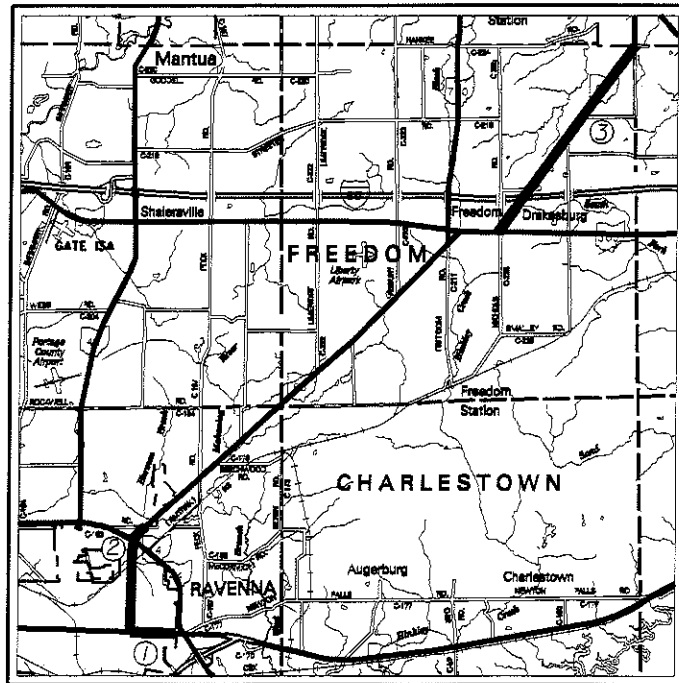


mexley@D04C0222 - 18705gim - 01/09/04

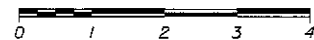


LOCATION MAP

LOC	SLM	START	END	TOTAL
1	59	8.41	9.05	0.64
2	88	0.51	2.03	1.52
3	88	8.48	11.52	3.11

LATITUDE: 41°09'27" LONGITUDE: 81°14'01"

SCALE IN MILES



PORTION TO BE IMPROVED: INTERSTATE & DIVIDED HIGHWAY: UNDIVIDED STATE & FEDERAL ROUTES: OTHER ROADS:

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
**POR-59/88/225-
8.41/0.51/9.76**
RAVENNA CITY
RAVENNA TOWNSHIP
FREEDOM TOWNSHIP
PALMYRA TOWNSHIP
PORTAGE COUNTY

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PROJECT EARTH DISTURBED AREA = 1.25
ESTIMATED CONTRACTOR EARTH DISTURBED AREA = 0.25
NOTICE OF INTENT EARTH DISTURBED AREA = 4.9

PROJECT DESCRIPTION

IMPROVEMENT OF 0.64 MILE OF STATE ROUTE 59 AND 3.56 MILE OF STATE ROUTE 88 BY RESURFACING AND OVERLAY RESPECTIVELY, INCLUDING PAVEMENT REPAIR, PAVEMENT PLANING, STRUCTURE REHABILITATION, GUARDRAIL UPGRADE, TRAFFIC CONTROL SIGNING, AND PAVEMENT MARKING. ALSO INCLUDED IS A CULVERT REPLACEMENT ON STATE ROUTE 225

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 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

POR - SR 59/88/225-8.41/0.51/9.76 (Cit
040331 PID - 18705
Dist 4 5/19/2004

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:
OHIO DEPARTMENT
OF TRANSPORTATION
DISTRICT 4 PRODUCTION

ENGINEERS SEAL:

SIGNED:
DATE: 01/09/04

STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	7-28-00	HW-1.1	7-20-01	MT-35.10	4-20-01	832	2-12-03
BP-4.1	7-28-00			MT-95.31	4-19-02	833	2-12-03
		DM-1.4	7-19-02	MT-95.32	4-19-02	908	4-18-03
GR-1.1	4-18-03	DM-4.3	7-19-02	MT-95.60	4-19-02		
GR-2.1	4-18-03	DM-4.4	7-19-02	MT-97.10	4-19-02		
GR-4.2	4-18-03			MT-97.12	4-19-02		
GR-5.1	4-18-03	TC-41.20	1-19-01	MT-99.20M	1-30-95		
GR-5.3	4-18-03	TC-42.20	4-20-01	MT-101.60	10-18-02		
		TC-52.10	4-20-01	MT-105.10	10-18-02		
RM-1.1	4-18-03	TC-52.20	4-20-01	MT-105.11	10-18-02		
RM-4.2	4-18-03	TC-61.10	1-19-01				
		TC-71.10	4-19-02				
		TC-73.10	1-19-01				
		TC-82.10	4-19-02				

APPROVED
DATE 1-9-04 DISTRICT DEPUTY DIRECTOR

APPROVED
DATE 2-13-04 DIRECTOR, DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS
NWP#3 2/5/03

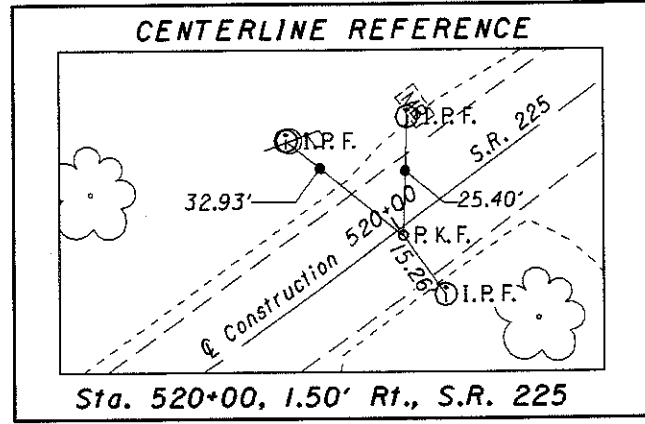
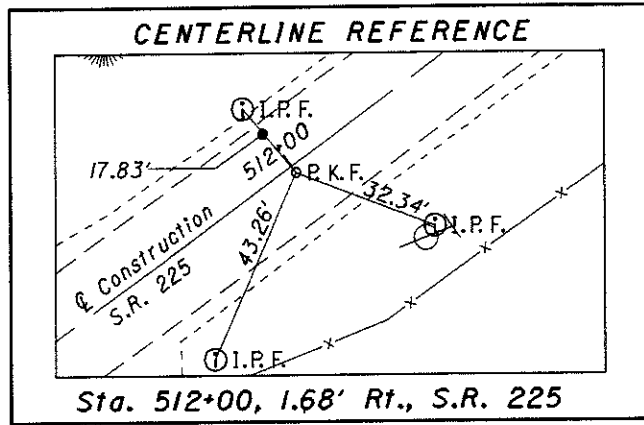
FEDERAL PROJECT NO.
E033(131)

PID NO.
18705

CONSTRUCTION PROJECT NO.

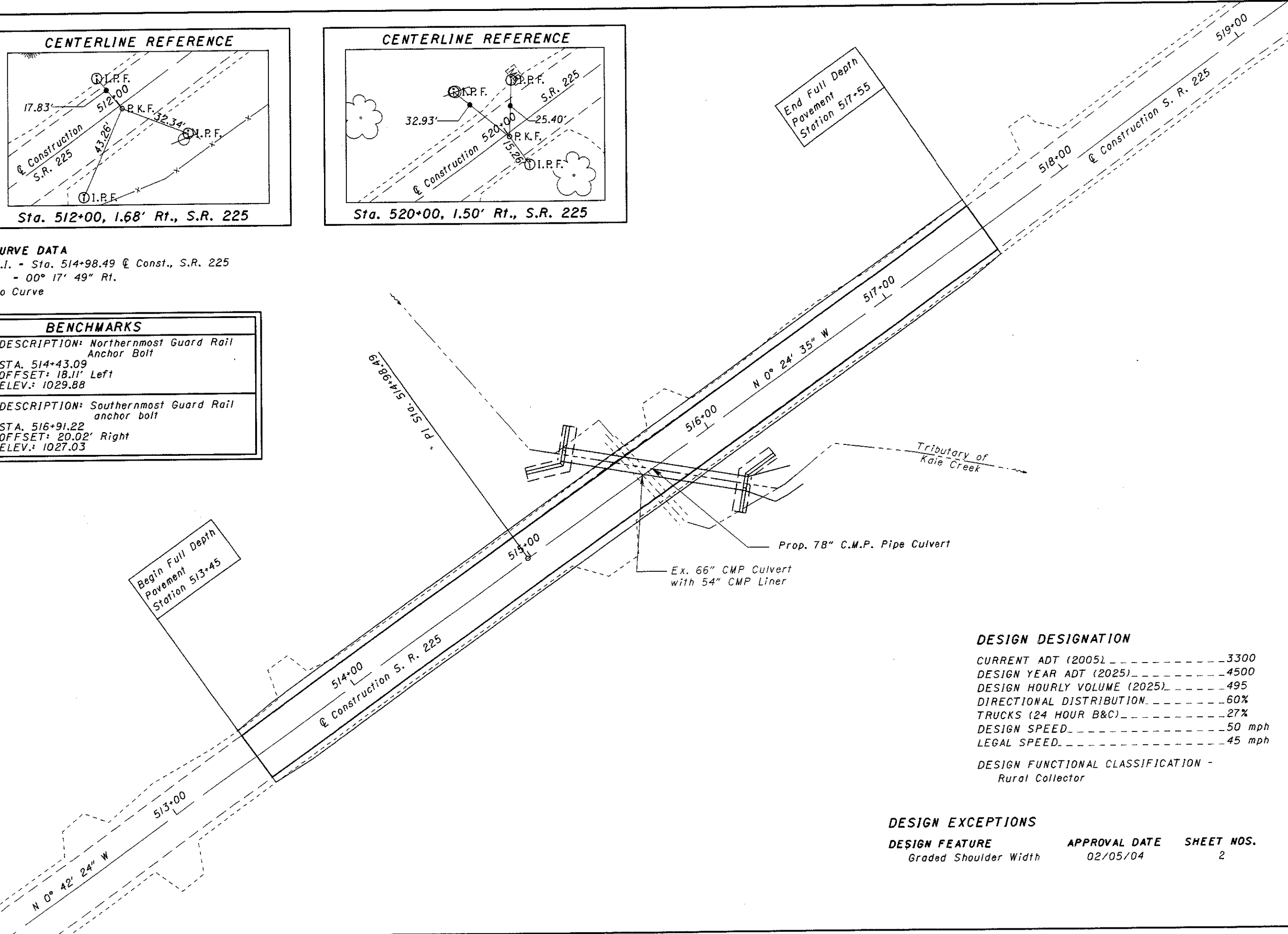
RAILROAD INVOLVEMENT

POR-59/88/225-
8.41/0.51/9.76



CURVE DATA
P.I. - Sta. 514+98.49 @ Const., S.R. 225
Δ - 00° 17' 49" Rt.
No Curve

BENCHMARKS	
DESCRIPTION:	Northernmost Guard Rail Anchor Bolt
STA.	514+43.09
OFFSET:	18.11' Left
ELEV.:	1029.88
DESCRIPTION:	Southernmost Guard Rail anchor bolt
STA.	516+91.22
OFFSET:	20.02' Right
ELEV.:	1027.03



Begin Full Depth Pavement Station 513+45

End Full Depth Pavement Station 517+55

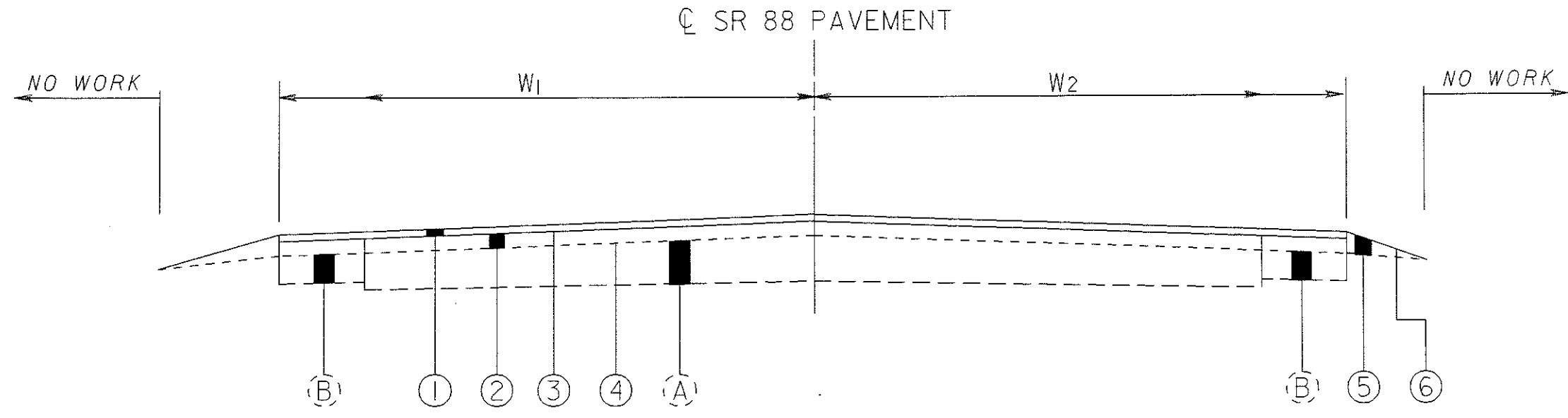
DESIGN DESIGNATION

CURRENT ADT (2005)	3300
DESIGN YEAR ADT (2025)	4500
DESIGN HOURLY VOLUME (2025)	495
DIRECTIONAL DISTRIBUTION	60%
TRUCKS (24 HOUR B&C)	27%
DESIGN SPEED	50 mph
LEGAL SPEED	45 mph

DESIGN FUNCTIONAL CLASSIFICATION - Rural Collector

DESIGN EXCEPTIONS

DESIGN FEATURE	APPROVAL DATE	SHEET NOS.
Graded Shoulder Width	02/05/04	2



ROUTE	FROM	TO	W1	W2
88	SLM 1.77	SLM 2.03	15'-0"	15'-0"
88	SLM 8.48	SLM 8.53	14'-0"	14'-0"
88	SLM 8.53	SLM 8.89	14'-6"	14'-6"
88	SLM 9.08	SLM 9.13	13'-6"	13'-6"
88	SLM 9.13	SLM 10.10	13'-6"	13'-6"
88	SLM 10.10	SLM 10.44	13'-0"	13'-0"
88	SLM 10.44	SLM 11.52	12'-6"	12'-6"

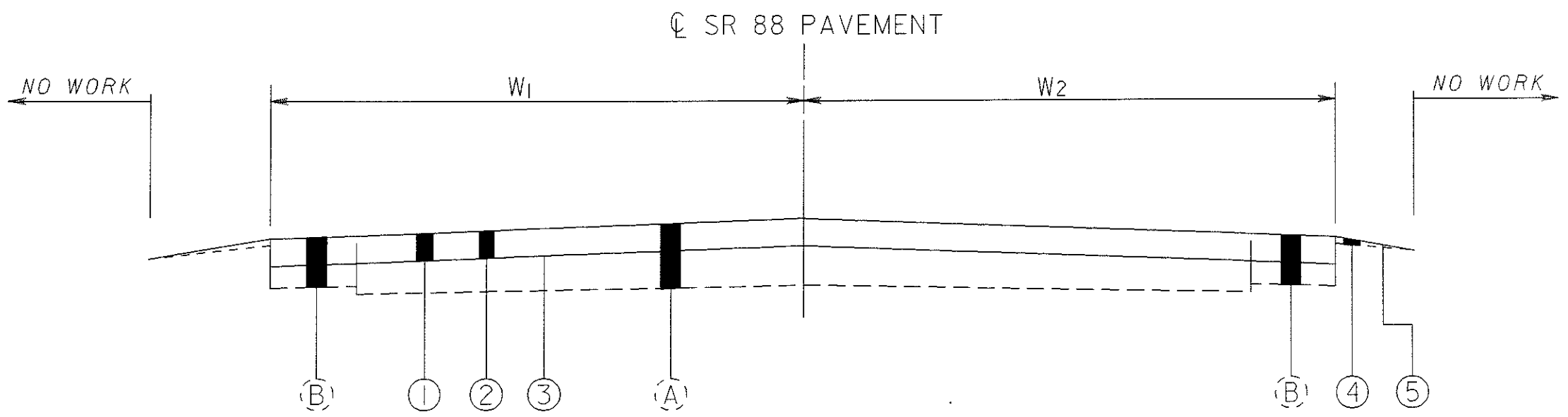
LEGEND

- ① 446 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE I, PG 64-28
- ② 448 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I, PG 64-28
- ③ 407 TACK COAT
- ④ 407 TACK COAT FOR INTERMEDIATE COURSE
- ⑤ 617 COMPACTED AGGREGATE
- ⑥ 408 PRIME COAT

- (A) EXISTING ASPHALT CONCRETE PAVEMENT
- (B) EXISTING ASPHALT CONCRETE SHOULDER

TYPICAL SECTIONS

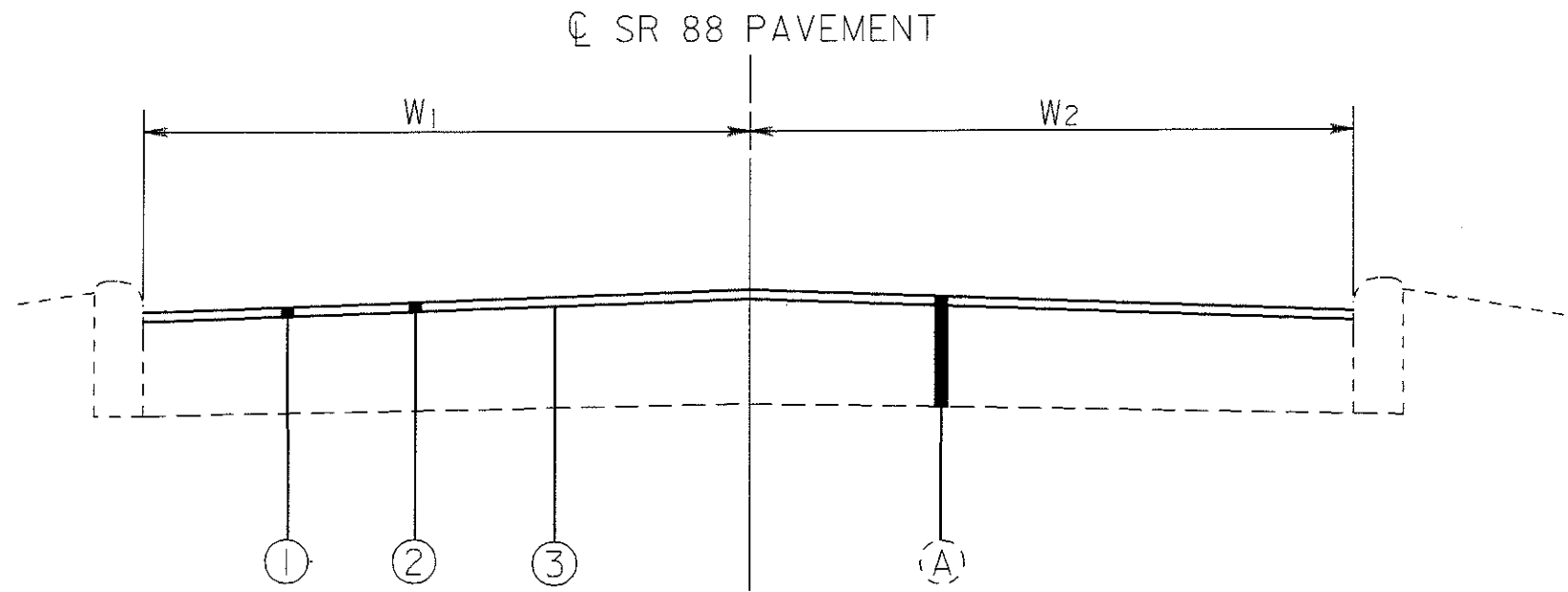
POR-59/88/225-
8.41/0.51/9.76



ROUTE	FROM	TO	W1	W2
88	SLM 1.44	SLM 1.77	12'-0"	12'-0"
88	SLM 8.89	SLM 8.97	12'-0"	12'-0"
88	SLM 9.02	SLM 9.08	12'-0"	12'-0"

LEGEND

- | | |
|---|--|
| <ul style="list-style-type: none"> ① 446 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22 ② 254 1/2" PAVEMENT PLANING, ASPHALT CONCRETE ③ 407 TACK COAT ④ 617 COMPACTED AGGREGATE ③ 408 PRIME COAT | <ul style="list-style-type: none"> Ⓐ EXISTING ASPHALT CONCRETE PAVEMENT Ⓑ EXISTING ASPHALT CONCRETE SHOULDER |
|---|--|

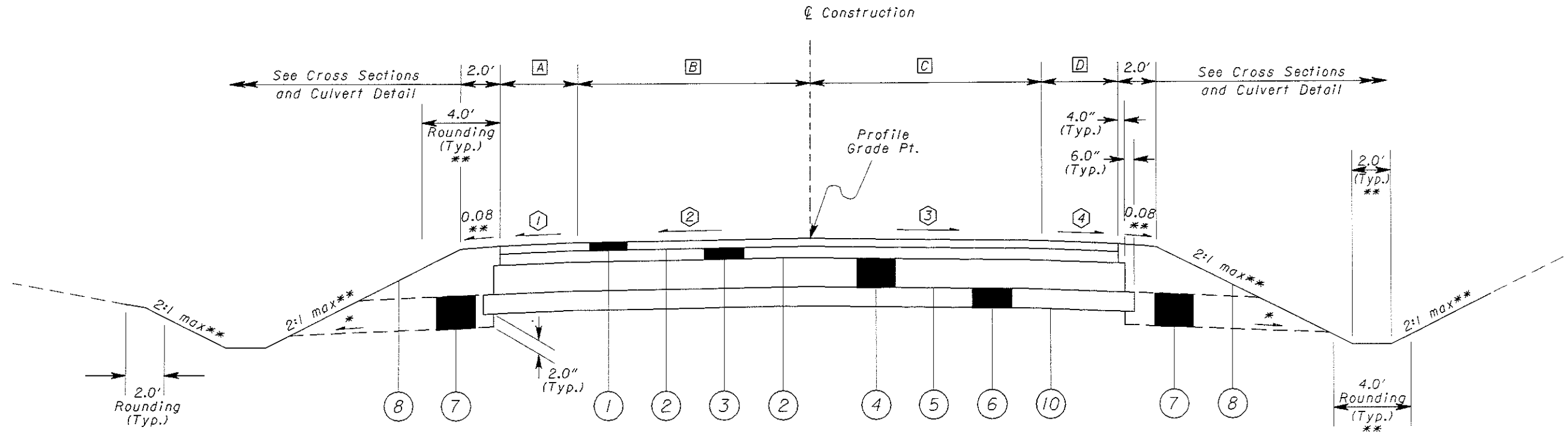


ROUTE	FROM	TO	W ₁	W ₂
88	SLM 0.51	SLM 1.07	13'-0"	13'-0"
88	SLM 1.07	SLM 1.45	12'-0"	12'-0"

LEGEND

- ① 254 1½" PAVEMENT PLANING, ASPHALT CONCRETE
- ② 446 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-28
- ④ 407 TACK COAT

④ EXISTING ASPHALT CONCRETE PAVEMENT



See Sheet 2 for legend

TRANSITION SECTION

Section Applies:
 Sta. 513+45.00 to Sta. 513+65.00 = 20.00'
 Sta. 517+35.00 to Sta. 517+55.00 = 20.00'

* 0.04 min, 0.08 preferred
 ** Match Existing at Project Limits

Station	PAVMENT WIDTHS				CROSS-SLOPES			
	A	B	C	D	①	②	③	④
513+45.00	2.9'	11.6'	12.0'	2.8'	0.041	0.026	0.013	0.028
513+65.00	4.0'	12.0	12.0'	4.0'	0.04	0.016	0.016	0.04
517+35.00	4.0'	12.0'	12.0'	4.0'	0.04	0.016	0.016	0.04
517+55.00	3.5'	12.2'	12.0'	2.4'	-0.014	0.017	0.023	0.036

Note: A negative cross slope indicates the pavement is rising with respect to the $\text{\textcircled{C}}$ Construction.

ITEM 608 - CURB RAMP, AS PER PLAN

THIS ITEM SHALL BE CONSTRUCTED ACCORDING TO THE PLAN INSERT SHEETS TITLED CURB RAMPS WITH TRUNCATED DOMES, AND SHALL INCLUDE THE REMOVAL OR MODIFICATION OF ANY CURB OR SIDEWALK THAT MAY NOT FACILITATE THE RECONSTRUCTION TO BE PERFORMED.

THIS ITEM SHALL ALSO INCLUDE THE PLACEMENT OF TRUNCATED DOMES FOR A DISTANCE OF 24" FROM THE EDGE OF ROAD FOR THE WIDTH OF THE SIDEWALK, AT EVERY ROAD INTERSECTION WITH AT-GRADE SIDEWALK.

UNLESS OTHERWISE DIRECTED BY THE ENGINEER, THIS ITEM SHALL BE PERFORMED PRIOR TO MAINLINE RESURFACING.

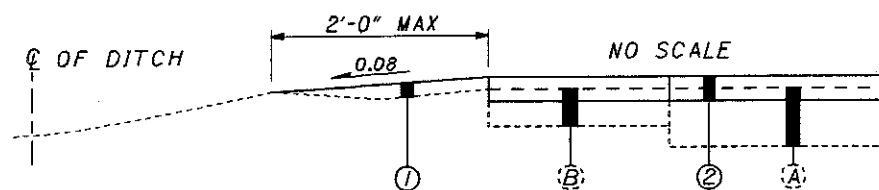
THERE ARE AN ESTIMATED 11 SIDEWALK LOCATIONS WITHIN THE PROJECT LIMITS REQUIRING THE WORK DESCRIBED ABOVE. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN PROVIDED AND SHALL BE USED AS DIRECTED BY THE ENGINEER.

QUANTITY THAT WILL BE CARRIED TO THE GENERAL SUMMARY:

608, CURB RAMP, AS PER PLAN 160 SQ. FT.

ITEM 617 - COMPACTED AGGREGATE, TYPE A, AS PER PLAN

UPON COMPLETION OF THE PAVING OPERATION, OR NO LONGER THAN 48 HOURS IN AREAS OF LOW BERM EXCEEDING 2" FROM PLAN TYPICAL, THE CONTRACTOR SHALL PLACE ITEM 617 COMPACTED AGGREGATE ADJACENT TO THE PAVED BERM. MATERIAL SHALL BE ASPHALT GRINDINGS. METHOD OF MEASUREMENT SHALL BE BY A METHOD OF CONVERTING WEIGHT TO CUBIC YARDS IN ACCORDANCE WITH A CONVERSION TO BE DETERMINED AFTER PLACEMENT. PLACEMENT AND COMPACTION SHALL MEET REQUIREMENTS OF ITEM 617. ALL MATERIALS, LABOR EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 617 COMPACTED AGGREGATE, TYPE A, AS PER PLAN.



- ① 617 COMPACTED AGGREGATE, TYPE A, AS PER PLAN (2" AVG.)
- ② PROPOSED ASPHALT OVERLAY
- A-A EXISTING ASPHALT PAVEMENT
- B-B EXISTING PAVED SHOULDER

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, THAT DO NOT HAVE A CURB CUT OR ARE NOT PAVED AS AN INTERSECTION AS SHOWN ON THE ASPHALT CONCRETE PLAN SHEET, 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 2 IN. FOR IMPROVED DRIVEWAYS. AGGREGATE DRIVEWAYS SHALL BE GRADED PRIOR TO PAVING SUCH THAT SURFACE DRAINAGE DOES NOT ENCRONCH 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).

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 MATING PURPOSES ONLY, THE PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF:

- 407, TACK COAT 0.15 GAL. PER SQ. YARD FOR THE PLANED SURFACE.
- 407, TACK COAT 0.08 GAL. PER SQ. YARD.
- 407, TACK COAT FOR INTERMEDIATE COURSE, 0.04 GAL PER SQ. YARD.

ITEM 408 - PRIME COAT

THE RATE OF APPLICATION OF THE 408 PRIME COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER FOR ESTIMATING PURPOSES ONLY, THE PLAN QUANTITIES INCLUDE AN AVERAGE APPLICATION RATE OF:

408, PRIME COAT, 0.4 GAL/SQ. YD.

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 TRINITY INDUSTRY, 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 SPECIFIED 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
SSS265M	ET-2000 (1997) PLAN, ELEVATION AND SECTIONS	6/20/97	3/6/98
SSI42	ET2000 PLUS 50'-0" PLAN, ELEVATION AND SECTION 25'-0" RAIL, SLEEVE W/PL POSTS 1-4	4/12/00	7/31/00
SSI41	ET2000 PLUS PLAN, ELEVATION AND SECTION 25'-0" RAIL, HBA POSTS 1-4	2/29/00	7/31/00
SSI58	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., 2516 MALLORY LANE, STOW, OHIO, 44224, (TELEPHONE: 330-346-0721).

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	DWG./REV. DATE	ODOT APPROVAL 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 APPROXIMATELY 18" X 18".

REFER TO THE MANUFACTURER'S INSTRUCTION REGARDING THE INSTALLATION OF, AND THE GRADING AROUND, THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4-INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 27-3/4-INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4-INCHES ABOVE THE GROUND LINE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT BID PRICE 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.

UTILITIES- POR 88/59

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 AND MATERIALS SPECIFICATIONS:

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, THE OHIO UTILITIES PROTECTION SERVICE (OUPS), THE OHIO & GAS PROCEDURES UNDERGROUND PROTECTION SERVICE (OGPUPS), THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 4 HEADQUARTERS AND ALL NON REGISTERED UTILITY OWNERS AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN ALL AREAS.

OUPS 1-800-362-2764 (CONTACT LIMITED BASIS PARTICIPANTS DIRECTLY)

OGPUPS 1-800-925-0988

ODOT 330-297-0801 KEN GREENE EXT. 305

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

AT & T 229 West 7th Street Cincinnati, Ohio 45202 (513) 784-3238 Jeff Ballinger	Ohio Edison 1910 West Market Street Akron, Ohio 44313 (330) 384-4714 Nick Toussant
--	---

Belden and Blake 1748 Saltwell Road Dover, Ohio 44622 (330) 602-5551 Keith Kerstetter	Qwest Communication 10645 Williams Rd West Salem, OH 44287 (330) 948-1884 Cliff Caldwell
--	---

Buckeye Pipeline 4911 East High Street P.O. Box 542 Mantua, Ohio 44255 (330) 274-2234 David McKee	SBC Ameritech 50 West Bowery Street, 4th floor Akron, OH 44308 (330) 384-8057 Sabrena Lampley
--	--

Cebridge Connection FKA Classic Cable 4720 Mahoning ave. P.O. Box 4898 Youngstown, Ohio 44515 (330) 792-9557 Paul Rader	Time Warner Cable 4352 Youngstown Road SE Warren, OH 44484 (330) 369-7138 Don Jugenheimer
---	--

Dominion East Ohio Gas 1000 West Wilbeth Road. Akron, Ohio 44314 (330) 798-7104 George Turner	Verizon 6223 Norwalk Road Medina, Ohio 44256 (330) 722-9588 Larry Furman
--	---

MCI 120 ravine Street Akron, Ohio 44304 (330) 253-8267 Al Guest	*Portage County Water 449 South Meridian Road Ravenna, Ohio 44266 (330) 297-3670 Louie Munoz
--	---

*Village of Garettsville
water, sewer & traffic
8213 High Street PO Box 266
Garettsville, Ohio 44231
(330) 527-2080

Alliance Petroleum Company
4150 Beldon Village Ave NW
suite 410
Canton, OH 44718
(330) 866-2424 Steve Nicholson

Beck Energy
PO Box 1070
Ravenna, Ohio 44266
(330) 297-6891 Junior Bargerhuff

Cedar Valley Energy
PO Box 726
Wooster, Ohio 44691
(330) 262-1034 Bill Bennett

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

Equity Oil and Gas
PO Box 677
Berea, Ohio 44017
(440) 234-4202 Chuck Baker

Great Lakes Energy Partners
PO Box 550
Hartsville, Ohio 44632-0550
(330) 877-6747 Sue Barclay

*Denotes Limited Basis Member - must be contacted directly

UTILITIES- POR 225

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

ELECTRIC
OHIO EDISON
1910 WEST MARKET STREET
AKRON, OH 44313
(330) 384-4711

TELECOMMUNICATIONS
SPRINT LOCAL
3801 ELM ROAD
WARREN, OH 44483
(330) 841-1214

THERE ARE NO KNOWN UNDERGROUND UTILITIES ON THIS PROJECT.

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.

ELEVATION DATUM

ALL ELEVATIONS ARE BASED ON U.S.G.S. DATUM.

North Coast Energy
3896 Oakwood Ave
Youngstown, OH 44515
(330) 793-6974 Andy Koval

Twinoaks Oil and Gas
PO Box 57
Chagrin Falls, Ohio 44022
(440) 248-5692 Red Davis

Waldron and Associates
PO Box 766
Wooster, Ohio 44691-0766
(330) 264-7275 Jerry Reeves

Weinsz Oil and Gas
PO Box 2771
North Canton, Ohio 44720
(330) 497-4343 Mike Weinsz

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.

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 109.02 OF THE 2002 CONSTRUCTION AND MATERIAL SPECIFICATIONS. CONVERSIONS SHALL BE APPROPRIATELY PRECISE AND SHALL REFLECT STANDARD INDUSTRY ENGLISH VALUES WHERE SUITABLE.

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.

GRADING AND FILLING OPERATIONS

THE PLACEMENT OF COMPACTED AGGREGATE SHALL NOT EXTEND PAST THE EXISTING GRADED SHOULDERS. NO EXCAVATION, GRADING, OR FILLING OPERATIONS SHALL BE PERFORMED IN ANY WETLANDS OR STREAMS, UNLESS THE REQUIRED STATE AND/OR FEDERAL PERMITS HAVE BEEN OBTAINED IN ACCORDANCE WITH ALL APPLICABLE STATE AND/OR FEDERAL LAWS AND REGULATIONS. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR STORE EQUIPMENT AND/OR MATERIALS IN ANY WETLANDS OR STREAMS.

CLEARING AND GRUBBING

ALL TREES AND STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING. THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE NUMBER OF TREES AND STUMPS TO BE REMOVED.

SIZES	NO. TREES	NO. STUMPS	TOTAL
18"	6	0	6
30"	1	0	1
48"	1	0	1
60"	0	0	0

INTERSECTIONS

INTERSECTIONS SHALL BE RESURFACED TO THE LESSER OF; 25 FT. BEYOND THE EDGE LINE OR TO THE RIGHT-OF-WAY LINE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR INDICATED IN THE PLAN. INTERSECTIONS 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 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 THE PERTINENT BID ITEM.

PAVEMENT MARKING LANE WIDTHS

THE NORMAL LANE WIDTH FOR THE PAVEMENT MARKINGS ON THIS PROJECT SHALL BE AS FOLLOWS:

ROUTE	S.L.M. TO S.L.M.	LANE WIDTH
S.R. 88	0.51 TO 1.19	12'
S.R. 88	1.19 TO 1.67	10'
S.R. 88	1.87 TO 2.03	12'
S.R. 88	8.48 TO 11.42	9'
S.R. 59	8.41 TO 9.05	12'
S.R. 225	9.75 TO 9.83	12'

ITEM SPECIAL - MAILBOX SUPPORT

THIS WORK SHALL CONSIST OF FURNISHING AND ERECTING MAIL-BOX 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 4 1/2" 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 107.10. HOWEVER, THE SAME MATERIAL AND SIZE LIMITATIONS AS FOR PERMANENT INSTALLATIONS SHALL APPLY.

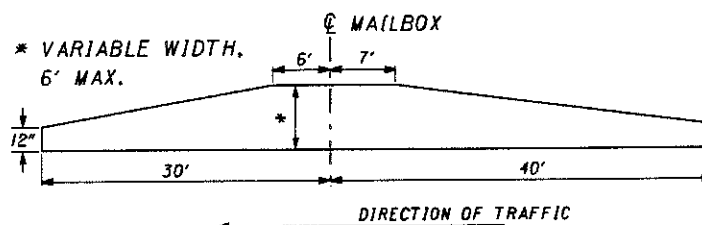
MAILBOX SUPPORTS, COMPLETE IN PLACE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, FOR ITEM SPECIAL MAIL-BOX SUPPORT, (SINGLE) (DOUBLE).

ITEM SPECIAL - MAILBOX SUPPORT 10 EACH

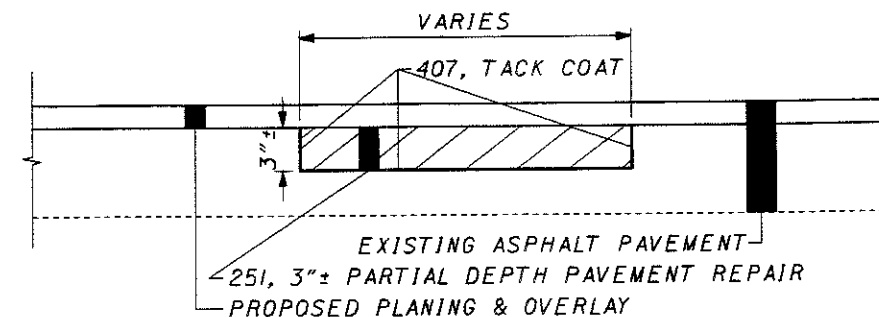
MAILBOX APPROACHES

ALL EXISTING MAIL BOX APPROACHES SHALL BE PAVED WITH ITEM 448 ASPHALT CONCRETE AS PER TYPICAL SHOWN OR AS NEAR AS PRACTICAL, AGGREGATE APPROACHES SHALL HAVE A 2 INCH MIN. THICKNESS; IMPROVED APPROACHES SHALL HAVE A 1 INCH 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 INCIDENTS 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 INCIDENTS REQUIRED TO LAYOUT AND CONSTRUCT THE MAILBOX APPROACHES SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22



QUANTITY THAT WILL BE CARRIED TO GENERAL SUMMARY
 ITEM 448 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS) 31 CU. YD.



ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR

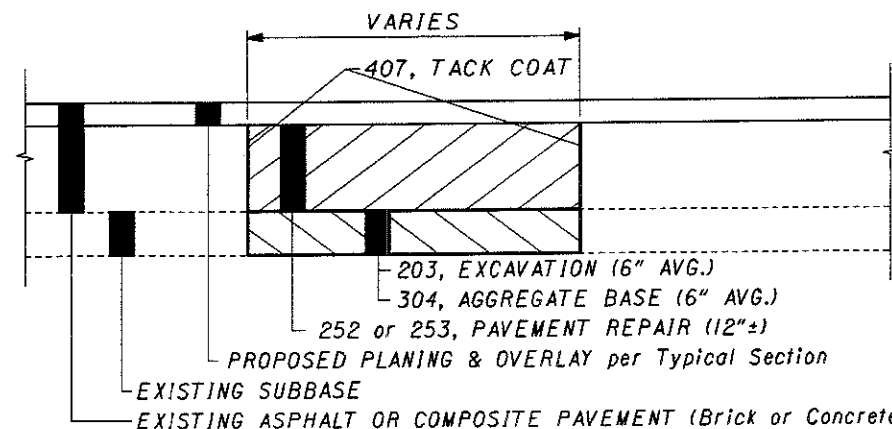
A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THE ITEM SHALL CONSIST OF REPAIRING EXISTING LOCATIONS EXHIBITING SURFACE DETERIORATION AND PLACING 3"± OF ITEM 448 ASPHALT CONCRETE, TYPE 2. THE ASPHALT CONCRETE SHALL BE COMPACTED WITH A TYPE 1 PNEUMATIC TIRE ROLLER AND A STEEL WHEEL ROLLER AS PER 401.11.

IT IS NOT THE INTENT TO REPAIR EVERY DETERIORATED AREA WITHIN THE PROJECT. THE ENGINEER SHALL DETERMINE WHICH AREAS ARE TO BE REPAIRED.

UNLESS OTHERWISE DIRECTED BY THE ENGINEER, THIS ITEM SHALL BE PERFORMED AFTER THE COMPLETION OF MAINLINE PAVEMENT PLANING. ALSO, THIS ITEM SHALL COMMENCE WITHIN 7 DAYS OF THE COMPLETION OF MAINLINE PAVEMENT PLANING.

PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF CUBIC YARDS OF PAVEMENT REPAIR. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

251, PARTIAL DEPTH PAVEMENT REPAIR 2268 SQ. YD.



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 ASPHALT CONCRETE BASE, PG64-22. THE MAXIMUM COMPACTED DEPTH OF ANY ONE LAYER SHALL BE 6 INCHES.

IT IS NOT THE INTENT TO REPAIR EVERY DETERIORATED AREA WITHIN THE PROJECT. THE ENGINEER SHALL DETERMINE WHICH AREAS ARE TO BE REPAIRED.

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

253, PAVEMENT REPAIR 150 SQ. YD.

ITEM 642- PAVEMENT MARKINGS, TYPE I, AS PER PLAN

ALL PAVEMENT MARKINGS [EDGE LINE, LANE LINE, AND CENTER LINE] TYPE I, FOR THIS PROJECT SHALL BE WATER BORNE FAST DRY TRAFFIC PANTS, CHOSEN FROM NTPEP, 60 SECOND DRY TIME. THE PAINT SHALL BE CHOSEN FROM THE APPROVED LIST.

IN LIEU OF THE REQUIREMENTS OF 642.04, THE APPLICATION RATE OF 614.II.B.3 SHALL BE USED IN PLACING PERMANENT PAVEMENT MARKINGS.

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.

RAILROAD RESTRICTION

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

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

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS

POR-225 SLM 9.80 CULVERT LOCATION

SEE CROSS SECTION SHEET FOR SEEDING AND MULCHING AREAS

659, TOPSOIL	188 CU. YD.
659, COMMERCIAL FERTILIZER	0.39 TON
659, INTER-SEEDING	85 SQ. YD.
659, WATER	13 M. GAL.
659, LIME	0.39 ACRE

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

INSTREAM WORK

INSTREAM WORK WILL BE LIMITED WHERE PRACTICABLE AND ONLY CLEAN, NON-ERODIBLE MATERIALS WILL BE USED FOR FORDS, COFFERDAMS, OR OTHER EQUIPMENT ACCESS PADS, THESE TEMPORARILY PLACED MATERIALS WILL BE REMOVED AND THE STREAM BOTTOM RESTORED TO NEAR NATURAL CONDITIONS WHEN THE WORK IS COMPLETED.

ITEM 605- AGGREGATE DRAINS

AGGREGATE DRAINS SHALL BE PLACED AT 50 FOOT INTERVALS ON EACH SIDE OF NORMAL CROWNED SECTIONS, STAGGERED SO THAT EACH DRAIN IS 25 FEET FROM THE ADJACENT DRAIN ON THE OPPOSITE SIDE, AND AT 25 FOOT INTERVALS ON THE LOW SIDE ONLY OF SUPERELEVATED SECTIONS. AN AGGREGATE DRAIN SHALL BE PLACED AT THE LOW POINT OF EACH SAGE VERTICAL CURVE. REFER TO SHEET x FOR LOCATIONS AND QUANTITIES.

ITEM 602- CONCRETE MASONRY, AS PER PLAN

THIS ITEM SHALL PROVIDE FOR ALL EQUIPMENT, MATERIALS, LABOR AND OTHER COSTS ASSOCIATED WITH THE HEADWALLS FOR THE NEW PIPE CULVERT. SEE SHEET 37 FOR DETAILS.

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLY TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

FARM DRAINS

ALL FARM DRAINS, WHICH ARE ENCOUNTERED DURING CONSTRUCTION, SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS..

EXISTING COLLECTORS AND ISOLATED FARM DRAINS, WHICH ARE ENCOUNTERED ABOVE THE ELEVATION OF ROADWAY DITCHES, SHALL BE OUTLETED INTO THE ROADWAY DITCH BY 603 TYPE F CONDUIT. THE OPTIMUM OUTLET ELEVATION SHALL BE ONE FOOT ABOVE THE FLOWLINE ELEVATION OF THE DITCH.

THE LOCATION, TYPE, SIZE AND GRADE OF REPLACEMENTS SHALL BE DETERMINED BY THE ENGINEER AND PAYMENT SHALL BE MADE ON FINAL MEASUREMENTS..

EROSION CONTROL PADS AND ANIMAL GUARDS SHALL BE PROVIDED AT THE OUTLET END OF ALL FARM DRAINS AS PER STANDARD CONSTRUCTION DRAWING DM-1.1, EXCEPT WHEN THEY OUTLET INTO A DRAINAGE STRUCTURE. PAYMENT FOR THE EROSION CONTROL PADS AND ANIMAL GUARDS AND ANY NECESSARY BENS OR BRANCHES SHALL BE INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT ITEMS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

- 603 8" CONDUIT, TYPE F 10 FT.
- 603 6" CONDUIT, TYPE F 10 FT.

ITEM 604 - MONUMENT ASSEMBLY, AS PER PLAN

ADJUSTABLE MONUMENT ASSEMBLIES AS SHOWN ON STANDARD CONSTRUCTION DRAWING "RM-1.I", REVISED APRIL 29, 1999, WILL BE PLACED BY THE CONTRACTOR AT THE TIME OF CONSTRUCTION. THE MONUMENTS SHALL BE CASTING MODEL #8371 WITH LID #8370-A, MANUFACTURED BY EAST JORDAN IRONWORKS, INC, 301 SPRING STREET, MICHIGAN 49727.

THE CONTRACTOR WILL BE PROVIDED A LOCATION LIST OF EXISTING MONUMENTATION WHICH IS TO BE REPLACED WITH NEW ADJUSTABLE MONUMENT BOX ASSEMBLIES AT THE PRE-CONSTRUCTION MEETING. THIS LIST MAY INCLUDE BOTH EXPOSED AND BURIED MONUMENTATION AND MAY ALSO INCLUDE SOME TIES TO AID IN RECOVERY.

THE CONTRACTOR SHALL HAVE A PROFESSIONAL SURVEYOR, LICENSED IN THE STATE OF OHIO, REFERENCE ALL DATUM POINT LOCATIONS WITH CROSS TIES PRIOR TO DISTURBING ANY EXISTING MONUMENTATION AND PRIOR TO THE INSTALLATION OF THE NEW ADJUSTABLE MONUMENT BOX ASSEMBLIES. PAYMENT FOR SAID CROSS TIES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 604. DEPENDING ON SITE CONDITIONS AND DEPTH, INSTALLATION OF THE NEW MONUMENT BOX MAY NOT REQUIRE THE REMOVAL OF THE EXISTING MONUMENT BOX. UNLESS UNAVOIDABLE, REMOVAL AND PLACEMENT OF THE NEW MONUMENT BOX SHALL NOT DISTURB THE EXISTING DATUM POINT. SHOULD REMOVAL, IF REQUIRED, OF THE EXISTING BOX OR PLACEMENT OF THE NEW BOX DISTURB THE DATUM POINT, THE REFERENCE TIES ESTABLISHED BY THE CONTRACTOR'S SURVEYOR SHALL BE USED TO RESET THE DATUM POINT. THE ACTUAL PLACEMENT OF THE DATUM POINT WITHIN THE MONUMENT ASSEMBLY SHALL BE DIRECTLY AND PHYSICALLY SUPERVISED IN THE FIELD BY THE CONTRACTOR'S LICENSED PROFESSIONAL SURVEYOR. SURVEY NOTES VERIFYING THE ACCURACY OF ANY RESET DATUM POINTS AS WELL AS VERIFICATION THAT ANY DATUM POINTS THAT WERE NOT RESET WERE NOT DISTURBED 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.

PAYMENT FOR THE REMOVAL OF ANY EXISTING MONUMENT ASSEMBLIES SHALL ALSO BE INCLUDED IN THIS ITEM.

QUANTITY THAT WILL BE CARRIED TO THE GENERAL SUMMARY:
ITEM 604 - MONUMENT ASSEMBLY, AS PER PLAN 3 EACH

PAVEMENT RESTORATION FOR MONUMENT ASSEMBLY INSTALLATIONS

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION OF ITEM 604 MONUMENT ASSEMBLIES.

- ITEM 448 - 2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-28 1 CU. YD.
- ITEM 301 - 10" ASPHALT CONCRETE BASE, PG64-22 3 CU. YD.
- ITEM 407 - TACK COAT (0.075 GAL. / SQ. YD.) 1 GAL.

THE ABOVE QUANTITIES ARE BASED ON A PAVEMENT RESTORATION WIDTH OF TWO FEET AROUND THE PERIMETER OF THE MONUMENT ASSEMBLIES.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

ITEM 604 - MANHOLE ADJUSTED TO GRADE, AS PER PLAN

THE MANHOLES THAT ARE DESIGNATED TO BE ADJUSTED TO GRADE SHALL BE DONE SO IN ACCORDANCE WITH SECTION 604 OF THE CMS WITH THE FOLLOWING EXCEPTION, ADJUST CASTING TO GRADE WITH PRECAST CONCRETE RISER RING AND SEAL WITH MASTIC CONCRETE. DO NOT USE BRICK

ITEM 604 MANHOLE ADJUSTED TO GRADE, AS PER PLAN, 13 EACH

ITEM 638 - VALVE BOX ADJUSTED TO GRADE

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN PROVIDED AND SHALL BE USED AS DIRECTED BY THE ENGINEER. QUANTITY THAT WILL BE CARRIED TO THE GENERAL SUMMARY:

638, VALVE BOX ADJUSTED TO GRADE 27 EACH

WATERWAY PERMIT DETERMINATION (404/401) - ODOT PROJECTS

ALL PROJECTS INVOLVING JURISDICTIONAL WATERS OF THE UNITED STATES (STREAMS, RIVERS, NON-ISOLATED WETLANDS) AND/OR ISOLATED WETLANDS ARE SUBJECT TO REGULATION UNDER SECTIONS 404 AND 401 OF THE CLEAN WATER ACT, AND POSSIBLY OHIO EPA ISOLATED WETLAND LAW. THE OHIO DEPARTMENT OF TRANSPORTATION - OFFICE OF ENVIRONMENTAL SERVICES (OES) AND/OR THE UNITED STATES ARMY CORPS OF ENGINEERS (USACE) HAS DETERMINED THAT THE PROJECT MEETS THE CRITERIA OF NATIONWIDE PERMIT (NWP) 3 - MAINTENANCE AND NWP 25 (STRUCTURAL DISCHARGES); BASED UPON THE ANTICIPATED IMPACTS TO STREAM(S) AND/OR WETLAND(S). HOWEVER, THIS PERMIT DETERMINATION DID NOT INCLUDE THE USE OF TEMPORARY CONSTRUCTION ACCESS FILLS THAT MAY BE REQUIRED FOR CONSTRUCTION (I.E. CAUSEWAY STREAM CROSSINGS, CONSTRUCTION ACCESS PADS, COFFERDAMS, ETC.). INFORMATION REGARDING THE USE OF TEMPORARY CONSTRUCTION ACCESS FILLS MAY NOT HAVE BEEN KNOWN AT THE TIME OF THE PERMIT DETERMINATION. THE CONTRACTOR SHOULD BE AWARE THAT THE USE OF TEMPORARY FILL BELOW THE ORDINARY HIGH WATER MARK (OHWM), WHICH IS THE USACE'S JURISDICTIONAL LIMITS, WILL REQUIRE A PRE-CONSTRUCTION NOTIFICATION (PCN) AND AUTHORIZATION BY THE USACE UNDER NWP 33 - TEMPORARY CONSTRUCTION ACCESS AND DEWATERING. SHOULD TEMPORARY CONSTRUCTION ACCESS FILL BE REQUIRED, THE CONTRACTOR SHALL COORDINATE SUCH ACTIVITIES, INCLUDING THE PCN, THROUGH OES AND ALLOW 60 DAYS MINIMUM FOR PROCESSING WITH THE USACE. THE CONTRACTOR SHALL NOT COORDINATE THESE ACTIVITIES DIRECTLY WITH THE USACE. THE CONTRACTOR SHALL NOT UTILIZE TEMPORARY FILLS BELOW OHWM UNTIL SUCH ACTIVITY IS AUTHORIZED BY THE USACE. SHOULD A PCN BE REQUIRED, THE PCN SHALL INCLUDE PERTINENT INFORMATION (I.E. VOLUME AND SURFACE AREA OF TEMPORARY FILLS) AND DRAWINGS (PLAN AND PROFILE VIEW) OF TEMPORARY FILLS BELOW OHWM. ONLY CLEAN, NON ERODIBLE MATERIALS SHALL BE USED FOR TEMPORARY CONSTRUCTION ACCESS FILLS. ANY TEMPORARY FILLS BELOW OHWM SHALL BE REMOVED FOLLOWING COMPLETION OF THE AUTHORIZED ACTIVITY AND THE AREA OF STREAM WHERE TEMPORARY FILL WAS LOCATED SHALL BE RESTORED TO ITS PRE-CONSTRUCTION CONDITION. PLEASE NOTE THAT FORDING OF WATERWAYS IS NOT ALLOWED PER ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS 2002, ITEM 207.03.

CONSTRUCTION AND DEMOLITION DEBRIS

THE CONSTRUCTOR SHALL TAKE PRECAUTIONS TO AVOID AND/OR LIMIT CONSTRUCTION AND DEMOLITION DEBRIS FROM ENTERING THE STREAMS. 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 FOR ROCK CHANNEL PROTECTION AND REMOVAL OF ANY TEMPORARY FILL ASSOCIATED WITH CONSTRUCTION OPERATIONS.

ENDANGERED SPECIES HABITAT

THIS PROJECT IS WITHIN THE RANGE OF THE FEDERALLY ENDANGERED INDIANA BAT (MYOTIS SOCALIS) AND MAY IMPACT SUMMER ROOSTING AND BROOD-REARING HABITAT FOR THIS SPECIES. THE SUMMER ROOSTING AND BROOD-REARING HABITAT FOR THE INDIANA BAT CONSISTS OF LIVING OR STANDING DEAD TREES OR SNAGS WITH EXFOLIATING, PEELING OR LOOSE BARK, SPLIT TRUNKS AND/OR BRANCHES OR CAVITIES SHALL BE PERFORMED ONLY AFTER SEPTEMBER 15 AND BEFORE APRIL 15 WHEN THE SPECIES WOULD NOT BE USING SUCH HABITAT.

EXISTING BRICK PAVEMENT/STONE CURB AVOIDANCE

THE EXISTING BRICK PAVEMENT AND STONE CURBS ALONG SOUTH FREEDOM STREET, THE SOUTH APPROACH OF THE SR 59/SR 88/SOUTH FREEDOM STREET INTERSECTION IN THE CITY OF RAVENNA, SHALL NOT BE RESURFACED, REMOVED OR DISTURBED BY ANY MILLING, RESURFACING, AND/OR OTHER CONSTRUCTION ACTIVITIES.

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. TWO LANE ROADS: A MINIMUM OF ONE TEN FOOT BIDIRECTIONAL LANE SHALL BE MAINTAINED ON THE EXISTING PAVEMENT OR COMPLETED PAVEMENT DURING CONSTRUCTION OF THE WORK EXCEPT WHERE THE DETOUR IS IN EFFECT.
MORE THAN TWO LANE ROADS: A MINIMUM OF ONE ELEVEN FOOT LANE IN EACH DIRECTION SHALL BE MAINTAINED ON THE EXISTING 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 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 OR CONES EXCEEDS TWO (2) MILES RURAL OR ONE (1) MILE URBAN.
8. NO WORK SHALL BE PERFORMED BETWEEN 10PM AND 6AM DAILY.
9. 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 LANE, 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.
10. 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.
11. 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.
12. 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 QUANTITIES 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 1	12.13 MILE
ITEM 614 WORK ZONE LANE LINE, CLASS 1	2.58 MILE
ITEM 614 WORK ZONE STOP LINE, CLASS 1	1116 FT.
ITEM 614 WORK ZONE CHANNELIZING LINE, CLASS 1	1200 FT.
ITEM 614 WORK ZONE MARKING SIGN	30 EACH

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.

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.

METHOD OF PAYMENT

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

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. NO EQUIPMENT SHALL BE PARKED IN THE MEDIAN OF THE HIGHWAY. 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.

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.

ITEM 614 - MAINTAINING TRAFFIC

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 12:00N 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.

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 INTERSECTIONS LISTED BELOW. LOOP DETECTORS DISTURBED BY PAVEMENT PLANING OR TRENCHING SHALL BE ABANDONED IN PLACE. THE LOOP DETECTOR WIRE WILL BE CUT INTO THE PAVEMENT AFTER THE PROPOSED SURFACE COURSE HAS BEEN PLACED. EACH DETECTOR SHALL BE REPLACED IN KIND, AT THE SAME LOCATION AS EXISTING. THE QUANTITIES LISTED BELOW HAVE BEEN CARRIED TO THE GENERAL SUMMARY. THE NEW LOOP DETECTOR WIRES SHALL BE RUN INTO THE EXISTING CONTROL BOX OR THE EXISTING PULLBOX. INCLUDED IN THIS ITEM IS THE POURED EPOXY TYPE CABLE SPLICE KIT CONFORMING TO 725.15 THAT MUST BE USED IN MAKING THESE CONNECTIONS.

ALL NECESSARY MATERIAL, LABOR, SPLICE KITS AND EQUIPMENT SHALL BE INCIDENTAL TO PAYMENT OF THESE ITEMS.

ITEM 632 DETECTOR LOOP 2 EACH

ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, 2 PORTABLE CHANGEABLE MESSAGE SIGNS [PCMS], ON SITE, FOR THE DURATION OF TIME SPECIFIED IN THIS NOTE. EACH SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS MAINTAINED BY THE DIRECTOR. THE CLASS 3 UNITS SHALL HAVE A MINIMUM LEGIBILITY DISTANCE OF 650 FEET.

EACH SIGN SHALL BE TRAILER MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM TO DIM THE SIGN DURING DARKNESS AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY.

PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE PCMS SHOULD NOT BE LOCATED IN THE MEDIAN OF THE HIGHWAY UNLESS IT IS PROTECTED FROM BOTH DIRECTIONS OF TRAFFIC. THE PCMS SHOULD BE LOCATED BEHIND GUARDRAIL WHEREVER POSSIBLE. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE THE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS WILL BE OFF, FACING AWAY FROM ALL TRAFFIC AND SHALL DISPLAY ONE OR MORE HIGH INTENSITY YELLOW REFLECTIVE SHEETING SURFACES OF 9-INCH BY 15-INCH MINIMUM SIZE FACING TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT AND TO REVISE SIGN MESSAGES, IF NECESSARY.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE CONTRACTOR. A LIST OF ALL PROPOSED PREPROGRAMMED MESSAGES WILL BE GIVEN TO THE ENGINEER PRIOR TO CONSTRUCTION. THE SIGN SHALL HAVE TWO DIFFERENT MEMORIES [PROM AND RAM] AND CAPABILITY TO STORE UP TO 99 MESSAGES IN EACH MEMORY. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. IN ORDER TO CONVEY A MAXIMUM OF INFORMATION AT A SINGLE GLANCE, ONLY THREE LINE PRESENTATION FORMATS WITH A MAXIMUM OF SIX MESSAGE PHASES WILL BE PERMITTED. NORMALLY, ONLY A MAXIMUM OF THREE MESSAGE PHASES SHOULD BE EMPLOYED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST ONCE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL [IN ACTIVE CELLULAR AREAS] ALLOW REMOTE SIGN ACTIVATION, DEACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES.

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF 614. THE CONTRACTOR SHALL PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC AND THE ENTIRE COST TO CONTROL TRAFFIC ACCRUED BY THE DEPARTMENT WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24 HOURS PER DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES. THE REQUIREMENT TO FURNISH, INSTALL, MAINTAIN AND REMOVE A PCMS UNIT ON THIS PROJECT SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES AS OUTLINED IN 614.02.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE BID FOR EACH SIGN MONTH OF ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN AND SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 2 SIGN MONTH

ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR)

IN ADDITION TO THE REQUIREMENTS OF 614 AND THE LATEST EDITION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD), A UNIFORMED LAW ENFORCEMENT OFFICER (AND OFFICIAL PATROL CAR WITH WORKING TOP MOUNTED EMERGENCY FLASHING LIGHTS) SHALL BE PROVIDED FOR CONTROLLING TRAFFIC FOR THE FOLLOWING TASKS:

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR-DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT, OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED.

LAW ENFORCEMENT OFFICERS (LEO'S) SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED. THE LEO'S ARE CONSIDERED TO BE EMPLOYED BY THE CONTRACTOR AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR ACTIONS. ALTHOUGH THEY ARE EMPLOYED BY THE CONTRACTOR, THE PROJECT ENGINEER SHALL HAVE CONTROL OVER THEIR PLACEMENT. THE OFFICIAL CAR SHALL BE A PUBLIC SAFETY VEHICLE AS REQUIRED BY THE OHIO REVISED CODE.

THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THESE SERVICES WITH:

RAVENNA PATROL POST
6259 STATE ROUTE 14
RAVENNA, OHIO 44266
330-297-1441

IF AFTER CONTACTING THE OHIO HIGHWAY PATROL, IT IS DETERMINED THAT THEY CANNOT SUPPLY THE LEO, THEN AN AUTHORIZED MUNICIPAL OR COUNTY POLICE OFFICER WITH A MARKED AND FLASHER-LIGHT EQUIPPED OFFICIAL POLICE OR PATROL CAR SHALL BE PROVIDED.

LAW ENFORCEMENT OFFICERS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR). THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

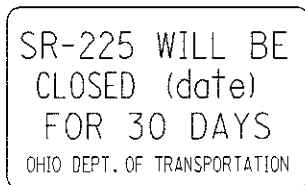
ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR 56 HOURS

THE HOURS PAID SHALL INCLUDE MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

IF THE CONTRACTOR WISHES TO UTILIZE LEO'S FOR FLAGGING AND TRAFFIC CONTROL OTHER THAN FOR THAT REQUIRED IN THESE PLANS, HE MAY DO SO AT HIS OWN EXPENSE. PAYMENT FOR THE EXCESS ABOVE CONTRACT REQUIREMENTS WILL BE INCLUDED UNDER ITEM 614 MAINTAINING TRAFFIC.

ITEM 614, MAINTAINING TRAFFIC (NOTICE OF CLOSURE SIGN)

NOTICE OF CLOSURE SIGNS, AS DETAILED IN THESE PLANS, SHALL BE ERECTED BY THE CONTRACTOR AT LEAST ONE WEEK IN ADVANCE OF THE SCHEDULED ROAD OR RAMP CLOSURE. THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.



OC-60B-60

DESIGNATED LOCAL ALTERNATE ROUTES

IN ADDITION TO THE OFFICIAL, SIGNED DETOUR ROUTE, A LOCAL ROUTE HAS BEEN DETERMINED TO BE THE SECONDARY, UNSIGNED ALTERNATE ROUTE OR "DESIGNATED LOCAL ALTERNATE." THIS ROUTE IS SHOWN ON THE DETOUR PLAN HEREIN. DURING THE TIME THAT TRAFFIC IS DETOURED, THE CONTRACTOR SHALL MAINTAIN THIS ROUTE IN A CONDITION WHICH IS REASONABLY CLOSE TO THE ORIGINAL CONDITION. ALL SUCH WORK SHALL BE PERFORMED WHEN AND AS DIRECTED BY THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITY IS PROVIDED FOR USE AS DIRECTED BY THE ENGINEER TO MAINTAIN THE DESIGNATED LOCAL ALTERNATE ROUTE:

ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 20 CU YDS

DETOUR NOTIFICATION

THE CONTRACTOR SHALL ADVISE THE ODOT DISTRICT OFFICE (330-297-0801 EXT 339) EIGHTEEN (18) DAYS IN ADVANCE OF WHEN THE DETOUR ROUTE SHOULD BE IN EFFECT. THE CONTRACTOR SHALL THEN PROVIDE AND INSTALL ALL DEVICES NECESSARY TO DEFINE THE ROUTE OF THE DETOUR AND SHALL MAINTAIN THE SAME THROUGHOUT THE DETOUR LIMITATION DATES. ALL TRAFFIC CONTROL DEVICES REQUIRED, OTHER THAN FOR THE DETOUR, SHALL BE FURNISHED, ERECTED, MAINTAINED, AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. PAYMENT FOR ALL WORK ASSOCIATED WITH THE DETOUR SHALL BE INCLUDED UNDER THE LUMP SUM BID FOR ITEM 614, DETOUR SIGNING.

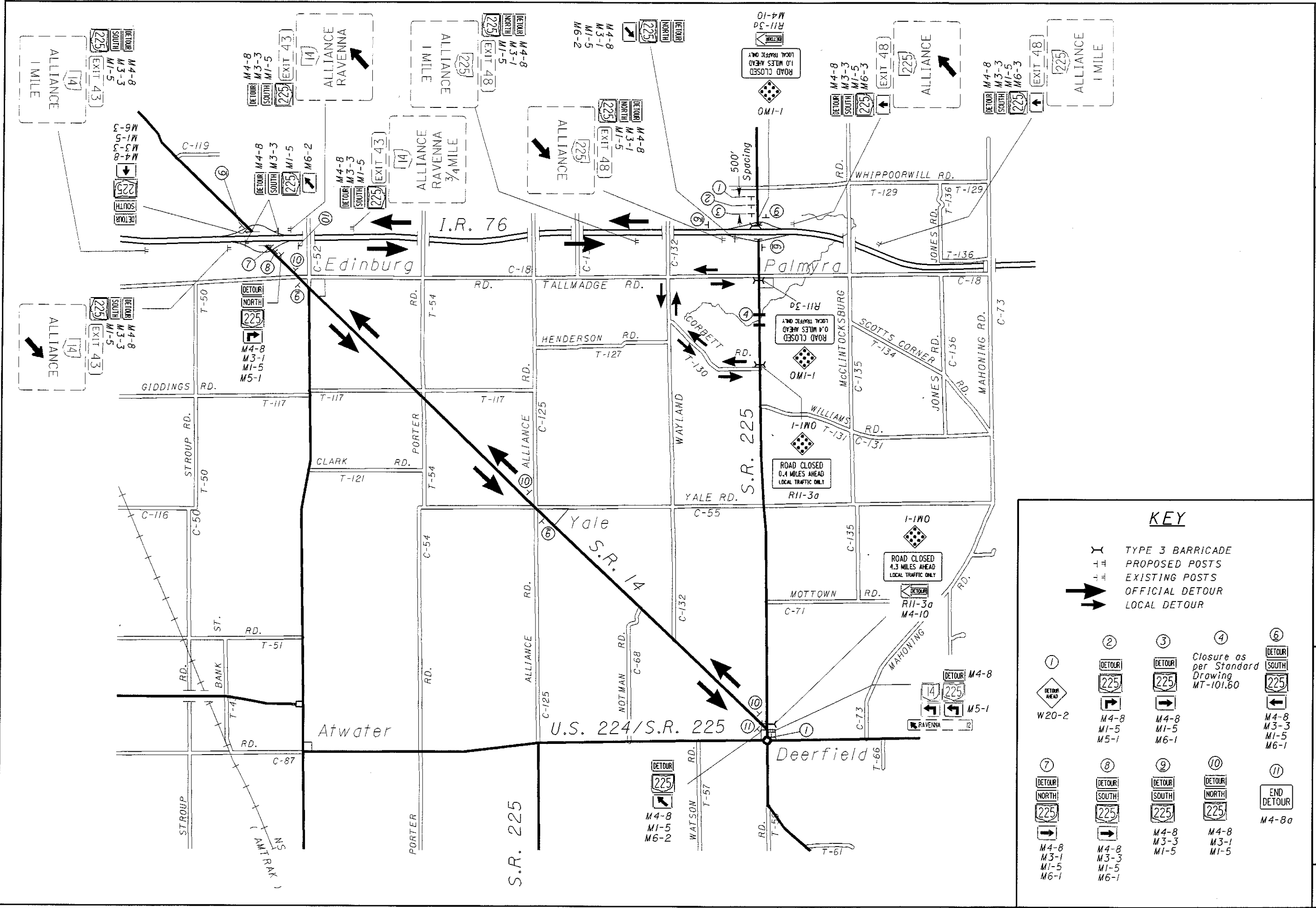
DETOUR DURATION

THE MAXIMUM LENGTH OF TIME FOR THE DETOUR ROUTE TO BE IN EFFECT SHALL BE THIRTY (30) CONSECUTIVE CALENDAR DAYS. CONSTRUCTION WORK MAY BE PERFORMED BEFORE AND AFTER THE DETOUR LIMITATION DATES, BUT THERE SHALL BE NO RESTRICTIONS TO THROUGH OR LOCAL TRAFFIC. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SCHEDULE AND PERFORM THE CONSTRUCTION WORK WITHIN THE DETOUR LIMITATION TIME. THE FAILURE OF THE CONTRACTOR TO MEET THE DETOUR LIMITATION DATES WILL CAUSE SEPARATE LIQUIDATED DAMAGES IN ACCORDANCE WITH 108.07 TO BE ASSESSED. THE CONTRACTOR WILL COMPLY WITH ALL PROVISIONS OF 108.07 OF THE DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN INCLUDED FOR DUST CONTROL PURPOSES:

616, WATER 3 M. GAL.



KEY

<p>Y TYPE 3 BARRICADE</p> <p>+ + PROPOSED POSTS</p> <p>+ + EXISTING POSTS</p> <p>➔ OFFICIAL DETOUR</p> <p>➔ LOCAL DETOUR</p>	<p>① DETOUR AHEAD W20-2</p> <p>② DETOUR NORTH 225</p> <p>③ DETOUR SOUTH 225</p> <p>④ Closure as per Standard Drawing MT-101.60</p> <p>⑤ DETOUR SOUTH 225</p> <p>⑥ DETOUR SOUTH M4-8 M3-3 M1-5 M6-1</p> <p>⑦ DETOUR NORTH 225</p> <p>⑧ DETOUR SOUTH 225</p> <p>⑨ DETOUR SOUTH 225</p> <p>⑩ DETOUR NORTH 225</p> <p>⑪ END DETOUR M4-8a</p>
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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-151 (Low Shoulder) signs or OW-171 (Uneven Lanes symbol), OWP-171 (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 I.

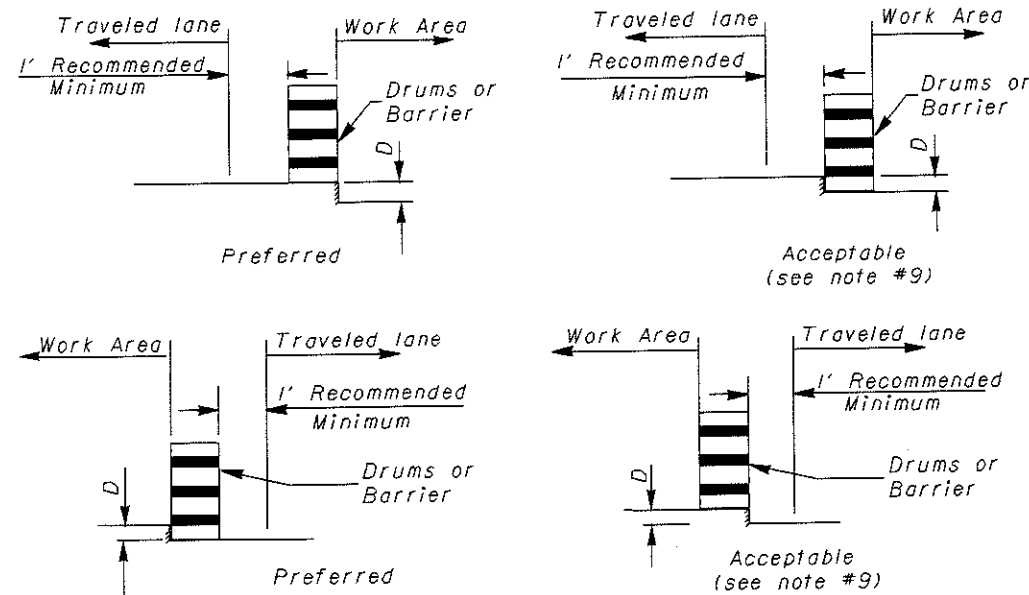
b. Lengths of 60 feet or less - repairs shall be affected in accordance with Item 255.08. Drums may be used as a separator adjacent to the traveled lane.

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	≤ 1 1/2	Erect OW-171, AND OWP-171.
1FT-12FT	> 1 1/2-3	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.

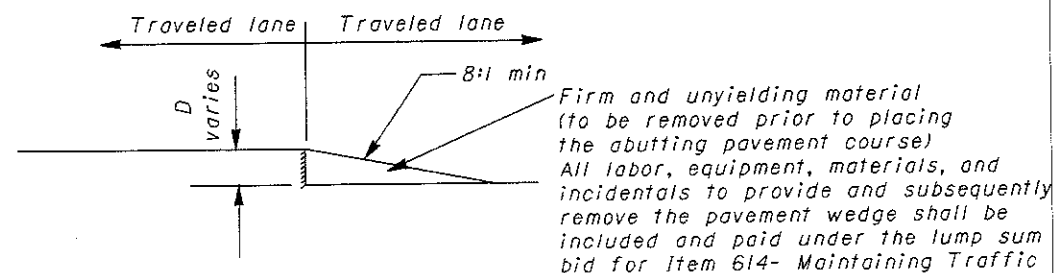
*Cones may be used for daytime only conditions.



OPTIONAL WEDGE TREATMENT

(MILLING OR RESURFACING)

1. This treatment may be used when permitted for Condition I only.
2. OW-171, OWP-171, and OC-53 signs required.



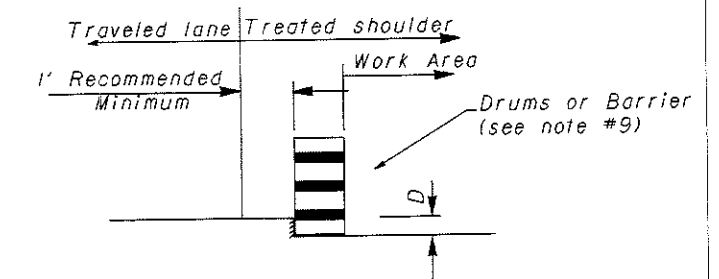
CONDITION II

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.

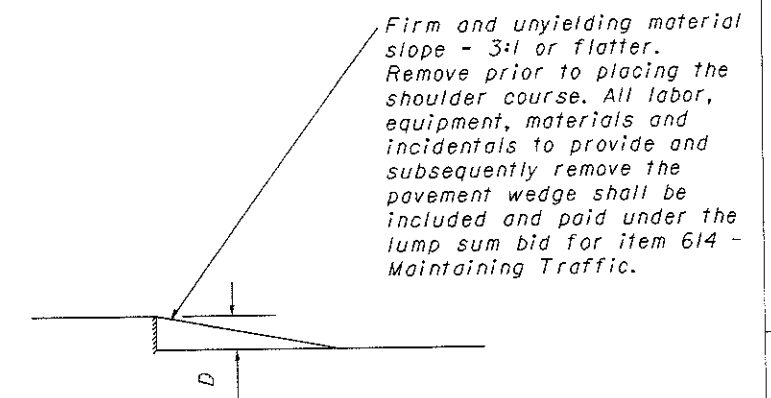
Distance From Traveled Lane	D (in)	Treatment
1FT-12FT	≤ 1 1/2	1.) If edgelines are present, no treatment necessary. or 2.) Erect OW-171, OWP-171, and OC-53 signs
1FT-12FT	>1 1/2- 5	1) If min. lane widths* requirements can be met, maintain lanes utilizing drums as shown below. - or - 2) If min. lane width* 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-151 signs required.



SHEET NUMBER						PARTICIPATION			ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
14	15	16				STATE FED	CITY FED	100% CITY						
												MAINTENANCE OF TRAFFIC		
	56					56			614	11100	56	HOURS	LAW ENFORCEMENT OFFICER WITH PATROL CAR	
						LUMP			614	12420		LUMP	DETOUR SIGNING	
30						30			614	12460	30	EACH	WORK ZONE MARKING SIGN	
20		20				40			614	13000	40	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	15
	2					2			614	18511	2	SMNTH	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	
2.58						2.58			614	20000	2.58	MILE	WORK ZONE LANE LINE, CLASS 1	
12.13						12.13			614	21000	12.13	MILE	WORK ZONE CENTER LINE, CLASS 1	
1200						1200			614	23000	1200	FT	WORK ZONE CHANNELIZING LINE, CLASS 1	
1116						1116			614	26000	1116	FT	WORK ZONE STOP LINE, CLASS 1	
		3				3			616	10000	3	M GAL	WATER	
									614	11000		LUMP	MAINTAINING TRAFFIC	
						2	2		619	16010	4	MNTH	FIELD OFFICE, TYPE B	
									623	10000		LUMP	CONSTRUCTION LAYOUT STAKES	
									624	10000		LUMP	MOBILIZATION	

GENERAL SUMMARY

**POR-59/88/225-
8.41/0.51/9.76**

BEGIN PROJECT SLM 8.41
8.41 FREEDOM STREET
SR 88 8.41

8.55 LIBERTY ST.

LINDEN ST. 8.61

GROVE ST. 8.74

8.77 SANFORD ST.

8.86 STEVENS ST.

8.92 NEW MILFORD ST.

BRYN MAWR ST. 9.01

9.05 RAVENNA CITY LIMIT (NO WORK)

END PROJECT SLM 9.05

NOTE:
* BUTT JOINT PER BP-3.1
ALL INTERSECTIONS ARE TO BE PROVIDED A BUTT JOINT PER BP-3.1

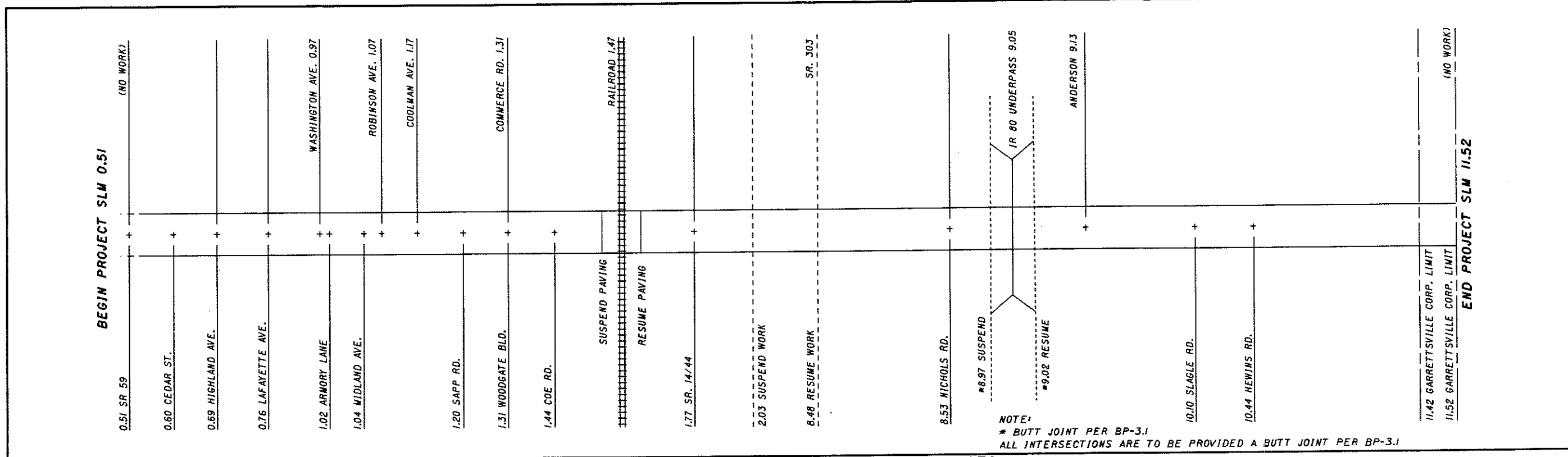
PAVEMENT DATA

ROUTE	S.L.M.		LENGTH		WP AVG. FEET	PAYEMENT AREA SQ. YD.	254		854		407		442		407		617		408		202		448			
	FROM	TO	MILES	FEET			PAVEMENT PLANING, ASPHALT CONCRETE	2" THICKNESS S. Y.	AVG. THICK INCHES	C. Y.	TACK COAT	FINE GRADED POLYMER, TYPE A	AVG. THICK INCHES	C. Y.	ASPHALT CONCRETE INTERMEDIATE COURSE, 9.5mm, TYPE B (448)	AVG. THICK INCHES	C. Y.	TACK COAT FOR INTERMEDIATE COURSE	COMPACTED AGGREGATE, TYPE A, AS PER PLAN	AVG. THICK INCHES	C. Y.	PRIME COAT	WEARING COURSE REMOVED	AVG. THICK INCHES	C. Y.	ASPHALT CONCRETE SURFACE COURSE, TYPE 1 P664-22 (DRIVEWAYS)
SR 59	8.41	8.55	0.14	739	34	2793	2792.53	3/4"	58.18	418.88	1 1/4"	96.96	111.70													
SR 59	8.55	8.61	0.06	317	44	1549	1548.80	3/4"	32.27	232.32	1 1/4"	53.78	61.95													
SR 59	8.61	8.74	0.13	686	54	4118	4118.40	3/4"	85.80	617.76	1 1/4"	143.00	164.74													
SR 59	8.74	8.77	0.03	158	54	950	950.40	3/4"	19.80	142.56	1 1/4"	33.00	38.02													
SR 59	8.77	8.81	0.04	211	54	1267	1267.20	3/4"	26.40	190.08	1 1/4"	44.00	50.69													
SR 59	8.81	8.86	0.05	264	54	1584	1584.00	3/4"	33.00	237.60	1 1/4"	55.00	63.36													
SR 59	8.86	8.92	0.06	317	54	1901	1900.80	3/4"	39.60	285.12	1 1/4"	66.00	76.03													
SR 59	8.92	9.01	0.09	475	54	2851	2851.20	3/4"	59.40	427.68	1 1/4"	99.00	114.05													
SR 59	9.01	9.05	0.04	211	54	1267	1267.20	3/4"	26.40	190.08	1 1/4"	44.00	50.69													
TURN LANES																										
INTERSECTIONS						908	908.33	3/4"	18.92	136.25	1 1/4"	31.54	36.33													
DRIVEWAYS																						2"				
TOTALS CARRIED TO GENERAL SUMMARY							19189	400	2879	667	768															

ASPHALT CONCRETE
SR 59 - SLM 8.41 TO SLM 9.05

POR-59/88/225 -
8.41/0.51/9.76

I:\Projects\18705\Roadway\New Folder\18705gp.dgn 08-MAR-2004 9:17AM ndar



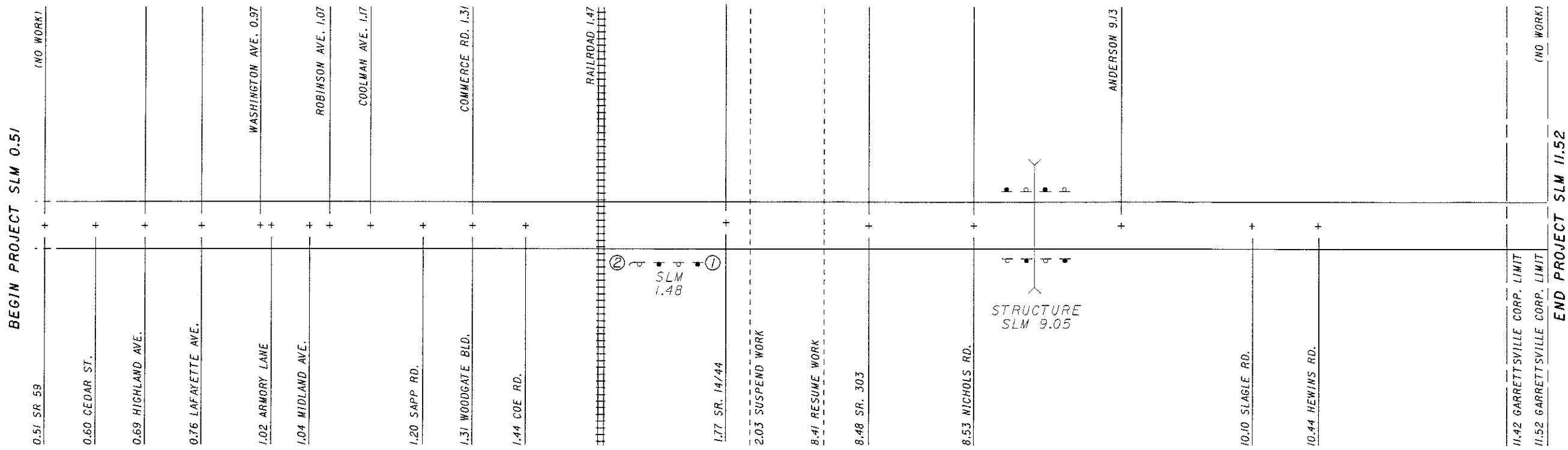
PAVEMENT DATA

ROUTE	S.L.M.		LENGTH		WP AVG.	PAVEMENT AREA	254		446		407		407		448		407		617		408		202		448			
							PAVEMENT PLANING, ASPHALT CONCRETE		ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-28		TACK COAT		TACK COAT		ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 64-28		TACK COAT FOR INTERMEDIATE COURSE		COMPACTED AGGREGATE, TYPE A, AS PER PLAN		PRIME COAT		WEARING COURSE REMOVED		ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22 (DRIVEWAYS)			
							Var THICKNESS	W/G THICK	C. Y.	INCHES	C. Y.	GAL.	GAL.	W/G THICK	C. Y.	GAL.	GAL.	W/G THICK	C. Y.	GAL.	C. Y.	GAL.	S. Y.	W/G THICK	C. Y.			
FROM	TO	MILES	FEET	FEET	SQ. YD.	S. Y.	INCHES	C. Y.	GAL.	GAL.	INCHES	C. Y.	GAL.	C. Y.	GAL.	S. Y.	INCHES	C. Y.										
SR 88	0.51	0.60	0.09	475	26	1373	1372.80	1.5"	57.20	205.92																		
SR 88	0.60	0.69	0.09	475	26	1373	1372.80	1.5"	57.20	205.92																		
SR 88	0.69	0.76	0.07	370	26	1068	1067.73	1.5"	44.49	160.16																		
SR 88	0.76	0.97	0.21	1109	26	3203	3203.20	1.5"	133.47	480.48																		
SR 88	0.97	1.02	0.05	264	26	763	762.67	1.5"	31.78	114.40																		
SR 88	1.02	1.04	0.02	106	26	305	305.07	1.5"	12.71	45.76																		
SR 88	1.04	1.07	0.03	158	26	458	457.60	1.5"	19.07	68.64																		
SR 88	1.07	1.17	0.10	528	24	1408	1408.00	1.5"	58.67	211.20																		
SR 88	1.17	1.20	0.03	158	24	422	422.40	1.5"	17.60	63.36																		
SR 88	1.20	1.31	0.11	581	24	1549	1548.80	1.5"	64.53	232.32																		
SR 88	1.31	1.44	0.13	686	24	1830	1830.40	1.5"	76.27	274.56							2.12	15.25										
SR 88	1.44	1.71	0.33	1442	24	3846	3846	1.5"	160.25	577							5.38	38.72										
SR 88	1.88	2.03	0.27	1073	30	3776		1.5"	157.33			302	.75"	78.67	151	8.47	61.01											
SR 88	8.48	8.53	0.05	264	28	821		1.5"	34.22			65.71	.75"	17.11	32.85	3.67	23.47											
SR 88	8.53	8.89	0.36	1901	29	6125		1.5"	255.20			489.98	.75"	127.60	244.99	26.40	168.96											
SR 88	8.89	8.97	0.08	422	29	1361	1361	1.5"	56.71	204.15						5.87	37.55											
SR 88	9.02	9.08	0.06	317	29	950	950	1.5"	39.60	142.50						4.40	28.16											
SR 88	9.08	9.13	0.05	264	29	792		1.5"	33.00			63.36	.75"	16.50	31.68	3.67	23.47											
SR 88	9.13	10.10	0.97	5122	27	15365		1.5"	640.20			1229.18	.75"	320.10	614.59	71.13	455.25											
SR 88	10.10	10.44	0.34	1795	26	5186		1.5"	216.09			414.89	.75"	108.04	207.45	24.93	159.57											
SR 88	10.44	11.52	1.08	5702	25	15840		1.5"	660.00			1267.20	.75"	330.00	633.60	79.20	506.88											
INTERSECTIONS						2827	1770	1.5"	107	319		56	.75"	23	43													
DRIVEWAYS						2867						229						2467	2"	172								
TOTALS CARRIED TO GENERAL SUMMARY							21679	2932	3306	4117	1021	1959	235	1518	2467	172												

CALCULATED
CJK
CHECKED
DAY

ASPHALT CONCRETE
SR 88 - SLM 0.51 TO SLM 11.52

POR-59/88/225-
8.41/0.51/9.76



- ① ANCHOR ASSEMBLY TYPE E-98
- ② ANCHOR ASSEMBLY TYPE T W/ RADIUS 8' (1 CURVED PANEL: 12.5')

NOTE:
 * BUTT JOINT PER BP-3.1
 ALL INTERSECTIONS ARE TO BE PROVIDED
 A BUTT JOINT PER BP-3.1

NOT TO SCALE

PROPOSED/EXISTING GUARDRAIL

REF. NO.	ROUTE	APPROX. LOG POINT	SIDE	ITEM 202		ITEM 606		NOTES	
				GUARDRAIL REMOVED FT.	GUARDRAIL TYPE 5 FT.	ANCHOR ASSEMBLY			
						TYPE T EACH	TYPE E-98 EACH		
I	SR 88	1.48	RT.	50	25	I	I		
TOTALS CARRIED TO G.S.					50	25	I	I	

GUARDRAIL DETAILS POR-88
SLM 8.41-11.52

POR-59/88/225-
8.41/0.51/9.76

CALCULATED
 CJK
 CHECKED
 DAY

REF NO.	SHEET NO.	STATION		SIDE	202					601	602	603		670	606			620	626	Special	
					Pipe Removed, 24" and Under	Pipe Removed, Over 24"	Guardrail Removed	Fence Removed	Headwall Removed	Rock Channel Protection, Type B, with Filter	Concrete Masonry, As Per Plan	12" Conduit, Type D	78" Conduit, Type A, 16 gage, 707.02 aluminum coated (0.079), 707.04, 707.07(0.109) or 707.22 with field paving of pipe	Ditch Erosion Protection	Guardrail, Type 5	Anchor Assembly, Type E-98	Anchor Assembly, Type T	Delimeter, Type D, Post Mounted	Barrier Reflector, Type A2	Mailbox Support System, Single	
		Ft.	Ft.		Ft.	Ft.	Each	Cu. Yd.	Cu. Yd.	Ft.	Ft.	Sq. Yd.	Lin. Ft.	Each	Each	Each	Each	Each	Each		
R1	10	513+67	513+88	LT	21																
R2	10	514+43	515+79	LT			139														
R3	10	514+44	514+93	LT				56													
R4	10	514+75	514+93	RT				18													
R5	10	515+12	515+63	RT	50																
R6	10	515+49	516+91	RT			149														
R7	10	515+63		LT&RT		50			2												
R8	10	515+66	516+06	LT	40																
D1	10	513+54	514+00	LT							45										
D2	10	514+00	514+64	LT									53								
D3	10	514+00	515+14	RT									95								
D4	10	515+64	515+53	RT							39										
D5	10	515+33	515+72	LT									32								
D6	10	515+53	515+97	RT									36								
D7	10	515+69		LT&RT						52	55.2		86								
D8	10	515+72	516+03	LT							32										
GR1	10	514+21	515+78	LT										112.5	1	1	1	2			
GR2	10,11	515+49	517+18	RT										125.0	1	1	1	3			
MB1	10	513+94		LT															1		
MB2	10	515+28		LT															1		
MB3	10	516+68		LT															1		
TOTALS CARRIED TO GENERAL SUMMARY					111	50	288	74	2	52	55.2	116	86	216		237.5	2	2	2	5	3

STATION	SIDE	605
		Aggregate Drains
		Ft.
513+60	RT	5.4
513+92	LT	5.4
514+10	RT	5.4
514+35	LT	5.4
514+60	RT	5.4
514+85	LT	5.4
515+10	RT	5.4
515+35	LT	5.4
515+60	RT	5.8
515+75	LT	6.3
516+10	RT	5.4
516+85	LT	5.4
517+10	RT	5.4
TOTAL CARRIED TO GENERAL SUMMARY		72

SCHEMATIC PLAN SUB-SUMMARY - POR-225-9.80

POR-59/88/225-8.41/0.51/9.76

lbrjei@D04CD998 - 22463gcm - 01/08/04

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

Sta. 513+45 to Sta. 513+65 Lt.
 $((14.52 + 16)(1/2)(1.25)(1/12)(20)(1/27)) = 1.2 \text{ cu. yd.}$

Sta. 513+45 to Sta. 513+65 Rt.
 $((14.82 + 16)(1/2)(1.25)(1/12)(20)(1/27)) = 1.2 \text{ cu. yd.}$

Sta. 513+65 to Sta. 517+35 Lt. & Rt.
 $((32)(1.25)(1/12)(370)(1/27)) = 45.7 \text{ cu. yd.}$

Sta. 517+35 to Sta. 517+55 Lt.
 $((16 + 15.69)(1/2)(1.25)(1/12)(20)(1/27)) = 1.2 \text{ cu. yd.}$

Sta. 517+35 to Sta. 517+55 Rt.
 $((16+14.45)(1/2)(1.25)(1/12)(20)(1/27)) = 1.2 \text{ cu. yd.}$

Mailbox Turnout, Sta. 516+68.0 Lt.
 $((43.10*)(1.25)(1/12)(1/27)) = 0.2 \text{ cu.yd.}$

TOTAL ITEM 448 = 50.7 CU. YD.
USE: 51 CU.YD.

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

Residential Drive, Sta. 513+77.5 Lt.
 $((398.13*)(1.25)(1/12)(1/27)) = 1.5 \text{ cu.yd.}$

Residential Drive, Sta. 515+27.9 Rt.
 $((393.49*)(1.25)(1/12)(1/27)) = 1.5 \text{ cu.yd.}$

Residential Drive, Sta. 515+91.1 Lt.
 $((358.98*)(1.25)(1/12)(1/27)) = 1.4 \text{ cu.yd.}$

TOTAL ITEM 448 = 4.4 CU. YD.
USE: 4 CU.YD.

ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22

Sta. 513+45 to Sta. 513+65 Lt.
 $((14.52 + 16)(1/2)(1.75)(1/12)(20)(1/27)) = 1.6 \text{ cu. yd.}$

Sta. 513+45 to Sta. 513+65 Rt.
 $((14.82 + 16)(1/2)(1.75)(1/12)(20)(1/27)) = 1.7 \text{ cu. yd.}$

Sta. 513+65 to Sta. 517+35 Lt. & Rt.
 $((32)(1.75)(1/12)(370)(1/27)) = 64.0 \text{ cu. yd.}$

Sta. 517+35 to Sta. 517+55 Lt.
 $((16 + 15.69)(1/2)(1.75)(1/12)(20)(1/27)) = 1.7 \text{ cu. yd.}$

Sta. 517+35 to Sta. 517+55 Rt.
 $((16+14.45)(1/2)(1.75)(1/12)(20)(1/27)) = 1.6 \text{ cu. yd.}$

Mailbox Turnout, Sta. 516+68.0 Lt.
 $((43.10*)(1.75)(1/12)(1/27)) = 0.2 \text{ cu. yd.}$

TOTAL ITEM 448 = 70.8 CU. YD.
USE: 71 CU.YD.

ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22 (DRIVEWAYS)

Residential Drive, Sta. 513+77.5 Lt.
 $((398.13*)(1.75)(1/12)(1/27)) = 2.2 \text{ cu. yd.}$

Residential Drive, Sta. 515+27.9 Rt.
 $((393.49*)(1.75)(1/12)(1/27)) = 2.1 \text{ cu. yd.}$

Residential Drive, Sta. 515+91.1 Lt.
 $((358.98*)(1.75)(1/12)(1/27)) = 1.9 \text{ cu. yd.}$

TOTAL ITEM 448 = 6.2 CU. YD.
USE: 6 CU.YD.

ITEM 407 TACK COAT FOR INTERMEDIATE COURSE

Sta. 513+45 to Sta. 513+65 Lt.
 $((2)(14.52 + 16)(1/2)(20)(1/9)(0.04 \text{ gal./sq. yd.})) = 2.7 \text{ gal.}$

Sta. 513+45 to Sta. 513+65 Rt.
 $((2)(14.82 + 16)(1/2)(20)(1/9)(0.04 \text{ gal./sq. yd.})) = 2.7 \text{ gal.}$

Sta. 513+65 to Sta. 517+35 Lt. & Rt.
 $((2)(32)(370)(1/9)(0.04 \text{ gal./sq. yd.})) = 105.2 \text{ gal.}$

Sta. 517+35 to Sta. 517+55 Lt.
 $((2)(16 + 15.69)(1/2)(20)(1/9)(0.04 \text{ gal./sq. yd.})) = 2.8 \text{ gal.}$

Sta. 517+35 to Sta. 517+55 Rt.
 $((2)(16 + 14.45)(1/2)(20)(1/9)(0.04 \text{ gal./sq. yd.})) = 2.7 \text{ gal.}$

Residential Drive, Sta. 513+77.5 Lt.
 $((2)(398.13*)(1/9)(0.04 \text{ gal./sq. yd.})) = 3.5 \text{ gal.}$

Residential Drive, Sta. 515+27.9 Rt.
 $((2)(393.49*)(1/9)(0.04 \text{ gal./sq. yd.})) = 3.5 \text{ gal.}$

Residential Drive, Sta. 515+91.1 Lt.
 $((2)(358.98*)(1/9)(0.04 \text{ gal./sq. yd.})) = 3.2 \text{ gal.}$

Mailbox Turnout, Sta. 516+68.0 Lt.
 $((2)(43.10*)(1/9)(0.04 \text{ gal./sq.yd.})) = 0.4 \text{ gal.}$

TOTAL ITEM 407 = 126.7 GAL.
USE: 127 GAL.

ITEM 301 ASPHALT CONCRETE BASE, PG 64-22 (DRIVEWAYS)

Residential Drive, Sta. 513+77.5 Lt.
 $((398.13*)(9)(1/12)(1/27)) = 11.1 \text{ cu. yd.}$

Residential Drive, Sta. 515+27.9 Rt.
 $((393.49*)(9)(1/12)(1/27)) = 10.9 \text{ cu. yd.}$

Residential Drive, Sta. 515+91.1 Lt.
 $((358.98*)(9)(1/12)(1/27)) = 10.0 \text{ cu. yd.}$

TOTAL ITEM 301 = 32.0 CU. YD.
USE: 32 CU.YD.

ITEM 301 ASPHALT CONCRETE BASE, PG 64-22

Sta. 513+45 to Sta. 513+65 Lt.
 $((14.52 + 16)(1/2) + 0.33)(9)(1/12)(20)(1/27)) = 8.7 \text{ cu. yd.}$

Sta. 513+45 to Sta. 513+65 Rt.
 $((14.82 + 16)(1/2) + 0.33)(9)(1/12)(20)(1/27)) = 8.7 \text{ cu. yd.}$

Sta. 513+65 to Sta. 517+35 Lt. & Rt.
 $((32 + 0.67)(9)(1/12)(370)(1/27)) = 335.8 \text{ cu. yd.}$

Sta. 517+35 to Sta. 517+55 Lt.
 $((16 + 15.69)(1/2) + 0.33)(9)(1/12)(20)(1/27)) = 9.0 \text{ cu. yd.}$

Sta. 517+35 to Sta. 517+55 Rt.
 $((16+14.45)(1/2) + 0.33)(9)(1/12)(20)(1/27)) = 8.6 \text{ cu. yd.}$

Mailbox Turnout, Sta. 516+68.0 Lt.
 $((43.10*)(9)(1/12)(1/27)) = 1.2 \text{ cu. yd.}$

TOTAL ITEM 301 = 372.0 CU. YD.
USE: 372 CU. YD.

ITEM 304 AGGREGATE BASE

Sta. 513+45 to Sta. 513+65 Lt.
 $((14.52 + 16)(1/2) + 0.83)(6)(1/12)(20)(1/27)) = 6.0 \text{ cu. yd.}$

Sta. 513+45 to Sta. 513+65 Rt.
 $((14.82 + 16)(1/2) + 0.83)(6)(1/12)(20)(1/27)) = 6.0 \text{ cu. yd.}$

Sta. 513+65 to Sta. 517+35 Lt. & Rt.
 $((32 + 1.67)(6)(1/12)(370)(1/27)) = 230.7 \text{ cu. yd.}$

Sta. 517+35 to Sta. 517+55 Lt.
 $((16 + 15.69)(1/2) + 0.83)(6)(1/12)(20)(1/27)) = 6.2 \text{ cu. yd.}$

Sta. 517+35 to Sta. 517+55 Rt.
 $((16+14.45)(1/2) + 0.83)(6)(1/12)(20)(1/27)) = 5.9 \text{ cu. yd.}$

Residential Drive, Sta. 513+77.5 Lt.
 $((398.13*)(6) + (255.62*)(8)(1/12)(1/27)) = 13.7 \text{ cu. yd.}$

Residential Drive, Sta. 515+27.9 Rt.
 $((393.49*)(6) + (282.75*)(8)(1/12)(1/27)) = 14.3 \text{ cu. yd.}$

Residential Drive, Sta. 515+91.1 Lt.
 $((358.98*)(6) + (321.48*)(8)(1/12)(1/27)) = 14.6 \text{ cu. yd.}$

Mailbox Turnout, Sta. 516+68.0 Lt.
 $((43.10*)(6)(1/12)(1/27)) = 0.8 \text{ cu. yd.}$

TOTAL ITEM 304 = 298.2 CU. YD.
USE: 298 CU.YD.

ITEM 408 PRIME COAT

Sta. 513+45 to Sta. 513+65 Lt.
 $((14.52 + 16)(1/2) + 0.33)(20)(1/9)(0.4 \text{ gal./sq. yd.})) = 13.9 \text{ gal.}$

Sta. 513+45 to Sta. 513+65 Rt.
 $((14.82 + 16)(1/2) + 0.33)(20)(1/9)(0.4 \text{ gal./sq. yd.})) = 14.0 \text{ gal.}$

Sta. 513+65 to Sta. 517+35 Lt. & Rt.
 $((32 + 0.67)(370)(1/9)(0.4 \text{ gal./sq. yd.})) = 537.2 \text{ gal.}$

Sta. 517+35 to Sta. 517+55 Lt.
 $((16 + 15.69)(1/2) + 0.33)(20)(1/9)(0.4 \text{ gal./sq. yd.})) = 14.4 \text{ gal.}$

Sta. 517+35 to Sta. 517+55 Rt.
 $((16 + 14.45)(1/2) + 0.33)(20)(1/9)(0.4 \text{ gal./sq. yd.})) = 13.8 \text{ gal.}$

Residential Drive, Sta. 513+77.5 Lt.
 $((398.13*)(1/9)(0.4 \text{ gal./sq. yd.})) = 17.7 \text{ gal.}$

Residential Drive, Sta. 515+27.9 Rt.
 $((393.49*)(1/9)(0.4 \text{ gal./sq. yd.})) = 17.5 \text{ gal.}$

Residential Drive, Sta. 515+91.1 Lt.
 $((358.98*)(1/9)(0.4 \text{ gal./sq. yd.})) = 16.0 \text{ gal.}$

Mailbox Turnout, Sta. 516+68.0 Lt.
 $((43.10*)(1/9)(0.4 \text{ gal./sq.yd.})) = 1.9 \text{ gal.}$

TOTAL ITEM 408 = 646.4 GAL.
USE: 646 GAL.

ITEM 204 SUBGRADE COMPACTION

Sta. 513+45 to Sta. 513+65 Lt.
 $((16.02 + 17.5)(1/2)(20)(1/9)) = 37.2 \text{ sq. yd.}$

Sta. 513+45 to Sta. 513+65 Rt.
 $((16.32 + 17.5)(1/2)(20)(1/9)) = 37.6 \text{ sq. yd.}$

Sta. 513+65 to Sta. 517+35 Lt. & Rt.
 $((35)(370)(1/9)) = 1438.9 \text{ sq. yd.}$

Sta. 517+35 to Sta. 517+55 Lt.
 $((17.5 + 17.19)(1/2)(20)(1/9)) = 38.5 \text{ sq. yd.}$

Sta. 517+35 to Sta. 517+55 Rt.
 $((17.5 + 15.95)(1/2)(20)(1/9)) = 37.2 \text{ sq. yd.}$

Residential Drive, Sta. 513+77.5 Lt.
 $((398.13*)(1/9)) = 44.2 \text{ sq. yd.}$

Residential Drive, Sta. 515+27.9 Rt.
 $((393.49*)(1/9)) = 43.7 \text{ sq. yd.}$

Residential Drive, Sta. 515+91.1 Lt.
 $((358.98*)(1/9)) = 39.9 \text{ sq. yd.}$

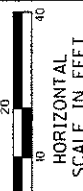
Mailbox Turnout, Sta. 516+68.0 Lt.
 $((43.10*)(1/9)) = 4.8 \text{ sq. yd.}$

TOTAL ITEM 204 = 1722.0 SQ. YD.
USE: 1722 SQ. YD.

* CADD Measurement

CALCULATIONS - POR-225-9.80

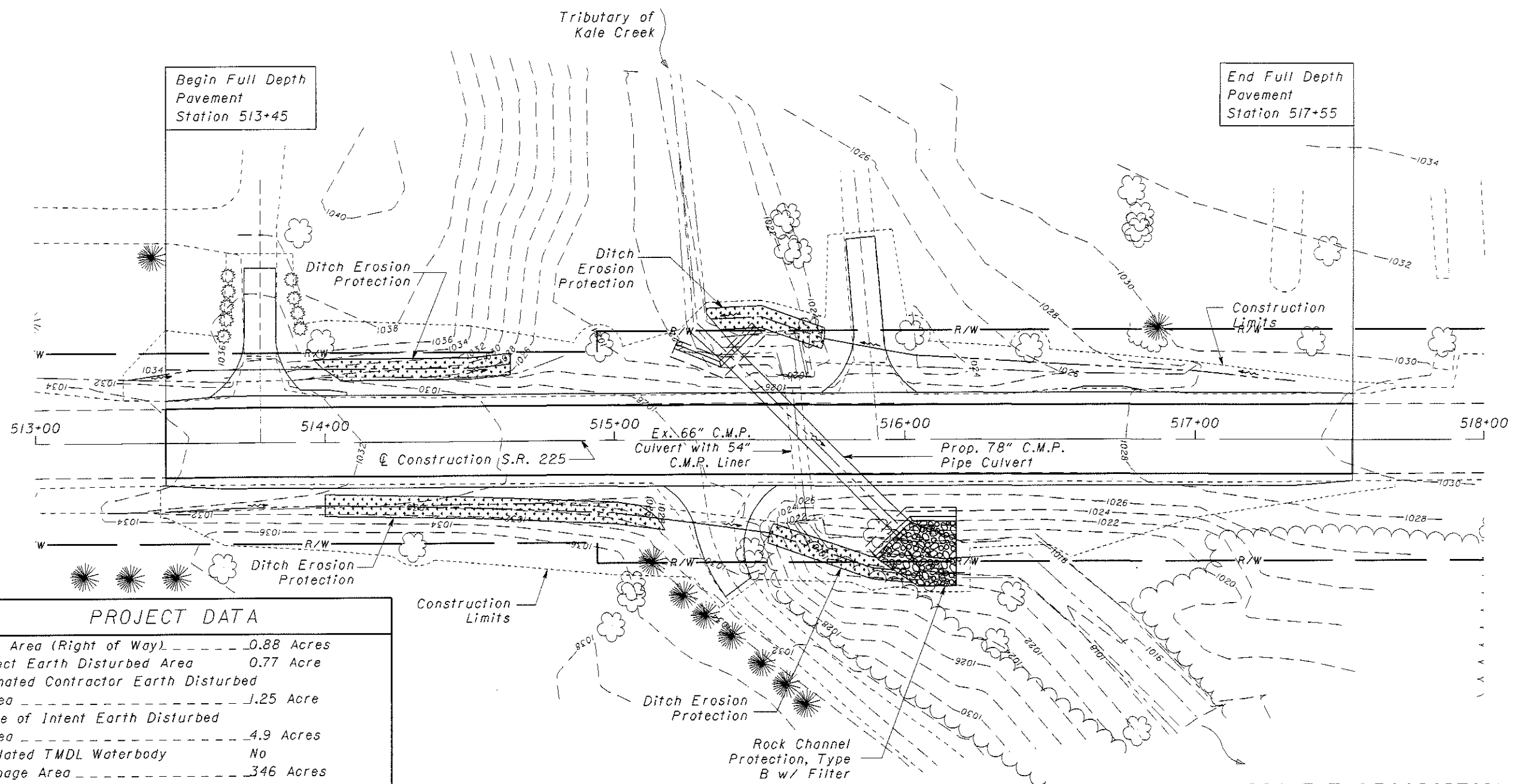
POR-59/88/225-8.41/0.51/9.76



CALCULATED AP
CHECKED JAD

PROJECT SITE PLAN - POR-225-9.80

POR-59/88/225-8.41/0.51/9.76



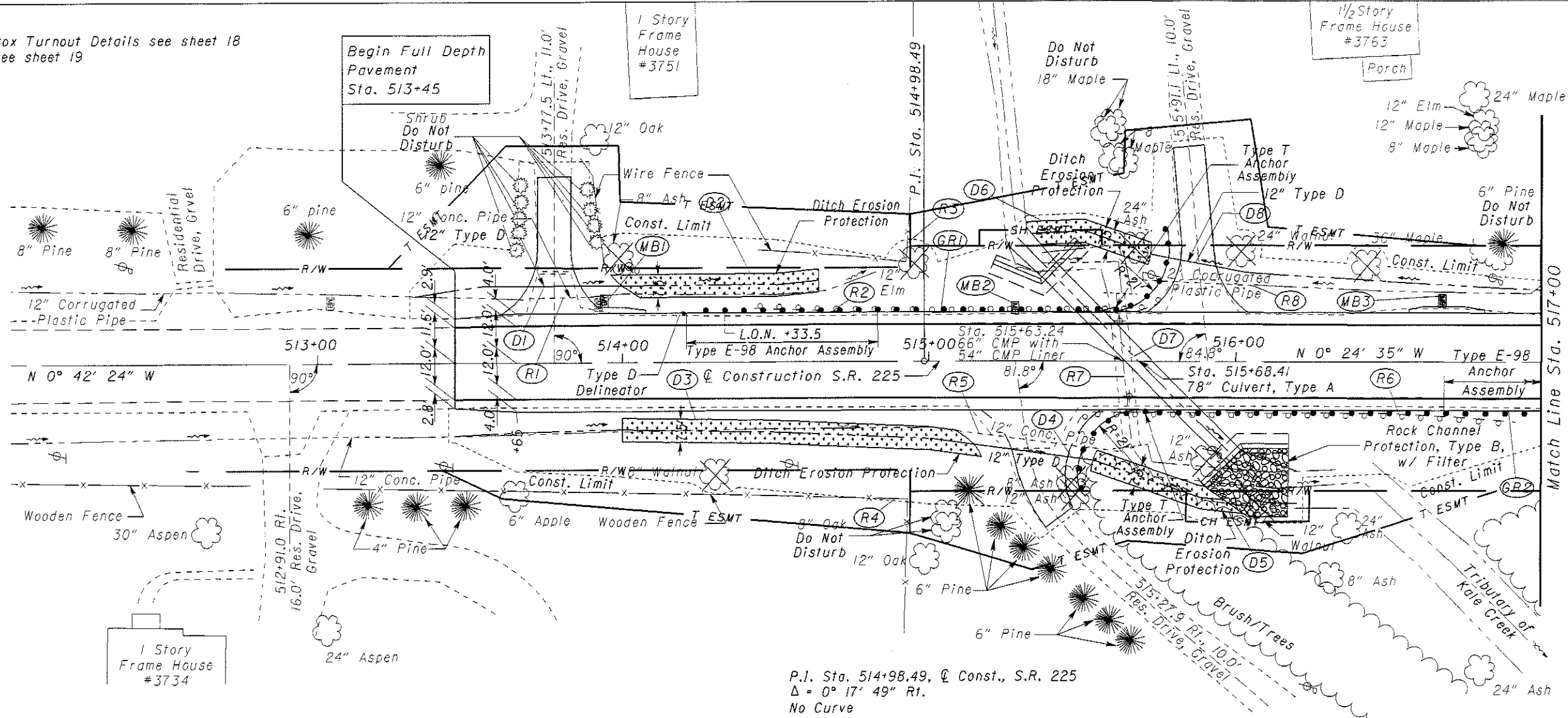
PROJECT DATA	
Total Area (Right of Way)	0.88 Acres
Project Earth Disturbed Area	0.77 Acre
Estimated Contractor Earth Disturbed Area	1.25 Acre
Notice of Intent Earth Disturbed Area	4.9 Acres
Regulated TMDL Waterbody	No
Drainage Area	346 Acres
Land Use	Residential
Impervious (Paved) Area for Pre-Construction Site	0.30 Acre
Impervious (Paved) Area for Post-Construction Site	0.33 Acre
Runoff Coefficient for Pre-Construction Site	0.80
Runoff Coefficient for Post-Construction Site	0.80
Soil and Water Conservation Map	47
Immediate Receiving Waters	Unnamed Tributary
Subsequent Receiving Waters	Kale Creek
Latitude	N 41°05'30"
Longitude	W 81°03'05"
USGS Deerfield Quadrangle	4766-II-SW

PROJECT DESCRIPTION

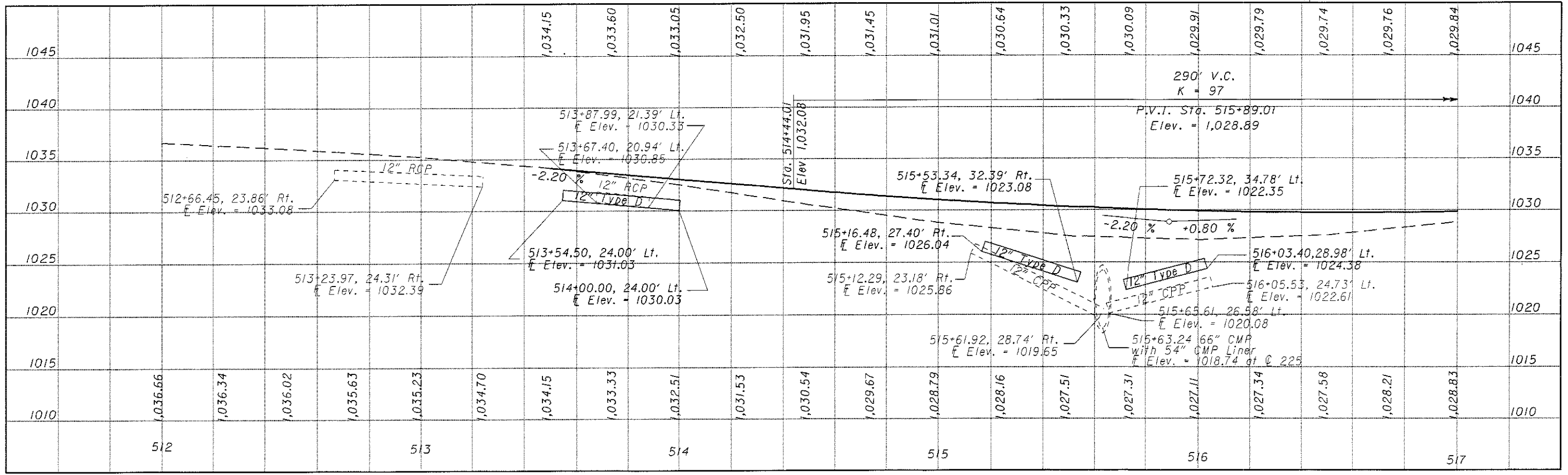
Replace the existing pipe culvert at milepost 9.8 on a new channel alignment and improve the vertical alignment of the adjacent roadway.

b:\pwr\04\CD988 - 22463jg101.m - 01/08/04

For Drive and Mail Box Turnout Details see sheet 18
For Culvert Details see sheet 19



P.I. Sta. 514+98.49, @ Const., S.R. 225
 $\Delta = 0^\circ 17' 49''$ Rt.
 No Curve



HORIZONTAL SCALE IN FEET

CALCULATED AP
CHECKED JAD

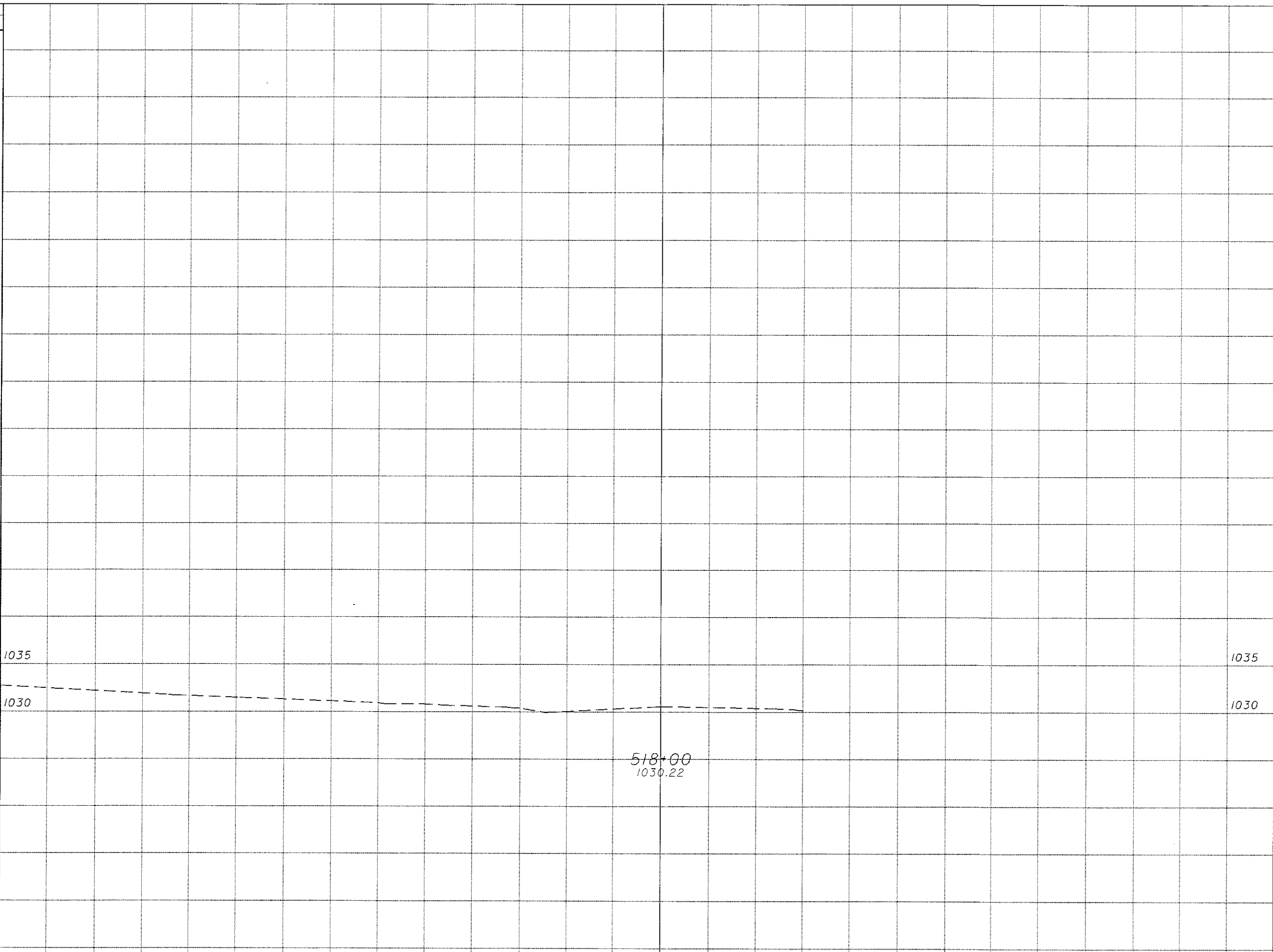
PLAN AND PROFILE - POR-225-9.80
Sta. 512+00 to Sta. 517+00

POR-59/88/225-
8.41/0.51/9.76

28
61

J:\yeh\@D04CD998 - 22463x.m - 01/08/04

SEEDING	
END WIDTH	SO. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED	AP
CHECKED	JAD

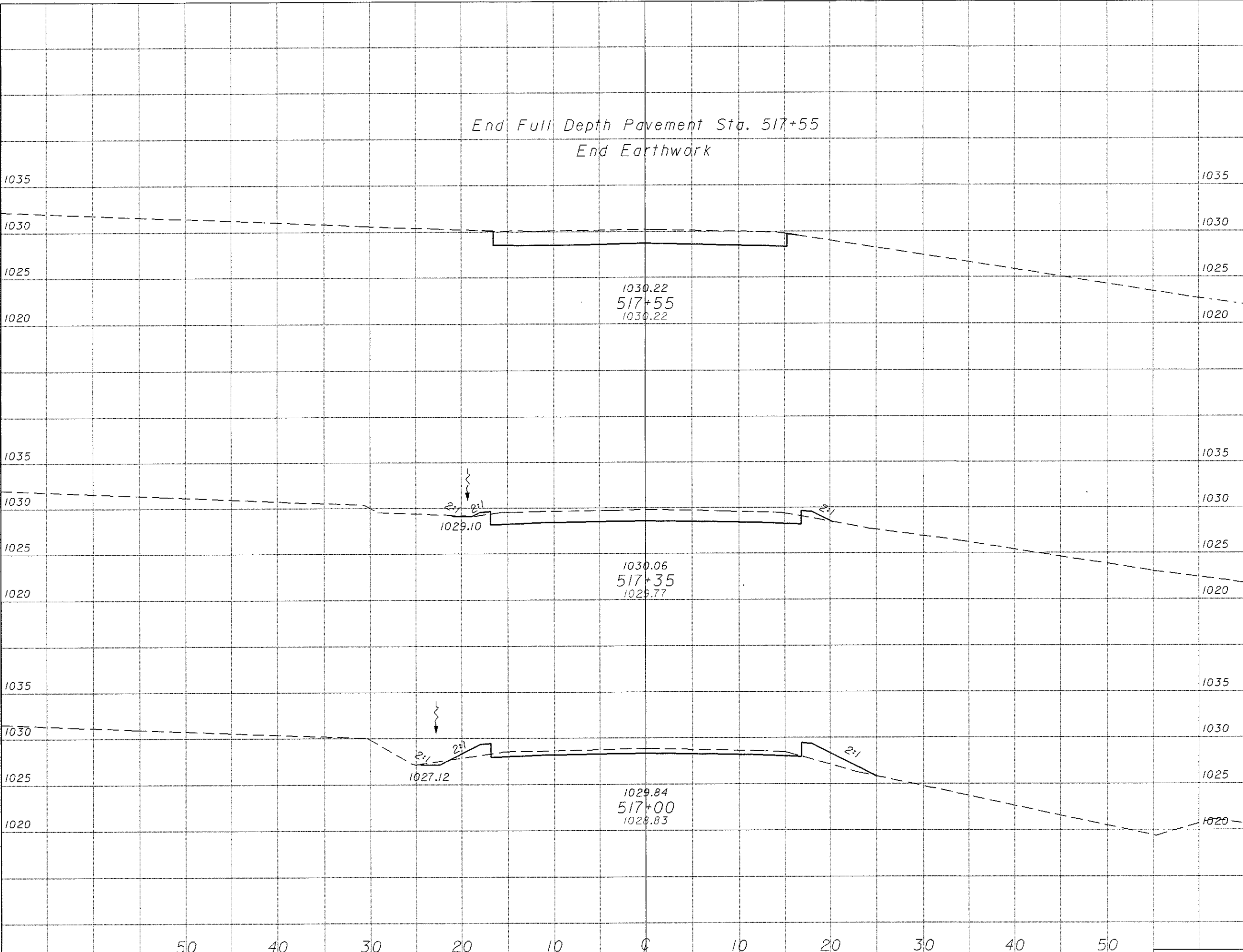
CROSS SECTIONS - POR-2250-9.80
Sta. 518+00

POR-59/88/225-
8.41/0.51/9.76

0	SHEET TOTAL	50	40	30	20	10	CL	10	20	30	40	50	SHEET TOTAL	0	0	30
1639	TOTALS CARRIED TO GENERAL SUMMARY											TOTALS CARRIED TO GENERAL SUMMARY	667	738	61	

I:\p\04\CD98 - 22463x.m - 01/08/04

SEEDING	
END WIDTH	SO. YDS.

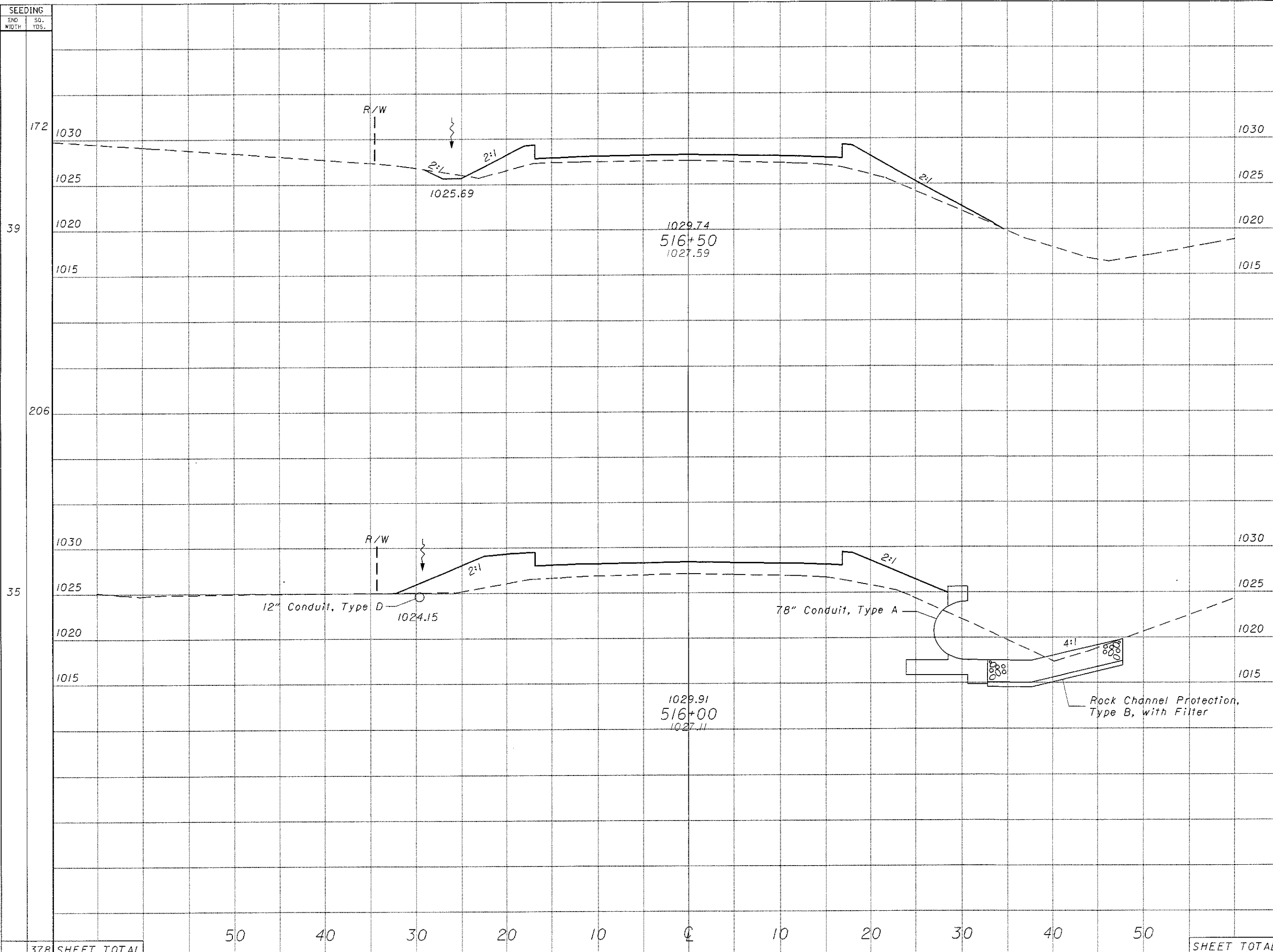


END STA.	AREA		VOLUME	
	CUT	FILL	CUT	FILL
0			0	0
8		48	0	
24		33	1	
14		40	2	
72		36	9	
23		15	11	
96	SHEET TOTAL		99	10

CROSS SECTIONS - POR-225-9.80
Sta. 517+00 to Sta. 517+55
POR-59/88/225-
8.41/0.51/9.76

31
61

bnyer@DDACD998 - 22463x.m - 01/08/04

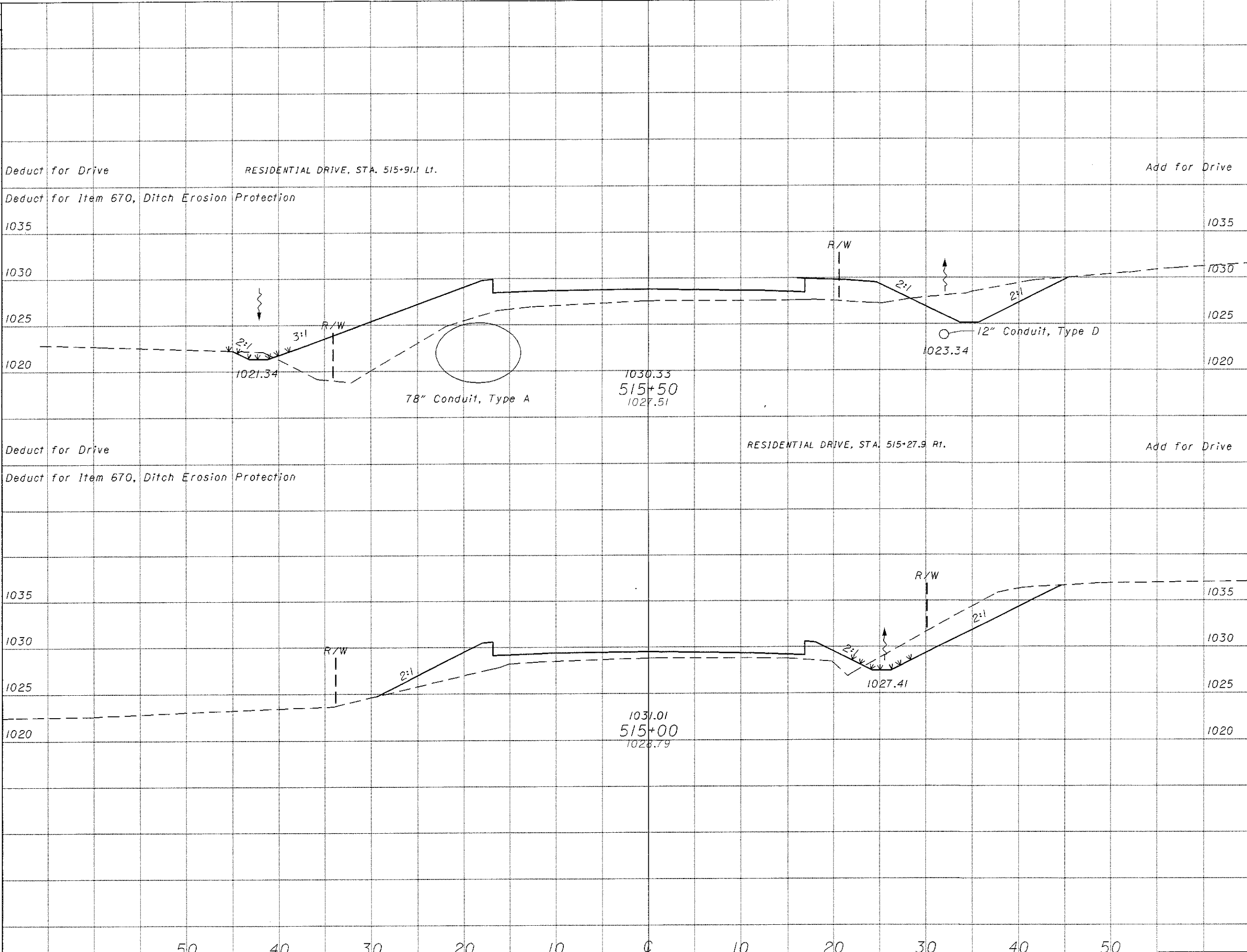


END STA.	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
172			16	61
39	2	55		
206			5	136
35	3	92		
378 SHEET TOTAL			21	197

CROSS SECTIONS - POR-225-9.80
Sta. 516+00 to Sta. 516+50
POR-59/88/225-
8.41/0.51/9.76
 CALCULATED AP
 CHECKED JAD

lhyer@D04CD998 - 22463x.lt - 01/08/04

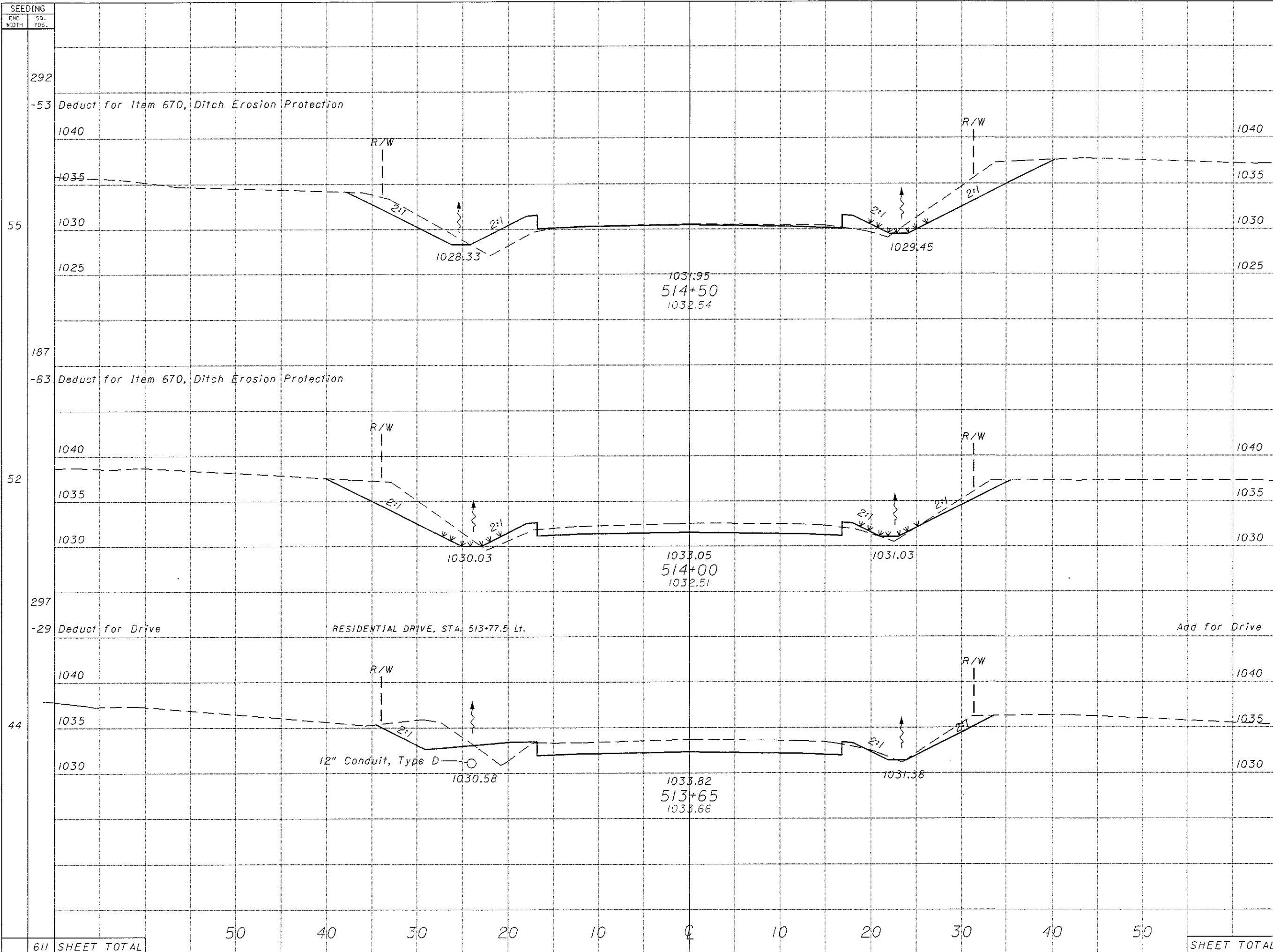
SEEDING	
END WIDTH	SO. YDS.



END WIDTH	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
286			62	221
-17			2	18
-54				
1035				
68			64	147
1030				
1025				
1020				
328			97	188
-67			5	1
-26				
50			41	56
1035				
1030				
1025				
1020				
450	50	40	30	20
	10	0	10	20
	30	40	50	
SHEET TOTAL			166	428

CALCULATED AP
 CHECKED JAD
CROSS SECTIONS - POR-225-9.80
Sta. 515+00 to Sta. 515+50
POR-59/88/225-
8.41/0.51/9.76
 33
 61

lhyer@D:\CD998 - 22463x.m - 01/08/04



SEEDING	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
292 -53 Deduct for Item 670, Ditch Erosion Protection			83	70
55 1040 1035 1030 1025 1028.33 1031.95 514+50 1032.54 1029.45	48	15		
187 -83 Deduct for Item 670, Ditch Erosion Protection			109	25
52 1040 1035 1030 1030.03 1033.05 514+00 1032.51 1031.03	69	48		
297 -29 Deduct for Drive RESIDENTIAL DRIVE, STA. 513+77.5 Lt. Add for Drive			98	7
44 1040 1035 1030 12" Conduit, Type D 1030.58 1033.82 513+65 1033.66 1031.38	82	3	25	0
611 SHEET TOTAL	50	40	315	102

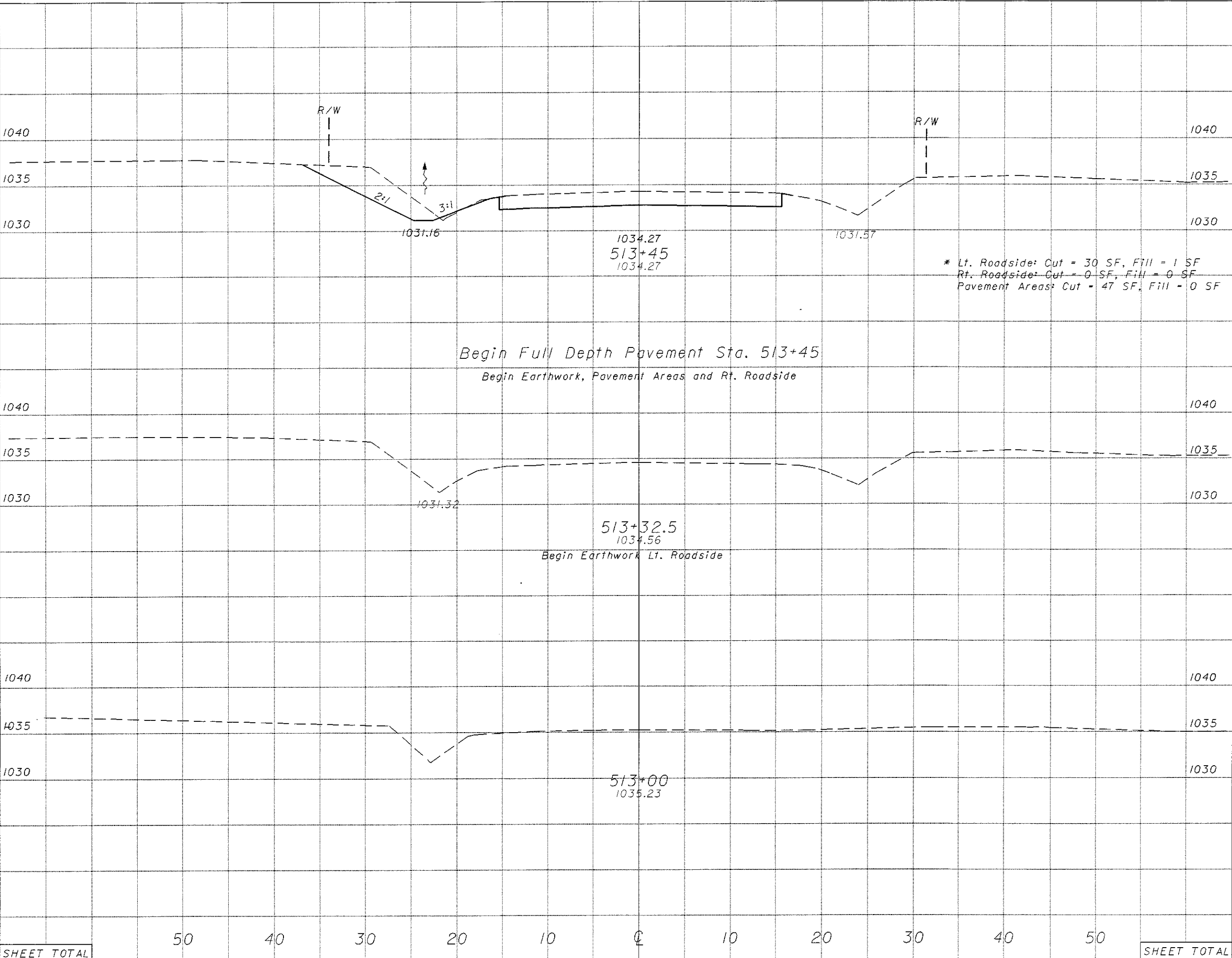
CROSS SECTIONS - POR-225-9.80
Sta. 513+65 to Sta. 514+50

POR-59/88/225-
8.41/0.51/9.76

34
61

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SEEDING	
END WIDTH	SO. *DS.



END CUT	AREA FILL	VOLUME	
		CUT	FILL
77*	1*	59	1
0	0	7	0
SHEET TOTAL		66	1

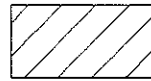
CALCULATED AP
 CHECKED JAD
CROSS SECTIONS - POR-225-9.80
Sta. 513+00 to Sta. 513+45
POR-59/88/225-
8.41/0.51/9.76
 35
 61

104 SHEET TOTAL

SHEET TOTAL

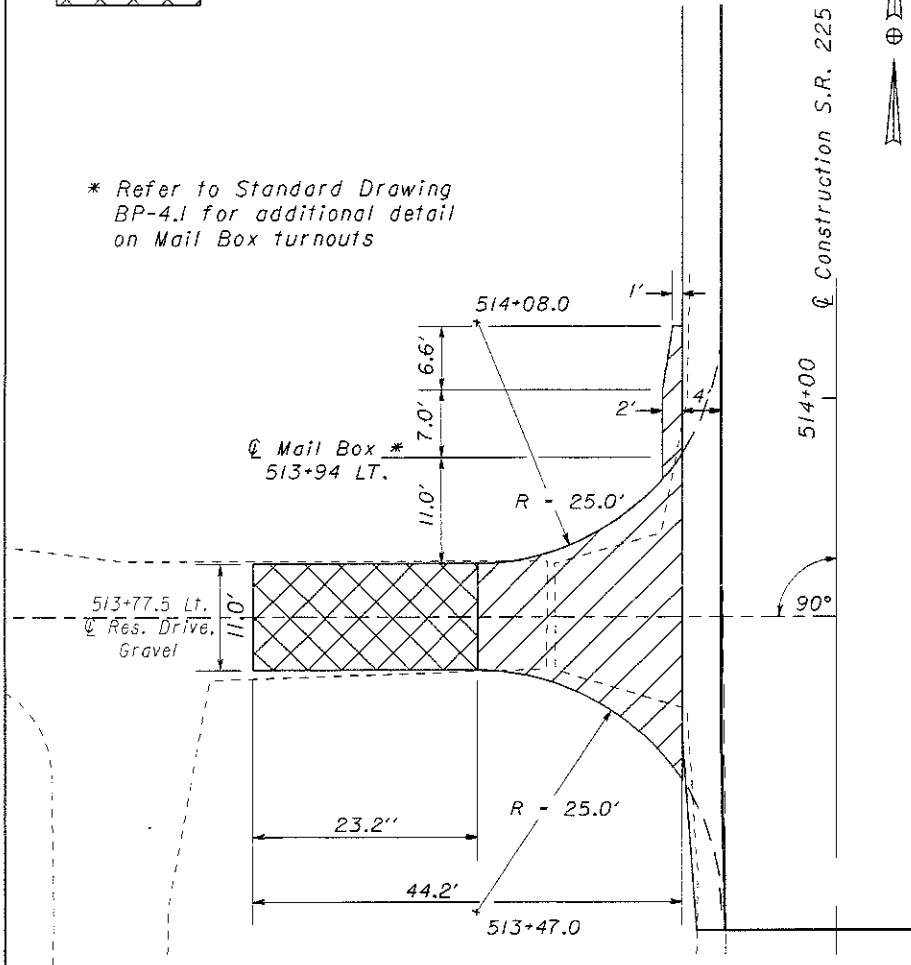
bnyer@D04CD988 - 224639d.m - 01/08/04

- 1 1/4" ITEM 448 Asphalt Concrete Surface Course, Type 1, PG64-22 (Driveways)
- ITEM 407 Tack Coat for Intermediate Course (0.04 gal./sq. yd.)
- 1 3/4" ITEM 448 Asphalt Concrete Intermediate Type 2, PG64-22 (Driveways)
- ITEM 407 Tack Coat for Intermediate Course (0.04 gal./sq. yd.)
- 9" ITEM 301 Asphalt Concrete Base, PG64-22 (Driveways)
- ITEM 408 Prime Coat (0.4 gal./sq. yd.)
- 6" ITEM 304 Aggregate Base

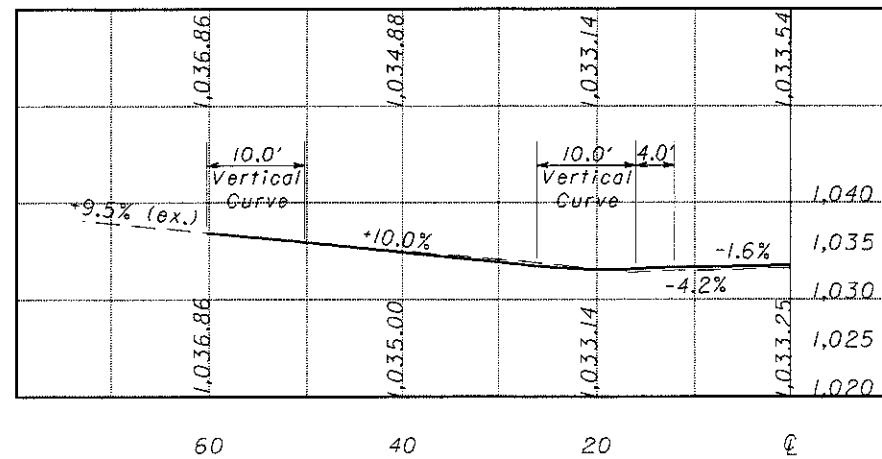


8" ITEM 304 Aggregate Base

* Refer to Standard Drawing BP-4.1 for additional detail on Mail Box turnouts



STA. 513+77.5 LT.

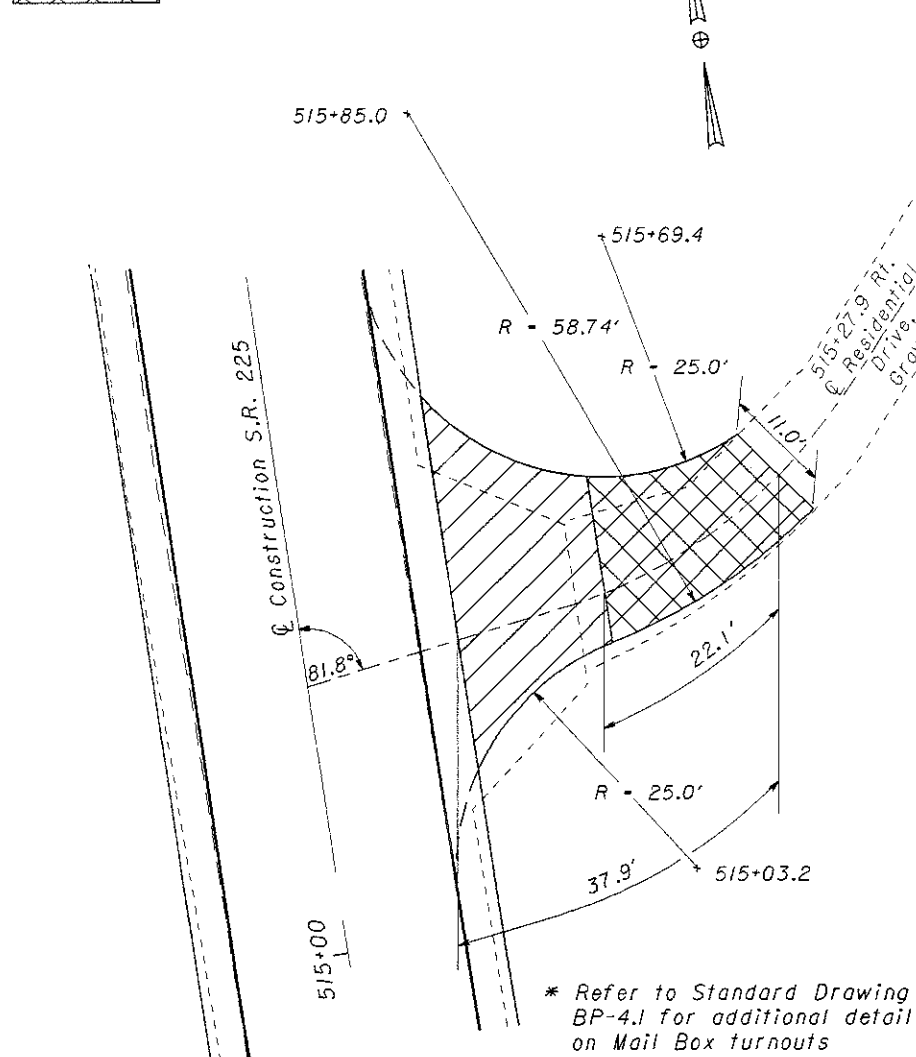


- 1 1/4" ITEM 448 Asphalt Concrete Surface Course, Type 1, PG64-22 (Driveways)
- ITEM 407 Tack Coat for Intermediate Course (0.04 gal./sq. yd.)
- 1 3/4" ITEM 448 Asphalt Concrete Intermediate Type 2, PG64-22 (Driveways)
- (0.04 gal./sq. yd.)
- 9" ITEM 301 Asphalt Concrete Base, PG64-22 (Driveways)
- ITEM 408 Prime Coat (0.4 gal./sq. yd.)
- 6" ITEM 304 Aggregate Base

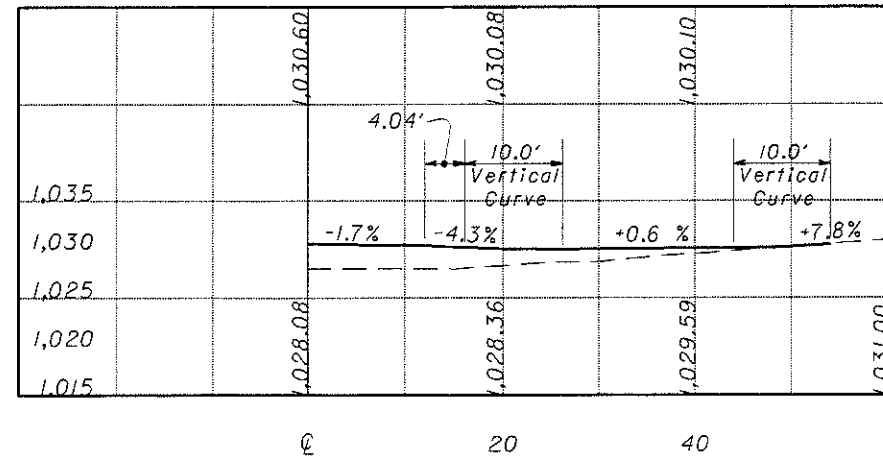


8" ITEM 304 Aggregate Base

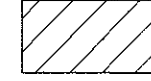
* Refer to Standard Drawing BP-4.1 for additional detail on Mail Box turnouts



STA. 515+27.9 RT.

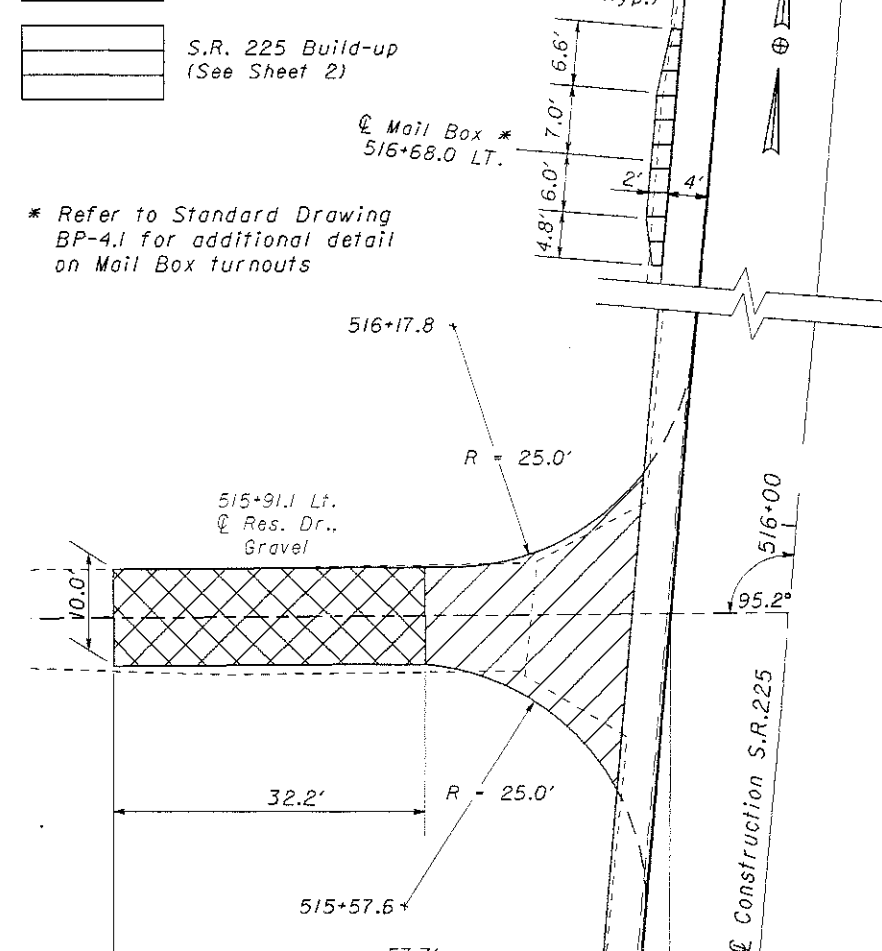


- 1 1/4" ITEM 448 Asphalt Concrete Surface Course, Type 1, PG64-22 (Driveways)
- ITEM 407 Tack Coat for Intermediate Course (0.04 gal./sq. yd.)
- 1 3/4" ITEM 448 Asphalt Concrete Intermediate Type 2, PG64-22 (Driveways)
- ITEM 407 Tack Coat for Intermediate Course (0.04 gal./sq. yd.)
- 9" ITEM 301 Asphalt Concrete Base, PG64-22 (Driveways)
- ITEM 408 Prime Coat (0.4 gal./sq. yd.)
- 6" ITEM 304 Aggregate Base

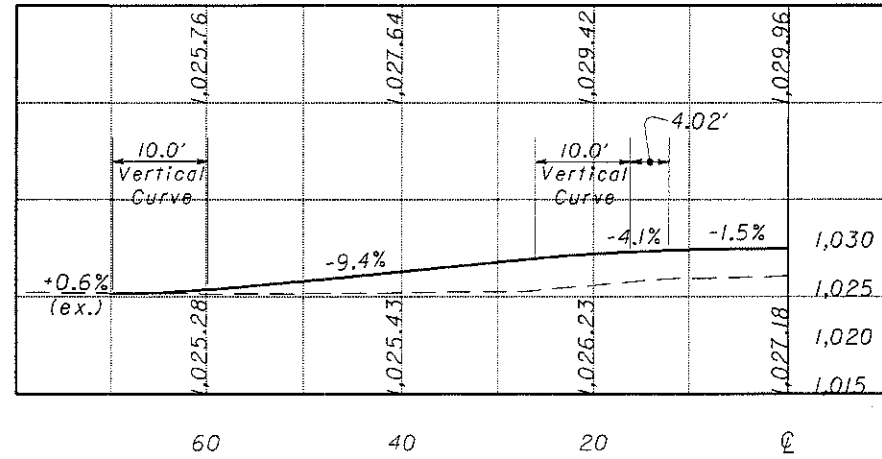


8" ITEM 304 Aggregate Base

* Refer to Standard Drawing BP-4.1 for additional detail on Mail Box turnouts



STA. 515+91.1 LT.

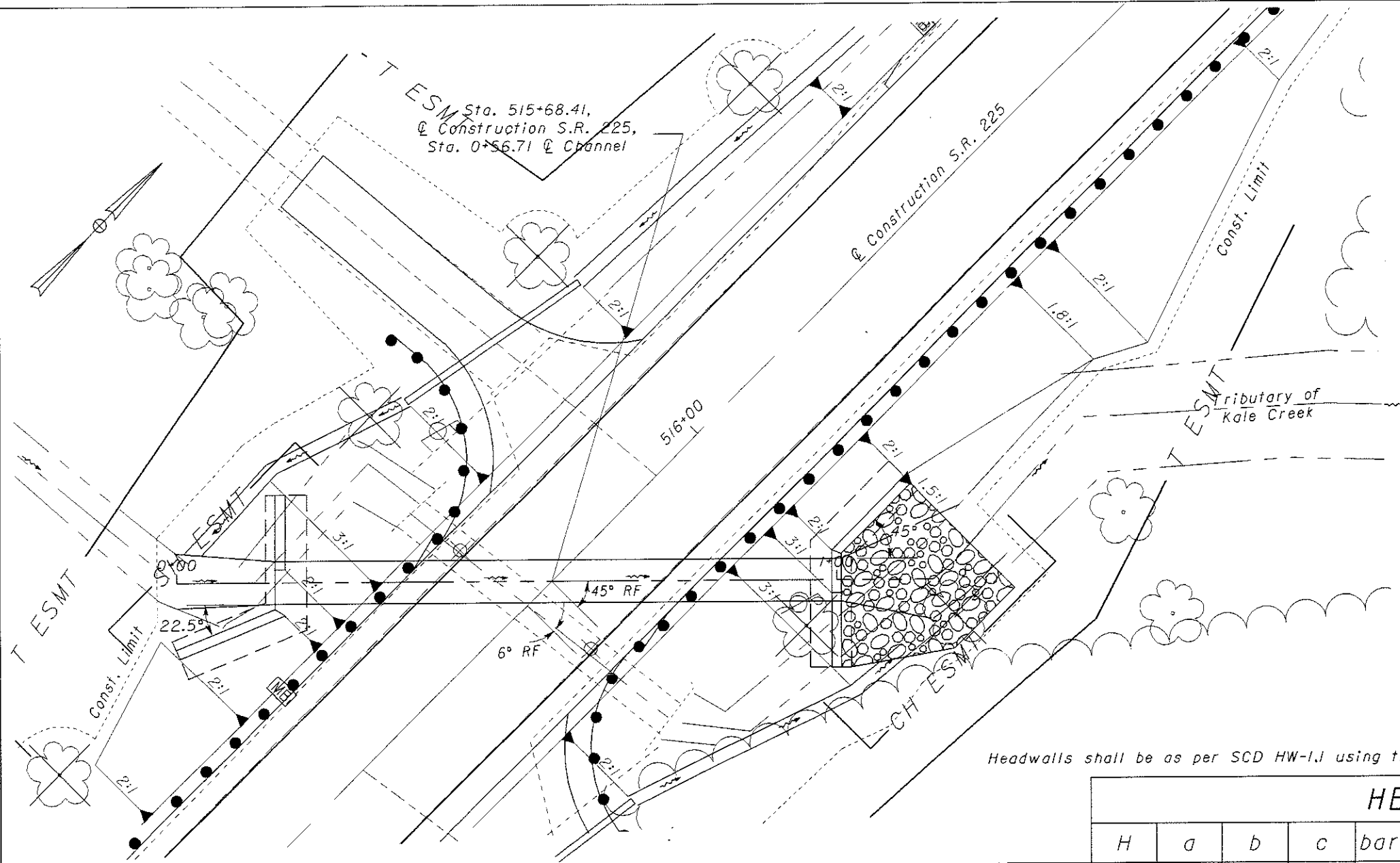


CALCULATED
AP
CHECKED
JAD

DRIVE and MAIL BOX TURNOUT DETAILS - POR-225-9.80

POR-59/88/225-8.41/0.51/9.76

lhyer@DACCDC998 - 22463dc.m - 01/08/04



HYDRAULIC DESIGN DATA	
DRAINAGE AREA :	346 ACRES
Q(25):	270 CFS
HW(25):	1026.40 FT
V(25):	11.3 FT/S
Q(100):	386 CFS
HW(100):	1028.60 FT
V(100):	13.45 FT/S

EXISTING STRUCTURE

TYPE: 66" CMP with 54" CMP LINER
 SKEW: 6° RF
 ALIGNMENT: TANGENT
 DATE BUILT: UNKNOWN

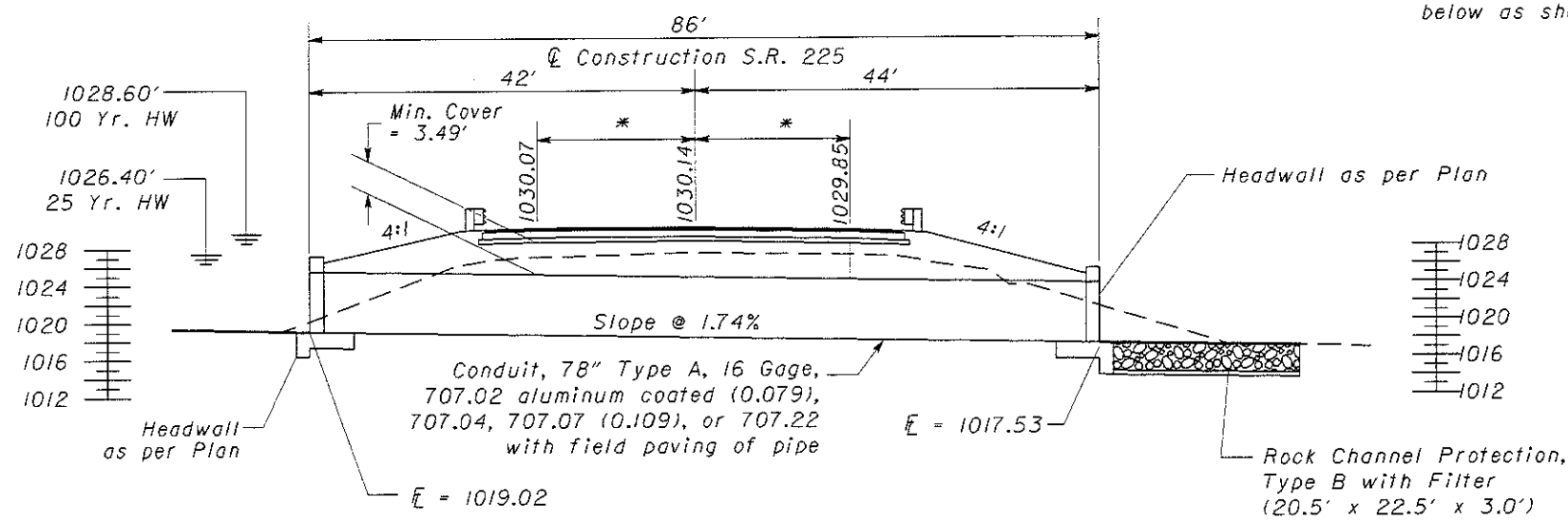
PROPOSED STRUCTURE

TYPE: 78" Conduit, Type A, 16 Gage,
 707.02, aluminum coated (0.079),
 707.04, 707.07 (0.109) or 707.22
 with field paving of pipe.
 SKEW: 45° RF
 ALIGNMENT: TANGENT

Headwalls shall be as per SCD HW-1.1 using the following parameters and as otherwise noted below:

HEADWALL PARAMETERS											
	H	a	b	c	bar#	L1	L2	h1	h2	Conc. (cy)	Steel (lbs)
INLET	8'-1.5"	4'-9"	1'-8"	4'-0"	#8	13'-4"	16'-3"	4'-5.5"	5'-0"	26.8 cy	2760 lbs
OUTLET	8'-1.5"	4'-9"	1'-8"*	4'-0"	#8	13'-4"	15'-0"	4'-5.5"	8'-1.5"	28.4 cy	2640 lbs

* NOTE: On the outlet footer, the toe shall be extended 1'-10" below depth b (1'-8") rather than the 1'-0" below as shown in HW-1.1

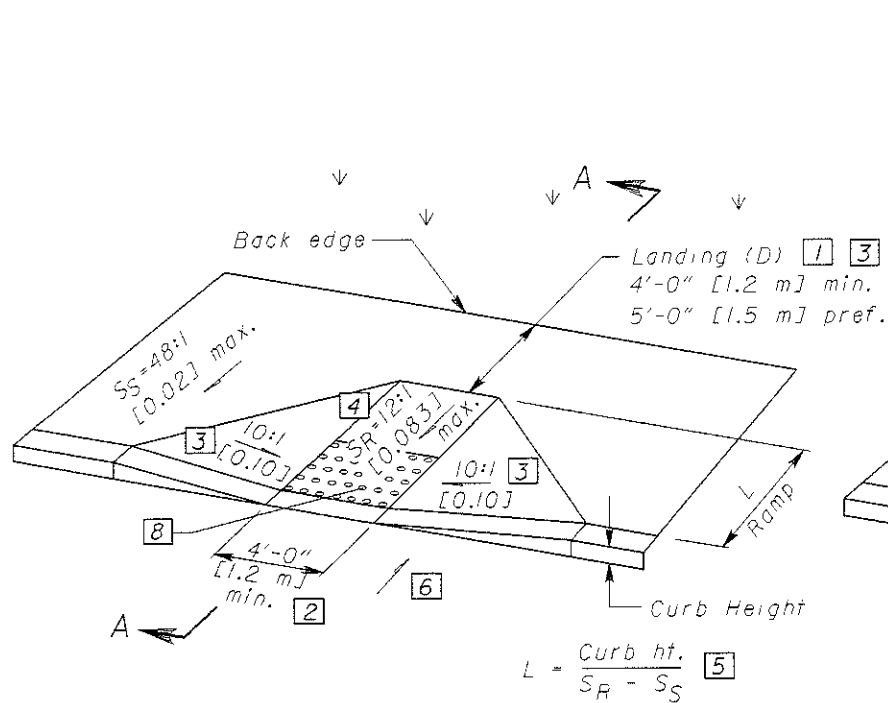


* Refer to Typical Sections

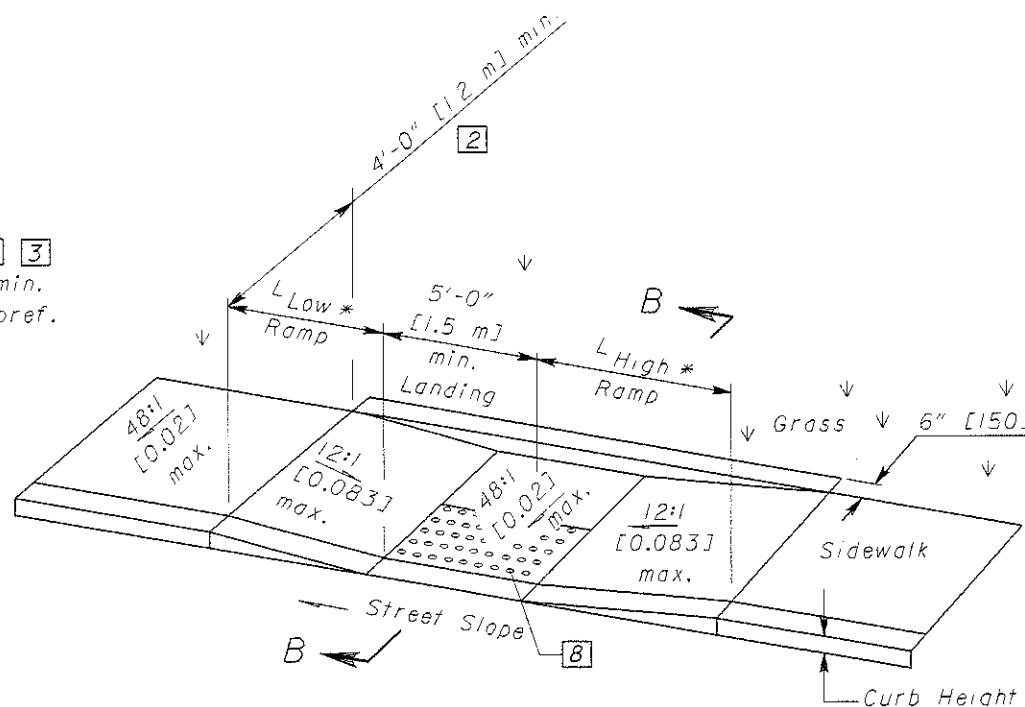
CALCULATED
AP
CHECKED
JAD

CULVERT DETAILS - POR-225-9.80

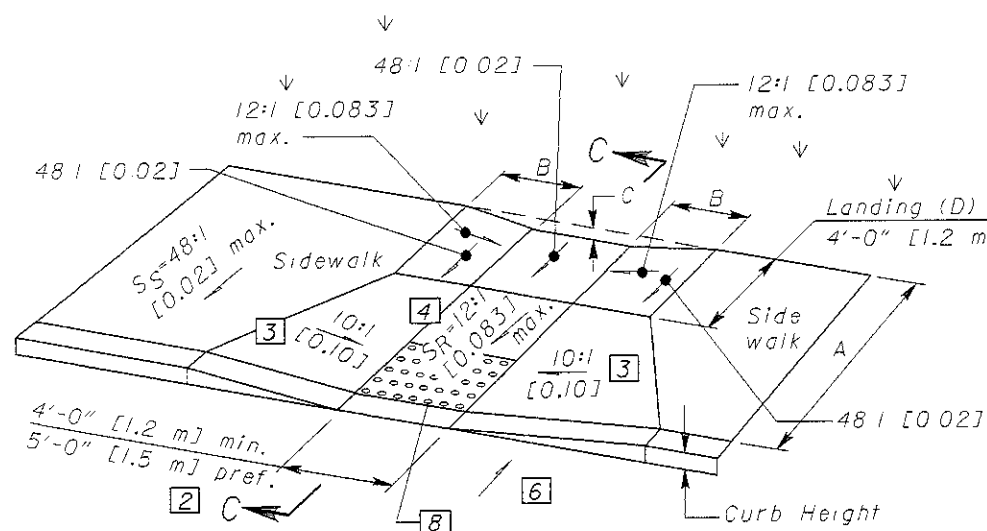
**POR-59/88/225-
8.41/0.51/9.76**



See Sht. 3/3 for SECTION A-A
PERPENDICULAR CURB RAMP DETAIL



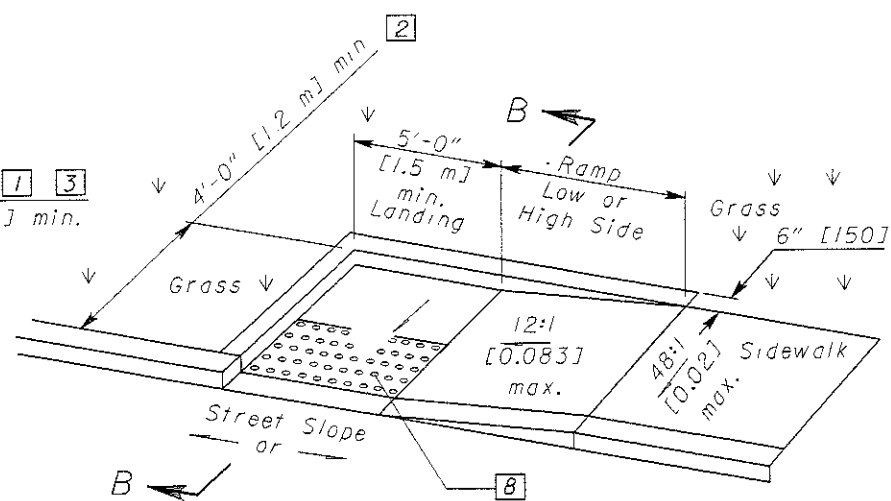
See Sht. 3/3 for SECTION B-B
PARALLEL CURB RAMP DETAIL (DOUBLE)



See Sht. 3/3 for SECTION C-C
COMBINED CURB RAMP DETAIL

$$B = C / 0.083$$

$$C = [Curb\ ht. + A(SS)] - [(A-D)SR + D(0.02)]$$



See Sht. 3/3 for SECTION B-B
PARALLEL CURB RAMP DETAIL (SINGLE)

Street Slope	Ramp Length @ 1"/ft [0.083]	
	L LOW SIDE *	L HIGH SIDE *
0.01	5'-6" [1.7 m]	7'-2" [2.2 m]
0.02	5'-0" [1.5 m]	8'-4" [2.5 m]
0.03	4'-6" [1.4 m]	10'-0" [3.0 m]
0.04	4'-2" [1.3 m]	12'-6" [3.8 m]
0.05	3'-10" [1.2 m]	16'-8" [5.1 m]

* Measured along the back of a 6" [150] high curb.

$$L_{HIGH} = \frac{Curb\ ht.}{0.083 - Street\ Slope} \quad [7]$$

$$L_{LOW} = \frac{Curb\ ht.}{0.083 + Street\ Slope} \quad [7]$$

LEGEND

- [1] May be reduced to 3'-0" [915] in existing sidewalks if the landing is unconstrained along the back edge.
- [2] May be reduced to 3'-4" [1.02 m] in existing sidewalks to better fit the walk configuration or where site conditions are restricted by narrow walks, pole foundations, drainage inlets, etc. The width may be tapered.
- [3] Where landing width (D) has been reduced to 3'-0" [915] the flared sides shall have a maximum slope of 12:1 [0.083].

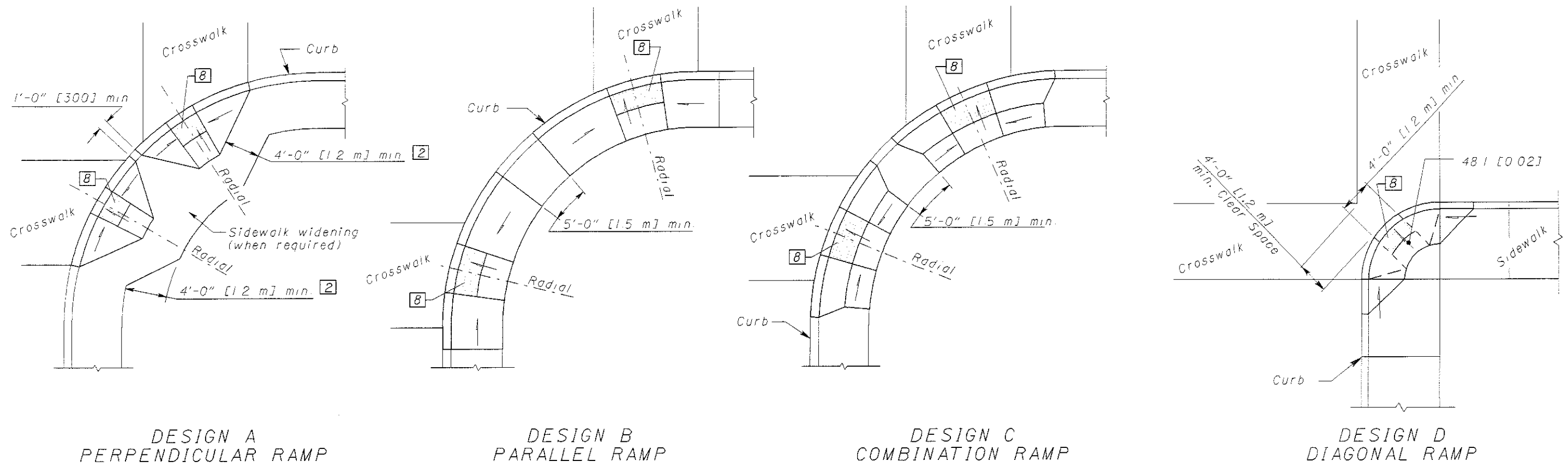
Flared sides are not required where the edges of a curb ramp are protected by landscaping or other barriers to travel by wheel chair users or pedestrians across the edge of the curb ramp. However, if the flared sides are used in these areas, they may be of any slope.

The slope of the ramp toward the curb is preferred to be 12:1 [0.083] or flatter related to the horizontal, but the maximum slope shall be 12:1 [0.083] relative to the existing or proposed walk slope.

In existing sidewalks, where the maximum ramp slope (S_R) is not feasible, it may be reduced as follows:

- A) 10:1 [0.10] for a max. rise of 6" [150],
- B) 8:1 [0.125] for a max. rise of 3" [75],
- C) 6:1 [0.167] over a max. run of 2'-0" [610] for historic areas where a flatter slope is not feasible.

- [5] The minimum length of a perpendicular ramp is 6' [2.0 m] from the back of a 6" [150] curb and may be increased where feasible to obtain a flatter ramp slope or to better blend with the walk configuration.
- [6] Gutter counter slopes at the foot of perpendicular curb ramps should not exceed 20:1 [0.05] over a distance of 2'-0" [610] from the curb.
- [7] Dimensions derived by equation are nominal. Construct ramps to meet required slopes and existing conditions.
- [8] Detectable Warnings (truncated domes) are to be installed in the location shown. Dimensions of the domes are 24" [610] from the back of the curb by the width of the ramp. See NOTES on sheet 3.



DESIGN A
PERPENDICULAR RAMP

DESIGN B
PARALLEL RAMP

DESIGN C
COMBINATION RAMP

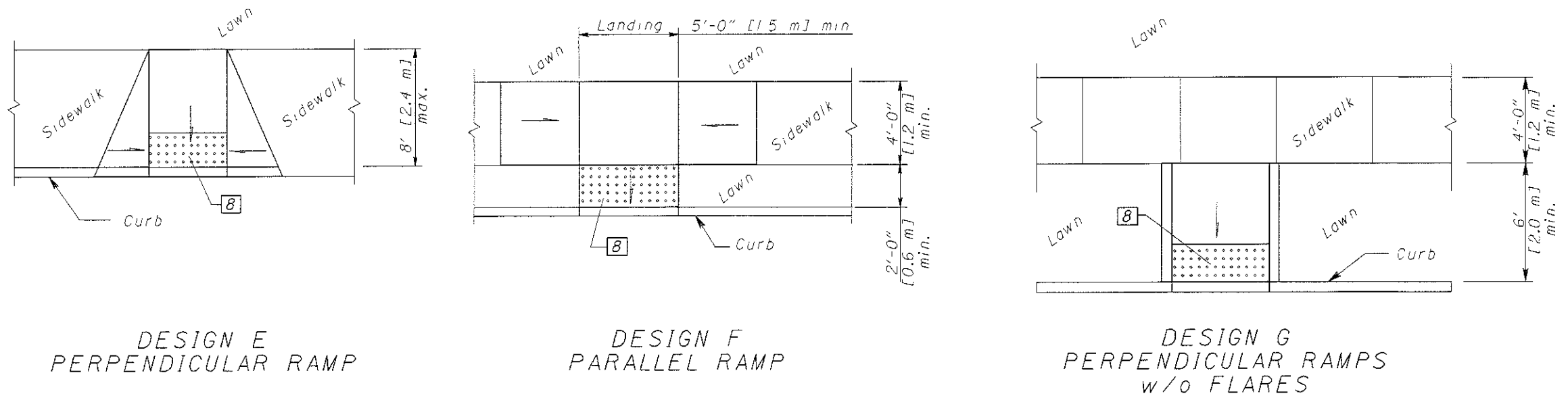
DESIGN D
DIAGONAL RAMP

CORNER CURB RAMP DESIGNS

(See Curb Ramp Details on Sht. 1/3 for additional requirements.)

For LEGEND, See sheet 1

Use in existing walks only and when site constraints prohibit other designs. The diagonal ramp may be perpendicular, parallel or combination. Avoid using where curb radii are less than 20'-0" [6.0 m].



DESIGN E
PERPENDICULAR RAMP

DESIGN F
PARALLEL RAMP

DESIGN G
PERPENDICULAR RAMPs
w/o FLARES

MID BLOCK CURB RAMP DESIGNS

(See Curb Ramp Details on Sht. 1/3 for additional requirements.)

NOTES

SURFACE TEXTURE: Texture of concrete surfaces shall be obtained by coarse brooming transverse to the ramp slopes and shall be rougher than adjacent walk

TRUNCATED DOMES: Install detectable warnings (truncated domes) for a distance of 24" [610] from the back of the curb for the entire width of the ramp opening as shown on details on Sheet 1.

Pavers will meet ASTM C 902 Class SX, Type I, or C 936, or C 1272 Type R.

Acceptable manufacturers and products are:

- 1) Whitacre-Greer Fireproofing Company, 1400 S. Mahoning Ave, Alliance, OH, 44601, ADA Paver, 4"x8"x2-1/4", Clear Red (Rustic) #30.
- 2) Hanover Architectural Products, 240 Bender Rd., Hanover, PA, 17331, Detectable Warning Paver, 4"x8"x2", Red or Quarry Red.
- 3) Endicott Clay Products, PO Box 17, Fairbury, NE, 68352, Handicap Detectable Warning Paver, 4"x8"x2-1/4", Red Blend.

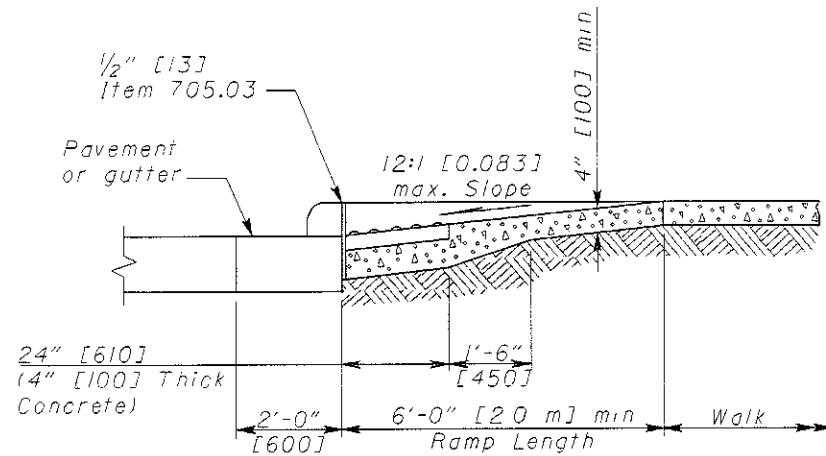
Pavers will be laid on top of a 4" [100] unreinforced concrete base. Setting bed and joints to be mortared in accordance with manufacturer's instruction, or with a maximum 1/2" [13] thick bed of latex modified cement mortar. Mortar joints to a width not greater than 5/32" [4] and not less than 1/16" [1.5]. Pavers shall not be directly touching each other unless they have spacing bars.

Mortared joints are to be flush with top surface and struck so as to give a smooth surface. Pavers shall be laid such that joints are level with adjoining joints so as to provide a smooth transition from brick to brick and brick to concrete surface.

The surface of any two adjacent units should not differ by more than 1/8" [3] in height. Bricks shall be placed in a running bond pattern. Face of all brick shall be clean of cement and protected so as to avoid chipping during construction.

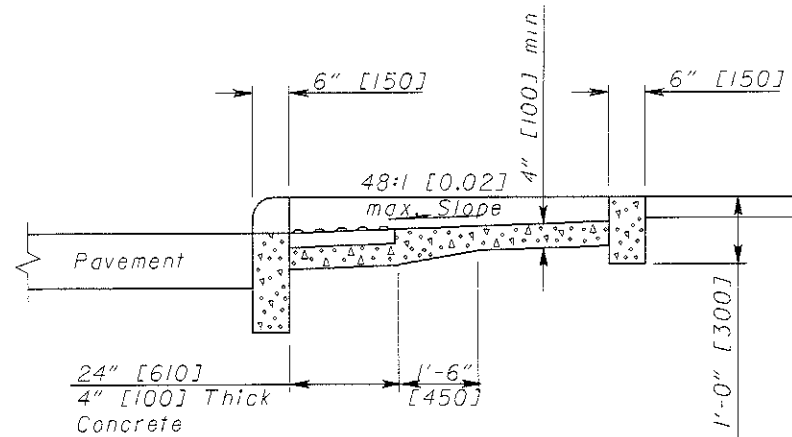
EXPANSION JOINTS: shall be provided in the curb ramp as extensions of walk joints and consistent with Item 608.03 requirements for a new concrete walk. A 1/2" [13] Item 705.03 expansion joint filler shall be provided around the edge of ramps built in existing concrete walk. Lines shown on this drawing indicate the ramp edge and slope changes and are not necessarily joint lines.

PAYMENT: Walk and curb, Items 608 and 609, shall be measured through the curb ramp area paid for under their respective items. Item 608 - Curb Ramp, As Per Plan, Each constructed in new curb and walk shall include the cost of any additional materials and installation (including truncated domes), grading, forming and finishing. Item 608 - Curb Ramp, As Per Plan, Square Foot [Meter], constructed in existing curb and walk shall include the cost of furnishing and installing all materials (including truncated domes), grading, forming, and finishing of the curb and walk of the curb ramp. Removal of existing curb and walk shall be paid for under Item 202.



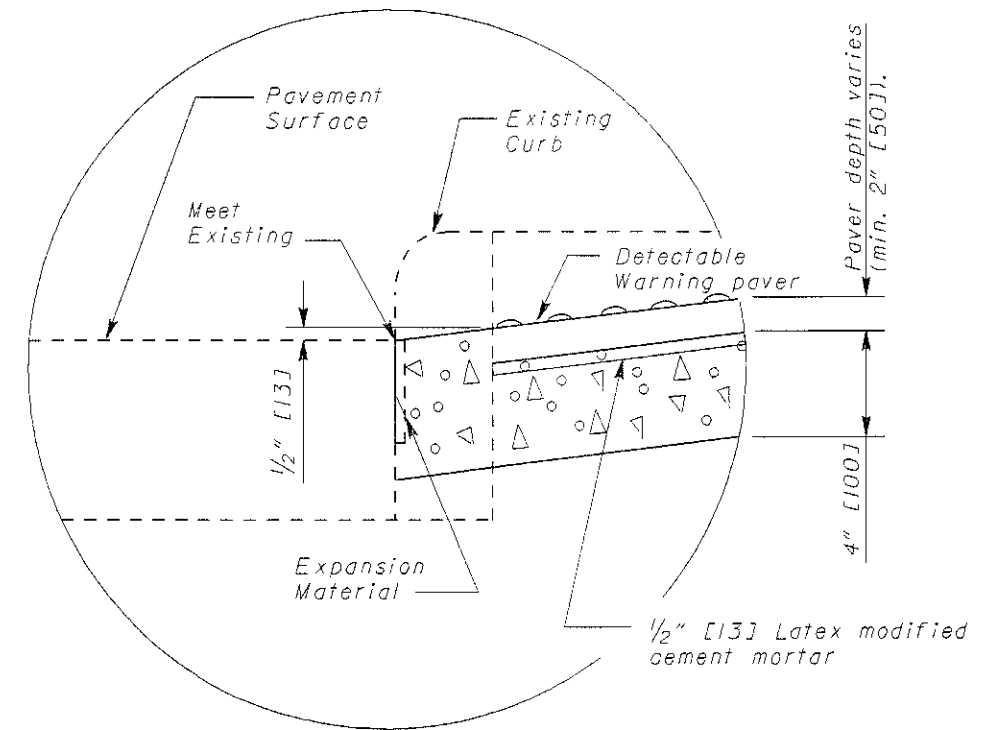
**SECTION A-A
NORMAL DETAIL**

See Sheet 1 of 3
(Gutter shown)

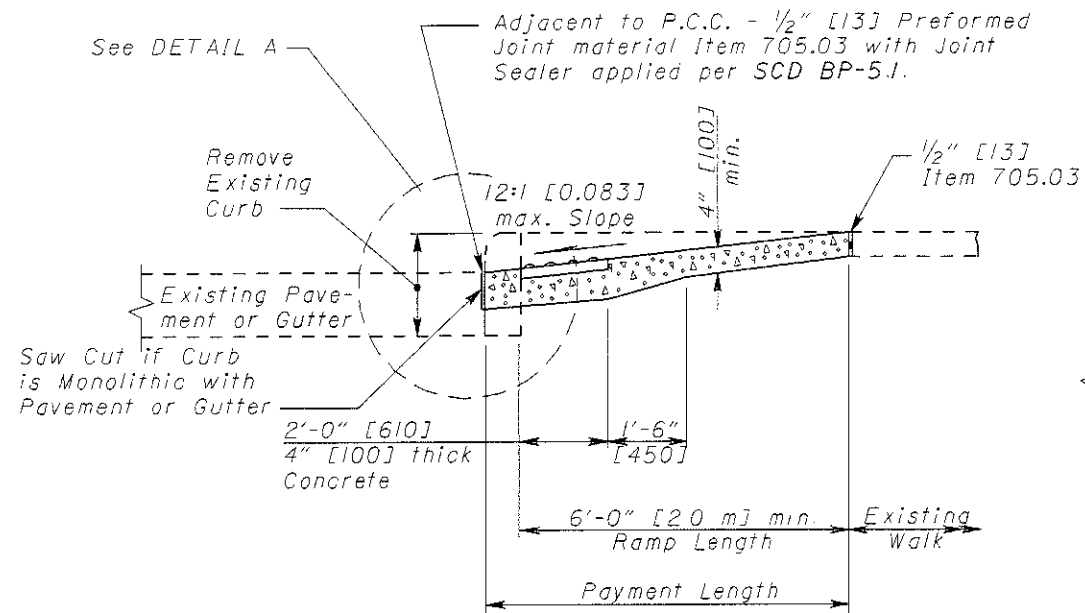


SECTION B-B

See Sheet 1 of 3

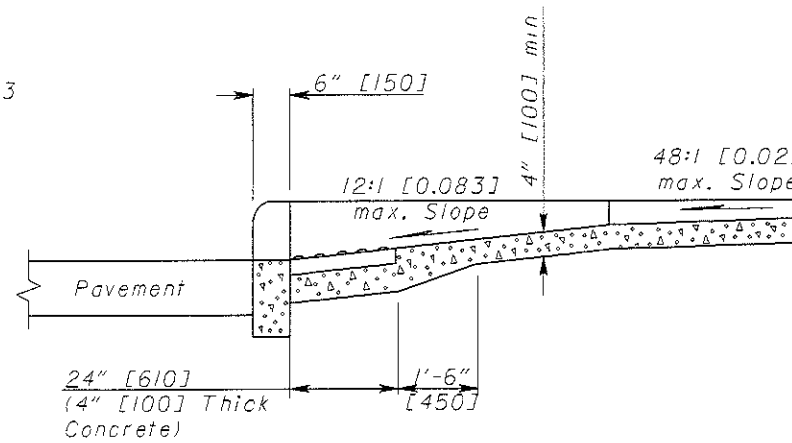


DETAIL A



**SECTION A-A
EXISTING WALK DETAIL**

See Sheet 1 of 3



SECTION C-C

See Sheet 1 of 3

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CENTER LINE

GENERAL SPEC. 640
MATERIAL TYPE

COUNTY	ROUTE	FROM		TO		TOTAL MILES	EQUIVALENT SOLID LINE	COMMENTS
		TRU LOG		TRU LOG				
POR	59	8.41	JCT. SR 88	9.05	EAST CORP. RAVENNA	1.07	1.22	
POR	88	0.51	JCT. SR 59	1.67	SUSPEND PROJECT	1.16	2.13	
POR	88	1.67	BEGIN PROJECT	2.03	END PROJECT	0.36	0.72	
POR	88	8.48	0.1 MILE SOUTH OF ANDERSON RD.	11.42	SOUTH CORP. GARRETTSVILLE	2.94	3.84	
POR	225	9.75	0.5 MILE NORTH OF CORBETT RD.	9.83	0.6 MILE NORTH OF CORBETT RD.	0.08	0.16	
TOTAL						5.61	8.07	

LANE LINE

COUNTY	ROUTE	FROM		TO		TOTAL MILES	4" LANE LINE		COMMENTS
		TRU LOG		TRU LOG			DASHED	SOLID	
POR	59	8.62	JCT. LINDEN ST.	9.05	EAST CORP. RAVENNA	0.86			
TOTAL						0.86			

EDGE LINE

COUNTY	ROUTE	FROM		TO		WHITE EDGE LINE			YELLOW EDGE LINE			COMMENTS
		TRU LOG		TRU LOG		TOTAL MILES	HIGH-WAY	RAMP	TOTAL MILES	HIGH-WAY	RAMP	
POR	88	0.69	JCT. SAPP RD.	1.67	SUSPEND PROJECT	1.96	1.96	-				
POR	88	1.67	BEGIN PROJECT	2.03	END PROJECT	0.72	0.72	-				
POR	88	8.48	0.1 MILE SOUTH OF ANDERSON RD.	11.42	SOUTH CORP. GARRETTSVILLE	5.88	5.88	-				
POR	225	9.75	0.5 MILE NORTH OF CORBETT RD.	9.83	0.6 MILE NORTH OF CORBETT RD.	0.16	0.16	-				
TOTAL						8.72	8.72	-				

AUXILIARY

COUNTY	ROUTE LOCATION	TRU LOG	CHANNEL LINE	STOP LINE	TRANSVERSE LINES		CROSS-WALK LINES	WORD ON PAVEMENT				LANE ARROWS				SYMBOL MARKINGS		ISLAND MARKINGS	DOTTED LINES	COMMENTS
					WHITE	YELLOW		ONLY		TURN	TURN	THRU	COMB.	R x R	SCHOOL					
								72"	96"						LEFT	RIGHT	72"			
					FT	FT		FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH			
POR	SR 59 @ SR 88	8.40	200	72			300				4									
POR	SR 59 @ LIBERTY/LINDEN RD.	8.55	200	24			140				4									
POR	SR 59 @ SANFORD/GIANT EAGLE	8.75		84			260				6									
POR	SR 59 @ STEVENS ST.	8.86		48			70				2									
POR	SR 59 @ NEW MILFORD ST.	8.91		84			260				6									
POR	SR 88 @ WASHINGTON ST.	0.44		36			140													
POR	SR 88 @ CONRAIL RAILROAD	0.96		24										2						
POR	SR 88 @ SR 303	7.93		30																
TOTAL			400	402			1170				22			2						

CALCULATED TJD
 CHECKED
 PLAN No.

PAVEMENT MARKING SUB-SUMMARY

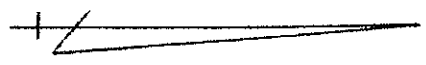
**POR-59/88/225-
8.41/0.51/9.76**

PAVEMENT MARKINGS

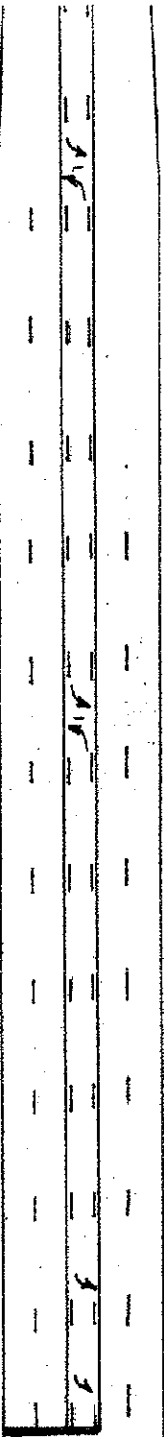
POR-59/88/225-
8.41/0.51/9.76

AUXILIARY PAVEMENT MARKING

COUNTY Portage
 LOCATION Sr. 59 & Sanford / Giant Eagle
 PAVEMENT SURFACE TYPE _____ (8.75)
 INTERSECTION TOTALS
 24" STOP LINE 24 LIN. FT.
 12" CROSSWALK LINE 240 LIN. FT.
 8" CHANNELIZING LINE _____ LIN. FT.
 SYMBOLS and LEGENDS 6-5
 24" TRANSVERSE LINE _____ LIN. FT.



STREET NAME: SR 59

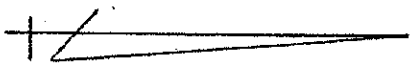


PLAZA

STREET NAME: SANFORD ST

AUXILIARY PAVEMENT MARKING

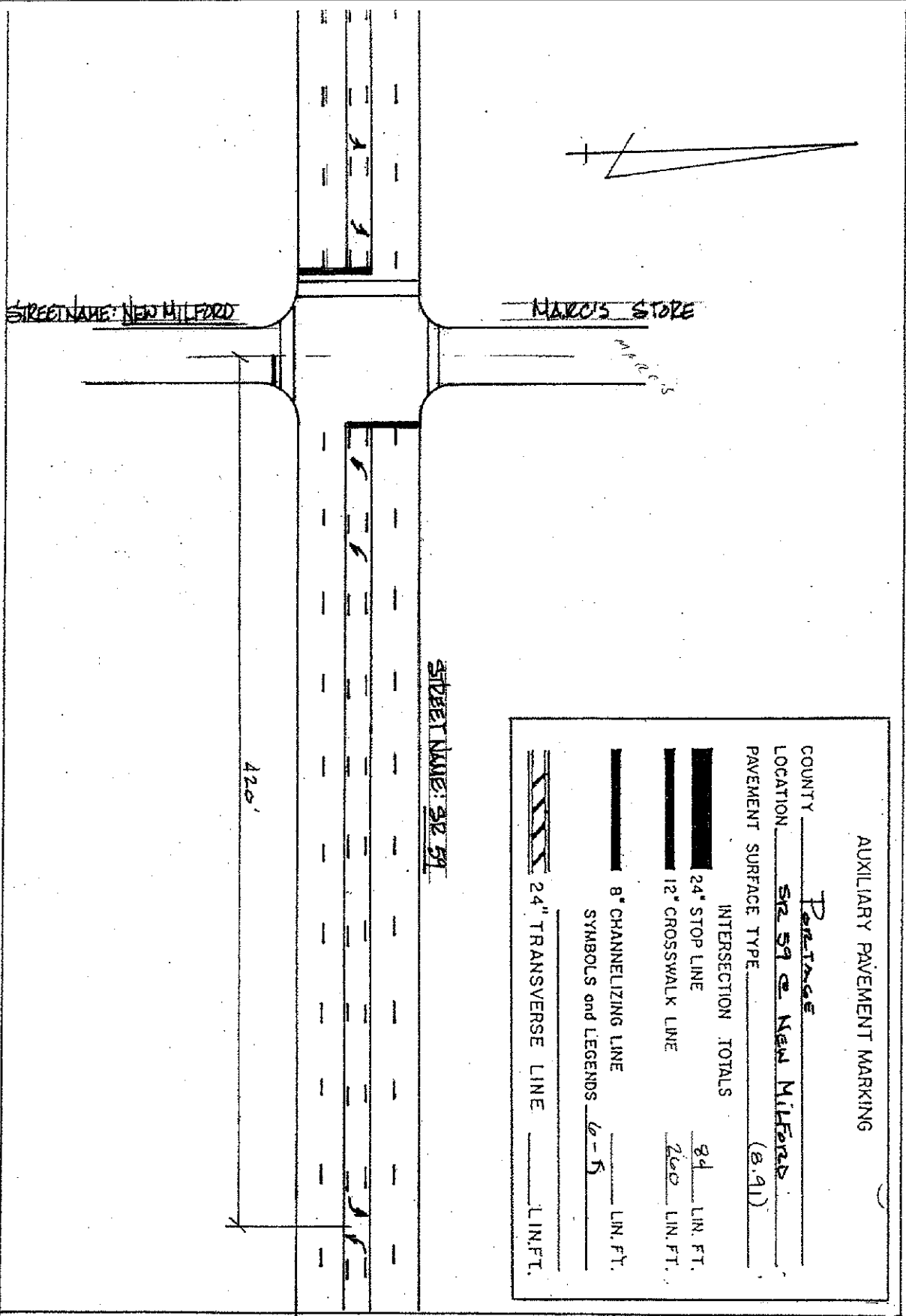
COUNTY Portage
 LOCATION Sr. 59 & Liberty / Linden
 PAVEMENT SURFACE TYPE _____ (8.55)
 INTERSECTION TOTALS
 24" STOP LINE 24 LIN. FT.
 12" CROSSWALK LINE 140 LIN. FT.
 8" CHANNELIZING LINE 200 LIN. FT.
 SYMBOLS and LEGENDS 4-5
 24" TRANSVERSE LINE _____ LIN. FT.



STREET NAME: SR 59




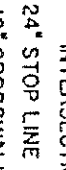


STREET NAME: LIBERTY ST.

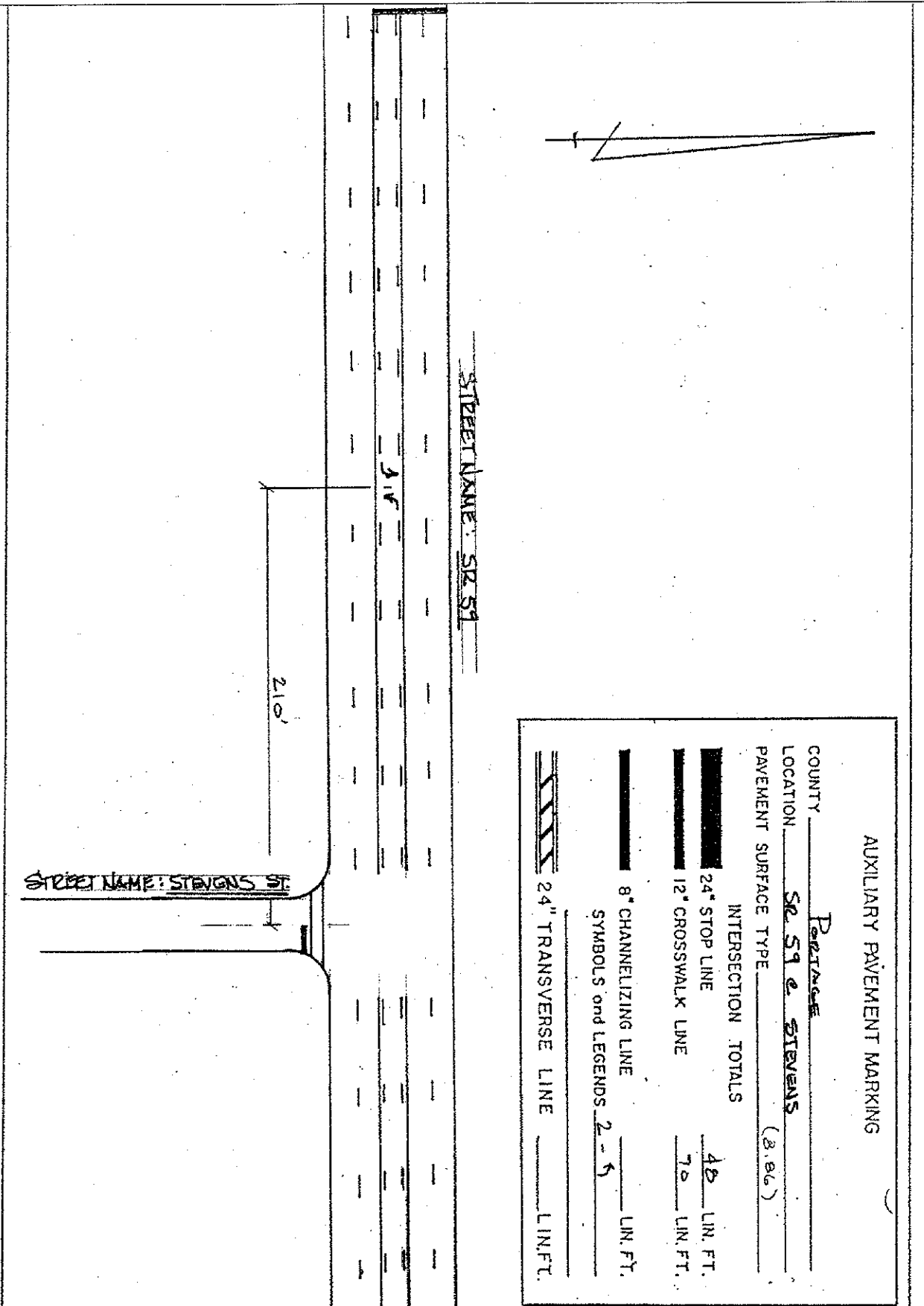


AUXILIARY PAVEMENT MARKING

COUNTY Portage
 LOCATION SR 59 @ New Milford
 PAVEMENT SURFACE TYPE _____ (8.91)

INTERSECTION TOTALS





	24" STOP LINE	<u>84</u>	LIN. FT.
	12" CROSSWALK LINE	<u>260</u>	LIN. FT.
	8" CHANNELIZING LINE	<u>6-5</u>	LIN. FT.
SYMBOLS and LEGENDS _____ LIN. FT.			
	24" TRANSVERSE LINE	_____	LIN. FT.



AUXILIARY PAVEMENT MARKING

COUNTY Portage
 LOCATION SR 59 @ STEVENS
 PAVEMENT SURFACE TYPE _____ (8.86)

INTERSECTION TOTALS

	24" STOP LINE	<u>48</u>	LIN. FT.
	12" CROSSWALK LINE	<u>70</u>	LIN. FT.
	8" CHANNELIZING LINE	<u>2-5</u>	LIN. FT.
SYMBOLS and LEGENDS _____ LIN. FT.			
	24" TRANSVERSE LINE	_____	LIN. FT.

lbr/ver@DD4CD98 - 18705ftm.m - 01/08/04

DISTRICT 4

ON

COUNTY PORTAGE ROUTE 88

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

Equivalent Yellow _____

	Content		
	11. R/B		
.90		.90	
	X R/P 28		
.80	WOODGATE	.80	
.70	SAPP	.70	
.60	ROBINSON	.60	
.50	MIDLAND	.50	
.40	WASHINGTON	.40	
.30		.30	
.20	LAFAYETTE	.20	
.10	HIGHLAND	.10	
0.00	SR 59	1.00	

Yellow: Solid 1.772 Dash _____ Yellow: Solid _____ Dash _____ Yellow: Solid _____ Dash _____

TOTAL YELLOW THIS PAGE: SOLID _____, DASH _____, EQUIVALENT LINE _____

ON

Total This Route = Yellow: Solid 17.016, Yellow: Dash 9.236, White: Dash _____

Equivalent Yellow 19.325

(1.954)	RAVENNA CORP	(1.948)	
.90		.90	
.80		.80	
.70		.70	
.60		.60	
.50	RAVENNA CORP	.50	
.40		.40	
.30		.30	
.20		.20	
.10		.10	
1.00		2.00	

Yellow: Solid 1.005 Dash 0.417 Yellow: Solid 0.562 Dash 1.000 Yellow: Solid 0.128 Dash 1.000

TOTAL YELLOW THIS PAGE: SOLID 1.695, DASH 2.417, EQUIVALENT LINE 2.299

PAVEMENT MARKINGS

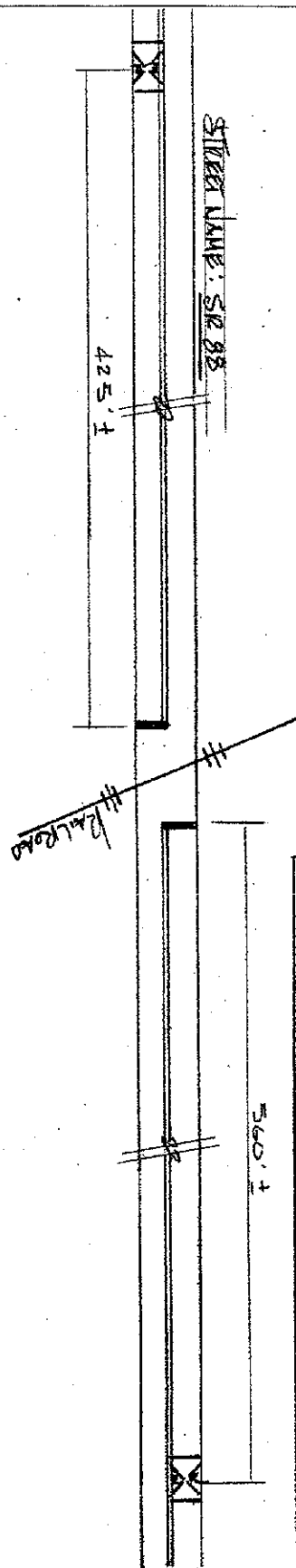
POR-59/88/225-8.41/0.51/9.76

PAVEMENT MARKINGS

**POR-59/88/225-
8.41/0.51/9.76**

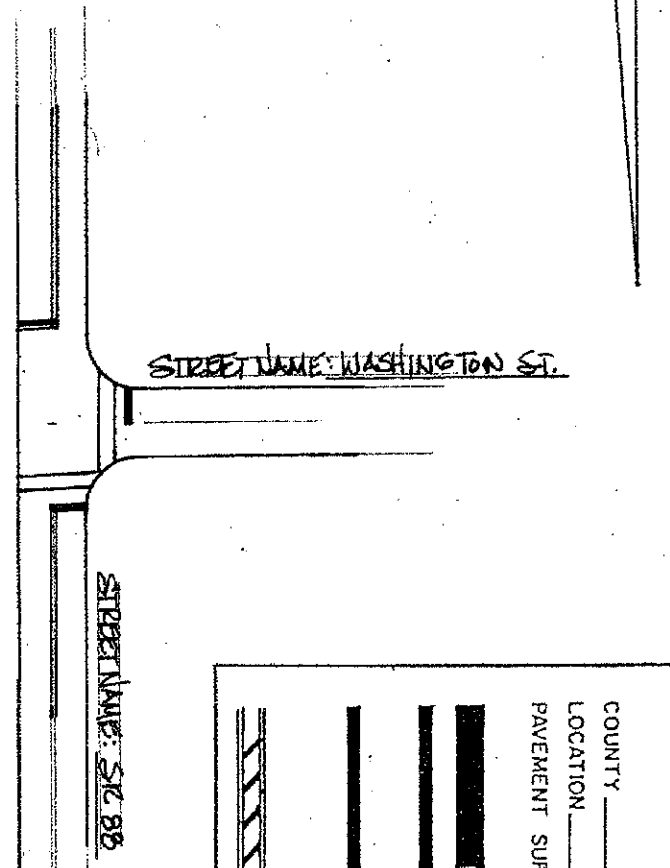
AUXILIARY PAVEMENT MARKING

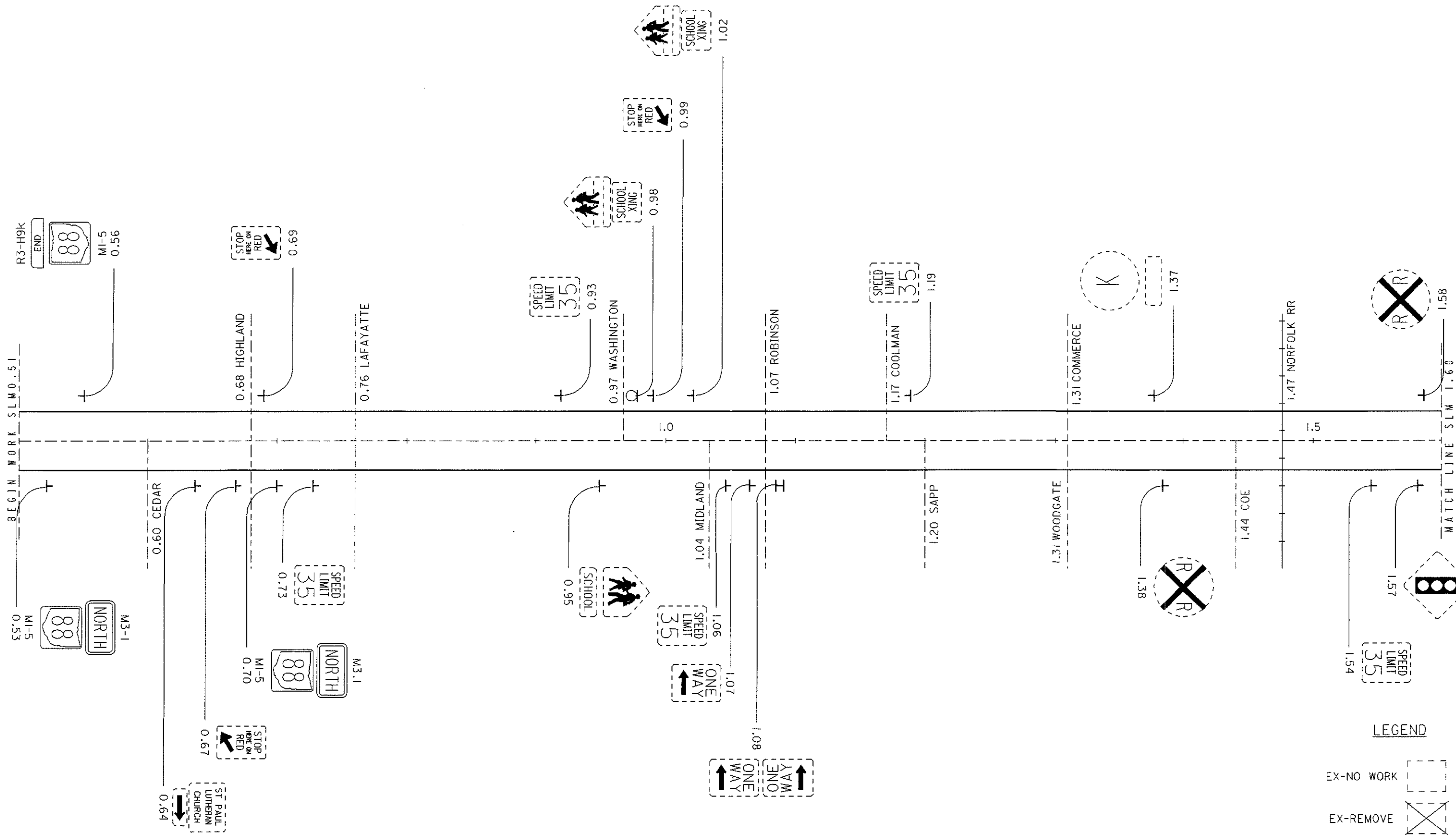
COUNTY Polk
 LOCATION SR 88 @ Carroll Park Road
 PAVEMENT SURFACE TYPE (0.96)
 INTERSECTION TOTALS
 24" STOP LINE 24 LIN. FT.
 12" CROSSWALK LINE _____ LIN. FT.
 8" CHANNELIZING LINE _____ LIN. FT.
 SYMBOLS and LEGENDS 2-RXB SYMBOLS
 24" TRANSVERSE LINE _____ LIN. FT.



AUXILIARY PAVEMENT MARKING

COUNTY Polk
 LOCATION SR 88 @ Washington St.
 PAVEMENT SURFACE TYPE (0.145)
 INTERSECTION TOTALS
 24" STOP LINE 36 LIN. FT.
 12" CROSSWALK LINE 140 LIN. FT.
 8" CHANNELIZING LINE _____ LIN. FT.
 SYMBOLS and LEGENDS _____
 24" TRANSVERSE LINE _____ LIN. FT.





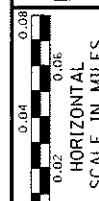
LEGEND

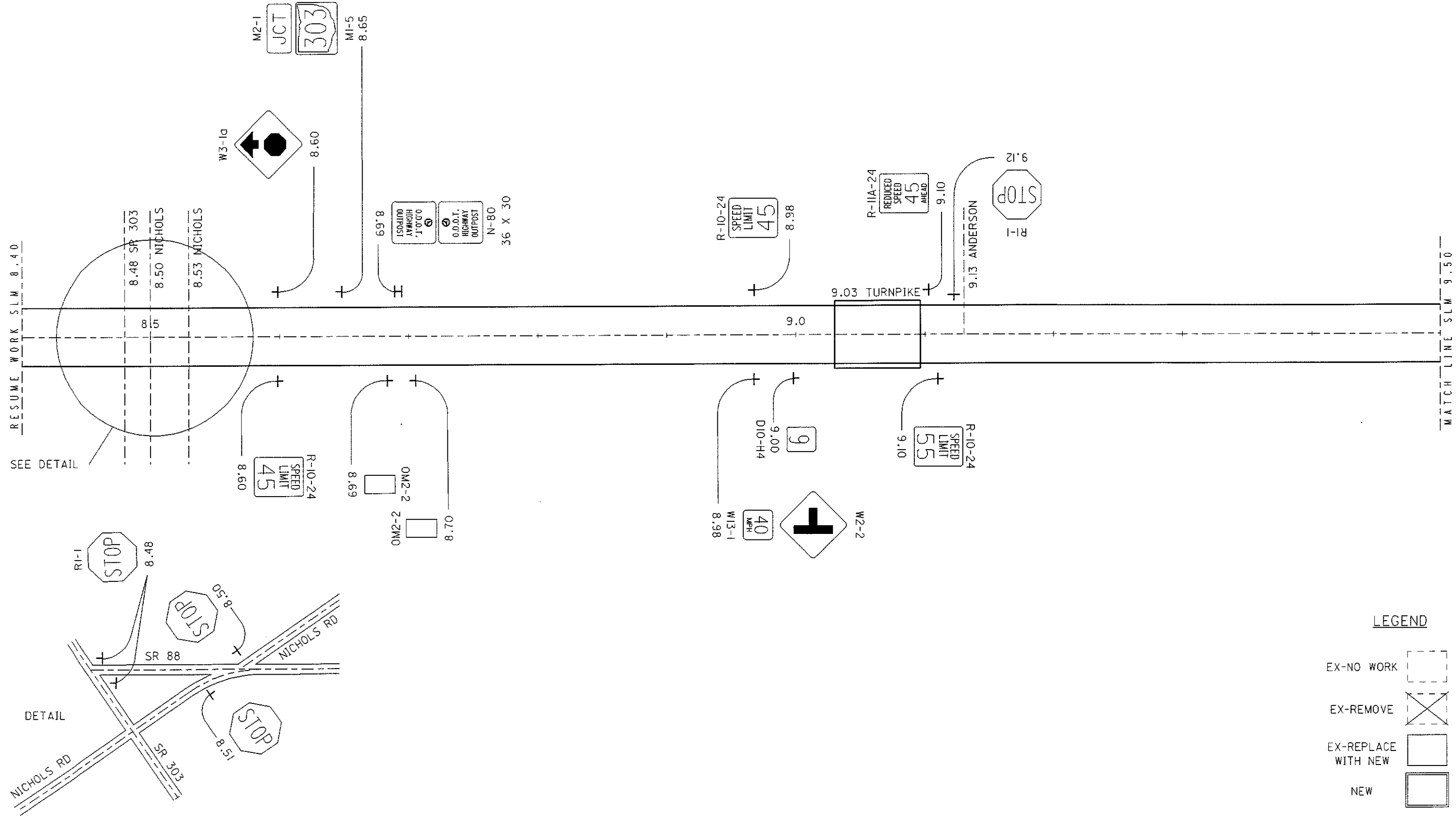
EX-NO WORK	
EX-REMOVE	
EX-REPLACE WITH NEW	
NEW	

POR-59/88/225-
8.41/0.51/9.76

SR 88 SIGNING PLAN
BEGIN WORK SLM 0.51 TO 1.60

CALCULATED	T. P.
CHECKED	K. G.



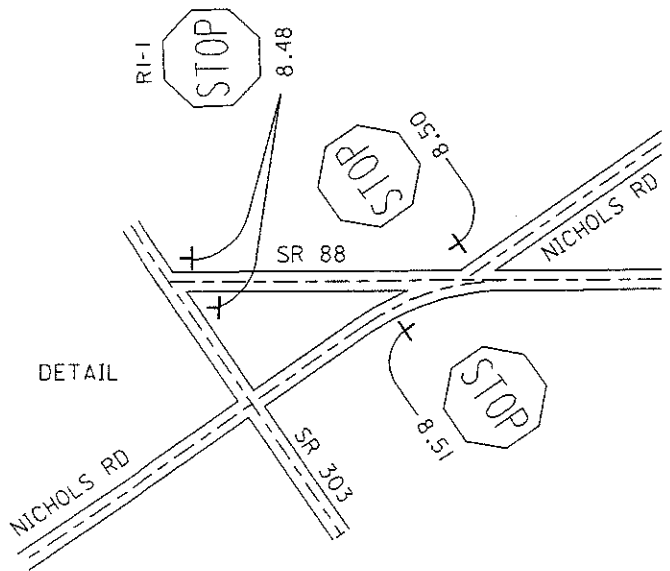


RESUME WORK SLM 8.40

MATCHLINE SLM 9.50

SEE DETAIL

DETAIL



LEGEND

- EX-NO WORK
- EX-REMOVE
- EX-REPLACE WITH NEW
- NEW

CALCULATED
T. P.
CHECKED
K. G.

0 0.04 0.08
0 0.02 0.06
HORIZONTAL
SCALE IN MILES

SR 88 SIGNING PLAN
SLM 8.40 TO 9.50

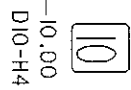
POR-59/88/225-
8.41/0.51/9.76

MATCH LINE SLM 9.50



9.95

W2-2



D10-H4

10



R1-1

10.11

10.10 SLAGLE



10.42

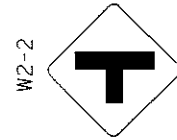
R-11B-24

10.44 HEWINS



R1-1

10.45







W2-2

10.51


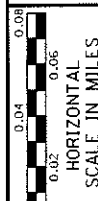
10.5

MATCH LINE SLM 10.60

LEGEND

- EX-NO WORK 
- EX-REMOVE 
- EX-REPLACE WITH NEW 
- NEW 

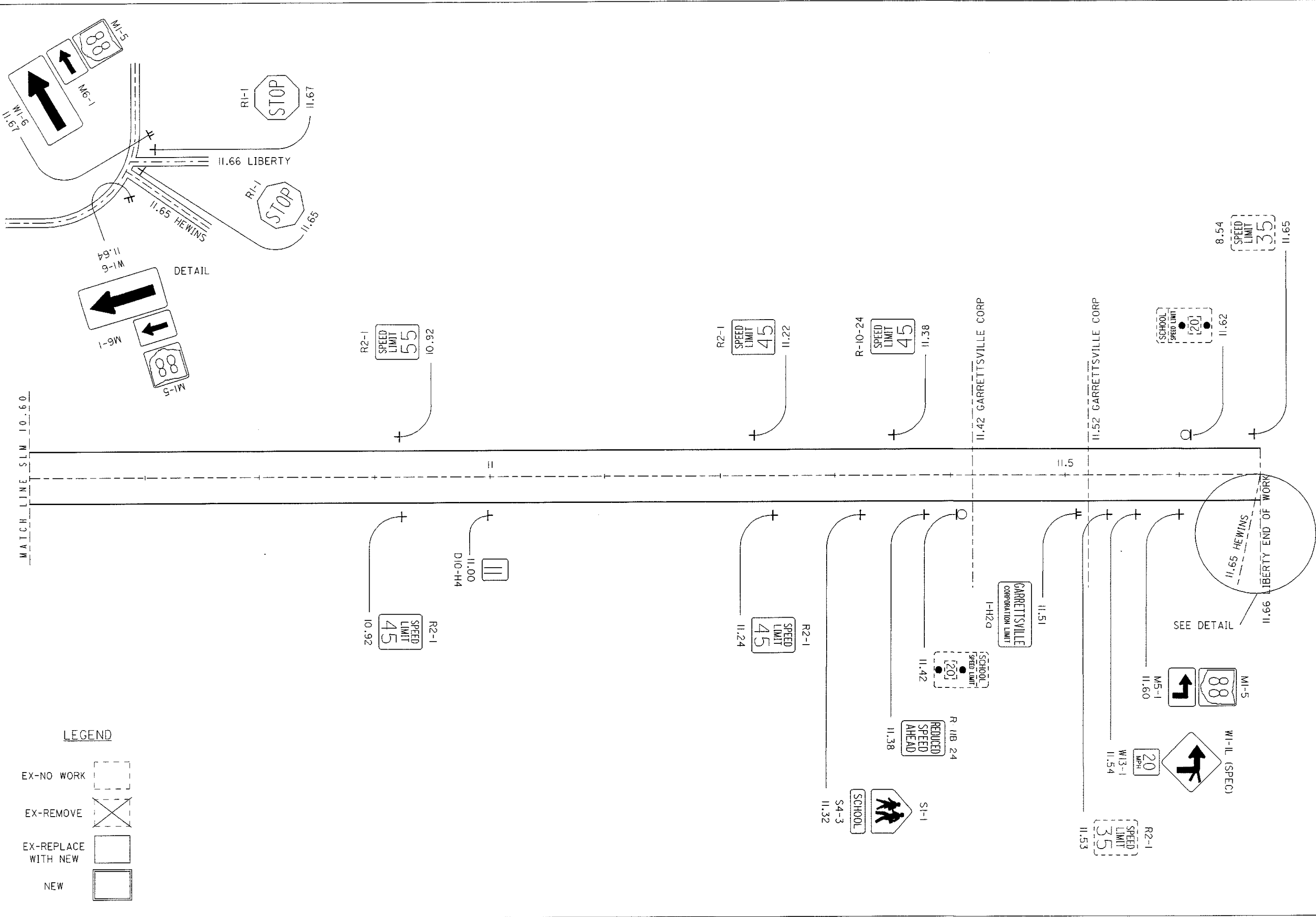
CALCULATED T.P. CHECKED K.G.

HORIZONTAL SCALE IN MILES

SR 88 SIGNING PLAN
SLM 9.50 TO 10.60

POR-59/88/225-
8.41/0.51/9.76



LEGEND

- EX-NO WORK
- EX-REMOVE
- EX-REPLACE WITH NEW
- NEW

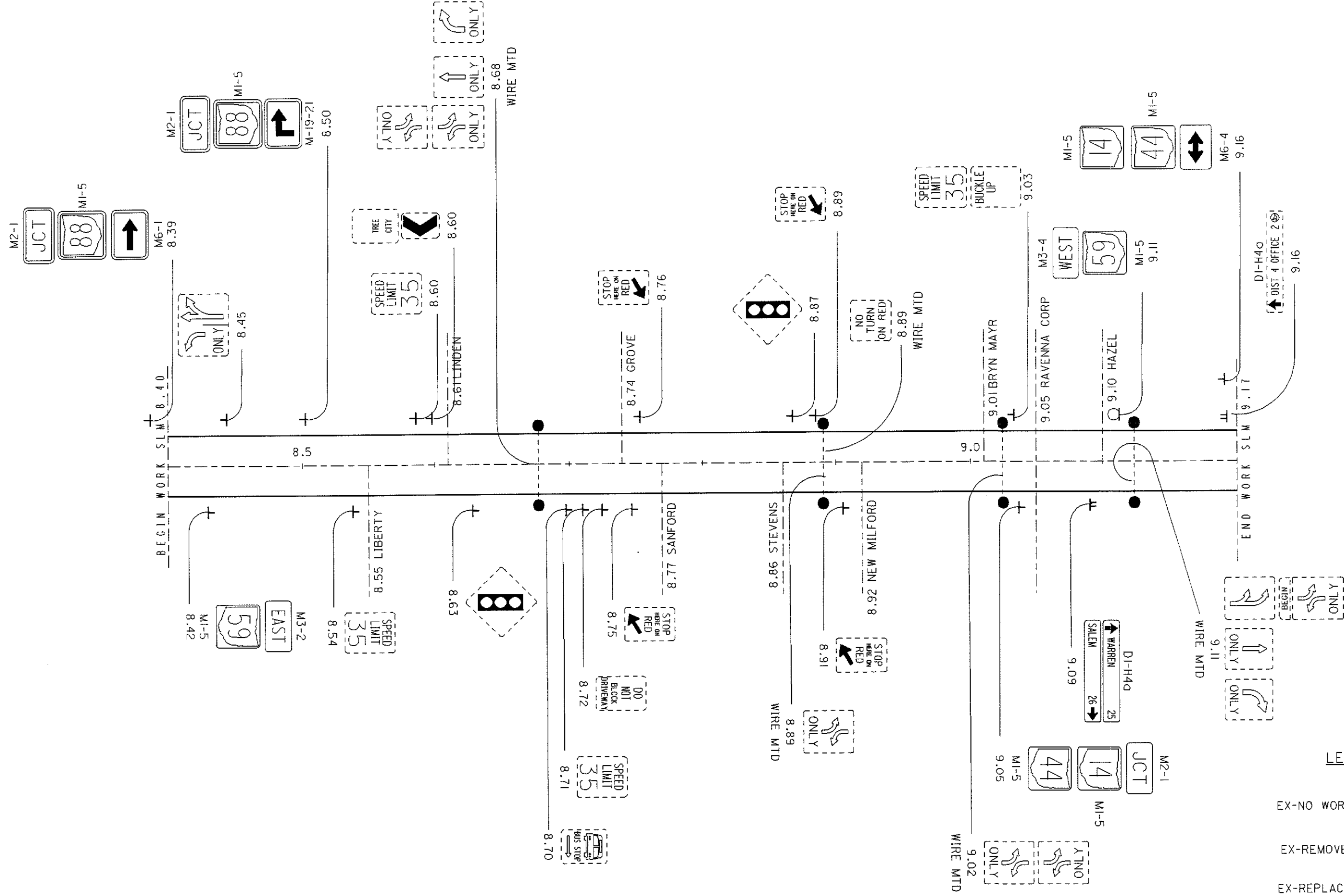
CALCULATED T.P. CHECKED K.G.

0 0.02 0.04 0.06 0.08

HORIZONTAL SCALE IN MILES

SR 88 SIGNING PLAN
SLM 10.60 TO 11.66 END OF WORK

POR-59/88/225-
8.41/0.51/9.76



LEGEND

EX-NO WORK	
EX-REMOVE	
EX-REPLACE WITH NEW	
NEW	

CALCULATED T.P. CHECKED R.G.

0 0.04 0.08
 0 0.02 0.06
 HORIZONTAL SCALE IN MILES

SR 59 SIGNING PLAN
SLM 8.40 TO 9.17

POR-59/88/225-8.41/0.51/9.76

lhyer@D04CD98 - m1.m - 01/08/04

POR-59 / 88 / 225-8.41 / 0.51 / 9.76 (POR-225.5.25 R/W)

LOT 1 DIVISION 2 T-2N R-7W
 LOT 2 DIVISION 2 T-2N R-7W
 LOT 3 DIVISION 2 T-2N R-7W
 LOT 17 DIVISION 3 T-2N R-7W
 LOT 18 DIVISION 3 T-2N R-7W
 PALMYRA TOWNSHIP
 PORTAGE COUNTY, OHIO

CONVENTIONAL SIGNS

- County Line _____
- Township Line _____
- Section Line _____
- Corporation Line _____ or _____
- Fence Line (existing) -x-x-x- (proposed) -x-x-x-
- Center Line _____
- Trees (to be removed) , Stumps (to be removed)
- Utility Poles: Telephone , Power , Light
- Right of Way (only) _____ R/W
- Standard Highway Ease. _____ SH ESMT
- Temp. Right of Way _____ T ESMT
- Exist. Right of Way _____
- Exist. Stand. High. Ease. _____ SH ESMT
- Exist. Channel Ease. _____ CH ESMT
- Exist. Utility Ease. _____ U ESMT
- Property Line _____ (in existing fence) -x-x-
- Railroad _____ or _____
- Guardrail (existing) (proposed)
- Construction Limits _____ CONSTRUCTION LIMITS

UTILITY OWNERSHIP:

OHIO EDISON
 1910 WEST MARKET STREET BLDG 1
 AKRON, OHIO 44313
 (330) 384-4714 (NICK TOUSSANT)

DOMINION EAST OHIO
 1000 WEST WILBETH ROAD
 AKRON, OHIO 44314
 (330) 798-7104 (GEORGE TURNER)

EASTERN STATES OIL AND GAS
 4188 STATE ROUTE 14
 RAVENNA, OHIO 44266
 (330) 325-1825 (WADE POL)

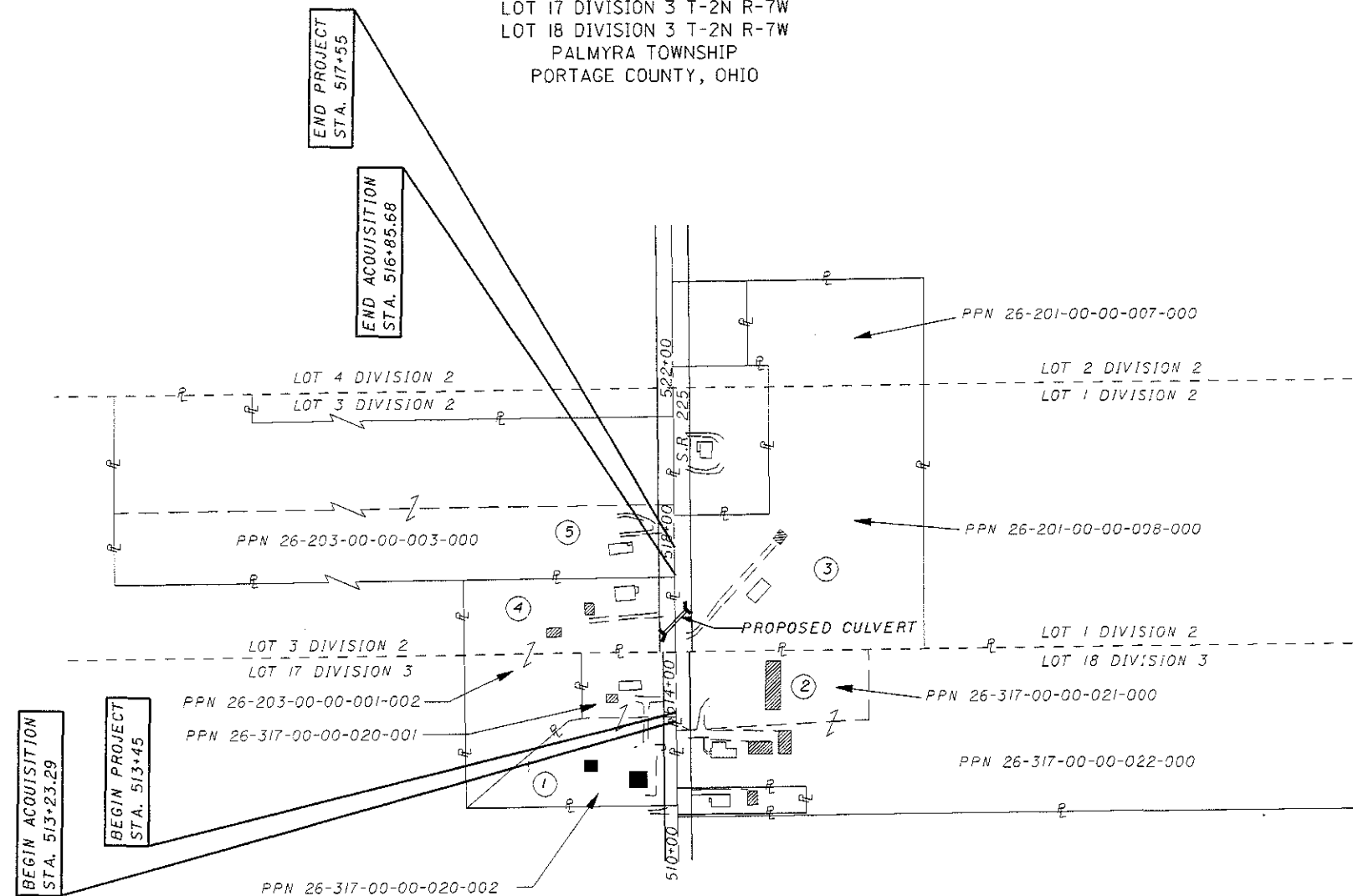
ATLAS AMERICA, INC.
 1823 STATE ROUTE 14 PO BOX 160
 DEERFIELD, OHIO 44411
 (330) 654-4343 (BASIL KAPTAIN)

KELT OIL AND GAS NORTH COAST ENERGY, INC.
 3896 OAKWOOD AVENUE
 YOUNGSTOWN, OHIO 44515
 (330) 793-6974 (ANDY KOVAL)
 (740) 432-7359

NORTHWOOD ENERGY CORP.
 941 CHATHAM LANE SUITE 100
 COLUMBUS, OHIO 43221-2416
 (614) 457-1024 (BRUCE DEAN)

UNDERGROUND UTILITIES:

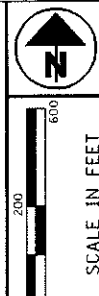
THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE OBTAINED FROM THE OWNER OF THE UTILITIES AS REQUIRED BY SECTION 153.64 O.R.C.



STRUCTURE KEY

- RESIDENTIAL
- COMMERCIAL
- OUT-BUILDING

- ① DAVID AND CAROLYN SWAIN
- ② BEN AND VICKY MUMAW & DAVID AND VALERIE ZAVODNY (MARY A. PLESO LIFE ESTATE)
- ③ JACK AND NORMA MYERS
- ④ JOSEPH AND MARCI GEDEON
- ⑤ JOHN AND PAMELA DEHAVEN



PID NO.
18705

R/W DESIGNER
WLC
R/W REVIEWER
GLT

PROPERTY MAP

POR-59 / 88 / 225-8.41 / 0.51 / 9.76

1 / 3				
59				
61				
REV. BY	DATE	DESCRIPTION		
DATE COMPLETED: APRIL 2003				

lbyer@DD4C0998 - 1st.m - 01/08/04

TOTAL NUMBER OF:
 4 OWNERSHIPS 0 OWNERSHIPS WITH STRUCTURES INVOLVED
 6 PARCELS 0 OWNERSHIPS WITH "P" ITEMS
 0 TOTAL TAKES

NET RESIDUE - RECORD AREA - TOTAL PRO - NET TAKE

NOTE: UNDER NO CIRCUMSTANCES ARE TEMPORARY EASEMENTS TO BE USED FOR STORAGE OF MATERIAL OR EQUIPMENT BY THE CONTRACTOR UNLESS NOTED OTHERWISE.
 NOTE: ALL TEMPORARY PARCELS TO BE OF 18 MONTHS DURATION.

ALL AREAS IN ACRES.

PARCEL NO.	OWNER	SHEET NO.	OWNERS RECORD		AUDITOR'S PARCEL	RECORD AREA	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUC-TURE	NET RESIDUE		TYPE FUND	REMARKS AND PERSONALTY	AS ACQUIRED	
			BOOK	PAGE								LEFT	RIGHT			BOOK	PAGE
1T	DAVID L. SWAIN AND CAROLYN SWAIN DAVID SWAIN AND CAROLYN SWAIN	3	1024	355	263170000020001 263170000020002	0.875 1.9879	0.122 0.166	0.092 0.001	0.000 0.000	0.092 0.001	NO			STATE			
					TOTAL:	2.8629	0.288	0.093	0.000	0.093					TO BUILD A DRIVE AND GRADE AND SEED		
2T	BEN T. MUMAW AND VICKY L. MUMAW DAVID A. ZAVODNY AND VALERIE J. ZAVODNY MARY A. PLESO (LIFE ESTATE)	3	1128	855	263170000022000 263170000021000	22.50 2.00	0.259		0.048	0.000	0.048	NO			STATE STATE	TO GRADE AND SEED	
3 CH	JACK A. MYERS AND NORMA SUE MYERS	3	IMAGE NO. 200303221		262010000008000 262010000007000	7.68 2.32	0.313	0.009	0.000	0.009	NO			STATE STATE	TO BUILD AND MAINTAIN A CHANNEL TO BUILD A DRIVE AND GRADE AND SEED		
3 T					TOTAL:	10.00		0.063	0.000	0.063	NO						
4 SH 4 T	JOSEPH M. GEDEON AND MARCI A. GEDEON	3	1152	655	262030000001002	4.013	0.171	0.005	0.000	0.005	NO	3.837		STATE STATE	TO BUILD A DRIVE AND GRADE AND SEED		
5	JOHN C. DEHAVEN AND PAMELA K. DEHAVEN	3	1038	981	262030000003000	12.50	0.367								NO TAKE		

FEDERAL PROJECT NO. 18705
 PID NO.
 STATE JOB NO.
 R/W DESIGNER W/LC
 R/W REVIEWER GLT
SUMMARY OF ADDITIONAL RIGHT OF WAY
 POR-59/88/225-8.41/0.51/9.76

TWW	5-12-03	Revise Record area for pcl. 2.	2	3
TWW	4-25-03	Split take areas for pcls 1 and 2.		
REV. BY	DATE	DESCRIPTION		
FIELD REVIEW BY		DATE:	60	
OWNERSHIP VERIFIED BY		DATE:	61	
DATE COMPLETED: APRIL 2003				

POR-59 / 88 / 225-8.41 / 0.51 / 9.76 (POR-225-5.25 R/W)

STRUCTURE KEY
 □ RESIDENTIAL
 ▨ COMMERCIAL

BASIS FOR BEARINGS:
 THE BASIS OF BEARINGS IS BASED ON THE VACATION PLAT OF PART OF STATE ROUTE 225, AS RECORDED IN PLAT BOOK 94, PAGE 9, OF THE PORTAGE COUNTY PLAT RECORDS.

LOT 1 DIVISION 2 T-2N R-7W
 LOT 2 DIVISION 2 T-2N R-7W
 LOT 3 DIVISION 2 T-2N R-7W
 LOT 17 DIVISION 3 T-2N R-7W
 LOT 18 DIVISION 3 T-2N R-7W
 PALMYRA TOWNSHIP
 PORTAGE COUNTY, OHIO



PID NO.
18705

R/W DESIGNER
WLC
 R/W REVIEWER
GLT

**RIGHT OF WAY DETAIL SHEET
STA. 513+00 TO STA. 518+00**

**POR-59 / 88 / 225-
8.41 / 0.51 / 9.76**

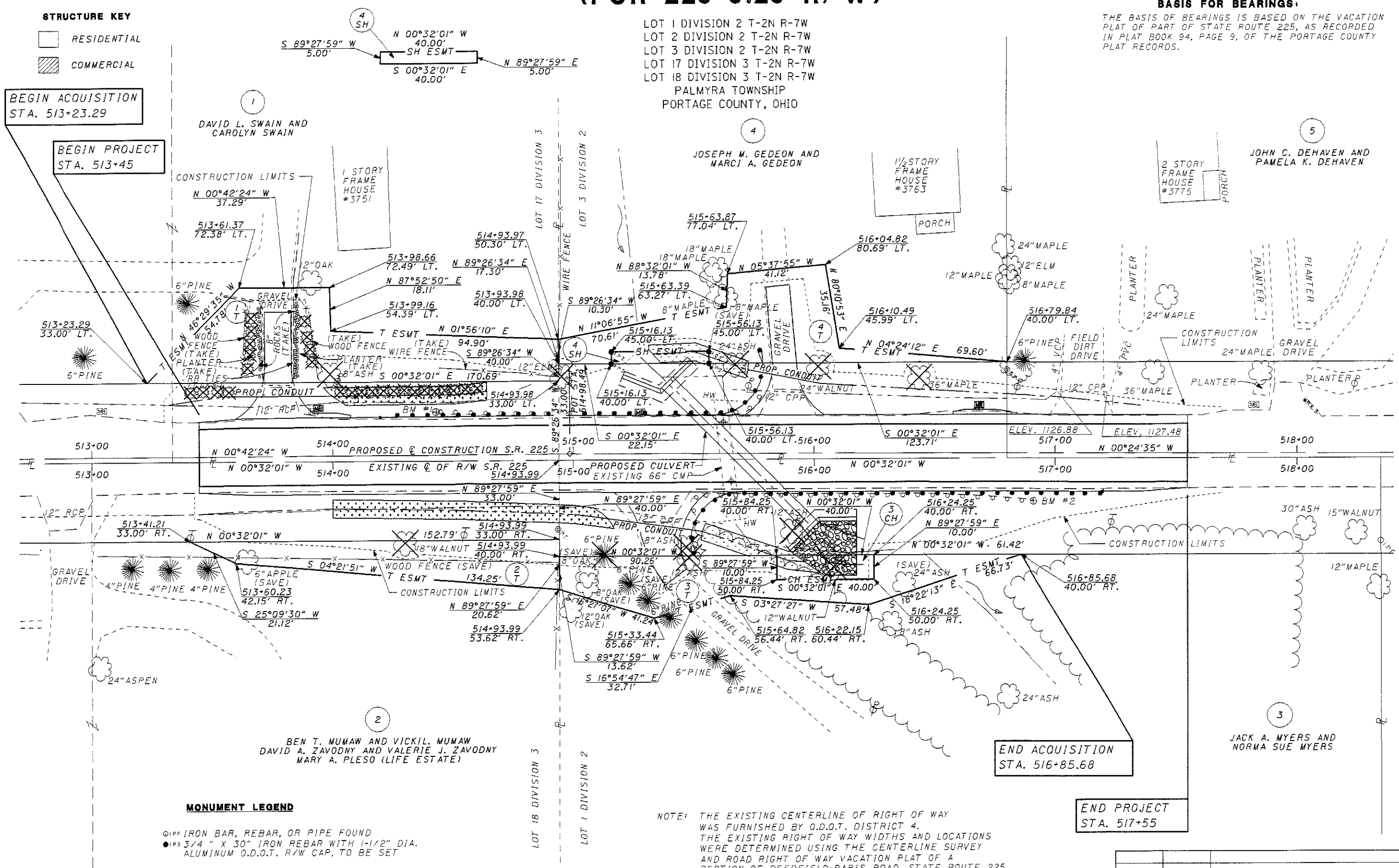
3 / 3
 61
 61

**BEGIN ACQUISITION
STA. 513+23.29**

**BEGIN PROJECT
STA. 513+45**

**END ACQUISITION
STA. 516+85.68**

**END PROJECT
STA. 517+55**



MONUMENT LEGEND
 ○ I.P.F. IRON BAR, REBAR, OR PIPE FOUND
 ● I.P.S. 3/4" X 30" IRON REBAR WITH 1-1/2" DIA.
 ALUMINUM O.D.O.T. R/W CAP. TO BE SET

NOTE: THE EXISTING CENTERLINE OF RIGHT OF WAY WAS FURNISHED BY O.D.O.T. DISTRICT 4. THE EXISTING RIGHT OF WAY WIDTHS AND LOCATIONS WERE DETERMINED USING THE CENTERLINE SURVEY AND ROAD RIGHT OF WAY VACATION PLAT OF A PORTION OF DEERFIELD-PARIS ROAD, STATE ROUTE 225, ON FILE AT O.D.O.T. DISTRICT 4.

REV. BY	DATE	DESCRIPTION
TWW	4-29-03	ADD TREES TO PCL 1 (TAKE ITEMS)
DATE COMPLETED: APRIL 2003		

lhyer@D04C0988 - rp100sr225.m - 01/08/04