

(TO BE DETERMINED BY DESIGN BUILD TEAM)
DRAINAGE AREA = _____ SQ. MI.
DESIGN DISCHARGE (50 YR) = _____ CFS
WATER AREA PROVIDED
 BELOW EL. _____ = _____ FT²
50 YR BACKWATER = _____ FT @ EL. _____
50 YR VELOCITY = _____ FPS
ROADWAY OVERTOPPING EL. = _____
50 YR DISCHARGE = _____ CFS @ EL. _____
100 YR DISCHARGE = _____ CFS @ EL. _____

(LEFT & RIGHT SIDE)

| |
|------------|
| STA. 18+07 |
| STA. 19+02 |
| STA. 20+02 |
| STA. 21+22 |
| STA. 21+97 |

| | | | | | |
|---------------|------|------|-------------------|-----------|--|
| PROJECT NO. | | YEAR | | SHEET NO. | |
| 90S353-M1-005 | | 2024 | | B1 | |
| REVISIONS | | | | | |
| NO. | DATE | BY | BRIEF DESCRIPTION | | |
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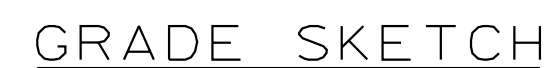


100 YEAR SCOUR EL. = _____
500 YEAR SCOUR EL. = _____



1. CONSTRUCTION SPECIFICATIONS; TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (JANUARY 1, 2021 EDITION.)
2. DESIGN SPECIFICATIONS; 9TH EDITION (2020) AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS AND THE 2ND EDITION (2011) AASHTO GUIDE SPECIFICATIONS FOR LRFD SEISMIC BRIDGE DESIGN WITH INTERIMS.
3. LOADING; HL-93 LIVE LOADING; SEISMIC CATEGORY "B" WITH $A_s = 0.186$, $S_{ds} = 0.368$, $S_{d1} = 0.152$ (1000 YEAR RETURN PERIOD); DEAD LOADS TO INCLUDE 35 LB/SQ.FT. FOR FUTURE WEARING SURFACE.
4. SUPERSTRUCTURE: TO CONSIST OF 5 SPANS OF CONTINUOUS PRESTRESS PRECAST BT-54 WITH COMPOSITE CONCRETE SLAB.
5. CONCRETE; CLASS A $f'c=3000$ PSI, CLASS D $f'c=4000$ PSI FOR BRIDGE DECK.
6. REINFORCING STEEL; TO BE ASTM A615 GRADE 60 UNLESS NOTED OTHERWISE. EPOXY COAT ALL SLAB STEEL.
7. BRIDGE DECK SURFACE FINISH; TO BE IN ACCORDANCE WITH METHOD 1 IN ARTICLE 604.22 OF THE STANDARD SPECIFICATIONS.
8. USE TDOT STD. DWG. NO. STD-1-1SS FOR PARAPETS.

9. TEXTURE COATING: TO BE GRAY (36440) EXCEPT TRAFFIC FACE AND TOP OF PARAPET TO BE WHITE (37886).
10. EXCAVATION: TO BE BASED ON FINAL PROFILE AT ABUTMENTS AND EXISTING GROUND AT PIERS.
11. RIP-RAP: MACHINED RIP-RAP SHALL BE CLASS "C" IN ACCORDANCE WITH SECTION 709 OF THE STANDARD SPECIFICATIONS AND SHALL BE MEASURED AND PAID FOR UNDER ROADWAY ITEM NO. 709-05.09.
12. FLUMES AT BRIDGE ENDS ARE REQUIRED.
13. BRIDGE DECK DRAINS ARE REQUIRED.
14. EXISTING BRIDGE DESCRIPTION (DESTROYED): BRIDGE NO. 90-SR353-00.45, TOTAL LENGTH = 354'-6", 5 SPANS AT 28'-6" AND 4 SPANS AT 53'-0", CONTINUOUS CONCRETE DECK GIRDER BRIDGE WITH CONCRETE SUBSTRUCTURES.
15. STREAM CHANNEL: ANY WORK WITHIN THE STREAM CHANNEL AREA (E.G. PIER/BENT FOOTING, RIP-RAP PLACEMENT, ETC.) SHALL BE SEPARATED FROM FLOWING WATER OR EXPECTED FLOW PATH AND PERFORMED DURING LOW FLOW CONDITIONS. ALL ITEMS USED WITHIN THE STREAM CHANNEL AREA FOR DIVERSION OF FLOW (OR EXPECTED FLOW), UNLESS SPECIFIED IN THE PLANS, SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE COST OF OTHER ITEMS. THIS NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR TEMPORARY DIVERSION CHANNELS (EC-STR-31).



(STATE ROUTE 353)
N.T.S.

| | | |
|----------------|----------------------|----------------------|
| PIN NO.: | <u>135866.08</u> | |
| DESIGN BY: | <u>GRESHAM SMITH</u> | DATE: <u>10/2024</u> |
| DRAWN BY: | <u>B. WELLS</u> | DATE: <u>10/2024</u> |
| SUPERVISED BY: | <u>D. MCCRARY</u> | DATE: <u>10/2024</u> |
| CHECKED BY: | <u>A. ALLSBROOK</u> | DATE: <u>10/2024</u> |



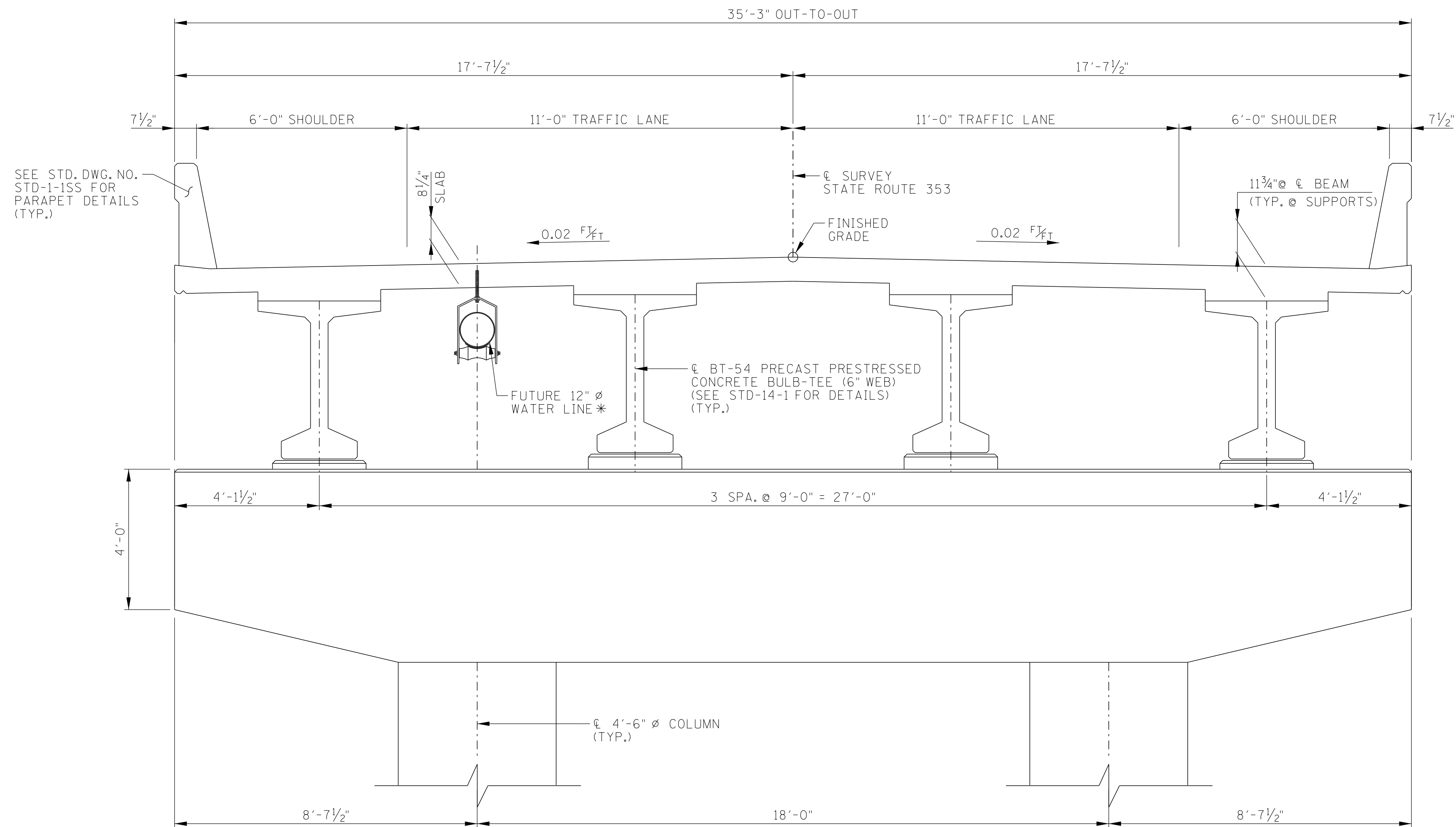
CONCEPTUAL PLANS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PRELIMINARY LAYOUT
STATE ROUTE 353 OVER
NOLICHUCKY RIVER
BRIDGE ID. NO. 90S23860001
STA.20+02.00
LOG MILE 0.45
WASHINGTON COUNTY
2024

SHEET 1 OF 2

CLASS "C" MACHINED RIP-RAP = 695 TONS

| CONST. NO.: | | | |
|---------------|------|------|-------------------|
| PROJECT NO. | | YEAR | SHEET NO. |
| 90S353-M1-005 | | 2024 | B2 |
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| - | - | | |
| - | - | | |
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* DENOTES: THE DESIGN BUILD TEAM SHALL VERIFY LOCATION AND SIZE WITH UTILITIES.

TYPICAL CROSS-SECTION
(LOOKING FORWARD ON SURVEY)

CONCEPTUAL PLANS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PRELIMINARY LAYOUT
STATE ROUTE 353 OVER
NOLICHUCKY RIVER
BRIDGE ID. NO. 90S23860001
STA. 20+02.00
LOG MILE 0.45
WASHINGTON COUNTY
2024

PIN NO.: 135866.08
DESIGN BY: GRESHAM SMITH DATE: 10/2024
DRAWN BY: B. WELLS DATE: 10/2024
SUPERVISED BY: D. MCCRARY DATE: 10/2024
CHECKED BY: A. ALLSBROOK DATE: 10/2024

