

## Terminal Railroad Association Collection

Inventory of Microfilmed Drawings of the Eads Bridge

Prepared by Catherine Forslund, 1996

| <u>Film #</u> | <u>WU number</u> | <u>description of drawing</u>   |
|---------------|------------------|---|
| 1.            | TR-643           | Rear elevation of towers on east approach, showing masonry and dimensions |
| 2.            | TR-138           | West approach, pier no. 5, course J                                       |
| 3.            | TR-113           | West approach, pier no. 5, course "J"                                     |
| 4.            | TR-137           | West approach, pier no. 5, course "I"                                     |
| 5.            | TR-112           | West approach, pier no. 5, course "I"                                     |
| 6.            | TR-116           | West approach, pier no. 5, course 2                                       |
| 7.            | TR-133           | West approach, pier no. 5, course 3                                       |
| 8.            | TR-117           | West approach, pier no. 5, course 5                                       |
| 9.            | TR-118           | West approach, pier no. 5, course 6                                       |
| 10.           | TR-119           | West approach, pier no. 5, course 7                                       |
| 11.           | TR-115           | West approach, pier no. 5, course 8                                       |
| 12.           | TR-135           | West approach, pier no. 5, course 9                                       |
| 13.           | TR-136           | West approach, pier no. 5, course 10                                      |
| 14.           | TR-132           | West approach, pier no. 5, course 11                                      |
| 15.           | TR-131           | West approach, pier no. 5, course 12                                      |
| 16.           | TR-129           | West approach, pier no. 5, course 13                                      |
| 17.           | TR-130           | West approach, pier no. 5, course 13 (2nd)                                |
| 18.           | TR-128           | West approach, pier no. 5, course 14                                      |
| 19.           | TR-126           | West approach, pier no. 5, course 15                                      |
| 20.           | TR-127           | West approach, pier no. 5, course 15 (2nd)                                |
| 21.           | TR-125           | West approach, pier no. 5, course 16                                      |
| 22.           | TR-123           | West approach, pier no. 5, course 17                                      |
| 23.           | TR-124           | West approach, pier no. 5, course 19                                      |
| 24.           | TR-121           | West approach, pier no. 5, course 20                                      |
| 25.           | TR-122           | West approach, pier no. 5, course 21                                      |
| 26.           | TR-120           | West approach, pier no. 5, course 22                                      |
| 27.           | TR-105           | West approach, pier no. 5, course 23                                      |
| 28.           | TR-106           | West approach, pier no. 5, course 24                                      |
| 29.           | TR-107           | West approach, pier no. 5, course 25                                      |
| 30.           | TR-108           | West approach, pier no. 5, course 26                                      |
| 31.           | TR-109           | West approach, pier no. 5, course 27                                      |
| 32.           | TR-110           | West approach, pier no. 5, course 28                                      |
| 33.           | TR-111           | West approach, pier no. 5, course 29                                      |
| 34.           | TR-114           | West approach, pier no. 5, course 30                                      |
| 35.           | TR-134           | West approach, pier no. 5, course 31                                      |

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| 36.      | TR-641 | Unidentified, shows a bridge span with some type of measurements at each truss section  |
| 37.      | TR-161 | Plan showing distance between piers and C   |
| 38.      | TR-162 | Unidentified, but appears to be like TR-160, 161  |
| 39.      | TR-160 | Plan showing distance between piers and C, showing various figures from triangulation, direct measurement and dimensions as originally adopted to calculations  |
| 40.      | TR-163 | Four chrome steel tubes to be tested, to be cut from staves furnished for the Illinois & St. Louis Bridge   |
| 41.      | TR-60  | Wrought iron skewbacks on piers   |
| 41 (sic) | TR-61  | Wrought iron skewbacks on abutments   |
| 42.      | TR-176 | Piers and section of arcade of Eads Bridge, traced from original drawing  |
| 43.      | TR-184 | General plan of 1/2 truss and plan of plates in flanges   |
| 44.      | TR-164 | Typical cross-section of St. Louis tunnel   |
| 45.      | TR-165 | Section of St. Louis Bridge & Tunnel, for use in estimating amount of clearance of various cars & loads, including table of dimensions regulating the size of cars or loads to be transferred over bridge and through tunnel. |
| 46.      | TR-177 | Fencing of two northernmost spans of 14th Street viaduct to serve as a store yard, traced   |
| 47.      | TR-167 | East approach to the Eads Bridge, aerial view showing roadway, street sign placement, etc.  |

(#47 and 48 -- two parts of the same drawing)

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| 48.                               | TR-167       | East approach to the Eads Bridge, aerial view showing roadway, street sign placement, etc.   |
| 49.                               | TR-181       | Details for gunite covering for girders 'A' and 'C' and floor system, north side, west side of roadway, east approach, 2 of 3  |
| 50.                               | TR-168       | Plan and section of ventilating chimney and fan for St. Louis tunnel   |
| 51.                               | TR-178       | Plan of proposed shelving for filing records in freight house No. 1, 11th & Poplar Street  |
| 52.                               | TR-166       | Typical cross-section on curved portion of tunnel  |
| 53.                               | TR-182       | Details of posts and bracing for reconstruction of east approach   |
| 54.                               | TR-605       | #52: Elevation of half of middle span  |
| (#54 and 55 show parts of TR-605) |              |  |
| 55.                               | TR-605       | #52: Elevation of half of middle span  |
| 56.                               | TR-32 and 33 | Eads Bridge, main spans, repairs to rib braces (1947)  |
| 57.                               | TR-31        | Eye plate washer for Eads Bridge, center span, upper tube B, panel point 15  |
| 58.                               | TR-1         | #40: Eye-plates connecting struts with steel-pins and wrought iron nuts & washers for steelpins, including list of eye-plates connecting struts with steel-pins of upper members |
| 59.                               | TR-155       | Details of carriages for cage for examining lower tubes of Eads Bridge, 4 required   |
| 60.                               | TR-154       | Eads Bridge lower deck, reinforcing of feet of vertical struts, Castings "D", marked "sheet 10 of 10 sheets"   |

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| 61.   | TR-153 | Eads Bridge lower deck, reinforcing new connections of horizontal struts removed and replaced, marked "sheet 9 of 10 sheets"                           |
| 62.   | TR-88  | Plate I: Showing the influence of variable loads on the ribs of central arch (520 feet span), including suppositions made for the calculation          |
| 63.   | TR-89  | Plate II: Showing the influence of temperature on the upper and lower member of a rib of centre span, including suppositions made for the calculations |
| 64.   | TR-90  | Plate II: Showing the influence of temperature on the upper and lower member of a rib of centre span, including suppositions made for the calculations |
| 65.   | TR-91  | Plate III: Showing the strains in the braces (of centre span), including suppositions made for the calculations  |
| 66.   | TR-183 | Trestle bridges for the east approach to the Illinois & St. Louis Bridge, proposed by the Detroit Bridge and Iron Works                                |
| 67.   | TR-30  | Rear view of bedplates for upper and lower members   |
| 68.   | TR-35  | Stirrup-Clamp, one right & one left  |
| 69.   | TR-51  | #35: Struts made of 8" channelbars (88 pieces required), including tables of side and centre spans specifications                                      |
| 70.   | TR-603 | #53: Longitudinal section of pier  |
| (#70 and 71 -- Two parts of the same drawing) |        |  |
| 71.   | TR-603 | #53: Longitudinal section of pier  |
| 72.   | TR-9   | #36: Struts made of 9" channelbars (88 pieces required)  |
| 73.   | TR-25  | #44: Anchorage of wind-truss of upper roadway at piers (4 sets required)   |

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| 74. | TR-55  | #45: Anchorage of wind-truss of upper roadway at abutments (bottom half only filmed)  |
| 75. | TR-7   | #30: Support of crossbeam of lower roadway at joint #s 10 & 34 and 11 & 33 (centre span)                                      |
| 76. | TR-103 | Eye plates connecting struts with steel pins of upper members for center span   |
| 77. | TR-218 | Eads Bridge, east approach, railroad deck, renewal of lateral bracing under south track between bents 4 and 6                 |
| 78. | TR-180 | Details for gunite covering for girders 'A' and 'C' and floor system, north side, west side of roadway, east approach, 3 of 3 |
| 79. | TR-179 | East approach Eads Bridge plan for uniting highway over north railway track, 1 of 3   |
| 80. | TR-219 | Details of connections between stuts (for wrought iron tension rods), revised from drawing 39                                 |
| 81. | TR-211 | Map showing state of work on the St. Louis tunnel   |
| 82. | TR-217 | #3: Tunnel of Illinois & St. Louis Bridge, cross and longitudinal sections  |
| 83. | TR-216 | Tunnel connection Illinois & St. Louis bridge with western railways   |
| 84. | TR-215 | Castings for Post Office connection   |
| 85. | TR-213 | Castings for 15 in. pipe, Clark Ave., 2 sets (4 half pieces) required   |
| 86. | TR-214 | Castings for Post Office connection   |
| 87. | TR-209 | Plan of proposed freight house between ?th and 11th streets   |

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| 88.  | TR-208                             | Section of proposed freight house between 9th and 11th Streets on Poplar   |
| 89.  | TR-206                             | Cross-section over roadways along 11th Street Freight House  |
| 90.  | TR-207                             | Proposed changes in new freight house, 11th & Poplar Streets   |
| 91.  | TR-222                             | Elevations, floor plans, and sections for freight house  |
| 92.  | TR-92                              | Loading diagram of train used in making tests on main spans of Eads Bridge, with average weight of train=4,153# per foot |
| 93.  | TR-34                              | Eads Bridge, steel eye plate washer for east span  |
| 94.  | TR-93, 94,95<br>(all in one frame) | Eads Bridge center span 1874-1928  |
| 95.  | TR-210                             | Proposed freight house   |
| 96.  | TR-8                               | #3 (revised): Wrought iron skewbacks for upper members (24 pieces required)  |
| 97.  | TR-85                              | #17: Steel pins for upper members of side spans (328 pieces exclusive of skewback pins)                                  |
| 98.  | TR-29                              | Rear view of bedplates for upper and lower members   |
| 99.  | TR-30                              | Rear view of bedplates for upper and lower members   |
| 100. | TR-187                             | Section of tunnel at post office showing proposed new brick wall   |
| 101. | TR-212                             | Details of supports for fan and motor for tunnel ventilation, sheet 1, with revisions                                    |

102. TR-169 Sketch showing relative position of bridge tunnel and new post office, St. Louis, drawing A, U.S.P.O (proposed), city block 193, between Olive & Locust Streets
103. TR-170 Sketch showing relative position of bridge tunnel iron tension rods, revised drawing 39 of 10/1/1873 and new post office, St. Louis, drawing B, U.S.P.O. (proposed), city block 193, between Olive & Locust Streets
104. TR-24 Details of connections with struts for wrought iron tension rods, revised drawing 39 of 10/1/1873
105. TR-23 Details of connections with struts for wrought iron tension rods, revised from drawing 39 of 10/2/1873
106. TR-24 Details of connections with struts for wrought iron tension rods, revised from drawing 39 of 10/1/1873
107. TR-57 Details of cross beams, middle span joints 20-24 and side span joints 19-22, includes tables for middle and side spans specifications
108. TR-52 Cast iron bed plates and clamps for bridges across Main Street, 2nd Street and alley between Main Street and 2nd Street
109. TR-13 #5: Wrought iron bars for braces of middle span
110. TR-102 #2: Anchor bolts through piers, includes smaller and larger sizes
111. TR-101 #4: Anchor bolts and cast iron anchor plates in abutments, includes both smaller and larger sizes
112. TR-21 (revised): Anchor bolts for steel ribs, a. bolts through piers and b. bolts in abutments and cast iron anchor plates in abutments
113. TR-66 Position of anchor bolts in abutments

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| 114. | TR-43  | #49: Showing mode of supporting the railway at joints 9 & 35 (centre span)                           |
| 115. | TR-2   | #46: Showing mode of supporting the railway on joints 7 & 34 of side spans and 8 & 36 of centre span |
| 116. | TR-636 | #30 (revised): Support of cross beam of lower roadway at joint #10 & 11, centre span                 |
| 117. | TR-26  | #74: Diagram showing lengths of tubes and braces near centres of spans (includes spans 1-3)          |
| 118. | TR-59  | #73 (revised): Adjusting arrangement in central tubes for spans no. II & III                         |
| 119. | TR-58  | #73: Adjusting arrangement in central tubes for side spans (marked "Duplicate")                      |
| 120. | TR-27  | #71: Crossbeams of lower roadway in centre part of spans (includes middle and side spans)            |
| 121. | TR-43  | #49: Showing mode of supporting the railway at joints 9 & 35 (centre span)                           |
| 122. | TR-19  | #48 (revised): Showing mode of supporting the railway at joint 33 (side span)                        |
| 123. | TR-42  | #8: Showing mode of supporting the railway at joint 33 (side span)                                   |
| 124. | TR-41  | #47 (revised): Support of crossbeam of lower roadway at joint no. 8 (side span)                      |
| 125. | TR-62  | #47: Support of cross beam of lower roadway at joint no. 8 (side span)                               |

126. TR-1 #40: Eye-plates connecting struts with steel-pins and wrought iron nuts & washers for steelpins, including list of eye-plates connecting struts with steel-pins of upper members
127. TR-3 #39: Wrought iron tension-rods between struts, including bracing between struts and table showing the values of "I"
128. TR-5 #38: Showing mode of supporting railway at joints (0-7) & (37-44) middle span and (0-6) & (35-42) side spans
129. TR-54 #34: Struts made of 7" channelbars (96 struts required, including tables of side and middle spans specifications
130. TR-371 #33: Struts made of 6" channel bars (172 struts required), with attached sheet listing struts made of 6" channel bars (3/30/1872)
131. TR-64 #38 (revised): Showing mode of supporting railway at joints (0-7) and (37-44) middle span and joints (0-6) and (35-42) side spans
132. TR-4 #31: Showing mode of supporting crossbeams of railroad on joints 9 & 10 of side spans
133. TR-6 #31: Showing mode of supporting the crossbeams of railroad on joints 9 & 10 of side spans
134. TR-10 #29 (revised): Suspension rods
135. TR-49 #29: Suspension rods, including tables for centre and side spans
136. TR-48 #28: Construction of railway track in centre part of spans
137. TR-50 #28 (revised): Construction of railway track in centre part of spans

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| 138. | TR-44  | #27A (revised): Full size section of wrought iron longitudinal beam and steel rail used in construction of railway, including table of lengths of beams for centre and side spans |
| 139. | TR-47  | #27B (revised): Full size section of wrought iron cross beam used in construction of railway, including table of lengths of beams for centre and side spans                       |
| 140. | TR-68  | #27: Full size sections of wrought iron beams and steel rails used in construction of railway, including tables of lengths of beams in centre and side spans                      |
| 141. | TR-156 | #25: Horizontal stays between steel ribs of side spans (wrought iron)   |
| 142. | TR-75  | #24: Wrought iron bars for braces of side spans   |
| 143. | TR-76  | #23: Skewbacks and pins for side spans (for upper and lower members)  |
| 144. | TR-79  | #22 (revised): Steel sleeve couplings connecting tubes of side spans  |
| 145. | TR-80  | #22: Steel sleeve couplings connecting tubes of side spans  |
| 146. | TR-11  | #s 21 and 21 (revised): Tension rods between steel ribs with connecting straps and bolts (steel) for middle span and side spans   |
| 147. | TR-82  | #20: Eye plate washers for side spans (steel)   |
| 148. | TR-83  | #19: Tubes for side spans   |
| 149. | TR-84  | #18: Steel pins for lower members of side spans (336 pins exclusive skewback pins)  |
| 150. | TR-85  | #17: Steel pins for upper members of side spans (328 pieces exclusive of skewback pins)   |

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| 151. | TR-45  | #16 (revised): Sections of staves used for tubes in side spans   |
| 152. | TR-86  | #16: Sections of staves used for tubes in side spans   |
| 153. | TR-157 | #15: Horizontal stays between steel ribs of middle span (wrought iron)                                 |
| 154. | TR-13  | #5: Wrought iron bars for braces of middle span  |
| 155. | TR-87  | #13 (revised): Skewback tubes and pins for middle span (for upper and lower members)                   |
| 156. | TR-638 | #13: Skewback tubes and pins for middle span<br>Scale: 1/8 and 1/4 full size                           |
| 157. | TR-77  | #12 & 22 (revised): Wrought iron steel couplings, including table showing number of pieces required    |
| 158. | TR-73  | #12 & 22 (revised): Wrought iron sleeve couplings connecting tubes                                     |
| 159. | TR-74  | #12 & 22 (revised): Wrought iron sleeve couplings connecting tubes                                     |
| 160. | TR-78  | #12 (revised): Steel sleeve couplings connecting tubes of middle span                                  |
| 161. | TR-14  | #11: Tension rods between steel ribs of middle span with connecting straps and bolts                   |
| 162. | TR-15  | #11 (revised): Tension rods between steel ribs of middle span with connecting straps and bolts (steel) |
| 163. | TR-81  | #10 & 20 (revised): Eye plate washers for middle and side spans (steel)                                |
| 164. | TR-16  | #10 (revised): Eyeplate washers for middle span (steel)  |
| 165. | TR-147 | #10: Eye plate washers for middle span   |

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| 166. | TR-152 | #9: Tubes for middle span   |
| 167. | TR-17  | #8: Steel pins for lower members of middle span (176 pieces exclusive skewback pins)  |
| 168. | TR-18  | #7 (revised): Steel pins for upper members of middle span (172 pieces exclusive skewback pins)  |
| 169. | TR-96  | #7: Steel pins for upper members of middle span (172 pieces exclusive skewback pins)  |
| 170. | TR-21  | (revised): Anchor bolts for steel ribs, a. bolts through piers and b. bolts in abutments and cast iron anchor plates in abutments     |
| 171. | TR-97  | #5 (revised): Anchor bolts for steel ribs, includes bolts through piers, bolts in abutments, and cast iron anchor plates in abutments |
| 172. | TR-98  | (revised): Anchor bolts for steel ribs, includes bolts through piers, bolts in abutments, and cast iron anchor plates in abutments    |
| 173. | TR-71  | Wrought iron skewbacks for lower members (24 pieces required)   |
| 174. | TR-72  | Wrought iron skewbacks for lower members (24 pieces required)   |
| 175. | TR-71  | Wrought iron skewbacks for lower members (24 pieces required)   |
| 176. | TR-22  | #3: Wrought iron anchor bolts and skewbacks for abutments   |
| 177. | TR-36  | Section of staves required for new tubes IC 18-19 and IB 19-20 to replace broken tubes  |
| 178. | TR-421 | #45: Anchorage of wind truss of upper roadway at abutments  |

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| 179. | TR-5   | #38: Showing mode of supporting railway at joints (0-7) & (37-44) middle span and (0-6) & (35-42) side spans                    |
| 180. | TR-382 | #51: Mode of supporting the struts on joints 0 & 42 side spans and 0 & 44 centre span   |
| 181. | TR-11  | #s 21 and 21 (revised): Tension rods between steel ribs with connecting straps and bolts (steel) for middle span and side spans |
| 182. | TR-150 | #6 (revised): Sections of staves used for tubes in centre span  |
| 183. | TR-151 | #6: Sections of staves used for tubes in centre span  |
| 184. | TR-146 | #12: Steel sleeve couplings for connecting tubes of middle span   |
| 185. | TR-149 | #12: Steel sleeve couplings for connecting tubes of middle span   |
| 186. | TR-7   | #30: Support of crossbeam of lower roadway at joint #s 10 & 34 and 11 & 33 (centre span)  |
| 187. | TR-637 | #57: Joint 22 of rib B of centre span   |
| 188. | TR-159 | Lamp posts for ventilators of tunnel  |
| 189. | TR-40  | Ornamental castings on Main & 2nd Street bridges  |
| 190. | TR-37  | #60: Cornices for approaches, a. over levees and b. from levee to 3rd street  |
| 191. | TR-38  | #60 (revised): Cornices for approaches, a. over levees and b. from levee to 3rd street  |
| 192. | TR-39  | #60: (revised): Cornices for approaches, a. over levees and b. from levee to 3rd street   |
| 193. | TR-220 | #64a: Details of superstructure of Illinois & St. Louis Bridge, traced by A.F.C. 11/10/1927                                     |

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| 194. | TR-20  | Joint A1 of middle span   |
| 195. | TR-65  | #32: Support of cross beam of lower roadway at joints #s 31 & 32 (side spans)   |
| 196. | TR-628 | Castings for 20 inch pipe, 7th Street, 2 sets (4 half pieces) required  |
| 197. | TR-145 | Concrete ventilating chimney for St. Louis tunnel at Eighth and St. Charles Streets   |
| 198. | TR-188 | Cast iron frame for ventilators in tunnel   |
| 199. | TR-57  | Details of cross beams, middle span joints 20-24 and side span joints 19-22, includes tables for middle and side spans specifications |
| 200. | TR-28  | #70: Lateral stiffening of support member of outer ribs in centre part of spans   |
| 201. | TR-205 | Present tracks on east approach from face of abutment to east tower   |
| 202. | TR-205 | Present tracks on east approach from face of abutment to east tower   |
| 203. | TR-204 | Tools for examining interior of tubes   |
| 204. | TR-104 | Details of reinforcing bars for tunnel ventilation  |
| 205. | TR-46  | #56: Joint A1 of middle span  |
| 206. | TR-642 | Portion of unidentified drawing, appears to show girder details and sections of piers and columns                                     |
| 207. | TR-185 | #s 41 & 42 (revised): Wind truss of Eads Bridge retraced from drawing by Eads   |
| 208. | TR-186 | Cross-section near centre of span   |