

# Index of Sheets

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1		TITLE SHEET
2		ESTIMATED QUANTITIES
3		GENERAL NOTES
3A		PROJECT COMMITMENTS
4		TRAFFIC CONTROL PLANS

# STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION BUREAU OF ENGINEERING

TENN.	YEAR	SHEET NO
	2015	1
FED AID PROJ NO		
STATE PROJ NO	48002-4228-04	

## STANDARD ROADWAY AND STRUCTURE DRAWINGS

### ROADWAY DESIGN STANDARDS

DWG. NO.	REVISION	DESCRIPTION
RD-A-1	12-18-99	STANDARD ABBREVIATIONS
RD-L-1	10-26-94	STANDARD LEGEND
RD-L-2	9-05-01	STANDARD LEGEND FOR UTILITY INSTALLATIONS

### ROADWAY AND PAVEMENT APPURTENANCES

DWG. NO.	REVISION	DESCRIPTION
RP-S-7	7-29-96	DETAILS FOR STANDARD CONCRETE SIDEWALKS

### SAFETY APPURTENANCES AND FENCE

DWG. NO.	REVISION	DESCRIPTION
S-GR-11	11-26-07	W-BEAM AND THREE BEAM BARRIER RAIL AND RUB RAIL ALTERNATES
S-GR-12	5-27-03	W-BEAM BARRIER POST DETAILS AND SPECIFICATIONS
S-GR-13	5-27-03	BARRIER RAIL MOUNTING POST BLOCK-OUTS WITH VERTICAL ADJUSTMENT HOLES
S-GR-14	4-17-12	W-BEAM BARRIER FASTENING HARDWARE AND BRIDGE APPROACH DELINEATORS
S-GR-15	6-30-05	W-BEAM BARRIER TERMINAL ELEMENT DETAILS
S-GR-18	5-15-08	GUARDRAIL TERMINAL (TYPE IN-LINE) AND SHOULDER LINE DETAIL
S-GR-24	5-15-08	GUARDRAIL END TERMINALS AT BRIDGE ENDS

### TRAFFIC CONTROL APPURTENANCES

DWG. NO.	REVISION	DESCRIPTION
T-M-1	11-1-11	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-PBR-1	6-30-09	INTERCONNECTED PORTABLE BARRIER RAIL
T-PBR-2	11-1-11	DETAILS FOR VERTICAL PANELS AND FLEXIBLE DELINEATORS
T-WZ-32	3-03-06	TRAFFIC CONTROL PLAN SIGNAL LAYOUT FOR TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE
T-WZ-34	9-01-05	TRAFFIC CONTROL PLAN GENERAL NOTES FOR TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE
T-WZ-35	4-2-12	TRAFFIC CONTROL PLAN PAY ITEM AND SIGN DETAILS FOR TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE

### EROSION CONTROL AND LANDSCAPING

DWG. NO.	REVISION	DESCRIPTION
EC-STR-3C	4-1-08	SILT FENCE WITH WIRE BACKING
EC-STR-3E	4-1-08	SILT FENCE FABRIC JOINING DETAILS

### LIST OF STANDARD DRAWINGS

DWG. NO.	REVISION	DESCRIPTION
SBR-2-137	11-5-01	STANDARD DRAWING SHOWING DETAILS FOR ATTACHING NEW GUARDRAIL TO EXISTING END OF BRIDGE

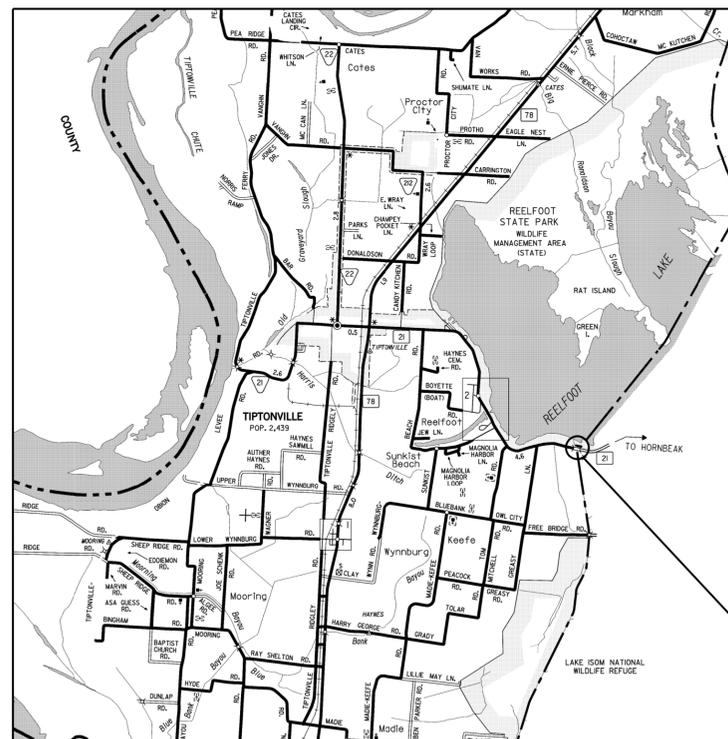
# LAKE COUNTY

BRIDGE NO. 48-SR21-7.61  
OVER REELFOOT LAKE SPILLWAY

## BRIDGE REPAIR

STATE ROUTE 21 F.A.H.S. NO.

SCALE: 1" = 1 MILE



### LIST OF DRAWINGS

DWG. NO.	DRAWING
BR-111-94	LAYOUT OF BRIDGE TO BE REPAIRED (7.61)
BR-111-95	ESTIMATED QUANTITIES
BR-111-96	GENERAL NOTES
BR-111-97	BRIDGE REPAIR DETAILS
BR-111-98	BRIDGE REPAIR DETAILS
BR-111-99	BRIDGE REPAIR DETAILS
BR-111-100	BRIDGE REPAIR DETAILS
BR-111-101	BRIDGE REPAIR DETAILS
BR-111-102	BRIDGE REPAIR DETAILS
BR-111-103	BRIDGE REPAIR DETAILS
BR-111-104	BRIDGE REPAIR DETAILS
BR-111-105	BRIDGE REPAIR DETAILS
BR-111-106	BRIDGE REPAIR DETAILS

### LIST OF REFERENCE DRAWINGS

DWG. NO.	DESCRIPTION
A-10-96	ORIGINAL PLANS
A-10-97	
A-10-98	
A-10-99	
A-10-100	
M-106-21	1983 REPAIR PLANS
M-106-22	
M-106-22A	1987 REPAIR PLANS
BR-84-1	
BR-84-2	
BR-84-3	
BR-84-4	
BR-84-5	
BR-84-6	

ALL DIMENSIONS SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.

ALL REFERENCE DRAWINGS TO BE PRINTED WITH THE PLANS

PROJECT NO. 48002-4228-04  
SR21 - L.M. 7.61

APPROVED: Paul D. Degges  
PAUL D. DEGGES, CHIEF ENGINEER

DATE \_\_\_\_\_

APPROVED: John Schroer  
JOHN SCHROER, COMMISSIONER

### SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED JANUARY 1, 2015 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

**UNOFFICIAL SET**  
NOT FOR BIDDING

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

APPROVED: \_\_\_\_\_  
DIVISION ADMINISTRATOR DATE \_\_\_\_\_

T.D.O.T. MANAGER MIKE LAWSON  
DESIGNED BY GARVER, LLC  
DESIGNER A. J. KHAIRI  
PE NO. 48002-4228-04

CHECKED BY J. H. RUDELL  
PIN. NO. 108056.01

BRIDGE REPAIR QUANTITIES

ITEM	DESCRIPTION	UNIT	TOTAL
23 ①	203-03 BORROW EXCAVATION (UNCLASSIFIED)	C.Y.	20
23 ②	209-08.02 TEMPORARY SILT FENCE (WITH BACKING)	L.F.	400
23 ③	303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	20
	403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	1
	411-01.10 ASPHALT MIX (PG64-22) GRADING D	TON	95
	411-01.11 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING E	TON	95
④	415-01.02 COLD PLANING BITUMINOUS PAVEMENT	S.Y.	560
⑤	604-03.10 CONCRETE OVERLAY (SIDEWALKS)	S.Y.	520
23 ⑥	604-10.05 CONCRETE	S.F.	200
23 ⑦	604-10.09 CONCRETE	C.Y.	500
⑧	604-10.13 CONCRETE SLAB REMOVAL	LS	1
⑨	604-10.14 REMOVE EXISTING WEARING SURFACE	LS	1
23 ⑩	604-10.18 REINFORCING STEEL (REPAIRS)	LB.	112,000
23 ⑪	604-10.30 BRIDGE DECK REPAIRS (FULL DEPTH OF SLAB)	S.Y.	25
23 ⑫	604-10.50 BRIDGE DECK REPAIRS (PARTIAL DEPTH OF SLAB)	S.Y.	95
23 ⑬	604-10.54 CONCRETE REPAIRS	S.F.	200
23 ⑭	604-10.62 EPOXY INJECTION REPAIR (COMPLETE AND IN PLACE)	L.F.	580
⑮	604-10.90 MISCELLANEOUS BRIDGE ITEMS	LS	1
⑯	617-01 BRIDGE DECK SEALANT	S.Y.	825
⑰	705-01.01 GUARDRAIL AT BRIDGE ENDS	L.F.	81
	705-04.05 GUARDRAIL TERMINAL (TYPE-IN-LINE)	EACH	2
⑱	705-04.07 TANGENT ENERGY ABSORBING TERMINAL (NCHRP 350 TL3)	EACH	1
⑲	705-04.50 PORTABLE BARRIER RAIL DELINEATOR	EACH	43
⑳	705-08.13 PERMANENT IMPACT ATTENUATOR NCHRP 350 TL-3	EACH	1
㉑	705-08.51 PORTABLE IMPACT ATTENUATOR NCHRP 350 TL-3	EACH	2
	712-01 TRAFFIC CONTROL	LS	1
	712-02.02 INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	430
	712-04.01 FLEXIBLE DRUMS (CHANNELIZING)	EACH	18
	712-05.03 WARNING LIGHTS (TYPE C)	EACH	16
㉒	712-06 SIGNS (CONSTRUCTION)	S.F.	561
	712-07.03 TEMPORARY BARRICADES (TYPE III)	L.F.	168
	712-09.01 REMOVABLE PAVEMENT MARKING LINE	L.F.	5780
	712-09.04 REMOVABLE PAVEMENT MARKING LINE (STOP LINE)	L.F.	48
	716-13.06 SPRAY THERMO PVMT. MARKING (40 MIL) (4" LINE)	L.M.	0.38
	717-01 MOBILIZATION	LS	1
㉓	730-40 TEMPORARY TRAFFIC SIGNAL SYSTEM	EACH	1
23 ㉔	801-03 WATER (SEEDING & SODDING)	M.G.	8
23 ㉕	803-01 SODDING (NEW SOD)	S.Y.	700

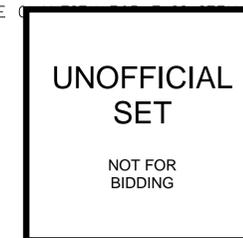
EPOXY INJECTION AND WALL REPLACEMENT QUANTITIES		
INTERIOR WALL NO.	EPOXY INJECTION (L.F.)	WALL REPLACEMENT (S.F.)
1	28	0
2	21	24
3	28	21
4	35	45
5	14	91
6	14	91
7	21	63
8	21	84
9	28	126
10	35	54
11	21	47
12	28	63
13	21	210
14	21	63
15	7	91
16	14	98
17	14	112
18	21	40
19	56	20
20	28	27
21	7	60
SUBTOTAL		1430
20% CONTINGENCY		286
TOTAL		1716

PROJECT NO.	YEAR	SHEET NO.	
48002-4228-04	2015	2	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

NOTE:  
WALL REPLACEMENT QUANTITIES SHOWN IN TABLE ARE FOR INFORMATION ONLY. PAYMENT FOR CULVERT WALL REPAIR SHALL BE MADE UNDER ITEM NOS. 604-10.09 AND 604-10.18.

- ① INCLUDES THE COST OF ALL LABOR AND MATERIALS FOR FURNISHING, HAULING, PLACING AND COMPACTING BORROW MATERIAL AT BRIDGE NO. 48-SR21-7.61 ON THE EXISTING ROADWAY SIDE SLOPES AS NECESSARY TO ACCOMMODATE THE APPROACH GUARDRAIL AND ROADWAY WIDENING, AS REQUIRED BY THE ENGINEER, IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 203. COST WILL INCLUDE 3" THICKNESS OF TOPSOIL ON NEW FILL AREAS. THE ENGINEER MAY INCREASE, DECREASE OR ELIMINATE THE QUANTITY FOR THIS ITEM.
- ② INCLUDES THE COST OF ALL LABOR AND MATERIALS FOR FURNISHING AND INSTALLING THE TEMPORARY SILT FENCE WHERE LOCATED BY THE ENGINEER, AND REMOVAL UPON PROJECT COMPLETION. SEE STD. DWGS. EC-STR-3C AND EC-STR-3E. THE ENGINEER MAY INCREASE, DECREASE FOR ELIMINATE THE QUANTITY FOR THIS ITEM. SEE SUBSECTION 209.07 OF THE SPECIFICATIONS FOR MAINTENANCE REPLACEMENT.
- ③ INCLUDES COST OF LABOR AND MATERIALS TO PLACE LISTED MATERIAL FOR ROADWAY WIDENING OR OTHER PURPOSES AS DIRECTED BY ENGINEER IN THE FIELD. THE QUANTITY MAY BE INCREASED, DECREASED, OR ELIMINATED BY THE ENGINEER.
- ④ INCLUDES ALL COSTS ASSOCIATED WITH COLD PLANING EXISTING ASPHALT PAVEMENT ON THE BRIDGE APPROACHES AT BRIDGE NO. 48-SR21-7.61. FOR NOTES AND DETAILS, SEE DWG. NO. BR-111-106.
- ⑤ INCLUDES ALL COSTS OF LABOR, MATERIALS AND EQUIPMENT TO PROVIDE NEW THIN CONCRETE OVERLAY AT SIDEWALK AREA USING EUCCO RE-COVER OR APPROVED EQUAL. FOR DETAILS, SEE DWG. NO. BR-111-106.
- ⑥ INCLUDES ALL COSTS ASSOCIATED WITH SPALL REPAIRS USING HIGH EARLY STRENGTH CONCRETE AT FIELD DESIGNATED LOCATIONS. FOR NOTES AND DETAILS, SEE DWG. NO. BR-111-105.
- ⑦ INCLUDES COST OF ALL LABOR AND MATERIALS FOR FORMING AND PLACING HIGH EARLY STRENGTH CONCRETE IN THE TOP CULVERT SLAB AND WALL REPAIR AT BRIDGE NO. 48-SR21-7.61. FOR NOTES AND DETAILS, SEE DWG. NOS. BR-111-97 THRU BR-111-101. THIS ITEM ALSO INCLUDES COST TO FILL EXISTING SHOULDER VOIDS AT NW, SW AND SE CORNERS OF BRIDGE AS SHOWN ON DWG. NOS. BR-111-94 AND BR-111-102 THRU BR-111-104.
- ⑧ INCLUDES COST OF ALL LABOR, MATERIALS AND EQUIPMENT TO REMOVE DESIGNATED PORTION OF CULVERT TOP SLAB AND FIELD DESIGNATED PORTIONS OF CULVERT WALLS. FOR NOTES AND DETAILS, SEE DWG. NOS. BR-111-97, BR-111-98 AND BR-111-101.
- ⑨ INCLUDES ALL COSTS FOR REMOVING EXISTING ASPHALT SURFACE FROM BRIDGE END TO BRIDGE END AT BRIDGE NO. 48-SR21-7.61. FOR NOTES, DETAILS AND APPROXIMATE DEPTHS, SEE DWG. NOS. BR-111-97, BR-111-98 AND BR-111-106.
- ⑩ INCLUDES COST OF ALL REINFORCING STEEL REQUIRED TO COMPLETE REPAIRS AS SHOWN ON THESE PLANS.
- ⑪ INCLUDES ALL COSTS TO PERFORM FULL DEPTH REPAIRS AT BRIDGE NO. 48-SR21-7.61. SEE DWG. NO. BR-111-105 FOR DETAILS.
- ⑫ INCLUDES ALL COSTS TO PERFORM PARTIAL DEPTH CONCRETE REPAIRS AT BRIDGE NO. 48-SR21-7.61. SEE DECK REPAIR NOTES ON DWG. NO. BR-111-105.
- ⑬ INCLUDES ALL COSTS ASSOCIATED WITH SPALL REPAIRS USING POLYMER MODIFIED CEMENTITIOUS PATCHING MATERIAL AT FIELD DESIGNATED LOCATIONS AT BRIDGE NO. 48-SR21-7.61. THE ENGINEER MAY INCREASE, DECREASE OR ELIMINATE THE QUANTITY FOR THIS ITEM. FOR NOTES AND DETAILS, SEE DWG. NO. BR-111-105.

- ⑭ INCLUDES THE COST OF ALL LABOR AND MATERIALS TO EPOXY INJECT CRACKS IN BOX CULVERT WALLS AS DIRECTED IN THE FIELD BY THE ENGINEER. FOR NOTES AND DETAILS, SEE DWG. NO. BR-111-106.
- ⑮ INCLUDES THE COST OF ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS TO FACILITATE CULVERT WALL REPAIRS WITH PHASED CONSTRUCTION IN ORDER TO KEEP THE CONSTRUCTION DRY AND MAINTAIN FLOW THROUGH THE BARRELS NOT BEING CONCURRENTLY REPAIRED. THE REPAIRS SHALL NOT BLOCK FLOW THROUGH MORE THAN THREE BARRELS AT ANY GIVEN TIME. ALL WORK SHALL MEET THE FULL APPROVAL OF THE ENGINEER FROM TDOT.
- ⑯ INCLUDES THE COST OF LABOR AND MATERIALS FOR PLACING BRIDGE DECK SEALANT BETWEEN GUTTERLINES FROM BRIDGE END TO BRIDGE END AT BRIDGE NO. 48-SR21-7.61. FOR NOTES AND DETAILS, SEE DWG. NOS. BR-111-97, BR-111-98 AND BR-111-106.
- ⑰ INCLUDES COST OF INSTALLING NEW GUARDRAIL COMPONENTS AT BRIDGE NO. 48-SR21-7.61. THE CONTRACTOR SHALL PROVIDE THE SHAPE CALLED FOR ON DRAWING NO. BR-111-94, OR THE STD. S-GR SERIES DRAWINGS, AS APPLICABLE.
- ⑱ INCLUDES ALL COSTS TO FURNISH AND INSTALL THE GUARDRAIL END TERMINALS THAT MEET THE NCHRP CRASH CRITERIA. TERMINAL-ET-2000-LET AND THE SEQUENTIAL KINKING TERMINAL-SKT. FOR LOCATIONS, SEE DWG. NO. BR-111-94.
- ⑲ INCLUDES ALL COSTS FOR FURNISHING AND INSTALLING PORTABLE DELINEATORS MOUNTED ON THE INTERCONNECTED PORTABLE CONCRETE BARRIER RAIL. FOR NOTES AND DETAILS, SEE STD. DWG. NOS. T-WZ-32, T-WZ-34 AND T-WZ-35. FOR LOCATIONS, SEE TRAFFIC CONTROL SHEET NO. 4.
- ㉑ INCLUDES ALL COSTS OF LABOR AND MATERIALS TO INSTALL NEW PERMANENT IMPACT ATTENUATOR AT NW CORNER OF BRIDGE. THE ATTENUATOR SHALL CONFORM TO NCHRP 350 TL-3 AND SHALL BE A "TRACC" ATTENUATOR OR APPROVED EQUAL. FOR LOCATION, SEE DWG. NO. BR-111-94. THIS ITEM ALSO INCLUDES ALL COSTS TO INSTALL NEW REINFORCED CONCRETE FOUNDATION PAD AS REQUIRED BY THE MANUFACTURER.
- ㉒ THIS ITEM SHALL BE A PORTABLE ENERGY ABSORBING TERMINAL MEETING THE REQUIREMENTS OF NCHRP 350 FOR TEST LEVEL 3. EXAMPLES WOULD BE A QUAD-GUARD, A REACT 350 OR A TRACC. THE PAY ITEM WILL INCLUDE FURNISHING AND INSTALLING ALL COMPONENTS AS LISTED ON THE MANUFACTURER'S BILL OF MATERIALS, SHOP DRAWINGS OF THE PORTABLE ENERGY TERMINALS MUST BE SUBMITTED TO AND APPROVED BY THE DIVISION OF STRUCTURES PRIOR TO INSTALLATION. THE CONTRACTOR SHALL BE PAID FOR A MAXIMUM OF TWO (2) ENERGY ABSORBING TERMINALS, NCHRP 350, TL 3 WHICH SHALL BE RELOCATED AS NECESSARY.
- ㉓ INCLUDES ALL COSTS ASSOCIATED WITH THE INSTALLATION AND MAINTENANCE OF SIGN PANELS, SHEETING AND SUPPORTS.
- ㉔ THE TRAFFIC SIGNAL SYSTEM SHALL BE SPAN WIRE MOUNTED. ONE MICROWAVE DETECTION AND ONE LOOP DETECTION ARE REQUIRED EACH APPROACH.
- ㉕ INCLUDES ALL COSTS OF ALL LABOR AND MATERIALS FOR FURNISHING AND INSTALLING THE LISTED ITEMS WHERE LOCATED BY THE ENGINEER, IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. THE ENGINEER MAY INCREASE, DECREASE OR ELIMINATE THE QUANTITY FOR THIS ITEM.
- ㉖ THE ENGINEER MAY INCREASE, DECREASE OR ELIMINATE THE QUANTITY FOR THIS ITEM.



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

ESTIMATED QUANTITIES

SR21 OVER REELFOOT LAKE SPILLWAY  
BRIDGE NO. 48-SR21-7.61

LAKE COUNTY  
2015



DESIGNED BY S. F. HARPER DATE FEBRUARY 2012  
 DRAWN BY C. W. THOMAS DATE FEBRUARY 2012  
 SUPERVISED BY J. H. RUELLELL DATE FEBRUARY 2012  
 CHECKED BY A. J. KHAIRI DATE FEBRUARY 2012 TN D.O.T. ENGINEERING SUPERVISOR M. LAWSON



TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	2015	48002-4228-04	3A

PROJECT COMMITMENTS			
COMMITMENT ID	SOURCE DIVISION	DESCRIPTION	STA./LOCATION
EDHZ001	ENVIRONMENTAL DIVISION, HAZARDOUS MATERIALS	TO MINIMIZE THE RISK TO CONSTRUCTION WORKERS, TDOT IS REQUIRED TO ENSURE THE REMOVAL OF ASBESTOS CONTAINING MATERIAL (ACM) FROM BRIDGES THAT ARE BEING DEMOLISHED OR REHABILITATED. IF THE ACM WILL BE DISTURBED DURING REPAIR ACTIVITIES, ASBESTOS ABATEMENT MUST BE COMPLETED PRIOR TO ANY DEMOLITION ACTIVITIES. ABATEMENT SHOULD BE ACCOMPLISHED PER SP202ACM SPECIAL PROVISION REGARDING REMOVAL OF ASBESTOS CONTAINING MATERIALS. BRIDGE #48SR0210003 HAS ACM IN THE BLACK FELT-LIKE MATERIAL BETWEEN THE BRIDGE RAILS AND RAIL POSTS, AND IN THE BLACK WRAP ON THE PIPE ALONG THE SOUTH SIDE OF THE BRIDGE.	BLACK FELT-LIKE MATERIAL BETWEEN THE BRIDGE RAILS AND RAIL POSTS, AND IN THE BLACK WRAP ON THE PIPE ALONG THE SOUTH SIDE OF THE BRIDGE

9/15/2015 1:34:26 PM  
 WORKSPACE: TD01 Bridge - TD01 - Bridge Repair - over - Resubmit - Resubmit\03A-Sheet\_3A.dgn



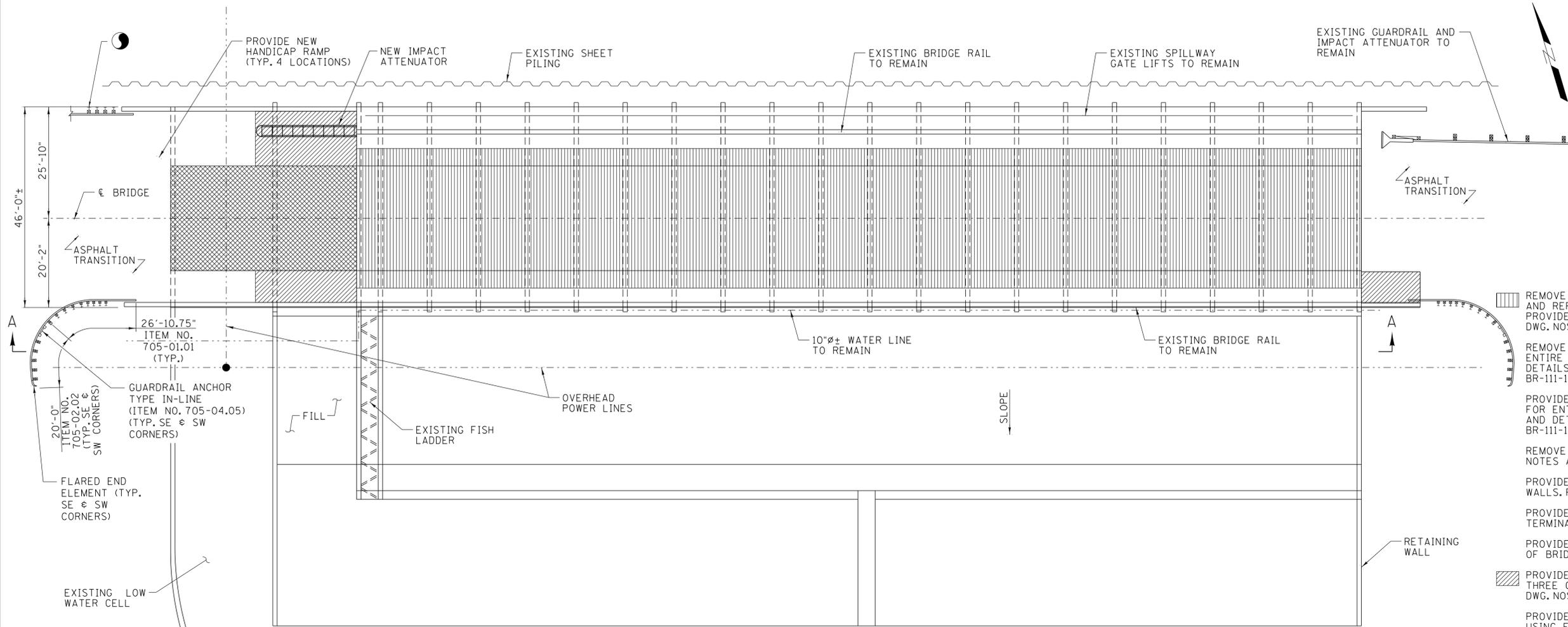
**UNOFFICIAL SET**  
 NOT FOR BIDDING



STATE OF TENNESSEE  
 DEPARTMENT OF TRANSPORTATION  
 BUREAU OF PLANNING AND DEVELOPMENT  
  
**PROJECT COMMITMENTS**



PROJECT NO.	YEAR	SHEET NO.	
48002-4228-04	2015		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

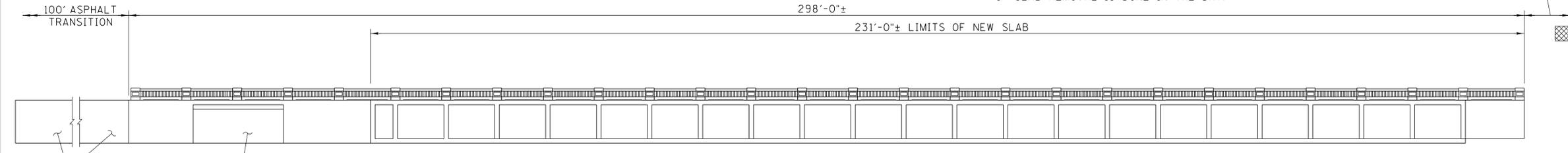


- SCOPE OF WORK**
- REMOVE PORTION OF CULVERT SLAB FOR ALL 22 BARRELS AND REPLACE WITH NEW CONTINUOUS CONCRETE SLAB AND PROVIDE NEW DECK DRAINS. FOR NOTES AND DETAILS, SEE DWG. NOS. BR-111-97 THRU BR-111-101.
  - REMOVE EXISTING DETERIORATED ASPHALT OVERLAY FOR ENTIRE LENGTH AND WIDTH OF BRIDGE. FOR NOTES AND DETAILS, SEE DWG. NOS. BR-111-97, BR-111-98, AND BR-111-101.
  - PROVIDE NEW 4" ASPHALT OVERLAY WITH MEMBRANE SEAL FOR ENTIRE LENGTH AND WIDTH OF BRIDGE. FOR NOTES AND DETAILS, SEE DWG. NOS. BR-111-97, BR-111-98, AND BR-111-106.
  - REMOVE AND REPLACE PORTIONS OF CULVERT WALLS. FOR NOTES AND DETAILS, SEE DWG. NO. BR-111-101.
  - PROVIDE EPOXY INJECTION TO REPAIR CRACKS IN CULVERT WALLS. FOR NOTES AND DETAILS, SEE DWG. NO. BR-111-106.
  - PROVIDE NEW APPROACH GUARDRAIL AND GUARDRAIL END TERMINALS AS SHOWN ON DETAILS THIS DRAWING.
  - PROVIDE NEW IMPACT ATTENUATOR AT NORTHWEST CORNER OF BRIDGE.
  - PROVIDE NEW HANDICAP ACCESSIBLE SIDEWALK RAMP AT THREE CORNERS OF BRIDGE. FOR NOTES AND DETAILS, SEE DWG. NOS. BR-111-102 THRU BR-111-104.
  - PROVIDE THIN CONCRETE OVERLAY TO SIDEWALK AREA USING EUCCO RE-COVER. FOR NOTES, SEE DWG. NO. BR-111-106.
  - FILL EXISTING VOID IN SHOULDER AT NORTHEAST, NORTHWEST, AND SOUTHWEST CORNERS OF BRIDGE USING REINFORCED CONCRETE. FOR NOTES AND DETAILS, SEE DWG. NOS. BR-111-102 THRU BR-111-104.
  - PROVIDE FULL AND PARTIAL DEPTH DECK REPAIR AT EXISTING WEST APPROACH SLAB. FOR NOTES AND DETAILS, SEE DWG. NO. BR-111-105.
  - PROVIDE SPALL REPAIR AT FIELD DESIGNATED LOCATIONS. FOR NOTES AND DETAILS, SEE DWG. NO. BR-111-105.
  - PROVIDE TRAFFIC CONTROL USING CONCRETE BARRIER RAIL AND SIGNAL LIGHTS. KEEP ONE TRAFFIC LANE OPEN AT ALL TIMES. FOR NOTES AND DETAILS, SEE SHEET NO. 4.
  - PROVIDE 100' ASPHALT TRANSITION AT BOTH ENDS OF BRIDGE. FOR NOTES AND DETAILS, SEE DWG. NO. BR-111-106.

**PLAN**  
SCALE: N.T.S.

UNLESS SLAB REMOVAL IS DONE IN THE DRY, NETTING AND/OR OTHER PRECAUTIONS MUST BE TAKEN TO ENSURE THAT ABSOLUTELY NO DEBRIS SHALL ENTER THE STREAM DURING THE REMOVAL OF THE CULVERT SLAB. (TARP OR PLYWOOD SHALL BE USED ON BAY FLOOR IF SLAB REMOVAL IS DONE IN THE DRY)

ANY REPAIRS DONE TO THE CULVERT WALLS MUST BE CONSTRUCTED IN THE DRY.



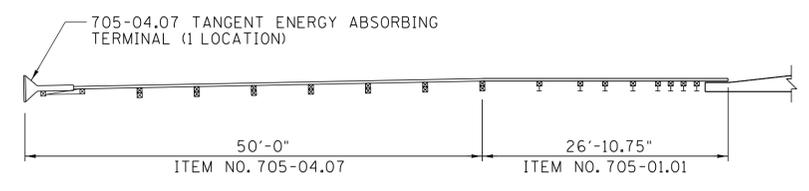
**VIEW A-A**  
SCALE: N.T.S.

**LIST OF REFERENCE DRAWINGS**

DWG. NO.	DESCRIPTION
A-10-96	ORIGINAL PLANS
A-10-97	
A-10-98	
A-10-99	
A-10-100	
A-10-101	
M-106-21	1983 REPAIR PLANS
M-106-22	
M-106-22A	1987 REPAIR PLANS
BR-84-1	2007 REPAIR PLANS
BR-84-2	
BR-84-3	
BR-84-4	
BR-84-5	
BR-84-6	

**LIST OF DRAWINGS**

DWG. NO.	REVISION	DRAWING
BR-111-94		LAYOUT OF BRIDGE TO BE REPAIRED (7.61)
BR-111-95		ESTIMATED QUANTITIES
BR-111-96		GENERAL NOTES
BR-111-97		BRIDGE REPAIR DETAILS
BR-111-98		BRIDGE REPAIR DETAILS
BR-111-99		BRIDGE REPAIR DETAILS
BR-111-100		BRIDGE REPAIR DETAILS
BR-111-101		BRIDGE REPAIR DETAILS
BR-111-102		BRIDGE REPAIR DETAILS
BR-111-103		BRIDGE REPAIR DETAILS
BR-111-104		BRIDGE REPAIR DETAILS
BR-111-105		BRIDGE REPAIR DETAILS
BR-111-106		BRIDGE REPAIR DETAILS



**DETAIL**

ALL DIMENSIONS SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.

**UNOFFICIAL SET**  
NOT FOR BIDDING

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
LAYOUT OF BRIDGE TO BE REPAIRED  
SR21 OVER REELFOOT LAKE SPILLWAY  
BRIDGE NO. 48-SR21-7.61  
LAKE COUNTY  
2015

ALL REFERENCE DRAWINGS TO BE PRINTED WITH THE PLANS

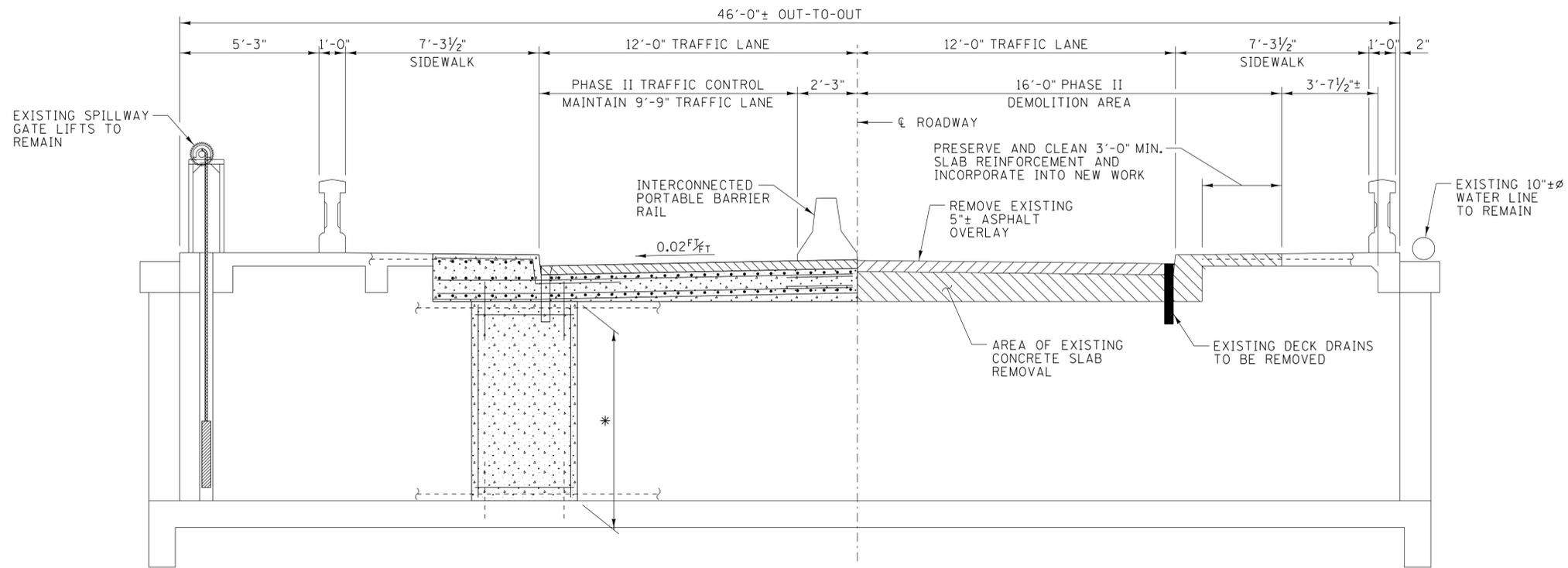
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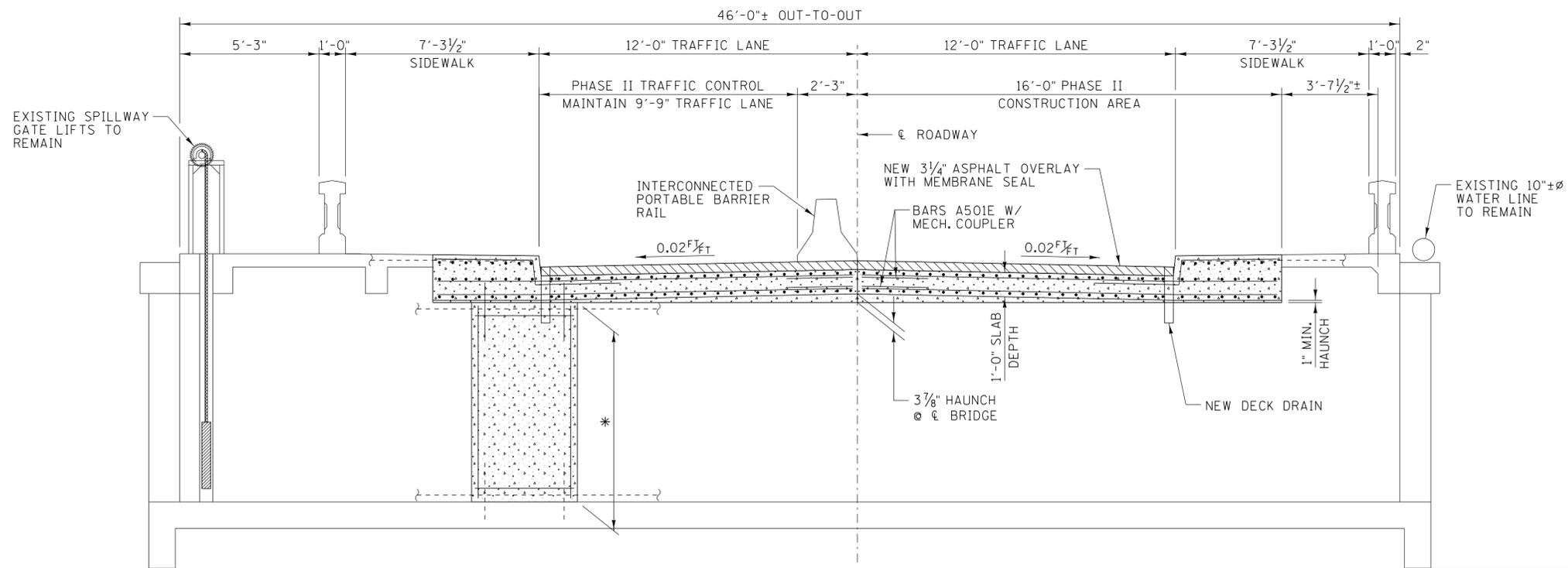
DESIGNED BY: WMM/SFH DATE: FEBRUARY 2012  
DRAWN BY: C. W. THOMAS DATE: FEBRUARY 2012  
SUPERVISED BY: J. H. RUELLELL DATE: FEBRUARY 2012  
CHECKED BY: A. J. KHAIRI DATE: FEBRUARY 2012  
TN D.O.T. ENGINEERING SUPERVISOR: M. LAWSON



PROJECT NO.	YEAR	SHEET NO.	
48002-4228-04	2015		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



PHASE II DEMOLITION  
SCALE: 3/8" = 1'-0"



PHASE II CONSTRUCTION  
SCALE: 3/8" = 1'-0"

\* NOTE:  
LIMITS OF CULVERT WALL REMOVAL AND REPLACEMENT VARIES. MIKE LAWSON FROM TDOT SHALL DETERMINE EXACT LIMITS OF WALL REPLACEMENT IN THE FIELD.

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

BRIDGE REPAIR DETAILS

SR21 OVER REELFOOT LAKE SPILLWAY  
BRIDGE NO. 48-SR21-7.61

LAKE COUNTY  
2015

**UNOFFICIAL SET**  
NOT FOR BIDDING

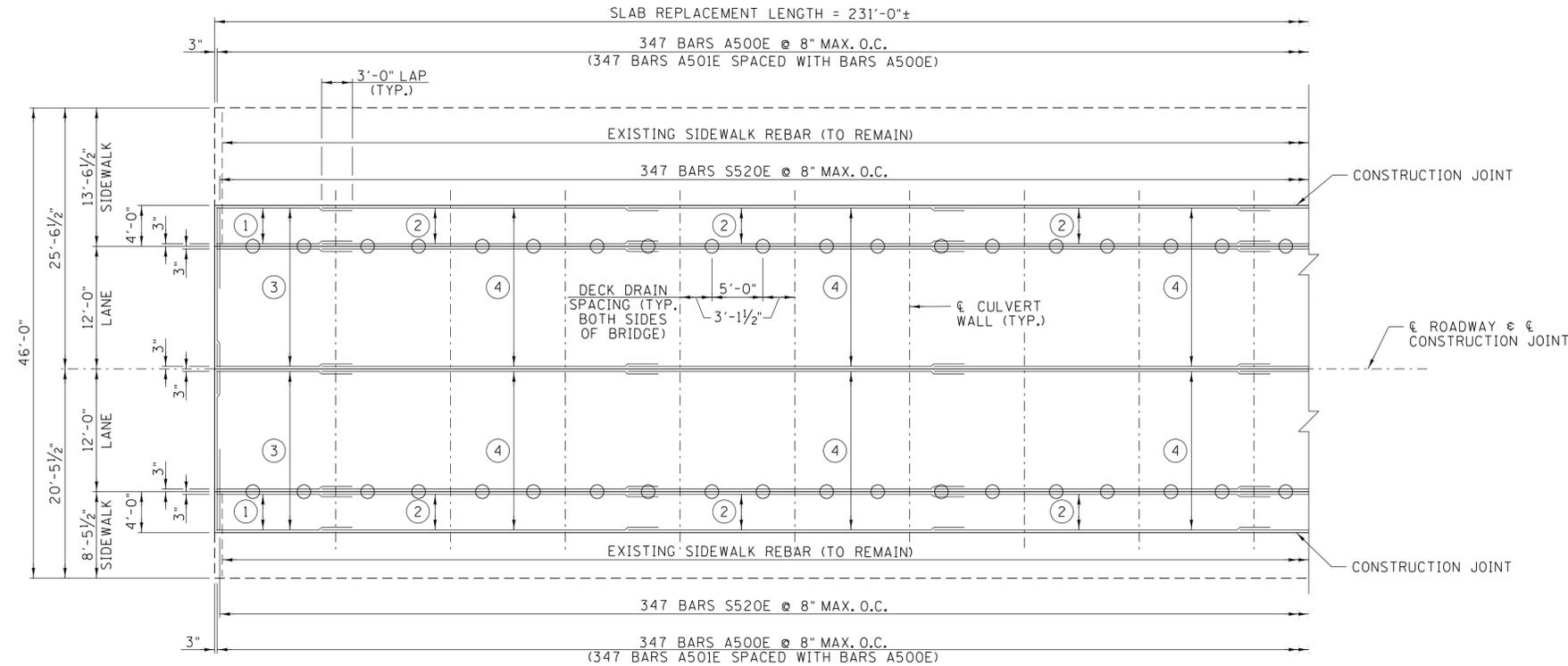
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DESIGNED BY: S. F. HARPER DATE: FEBRUARY 2012  
DRAWN BY: C. W. THOMAS DATE: FEBRUARY 2012  
SUPERVISED BY: J. H. RUDELL DATE: FEBRUARY 2012  
CHECKED BY: A. J. KHAIRI DATE: FEBRUARY 2012

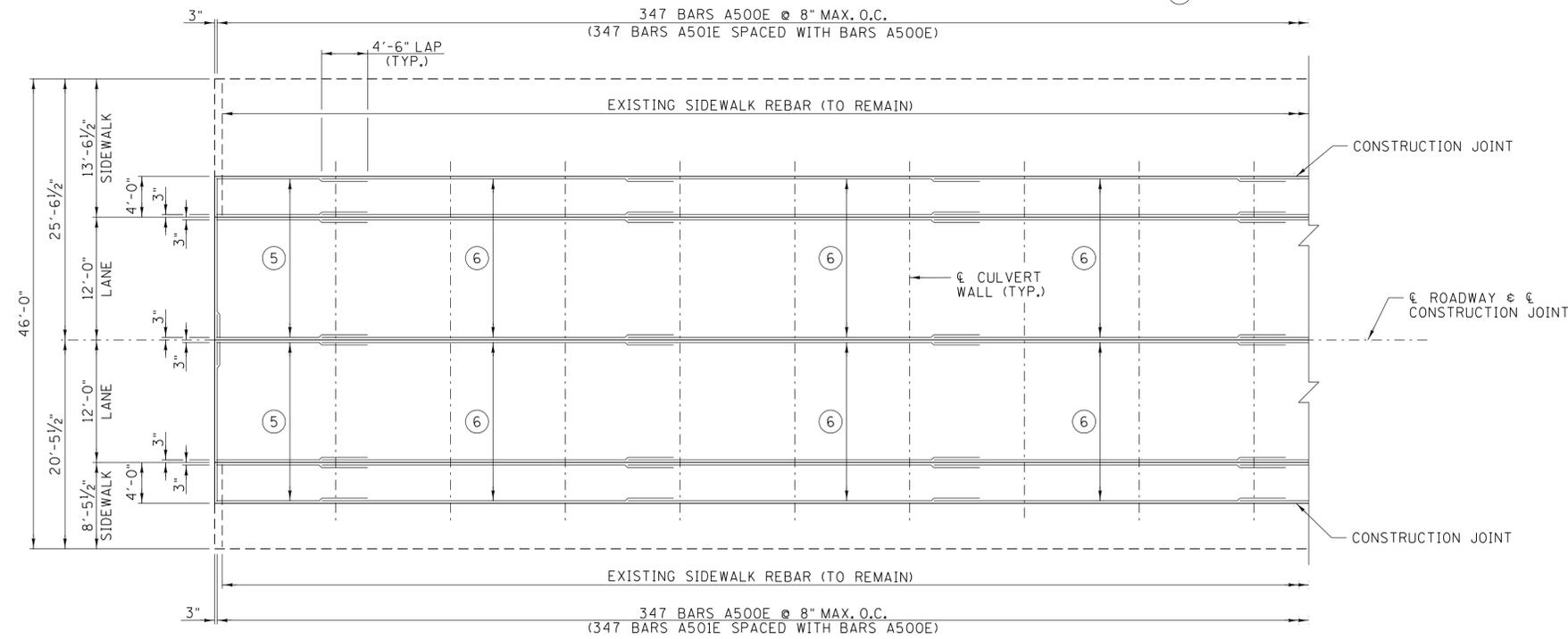
TN D.O.T. ENGINEERING SUPERVISOR M. LAWSON

PROJECT NO.	YEAR	SHEET NO.	
48002-4228-04	2015		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



**SLAB PLAN**  
(TOP MAT OF REINFORCING STEEL)  
SCALE: 1/8" = 1'-0"

- ① 8 BARS A511E @ 6" MAX. O.C. LOCATED AT TOP OF SIDEWALK
- ② 8 BARS A510E @ 6" MAX. O.C.
- ③ 32 BARS A601E @ 6" MAX. O.C.
- ④ 32 BARS A600E @ 6" MAX. O.C.

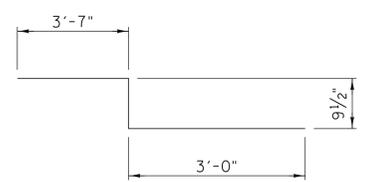


**SLAB PLAN**  
(BOTTOM MAT OF REINFORCING STEEL)  
SCALE: 1/8" = 1'-0"

- ⑤ 32 BARS A701E @ 6" MAX. O.C.
- ⑥ 32 BARS A700E @ 6" MAX. O.C.

BILL OF STEEL							
SLAB REINFORCEMENT							
BARS	SIZE	NO. REQ'D	BENDING DIMENSIONS				LENGTH
			A	B	C	D	
A500E	5	1388					15'-8"
*A501E	5	1388					2'-8"
A510E	5	112					30'-0"
A511E	5	32					22'-6"
A600E	6	448					30'-0"
A601E	6	128					22'-6"
A700E	7	448					30'-0"
A701E	7	128					28'-6"
S520E	5	694					7'-4 1/2"

NOTES:  
ALL BAR DIMENSIONS ARE OUT-TO-OUT.  
ALL DIMENSIONS SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO FABRICATION.  
BARS ENDING IN "E" SHALL BE EPOXY COATED.  
NUMBER OF BARS IS FOR ENTIRE BRIDGE.  
\* THREADED FOR MECHANICAL COUPLER.



BARS S520E

NO ORIGINAL CONSTRUCTION PLANS PROVIDED.  
ALL DIMENSIONS SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

BRIDGE REPAIR DETAILS

**UNOFFICIAL SET**  
NOT FOR BIDDING

SR21 OVER REELFOOT LAKE SPILLWAY  
BRIDGE NO. 48-SR21-7.61

LAKE COUNTY  
2015

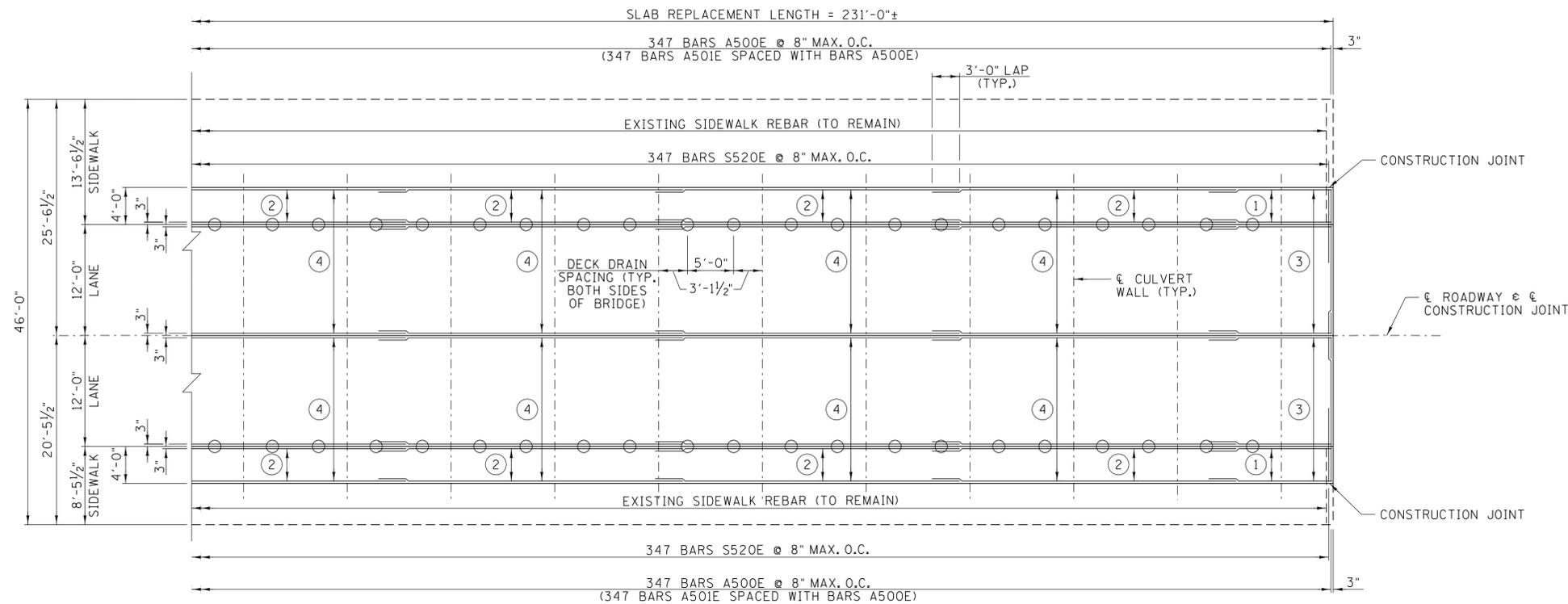
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DESIGNED BY: J. G. S./S. F. H. DATE FEBRUARY 2012  
DRAWN BY: C. W. THOMAS DATE FEBRUARY 2012  
SUPERVISED BY: J. H. RUDELL DATE FEBRUARY 2012  
CHECKED BY: A. J. KHAIRI DATE FEBRUARY 2012

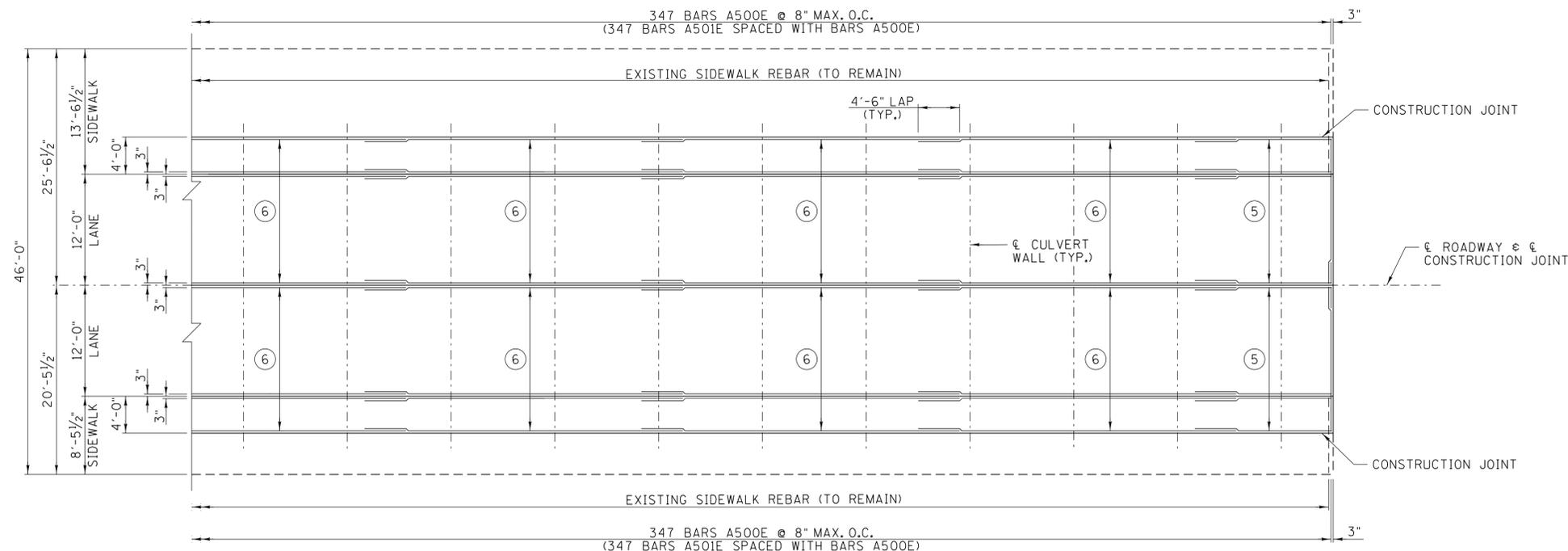
TN D.O.T. ENGINEERING SUPERVISOR M. LAWSON

PROJECT NO.	YEAR	SHEET NO.	
48002-4228-04	2015		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



**SLAB PLAN**  
(TOP MAT OF REINFORCING STEEL)  
SCALE: 1/8" = 1'-0"

- ① 8 BARS A511E @ 6" MAX. O.C. LOCATED AT TOP OF SIDEWALK
- ② 8 BARS A510E @ 6" MAX. O.C.
- ③ 32 BARS A601E @ 6" MAX. O.C.
- ④ 32 BARS A600E @ 6" MAX. O.C.



**SLAB PLAN**  
(BOTTOM MAT OF REINFORCING STEEL)  
SCALE: 1/8" = 1'-0"

- ⑤ 32 BARS A701E @ 6" MAX. O.C.
- ⑥ 32 BARS A700E @ 6" MAX. O.C.

**UNOFFICIAL SET**  
NOT FOR BIDDING

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

BRIDGE REPAIR DETAILS

SR21 OVER REELFOOT LAKE SPILLWAY  
BRIDGE NO. 48-SR21-7.61

LAKE COUNTY  
2015

9/15/2015 1:34:29 PM  
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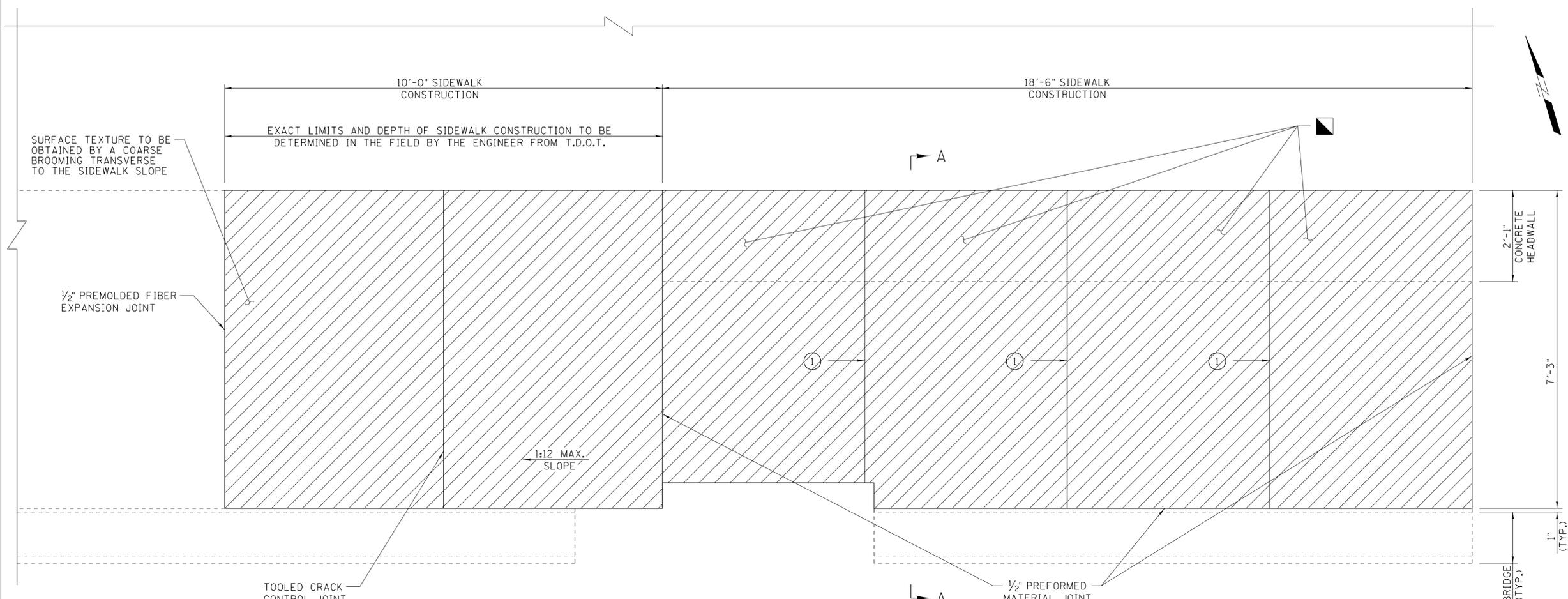


DESIGNED BY: J. G. S./S. F. H. DATE: FEBRUARY 2012  
 DRAWN BY: C. W. THOMAS DATE: FEBRUARY 2012  
 SUPERVISED BY: J. H. RUDELL DATE: FEBRUARY 2012  
 CHECKED BY: A. J. KHAIRI DATE: FEBRUARY 2012

TN D.O.T. ENGINEERING SUPERVISOR M. LAWSON

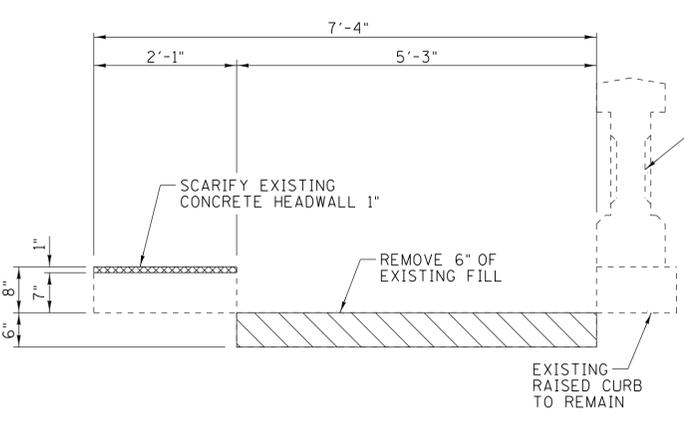


PROJECT NO.	YEAR	SHEET NO.	
48002-4228-04	2015		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

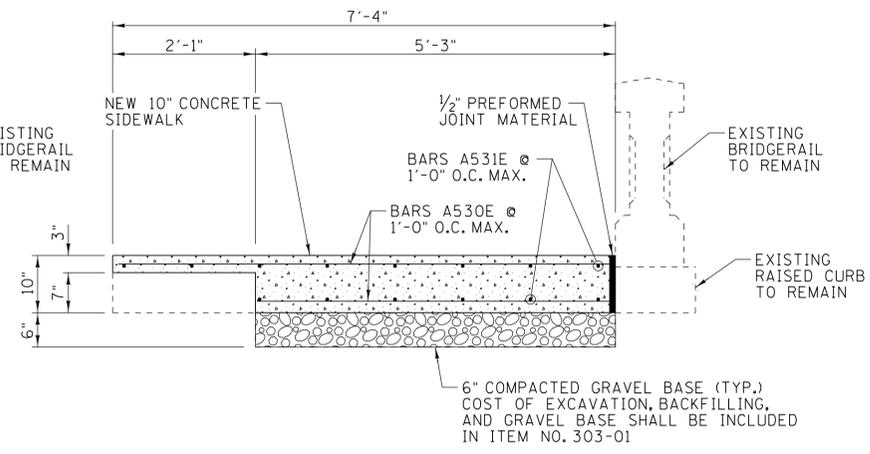


PLAN  
(SHOWN AT SW CORNER)  
SCALE: 3/4" = 1'-0"

- NEW SIDEWALK CONSTRUCTION AREA
- TOOLED CRACK CONTROL JOINTS AT 4'-7 1/2" ± O.C.
- SIDEWALK SECTIONS ADJACENT TO BRIDGE SIDEWALKS SHALL MATCH THE LONGITUDINAL GRADE AND CROSS-SLOPE OF THE NEW SIDEWALKS ON THE BRIDGE.



SECTION A-A (PHASE II DEMOLITION)  
SCALE: 3/4" = 1'-0"



SECTION A-A (PHASE II CONSTRUCTION)  
SCALE: 3/4" = 1'-0"

BILL OF STEEL							
SOUTHWEST SIDEWALK REINFORCEMENT							
BARS	SIZE	NO. REQ'D	BENDING DIMENSIONS				LENGTH
			A	B	C	D	
A530E	5	58					7'-0"
A531E	5	14					28'-2"

NOTES:  
ALL BAR DIMENSIONS ARE OUT-TO-OUT.  
ALL DIMENSIONS SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO FABRICATION.  
BARS ENDING IN "E" TO BE EPOXY COATED.  
NUMBER OF BARS IS FOR SOUTHWEST SIDEWALK ONLY.

NOTES:  
REQUIRED LENGTH OF SIDEWALK HAS BEEN ESTIMATED AT 10'-0". FINAL SIDEWALK LENGTH SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER FROM T.D.O.T.

THE CONTRACTOR SHALL TRIM NEW REINFORCEMENT IN THE FIELD AS REQUIRED.

COST OF ALL LABOR AND MATERIALS TO CONSTRUCT NEW SIDEWALKS INCLUDING CLASS "A" CONCRETE, 1/2" PREMOLDED FIBER JOINT, AND SURFACE TEXTURING SHALL BE INCLUDED IN ITEM NO. 604-10.09, CONCRETE, C.Y.

COST OF ALL REINFORCING STEEL SHALL BE INCLUDED IN ITEM NO. 604-10.18, REINFORCING STEEL (REPAIRS), LB.

COST OF EXCAVATION, BACKFILLING, COMPACTION, AND GRAVEL BASE SHALL BE INCLUDED IN ITEM NO. 303-01, MINERAL AGGREGATE, TYPE "A" BASE, GRADING D, TON.

ALL WORK SHALL MEET THE FULL APPROVAL OF THE ENGINEER FROM T.D.O.T.

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

BRIDGE REPAIR DETAILS

SR21 OVER REELFOOT LAKE SPILLWAY  
BRIDGE NO. 48-SR21-7.61

LAKE COUNTY  
2015

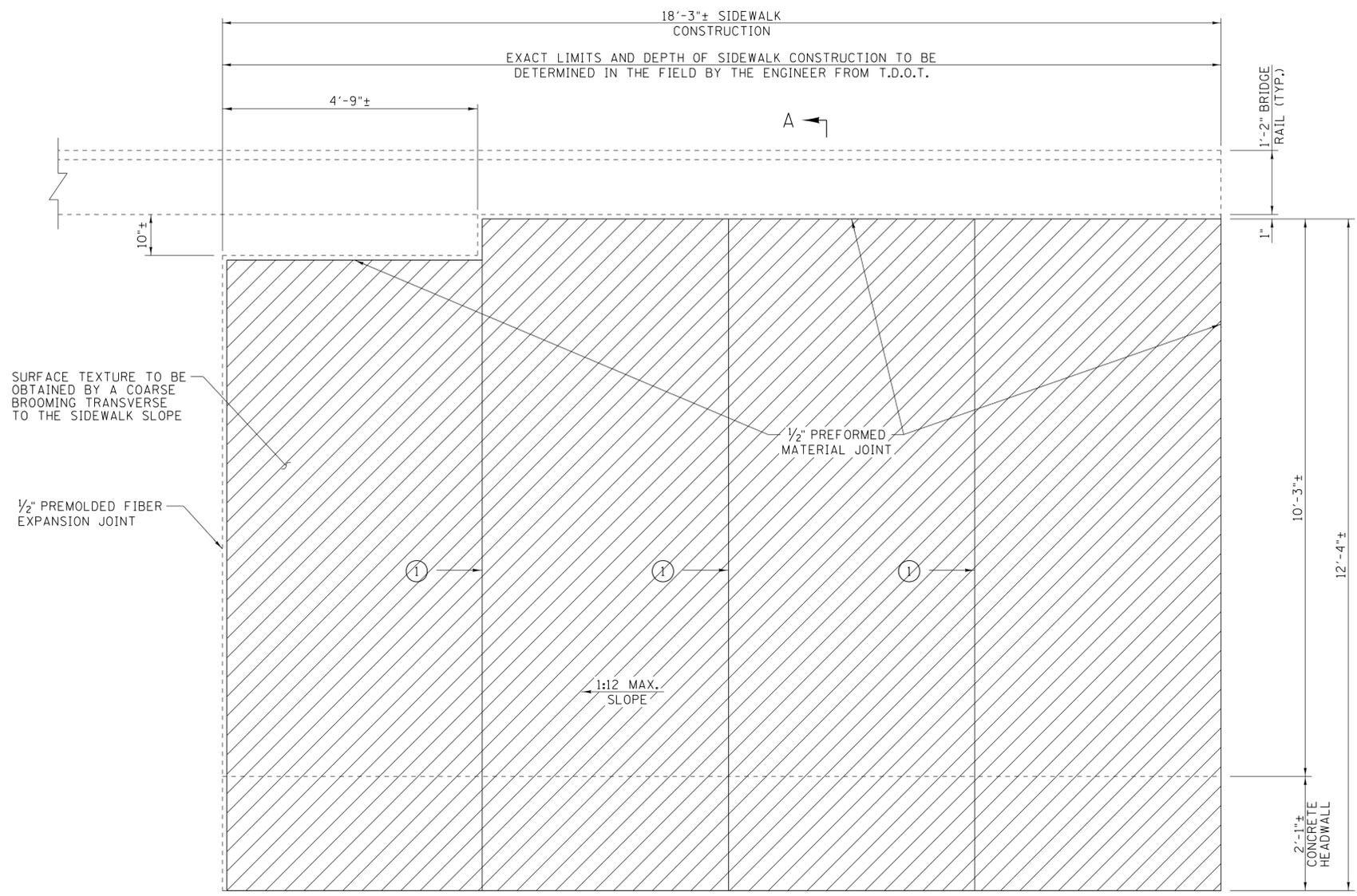
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NOT FOR BIDDING

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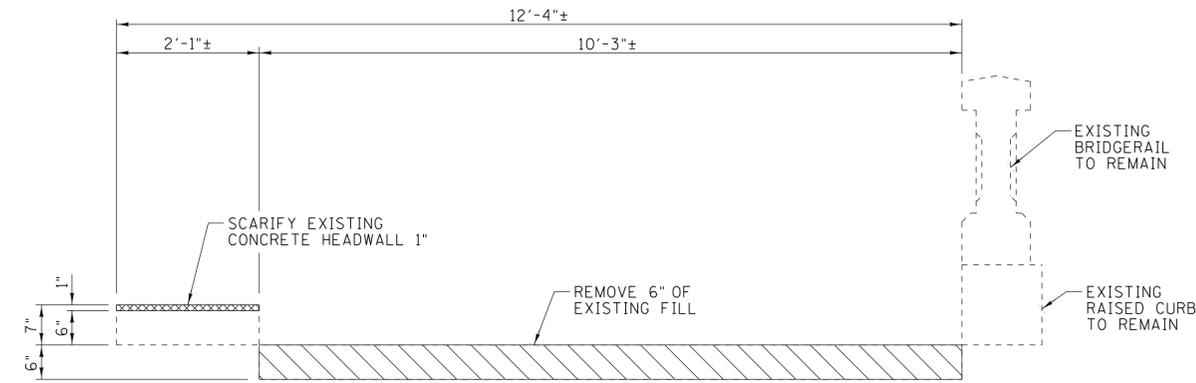
DESIGNED BY: J. G. S./S. F. H. DATE FEBRUARY 2012  
DRAWN BY: C. W. THOMAS DATE FEBRUARY 2012  
SUPERVISED BY: J. H. RUDELL DATE FEBRUARY 2012  
CHECKED BY: A. J. KHARI DATE FEBRUARY 2012  
TN D.O.T. ENGINEERING SUPERVISOR M. LAWSON

PROJECT NO.	YEAR	SHEET NO.	
48002-4228-04	2015		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

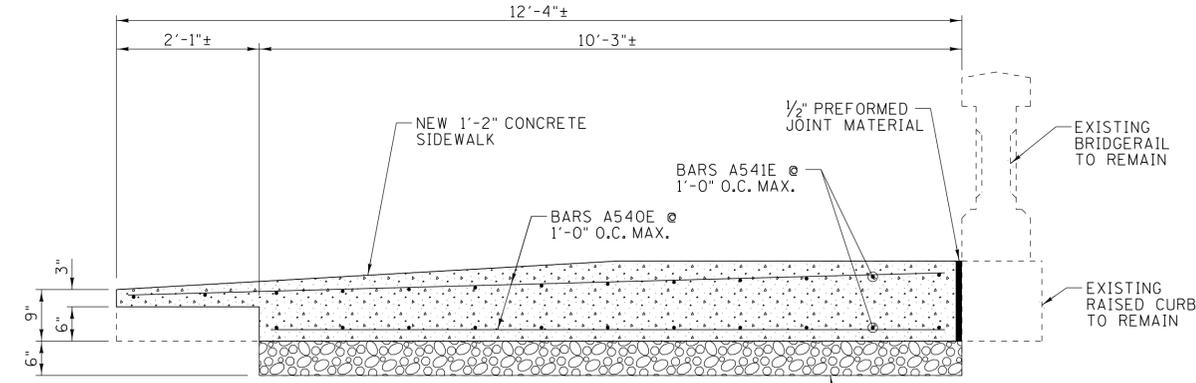


PLAN  
(SHOWN AT NW CORNER)  
SCALE: 3/4" = 1'-0"

- NEW SIDEWALK CONSTRUCTION AREA
- ① TOOLED CRACK CONTROL JOINTS AT 4'-7"±



SECTION A-A (PHASE I DEMOLITION)  
SCALE: 3/4" = 1'-0"



SECTION A-A (PHASE I CONSTRUCTION)  
SCALE: 3/4" = 1'-0"

6" COMPACTED GRAVEL BASE (TYP.)  
COST OF EXCAVATION, BACKFILLING, AND GRAVEL BASE SHALL BE INCLUDED IN ITEM NO. 303-01

BILL OF STEEL							
NORTHWEST SIDEWALK REINFORCEMENT							
BARS	SIZE	NO. REQ'D	BENDING DIMENSIONS				LENGTH
			A	B	C	D	
A540E	5	38					11'-11"
A541E	5	24					17'-10"

NOTES:  
ALL BAR DIMENSIONS ARE OUT-TO-OUT.  
ALL DIMENSIONS SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO FABRICATION.  
BARS ENDING IN "E" TO BE EPOXY COATED.  
NUMBER OF BARS IS FOR NORTHWEST SIDEWALK ONLY.

NOTES:  
REQUIRED LENGTH OF SIDEWALK HAS BEEN ESTIMATED AT 10'-0". FINAL SIDEWALK LENGTH SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER FROM TDOT.

THE CONTRACTOR SHALL TRIM NEW REINFORCEMENT IN THE FIELD AS REQUIRED.

COST OF ALL LABOR AND MATERIALS TO CONSTRUCT NEW SIDEWALKS INCLUDING CLASS "A" CONCRETE, 1/2" PREFORMED FIBER JOINT, AND SURFACE TEXTURING SHALL BE INCLUDED IN ITEM NO. 604-10.09, CONCRETE, C.Y.

COST OF ALL REINFORCING STEEL SHALL BE INCLUDED IN ITEM NO. 604-10.18, REINFORCING STEEL (REPAIRS), LB.

COST OF EXCAVATION, BACKFILLING, COMPACTION, AND GRAVEL BASE SHALL BE INCLUDED IN ITEM NO. 303-01, MINERAL AGGREGATE, TYPE "A" BASE, GRADING D, TON.

ALL WORK SHALL MEET THE FULL APPROVAL OF THE ENGINEER FROM T.D.O.T.

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

BRIDGE REPAIR DETAILS

SR21 OVER REELFOOT LAKE SPILLWAY  
BRIDGE NO. 48-SR21-7.61

LAKE COUNTY  
2015

UNOFFICIAL SET  
NOT FOR BIDDING

9/15/2015 1:34:30 PM  
 WORKSPACE: T:\01 Bridge - Bridge Repair - over - Reelfoot Lake Drawings\BRC\Final - Resubmit\2- BR-111-103.dgn  
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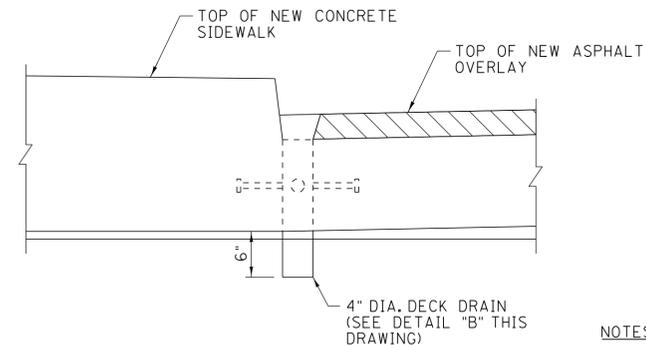


DESIGNED BY: J. G. SMITH DATE FEBRUARY 2012  
 DRAWN BY: J. G. SMITH DATE FEBRUARY 2012  
 SUPERVISED BY: J. H. RUDELL DATE FEBRUARY 2012  
 CHECKED BY: A. J. KHAYR DATE FEBRUARY 2012

TN D.O.T. ENGINEERING SUPERVISOR M. LAWSON

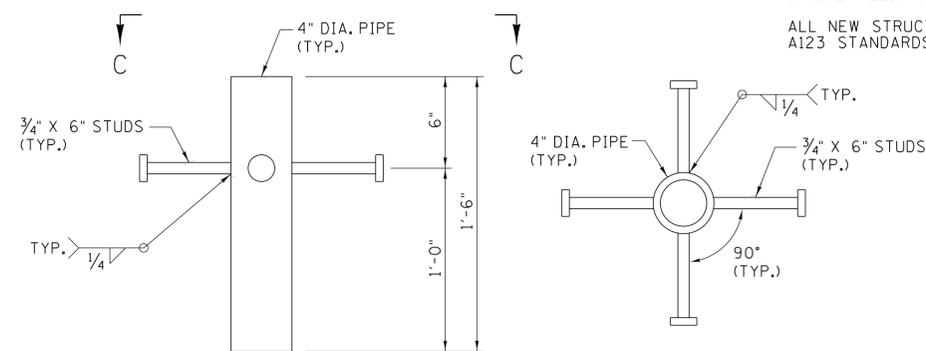


PROJECT NO.	YEAR	SHEET NO.	
48002-4228-04	2015		
REVISIONS			
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SECTION AT DECK DRAIN  
SCALE: 1" = 1'-0"

NOTES:  
 COST OF DECK DRAIN ASSEMBLIES TO BE INCLUDED IN ITEM NO. 604-10.09, CONCRETE, C.Y.  
 STRUCTURAL STEEL FOR PIPES SHALL CONFORM TO ASTM A53 GRADE 35.  
 STRUCTURAL STEEL FOR STUDS SHALL CONFORM TO AASHTO M169 GRADE 60.  
 WELDING SHALL BE IN ACCORDANCE WITH ANSI/AASHTO/AWS D1.5-2008 BRIDGE WELDING CODE AND THE STANDARD SPECIFICATIONS.  
 ALL NEW STRUCTURAL STEEL SHALL BE GALVANIZED TO ASTM A123 STANDARDS.



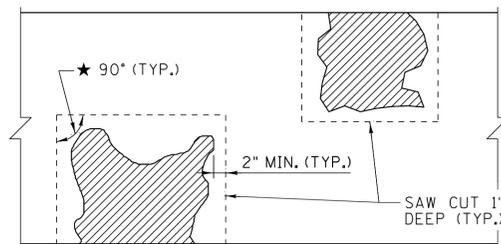
DETAIL "B"  
SCALE: 1/2" = 1'-0"

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

DRAIN DETAILS  
(80 LOCATIONS TOTAL)

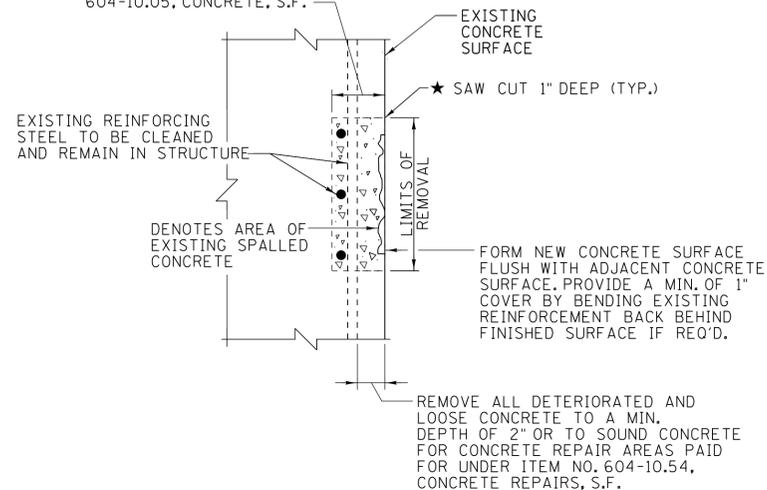
DENOTES AREAS OF EXISTING SPALLED CONCRETE

★ SAW CUT EXISTING CONCRETE 1" DEEP SO AS TO OBTAIN A RECTANGULAR AREA. ALL EXISTING REINFORCEMENT SHALL BE CAREFULLY PRESERVED AND BLAST CLEANED.



SPALL SURFACE REPAIR DETAILS

REMOVE ALL DETERIORATED CONCRETE TO A MIN. DEPTH OF 4" AND A MIN. 3/4" BEHIND THE EXISTING REINFORCING STEEL FOR REPAIR AREAS UNDER ITEM 604-10.05, CONCRETE, S.F.



REMOVE ALL DETERIORATED AND LOOSE CONCRETE TO A MIN. DEPTH OF 2" OR TO SOUND CONCRETE FOR CONCRETE REPAIR AREAS PAID FOR UNDER ITEM NO. 604-10.54, CONCRETE REPAIRS, S.F.

NOTES FOR ITEM NO. 604-10.54;

THE COST OF SAW CUTTING, REMOVING SPALLED OR CRACKED CONCRETE, CLEANING EXPOSED REINFORCING STEEL, PATCHING MATERIAL, LABOR AND ANY MISCELLANEOUS MATERIALS NECESSARY TO COMPLETE THE REPAIRS AS SHOWN SHALL BE INCLUDED IN ITEM NO. 604-10.54, CONCRETE REPAIRS, S.F.

PATCHING MATERIAL SHALL BE A POLYMER-MODIFIED CEMENTITIOUS STRUCTURAL PATCHING VERTICAL AND OVERHEAD MATERIAL. SEE T.D.O.T. QUALIFIED PRODUCTS LIST OPL 13.009, FOR ACCEPTABLE PATCHING MATERIALS.

AFTER CONCRETE REMOVAL OF THE 2" DEPTH HAS TAKEN PLACE, THE ENGINEER SHALL HAVE THE OPTION TO REMOVE ADDITIONAL CONCRETE DEPTH AND SHALL DESIGNATE THIS AREA TO BE REPAIRED AND PAID FOR UNDER ITEM NO. 604-10.05 INSTEAD OF UNDER ITEM NO. 604-10.54.

ITEM NO. 604-10.54 SHALL BE BID SUCH THAT THIS ITEM MAY BE INCREASED, DECREASED, OR ELIMINATED AS DIRECTED BY THE ENGINEER.

ALL AREAS TO BE REPAIRED ARE TO BE MARKED BY THE ENGINEER FROM THE BRIDGE INSPECTION AND REPAIR OFFICE.

NOTES FOR ITEM NO. 604-10.05;

COST OF SAW CUTTING, REMOVING SPALLED OR CRACKED CONCRETE, CLEANING EXPOSED REINFORCING STEEL, CONCRETE, LABOR AND ANY MISCELLANEOUS MATERIALS NECESSARY TO COMPLETE THE REPAIRS AS SHOWN SHALL BE INCLUDED IN ITEM NO. 604-10.05, CONCRETE, S.F.

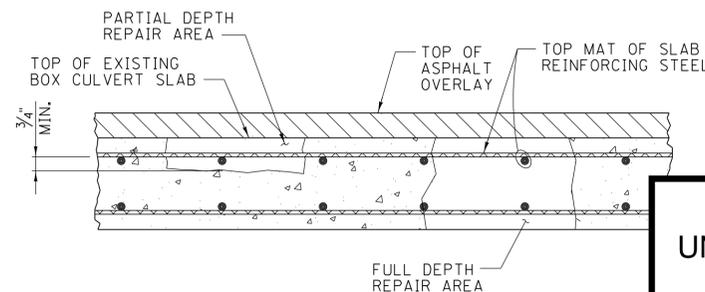
CONCRETE SHALL BE HIGH EARLY STRENGTH CONCRETE, F'C = 3500 PSI AT 28 DAY STRENGTH.

ITEM NO. 604-10.05 SHALL BE BID SUCH THAT THIS ITEM MAY BE INCREASED, DECREASED, OR ELIMINATED AS DIRECTED BY THE ENGINEER.

REMOVE CONCRETE IN ALL PARTIAL DEPTH DELAMINATED AREAS TO A DEPTH OF 3/4" BELOW THE TOP BAR OF THE TOP MAT OF REINFORCING STEEL. ALL REINFORCING STEEL IN AREAS OF DECK REPAIR SHALL BE COMPLETELY CLEANED. AREAS OF CONCRETE REMOVAL SHALL BE DESIGNATED BY PERSONNEL FROM THE BRIDGE REPAIR OFFICE. INSPECTIONS TO DETERMINE AREAS OF DECK REPAIR SHALL BE SCHEDULED WITH THE BRIDGE REPAIR OFFICE AT LEAST THREE (3) DAYS IN ADVANCE. DECK REPAIR WILL BE PAID FOR UNDER ITEM NO. 604-10.50, BRIDGE DECK REPAIR (PARTIAL DEPTH OF SLAB), AND ITEM NO. 604-10.30, BRIDGE DECK REPAIR (FULL DEPTH OF SLAB). DURING PARTIAL DEPTH REPAIRS, SHOULD DETERIORATED CONCRETE BE ENCOUNTERED WHICH APPEARS TO RUN FULL DEPTH IN THE SLAB, THE ENGINEER MAY DESIGNATE THESE AREAS TO BE REPAIRED UNDER ITEM NO. 604-10.30. POWER DRIVEN HAND TOOLS USED FOR THE REMOVAL OF UNSOUND CONCRETE IN MAKING PARTIAL AND FULL DEPTH REPAIRS ARE SUBJECT TO THE FOLLOWING RESTRICTIONS: 1) (PARTIAL DEPTH REPAIRS) PNEUMATIC HAMMERS HEAVIER THAN NOMINAL 60 POUND CLASS SHALL NOT BE USED. 2) (FULL DEPTH REPAIRS) PNEUMATIC HAMMERS HEAVIER THAN NOMINAL 90 POUND CLASS SHALL NOT BE USED. ALSO ALL DECK REPAIR OVER BEAMS WILL BE RESTRICTED TO 60 POUND PNEUMATIC HAMMERS. 3) CHIPPING HAMMERS OF THE 15 POUND CLASS SHALL BE USED TO REMOVE CONCRETE FROM BENEATH ANY REINFORCING STEEL.

NOTE:  
FOR DETAILS OF ASPHALT OVERLAY, SEE SHEET NO. BR-111-106.

NOTE:  
ITEM NO. 604-10.30 AND 604-10.50 SHALL BE BID WITH THE CONTINGENCY THAT THESE ITEMS MAY BE INCREASED, DECREASED, OR ELIMINATED AS DIRECTED BY THE ENGINEER.



DETAIL SHOWING FULL AND PARTIAL DEPTH REPAIR

**UNOFFICIAL SET**  
NOT FOR BIDDING

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

BRIDGE REPAIR DETAILS

SR21 OVER REELFOOT LAKE SPILLWAY  
BRIDGE NO. 48-SR21-7.61

LAKE COUNTY  
2015



DESIGNED BY J. G. S./S. F. H. DATE FEBRUARY 2012  
 DRAWN BY C. W. THOMAS DATE FEBRUARY 2012  
 SUPERVISED BY J. H. RUDELL DATE FEBRUARY 2012  
 CHECKED BY A. J. KHAIRI DATE FEBRUARY 2012

TN D.O.T. ENGINEERING SUPERVISOR M. LAWSON

