 511	2	2 6 STR								
RS 512	2	2 6 STR								
RS 513	16	19 8 STR								370
RS 514	2	2 6 STR								1
RS 515	2	2 6 STR								1
RS 516	11	16 9 STR								1
RS 517	20	25 6 STR								1
RS 518	24	6 9 STR								1
RS 519	80	9 1 25	9	1	6	5	3	1	6	9
RS 520	48	7 9 STR								1
RS 521	4	4 7 STR								1
RS 522	10	7 9 STR								1
RS 523	12	3 25	9	1	6	8	3	1	6	9
RS 524	4	4 7 STR								1
RS 525	7	8 9 25	9	1	6	2	0	1	6	9
RS 526	7	8 9 25	9	1	6	4	9	1	6	9
RS 601	756	22 10 22	22	2	2					25923
RS 602	758	21 1 22	20	5						24004
RS 603	2	2 6 STR								
RS 604	12	18 10 STR								
RS 605	3	2 22	2	6						
RS 606	19	24 2 22	23	6						
RS 607	8	22 3 STR								
RS 608	5	0 STR								
RS 609	13	19 10 STR								
RS 610	3	2 22	2	6						
RS 611	17	22 4 22	21	8						
TOTAL										146998

Note: For notes see Sheet 63 of 76.

NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
REINFORCEMENT SCHEDULE			
OHIO TURNPIKE OVER S.F. 420 & I-280			
HOWARD NEEDLES TAMMEN AND BERGENDOFF			
ARCHITECTS ENGINEERS PLANNERS			
CLEVELAND OHIO			
DESIGNED	W.E.B.	CHECKED	J.L.V.
DRAWN	W.E.B.	IN CHARGE	R.H.W.
DATE:	12-19-88	SCALE:	
CIP:	43-89-11	SHEET	65 OF 76





INDEX OF SHEETS

TITLE SHEET.	B1
SURVEY CONTROL	B2
SCHEMATIC	B3
TYPICALS	B4, B4A, B4B, 5
GENERAL NOTES	B6 - B10
SIDE ROAD MAINTENANCE OF TRAFFIC.	B11, B11A-B11F, B12, B12A-B12D, B13, B13A-B13E, B14, B14A-B14E
GENERAL SUMMARY.	B15 - B19
CALCULATIONS AND SUBSUMMARIES.	B20-B23, B23A, B24-B33
STORM WATER POLLUTION PREVENTION PLAN.	B34
PLAN AND PROFILE	B35-B44, B44A, B44B, B44C
PAVEMENT ELEVATION TABLE.	B45 - B50
CROSS SECTIONS	B51-B85, B85A-B85D
ROADWAY DETAIL	B86-B87, B87A
DRAINAGE DETAILS	B88 - B96
TRAFFIC CONTROL	B97-B109, B109A, B110, B110A, B111

STRUCTURES	B111A-B111K, B112, B112A-B112S, B113-B135
SOIL PROFILE	
LCI COMMUNICATIONS CORP.	1-2, 20-34, 81-85

OHIO TURNPIKE COMMISSION STANDARD DRAWINGS

AS - 1	06-11-98	CBR - 1	02-20-02	RPM - 1	02-25-00
AS - 2	12-26-97	CBR - 2	02-20-02		
AS - 3	06-11-98	CBR - 3	02-20-02	TC - 1	09-11-98
AS - 4	06-11-98	CJ - 2	12-10-99	TC - 2	06-25-97
AS - 5	11-11-97	DJ - 1	11-11-97		
		DJ - 2	11-11-97	TCB - 1	01-02-02
CB - 1	04-27-01	DJ - 4	11-11-97	TCB - 2	06-25-97
CB - 2	01-01-97	DR - 1	01-01-97	TCR - 9.1	01-02-02
CB - 4	02-20-02			TCR - 1	04-28-98
CB - 5	02-20-02	EPA - 1	05-31-00	TCR - 2	02-20-02
CL - 2	09-14-01			TCR - 9	02-25-00
F - 1	04-18-97	GR - 1	02-20-02	TCR - 10	01-02-02
		GR - 2	02-20-02	TCR - 11PM	01-12-98
				TCR - 11PS	01-12-98
		JB - 1	01-01-97	TCR - 12	02-04-00
				TCR - 13	01-01-97
XOV - 3	02-20-02	MCC - 1	02-20-02	TCR - 14	06-04-01
		MCC - 2	02-20-02	TCR - 15	01-02-02
				U - 1	01-01-97

OHIO DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS

BP-2.2	07-28-00	RM-4.2	01-18-02	TC-7.65	01-19-01
BP-3.1	07-28-00	RM-4.3M	10-21-97	TC-12.30	01-19-01
BP-2.1	07-28-00	MC-4.4M	10-21-97	TC-21.10	01-19-01
BS-1-93	12-19-94			TC-21.20	01-19-01
		BR-1M	01-06-99	TC-21.40	01-18-02
FB-1-82	12-19-94	MH-1.1	07-20-01	TC-21.41	01-18-02
		MH-1.2	07-20-01	TC-22.20	01-19-01
GR-1.1M	10-21-97	MT-35.10	04-20-01	TC-31.21	04-20-01
GR-1.2M	01-03-96	MT-95.30M	04-25-94	TC-32.10	10-19-01
GR-1.3M	11-30-94	MT-95.31M	04-25-94		
GR-2.1M	04-14-98	MT-95.32M	04-25-94	TC-41.10	01-19-01
GR-2.2M	10-21-97	MT-95.40M	04-25-94	TC-41.20	01-19-01
GR-3.1M	10-21-97	MT-96.10M	01-30-95	TC-41.40	01-18-02
GR-3.2M	10-21-97	MT-96.21M	01-30-95	TC-42.10	01-19-01
GR-4.2M	10-21-97	MT-98.12M	06-24-93	TC-42.20	04-20-01
GR-5.2M	11-30-94	MT-98.13M	06-24-93	TC-51.11	04-20-01
HL-20.11M	03-31-95	MT-98.15M	06-24-93	TC-51.12	04-20-01
HL-20.31M	05-01-95	MT-98.16M	06-24-93	TC-52.10	04-20-01
HL-30.11	07-20-01	MT-98.17M	04-25-94	TC-52.20	04-20-01
HL-30.22	07-20-01	MT-101.60M	04-25-94	TC-61.10	01-19-01
I-2.1	07-20-01	PCB-91	07-06-99	TC-65.10M	11-01-95
GR-3.5M	10-21-97	RB-1-55	02-02-59	TC-18.24	01-18-02
		SD-1-69	06-12-69	DM-1.1	07-20-01
RM-1.1	4-24-99	MT-105.10M	04-25-94	DM-4.3	04-29-99
RM-4.1M	10-21-97	MT-105.11M	04-25-94	DM-4.4	04-29-99
		MT-97.11M	01-30-95	AS-1-81	04-20-01



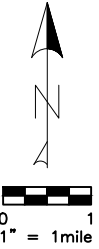
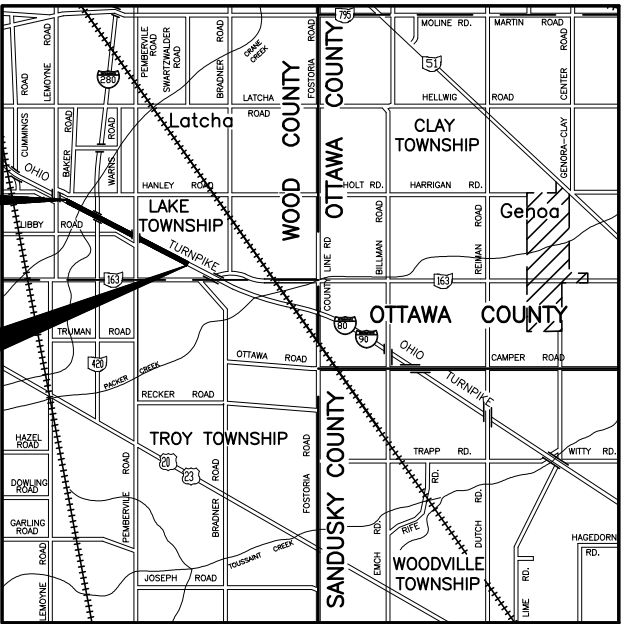
OHIO TURNPIKE COMMISSION  
THE JAMES W. SHOCKNESSY OHIO TURNPIKE

CONTRACT 77-02-01  
THIRD LANE CONSTRUCTION  
M.P. 71.05 TO M.P. 72.59

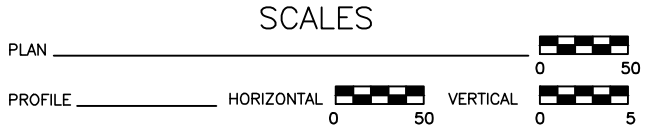
STA. 424+75.00 TO STA. 511+00.00  
WOOD COUNTY

BEGIN PROJECT  
STA. 424+75  
M.P. 71.05

END PROJECT  
STA. 511+00.00  
M.P. 72.59



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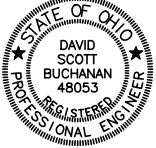
THE FOLLOWING SHEETS PREPARED BY:

B2, B4A, B4B, B11C-B11F, B12, B12A-B12D,  
B13, B13A-B13E, B14, B14A, B14D, B14E,  
B23A, B44B, B44C, B85A-B85D, B87A,  
B109A, B110, B110A, B111, B111A-B111K,  
B112, B112A-B112S



Akron Cleveland Columbus

564 White Pond Drive  
Akron, Ohio 44320-1100  
(330) 836-9111



D.S. BUCHANAN REG. ENGINEER NO. 48053

APPROVED FOR  
THE OHIO TURNPIKE COMMISSION  
BY

CHIEF ENGINEER

DATE

RECOMMENDED FOR APPROVAL  
BY  
URS GREINER WOODWARD CLYDE, INC.

REVIEW CONSULTANT

DATE

PREPARED BY:

acla  
adache-ciuni-lynn associates  
CONSULTING ENGINEERS  
5595 TRANSPORTATION BOULEVARD  
CLEVELAND, OHIO 44125  
PH (216) 518-5544 FAX (216) 518-5545

JOSEPH R. CIUNI DATE

DESIGN CONTRACT NO. 71-97-17

# STRUCTURE – GENERAL NOTES

THESE NOTES APPLY ONLY TO THE STRUCTURES LOCATED AT M.P. 71.7, M.P. 71.9 AND M.P. 72.0 AS SHOWN ON SHEETS B111G THROUGH B112S OF B135. THE NOTES APPLY TO EACH STRUCTURE UNLESS NOTED BY THE FOLLOWING:

- ② NEW EXIT 71 RAMP OVER TURNPIKE, M.P. 71.9 (PIER 2 ONLY)
- ③ PEMBERVILLE ROAD OVER TURNPIKE. M.P. 72.0

## DESIGN SPECIFICATIONS

THESE STRUCTURES CONFORM TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1996, INCLUDING THE 1997 AND 1998 INTERIM SPECIFICATIONS, AND THE ODOT BRIDGE DESIGN MANUAL.

## DESIGN LOADING

- ② HS25–44 CASE I, THE ALTERNATE MILITARY LOADING, AND A 30 P.S.F. FUTURE WEARING SURFACE.
- ③ HS20–44 CASE II, THE ALTERNATE MILITARY LOADING, AND A 60 P.S.F. FUTURE WEARING SURFACE.

## DESIGN STRESSES

- CONCRETE CLASS S – COMPRESSIVE STRENGTH 4500 P.S.I. (SUPERSTRUCTURE) ③
- CONCRETE CLASS C – COMPRESSIVE STRENGTH 4000 P.S.I. (SUBSTRUCTURE)
- REINFORCING STEEL – ASTM A615, A616, A617  
GRADE 60 MINIMUM YIELD STRENGTH 60,000 P.S.I.  
SPIRAL REINFORCEMENT MAY BE PLAIN BARS,  
ASTM A82 OR A615.
- NEW STRUCTURAL STEEL ASTM A572 – YIELD STRENGTH 50,000 P.S.I. ③

## ODOT STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFERENCE SHALL BE MADE TO THE FOLLOWING OHIO DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS:

AS–1–81	REVISED	04–20–01
BR–1	REVISED	01–06–99
BS–1–93	DATED	12–19–94

REFERENCE SHALL BE MADE TO THE FOLLOWING OHIO DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL SPECIFICATIONS:

944	DATED	12–07–95
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## UTILITY LINES

THE CONTRACTOR SHALL EXERCISE EXTREME CARE TO PROTECT THE EXISTING UTILITY LINES IN THE VICINITY OF THE STRUCTURE WHILE PERFORMING ANY WORK. THE CONTRACTOR AND UTILITY COMPANY(IES) ARE REQUESTED TO COOPERATE BY ARRANGING WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER BE HELD TO A MINIMUM. ALL EXPENSE INVOLVED IN PERMANENT OR TEMPORARY RELOCATION (INSTALLING) THE AFFECTED UTILITY LINES SHALL BE IN ACCORDANCE WITH SP 117.

REFER TO SHEET B6 OF B135 FOR FURTHER INFORMATION ON EXISTING UTILITIES.

## EXISTING STRUCTURE PLANS

THE ORIGINAL CONSTRUCTION PLANS OR THE DECK REPLACEMENT DESIGN PLANS MAY BE EXAMINED BY PROSPECTIVE BIDDERS AT THE OFFICES OF URS, 564 WHITE POND DRIVE, AKRON, OHIO 44320, TELEPHONE: (330) 836–9111.

## EXISTING STRUCTURE VERIFICATION

DETAILS, DIMENSIONS, AND ELEVATIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND/OR FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO SECTION 513.02 OF THE SPECIFICATIONS AND O.T.C. GENERAL CONDITIONS G–2.04 AND G–5.02.

CONTRACT BID PRICES SHALL BE BASED UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE BY THE CONTRACTOR. HOWEVER, ALL PROJECT WORK SHALL BE BASED UPON ACTUAL DETAILS, DIMENSIONS, ELEVATIONS, AND SKEW ANGLES WHICH HAVE BEEN FIELD VERIFIED BY THE CONTRACTOR. THE STRUCTURAL STEEL AND STRUCTURAL STEEL DECK JOINTS SHALL NOT BE FABRICATED UNTIL THE ACTUAL DETAILS, DIMENSIONS, ELEVATIONS, AND SKEW ANGLES HAVE BEEN FIELD VERIFIED BY THE CONTRACTOR.

ANY ADDITIONAL COST RESULTING FROM VARIATIONS FROM PLAN DIMENSIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO ADDITIONAL PAYMENT OVER THE UNIT PRICE BID WILL BE AWARDED BY THE COMMISSION.

## DIMENSIONS

DIMENSIONS GIVEN ARE MEASURED HORIZONTALLY AND AT SIXTY (60) DEGREES FAHRENHEIT, UNLESS OTHERWISE NOTED.

## DECK PROTECTIVE METHOD ③

THE DECK PROTECTIVE METHOD FOR THE SUPERSTRUCTURE DECK IS EPOXY COATED REINFORCING STEEL IN THE TOP AND BOTTOM MATS, TWO AND ONE–HALF (2 1/2) INCH CONCRETE COVER AND CONCRETE WEATHERPROOFING SEALER ON THE TOP SURFACE.

## MONOLITHIC WEARING SURFACE ③

THE THICKNESS OF THE MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE ONE (1.0) INCH.

## EPOXY COATED REINFORCING STEEL SUPPORT ③

IN ACCORDANCE WITH THE REQUIREMENTS OF SP 509 AND SECTION 509.09 OF THE SPECIFICATIONS THE TOP AND BOTTOM MATS OF ALL LONGITUDINAL AND TRANSVERSE EPOXY COATED REINFORCING STEEL SHALL BE SUPPORTED BY APPROVED EPOXY COATED DEVICES WITH SPACING NOT EXCEEDING THREE (3) FOOT CENTERS IN EACH DIRECTION. BROKEN CONCRETE, BRICKS, ETC. SHALL NOT BE USED FOR SUPPORT OF REINFORCING STEEL.

## CONCRETE WEATHERPROOFING

ITEM SP 536–CONCRETE WEATHERPROOFING SHALL BE APPLIED TO THE FOLLOWING NEW EXPOSED CONCRETE SURFACES OF THE BRIDGE:

- THE TOPS OF NEW SUPERSTRUCTURE SLABS. ③
- ALL NEW PARAPET SURFACES AND SLAB SIDE EDGES. ③
- THE BOTTOM SURFACE OF THE NEW SUPERSTRUCTURE SLAB FROM THE SLAB SIDE EDGE TO THE EXTERIOR STRINGER FLANGE. ③
- NEW APPROACH SLABS AND BARRIERS ON THE APPROACH SLABS. ③
- NEW EXPOSED CONCRETE SURFACES OF ALL ABUTMENTS AND PIERS. ② ③

CARE SHALL BE TAKEN NOT TO APPLY WEATHERPROOFING ON CONSTRUCTION JOINT SURFACES, SURFACES TO RECEIVE JOINT SEALER OR FASCIA BEAM PAINT.

## ITEM 503 – UNCLASSIFIED EXCAVATION, AS PER PLAN

UNCLASSIFIED EXCAVATION SHALL BE IN ACCORDANCE WITH SECTION 503 OF THE SPECIFICATIONS EXCEPT THAT THE BACKFILL MATERIAL BEHIND THE ABUTMENTS SHALL BE GRANULAR MATERIAL AS PER SECTION 203.02 OF THE SPECIFICATIONS AND PLACED IN LIFTS NOT TO EXCEED A THICKNESS OF SIX (6) INCHES.

## PILE DRIVING

IF EQUIPMENT FOR PILE DRIVING OPERATIONS OCCUPIES ANY PORTION OF THE EXISTING STRUCTURE, STRESS CALCULATIONS BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF OHIO SHALL BE SUBMITTED TO THE ENGINEER IN ACCORDANCE WITH SECTION 501.09 OF THE SPECIFICATIONS.

## PILES DRIVEN TO BEDROCK

PILES SHALL BE DRIVEN TO REFUSAL ON BEDROCK. REFUSAL SHALL BE CONSIDERED AS OBTAINED BY PENETRATING SOFT BEDROCK FOR SEVERAL INCHES WITH A MINIMUM RESISTANCE OF 20 BLOWS PER INCH OR REFUSAL SHALL BE CONSIDERED AS OBTAINED AFTER THE PILE HAS CONTACTED HARD BEDROCK AND THE PILE HAS THEN RECEIVED AT LEAST 20 BLOWS.

	RECORD DRAWING			05/04
NO.	REVISIONS			BY DATE
OHIO TURNPIKE COMMISSION				
STRUCTURE GENERAL NOTES				
M.P. 71.9, 72.0			WOOD COUNTY	
<b>URS</b>			564 White Pond Drive Akron, Ohio 44320-1100 (330) 836-9111	
Akron Cleveland Columbus				
DESIGNED:	M.D.P.	CHECKED:	R.S.C.	DATE: 02//01/02
DRAWN:	S.F.W.	IN CHARGE:	P.D.H.	SCALE: NONE
CONTRACT 77-02-01 SHEET B111AOF B135				

# STRUCTURE – GENERAL NOTES

PILE DESIGN LOADS (SAFE BEARING CAPACITY) ②  
THE DESIGN LOAD FOR THE PIER 2 PILES IS 62.5 TONS PER PILE,

PILE DESIGN LOADS (SAFE BEARING CAPACITY) ③  
THE DESIGN LOAD FOR THE REAR ABUTMENT PILES IS 52 TONS PER PILE  
THE DESIGN LOAD FOR THE FORWARD ABUTMENT PILES IS 53 TONS PER PILE

BRIDGE DECK ELEVATIONS, SLAB THICKNESS, AND APPROACH PROFILES ③

IN ORDER TO MEET ROADWAY GRADES, TO ASSURE THE CONSTRUCTION OF THE REQUIRED THICKNESS OF DECK SLABS, AND TO ASSURE THE PROPER LOCATION OF THE REINFORCING STEEL IN THE DECK SLABS, THE CONTRACTOR SHALL OBTAIN THE ELEVATIONS OF THE TOP OF THE NEW STEEL BEAMS AT THE LOCATIONS SHOWN IN THE TABLE ON SHEET B112P OF B135 FOR THE FINAL PAVEMENT ELEVATIONS. THE CONTRACTOR SHALL COMPUTE THE DECK SCREED ELEVATIONS UTILIZING THE DEAD LOAD DEFLECTIONS. THE CONTRACTOR SHALL THEN CALCULATE THE DECK THICKNESS OVER THE BEAMS USING THE DECK SCREED ELEVATIONS AND THE TOP OF BEAM ELEVATIONS. THE CONTRACTOR SHALL FURNISH THE ELEVATIONS TO THE ENGINEER FOR FINAL CHECKING. IF THE COMPUTED DECK THICKNESS IS FOUND TO BE LESS THAN THE MINIMUM THICKNESS REQUIRED, THE FINAL PAVEMENT ELEVATIONS SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER. FORM WORK SHALL NOT PROCEED UNTIL A CHECK OF THE FINAL ELEVATIONS HAS BEEN PERFORMED BY THE ENGINEER.

THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED UPON 8 1/2" THICK CONCRETE OUTSIDE THE HAUNCH AREAS, AND THE AVERAGE THICKNESS OF CONCRETE PLACED OVER THE PROPOSED BEAMS AT THE HAUNCHES. A TYPICAL HAUNCH WIDTH OF NINE (9) INCHES SHALL BE USED FOR COMPUTING THE QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN SIX (6) AND TWELVE (12) INCHES, PROVIDED THAT THE SLOPE SHALL NOT BE MORE THAN 1:4 FOR A HAUNCH LESS THAN NINE (9) INCHES IN WIDTH.

PRIOR TO PLACING THE APPROACH SLABS, THE CONTRACTOR SHALL PROVIDE THE ENGINEER THE EDGE OF NEW AND EXISTING PAVEMENT ELEVATIONS AND EDGE OF SHOULDER ELEVATIONS AT 25 FOOT INTERVALS FOR A DISTANCE OF 200 FEET BEYOND THE END OF THE APPROACH SLAB, AND AS BUILT ELEVATIONS OF THE ABUTMENT AND DECK SLABS. AFTER RECEIPT OF THESE ELEVATIONS, THE ENGINEER SHALL CALCULATE AND PROVIDE TO THE CONTRACTOR FINAL ELEVATIONS FOR THE APPROACH SLABS AND APPROACH PAVEMENT. NO APPROACH SLABS SHALL BE POURED NOR SHALL PAVING COMMENCE UNTIL RECEIPT OF THESE FINAL ELEVATIONS.

PAYMENT FOR THE ABOVE MENTIONED WORK SHALL BE INCLUDED WITH THE LUMP SUM PRICE BID FOR ITEM SP 623–CONSTRUCTION LAYOUT SURVEY.

REPLACEMENT OF EXISTING REINFORCING STEEL ③

ANY EXISTING REINFORCING BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND WHICH ARE MADE UNUSABLE BY THE CONCRETE REMOVAL OPERATIONS OF THE CONTRACTOR SHALL BE REPLACED WITH NEW STEEL AT THE EXPENSE OF THE CONTRACTOR. DRILLING DOWEL HOLES, FURNISHING AND PLACING SP 956 NONSHRINKING EPOXY MORTAR, AND REINFORCING BAR DOWELS, WHERE NEEDED TO REPLACE EXISTING REINFORCEMENT DAMAGED BY THE CONTRACTOR, SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION, SHALL BE REPLACED WITH NEW STEEL. AN ALLOWANCE HAS BEEN INCLUDED IN THE QUANTITIES FOR ITEM SP 509 FOR THIS PURPOSE.

REINFORCING BAR CLEARANCES

REINFORCING BAR CLEARANCES SHALL BE ASSUMED TO BE 2 INCHES UNLESS OTHERWISE NOTED IN PLANS.

CUTTING OR BENDING OF REINFORCING BARS

ANY CUTTING OR BENDING OF BARS NECESSARY TO ACCOMMODATE ANY ESSENTIAL ELEMENT OF WORK RELATED TO THE PROJECT, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 509 REINFORCING STEEL, GRADE 60 AND/OR ITEM SP 509 EPOXY COATED REINFORCING STEEL, GRADE 60 AND/OR ITEM SP 825 GALVANIZED REINFORCING STEEL, GRADE 60 UNLESS OTHERWISE NOTED.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE ESTIMATED QUANTITIES FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED AT THE ENGINEER'S DISCRETION SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

CONSTRUCTION JOINTS

CONSTRUCTION JOINT SURFACES SHALL BE FREE FROM OIL, LAITANCE, FORM RELEASE AGENT, OR ANY OTHER MATERIAL THAT WOULD PREVENT BONDING TO THE CONCRETE SURFACE. ALL LAITANCE AND OTHER CONTAMINANTS SHALL BE REMOVED BY HIGH PRESSURE WATER BLASTING WITH A MINIMUM PRESSURE OF 5,000 P.S.I. HOWEVER, WATER BLASTING SHALL NOT BE REQUIRED WHERE EXISTING CONCRETE HAS BEEN ROUGHENED BY JACKHAMMERS DURING CONCRETE REMOVAL OPERATIONS. SURFACES SHALL BE THOROUGHLY DRENCHED WITH CLEAN WATER AND ALLOWED TO DRY TO A DAMP CONDITION FREE OF STANDING WATER BEFORE PLACING CONCRETE. PREPARATION OF CONSTRUCTION JOINT SURFACES SHALL NOT BE MEASURED FOR PAYMENT. THE COST THEREOF SHALL BE INCLUDED IN THE CONTRACT PRICE OF THE PERTINENT CONCRETE ITEMS.

ITEM 518 – 6" PERFORATED CORRUGATED PLASTIC PIPE, AS PER PLAN ③

CORRUGATED PIPE USED IN ABUTMENT DRAINAGE SHALL BE SIX (6) INCH DIAMETER, PLASTIC CORRUGATED PIPE AS PER ODOT SUPPLEMENTAL SPECIFICATION 944, AASHTO M294, TYPE SP.

ITEM 518 – 6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS, AS PER PLAN ③

CORRUGATED PIPE USED IN ABUTMENT DRAINAGE SHALL BE SIX (6) INCH DIAMETER, PLASTIC CORRUGATED PIPE AS PER ODOT SUPPLEMENTAL SPECIFICATION 944, AASHTO M294, TYPE S. THIS ITEM SHALL INCLUDE ALL ELBOWS, TEES AND END CAPS REQUIRED TO COMPLETE THE ABUTMENT DRAINAGE SYSTEM.

MECHANICAL SPLICE SYSTEM

THE MECHANICAL SPLICE SYSTEM SHALL BE CAPABLE OF DEVELOPING 125 PERCENT OF THE YIELD STRENGTH OF THE BARS CONNECTED. THE SPLICE SHALL BE A GALVANIZED THREADED SYSTEM WITH OR WITHOUT A SEPARATE COUPLER, AND SHALL BE COATED IN ACCORDANCE WITH SP 825. THREADS THAT REMAIN EXPOSED AFTER THE ROD AND COUPLER ARE SCREWED TOGETHER SHALL BE CLEANED, COATED WITH AN APPROVED GALVANIZING PATCHING MATERIAL ALL IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. CONNECTORS AND DOWEL BARS SHALL CONFORM WITH ITEM SP 825 AND BE INCIDENTAL TO THE BID PRICE PER POUND FOR ITEM SP 825.

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M.P. 71.9, 72.0			WOOD COUNTY	
<div>URS</div> <div>Akron Cleveland Columbus</div>			<div>564 White Pond Drive Akron, Ohio 44320-1100 (330) 836-9111</div>	
DESIGNED:	M.D.P.	CHECKED:	R.S.C.	DATE: 02/01/02
DRAWN:	S.F.W.	IN CHARGE:	P.D.H.	SCALE: NONE
CONTRACT 77-02-01 SHEET B111B OF B135				

Drawing : j:\\$PROJECTS\43 Bridge Repairs & Resurfacing\Third Lane 155.78 to 176.34\third lane asbuilt\77-02-01\77-02-01\As-built\URS\_dwg\770201B-111C.DWG User: nathan.colson Jul 09, 2015 - 10:01

# STRUCTURE – GENERAL NOTES

CONCRETE PARAPETS ③

DEFLECTION JOINTS SHALL BE CONSTRUCTED BY SAWING THE CONCRETE AFTER IT HAS TAKEN ITS INITIAL SET AND BEFORE ANY CRACKS DEVELOP. THE USE OF AN EDGE GUIDE, FENCE OR JIG SHALL BE USED TO ENSURE THAT THE CUT JOINT IS STRAIGHT, TRUE AND ALIGNED ON BOTH FACES OF THE PARAPET. THE JOINT SHALL BE THE WIDTH OF THE SAW BLADE, NOT TO EXCEED ONE QUARTER (0.25) INCH, AND SHALL BE ONE AND ONE-HALF (1.5) INCHES DEEP. THE SAW CUT SHALL BE MADE IN THE COMPLETE CIRCUMFERENCE OF THE PARAPET, STARTING AND ENDING AT THE ELEVATION OF THE CONCRETE DECK, EXCEPT AS NOTED ON THE PLANS AND SHALL BE CAULKED WITH A ONE (1) INCH THICKNESS OF MATERIAL CONFORMING TO FEDERAL SPECIFICATION TT-S-00227E. THE BOTTOM ONE HALF (0.5) INCH OF THE SAWED JOINT AT THE OUTSIDE FACE OF THE PARAPET SHALL BE LEFT UNSEALED TO ALLOW ANY WATER WHICH MAY ENTER THE JOINT TO ESCAPE.

PARAPET FORMS ③

FORMS FOR THE BRIDGE PARAPETS AND SLAB SIDE EDGES SHALL BE IN ACCORDANCE WITH SECTION 508.02 OF THE SPECIFICATIONS AND THE FOLLOWING:

WHEN WOOD FORMS ARE USED THEY SHALL PRODUCE A SMOOTH SURFACE OF UNIFORM TEXTURE AND COLOR SUBSTANTIALLY EQUAL TO THAT WHICH WOULD BE OBTAINED WITH THE USE OF NEW PLYWOOD CONFORMING TO THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY PRODUCT STANDARD PSI FOR EXTERIOR B-B CLASS I.

FORMS SHALL BE OF A CONSTRUCTION WHICH WOULD ALLOW FOR THEIR REMOVAL WITHIN 24 HOURS OF THE CONCRETE PLACEMENT WITHOUT CAUSING DAMAGE TO THE CONCRETE.

GROUT CLEANING ③

ALL BARRIER SURFACES AND DECK EDGES SHALL BE GROUT CLEANED IN ACCORDANCE WITH SECTION 511.15 OF THE SPECIFICATIONS USING WHITE PORTLAND CEMENT.

STRUCTURAL STEEL ERECTION/SHOP ASSEMBLY ③

IN ACCORDANCE WITH SP 614-MAINTAINING TRAFFIC, THE ROADWAYS OF THE OHIO TURNPIKE MAY BE CLOSED FOR THE ERECTION OF THE STRUCTURAL STEEL, PROVIDED THE DURATION OF THE CLOSURES DOES NOT EXCEED TEN (10) MINUTE INTERVALS. TO INSURE THE CLOSURES DO NOT EXCEED THE SPECIFIED INTERVALS, THE FIRST LINES OF STRUCTURAL STEEL ERECTED SHALL BE IN A PAIR. E.G., BEAM LINES AND SHALL BE ERECTED AS ONE UNIT WITH CROSSFRAMES/DIAPHRAGMS BOLTED IN PLACE. SUBSEQUENT BEAM LINES IN THE TRANSVERSE DIRECTION MAY BE ERECTED ONE AT A TIME. HOWEVER, THE REQUIREMENT TO PLACE THE FIRST TWO (2) BEAM LINES AS A UNIT SHALL APPLY AS THE STRUCTURE ADVANCES IN THE LONGITUDINAL DIRECTION. (A) (B)

THE ABOVE ERECTION REQUIREMENTS SHALL APPLY UNLESS ALTERNATE PROCEDURES ARE APPROVED BY THE CHIEF ENGINEER.

IN ADDITION TO THE ABOVE REQUIREMENTS, TO INSURE PROPER FIT-UP SO AS TO MINIMIZE ERECTION TIME, THE STRUCTURE SHALL BE SHOP ASSEMBLED IN ACCORDANCE WITH SHOP ASSEMBLY SECTION 513.20, OF THE SPECIFICATIONS.

ALL APPLICABLE SECTIONS OF 501.06 OF THE SPECIFICATIONS, APPROVAL OF CONSTRUCTION PLANS, SHALL APPLY TO THIS PROJECT. PLANS FOR THE PROPOSED ERECTION AND HANDLING PROCEDURES SHALL INCLUDE THE PROPOSED LOCATION OF ALL EQUIPMENT. A PRE-STRUCTURAL STEEL ERECTION MEETING SHALL BE SCHEDULED PRIOR TO THE STRUCTURAL STEEL ERECTION.

PAYMENT FOR LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE REQUIREMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 513-STRUCTURAL STEEL, A572-50, AISC CATEGORY 1.

ITEM 202 – STRUCTURE REMOVED, AS PER PLAN OR ITEM SP 202 – PORTIONS OF STRUCTURE REMOVED ③

ALL DEMOLITION OPERATIONS PERFORMED UNDER ITEM 202 AND ITEM SP 202 SHALL COMPLY IN ALL RESPECTS WITH THE REQUIREMENTS OF THE SPECIAL PROVISION SP 525A LEAD PAINT REMOVAL, WORKER/ENVIRONMENTAL PROTECTION AND WASTE HANDLING AND/OR SP 525B – DEMOLITION OF BRIDGES WITH STEEL COATED WITH LEAD PAINT – WORKER/ENVIRONMENTAL PROTECTION/DISPOSAL.

PAINTING OF STRUCTURAL STEEL ③

THE NEW STRUCTURAL STEEL SHALL BE SHOP PRIMED AND FIELD CLEANED IN ACCORDANCE WITH SPECIAL PROVISION SP 514B – SHOP PRIMING/ FIELD PAINTING – SYSTEM IZEU/SYSTEM UUU.

THE NEW STRUCTURAL STEEL WILL BE FIELD PAINTED WITH THE INTERMEDIATE AND FINISH COATS IN ACCORDANCE WITH SPECIAL PROVISION SP 514B – SHOP PRIMING/FIELD PAINTING – SYSTEM IZEU/SYSTEM UUU.

DISPOSAL OF THE WASTE MATERIAL/HAZARDOUS WASTE MATERIAL FROM THE CLEANING, TOUCH-UP AND PAINTING WORK SHALL BE INCLUDED FOR PAYMENT WITH THE LUMP SUM PRICES BID FOR ITEM SP514B.

MAINTAINING TRAFFIC FOR BRIDGE PAINTING ③

THE QUANTITIES AND PHASING OF THE MAINTENANCE OF TRAFFIC PLANS ARE ESTABLISHED FOR ALL ELEMENTS OF BRIDGE CONSTRUCTION. THE PAINTING OF STRUCTURAL STEEL SHOULD BE COORDINATED WITH THE PHASING IN THE MAINTENANCE OF TRAFFIC PLANS. ANY ADDITIONAL MAINTENANCE OF TRAFFIC PHASES REQUIRED BY THE CONTRACTOR FOR THE PAINTING SHALL BE INCLUDED IN ITEM SP 614 – MAINTAINING TRAFFIC AND WILL NOT BE PAID FOR SEPARATELY. THE CONTRACTOR SHALL SUBMIT HIS SEQUENCE OF OPERATIONS TO THE ENGINEER FOR APPROVAL PRIOR TO IMPLEMENTATION OF ANY TRAFFIC CONTROL MEASURES. THE CONTRACTOR MAY ELECT TO PROVIDE AN ALTERNATE MAINTENANCE OF TRAFFIC PLAN AT NO ADDITIONAL COST TO THE COMMISSION. THE ALTERNATE PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL AT LEAST SEVEN (7) DAYS IN ADVANCE.

ITEM 507 – STEEL POINT (OR SHOE), AS PER PLAN

STEEL PILE POINTS SHALL BE USED TO PROTECT THE TIPS OF THE PROPOSED STEEL "H" PILING. THE STEEL POINTS SHALL BE FURNISHED BY ASSOCIATED PILE AND FITTING CORPORATION, 262 RUTHERFORD BOULEVARD, CLIFTON, NEW JERSEY 07014; DOUGHERTY FOUNDATION PRODUCTS, INC., P.O. BOX 688, FRANKLIN LAKES, NEW JERSEY 07417; VERSA STEEL, INC., 3061 NW YEON AVENUE, P.O. BOX 10559, PORTLAND, OREGON 97210; PILING ACCESSORIES, INC., 3467 GRIBBLES ROAD, MATTHEWS, N.C. 28105; OR BY A MANUFACTURER THAT CAN FURNISH A STEEL POINT THAT IS ACCEPTABLE TO THE ENGINEER. THE MATERIAL USED FOR THE MANUFACTURING OF PILE POINTS SHALL CONFORM TO ASTM A27 65/35 – CLASS 2, HEAT TREATED OR AASHTO M103 65/35, HEAT TREATED. A NOTARIZED COPY OF THE MILL TEST REPORT SHALL BE SUBMITTED TO THE ENGINEER.

ITEM 506 – STATIC LOAD TEST, AS PER PLAN

ITEM 506 – SUBSEQUENT STATIC LOAD TEST, AS PER PLAN

FOR STATIC LOAD TESTS PERFORMED ON SERVICE PILES AS DIRECTED BY THE ENGINEER , THE APPLICATION OF LOAD SHALL BE IN ACCORDANCE WITH SECTION 506.03 OF THE CMS EXCEPT THAT THE MAXIMUM APPLIED TEST LOAD SHALL BE LIMITED TO TWO (2) TIMES THE PLAN DESIGN LOAD.

ITEM 202 – STRUCTURE REMOVED, AS PER PLAN ③

WHEN NO LONGER NEEDED TO MAINTAIN TRAFFIC, THE EXISTING STRUCTURE SHALL BE REMOVED, UPON RECEIVING PERMISSION FROM THE ENGINEER. REMOVAL OF EXISTING STRUCTURE AS SHOWN ON THE CONTRACT DRAWINGS SHALL CONFORM IN ALL ASPECTS TO THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIALS SPECIFICATIONS.

THE CONTRACTOR SHALL PREPARE DETAILED PROCEDURES AND PLANS FOR REMOVAL OF THE EXISTING STRUCTURE, INCLUDING METHODS OF PROTECTING EXISTING UTILITIES AND VEHICULAR TRAFFIC WITHIN THE LIMITS OF THE PROJECT. THESE PROCEDURES AND PLANS SHALL BE PREPARED AND SEALED BY A PROFESSIONAL ENGINEER IN THE STATE OF OHIO AND SHALL INCLUDE INFORMATION AS TO THE METHODS, EQUIPMENT, MATERIALS TO BE USED, PERSONNEL, SUPERVISION, HOURS OF OPERATION, AND DURATION OF THE JOB, AND SHALL BE SUBMITTED, IN ACCORDANCE WITH SP 127 – SUBMITTALS.

THESE PLANS SHALL BE APPROVED BY THE ENGINEER BEFORE COMMENCING ANY DEMOLITION OPERATION. THE REVIEW AND APPROVAL BY THE ENGINEER SHALL NOT RELIEVE THE CONTRACTOR OF HIS FULL RESPONSIBILITY FOR SAFE DEMOLITION OPERATIONS. THE CONTRACTOR SHALL BE AND SHALL REMAIN RESPONSIBLE FOR A SAFE DEMOLITION.

REMOVAL OF THE EXISTING PEMBERVILLE ROAD STRUCTURE OVER THE OHIO TURNPIKE: THE EXISTING STRUCTURE SHALL BE REMOVED TO THE ELEVATIONS INDICATED OR AS DIRECTED BY THE ENGINEER. THE ABUTMENTS AND PIERS 1 AND 2 SHALL BE REMOVED TO 1'-0" MIN. BELOW PROPOSED GRADE. PIER 3 SHALL BE REMOVED TO THE TOP OF THE EXISTING DRILLED SHAFTS AS SHOWN ON SHEET B112K OF B135. FOR REMOVAL OF EXISTING ABUTMENT PILES AS DIRECTED BY THE ENGINNER, REFER TO ITEM SPECIAL – REMOVAL OF EXISTING PILES ON SHEET G6/G6.

PROTECTIVE STRUCTURES FOR CATCHING FALLING DEBRIS AND WATER FROM THE DEMOLITION OPERATION SHALL BE IN ACCORDANCE WITH SPECIAL PROVISIONS SP 527 – FALSEWORK, TEMPORARY BRACING AND PROTECTIVE STRUCTURES.

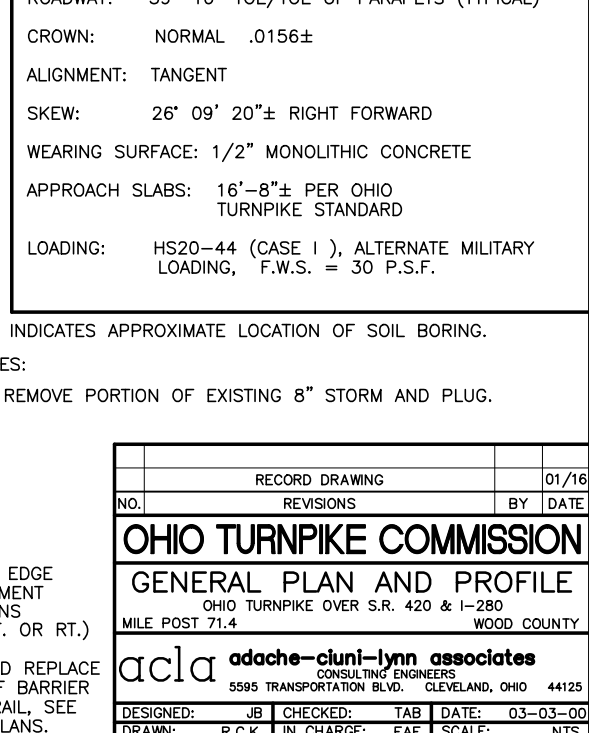
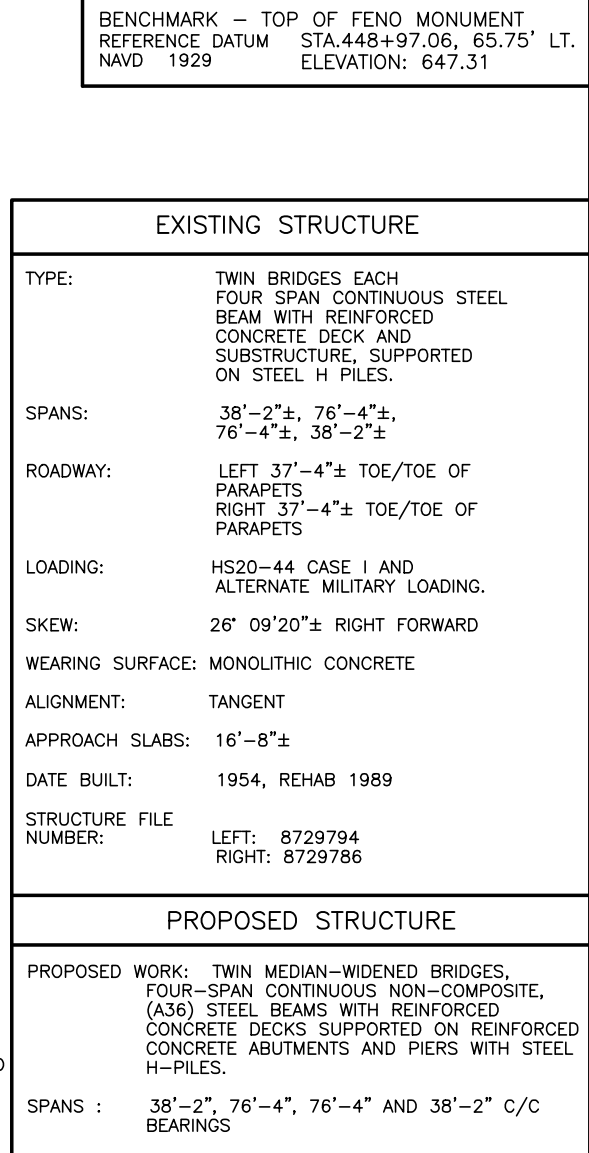
EXCAVATION FOR THE REMOVAL OF FOOTINGS SHALL BE IN ACCORDANCE WITH 202 AND SHALL BE INCLUDED FOR PAYMENT IN THE CONTRACT UNIT PRICE BID LUMP SUM FOR ITEM 202 – STRUCTURE REMOVED, AS PER PLAN.

THE CONCRETE DECK SLAB AND ABUTMENT SLABS SHALL BE SAW CUT AND REMOVED IN SECTIONS, WITH THE FOLLOWING RESTRICTIONS:

- BEFORE ANY SAWING IS COMMENCED, THE OUTLINES OF THE TOP FLANGES AND COVERPLATES OF ALL BEAMS SHALL BE DRAWN ON THE BRIDGE DECK AND (1) INCH ± DIAMETER PILOT HOLES MADE OUTSIDE THESE LINES TO CONFIRM THE WIDTH OF THE FLANGES. PILOT HOLES SHALL BE DRILLED ON BOTH SIDES OF THE BEAMS AT EACH SAW CUT LOCATION. IN NO CASE WILL PILOT HOLES BE DRILLED OVER THE BEAM FLANGES.
- ALL FULL DEPTH SAWING MUST BE CONFINED TO THE AREAS BETWEEN FLANGE EDGES MINUS FOUR (4) INCHES (2 INCHES ± EACH SIDE). SAWING OUTSIDE THE FASCIA BEAMS (SAWING OF PARAPETS) SHALL BE STOPPED TWO (2) INCHES ± OUTSIDE THE CONFIRMED LIMITS OF THE BEAM FLANGES OR COVER PLATES.

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M.P. 71.9, 72.0		WOOD COUNTY	
URS		564 White Pond Drive Akron, Ohio 44320-1100 (330) 836-9111	
Akron Cleveland Columbus			
DESIGNED: M.D.P.	CHECKED: R.S.C.	DATE: 02/01/02	
DRAWN: S.F.W.	IN CHARGE: P.D.H.	SCALE: NONE	
G3/G6		CONTRACT 77-02-01 SHEET B111C OF B135	

BENCHMARK - TOP OF FENO MONUMENT  
REFERENCE DATUM STA.448+97.06, 65.75' LT.  
NAVD 1929 ELEVATION: 647.31



ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	GENERAL	ABUTMENT	PIERS	SUPER.	AS-BUILT	REFER TO SHEET NO.
SP 202	LUMP SUM		PORTIONS OF STRUCTURE REMOVED	LUMP				LUMP	THIS SHEET
503	LUMP SUM		COFFERDAMS, CRIBS AND SHEETING	LUMP				LUMP	
503	602	CU. YD.	UNCLASSIFIED EXCAVATION		288	314		696.80	
503	65	CU. YD.	ABUTMENT BACKFILL, AS PER 503.10		65			65	
505	LUMP SUM		PILE DRIVING EQUIPMENT MOBILIZATION	LUMP				LUMP	
506	LUMP SUM		STATIC LOAD TEST, AS PER PLAN *					NON-PERFORMED	G3/G3
506	1	EACH	SUBSEQUENT STATIC LOAD TEST, AS PER PLAN *	1				0	G3/G3
507	3241	LIN. FT.	STEEL PILES HP 10 X 42		1207	2034		3789	5/20
507	82	EACH	STEEL POINT (OR SHOE), AS PER PLAN		28	54		82	G1/G3
SP 509	129,245	POUND	EPOXY COATED REINFORCING STEEL, GRADE 60	200	25,817		103,228	130036	G2/G3
509	5937	POUND	REINFORCING STEEL, GRADE 60			5937		5937	
510	92	EACH	DOWEL HOLES USING SP853 GROUT ANCHORING		68		24	124	
SP 511A	343	CU. YD.	CLASS S CONCRETE, SUPERSTRUCTURE DECK SLAB, USING SHRINKAGE COMPENSATING CEMENT	6			337	336	THIS SHEET
SP 511A	78	CU. YD.	CLASS S CONCRETE, BARRIERS AND PARAPETS, USING TYPE I CEMENT		12		66	78	
SP 511A	55	CU. YD.	CLASS S CONCRETE, ABUTMENT SLABS, USING SHRINKAGE COMPENSATING CEMENT		55			55	
SP 511	178	CU. YD.	CLASS C CONCRETE, ABUTMENTS		178			170.17	
SP 511	101	CU. YD.	CLASS C CONCRETE, PIER CAP AND COLUMNS			101		101	
SP 511	105	CU. YD.	CLASS C CONCRETE, PIER FOOTINGS			105		105	
SP 512	22	SQ. YD.	MEMBRANE WATERPROOFING (SHEET TYPE 2)		22			22	
513	318,000	POUND	STRUCTURAL STEEL, AISC CATEGORY I				318,000	321751.3	
513	252	EACH	WELDED STUD SHEAR CONNECTORS				252	252	
SP 514A	LUMP SUM		FIELD CLEANING AND TOUCH-UP OF SHOP PRIMER				LUMP	LUMP	
SP 514A	LUMP SUM		SURFACE PREPARATION OF EXISTING STEEL, SYSTEM OZEU				LUMP	LUMP	
SP 514A	LUMP SUM		FIELD PAINTING OF EXISTING STEEL, PRIME COAT, SYSTEM OZEU				LUMP	LUMP	
SP 514A	LUMP SUM		PAINTING OF SLIP/CREEP CRITICAL SURFACES WITH INORGANIC ZINC PRIMER				LUMP	LUMP	
SP 514A	LUMP SUM		SURFACE PREPARATION OF SLIP/CREEP CRITICAL SURFACES				LUMP	LUMP	
SP 514A	LUMP SUM		FIELD PAINTING OF NEW AND EXISTING STEEL, INTERMEDIATE COAT, SYSTEM OZEU				LUMP	LUMP	
SP 514A	LUMP SUM		FIELD PAINTING OF NEW AND EXISTING STEEL, FINISH COAT, SYSTEM OZEU				LUMP	LUMP	
SP 514A	60	MAN HOUR	GRINDING FINS, TEARS, SLIVERS				60	60	
SP 514A	200	SQ. FT.	SPOT WASHING TO REMOVE CHLORIDES				200	200	
SP 514A	200	LIN. FT.	CAULKING				200	200	
516	6	EACH	BEARING DEVICES, FIXED				6	6	
516	24	EACH	BEARING DEVICES, EXPANSION				24	24	
SP 516B	1035	LIN. FT.	SEALING OF CONSTRUCTION JOINTS				1035	1035	
518	97	CU. YD.	POROUS BACKFILL WITH FILTER FABRIC	97				97	
518	192	LIN. FT.	6" PERFORATED CORRUGATED PLASTIC PIPE, AS PER PLAN		192			192	G2/G3
518	124	LIN. FT.	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS, AS PER PLAN		124			124	G2/G3
SP 519	20	SQ. FT.	PATCHING CONCRETE STRUCTURES *	20				20	G2/G3
523	3	HOURL	DYNAMIC LOAD TEST *		2	1		0	
SP 524	7	EACH	REBUILD EXPANSION BEARING DEVICE				7	10	
SP 524C	1	EACH	RESET EXISTING ROCKER BEARING				1	1	
SP 525A	LUMP SUM		WORKER PROTECTION	LUMP				LUMP	
SP 525A	20	EACH	PROTECTIVE CLOTHING/EQUIPMENT SET	20				20	
SP 525A	LUMP SUM		ESTABLISH REGULATED AREAS	LUMP				LUMP	
SP 525A	LUMP SUM		PAINT WASTE/HAZARDOUS WASTE CLASSIFICATION, HANDLING, AND DISPOSAL	LUMP				LUMP	
SP 525A	LUMP SUM		CONTAINMENT SYSTEM	LUMP				LUMP	
SP 527	LUMP SUM		FALSEWORK, TEMPORARY BRACING AND PROTECTIVE STRUCTURES	LUMP				LUMP	
SP 533R	168	LIN. FT.	REPLACEMENT OF 3 INCH CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT		168			0	
SP 533W	113	LIN. FT.	3 INCH CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT (WIDENING)		113			113	
SP 536	1648	SQ. YD.	CONCRETE WEATHERPROOFING, DECK, ABUTMENT SLABS, AND APPROACH SLABS		315		1333	1648	G1/G3
SP 536	358	SQ. YD.	CONCRETE WEATHERPROOFING, BARRIERS AND PARAPETS		71		287	0	G1/G3
SP 536	395	SQ. YD.	CONCRETE WEATHERPROOFING, SUBSTRUCTURE		74	321		395	G1/G3
601	340	SQ. YD.	CRUSHED AGGREGATE SLOPE PROTECTION		340			524	
SP 825	21,781	POUND	GALVANIZED REINFORCING STEEL, GRADE 60			21,781		21781	

① ITEM SP 202, PORTIONS OF STRUCTURE REMOVED, INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING:

SUPERSTRUCTURE CONCRETE 41 CU. YDS.

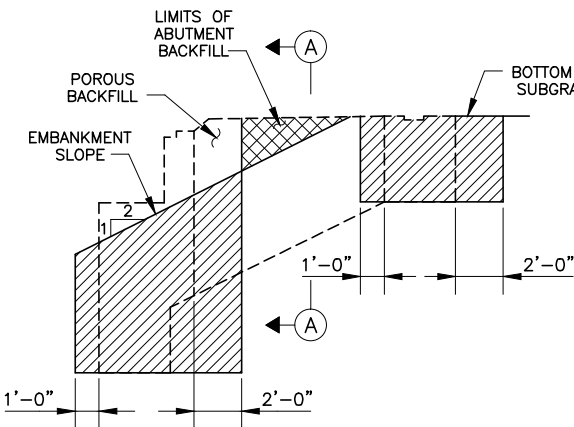
CONCRETE PARAPETS 518 LIN. FT.

ABUTMENT SLAB CONCRETE 5 CU. YDS.

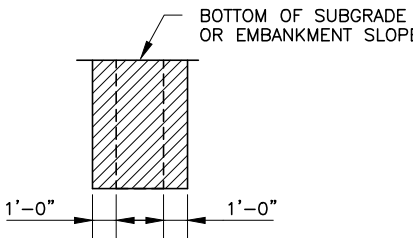
THE ABOVE QUANTITIES ARE GIVEN FOR INFORMATION ONLY. THE CONTRACTOR SHALL OBTAIN HIS OWN QUANTITIES TO BE USED AS A BASIS FOR DETERMINING HIS BID PRICE FOR ITEM SP 202, PORTIONS OF STRUCTURE REMOVED.

② AS A CONTINGENCY, 6 CUBIC YARDS OF CONCRETE HAS BEEN INCLUDED IN THE ESTIMATED QUANTITY FOR SUPERSTRUCTURE CONCRETE, IN THE GENERAL COLUMN, TO BE USED AS DIRECTED BY THE ENGINEER FOR ADDITIONAL CONCRETE REQUIRED IN THE HAUNCHES DUE TO PROFILE ADJUSTMENT.

\* TO BE USED "AS DIRECTED BY THE ENGINEER".



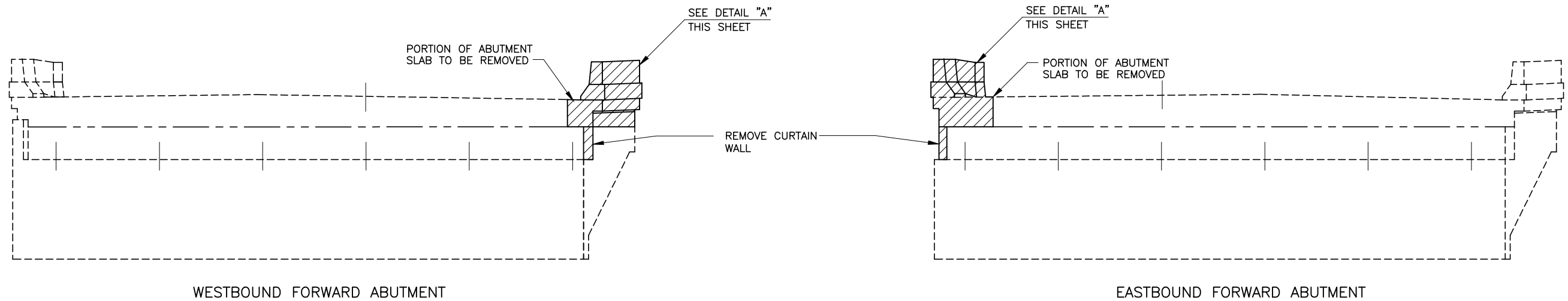
ABUT./APPR SLAB FOUNDATION & ABUTMENT



SECTION A-A  
(WINGWALLS)

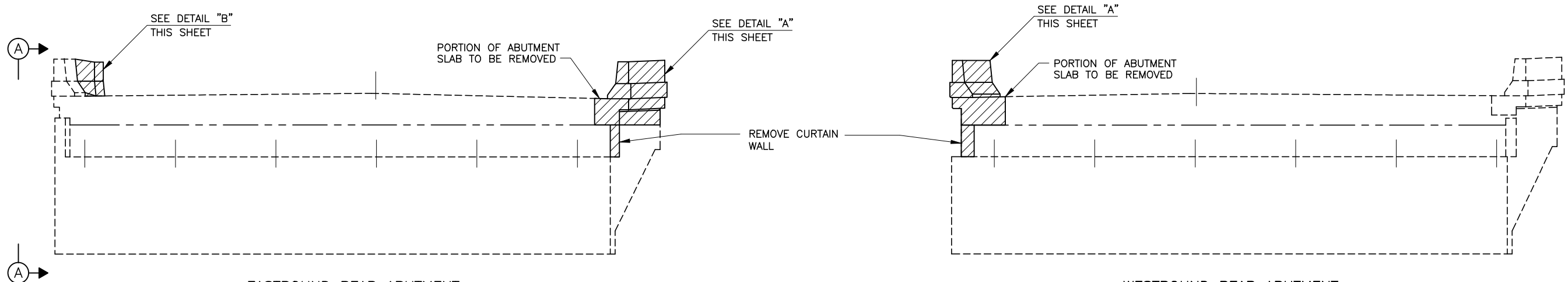
- ▨ LIMITS OF UNCLASSIFIED EXCAVATION
- ▩ LIMITS OF ABUTMENT BACKFILL

RECORD DRAWING		01/16	
NO.	REVISIONS	BY	DATE
<b>OHIO TURNPIKE COMMISSION</b>			
ESTIMATED QUANTITIES			
OHIO TURNPIKE OVER S.R. 420 & I-280			
MILE POST 71.4 WOOD COUNTY			
<b>acila</b> <b>adache-cluni-lynn associates</b>			
CONSULTING ENGINEERS			
5595 TRANSPORTATION BLVD. CLEVELAND, OHIO 44125			
DESIGNED:	TES	CHECKED:	TAB
DRAWN:	RCK	IN CHARGE:	EAF
DATE: 03-03-00		SCALE: NTS	
CONTRACT 77-02-01 SHEET B117 OF B135			



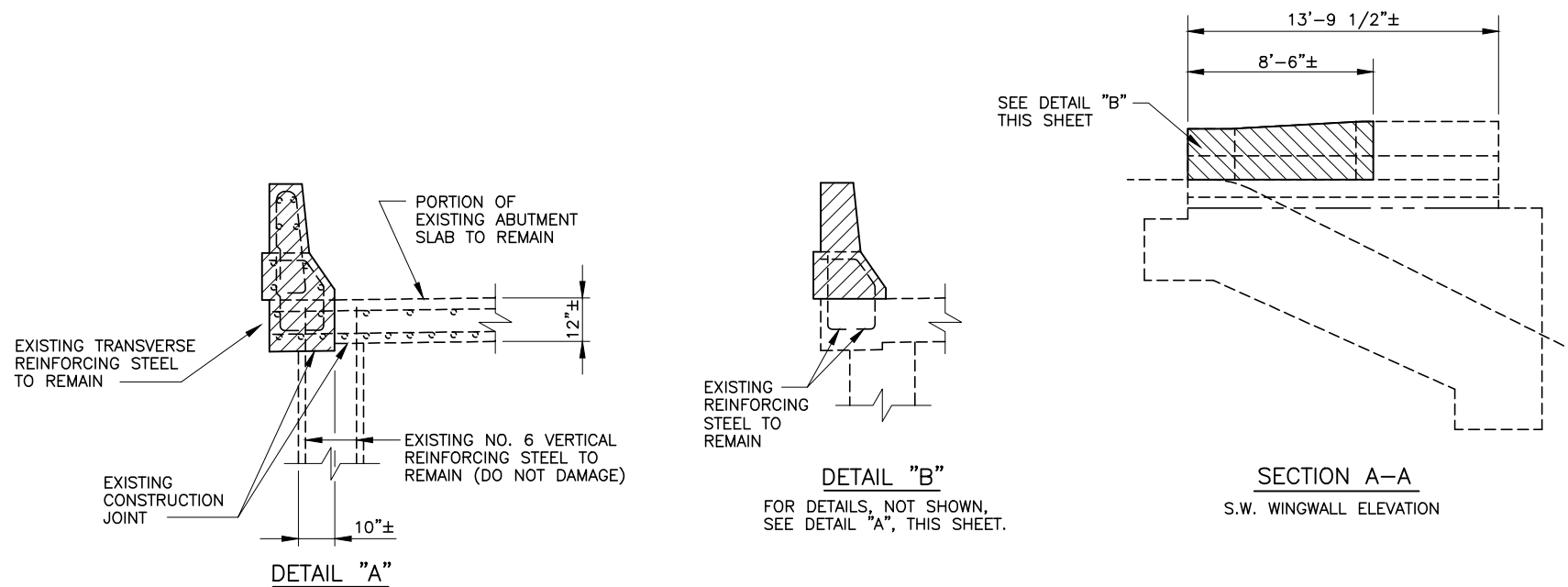
WESTBOUND FORWARD ABUTMENT

EASTBOUND FORWARD ABUTMENT



EASTBOUND REAR ABUTMENT

WESTBOUND REAR ABUTMENT



LEGEND

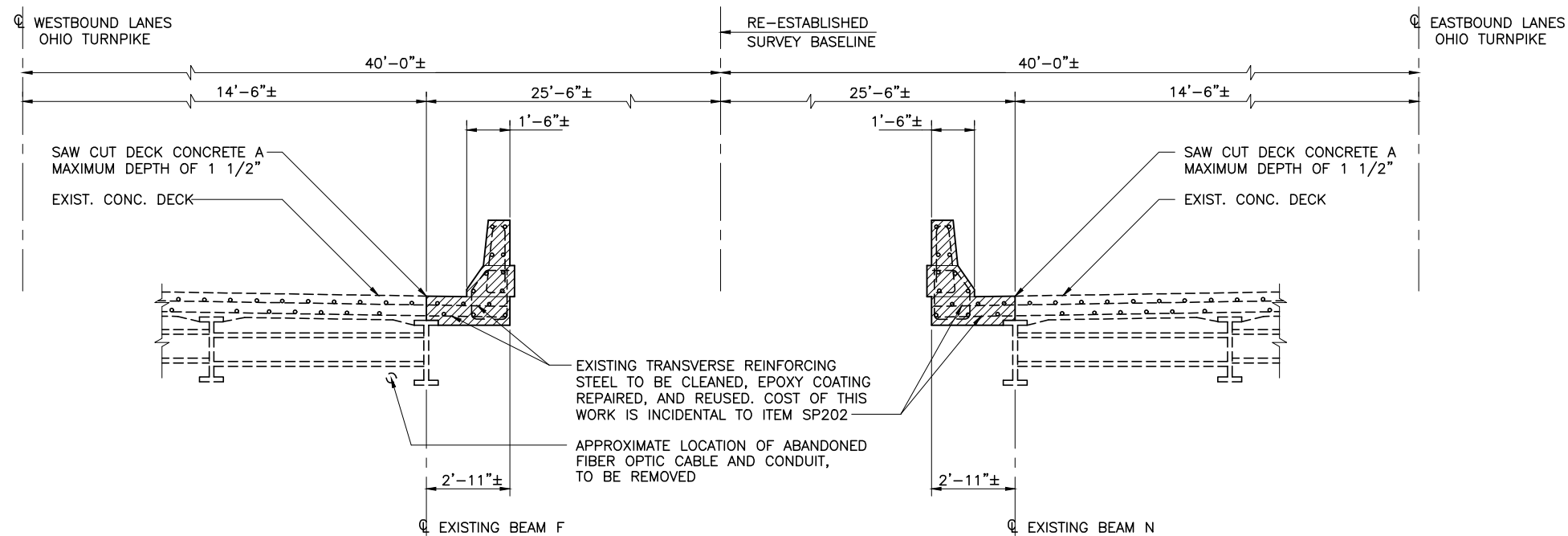
AREAS TO BE REMOVED IN ACCORDANCE WITH ITEM SP202 - PORTIONS OF STRUCTURE REMOVED

NOTE:


- THE EXISTING REINFORCING TO REMAIN AND BE REUSED SHALL BE CLEANED AND THE COATING REPAIRED. THE COST TO BE INCIDENTAL TO THE COST OF ITEM 202, PORTIONS OF STRUCTURES REMOVED.
- FOR LIMITS OF REMOVAL FOR EXISTING CONCRETE ABUTMENT SLAB, SEE EXPANSION JOINT DETAILS, SHEET **16 / 20**

RECORD DRAWING		01/16	
NO.	REVISIONS	BY	DATE
<b>OHIO TURNPIKE COMMISSION</b>			
<b>ABUTMENT REMOVAL DETAILS</b>			
OHIO TURNPIKE OVER S.R. 420 & I-280			
MILE POST 71.4		WOOD COUNTY	
<b>acla adache-cluni-lynn associates</b>			
CONSULTING ENGINEERS			
5595 TRANSPORTATION BLVD. CLEVELAND, OHIO 44125			
DESIGNED: AJM	CHECKED: TES	DATE: 03-03-00	
DRAWN: RCK	IN CHARGE: EAF	SCALE: NTS	
<b>CONTRACT 77-02-01 SHEET B118 OF B135</b>			





# EXISTING TRANSVERSE SECTION

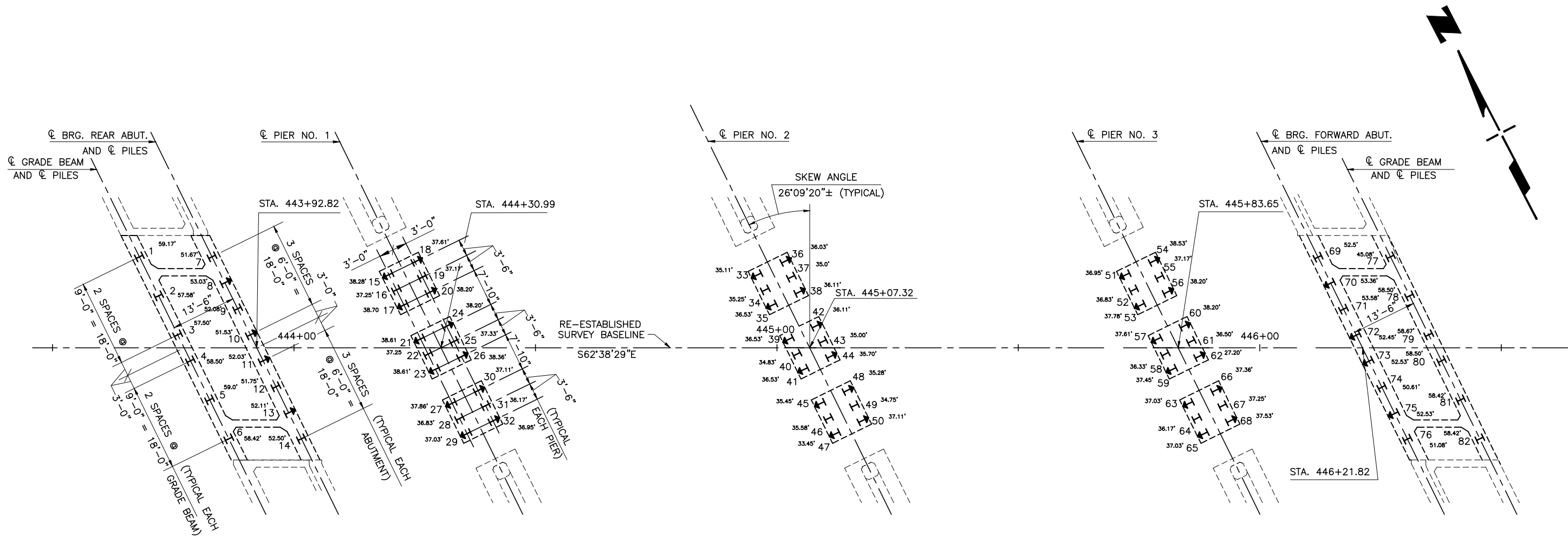
 AREAS TO BE REMOVED IN ACCORDANCE WITH ITEM SP202 - PORTIONS OF STRUCTURE REMOVED.

THE EXISTING JOINT ARMOR SHALL BE SAWCUT AND GROUND AS REQUIRED FOR PROPER FIT (BURNING IS NOT PERMITTED). INCLUDE FOR PAYMENT WITH ITEM SP 202 - PORTIONS OF STRUCTURE REMOVED.

REFER TO SHEET **16 / 20** FOR PORTION OF JOINT ARMOR TO REMAIN.

	RECORD DRAWING			1/16
NO.	REVISIONS		BY	DATE

<b>OHIO TURNPIKE COMMISSION</b>				
<b>DECK DEMOLITION</b>				
OHIO TURNPIKE OVER S.R. 420 & I-280				
MILE POST 71.4		WOOD COUNTY		
<b>adache-cluni-lynn associates</b>				
CONSULTING ENGINEERS				
5595 TRANSPORTATION BLVD. CLEVELAND, OHIO 44125				
DESIGNED:	AJM	CHECKED:	TES	DATE: 03-03-00
DRAWN:	RCK	IN CHARGE:	EAF	SCALE: NTS
<b>CONTRACT 77-02-01 SHEET B119 OF B135</b>				



PILING PLAN

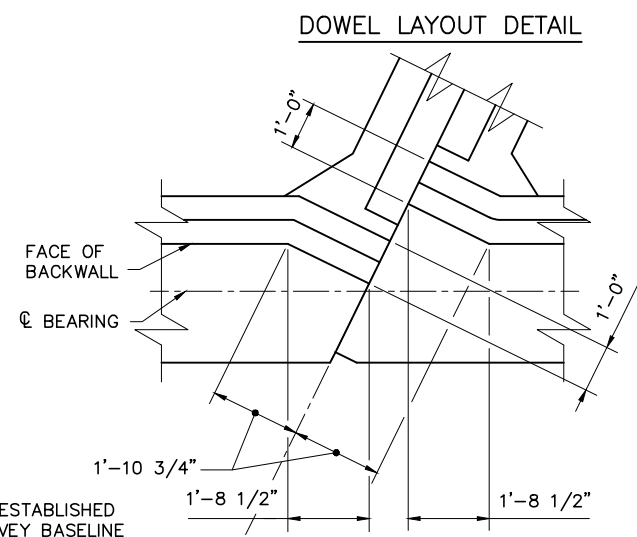
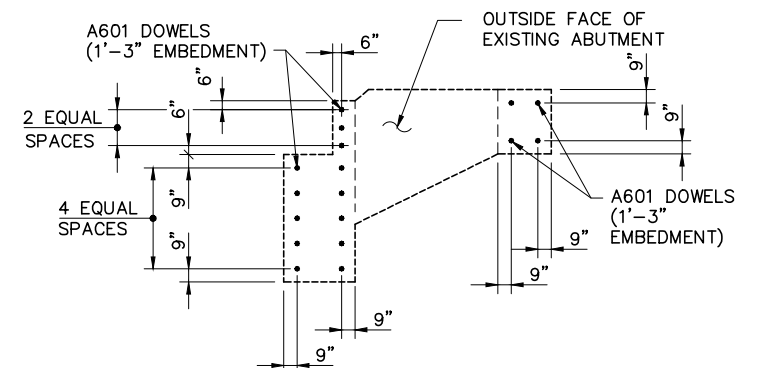
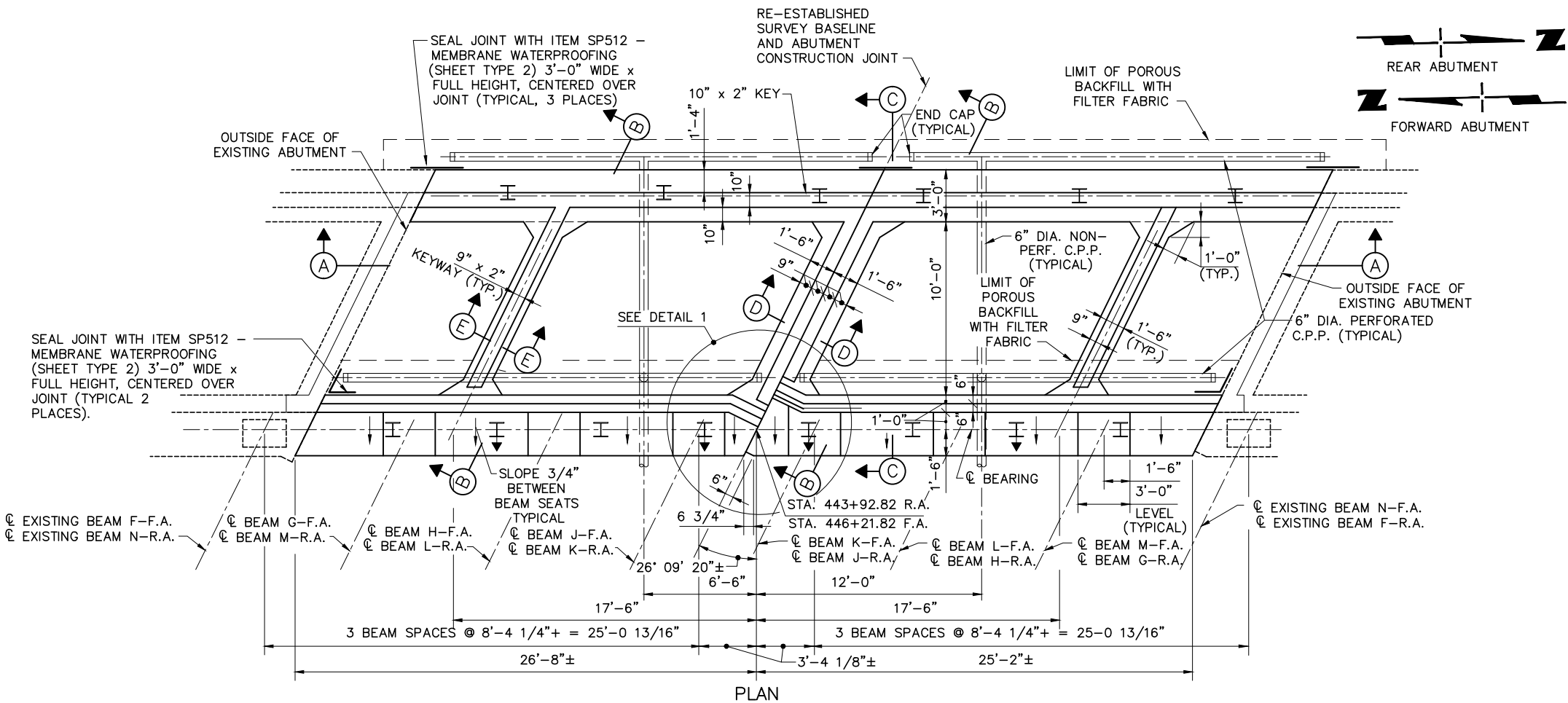
PAY LENGTH APPEARS NEXT TO PILE NUMBER

ESTIMATED PILE PAY LENGTHS AND CUTOFF ELEVATIONS		
PILE NUMBER	ESTIMATED PAY LENGTH (FT.)	ESTIMATED CUTOFF ELEVATION
1 TO 3	36	646.14
4 TO 6	36	646.21
7 TO 14	35	639.30
15 TO 32	38	624.50
33 TO 50	37	623.50
51 TO 68	38	624.50
69 TO 76	51	639.14
77 TO 79	51	646.06
80 TO 82	50	645.95

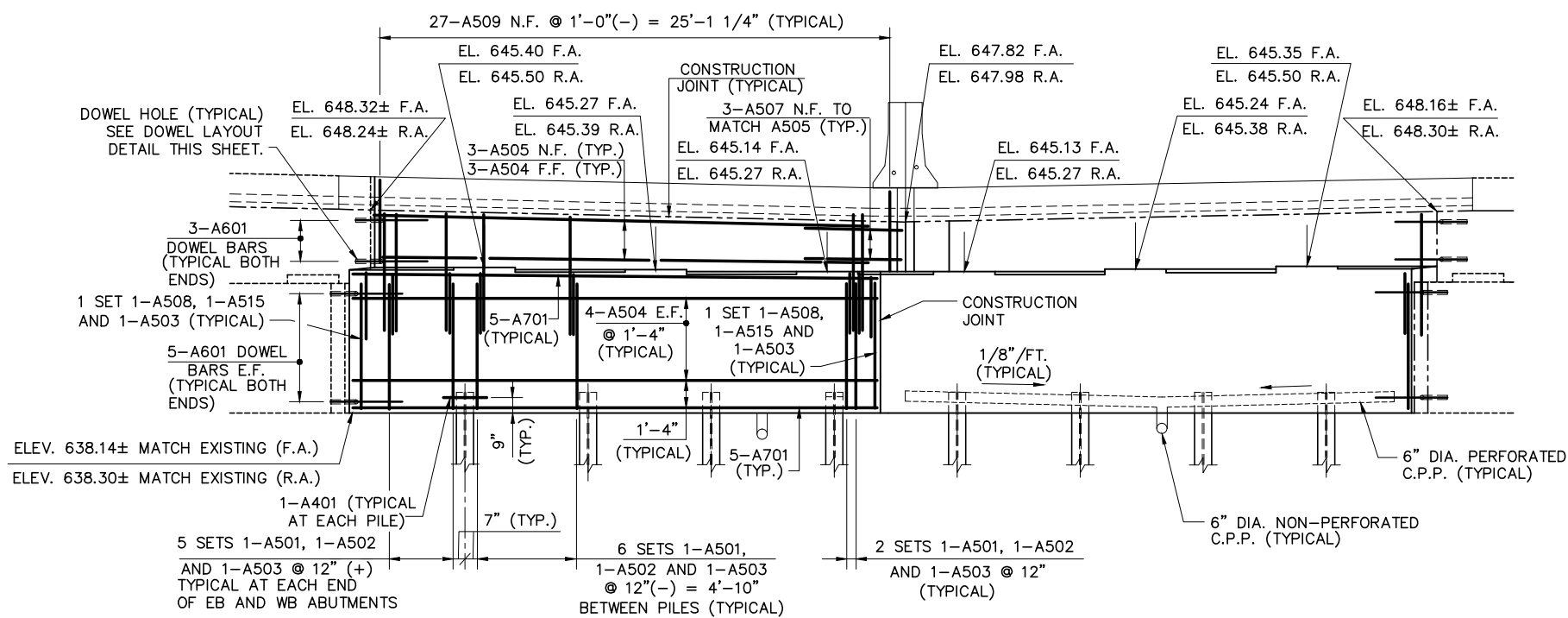
- NOTES:
- ① ALL PILES SHALL BE STEEL HP10X42 PILES WITH STEEL POINTS.
  - ② FOR GENERAL NOTES REGARDING PILE DESIGN LOADS AND INSTALLATION, SEE SHEET **G1/G3**
  - ③ ↑ INDICATES DIRECTION OF 1:4 PILE BATTER

RECORD DRAWING	01/19/04
NO. REVISIONS	BY DATE
<b>OHIO TURNPIKE COMMISSION</b>	
PILING PLAN	
OHIO TURNPIKE OVER S.R. 420 & I-280	
MILE POST 71.4 WOOD COUNTY	
<b>adache-cluni-lynn associates</b> CONSULTING ENGINEERS 5595 TRANSPORTATION BLVD. CLEVELAND, OHIO 44125	
DESIGNED: AJM	CHECKED: TAB DATE: 03-03-00
DRAWN: R.C.K.	IN CHARGE: EAF SCALE: NTS

CONTRACT 77-02-01 SHEET B120 OF B135

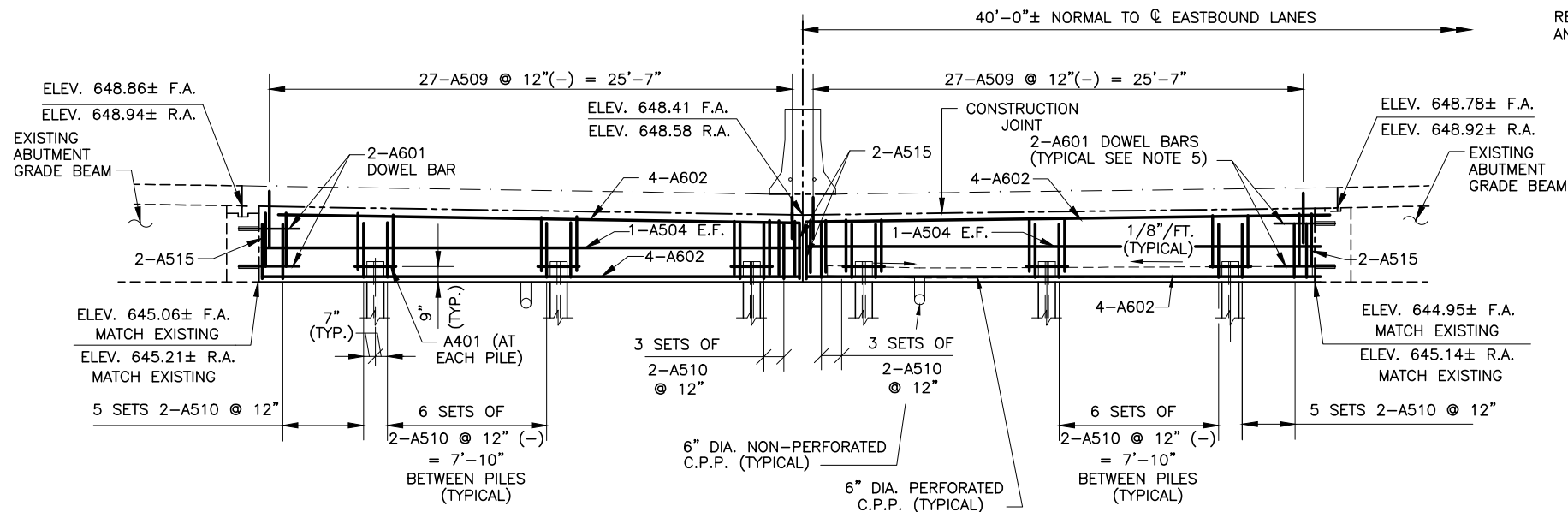


- NOTES:**
- FOR SECTIONS A-A, B-B, C-C D-D AND E-E SEE SHEET **7 / 20**.
  - POROUS BACKFILL WITH FILTER FABRIC, 2 FEET THICK SHALL EXTEND UP FROM THE BOTTOM OF THE ABUTMENT TO THE BOTTOM OF THE ABUTMENT SLAB AND TO THE BOTTOM OF THE APPROACH SLAB AND Laterally AS SHOWN ON THE PLAN.
  - SPECIAL CARE SHALL BE TAKEN TO FINISH THE CONCRETE UNDER THE BEARINGS TO A FLAT, LEVEL SURFACE. THE CONCRETE SURFACE SHALL BE STEEL TROWEL FINISHED WITHOUT BRUSHING AND THE FLATNESS OF THE FINISHED SURFACE SHALL NOT VARY FROM A STRAIGHT EDGE LAID ON THE SURFACE IN ANY DIRECTION WITHIN THE LIMITS OF THE BEARING FOOTPRINT BY MORE THAN 1/16 INCH. SURFACES WHICH FAIL TO CONFORM TO THE REQUIRED FLATNESS SHALL BE GROUND UNTIL ACCEPTABLE.
  - FOR PILING PLAN SEE SHEET **5 / 20**.
  - FOR ABUTMENT SLAB, SEE SHEET **8 / 20**.
  - FOR REINFORCING SCHEDULE AND BAR BENDING DIAGRAMS SEE SHEET **20 / 20**.
  - MINIMUM REINFORCING BAR LAP LENGTH: 3'-5" FOR NO. 5 BARS EXCEPT AS NOTED.



**ELEVATION**  
FORWARD ABUTMENT SHOWN REAR ABUTMENT SIMILAR EXCEPT AS NOTED.

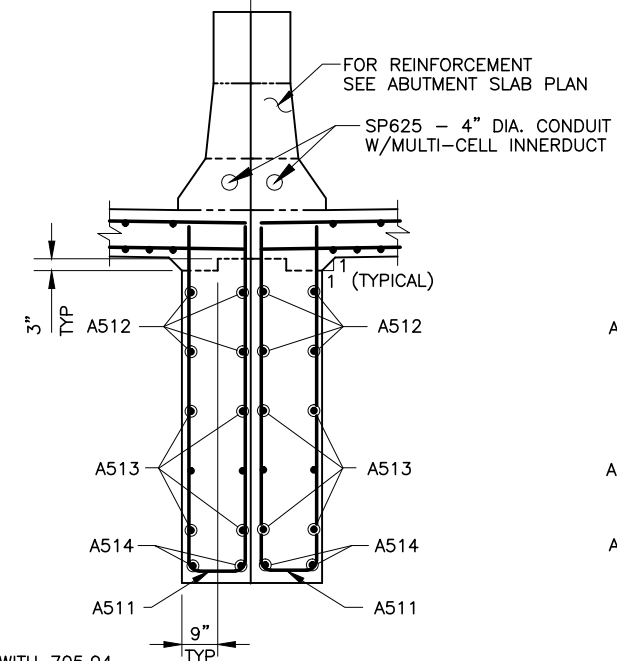
RECORD DRAWING		1/16
NO.	REVISIONS	BY DATE
<b>OHIO TURNPIKE COMMISSION</b>		
<b>ABUTMENT PLAN</b>		
OHIO TURNPIKE OVER S.R. 420 & I-280		
MILE POST 71.4 WOOD COUNTY		
<b>acla</b> <b>adache-cluni-lynn associates</b>		
CONSULTING ENGINEERS 5595 TRANSPORTATION BLVD. CLEVELAND, OHIO 44125		
DESIGNED: TES	CHECKED: TAB	DATE: 03-03-00
DRAWN: RCK	IN CHARGE: EAF	SCALE: NTS



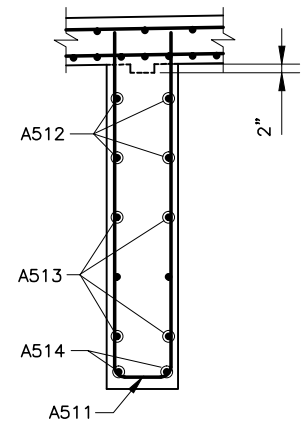
SECTION A-A

FORWARD ABUTMENT SHOWN REAR  
ABUTMENT SIMILAR EXCEPT AS NOTED.

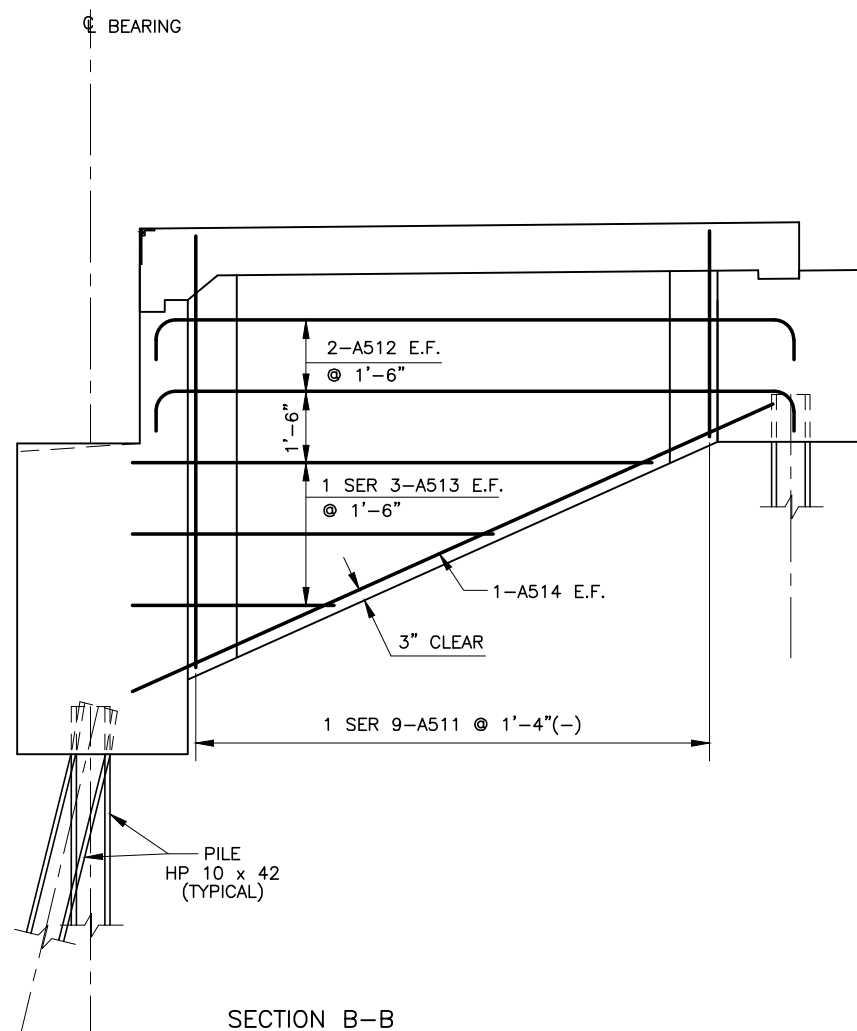
RE-ESTABLISHED SURVEY BASELINE  
AND CONSTRUCTION JOINT



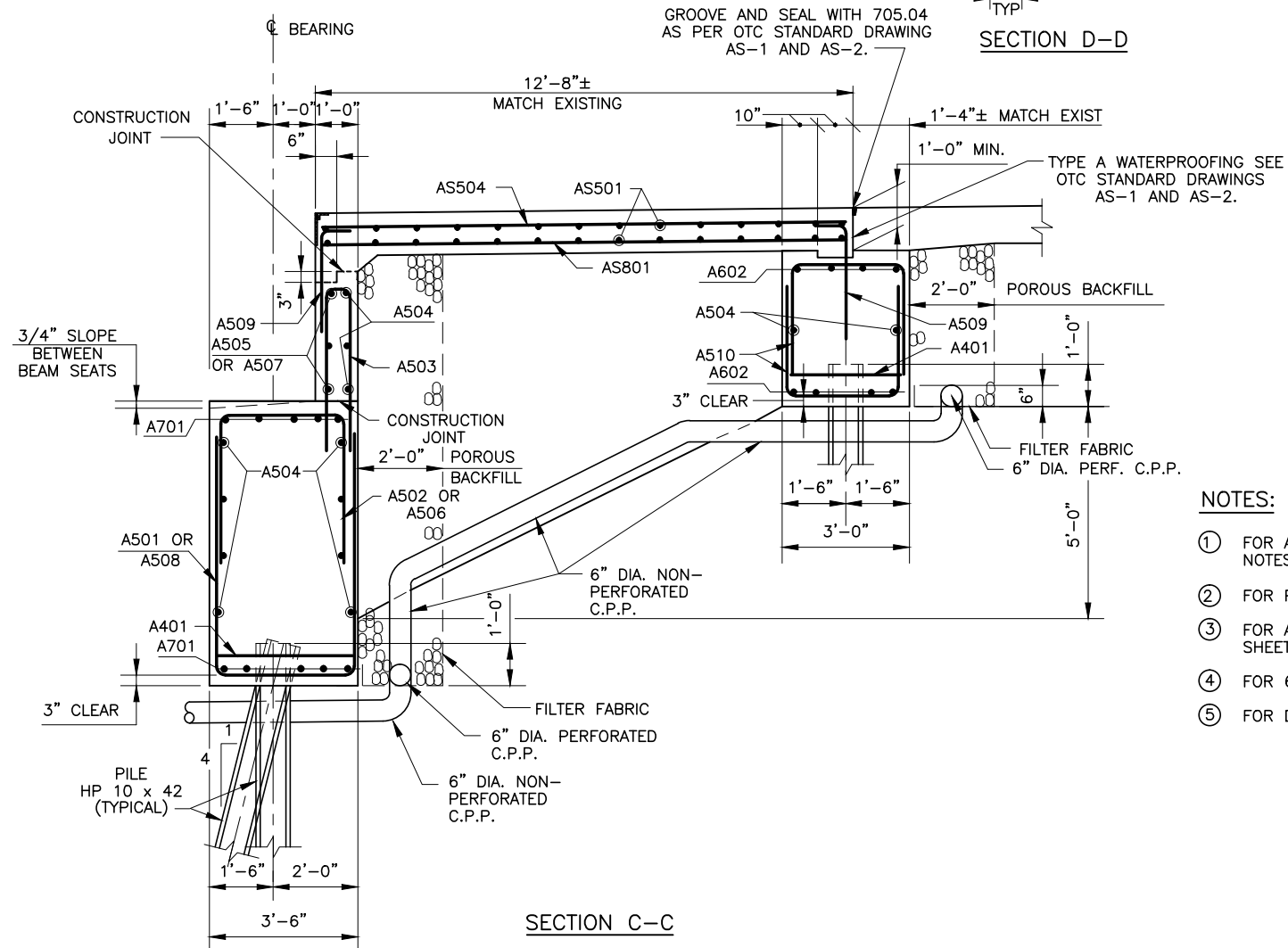
SECTION D-D



SECTION E-E



SECTION B-B

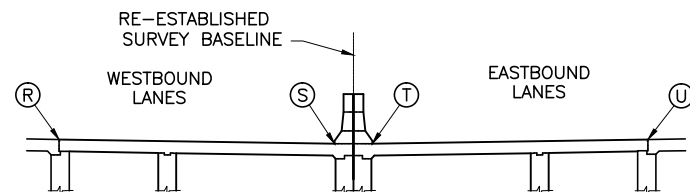
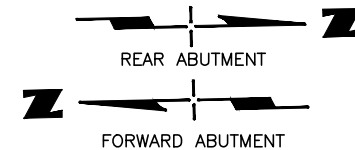
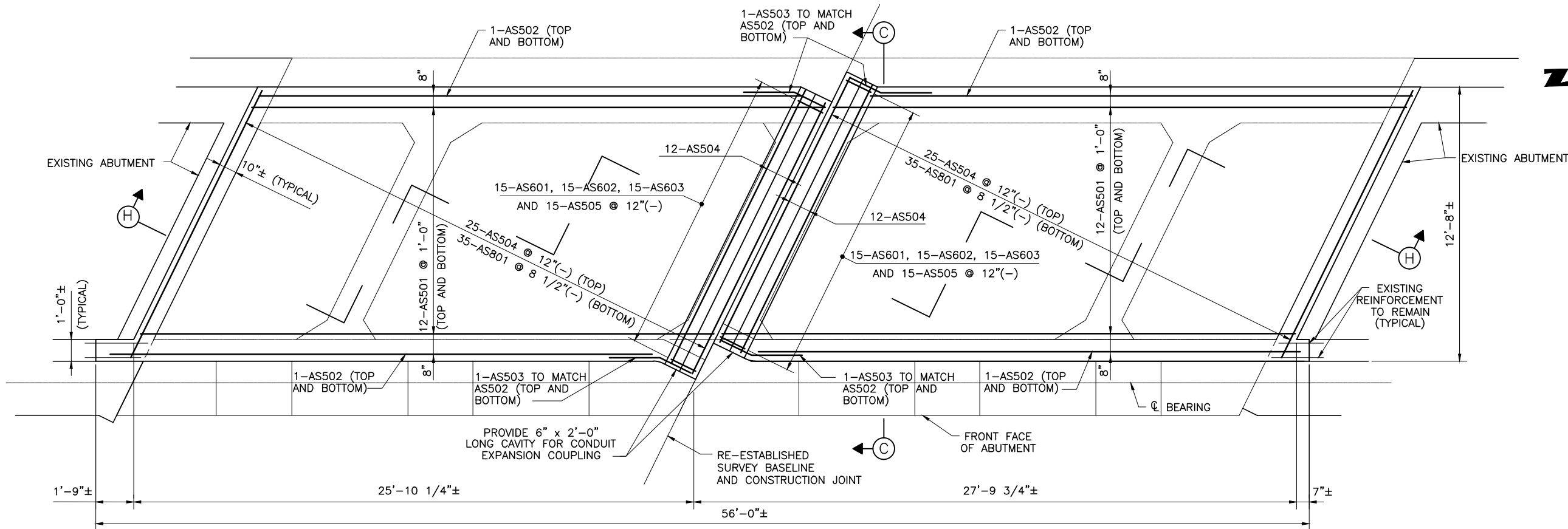


SECTION C-C

NOTES:

- ① FOR ABUTMENT PLAN AND ELEVATION AND ADDITIONAL NOTES SEE SHEET **6 / 20**.
- ② FOR PILING PLAN SEE SHEET **5 / 20**.
- ③ FOR ABUTMENT SLAB PLAN AND SECTION SEE SHEET **8 / 20**.
- ④ FOR 6" C.P.P. TERMINATION DETAIL SEE SHEET **G3 / G3**.
- ⑤ FOR DOWEL BAR LAYOUT DETAIL SEE SHEET **6 / 20**.

RECORD DRAWING		1/16
NO.	REVISIONS	BY DATE
<b>OHIO TURNPIKE COMMISSION</b>		
<b>ABUTMENT DETAILS</b>		
OHIO TURNPIKE OVER S.R. 420 & I-280		
MILE POST 71.4 WOOD COUNTY		
<b>acla adache-ciuni-lynn associates</b>		
CONSULTING ENGINEERS		
5595 TRANSPORTATION BLVD. CLEVELAND, OHIO 44125		
DESIGNED: TES	CHECKED: TAB	DATE: 03-03-00
DRAWN: RCK	IN CHARGE: EAF	SCALE: NTS



ELEVATION KEY  
LOOKING UP-STATION

### ABUTMENT SLAB PLAN

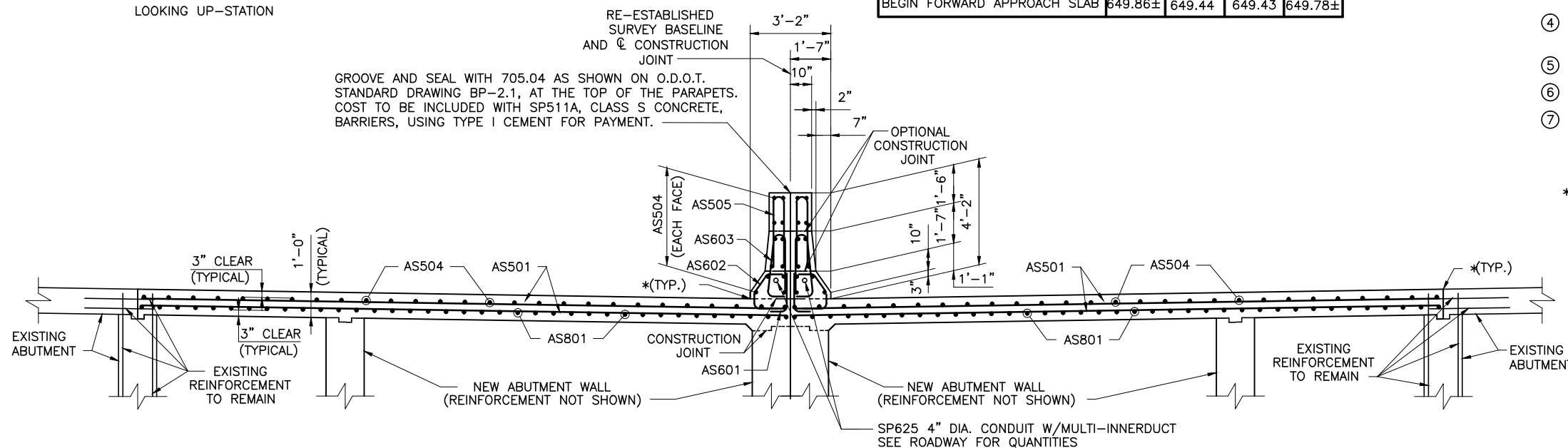
FORWARD ABUTMENT SHOWN  
REAR ABUTMENT SIMILAR

ELEVATION TABLE (SEE ELEVATION KEY)				
LOCATION	R	S	T	U
END REAR APPROACH SLAB	649.91±	649.59	649.60	649.93±
FACE OF REAR ABUT. BACKWALL	649.91±	649.62	649.62	649.97±
FACE OF FWD. ABUT BACKWALL	649.88±	649.48	649.47	649.81±
BEGIN FORWARD APPROACH SLAB	649.86±	649.44	649.43	649.78±

### NOTES:

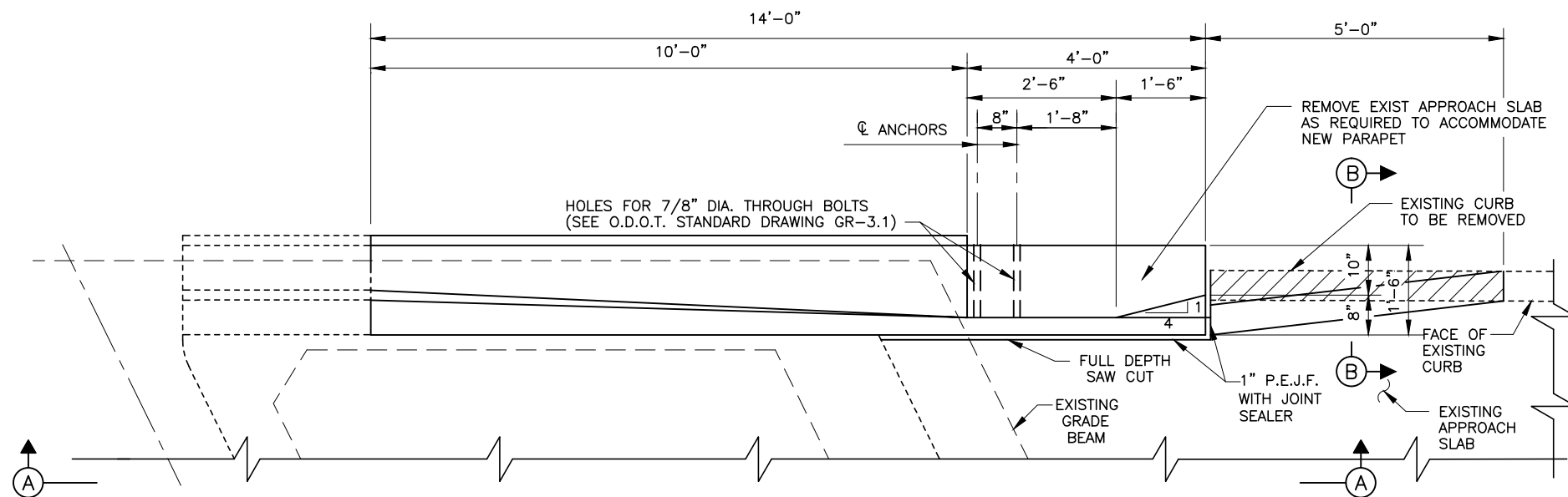
- ALL REINFORCING BARS ARE TO BE EPOXY COATED.
- PLACEMENT OF THE ABUTMENT SLAB PRIOR TO PLACEMENT OF THE BRIDGE DECK SLAB SHALL NOT BE PERMITTED. HOWEVER THE ABUTMENT SLAB AND THE BRIDGE DECK SLAB MAY BE PLACED AT THE SAME TIME.
- TRANSVERSE CONSTRUCTION JOINTS SHALL NOT BE USED IN THE ABUTMENT SLAB.
- FOR ADDITIONAL ABUTMENT DETAILS AND NOTES SHEETS **6 / 20** AND **7 / 20**.
- FOR EXPANSION JOINT DETAILS, SEE SHEET **16 / 20**.
- FOR SECTION C-C, SEE SHEET **7 / 20**.
- FOR REINFORCING SCHEDULE AND BAR BENDING DIAGRAMS, SEE SHEET **20 / 20**.

\* LONGITUDINAL CONSTRUCTION JOINT SHALL BE TREATED IN ACCORDANCE WITH ITEM SP516B SEALING OF CONSTRUCTION JOINT.

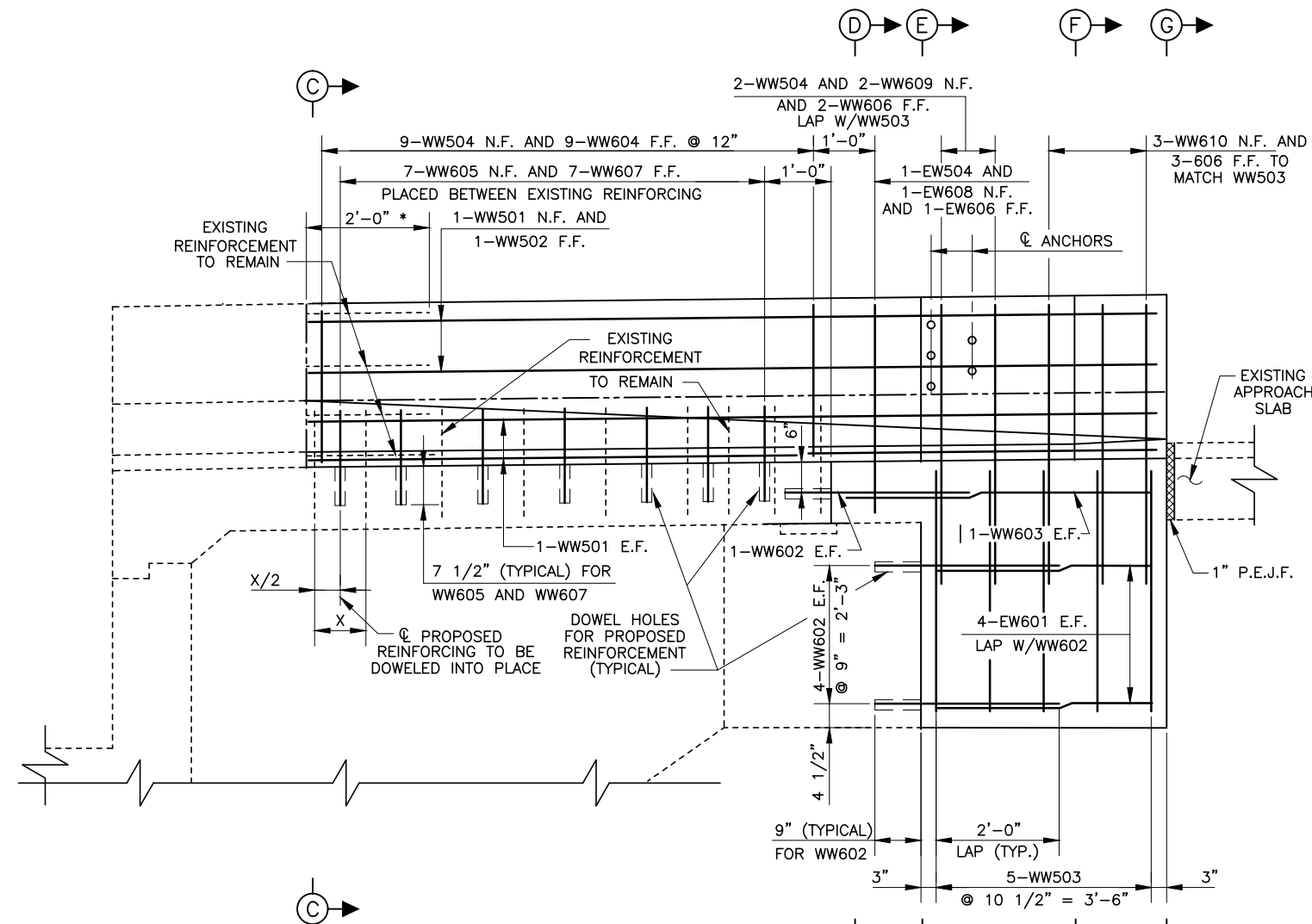


### SECTION H-H

RECORD DRAWING		1/16	
NO.	REVISIONS	BY	DATE
<b>OHIO TURNPIKE COMMISSION</b>			
<b>ABUTMENT SLAB PLAN</b>			
OHIO TURNPIKE OVER S.R. 420 & I-280 MILE POST 71.4 WOOD COUNTY			
<b>acla</b> <b>adache-ciuni-lynn associates</b> CONSULTING ENGINEERS 5595 TRANSPORTATION BLVD. CLEVELAND, OHIO 44125			
DESIGNED: AJM	CHECKED: TES	DATE: 03-03-00	
DRAWN: R.C.K.	IN CHARGE: EAF	SCALE: NTS	



PARAPET TRANSITION PLAN  
(REAR ABUTMENT EASTBOUND STRUCTURE)



SECTION A-A

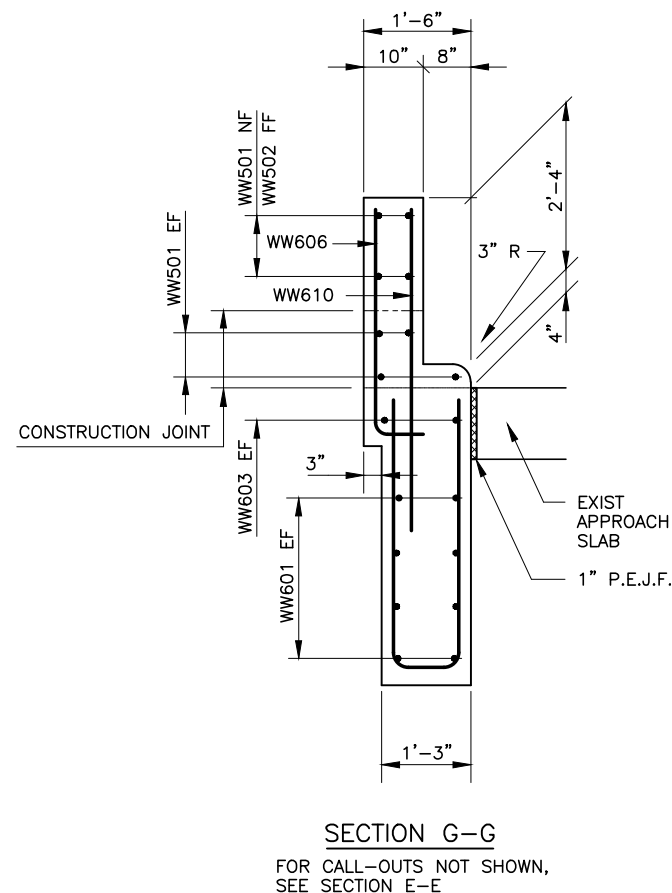
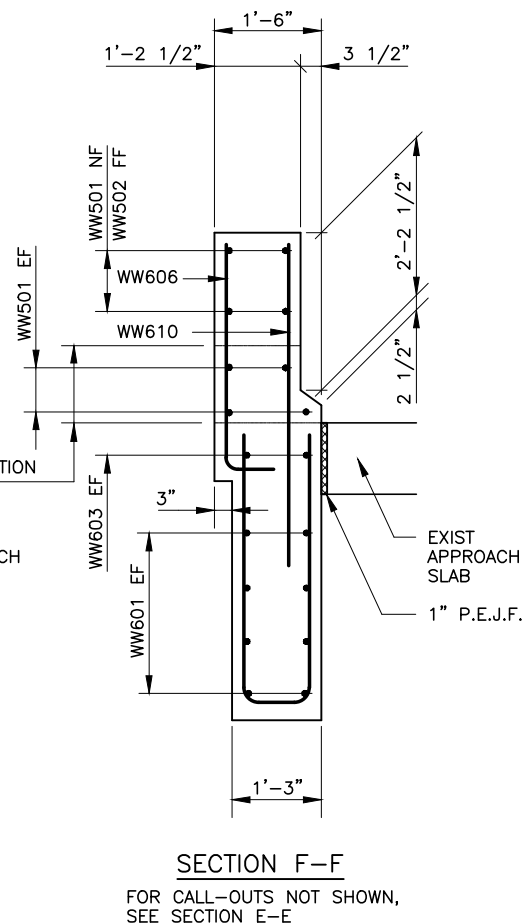
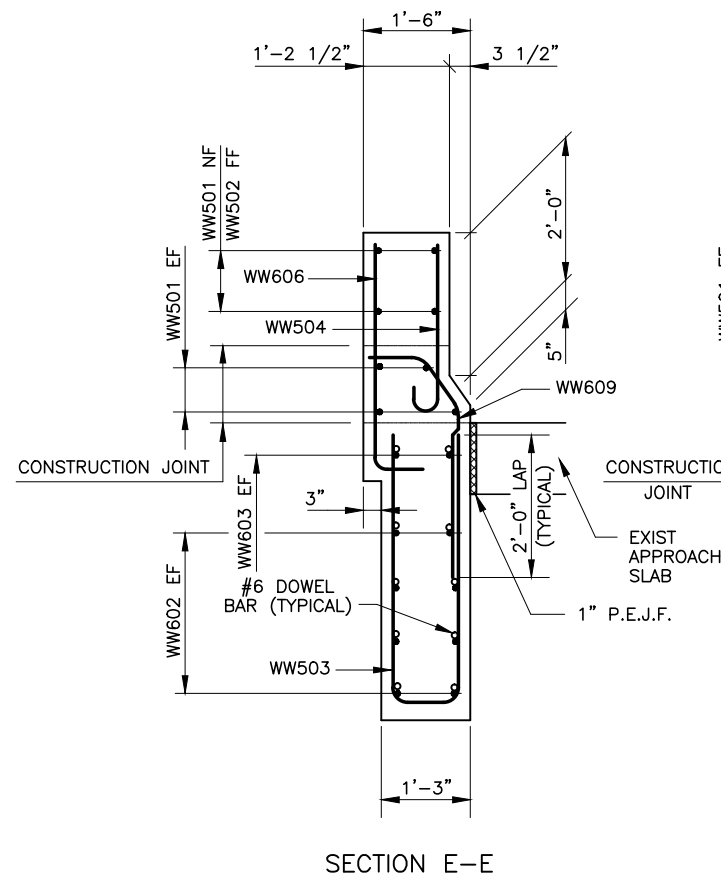
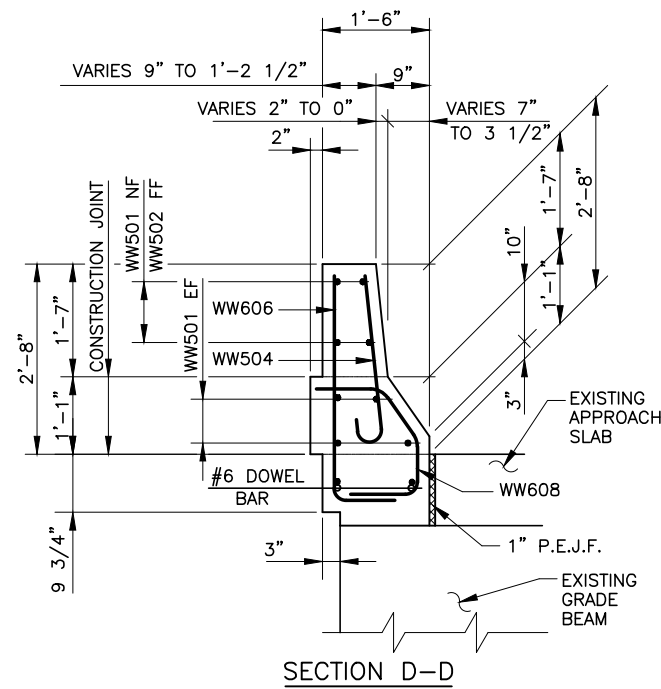
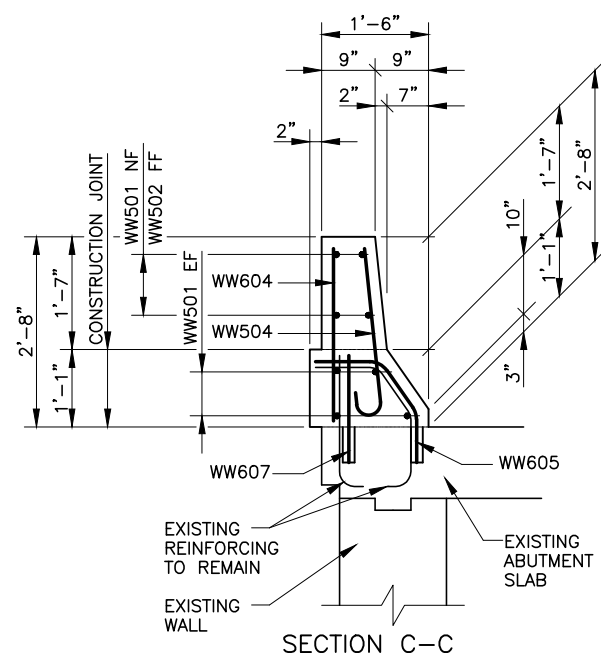
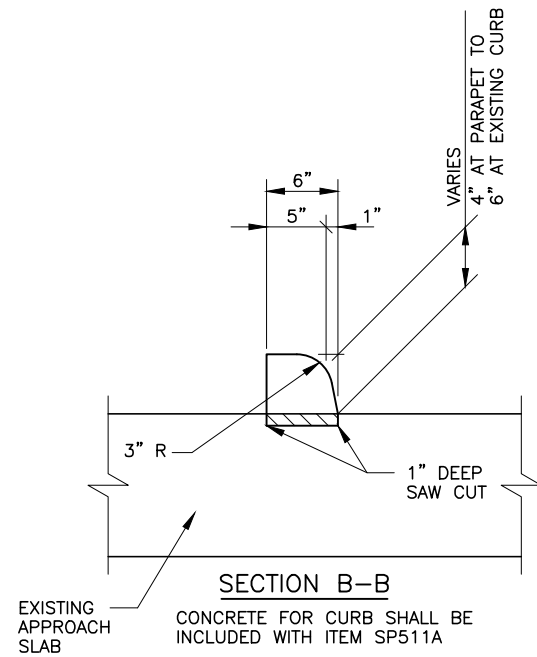
(X) DENOTES EXISTING REINFORCING STEEL SPACING.

\* DENOTES EXISTING HORIZONTAL REINFORCEMENT TO BE FIELD CUT AT THIS POINT. SEE NOTE ⑤.

# NOTES:

- 1" PREFORMED EXPANSION JOINT FILLER (P.E.J.F.) TOPPED WITH 1" MINIMUM DEPTH 705.04 JOINT SEALER. TO BE INCLUDED WITH ITEM SP511A, CLASS S CONCRETE BARRIERS, USING TYPE I CEMENT FOR PAYMENT.
- PORTION OF EXISTING APPROACH SLAB AND CURB TO BE REMOVED AT THE NEW PARAPET LOCATIONS ONLY. EXISTING REINFORCING IS TO BE CUT FLUSH WITH CONCRETE REMOVAL LINE. PAYMENT TO BE INCLUDED WITH ITEM SP202.
- DOWEL HOLES SHALL BE AS PER ITEM 510, DOWEL HOLES, USING SP853 GROUT ANCHORING.
- FOR REINFORCING SCHEDULE AND BAR BENDING DIAGRAMS, SEE SHEET 20 / 20 .
- EXISTING REINFORCING STEEL TO BE CLEANED, EPOXY COATING REPAIRED, AND REUSED. COST OF THIS IS INCIDENTAL TO ITEM SP202-PORTIONS OF STRUCTURE REMOVED.
- FOR SECTIONS B-B THROUGH G-G SEE SHEET 10 / 20 .

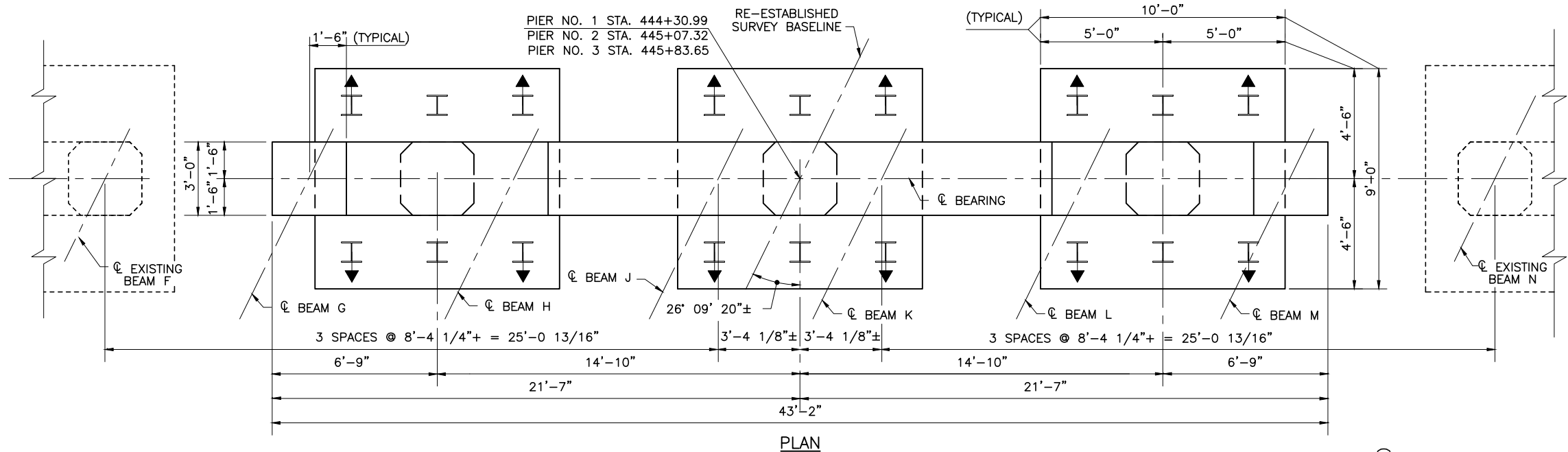
RECORD DRAWING		01/16
NO.	REVISIONS	BY DATE
<b>OHIO TURNPIKE COMMISSION</b>		
<b>PARAPET MODIFICATION DETAILS</b>		
OHIO TURNPIKE OVER S.R. 420 & I 280		
MILE POST 71.4 WOOD COUNTY		
acla <b>adache-ciuni-lynn associates</b>		
CONSULTING ENGINEERS 5595 TRANSPORTATION BLVD. CLEVELAND, OHIO 44125		
DESIGNED: AJM	CHECKED: TES	DATE: 03-03-00
DRAWN: RCK	IN CHARGE: EAF	SCALE: NTS



# NOTES:

- FOR LOCATION OF SECTIONS AND ADDITIONAL NOTES SEE SHEET 9 / 20.

RECORD DRAWING		1/16
NO.	REVISIONS	BY DATE
<b>OHIO TURNPIKE COMMISSION</b>		
PARAPET MODIFICATION DETAILS		
OHIO TURNPIKE OVER S.R. 420 & I-280		
MILE POST 71.4 WOOD COUNTY		
acla adache-ciuni-lynn associates		
CONSULTING ENGINEERS		
5595 TRANSPORTATION BLVD. CLEVELAND, OHIO 44125		
DESIGNED: AJM	CHECKED: TES	DATE: 03-03-00
DRAWN: RCK	IN CHARGE: EAF	SCALE: NTS
CONTRACT 77-02-01 SHEET B125 OF B135		



# NOTES:

- FOR REINFORCING SCHEDULE AND BAR BENDING DIAGRAM, SEE SHEET 19/20.
- COLUMN SPIRAL REINFORCEMENT SHALL EXTEND A MINIMUM OF 2" INTO THE PIER CAP CONCRETE.
- REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT SHALL BE ACCURATELY PLACED TO AVOID INTERFERENCE WITH THE DRILLING OF THE ANCHOR ROD HOLES OR THE PRESETTING OF THE ANCHOR RODS.
- FOR ANCHOR ROD PLACEMENT DETAILS SEE SHEET 12/20.
- FOR SECTIONS A-A, B-B AND C-C SEE SHEET 12/20.
- MINIMUM REINFORCING BAR LAP LENGTHS ARE AS FOLLOWS:  
# 5 BAR = 2'-5"  
# 9 BAR = 7'-6"  
UNLESS OTHERWISE NOTED.
- THE MINIMUM CONCRETE COVER FOR REINFORCING STEEL SHALL BE 2" EXCEPT AS NOTED.

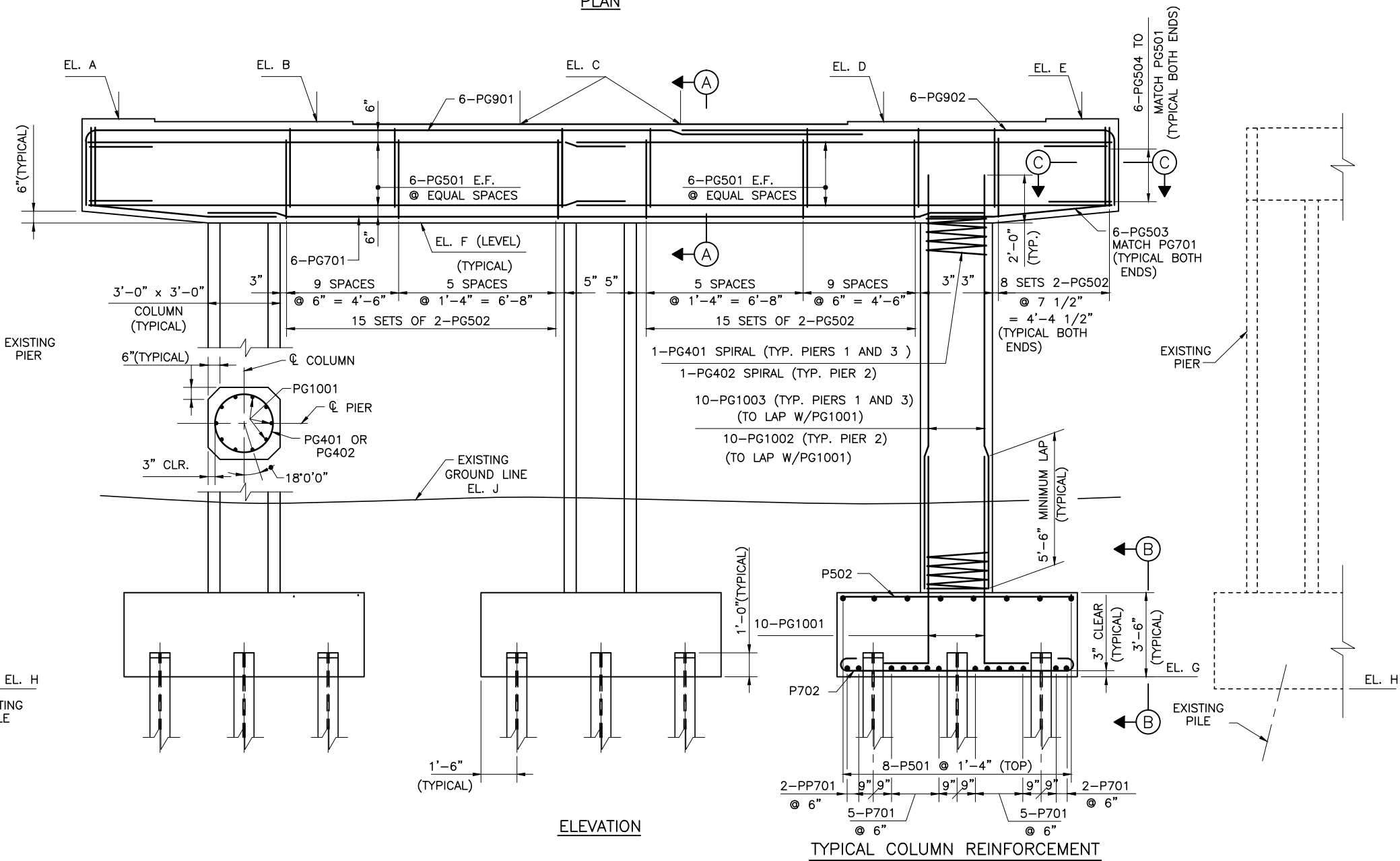
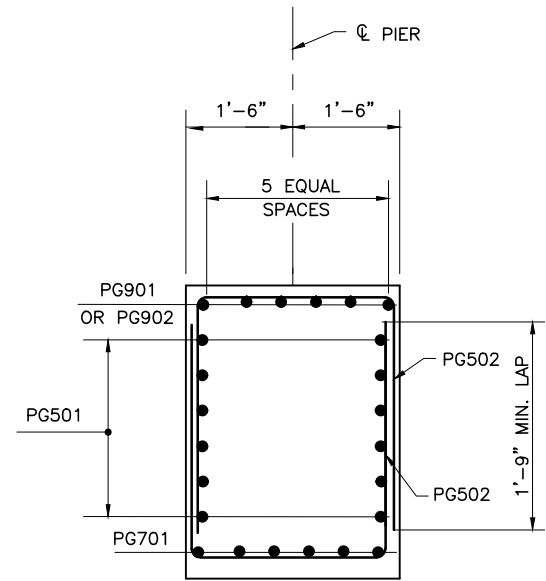


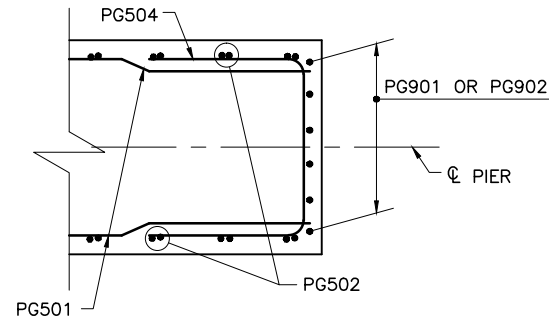
TABLE OF ELEVATIONS			
LOCATION	PIER 1	PIER 2	PIER 3
A	645.02	645.66	644.98
B	644.92	645.55	644.85
C	644.82	645.43	644.73
D	644.94	645.53	644.82
E	645.05	645.63	644.92
F	640.82	641.43	640.73
G	623.50	622.50	623.50
H	623.4±	622.0±	623.4±
J	630.5±	629.9±	630.5±

RECORD DRAWING		1/16
NO.	REVISIONS	BY DATE
OHIO TURNPIKE COMMISSION		
PIER PLAN AND ELEVATION		
OHIO TURNPIKE OVER S.R. 420 & I-280		
MILE POST 71.4 WOOD COUNTY		
acla adache-cluni-lynn associates		
CONSULTING ENGINEERS		
5595 TRANSPORTATION BLVD. CLEVELAND, OHIO 44125		
DESIGNED: TAB	CHECKED: AJM	DATE: 03-03-00
DRAWN: R.C.K.	IN CHARGE: EAF	SCALE: NTS

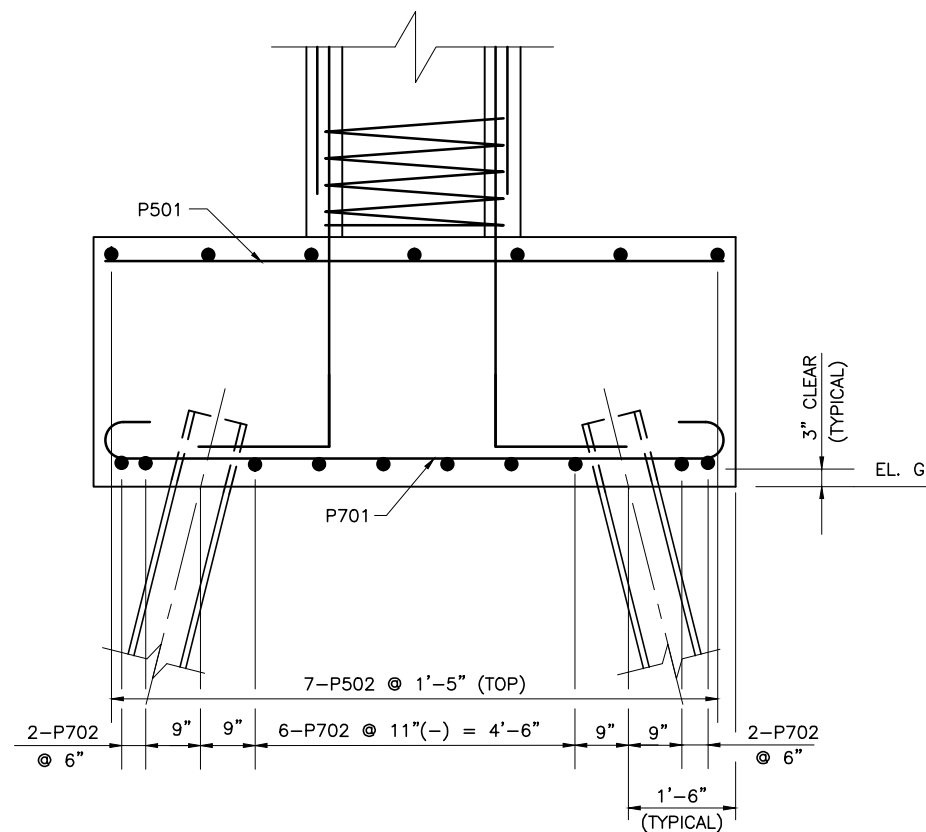




SECTION A-A

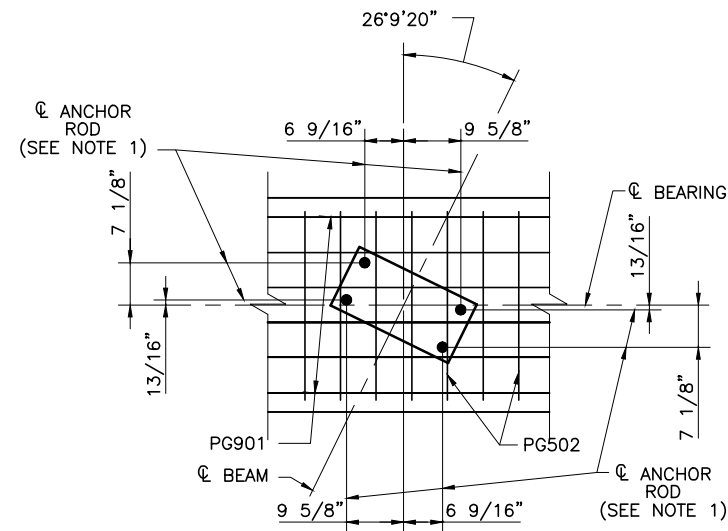


SECTION C-C



SECTION B-B

NON-BATTERED PILES NOT SHOWN



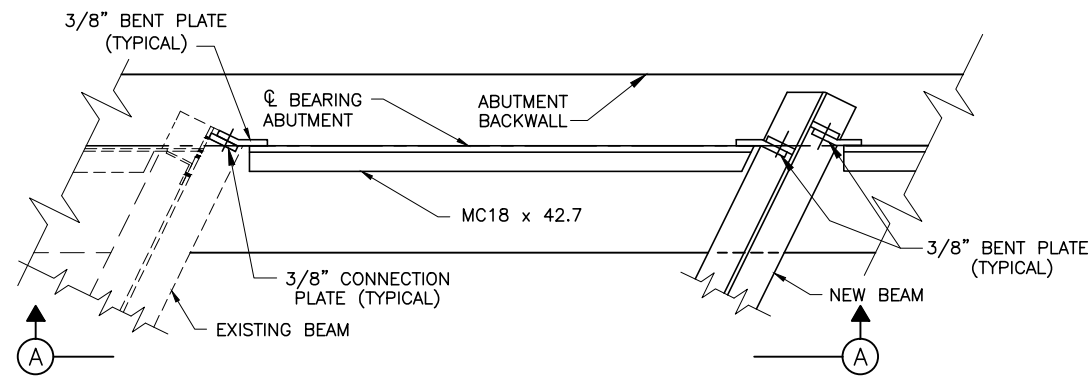
ANCHOR ROD PLACEMENT DETAIL  
BEARINGS (ODOT STD. F-200) AT PIER NO. 2

NOTES:

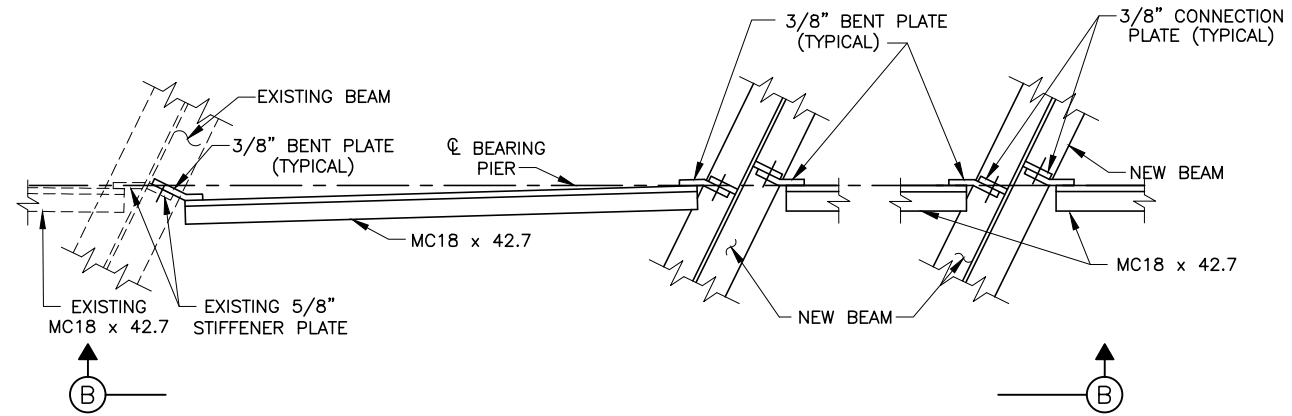
- BEARING ANCHOR RODS SHALL BE GALVANIZED ACCORDING TO SP711.02 AND GROUTED USING SP853 GROUT ANCHORING.
- FOR PIER PLAN AND ELEVATION AND ADDITIONAL NOTES SEE SHEET 11/20.

RECORD DRAWING		1/16	
NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
PIER DETAILS			
OHIO TURNPIKE OVER S.R. 420 & I-280			
MILE POST 71.4 WOOD COUNTY			
acla adache-ciuni-lynn associates			
CONSULTING ENGINEERS			
5595 TRANSPORTATION BLVD. CLEVELAND, OHIO 44125			
DESIGNED:	TAB	CHECKED:	AJM
DRAWN:	R.C.K.	IN CHARGE:	EAF
DATE:		03-03-00	
SCALE:		NTS	

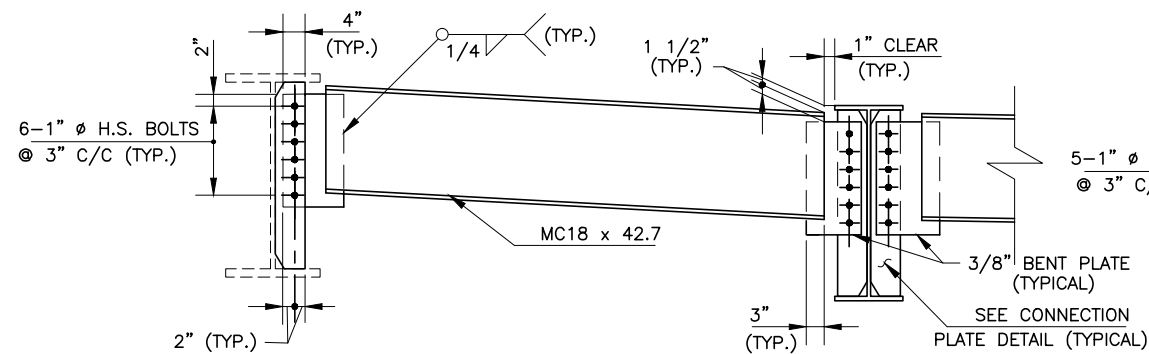




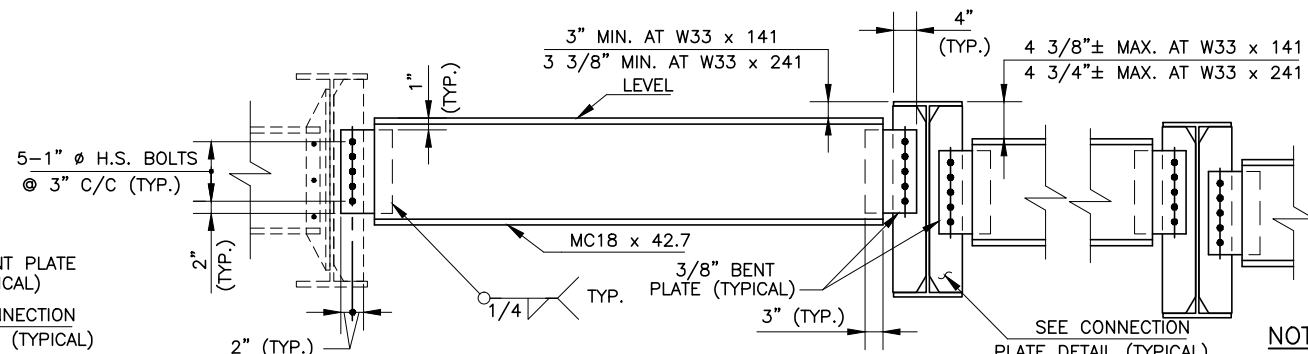
END DIAPHRAGM PLAN



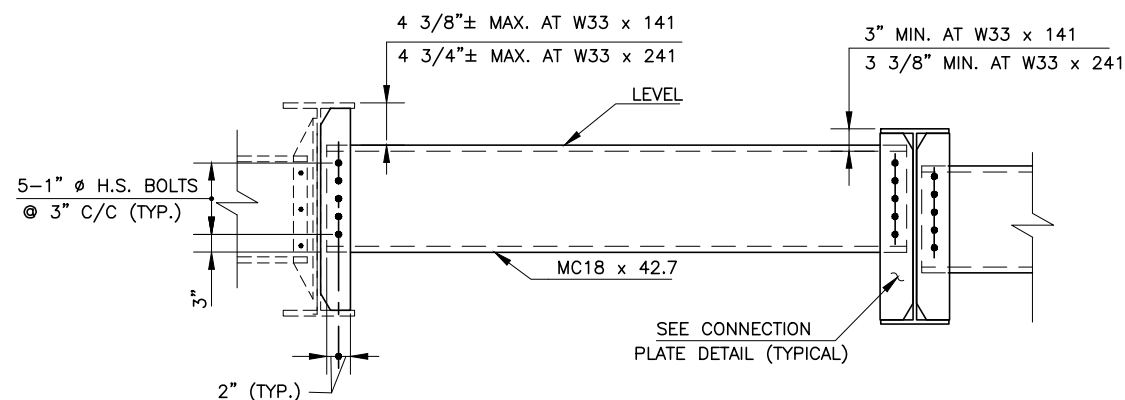
PLAN - DIAPHRAGM AT PIER



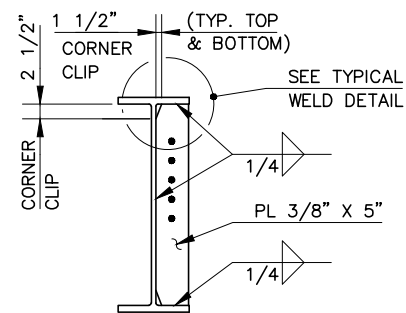
VIEW A-A END DIAPHRAGM



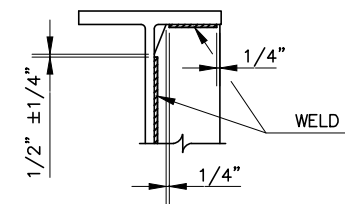
VIEW B-B DIAPHRAGM AT PIER



INTERMEDIATE DIAPHRAGM DETAIL



CONNECTION PLATE DETAIL  
(PROVIDE FIELD WELDS FOR EXISTING BEAMS)

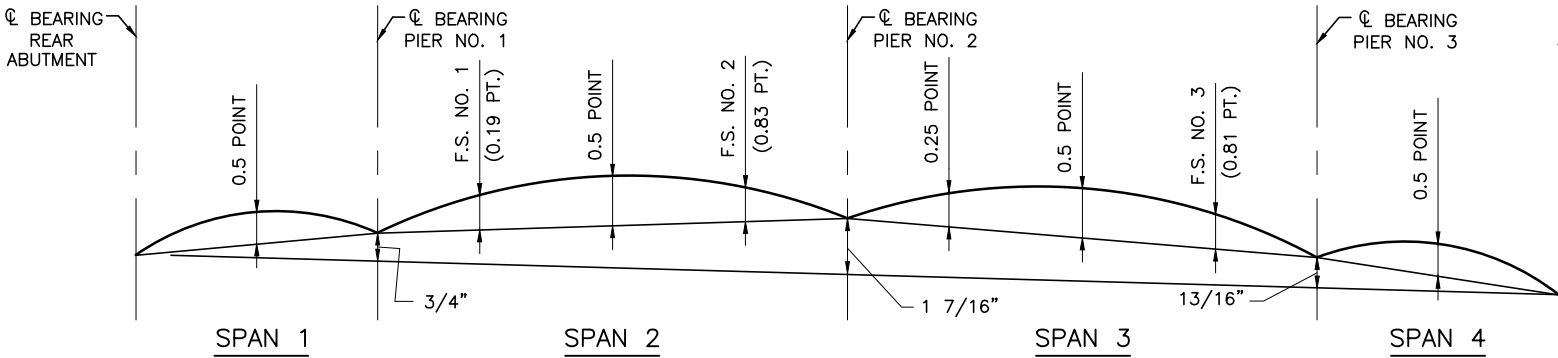


TYPICAL WELD  
DETAIL

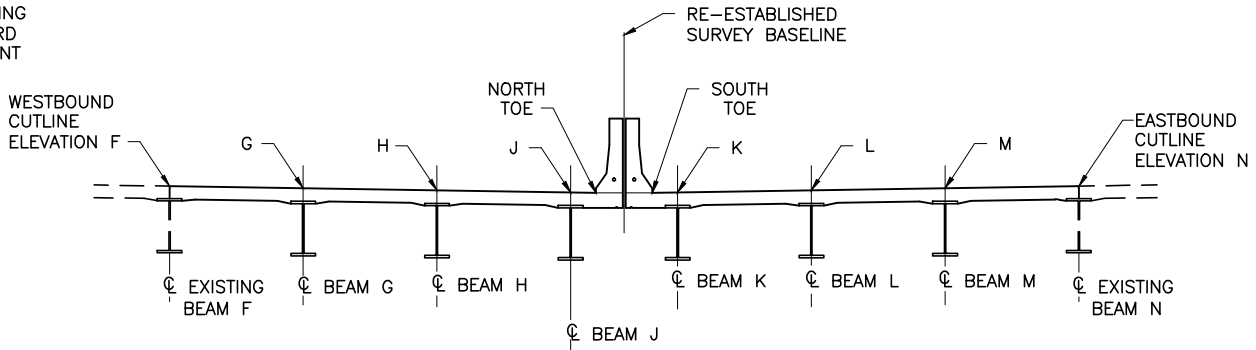
# NOTES

- HIGH STRENGTH BOLTS SHALL BE 1" DIAMETER GALVANIZED AND SHALL CONFORM TO ASTM A325, SP513, SP514 OR SP514A OR SP514B AND 711. HOLES FOR 1" DIA. BOLTS SHALL BE 1 1/16" DIAMETER.
- THE HOLES IN CONNECTION PLATES, ATTACHED TO THE EXISTING STRINGERS, FOR THE CONNECTION OF THE INTERMEDIATE AND END DIAPHRAGMS, SHALL BE FIELD DRILLED PER ITEM 513.14 OF THE O.D.O.T. CONSTRUCTION AND MATERIAL SPECIFICATIONS.
- FOR FRAMING PLAN SEE SHEET 13 / 20 .
- FOR DIAPHRAGMS LOCATED BETWEEN EXISTING BEAMS AND NEW BEAMS THE BOLTS SHALL BE ONLY HAND TIGHTENED PRIOR TO POURING THE DECK SLAB. COMPLETE TIGHTENING SHALL BE DONE AFTER THE DECK HAS CURED.

	RECORD DRAWING		1/16
NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
SUPERSTRUCTURE DETAILS			
OHIO TURNPIKE OVER S.R.420 & I-280			
MILE POST	71.4	WOOD COUNTY	
acla adache-ciuni-lynn associates			
CONSULTING ENGINEERS			
5595 TRANSPORTATION BLVD. CLEVELAND, OHIO 44125			
DESIGNED:	R.C.K.	CHECKED: A.J.M./TAB	DATE: 03-03-00
DRAWN:	R.C.K.	IN CHARGE: EAF	SCALE: NTS
CONTRACT 77-02-01 SHEET B129 OF B135			



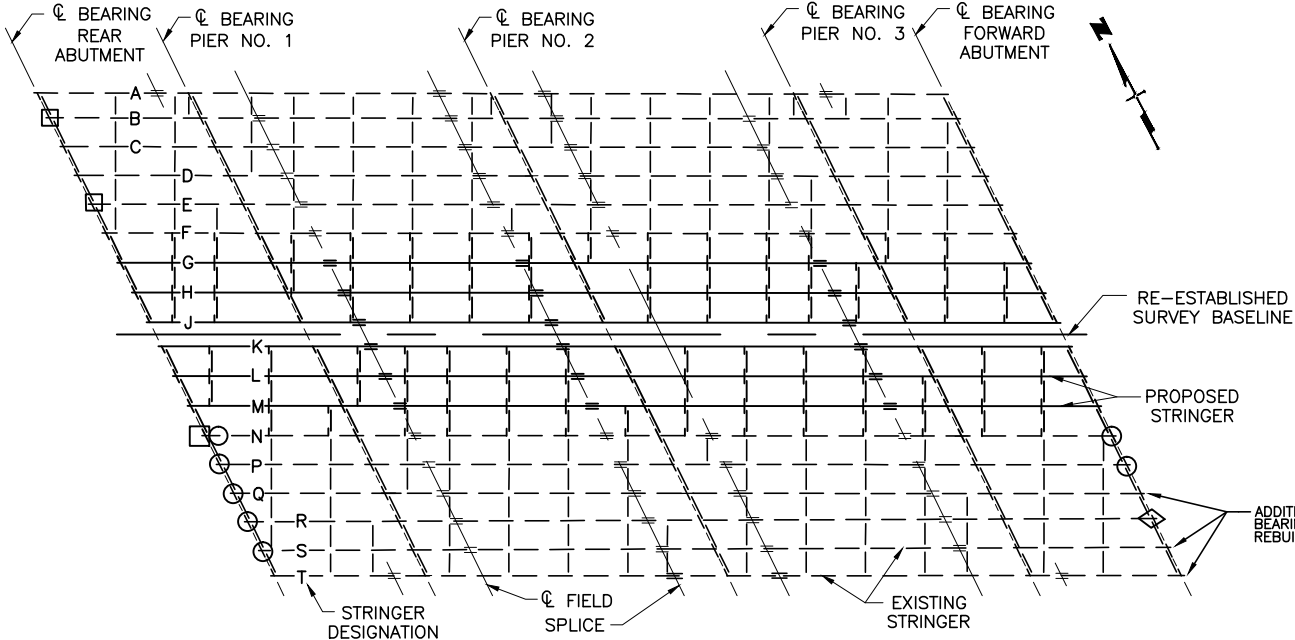
CAMBER DIAGRAMS



ELEVATION KEY

DEFLECTION AND CAMBER TABLE									
		SPAN 1	SPAN 2		SPAN 3			SPAN 4	
		0.5 POINT	F.S. NO. 1	0.5 POINT	F.S. NO. 2	0.25 POINT	0.5 POINT	F.S NO. 3	0.5 POINT
BEAM G, H, L, M	DEFLECTION DUE TO WEIGHT OF STEEL	0	1/16"	1/8"	1/16"	1/16"	1/8"	1/16"	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	5/16"	9/16"	1/8"	1/4"	9/16"	5/16"	0
	ADJUSTMENT REQUIRED FOR VERTICAL CURVE	1/8"	1/16"	3/16"	0	3/16"	1/8"	1/8"	1/16"
	TOTAL REQUIRED CAMBER	1/8"	7/16"	7/8"	3/16"	1/2"	13/16"	1/2"	1/16"
BEAM J, K	DEFLECTION DUE TO WEIGHT OF STEEL	0	1/16"	1/8"	1/16"	1/16"	1/8"	1/16"	0
	DEFLECTION DUE TO REMAINING DEAD LOAD	0	5/16"	1/2"	1/8"	1/4"	1/2"	5/16"	0
	ADJUSTMENT REQUIRED FOR VERTICAL CURVE	1/8"	1/16"	3/16"	0	3/16"	1/8"	1/8"	1/16"
	TOTAL REQUIRED CAMBER	1/8"	7/16"	13/16"	3/16"	1/2"	3/4"	1/2"	1/16"

F.S. INDICATES FIELD SPLICE

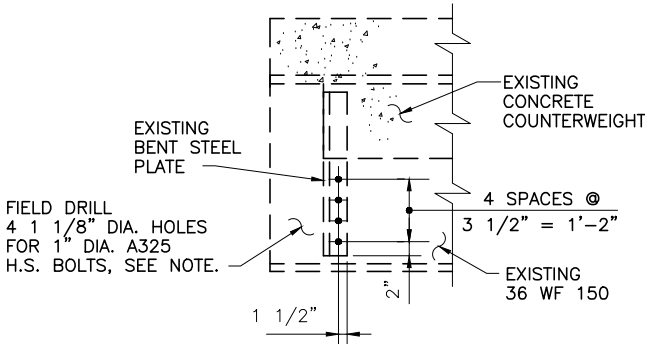


FRAMING PLAN

LOCATION	F	G	H	J	NORTH TOE	SOUTH TOE	K	L	M	N
CL BRG. REAR ABUT.	649.94	649.87	649.75	649.64	649.62	649.62	649.64	649.76	649.87	649.99
.50 POINT SPAN NO. 1	650.00	649.89	649.78	649.67	649.65	649.65	649.67	649.79	649.91	650.03
CL BRG. PIER NO. 1	650.00	649.89	649.79	649.69	649.67	649.67	649.69	649.81	649.92	650.03
FIELD SPLICE NO. 1	650.00	649.90	649.79	649.69	649.67	649.67	649.69	649.80	649.91	650.02
.50 POINT SPAN NO. 2	650.01	649.91	649.81	649.70	649.68	649.68	649.70	649.81	649.92	650.03
FIELD SPLICE NO. 2	650.04	649.93	649.81	649.70	649.68	649.68	649.70	649.80	649.91	650.01
CL BRG. PIER NO. 2	650.04	649.92	649.81	649.69	649.67	649.67	649.69	649.79	649.89	650.00
.25 POINT SPAN NO. 3	650.02	649.90	649.79	649.68	649.66	649.66	649.68	649.78	649.88	649.98
.50 POINT SPAN NO. 3	650.00	649.88	649.77	649.65	649.63	649.63	649.65	649.76	649.86	649.96
FIELD SPLICE NO. 3	649.98	649.86	649.74	649.62	649.60	649.59	649.62	649.72	649.82	649.92
CL BRG. PIER NO. 3	649.97	649.85	649.72	649.60	649.57	649.57	649.59	649.69	649.79	649.89
.50 POINT SPAN NO. 4	649.94	649.81	649.69	649.55	649.53	649.52	649.54	649.64	649.75	649.86
CL BRG. FWD. ABUT.	649.90	649.78	649.65	649.51	649.48	649.48	649.50	649.61	649.72	649.84

1 FINISHED PAVEMENT ELEVATIONS:

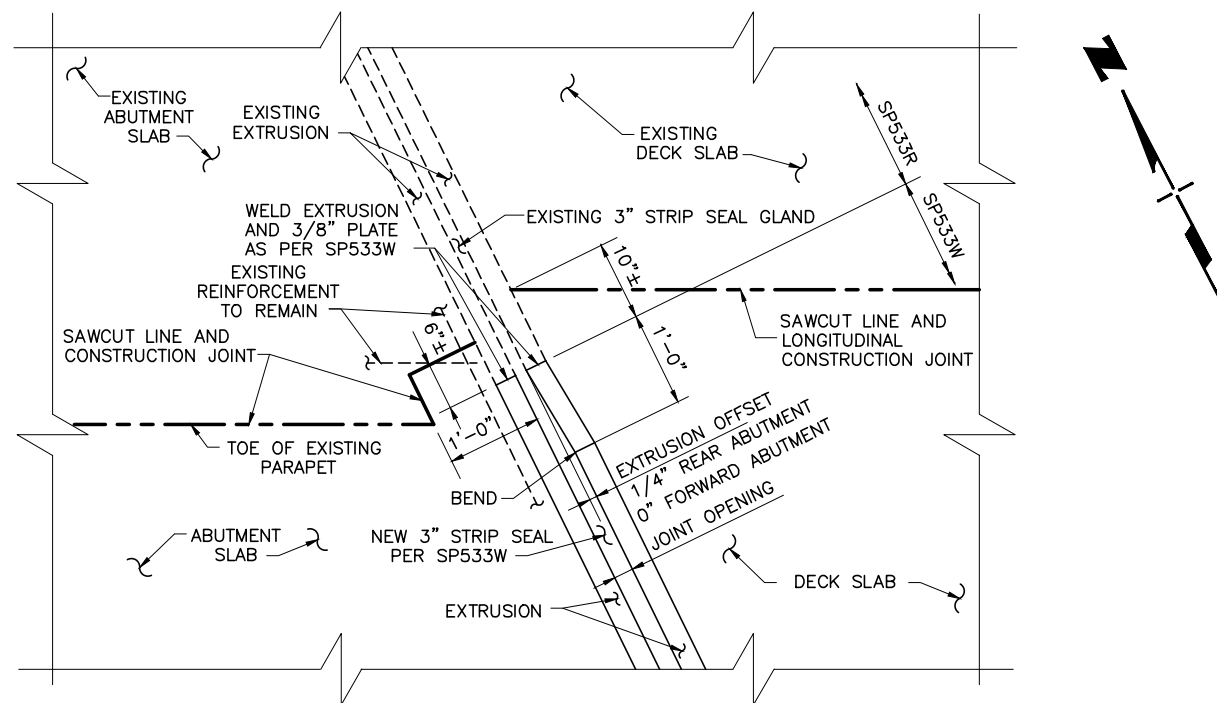
THE ELEVATIONS SHOWN ARE FINISHED PAVEMENT ELEVATIONS. PROPER ALLOWANCE SHALL BE MADE FOR THE DEAD LOAD DEFLECTIONS CAUSED BY THE WEIGHT OF THE CONCRETE.



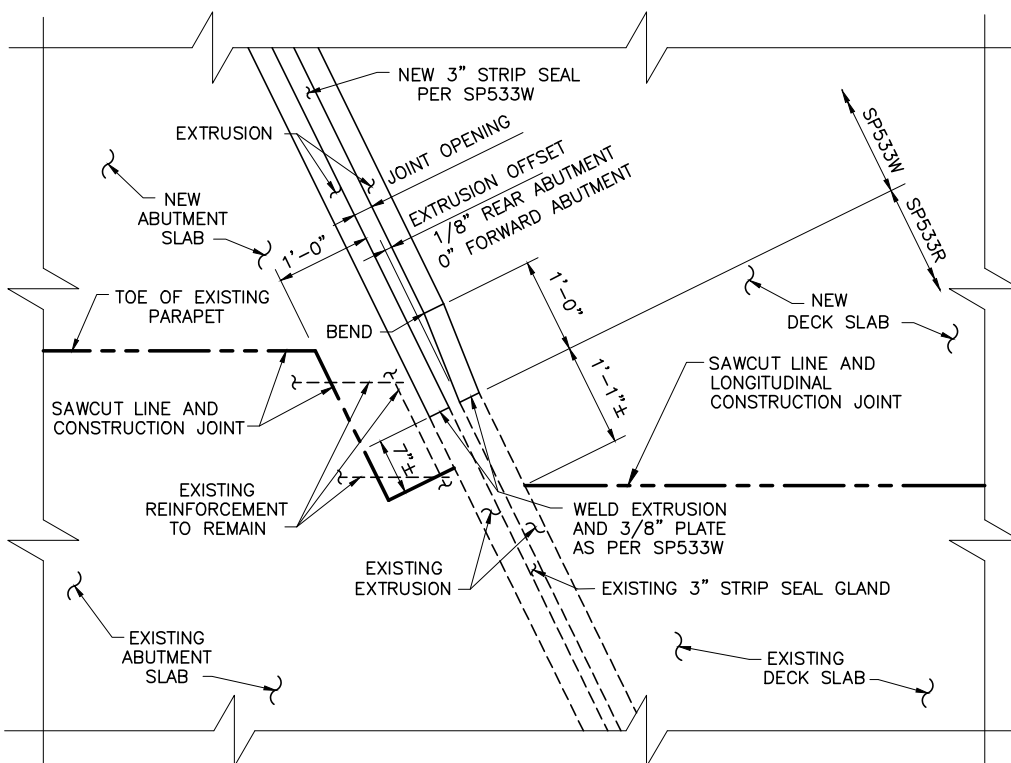
END DIAPHRAGM  
CONNECTION PLATE  
REPAIR DETAIL

FIELD DRILL HOLES IN EXISTING STRUCTURAL STEEL BEAMS AND CONNECTION PLATES AND INSTALL HIGH-STRENGTH STEEL BOLTS IN THESE HOLES IN ACCORDANCE WITH ITEM SP513. PAYMENT FOR THIS WORK SHALL BE INCIDENTAL TO ITEM 513-STRUCTURAL STEEL, AISC CATEGORY I.

RECORD DRAWING		01/19/04
NO.	REVISIONS	BY DATE
OHIO TURNPIKE COMMISSION		
CAMBER AND ELEVATIONS		
OHIO TURNPIKE OVER S.R. 420 & I-280		
MILE POST 71.4 WOOD COUNTY		
acla adache-cluni-lynn associates		
CONSULTING ENGINEERS 5595 TRANSPORTATION BLVD. CLEVELAND, OHIO 44125		
DESIGNED: RCK	CHECKED: AJM	DATE: 03-03-00
DRAWN: RCK	IN CHARGE: EAF	SCALE: NTS
CONTRACT 77-02-01 SHEET B130 OF B135		



**PART PLAN AT WESTBOUND LANES**  
 REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR

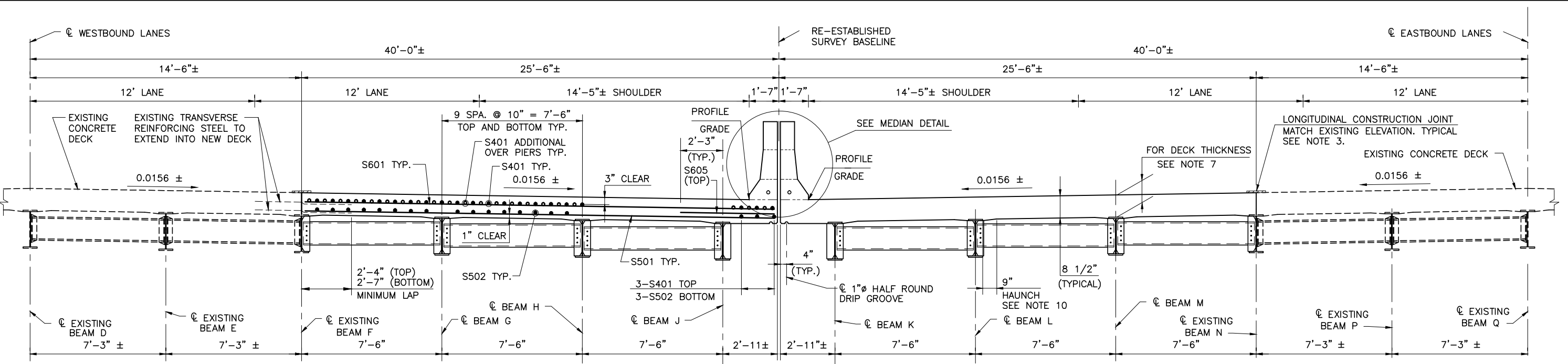


**PART PLAN AT EASTBOUND LANES**  
 REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR

**NOTES:**

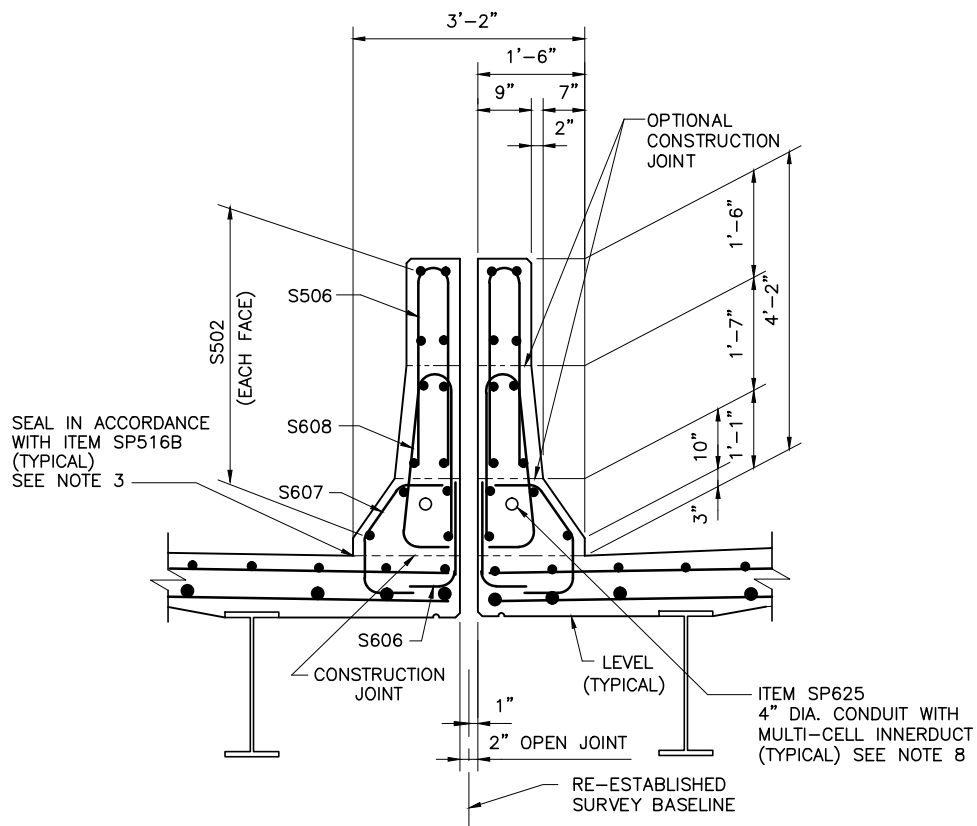
- ① THE CONTRACTOR SHALL VERIFY THE SIZE AND MANUFACTURER OF THE EXISTING EXPANSION JOINTS.
- ② PAYMENT FOR THE NEW EXPANSION JOINT ARMOR AND THE STRIP SEAL GLAND IN THE WIDENED PORTION WILL BE MADE UNDER ITEM SP533W. IF AN EXTRUSION CAN BE PROVIDED TO MATCH THAT IN THE EXISTING DECK REMAINING, THEN ONE CONTINUOUS STRIP SEAL WILL BE PROVIDED FOR THE ENTIRE WIDTH OF THE DECK. PAYMENT FOR THE PORTION OF THE NEW STRIP SEAL GLAND IN THE EXISTING JOINT ARMOR WILL BE MADE UNDER ITEM SP533R.
- ③ FOR ADDITIONAL DETAILS AND NOTES NOT SHOWN, SEE O.T.C. STANDARD DRAWING DJ-1 AND DJ-2.
- ④ MINIMUM JOINT OPENING AT TIME OF STRIP SEAL GLAND INSTALLATION SHALL NOT BE LESS THAN 1 1/2".
- ⑤ FOR SLAB PLAN DETAILS SEE 18 / 20.
- ⑥ FOR ABUTMENT SLAB DETAILS, SEE SHEET 8 / 20.

RECORD DRAWING		1/16
NO.	REVISIONS	BY DATE
<b>OHIO TURNPIKE COMMISSION</b>		
<b>EXPANSION JOINT DETAILS</b>		
OHIO TURNPIKE OVER S.R. 420 & I-280		
MILE POST 71.4		WOOD COUNTY
<b>acla</b> <b>adache-cluni-lynn associates</b> <small>CONSULTING ENGINEERS</small> 5595 TRANSPORTATION BLVD. CLEVELAND, OHIO 44125		
DESIGNED: AJM	CHECKED: TAB	DATE: 03-03-00
DRAWN: R.C.K.	IN CHARGE: EAF	SCALE: NTS



TRANSVERSE SECTION

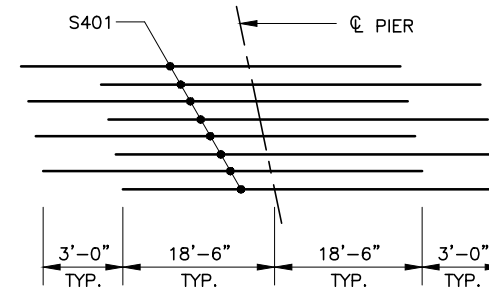
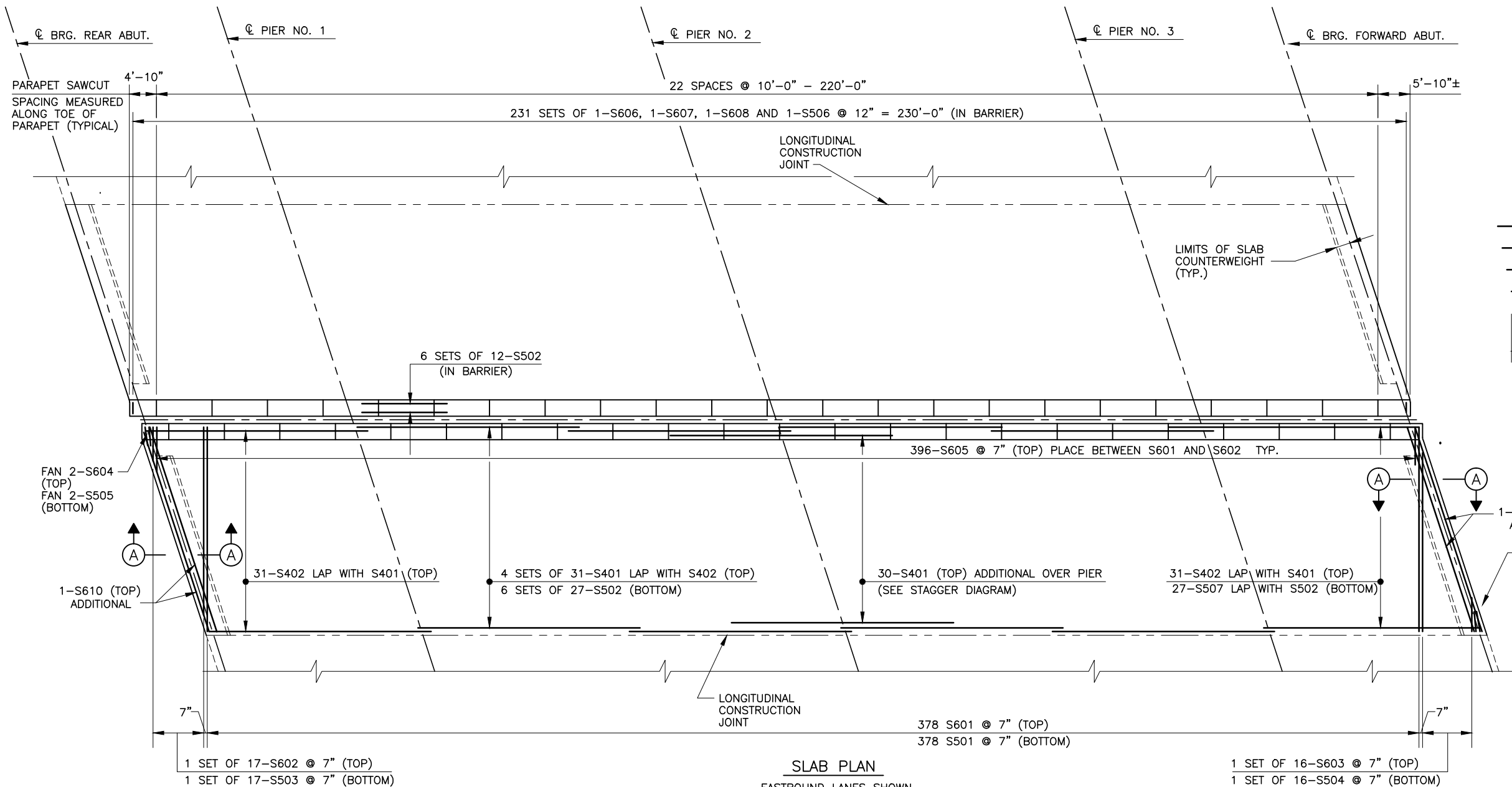
EXISTING BEAMS ARE 36WF150 OR 36WF194, WITH COVER PLATES  
PROPOSED BEAMS ARE W33 x 141 OR W33 x 241



NOTES:

- ① DRIP GROOVES SHALL TERMINATE 2'-0" FROM THE FACE OF THE ABUTMENTS.
- ② FOR ADDITIONAL NOTES: SEE SHEET 18/20 AND THE STRUCTURAL GENERAL NOTES.
- ③ LONGITUDINAL CONSTRUCTION JOINTS SHALL BE TREATED IN ACCORDANCE WITH ITEM SP516B SEALING OF CONSTRUCTION JOINTS.
- ④ FOR SLAB PLAN SEE SHEET 18/20
- ⑤ FOR FRAMING PLAN AND STRUCTURAL STEEL DETAILS SEE SHEETS 13/20 AND 14/20
- ⑥ FOR FINISHED PAVEMENT ELEVATIONS SEE SHEET 15/20
- ⑦ THE DECK THICKNESS FROM THE TOP OF BEAM TO TOP OF DECK IS AS FOLLOWS:  
9" (+) OVER W33 x 241 BEAMS  
9 1/2" OVER W33 x 141 BEAMS
- ⑧ FOR 4" DIA. CONDUIT WITH MULTI-CELL INNERDUCT QUANTITIES, SEE ROADWAY PLANS. FOR DUCT DETAILS, SEE OTC STANDARD DRAWING MCC-1.
- ⑨ A HAUNCH WIDTH OF 9 INCHES SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE. HOWEVER THE HAUNCH WIDTH MAY VARY BETWEEN 6 AND 12 INCHES.

RECORD DRAWING		1/16
NO.	REVISIONS	BY DATE
OHIO TURNPIKE COMMISSION		
TRANSVERSE SECTION		
OHIO TURNPIKE OVER S.R. 420 & I-280		
MILE POST 71.4 WOOD COUNTY		
acla adache-ciuni-lynn associates		
CONSULTING ENGINEERS		
5595 TRANSPORTATION BLVD. CLEVELAND, OHIO 44125		
DESIGNED:	D.P.	CHECKED: T.A.B. DATE: 03-03-00
DRAWN:	R.D.W.	IN CHARGE: E.A.F. SCALE: NTS

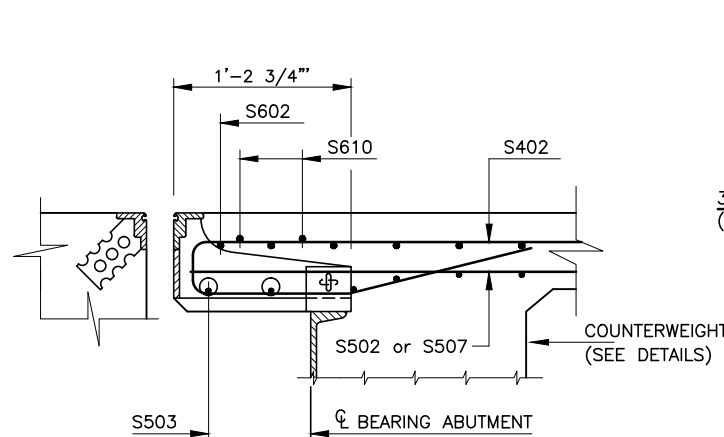


STAGGER DIAGRAM  
ADDITIONAL TOP BARS OVER PIERS

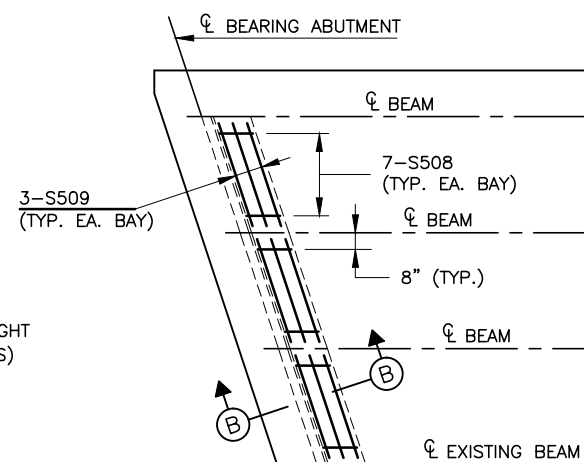
SLAB PLAN  
EASTBOUND LANES SHOWN  
WESTBOUND LANES SIMILAR

NOTES:

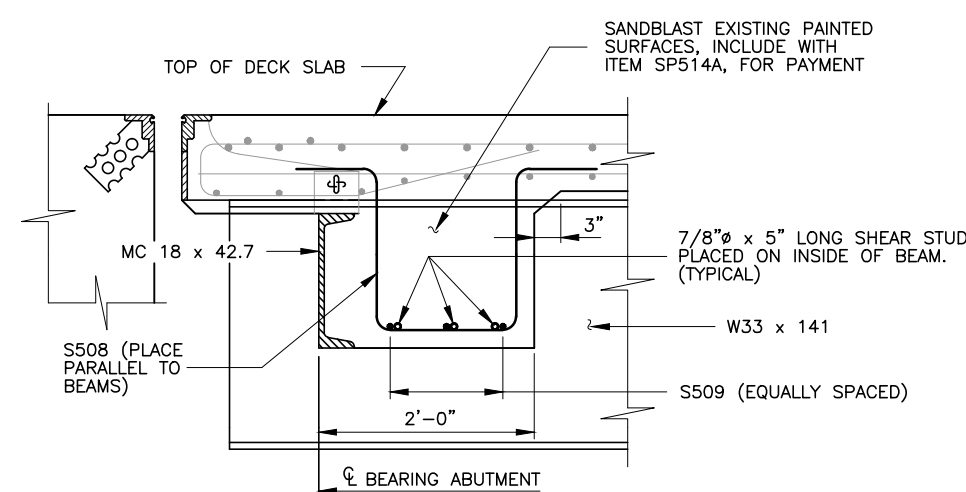
- ① FOR THE TRANSVERSE SECTION, SEE SHEET 17 / 20
- ② LONGITUDINAL REINFORCING BAR SPLICE LENGTHS SHALL BE 1'-7" FOR NO. 4 BARS 3'-2" FOR NO. 5 BARS
- ③ LONGITUDINAL OR TRANSVERSE CONSTRUCTION JOINTS SHALL NOT BE PERMITTED IN THE DECK SLAB, EXCEPT AS SHOWN IN THE PLANS.
- ④ FOR EXPANSION JOINT DETAILS, SEE OTC STANDARD DRAWINGS DJ-1 AND DJ-2, AND SHEET 16 / 20
- ⑤ FOR FINISHED PAVEMENT ELEVATIONS, SEE SHEET 15 / 20
- ⑥ FOR PARAPET SAW CUT DETAIL, SEE SHEET G2 / G3



SECTION A-A  
FOR CALL-OUTS AND DETAILS NOT SHOWN, SEE O.T.C STANDARD DRAWING DJ-1



PARTIAL SLAB PLAN  
(REAR ABUTMENT - EASTBOUND SHOWN)



SECTION B-B  
(COUNTERWEIGHT DETAILS)

RECORD DRAWING		1/16/04
NO.	REVISIONS	BY DATE
<b>OHIO TURNPIKE COMMISSION</b>		
<b>SLAB PLAN</b>		
OHIO TURNPIKE OVER S.R. 420 & I-280		
MILE POST 71.4 WOOD COUNTY		
<b>acla adache-cluni-lynn associates</b>		
CONSULTING ENGINEERS		
5595 TRANSPORTATION BLVD. CLEVELAND, OHIO 44125		
DESIGNED: D.P.	CHECKED: T.A.B.	DATE: 03-03-00
DRAWN: R.D.W.	IN CHARGE: E.A.F.	SCALE: NTS
CONTRACT 77-02-01 SHEET B133 OF B135		

PIER NO. 1 , NO. 2 AND NO. 3  
ITEM 509 – REINFORCING, STEEL GRADE 60

MARK	NUMBER REQUIRED				LENGTH ft in	TYPE	DIM A		DIM B		DIM C		DIM D		INCREMENT ft in	WEIGHT ( lbs. )	PIER 1 WEIGHT ( lbs. )	PIER 2 WEIGHT ( lbs. )	PIER 3 WEIGHT ( lbs. )
	PIER 1	PIER 2	PIER 3	TOTAL			ft	in	ft	in	ft	in	ft	in					
P 501	24	24	24	72	8 6	STR										639	213	213	213
P 502	21	21	21	63	8 9	STR										624	208	208	208
P 701	42	42	42	126	10 2	2	8	6								2619	873	873	873
P 702	30	30	30	90	11 2	2	9	6								2055	685	685	685
TOTAL WEIGHT																5937	1979	1979	1979

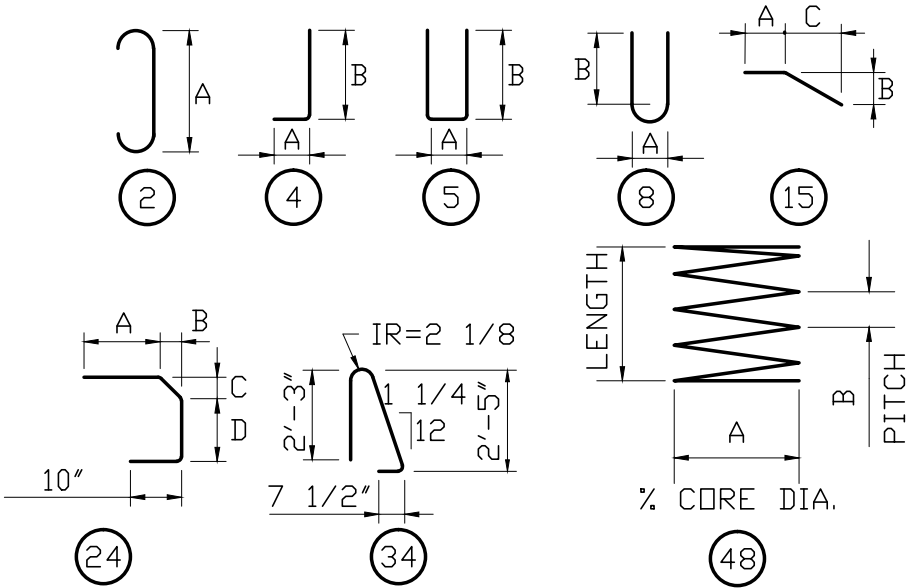
PIER NO. 1, NO. 2 AND NO. 3  
ITEM SP825 – GALVANIZED REINFORCING STEEL, GRADE 60

MARK	NUMBER REQUIRED				LENGTH ft in	TYPE	DIM A		DIM B		DIM C		DIM D		INCREMENT ft in	WEIGHT ( lbs. )	PIER 1 WEIGHT ( lbs. )	PIER 2 WEIGHT ( lbs. )	PIER 3 WEIGHT ( lbs. )
	PIER 1	PIER 2	PIER 3	TOTAL			ft	in	ft	in	ft	in	ft	in					
PG 401	3	0	3	6	13 11	48	2	6	0 4.5							1442	721	0	721
PG 402	0	3	0	3	15 7	48	2	6	0 4.5							802	0	802	0
PG 501	24	24	24	72	22 8	STR										1701	567	567	567
PG 502	92	92	92	276	8 1	5	2	8	2 10							2328	776	776	776
PG 503	12	12	12	36	7 6	15	2	5	0 6	5	1					282	94	94	94
PG 504	12	12	12	36	7 2	5	2	6	2 5							270	90	90	90
PG 701	6	6	6	18	32 8	STR										1203	401	401	401
PG 901	6	6	6	18	35 5	4	3	2	32 7							2166	722	722	722
PG 902	6	6	6	18	20 7	4	3	2	17 9							1260	420	420	420
PG 1001	30	30	30	90	10 3	4	1	10	8 9							3969	1323	1323	1323
PG 1002	0	30	0	30	17 5	STR										2248	0	2248	0
PG 1003	30	0	30	60	15 11	STR										4110	2055	0	2055
TOTAL WEIGHT																21781	7169	7443	7169

SLAB  
ITEM SP509 – EPOXY COATED REINFORCING STEEL, GRADE 60

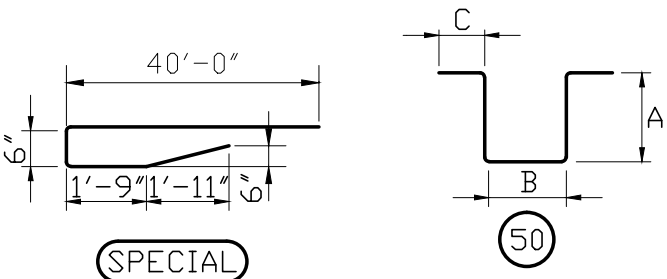
MARK	NUMBER REQUIRED			LENGTH ft in	TYPE	DIM A	DIM B	DIM C	DIM D	INCREMENT	WEIGHT ( lbs. )	LEFT WEIGHT ( lbs. )	RIGHT WEIGHT ( lbs. )
	W. B.	E. B.	TOTAL			ft in	ft in	ft in	ft in	ft inches			
S 401	214	214	428	40 0	STR						11436	5718	5718
S 402	62	62	124	44 1	SPEC						3652	1826	1826
S 501	378	378	756	25 1	STR						19778	9889	9889
S 502	234	234	468	40 0	STR						19524	9762	9762
S 503	1 SER. 17 BARS	1 SER. 17 BARS	2 SER. 17 BARS	4 10 24 10	STR					1 2 1 / 4	508	254	254
S 504	1 SER. 16 BARS	1 SER. 16 BARS	2 SER. 16 BARS	22 2 4 4	STR					1 2 1 / 4	442	221	221
S 505	4	4	8	4 0	STR						34	17	17
S 506	231	231	462	6 2	8	0 6	2 9				2972	1486	1486
S 507	31	31	62	9 4	STR						604	302	302
S 508	42	42	84	6 1	50	1 9	1 7 1/2	0 9			534	267	267
S 509	18	18	36	7 11	STR						298	149	149
S 601	378	378	756	25 1	STR						28482	14241	14241
S 602	1 SER. 17 BARS	1 SER. 17 BARS	2 SER. 17 BARS	4 10 23 10	STR					1 2 1 / 4	732	366	366
S 603	1 SER. 16 BARS	1 SER. 16 BARS	2 SER. 16 BARS	22 2 4 4	STR					1 2 1 / 4	636	318	318
S 604	5	5	10	3 6	STR						52	26	26
S 605	396	396	792	5 0	STR						5948	2974	2974
S 606	231	231	462	2 3	4	0 7.5	1 6				1562	781	781
S 607	231	231	462	3 0	24	0 7	0 6	0 8.5	0 10		2082	1041	1041
S 608	231	231	462	5 3	34						3644	1822	1822
S 609	2	2	4	27 9	STR						166	83	83
S 610	2	2	4	26 0	STR						156	78	78
TOTAL WEIGHT											103242	51621	51621

BAR BENDING DIAGRAMS



NOTES:

- ① EPOXY COATED REINFORCING STEEL SUPPORT: IN ACCORDANCE WITH THE REQUIREMENTS OF SP509 AND 509.09, THE TOP AND BOTTOM MATS OF ALL LONGITUDINAL AND TRANSVERSE EPOXY COATED REINFORCING STEEL SHALL BE SUPPORTED BY APPROVED EPOXY COATED DEVICES WITH SPACING NOT EXCEEDING 3'-0" CENTERS IN EACH DIRECTION. BROKEN CONCRETE, BRICKS, ETC. SHALL NOT BE USED FOR SUPPORT OF EPOXY COATED REINFORCING STEEL.
- ② REINFORCING STEEL SAMPLES: REFER TO D.T.C. GENERAL CONDITIONS, SECTION G, 6.02 AND C.M.S. SECTIONS 700, 709.01 THROUGH 709.05 AND 709.08. SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR SAMPLING. RANDOM SAMPLES SHALL BE REPLACED IN THE STRUCTURE BY THE ADDITIONAL STEEL, SPLICED IN ACCORDANCE WITH 509.08.
- ③ THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR DIGITS ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, P601 IS A NO. 6 BAR. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE INDICATED. IR INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED.
- ④ CONCRETE SPACERS OR OTHER APPROVED NONCORROSIVE SPACING DEVICES, EQUAL IN QUALITY AND DURABILITY TO THE COLUMN CONCRETE, SHALL BE USED NEAR THE BOTTOM AND AT INTERVALS NOT EXCEEDING 10' TO ENSURE A MINIMUM 3" CLEAR SPACE BETWEEN THE OUTSIDE OF THE REINFORCING CAGE AND THE COLUMN DESIGN DIMENSION.
- ⑤ SPIRAL REINFORCING BARS: THE "LENGTH" SHOWN IN THE STEEL LIST FOR THE SPIRAL BARS IS THE DISTANCE FROM THE TOP OF FOOTING TO THE BOTTOM LAYER OF REINFORCING STEEL IN THE PIER CAP. SPIRAL REINFORCING BARS MAY HAVE DEFORMATION AND SHALL IN ALL OTHER RESPECTS CONFORM TO ITEM SP825. 1 1/2 CLOSED COILS SHALL BE PROVIDED AT THE ENDS OF EACH SPIRAL UNIT.
- ⑥ SPIRAL PITCH SPACERS: THREE STEEL HOT-DIPPED GALVANIZED ANGLE SPACERS, EACH WEIGHTING APPROXIMATELY 0.80 LB. PER LINEAR FOOT OF SPIRAL, SHALL BE PROVIDED FOR EACH SPIRAL UNIT. THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF EACH COIL FOR ITS FULL LENGTH. THE TOTAL NUMBER OF POUNDS OF THESE SPACERS, BASED ON 2.40 LBS. PER LINEAR FOOT, WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED SPIRAL WEIGHT.



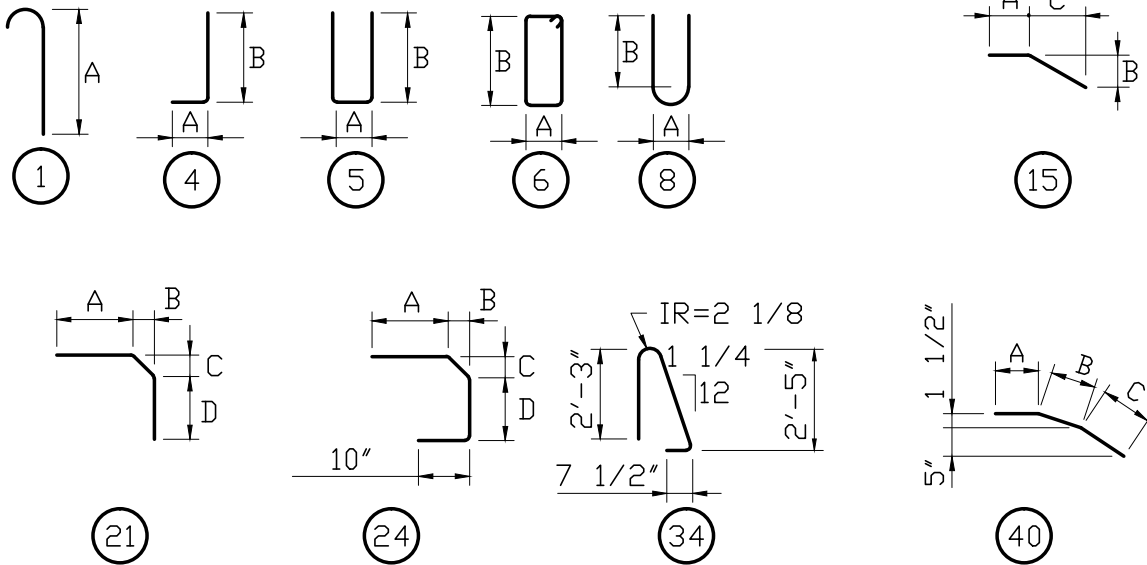
RECORD DRAWING		01/16	
NO.	REVISIONS	BY	DATE
<b>OHIO TURNPIKE COMMISSION</b>			
<b>REINFORCEMENT SCHEDULE</b>			
OHIO TURNPIKE OVER S.R. 420 & I-280			
MILE POST 71.4		WOOD COUNTY	
<b>acila adache-cluni-lynn associates</b>			
CONSULTING ENGINEERS			
5595 TRANSPORTATION BLVD. CLEVELAND, OHIO 44125			
DESIGNED: RCK/RDW	CHECKED: TAB	DATE: 03-03-00	
DRAWN: TES	IN CHARGE: EAF	SCALE: NTS	



REAR AND FORWARD ABUTMENTS  
ITEM SP509 – EPOXY COATED REINFORCING STEEL GRADE 60

MARK	NUMBER REQUIRED			LENGTH		TYPE	DIM A		DIM B		DIM C		DIM D		INCREMENT	WEIGHT ( lbs. )	LEFT WEIGHT ( lbs. )	RIGHT WEIGHT ( lbs. )
	REAR	IFORWARD	TOTAL	ft	in		ft	in	ft	in	ft	in	ft	in				
A 401	14	14	28	8	7	6	2	8	1	5						160	80	80
A 501	50	50	100	15	11	5	3	2	6	6						1660	830	830
A 502	50	50	100	7	11	5	3	2	2	6						824	412	412
A 503	54	54	108	09	7	5	0	8	5	0						1080	540	540
A 504	26	26	52	25	6	STR										1384	692	692
A 505	6	6	12	23	8	STR										296	148	148
A 506	4	4	8	8	3	5	3	6	2	6						52	26	26
A 507	6	6	12	3	7	15	2	0	0	9	1	6				44	22	22
A 508	4	4	8	15	11	5	3	6	6	6						100	50	50
A 509	108	108	216	3	5	4	0	10	2	8						770	385	385
A 510	80	80	160	7	7	5	2	8	2	7						1266	633	633
A 511	4 SER. 9 BARS	4 SER. 9 BARS	8 SER. 9 BARS	19	3	5	1	2	9	2					1 3 0 / 0	1070	535	535
				9	3		1	2	4	2								
A 512	16	16	32	15	1	5	13	8	0	10						504	252	252
A 513	8 SER. 3 BARS	8 SER. 3 BARS	16 SER. 3 BARS	10	11	STR									3 4 0 / 0	380	190	190
				4	3													
A 514	8	8	16	14	9	STR										246	123	123
A 515	8	8	16	8	3	5	3	0	2	9						138	69	69
A 601	34	34	68	3	6	STR										358	179	179
A 602	16	16	32	25	6	STR										1226	613	613
A 701	20	20	40	25	6	STR										2084	1042	1042
															TOTAL WEIGHT	13642	6821	6821

BAR BENDING DIAGRAMS



REAR AND FORWARD ABUTMENT SLABS  
ITEM SP509 – EPOXY COATED REINFORCING STEEL GRADE 60

MARK	NUMBER REQUIRED			LENGTH		TYPE	DIM A		DIM B		DIM C		DIM D		INCREMENT	WEIGHT ( lbs. )	LEFT WEIGHT ( lbs. )	RIGHT WEIGHT ( lbs. )
	REAR	IFORWARD	TOTAL	ft	in		ft	in	ft	in	ft	in	ft	in				
AS 501	48	48	96	26	6	STR										2654	1327	1327
AS 502	8	8	16	25	0	STR										418	209	209
AS 503	8	8	16	3	10	15	2	4	0	8	1	5				64	32	32
AS 504	74	74	148	13	9	STR										2122	1061	1061
AS 505	30	30	60	6	2	8	0	6	2	9						384	192	192
AS 601	30	30	60	2	4	4	1	0	1	6						210	105	105
AS 602	30	30	60	3	0	24	0	7	0	6	0	8.5	0	10		270	135	135
AS 603	30	30	60	5	3	34										472	236	236
AS 801	70	70	140	13	9	STR										5140	2570	2570
															TOTAL WEIGHT	11736	5868	5868

SOUTHWEST PARAPET TRANSITION  
ITEM SP509 – EPOXY COATED REINFORCING STEEL GRADE 60

MARK	NUMBER REQUIRED			LENGTH		TYPE	DIM A		DIM B		DIM C		DIM D		INCREMENT	WEIGHT ( lbs. )	EASTBOUND WEIGHT ( lbs. )	WESTBOUND WEIGHT ( lbs. )
	E. B.	W. B.	TOTAL	ft	in		ft	in	ft	in	ft	in	ft	in				
WW 501	6		6	13	8	STR										86	86	
WW 502	2		2	13	8	40	9	11	2	4	1	5				29	29	
WW 503	5		5	7	10	5	0	11	3	7						41	41	
WW 504	12		12	3	0	1	2	5								38	38	
WW 601	8		8	3	6	STR										42	42	
WW 602	10		10	3	0	STR										45	45	
WW 603	2		2	5	0	STR										15	15	
WW 604	9		9	2	5	STR										33	33	
WW 605	7		7	2	2	21	0	8	0	6	0	8.5	0	10		23	23	
WW 606	6		6	3	11	4	1	0	3	1						35	35	
WW 607	7		7	1	6	STR										16	16	
WW 608	1		1	3	0	24	0	8	0	6	0	8.5	0	10		5	5	
WW 609	2		2	3	7	21	0	8	0	6	0	8.5	2	3		11	11	
WW 610	3		3	4	6	STR										20	20	
															TOTAL WEIGHT	439	439	

NOTE  
FOR NOTES SEE SHEET 19 / 20 .

RECORD DRAWING

NO. REVISIONS

BY DATE

01/16

OHIO TURNPIKE COMMISSION

REINFORCEMENT SCHEDULE

OHIO TURNPIKE OVER S.R. 420 & I-280

MILE POST 71.4

WOOD COUNTY

acla adache-ciuni-lynn associates

CONSULTING ENGINEERS

5595 TRANSPORTATION BLVD. CLEVELAND, OHIO 44125

DESIGNED: RCK/RDW

CHECKED: TAB

DATE: 03-03-00

DRAWN: TES

IN CHARGE: EAF

SCALE: NTS

20 / 20

CONTRACT 77-02-01 SHEET B135 OF B135



# OHIO TURNPIKE COMMISSION

## OHIO TURNPIKE PROJECT NO. 1

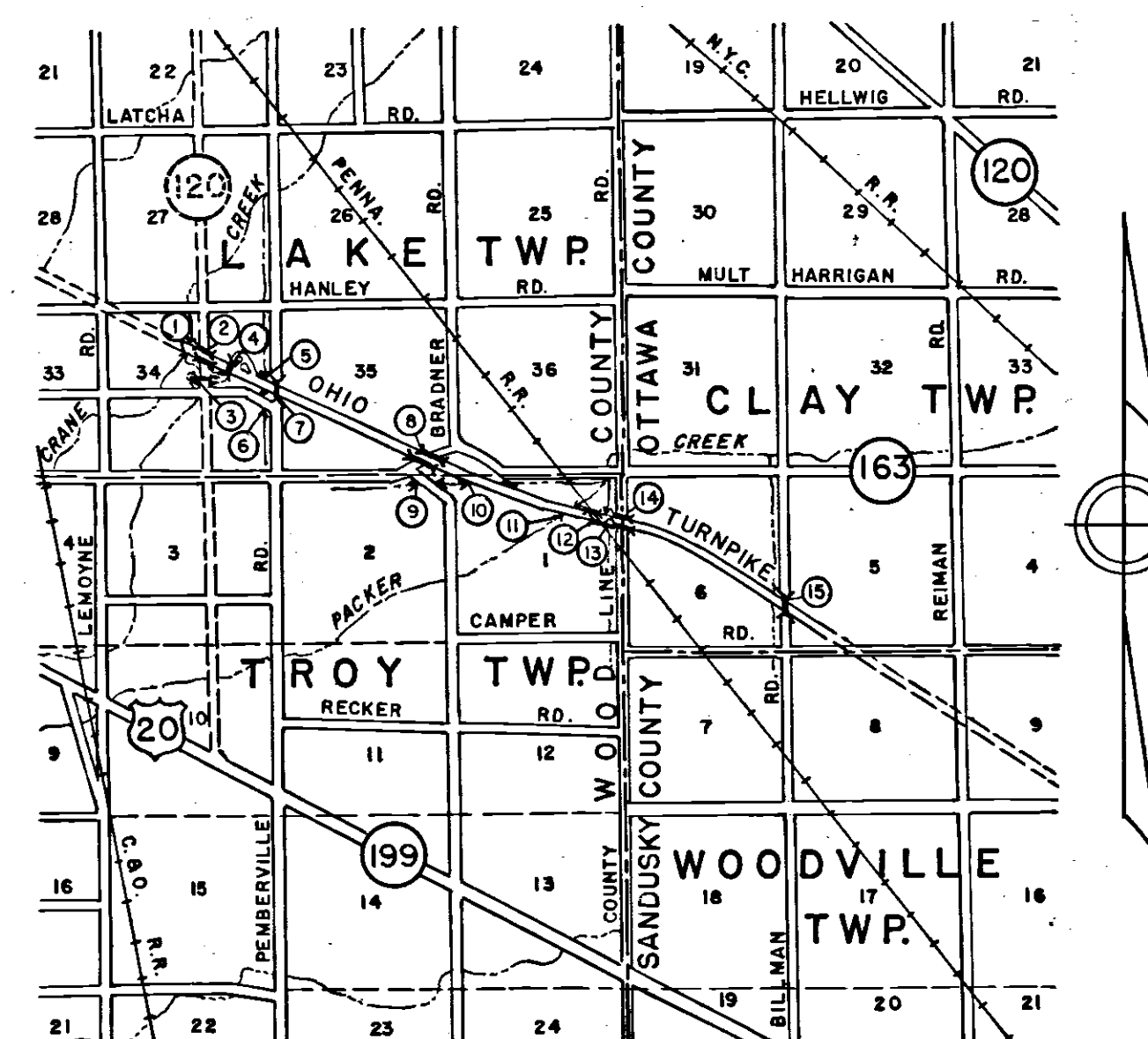
DESIGN SECTION D-15

### CONTRACT NO. C-43

#### TURNPIKE CONSTRUCTION CONTRACT

STATION 435+00 TO STATION 595+44.85 WOOD COUNTY

STATION 0+00 TO STATION 66+94.00 OTTAWA COUNTY



LOCATION PLAN  
(FROM WOOD, OTTAWA, & SANDUSKY COUNTY MAPS)  
SCALE IN MILES

APPROVAL RECOMMENDED  
SANZENBACHER, MORRIS & TAYLOR, & BROOKHART & TYO  
CONTRACTING ENGINEER

*Frederick C. Miller*

March 30 1953

APPROVED  
J. E. GREINER CO.  
CONSULTING ENGINEER

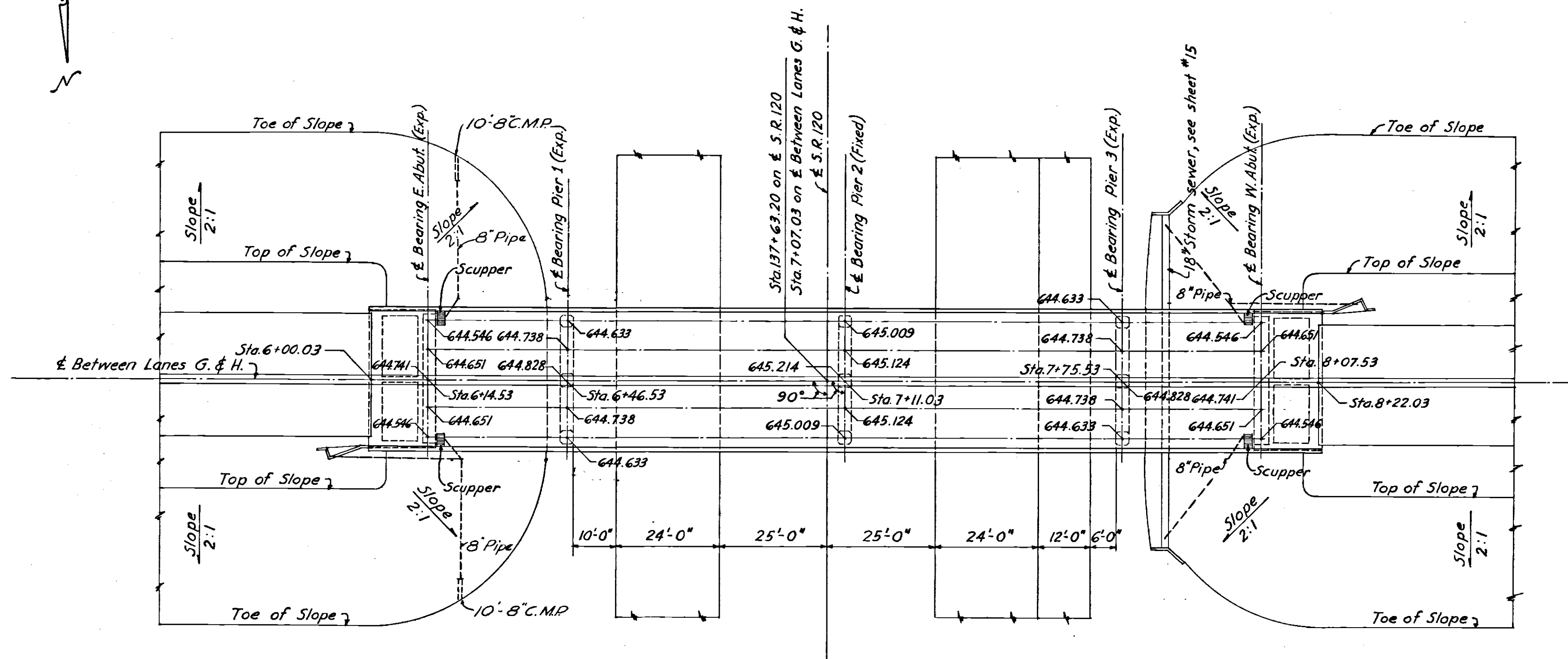
*J. E. Greiner*

5-29-53

APPROVED  
OHIO TURNPIKE COMMISSION

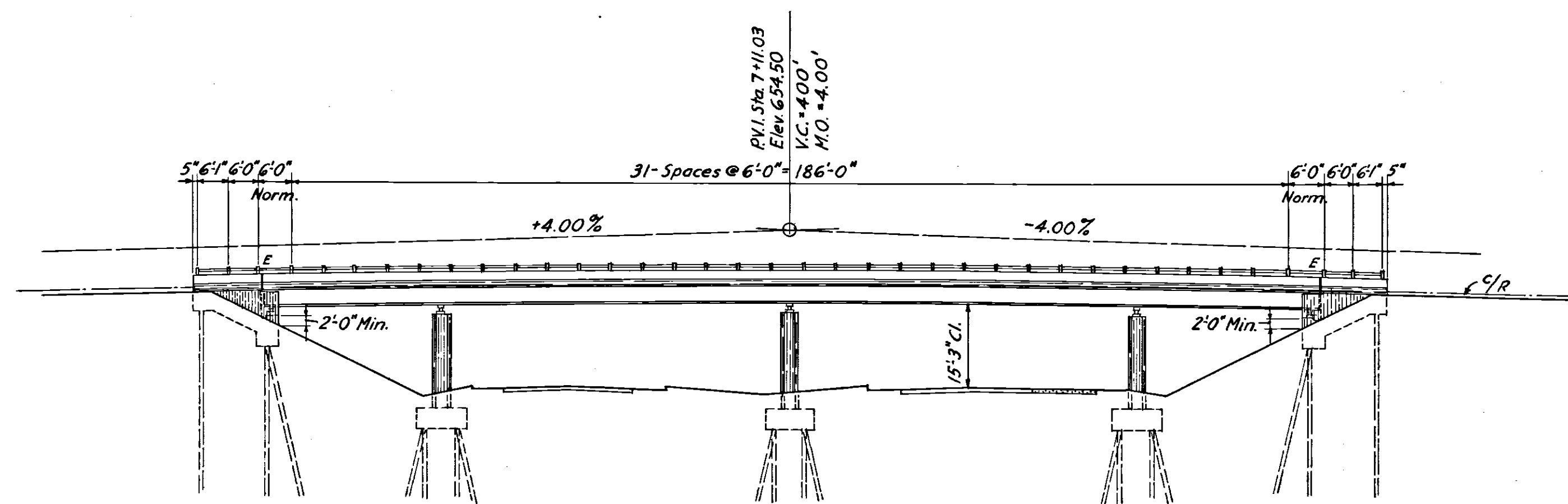
*W. H. Miller*  
CHIEF ENGINEER

6-2-53



NOTE: For Test Hole see sheet I-50.

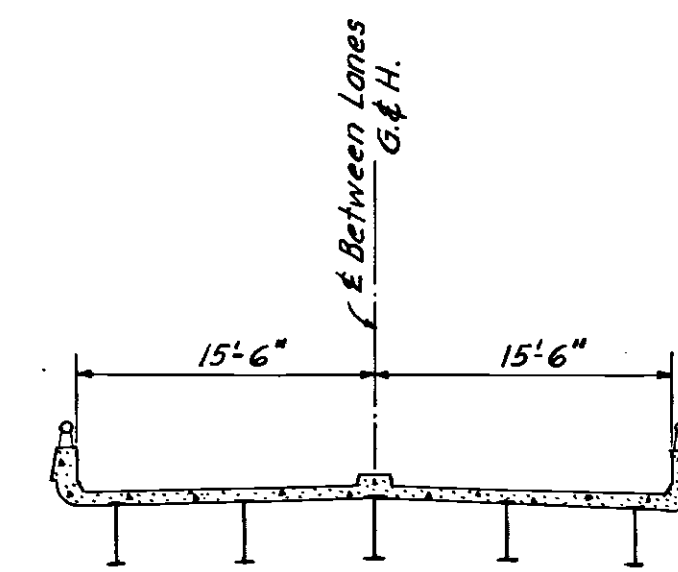
PLAN  
Scale 1 in. = 20 ft.



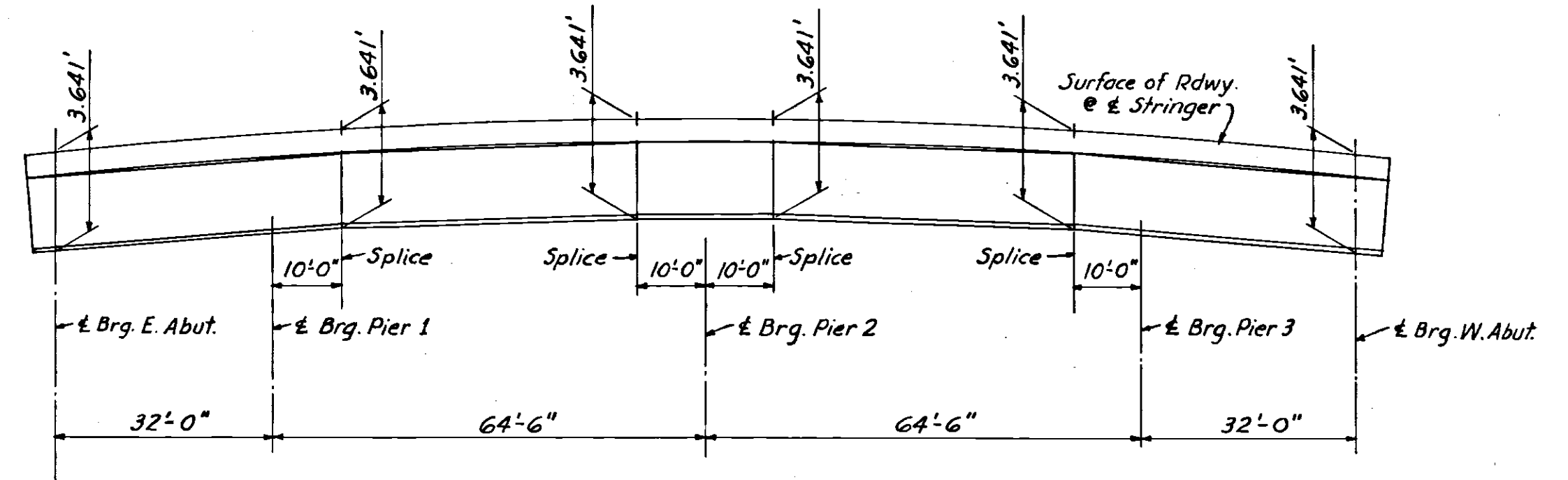
ELEVATION  
Scale 1 in. = 20 ft.

AVERAGE PILE LENGTH

East Abut.			Pier #1		Pier #2		Pier #3		West Abut.		
Rear V.	Vert.	Bottom	Vert.	Bottom	Vert.	Bottom	Vert.	Bottom	Rear V.	Vert.	Bottom
49.7	44.4	44.9	29.7	29.9	31.0	31.6	31.7	30.2	48.0	42.8	45.4



TYPICAL SECTION  
Scale 1 in. = 10 ft.



ELEVATION OF STRINGER  
No Scale

TABLE OF QUANTITIES										
SPEC. ITEM NO.	DESCRIPTION	UNIT	SUPERSTRUCT.	EAST ABUT.	PIER 1	PIER 2	PIER 3	WEST ABUT.	DRAINAGE	TOTALS
E-2	Excavation for Structures - Dry	C.Y.	—	73.4	65.6	106.9	65.6	73.4	—	384.9
I-15	Guard Rail - Type "C"	L.F.	440	—	—	—	—	—	—	440
S-1	Concrete for Superstructure - Class "C"	C.Y.	226.3	—	—	—	—	—	—	226.3
S-1	Concrete for Substructure - Class "C"	C.Y.	—	74.5	67.2	68.3	67.2	74.5	2.6	354.3
S-1	Concrete for Substructure - Class "E"	C.Y.	—	—	—	—	—	—	—	—
S-4	Reinforcing Steel - Superstructure	Lbs.	61,852	—	—	—	—	—	—	61,852
S-4	Reinforcing Steel - Substructure	Lbs.	—	6,275	8,225	9,206	8,225	6,275	—	38,248
S-7	Structural Steel	Lbs.	201,316	—	—	—	—	—	—	201,316
S-9	Structural Expansion Joints	Lbs.	7,462	—	—	—	—	—	—	7,462
S-14	Standard Handrail - Type "A"	L.F.	445.3	—	—	—	—	—	—	445.3
S-16	First Test Pile	EA.	—	—	—	—	—	—	—	1
S-18	Steel Piles (10BP42) - Furnishing	L.F.	—	552	452	526	415	552	—	2497
S-18	Steel Piles - Driving	L.F.	—	467.4	358.1	439	336.8	459.6	—	2061
S-18	Steel Pile Splices - Making	EA.	—	0	—	—	—	0	—	0
S-29	Scuppers - Type "A"	EA.	—	—	—	—	—	—	4	4
S-29	6" Std. wt. W.I. Pipe (Sec. M-6.10)	L.F.	—	—	—	—	—	—	100	100
S-29	8" Pipe [V.C.P. (Sec. M-6.8), P.C.C.P. (Sec. M-6.9) or C.M.P. 16 Ga. Galv. Fully Bit. Coated (Sec. M-6.4c)]	L.F.	—	—	—	—	—	—	167.1	167.1
S-29	8" C.M.P. Outlet, 16 Ga. Galv. Fully Bit. Coated (Sec. M-6.4c)	L.F.	—	—	—	—	—	—	20	20

NOTE: Estimated length of Steel Piles.  
38 Pcs. @ 35'  
12 Pcs. @ 46'  
8 Pcs. @ 53'

STRUCTURE NO 3

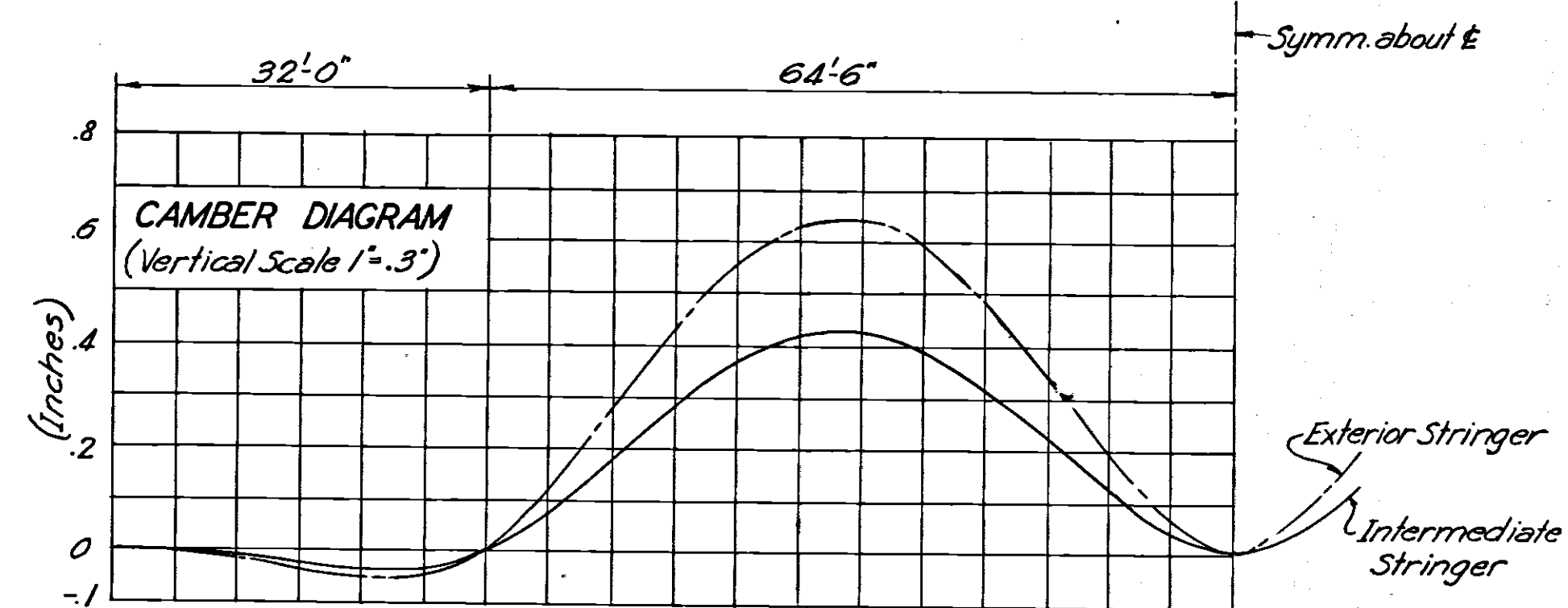
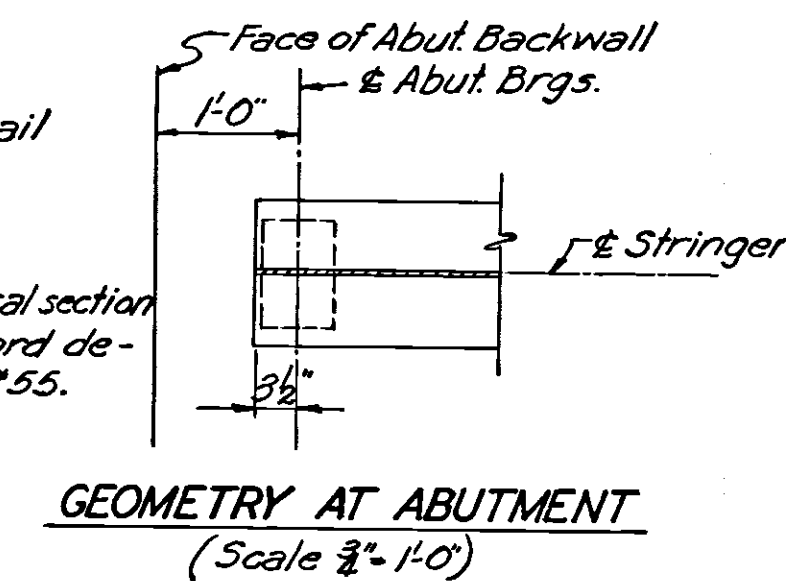
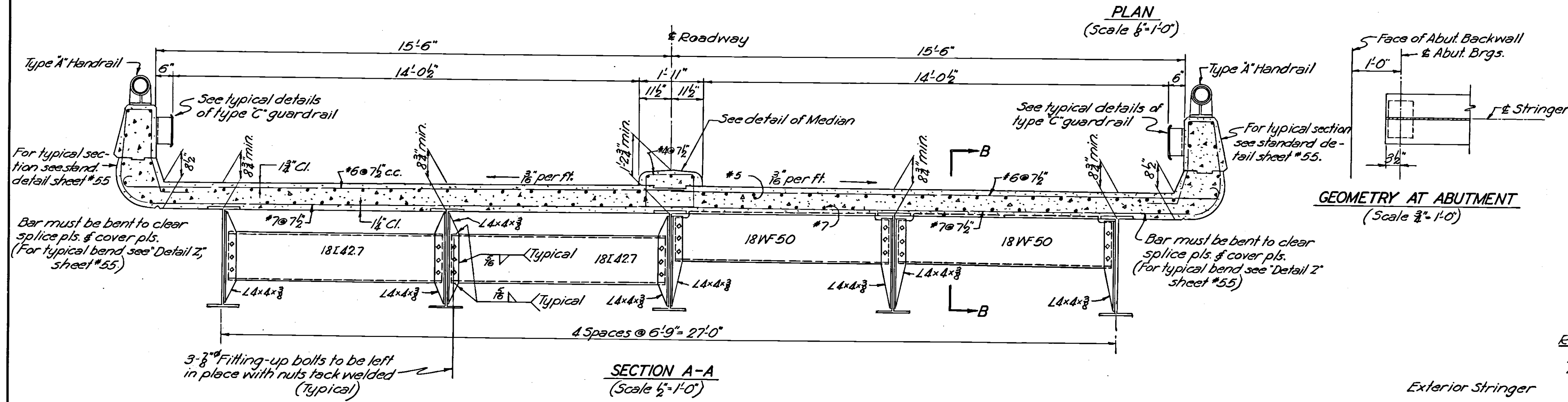
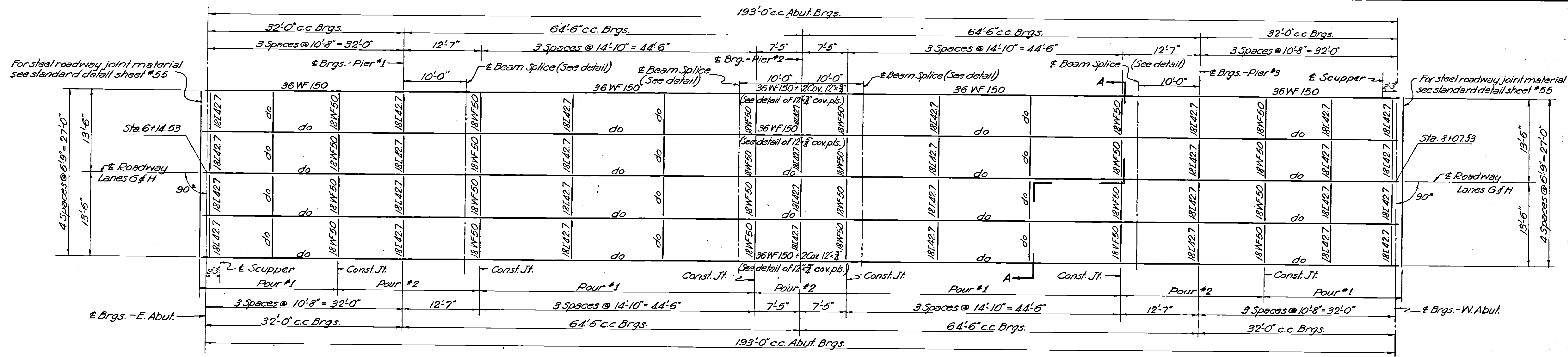
OHIO TURNPIKE COMMISSION  
OHIO TURNPIKE PROJECT NO. 1  
GENERAL PLAN  
INTERCHANGE STRUCTURE OVER S.R.120  
STA. 7+07.03 LANES G & H WOOD CO.

SANZENBACHER, MORRIS & TAYLOR AND BROOKHART & TYO, ASSOCIATES  
CONTRACTING ENGINEER  
DESIGN SECTION D-15

BRIDGE DECK LANTER OVERLAY - CIP: 43-90-08

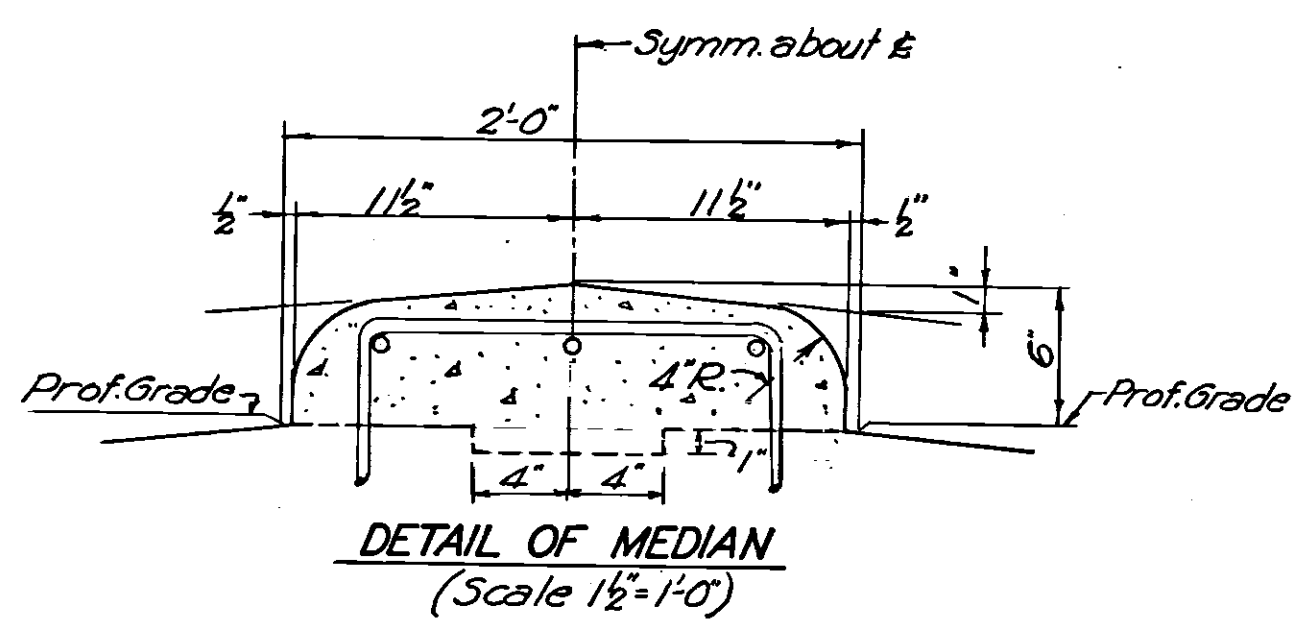
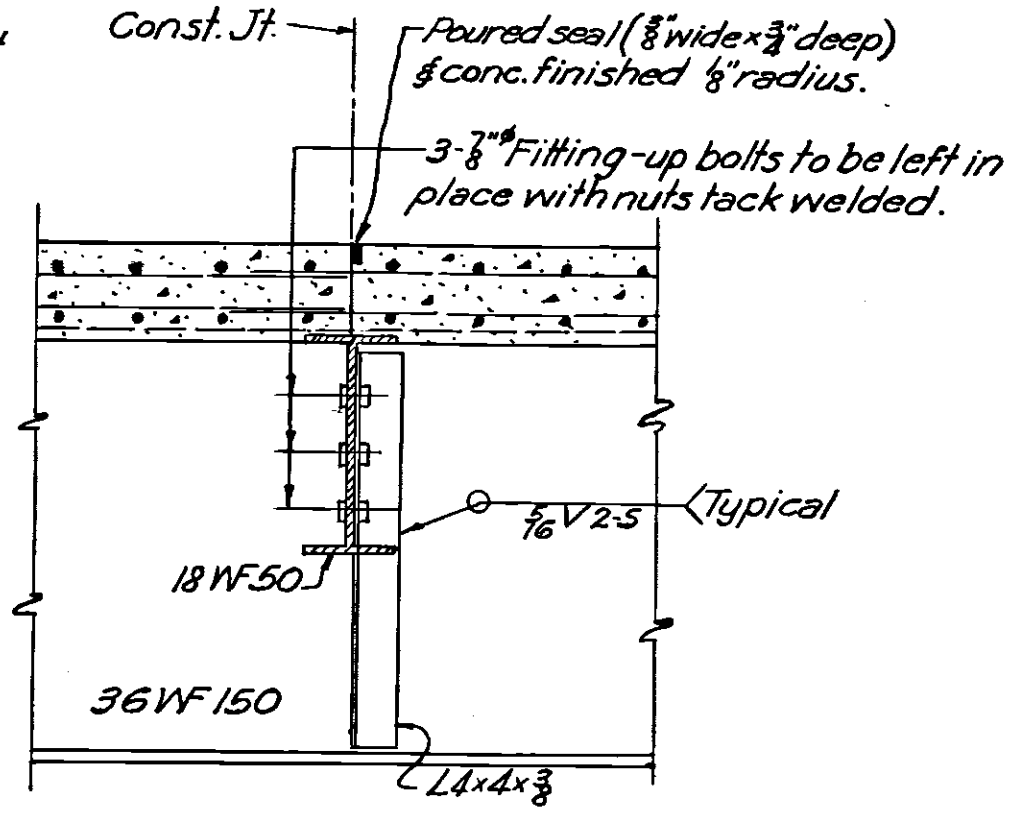
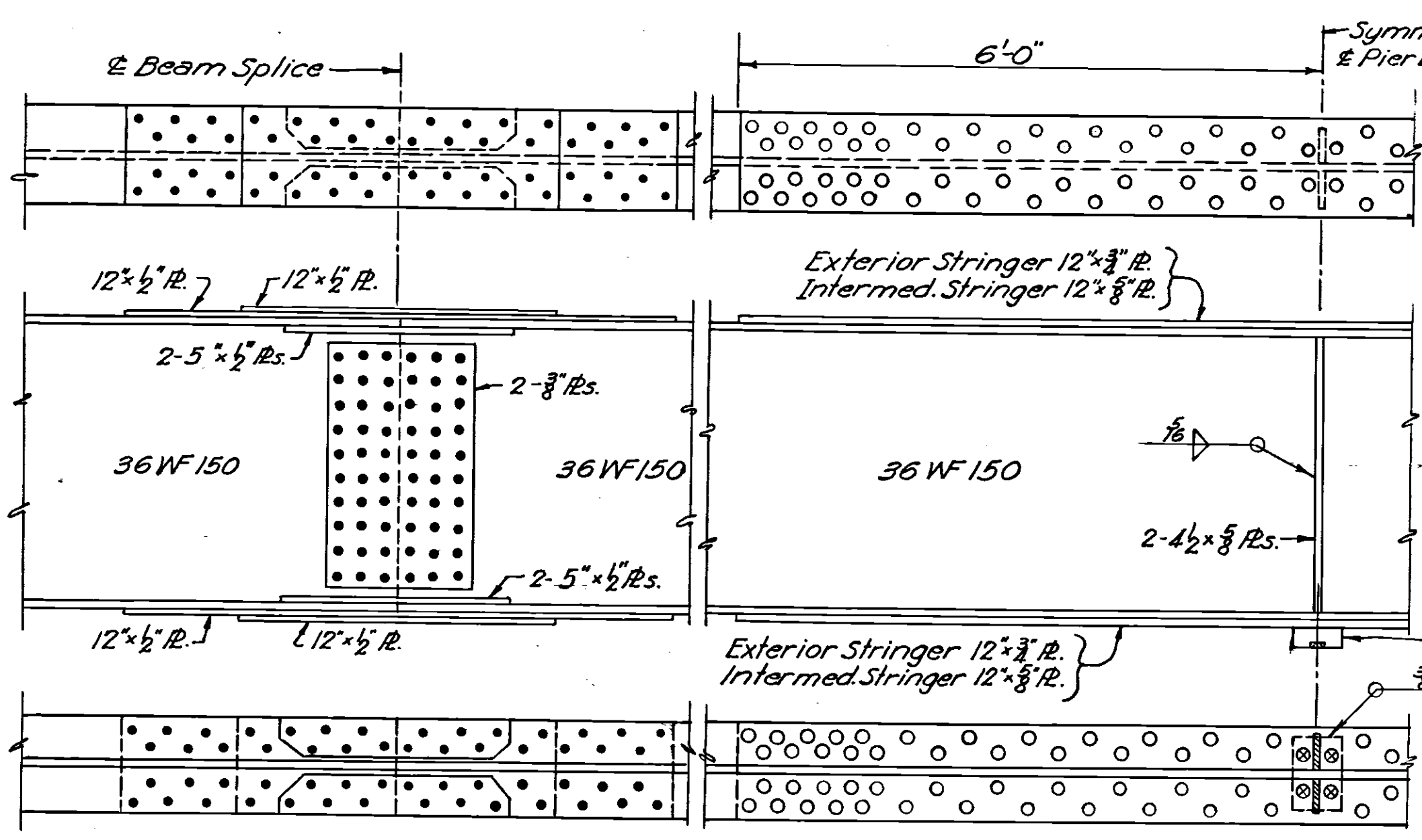
DESIGNED: J.G. CHECKED: J.G. DATE: MARCH, 1952  
DRAWN: C.W.F. IN CHARGE: SCALE: AS NOTED

CONTRACT No. C-43 SHEET 27 OF 70



Reaction (kips)		Max. Moment (kip-ft)		Reaction (kips)		Max. Moment (kip-ft)	
D.L.	L.L.	End Span	@ 1st Pier	D.L.	L.L.	Interior Span	@ 2nd Pier
14.3	19.2	4.1	95.7	14.3	19.2	354.0	121.0
6.1	38.9	29.5	29.5	4.5	32.1	197.5	33.2
39.6	+175.2	7.8	133.0	52.1	9.1	+603.6	228.5
				163.3	-977.9		
D.L.	L.L.	9.3	62.8	D.L.	L.L.	232.5	79.5
24.1	154.5	37.1	298.5	41.3	248.3	41.3	448.0
77	49.2	9.8	216.7	57.2	65.6	76.0	282.5
41.2	+213.0	109.7	-572.4	132.3	-811.5		

**MOMENTS & REACTIONS**  
CF=2000 (Predicted)



**COVER PLATES AT CENTER SUPPORT**  
(Scale 3/4"=1'-0")

**NOTE:**  
Detail of shoes same as shoe details for structures carrying turnpike (see standard detail sheet #55)

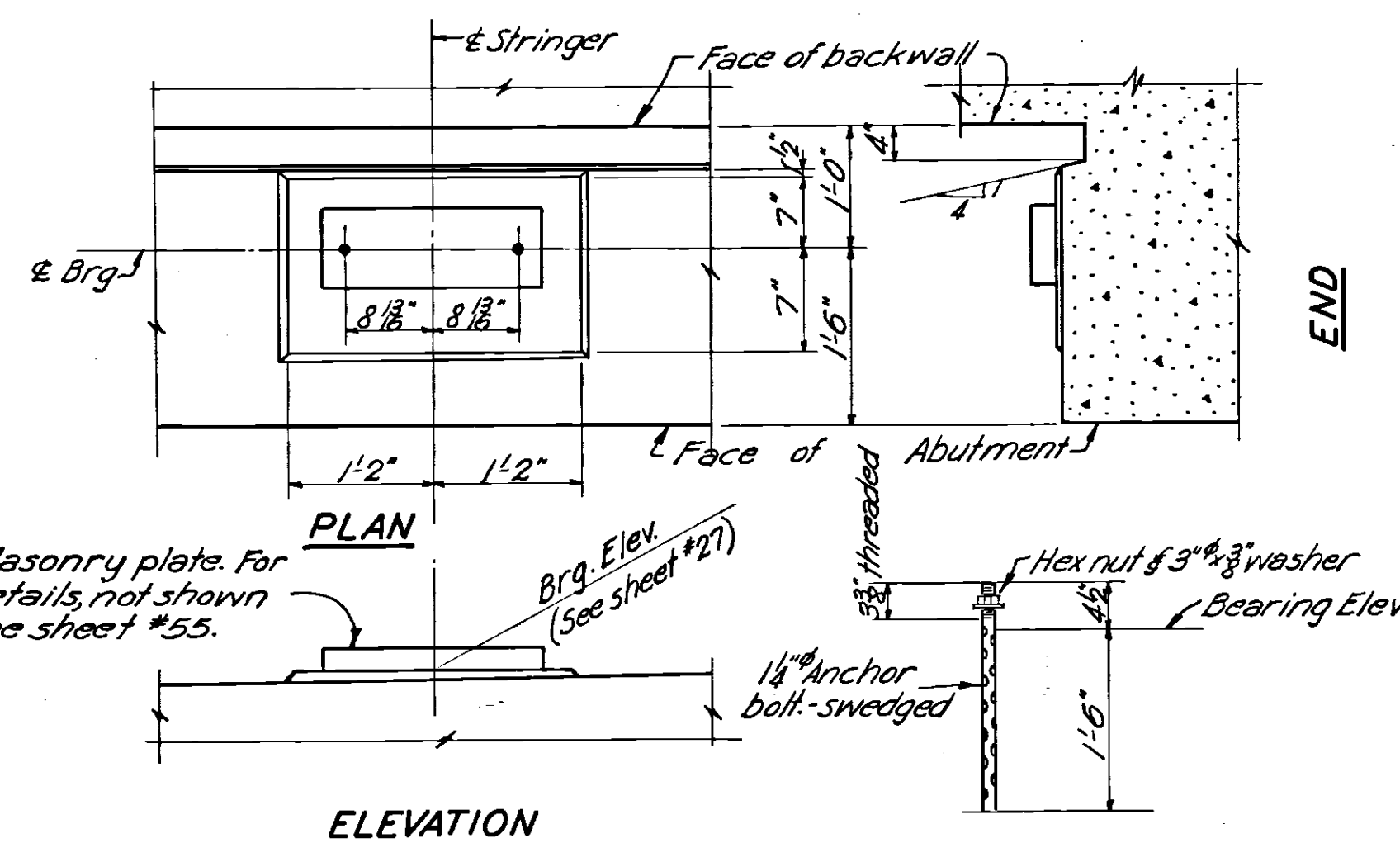
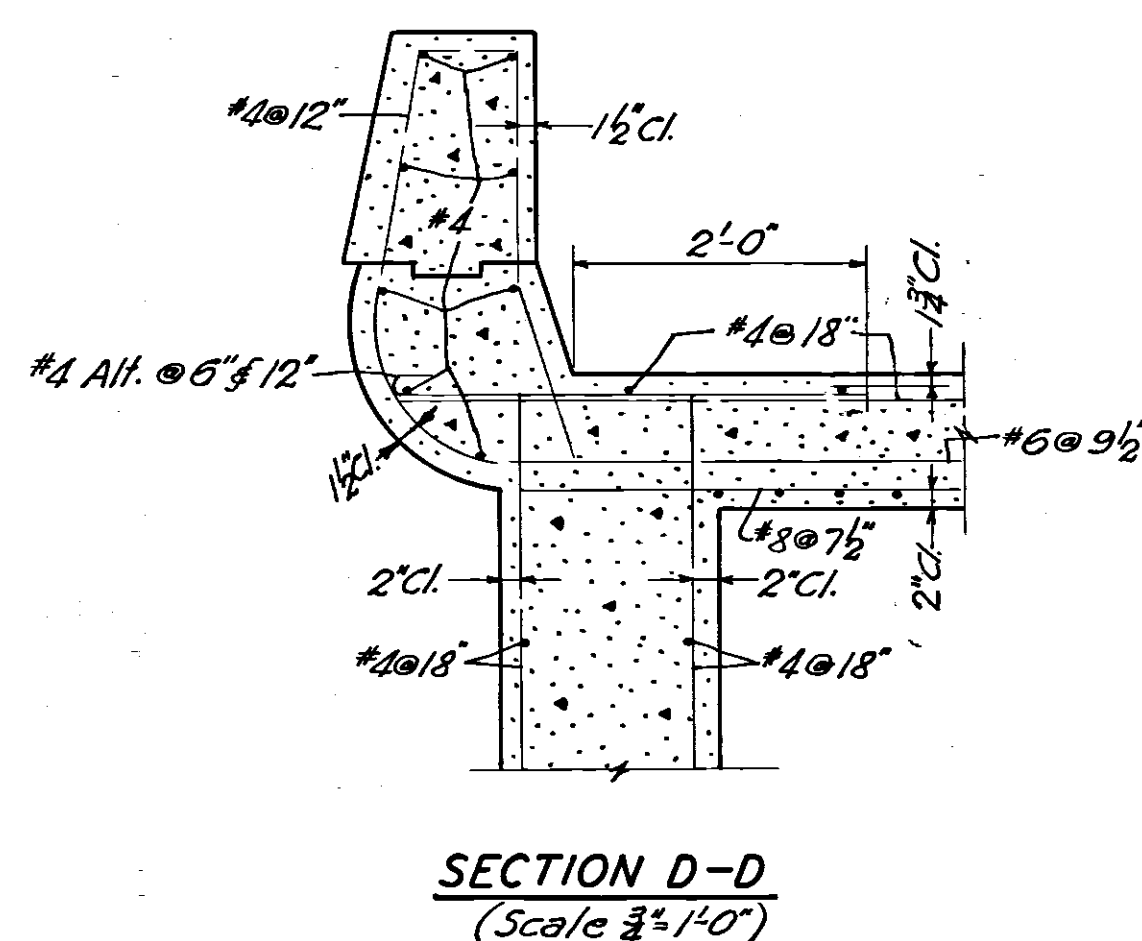
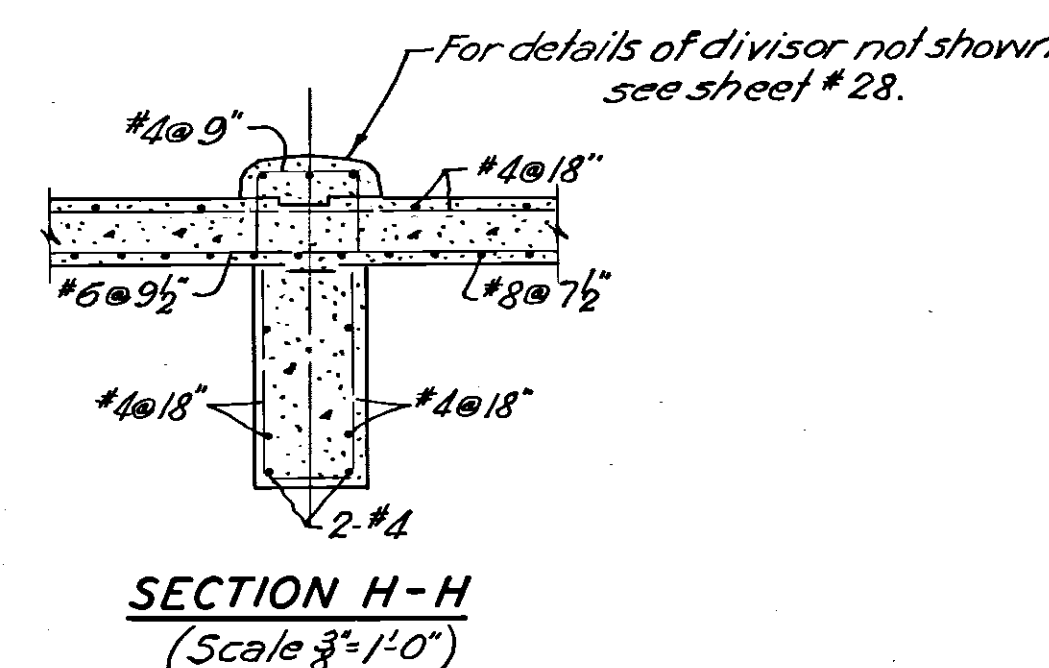
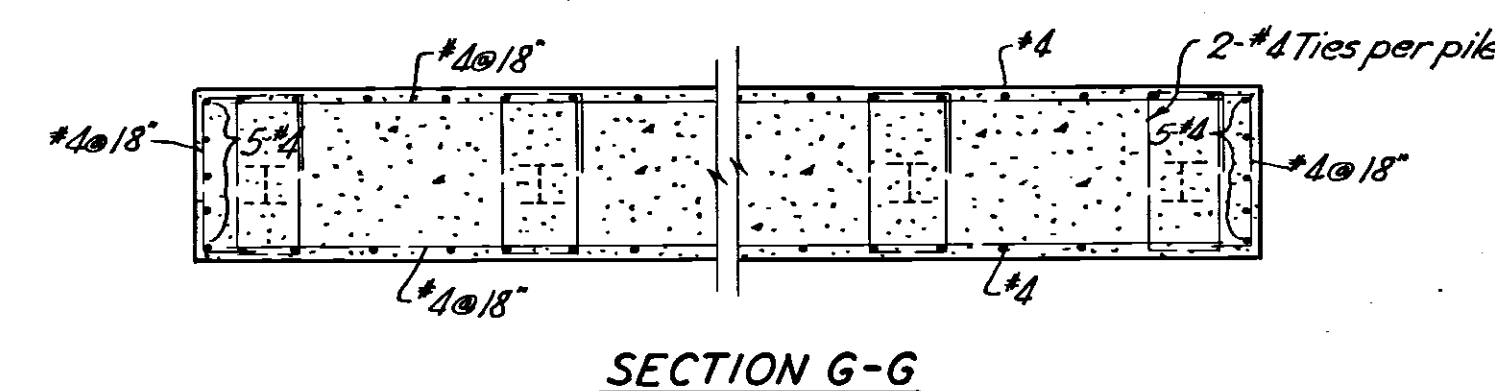
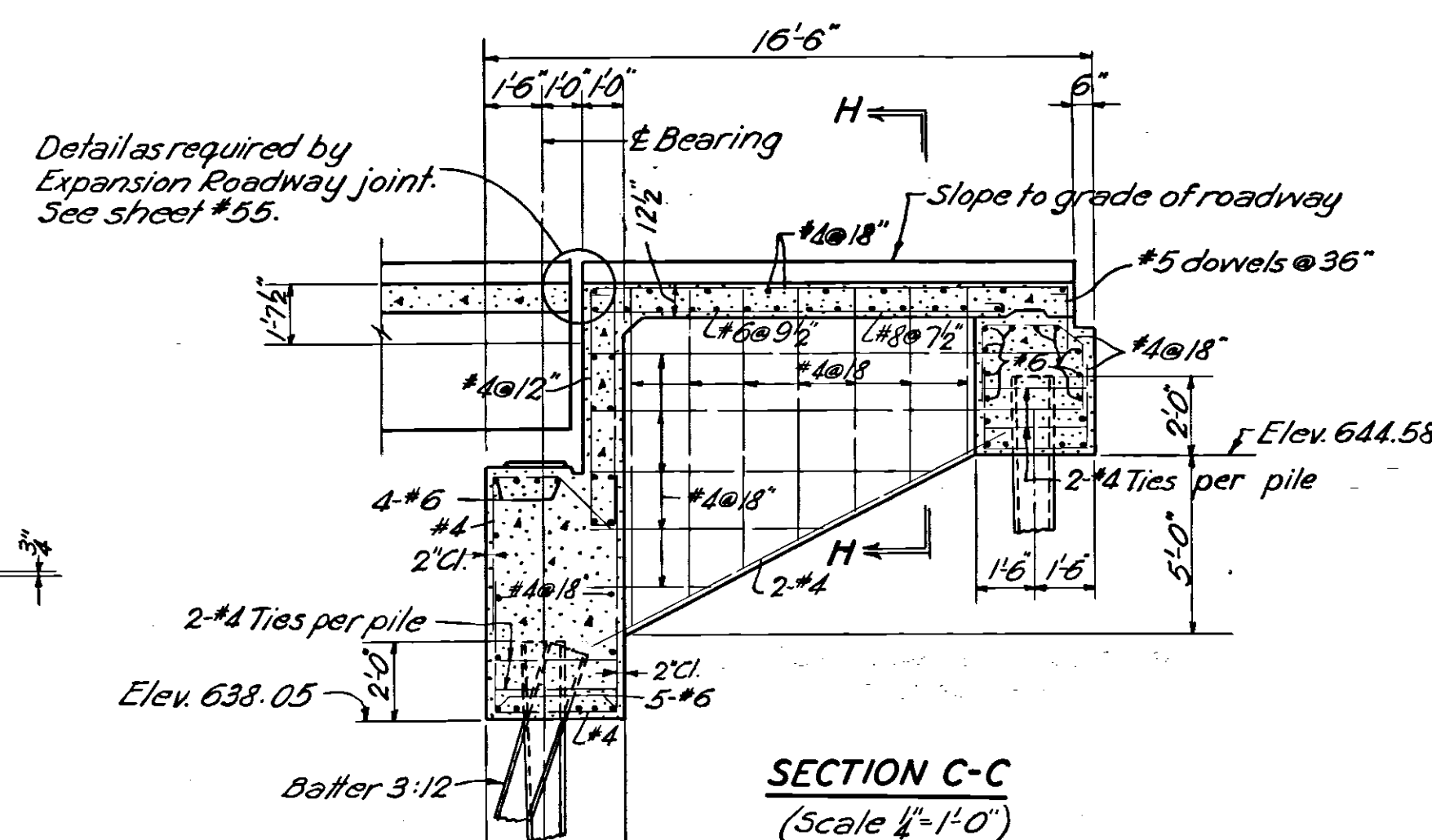
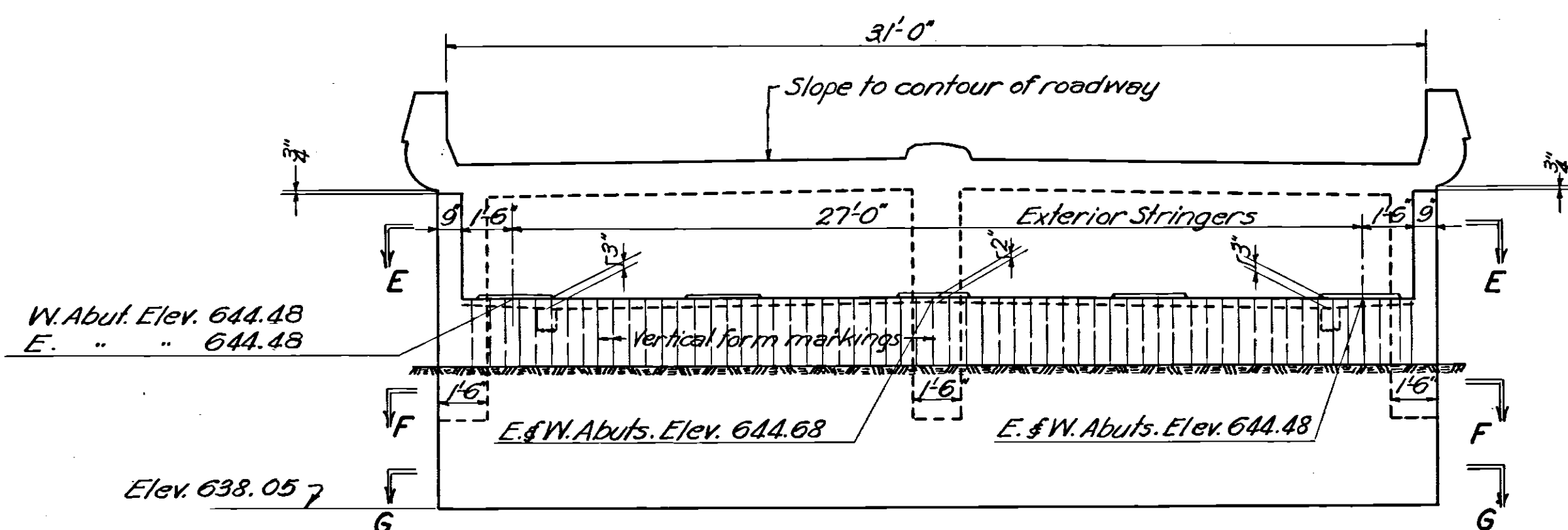
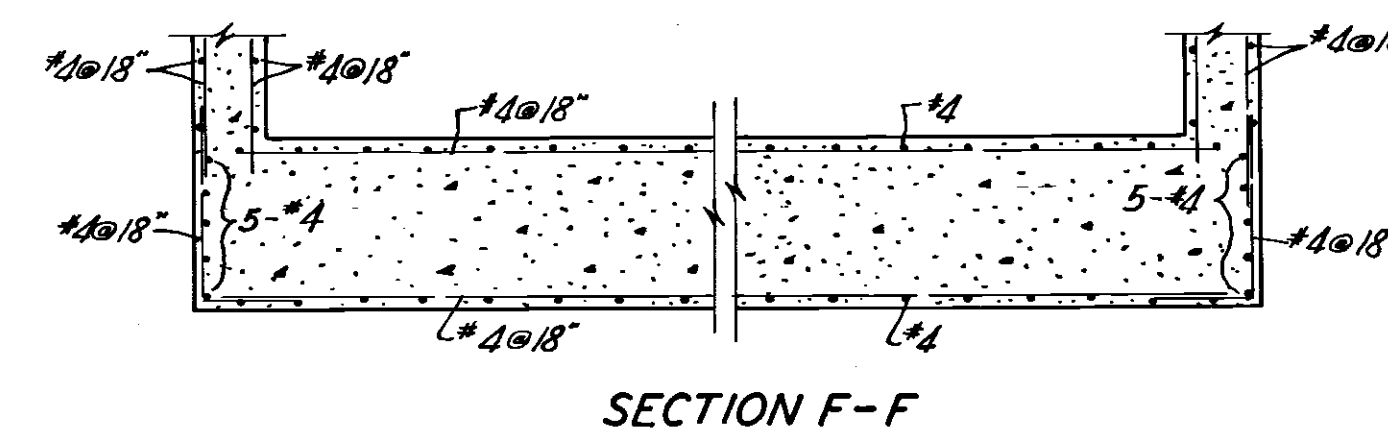
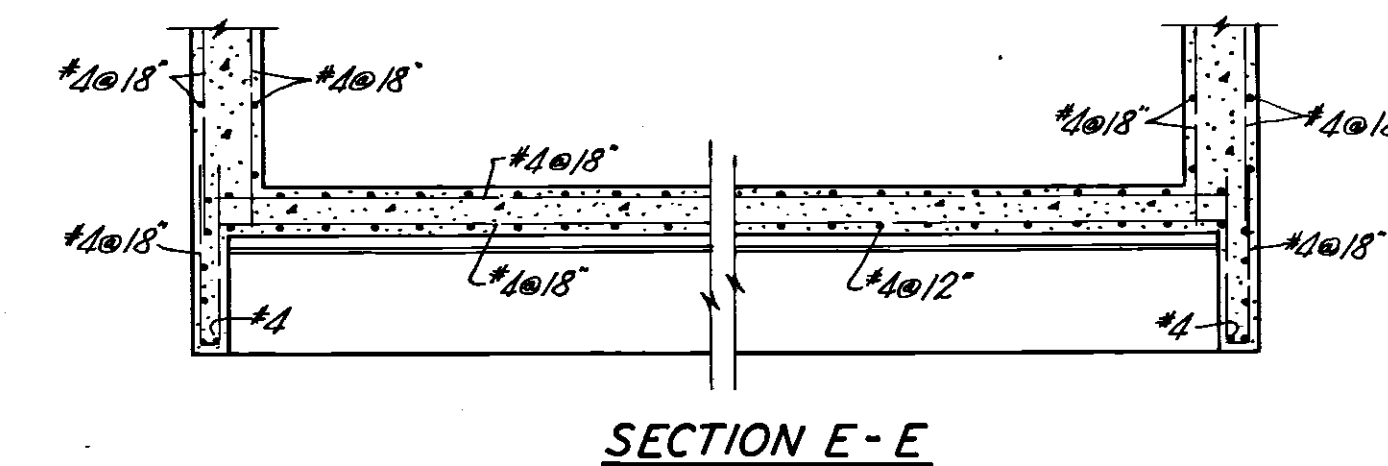
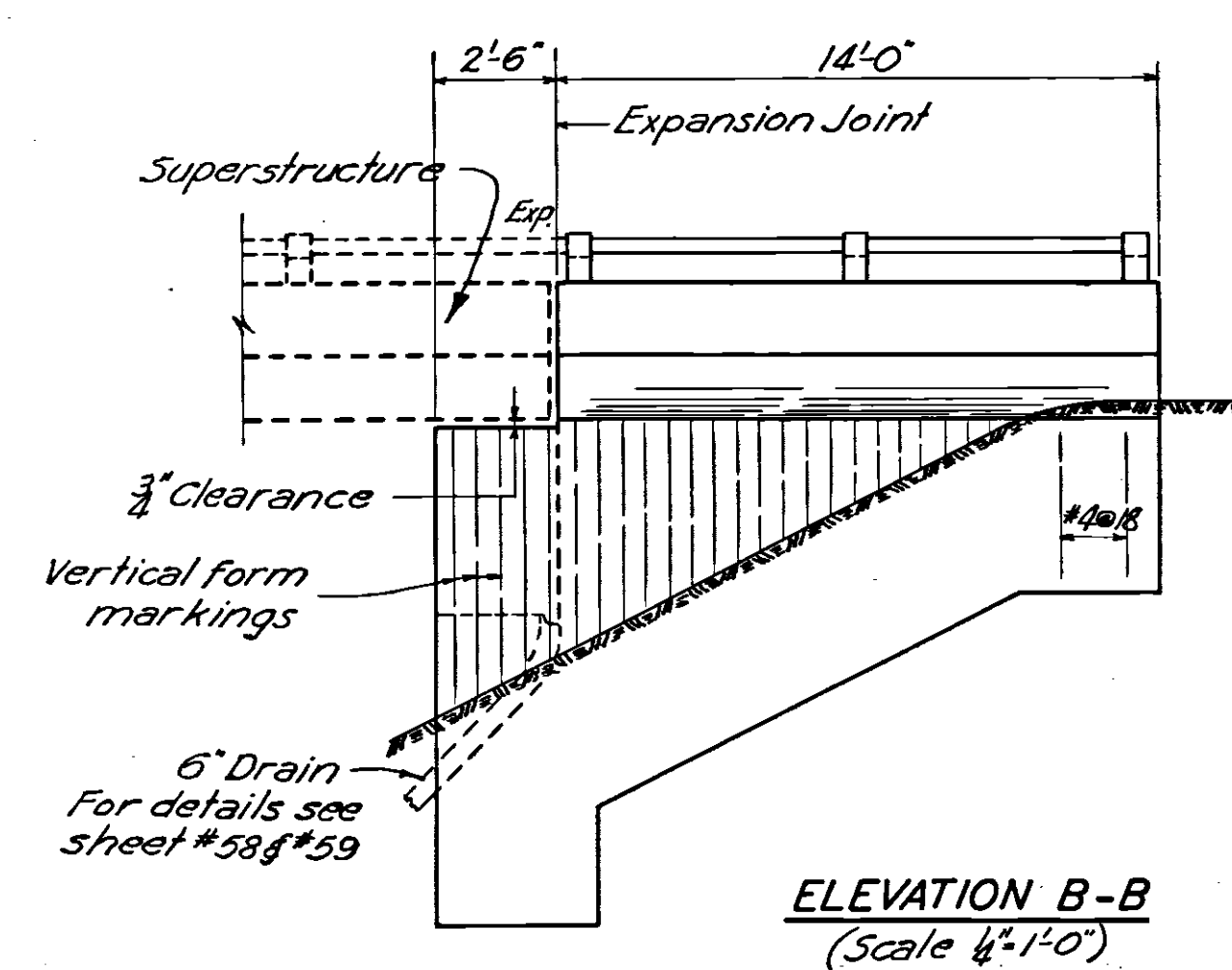
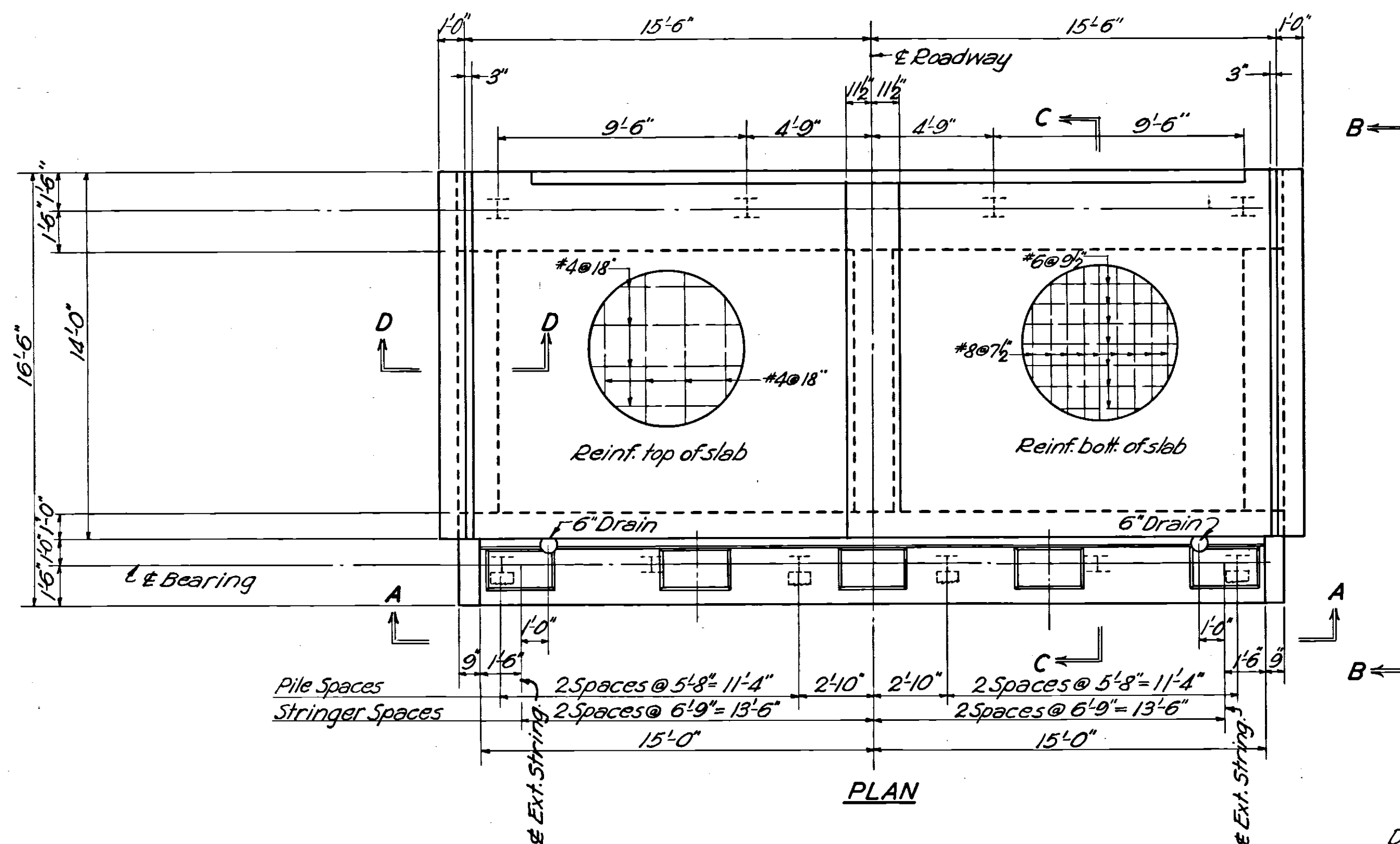
**GENERAL NOTES**  
The dead, live, and impact, reactions and moments are those resulting from the loading specified in the State of Ohio, Department of Highways Design Specifications for Highway Structures, dated October 1, 1951.  
All unit stresses used in proportioning members have been modified in accordance with Section 73 of the above noted specifications as amended July 15, 1952.  
For general notes and details see sheet #55.

**NOTE:**  
Shop drawings by American Bridge Co. See Q 4301 Shts. E1, E2, K1, SCL, #1 through 5, Q 4301 x1 Sht. 1.

OHIO TURNPIKE COMMISSION	
OHIO TURNPIKE PROJECT NO. 1	
SUPERSTRUCTURE	
INTERCHANGE STRUCTURE OVER SR.120	
STA. 7+110.3 LANES G & H	WOOD CO.
SANZENBACHER, MORRIS & TAYLOR AND BROOKHART & TYO, ASSOCIATES	
CONTRACTING ENGINEER	
DESIGN SECTION D-15	
DESIGNED: G.B.	CHECKED: R.T.
DRAWN: E.R.L.	IN CHARGE:
DATE: MARCH, 1953	SCALE: AS NOTED
CONTRACT No. C-43	
SHEET 28 OF 70	

BRIDGE DECK LAYTEX OVERLAY - CIP: 43-90-08	
1	AS BUILT PLANS
NO.	REVISION
BY	DATE





**DETAILS OF BRIDGE SEAT**  
 (Scale 3/8" = 1'-0")

Maximum pile load equals 31 tons.  
 For general notes and details, see sheets  
 #55, #57, #58, & #59

OHIO TURNPIKE COMMISSION  
**OHIO TURNPIKE PROJECT NO. 1**  
 ABUTMENT DETAILS  
 INTERCHANGE STRUCTURE OVER SR.120  
 STA. 7+1.03 LANES G&H WOOD CO.

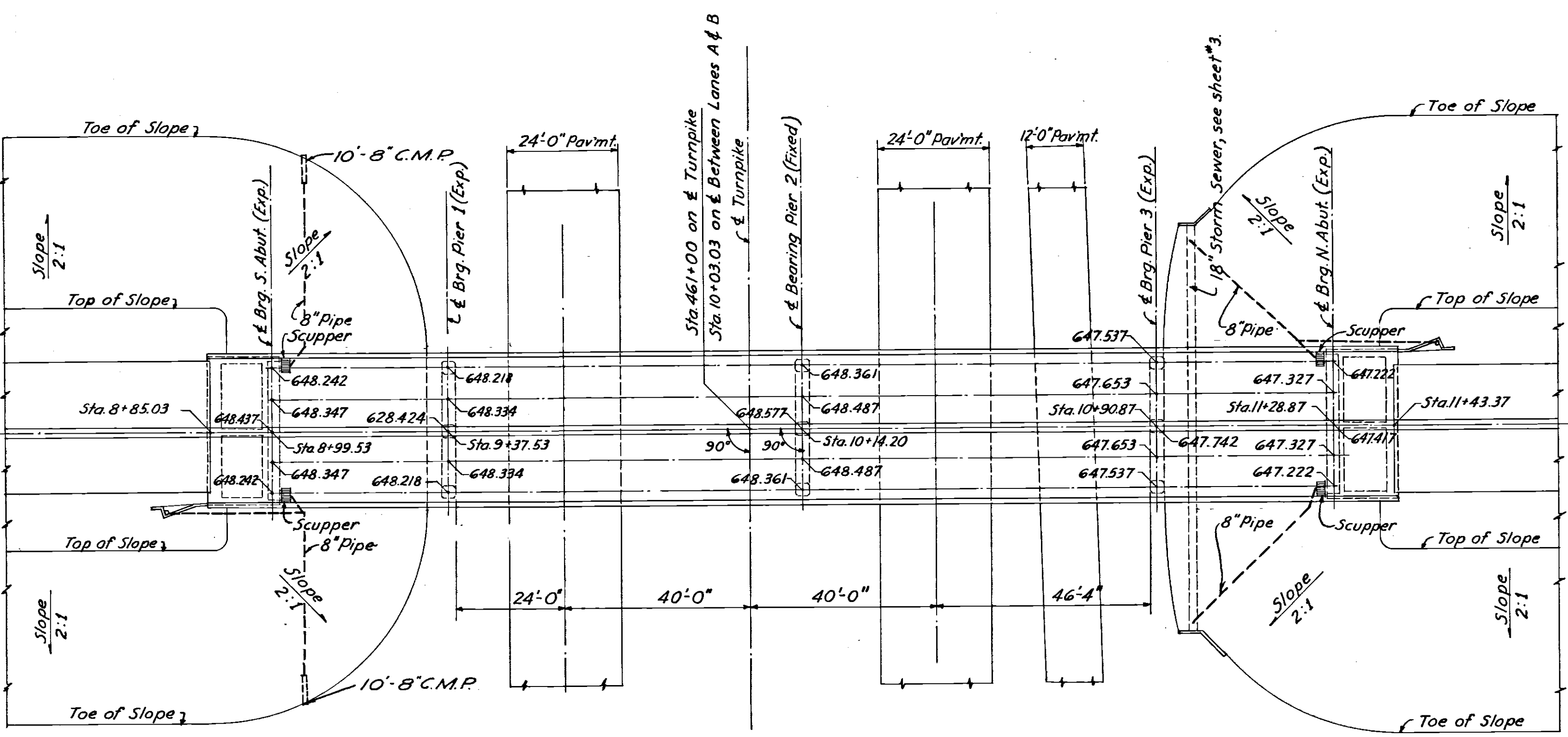
SANZENBACHER, MORRIS & TAYLOR AND BROOKHART & TYO, ASSOCIATES  
 CONTRACTING ENGINEER  
 DESIGN SECTION D-15

BRIDGE DECK LATEX OVERLAY - CIP: 43-90-08

2	As BUILT PLANS	C.R.M. 6/22/55
1		E.D.S. 2-12-54
1/2	REVISION	BY DATE

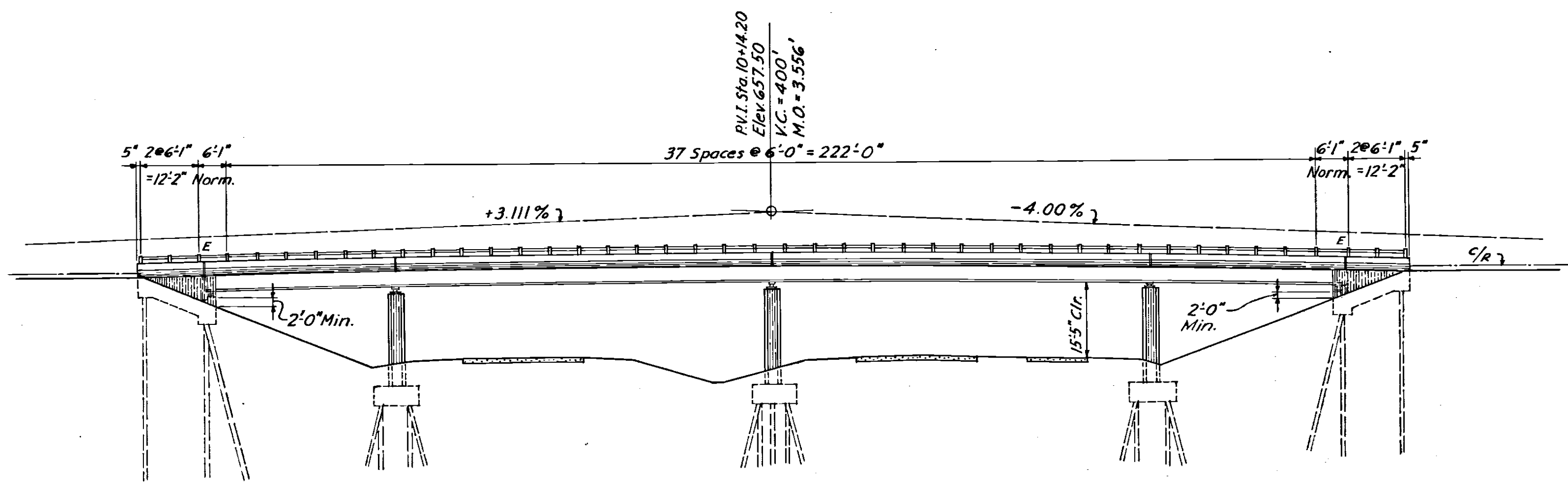
DESIGNED: D.B.F.	CHECKED: Y.D.M.	DATE: MARCH 1955
DRAWN: B.E.J.	IN CHARGE:	SCALE: AS NOTED
CONTRACT No. C-43		SHEET 29 OF 70





NOTE For Test Hole see sheet I-50

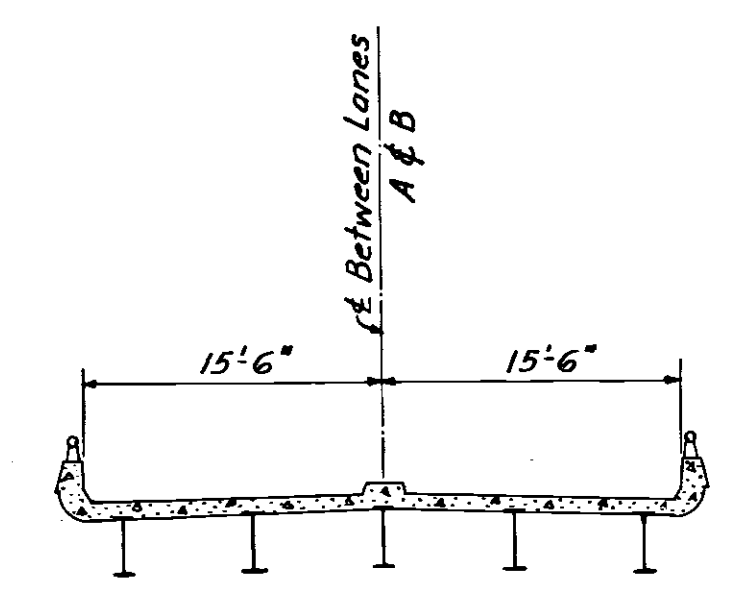
PLAN  
Scale 1 in. = 20 ft.



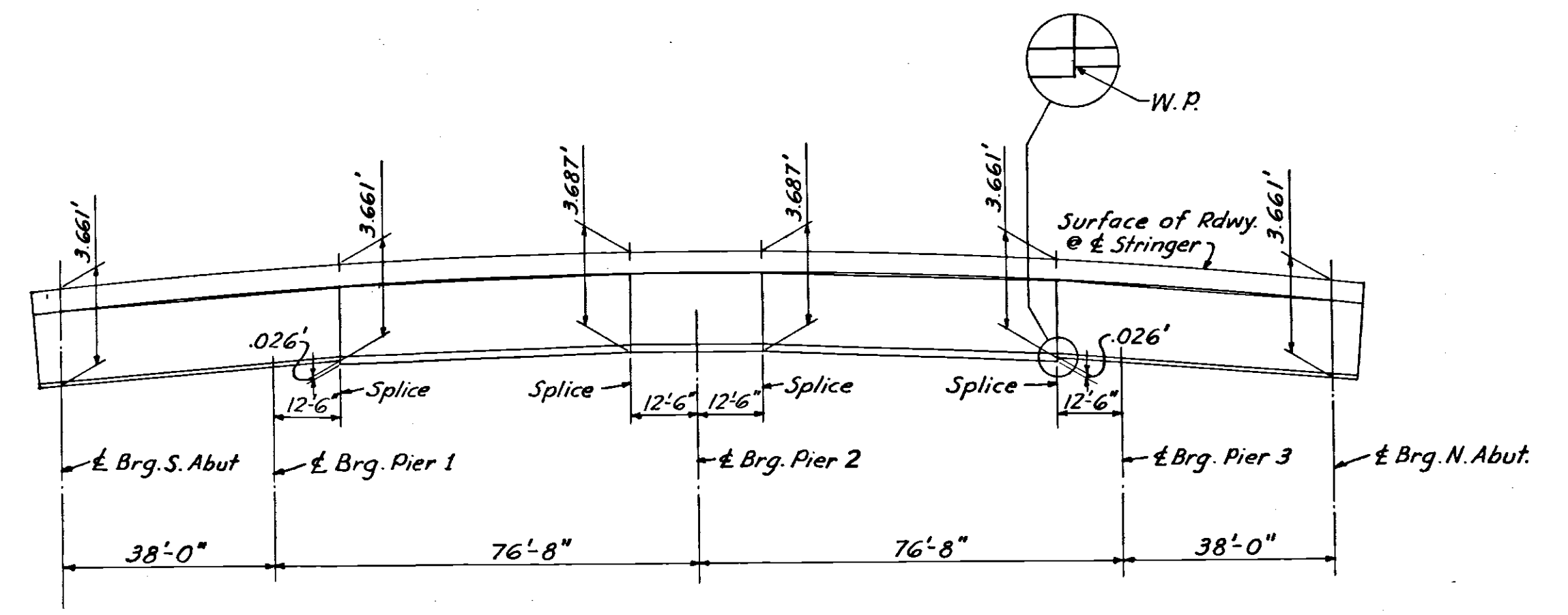
ELEVATION  
Scale 1 in. = 20 ft.

AVERAGE PILE LENGTH

South Abut			Pier #1		Pier #2		Pier #3		North Abut		
Rear V.	Vert.	Bottom	Vert.	Bottom	Vert.	Bottom	Vert.	Bottom	Rear V.	Vert.	Bottom
49.8	46.7	44.8	31.1	31.2	27.7	26.9	30.2	28.7	44.0	34.6	42.9



TYPICAL SECTION  
Scale 1 in. = 10 ft.



ELEVATION OF STRINGER  
No Scale

TABLE OF QUANTITIES										
SPEC. ITEM NO.	DESCRIPTION	UNIT	SUPERSTRUCT.	SOUTH ABUT.	PIER 1	PIER 2	PIER 3	NORTH ABUT.	DRAINAGE	TOTALS
E-2	Excavation for Structures - Dry	C.Y.	—	74.5	49.6	87	49.6	74.5	—	335.2
I-15	Guard Rail - Type "C"	L.F.	516.7	—	—	—	—	—	—	516.7
S-1	Conc. for Superstructure - Class "C"	C.Y.	277.3	—	—	—	—	—	—	277.3
S-1	Conc. for Substructure - Class "C"	C.Y.	—	75.6	67.7	70.6	67.7	75.6	2.6	359.8
S-1	Conc. for Substructure - Class "E"	C.Y.	—	—	—	—	—	—	—	—
S-4	Reinf. Steel - Superstructure	LBS.	72,347	—	—	—	—	—	—	72,347
S-4	Reinf. Steel - Substructure	LBS.	—	6,275	8,725	9,582	8,725	6,275	42	39,624
S-7	Structural Steel	LBS.	273,052	—	—	—	—	—	—	273,052
S-9	Structural Expansion Joints	LBS.	7464	—	—	—	—	—	—	7464
S-14	Standard Handrail - Type "A"	L.F.	518	—	—	—	—	—	—	518
S-16	First Test Pile	E.A.	—	—	—	—	—	—	—	1
S-18	Steel Piles (10BPA2) - Furnishing	L.F.	—	552	468	561	490	552	—	2,623
S-18	Steel Piles - Driving	L.F.	—	471.9	405.1	464.1	411.3	416.6	—	2,169
S-18	Steel Pile Splices - Making	E.A.	—	0	—	—	—	0	—	0
S-29	Scuppers - Type "A"	E.A.	—	—	—	—	—	—	4	4
S-29	6" Standard wt. W.I. Pipe (Sec. M-6.10)	L.F.	—	—	—	—	—	—	100	100
S-29	8" Pipe / V.C.P. (Sec. M-6.8), P.C.C.P. (Sec. M-6.5) or C.M.P. 16 Ga. Galv. Fully Bit. coated (Sec. M-6.4c)	L.F.	—	—	—	—	—	—	213	213
S-29	8" C.M.P. Outlet 16 Ga. Galv. Fully Bit. Coated (Sec. M-6.4c)	L.F.	—	—	—	—	—	—	20	20

NOTE Estimated length of steel piles.  
45 Pcs. @ 36'  
12 Pcs. @ 50'  
8 Pcs. @ 57'

STRUCTURE NO 4

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE PROJECT NO. 1

GENERAL PLAN

INTERCHANGE STRUCTURE OVER TURNPIKE

STA. 461+00

WOOD CO.

SANZENBACHER, MORRIS & TAYLOR AND BROOKHART & TYO, ASSOCIATES

CONTRACTING ENGINEER

DESIGN SECTION D-15

DESIGNED: J.G.

CHECKED: J.G.

DATE: MARCH, 1953

DRAWN: C.W.F.

IN CHARGE:

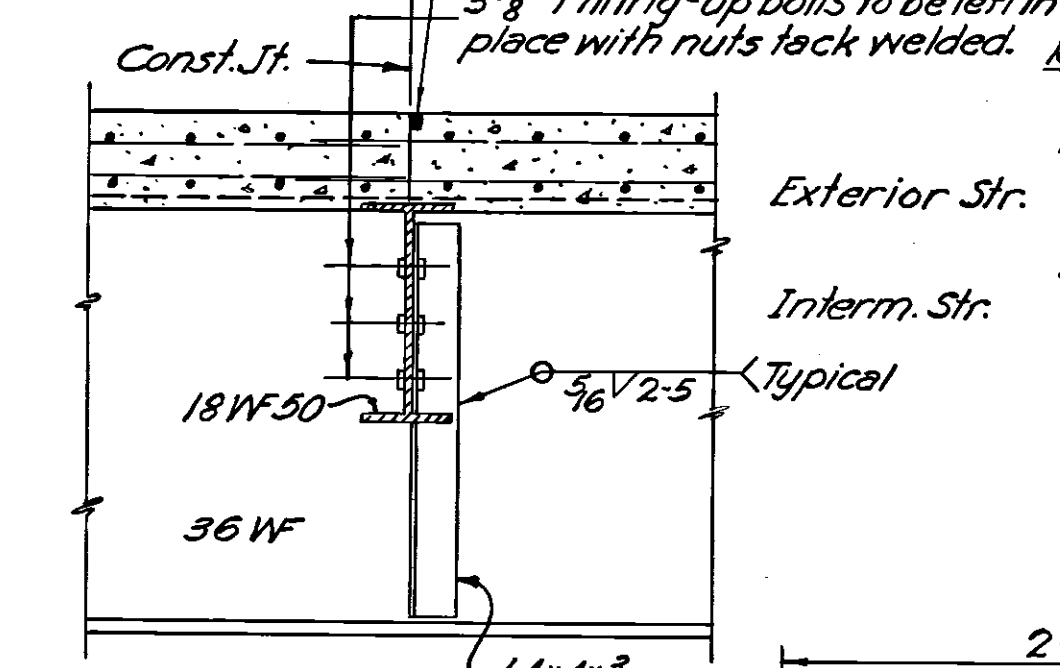
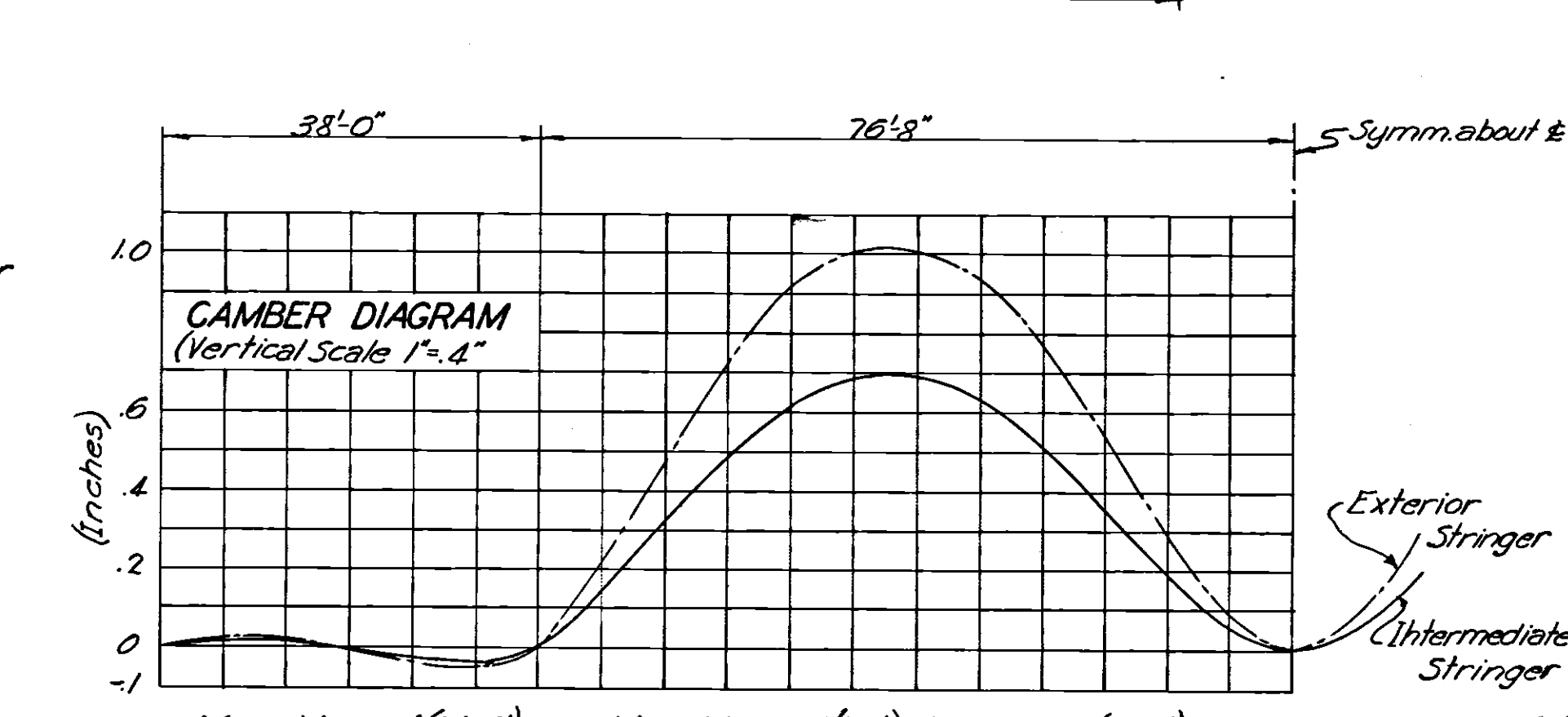
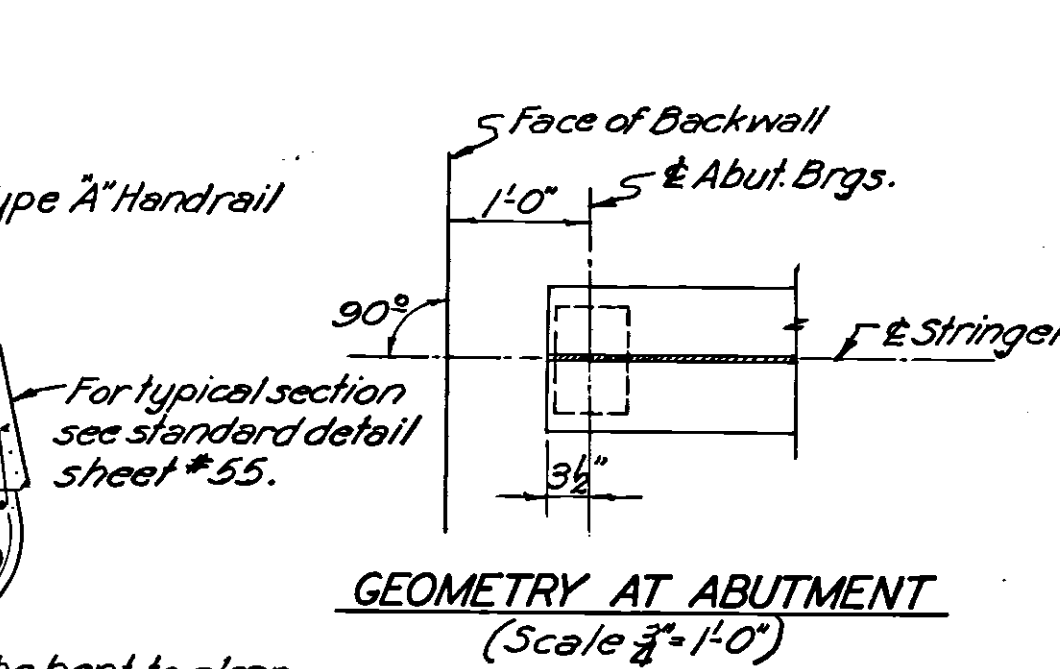
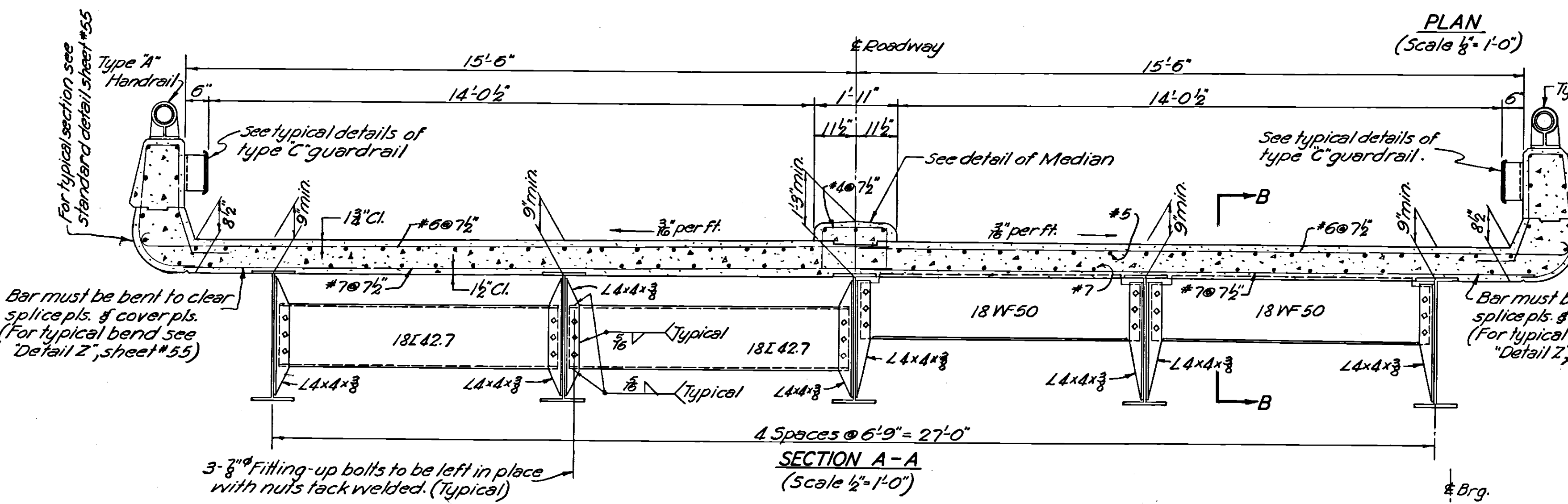
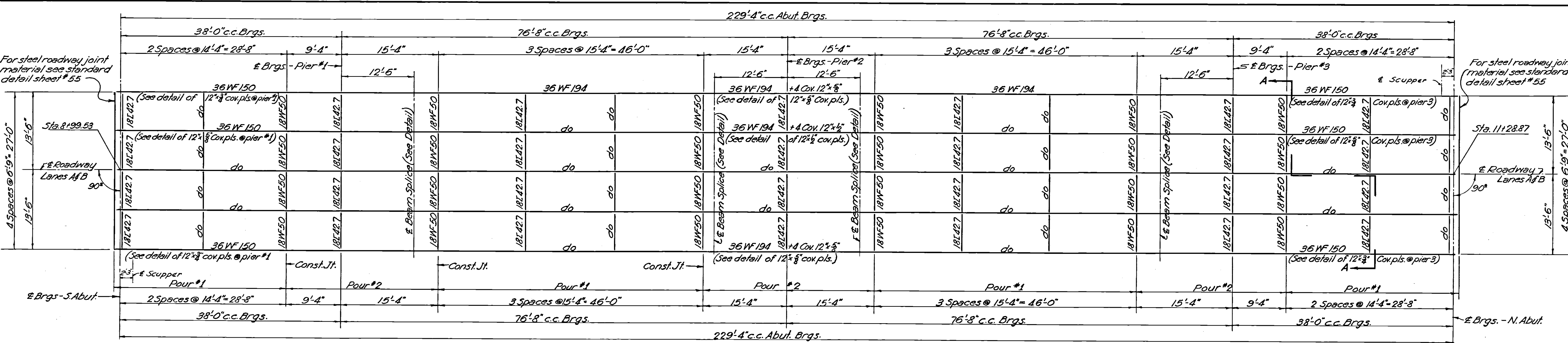
SCALE: AS NOTED

CONTRACT No. C-43

SHEET 31 OF 70

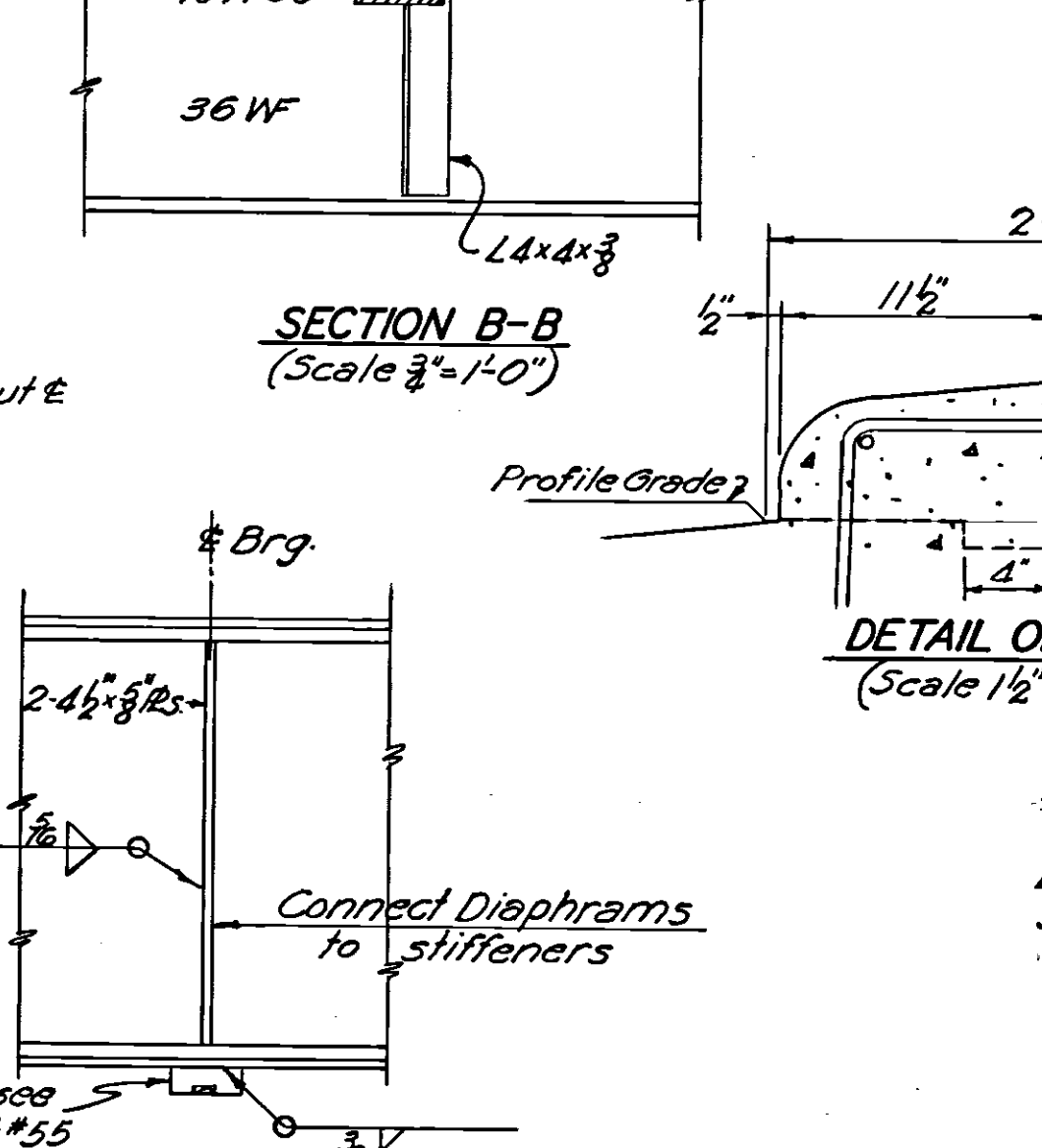
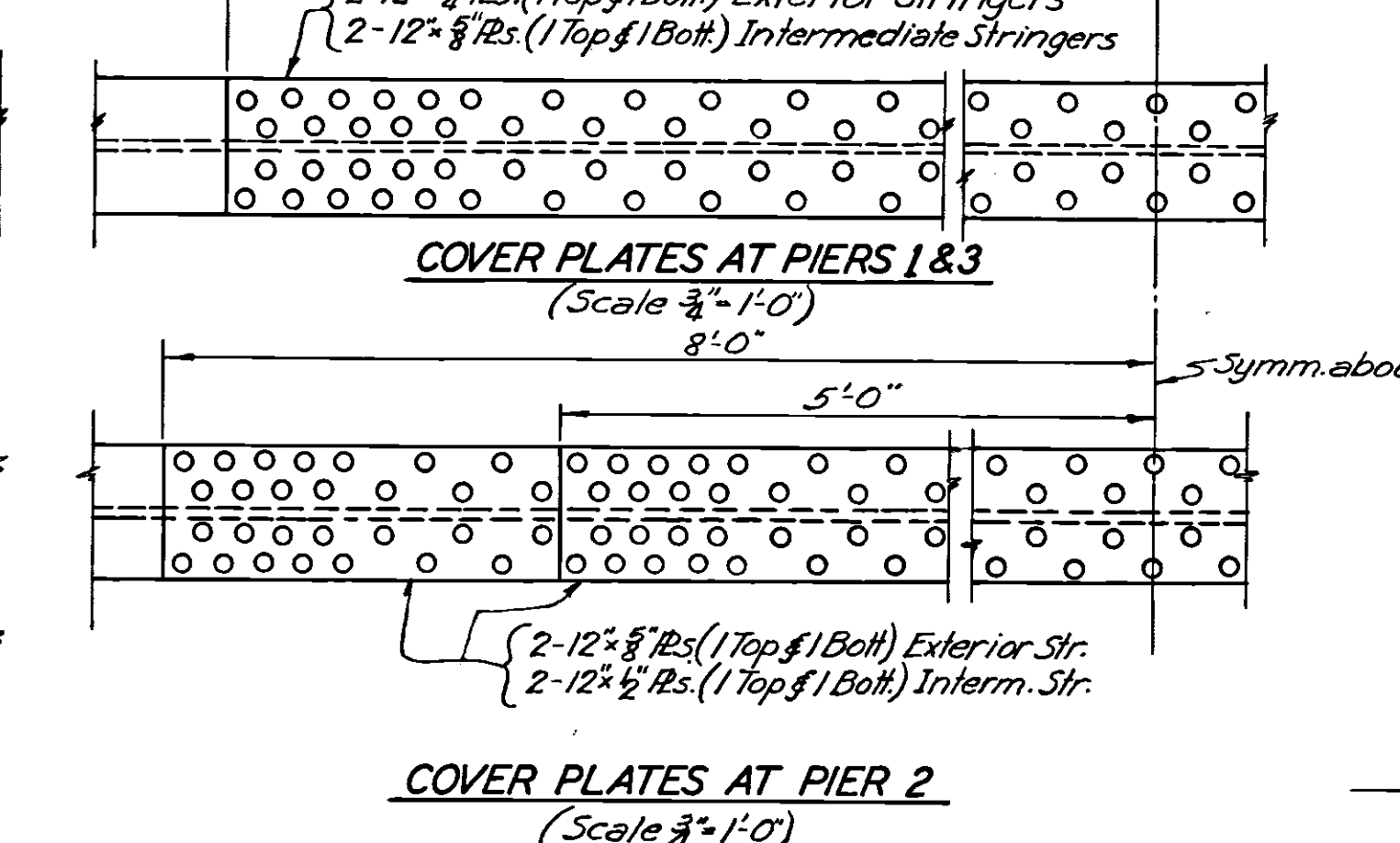
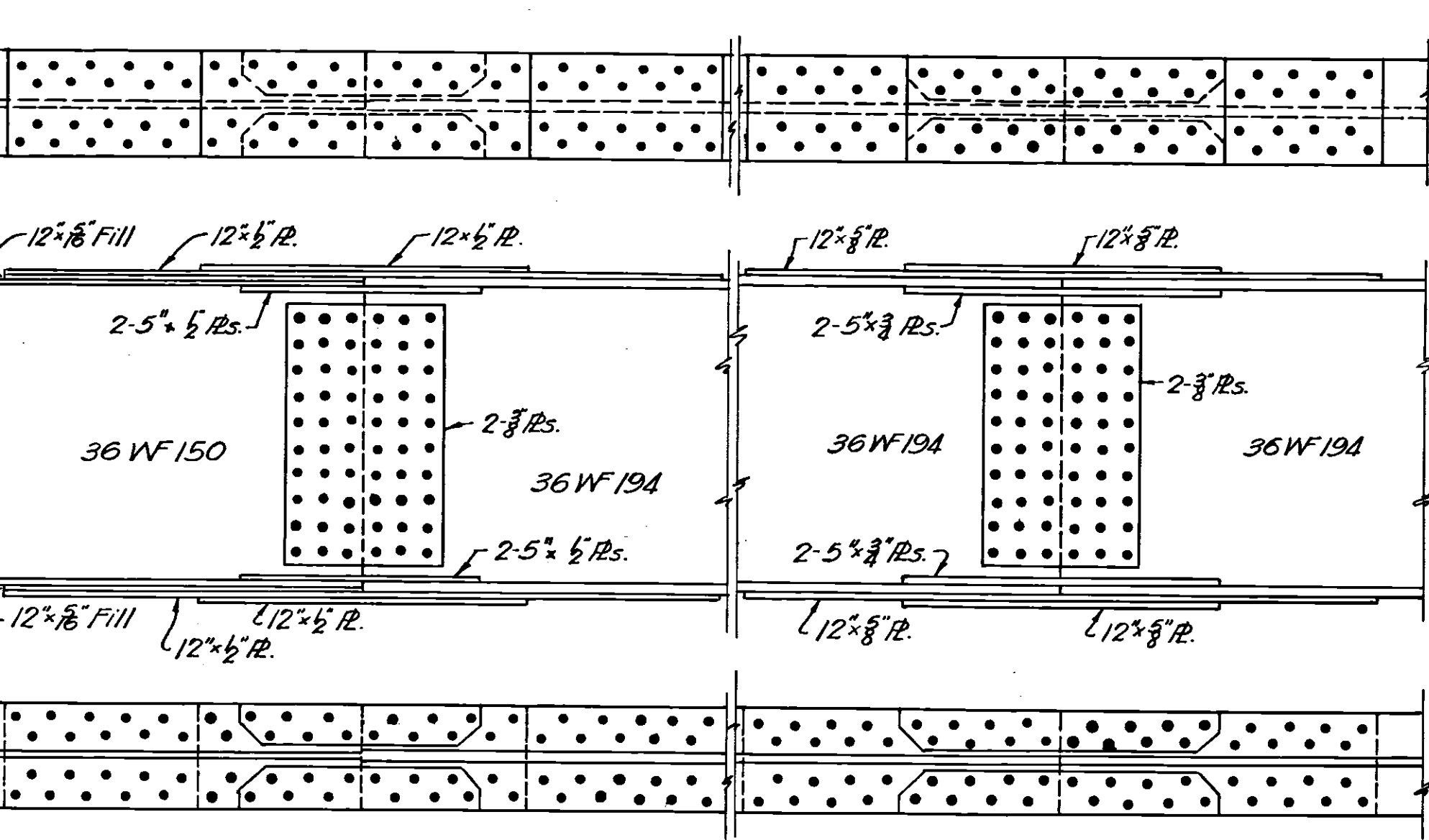
1	AS-BUILT PLANS	CRM: 6/22/54
NO.	REVISION	BY DATE





**MOMENTS & REACTIONS**  
CF=2000 (Predicted)

End Span		1st Pier		Interior Span		2nd Pier	
Reaction (kips)	Max. Moment (k-ft)	Reaction (kips)	Max. Moment (k-ft)	Reaction (kips)	Max. Moment (k-ft)	Reaction (kips)	Max. Moment (k-ft)
D.L. 17.7	31.5	113.9	622.2	517.4	149.3	1026.7	
L.L. 19.9	150.0	35.8	233.0	264.0	41.2	311.0	
I. 6.1	46.0	8.8	57.5	65.5	10.2	77.2	
	43.7	158.5	-912.7	+846.9	200.7	-1414.9	
D.L. 11.8	19.2	76.9	420.1	350.8	101.2	695.7	
L.L. 25.0	188.4	44.9	292.1	332.1	51.7	393.0	
I. 7.7	52.8	11.1	72.5	82.3	12.8	97.3	
	44.5	132.9	-784.7	+765.2	165.7	-1186.0	



**GENERAL NOTES**

The dead, live, and impact reactions and moments are those resulting from the loading specified in the "State of Ohio, Department of Highways Design Specifications for Highway Structures, dated October 1, 1951."

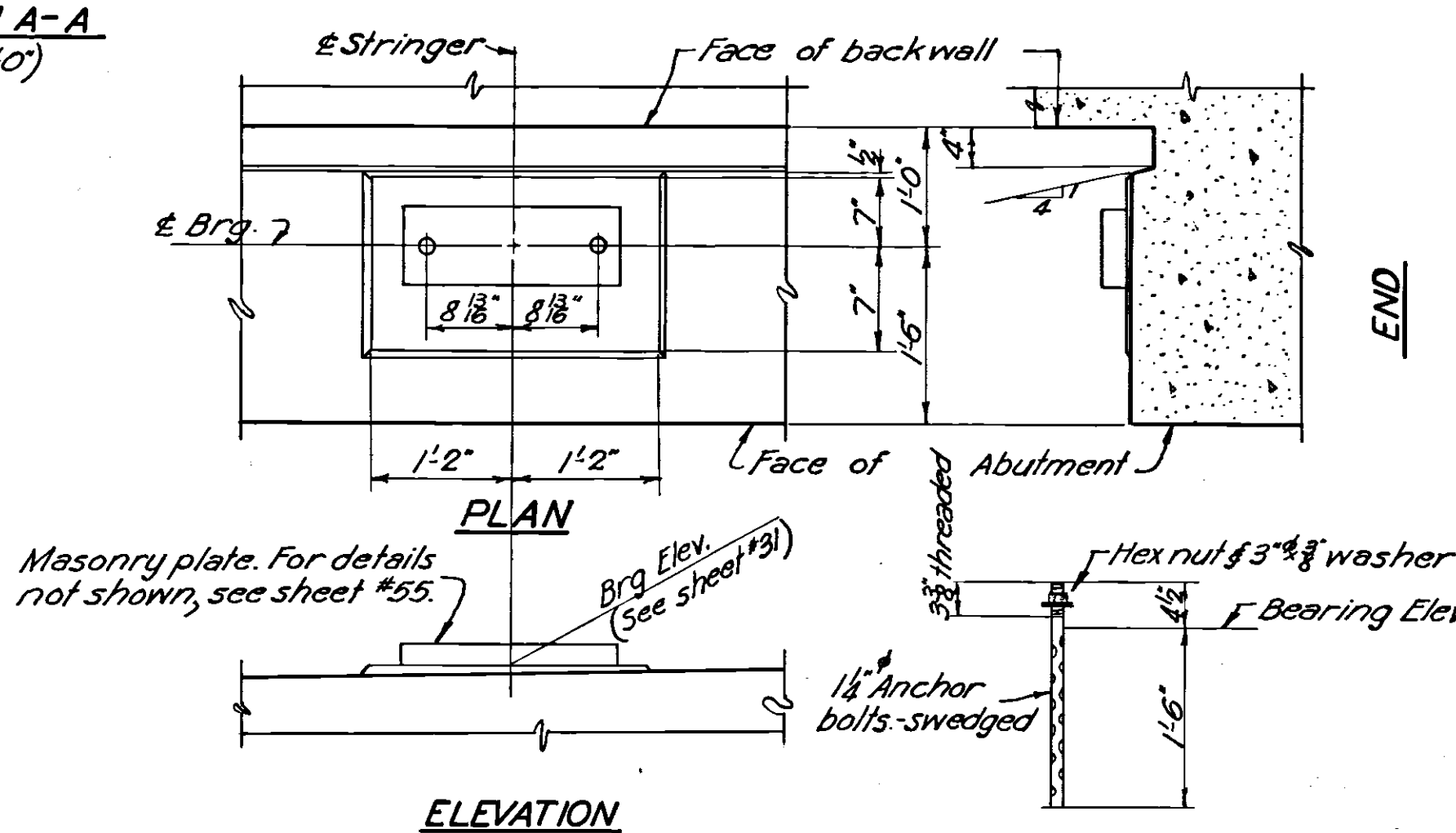
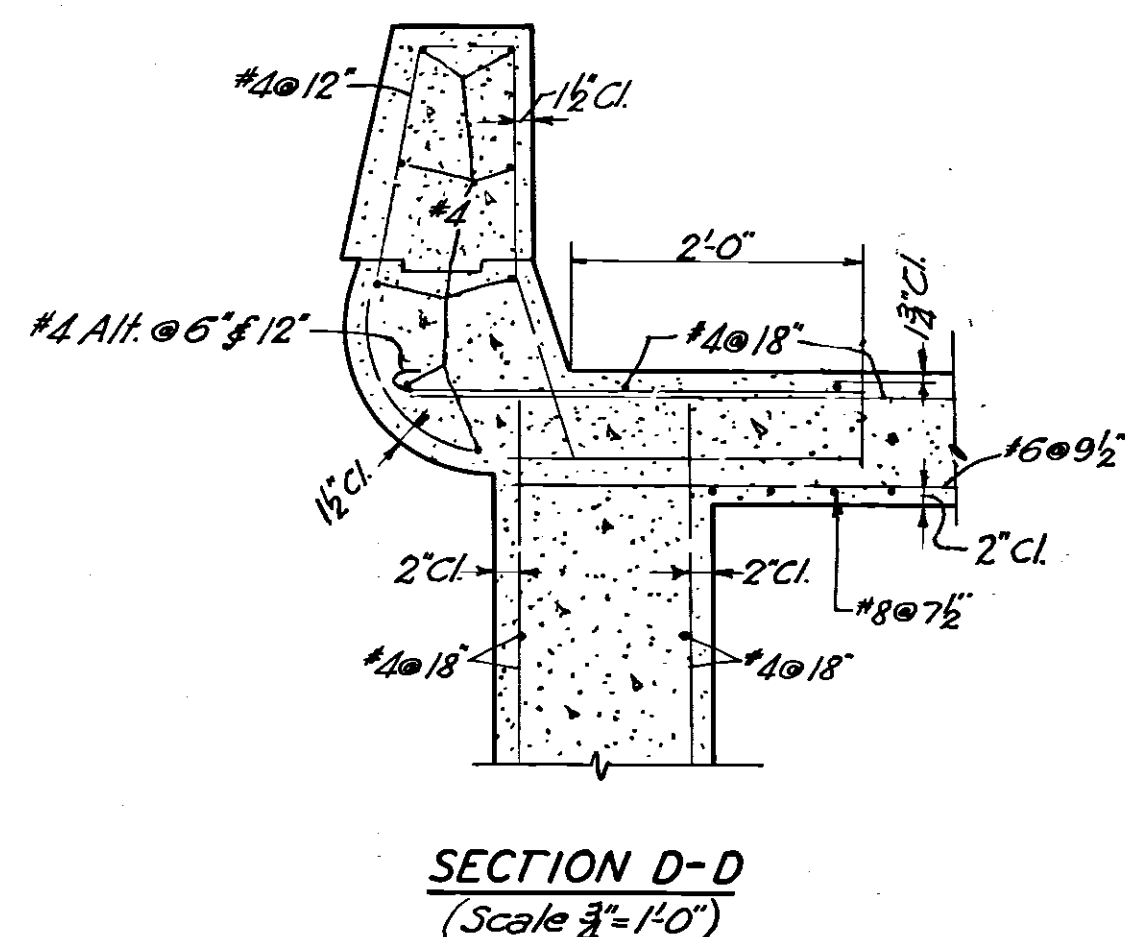
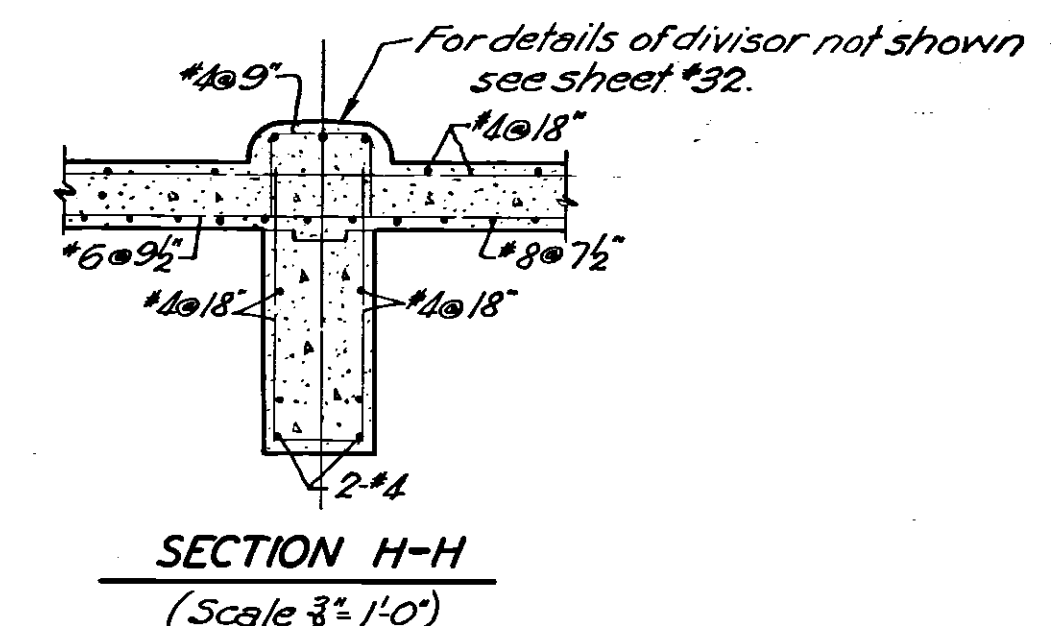
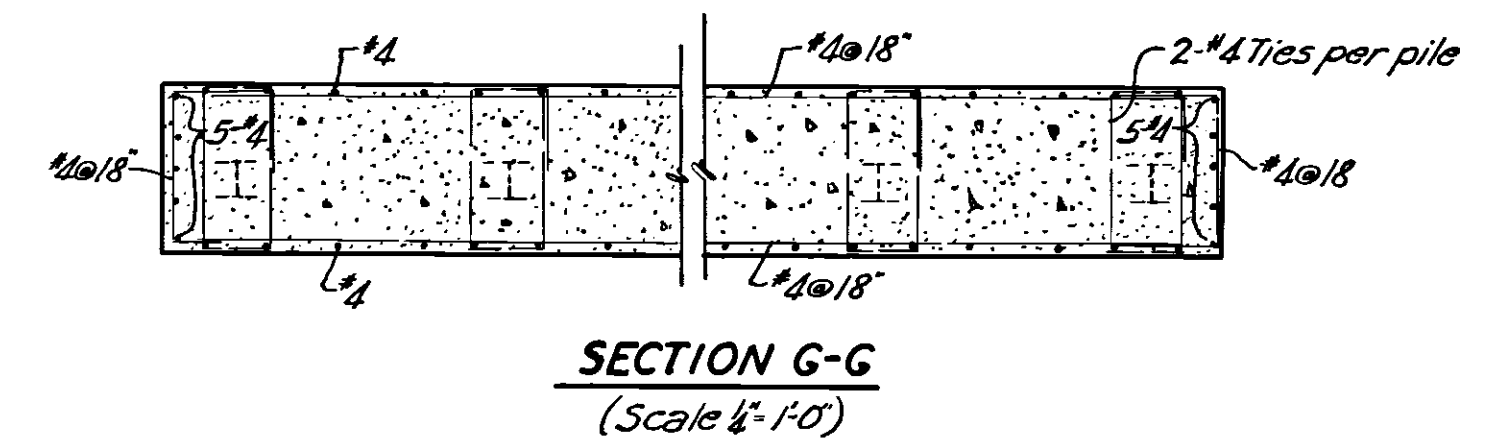
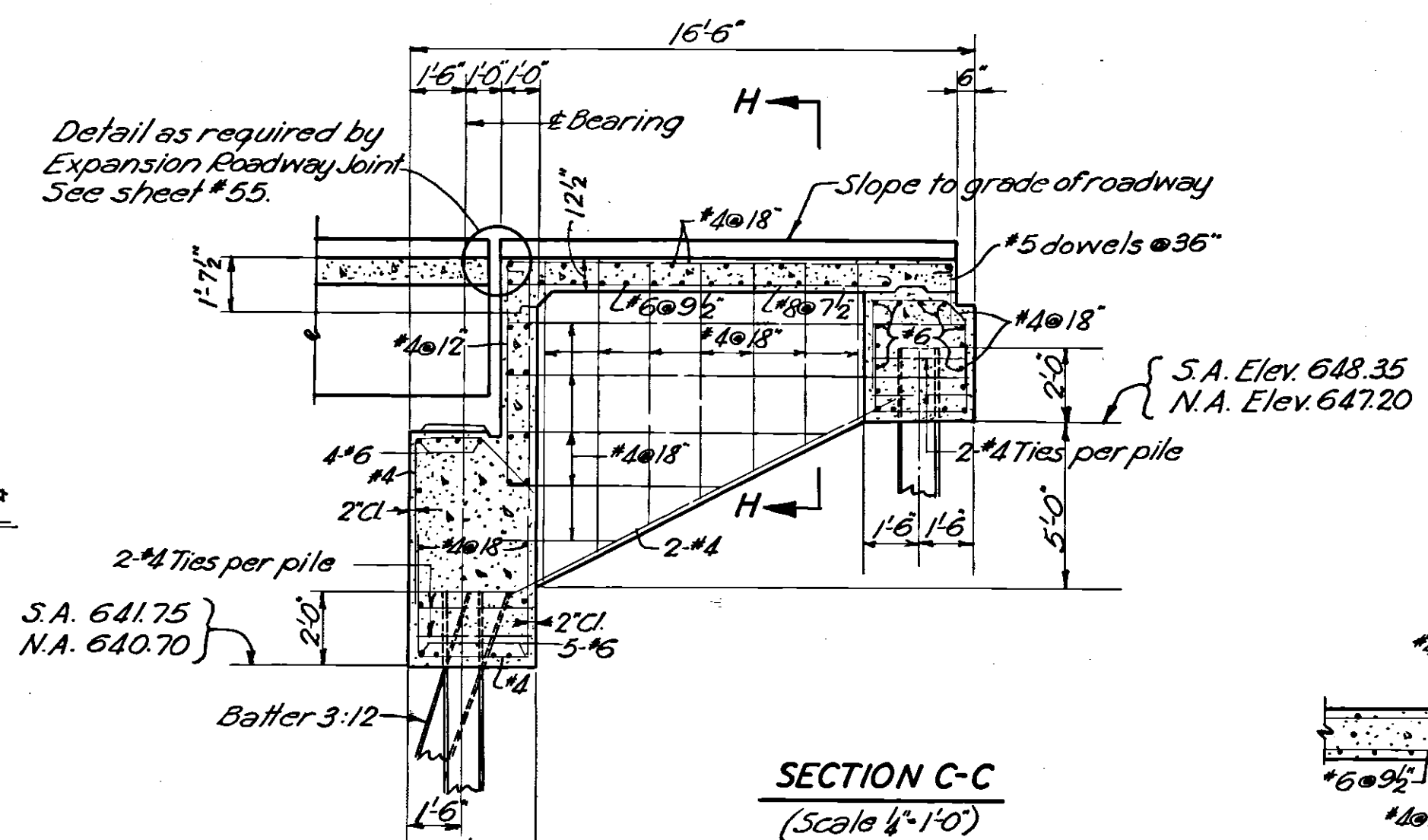
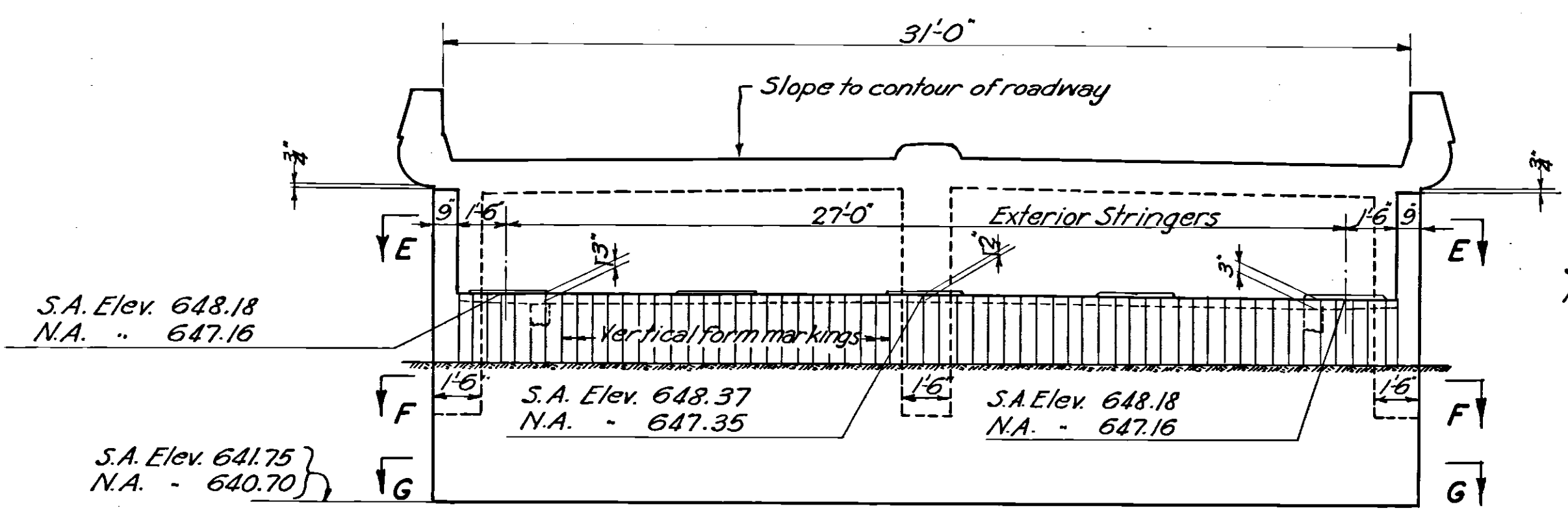
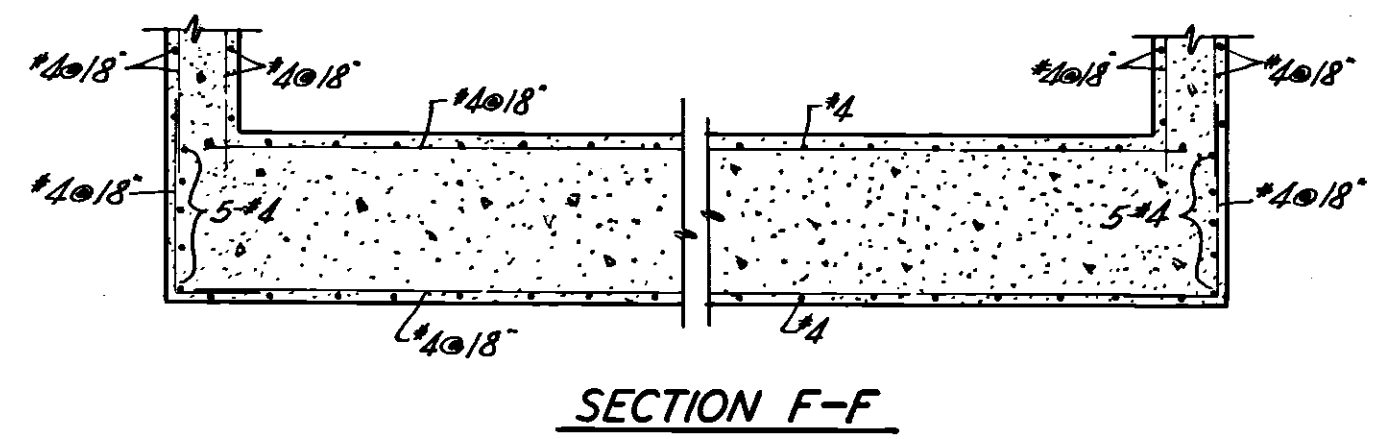
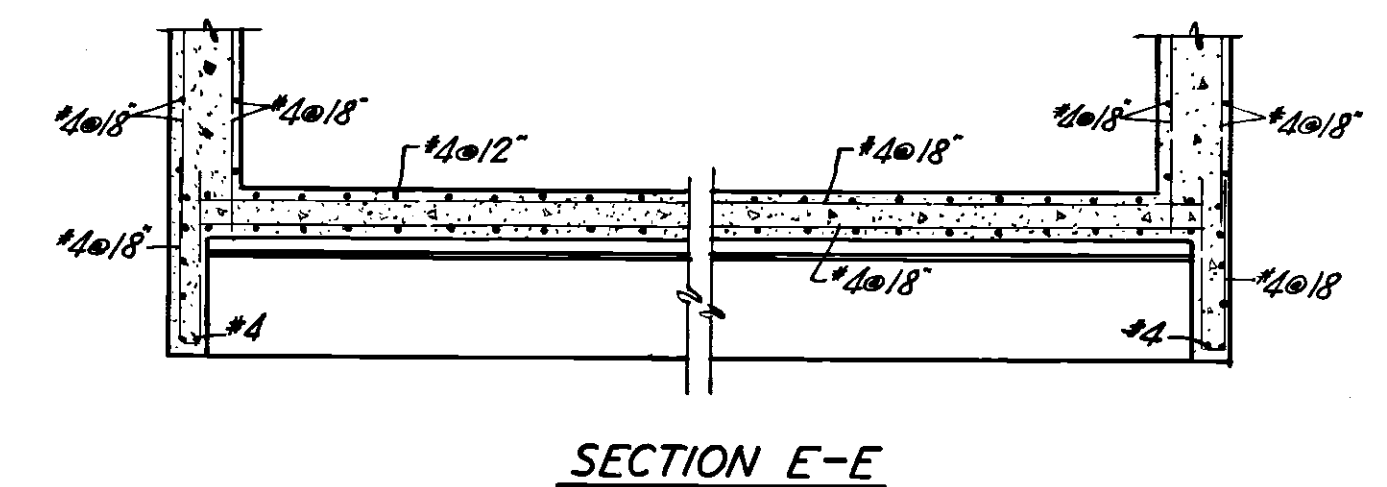
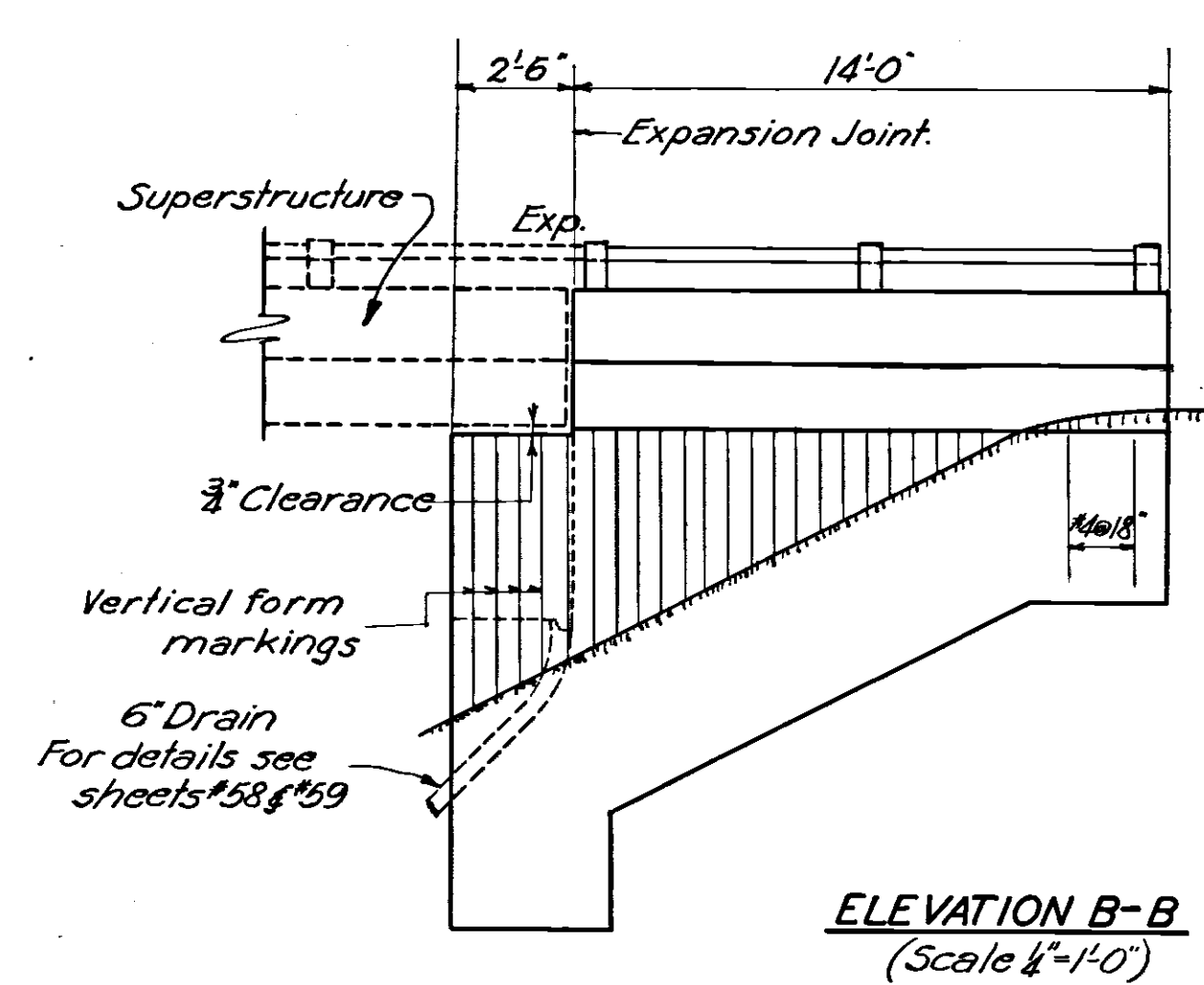
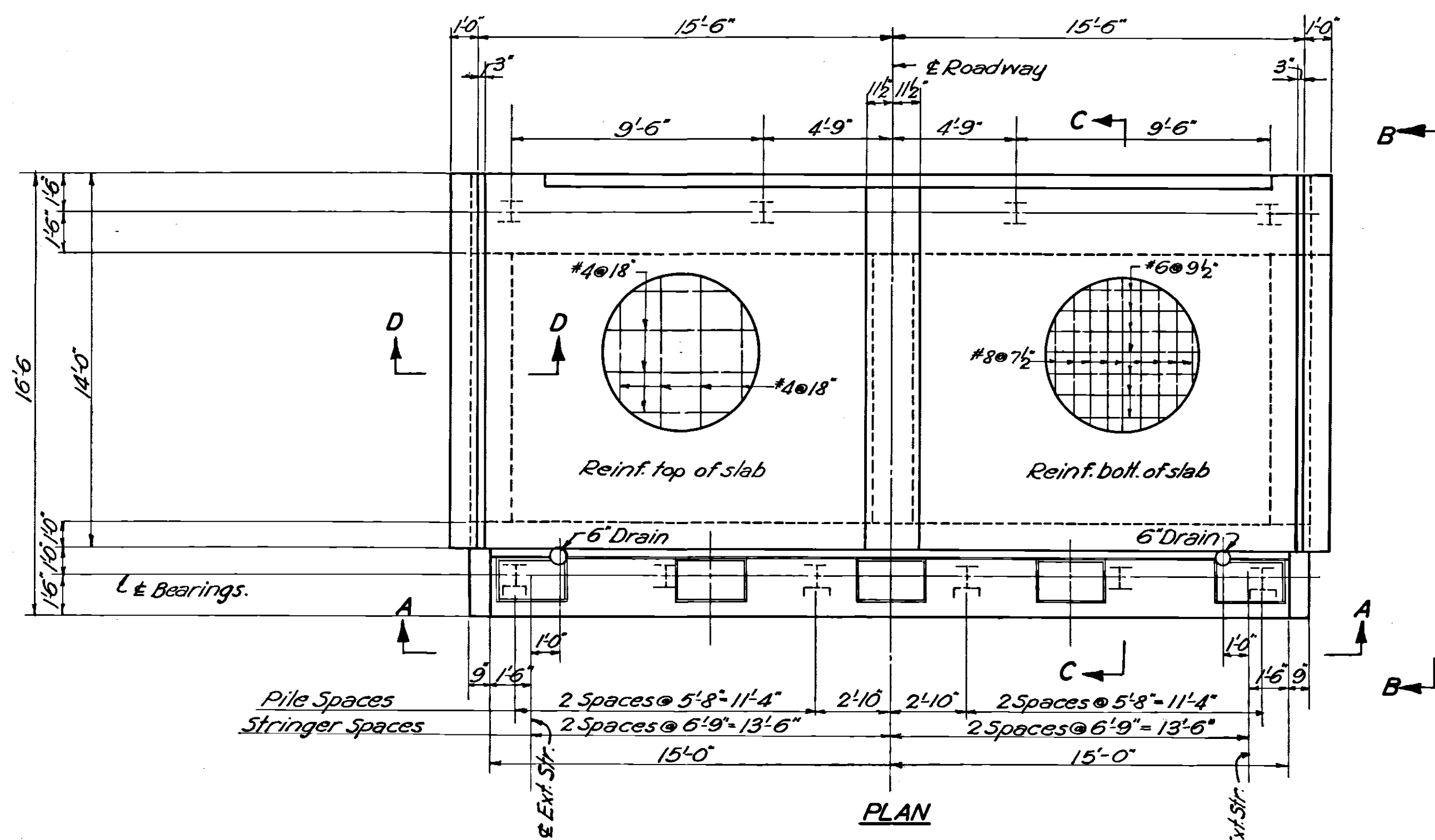
All unit stresses used in proportioning members have been modified in accordance with Section 73 of the above noted specifications as amended July 15, 1952.

For general notes and details, see sheet #55.

**NOTE:**  
Shop drawings by American Bridge Co. See Q 4302 Shs. E1, E2, K1, SCI #1 through 5 Q 4302 x1, Sht. 1.

OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE PROJECT NO. 1			
SUPERSTRUCTURE			
INTERCHANGE STRUCTURE OVERTURNPIKE			
STA. 461+00.00		WOOD CO.	
SANZENBACHER, MORRIS & TAYLOR AND BROOKHART & TYO, ASSOCIATES			
CONTRACTING ENGINEER			
DESIGN SECTION D-15			
DESIGNED: G.B.	CHECKED: B.T.	DATE: MARCH 1953	
DRAWN: E.R.L.	IN CHARGE:	SCALE: AS NOTED	
CONTRACT No. C-43		SHEET 32 OF 70	

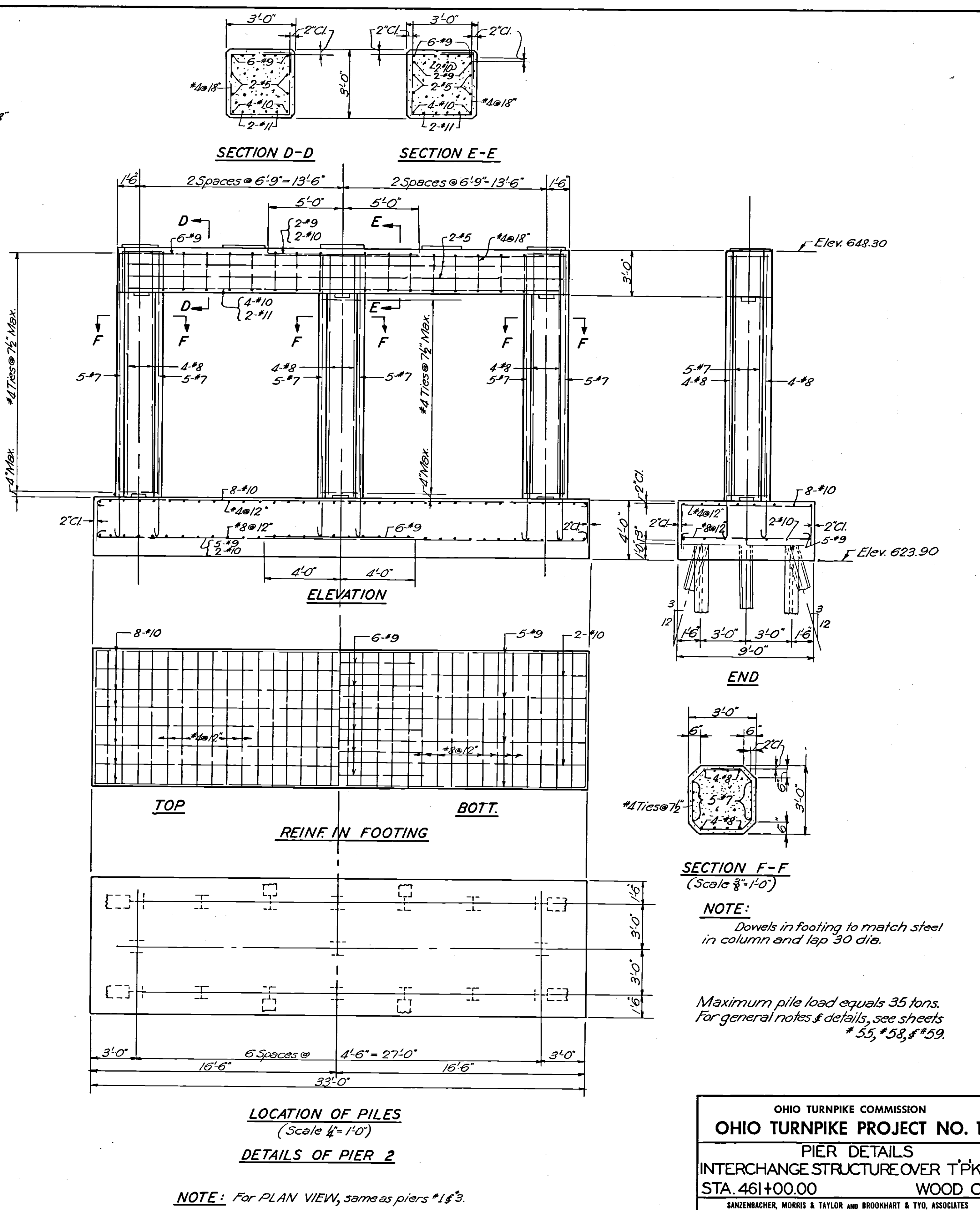
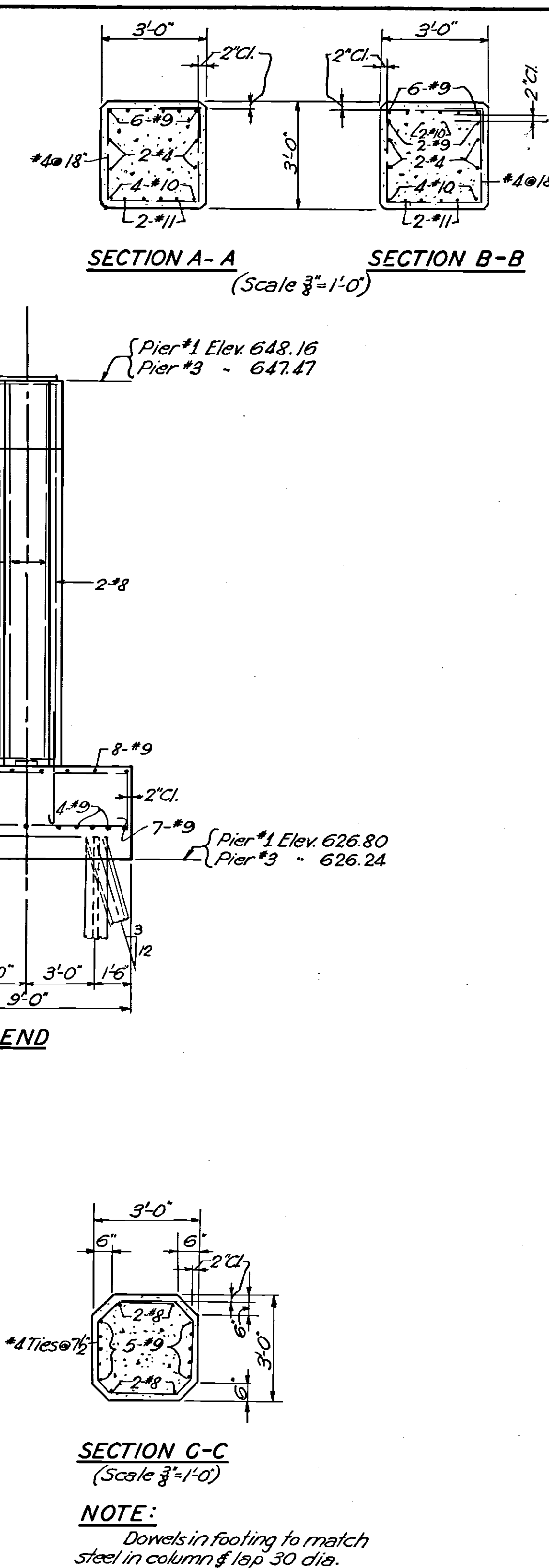
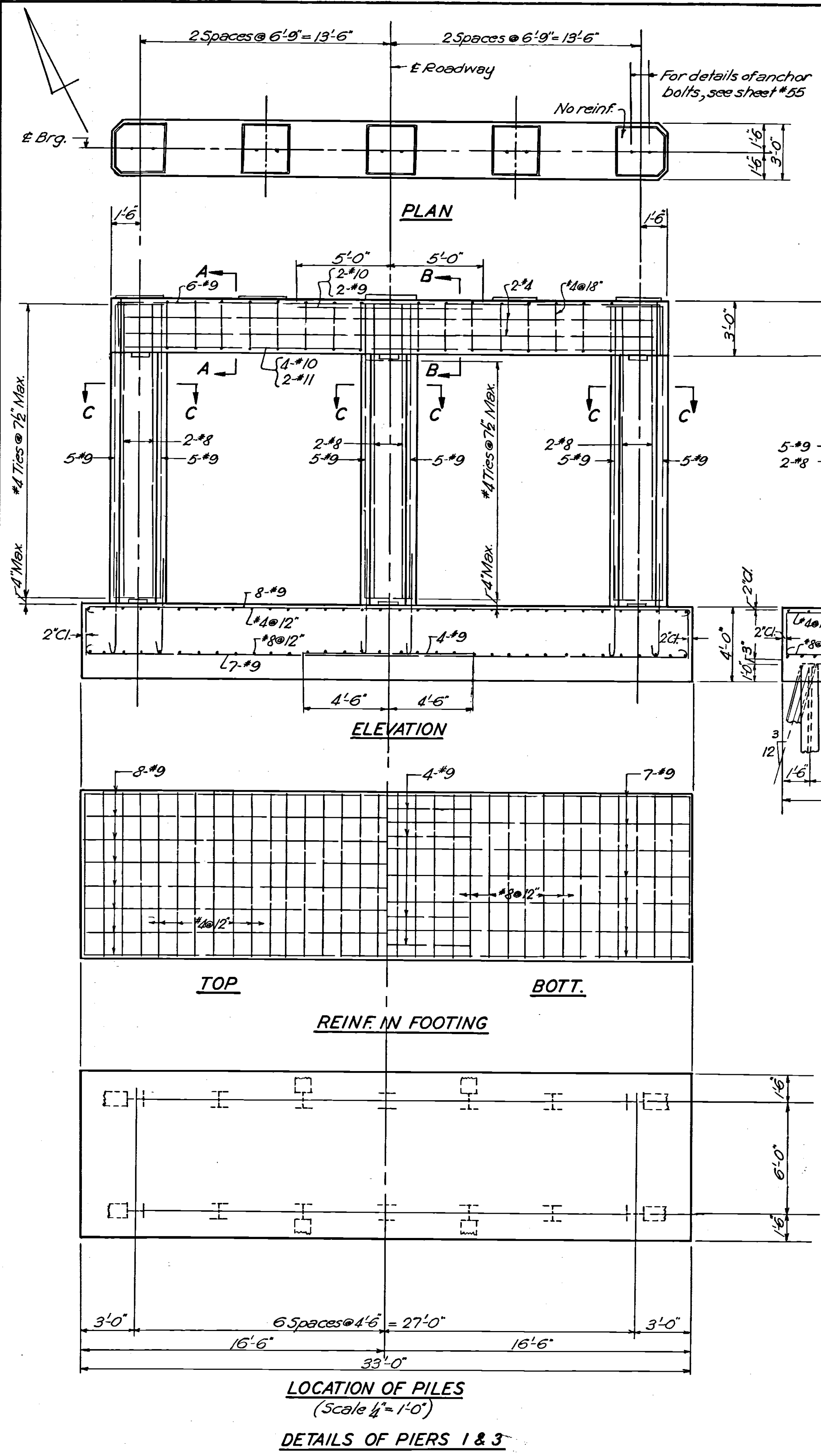




DETAILS OF BRIDGE SEAT  
(Scale 3/8" = 1'-0")

Maximum pile load equals 31 tons.  
For general notes & details, see sheets #55, #57, #58, #59.

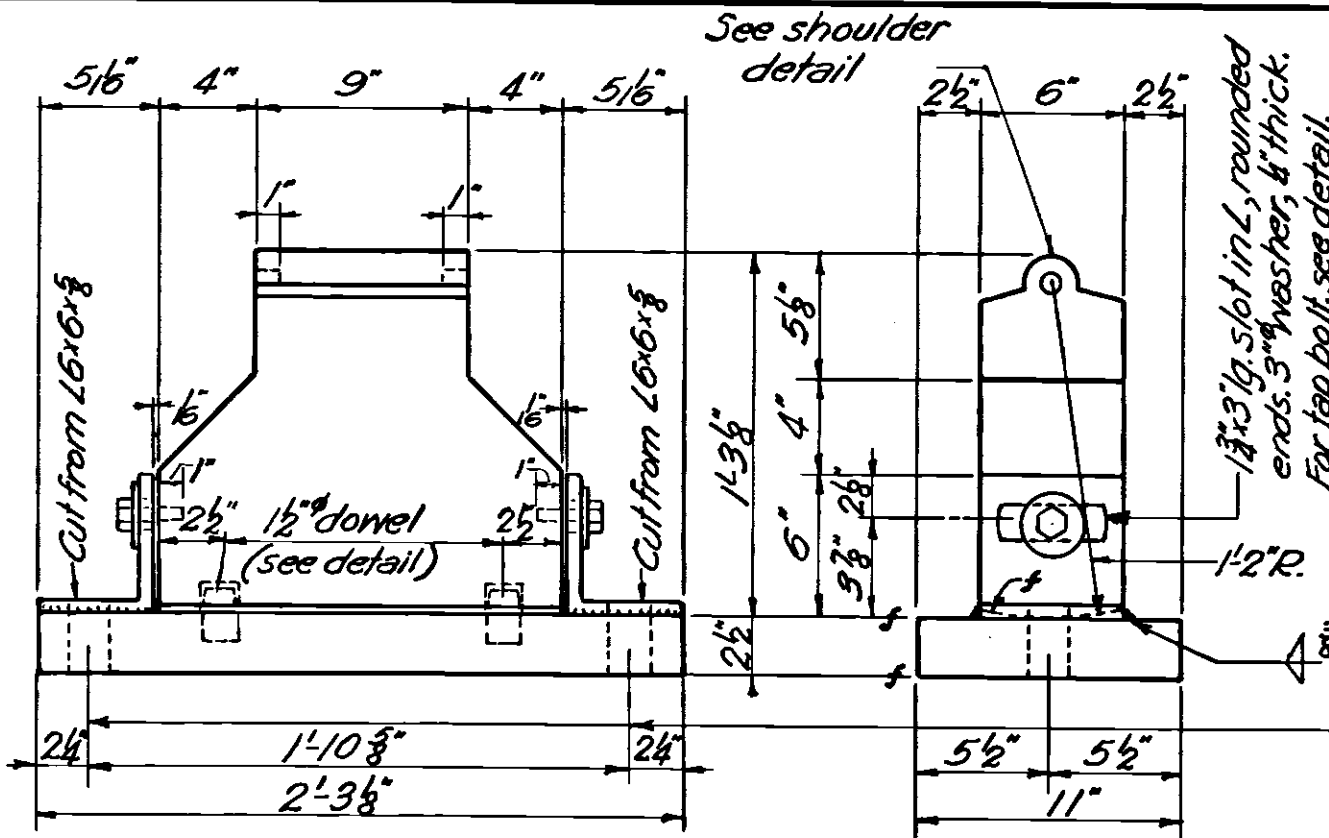
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE PROJECT NO. 1			
ABUTMENT DETAILS			
INTERCHANGE STRUCTURE OVER TURNPIKE			
STA 461+00.00 WOOD CO.			
SANZENBACHER, MORRIS & TAYLOR AND BROOKHART & TYO, ASSOCIATES			
CONTRACTING ENGINEER			
DESIGN SECTION D-15			
2	AS BUILT PLANS	C.R.M. 4/22/54	DESIGNED: D.R.F.
1		J.H. 2-12-54	CHECKED: Y.D.M.
Nº	REVISION	BY DATE	IN CHARGE
		CONTRACT No. C-43	DATE: MARCH 1953
			SCALE: AS NOTED
			SHEET 33 OF 70



OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE PROJECT NO. 1			
PIER DETAILS			
INTERCHANGE STRUCTURE OVER T'PKE.			
STA. 461+00.00 WOOD CO.			
SANZENBACHER, MORRIS & TAYLOR AND BROOKHART & TYO, ASSOCIATES			
CONTRACTING ENGINEER			
DESIGN SECTION B-15			
DESIGNED: V.D.M.	CHECKED: D.R.F.	DATE: MARCH 1953	
DRAWN: B.E.J.	IN CHARGE:	SCALE: AS NOTED	
CONTRACT No. C-43	SHEET 34 OF 70		

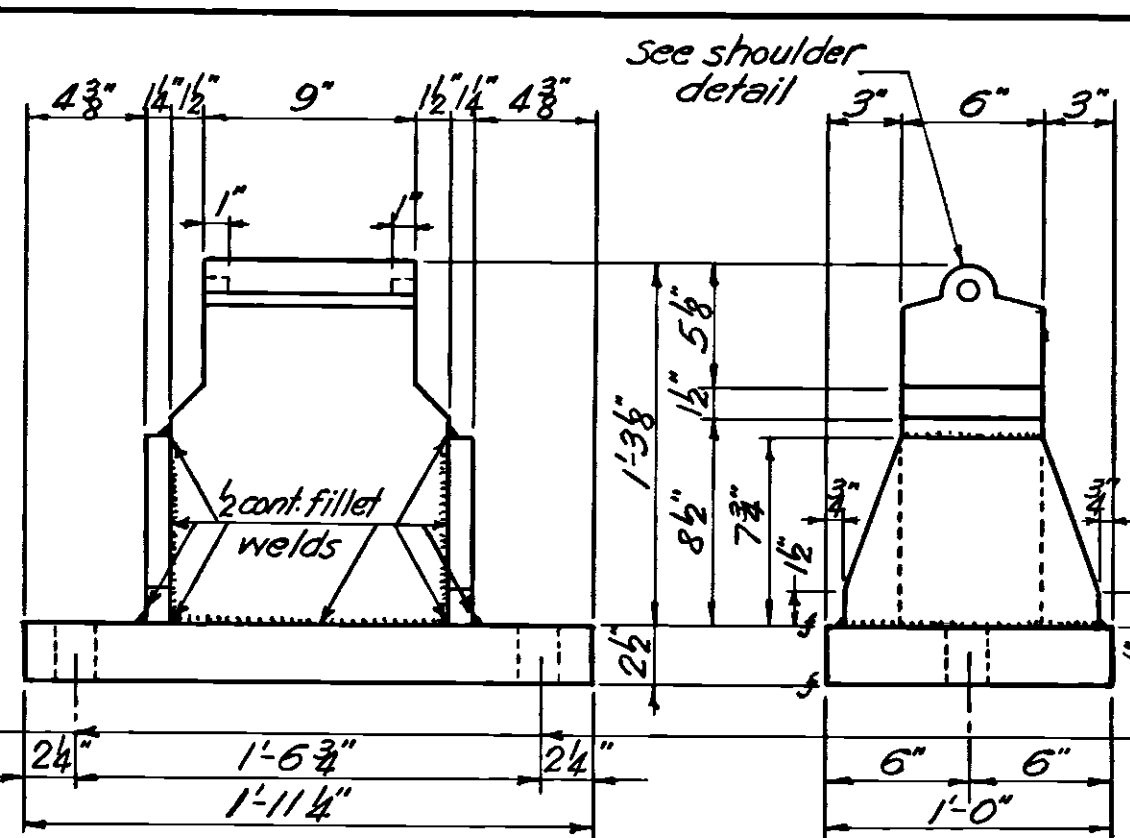
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1		J.H. 2-12-54
Nº	REVISION	BY DATE





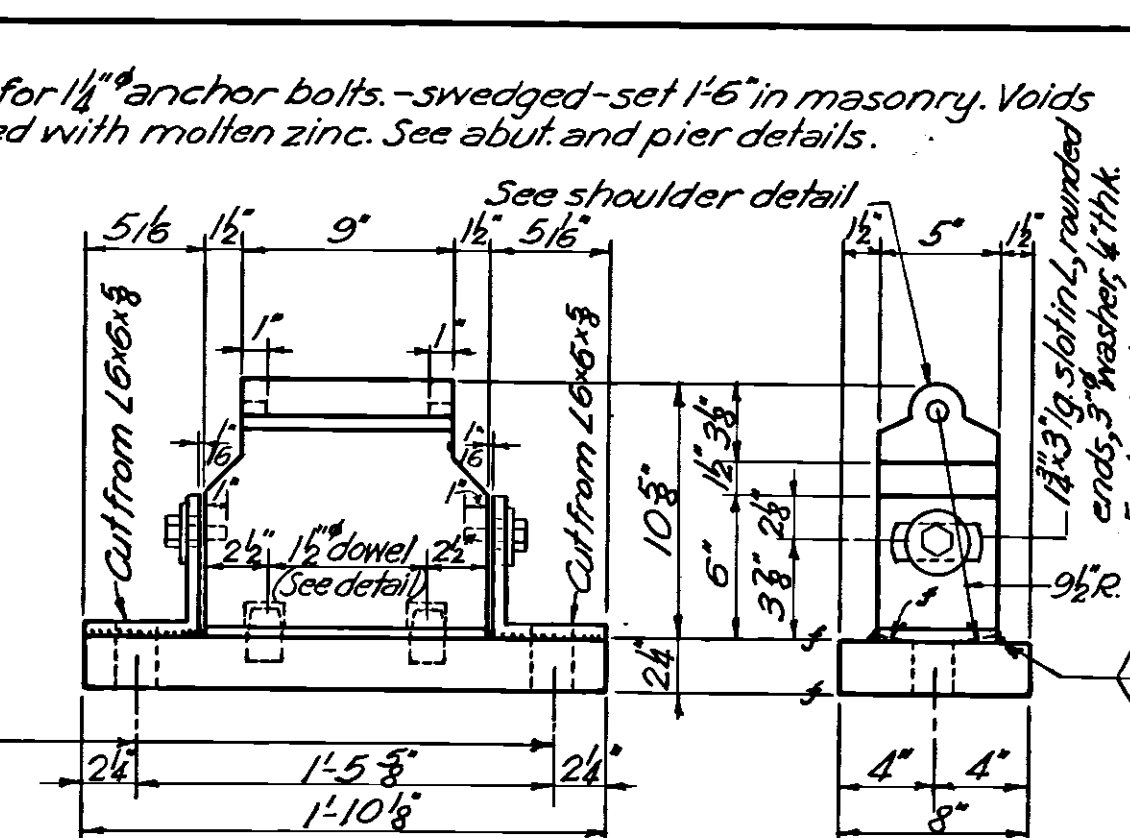
**TYPICAL EXPANSION BEARING AT PIER**  
(Scale 1 1/2"=1'-0")

NOTE: Omit hold down bolts and tap bolts for interior stringers.



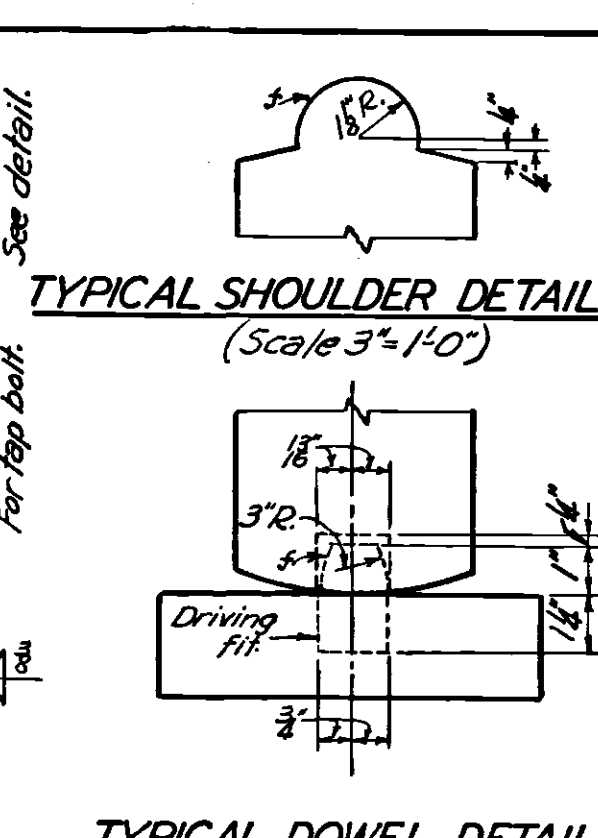
**TYPICAL FIXED BEARING AT PIER**  
(Scale 1 1/2"=1'-0")

NOTE: Omit tap bolts for interior stringers

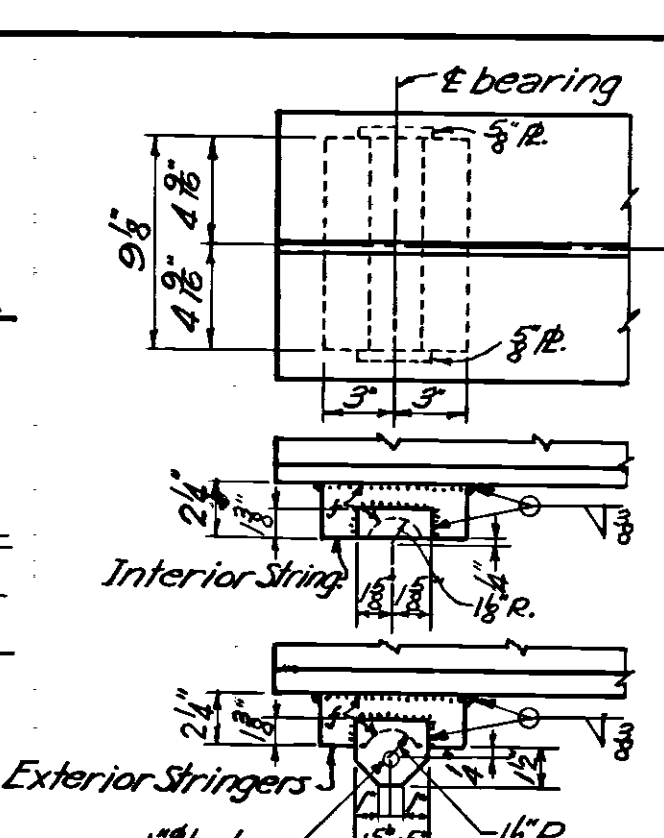


**TYPICAL EXPANSION BEARING AT ABUTMENT**  
(Scale 1 1/2"=1'-0")

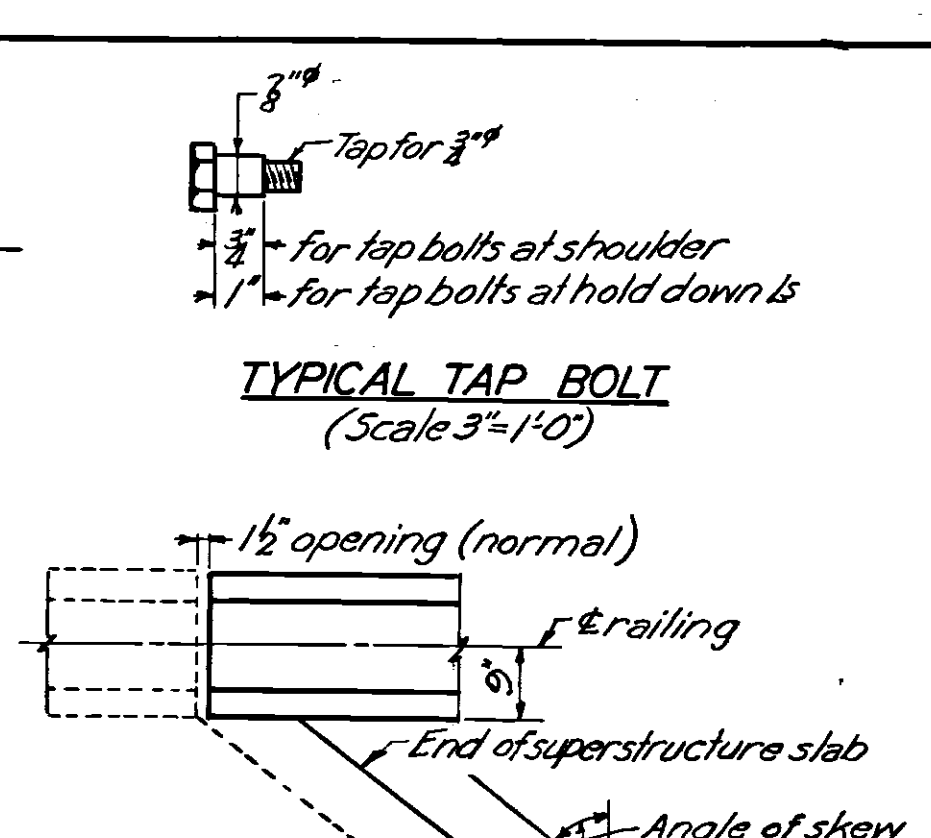
NOTE: Omit hold down bolts and tap bolts for interior stringers. Where necessary cut one corner of base plate to clear drain trough at abutment back wall. See Abut. details.



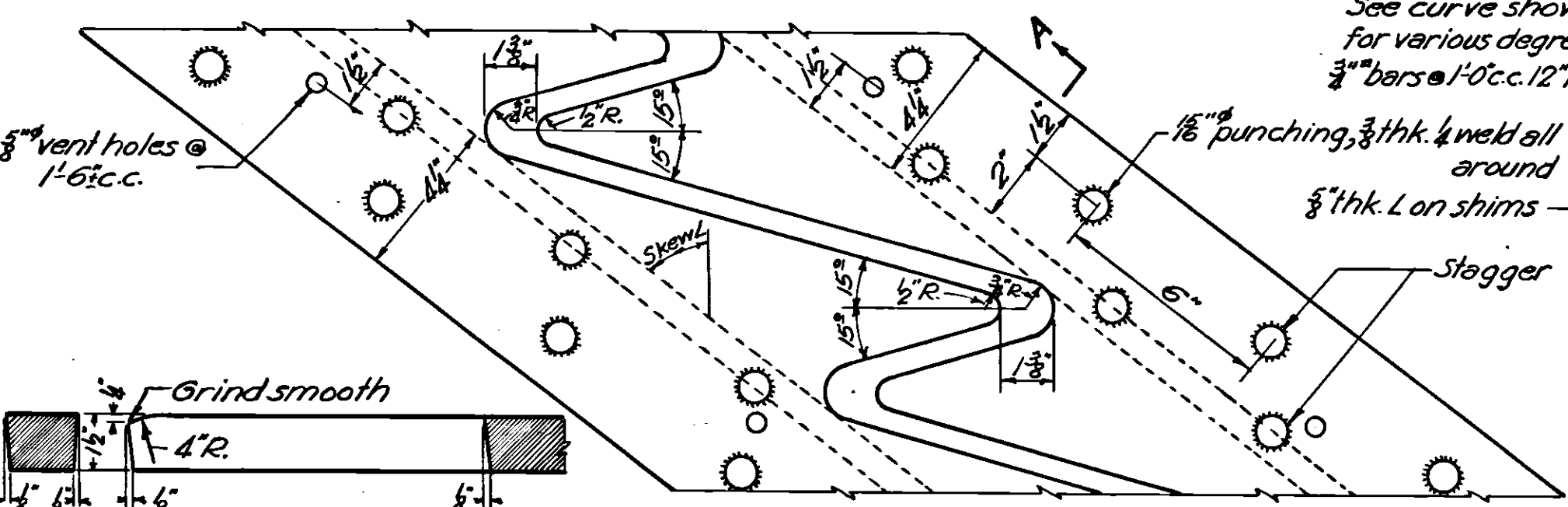
**TYPICAL SHOULDER DETAIL**  
(Scale 3"=1'-0")



**TYPICAL SOLE PLATE**  
(Scale 1 1/2"=1'-0")

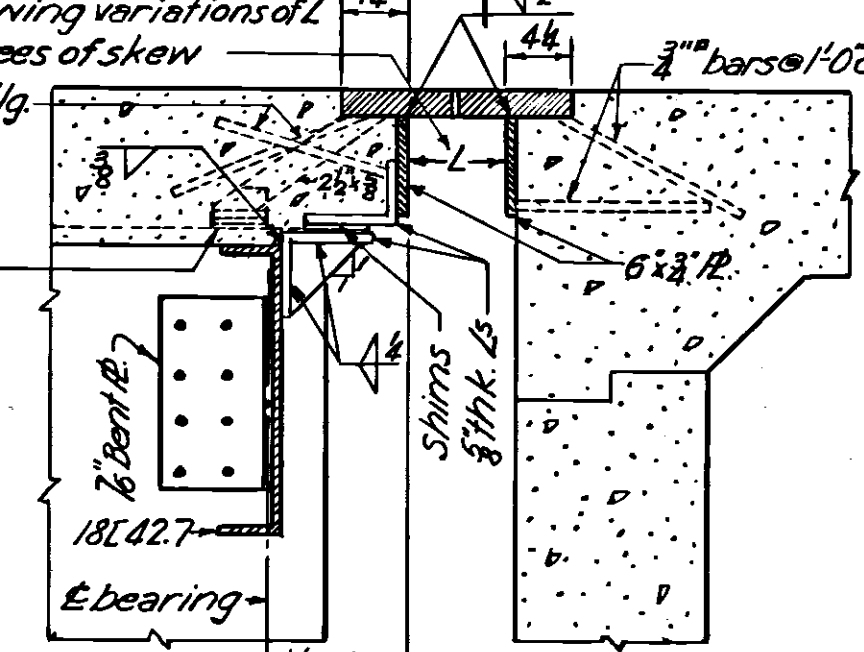


**TYPICAL TAP BOLT**  
(Scale 3"=1'-0")

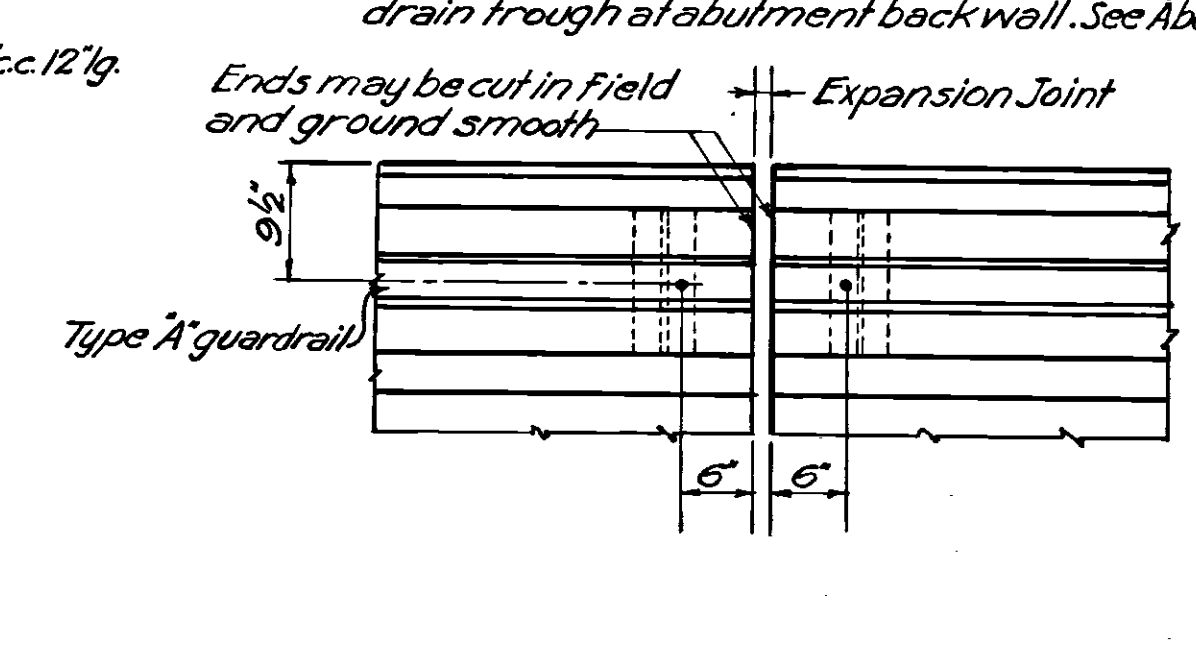


**DETAILS OF EXPANSION DAM TEETH**  
(Scale 3"=1'-0")

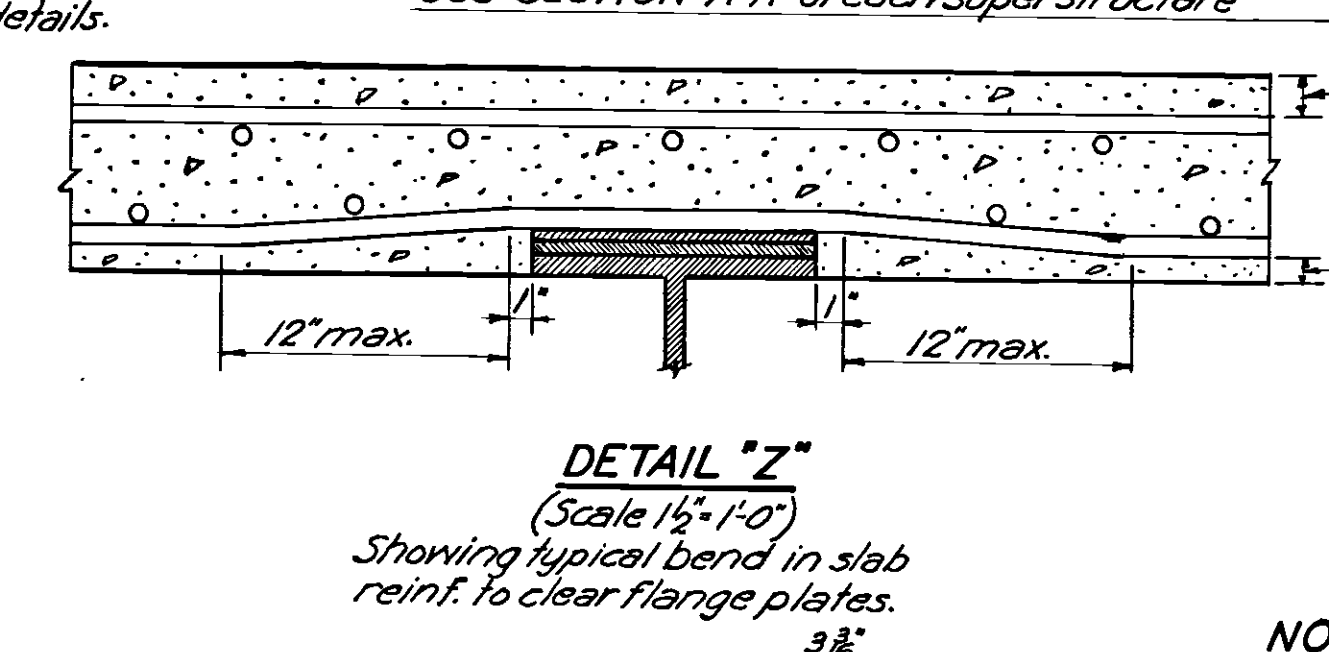
(Position of teeth shown for normal temp.)



**SECTION A-A**  
(Scale 1 1/2"=1'-0")



**EXPANSION JOINT FOR TYPE A GUARD RAIL ON PARAPET**  
(Scale 3"=1'-0")



**DETAIL "Z"**  
(Scale 1 1/2"=1'-0")

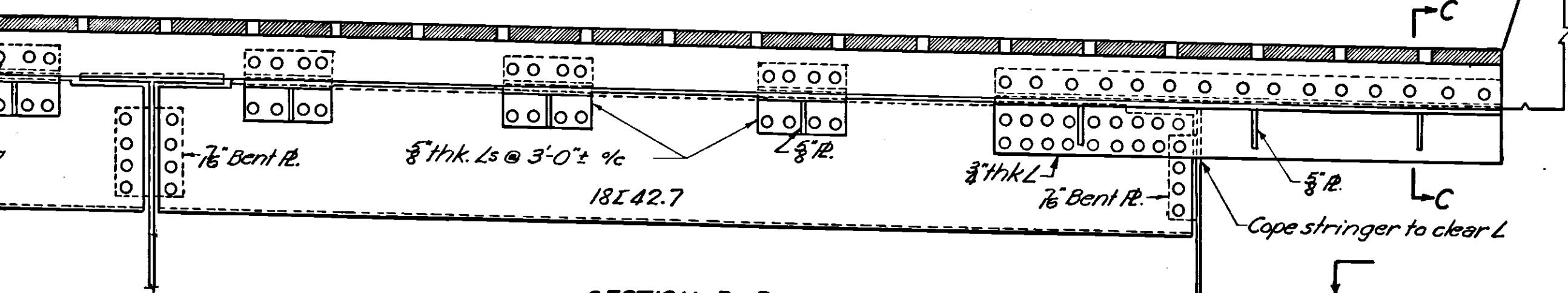
Showing typical bend in slab reinf. to clear flange plates.



**PLAN OF END FINISH SUPERSTRUCTURE DETAILS**  
(Scale 1 1/2"=1'-0")

**NOTES**

Roadway slabs and parapets of superstructure shall be Class C concrete.  
Reinforcing steel shall be intermediate or hard grade.  
Unless otherwise indicated on the plans bars shall be lapped 30 diameters of splices.  
All hooks and bends in reinforcing steel shall conform with the table titled "Standard Bends" shown in the Ohio Turnpike Project No. 1-General Specifications-Section 5-4.  
Unless otherwise indicated chamfers shall be 1 inch.  
Rivets 3/8"  
Reaming shall be required for all beam splices.  
Stringer shall be cambered for dead load deflection as indicated.  
Structural steel shall conform to section M-7.4 of the specifications.  
A 1/8" thick sheet of lead or 3 layers of 12 oz duck swabbed with red lead paste shall be placed under all base plates.  
Provide tracks or screeds for finishing machines at center and outside stringers. (See details for optional construction joints at these points.)



**SECTION B-B**  
(Scale 3"=1'-0")

See railing details

See details

Line forms for smooth finish

1/2" drip notch

2' x 3"

SECTION THRU PARAPET

(Scale 3"=1'-0")

1/2" opening (normal)

5/8" thk. L

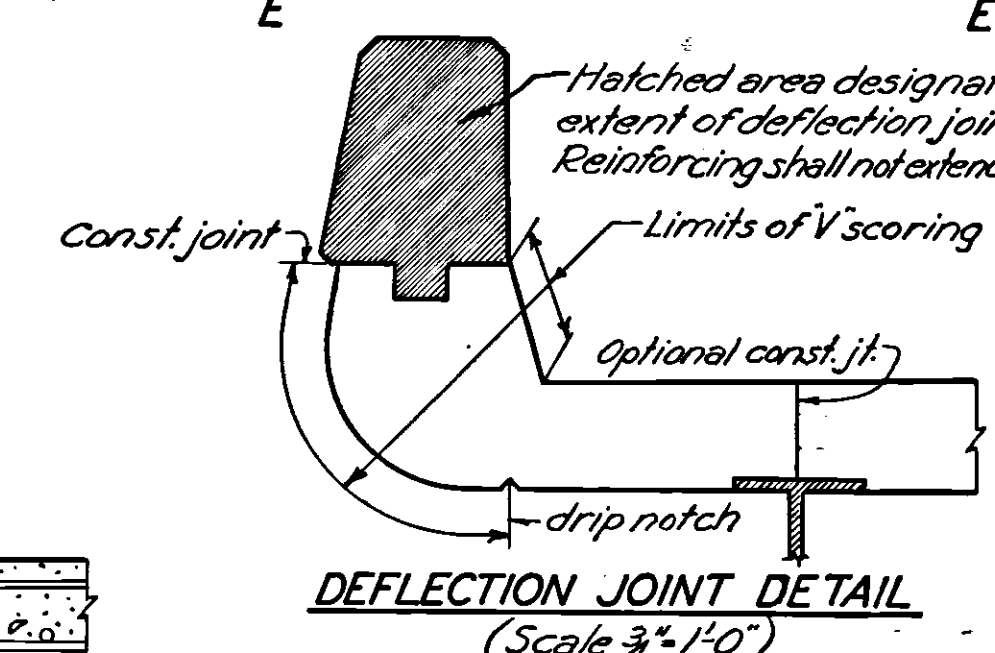
5/8" thk. L

Shims

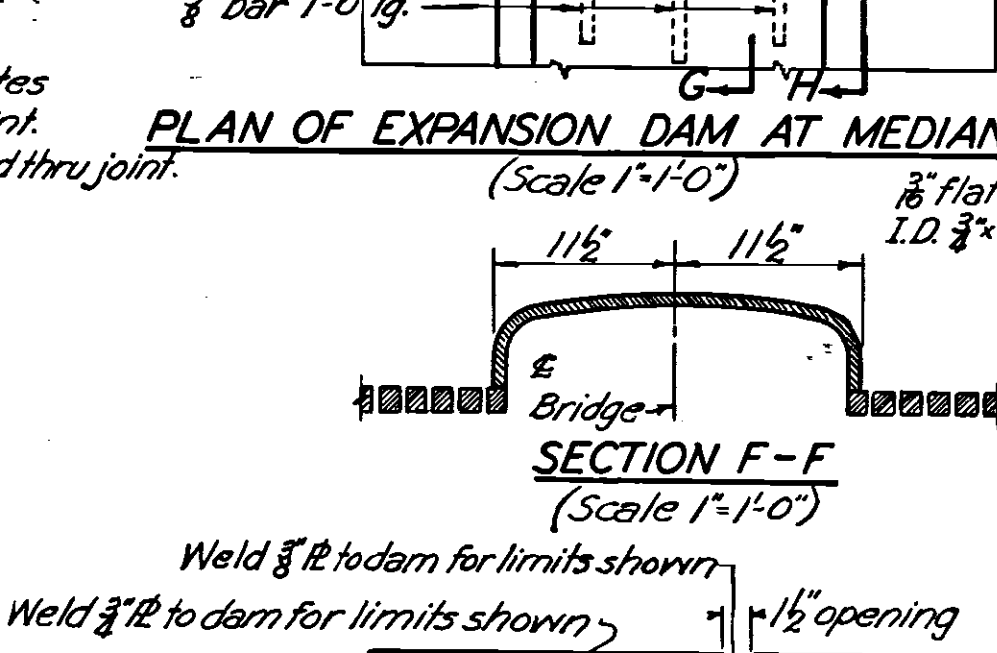
Haunch down to underside parapet as req'd.

SECTION C-C

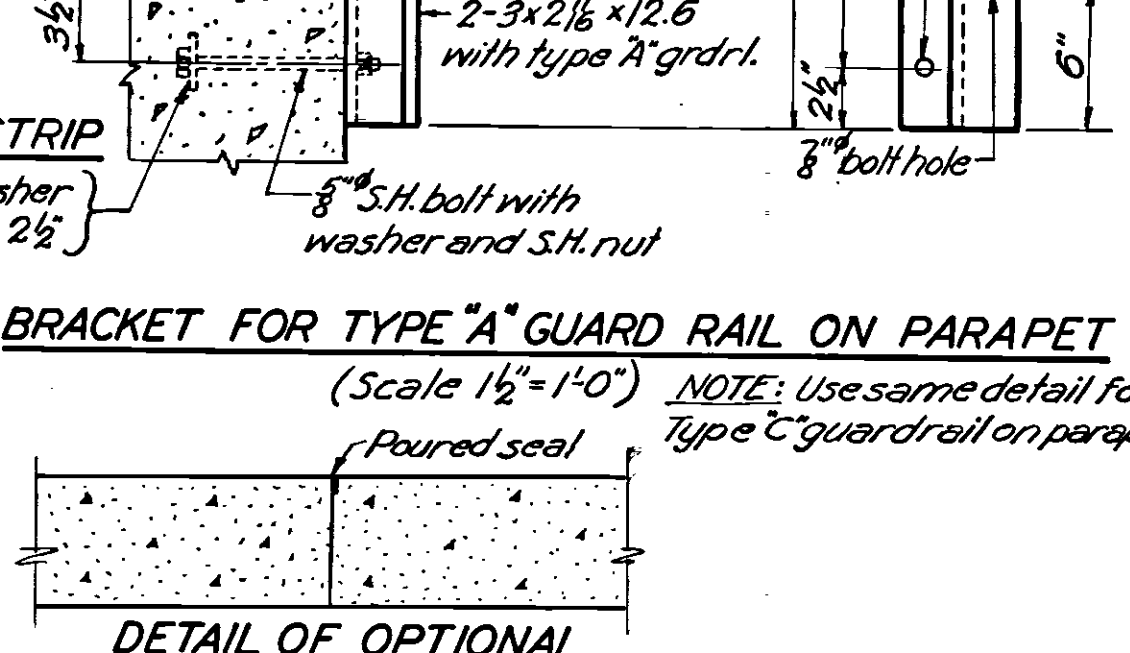
(Scale 1 1/2"=1'-0")



**DEFLECTION JOINT DETAIL**  
(Scale 3"=1'-0")



**PLAN OF EXPANSION DAM AT MEDIAN STRIP**  
(Scale 1 1/2"=1'-0")



**BRACKET FOR TYPE "A" GUARD RAIL ON PARAPET**  
(Scale 1 1/2"=1'-0")

NOTE: Use same detail for Type C guard rail on parapet.

Poured seal

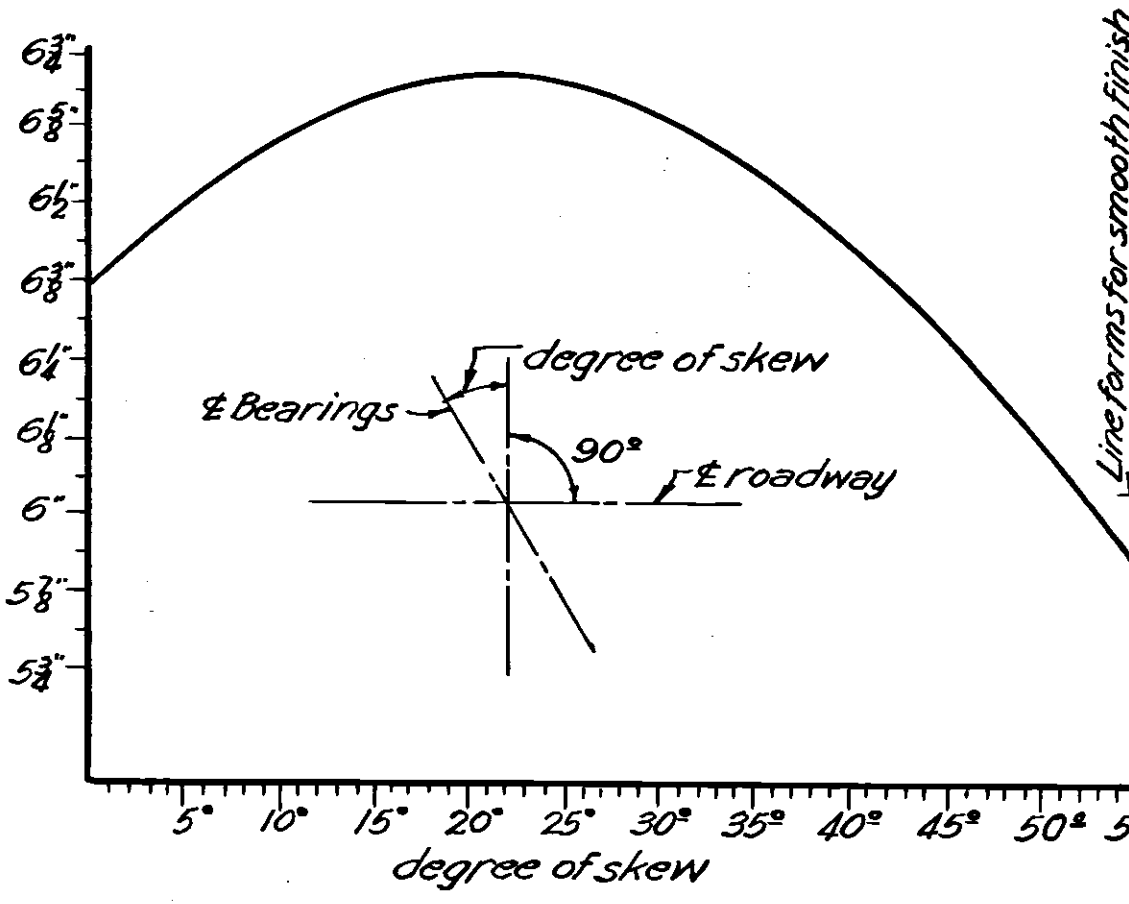
DETAIL OF OPTIONAL LONGITUDINAL CONSTRUCTION JOINTS

(No Scale)

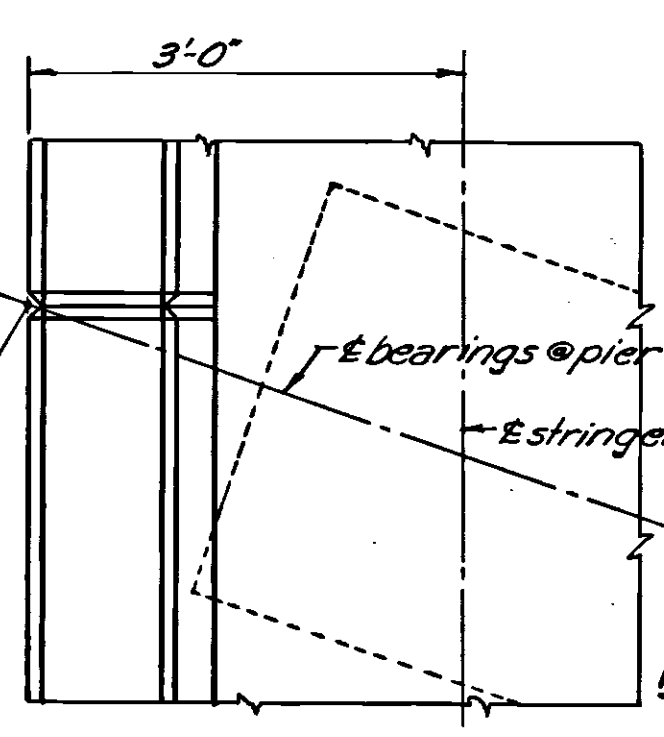
Poured seal

POURED SEAL DETAIL

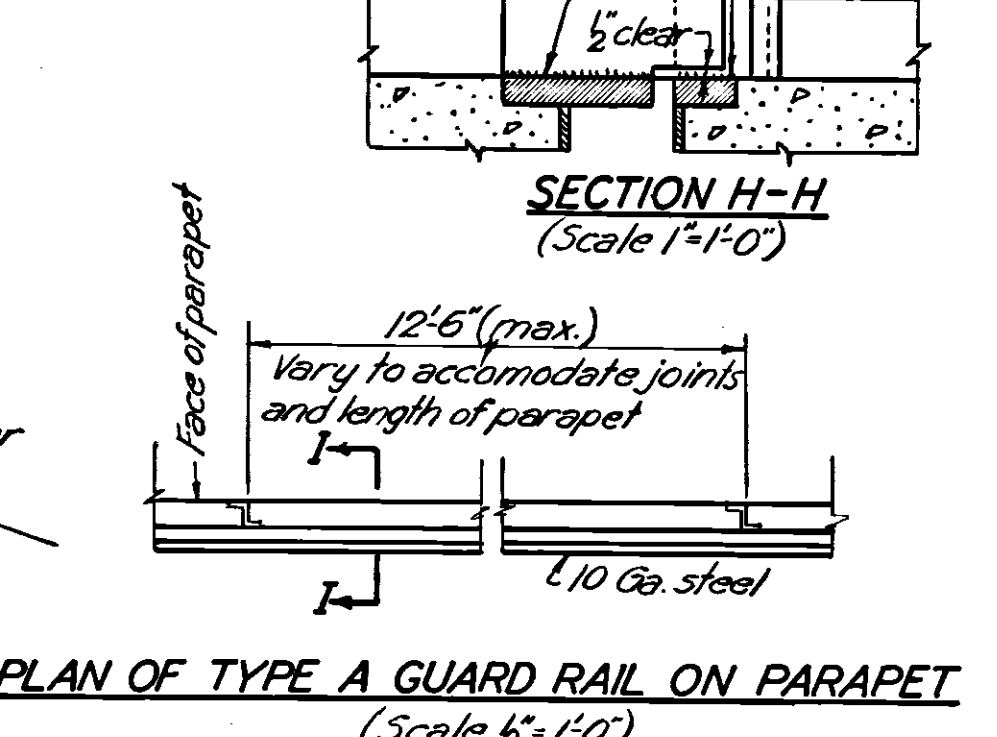
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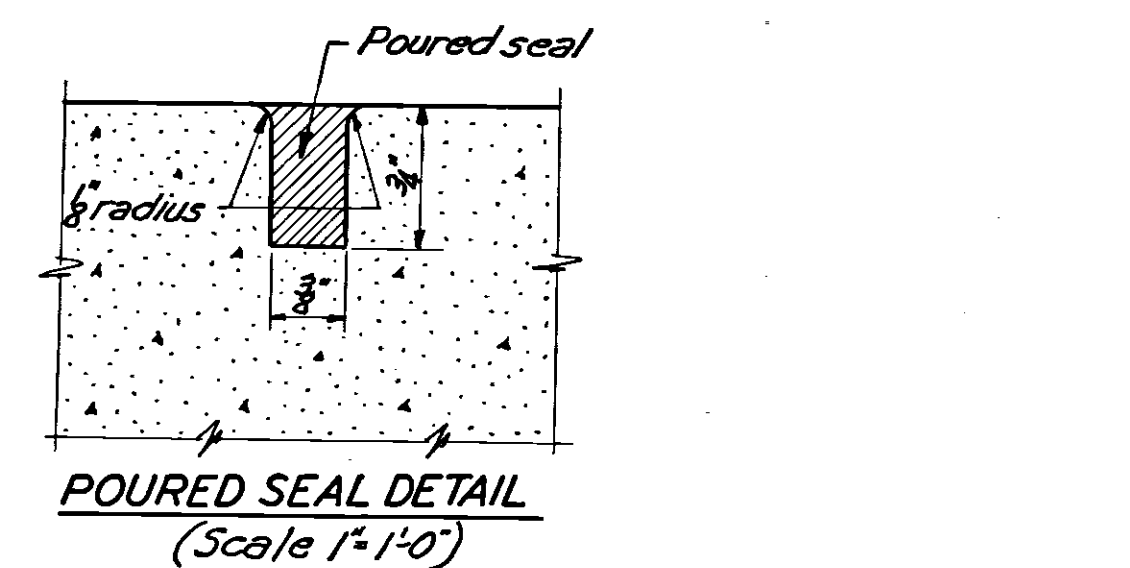
**VARIATION OF DISTANCE "L"**  
(See section A-A)



**SECTION E-E**  
(Scale 3"=1'-0")



**PLAN OF TYPE A GUARD RAIL ON PARAPET**  
(Scale 1 1/2"=1'-0")



**SECTION F-F**  
(Scale 1 1/2"=1'-0")

Weld 3/8" to dam for limits shown

Weld 3/8" to dam for limits shown

1 1/2" opening

SECTION H-H

(Scale 1 1/2"=1'-0")

Face of parapet

12' 6" (max.)

Very to accommodate joints and length of parapet

10 Ga. steel

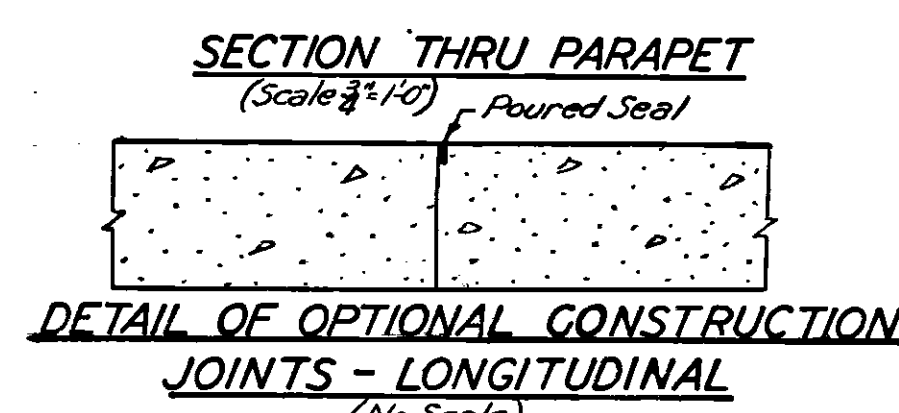
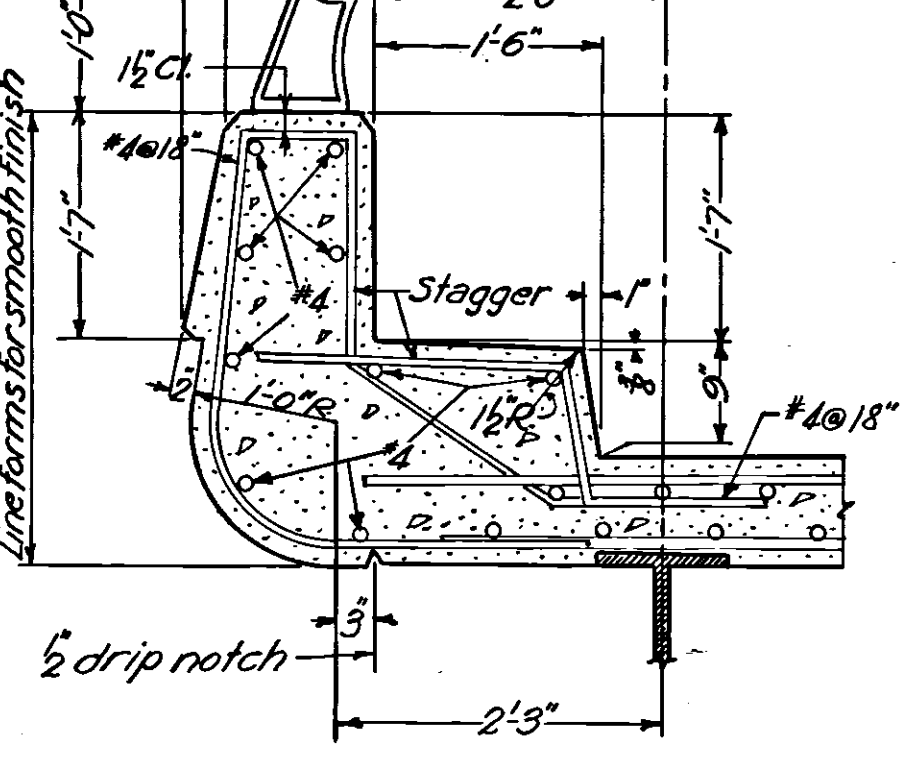
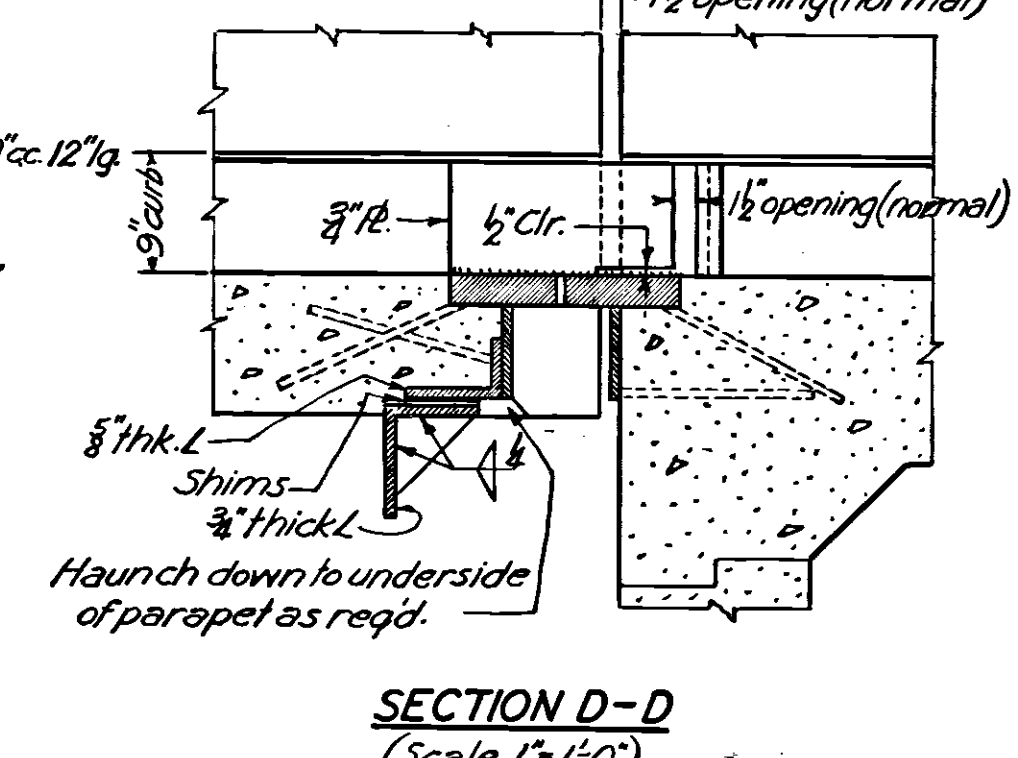
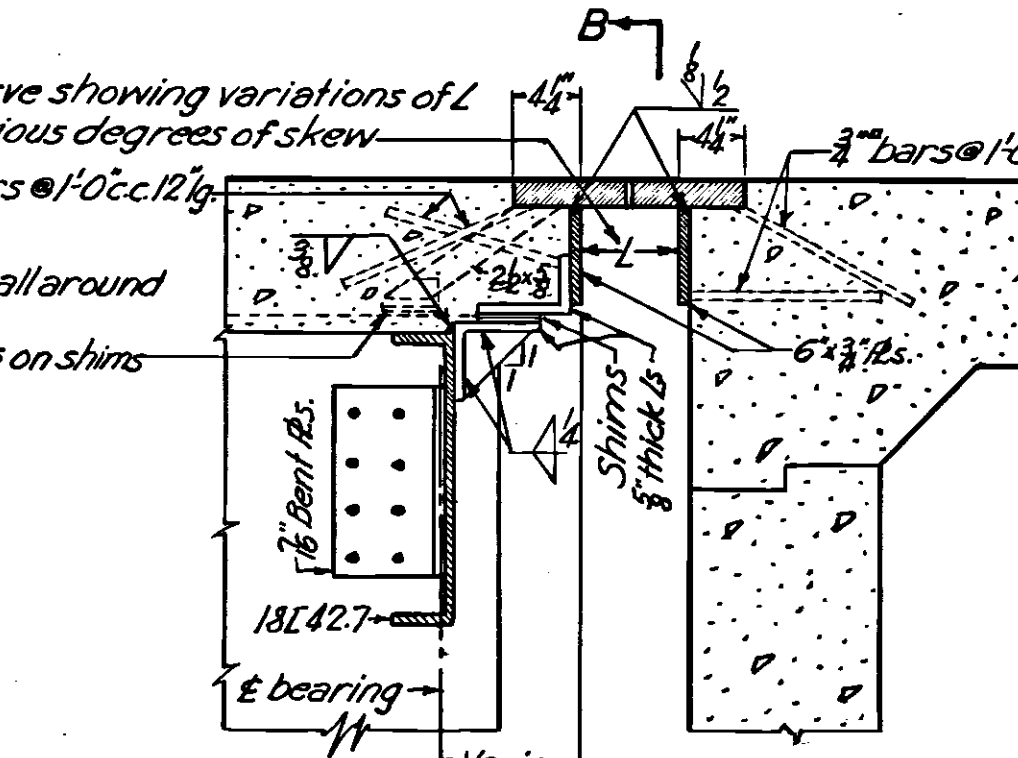
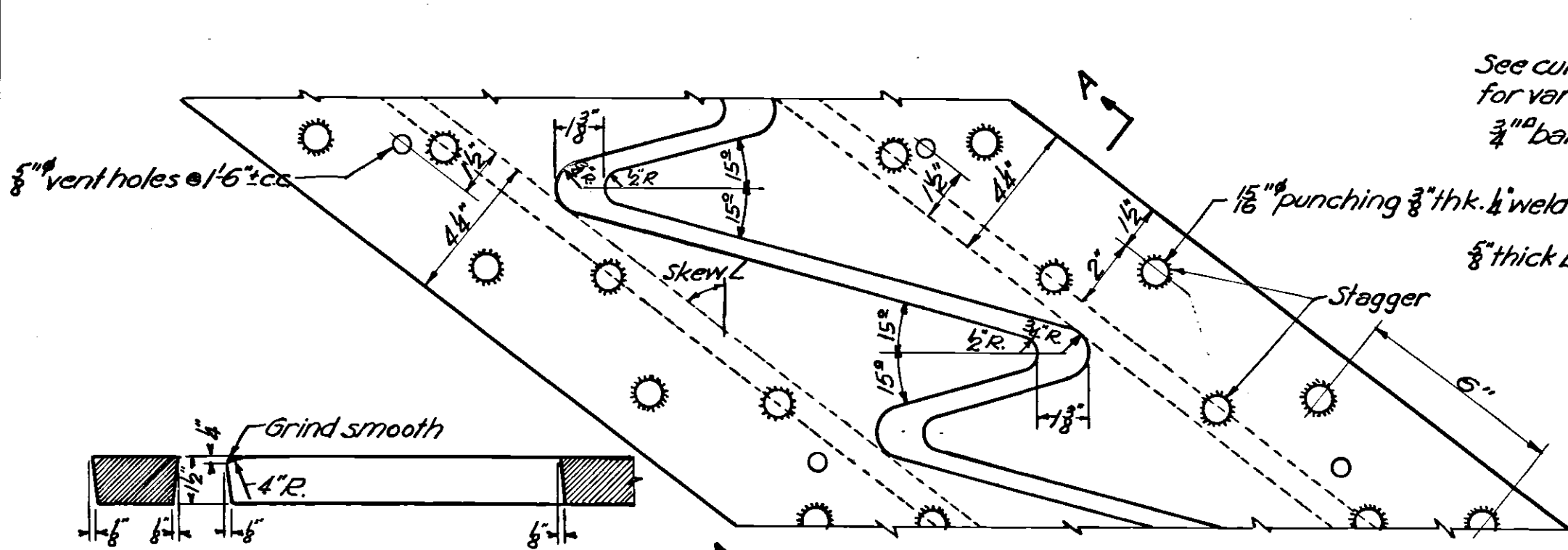
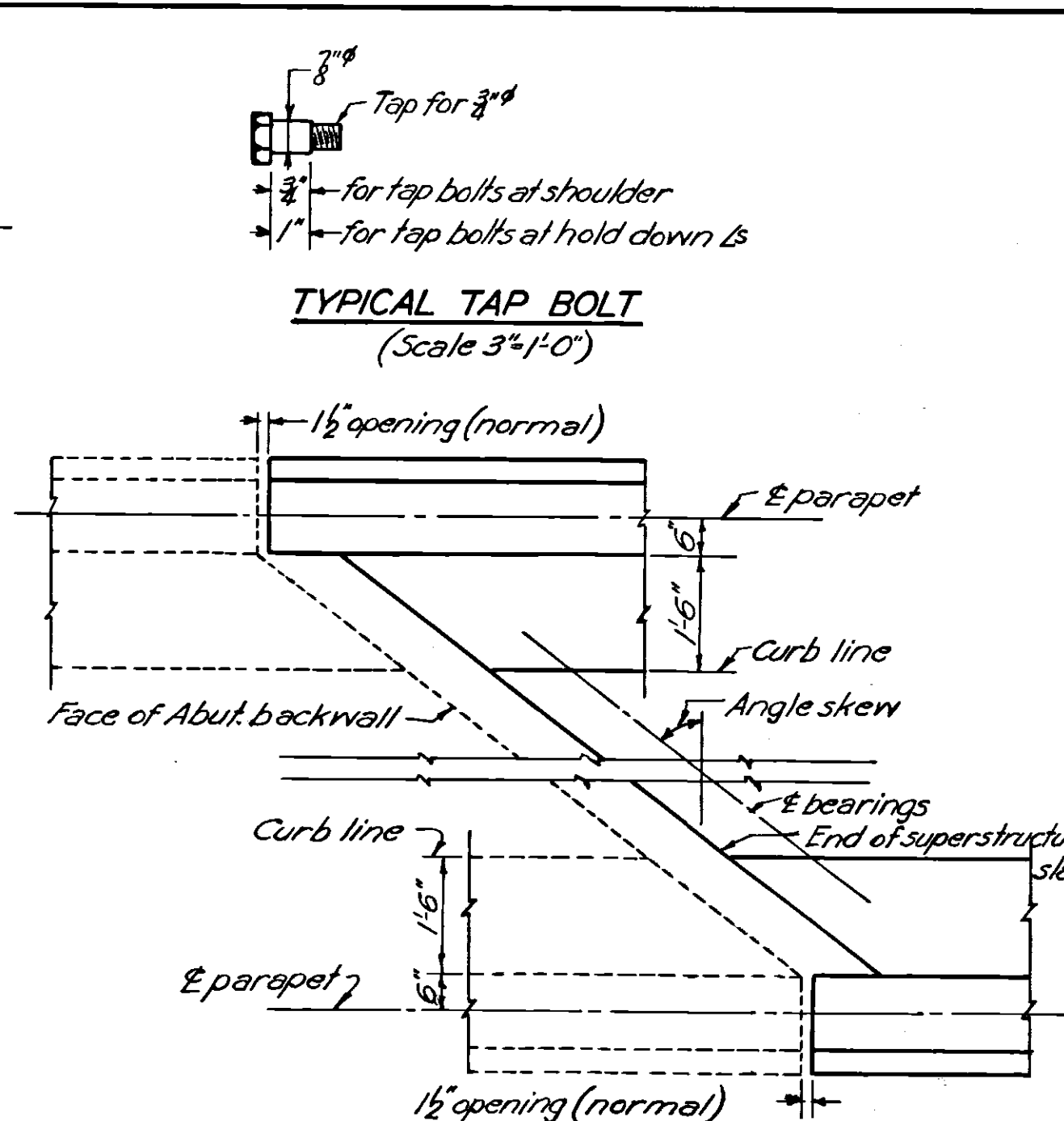
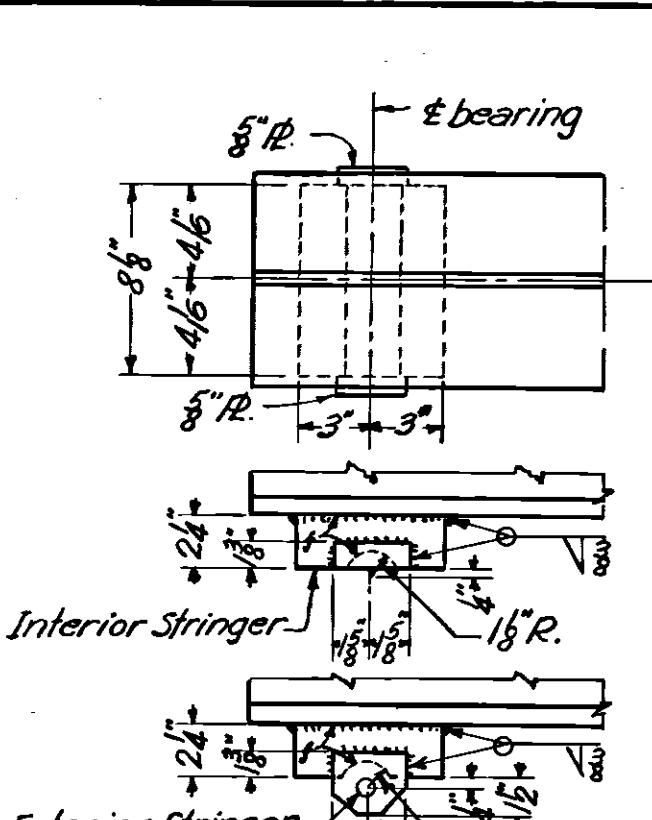
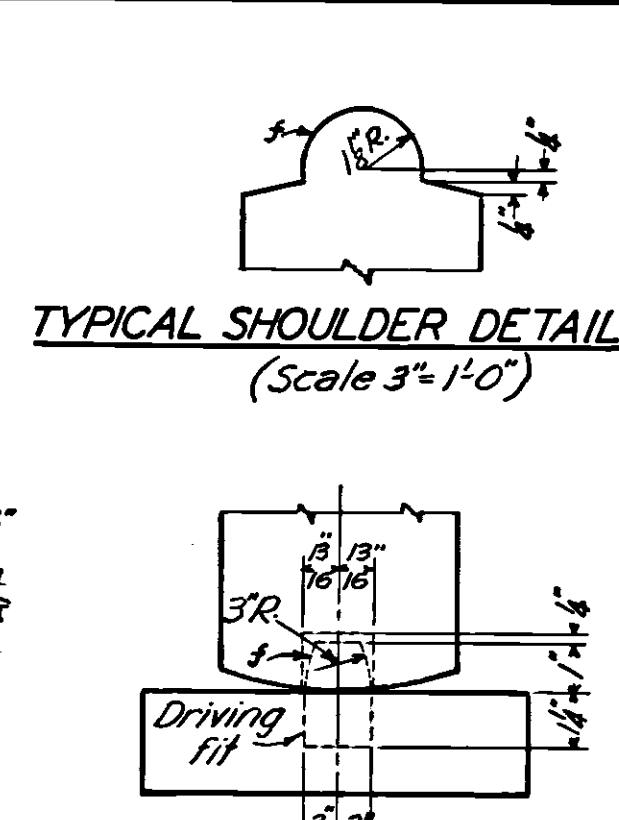
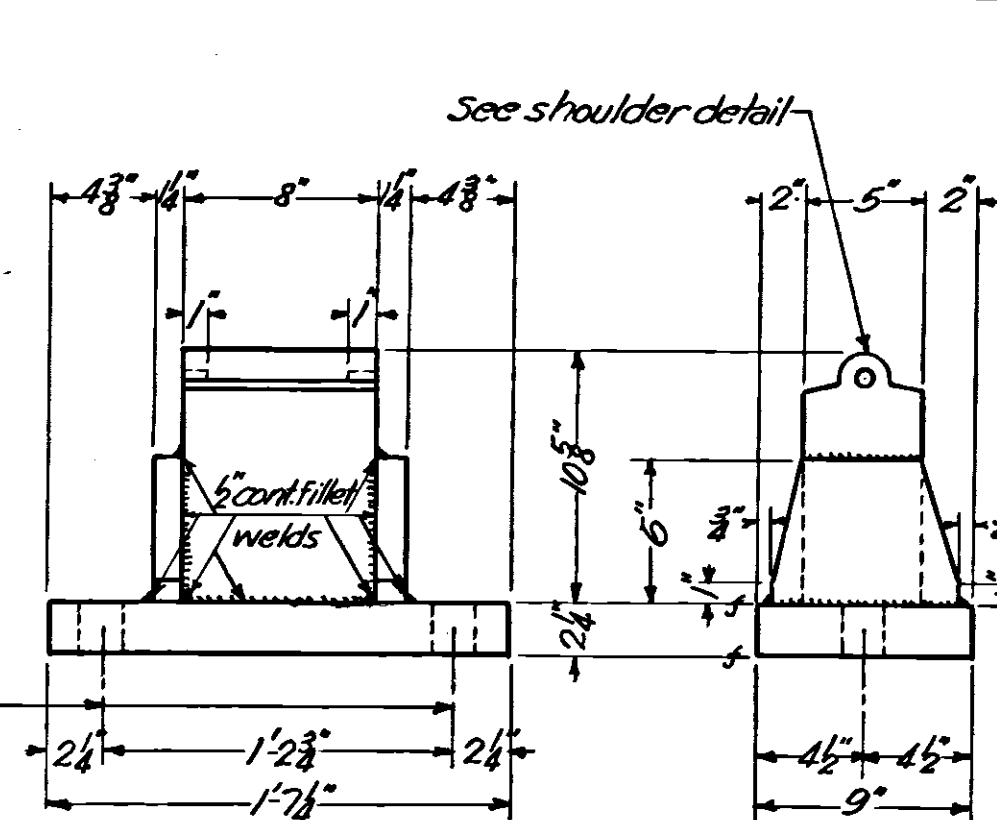
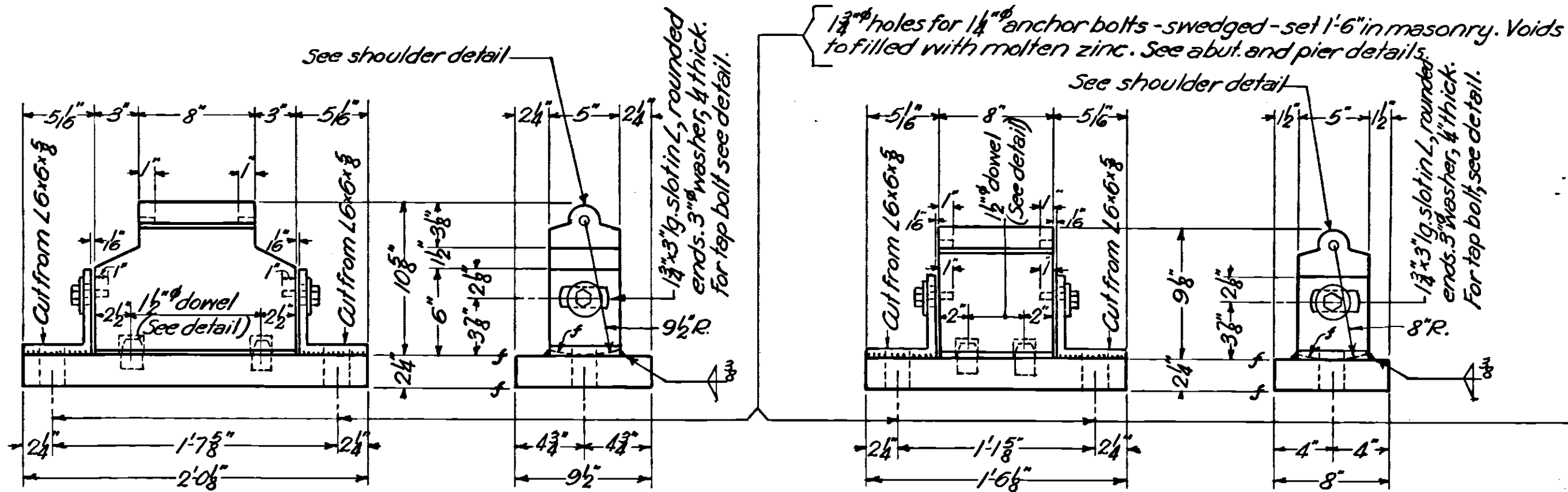
PLAN OF TYPE A GUARD RAIL ON PARAPET

(Scale 1 1/2"=1'-0")

OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE PROJECT NO. 1			
STANDARD SUPERSTRUCTURE DETAILS FOR STRUCTURES CARRYING TURNPIKE			
SANZENBACHER, MORRIS & TAYLOR AND BROOKHART & TYO, ASSOCIATES			
CONTRACTING ENGINEER			
DESIGN SECTION D-15			
DESIGNED: S.E.	CHECKED: S.B.	DATE: MARCH 1953	
DRAWN: R.T.	IN CHARGE:		
CONTRACT No. C-43		SHEET 55 OF 70	

1	AS BUILT PLANS	C.R.M.	6/22/56
NO	REVISION	BY	DATE





**NOTES**

Roadway slabs and parapets of superstructure shall be Class "C" concrete.

Reinforcing steel shall be intermediate or hard grade. Unless otherwise indicated on the plans bars shall be lapped 30 diameters at splices.

All hooks and bends in reinforcing steel shall conform with the table titled "Standard Bends" shown in the "Ohio Turnpike Project No. 1 - General Specifications" Section S-4. Unless otherwise indicated chamfers shall be 1 inch.

Rivets 8"

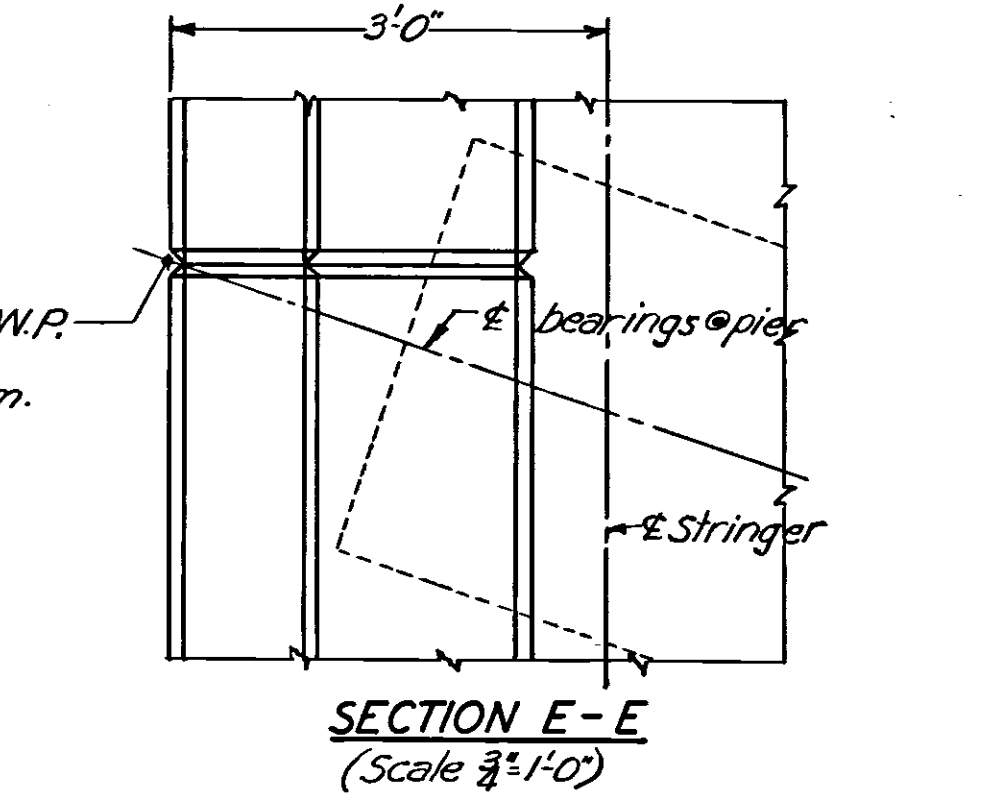
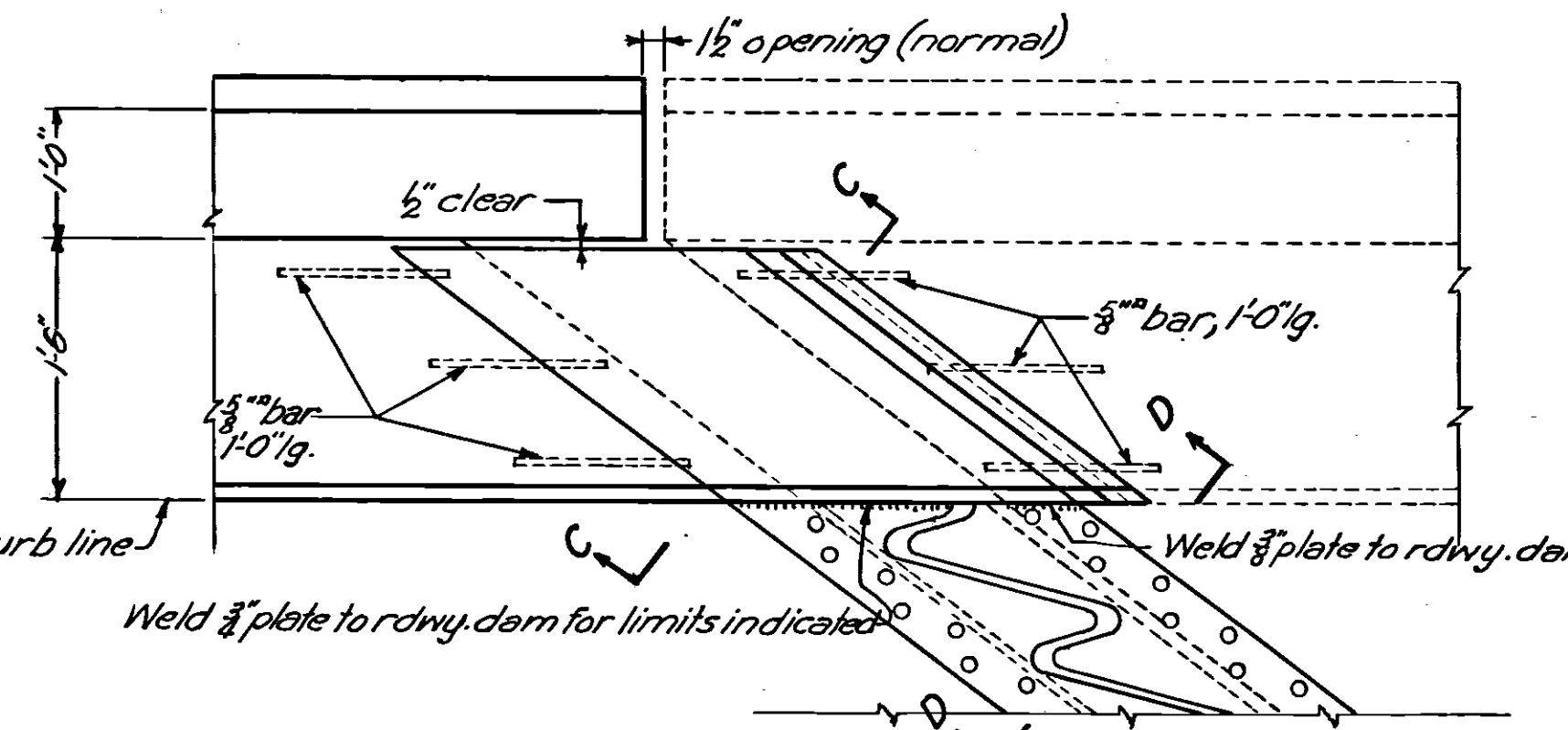
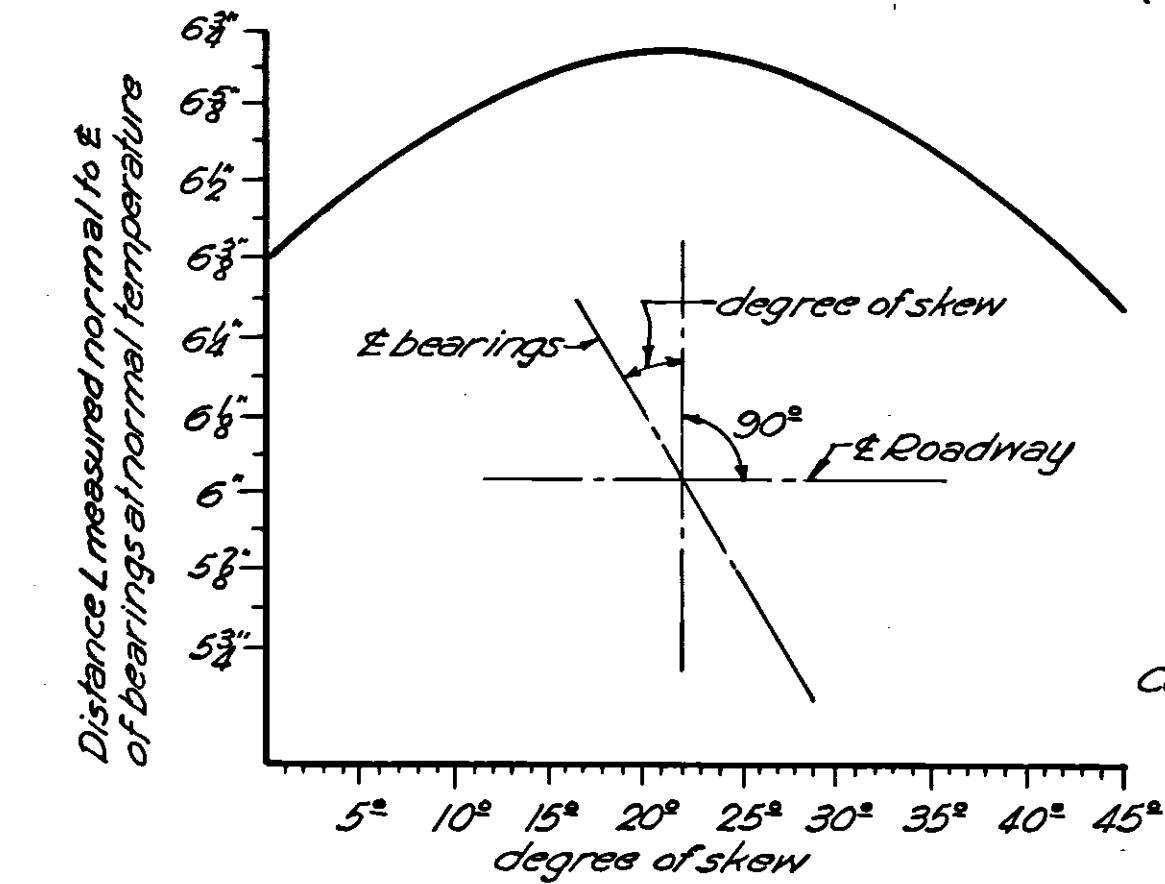
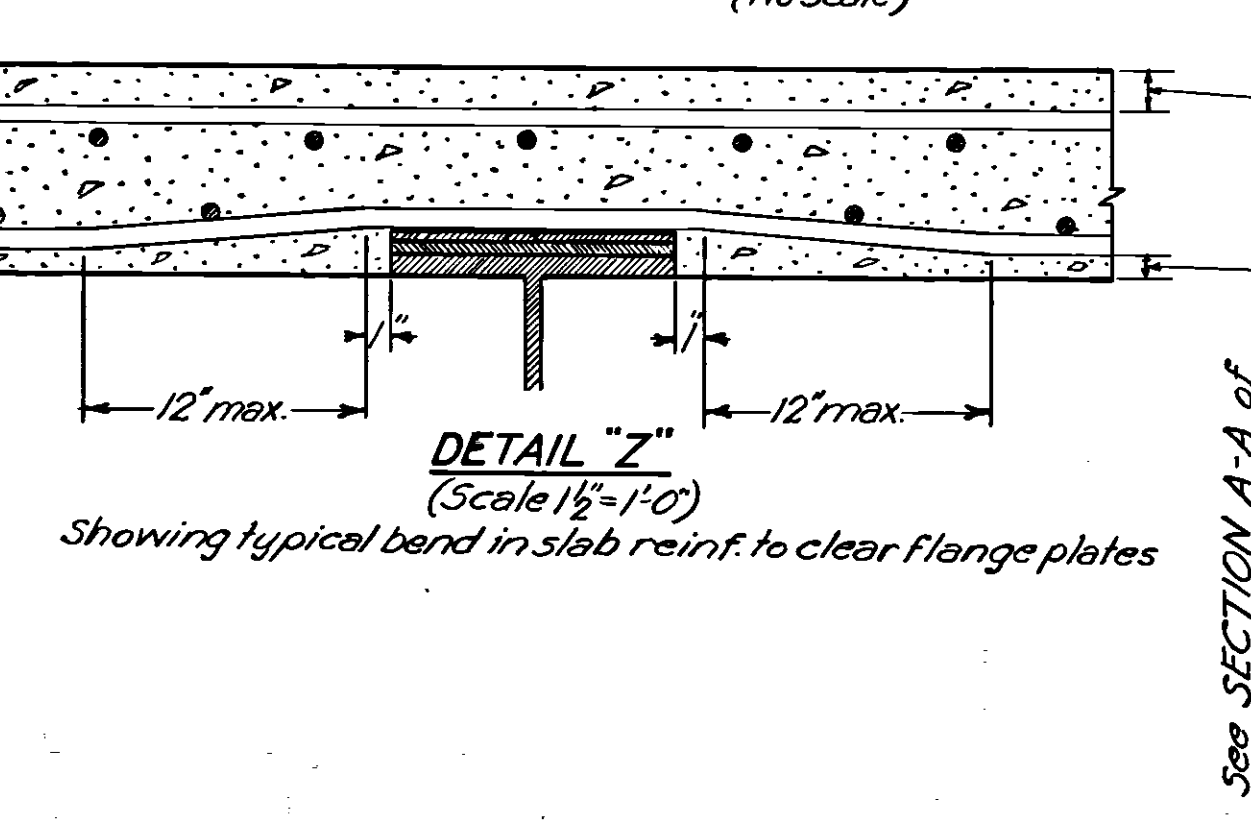
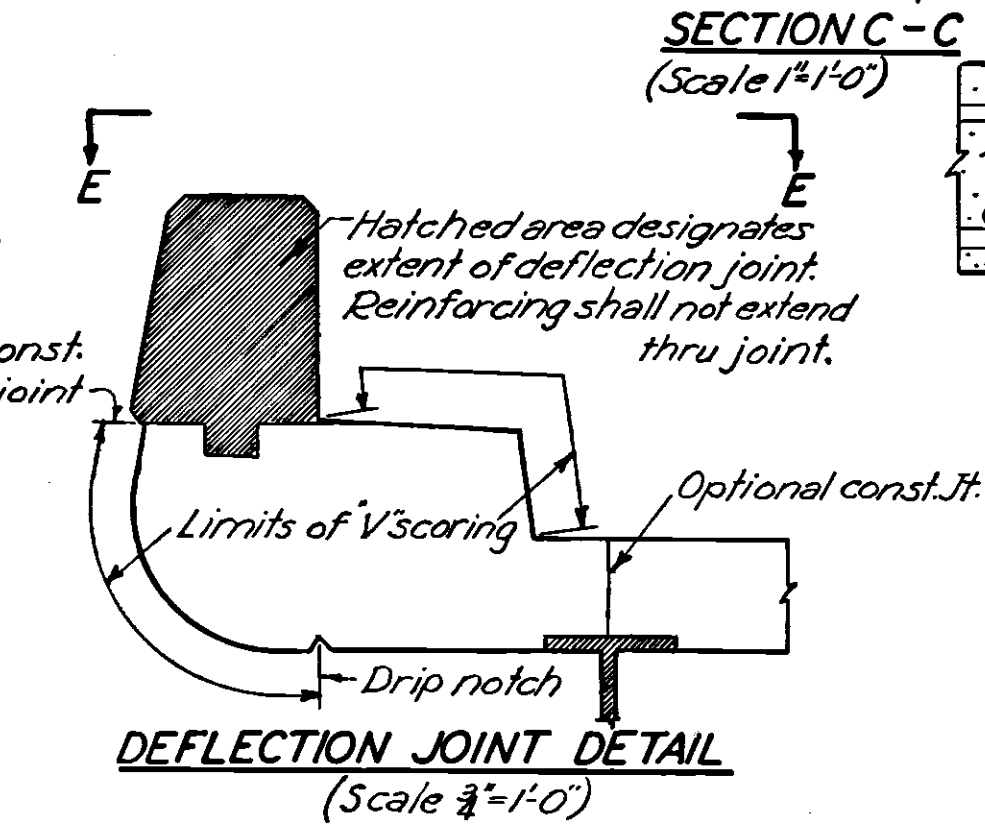
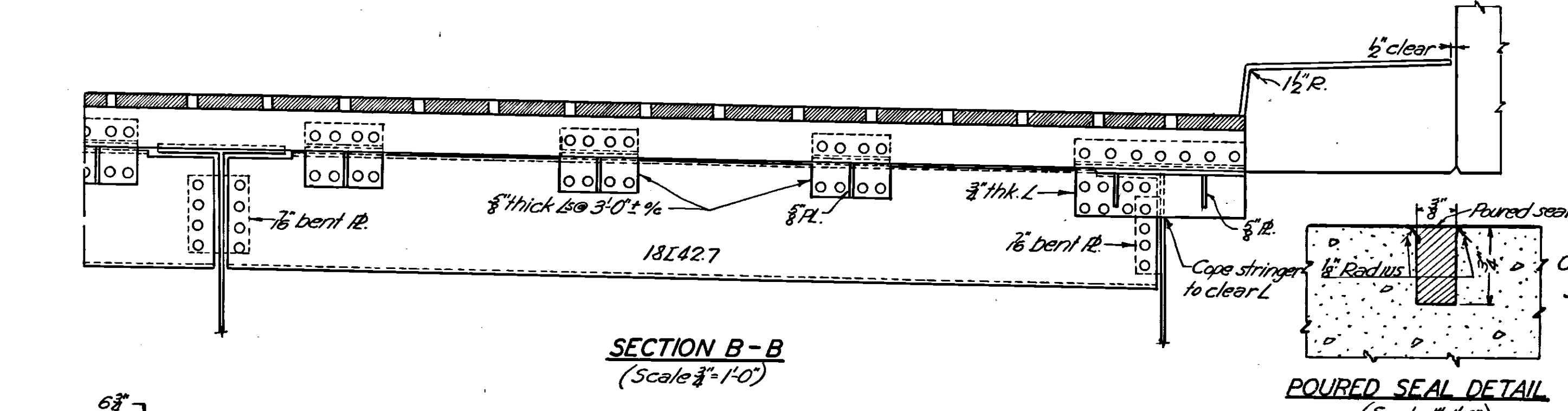
Reaming shall be required for all beam splices.

Stringers shall be cambered for dead load deflection as indicated.

Structural steel shall conform to section M-7.4 of the specification.

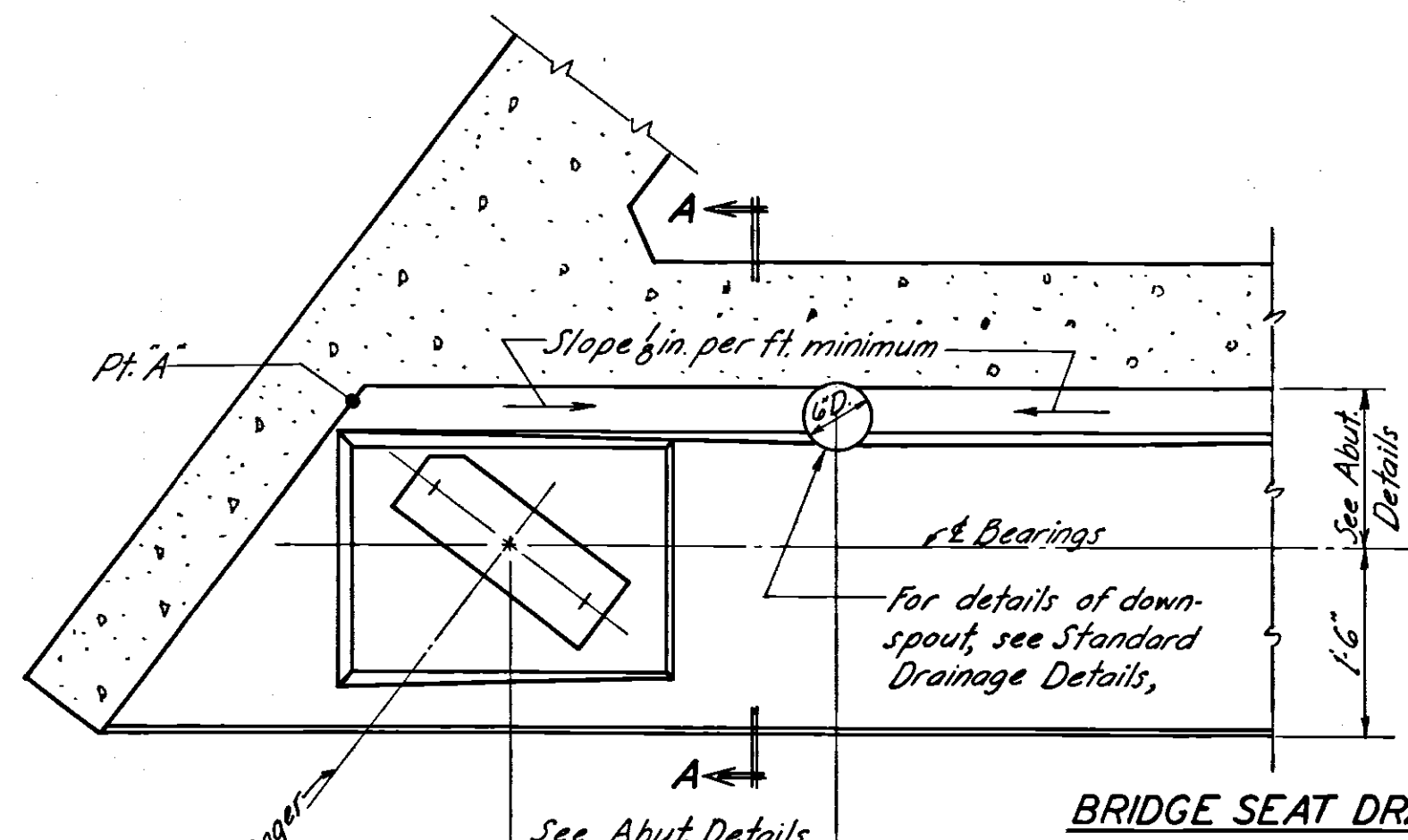
A 1/8" thick sheet of lead or 3 layers of 12 oz. duck swabbed with red lead paste shall be placed under all base plates.

Provide tracks or screeds for finishing machines at center and outside stringers. (See details for optional construction joints at these points.)

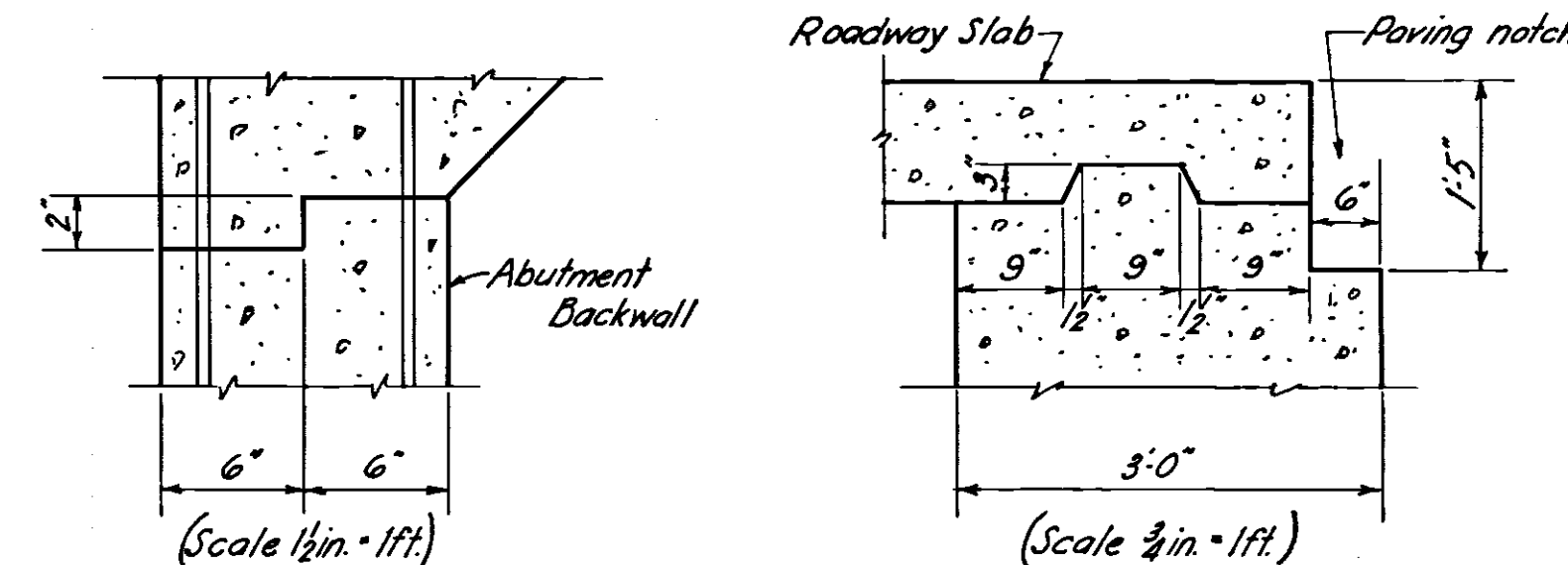
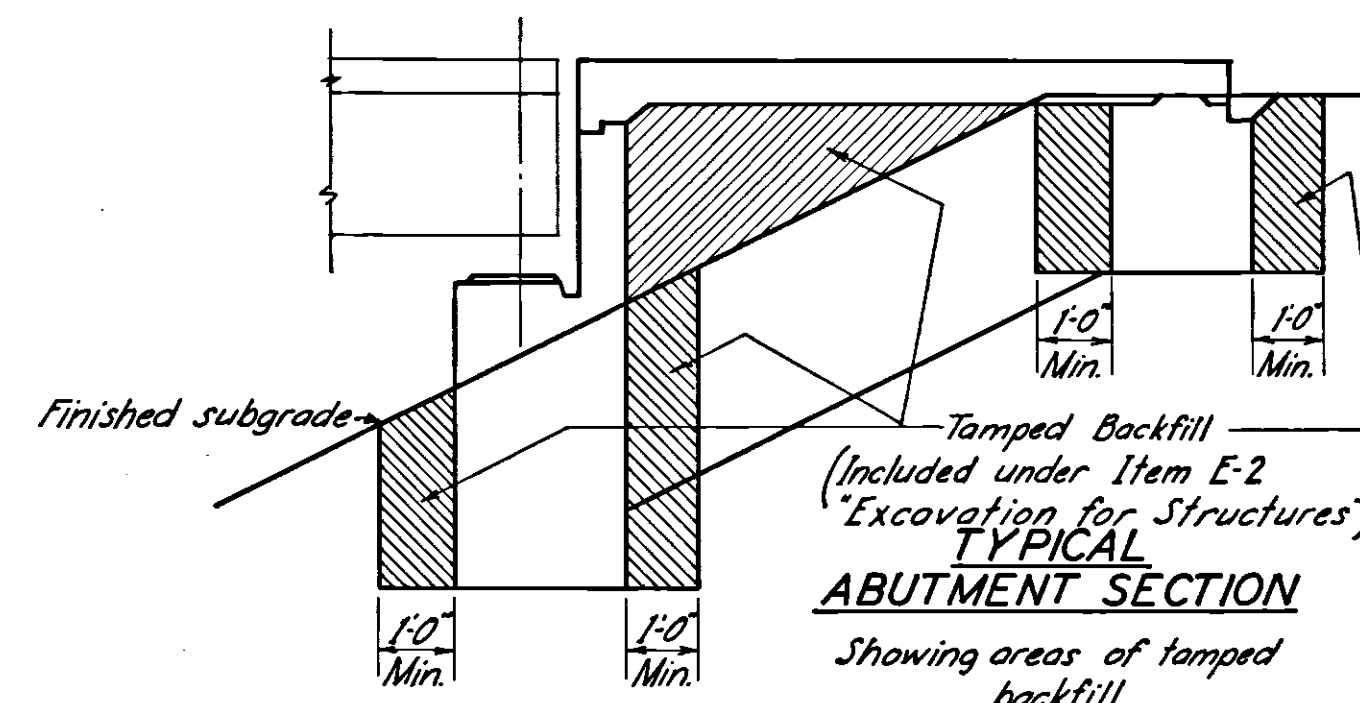
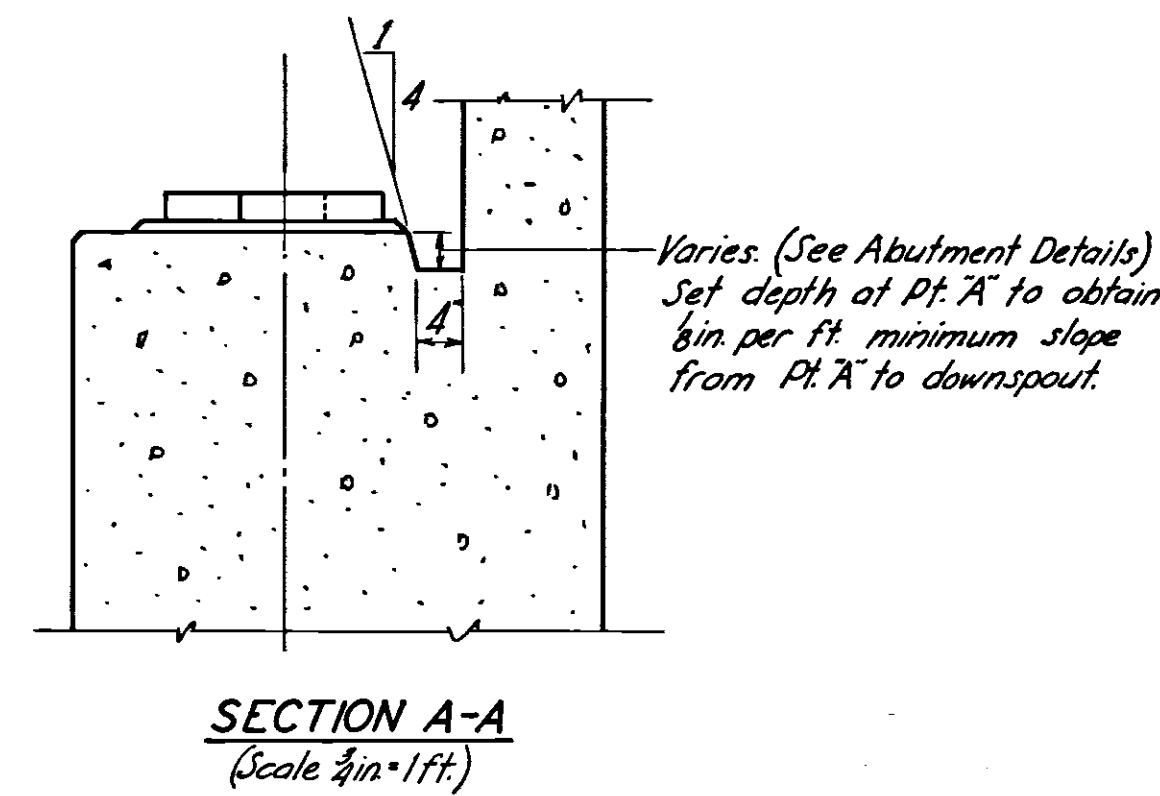


OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE PROJECT NO. 1			
STANDARD SUPERSTRUCTURE DETAILS			
FOR			
STRUCTURES OVER TURNPIKE			
SANZENBACHER, MORRIS & TAYLOR AND BROOKHART & TYO, ASSOCIATES			
CONTRACTING ENGINEER			
DESIGN SECTION D-15			
DESIGNED: R.T.	CHECKED: G.B.	DATE: MARCH, 1953	
DRAWN: R.T.	IN CHARGE:		
CONTRACT No. C-43			SHEET 56 OF 70

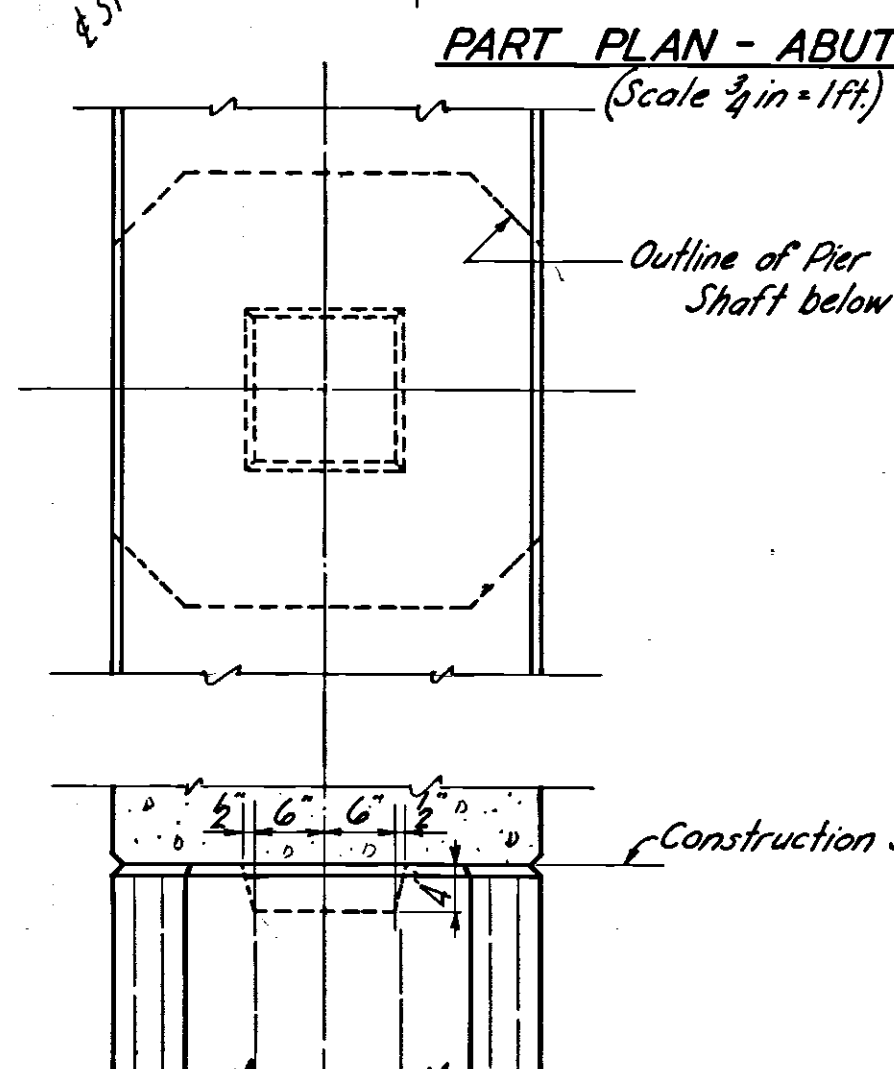
1	AS BUILT PLANS	C.R.M. 6/22/56
NO.	REVISION	BY DATE



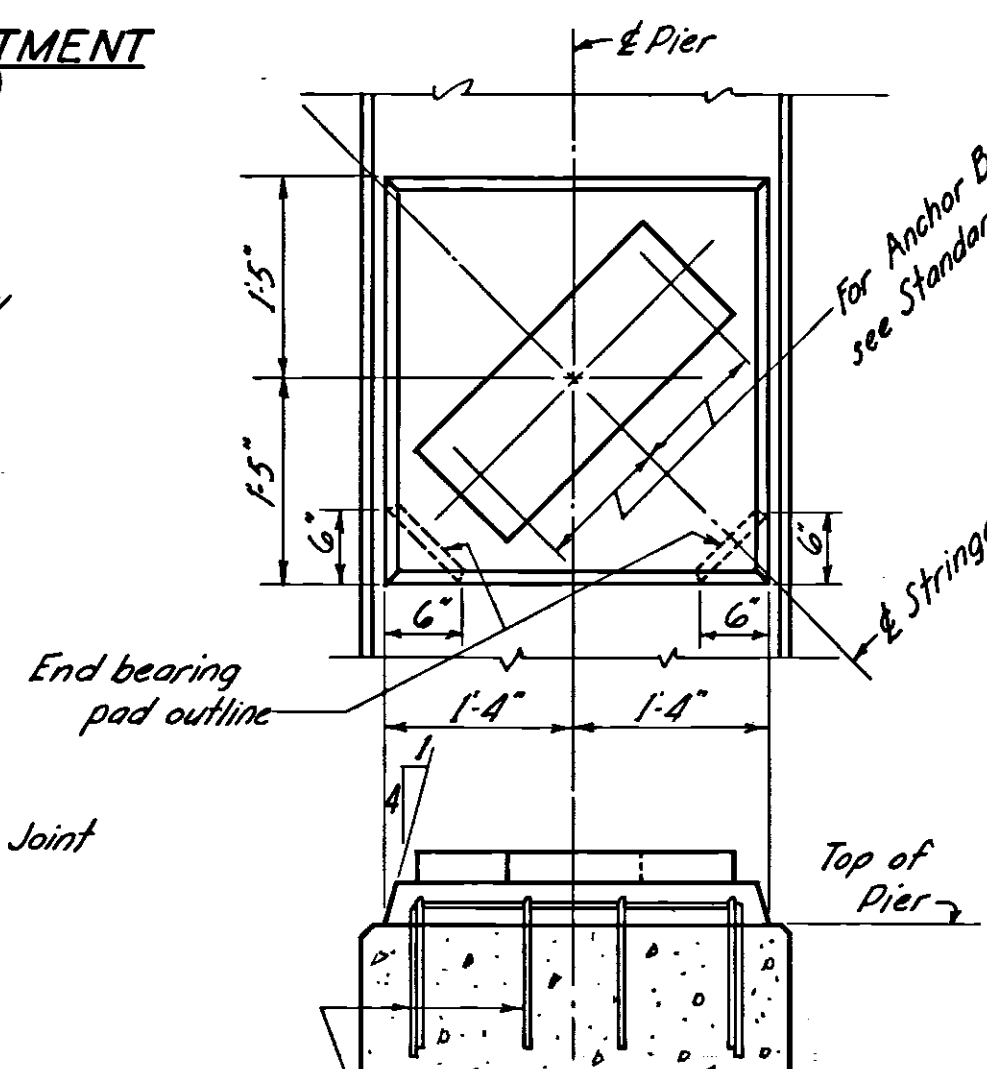
BRIDGE SEAT DRAIN TROUGH



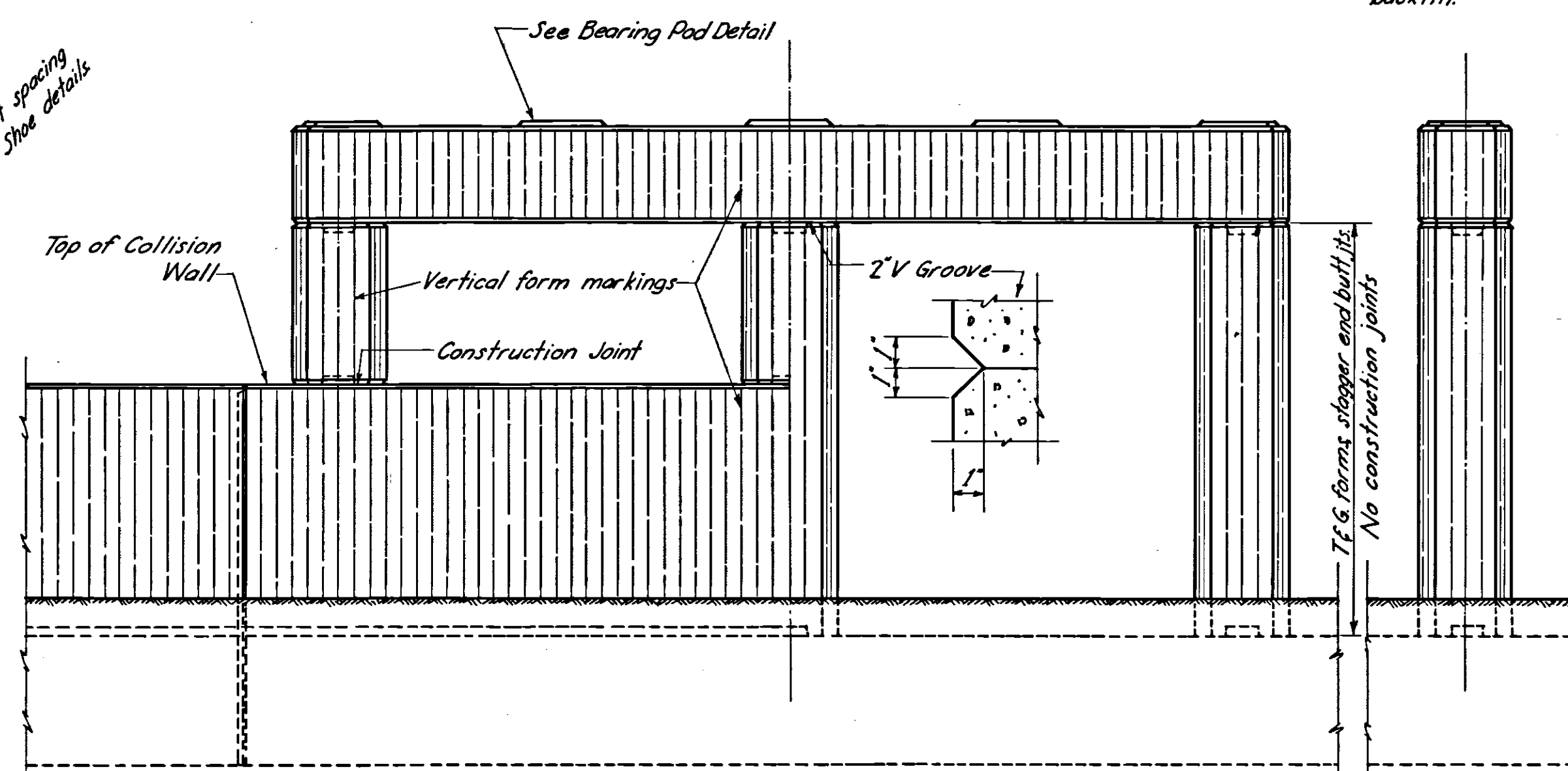
PART PLAN - ABUTMENT (Scale 1/4" = 1 ft.)



CONSTRUCTION JOINT DETAIL (For Piers) (Scale 1/4" = 1 ft.)



STRINGER BEARING PAD DETAIL (Applies to all Piers) (Scale 1/4" = 1 ft.)

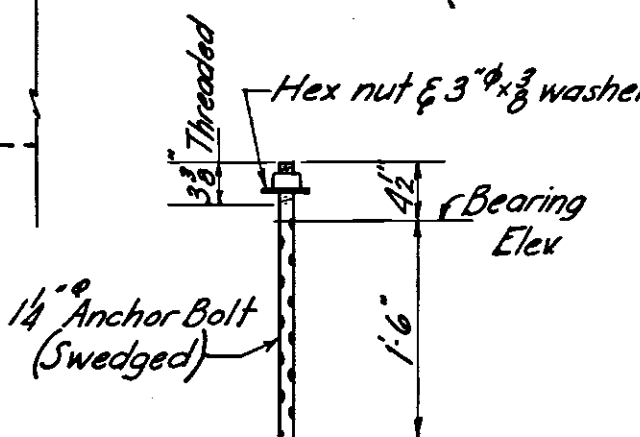


HALF ELEVATION PIER WITH COLLISION WALL (Scale 1/4" = 1 ft.)

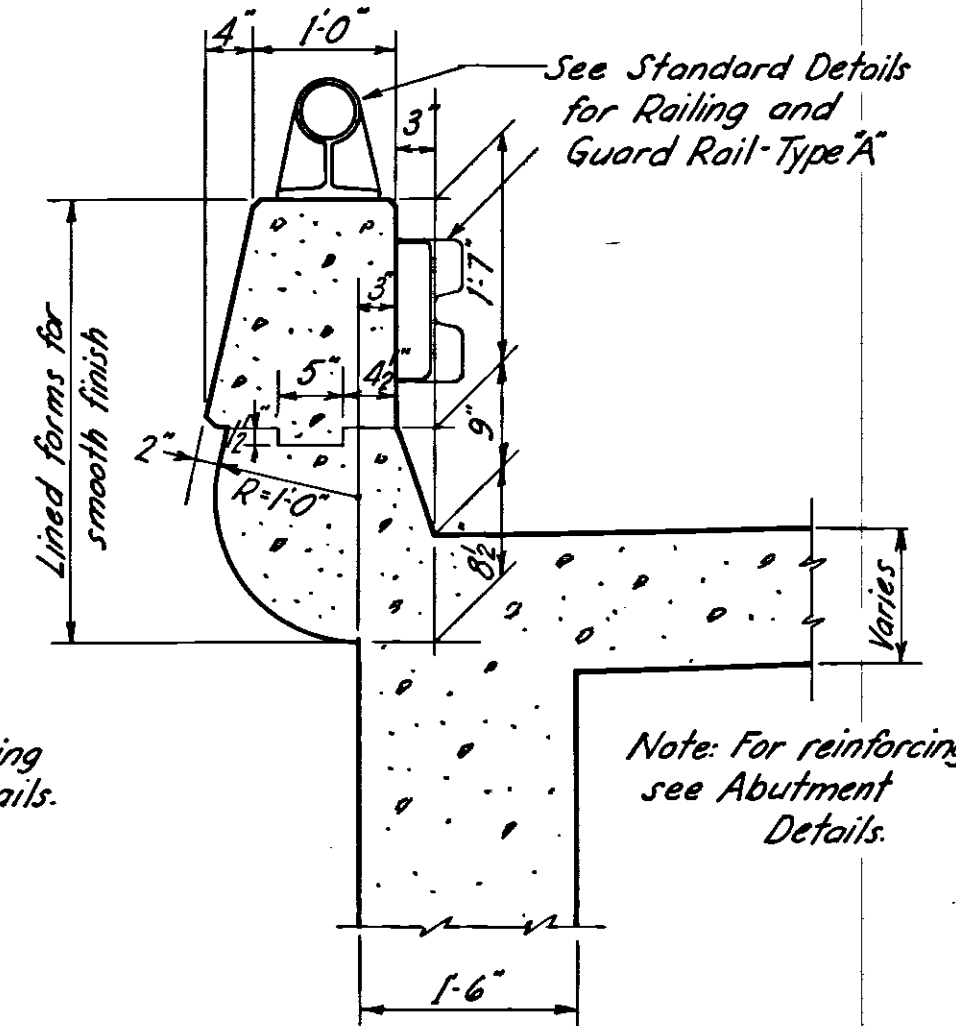
HALF ELEVATION TYPICAL PIER (Scale 1/4" = 1 ft.)

END VIEW OF PIER

TYPICAL ABUTMENT PARAPET (STRUCTURES WITH SAFETY CURB) (Scale 1/4" = 1 ft.)



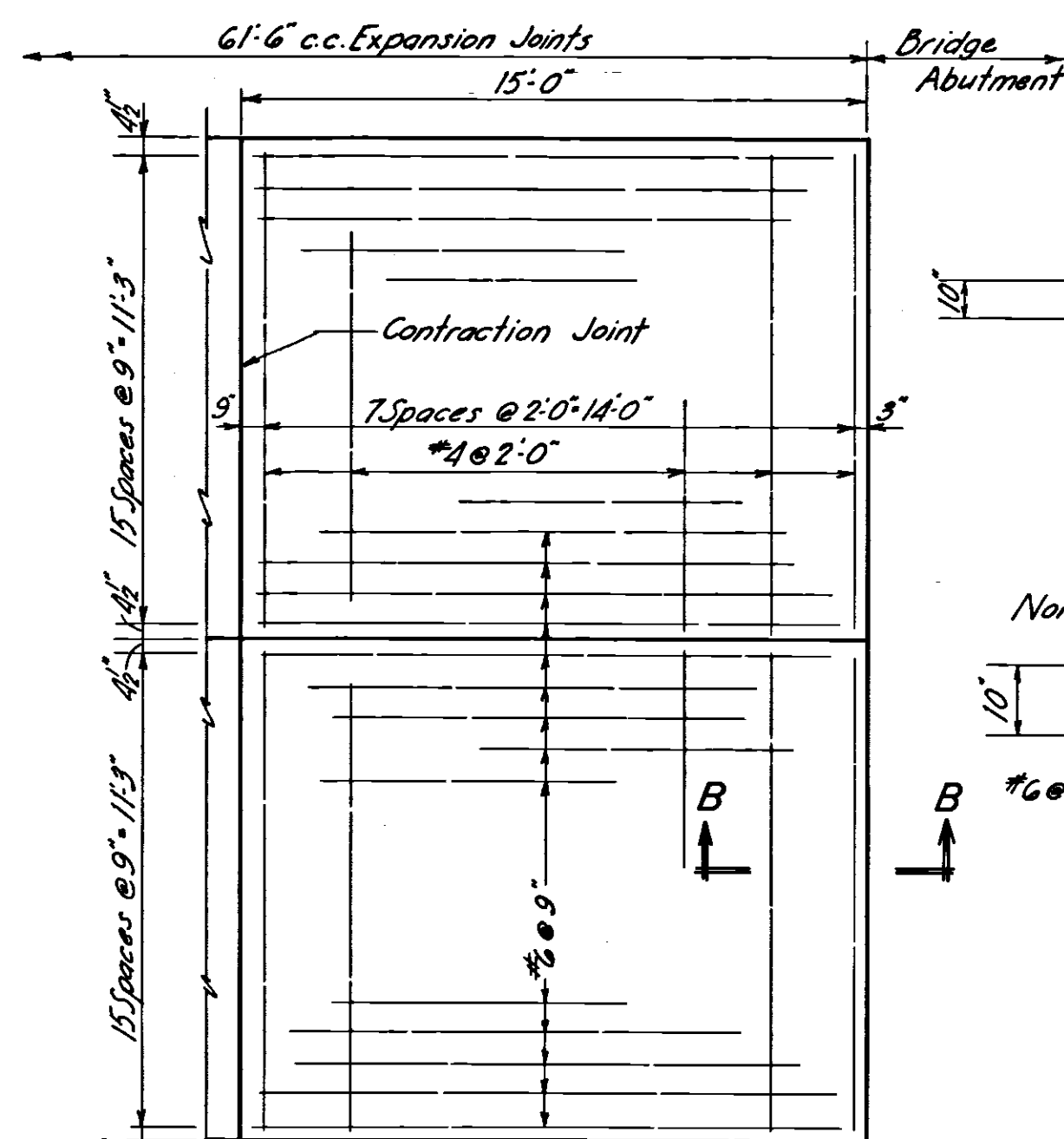
TYPICAL ABUTMENT PARAPET (STRUCTURES WITH GUARD RAIL) (Scale 1/4" = 1 ft.)



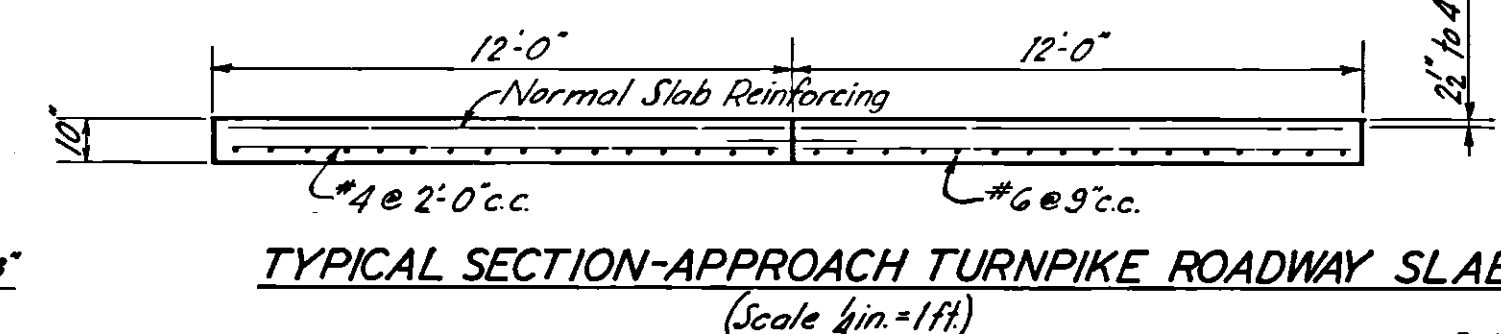
# GENERAL NOTES

All abutments, typical piers and their footings, and all box culverts shall be Class C Concrete. Piers which act as collision walls may consist of both Class C and Class E Concrete - the limits of which are indicated on the plans.

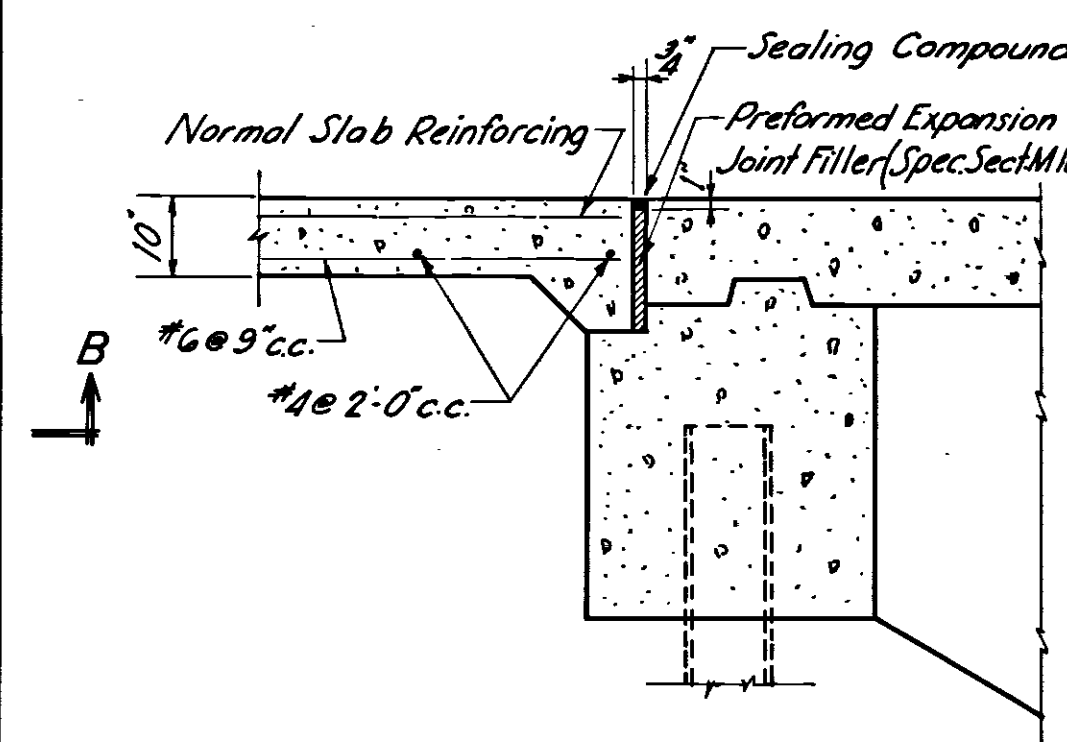
Unless otherwise indicated, all exposed edges of abutments, piers, retaining walls, and box culverts shall be chamfered 1 inch. Reinforcing steel shall be intermediate or hard grade. Unless otherwise indicated on the plans, bars shall be lapped 30 diameters of splices. All hooks and bends in reinforcing shall conform with Table "Standard Bends" shown in General Specifications - Section S4. Abutment slab shall not be placed until expansion dam is placed. All piles indicated are 10BP42, and splices shall be made to conform with the detail shown below.



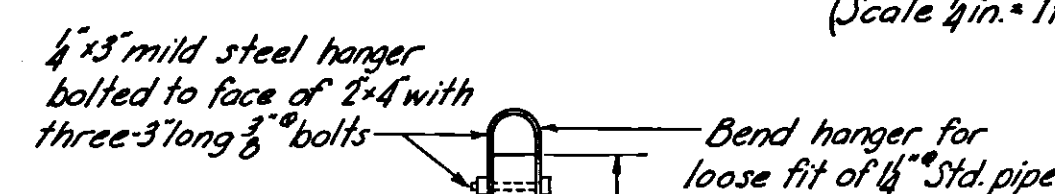
ADDITIONAL REINFORCEMENT OF TURNPIKE ROADWAY SLAB AT BRIDGE APPROACH (Scale 1/4" = 1 ft.)



TYPICAL SECTION-APPROACH TURNPIKE ROADWAY SLAB (Scale 1/4" = 1 ft.)

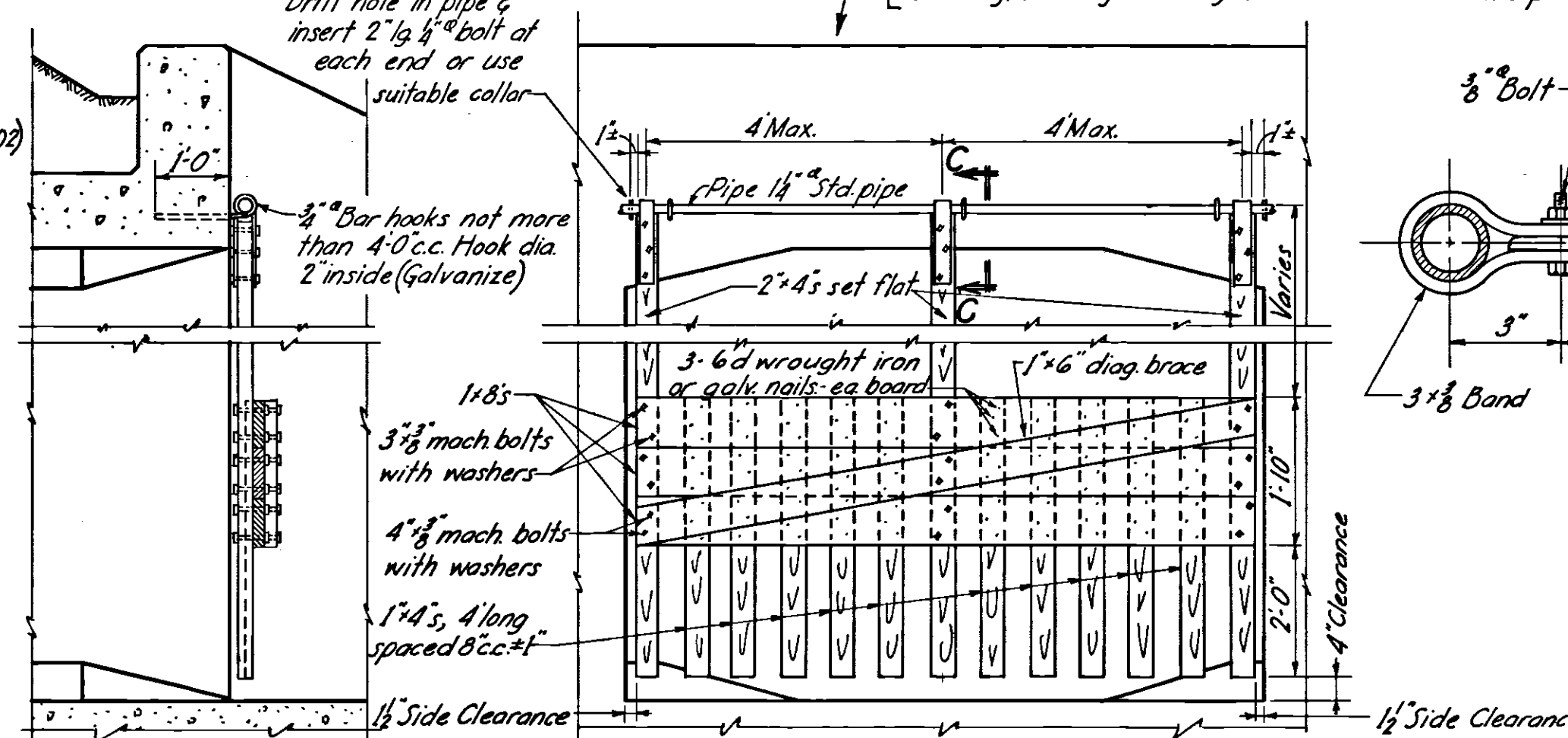


SECTION B-B (Scale 1/4" = 1 ft.)

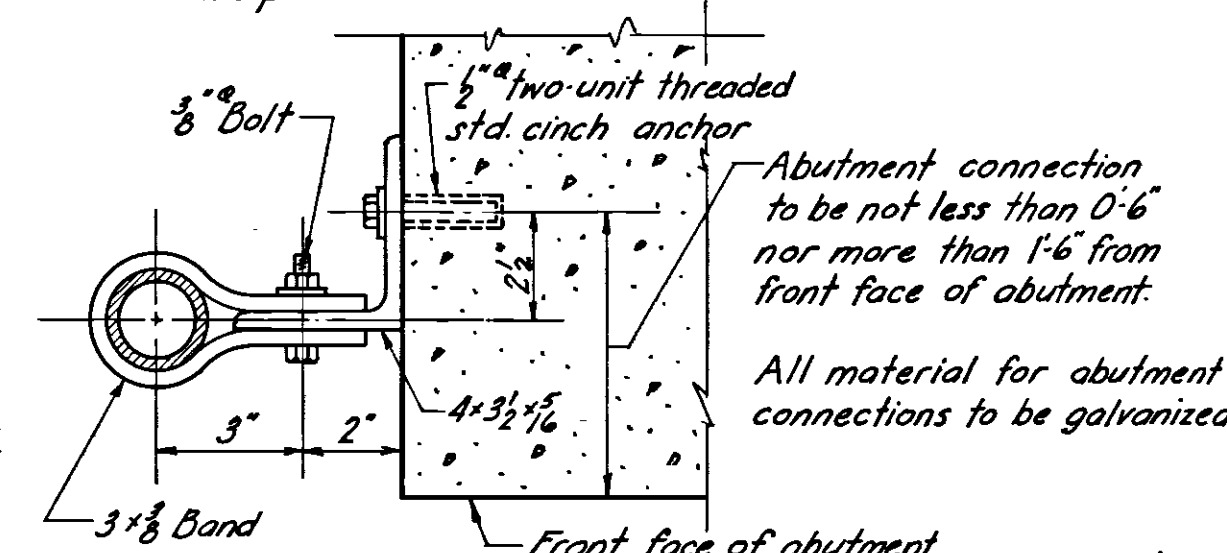


SECTION C-C (Scale 1/4" = 1 ft.)

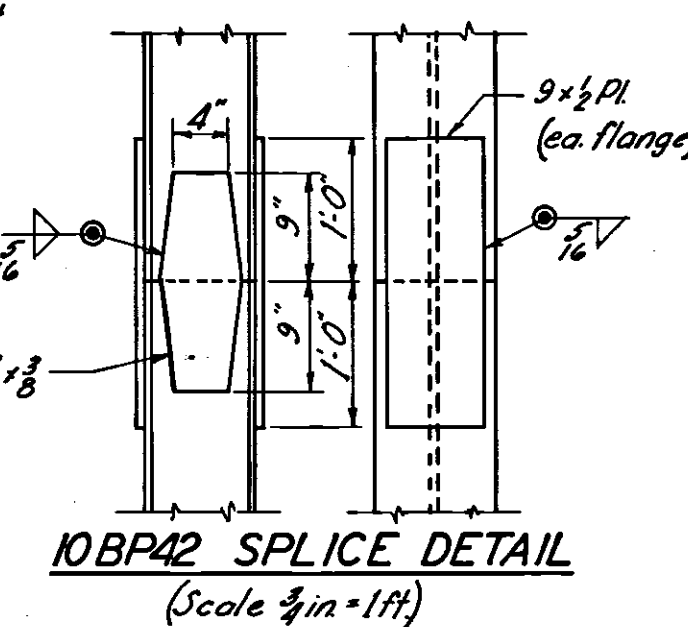
1. When culvert opening exceeds 12' in horizontal length, use multiple gates of approximately equal length.
2. All lumber used for flood gates to be structural grade long leaf Southern Pine or Douglas Fir, Sect. M8.24 Genl. Specs. It shall be pressure treated in accordance with Sect. M8.24 Genl. Specs.
3. All standard pipes, mild steel hangers, bolts etc. shall be galvanized.
4. The lengths occupied by gates shall be included for payment in the length of right-of-way fence indicated on the plans.



GATE INSTALLATION AT BOX CULVERTS - TYPE C (No Scale)



ABUTMENT CONNECTION TO RIGHT-OF-WAY FENCE (Scale 3/4" = 1 ft.)



10BP42 SPLICE DETAIL (Scale 1/4" = 1 ft.)

1	AS BUILT PLANS	CPM 6/22/66
NO.	REVISION	BY DATE
OHIO TURNPIKE COMMISSION		
OHIO TURNPIKE PROJECT NO. 1		
STANDARD DETAILS FOR PIERS, ABUTMENTS & BOX CULVERTS		
SANZENBACHER, MORRIS & TAYLOR AND BROOKHART & TYO, ASSOCIATES		
CONTRACTING ENGINEER		
DESIGN SECTION D-15		
DESIGNED: SA	CHECKED: RT	DATE: March, 1963
DRAWN: CB	IN CHARGE:	SCALE: As Shown
CONTRACT No. C-43		SHEET 58 OF 70