



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

LOI NO. 18-2021

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

BRIDGE DECK REHABILITATION
PROJECT NOS. 71-21-07

DECK REPLACEMENT OF THE MAINLINE BRIDGE OVER STATE
ROUTE 99 AT MILEPOST 111.2, AND DECK OVERLAY OF THE STATE
ROUTE 13 BRIDGE OVER THE MAINLINE AT MILEPOST 119.3 IN ERIE
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. 71-21-07**

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. 71-21-07, Bridge Deck Rehabilitation, Deck Replacement of the Mainline Bridge over State Route 99 at Milepost 111.2, and Deck Overlay of the State Route 13 Bridge over the Mainline at Milepost 119.3 in Erie County, Ohio (the “Project”).

As-Built drawings of the bridges 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**. **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 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 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 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 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. 18-2021
DRAFT SCOPE OF SERVICES
PROJECT NO. 71-21-07

A. PROJECT OVERVIEW

Project 71-21-07 includes, but is not limited to:

- a. Design of a deck replacement for the **MP 111.2 – Mainline Bridge over the State Route 99** and also includes all necessary substructure and superstructure repairs, as well as approach work to provide proper transition to the bridge.
- b. Design of a deck overlay for the **MP 119.3 – State Route 13 Bridge over the Mainline** and also includes all necessary substructure and superstructure repairs, as well as approach work to provide proper transition to the bridge.
- c. 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.
- d. Preparation of an engineering report summarizing the site inspection and engineering investigation.
- e. 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.
- f. Communication and coordination with all stakeholders, including obtaining the necessary approvals and access required concerning the property interests of others.
- g. Consultation with the Commission staff on the recommendations.
- h. Preparation of final Construction Plans and Specifications for bidding.
- i. Provide for engineering support during construction.
- j. Prepare record drawings and final load rating reflecting the as-built condition of the structures.

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 Erie 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. 71-21-07

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 Nos. 71-21-07, **Bridge Deck Rehabilitation**, Deck Replacement of the Mainline Bridge over State Route 99 at Milepost 111.2, and Deck Overlay of the State Route 13 Bridge over the Mainline at Milepost 119.3 in Erie County, Ohio (**the “Project”**).

RECITALS

WHEREAS, on _____, 2021, the Commission issued Request for Letters of Interest No. 18-2021 (“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.

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

APPENDIX B

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 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

APPENDIX B

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.

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

APPENDIX B

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. 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.

APPENDIX B

- 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.

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

APPENDIX B

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 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.

APPENDIX B

- 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,
 - 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.

APPENDIX B

- 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.

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

APPENDIX B

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 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

APPENDIX B

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:

[Name
Address
Address
Telephone
Fax
Email]

APPENDIX B

- 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 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

APPENDIX B

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 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;

APPENDIX B

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

APPENDIX B

- 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.
- 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

APPENDIX B

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.

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	Ohio Turnpike and Infrastructure Commission General Counsel Attn: Jennifer L. Stueber, Esq. 682 Prospect Street Berea, Ohio 44017

APPENDIX B

tony.yacobucci@ohioturnpike.org	jennifer.stueber@ohioturnpike.org
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.
- 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

APPENDIX B

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. 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. 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 Name of SBE (See instructions)	Column 2 Project Role (See instructions)	Column 3 Description of Work (See instructions)	Column 4 Amount Subcontracted to SBE (See instructions)	Column 5 Amount to be Applied Towards Goal (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%2fpreconstruction%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 RMP 43-84-06 DECK REPLACEMENT AND WIDENING OHIO TURNPIKE BRIDGES OVER S.R. 99

M.P. 111.2

STATION 270+28.05 ERIE COUNTY

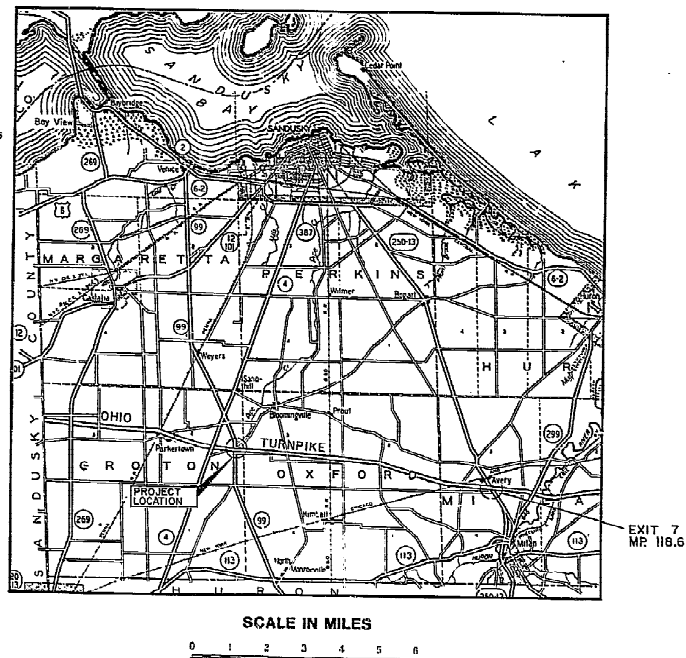
ORIGINAL CONTRACT SECTION C-33

INDEX OF SHEETS

- | | |
|---|---|
| 1. TITLE SHEET | 14. TRAFFIC CONTROL PLAN, ESTIMATED QUANTITIES |
| 2. TYPICAL SECTION, GENERAL NOTES | 15. TRAFFIC CONTROL GEN NOTES, DETAILS AND SINGLE LANE ZONE |
| 3. GENERAL SUMMARY | 16. BI-DIRECTIONAL TRAFFIC CONTROL |
| 4. ROADWAY PLAN, SUB-SUMMARY | 17. TRAFFIC CONTROL CROSSOVER DETAILS |
| 5. GENERAL PLAN & ELEVATION, GENERAL NOTES & ESTIMATED QUANTITIES | 18. TRAFFIC CONTROL, S.R. 99 DETOUR PLANS |
| 6. ABUTMENTS | 19. CROSSOVER CONSTRUCTION PLANS |
| 7. ABUTMENT DETAILS | 20. CRACK AND JOINT DETAILS |
| 8. PIERS | 21. REINFORCED CONCRETE APPROACH SLABS |
| 9. DECK CROSS-SECTION, SLAB PLAN, FRAMING PLAN, NOTES | 22. CONCRETE BARRIER BELOW BRIDGE |
| 10. BEARINGS, DIAPHRAGMS | 23. CROSS SECTIONS |
| 11. EXPANSION DAMS | 24. FINAL PAVEMENT ELEVATIONS |
| 12. SCREED ELEVATIONS TABLE, SCREED PLAN | |
| 13. REINFORCING STEEL | |

OHIO DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS

- | | |
|----------------|--------------------------------|
| BP-2 (12-6-76) | MC-3 (6-1-73) |
| BP-5 (7-16-81) | MC-7 (10-15-76) |
| BP-7 (6-12-76) | MC-8A (5-1-81) |
| F-2 (5-1-75) | TC-35.10 (10-5-77) |
| F-3 (5-1-76) | DR-1 (5-29-79) |
| GR-1 (2-5-82) | SD-1-69, SHEET 3 & 4 (6-12-69) |
| GR-2B (2-5-82) | |
| GR-3 (2-5-82) | |



APPROVED FOR
THE OHIO TURNPIKE COMMISSION
BY
Melvin Rackoff
CHIEF ENGINEER
3-80-84
DATE

PLANS PREPARED BY AND RECOMMENDED BY
RACKOFF ENGINEERS, INC.
Melvin Rackoff
MELVIN RACKOFF

SCOPE OF WORK

REMOVAL OF: EXISTING ALUMINUM RAILING, CONCRETE PARAPETS, CONCRETE DECK, STEEL EXPANSION DAMS AND THEIR SUPPORT PLATES AND ANGLES, ABUTMENT SLABS, ABUTMENT PARAPETS, ABUTMENT ALUMINUM RAILING, ABUTMENT BACKWALL DOWN TO FIRST CONSTRUCTION JOINT (LEAVING EXISTING BACKWALL IN PLACE), OUTSIDE ABUTMENT CHEEK WALLS, DECK SCUPPERS, AND APPROACH SLABS.

REPLACEMENT OR CONSTRUCTION OF: CONCRETE DECK, DEFLECTION PARAPETS, COMPRESSION SEAL EXPANSION DAMS WITH SUPPORTS, SCUPPERS, TOP OF ABUTMENT BACKWALLS, ABUTMENT SLABS, ABUTMENT WIDENING, PIER WIDENING, ABUTMENT DEFLECTION PARAPETS, APPROACH SLABS, WIDENED CRUSHED AGGREGATE SLOPE PROTECTION.

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS

DR-1 (DATED 5-29-79)
SD-1-69 (DATED 6-12-69) SHEETS 3 AND 4

CHEM-TRETE BSM 40 WEATHERPROOFING TO BE APPLIED TO: (A) TOP, ROADWAY SIDE, END SURFACES AND OUTSIDE OF DEFLECTION PARAPETS, (B) TOP SURFACE OF DECK AND ABUTMENT SLABS, AND (C) UNDERSIDE FROM PARAPET TO FIRST BEAM.

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1977, INCLUDING THE 1978, 1979, 1980, 1981 AND 1982 INTERIM SPECIFICATIONS AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:

DESIGN LOADING: HS 20-44 CASE I AND THE ALTERNATE MILITARY LOADING, AND CHECKED FOR 21^K SINGLE AXLE, 24^K TANDEM AXLE AND 99^K TRUCK
CONCRETE CLASS S, SUPERSTRUCTURE-COMPRESSIVE STRENGTH 4300 P.S.I., $f_c=1800$ P.S.I., USING NO. 57 SIZE AGGREGATE.
CONCRETE CLASS C, SUBSTRUCTURE - COMPRESSIVE STRENGTH 4000 P.S.I., $f_c=1333$ P.S.I.
REINFORCING STEEL - ASTM A615, A616, A617 - GRADE 60, MINIMUM YIELD STRENGTH 60,000 P.S.I., $f_y=24,000$ P.S.I., FUSION BONDED EPOXY COATED, ASTM A773-81. SPIRAL REINFORCING MAY BE PLAIN BARS, ASTM A66 OR A673-81.
STRUCTURAL STEEL - ASTM A36 - UNIT STRESS 20,000 P.S.I. ANY RIVETS OR BOLTS REMOVED TO BE REPLACED WITH HIGH STRENGTH BOLTS OF LIKE SIZE, ASTM A325.
DECK PROTECTION METHOD: CLASS S CONCRETE AND EPOXY COATED REINFORCING STEEL, CHEM-TRETE BSM 40 WEATHERPROOFING.

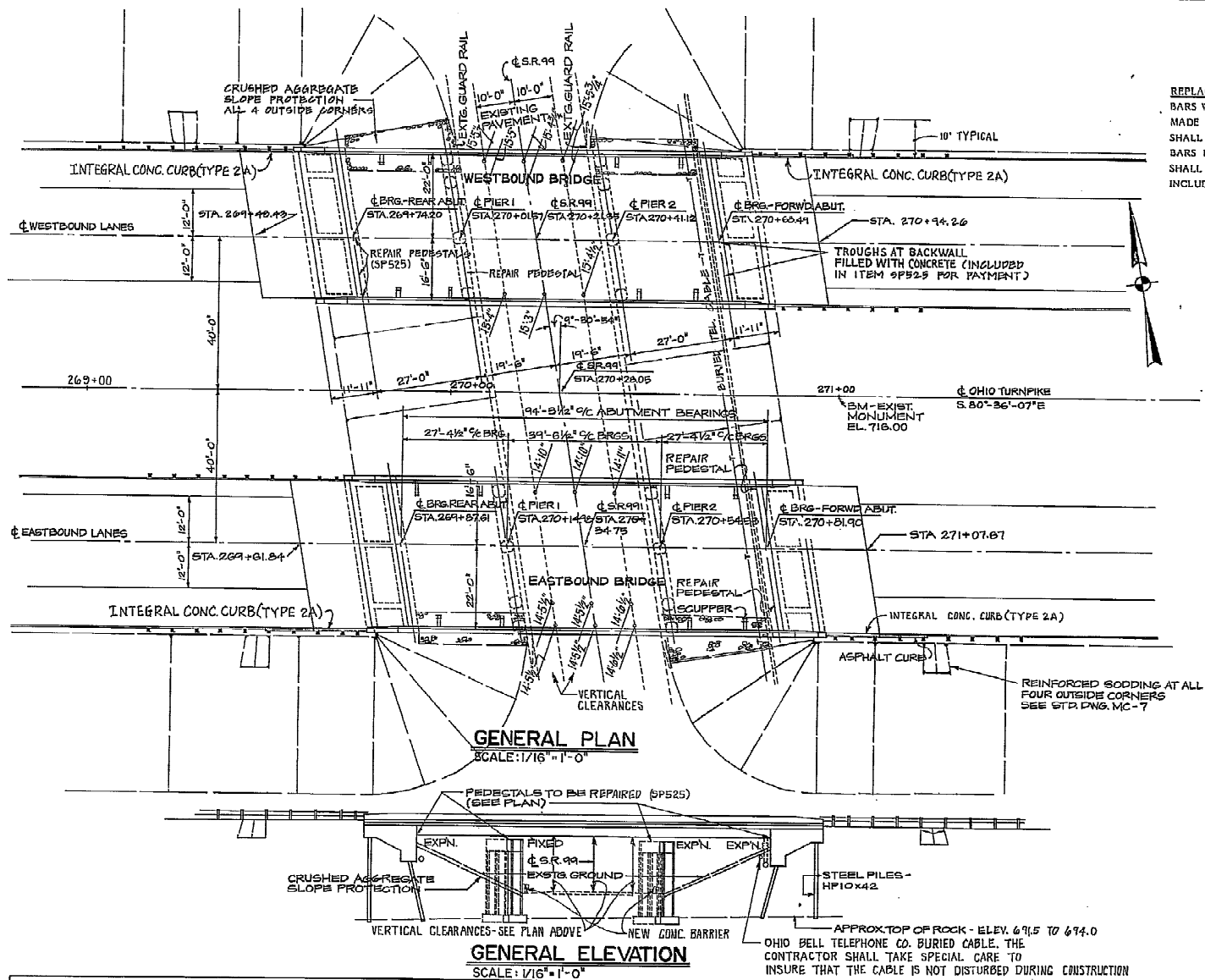
PORTLAND CEMENT SHALL BE TYPE II OR TYPE V CONFORMING TO AASHTO SPECIFICATION M85-80.

AGGREGATES: FINE AGGREGATE SHALL BE NATURAL SAND. COARSE AGGREGATE SHALL BE CRUSHED CARBONATE STONE.

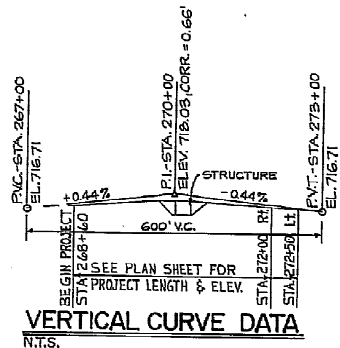
EXISTING STRUCTURE VERIFICATION: DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF EXISTING STRUCTURE AND/OR FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTION 513.02 AND OHIO TURNPIKE COMMISSION GENERAL CONDITIONS - SECTION 6-2.04 AND 6-5.02.

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 AND DIMENSIONS WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION OHIO TURNPIKE GENERAL PLAN & ELEVATION, GENL. NOTES AND ESTIMATED QUANTITIES OHIO TURNPIKE OVER S.R. 99 RACKOFF ENGINEERS, INC. ENGINEERS - CONSULTANTS			
COLUMBUS	DESIGNED R.A.K.	CHECKED F.S.	DATE 3-2-84
	DRAWN B.J.M.	IN CHARGE RAK	SCALE 1/16"=1'-0"
	CONTRACT NO. RMP 43-84-06		SHEET 5 OF 24

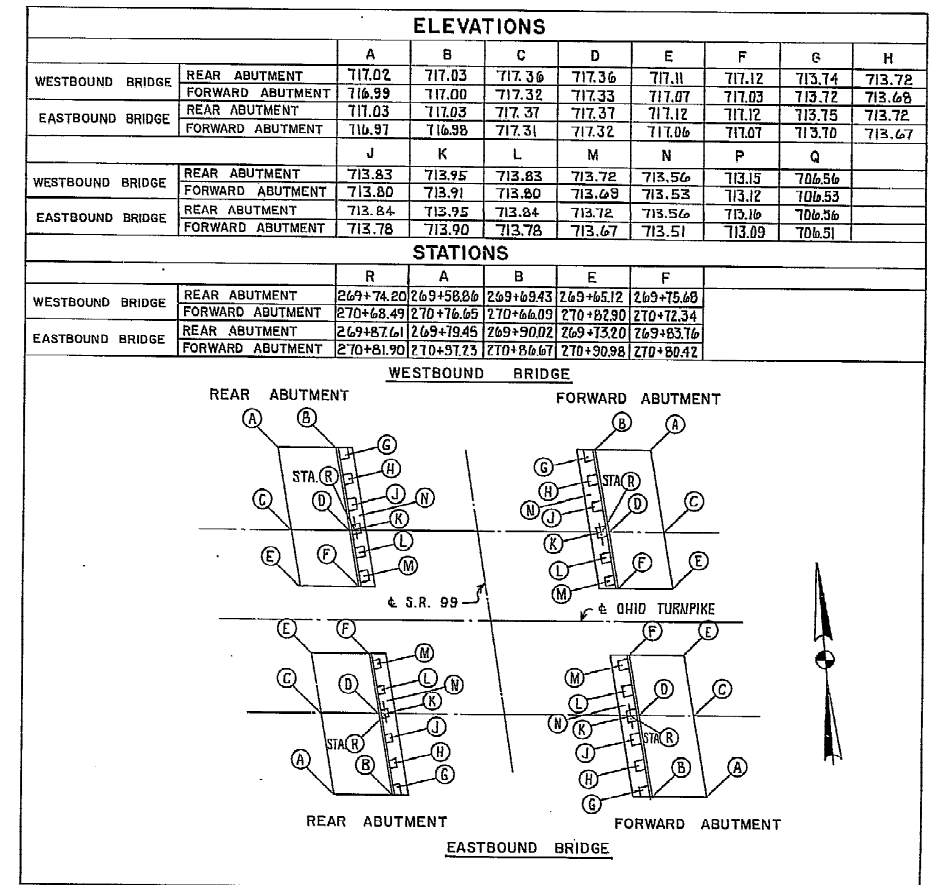
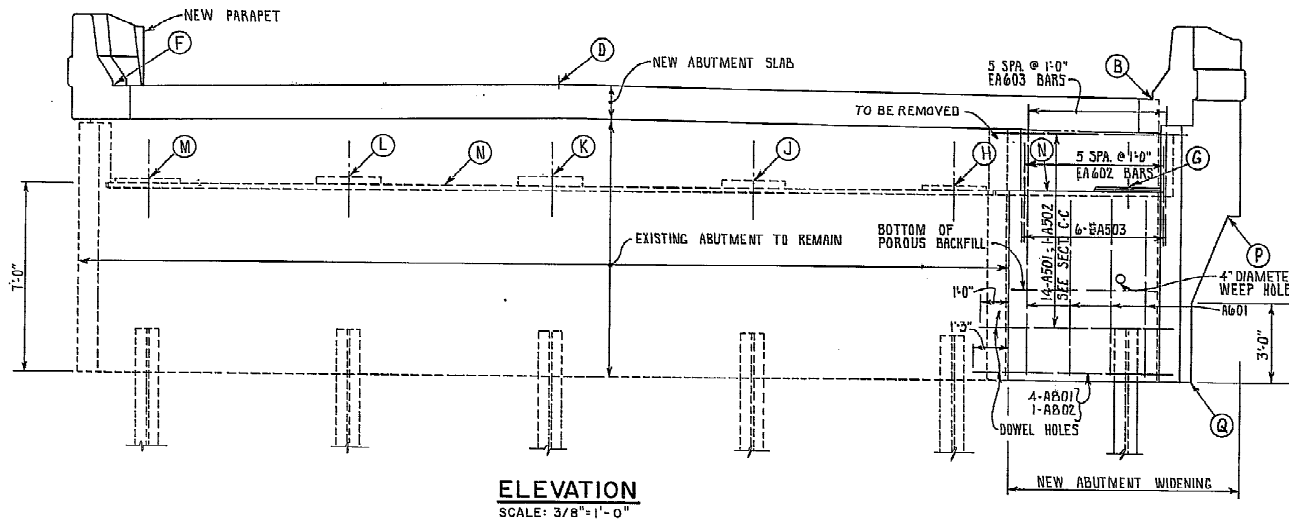
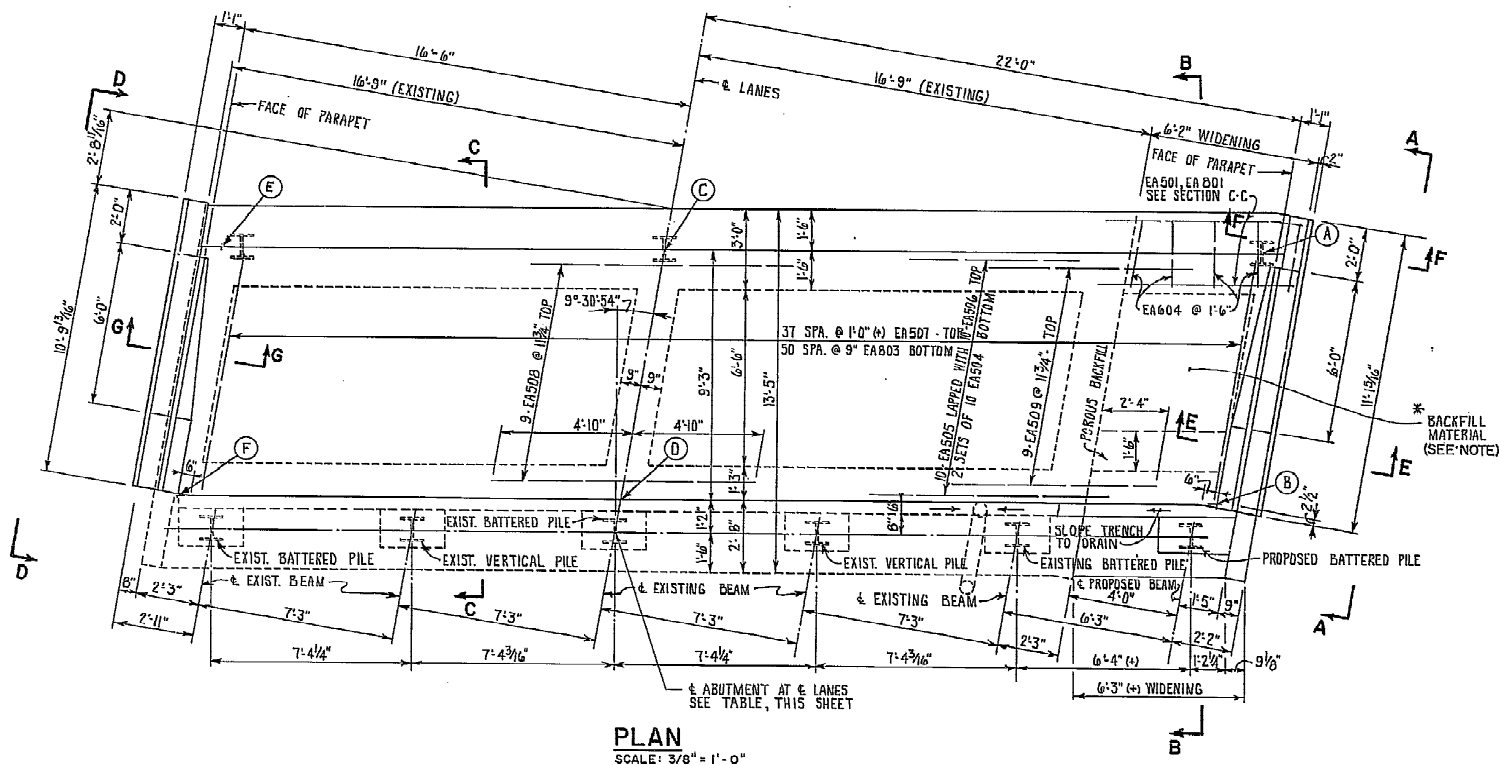


REPLACEMENT OF EXISTING REINFORCING STEEL: ANY EXISTING REINFORCING BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND WHICH ARE MADE UNUSABLE BY THE CONTRACTOR'S CONCRETE REMOVAL OPERATIONS SHALL BE REPLACED WITH NEW BARS AT HIS COST. ANY EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION SHALL BE REPLACED WITH NEW BARS. AN ALLOWANCE OF 300 POUNDS IS INCLUDED IN ITEM SP524 FOR THIS PURPOSE.



ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	ABUTS.	PIERS	GEN'L.	AS BUILT
SP202	LUMP	SUM	PORTIONS OF STRUCTURES REMOVED				LUMP	
503	128	CU. YD.	UNCLASSIFIED EXCAVATION INCLUDING ROCK		60			
905	LUMP	SUM	PILE DRIVING EQUIPMENT MOBILIZATION					
507	170	LBS.	STEEL PILES, HP10x42		170			74.4
509	10,438	LBS.	REINFORCING STEEL, GRADE 60		3046	1392		
510	168	LIN. FT.	DOWEL HOLES, USING SP 653 GROUT ANCHORING		145	20		
SP511	292	CU. YD.	CLASS S CONCRETE, SUPER & ABUT. SLABS (INCLUDING PARAPETS)	233	59			322
SP511	47	CU. YD.	CLASS C CONCRETE, ABUT. BELOW SLABS		47			
SP511	29	CU. YD.	CLASS C CONCRETE, PIER CAPS AND COLUMNS			29		
SP511	10	CU. YD.	CLASS C CONCRETE, FOOTINGS			10		
513	360	EA.	WELDED STUD SHEAR CONNECTORS	360				
513	20,200	LBS.	STRUCTURAL STEEL, AISC CATEGORY I	20,200				19,902
513	13,100	LBS.	STRUCTURAL STEEL AISC CERTIFICATION NOT REQUIRED	13,100				12,882
SP514	LUMP	SUM	FIELD PAINTING OF EXT'G. STRUCTURAL STEEL	LUMP				
SP514	35,500	LBS.	FIELD PAINTING OF NEW STRUCTURAL STEEL	35,500				35,864
516	3100	LBS.	BEARING DEVICES, INCLUDING 1/8" SHEET LEAD OR 1/8" PREFORMED BRG. PADS	3100				3080
518	16	EA.	SCUPPERS, INCLUDING SUPPORTS	16				
518	7	CU. YD.	POROUS BACKFILL		7			
SP525	14	SQ. FT.	REPAIR OF ABUTMENTS AND PIERS		12	2		25
SP527	LUMP	SUM	FALSEWORK AND TEMPORARY BRACING				LUMP	
SP528	52	EACH	REPLACE EXISTING RIVETS WITH NEW HIGH STRENGTH BOLTS	52				72
SP533A	81	LIN. FT.	1/4 INCH PREFORMED ELASTIC JOINT SEAL	81				
SP533A	81	LIN. FT.	2 1/2 INCH PREFORMED ELASTIC JOINT SEAL	81				
SP536	1716	SQ. YD.	CHEM-TRETE BSM 40 WEATHERPROOFING	1207	509			
601	136	SQ. YD.	CRUSHED AGGREGATE SLOPE PROTECTION				136	
SP524	83,647	LBS.	EPOXY COATED REINFORCING STEEL, GRADE 60	60,137	15,818	1392	300	73,157
503	5	CU. YD.	EMBANKMENT, AS PER 503.10		5			



ABUTMENT NOTES:

BRIDGE SEAT REINFORCING: REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT SHALL BE ACCURATELY PLACED TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES.

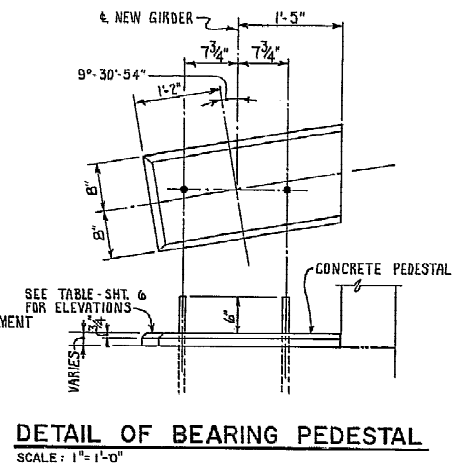
BEARING ANCHORS: AT THE OPTION OF THE CONTRACTOR, BEARING ANCHORS (OR FRAMED HOLES) LOCATED AND SUPPORTED BY TEMPLATES, MAY BE CAST IN PLACE.

POROUS BACKFILL, 1'-0" THICK, SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE AND Laterally TO THE ENDS OF THE WINGWALLS.

FOR ELEVATIONS AND SECTIONS - SEE SHT. 7

* 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. INCLUDE WITH ITEM 503, EMBANKMENT, AS PER 503.10, FOR PAYMENT.

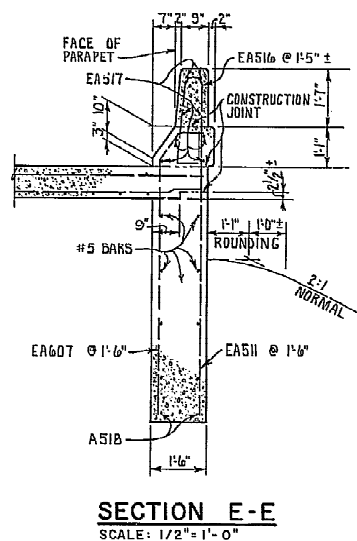
NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE			
ABUTMENTS			
OHIO TURNPIKE OVER S.R. 99			
RACKOFF ENGINEERS, INC.			
ENGINEERS - CONSULTANTS			
COLUMBUS			OHIO
DESIGNED R.A.K.	CHECKED R.S.O.	DATE 3-2-84	
DRAWN K.W.F.	IN CHARGE R.A.K.	SCALE 3/8" = 1'-0"	
CONTRACT NO. RMP 43-84-06 SHEET 6 OF 24			



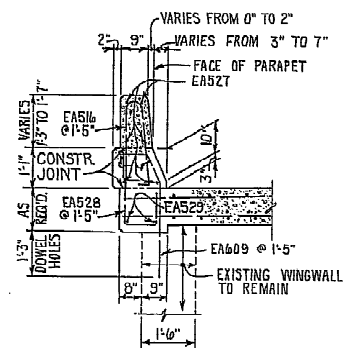
NOTES:

CONCRETE INSERT ASSEMBLIES, AS SHOWN ON STANDARD CONSTRUCTION DRAWING GR-1 AND GR-3, SHALL BE PROVIDED AT ALL WINGWALL TERMINALS FOR ATTACHMENT OF GUARDRAIL TERMINAL CONNECTORS, EVEN THOUGH GUARDRAIL MAY NOT BE SPECIFIED ON THE ROADWAY PLANS. WHERE THE APPROACH SLAB IS UNCURBED, CONCRETE ANCHOR ASSEMBLIES SHALL BE PROVIDED FOR WHEEL GUARD ATTACHMENT. INCLUDE WITH ITEM SP 511 FOR PAYMENT.

DETAIL OF BEARING PEDESTAL
SCALE: 1" = 1'-0"



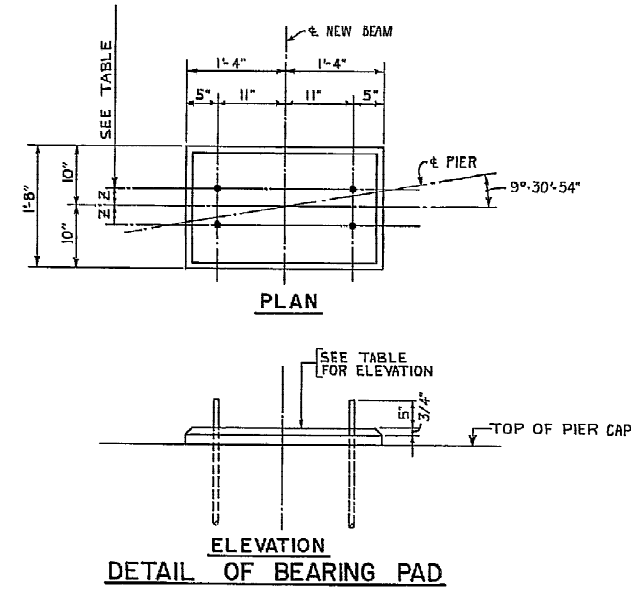
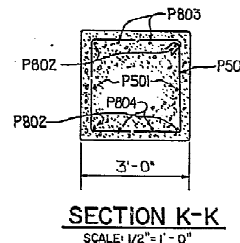
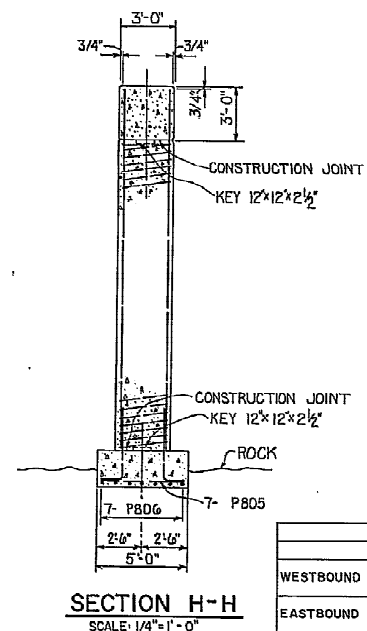
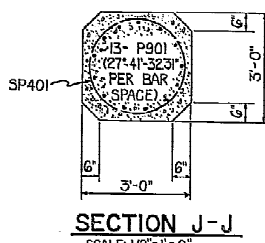
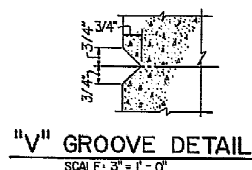
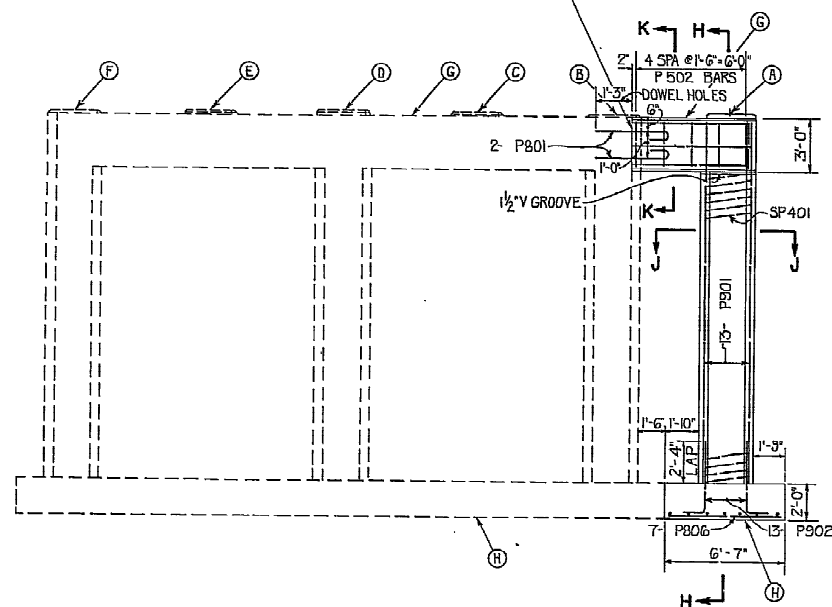
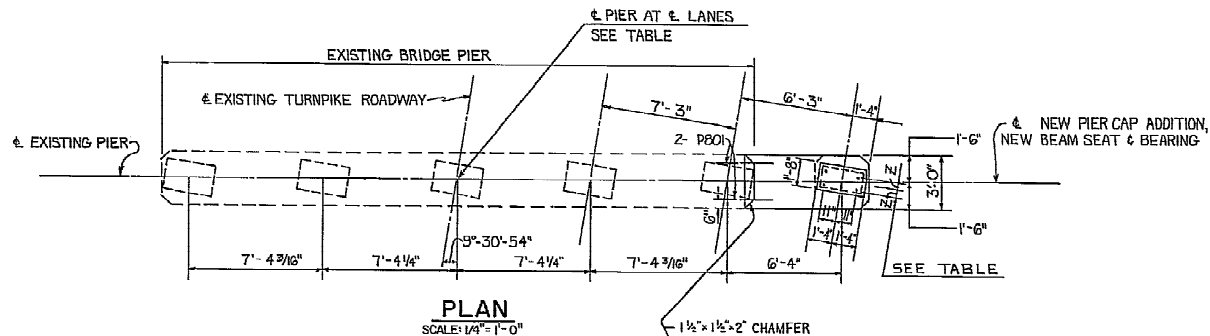
SECTION E-E
SCALE: 1/2" = 1'-0"



SECTION G-G
SCALE: 1/2" = 1'-0"

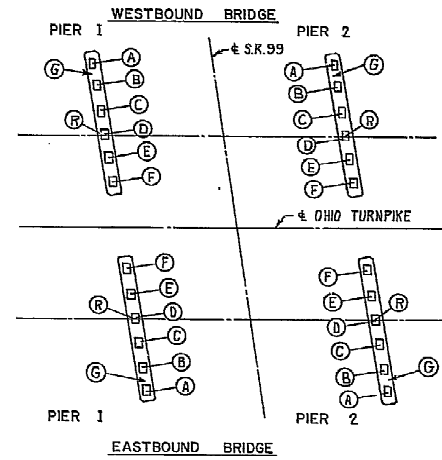
NOTATION : FF - FRONT FACE
RF - REAR FACE
EF - EACH FACE

NO.	REVISIONS	BY	DATE	
OHIO TURNPIKE COMMISSION				
OHIO TURNPIKE				
ABUTMENT DETAILS				
OHIO TURNPIKE OVER S.R. 99				
RACKOFF ENGINEERS, INC.				
ENGINEERS - CONSULTANTS				
COLUMBUS		OHIO		
DESIGNED R.A.K.	CHECKED R50	DATE 3-2-84		
DRAWN K.W.F.	IN CHARGE RAK	SCALE AS NOTED		
CONTRACT NO. RMP 43-84-06 SHEET 7 OF 24				



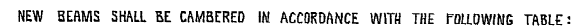
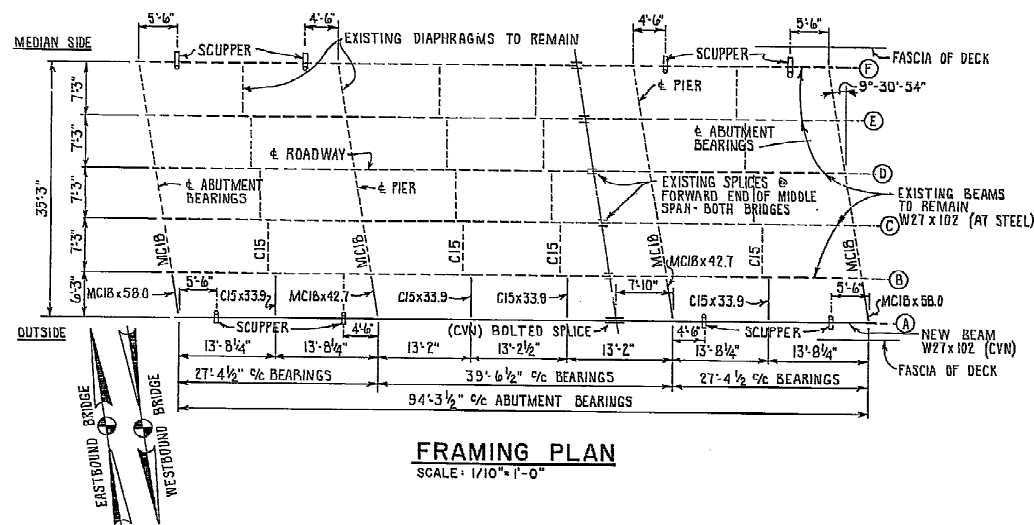
		STATIONS		DIMENSIONS		ELEVATIONS	
		R	Z				H
WESTBOUND BRIDGE	PIER 1	269+01.57	5"				691.02
	PIER 2	270+68.49	3"				691.01
EASTBOUND BRIDGE	PIER 1	270+14.96	5"				691.02
	PIER 2	270+81.90	3"				691.00

		ELEVATIONS							
		G	A	B	C	D	E	F	
WESTBOUND BRIDGE	PIER 1	712.69	712.87	712.85	712.96	713.08	712.96	712.85	
	PIER 2	712.66	712.86	712.84	712.95	713.06	712.95	712.83	
EASTBOUND BRIDGE	PIER 1	712.69	712.87	712.85	712.96	713.07	712.96	712.85	
	PIER 2	712.67	712.85	712.82	712.94	713.05	712.94	712.83	

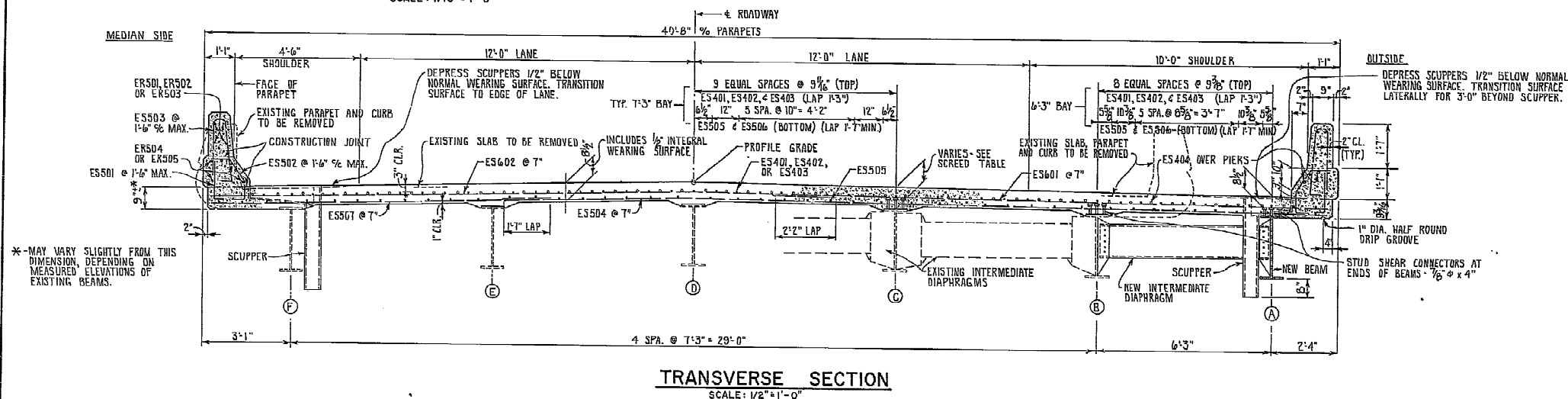
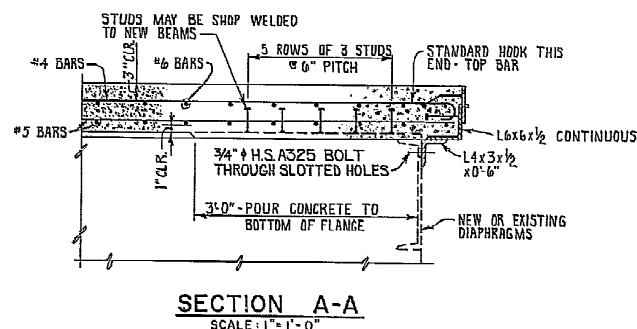
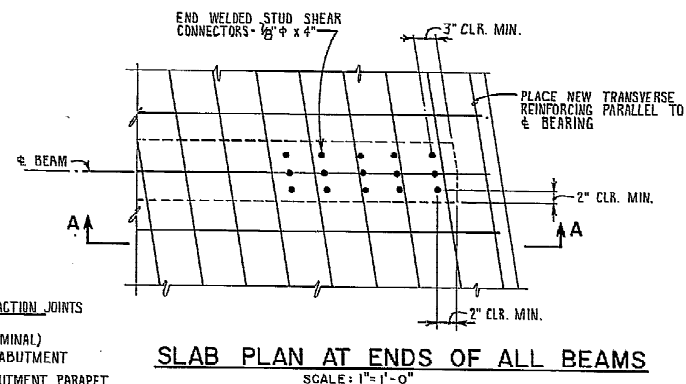
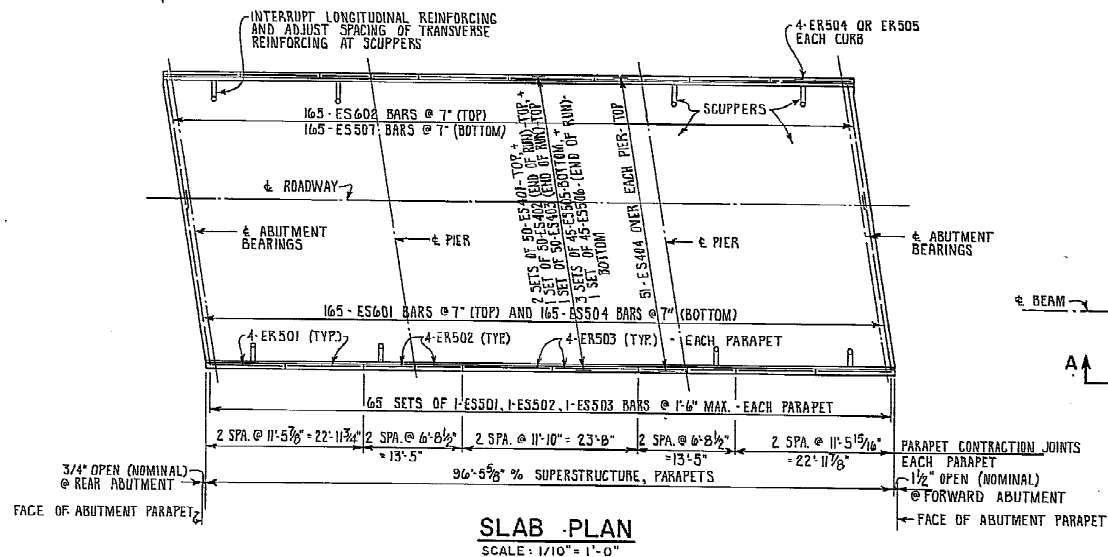
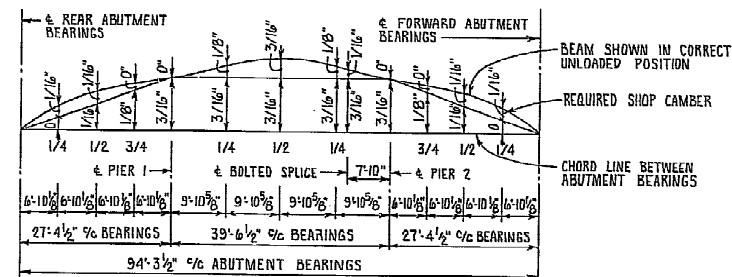


FOUNDATION BEARING PRESSURE: PIER FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM BEARING PRESSURE OF 5.33 TONS PER SQ. FT.

NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE			
PIERS			
OHIO TURNPIKE OVER S.R.99			
RACKOFF ENGINEERS, INC.			
ENGINEERS - CONSULTANTS			
COLUMBUS	OHIO		
DESIGNED R.S.O.	CHECKED RAK	DATE 3-2-84	
DRAWN S.L.V.	IN CHARGE RAK	SCALE AS NOTED	
CONTRACT NO. RMP-43-84-06 SHEET 8 OF 24			



DEFLECTION AND CAMBER - NEW BEAMS							
SPAN POINT →	END SPANS			MIDDLE SPAN			
	1/4 POINT	MIDPOINT	3/4 POINT	1/4 POINT	MIDPOINT	SPLICE	
DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0	0
DEFLECTION DUE TO REMAINING DEAD LOAD	1/16"	1/16"	0	1/8"	3/16"	1/16"	1/16"
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0	0	0	0	0	0	0
REQUIRED SHOP CAMBER	1/16"	1/16"	0	1/8"	3/16"	1/16"	1/16"



SUPERSTRUCTURE NOTES

INSTALLATION OF SEAL: DURING INSTALLATION OF THE SUPPORT/ARMOR FOR THE SUPERSTRUCTURE SIDE OF THE EXPANSION JOINT SEAL, THE SEALING OF BEAMS ON BEARINGS SHALL BE CAREFULLY OBSERVED TO MAKE SURE THAT POSITIVE BEARING IS MAINTAINED. PROPER VERTICAL FIT OF THE SUPPORT/ARMOR ON THE BEAMS SHALL BE ACHIEVED BY POSITIONING OF THE SUPPORT ANGLES RATHER THAN BY CLAMPING FORCE.

WHERE A SHAPE OR PLATE IS DESIGNATED (CVN) THE MATERIAL SHALL MEET SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01 OF CMS.

HIGH STRENGTH BOLTS FOR BEAM BOLTED FIELD SPLICES SHALL BE 1" DIA A325.
ALL OTHER CONNECTIONS SHALL HAVE 7/8" DIA UNLESS NOTED.

SCUPPERS SHALL BE IN ACCORDANCE WITH STD. DWG. SD-1-69 EXCEPT THAT SCUPPER PIPES SHALL EXTEND 8" BELOW THE BOTTOM OF THE BEAMS INSTEAD OF THE 2".

DECK SLAB DEPTH: THE DISTANCE SHOWN FROM TOP OF DECK SLAB TO TOP OF STEEL BEAM IS THE DESIGN DIMENSION. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED ON THIS DIMENSION, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE BEAM MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE.

A HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" AND 12" PROVIDED THAT THE SLOPE SHALL BE NOT MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" WIDTH.

WELDED ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE MAY BE MADE TO AREAS OF THE FASCIA BEAM FLANGES DESIGNATED "COMPRESSION". ATTACHMENTS SHALL NOT BE MADE TO AREAS DESIGNATED "TENSION". FILLET WELDS TO COMPRESSION FLANGES SHALL BE NOT CLOSER THAN 1" FROM EDGE OF FLANGE, BE NOT MORE THAN 2" LONG, AND BE NOT SMALLER THAN THE MINIMUM SIZE REQUIRED BY AASHTO. SEE SHEET 10 FOR DIAGRAM.

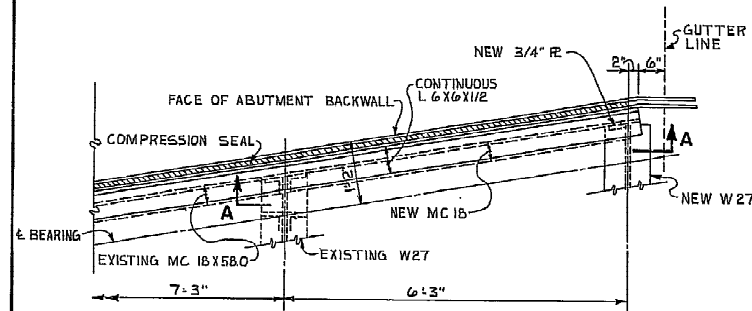
WELDED STUD SHEAR CONNECTORS SHALL CONFORM TO AASHTO M169.

BOLTED BEAM SPLICE DETAILS: SEE STD. DWG. SD-1-69, SHEET 4

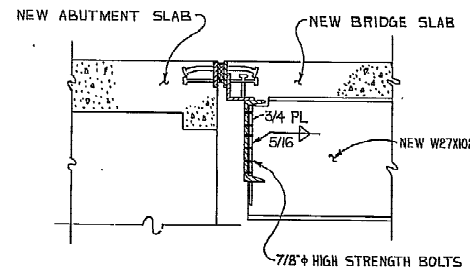
THE DEFLECTION JOINTS IN THE BARRIER CURB MAY BE EITHER 1/4" GRAY SPONGE RUBBER OR 1/4" GRAY CELLULAR POLYVINYL CHLORIDE (PVC SPONGE). EITHER MATERIAL SHALL MEET THE REQUIREMENTS OF AASHTO M-153, TYPE 1, EXCEPT THE DENSITY OF THE PVC SPONGE SHALL BE NOT LESS THAN 20 LBS PER CU FT.

BARRIER CURBS SHALL BE PLACED IN ALTERNATE SECTIONS BY THE USE OF BULKHEADS AND AFTER PLACEMENT OF SPONGE FILLER. THE FILLER SHALL BE ATTACHED TO THE FACE OF THE CONCRETE ON ONE SIDE, FLUSH WITH THE SURFACE OF CONCRETE AND EXPOSED EDGES SHALL BE FREE OF MORTAR. THERE SHALL BE NO DEVIATION FROM THIS PROCEDURE.

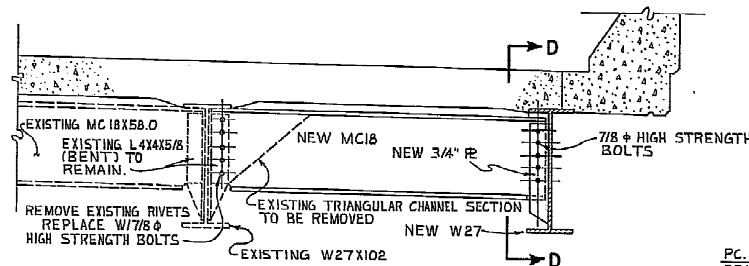
INCLUDE WITH ITEM SP511, CLASS 5 CONCRETE, SUPERSTRUCTURE AND ABUTMENT SLABS (INCLUDING PARAPETS), FOR PAYMENT.



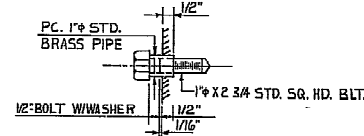
PARTIAL PLAN - END DIAPHRAGMS
SCALE: 3/4" = 1'-0"



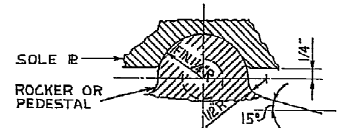
SECTION D-D
SCALE: 3/4" = 1'-0"



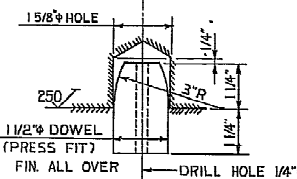
SECTION A-A
SCALE: 3/4" = 1'-0"



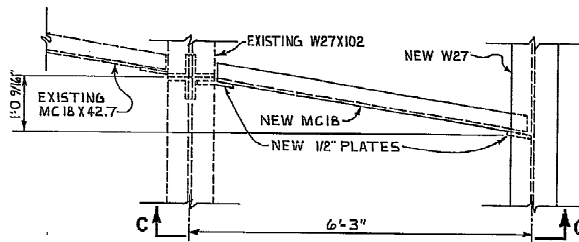
DETAIL OF SHOULDERED BOLT
SCALE: 3" = 1'-0"



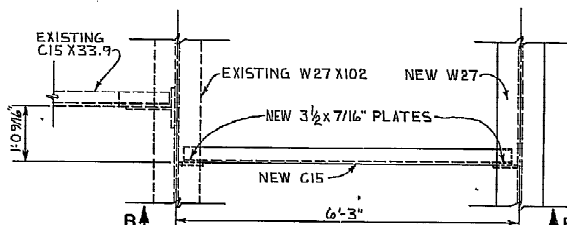
DETAIL "A"
SCALE: 6" = 1'-0"



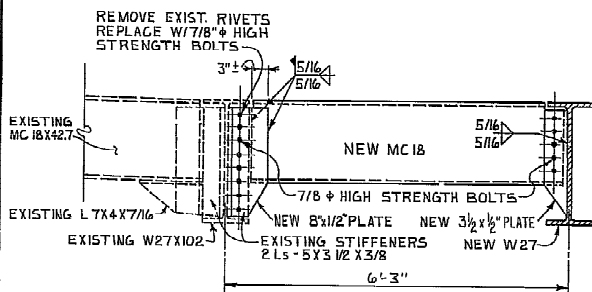
DETAIL "B"
SCALE: 6" = 1'-0"



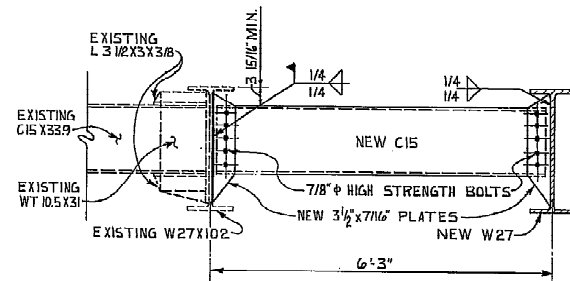
PARTIAL PLAN - NEW DIAPHRAGMS AT PIERS
SCALE: 3/4" = 1'-0"



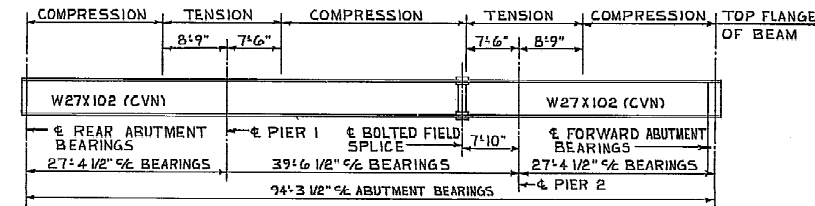
PARTIAL PLAN - INTERMEDIATE DIAPHRAGMS
SCALE: 3/4" = 1'-0"



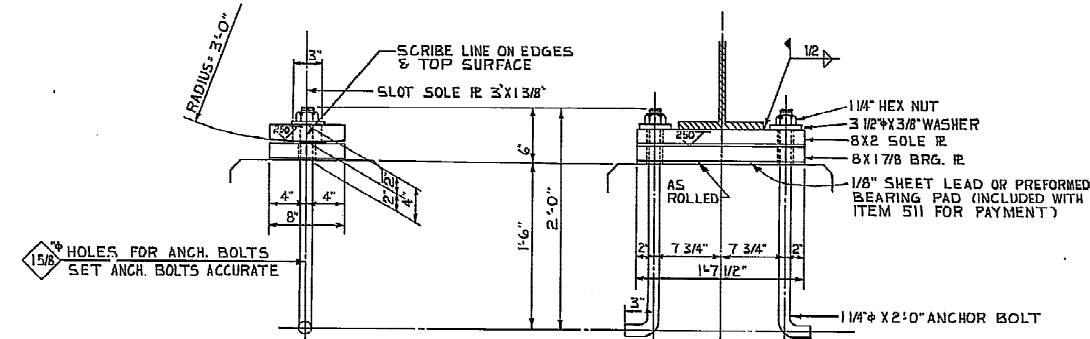
SECTION C-C
SCALE: 3/4" = 1'-0"



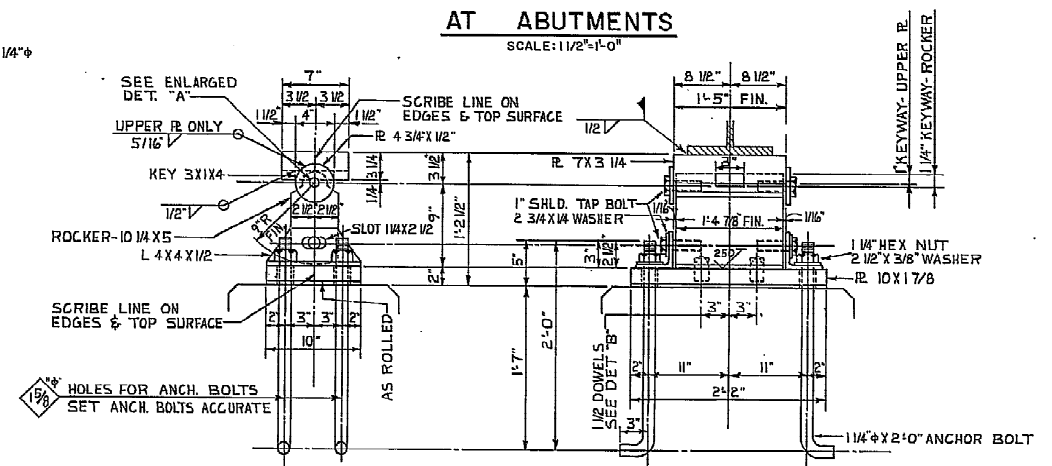
SECTION B-B
SCALE: 3/4" = 1'-0"



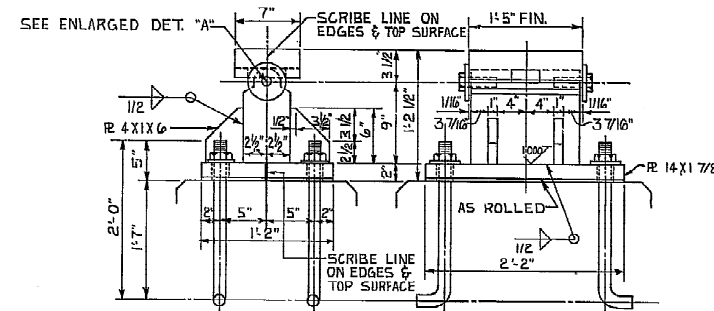
BEAM ELEVATION
NO SCALE



SLIDING EXPANSION BEARINGS AT ABUTMENTS
SCALE: 1 1/2" = 1'-0"



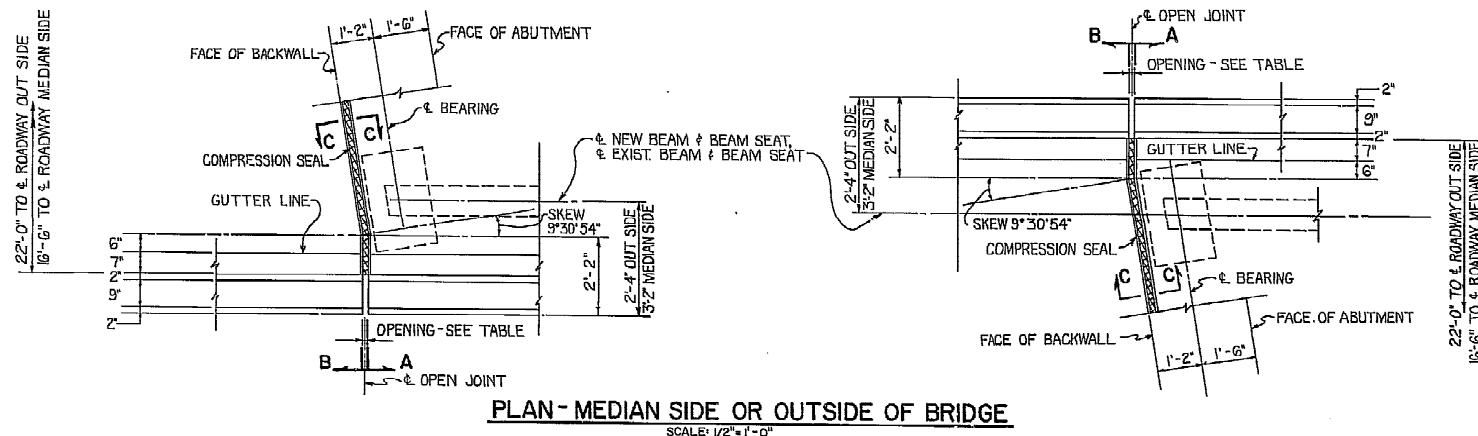
EXPANSION SHOES AT PIER 2
SCALE: 1 1/2" = 1'-0"



FIXED SHOES AT PIER 1
SCALE: 1 1/2" = 1'-0"

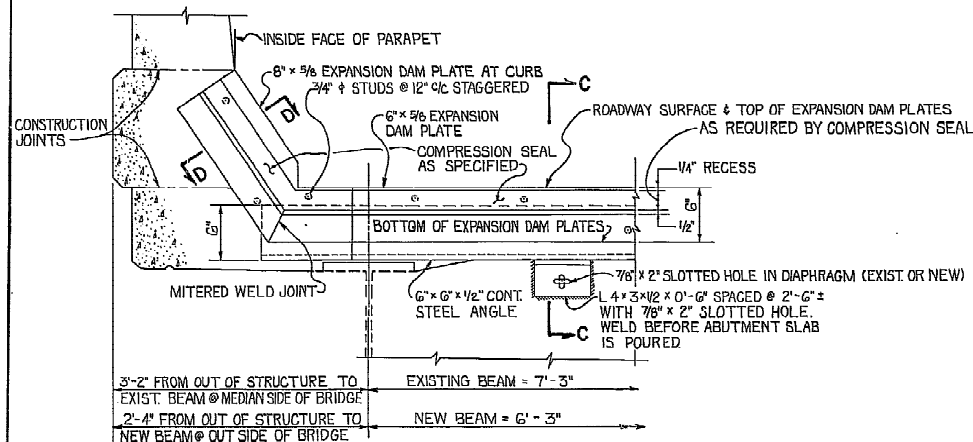
NOTE: DIMENSIONS, DETAILS & SIZES NOT SHOWN, SAME AS FOR EXPANSION SHOES.

NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE			
BEARINGS, DIAPHRAGMS			
OHIO TURNPIKE OVER S.R.99			
RACKOFF ENGINEERS, INC.			
ENGINEERS - CONSULTANTS			
COLUMBUS	DESIGNED R.A.O./R.A.K.	CHECKED R.A.K.	DATE 3/2/84
DRAWN D.E.R.	IN CHARGE R.A.K.	SCALE AS NOTED	
CONTRACT NO. RMP 43-84-06 SHEET 10 OF 24			



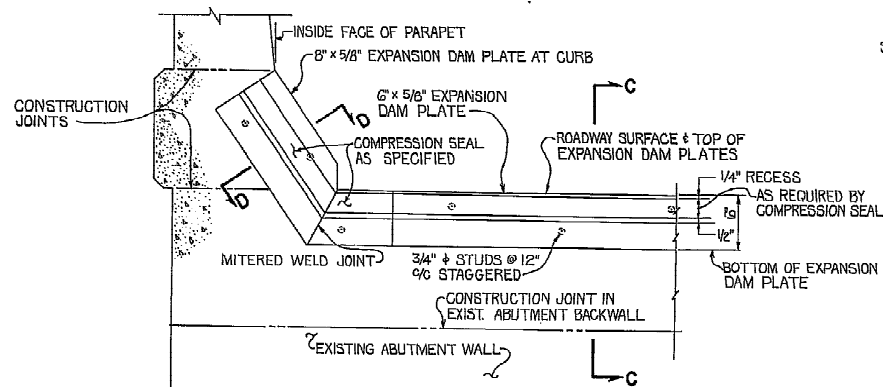
PLAN-MEDIAN SIDE OR OUTSIDE OF BRIDGE

SCALE: 1/2" = 1'-0"



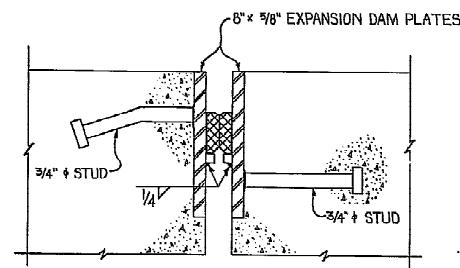
SECTION A-A

SCALE: 1/2" = 1'-0"



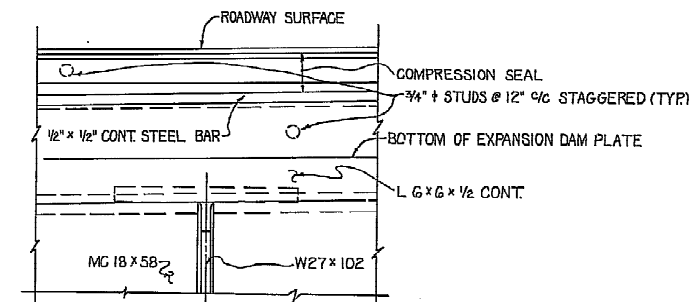
SECTION B-B

SCALE: 1/2" = 1'-0"



SECTION D-D

SCALE: 3/8" = 1'-0"

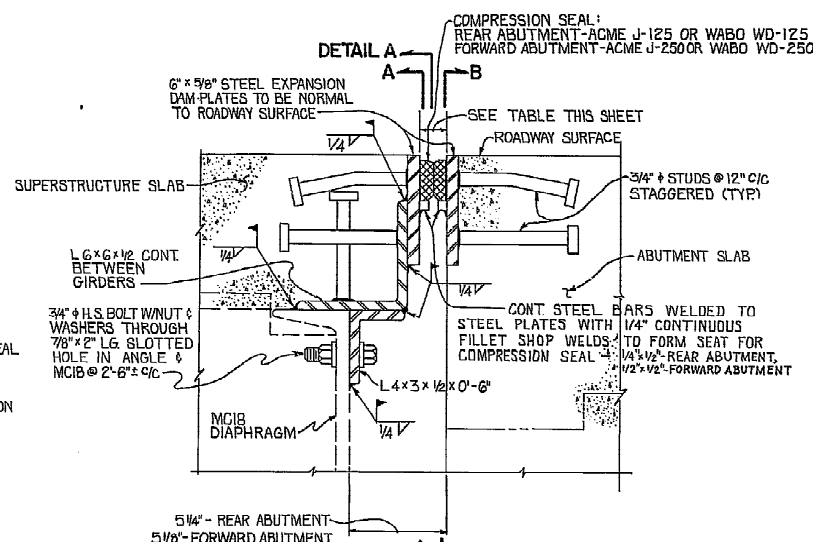


DETAIL A

SCALE: 3/8" = 1'-0"

TEMPERATURE	ADJUSTMENT							TABLE
LOCATION	30°F	40°F	50°F	60°F	70°F	80°F	90°F	
REAR ABUTMENT	0.85"	0.82"	0.80"	0.78"	0.75"	0.73"	0.70"	
FORWARD ABUTMENT	1.72"	1.66"	1.61"	1.55"	1.49"	1.43"	1.37"	

- NOTES:
- COMPRESSION SEALS TO BE ACME, WABO-MAURER, OR EQUIVALENT
 - STEEL TO BE ASTM A-36
 - STUD ANCHORS TO BE LOW CARBON STEEL ASTM A-108
 - STEEL MEMBERS SHALL BE FURNISHED IN LENGTHS AS LONG AS PRACTICABLE. AT ALL FIELD BUTT JOINTS THEY SHALL BE RIGIDLY FASTENED AS REQUIRED PRIOR TO PLACING CONCRETE.



SECTION C-C

SCALE: 3/8" = 1'-0"

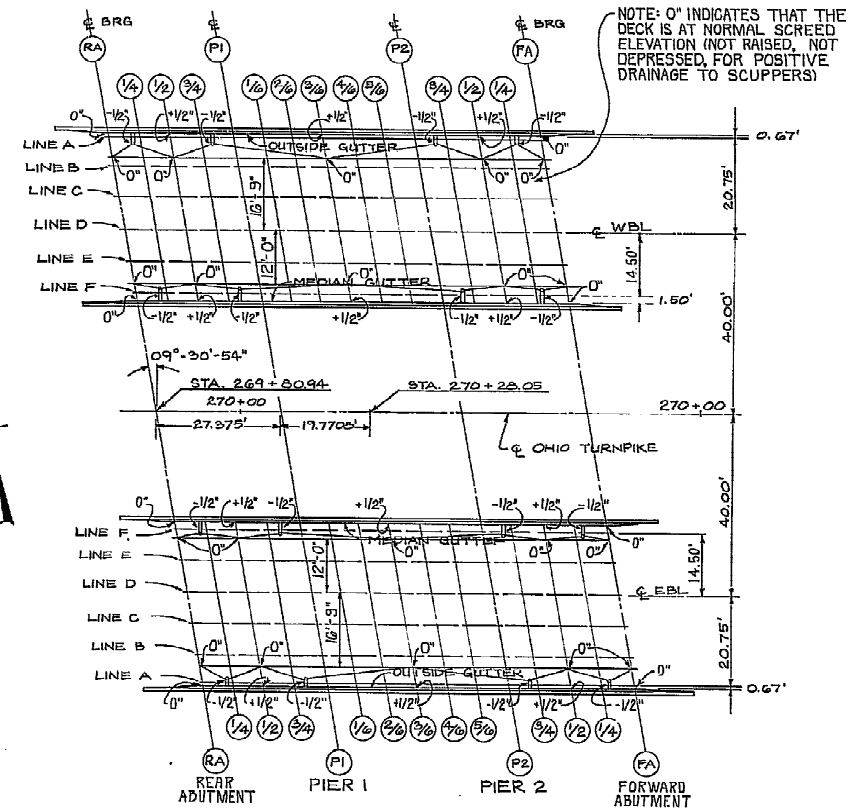
NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE			
EXPANSION DAMS			
OHIO TURNPIKE OVER S.R.99			
RACKOFF ENGINEERS, INC.			
ENGINEERS - CONSULTANTS			
COLUMBUS			OHIO
DESIGNED R.S.D.	CHECKED RAK	DATE 3-2-84	
DRAWN J.W.C.	IN CHARGE RAK	SCALE AS NOTED	
CONTRACT NO. RMP 43-84-06 SHEET 11 OF 24			

WEST BOUND LANES

LOCATION	BRG-RA	1/4	1/2	3/4	PIER 1	1/6	2/6	3/6	4/6	5/6	PIER 2	3/4	1/2	1/4	BRG-FA
STATION	269+70.61	269+77.45	269+84.30	269+91.14	269+97.98	270+04.82	270+11.67	270+18.51	270+25.35	270+32.19	270+39.03	270+45.87	270+52.71	270+59.55	270+66.40
REQ'D SCREED ELEVATION	717.03	717.03	717.04	717.04	717.04	717.04	717.05	717.05	717.04	717.04	717.03	717.02	717.02	717.01	717.00
ACT TOP OF STEEL ELEV															
SLAB THICKNESS															
STATION	269+70.72	269+77.57	269+84.41	269+91.25	269+98.09	270+04.93	270+11.77	270+18.61	270+25.45	270+32.29	270+39.13	270+45.97	270+52.81	270+59.65	270+66.50
REQ'D SCREED ELEVATION	717.04	717.04	717.05	717.06	717.07	717.10	717.10	717.09	717.08	717.07	717.06	717.05	717.03	717.01	717.01
ACT TOP OF STEEL ELEV	716.32	716.32	716.33	716.35	716.36	716.38	716.38	716.38	716.37	716.36	716.35	716.32	716.30	716.28	716.26
SLAB THICKNESS	.72	.72	.72	.71	.71	.72	.72	.72	.72	.72	.71	.71	.73	.73	.75
STATION	269+71.77	269+78.61	269+85.45	269+92.29	269+99.13	270+05.97	270+12.81	270+19.65	270+26.49	270+33.33	270+40.17	270+47.01	270+53.85	270+60.69	270+67.53
REQ'D SCREED ELEVATION	717.14	717.14	717.15	717.16	717.17	717.18	717.18	717.17	717.16	717.15	717.14	717.13	717.11	717.09	717.07
ACT TOP OF STEEL ELEV	716.33	716.33	716.33	716.33	716.33	716.33	716.32	716.32	716.32	716.31	716.30	716.29	716.27	716.25	716.23
SLAB THICKNESS	.81	.81	.81	.82	.83	.85	.85	.85	.85	.85	.86	.86	.86	.86	.88
STATION	269+72.95	269+79.79	269+86.63	269+93.47	270+00.31	270+07.15	270+13.99	270+20.83	270+27.67	270+34.51	270+41.35	270+48.19	270+55.03	270+61.87	270+68.71
REQ'D SCREED ELEVATION	717.25	717.26	717.26	717.27	717.28	717.30	717.30	717.29	717.29	717.28	717.27	717.26	717.24	717.22	717.20
ACT TOP OF STEEL ELEV	716.44	716.44	716.44	716.44	716.44	716.45	716.45	716.45	716.45	716.44	716.43	716.42	716.40	716.38	716.36
SLAB THICKNESS	.81	.82	.82	.83	.84	.85	.85	.85	.85	.84	.84	.84	.85	.85	.87
STATION	269+74.20	269+81.04	269+87.88	269+94.72	270+01.56	270+08.40	270+15.24	270+22.08	270+28.92	270+35.76	270+42.60	270+49.44	270+56.28	270+63.12	270+69.96
REQ'D SCREED ELEVATION	717.31	717.31	717.31	717.32	717.33	717.35	717.35	717.34	717.34	717.33	717.32	717.31	717.29	717.27	717.25
ACT TOP OF STEEL ELEV	716.55	716.56	716.56	716.55	716.56	716.56	716.56	716.55	716.55	716.55	716.54	716.53	716.52	716.50	716.48
SLAB THICKNESS	.82	.81	.81	.83	.83	.85	.85	.85	.85	.84	.84	.84	.84	.83	.85
STATION	269+75.42	269+82.26	269+89.10	269+95.94	270+02.78	270+09.62	270+16.46	270+23.30	270+30.14	270+36.98	270+43.82	270+50.66	270+57.50	270+64.34	270+71.18
REQ'D SCREED ELEVATION	717.25	717.26	717.26	717.27	717.27	717.29	717.29	717.28	717.27	717.26	717.25	717.24	717.22	717.20	717.18
ACT TOP OF STEEL ELEV	716.45	716.45	716.44	716.44	716.44	716.44	716.44	716.43	716.43	716.43	716.42	716.41	716.40	716.38	716.36
SLAB THICKNESS	.80	.81	.82	.83	.83	.86	.85	.85	.84	.84	.82	.83	.84	.82	.81
STATION	269+76.69	269+83.53	269+90.37	269+97.21	270+04.05	270+10.89	270+17.73	270+24.57	270+31.41	270+38.25	270+45.09	270+51.93	270+58.77	270+65.61	270+72.45
REQ'D SCREED ELEVATION	717.14	717.14	717.15	717.16	717.17	717.18	717.18	717.17	717.16	717.15	717.14	717.13	717.12	717.10	717.08
ACT TOP OF STEEL ELEV	716.32	716.31	716.31	716.32	716.33	716.35	716.35	716.36	716.36	716.35	716.34	716.33	716.32	716.31	716.30
SLAB THICKNESS	.82	.83	.84	.82	.81	.80	.79	.79	.80	.79	.79	.80	.81	.81	.81
STATION	269+77.87	269+84.71	269+91.55	269+98.39	270+05.23	270+12.07	270+18.91	270+25.75	270+32.59	270+39.43	270+46.27	270+53.11	270+59.95	270+66.79	270+73.63
REQ'D SCREED ELEVATION	717.12	717.12	717.12	717.12	717.12	717.13	717.13	717.13	717.13	717.12	717.11	717.10	717.09	717.08	717.07
ACT TOP OF STEEL ELEV															
SLAB THICKNESS															

EAST BOUND LANES

LOCATION	BRG-RA	1/4	1/2	3/4	PIER 1	1/6	2/6	3/6	4/6	5/6	PIER 2	3/4	1/2	1/4	BRG-FA
STATION	269+84.74	269+91.58	269+98.42	269+105.26	270+12.10	270+18.94	270+25.78	270+32.62	270+39.46	270+46.30	270+53.14	270+60.00	270+66.84	270+73.68	270+80.52
REQ'D SCREED ELEVATION	717.12	717.12	717.12	717.12	717.12	717.13	717.13	717.13	717.12	717.11	717.10	717.10	717.09	717.09	717.08
ACT TOP OF STEEL ELEV															
SLAB THICKNESS															
STATION	269+85.15	269+91.99	269+98.83	269+105.67	270+12.55	270+19.39	270+26.23	270+33.07	270+39.91	270+46.75	270+53.59	270+60.43	270+67.27	270+74.11	270+80.95
REQ'D SCREED ELEVATION	717.14	717.16	717.17	717.17	717.18	717.20	717.21	717.23	717.20	717.18	717.16	717.15	717.13	717.12	717.10
ACT TOP OF STEEL ELEV	716.37	716.36	716.36	716.39	716.33	716.32	716.32	716.32	716.32	716.33	716.32	716.31	716.30	716.29	716.27
SLAB THICKNESS	.77	.80	.81	.78	.85	.88	.89	.91	.88	.85	.84	.84	.83	.83	.83
STATION	269+86.39	269+93.23	269+100.07	269+106.91	270+13.00	270+19.84	270+26.68	270+33.52	270+40.36	270+47.20	270+54.04	270+60.88	270+67.72	270+74.56	270+81.40
REQ'D SCREED ELEVATION	717.26	717.27	717.28	717.29	717.30	717.31	717.32	717.34	717.32	717.30	717.28	717.26	717.25	717.23	717.21
ACT TOP OF STEEL ELEV	716.49	716.48	716.47	716.46	716.45	716.45	716.44	716.44	716.44	716.43	716.42	716.42	716.41	716.40	716.39
SLAB THICKNESS	.79	.81	.83	.85	.87	.88	.89	.92	.90	.89	.87	.86	.85	.84	.83
STATION	269+87.61	269+94.45	269+101.29	269+108.13	270+14.45	270+21.29	270+28.13	270+34.97	270+41.81	270+48.65	270+55.49	270+62.33	270+69.17	270+76.01	270+82.85
REQ'D SCREED ELEVATION	717.37	717.38	717.39	717.40	717.41	717.42	717.44	717.46	717.43	717.41	717.39	717.37	717.36	717.34	717.32
ACT TOP OF STEEL ELEV	716.58	716.57	716.57	716.57	716.56	716.55	716.55	716.55	716.54	716.54	716.54	716.54	716.53	716.53	716.51
SLAB THICKNESS	.83	.85	.86	.87	.89	.91	.93	.95	.93	.91	.89	.87	.87	.85	.85
STATION	269+88.82	269+95.66	269+102.50	269+109.34	270+15.90	270+22.74	270+29.58	270+36.42	270+43.26	270+50.10	270+56.94	270+63.78	270+70.62	270+77.46	270+84.30
REQ'D SCREED ELEVATION	717.26	717.28	717.29	717.29	717.31	717.32	717.34	717.36	717.33	717.31	717.29	717.27	717.26	717.24	717.21
ACT TOP OF STEEL ELEV	716.46	716.46	716.46	716.46	716.46	716.46	716.45	716.45	716.45	716.44	716.44	716.43	716.42	716.41	716.39
SLAB THICKNESS	.84	.85	.86	.87	.87	.89	.91	.93	.90	.88	.87	.86	.85	.84	.83
STATION	269+90.04	269+96.88	269+103.72	269+110.56	270+17.35	270+24.19	270+31.03	270+37.87	270+44.71	270+51.55	270+58.39	270+65.23	270+72.07	270+78.91	270+85.75
REQ'D SCREED ELEVATION	717.14	717.16	717.17	717.17	717.18	717.20	717.21	717.23	717.20	717.18	717.16	717.14	717.13	717.11	717.09
ACT TOP OF STEEL ELEV	716.35	716.34	716.34	716.34	716.34	716.35	716.35	716.32	716.32	716.31	716.30	716.29	716.28	716.27	716.26
SLAB THICKNESS	.83	.86	.87	.87	.88	.89	.91	.93	.92	.91	.90	.89	.89	.88	.85
STATION	269+91.26	269+98.10	269+104.94	269+111.78	270+18.80	270+25.64	270+32.48	270+39.32	270+46.16	270+53.00	270+59.84	270+66.68	270+73.52	270+80.36	270+87.20
REQ'D SCREED ELEVATION	717.08	717.06	717.07	717.08	717.08	717.10	717.11	717.13	717.10	717.08	717.06	717.05	717.03	717.01	716.99
ACT TOP OF STEEL ELEV	716.36	716.36	716.37	716.37	716.35	716.37	716.38	716.37	716.36	716.36	716.35	716.35	716.34	716.33	716.32
SLAB THICKNESS	.73	.74	.75	.75	.76	.77	.77	.80	.78	.76	.75	.74	.73	.72	.71
STATION	269+92.48	269+99.32	269+106.16	269+113.00	270+20.25	270+27.09	270+33.93	270+40.77	270+47.61	270+54.45	270+61.29	270+68.13	270+74.97	270+81.81	270+88.65
REQ'D SCREED ELEVATION	717.03	717.04	717.04	717.05	717.05	717.04	717.04	717.04	717.03	717.02	717.01	717.00	717.00	716.99	716.98
ACT TOP OF STEEL ELEV															
SLAB THICKNESS															



SCREED PLAN
SCALE: 1/16" = 1'-0"

NOTE: THE ELEVATIONS GIVEN IN THE TABLE ARE CONTROL ELEVATIONS TO WHICH SCREEDS MUST BE SET. THE ALLOWANCE FOR ANTICIPATED DEAD LOAD DEFLECTION DUE TO THE WEIGHT OF CONCRETE HAS BEEN ADDED.

IN ADDITION TO THE SCREED TABLE, THE SCUPPERS SHALL BE DEPRESSED 1/2" AND THE GUTTER ELEVATION AT THE MIDDLE OF THE MIDDLE SPAN SHALL BE RAISED 1/2" TO CREATE A MORE POSITIVE DRAINAGE PATTERN TO THE SCUPPERS, AS SHOWN ON SCREED PLAN.

NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE			
SCREED ELEVATIONS TABLE, SCREED PLAN			
OHIO TURNPIKE OVER S.R. 99			
RACKOFF ENGINEERS, INC.			
ENGINEERS - CONSULTANTS			
COLUMBUS	DESIGNED J.R.D.	CHECKED DR.	DATE 3-2-84
	DRAWN C-H	IN CHARGE RAK	SCALE AS NOTED
CONTRACT NO. RMP-43-84-06 SHEET 12 OF 24			

ABUTMENTS

MARK	NO.	LENGTH	WEIGHT	SHAPE	WB RA	BR FA	ES RA	BR FA	BENDING DIAGRAMS
A401	8	10'-9"	55	BT	2	2	2	2	
A402	8	8'-5"	45	BT	2	2	2	2	
A501	72	7'-0"	526	S	18	18	18	18	
A502	4	6'-0"	25	S	1	1	1	1	
A503	24	6'-7"	165	BT	6	6	6	6	
A510	4	11'-0"	46	S	1	1	1	1	
A512	8	9'-9"	81	S	2	2	2	2	
A513	8	10'-3"	111	S	2	2	2	2	
A520	8	10'-8"	89	S	2	2	2	2	
A521	4	11'-5"	45	BT	1	1	1	1	
A522	4	7'-6"	31	S	1	1	1	1	
A523	4	8'-2"	34	BT	1	1	1	1	
A524	4	4'-4"	15	S	1	1	1	1	
A525	4	5'-3"	22	BT	1	1	1	1	
A526	8	8'-3"	69	BT	2	2	2	2	
A601	16	16'-3"	391	BT	4	4	4	4	
A602	24	8'-1"	291	BT	6	6	6	6	
A604	16	13'-2"	316	BT	4	4	4	4	
A601	32	7'-3"	619	S	8	8	8	8	
A602	4	6'-0"	64	S	1	1	1	1	
TOTAL				3,046					

EPOXY COATED REINFORCING STEEL - ABUTMENTS

MARK	NO.	LENGTH	WEIGHT	SHAPE	WB RA	BR FA	ES RA	BR FA	BENDING DIAGRAMS
EA504	80	20'-10"	1738	S	20	20	20	20	
EA505	40	30'-0"	1252	S	10	10	10	10	
EA506	40	11'-8"	487	S	10	10	10	10	
EA507	152	9'-0"	1427	S	36	36	36	36	
EA508	36	9'-8"	363	S	9	9	9	9	
EA509	36	7'-5"	278	S	9	9	9	9	
EA511	4	1'-8"	163	S	1	1	1	1	
EA512	8	3'-9"	31	S	2	2	2	2	
EA513	64	4'-4"	289	S	16	16	16	16	
EA514	32	2'-1"	70	S	8	8	8	8	
EA515	32	2'-8"	89	BT	8	8	8	8	
EA516	24	5'-3"	131	BT	6	6	6	6	
EA517	32	8'-9"	292	S**	8	8	8	8	
EA527	32	8'-5"	281	S**	10	10	10	10	
EA528	36	3'-8"	138	BT	9	9	9	9	
EA529	8	10'-5"	87	S	2	2	2	2	
EA603	24	7'-1"	273	BT	6	6	6	6	
EA604	4	3'-9"	23	BT	1	1	1	1	
EA606	4	9'-0"	54	BT	1	1	1	1	
EA607	4	4'-1"	49	S	2	2	2	2	
EA608	8	4'-1"	49	S	2	2	2	2	
EA609	4	12'-0"	120	BT	1	1	1	1	
EA610	8	4'-1"	49	BT	2	2	2	2	
EA611	8	4'-7"	55	S	2	2	2	2	
EA803	204	9'-0"	4902	S	51	51	51	51	
TOTAL				12,772					

NOTES

- ONE SET OF SIX: VARIES FROM 8'-2" TO 4'-10" - INCREMENT = 8"
 - VARIES FROM 7" TO 9" - INCREMENT = 7/16"
 - VARIES FROM 2" TO 6" - INCREMENT = 1"
 - VARIES FROM 4'-2" TO 7'-10" - INCREMENT = 11"
 - VARIES FROM 5'-4" TO 9'-4" - INCREMENT = 1'-0"
 - VARIES FROM 3'-10" TO 4'-2" - INCREMENT = 1"
- ** APPROXIMATE MEASUREMENT TO BE FIELD VERIFIED.
- ** REINFORCING STEEL TO BE FIELD BENT.

PIERS

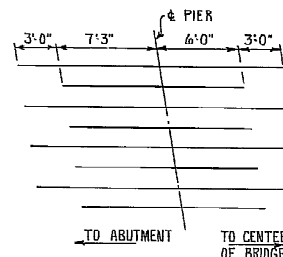
MARK	NO.	LENGTH	WEIGHT	SHAPE	WESTBOUND P1	P2	P1	P2	BENDING DIAGRAMS
SP401	4	16'-8"	1249	BT	1	1	1	1	
P501	4	14'-9"	62	BT	1	1	1	1	
P502	20	11'-8"	235	BT	5	5	5	5	
P801	16	8'-2"	135	BT	4	4	4	4	
P802	16	6'-2"	263	S	4	4	4	4	
P803	8	9'-3"	195	BT	2	2	2	2	
P804	8	6'-8"	142	S	2	2	2	2	
P805	28	4'-6"	326	S	7	7	7	7	
P806	28	6'-1"	453	S	7	7	7	7	
P901	52	19'-5"	3433	S	13	13	13	13	
P902	52	5'-0"	884	BT	13	13	13	13	
TOTAL WEIGHT				7392					

EPOXY COATED REINFORCING STEEL - SUPERSTRUCTURE

MARK	NO.	LENGTH	WEIGHT	SHAPE	WESTBOUND	EASTBOUND	BENDING DIAGRAMS
ES401	200	30'-0"	4008	S	100	100	
ES402	100	30'-0"	2004	BT	50	50	
ES403	100	10'-11"	729	BT	50	50	
ES404	204	16'-3"	2214	S	102	102	
ES501	280	2'-3"	610	BT	130	130	
ES502	260	3'-0"	814	BT	130	130	
ES503	260	5'-3"	1424	BT	130	130	
ES504	330	30'-0"	10,326	S	165	165	
ES505	270	30'-0"	8448	S	135	135	
ES506	90	10'-11"	1025	S	45	45	
ES507	330	12'-2"	4188	S	165	165	
ER501	64	11'-2"	745	S	32	32	
ER502	96	6'-4"	634	S	48	48	
ER503	32	11'-6"	384	S	16	16	
ER504	48	30'-0"	1502	S	24	24	
ER505	16	10'-11"	182	S	8	8	
ES601	330	20'-0"	9913	S	165	165	
ES602	330	22'-8"	11,235	S	165	165	
TOTAL WEIGHT				60,385			

REINFORCING STEEL: REFER TO C.M.S. SECTIONS 106.03, 702, 709.01 THROUGH 709.05 AND 709.06. SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR SAMPLING. RANDOM SAMPLES SHALL BE REPLACED IN THE STRUCTURES BY ADDITIONAL STEEL, SPLICED IN ACCORDANCE WITH 509.08.

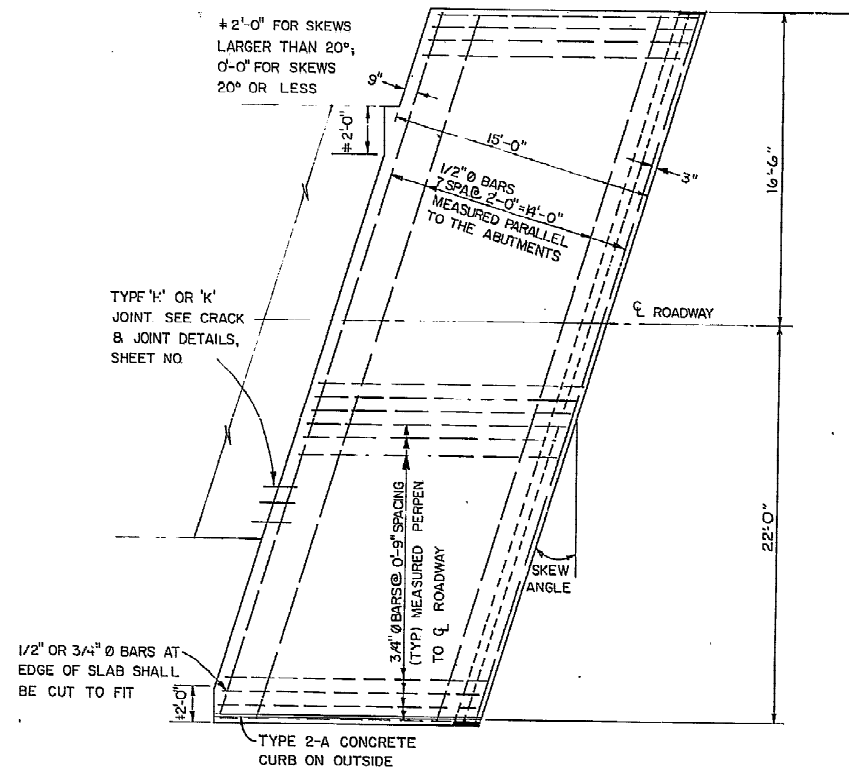
NOTE: "E" PREFIX TO BAR NUMBERS INDICATES EPOXY COATED.



STAGGER DIAGRAM OF ES404 BARS OVER PIERS

NO SCALE

NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION OHIO TURNPIKE REINFORCING STEEL			
OHIO TURNPIKE OVER S.R. 99			
RACKOFF ENGINEERS, INC. ENGINEERS - CONSULTANTS			
COLUMBUS	OHIO	DESIGNED RAK/RSD	CHECKED KWF
DRAWN B.J.M.	IN CHARGE RAK	DATE 3-2-84	SCALE NO SCALE
CONTRACT NO. RMP-43-84-06 SHEET 13 OF 24			



APPROACH SLAB FOR SKEWED BRIDGE

NOTE 1: PREFORMED ELASTOMERIC JOINT SEALER 705 II
(1 1/4" FOR 1/2" JOINT) DEPRESSED 1/8" BELOW
ROADWAY, PLACED IN 1/2" X 2 1/4" GROOVE.

NOTE 2: TYPE A WATERPROOFING SHALL NOT EXTEND ABOVE
THE BOTTOM OF THE GROOVE INTO WHICH THE
PREFORMED ELASTOMERIC 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: TYPE 2-A CURB TO BE INCLUDED IN UNIT PRICE BID FOR
ITEM GII APPROACH SLABS.

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 C COMPRESSIVE STRENGTH 4000' PSI
REINFORCING STEEL ASTM A615, A616 OR A617 - GRADE 60 MIN YIELD STRENGTH
60,000 PSI

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.

PREFORMED ELASTOMERIC JOINT SEALER SHOWN AT THE BRIDGE LIMIT END OF THE
APPROACH SLAB 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.

APPROACH SLAB WIDTH: APPROACH SLABS SHALL BE THE SAME WIDTH AS THE
BRIDGE ROADWAY, UNLESS SHOWN OTHERWISE ON THE PLANS.

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 TYPE OF JOINT FURNISHED.

OHIO TURNPIKE COMMISSION

REINFORCED CONCRETE
APPROACH SLABS

DATE: OCTOBER 1983 SCALE: N.T.S.
RMP: 43-84-06 SHEET 21 OF 24

INDEX OF SHEETS

TITLE.....	B1
SCHEMATIC PLAN.....	B2
TYPICAL SECTIONS.....	B3-4
GENERAL NOTES.....	B5
MAINTENANCE OF TRAFFIC.....	B6-8
GENERAL SUMMARY.....	B17-18
PAVEMENT CALCULATIONS.....	B19
SUPERELEVATION TABLES.....	B20-21
STORM WATER POLLUTION PREVENTION PLAN.....	B22
OHIO TURNPIKE PLAN & PROFILE SHEETS.....	B23-39, B40-41, 41A, 41B
BILLINGS ROAD PLAN & PROFILE SHEETS.....	B40-41, 41A, 41B

OHIO TURNPIKE CROSS SECTIONS.....	B44-65
BILLINGS ROAD CROSS SECTIONS.....	B66-73

MISC. DETAILS.....	B78
UNDERDRAIN DETAILS.....	B79
OHIO TURNPIKE MISC. DETAILS.....	B81-84
TRAFFIC CONTROL.....	B85-90
BILLINGS ROAD STRUCTURE.....	B91-106
STRUCTURE GENERAL NOTES.....	B107

N&S RAILROAD BRIDGE.....	B112-113, 113A, 114-120
PORTLAND ROAD BRIDGE.....	B121-123, 123A, 124-138
STATE ROUTE 99 BRIDGE.....	B139-140, 140A, 141-146
BILLINGS ROAD RIGHT OF WAY.....	B147
SOILS.....N&S RR 1-3, PORTLAND RD 1-3, SR99 1-3, & ROADWAY 1-6	

OHIO TURNPIKE COMMISSION STANDARD DRAWINGS

CB-1 CATCH BASIN & SLOPE DETAILS.....	B148
CB-2 CATCH BASIN ADJUSTMENT DETAILS.....	B149
CBR-1 TEMP. CONCRETE BARRIER-SETTING & REMOVAL OPERATIONS.....	B150
CBR-2 TEMP. CONCRETE BARRIER-MAINLINE STORAGE DETAILS.....	B151
CBR-3 CONCRETE BARRIER PLAN & DETAILS.....	B152
CJ-1 CRACK & JOINT DETAILS (D,H,J,K,L, BLOW-UPS).....	B153
CJ-2 CRACK & JOINT DETAILS (EXP., 3 CORNER).....	B154

GR-2 GUARDRAIL MODIFICATIONS @ OVERHEAD SIGNS.....	B156
RPM-1 RAISED PAVEMENT MARKER & STRIPING LAYOUTS.....	B157
TCR-2 TRAFFIC CONTROL.....	B158
TCR-9 TRAFFIC CONTROL.....	B159
TCR-11 TRAFFIC CONTROL.....	B160
TCR-12 TRAFFIC CONTROL.....	B161
TCR-13 SONIC MAP ALERT PATTERN.....	B162
PED-1 PREFABRICATED EDGE DRAIN.....	B162A

APPROSLA REINFORCED CONCRETE APPROACH SLAB.....	B163
APPROSLA2 REINFORCED CONCRETE APPROACH SLAB SECTIONS & DETAILS.....	B164
CL-1A CHAIN LINK SAFETY FENCE (ALL ALUMINUM) DETAILS, TYPE I.....	B165
CL-2A CHAIN LINK SAFETY FENCE (ALL ALUMINUM) DETAILS, TYPE II.....	B166
CONCEND PRECAST FLARED END SECTION.....	B167
DECKJNT1 DECK JOINT DETAILS.....	B168
DECKJNT2 DECK JOINT DETAILS.....	B169
GR-1A GUARDRAIL INSTALLATION DETAILS AT OBSTRUCTIONS.....	B170
OTCBARTR MEDIAN BARRIER TRANSITION AND MEDIAN WALL DETAILS.....	B171

SHEETS NOT USED: B9-16, B42-43, B74-77, B108-111, B 82, B 80, B155

FIBER OPTIC CABLE AS-BUILT DRAWINGS

LCI COMMUNICATIONS CORP. - SHEETS 42 THRU 46

OHIO DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS

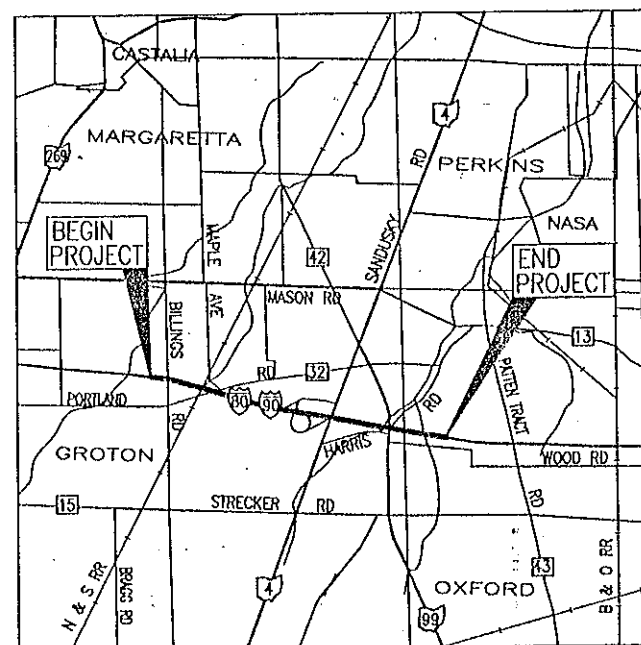
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BP-3.1 2-21-92	HL-10.12 5-1-87	TC-21.20 9-1-92	TC-51.12 7-3-94
GR-1.1 5-6-91	HL-10.13 5-1-87	TC-21.40 9-1-92	TC-52.10 4-3-79
GR-1.2 10-30-92	HL-20.11 5-1-87	TC-21.41 9-1-92	TC-52.20 4-3-79
GR-1.3 2-21-92	HL-20.13 5-1-87	TC-22.10 9-1-92	TC-72.20 2-26-82
GR-2.1 5-6-91	HL-30.11 5-1-87	TC-22.20 9-1-92	TC-83.10 3-18-92
GR-3.1 5-6-91	HL-30.21 5-1-87	TC-31.21 9-1-92	MT-97.10 11-14-86
GR-4.2 5-6-91	HL-30.22 5-1-87	TC-32.10 9-1-92	MT-99.10 7-1-92
GR-8.1 1-31-94	HL-30.31 5-1-87	TC-32.11 9-1-92	MT-101.60 7-1-92
MC-1 6-13-69	HL-50.11 5-1-87	TC-41.10 8-29-84	MT-105.10 7-1-92
MC-9.1 10-30-92	HL-60.11 5-1-87	TC-41.20 6-21-94	MT-105.11 7-1-92
MC-9.2 5-6-91	HL-60.12 5-1-87	TC-41.40 6-18-79	
MC-9.3 10-30-92	TC-7.65 3-1-79	TC-42.10 8-19-77	
MC-9.4 10-30-92	TC-9.10 4-24-80	TC-42.20 3-26-79	
I-3A&B 4-1-80	TC-12.30 1-20-84	TC-51.10 1-20-84	
MC-4 7-26-76	TC-18.26 5-31-79		

OHIO TURNPIKE COMMISSION

THE JAMES W. SHOCKNESSY OHIO TURNPIKE

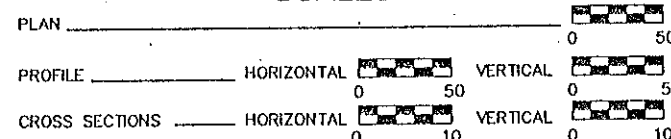
CONTRACT 77-96-03 PART B
3 RD. LANE CONSTRUCTION
MP. 108.65 TO MP. 111.73

STATION 134+34 TO STATION 298+02 ERIE COUNTY



2 WORKING DAYS
BEFORE YOU DIG
Call 800-362-2764 (Toll Free)
OHIO UTILITIES PROTECTION SERVICE
CALL JAYTEL - (419) 884-0400
(LCI FIBER OPTIC CABLE)
OHIO TURNPIKE DIVISION SUPERINTENDENT
(419) 862-2922
(ROADWAY LIGHTING CABLE)

SCALES



Robert O. Brunner

APPROVED FOR
THE OHIO TURNPIKE COMMISSION
BY

CHIEF ENGINEER

DATE

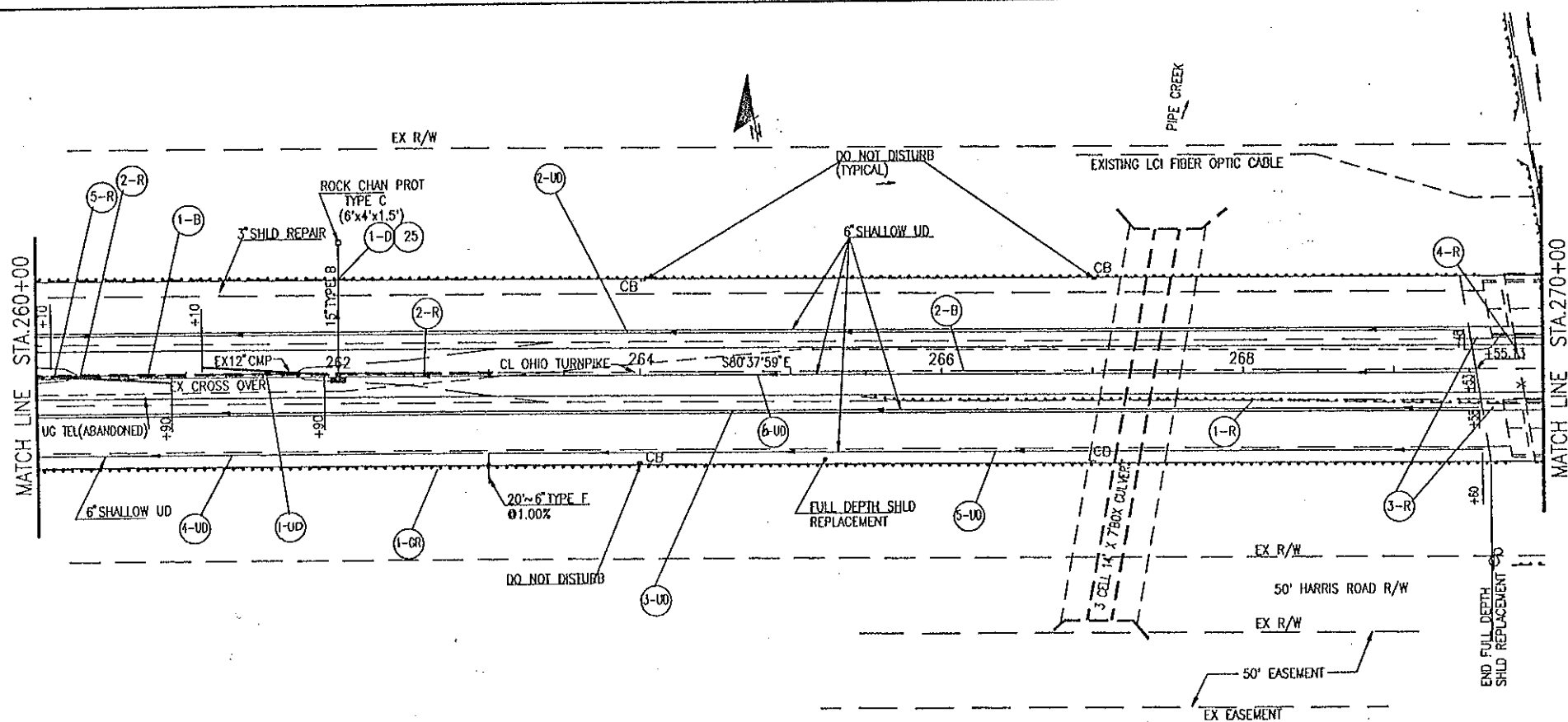
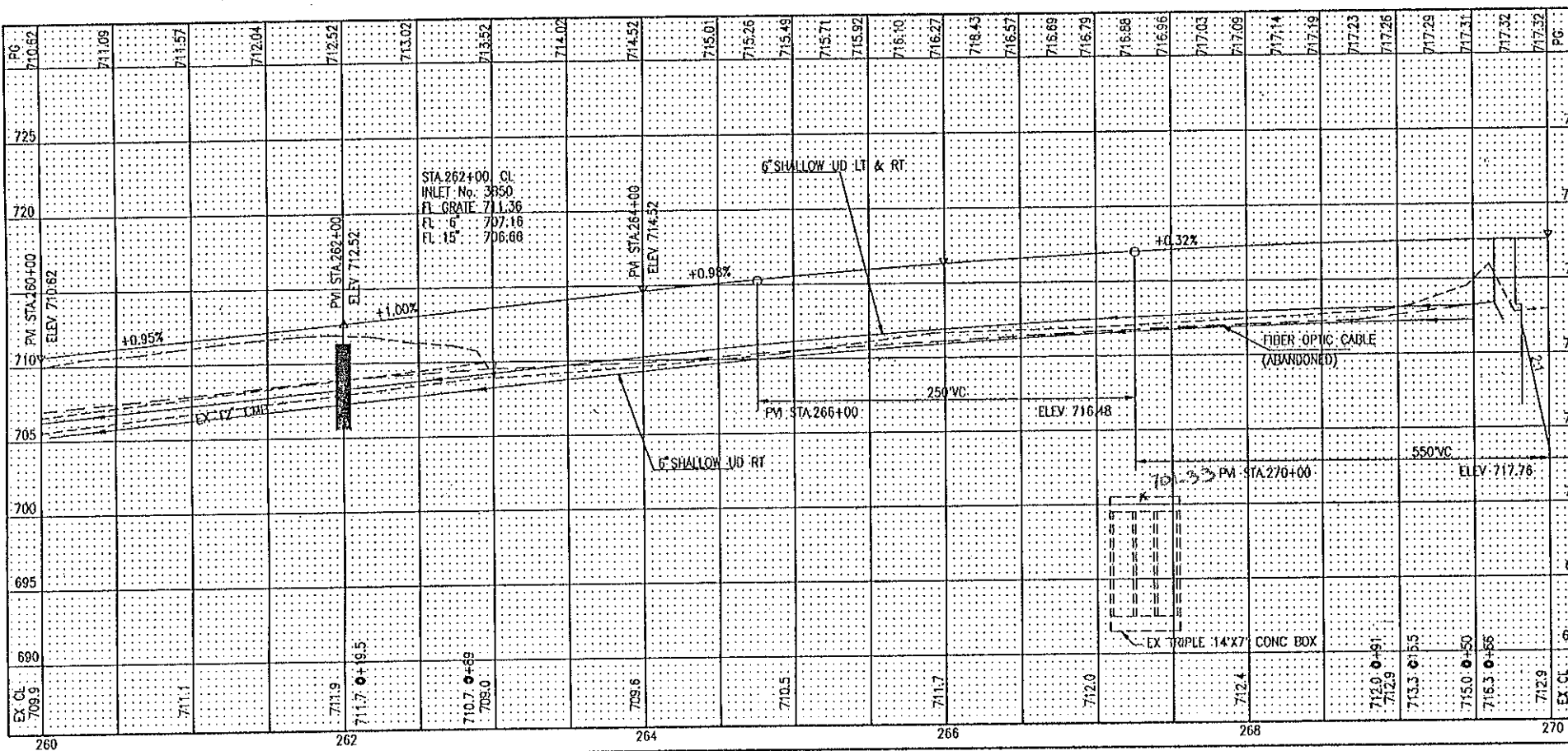
RECOMMENDED FOR APPROVAL
BY
URS CONSULTANTS, INC.

REVIEW CONSULTANT

DATE

PLAN PREPARED BY
FRANKLIN CONSULTANTS, INC.
2700 EAST DUBLIN-GRANVILLE ROAD
COLUMBUS, OHIO 43231
(614) 891-6000 FAX: (614) 891-6003

DESIGN CONTRACT NO. 71-95-14

[illegible]

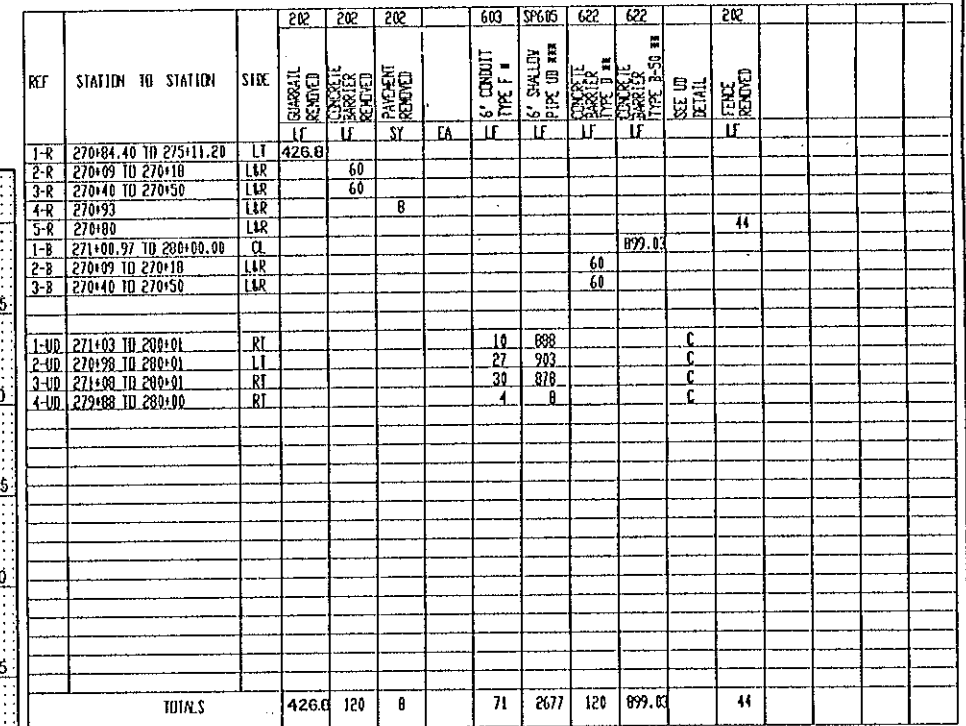
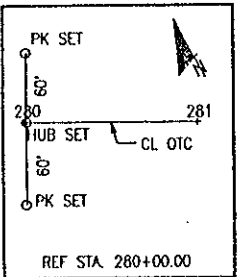
REF	STATION TO STATION	SIDE	GUARDRAIL REMOVED LF	PIPE REMOVED 24' & UNDER LF	GUARDRAIL REQUIRED FOR RE-USE LF	PAVEMENT REMOVED SY	6" CONDUIT TYPE F # LF	6" SHALLOW PIPE UD # LF	CONCRETE BARRIER TYPE B-SH # LF	GUARDRAIL REBUILD LF	ANCHOR ASSEMBLY TYPE # EA	PORTABLE CONDUIT # TYPE B-SH LF	GUARD POST REMOVED EA	FENCE REMOVED LF
1-R	269+46.90 TO 269+74.80	RT	402.9											
2-R	269+00.00 TO 269+02.70	CL		303										
3-R	269+52	LWR				8								
4-R	269+85	LWR												44
1-B	269+00 TO 269+90	CL						10				80		
2-B	269+10 TO 269+55.13	CL						745.13				80		
1-LR	269+00 TO 269+75	RT			975					950	1			
1-UD	269+00 TO 269+95	RT						195						
2-UD	269+00 TO 269+48	LI						948						
3-UD	269+00 TO 269+58	RT						938						
4-UD	269+00 TO 269+98	RT						290						
5-UD	269+00 TO 269+60	RT					20	660						
6-UD	269+00 TO 269+53	RT					10	743						
5-R	269+00 TO 269+75	CL											12	
TOTALS			402.9	303	975	8	30	3002	755.13	950	1	160	12	44

* 707.17 NON PERFORMED ASTM D 3034
 (SDR-35), SS931 OR SS944
 0 AS PER PLAN
 *** 707.15 W/FABRIC WRAP
 / ET-2000, OPTION A (ALL POSTS IN FOUNDATION TUBES)
 ### FURNISHED BY COMMISSION
 5 ☒ BORED OR JACKED
 NOTES
 FOR 5-YD UNDERDRAIN DETAILS SEE SHEET B79 DETAIL H.
 1-GR ET-2000 BEGINS @259+75
 SAW CUT FOR 3-R IS 28' L & R OF CL
 CALCULATIONS
 1-D ITEM 601

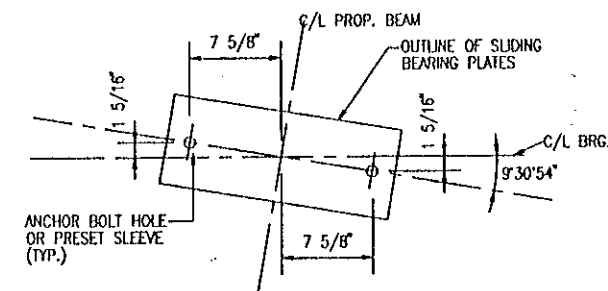
$$[(6 \times 4 \times 1.5) \div 27] = 1.33 \text{ CY}$$
 3-R ITEM 202

$$[2(4.75 \times 15.21) \div 9] = 8.03 \text{ SY}$$

NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
PLAN AND PROFILE			
STA.260+00 TO STA.270+00			
FRANKLIN CONSULTANTS, INC.			
DESIGNED: PCB	CHECKED: RDB	DATE: 12/95	
DRAWN: SAM	IN CHARGE: RDB	SCALE: 1"=50'	
CONTRACT 77-96-03		SHEET B36 OF 171	



NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
PLAN AND PROFILE			
STA.270+00 TO STA.280+00			
FRANKLIN CONSULTANTS, INC.			
DESIGNED: ROB	CHECKED: ROB	DATE: 12/95	
DRAWN: SAM	IN CHARGE: ROB	SCALE: 1"=50'	
CONTRACT 77-96-03		SHEET 837 OF 171	



SEE SHEET B142 FOR SECTIONS A-A, B-B & C-C.

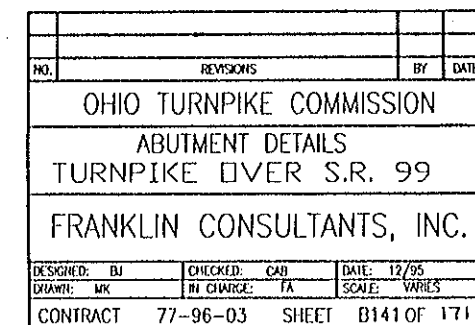
BRIDGE SEAT REINFORCING:
REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT SHALL BE ACCURATELY PLACED TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES OR THE PRE-SETTING OF BEARING ANCHORS.

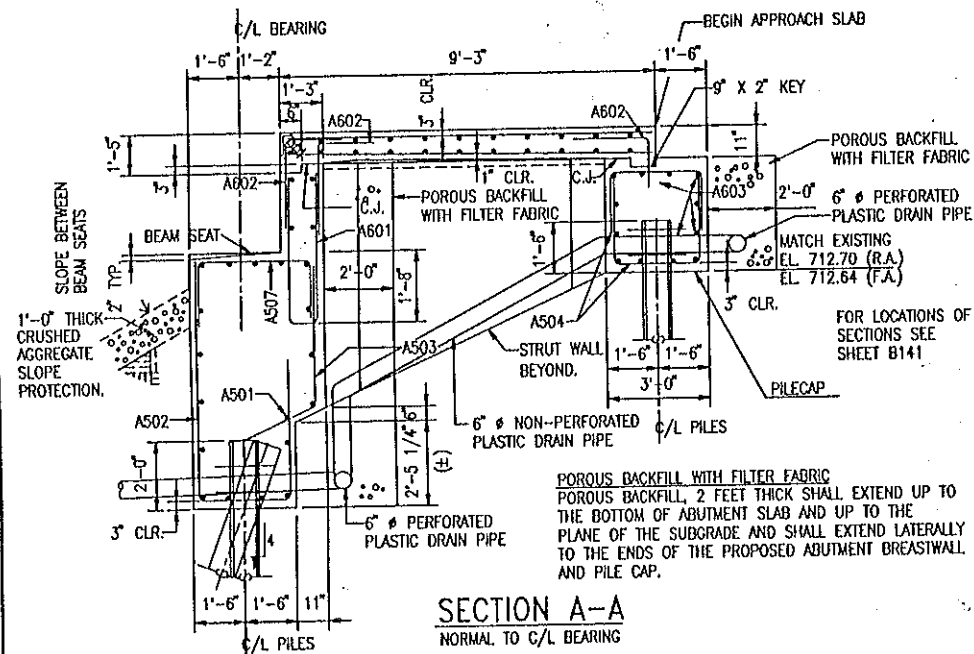
BEAM SEAT SURFACE UNDER BEARINGS
SPECIAL CARE SHALL BE TAKEN TO FINISH THE CONCRETE UNDER BEARINGS TO A FLAT, LEVEL SURFACE. THE CONCRETE SURFACE SHALL BE STEEL TROWEL FINISHED WITHOUT BRUSHING AND THE FLATNESS OF THE FINISHED SURFACE SHALL NOT VARY FROM A STRAIGHT EDGE LAD ON THE SURFACE IN ANY DIRECTION 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.

REINFORCING STEEL:
NEW REINFORCING STEEL MAY REQUIRE FIELD CUTTING
OR BENDING TO BE PROPERLY FITTED. PAYMENT SHALL
BE INCLUDED IN SP509.

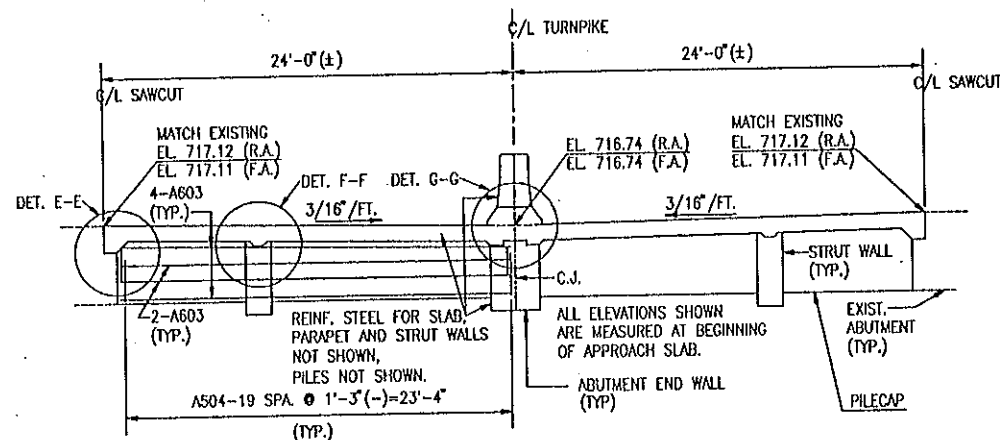
LEGEND

C.J. = CONSTRUCTION JOINT
PROP. = PROPOSED
EXIST. = EXISTING
R.A. = REAR ABUTMENT
F.A. = FORWARD ABUTMENT
EQ. SPA. = EQUAL SPACES
I = VERTICAL PILE
I = BATTERED PILE
E.E. = EACH END
U.N.O. = UNLESS NOTED OTHERWISE
T & B = TOP & BOTTOM
BRG = BEARING

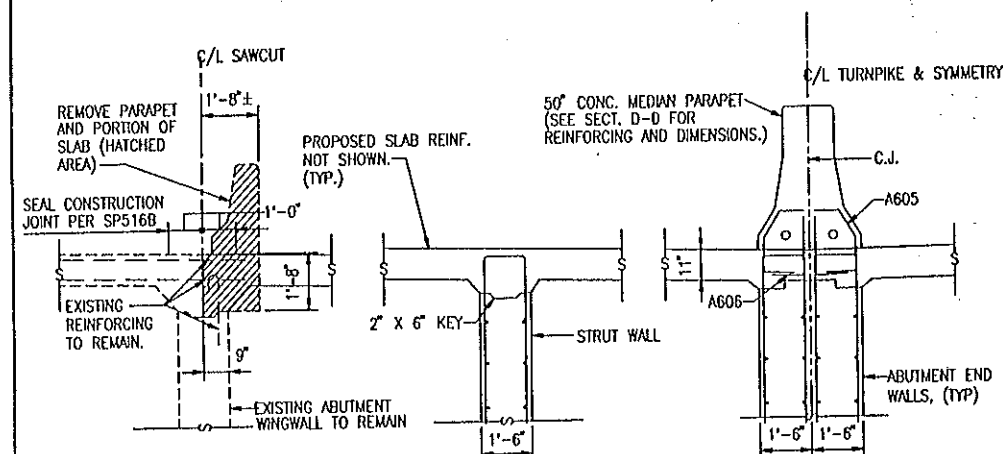




SECTION A-A
NORMAL TO C/L BEARING



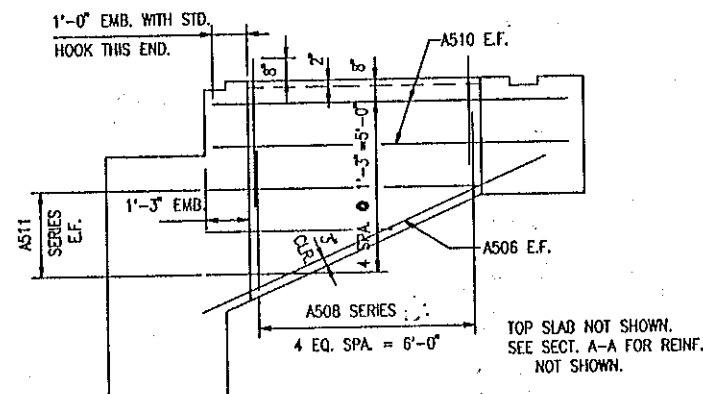
SECTION C-C



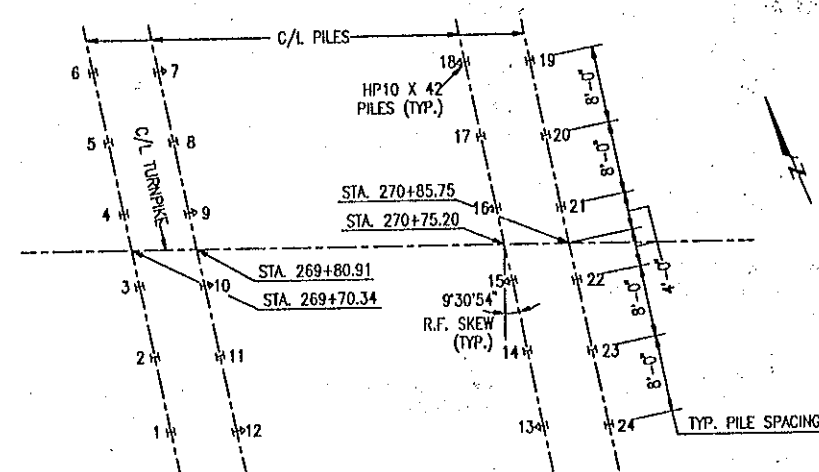
DETAIL E-E

DETAIL F-F

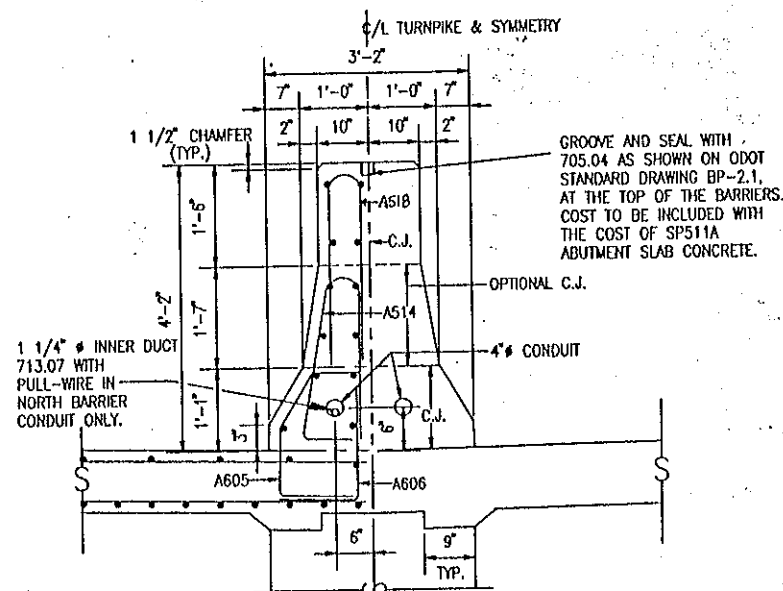
DETAIL G-G



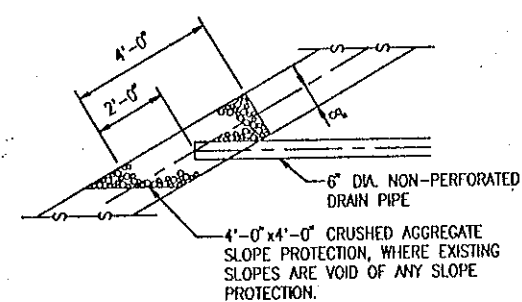
SECTION B-B
TYP. @ STRUT WALLS AND END WALLS



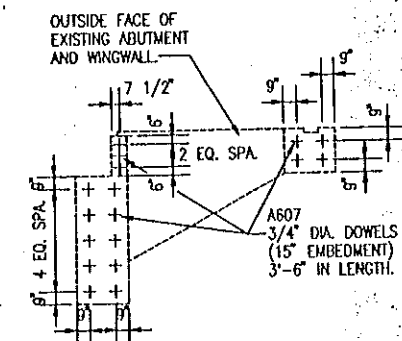
PILE LAYOUT PLAN
N.T.S.



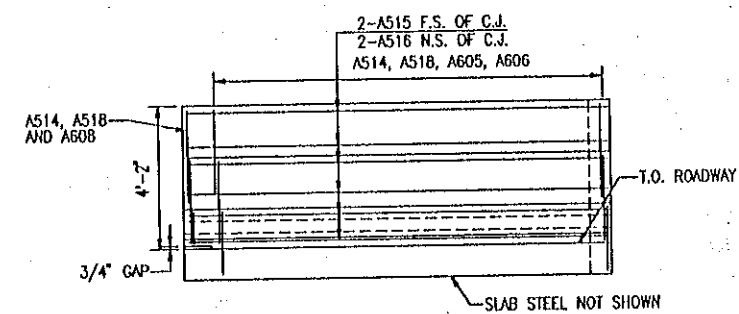
SECTION D-D



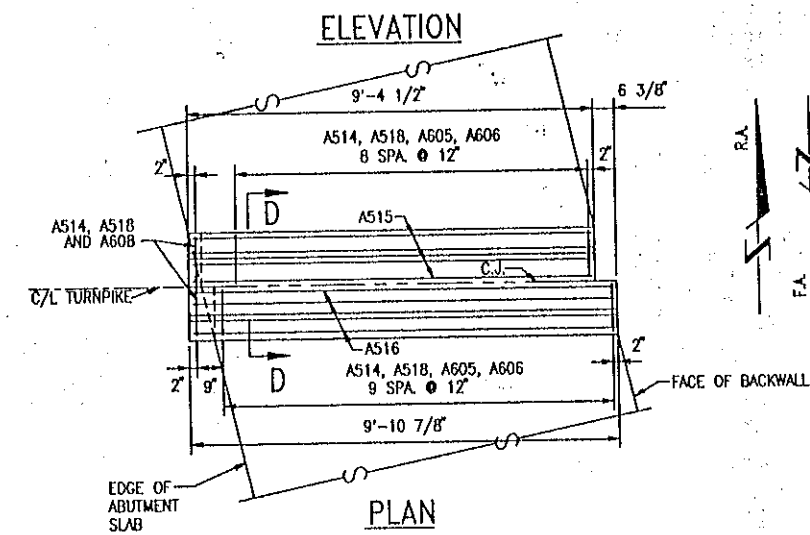
TYPICAL DRAIN OUTLET DETAIL



DOWEL LAYOUT DETAIL



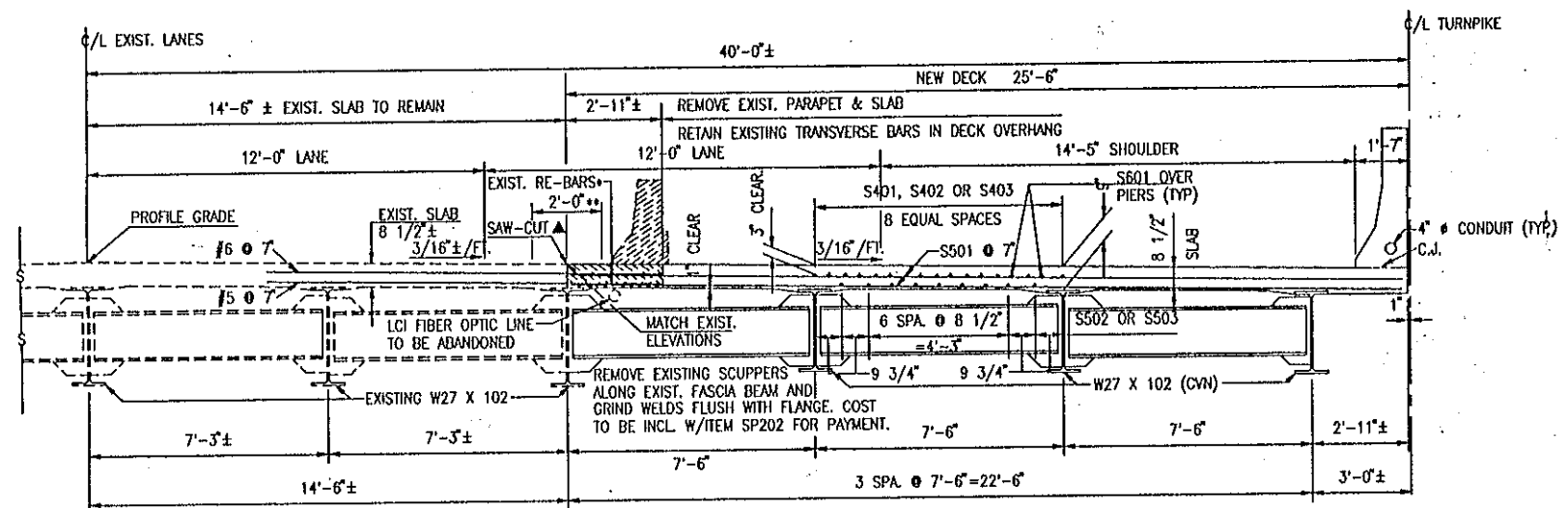
ELEVATION



PLAN
MEDIAN PARAPET DETAILS

LEGEND
C/L = CENTERLINE
CLR. = CLEARANCE
C.J. = CONSTRUCTION JOINT
F.A. = FORWARD ABUTMENT
R.A. = REAR ABUTMENT
REINF. = REINFORCING
O.C. = ON CENTER
EMB. = EMBEDEDMENT
E.F. = EACH FACE
F.S. = FAR SIDE
N.S. = NEAR SIDE
N.T.S. = NOT TO SCALE
T.O. = TOP OF
I = VERTICAL PILE
D = BATTERED PILE

NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
ABUTMENT DETAILS			
TURNPIKE OVER S.R.99			
FRANKLIN CONSULTANTS, INC.			
DESIGNED: BJ	CHECKED: CB	DATE: 12/95	
DRAWN: WK	IN CHARGE: FA	SCALE: VARIOUS	
CONTRACT	77-96-03	SHEET	B142 OF 171



TRANSVERSE SECTION

EXISTING TRANSVERSE REINFORCING STEEL TO BE CLEANED, EPOXY COATING REPAIRED, AND REUSED. COST TO BE INCIDENTAL TO ITEM 202.

LONGITUDINAL CONSTR. JT. TO BE SEALED AS PER SP5160.

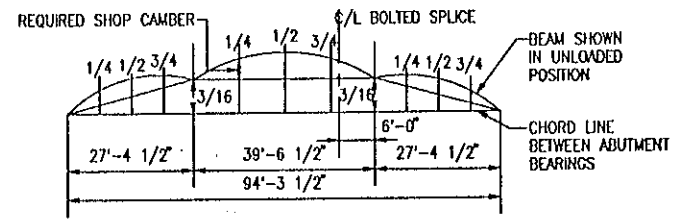
CROSS-HATCHED AREAS TO BE REMOVED. ALL END DIAPHRAGMS MC18 X 58.

HAUNCH WIDTH OF 9 INCHES SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6 AND 12 INCHES.

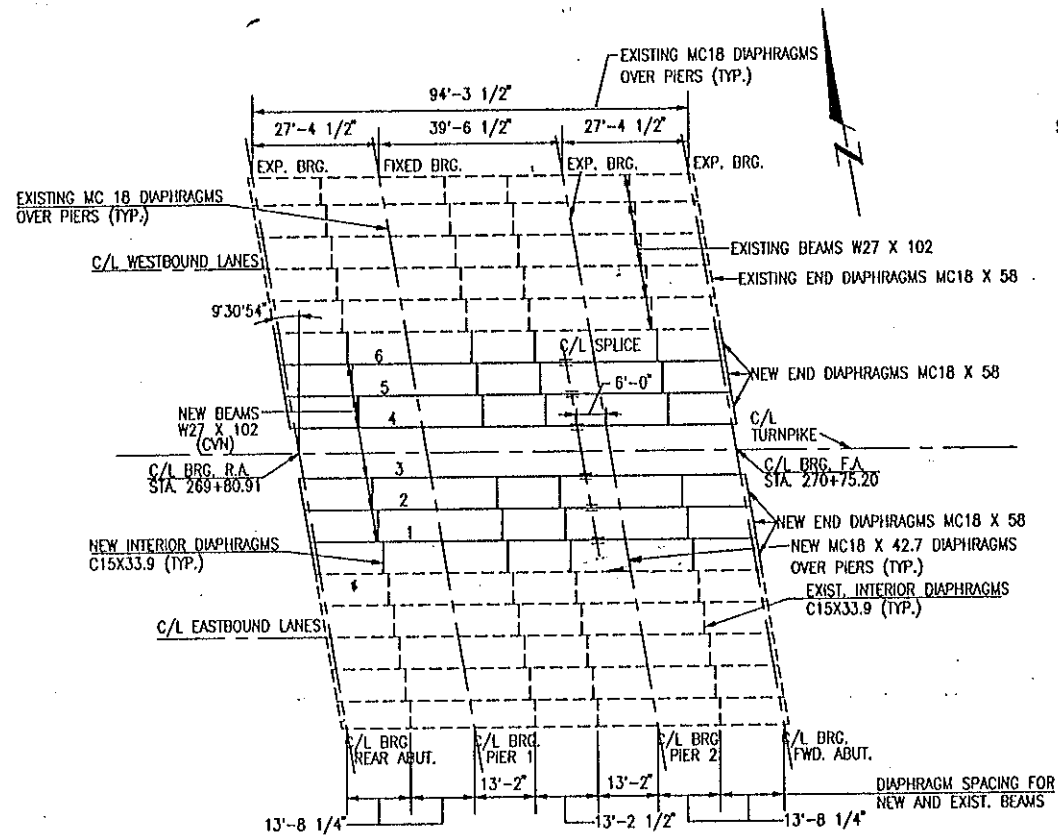
ITEM SP527B FALSEWORK, TEMPORARY BRACING AND PROTECTIVE STRUCTURES PROTECTIVE STRUCTURES FOR CATCHING FALLING MATERIAL FROM THE PLACING OF THE DECK FORMWORK AND THE CONCRETE POURING OPERATION SHALL BE ERECTED IMMEDIATELY AFTER THE STEEL BEAMS ARE PLACED.

TRANSVERSE CONSTRUCTION JOINTS SHALL NOT BE PERMITTED IN THE DECK SLAB.

DEFLECTION AND CAMBER						
	END SPANS			CENTER SPAN		
	1/4 POINT	1/2 POINT	3/4 POINT	1/4 POINT	1/2 POINT	SPLICE
DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	0	0	1/16	1/8	1/16
ADJUSTMENT REQUIRED FOR VERT. CURVE	0	0	0	0	0	0
REQUIRED SHOP CAMBER	0	0	0	1/16	1/8	1/16

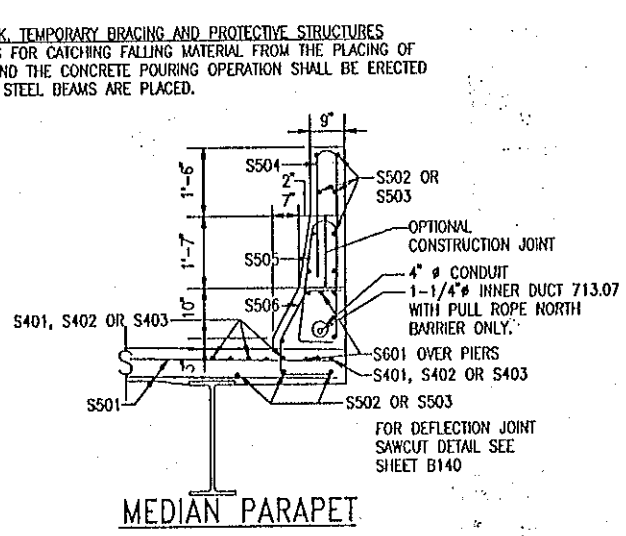


BEAM LAYOUT DIAGRAM

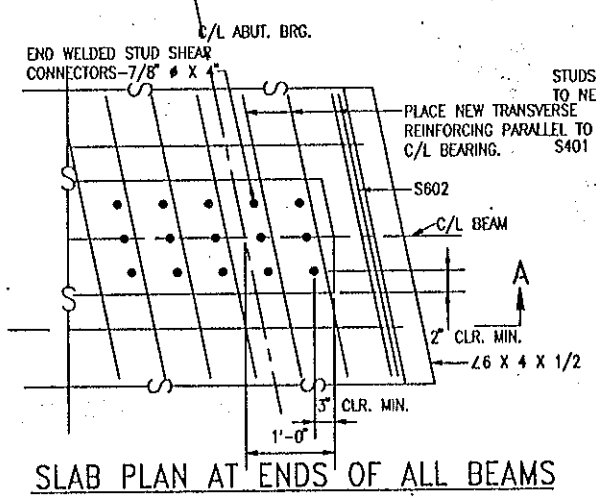


FRAMING PLAN

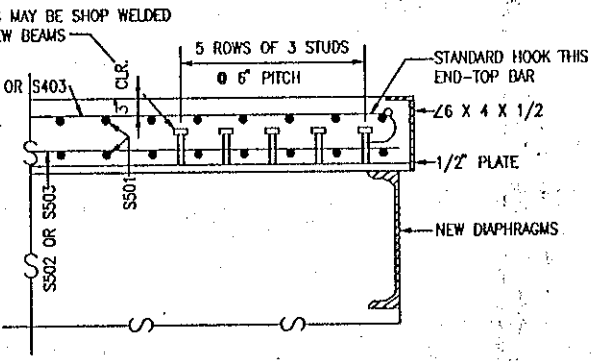
NEW BEARINGS
PIER 1, B-100 BOLSTERS
PIER 2, R-100 ROCKERS
ABUT. BEARINGS
SEE SHEET B145



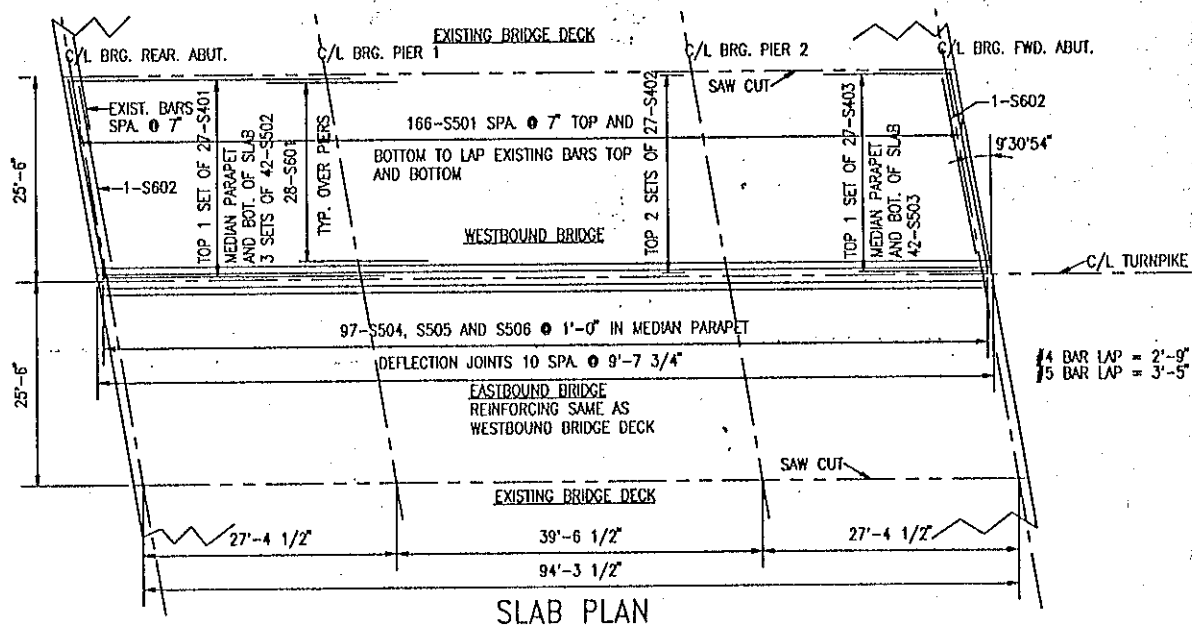
MEDIAN PARAPET



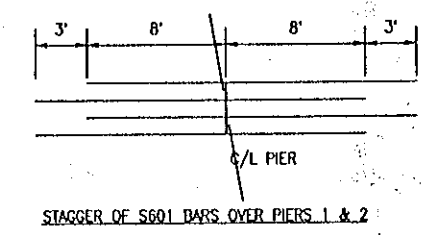
SLAB PLAN AT ENDS OF ALL BEAMS



SECTION A-A



SLAB PLAN



NO.	REVISIONS	BY	DATE
1	OHIO TURNPIKE COMMISSION		
2	SUPERSTRUCTURE DETAILS		
3	TURNPIKE OVER S.R. 99		
4	FRANKLIN CONSULTANTS, INC.		
5	DESIGNED: CAB	CHECKED: BJ	DATE: 12/95
6	DRAWN: MK	IN CHARGE: TA	SCALE: VARIES
7	CONTRACT 77-96-03	SHEET B144 OF 171	

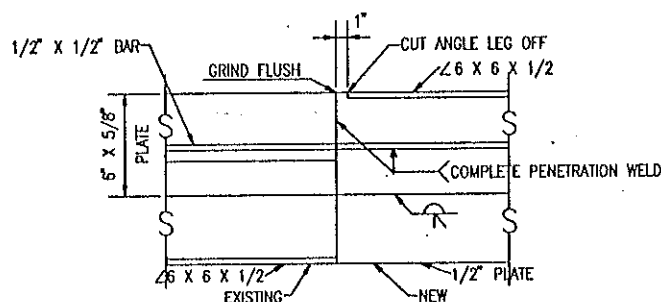


HIGH STRENGTH BOLTS
SHALL BE 1" DIAMETER FOR BEAM SPLICES.
ALL OTHER 7/8" DIAMETER AS NOTED. THE
BOLTS SHALL BE GALVANIZED AND CONFORM
TO ASTM A325, SP513 AND SP711.

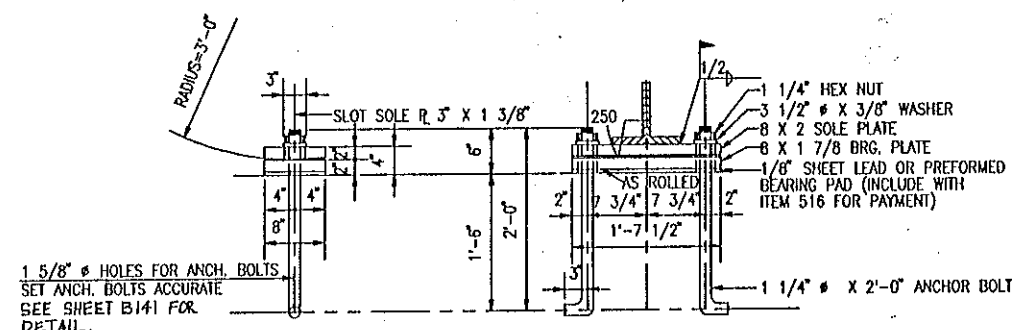
WHERE A SHAPE OR PLATE IS DESIGNATED (CWN) THE MATERIAL SHALL MEET SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.

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.

SEE SHEET B118 FOR CAULKING OF SPLICE DETAIL.



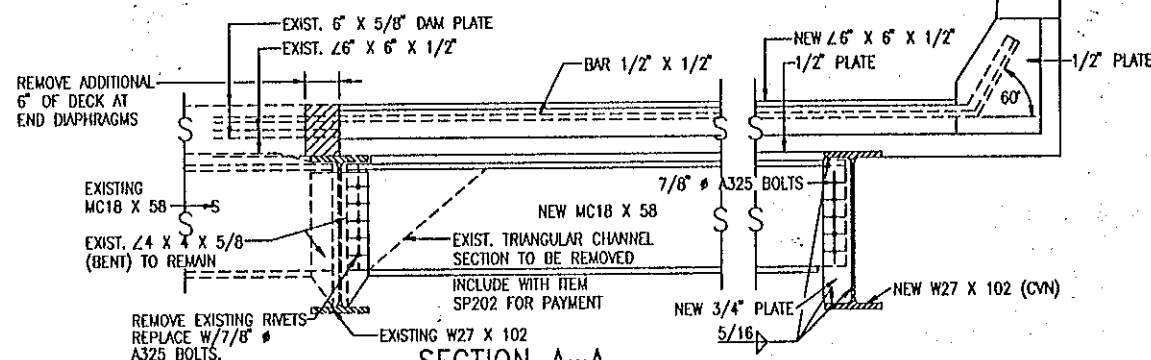
SECTION E-E
DECK SIDE SHOWN, ABUT. SIDE SIMILAR



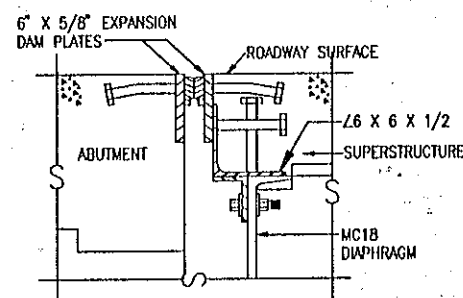
SLIDING EXPANSION BEARINGS AT ABUTMENTS

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

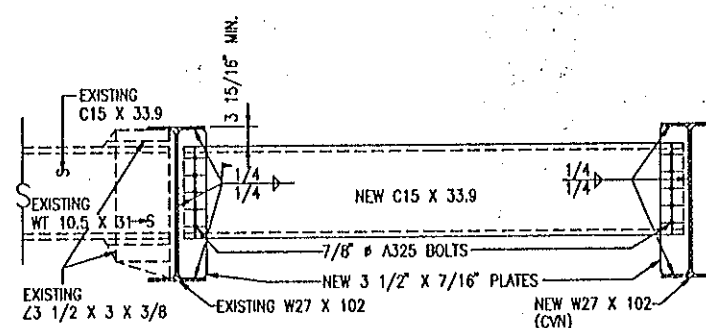
PARTIAL PLAN-END DIAPHRAGMS



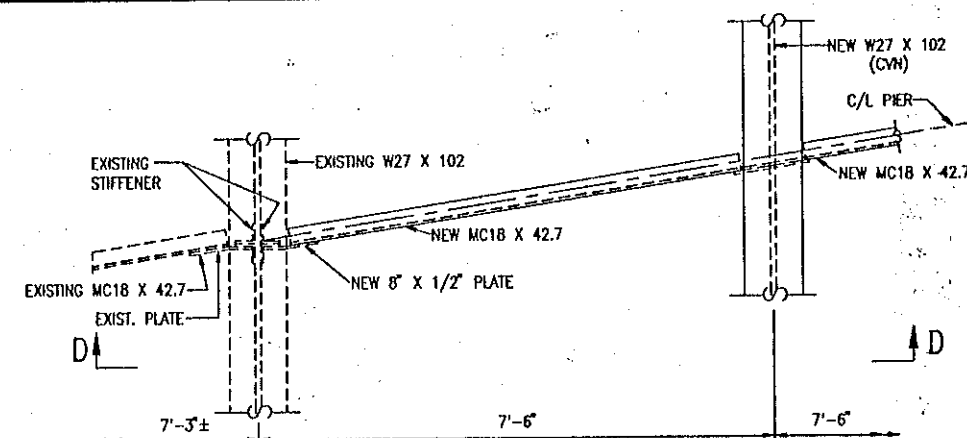
SECTION A-A



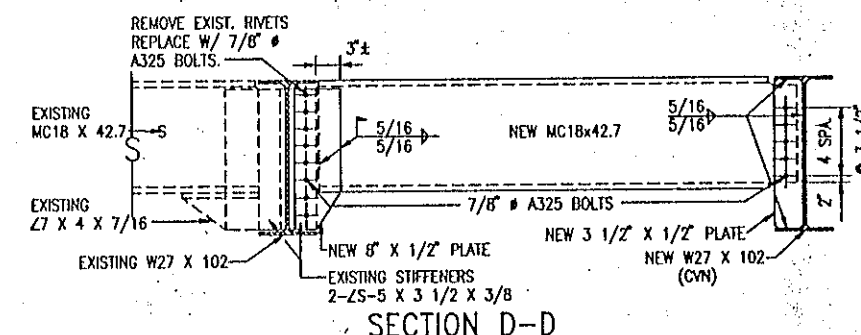
SECTION B-B
THRU EXISTING END DAM



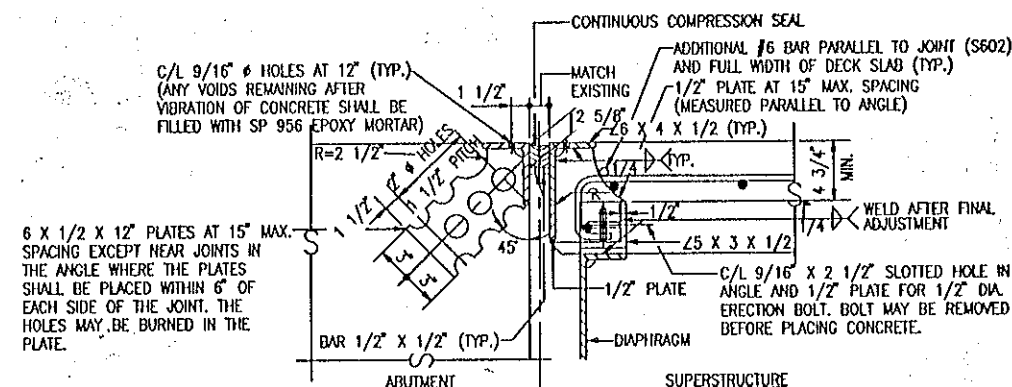
SECTION F-F



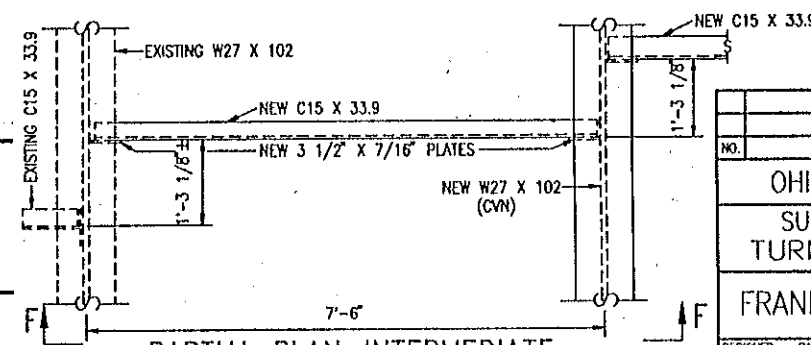
PARTIAL PLAN-NEW DIAPHRAGMS AT PIERS



SECTION D-D

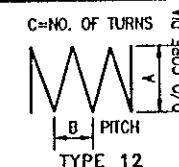
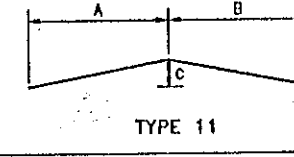
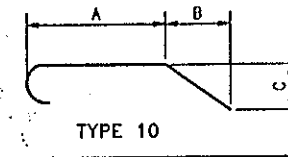
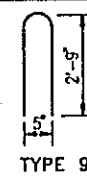
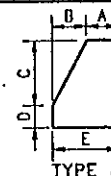
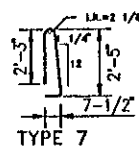
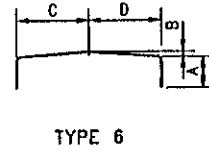
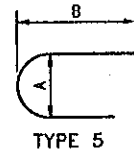
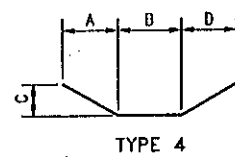
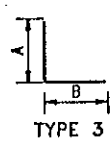
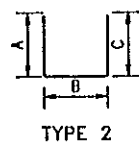
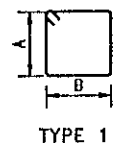


SECTION C-C
THRU NEW END DAM
FOR ADDITIONAL DETAILS SEE SHEET B144



PARTIAL PLAN—INTERMEDIATE
DIAPHRAGMS

NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
SUPERSTRUCTURE DETAILS			
TURNPIKE OVER S.R. 99			
FRANKLIN CONSULTANTS, INC.			
DESIGNED: CAS	CHECKED: BJ	DATE: 12/95	
DRAWN: MK	IN CHARGE: FA	SCALE: VARIES	
CONTRACT 77-96-03		SHEET B145 OF 171	



ABUTMENTS										PIERS										SUPERSTRUCTURE													
MARK	No.	LENGTH	WEIGHT	TYPE	A	B	C	D	E		MARK	No.	LENGTH	WEIGHT	TYPE	A	B	C	D	E		MARK	No.	LENGTH	WEIGHT	TYPE	A	B	C	D	E		
A401	48	9'-0"	289	1	2'-6"	1'-9"					GSP401	6	18'-0"	1437	12	2'-6"	0'-4 1/2"	46				S401	54	30'-0"	1082	5	0'-4"	29'-6"					
A501	36	23'-2"	870	STR							GP501	4	39'-2"	163	STR							S402	108	30'-0"	2164	STR							
A502	76	12'-0"	951	2	6'-3"	2'-8"	3'-4"				GP502	48	12'-3"	613	1	3'-2"	2'-8"					S403	54	15'-3"	550	5	0'-4"	14'-9"					
A503	76	6'-4"	502	4	0'-11"	3'-7"	1'-10"	-			GP503	4 SERIES OF 5	11'-7" TO 12'-5"	250	1	2'-10" TO 3'-3"	2'-8"				1 1/4" INCR	S501	332	25'-6"	8830	STR							
A504	160	8'-11"	1484	2	3'-3"	2'-8"	3'-3"														S502	252	30'-0"	7885	STR								
A505	16	23'-2"	387	4	1'-5"	21'-9"	0'-3"	-													S503	84	16'-3"	1424	STR								
A506	16	10'-0"	167	STR																	S504	194	5'-9"	1163	9								
A507	76	7'-4"	581	2	2'-0"	3'-7"	2'-0"				GP901	78	19'-0"	5039	STR						S505	194	5'-5"	1096	7								
A508	Ø SER. OF 5	6'-7" TO 9'-9"	341	2	2'-10" TO 4'-5"	1'-2" TO 4'-5"	2'-10" TO 4'-5"		Ø 1/2" INCR		GP902	78	9'-6"	2519	3	7'-10"	1'-11"				S506	194	3'-2"	641	8	0'-7"	0'-6"	0'-8 1/2"	0'-10"	0'-10"			
A509	4	23'-11"	100	4	1'-5"	22'-6"	0'-3"	-													S601	112	19'-0"	3196	STR								
A510	32	9'-8"	323	3	9'-0"	0'-10"					GP1001	8	43'-10"	1509	2	2'-8"	39'-2"				S602	4	25'-6"	153	STR								
A511	16 SER. OF 3	2'-5" TO 7'-6"	248	STR					Ø 1'-8 5/16" INCR		GP1002	8	38'-10"	1337	4	4'-4"	30'-6"	0'-6"	4'-4"					TOTAL	28184	LBS	EPOXY	COATED	REINFORCING	STEEL			
A512	36	23'-11"	898	STR																													
A513	108	8'-11"	1005	STR									TOTAL	12867	LBS	GALVANIZED	REINFORCING	STEEL															
A514	42	5'-6"	241	7																													
A515	24	9'-0"	225	STR																													
A516	24	9'-7"	240	STR							UP501	48	6'-6"	325	STR																		
A517	34	10'-0"	355	STR							UP801	76	6'-6"	1319	STR																		
A518	42	5'-9"	252	5	0'-5"	2'-9"					UP802	40	34'-0"	3631	STR																		
A601	80	6'-3"	751	2	2'-10"	0'-11"	2'-10"																										
A602	312	4'-8"	2187	3	2'-5"	2'-5"																											
A603	48	23'-3"	1676	STR																													
A604	192	8'-11"	2572	STR									TOTAL	5275	LBS	UNCOATED	REINFORCING	STEEL															
A605	38	3'-1"	176	8	0'-9"	0'-6"	0'-8 1/2"	0'-11 1/2"	0'-10 1/2"																								
A606	38	2'-5"	138	3	1'-8"	0'-11"																											
A607	68	3'-6"	357	STR																													
A608	4	3'-0"	18	8	0'-7"	0'-6"	0'-8 1/2"	0'-11 1/2"	0'-10"																								
A801	36	23'-2"	2227	STR																													

REINFORCING STEEL SAMPLES; REFER TO D.T.C. GENERAL CONDITIONS G-6.02 AND CMS SECTION 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 STRUCTURES BY THE ADDITIONAL STEEL, SPLICED IN ACCORDANCE WITH 509.08.

BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR ARE USED, INDICATE THE BAR SIZE NUMBER. FOR EXAMPLE, A700 IS A NO. 7 AND A1014 IS A NO. 10 SIZE. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE INDICATED. R INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED. "STD." WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BEND AT THE END OF THE BAR.

SPIRAL REINFORCING BARS: THE "LENGTH" SHOWN IN THE STEEL LIST FOR THE SPIRAL BARS IS THE DISTANCE FROM THE TOP OF THE FOOTING TO THE BOTTOM LAYER OF REINFORCING IN THE PIER CAP.

THE "NO. OF TURNS" SHOWN IS THE "LENGTH" DIVIDED BY THE PITCH, PLUS 3 TURNS (TOTAL NUMBER OF CLOSED COILS), EXPRESSED AS THE NEAREST WHOLE NUMBER. SPIRAL REINFORCING BARS MAY HAVE DEFORMATION AND SHALL IN OTHER RESPECTS CONFORM TO ITEM SP825. 1-1/2" CLOSED COILS SHALL BE PROVIDED AT THE ENDS OF EACH SPIRAL UNIT. THREE STEEL, HOT DIPPED GALVANIZED ANGLE SPACERS, WEIGHING APPROXIMATELY 0.80 LB. PER LIN. FT. OF SPACERS, SHALL BE PROVIDED FOR EACH SPIRAL UNIT. THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF THE COIL. THE NUMBER OF POUNDS OF THESE SPACERS, BASED ON 0.80 LB. PER. LIN. FT., WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED QUANTITY OF SPIRAL BARS.

EPOXY COATED REINFORCING STEEL SUPPORT: IN ACCORDANCE WITH THE REQUIREMENTS OF SP 509 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 TO EXCEED 3'-0" CENTERS IN EACH DIRECTION. BROKEN CONCRETE, BRICKS, ETC. SHALL NOT BE USED FOR SUPPORT OF REINFORCING STEEL.

ALL BARS EPOXY COATED EXCEPT AS NOTED.

BAR MARKS FOR GALVANIZED BARS BEGIN WITH THE PREFIX "G".

BAR MARKS FOR UNCOATED (BLACK) REINFORCING BARS BEGIN WITH THE PREFIX "U".

ALL DIMENSIONS SHOWN ARE OUT TO OUT.

LEGEND:
STR. = STRAIGHT
INCR. = INCREMENT
SER. = SERIES

NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
REINFORCING STEEL			
TURNPIKE OVER S.R. 99			
FRANKLIN CONSULTANTS, INC.			
DESIGNED: BJ	CHECKED: CB	DATE: 12/95	
DRAWING: MK	IN CHARGE: FA	SCALE: NONE	
CONTRACT 77-96-03		SHEET B146 OF 171	



OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

THE JAMES W. SHOCKNESSY OHIO TURNPIKE

PROJECT NO. 39-16-01

PART A

RIGHT TWO (2) LANES AND SHOULDER RECONSTRUCTION

MILEPOST 107.3 TO MILEPOST 112.5
ERIE COUNTY, OHIO

INDEX OF SHEETS

TITLE SHEET
39-16-01 PART A _____ 1 - 432
39-16-01 PART B _____ 1 - 24
OTIC STANDARD DRAWINGS
ODOT STANDARD DRAWINGS

PART B

BRIDGE DECK REPAIR AND REHABILITATION

OHIO TURNPIKE OVER NS AND KELLEY ROAD MILEPOST 117.3
OHIO TURNPIKE OVER US ROUTE 250 MILEPOST 118.1
ERIE COUNTY, OHIO

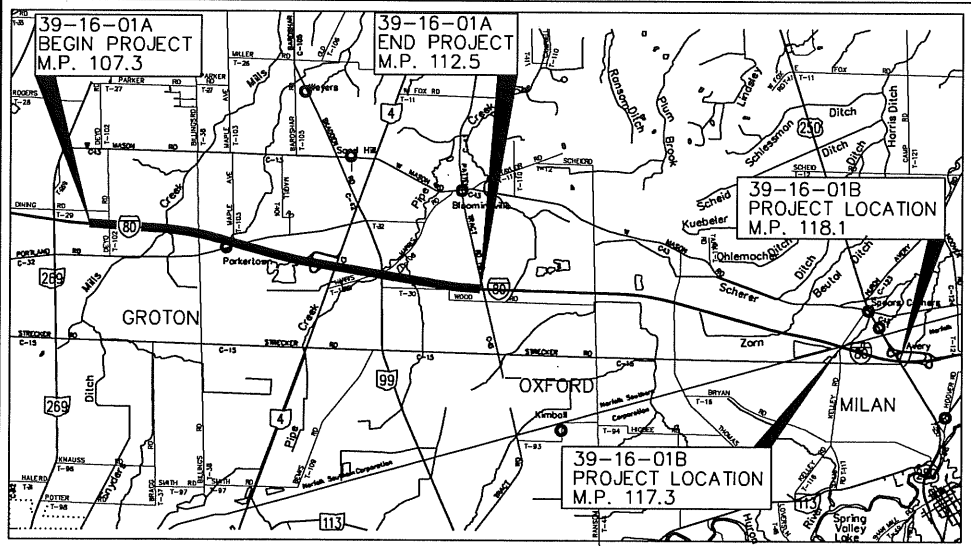
UNDERGROUND UTILITIES

CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG



CALL
1-800-362-2764
(TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

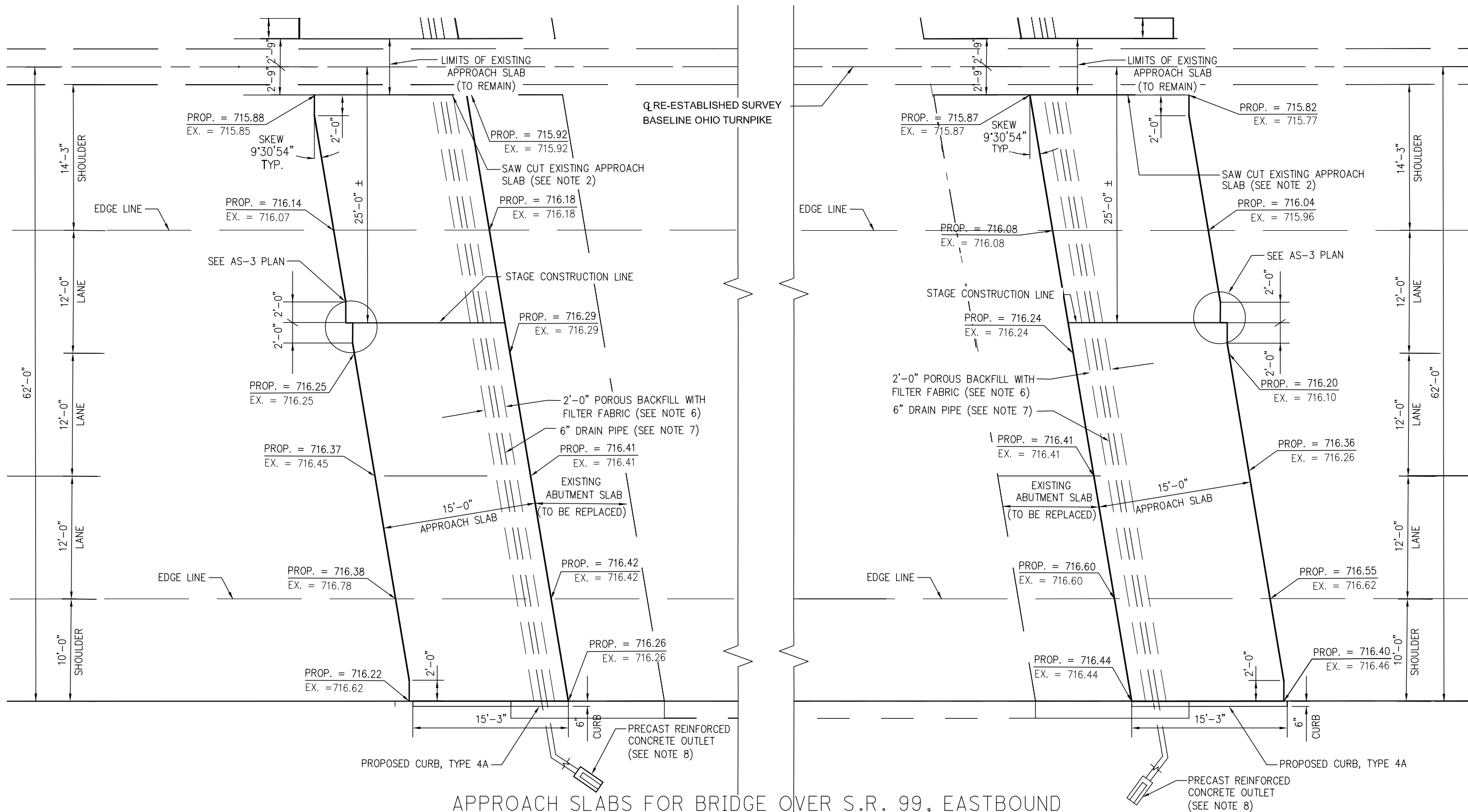
OIL & GAS PRODUCERS PROTECTIVE
SERVICE CALL: 1-800-925-0988

OHIO TURNPIKE DIVISION SUPERINTENDENT:
(440) 234-2081 X 5700



APPROVED FOR
THE OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION
BY
Anthony D. Yarn
CHIEF ENGINEER
11-10-15
DATE

PROJECT NO. 39-16-01A	PROJECT NO. 39-16-01B			
DESIGN CONTRACT: 71-14-11	DESIGN CONTRACT: 43-15-06			
PLAN PREPARED BY:  CT Consultants engineers architects planners 8150 Sterling Court, Mentor, Ohio 44060 440.951.9000 www.ctconsultants.com	PLAN PREPARED BY: 			
	NO.	REVISIONS	BY	DATE




APPROACH SLABS FOR BRIDGE OVER S.R. 99, EASTBOUND

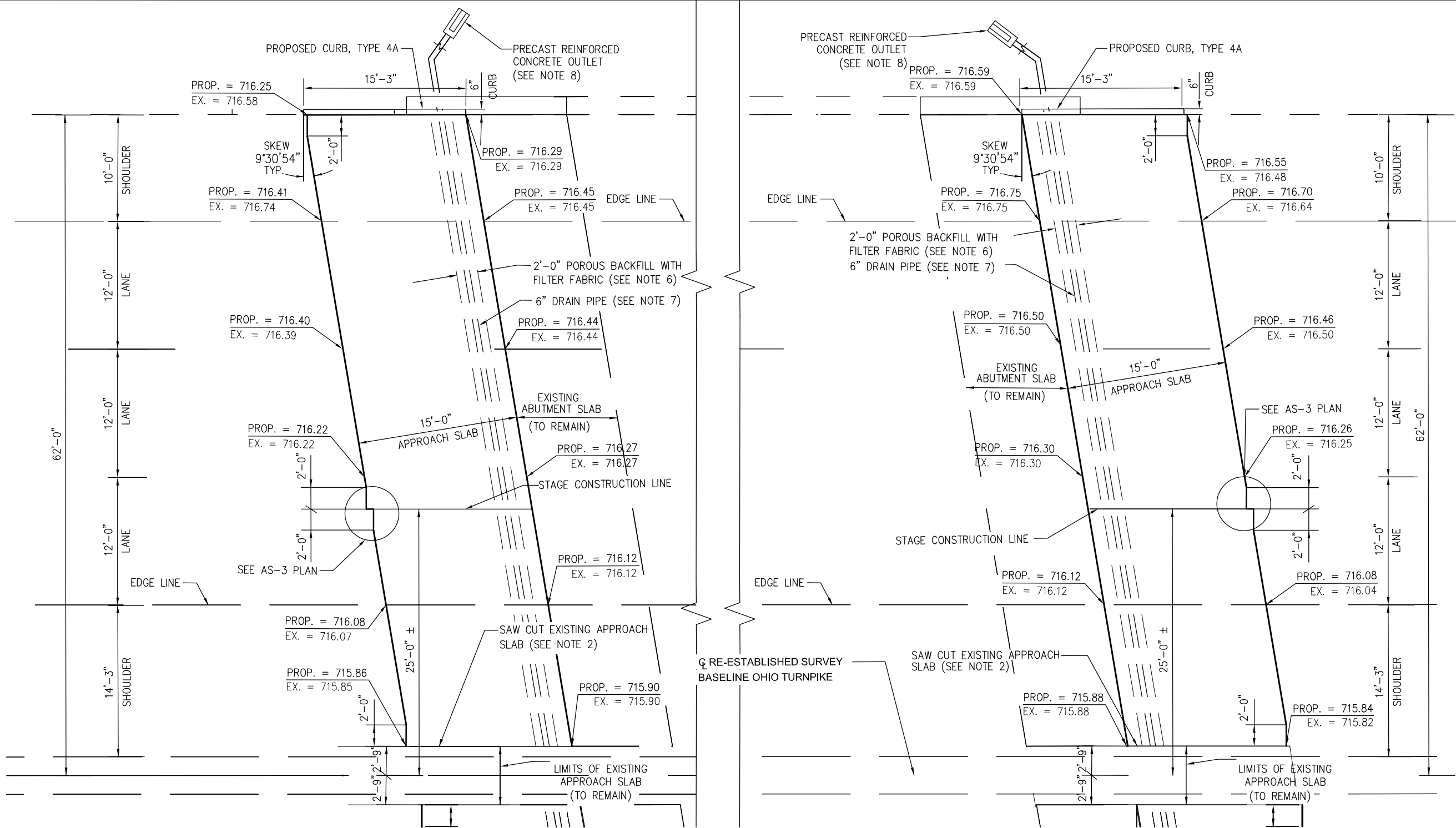
NOTES:

1. FOR APPROACH SLAB REINFORCING, NOTES AND ADDITIONAL DETAILS, SEE OTIC STANDARD DRAWING AS-3.
2. FOR DOWEL CONNECTION AT LONGITUDINAL JOINT BETWEEN EXISTING AND PROPOSED APPROACH SLABS, SEE SECTION D-D ON OTIC STANDARD DRAWING AS-2. TREATMENT OF JOINT PER SP-516B SHALL BE INCIDENTAL TO THIS WORK.
3. FOR TYPE 4-A INTEGRAL CURB DETAILS, SEE ODOT STANDARD DRAWING BP-5.1.
4. REMOVAL OF THE EXISTING APPROACH SLAB IS INCLUDED UNDER ITEM 202 - APPROACH SLAB REMOVED. NEW APPROACH SLAB IS INCLUDED UNDER ITEM SP 526 - CLASS C CONCRETE, APPROACH SLAB, USING TYPE 1 CEMENT (T=12"). SEE REMOVAL SUBSUMMARY FOR QUANTITIES.
5. FOR APPROACH SLAB TYPICAL SECTIONS SEE SHEET 12.
6. POROUS BACKFILL WITH FILTER FABRIC SHALL BE INSTALLED IN ACCORDANCE WITH OTIC STANDARD DRAWING AS-5.
7. 6" DRAIN PIPE SHALL BE INSTALLED IN ACCORDANCE WITH OTIC STANDARD DRAWING AS-5 AND OUTLETTED AS SHOWN ABOVE.

8. FOR PRECAST REINFORCED CONCRETE OUTLET DETAILS, SEE ODOT STANDARD CONSTRUCTION DRAWING DM-1.1.
9. QUANTITIES FOR POROUS BACKFILL, 6" DRAIN PIPE, AND PRECAST CONCRETE OUTLETS ARE CARRIED TO THE STRUCTURE ESTIMATED QUANTITY TABLE.
10. THE PROPOSED ELEVATIONS NOTED ON THESE APPROACH SLAB DETAILS HAVE BEEN DEVELOPED FROM EXISTING SURVEY INFORMATION. THE PROPOSED ELEVATIONS REFLECT THE DESIGNERS CALCULATED ADJUSTMENTS TO THE EXISTING ELEVATIONS ALONG THE APPROACH SLABS. THE CONTRACTOR SHALL WORK WITH THE PROJECT ENGINEER AND THE OTIC PROJECT MANAGER TO CONFIRM THAT THESE PROPOSED ELEVATIONS PROVIDE A SMOOTH TRANSITION FROM THE EXISTING OR PROPOSED PAVEMENT ON TO THE PROPOSED APPROACH SLABS IN THE FIELD. THE CONTRACTOR SHALL NOT POUR THE PROPOSED APPROACH SLABS UNTIL THE FINAL ADJUSTED PROPOSED ELEVATIONS, AS DETERMINED IN THE FIELD, HAVE BEEN APPROVED BY THE CHIEF ENGINEER. ALL WORK REQUIRED TO CONFIRM THESE PROPOSED ELEVATIONS SHALL BE CONSIDERED INCIDENTAL TO ITEM SP 526 - CLASS C CONCRETE, APPROACH SLAB, USING TYPE 1 CEMENT.

NO.	REVISIONS	BY	DATE
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION			
MAINLINE PAVEMENT RECONSTRUCTION SR 99 BRIDGE, MP 111.2 APPROACH SLAB DETAIL			
 CT Consultants <i>engineers architects planners</i> <small>2100 Gering Road • Austin, Ohio 44016 419.833.3000 • www.ctcinfo.com</small>			
DESIGNED: WDB	CHECKED: JMP	DATE: JUNE 2015	
DRAWN: MZP	IN CHARGE: WDB	SCALE: 1"=5'	
PROJECT 39-16-01A SHEET 383 OF 432			

CAD FILE NAME: 14693--APPROACH.DWG




APPROACH SLABS FOR BRIDGE OVER S.R. 99, WESTBOUND

NOTES:

- FOR APPROACH SLAB REINFORCING, NOTES AND ADDITIONAL DETAILS, SEE OTIC STANDARD DRAWING AS-3.
- FOR DOWEL CONNECTION AT LONGITUDINAL JOINT BETWEEN EXISTING AND PROPOSED APPROACH SLABS, SEE SECTION D-D ON OTIC STANDARD DRAWING AS-2. TREATMENT OF JOINT PER SP-516B SHALL BE INCIDENTAL TO THIS WORK.
- FOR TYPE 4-A INTEGRAL CURB DETAILS, SEE ODOT STANDARD DRAWING BP-5.1.
- REMOVAL OF THE EXISTING APPROACH SLAB IS INCLUDED UNDER ITEM 202 - APPROACH SLAB REMOVED. NEW APPROACH SLAB IS INCLUDED UNDER ITEM SP 526 - CLASS C CONCRETE, APPROACH SLAB, USING TYPE 1 CEMENT (T=12"). SEE REMOVAL SUBSUMMARY FOR QUANTITIES.
- FOR APPROACH SLAB TYPICAL SECTIONS SEE SHEET 12.
- POROUS BACKFILL WITH FILTER FABRIC SHALL BE INSTALLED IN ACCORDANCE WITH OTIC STANDARD DRAWING AS-5.
- 6" DRAIN PIPE SHALL BE INSTALLED IN ACCORDANCE WITH OTIC STANDARD DRAWING AS-5 AND OUTLETTED AS SHOWN ABOVE.

- FOR PRECAST REINFORCED CONCRETE OUTLET DETAILS, SEE ODOT STANDARD CONSTRUCTION DRAWING DM-1.1.
- QUANTITIES FOR POROUS BACKFILL, 6" DRAIN PIPE, AND PRECAST CONCRETE OUTLETS ARE CARRIED TO THE STRUCTURE ESTIMATED QUANTITY TABLE.
- THE PROPOSED ELEVATIONS NOTED ON THESE APPROACH SLAB DETAILS HAVE BEEN DEVELOPED FROM EXISTING SURVEY INFORMATION. THE PROPOSED ELEVATIONS REFLECT THE DESIGNERS CALCULATED ADJUSTMENTS TO THE EXISTING ELEVATIONS ALONG THE APPROACH SLABS. THE CONTRACTOR SHALL WORK WITH THE PROJECT ENGINEER AND THE OTIC PROJECT MANAGER TO CONFIRM THAT THESE PROPOSED ELEVATIONS PROVIDE A SMOOTH TRANSITION FROM THE EXISTING OR PROPOSED PAVEMENT ON TO THE PROPOSED APPROACH SLABS IN THE FIELD. THE CONTRACTOR SHALL NOT POUR THE PROPOSED APPROACH SLABS UNTIL THE FINAL ADJUSTED PROPOSED ELEVATIONS, AS DETERMINED IN THE FIELD, HAVE BEEN APPROVED BY THE CHIEF ENGINEER. ALL WORK REQUIRED TO CONFIRM THESE PROPOSED ELEVATIONS SHALL BE CONSIDERED INCIDENTAL TO ITEM SP 526 - CLASS C CONCRETE, APPROACH SLAB, USING TYPE 1 CEMENT.

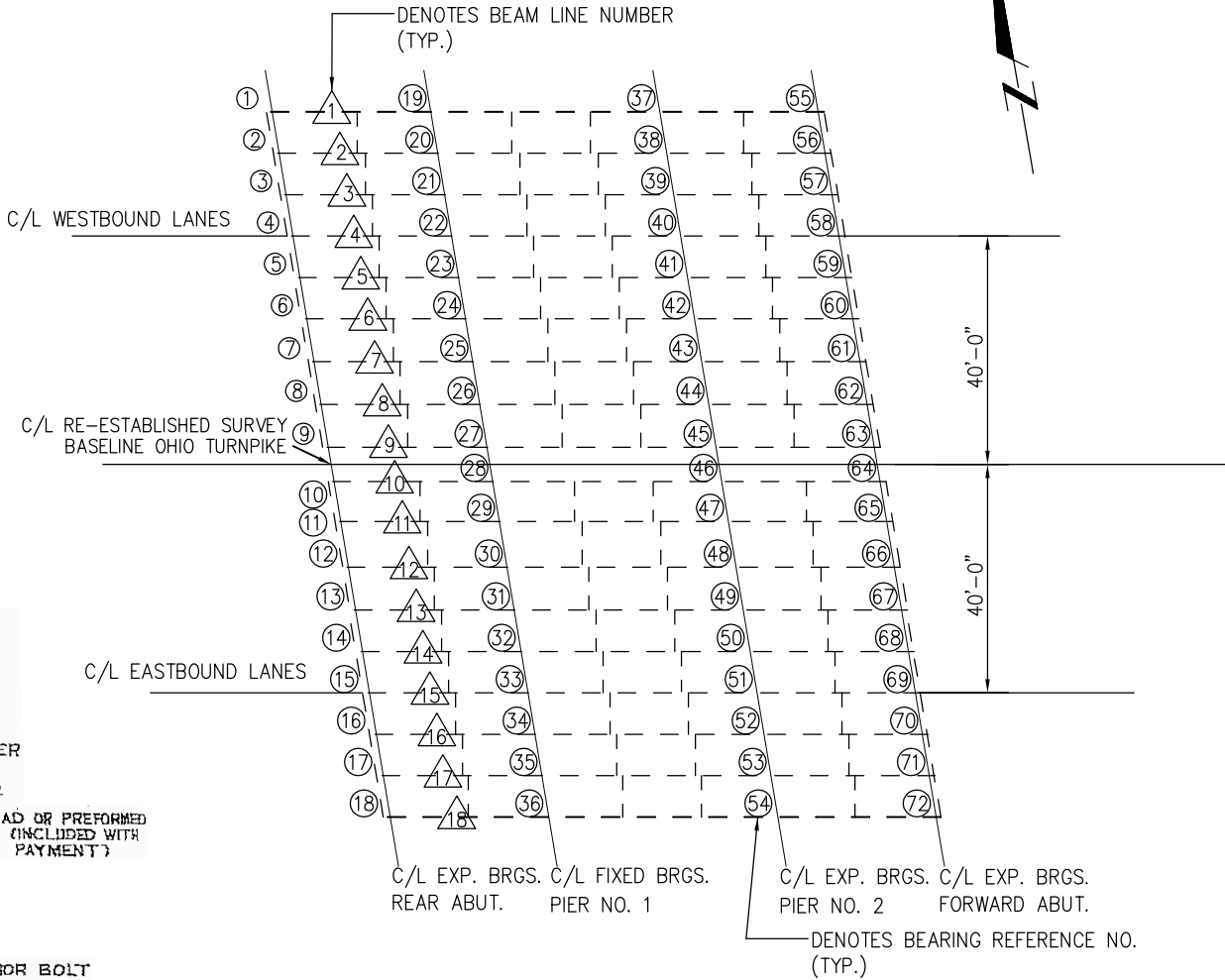
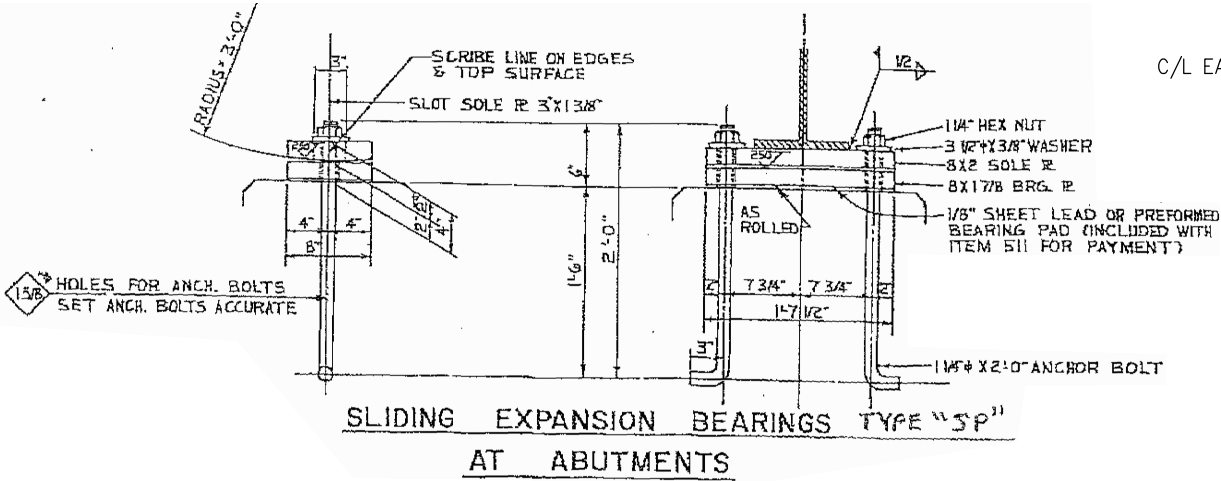
NO.	REVISIONS	BY	DATE
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION			
MAINLINE PAVEMENT RECONSTRUCTION SR 99 BRIDGE, MP 111.2 APPROACH SLAB DETAIL			
 CT Consultants <i>engineers architects planners</i> <small>43102 Lehigh Valley, PA 18001 (610) 401-8000 www.ctconsultants.com</small>			
DESIGNED: WDB	CHECKED: JMP	DATE: JUNE 2015	
DRAWN: MZP	IN CHARGE: WDB	SCALE: NTS	
PROJECT 39-16-01A SHEET 384 OF 432			

REAR ABUTMENT		
REF #	EX. BRG.	BRG. DISPOSITION
1	SP	-
2	SP	REFURBISH AND RESET (SEE NOTE 4.)
3	SP	-
4	SP	-
5	SP	REFURBISH AND RESET (SEE NOTE 4.)
6	SP	REFURBISH AND RESET (SEE NOTE 4.)
7	SP	-
8	SP	-
9	SP	-
10	SP	-
11	SP	-
12	SP	-
13	SP	REFURBISH AND RESET (SEE NOTE 4.)
14	SP	-
15	SP	-
16	SP	-
17	SP	-
18	SP	-

PIER 1		
REF #	EX. BRG.	BRG. DISPOSITION
19	FS	-
20	FS	-
21	FS	-
22	FS	-
23	FS	-
24	FS	-
25	B-100	-
26	B-100	-
27	B-100	-
28	B-100	-
29	B-100	-
30	B-100	-
31	FS	-
32	FS	-
33	FS	-
34	FS	-
35	FS	-
36	FS	-

PIER 2		
REF #	EX. BRG.	BRG. DISPOSITION
37	ES	-
38	ES	-
39	ES	-
40	ES	-
41	ES	-
42	ES	-
43	R-100	-
44	R-100	-
45	R-100	-
46	R-100	-
47	R-100	-
48	R-100	-
49	ES	-
50	ES	-
51	ES	-
52	ES	-
53	ES	-
54	ES	-

FORWARD ABUTMENT		
REF #	EX. BRG.	BRG. DISPOSITION
55	SP	-
56	SP	-
57	SP	-
58	SP	-
59	SP	-
60	SP	REBUILD PER SP516K
61	SP	-
62	SP	-
63	SP	-
64	SP	-
65	SP	-
66	SP	-
67	SP	REFURBISH AND RESET (SEE NOTE 4.)
68	SP	REFURBISH AND RESET (SEE NOTE 4.)
69	SP	REFURBISH AND RESET (SEE NOTE 4.)
70	SP	REFURBISH AND RESET (SEE NOTE 4.)
71	SP	REFURBISH AND RESET (SEE NOTE 4.)
72	F-100	-




NOTES:

- BEARING TYPE NOTATION:
SP = SLIDING EXPANSION BEARING PLATES
FS = FIXED SHOE BEARING
ES = EXPANSION SHOE BEARING
- FOR DETAILS OF TYPE SP BEARINGS, SEE THIS SHEET.
- ALL BEARING WORK IS TO BE COMPLETED PRIOR TO THE INSTALLATION OF NEW CONTINUOUS ELASTOMER SEAL.
- ITEM 516 – REFURBISH AND RESET BEARING, AS PER PLAN

THIS WORK IS ASSOCIATED WITH REMOVING PACK RUST BETWEEN SOLE PLATE AND MASONRY PLATE OF DESIGNATED SLIDING EXPANSION BEARINGS. REMOVE ANCHOR BOLT NUTS; JACK AND BLOCK BEAM; REMOVE PACK RUST USING CHISELS, SANDBLASTING OR OTHER SUITABLE MEANS; SURFACE PREPARE AND RECOAT ALL STEEL SURFACES WITH SYSTEM OZEU PAINT PER SP 514A; RESET THE SOLE PLATE ON THE MASONRY PLATE; INSTALL NEW ANCHOR BOLT NUTS. PERFORM THE WORK IN ACCORDANCE WITH SP 516K – REBUILD EXPANSION BEARING DEVICE. THIS SPECIFICATION SHALL BE ADAPTED FOR SLIDING PLATE BEARINGS IN LIEU OF A STEEL ROCKER AND MASONRY PLATE.

PAYMENT FOR ALL LABOR, MATERIALS, AND INCIDENTALS NEEDED TO COMPLETE THE WORK SHALL BE INCLUDED IN THE CONTRACT "EACH" UNIT PRICE BID FOR ITEM 516 – REFURBISH AND RESET BEARING, AS PER PLAN.


NO.	REVISIONS	BY	DATE
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION			
BRIDGE MAINTENANCE OHIO TURNPIKE OVER S.R. 99, M.P. 111.2 BEARING REHABILITATION			
 CT Consultants <i>engineers architects planners</i> 4150 Seidling Court, Mentor, Ohio 44060 440.933.8800 www.ctconsultants.com			
DESIGNED: JPR	CHECKED: JMP	DATE: OCT. 2015	
DRAWN: MZP	IN CHARGE: WDB	SCALE: NO SCALE	
PROJECT 39-16-01A SHEET 396 OF 432			

EXPANSION JOINT SCHEDULE – WESTBOUND LANES												
BRIDGE	LOCATION ¹		EX. JOINT TYPE	SKEW±	JOINT MOVEMENT ²			REPAIR SPECIFICATION	EX. JOINT OPENING (INCH) ³	LENGTH ⁴ (FEET)	PROPOSED JOINT TYPE	TEMPERATURE WHEN EX. JOINT MEASURED (°F)
					CONTR. (INCH)	EXP. (INCH)	TOTAL (INCH)					
MILL CREEK M.P. 108.3	REAR ABUT.	OUTSIDE	STRIP SEAL	NONE	–	–	FIX	SP533D	1½" – 1¾"	34.00'	EMSEAL BEJS	45°
	REAR ABUT.	INSIDE	STRIP SEAL		–	–	FIX	SP533D	1½" – 1⅝"	27.00'	EMSEAL BEJS	45°
	FWD. ABUT.	OUTSIDE	STRIP SEAL		0.54"	0.36"	0.90"	SP533D	¾"	34.00'	EMSEAL BEJS	45°
	FWD. ABUT.	INSIDE	STRIP SEAL		0.54"	0.36"	0.90"	SP533D	⅞" – 1"	27.00'	EMSEAL BEJS	45°
NS RAILROAD M.P. 109.1	REAR ABUT.	OUTSIDE	STRIP SEAL	11°29' L.F.	0.38"	0.25"	0.63"	SP533D	⅝" – 1⅛"	34.70'	EMSEAL BEJS	42°
	REAR ABUT.	INSIDE	STRIP SEAL		0.38"	0.25"	0.63"	SP533D	1" – 1½"	27.55'	EMSEAL BEJS	42°
	FWD. ABUT.	OUTSIDE	STRIP SEAL		1.13"	0.76"	1.89"	SP533D	½" – ¾"	34.70'	EMSEAL BEJS	42°
	FWD. ABUT.	INSIDE	STRIP SEAL		1.13"	0.76"	1.89"	SP533D	½" – 1⅛"	27.55'	EMSEAL BEJS	42°
PORTLAND ROAD M.P. 109.2	REAR ABUT.	OUTSIDE	STRIP SEAL	60°05' L.F.	0.49"	0.33"	0.82"	SP533D	1⅛" – 1¼"	68.17'	EMSEAL BEJS	43°
	REAR ABUT.	INSIDE	STRIP SEAL		0.49"	0.33"	0.82"	SP533D	⅞" – 1⅞"	54.14'	EMSEAL BEJS	43°
	FWD. ABUT.	OUTSIDE	STRIP SEAL		0.94"	0.63"	1.57"	SP533D	1⅝" – 1⅝"	68.17'	EMSEAL BEJS	43°
	FWD. ABUT.	INSIDE	STRIP SEAL		0.94"	0.63"	1.57"	SP533D	1" – 1⅝"	54.14'	EMSEAL BEJS	43°
S.R. 99 M.P. 111.2	REAR ABUT.	OUTSIDE	COMP SEAL	9°30'54" R.F.	0.20"	0.13"	0.33"	SP533D	¾" – 1"	34.47'	EMSEAL BEJS	36°
	REAR ABUT.	INSIDE	COMP SEAL		0.20"	0.13"	0.33"	SP533D	¾" – 1½"	27.38'	EMSEAL BEJS	36°
	FWD. ABUT.	OUTSIDE	COMP SEAL		0.48"	0.32"	0.80"	SP533D	1" – 1¼"	34.47'	EMSEAL BEJS	36°
	FWD. ABUT.	INSIDE	COMP SEAL		0.48"	0.32"	0.80"	SP533D	1⅛" – 1⅝"	27.38'	EMSEAL BEJS	36°



EXPANSION JOINT SCHEDULE – EASTBOUND LANES												
BRIDGE	LOCATION ¹		EX. JOINT TYPE	SKEW±	JOINT MOVEMENT ²			REPAIR SPECIFICATION	EX. JOINT OPENING (INCH) ³	LENGTH ⁴ (FEET)	PROPOSED JOINT TYPE	TEMPERATURE WHEN EX. JOINT MEASURED (°F)
					CONTR. (INCH)	EXP. (INCH)	TOTAL (INCH)					
MILL CREEK M.P. 108.3	REAR ABUT.	OUTSIDE	STRIP SEAL	NONE	–	–	FIX	SP533D	1" – 1¾"	34.00'	EMSEAL BEJS	54°
	REAR ABUT.	INSIDE	STRIP SEAL		–	–	FIX	SP533D	1¼" – 1⅝"	27.00'	EMSEAL BEJS	54°
	FWD. ABUT.	OUTSIDE	STRIP SEAL		0.54"	0.36"	0.90"	SP533D	⅝" – ½"	34.00'	EMSEAL BEJS	54°
	FWD. ABUT.	INSIDE	STRIP SEAL		0.54"	0.36"	0.90"	SP533D	⅝" – 1"	27.00'	EMSEAL BEJS	54°
NS RAILROAD M.P. 109.1	REAR ABUT.	OUTSIDE	STRIP SEAL	11°29' L.F.	0.38"	0.25"	0.63"	SP533D	⅝" – ⅞"	34.70'	EMSEAL BEJS	50°
	REAR ABUT.	INSIDE	STRIP SEAL		0.38"	0.25"	0.63"	SP533D	¾" – 1½"	27.55'	EMSEAL BEJS	50°
	FWD. ABUT.	OUTSIDE	STRIP SEAL		1.13"	0.76"	1.89"	SP533D	⅝" – ⅞"	34.70'	EMSEAL BEJS	50°
	FWD. ABUT.	INSIDE	STRIP SEAL		1.13"	0.76"	1.89"	SP533D	½" – 1⅝"	27.55'	EMSEAL BEJS	50°
PORTLAND ROAD M.P. 109.2	REAR ABUT.	OUTSIDE	STRIP SEAL	60°05' L.F.	0.49"	0.33"	0.82"	SP533D	½" – 1"	68.17'	EMSEAL BEJS	50°
	REAR ABUT.	INSIDE	STRIP SEAL		0.49"	0.33"	0.82"	SP533D	⅞" – 1¼"	54.14'	EMSEAL BEJS	50°
	FWD. ABUT.	OUTSIDE	STRIP SEAL		0.94"	0.63"	1.57"	SP533D	1¼" – 1¾"	68.17'	EMSEAL BEJS	50°
	FWD. ABUT.	INSIDE	STRIP SEAL		0.94"	0.63"	1.57"	SP533D	1⅝" – 1½"	54.14'	EMSEAL BEJS	50°
S.R. 99 M.P. 111.2	REAR ABUT.	OUTSIDE	COMP SEAL	9°30'54" R.F.	0.20"	0.13"	0.33"	SP533D	⅝" – 1"	34.47'	EMSEAL BEJS	46°
	REAR ABUT.	INSIDE	COMP SEAL		0.20"	0.13"	0.33"	SP533D	⅝" – 1½"	27.38'	EMSEAL BEJS	46°
	FWD. ABUT.	OUTSIDE	COMP SEAL		0.48"	0.32"	0.80"	SP533D	1¼"	34.47'	EMSEAL BEJS	46°
	FWD. ABUT.	INSIDE	COMP SEAL		0.48"	0.32"	0.80"	SP533D	1" – 1⅝"	27.38'	EMSEAL BEJS	46°

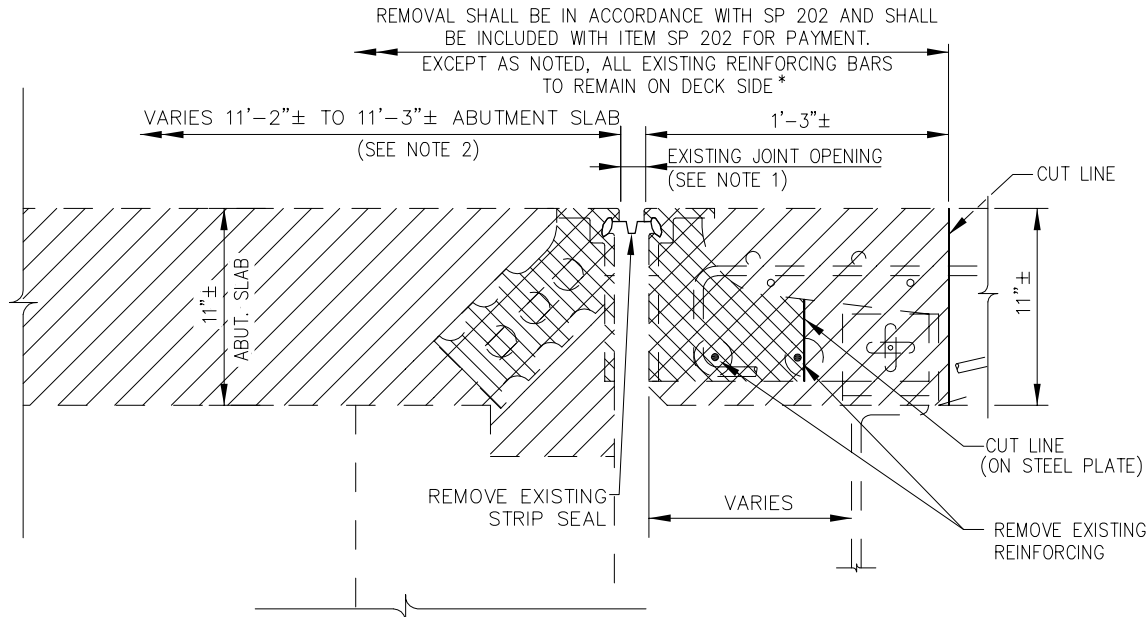
NOTES:

1. OUTSIDE REFERS TO THE RIGHT TWO LANES AND OUTSIDE SHOULDER. INSIDE REFERS TO THE THIRD LANE AND INSIDE SHOULDER.
2. JOINT MOVEMENTS ARE CALCULATED VALUES USING THE COEFFICIENT OF EXPANSION FOR STEEL, AND THEY ARE GIVEN FROM A NEUTRAL TEMPERATURE OF 60° F.
3. EXISTING JOINT OPENING VALUES WERE MEASURED AT AN AIR TEMPERATURE OF 36° TO 54° F (SEE THE TABLES ON THIS SHEET). THE JOINT IS TO BE REPLACED ACROSS THE FULL WIDTH OF THE SUPERSTRUCTURE. THE JOINT MANUFACTURER SHALL DETERMINE THE REQUIRED JOINT OPENING
4. JOINT LENGTH IS FOR INFORMATION AND BIDDING PURPOSES ONLY. THE CONTRACTOR SHALL DETERMINE ALL NECESSARY DIMENSIONS (MEASURED FROM THE EXISTING SPLICE), CROSS SLOPES, ETC. FOR FABRICATION AND PROPER FIT ON THE EXISTING STRUCTURE. ALL LENGTHS INCLUDE 7" BEJS FILLER EMBEDMENT INTO A BARRIER.
5. FOR DECK JOINT DETAILS, SEE SHEETS 2 OF 5 THROUGH 5 OF 5.
6. BEJS = BRIDGE EXPANSION JOINT SYSTEM

NO.	REVISIONS	BY	DATE
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION			
BRIDGE MAINTENANCE EXPANSION JOINT SCHEDULE			
<div><div>CT Consultants <small>engineers architects planners</small></div><div><small>8100 Swallow Creek • Mentor, Ohio 44060 440.923.8000 • www.ctmna.com</small></div></div>			
DESIGNED: JPR	CHECKED: JMP	DATE: OCT. 2015	
DRAWN: MZP	IN CHARGE: WDB	SCALE: N/A	
PROJECT 39–16–01A SHEET 397 OF 432			

LEGEND:

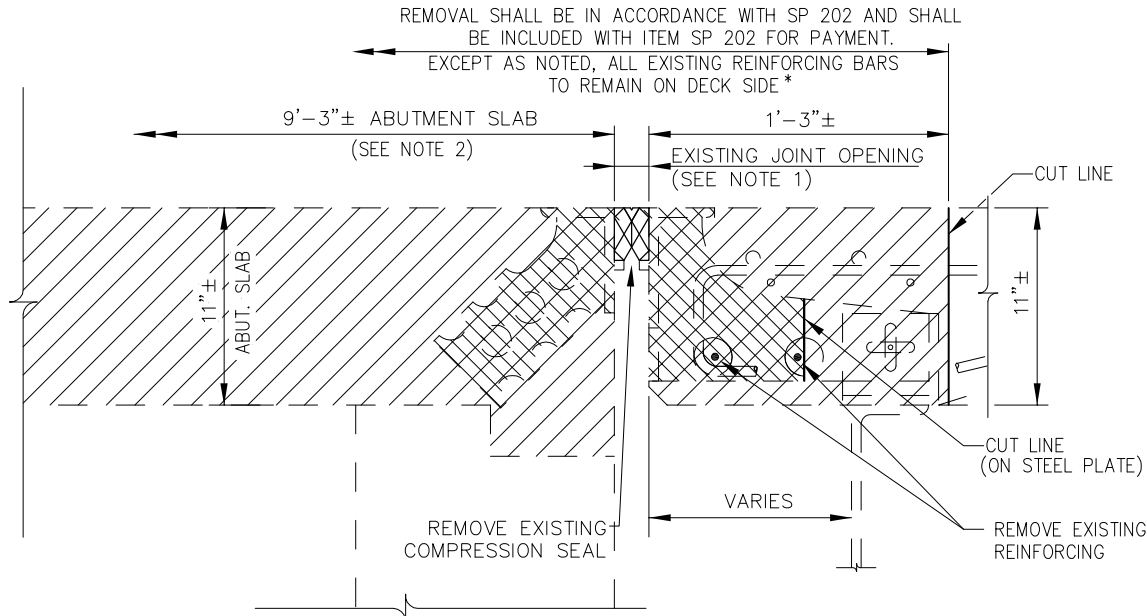
-  INDICATES LIMITS OF CONCRETE REMOVAL PER ITEM SP202
 INDICATES LIMITS OF STEEL JOINT ARMOR REMOVAL F ITEM SP202



ABUTMENT SLAB (ALL EXISTING REINF. NOT SHOWN) SUPERSTRUCTURE (ALL EXISTING REINF. NOT SHOWN)

EXISTING CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT - REMOVAL DETAIL (ABUTMENT SHOWN)

(W.B. TURNPIKE BRIDGE OVER MILL CREEK, M.P. 108.3)
 ▲ (E.B. & W.B. TURNPIKE BRIDGES OVER NS RAILROAD, M.P. 109.1)
 (E.B. & W.B. TURNPIKE BRIDGES OVER PORTLAND ROAD, M.P. 109.2)

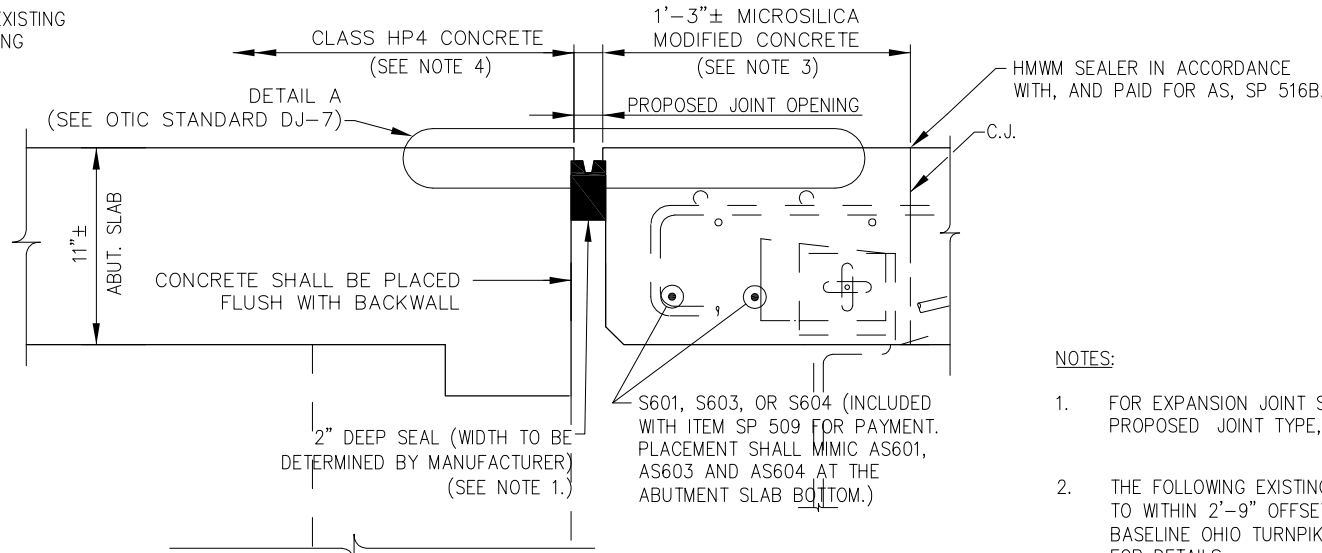


ABUTMENT SLAB (ALL EXISTING REINF. NOT SHOWN) SUPERSTRUCTURE (ALL EXISTING REINF. NOT SHOWN)

EXISTING ELASTOMERIC COMPRESSION SEAL IN STRUCTURAL STEEL JOINT - REMOVAL DETAIL (ABUTMENT SHOWN)

(E.B. TURNPIKE BRIDGE OVER S.R. 99, M.P. 111.2)

* - THE EXISTING REINFORCING STEEL TO REMAIN AND BE REUSED SHALL BE CLEAN OF RUST AND AN EPOXY COATING APPLIED PER THE MANUFACTURER'S INSTRUCTIONS. THE COATING SHALL BE A LIQUID SYSTEM THAT MEETS THE REQUIREMENTS OF ASTM A775/A775M-07b (2014) ANNEX A2 SPECIFICATION. THE COST TO BE INCIDENTAL TO THE COST OF ITEM SP 202 - PORTIONS OF STRUCTURES REMOVED.



ABUTMENT SLAB (ALL EXISTING REINF. NOT SHOWN) SUPERSTRUCTURE (ALL EXISTING REINF. NOT SHOWN)

ITEM SP533D - CONTINUOUS ELASTOMER SEAL IN PORTLAND CEMENT CONCRETE JOINT - JOINT DETAIL (NEW ABUTMENT SLAB SHOWN)

(W.B. TURNPIKE BRIDGE OVER MILL CREEK, M.P. 108.3)
 ▲ (E.B. & W.B. TURNPIKE BRIDGES OVER NS RAILROAD, M.P. 109.1)
 (E.B. & W.B. TURNPIKE BRIDGES OVER PORTLAND ROAD, M.P. 109.2)
 (E.B. TURNPIKE BRIDGE OVER S.R. 99, M.P. 111.2)

▲ - APPLY THIS DETAIL TO:
 REAR ABUTMENT SLAB E.B. AND
 FORWARD ABUTMENT SLAB W.B.

NOTES:


- FOR EXPANSION JOINT SCHEDULE, EXISTING JOINT OPENING, PROPOSED JOINT TYPE, AND ADDITIONAL NOTES, SEE SHEET 397.
- THE FOLLOWING EXISTING ABUTMENT SLABS ARE TO BE REPLACED TO WITHIN 2'-9" OFFSET FROM @ RE-ESTABLISHED SURVEY BASELINE OHIO TURNPIKE. SEE THE BRIDGE MAINTENANCE PLANS FOR DETAILS:

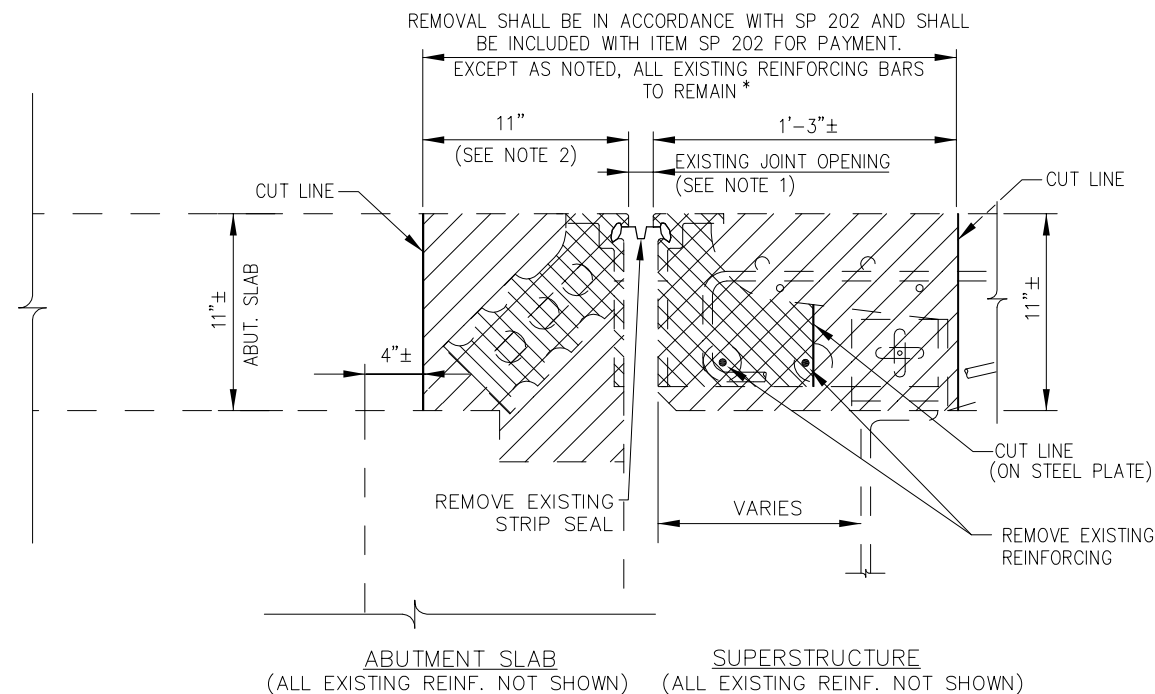
 OVER MILL CREEK, M.P. 108.3, W.B. REAR AND W.B. FORWARD

 OVER NS RAILROAD, M.P. 109.1, W.B. FORWARD AND E.B. REAR

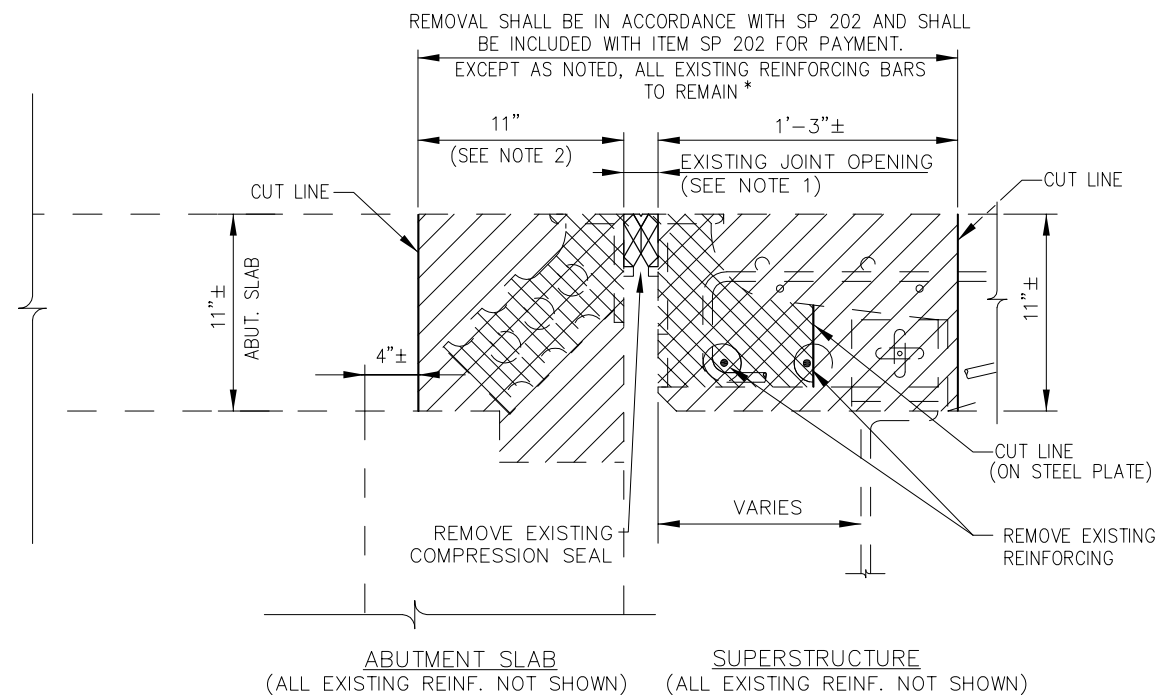
 OVER PORTLAND ROAD, M.P. 109.2, W.B. REAR, W.B. FORWARD
 E.B. REAR, E.B. FORWARD

 OVER S.R. 99, M.P. 111.2, E.B. REAR AND E.B. FORWARD
- MICRO-SILICA MODIFIED CONCRETE, IN ACCORDANCE WITH SS 848, INCLUDED WITH ITEM SP 533D - CONTINUOUS ELASTOMER SEAL IN A PORTLAND CEMENT CONCRETE JOINT, FOR PAYMENT.
- CLASS HP4 CONCRETE IS PAID FOR UNDER ITEM SP 511B - CLASS HP4 CONCRETE, ABUTMENT SLAB.

NO.	REVISIONS	BY	DATE
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION			
BRIDGE MAINTENANCE			
STRUCTURE EXPANSION JOINT DETAILS			
 CT Consultants <small>engineers architects planners</small> <small>9910 Spring Creek, Ste. 100, Ohio 43081</small> <small>614.951.0000 www.ctconsultants.com</small>			
DESIGNED: JPR	CHECKED: JMP	DATE: OCT. 2015	
DRAWN: MZP	IN CHARGE: WDB	SCALE: NO SCALE	

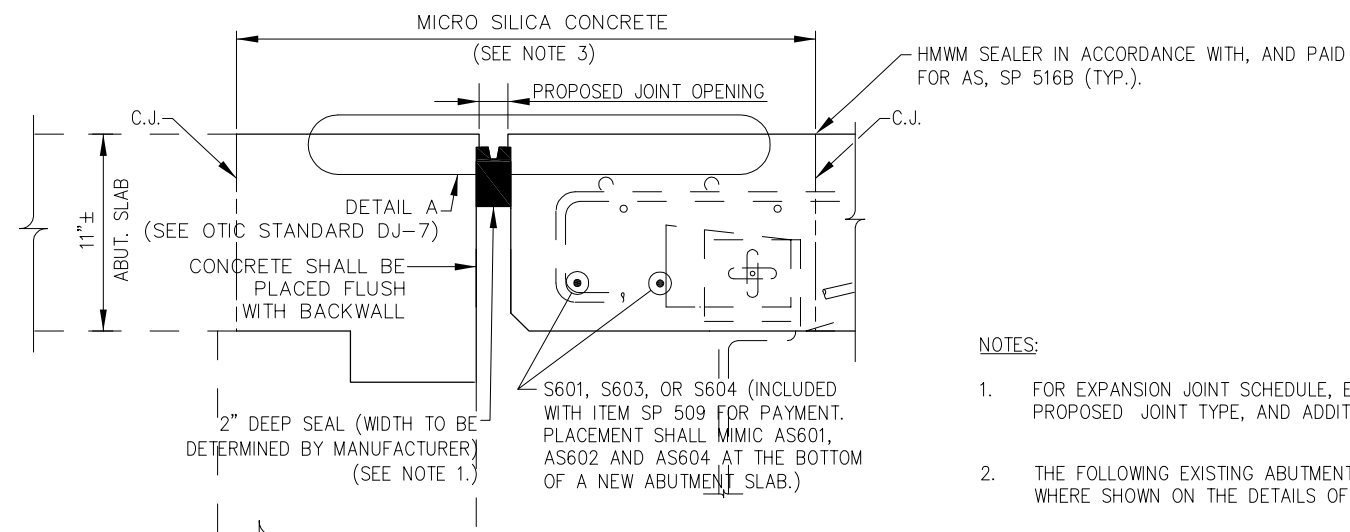


ABUTMENT SLAB (ALL EXISTING REINF. NOT SHOWN) SUPERSTRUCTURE (ALL EXISTING REINF. NOT SHOWN)
EXISTING CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT - REMOVAL DETAIL (ABUTMENT SHOWN)
(E.B. TURNPIKE BRIDGE OVER MILL CREEK, M.P. 108.3)
▲ (E.B. & W.B. TURNPIKE BRIDGES OVER NS RR, M.P. 109.1)



ABUTMENT SLAB (ALL EXISTING REINF. NOT SHOWN) SUPERSTRUCTURE (ALL EXISTING REINF. NOT SHOWN)
EXISTING ELASTOMERIC COMPRESSION SEAL IN STRUCTURAL STEEL JOINT - REMOVAL DETAIL (ABUTMENT SHOWN)
(W.B. TURNPIKE BRIDGE OVER S.R. 99, M.P. 111.2)

* - THE EXISTING REINFORCING STEEL TO REMAIN AND BE REUSED SHALL BE CLEAN OF RUST AND AN EPOXY COATING APPLIED PER THE MANUFACTURER'S INSTRUCTIONS. THE COATING SHALL BE A LIQUID SYSTEM THAT MEETS THE REQUIREMENTS OF ASTM A775/A775M-07b (2014) ANNEX A2 SPECIFICATION. THE COST TO BE INCIDENTAL TO THE COST OF ITEM SP 202 - PORTIONS OF STRUCTURES REMOVED.



ABUTMENT SLAB (ALL EXISTING REINF. NOT SHOWN) SUPERSTRUCTURE (ALL EXISTING REINF. NOT SHOWN)
ITEM SP533D - CONTINUOUS ELASTOMER SEAL IN PORTLAND CEMENT CONCRETE JOINT - JOINT DETAIL (RETRO-FITTED EXISTING ABUTMENT SLAB SHOWN)
(E.B. TURNPIKE BRIDGE OVER MILL CREEK, M.P. 108.3)
▲ (E.B. & W.B. TURNPIKE BRIDGES OVER NS RR, M.P. 109.1)
(W.B. TURNPIKE BRIDGE OVER S.R. 99, M.P. 111.2)

▲ - APPLY THIS DETAIL TO:
FORWARD ABUTMENT SLAB E.B.
AND REAR ABUTMENT SLAB W.B.

LEGEND:

- INDICATES LIMITS OF CONCRETE REMOVAL PER ITEM SP202
- INDICATES LIMITS OF STEEL JOINT ARMOR REMOVAL PER ITEM SP202

NOTES:

- FOR EXPANSION JOINT SCHEDULE, EXISTING JOINT OPENING, PROPOSED JOINT TYPE, AND ADDITIONAL NOTES, SEE SHEET 397.
- THE FOLLOWING EXISTING ABUTMENT SLABS ARE TO REMAIN EXCEPT WHERE SHOWN ON THE DETAILS OF THIS SHEET:


OVER MILL CREEK, M.P. 108.3, E.B. REAR AND E.B. FORWARD

OVER NS RAILROAD, M.P. 109.1, E.B. FORWARD AND W.B. REAR

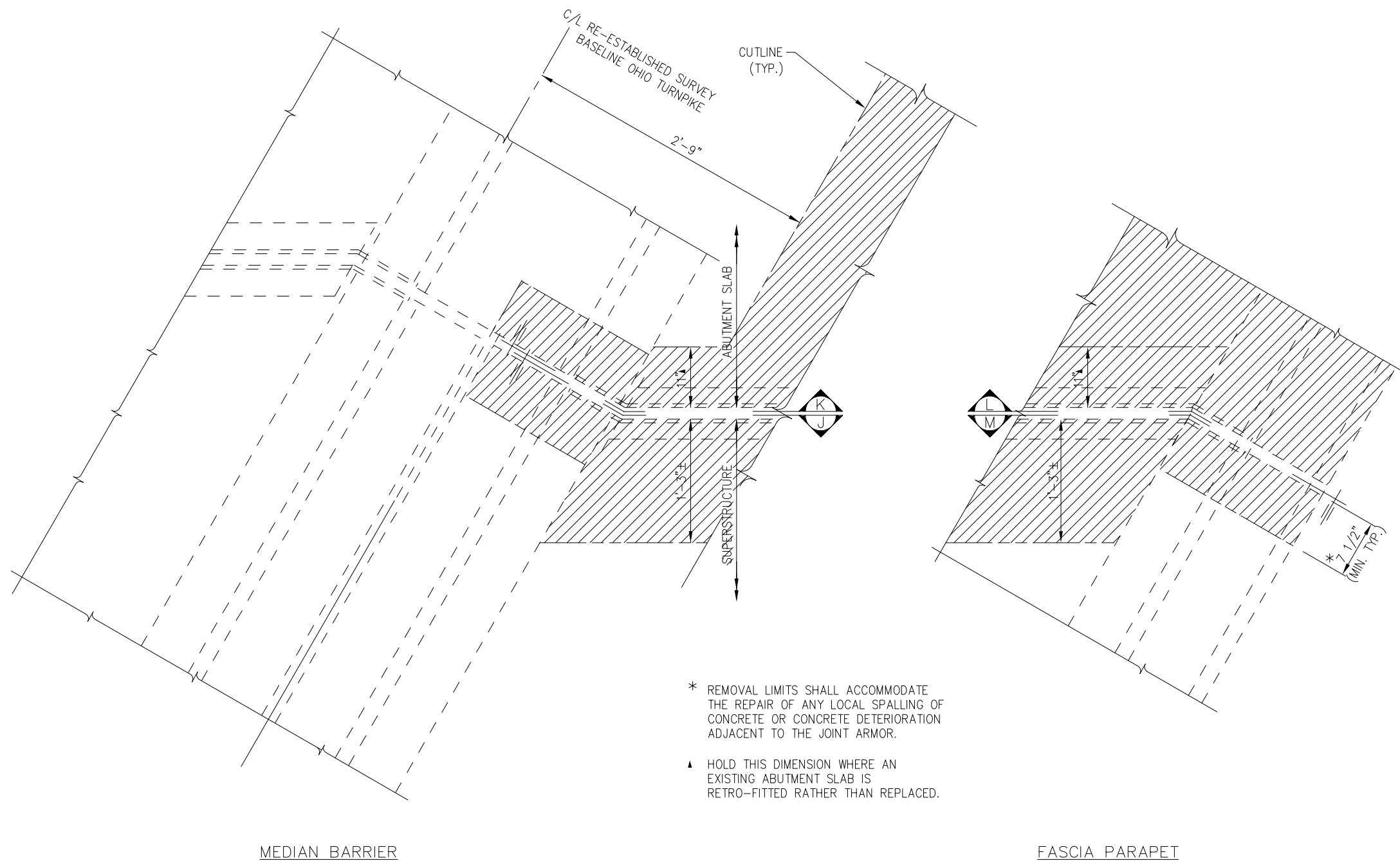
OVER S.R. 99, M.P. 111.2, W.B. REAR AND W.B. FORWARD
- MICRO-SILICA MODIFIED CONCRETE, IN ACCORDANCE WITH SS 848, INCLUDED WITH ITEM SP 533D - CONTINUOUS ELASTOMER SEAL IN A PORTLAND CEMENT CONCRETE JOINT, FOR PAYMENT.

THE FOLLOWING ESTIMATED QUANTITIES OF MICRO-SILICA CONCRETE ARE FOR INFORMATION AND BIDDING PURPOSES ONLY; AND INCLUDES THE LOCATIONS DETAILED ON SHEET 2 OF 5 AND 3 OF 5:


OVER MILL CREEK, M.P. 108.3	17 CY
OVER NS RAILROAD, M.P. 109.1	18 CY
OVER PORTLAND ROAD, M.P. 109.2	24 CY
OVER S.R. 99, M.P. 111.2	18 CY


NO.	REVISIONS	BY	DATE
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION			
BRIDGE MAINTENANCE			
STRUCTURE EXPANSION JOINT DETAILS			
 CT Consultants <i>engineers architects planners</i> 4310 Seelye Court • Mentor, Ohio 44060 440.921.9000 www.ctconsultants.com			
DESIGNED: JPR	CHECKED: JMP	DATE: OCT. 2015	
DRAWN: MZP	IN CHARGE: WDB	SCALE: NO SCALE	
PROJECT 39-16-01A SHEET 399 OF 432			

CAD FILE NAME: 14693-EXPANSION-JOINTS.DWG

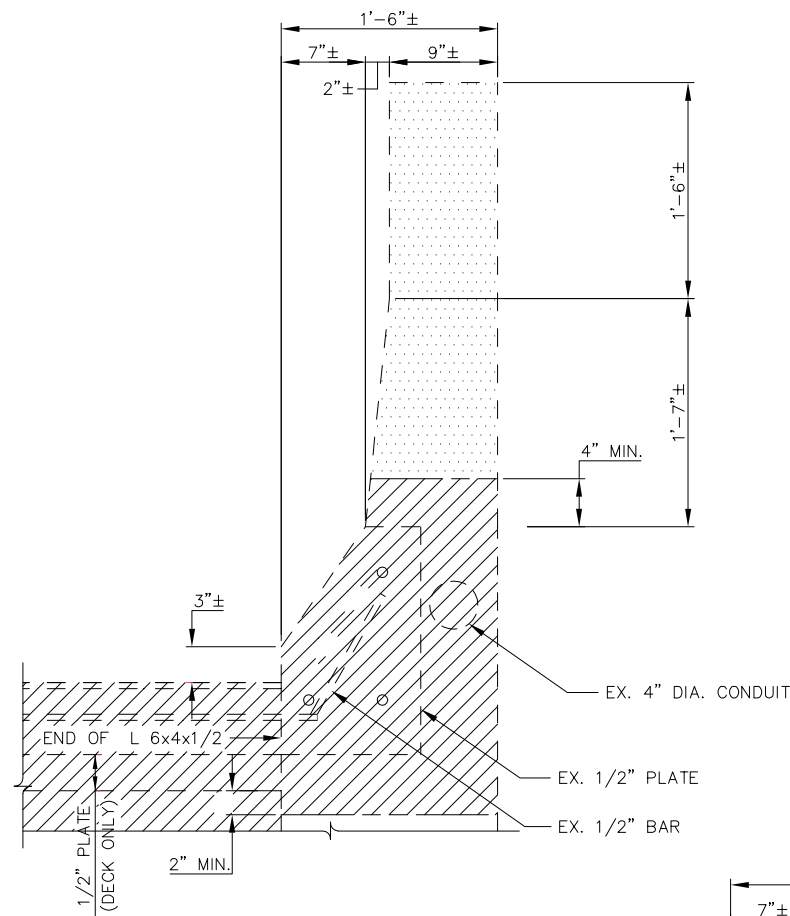


EXPANSION JOINT REMOVAL PLAN
DETAIL PERTAINS TO THE COMPLETE REMOVAL OF EXISTING
JOINT ARMOR AS NEEDED TO INSTALL ITEM SP 533D
(TYPICAL FOR ALL BRIDGES EXCEPT FOR THE STEEL JOINT
ARMOR SHAPE AT ITS TERMINAL END.)

- LEGEND:
-  INDICATES LIMITS OF CONCRETE
REMOVAL THAT SHALL BE INCLUDED
WITH ITEM SP 202.
- NOTES:
1. FOR SECTIONS J, K, L, & M, SEE SHEET 401.

NO.	REVISIONS	BY	DATE
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION			
BRIDGE MAINTENANCE STRUCTURE EXPANSION JOINT DETAILS			
 CT Consultants <small>engineers architects planners</small> <small>4301 Harding Court - Mason, Ohio 45040 419.933.9000 - www.ctmconsultants.com</small>			
DESIGNED:	JPR	CHECKED:	JMP
DRAWN:	MZP	IN CHARGE:	WDB
		DATE:	OCT. 2015
		SCALE:	NO SCALE
PROJECT 39-16-01A SHEET 400 OF 432			

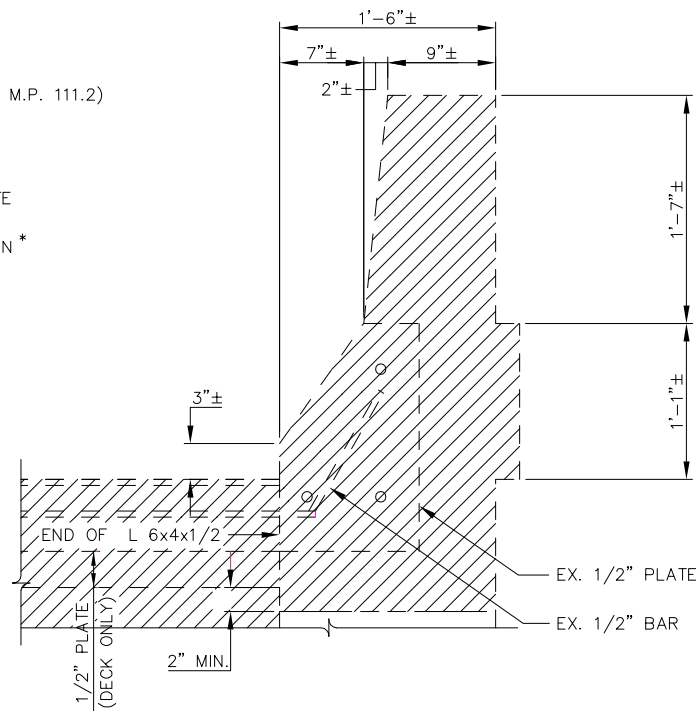
CAD FILE NAME: 14693-EXPANSION-JOINTS.DWG



(E.B. & W.B. TURNPIKE BRIDGES OVER S.R. 99, M.P. 111.2)

SECTION J

SECTION K OPPOSITE
COMPRESSION SEAL ARMOR SHOWN
ALL EXISTING REINFORCEMENT TO REMAIN *

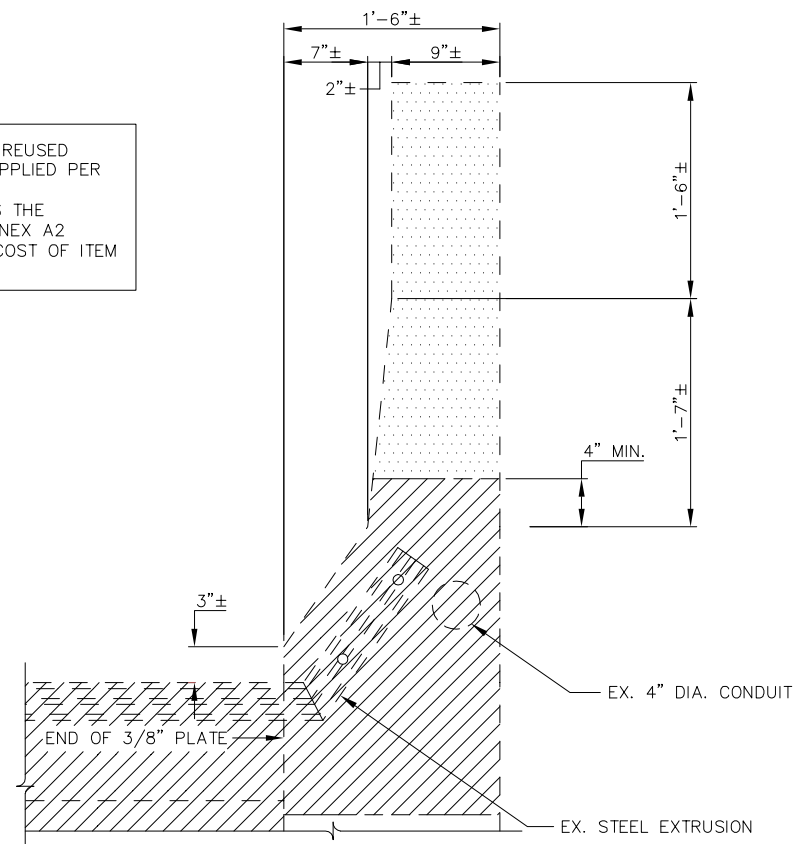


(E.B. & W.B. TURNPIKE BRIDGES OVER S.R. 99, M.P. 111.2)

SECTION L

SECTION M OPPOSITE
COMPRESSION SEAL ARMOR SHOWN
ALL EXISTING REINFORCEMENT TO REMAIN *

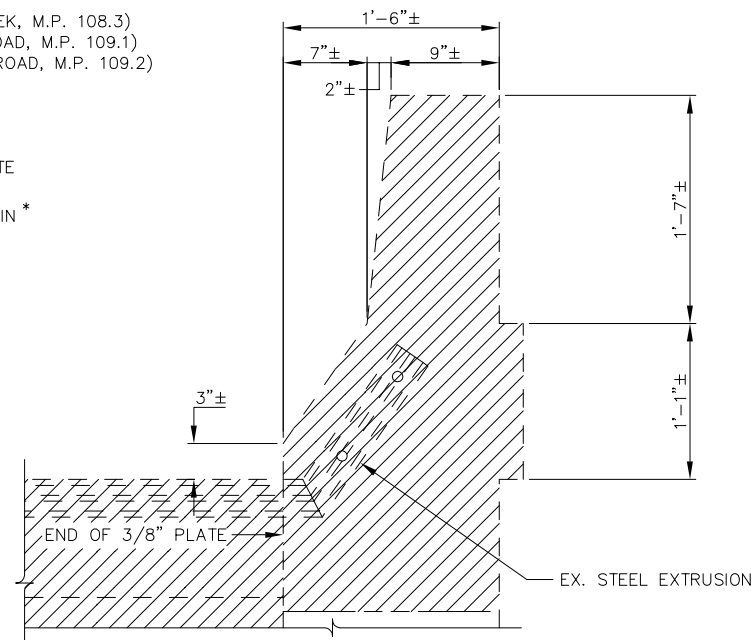
*--THE EXISTING REINFORCING STEEL TO REMAIN AND BE REUSED SHALL BE CLEAN OF RUST AND AN EPOXY COATING APPLIED PER THE MANUFACTURER'S INSTRUCTIONS. THE COATING SHALL BE A LIQUID SYSTEM THAT MEETS THE REQUIREMENTS OF ASTM A775/A775M-07b (2014) ANNEX A2 SPECIFICATION. THE COST TO BE INCIDENTAL TO THE COST OF ITEM SP 202 - PORTIONS OF STRUCTURES REMOVED.



(E.B. & W.B. TURNPIKE BRIDGES OVER MILL CREEK, M.P. 108.3)
(E.B. & W.B. TURNPIKE BRIDGES OVER NS RAILROAD, M.P. 109.1)
(E.B. & W.B. TURNPIKE BRIDGES OVER PORTLAND ROAD, M.P. 109.2)

SECTION J

SECTION K OPPOSITE
STRIP SEAL ARMOR SHOWN
ALL EXISTING REINFORCEMENT TO REMAIN *



(E.B. & W.B. TURNPIKE BRIDGES OVER MILL CREEK, M.P. 108.3)
(E.B. & W.B. TURNPIKE BRIDGES OVER NS RAILROAD, M.P. 109.1)
(E.B. & W.B. TURNPIKE BRIDGES OVER PORTLAND ROAD, M.P. 109.2)

SECTION L

SECTION M OPPOSITE
STRIP SEAL ARMOR SHOWN
ALL EXISTING REINFORCEMENT TO REMAIN *

LEGEND:




INDICATES MINIMUM LIMITS OF CONCRETE REMOVAL THAT SHALL BE INCLUDED WITH ITEM SP 202



INDICATES ADDITIONAL FULL-HEIGHT OF CONCRETE REMOVAL PER ITEM SP 202 ON MEDIAN PARAPET SUPERSTRUCTURE SIDE WHEN THE EXISTING CONCRETE EXPANSION JOINT OPENING IS NOT SUFFICIENT FOR THERMAL EXPANSION OF DECK. THE CONTRACTOR SHALL MEASURE THE EXISTING CONCRETE EXPANSION JOINT OPENING THEN COMPARE IT WITH THE "EXP. (INCH)" VALUE ON THE EXPANSION JOINT SCHEDULES, SHEET 1 of 5.

NOTES:

- FOR EXPANSION JOINT REMOVAL PLAN, SEE SHEET 400.

NO.		REVISIONS	BY	DATE
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION				
BRIDGE MAINTENANCE				
STRUCTURE EXPANSION JOINT DETAILS				
 CT Consultants <small>engineers architects planners</small> <small>3300 Sandberg Court - Mason, Ohio 45040 419.931.0000 - www.ctconsultants.com</small>				
DESIGNED:	JPR	CHECKED:	JMP	DATE: OCT. 2015
DRAWN:	MZP	IN CHARGE:	WDB	SCALE: NO SCALE
PROJECT 39-16-01A SHEET 401 OF 432				

SUB-SUMMARY OF ITEM SPECIAL – PATCHING CONCRETE BRIDGE DECKS, TYPE B REPAIR QUANTITY			
SLAB	UNIT	OBSERVED QUANTITY	ESTIMATED QUANTITY
W.B. BRIDGE DECK (a)	S.Y.	0.1	0.5
E.B. REAR ABUT. SLAB (b)	S.Y.	0.5	2.5
TOTAL		3 S.Y. *	

*THIS QUANTITY IS CARRIED TO THE STRUCTURE ESTIMATED QUANTITY TABLE
(a) HOLE AT MISSING RAISED PAVEMENT MARKER BETWEEN LANES 1 AND 2
(b) FOUR POTHOLES NEAR THE APPROACH SLAB

SUB-SUMMARY OF ITEM SPECIAL – PATCHING CONCRETE BRIDGE DECKS, TYPE B REPAIR QUANTITY			
SLAB	UNIT	OBSERVED QUANTITY	ESTIMATED QUANTITY
E.B. BRIDGE DECK (a)	S.Y.	0.1	0.5
E.B. FORWARD ABUT. SLAB (b)	S.Y.	0.7	3.5
W.B. DECK SLAB (c)	S.Y.	0.1	0.5
W.B. REAR ABUT. SLAB (d)	S.Y.	0.1	0.5
TOTAL		5 S.Y. *	

*THIS QUANTITY IS CARRIED TO THE STRUCTURE ESTIMATED QUANTITY TABLE
(a) PATCHED HOLE AT MISSING RAISED PAVEMENT MARKER BETWEEN LANES 1 AND 2
(b) DELAMINATED AREA AROUND A POTHOLE, LANE 3
(c) HOLE AROUND MISSING RAISED PAVEMENT MARKER BETWEEN LANES 1 AND 2
(d) HOLE AROUND MISSING RAISED PAVEMENT MARKER BETWEEN LANES 1 AND 2

SUB-SUMMARY OF ITEM SPECIAL – PATCHING CONCRETE BRIDGE DECKS, TYPE B REPAIR QUANTITY			
SLAB	UNIT	OBSERVED QUANTITY	ESTIMATED QUANTITY
E.B. BRIDGE DECK (a)	S.Y.	0.3	1.5
W.B. BRIDGE DECK (b)	S.Y.	0.1	0.5
TOTAL		2 S.Y. *	

*THIS QUANTITY IS CARRIED TO THE STRUCTURE ESTIMATED QUANTITY TABLE
(a) TWO POTHOLES NEAR THE REAR END OF THE DECK SLAB (OUTSIDE OF THE PROPOSED JOINT WORK)
(b) HOLE AT MISSING RAISED PAVEMENT MARKER BETWEEN LANES 1 AND 2

SUB-SUMMARY OF ITEM SP519C – PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR REPAIR QUANTITY			
BRIDGE PARAPET	UNIT	MEASURED QUANTITY	ESTIMATED QUANTITY
E.B. RIGHT (OUTSIDE) (c)	S.F.	5	10
E.B. RIGHT, (OUTSIDE) (d)	S.F.	5	10
TOTAL		20 S.F.*	

*THIS QUANTITY IS CARRIED TO THE STRUCTURE ESTIMATED QUANTITY TABLE
(c) UNSOUND AREA AT 11’ FROM EAST END OF BRIDGE DECK (3’± LONG x 1.5’± HIGH)
(d) UNSOUND AREA AT 25’ FROM EAST END OF BRIDGE DECK (3’± LONG x 1.5’± HIGH)

SUB-SUMMARY OF ITEM SPECIAL – PATCHING CONCRETE BRIDGE DECKS, TYPE B REPAIR QUANTITY			
SLAB	UNIT	OBSERVED QUANTITY	ESTIMATED QUANTITY
E.B. BRIDGE DECK (a)	S.Y.	0.4	2
TOTAL		2 S.Y. *	

*THIS QUANTITY IS CARRIED TO THE STRUCTURE ESTIMATED QUANTITY TABLE
(a) ASPHALT PATCH IN LANE 1 AT 8’± BACK OF THE EAST END OF THE BRIDGE DECK

SUB-SUMMARY OF ITEM SP519C – PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR REPAIR QUANTITY			
BRIDGE PARAPET	UNIT	MEASURED QUANTITY	ESTIMATED QUANTITY
W.B. LEFT (OUTSIDE) (b)	S.F.	6	12
TOTAL		12 S.F. *	


*THIS QUANTITY IS CARRIED TO THE STRUCTURE ESTIMATED QUANTITY TABLE
(b) UNSOUND AREA AT EAST END OF DECK (3’± LONG x 2’± HIGH)

1. ITEM SPECIAL – PATCHING CONCRETE BRIDGE DECKS, TYPE B:

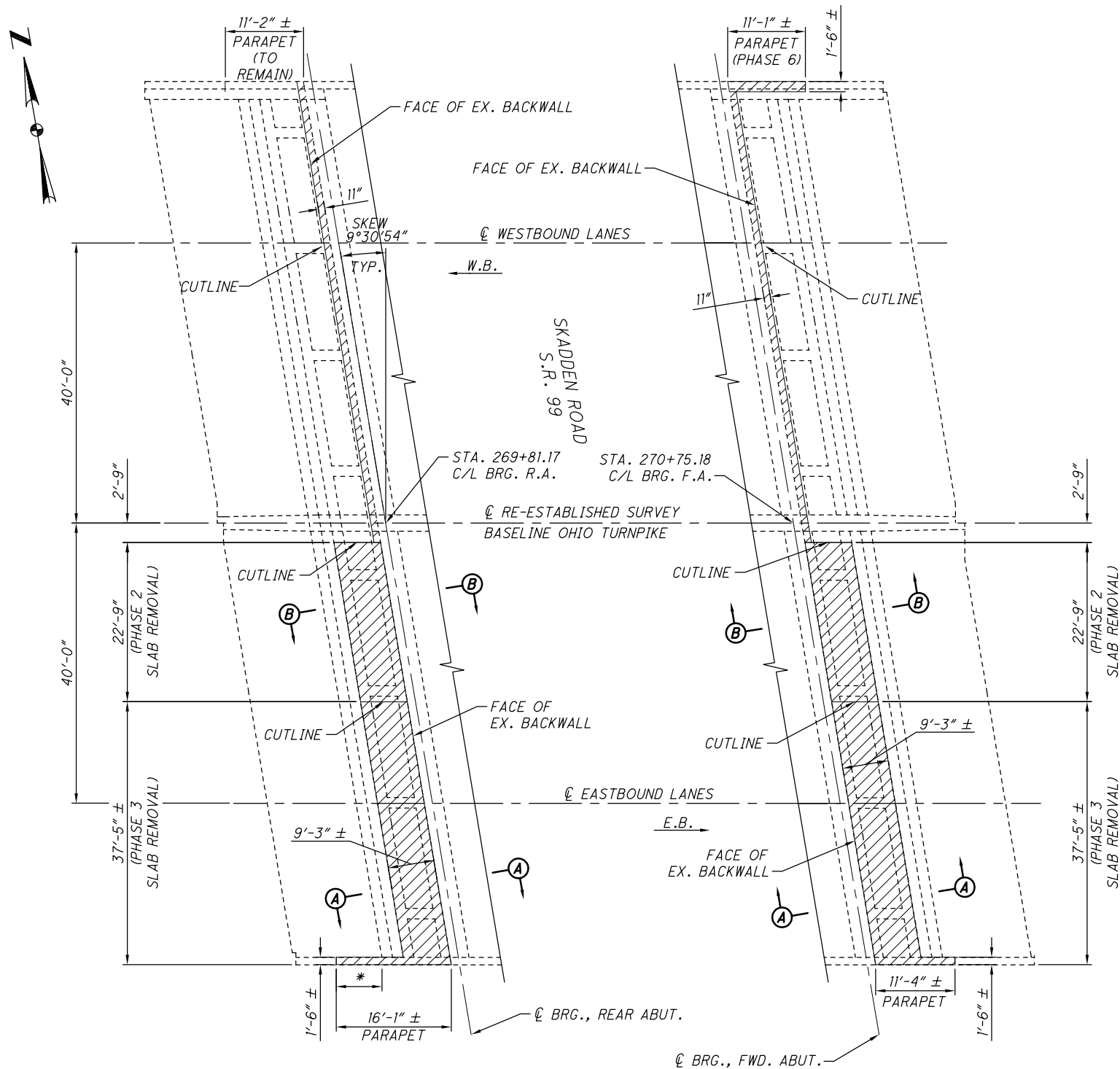
ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 500% OVER OBSERVED QUANTITIES TO ALLOW FOR FUTURE POTHOLE ENLARGEMENT. EXACT SIZE OF POTHOLE REPAIR SHALL BE DETERMINED BY THE CHIEF ENGINEER IN THE FIELD FOR FINAL PAY QUANTITIES. PATCHING SHALL BE DONE PER GENERAL NOTE "ITEM SPECIAL – PATCHING CONCRETE BRIDGE DECKS, TYPE B."

2. ITEM SP519C – PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR

PATCH UNSOUND AREAS OF CONCRETE ON THE ROADWAY FACE OF OUTSIDE BRIDGE PARAPETS PER SP 519C. ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 100% OVER MEASURED QUANTITIES FOR BIDDING PURPOSES. EXACT DIMENSIONS AND LOCATIONS OF PATCHES SHALL BE DETERMINED BY THE CHIEF ENGINEER IN THE FIELD FOR FINAL PAY QUANTITIES.

NO.	REVISIONS	BY	DATE
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION			
MAINLINE PAVEMENT RECONSTRUCTION BRIDGE MAINTENANCE DECK, ABUTMENT SLAB, AND PARAPET PATCHING			
		CT Consultants <small>engineers architects planners</small> <small>8750 Zandbergen Court, Missouri, Ohio 45408 440.912.8000 www.ctconsultants.com</small>	
DESIGNED:	JPR	CHECKED:	JPM
DRAWN:	MZP	IN CHARGE:	WDB
		DATE:	OCT. 2015
		SCALE:	NO SCALE
1/1		PROJECT 39-16-01A SHEET 402 OF 432	

CAD FILE NAME: 14693--S.R. 99 SLAB REMOVAL.DWG



* FOOTING BEYOND GRADE BEAM (TO BE REMOVED)

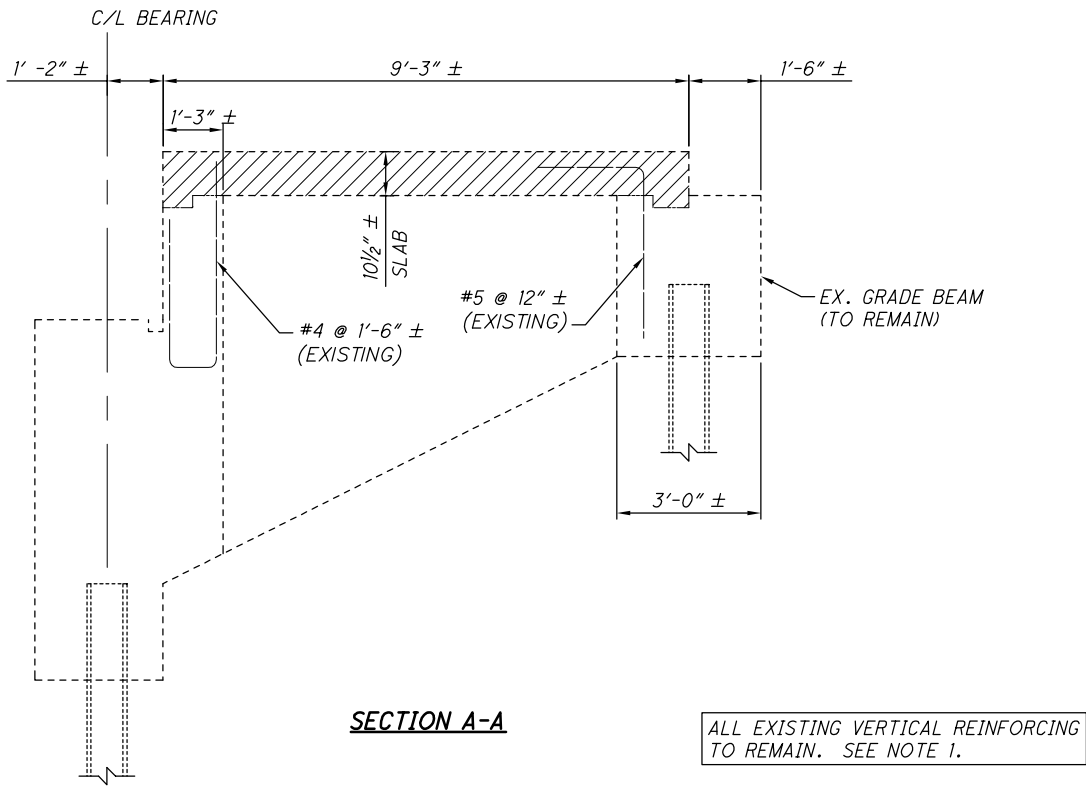
ABUTMENT PLAN

LEGEND:

 INDICATES PORTIONS OF STRUCTURE TO BE REMOVED PER SP 202.

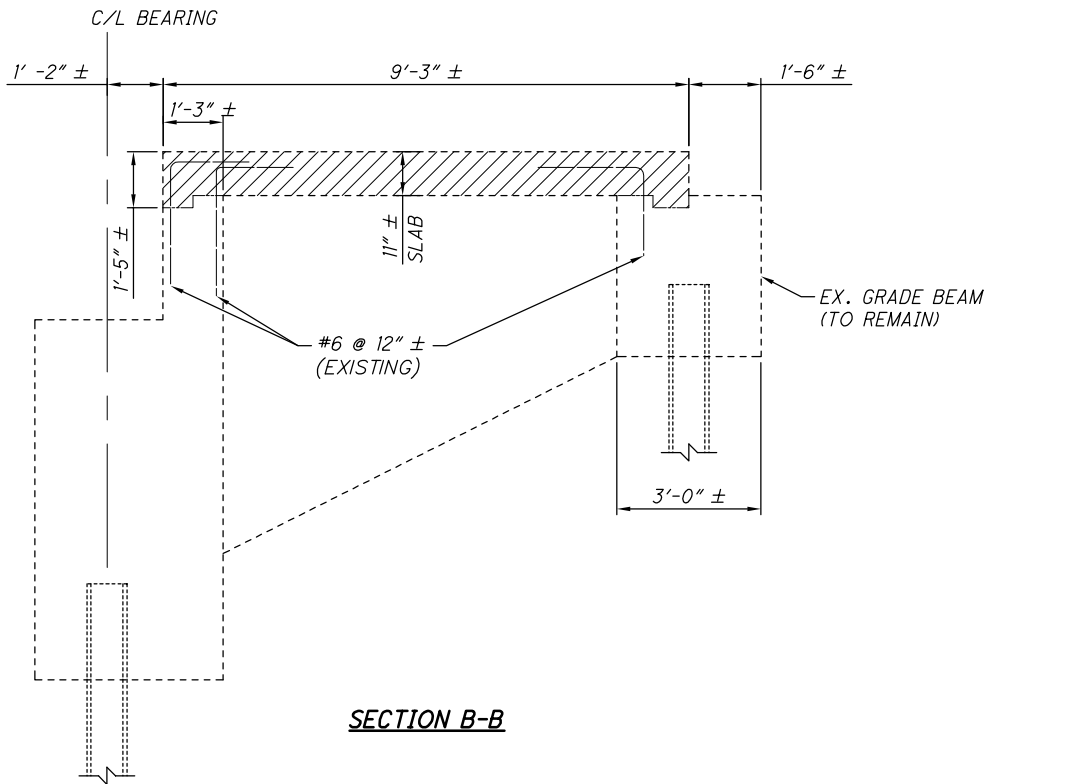
NOTES:

1. THE EXISTING REINFORCING STEEL (INCLUDING HORIZONTAL LEGS) TO REMAIN AND BE REUSED SHALL BE CLEAN OF RUST AND AN EPOXY COATING APPLIED PER THE MANUFACTURER'S INSTRUCTIONS. THE COATING SHALL BE A LIQUID SYSTEM THAT MEETS THE REQUIREMENTS OF ASTM A775/A775M-07b (2014) ANNEX A2 SPECIFICATION. THE COST TO BE INCIDENTAL TO ITEM SP 202 - PORTIONS OF STRUCTURE REMOVED.
2. FOR ABUTMENT SLAB REPLACEMENT DETAILS, SEE SHEET 2 OF 8.
3. WORK THIS SHEET WITH SHEETS 399 AND 403.




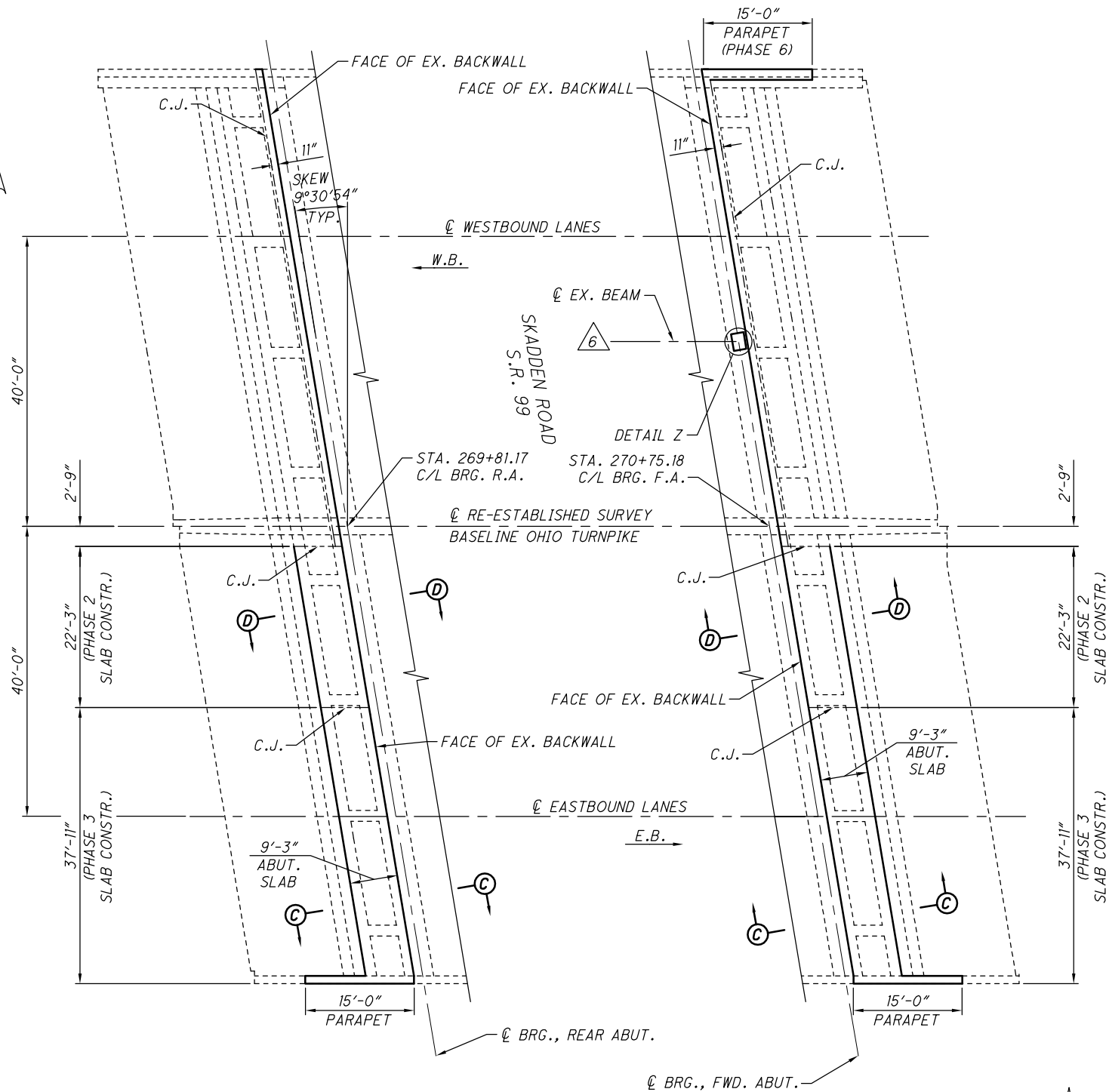
SECTION A-A

ALL EXISTING VERTICAL REINFORCING TO REMAIN. SEE NOTE 1.

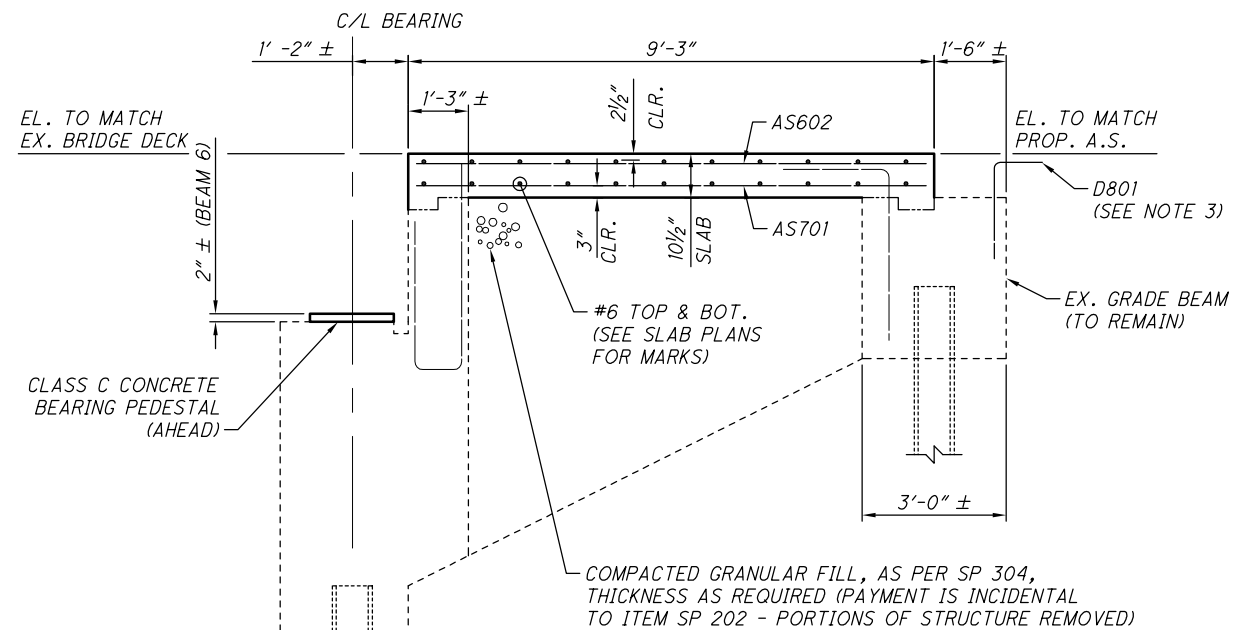


SECTION B-B

NO.	REVISIONS	BY	DATE
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION			
BRIDGE MAINTENANCE			
OHIO TURNPIKE OVER S.R. 99, M.P. 111.2			
ABUTMENT SLAB REMOVAL DETAILS			
 CT Consultants <i>engineers architects planners</i> 8710 Sanding Court, Mexico, Ohio 44060 (419) 933-1000 www.ctconsultants.com			
DESIGNED:	JPR	CHECKED:	JMP
DRAWN:	MLF	IN CHARGE:	WDB
		DATE:	OCT. 2015
		SCALE:	N/A
PROJECT 39-16-01A SHEET 424 OF 432			

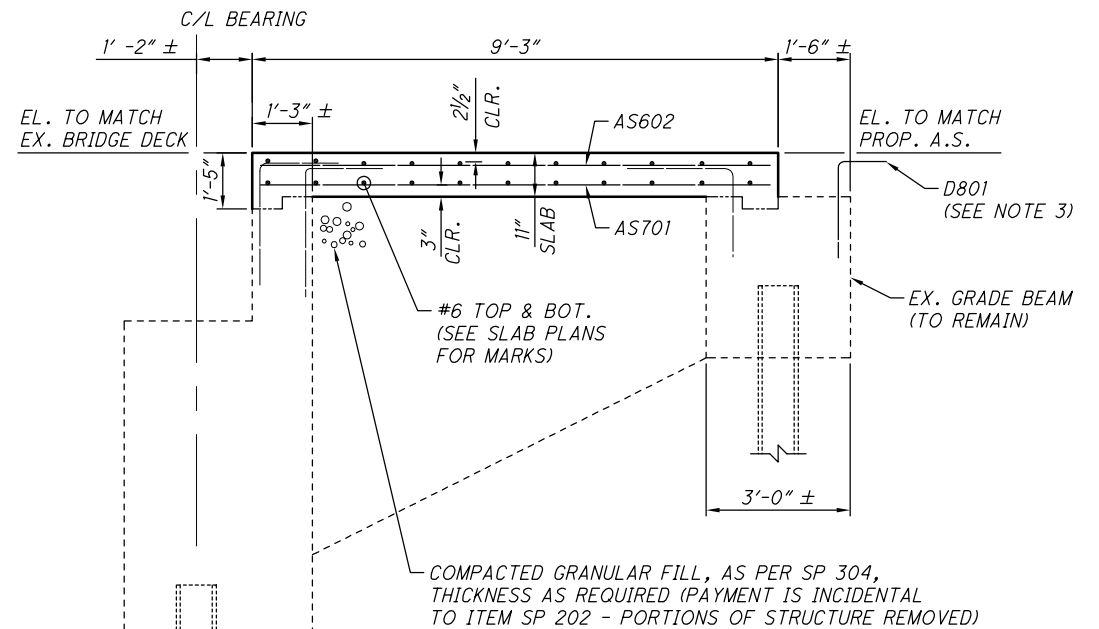


ABUTMENT PLAN

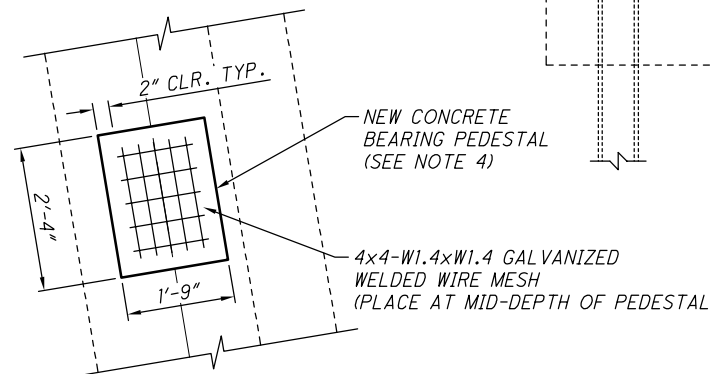


SECTION C-C

NOTE: SEE APPROACH SLAB PLANS FOR PROPOSED DRAINAGE ALONG THE GRADE BEAM



SECTION D-D

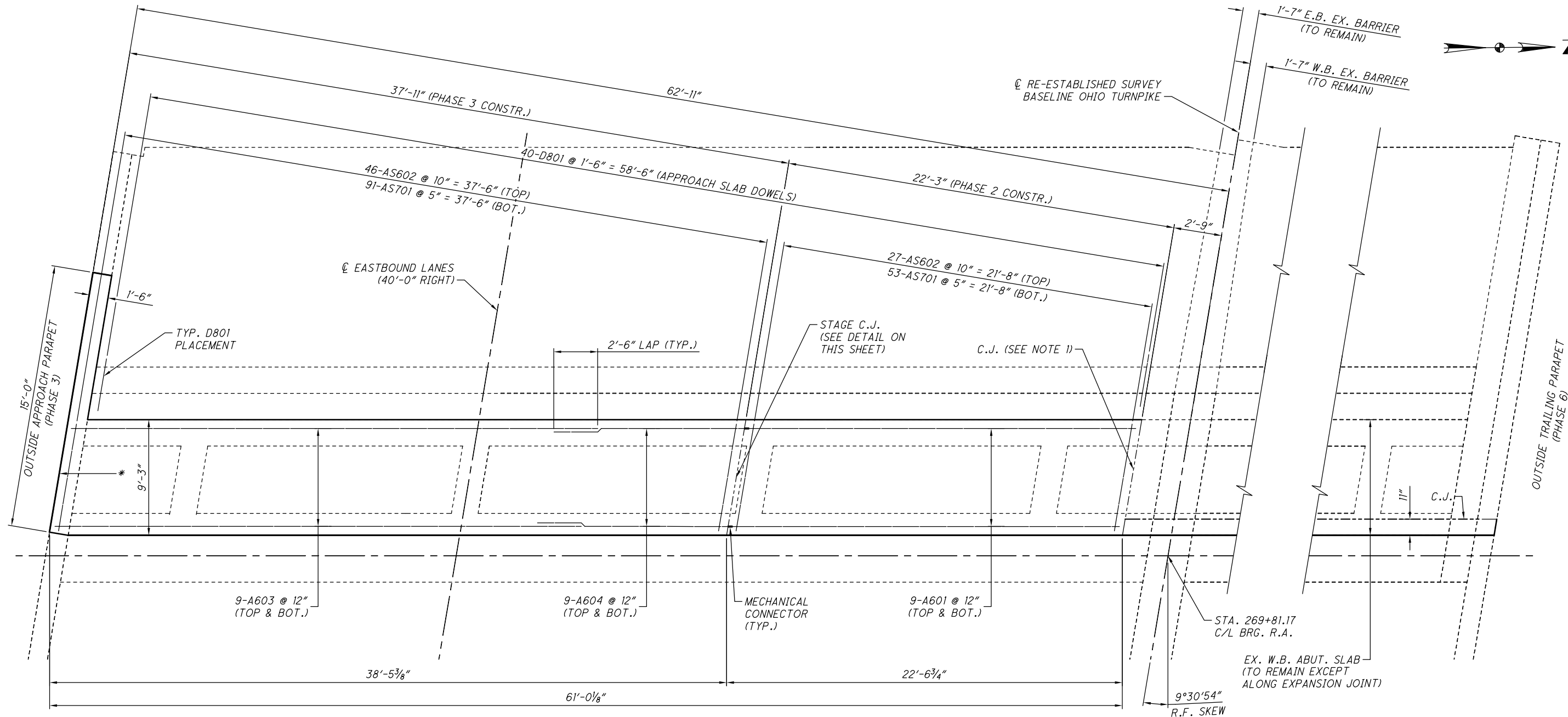


DETAIL Z
(AT BEAM 6, FORWARD ABUT.)
(SEE SECTION C-C FOR THICKNESS)

NOTES:

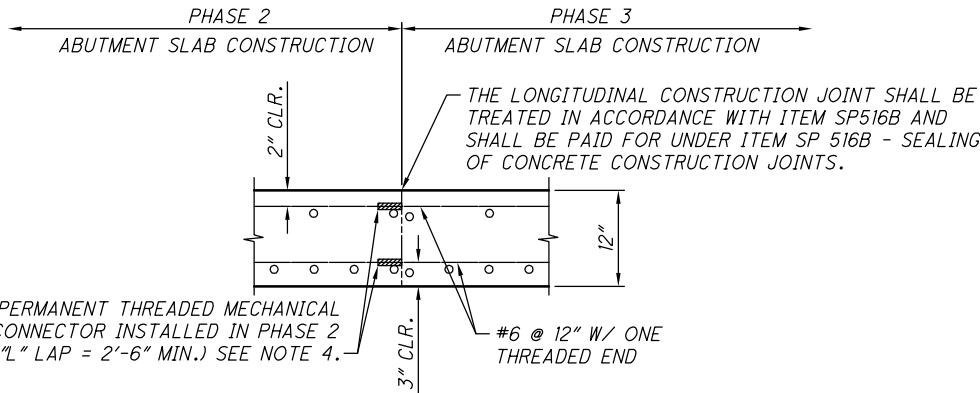
- FOR ABUTMENT SLAB REMOVAL DETAILS, SEE SHEET 1 OF 8.
- FOR REINFORCING BAR PLACEMENT DETAILS, SEE SHEETS 3 & 4 OF 8.
- INSTALL D801 APPROACH SLAB DOWELS PER C&MS 510. PLACE DOWEL WITH NON-SHRINK, NON-METALLIC GROUT. DRILL DOWEL HOLES 4" (MIN.) CLEAR OF GRADE BEAM'S EDGE AND 12" DEEP.
- PAYMENT FOR REPLACING CONCRETE BEARING PEDESTALS IS UNDER ITEM 511 - CONCRETE MISC.: REPLACE EXISTING CONCRETE BEARING PEDESTAL. SEE ITEM 511 GENERAL NOTE FOR ADDITIONAL INFORMATION.

REVISIONS			
NO.	REVISIONS	BY	DATE
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION			
BRIDGE MAINTENANCE			
OHIO TURNPIKE OVER S.R. 99, M.P. 111.2			
ABUTMENT SLAB DETAILS			
CT Consultants			
engineers architects planners			
14100 Sandberg Court, Mentor, Ohio 44060			
(937) 937-9900 www.ctconsultants.com			
DESIGNED: JPR	CHECKED: JMP	DATE: OCT. 2015	
DRAWN: MLF	IN CHARGE: WDB	SCALE: N/A	



REAR ABUTMENT REINFORCING PLAN

* - TREAT THE INTERFACE BETWEEN SLAB AND PARAPET IN ACCORDANCE WITH SP 516B, AND SHALL BE PAID FOR UNDER ITEM SP 516B - SEALING OF CONCRETE CONSTRUCTION JOINTS.




ABUTMENT SLAB STAGE CONSTRUCTION JOINT DETAIL

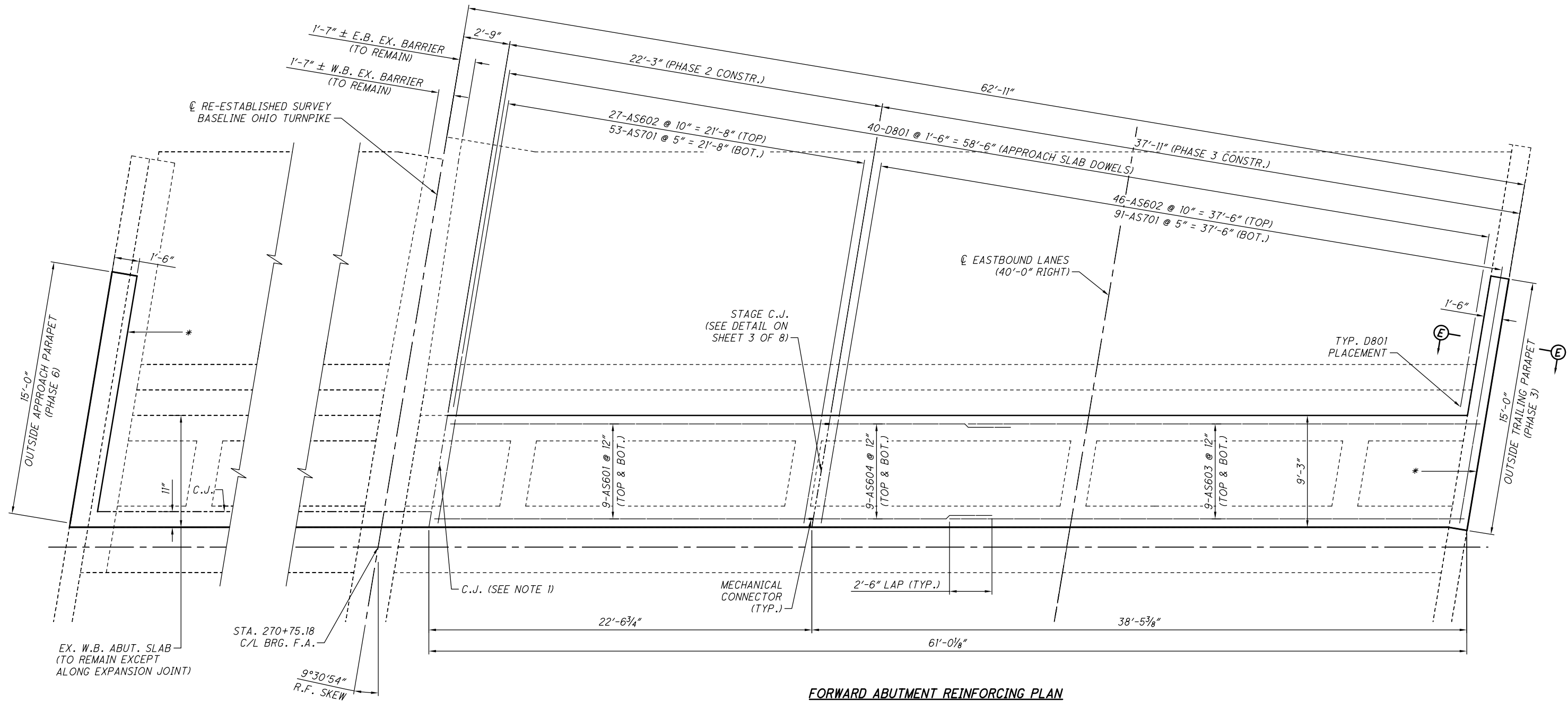
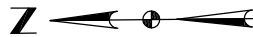
NOTES:

1. FOR DOWEL CONNECTION AT LONGITUDINAL JOINT BETWEEN EXISTING AND PROPOSED ABUTMENT SLABS, SEE SECTION D-D ON STANDARD DRAWING AS-2. TREATMENT OF JOINT PER SP 516B SHALL BE PAID FOR UNDER ITEM SP 516B - SEALING OF CONCRETE CONSTRUCTION JOINTS.
2. FOR PROPOSED OUTSIDE TRAILING PARAPET DETAIL, SEE SHEETS 6 & 7 OF 8.
3. FOR PROPOSED OUTSIDE APPROACH PARAPET DETAILS, SEE SHEET 5 OF 8.
4. MECHANICAL CONNECTORS: AN APPROVED TYPE OF MECHANICAL CONNECTOR FOR REINFORCING BARS SHALL BE PROVIDED. INSTALLATION OF CONNECTORS SHALL CONFORM WITH MANUFACTURER'S RECOMMENDED PROCEDURES. IF A DOWEL BAR SPLICE TYPE OF CONNECTOR IS FURNISHED, THE MINIMUM DOWEL BAR LENGTH TO BE FURNISHED WITH THE CONNECTOR SHALL BE AS GIVEN BY THE DIMENSION "L" SHOWN ON THE STAGE CONSTRUCTION JOINT DETAIL.

CONNECTORS AND DOWEL BARS USED WITH EPOXY COATED BARS SHALL BE EPOXY COATED. COATING FOR BOTH CONNECTORS AND BARS SHALL CONFORM TO THE SAME SPECIFICATIONS. COATINGS WHICH HAVE BEEN DAMAGED OR OTHERWISE DO NOT MEET SPECIFICATIONS WITH RESPECT TO COLOR, CONTINUITY, AND UNIFORMITY SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER OR THEY SHALL BE REPLACED WITH MATERIAL WHICH MEETS THE SPECIFICATIONS.

CONNECTORS AND DOWEL BARS SHALL CONFORM WITH ITEM SP 509 AND BE INCLUDED IN THE BID PRICE PER POUND FOR ITEM SP 509.


NO.		REVISIONS	BY	DATE
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION				
BRIDGE MAINTENANCE OHIO TURNPIKE OVER S.R. 99, M.P. 111.2 ABUTMENT SLAB DETAILS				
 CT Consultants <small>engineers architects planners</small> <small>8350 Solberg Circle, Mason, Ohio 45040 440.823.0000 www.ctconsultants.com</small>				
DESIGNED: JPR	CHECKED: JMP	DATE: OCT. 2015		
DRAWN: MLF	IN CHARGE: WDB	SCALE: N/A		
3/8		PROJECT 39-16-01A SHEET 426 OF 432		



* - TREAT THE INTERFACE BETWEEN SLAB AND PARAPET IN ACCORDANCE WITH SP 516B, AND SHALL BE PAID FOR UNDER ITEM SP 516B - SEALING OF CONCRETE CONSTRUCTION JOINTS.

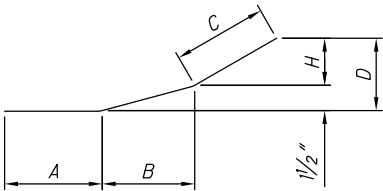
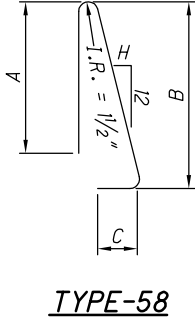
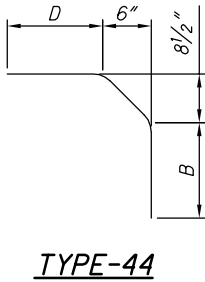
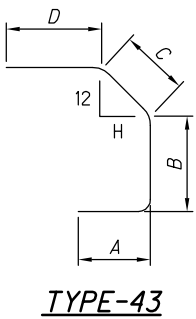
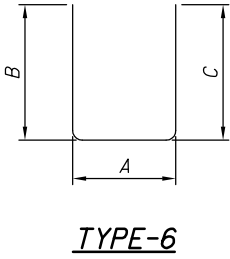
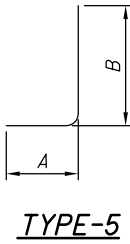
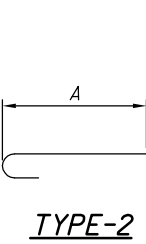
NOTES:

1. FOR DOWEL CONNECTION AT LONGITUDINAL JOINT BETWEEN EXISTING AND PROPOSED ABUTMENT SLABS, SEE SECTION D-D ON STANDARD DRAWING AS-2. TREATMENT OF JOINT PER SP 516B SHALL BE PAID FOR UNDER ITEM SP 516B - SEALING OF CONCRETE CONSTRUCTION JOINTS.
2. FOR PROPOSED OUTSIDE TRAILING PARAPET DETAILS AND SECTION E-E, SEE SHEET 6 & 7 OF 8.
3. FOR PROPOSED OUTSIDE APPROACH PARAPET DETAILS, SEE SHEET 5 OF 8.

NO.	REVISIONS	BY	DATE
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION			
BRIDGE MAINTENANCE OHIO TURNPIKE OVER S.R. 99, M.P. 111.2 ABUTMENT SLAB DETAILS			
 CT Consultants <i>engineers architects planners</i> 4150 Denning Court, Mentor, Ohio 44060 (440) 951-9900 www.ctconsultants.com			
DESIGNED: JPR	CHECKED: JMP	DATE: OCT. 2015	
DRAWN: MLF	IN CHARGE: WDB	SCALE: N/A	
PROJECT 39-16-01A SHEET 427 OF 432			


MARK	NUMBER					LENGTH	WEIGHT	TYPE	DIMENSIONS						
	R.A.		F.A.		TOTAL				A	B	C	D	E	H	INC
	PHASE 2	PHASE 3	PHASE 2	PHASE 3											
BRIDGE OVER S.R. 99, M.P. 111.2															
ABUTMENT SLABS															
AS601*	18		18		36	22'-1"	1,194	STR							
AS602	27	46	27	46	146	9'-0"	1,974	STR							
AS603		18		18	36	30'-0"	1,622	STR							
AS604*		18		18	36	10'-9"	581	STR							
AS605	(NOT USED)							STR							
AS606		13		13	26	3'-5"	134	43	10½"	1'-0"	10½"	9"		8½	
AS607		2		2	4	2'-6"	15	5	1'-9"	11"					
AS608		11		11	22	3'-0"	99	5	2'-3"	11"					
AS701	53	91	53	91	288	9'-0"	5,298	STR							
D801	15	25	15	25	80	3'-0"	641	5	1'-9"	1'-5"					
SUB-TOTAL							11,558	POUNDS							
PARAPETS (EBL R.A. & F.A.)															
P501		2		2	4	5'-6"	23	58	2'-2"	2'-5"	8"			1¼	
P502		14		14	28	3'-0"	88	2	2'-5"						
P503		2		2	4	13'-8"	57	77	9'-11"	2'-4"	1'-5"	6½"		5"	
P504		4		4	8	14'-8"	122	STR							
P505		4		4	8	3'-11"	33	STR							
P506		2		2	4	13'-8"	57	STR							
PA516		6		6	12	8'-5"	105	6	1'-2"	3'-9"	3'-9"				
P601		9		9	18	3'-0"	81	STR							
PB614		9		9	18	4'-6"	122	STR							
PC615		3		3	6	3'-8"	33	44		2'-2½"		8"			
P617		8		8	16	3'-6"	84	STR							
P618		2		2	4	5'-0"	30	STR							
SUB-TOTAL							835	POUNDS							
			PHASE 6	PARAPET REPLACEMENT (WBL F.A.)											
P501			3		3	5'-6"	17	58	2'-2"	2'-5"	8"			1¼	
PF512			13		13	3'-0"	41	2	2'-5"						
PG513			2		2	13'-8"	29	77	9'-11"	2'-4"	1'-5"	6½"		5"	
P514			10		10	14'-8"	153	STR							
P515			2		2	3'-11"	8	STR							
PA516			6		6	6'-5"	40	6	1'-2"	2'-9"	2'-9"				
P601			9		9	3'-0"	41	STR							
PD611			10		10	1'-7"	24	44		10"		8"			
PE612			10		10	1'-6"	23	STR							
PH613			10		10	2'-5"	36	STR							
PB614			9		9	4'-6"	61	STR							
PC615			3		3	3'-8"	17	44		2'-2½"		8"			
P617			8		8	3'-6"	42	STR							
SUB-TOTAL							532	POUNDS							
DECK SLABS (ALONG EXPANSION JOINTS)															
	(ON EBL)		(ON WBL)												
	PHASE 2	PHASE 3	PHASE 5	PHASE 6											
S601*	4		4		8	25'-1"	302	STR							
S603		4		4	8	30'-0"	361	STR							
S604*		4		4	8	10'-9"	129	STR							
SUB-TOTAL							792	POUNDS							

* REINFORCING BAR UTILIZES A MECHANICAL CONNECTOR. BAR LENGTH FOR PAYMENT IS MEASURED TO THE CONSTRUCTION JOINT. A REVISED BAR LENGTH AND/OR BAR END PREPARATION MAY BE NECESSARY DEPENDING ON THE TYPE OF MECHANICAL CONNECTOR FURNISHED.



NOTES:

- BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR ARE USED, INDICATE THE BAR SIZE NUMBER. FOR EXAMPLE, A700 IS A NO. 7 AND A1014 IS A NO. 10 SIZE. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE INDICATED. "R" INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED. "STD" WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BEND AT THE END OF THE BAR.
- ALL REINFORCING STEEL IS TO BE EPOXY COATED.

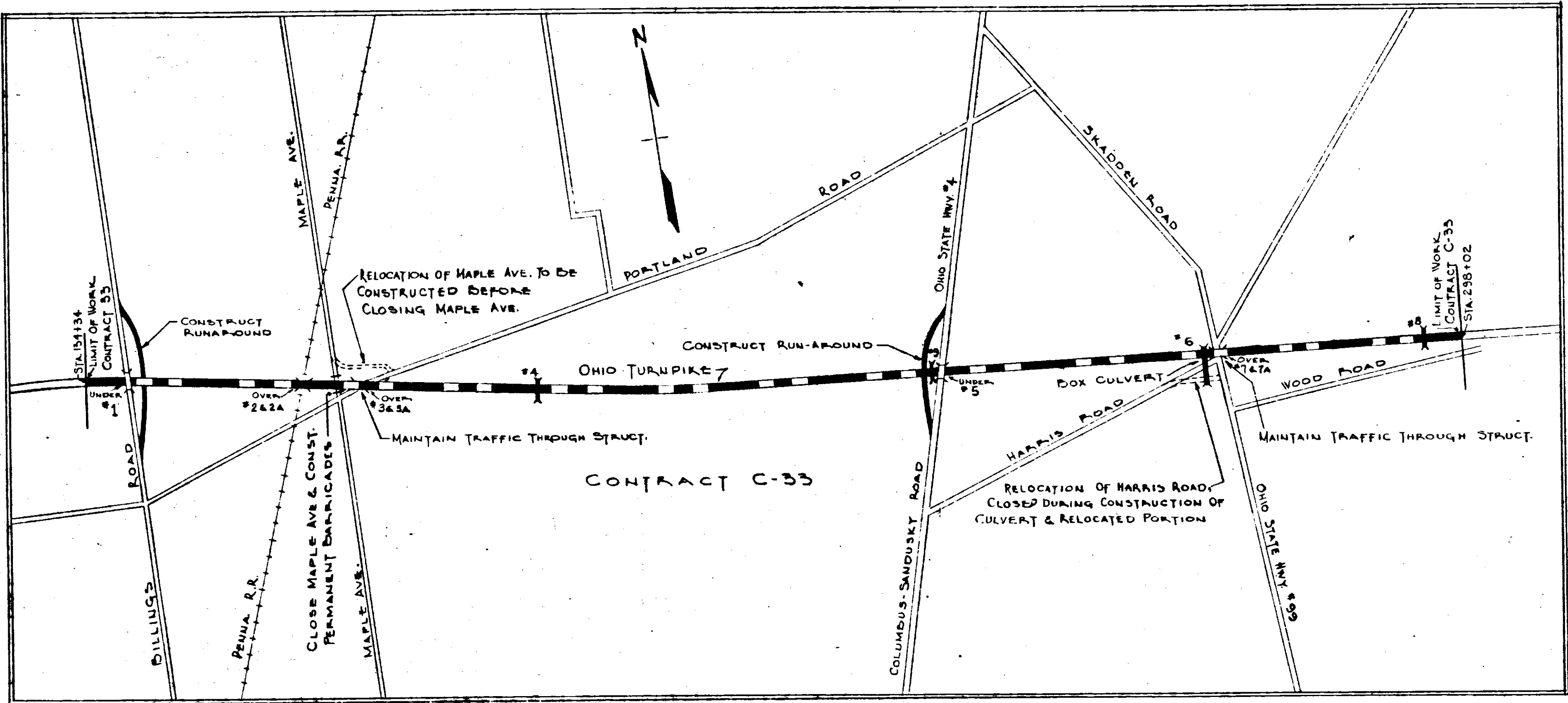
NO.	REVISIONS	BY	DATE
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION			
BRIDGE MAINTENANCE OHIO TURNPIKE OVER S.R. 99, M.P. 111.2 BAR SCHEDULE			
 CT Consultants <small>engineers architects planners</small> <small>4000 Spring Creek, Steen, Ohio 44088 440.952.9000 www.ctconsultants.com</small>			
DESIGNED: JPR	CHECKED: JMP	DATE: OCT. 2015	
DRAWN: MLF	IN CHARGE: WDB	SCALE: N/A	

CAD FILE NAME:14693-S.R. 99 SLAB REMOVAL.DWG

INDEX OF DRAWINGS

SHEET NO.	DESCRIPTION
1	INDEX
2	SUMMARY
3-8	TURNPIKE PLAN & PROFILE
9	PLAN & PROFILE - BILLINGS ROAD
10	PLAN & PROFILE - MAPLE ROAD
11	PLAN & PROFILE - COLUMBUS-SANDUSKY RD.
12	PLAN & PROFILE - HARRIS ROAD
13-13A	SPECIAL - HEADWALLS
14-17	STRUCTURE NO. 1 - BILLINGS ROAD
18-23	STRUCTURES NO. 2&2A - PENNA. RAILROAD
24-29	STRUCTURES NO. 3&3A - PORTLAND ROAD
30, 31	STRUCTURE NO. 4 - BOX CULVERT - STA. 187+50
32-35	STRUCTURE NO. 5 - COLUMBUS-SANDUSKY RD.
36, 37	STRUCTURE NO. 6 - BOX CULVERT - STA. 267+32
38-41	STRUCTURES NO. 7&7A - SKADDEN ROAD
42-46	STRUCTURAL STEEL DETAILS
47, 48	STRUCTURE NO. 8 - BOX CULVERT - STA. 291+22
49	STRUCTURE NO. 9 - BOX CULVERT - STA. 236+22
1-31	CROSS SECTIONS - TURNPIKE
32-34	CROSS SECTIONS - BILLINGS ROAD
35-38	CROSS SECTIONS - MAPLE AVENUE
39-41	CROSS SECTIONS - COLUMBUS-SANDUSKY RD.
42-43	CROSS SECTIONS - HARRIS ROAD
S1 TO S5	SCREED ELEVATIONS
IS TO 4S	MASTER SOIL PROFILE
R-1	REPAIRS TO STRUCTURE - 7A

STD. DWG. NO.		DATE OF LATEST REVISION
1	TURNPIKE DITCH DETAILS	5-6-53
2	STD. HEADWALLS - PIPE SIZES 48" & UNDER	1-20-53
3	STD. HEADWALLS - PIPE SIZES OVER 48"	1-20-53
4	TYPICAL ROADWAY SECTIONS	5-6-53
5	HANDRAIL DETAILS	5-6-53
6	INLETS & CURBS	5-6-53
7	MANHOLES	5-6-53
8	PAVEMENT REINFORCEMENT & DETAILS	6-3-53
9	TRANSVERSE PAVEMENT JOINTS - TYPE A	2-7-53
10	TRANSVERSE PAVEMENT JOINTS - TYPE B	5-6-53
11	PAVEMENT JOINT SPACING	12-31-52
12	RIGHT-OF-WAY FENCE & GATES	5-6-53
13	R/W. FENCE INSTALLATION DETAILS	5-6-53
14	PERMANENT BARRICADES, MONUMENTS & DELINEATORS	3-31-53
15	DRAINAGE DETAILS FOR TURNPIKE OVERPASSES	4-27-53
16	UNDERDRAINS	1-20-53
17	GUARD RAILS - TYPES A&B	1-24-53
18	GUARD RAILS - TYPES C&D	5-6-53
19	AGRICULTURAL TILE DRAINAGE - TYPICAL DETAILS	12-5-52
20	FLOOD GATES FOR RIGHT-OF-WAY FENCES	1-6-53
21	TRANSVERSE PAVEMENT JOINTS - TYPE "C"	1-23-53
22	CULVERT PIPE BEDDING AND BACKFILL	2-19-53
23	RIGHT OF WAY FENCE - TYPE 3	2-25-53



MAP SHOWING PROVISIONS FOR
MAINTAINING TRAFFIC DURING CONSTRUCTION
NOTE: RUN-AROUNDS ARE TO BE CONSTRUCTED AND MAINTAINED BY THE CONTRACTOR.

LIST OF SUPPLEMENTAL SPECIFICATIONS

	DATE OF LATEST REVISIONS
B-20 WATERBOUND MACADAM BASE COURSE	DEC. 9, 1952
B-35 ASPHALTIC CONCRETE BASE & LEVELING COURSES	DEC. 9, 1952
I-9 STONE UNDERDRAIN (FRENCH DRAIN)	DEC. 9, 1952
I-30 FARM TILE DRAINS	JULY 9, 1953
T-10 TRAFFIC COMPACTED SURFACE COURSE	DEC. 9, 1952
T-30 BITUMINOUS PRIME COAT & TACK COAT	DEC. 9, 1952
T-35 ASPHALTIC CONCRETE SURFACE COURSE	DEC. 9, 1952
A-5 SUPPLEMENTAL SPECS. TO GENERAL SPECS.	AUG. 7, 1953
I-16 CATCH BASINS ABANDONED	FEB. 3, 1953
I-18 STABILIZED SHOULDERS AND TEMPORARY RUNAROUNDS	MAY 28, 1953
I-29 CONSTRUCTION CONTRACT INFORMATION SIGN	MAY 28, 1953

GENERAL NOTES

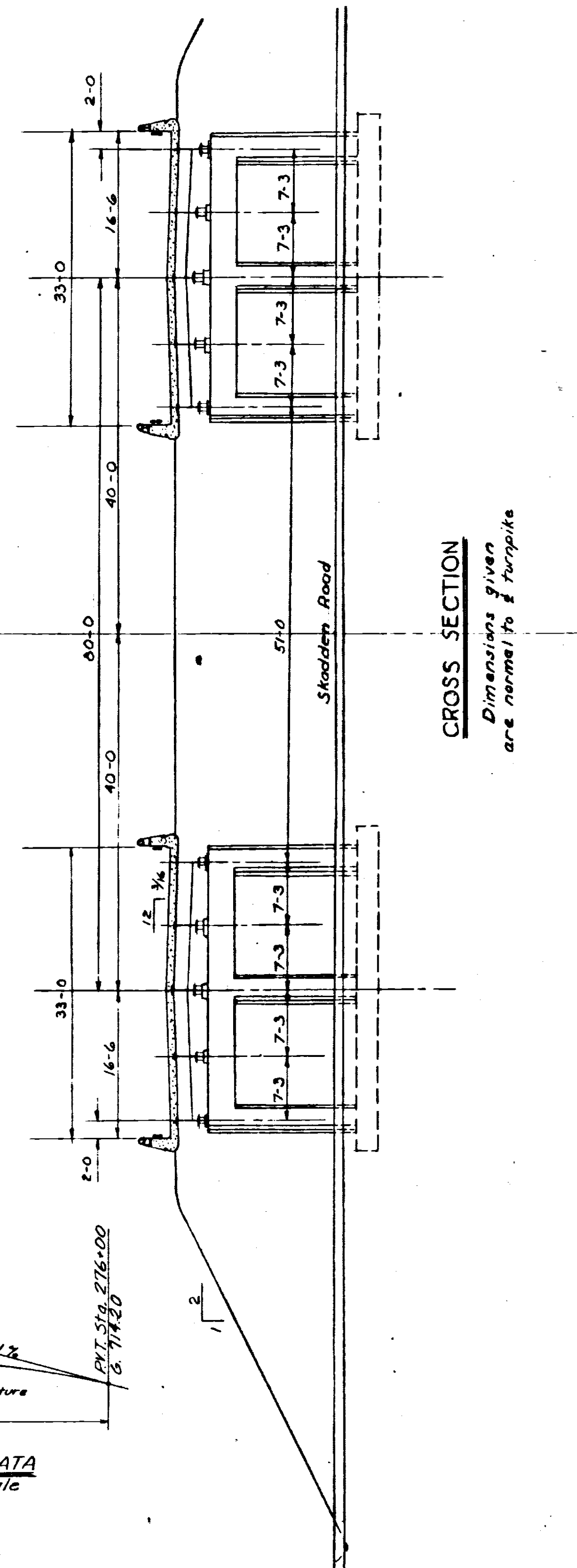
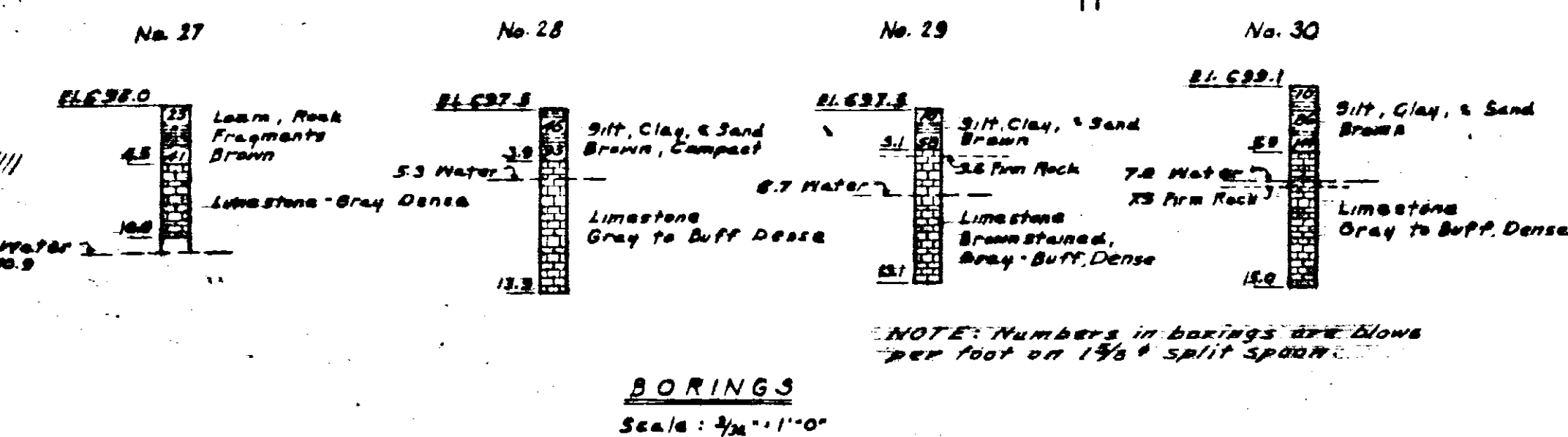
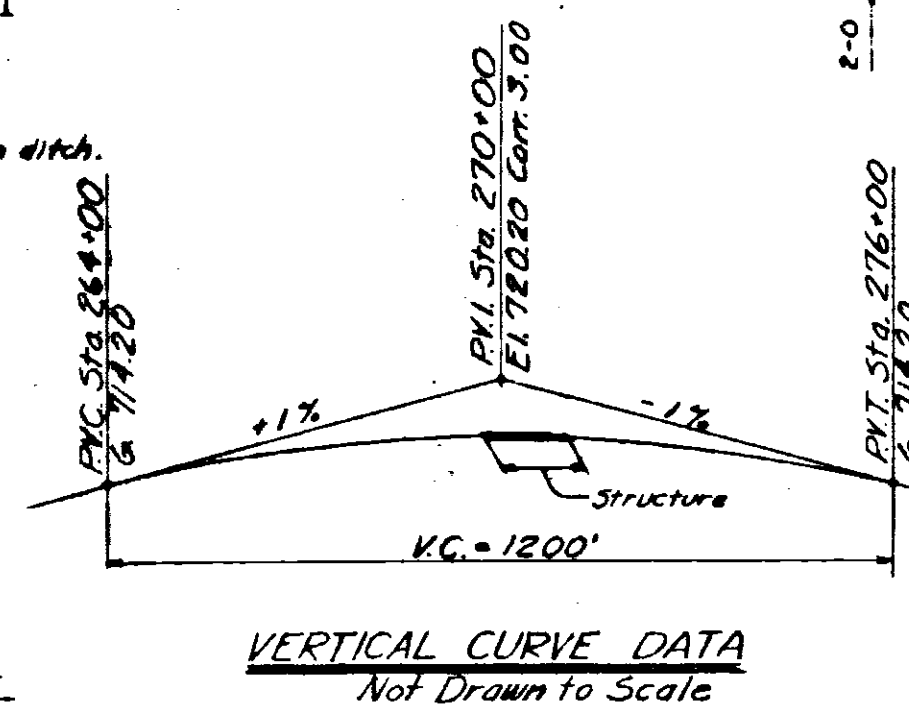
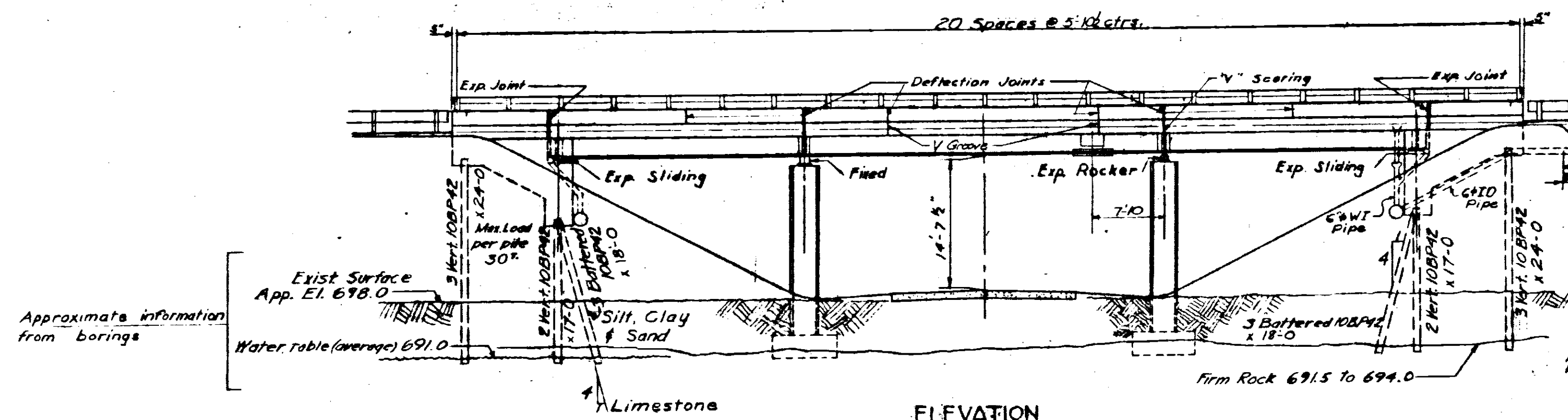
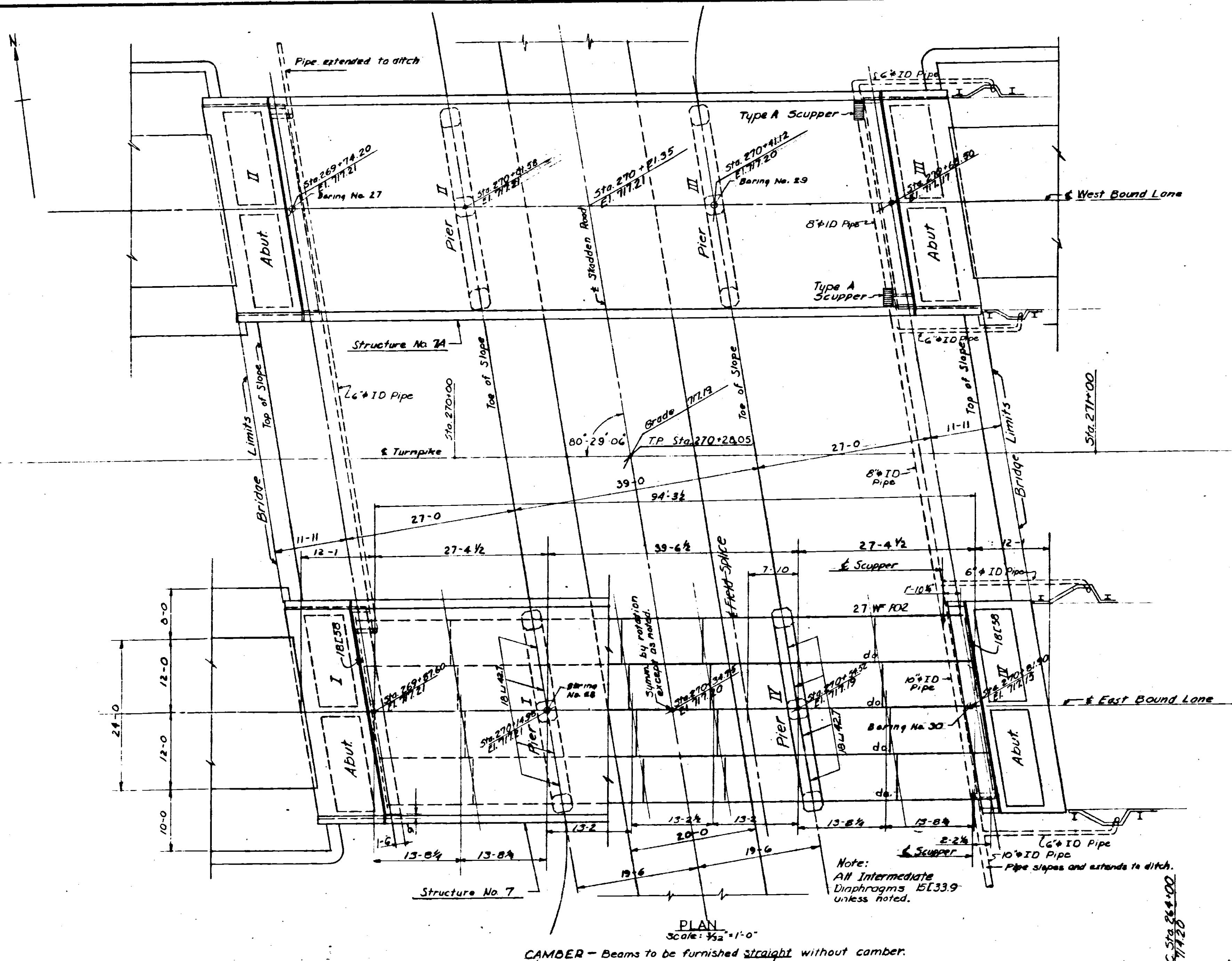
- STATION 134+34 AHEAD, CONTRACT C-33 EQUALS STATION 134+16.88 BACK, CONTRACT C-34.
- LOCATION OF INTERCEPTION OF EXISTING FARM TILE AS SHOWN ON PLAN IS APPROXIMATE ONLY. CONSTRUCTION TO FIT ACTUAL FIELD CONDITIONS.
- ALL INTERCEPTED TILE SHALL BE CONNECTED BY CONTRACTOR.
- TRENCH EXCAVATION, BACKFILL, CONNECTIONS, AND BREATHERS TO BE INCLUDED IN UNIT PRICE PER LINEAR FOOT OF FARM TILE.
- ALL FARM TILE WITHIN RIGHT OF WAY TO BE ABANDONED. (10' OR LARGER TILE TO BE REMOVED)
- ELEVATIONS ARE REFERRED TO M.S.L., U.S.C. & G.S. DATUM.
- THE NORTH INDICATED AND REFERRED TO IN THIS SET OF PLANS IS THE GRID NORTH OF THE NORTH ZONE OF THE OHIO STATE LAMBERT PROJECTION COORDINATE SYSTEM.
- THE OFFSETS OF MEDIAN DITCHES ON CURVES ARE SHOWN ON THE PLAN & PROFILE SHEETS ONLY. NO CHANGES HAVE BEEN MADE ON THE CROSS SECTION SHEETS. MAX. OFFSET ON CURVES 2.31', LENGTH OF TRANSITION 275'.

THIS PROJECT SHALL BE CONSTRUCTED UNDER OHIO TURNPIKE PROJECT NO. 1, GENERAL SPECIFICATIONS DATED DECEMBER 9, 1952, EXCEPT AS NOTED, SUPPLEMENTAL SPECIFICATIONS (LISTED ELSEWHERE ON THIS SHEET) AND SPECIAL PROVISIONS FOR CONTRACT C-33.

2	AS BUILT PLANS	CPK	12/15/53
1	NOTE NO. 8	FBP	2/24/54
No.	Revision	By	Date
OHIO TURNPIKE COMMISSION OHIO TURNPIKE PROJECT NO. 1			
INDEX SHEET			
BALKE & WATKINS CONTRACTING ENGINEER DESIGN SECTION D-11			
DESIGNED: JWF	CHECKED: AGL & JWF	DATE: 3-18-53	
DRAWN: JWF	IN CHARGE: BW	SCALE:	
CONTRACT NO. C-33		SHEET 1 OF 49	

REFERENCE NUMBER	SPECIFICATION ITEM NUMBER	DESCRIPTION	UNIT	SHEET NUMBERS																TOTALS	PROPOSAL QUANTITIES	
				3	4	5	6	7	8	9	10	11	12	30	36	47	49					
ROADWAY																						
1	E-1	ROADWAY EXCAVATION	C.Y.	1072	1533	3033	2845	100303	7219	324	407	557	611							143,514	142,200	
2	E-3	CHANNEL EXCAVATION	C.Y.			1207	455	315	1392											3369	5,100	
3	E-4	BORROW	C.Y.																	770047	635,500	
4	E-11	WATER	M.GAL.																	1021	2,000	
5	E-12	PIPE REMOVED (under 16")	L.F.			271	1046		120				1023							2460	1245	
8	I-15	GUARD RAIL - TYPE A	L.F.	490	3262	150	250	675	775											5602	4,500	
9	I-15	GUARD RAIL - TYPE B	L.F.	2275	125			1552	2544											6496	6,500	
10	I-15	GUARD RAIL - TYPE C-1 ON C-2	L.F.									2238								2238	1,650	
11	I-15	GUARD RAIL - TYPE D-2	L.F.							1456			208							1664	1,850	
12	I-23	R/W FENCE - TYPE 2	L.F.	4711	6048	5656	5750	5770	5711											33,640	33,900	
13	I-25	PERMANENT BARRICADES	L.F.		32															32	32	
14	I-26	PERMANENT MONUMENTS	EA.	2	2	1	2	1	1											9	9	
15	I-28	TEMPORARY CATTLE FENCE	L.F.																	1945	8,000	
16	L-3	PLACING STOCKPILED TOPSOIL	S.Y.	13331	13315	16488	16458	15922	15363											90,907	90,850	
17	L-6	ROADSIDE CLEANUP	L.S.																	Lump	Lump	
18	L-9	SEEDING & PROTECTING - TYPE A	S.Y.	13331	13315	16488	16458	15922	15363											90,907	90,850	
19	L-9	COMMERCIAL FERTILIZER 10-6-4	T.	1.10	1.10	1.36	1.35	1.32	1.27											7.50	8.0	
20	L-10	SODDING	S.Y.																	0	26,300	
21	L-19	SPECIAL SEEDING	S.Y.	20202	14760	19367	22844	32989	18800	12631	5,889	22,398	3799							173,879	123,000	
22		REMOVAL OF EXISTING BRIDGE	EA.																	1	1	
DRAINAGE - INCLUDING SMALL STRUCTURES (BOX CULVERTS)																						
25	E-2	EXCAVATION FOR STRUCTURES (DRY)	C.Y.	161	1615	499	970	26	552		187		197	676	1244	1297	304			7723	8200	
26	E-2	EXCAVATION FOR STRUCTURES (WET)	C.Y.												575					575	575	
27	I-2	15" C.M.P. 12 GA. STORM SEWER UNDER PAVT.	L.F.		128															128	130	
28	I-2	24" STD. STA. R.C.C.P.	L.F.					50												90	90	
29	I-2	15" STD. STA. R.C.C.P. STORM SEWER	L.F.	242	72	242	154	187	197											1054	1050	
30	I-2	18" STD. STA. R.C.C.P. STORM SEWER	L.F.		75			74												149	150	
31	SF-203	12" CORRUG. PERFORATED PIPE 12' LG.	L.F.																	0	300	
32	I-5	PIPE SPECIALS (15" C.M.P. 12 GA. 30' BENDS)	EA.		2															2	2	
33	I-5	PIPE SPECIALS (6" C.I. FLAP VALVE)	EA.																	1	1	
35	I-8	INLETS, TYPE A-1	EA.	1	1	1		1	1											5	6	
36	I-9	STONE UNDERDRAINS No. 1	L.F.										176							170	750	
37	I-14	6" PLAIN CONC. DITCH PAVEMENT	S.Y.																	0	675	
38	I-16	CATCH BASIN ABANDONED	EA.									1	2							3	2	
39	I-30	6" EXTRA QUALITY FARM TILE DRAIN	L.F.		106															106	1200	
40	I-30	8" EXTRA QUALITY FARM TILE DRAIN	L.F.				500													500	1,800	
41	I-30	10" EXTRA QUALITY FARM TILE DRAIN	L.F.				735		697											1432	1,550	
42	I-30	12" EXTRA QUALITY FARM TILE DRAIN	L.F.			111														111	100	
43	I-30	14" EXTRA QUALITY FARM TILE DRAIN	L.F.																	0	30	
44	I-30	8" TILE OUTLET	L.F.				20													20	32	
45	I-30	6" TILE OUTLET (FARM DRAIN)	L.F.		20		50													70	40	
46	I-30	10" TILE OUTLET (FARM DRAIN)	L.F.				20		20											40	60	
48	I-30	12" TILE OUTLET FOR TILE DRAINS	L.F.			62	20													82	40	
49	I-30	15" TILE OUTLET FOR TILE DRAIN	L.F.																	0	20	
50	S-1	CLASS "C" CONCRETE FOR STRUCTURES	C.Y.	10	85	35	43	6	28		31		16	267	1531	477	95			2627	2575	
51	S-4	REINFORCING STEEL	LBS.	519	4194	1399	2454	319	1641		994		655	31690	55850	3928	9802			464,739	454,000	
52	S-27	18" STD. STA. R.C.C.P. ROADWAY CULVERT	L.F.										61							61	50	
53	S-27	24" STD. STA. R.C.C.P. ROADWAY CULVERT	L.F.		82								45							127	120	
54	S-27	30" STD. STA. R.C.C.P. ROADWAY CULVERT	L.F.	139																139	100	
55	S-27	36" STD. STA. R.C.C.P. ROADWAY CULVERT	L.F.				168						58							225	235	
56	S-27	42" STD. STA. R.C.C.P. ROADWAY CULVERT	L.F.																	0	115	
57	S-27	48" STD. STA. R.C.C.P. ROADWAY CULVERT	L.F.		78															78	80	
58	S-27	54" STD. STA. R.C.C.P. ROADWAY CULVERT	L.F.			188					58									246	50	
59	S-27	54" EXT. STA. R.C.C.P. ROADWAY CULVERT	L.F.		244															244	240	
60	S-27	SECTIONAL-PLATE PIPE ARCH 7'8"x5'-5"-8 GA.	L.F.		251				167											418	400	
61	S-27	SECTIONAL-PLATE PIPE ARCH 8'10"x6'-1"-8 GA.	L.F.				45													145	140	
62	SF-203	BACKFILL - * 6 COURSE AGGREGATE M-3	C.Y.																	551	50	
63	SF-203	BACKFILL - * 2 CRUSHED ROCK - M-3.5	C.Y.																	266	750	
64	SF-203	FINE FILTER AGGREGATE M-2.1 SAND	C.Y.																	83	30	

REFERENCE NUMBER	SPECIFICATION ITEM NUMBER	DESCRIPTION	UNIT	SHEET NUMBERS																TOTALS	PROPOSAL QUANTITIES
				14	18	24	32	38													
STRUCTURES					*1	*2	*3	*5	*7												
91	E-2	EXCAVATION FOR STRUCTURES	C.Y.	471	1439	1201	581	651											4343	3,275	
92	E-12	PIPE REMOVED (under 16")	L.F.																0	250	
93	I-4	6" PIPE OUTLET FOR UNDERDRAINS	L.F.		36														36	36	
95	I-14	PAVED DITCH - 4" CONC.	L.F.		438														438	460	
96	I-15	GUARD RAIL TYPE A	L.F.		701	1037		468											2202	2,100	
97	S-1	CLASS "C" CONCRETE FOR STRUCTURES	C.Y.	404	1343	1438	466	636											4257	4,155	
98	S-1	CLASS "E" CONCRETE FOR STRUCTURES	C.Y.	99	337	166	124	52											777	750	
99	S-3	WATERPROOFING TYPE A	S.Y.		585														585	550	
100	S-3	WATERPROOFING TYPE C	S.Y.				665												665	675	
101	S-3	PREMOULDED SEALING STRIP	L.F.		161														161	100	
102	S-4	REINFORCING STEEL IN PLACE	LBS.	83679	70410	24350	10374	15271											714,065	694,400	
103	S-7	STRUCTURAL STEEL IN PLACE	LBS.	31109	36630	21743	166341	146802											1,458,894	1,450,900	
104	S-9	EXPANSION DAMS	LBS.	5031	13031	25543	5827	13106											62538	59,500	
105	S-14	STANDARD HANDRAIL TYPE A	L.F.			1041		472											1513	2,125	
106	S-14	STANDARD HANDRAIL TYPE B	L.F.	444			434												878	825	
107	S-14	RAILING 8"x8" TIMBER	L.F.		209														209	200	
108	S-16	FIAT TEST PILE	EA.	1	1	1	1	1											5	5	
109	S-17	TEST PILE LOAD	EA.																0	5	
110	S-18	STEEL PILES, FURNISHING (10DP42)	L.F.	367	948		417	720											2452	2,275	
111	S-18	STEEL PILES, FURNISHING (12DP53)	L.F.			1213													1213	1,175	
112	S-18	STEEL PILES, DRIVING (10DP42)	L.F.	344	862	1081	339	561											3187	3,080	
114	S-29	SCUPPERS, TYPE A	EA.		5	4		4											16	16	
115	S-29	SCUPPERS, TYPE B	EA.	4															8	8	
116	S-29	DRAINAGE PIPE 6" ROUND	L.F.	106	252	414	124	210											1106	1050	
117	S-29	DRAINAGE PIPE 8" ROUND	L.F.	70	174	130	114	75											562	560	
118	S-29	DRAINAGE PIPE 10" ROUND	L.F.	26	90	150		60											326	325	
119	S-29	DRAINAGE PIPE 4" ROUND WROUGHT IRON	L.F.	10	19	33	9	19											90	105	
120	S-29	DRAINAGE PIPE 6" ROUND WROUGHT IRON	L.F.	64	136	68	52	61											381	320	
121	S-29	ROMIOUS BACKFILL *34 AGGREGATE	C.Y.		245														245	245	
122	T-10	9" TRAFFIC COMPACTED SURFACE COURSE	TONS		139														139	140	
123	T-35	ASPHALTIC CONCRETE SURFACE COURSE TYPE "A"	C.Y.				26												26	25	
94	I-4	6" & PERFORATED PIPE UNDERDRAIN	L.F.		366														366	385	
113	S-18	STEEL SPLICE - MAKING	EA.		1	8													9	5	
MISCELLANEOUS																					
130	T-29	CONSTRUCTION CONTRACT INF SIGNS	EA.																6	6	



QUANTITIES				
No.	Item	Location & Remarks	Unit	Estimated Quantity
E2	Structural F.C.	C.Y.	526	631.4
E12	Pipe Removal	L.F.	265	0
S1	Conc. Class 'C'	C.Y.	538	605.8
S1	Conc. Class 'E'	C.Y.	58	525
S4	Reinf. Steel	Lbs.	118,400	146,802
S7	Struct. Steel	Lbs.	144,900	13,106
S9	Exp. Joints	Lbs.	12,600	472.4
S14	Handrail Type A	L.F.	384	1
S16	Test Pile	Ea.	1	0
S17	Pile Load	Ea.	1	720
S18	Piles Turn 108P42	L.F.	640	560.6
S18	Piles Driving	L.F.	582	1
S18	Piles Splice	Ea.	1	0
S29	Scuppers Type A	Ea.	4	4
S29	6" Pipe	L.F.	210	75
S29	8" Pipe	L.F.	75	60
S29	10" Pipe	L.F.	60	25
S29	4" W.I. Pipe	L.F.	25	60.7
S29	6" W.I. Pipe	L.F.	50	384
I15	Guard Rail Type A	L.F.	384	468.2

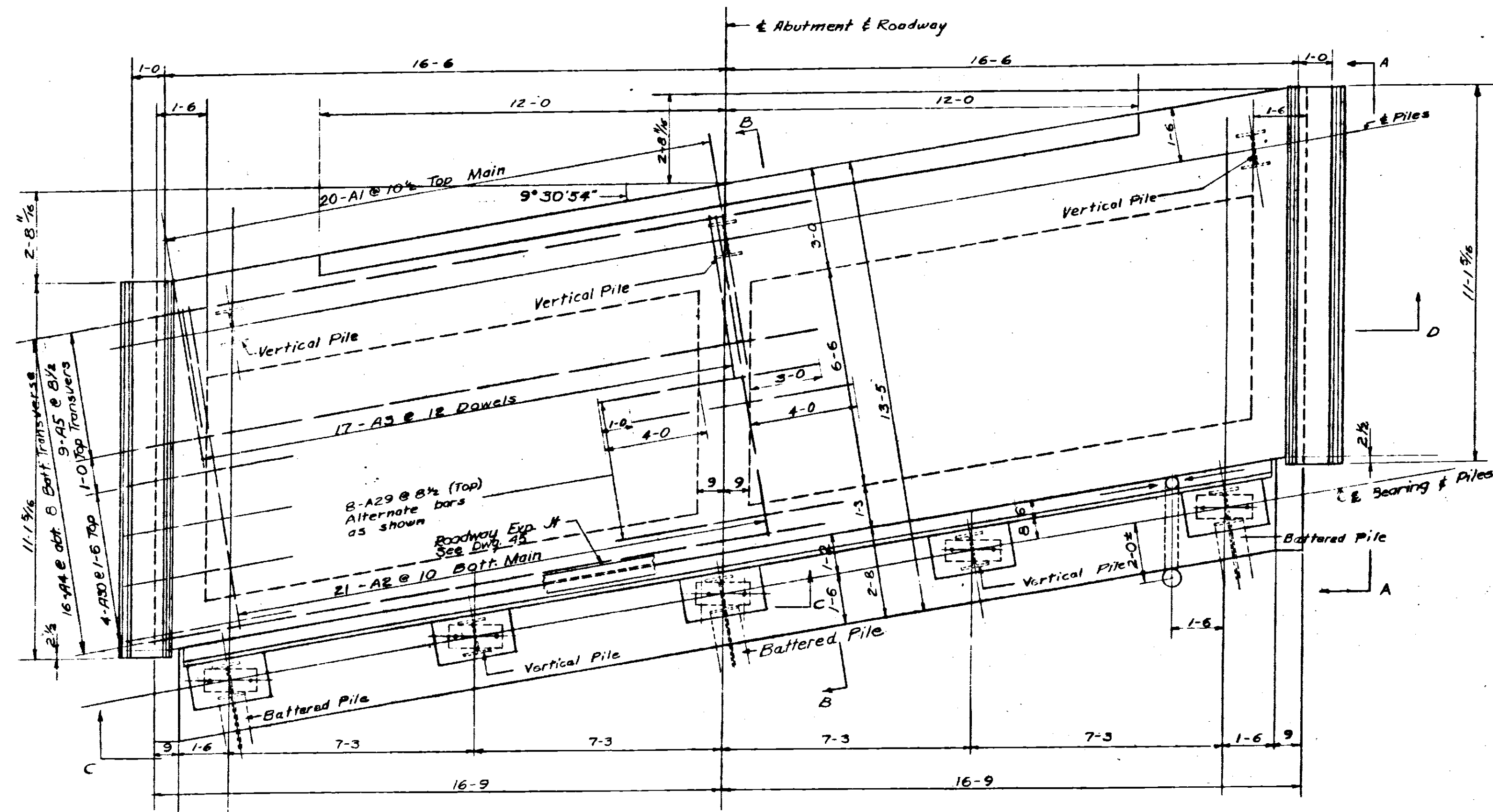
ITEM	EXTERIOR STRINGER		INTERIOR STRINGER	
	ME Pier	ME Midspan	ME Pier	ME Midspan
D.L.	162	76	119	70
L.L.	122	160	174	244
Impact	32	56	45	55
Total	316	292	338	369
Allow. Stress	18	18	18	18
Net S.M. Reg'd	210	194	225	245
Net S.M. Furn.	250	250	250	250

ITEM	Load per size		Load per pile	
	At Piers	At Abut	Front Piles	Rear Piles
D.L.	51	10	46	36
L.L.	38	41	14	16
Impact	10	13	-	-
Total	99	64	60	52

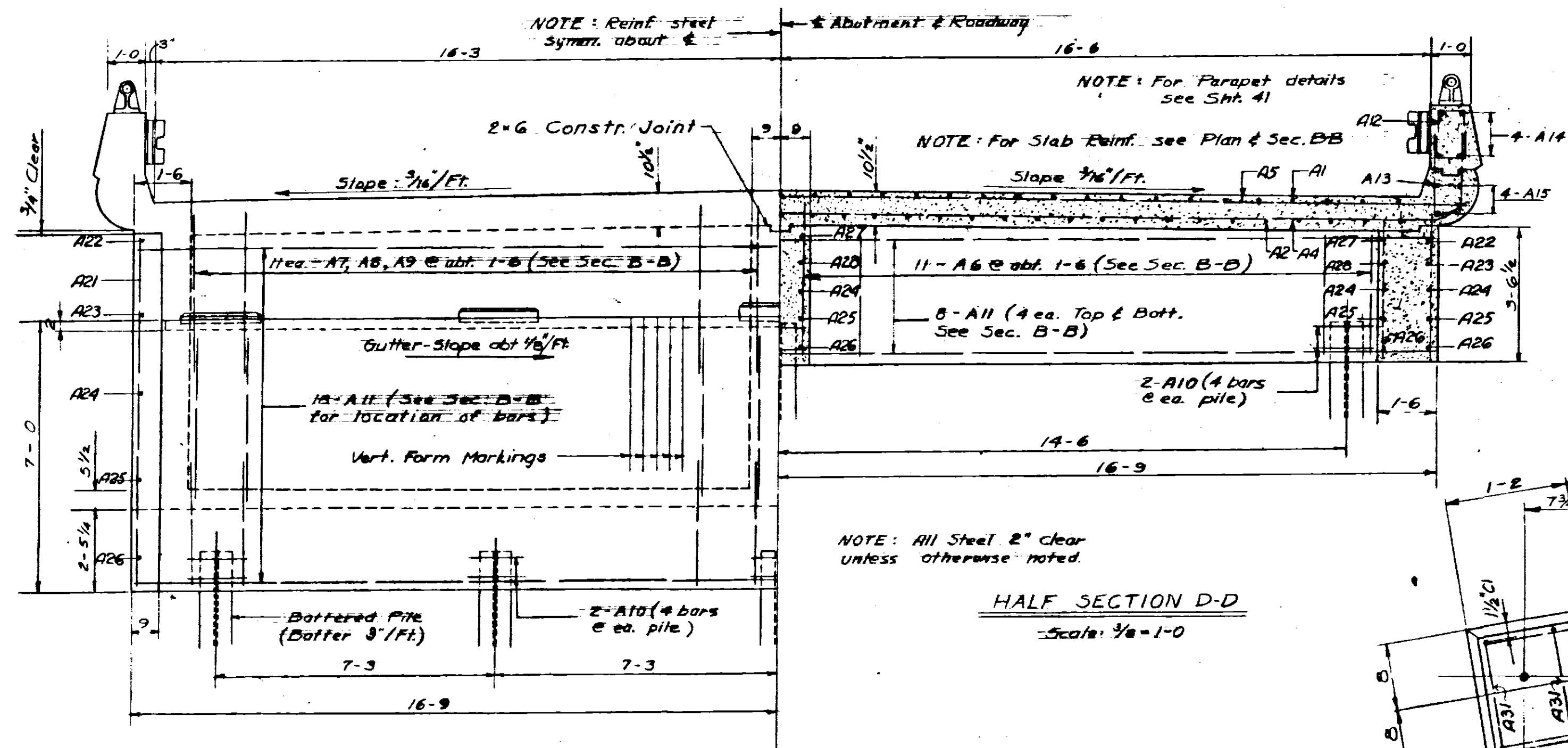
DRAWING INDEX - STA. 7000.00 TO 7000.00	
Drawing No.	Contents
38	General Plan & Elevation
39	Abutments
40	Piers
41	Roadway Slab
42 & 45	Steel Details
45	Shoe Details
Std Dwg. 315.17	Handrail, Drainage Guard Rail
14, 32, 42	General Notes

No.	Revision	By	Date
4	Deck Replacement & Widening - See EMP 43-84-26	A.M.	1/26/53
3	As Built		
2	Clearance Under Steel		
1	Quantities, Borings	ACR	4/1/51

OHIO TURNPIKE COMMISSION
OHIO TURNPIKE PROJECT NO. 1
STRUCTURE NOS. 7 & 7A
SKADDEN ROAD - OHIO ROUTE 99
GENERAL PLAN & ELEVATION
BALKE & WATKINS
CONTRACTING ENGINEER
DESIGN SECTION D-11
DESIGNED: R.C.B. CHECKED: H.M. DATE: 3-7-53
DRAWN: R.G.D. IN CHARGE: H.A.B. SCALE: AS NOTED
CONTRACT NO. C-33 SHEET 38 OF 49



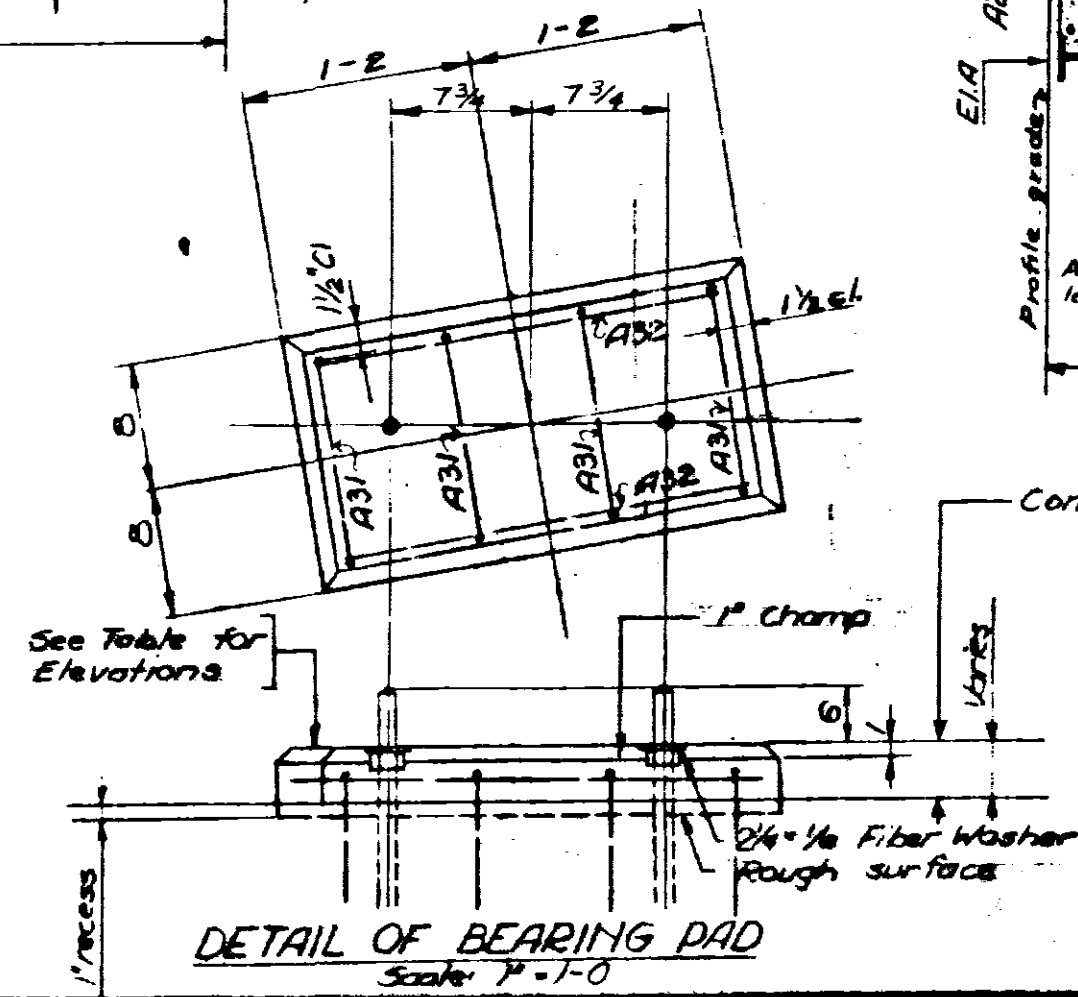
PLAN
 ABUTMENTS I, II, III
 Scale: $\frac{3}{8}'' = 1'-0''$



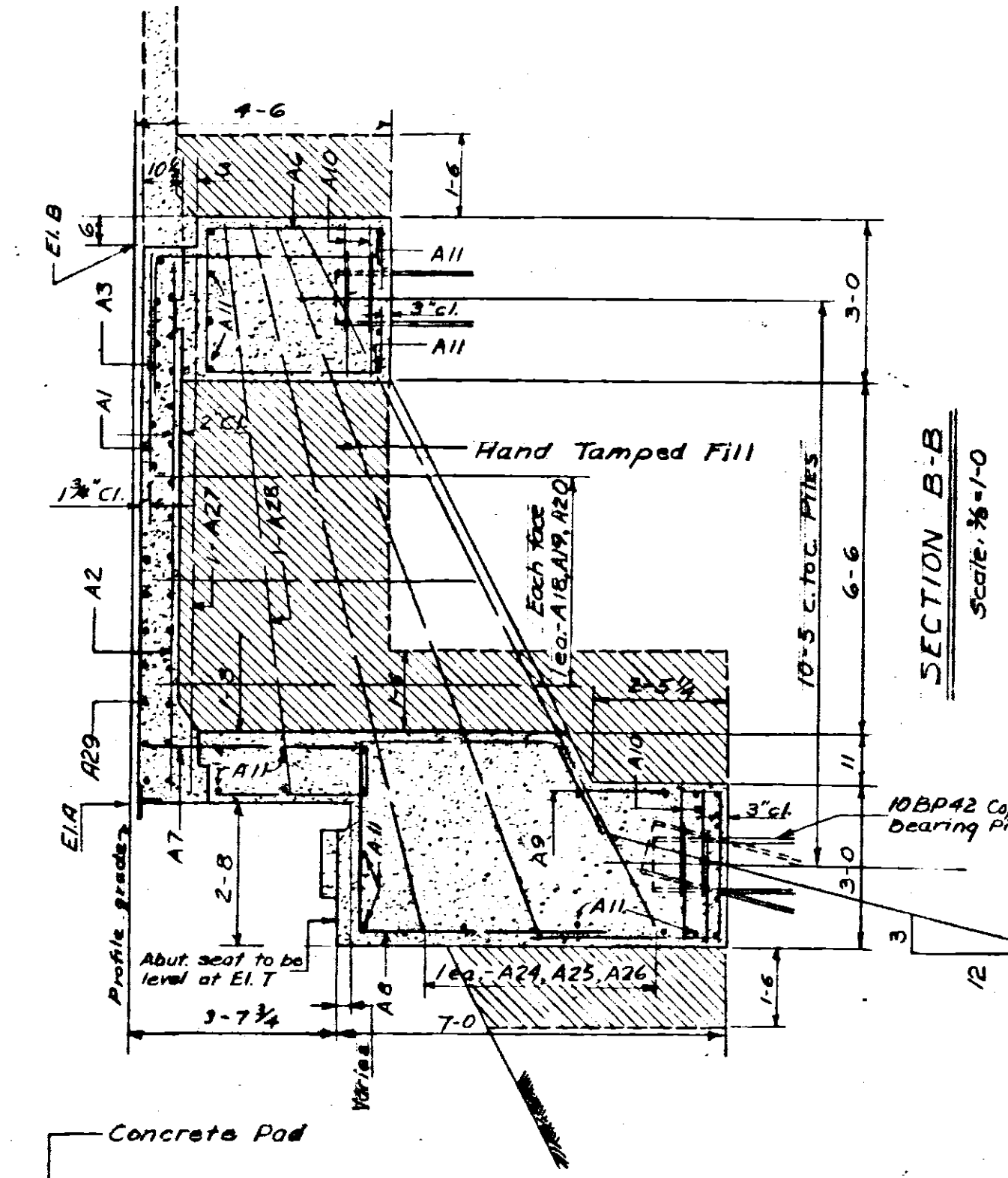
HALF ELEVATION C-C
 Scale: $\frac{3}{8}'' = 1'-0''$
 VIEW LOOKING WEST FOR ABUTM. I, II
 EAST III

Note: All piles are
 10 BD 42 - Max L = 30'
 All concrete is
 Class 'C' Concrete

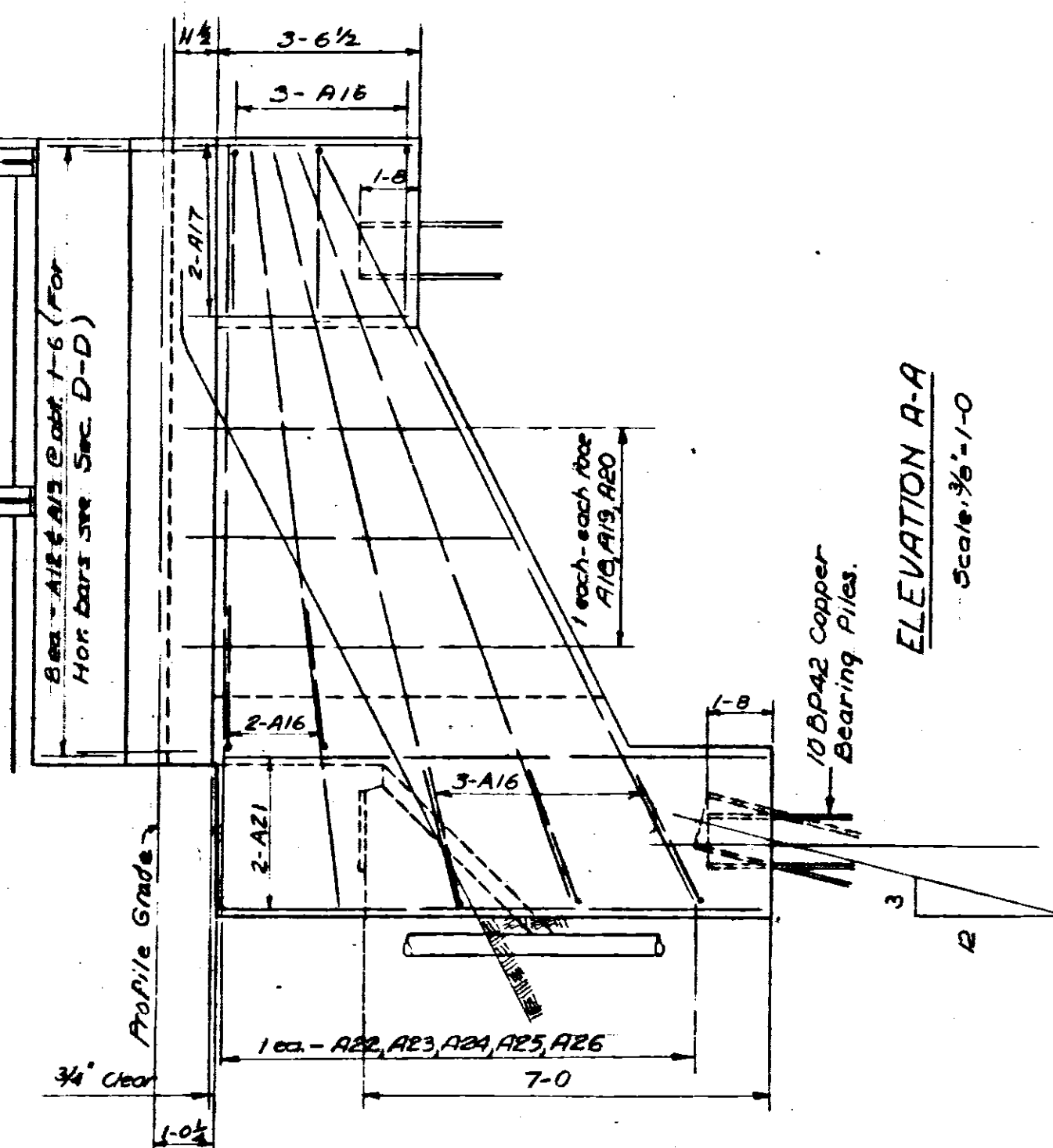
NOTE: Use lower nuts to set
 masonry plates to exact
 elevation. Check horizontal
 measurements and use
 upper nuts to clamp plates
 in position. When all have
 been checked, pour pad.



DETAIL OF BEARING PAD
 Scale: $\frac{3}{8}'' = 1'-0''$



SECTION B-B
 Scale: $\frac{3}{8}'' = 1'-0''$



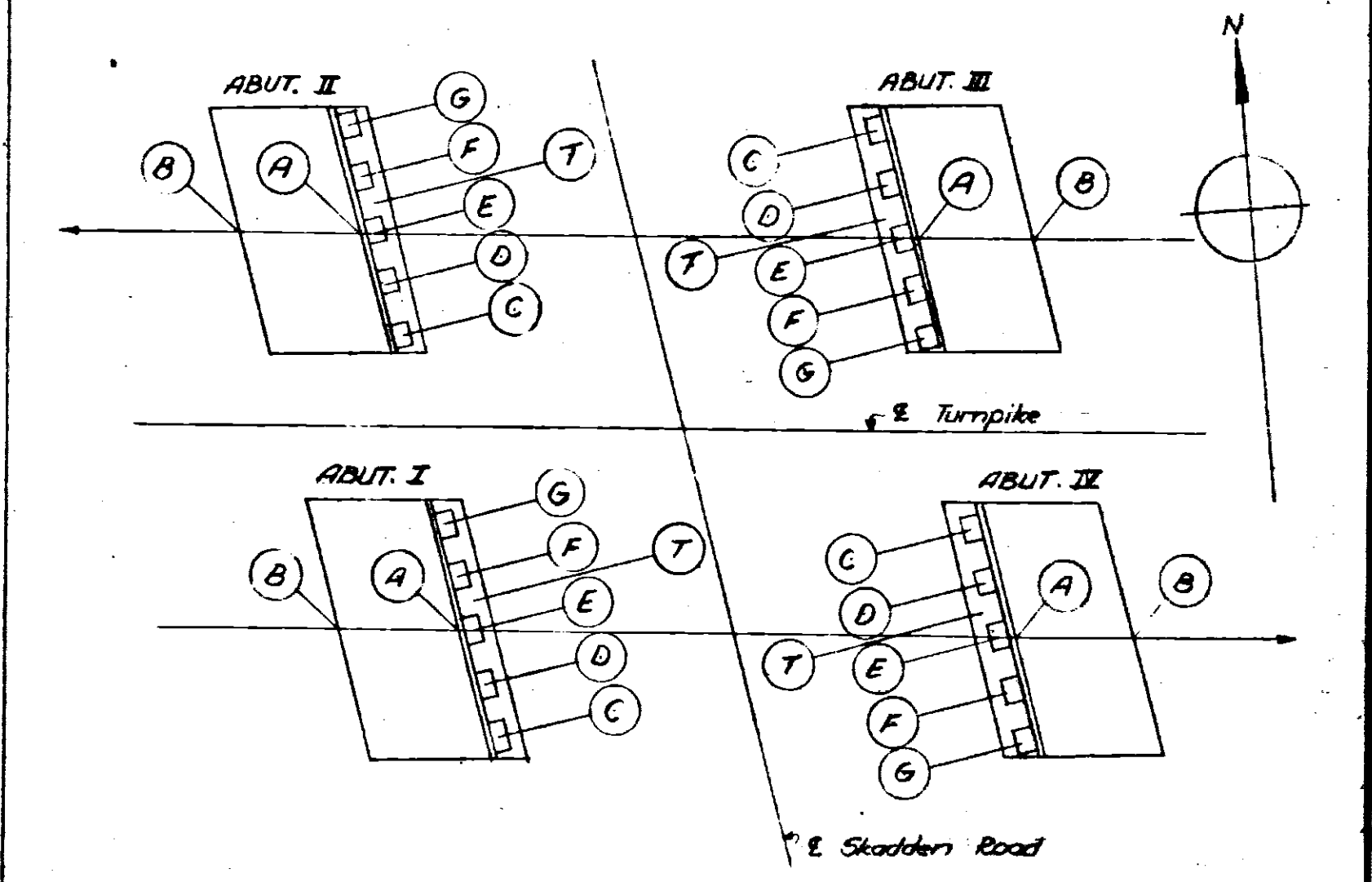
ELEVATION A-A
 Scale: $\frac{3}{8}'' = 1'-0''$

REINFORCING SCHEDULE
 One abutment billed

MARK	SIZE	NO.	LENGTH	WEIGHT	TYPE	DIM 'A'	DIM 'B'
A1	#5	39	6'-0"	625	5hr		
A2	#8	41	9'-9"	1064	5hr		
A3	#5	34	6'-3"	221	1	2'-6"	3'-9"
A4	#5	16	35'-6"	594	7		
A5	#5	9	35'-2"	330	5hr		
A6	#4	22	12'-5"	183	2	2'-8"	3'-2"
A7	#4	22	7'-8"	113	4		
A8	#4	22	12'-9"	188	5		
A9	#4	22	9'-0"	132	3	2'-8"	3'-2"
A10	#4	32	4'-9"	102	3	1'-3"	1'-9"
A11	#5	27	33'-6"	2415	5hr		
A12	#4	16	4'-9"	51	2	9	1'-3"
A13	#4	16	4'-11"	53	6		
A14	#6	5	10'-8"	126	5hr		
A15	#7	8	10'-8"	172	5hr		
A16	#4	16	5'-0"	53	1	2'-8"	2'-6"
A17	#5	4	3'-9"	16	5hr		
A18	#5	6	6'-9"	43	5hr		
A19	#5	6	5'-9"	37	5hr		
A20	#5	6	4'-9"	30	5hr		
A21	#5	4	9'-0"	38	5hr		
A22	#5	2	13'-0"	27	5hr		
A23	#5	2	13'-2"	28	5hr		
A24	#5	6	13'-4"	84	5hr		
A25	#5	6	13'-10"	87	5hr		
A26	#5	6	14'-6"	91	5hr		
A27	#5	4	9'-9"	41	5hr		
A28	#5	4	10'-3"	43	5hr		
A29	#5	8	8'-6"	75	5hr		
A30	#5	8	5'-0"	42	5hr		
A31	#3	20	3'-1"	23	3	1'-1"	1'-0"
A32	#3	10	2'-1"	8	5hr		

NOTE: All dimensions given are out
 to out to dimensions.

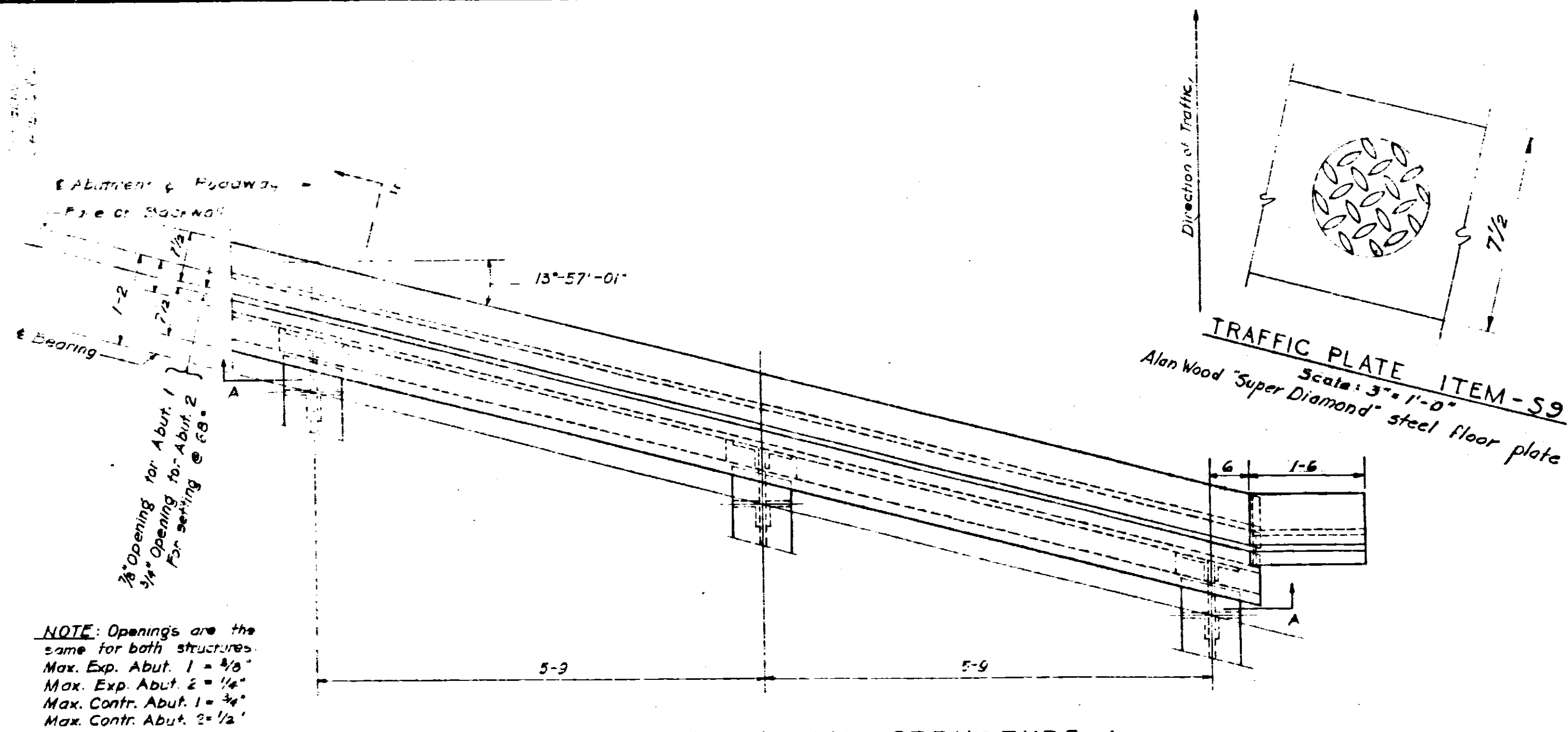
ABUT.	T	A	B	C	D	E	F	G
I	713.56	717.21	717.21	713.72	713.84	713.95	713.84	713.72
II	713.56	717.21	717.20	713.72	713.85	713.95	713.83	713.72
III	713.53	717.17	717.15	713.69	713.80	713.91	713.80	713.68
IV	713.51	717.15	717.13	713.67	713.78	713.90	713.78	713.67



NOTE: A - Anchor bolts, fiber washers,
 bobbit or pipe to be furnished by
 General Contractor.

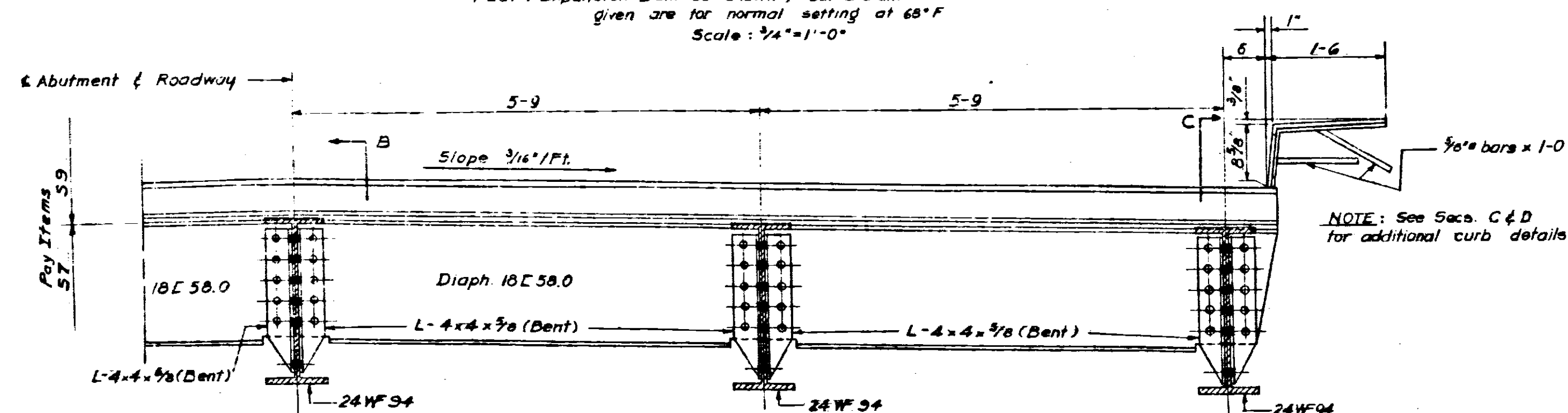
4	Deck Replacement & Widening - See EMP 45-BH-06	1981
3	As Built	A.M. 11/1/53
2	Abut. Pod Elevations Revised	ACA 3/20/53
1	Note A added Joint & Curb Removed	J.G. 10/2/53
No.	Revision	By Date

OHIO TURNPIKE COMMISSION
OHIO TURNPIKE PROJECT NO. 1
STRUCTURE NOS. 7 & 7A
SKADDEN ROAD-OHIO ROUTE 99
ABUTMENTS
BALKE & WATKINS
CONTRACTING ENGINEER
DESIGN SECTION D-11
 DESIGNED: R.C.B. CHECKED: H.M. DATE: 3-7-53
 DRAWN: H.A.B. Jr. IN CHARGE: H.A.B. SCALE: As Noted
CONTRACT NO. C-33 **SHEET 39 OF 49**

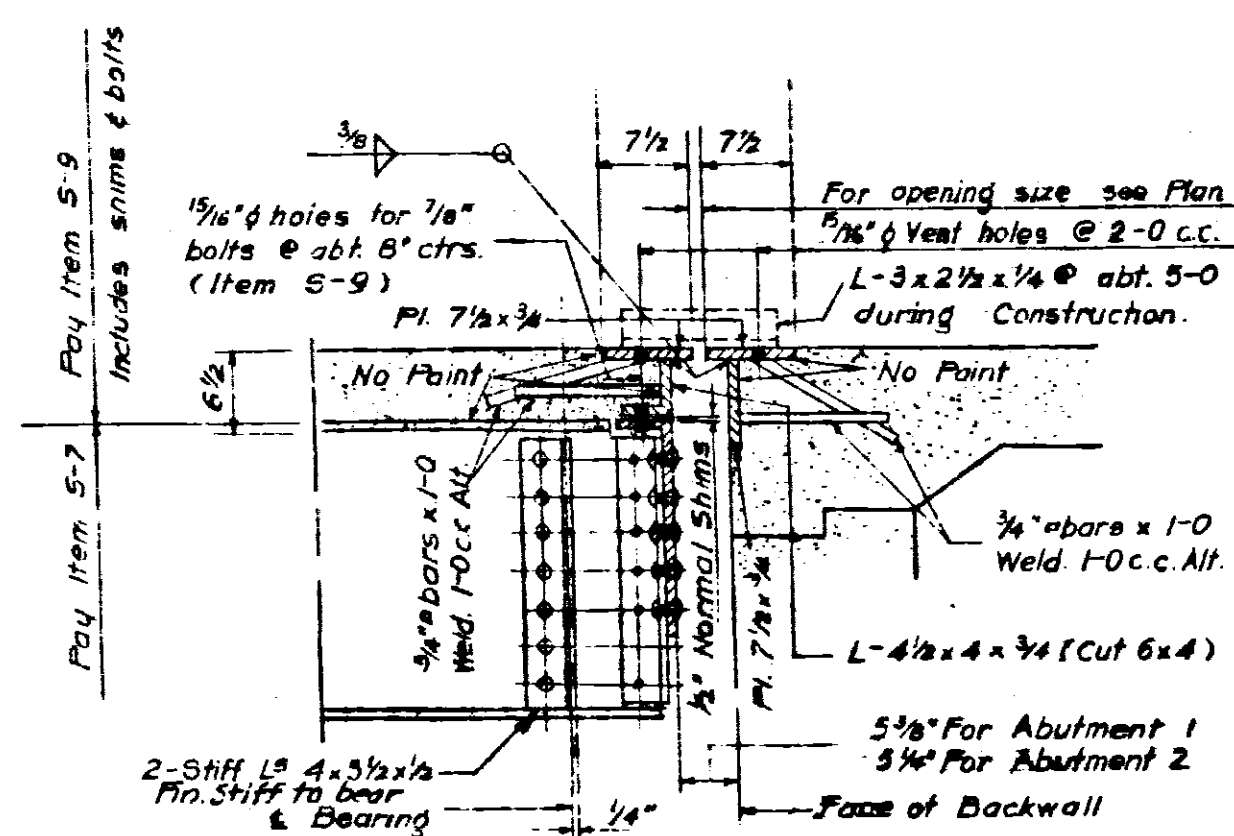


PART PLAN EXPANSION DAM - STRUCTURE 1

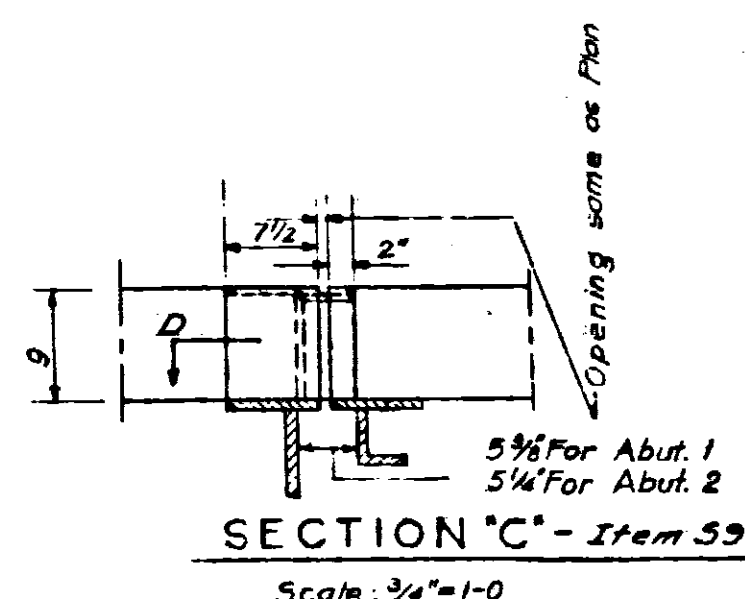
Abut 1 Expansion Dam as shown; Abut 2 Dam similar. Dimensions given are for normal setting at 68°F
Scale: 3/4" = 1'-0"



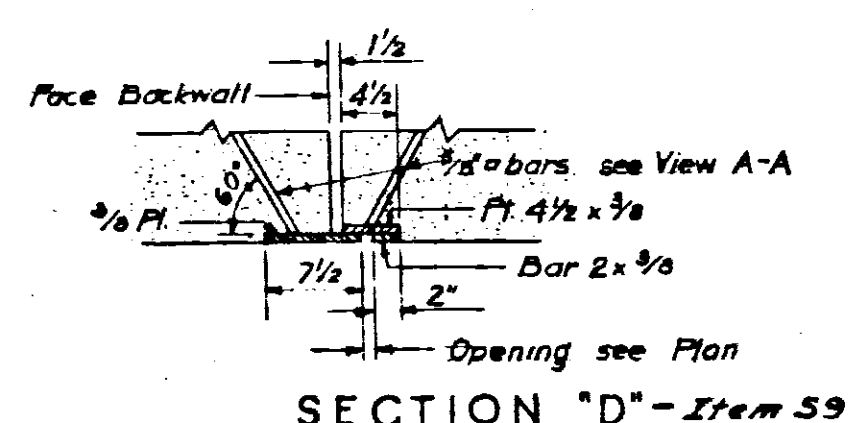
VIEW A-A
Scale: 3/4" = 1'-0"



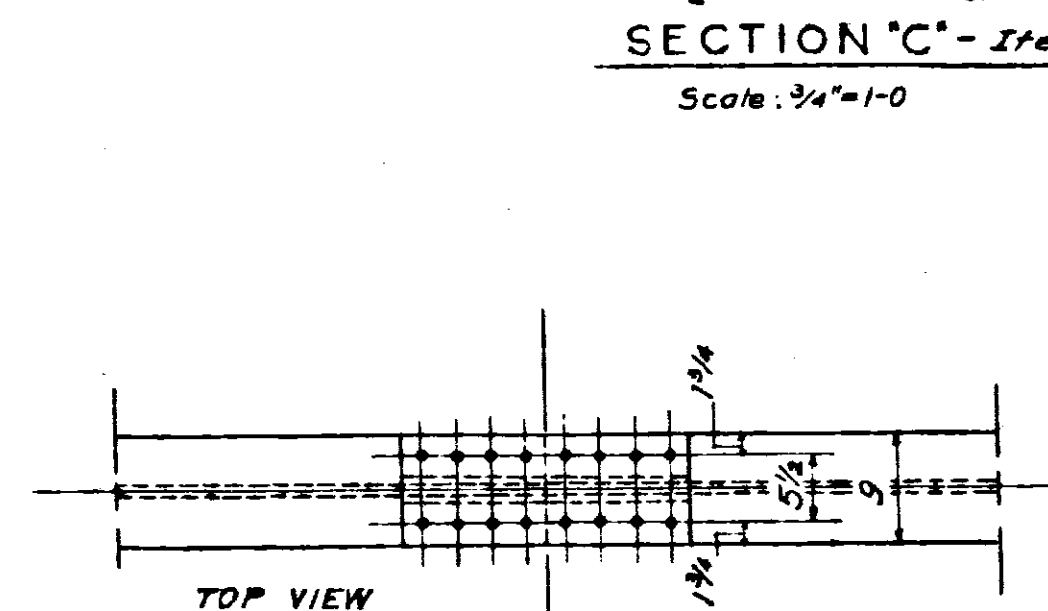
SECTION 'B'
Scale: 3/4" = 1'-0"



SECTION 'C' - Item 59
Scale: 3/4" = 1'-0"



SECTION 'D' - Item 59
Scale: 3/4" = 1'-0"

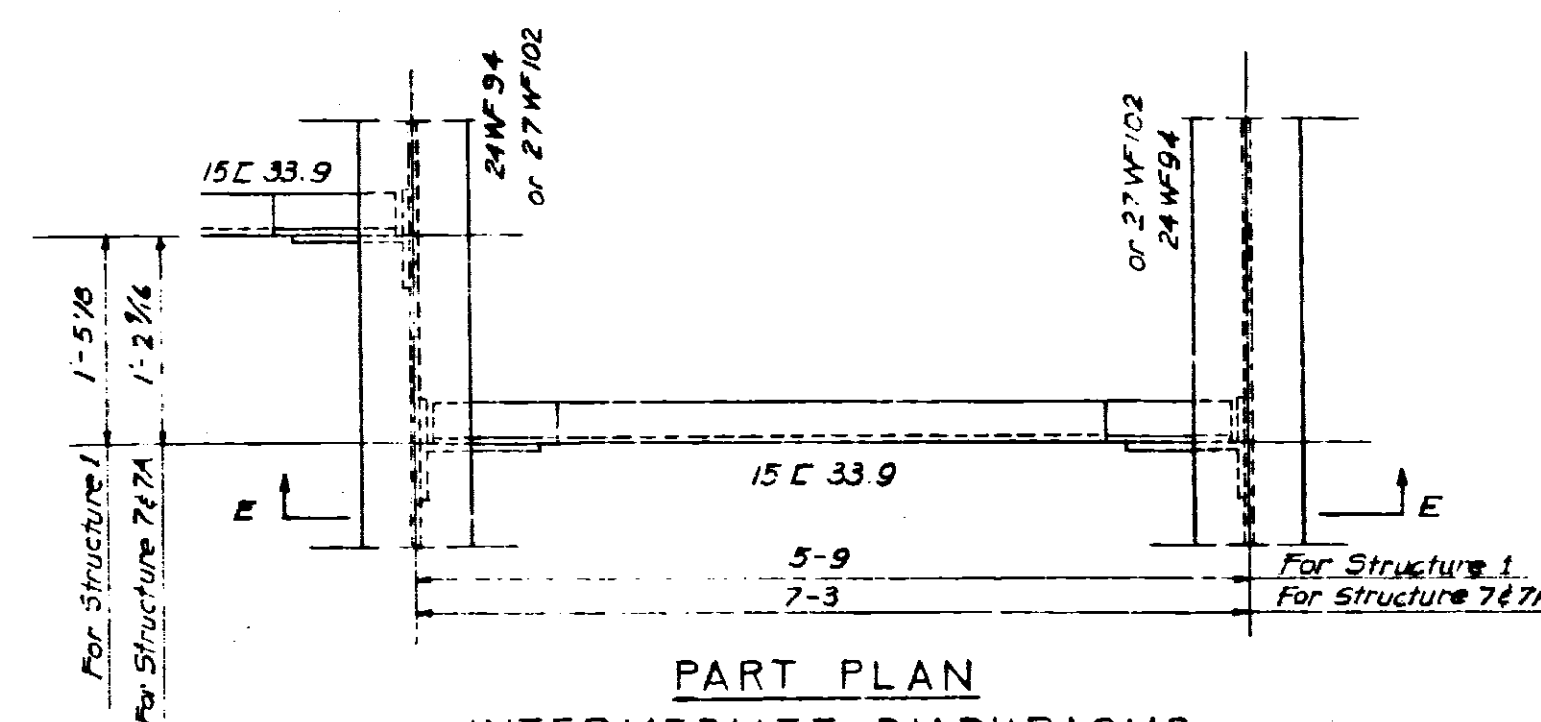


NOTE: Contractor may shop rivet one side of splice where field erection conditions will permit.

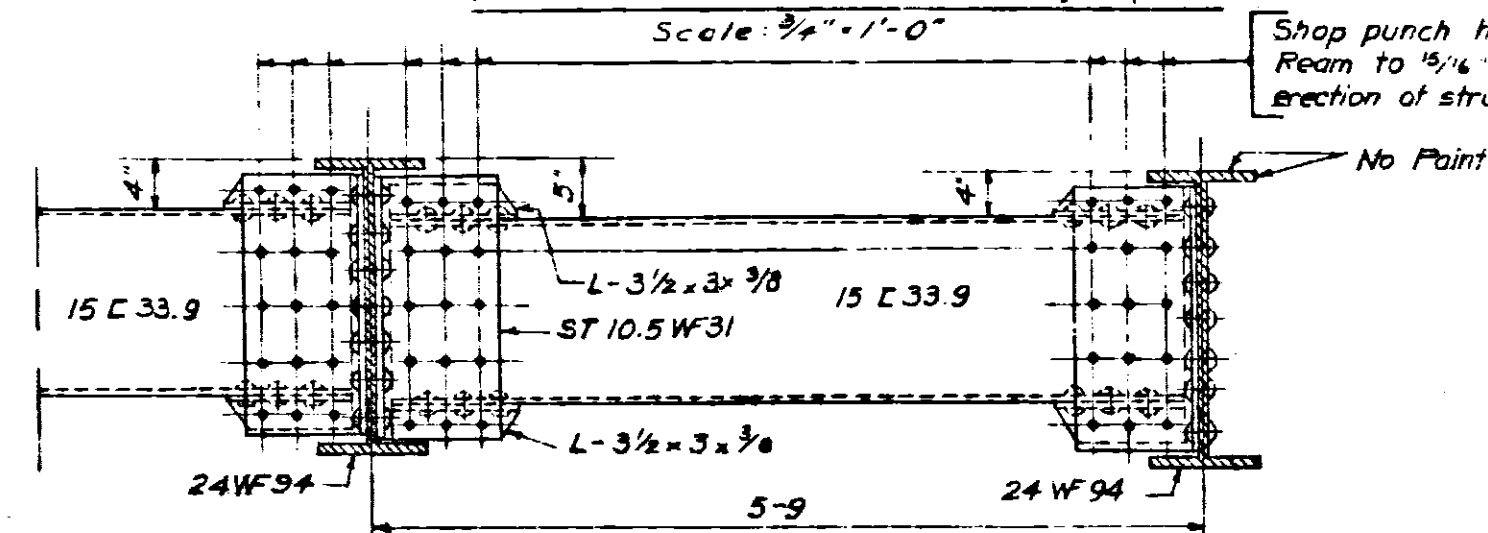
SPLICE DETAIL

Scale: 3/4" = 1'-0"

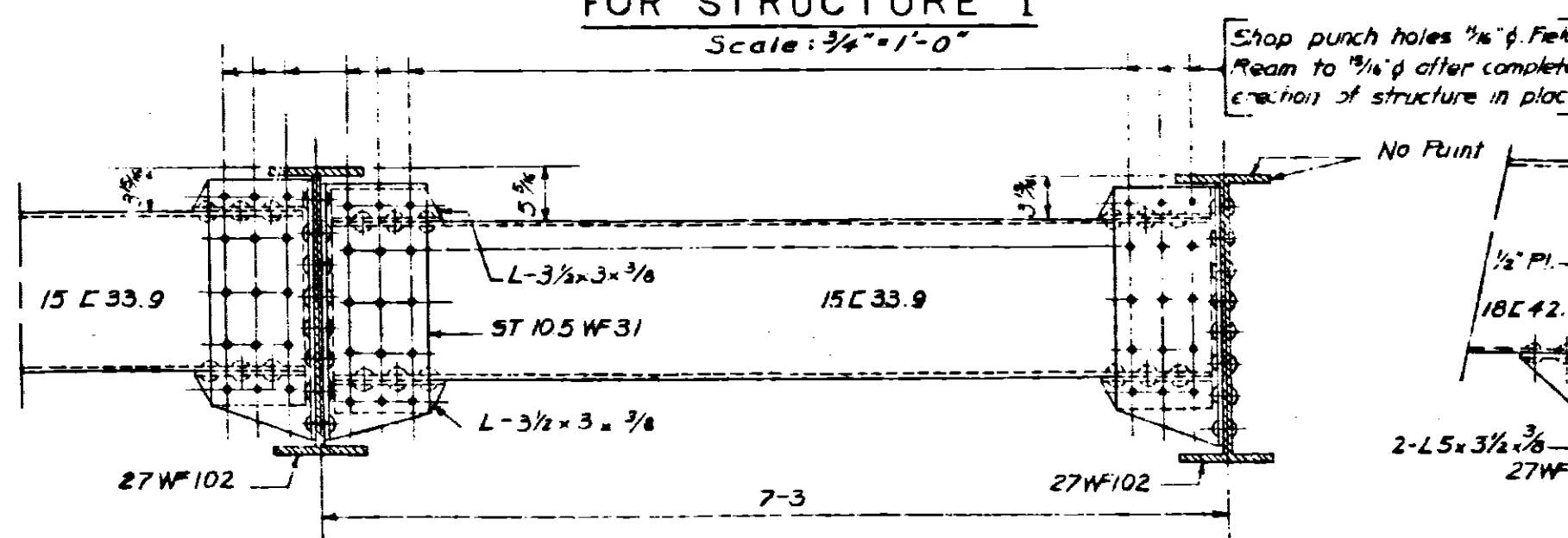
Reaming: All rivet holes for Stringer Splices shall be sub-punched or sub-drilled 1/4", and reamed to size with parts assembled in position.



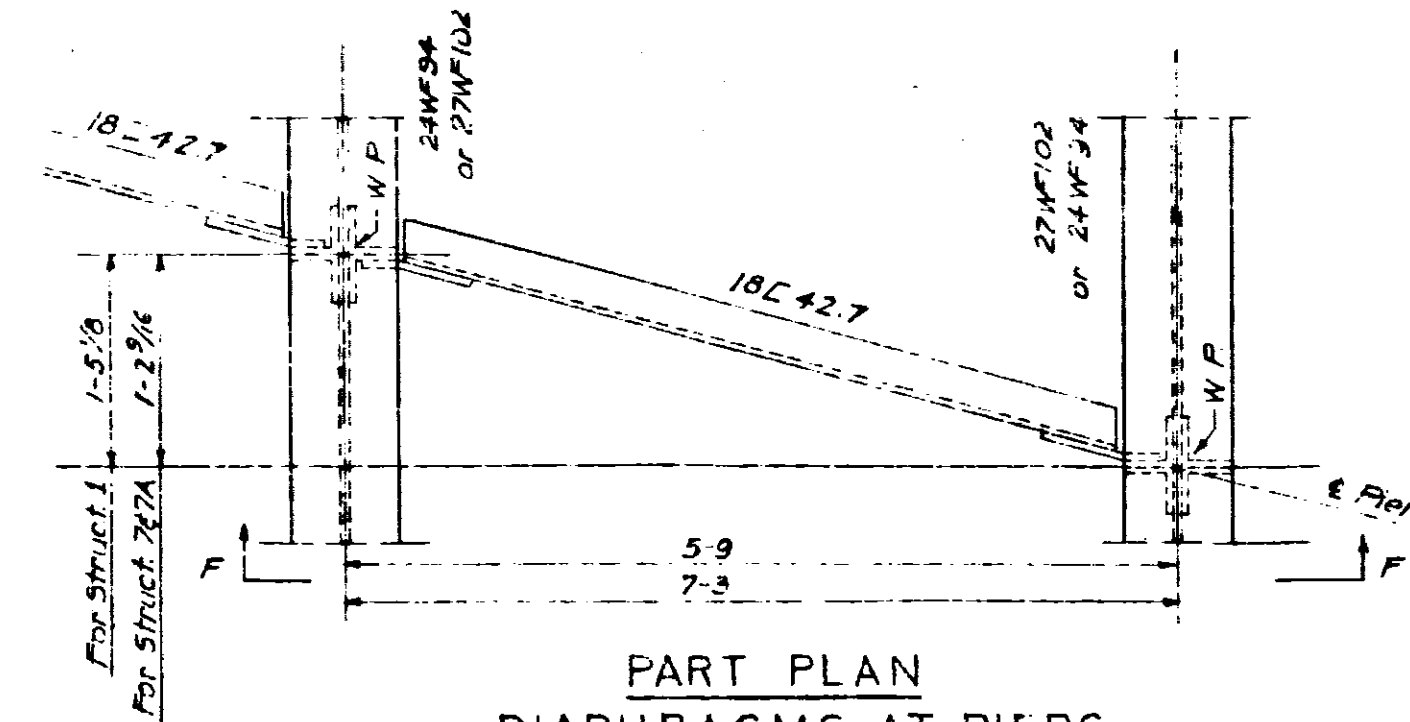
PART PLAN INTERMEDIATE DIAPHRAGMS FOR STRUCTURES 1, 7 & 7A
Scale: 3/4" = 1'-0"



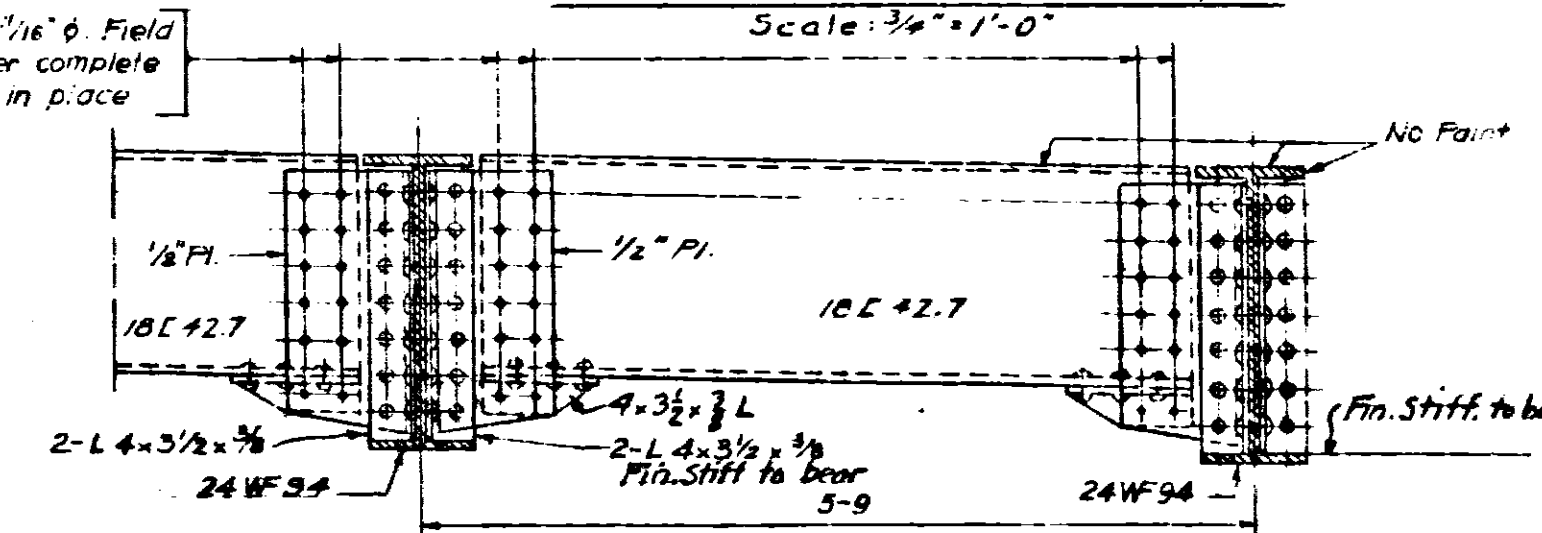
SECTION E-E FOR STRUCTURE 1
Scale: 3/4" = 1'-0"



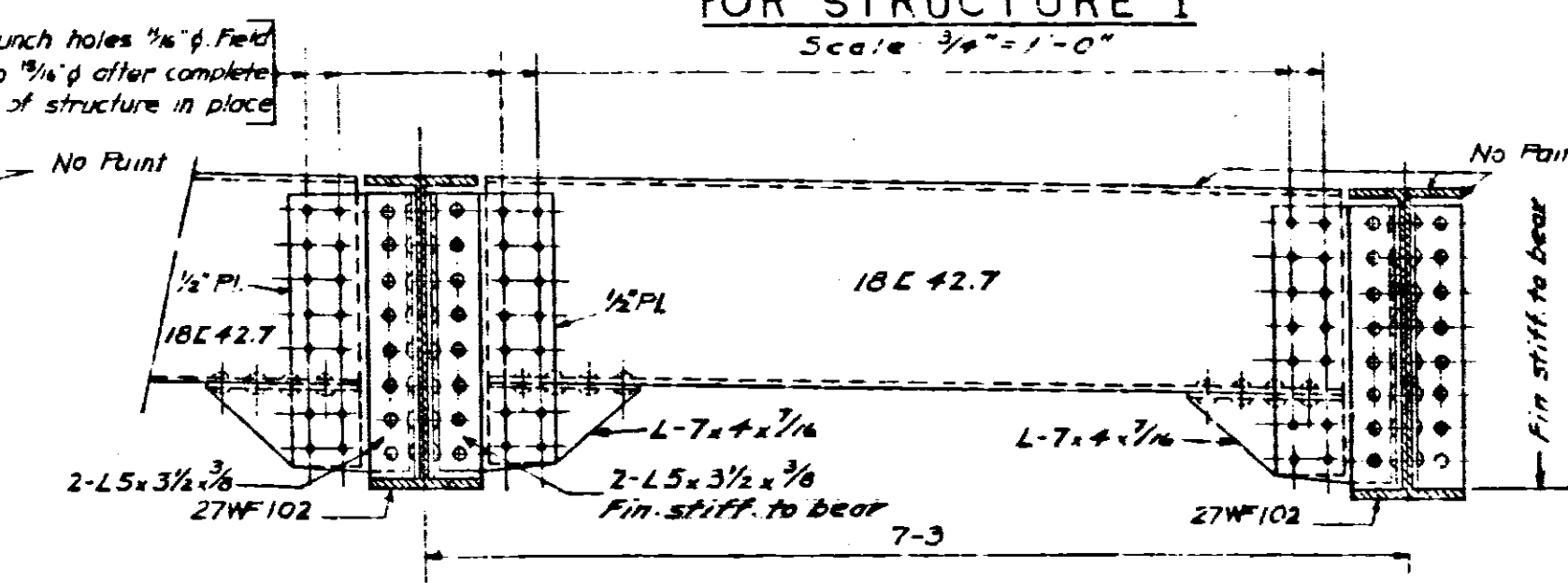
SECTION E-E FOR STRUCTURES 7 & 7A
Scale: 3/4" = 1'-0"



PART PLAN DIAPHRAGMS AT PIERS FOR STRUCTURES 1, 7 & 7A
Scale: 3/4" = 1'-0"



SECTION F-F FOR STRUCTURE 1
Scale: 3/4" = 1'-0"



SECTION F-F FOR STRUCTURES 7 & 7A
Scale: 3/4" = 1'-0"

GENERAL NOTES (Continued from Dwg. 14)

STEEL
STRUCTURAL STEEL - A.S.T.M. A7 (current) O.H. Carbon Steel
Physical - Tensile 60,000-72,000 p.s.i.
Yield .5 Tensile - 33,000 min.
Elongation in 8" Min. per cent = 1,500,000 ÷ tensile
Min. Elongation in 2" = 22%
Chemical - Phos.-Acid .06 Max., Basic .04 Max., Sulfur .03 Max.
RIVET STEEL - A.S.T.M. A141 (current)
Physical - Tensile 52,000-62,000 p.s.i.
Yield .5 Tensile - 28,000 min.
Elongation same as A7 above.
Chemical - Same as A7 above.

RIVETS
Shop and Field 7/8"

CAMBER
Camber beams to fit vertical curve where required. Where beams are on a uniform grade detail beams straight, but specify convex side "down" or "up" for "as rolled" camber to offset Dead Load deflection curve.

REAMING
SHOP - Sub-punch holes 1/4" in splice plates and beams. Assemble beams to correct alignment and ream holes to 3/4" for 1/2" rivets. Match mark parts.
FIELD - Sub-punch open holes 1/4" in diaphragm channels and connections. Ream to 3/4" for 1/2" rivets after all steel has been erected and adjusted.

SCRIBE LINES
All shoes are to have reference lines scribed on them as shown on the drawings.

FIELD RIVETING
Each structure is to be completely erected in place and cross diaphragms are to be field reamed before field riveting is started.

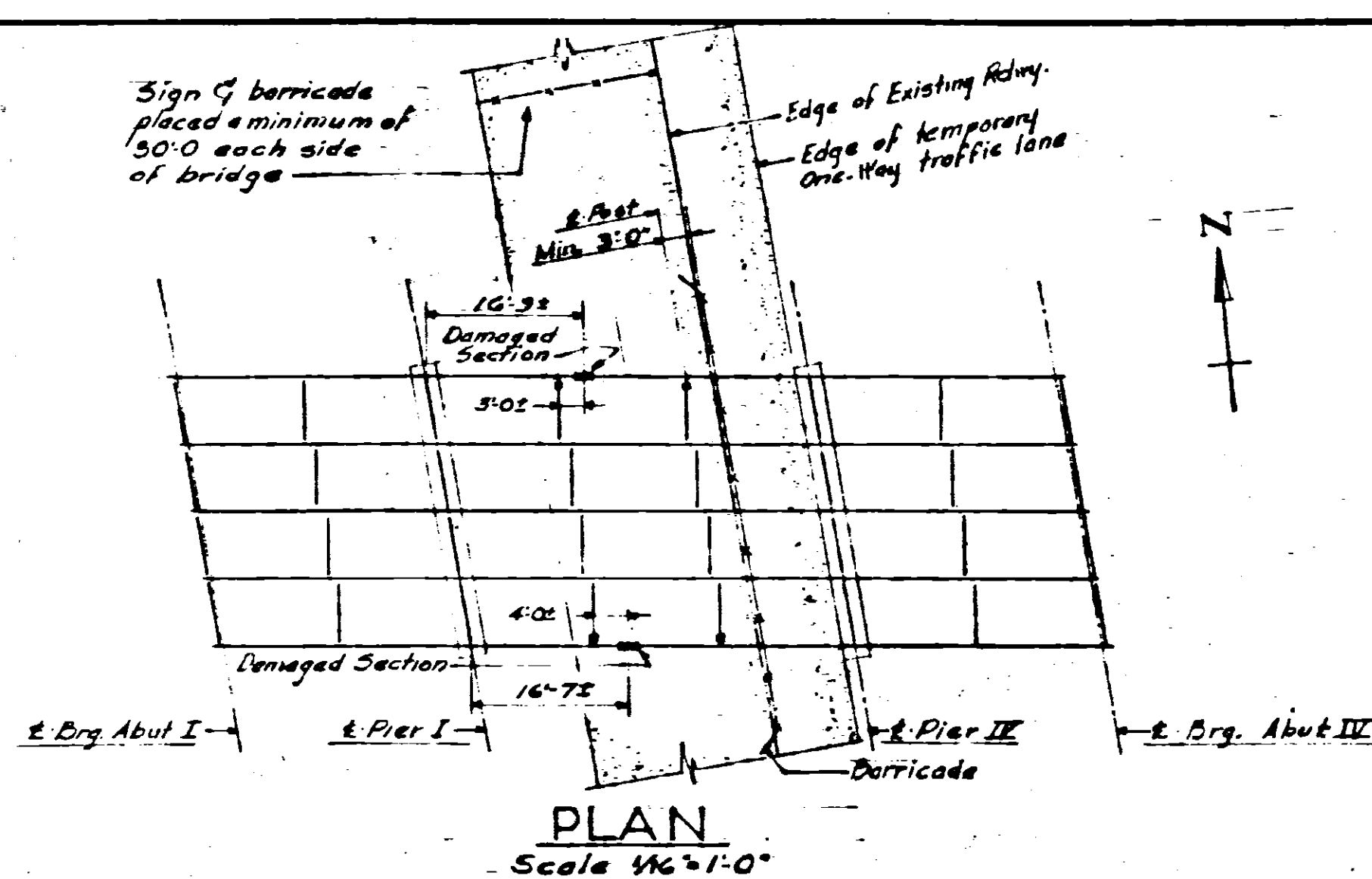
WELDING
All shop and field welding is to be class A except that class B welding may be used for raised patterns on roadway plates at expansion joints.

ANCHOR BOLTS
All anchor bolts are to be carefully located to be cast in place of exact locations for fitting holes in masonry plates which provide 3/4" clearance.

SETTING OF MASONRY PLATES
Each anchor bolt has been provided with sufficient threads and an extra nut for adjusting the masonry plates to exact elevation. A fiber washer is provided to compress under load thus relieving bearing on the anchor bolt. After adjustment for elevation the plates can be moved laterally to correct E to E spacing and the scribe lines can be aligned with a wire or thin line. After adjustment clamp all plates by tightening upper nuts. Pour concrete pads as shown on the drawings. The space around the anchor bolts is to be filled with molten babbitt metal or zinc after the setting of the masonry plates has been checked. At sliding bearings where the sole plates engage the anchor bolts the holes in the bearing plates must be filled before the stringers are set in place.

NOTE: Anchor bolts, fiber washers, babbitt or zinc to be furnished by General Contractor.

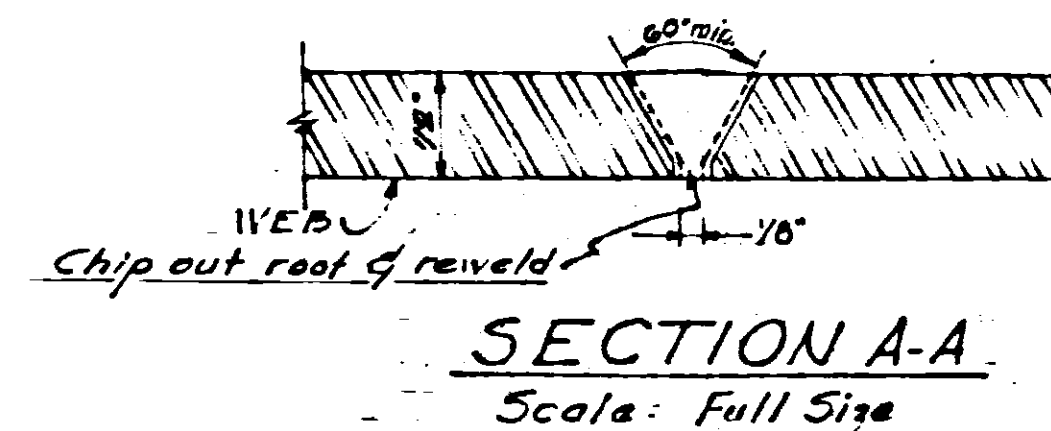
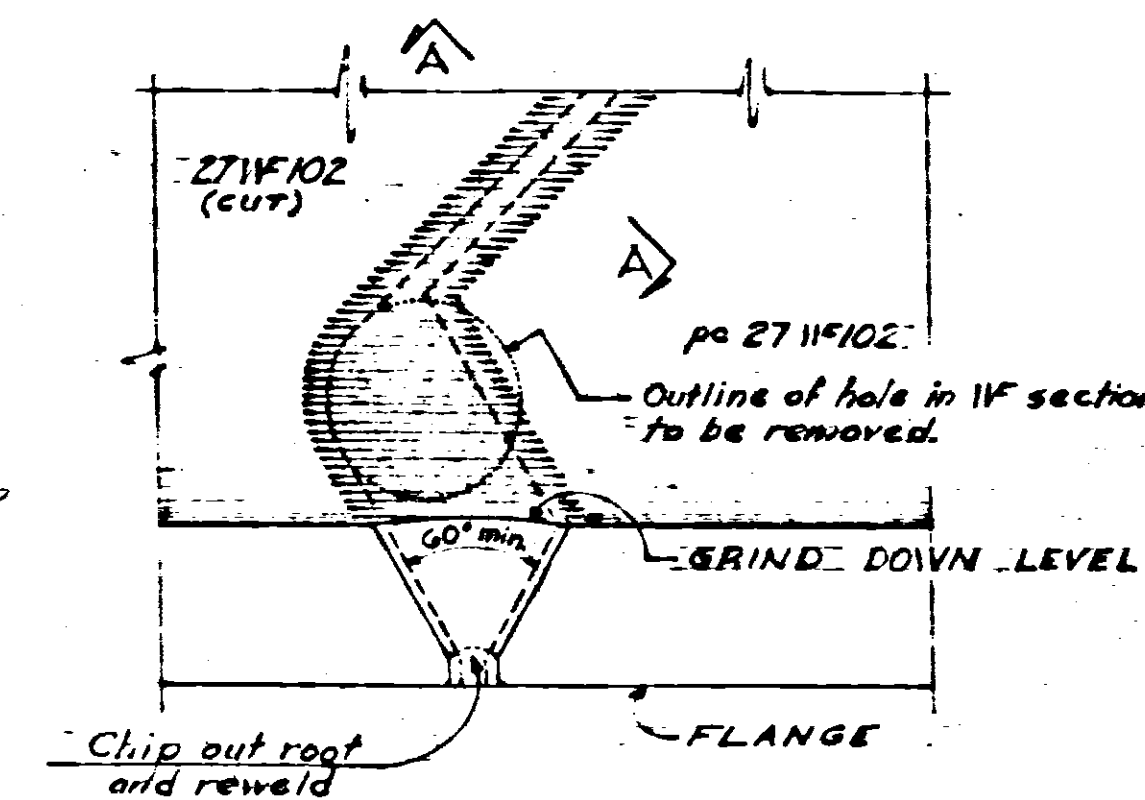
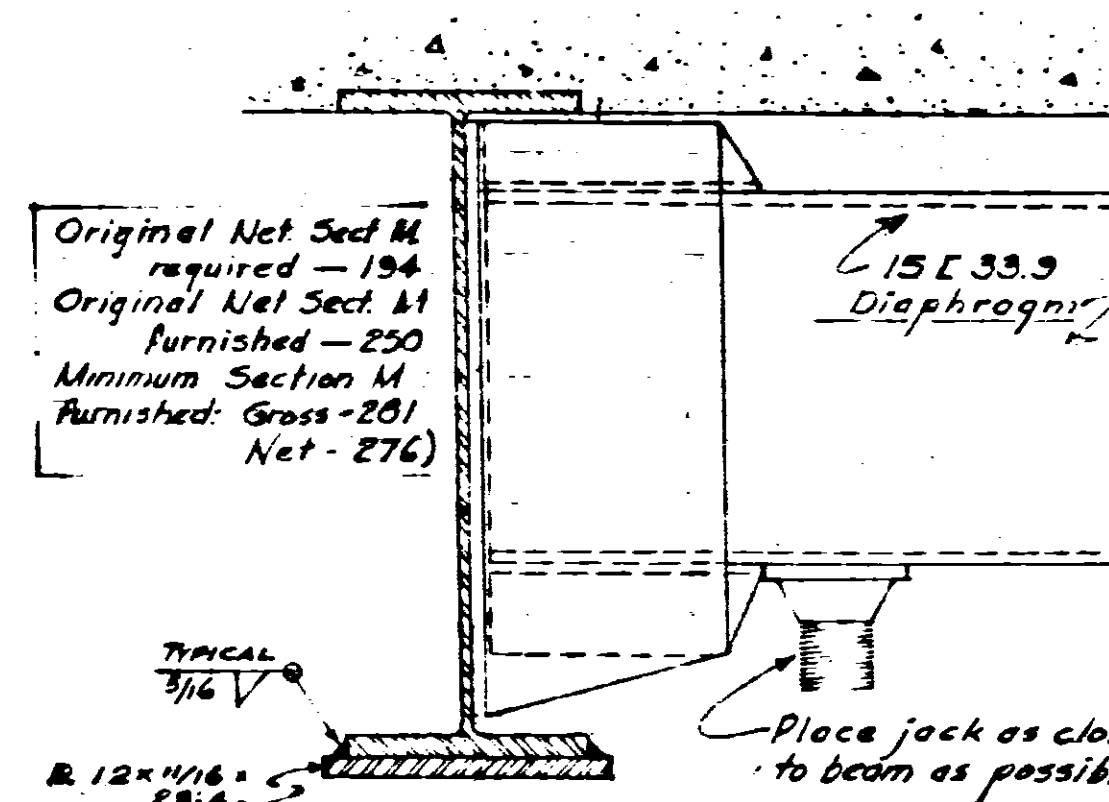
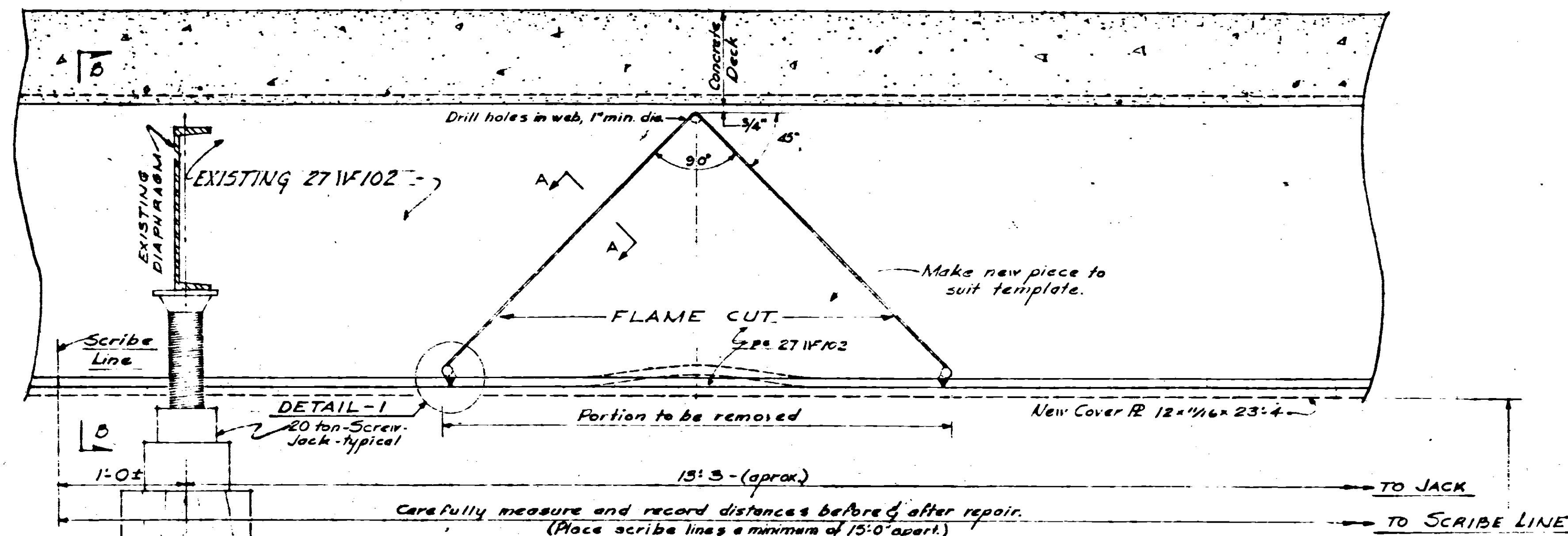
3	Deck Replacement - Wording, See EMP-45-B-00	1/8/54
2	As Built	A.M. 11/1/55
1	As built - Structural Steel	J.G. 10/2/55
No.	Revision	By Date
OHIO TURNPIKE COMMISSION		
OHIO TURNPIKE PROJECT NO. 1		
STRUCTURE NOS. 1, 7, & 7A		
STEEL DETAILS		
BALKE & WATKINS		
CONTRACTING ENGINEER		
DESIGN SECTION D-11		
DESIGNED: H.A.B.	CHECKED: H.A.B.	DATE: 3-7-53
DRAWN: A.M.	IN CHARGE: H.A.B.	SCALE: As Noted
CONTRACT NO. C-33		SHEET 42 OF 49



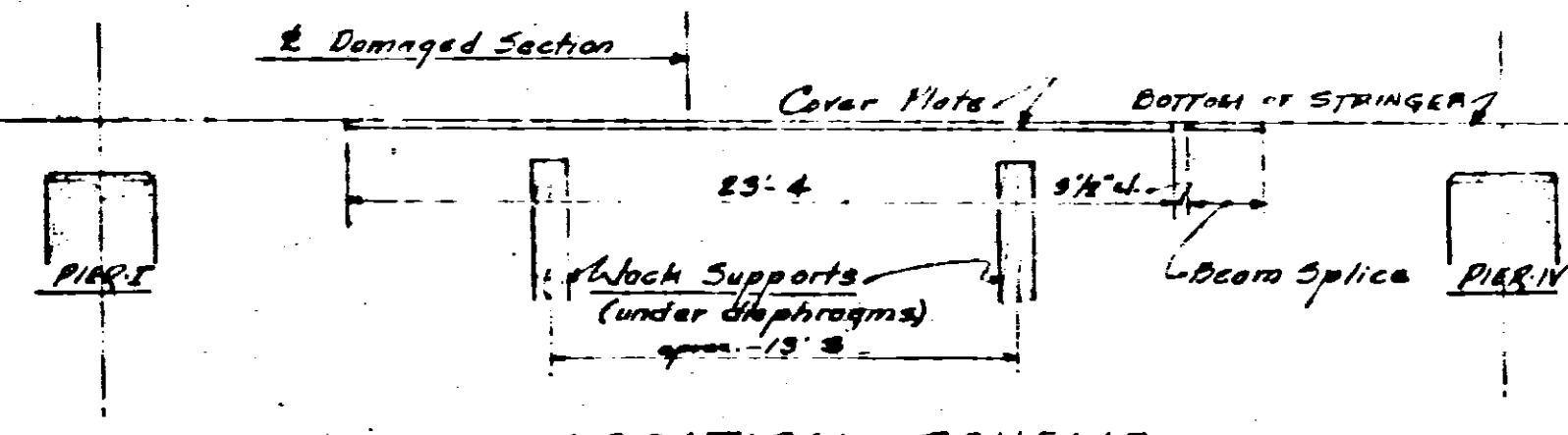
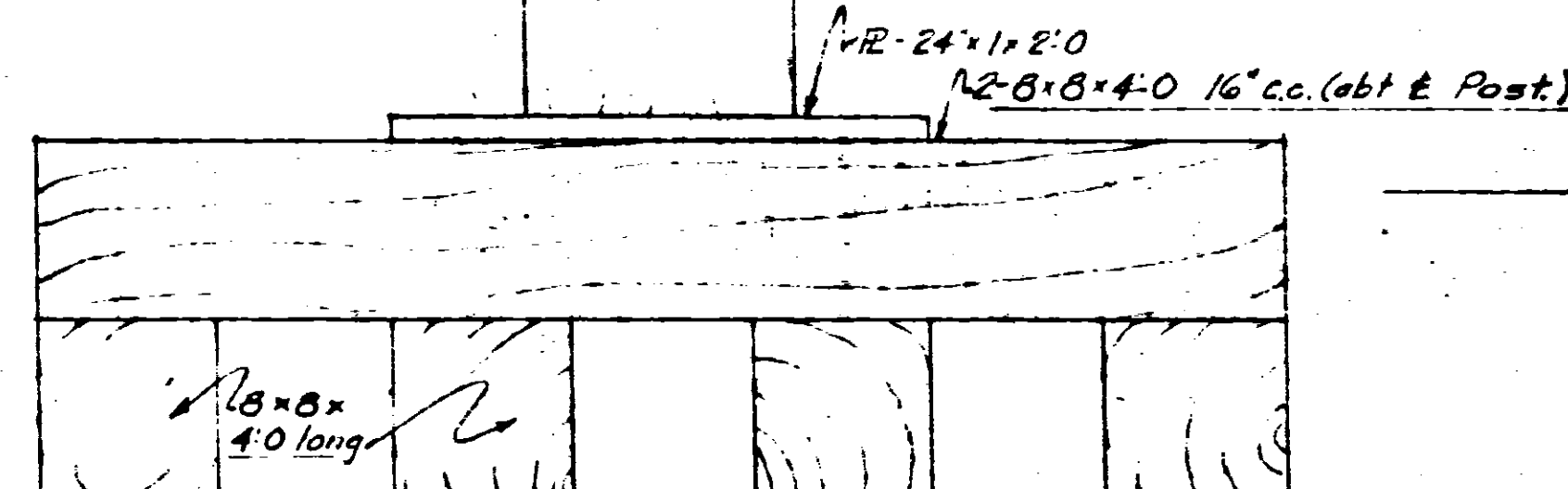
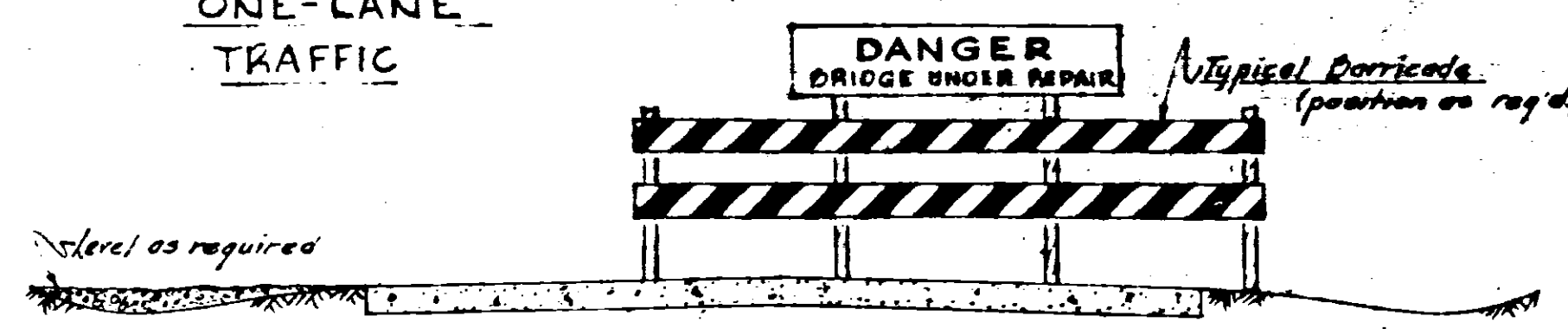
PROCEDURE

1. Provide temporary Detour on East shoulder of Route 99 with suitable barricades, signs, lights etc. in compliance with Section G 707 of the General Specifications, Ohio T.P. Project #1.
2. Mark the underside of the deck adjacent to the top flange at the center of the damaged portion and at 4'-0" intervals between adjacent Piers. Determine the elevations of the marked points. Scribe lines on flange about 15'-0" apart and record distance on a steel bar with matched scribe lines.
3. Support structure of diaphragms adjacent to damaged portion of beam, as detailed, by jacks brought up snug.
4. Cut and remove triangular portion of damaged section as shown on this drawing. The bottom flange should be cut approx. 1'-0" beyond limits of damaged section. The cut should converge at a point just below the fillet of the top flange. Prepare edges for downhanded welding.
5. After damaged portion has been removed, check elevations of marked sections and adjust jacks accordingly. Little deflection is anticipated.
6. Replace damaged portion with a piece cut from a 27W102. Complete one line of weld, then permit steel to return to normal temperature. Complete the welding and grind all welds smooth.
7. After the triangular piece has been welded in place check the distance between scribe lines. If this distance has changed, adjust jacks accordingly and weld cover plate. Use care to insure that the shrinkage along the length of the cover plate will be a minimum.
8. After repairs are complete check elevations & scribe distances.
9. Any variation noted from 8. to be recorded. Computations will be made to determine resulting change in stress.
10. All welding shall conform to Section 5.7.22 of the General Specification, Ohio Turnpike, Project No. 1.
11. During entire period of repairs, no live loads are to be allowed on Structure.

Note:
Contractor shall brace shoring to prevent any possible displacement.



ONE-LANE TRAFFIC



1	As Built	AM 12-10-55
No.	Revision	By Date
OHIO TURNPIKE COMMISSION		
OHIO TURNPIKE PROJECT NO. 1		
CONTRACT-33		
REPAIRS TO STRUCTURE - 7A		
SKADDEN RD. OHIO ROUTE-99		
BALKE & WATKINS		
CONTRACTING ENGINEER		
DESIGN SECTION D-II		
DESIGNED: H.A.B.	CHECKED: E.A.M.	DATE: 7-12-55
DRAWN: J.K.G.	IN CHARGE: A.C.A.	SCALE: AS NOTED
CONTRACT NO. C-33 SHEET R1 OF		

OHIO TURNPIKE COMMISSION

THE JAMES W. SHOCKNESSY OHIO TURNPIKE

CONTRACT CIP : 43-89-19

DECK REPLACEMENT

- ① PATTEN-TRACT ROAD OVER OHIO TURNPIKE M.P. 112.5
② THOMAS ROAD OVER OHIO TURNPIKE M.P. 115.1

CONTRACT FTP : 43-89-20

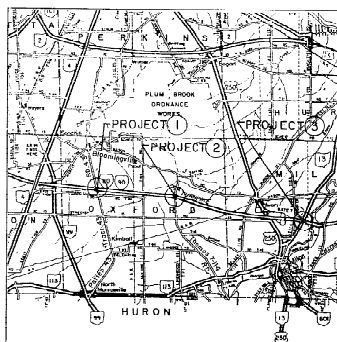
DECK REPLACEMENT

- ③ STATE ROUTE 13 OVER TURNPIKE M.P. 119.3

ORIGINAL CONTRACT SECTIONS C-31 AND C-32
ERIE COUNTY

INDEX OF SHEETS

TITLE SHEET	1
TRAFFIC CONTROL PLANS	2-4
GENERAL NOTES	5
GENERAL SUMMARY	6
ROADWAY PLANS	
PATTEN-TRACT ROAD OVER TURNPIKE - M.P. 112.5	7
THOMAS ROAD OVER TURNPIKE - M.P. 115.1	8
STATE ROUTE 13 OVER TURNPIKE - M.P. 119.3	9
DRAINAGE PROFILES	10-11
CATCH BASIN AND SLOPE DRAIN DETAILS	12
CONCRETE BARRIER PLAN AND DETAILS	13-16
REINFORCED CONCRETE APPROACH SLABS	17
STRUCTURE GENERAL NOTES	17-18
COMMON DETAILS	19
LAMINATED ELASTOMERIC BEARING DETAILS	20
DIAPHRAGM DETAILS	21
DECK JOINT DETAILS	22
CHAIN LINK SAFETY FENCE DETAILS, TYPE II	23-24
PATTEN-TRACT ROAD OVER TURNPIKE - M.P. 112.5	
GENERAL PLAN AND ELEVATION	25
ESTIMATED QUANTITIES AND REINFORCING SCHEDULE	26
ABUTMENT AND PIER REPAIR	27
FRAMING PLAN AND FINISHED PAVEMENT ELEVATIONS	28
SLAB PLAN AND TRANSVERSE SECTION	29
ABUTMENT SLABS AND DETAILS	30
THOMAS ROAD OVER TURNPIKE - M.P. 115.1	
GENERAL PLAN AND ELEVATION	31
ESTIMATED QUANTITIES AND REINFORCING SCHEDULE	32
ABUTMENT AND PIER REPAIR	33
FRAMING PLAN AND FINISHED PAVEMENT ELEVATIONS	34
SLAB PLAN AND TRANSVERSE SECTION	35
ABUTMENT SLABS AND DETAILS	36
STATE ROUTE 13 OVER TURNPIKE - M.P. 119.3	
GENERAL PLAN AND ELEVATION	37
ESTIMATED QUANTITIES AND REINFORCING SCHEDULE	38
ABUTMENT AND PIER REPAIR	39
FRAMING PLAN AND FINISHED PAVEMENT ELEVATIONS	40
SCUOPER DETAILS	41
SLAB PLAN AND TRANSVERSE SECTION	42
ABUTMENT SLABS AND DETAILS	43

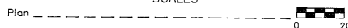


LOCATION MAP

SCALE IN FEET

Portion to be Improved
Other Roads

SCALES



APPROVED FOR
THE OHIO TURNPIKE COMMISSION
BY

William Plavin
CHIEF ENGINEER

2-17-89
DATE

UNDERGROUND UTILITIES
2 WORKING DAYS
BEFORE YOU DIG
Call 800-362-2764 (Toll Free)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS

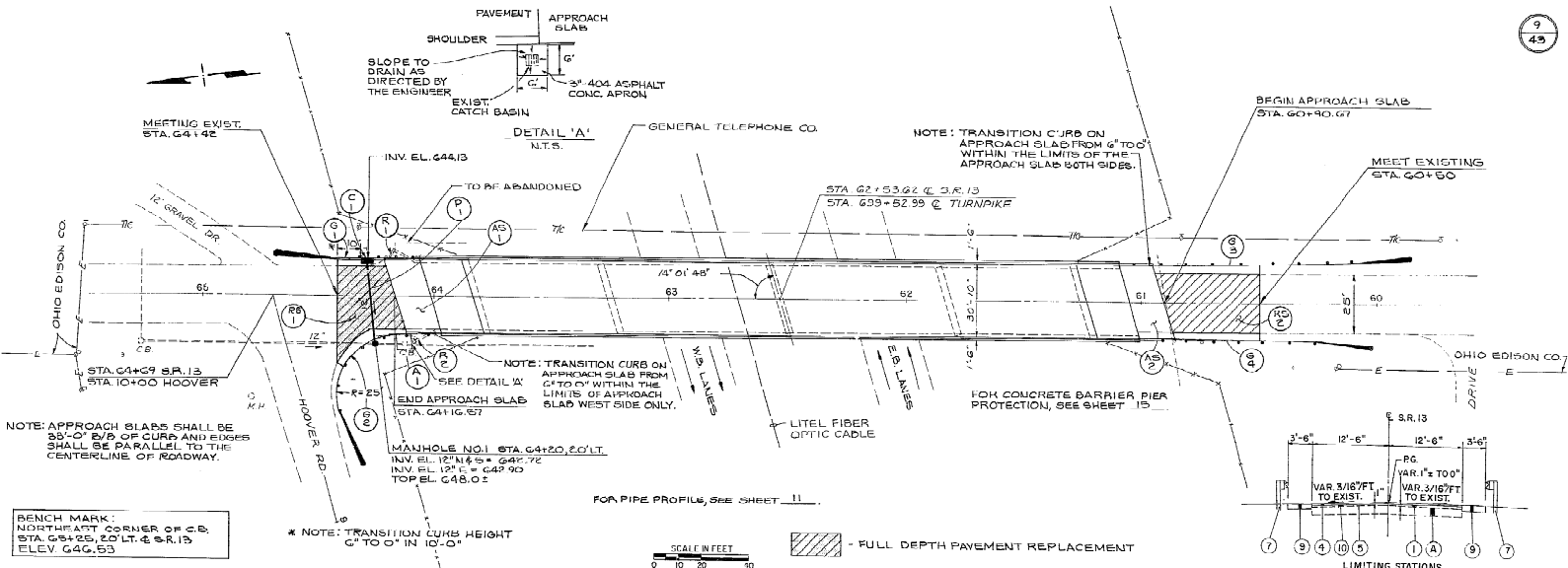
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BP-7	10-11-87				
P-1	11-10-87				
GR-1	1-11-85				
GR-2B	2-5-82				
GR-3	1-21-85				
GR-4	2-5-82				
WH-1	12-18-86				
MC-4	7-22-72				
BP-2	1-11-85				



PLANS PREPARED BY
URS CONSULTANTS
ARCHITECTS ENGINEERS PLANNERS
AKRON COLUMBUS CLEVELAND
F.J. Richardson
F.J. RICHARDSON REG. ENGINEER NO. 19531

[illegible]

DATE: JAN 1989	SCALE: —
CIP: 43 89-19	SHEET 6 OF 43
FTP: 43-89-20	

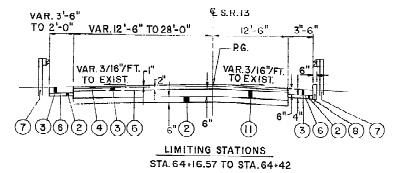


BENCH MARK:
NORTHEAST CORNER OF C.B.
STA. 64+25.20 LT. & S.R. 13
ELEV. 646.53

* NOTE: TRANSITION CURB HEIGHT
C" TO 0" IN 10'-0"

ESTIMATED QUANTITIES

REF. NO.	LOCATION	SIDE	ITEM	QTY	UNIT	PRICE	TOTAL
R-1	G4+16	R.C.	WEARING COURSE REMOVED (1")	22	SF	5.92	130.24
R-2	G4+08	LT.	WEARING COURSE REMOVED (1")	22	SF	5.92	130.24
C-1	G4+07 TO G4+09	RT.	WEARING COURSE REMOVED (1")	37.5	SF	5.92	221.25
G-2	G4+20 HOVER TO G4+27	LT.	WEARING COURSE REMOVED (1")	75	SF	5.92	444.00
G-3	G4+00 TO G4+20	RT.	WEARING COURSE REMOVED (1")	75	SF	5.92	444.00
G-4	G4+02 TO G4+08	LT.	WEARING COURSE REMOVED (1")	75	SF	5.92	444.00
C-1	G4+22 TO G4+28	RT.	WEARING COURSE REMOVED (1")	75	SF	5.92	444.00
AS-1	G0+90.67 TO G1+02.27	€	ASPHALT CONCRETE, AC-20	22	SF	5.92	130.24
AS-2	G4+00.97 TO G4+16.87	€	ASPHALT CONCRETE, AC-20	22	SF	5.92	130.24
RS-1	G4+16.87 TO G4+18	€	RECONDITIONING SHOULDER	40.21	SF	12.84	516.28
RS-2	G0+90.67 TO G4+16.87	LT. & RT.	RECONDITIONING SHOULDER	108.45	SF	12.84	1391.12
P-1	G4+127	€	PRIME COAT, AS PER PLAN	25	SF	1.8	45.00
A-1	G4+13	LT.	ASPHALT CONCRETE, AC-20	24	SF	5.92	142.08
F-1	G4+22 TO G4+25	LT. & RT.	ASPHALT CONCRETE, AC-20	24	SF	5.92	142.08
F-2	G0+100 TO G0+89	LT. & RT.	ASPHALT CONCRETE, AC-20	24	SF	5.92	142.08
TOTALS				2		112.5	1084.5



- (1) 202-WEARING COURSE REMOVED (1")
- (2) SP 304-AGGREGATE BASE
- (3) 402-ASPHALT CONCRETE, AC-20
- (4) 404-ASPHALT CONCRETE, AC-20
- (5) 407-TACK COAT, AS PER PLAN
- (6) 408-PRIME COAT, AS PER PLAN
- (7) 606-GUARDRAIL, TYPE 5
- (8) 609-CURB, TYPE 6
- (9) 617-RECONDITIONING SHOULDER
- (10) 403-ASPHALT CONCRETE, AC-20
- (11) -EXISTING PAVEMENT
- 301-BITUMINOUS AGGREGATE

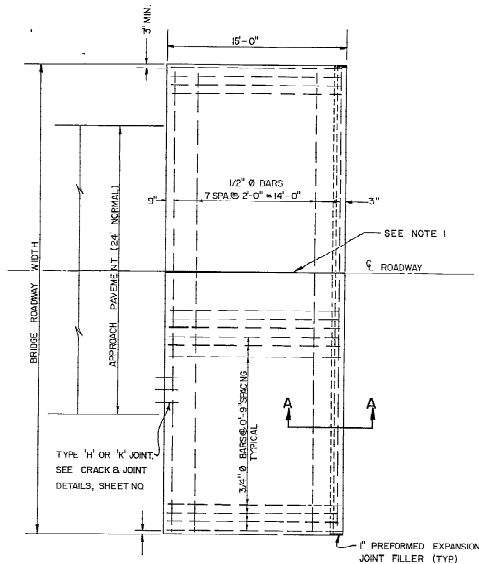
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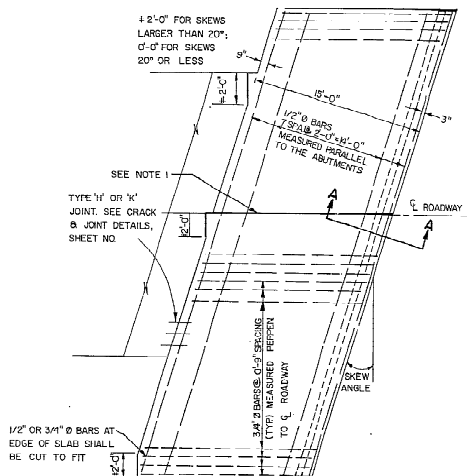
OHIO TURNPIKE COMMISSION

ROADWAY PLAN
S.R. 13
OVER TURNPIKE
MP 119.3

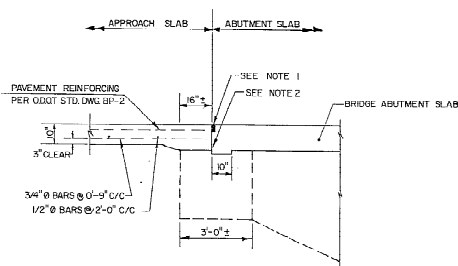
DATE: JANUARY, 1989 SCALE: AS SHOWN
FTR 43-89-20 SHEET 9 OF 43



PLAN



APPROACH SLAB FOR SKEWED BRIDGE



SECTION A-A

NOTE 1: GROOVE AND SEAL AS PER O.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 OVERHEAD AND PROFIT. "DIRECT COSTS" SHALL BE DEFINED UNDER SECTION 6-5.02(2) OF THE GENERAL CONDITIONS.

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. A616, 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.

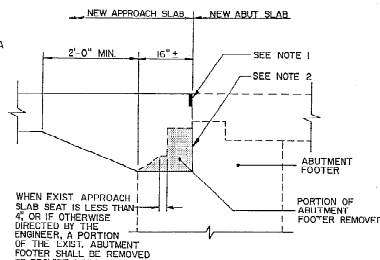
LONGITUDINAL CONSTRUCTION JOINTS REQUIRED FOR STAGE CONSTRUCTION SHALL BE AS PER 51109.

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 DRAWINGS BR-1.

APPROACH SLAB WIDTH: APPROACH SLAB FOR 36'-6" BRIDGE WIDTH SHALL BE 39'-0" WIDE WHEN CURBS ARE NOT INCLUDED, 39'-3" WHEN CURB IS INCLUDED ON ONE SIDE ONLY, 39'-6" WHEN CURBS ARE 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 'Y' AS DETAILED ON THE PLANS. PAYMENT FOR THE TRANSVERSE JOINT SHALL BE AT THE UNIT PRICE BID PER LIN. FT. FOR THE JOINT FURNISHED.



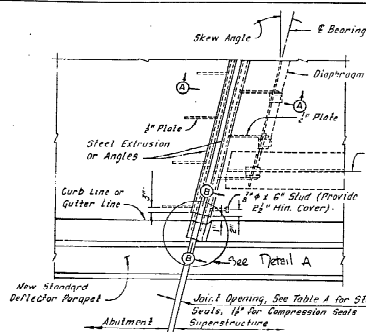
APPROACH SLAB SEAT REPAIR DETAIL

2	ADDED IMPRESSED JOINT A CHANGED TYPE OF CEMENT	DFC	10/04
1	ADDED SEAT REPAIR DETAIL	DFC	10/04
N1	REVISION	BY	DATE

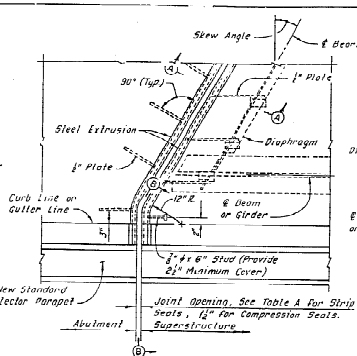
OHIO TURNPIKE COMMISSION

REINFORCED CONCRETE
APPROACH SLABS

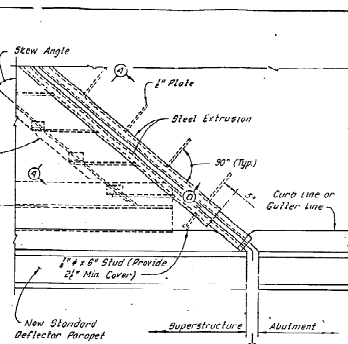
DATE: OCTOBER 1983 SCALE: N.T.S.
SHEET 16 OF 43



PLAN - SKEW ANGLE < 10°
(Strip Seal Shown, Compression Seal Similar)
Scale: 3/4" = 1'-0"

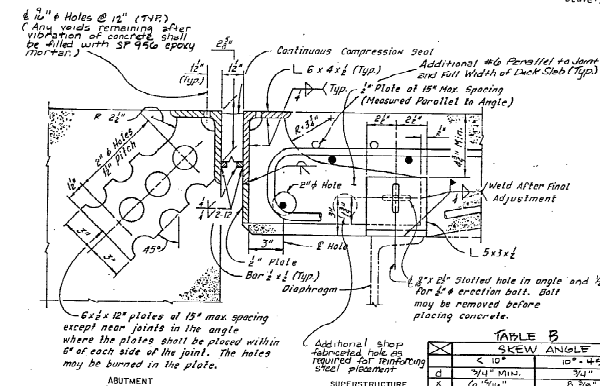


PLAN - SKEW ANGLE 10° TO 45°
(Strip Seal Shown, Compression Seal Similar)
Scale: 3/4" = 1'-0"

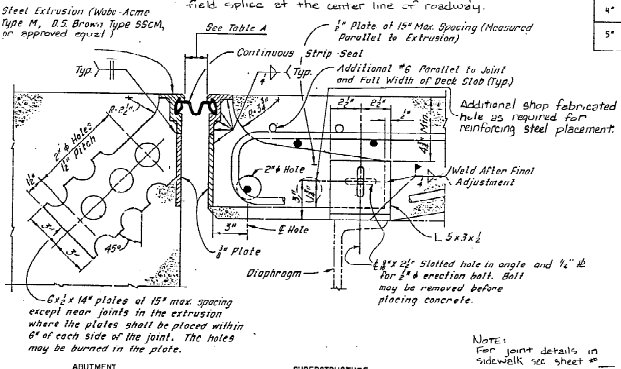


PLAN - SKEW ANGLE > 45° (STRIP SEAL ONLY)
Scale: 3/4" = 1'-0"

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.

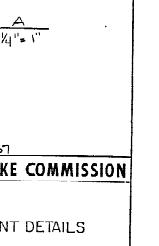
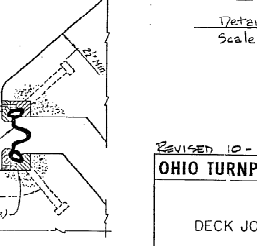
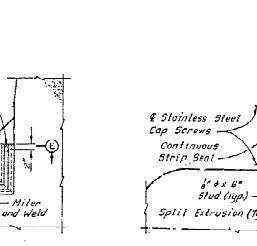
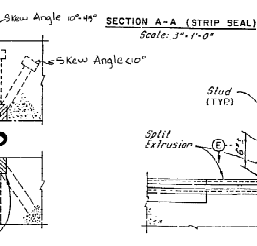
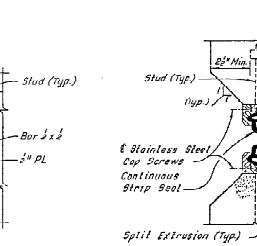
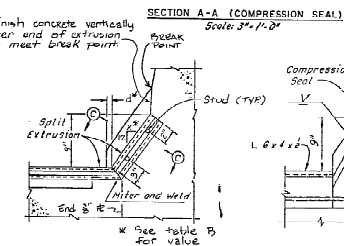
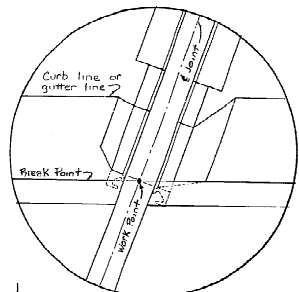


	SKEW ANGLE
	< 10°
d	3/4" MIN.
k	6 3/4" MIN.



NOTE: For joint details in sidewalk see sheet #

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



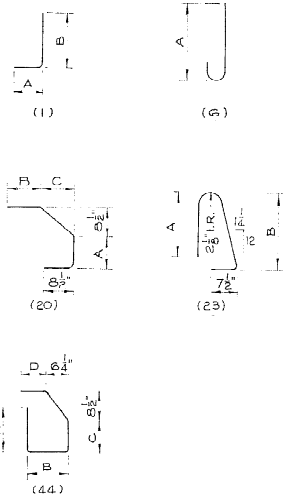
ESTIMATED QUANTITIES							
ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	ABUT.	PIER	GEN'L.
242	147	SY	WEARING COURSE REMOVED, AS PER PLAN	447			
SP 202	LUMP	LS	PORTIONS OF STRUCTURES REMOVED				
503	15.75	CY	ABUTMENT BACKFILL AS PER 503.10		15.75		
509		LB	REINFORCING STEEL, GRADE 60				
510	62	LF	DOUBLE HOLES, USING SP 852 GROUT ANCHORING	62			
511	0.83	CY	CLASS 'N' CONCRETE, BELTWAY, EARS, AS PER PLAN		0.83	0.63	
SP 514	274.56	CY	CLASS 'N' CONCRETE, SUBSTRUCTURE DECK AND BAPKETS	274.56			
SP 514	50.28	CY	CLASS 'N' CONCRETE, BELTWAY, EARS, AND BAPKETS	50.28			
513	3300	LB	STRUCTURAL STEEL (AISC CERTIFICATION NOT REQUIRED), AS PER PLAN	3300			
513		LB	STRENGTH STEEL (A500/ASTM A36) AISC CERTIFICATION NOT REQUIRED				
SP 513	2070	EA	WELDED STEEL SHEET PILING	2070			
SP 514	3300	LB	FIELD PAINTING OF NEW STRUCTURAL STEEL	3300			
SP 514	262	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL	262			
SP 514	1246	SF	SURFACE PREPARATION, TOP FLANGE EXISTING BEAMS	1246			
518	2	EA	SCUPPER, INCLUDING SUPPORTS	2			
518	6	LF	6 INCH PIPE DOWNSPOUT, INCLUDING SPECIALS (PLASTIC PIPE, 707.39)				16
SP 519	32.07	SF	PATCHING, CONCRETE STRUCTURES		32.07		
SP 524C	13	EA	MODIFIED, EXISTING, EXPANSION BEARING, DEVICES		13		
SP 527	LUMP	LS	FALSEWORK, TEMPORARY BRACING, AND PROTECTIVE STRUCTURES				
SP 533	63.4	LF	3" CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT		63.4		
SP 538	1461.24	SY	CONCRETE WEATHERPROOFING	1461.24	182	8	111
SP 824	77433	LB	EPOXY COATED REINFORCING STEEL, GRADE 60	65891	11542		

ESTIMATED QUANTITIES: CALCULATED BY RFF (JAN. 1989)
CHECKED BY RAB (JAN. 1989)

ITEM SP 202

PORTIONS OF STRUCTURES REMOVED SHALL INCLUDE APPROXIMATELY 478 SQUARE YARDS OF ASPHALT CONCRETE SURFACE, 346 CUBIC YARDS OF SUBSTRUCTURE CONCRETE, 350 CUBIC YARDS OF ABUTMENT SLAB CONCRETE, 2597 LINEAL FEET OF RAILING, SCUPPERS INCLUDING DOWNSPOUTS, AND EXPANSION JOINTS. EXISTING ASPHALT WEARING COURSE ON THE DECK AND ABUTMENT SLAB IS APPROXIMATELY 1.8 INCHES.

MARK	NO. RECD.	LGTH	TYPE	DIMENSIONS				INCRM.	WEIGHT LBS.
				A	B	C	D		
ABUTMENT									
EA 401	124	14-0	ST						2872
EA 402	134	15-10	ST						1417
EA 550	28	5-3	23	2-2	2-4				163
EA 551	48	2-3	1	0-10	1-6				111
EA 553	20	2-1	30						43
EA 554	32	2-8	6	2-1					89
EA 560	12	3-7	1	1-0	2-8				46
EA 561	32	10-10	ST						530
EA 562	32	4-4	ST						145
EA 601	62	2-1	1	1-0	1-9				201
EA 652	28	2-9	20	0-9	0-7	0-6			115
EA 655	4	2-9	20	0-9	0-7	0-6			16
EA 656	4	2-7	20	3-9	0-6	0-4			19
EA 657	4	2-7	20	0-9	0-6	0-4			19
EA 658	4	2-6	20	0-9	0-5	0-3			17
EA 659	16	2-4	20	0-9	0-4	0-2			57
EA 661	134	15-10	ST						2662
TOTAL				ABUTMENT = 11942					
SUPERSTRUCTURE									
ES 401	82	17-0	6	16-6					931
ES 402	328	30	0	6"					6273
ES 501	391	33-4	ST						13595
SERIES	2-SETS	30-4							
OF	OF 104	70	ST				2-3	1	401
ES 502	20	BAR	10-0					8	
SERIES	2-SETS	7-9							
OF	OF 34	70	ST					1-1	40
ES 503	6	BAR	6-7						
ES 504	352	30-0	ST						11014
ES 505	44	34-4	ST						1074
ES 506	132	41-0	ST						5615
ES 507	64	14-6	ST						266
ES 508	128	7-0	ST						933
ES 509	16	10-3	ST						72
ES 510	352	5-3	23	3-2	2-4				1927
ES 511	352	4-6	44	1-4	1-3	0-9	0-9		1634
ES 601	391	33-4	ST						19576
SERIES	2-SETS	30-4							
OF	OF 104	70	ST					2-3	608
ES 602	20	BAR	10-0					8	
SERIES	2-SETS	7-9							
OF	OF 34	70	ST					1-1	60
ES 603	6	BAR	6-7						
ES 604	4	33	0	ST					198
TOTAL SUPERSTRUCTURE				= 65891					



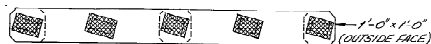
REINFORCING STEEL SAMPLES

REFER TO U.I.C. GENERAL CONDITIONS 6-6.02 AND CMS SECTION 709.01 THROUGH 709.05 AND 709.08. SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR SAMPLING FOR EACH BRIDGE. RANDOM SAMPLES SHALL BE REPLACED IN THE STRUCTURES BY THE ADDITIONAL STEEL, SPLICED IN ACCORDANCE WITH 509.08.

AS BUILT 2/90	
URS	
OHIO TURNPIKE COMMISSION	
ESTIMATED QUANTITIES AND REINFORCING BAR SCHEDULE	
SR 13 OVER THE OHIO TURNPIKE	
ERIC	COUNTY
DATE: JANUARY 1989	SCALE: N.T.S.
FTP-43-83-20	SHEET 38 OF 43



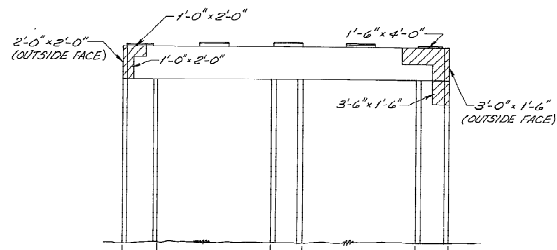
PIER P-1 PLAN



PIER P-2 PLAN

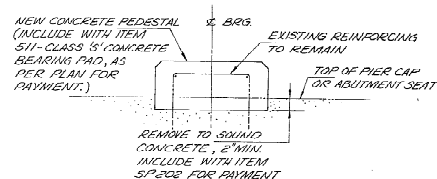


PIER P-3 PLAN



PIER P-1 ELEVATION
(SOUTH FACE)

BRIDGE AT S.R. 13			
SUMMARY OF REPAIR QUANTITIES			
MEASURED QUANTITY		TOTAL QUANTITY	ESTIMATED QUANTITY
LOCATION	UNIT		
PIER P-1	SF	31.07	
PIER P-2	SF	1.0	
CONTINGENCY	SF		
		TOTAL	32.07



DETAIL 'A'

NOTES

- (1) PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION WAS PERFORMED IN OCTOBER 1980.
 - (2) ESTIMATED QUANTITY HAS BEEN INCREASED 10% OVER MEASURED QUANTITIES TO ALLOW FOR UNEXPECTED DETERIORATION. CLASS DIMENSIONS OF PATCHES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
 - (3) INDICATES AREA TO BE PATCHED PER ITEM 507 - PATCHING CONCRETE STRONGUOLS.
 - (4) INDICATES CONCRETE BEAM SHALL BE REPAIRED IN ACCORDANCE WITH ENR PART II, "A" AND "B".
 - (5) INDICATES CONCRETE REPAIRING PADS, AS PER PLAN FOR PATCHING. CLASS "C" CONCRETE SHALL BE IN ACCORDANCE WITH ITEM 600.
 - (6) ANY EXISTING REINFORCING BARS OPENED BY THE LINERWALL TO BE UNUSABLE BECAUSE OF CORROSION SHALL BE REPLACED WITH NEW STEEL. PAYMENT FOR NEW STEEL SHALL BE BASED ON MARKET CONTRACT UNIT PRICE \$10 PER POUND OF ITEM 509 - REINFORCING STEEL, GRADE 60. A PORTION OF 50 PERCENT HAS BEEN INCLUDED IN THE ESTIMATED QUANTITIES.
 - (7) REMOVE AND REPLACE ITS LUNGRILL BLANK PERSTALS WHILE THE DECK IS OFF AND THE BEARINGS DISASSEMBLED
- FOR ADDITIONAL NOTES, SEE THE STRUCTURE CHART AND:

AS BUILT 2/90

URS

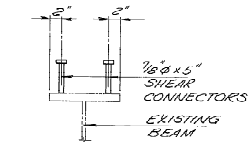
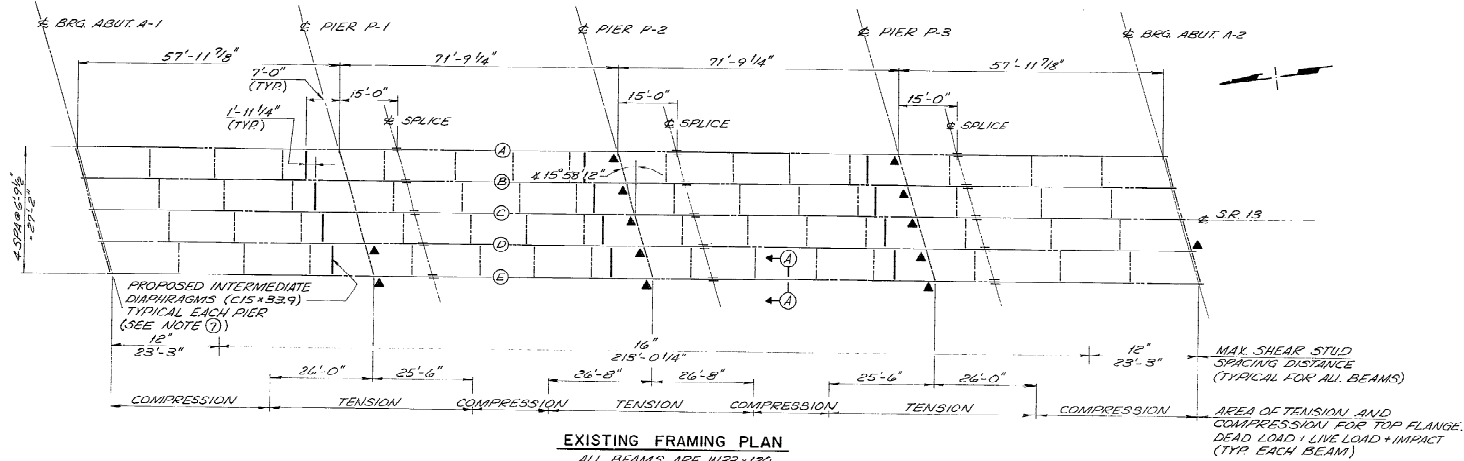
OHIO TURNPIKE COMMISSION

ABUTMENT AND
PIER REPAIR

S.R.13 OVER
THE OHIO TURNPIKE

ERIE COUNTY

DATE: JANUARY 1989	SCALE: N.T.S.
FTP: 43-89-20	SHEET 59 OF 43



SECTION A-A
(TYPICAL EACH BEAM)

TABLE OF FINISHED PAVEMENT ELEVATIONS

LOCATION	BEAM A	BEAM B	BEAM C	BEAM D	BEAM E	ALLOWANCES FOR THE DEAD LOAD (***)
ABUT. A-1	648.69	648.81	648.93	648.84	648.75	~
1/4 PT.	648.80	648.92	649.04	648.95	648.86	0.024
1/2 PT.	648.91	649.03	649.15	649.06	648.96	0.028
3/4 PT.	649.01	649.13	649.25	649.16	649.07	0.013
PIER P-1	649.11	649.23	649.35	649.26	649.18	~
1/4 PT.	649.23	649.35	649.46	649.37	649.28	0.016
1/2 PT.	649.34	649.46	649.57	649.48	649.38	0.030
3/4 PT.	649.44	649.56	649.68	649.58	649.49	0.016
PIER P-2	649.54	649.66	649.77	649.68	649.58	~
1/4 PT.	649.63	649.75	649.87	649.77	649.67	0.016
1/2 PT.	649.72	649.84	649.95	649.85	649.76	0.030
3/4 PT.	649.80	649.92	650.03	649.93	649.83	0.016
PIER P-3	649.88	649.99	650.10	650.00	649.91	~
1/4 PT.	649.93	650.04	650.16	650.06	649.96	0.013
1/2 PT.	649.98	650.10	650.21	650.11	650.01	0.028
3/4 PT.	650.03	650.14	650.26	650.16	650.05	0.024
ABUT. A-2	650.07	650.19	650.30	650.20	650.10	~

(***) DENOTES: ALLOWANCES FOR THE DEAD LOAD DEFLECTIONS SHALL BE ADDED TO THE FINISHED PAVEMENT ELEVATIONS TO OBTAIN THE PROPER FORMING ELEVATIONS

NOTES

- ALL STRUCTURAL STEEL SHALL BE ASTM A36 UNLESS NOTED OTHERWISE.
- WHERE A SHAFT OR PILE IS DESIGNATED (CUM) THE MATERIAL SHALL MEET SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01 OF THE SPECIFICATIONS.
- 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.
- WELDED STUD SHEAR CONNECTORS SHALL CONFORM TO AASHTO M-189 AND SP 513.
- THE ELEVATIONS SHOWN ARE FINISHED PAVEMENT ELEVATIONS. PROPER ALLOWANCE SHALL BE MADE FOR THE DEAD LOAD DEFLECTIONS CAUSED BY THE WEIGHT OF THE CONCRETE.
- ▲ DENOTES ITEM SP 524C - MODIFIED REDUCING EXPANSION BEARING DEVICES. FOR ADDITIONAL DETAILS AND NOTES, SEE COMMON DETAILS, SHEET 19.
- FOR THE PROPOSED INTERMEDIATE DIAPHRAGM DETAILS AND ADDITIONAL NOTES, SEE SHEET 21.
- THE EXISTING SCOPPER ATTACHMENT PLATES SHALL BE REMOVED BY AIR ARCING INEL WELDS. PAYMENT TO BE INCLUDED WITH ITEM SP 202 - PORTIONS OF STRUCTURES REMOVED.
- FOR THE SCOPPER DETAILS, SEE SHEET 41.

URS

OHIO TURNPIKE COMMISSION

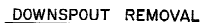
FRAMING PLAN AND FINISHED PAVEMENT ELEVATIONS

S.R.13 OVER THE OHIO TURNPIKE

ERIE COUNTY

DATE: JANUARY 1999 SCALE: N.T.S.

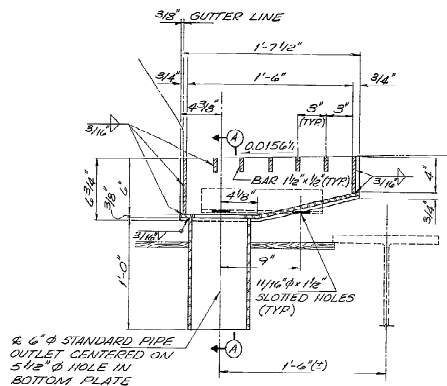
FTP: 43-69-20 SHEET 40 OF 43



REMOVE EXISTING SCUPPER
OUTLET PIPES, FITTINGS
AND SUPPORTS TO 6" BELOW
EXISTING GROUND.
(EXIST. CHANNELS, C12x25,
TO REMAIN)

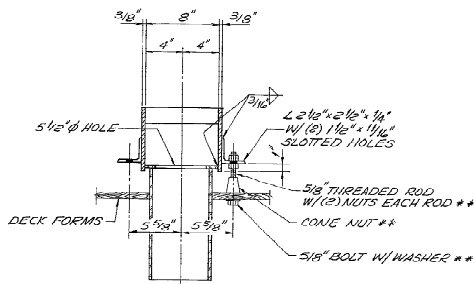
SEE DRAIN PIPE
CAP DETAIL
SHEET 19

- EXISTING GROUND



2. 6" ϕ STANDARD PIPE
OUTLET CENTERED ON
5 1/2" ϕ HOLE IN
BOTTOM PLATE

SCUPPER DETAIL



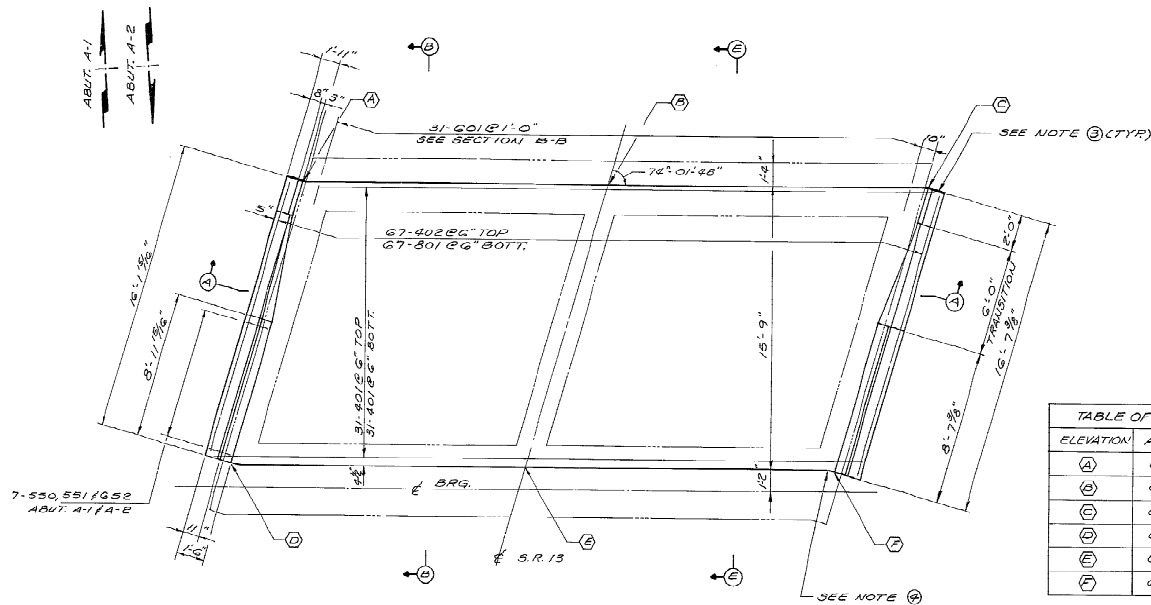
SECTION A-A

(*) DENOTES: 5/8" ϕ THD. ROD, NUTS, CONE NUTS
AND 5/8" ϕ BOLT TO BE INCLUDED
WITH SCUPPER FOR PAYMENT.

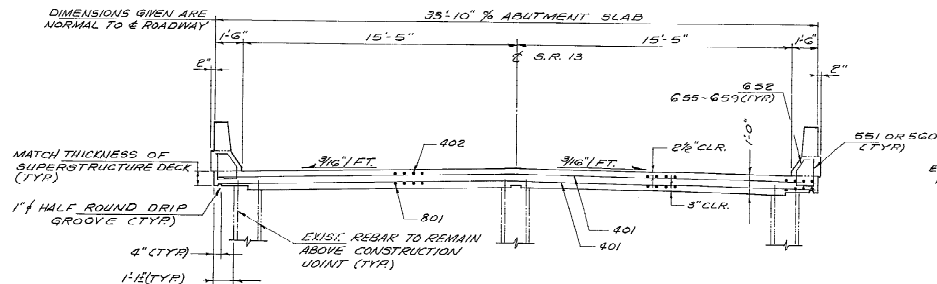
NOTES

① PAYMENT FOR THE EROSION CONTROL PAD SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 518-6" PIPE DOWNSPOUT, INCLUDING SPECIALS.

URS	
OHIO TURNPIKE COMMISSION	
SCUPPER DETAILS	
S.R. 13 OVER THE OHIO TURNPIKE	
ERIE	COUNTY
DATE: JANUARY 1989	SCALE: N.T.S.
FTP: 43-89-20	SHEET 41 OF 43



PLAN



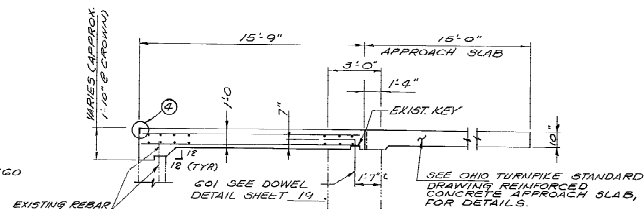
SECTION A-A

FOR SPACING OF 551, 552, 555-559 560 BARS AND ADDITIONAL REINFORCING IN THE PARAPETS SEE WINGWALL PARAPET ELEVATION, COMMON DETAIL SHEET 19.

TABLE OF ELEVATIONS		
ELEVATION	ABUT. A-2	ABUT. A-1
(A)	650.08	648.58
(B)	650.85	648.80
(C)	650.10	648.50
(D)	650.06	648.72
(E)	650.91	648.93
(F)	650.0A	648.65

NOTES

- LONGITUDINAL OR TRANSVERSE CONSTRUCTION JOINTS SHALL NOT BE PERMITTED IN THE DECK SLAB.
- ALL REINFORCING STEEL SHALL BE EPOXY COATED.
- 1" PREFORMED EXPANSION JOINT FILLER, TOPPED WITH 1" MIN. DEPTH 705.04 JOINT SEALER (INCLUDE WITH APPROACH SLAB FOR PAYMENT).
- FOR THE TYPICAL DECK JOINT DETAILS, SEE SHEET 22.
- SEE ABUTMENT SLAB AND DECK SLAB POURING SEQUENCE NOTE ON SHEET 19.
- FOR SECTION E-E, THE DOWEL DETAIL AND ADDITIONAL NOTES SEE SHEET 19.
- THE PREFIX (EA) SHALL BE ADDED TO ALL REINFORCING STEEL IN THE ABUTMENT SLABS.



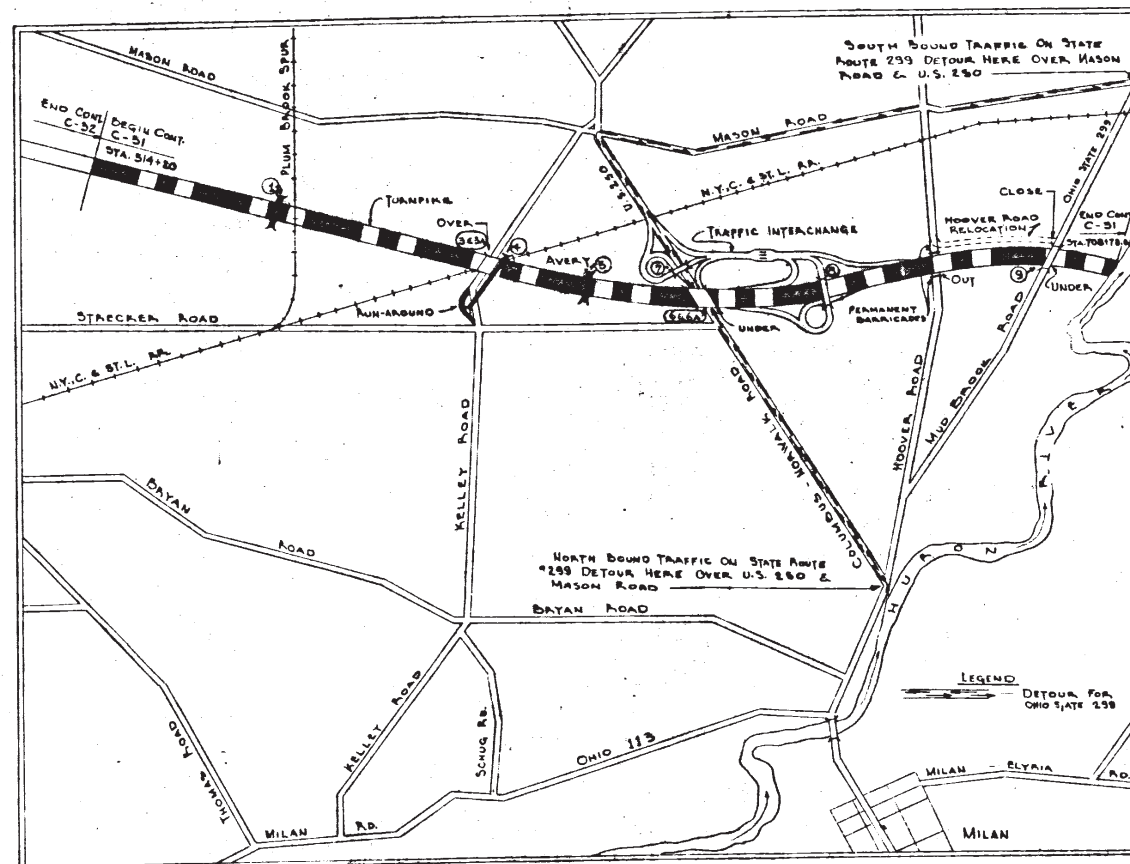
SECTION B-B

URS	
OHIO TURNPIKE COMMISSION	
ABUTMENT SLABS AND DETAILS	
S.R.13 OVER THE OHIO TURNPIKE	
ERIE	COUNTY
DATE: JANUARY 1989	SCALE: N.T.S.
FTP: 43-89-20	SHEET 45 OF 49

INDEX OF DRAWINGS

SHEET NO.	DESCRIPTION
1	INDEX
2	SUMMARY
3 TO 9 INCL.	TURNPIKE PLAN & PROFILE
10	U.S. #250 PLAN & PROFILE
11	HOOVER RD. PLAN & PROFILE
12	INTERCHANGE - KEY MAP
13-14	INTERCHANGE - PLAN
15-15A-16-16A	INTERCHANGE - DETAILS
17 TO 19 INCL.	INTERCHANGE - PROFILES
20	SPECIAL HEADWALLS & STD. MEDIAN DITCH DIKES
20A	SPECIAL HEADWALLS
21-22	STRUCTURE No. 1 - BOX CULVERT - STA. 553+66.00
23 TO 28 INCL.	VOID No. 2A - PLUM BROOK ORD. SPUR
29 TO 42 INCL.	STRUCTURE No. 3A - KELLEY ROAD
43-44-44A	STRUCTURE No. 4 - BOX CULVERT - STA. 598+17.72
45-46	STRUCTURE No. 5 - BOX CULVERT - STA. 609+50.00
47 TO 55 INCL.	STRUCTURE No. 6-6A - U.S. #250
56 TO 62 INCL.	STRUCTURE No. 7 - INTERCHANGE - U.S. #250
62 TO 66 INCL.	STRUCTURE No. 8 - INTERCHANGE - TURNPIKE
67 TO 70 INCL.	STRUCTURE No. 9 - MUD BROOK ROAD
71	STEEL DETAILS - STRUCTURES 2, 2A & 9
51	SCREED ELEVATIONS STR. 3-3A
1 TO 44 INCL.	CROSS SECTIONS - TURNPIKE
45 TO 51 INCL.	CROSS SECTIONS - U.S. 250
52 TO 67 INCL.	CROSS SECTIONS - INTERCHANGE
68-69	CROSS SECTIONS - HOOVER ROAD

STD. DWG. NO.	DESCRIPTION	DATE OF LATEST REVISION
1	TURNPIKE DITCH DETAILS	5-6-53
2	STD. HEADWALLS - PIPE SIZES 48" & UNDER	1-20-53
3	STD. HEADWALLS - PIPE SIZES OVER 48"	1-20-53
4	TYPICAL ROADWAY SECTIONS	5-6-53
5	HANDRAIL DETAILS	5-6-53
6	INLETS & CURBS	5-6-53
7	MANHOLES	5-6-53
8	PAVEMENT REINFORCEMENT & DETAILS	6-3-53
9	TRANSVERSE PAV'T. JOINTS - TYPE A	2-7-53
10	TRANSVERSE PAV'T. JOINTS - TYPE B	5-6-53
11	PAVEMENT JOINT SPACING	12-31-52
12	RIGHT OF WAY FENCE & GATES	5-6-53
13	R/W FENCE INSTALLATION DETAILS	5-6-53
14	PERMANENT BARRICADES & MONUMENTS AND DELINEATORS	3-3-53
15	DRAINAGE DETAILS FOR TURNPIKE OVERPAVES & UNDERPASSES	4-27-53
16	UNDERDRAINS	1-20-53
17	GUARDRAILS - TYPE A & B	1-24-53
18	GUARDRAILS - TYPE C & D	5-6-53
19	AGRICULTURAL TILE DRAINAGE - TYP. DETS.	12-5-52
20	FLOOD GATES FOR A/W FENCES	1-6-53
21	TRANSVERSE PAV'T. JOINTS - TYPE C	1-23-53
22	CULVERT PIPE BEDDING AND BACKFILL	2-19-53
23	RIGHT OF WAY FENCE - TYPE 3	2-25-53
24	TRAFFIC DIVIDERS	5-8-53

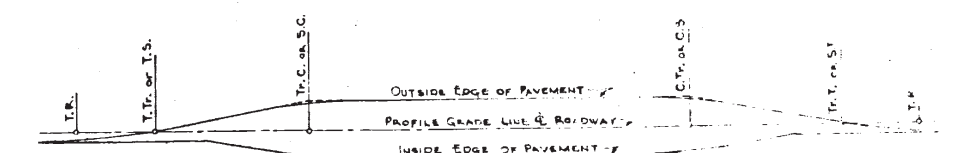
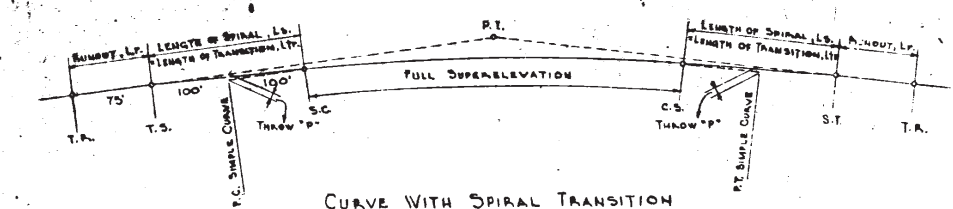
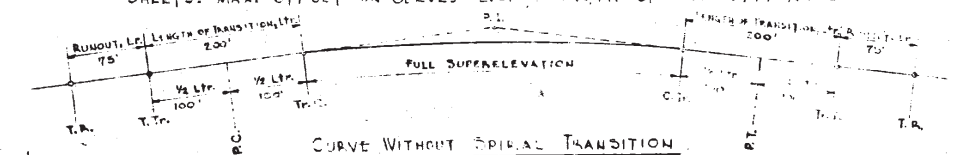


MAP SHOWING PROVISIONS FOR
MAINTAINING TRAFFIC DURING CONSTRUCTION
NOTE: RUN-AROUNDS ARE TO BE CONSTRUCTED
AND MAINTAINED BY THE CONTRACTOR.

	LIST OF SUPPLEMENTAL SPECIFICATIONS	DATE OF LATEST REVISION
B-20	WATERBOUND MACADAM BASE COURSE	DEC. 9, 1952
B-35	ASPHALTIC CONCRETE BASE & LEVELING COURSES	DEC. 9, 1952
I-9	STONE UNDERDRAINS. (FRENCH DRAINS)	DEC. 9, 1952
I-16	CATCH BASINS ABANDONED	FEB. 3, 1953
I-30	FARM TILE DRAINS	JULY 9, 1953
T-10	TRAFFIC COMPACTED SURFACE COURSE	DEC. 9, 1952
T-30	BITUMINOUS PRIME COAT & TACK COAT	DEC. 9, 1952
T-35	ASPHALTIC CONCRETE SURFACE COURSE	DEC. 9, 1952
A-5	SUPPLEMENTAL SPEC'S. TO GENERAL SPEC'S.	AUG. 7, 1953
I-18	STABILIZED SHOULDERS AND TEMPORARY RUNAROUNDS	MAY 28, 1953
I-21	CONCRETE MEDIAN AND TRAFFIC ISLAND PAVEMENT	MAY 28, 1953
I-29	CONSTRUCTION CONTRACT INFORMATION SIGNS	MAY 28, 1953

GENERAL NOTES

- THE E OF THE TURNPIKE CONTAINS THE FOLLOWING EQUATIONS:
 $668+83.62 \text{ BK.} = 669+06.15 \text{ AH.} - 704+39.53 \text{ BK.} = 705+00 \text{ AH.}$
- LOCATION OF INTERCEPTION OF EXISTING FARM TILE AS SHOWN ON PLAN IS APPROXIMATE ONLY. CONSTRUCTION TO FIT ACTUAL FIELD CONDITIONS.
- ALL INTERCEPTED TILE SHALL BE CONNECTED BY CONTRACTOR.
- ALL FARM TILE WITHIN RIGHT-OF-WAY TO BE ABANDONED AND SIZES 10" OR LARGER IN DIA. TO BE REMOVED.
- ELEVATIONS ARE REFERRED TO M.S.L., U.S.C. & G.S. DATUM.
- THE NORTH INDICATED AND REFERRED TO IN THIS SET OF PLANS IS THE GRID NORTH OF THE NORTH ZONE OF THE OHIO STATE LAMBERT PROJECTION COORDINATE SYSTEM.
- ELEVATIONS & PROFILE FOR MEDIAN DITCHES REFER TO THE VERTEX OF DITCH. (NOT ROUNDING WHICH IS VARIABLE DEPENDING ON CROSS-SLOPES). THE ELEVATIONS FOR TOP OF GRATINGS REFER TO THE ROUNDINGS AT THE INLETS.
- ALL SIDE DITCHES, UNLESS OTHERWISE SPECIFIED, ARE STANDARD DITCHES WITH 4' ROUNDING ACCORDING TO "STANDARD DWG. NO. 1".
- MAXIMUM DEGREE OF CURVATURE ON TURNPIKE IS $1^{\circ}00'$ - RATE OF SUPERELEVATION IS $\frac{3}{16}$ " PER FOOT. SUPERELEVATION ROTATED ABOUT E OF PAVEMENT. SEE SHEETS 15-15A-16 & 16A FOR SUPERELEVATION OF INTERCHANGE LAYOUT.
- THE OFFSETS OF MEDIAN DITCHES ON CURVES ARE SHOWN ON THE PLAN & PROFILE SHEETS ONLY. NO CHANGES HAVE BEEN MADE ON THE CONSTRUCTION SHEETS. MAX. OFFSET ON CURVES 2.31' LENGTH OF TRANSITION 2' 5'



SUPERELEVATION ROTATED ABOUT CENTER LINE OF PAVEMENT

Legend
T.A. = Point of Tangent Runout
T.Tr. = Point of Tangent Transition
Tr.C. = Point of Transition Curve
C.Tr. = Point of Curve Transition
Tr.T. = Point of Transition Tangent
Lr. = Length of Runout
Ls. = Length of Spiral
T.S. = Point of Tangent Spiral
S.C. = Point of Curve Spiral
C.S. = Point of Curve Spiral
S.T. = Point of Spiral Tangent
Ltr. = Length of Transition

THIS PROJECT SHALL BE CONSTRUCTED UNDER OHIO TURNPIKE PROJECT NO. 1, GENERAL SPECIFICATIONS DATED DECEMBER 9, 1952, EXCEPT AS NOTED, SUPPLEMENTAL SPECIFICATIONS (LISTED ELSEWHERE ON THIS SHEET) AND SPECIAL PROVISIONS FOR CONTRACT C-31.

2 AS BUILT PLANS		CPK 12/15/53
1	NOTE #10	PRB 12/15/53
No.	Revision	By Date
OHIO TURNPIKE COMMISSION OHIO TURNPIKE PROJECT NO. 1		
INDEX SHEET		
BALKE & WATKINS CONTRACTING ENGINEER DESIGN SECTION D-11		
DESIGNED: DRAWN: J.W.F.	CHECKED: IN CHARGE: B.L.	DATE: 5-13-53 SCALE:
CONTRACT NO. C-31		SHEET 1 OF 71

2	AS BUILT PLANS	LRW	12/5/55
1	Totals	LBW	6-10-55
No.	Revision	By	Date

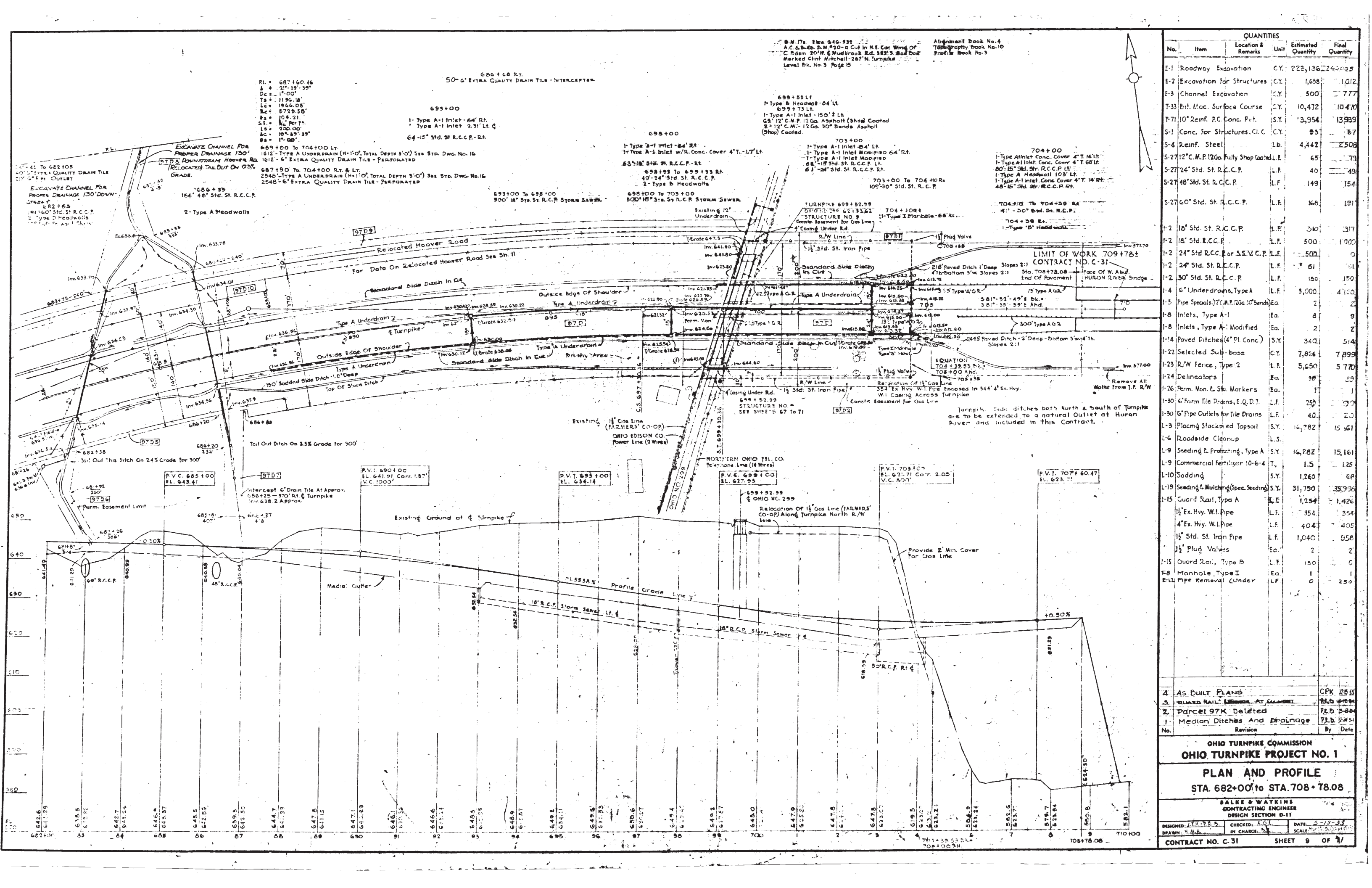
**OHIO TURNPIKE COMMISSION
OHIO TURNPIKE PROJECT NO. 1**

SUMMARY SHEET

**BALKE & WATKINS
CONTRACTING ENGINEER
DESIGN SECTION D-11**

DESIGNED:	CHECKED: A. L. ACML	DATE: 5-13-55
DRAWN: J. W. F.	IN CHARGE: D. L.	SCALE:

CONTRACT NO. C-31 SHEET 2 OF 71



QUANTITIES					
No.	Item	Location & Remarks	Unit	Estimated Quantity	Final Quantity
E-1	Roadway Excavation		C.Y.	223,136	243,005
E-2	Excavation for Structures		C.Y.	1,658	1,012
E-3	Channel Excavation		C.Y.	500	777
T-33	Bit. Mac. Surface Course		C.Y.	10,472	10,470
T-71	10" Reinf. P.C. Conc. Pvt.		S.Y.	3,954	13,939
S-1	Conc. for Structures, C.I.C.		C.Y.	93	87
S-4	Reinf. Steel		Lb.	4,442	2,508
S-27	12" C.M.P. 12Ga. Fully Shop Coated		L.F.	65	73
S-27	24" Std. St. R.C.C.P.		L.F.	40	49
S-27	48" Std. St. R.C.C.P.		L.F.	149	154
S-27	60" Std. St. R.C.C.P.		L.F.	166	191
I-2	18" Std. St. R.C.C.P.		L.F.	310	317
I-2	18" Std. R.C.C.P.		L.F.	500	1,000
I-2	24" Std. R.C.C.P. for S.V.C.P.		L.F.	500	0
I-2	24" Std. St. R.C.C.P.		L.F.	61	61
I-2	30" Std. St. R.C.C.P.		L.F.	150	150
I-4	6" Underdrains, Type A		L.F.	3,000	4,100
I-5	Pipe Specials (22" C.M.P. 12Ga. 30' Bends)		Ea.	2	2
I-8	Inlets, Type A-I		Ea.	8	9
I-8	Inlets, Type A-I Modified		Ea.	2	2
I-14	Paved Ditches (4" Pl. Conc.)		S.Y.	340	514
I-22	Selected Sub-base		C.Y.	7,826	7,899
I-23	R/W Fence, Type 2		L.F.	5,650	5,770
I-24	Delineators		Ea.	30	29
I-26	Perm. Mon. & Sta. Markers		Ea.	1	1
I-30	6" Farm Tile Drains, E.Q.D.T.		L.F.	250	300
I-30	6" Pipe Outlets for Tile Drains		L.F.	40	20
L-3	Placing Stockpiled Topsoil		S.Y.	16,282	15,161
L-6	Roadside Cleanup		L.S.		
L-9	Seeding & Protecting, Type A		S.Y.	16,282	15,161
L-9	Commercial Fertilizer 10-6-4		T.	1.5	1.25
L-10	Sodding		S.Y.	1,260	68
L-19	Seeding & Mulching (Spec. Seeding)		S.Y.	31,750	35,936
I-15	Guard Rail, Type A		L.F.	1,254	1,426
	1 1/2" Ex. Hvy. W.I. Pipe		L.F.	354	354
	4" Ex. Hvy. W.I. Pipe		L.F.	404	405
	1 1/2" Std. St. Iron Pipe		L.F.	1,040	958
	1 1/2" Plug Valves		Ea.	2	2
I-15	Guard Rail, Type B		L.F.	130	0
E-8	Manhole, Type I		Ea.	1	1
E-12	Pipe Removal Under		L.F.	0	250

AS BUILT PLANS

ILLINOIS RAILROAD AT COLUMBIANA

Parcel 97K Deleted

Median Ditches And Drainage

CPK 12835

12835-12836

12835-12836

12835-12836

No.

Revision

By

Date

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE PROJECT NO. 1

PLAN AND PROFILE

STA. 682+00 TO STA. 708+78.08

BALKE & WATKINS

CONTRACTING ENGINEER

DESIGN SECTION D-11

DESIGNED: J.H.P.B.

CHECKED: A.G.

DATE: 5-19-33

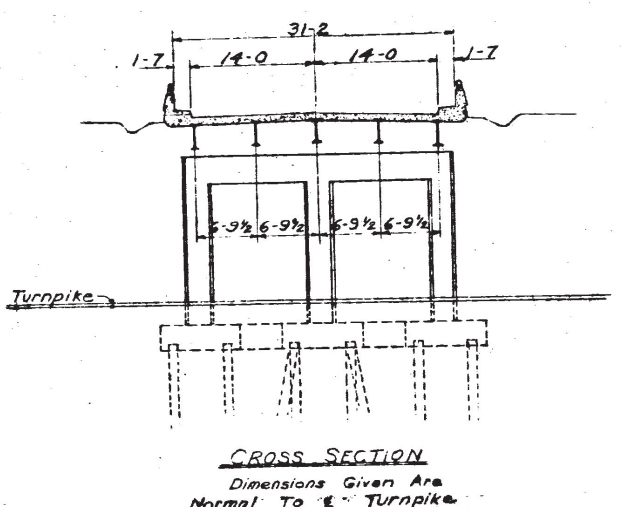
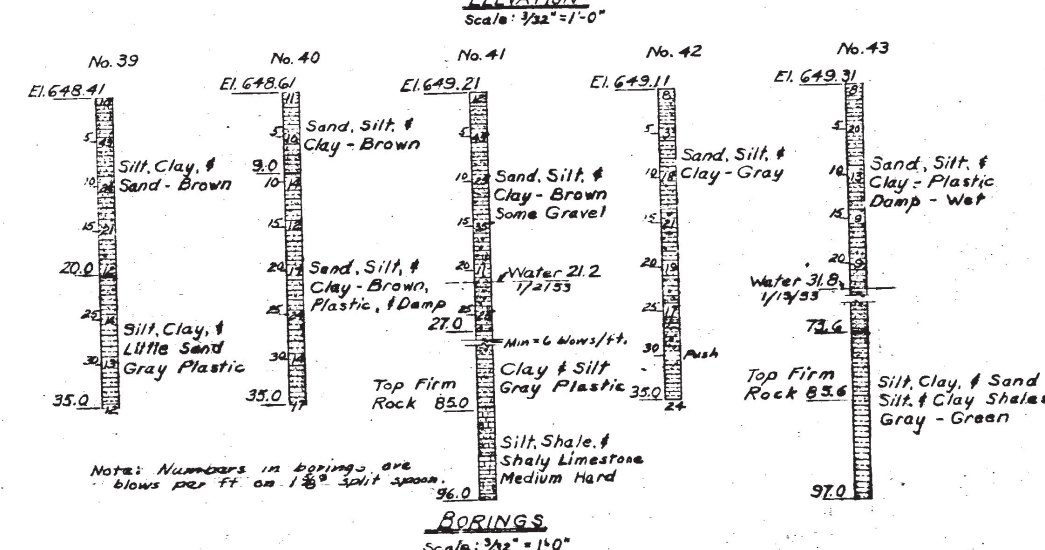
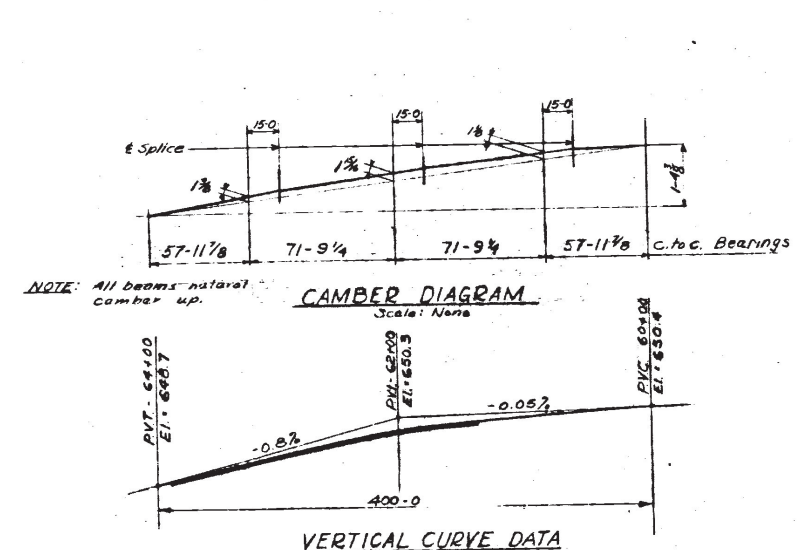
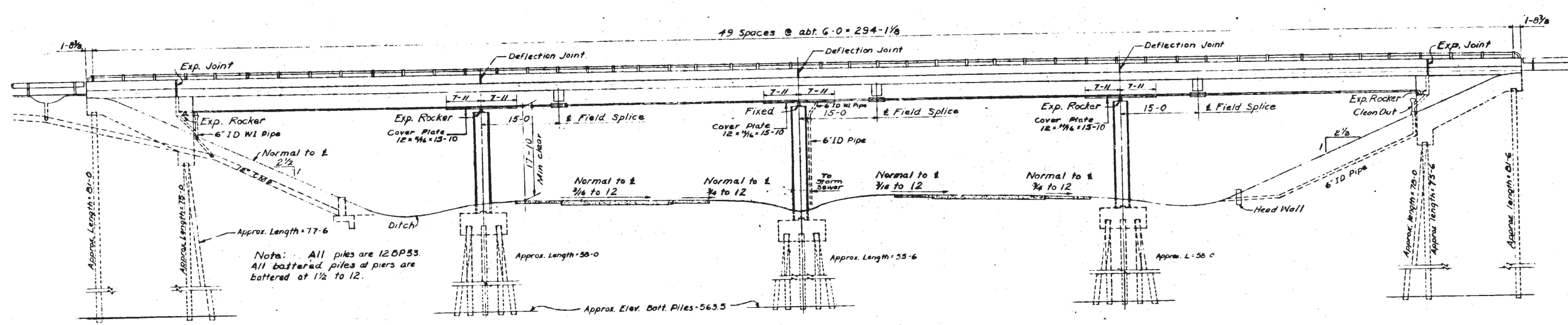
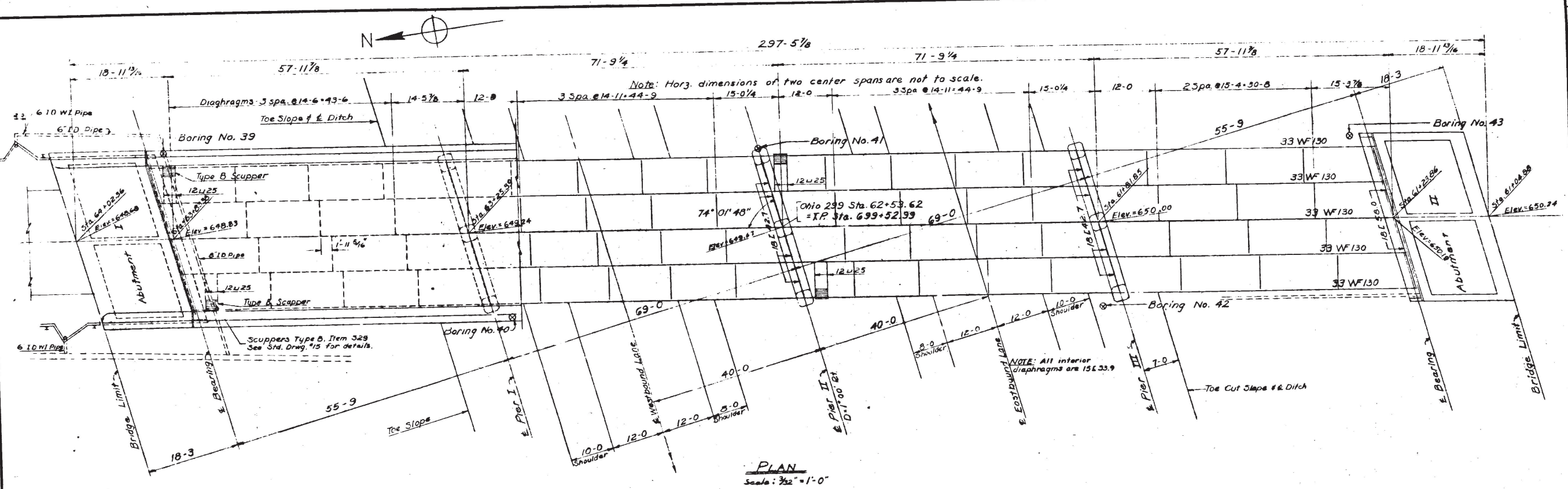
DRAWN: H.W.B.

IN CHARGE: H.W.B.

SCALE: 1"=40'

CONTRACT NO. C-31

SHEET 9 OF 71



QUANTITIES				
No.	Item	Location & Remarks	Unit	Estimated Quantity
E 2	Struct. Exc.		CY	448
7 35	Asphaltic Conc. 3rd Course Type C		CY	30
31	Conc. Class C		CY	430
31	Conc. Class E		CY	102
33	Waterproofing Type C		SY	930
34	Reinf. Steel		Lbs	69,500
37	Struct. Steel		Lbs	243,600
39	Exp. Joints		Lbs	6,500
314	Railing-Type B		LF	590
316	First Test Pile		Ea.	1
317	Pile Test Load		Ea.	1
318	Piles Furn. 12 BP 53		LF	3,648
318	Piles Driving		LF	3,590
318	Piles-Splice		Ea.	1
329	Scupper-Type B		Ea.	4
329	6\" Pipe		LF	90
329	8\" Pipe		LF	50
329	4\" WI Pipe		LF	10
329	6\" WI Pipe		LF	40

ITEM				
		EXTERIOR STRINGER		INTERIOR STRINGER
		Pos. Mom. End Span	Neg. Mom. Center Pier	Pos. Mom. End Span
D.L.	287	605	189	398
L.L.	170	224	301	397
Impact	53	42	59	74
Total	490	871	549	869
Allow. Stress	18	18	18	18
Net S.M. Bqd.	327	551	366	579
Net S.M. Furn.	378	591	378	591

ITEM				
		Load per shoe		Load per pile
		Abut. Pier I	Pier II	Abutment Pier
D.L.	19	97	96	69
L.L.	30	27	28	19
Impact	6	4	5	-
Total	55	128	129	88

DRAWING INDEX-STRUCTURE NO. 9		CONTENTS	
DRAWING NO.			
67	General Plan and Elevation		
68	Abutments		
69	Piers		
70	Roadway Slab		
71	Steel Details		
Std. Drawg. 515	Handrail & Drainage		
47, 48, 61	General Notes		

3	As Built	RAK	7/9/59
1	Type B Scupper, Dia. Spacing	EM	4/13/58
1	Quantities, Borings	ACA	4/13/58
No.	Revision	By	Date

OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE PROJECT NO. 1			
STRUCTURE NO. 9			
MUD BROOK ROAD - OHIO ROUTE 299			
GENERAL PLAN & ELEVATION			
BALKE & WATKINS			
CONTRACTING ENGINEER			
DESIGN SECTION D-11			
DESIGNED: H.M.	CHECKED: E.M.	DATE: 4-18-53	
DRAWN: J.P.R.	IN CHARGE: H.A.B.	SCALE: As Noted	
CONTRACT NO. C-31		SHEET 67 OF 71	

Designed for CF=30

REINFORCING SCHEDULE

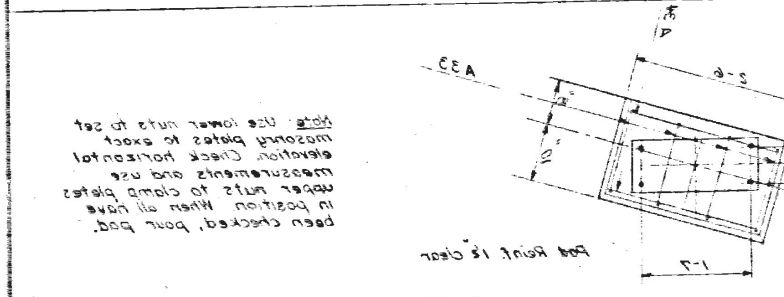
One Abutment Each

NO. TEMP. REIN. THE DIM. DIM. B.

MARK	SIZE	NO.	TEMP.	REIN.	THE	DIM.	DIM. B.
A1	#8	10	0-0	32-54	2-1	2-1	2-1
A2	#8	38	10-3	1700	2-1	2-1	2-1
A3	#2	24	2-0	334	1	1	1
A4	#2	20	30-6	272	1	1	1
A5	#2	8	30-8	202	1	1	1
A6	#2	12	10-0	127	1	1	1
A7	#2	10	10-0	127	1	1	1
A8	#2	10	10-0	127	1	1	1
A9	#2	10	10-0	127	1	1	1
A10	#2	10	10-0	127	1	1	1
A11	#2	10	10-0	127	1	1	1
A12	#2	10	10-0	127	1	1	1
A13	#2	10	10-0	127	1	1	1
A14	#2	10	10-0	127	1	1	1
A15	#2	10	10-0	127	1	1	1
A16	#2	10	10-0	127	1	1	1
A17	#2	10	10-0	127	1	1	1
A18	#2	10	10-0	127	1	1	1
A19	#2	10	10-0	127	1	1	1
A20	#2	10	10-0	127	1	1	1
A21	#2	10	10-0	127	1	1	1
A22	#2	10	10-0	127	1	1	1
A23	#2	10	10-0	127	1	1	1
A24	#2	10	10-0	127	1	1	1
A25	#2	10	10-0	127	1	1	1
A26	#2	10	10-0	127	1	1	1
A27	#2	10	10-0	127	1	1	1
A28	#2	10	10-0	127	1	1	1
A29	#2	10	10-0	127	1	1	1
A30	#2	10	10-0	127	1	1	1
A31	#2	10	10-0	127	1	1	1
A32	#2	10	10-0	127	1	1	1
A33	#2	10	10-0	127	1	1	1
A34	#2	10	10-0	127	1	1	1
A35	#2	10	10-0	127	1	1	1
A36	#2	10	10-0	127	1	1	1
A37	#2	10	10-0	127	1	1	1
A38	#2	10	10-0	127	1	1	1
A39	#2	10	10-0	127	1	1	1
A40	#2	10	10-0	127	1	1	1
A41	#2	10	10-0	127	1	1	1
A42	#2	10	10-0	127	1	1	1
A43	#2	10	10-0	127	1	1	1
A44	#2	10	10-0	127	1	1	1
A45	#2	10	10-0	127	1	1	1
A46	#2	10	10-0	127	1	1	1
A47	#2	10	10-0	127	1	1	1
A48	#2	10	10-0	127	1	1	1
A49	#2	10	10-0	127	1	1	1
A50	#2	10	10-0	127	1	1	1
A51	#2	10	10-0	127	1	1	1
A52	#2	10	10-0	127	1	1	1
A53	#2	10	10-0	127	1	1	1
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A80	#2	10	10-0	127	1	1	1
A81	#2	10	10-0	127	1	1	1
A82	#2	10	10-0	127	1	1	1
A83	#2	10	10-0	127	1	1	1
A84	#2	10	10-0	127	1	1	1
A85	#2	10	10-0	127	1	1	1
A86	#2	10	10-0	127	1	1	1
A87	#2	10	10-0	127	1	1	1
A88	#2	10	10-0	127	1	1	1
A89	#2	10	10-0	127	1	1	1
A90	#2	10	10-0	127	1	1	1
A91	#2	10	10-0	127	1	1	1
A92	#2	10	10-0	127	1	1	1
A93	#2	10	10-0	127	1	1	1
A94	#2	10	10-0	127	1	1	1
A95	#2	10	10-0	127	1	1	1
A96	#2	10	10-0	127	1	1	1
A97	#2	10	10-0	127	1	1	1
A98	#2	10	10-0	127	1	1	1
A99	#2	10	10-0	127	1	1	1
A100	#2	10	10-0	127	1	1	1

ELEVATIONS

ABUT.	T	A	B	C	D	E	F	G
I	643.82	643.85	643.88	643.92	644.11	644.58	644.17	644.08
II	643.52	643.50	643.54	643.57	643.75	644.23	643.81	643.40



DETAIL OF BEARING

Scale: 1/4" = 1'-0"

CONTRACT NO. 12-1-10

DESIGN SECTION D-11

CONTRACTING ENGINEER

BAKER & WATKINS

STRUCTURE NO. 2

MUD BROOK ROAD - OHIO ROUTE 224

OHIO TURNPIKE PROJECT NO. 1

OHIO TURNPIKE COMMISSION

REVISION

NO.

1. Foundation: Anchor Bolt Note

2. Joint & Cup Remover, Key Added

3. AS Built

4. AS BUILT

5. AS BUILT

6. AS BUILT

7. AS BUILT

8. AS BUILT

9. AS BUILT

10. AS BUILT

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74. AS BUILT

75. AS BUILT

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77. AS BUILT

78. AS BUILT

79. AS BUILT

80. AS BUILT

81. AS BUILT

82. AS BUILT

83. AS BUILT

84. AS BUILT

85. AS BUILT

86. AS BUILT

87. AS BUILT

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89. AS BUILT

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91. AS BUILT

92. AS BUILT

93. AS BUILT

94. AS BUILT

95. AS BUILT

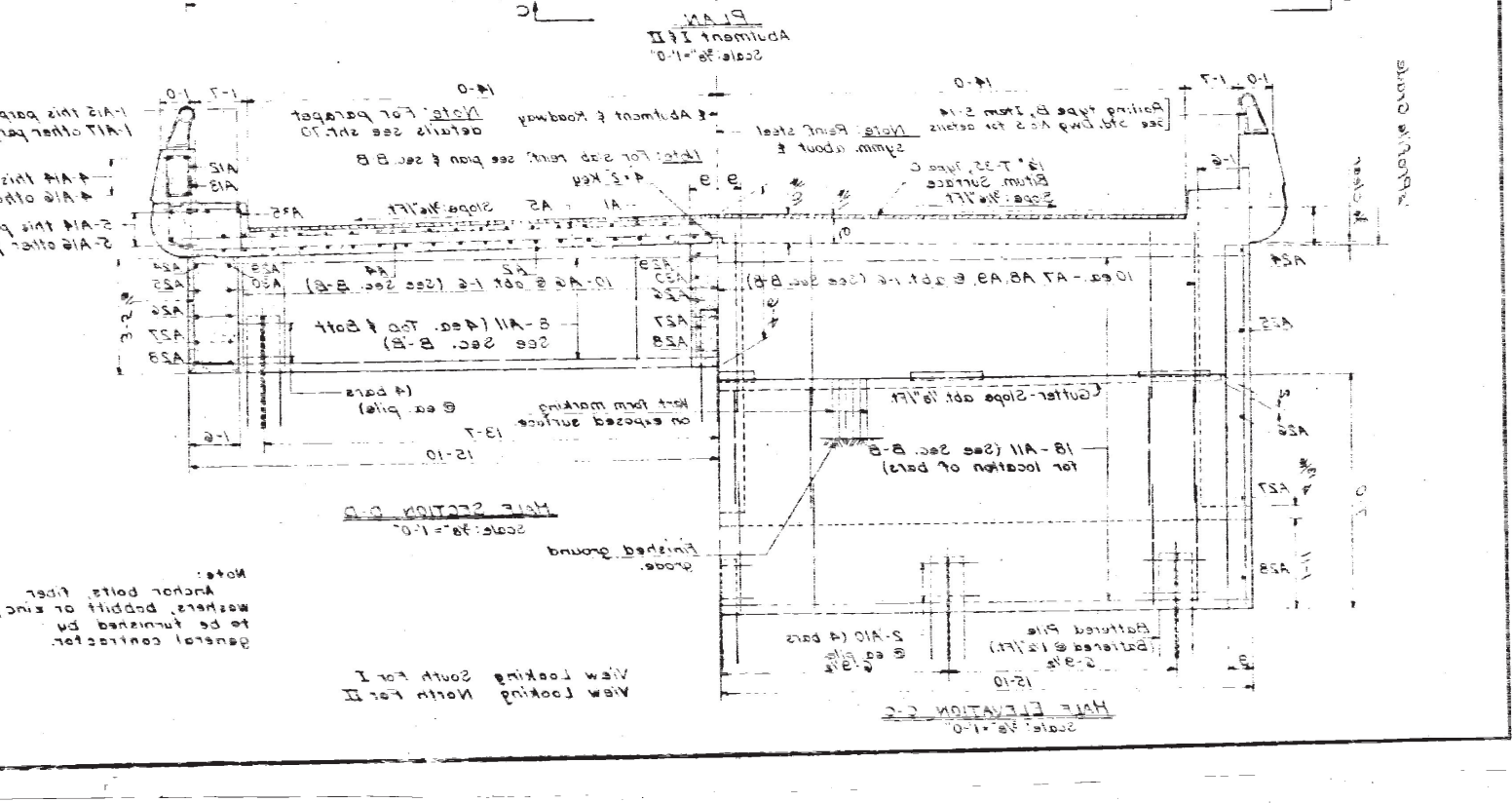
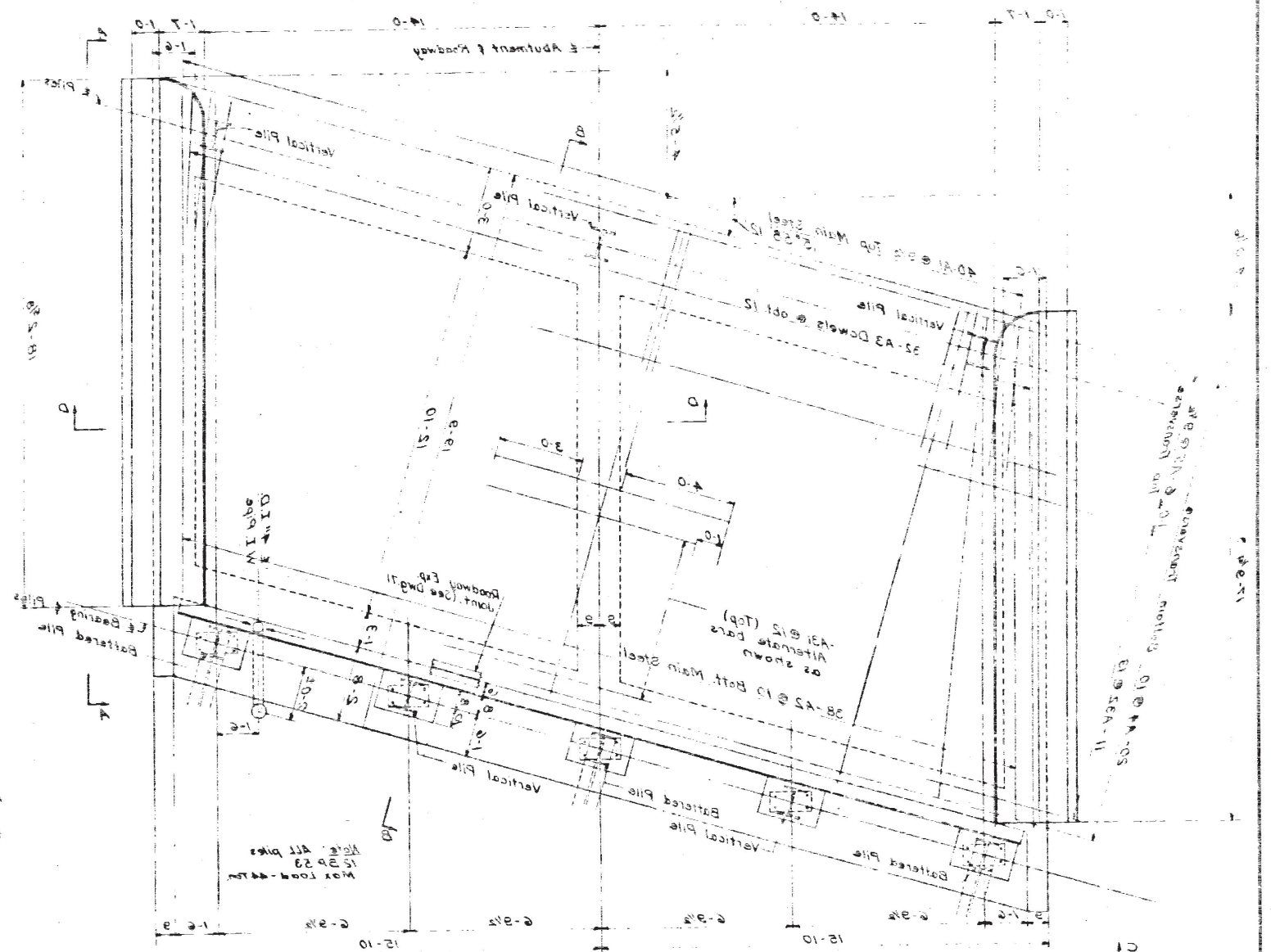
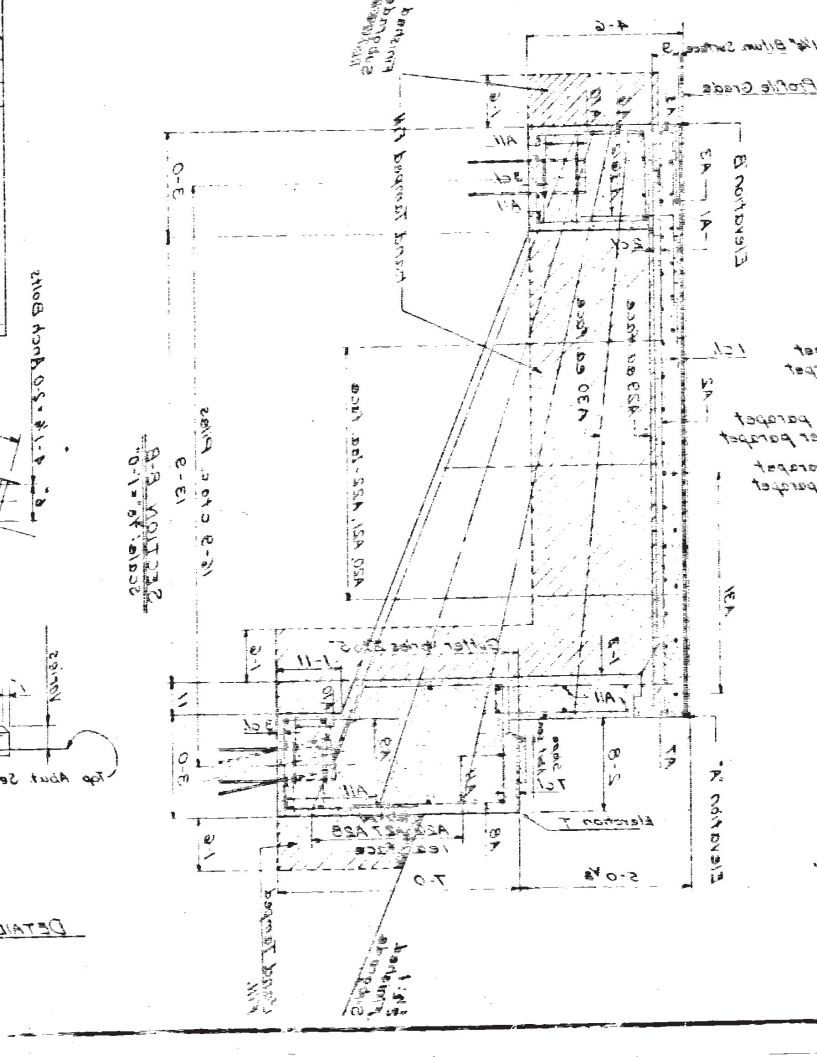
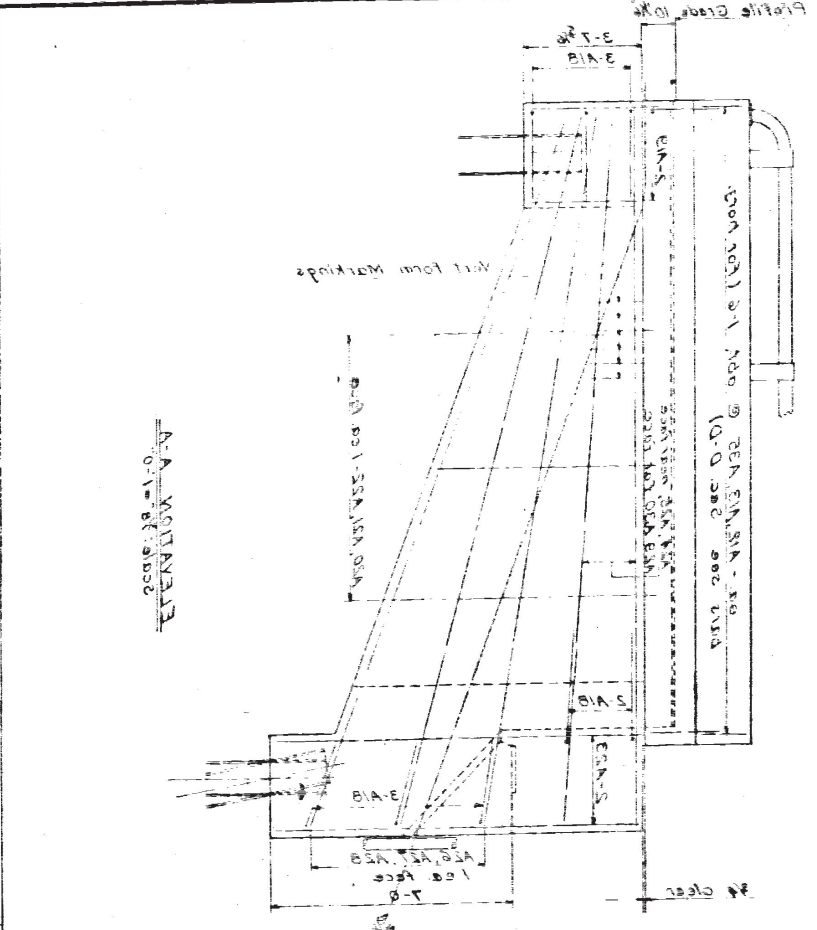
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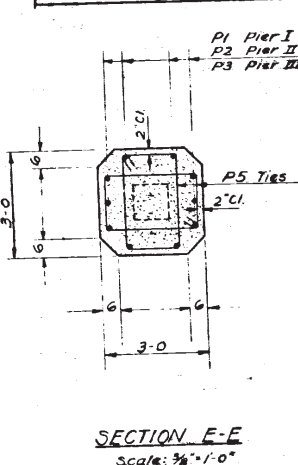
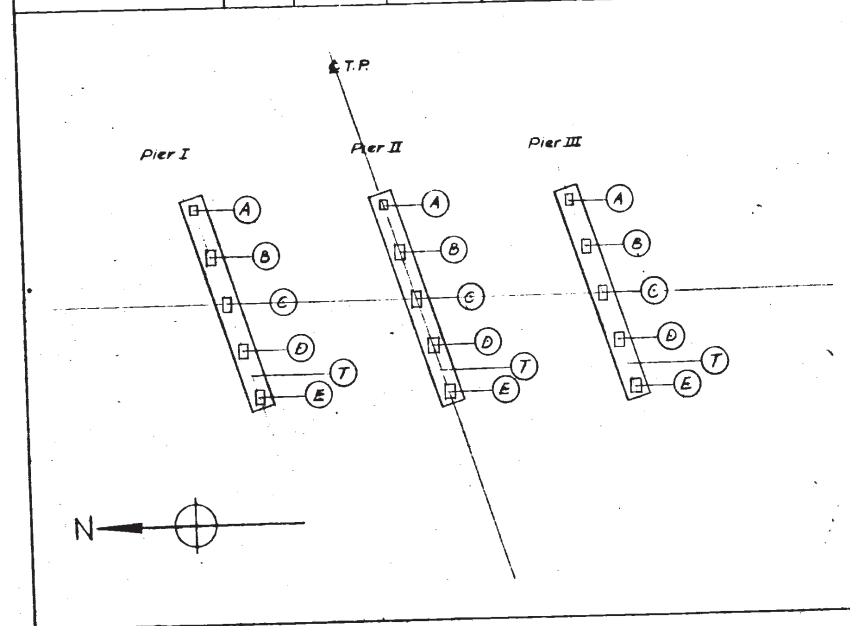
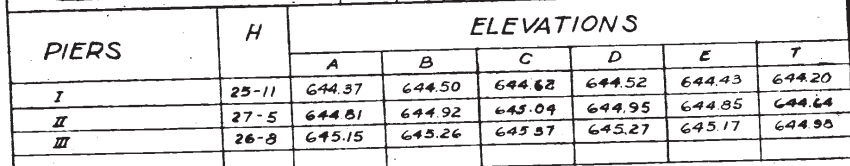
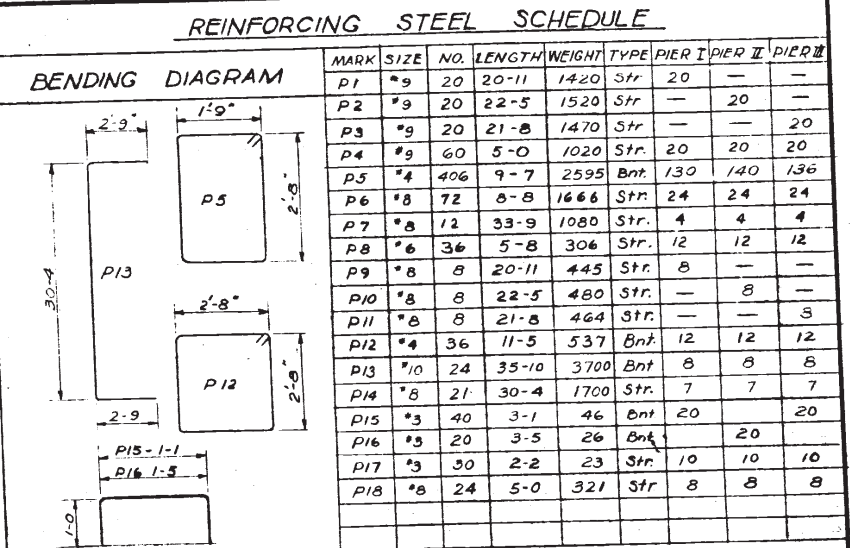
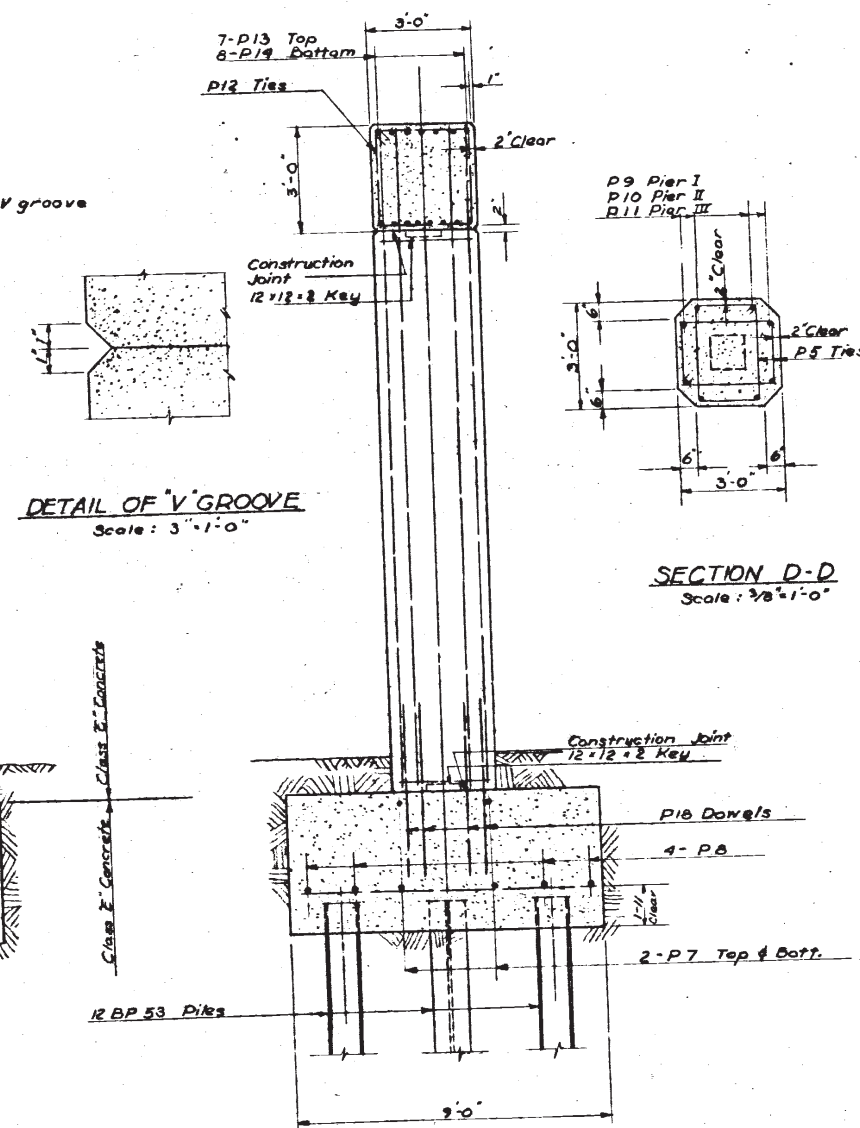
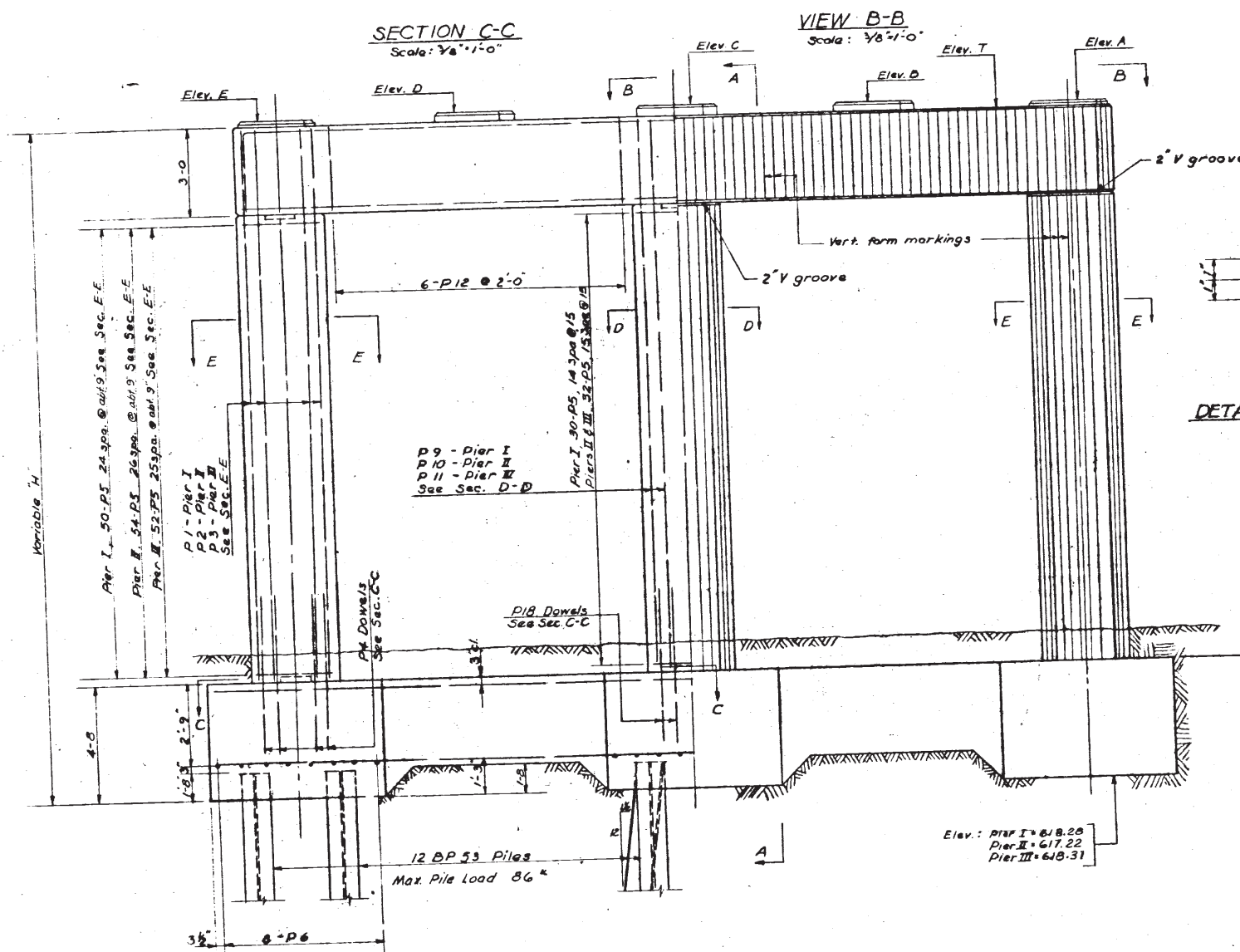
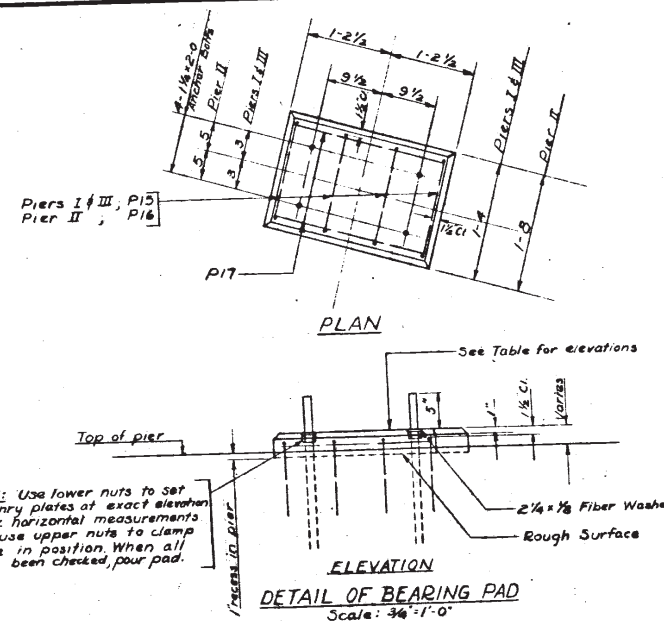
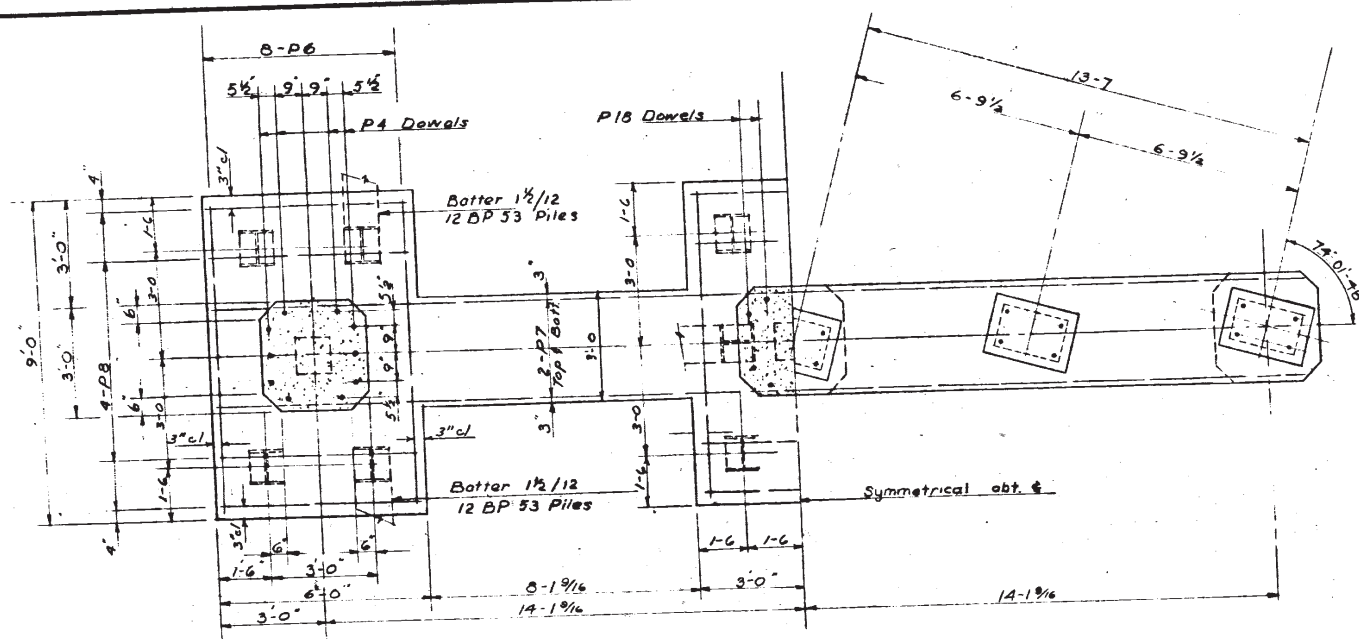
97. AS BUILT

98. AS BUILT

99. AS BUILT

100. AS BUILT





3	As Built	RAK	1/16
2	Note referring Anchor Bolts, Pile Load	RGD	11/17
1	Reinf. Reinf. Schedule, 2 on Piles	J K	6/19
No.	Revision	By	Date

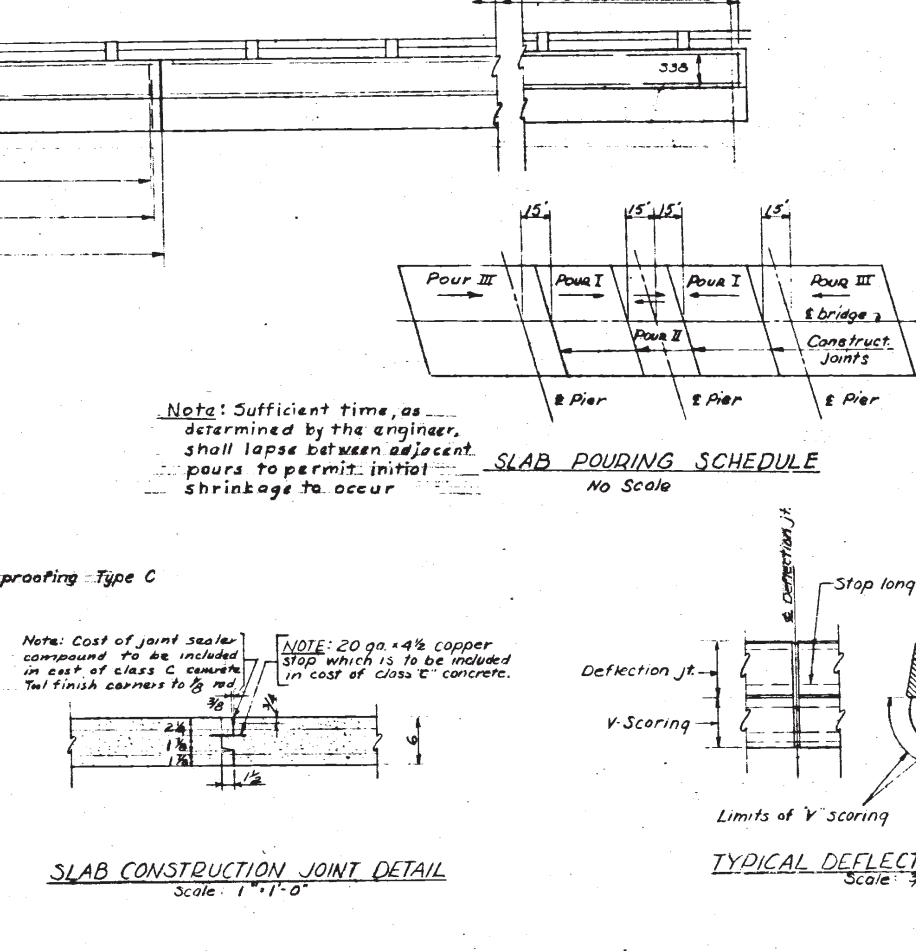
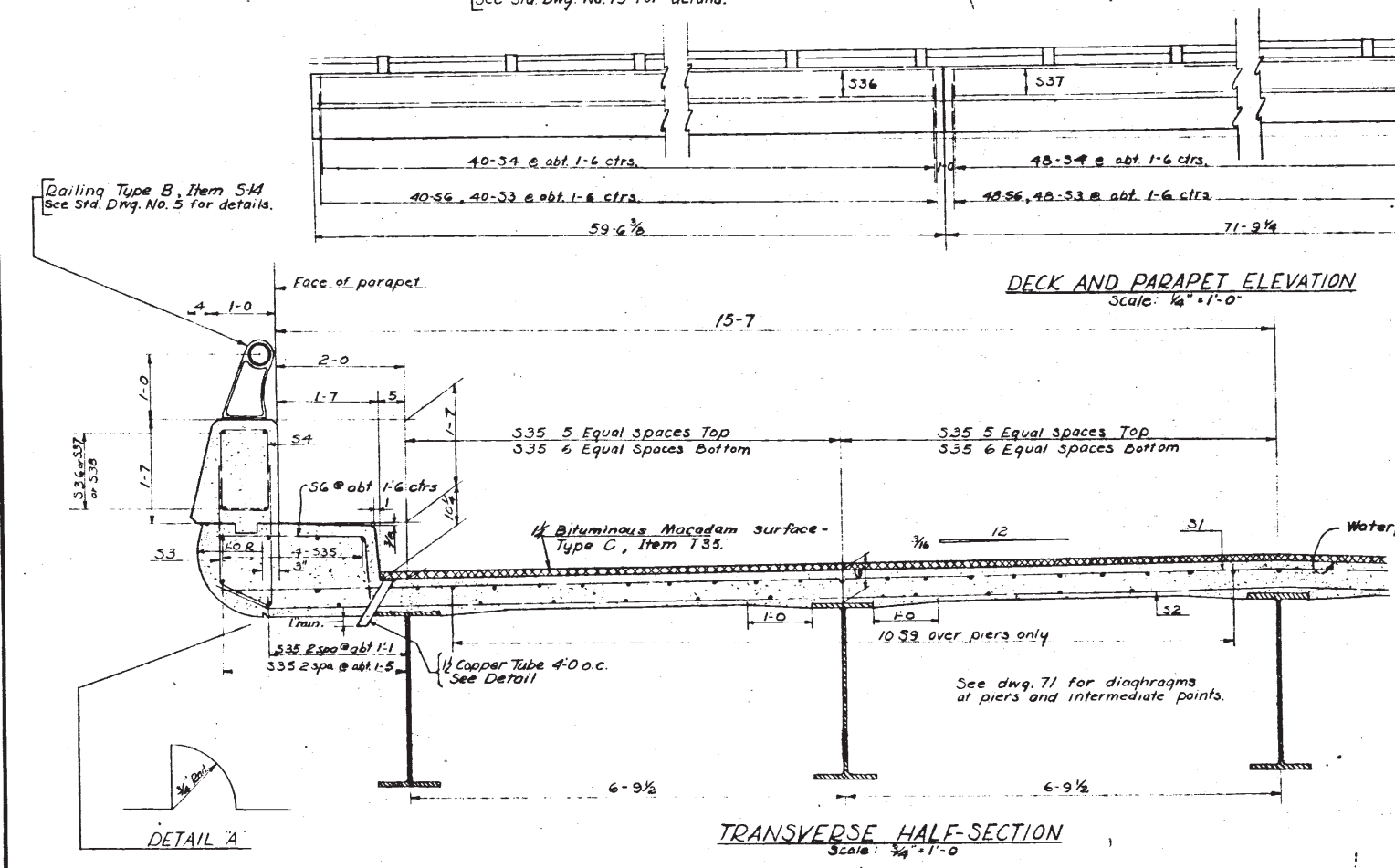
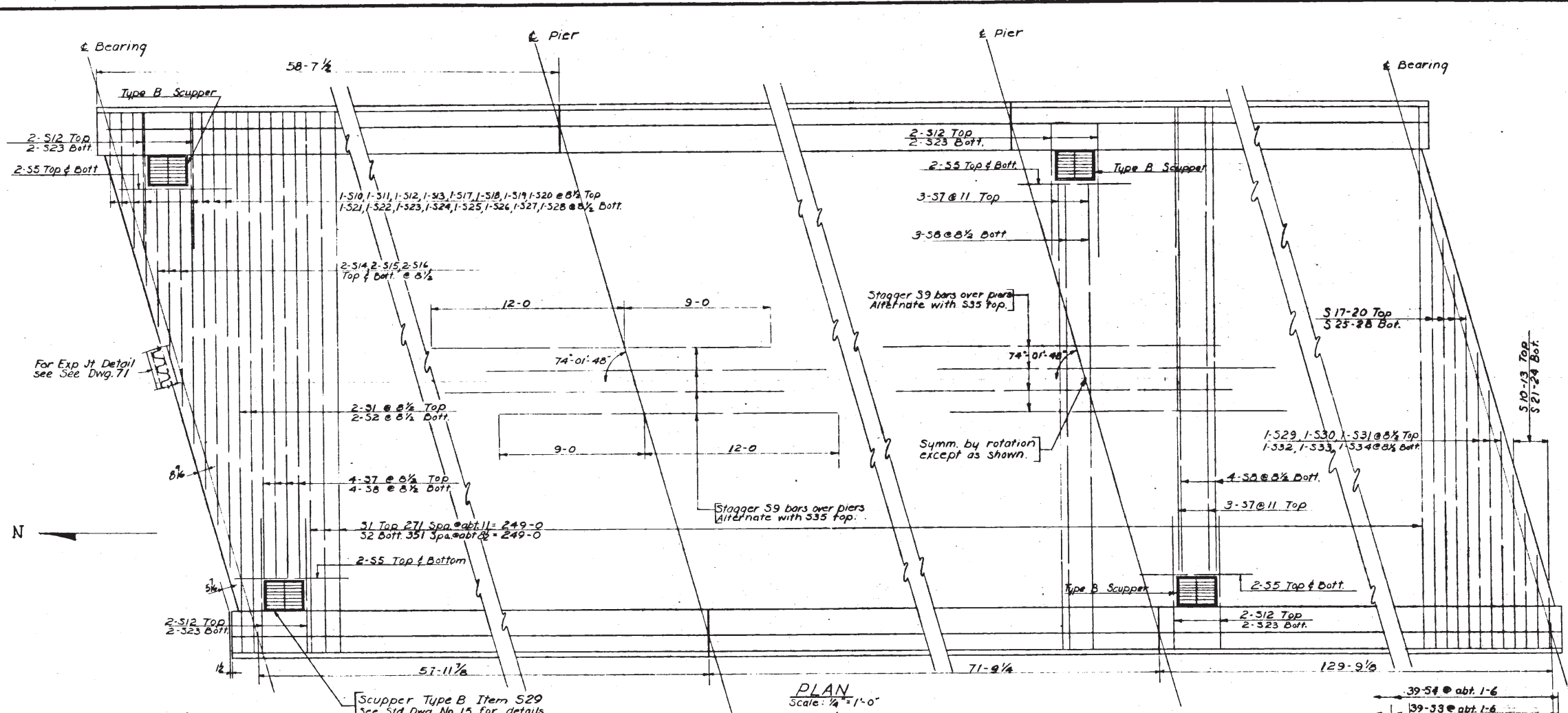
OHIO TURNPIKE COMMISSION
OHIO TURNPIKE PROJECT NO. 1

STRUCTURE NO. 9
MUD BROOK ROAD - OHIO ROUTE 299
PIERS

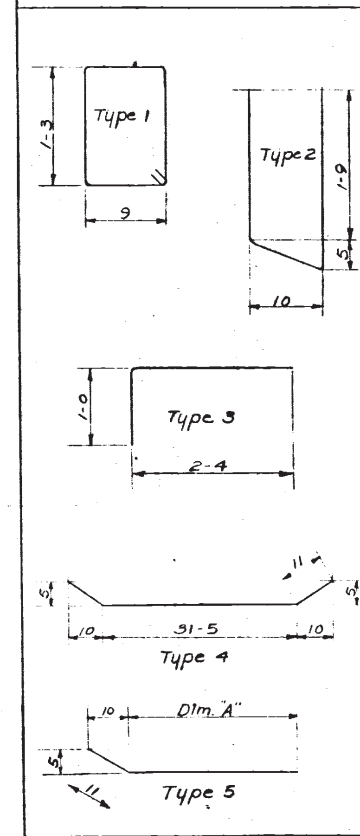
BALKE & WATKINS
CONTRACTING ENGINEER
DESIGN SECTION D-11

DESIGNED: H.M.	CHECKED: E.M.	DATE: 4-15-53
DRAWN: R.G.D.	IN CHARGE: H.A.B.	SCALE: As Noted

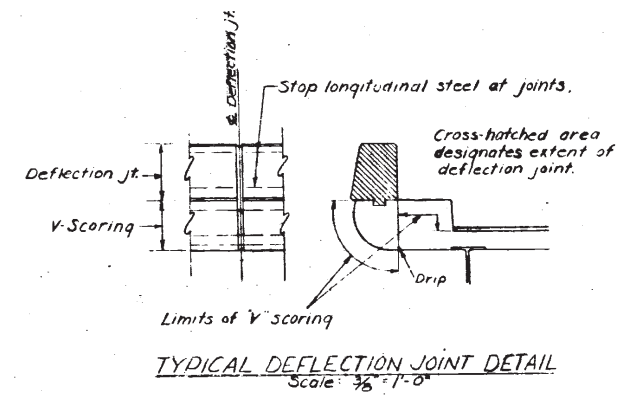
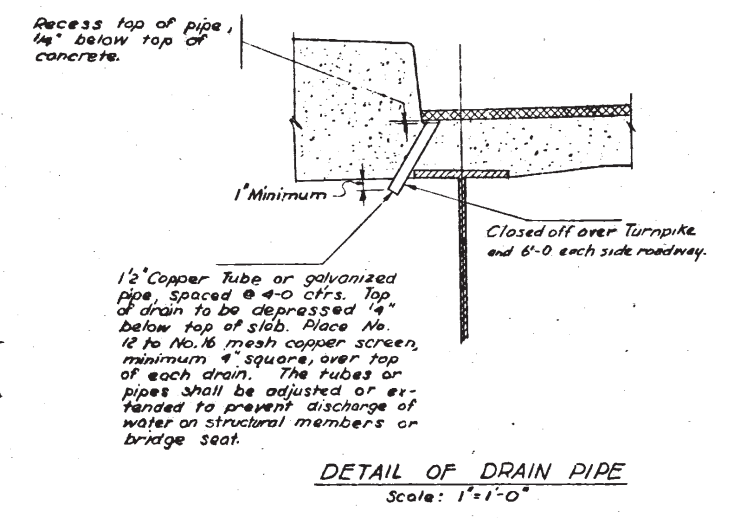
CONTRACT NO. C-31 **SHEET 69 OF 71**



REINFORCEMENT: SLAB AND PARAPET



MARK	SIZE	NO	LENGTH	WEIGHT	TYPE	DIM. "A"
S1	#6	268	33-0	13,300	Str	
S2	#6	347	33-3	17,400	4	
S3	#4	350	5-3	123	2	
S4	#4	350	4-9	1,110	1	
S5	#6	8	7-0	84	Str	
S6	#4	350	3-4	780	3	
S7	#6	10	28-5	426	Str	
S8	#6	11	28-7	470	5	27-0
S9	#5	60	21-0	1320	Str	
S10	#6	2	3-8	11	Str	
S11	#6	2	6-3	19	Str	
S12	#6	10	8-9	130	Str	
S13	#6	2	11-2	33	Str	
S14	#6	2	9-1	27	Str	
S15	#6	2	11-7	35	Str	
S16	#6	2	14-1	42	Str	
S17	#6	2	21-1	63	Str	
S18	#6	2	23-7	71	Str	
S19	#6	2	26-1	78	Str	
S20	#6	2	28-7	86	Str	
S21	#6	2	3-10	12	5	2-11
S22	#6	2	6-5	19	5	5-6
S23	#6	10	8-11	134	5	8-0
S24	#6	2	11-4	35	5	10-5
S25	#6	2	21-3	65	5	20-4
S26	#6	2	23-9	71	5	22-10
S27	#6	2	26-3	78	5	25-4
S28	#6	2	28-9	87	5	27-10
S29	#6	1	13-8	21	Str	
S30	#6	1	16-2	24	Str	
S31	#6	1	18-8	28	Str	
S32	#6	1	13-10	21	5	12-11
S33	#6	1	16-4	24	5	15-5
S34	#6	1	18-10	28	5	17-11
S35	#5	342	44-3	1930	Str	
S36	#6	16	30-4	730	Str	
S37	#6	32	36-8	1770	Str	
S38	#6	16	30-0	720	Str	



2	As Built	RAK	7/9/55
1	Type B Scupper	EM	7/16/55
No.	Revision	By	Date
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE PROJECT NO. 1			
STRUCTURE NO. 9			
MUD BROOK ROAD - OHIO ROUTE 299			
ROADWAY SLAB			
BALKE & WATKINS			
CONTRACTING ENGINEER			
DESIGN SECTION D-11			
DESIGNED: H.M.	CHECKED: E.M.	DATE: 4-15-53	
DRAWN: J.K.	IN CHARGE: H.A.B.	SCALE: As Noted	
CONTRACT NO. C-31		SHEET 70 OF 71	

