

27-AUG-2015 06:16
 \\J003WF01.tdot.state.tn.us\03shor-ed\SURVEY\DESIGN\PIN 10030101Lewis Co. SR-99 Traffic Control for Bridge Repair\00301-03-002A- Estimated Quantities.dgn

| ESTIMATED ROADWAY QUANTITIES | | | |
|------------------------------|---|------|----------|
| ITEM NO. | DESCRIPTION | UNIT | QUANTITY |
| 307-01.08 | ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2 | TON | 293 |
| 403-01 | BITUMINOUS MATERIAL FOR TACK COAT (TC) | TON | 2 |
| 411-01.10 | ACS MIX(PG64-22) GRADING D | TON | 174 |
| 415-01.01 | COLD PLANING BITUMINOUS PAVEMENT | TON | 440 |
| 705-08.51 | PORTABLE IMPACT ATTENUATOR NCHRP350 TL-3 | EACH | 2 |
| 712-01 | TRAFFIC CONTROL | LS | 1 |
| 712-01.51 | PORTABLE BARRIER RAIL DELINEATOR (DOUBLE) | EACH | 25 |
| 712-02.02 | INTERCONNECTED PORTABLE BARRIER RAIL | L.F. | 620 |
| 712-04.01 | FLEXIBLE DRUMS (CHANNELIZING) | EACH | 72 |
| 712-05.01 | WARNING LIGHTS (TYPE A) | EACH | 8 |
| 712-06 | SIGNS (CONSTRUCTION) | S.F. | 307 |
| 712-08.03 | ARROW BOARD (TYPE C) | EACH | 2 |
| 716-08.01 | REMOVAL OF PAVEMENT MARKING (LINE) | L.F. | 2873 |
| 716-02.05 | PLASTIC PAVEMENT MARKING (STOP LINE) | L.F. | 22 |
| 716-05.01 | PAINTED PAVEMENT MARKING (4" LINE) | L.M. | 1 |
| 716-11.01 | SPRAY THERMO PAVEMENT MARKING (4IN LINE) | L.M. | 2.25 |
| 717-01 | MOBILIZATION | LS | 1 |
| 730-40 | TEMPORARY TRAFFIC SIGNAL SYSTEM | EACH | 1 |

STANDARD ROADWAY DRAWINGS

DWG. NO REV. DESCRIPTION

ROADWAY DESIGN STANDARDS

RD-A-1 12-18-99 STANDARD ABBREVIATIONS
 RD-L-1 10-26-94 STANDARD LEGEND

TRAFFIC CONTROL APPURTENANCES

T-FAB-1 05-27-97 FLASHING YELLOW ARROW BOARD
 T-M-1 11-01-11 DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
 T-M-2 01-15-13 DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS
 T-PBR-1 06-30-09 INTERCONNECTED PORTABLE BARRIER RAIL
 T-PBR-2 10-10-06 DETAIL FOR VERTICAL PANELS AND FLEXIBLE DELINEATORS
 T-WZ-10 04-02-12 ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS
 T-WZ-32 10-29-13 TRAFFIC CONTROL PLAN SIGNAL LAYOUT FOR TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE
 T-WZ-33 05-27-98 TRAFFIC CONTROL PLAN FOR CLOSE INTERSECTION CONDITIONS USING TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE
 T-WZ-34 09-01-05 TRAFFIC CONTROL PLAN GENERAL NOTES FOR TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE
 T-WZ-35 04-02-12 TRAFFIC CONTROL PLAN PAY ITEM AND SIGN DETAILS FOR TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

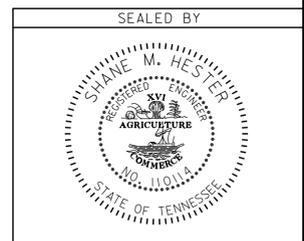
- ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY-EIGHT (48) HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY BE ERECTED UP TO ONE WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.
- IF THE CONTRACTOR MOVES OFF THE PROJECT, HE SHALL COVER OR REMOVE ALL UNNEEDED SIGNS AS DIRECTED BY THE ENGINEER. COSTS OF REMOVAL, COVERING, AND REINSTALLING SIGNS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT ALL COSTS SHALL BE INCLUDED IN THE ORIGINAL UNIT PRICE BID FOR ITEM NO 712-06, SIGNS (CONSTRUCTION) PER SQUARE FOOT.
- A LONG TERM BUT SPORADIC USE WARNING SIGN, SUCH AS A FLAGGER SIGN, MAY REMAIN IN PLACE WHEN NOT REQUIRED PROVIDED THE SIGN FACE IS FULLY COVERED.
- TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.
- USE OF BARRICADES, PORTABLE BARRIER RAILS, VERTICAL PANELS, AND DRUMS SHALL BE LIMITED TO THE IMMEDIATE AREAS OF CONSTRUCTION WHERE A HAZARD IS PRESENT. THESE DEVICES SHALL NOT BE STORED ALONG THE ROADWAY WITHIN THIRTY (30) FEET OF THE EDGE OF THE TRAVELED WAY BEFORE OR AFTER USE UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL INCREASE TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. THESE DEVICES SHALL BE REMOVED FROM THE CONSTRUCTION WORK ZONE WHEN THE ENGINEER DETERMINES THEY ARE NO LONGER NEEDED. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.
- THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO PARK WITHIN THIRTY (30) FEET OF A OPEN TRAFFIC LANE AT ANY TIME UNLESS PROTECTED AS DESCRIBED ABOVE FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE.. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.
- ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- ALL DETOURS SHALL BE PAVED, STRIPED, SIGNED AND THE VERTICAL PANELS ARE TO BE IN PLACE BEFORE IT IS OPENED TO TRAFFIC.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|-------------|-----------|
| REPAIR | 2015 | NH-99(51) | 2A |

REV. 8-19-15:
 REVISED QUANTITIES FOR ITEM NOS. 712-04.01 AND 712-06. ADDED ITEM NO. 712-08.03. ADDED STD. DWGS. T-FAB-1 AND T-WZ-10.

REV. 8-26-15:
 CHANGED QUANTITIES FOR ITEM NOS. 307-01.08,411-01.10 AND 415-01.01

**UNOFFICIAL
 SET
 NOT FOR
 BIDDING**

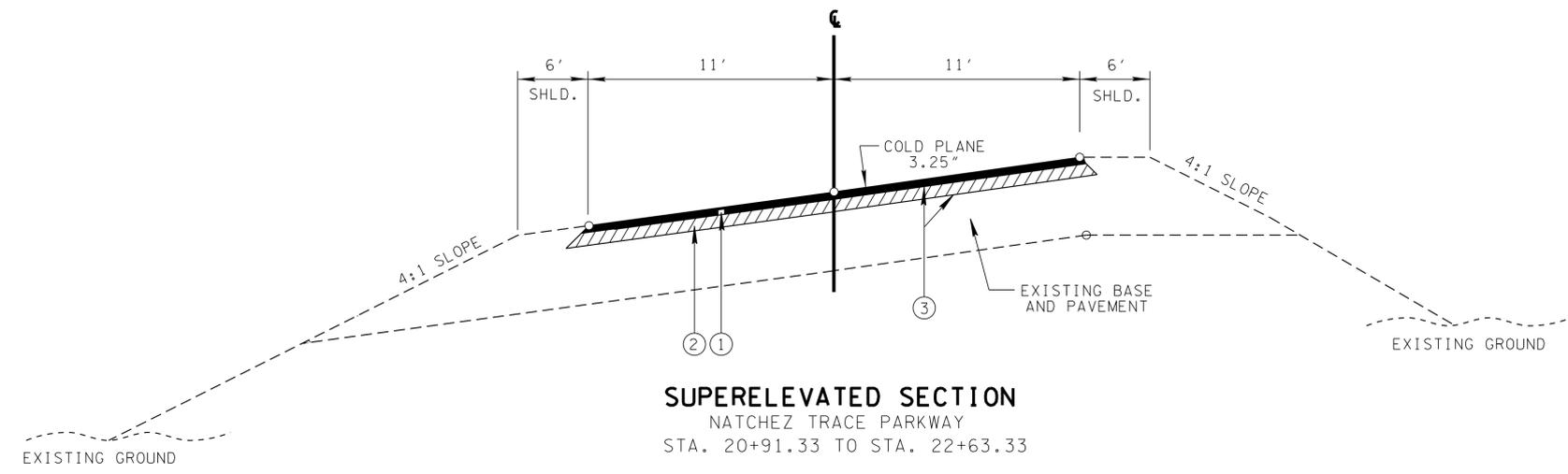


STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

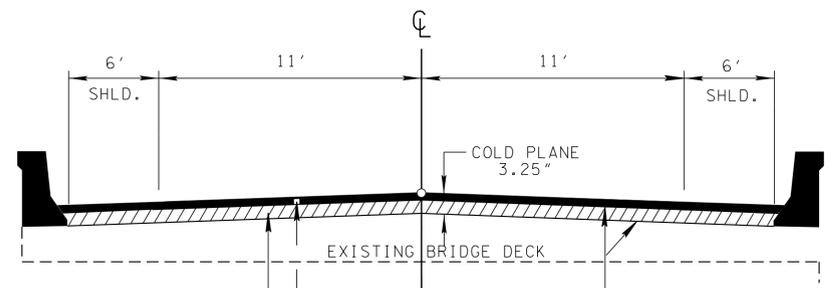
**ESTIMATED ROADWAY
 QUANTITIES, GENERAL
 NOTES, AND STANDARD
 ROADWAY DRAWINGS**

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|-------------|-----------|
| REPAIR | 2015 | NH-99(51) | 2B |
| | | | |
| | | | |

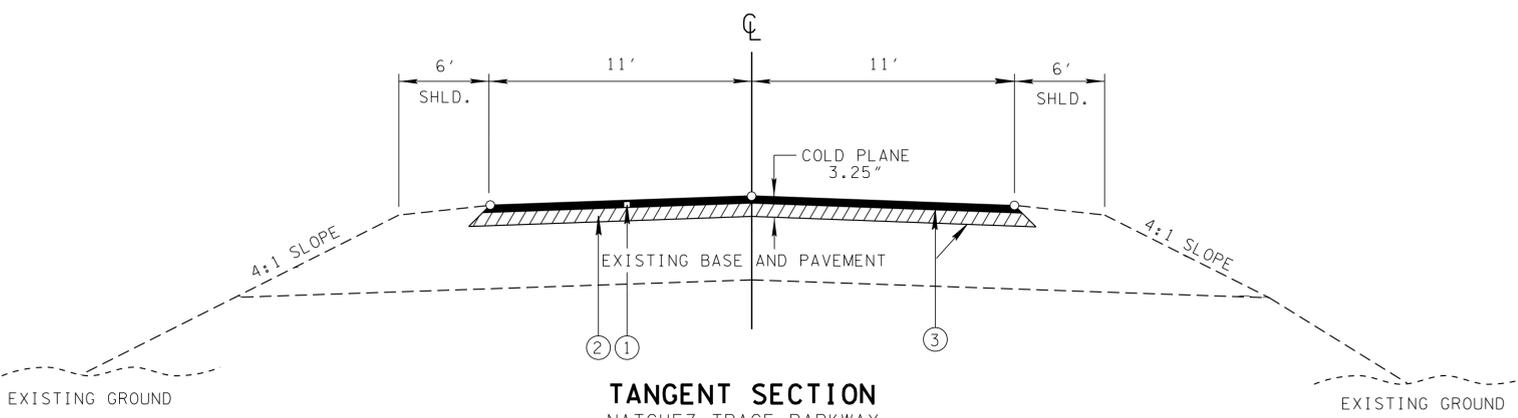
REV. 8-26-15:
 ADDED BRIDGE TYPICAL SECTION, CHANGED
 STATION LIMITS ON SUPERELEVATED AND
 TANGENT TYPICAL SECTIONS. CORRECTED
 COLD PLANING TRANSITION DETAIL.



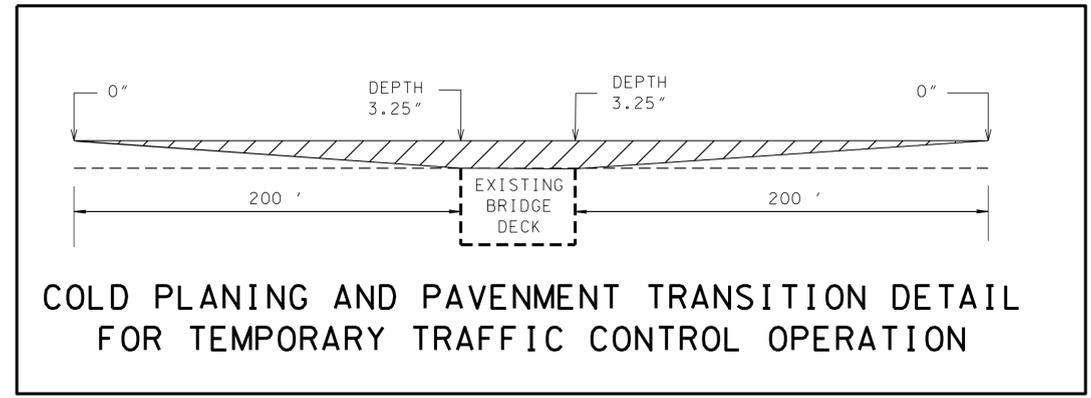
SUPERELEVATED SECTION
 NATCHEZ TRACE PARKWAY
 STA. 20+91.33 TO STA. 22+63.33



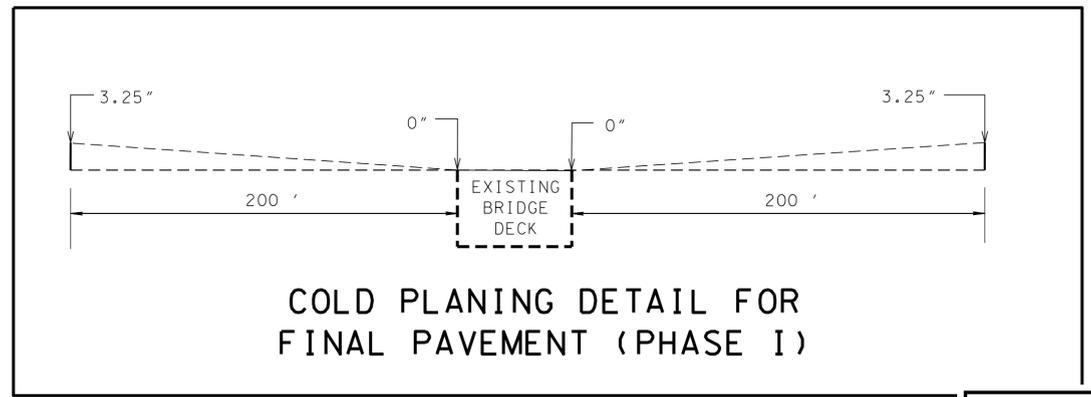
BRIDGE SECTION
 NATCHEZ TRACE PARKWAY
 STA. 22+63.33 TO STA. 27+24.33



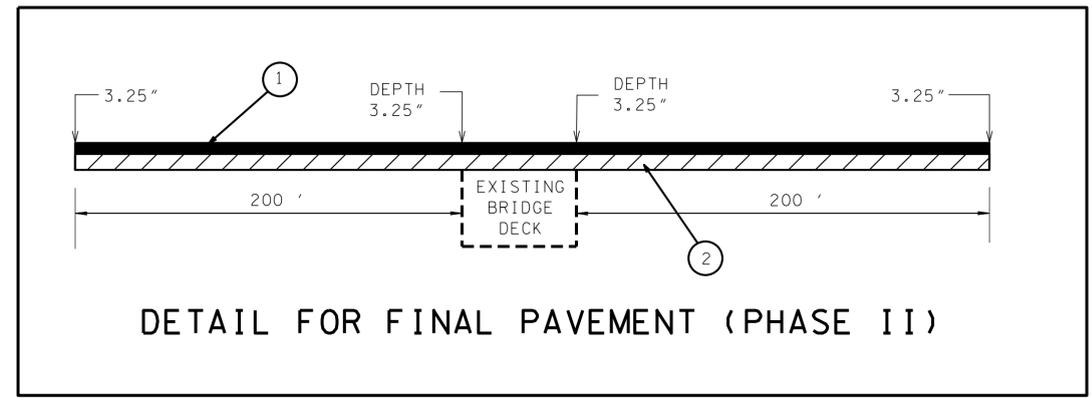
TANGENT SECTION
 NATCHEZ TRACE PARKWAY
 STA. 27+24.33 TO STA. 28+96.33



**COLD PLANING AND PAVEMENT TRANSITION DETAIL
 FOR TEMPORARY TRAFFIC CONTROL OPERATION**



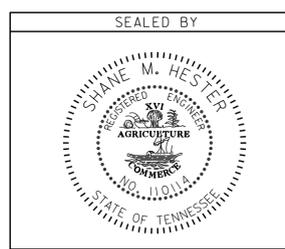
**COLD PLANING DETAIL FOR
 FINAL PAVEMENT (PHASE I)**



DETAIL FOR FINAL PAVEMENT (PHASE II)

| PAVING SCHEDULE | |
|-----------------|---|
| 1 | SURFACE @ 1.25" \ THICK (APPROX 132.5 LBS/SY) 411-01.10 ASC MIX (PG64-22) GRADING D |
| 2 | BLACK BASE @ 2.00" \ THICK (APPROX 226.0 LBS/SY) 307-01.08 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2 |
| 3 | TACK COAT @ 0.07 GAL/SY (GENERAL USE) 0.10 GAL/SY (MILLING - COLD PLANE) 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) |

**UNOFFICIAL
 SET
 NOT FOR
 BIDDING**



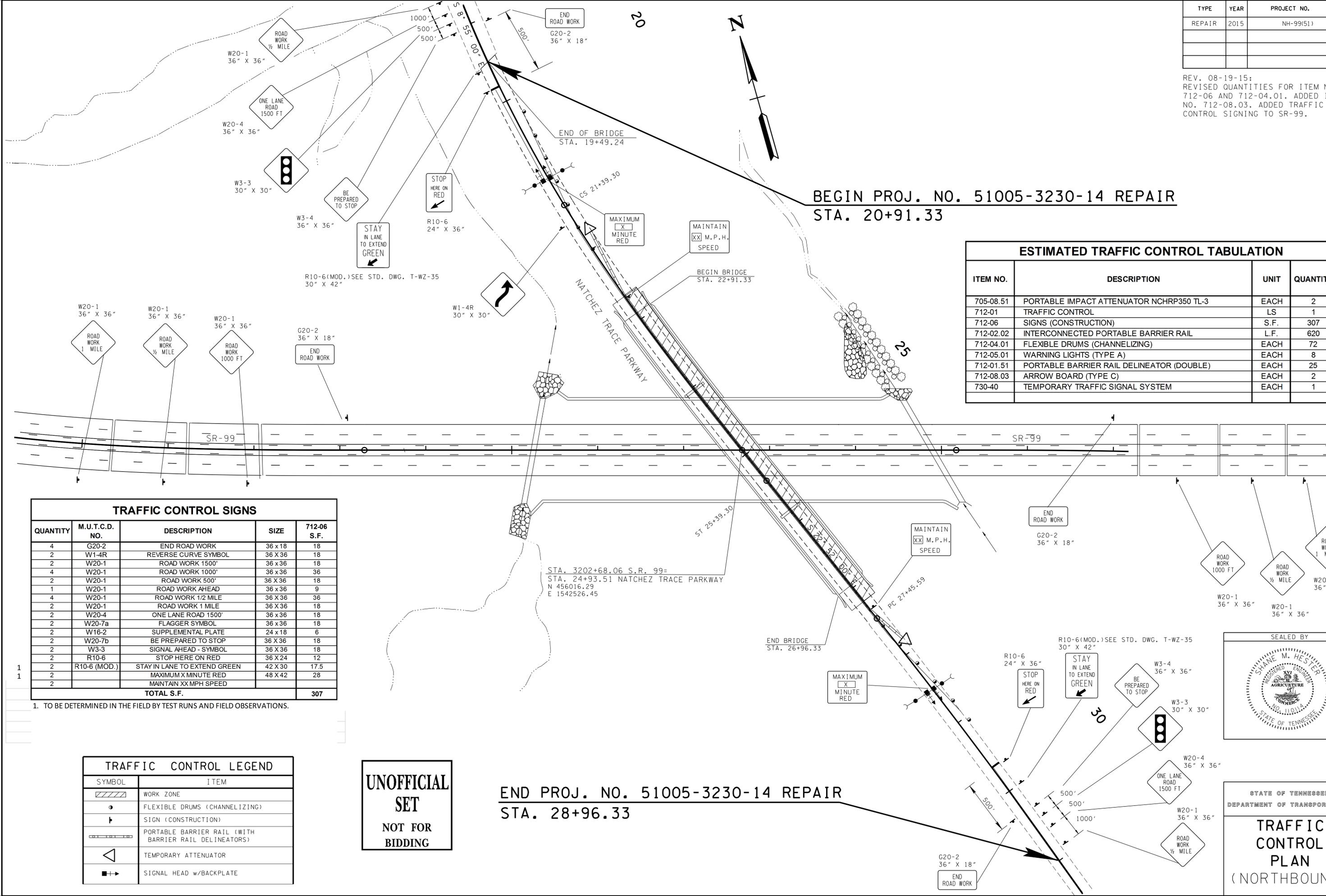
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

**TYPICAL
 SECTIONS
 AND
 PAVEMENT
 SCHEDULE**

27-AUG-2015 06:16 \\J003\F01\tdot.storfe.rn.us\03Shorad\SURVEY\DESIGN\PIN 10030101Lewis Co. SR-99 Traffic Control for Bridge Repair\00301-03-002B Typical Sections.dgn

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|-------------|-----------|
| REPAIR | 2015 | NH-99(51) | 2C |
| | | | |
| | | | |

REV. 08-19-15:
 REVISED QUANTITIES FOR ITEM NOS.
 712-06 AND 712-04.01. ADDED ITEM
 NO. 712-08.03. ADDED TRAFFIC
 CONTROL SIGNING TO SR-99.



**BEGIN PROJ. NO. 51005-3230-14 REPAIR
 STA. 20+91.33**

| ESTIMATED TRAFFIC CONTROL TABULATION | | | |
|--------------------------------------|---|------|----------|
| ITEM NO. | DESCRIPTION | UNIT | QUANTITY |
| 705-08.51 | PORTABLE IMPACT ATTENUATOR NCHRP350 TL-3 | EACH | 2 |
| 712-01 | TRAFFIC CONTROL | LS | 1 |
| 712-06 | SIGNS (CONSTRUCTION) | S.F. | 307 |
| 712-02.02 | INTERCONNECTED PORTABLE BARRIER RAIL | L.F. | 620 |
| 712-04.01 | FLEXIBLE DRUMS (CHANNELIZING) | EACH | 72 |
| 712-05.01 | WARNING LIGHTS (TYPE A) | EACH | 8 |
| 712-01.51 | PORTABLE BARRIER RAIL DELINEATOR (DOUBLE) | EACH | 25 |
| 712-08.03 | ARROW BOARD (TYPE C) | EACH | 2 |
| 730-40 | TEMPORARY TRAFFIC SIGNAL SYSTEM | EACH | 1 |

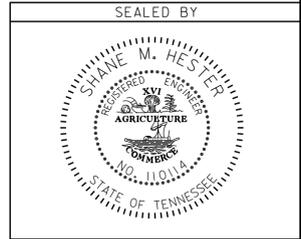
| TRAFFIC CONTROL SIGNS | | | | |
|-----------------------|----------------|------------------------------|---------|-------------|
| QUANTITY | M.U.T.C.D. NO. | DESCRIPTION | SIZE | 712-06 S.F. |
| 4 | G20-2 | END ROAD WORK | 36 x 18 | 18 |
| 2 | W1-4R | REVERSE CURVE SYMBOL | 36 X 36 | 18 |
| 2 | W20-1 | ROAD WORK 1500' | 36 x 36 | 18 |
| 4 | W20-1 | ROAD WORK 1000' | 36 x 36 | 36 |
| 2 | W20-1 | ROAD WORK 500' | 36 x 36 | 18 |
| 1 | W20-1 | ROAD WORK AHEAD | 36 x 36 | 9 |
| 4 | W20-1 | ROAD WORK 1/2 MILE | 36 X 36 | 36 |
| 2 | W20-1 | ROAD WORK 1 MILE | 36 X 36 | 18 |
| 2 | W20-4 | ONE LANE ROAD 1500' | 36 x 36 | 18 |
| 2 | W20-7a | FLAGGER SYMBOL | 36 x 36 | 18 |
| 2 | W16-2 | SUPPLEMENTAL PLATE | 24 x 18 | 6 |
| 2 | W20-7b | BE PREPARED TO STOP | 36 X 36 | 18 |
| 2 | W3-3 | SIGNAL AHEAD - SYMBOL | 36 X 36 | 18 |
| 2 | R10-6 | STOP HERE ON RED | 36 X 24 | 12 |
| 2 | R10-6 (MOD.) | STAY IN LANE TO EXTEND GREEN | 42 X 30 | 17.5 |
| 2 | | MAXIMUM X MINUTE RED | 48 X 42 | 28 |
| 2 | | MAINTAIN XX MPH SPEED | | |
| TOTAL S.F. | | | | 307 |

1. TO BE DETERMINED IN THE FIELD BY TEST RUNS AND FIELD OBSERVATIONS.

| TRAFFIC CONTROL LEGEND | |
|------------------------|---|
| SYMBOL | ITEM |
| | WORK ZONE |
| | FLEXIBLE DRUMS (CHANNELIZING) |
| | SIGN (CONSTRUCTION) |
| | PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS) |
| | TEMPORARY ATTENUATOR |
| | SIGNAL HEAD w/BACKPLATE |

**UNOFFICIAL
 SET
 NOT FOR
 BIDDING**

**END PROJ. NO. 51005-3230-14 REPAIR
 STA. 28+96.33**



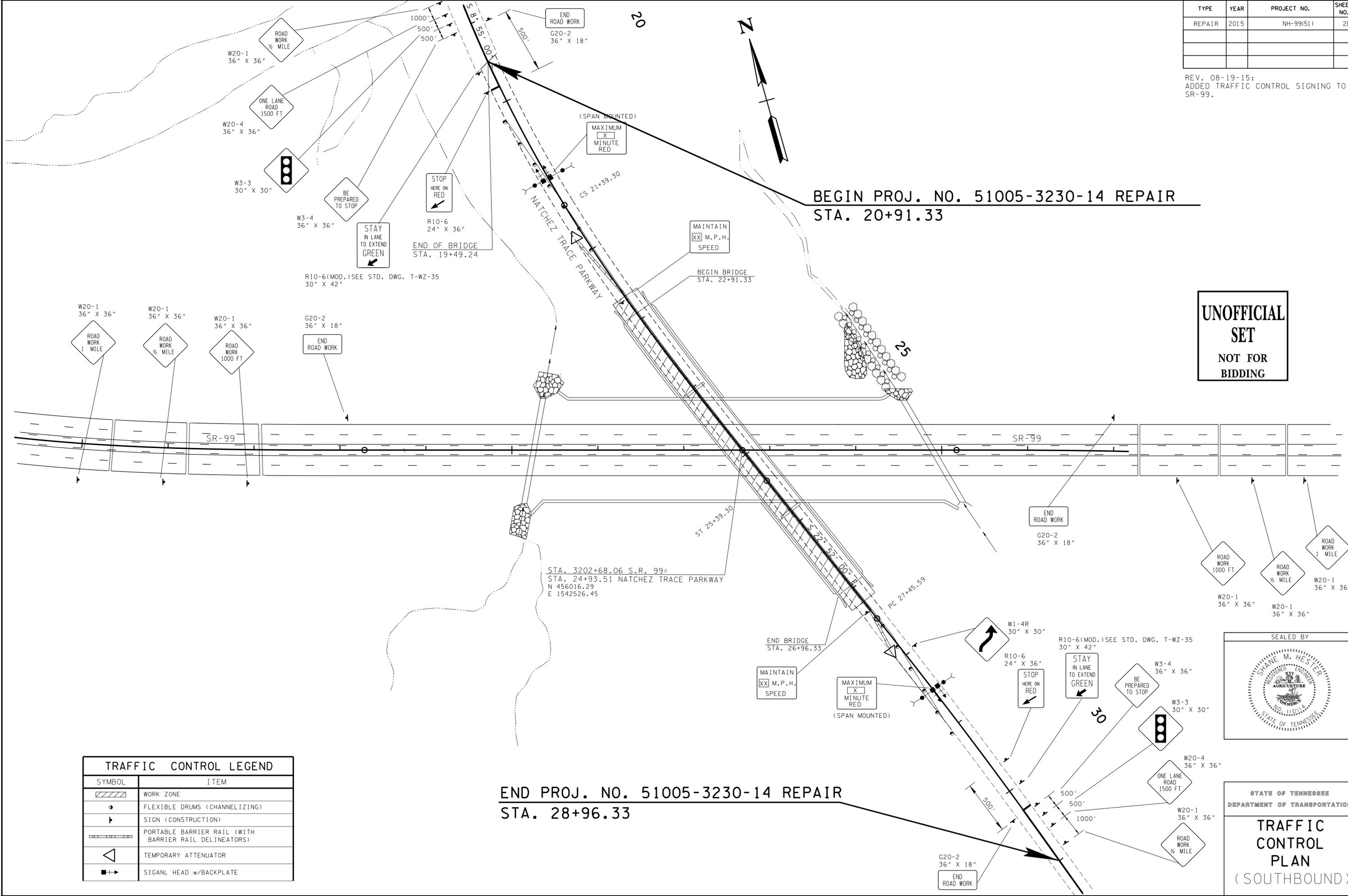
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL PLAN
 (NORTHBOUND)

24-AUG-2015 11:27
 \\J033\F01\tdot.stote.rtu.us\03Shor\ed\SURVEY\DESIGN\PIN 10030101Lewis Co. SR-99 Traffic Control for Bridge Repair\00301-03-002C- Traffic ControlPlan (Northbound).dgn

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|-------------|-----------|
| REPAIR | 2015 | NH-99(51) | 2D |
| | | | |
| | | | |

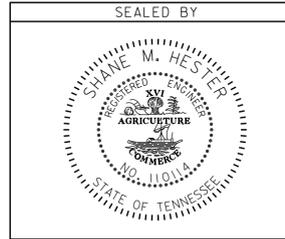
REV. 08-19-15:
ADDED TRAFFIC CONTROL SIGNING TO
SR-99.

24-AUG-2015 08:39 \\J033\F01.tcdt.stote.tn.us\03Shor\ed\SURVEY\DESIGN\PIN 10030101Lewis Co. SR-99 Traffic Control for Bridge Repair\00301-03-002D- Traffic ControlPlan (Southbound).dgn



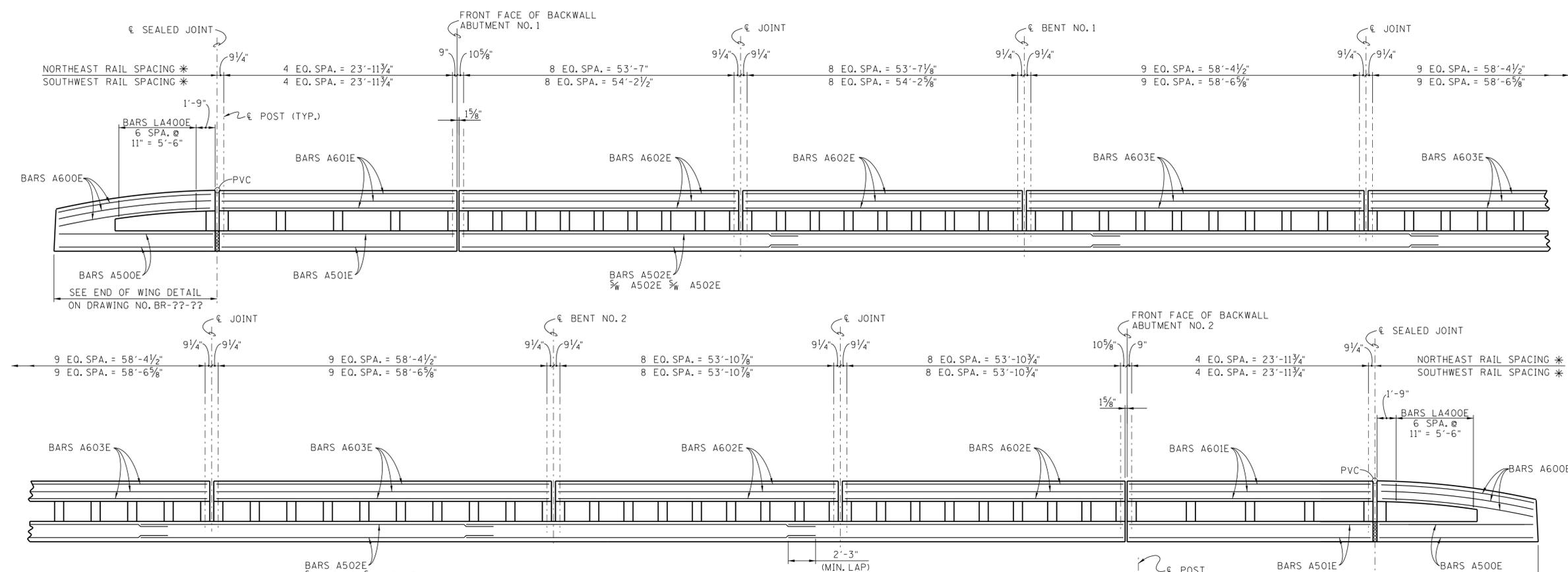
**UNOFFICIAL
SET
NOT FOR
BIDDING**

| TRAFFIC CONTROL LEGEND | |
|------------------------|---|
| SYMBOL | ITEM |
| | WORK ZONE |
| | FLEXIBLE DRUMS (CHANNELIZING) |
| | SIGN (CONSTRUCTION) |
| | PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS) |
| | TEMPORARY ATTENUATOR |
| | SIGNAL HEAD w/BACKPLATE |



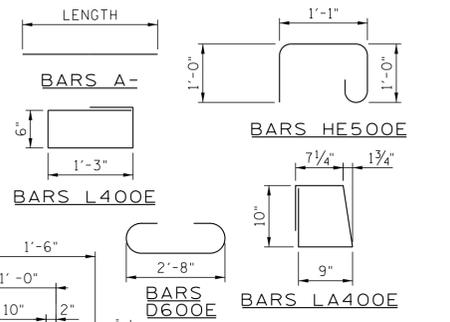
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL PLAN
(SOUTHBOUND)

| | | | |
|--------------------------|---------|-----------|-------------------|
| CONST. NO. 51005-3230-14 | | | |
| PROJECT NO. | YEAR | SHEET NO. | |
| NH-99(51) | 2015 | | |
| REVISIONS | | | |
| NO. | DATE | BY | BRIEF DESCRIPTION |
| 1 | 9-24-15 | JH | REVISED NOTE |



BILL OF STEEL

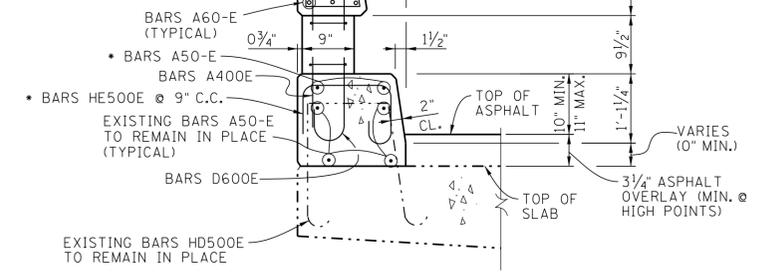
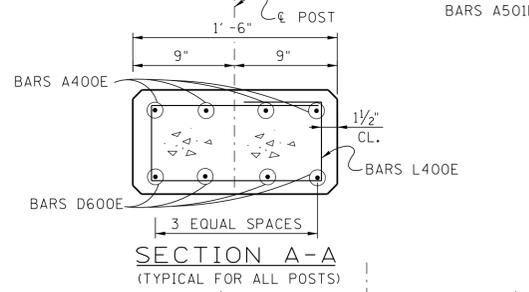
| BAR | LOCATION | NO. REQ'D. | LENGTH |
|--------|------------------|------------|--------|
| A400E | CURB POST & RAIL | 624 | 2'-8" |
| A500E | CURB | 8 | 15'-0" |
| A501E | CURB | 8 | 25'-2" |
| A502E | CURB | 28 | 60'-0" |
| A600E | RAIL | 32 | 15'-0" |
| A601E | RAIL | 32 | 25'-2" |
| A602E | RAIL | 64 | 55'-0" |
| A603E | RAIL | 48 | 59'-8" |
| D600E | CURB POST & RAIL | 624 | 4'-0" |
| HE500E | CURB | 1206 | 3'-11" |
| LA400E | POST | 312 | 4'-2" |
| LA400E | RAIL | 1590 | 3'-9" |



NOTES:
 1.) CONCRETE IN CURBS MAY BE PLACED IN ANY SEQUENCE OF POURS NOT MORE THAN 32'-0" NOR LESS THAN 20'-0" IN LENGTH WITH AN INTERVAL OF AT LEAST 12 HOURS BETWEEN ADJACENT POURS. THE ENTIRE CURB SHALL BE POURED AND APPROVED BY ENGINEER PRIOR TO POURING ANY POST.

*DENOTES: DISTANCE ALONG OUTSIDE EDGE OF SLAB.

ELEVATION
(POST SPACING MEASURED ALONG GUTTER LINE)



* DENOTES: ADDITIONAL BARS REQUIRED WHEN TOP COVER OVER EXISTING BARS HD500E EXCEEDS 3".

ESTIMATED QUANTITIES

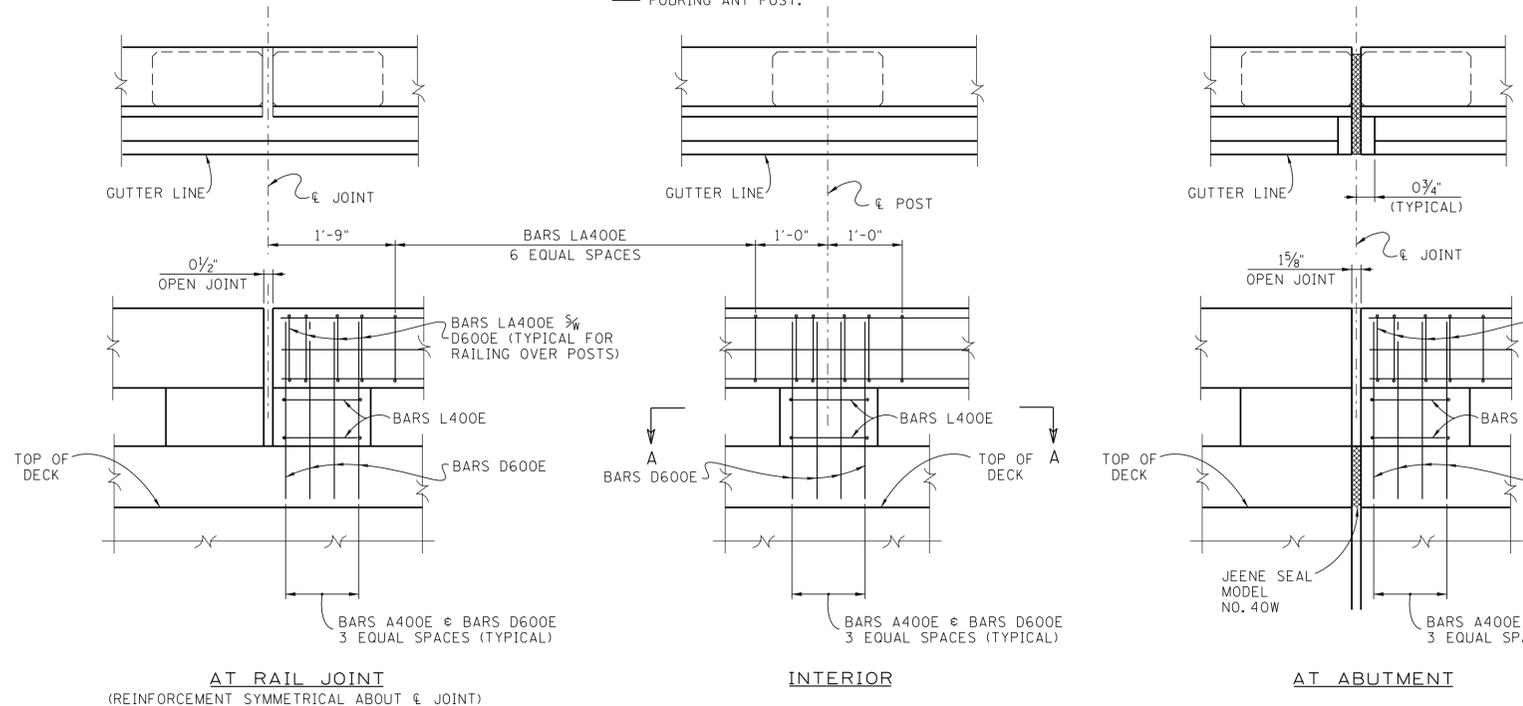
| CLASS "A" CONCRETE (BRIDGES) C.Y. | EPOXY-COATED STEEL REINFORCING (BRIDGES) LB. |
|-----------------------------------|--|
| 101 | 28,245 |

UNOFFICIAL SET NOT FOR BIDDING



STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
BRIDGE NO. 1
 CONCRETE BRIDGE RAILING
 NATCHEZ TRACE PARKWAY
 OVER STATE ROUTE 99
 STATION 24+93.51
 LEWIS COUNTY
 2015

CORRECT *John S. Hastings*
 ENGINEER OF STRUCTURES



TYPICAL DETAILS

DESIGNED BY J.S. HASTINGS DATE 12-14
 DRAWN BY KEVIN MARTINKO DATE 1-15
 SUPERVISED BY J.S. HASTINGS DATE 1-15
 CHECKED BY J.S. HASTINGS DATE 5-15

AT SEALED JOINT

