DESIGN FUNCTIONAL CLASSIFICATION -
RURAL MINOR ARTERIAL

DESIGN EXCEPTIONS

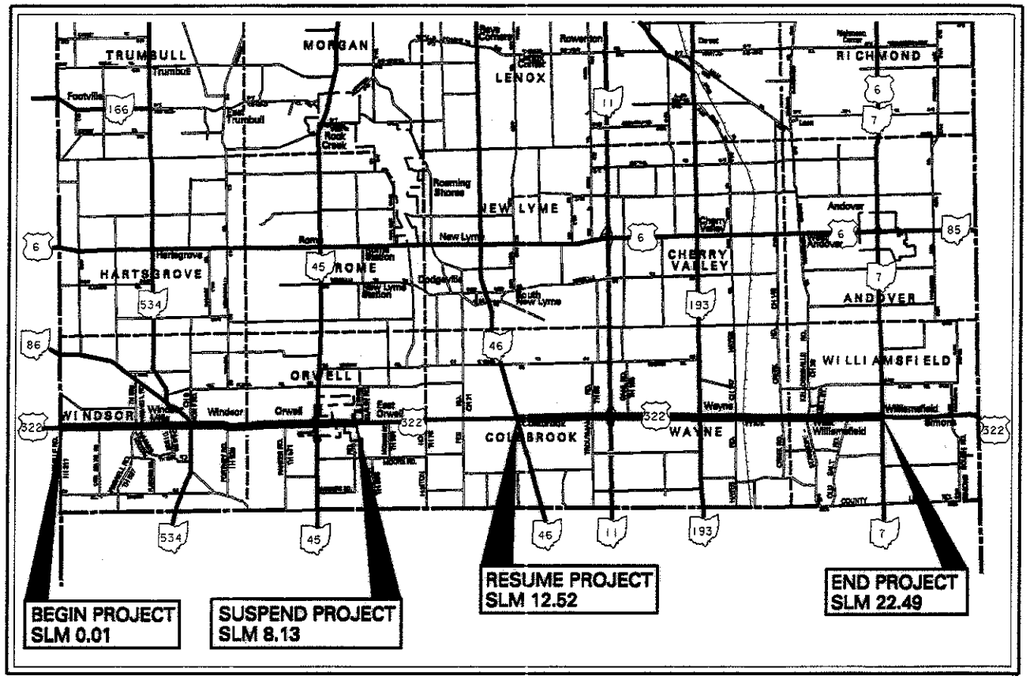
NONE

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
ATB-322-0.00

PROJECT DESCRIPTION

ASPHALT RESURFACING, MINOR GUARDRAIL REHAB, FULL AND PARTIAL DEPTH REPAIRS, PIPE CULVERT REPAIR, AND BRIDGE DECK WATERPROOFING AND SEALING OF CONCRETE SURFACES ON FOUR STRUCTURES, WITH A PROJECT LENGTH OF 18.14 MILES

INDEX OF SHEETS:



LOCATION MAP

LATITUDE: ° ′ ″ LONGITUDE: ° ′ ″

SCALE IN MILES

0 1 2 4 6 8

PORTION TO BE IMPROVED _____

INTERSTATE & DIVIDED HIGHWAY _____

UNDIVIDED STATE & FEDERAL ROUTES _____

OTHER ROADS _____

2002 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES

APPROVED _____
DATE 11-15-02 DISTRICT DEPUTY DIRECTOR

APPROVED _____
DATE 11-27-02 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO. TE21-G020(283)

PID NO. 22442

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT NORFOLK SOUTHERN

ATB-322-0.00

1 / 39

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

PLAN PREPARED BY:

District 4 Plans Production

ENGINEERS SEAL:

STATE OF OHIO · DOUGLAS A. YARD · E-58044 · REGISTERED PROFESSIONAL ENGINEER

SIGNED _____
DATE: 10/15/02

STANDARD CONSTRUCTION DRAWINGS

BP-1.1	7-28-00						
		HW-2.2	7-20-01				
				MT-35.10	4-20-01		
RM-1.1	4-29-99			MT-97.10	4-19-02		
RM-4.2	1-18-02			MT-97.11	4-19-02		
				MT-99.20M	1-30-95		
GR-1.1M	10-21-97	TC-41.20	1-19-01	MT-105.10	4-25-94		
GR-1.2M	1-03-96	TC-42.20	4-20-01	MT-105.11	4-25-94		
GR-1.3M	11-30-94	TC-52.10	4-20-01				
GR-2.1M	4-14-98	TC-52.20	4-20-01				
GR-2.2M	10-21-97	TC-65.10	10-19-01				
GR-4.2M	10-21-97	TC-65.11	10-19-01				
GR-4.4M	11-30-94	TC-65.12	10-19-01				
		TC-71.10	4-19-02				
		TC-73.10	1-19-01				

SUPPLEMENTAL SPECIFICATIONS

841	10-12-99
843	5-05-98
864	7-11-00

SPECIAL PROVISIONS

NWP#3 10-25-02

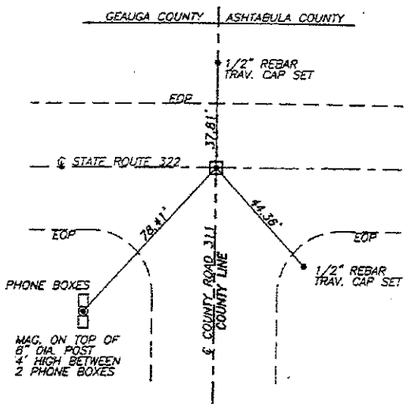
ATB - USR 322 - 0.00
030102 PID - 22442
Dist 4 2/12/2003

CALCULATED | CHECKED

MONUMENTS WITH REFERENCE TIES

EXISTING MONUMENTS

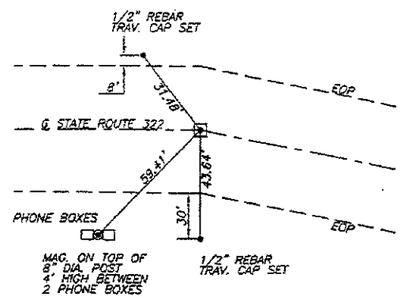
CENTERLINE REFERENCE
ATB-322-0.00
℄-℄ STA. 0+00



NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 1.1' BELOW SURFACE.
LID FLUSH WITH SURFACE.

SCALE: NONE

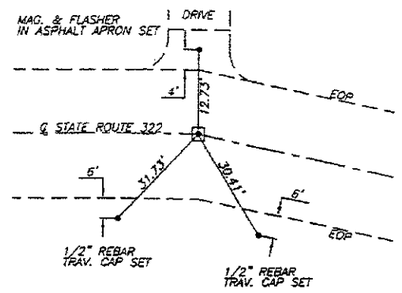
CENTERLINE REFERENCE
ATB-322-0.03
PC STA. 1+40.27



NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 1.0' BELOW SURFACE.
LID FLUSH WITH SURFACE.

SCALE: NONE

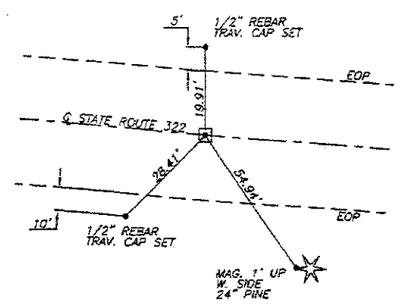
CENTERLINE REFERENCE
ATB-322-0.08
PI STA. 3+96.47



NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.9' BELOW SURFACE.
LID 0.3' BELOW SURFACE.

SCALE: NONE

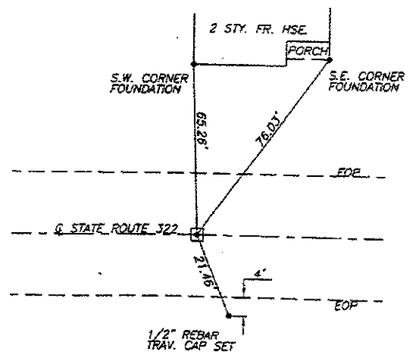
CENTERLINE REFERENCE
ATB-322-0.12
PT STA. 6+51.94



NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.9' BELOW SURFACE.
LID FLUSH WITH SURFACE.

SCALE: NONE

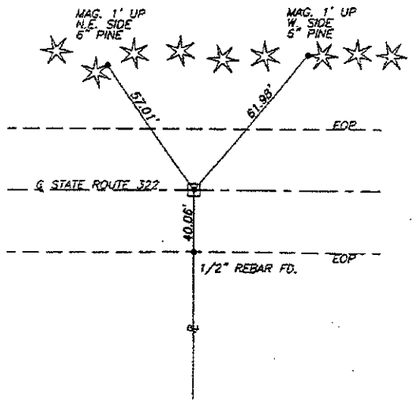
CENTERLINE REFERENCE
ATB-322-0.22
PI STA. 11+76.47



NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 1.0' BELOW SURFACE.
LID FLUSH WITH SURFACE.

SCALE: NONE

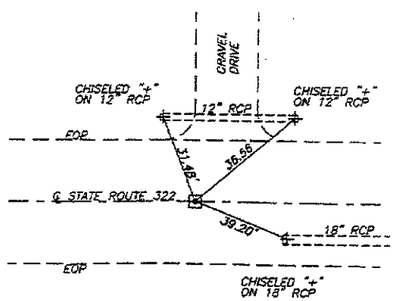
CENTERLINE REFERENCE
ATB-322-0.41
PI STA. 21+70.09



NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.9' BELOW SURFACE.
LID FLUSH WITH SURFACE.

SCALE: NONE

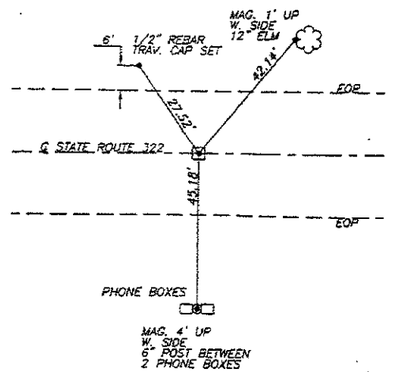
CENTERLINE REFERENCE
ATB-322-0.62
PI STA. 32+79.26



NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.9' BELOW SURFACE.
LID FLUSH WITH SURFACE.

SCALE: NONE

CENTERLINE REFERENCE
ATB-322-0.85
PI STA. 44+79.28



NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.6' BELOW SURFACE.
LID FLUSH WITH SURFACE.

SCALE: NONE

ATB-322-0.00

CALCULATED | CHECKED

EXISTING MONUMENTS WITH REFERENCE TIES

ATB-322-0.00

NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.9' BELOW SURFACE.
LID FLUSH WITH SURFACE.
SCALE: NONE

NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.9' BELOW SURFACE.
LID FLUSH WITH SURFACE.
SCALE: NONE

NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.8" BELOW SURFACE.
LID FLUSH WITH SURFACE.
SCALE: NONE

NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.9" BELOW SURFACE.
LID FLUSH WITH SURFACE.
SCALE: NONE

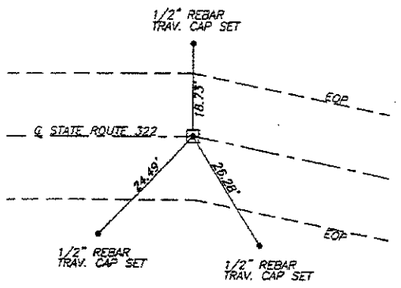
NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.7' BELOW SURFACE.
LID 0.2' BELOW SURFACE.
SCALE: NONE

NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.9" BELOW SURFACE.
LID FLUSH WITH SURFACE.
SCALE: NONE

NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.9" BELOW SURFACE.
LID FLUSH WITH SURFACE.
SCALE: NONE

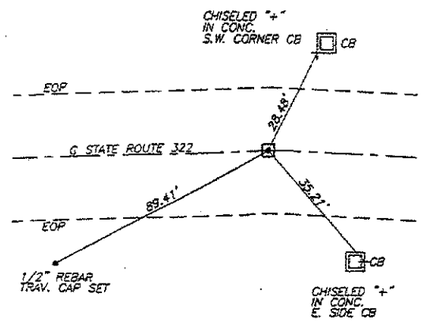
NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.9" BELOW SURFACE.
LID FLUSH WITH SURFACE.
SCALE: NONE

CENTERLINE REFERENCE
ATB-322-3.05
PC STA. 160+79.98



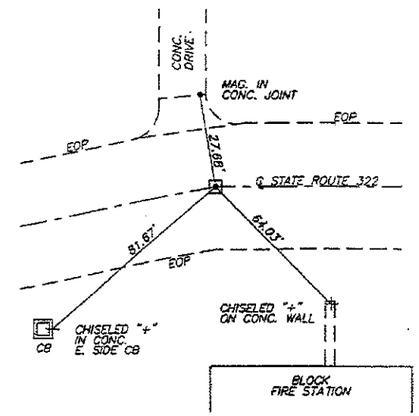
NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.9' BELOW SURFACE.
LID FLUSH WITH SURFACE.
SCALE: NONE

CENTERLINE REFERENCE
ATB-322-3.07
PT STA. 161+83.97



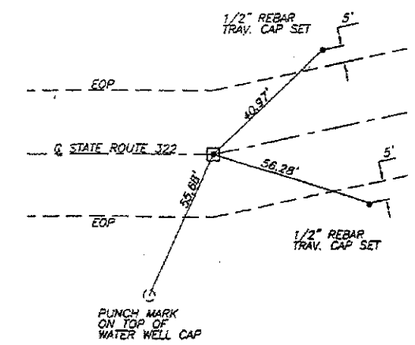
NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.9' BELOW SURFACE.
LID FLUSH WITH SURFACE.
SCALE: NONE

CENTERLINE REFERENCE
ATB-322-3.08
PT STA. 162+87.01



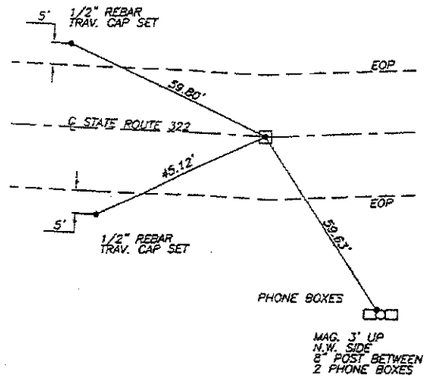
NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.9' BELOW SURFACE.
LID FLUSH WITH SURFACE.
SCALE: NONE

CENTERLINE REFERENCE
ATB-322-3.23
PC STA. 170+51.81



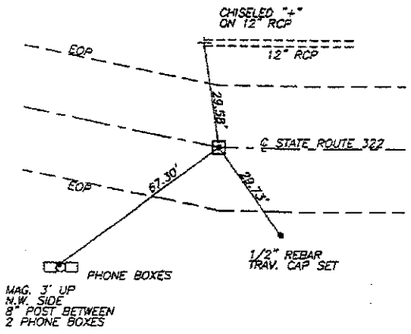
NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.9' BELOW SURFACE.
LID FLUSH WITH SURFACE.
SCALE: NONE

CENTERLINE REFERENCE
ATB-322-3.25
PI STA. 171+44.49



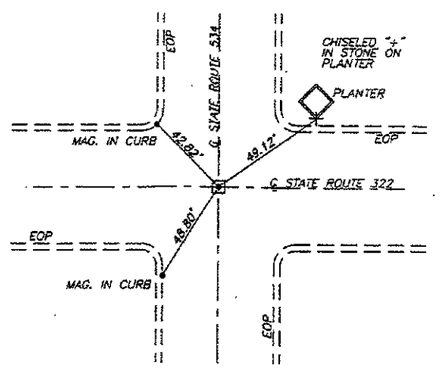
NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 1.0' BELOW SURFACE.
LID FLUSH WITH SURFACE.
SCALE: NONE

CENTERLINE REFERENCE
ATB-322-3.28
PC STA. 172+37.24



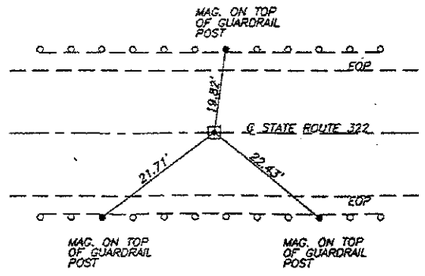
NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.7' BELOW SURFACE.
LID FLUSH WITH SURFACE.
SCALE: NONE

CENTERLINE REFERENCE
ATB-322-3.57
℄ – ℄ STA. 188+46.73 BK. = STA. 200+00.00 AHD.



NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.75' BELOW SURFACE.
NO LID – TOP BOX FLUSH WITH SURFACE.
SCALE: NONE

CENTERLINE REFERENCE
ATB-322-3.98
PI STA. 221+49.25



NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 1.1' BELOW SURFACE.
LID FLUSH WITH SURFACE.
SCALE: NONE

CALCULATED
CHECKED

EXISTING MONUMENTS WITH REFERENCE TIES

ATB-322-0.00

CENTERLINE REFERENCE
ATB-322-4.20
PI STA. 233+52.60

NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 1.1' BELOW SURFACE.
LID FLUSH WITH SURFACE.
SCALE: NONE

CENTERLINE REFERENCE
ATB-322-4.36
PT STA. 241+89.42

NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 1.0' BELOW SURFACE.
LID FLUSH WITH SURFACE.
SCALE: NONE

CENTERLINE REFERENCE
ATB-322-4.53
PT STA. 250+47.52

NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.9' BELOW SURFACE.
LID FLUSH WITH SURFACE.
SCALE: NONE

CENTERLINE REFERENCE
ATB-322-4.58
PC STA. 253+55.87

NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 1.0' BELOW SURFACE.
LID FLUSH WITH SURFACE.
SCALE: NONE

CENTERLINE REFERENCE
ATB-322-5.07
POT STA. 279+07.80

NOTES:
3/4" BAR FD.
TOP BAR 0.75' BELOW SURFACE.
NO MON. BOX.
SCALE: NONE

CENTERLINE REFERENCE
ATB-322-5.16
PI STA. 284+00.05

NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 1.0" BELOW SURFACE.
NO LID - TOP BOX FLUSH WITH SURFACE.
SCALE: NONE

CENTERLINE REFERENCE
ATB-322-5.41
PI STA. 297+00.05

NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 1.1' BELOW SURFACE.
NO LID - TOP MON. BOX FLUSH WITH SURFACE.
SCALE: NONE

CENTERLINE REFERENCE
ATB-322-5.54
PC STA. 303+79.77

NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.85' BELOW SURFACE.
TOP BOX 0.4' BELOW SURFACE.
NO LID.
SCALE: NONE

CALCULATED
CHECKED

EXISTING MONUMENTS WITH REFERENCE TIES

ATB-322-0.00

CALCULATED

CHECKED

EXISTING MONUMENTS WITH REFERENCE TIES

ATB-322-0.00

NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.8' BELOW SURFACE.
LID 0.4' BELOW SURFACE.
LID BROKE.

SCALE: NONE

NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.9' BELOW SURFACE.
LID FLUSH WITH SURFACE.

SCALE: NONE

NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 1.1' BELOW SURFACE.
LID FLUSH WITH SURFACE.

SCALE: NONE

NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.9' BELOW SURFACE.
LID FLUSH WITH SURFACE.

SCALE: NONE

NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.8' BELOW SURFACE.
TOP BOX 0.3' BELOW SURFACE.
NO LID.

SCALE: NONE

NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.9' BELOW SURFACE.
LID FLUSH WITH SURFACE.

SCALE: NONE

NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.9' BELOW SURFACE.
LID FLUSH WITH SURFACE.

SCALE: NONE

NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 1.0' BELOW SURFACE.
LID FLUSH WITH SURFACE.

SCALE: NONE

CENTERLINE REFERENCE
ATB-322-7.33
PI ℄ – ℄ STA. 398+56.52

NOTES:
NAIL FD. 0.2' BELOW SURFACE.
NO MON. BOX.
SCALE: NONE

CENTERLINE REFERENCE
ATB-322-8.00
℄ – ℄ STA. 433+84.62

NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 1.0' BELOW SURFACE.
LID FLUSH WITH SURFACE.
SCALE: NONE

CENTERLINE REFERENCE
ATB-322-8.04
℄ – ℄ STA. 435+92.75

NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 0.9' BELOW SURFACE.
TOP BOX 0.3' BELOW SURFACE.
NO LID.
SCALE: NONE

CENTERLINE REFERENCE
ATB-322-8.11 BK.
ATB-322-8.13 AHD.
PI STA. 439+48.08

NOTE:
STATION EQUATION @ STA. 439+48.08
SLM 18+11 BK. = SLM 18.13 AHD.

NOTES:
1" BAR IN A MON. BOX FD.
TOP BAR 1.0' BELOW SURFACE.
LID FLUSH WITH SURFACE.
SCALE: NONE

CENTERLINE REFERENCE
ATB-322-14.58

NOTES:
1 1/2" COPPER TOP BAR FD.
TOP BAR 0.4' BELOW SURFACE.
NO MON. BOX.
SCALE: NONE

CENTERLINE REFERENCE
ATB-322-15.56

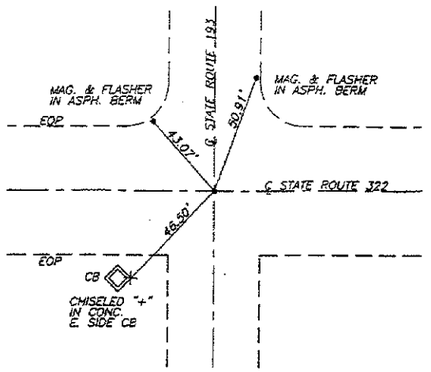
NOTES:
1 1/2" COPPER TOP BAR FD.
TOP BAR 0.5' BELOW SURFACE.
NO MON. BOX.
SCALE: NONE

CALCULATED | CHECKED

EXISTING MONUMENTS WITH REFERENCE TIES

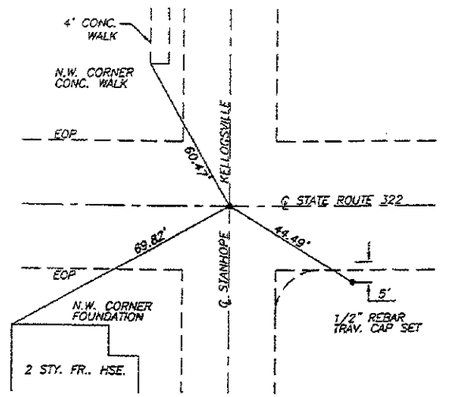
ATB-322-0.00

CENTERLINE REFERENCE
ATB-322-17.51



NOTES:
PK NAIL FD FLUSH.
SCALE: NONE

CENTERLINE REFERENCE
ATB-322-20.46

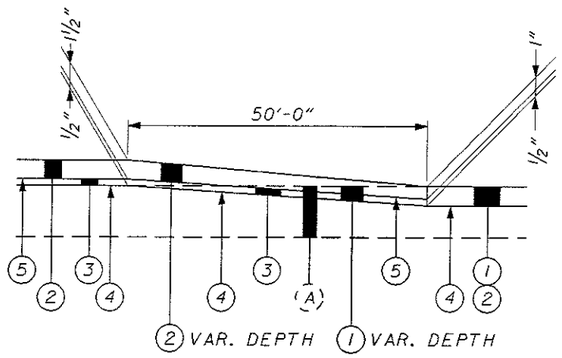


NOTES:
SPIKE FD FLUSH.
SCALE: NONE

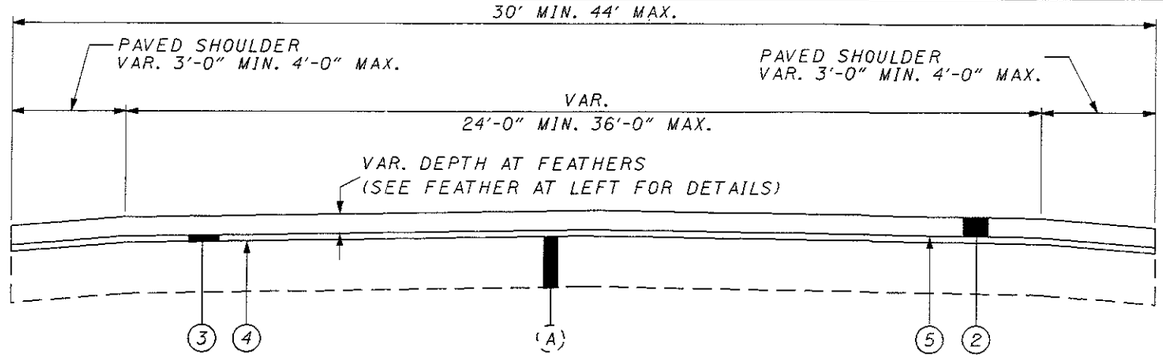
CALCULATED | CHECKED

EXISTING MONUMENTS WITH REFERENCE TIES

ATB-322-0.00



FEATHER

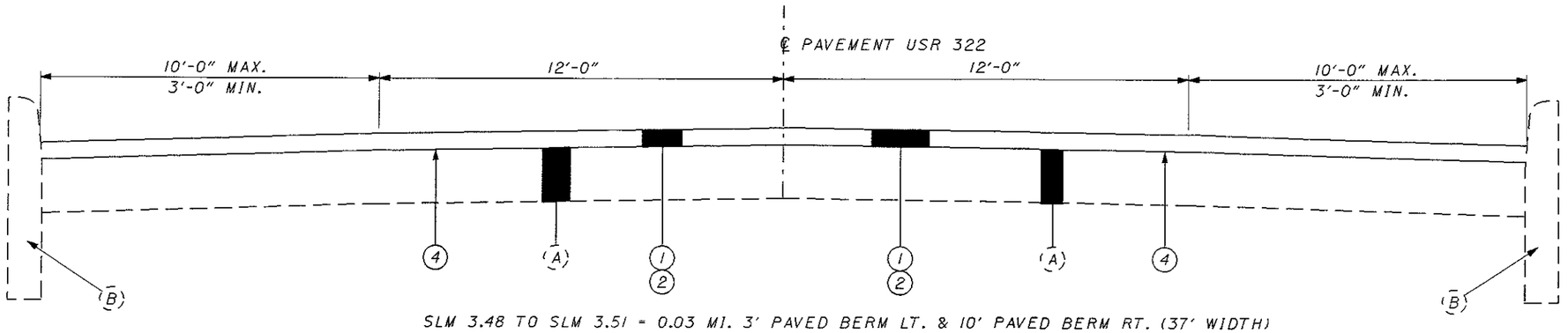


SLM 0.01 TO SLM 2.02 = 2.01 MI. (30' WIDTH)
SLM 2.02 TO SLM 2.09 = PAVEMENT INCLUDED IN BRIDGE QUANTITIES
SLM 2.09 TO SLM 3.47 = 1.38 MI. (30' WIDTH)
SLM 3.47 TO SLM 3.48 = 0.01 MI. FEATHER (30' WIDTH)
SLM 3.64 TO SLM 3.65 = 0.01 FEATHER (30' WIDTH)
SLM 3.65 TO SLM 5.26 = 1.61 MI. (30' WIDTH)
SLM 5.26 TO SLM 5.33 = PAVEMENT INCLUDED IN BRIDGE QUANTITIES
SLM 5.33 TO SLM 6.98 = 1.65 MI. (30' WIDTH)
SLM 6.98 TO SLM 6.99 = 0.01 MI. FEATHER (30' WIDTH)
SLM 7.14 TO SLM 7.15 = 0.01 FEATHER (30' WIDTH)
SLM 7.15 TO SLM 7.92 = 0.77 MI. (30' WIDTH)
SLM 7.92 TO SLM 7.93 = 0.01 FEATHER (30' WIDTH)
SLM 8.02 TO SLM 8.03 = 0.01 FEATHER (30' WIDTH)
SLM 8.03 TO SLM 8.11 = 0.08 MI. (30' WIDTH)
SLM 8.11 = SLM 8.13 = STATION EQUATION
SLM 12.52 TO SLM 13.56 = 1.04 MI. (30' WIDTH)

TOTAL = 8.60 MI.

SLM 13.56 TO SLM 13.62 = PAVEMENT INCLUDED IN BRIDGE QUANTITIES
SLM 13.62 TO SLM 14.08 = 0.46 MI. (30' WIDTH)
SLM 14.08 TO SLM 14.12 = PAVEMENT INCLUDED IN BRIDGE QUANTITIES
SLM 14.12 TO SLM 14.95 = 0.83 MI. (30' WIDTH)
SLM 14.95 TO SLM 14.98 = 0.03 MI. (30' TO 44' WIDTH)
SLM 14.98 TO SLM 15.02 = 0.04 MI. (44' WIDTH)
SLM 15.02 TO SLM 15.05 = 0.03 MI. (44' TO 30' WIDTH)
SLM 15.05 TO SLM 15.09 = BRIDGE OVER SR 11 (NO WORK)
SLM 15.09 TO SLM 15.12 = 0.03 MI. (30' TO 44' WIDTH)
SLM 15.12 TO SLM 15.16 = 0.04 MI (44' WIDTH)
SLM 15.16 TO SLM 15.19 = 0.03 MI. (44' TO 30' WIDTH)
SLM 15.19 TO SLM 18.675 = 3.485 MI. (30' WIDTH)
SLM 18.675 TO SLM 18.685 = NORFOLK SOUTHERN RAILROAD (NO WORK)
SLM 18.685 TO SLM 19.15 = 0.465 MI. (30' WIDTH)
SLM 19.15 TO SLM 19.20 = PAVEMENT INCLUDED IN BRIDGE QUANTITIES
SLM 19.20 TO SLM 22.49 = 3.29 MI. (30' WIDTH)

TOTAL = 8.73 MI.



SLM 3.48 TO SLM 3.51 = 0.03 MI. 3' PAVED BERM LT. & 10' PAVED BERM RT. (37' WIDTH)
SLM 3.51 TO SLM 3.60 = 0.09 MI. (44' WIDTH)
SLM 3.60 TO SLM 3.64 = 0.04 MI. 10' PAVED BERM LT. & 3' PAVED BERM RT. (37' WIDTH)
SLM 6.99 TO SLM 7.09 = 0.10 MI. (44' WIDTH)
SLM 7.09 TO SLM 7.14 = 0.05 MI. 3' PAVED BERM LT. & 10' PAVED BERM RT. (37' WIDTH)
SLM 7.93 TO SLM 7.96 = 0.03 MI. 10' PAVED BERM LT. & 3' PAVED BERM RT. (37' WIDTH)
SLM 7.96 TO SLM 8.02 = 0.06 MI. (44' WIDTH)

TOTAL = 0.40 MI.

LEGEND

EXISTING
(A) PAVEMENT
(B) CURB

PROPOSED
(1) ITEM 254 - 1½" PAVEMENT PLANING, ASPHALT CONCRETE
(2) ITEM 446 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22
(3) ITEM 448 -½" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 64-22
(4) ITEM 407 - TACK COAT
(5) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE

TYPICAL SECTIONS

ATB-322-0.00

39

UTILITIES NOTIFICATION

BECAUSE OF THE NATURE OF THIS PROJECT, THE CONTRACTOR SHALL USE THE FOLLOWING PROCEDURE AT EACH LOCATION WHERE WORK IS PERFORMED, IN ACCORDANCE WITH SECTIONS 105.06 AND 107.17 IN THE CONSTRUCTION SPECIFICATIONS:

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, THE OHIO UTILITIES PROTECTION SERVICE [OUPS], THE OIL AND GAS PRODUCERS UNDERGROUND PROTECTION SERVICE [OGPUPS], NON-MEMBER UTILITY OWNERS AND THE OHIO DEPARTMENT OF TRANSPORTATION [ODOT] DISTRICT 4 HEADQUARTERS AT LEAST TWO [2] WORKING DAYS PRIOR TO BEGINNING WORK AT ANY LOCATION.

- OUPS: 1-800-362-2764 [CONTACT NON-MEMBERS DIRECTLY]
- OGPUPS: 1-800-925-0988
- ODOT, DISTRICT 4: 330-297-0801 EXT 305

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE NOT SHOWN ON THE PLANS, BUT CAN BE OBTAINED FROM THE OWNERS OF THE UTILITIES.

*Denotes Limited Basis Member - must be contacted directly

A T & T
229 West 7th Street,
10th floor
Cincinnati, Ohio 45202
Phone: (513) 784-3238
Contact: Jeff Ballinger

Classic Cable
4720 Mahoning Avenue
PO Box 4898
Youngstown, Ohio 44515
Phone: (330) 792-9557
Contact: Paul Rader

Dominion East Ohio
7001 Center Road
Ashtabula, Ohio 44004
Phone: (440) 998-1174
Contact: Jeff Baker

Sprint Local Operations
3801 Elm Road
Warren, Ohio 44483
Phone: (330) 841-1404
Contact: Rod Harris

The Illuminating Company
730 South Avenue
Youngstown, Ohio 44502
Phone: (330) 740-7635
Contact: Bill Speece

Western Reserve Telephone
(ALLTEL)
50 Executive Parkway
Hudson, Ohio 44236
Phone: (330) 650-7635
Contact: Jeff Guylas

*Eastern Natural Gas
PO Box 128
Burghill, Ohio 44404
Phone: (330) 772-3500
Contact: Stan Bell

*Orwell Board of Public Affairs
PO Box 354
Orwell, Ohio 44076-0354
Phone: (440) 437-8398
Contact: Greg Hogue

*Orwell Cable Television
PO Box 337
Orwell, Ohio 44076
Phone: (440) 437-6111
Contact: Walt Stackhouse

*Orwell Natural Gas
PO Box 190
Orwell, Ohio 44076
Phone: 1-800-832-6164
Contact: Ann Yeager

*Orwell Telephone
PO Box 337
Orwell, Ohio 44076
Phone: (440) 437-6111
Contact: Walt Stackhouse

Annarock Petroleum
2202 Niles-Cortland Road
Cortland, Ohio 44410
Phone: (330) 637-8991
Contact: Rocco Maiorca

CGAS
4470 Indianola Avenue
PO Box 14981
Columbus, Ohio 43214-0981
Phone: (614) 781-3238
Contact: Tom Moore

Cutter Oil Co.
9270 Cedar Valley Road
West Salem, Ohio 44287
Phone: (419) 846-3850
Contact: Charles Cutter

Equity Oil & Gas
PO Box 677
Berea, Ohio 44017
Phone: (440) 234-4202
Contact: Chuck Baker

Great Lakes Energy Partners
PO Box 550
Hartville, Ohio 44632-0550
Phone: (330) 877-6747
Contact: Sue Barclay

Knox Energy, Inc.
11872 Worthington Road
Pataskala, Ohio 43062
Phone: (740) 927-6731
Contact: Mark Jordan

Northern Industrial
5900 Mayfair Road NW
North Canton, Ohio 44720
Phone: (330) 498-9130
Contact: Robert Wentzel

Northwood Energy
941 Chatham Lane, suite 100
Columbus, Ohio 43221-2416
Phone: (614) 457-1024
Contact: Bruce Dean

Petrox, Inc.
67 Poland Manor
Poland, Ohio 44514
Phone: (330) 757-3303
Contact: Ben Cart

Power Gas Marketing & Transmission
13010 State Route 88
Garrettsville, Ohio 44231
Phone: (330) 527-2171
Contact: John Firko

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

PROFILE AND ALIGNMENT

THE PROPOSED PAVEMENT RESURFACING SHALL FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. THE PROPOSED ASPHALT CONCRETE OVERLAY SHALL BE AS SHOWN ON THE TYPICAL SECTIONS.

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)

THIS ITEM OF WORK SHALL CONSIST OF PAVING ALL EXISTING DRIVEWAYS A DISTANCE OF 10 FT. FROM THE EDGE OF PAVED SHOULDER UNLESS OTHERWISE DIRECTED BY THE ENGINEER. DRIVEWAYS SHALL BE PAVED AFTER COMPLETION OF THE SURFACE COURSE. ASPHALT CONCRETE AVERAGE THICKNESSES SHALL BE 2 IN. FOR AGGREGATE DRIVEWAYS (UNIMPROVED) AND 1 IN. FOR IMPROVED DRIVEWAYS. AGGREGATE DRIVEWAYS SHALL BE GRADED PRIOR TO PAVING SUCH THAT SURFACE DRAINAGE DOES NOT ENCROACH UPON THE PAVED SHOULDER. THE MAXIMUM PAVED WIDTH SHALL NOT EXCEED THAT ALLOWED FOR THROAT AND RADIUS FOR UNCURBED DRIVEWAYS AS PER STANDARD DRIVE DESIGN MANUAL. ALL GRADING, TOOLS, EQUIPMENT, MATERIAL AND INCIDENTALS REQUIRED TO LAYOUT AND CONSTRUCT THE DRIVEWAYS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS).

INTERSECTIONS AND RAMPS

INTERSECTIONS AND RAMPS SHALL BE RESURFACED A MINIMUM OF 25 FEET BEYOND THE EDGE LINE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR INDICATED IN THE PLAN. INTERSECTIONS AND RAMPS SHALL BE PAVED AFTER COMPLETION OF THE SURFACE COURSE. A BUTT JOINT, AS PER STANDARD CONSTRUCTION DRAWING BP-3.1, SHALL BE USED TO PROVIDE A SMOOTH TRANSITION TO THE EXISTING PAVEMENT. INTERSECTIONS AND RAMPS SHALL BE RESURFACED WITH STANDARD MIX, AS SHOWN ON THE ASPHALT CONCRETE SHEET. ANY GRADING OR PRIME NECESSARY TO ACCOMPLISH THIS WORK SHALL BE INCLUDED IN THE COST OF ITEM 448.

CONVERSION OF STANDARD CONSTRUCTION DRAWINGS

THE METRIC STANDARD DRAWINGS REFERENCED IN THIS PLAN SHALL BE CONVERTED TO ENGLISH UNITS USING THE SI (METRIC) TO ENGLISH CONVERSION FACTORS PROVIDED IN SECTION 109.011 OF THE 1997 CONSTRUCTION AND MATERIALS SPECIFICATIONS. THE APPENDIX OF ASTM E 380 SHALL BE UTILIZED FOR ANY ADDITIONAL CONVERSION FACTORS REQUIRED. CONVERSIONS SHALL BE APPROPRIATELY PRECISE AND SHALL REFLECT STANDARD INDUSTRY ENGLISH VALUES WHERE SUITABLE.

WORK ON RAILWAY PROPERTY

REFER TO THE SPECIAL CLAUSES IN THE PROPOSAL FOR REQUIREMENTS REGARDING WORK ON OR ABOVE RAILWAY PROPERTY.

A TEMPORARY MINNIMUM VERTICAL CLEARANCE OF 22' ABOVE THE TOP OF RAIL ELEVATION AND A TEMPORARY MINIMUM CLEARANCE OF 13' AS MEASURED FROM THE TRACK CENTERLINE SHALL BE MAINTAINED TO ANY TEMPORARY FORM WORK, FALSE WORK, STOCKPILED MATERIALS, OR OTHER OBSTRUCTIONS WHICH WILL BE LEFT IN PLACE DURING TRAIN MOVEMENTS THROUGH THE JOB SITE.

UPON COMPLETION OF THE WORK ON THE RAILWAY PROPERTY, THE CONTRACTOR SHALL REQUEST THE ENGINEER TO ARRANGE A FINAL INSPECTION OF THE PROJECT WITH THE RAILWAY'S ENGINEER OR HIS AUTHORIZED REPRESENTATIVE.

CALCULATED | CHECKED

GENERAL NOTES

ATB-322-0.00

ITEM SPECIAL - MAILBOX SUPPORT

THIS WORK SHALL CONSIST OF FURNISHING AND ERECTING MAILBOX SUPPORTS AND ANY ASSOCIATED MOUNTING HARDWARE IN ACCORDANCE WITH PLAN DETAILS, AND ATTACHING AN OWNER-SUPPLIED MAILBOX AT LOCATIONS SPECIFIED IN THE PLAN, OR OTHERWISE ESTABLISHED BY THE ENGINEER.

WOOD POSTS SHALL BE NOMINAL 4" BY 4" SQUARE OR 4½" DIAMETER ROUND, AND CONFORM TO 710.14.

STEEL POSTS SHALL BE NOMINAL PIPE SIZE 2" I.D., AND CONFORM TO AASHTO M 181.

HARDWARE (PLATES, SCREWS, BOLTS, ETC.) SHALL BE COMMERCIAL GRADE GALVANIZED STEEL.

POSTS SHALL BE SET PER THE FIRST PARAGRAPH OF 606.03, AND SHALL IN NO INSTANCE BE ENCASED IN CONCRETE.

SUPPORT HARDWARE SHALL ACCOMMODATE EITHER A SINGLE OR A DOUBLE MAILBOX INSTALLATION, AND NO MORE THAN TWO BOXES MAY BE MOUNTED ON A SINGLE POST.

THE MAILBOX SHALL BE SECURELY AND NEATLY ATTACHED BY THE CONTRACTOR TO THE NEW SUPPORT. THE CONTRACTOR SHALL FURNISH ALL NECESSARY ATTACHMENT HARDWARE (NUTS, BOLTS, PLATES, SPACERS, AND WASHERS) AS NECESSARY TO ACCOMMODATE THE COMPLETE INSTALLATION.

IN THE ABSENCE OF A NEW BOX SUPPLIED BY THE OWNER, THE CONTRACTOR SHALL SALVAGE THE EXISTING BOX AND PLACE IT ON THE NEW SUPPORT. DUE CARE SHALL BE EXERCISED IN SUCH AN OPERATION, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY BOX DAMAGED BY IMPROPER HANDLING ON HIS PART, AS JUDGED AND DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL POST MASTER REGARDING THE TIMING OF THE MOVEMENT OF ANY MAILBOX TO A NEW LOCATION.

PAYMENT UNDER THIS ITEM SHALL BE LIMITED TO FINAL PERMANENT INSTALLATIONS. TEMPORARY INSTALLATIONS SHALL BE IN ACCORDANCE WITH 107.12. HOWEVER, THE SAME MATERIAL AND SIZE LIMITATIONS AS FOR PERMANENT INSTALLATIONS SHALL APPLY.

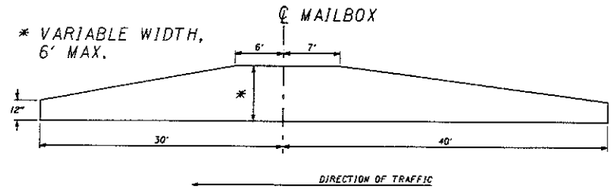
MAILBOX SUPPORTS, COMPLETE IN PLACE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, FOR ITEM SPECIAL MAILBOX SUPPORT, SINGLE. AN ESTIMATED QUANTITY OF 5 EACH HAS BEEN INCLUDED FOR USE, AS DIRECTED BY THE ENGINEER, FOR THIS ITEM (CARRIED TO GENERAL SUMMARY).

PAVED MAILBOX APPROACHES

ALL EXISTING MAIL BOX APPROACHES SHALL BE PAVED WITH ITEM 448 OR 446 AS PER TYPICAL SHOWN OR AS NEAR AS PRACTICAL. AGGREGATE APPROACHES SHALL HAVE A 2 IN. MIN. THICKNESS; IMPROVED APPROACHES SHALL HAVE A 1 IN. MIN. THICKNESS. THE CONTRACTOR SHALL HAVE THE OPTION OF PAVING THE MAILBOX APPROACHES WITH EITHER THE PAVING OF THE DRIVEWAYS OR THE PAVING OF THE MAINLINE AND SHOULDERS. PAYMENT SHALL BE AS FOLLOWS:

1. SHOULD THE CONTRACTOR ELECT TO PAVE THE MAILBOX APPROACHES WITH THE DRIVEWAYS THEN ALL GRADING, TACK, TOOLS, EQUIPMENT, MATERIAL AND INCIDENTALS REQUIRED FOR THE CONTRACTOR TO LAYOUT AND CONSTRUCT THE MAILBOX APPROACHES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS).

2. SHOULD THE CONTRACTOR ELECT TO PAVE THE MAILBOX APPROACHES WITH THE MAINLINE AND SHOULDERS, THEN ALL GRADING, TACK, TOOLS, EQUIPMENT, MATERIAL AND INCIDENTALS REQUIRED TO LAYOUT AND CONSTRUCT THE MAILBOX APPROACHES SHALL BE INCLUDED IN THE UNIT BID FOR ITEM 446 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22.



ITEM 604 - MONUMENT ASSEMBLY, AS PER PLAN

ADJUSTABLE MONUMENT ASSEMBLIES AS SHOWN ON STANDARD CONSTRUCTION DRAWING "RM-1.1", REVISED APRIL 29, 1999, WILL BE PLACED BY THE CONTRACTOR AT THE TIME OF CONSTRUCTION AT EXISTING LOCATIONS SPECIFIED AT THE PRE-CONSTRUCTION MEETING. THE MONUMENTS SHALL BE CASTING MODEL #8371 WITH LID #8370-A, MANUFACTURED BY EAST JORDAN IRONWORKS, INC, 301 SPRING STREET, MICHIGAN 49727. MONUMENTS SHALL BE PLACED IN ACCORDANCE WITH THE REFERENCE TIES PROVIDED AT THE PRE-CONSTRUCTION MEETING. THE ACTUAL PLACEMENT OF THE DATUM POINT WITHIN THE MONUMENT ASSEMBLY SHALL BE DIRECTLY AND PHYSICALLY SUPERVISED IN THE FIELD BY A LICENSED SURVEYOR IN THE STATE OF OHIO. SURVEY NOTES VERIFYING THE ACCURACY OF THE POINT SHALL BE SEALED BY THE SURVEYOR AND RETURNED TO THE DISTRICT 4 SURVEY OPERATIONS MANAGER. ANY REQUEST FOR NON PERFORMANCE SHALL BE DIRECTED IN WRITING TO THE DISTRICT 4 PRODUCTION ADMINISTRATOR OR SURVEY OPERATIONS MANAGER AND MUST INCLUDE PROPER WRITTEN JUSTIFICATION.

COST OF THE REMOVAL OF THE EXISTING ASSEMBLY SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THIS ITEM

AN ESTIMATED QUANTITY OF 48 ITEM 604 MONUMENT ASSEMBLY, AS PER PLAN HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 407 - TACK COAT

THE RATE OF APPLICATION OF THE 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. FOR ESTIMATING PURPOSES ONLY, THE PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF:

407, TACK COAT 0.15 GAL. PER SQ. YD. FOR PLANED SURFACES, 0.075 GAL. PER SQ.YD. FOR OLD PAVEMENT, AND 0.04 GAL. PER SQ. YD. FOR NEW PAVEMENT.

ITEM 642 STOP LINE, TYPE 2

THIS ITEM IS TO BE USED AS DIRECTED BY THE ENGINEER TO INSTALL OR REPLACE STOP BARS AT INTERSECTING ROADWAYS. THE FOLLOWING ESTIMATED QUANTITY IS CARRIED TO THE GENERAL SUMMARY AND IS IN ADDITION TO QUANTITIES SHOWN IN THE PAVEMENT MARKINGS DETAIL SHEETS.

ITEM 642 STOP LINE, TYPE 2 - 430 LIN. FT.

CONSTRUCTION AND DEMOLITION DEBRIS

THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID AND/OR LIMIT DEMOLITION DEBRIS FROM ENTERING THE STREAM. ANY MATERIAL THAT DOES FALL INTO THE STREAM SHALL BE REMOVED AS SOON AS POSSIBLE.

STREAM CHANNEL EXCAVATION

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT ANY INCIDENTAL DISCHARGES ASSOCIATED WITH THE EXCAVATION AND HAULING OF MATERIAL FROM THE STREAM CHANNEL. THIS PERTAINS TO ANY EXCAVATION OPERATION SUCH AS, FOUNDATION PIER OR ABUTMENT EXCAVATION, CHANNEL CLEAN OUT, EXCAVATION FOR ROCK CHANNEL PROTECTION AND REMOVAL OF ANY TEMPORARY FILL ASSOCIATED WITH CONSTRUCTION OPERATIONS.

MECHANICAL EQUIPMENT OPERATION AT STREAM CHANNEL

THE MECHANICAL EQUIPMENT USED TO EXECUTE THE WORK AUTHORIZED HEREIN SHALL BE OPERATED IN SUCH A WAY AS TO MINIMIZE TURBIDITY THAT COULD DEGRADE WATER QUALITY AND ADVERSELY AFFECT AQUATIC PLANT AND ANIMAL LIFE.

IN-STREAM WORK

IN-STREAM WORK SHOULD BE AVOIDED FROM MARCH 1 TO JUNE 15 TO REDUCE IMPACTS TO FISH SPAWNING ACTIVITIES.

CALCULATED | CHECKED

GENERAL NOTES

ATB-322-0.00

PAINTING AND/OR SEALING OPERATIONS

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT EPOXY-URETHANE SEALER, PAINT, OR OTHER MATERIALS USED TO REPAIR, CLEAN, SEAL, OR TREAT ANY BRIDGE STRUCTURE FROM ENTERING ANY STREAMS, WETLANDS OR OTHER WATERS OF THE UNITED STATES AND TAKE THE APPROPRIATE ACTIONS IN THE EVENT OF A RELEASE.

IF NECESSARY, AN UNDER-DECK APRON OR SIMILAR DEVICE SHALL BE INSTALLED TO PREVENT ACCIDENTAL SPILLAGE OR MATERIAL FROM ENTERING THE WATER. SHOULD MATERIAL OR DEBRIS INADVERTENTLY ENTER ANY STREAM, IT SHALL BE REMOVED IMMEDIATELY IN SUCH A MANOR AS TO MINIMIZE TURBIDITY THAT COULD DEGRADE WATER QUALITY AND ADVERSELY EFFECT AQUATIC PLANT OR ANIMAL LIFE.

ENDANGERED SPECIES HABITAT

THIS PROJECT IS WITHIN THE RANGE OF THE FEDERALLY ENDANGERED INDIANA BAT (MYOTIS SODALIS) AND MAY IMPACT SUMMER ROOSTING HABITAT FOR THIS SPECIES. THE SUMMER ROOSTING HABITAT FOR THE INDIANA BAT CONSISTS OF LIVING OR DEAD TREES OR SNAGS WITH EXFOLIATING, PEELING OR LOOSE BARK, SPLIT TRUNKS AND/OR BRANCHES OR CAVITIES. THEREFORE, ANY UNAVOIDABLE CUTTING OF SUCH TREES WILL BE PREFORMED ONLY AFTER SEPTEMBER 15 AND BEFORE APRIL 15.

THIS PROJECT IS WITHIN THE RANGE OF THE FEDERALLY THREATENED BALD EAGLE (HALIAEETUS LEUCOCEPHALUS) AND AN ACTIVE BALD EAGLE NESTING SITE HAS BEEN IDENTIFIED WITHIN CLOSE PROXIMITY OF THE PROJECT LIMITS AT THE US ROUTE 322 BRIDGE OVER PYMATUNING CREEK (STRUCTURE NO. ATB-322-1917). THEREFORE, NO CONSTRUCTION ACTIVITIES SHALL BE PERFORMED BY THE CONTRACTOR WITHIN 0.05 MILE OR THE US ROUTE 322 BRIDGE OVER PYMATUNING CREEK (STRUCTURE NO. ATB-322-1917) FROM OCTOBER 1 THROUGH MAY 20 WHEN THE BREEDING EAGLES MAY BE ACTIVELY UTILIZING THE NESTING LOCATION.

SCENIC RIVER AVOIDANCE

THE GRAND RIVER IS DESIGNATED A STATE SCENIC RIVER AT THIS SECTION. UNDER NO CIRCUMSTANCES SHALL ANY EQUIPMENT (BACKHOE, EARTH MOVING EQUIPMENT, ETC.) AND/OR MATERIALS ENTER THE RIVER. THE CONTRACTOR SHALL NOT MOVE EQUIPMENT OR MATERIALS WITHIN THE RIVER, OR OTHERWISE IMPACT THIS WATERWAY. SHOULD ANY MATERIALS AND/OR DEMOLITION DEBRIS FALL INTO THE RIVER, ALL WORK SHALL BE STOPPED, AND ALL DEBRIS/MATERIALS, ETC. SHALL BE REMOVED IMMEDIATELY, AND IN SUCH A WAY AS TO MINIMIZE TURBIDITY THAT COULD DEGRADE WATER QUALITY AND ADVERSELY AFFECT AQUATIC PLANT AND ANIMAL LIFE.

IN EACH CASE WHERE THERE IS AN INCIDENT OF DEBRIS AND/OR MATERIALS THAT FALL OR MIGRATE INTO THE RIVER, THE CONTRACTOR SHALL, AS SOON AS POSSIBLE, NOTIFY THE PROJECT ENGINEER/SUPERVISOR.

IN EACH CASE WHERE THERE IS AN INCIDENT OF HAZARDOUS MATERIAL FALLING OR MIGRATING INTO THE RIVER, THE CONTRACTOR SHALL, AS SOON AS POSSIBLE, NOTIFY THE ENGINEER/SUPERVISOR AND THE FOLLOWING AGENCIES:

OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF NATURAL AREAS & PRESERVES
11027 HOPKINS RD.
GARRETTSVILLE, OHIO 44231
(330) 527-4184
ATTN.: STEVE ROLOSON

OHIO EPA SPILL REPORTING
24 HOUR EMERGENCY SERVICE
CALL: 1-800-282-9378

PROVIDE AS MUCH OF THE FOLLOWING INFORMATION AS POSSIBLE:

1. TIME OBSERVED
2. LOCATION
3. MATERIAL RELEASED
4. PROBABLE SOURCE
5. VOLUME & DURATION
6. PRESENT & ANTICIPATED MOVEMENT OF CONTAMINANT
7. PERSONNEL ON SCENE
8. ACTIONS ALREADY INITIATED
9. PERSON(S) ON THE SCENE TO CONTACT

WETLANDS/STREAMS AVOIDANCE

NO EXCAVATION, GRADING, OR FILLING OPERATIONS SHALL BE PERFORMED IN ANY WETLANDS. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR STORE EQUIPMENT AND/OR MATERIALS IN ANY WETLANDS.

ITEM 606 - ANCHOR ASSEMBLY, TYPE E-98

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING EITHER OF THE FOLLOWING GUARDRAIL END TERMINALS.

1) THE ET-2000 (1997) MANUFACTURED BY SYRO, INC., 1170 N. STATE STREET, GIRARD, OHIO 44420 (TELEPHONE: 330-545-4373).

THE LENGTH OF THE ET-2000 (1997) SYSTEM IS CONSIDERED TO BE 50'-0", INCLUSIVE OF TWO 25'-0" LONG RAIL ELEMENTS. INSTALLATION SHALL BE AT THE LOCATIONS IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DWG. NO.	DRAWING NAME	DWG./REV. DATE	ODOT APPROVAL DATE
SS265	ET-2000 (1997) PLAN, ELEVATION AND SECTIONS	6/20/97	3/6/98
SS142	ET2000 PLUS 50'-0" PLAN, ELEVATION AND SECTION 25'-0" RAIL, SLEEVE W/PL POSTS 1-4	4/12/00	7/31/00
SS141	ET2000 PLUS PLAN, ELEVATION AND SECTION 25'-0" RAIL, HBA POSTS 1-4	2/29/00	7/31/00
SS158	ET2000 PLUS 50'-0" WITH 12'-6" PANELS AND HBA POSTS 1-4 PLAN, ELEVATION AND SECTION	5/22/00	7/31/00

2) THE SKT-350 MANUFACTURED BY ROAD SYSTEMS, INC., 7631 NEW CASTLE DRIVE, FRANKFORT, IL 60423 (TELEPHONE: 815-464-5917).

THE LENGTH OF THE SKT-350 SYSTEM IS CONSIDERED TO BE 50'-0", INCLUSIVE OF FOUR 12'-6" LONG RAIL ELEMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DWG. NO.	DRAWING NAME	DATE	DATE
SKT-4M	SEQUENTIAL KINKING TERMINAL (SKT-350) ASSEMBLY WITH 4 FOUNDATION TUBES	12/11/97	3/6/98

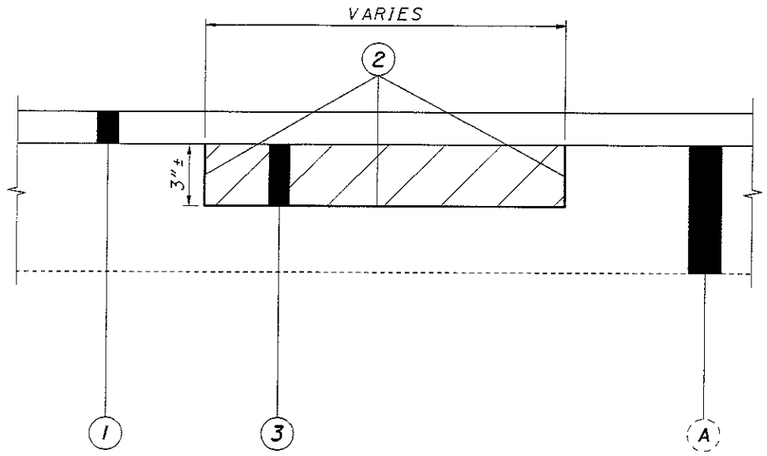
THE FACE OF THE TYPE E-98 IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19, APPROXIMATELY 18" X 18".

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, TYPE E-98, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

CALCULATED
CHECKED

GENERAL NOTES

ATB-322-0.00



ITEM 251 PARTIAL DEPTH PAVEMENT REPAIR

A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THE ITEM SHALL CONSIST OF REPAIRING EXISTING LOCATIONS EXIBITING SURFACE DETERIORATION AND PLACING 3.00"± OF ITEM 448 ASPHALT CONCRETE, TYPE 2. THE ASPHALT CONCRETE SHALL BE COMPACTED WITH A TYPE 1 PNEUMATIC TIRE ROLLER AND A STEEL WHEEL ROLLER AS PER 401.11.

PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF SQUARE YARDS OF PAVEMENT REPAIR.

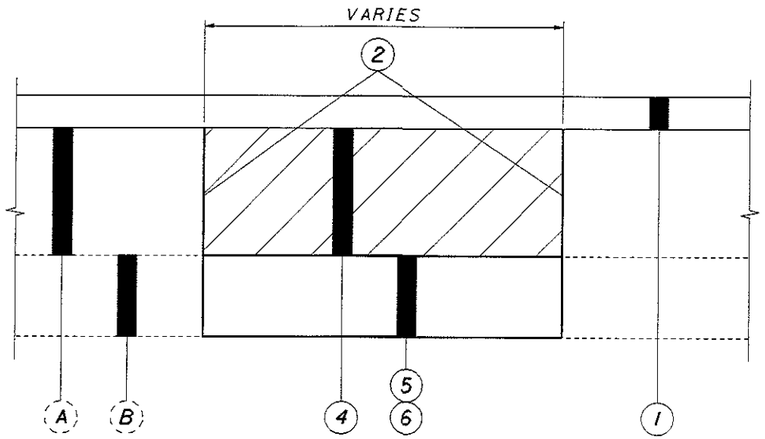
ITEM 251 PARTIAL DEPTH PAVEMENT REPAIR - 13,100 SY

LEGEND

(1)	448		PROPOSED OVERLAY
(2)	407		TACK COAT
(3)	251	3"±	PARTIAL DEPTH PAVEMENT REPAIR
(4)	253	12"±	PAVEMENT REPAIR
(5)	203	6" AVG.	EXCAVATION
(6)	304		AGGREGATE BASE

(A) EXISTING ASPHALT PAVEMENT

(B) EXISTING SUBBASE



ITEM 253 PAVEMENT REPAIR

A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THIS ITEM SHALL CONSIST OF REMOVING DETERIORATED PAVEMENT FULL DEPTH AND PLACING 12"± 301 BITUMINOUS AGGREGATE BASE. THE MAXIMUM COMPACTED DEPTH OF ANY ONE LAYER SHALL BE 6.00 INCHES.

PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF CUBIC YARDS OF PAVEMENT REMOVED AND REPLACED TO THE LIMITS DESIGNATED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 253 PAVEMENT REPAIR - 20 CY

ITEM 203 EXCAVATON

THIS ITEM OF WORK SHALL CONSIST OF REMOVING AND DISPOSING OF ALL UNSUITABLE MATERIAL BY EXCAVATING THE EXISTING SUBGRADE AND SUBBASE TO AN AVERAGE DEPTH OF 6 INCHES OR AS DIRECTED BY THE ENGINEER. EXACT LIMITS OF REMOVAL SHALL BE DETERMINED BY THE ENGINEER. ALL EQUIPMENT, LABOR, TOOLS, AND INCIDENTIALS NECESSARY TO COMPLETE THIS ITEM SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 203 EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 203 EXCAVATON - 10 CY

ITEM 304 AGGREGATE BASE

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN PROVIDED AND SHALL BE USED AS DIRECTED BY THE ENGINEER TO BACKFILL AREAS WHICH WERE EXCAVATED UNDER ITEM 203 EXCAVATION.

ITEM 304 AGGREGATE BASE - 10 CY

PAVEMENT REPAIR NOTES

CALCULATED | CHECKED

PLAN NO.

PAVEMENT

ATB-322-0.00

MAINTENANCE OF TRAFFIC

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS AND RAMPS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, LATEST REVISION, THE SPECIFICATIONS AND THE FOLLOWING:

1. A MINIMUM OF ONE TEN FOOT BIDIRECTIONAL LANE SHALL BE MAINTAINED ON THE EXISTING PAVEMENT OR COMPLETED PAVEMENT DURING CONSTRUCTION OF THE WORK.

2. THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (330) 297-0801, EXT 209, EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.

3. CONES SHALL NOT BE ACCEPTABLE TRAFFIC CONTROL DEVICES FOR LANE RESTRICTIONS OR LANE REDUCTIONS THAT ARE IN OPERATION ONE-HALF HOUR AFTER SUNSET OR ONE HALF-HOUR BEFORE SUNRISE. ALL NIGHTTIME LANE RESTRICTIONS SHALL REQUIRE DRUMS OR BARRICADES AT A MAXIMUM SPACING OF FIFTY (50) FEET. WEIGHTED CHANNELIZERS MAY BE USED IN ACCORDANCE WITH THE ADDITIONAL NOTE PROVIDED HEREIN.

4. LANE RESTRICTIONS OR LANE REDUCTIONS SHALL NOT BE PERMITTED AFTER NORMAL WORKING HOURS. NORMAL WORKING HOURS SHALL BE THOSE HOURS DURING WHICH THE CONTRACTOR HAS A FULL COMPLEMENT OF EMPLOYEES AND EQUIPMENT ACTIVELY REMOVING AND/OR PLACING PAVEMENT MATERIALS.

5. THE CONTRACTOR SHALL FURNISH, ERECT, MAINTAIN AND SUBSEQUENTLY REMOVE ALL FLAGS, BARRICADES, SIGNS, SIGN SUPPORTS AND FURNISH AND MAINTAIN ALL FLAGGERS, WATCHERS AND INCIDENTALS RELATED THERETO.

6. ALL FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT OPERATIONS SHALL BE COMPLETED THE SAME DAY THE EXCAVATION IS MADE. IF THE CONTRACTOR CANNOT COMPLETE THE WORK, THE EXCAVATION SHALL BE BACKFILLED.

7. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMITTED TO HAVE SUCCESSIVE WORK ZONES UNLESS THE DISTANCE BETWEEN THE DRUMS, BARRICADES, WEIGHTED CHANNELIZERS OR CONES EXCEEDS TWO (2) MILES.

8. IN ADDITION TO THE REQUIREMENTS OF 614 WORK ZONE PAVEMENT MARKINGS (614.11), AT THE END OF EACH DAY OF WORK, THE CONTRACTOR SHALL REPLACE (WITH TEMPORARY MARKINGS) ALL CENTER, STOP OR CHANNELIZING LINES THAT WERE REMOVED OR COVERED DURING THE PAVEMENT REMOVAL OR PLACEMENT OPERATIONS. QUANTITIES FOR SUCH REPLACEMENT ARE CARRIED AS PART OF THE ITEMS LISTED UNDER 614 WORK ZONE PAVEMENT MARKINGS.

9. A QUANTITY OF 20 CU. YDS. OF 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC SHALL BE PROVIDED FOR USE IN MAINTAINING PAVEMENT, SHOULDERS AND OTHER LOCATIONS PRIOR TO RESURFACING, AS DIRECTED BY THE ENGINEER.

10. PRIOR TO OPENING TO TRAFFIC, EACH LANE SHALL BE IN A SAFE, PASSABLE CONDITION. ALL TRANSVERSE JOINTS SHALL EXTEND ACROSS THE FULL LANE AND SHOULDER WIDTH AND EACH LANE SHALL BE FREE FROM UNEVEN LONGITUDINAL JOINTS. THE CONTRACTOR SHALL PROVIDE ASPHALT WEDGES FOR TRANSVERSE JOINTS WHEREVER THERE ARE PAVEMENT ELEVATION DIFFERENCES.

11. A QUANTITY OF ITEM 614 WORK ZONE MARKING SIGN HAS BEEN INCLUDED IN THE PLAN. THIS QUANTITY SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING SIGNS: OW-62 [BUMP], OW-71 [TWO-WAY TRAFFIC], OW-167 [NO EDGE LINES], OW-171 [UNEVEN LANES SYMBOL]. THESE QUANTITES SHALL BE AS PER 614.04.

THE FOLLOWING QUANTITIES SHALL BE USED FOR THE MAINTENANCE OF TRAFFIC ON THIS PROJECT:

ITEM 614 WORK ZONE CENTER LINE, CLASS I	36.38 MILE
ITEM 614 WORK ZONE STOP LINE, CLASS I	696 LIN. FT.
ITEM 614 WORK ZONE CHANNELIZING LINE, CLASS I	384 LIN. FT.
ITEM 614 WORK ZONE MARKING SIGN	22 EACH

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

WEIGHTED CHANNELIZERS

THE WEIGHTED CHANNELIZER SHALL BE PREDOMINATELY ORANGE IN COLOR AND SHALL BE MADE OF A LIGHTWEIGHT, FLEXIBLE, AND DEFORMABLE MATERIAL. THEY SHALL BE AT LEAST 42 INCHES IN HEIGHT WITH A WEIGHTED BASE. THEY MAY HAVE A "HANDLE" OR LIFTING DEVICE WHICH EXTENDS ABOVE THE 42" MINIMUM HEIGHT.

THE MARKINGS ON THE WEIGHTED CHANNELIZER SHALL BE HORIZONTAL, CIRCUMFERENTIAL, ALTERNATING ORANGE AND WHITE RETROREFLECTIVE STRIPES 6 INCHES WIDE. EACH WEIGHTED CHANNELIZER SHALL HAVE A MINIMUM OF TWO ORANGE AND TWO WHITE STRIPES. ANY NON-RETROREFLECTIVE SPACES BETWEEN THE HORIZONTAL ORANGE AND WHITE STRIPES SHALL NOT EXCEED 2 INCHES WIDE. THE WEIGHTED CHANNELIZER SHALL HAVE A 4-INCH MINIMUM WIDTH, REGARDLESS OF ORIENTATION.

ON FREEWAYS AND MULTILANE HIGHWAYS:

USE OF WEIGHTED CHANNELIZERS ON FREEWAYS AND MULTILANE HIGHWAYS SHALL BE LIMITED TO SHORT-TERM OPERATION, GENERALLY TWELVE HOURS OR LESS, FOR EITHER DAY OR NIGHT. UPON COMPLETION OF WORK WITHIN THE ABOVE NOTED TIME PERIOD, THE WEIGHTED CHANNELIZERS SHALL BE REMOVED. THE WEIGHTED CHANNELIZERS MAY AGAIN BE PLACED ON THE HIGHWAY WHEN THE WORK IS TO RESUME ON THE FOLLOWING DAY OR NIGHT. ANY LANE CLOSURE USING CHANNELIZATION DEVICES, EXPECTED TO REMAIN FOR MORE THAN TWELVE HOURS, SHALL REQUIRE THE USE OF DRUMS OR BARRIERS.

WHEN USED AT NIGHT, WEIGHTED CHANNELIZERS SHALL ONLY BE PLACED IN THE "TANGENT AREA". THE "TANGENT AREA" IS DEFINED AS THE AREA AFTER THE TRANSITION TAPER WHERE THE WORK TAKES PLACE. DRUMS SHALL BE USED IN THE TRANSITION TAPERS FOR NIGHT OPERATIONS.

ON OTHER HIGHWAYS:

THERE ARE NO DURATIONS OF WORK RESTRICTIONS FOR USE OF WEIGHTED CHANNELIZERS ON ALL OTHER TYPES OF HIGHWAYS, DAY OR NIGHT. ON THESE ROADWAYS THE WEIGHTED CHANNELIZER MAY BE USED IN THE TRANSITION TAPERS AS WELL AS IN THE TANGENT AREAS, DAY OR NIGHT.

MAXIMUM SPACING OF THE WEIGHTED CHANNELIZER SHALL BE 40 FEET.

STEPS SHOULD BE TAKEN TO ENSURE THAT THE WEIGHTED CHANNELIZERS WILL NOT BE BLOWN OVER OR DISPLACED BY WIND OR MOVING TRAFFIC. BALLASTS SHOULD NOT PRESENT A HAZARD IF THE WEIGHTED CHANNELIZERS ARE INADVERTENTLY STRUCK, NOR SHOULD THEY AFFECT THE VISIBILITY OF THE WEIGHTED CHANNELIZERS. ALL BALLASTS USED SHOULD BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

CALCULATED MJH
CHECKED

MAINTENANCE OF TRAFFIC GENERAL NOTES

ATB-322-0.00

TRAFFIC CONTROL INSPECTOR

THE CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL OTHER THAN THE SUPERINTENDENT AND SUBJECT TO THE APPROVAL OF THE ENGINEER, TO CONTINUOUSLY INSPECT ALL TRAFFIC CONTROL DEVICES WHENEVER CONSTRUCTION WORK IS BEING PERFORMED WITHIN THE WORK LIMITS OF THE PROJECT. THE DESIGNATED INDIVIDUAL SHALL ALSO INSPECT ALL TRAFFIC DEVICES AT THE BEGINNING AND AT THE END OF EACH WORK DAY. THE DESIGNATED INDIVIDUAL OR A QUALIFIED REPRESENTATIVE SHALL ALSO BE AVAILABLE ON AN AROUND THE CLOCK BASIS TO REPAIR AND/OR REPLACE DAMAGED OR MISSING TRAFFIC CONTROL DEVICES. THESE INDIVIDUALS SHALL BE EQUIPPED WITH CELLULAR PHONES AND THEIR NAMES AND PHONE NUMBERS SHALL BE GIVEN TO THE PROJECT ENGINEER AT THE PRE-CONSTRUCTION MEETING. THE DESIGNATED INDIVIDUAL MAY HAVE OTHER CONSTRUCTION RELATED DUTIES AS LONG AS IMMEDIATE ATTENTION IS GIVEN TO TRAFFIC CONTROL. PAYMENT FOR THE SERVICES OF THE TRAFFIC CONTROL INSPECTOR SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

HOLIDAY WORK LIMITATIONS

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

CHRISTMAS	NEW YEARS	MEMORIAL DAY
FOURTH OF JULY	LABOR DAY	THANKSGIVING

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF THE WEEK	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 12:00N MONDAY
MONDAY	12:00N FRIDAY THROUGH 12:00N TUESDAY
TUESDAY	12:00N MONDAY THROUGH 2:00N WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 12:00N THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 12:00N MONDAY
FRIDAY	12:00N THURSDAY THROUGH 12:00N MONDAY
SATURDAY	12:00N FRIDAY THROUGH 12:00N MONDAY

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY-WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA-WIDE.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED LIQUIDATED DAMAGES IN ACCORDANCE WITH 108.07.

ADDITIONAL WORK LIMITATIONS

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC UNTIL JULY 1, 2003.

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC FROM 10:00PM TO 6:00AM EVERY DAY.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED LIQUIDATED DAMAGES IN ACCORDANCE WITH 108.07.

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR SHALL BE ADVISED THAT OTHER PROJECTS MAY BE ONGOING IN AREAS IMMEDIATELY ADJACENT TO AND WITHIN THE PROJECT LIMITS OF THIS PROJECT. THE CONTRACTOR SHALL SCHEDULE HIS WORK SO AS TO CAUSE A MINIMUM OF DELAY OR CONFLICT WITH THE OTHER PROJECT(S). IN ACCORDANCE WITH 105.08, THE CONTRACTOR SHALL ARRANGE WITH THE OTHER CONTRACTORS A MUTUALLY ACCEPTABLE WORK SCHEDULE SUBJECT TO THE APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL RECEIVE DAILY APPROVAL FROM THE ENGINEER PRIOR TO COMMENCING ANY OPERATIONS. ANY CONFLICT BETWEEN CONTRACTORS INVOLVING WORK SCHEDULES, WORK AREA OR COOPERATION SHALL BE RESOLVED BY THE ENGINEER. COMPENSATION FOR THE ABOVE COOPERATION SHALL BE INCIDENTAL TO THE VARIOUS PAY ITEMS INCLUDED WITHIN THIS PROJECT.

ITEM 632 LOOP DETECTOR REPLACEMENT

THE CONTRACTOR SHALL CONTACT THE DISTRICT OFFICE (330-297-0801, EXT. 386) THREE WORKING DAYS PRIOR TO ANY PLANING OR TRENCHING AT THE INTERSECTION OF SR-7 AND US-322. ANY LOOP DETECTORS DISTURBED BY PAVEMENT PLANING OR TRENCHING SHALL BE ABANDONED IN PLACE.

ADVANCE NOTICE TO PAVE

THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE DISTRICT CONSTRUCTION ENGINEER A DETAILED SCHEDULE 15 DAYS PRIOR TO THE PLACEMENT OF THE OVERLAY COURSES, ON HOW THEY PROPOSE TO PROSECUTE THE PAVING OPERATIONS. THE DETAILS SHALL SHOW THE ORDER OF PERFORMANCE OF EACH STAGE (START TO FINISH) OF THE WORK INCLUDING THE MAINTENANCE OF TRAFFIC THAT WILL BE USED.

CONTRACTOR'S EQUIPMENT - OPERATION AND STORAGE

A QUALIFIED FLAGGER SHALL BE EMPLOYED WHERE THE CONTRACTOR'S EQUIPMENT MUST MERGE WITH THE TRAFFIC STREAM. THE CONTRACTOR'S EQUIPMENT SHALL BE EQUIPPED WITH AT LEAST ONE AMBER FLASHING LIGHT. PAVERS, ROLLERS AND OTHER EQUIPMENT MAY BE PARKED IN AREAS ALONG THE HIGHWAY WHEN PAVING OPERATIONS ARE SCHEDULED TO CONTINUE WITHIN THE NEXT WORKDAY. OTHERWISE, THE EQUIPMENT SHALL BE STORED AT A STORAGE AREA OUTSIDE THE R/W, THE LOCATION OF WHICH SHALL HAVE PRIOR APPROVAL OF THE ENGINEER. WHEN PARKING ALONG THE HIGHWAY, THE EQUIPMENT SHALL BE PLACED AND DELINEATED AS PER 614.03. ADEQUATE BARRICADES AND LIGHTS SHALL BE PLACED ON THE PAVEMENT SIDE OF THE EQUIPMENT TO IDENTIFY THE LIMITS OF THE EQUIPMENT. ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORED AT THE APPROVED CONTRACTOR'S STORAGE AREA. NO EQUIPMENT SHALL BE PARKED ON PRIVATE PROPERTY UNLESS PRIOR APPROVAL OF THE OWNER AND THE PROJECT ENGINEER/SUPERVISOR HAS BEEN GRANTED.

CALCULATED MJH
CHECKED

MAINTENANCE OF TRAFFIC GENERAL NOTES

ATB-322-0.00

GENERAL NOTES

1. It is intended that this drawing be used for treatment of drop-offs that develop during construction operations, and that are not otherwise provided for in the construction plans. Where the plans do not provide specific items for labor, equipment, or materials to implement the drop-off treatments specified herein, they shall be included for payment in the lump sum bid for Item 614 - Maintaining Traffic.

2. While the need for certain advisory signing is noted herein, it is not intended that this be indicative of all signing that may be required to advise or warn motorist, and all requirements of the Ohio Manual of Uniform Traffic Control Devices (OMUTCD) must be fulfilled.

3. In urban or otherwise heavily developed areas where pedestrians and/or bicyclists may be present in significant numbers, additional signing and protective measures other than those shown herein may be required.

4. The drop-off treatment selected for use at any given location shall be appropriate for the prevailing conditions at the site.

5. Where concrete barrier is specified, it shall be in accordance with Standard Construction Drawing RM-4.2 and Item 622.

6. When drums are specified for a drop-off condition, a minimum number of four drums shall be used. Spacing shall be as indicated in the plans or as specified in the OMUTCD.

7. When OW-15I (Low Shoulder) signs or OW-17I (Uneven Lanes symbol), OWP-17I (uneven lane plaque), and OC-53 (Maintain Present Lane) signs are required, they shall be placed 750' in advance of the condition, on all intersecting entrance ramps within the limits of the condition and immediately beyond all intersecting roadways within the limits of the condition. When the drop-off condition extends more than one-half mile, additional signs shall be erected at intervals of a maximum of one mile.

8. For locations, such as at ramps, lane shifts, lane closures, etc., where traffic is required to negotiate any difference in elevation between pavements, the Optional Wedge Treatment shall be provided.

9. Portable concrete barrier shall be placed on the same level as the traffic surface and shall not encroach on lane width(s) designated as the minimum required for traffic use. Where drums are used, and their presence would reduce traveled lane widths to less than 10', drums may be placed on the opposite level from that of traffic provided the drop-off depth does not exceed 5" and approval is granted by the Project Engineer.

10. Pavement Repairs (or similar work):

   a. Lengths greater than 60 feet - utilize appropriate treatment from Condition 1.

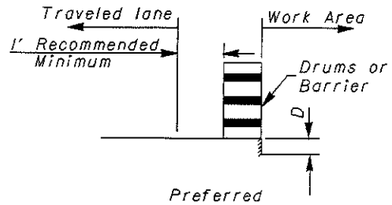
   b. Lengths of 60 feet or less - repairs shall be affected in accordance with Item 255.08. Drums may be used as a separator adjacent to the traveled lane.

CONDITION I

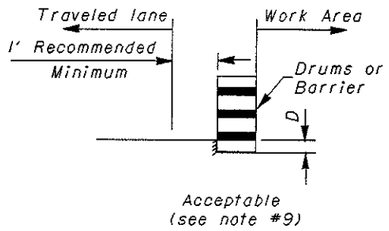
1. These treatments are to be used for resurfacing, pavement planing excavation, etc., between, beside or within traveled lanes.

Distance From Traveled Lane	D (in)	Treatment
1FT-12FT	< 1½	Erect OW-17I, AND OWP-17I.
1FT-12FT	1½-3	1. Lane closure utilizing drums* as shown below. (use only on 3 or more lanes) - or - 2. Optional Wedge Treatment.
1FT-12FT	3 - 5	Lane closure utilizing drums as shown below
1FT-12FT	5 - 12	Lane closure utilizing portable concrete barrier as shown below.
>12FT-20FT	12 - 24	Lane closure utilizing drums as shown below
>12FT-20FT	>24	Lane closure utilizing portable concrete barrier as shown below.

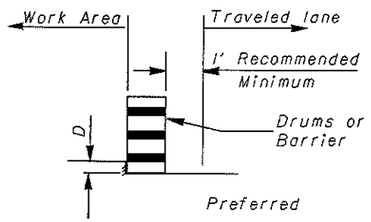
*Cones may be used for daytime only conditions.



Preferred



Acceptable (see note #9)



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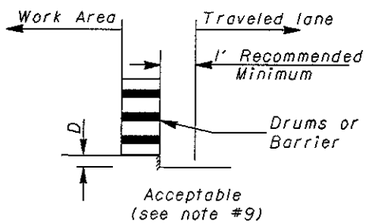


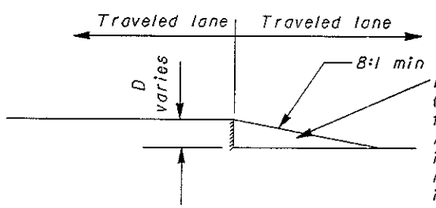
Acceptable (see note #9)

OPTIONAL WEDGE TREATMENT

(MILLING OR RESURFACING)

1. This treatment may be used when permitted for Condition 1 only.

2. OW-17I, OWP-17I, and OC-53 signs required.



Firm and unyielding material (to be removed prior to placing the abutting pavement course) All labor, equipment, materials, and incidentals to provide and subsequently remove the pavement wedge shall be included and paid under the lump sum bid for Item 614- Maintaining Traffic

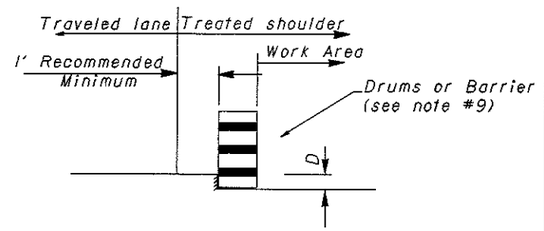
CONDITION II

DROPOFFS WITHIN GRADED SHOULDER AREA
[except for linear grading areas]

The treatments indicated below are for use in conjunction with resurfacing, planing, or excavation within the graded shoulder area.

Distance From Traveled Lane	D (in)	Treatment
1FT-12FT	< 1½	1.) If edgelines are present, no treatment necessary. or 2.) Erect OW-17I, OWP-17I, and OC-53 signs
1FT-12FT	1½- 5	1) If min. lane widths* requirements can be met, maintain lanes utilizing drums as shown below. - or - 2) If min. lane width* requirements cannot be met, close adjacent lane utilizing drums. (use only on 3 or more lanes) - or - 3) Optional shoulder treatment
>12FT-30FT	<= 24	Shoulder closure utilizing drums as shown below
>12FT-30FT	>24	Shoulder closure utilizing portable concrete barrier as shown below.

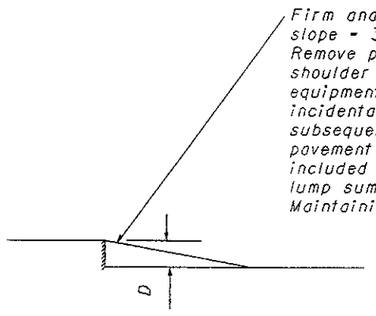
*Minimum lane widths shall be 10' unless otherwise specified in the plans.



OPTIONAL SHOULDER TREATMENT

1. This treatment shall not be used within a bituminous shoulder where a hot longitudinal joint per 401.15 is required.

2. OW-15I signs required.



Firm and unyielding material slope - 3:1 or flatter. Remove prior to placing the shoulder course. All labor, equipment, materials and incidentals to provide and subsequently remove the pavement wedge shall be included and paid under the lump sum bid for item 614 - Maintaining Traffic.

DROPOFFS IN WORK ZONES

ATB-322-0.00

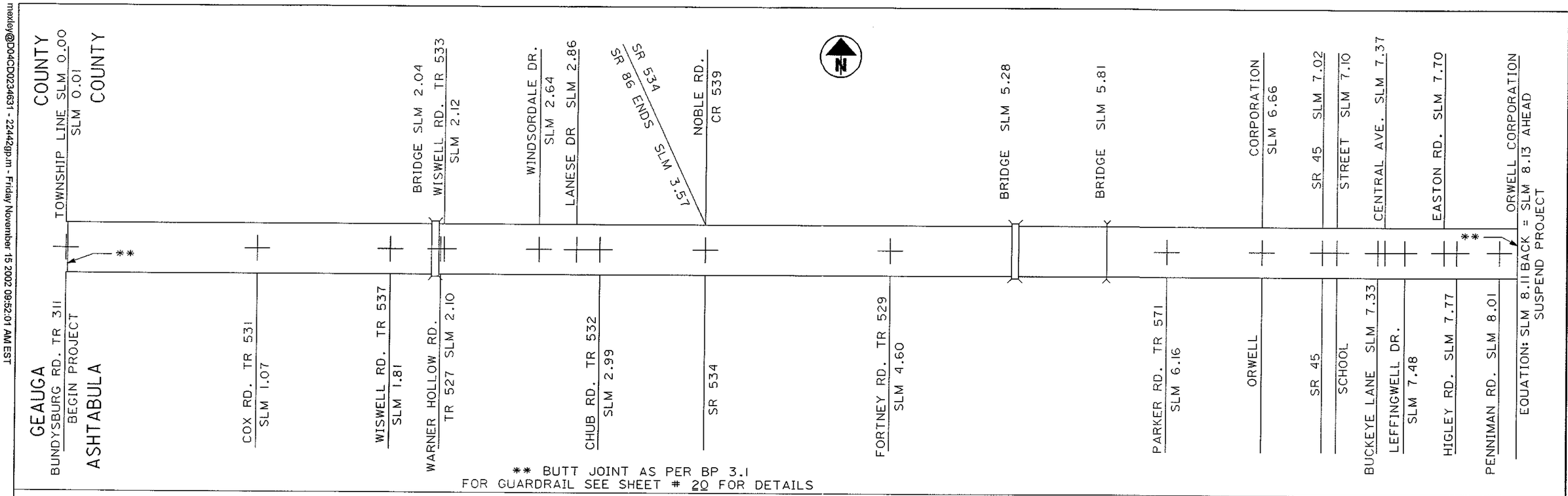
15
15

SHEET NUMBER											ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
H	13	14	16	19	20	21	22	23	35	•						
•	•	•	•	•	•	•	•	•	•	•			•		ROADWAY	•
•	•	•	662	831	•	•	•	•	•	•	202	23500	1493	SQ YD	WEARING COURSE REMOVED	•
•	•	•	•	•	•	•	•	•	16	•	202	35200	16	FT	PIPE REMOVED, OVER 24"	•
•	•	•	•	•	500	525	•	•	75	•	202	38000	1100	FT	GUARDRAIL REMOVED	•
•	•	•	•	•	25	26	•	•	•	•	202	42000	51	EACH	ANCHOR ASSEMBLY REMOVED, TYPE A	•
•	•	•	•	•	•	•	1220	•	•	•	202	54101	1220	EACH	RAISED PAVEMENT MARKER REMOVED FOR STORAGE, AS PER PLAN	22
•	10	•	•	•	•	•	•	•	49	•	203	10000	59	CU YD	EXCAVATION	•
•	•	•	•	•	•	•	•	•	49	•	203	20000	49	CU YD	EMBANKMENT	•
48	•	•	•	•	•	•	•	•	•	•	604	38501	48	EACH	MONUMENT ASSEMBLY, AS PER PLAN	H
•	•	•	•	•	162.5	125	•	•	•	•	606	13000	287.5	FT	GUARDRAIL, TYPE 5	•
•	•	•	•	•	•	•	•	•	75	•	606	13010	75	FT	GUARDRAIL, TYPE 5 WITH TUBULAR BACKUP	•
•	•	•	•	•	18	21	•	•	•	•	606	22010	39	EACH	ANCHOR ASSEMBLY, TYPE E-98	•
•	•	•	•	•	5	4	•	•	•	•	606	26500	9	EACH	ANCHOR ASSEMBLY, TYPE T	•
•	•	•	•	•	•	•	•	•	•	•			•			•
•	•	•	•	•	•	•	•	•	•	•			•		DRAINAGE	•
•	•	•	•	•	•	•	•	•	•	•			•			•
•	•	•	•	•	•	•	•	•	16	•	603	53300	16	FT	53" X 83" CONDUIT, TYPE A, 706.04, HE-1	•
•	•	•	•	•	•	•	•	•	5	•	602	20000	5	CU YD	CONCRETE MASONRY	•
•	•	•	•	•	•	•	•	•	•	•			•			•
•	•	•	•	•	•	•	•	•	•	•			•		PAVEMENT	•
•	•	•	•	•	•	•	•	•	•	•			•			•
•	1300	•	•	•	•	•	•	•	•	•	251	01000	1300	SQ YD	PARTIAL DEPTH PAVEMENT REPAIR	•
•	20	•	•	•	•	•	•	•	•	•	253	02000	20	CU YD	PAVEMENT REPAIR	•
•	•	•	1924	•	•	•	•	•	•	•	254	01000	1924	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE	•
•	10	•	•	•	•	•	•	•	•	•	304	20000	10	CU YD	AGGREGATE BASE	•
•	•	•	1685	1589	•	•	•	•	•	•	407	10000	2574	GALLON	TACK COAT	•
•	•	•	594	713	•	•	•	•	•	•	407	14000	1207	GALLON	TACK COAT FOR INTERMEDIATE COURSE	•
•	•	•	664	705	•	•	•	•	•	•	446	47020	1369	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22	•
•	•	•	873	435	•	•	•	•	•	•	448	46020	308	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22	•
•	•	•	368	244	•	•	•	•	•	•	448	48020	612	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)	•
•	•	•	•	•	•	•	•	•	•	•			•			•
•	•	•	•	•	•	•	•	•	•	•			•			•
•	•	•	•	•	•	•	•	•	•	•			•		TRAFFIC CONTROL	•
•	•	•	•	•	•	•	•	•	•	•			•			•
•	•	•	•	•	•	•	1220	•	•	•	621	00400	1220	EACH	RPM REFLECTOR, INSTALLATION ONLY	•
•	•	•	•	•	•	•	•	36.582	•	•	642	00100	36.582	MILE	EDGE LINE, TYPE 1	•
•	•	•	•	•	•	•	•	18.491	•	•	642	00300	18.491	MILE	CENTER LINE, TYPE 1	•
•	•	•	•	•	•	•	•	192	•	•	642	00402	192	FT	CHANNELIZING LINE, TYPE 2	•
430	•	•	•	•	•	•	•	348	•	•	642	00502	778	FT	STOP LINE, TYPE 2	•
•	•	•	•	•	•	•	•	432	•	•	642	00702	432	FT	TRANSVERSE LINE, TYPE 2	•
•	•	•	•	•	•	•	•	114	•	•	642	00902	114	SQ FT	ISLAND MARKING, TYPE 2	•
•	•	•	•	•	•	•	•	2	•	•	642	01002	2	EACH	RAILROAD SYMBOL MARKING, TYPE 2	•
•	•	•	•	•	•	•	•	4	•	•	642	01112	4	EACH	SCHOOL SYMBOL MARKING, 96", TYPE 2	•
•	•	•	•	•	•	•	•	2	•	•	642	01302	2	EACH	LANE ARROW, TYPE 2	•
•	•	•	•	•	•	•	•	2	•	•	642	01412	2	EACH	WORD ON PAVEMENT, 96", TYPE 2	•
•	•	•	•	•	•	•	•	•	•	•			•			•
•	•	•	•	•	•	•	•	•	•	•			•			•
•	•	•	•	•	•	•	•	•	•	•			•		FOR STRUCTURES GENERAL SUMMARY	37
•	•	•	•	•	•	•	•	•	•	•			•			•
•	•	•	•	•	•	•	•	•	•	•			•			•
•	•	•	•	•	•	•	•	•	•	•			•		MAINTENANCE OF TRAFFIC	•
•	•	•	•	•	•	•	•	•	•	•			•			•
•	•	22	•	•	•	•	•	•	•	•	614	12460	22	EACH	WORK ZONE MARKING SIGN	•
•	•	20	•	•	•	•	•	•	•	•	614	13000	20	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	•
•	•	36.38	•	•	•	•	•	•	•	•	614	21000	36.38	MILE	WORK ZONE CENTER LINE, CLASS I	•
•	•	384	•	•	•	•	•	•	•	•	614	23000	384	FT	WORK ZONE CHANNELIZING LINE, CLASS I	•
•	•	696	•	•	•	•	•	•	•	•	614	26000	696	FT	WORK ZONE STOP LINE, CLASS I	•
•	•	•	•	•	•	•	•	•	•	•			•			•
•	•	•	•	•	•	•	•	•	•	•			•			•
•	•	•	•	•	•	•	•	•	•	•	614	11000	LUMP		MAINTAINING TRAFFIC	•
•	•	•	•	•	•	•	•	•	•	•	619	16010	6	MONTH	FIELD OFFICE, TYPE B	•
•	•	•	•	•	•	•	•	•	•	•	623	10000	LUMP		CONSTRUCTION LAYOUT STAKES	•
•	•	•	•	•	•	•	•	•	•	•	624	10000	LUMP		MOBILIZATION	•
•	•	•	•	•	•	•	•	•	•	•			•			•

CALCULATED LLS CHECKED

GENERAL SUMMARY

ATB-322-0.00



** BUTT JOINT AS PER BP 3.1
FOR GUARDRAIL SEE SHEET # 20 FOR DETAILS

PAVEMENT DATA

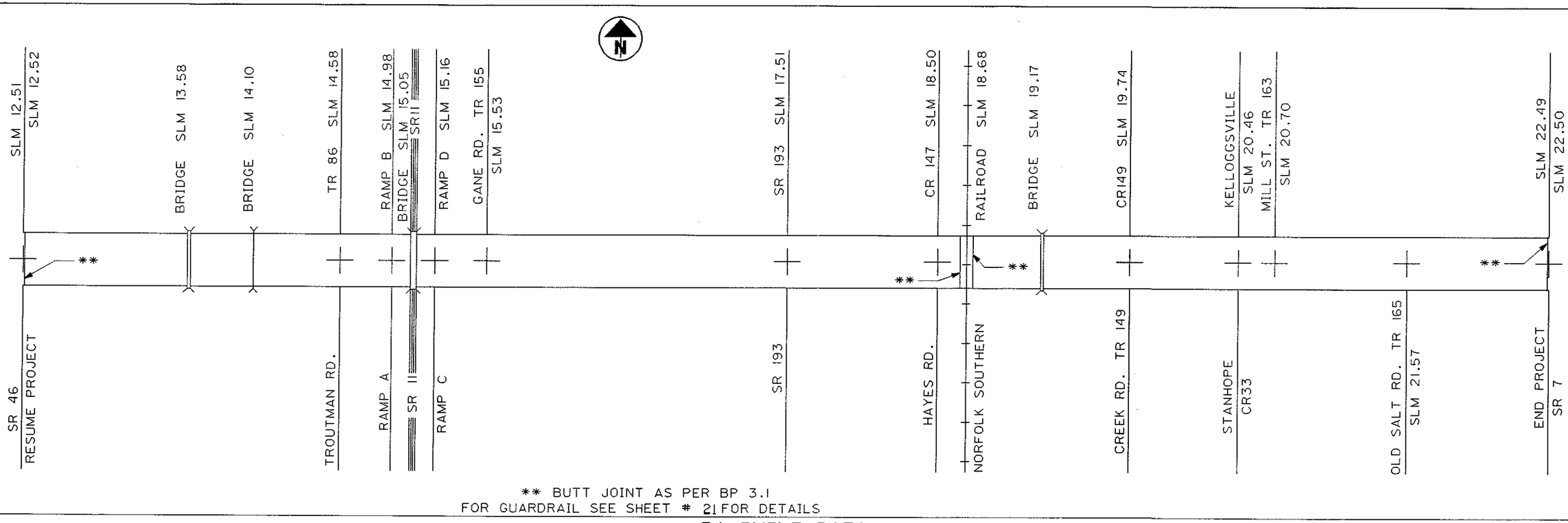
PART	ROUTE	LOG POINT TO LOG POINT	LENGTH MILES	LENGTH LIN.FT.	WP FEET AVG.	PAVEMENT AREA SQ. YDS.	254 PAVEMENT PLANING ASPHALT CONCRETE SQ.YD.	254 PAVEMENT PLANING ASPHALT CONCRETE VAR. DEPTH SQ.YD.	407 TACK COAT @ 0.15 gal./s.y. GAL.	407 TACK COAT @ 0.075 gal./s.y. GAL.	407 TACK COAT FOR INTERMEDIATE COURSE @ 0.04 gal./s.y. GAL.	448 INTERMEDIATE COURSE, TYPE I, PG 64-22 AVG. THICK INCHES	448 INTERMEDIATE COURSE, TYPE I, PG 64-22 CU.YD.	448 INTERMEDIATE COURSE, TYPE I, PG 64-22 (DRIVEWAYS) AVG. THICK INCHES	448 INTERMEDIATE COURSE, TYPE I, PG 64-22 (DRIVEWAYS) CU.YD.	448 SURFACE COURSE, TYPE I, PG 64-22 (DRIVEWAYS) AVG. THICK INCHES	448 SURFACE COURSE, TYPE I, PG 64-22 (DRIVEWAYS) CU.YD.	446 SURFACE COURSE, TYPE I, PG 64-22 AVG. THICK INCHES	446 SURFACE COURSE, TYPE I, PG 64-22 CU.YD.	202 WEARING COURSE REMOVED SQ. YD.
	USR 322	0.01 TO 2.02	2.01	10,612.8	30	35376.00				2653.20	1415.04	1/2	491.33					1 1/2	1474.00	
		2.09 TO 3.47	1.38	7,286.4	30	24288.00				1821.60	971.52		337.33					1 1/2	1012.00	
		3.47 TO 3.48	0.01	52.8	30	176.00		176	26.40		7.04		2.44					1 1/4	6.11	
		3.48 TO 3.51	0.03	158.4	37	651.20	651.20		97.68									1 1/2	27.13	
		3.51 TO 3.60	0.09	475.2	44	2323.20	2323.20		348.48									1 1/2	96.80	
		3.60 TO 3.64	0.04	211.2	37	868.27	868.27		130.24									1 1/2	36.18	
		3.64 TO 3.65	0.01	52.8	30	176.00		176	26.40		7.04		2.44					1 1/4	6.11	
		3.65 TO 5.26	1.61	8,500	30	28336.00				2125.20	1133.44		393.56					1 1/2	1180.67	
		5.33 TO 6.98	1.65	8,712.0	30	29040.00				2178.00	1161.60		403.33					1 1/2	1210.00	
		6.98 TO 6.99	0.01	52.8	30	176.00		176			7.04		2.44					1 1/4	6.11	
		6.99 TO 7.09	0.10	528.0	44	2581.33	2581.33		26.40									1 1/2	107.56	
		7.09 TO 7.14	0.05	264.0	37	1085.33	1085.33		387.20									1 1/2	45.22	
		7.14 TO 7.15	0.01	52.8	30	176.00		176	162.80		7.04		2.44					1 1/4	6.11	
		7.15 TO 7.92	0.77	4,065.6	30	13552.00			19.80	254.10	542.08		188.22					1 1/2	564.67	
		7.92 TO 7.93	0.01	52.8	30	176.00		176			7.04		2.44					1 1/4	6.11	
		7.93 TO 7.96	0.03	158.4	37	651.20	651.20		19.80									1 1/2	27.13	
		7.96 TO 8.02	0.06	316.8	44	1548.80	1548.80		73.26									1 1/2	64.53	
		8.02 TO 8.03	0.01	52.8	30	176.00		176	232.32		7.04		2.44					1 1/4	6.11	
	USR 322	8.03 TO 8.11	0.08	422.4	30	1408.00			26.40	105.60	56.32	1/2	19.56					1 1/2	58.67	
		DRIVES								589.75						1 1/2	327.64			
		MAILBOX APPROACHES								72.00						1 1/2	40.00			
		INTERSECTIONS					1158.33		173.75	135.00	72.00	1/2	25.00					1 1/2	123.26	662
							10868	1056	1751	9934										
							11924		11685		5394		1873				368		6064	662

CALCULATED LLS CHECKED ---

PLAN NO.

ASPHALT CONCRETE

ATB-322-0.00



** BUTT JOINT AS PER BP 3.1
FOR GUARDRAIL SEE SHEET # 21 FOR DETAILS

PAVEMENT DATA

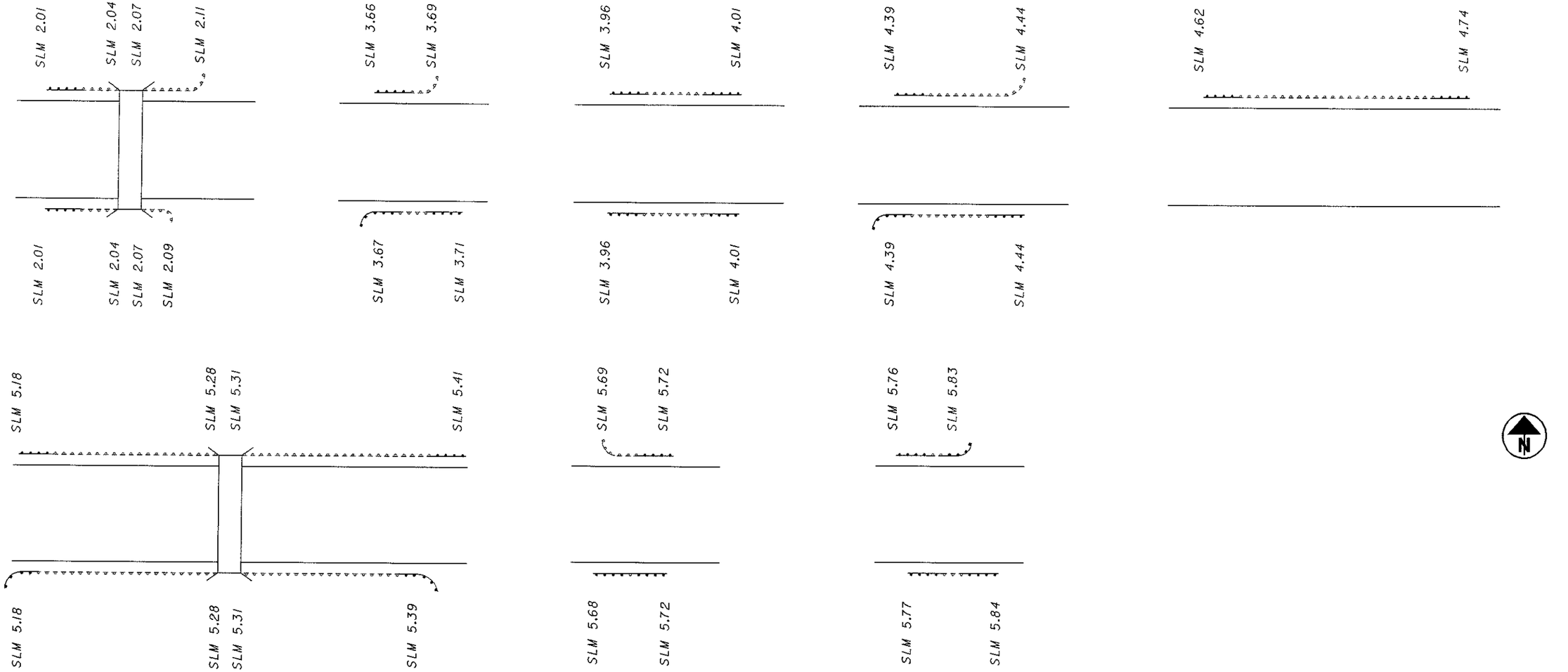
PART	ROUTE	LOG POINT TO LOG POINT	LENGTH MILES	LENGTH LIN.FT.	WP FEET AVG.	PAVEMENT AREA SQ. YDS.	254 PAVEMENT PLANING ASPHALT CONCRETE SQ.YD.	254 PAVEMENT PLANING ASPHALT CONCRETE VAR. DEPTH SQ.YD.	407 TACK COAT @ 0.15 gal./s.y. GAL.	407 TACK COAT @ 0.075 gal./s.y. GAL.	407 TACK COAT @ 0.04 gal./s.y. GAL.	448 INTERMEDIATE COURSE, TYPE I, PG 64-22 AVG. THICK INCHES	448 INTERMEDIATE COURSE, TYPE I, PG 64-22 CU.YD.	448 INTERMEDIATE COURSE, TYPE I, PG 64-22 (DRIVEWAYS) AVG. THICK INCHES	448 INTERMEDIATE COURSE, TYPE I, PG 64-22 (DRIVEWAYS) CU.YD.	448 SURFACE COURSE, TYPE I, PG 64-22 (DRIVEWAYS) AVG. THICK INCHES	448 SURFACE COURSE, TYPE I, PG 64-22 (DRIVEWAYS) CU.YD.	446 SURFACE COURSE, TYPE I, PG 64-22 AVG. THICK INCHES	446 SURFACE COURSE, TYPE I, PG 64-22 CU.YD.	202 WEARING COURSE REMOVED SQ. YD.
	USR 322	12.52 TO 13.56	1.04	5491.2	30	18304.00				1372.80	732.16	1/2	254.22					1 1/2	762.67	
		13.62 TO 14.08	0.46	2428.8	30	8096.00				607.20	323.84		112.44						337.33	
		14.12 TO 14.95	0.83	4382.4	30	14608.00				1095.60	584.32		202.89						608.67	
		14.95 TO 14.98	0.03	158.4	37	651.20				48.84	26.05		9.04						27.13	
		14.98 TO 15.02	0.04	211.2	44	1032.53				77.44	41.30		14.34						43.02	
		15.02 TO 15.05	0.03	158.4	37	651.20				48.84	26.05		9.04						27.13	
		15.09 TO 15.12	0.03	158.4	37	651.20				48.84	26.05		9.04						27.13	
		15.12 TO 15.16	0.04	211.2	44	1032.53				77.44	41.30		14.34						43.02	
		15.16 TO 15.19	0.03	158.4	37	651.20				48.84	26.05		9.04						27.13	
		15.19 TO 18.675	3.485	18400.8	30	61336.00				4600.20	2453.44		851.89						2555.67	
		18.685 TO 19.15	0.465	2455.2	30	8184.00				613.80	327.36		113.67						341.00	
	USR 322	19.15 TO 22.49	3.29	17371.2	30	57904.00				4342.80	2316.16	1/2	804.22					1 1/2	2412.67	
		DRIVES								394.58						1 1/2	219.21			
		MAILBOX APPROACHES								45.00						1 1/2	25.00			
		INTERSECTIONS								166.46	88.78	1/2	30.83					1 1/2	92.48	831
										13589	7013		2435				244		7305	831

CALCULATED LLS CHECKED ___

PLAN NO.

ASPHALT CONCRETE

ATB-322-0.00



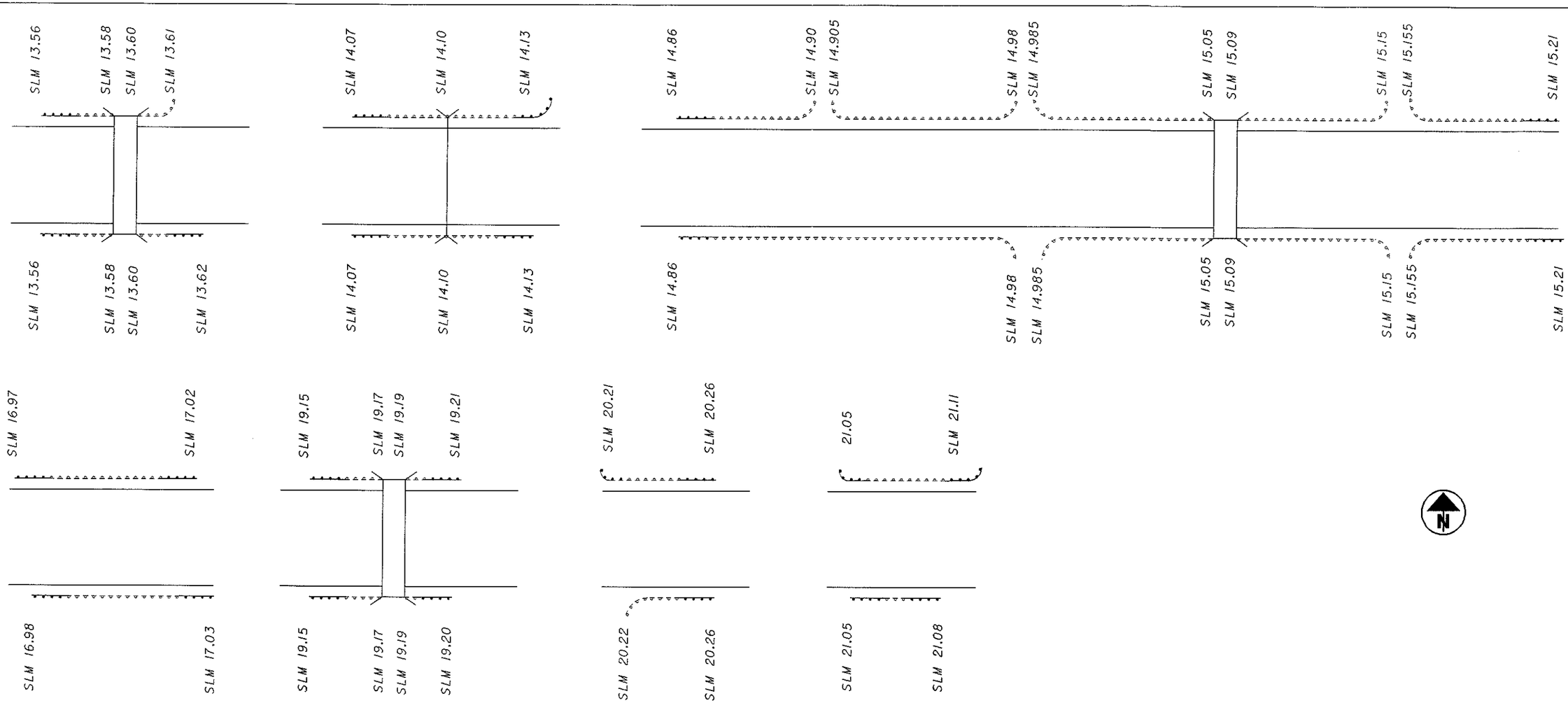
ROUTE	EXISTING LOG POINT TO LOG POINT		SIDE	202 GUARDRAIL REMOVED LIN. FT.	202 ANCHOR ASSEMBLY REMOVED, TYPE A EACH	606 GUARDRAIL, TYPE 5 LIN. FT.	606 ANCHOR ASSEMBLY, TYPE T EACH	606 ANCHOR ASSEMBLY, TYPE B-98 EACH	606 ANCHOR ASSEMBLY, TYPE E-98 EACH	COMMENTS
USR 322	2.01	2.04	RIGHT	25	1				1	
USR 322	2.01	2.04	LEFT	25	1				1	
USR 322	2.07	2.09	RIGHT							NO WORK
USR 322	2.07	2.11	LEFT							NO WORK
USR 322	3.66	3.69	LEFT	25	1				1	
USR 322	3.67	3.71	RIGHT	25	2	37.5	1			
USR 322	3.96	4.01	RIGHT	50	2				2	
USR 322	3.96	4.01	LEFT	50	2				2	
USR 322	4.39	4.44	RIGHT	25	2	37.5	1			
USR 322	4.39	4.44	LEFT	25	1				1	
USR 322	4.62	4.74	LEFT	50	2				2	
USR 322	5.18	5.28	RIGHT		1	25	1			
USR 322	5.18	5.28	LEFT	25	1				1	
USR 322	5.31	5.39	RIGHT		1	37.5	1			
USR 322	5.31	5.41	LEFT	25	1				1	
SUB-TOTAL				350	18	137.5	4		12	

ROUTE	EXISTING LOG POINT TO LOG POINT		SIDE	202 GUARDRAIL REMOVED LIN. FT.	202 ANCHOR ASSEMBLY REMOVED, TYPE A EACH	606 GUARDRAIL, TYPE 5 LIN. FT.	606 ANCHOR ASSEMBLY, TYPE T EACH	606 ANCHOR ASSEMBLY, TYPE B-98 EACH	606 ANCHOR ASSEMBLY, TYPE E-98 EACH	COMMENTS
USR 322	5.68	5.72	RIGHT	50	2				2	
USR 322	5.69	5.72	LEFT	25	1				1	
USR 322	5.76	5.83	LEFT	25	2	25	1		1	
USR 322	5.77	5.84	RIGHT	50	2				2	
SUB-TOTAL				150	7	25	1		6	
SUB-TOTAL FROM LEFT COLUMNS				350	18	137.5	4		12	
TOTALS TO GENERAL SUMMARY				500	25	162.5	5		18	

CALCULATED LLS
CHECKED

GUARDRAIL DETAILS AND SUB-SUMMARY

ATB-322-0.00



ROUTE	EXISTING LOG POINT TO LOG POINT		SIDE	202 GUARDRAIL REMOVED LIN. FT.	202 ANCHOR ASSEMBLY REMOVED, TYPE A EACH	606 GUARDRAIL, TYPE 5 LIN. FT.	606 ANCHOR ASSEMBLY, TYPE T EACH	606 ANCHOR ASSEMBLY, TYPE B-98 EACH	606 ANCHOR ASSEMBLY, TYPE E-98 EACH	COMMENTS
USR 322	13.56	13.58	RIGHT	25	1				1	
USR 322	13.56	13.58	LEFT	25	1				1	
USR 322	13.60	13.62	RIGHT	25	1				1	
USR 322	13.60	13.61	LEFT							NO WORK
USR 322	14.07	14.10	RIGHT	25	1				1	
USR 322	14.07	14.10	LEFT	25	1				1	
USR 322	14.10	14.13	RIGHT	25	1				1	
USR 322	14.10	14.13	LEFT		1	37.5	1			
USR 322	14.86	14.98	RIGHT	25	1				1	
USR 322	14.86	14.90	LEFT	25	1				1	
USR 322	14.905	14.98	LEFT							NO WORK
USR 322	14.985	15.05	RIGHT							NO WORK
USR 322	14.985	15.05	LEFT							NO WORK
USR 322	15.09	15.15	RIGHT							NO WORK
USR 322	15.09	15.15	LEFT							NO WORK
SUB-TOTAL				200	9	37.5	1		8	

ROUTE	EXISTING LOG POINT TO LOG POINT		SIDE	202 GUARDRAIL REMOVED LIN. FT.	202 ANCHOR ASSEMBLY REMOVED, TYPE A EACH	606 GUARDRAIL, TYPE 5 LIN. FT.	606 ANCHOR ASSEMBLY, TYPE T EACH	606 ANCHOR ASSEMBLY, TYPE B-98 EACH	606 ANCHOR ASSEMBLY, TYPE E-98 EACH	COMMENTS
USR 322	15.155	15.21	RIGHT	25	1				1	
USR 322	15.155	15.21	LEFT	25	1				1	
USR 322	16.97	17.02	LEFT	50	2				2	
USR 322	16.98	17.03	RIGHT	50	2				2	
USR 322	19.15	19.17	RIGHT	25	1				1	
USR 322	19.15	19.17	LEFT	25	1				1	
USR 322	19.19	19.20	RIGHT	25	1				1	
USR 322	19.19	19.21	LEFT	25	1				1	
USR 322	20.21	20.26	LEFT		2	25	1			
USR 322	20.22	20.26	RIGHT	25	1				1	
USR 322	21.05	21.08	RIGHT	50	2				2	
USR 322	21.05	21.11	LEFT		2	62.5	2			
SUB-TOTAL				325	17	87.5	3		13	
SUB-TOTAL FROM LEFT COLUMNS				200	9	37.5	1		8	
TOTALS TO GENERAL SUMMARY				525	26	125.0	4		21	

GUARDRAIL DETAILS AND SUB-SUMMARY

CALCULATED LLS
CHECKED

ATB-322-0.00

RAISED PAVEMENT MARKER, INSTALLATION ONLY

The Department will supply the RPM castings with the yellow/yellow, one-way white, white/red and yellow/red retro-reflectors installed in the castings for Item 621, Raised Pavement Marker, Installation Only. The Contractor shall furnish all other material required to complete this item.

The Contractor will be informed at the pre-construction conference as to the location in Columbus of the Department supplied RPM materials. When specified, additional RPM materials will be stored within the District for use on this project. The Contractor shall pick up Department supplied materials at the specified location(s) for transport to the work site or to the Contractor's storage facility. An authorization for pick-up form is given in Supplemental Specification 1082 dated January 6, 1998. The Contractor shall notify the District and/or the parties listed on the authorization form in writing at least 5 working days prior to pick-up of Department supplied materials. The materials shall be stored without damage or contamination with foreign matter. A deduction in the amount of the actual cost to the Department shall be made for the materials damaged by the Contractor or for castings received by the Contractor which were not installed or were not returned to the Department.

Loading of material supplied by the Department at the recycler's warehouse shall be done in accordance with supplemental specification 1082.

All castings shall be placed the same working day that the RPM slots are cut into the pavement.

RPM REMOVED FOR STORAGE, AS PER PLAN

In addition to the requirements of 202.10, the contractor shall deliver the removed markers to the ODOT District office at 705 Oakwood St, Ravenna, OH 44266. The Contractor shall contact the District [Luke Nagle, 330-297-0801 ext 329] two working days prior to the delivery.

NOTE:
Raised Pavement Markers supplied by the Department shall be the Low Profile Type.

RPM REPLACEMENT / REMOVAL

STANDARD CONSTRUCTION DWG.			
TC-65.10	10-19-01	TC-65.12	10-19-01
TC-65.11	10-19-01		

LOCATION				ITEM 202	ITEM 621				REMARKS
					INSTALLATION ONLY				
COUNTY	ROUTE	CENTER LINE LOG MILES		RPM REMOVED FOR STORAGE, AS PER PLAN	RPM WITH YELLOW/ YELLOW REFLECTOR	RPM WITH WHITE/ RED REFLECTOR	RPM WITH ONE-WAY WHITE REFLECTOR	RPM WITH YELLOW/ RED REFLECTOR	
		FROM	TO						
ATB	322	0.00	6.68	↕	442				COUNTY LINE TO E. ORWELL CORP. (CENTER LINE)
ATB	322	12.49	22.50	↕	677	8	16		SR 46 TO SR 7 (CENTER LINE, TURN LANES AT SR 11 & STOP APPROACH)
TOTAL				1220	1119	8	16		**TOTALS CARRIED TO GENERAL SUMMARY**

CALCULATED KG CHECKED LJ

RAISED PAVEMENT MARKER SUB-SUMMARY

ATB-322-0.00

CENTER LINE

GENERAL SPEC. 640
MATERIAL TYPE 642, TYPE 1, FAST DRY WATERBASED

COUNTY	ROUTE	TRU LOG	FROM	TRU LOG	TO	TOTAL MILES	EQUIVALENT SOLID LINE	COMMENTS
ATB	322	0.00	GEAUGA COUNTY LINE	8.13	ORWELL EAST CORP. LIMIT	8.13	4.79	
ATB	322	12.49	JCT. SR 46	22.50	JCT. SR 7	10.061	8.152	
TOTAL						18.191	12.942	

LANE LINE

COUNTY	ROUTE	TRU LOG	FROM	TRU LOG	TO	TOTAL MILES	4" LANE LINE DASHED	4" LANE LINE SOLID	COMMENTS
TOTAL									

EDGE LINE

COUNTY	ROUTE	TRU LOG	FROM	TRU LOG	TO	WHITE EDGE LINE TOTAL MILES	WHITE EDGE LINE HIGHWAY	WHITE EDGE LINE RAMP	YELLOW EDGE LINE TOTAL MILES	YELLOW EDGE LINE HIGHWAY	YELLOW EDGE LINE RAMP	COMMENTS
ATB	322	0.00	GEAUGA COUNTY LINE	8.13	ORWELL EAST CORP. LIMIT	16.26	16.26	-				
ATB	322	12.49	JCT. SR 46	22.50	JCT. SR 7	20.122	20.122	-				
TOTAL						36.382	36.382	-				

AUXILIARY

AUXILIARY MARKINGS:
TYPE 2, FAST DRY ALKYD TYPE

COUNTY	ROUTE LOCATION	TRU LOG	8" CHANNEL LINE	24" STOP LINE	24" TRANSVERSE LINES WHITE	24" TRANSVERSE LINES YELLOW	12" CROSS-WALK LINES	WORD ON PAVEMENT ONLY 72"	WORD ON PAVEMENT ONLY 96"	LANE ARROWS TURN LEFT	LANE ARROWS TURN RIGHT	LANE ARROWS THRU	LANE ARROWS COMB.	SYMBOL MARKINGS RxR	SYMBOL MARKINGS SCHOOL 72"	SYMBOL MARKINGS SCHOOL 96"	ISLAND MARKINGS	DOTTED LINES	COMMENTS
			LIN FT	LIN FT	LIN FT	LIN FT	LIN FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	SQ FT	LIN FT	
ATB	US 322 @ WINDSOR ELEM. SCHOOL	2.987														2			
ATB	US 322 @ COLEBROOK ELEM. SCHOOL	12.507														2			
ATB	US 322 @ SR 11 SB RAMPS	14.941	92			216			1	1							57		
ATB	US 322 @ SR 11 NB RAMPS	15.115	100			216			1	1							57		
ATB	US 322 @ CONRAIL RAILROAD	18.643		20										2					
ATB	US 322 @ SR 7	22.450		30															
ATB	SR 7 @ US 322			28															
ATB	SR 193 @ US 322			76															
ATB	SR 46 @ US 322			56															
ATB	SR 534 @ US 322			22															
ATB	SR 86 @ US 322			16															
ATB	SR 11 NB OFF RAMP TO US 322			50															
ATB	SR 11 SB OFF RAMP TO US 322			50															
TOTAL			192	348		432			2	2				2		4	114		

CALCULATED TJD
CHECKED LLS

PLAN No.

PAVEMENT MARKING SUB-SUMMARY

ATB-322-0.00

TS 54
DISTRICT 4

N

Center Line Log Record and Field Sheet — SHEET ___ OF ___

COUNTY ASHTABULA ROUTE 322

Total This Route = Yellow: Solid 11.305, Yellow: Dash 22.799, White: Dash ___

Equivalent Yellow 17.005

.90 .80 .70 .60 .50 .40 .30 .20 .10 0.00 GEA/ATB

BUNNSBURG RD

CO. LINE

Yellow: Solid ___ Dash 1.000

(1.979) (1.979)

WISWELL RD (1.818)

(1.677)

1.00

Yellow: Solid 0.311 Dash 1.000

CHUB RD (2.987)

MM-3 (2.983)

LANESE RD (2.856)

(2.763)

(2.644)

(2.595)

(2.475)

(2.293)

WISWELL RD (2.149)

(2.119)

WARNER HOLLOW RD (2.098)

(2.069)

(2.034)

COX RD (1.075)

2.00

Yellow: Solid 0.541 Dash 0.949

TOTAL YELLOW THIS PAGE: SOLID 0.852, DASH 2.949, EQUIVALENT LINE 1.589

TS 54
DISTRICT 4

N

Center Line Log Record and Field Sheet — SHEET ___ OF ___

COUNTY ASHTABULA ROUTE 322

Total This Route = Yellow: Solid ___, Yellow: Dash ___, White: Dash ___

Equivalent Yellow ___

(3.957)

MM-4

(3.645)

SR 534 (3.574)

(3.574) SR 86

(3.499)

(4.457)

3.00

Yellow: Solid 0.134 Dash 1.000

(4.914)

(4.912)

MM-5

(4.733)

FORTNEY RD (4.593)

(4.256)

4.00

Yellow: Solid 0.910 Dash 0.724

(5.974)

MM-6

(5.313)

(5.281)

5.00

Yellow: Solid ___ Dash 1.000

TOTAL YELLOW THIS PAGE: SOLID 1.044, DASH 2.724, EQUIVALENT LINE 1.725

CALCULATED TJD
CHECKED LLS

PAVEMENT MARKINGS

ATB-322-0.00

TS 54
DISTRICT 4

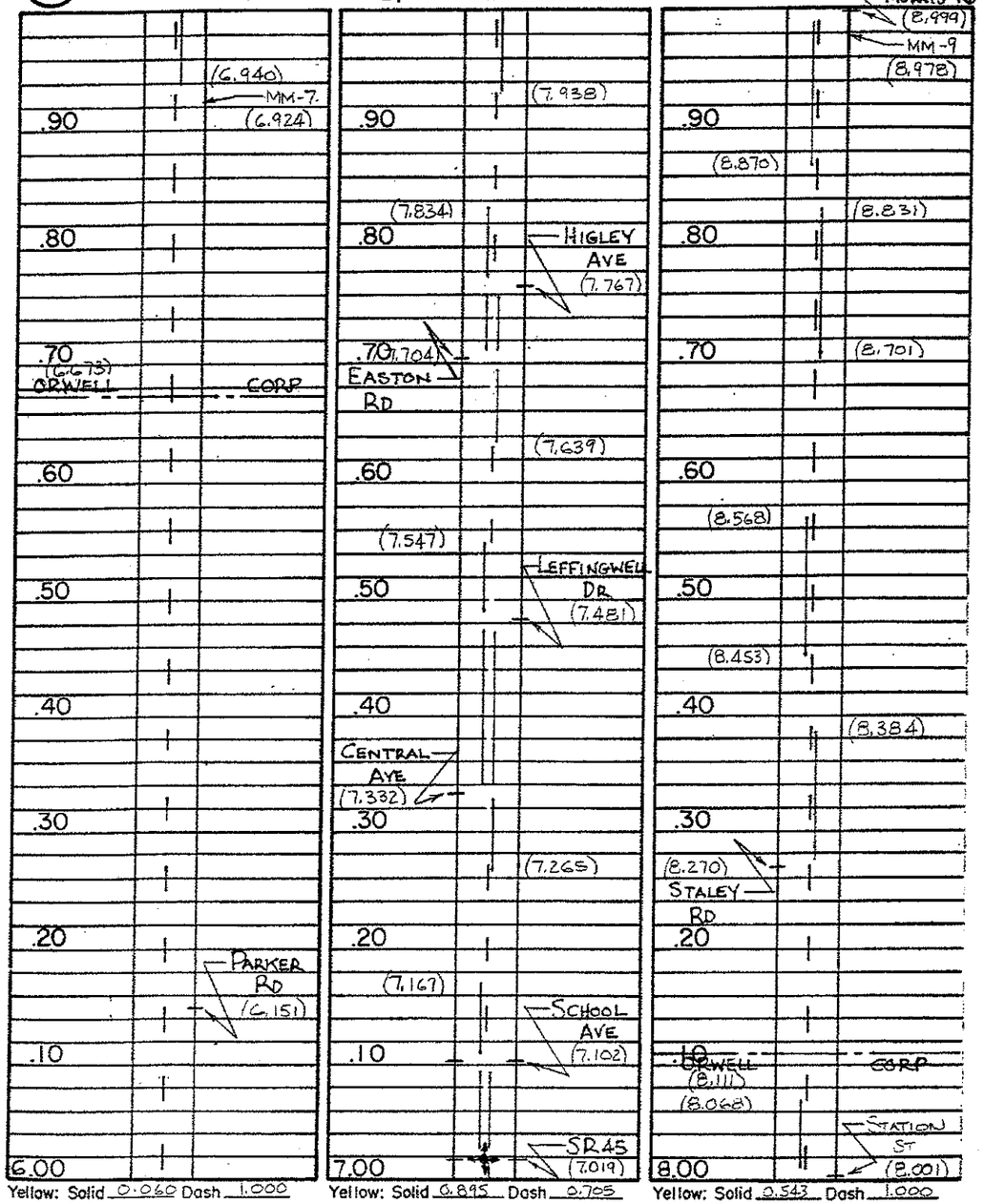
N

Center Line Log Record and Field Sheet

COUNTY ASHTABULA ROUTE 322

Total This Route = Yellow: Solid ____, Yellow: Dash ____, White: Dash ____

Equivalent Yellow ____



Yellow: Solid 0.060 Dash 1.000 | Yellow: Solid 0.895 Dash 0.705 | Yellow: Solid 0.543 Dash 1.000

TOTAL YELLOW THIS PAGE: SOLID 1.498, DASH 2.705, EQUIVALENT LINE 2.174

* SEE AUXILIARY PAVEMENT MARKING DETAIL

TS 54
DISTRICT 4

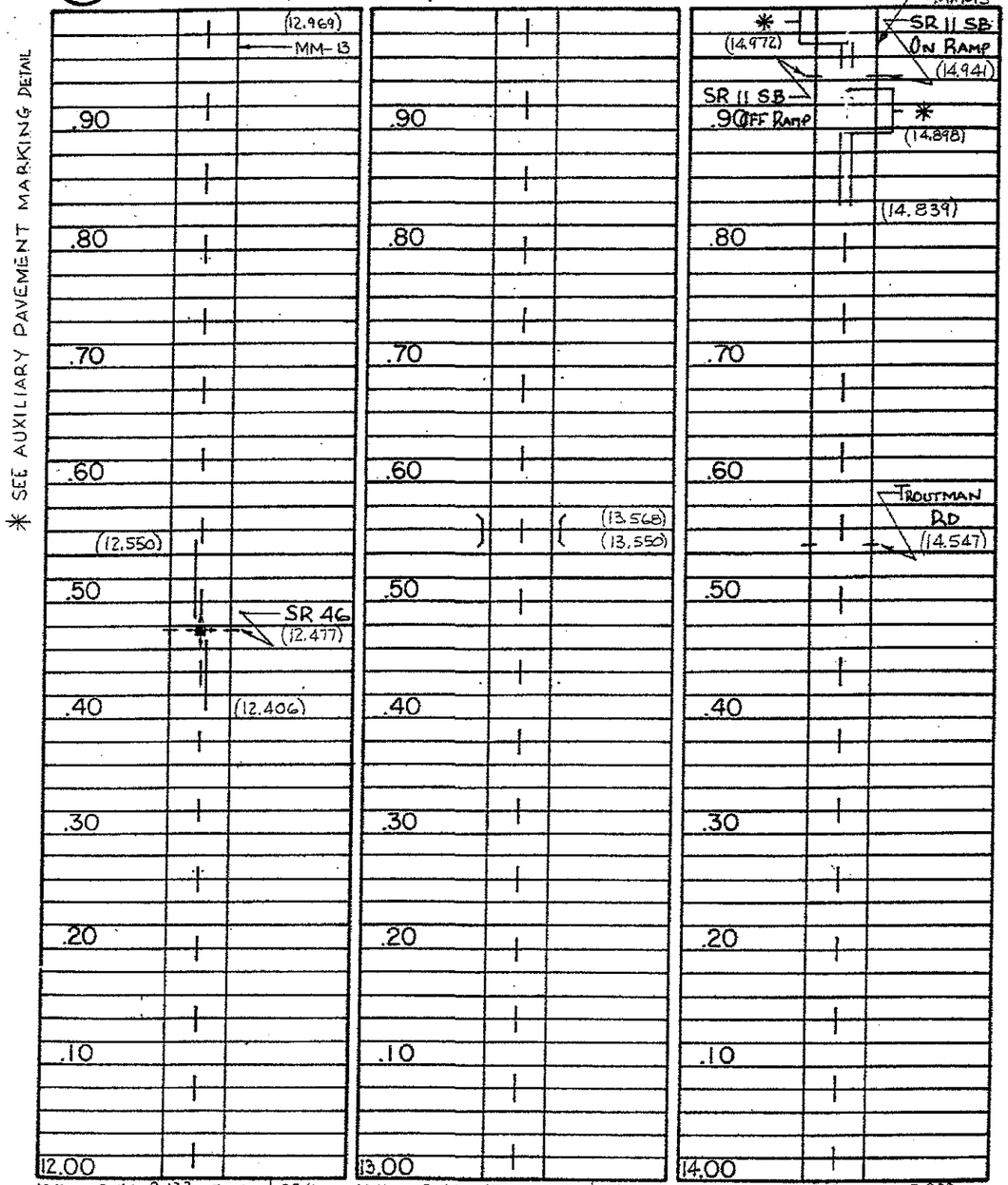
N

Center Line Log Record and Field Sheet

COUNTY ASHTABULA ROUTE 322

Total This Route = Yellow: Solid ____, Yellow: Dash ____, White: Dash ____

Equivalent Yellow ____



Yellow: Solid 0.132 Dash 1.000 | Yellow: Solid ____ Dash 1.000 | Yellow: Solid 0.428 Dash 0.839

TOTAL YELLOW THIS PAGE: SOLID 0.560, DASH 2.839, EQUIVALENT LINE 1.270

CALCULATED TJD
CHECKED LLS

PAVEMENT_MARKINGS

ATB-322-0.00

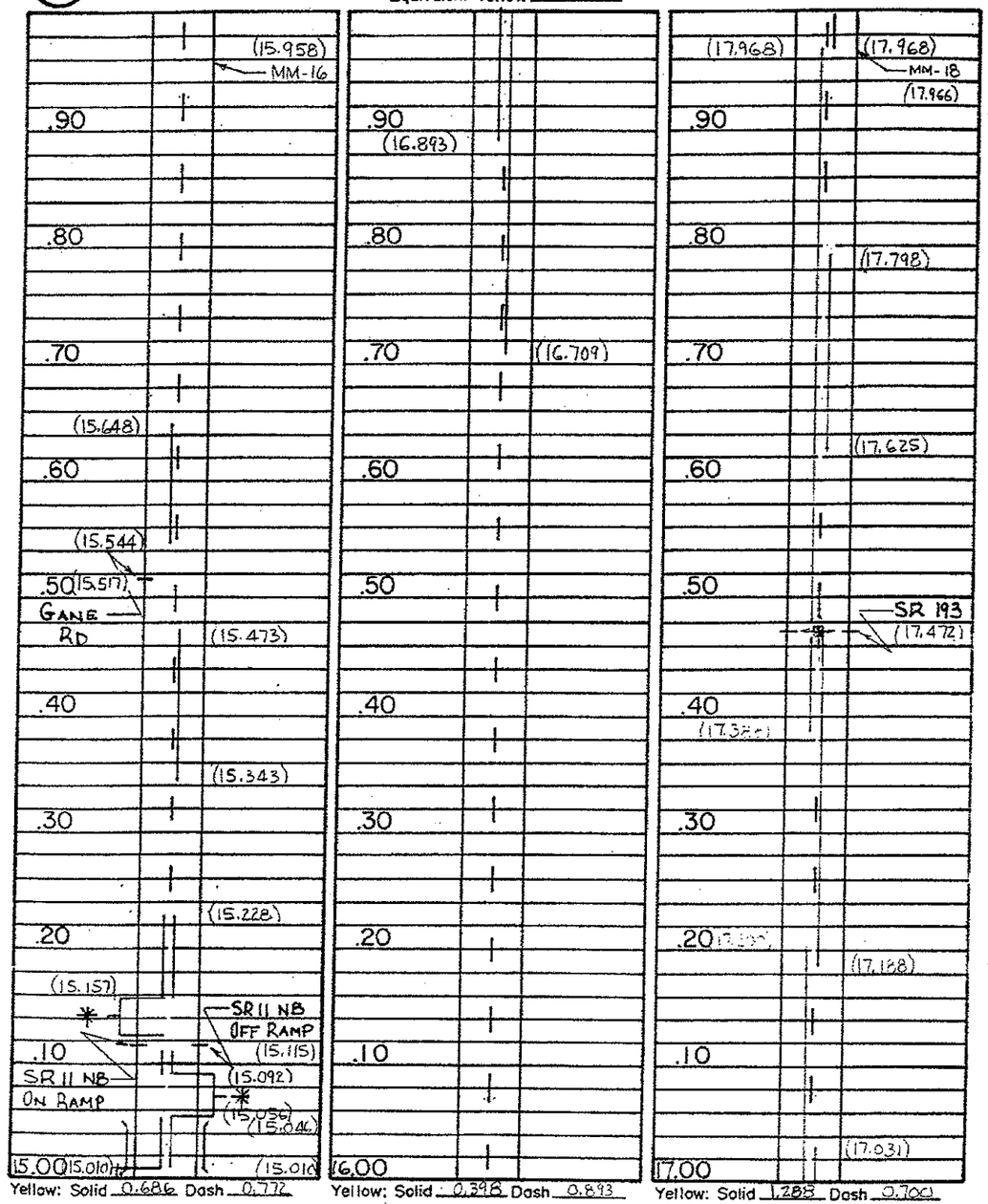
TS 54
DISTRICT 4

N

Center Line Log Record and Field Sheet SHEET 6 OF 7

COUNTY ASHTABULA ROUTE 322

Total This Route = Yellow: Solid ____, Yellow: Dash ____, White: Dash ____
Equivalent Yellow ____



Yellow: Solid 0.686 Dash 0.772
Yellow: Solid 0.398 Dash 0.893
Yellow: Solid 1.288 Dash 0.700

TOTAL YELLOW THIS PAGE: SOLID 2.372, DASH 2.365, EQUIVALENT LINE 2.963

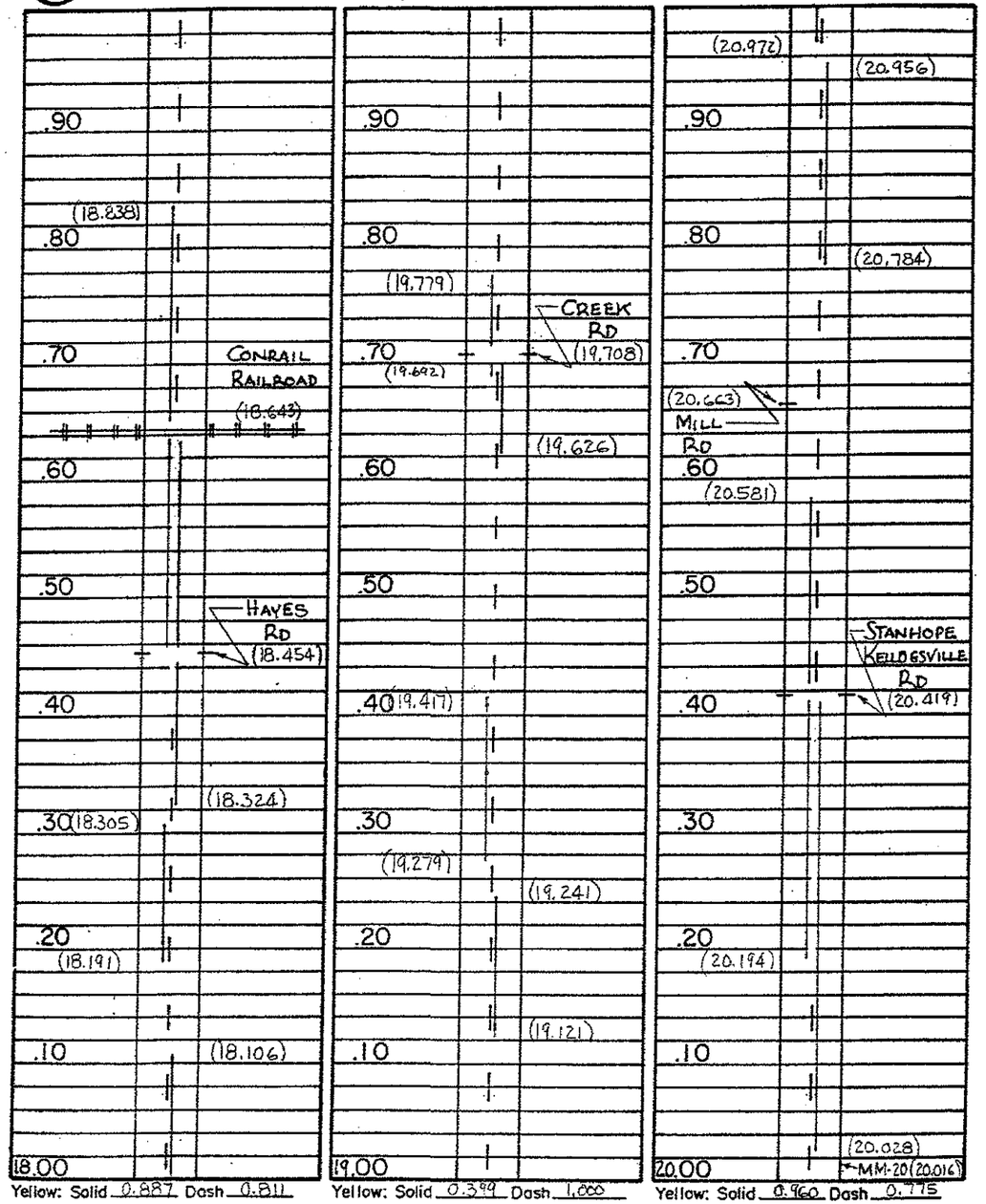
TS 54
DISTRICT 4

N

Center Line Log Record and Field Sheet SHEET ____ OF ____

COUNTY ASHTABULA ROUTE 322

Total This Route = Yellow: Solid ____, Yellow: Dash ____, White: Dash ____
Equivalent Yellow ____



Yellow: Solid 0.887 Dash 0.811
Yellow: Solid 0.399 Dash 1.000
Yellow: Solid 0.960 Dash 0.775

TOTAL YELLOW THIS PAGE: SOLID 2.246, DASH 2.586, EQUIVALENT LINE 2.893

CALCULATED TJD
CHECKED LLS

PAVEMENT MARKINGS

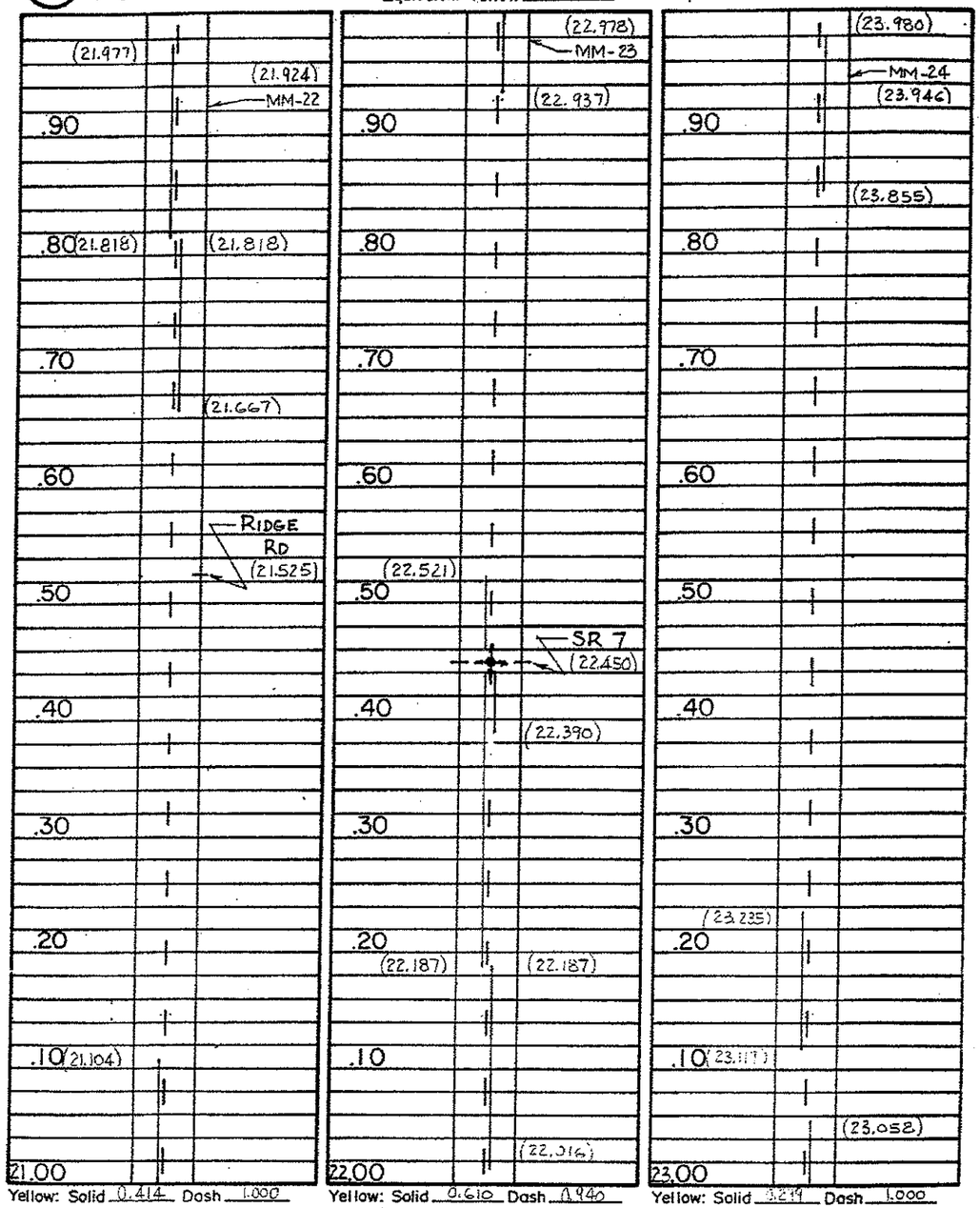
ATB-322-0.00

TS 54
DISTRICT 4

Center Line Log Record and Field Sheet — SHEET ___ OF ___

COUNTY ASHTABULA ROUTE 322

Total This Route = Yellow: Solid ____, Yellow: Dash ____, White: Dash ____
Equivalent Yellow ____



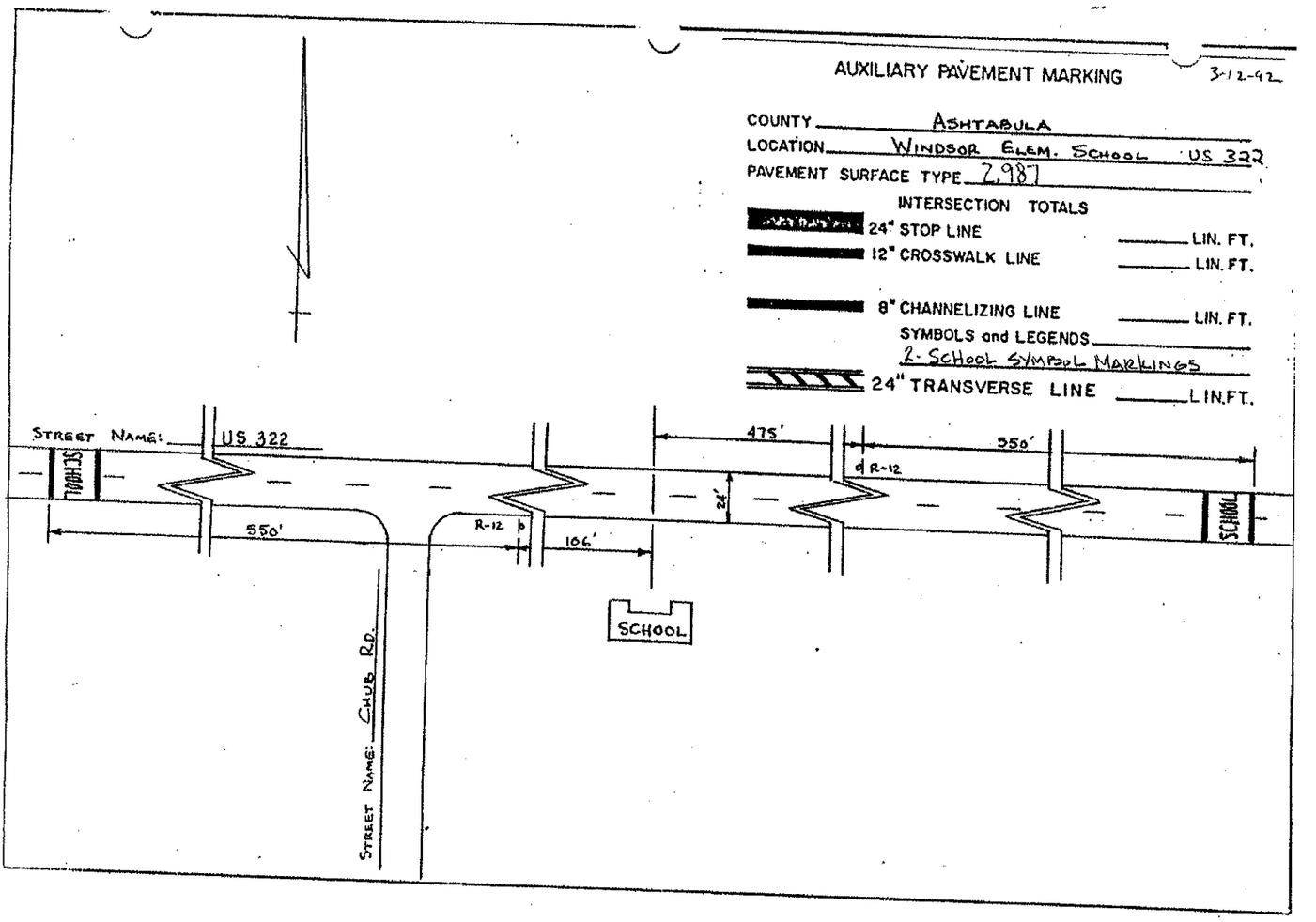
Yellow: Solid 0.414 Dash 1.000 | Yellow: Solid 0.610 Dash 0.940 | Yellow: Solid 0.319 Dash 1.000

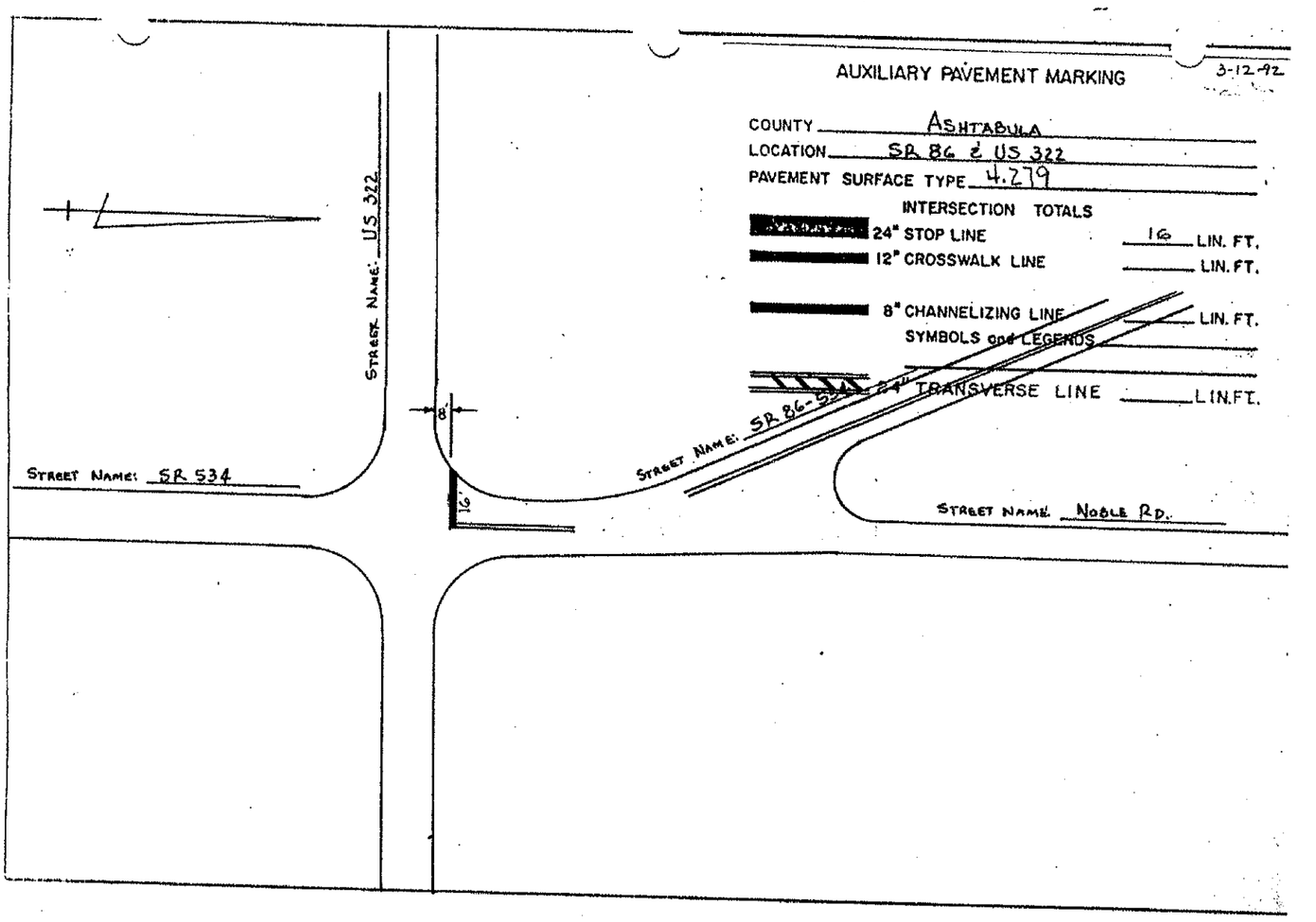
TOTAL YELLOW THIS PAGE: SOLID 1.323, DASH 2.940, EQUIVALENT LINE 3.052

CALCULATED TJD CHECKED LLS

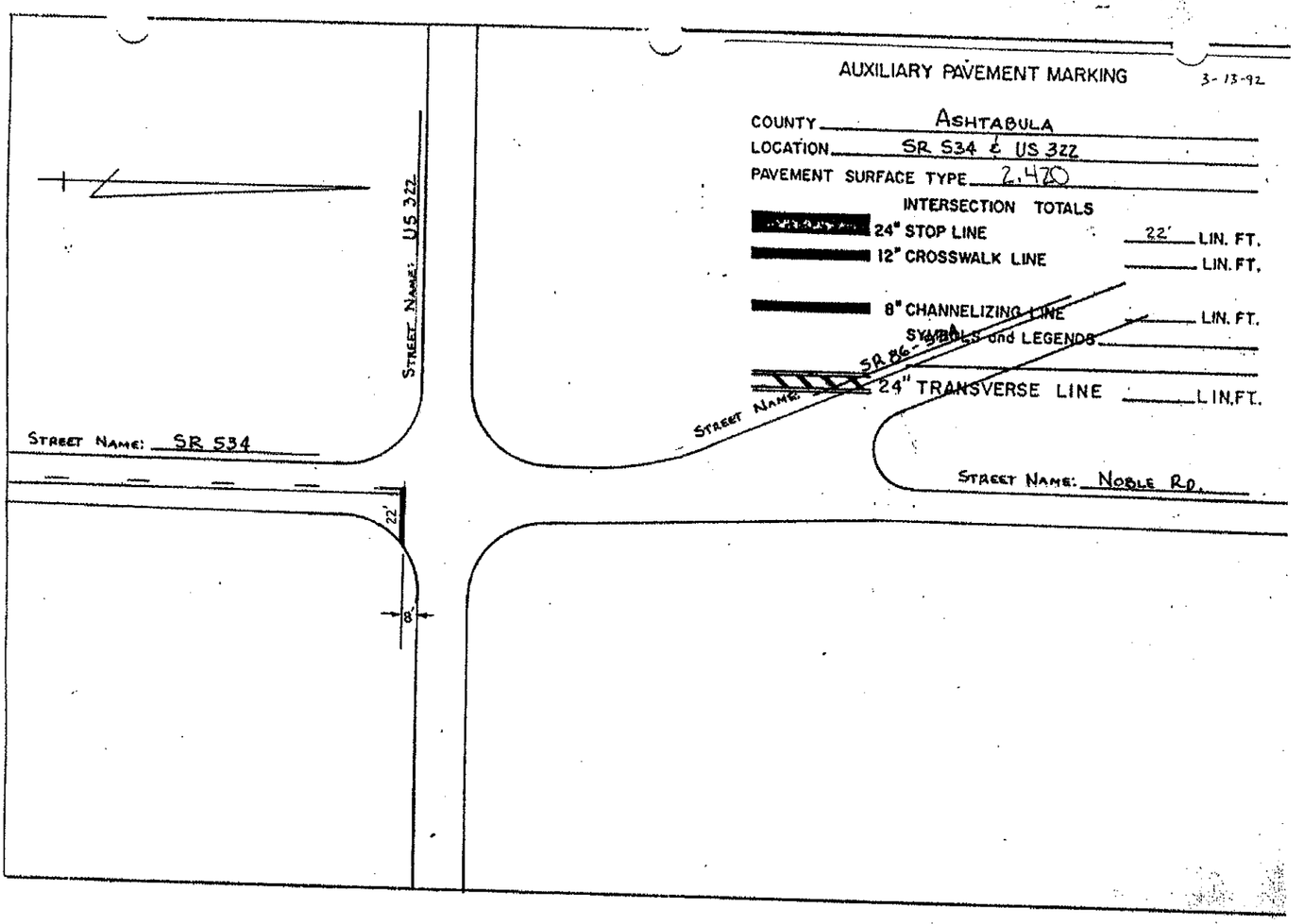
PAVEMENT MARKINGS

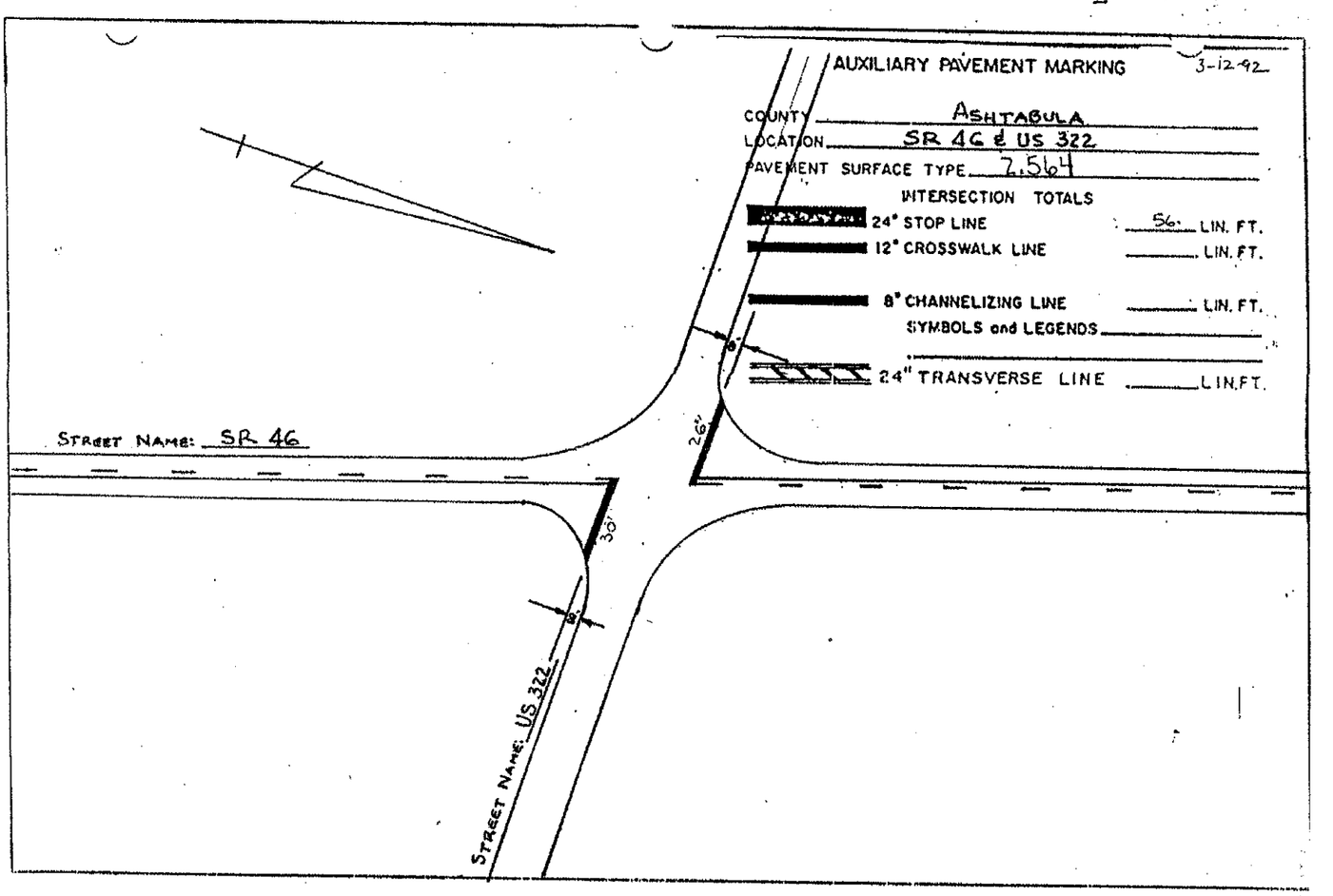
ATB-322-0.00





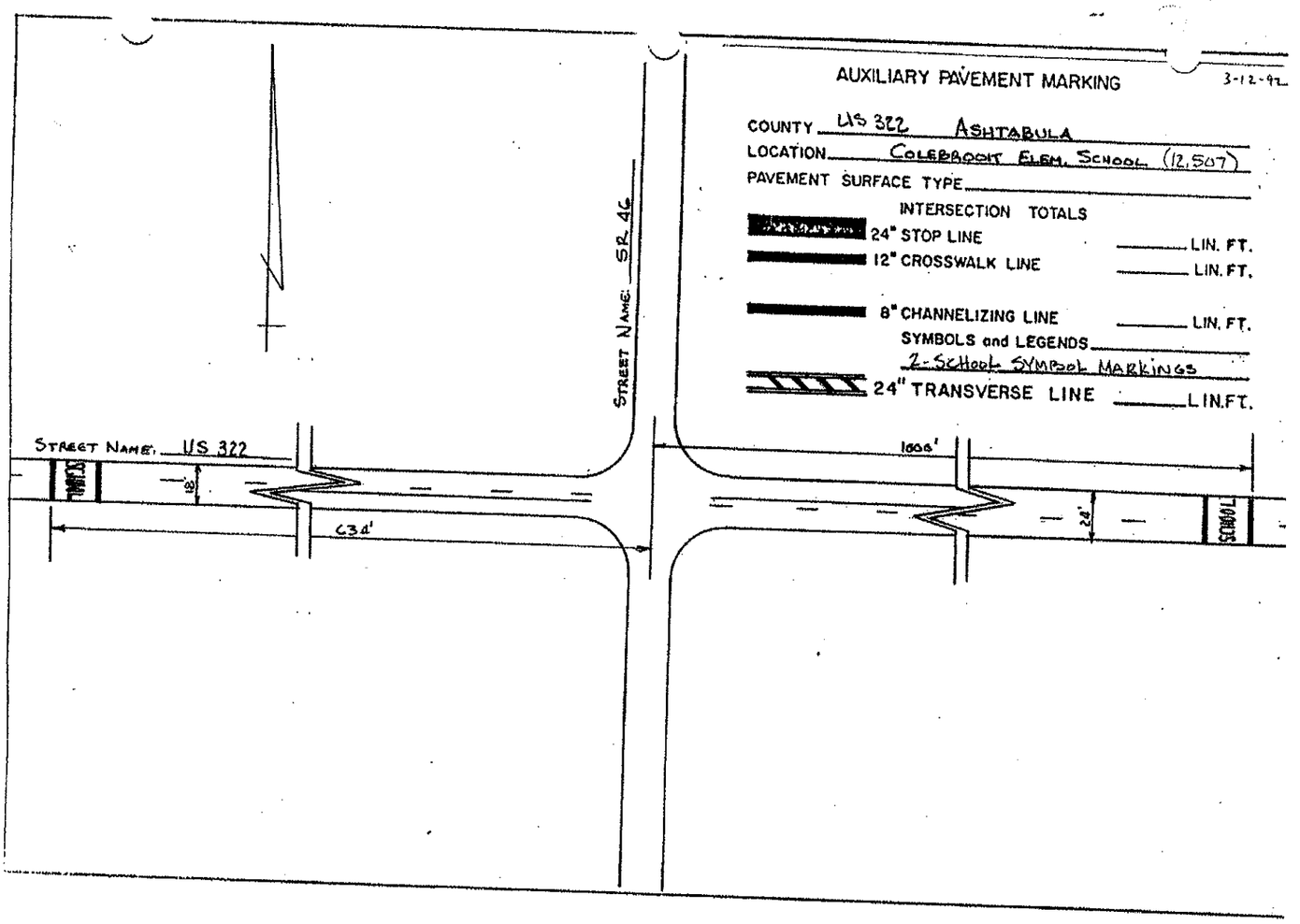
RW RO / INV 100	ATB-322-0.00	PAVEMENT MARKINGS	CALCULATED TJD / CHECKED LLS

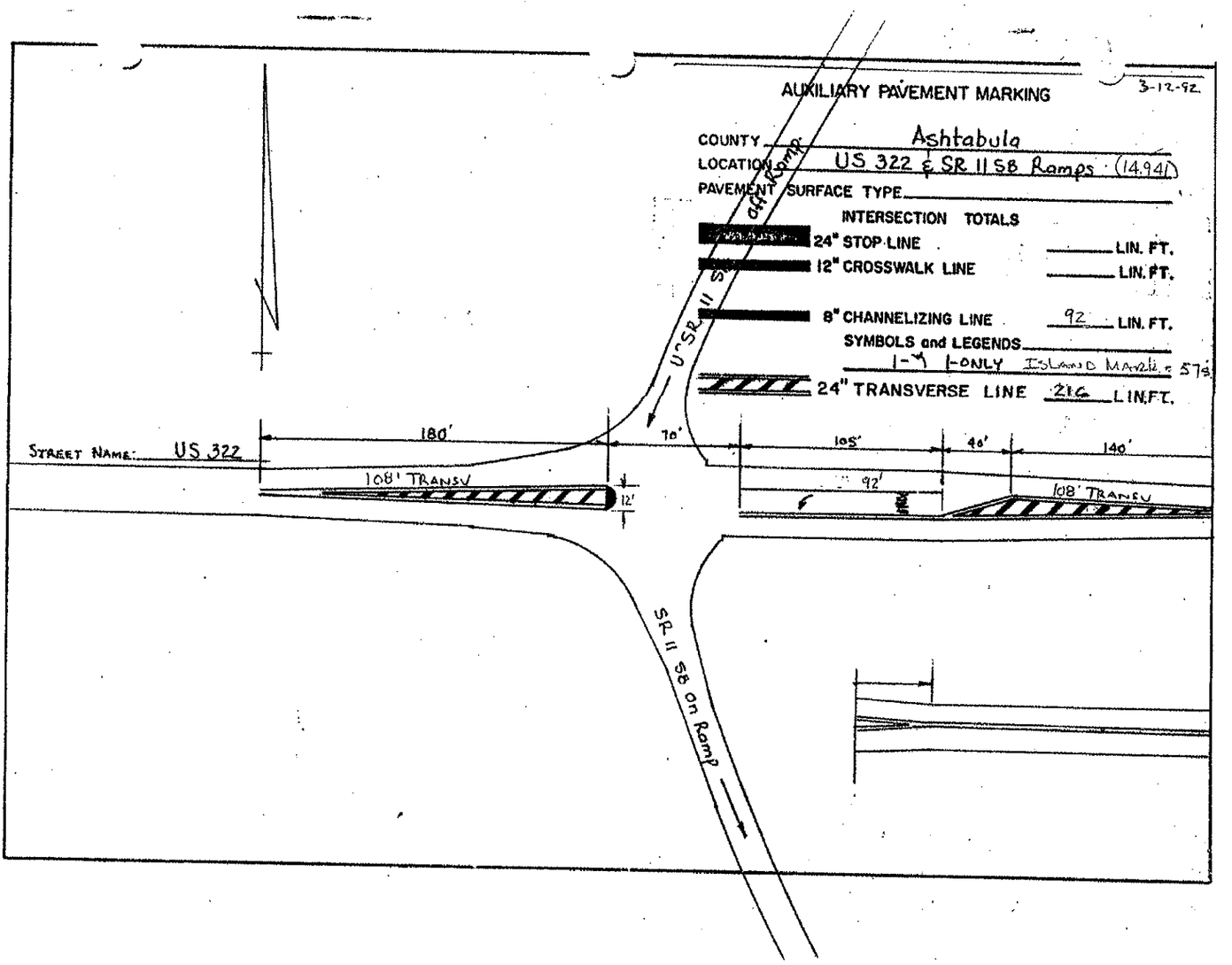




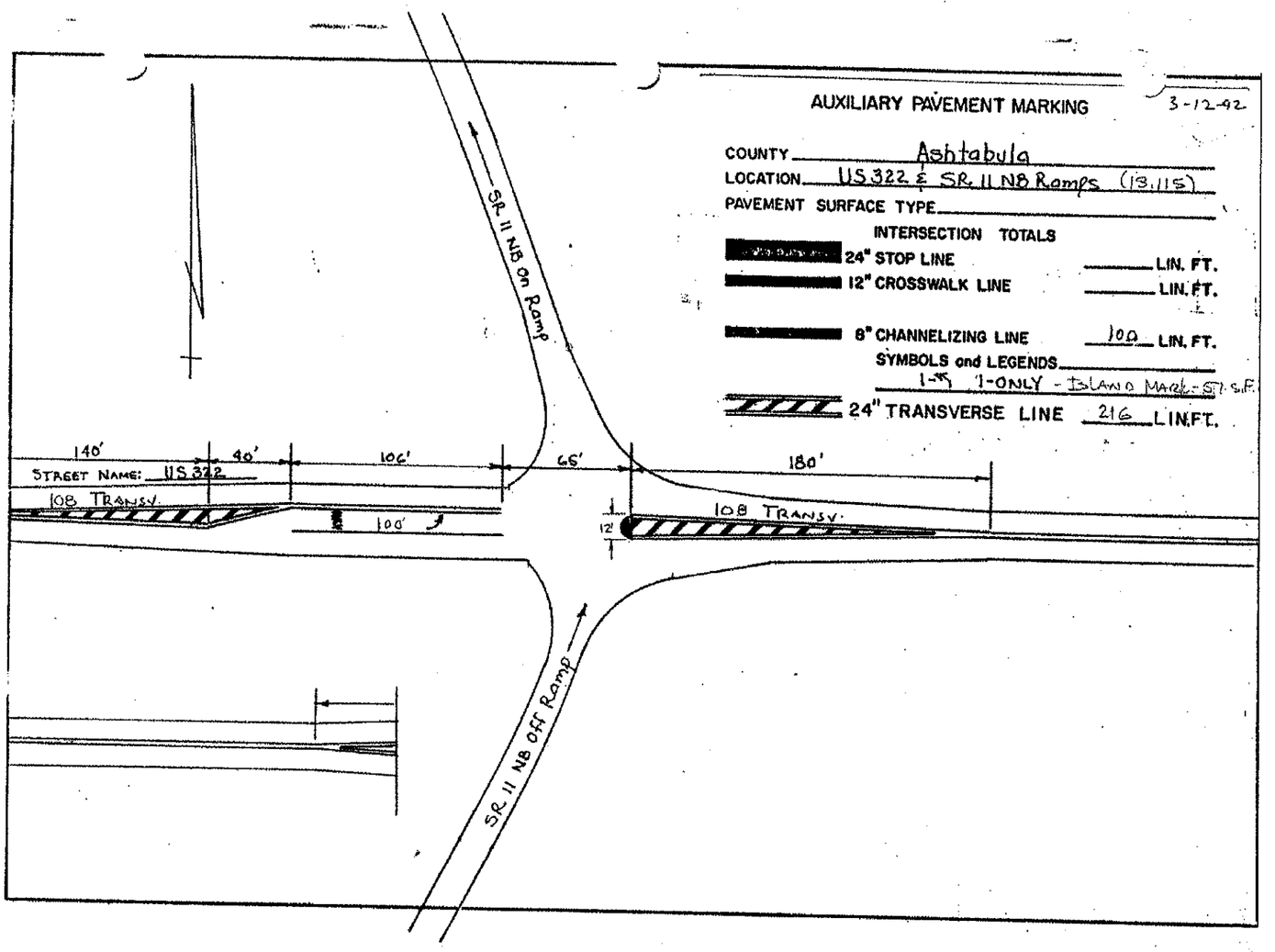
RW RO / IN RO	ATB-322-0.00	PAVEMENT MARKINGS

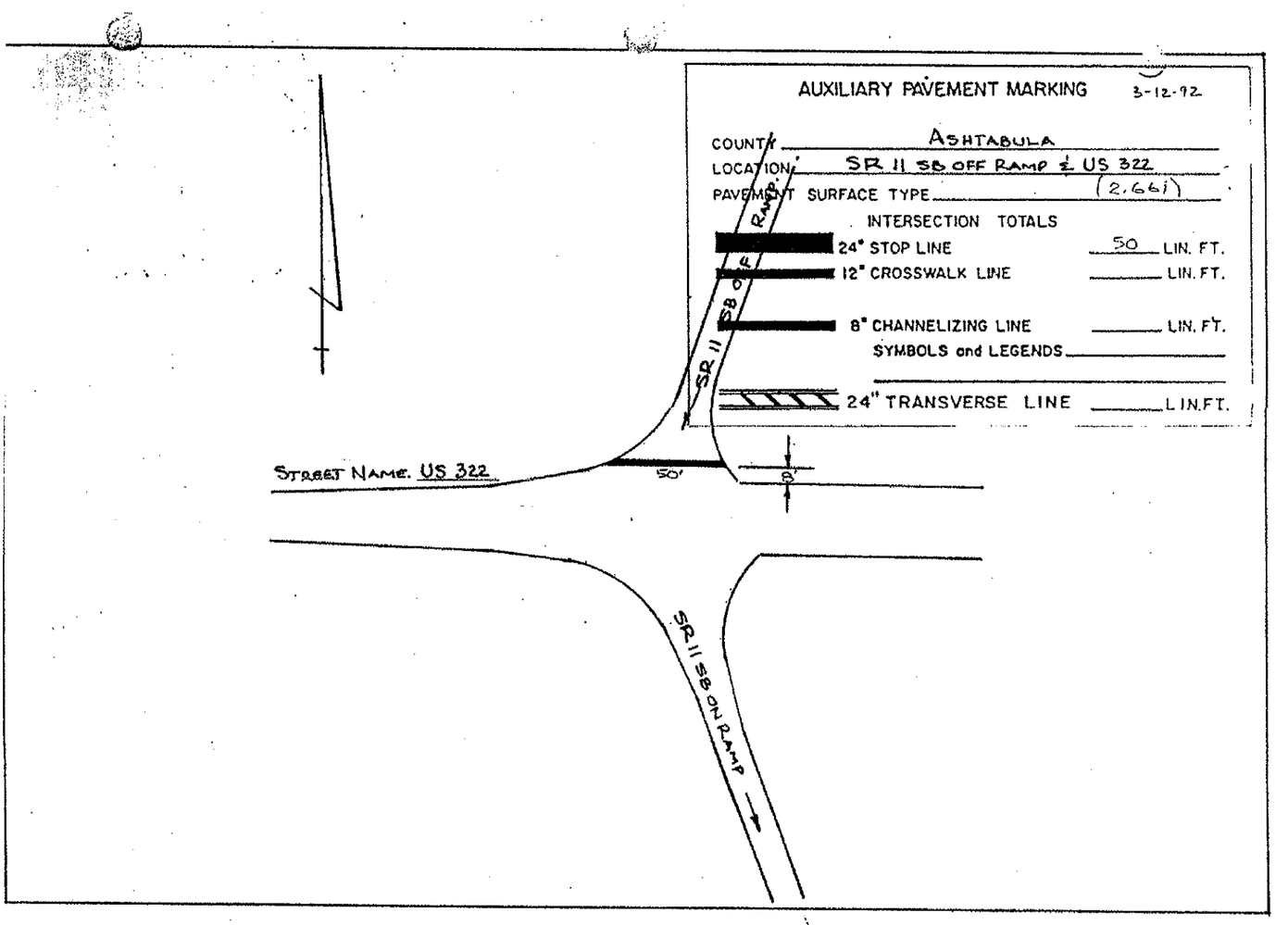
CALCULATED TJD
CHECKED LLS



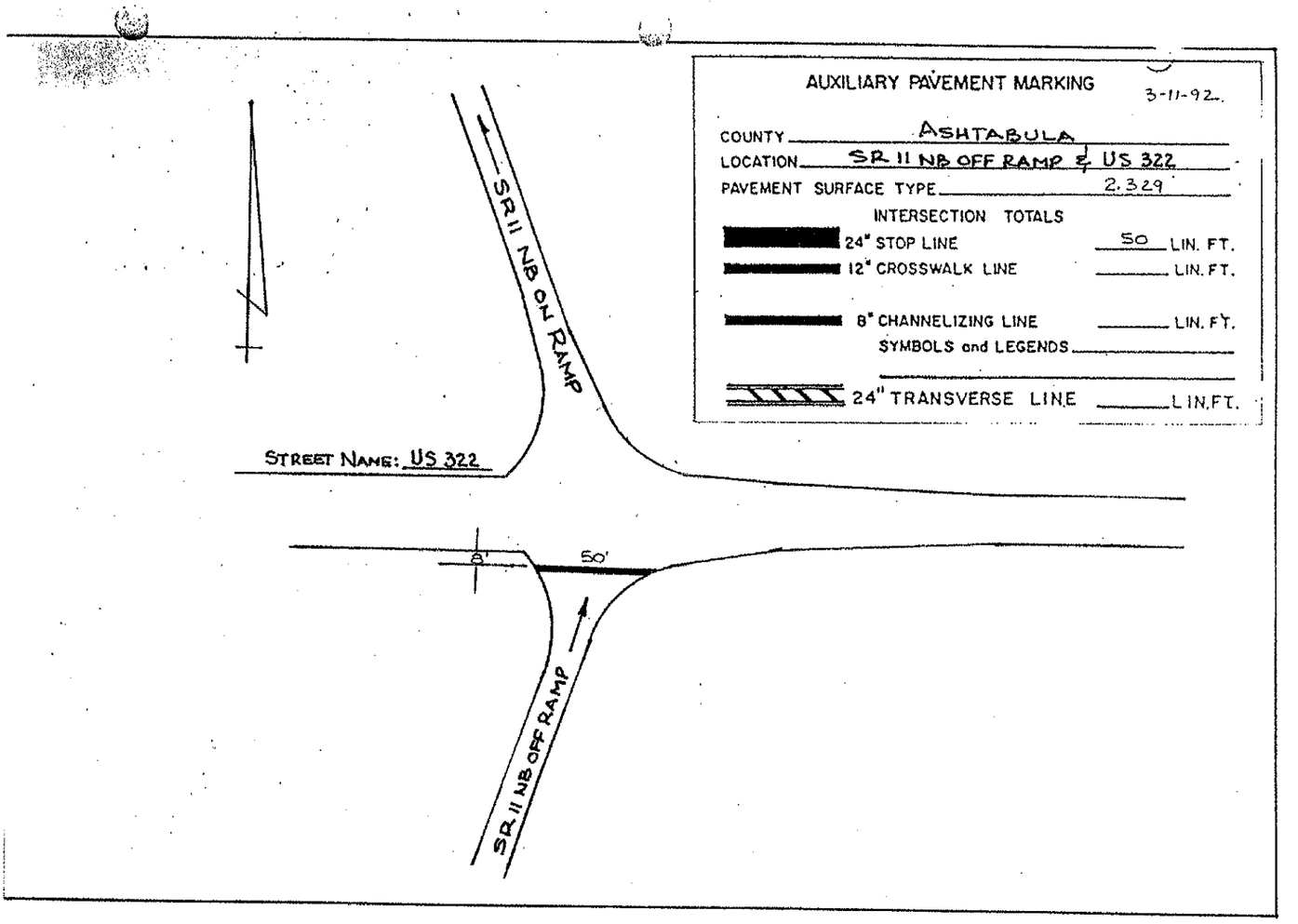


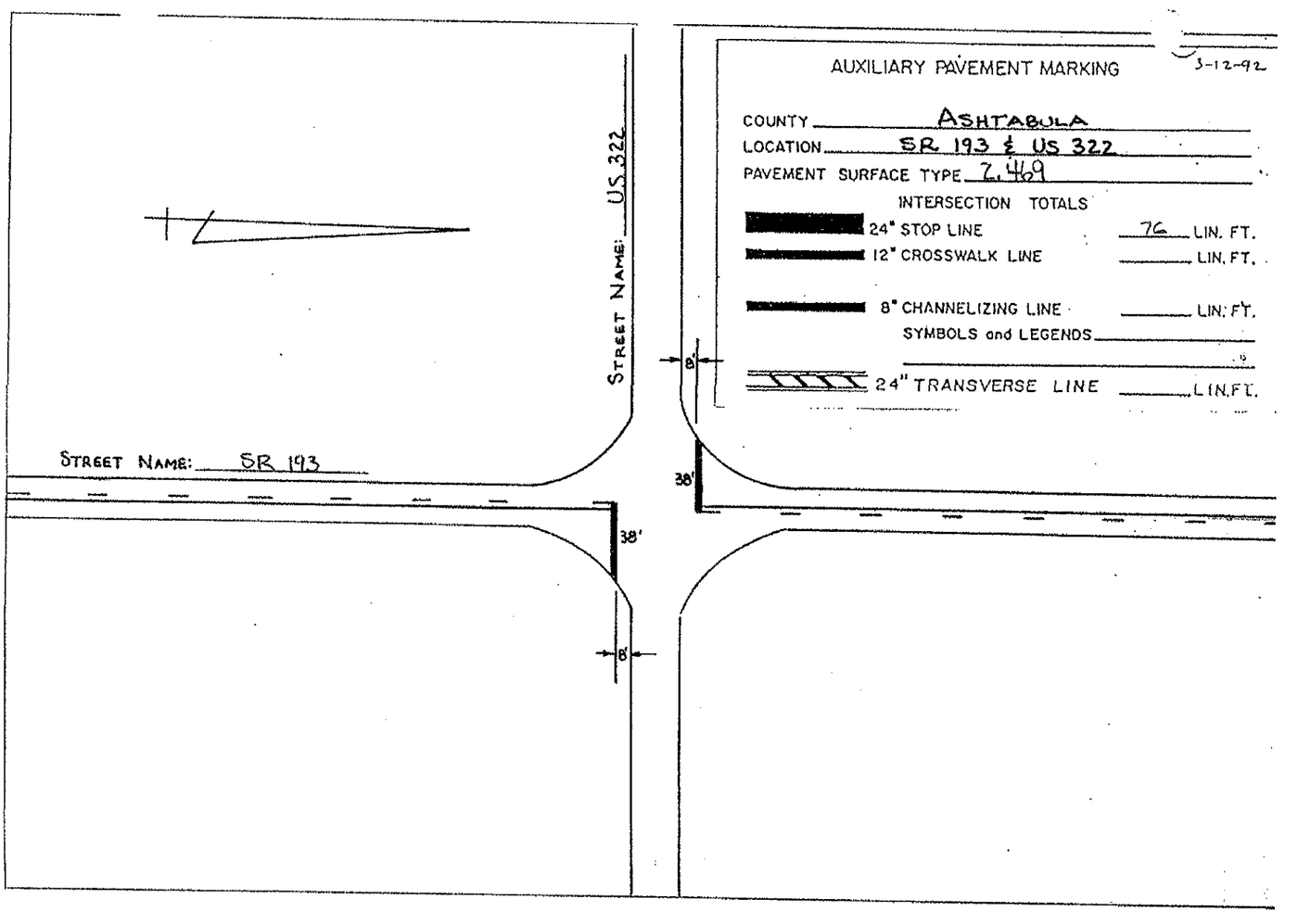
ILW ILO ILW IO	ATB-322-0.00	PAVEMENT MARKINGS	CALCULATED TJD CHECKED LLS



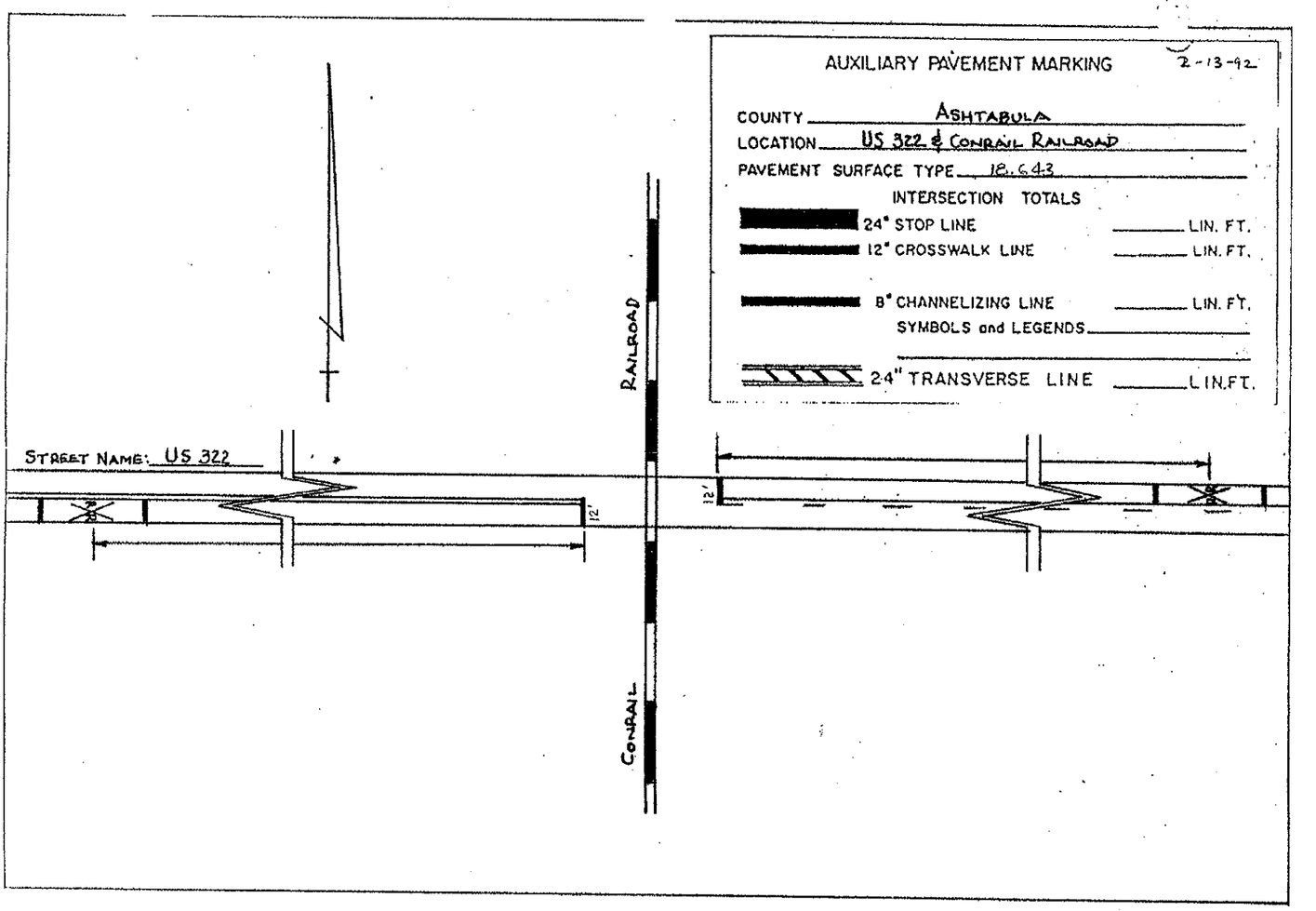


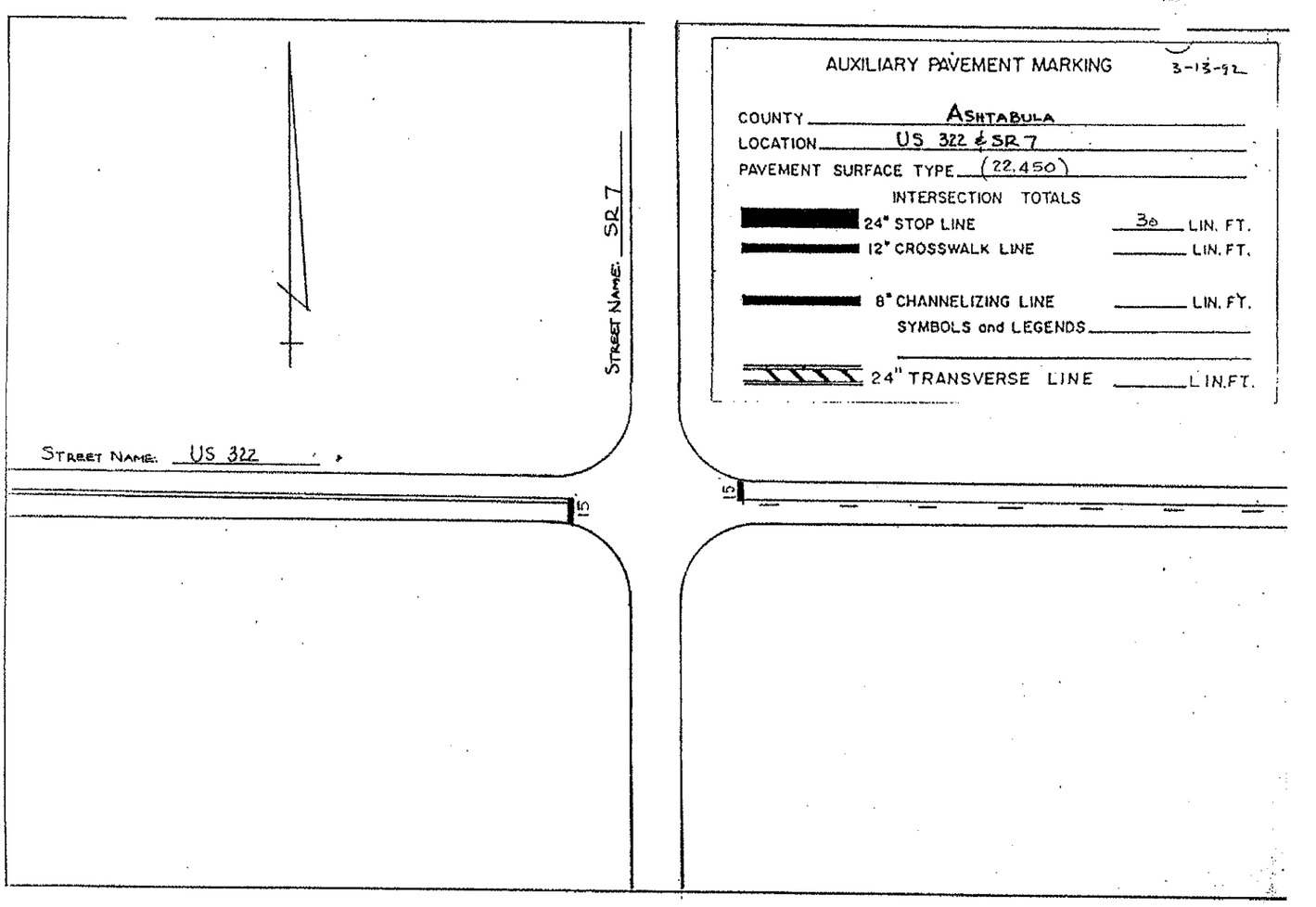
ATB-322-0.00	PAVEMENT MARKINGS	CALCULATED TJD CHECKED LLS



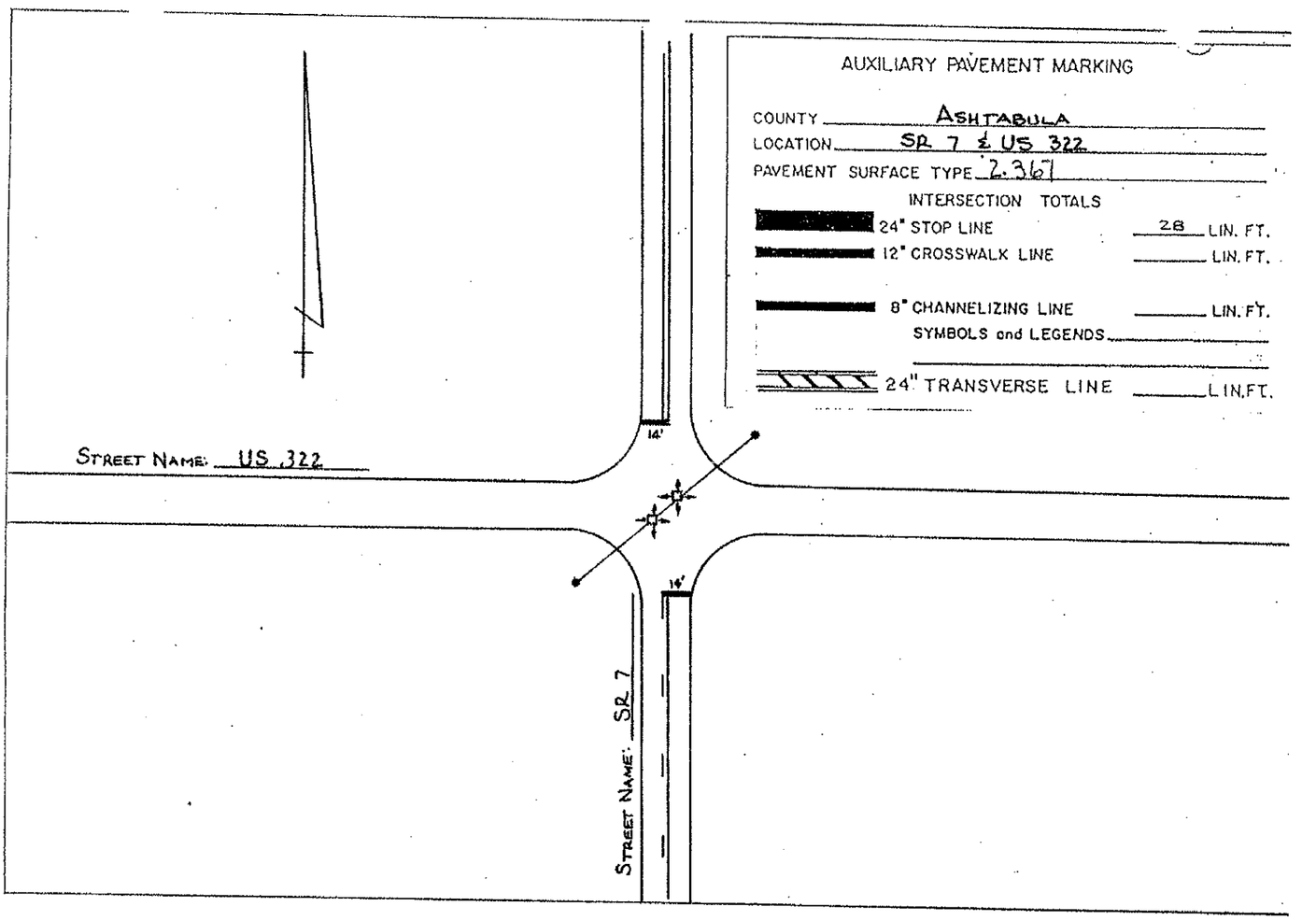


ATB-322-0.00	PAVEMENT MARKINGS	CALCULATED TJD CHECKED LLS

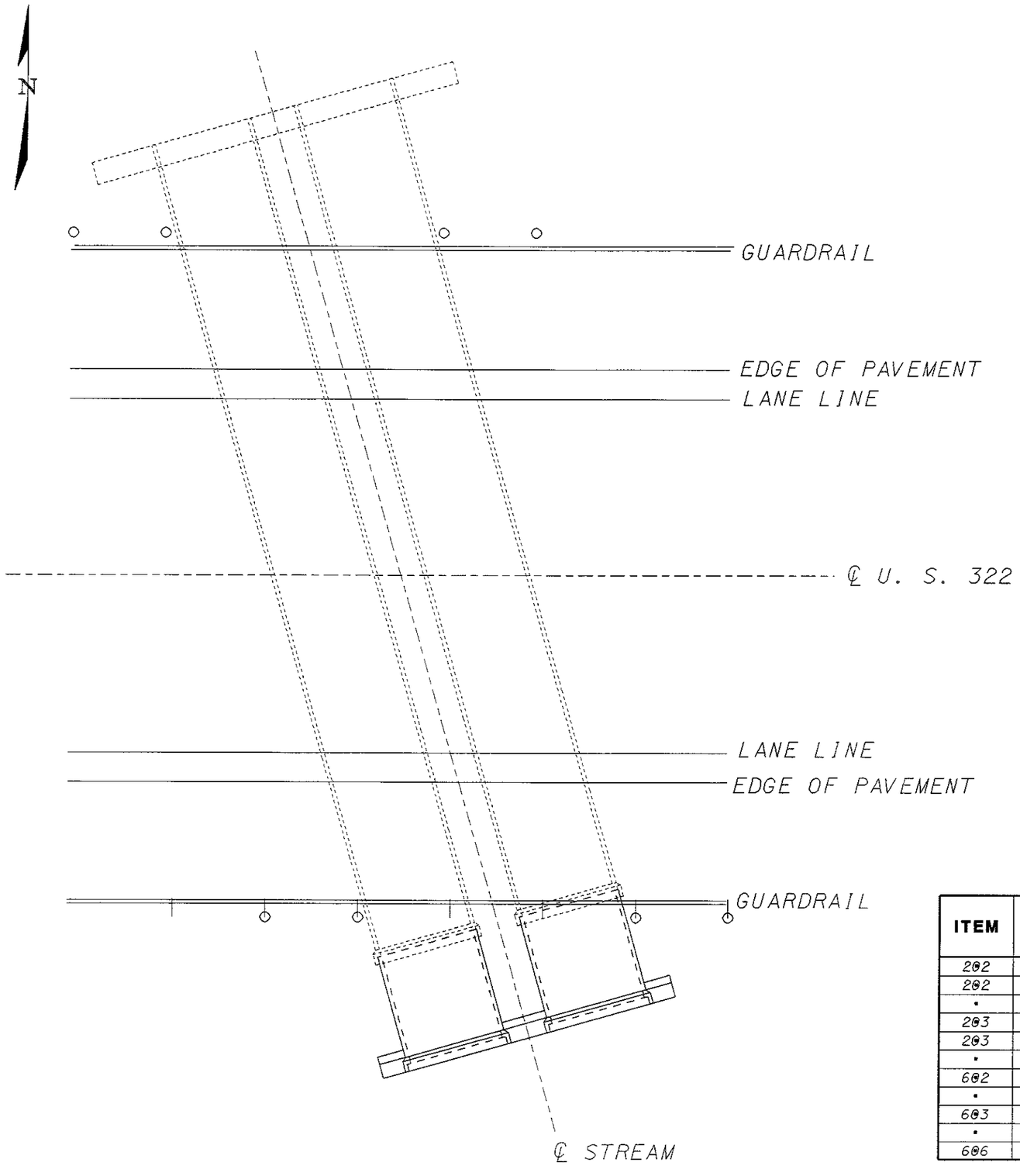




ATB-322-0.00	PAVEMENT MARKINGS	CALCULATED TJD CHECKED LLS

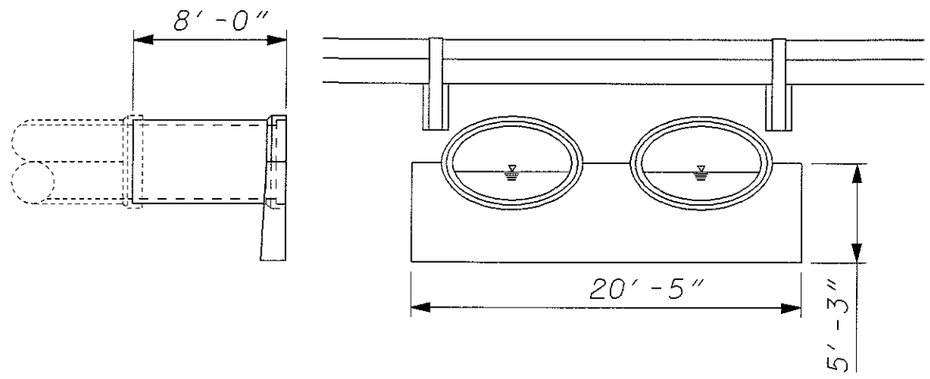


ATB-322-0.00	PAVEMENT MARKINGS	CALCULATED TJD CHECKED LLS



WORK TO BE DONE:

- REMOVE EXISTING EIGHT FOOT END SECTION OF BOTH PIPES AND REMOVE HEADWALL AND REPLACE WITH NEW EIGHT FOOT SECTIONS OF 53" X 83" CONDUIT AND NEW HALF HEIGHT HEADWALL.
- REPAIR EMBANKMENT AROUND PIPE END.
- CHANNEL CLEANOUT AT BOTH PIPE ENDS.
- REMOVE AND REPLACE GUARDRAIL.



FOR DIMENSIONS NOT GIVEN, SEE STANDARD DRAWING HW-2.2.

ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
202	35200	16	F-T	PIPE REMOVED, OVER 24"
202	38000	75	F-T	GUARDRAIL REMOVED
.	.	.	.	.
203	10000	49	CU-YD	EXCAVATION
203	20000	49	CU-YD	EMBANKMENT
.	.	.	.	.
602	20000	5	CU-YD	CONCRETE MASONRY
.	.	.	.	.
603	53300	16	F-T	53" X 83" CONDUIT, TYPE A, 706.04, HE-1
.	.	.	.	.
606	13010	75	F-T	GUARDRAIL, TYPE 5 WITH TUBULAR BACKUP

CALCULATED | CHECKED

PIPE END REPLACEMENT SLM 5.81

ATB-322-0.00

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

REFERENCE SHALL BE MADE TO STANDARD DRAWING(S):

DS-1-92 DATED (REVISED) 07-19-02

DATED (REVISED)

DATED (REVISED)

AND TO SUPPLEMENTAL SPECIFICATION(S):

841 DATED 10/12/99

843 DATED 05/05/98

864 DATED 07/11/00

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1996, INCLUDING THE 1997, 1998, AND 1999 INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL.

SUMMARY OF WORK REQUIRED ON STRUCTURES:

BRIDGE No. ATB-322-0528

- TREAT CONCRETE DECK USING SOLUBLE REACTIVE SILICATE (SRS) CONCRETE TREATMENT.
- EPOXY-URETHANE SEALING OF CONCRETE SURFACES, ABUTMENTS, WINGWALLS, DECK EDGES AND PIER CAPS.
- REPAIR CRACK (REAR PIER) OVER LEFT PIER COLUMN BY EPOXY INJECTION.

BRIDGE No. ATB-322-1358

- REMOVE THE EXISTING ASPHALT CONCRETE WEARING COURSE AND REPLACE WITH TYPE 3 MEMBRANE WATERPROOFING AND NEW ASPHALT CONCRETE WEARING SURFACE.
- EPOXY-URETHANE SEALING OF CONCRETE SURFACES, ABUTMENTS, WINGWALLS, DECK EDGES AND PIER CAPS.

BRIDGE No. ATB-322-1410

- REMOVE THE EXISTING ASPHALT CONCRETE WEARING COURSE AND REPLACE WITH TYPE 3 MEMBRANE WATERPROOFING AND NEW ASPHALT CONCRETE WEARING SURFACE.
- EPOXY-URETHANE SEALING OF CONCRETE SURFACES, ABUTMENTS, WINGWALLS AND DECK EDGES.
- PATCH SPALLED AREAS OF UNDERSIDE OF CONCRETE DECK.

BRIDGE ATB-322-1917

- REMOVE THE EXISTING ASPHALT CONCRETE WEARING COURSE AND REPLACE WITH TYPE 3 MEMBRANE WATERPROOFING AND NEW ASPHALT CONCRETE WEARING SURFACE.
- EPOXY-URETHANE SEALING OF CONCRETE SURFACES, ABUTMENTS AND WINGWALLS.
- NON-EPOXY SEALING OF CONCRETE BOXBEAM SURFACES.

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE 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 SECTIONS 102.05, 105.02 AND 513.04.

CONTRACTOR 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.

ITEM SPECIAL - STEEL DRIP STRIP:

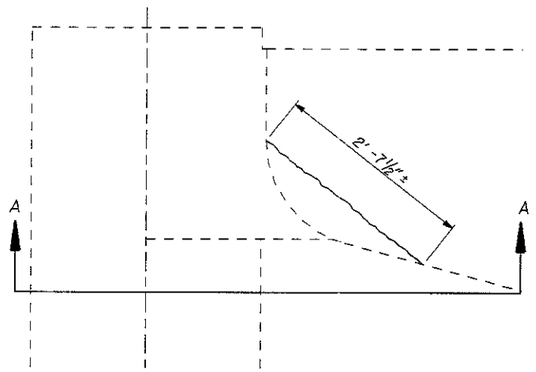
AFTER REMOVAL OF THE EXISTING WEARING COURSE AND PRIOR TO INSTALLING THE TYPE 3 WATERPROOFING, INSTALL STEEL DRIP STRIPS ON EACH EDGE OF STRUCTURES ATB-322-1358, ATB-322-1410 AND ATB-322-1917. INSTALLATION IS TO BE AS PER STANDARD DRAWING DS-1-92.

ITEM 864 - SEALING OF CONCRETE SURFACES (EPOXY - URETHANE) AND (NON-EPOXY):

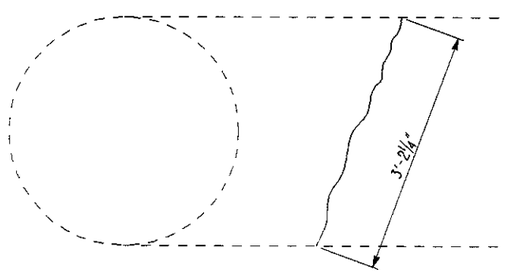
USE FEDERAL COLOR NO. 17778 (LIGHT NEUTRAL) FOR THIS ITEM.

ITEM SPECIAL - CONCRETE REPAIR BY EPOXY INJECTION:

THIS ITEM IS TO REPAIR A CRACK IN THE NORTH END OF THE REAR PIER ON STRUCTURE ATB-322-0528 AS SHOWN BELOW.



REAR PIER LOOKING EAST



SECTION VIEW A-A

IN-STREAM WORK

IN-STREAM WORK SHOULD BE AVOIDED FROM MARCH 1 TO JUNE 15 TO REDUCE IMPACTS TO FISH SPAWNING ACTIVITIES.

CONSTRUCTION AND DEMOLITION DEBRIS

THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID AND/OR LIMIT DEMOLITION DEBRIS FROM ENTERING THE STREAM. ANY MATERIAL THAT DOES FALL INTO THE STREAM SHALL BE REMOVED AS SOON AS POSSIBLE.

STREAM CHANNEL EXCAVATION

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT ANY INCIDENTAL DISCHARGES ASSOCIATED WITH THE EXCAVATION AND HAULING OF MATERIAL FROM THE STREAM CHANNEL. THIS PERTAINS TO ANY EXCAVATION OPERATION SUCH AS, FOUNDATION PIER OR ABUTMENT EXCAVATION, CHANNEL CLEANOUT, EXCAVATION FOR ROCK CHANNEL PROTECTION AND REMOVAL OF ANY TEMPORARY FILL ASSOCIATED WITH CONSTRUCTION OPERATIONS.

MECHANICAL EQUIPMENT OPERATION AT STREAM CHANNEL

THE MECHANICAL EQUIPMENT USED TO EXECUTE THE WORK AUTHORIZED HEREIN SHALL BE OPERATED IN SUCH A WAY AS TO MINIMIZE TURBIDITY THAT COULD DEGRADE WATER QUALITY AND ADVERSELY AFFECT AQUATIC PLANT AND ANIMAL LIFE.

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT FOUR PRODUCTION
705 OAKWOOD STREET, RAVENNA, OHIO

DESIGNED JEL
DRAWN JEL
CHECKED
REVIEWED
DATE - -01
REVISED
STRUCTURE FILE NUMBER 0406244, 0406368, 0406392 AND 0406420

STRUCTURE NOTES

ATB-322-0.00

ESTIMATED QUANTITIES

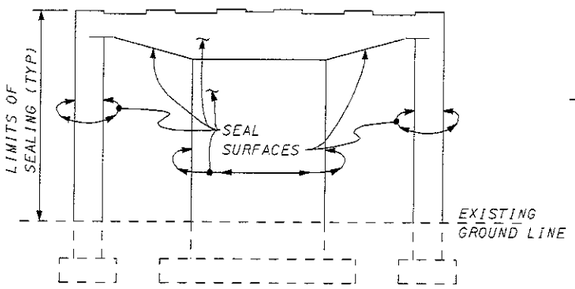
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	SEE SHEET
				STRUCTURE ATB-322-0528 (SFN: 0406244)					
202	23500	711	SQ YD	WEARING COURSE REMOVED				711	
407	10000	53	GALLON	TACK COAT				53	
407	14000	29	GALLON	TACK COAT FOR INTERMEDIATE COURSE				29	
446	47020	30	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22				30	
448	46020	10	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22				10	
SPECIAL	51912600	6	FT	CONCRETE REPAIR BY EPOXY INJECTION		6			1/4
841	10000	980	SQ YD	TREATING OF CONCRETE SURFACES WITH SRS	222		758		
864	10100	199	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	72	85	42		
				STRUCTURE ATB-322-1358 (SFN: 0406368)					
202	23500	1234	SQ YD	WEARING COURSE REMOVED	107		416	711	
407	10000	61	GALLON	TACK COAT	7			54	
407	14000	50	GALLON	TACK COAT FOR INTERMEDIATE COURSE	4		17	29	
446	47020	52	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22	5		17	30	
448	46020	10	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22				10	
448	46050	22	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22	5		17		
512	33010	479	SQ YD	TYPE 3 WATERPROOFING	16		463		
SPECIAL	51822300	215	FT	STEEL DRIP STRIP			215		1/4
864	10100	110	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	30	45	35		
				STRUCTURE ATB-322-1410 (SFN: 0406392)					
202	23500	987	SQ YD	WEARING COURSE REMOVED	178		98	711	
407	10000	65	GALLON	TACK COAT	12			53	
407	14000	40	GALLON	TACK COAT FOR INTERMEDIATE COURSE	7		4	29	
446	47020	42	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22	8		4	30	
448	46020	10	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22				10	
448	46050	12	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22	8		4		
512	33010	123	SQ YD	TYPE 3 WATERPROOFING			123		
SPECIAL	51822300	40	FT	STEEL DRIP STRIP			40		1/4
843	50000	100	SQ FT	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR			100		
864	10100	157	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	152		5		
				STRUCTURE ATB-322-1917 (SFN: 0406430)					
202	23500	1172	SQ YD	WEARING COURSE REMOVED	120		341	711	
407	10000	88	GALLON	TACK COAT	9		26	53	
407	14000	48	GALLON	TACK COAT FOR INTERMEDIATE COURSE	5		14	29	
446	47020	49	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22	5		14	30	
448	46020	10	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22				10	
448	46050	19	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22	5		14		
512	33010	386	SQ YD	TYPE 3 WATERPROOFING			386		
SPECIAL	51822300	196	FT	STEEL DRIP STRIP			196		1/4
864	10050	75	SQ YD	SEALING OF CONCRETE SURFACES (NON-EPOXY)			75		
864	10100	33	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	33				

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT FOUR PRODUCTION
705 OAKWOOD STREET, RAVENNA, OHIO

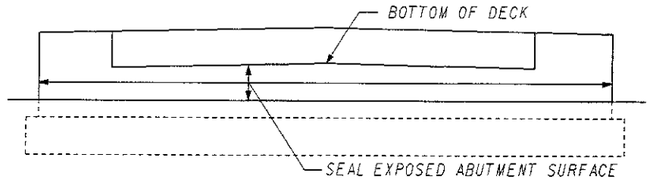
DESIGNED JEL
DRAWN JEL
CHECKED
REVISED
DATE
REVISED
STRUCTURE FILE NUMBER 0406244, 0406368, 0406392 AND 0406430

BRIDGE ESTIMATED QUANTITIES
BRIDGE NOs. ATB-322-0528, ATB-322-1358, ATB-322-1410 AND ATB-322-1917

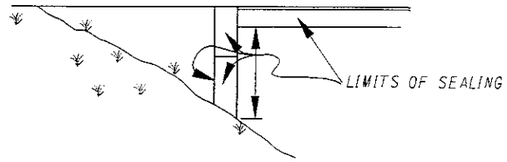
ATB-322-0.00



TYPICAL SEALING LIMITS (PIER)
ATB-322-0528

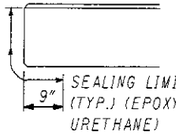


TYPICAL SEALING LIMITS ABUTMENT
EPOXY-URETHANE

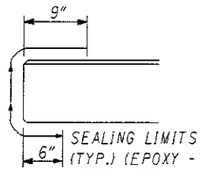


SEAL ENTIRE EXPOSED AREA OF WINGWALLS

TYPICAL SEALING LIMITS WINGWALLS
EPOXY-URETHANE

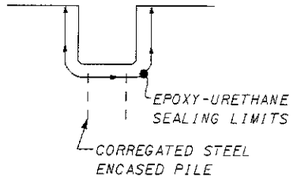


STRUCTURE ATB-322-1358 AND ATB-322-1410

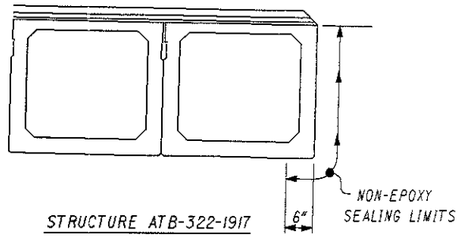


STRUCTURE ATB-322-0528

TYPICAL SEALING LIMITS (DECK)



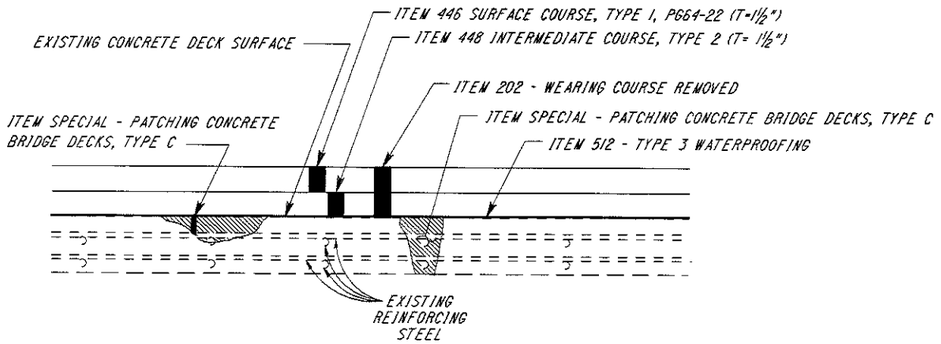
TYPICAL SEALING LIMITS (PIER)
ATB-322-1358



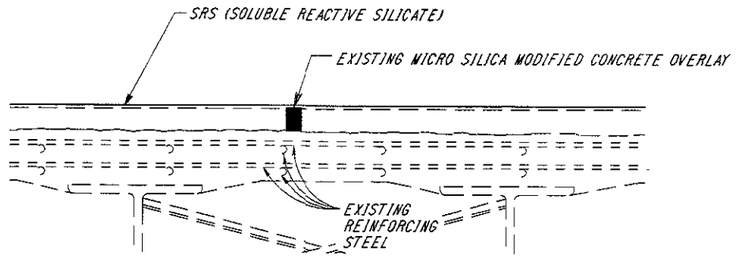
STRUCTURE ATB-322-1917

BRIDGE NUMBER	PIER	ABUTMENT	SUPERSTRUCTURE	TOTAL
	SQ YD	SQ YD	SQ YD	SQ YD
ATB-322-0528	85	72	42	199
ATB-322-1358	45	30	35	110
ATB-322-1410		152	5	157
ATB-322-1917		33	75	108

SEALING OF CONCRETE SURFACES DETAILS



OVERLAY DETAIL
STRUCTURE ATB-322-1410



OVERLAY DETAIL
STRUCTURE ATB-322-0528

GENERAL INFORMATION : BRIDGE DECK OVERLAYS										
STRUCTURE NO.	OVERPASS WATERWAY	BRIDGE LIMITS	BRIDGE WIDTH	DECK AREA	THICKNESS OF OVERLAY	VOLUME OF OVERLAY	BRIDGE DECK OVERLAY MATERIAL TREATMENT	EXISTING MSM CONCRETE	EXISTING ASPHALT CONCRETE	EXISTING CONCRETE DECK
		L.F.	L.F.	SQ.YD.	INCH	CU.YD.		INCH	INCH	DEPTH
ATB-322-0528	GRAND RIVER	170.52	40.0	757.87			SRS (SOLUBLE REACTIVE SILICATE)			8½"
ATB-322-1410	BRANCH MOSQUITO CREEK	20.00	44.00	97.78	3	8	ASPHALT CONCRETE			8¼"

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT FOUR PRODUCTION
705 OAKWOOD STREET, RAVENNA, OHIO

REVIEWED - DATE - 01
STRUCTURE FILE NUMBER 0406244, 0406391, 0406392 AND 0406430

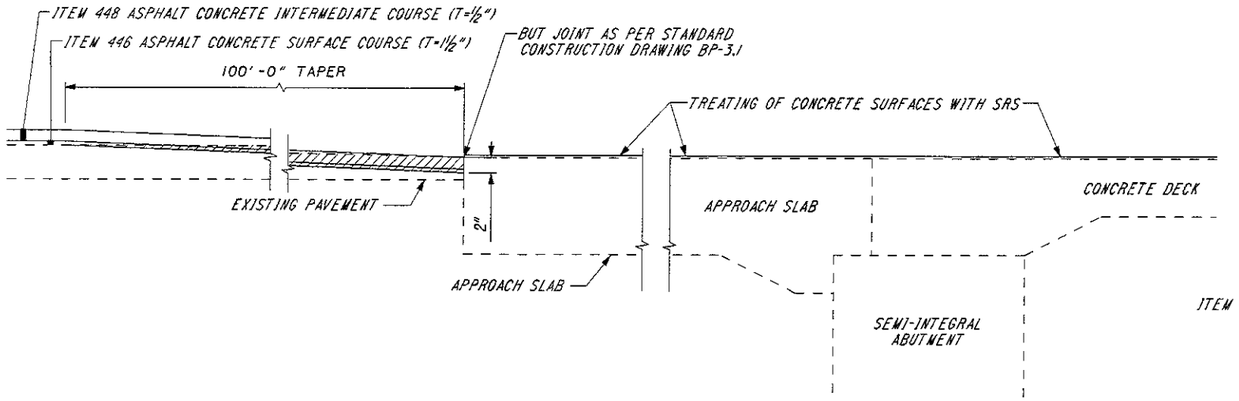
DRAWN JEL REVISED
DESIGNED JEL CHECKED

SUPERSTRUCTURE DETAILS

ATB-322-0.00

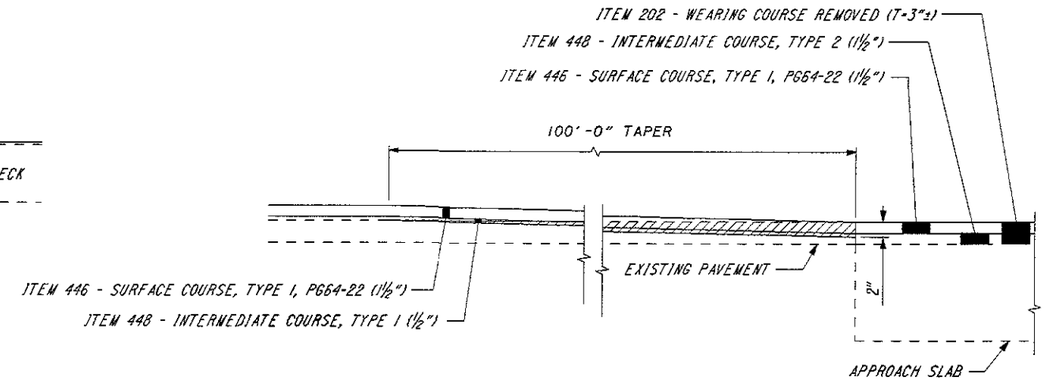
3/4

38/39



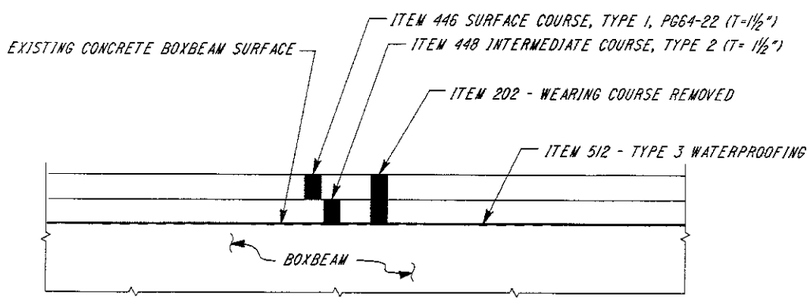
TAPER DETAIL
STRUCTURE ATB-322-0528

ITEM 202 - WEARING COURSE REMOVED

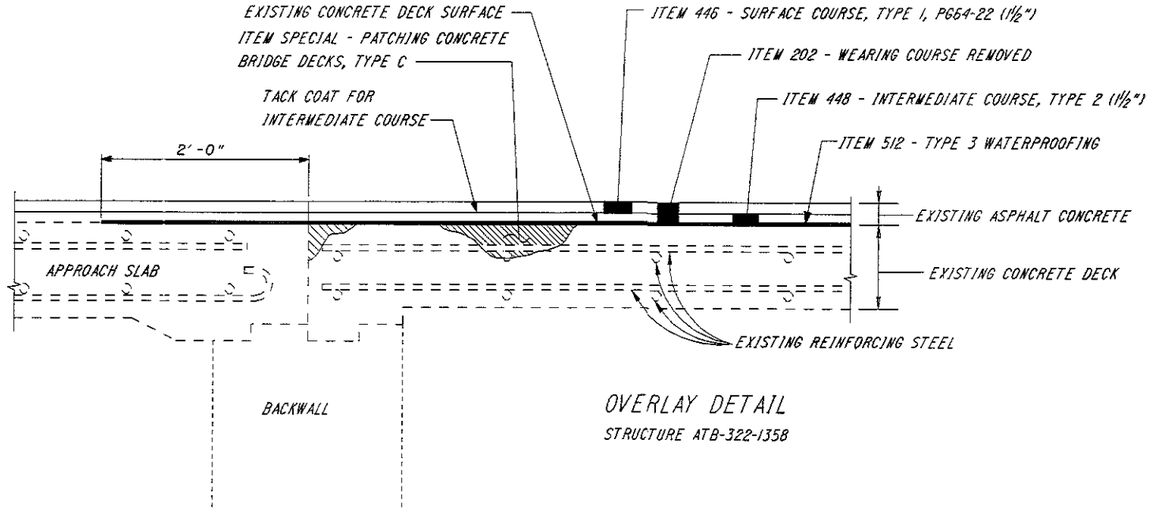


TAPER DETAIL
STRUCTURES ATB-322-1358, ATB-322-1410 AND ATB-322-1917

ITEM 202 - WEARING COURSE REMOVED
(T=VARIES FROM 0" TO 2" IN 100 FEET)



OVERLAY DETAIL
STRUCTURE ATB-322-1917



OVERLAY DETAIL
STRUCTURE ATB-322-1358

GENERAL INFORMATION : BRIDGE DECK OVERLAYS

STRUCTURE NO.	OVERPASS WATERWAY	BRIDGE LIMITS	BRIDGE WIDTH	DECK AREA	THICKNESS OF OVERLAY	VOLUME OF OVERLAY	BRIDGE DECK OVERLAY MATERIAL TREATMENT	EXISTING MSM CONCRETE	EXISTING ASPHALT CONCRETE	EXISTING CONCRETE DECK
		L.F.	L.F.	SQ.YD.	INCH	CU.YD.		INCH	INCH	DEPTH
ATB-322-1358	MOSQUITO CREEK	92.5	40.5	416.25	3	34.69	ASPHALT CONCRETE		3±	1'-3"
ATB-322-1917	PYMATUNING CREEK	85.16	36.0	340.64	3	28	ASPHALT CONCRETE			

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT FOUR PRODUCTION
705 OAKWOOD STREET, RAVENNA, OHIO

DATE - -01
REVIEWED
STRUCTURE FILE NUMBER 0406244, 0406386, 0406392 AND 0406430
DRAWN JEL
REVISED
DESIGNED JEL
CHECKED

SUPERSTRUCTURE DETAILS
BRIDGE NOs. ATB-322-0528, ATB-322-1358, ATB-322-1410 AND ATB-322-1917

ATB-322-0.00

4/4

39/39