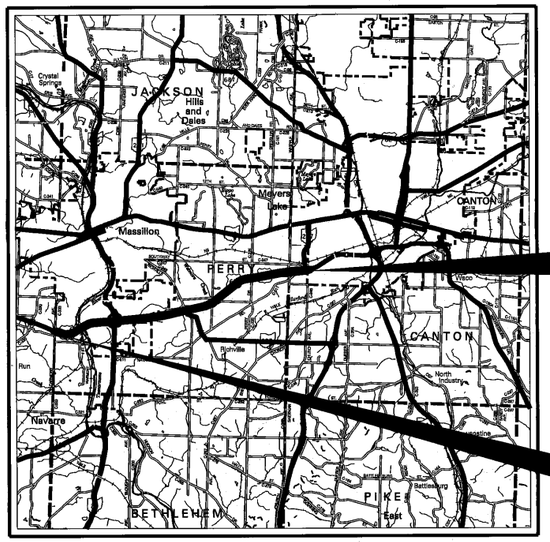
STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

STA-30/297-6.06/0.17
Part 1

CITY OF MASSILLON, PERRY TOWNSHIP
STARK COUNTY
FOR PART 2, SEE STA-30-(6.70)(11.57)



LOCATION MAP

LATITUDE: 40°45'51" LONGITUDE: 81°28'52"

SCALE IN MILES

0 1 2 3 4

N

PORTION TO BE IMPROVED
INTERSTATE & DIVIDED HIGHWAY
UNDIVIDED STATE & FEDERAL ROUTES
OTHER ROADS
NHS PROJECT YES

INDEX OF SHEETS:

PROJECT DESCRIPTION

IMPROVEMENT OF 6.99 MILES OF US 30 AND 0.68 MILES OF SR 297, BY RESURFACING INCLUDING PAVEMENT REPAIR, PAVEMENT PLANING, SIGNING UPGRADE, GUARDRAIL UPGRADE, AND DRAINAGE WORK.

EARTH DISTURBED AREAS

PROJECT EDA - N/A (MAINTENANCE PROJECT)
EST. CONTRACTOR EDA - N/A (MAINTENANCE PROJECT)
NOTICE ON INTENT EDA - N/A (MAINTENANCE PROJECT)

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2005 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 DETOURS WILL BE PROVIDED AS INDICATED ON SHEETS 7-14.

APPROVED _____
DATE 3-9-06 DISTRICT DEPUTY DIRECTOR

APPROVED London Trustee
DATE 5-15-06 DIRECTOR, DEPARTMENT OF TRANSPORTATION

DESIGN EXCEPTIONS

NONE

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 NO. 4
OFFICE OF PRODUCTION
2088 SOUTH ARLINGTON ROAD
AKRON, OHIO 44306

ENGINEERS SEAL:

STATE OF OHIO
Thomas J Powell
E-61151
REGISTERED PROFESSIONAL ENGINEER

SIGNED _____
DATE: 02/08/06

STANDARD CONSTRUCTION DRAWINGS

										SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	7/16/04	F-2.1	7/28/00	RM-1.1	1/20/06	MT-35.10	4/20/01			800	4/21/06
BP-4.1	7/16/04	F-3.1	7/28/00	RM-4.2	4/18/03	MT-95.30	7/16/04	MT-101.70	10/18/02	802	4/15/05
BP-5.1	7/28/00	F-3.4	7/28/00	RM-4.5	4/18/03	MT-95.31	7/16/04	MT-102.10	10/18/02	832	4/17/04
				RM-4.6	1/16/04	MT-95.32	7/16/04	MT-102.20	10/18/02	833	2/12/03
CB-1.1	7/15/05	GR-1.1	7/16/04			MT-95.70	4/19/02	MT-105.10	10/18/02	843	4/18/03
CB-2.2	7/15/05	GR-2.1	1/16/04	AS-1-81	7/19/02	MT-97.10	4/19/02	MT-105.11	10/18/02	885	11/04/05
CB-3.2	7/15/05	GR-3.1	4/18/03	GSD-1-96	7/19/02	MT-98.12	4/19/02				
		GR-3.2	4/18/03	PCB-91	7/19/02	MT-98.13	4/19/02	TC-41.20	1/19/01		
DM-1.1	10/21/05	GR-4.2	4/15/05	PSID-1-99	7/18/03	MT-98.14	4/19/02	TC-42.20	7/16/04		
DM-1.2	10/21/05	GR-5.1	4/18/03	SBR-1-99	7/19/02	MT-98.15	7/16/04	TC-52.10	4/20/01	SPECIAL PROVISIONS	
DM-1.4	1/21/05	GR-5.2	1/16/04	SICD-1-96	7/19/02	MT-98.16	4/19/02	TC-52.20	4/20/01		
DM-4.1	7/19/02	GR-5.3	1/16/04			MT-98.17	10/18/02	TC-65.10	1/21/05		
DM-4.3	7/19/02	GR-6.2	4/18/03			MT-98.18	10/18/02	TC-65.11	1/21/05		
DM-4.4	7/19/02					MT-99.20m	1/30/95	TC-71.10	1/21/05	NWP#34#33 5/18/06	
		HW-2.1	1/20/06			MT-100.00	4/19/02	TC-72.20	1/21/05		
		HW-2.2	7/15/05			MT-101.20	10/18/02	TC-73.10	1/19/01		

FEDERAL PROJECT NO. E 033 (671)
PID NO. 23754
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
STA-30/297-6.06/0.17
1 / 60

STA - USR 30/297-6.06/0.17(6.70)(11.
060320 PID - 23754
Dist 4 7/12/2006

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BEGIN PROJECT
SLM 6.06
E 033 (671)

CARMONT AVE.

STA-30-6.03

STA-30-7.69
(SEE PART 2)

Tuscarawas River

U-TURN
SLM 7.07

RAMP J
RAMP K
RAMP G
RAMP H
RAMP I
RAMP L
RAMP E
RAMP F

STA-30-7.69

MATCH LINE SLM 8.00, U.S. 30

MATCH LINE SLM 8.00, U.S. 30

U-TURN
SLM 8.28

U-TURN
SLM 9.07

RAMP A
RAMP C
RAMP B
RAMP D

STA-30-9.58

U-TURN
SLM 10.21

STA-30-10.32

GENOA AVE.

RICHVILLE ST.

MATCH LINE SLM 11.00, U.S. 30

MATCH LINE SLM 11.00, U.S. 30

PERRY DR.

U-TURN
SLM 11.98

STA-30-11.57
(SEE PART 2)

RAMP M
RAMP N

STA-30-12.57

WHIPPLE AVE.

GAMBRINUS AVE.

Service Rd. B
Service Rd. C

RAMP O
(no work)

RAMP P
(no work)

STA-30-13.05

CLAREDON AVE.

END PROJECT
SLM 13.05
E 033 (671)

GR-1 GR-2 GR-3 GR-4 GR-5 GR-6 GR-7 GR-8 GR-9 GR-10 GR-11 GR-12 GR-13 GR-14 GR-15 GR-16 GR-17 GR-18 GR-19 GR-20 GR-21 GR-22 GR-23 GR-24 GR-25 GR-26 GR-27 GR-28 GR-29 GR-30 GR-31 GR-32 GR-33 GR-34 GR-35 GR-36 GR-37 GR-38 GR-39 GR-40 GR-41 GR-42 GR-43 GR-44 GR-45

SCHEMATIC PLAN

STA-30/297-6.06/0.17

2
60

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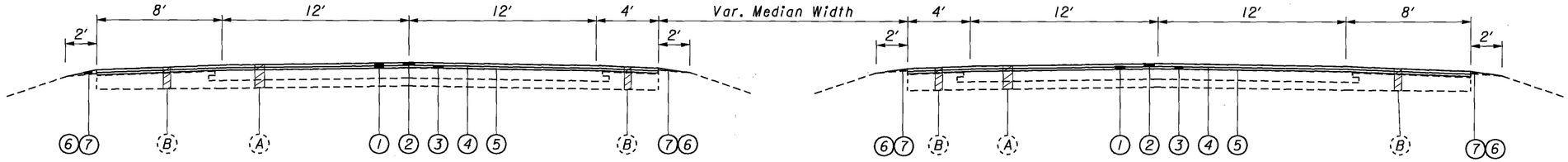
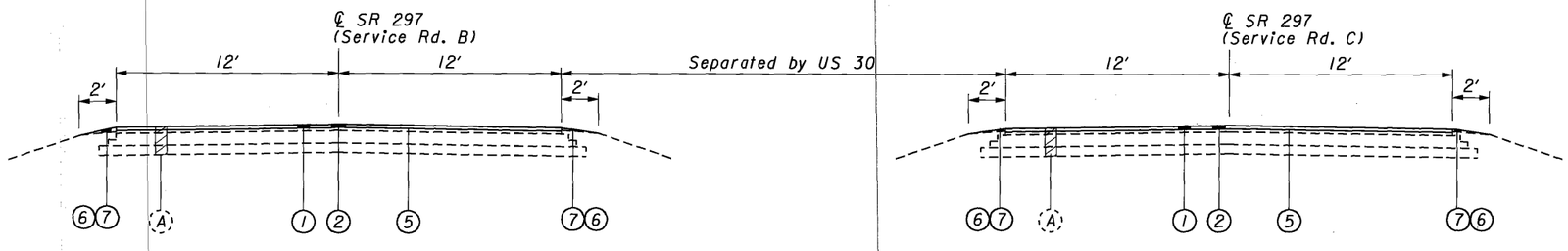


SECTION APPLIES:				
	SLM		LENGTH	WP
ROUTE	FROM	TO	(MILES)	(FEET)
30	6.06	13.05	6.99	72
TOTAL			6.99	

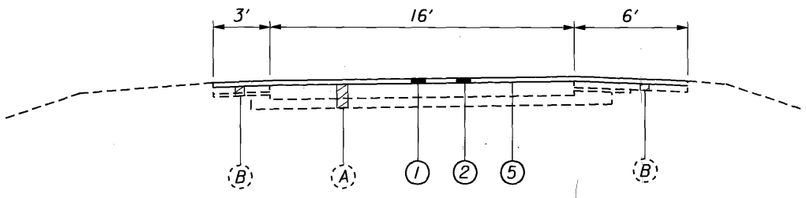


SECTION APPLIES:				
	SLM		LENGTH	WP
ROUTE	FROM	TO	(MILES)	(FEET)
297	0.17	0.66	0.49	48
TOTAL			0.49	

LEGEND

(1) 254, PAVEMENT PLANING, ASPHALT CONCRETE
(2) 442, 1½" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446)
(3) 442, 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE B (446)
(4) 407, TACK COAT FOR INTERMEDIATE COURSE
(5) 407, TACK COAT
(6) 408, PRIME COAT, AS PER PLAN
(7) 617, COMPACTED AGGREGATE, TYPE A, AS PER PLAN

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



TYPICAL RAMP SECTION

RAMP E @ SR 21
RAMP F @ SR 21
RAMP G @ SR 21
RAMP H @ SR 21
RAMP I @ SR 21
RAMP J @ SR 21
RAMP K @ SR 21
RAMP L @ SR 21
RAMP A @ SR 627
RAMP B @ SR 627
RAMP C @ SR 627
RAMP D @ SR 627
RAMP M @ WHIPPLE AVE.
RAMP N @ WHIPPLE AVE.

CALCULATED LMB CHECKED

TYPICAL SECTIONS

STA-30/297-6.06/0.17

3
60

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UTILITIES
THE CONTRACTOR SHALL USE THE FOLLOWING PROCEDURE AT EACH LOCATION WHERE WORK IS PERFORMED, IN ACCORDANCE WITH SECTIONS 105.07 AND 107.16 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 IN ALL AREAS.

OUPS 1-800-362-2764 (CONTACT LIMITED BASIS PARTICIPANTS DIRECTLY)
OGPUPS 1-800-925-0988
ODOT 330-786-3145 KEN GREENE

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE NOT SHOWN ON THE PLANS, BUT CAN BE OBTAINED FROM THE OWNERS OF THE UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES.

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
ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

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. 30	6.06 TO 13.05	12'
S.R. 30 RAMPS		16'
S.R. 297	0.17 TO 0.66	12'

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL
WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A "W-BEAM RAIL SPLICE" AS SHOWN IN AASHTO M 180. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

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

THE UNDERSIDE OF BRIDGES SHALL BE CHECKED FOR THE PRESENCE OF BATS PRIOR TO CONSTRUCTION BY THE ENGINEER. IF BATS ARE FOUND, THE DISTRICT 4 ENVIRONMENTAL SECTION SHALL BE CONTACTED FOR FURTHER DIRECTION.

DEMOLITION DEBRIS
THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID AND/OR LIMIT DEMOLITION DEBRIS FROM ENTERING THE STREAMS OR WETLANDS. ANY MATERIAL THAT DOES FALL INTO THE STREAM OR WETLANDS 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 OPERATIONS SUCH AS, FOUNDATION PIER OR ABUTMENT EXCAVATION, CHANNEL CLEAN OUT, EXCAVATION FOR ROCK CHANNEL PROTECTION AND REMOVAL OF ANY TEMPORARY FILL ASSOCIATED WITH CONSTRUCTION OPERATIONS.

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

BEST MANAGEMENT PRACTICES
WATER COLUMN AND SEDIMENTATION IMPACTS SHALL BE KEPT TO A MINIMUM THROUGH THE USE OF BEST MANAGEMENT PRACTICES FOR SOIL EROSION AND SEDIMENTATION CONTROL.

TRAIL CLOSURE
THE OHIO AND ERIE CANAL TOWPATH TRAIL WILL BE CLOSED FOR SHORT PERIODS OF TIME WHILE THE WORK IS PERFORMED OVER THE TRAIL. CLOSURES WILL BE LIMITED TO DURATIONS OF APPROXIMATELY 3-5 DAYS IN LENGTH, DURING WEEKDAYS FROM 7 AM TO 6PM. AT NO TIME SHALL THE TOWPATH TRAIL BE CLOSED DURING WEEKENDS. ADVANCE NOTICE OF THE CLOSURE WILL BE PROVIDED TO THE CITY OF MASSILLON PARKS DISTRICT AND SIGNS WILL BE POSTED BY THE CONTRACTOR AT APPROPRIATE LOCATIONS ON THE TRAIL. THE CITY OF MASSILLON SHALL BE CONTACTED A MINIMUM OF THREE WEEKS PRIOR TO CLOSING THE TRAIL. THE CITY OF MASSILLON PARK DIRECTOR KEN KAMINSKI MAY BE CONTACTED AT 505 ERIE STREET NORTH, MASSILLON, OHIO 44646 (330) 832-1621.

PAINTING AND SEALING OPERATIONS
THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT EPOXY-URETHANE SEALER, PAINT, OR OTHER MATERIALS USED TO REPAIR, CLEAN, SEAL, OR TREAT ANY BRIDGE STRUCTURE FROM ENTERING ANY STREAMS, WETLANDS OR OTHER WATERS OF THE UNITED STATES AND TAKE THE APPROPRIATE ACTIONS IN THE EVENT OF A RELEASE. THE CONTRACTOR SHALL LIMIT THE AMOUNT OF OPEN PAINT/SEALER MATERIAL TO THE EXTENT PRACTICABLE TO PERFORM THE REQUIRED WORK. DISCARDED CONTAINERS SHALL BE REMOVED FROM THE VICINITY OF THE STREAM, AND UNDER NO CIRCUMSTANCES SHALL ANY PAINT/SEALER MATERIAL BE STORED WITHIN THE 100 YEAR FLOODPLAIN. IN EACH CASE WHERE THERE IS AN INCIDENT OF DEBRIS AND/OR MATERIALS THAT FALL OR MIGRATE INTO THE RIVER, THE CONTRACTOR SHALL, AS SOON AS POSSIBLE, NOTIFY THE ENGINEER/SUPERVISOR, AND THE FOLLOWING AGENCIES:

OHIO EPA SPILL REPORTING
24 HOUR EMERGENCY SERVICE
CALL: 1-800-282-9378
PROVIDE AS MUCH OF THE FOLLOWING INFORMATION AS POSSIBLE:
1. TIME OBSERVED
2. LOCATION
3. MATERIAL RELEASED
4. PROBABLE SOURCE
5. VOLUME & DURATION
6. PRESENT & ANTICIPATED MOVEMENT OF CONTAMINANT
7. PERSONNEL ON SCENE
8. ACTIONS ALREADY INITIATED
9. PERSON(S) ON THE SCENE TO CONTACT

STARK COUNTY SANITARY ENGINEER: MICHAEL ARMOGIDA, P.E., 1701 MAHONING RD NE, CANTON, OHIO 44705 (330) 451-2303 OR (330) 451-2320 (24 HR. EMERGENCY #)

STARK SOIL & WATER CONSERVATION DISTRICT, 2350 RICHVILLE DR., MASSILLON, OHIO 44646 (330) 830-7700 X103

CALCULATED LMB CHECKED

GENERAL NOTES

STA-30/297-6.06/0.17

PAVING UNDER GUARDRAIL

THIS OPERATION SHALL INCLUDE PREPARATION OF THE GRADED SHOULDER USING 209, LINEAR GRADING, AND PAVING UNDER THE GUARDRAIL USING 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 64-22, UNDER GUARDRAIL, AS PER PLAN.

ITEM 209, LINEAR GRADING, SHALL CONSIST OF EXCAVATING EXISTING MATERIAL, PLACING GRANULAR MATERIAL AND APPLYING HERBICIDE AS SPECIFIED IN THE PLANS AND IN ACCORDANCE WITH THE FOLLOWING:

ALL COLLECTED DEBRIS, ASPHALT AND TOPSOIL, INCLUDING RHIZOMES, ROOTS AND OTHER VEGETATIVE PLANT MATERIAL SHALL BE REMOVED AND DISPOSED OF AS SPECIFIED IN 105.17.

THE REMOVED MATERIAL SHALL BE REPLACED WITH COMPACTABLE GRANULAR MATERIAL CONFORMING TO 703.16 PLACED TO GRADE AS DETAILED ON THE TYPICAL SECTION OR AS APPROVED BY THE ENGINEER.

HERBICIDE SHALL BE EPA APPROVED FOR PAVING UNDER GUARDRAIL. IT SHALL BE APPLIED TO THE PREPARED AREA AFTER FINAL LEVELING AND GRADING HAS BEEN COMPLETED. THE APPLICATION SHALL BE JUST PRIOR TO PAVING AND SHALL STRICTLY ADHERE TO THE MANUFACTURER'S INSTRUCTIONS.

EACH SUCCESSFUL BIDDER MUST BE LICENSED BY THE OHIO DEPARTMENT OF AGRICULTURE AS A COMMERCIAL APPLICATOR AND ALL PERSONS INVOLVED IN THE ACTUAL SPRAYING SHALL BE LICENSED AS COMMERCIAL OPERATORS IN THE APPROPRIATE SPRAY CATEGORY.

HERBICIDE LABEL, MATERIAL SAFETY DATA SHEET AND COPY OF APPLICATORS LICENSES SHALL BE SUBMITTED TO THE ENGINEER FOR VERIFICATION PRIOR TO COMMENCING WORK.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 209, LINEAR GRADING, AS PER PLAN.

PAVING UNDER GUARDRAIL SHALL CONSIST OF PLACING ITEM 448 TO THE DEPTH SPECIFIED. PAVING MAY BE PLACED UNDER EXISTING OR PROPOSED GUARDRAIL USING ONE OF THE FOLLOWING METHODS:
METHOD A: 1) SET GUARDRAIL POSTS [OMIT IF EXISTING GUARDRAIL IS TO REMAIN]
2) PLACE ITEM 448

METHOD B: 1) PLACE ITEM 448
2) BORE ASPHALT AT POST LOCATIONS (MAY BE OMITTED IF STEEL POSTS ARE USED)
3) SET GUARDRAIL POSTS
4) PATCH AROUND POSTS. THE MATERIALS USED FOR PATCHING SHALL BE AN ASPHALT CONCRETE APPROVED BY THE ENGINEER. PATCHED AREAS SHALL BE COMPACTED USING EITHER HAND OR MECHANICAL METHODS. FINISHED SURFACES SHALL BE SMOOTH AND SLOPED TO DRAIN AWAY FROM THE POSTS

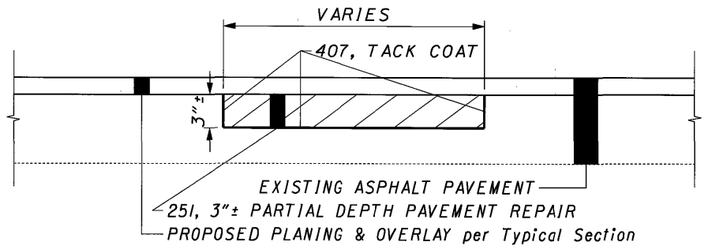
ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE, WITH THE EXCEPTION OF SETTING GUARDRAIL POSTS, SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 448, ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 1, PG 64-22, UNDER GUARDRAIL, AS PER PLAN.

SEEDING AND MULCHING

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.

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

659, SEEDING AND MULCHING	3252 SQ. YD.
659, COMMERCIAL FERTILIZER	0.44 TON
659, LIME	0.67 ACRE
659, WATER	18 M. GAL.



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 442 ASPHALT CONCRETE, TYPE B. THE ASPHALT CONCRETE SHALL BE COMPACTED WITH A TYPE I PNEUMATIC TIRE ROLLER AND A STEEL WHEEL ROLLER AS PER 401.13.

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 SQUARE YARDS OF PAVEMENT REPAIR.

ITEM 630 - REMOVAL OF MISC. TRAFFIC CONTROL ITEM, BEAM SUPPORT FOUNDATION

THE CONTINGENCY QUANTITY HAS BEEN PROVIDED FOR THIS WORK TO BE USED FOR REMOVAL OF BEAM SUPPORT FOUNDATIONS, AS DIRECTED BY THE ENGINEER, WHERE EVER NEEDED THROUGHOUT THE PROJECT.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:
ITEM 630 - REMOVAL OF MISC. TRAFFIC CONTROL ITEM, BEAM SUPPORT FOUNDATION - 8 EACH

ITEM 690 - SPECIAL, MISC.: CLEARING AND GRUBBING

THIS ITEM IS INTENDED TO BE USED TO CLEAR ALL GROWTH IN FRONT OF HIGHWAY SIGNS THAT MAY IMPEDE ITS VIEWING BY MOTORISTS.

IN ADDITION TO THE REQUIREMENTS OF 201, THE CONTRACTOR WILL REMOVE STUMPS AT LEAST 6 INCHES BELOW GROUND SURFACE AND THE WORK WILL NOT INCLUDE SCALPING. THE AREA TO BE CLEARED AND GRUBBED WILL BE DELINEATED IN THE WORK ORDER.

THE FOLLOWING IS AN ESTIMATED QUANTITY TO BE USED AS DIRECTED BY THE ENGINEER FOR THE ABOVE WORK:

ITEM 690-SPECIAL, MISC.; CLEARING AND GRUBBING 9 ACRES.

PAYMENT WILL BE AT THE UNIT BID PRICE PER ACRE CLEARED AND GRUBBED AND WILL INCLUDE BACKFILLING HOLES AND REMOVING ALL TREES AND STUMPS.

CALCULATED LMB CHECKED

GENERAL NOTES

STA-30/297-6.06/0.17

ITEM 606 - ANCHOR ASSEMBLY, TYPE B-98

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

1) THE SRT-350, GUARDRAIL END TERMINAL AS MANUFACTURED BY TRINITY INDUSTRY, 1170 N. STATE STREET, GIRARD, OHIO 44420 (TELEPHONE: 330-545-4373).

THE LENGTH OF THE SRT-350 SYSTEM IS CONSIDERED TO BE 37'-6", INCLUSIVE OF THREE 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
SS444	SLOTTED RAIL TERMINAL POST LAYOUT AND	7/12/99 Rev. 1	8/27/99
SS444M	ERECTION DETAILS SRT-350 (12.5, 8 POST)	7/12/99	
SS425M	SLOTTED RAIL TERMINAL SRT-350 POST LAYOUT AND ERECTION DETAILS (12.5, 9 POST)	6/21/97 Rev. 1	3/6/98

2) THE FLEAT-350 MANUFACTURED BY ROAD SYSTEMS, INC., 2516 MALLORY LANE, STOW, OHIO, 44224, (TELEPHONE: 330-346-0721).

THE LENGTH OF THE FLEAT-350 IS CONSIDERED TO BE 37'-6", INCLUSIVE OF THREE 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
FLT-M	FLARED ENERGY ABSORBING TERMINAL (FLEAT-350) ASSEMBLY	4/16/98	7/31/98

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.

THE FACE OF THE TYPE B-98 IMPACT HEAD SHALL BE COVERED WITH TYPE G REFLECTIVE SHEETING, PER CMS 730.19: APPROXIMATELY 36" W X 12" H FOR THE SRT-350 AND 14" W X 20" H FOR THE FLEAT.

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

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
SS142	ET2000 PLUS 50'-0" PLAN, ELEVATION AND SECTION 25'-0" RAIL, SLEEVE W/PL POSTS 1-4	4/12/00	7/31/00
SS141	ET2000 PLUS PLAN, ELEVATION AND SECTION 25'-0" RAIL, HBA POSTS 1-4	2/29/00	7/31/00
SS158	ET2000 PLUS 50'-0" WITH 12'-6" PANELS AND HBA POSTS 1-4 PLAN, ELEVATION AND SECTION	5/22/00	7/31/00

2) THE SKT-350 MANUFACTURED BY ROAD SYSTEMS, INC., 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 A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19, 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 PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, TYPE E-98, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

ITEM 617 COMPACTED AGGREGATE, AS PER PLAN

IN LOW SHOULDER AREAS EXCEEDING 1", OR AS DIRECTED BY THE ENGINEER, RECYCLED ASPHALT PAVEMENT (RAP) SHALL BE USED IN AREAS ADJACENT TO THE PAVED BERM. THE RAP SHALL HAVE A MINIMUM PG CONTENT OF 4.5% AND MEET THE FOLLOWING GRADATION. ONCE THE STOCKPILE MEETS THE GRADATION, THE PG CONTENT OF THE RAP SHALL BE DETERMINED PER 441.03. THE RAP ANALYSIS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL 2 WEEKS PRIOR TO USE. METHOD OF MEASUREMENT SHALL BE AS PER 617.06. PLACEMENT AND COMPACTION SHALL MEET THE REQUIREMENTS OF ITEM 617. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 617 COMPACTED AGGREGATE, AS PER PLAN.

MODIFIED GRADATION SHALL APPLY:

SIEVE	TOTAL PERCENT PASSING
1-1/2"	100
3/4"	50-100
NO. 4	35-70
NO. 30	9-33
NO. 200	0-13

ITEM 408 - PRIME COAT, AS PER PLAN

THE CONTRACTOR WILL APPLY "MC-70" AT A RATE OF 0.4 GALLONS PER SQUARE YARD, OR AS DETERMINED BY THE ENGINEER, TO THE COMPLETED COMPACTED AGGREGATE SHOULDER.

THE CONTRACTOR SHALL PROVIDE A SHIELD TO PREVENT THE SPRAYING OR DRIFTING OF LIQUID PRIME COAT MATERIAL ONTO THE EDGE OF THE PAVEMENT OR EDGELINE. CARE ALSO SHALL BE TAKEN TO AVOID SPRAYING LIQUID PRIME COAT MATERIAL ONTO DRIVEWAY APRONS, MAILBOX APPROACHES OR ANY PEDESTRIAN AREAS. THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO 107.10 OF THE SPECIFICATIONS.

ADOPT-A-HIGHWAY SIGN

PRIOR TO ORDERING THE ADOPT-A-HIGHWAY SIGNS, THE CONTRACTOR SHALL CONTACT MR. KEN GREENE (330-786-3145) OR MR. BOB PALLO (330-786-2218) FOR THE CORRECT LEGEND INFORMATION FOR EACH SIGN TO BE REPLACED ON THE PLAN.

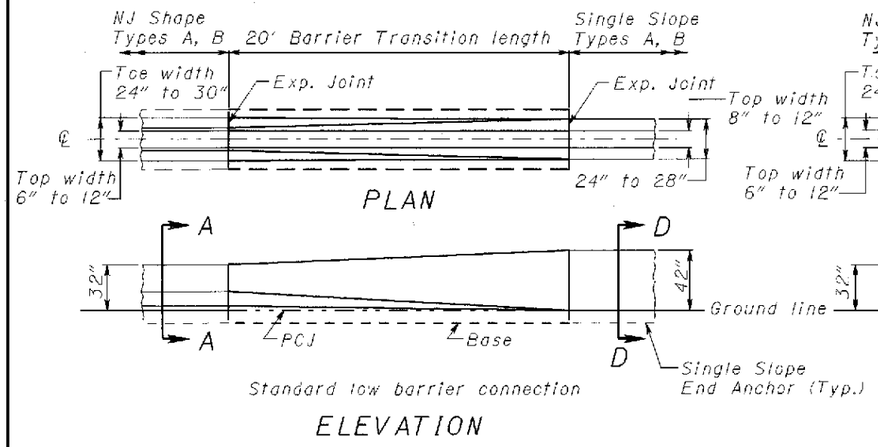
SIGN PLACEMENT

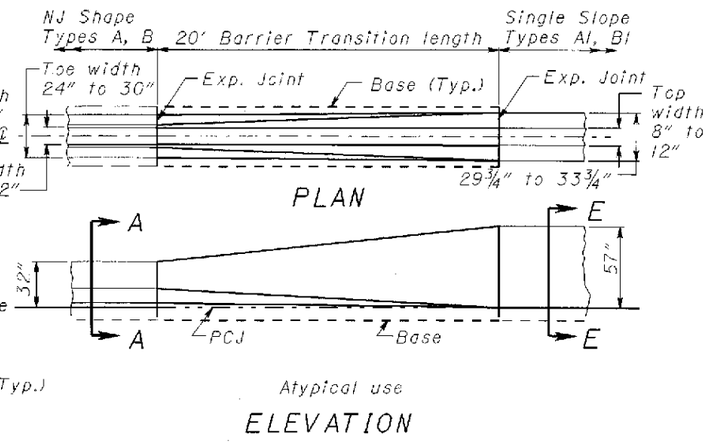
THE EXACT LOCATION OF SIGNS ARE TO BE STAKED AND CHECKED BY THE ENGINEER PRIOR TO PLACEMENT TO INSURE CLEARANCE OF DRIVES, ROADWAYS AND OTHER OBSTACLES. IF THERE ARE ANY CONFLICTS, THEY ARE TO BE ADJUSTED AS DIRECTED BY THE ENGINEER. PAYMENT FOR THIS IS INCIDENTAL TO ALL 630 ITEMS.

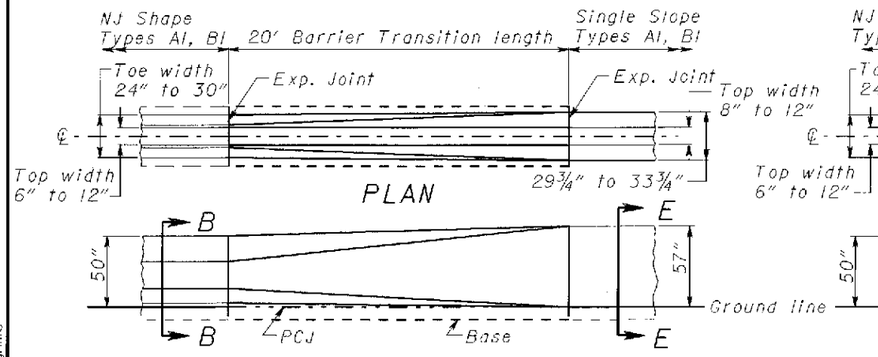
CALCULATED LMB CHECKED

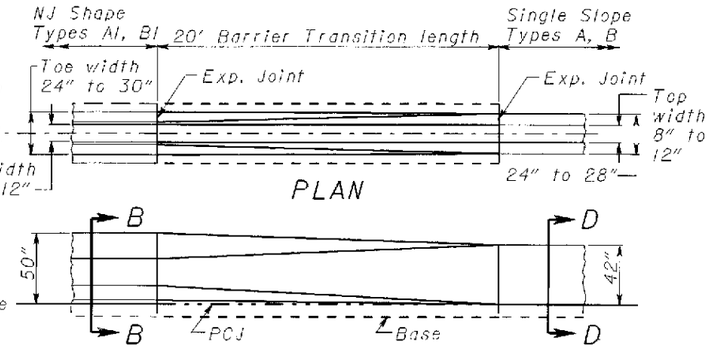
GENERAL NOTES

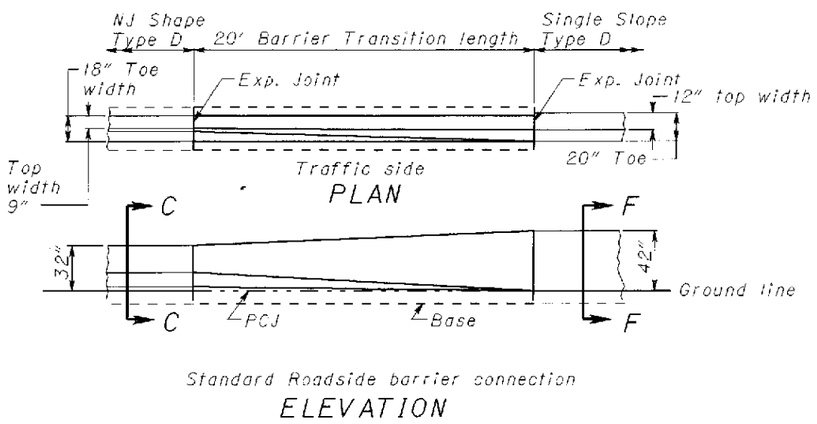
STA-30/297-6.06/0.17

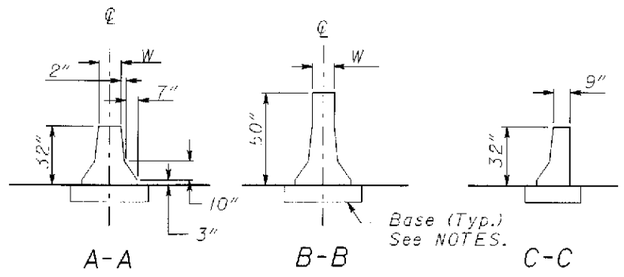






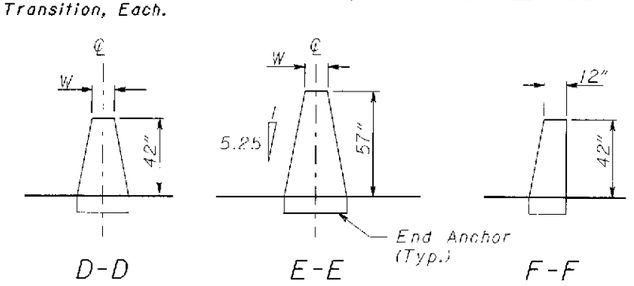






NJ SHAPE SECTIONS

See Plan Insert sheets for specific NJ Shape Concrete barrier details.



SINGLE SLOPE SECTIONS

See SCD RM-4.3 and RM-4.5 for specific Single Slope concrete barrier details.

NOTES

GENERAL: *This insert details the Barrier Transition, to connect existing NJ Concrete Barrier (safety shape) to a new run of Single Slope Concrete Barrier at locations shown on the plans. For NJ barrier shape and other details see the respective plan insert sheets. For Single Slope barrier details, see* ***SCD RM-4.3*** *(****RM-4.5*** *for Type D).*

ADJACENT CONCRETE BARRIER RUNS: *Remove any tapered end sections, Impact attenuators, or other guardrail hardware from existing barrier end.*

The barrier to barrier transition is not intended to be used at transition sections (those shown on ***SCD RM-4.4****), Inlets, or on Type C or CI Barrier.*

If proposed adjacent single slope barrier is Type A or A1, the Barrier Transiton should contain horizontal reinforcing steel similiar to that required in the respective single slope barrier. Reinforcement is not shown and should be detailed separately.

The adjacent single slope end should be terminated with a reinforced End Anchor as detailed on the SCDs.

BARRIER FACE TRANSITION: *To prevent vehicle snagging, a smooth transition from the safety shape face to the single slope face is made over a 20' [6 m] length. The actual shape of the Transition is dependent on both the adjacent NJ barrier and the single slope barrier Types, as detailed on the plans. The contractor and Engineer will agree on a construction method to ensure a smooth barrier face.*

MATERIALS: *Materials are same for those shown on* ***RM-4.3*** *and* ***RM-4.5****, except that cast-in-place is the only acceptable method. Edges may be chamfered or radiused as shown on those drawings.*

CONCRETE BASE: *Construct base as shown on the NJ shape insert sheets, including the methods detailing the footing joint, Permissible Construction Joint (PCJ), and Dowelling requirements. The width of the base matches the existing NJ barrier.*

Where barrier is to be placed at location of parapet removal, proposed shall be connected to existing using dowels fastened to existing with 6" dowel holes and non-shrink non-metallic grout.

JOINTS: *Construct joints as shown on respective barrier drawings.*

RACEWAYS: *When specified, place raceway(s) to match raceway elevation in adjoining segments. Place to obtain maximum concrete cover.*

METRIC UNITS: *Refer to respective barrier drawings or inserts for metric dimensions.*

PAYMENT: *This Barrier Transiton shall include all material and labor needed to construct this 20' [6 m] section, including any raceways, reinforcing steel, dowels and other necessary incidentals. Payment shall be made at the unit price for* ***Item 622 - Barrier Transition, Each.***

BARRIER TO BARRIER TRANSITION

BARRIER

STA-30/297-6.06/0.17

6A
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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. 4 OR MORE LANE ROADWAYS: A MINIMUM OF ONE ELEVEN FOOT LANE IN EACH DIRECTION SHALL BE MAINTAINED; ON TWO AND THREE LANE ROADWAYS: A MINIMUM OF ONE TEN FOOT BIDIRECTIONAL LANE SHALL BE MAINTAINED ON THE EXISTING PAVEMENT OR COMPLETED PAVEMENT DURING CONSTRUCTION OF THE WORK. ON RAMPS, A MINIMUM OF ONE TEN FOOT LANE SHALL BE MAINTAINED EXCEPT WHEN DETOURS ARE IN EFFECT.

2. THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (330) 786-2211, 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.

7. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMITTED TO HAVE SUCCESSIVE WORK ZONES UNLESS THE DISTANCE BETWEEN THE DRUMS, BARRICADES OR CONES EXCEEDS ONE [1] MILE.

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, 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 30 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: W8-1 [BUMP], W8-H13 [NO EDGE LINES], W8-11 [UNEVEN LANES SYMBOL]. THESE QUANTITES SHALL BE AS PER 614.04.

13. NO WORK SHALL BE PERFORMED OVER AN OPEN LANE OF TRAFFIC.

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

US-30: PHASE 1 (PLANED SURFACE)	
ITEM 614 WORK ZONE LANE LINE, CLASS II	14.63 MILE
ITEM 614 WORK ZONE STOP LINE, CLASS I	188 FT.
ITEM 614 WORK ZONE CHANNELIZING LINE, CLASS I	3804 FT.
ITEM 614 WORK ZONE MARKING SIGN (ALL PHASES)	32 EACH
US-30: PHASE 2 (INTERMEDIATE COURSE)	
ITEM 614 WORK ZONE LANE LINE, CLASS II	14.63 MILE
ITEM 614 WORK ZONE STOP LINE, CLASS I	188 FT.
ITEM 614 WORK ZONE CHANNELIZING LINE, CLASS I	3804 FT.
US-30: PHASE 3 (SURFACE COURSE)	
ITEM 614 WORK ZONE LANE LINE, CLASS II	14.63 MILE
ITEM 614 WORK ZONE STOP LINE, CLASS I	188 FT.
ITEM 614 WORK ZONE CHANNELIZING LINE, CLASS I	3804 FT.
SR-297: PHASE 1 (PLANED SURFACE)	
ITEM 614 WORK ZONE LANE LINE, CLASS II	0.73 MILE
ITEM 614 WORK ZONE STOP LINE, CLASS I	148 FT.
ITEM 614 WORK ZONE CHANNELIZING LINE, CLASS I	1310 FT.
ITEM 614 WORK ZONE MARKING SIGN (BOTH PHASES)	6 EACH
SR-297: PHASE 2 (SURFACE COURSE)	
ITEM 614 WORK ZONE LANE LINE, CLASS II	0.73 MILE
ITEM 614 WORK ZONE STOP LINE, CLASS I	148 FT.
ITEM 614 WORK ZONE CHANNELIZING LINE, CLASS I	1310 FT.

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.

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.

WINTER TRAFFIC LIMITATIONS

ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC BETWEEN NOVEMBER 15 AND APRIL 1. NOVEMBER 14 SHALL BE CONSIDERED TO CONSTITUTE AN INTERIM COMPLETION DATE AND LIQUIDATED DAMAGES AS SPECIFIED IN 108.07 SHALL BE ASSESSED FOR EACH CALENDAR DAY THAT THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT. THE CONTRACTOR MAY CLOSE LANES PRIOR TO APRIL 1 WITH WRITTEN APPROVAL FROM THE DISTRICT CONSTRUCTION ENGINEER.

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.

MAINTENANCE OF SHOULDERS - US-30

THE USE OF SHOULDERS TO MAINTAIN TRAFFIC IS PROHIBITED. SHOULD ANY EXISTING OR NEW SHOULDER AREAS BECOME DAMAGED OR DESTROYED DUE TO THE CONTRACTOR'S NEGLIGENCE OR FAILURE TO PROVIDE ADEQUATE SIGNS, BARRICADES, CONES, FLAGGERS OR OTHER TRAFFIC CONTROL DEVICES, THE RESTORATION OF THE SHOULDERS WILL BE AT THE CONTRACTORS EXPENSE, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

IN ORDER TO PREVENT TRAFFIC FROM STRAYING ONTO THE SHOULDERS, THE LANES ON THE PLANED SURFACE AND INTERMEDIATE SURFACE COURSES SHALL BE STRIPED 11' WIDE. ADDITIONALLY, WEIGHTED CHANNELIZERS SHALL BE PLACED BEHIND THE EDGE LINES DURING PAVING OPERATIONS.

THE FOLLOWING QUANTITY HAS BEEN PROVIDED FOR THIS WORK:

ITEM 614 WORK ZONE EDGE LINE, CLASS I	56.32 MILE

CALCULATED MJH
CHECKED LAB

MAINTENANCE OF TRAFFIC GENERAL NOTES

STA-30/297-6.06/0.17

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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.

LANE CLOSURES

DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AS PER THE PERMITTED LANE CLOSURE CHART. THE PERMITTED LANE CLOSURE CHART USED FOR THIS PROJECT SHALL BE THE MOST CURRENT CHART AVAILABLE ON THE DATE THIS PROJECT SELLS.

THE CHART CAN BE FOUND AT:

https://dotaw100.dot.state.oh.us/plcm/plcm_web.jsp

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THE REQUIREMENTS IN THE CHART, THE CONTRACTOR SHALL BE ASSESSED LIQUIDATED DAMAGES IN THE AMOUNT OF $2,000 PER HOUR OR PORTION THEREOF THAT THE LANE REDUCTION REMAINS BEYOND THE SPECIFIED LIMIT.

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. THIS LIST IS AVAILABLE ON THE ODOT WEBSITE AT HTTP://WWW.DOT.STATE.OH.US/TESTLAB/APPLISTS/MISC/PCMS.HTM. THE CLASS I UNITS SHALL HAVE A MINIMUM LEGIBILITY DISTANCE OF 1250 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. PCMS TRAILERS SHOULD BE DELINEATED ON A PERMANENT BASIS BY AFFIXING RETROREFLECTIVE MATERIAL, IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER AS SEEN BY ONCOMING ROAD USERS.

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. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. 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, DE-ACTIVATED 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 — 8 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 AS DIRECTED BY THE ENGINEER 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 PATROL CAR SHALL BE A PUBLIC SAFETY VEHICLE AS REQUIRED BY THE OHIO REVISED CODE.

THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THESE SERVICES WITH:

CANTON PATROL POST
4710 SHUFFEL ROAD
NORTH CANTON, OHIO 44720
330-433-6200

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 360 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.

DETOUR DURATION

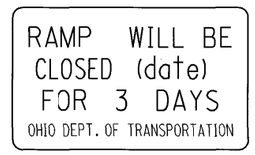
THE MAXIMUM LENGTH OF TIME FOR EACH DETOUR TO BE IN EFFECT SHALL BE THREE (3) CONSECUTIVE DAYS. CONSTRUCTION WORK MAY BE PERFORMED BEFORE AND AFTER THE DETOUR LIMITATION DATES, BUT THERE SHALL BE NO RESTRICTIONS TO THROUGH OR LOCAL TRAFFIC. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SCHEDULE 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.

DETOUR NOTIFICATION

THE CONTRACTOR SHALL ADVISE THE ODOT DISTRICT OFFICE (330-786-3148) EIGHTEEN (18) DAYS IN ADVANCE OF WHEN THE DETOUR ROUTE SHOULD BE IN EFFECT. ALL WORK ZONE DEVICES REQUIRED 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.

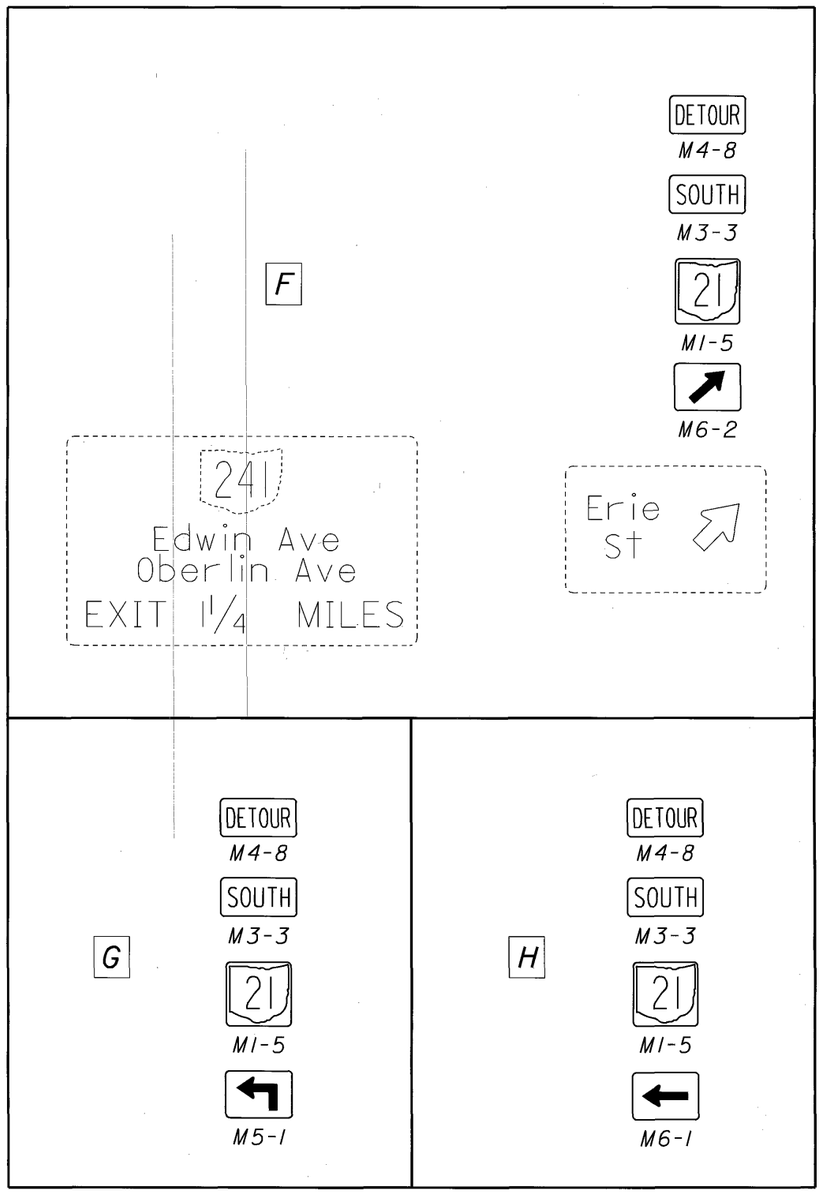
ITEM 614, MAINTAINING TRAFFIC (NOTICE OF CLOSURE SIGN)

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.



W20-H14

LEGEND FOR DETOUR MAP - RAMP K SEE NEXT SHEET



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MAINTENANCE OF TRAFFIC GENERAL NOTES

STA-30/297-6.06/0.17

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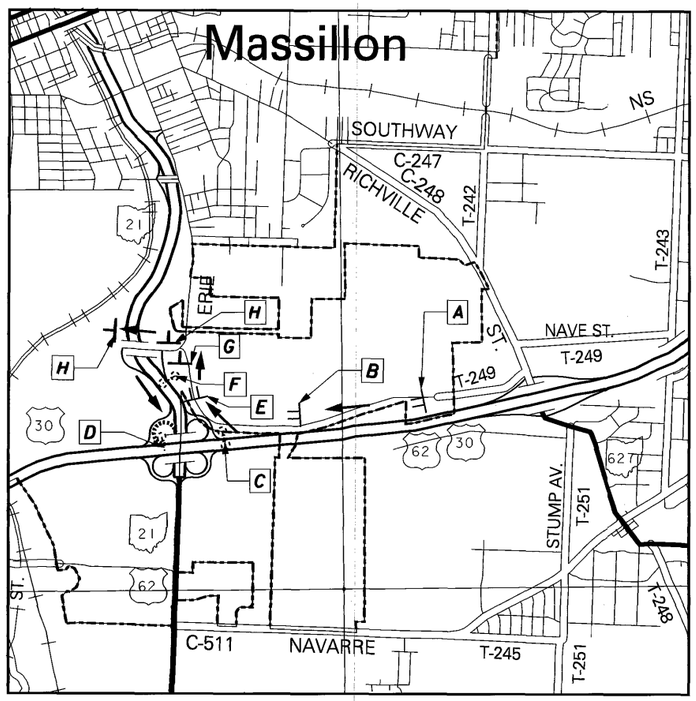
60



DETOUR MAP - RAMP K

LEGEND

..... - RAMP CLOSURE, USE TYPE III BARRICADES

← - OFFICIAL SIGNED DETOUR: SR-21 NORTHBOUND / ERIE ST.

(NOT TO SCALE)

A

DETOUR M4-8
SOUTH M3-3
21 M1-5

62 21
Massillon
Millersburg
EXIT 1 MILE

B

DETOUR M4-8
SOUTH M3-3
21 M1-5

21 NORTH
Massillon
RIGHT LANE

C

DETOUR M4-8
SOUTH M3-3
21 M1-5
M6-2

30 WEST
Wooster

62 WEST 21 SOUTH
Millersburg
96" x 24" CLOSED
EXIT 1/4 MILE

21 NORTH
Massillon

D

WEST SOUTH
62 21
96" x 24" CLOSED
Millersburg

E

DETOUR M4-8
SOUTH M3-3
21 M1-5

Erie St
NEXT RIGHT

MAINTENANCE OF TRAFFIC GENERAL NOTES

CALCULATED MJH
CHECKED

STA-30/297-6.06/0.17

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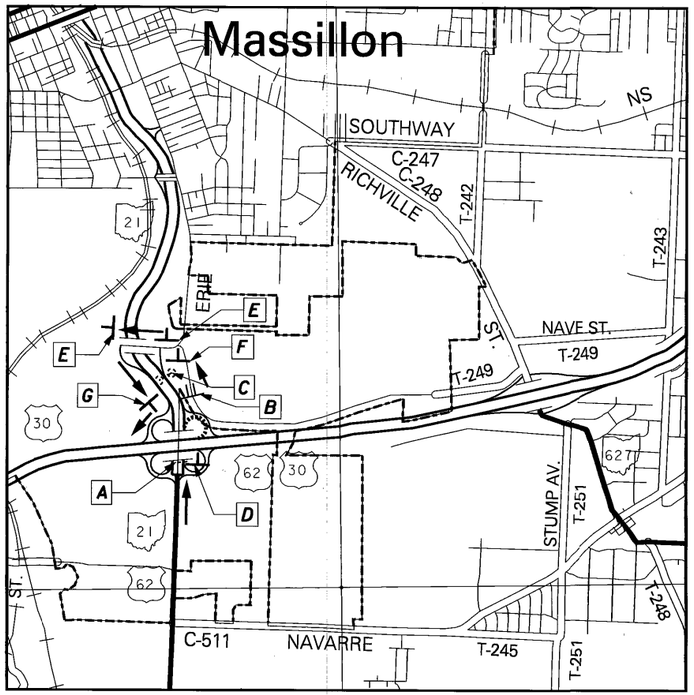


DETOUR MAP - RAMP G

LEGEND

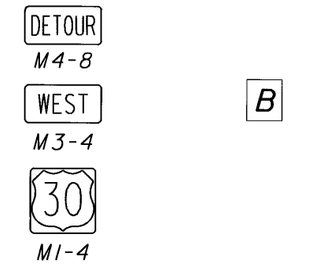
..... - RAMP CLOSURE, USE TYPE III BARRICADES

← - OFFICIAL SIGNED DETOUR: SR-21 NORTHBOUND / ERIE ST.

(NOT TO SCALE)

A

B



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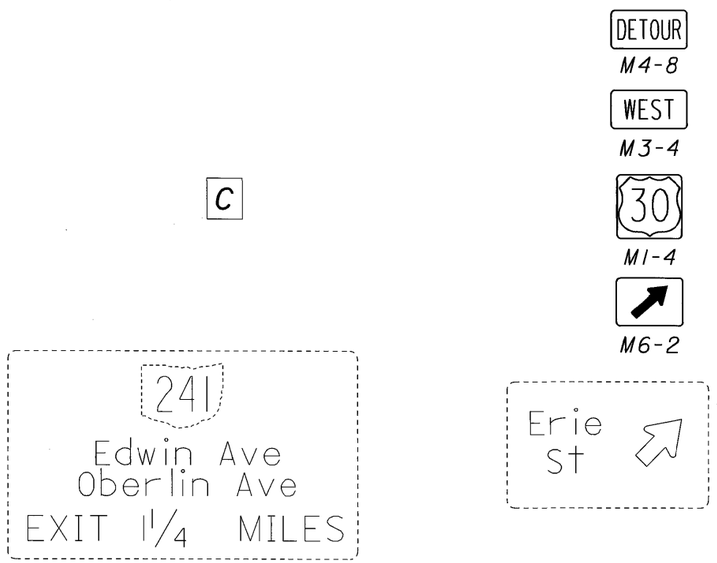

D

E

F

G

CALCULATED MJH CHECKED

MAINTENANCE OF TRAFFIC GENERAL NOTES

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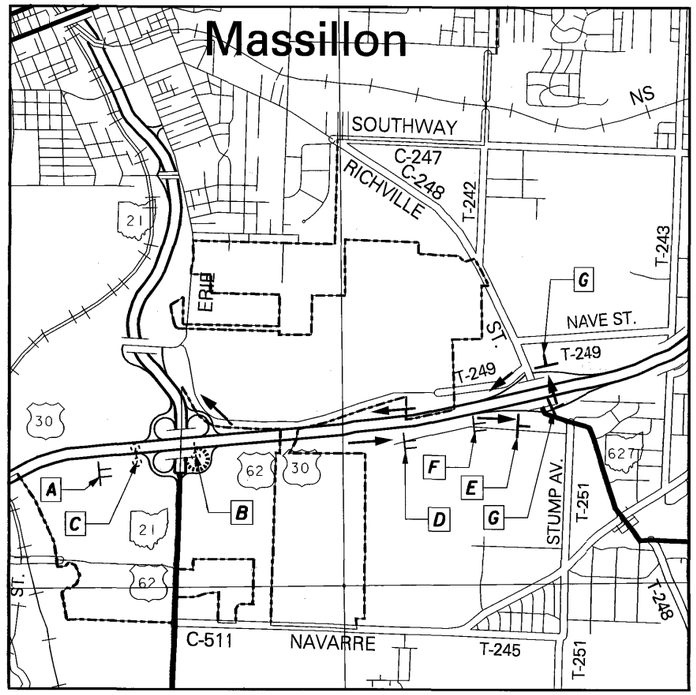


DETOUR MAP - RAMP F

LEGEND

..... - RAMP CLOSURE, USE TYPE III BARRICADES

← - OFFICIAL SIGNED DETOUR: SR-21 NORTHBOUND / ERIE ST.

(NOT TO SCALE)

A

DETOUR M4-8

NORTH M3-1

21 M1-5

62 21

New Philadelphia
Massillon

EXIT 1 MILE

D

DETOUR M4-8

NORTH M3-1

21 M1-5

627

Richville Dr

EXIT 1 MILE

F

DETOUR M4-8

NORTH M3-1

21 M1-5

M6-2 627

Richville Dr

B

21 NORTH

96" x 24" CLOSED

Massillon

E

DETOUR M4-8

NORTH M3-1

21 M1-5

M5-1

G

DETOUR M4-8

NORTH M3-1

21 M1-5

M6-1

C

DETOUR M4-8

NORTH M3-1

21 M1-5

30 62 EAST

Canton

21 NORTH

96" x 24" CLOSED

Massillon

EXIT 1/4 MILE

WEST SOUTH

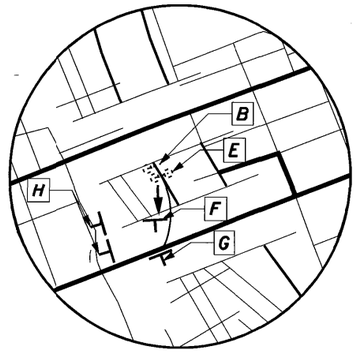
62 21

New Philadelphia

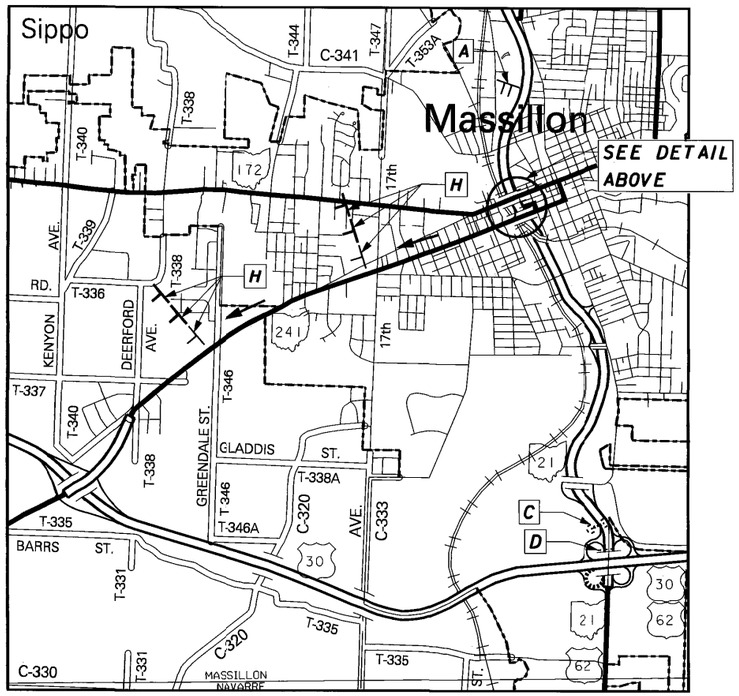
CALCULATED MJH
CHECKED

MAINTENANCE OF TRAFFIC GENERAL NOTES

STA-30/297-6.06/0.17



DETAIL



DETOUR MAP - RAMP I

LEGEND

..... - RAMP CLOSURE, USE TYPE III BARRICADES

← - OFFICIAL SIGNED DETOUR: SR-21 NORTHBOUND / ERIE ST.

(NOT TO SCALE)

A

DETOUR M4-8 | DETOUR M4-8
EAST M3-2 | EAST M3-2
30 M1-4 | 62 M1-4

Oberlin Ave
EXIT 1/4 MILE

B

DETOUR M4-8 | DETOUR M4-8
EAST M3-2 | EAST M3-2
30 M1-4 | 62 M1-4
M6-2 | M6-2

241
Oberlin Ave

C

62 WEST | 21 SOUTH
New Philadelphia

D

30 | 62 EAST
96" x 24" CLOSED
Canton

E

DETOUR M4-8 | DETOUR M4-8
EAST M3-2 | EAST M3-2
30 M1-4 | 62 M1-4
M6-2 | M6-2

30 | 62
Wooster
Canton
EXITS 1 1/2 MILES

Erie St
EXIT 1 MILE

241
Oberlin Ave

F

DETOUR M4-8 | DETOUR M4-8
EAST M3-2 | EAST M3-2
30 M1-4 | 62 M1-4
M5-1 | M5-1

G

DETOUR M4-8 | DETOUR M4-8
EAST M3-2 | EAST M3-2
30 M1-4 | 62 M1-4
M6-1 | M6-1

H

DETOUR M4-8 | DETOUR M4-8
SOUTH | EAST M3-2 | EAST M3-2
241 | 30 M1-4 | 62 M1-4
M6-3 | M6-3

30 EAST | 62 EAST
96" x 24" CLOSED
Canton
EXIT 1/4 MILE

30 WEST
Wooster

MAINTENANCE OF TRAFFIC GENERAL NOTES

CALCULATED MJH
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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 PCB - 91, 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 W8-9 (Low Shoulder) signs or W8-11 (Uneven Lanes) and R4-9 (Stay in 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.

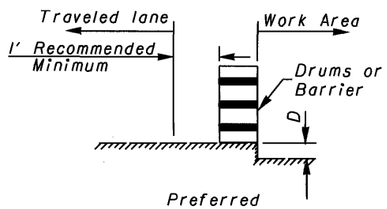
   b. Lengths of 60 feet or less - repairs shall be affected in accordance with Item 255.08. Drums may be used as a separator adjacent to the traveled lane.

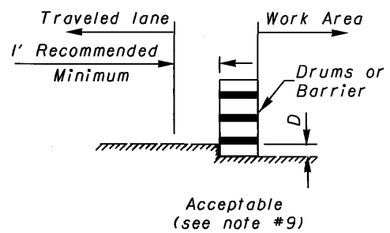
CONDITION I

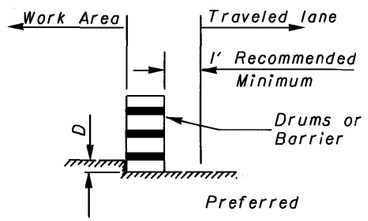
1. These treatments are to be used for resurfacing, pavement planing excavation, etc., between, beside or within traveled lanes.

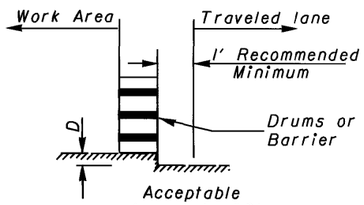
Distance From Traveled Lane	D (in)	Treatment
1FT-12FT	≤ 1½	Erect W8-11.
1FT-12FT	1½-3	1. Lane closure utilizing drums* as shown below. (use only on 3 or more lanes) - or - 2. Optional Wedge Treatment.
1FT-12FT	3 - 5	Lane closure utilizing drums as shown below
1FT-12FT	5 - 12	Lane closure utilizing portable concrete barrier as shown below.
>12FT-20FT	12 - 24	Lane closure utilizing drums as shown below
>12FT-20FT	>24	Lane closure utilizing portable concrete barrier as shown below.

*Cones may be used for daytime only conditions.







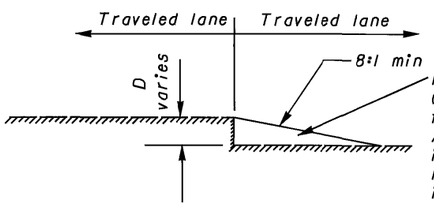


OPTIONAL WEDGE TREATMENT

(MILLING OR RESURFACING)

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

2. W8-11 and R4-9 signs required.



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

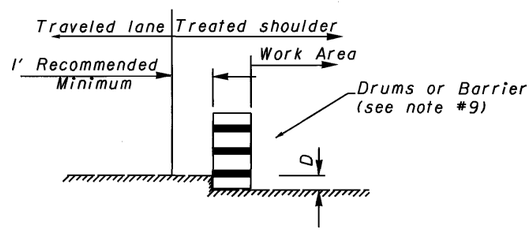
CONDITION II

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

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

Distance From Traveled Lane	D (in)	Treatment
1FT-12FT	≤ 1½	1.) If edgelines are present, no treatment necessary. or 2.) Erect W8-11 and R4-9 signs
1FT-12FT	1½- 5	1) If min. lane widths* requirements can be met, maintain lanes utilizing drums as shown below. - or - 2) If min. lane width* requirements cannot be met, close adjacent lane utilizing drums. (use only on 3 or more lanes) - or - 3) Optional shoulder treatment
>12FT-30FT	<= 24	Shoulder closure utilizing drums as shown below
>12FT-30FT	>24	Shoulder closure utilizing portable concrete barrier as shown below.

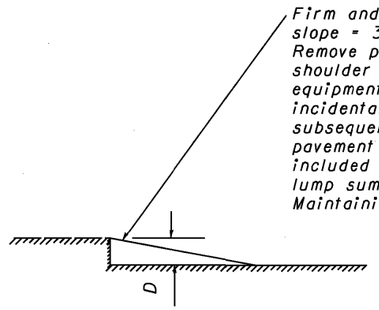
*Minimum lane widths shall be 10' unless otherwise specified in the plans.



OPTIONAL SHOULDER TREATMENT

1. This treatment shall not be used within a bituminous shoulder where a hot longitudinal joint per 401.17 is required.

2. W8-9 signs required.



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

DROPOFFS IN WORK ZONES

STA-30/297-6.06/0.17

SHEET NUMBER								PARTICIPATION			ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
				5	18	19	20	NHS	NON-NHS							
															ROADWAY	
								Lump			201	11000	LUMP		CLEARING AND GRUBBING	
					28			28			202	30700	28	FT	CONCRETE BARRIER REMOVED	
					16512.5			15437.5	1075		202	38000	16512.5	FT	GUARDRAIL REMOVED	
							985	985			202	54000	985	EACH	RAISED PAVEMENT MARKER REMOVED	
					12			12			203	10000	12	CU YD	EXCAVATION	
					171			160	11		209	60201	171	STATION	LINEAR GRADING, AS PER PLAN	5
					15237.5			14287.5	950		606	13000	15237.5	FT	GUARDRAIL, TYPE 5	
					37.5			37.5			606	13050	37.5	FT	GUARDRAIL, TYPE 5A	
					28			28			606	22000	28	EACH	ANCHOR ASSEMBLY, TYPE B-98	
					9			7	2		606	22010	9	EACH	ANCHOR ASSEMBLY, TYPE E-98	
					21			19	2		606	26500	21	EACH	ANCHOR ASSEMBLY, TYPE T	
					25			25			606	35000	25	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 1	
					11			11			606	35100	11	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 2	
					100			100			622	10160	100	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D	
					2			2			622	10200	2	EACH	BARRIER TRANSITION	
					8			8			622	25000	8	EACH	CONCRETE BARRIER END SECTION, TYPE D	
															EROSION CONTROL	
				3252				3048	204		659	10000	3252	SQ YD	SEEDING AND MULCHING	
				0.44				0.41	0.03		659	20000	0.44	TON	COMMERCIAL FERTILIZER	
				0.67				0.63	0.04		659	31000	0.67	ACRE	LIME	
				18				17	1		659	35000	18	M GAL	WATER	
															PAVEMENT	
						7398		7122	276		251	01000	7398	SQ YD	PARTIAL DEPTH PAVEMENT REPAIR	
						369899		356102	13797		254	01000	369899	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE	
					12			12			301	46000	12	CU YD	ASPHALT CONCRETE BASE, PG64-22	
						55487		53417	2070		407	10000	55487	GALLON	TACK COAT	
						11473		11473			407	14000	11473	GALLON	TACK COAT FOR INTERMEDIATE COURSE	
						18723		17803	920		408	10001	18723	GALLON	PRIME COAT, AS PER PLAN	6
						15422		14847	575		442	10050	15422	CU YD	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B (446)	
						13944		13944			442	10150	13944	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE B (446)	
					428			395	33		448	46061	428	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, UNDER GUARDRAIL, PG64-22, AS PER PLAN	5
						2600		2472	128		617	10101	2600	CU YD	COMPACTED AGGREGATE, AS PER PLAN	6

CALCULATED RCB
CHECKED

GENERAL SUMMARY

STA-30/297-6.06/0.17

SHEET NUMBER								PARTICIPATION			ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
			5	18	20	21	36	NHS	NON-NHS							
															TRAFFIC CONTROL	
					624			624			621	10010	624	EACH	RPM, LOW PROFILE, WHITE	
					14			14			621	10020	14	EACH	RPM, LOW PROFILE WHITE/RED	
					35			35			621	10030	35	EACH	RPM, LOW PROFILE YELLOW/RED	
				286				273	13		626	00100	286	EACH	BARRIER REFLECTOR, TYPE A	
				6				6			626	00200	6	EACH	BARRIER REFLECTOR, TYPE B	
							2359.5	2359.5			630	03100	2359.5	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
							415.3	415.3			630	06400	415.3	FT	GROUND MOUNTED SUPPORT, S4 X 7.7 BEAM	
							64.3	64.3			630	06500	64.3	FT	GROUND MOUNTED SUPPORT, W6 X 9 BEAM	
							48.3	48.3			630	07000	48.3	FT	GROUND MOUNTED SUPPORT, W8 X 18 BEAM	
							290.5	290.5			630	07500	290.5	FT	GROUND MOUNTED SUPPORT, W10 X 22 BEAM	
							122.3	122.3			630	07600	122.3	FT	GROUND MOUNTED SUPPORT, W10 X 12 BEAM	
							377.0	377.0			630	08000	377.0	FT	GROUND MOUNTED SUPPORT, W12 X 30 BEAM	
							77.5	77.5			630	08004	77.5	FT	ONE WAY SUPPORT, NO. 3 POST	
							64	64			630	09000	64	EACH	BREAKAWAY BEAM CONNECTION	
							1	1			630	20600	1	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 6	
							1	1			630	35500	1	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-7.65, DESIGN 6	
							24	24			630	75000	24	EACH	SIGN ATTACHMENT ASSEMBLY, RIGID OVERHEAD	
							5	5			630	79500	5	EACH	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	
							1704.1	1704.1			630	80100	1704.1	SQ FT	SIGN, FLAT SHEET	
							2735.5	2735.5			630	80200	2735.5	SQ FT	SIGN, GROUND MOUNTED EXTRUSHEET	
							1433.0	1433.0			630	80224	1433.0	SQ FT	SIGN, OVERHEAD EXTRUSHEET	
							64	64			630	84500	64	EACH	GROUND MOUNTED BEAM SUPPORT FOUNDATION	
							3	3			630	84510	3	EACH	RIGID OVERHEAD SIGN SUPPORT FOUNDATION	
							200	200			630	84900	200	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
							5	5			630	85100	5	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
							17	17			630	85400	17	EACH	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL	
							1	1			630	85600	1	EACH	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND REERECTION	
							143	143			630	86002	143	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
							61	61			630	86102	61	EACH	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL	
							11	11			630	87400	11	EACH	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL	
							3	3			630	89808	3	EACH	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL, TYPE TC-18.26	
			8					8			630	89902	8	EACH	REMOVAL OF MISCELLANEOUS TRAFFIC CONTROL ITEM, BEAM SUPPORT FOUNDATION	5
							10	10			631	94200	10	EACH	REMOVAL OF LUMINAIRE AND DISPOSAL	
							2	2			631	94304	2	EACH	REMOVAL OF DISCONNECT SWITCH AND DISPOSAL	
							6	6			631	94406	6	EACH	REMOVAL OF SIGNS WIRED	
							2	2			631	94412	2	EACH	REMOVAL OF SIGN SERVICE AND DISPOSAL	
						36.97		35.99	0.98		646	10000	36.97	MILE	EDGE LINE	
						15.36		14.63	0.73		646	10100	15.36	MILE	LANE LINE	
						5114		3804	1310		646	10300	5114	FT	CHANNELIZING LINE	
						336		188	148		646	10400	336	FT	STOP LINE	
						609		609			646	10600	609	FT	TRANSVERSE/DIAGONAL LINE	
						15			15		646	20300	15	EACH	LANE ARROW	
			9					9			SPECIAL	69099000	9	ACRE	MISC.: CLEARING GRUBBING	5,57

CALCULATED RCB CHECKED

GENERAL SUMMARY

STA-30/297-6.06/0.17

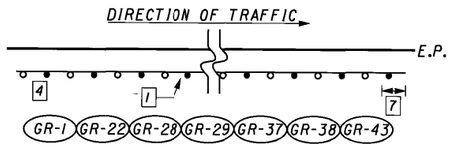
SHEET NUMBER								PARTICIPATION			ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
						7	8	NHS	NON-NHS							
															STRUCTURES	
															FOR STRUCTURE GENERAL SUMMARY	59
															MAINTENANCE OF TRAFFIC	
							360	360			614	11100	360	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR	
								LUMP			614	12420	LUMP		DETOUR SIGNING	
						38		32	6		614	12460	38	EACH	WORK ZONE MARKING SIGN	
						30		30			614	13000	30	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
							8	8			614	18601	8	SIGN MNTH	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	8
						45.35		43.89	1.46		614	20400	45.35	MILE	WORK ZONE LANE LINE, CLASS II	
						56.32		56.32			614	22000	56.32	MILE	WORK ZONE EDGE LINE, CLASS I	
						14032		11412	2620		614	23000	14032	FT	WORK ZONE CHANNELIZING LINE, CLASS I	
						860		564	296		614	26000	860	FT	WORK ZONE STOP LINE, CLASS I	
											614	11000	LUMP		MAINTAINING TRAFFIC	
											619	16020	21	MONTH	FIELD OFFICE, TYPE C	
											623	10000	LUMP		CONSTRUCTION LAYOUT STAKES	
											624	10000	LUMP		MOBILIZATION	

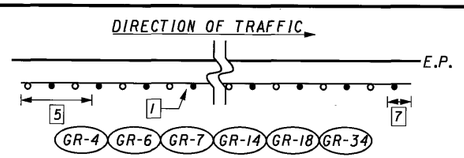
CALCULATED WHV CHECKED

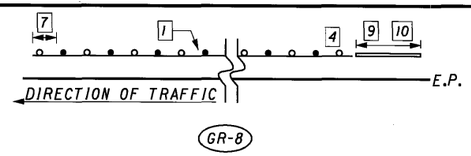
GENERAL SUMMARY

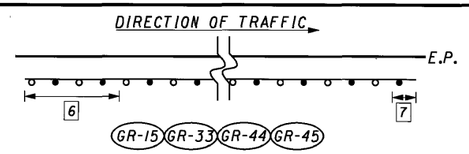
STA-30/297-6.06/0.17

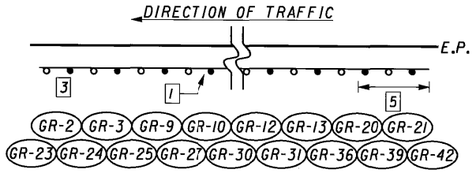
17/60

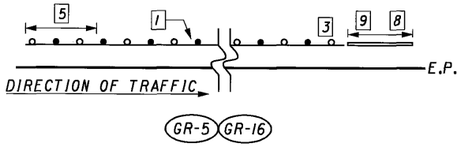


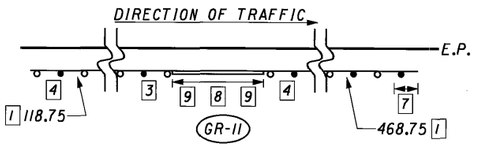


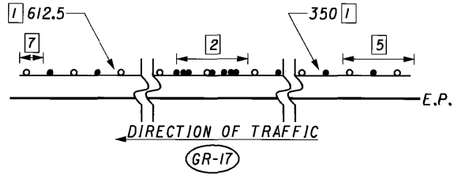




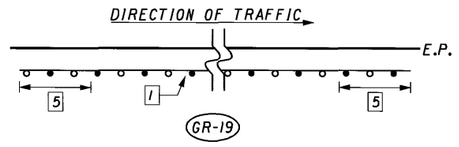


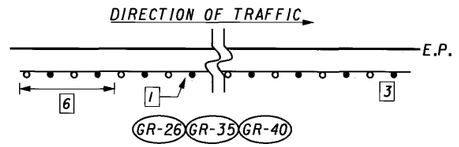


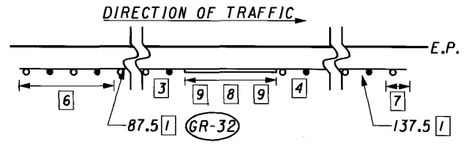


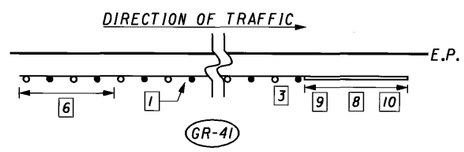


REF NO.	SIDE	202 CONCRETE BARRIER REMOVED	202 GUARDRAIL REMOVED	203 EXCAVATION	209 LINEAR GRADING, AS PER PLAN	301 6" ASP. CONC. BASE, PG64-22	448 2" ASP. CONC. INTERMED. COURSE, TYPE I, UNDER G-RAIL, PG64-22, AS PER PLAN	606 GUARDRAIL, TYPE 5	606 GUARDRAIL, TYPE 5A	606 ANCHOR ASSEMBLY, TYPE B-98	606 ANCHOR ASSEMBLY, TYPE E-98	606 ANCHOR ASSEMBLY, TYPE T	606 BRIDGE TERMINAL ASSEMBLY, TYPE 1	606 BRIDGE TERMINAL ASSEMBLY, TYPE 2	622 CONCRETE BARRIER, SINGLE SLOPE, TYPE D	622 BARRIER TRANSITION	622 CONCRETE BARRIER, END SECTION, TYPE D	626 BARRIER REFLECTOR		COMMENTS
		FT	FT	CU YD	STATION	CU YD	CU YD	FT	FT	EACH	EACH	EACH	EACH	EACH	FT	EACH	EACH	TYPE A EACH	TYPE B EACH	FLARE RATIO 15:1 (TYP.)
GR-1	RT		1425		14.25		43.98	1412.5				1		1				16		
GR-2	MED LT		200		2.69		1.54	231.25		1			1					4		212.5' flare & arc per gr-6.1
GR-3	LT		300		3.06		4.63	268.75		1			1					5		150' flare & arc per gr-6.1
GR-4	RAMP L		537.5		5.38		10.8	487.5		1		1						7		150' flare & arc
GR-5	MED RT		125	1.68	1	1.68	1.54	62.5		1			1		20		1	2	1	44.25' flare & arc
GR-6	RAMP J		500		5		10.8	450		1		1						11		125' flare & arc
GR-7	RAMP K		275		2.75		8.49	225		1		1						7		
GR-8	LT & RAMP K	14	500	0.99	4.63	0.99	14.27	450				1		1		1	1	11	1	
GR-9	MED RT		200		2.69		1.54	231.25		1			1					7		212.5' flare & arc per gr-6.1
GR-10	RAMP I		487.5		4.88		15.05	450		1			1					11		
GR-11	RT & RAMP F		650	2.37	6	2.37	18.52	587.5				1	1	2	20		2	13	1	
GR-12	MED LT		200		2.69		1.54	231.25		1			1					7		212.5' flare & arc per gr-6.1
GR-13	RAMP G		337.5		3.38		10.42	300		1			1					5		
GR-14	RAMP F		400		4		12.35	350		1		1						5		
GR-15	RAMP E		550		5.5		16.98	487.5			1	1						7		
GR-16	MED LT		125	1.68	1	1.68	1.54	62.5		1			1		20		1	2	1	44.25' flare & arc
GR-17	RAMP H		1050		10.5		30.86	962.5	37.5	1		1						12		150' flare & arc per gr-6.1
GR-18	LT		125		1.25		1.54	75		1		1						4		50' flare & arc
GR-19	RAMP B		937.5		9.38		22.38	862.5		2								20		200' flare & arc per gr-6.1 leading end
GR-20	RT		400		4		12.35	362.5		1			1					9		
GR-21	MED RT		175		2.69		1.54	231.25		1			1					7		212.5' flare & arc per gr-6.1
GR-22	LT		375		3.75		11.57	362.5				1		1				9		
GR-23	RT		275		2.75		8.49	237.5		1			1					7		
GR-24	MED LT		175		2.69		1.54	231.25		1			1					4		212.5' flare & arc per gr-6.1
GR-25	LT		200		2.13		4.63	175		1			1					4		150' flare & arc per gr-6.1
GR-26	RT		250		2.5		7.72	200			1		1					4		
GR-27	MED RT		200		2.69		1.54	231.25		1			1					4		212.5' flare & arc per gr-6.1
GR-28	LT		162.5		1.63		5.02	150				1		1				3		
GR-29	RT		287.5		2.88		8.87	275				1		1				4		
GR-30	MED LT		200		2.69		1.54	231.25		1			1					4		212.5' flare & arc per gr-6.1
GR-31	LT		475		4.75		14.66	437.5		1			1					6		
GR-32	RT & RAMP N		337.5	2.37	2.88	2.37	8.87	225			1	1	1	1	20		2	4	1	
GR-33	RAMP M		712.5		7.13		21.99	650			1	1						9		
GR-34	RAMP N		125		1.25		3.86	75		1		1						3		
GR-35	RT		250		2.5		7.72	200			1		1					4		
GR-36	MED RT		200		2.69		1.54	231.25		1			1					4		212.5' flare & arc per gr-6.1
GR-37	LT		175		1.75		5.4	162.5				1		1				3		
GR-38	RT		225		2.25		6.94	212.5				1		1				4		
GR-39	MED LT		200		2.69		1.54	231.25		1			1					4		212.5' flare & arc per gr-6.1
GR-40	LT		375		3.75		11.57	325			1		1					5		
GR-41	RT	14	262.5	1.98	2.13	1.98	6.56	162.5			1		1		20	1	1	4	1	
GR-42	MED RT		200		2.69		1.54	231.25		1			1					4		212.5' flare & arc per gr-6.1
GR-43	LT		275		2.75		8.49	262.5				1		1				4		
GR-44	SR 297 WB LT		400		4		12.35	337.5			1	1						5		
GR-45	SR 297 WB RT		675		6.75		20.83	612.5			1	1						8		
TO GEN. SUM.		28	16512.5	12	171	12	428	15237.5	37.5	28	9	21	25	11	100	2	8	286	6	









LEGEND

1. 606, GUARDRAIL, TYPE 5
2. 606, GUARDRAIL, TYPE 5A
3. 606, BRIDGE TERMINAL ASSEMBLY, TYPE 1
4. 606, BRIDGE TERMINAL ASSEMBLY, TYPE 2
5. 606, ANCHOR ASSEMBLY, TYPE B-98
6. 606, ANCHOR ASSEMBLY, TYPE E-98
7. 606, ANCHOR ASSEMBLY, TYPE T
8. 622, CONCRETE BARRIER, SINGLE SLOPE, TYPE D (20' typ.)
9. 622, CONCRETE BARRIER END SECTION, TYPE D
10. 622, BARRIER TRANSITION (SEE PLAN INSERT SHEET)

NOTE:
SEE SCD RM-4.5 AND PLAN INSERT SHEET "BARRIER TO BARRIER TRANSITION" FOR ADDITIONAL DETAILS.

SEE SCHEMATIC PLAN FOR REFERENCE NUMBER LOCATIONS.

THE BARRIER DETAILS SHOWN HERE ARE REPRESENTATIVE OF THE PROPOSED BARRIER WORK AND MAY REQUIRE TO BE MIRRORED HORIZONTALY OR VERTICALLY, BASED UPON THE DIRECTION OF TRAFFIC AT EACH LOCATION.

CALCULATED RCB
CHECKED TJP

GUARDRAIL SUBSUMMARY

STA-30/297-6.06/0.17

18
60

PAVEMENT DATA

ROUTE	S.L.M. FROM	S.L.M. TO	LENGTH MILES	LENGTH FEET	WP AVG. FEET	PAVEMENT AREA SQ. YD.	251 PARTIAL DEPTH PAVEMENT REPAIR S. Y.	254 PAVEMENT PLANING, ASPHALT CONCRETE THK. IN.	254 S. Y.	407 TACK COAT @ 0.075 GAL/SY GAL.	407 @ 0.15 GAL/SY GAL.	407 TACK COAT FOR INTERMED. COURSE @ 0.04 GAL/SY GAL.	408 PRIME COAT, AS PER PLAN [1] @ 0.4 GAL/SY GAL.	442 ASPHALT CONCRETE SURFACE COURSE, 12.5mm, TYPE B (446) 1½" AVG. THICKNESS C. Y.	442 ASPHALT CONCRETE INTERMED. COURSE, 19mm, TYPE B (446) AVG. THK. IN.	442 C. Y.	617 COMPACTED AGGREGATE, AS PER PLAN [1] C. Y.
US 30	6.06	6.71	0.65	3432	72	27456	549	2½	27456		4118	1098	1220	1144	1¾	1335	169
US 30	6.80	7.69	0.89	4699	72	37592	752	2½	37592		5639	1504	1671	1567	1¾	1828	232
US 30	7.73	9.58	1.85	9768	72	78144	1563	2½	78144		11722	3126	3473	3256	1¾	3799	482
US 30	9.60	10.32	0.72	3802	72	30416	608	2½	30416		4562	1217	1352	1268	1¾	1479	188
US 30	10.34	12.57	2.23	11774	72	94192	1884	2½	94192		14129	3768	4186	3925	1¾	4579	581
US 30	12.60	13.05	0.45	2376	72	19008	380	2½	19008		2851	760	845	792	1¾	924	117
SR 297	0.17	0.66	0.49	2587	48	13797	276	1½	13797		2070		920	575			128
RAMP QUANTITIES INCLUDING ACCEL/DECEL LANES (FROM STA-30-0.00, CONSTRUCTION PLAN 870438)																	
RAMP A	@ SR 627				16	4913	98	1½	4913		737		356	205			49
RAMP B	@ SR 627				16	3780	76	1½	3780		567		280	158			39
RAMP C	@ SR 627				16	4474	89	1½	4474		671		329	187			46
RAMP D	@ SR 627				16	5891	118	1½	5891		884		409	246			57
RAMP E	@ SR 21				16	6444	129	1½	6444		967		284	269			40
RAMP F	@ SR 21				16	5174	103	1½	5174		776		372	216			52
RAMP G	@ SR 21				16	3145	63	1½	3145		472		310	132			43
RAMP H	@ SR 21				16	6885	138	1½	6885		1033		439	287			61
RAMP I	@ SR 21				16	3246	65	1½	3246		487		350	136			49
RAMP J	@ SR 21				16	3258	65	1½	3258		489		299	136			41
RAMP K	@ SR 21				16	6530	131	1½	6530		979		551	273			77
RAMP L	@ SR 21				16	5570	111	1½	5570		836		389	233			54
RAMP M	@ WHIPPLE AVE.				16	5241	105	1½	5241		786		391	219			54
RAMP N	@ WHIPPLE AVE.				16	4743	95	1½	4743		712		297	198			41
TOTALS CARRIED TO GENERAL SUMMARY							7398		369899		55487	11473	18723	15422		13944	2600

COMMENTS

[1] 408 & 617 ARE CALCULATED BASED ON 4 SIDES ALONG MAINLINE AND 2 SIDES ALONG RAMPS

[2] ACCEL/DECEL 408 & 617 ARE CALCULATED WITH MAINLINE

[2] SERVICE ROADS BOTH SIDES OF U.S. 30

CALCULATED RCB
CHECKED TJP

ASPHALT CONCRETE

U.S. 30 - SLM 6.06 TO SLM 13.05, S.R. 297 - SLM 0.17 TO SLM 0.66

STA-30/297-6.06/0.17

19
60

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RPM REPLACEMENT / REMOVAL

STANDARD CONSTRUCTION DWG.	
TC-65.10 1-21-05	
TC-65.11 1-21-05	

CALCULATED KG
CHECKED DY

LOCATION				ITEM 202	ITEM 621				
COUNTY	ROUTE	SECTION (S.L.M.) FROM	SECTION (S.L.M.) TO	RAISED PAVEMENT MARKER REMOVED	RPM LOW PROFILE YELLOW/ YELLOW	RPM LOW PROFILE WHITE/ RED	RPM LOW PROFILE ONE-WAY WHITE	RPM LOW PROFILE YELLOW/ RED	REMARKS
STA	30	6.06	13.10	936			624		US 30 EB. AND WB. (LANE LINE AT 120' SPACING)
STA	30	RAMP A		27		9		18	EB. OFF RAMP TO SR 21 (GORE MARKINGS AND EDGE LINE)
STA	30	RAMP B		22		5		17	EB. ON RAMP FROM SR 21 (GORE MARKINGS AND EDGE LINE)
TOTAL				985		14	624	35	**TOTALS CARRIED TO GENERAL SUMMARY**

RAISED PAVEMENT MARKER SUB SUMMARY

STA-30/297-6.06/0.17

20
60

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CENTER LINE

GENERAL SPEC. 640
MATERIAL TYPE : 646 - EPOXY

COUNTY	ROUTE	TRU LOG	FROM	TRU LOG	TO	TOTAL MILES	EQUIVALENT SOLID LINE	COMMENTS
TOTAL								

LANE LINE

COUNTY	ROUTE	TRU LOG	FROM	TRU LOG	TO	TOTAL MILES	4" LANE LINE DASHED	4" LANE LINE SOLID	COMMENTS
STA	30	6.06	MASSILLON WEST CORP.	13.10	CANTON WEST CORP.	14.63			*INCLUDES RAMPS
STA	297	0.66	SERVICE ROAD "C"	0.17	SERVICE ROAD " C"	0.36			
STA	297	0.17	SERVICE ROAD "B"	0.66	SERVICE ROAD "B"	0.37			
TOTAL						15.36			

EDGE LINE

COUNTY	ROUTE	TRU LOG	FROM	TRU LOG	TO	WHITE EDGE LINE TOTAL MILES	WHITE EDGE LINE HIGH-WAY	WHITE EDGE LINE RAMP	YELLOW EDGE LINE TOTAL MILES	YELLOW EDGE LINE HIGH-WAY	YELLOW EDGE LINE RAMP	COMMENTS
STA	30	6.06	MASSILLON WEST CORP.	13.10	CANTON WEST CORP.	19.93	14.08	5.85	17.04	14.08	2.96	
STA	297	0.66	SERVICE ROAD "C"	0.17	SERVICE ROAD "C"			0.49			0.49	
STA	297	0.17	SERVICE ROAD "B"	0.66	SERVICE ROAD "B"			0.49			0.49	
TOTAL						19.93	14.08	6.83	17.04	14.08	3.94	

AUXILIARY

COUNTY	ROUTE LOCATION	TRU LOG	CHANNEL LINE	STOP LINE	TRANSVERSE DIAGONAL LINES WHITE	TRANSVERSE DIAGONAL LINES YELLOW	CROSS-WALK LINES	WORD ON PAVEMENT ONLY 72"	WORD ON PAVEMENT ONLY 96"	LANE ARROWS TURN LEFT	LANE ARROWS TURN RIGHT	LANE ARROWS THRU	LANE ARROWS COMB.	SYMBOL MARKINGS RxR	SYMBOL MARKINGS SCHOOL 72"	SYMBOL MARKINGS SCHOOL 96"	ISLAND MARK-INGS	DOTTED LINES	COMMENTS
			FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	SQ FT	FT	
STA	US 30 EB TO US 62/SR21 SB	7.300	400	62	200														
STA	SR 21 SB TO US 30 WB	7.259	210																
STA	US 30 WB TO US 62/SR 21 SB	7.464	415		125														
STA	SR 21 SB TO US 30 EB	7.416	115																
STA	US 30 EB TO SR 21 NB	8.014	344		139														
STA	US 62/SR 21 NB TO US 30 WB	7.927	65																
STA	US 30 WB TO SR 21 NB	8.089	360		145														
STA	US 62/SR 21 NB TO US 30 EB	8.159	169																
STA	US 30 EB TO RICHVILLE DR.	9.296	372	65															
STA	US 30 WB FROM RICHVILLE DR.	9.200	172																
STA	US 30 WB TO RICHVILLE DR.	9.940	412	61															
STA	US 30 EB FROM RICHVILLE DR.	10.064	194																
STA	US 30 EB OFF RAMP TO WHIPPLE AVE.	12.419	374																
STA	US 30 WB ON RAMP FROM WHIPPLE AVE.	12.333	202																
STA	SR 297 WB SERVICE ROAD AT WHIPPLE AVE.	0.170	610	72						7									
STA	SR 297 EB SERVICE ROAD AT RAFF RD.	0.660	700	76						8									
TOTAL			5114	336	609					15									

CALCULATED TJD CHECKED

PLAN No.

PAVEMENT MARKING SUB-SUMMARY

STA-30/297-6.06/0.17

TS 54
DISTRICT 4

N

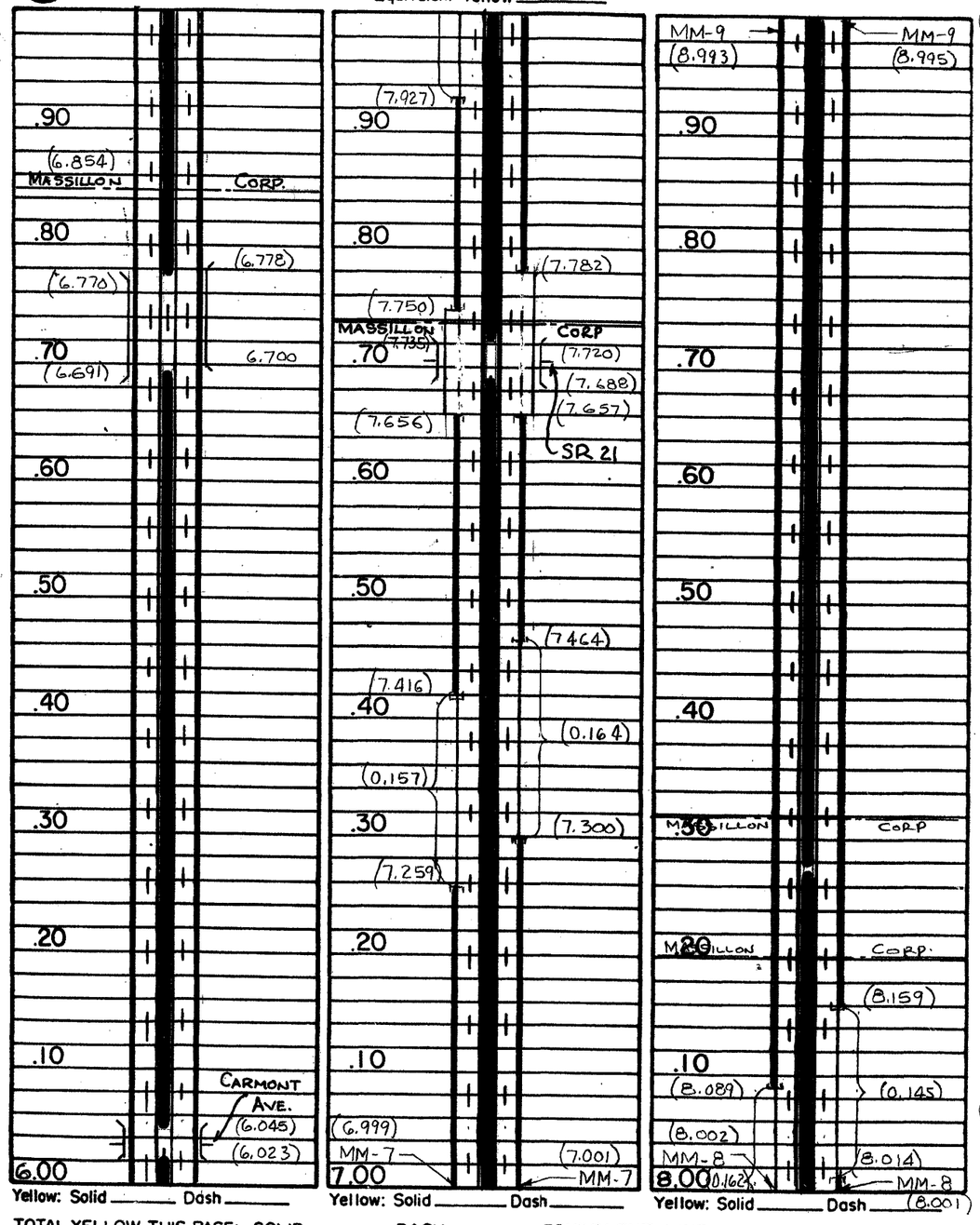
Center Line Log Record and Field Sheet

SHEET 3 OF 11

COUNTY STARK ROUTE 30

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

Equivalent Yellow _____



Yellow: Solid _____ Dash _____ | Yellow: Solid _____ Dash _____ | Yellow: Solid _____ Dash _____

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

TS 54
DISTRICT 4

N

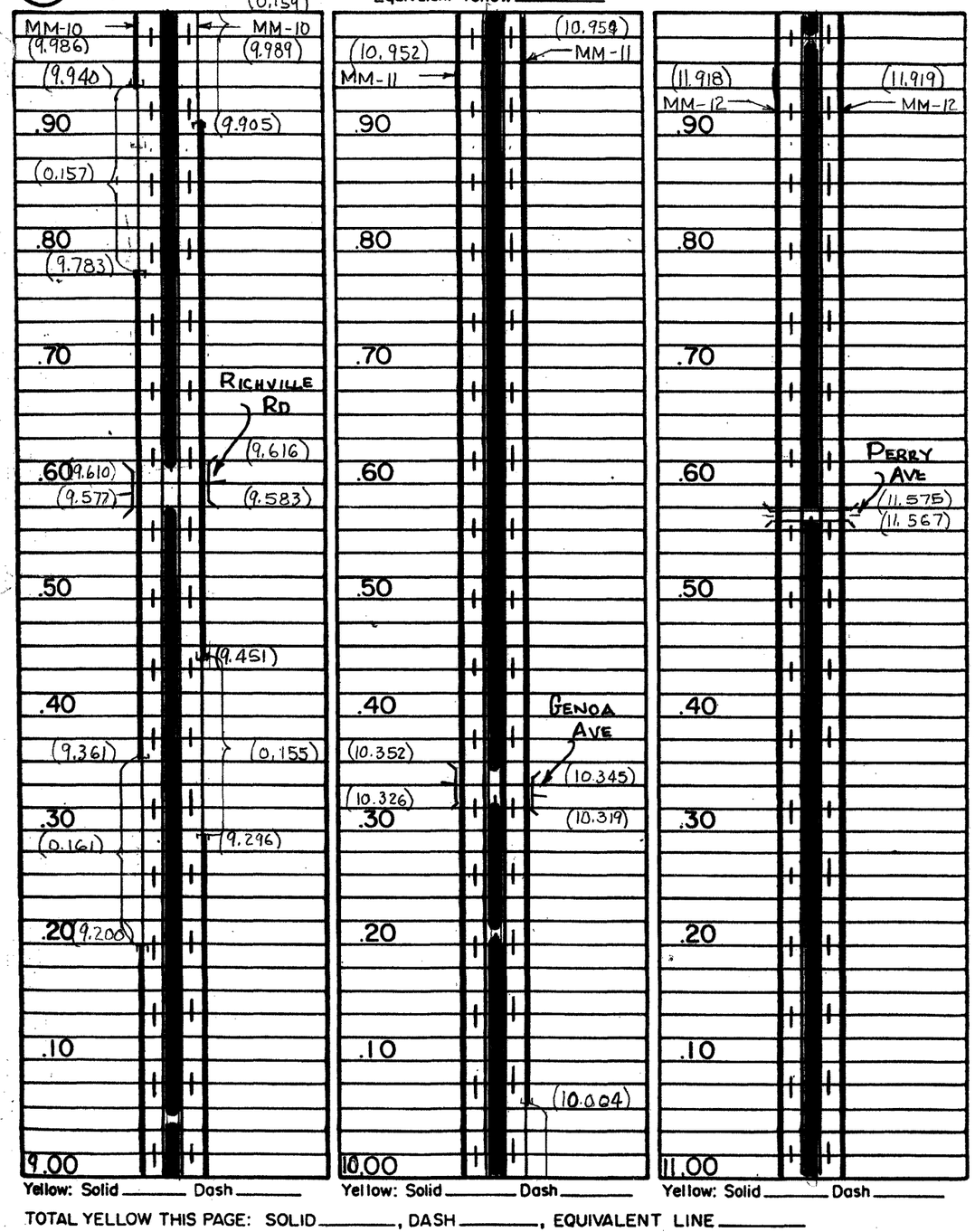
Center Line Log Record and Field Sheet

SHEET 4 OF 11

COUNTY STARK ROUTE 30

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

Equivalent Yellow _____



Yellow: Solid _____ Dash _____ | Yellow: Solid _____ Dash _____ | Yellow: Solid _____ Dash _____

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

CALCULATED LMB
CHECKED

PAVEMENT MARKINGS

STA-30/297-6.06/0.17

22
60

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TS 54
DISTRICT 4

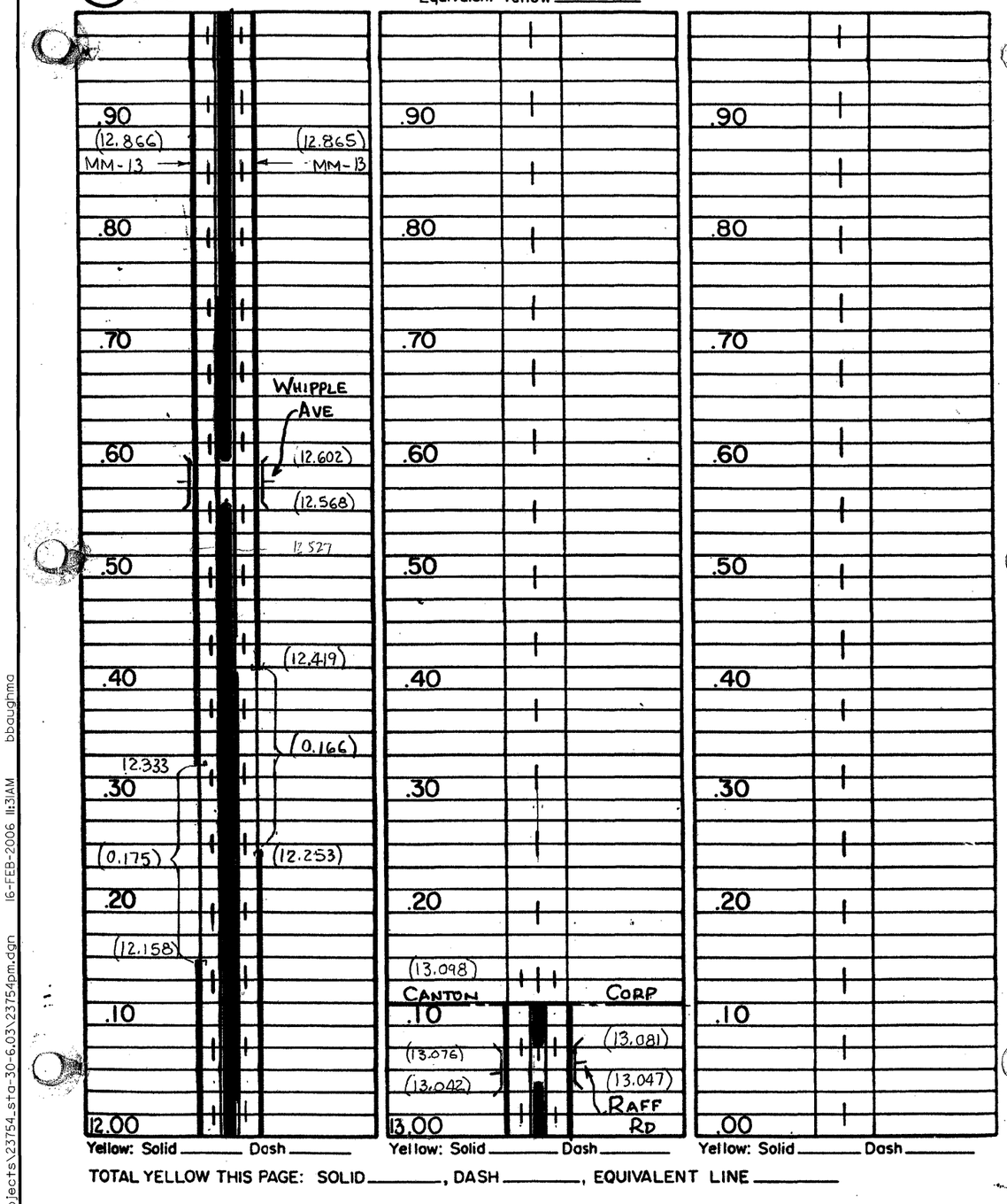
Center Line Log Record and Field Sheet

SHEET 2 OF 11

COUNTY STARK ROUTE 30

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

Equivalent Yellow _____



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

AUXILIARY PAVEMENT MARKING 5-1-92

COUNTY STARK

LOCATION US 30 & US62/SR 21

PAVEMENT SURFACE TYPE _____

INTERSECTION TOTALS

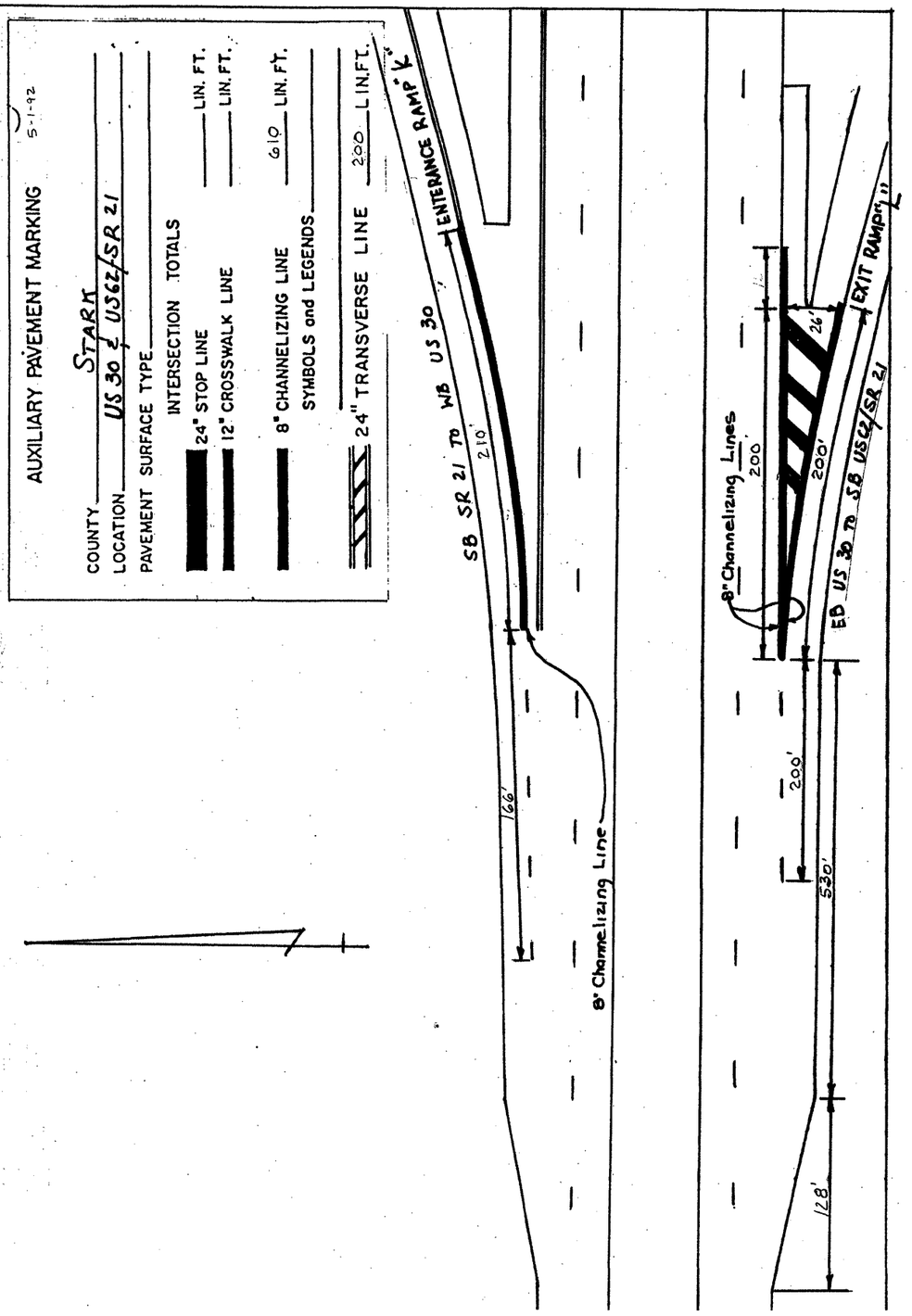
24" STOP LINE _____ LIN. FT.

12" CROSSWALK LINE _____ LIN. FT.

8" CHANNELIZING LINE 610 LIN. FT.

SYMBOLS and LEGENDS

24" TRANSVERSE LINE 200 LIN.FT.



CALCULATED LMB
CHECKED

PAVEMENT MARKINGS

STA-30/297-6.06/0.17

23
60

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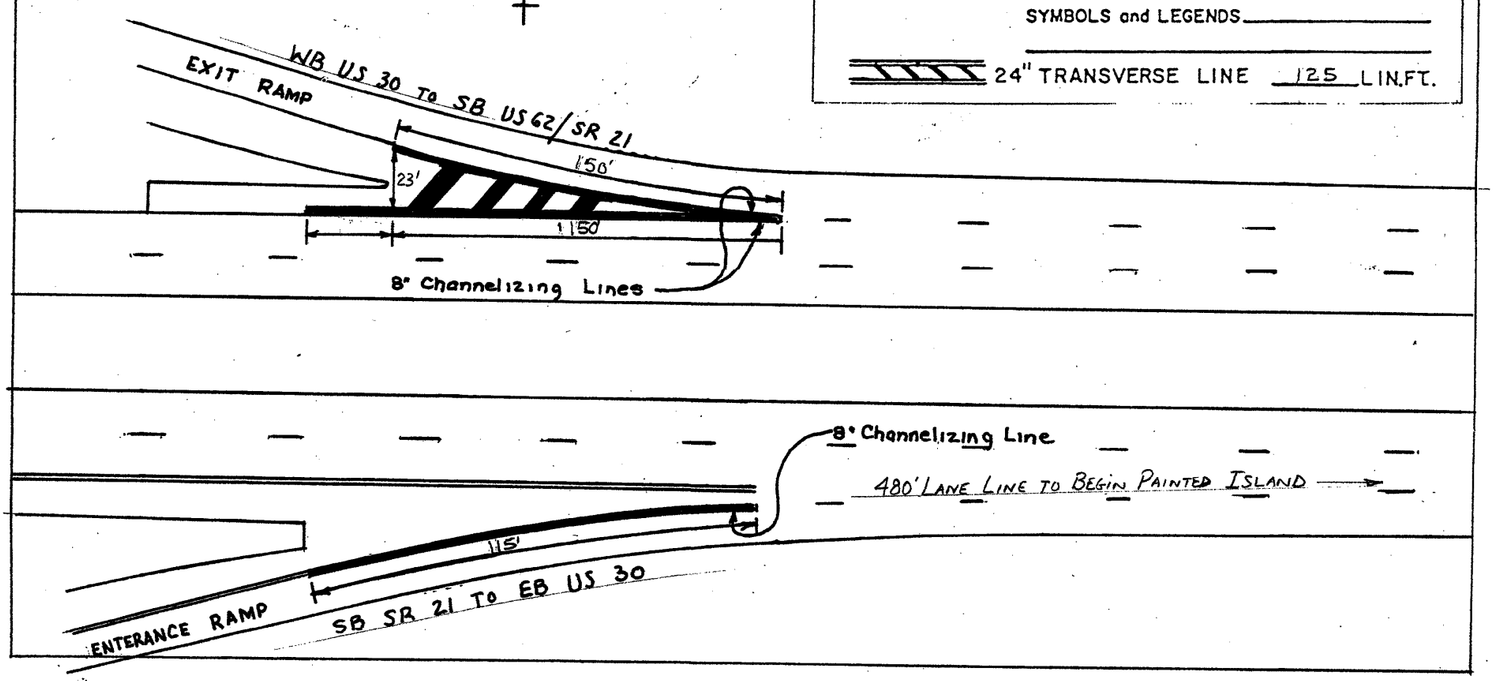
AUXILIARY PAVEMENT MARKING 5-1-92

COUNTY STARK
LOCATION US 30 & US 62/SR 21
PAVEMENT SURFACE TYPE

INTERSECTION TOTALS

24" STOP LINE		LIN. FT.
12" CROSSWALK LINE		LIN. FT.
8" CHANNELIZING LINE	415	LIN. FT.
SYMBOLS and LEGENDS		
24" TRANSVERSE LINE	125	LIN. FT.

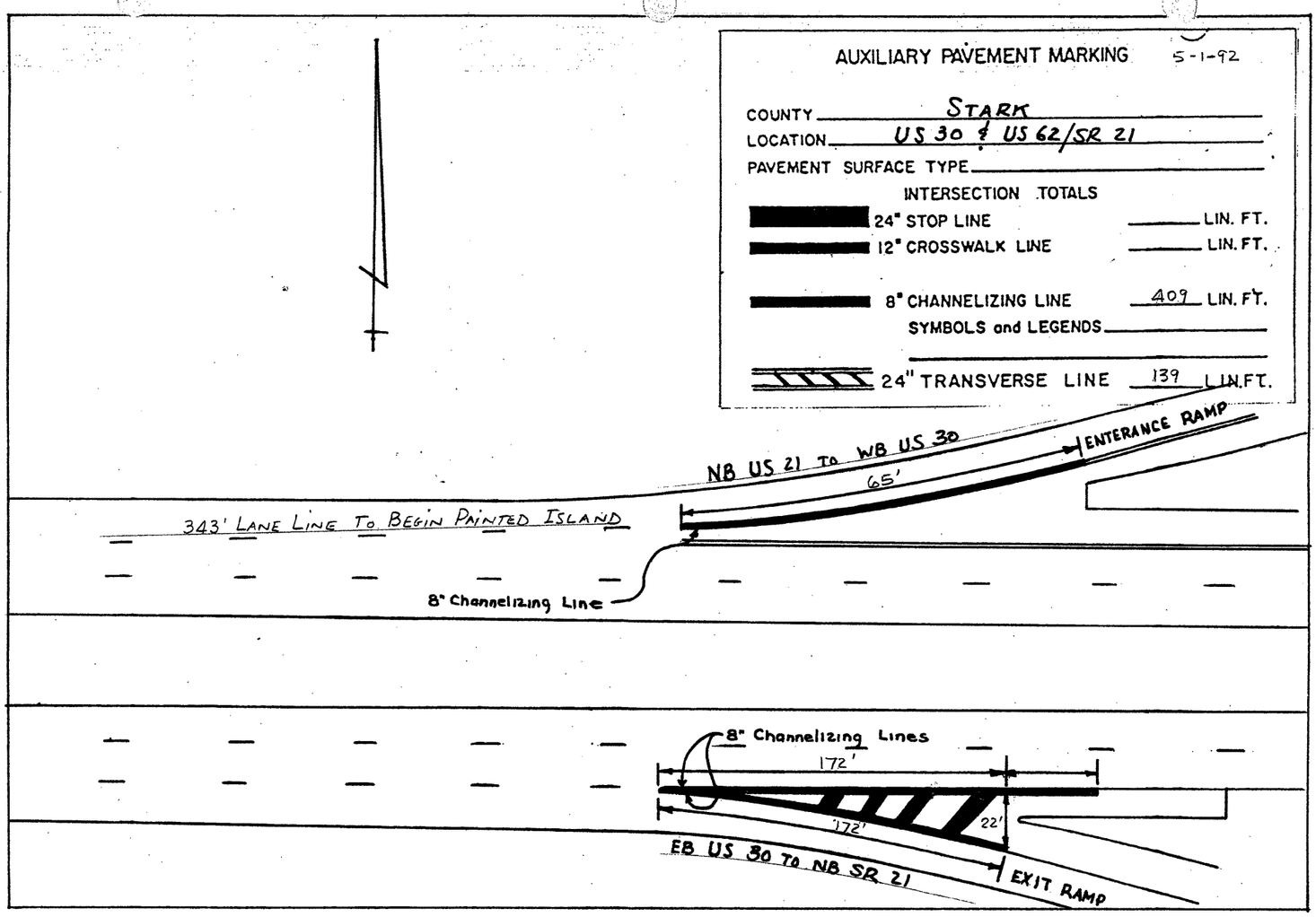


AUXILIARY PAVEMENT MARKING 5-1-92

COUNTY STARK
LOCATION US 30 & US 62/SR 21
PAVEMENT SURFACE TYPE

INTERSECTION TOTALS

24" STOP LINE		LIN. FT.
12" CROSSWALK LINE		LIN. FT.
8" CHANNELIZING LINE	409	LIN. FT.
SYMBOLS and LEGENDS		
24" TRANSVERSE LINE	139	LIN. FT.

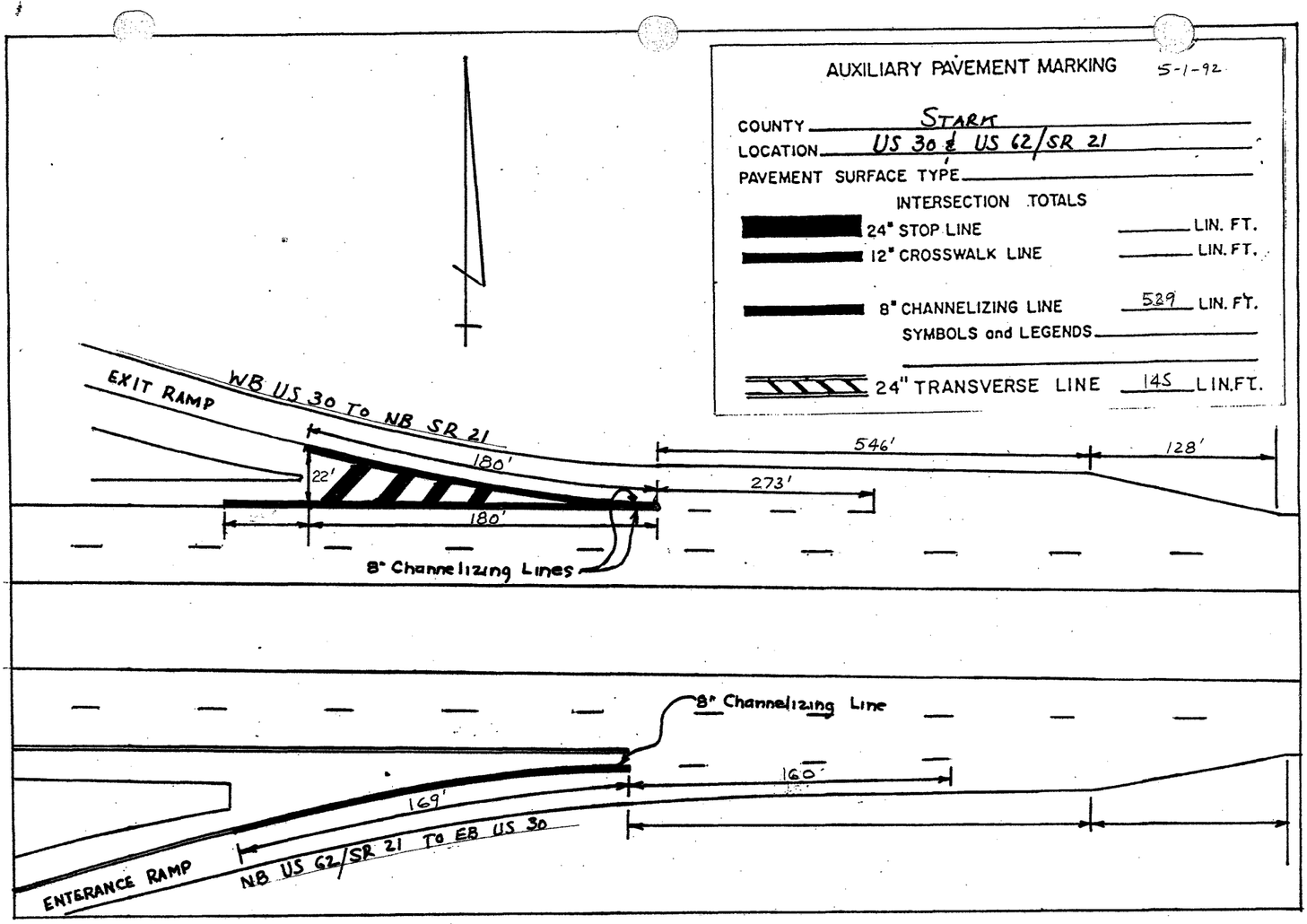


AUXILIARY PAVEMENT MARKING 5-1-92

COUNTY STARK
LOCATION US 30 & US 62/SR 21
PAVEMENT SURFACE TYPE

INTERSECTION TOTALS

24" STOP LINE		LIN. FT.
12" CROSSWALK LINE		LIN. FT.
8" CHANNELIZING LINE	529	LIN. FT.
SYMBOLS and LEGENDS		
24" TRANSVERSE LINE	145	LIN.FT.

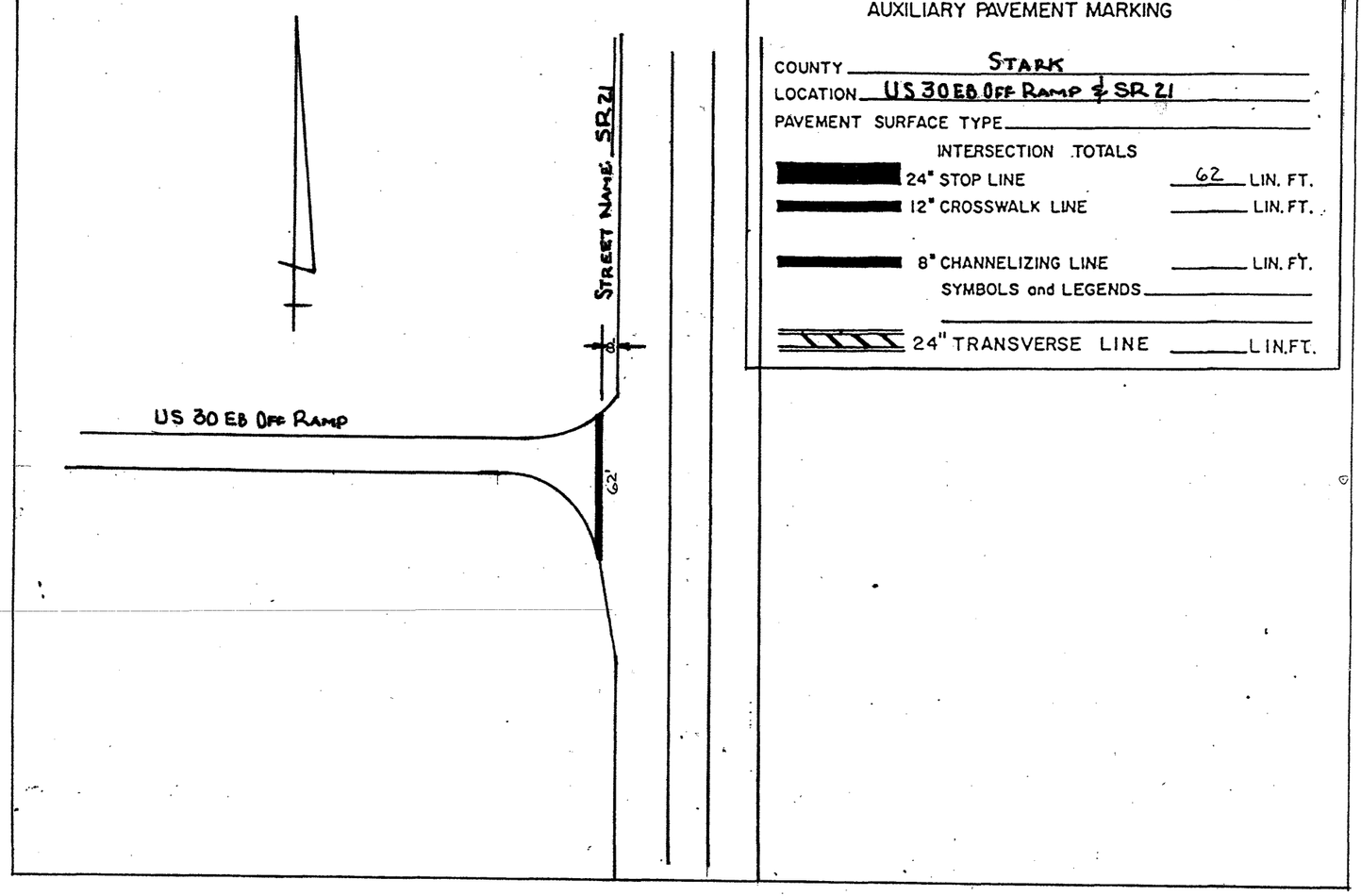


AUXILIARY PAVEMENT MARKING

COUNTY STARK
LOCATION US 30 EB Off Ramp & SR 21
PAVEMENT SURFACE TYPE

INTERSECTION TOTALS

24" STOP LINE	62	LIN. FT.
12" CROSSWALK LINE		LIN. FT.
8" CHANNELIZING LINE		LIN. FT.
SYMBOLS and LEGENDS		
24" TRANSVERSE LINE		LIN.FT.



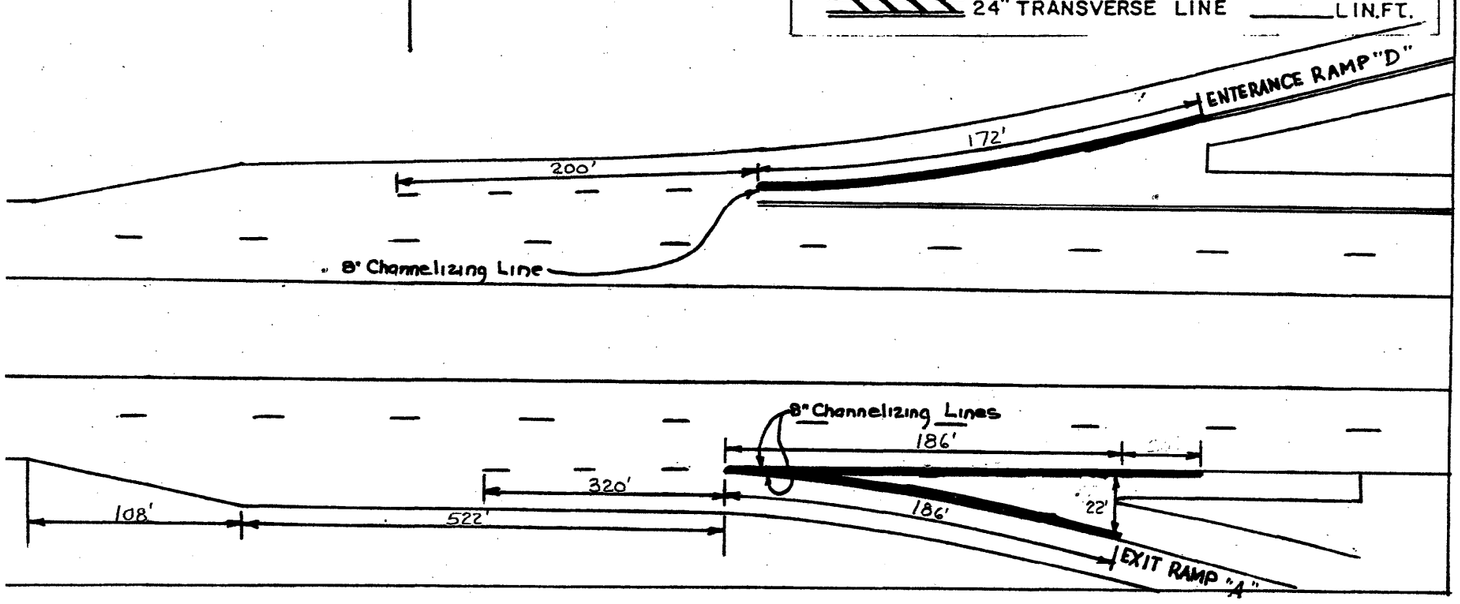
AUXILIARY PAVEMENT MARKING

5-1-92

COUNTY STARK
LOCATION US 30 & RICHVILLE DR.
PAVEMENT SURFACE TYPE

INTERSECTION TOTALS

24" STOP LINE		LIN. FT.
12" CROSSWALK LINE		LIN. FT.
8" CHANNELIZING LINE	544	LIN. FT.
SYMBOLS and LEGENDS		
24" TRANSVERSE LINE		LIN.FT.

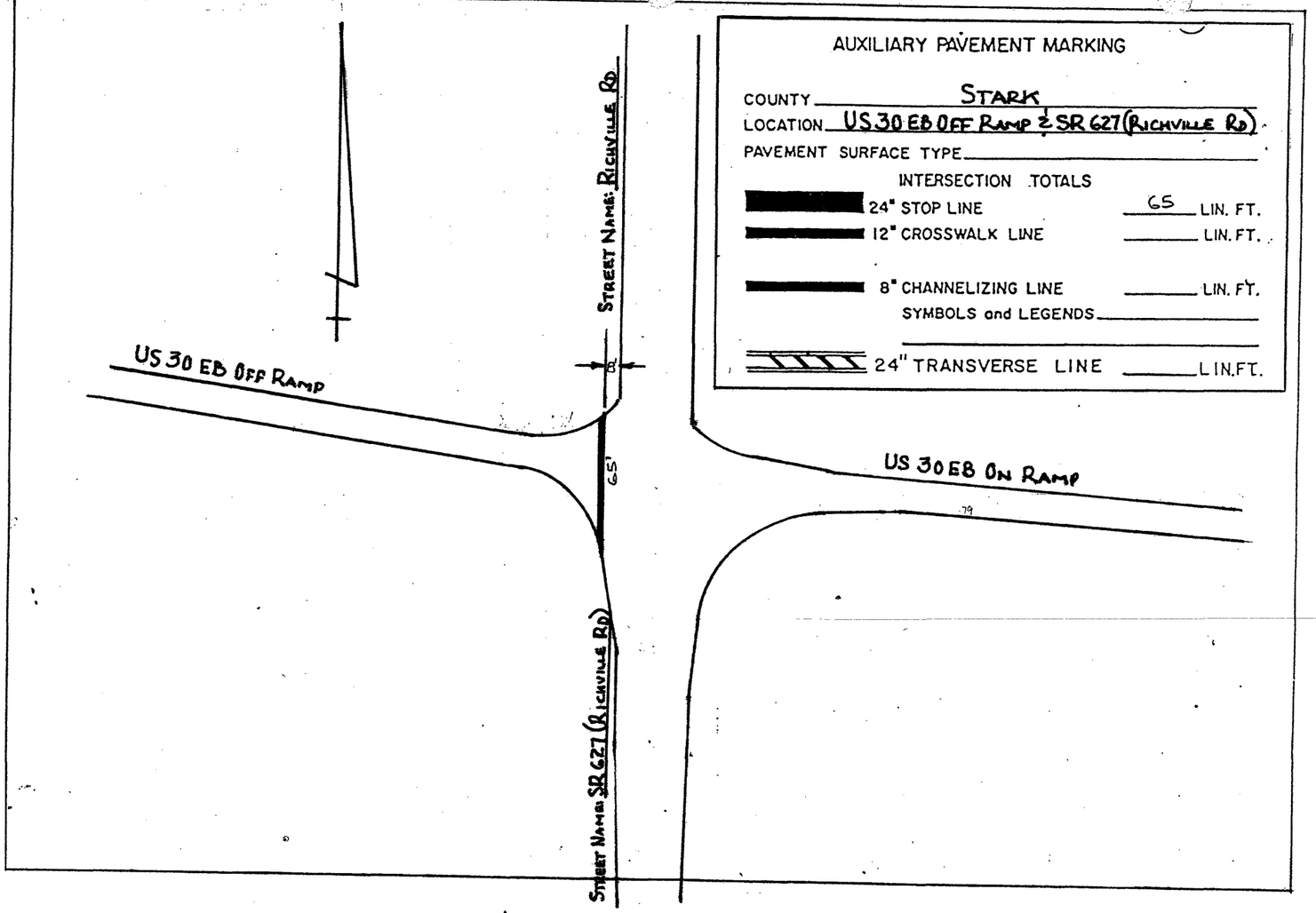


AUXILIARY PAVEMENT MARKING

COUNTY STARK
LOCATION US 30 EB OFF RAMP & SR 627 (RICHVILLE RD)
PAVEMENT SURFACE TYPE

INTERSECTION TOTALS

24" STOP LINE	65	LIN. FT.
12" CROSSWALK LINE		LIN. FT.
8" CHANNELIZING LINE		LIN. FT.
SYMBOLS and LEGENDS		
24" TRANSVERSE LINE		LIN.FT.



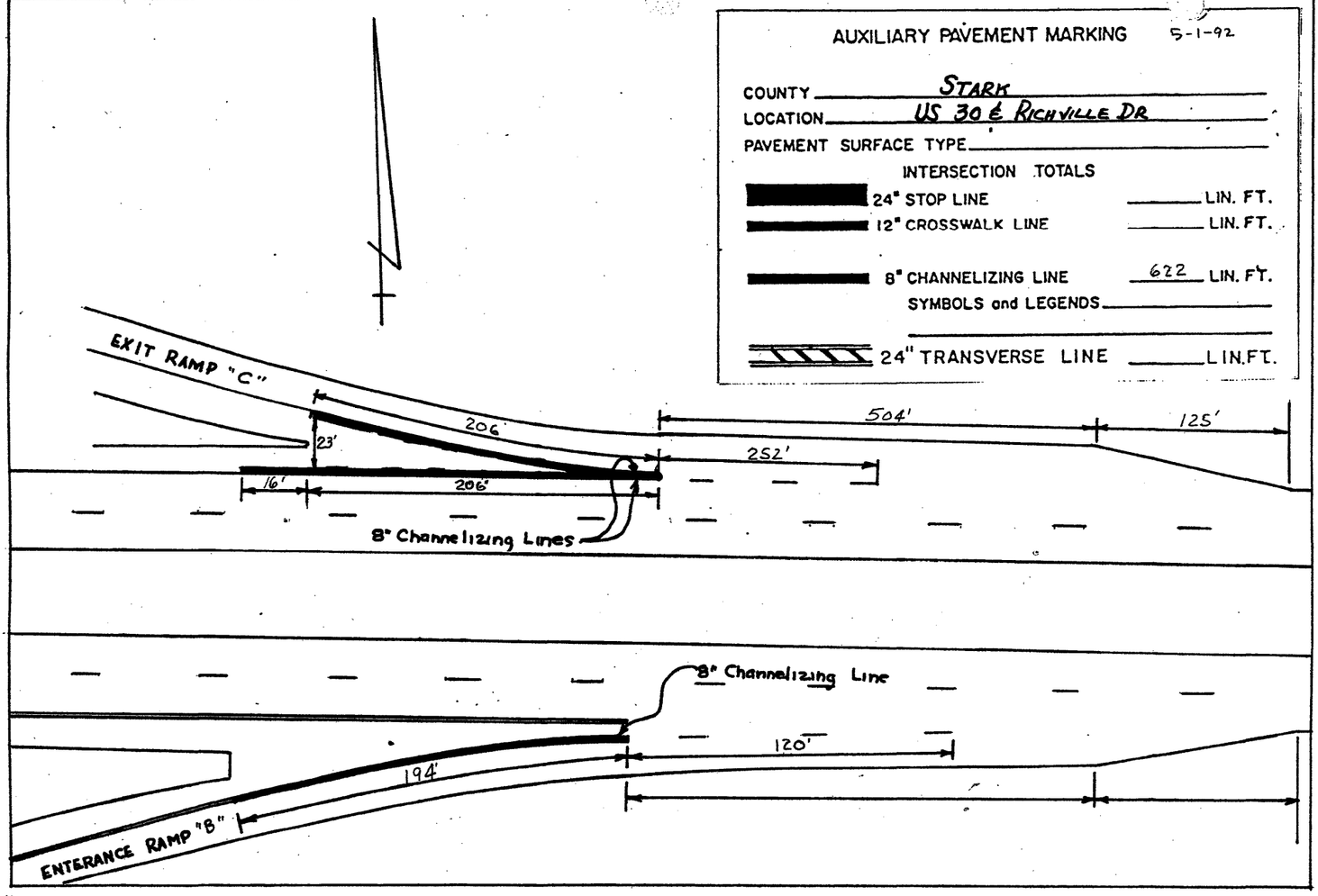
26/60	STA-30/297-6.06/0.17	PAVEMENT MARKINGS	CALCULATED LMB / CHECKED

AUXILIARY PAVEMENT MARKING 5-1-92

COUNTY STARK
LOCATION US 30 & RICHVILLE DR
PAVEMENT SURFACE TYPE

INTERSECTION TOTALS

24" STOP LINE		LIN. FT.
12" CROSSWALK LINE		LIN. FT.
8" CHANNELIZING LINE	622	LIN. FT.
SYMBOLS and LEGENDS		
24" TRANSVERSE LINE		LIN.FT.

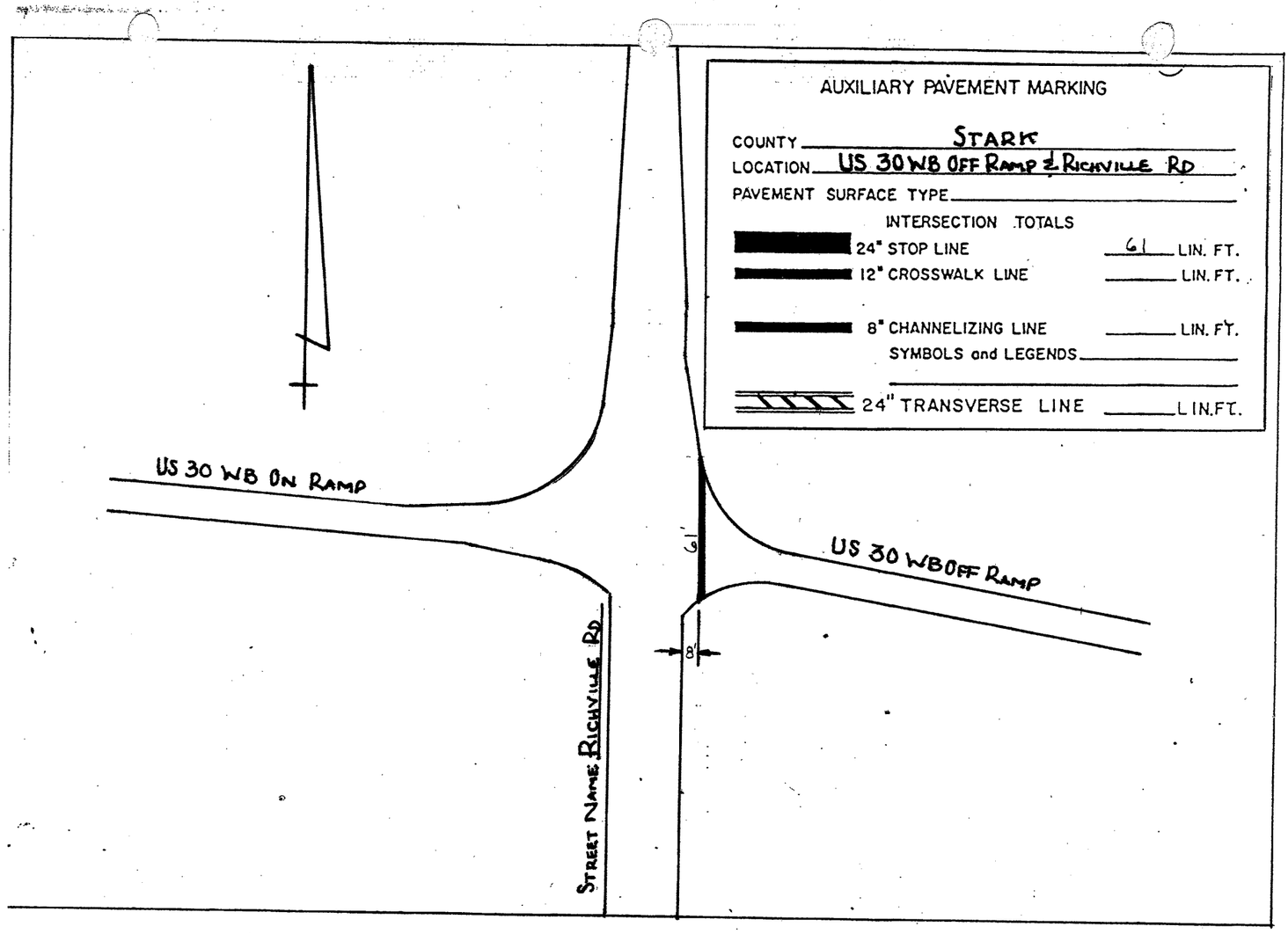


AUXILIARY PAVEMENT MARKING

COUNTY STARK
LOCATION US 30 WB OFF RAMP & RICHVILLE RD
PAVEMENT SURFACE TYPE

INTERSECTION TOTALS

24" STOP LINE	61	LIN. FT.
12" CROSSWALK LINE		LIN. FT.
8" CHANNELIZING LINE		LIN. FT.
SYMBOLS and LEGENDS		
24" TRANSVERSE LINE		LIN.FT.



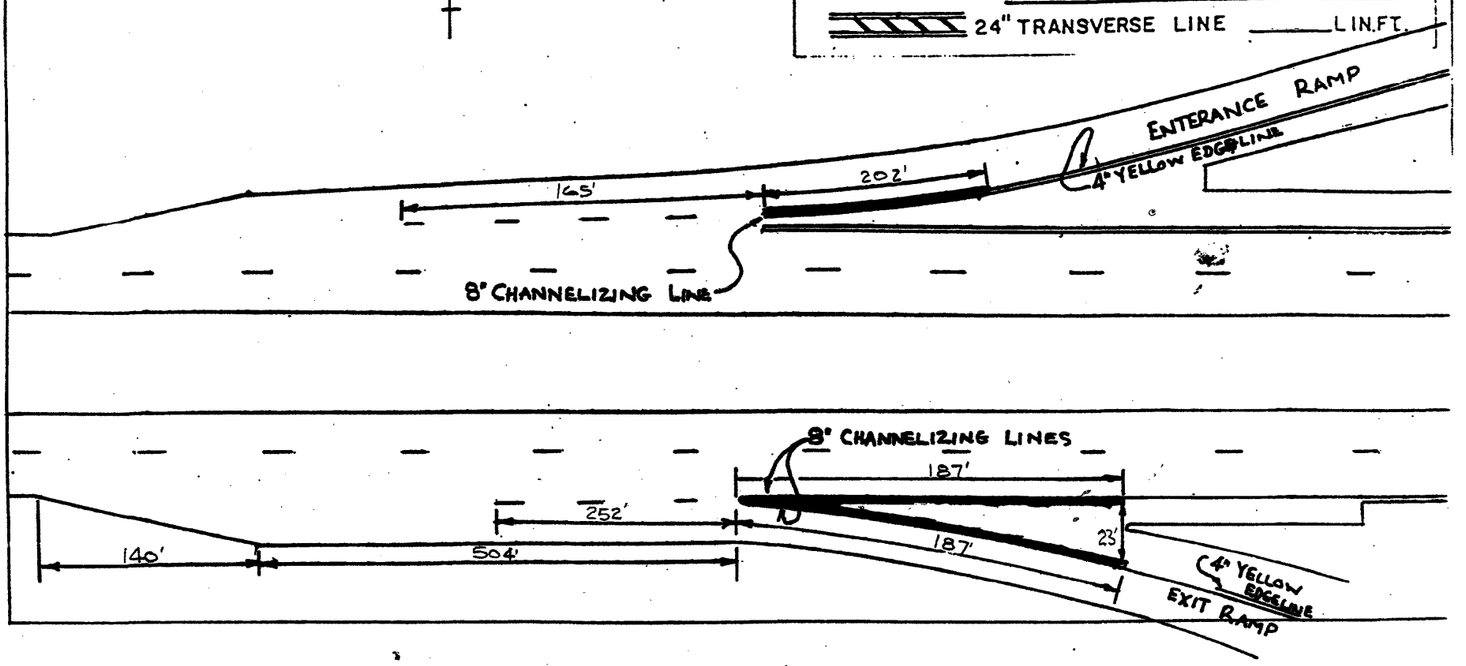
AUXILIARY PAVEMENT MARKING
TAPERED

5-1-92

COUNTY STARK
LOCATION US 30 & WHIPPLE AVE
PAVEMENT SURFACE TYPE

INTERSECTION TOTALS

24" STOP LINE		LIN. FT.
12" CROSSWALK LINE		LIN. FT.
8" CHANNELIZING LINE	576	LIN. FT.
SYMBOLS and LEGENDS		
24" TRANSVERSE LINE		LIN.FT.

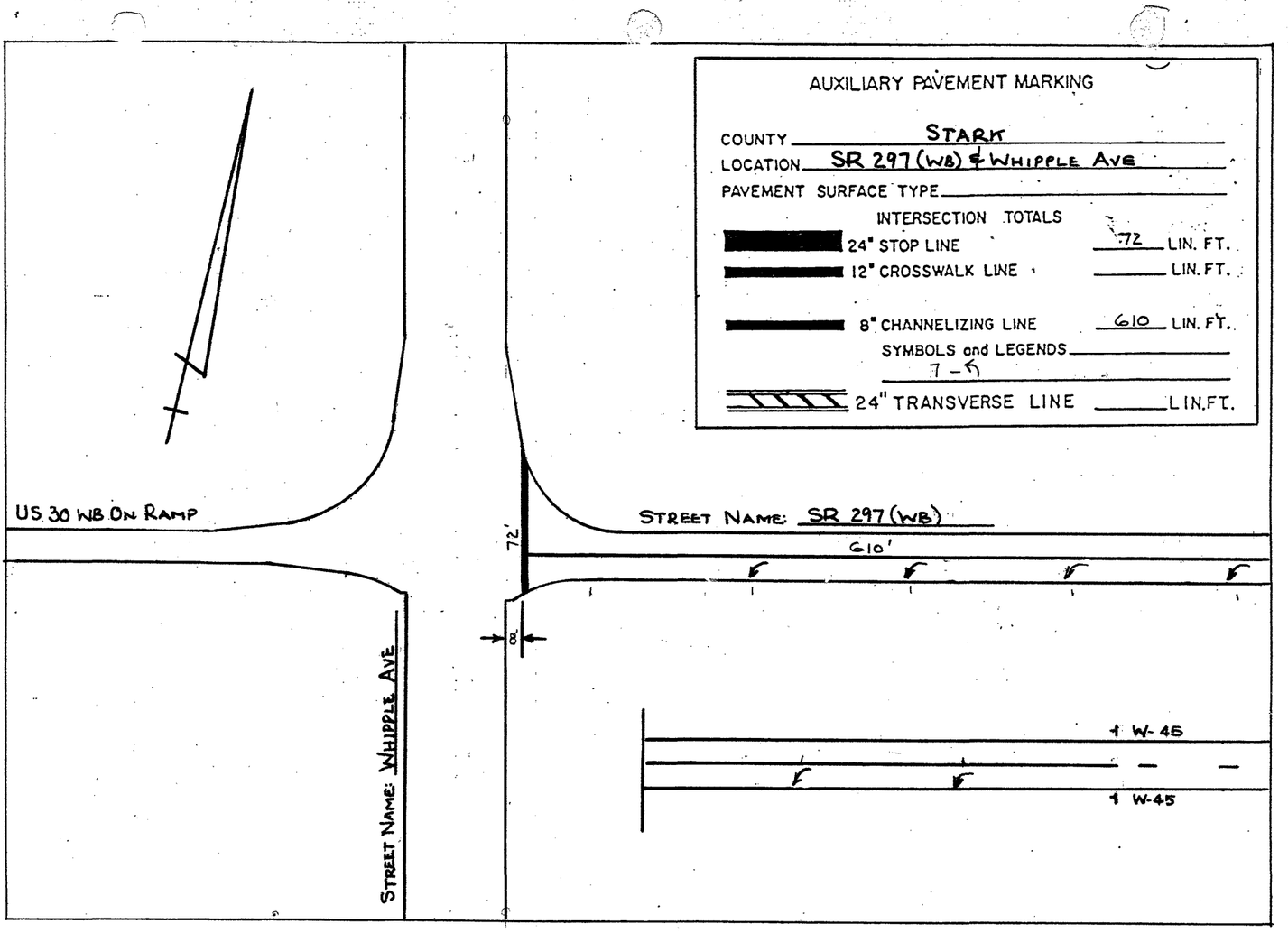


AUXILIARY PAVEMENT MARKING

COUNTY STARK
LOCATION SR 297 (WB) & WHIPPLE AVE
PAVEMENT SURFACE TYPE

INTERSECTION TOTALS

24" STOP LINE	72	LIN. FT.
12" CROSSWALK LINE		LIN. FT.
8" CHANNELIZING LINE	610	LIN. FT.
SYMBOLS and LEGENDS	7-6	
24" TRANSVERSE LINE		LIN.FT.



CALCULATED LMB
CHECKED

AUXILIARY PAVEMENT MARKING

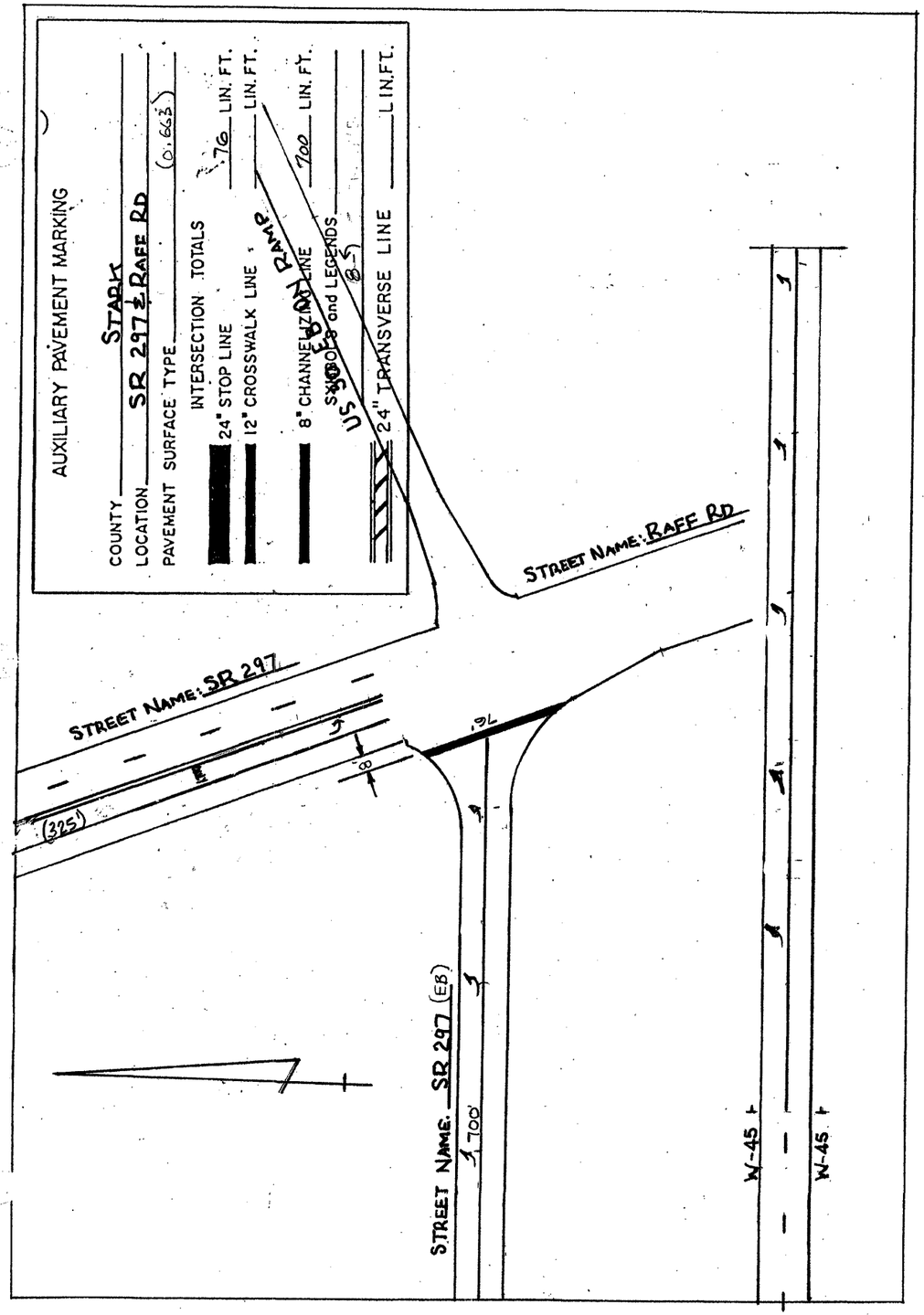
COUNTY STARK

LOCATION SR 297 & RAFF RD (0.663)

PAVEMENT SURFACE TYPE

INTERSECTION TOTALS

24" STOP LINE	76	LIN. FT.
12" CROSSWALK LINE		LIN. FT.
8" CHANNELIZATION LINE	700	LIN. FT.
SYMBOLS and LEGENDS	85	
24" TRANSVERSE LINE		LIN.FT.



TS 54
DISTRICT 4

N

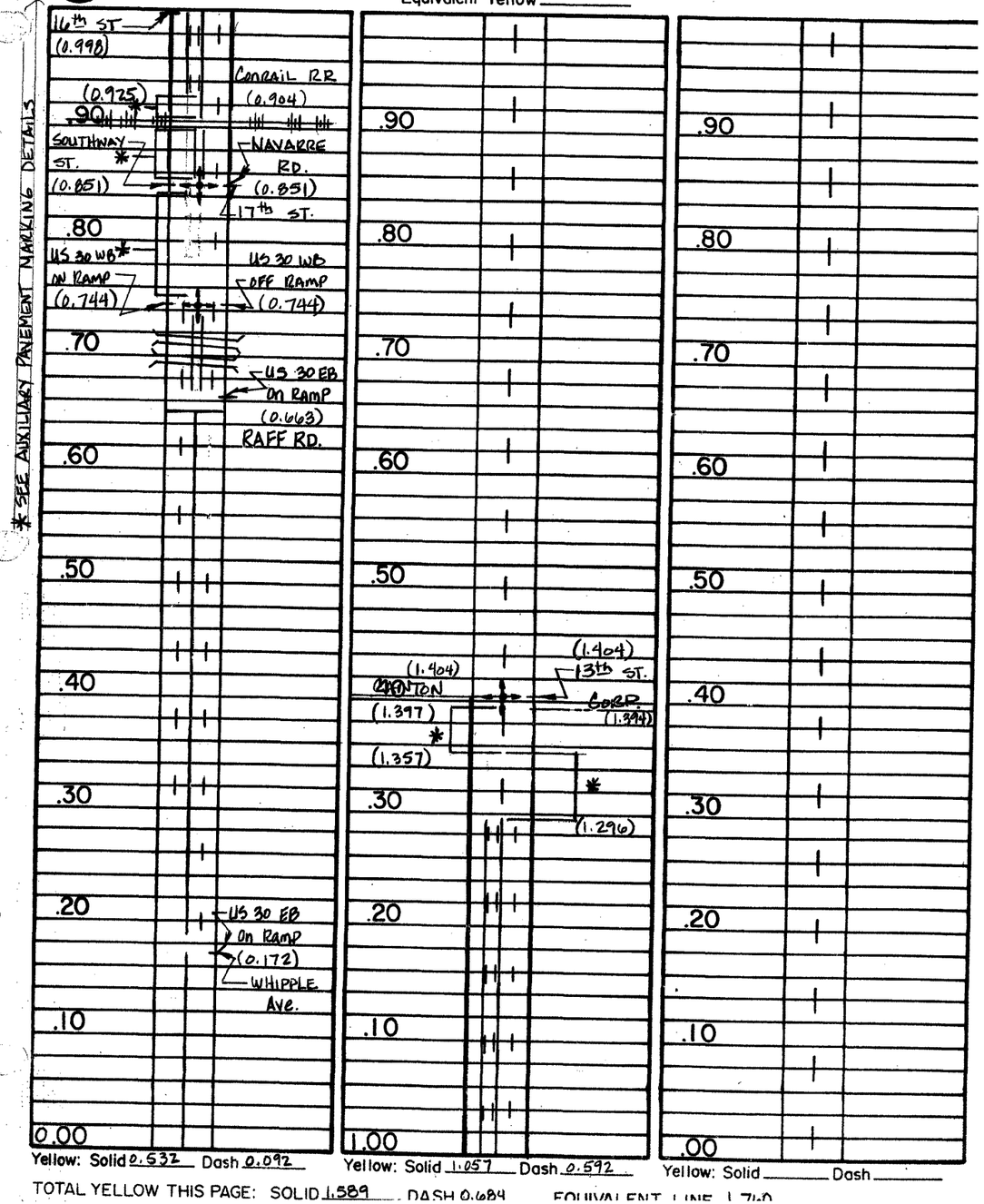
Center Line Log Record and Field Sheet

SHEET 1 OF 2

COUNTY STARK ROUTE 297

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

Equivalent Yellow _____



SEE AUXILIARY PAVEMENT MARKING DETAILS

Yellow: Solid 0.532 Dash 0.092

Yellow: Solid 1.057 Dash 0.592

Yellow: Solid _____ Dash _____

TOTAL YELLOW THIS PAGE: SOLID 1.589 DASH 0.684 EQUIVALENT LINE 1.710

CALCULATED LMB CHECKED

PAVEMENT MARKINGS

STA-30/297-6.06/0.17

29/60

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SIGNING SUBSUMMARY

CALCULATED WHV
CHECKED LAB

REF NO.	SLM	SIDE	CODE (# HINGED)	SIZE (INCHES)	630 SIGN, FLATSHEET S.F.	630 SIGN, GROUND MOUNTED EXTRUSHEET S.F.	630 SIGN, OVERHEAD EXTRUSHEET S.F.	630 GROUND MOUNTED SUPPORT, NO. 3 POST FT.	630 ONE WAY SUPPORT, NO. 3 POST FT.	630 GROUND MOUNTED SUPPORT, S4 X 7.7 BEAM FEET	630 GROUND MOUNTED SUPPORT, W6 X 9 BEAM FT	630 GROUND MOUNTED SUPPORT, W8 X 18 BEAM FT	630 GROUND MOUNTED SUPPORT, W10 X 12 BEAM FEET	630 GROUND MOUNTED SUPPORT, W10 X 22 BEAM FEET	630 GROUND MOUNTED SUPPORT, W12 X 30 BEAM FT.	630 OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 6 EA.	630 OVERHEAD SIGN SUPPORT, TYPE TC-7.65, DESIGN 6 EA.	630 GROUND MOUNTED BEAM SUPPORT FOUNDATION EA.	630 RIGID OVERHEAD SIGN SUPPORT FOUNDATION EA.	630 BREAKAWAY BEAM CONNECTION EA.	630 SIGN ATTACHMENT ASSEMBLY, RIGID OVERHEAD EA.	630 SIGN SUPPORT ASSEMBLY, POLE MOUNTED EA.	630 REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL EA.	630 REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL EA.	630 REMOVAL OF GROUND MOUNTED SIGN AND REERECTION EA.	630 REMOVAL OF GROUND MOUNTED MAJOR SIGN AND REERECTION EA.	630 REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL EA.	630 REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL EA.	630 REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL EA.	630 REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL, TYPE TC-12.36 EA.	631 REMOVAL OF LUMINAIRE AND DISPOSAL EA.	631 REMOVAL OF SIGN SERVICE AND DISPOSAL EA.	631 REMOVAL OF DISCONNECT SWITCH AND DISPOSAL EA.	631 REMOVAL OF SIGNS WIRED EA.
	SHEET #37																																		
1	6.05 WB	LT	OM-3L-12	12 X 36	3.00			11.5																1					1					
		MED	OM-3R-12	12 X 36	3.00			11.5																1					1					
2	6.46 EB	RT	E1-1	156 X 144		156.0								28.5/25				2		2													
			E1-1	264 X 138																					1					2				
3	6.60 EB	RT	W8-13-48 #	48 X 48	16.00			14																1					1					
4	6.70 EB	MED	OM-3L-12	12 X 36	3.00			11.5																1					1					
		RT	OM-3R-12	12 X 36	3.00			11.5																1					1					
			BRIDGE ID																							1								
5	6.77 WB	LT	OM-3L-12	12 X 36	3.00			11.5																1					1					
		MED	OM-3R-12	12 X 36	3.00			11.5																1					1					
6	6.84 WB	LT	W8-13-48 #	48 X 48	16.00			14																1					1					
7	6.96 EB	RT	E1-1	156 X 144		156.0								28.75/25				2		2													
8	7.00 WB	LT	D10-1-12	12 X 24	2.00			10.5																1					1					
9	7.00 EB	RT	D10-1-12	12 X 24	2.00			10.5																1					1					
10	7.05 WB	LT	R2-H2B-48	48 X 96																				1					2					
			R2-1-48	48 X 60	20.00			15/15																										
			R2-H2A-48	48 X 60	20.00			15/15																										
11	7.06 EB	MED	R3-4-36	36 X 36	9.00			13.5																2					1					
			R3-H4A-24	24 X 30	5.00																													
12	7.08 WB	LT	R3-4-36	36 X 36	9.00			13.5																2					1					
			R3-H4A-24	24 X 30	5.00																													
13	7.08 EB	RT	E1-1	156 X 60		65.0							20.5/17.25					2		2				1	1					2				
14	7.15 WB	LT	M3-4-36	36 X 18	4.50			14																2					2					
			M1-4-36	36 X 36	9.00																													
	SHEET #38																																	
15	7.27 WB	LT	R5-H10F-36	36 X 30	7.50			13																1					1					
16	7.41 WB	LT	R1-2-60	60 X 60	25.00			15/15																										
17	7.44 EB	RT	E1	156 X 126																														
			E1	264 X 126																														
			E6-2	192 X 96			128.0														3						3				2	1	1	3
			E1-1	156 X 120			130.0														3										2			
			E1-H3	204 X 120			170.0														3										3			
18	7.47 WB	LT	R1-2-60	60 X 60																				1					2					
19	7.47 EB	RT	E5-H1-72	72 X 60		30.0				17.25/17.5								2		2				1						2				
20	7.51 WB	LT	W4-1R-48	48 X 48	16.00			14/14																2					2					
21	7.53 EB	RT	E3-H1	84 X 60																					1					2				
22	7.57 EB	RT	W4-1R-48	48 X 48	16.00			14/14																1					2					
23	7.64 EB	RT	R1-2-60	60 X 60	25.00			15/15																1					2					
24	7.66 WB	LT	E5-H1-72	72 X 60		30.0				16.25/16.5								2		2				1						2				
25	7.69 WB	LT	E1-H3	216 X120			180.0														3						1							
			W13-2-48	48 X 60	20.00																	1												
26	7.69 EB	MED	OM-3L-12	12 X 36	3.00			11.5																1					1					
		RT	OM-3R-12	12 X 36	3.00			11.5																1					1					
			BRIDGE ID																							1								
27	7.72 WB	MED	OM-3L-12	12 X 36	3.00			11.5																1					1					
		LT	OM-3R-12	12 X 36	3.00			11.5																1										
			BRIDGE ID																							1			1					
28	7.74 WB	LT	E8-H2	84 X 36	21.00					13.5/14.5								2		2				1					2					
29	7.74 EB	RT	I-H2E-40	40 X 20	5.56			12/12																										
29A	7.75 EB	RT	E1-H3	192 X 96		128.0															3				1									
			W13-2-48	48 X 60	20.00																	1												
TOTALS CARRIED TO SHEET 36					303.56	565.0	608.0	421.0		95.5			37.75	107.25				12		12	15	2	31	4	3		4	31	10		7	1	1	3

STA-30/297-6.06/0.17

REF NO.	SLM	SIDE	CODE # HINGED	SIZE (INCHES)	630																						631			
					SIGN, FLATSHEET	SIGN, GROUND MOUNTED EXTRUSHEET	SIGN, OVERHEAD EXTRUSHEET	GROUND MOUNTED SUPPORT, NO. 3 POST	ONE WAY SUPPORT, NO. 3 POST	GROUND MOUNTED SUPPORT, S4 X 7.7 BEAM	GROUND MOUNTED SUPPORT, W6 X 9 BEAM	GROUND MOUNTED SUPPORT, W8 X 18 BEAM	GROUND MOUNTED SUPPORT, W10 X 12 BEAM	GROUND MOUNTED SUPPORT, W10 X 22 BEAM	GROUND MOUNTED SUPPORT, W12 X 30 BEAM	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 6	OVERHEAD SIGN SUPPORT, TYPE TC-7.65, DESIGN 6	GROUND MOUNTED BEAM SUPPORT FOUNDATION	RIGID OVERHEAD SIGN SUPPORT FOUNDATION	BREAKAWAY BEAM CONNECTION	SIGN ATTACHMENT ASSEMBLY, RIGID OVERHEAD	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND REERECTION	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL, TYPE TC-12.36	REMOVAL OF LUMINAIRE AND DISPOSAL	REMOVAL OF SIGN SERVICE AND DISPOSAL	REMOVAL OF DISCONNECT SWITCH AND DISPOSAL	REMOVAL OF SIGNS WIRED
					S.F.	S.F.	S.F.	FEET	FT.	FEET	FT.	FT.	FT.	FT.	FEET	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.
	SHEET #38																															
30	7.78 EB	RT	E5-H1-72	72 X 60		30.0				16.25/16.25								2		2			1						2				
31	7.83 EB	LT	W4-1R-48	48 X 48	16.0			14/14															1					2					
32	7.86 EB	RT	M4-1-30	30 x 15	3.13			17.5/17.5															4					1					
			M3-3-30	30 x 15	3.13																												
			M1-1-30	30 x 30	6.25																												
			M6-3-30	30 X 24	5.00																												
33	7.90 EB	RT	W4-1R-48	48 X 48	16.00			14/14															1					1					
34	7.93 WB	LT	E5-H1-72	72 X 60		30.0				17.25/17.25								2		2			1						2				
35	7.97 WB	LT	W13-3-48	48 X 60	20.00			15/15															1					2					
36	7.96 WB	LT	E6-2	144 X 96			96.0														3					3				1			
			E1-1	180 x 144			180.0														3										1	1	3
			E6-2A	192 X 96			128.0														3									2			
37	8.00 WB	LT	D10-1-12	12 X 24	2.00			10.5															1					1					
38	8.00 EB	RT	D10-1-12	12 X 24	2.00			10.5															1					1					
39	8.03 EB	RT	R1-2-60	60 X 60	25.00			15/15															1					1					
40	8.10 WB	LT	M4-1-30	30 x 15	3.13			17.5/17.5															4					1					
			M3-1-30	30 x 15	3.13																												
			M1-1-30	30 x 30	6.25																												
			M6-2-30	30 X 24	5.00																												
41	8.22 EB	RT	M3-2-36	36 X 18	4.50			17																									
			M1-4-36	36 X 36	9.00																												
			M1-4-36	36 X 36	9.00																												
42	8.27 WB	LT	M4-1-30	30 x 15	3.13			17.5/17.5															4					1					
			M3-1-30	30 x 15	3.13																												
			M1-1-30	30 x 30	6.25																												
			M5-2-30	30 X 24	5.00																												
43	8.27 EB	MED	R3-H4A-24	24 X 30	5.00			13.5															2					1					
			R3-4-36	36 X 36	9.00																												
44	8.29 WB	MED	R3-H4A-24	24 X 30	5.00			13.5															2					1					
			R3-4-36	36 X 36	9.00																												
	SHEET #39																															
45	8.32 EB	RT	R2-1-48	48 X 60	20.00			15/15																									
			R2-H2A-48	48 X 60	20.00			15/15																									
46	8.36 WB	LT	E1-1	156 X 114																			1					2					
47	8.42 EB	RT	E1-1	192 X 120		160.0									27.75/29			2		2													
48	8.44 EB	RT	E1-1	192 X 120																			1					2					
49	8.49 WB	LT	E1-1	180 X 144		180.0								23/23.5				2		2													
50	8.57 EB	RT	E3-H1	192 X 84		112.0									25.5/27.5			2		2													
51	8.60 WB	LT	E3-H1	180 X 84																			1					2					
			UNKNOWN	60 X 24																			1										
52	8.63 EB	RT	R2-H2B-48	48 X 96																			1					2					
53	8.64 WB	LT	E1-1	144 X 48		48.0																											
			E1-1	144 X 60		60.0						23.25/25						2		2													
			R2-4A-48	48 X 60																			1					2					
54	8.90 WB	LT	R2-1-48	48 X 60	20.00			15/15																									
			R2-H2A-48	48 X 60	20.00			15/15																									
55	8.92 EB	RT	E3-H1	192 X 84																			1					2					
			E1-1	192 X 120		160.0								24/24.75				2		2													
56	8.96 WB	LT	E1-1	180 X 144																			1					2					
57	8.99 WB	LT	E1-1	180 x 144		180.0									31.25/28.5			2		2													
58	9.00 WB	LT	D10-1-12	12 X 24	2.0			10.5															1					1					
TOTALS CARRIED TO SHEET 36					266.03	960.0	404.0	416.5		67.0		48.25		95.25	169.50			16		16	9		27	6			3	16	16		3	1	1	3

CALCULATED WHV

CHECKED LAB

SIGNING SUBSUMMARY

STA-30/297-6.06/0.17

REF NO.	SLM	SIDE	CODE # HINGED	SIZE (INCHES)	630																						631			
					SIGN, FLATSHEET	SIGN, GROUND MOUNTED EXTRUSHEET	SIGN, OVERHEAD EXTRUSHEET	GROUND MOUNTED SUPPORT, NO. 3 POST	ONE WAY SUPPORT, NO. 3 POST	GROUND MOUNTED SUPPORT, S4 X 7.7 BEAM	GROUND MOUNTED SUPPORT, W6 X 9 BEAM	GROUND MOUNTED SUPPORT, W8 X 18 BEAM	GROUND MOUNTED SUPPORT, W10 X 12 BEAM	GROUND MOUNTED SUPPORT, W10 X 22 BEAM	GROUND MOUNTED SUPPORT, W12 X 30 BEAM	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 6	OVERHEAD SIGN SUPPORT, TYPE TC-7.65, DESIGN 6	GROUND MOUNTED BEAM SUPPORT FOUNDATION	RIGID OVERHEAD SIGN SUPPORT FOUNDATION	BREAKAWAY BEAM CONNECTION	SIGN ATTACHMENT ASSEMBLY, RIGID OVERHEAD	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND REERECTION	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL, TYPE TC-12.36	REMOVAL OF LUMINAIRE AND DISPOSAL	REMOVAL OF SIGN SERVICE AND DISPOSAL	REMOVAL OF DISCONNECT SWITCH AND DISPOSAL	REMOVAL OF SIGNS WIRED
					S.F.	S.F.	S.F.	FEET	FT.	FEET	FT.	FEET	FT.	FT.	FEET	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.
	SHEET #39																															
59	9.00 EB	RT	D10-1-12	12 X 24	2.00			10.5																								
60	9.06 EB	MED	R3-H4A-24	24 X 30	5.00			13.5															2					1				
			R3-4-36	36 X 36	9.00																											
61	9.08 WB	MED	R3-H4A-24	24 X 30	5.00			13.5															2					1				
			R3-4-36	36 X 36	9.00																											
62	9.10 WB	LT	M3-4-36	36 X 18	4.50			17/17															2					1				
			M1-4-36	36 X 36	9.00																											
			M1-4-36	36 X 36	9.00																											
63	9.28 WB	RT	M1-5-36	36 X 45																			1						2			
			E1-1	192 X 72																				1								
			E1-1	228 X 84		133.0								24/20.25				2		2												
64	9.38 EB	LT	R1-2-60	60 X 60	25.00			15/15															1					1				
	SHEET #40																												2			
65	9.45 WB	LT	W4-1R-48	48 X 48	16.00			14/14															1					2				
66	9.45 EB	RT	E5-H1-72	72 X 60		30.0				17/17								2		2			1						2			
67	9.47 EB	RT	M4-1-30	30 X 15	3.13			17.5/17.5															4					1				
			M3-3-30	30 X 15	3.13																											
			M1-1-30	30 X 30	6.25																											
			M6-3-30	30 X 24	5.00																											
68	9.58 EB	MED	OM-3L-12	12 x 24	2.00			11.5															1					1				
		RT	OM-3R-12	12 x 24	2.00			11.5															1					1				
			BRIDGE I.D.																						1							
69	9.61 WB	MED	OM-3L-12	12 x 24	2.00			11.5															1					1				
		LT	OM-3R-12	12 x 24	2.00			11.5															1					1				
			BRIDGE I.D.																						1							
70	9.47 EB	RT	M4-1-30	30 X 15	3.13			17.5/17.5															2					1				
			M3-1-30	30 X 15	3.13																											
			M1-1-30	30 X 30	6.25																											
			M6-3-30	30 X 24	5.00																											
71	9.79 WB	LT	E5-H1-72	72 X 60		30.0				17.25/17.5								2		2			1						2			
72	9.80 EB	RT	W4-1R-48	48 X 48	16.00			13.5/13.5															1					1				
73	9.90 EB	RT	R1-2-60	60 X 60	25.00			15/15															1					1				
74	9.96 WB	LT	M1-5-36	36 X 45																			1						2			
			E1-1	192 X 72																				1								
			E1-1	228 X 96			152.0							23/20.75				2		2												
75	10.00 WB	LT	D10-1-12	12 X 24	2.00			10.5															1					1				
76	10.00 EB	RT	D10-1-12	12 X 24	2.00			10.5															1					1				
77	10.10	RT	M3-2-36	36 X 18																			3					1				
			M1-4-36	36 X 36																												
			M1-4-36	36 X 36																												
78	10.15 EB	RT	M3-2-36	36 X 18	4.50			17/17																								
			M1-4-36	36 X 36	9.00																											
			M1-4-36	36 X 36	9.00																											
79	10.20 EB	MED	R3-H4A-24	24 X 30	5.00			13.5															2					1				
			R3-4-36	36 X 36	9.00																											
80	10.22 WB	MED	R3-H4A-24	24 X 30	5.00			13.5															2					1				
			R3-4-36	36 X 36	9.00																											
81	10.23 EB	RT	R2-H2B-48	48 X 96																			1					2				
82	10.30 WB	LT	E1-1	192 X 120		160.0									23/23.5			2		2												
83	10.30 EB	MED	OM-3L-12	12 x 24	2.00			11.5															1					1				
		RT	OM-3R-12	12 x 24	2.00			11.5															1					1				
TOTALS CARRIED TO SHEET 36					236.02	353.0	152.0	407.5		68.75				88.00	46.50			10		10			36	2	2			23	10				

CALCULATED WHV

CHECKED LAB

SIGNING SUBSUMMARY

STA-30/297-6.06/0.17

REF NO.	SLM	SIDE	CODE # HINGED	SIZE (INCHES)	630																								631			
					SIGN, FLATSHEET	SIGN, GROUND MOUNTED EXTRUSHEET	SIGN, OVERHEAD EXTRUSHEET	GROUND MOUNTED SUPPORT, NO. 3 POST	ONE WAY SUPPORT, NO. 3 POST	GROUND MOUNTED SUPPORT, S4 X 7.7 BEAM	GROUND MOUNTED SUPPORT, W6 X 9 BEAM	GROUND MOUNTED SUPPORT, W8 X 18 BEAM	GROUND MOUNTED SUPPORT, W10 X 12 BEAM	GROUND MOUNTED SUPPORT, W10 X 22 BEAM	GROUND MOUNTED SUPPORT, W12 X 30 BEAM	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 6	OVERHEAD SIGN SUPPORT, TYPE TC-7.65, DESIGN 6	GROUND MOUNTED BEAM SUPPORT FOUNDATION	RIGID OVERHEAD SIGN SUPPORT FOUNDATION	BREAKAWAY BEAM CONNECTION	SIGN ATTACHMENT ASSEMBLY, RIGID OVERHEAD	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND REERECTION	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL, TYPE TC-18.26	REMOVAL OF LUMINAIRE AND DISPOSAL	REMOVAL OF SIGN SERVICE AND DISPOSAL	REMOVAL OF DISCONNECT SWITCH AND DISPOSAL	REMOVAL OF SIGNS WIRED
					S.F.	S.F.	S.F.	FEET	FT.	FT.	FEET	FT.	FEET	FT.	FEET	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.
	SHEET #40																															
84	10.34 WB	MED	OM-3L-12	12 x 24	2.00			11.5														1					1					
		LT	OM-3R-12	12 x 24	2.00			11.5														1					1					
			BRIDGE ID																					1								
85	10.40 EB	RT	R2-1-48	48 X 60	20.00			15/15																								
			R2-H2A-48	48 X 60	20.00			15/15																								
	SHEET #41																															
87	10.56 WB	LT	E3-H1	192 X 72		96.0							21.25/19.5					2		2								2				
88	10.80 WB	LT	M1-5-36	45 X 36																		1										
			E1-1	192 X 72																			1					2				
			E1-1	192 X 120		160.0									25.75/26.5			2		2												
89	10.95 WB	LT	E7-H4	132 X 60		55.0							20.5/23.25					2		2			1					3				
90	11.00 WB	LT	D10-1-12	12 X 24	2.0			10.5														1					1					
91	11.00 EB	RT	D10-1-12	12 X 24	2.0			10.5														1					1					
92	11.02 EB	MED	OM2-2-6	6 X 12	0.50			9.5														4					2					
			OM2-2-6	6 X 12	0.50			9.5																								
			OM2-2-6	6 X 12	0.50			9.5																								
			OM2-2-6	6 X 12	0.50			9.5																								
93	11.38 EB	RT	E1-1	204 X 144		204.0									30/26.75			2		2												
94	11.40 EB	RT	E1-1	180 X 138		172.5																	1					2				
	SHEET #42																															
95	11.59 WB	LT	R16H15-120	120 X 60		50.0					18.25/16.75							2		2			1					2				
96	11.90 WB	LT	R2-H2B-48	48 X 96																		1					2					
97	11.91 EB	RT	E1-1	204 X 144											26.75/25.25			2		2					1			2				
98	11.95 WB	LT	R2-1-48	48 X 60	20.00			15/15																								
			R2-H2A-48	48 X 60	20.00			15/15																								
99	11.97	MED	R3-H4A-24	24 X 30	5.00			13.5														2					1					
			R3-4-36	36 X 36	9.00																											
100	11.99 WB	MED	R3-H4A-24	24 X 30	5.00			13.5														2					1					
			R3-4-36	36 X 36	9.00																											
101	12.00 WB	LT	D10-1-12	12 X 24	2.0			10.5														1					1					
102	12.00 EB	RT	D10-1-12	12 X 24	2.0			10.5														1					1					
103	12.10 WB	LT	M3-4-36	36 X 18	4.50			17/17																								
			M1-4-36	36 X 36	9.00																											
			M1-4-36	36 X 36	9.00																											
104	12.13 WB	LT	R1-2-60	60 X 60	25.00			15.5/15.5														1					1					
105	12.36 WB	LT	W4-1R-48	48 X 48	16.00			13.5/13.5														1					1					
106	12.42 EB	RT	E5-H1-72	72 X 60		30.0				18/18								2		2		1						2				
107	12.53 EB	RT	M4-1-30	30 X 15	3.13			17.5/17.5																								
			M3-3-30	30 X 15	3.13																											
			M1-1-30	30 X 30	6.25																											
			M6-3-30	30 X 24	5.00																											
			R2-H2B-48	48 X 96																		1					1					
108	12.56 EB	MED	OM-3L-12	12 x 24	2.00			11.5														1					1					
		RT	OM-3R-12	12 x 24	2.00			11.5														1					1					
109	12.60 WB	MED	OM-3L-12	12 x 24	2.00			11.5														1					1					
		LT	OM-3R-12	12 x 24	2.00			11.5														1					1					
	SHEET #43																															
110	13.00 WB	LT	D10-1-12	12 X 24	2.0			10.5														1					1					
111	13.00 EB	RT	D10-1-12	12 X 24	2.0			10.5														1					1					
112	13.04	MED	OM-3L-12	12 x 24	2.00			11.5														1					1					
		RT	OM-3R-12	12 x 24	2.00			11.5														1					1					
113	13.09 WB	MED	OM-3L-12	12 x 24	2.00			11.5														1					1					
		LT	OM-3R-12	12 x 24	2.00			11.5														1					1					
TOTALS CARRIED TO SHEET 36					223.01	767.5		490.0		36.0	35.0		84.50		161.00			14		14			30	5		1		25	15				

CALCULATED WHV

CHECKED LAB

SIGNING SUBSUMMARY

STA-30/297-6.06/0.17

SIGNING SUBSUMMARY

CALCULATED WHV | CHECKED LAB

REF NO.	SLM	SIDE	CODE # HINGED	SIZE (INCHES)	630																						631			
					SIGN, FLATSHEET	SIGN, GROUND MOUNTED EXTRUSHEET	SIGN, OVERHEAD EXTRUSHEET	GROUND MOUNTED SUPPORT, NO. 3 POST	ONE WAY SUPPORT, NO. 3 POST	GROUND MOUNTED SUPPORT, S4 X 7.7 BEAM	GROUND MOUNTED SUPPORT, W6 X 9 BEAM	GROUND MOUNTED SUPPORT, W8 X 18 BEAM	GROUND MOUNTED SUPPORT, W10 X 12 BEAM	GROUND MOUNTED SUPPORT, W10 X 22 BEAM	GROUND MOUNTED SUPPORT, W12 X 30 BEAM	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 6	OVERHEAD SIGN SUPPORT, TYPE TC-7.65, DESIGN 6	GROUND MOUNTED BEAM SUPPORT FOUNDATION	RIGID OVERHEAD SIGN SUPPORT FOUNDATION	BREAKAWAY BEAM CONNECTION	SIGN ATTACHMENT ASSEMBLY, RIGID OVERHEAD	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND REERECTION	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL, TYPE TC-12.30	REMOVAL OF LUMINAIRE AND DISPOSAL	REMOVAL OF SIGN SERVICE AND DISPOSAL	REMOVAL OF DISCONNECT SWITCH AND DISPOSAL	REMOVAL OF SIGNS WIRED
					SQ. FT.	S.F.	S.F.	FEET	FT.	FT.	FEET	FT.	FT.	FT.	FT.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.
	SHEET #43																													
114	13.10 WB	LT	I-H2E-40	40 X 20	5.56			13/13.5																						
115	13.10 EB	RT	I-H2A-40	40 X 20	5.56			12.75/13.25															1				2			
	SHEET #44																													
	SR 21																													
116	8.24 NB	RT	R5-10B-30	30 X 18																			1				1			
117	8.25 SB	MED	R6-1R-36	36 X 12	3.00			11.5/11.5															1				2			
118	8.35 SB	LT	W13-2-48	48 X 60	20.00			15/15															1				2			
119	8.36 NB	OVER-HEAD	E1-2	108 X 60			45.0										1		2											
			E1-H3	168 X 84			98.0																							
120	8.37 NB	BRIDGE MOUNT	E1-2	132 X 72																						2		2		
			E1-H3	144 X 84																										
121	8.40 SB	BR. MT.	M2-H6	192 X 84																						1		1		
122	8.41 SB	LT	M2-H6	216 X 84			126.0									1			1											
123	8.44 NB	RT	W13-2-48	48 X 60	20.00			15/15															1				2			
	RAMP E																													
124	0.51	RT	R5-H10E-30	30 X 36	7.50			13.5																						
	RAMP F																													
125	0.04	RT	W13-2-48	48 X 60																			1				2			
	RAMP G																													
126	0.08	LT	W1-6R-60	60 X 30	12.50			13/13															1				2			
127	0.25	RT	R1-2-60	60 X 60	25.00			15/15															1				2			
	RAMP H																													
128	0.04	LT	R1-2-60	60 X 60	25.00			15/15															1				2			
129	0.06	LT	R1-2-24	24 X 24																			1				1			
	RAMP I																													
130	0.25	RT	R1-2-60	60 X 60	25.00			15/15															1				2			
	RAMP J																													
131	0.05	LT	W1-6R-60	60 X 30	12.50			13/13															1				2			
132	0.27	RT	D1-H5A-96	96 X 18	12.00																		1							
	RAMP L																													
133	0.33	RT	W3-1-48	48 X 48																			1				2			
			W3-1A-48	48 X 48	16.00			13.5/13.5																						
134	0.37	RT	M3-3-24	24 X 12	2.00						19.25/20						2		2				9					2		
			M1-5-24	24 X 24	4.00																									
			M6-1-21	21 X 15	2.19																									
			M3-4-24	24 X 12	2.00																									
			M1-4-24	24 X 24	4.00																									
			M6-1-21	21 X 15	2.19																									
			D1-H5A-96	96 X 18	12.00																									
			D1-H5A-96	96 X 18																										
			D1-H5A-96	96 X 18	12.00																									
135	0.48	LT	R5-1A-36	36 X 24	6.00			12.5															1				1			
		RT	R5-1A-36	36 X 24	6.00			12.5															1				1			
136	0.49	LT	R5-1-36	36 X 36	9.00			14.5	15.5														4				2			
			R1-1-48	48 X 48	16.00																									
			R6-1R-36	36 X 12	3.00																									
			R6-1L-36	36 X 12	3.00																									
		RT	R5-1-36	36 X 36	9.00			14.5															4				2			
			R1-1-48	48 X 48	16.00																									
			R6-1R-36	36 X 12																										
			R6-1L-36	36 X 12																										
TOTALS CARRIED TO SHEET 36					298.00		269.0	372.0	15.5		29.25					1	1	2	3	2			33				3	30	2	3

STA-30/297-6.06/0.17

REF NO.	SLM	SIDE	CODE # HINGED	SIZE (INCHES)	630 SIGN, FLATSHEET S.F.	SIGN, GROUND MOUNTED EXTRUSHEET S.F.	SIGN, OVERHEAD EXTRUSHEET S.F.	GROUND MOUNTED SUPPORT, NO. 3 POST FEET	ONE WAY SUPPORT, NO. 3 POST FT.	GROUND MOUNTED SUPPORT, S4 X 7.7 BEAM FEET	GROUND MOUNTED SUPPORT, W6 X 9 BEAM FEET	GROUND MOUNTED SUPPORT, W8 X 18 BEAM FEET	GROUND MOUNTED SUPPORT, W10 X 12 BEAM FEET	GROUND MOUNTED SUPPORT, W10 X 22 BEAM FEET	GROUND MOUNTED SUPPORT, W12 X 30 BEAM FEET	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 6 EA.	OVERHEAD SIGN SUPPORT, TYPE TC-7.65, DESIGN 6 EA.	GROUND MOUNTED BEAM SUPPORT FOUNDATION EA.	RIGID OVERHEAD SIGN SUPPORT FOUNDATION EA.	BREAKAWAY BEAM CONNECTION EA.	SIGN ATTACHMENT ASSEMBLY, RIGID OVERHEAD EA.	SIGN SUPPORT ASSEMBLY, POLE MOUNTED EA.	631 REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL EA.	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION EACH	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND REERECTION EACH	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL EACH	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL EACH	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL, TYPE TC-12.30 EA.	REMOVAL OF LUMINAIRE AND DISPOSAL EA.	REMOVAL OF SIGN SERVICE AND DISPOSAL EA.	REMOVAL OF DISCONNECT SWITCH AND DISPOSAL EA.	REMOVAL OF SIGNS WIRED EA.
	SHEET45																																		
	SR-627																																		
137	0.29 WB	RT	M2-H7-30	108 X 30		22.50				14.25/14.25								2		2															
			M2-H7-30	108 X 30		22.50																													
138	0.37 WB	RT	M2-1-21	21 X 15	2.19																														
			M1-4-24	24 X 24	2.00			14.75																											
			M1-4-24	24 X 24	2.00																														
	RICHVILLE DR.																																		
139	0.14 SB	LT	M2-H7-30	108 X 30																				1						2				
140	0.20 SB	LT	M2-1-21	21 X 15																				3					1					
			M1-4-24	24 X 24																															
			M1-4-24	24 X 24																															
141	0.29 SB	LT	M2-H7-30	108 X 30		22.50				15/15.5								2		2															
			M2-H7-30	108 X 30		22.50																													
142	0.29 SB	LT	M2-1-21	21 X 15	2.19																														
			M1-4-24	24 X 24	2.00			14.75																											
			M1-4-24	24 X 24	2.00																														
	RAMP A																																		
143	2.52	RT	R5-H10D-36	30 X 36	7.50			13.5																1					1					
	RAMP B																																		
144	0.10	LT	R5-1A-36	36 X 24	6.00			12.5																											
145	0.10	RT	R5-1A-36	36 X 24	6.00																														
			M1-5-24	24 X 30	5.00																														
			M6-1R-21	21 X 15	2.19					14.25/15								2		2				5							2				
			D3-H3	96 X 24	16.00																														
			D1-H5-96	96 X 24	16.00																														
146	0.17	LT	R5-1-36	36 X 36	9.00																														
			R1-1-48	48 X 48	16.00			14.5	15.5															4					2					
			R1-1R-36	36 X 12	3.00																														
			R1-1L-36	36 X 12	3.00																														
		RT	R5-1-36	36 X 36	9.00																														
			R1-1-48	48 X 48	16.00			14.5/14.5																2					2					
	RAMP C																																		
147	2.40	RT	R5-1A-36	36 X 24																															
			M3-2-24	24 X 12	2.00																														
			M1-5-24	24 X 30	5.00																														
			M6-1L-21	21 X 15	2.19					14.75/13.75								2		2				6							2				
			D3-H3	96 X 24	16.00																														
			D1-H5-96	96 X 24	16.00																														
148	2.45	LT	R5-1A-36	36 X 24	6.00			12.5																											
		RT	R5-1A-36	36 X 24	6.00			12.5																											
149	2.49	LT	R5-1-36	36 X 36	9.00																				1					1					
			R1-1-48	48 X 48	16.00			14.5	15.5															3					2					
			R6-1R-36	36 X 12	3.00																														
			R6-1L-36	36 X 12	3.00																														
		RT	R5-1-36	36 X 36	9.00																														
			R1-1-48	48 X 48	16.00			14.5/14.5																3					2					
			R6-1R-36	36 X 12																															
			R6-1L-36	36 X 12																															
TOTALS CARRIED TO SHEET 36					236.26	90.0		167.5	31.0	116.75								8		8				29					11	6					

CALCULATED WHV

CHECKED LAB

SIGNING SUBSUMMARY

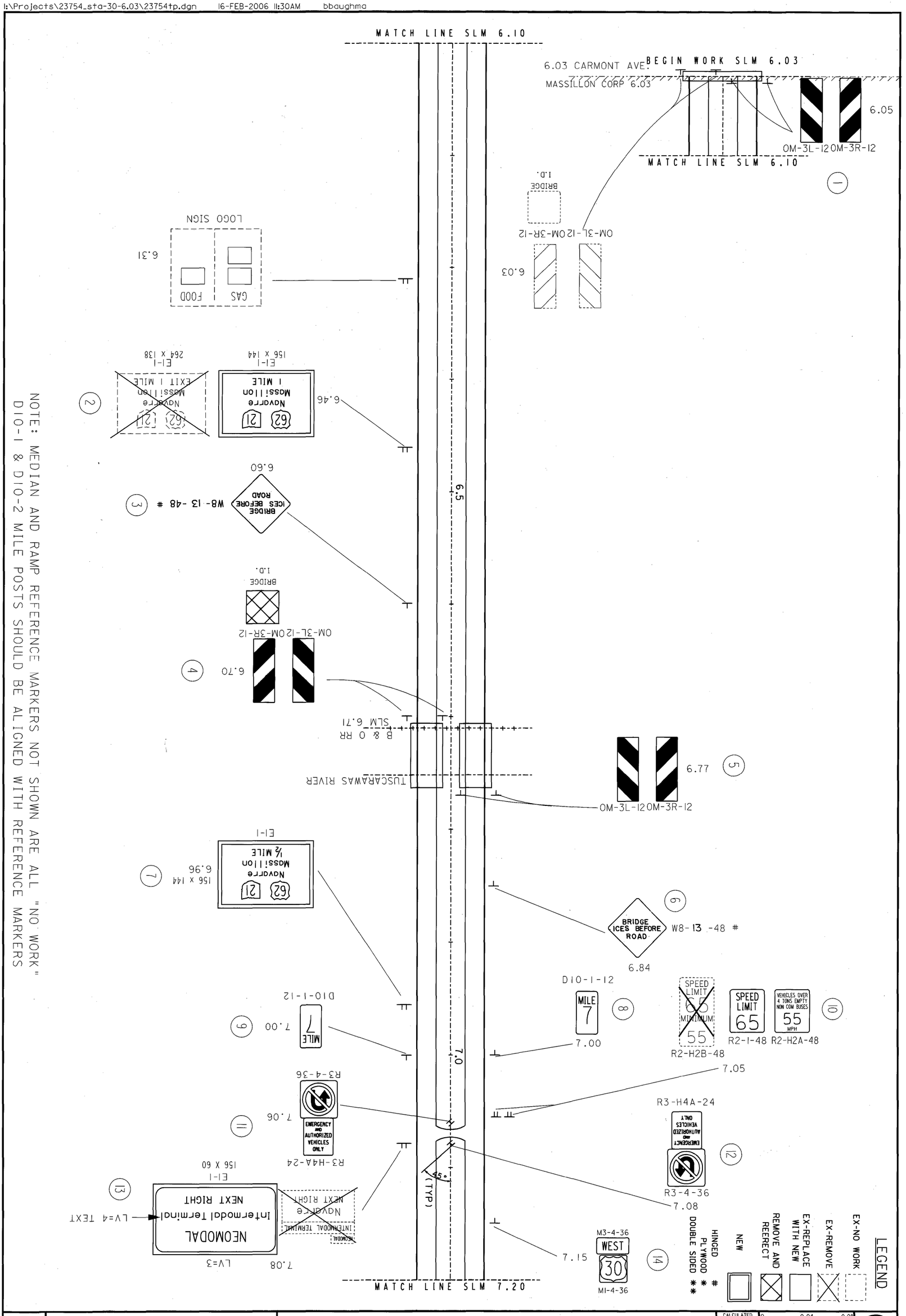
STA-30/297-6.06/0.17

SIGNING SUBSUMMARY

CALCULATED WHV | CHECKED LAB

REF NO.	SLM	SIDE	CODE (# HINGED)	SIZE (INCHES)	630																							631			
					SIGN, FLATSHEET	SIGN, GROUND MOUNTED EXTRUSHEET	SIGN, OVERHEAD EXTRUSHEET	GROUND MOUNTED SUPPORT, NO. 3 POST	ONE WAY SUPPORT, NO. 3 POST	GROUND MOUNTED SUPPORT, S4 X 7.7 BEAM	GROUND MOUNTED SUPPORT, W6 X 9 BEAM	GROUND MOUNTED SUPPORT, W8 X 18 BEAM	GROUND MOUNTED SUPPORT, W10 X 12 BEAM	GROUND MOUNTED SUPPORT, W10 X 22 BEAM	GROUND MOUNTED SUPPORT, W12 X 30 BEAM	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 6	OVERHEAD SIGN SUPPORT, TYPE TC-7.65, DESIGN 6	GROUND MOUNTED BEAM SUPPORT FOUNDATION	RIGID OVERHEAD SIGN SUPPORT FOUNDATION	BREAKAWAY BEAM CONNECTION	SIGN ATTACHMENT ASSEMBLY, RIGID OVERHEAD	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND REERECTION	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL, TYPE TC-12.36	REMOVAL OF LUMINAIRE AND DISPOSAL	REMOVAL OF SIGN SERVICE AND DISPOSAL	REMOVAL OF DISCONNECT SWITCH AND DISPOSAL	REMOVAL OF SIGNS WIRED
					SQ. FT.	S.F.	S.F.	FT.	FT.	FEET	FT.	FT.	FT.	FT.	FT.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.
	SHEET #45																														
	RAMP D																														
150	1.52	RT	R5-H10D-36	30 X 36	7.50			13.5																							
	SHEET #46																														
	RAMP N																														
151	0.06	RT	W3-1A-36	36 X 36	9.00			13.5													1				1						
152	0.10	RT	M1-5-24	36 X 24	6.00					15/16.25								2		2		4						2				
			M6-3-21	21 X 15	2.19																										
			R5-1A-36	36 X 24	6.00																										
			D3-H3	96 X 24	16.00																										
			D3-H3A	96 X 24	16.00																										
			D4B	96 X 24																											
153	0.10	LT	R5-1A-36	36 X 24	6.00																	1					1				
154	0.16	LT	R5-1-36	36 X 36	9.00			14.5	15.5													2					1				
			R1-1-24	24 X 24	4.00																										
			R6-1L-36	36 X 12	3.00																										
			R6-1R-36	36 X 12	3.00																										
		RT	R5-1-48	48 X 48	16.00			14.5/14.5														4					2				
			R1-1-36	36 X 36	9.00																										
155	0.48	RT	R5-1-36	36 X 36	9.00																2	2					2				
			R3-H8BN-36	36 X 30	7.50																										
156	0.49	LT	R5-1-36	36 X 24	6.00			14.5	15.5													1					1				
			R6-1L-36	36 X 12	3.00																										
			R6-1R-36	36 X 12	3.00																										
TOTALS FROM THIS SHEET					141.19			85.00	31.00	31.25								2		2		3	14				1	7	2				
TOTALS FROM SHEET NO. 30					303.56	565.00	608.00	421.00		95.50			37.75	107.25				12		12	15	2	31	4	3		4	31	10		7	1	1	3
TOTALS FROM SHEET NO.31					266.03	960.00	404.00	416.50		67.00		48.25		95.25	169.50			16		16	9		27	6			3	16	16		3	1	1	3
TOTALS FROM SHEET NO.32					236.02	353.00	152.00	407.50		68.75				88.00	46.50			10		10			36	2	2			23	10					
TOTALS FROM SHEET NO. 33					223.01	767.50		490.00		36.00	35.00		84.50		161.00			14		14			30	5		1		25	15					
TOTALS FROM SHEET NO. 34					298.00		269.00	372.00	15.50		29.25					1	1	2	3	2			33				3	30	2	3				
TOTALS FROM SHEET NO. 35					236.26	90.00		167.50	31.00	116.75								8		8			29					11	6					
TOTALS CARRIED TO GENERAL SUMMARY					1704.1	2735.5	1433.0	2359.5	77.5	415.3	64.3	48.3	122.3	290.5	377.0	1	1	64	3	64	24	5	200	17	5	1	11	143	61	3	10	2	2	6

STA-30/297-6.06/0.17



NOTE: MEDIAN AND RAMP REFERENCE MARKERS NOT SHOWN ARE ALL "NO WORK"
D10-1 & D10-2 MILE POSTS SHOULD BE ALIGNED WITH REFERENCE MARKERS

37/60	STA-30/ 297-6.06/ 0.17	US 30 SIGNING PLAN SLM 6.03 TO 7.20	CALCULATED WHV; CHECKED LAB; 0 0.02 0.04 0.06 0.08 HORIZONTAL SCALE IN MILES; N

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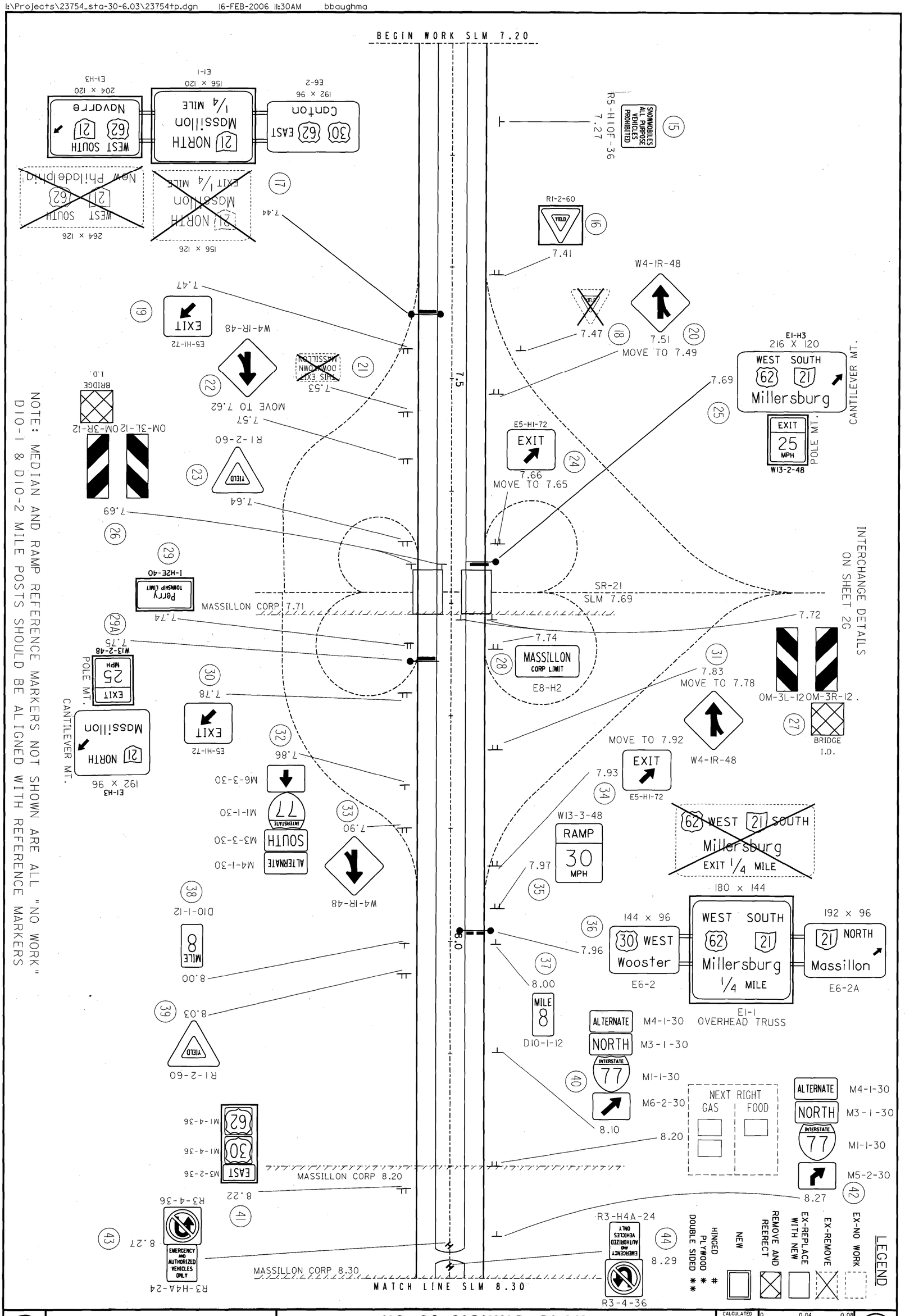


38/60

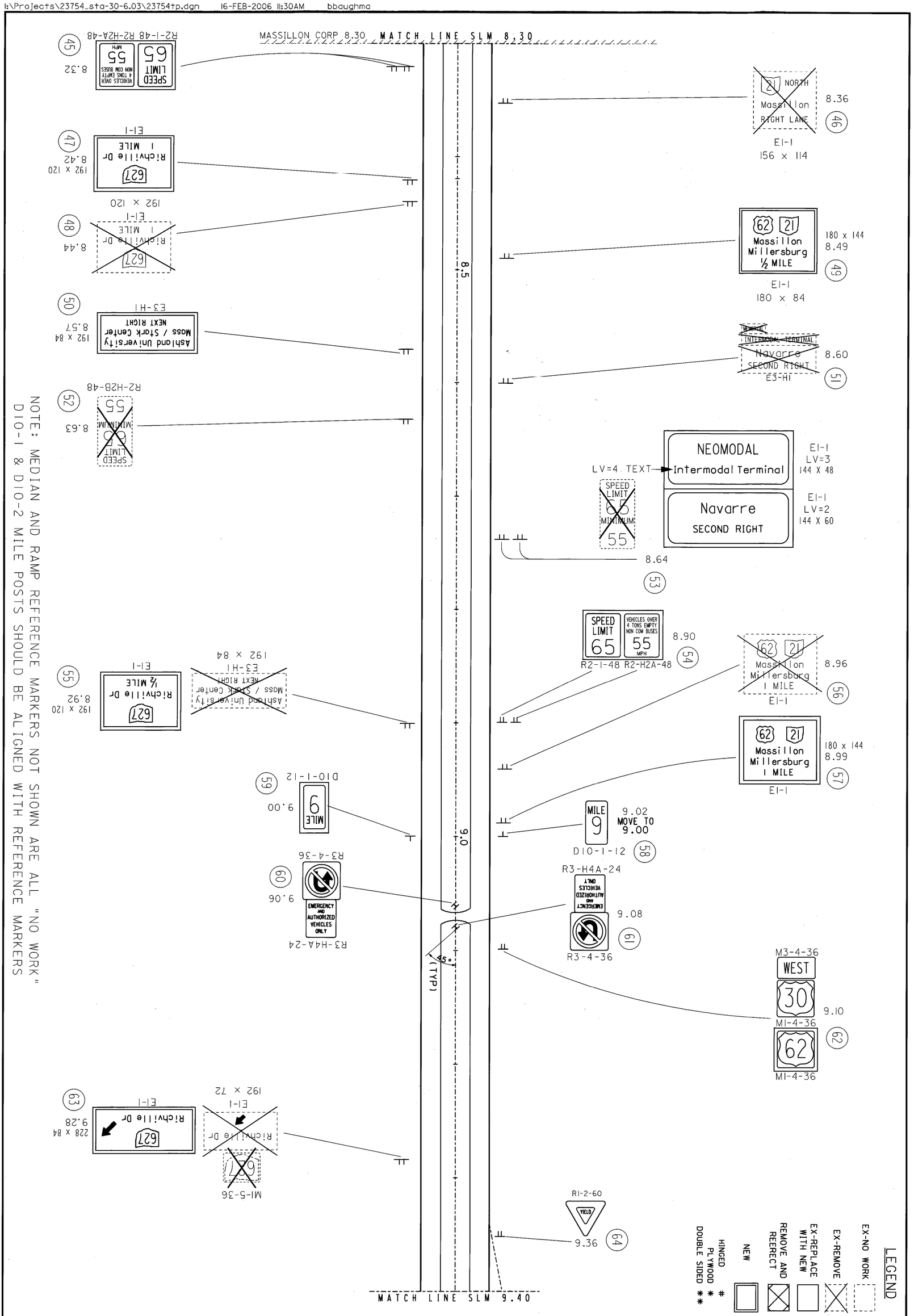
STA-30/297-6.06/0.17

US 30 SIGNING PLAN SLM 7.20 TO 8.30

CALCULATED WHV
CHECKED LAB

0 0.04 0.08
0.02 0.06
HORIZONTAL SCALE IN MILES

N



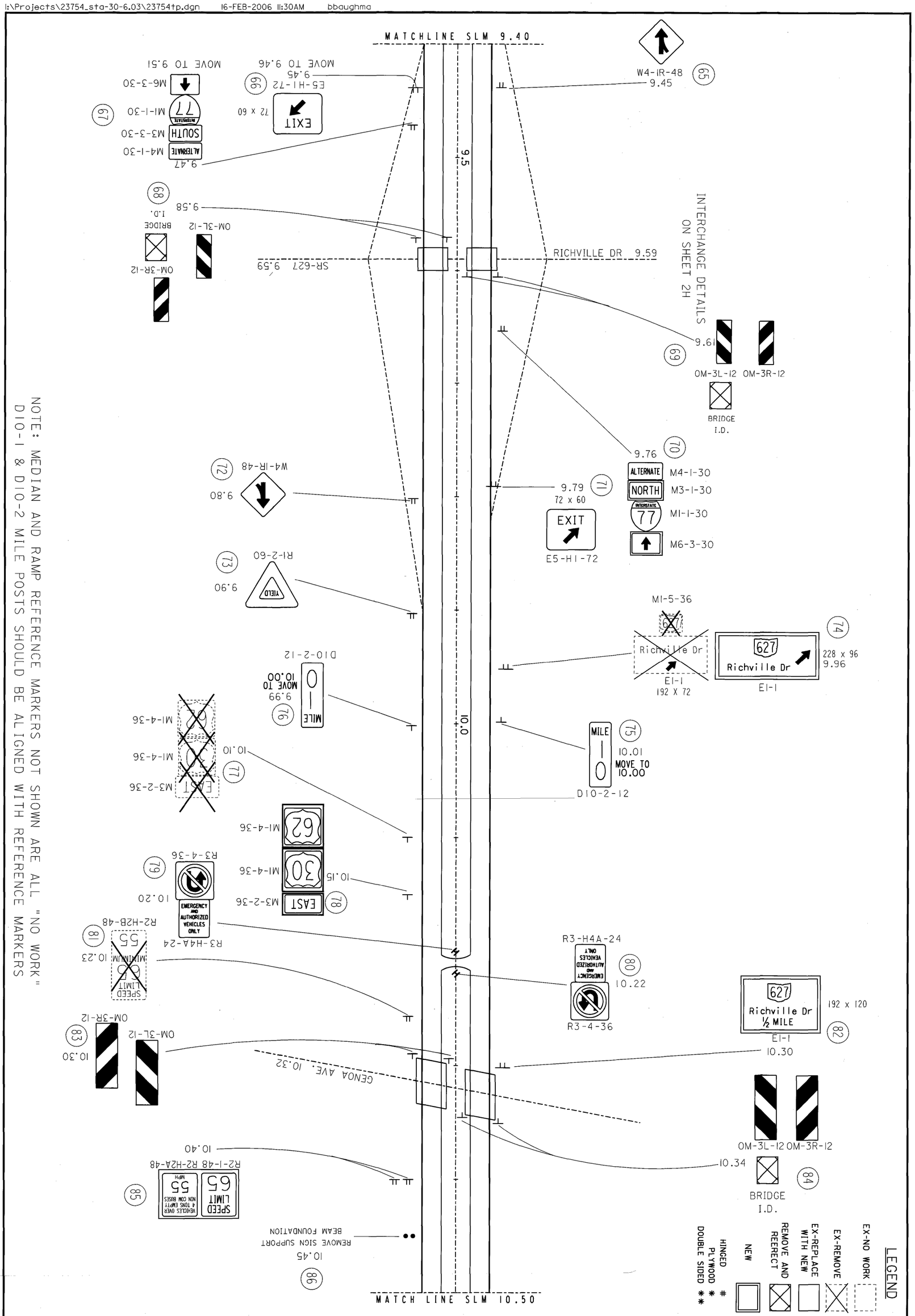
STA-30/297-6.06/0.17

US 30 SIGNING PLAN SLM 8.30 TO 9.40

CALCULATED WHV
CHECKED LAB

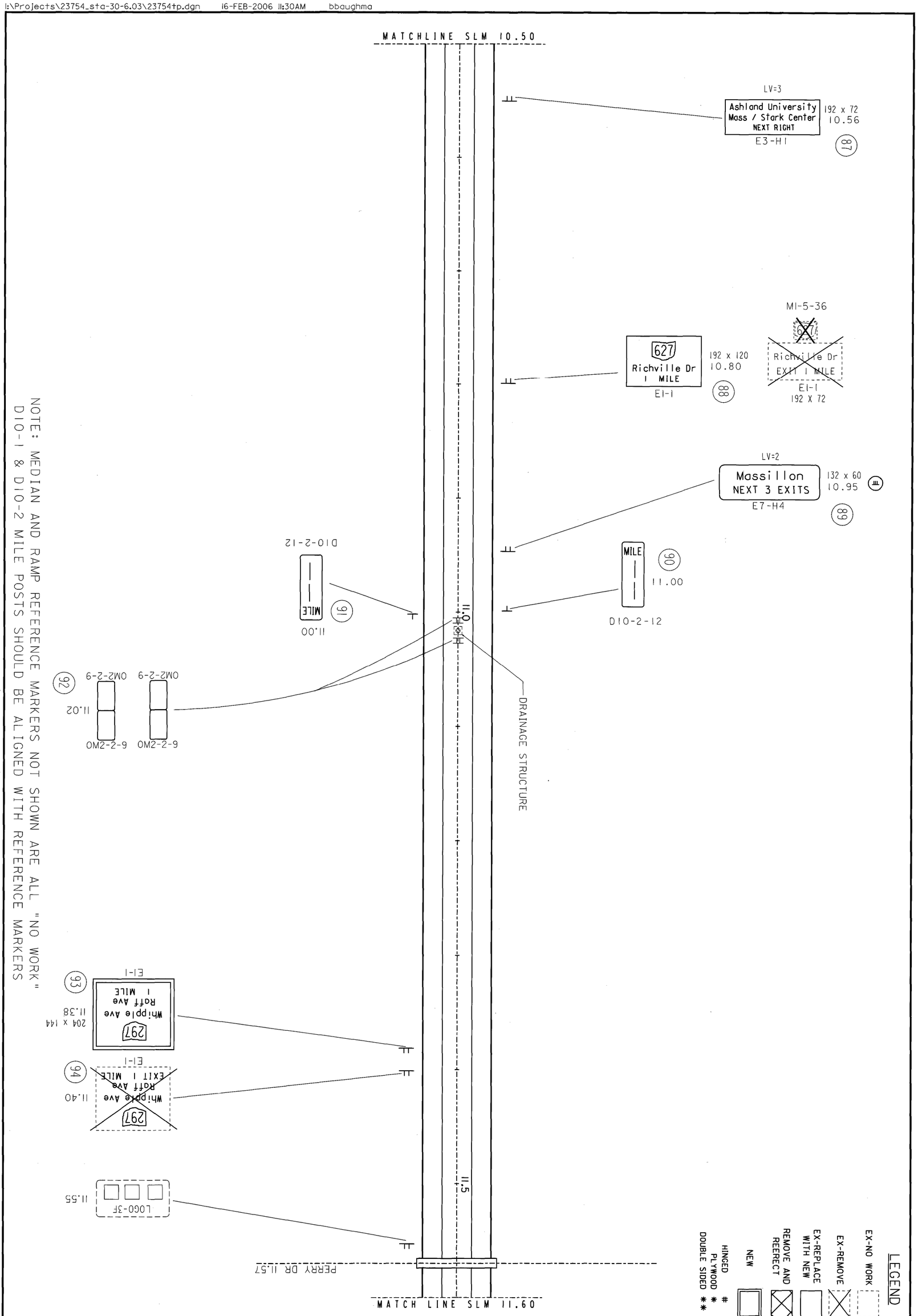
0 0.02 0.04 0.06 0.08
HORIZONTAL SCALE IN MILES

N



NOTE: MEDIAN AND RAMP REFERENCE MARKERS NOT SHOWN ARE ALL "NO WORK"
D10-1 & D10-2 MILE POSTS SHOULD BE ALIGNED WITH REFERENCE MARKERS

40/60	STA-30/297-6.06/0.17	US 30 SIGNING PLAN SLM 9.40 TO 10.50	CALCULATED WHV; CHECKED LAB; HORIZONTAL SCALE IN MILES 0 0.02 0.04 0.06 0.08



STA-30/ 297-6.06/ 0.17

US 30 SIGNING PLAN
SLM 10.50 TO 11.60

CALCULATED WHV
CHECKED LAB

0 0.02 0.04 0.06 0.08
HORIZONTAL SCALE IN MILES

US 30 SIGNING PLAN
SLM 11.60 TO 12.70

STA-30/297-6.06/0.17

42
60

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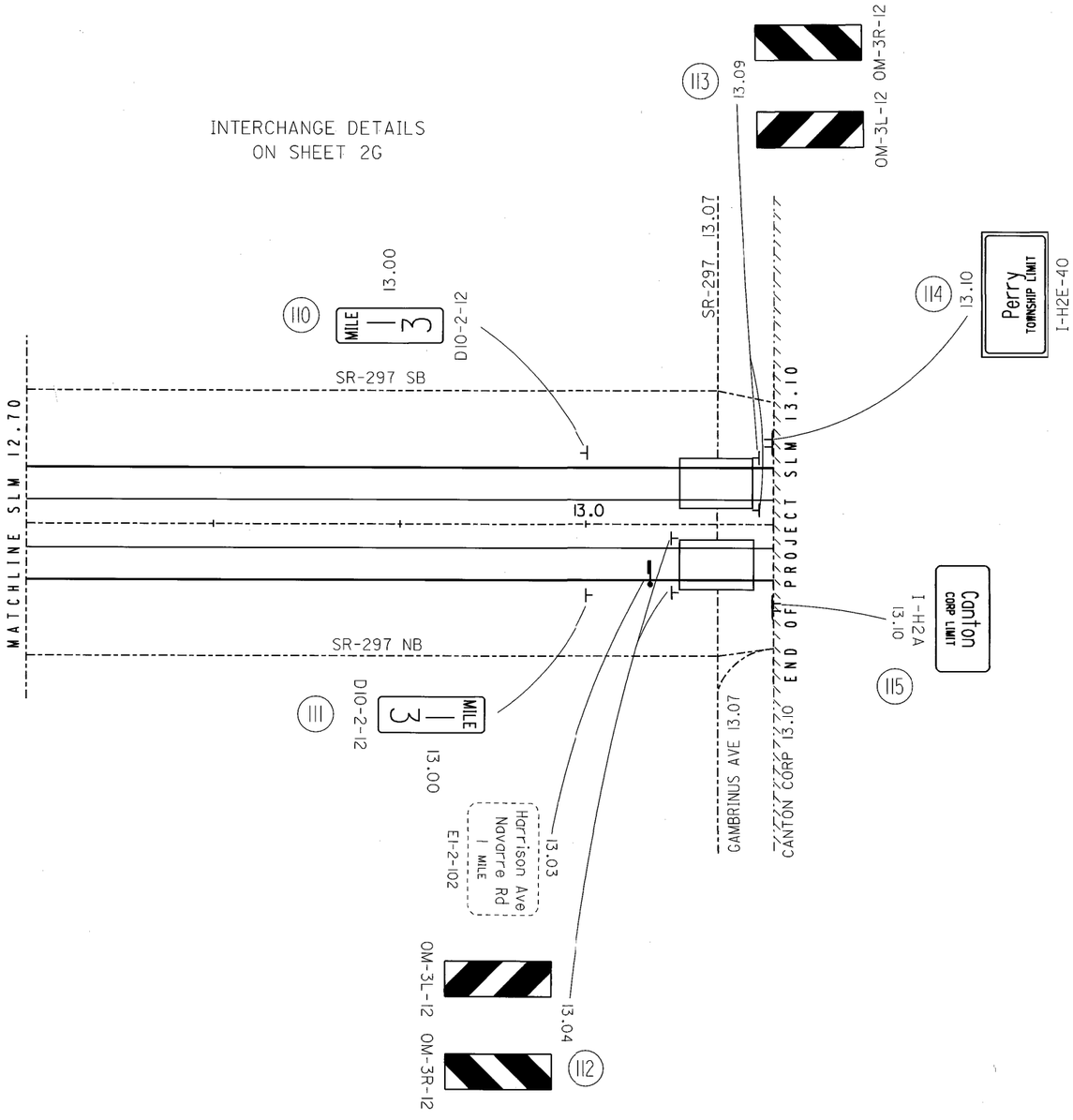

NOTE: MEDIAN AND RAMP REFERENCE MARKERS NOT SHOWN ARE ALL "NO WORK"
DIO-1 & DIO-2 MILE POSTS SHOULD BE ALIGNED WITH REFERENCE MARKERS

LEGEND

- EX-NO WORK
- EX-REMOVE
- EX-REPLACE WITH NEW
- REMOVE AND REERECT
- NEW
- HINGED #
- PLYWOOD *
- DOUBLE SIDED **

0 0.02 0.04 0.06 0.08
HORIZONTAL SCALE IN MILES

CALCULATED WHV
CHECKED LAB

US 30 SIGNING PLAN
SLM 12.70 TO 13.10

STA-30/297-6.06/0.17

43
60

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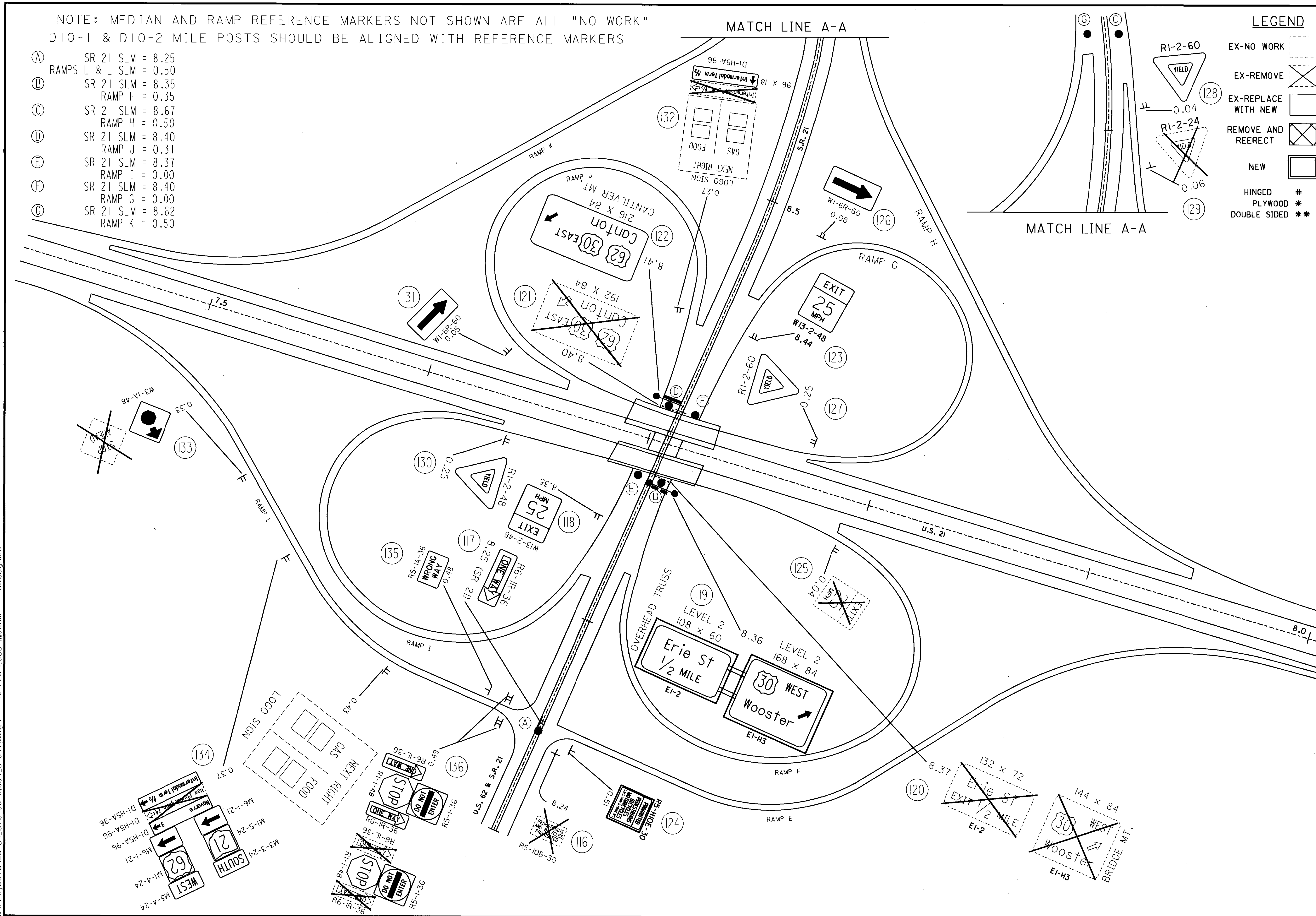
NOTE: MEDIAN AND RAMP REFERENCE MARKERS NOT SHOWN ARE ALL "NO WORK"
DIO-I & DIO-2 MILE POSTS SHOULD BE ALIGNED WITH REFERENCE MARKERS
Ⓐ SR 21 SLM = 8.25
RAMPS L & E SLM = 0.50
Ⓑ SR 21 SLM = 8.35
RAMP F = 0.35
Ⓒ SR 21 SLM = 8.67
RAMP H = 0.50
Ⓓ SR 21 SLM = 8.40
RAMP J = 0.31
Ⓔ SR 21 SLM = 8.37
RAMP I = 0.00
Ⓕ SR 21 SLM = 8.40
RAMP G = 0.00
Ⓖ SR 21 SLM = 8.62
RAMP K = 0.50
MATCH LINE A-A
LEGEND
EX-NO WORK
EX-REMOVE
EX-REPLACE WITH NEW
REMOVE AND REERECT
NEW
HINGED #
PLYWOOD *
DOUBLE SIDED **
RAMP K
RAMP J
RAMP H
RAMP G
RAMP I
RAMP L
RAMP F
RAMP E
S.R. 21
U.S. 21
U.S. 62 & S.R. 21
216 X 84
CANTILEVER MT.
192 X 84
OVERHEAD TRUSS
LEVEL 2
108 X 60
LEVEL 2
168 X 84
132 X 72
144 X 84
BRIDGE MT.
LOGO SIGN
NEXT RIGHT
FOOD
GAS
Canton
EAST
Erie St
1/2 MILE
WEST
Wooster
EXIT
25
MPH
YIELD
WRONG WAY
ONE WAY
STOP
DO NOT ENTER
SOUTH
R1-2-60
R1-2-24
R1-2-48
W1-6R-60
W13-2-48
W3-1A-48
R5-1A-36
R6-1R-36
R6-1L-36
R1-1-48
R5-1-36
R5-10B-30
R5-10E-30
D1-H5A-96
M6-1-21
M1-5-24
M3-3-24
M1-4-24
M3-4-24
E1-2
E1-H3
96 X 18
7.5
8.0
8.5
MATCH LINE A-A

US 30 SIGNING PLAN
SR 21 INTERCHANGE DETAIL

SCALE IN MILES: 0, 0.02, 0.04, 0.06

CALCULATED CDK | CHECKED LAB

STA-30/297-6.06/0.17

44 / 60

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Ⓐ SR-627/RICHVILLE SLM = 0.18
EB RAMPS SLM = 1.50

Ⓑ SR-627/RICHVILLE SLM = 0.10
WB RAMPS SLM = 2.50

LEGEND

EX-NO WORK

EX-REMOVE

EX-REPLACE WITH NEW

REMOVE AND REERECT

NEW

HINGED #
PLYWOOD *
DOUBLE SIDED **

SCALE IN MILES 0 0.02 0.04 0.06

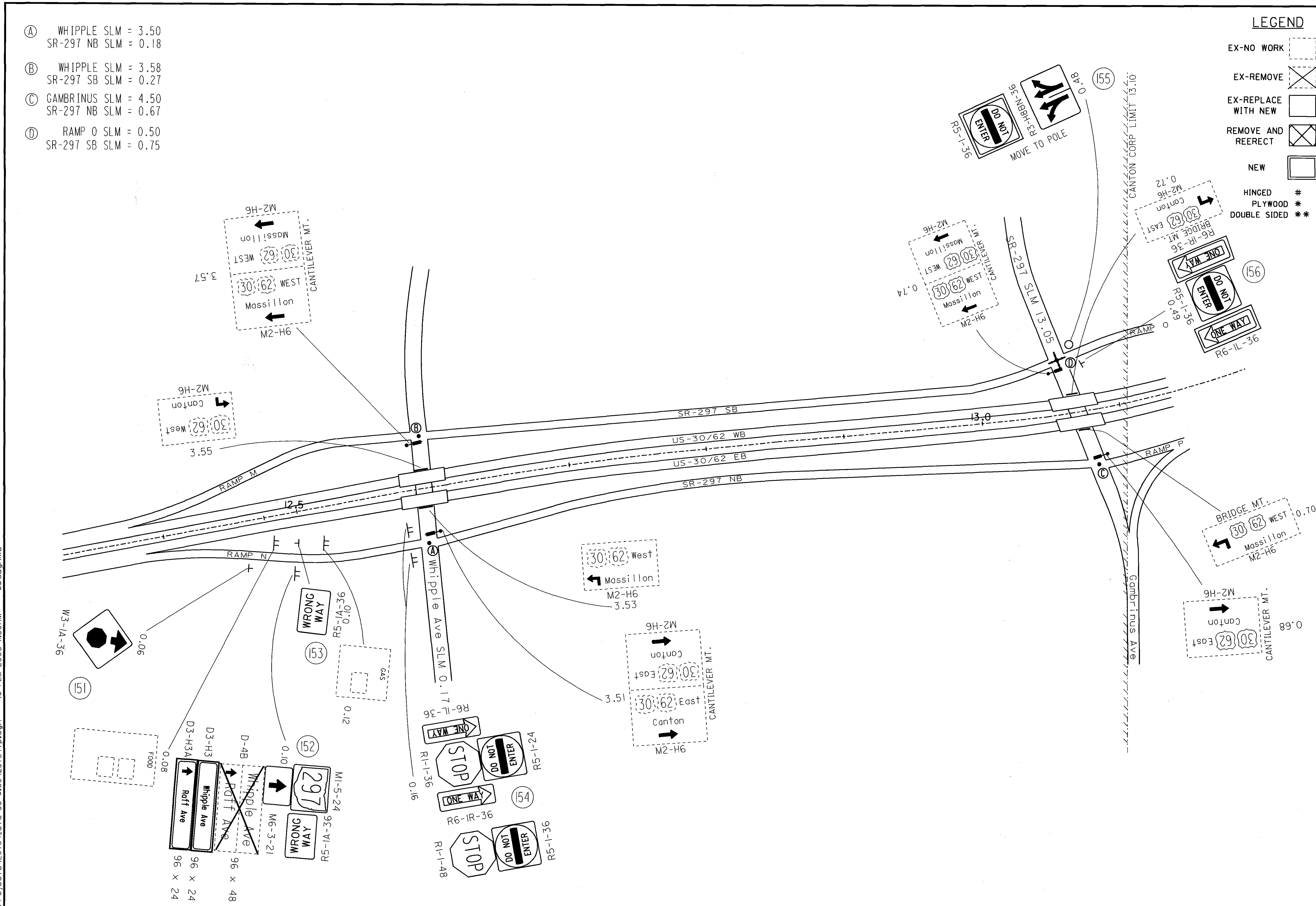
CALCULATED WHV
CHECKED LAB

US 30 SIGNING PLAN
INTERCHANGE DETAIL
S.R. 627 INTERCHANGE

STA-30/297-6.06/0.17

45/60

NOTE: MEDIAN AND RAMP REFERENCE MARKERS NOT SHOWN ARE ALL "NO WORK"
DIO-1 & DIO-2 MILE POSTS SHOULD BE ALIGNED WITH REFERENCE MARKERS



Ⓐ WHIPPLE SLM = 3.50
SR-297 NB SLM = 0.18
Ⓑ WHIPPLE SLM = 3.58
SR-297 SB SLM = 0.27
Ⓒ GAMBRINUS SLM = 4.50
SR-297 NB SLM = 0.67
Ⓓ RAMP O SLM = 0.50
SR-297 SB SLM = 0.75
LEGEND
EX-NO WORK
EX-REMOVE
EX-REPLACE WITH NEW
REMOVE AND REERECT
NEW
HINGED #
PLYWOOD *
DOUBLE SIDED **
SCALE IN MILES
0 0.02 0.04 0.06 0.08
CALCULATED
CHECKED LAB
SR-297 SB
US-30/62 WB
US-30/62 EB
SR-297 NB
RAMP M
RAMP N
RAMP O
RAMP P
12.5
13.0
Whipple Ave SLM 0.17
SR-297 SLM 13.05
Gambrinus Ave
CANTON CORP LIMIT 13.10
CANTILEVER MT.
BRIDGE MT.
M2-H6
30 62 WEST Massillon
30 62 West Canton
30 62 East Canton
3.57
3.55
3.53
3.51
0.74
0.72
0.70
0.68
155
R5-1-36
R3-H8BN-36
DO NOT ENTER
MOVE TO POLE
0.48
156
R6-1R-36
R6-1L-36
R5-1-36
ONE WAY
0.49
151
W3-1A-36
0.06
152
153
154
WRONG WAY
R5-1A-36
0.10
0.12
GAS
FOOD
D3-H3A
D3-H3
D-4B
Raff Ave
Whipple Ave
96 x 24
96 x 48
0.08
M1-5-24
297
M6-3-21
R1-1-36
R1-1-48
STOP
R5-1-24
0.16

US 30 SIGNING PLAN
WHIPPLE & SR 297 INTERCHANGE DETAIL

STA-30/297-6.06/0.17

46/60

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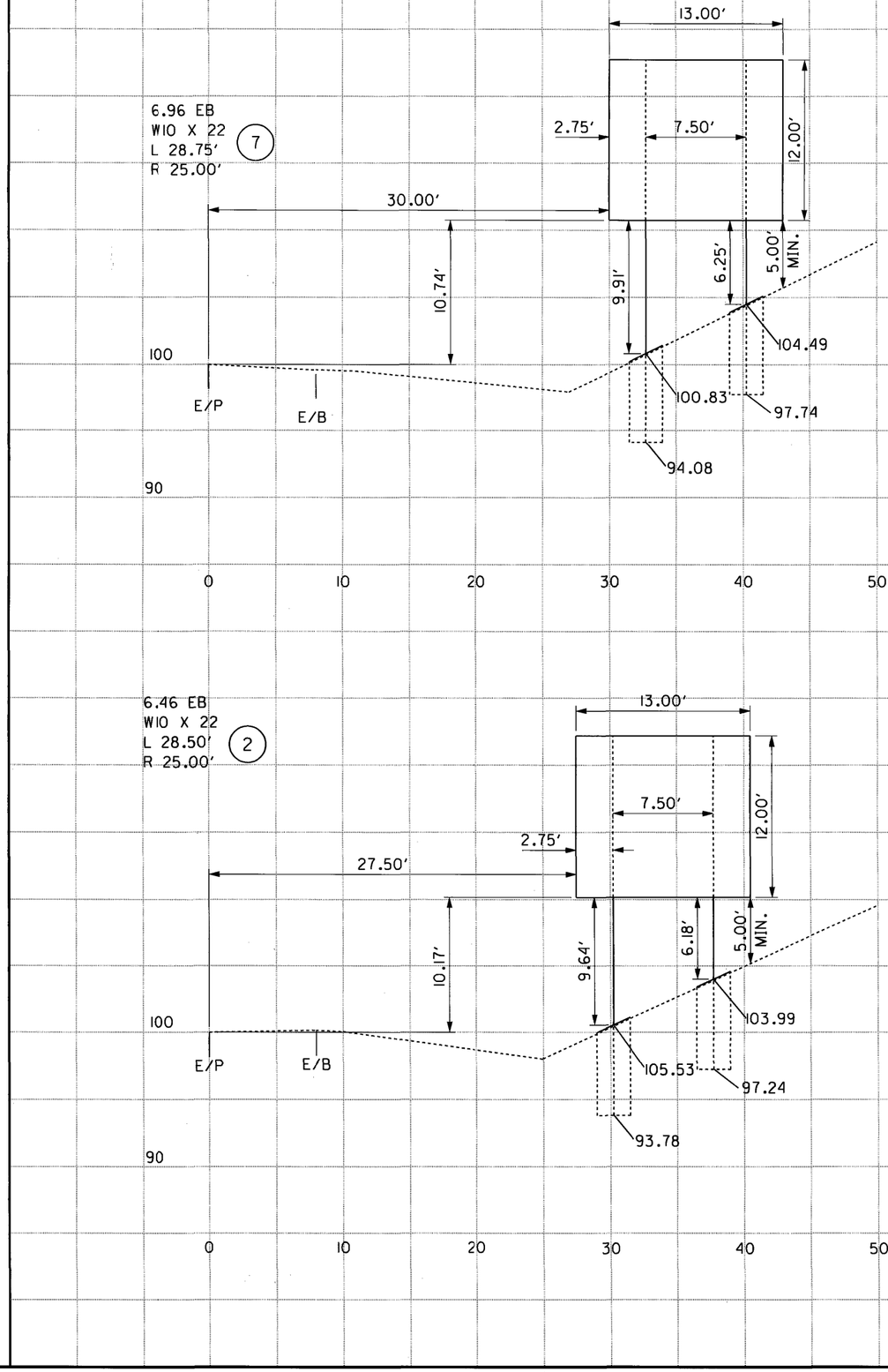

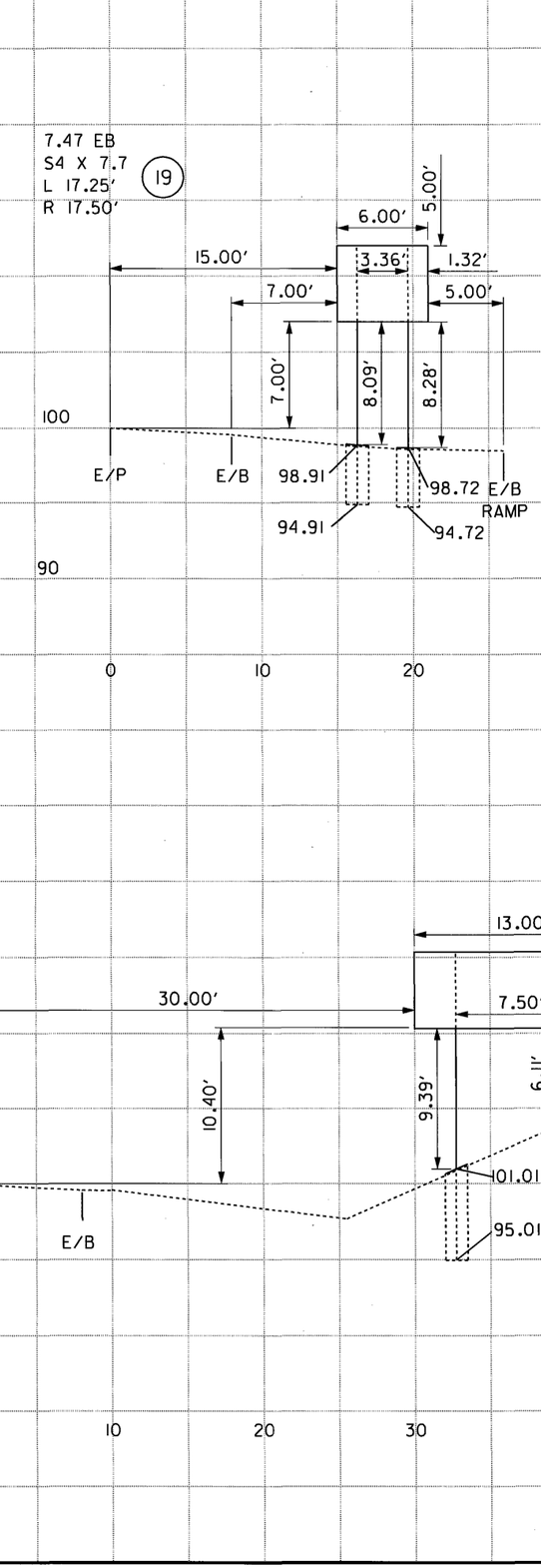

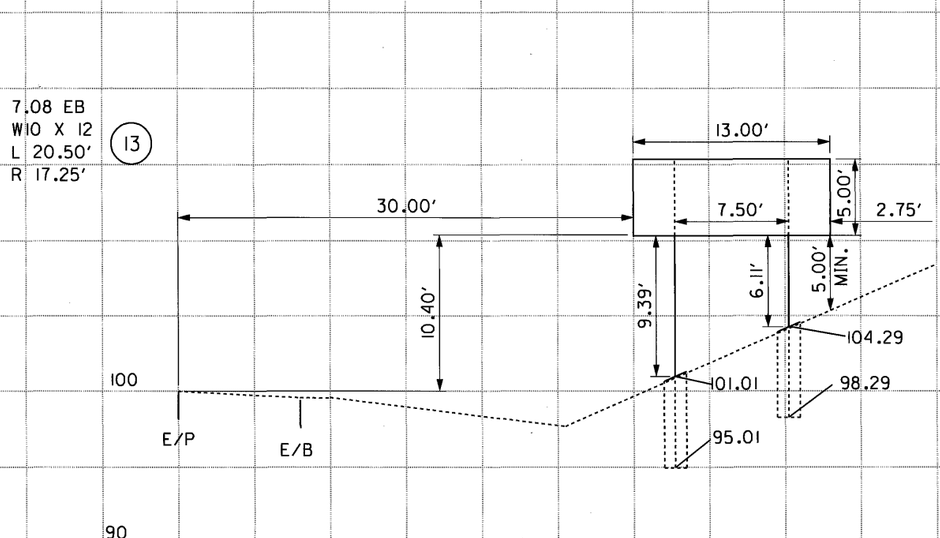

CALCULATED WHV
CHECKED LAB

STA 30 CROSS SECTIONS

STA-30/297-6.06/0.17

47
60

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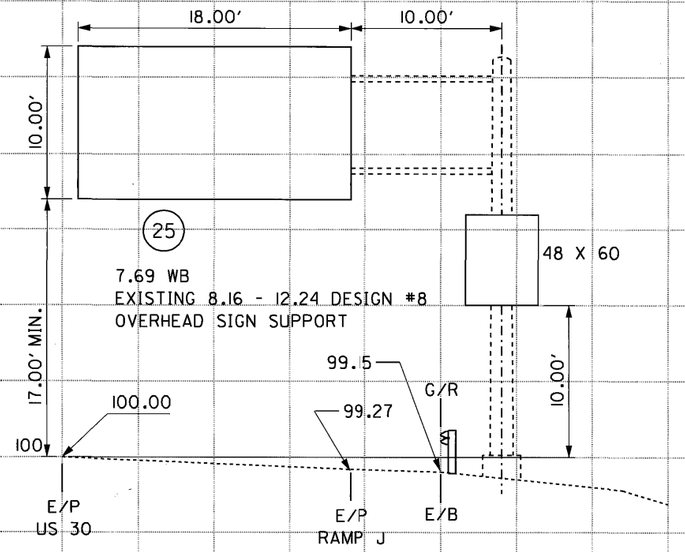

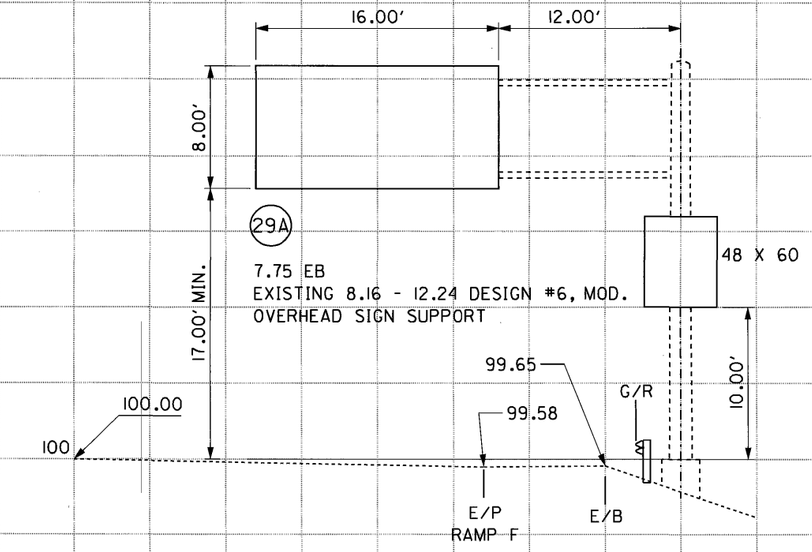

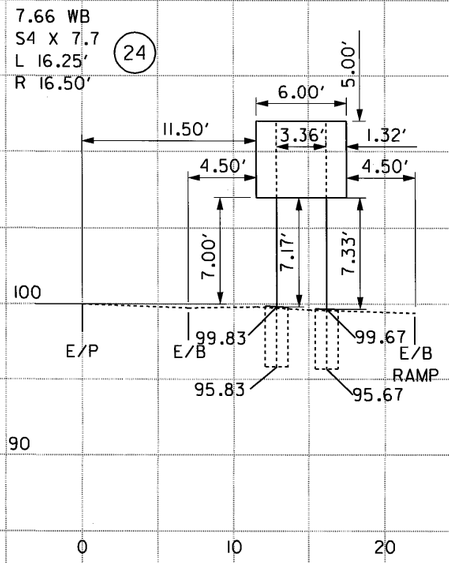

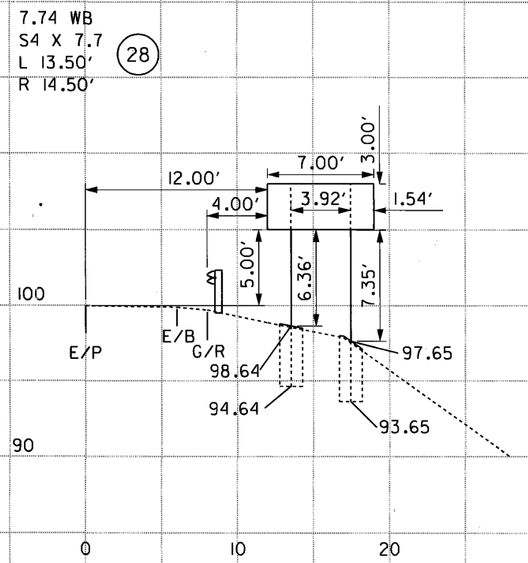

CALCULATED WHV
CHECKED LAB

STA 30 CROSS SECTIONS

STA-30/297-6.06/0.17

48
60

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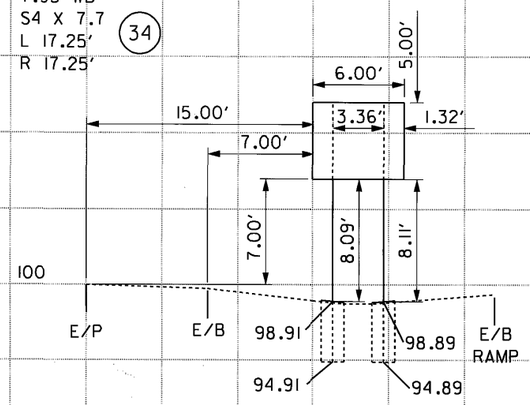
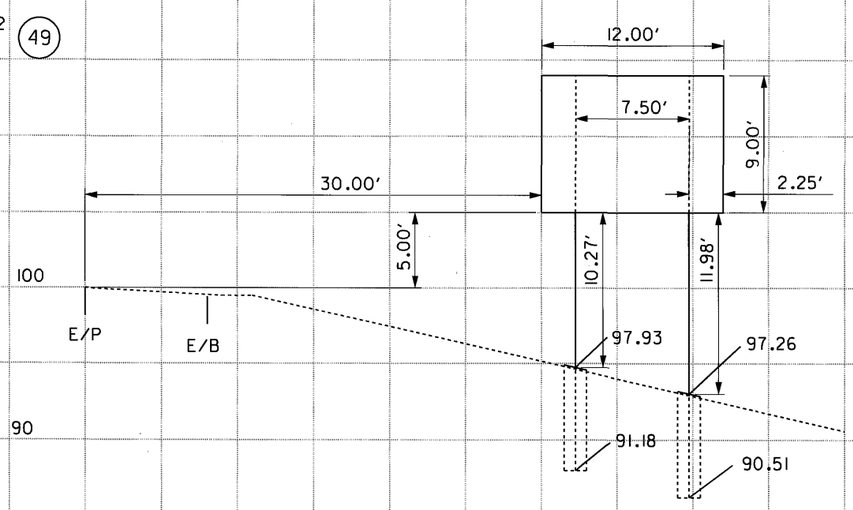
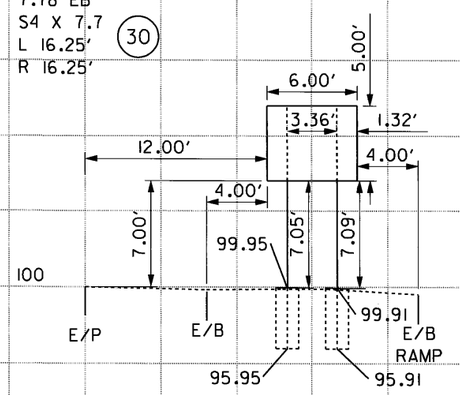
7.93 WB
S4 X 7.7
L 17.25'
R 17.25'



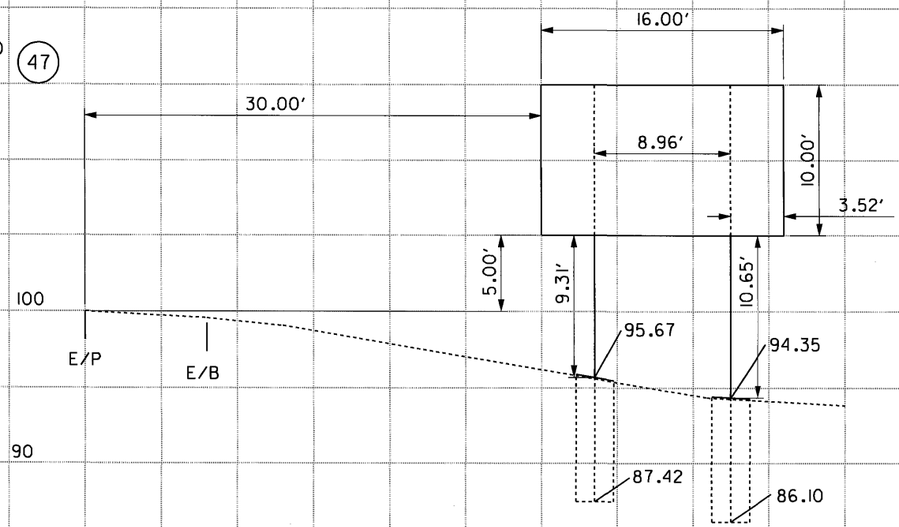
8.49 WB
W10 X 22
L 23.00'
R 23.50'



7.78 EB
S4 X 7.7
L 16.25'
R 16.25'



8.42 EB
W12 X 30
L 27.75'
R 29.00'



STA 30 CROSS SECTIONS

STA-30/297-6.06/0.17

49
60

CALCULATED WHV
CHECKED LAB

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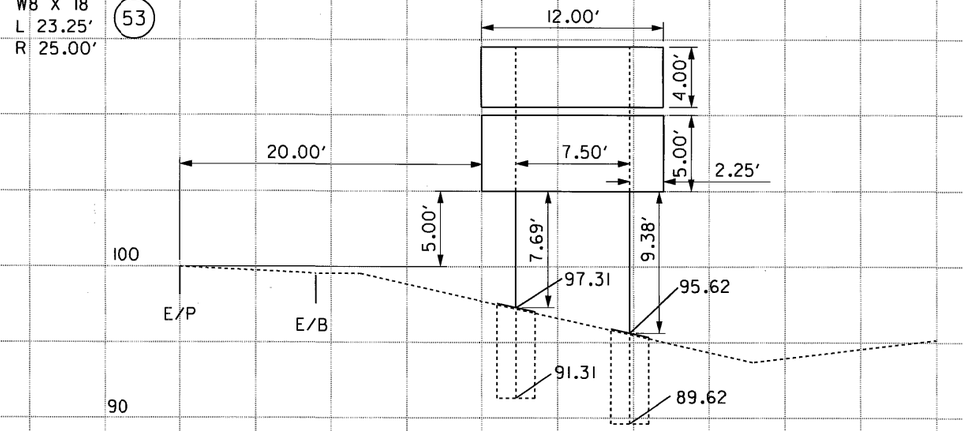
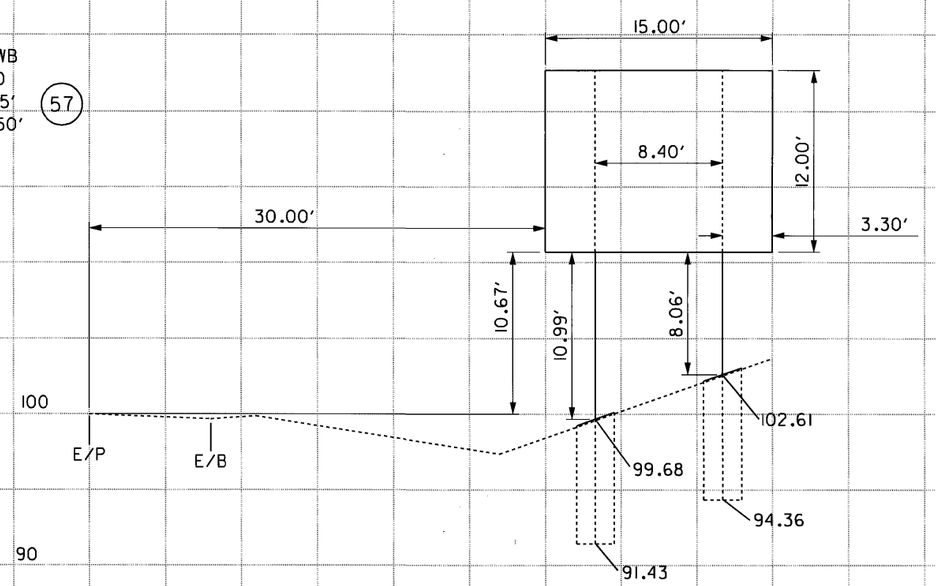
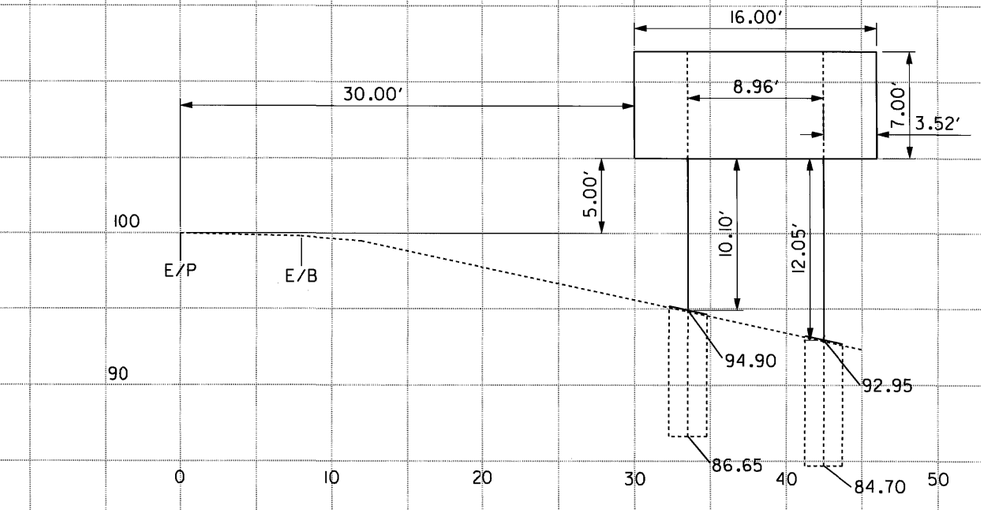
8,64 WB
W8 X 18
L 23.25'
R 25.00'
(53)



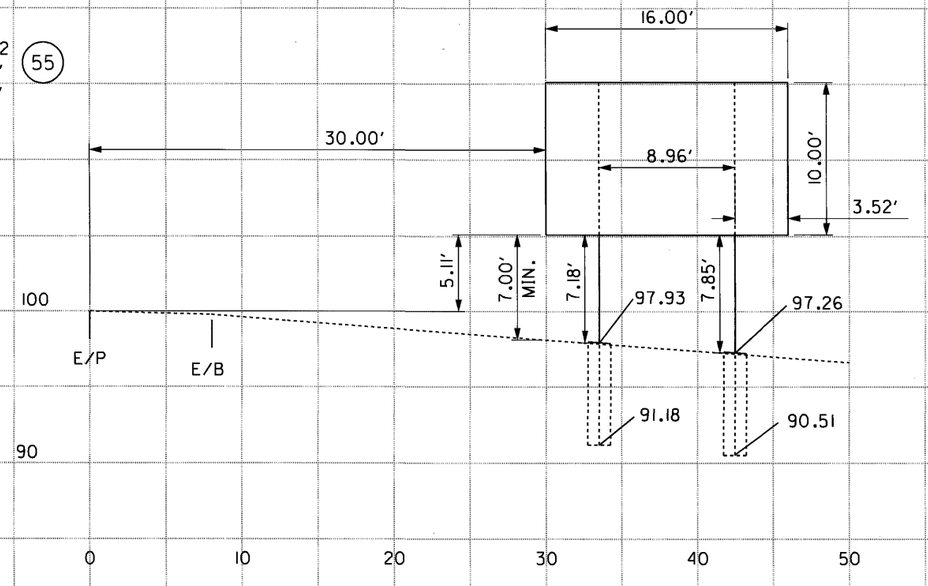
8.99 WB
W12X30
L 31.25'
R 28.50'
(57)



8.57 EB
W12X30
L 25.50'
R 27.50'
(50)



8.92 EB
W10 X 22
L 24.00'
R 24.75'
(55)



CALCULATED WHV
CHECKED LAB

STA 30 CROSS SECTIONS

STA-30/297-6.06/0.17

50/60

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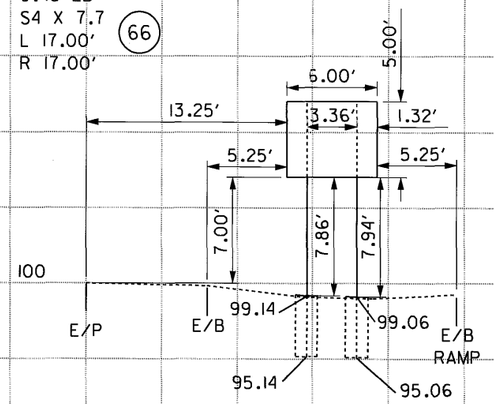
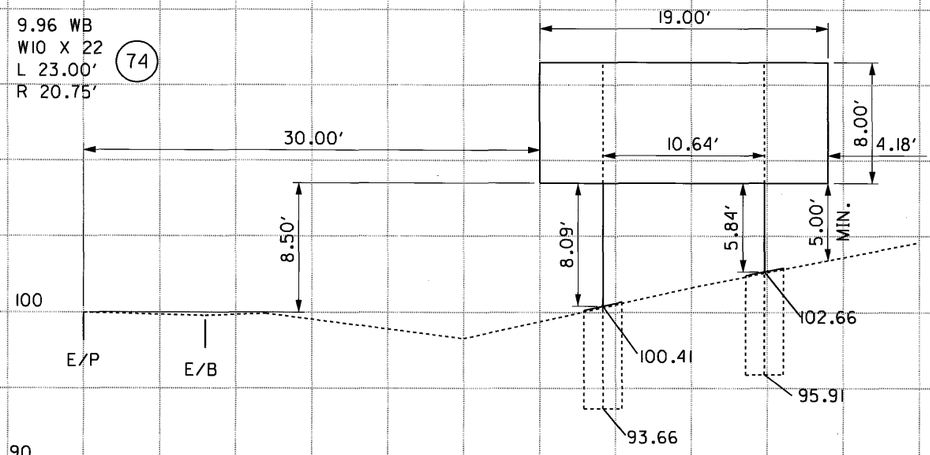
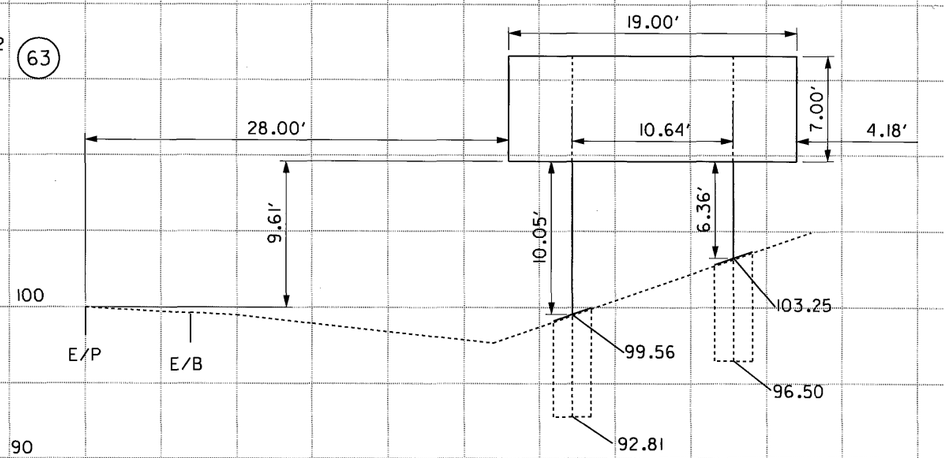
9.45 EB
S4 X 7.7
L 17.00'
R 17.00'



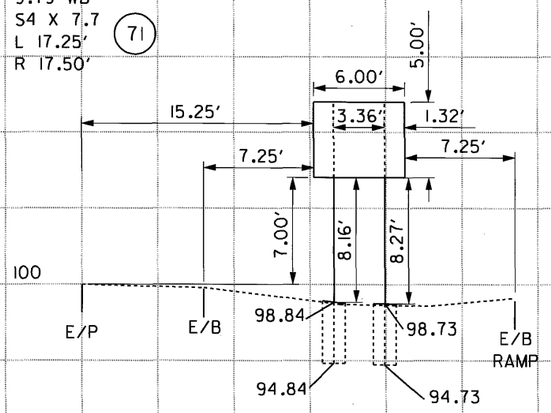
9.96 WB
W10 X 22
L 23.00'
R 20.75'



9.28 EB
W10 X 22
L 24.00'
R 20.25'



9.79 WB
S4 X 7.7
L 17.25'
R 17.50'



CALCULATED WHV
CHECKED LAB

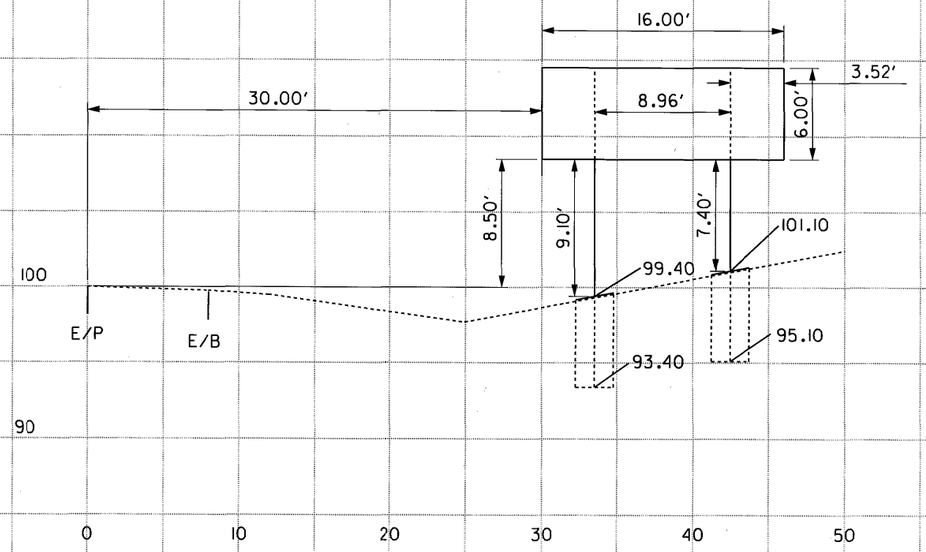
STA 30 CROSS SECTIONS

STA-30/297-6.06/0.17

51
60

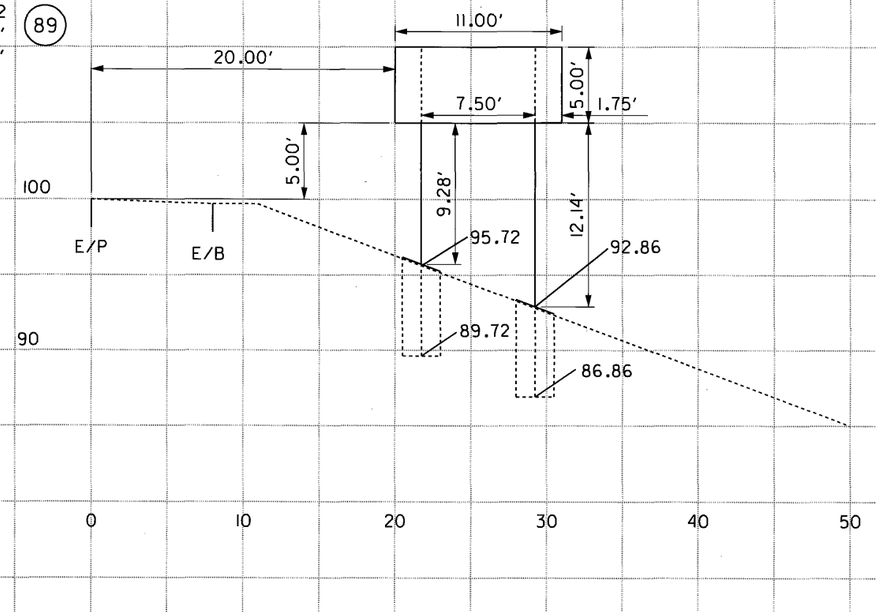
10.56 WB
W10 X 12
L 21.25'
R 19.50'

(87)



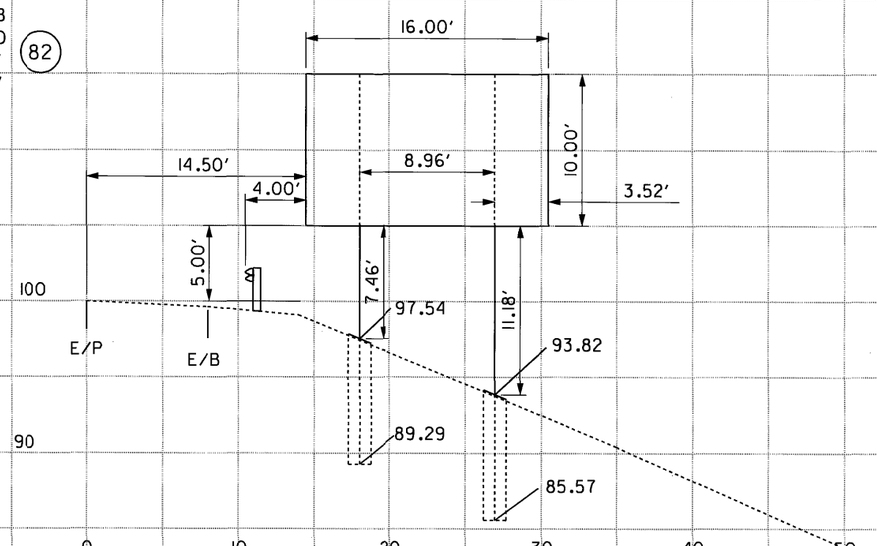
10.95 WB
W10 X 12
L 20.50'
R 23.25'

(89)



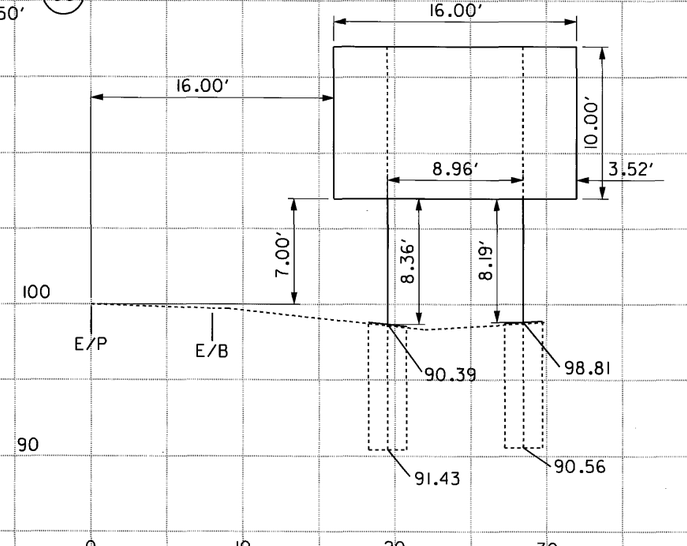
10.30 WB
W12 X 30
L 23.00'
R 23.50'

(82)



10.80 WB
W12X30
L 25.75'
R 26.50'

(88)



CALCULATED WHV
CHECKED LAB

STA 30 CROSS SECTIONS

STA-30/297-6.06/0.17

52
60

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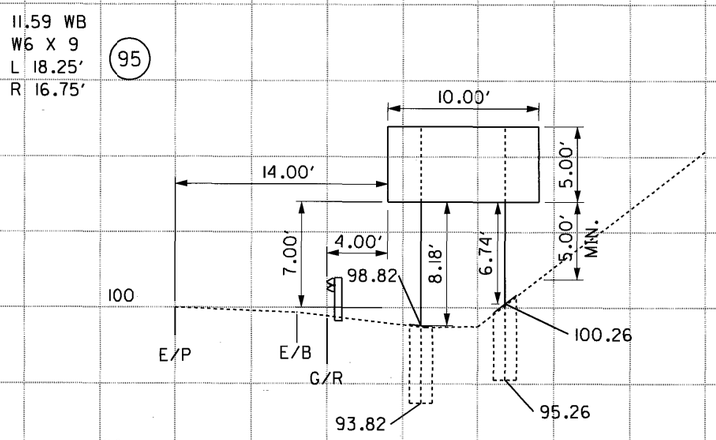

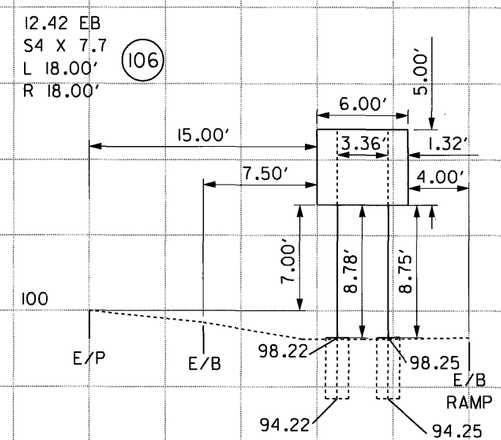

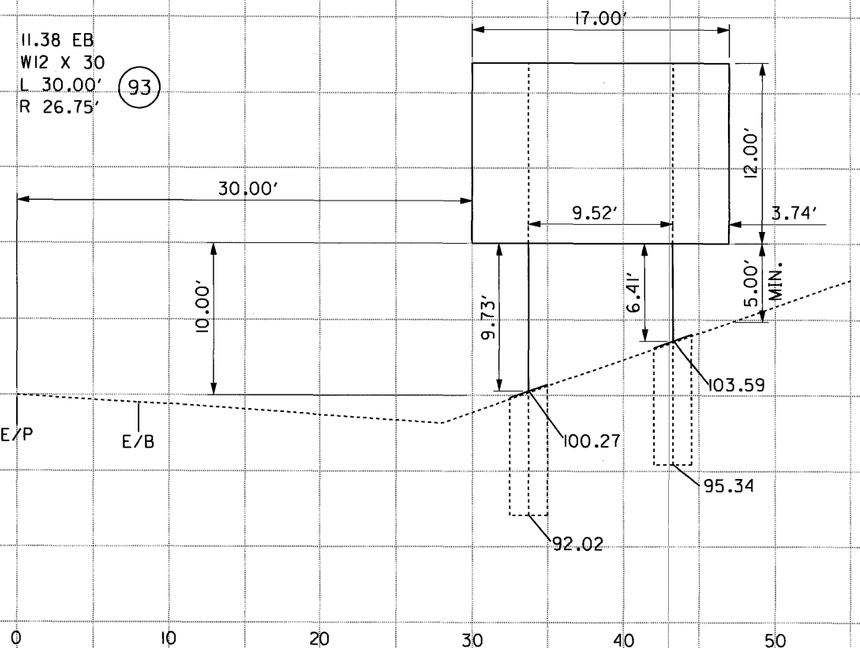

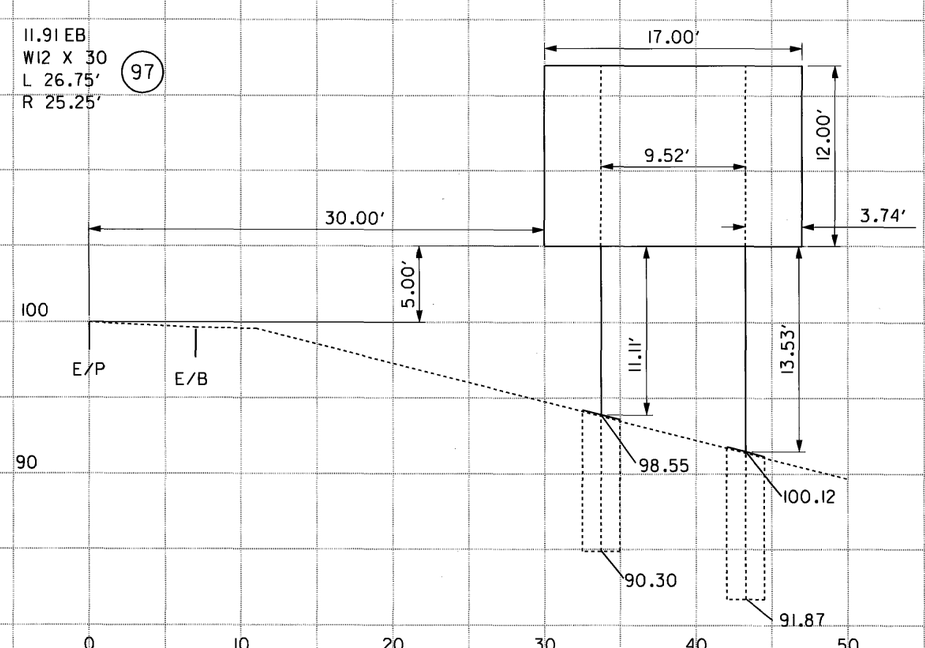

CALCULATED WHV
CHECKED LAB

STA 30 CROSS SECTIONS

STA-30/297-6.06/0.17

53
60

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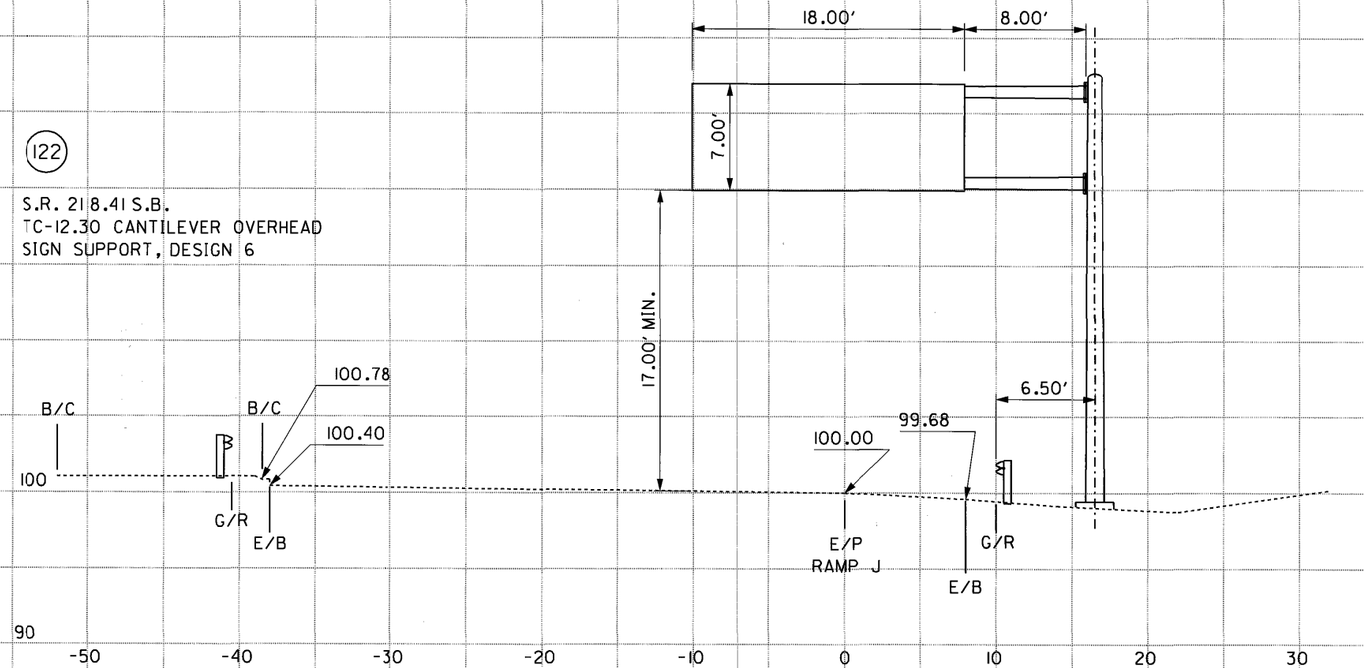
CALCULATED WHV
CHECKED LAB

STA 30 CROSS SECTIONS

STA-30/297-6.06/0.17

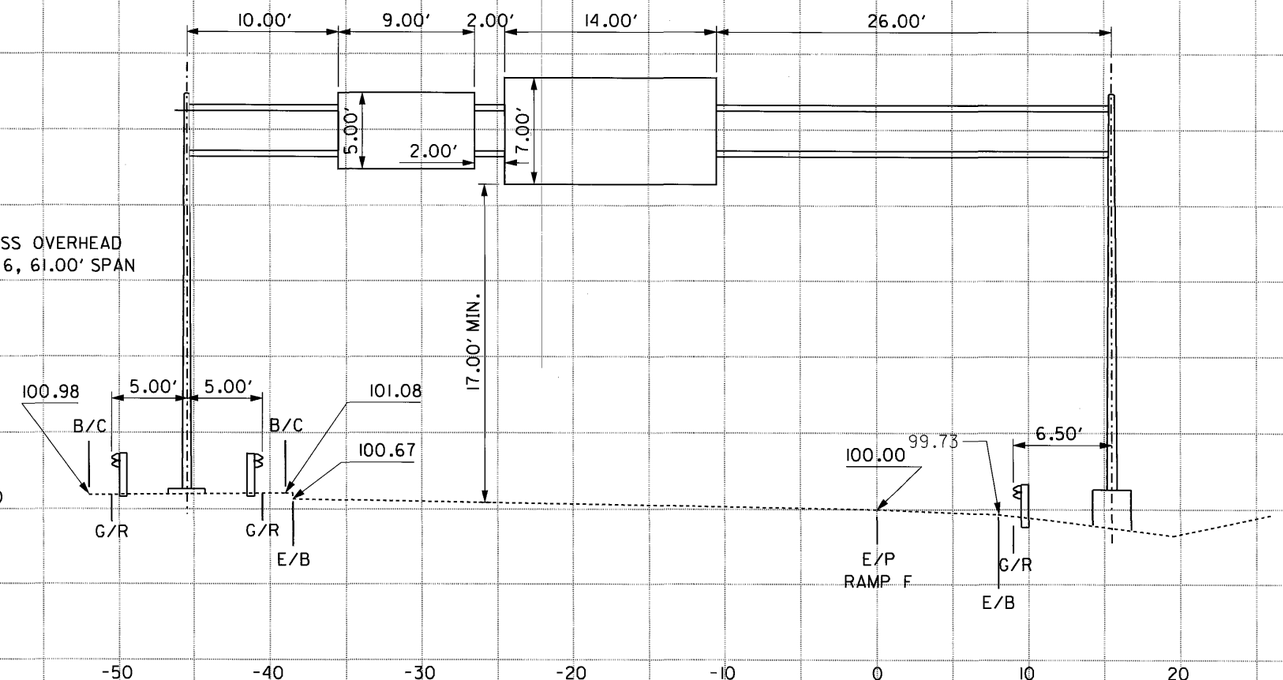
(122)

S.R. 218.41 S.B.
TC-12.30 CANTILEVER OVERHEAD
SIGN SUPPORT, DESIGN 6



(119)

S.R. 218.36 N.B.
TC-7.65 ALUMINUM TRUSS OVERHEAD
SIGN SUPPORT, DESIGN 6, 61.00' SPAN



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36

7.96 WB
EXISTING 8.16 - 7.5 DESIGN #2
OVERHEAD SIGN SUPPORT, 72' SPAN

17

7.44 EB
EXISTING 8.16 - 7.6 DESIGN #2
OVERHEAD SIGN SUPPORT, 72' SPAN

CALCULATED WHV
CHECKED LAB

STA 30 CROSS SECTIONS

STA-30/297-6.06/0.17

55
60

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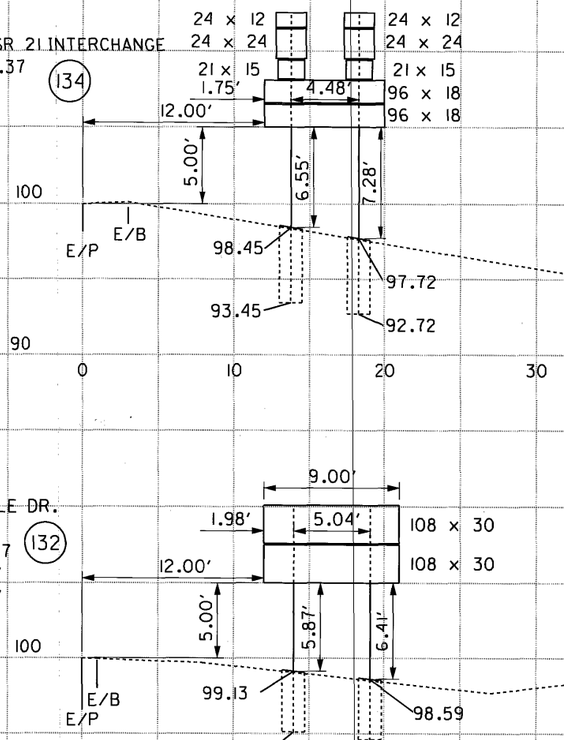
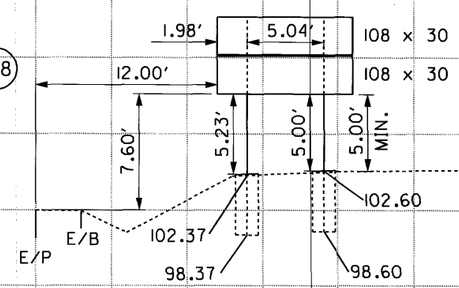
US 30 - SR 21 INTERCHANGE
RAMP L 0.37
W6 X 9
L 19.25
R 20.00'

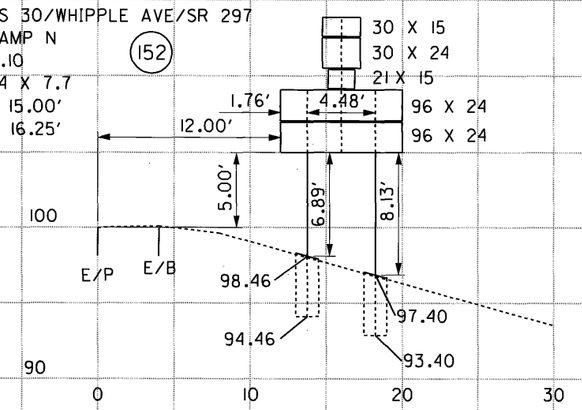


RICHVILLE DR.
0.21 SB
S4 X 7.7
L 15.00'
R 15.50'

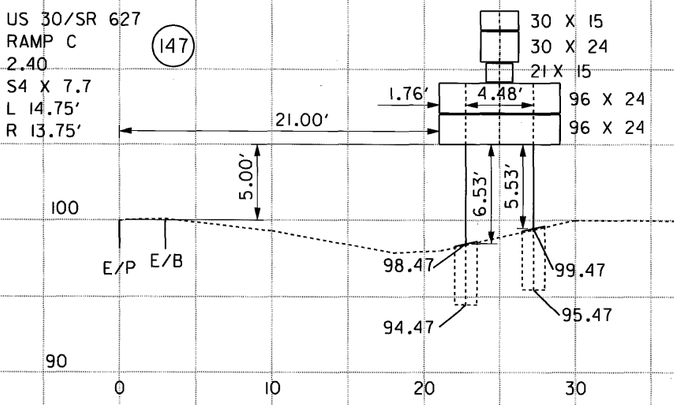
SR 627
0.29 NB
S4 X 7.7
L 14.25'
R 14.25'



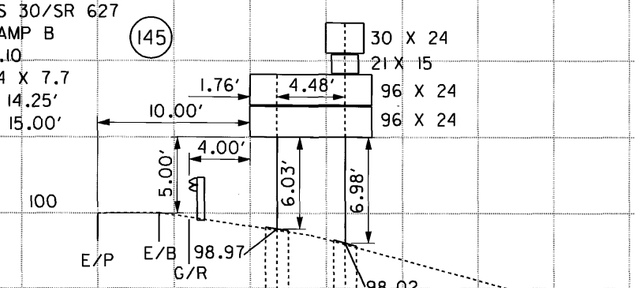
US 30/WHIPPLE AVE/SR 297
RAMP N
0.10
S4 X 7.7
L 15.00'
R 16.25'



US 30/SR 627
RAMP C
2.40
S4 X 7.7
L 14.75'
R 13.75'



US 30/SR 627
RAMP B
0.10
S4 X 7.7
L 14.25'
R 15.00'



CALCULATED WHV
CHECKED LAB

STA 30 CROSS SECTIONS

STA-30/297-6.06/0.17

56
60

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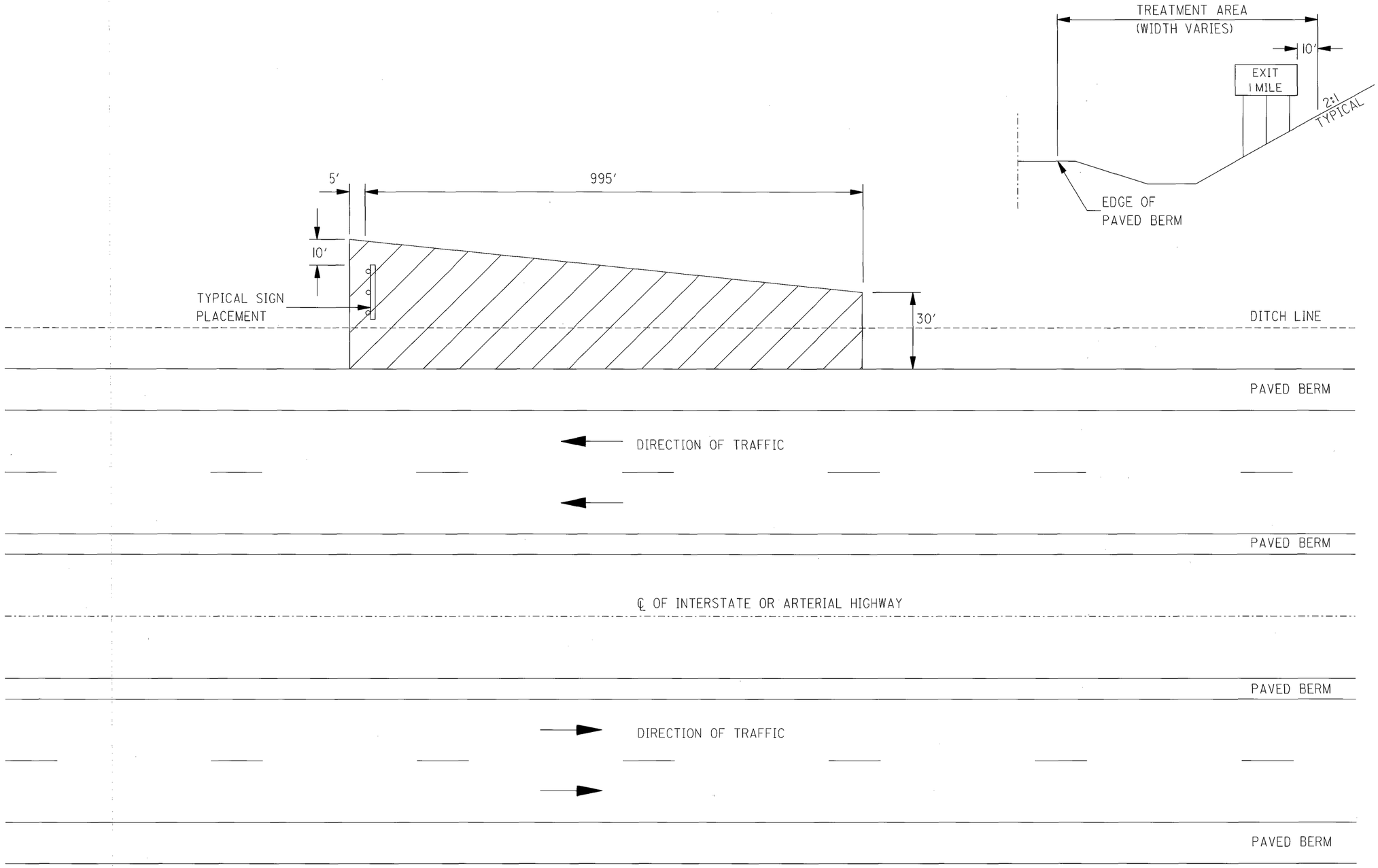


* CLEAR SIGHT AREA

* PAY QUANTITY IS BASED ONLY CN ACTUAL AREAS MEASURED WHERE BRUSH CUTTING HAS BEEN PERFORMED WITHIN THE CLEAR SIGHT AREA.

CALCULATED ALP
CHECKED

BRUSH CUT AND TREATED DETAIL

STA-30/297-6.06/0.17

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

843 DATED 04/18/03

DESIGN SPECIFICATIONS

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2002 AND THE ODOT BRIDGE DESIGN MANUAL.

ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN

ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN: THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SEPARATELY LISTED FOR PAYMENT, EXCEPT FOR WEARING COURSE REMOVAL. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05.

EXISTING STRUCTURE VERIFICATION

EXISTING STRUCTURE VERIFICATION: DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

ITEM 516 - REFURBISH BEARING DEVICES, AS PER PLAN

ITEM 516 - REFURBISHING BEARING DEVICES, AS PER PLAN: THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO PROPERLY ALIGN BRIDGE BEARINGS AS WELL AS THEIR CLEANING AND PAINTING. INCLUDED SHALL BE THE DISASSEMBLY OF THE BEARINGS, HAND TOOL CLEANING (GRINDING IF NECESSARY), PAINTING ACCORDING TO ITEM 514, REPLACEMENT OF ANY DAMAGED SHEET LEAD WITH PREFORMED BEARING PADS (711.21), INSTALLATION OF ANY NECESSARY STEEL SHIMS OF THE SAME SIZE AS THE BEARINGS TO PROVIDE A SNUG FIT, REALIGNMENT OF THE UPPER BEARING PLATE BY REMOVING EXISTING WELDS AND REWELDING SO THAT THE BEARINGS ARE VERTICALLY ALIGNED AT 60 DEGREES F, LUBRICATING SLIDING SURFACES, AND REASSEMBLY OF THE BEARINGS. ASSURE ALL BEARINGS ARE SHIMMED ADEQUATELY AND THAT NO BEAMS AND/OR BEARING DEVICES ARE "FLOATING". AT NO ADDITIONAL COST TO THE STATE, THE CONTRACTOR MAY INSTALL NEW BEARINGS OF THE SAME TYPE AS THE EXISTING IN PLACE OF REFURBISHING THE BEARINGS. ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER. PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 516 - REFURBISH BEARING DEVICES, AS PER PLAN.

ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN

THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS.

SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH CMS 501.05.

IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FOR THE DISTANCE OF THE SEPARATION IN ACCORDANCE WITH CMS 512.07. THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS. THE BRIDGE BEARINGS SHALL BE FULLY SEATED AT ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS.

THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS.

THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

ITEM 514 - FIELD PAINTING, MISC: REPAIR PAINTING

ALL PAINTED AREAS AT THE BEARINGS THAT ARE RUSTED SHALL BE CLEANED AND PAINTED AS FOLLOWS.

CMS 514.06 THROUGH 514.08 APPLY. REMOVE EXISTING PAINT COATING FROM THE AREA OF THE DAMAGED PAINT ACCORDING TO SSPC-SP3, POWER AND HAND TOOL CLEANING, AS SHOWN ON THE PICTORAL SURFACE PREPARATION STANDARDS FOR PAINTING STEEL SURFACES SHOWN IN SSPC-VIS 3. THE ENGINEER WILL USE THE SSPC-VIS 3 TO DETERMINE THE ACCEPTANCE OF THE POWER TOOL CLEANING. CONTAIN AND DISPOSE OF WASTE GENERATED BY THE CLEANING ACCORDING TO CMS 514.11 D.

APPLY THE THREE-COAT PAINT SYSTEM, CMS 708.02, ACCORDING TO CMS 514.12 THROUGH 514.15. TINT THE FINISH COAT TO APPROXIMATELY THE SAME COLOR AS THE EXISTING FINISH COLOR. THE ENGINEER WILL DETERMINE THE PRIME COAT THICKNESS; PRIME AND INTERMEDIATE COAT THICKNESS; AND PRIME, INTERMEDIATE AND FINISH COAT THICKNESS USING A TYPE 2 MAGNETIC GAGE AT SPOT LOCATIONS. EACH COAT OF PAINT SHALL MEET THE MINIMUM DRY FILM THICKNESS REQUIREMENTS OF CMS 514.18.

THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH ALL NECESSARY EQUIPMENT TO INSPECT THIS WORK.

THE ORIGINAL COLOR OF THE PAINT WAS FEDERAL COLOR NUMBER 15526 (BLUE).

ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN:

THIS ITEM SHALL BE USED TO REPAIR DISINTEGRATED CONCRETE SURFACES TO BE REPAIRED ON EACH STRUCTURE AS DIRECTED BY THE ENGINEER AFTER FIELD EXAMINATION. FINAL EXPOSED SURFACES SHALL HAVE A SMOOTH FINISH AND SHALL MATCH AS NEARLY AS PRACTICABLE THE SURROUNDING CONCRETE. ALL EXISTING REINFORCING STEEL SHALL HAVE AT LEAST 3 (THREE) INCH COVER AFTER PATCHING HAS BEEN COMPLETED.

A CONCRETE BONDING AGENT SHALL BE APPLIED TO AREAS WHERE PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR IS PLACED ON OLD CONCRETE. THE CONCRETE BONDING AGENT SHALL BE APPLIED TO THE EXISTING PREPARED SURFACE AREAS. THE BONDING AGENT SHALL BE APPLIED AS PER THE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS AND SHALL MEET THE REQUIREMENTS OF ASTM C-881. THE BONDING AGENT SHALL BE SUPPLIED BY ONE OF THE FOLLOWING OR EQUALLY APPROVED BY ODOT:

NITOBOND 881-12
FOSROC INC.
150 CARLEY COURT
GEORGETOWN, KY 40324

SIKADUR 32, HI-MOD LPL
SIKA CORP.
ADMIXTURE DIVISION
1682 MARION WILLIAMSPORT RD. E.
MARION, OH. 43302

CONCRESIVE LIQUID LPL
MASTER BUILDERS, INC.
23700 CHAGRIN BLVD.
CLEVELAND, OHIO 44122-5554

ALL WORK SHALL BE DONE IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION FOR: ITEM 843 PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR AND SHALL BE PAID FOR AT THE UNIT COST INCLUDING ALL ABOVE MENTIONED WORK AND INCIDENTALS FOR ITEM 843 PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN.

PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION WAS PERFORMED IN .

ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ALLOW FOR ADDITIONAL DETERIORATION.

ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN

STRUCTURE	LOCATION	MEASURED QTY (SQ FT)	ESTIMATED QTY (SQ FT)
STA-030-0958 L	REAR ABUT	20	30
	DECK	100	150
	PIERS	50	75
	FWD ABUT	20	30
		TOTAL	285

ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN

STRUCTURE	LOCATION	MEASURED QTY (SQ FT)	ESTIMATED QTY (SQ FT)
STA-030-0958 R	REAR ABUT	20	30
	DECK	100	150
	PIERS	50	75
	FWD ABUT	20	20
		TOTAL	285

ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN

STRUCTURE	LOCATION	MEASURED QTY (SQ FT)	ESTIMATED QTY (SQ FT)
STA-030-1032 L	REAR ABUT	100	150
	DECK	50	75
	PIERS	200	300
	FWD ABUT	100	150
		TOTAL	675

ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN

STRUCTURE	LOCATION	MEASURED QTY (SQ FT)	ESTIMATED QTY (SQ FT)
STA-030-1032 R	REAR ABUT	20	30
	DECK	50	75
	PIERS	200	300
	FWD ABUT	20	30
		TOTAL	435

ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN

STRUCTURE	LOCATION	MEASURED QTY (SQ FT)	ESTIMATED QTY (SQ FT)
STA-030-1259 L	REAR ABUT	100	150
	DECK	150	225
	PIERS	100	150
	FWD ABUT	100	150
		TOTAL	675

ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN

STRUCTURE	LOCATION	MEASURED QTY (SQ FT)	ESTIMATED QTY (SQ FT)
STA-030-1259 R	REAR ABUT	100	150
	DECK	200	300
	PIERS	100	150
	FWD ABUT	100	150
		TOTAL	750

ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN

STRUCTURE	LOCATION	MEASURED QTY (SQ FT)	ESTIMATED QTY (SQ FT)
STA-030-1305 L	REAR ABUT	100	150
	DECK	100	150
	PIERS	50	75
	FWD ABUT	100	150
		TOTAL	525

ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN

STRUCTURE	LOCATION	MEASURED QTY (SQ FT)	ESTIMATED QTY (SQ FT)
STA-030-1305 R	REAR ABUT	100	150
	DECK	100	150
	PIERS	50	75
	FWD ABUT	100	150
		TOTAL	525

THESE QUANTITIES ARE CARRIED TO THE STRUCTURE ESTIMATED QUANTITIES.

DESIGN AGENCY: ODOT --- DISTRICT 4 PRODUCTION

DESIGNED: JEL | CHECKED: | DRAWN: JEL | REVISED: | REVIEWED: TJP | DATE: 01/30/06

STRUCTURE FILE NUMBER: 7807458, 7807474, 7807490, 7807512, 7807563, 7807601, 7807644, 7807679

STRUCTURE GENERAL NOTES

BRIDGE NOs. STA-30-0958 L & R, STA-30-1032 L & R, STA-30-1259 L & R AND STA-30-1305 L & R

STA-30/297-6.06/0.17

PID No. 23754

1/3

CALC:	JEL	DATE:	01/10/06
CHECKED:	TJP	DATE:	01/30/06

ESTIMATED QUANTITIES

BRIDGE NO. / STRUCTURE FILE NO.								ITEM	EXTENSION	UNIT	DESCRIPTION
STA-030-0958 L SFN 7607474	STA-030-0958 R SFN 7607458	STA-030-1032 L SFN 7607512	STA-030-1032 R SFN 7607490	STA-030-1259 L SFN 7607601	STA-030-1259 R SFN 7607563	STA-030-1305 L SFN 7607679	STA-030-1305 R SFN 7607644				
LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	202	11201	LUMP	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN
632	632	566	566	518	518	618	618	512	10100	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)
110	110	95	95	110	110	110	110	514	27700	SQ FT	FIELD PAINTING, MISC.: REPAIR PAINTING
20	20	20	20	20	20	20	20	516	45305	EACH	REFURBISH BEARING DEVICE, AS PER PLAN
LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	516	47001	LUMP	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
285	285	675	435	675	750	525	525	843	50001	SQ FT	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN

DESIGN AGENCY: ODOT --- DISTRICT 4 PRODUCTION

DESIGNED: JEL | DRAWN: JEL | REVIEWED: TJP | DATE: 01/30/06

CHECKED | REVISED | STRUCTURE FILE NUMBER 7607454, 7607474, 7607490, 7607512, 7607563, 7607601, 7607644, 7607679

ESTIMATED QUANTITIES

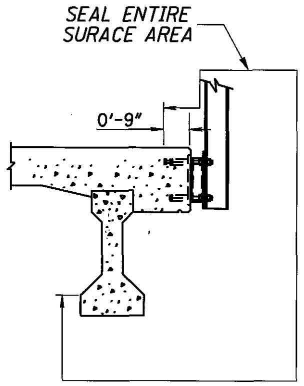
BRIDGE NOs. STA-30-0958 L & R, STA-30-1032 L & R, STA-30-1259 L & R AND STA-30-1305 L & R

STA-30/297-6.06/0.17

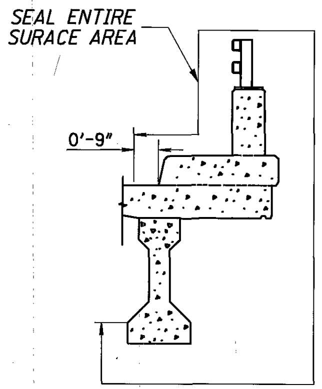
PID No. 23754

2 / 3

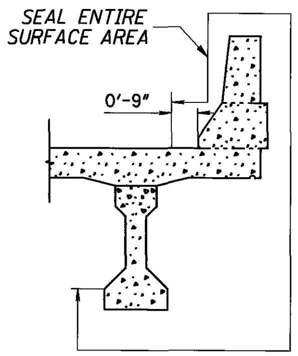
59 / 60



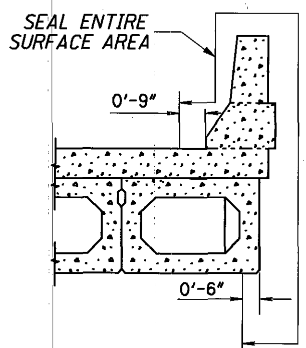
DETAIL A
CONCRETE DECKS WITH
OVER THE SIDE DRAINAGE



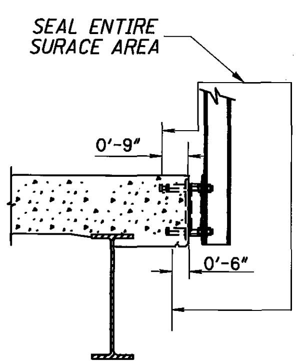
DETAIL B
CONCRETE DECKS WITH CURBS,
SIDEWALKS AND PARAPET



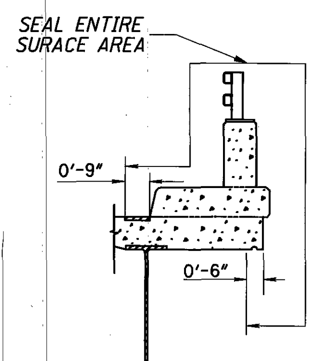
DETAIL C
CONCRETE DECK WITH
DEFLECTOR PARAPET



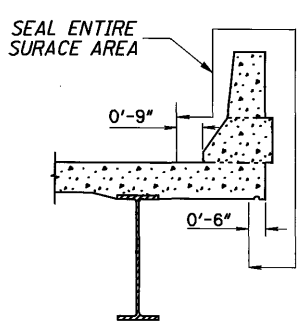
DETAIL D
PRESTRESSED BOX BEAM DECK
WITH DEFLECTOR PARAPET



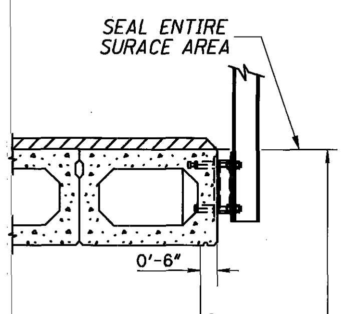
DETAIL E
CONCRETE DECKS WITH
OVER THE SIDE DRAINAGE



DETAIL F
CONCRETE DECKS WITH CURBS,
SIDEWALKS AND PARAPET



DETAIL G
CONCRETE DECK WITH
DEFLECTOR PARAPET



DETAIL H
PRESTRESSED BOX BEAM DECK
WITH OVER THE SIDE DRAINAGE

BRIDGE NO.	STRUCTURE TYPE	PROPOSED SEALING	FEDERAL COLOR NUMBER	ESTIMATED QUANTITIES				
				ABUT SQ YD	PIER SQ YD	SUPER SQ YD	GEN SQ YD	TOTAL SQ YD
STA-030-0958L	3 SPAN CONTINUOUS STEEL BEAM	SEAL PARAPETS PER DETAIL G SEAL ALL EXPOSED CONCRETE AT ABUTMENTS SEAL ALL EXPOSED CONCRETE AT PIERS	LIGHT NEUTRAL 595B-17778	66	185	340	41	632
STA-030-0958R	3 SPAN CONTINUOUS STEEL BEAM	SEAL PARAPETS PER DETAIL G SEAL ALL EXPOSED CONCRETE AT ABUTMENTS SEAL ALL EXPOSED CONCRETE AT PIERS	LIGHT NEUTRAL 595B-17778	66	185	340	41	632
STA-030-1032L	3 SPAN CONTINUOUS STEEL BEAM	SEAL PARAPETS PER DETAIL G SEAL ALL EXPOSED CONCRETE AT ABUTMENTS SEAL ALL EXPOSED CONCRETE AT PIERS	LIGHT NEUTRAL 595B-17778	70	193	262	41	566
STA-030-1032R	3 SPAN CONTINUOUS STEEL BEAM	SEAL PARAPETS PER DETAIL G SEAL ALL EXPOSED CONCRETE AT ABUTMENTS SEAL ALL EXPOSED CONCRETE AT PIERS	LIGHT NEUTRAL 595B-17778	70	193	262	41	566
STA-030-1259L	3 SPAN CONTINUOUS STEEL BEAM	SEAL PARAPETS PER DETAIL G SEAL ALL EXPOSED CONCRETE AT ABUTMENTS SEAL ALL EXPOSED CONCRETE AT PIERS	LIGHT NEUTRAL 595B-17778	55	185	237	41	518
STA-030-1259R	3 SPAN CONTINUOUS STEEL BEAM	SEAL PARAPETS PER DETAIL G SEAL ALL EXPOSED CONCRETE AT ABUTMENTS SEAL ALL EXPOSED CONCRETE AT PIERS	LIGHT NEUTRAL 595B-17778	55	185	237	41	518
STA-030-1305L	3 SPAN CONTINUOUS STEEL BEAM	SEAL PARAPETS PER DETAIL G SEAL ALL EXPOSED CONCRETE AT ABUTMENTS SEAL ALL EXPOSED CONCRETE AT PIERS	LIGHT NEUTRAL 595B-17778	55	184	338	41	618
STA-030-1305R	3 SPAN CONTINUOUS STEEL BEAM	SEAL PARAPETS PER DETAIL G SEAL ALL EXPOSED CONCRETE AT ABUTMENTS SEAL ALL EXPOSED CONCRETE AT PIERS	LIGHT NEUTRAL 595B-17778	55	184	338	41	618

NOTES:
- EPOXY-URETHANE SEALER SHALL BE USED UNLESS SHOWN OTHERWISE
- DETAILS E, F, G AND H ALSO APPLY TO CONCRETE SLAB BRIDGES

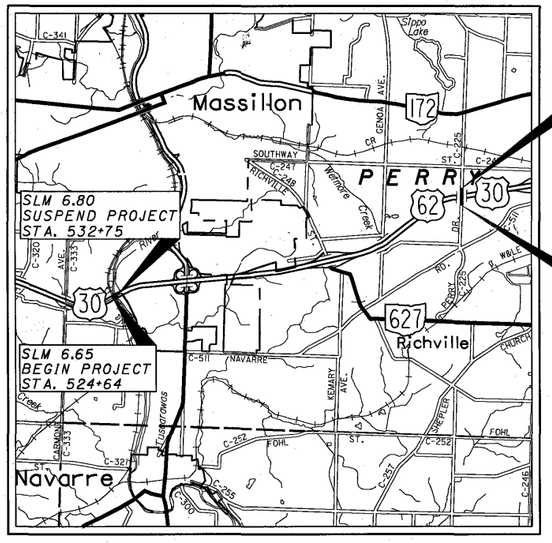
DESIGN AGENCY
ODOT --- DISTRICT 4
PRODUCTION

REVIEWED TJP | DATE 01/30/06
DRAWN JEL | REVISED
DESIGNED JEL | CHECKED

CONCRETE SEALING DETAILS
STRUCTURE NUMBERS STA-30-0958 L & R, STA-30-1032 L & R,
STA-30-1259 L & R AND STA-30-1305 L & R

STA-30/297-6.06/0.17
PID No. 23754

3/3



LOCATION MAP

PROJECT	LATITUDE	LONGITUDE
STA-30-6.70	N40°45'29"	W81°32'03"
STA-30-11.57	N40°46'35"	W81°26'49"

SCALE IN MILES

0 1 2 3 4

N

PORTION TO BE IMPROVED

INTERSTATE & DIVIDED HIGHWAY

UNDIVIDED STATE & FEDERAL ROUTES

OTHER ROADS

DESIGN DESIGNATION	U.S. 30 (6.70)	U.S. 30 (11.57)	PERRY DR.
CURRENT ADT (2006)	19800	31700	8700
DESIGN YEAR ADT (2026)	25200	36200	11100
DESIGN HOURLY VOLUME (2026)	2268	3261	1110
DIRECTIONAL DISTRIBUTION	0.60	0.60	0.60
TRUCKS (24 HOUR B&C)	0.22	0.14	0.03
DESIGN SPEED	65	65	35
LEGAL SPEED	65	65	35
DESIGN FUNCTIONAL CLASSIFICATION -	URBAN FREEWAY (EXPRESSWAY)	URBAN FREEWAY (EXPRESSWAY)	URBAN ARTERIAL

DESIGN EXCEPTIONS

DESIGN FEATURE	APPROVAL DATES	SHEET NUMBERS	NORMAL DESIGN CRITERIA	ACTUAL VALUE
SHOULDER WIDTH	1/09/2006	4-5	17'	13'
SHOULDER WIDTH	1/09/2006	6	14'	6.5'
SHOULDER WIDTH	1/09/2006	6	14'	8.5'

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:
BARR & PREVOST
2800 CORPORATE EXCHANGE DRIVE, SUITE 240
COLUMBUS, OHIO 43231
TEL. 614-714-0270 FAX. 614-714-0322

ENGINEERS SEAL:

JAMES E. PREVOST REGISTERED PROFESSIONAL ENGINEER E-64055 STATE OF OHIO

SIGNED: James E. Prevost
DATE: 2/06/06

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

STA-30-(6.70)(11.57)

PART 2

RECONSTRUCTION OF EXISTING SEPARATED CROSSING WITH THE R.J. CORMAN RAILROAD

CITY OF MASSILLON
PERRY TOWNSHIP
STARK COUNTY

FOR PART 1, SEE STA-30/297-6.06/0.17

INDEX OF SHEETS:

STANDARD CONSTRUCTION DRAWINGS	SUPPLEMENTAL SPECIFICATIONS
SEE PART 1	SEE PART 1
	SPECIAL PROVISIONS
	SEE PART 1

PROJECT DESCRIPTION

STA-30-6.70

REHABILITATION OF THE EXISTING 5-SPAN CONTINUOUS STEEL GIRDER STRUCTURE OVER THE TUSCARAWAS RIVER WITH A PRESTRESSED CONCRETE I-BEAM WITH MINIMAL ROADWAY WORK. THE PROJECT LENGTH IS 811'.

STA-30-11.57

REHABILITATION OF THE EXISTING 4-SPAN CONTINUOUS STEEL BEAM STRUCTURE OVER U.S. 30 WITH MINIMAL ROADWORK WORK. THE PROJECT LENGTH IS 525'.

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

PROJECT EARTH DISTURBING AREAS

	6.70	11.57
PROJECT EARTH DISTURBED AREA	1.86 AC.	1.26 AC.
ESTIMATED CONTRACTOR EARTH DISTURBED AREA	1.61 AC.	1.28 AC.
NOTICE OF INTENT EARTH DISTURBED AREA	4.90 AC.	4.90 AC.

2005 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.

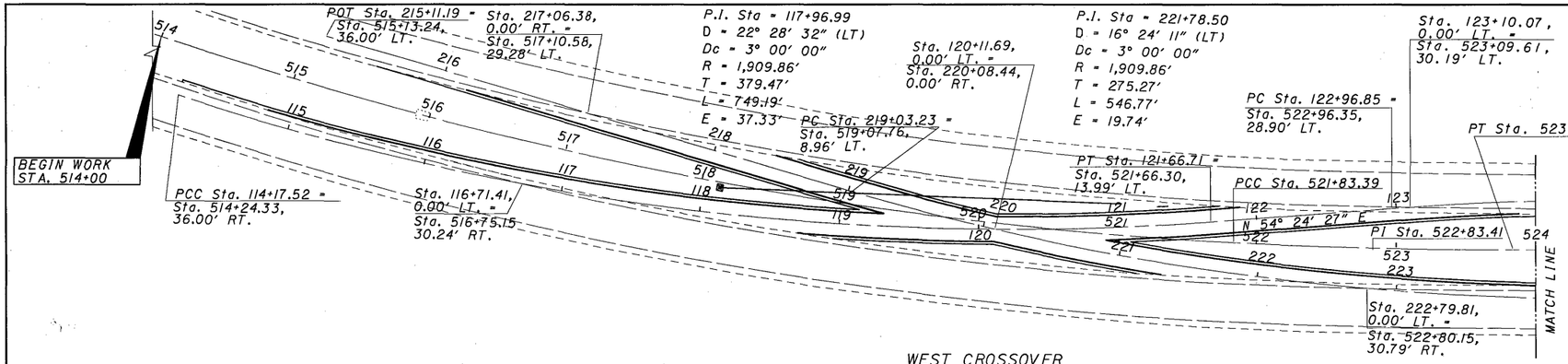
I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING OF PERRY DRIVE TO TRAFFIC AND THAT DETOURS WILL BE REQUIRED AS INDICATED ON SHEET 56. IMPROVEMENTS ON U.S. 30 WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

UNDER AUTHORITY OF SECTION 4511.21, DIVISION (H) OF THE OHIO REVISED CODE, THE REVISED PRIMA FACIE SPEED LIMITS AS INDICATED HEREIN ARE DETERMINED TO BE REASONABLE AND SAFE, AND ARE HEREBY ESTABLISHED FOR THE DURATION OF THIS PROJECT. THE PRIMA FACIE SPEED LIMIT OR LIMITS HEREBY ESTABLISHED SHALL BECOME EFFECTIVE WHEN APPROPRIATE SIGNS GIVING NOTICE THEREOF ARE ERECTED.

APPROVED _____
DATE 29.06 DISTRICT DEPUTY DIRECTOR

APPROVED _____
DATE 5-15-06 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO. E 033(671)
PID NO. 23754
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT R.J. CORMAN RAILROAD
STA-30-(6.70)(11.57)
1/127



CURVE DATA
P.I. STA. 522+83.41
P.C. STA. 521+83.39
Δ = 3°00'00" (LT.)
Dc = 1°30'00"
R = 3819.72'
T = 100.02'
L = 200.00'
E = 1.31'

BENCHMARKS

BENCHMARK #1 , EL. 970.77
½" REBAR WITH RED CAP
"GPD CONTROL POINT"
U.S. 30 STA. 527+22.38, 2.52' LT

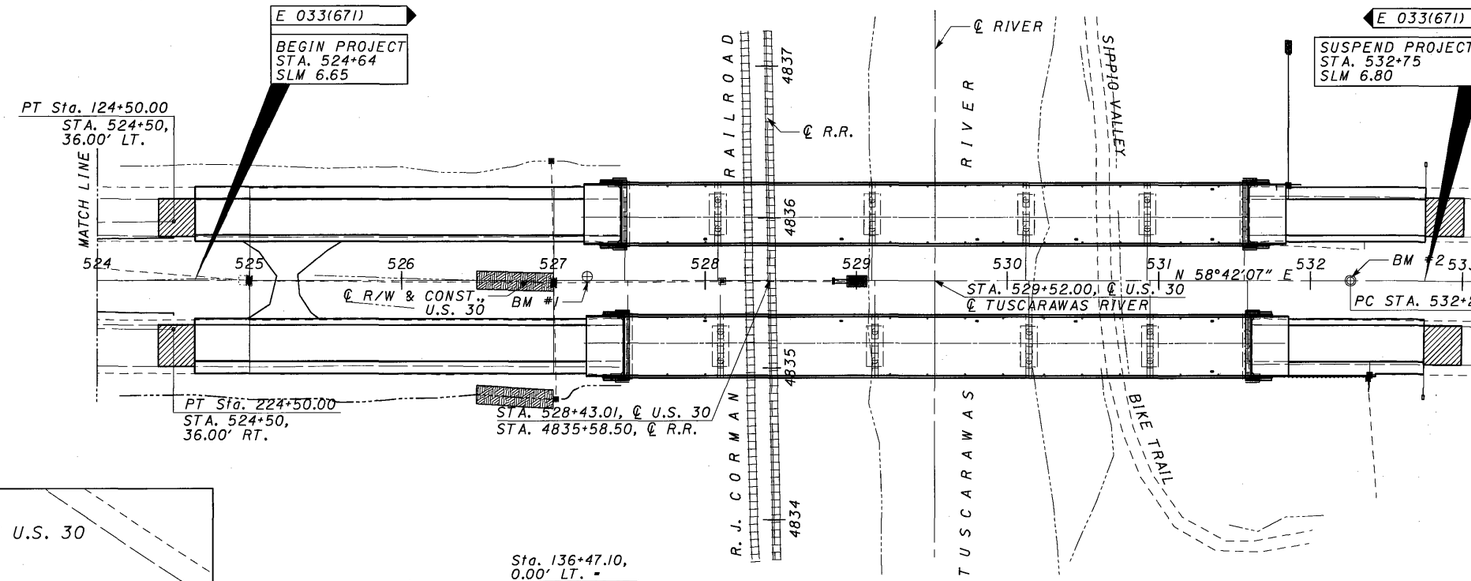
BENCHMARK #2 , EL. 957.22
½" REBAR IN CONCRETE AT
U.S. 30 STA. 532+26.20, ON ℄

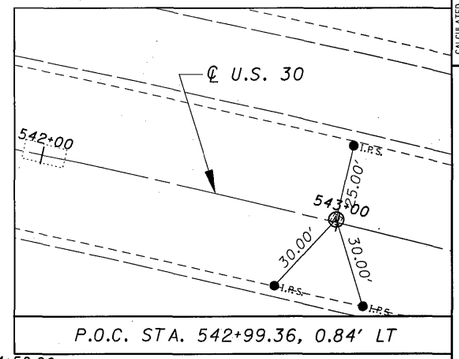
BENCHMARK #3 , EL. 943.44
½" REBAR IN CONCRETE AT
U.S. 30 STA. 542+99.36, 0.84' LT.

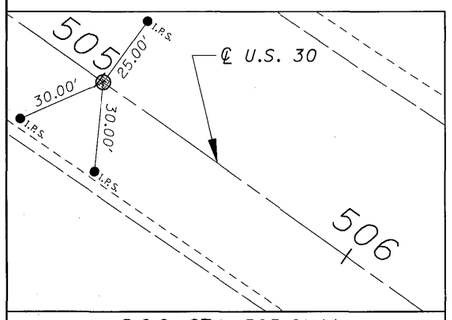
HORIZONTAL SCALE IN FEET
0 25 50 100

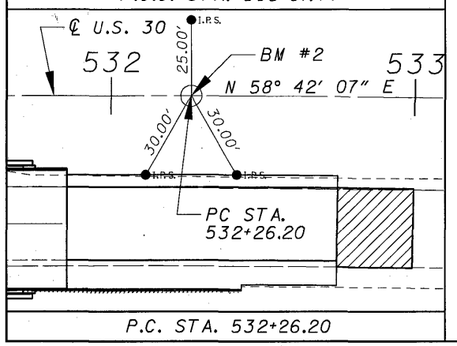
CALCULATED RJS
CHECKED SJS

WEST CROSSOVER

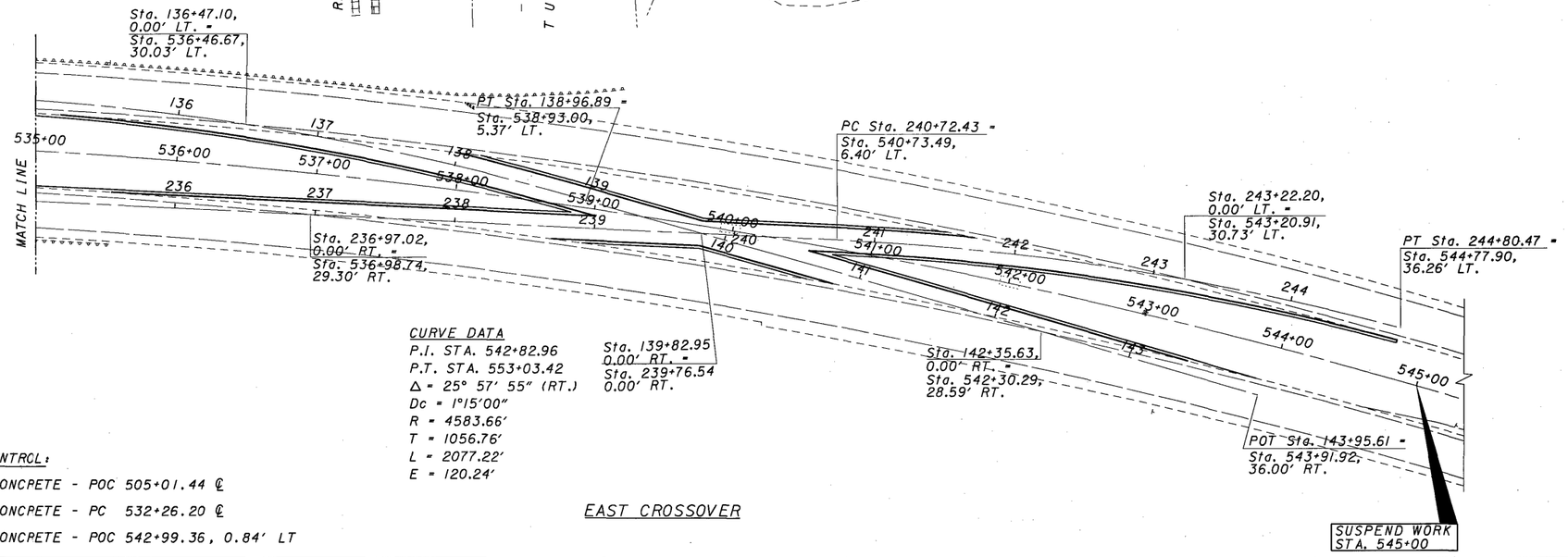








HORIZONTAL CONTROL:
½" REBAR IN CONCPETE - POC 505+01.44 ℄
½" REBAR IN CONCPETE - PC 532+26.20 ℄
½" REBAR IN CONCPETE - POC 542+99.36, 0.84' LT

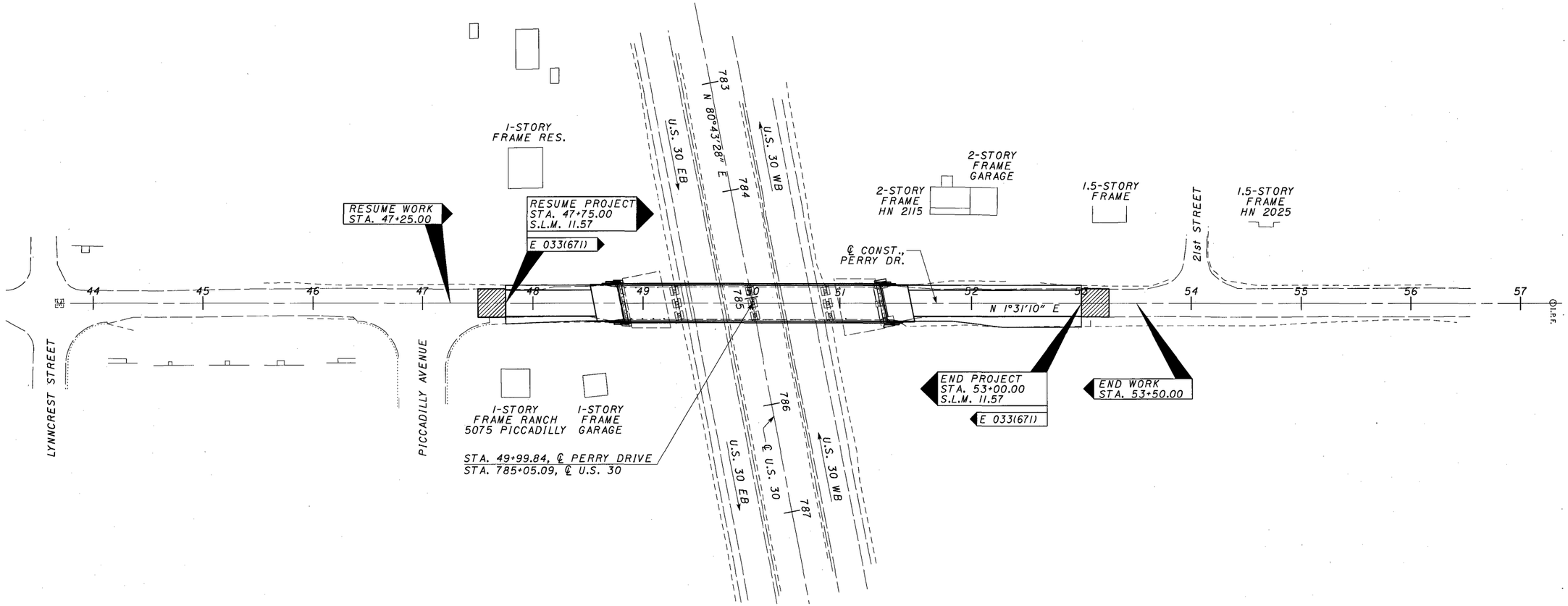


CURVE DATA
P.I. STA. 542+82.96
P.T. STA. 553+03.42
Δ = 25° 57' 55" (RT.)
Dc = 1°15'00"
R = 4583.66'
T = 1056.76'
L = 2077.22'
E = 120.24'

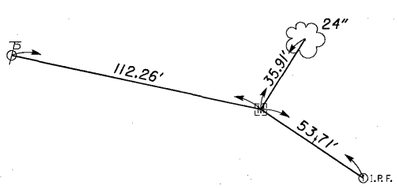
EAST CROSSOVER

SCHEMATIC PLAN
RAILROAD & TUSCARAWAS RIVER

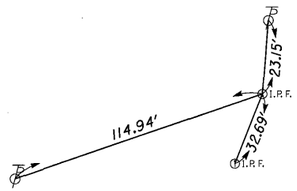
STA-30-(6.70)(11.57)



CENTERLINE REFERENCES (NOT TO SCALE)



PERRY DRIVE STA. 43+69.32, ON ℄



PERRY DRIVE STA. 57+29.46, 0.39' LT.

BENCHMARKS

BM1: NO. 5 REBAR WITH RED CAP
STA. 44+47.25, 25.33' RT
EL. 1136.78

BM2: NO. 5 REBAR WITH RED CAP
STA. 54+05.50, 16.87' RT
EL. 1129.28

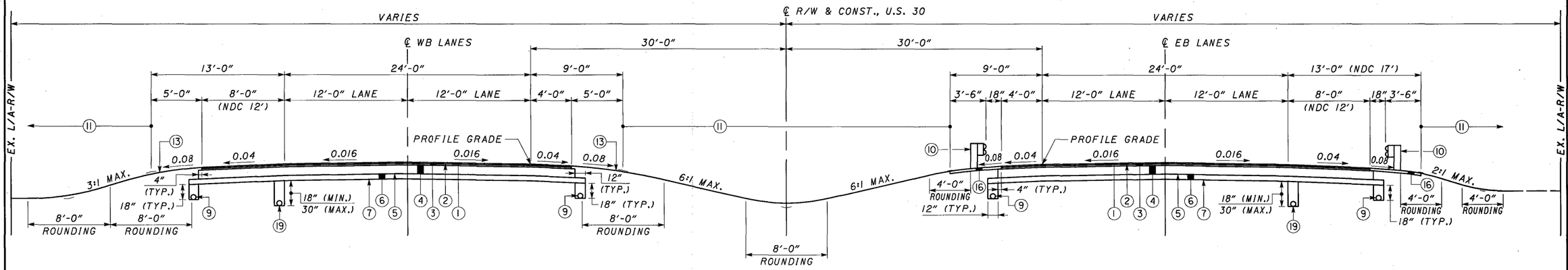
N

0 25 50 100
HORIZONTAL SCALE IN FEET

CALCULATED RJS
CHECKED SJS

SCHEMATIC PLAN
PERRY DRIVE

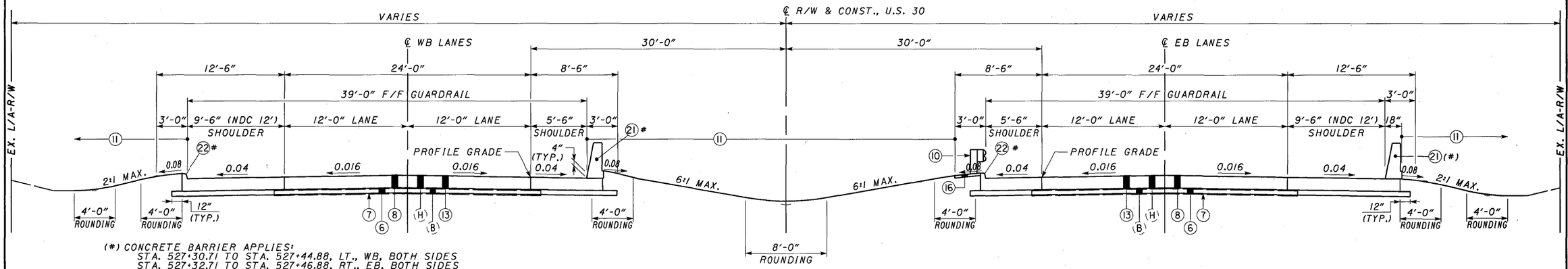
STA-30-(6.70)(11.57)



NORMAL SECTION

EASTBOUND:
STA. 524+64.00 TO STA. 527+21.88 - 257.88 FT.
TOTAL - 257.88 FT.

WESTBOUND:
STA. 524+64.00 TO STA. 527+19.88 - 255.88 FT.
TOTAL - 255.88 FT.



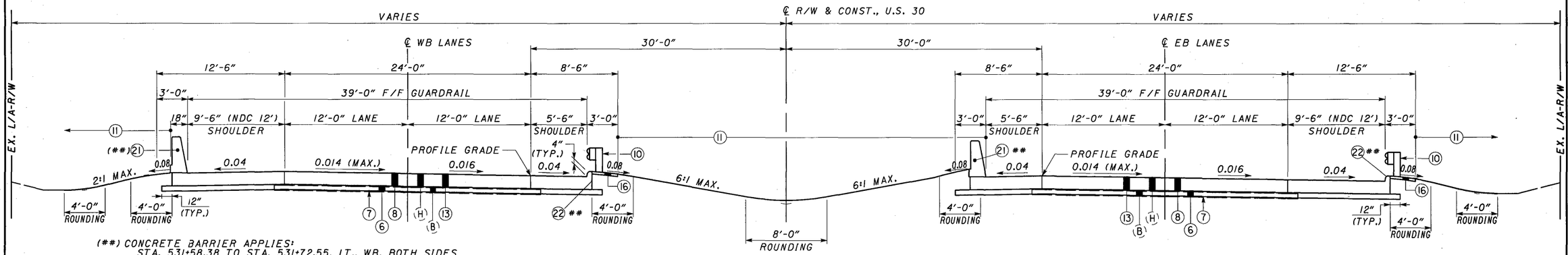
(#) CONCRETE BARRIER APPLIES:
STA. 527+30.71 TO STA. 527+44.88, LT., WB, BOTH SIDES
STA. 527+32.71 TO STA. 527+46.88, RT., EB, BOTH SIDES

INTEGRAL CURB APPLIES:
STA. 527+19.88 TO STA. 527+30.71, LT., WB, BOTH SIDES
STA. 527+21.88 TO STA. 527+32.71, RT., EB BOTH SIDES

APPROACH SLAB NORMAL SECTION

WESTBOUND:
STA. 527+19.88 TO STA. 531+58.38 - 438.50 FT.
DEDUCT FOR STRUCTURE STA-30-0670L:
STA. 527+44.88 TO STA. 531+58.38 - 413.50 FT.
TOTAL - 25.00 FT.

EASTBOUND:
STA. 527+21.88 TO STA. 531+60.38 - 438.50 FT.
DEDUCT FOR STRUCTURE STA-30-0670R:
STA. 527+46.88 TO STA. 531+60.38 - 413.50 FT.
TOTAL - 25.00 FT.



(##) CONCRETE BARRIER APPLIES:
STA. 531+58.38 TO STA. 531+72.55, LT., WB, BOTH SIDES
STA. 531+60.38 TO STA. 531+74.55, RT., EB, BOTH SIDES

INTEGRAL CURB APPLIES:
STA. 531+72.55 TO STA. 531+83.38, LT., WB, BOTH SIDES
STA. 531+74.55 TO STA. 531+85.38, RT., EB BOTH SIDES

APPROACH SLAB SUPERELEVATED SECTION

EASTBOUND:
STA. 531+60.38 TO STA. 531+85.38 - 25.00 FT.
TOTAL - 25.00 FT.

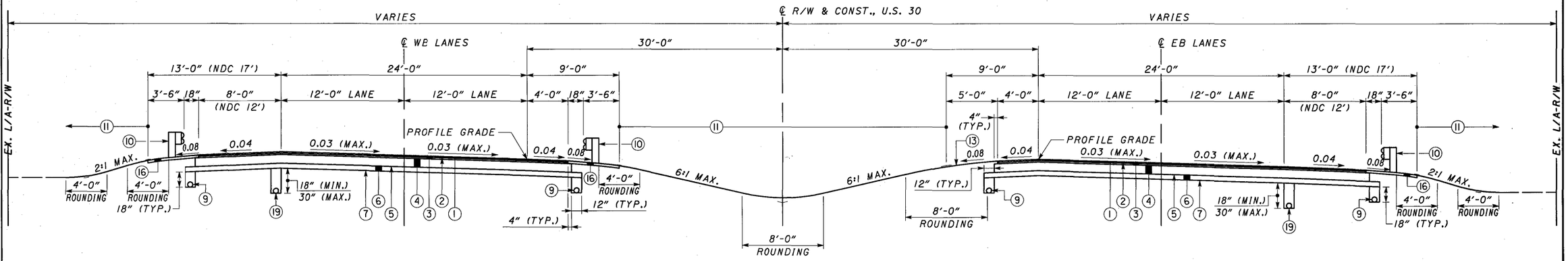
WESTBOUND:
STA. 531+58.38 TO STA. 531+83.38 - 25.00 FT.
TOTAL - 25.00 FT.

NOTES:

FOR LEGEND CONTAINING BALLOON REFERENCED ITEMS, SEE SHEET 5.

TYPICAL SECTIONS
OVER RAILROAD & TUSCARAWAS RIVER

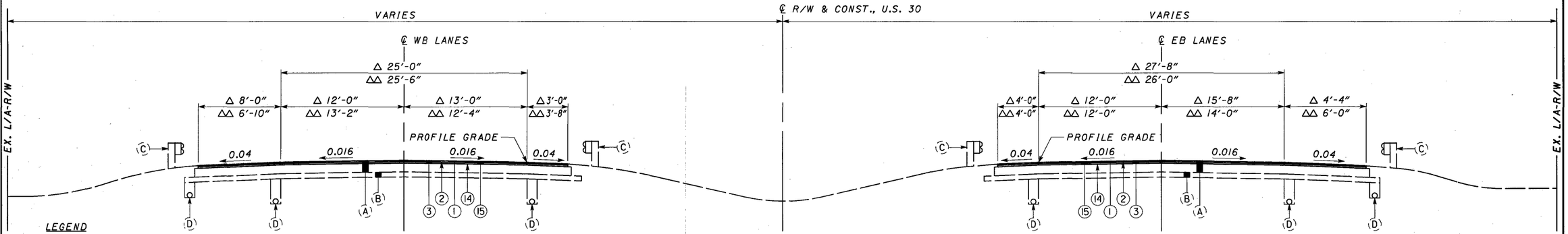
STA-30-(6.70)(11.57)



SUPERELEVATED SECTION

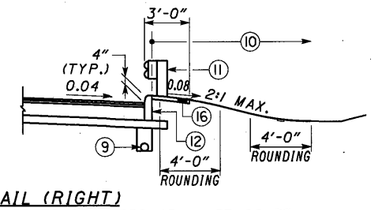
EASTBOUND:
STA. 531+85.38 TO STA. 532+75.00 - 89.62 FT.
TOTAL - 89.62 FT.

WESTBOUND:
STA. 531+83.38 TO STA. 532+75.00 - 91.62 FT.
TOTAL - 91.62 FT.



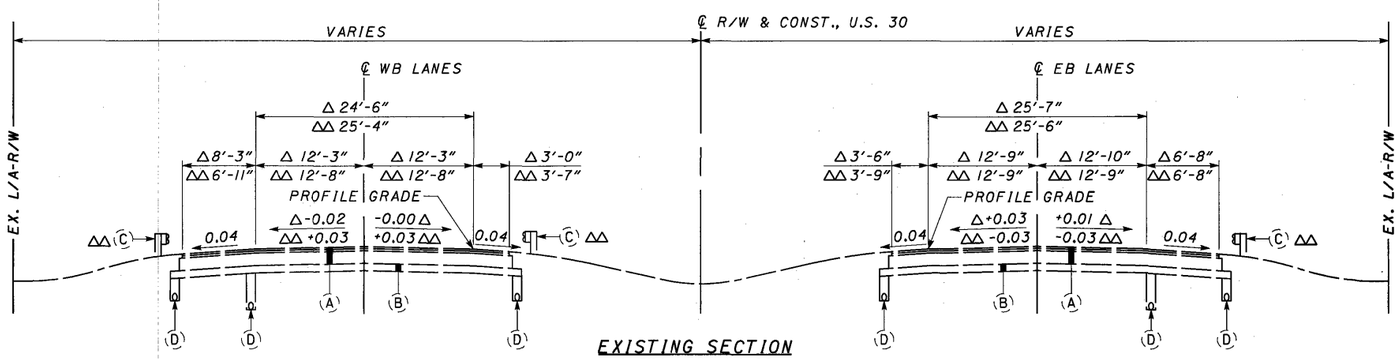
RESURFACING SECTION

△ STA. 524+40.00 TO STA. 524+64.00 - 24.00 FT.
△△ STA. 532+75.00 TO STA. 533+00.00 - 25.00 FT.
TOTAL - 49.00 FT.



CURB DETAIL (RIGHT)

STA. 531+85.38 TO STA. 532+43 - 57.62 FT.
TOTAL - 57.62 FT.



EXISTING SECTION

△ STA. 524+64.00
△△ STA. 532+75.00

LEGEND

(1) ITEM 448 -- ASPHALT CONCRETE SURFACE COURSE, TYPE I, PG64-28 (T-1½")
(2) ITEM 407 -- TACK COAT FOR INTERMEDIATE COURSE (APPL. RATE 0.04 GAL./S.Y.)
(3) ITEM 448 -- ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-28 (T-1¾")
(4) ITEM 302 -- ASPHALT CONCRETE BASE (T-10¼", PLACED IN 2 LIFTS)
(5) ITEM 408 -- PRIME COAT (APPL. RATE 0.4 GAL./S.Y.)
(6) ITEM 304 -- AGGREGATE BASE, AS PER PLAN (T-6")
(7) ITEM 204 -- SUBGRADE COMPACTION
(8) ITEM 526 -- REINFORCED CONCRETE APPROACH SLABS (T-15") (***)
(9) ITEM 605 -- 4" BASE PIPE UNDERDRAINS
(10) ITEM 606 -- GUARDRAIL, TYPE 5
(11) ITEM 659 -- SEEDING AND MULCHING
(12) ITEM 609 -- CURB, TYPE 4C
(13) ITEM 202 -- APPROACH SLAB REMOVED (***)
(14) ITEM 407 -- TACK COAT (APPL. RATE 0.075 GAL./S.Y.)
(15) ITEM 202 -- WEARING COURSE REMOVED (3¼" DEPTH)
(16) ITEM 448 -- ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I, UNDER GUARDRAIL, PG64-22, AS PER PLAN (T-3")
(17) ITEM 448 -- ASPHALT CONCRETE SURFACE COURSE, TYPE I, PG64-28 (T-1¼")
(18) ITEM 302 -- ASPHALT CONCRETE BASE, PG64-22 (T-8", PLACED IN 2 LIFTS)
(19) ITEM 605 -- 4" SHALLOW PIPE UNDERDRAINS
(20) ITEM 202 -- WEARING COURSE REMOVED (3" DEPTH)
(21) ITEM 511 -- CLASS HP CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN
(22) ITEM 609 -- CURB, TYPE 4A, COST INCLUDED WITH APPROACH SLABS, PER 526.06 (***)

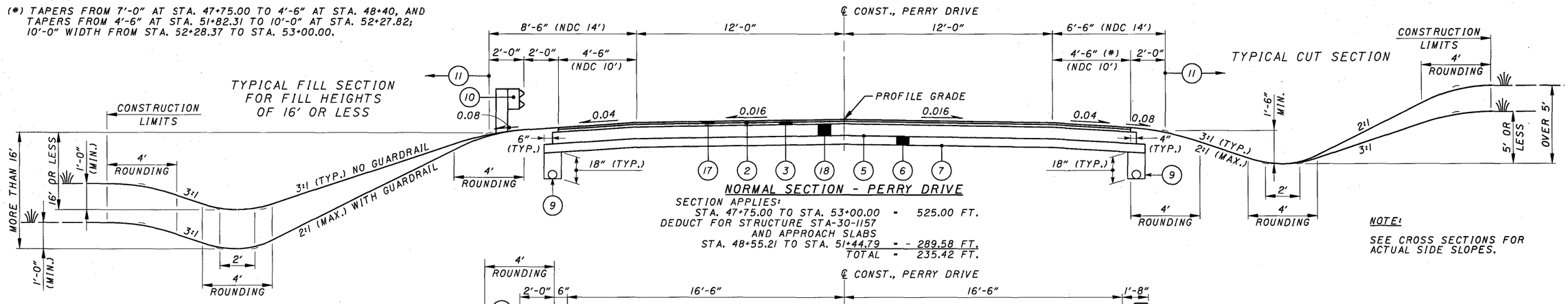
(A) EXISTING ASPHALT CONCRETE PAVEMENT (T-13½"±)
(B) EXISTING AGGREGATE BASE (T-6"±)
(C) EXISTING GUARDRAIL
(D) EXISTING PIPE UNDERDRAINS
(E) EX. ASPHALT CONCRETE PAVEMENT (T- 12")
(F) EX. AGGREGATE BASE (T-4"±)
(G) EX. BITUMINOUS SURFACE TREATED SHOULDER (T-8")
(H) EX. APPROACH SLAB (T-16"), 24' WIDTH
(I) EX. APPROACH SLAB (T-13" MIN), VARIABLE WIDTH (30'-0" - 32'-7")

NOTE:
(***) SEE BRIDGE PLANS FOR APPROACH SLAB QUANTITIES.

TYPICAL SECTIONS OVER RAILROAD & TUSCARAWAS RIVER

STA-30-(6.70)(11.57)

(*) TAPERS FROM 7'-0" AT STA. 47+75.00 TO 4'-6" AT STA. 48+40, AND TAPERS FROM 4'-6" AT STA. 51+82.31 TO 10'-0" AT STA. 52+27.82; 10'-0" WIDTH FROM STA. 52+28.37 TO STA. 53+00.00.



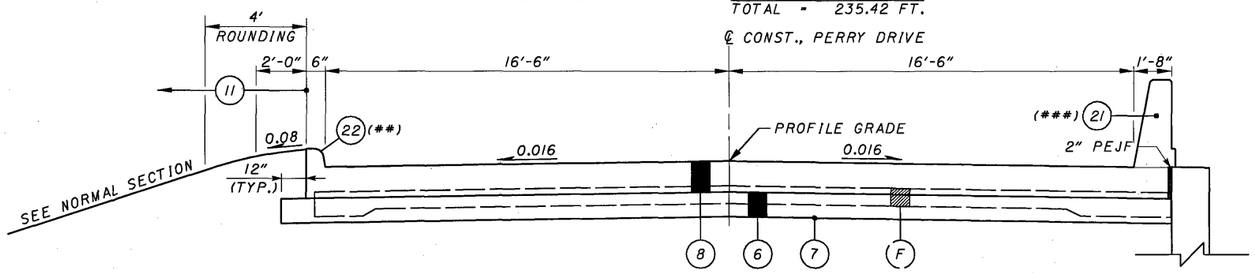
NORMAL SECTION - PERRY DRIVE

SECTION APPLIES:
STA. 47+75.00 TO STA. 53+00.00 - 525.00 FT.
DEDUCT FOR STRUCTURE STA-30-1157 AND APPROACH SLABS
STA. 48+55.21 TO STA. 51+44.79 - - 289.58 FT.
TOTAL - 235.42 FT.

NOTE:
SEE CROSS SECTIONS FOR ACTUAL SIDE SLOPES.

(**) CURB APPLIES:
STA. 48+55.16 TO STA. 48+66.00, LT. & RT.
STA. 51+33.95 TO STA. 51+44.79, LT. & RT.

INTEGRAL CURB TO BE INCLUDED WITH COST OF APPROACH SLABS, PER 526.06.



(***) CONCRETE BARRIER APPLIES:
STA. 48+66.00 TO STA. 48+80.16, LT. & RT.
STA. 51+19.79 TO STA. 51+33.95, LT. & RT.

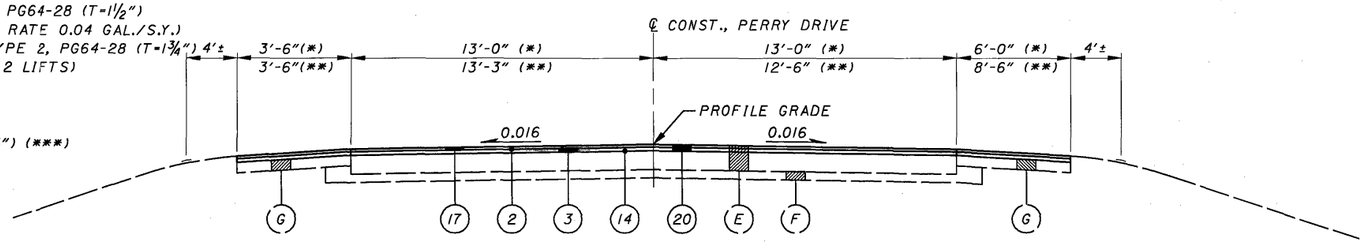
APPROACH SLAB NORMAL SECTION - PERRY DRIVE

SECTION APPLIES:
STA. 48+55.21 TO STA. 51+44.79 - 289.58 FT.
DEDUCT FOR STRUCTURE STA-30-1157
STA. 48+80.21 TO STA. 51+19.79 - 239.58 FT.
TOTAL - 50.00 FT.

LEGEND

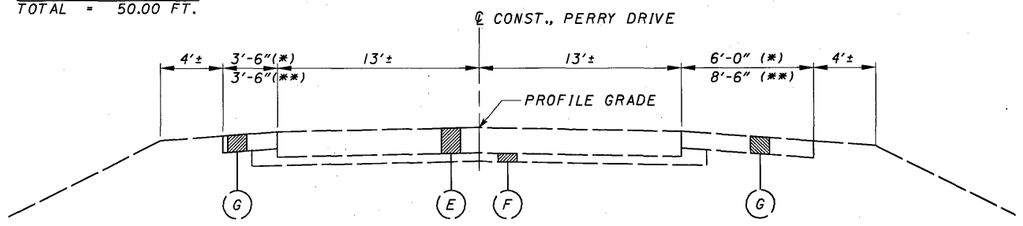
(1) ITEM 448 -- ASPHALT CONCRETE SURFACE COURSE, TYPE I, PG64-28 (T=1½")
(2) ITEM 407 -- TACK COAT FOR INTERMEDIATE COURSE (APPL. RATE 0.04 GAL./S.Y.)
(3) ITEM 448 -- ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-28 (T=1¾")
(4) ITEM 302 -- ASPHALT CONCRETE BASE (T=10¼", PLACED IN 2 LIFTS)
(5) ITEM 408 -- PRIME COAT (APPL. RATE 0.4 GAL./S.Y.)
(6) ITEM 304 -- AGGREGATE BASE, AS PER PLAN (T=6")
(7) ITEM 204 -- SUBGRADE COMPACTION
(8) ITEM 526 -- REINFORCED CONCRETE APPROACH SLABS (T=15") (***)
(9) ITEM 605 -- 4" BASE PIPE UNDERDRAINS
(10) ITEM 606 -- GUARDRAIL, TYPE 5
(11) ITEM 659 -- SEEDING AND MULCHING
(12) ITEM 609 -- CURB, TYPE 4C
(13) ITEM 202 -- APPROACH SLAB REMOVED (***)
(14) ITEM 407 -- TACK COAT (APPL. RATE 0.075 GAL./S.Y.)
(15) ITEM 202 -- WEARING COURSE REMOVED (3¼" DEPTH)
(16) ITEM 448 -- ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I, UNDER GUARDRAIL, PG64-22, AS PER PLAN (T=3")
(17) ITEM 448 -- ASPHALT CONCRETE SURFACE COURSE, TYPE I, PG64-28 (T=1¼")
(18) ITEM 302 -- ASPHALT CONCRETE BASE, PG64-22 (T=8", PLACED IN 2 LIFTS)
(19) ITEM 605 -- 4" SHALLOW PIPE UNDERDRAINS
(20) ITEM 202 -- WEARING COURSE REMOVED (3" DEPTH)
(21) ITEM 511 -- CLASS HP CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN
(22) ITEM 609 -- CURB, TYPE 4A, COST INCLUDED WITH APPROACH SLABS, PER 526.06 (***)
(A) EXISTING ASPHALT CONCRETE PAVEMENT (T=13½"±)
(B) EXISTING AGGREGATE BASE (T=6"±)
(C) EXISTING GUARDRAIL
(D) EXISTING PIPE UNDERDRAINS
(E) EX. ASPHALT CONCRETE PAVEMENT (T= 12")
(F) EX. AGGREGATE BASE (T=4"±)
(G) EX. BITUMINOUS SURFACE TREATED SHOULDER (T=8")
(H) EX. APPROACH SLAB (T=16"), 24' WIDTH
(I) EX. APPROACH SLAB (T=13" MIN), VARIABLE WIDTH (30'-0" - 32'-7")

NOTE:
(***) SEE BRIDGE PLANS FOR APPROACH SLAB QUANTITIES.



RESURFACING SECTION - PERRY DRIVE

SECTION APPLIES:
(*) STA. 47+50.00 TO STA. 47+75.00 - 25.00 FT.
(**) STA. 53+00.00 TO STA. 53+25.00 - 25.00 FT.
TOTAL - 50.00 FT.



EXISTING TYPICAL SECTION - PERRY DRIVE

SECTION APPLIES:
(*) STA. 47+75.00
(**) STA. 53+00.00

TYPICAL SECTIONS - PERRY DRIVE

STA-30-(6.70)(11.57)

ROUNDING

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

UTILITIES

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

AMERICAN ELECTRIC POWER (TRANSMISSION) (CLEAR)
850 TECH CENTER DRIVE
GAHANNA, OHIO 43230-6605
ATTN:TINA HAIRSTON
(614) 552-1801
(614) 552-1818 (FAX)

AMERICAN ELECTRIC POWER (DISTRIBUTION)
850 TECH CENTER DRIVE
GAHANNA, OHIO 43230
ATTN: RICK ECKLE
(614) 883-6829

AQUA OHIO (CLEAR)
870 3RD STREET
MASSILLON, OHIO 44647
ATTN: DON SNYDER
(330) 833-4156 X205

CANTON WATER DEPARTMENT
ENGINEERING DEPARTMENT
P.O. BOX 7904
CANTON, OHIO 44705
ATTN: LEWIS MILLER
(330) 489-3310
(330) 489-3073 (FAX)

CITY OF MASSILLON
ENGINEERING DEPARTMENT
151 LINCOLN WAY EAST
MASSILLON OHIO 44646
ATTN: GREG MC CUE
(330) 830-1722

DOMINION EAST OHIO
7015 FREEDOM AVE, N.W.
NORTH CANTON, OHIO 44720
ATTN: GEORGE TURNER, JR.
(330) 266-2041

GREAT LAKES ENERGY PARTNERS, L.L.C.
P.O. BOX 550
HARTVILLE, OHIO 44632-0550
ATTN: MARK BELZER
(330) 877-6747
(330) 877-6129 (FAX)

MASSILON CABLE
P.O. BOX 814
MASSILLON, OHIO 44648
ATTN: JEFF CAMPBELL
(330) 833-4134
(330) 833-7522 (FAX)

NORTHERN INDUSTRIAL ENERGY DEVELOPMENT, INC.
5900 MAYFAIR ROAD NW
NORTH CANTON, OHIO 44720
ATTN: ROBERT WENTZEL
(330) 498-9130
(888) 863-0032
(330) 498-9137 (FAX)

SBC
50 W. BOWERY STREET
4TH FLOOR
AKRON, OHIO 44308
ATTN: SABRENA LAMPLEY-TALBERT
(330) 384-8057
(330) 384-8879 (FAX)

STARK COUNTY METROPOLITAN SEWER DISTRICT
1701 MAHONING ROAD, NE
P.O. BOX 7906
CANTON, OHIO 44705-7906
ATTN: JIM JONES
(330) 451-2314
(330) 453-9044 (FAX)

TIME WARENER CABLE
1655 BRITTAIN ROAD
AKRON, OHIO 44310
ATTN: CHARLIE TONEY
(330) 630-7950
(330) 633-2342

UTILITIES

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.

ELEVATION DATUM

ALL ELEVATIONS ARE BASED ON U.S.G.S. DATUM. (NAV 1988)

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

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"	1	0	1
30"	0	0	0
48"	0	0	0
60"	0	0	0

IN ADDITION, THE CONTRACTOR SHALL REMOVE ALL VEGETATION WITHIN 15 FEET OF THE STRUCTURES.

PAVING UNDER GUARDRAIL

THIS OPERATION SHALL INCLUDE PREPARATION OF THE GRADED SHOULDER USING 209, LINEAR GRADING, AND PAVING UNDER THE GUARDRAIL USING 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 64-22, UNDER GUARDRAIL, AS PER PLAN.

ITEM 209, LINEAR GRADING, SHALL CONSIST OF EXCAVATING TOPSOIL, PLACING GRANULAR MATERIAL AND APPLYING HERBICIDE AS SPECIFIED IN THE PLANS AND IN ACCORDANCE WITH THE FOLLOWING:

ALL COLLECTED DEBRIS AND TOPSOIL, INCLUDING RHIZOMES, ROOTS AND OTHER VEGETATIVE PLANT MATERIAL SHALL BE REMOVED AND DISPOSED OF AS SPECIFIED IN 105.17.

THE REMOVED MATERIAL SHALL BE REPLACED WITH COMPACTABLE GRANULAR MATERIAL CONFORMING TO 703.16 PLACED TO GRADE AS DETAILED ON THE TYPICAL SECTION OR AS APPROVED BY THE ENGINEER.

HERBICIDE SHALL BE EPA APPROVED FOR PAVING UNDER GUARDRAIL. IT SHALL BE APPLIED TO THE PREPARED AREA AFTER FINAL LEVELING AND GRADING HAS BEEN COMPLETED. THE APPLICATION SHALL BE JUST PRIOR TO PAVING AND SHALL STRICTLY ADHERE TO THE MANUFACTURER'S INSTRUCTIONS.

EACH SUCCESSFUL BIDDER MUST BE LICENSED BY THE OHIO DEPARTMENT OF AGRICULTURE AS A COMMERCIAL APPLICATOR AND ALL PERSONS INVOLVED IN THE ACTUAL SPRAYING SHALL BE LICENSED AS COMMERCIAL OPERATORS IN THE APPROPRIATE SPRAY CATEGORY.

HERBICIDE LABEL, MATERIAL SAFETY DATA SHEET AND COPY OF APPLICATORS LICENSES SHALL BE SUBMITTED TO THE ENGINEER FOR VERIFICATION PRIOR TO COMMENCING WORK.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 209, LINEAR GRADING, AS PER PLAN.

PAVING UNDER GUARDRAIL SHALL CONSIST OF PLACING ITEM 448 TO THE DEPTH SPECIFIED USING ONE OF THE FOLLOWING, METHODS:

METHOD A: 1) SET GUARDRAIL POSTS

2) PLACE ITEM 448

METHOD B: 1) PLACE ITEM 448

2) BORE ASPHALT AT POST LOCATIONS (MAY BE OMITTED IF STEEL POSTS ARE USED)

3) SET GUARDRAIL POSTS

4) PATCH AROUND POSTS. THE MATERIALS USED FOR PATCHING SHALL BE AN ASPHALT CONCRETE APPROVED BY THE ENGINEER. PATCHED AREAS SHALL BE COMPACTED USING EITHER HAND OR MECHANICAL METHODS. FINISHED SURFACES SHALL BE SMOOTH AND SLOPED TO DRAIN AWAY FROM THE POSTS.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE, WITH THE EXCEPTION OF SETTING GUARDRAIL POSTS, SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 448, ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 1, PG 64-22, UNDER GUARDRAIL, AS PER PLAN.

ITEM 606 - ANCHOR ASSEMBLY, TYPE B-98

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

1) THE SRT-350, GUARDRAIL END TERMINAL AS MANUFACTURED BY TRINITY INDUSTRY, 1170 NORTH STATE STREET, GIRARD, OHIO 44420 (TELEPHONE: 330-545-4373).

THE LENGTH OF THE SRT-350 SYSTEM IS CONSIDERED TO BE 37'-6", INCLUSIVE OF THREE 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
SS444	SLOTTED RAIL TERMINAL POST LAYOUT AND ERECTION DETAILS SRT-350 (12.5, 8 POST)	7/12/99 Rev. 1	8/27/99
SS425M	SLOTTED RAIL TERMINAL SRT-350 POST LAYOUT AND ERECTION DETAILS (12.5, 9 POST)	6/21/97 Rev. 1	3/6/98

2) THE FLEAT-350 MANUFACTURED BY ROAD SYSTEMS, INC., 2516 MALLORY LANE, STOW, OHIO, 44224 (TELEPHONE: 330-346-0721).

THE LENGTH OF THE FLEAT-350 IS CONSIDERED TO BE 37'-6", INCLUSIVE OF THREE 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
FLT-M	FLARED ENERGY ABSORBING TERMINAL (FLEAT-350) ASSEMBLY	4/16/98	7/31/98

REFER TO THE MANUFACTURER'S INSTRUCTIONS 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 27¾ 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.

THE FACE OF THE TYPE B-98 IMPACT HEAD SHALL BE COVERED WITH TYPE G REFLECTIVE SHEETING, PER CMS 730.19: APPROXIMATELY 36" W X 12" H FOR THE SRT-350 AND 14" W X 20" H FOR THE FLEAT.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, TYPE B-98, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING REFLECTIVE SHEETING AND ALL RELATED HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOTSEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

ITEM SPECIAL - MAILBOX SUPPORT

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

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

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

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

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

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

CALCULATED RJS CHECKED SJS

GENERAL NOTES

STA-30-(6.70)(11.57)

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 MAILBOX SUPPORT, SINGLE.

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 603 CONDUIT ITEMS.

RESIDENTIAL AND COMMERCIAL DRAINAGE CONNECTIONS

EXISTING ROOF DRAINS, FOOTER DRAINS, OR YARD DRAINS, DISTURBED BY THE WORK, SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS BY CONNECTING A CONDUIT THROUGH THE CURB OR INTO A DRAINAGE STRUCTURE. THE LOCATION, TYPE, SIZE AND GRADE OF THE NEW CONDUIT REQUIRED TO REPLACE OR EXTEND THE EXISTING DRAIN WILL BE DETERMINED BY THE ENGINEER.

THE FOLLOWING CONDUIT TYPES MAY BE USED: 707.33, 707.41 NON-PERFORATED, 707.42, 707.43, 707.45, 707.46, 707.47, 707.51, 707.52 SDR35.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE WORK NOTED ABOVE:

603, 6" CONDUIT, TYPE E	50 FT.
603, 6" CONDUIT, TYPE F	50 FT.
603, 12" CONDUIT, TYPE B	60 FT.

WATERWAY PERMIT DETERMINATION (404/401)

ALL PROJECTS INVOLVING JURISDICTIONAL WATERS OF 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 33 - TEMPORARY CONSTRUCTION ACCESS AND DEWATERING. SHOULD THE VOLUME AND/OR SURFACE AREA OF THE TEMPORARY CONSTRUCTION ACCESS FILL BELOW THE ORDINARY HIGH WATER MARK (OHWM) PREVIOUSLY VERIFIED BY THE USACE FOR THE PROJECT NEED TO BE INCREASED, THE CONTRACTOR SHALL COORDINATE SUCH ACTIVITIES, INCLUDING THE PRE-CONSTRUCTION NOTIFICATION (PCN), THROUGH THE ODOT DISTRICT 4 ENVIRONMENTAL SECTION AND ODOT 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 THE 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 2005, ITEM 207.03.

SEEDING AND MULCHING

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

653, TOP SOIL FURNISHED AND PLACED	150 C.Y.
659, SEEDING AND MULCHING	3886 S.Y.
659, REPAIR SEEDING AND MULCHING	201 S.Y.
659, INTER-SEEDING	201 S.Y.
659, COMMERCIAL FERTILIZER	0.56 TON
659, LIME	0.83 ACRE
659, WATER	22 M. GAL.
659, MOWING	6 M. S.F.

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. NOTE THAT TOP SOIL SHALL ONLY BE PLACED AT THE STA-30-11.57 SITE. MOWING SHALL ONLY BE PERFORMED AT THE STA-30-6.70 SITE.

SODDING

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

659, COMMERCIAL FERTILIZER	0.01 TON
659, LIME	0.01 ACRE
659, WATER	1 M. GAL.

ITEM 203 - EMBANKMENT, AS PER PLAN

PLACE AND COMPACT EMBANKMENT MATERIAL IN 6-INCH LIFTS FOR THE CONSTRUCTION OF THE BRIDGE APPROACH EMBANKMENT.

WETLANDS AVOIDANCE

UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR IMPACT THE EXISTING WETLANDS AS INDICATED ON THE PLANS.
STA. 528+70 LT TO STA. 533+70 LT
STA. 531+20 RT TO STA. 534+30 RT
UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR STORE EQUIPMENT AND/OR MATERIALS WITHIN THESE WETLAND AREAS. TO PROTECT AND DELINEATE THE BOUNDARY OF THESE EXISTING WETLANDS, AS APPROPRIATE, FILTER FABRIC FENCE AND TEMPORARY CONSTRUCTION FENCE SHALL BE INSTALLED AROUND THE PERIMETER OF THE WETLANDS WITHIN AND ADJACENT TO THE LIMITED ACCESS RIGHT-OF-WAY, MAINTAINING A MINIMUM OF (1) FOOT BUFFER BETWEEN THE FENCE AND THE WETLAND BOUNDARY, OR AT THE PROPOSED CONSTRUCTION LIMITS WITHIN THE WETLANDS AREA, AS APPLICABLE. THIS FILTER FABRIC FENCE AND TEMPORARY CONSTRUCTION FENCE SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES WITHIN THESE LIMITS AND ADJACENT AREA, INCLUDING ANY NECESSARY CLEARING AND GRUBBING ACTIVITIES, AND MAINTAINED BY THE CONTRACTOR THROUGHOUT PROJECT CONSTRUCTION. PAYMENT SHALL BE INCLUDED WITH ITEM 832-EROSION CONTROL.

ENDANGERED SPECIES HABITAT

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

THE UNDERSIDE OF BRIDGES SHALL BE CHECKED FOR THE PRESENCE OF BATS PRIOR TO CONSTRUCTION BY THE ENGINEER. IF BATS ARE FOUND, THE DISTRICT 4 ENVIRONMENTAL SECTION SHALL BE CONTACTED FOR FURTHER DIRECTION.

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 603 CONDUIT ITEM.

ITEM 304 - AGGREGATE BASE, AS PER PLAN

FURNISH MATERIALS PER CMS 703.17 EXCEPT THAT MATERIAL SHALL BE LIMESTONE.

ITEM 623 CONSTRUCTION LAYOUT STAKES (BRIDGE CLEARANCES)

AFTER ALL NEW CONSTRUCTION HAS BEEN COMPLETED, A REGISTERED SURVEYOR SHALL TAKE VERTICAL CLEARANCE MEASUREMENTS AT LOCATIONS INDICATED ON THE APPROVED ODOT FORM (AVAILABLE IN THE DISTRICT STRUCTURES AND PAVEMENT OFFICE) AND/OR ALONG RAILROAD TRACKS AS APPLICABLE. THE FINAL MEASUREMENTS SHALL BE RECORDED ON THE FORM AND SUBMITTED TO THE PROJECT ENGINEER AND THE DISTRICT STRUCTURES AND PAVEMENT ENGINEER. THE RECORD SHALL BEAR THE SEAL OF THE LICENSED SURVEYOR WHO HAS TAKEN THE MEASUREMENTS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 623 CONSTRUCTION LAYOUT STAKES.

CONSTRUCTION NOISE - PERRY DRIVE ONLY

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF 8 P.M. AND 7 A.M. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

MECHANICAL EQUIPMENT OPERATION AT STREAM CHANNEL

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

BEST MANAGEMENT PRACTICES

WATER COLUMN AND SEDIMENTATION IMPACTS SHALL BE KEPT TO A MINIMUM THROUGH THE USE OF BEST MANAGEMENT PRACTICES FOR SOIL EROSION AND SEDIMENTATION CONTROL

CALCULATED RJS
CHECKED SJS

GENERAL NOTES

STA-30-(6.70)(11.57)

MAINTAINING TRAFFIC

MAINTAINING TRAFFIC AT ALL TIMES

A MINIMUM OF TWO LANES OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES ON US 30, EXCEPT AT THE TIMES AND LOCATIONS SPECIFIED IN THESE PLANS DURING THE REHABILITATION OF STA-30-0670 L/R BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, ITEM 615 ROADS FOR MAINTAINING TRAFFIC AND TEMPORARY SURFACES USING ITEMS 410 AND 614.

DETOUR NOTIFICATION - PERRY DRIVE

THE CONTRACTOR SHALL ADVISE THE ODOT DISTRICT OFFICE (330-786-3148), AND COUNTY/CITY, EIGHTEEN (18) DAYS IN ADVANCE OF WHEN THE DETOUR SHOULD BE IN EFFECT. ALL WORK ZONE DEVICES REQUIRED SHALL BE FURNISHED, ERECTED, MAINTAINED AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR.

DETOUR DURATION - PERRY DRIVE

THE MAXIMUM LENGTH OF TIME FOR THE DETOUR ROUTE TO BE IN EFFECT SHALL BE 90 CONSECUTIVE DAYS. CONSTRUCTION WORK MAY BE PERFORMED BEFORE AND AFTER THE DETOUR LIMITATION DATES, BUT THERE SHALL BE NO RESTRICTIONS (LANE WIDTH REDUCTIONS, TEMPORARY ROADWAYS, OR ONE WAY TRAFFIC) 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, AS PER 108.07 OF THE CMS, OF OVERRUN DETOUR LIMITATION TIME TO BE ASSESSED. THE CONTRACTOR WILL COMPLY WITH ALL PROVISIONS OF 108.07 OF THE DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIALS SPECIFICATIONS.

DETOUR SIGNING SHALL BE PAID FOR UNDER THE FOLLOWING:

ITEM 614, DETOUR SIGNING - LUMP SUM

WINTER TRAFFIC LIMITATIONS

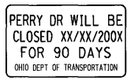
ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC BETWEEN NOVEMBER 15 AND APRIL 1. NOVEMBER 14 SHALL BE CONSIDERED TO CONSTITUTE AN INTERIM COMPLETION DATE AND LIQUIDATED DAMAGES, AS SPECIFIED IN 108.07, SHALL BE ASSESSED FOR EACH CALENDAR DAY THAT THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT. THE CONTRACTOR MAY CLOSE LANES, PRIOR TO APRIL 1, WITH WRITTEN APPROVAL FROM THE DISTRICT CONSTRUCTION ENGINEER.

LANE CLOSURE/REDUCTION REQUIRED

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

NOTICE OF CLOSURE SIGN

NOTICE OF CLOSURE SIGNS, AS DETAILED IN THESE PLANS, SHALL BE ERECTED BY THE CONTRACTOR AT LEAST ONE (1) WEEK IN ADVANCE OF THE SCHEDULED ROAD CLOSURE. THE SIGNS SHALL BE ERECTED ON THE RIGHT HAND SIDE OF THE ROAD 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.



W20-H14-60
(60"x36")

ESTIMATED QUANTITIES

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC.

ITEM 410, TRAFFIC COMPACTED SURFACE, TYPE A OR B
50 CU. YD.
ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
50 CU. YD.
ITEM 616, WATER - 5 M. GAL.

ITEM 614, MAINTAINING TRAFFIC

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR

IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND 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 ON US 30 DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED.

* DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE OF PERRY DRIVE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

LAW ENFORCEMENT OFFICERS (LEOS) SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED. THE LEOS 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 ENGINEER SHALL HAVE CONTROL OVER THEIR PLACEMENT. THE OFFICIAL PATROL CAR SHALL BE A PUBLIC SAFETY VEHICLE AS REQUIRED BY THE OHIO REVISED CODE. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THESE SERVICES WITH:

OHIO STATE HIGHWAY PATROL
CANTON PATROL POST
4710 SHUFFEL ROAD
NORTH CANTON, OH 44720
PHONE: (330) 433-6200
FAX: (330) 433-6230

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 QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR
120 HOURS

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER - 5 M. GAL.

ITEM 622, PORTABLE CONCRETE BARRIER, 32", AS PER PLAN

THIS WORK SHALL CONSIST OF FURNISHING, INSTALLING, MAINTAINING AND SUBSEQUENTLY REMOVING A 32" PORTABLE CONCRETE BARRIER WITH AN 18" HIGH MINIMUM HEIGHT GLARE SCREEN AT THE LOCATIONS SHOWN ON THE PLANS. FOR DETAILS SEE SCD RM-4.1.

THE GLARE SCREEN SHALL BE CONSTRUCTED USING ONE OF THE FOLLOWING SYSTEMS OR AN APPROVED EQUAL:

CARSONITE MODULAR GLARE SCREEN
CARSONITE INTERNATIONAL
605 BOB GIFFORD BLVD.
EARLY BRANCH, SOUTH CAROLINA 29916
TELEPHONE: (702) 883-5104 OR (800)-648-7974

TRINITY GLAREFOIL
TRINITY INDUSTRY
1170 N. STATE ST.
GIRARD, OHIO 444420
TELEPHONE: (330) 545-4373

PADDLE OR INTERMITTENT TYPE GLARE SCREENS SHALL BE DESIGNED USING A 20 DEGREE CUT-OFF ANGLE BASED ON TANGENT ALIGNMENT. THAT SPACING SHALL BE USED THROUGHOUT THE BARRIER LENGTH WITHOUT REGARD TO BARRIER CURVATURE.

THE GLARE SCREEN SYSTEM SHALL BE SECURELY FASTENED TO THE 32" PORTABLE CONCRETE BARRIER USING THE HARDWARE AND PROCEDURES SPECIFIED BY THE MANUFACTURER.

PAYMENT SHALL INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT NECESSARY TO PERFORM THE WORK AND SHALL BE PAID FOR AT THE CONTRACT PRICE PER FOOT FOR ITEM 622, PORTABLE CONCRETE BARRIER, 32", AS PER PLAN.

ITEM 614, WORK ZONE SPEED LIMIT SIGN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, COVER DURING SUSPENSION OF WORK AND SUBSEQUENTLY REMOVE WORK ZONE SPEED LIMIT (R2-1) (55 MPH SPEED LIMIT) SIGNS AND SUPPORTS WITHIN THE WORK LIMITS IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:

THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SPEED LIMIT SIGNS WITHIN THE REDUCED SPEED ZONE. THESE SIGNS SHALL BE RESTORED DURING SUSPENSION OR TERMINATION OF THE REDUCED SPEED LIMIT. THE EXPENSE OF COVERING OR REMOVAL AND RESTORATION OF EXISTING SPEED LIMIT OR MINIMUM SPEED LIMIT SIGNS SHALL BE INCLUDED IN THE PAY ITEM FOR WORK ZONE SPEED LIMIT SIGNS.

THE WORK ZONE SPEED LIMIT SIGNS MAY BE ERECTED OR UNCOVERED NO MORE THAN FOUR (4) HOURS BEFORE THE ACTUAL START OF WORK. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN FOUR (4) HOURS FOLLOWING RESTORATION OF ALL LANES TO TRAFFIC WITH NO RESTRICTIONS, OR SOONER AS DIRECTED BY THE ENGINEER. TEMPORARY SIGN COVERING AND UNCOVERING DUE TO TEMPORARY LANE RESTORATIONS SHALL BE GUIDED BY THE FOUR-HOUR LIMITATIONS STATED ABOVE. SUCH LANE RESTORATIONS SHOULD BE EXPECTED TO REMAIN IN EFFECT FOR THIRTY (30) OR MORE DAYS, SUCH AS DURING WINTER SHUT-DOWNS.

CONSTRUCTION AND MATERIALS SPECIFICATIONS, ITEM 614, PARAGRAPH 614.02(B) INDICATES THAT THE TWO (2) DIRECTIONS OF A DIVIDED HIGHWAY ARE CONSIDERED SEPARATE HIGHWAY SECTIONS. THEREFORE, IF THE WORK ON A MULTI-LANE DIVIDED HIGHWAY IS LIMITED TO ONLY ONE DIRECTION, SPEED REDUCTION IN THE DIRECTION OF THE WORK DOES NOT AUTOMATICALLY CONSTITUTE SPEED REDUCTION IN THE OPPOSITE DIRECTION. SPEED LIMIT REDUCTION IN THE OPPOSITE DIRECTION, IN SUCH CASE, IS APPROPRIATE ONLY IF CONDITIONS ARE EXPECTED TO HAVE AN IMPACT ON THE DIRECTIONAL TRAFFIC FLOW, AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL ERECT A WORK ZONE SPEED LIMIT SIGN IN ADVANCE OF ANY LANE RESTRICTION EXPECTED TO LAST AT LEAST 30 CONSECUTIVE CALENDAR DAYS, OR AS DIRECTED BY THE ENGINEER. THE SIGN SHALL BE MOUNTED ON BOTH SIDES OF A DIRECTIONAL ROADWAY OF DIVIDED HIGHWAYS. THE FIRST WORK ZONE SPEED LIMIT SIGN SHALL BE PLACED 500 FEET IN ADVANCE OF THE LANE REDUCTION OR SHIFT TAPER, OR AT A POINT WHEREVER CONSTRUCTION BEGINS, WHICHEVER COMES FIRST. THE SIGN SHALL BE REPEATED, ON THE SIDE NEAREST TRAFFIC, EVERY 1 MILE FOR 55 MPH ZONES.

REDUCED SPEED AHEAD SIGNS SHALL BE ERECTED IN ADVANCE OF THE SPEED REDUCTION, APPROXIMATELY 1300 FEET, ON MULTI-LANE HIGHWAYS.

A SIGN(S) TO INDICATE THE RESUMPTION OF THE STATUTORY SPEED LIMIT SHALL BE ERECTED AT THE END OF ANY REDUCED SPEED ZONE. R2-1 (SPEED LIMIT) AND R2-H2a SIGNS SHALL BE USED ON DIVIDED ROADWAYS. WHEN USED, THE R2-1 AND R2-H2a SIGNS SHALL BE MOUNTED SIDE-BY-SIDE ON SEPARATE SUPPORTS. THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED, BUT GOOD, CONDITION PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS. SIGN FACES SHALL BE REFLECTORIZED WITH TYPE G SHEETING COMPLYING WITH THE REQUIREMENTS OF CMS 730.19.

WORK ZONE SPEED LIMIT SIGNS SHALL BE MOUNTED ON TWO (2) ITEM 630, GROUND MOUNTED SUPPORTS, NO. 3 POSTS.

WORK ZONE SPEED LIMIT SIGNS AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGNS AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND REERECTED AT ANOTHER LOCATION WITHIN THE PROJECT, DUE TO CHANGES IN THE SPEED ZONE DIRECTED BY THE ENGINEER, IT SHALL BE CONSIDERED ANOTHER UNIT.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE IN PLACE, WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, ERECTING, MAINTAINING, COVERING DURING SUSPENSION OF WORK, AND REMOVING THE SIGNS AND SUPPORTS. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, WORK ZONE SPEED LIMIT SIGN - 12 EACH

DESIGNATED DETOUR ROUTE

DURING THE TIME THAT TRAFFIC IS DETOURED, THE CONTRACTOR SHALL MAINTAIN THE DETOUR ROUTE IN A CONDITION WHICH IS REASONABLY SMOOTH AND FREE FROM HOLES, RUTS, RIDGES, BUMPS, DUST AND STANDING WATER. ONCE THE DETOUR IS REMOVED, AND TRAFFIC IS RETURNED TO ITS NORMAL PATTERN, THE DETOUR ROUTE SHALL BE RESTORED TO A CONDITION THAT IS EQUIVALENT TO THAT WHICH EXISTED PRIOR TO ITS USE FOR THIS PURPOSE. ALL SUCH WORK SHALL BE PERFORMED WHEN AND AS DIRECTED BY THE ENGINEER.

ITEM 614, BARRIER REFLECTORS AND OBJECT MARKERS

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE CONCRETE BARRIER USED FOR TRAFFIC CONTROL. BARRIER REFLECTORS, OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO CMS 626, EXCEPT THAT THE SPACING SHALL BE FIFTY (50) FEET. AN ESTIMATED QUANTITY OF 50 EACH OF ITEM 614 BARRIER REFLECTORS, TYPE B AND 50 EACH OF ITEM 614 OBJECT MARKER, ONE-WAY HAVE BEEN PROVIDED AND CARRIED TO THE GENERAL SUMMARY.

WORK ZONE INCREASED PENALTIES SIGN (R11-H5a)

R11-H5a-48 SIGNS SHALL BE FURNISHED, ERECTED AND MAINTAINED IN GOOD CONDITION, AND/OR REPLACED AS NECESSARY AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. SIGNS SHALL BE MOUNTED AT THE APPROPRIATE OFFSETS AND ELEVATIONS AS PRESCRIBED BY THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THEY SHALL BE MAINTAINED ON SUPPORTS MEETING CURRENT SAFETY CRITERIA.

THE SIGNS MAY BE ERECTED OR UNCOVERED NO MORE THAN FOUR HOURS BEFORE THE ACTUAL START OF WORK. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN FOUR (4) HOURS FOLLOWING RESTORATION OF ALL LANES TO TRAFFIC WITH NO RESTRICTIONS, OR SOONER AS DIRECTED BY THE ENGINEER. TEMPORARY SIGN COVERING AND UNCOVERING, DUE TO TEMPORARY LANE RESTORATIONS, SHALL BE GUIDED BY THE FOUR-HOUR LIMITATIONS STATED ABOVE. SUCH LANE RESTORATIONS SHOULD BE EXPECTED TO REMAIN IN EFFECT FOR 30 OR MORE CONSECUTIVE CALENDAR DAYS, SUCH AS DURING WINTER WORK SHUT-DOWNS.

THE SIGNS SHALL BE DUAL MOUNTED. THE FIRST SIGN SHALL BE PLACED BETWEEN THE ROAD WORK AHEAD (W20-1) SIGN AND THE NEXT SIGN IN THE SEQUENCE.

THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED, BUT GOOD, CONDITION PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS. SIGN FACES SHALL BE REFLECTORIZED WITH TYPE G SHEETING COMPLYING WITH THE REQUIREMENTS OF CMS 730.19.

WORK ZONE INCREASED PENALTIES SIGNS AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGN AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND REERECTED AT ANOTHER LOCATION AS DIRECTED BY THE ENGINEER, IT SHALL BE CONSIDERED ANOTHER UNIT.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE, IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, ERECTING, MAINTAINING, COVERING DURING SUSPENSION OF WORK AND REMOVAL OF THE SIGN AND SUPPORT.

ITEM 614, WORK ZONE INCREASED PENALTIES SIGN - 12 EACH

EARTHWORK FOR MAINTAINING TRAFFIC

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE PLAN FOR INFORMATION ONLY.

EXCAVATION FOR MAINTAINING TRAFFIC - 425.5 CU. YD.
EMBANKMENT FOR MAINTAINING TRAFFIC - 2297.2 CU. YD.

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

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

ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ONE OF THE FOLLOWING IMPACT ATTENUATORS:

1. THE QUADGUARD CZ, (24 INCHES WIDE BY SIX-BAY) WORK ZONE IMPACT ATTENUATOR MANUFACTURED BY ENERGY ABSORPTION SYSTEMS, INC., 35 EAST WACKER DRIVE, CHICAGO, IL 60601 (TELEPHONE: (312) 467-6750).

THE LENGTH OF THE SIX-BAY QUADGUARD CZ IS 20'-9". 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. #	DWG. NAME	DWG./REV. DATE	ODOT APPROVED DATE
QSCZVCR-T4	QUADGUARD CZ SYSTEM FOR CONSTRUCTION ZONES	5/13/99 REF J	8/27/99
35-40-10	QUADGUARD SYSTEM CONCRETE PAD, CB, QG	11/19/97 REV D	8/27/99
35-40-16	QUADGUARD SYSTEM BACKUP ASSEMBLY, CZ, QG	7/30/99 REV F	8/27/99
35405IZ	QUADGUARD CZ SYSTEM NOSE ASSEMBLY, CB, QG, 24, 30, 36	5/17/99	8/27/99
35-40-18	TRANSITION ASSEMBLY, 40' OFFSET, QG	6/25/99 REV F	8/27/99
35400260	QUADGUARD SYSTEM PCMB ANCHOR ASSEMBLY	11/19/97 REV C	8/27/99

2. THE TRACC (TRINITY ATTENUATING CRASH CUSHION) MANUFACTURED BY TRINITY INDUSTRY, 1170 N. STATE STREET, GIRARD, OHIO 44420 (TELEPHONE: 330-545-7373). THE TRACC IS 21'-0" LONG AND 2'-7" WIDE. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PREAPPROVED SHOP DRAWINGS:

DWG. #	DWG. NAME	DWG./REV. DATE	ODOT APPROVED DATE
SS450	CRASH-CUSHION ATTENUATING TERMINAL PLAN, ELEVATION & SECTIONS	3/12/99 REV 1	8/27/99
SS455	TRACC TRANSITION TO W-BEAM MEDIAN BARRIER PLAN, ELEVATION, & SECTIONS	2/18/99	8/27/99
SS461	TRACC TRANSITION TO CONCRETE SAFETY SHAPE BARRIER PLAN, & SECTIONS	6/30/99 REV 1	8/27/99
SS462	TRACC TRANSITION TO CONCRETE BARRIER SINGLE SLOPE PLAN, ELEVATION, & SECTIONS	6/30/99	8/27/99

3. THE BARRIER SYSTEMS, INC. TAU-II IMPACT ATTENUATOR, DISTRIBUTED BY ROAD SYSTEMS, INC., SALES SUPPORT, 2183 ELM TRACE, AUSTINTOWN, OH 44515, (TELEPHONE: (330) 799-9291).

THE TAU-II FOR THIS NOTE IS A PARALLEL 8-BAY UNIT 24' LONG AND 35' WIDE. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPEFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DWG. #	DWG. NAME	DWG./REV. DATE	ODOT APPROVED DATE
A040416	UNIVERSAL TAU-II PARTS LIST	4/22/04	10/16/04
A040420	UNIVERSAL TAU-II FOUNDATION, FLUSH MOUNT BACKSTOP	4/28/04	10/16/04
A040105	UNIVERSAL TAU-II FOUNDATION, PCB BACKSTOP (REFERRED ON A04020)	1/07/04	10/16/04
B040239	APPLICATION, FLUSH MOUNT BACKSTOP (TYPICAL FOR PARALLEL 60 MPH UNIT)	4/21/04	10/16/04

4. THE GREAT CZ IMPACT ATTENUATOR MANUFACTURED BY ENERGY ABSORPTION SYSTEMS, INC. THIS ATTENUATOR MAY BE USED UNTIL JANUARY 1, 2007 IF THE ITEM WAS PURCHASED BEFORE OCTOBER 1, 1998 AND IS IN THE CONTRACTOR'S INVENTORY.

THE CONTRACTOR SHALL PROVIDE A REPLACEMENT UNIT WHEN AN IMPACT IS SEVERE ENOUGH TO REQUIRE COMPLETE REPLACEMENT OF THE ATTENUATOR. THE CONTRACTOR SHALL HAVE A SPARE PARTS PACKAGE AVAILABLE ON THE PROJECT SITE AT ALL TIMES WHEN AN ATTENUATOR IS IN PLACE. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF ONE COMPLETE SPARE PARTS PACKAGE FOR EVERY ONE TO SIX UNITS INSTALLED ON THE PROJECT SITE. FOR EXAMPLE, FIVE INSTALLED UNITS REQUIRE ONE SPARE PARTS PACKAGE AND SEVEN INSTALLED UNITS REQUIRE TWO SPARE PARTS PACKAGES.

ITEM 614, WORK ZONE CROSSOVER LIGHTING SYSTEM

THIS WORK SHALL CONSIST OF FURNISHING, ERECTING, OPERATING, MAINTAINING AND REMOVING A WORK ZONE LIGHTING SYSTEM FOR AN OVERLAPPING PAIR OF CROSSOVERS ON A TWO-LANE, TWO-WAY OPERATION. THE SYSTEM SHALL BE AS SHOWN ON SCD MT-100.00. THE CONTRACTOR SHALL ARRANGE FOR AND PAY FOR POWER. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH APPLICABLE PORTIONS OF 625 AND 724 EXCEPT: THE PERFORMANCE TEST OF 625.19F, AND CERTIFIED DRAWING REQUIREMENT OF 625.04, ARE WAIVED, AND USED MATERIALS, IN GOOD CONDITION, ARE ACCEPTABLE.

CALCULATED SMM
CHECKED JEP

MAINTENANCE OF TRAFFIC GENERAL NOTES

STA-30-(6.70)
(11.57)

POLES MAY BE LESS THAN 30 FT FROM THE EDGE OF PAVEMENT, WHEN BEHIND GUARDRAIL. ADDITIONAL POLE LINES, CABLES AND APPURTENANCES NECESSARY TO FURNISH POWER TO THE LIGHTING SYSTEM SHALL BE INCLUDED IN THIS ITEM. SERVICE POLES SHALL BE POSITIONED WITH THE SAME CONSTRAINTS AS THE LIGHTING POLES AS A MINIMUM.

PAYMENT WILL BE MADE AT THE UNIT PRICE PER EACH FOR ITEM 614, WORK ZONE CROSSOVER LIGHTING SYSTEM THROUGHOUT ALL PHASES OR WORK WHEN THE CROSSOVER ROADWAYS ARE USED.

ITEM 614, WORK ZONE CROSSOVER LIGHTING SYSTEM - 2 EACH

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN, ON SITE, FOR THE DURATION OF THE PROJECT. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS MAINTAINED BY THE DIRECTOR (OFFICE OF MATERIALS MANAGEMENT). THIS LIST IS AVAILABLE ON THE ODOT WEBSITE AT http://www.dot.state.oh.us/testlab/applists/misc/pcms.htm. THE LIST CURRENTLY CONTAINS CLASS I, II, AND III UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 1250 FT, 850 FT, AND 650 FT, RESPECTIVELY.

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. PCMS TRAILERS SHOULD BE DELINEATED ON A PERMANENT BASIS BY AFFIXING RETROREFLECTIVE MATERIAL, IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER AS SEEN BY ONCOMING ROAD USERS.

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS ARE TO BE EAST AND WEST OF THE WORK ZONE ON STA-30-0670 ON US 30.. 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 CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED, FACING AWAY FROM 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 ODOT 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 ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. 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 UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF CMS 614.07. 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. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE, THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT 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
12 SIGN MONTHS

ITEM 614, WORK ZONE RAISED PAVEMENT MARKERS, AS PER PLAN

WORK ZONE RAISED PAVEMENT MARKERS, AS PER PLAN, AND THEIR INSTALLATION SHALL CONFORM TO CMS 614 OR CMS 621 AS SPECIFIED HEREIN.

RAISED PAVEMENT MARKERS IN USE DURING THE SNOW-PLOWING SEASON SHALL CONFORM TO 621.

RAISED PAVEMENT MARKERS IN USE DURING NON-SNOW-PLOWING SEASON SHALL CONFORM TO EITHER 614 OR 621.

THE SNOW-PLOWING SEASON SHALL RUN FROM OCTOBER 15 TO APRIL 1.

IF PROJECT DELAYS, NOT THE FAULT OF ODOT, CAUSE THE WORK TO EXTEND INTO THE SNOW-PLOWING SEASON, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING WORK ZONE RAISED PAVEMENT MARKERS (WZRPMS) CONFORMING TO CMS 614, WITH RAISED PAVEMENT MARKERS CONFORMING WITH CMS 621, AS DETERMINED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

AN ESTIMATED QUANTITY OF 696 EACH OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN HAS BEEN PROVIDED AND CARRIED TO THE GENERAL SUMMARY. THIS ITEM SHALL INCLUDE PURCHASE, INSTALLATION AND REMOVAL OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN, INCLUDING FILLING OF ANY DEPRESSIONS CREATED IN THE PAVEMENT AS PER CMS 202.10.

WORK ZONE RAISED PAVEMENT MARKERS ON CONCRETE SURFACES

RAISED PAVEMENT MARKERS IN WORK ZONES, INSTALLED ON TO CONCRETE SURFACES, SHALL BE ITEM 614 WORK ZONE RAISED PAVEMENT MARKERS. WZRPMS ARE INTENDED FOR USE ONLY DURING THE NON-SNOW-PLOWING SEASON. WZRPMS SHALL NOT BE PROVIDED DURING THE SNOW-PLOWING SEASON.

THE SNOW-PLOWING SEASON SHALL RUN FROM OCTOBER 15 TO APRIL 1.

WHERE A TEMPORARY ALIGNMENT WILL REMAIN IN USE THROUGH THE WINTER, THE WZRPMS SHALL BE REMOVED PRIOR TO THE BEGINNING OF THE SNOW-PLOWING SEASON AND REPLACED APPROXIMATELY APRIL 1, OR AS OTHERWISE DETERMINED BY THE ENGINEER.

THIS ITEM SHALL INCLUDE PURCHASE, INSTALLATION AND REMOVAL OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKERS.

AN ESTIMATED QUANTITY OF 12 EACH OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKER HAS BEEN PROVIDED AND CARRIED TO THE GENERAL SUMMARY.

TRAIL CLOSURE

THE OHIO AND ERIE CANAL TOWPATH WILL BE CLOSED FOR SHORT PERIODS OF TIME WHILE THE WORK IS PERFORMED OVER THE TRAIL. CLOSURES WILL BE LIMITED TO DURATIONS OF APPROXIMATELY 3-5 DAYS IN LENGTH, DURING WEEKDAYS FROM 7 AM TO 6 PM. AT NO TIME SHALL THE TOWPATH TRAIL BE CLOSED DURING WEEKENDS. ADVANCE NOTICE OF THE CLOSURE WILL BE PROVIDED TO THE CITY OF MASSILLON PARKS DISTRICT AND SIGNS WILL BE POSTED BY THE CONTRACTOR AT APPROPRIATE LOCATIONS ON THE TRAIL. THE CITY OF MASSILLON SHALL BE CONTACTED A MINIMUM OF THREE WEEKS PRIOR TO CLOSING THE TRAIL.

THE CITY OF MASSILLON PARK DIRECTOR KEN KAMINSKI MAY BE CONTACTED AT:

505 ERIE STREET NORTH
MASSILLON, OH 44646
PHONE: (330) 832-1621

ALL LABOR, EQUIPMENT AND MATERIAL FOR PLACING AND REMOVING THE CLOSURE SIGNAGE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR:

ITEM 614, MAINTAINING TRAFFIC - LUMP SUM

SEQUENCE OF CONSTRUCTION - 0670

PHASE 1A

PHASE 1A WORK SHALL CONSIST OF CONSTRUCTING BOTH OF THE TEMPORARY CROSSOVERS. TWO LANES OF TRAFFIC IN EACH DIRECTION.

THE CROSSOVERS ARE TO BE CONSTRUCTED IN CONFORMANCE WITH CMS 615. ALL NECESSARY DRAINAGE PROVISIONS, AS SHOWN IN THESE PLANS, SHALL BE INCLUDED WITH THIS ITEM.

ITEM 615, ROADS FOR MAINTAINING TRAFFIC, - LUMP SUM

PHASE 1

PHASE 1 WORK SHALL CONSIST OF CONSTRUCTING STA-30-0670 R. ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES. EASTBOUND TRAFFIC SHALL BE CROSSED OVER TO THE EXISTING LEFT STRUCTURE FOR THE DURATION OF THIS PHASE.

PHASE 2

PHASE 2 WORK SHALL CONSIST OF CONSTRUCTING STA-30-0670 L. ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES. WESTBOUND TRAFFIC SHALL BE CROSSED OVER TO THE COMPLETED RIGHT STRUCTURE FOR THE DURATION OF THIS PHASE.

UNSUITABLE FOUNDATION SOILS

IF UNSUITABLE FOUNDATION SOILS ARE ENCOUNTERED IN THE AREAS OF THE CROSS OVER, THEY SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL MEETING THE REQUIREMENTS OF 203.02.R. THE LOCATIONS AND DIMENSIONS WILL BE AS DETERMINED BY THE ENGINEER.

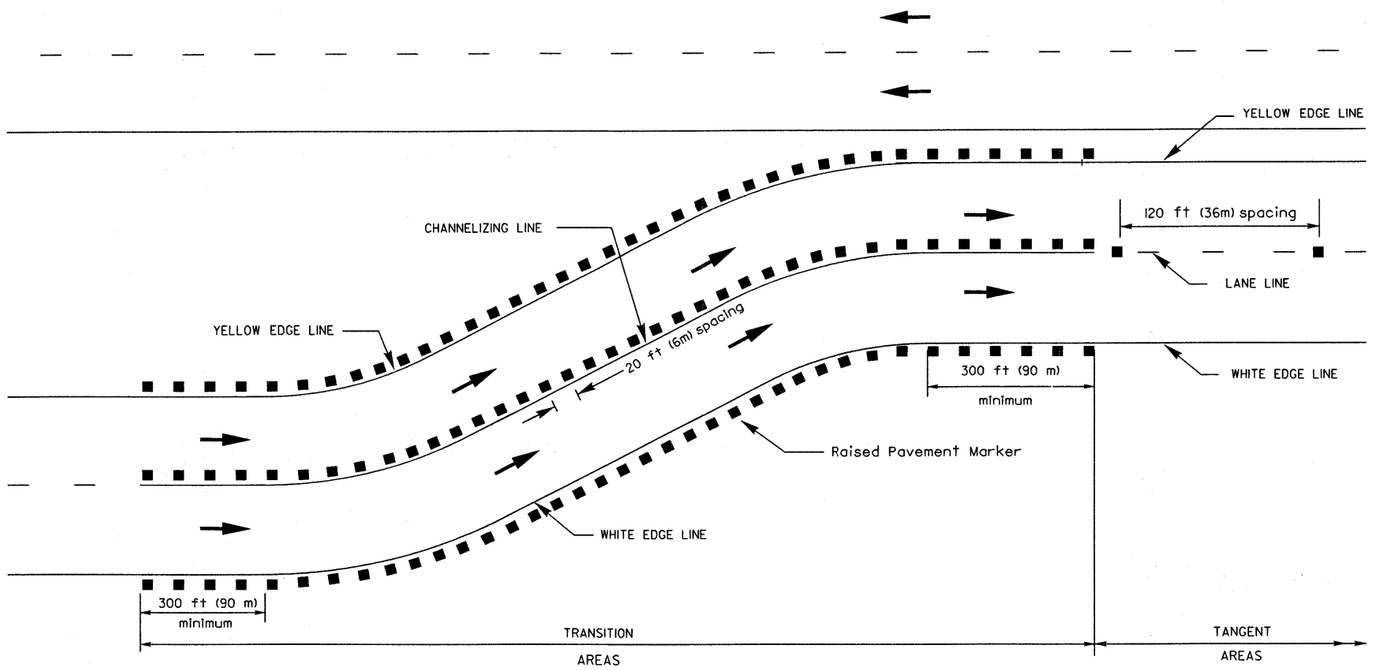
THE FOLLOWING CONTINGENCY QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER:

ITEM 204, GRANULAR EMBANKMENT	50 C.Y.
ITEM 204, EXCAVATION OF SUBGRADE	50 C.Y.

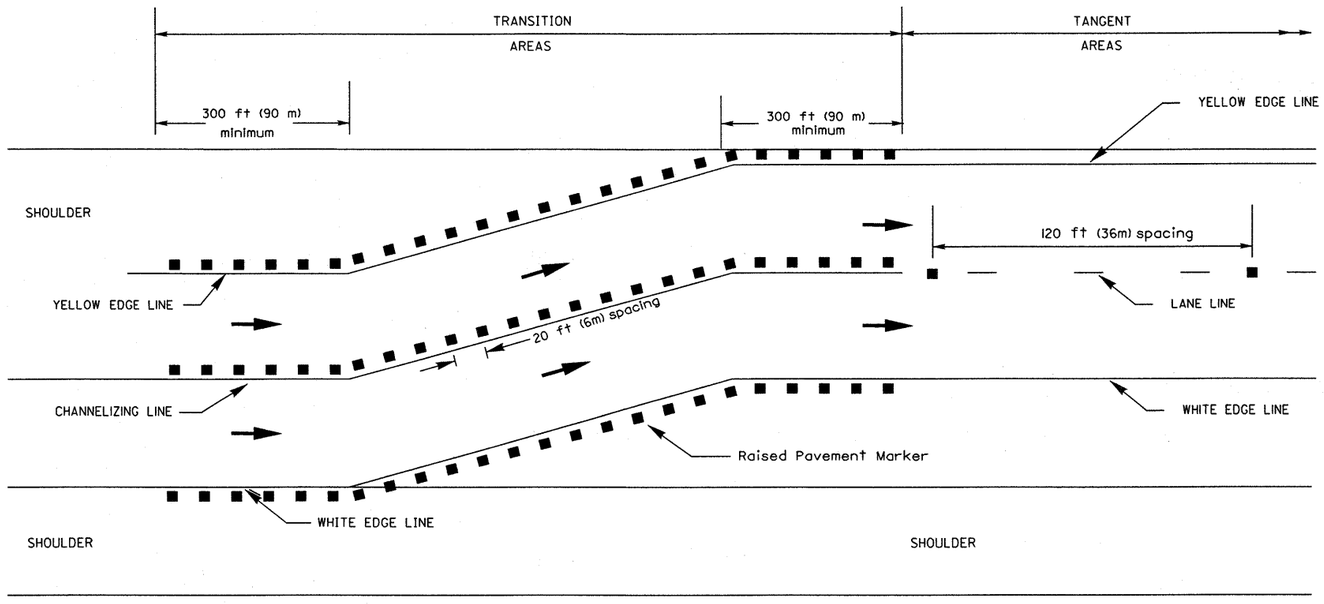
CALCULATED SMM CHECKED JEP

MAINTENANCE OF TRAFFIC GENERAL NOTES

STA-30-(6.70)
(11.57)



WORK ZONE DELINEATION FOR CROSSOVERS



WORK ZONE DELINEATION FOR LANE SHIFTS

LEGEND

- RPM
- DIRECTION OF TRAVEL

NOTES

1. This drawing presents delineation procedures for freeways and expressways on asphalt surfaces. Procedures are provided for transition areas and for tangent areas. The procedures for transition areas apply to crossovers and to lane shifts of 4 feet (1.2 m) or greater. Delineation of transition areas for shifts of less than 4 inches (1.2 m) shall be as per the tangent area delineation.

2. Raised Pavement Markers shall meet the following seasonal specifications:
   a) Raised Pavement Markers in place during the normal construction season may be either 621 Raised Pavement Markers or 614 Work Zone Raised Pavement Markers (WZRPMs). The normal construction season with regard to use of WZRPMs shall be the period from April 1 through October 15.
   b) At locations where it is intended that Raised Pavement Markers will winter over, 621 Raised Pavement Markers shall be provided.
   c) At locations where it is intended that work will continue beyond October 15 but will be completed prior to the beginning of snow-plowing season, 614 WZRPMs may remain in place until such time. Snow-plowing season shall be as specified in the plans. If snow-plowing season is not specified in the plans, it shall be assumed that snow-plowing season runs from October 16 through March 31. If project delays, not the fault of ODOT, cause work to extend into the snow-plowing season, the contractor shall be responsible for replacing WZRPMs with 621 Raised Pavement Markers, as determined by the Engineer, at the contrator's expense.

3. All material furnished shall be listed on the Department's Prequalified Lists.

4. The geometrics of the crossover shall be as shown in the plans. Additional details are provided in Standard Construction Drawing MT-95.70.

5. See Standard Construction Drawings MT-102.10 and MT-102.20 for more details concerning lane shifts.

6. Spacing of raised pavement markers (RPMs) shall be at 20 feet (6 m) center-to-center for all long-line marking within transition areas. Within tangent areas RPMs shall be provided only along the lane lines, spaced at 120 foot (36 m) center-to-center.

7. The RPMs shall be 1-way, facing oncomming traffic, and shall be white or yellow to match the color of the associated line marking.

8. Along the edge lines, the RPMs shall be offset a maximum of 4 inches (100 mm) to the outside of the lines. Along the channelizing lines, the RPMs shall be offset to the left of the lines by no more than 1 inch (25 mm). Along the lane lines the RPMs shall be centered between dashes.

9. The RPMs shall be removed when they are no longer appropriate.

10. Holes resulting from removal of 621 RPMs shall be filled as per 202.10. If removal of the 621 RPMs does not take place immediately after the highlighted alignment becomes invalid, the reflectors within the 621 RPMs shall be removed.

11. Following removal of 621 RPMs resurfacing of the transition shall be performed. The resurfacing shall be performed at the time the surface course is being applied. In preparation for resurfacing, the existing pavement shall be removed to a depth necessary to match the level of the intermediate course of the proposed pavement.

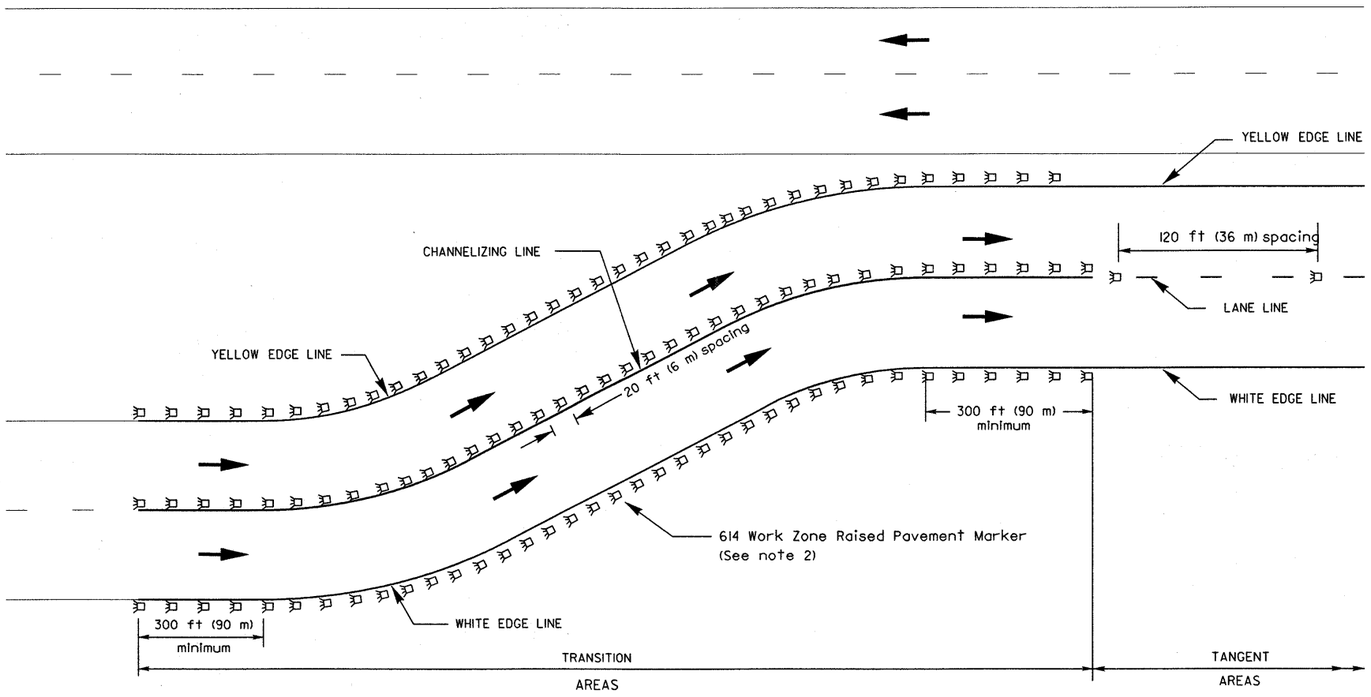
04-21-06

WORK ZONE DELINEATION ON ASPHALT SURFACES

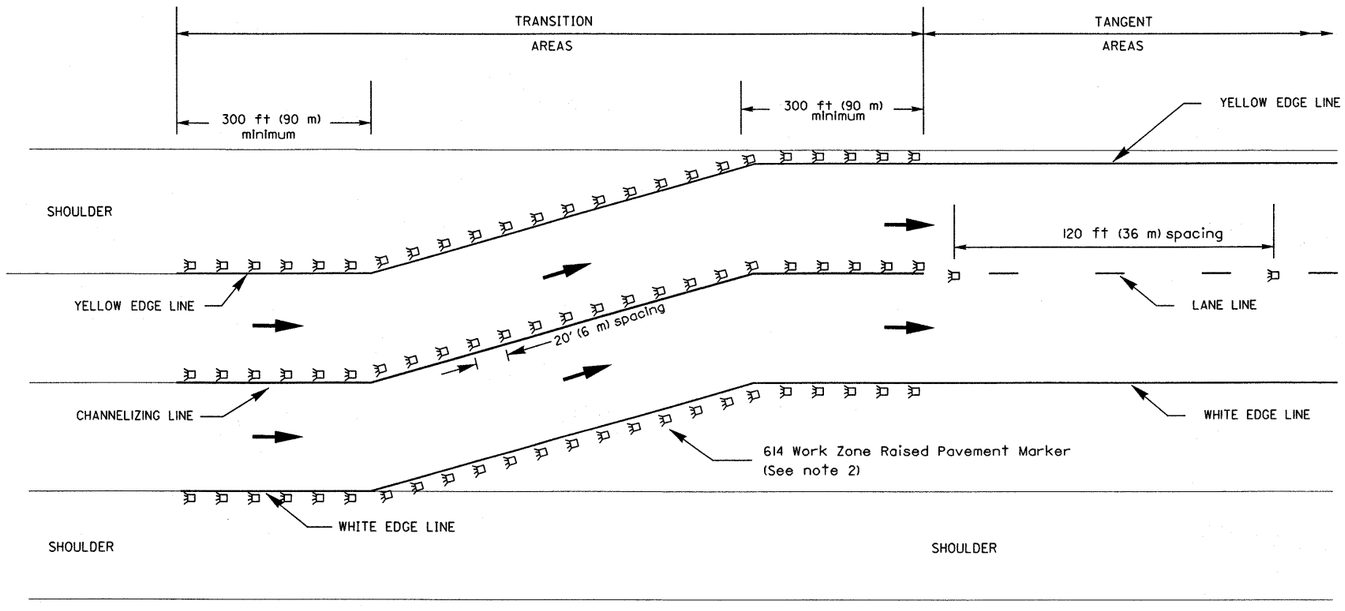
OFFICE OF TRAFFIC ENGINEERING

STA-30-(6.70) (11.57)

SHB



WORK ZONE DELINEATION FOR CROSSOVERS



WORK ZONE DELINEATION FOR LANE SHIFTS

NOTES

1. This drawing presents delineation procedures for freeways and expressways on concrete surfaces. Procedures are provided for transition areas and for tangent areas. The procedures for transition areas apply to crossovers and to lane shifts of 4 feet (1.2 m) or greater. Delineation of transition areas for shifts of less than 4 feet (1.2 m) shall be as per the tangent area delineation.

2. The Work Zone Raised Pavement Markers (WZRPMs) shown on this drawing are intended for use only during the non-snow-plowing season. WZRPMs shall not be provided during the snow-plowing season. The snow-plowing season shall be from October 16 through March 31 or as otherwise specified in the plans. Where a temporary alignment will remain in use through the winter, the WZRPMs shall be removed prior the beginning of snow-plowing season and replaced approximately April 1, or as otherwise determined by the Engineer.

3. All material furnished shall be listed on the Department's Qualified Products Lists.

4. The geometrics of the crossover shall be as shown in the plans. Additional details are provided in Standard Construction Drawing MT-95.70.

5. See Standard Construction Drawings MT-102.10 and MT-102.20 for more details concerning lane shifts.

6. Spacing of WZRPMs shall be at 20 feet (6 m) center-to-center for all long-line marking within transition areas. Within tangent areas WZRPMs shall be provided only along the lane lines, spaced at 120 feet (36 m) center-to-center.

7. The WZRPMs shall be 1-way, facing oncoming traffic, and shall be white or yellow to match the color of the associated line marking.

8. Along the edge lines, the WZRPMs shall be offset a maximum of 4 inches (100 mm) to the outside of the lines. Along the channelizing lines, the WZRPMs shall be offset to the left of the lines by no more than 1 inch (25 mm). Along the lane lines the WZRPMs shall be centered between dashes.

9. The WZRPMs shall be removed when they are no longer appropriate.

LEGEND

- WORK ZONE RPM, TYPE A
- DIRECTION OF TRAVEL

4-21-06

WORK ZONE DELINEATION ON CONCRETE SURFACES

OFFICE OF TRAFFIC ENGINEERING

STA-30-(6.70)
(11.57)

SHR

REF NO	SHEET NO	STATION FROM	STATION TO	SIDE	614 OBJECT MARKER, ONE-WAY EACH	614 BARRIER REFLECTOR, TYPE B EACH	614 WORK ZONE LANE LINE, CLASS I FT	614 WORK ZONE CHANNELIZING LINE, CLASS I FT	614 WORK ZONE EDGE LINE, CLASS I FT	622 PORTABLE CONCRETE BARRIER, 32" FT
WZWCL	16	501+09	511+50	RT.				1041		
WZYEL	16	503+29	511+50	RT.					821	
WZWCL	16	510+93	511+50	LT.				57		
PCB	16	509+64	511+50	RT.	4	4				190
WZWCL	17	511+50	514+09	RT.				259		
WZYEL	17	511+50	517+00	RT.					550	
PCB	17	511+50	517+00	RT.	11	11				550
WZWLL	17	514+09	517+00	RT.			291			
WZWCL	17	511+50	515+43	LT.				393		
WZYEL	17	512+43	517+00	LT.					457	
WZWEL	17	512+43	517+00	LT.					457	
WZWLL	17	515+43	517+00	LT.			157			
PCB	17	515+43	517+00	LT.	3	3				160
WZYEL	18	517+00	522+50	RT.					550	
WZWLL	18	517+00	522+50	RT.			550			
PCB	18	517+00	522+50	RT.	11	11				550
WZYEL	18	517+00	522+50	LT.					550	
WZWEL	18	517+00	522+50	LT.					550	
WZWLL	18	517+00	522+50	LT.			550			
PCB	18	517+00	522+50	LT.	11	11				550
WZYEL	19	522+50	528+00	RT.					550	
WZWLL	19	522+50	528+00	RT.			550			
PCB	19	522+50	527+16	RT.	10	10				470
WZYEL	19	522+50	528+00	LT.					550	
WZWEL	19	522+50	528+00	LT.					550	
WZWLL	19	522+50	528+00	LT.			550			
PCB	19	522+50	527+36	LT.	10	10				490
WZYEL	20	528+00	533+50	RT.					550	
WZWLL	20	528+00	533+50	RT.			550			
WZWEL	20	531+61	533+50	RT.					189	
PCB	20	531+66	533+50	RT.	4	4				190
WZYEL	20	528+00	533+50	LT.					550	
WZWEL	20	528+00	533+50	LT.					550	
WZWLL	20	528+00	533+50	LT.			550			
PCB	20	532+05	533+50	LT.	3	3				150
TOTALS THIS TABLE					67	67	3748	1750	7424	3300

REF NO	SHEET NO	STATION FROM	STATION TO	SIDE	411 STABILIZED CRUSHED AGGREGATE CU YD	614 OBJECT MARKER, ONE-WAY EACH	614 BARRIER REFLECTOR, TYPE B EACH	614 WORK ZONE LANE LINE, CLASS I FT	614 WORK ZONE CHANNELIZING LINE, CLASS I FT	614 WORK ZONE EDGE LINE, CLASS I FT	615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B SQ YD	622 PORTABLE CONCRETE BARRIER, 32" FT
	20	514+24	524+50	C.	76						2944	
	20	534+50	544+78	C.	78						2967	
WZYEL	21	533+50	539+00	RT.						550		
WZWEL	21	533+50	539+00	RT.						550		
WZWLL	21	533+50	539+00	RT.				550				
PCB	21	533+50	539+00	RT.		11	11					550
WZYEL	21	533+50	539+00	LT.						550		
WZWEL	21	533+50	539+00	LT.						550		
WZWLL	21	533+50	539+00	LT.				550				
PCB	21	533+50	539+00	LT.		11	11					550
WZYEL	22	539+00	544+50	RT.						550		
WZWEL	22	539+00	544+50	RT.						550		
WZWLL	22	539+00	543+98	RT.				498				
WZWCL	22	543+98	544+50	RT.					52			
PCB	22	539+00	543+98	RT.		10	10					500
WZYEL	22	539+00	544+50	LT.						550		
WZWEL	22	539+00	544+50	LT.						550		
WZWLL	22	539+00	544+50	LT.				550				
PCB	22	539+00	544+50	LT.		11	11					550
WZYEL	23	544+50	546+98	RT.						248		
WZWEL	23	544+50	546+98	RT.						248		
WZWCL	23	544+50	546+98	RT.					248			
WZYEL	23	544+50	550+00	LT.						550		
WZWEL	23	544+50	550+00	LT.						550		
WZWLL	23	544+50	544+72	LT.				22				
WZWCL	23	544+72	550+00	LT.					528			
PCB	23	544+50	549+38	LT.		10	10					490
WZYEL	24	550+00	555+73	LT.						573		
WZWEL	24	550+00	555+73	LT.						573		
WZWCL	24	550+00	558+43	LT.					843			
TOTALS THIS TABLE					154	53	53	2170	1671	7142	5911	2640
TOTALS PREVIOUS TABLE						67	67	3748	1750	7424		3300
TOTALS THIS SHEET					154	120	120	5918	3421	14,566	5911	5940
TOTALS CARRIED TO SHEET 14					154	120	120	1.1 MI	3421	2.8 MI	5911	5940

CALCULATED SMM
CHECKED JEP

MAINTENANCE OF TRAFFIC SUBSUMMARY - PHASE 1A

STA-30-(6.70)(11.57)

REF NO	SHEET NO	STATION FROM	STATION TO	SIDE	614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN, YELLOW EACH	614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN, WHITE EACH	614 WORK ZONE RAISED PAVEMENT MARKER, ON CONCRETE SURFACES, YELLOW EACH	614 WORK ZONE RAISED PAVEMENT MARKER, ON CONCRETE SURFACES, WHITE EACH	614 OBJECT MARKER, TWO-WAY EACH	614 BARRIER REFLECTOR, TYPE B EACH	614 WORK ZONE EDGE LINE, CLASS 1, YELLOW FT	614 WORK ZONE EDGE LINE, CLASS 1, WHITE FT	622 PORTABLE CONCRETE BARRIER, 32", AS PER PLAN FT
WZYEL	39	489+31	492+00	RT.							269		
WZYEL	40	492+00	503+00	RT.							1100		
WZYEL	41	503+00	506+90	RT.							390		
TRAN	41	506+90	514+00	RT.	35	35					710	710	
TRAN	42	514+00	525+00	RT/LT	55	55					1100	1100	
WZYEL	42	520+49	525+00	LT.							451		
PCBGS	42	520+49	525+00	LT.					9	9			450
TRAN	43	525+00	527+50	LT.	11	11	1	1			250	250	
TAN	43	527+50	531+50	LT.							400	400	
TRAN	43	531+50	536+00	LT.	22	20	2	2			450	450	
WZYEL	43	525+00	536+00	LT.							1100		
PCBGS	43	525+00	536+00	LT.					22	22			1100
TRAN	44	536+00	546+92	LT/RT	55	55					1092	1092	
WZYEL	44	536+00	547+00	LT.							1100		
PCBGS	44	536+00	546+06	LT.					20	20			1010
WZYEL	45	547+00	558+00	LT.							1100		
WZYEL	46	558+00	559+90	LT.							190		
TOTALS THIS SHEET					176	176	3	3	51	51	9702	4002	2560
TOTALS THIS SHEET					352		6				1.8 MI	0.8 MI	
TOTALS CARRIED TO SHEET 14					352		6		51	51	2.6 MI		2560

CALCULATED SMM
CHECKED JEP

MAINTENANCE OF TRAFFIC SUBSUMMARY - PHASE 1

STA -30-(6.70)(11.57)

REF NO	SHEET NO	STATION FROM	STATION TO	SIDE	411 STABILIZED CRUSHED AGGREGATE CU YD	614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN, YELLOW EACH	614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN, WHITE EACH	614 WORK ZONE RAISED PAVEMENT MARKER, ON CONCRETE SURFACES, YELLOW EACH	614 WORK ZONE RAISED PAVEMENT MARKER, ON CONCRETE SURFACES, WHITE EACH	614 OBJECT MARKER, ONE-WAY EACH	614 OBJECT MARKER, TWO-WAY EACH	614 BARRIER REFLECTOR, TYPE B EACH	614 WORK ZONE LANE LINE, CLASS 1 FT	614 WORK ZONE CHANNELIZING LINE, CLASS 1 FT	614 WORK ZONE EDGE LINE, CLASS 1, YELLOW FT	614 WORK ZONE EDGE LINE, CLASS 1, WHITE FT	615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B SQ YD	622 PORTABLE CONCRETE BARRIER, 32" FT	622 PORTABLE CONCRETE BARRIER, 32", AS PER PLAN FT
WZYEL	47	501+95	506+00	RT.											405				
WZYEL	48	506+00	517+00	RT.											1100				
TRAN	48	512+13	517+00	LT.		24	24								487	487			
PCBGS	48	513+40	517+00	RT.							7	7							360
WZYEL	49	517+00	528+00	RT.											1100				
TRAN	49	517+00	527+50	LT/RT		52	52	1	1						1050	1050			
TAN	49	527+50	528+00	RT.											50	50			
PCBGS	49	517+00	528+00	RT.							22	22							1100
WZYEL	50	528+00	539+00	RT.											1100				
TAN	50	528+00	531+50	RT.											350	350			
TRAN	50	531+50	539+00	RT.		35	35	2	2						750	750			
PCBGS	50	528+00	539+00	RT.							22	22							1100
WZYEL	51	539+00	540+22	RT.											122				
TRAN	51	539+00	550+00	RT/LT		55	55								1100	1100			
PCBGS	51	539+00	540+22	RT.							2	2							120
TRAN	52	550+00	551+17	LT.		6	6								117	117			
WZYEL	52	551+17	561+00	LT.											983				
WZYEL	53	561+00	567+97	LT.											697				
TOTALS THIS SHEET						172	172	3	3		53	53			9411	3904			2680
TOTALS THIS SHEET						344		6							1.8 MI	0.8 MI			
TOTALS THIS SHEET						344		6			53	53			2.6 MI				2680
TOTALS FROM SHEET 12					154					120		120	1.1 MI	3421	2.8 MI		5911	5940	
TOTALS FROM SHEET 13						352		6			51	51			2.6 MI				2560
TOTALS CARRIED TO GENERAL SUMMARY					154	696		12		120	104	224	1.1 MI	3421	8 MI		5911	5940	5240

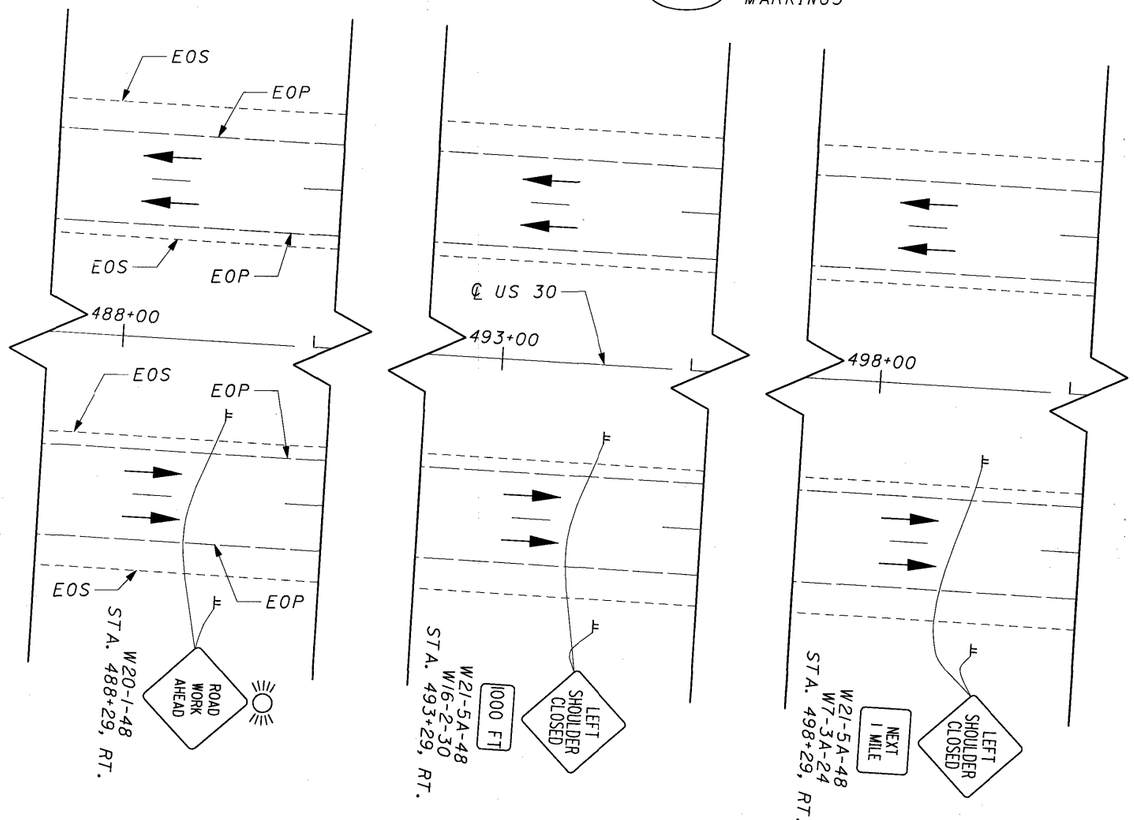
CALCULATED SMM
CHECKED JEP

MAINTENANCE OF TRAFFIC SUBSUMMARY - PHASE 2

STA-30-(6.70)(11.57)

LEGEND

WZYEL	WORK ZONE EDGE LINE, YELLOW		WORK ZONE
WZWEL	WORK ZONE EDGE LINE, WHITE		TEMPORARY PAVEMENT
TRAN	TRANSITION AREA DELINEATION		WORK ZONE SIGNS, ONE POST AND TWO POST
TAN	TANGENT AREA DELINEATION		32" PORTABLE CONCRETE BARRIER
WZWLL	WORK ZONE LANE LINE, WHITE		32" PORTABLE CONCRETE BARRIER WITH 18" GLARE SCREEN
WZWCL	WORK ZONE CHANNELIZING LINE, WHITE		TAPERED END PIECE
PCB	32" PORTABLE CONCRETE BARRIER		REMOVAL OF EXISTING PAVEMENT MARKINGS
PCBGS	32" PORTABLE CONCRETE BARRIER WITH 18" GLARE SCREEN		DRUMS
R	REMOVAL OF EXISTING PAVEMENT MARKINGS		

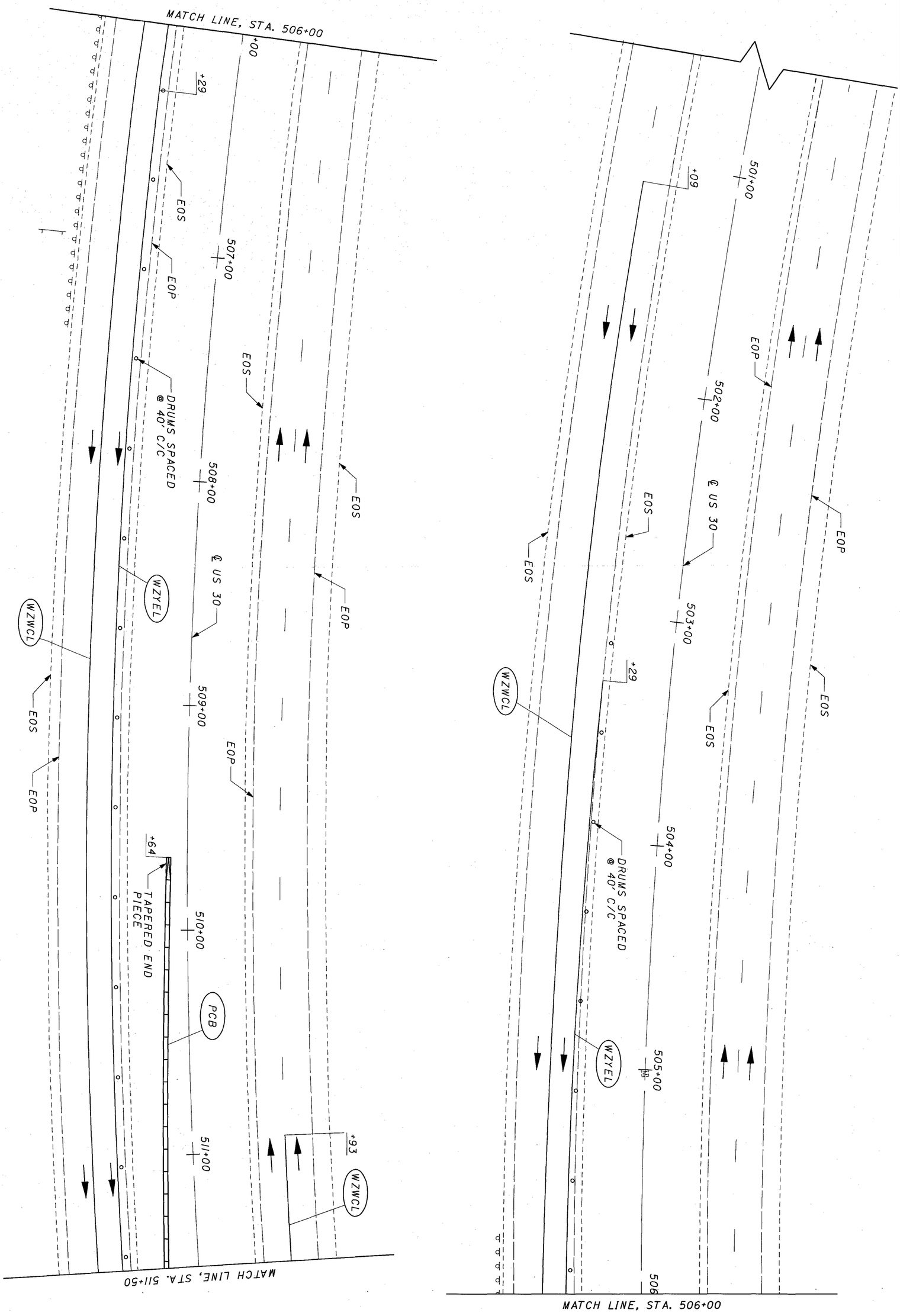


HORIZONTAL SCALE IN FEET
0 10 20 40

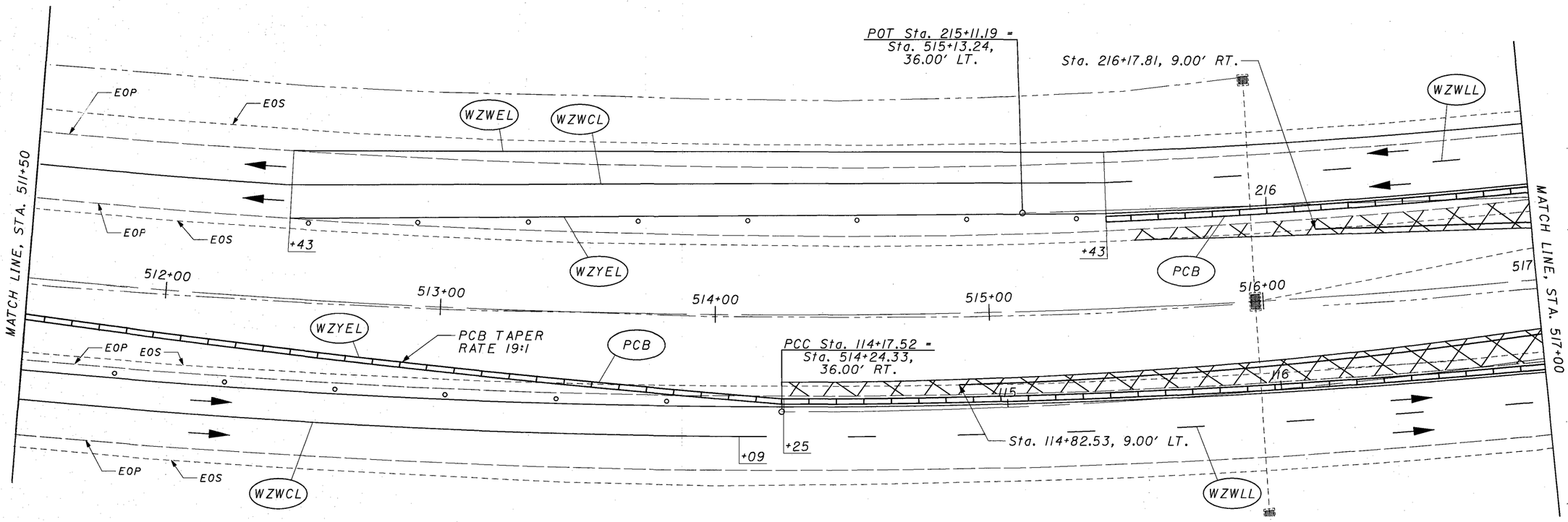
CALCULATED SMM
CHECKED JEP

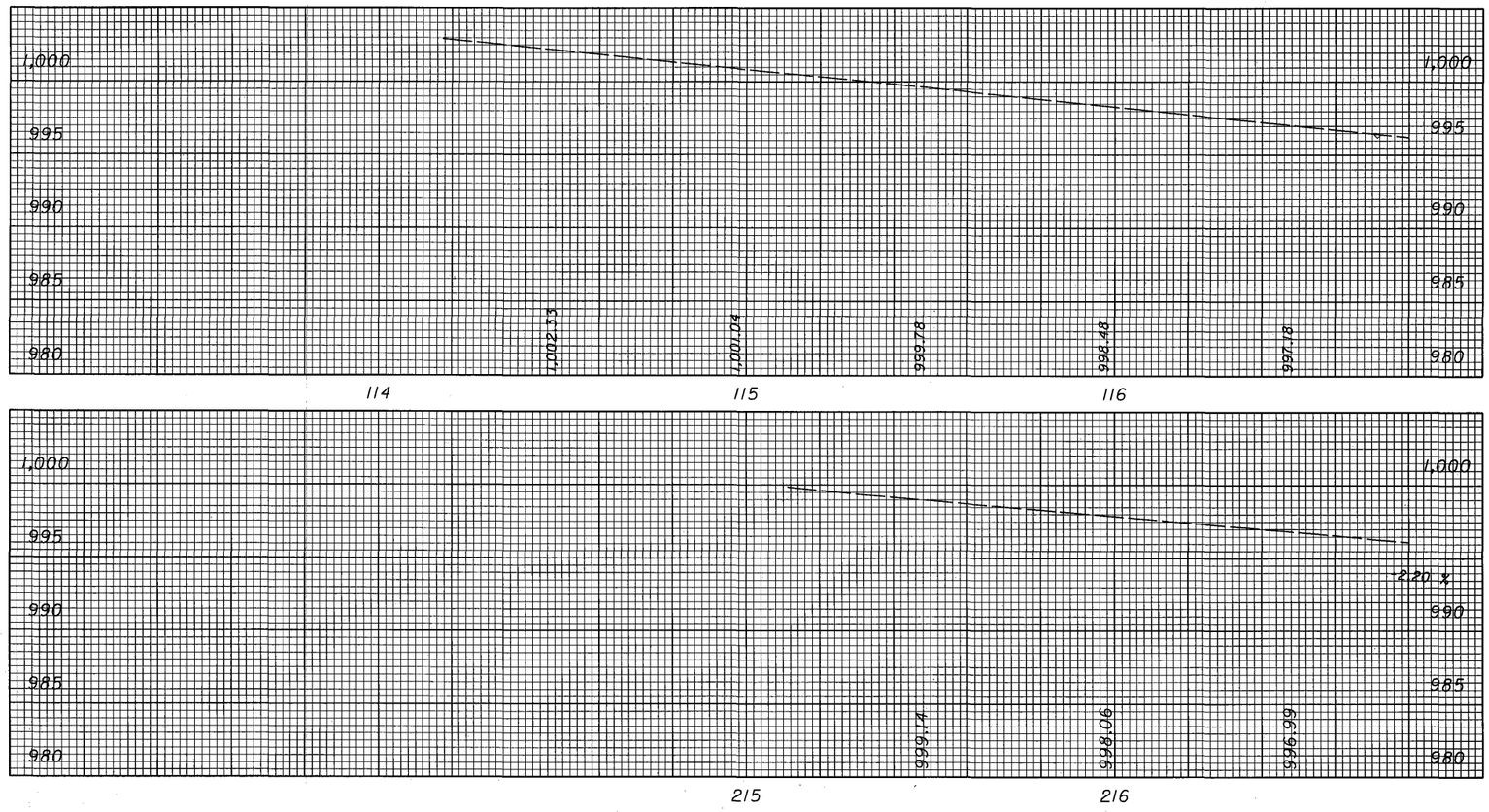
MAINTENANCE OF TRAFFIC - PHASE 1A
STA. 482+80 TO STA. 511+50

STA-30-(6.70)
(11.57)



16 / 127	STA-30-(6.70) (11.57)	MAINTENANCE OF TRAFFIC - PHASE 1A STA. 482+80 TO STA. 511+50	CALCULATED SMM / CHECKED JEP	0 20 40 HORIZONTAL SCALE IN FEET





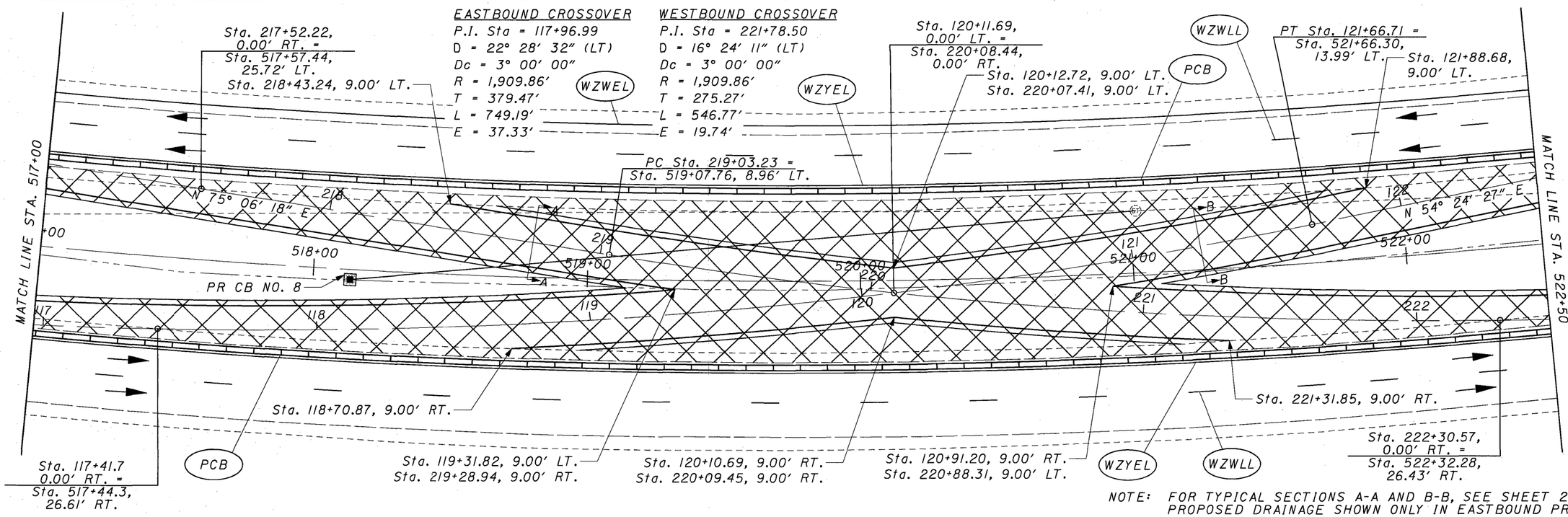
N

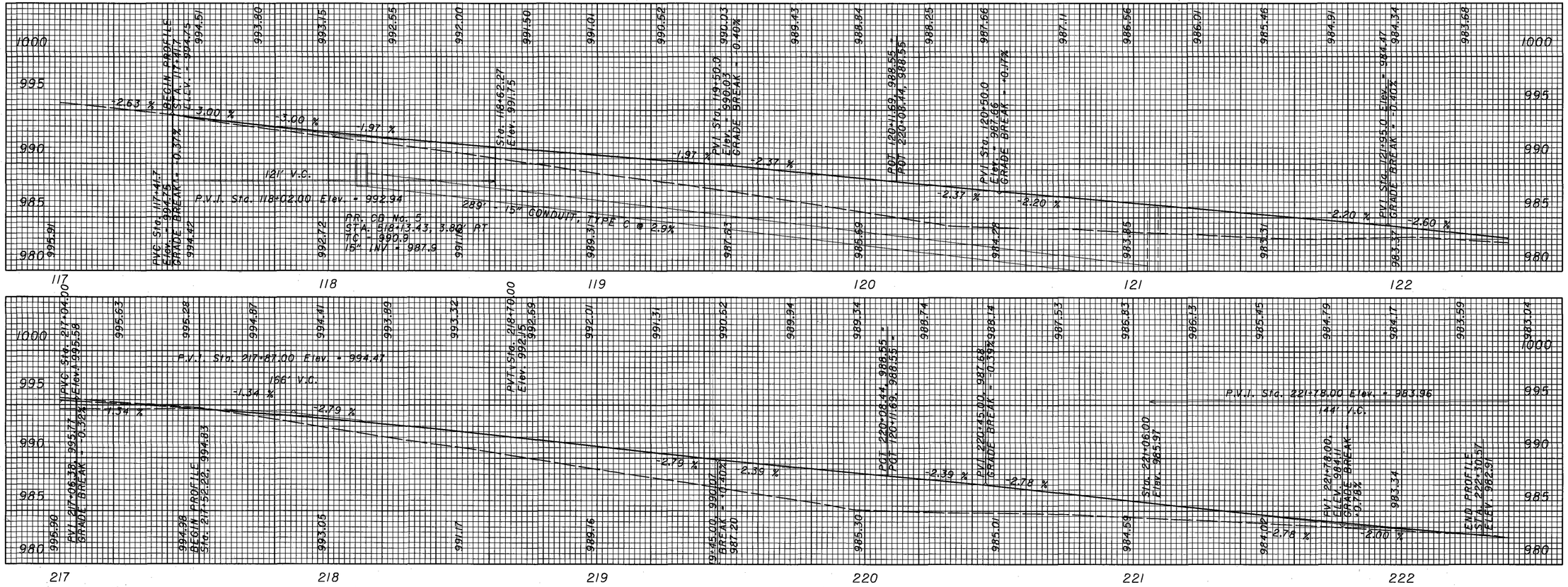
HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED SMM
CHECKED JEP

MAINTENANCE OF TRAFFIC - PHASE 1A
STA. 511+50 TO STA. 517+00

STA-30-(6.70)
(11.57)



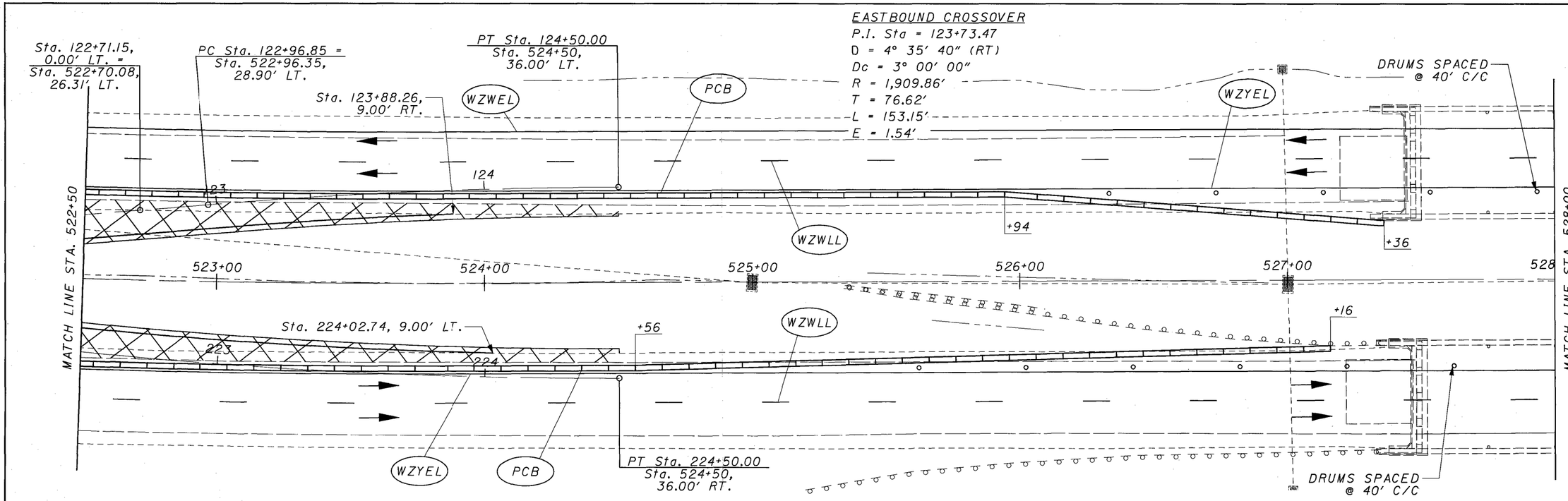


HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED SMM
CHECKED JEP

MAINTENANCE OF TRAFFIC - PHASE 1A
STA 517+00 TO STA. 522+50

STA-30-(6.70) (11.57)



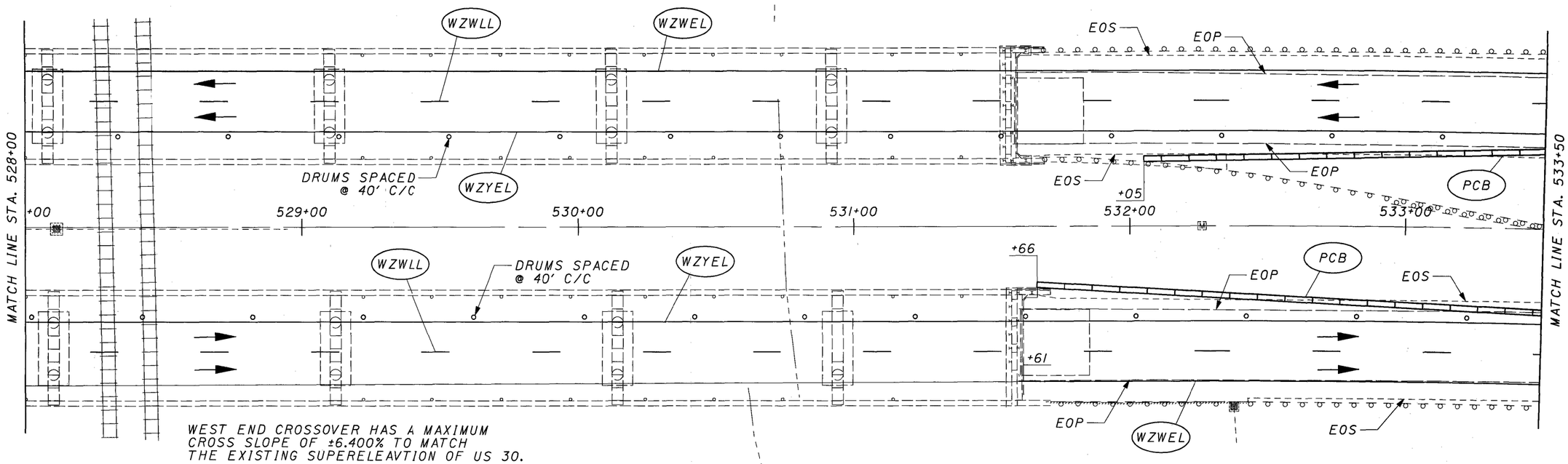
N

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED SMM
CHECKED JEP

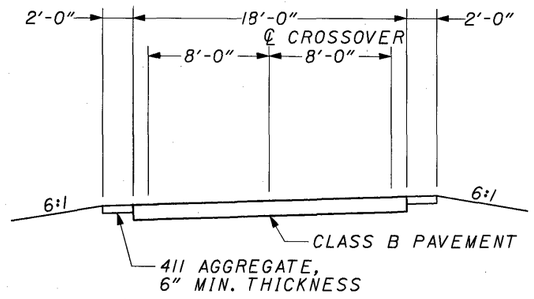
MAINTENANCE OF TRAFFIC - PHASE 1A
STA. 522+50 TO STA. 528+00

STA-30-(6.70)
(11.57)

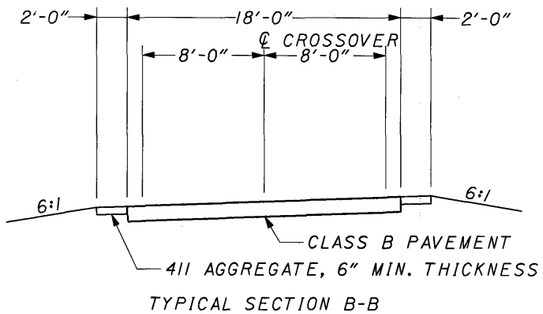


WEST END CROSSOVER HAS A MAXIMUM CROSS SLOPE OF ±6.400% TO MATCH THE EXISTING SUPERELEAVTION OF US 30.

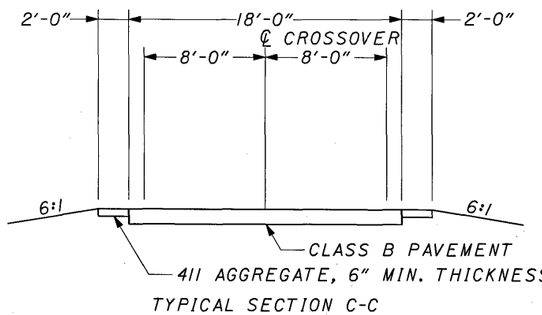
EAST END CROSSOVER HAS A MAXIMUM CROSS SLOPE OF ±2.000% TO MATCH THE EXISTING SUPERELEVATION OF US 30.



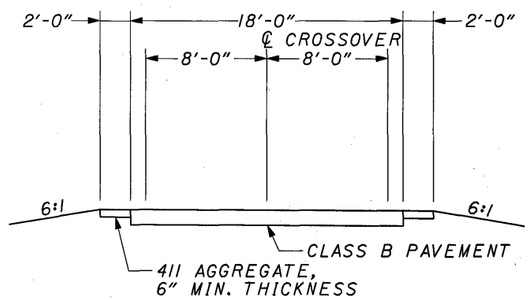
TYPICAL SECTION A-A
STA. 218+75
WESTBOUND
WEST END CROSSOVER



TYPICAL SECTION B-B
STA. 121+25
EASTBOUND
WEST END CROSSOVER

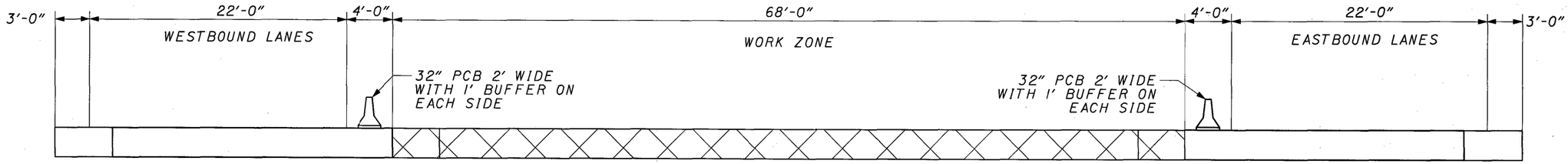


TYPICAL SECTION C-C
STA. 138+50
EASTBOUND
EAST END CROSSOVER



TYPICAL SECTION D-D
STA. 241+00
WESTBOUND
EAST END CROSSOVER

ITEM NUMBER	ITEM DESCRIPTION	WEST END CROSSOVER	EAST END CROSSOVER
411	STABILIZED CRUSHED AGGREGATE	76 CU YD	78 CU YD
615	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B	2944 SQ YD	2967.5 SQ YD



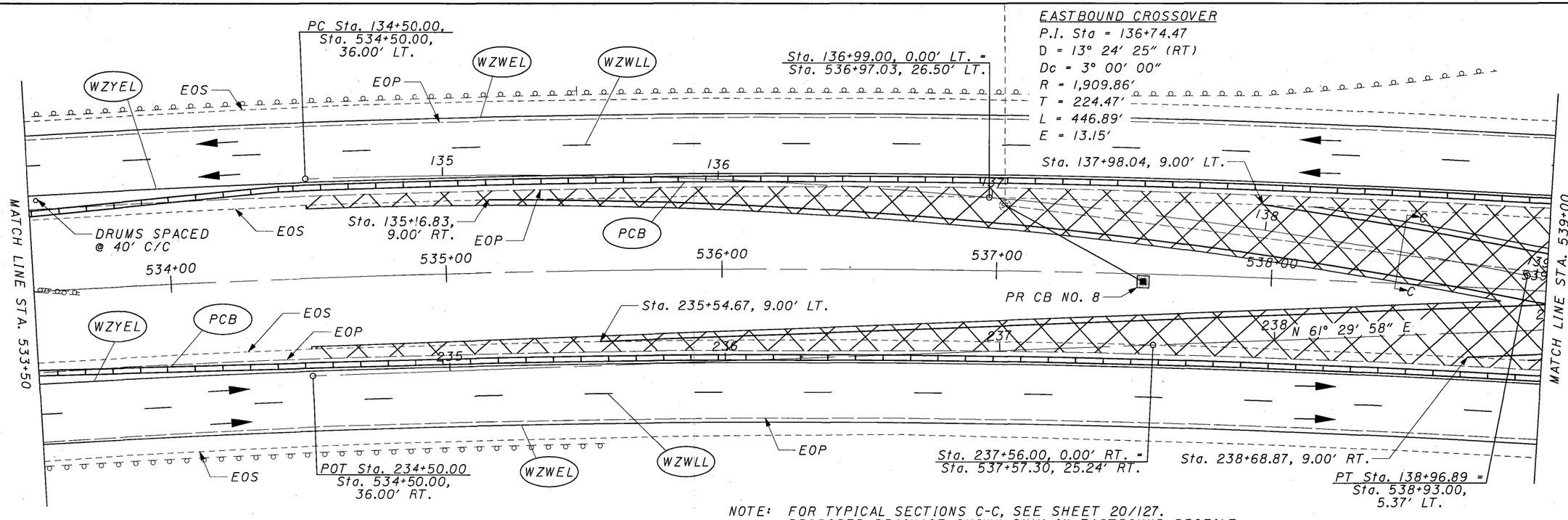
TYPICAL SECTION
CROSSOVER CONSTRUCTION
WORK ZONE

HORIZONTAL SCALE IN FEET
0 10 20 40

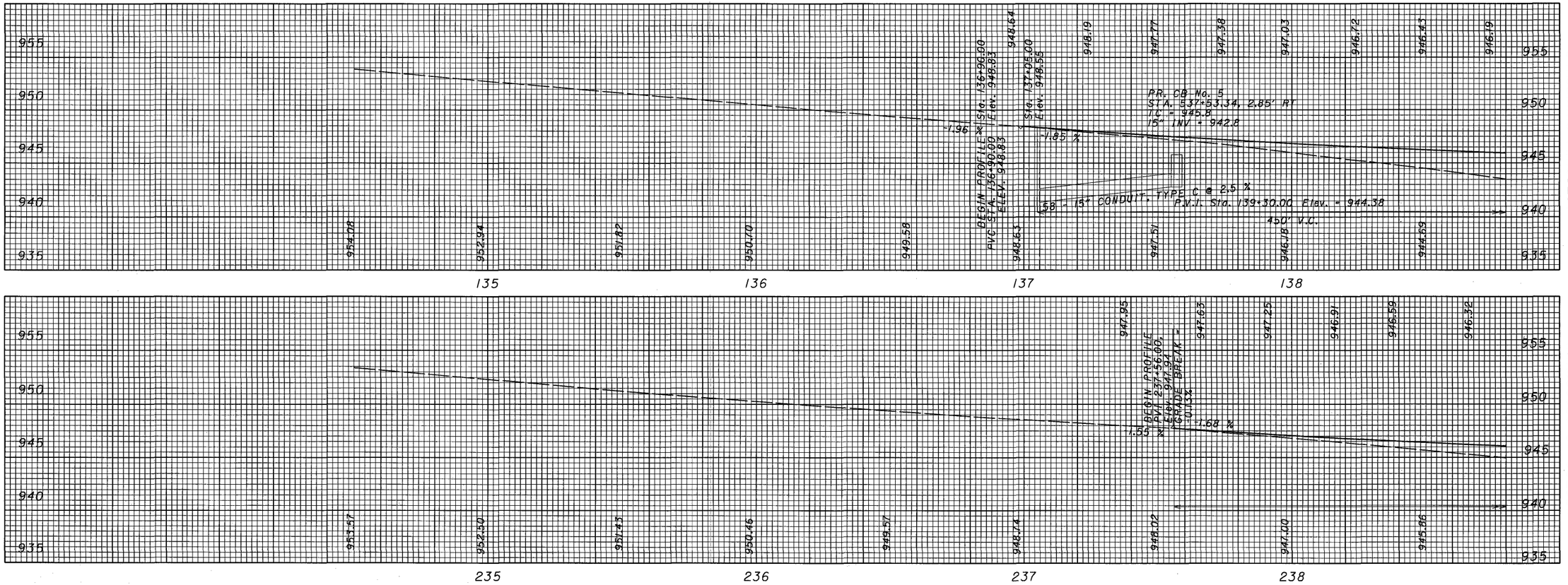
CALCULATED SMM
CHECKED JEP

MAINTENANCE OF TRAFFIC - PHASE 1A
STA. 528+00 TO STA. 533+50

STA-30-(6.70)
(11.57)



NOTE: FOR TYPICAL SECTIONS C-C, SEE SHEET 20/127.
PROPOSED DRAINAGE SHOWN ONLY IN EASTBOUND PROFILE.



N

HORIZONTAL SCALE IN FEET
0 10 20 40

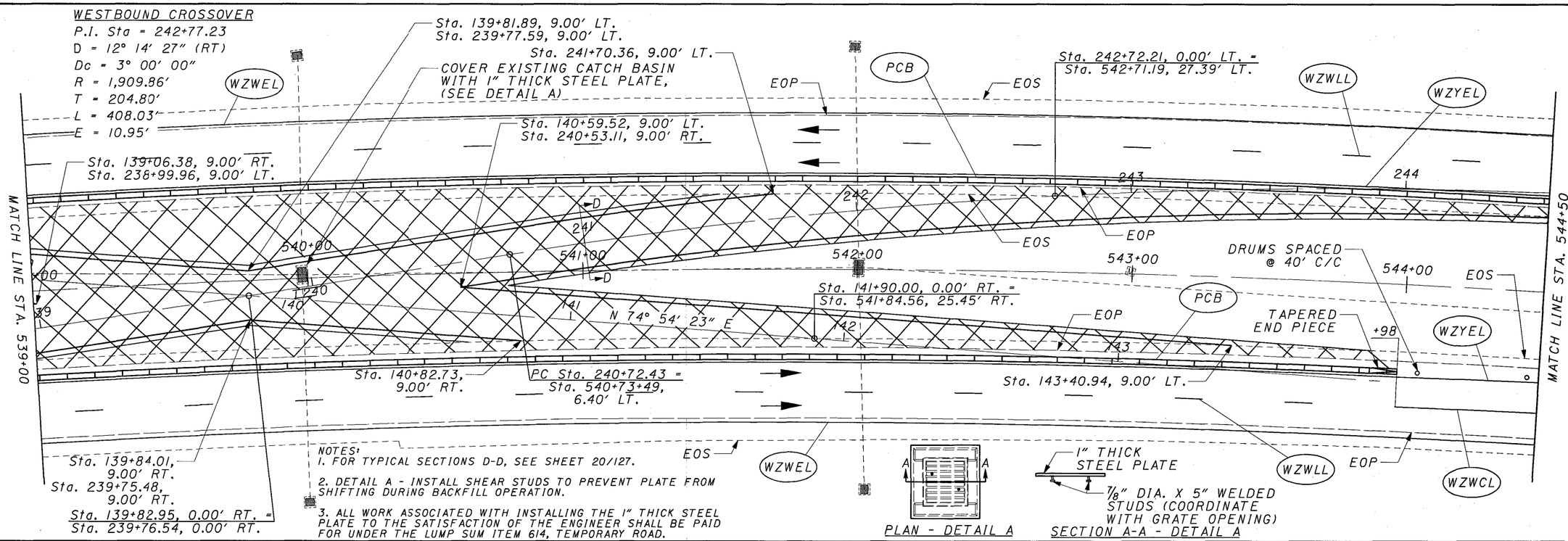
CALCULATED SMM
CHECKED JEP

MAINTENANCE OF TRAFFIC - PHASE 1A
STA. 533+50 TO STA. 539+00

STA-30-(6.70)
(11.57)

21
127

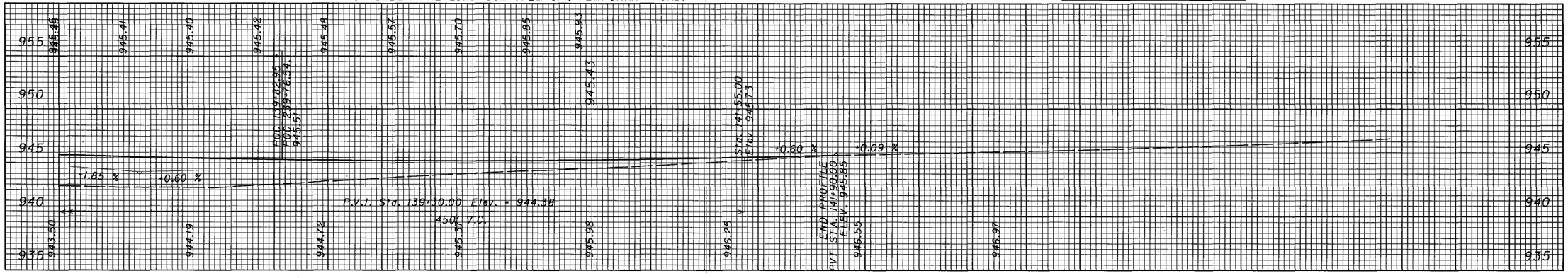
WESTBOUND CROSSOVER
P.I. Sta = 242+77.23
D = 12° 14' 27" (RT)
Dc = 3° 00' 00"
R = 1,909.86'
T = 204.80'
L = 408.03'
E = 10.95'

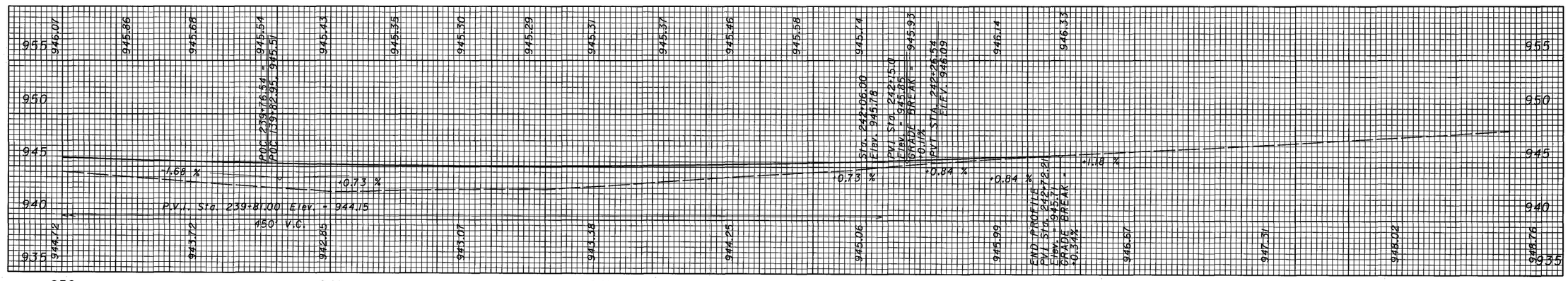


NOTES:
1. FOR TYPICAL SECTIONS D-D, SEE SHEET 20/127.
2. DETAIL A - INSTALL SHEAR STUDS TO PREVENT PLATE FROM SHIFTING DURING BACKFILL OPERATION.
3. ALL WORK ASSOCIATED WITH INSTALLING THE 1" THICK STEEL PLATE TO THE SATISFACTION OF THE ENGINEER SHALL BE PAID FOR UNDER THE LUMP SUM ITEM 614, TEMPORARY ROAD.

PLAN - DETAIL A

SECTION A-A - DETAIL A





HORIZONTAL SCALE IN FEET
0 10 20 40
CALCULATED SMM
CHECKED JEP

TRAFFIC - PHASE 1A
MAINTENANCE OF TRAFFIC STA. 539+00 TO STA. 544+50
STA-30-(6.70) (11.57)

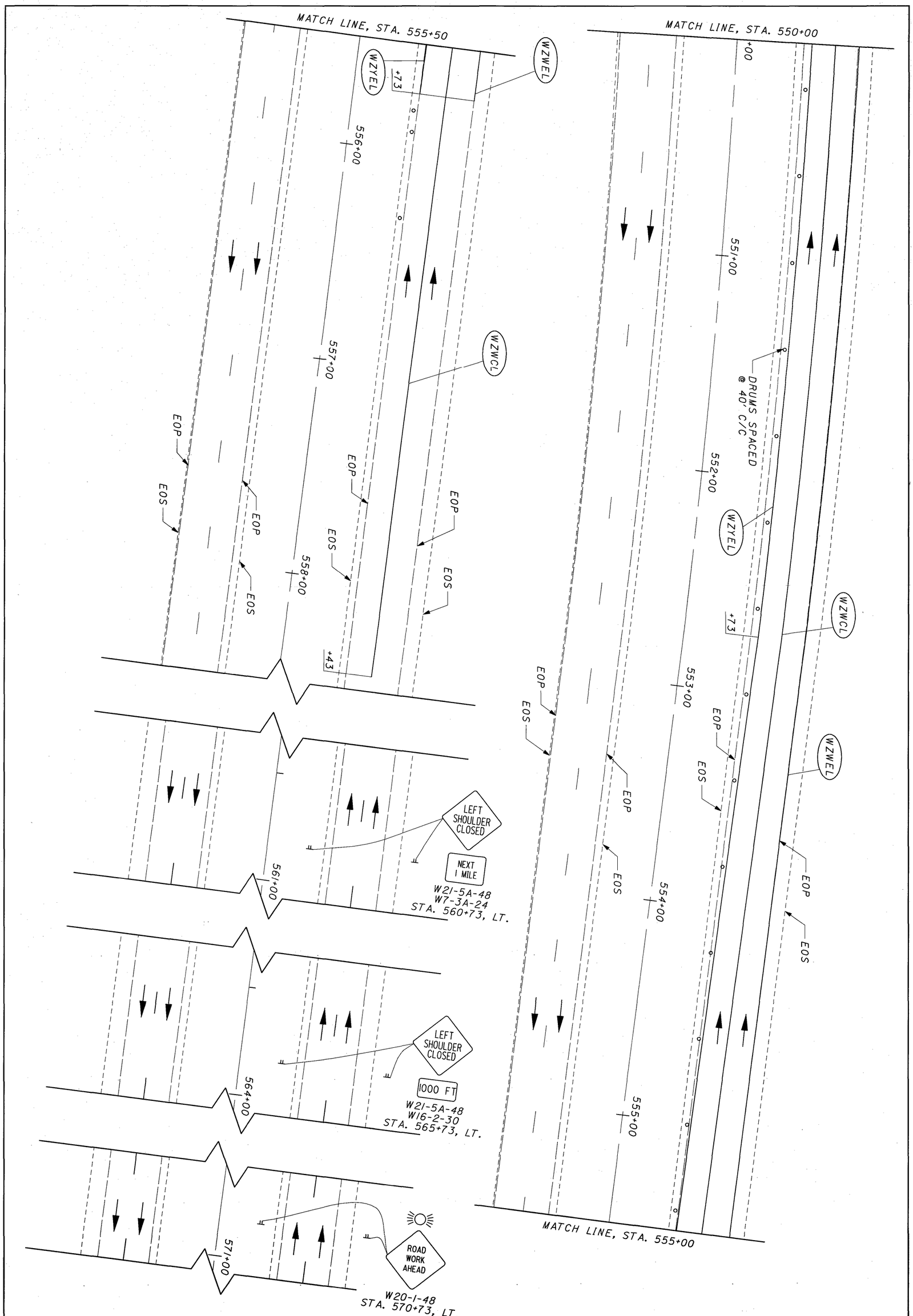
239

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED SMM
CHECKED JEP

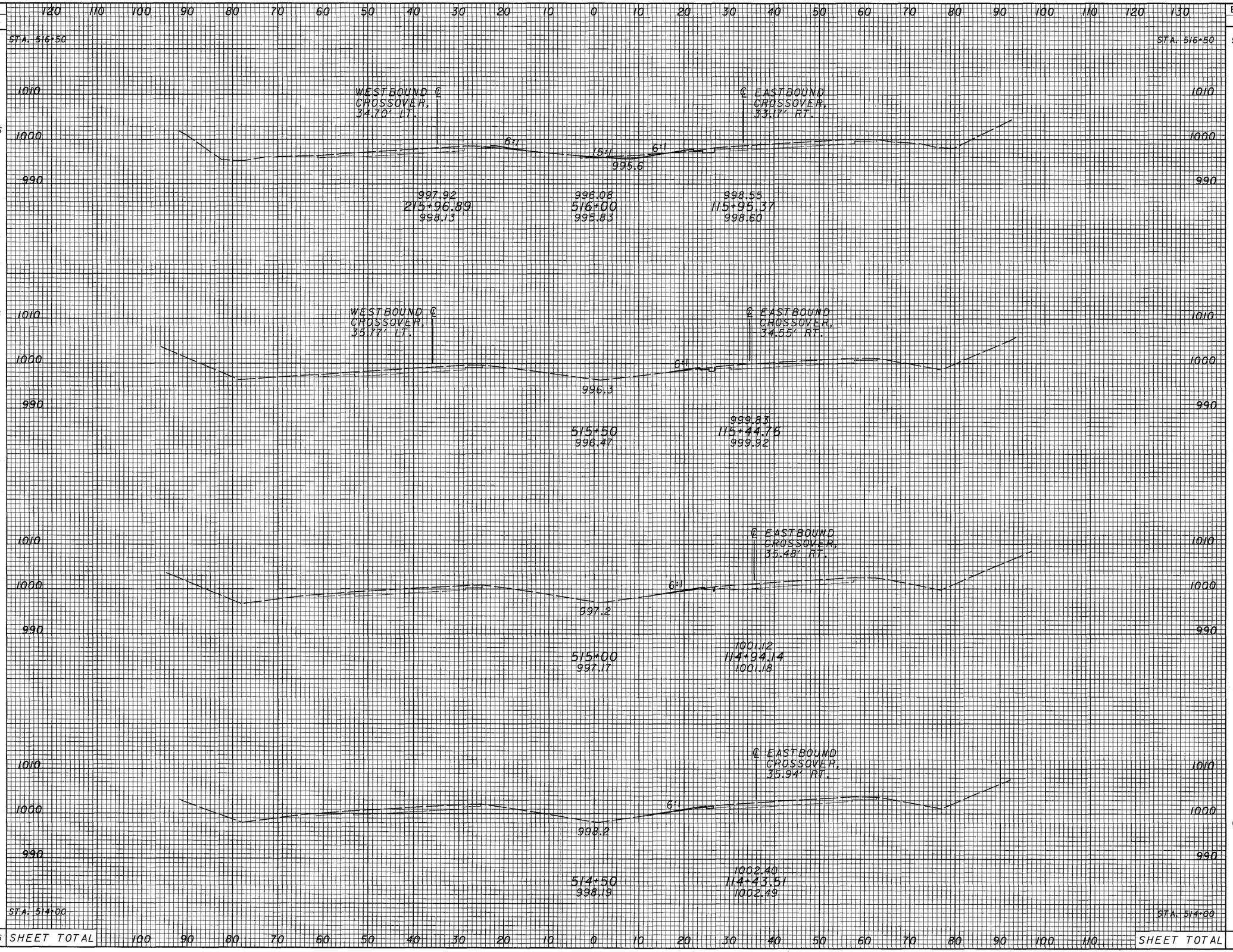
MAINTENANCE OF TRAFFIC - PHASE 1A
STA. 539+00 TO STA. 544+50

STA-30-(6.70)
(11.57)



24 / 127	STA-30-(6.70) (11.57)	MAINTENANCE OF TRAFFIC - PHASE 1A STA. 544+50 TO STA. 550+00	CALCULATED SMM / CHECKED JEP	0 10 20 40 HORIZONTAL SCALE IN FEET

SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
35		STA. 516+50	5.3	8.1		
	206				13.3	11.9
39			9.1	4.7		
	136				10.1	5.4
10			1.8	1.1		
	67				2.6	2.4
14			1.0	1.5		
	83				1.6	2.8
16			0.7	1.5		
	44				0.6	1.4
0		STA. 514+00	0	0		
	536	SHEET TOTAL			28.2	23.9



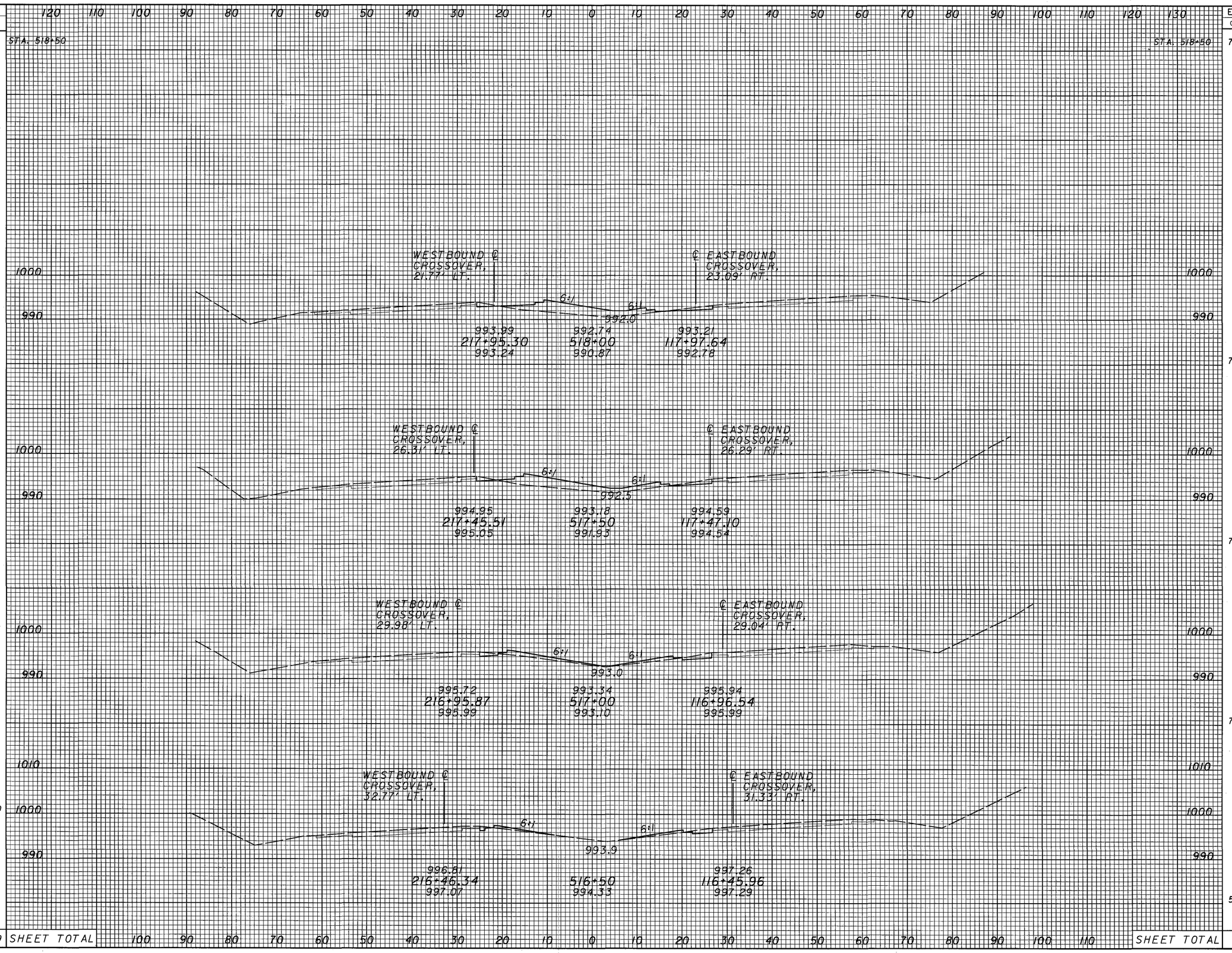
CALCULATED RJS
CHECKED SJS

CROSS SECTIONS - WEST CROSSOVER STA. 514+50 TO STA. 516+00

STA-30-(6.70) (11.57)

25/127

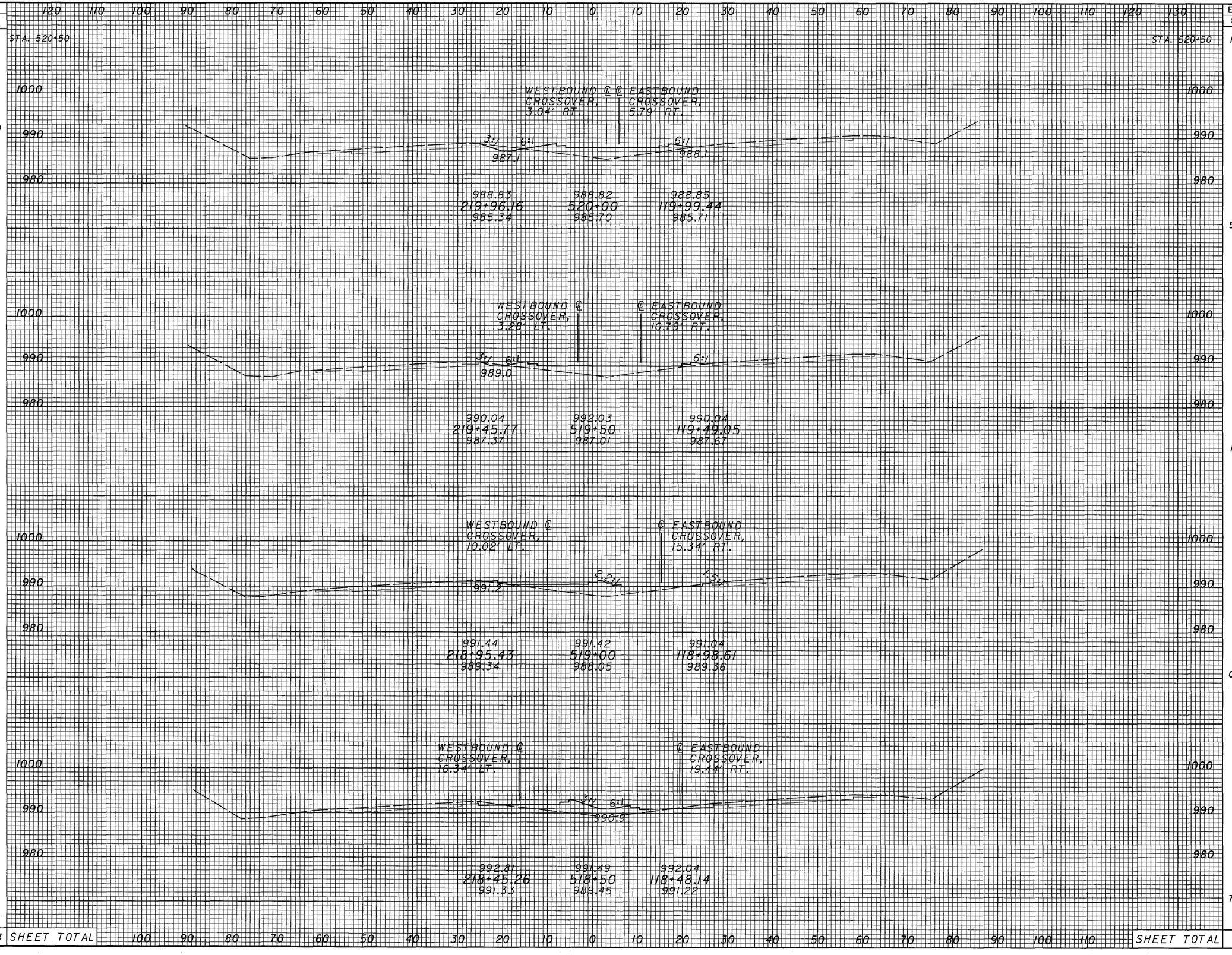
SEEDING END WIDTH	SEEDING SQ. YDS.	STA.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
15		STA. 518+50	7.2	50.2		
	106				13.4	95.8
23			7.3	53.3		
	147				13.2	95.4
30			7.0	49.7		
	186				13.6	63.1
37			7.7	18.5		
	200				12.0	24.6
35			5.3	8.1		
	639	SHEET TOTAL			52.2	278.9



CALCULATED RJS
CHECKED SJS

CROSS SECTIONS - WEST CROSSOVER
STA. 516+50 TO STA. 518+00
STA-30-(6.70) (11.57)

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
22		1.3	55.5		
	139			6.4	104.2
28		5.6	57.0		
	131			6.7	102.7
19		1.6	53.9		
	72			2.2	101.6
7		0.8	55.8		
	61			7.4	98.1
15		7.2	50.2		
	403 SHEET TOTAL			22.7	406.6



CALCULATED RJS
CHECKED SJS

CROSS SECTIONS - WEST CROSSOVER STA. 518+50 TO STA. 520+00

STA-30-(6.70) (11.57)

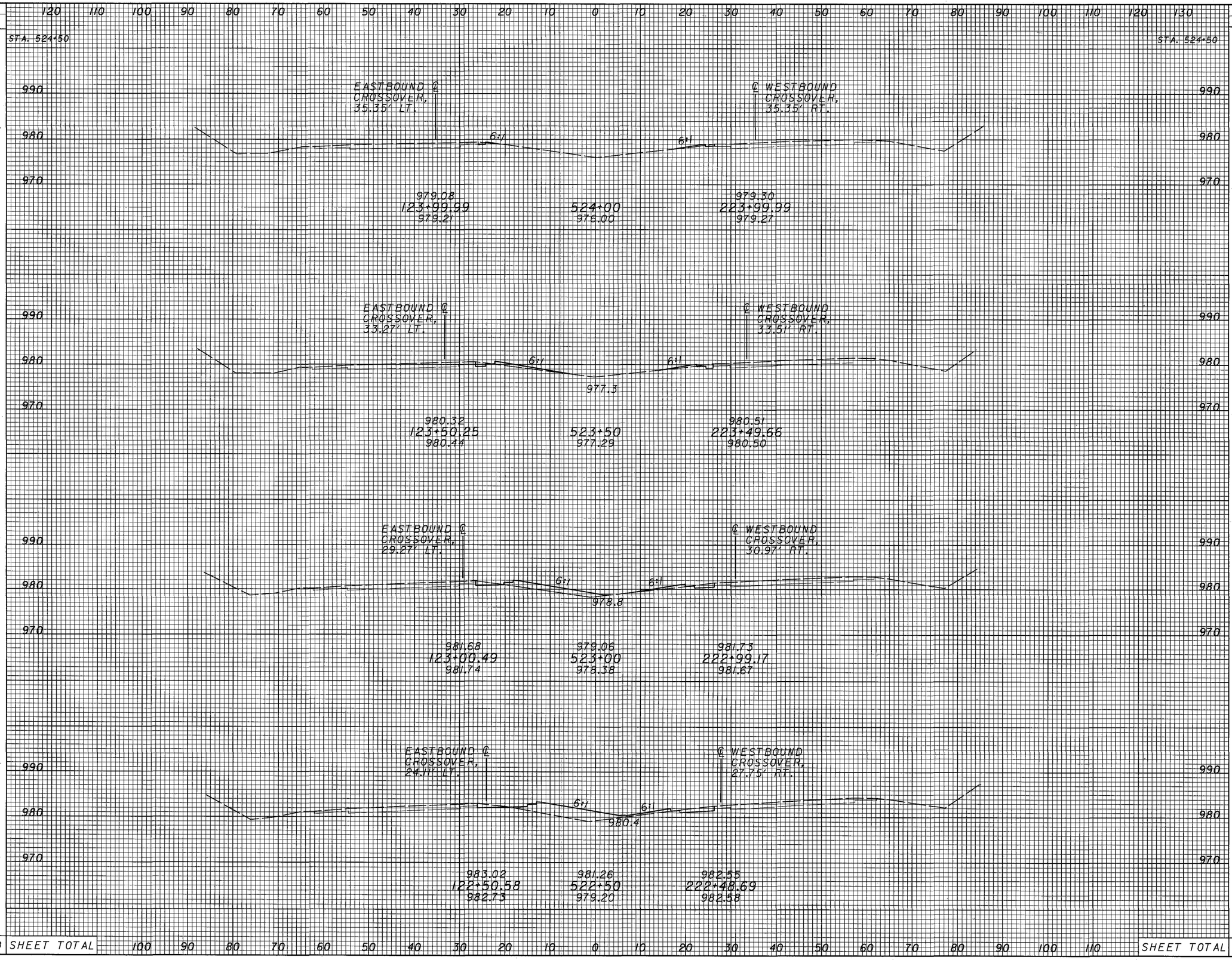
SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
30		STA. 522+50	9.6	47.7		
	139	EASTBOUND ℄ CROSSOVER, 18.29' LT. ℄ WESTBOUND CROSSOVER, 23.85' RT. 6:1 6:1 982.5 990 980 970 984.32 122+00.52 983.38 983.53 522+00 979.85 983.63 221+98.20 983.37			17.2	109.9
20			9.0	71.0		
	92	EASTBOUND ℄ CROSSOVER, 11.84' LT. ℄ WESTBOUND CROSSOVER, 19.33' RT. 6:1 3:1 6:1 983.5 990 980 985.45 121+50.34 983.31 985.59 521+50 981.05 984.85 221+47.65 984.05			14.2	126.5
13			6.3	65.6		
	69	EASTBOUND ℄ CROSSOVER, 5.52' LT. ℄ WESTBOUND CROSSOVER, 14.35' RT. 6:1 6:1 12:1 985.9 1000 990 980 986.55 121+00.09 983.85 986.58 521+00 982.99 986.21 220+97.11 984.63			8.6	106.7
12			3.0	49.6		
	94	EASTBOUND ℄ CROSSOVER, 0.35' RT. ℄ WESTBOUND CROSSOVER, 8.92' RT. 6:1 6:1 6:1 3:1 986.6 987.0 1000 990 980 987.66 120+49.79 984.29 987.66 520+50 984.33 987.62 220+46.61 985.02			4.0	97.3
22			1.3	55.5		
	394	SHEET TOTAL			44.0	440.4

CALCULATED R.J.S. CHECKED S.J.S.

CROSS SECTIONS - WEST CROSSOVER STA. 520+50 TO STA. 522+00

STA-30-(6.70) (11.57)

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
41		8.6	1.1		
	158			9.3	2.6
16		1.4	1.7		
	131			5.0	8.6
31		4.0	7.6		
	186			9.7	31.2
36		6.5	26.1		
	183			14.9	68.3
30		9.6	47.7		
	658 SHEET TOTAL			38.9	110.7

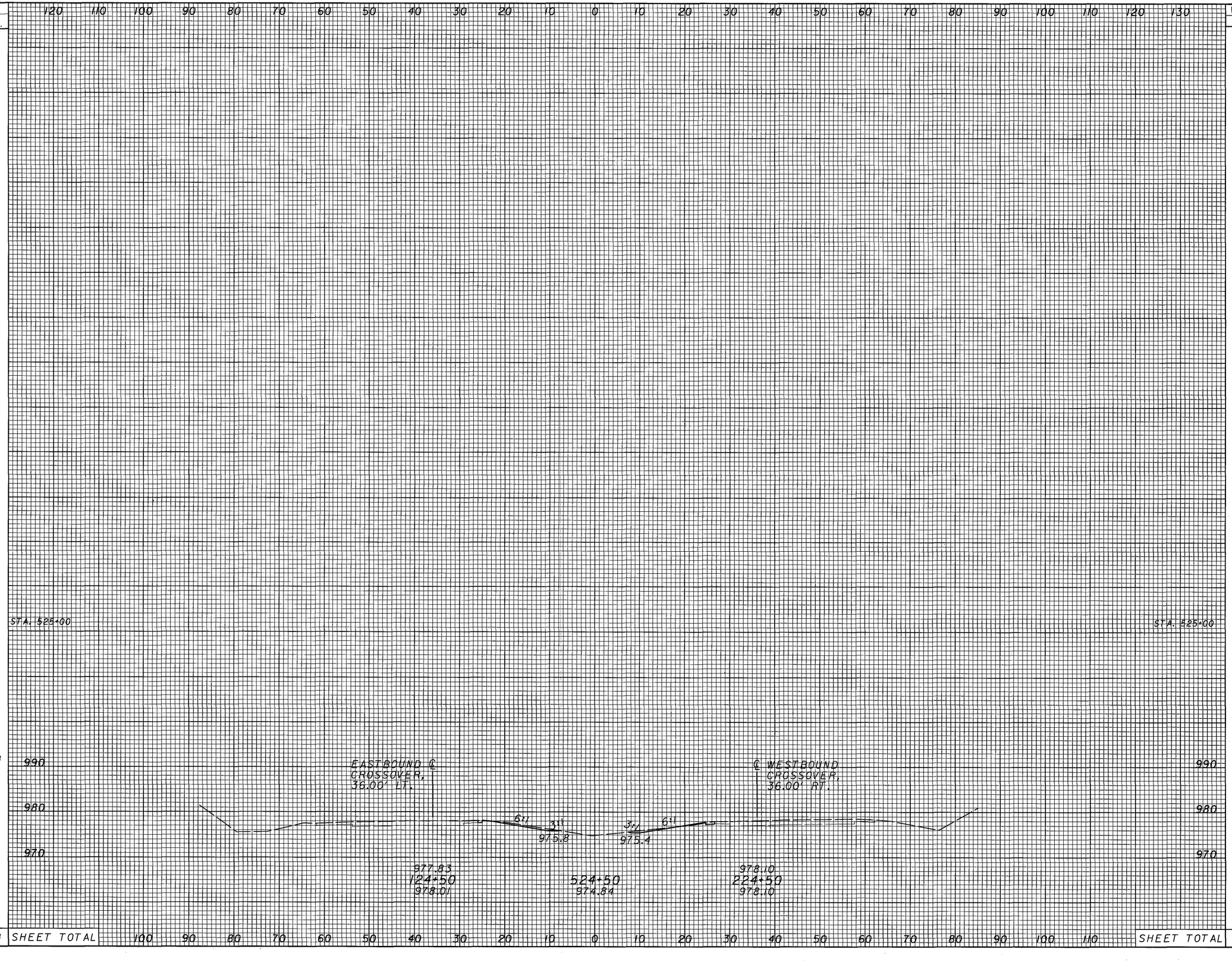


CALCULATED RJS
CHECKED SJS

CROSS SECTIONS - WEST CROSSOVER STA. 522+50 TO STA. 524+00

STA-30-(6.70) (11.57)

SEEDING			END AREA		VOLUME	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
0		STA. 525+00	0	0		
114		990			8.0	1.0
		980				
		970				
41			8.6	1.1		
114		SHEET TOTAL			8.0	1.0



CALCULATED RJS
CHECKED SJS

CROSS SECTIONS - WEST CROSSOVER STA. 524+50

STA-30-(6.70) (11.57)

30
127

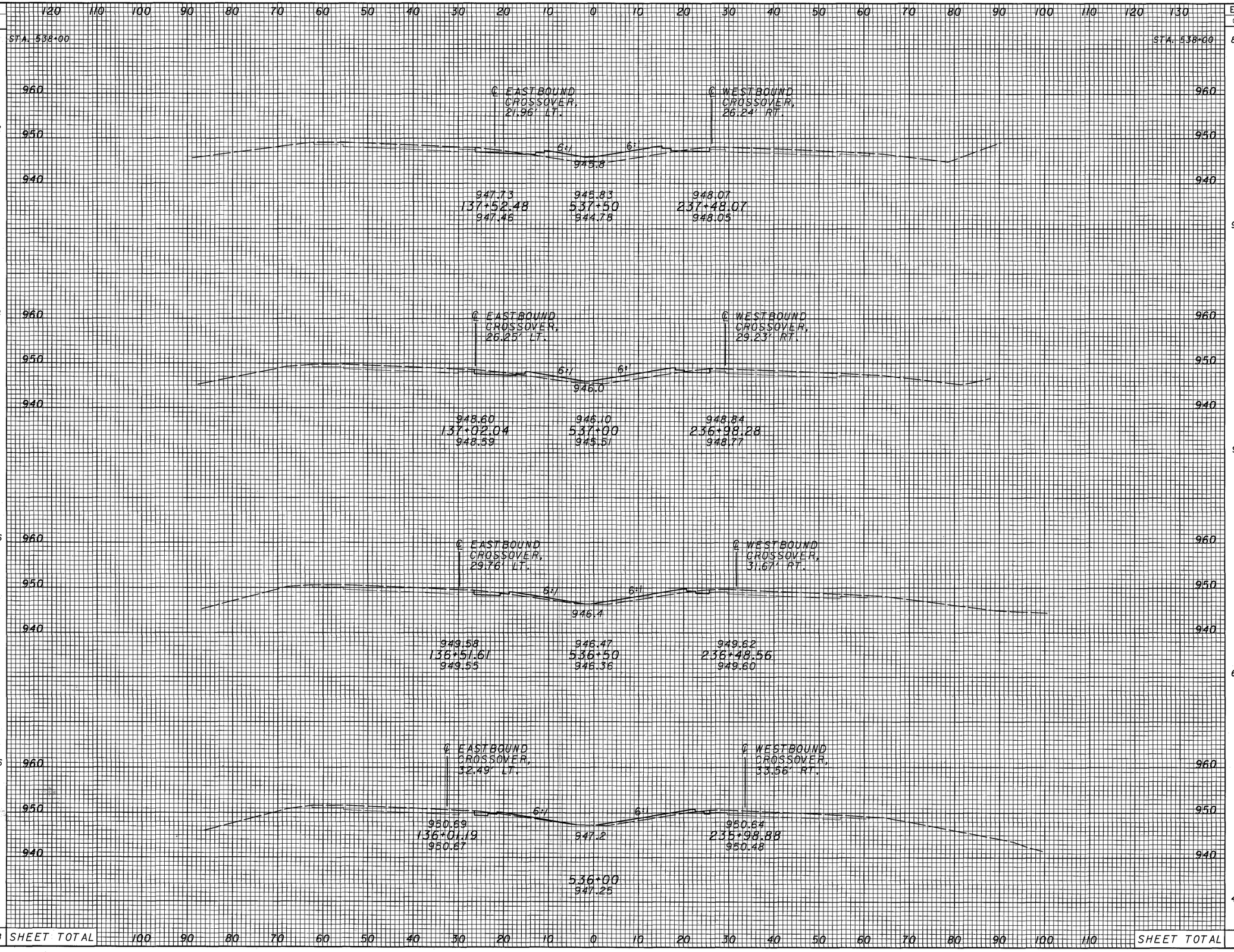
SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
44		STA. 536+00	4.2	15.0		
	228				5.7	18.1
38		℄ EASTBOUND CROSSOVER, 34.44' LT. 951.80 135+50.79 951.80 — 6:1 — 948.3 — 6:1 — 951.35 235+49.23 951.45 ℄ WESTBOUND CROSSOVER, 34.92' RT. 535+50 948.35	2.0	4.5		
150		℄ EASTBOUND CROSSOVER, 35.61' LT. 952.91 135+00.39 952.93 — 6:1 — 949.49 — 6:1 — 952.35 234+99.61 952.51 ℄ WESTBOUND CROSSOVER, 35.13' RT. 535+00	1.5	0.8	3.2	4.9
86		℄ EASTBOUND CROSSOVER, 36.00' LT. 954.08 134+50 954.08 — 6:1 — 950.83 — 6:1 — 953.35 234+50 953.57 ℄ WESTBOUND CROSSOVER, 36.00' RT. 534+50	1.0	0.8	2.3	1.5
42					0.9	0.7
0		STA. 534+00	0	0		
506		SHEET TOTAL			12.1	25.2

CALCULATED RJS
CHECKED SJS

CROSS SECTIONS - EAST CROSSOVER STA. 534+50 TO STA. 535+50

STA-30-(6.70) (11.57)

SEEDING END WIDTH	SEEDING SQ. YDS.	STATION	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
18		STA. 538+00	8.9	50.6		
	122				17.4	86.5
26			9.9	42.8		
	164				17.6	70.6
33			9.1	33.5		
	206				14.7	50.6
41			6.8	21.1		
	236				10.2	33.4
44			4.2	15.0		
	728	SHEET TOTAL			59.9	241.1

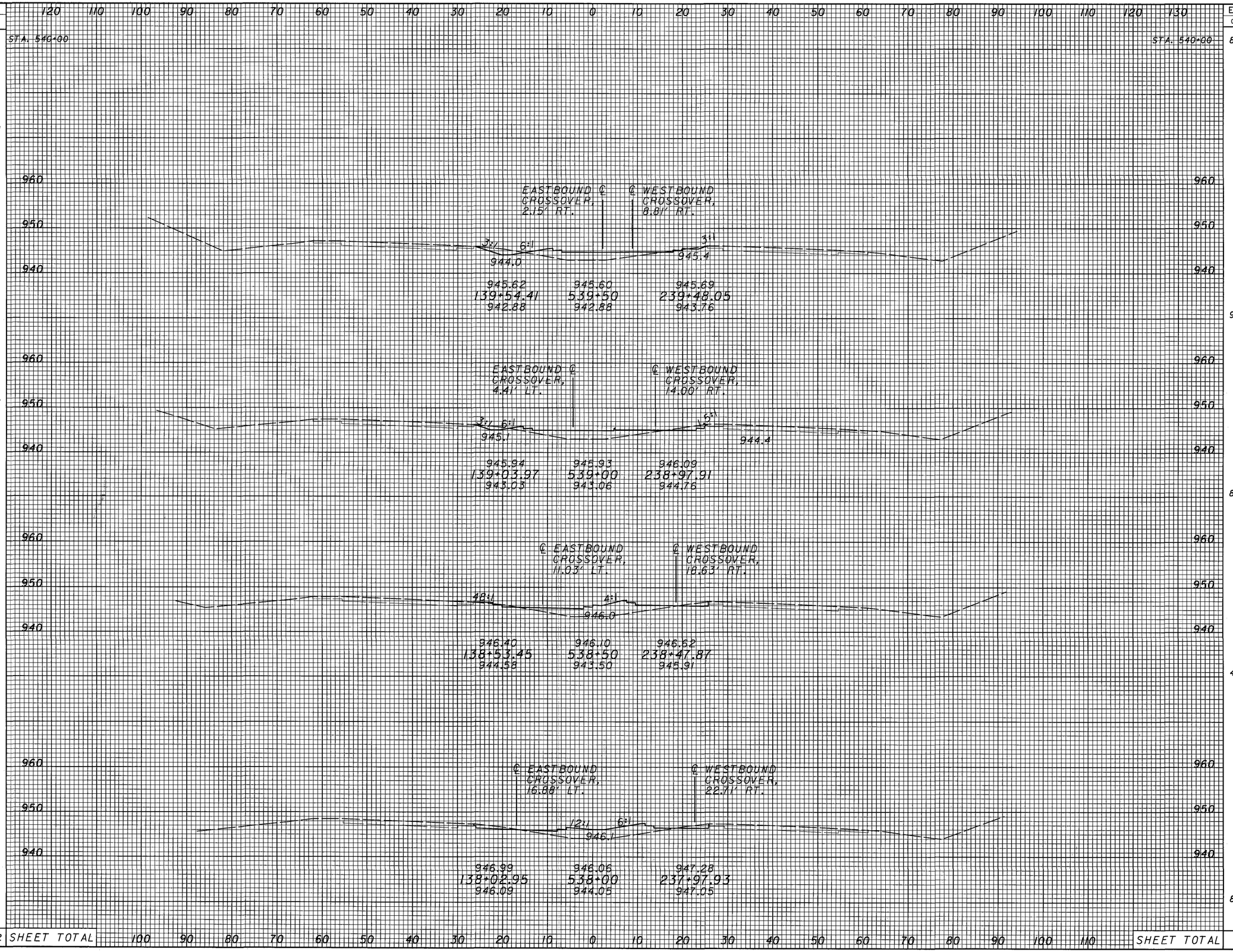


CALCULATED R.J.S.
CHECKED S.J.S.

CROSS SECTIONS - EAST CROSSOVER STA. 536+00 TO STA. 537+50

STA-30-(6.70) (11.57)

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
25		8.8	36.2		
	139			16.8	69.5
25		9.3	38.9		
	103			16.5	75.0
12		8.5	42.1		
	67			12.2	89.0
12		4.7	54.0		
	83			12.6	96.9
18		8.9	50.6		
	392 SHEET TOTAL			58.1	330.4



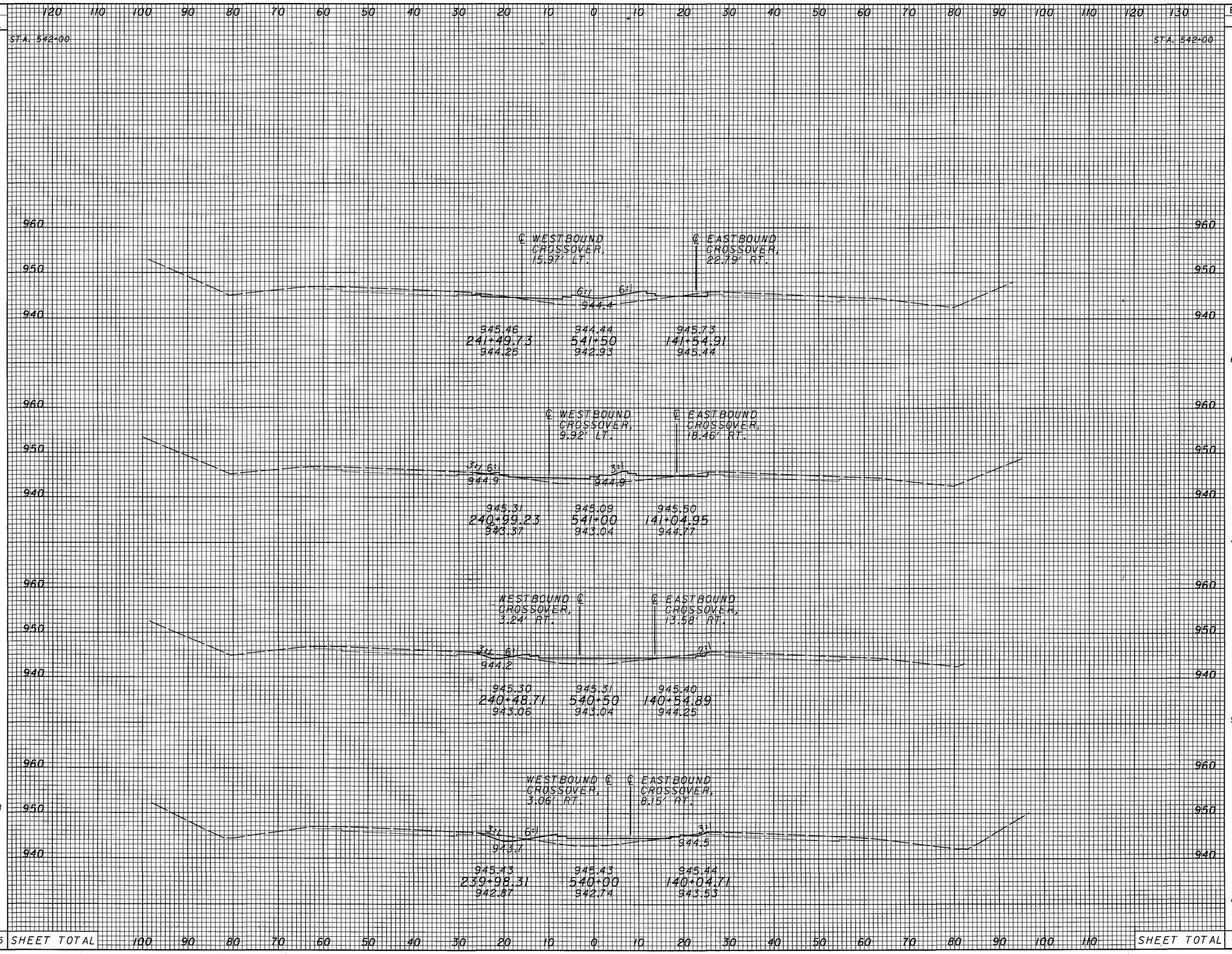
CALCULATED RJS
CHECKED SJS

CROSS SECTIONS - EAST CROSSOVER
STA. 538+00 TO STA. 539+50

STA-30-(6.70)
(11.57)

33
127

SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
26		STA. 542+00	7.1	35.5		
	119				12.5	74.6
17			6.4	45.1		
	83				9.2	79.0
13			3.5	40.2		
	75				12.0	63.7
14			9.5	28.6		
	108				16.9	60.0
25			8.8	36.2		
	385	SHEET TOTAL			50.6	277.3

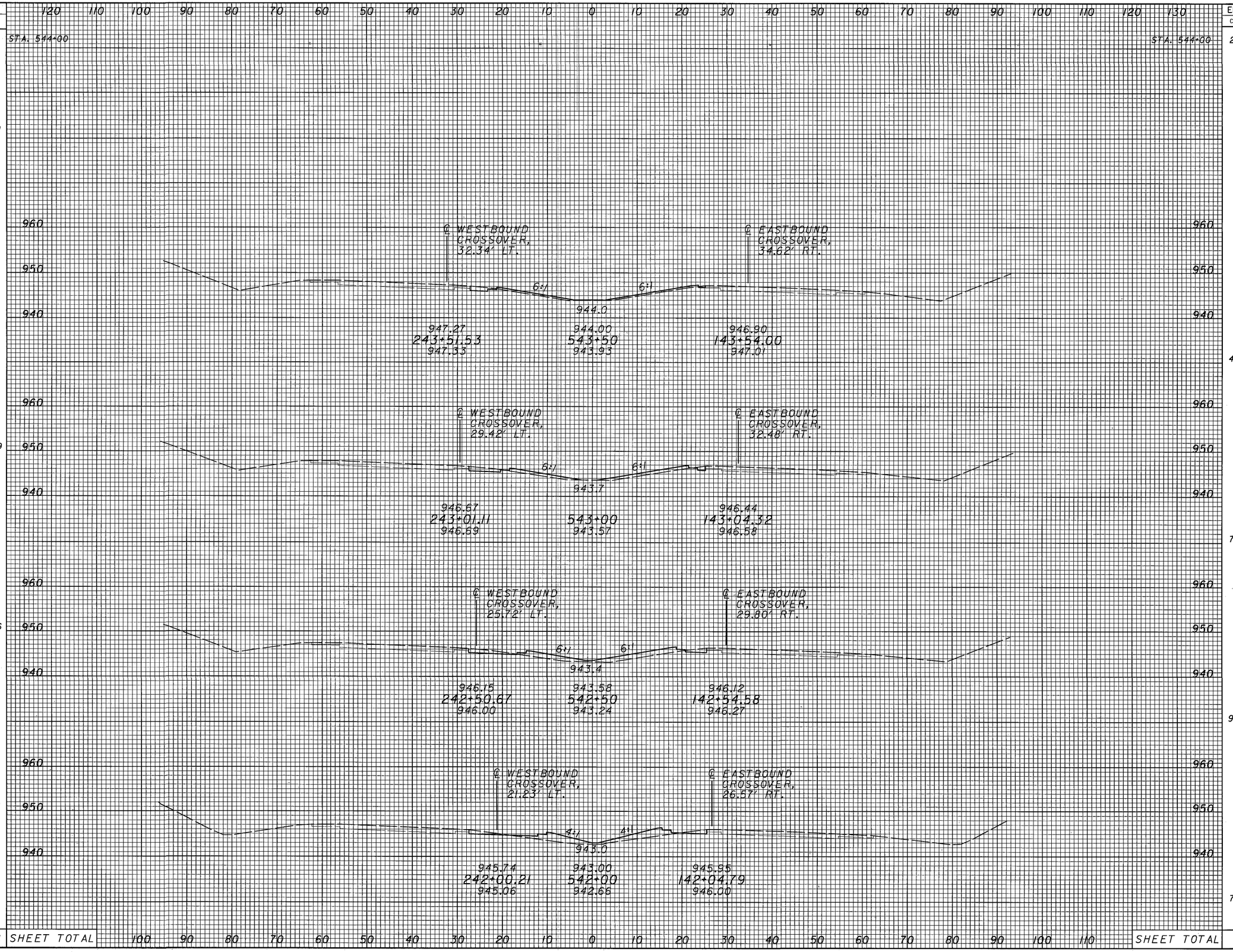


CALCULATED RJS
CHECKED SJS

CROSS SECTIONS - EAST CROSSOVER STA. 540+00 TO STA. 541+50

STA-30-(6.70) (11.57)

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		2.1	2.8		
22					
	189			6.0	14.8
46		4.4	13.2		
	239			10.6	31.3
40		7.1	20.6		
	206			15.1	49.4
34		9.2	32.8		
	167			15.1	63.2
26		7.1	35.5		
	801 SHEET TOTAL			46.8	158.7

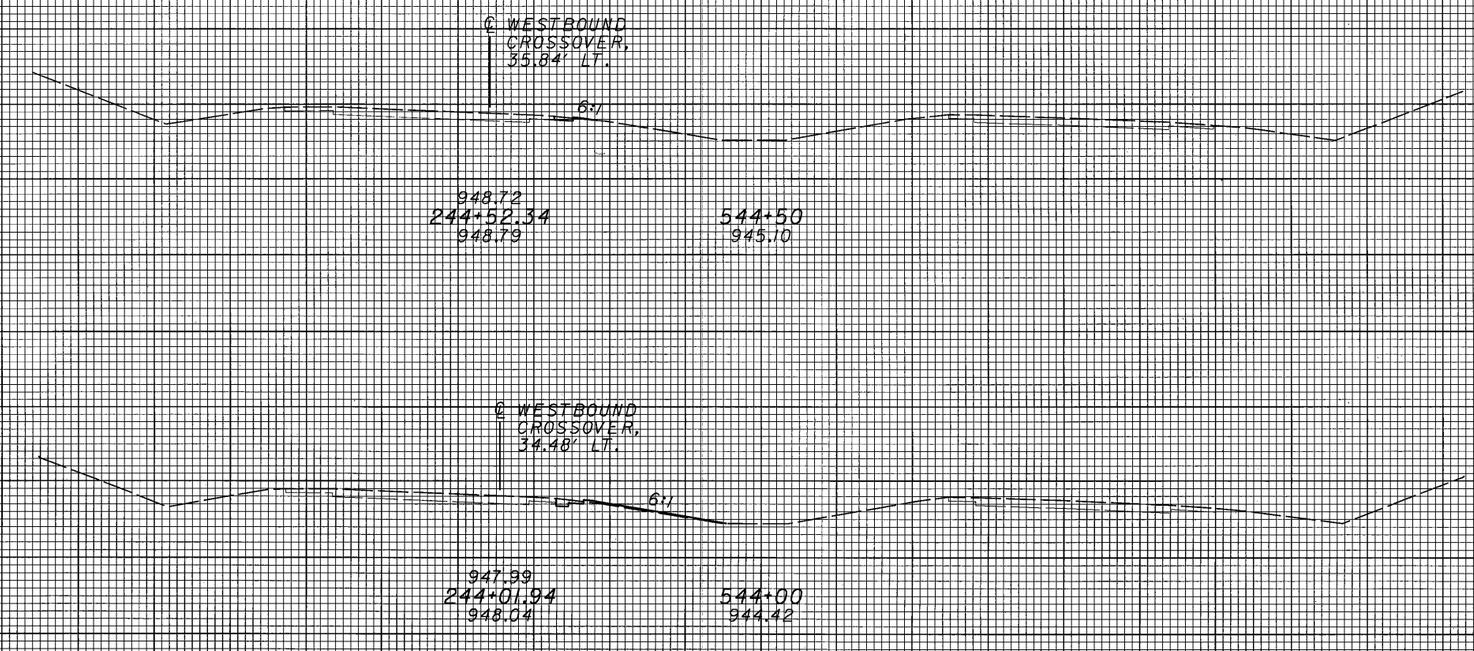


CALCULATED R.J.S
CHECKED S.J.S

CROSS SECTIONS - EAST CROSSOVER STA. 542+00 TO STA. 543+50

STA-30-(6.70) (11.57)

SEEDING				END AREA		VOLUME	
END WIDTH	SQ. YDS.			CUT	FILL	CUT	FILL
0		STA. 545+00	STA. 545+00	0	0		
17						1.0	0.2
6				1.1	0.2		
78						3.0	2.8
22				2.1	2.8		
	95	SHEET TOTAL	SHEET TOTAL			4.0	3.0



CALCULATED RJS
CHECKED SJS

CROSS SECTIONS - EAST CROSSOVER STA. 544+00 TO STA. 544+50

STA-30-(6.70) (11.57)

SUPERELEVATION TABLE

EASTBOUND, WEST END CROSSOVER, Dc = 3°00'00"

LEFT SIDE					CENTERLINE CONTROL		RIGHT SIDE					REMARKS
EDGE ELEVATION	TRANSITION RATE	ELEVATION CORRECTION	CROSS SLOPE	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE	ELEVATION CORRECTION	TRANSITION RATE	EDGE ELEVATION	
1000.83		-0.58	-6.400%	9.00	114+82.52	1001.41					BEGIN WIDENING LT	
1000.39		-0.58	-6.400%	9.00	115+00.00	1000.97					(MATCH EX SUPER)	
999.75		-0.58	-6.400%	9.00	115+25.00	1000.33						
999.12		-0.58	-6.400%	9.00	115+50.00	999.70						
998.48		-0.58	-6.400%	9.00	115+75.00	999.06						
997.85		-0.58	-6.400%	9.00	116+00.00	998.43						
997.21		-0.58	-6.400%	9.00	116+25.00	997.79						
996.58		-0.58	-6.400%	9.00	116+50.00	997.16						
995.92		-0.58	-6.400%	9.00	116+75.00	996.50						
995.27		-0.58	-6.400%	9.00	117+00.00	995.85						
994.61		-0.58	-6.400%	9.00	117+25.00	995.19						
994.17	326:1	-0.58	-6.400%	9.00	117+41.73	994.75					BEGIN PROFILE	
993.96	326:1	-0.55	-6.118%	9.00	117+50.00	994.51						
993.33	326:1	-0.47	-5.266%	9.00	117+75.00	993.80						
992.75	326:1	-0.40	-4.414%	9.00	118+00.00	993.15						
992.23	326:1	-0.32	-3.563%	9.00	118+25.00	992.55						
991.76	326:1	-0.24	-2.711%	9.00	118+50.00	992.00						
991.40	339:1	-0.18	-2.000%	9.00	118+70.86	991.58	9.00	2.000%	0.18	339:1	991.76	BEGIN FULL
991.33	339:1	-0.17	-1.864%	9.00	118+75.00	991.50	9.00	1.864%	0.17	339:1	991.67	WIDTH RT
990.92	339:1	-0.09	-1.044%	9.00	119+00.00	991.01	9.00	1.044%	0.09	339:1	991.10	
990.50	339:1	-0.02	-0.224%	9.00	119+25.00	990.52	9.00	0.224%	0.02	339:1	990.54	
990.38	339:1	0.00	0.000%	9.00	119+31.82	990.38	9.00	0.000%	0.00	339:1	990.38	BEGIN XO LT
990.03		0.00	0.000%	9.00	119+50.00	990.03	9.00	0.000%	0.00		990.03	
989.43		0.00	0.000%	9.00	119+75.00	989.43	9.00	0.000%	0.00		989.43	
988.84		0.00	0.000%	9.00	120+00.00	988.84	9.00	0.000%	0.00		988.84	
988.59		0.00	0.000%	9.00	120+10.69	988.59	9.00	0.000%	0.00		988.59	BEGIN XO RT
988.56		0.00	0.000%	9.00	120+11.69	988.56	9.00	0.000%	0.00		988.56	℄ INTERSECTS
988.54		0.00	0.000%	9.00	120+12.72	988.54	9.00	0.000%	0.00		988.54	END XO LT
988.25		0.00	0.000%	9.00	120+25.00	988.25	9.00	0.000%	0.00		988.25	
987.66		0.00	0.000%	9.00	120+50.00	987.66	9.00	0.000%	0.00		987.66	
987.11		0.00	0.000%	9.00	120+75.00	987.11	9.00	0.000%	0.00		987.11	
986.75	418:1	0.00	0.000%	9.00	120+91.20	986.75	9.00	0.000%	0.00	418:1	986.75	END XO RT
986.54	418:1	-0.02	-0.234%	9.00	121+00.00	986.56	9.00	0.234%	0.02	418:1	986.58	
985.93	418:1	-0.08	-0.898%	9.00	121+25.00	986.01	9.00	0.898%	0.08	418:1	986.09	
985.32	418:1	-0.14	-1.562%	9.00	121+50.00	985.46	9.00	1.562%	0.14	418:1	985.60	
984.91	418:1	-0.18	-2.006%	9.00	121+66.71	985.09	9.00	2.006%	0.18	418:1	985.27	PT
984.71	418:1	-0.20	-2.227%	9.00	121+75.00	984.91	9.00	2.227%	0.20	418:1	985.11	
984.37	418:1	-0.23	-2.590%	9.00	121+88.68	984.60	9.00	2.590%	0.23	418:1	984.83	END FULL
					122+00.00	984.34	9.00	2.590%	0.23		984.57	WIDTH LT
					122+25.00	983.68	9.00	2.590%	0.23		983.91	(MATCH EX.
					122+50.00	983.03	9.00	2.590%	0.23		983.26	SUPER)
					122+71.15	982.48	9.00	2.590%	0.23		982.71	END PROFILE
					122+75.00	982.38	9.00	2.590%	0.23		982.61	
					122+96.85	981.78	9.00	2.590%	0.23		982.01	PC
					123+00.00	981.69	9.00	2.590%	0.23		981.92	
					123+25.00	981.01	9.00	2.590%	0.23		981.24	
					123+50.00	980.32	9.00	2.590%	0.23		980.55	
					123+75.00	979.70	9.00	2.590%	0.23		979.93	
					123+88.23	979.37	9.00	2.590%	0.23		979.60	END WID-
												ENING RT

SUPERELEVATION TABLE

WESTBOUND, WEST END CROSSOVER, Dc = 3°00'00"

LEFT SIDE					CENTERLINE CONTROL		RIGHT SIDE					REMARKS
EDGE ELEVATION	TRANSITION RATE	ELEVATION CORRECTION	CROSS SLOPE	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE	ELEVATION CORRECTION	TRANSITION RATE	EDGE ELEVATION	
					216+17.81	997.44	9.00	6.400%	0.58		998.02	BEGIN WID-
					216+25.00	997.28	9.00	6.400%	0.58		997.86	ENING RT
					216+50.00	996.73	9.00	6.400%	0.58		997.31	(MATCH
					216+75.00	996.18	9.00	6.400%	0.58		996.76	EX SUPER)
					217+00.00	995.63	9.00	6.400%	0.58		996.21	
					217+25.00	995.28	9.00	6.400%	0.58		995.86	
					217+50.00	994.87	9.00	6.400%	0.58	235:1	995.45	
					217+52.52	994.83	9.00	6.281%	0.57	235:1	995.40	BEGIN
					217+75.00	994.41	9.00	5.220%	0.47	235:1	994.88	PROFILE
					218+00.00	993.89	9.00	4.040%	0.36	235:1	994.25	
					218+25.00	993.32	9.00	2.861%	0.26	235:1	993.58	
992.69	476:1	-0.18	-2.000%	9.00	218+43.24	992.87	9.00	2.000%	0.18	476:1	993.05	BEGIN FULL
992.52	476:1	-0.17	-1.842%	9.00	218+50.00	992.69	9.00	1.842%	0.17	476:1	992.86	WIDTH LT
991.90	476:1	-0.11	-1.259%	9.00	218+75.00	992.01	9.00	1.259%	0.11	476:1	992.12	
991.25	476:1	-0.06	-0.675%	9.00	219+00.00	991.31	9.00	0.675%	0.06	476:1	991.37	
991.17	476:1	-0.05	-0.600%	9.00	219+03.23	991.22	9.00	0.600%	0.05	476:1	991.27	PC
991.02	476:1	-0.04	-0.459%	9.00	219+09.28	991.06	9.00	0.459%	0.04	476:1	991.10	
990.61	476:1	-0.01	-0.092%	9.00	219+25.00	990.62	9.00	0.092%	0.01	476:1	990.63	
990.51	476:1	0.00	0.000%	9.00	219+28.94	990.51	9.00	0.000%	0.00	476:1	990.51	BEGIN XO RT
989.94		0.00	0.000%	9.00	219+50.00	989.94	9.00	0.000%	0.00		989.94	
989.34		0.00	0.000%	9.00	219+75.00	989.34	9.00	0.000%	0.00		989.34	
988.74		0.00	0.000%	9.00	220+00.00	988.74	9.00	0.000%	0.00		988.74	
988.56		0.00	0.000%	9.00	220+07.41	988.56	9.00	0.000%	0.00		988.56	BEGIN XO LT
988.54		0.00	0.000%	9.00	220+08.44	988.54	9.00	0.000%	0.00		988.54	℄INTERSECTS
988.52		0.00	0.000%	9.00	220+09.45	988.52	9.00	0.000%	0.00		988.52	END XO RT
988.14		0.00	0.000%	9.00	220+25.00	988.14	9.00	0.000%	0.00		988.14	
987.53		0.00	0.000%	9.00	220+50.00	987.53	9.00	0.000%	0.00		987.53	
986.83		0.00	0.000%	9.00	220+75.00	986.83	9.00	0.000%	0.00		986.83	
986.46	242:1	0.00	0.000%	9.00	220+88.31	986.46	9.00	0.000%	0.00	242:1	986.46	END XO LT
986.08	242:1	-0.05	-0.537%	9.00	221+00.00	986.13	9.00	0.537%	0.05	242:1	986.18	
985.30	242:1	-0.15	-1.685%	9.00	221+25.00	985.45	9.00	1.685%	0.15	242:1	985.60	
985.08	441:1	-0.18	-2.000%	9.00	221+31.85	985.26	9.00	2.000%	0.18	242:1	985.44	END FULL
984.57	441:1	-0.22	-2.458%	9.00	221+50.00	984.79						WIDTH RT
983.89	441:1	-0.28	-3.088%	9.00	221+75.00	984.17						(MATCH
983.67	239:1	-0.30	-3.300%	9.00	221+83.39	983.97						EX SUPER)
983.22	239:1	-0.37	-4.073%	9.00	222+00.00	983.59						
982.57	239:1	-0.47	-5.237%	9.00	222+25.00	983.04						
982.43	239:1	-0.49	-5.496%	9.00	222+30.58	982.92						END PROFILE
981.94	413:1	-0.58	-6.400%	9.00	222+50.00	982.52						
981.60	413:1	-0.52	-5.728%	9.00	222+75.00	982.12						
981.27	413:1	-0.45	-5.055%	9.00	223+00.00	981.72						
980.72	413:1	-0.39	-4.383%	9.00	223+25.00	981.11						
980.17	413:1	-0.33	-3.710%	9.00	223+50.00	980.50						
979.63	413:1	-0.27	-3.038%	9.00	223+75.00	979.90						
979.09	413:1	-0.21	-2.366%	9.00	224+00.00	979.30						
979.02	413:1	-0.21	-2.292%	9.00	224+02.74	979.23					END WIDENING LT	

CALCULATED SJS
CHECKED SMM

WEST CROSSOVER SUPERELEVATION TABLE

STA-30-(6.70)
(11.57)

SUPERELEVATION TABLE

EASTBOUND, EAST END CROSSOVER, Dc = 3°00'00"

LEFT SIDE					CENTERLINE CONTROL		RIGHT SIDE					REMARKS
EDGE ELEVATION	TRANSITION RATE	ELEVATION CORRECTION	CROSS SLOPE	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE	ELEVATION CORRECTION	TRANSITION RATE	EDGE ELEVATION	
					135+16.77	952.55	9.00	-4.000%	-0.36		952.19	BEGIN WID-
					135+25.00	952.37	9.00	-4.000%	-0.36		952.01	ENING RT
					135+50.00	951.82	9.00	-4.000%	-0.36		951.46	(MATCH EX.
					135+75.00	951.27	9.00	-4.000%	-0.36		950.91	SUPER)
					136+00.00	950.72	9.00	-4.000%	-0.36		950.36	
					136+25.00	950.17	9.00	-4.000%	-0.36		949.81	
					136+50.00	949.62	9.00	-4.000%	-0.36		949.26	
					136+75.00	949.13	9.00	-4.000%	-0.36		948.77	
					136+98.80	948.66	9.00	-4.000%	-0.36		948.30	BEGIN
					137+00.00	948.64	9.00	-4.000%	-0.36		948.28	PROFILE
					137+25.00	948.19	9.00	-4.000%	-0.36		947.83	
					137+50.00	947.77	9.00	-4.000%	-0.36		947.41	
					137+75.00	947.38	9.00	-4.000%	-0.36		947.02	
947.42	301:1	0.36	4.000%	9.00	137+98.01	947.06	9.00	-4.000%	-0.36	301:1	946.70	BEGIN FULL
947.38	301:1	0.35	3.927%	9.00	138+00.00	947.03	9.00	-3.927%	-0.35	301:1	946.68	WIDTH LT
946.99	301:1	0.27	3.004%	9.00	138+25.00	946.72	9.00	-3.004%	-0.27	301:1	946.45	
946.62	301:1	0.19	2.081%	9.00	138+50.00	946.43	9.00	-2.081%	-0.19	301:1	946.24	
946.29	301:1	0.10	1.158%	9.00	138+75.00	946.19	9.00	-1.158%	-0.10	301:1	946.09	
946.03	301:1	0.03	0.350%	9.00	138+96.89	946.00	9.00	-0.350%	-0.03	301:1	945.97	PT
945.99	301:1	0.02	0.235%	9.00	139+00.00	945.97	9.00	-0.235%	-0.02	301:1	945.95	
945.92	301:1	0.00	0.000%	9.00	139+06.38	945.92	9.00	0.000%	0.00	301:1	945.92	BEGIN XO RT
945.79		0.00	0.000%	9.00	139+25.00	945.79	9.00	0.000%	0.00		945.79	
945.65		0.00	0.000%	9.00	139+50.00	945.65	9.00	0.000%	0.00		945.65	
945.53		0.00	0.000%	9.00	139+75.00	945.53	9.00	0.000%	0.00		945.53	
945.51		0.00	0.000%	9.00	139+81.89	945.51	9.00	0.000%	0.00		945.51	BEGIN XO LT
945.50		0.00	0.000%	9.00	139+82.95	945.50	9.00	0.000%	0.00		945.50	℄ INTERSECTS
945.50		0.00	0.000%	9.00	139+84.01	945.50	9.00	0.000%	0.00		945.50	END XO RT
945.46		0.00	0.000%	9.00	140+00.00	945.46	9.00	0.000%	0.00		945.46	
945.41		0.00	0.000%	9.00	140+25.00	945.41	9.00	0.000%	0.00		945.41	
945.40		0.00	0.000%	9.00	140+50.00	945.40	9.00	0.000%	0.00		945.40	
945.41	390:1	0.00	0.000%	9.00	140+59.52	945.41	9.00	0.000%	0.00	390:1	945.41	END XO LT
945.46	390:1	0.04	0.441%	9.00	140+75.00	945.42	9.00	-0.441%	-0.04	390:1	945.38	
945.50	390:1	0.06	0.661%	9.00	140+82.73	945.44	9.00	-0.661%	-0.06	390:1	945.38	END FULL
945.58	390:1	0.10	1.153%	9.00	141+00.00	945.48						WIDTH RT
945.74	390:1	0.17	1.864%	9.00	141+25.00	945.57						(MATCH
945.93	390:1	0.23	2.576%	9.00	141+50.00	945.70						EX SUPER)
946.15	390:1	0.30	3.288%	9.00	141+75.00	945.85						
946.26	390:1	0.33	3.696%	9.00	141+89.31	945.93						END PROFILE
946.30	390:1	0.36	4.000%	9.00	142+00.00	945.94						
946.33		0.36	4.000%	9.00	142+25.00	945.97						
946.46		0.36	4.000%	9.00	142+50.00	946.10						
946.59		0.36	4.000%	9.00	142+75.00	946.23						
946.77		0.36	4.000%	9.00	143+00.00	946.41						
946.96		0.36	4.000%	9.00	143+25.00	946.60						
947.11		0.36	4.000%	9.00	143+40.94	946.75						END WIDENING LT

SUPERELEVATION TABLE

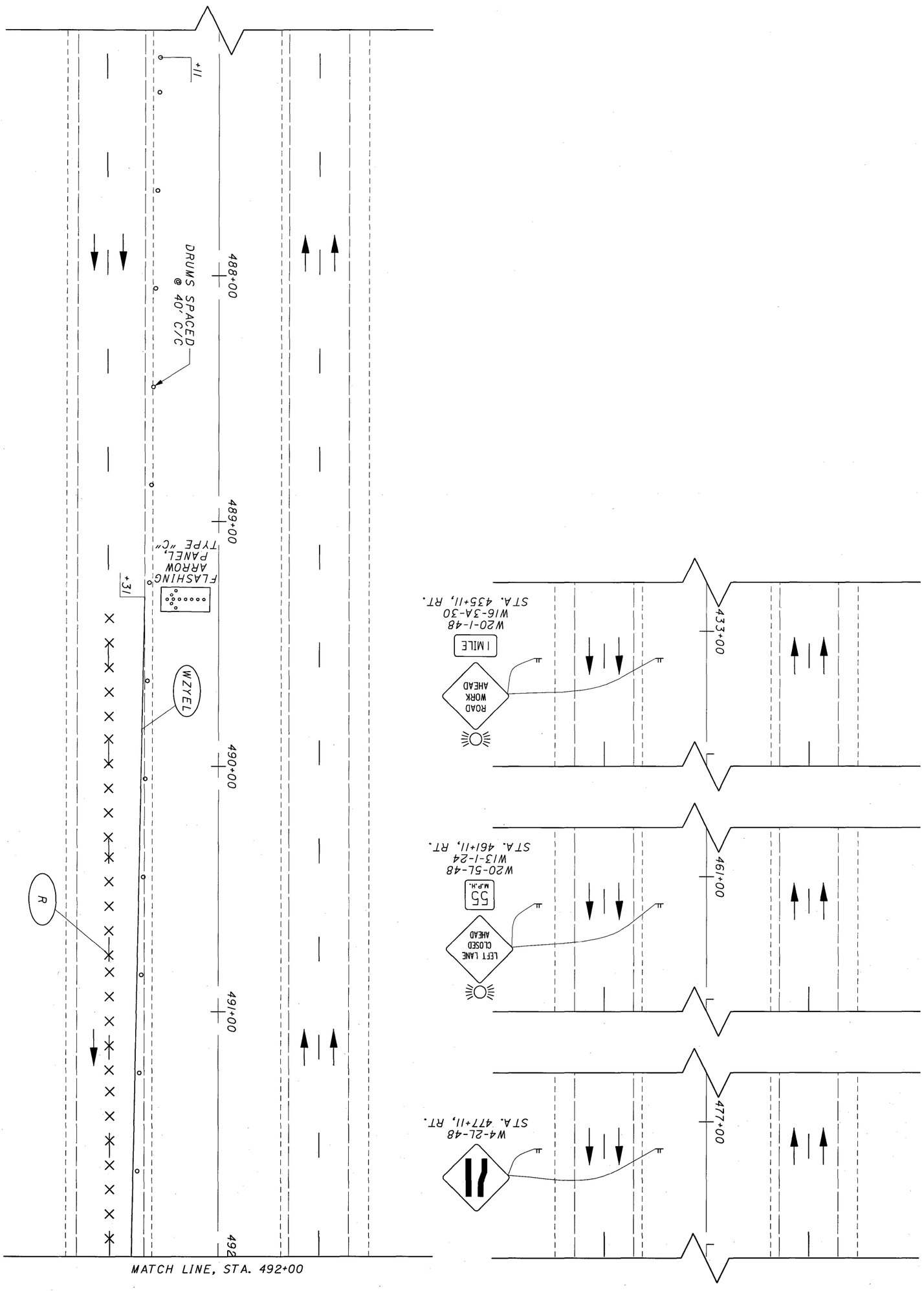
WESTBOUND, EAST END CROSSOVER, Dc = 3°00'00"

LEFT SIDE					CENTERLINE CONTROL		RIGHT SIDE					REMARKS
EDGE ELEVATION	TRANSITION RATE	ELEVATION CORRECTION	CROSS SLOPE	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE	ELEVATION CORRECTION	TRANSITION RATE	EDGE ELEVATION	
951.64	252:1	0.36	4.000%	9.00	235+54.67	951.28						BEGIN WID-
951.30	252:1	0.28	3.103%	9.00	235+75.00	951.02						ENING LT
950.80	252:1	0.18	2.000%	9.00	236+00.00	950.62						(MATCH EX.
950.32		0.18	2.000%	9.00	236+25.00	950.14						SUPER)
949.76		0.18	2.000%	9.00	236+50.00	949.58						
949.38		0.18	2.000%	9.00	236+75.00	949.20						
948.99		0.18	2.000%	9.00	237+00.00	948.81						
948.60		0.18	2.000%	9.00	237+25.00	948.42						
948.22		0.18	2.000%	9.00	237+50.00	948.04						
948.13		0.18	2.000%	9.00	237+55.66	947.95						BEGIN
947.81		0.18	2.000%	9.00	237+75.00	947.63						PROFILE
947.43		0.18	2.000%	9.00	238+00.00	947.25						
947.09		0.18	2.000%	9.00	238+25.00	946.91						
946.77		0.18	2.000%	9.00	238+50.00	946.59						
946.69		0.18	2.000%	9.00	238+57.36	946.51						
946.55	167:1	0.18	2.000%	9.00	238+69.87	946.37	9.00	-2.000%	-0.18	167:1	946.19	BEGIN FULL
946.47	167:1	0.15	1.659%	9.00	238+75.00	946.32	9.00	-1.659%	-0.15	167:1	946.17	WIDTH RT
946.07	167:1	0.00	0.000%	9.00	238+99.96	946.07	9.00	0.000%	0.00	167:1	946.07	BEGIN XO LT
946.07		0.00	0.000%	9.00	239+00.00	946.07	9.00	0.000%	0.00		946.07	
945.86		0.00	0.000%	9.00	239+25.00	945.86	9.00	0.000%	0.00		945.86	
945.68		0.00	0.000%	9.00	239+50.00	945.68	9.00	0.000%	0.00		945.68	
945.54		0.00	0.000%	9.00	239+75.00	945.54	9.00	0.000%	0.00		945.54	
945.53		0.00	0.000%	9.00	239+75.48	945.53	9.00	0.000%	0.00		945.53	BEGIN XO RT
945.53		0.00	0.000%	9.00	239+76.54	945.53	9.00	0.000%	0.00		945.53	℄INTERSECTS
945.52		0.00	0.000%	9.00	239+77.59	945.52	9.00	0.000%	0.00		945.52	END XO LT
945.43		0.00	0.000%	9.00	240+00.00	945.43	9.00	0.000%	0.00		945.43	
945.35		0.00	0.000%	9.00	240+25.00	945.35	9.00	0.000%	0.00		945.35	
945.30		0.00	0.000%	9.00	240+50.00	945.30	9.00	0.000%	0.00		945.30	
945.30	261:1	0.00	0.000%	9.00	240+53.11	945.30	9.00	0.000%	0.00	261:1	945.30	END XO RT
945.36	261:1	0.07	0.824%	9.00	240+72.43	945.29	9.00	-0.824%	-0.07	261:1	945.22	PC
945.37	261:1	0.08	0.934%	9.00	240+75.00	945.29	9.00	-0.934%	-0.08	261:1	945.21	
945.50	833:1	0.18	2.000%	9.00	241+00.00	945.32	9.00	-2.000%	-0.18	833:1	945.14	
945.58	833:1	0.21	2.333%	9.00	241+25.00	945.37	9.00	-2.333%	-0.21	833:1	945.16	
945.70	833:1	0.24	2.667%	9.00	241+50.00	945.46	9.00	-2.667%	-0.24	833:1	945.22	
945.82	833:1	0.26	2.938%	9.00	241+70.37	945.56	9.00	-2.938%	-0.26	833:1	945.30	END FULL
					241+75.00	945.58	9.00	-3.000%	-0.27	833:1	945.31	WIDTH LT
					242+00.00	945.74	9.00	-3.333%	-0.30	833:1	945.44	(MATCH EX.
					242+25.00	945.93	9.00	-3.667%	-0.33	833:1	945.60	SUPER)
					242+50.00	946.14	9.00	-4.000%	-0.36	833:1	945.78	
					242+72.21	946.33	9.00	-4.000%	-0.36		945.97	END PROFILE
					242+75.00	946.36	9.00	-4.000%	-0.36		946.00	
					243+00.00	946.66	9.00	-4.000%	-0.36		946.30	
					243+25.00	946.95	9.00	-4.000%	-0.36		946.59	
					243+50.00	947.24	9.00	-4.000%	-0.36		946.88	
					243+75.00	947.60	9.00	-4.000%	-0.36		947.24	
					244+00.00	947.96	9.00	-4.000%	-0.36		947.60	
					244+25.00	948.32	9.00	-4.000%	-0.36		947.96	
					244+50.00	948.68	9.00	-4.000%	-0.36		948.32	
					244+75.00	949.15	9.00	-4.000%	-0.36		948.79	
					244+80.47	949.25	9.00	-4.000%	-0.36		948.89	END WID-
												ENING RT

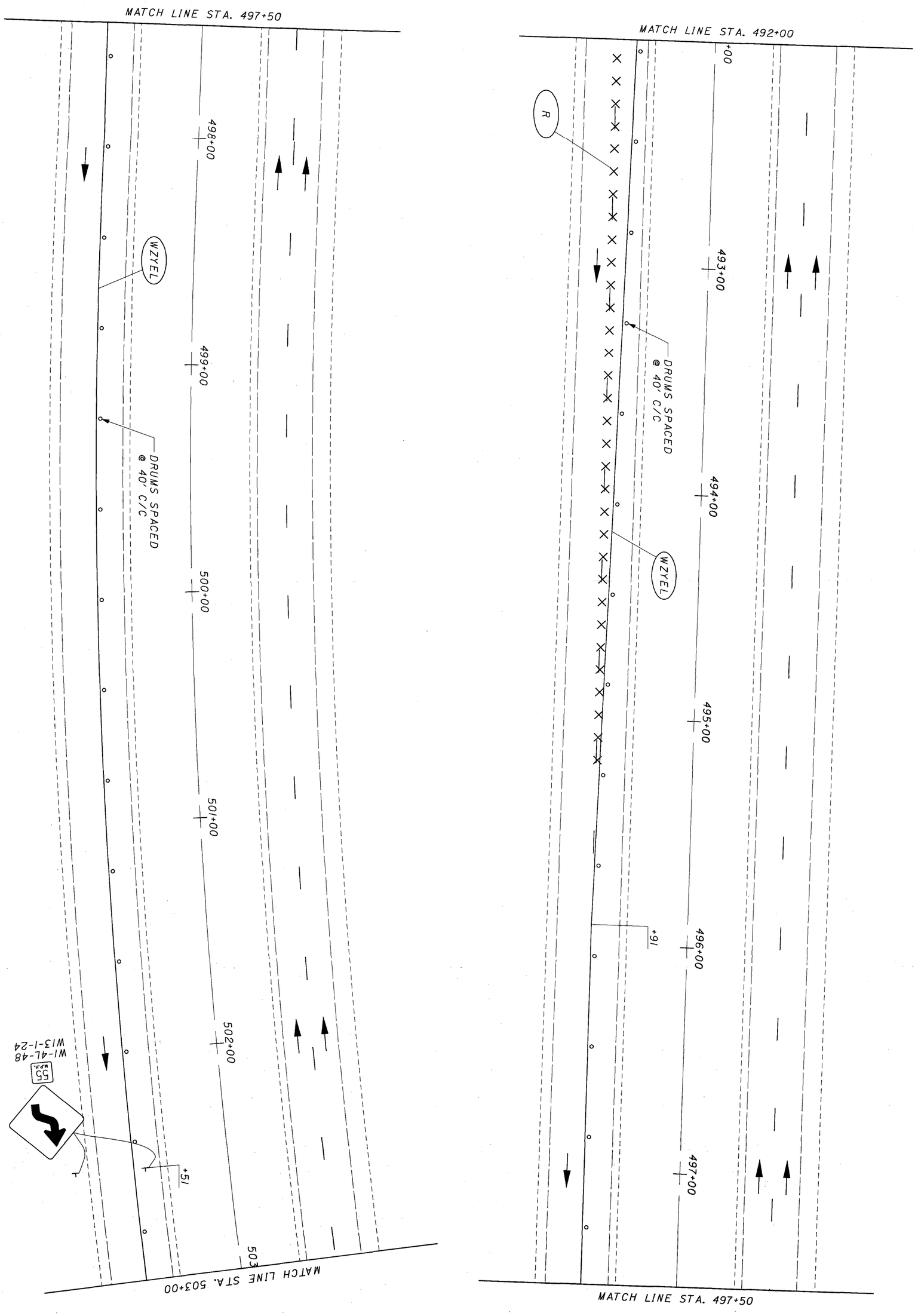
CALCULATED SJS
CHECKED SMM

EAST CROSSOVER
SUPERELEVATION TABLE

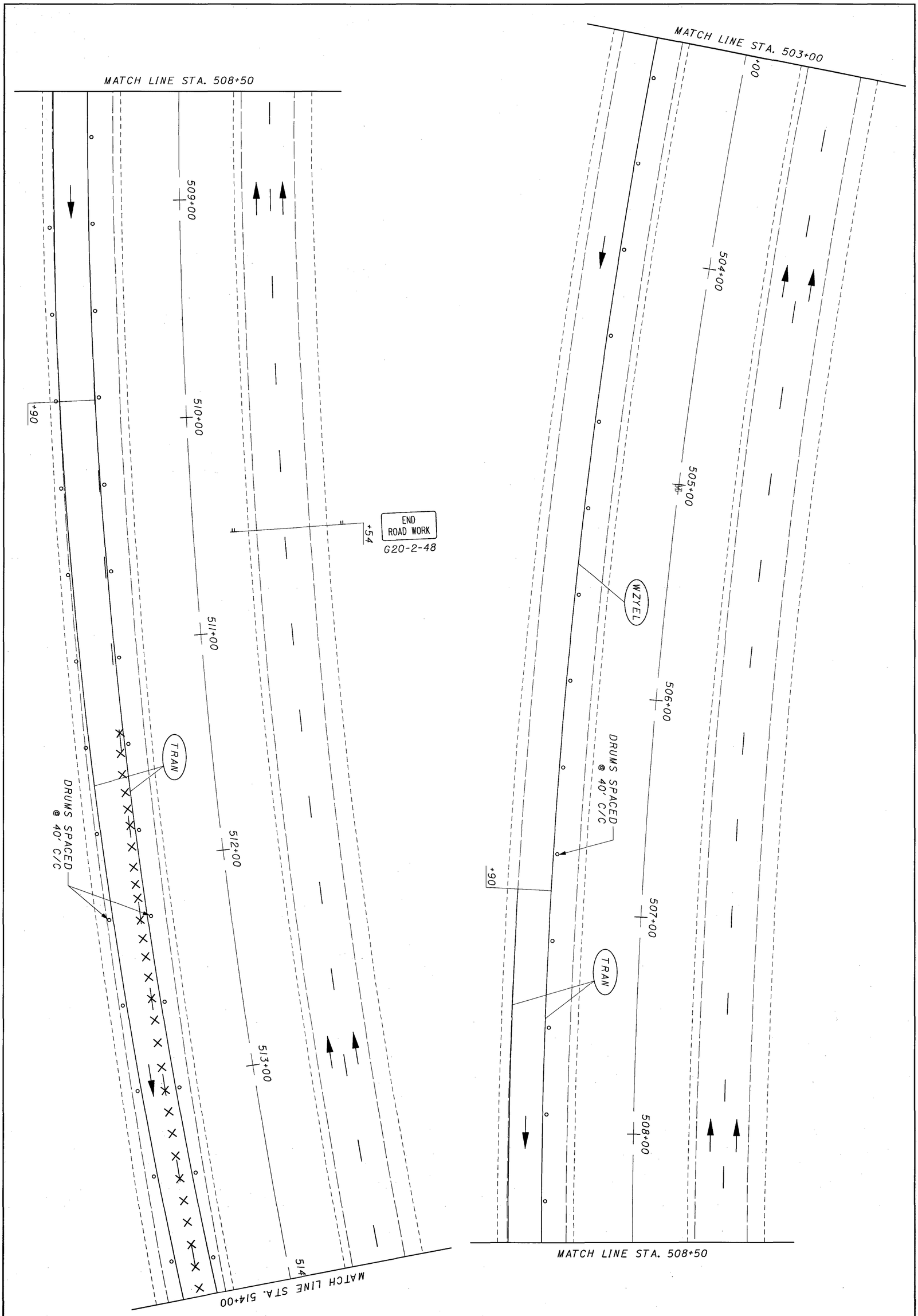
STA-30-(6.70)
(11.57)



39 / 127	STA-30-(6.70) (11.57)	MAINTENANCE OF TRAFFIC - PHASE 1 STA. 492+00 TO STA. 503+00	CALCULATED SMM CHECKED MOW	0 20 10 40 HORIZONTAL SCALE IN FEET	N



40 / 127	**STA-30-(6.70) (11.57)**	**MAINTENANCE OF TRAFFIC - PHASE 1 STA. 492+00 TO STA. 503+00**	CALCULATED SMM / CHECKED MOW	0 20 / 10 40 HORIZONTAL SCALE IN FEET



41 / 127	**STA-30-(6.70) (11.57)**	**MAINTENANCE OF TRAFFIC - PHASE 1 STA. 503+00 TO STA. 514+00**	CALCULATED SMM CHECKED MOW	0 20 10 40 HORIZONTAL SCALE IN FEET

MATCH LINE STA. 514+00

514+00

515+00

516+00

517+00

518+00

519+00

MATCH LINE STA. 519+50

216

218

219

R

TRAN

R

PR CB NO. 8

915

116

117

118

119

16'-0"

+30

+25

+00

DRUMS SPACED
@ 40' C/C

W1-6-96

MATCH LINE STA. 519+50

520+00

521+00

522+00

523+00

524+00

525

MATCH LINE STA. 525+00

220

221

222

223

224

120

121

122

123

16'-0"

+49

+31

TAPERED END PIECE

WZYEL

PCBGS

R

DRUMS SPACED
@ 40' C/C

A

A

TRAN

+79 GATES AND TYPE III
BARRICADES IN POSITION

R11-2-48

ROAD
CLOSED

7'-6"
11'-0"
1'-0"
1'-0"
11'-0"
2'-0"
2'-0"

WB
LANE

EB
LANE

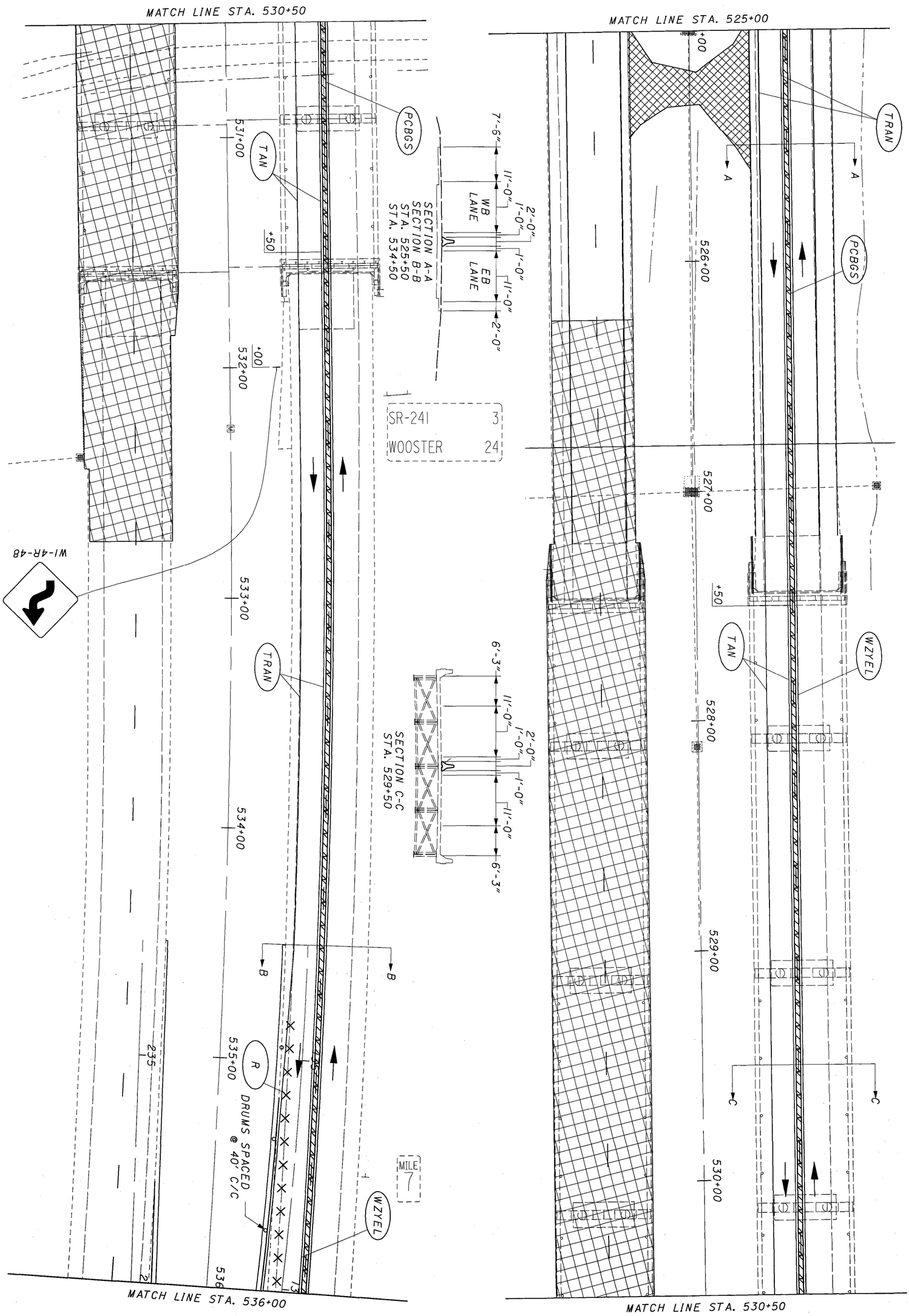
SECTION A-A
STA. 524+50

0 10 20 40
HORIZONTAL
SCALE IN FEET

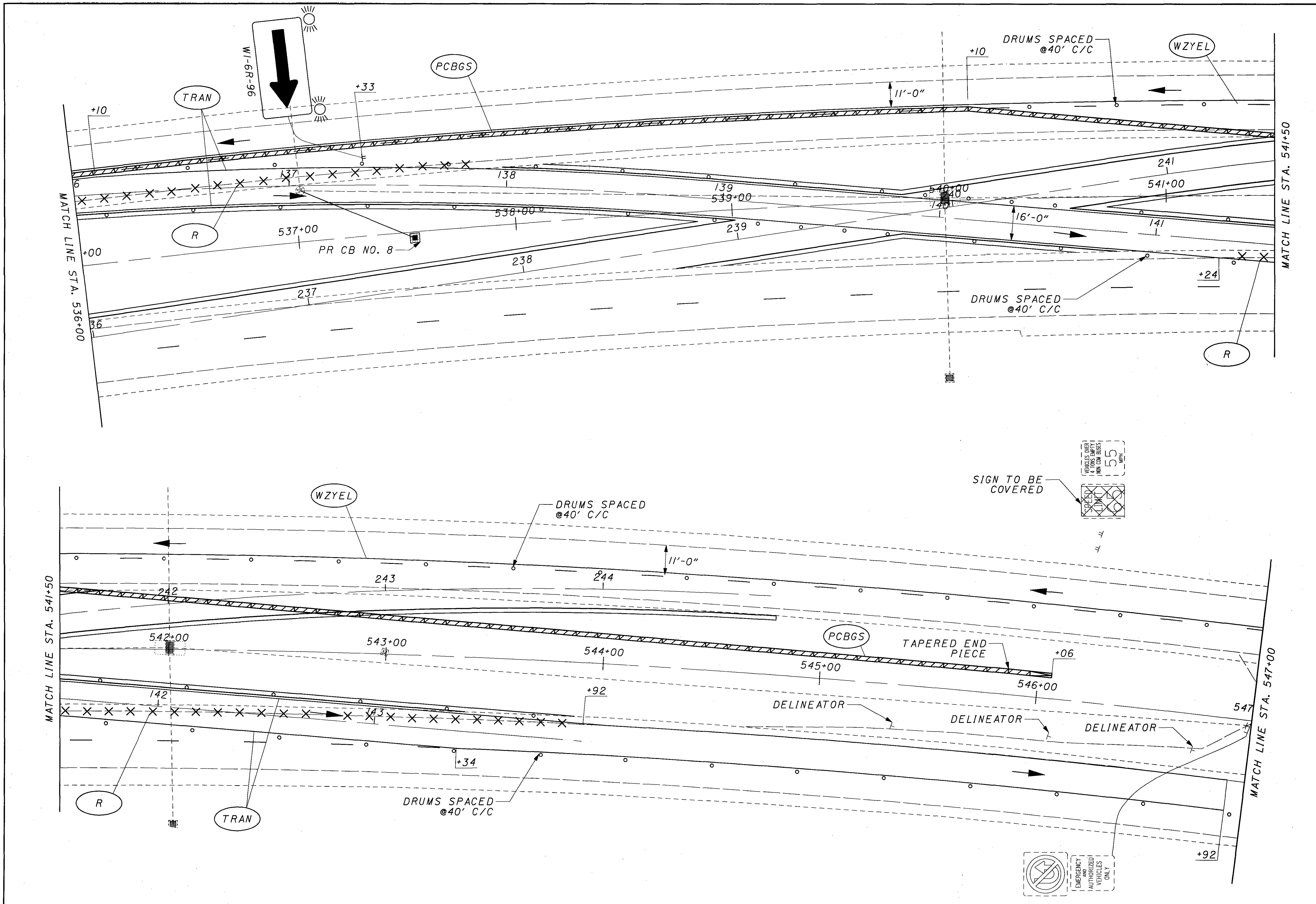
CALCULATED SMM
CHECKED MOW

MAINTENANCE OF TRAFFIC - PHASE 1
STA. 514+00 TO STA. 525+00

STA-30-(6.70)
(11.57)



43 / 127	STA-30-(6.70) (11.57)	MAINTENANCE OF TRAFFIC - PHASE 1 STA. 525+00 TO STA. 536+00	CALCULATED SMM CHECKED MOW	0 20 10 40 HORIZONTAL SCALE IN FEET


W1-6R-96
TRAN
PCBGS
+33
+10
DRUMS SPACED
@40' C/C
WZYEL
11'-0"
R
537+00
PR CB NO. 8
538+00
539+00
540+00
541+00
16'-0"
+24
237
238
239
241
137
138
139
140
141
MATCH LINE STA. 536+00
MATCH LINE STA. 541+50
SIGN TO BE
COVERED
VEHICLES OVER 4 TONS EMPTY NON COM BUSES 55 MPH
243
244
242
542+00
543+00
544+00
545+00
546+00
547
TAPERED END
PIECE
+06
142
143
+92
+34
DELINEATOR
MATCH LINE STA. 547+00
EMERGENCY AND AUTHORIZED VEHICLES ONLY

MAINTENANCE OF TRAFFIC - PHASE 1
STA. 536+00 TO STA. 547+00

STA-30-(6.70) (11.57)

CALCULATED SMM
CHECKED MOW

HORIZONTAL SCALE IN FEET
0 10 20 40

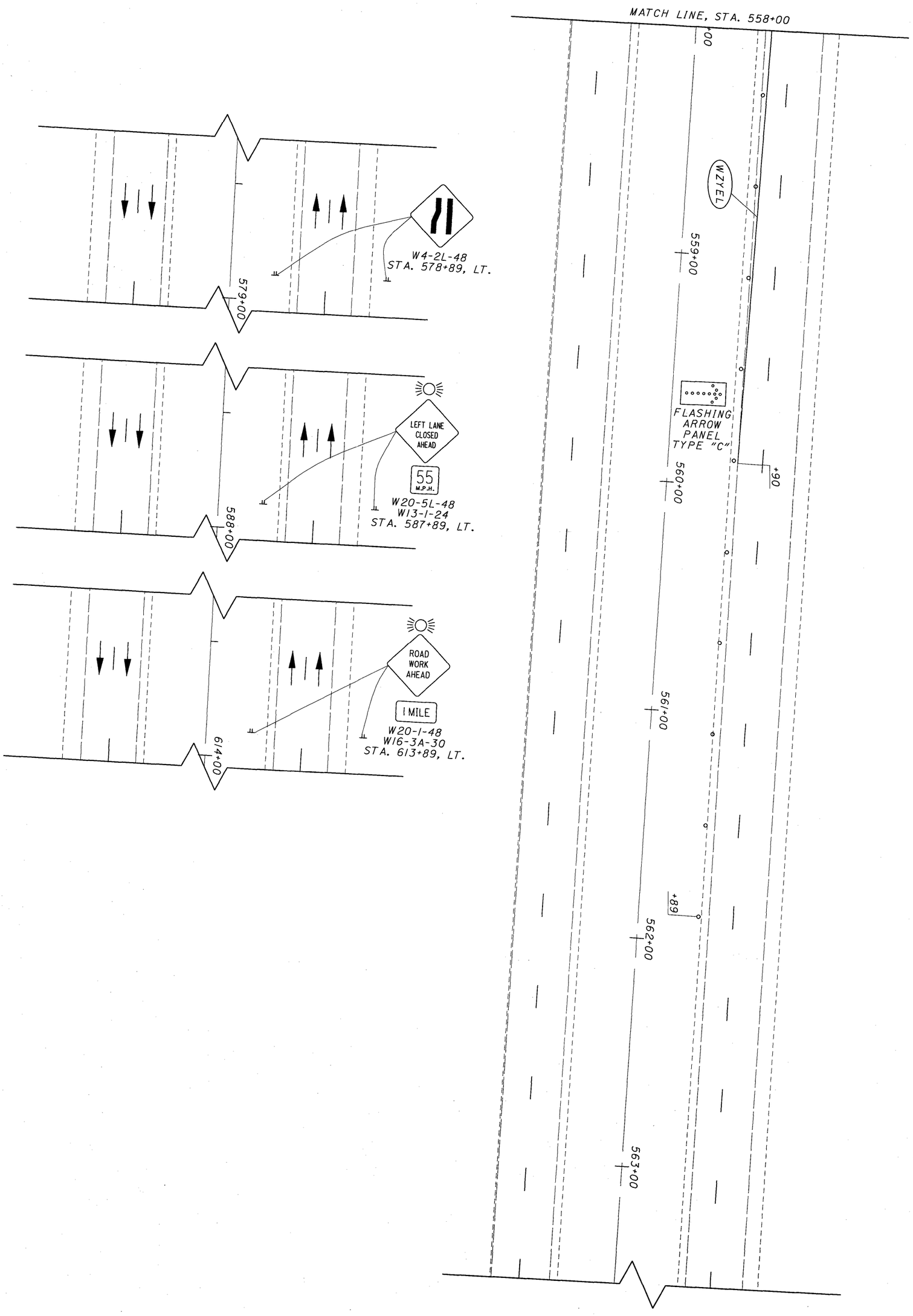
N

0 10 20 40
HORIZONTAL SCALE IN FEET

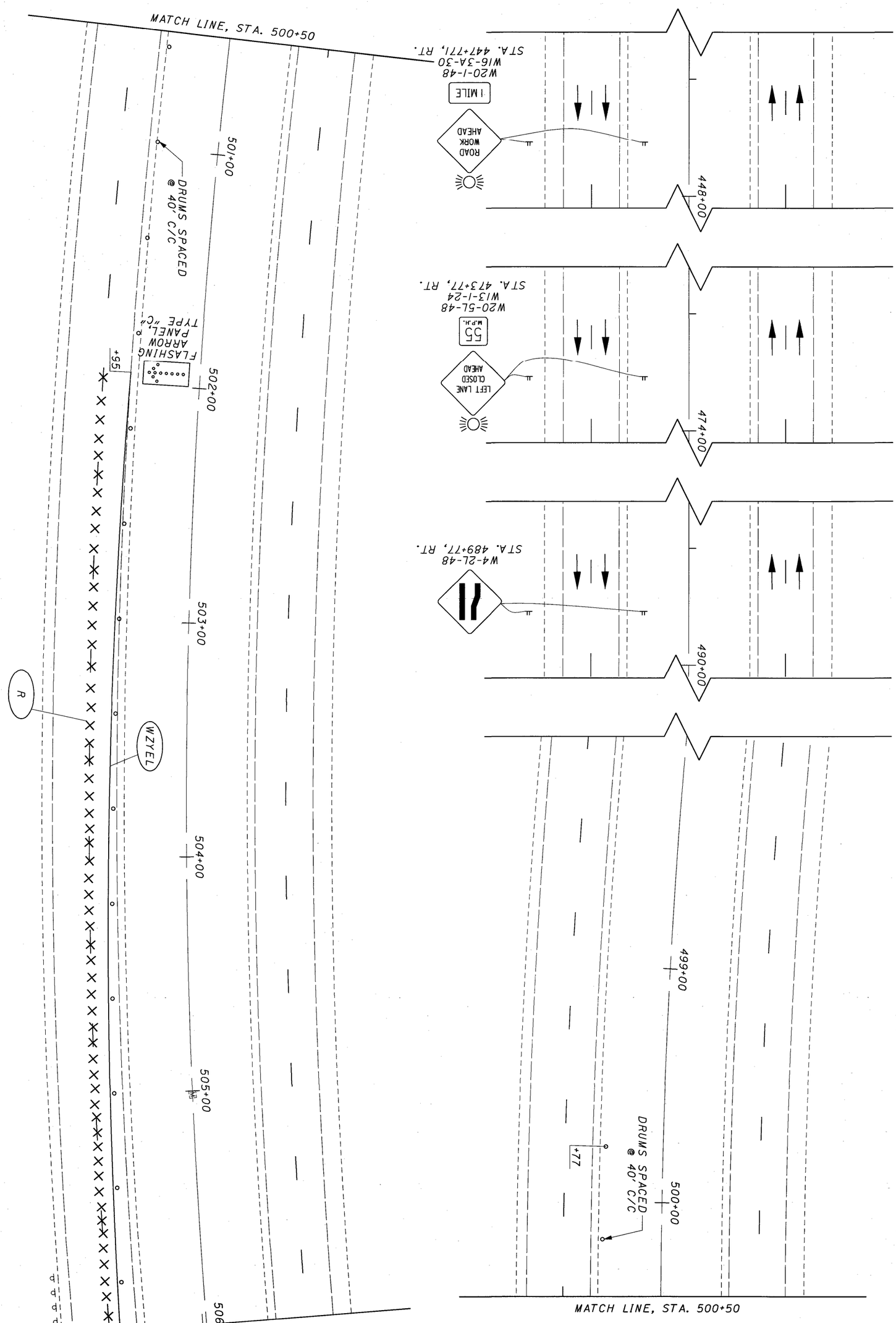
CALCULATED SMM
CHECKED MOW

MAINTENANCE OF TRAFFIC - PHASE 1
STA. 547+00 TO STA. 558+00

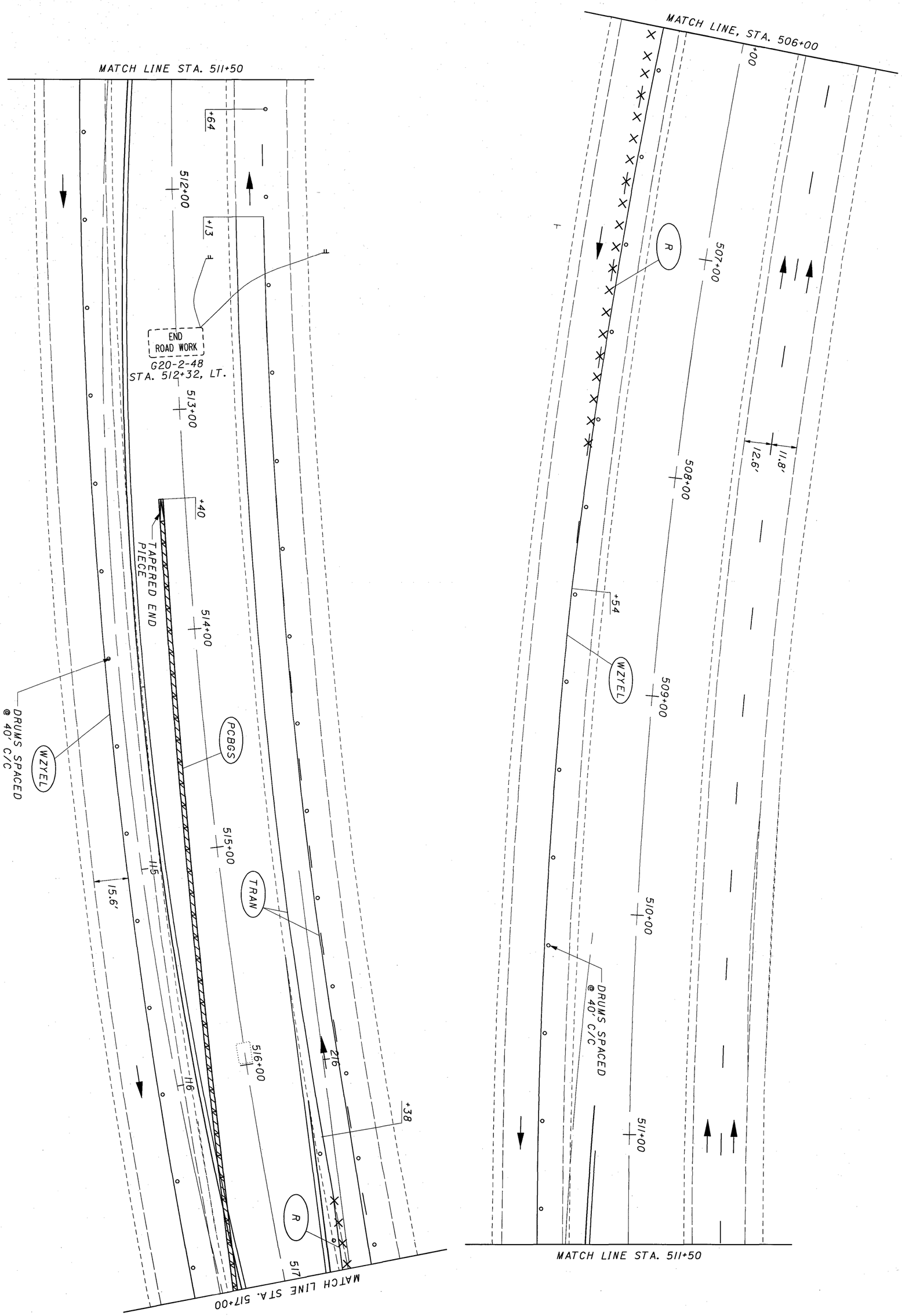
STA-30-(6.70)
(11.57)



46 / 127	STA-30-(6.70) (11.57)	MAINTENANCE OF TRAFFIC - PHASE 1 STA. 558+00 TO STA. 612+10	CALCULATED SMM CHECKED MOW	0 20 10 40 HORIZONTAL SCALE IN FEET



47 / 127	**STA-30-(6.70) (11.57)**	**MAINTENANCE OF TRAFFIC - PHASE 2** **STA. 447+30 TO STA. 506+00**	CALCULATED SMM CHECKED MOW	0 20 40 HORIZONTAL SCALE IN FEET



48 / 127	**STA-30-(6.70) (11.57)**	**MAINTENANCE OF TRAFFIC - PHASE 2** **STA. 506+00 TO STA. 517+00**	CALCULATED SMM CHECKED MOW	0 20 10 40 HORIZONTAL SCALE IN FEET

DRUMS SPACED @ 40' C/C

MATCH LINE STA. 517+00

MATCH LINE STA. 522+50

MATCH LINE STA. 522+50

MATCH LINE STA. 528+00

PCC Sta. 521+83.39

PR CB NO. 8

PT Sta. 523+83.39

PI Sta. 524+83.41

16'-0"

11'-0"

2'-0"
1'-0"
1'-0"
4'-0"
6'-0"
WB LANE
EB LANE

SECTION A-A
STA. 526+00

W1-6R-96

W1-4R-48
W13-1-24
55 M.P.H.

R
TRAN
WZYEL
PCBGS
TAN

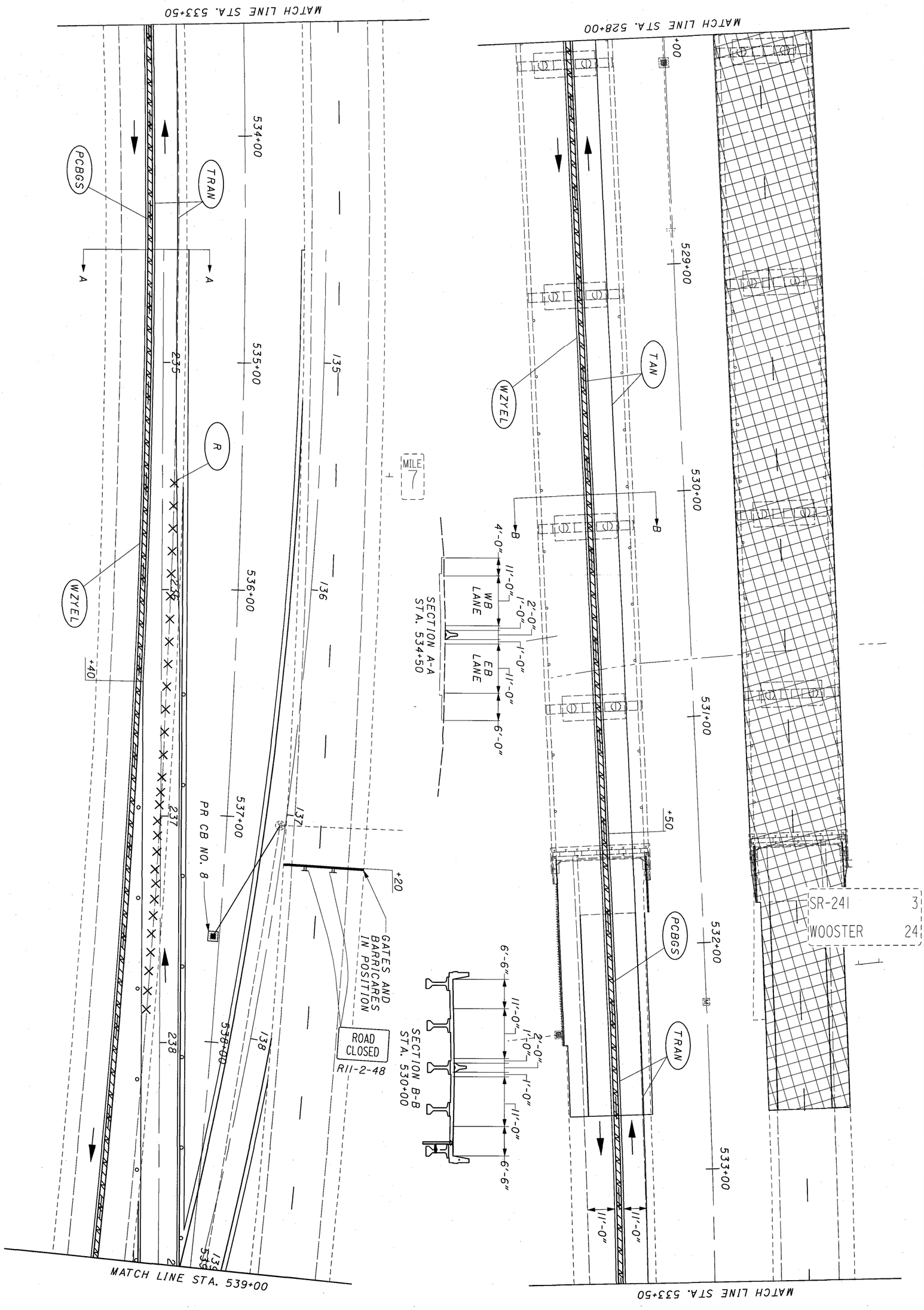
HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED SMM
CHECKED MOW

MAINTENANCE OF TRAFFIC - PHASE 2
STA. 517+00 TO STA. 528+00

STA-30-(6.70)
(11.57)

49
127



50 / 127	**STA-30-(6.70) (11.57)**	**MAINTENANCE OF TRAFFIC - PHASE 2** **STA. 528+00 TO STA. 539+00**	CALCULATED SMM CHECKED MOW	0 20 10 40 HORIZONTAL SCALE IN FEET

W1-6L-96

+25

+50

TRAN

DRUMS SPACED
@ 40' C/C

R

244

243

242

16'-0"

241

MATCH LINE STA. 539+00

+00

39

140

240

541+00

542+00

543+00

544+00

MATCH LINE STA. 544+50

141

142

143

+22

PCBGS

WZYEL

TAPERED
END PIECE

DRUMS SPACED
@ 40/ C/C

VEHICLES OVER 4 TONS EMPTY NON COM BUSES

SPEED LIMIT 55 MPH

R

TRAN

DRUMS SPACED
@ 40/ C/C

EMERGENCY AND AUTHORIZED VEHICLES ONLY

+17

14.0'

DRUMS SPACED
@ 40' C/C

DRUMS SPACED
@ 40/ C/C

MATCH LINE STA. 544+50

545+00

546+00

547+00

548+00

549+00

550

DELINEATOR

DELINEATOR

DELINEATOR

DELINEATOR

DELINEATOR

DELINEATOR

13.6'

11.9'

+47

DRUMS SPACED
@ 40/ C/C

EMERGENCY AND AUTHORIZED VEHICLES ONLY

Navarre
NEXT RIGHT

INTERMODAL TERMINAL

NEGMODAL

END
ROAD WORK
G20-2-48
STA. 549+92, RT.

MATCH LINE STA. 550+00

N

0 10 20 40
HORIZONTAL
SCALE IN FEET

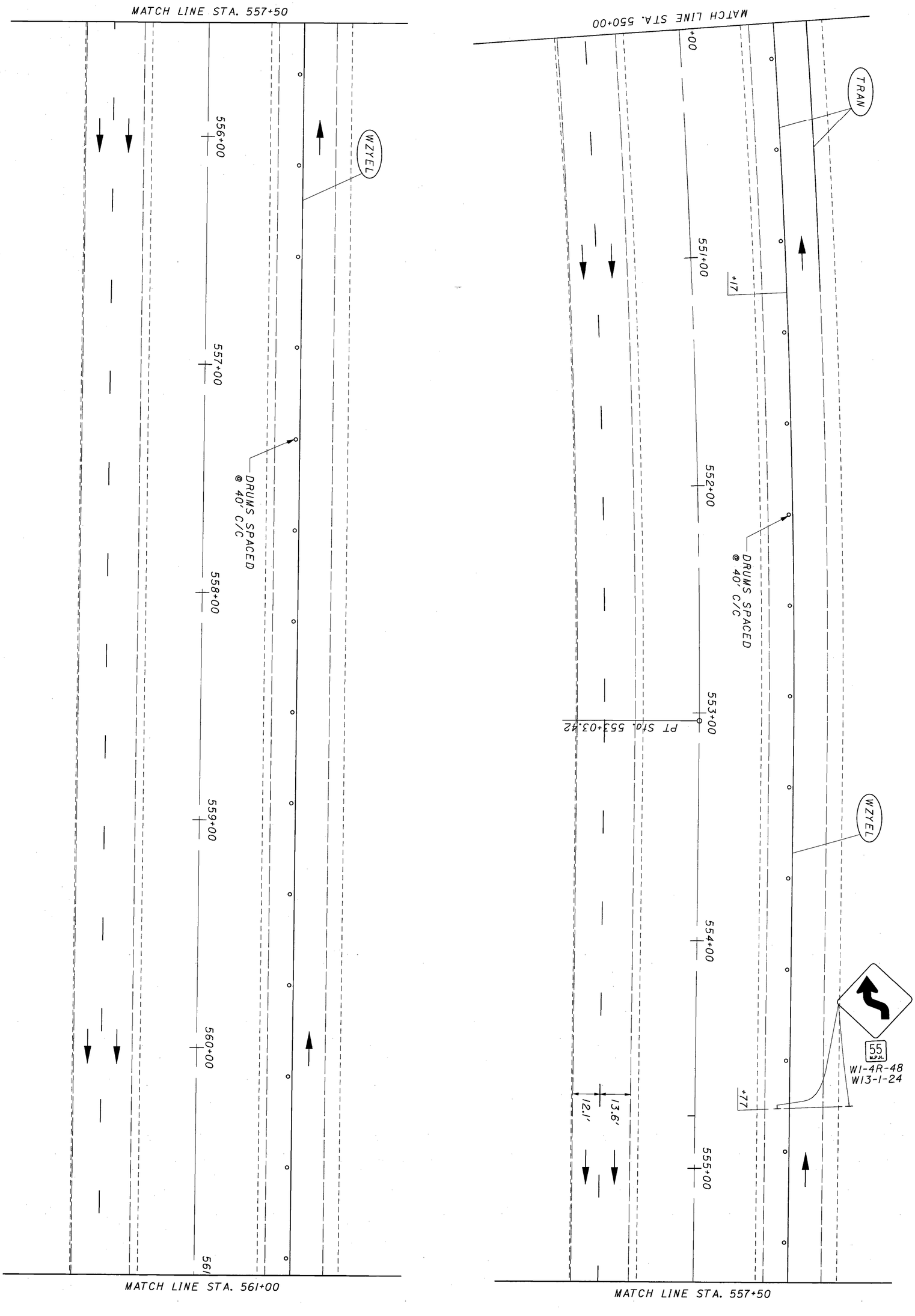
CALCULATED SMM

CHECKED MOW

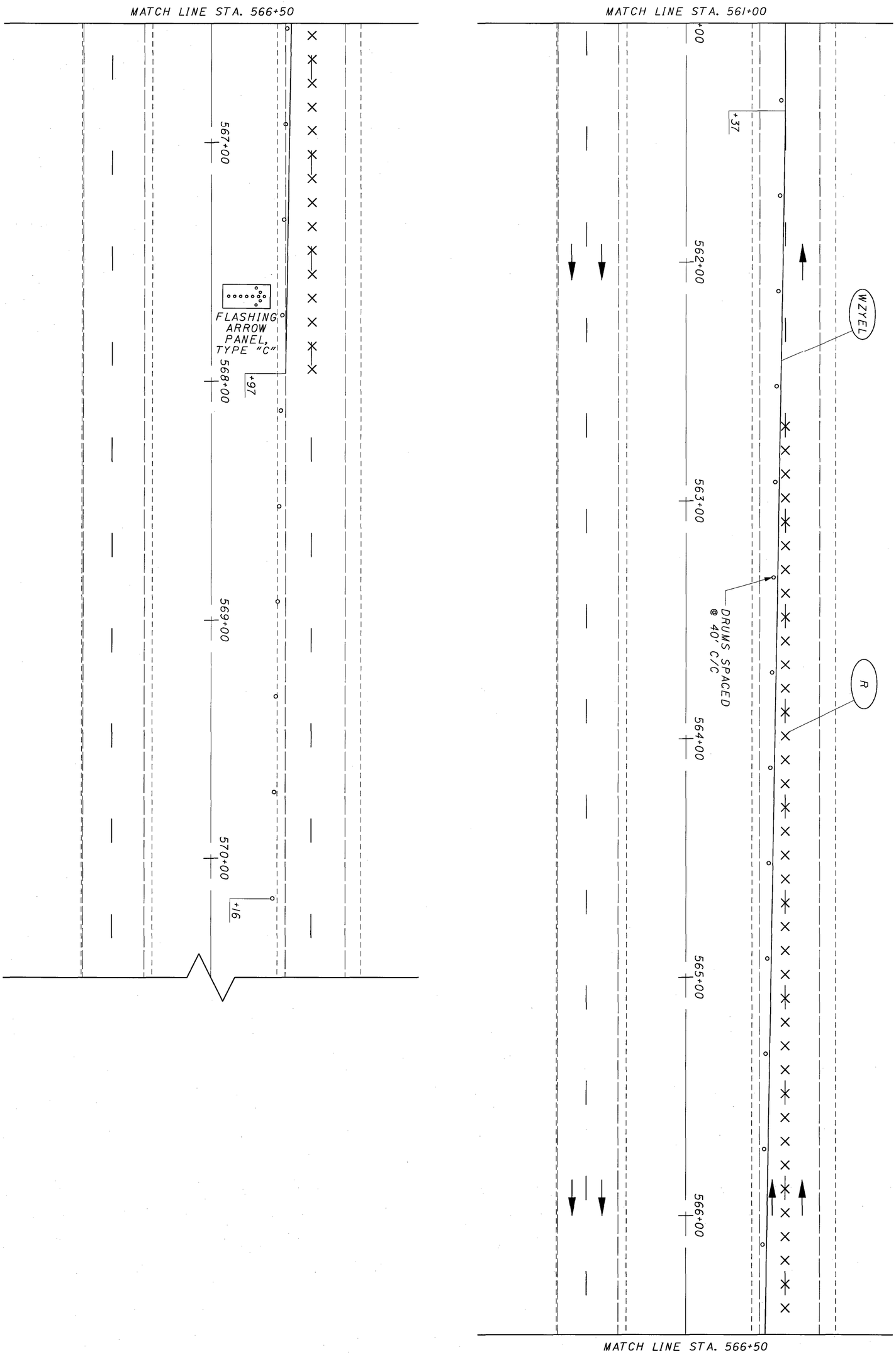
MAINTENANCE OF TRAFFIC - PHASE 2
STA. 539+00 TO STA. 550+00

STA-30-(6.70)
(11.57)

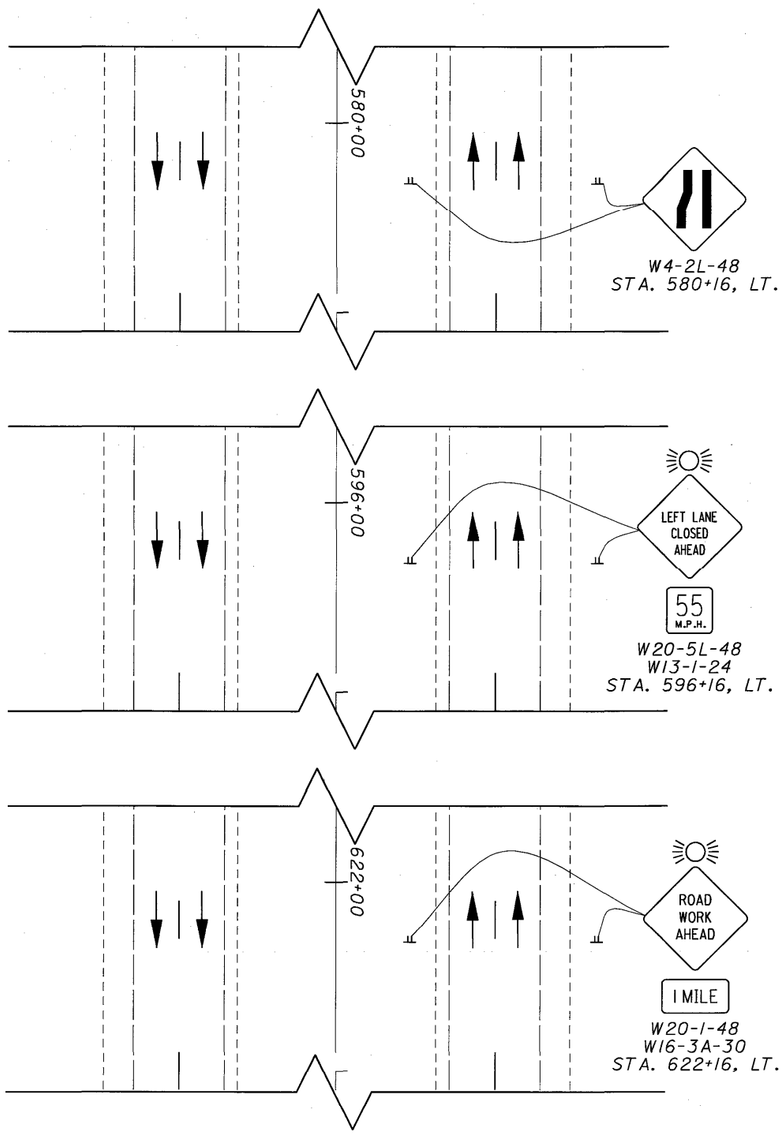
51
127



52 / 127	STA-30-(6.70) (11.57)	MAINTENANCE OF TRAFFIC - PHASE 2 STA. 550+00 TO STA. 561+00	CALCULATED SMM CHECKED MOW	0 20 10 40 HORIZONTAL SCALE IN FEET



53 / 127	STA-30-(6.70) (11.57)	MAINTENANCE OF TRAFFIC - PHASE 2 STA. 561+00 TO STA. 566+00	CALCULATED SMM CHECKED MOW	0 20 40 HORIZONTAL SCALE IN FEET



54 / 127	STA-30-(6.70) (11.57)	MAINTENANCE OF TRAFFIC - PHASE 2 STA. 579+80 TO STA. 622+70	CALCULATED SMM CHECKED MOW	0 10 20 40 HORIZONTAL SCALE IN FEET

REF. NO.	STATION		614			622
			BARRIER REFLECTOR, TYPE B	OBJECT MARKER, ONE-WAY	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)	PORTABLE CONCRETE BARRIER, 32"
	FROM	TO	EACH	EACH	EACH	FEET
PCB-1	781+85	785+45	7	7		340
WZIA-1	781+85				1	
PCB-2	784+65	788+25	7	7		340
WZIA-2	788+25				1	
PCB-3	782+85	785+25	5	5		220
WZIA-3	782+85				1	
PCB-4	784+86	787+26	5	5		220
WZIA-4	787+26				1	
PCB-5			24	24		1120
WZIA-5					4	
GRAND TOTAL CARRIED TO GENERAL SUMMARY			48	48	8	2240

PCB-5 AND WZIA-5 ARE CONTINGENCY QUANTITIES FOR USE AS DIRECTED BY THE ENGINEER FOR BRIDGE PAINTING.

NOTE: TRAFFIC DURING BRIDGE PAINTING SHALL BE MAINTAINED IN STRICT ACCORDANCE WITH ODOT SCD MT-95.40. CONTINGENCY QUANTITIES FOR PROTABLE CONCRETE BARRIER AND WORK ZONE IMPACT ATTENUATORS ARE INCLUDED IN THE SUBSUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

LEGEND

- WORK ZONE
- WORK ZONE IMPACT ATTENUATOR
- PORTABLE CONCRETE BARRIER, 32"
- TYPE "A" WARNING LIGHT
- DRUM, SPACED @ 40' C/C (TYP.)
- HIGH LEVEL SAFETY FLAGS

EASTBOUND SIGNS
PHASE I

SHOULDER WORK AHEAD
W21-H5-60 (60"x60")
STA. 756+85 LT. & RT.

SHOULDER CLOSED
NEXT 400 FT
W21-5a-60 (60"x60")
W16-4-30 (30"x24")
STA. 776+85 LT. & RT.

SHOULDER CLOSED AHEAD
1000 FT
W21-5b-60 (60"x60")
W16-2a-30 (30"x16")
STA. 771+85 LT. & RT.

END ROAD WORK
G20-2-60 (60"x30")
STA. 792+45 LT. & RT.

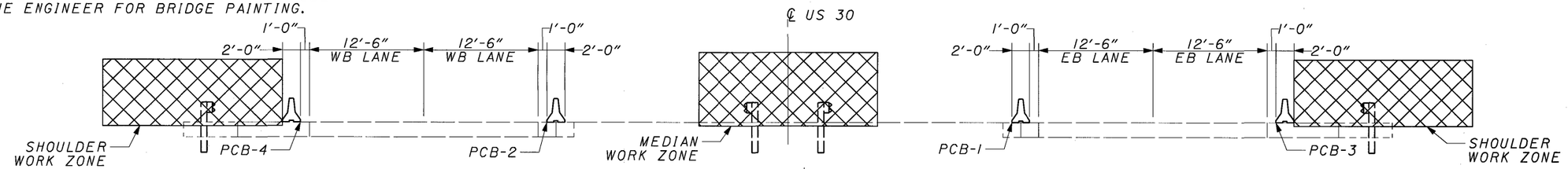
WESTBOUND SIGNS
PHASE I

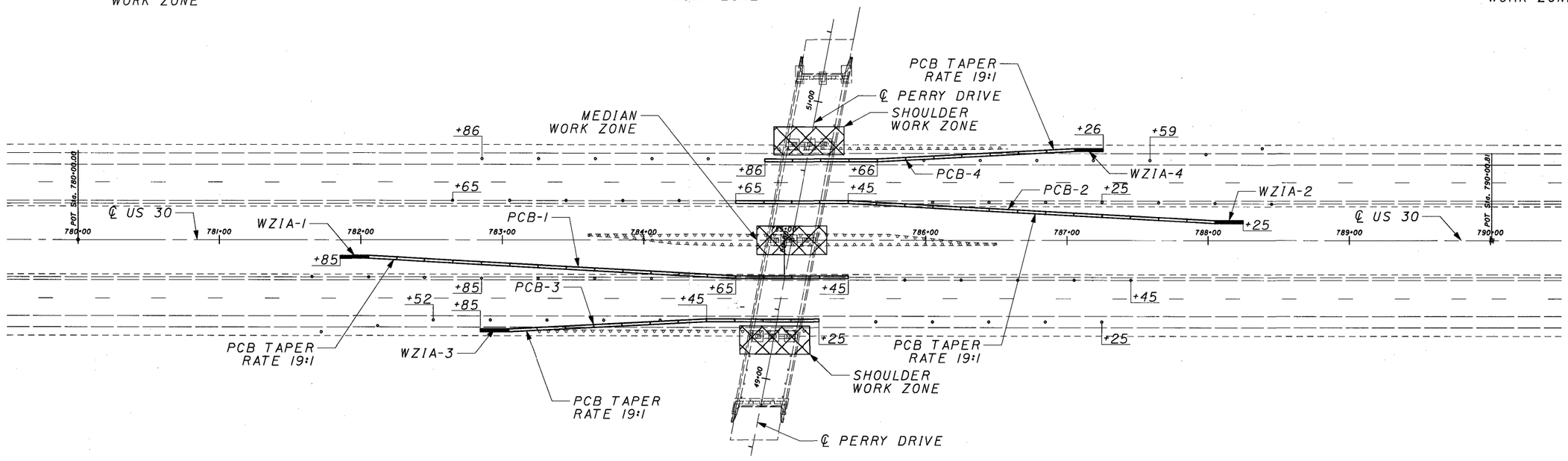
SHOULDER WORK AHEAD
W21-H5-60 (60"x60")
STA. 813+25 LT. & RT.

SHOULDER CLOSED
NEXT 400 FT
W21-5a-60 (60"x60")
W16-4-30 (30"x24")
STA. 793+25 LT. & RT.

SHOULDER CLOSED AHEAD
1000 FT
W21-5b-60 (60"x60")
W16-2a-30 (30"x16")
STA. 798+25 LT. & RT.

END ROAD WORK
G20-2-60 (60"x30")
STA. 777+65 LT. & RT.



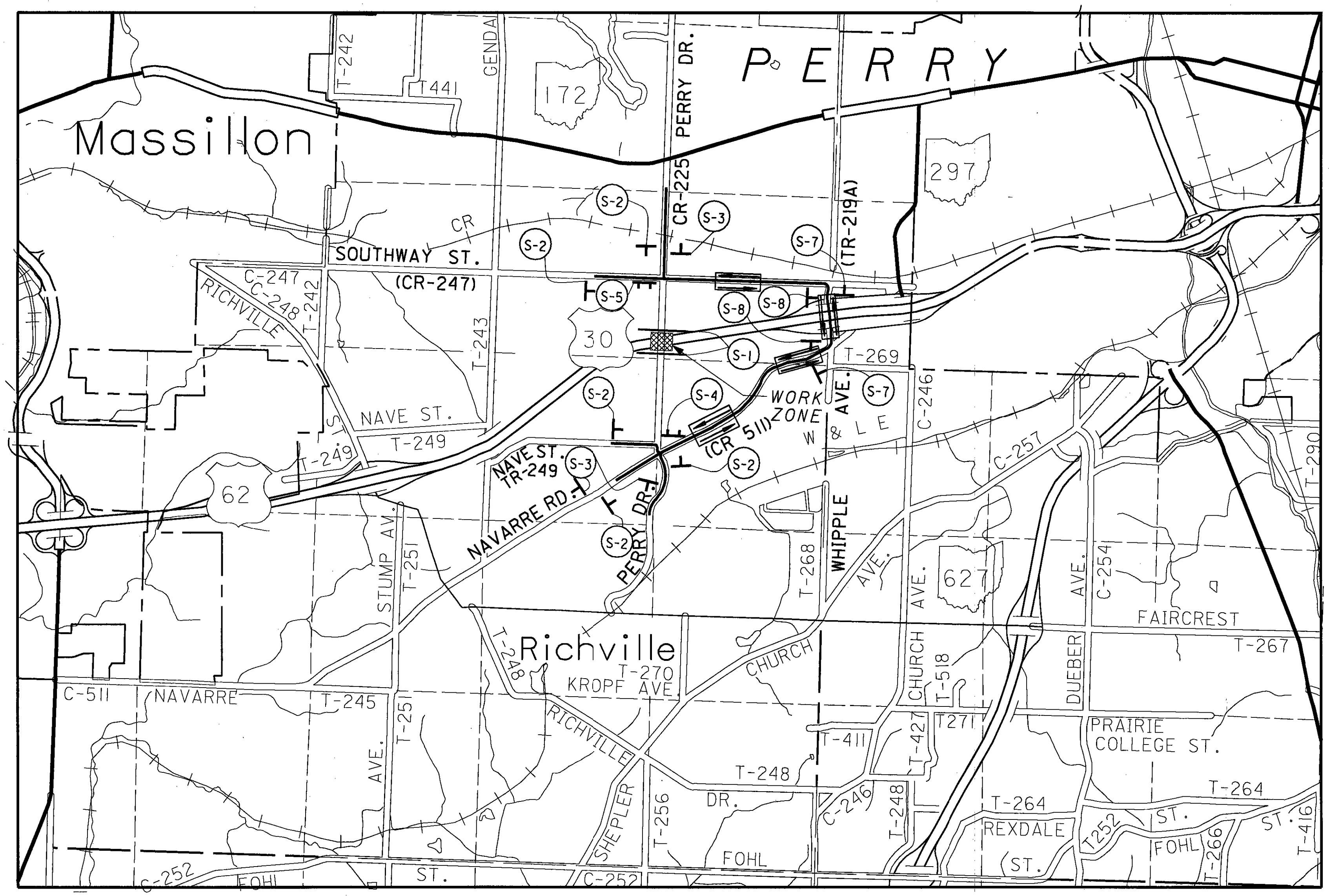


MAINTAINING TRAFFIC PLAN US-30
MEDIAN AND SHOULDER WORK ZONES

HORIZONTAL SCALE IN FEET
0 20 40 80

CALCULATED SMM
CHECKED JEP

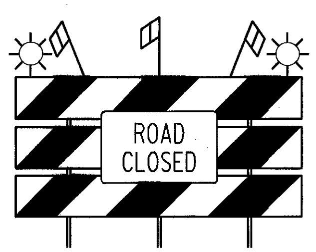
STA-30-(6.70)(11.57)



LEGEND

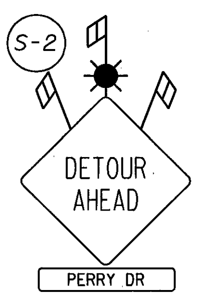
- DIRECTION OF DETOURED TRAFFIC ARROWS
- TYPE III ROAD CLOSED BARRICADE
- TYPE III WING BARRICADE
- SINGLE GROUND MOUNTED POST SUPPORT
- HIGH LEVEL SAFETY FLAG
- TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT
- TYPE "B" HIGH INTENSITY FLASHING WARNING LIGHT

S-1



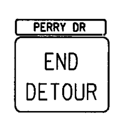
R11-2-48
TYPE III FIXED
GATES AND BARRICADES

S-2



W20-2-36
D-3-30

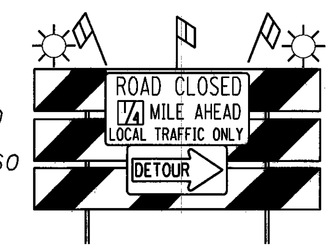
S-3



D-3-30
M4-8a-30

S-4

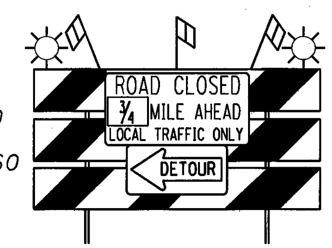
R11-3a-60
M4-10-48
OC-SPEC-60



TYPE III WING BARRICADE

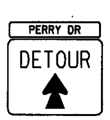
S-5

R11-3a-60
M4-10-48
OC-SPEC-60



TYPE III WING BARRICADE

S-6



D-3-30
M4-9C-30

S-7

D-3-30
M4-9L-30

S-8

D-3-30
M4-9R-30

NOT TO SCALE

CALCULATED MGW 1-29-05 CHECKED SMM 1-29-05

PERRY DR. (CR 225) DETOUR

STA-30-(6.70)(11.57)

SHEET NUMBER												OFFICE CALCS	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
7	8	60	63	64	65	66	73	79	121									
																	ROADWAY	
LUMP													201	11000	LUMP		CLEARING AND GRUBBING	
								200				3771	202	23010	3971	SQ YD	PAVEMENT REMOVED, ASPHALT	
												599	202	23500	599	SQ YD	WEARING COURSE REMOVED	
					58								202	32000	58	FT	CURB REMOVED	
					8								202	35100	8	FT	PIPE REMOVED, 24" AND UNDER	
				10									202	35200	10	FT	PIPE REMOVED, OVER 24"	
		1250	337.5		1256.25								202	38000	2843.75	FT	GUARDRAIL REMOVED	
			75		75								202	38300	150	FT	GUARDRAIL REMOVED, BARRIER DESIGN	
		1			1								202	58100	2	EACH	CATCH BASIN REMOVED	
		263											202	75000	263	FT	FENCE REMOVED	
						1036	502						203	10000	1538	CU YD	EXCAVATION	
						154	70						203	20001	224	CU YD	EMBANKMENT, AS PER PLAN	8
								346				4691	204	10000	5037	SQ YD	SUBGRADE COMPACTION	
												3	204	45000	3	HOUR	PROOF ROLLING	
		9			10								209	15000	19	STATION	RESHAPING UNDER GUARDRAIL	
												13	209	60200	13	STATION	LINEAR GRADING	
									1				604	40500	1	EACH	REFERENCE MONUMENT	
		537.5	287.5		1287.5								606	13000	2112.5	FT	GUARDRAIL, TYPE 5	
		400											606	15500	400	FT	GUARDRAIL, BARRIER DESIGN, TYPE 5	
		1	2		2								606	22000	5	EACH	ANCHOR ASSEMBLY, TYPE B-98	
		3											606	22010	3	EACH	ANCHOR ASSEMBLY, TYPE E-98	
		4			1								606	26500	5	EACH	ANCHOR ASSEMBLY, TYPE T	
		4	2		2								606	35000	8	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 1	
		2			1								606	35100	3	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 2	
		2											606	60010	2	EACH	IMPACT ATTENUATOR, TYPE 1-98 (BIDIRECTIONAL)	
		144											607	15000	144	FT	FENCE, TYPE 47	
		68											622	10160	68	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D	
		2											622	25000	2	EACH	CONCRETE BARRIER END SECTION, TYPE D	
		1											SPECIAL	69050100	1	EACH	MAILBOX SUPPORT SYSTEM, SINGLE	7
		1											SPECIAL	69050200	1	EACH	MAILBOX SUPPORT SYSTEM, DOUBLE	7
																	EROSION CONTROL	
		3		9	3								601	32104	15	CU YD	ROCK CHANNEL PROTECTION, TYPE B WITH FABRIC FILTER	
	150												653	10000	150	CU YD	TOPSOIL FURNISHED AND PLACED	
	3886												659	10000	3886	SQ YD	SEEDING AND MULCHING	
	201												659	14000	201	SQ YD	REPAIR SEEDING AND MULCHING	
	201												659	15000	201	SQ YD	INTER-SEEDING	
	0.57												659	20000	0.57	TON	COMMERCIAL FERTILIZER	
	0.84												659	31000	0.84	ACRE	LIME	
	23												659	35000	23	M GAL	WATER	
	6												659	40000	6	M SQ FT	MOWING	
		29											660	20000	29	SQ YD	SODDING REINFORCED	
			134										670	00700	134	SQ YD	DITCH EROSION PROTECTION	
													832	15000	LUMP		STORM WATER POLLUTION PREVENTION PLAN	
													832	30000	18155	EACH	EROSION CONTROL	

CALCULATED SJS CHECKED JEP

GENERAL SUMMARY

STA-30-(6.70)(11.57)

SHEET NUMBER												OFFICE CALCS	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
8	60	63	64	65		79		80	100	118								
																	DRAINAGE	
	0.2		0.6	0.3									602	20000	1.1	CU YD	CONCRETE MASONRY	
	94	126	144	138									603	00410	502	FT	4" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	
50													603	01400	50	FT	6" CONDUIT, TYPE E	
50													603	01500	50	FT	6" CONDUIT, TYPE F	
60													603	04400	60	FT	12" CONDUIT, TYPE B	
	80												603	04600	80	FT	12" CONDUIT, TYPE C	
				97									603	06100	97	FT	15" CONDUIT, TYPE C	
			10										603	13600	10	FT	30" CONDUIT, TYPE C, 706.02	
				2									604	00800	2	EACH	CATCH BASIN, NO. 3A	
	1												604	01600	1	EACH	CATCH BASIN, NO. 5	
	1												604	04500	1	EACH	CATCH BASIN, NO. 2-2B	
			1										604	09500	1	EACH	CATCH BASIN, RECONSTRUCTED TO GRADE	
	1			2									604	36600	3	EACH	PRECAST REINFORCED CONCRETE OUTLET	
		472		182									605	05100	654	FT	4" SHALLOW PIPE UNDERDRAINS	
			126										605	05200	126	FT	4" UNCLASSIFIED PIPE UNDERDRAINS	
	473	944		362									605	06000	1779	FT	4" BASE PIPE UNDERDRAINS	
																	PAVEMENT	
												1018	302	46000	1018	CU YD	ASPHALT CONCRETE BASE, PG64-22	
						62						773	304	20001	835	CU YD	AGGREGATE BASE, AS PER PLAN	8
												46	407	10000	46	GALLON	TACK COAT	
												173	407	14000	173	GALLON	TACK COAT FOR INTERMEDIATE COURSE	
						109						1585	408	10000	1694	GALLON	PRIME COAT	
												211	448	46040	211	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-28	
												173	448	47010	173	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-28	
												60	448	46061	60	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, UNDER GUARDRAIL, PG64-22, AS PER PLAN	7
						16							448	48020	16	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)	
				58									609	24510	58	FT	CURB, TYPE 4C	
												10	617	10100	10	CU YD	COMPACTED AGGREGATE	
												171	617	20000	171	SQ YD	SHOULDER PREPARATION	
																	TRAFFIC CONTROL	
									1050	350			625	25400	1400	FT	CONDUIT, 2", 725.04	
									4	2			625	29900	6	EACH	JUNCTION BOX (6"x6"x4")	
									4	2			625	30706	6	EACH	PULLBOX, 725.08, 24"	
								16					626	00100	16	EACH	BARRIER REFLECTOR, TYPE A	
								2					626	00200	2	EACH	BARRIER REFLECTOR, TYPE B	
								6					626	00300	6	EACH	BARRIER REFLECTOR, TYPE A2	
								6					626	00400	6	EACH	BARRIER REFLECTOR, TYPE B2	
								84					630	03100	84	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
								23					630	80100	23	SQ FT	SIGN, FLAT SHEET	
								7					630	84900	7	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
								6					630	86002	6	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
								0.2					646	10000	0.2	MILE	EDGE LINE	
								0.1					646	10200	0.1	MILE	CENTER LINE	

CALCULATED SJS
CHECKED JEP

GENERAL SUMMARY

STA-30-(6.70)(11.57)

SHEET NUMBER											ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
	9	10	11	14	55											
															STRUCTURES (OVER 20')	
															FOR STRUCTURE STA-30-0670 L&R GENERAL SUMMARY	83
															FOR STRUCTURE STA-30-1157 GENERAL SUMMARY	104
															MAINTENANCE OF TRAFFIC	
			50								204	13000	50	CU YD	EXCAVATION OF SUBGRADE	
			50								204	21000	50	CU YD	GRANULAR EMBANKMENT	
	50										410	12000	50	CU YD	TRAFFIC COMPACTED SURFACE, TYPE A OR B	
				154							411	10000	154	CU YD	STABILIZED CRUSHED AGGREGATE	
	120										614	11100	120	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR	
					8						614	12336	8	EACH	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)	
	LUMP										614	12420	LUMP		DETOUR SIGNING	
		12									614	12470	12	EACH	WORK ZONE SPEED LIMIT SIGN	
		12									614	12484	12	EACH	WORK ZONE INCREASED PENALITIES SIGN	
			2								614	12756	2	EACH	WORK ZONE CROSSOVER LIGHTING SYSTEM	
				12							614	12800	12	EACH	WORK ZONE RAISED PAVEMENT MARKERS	
				696							614	12801	696	EACH	WORK ZONE RAISED PAVEMENT MARKERS, AS PER PLAN	11
	50										614	13000	50	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
				224	48						614	13300	272	EACH	BARRIER REFLECTOR, TYPE B	
				120	48						614	13350	168	EACH	OBJECT MARKER, ONE WAY	
				104							614	13360	104	EACH	OBJECT MARKER, TWO WAY	
			12								614	18601	12	SIGN MNTH	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	11
				1.1							614	20000	1.1	MILE	WORK ZONE LANE LINE, CLASS I	
				8							614	22000	8	MILE	WORK ZONE EDGE LINE, CLASS I	
				3421							614	23000	3421	FT	WORK ZONE CHANNELIZING LINE, CLASS I	
			LUMP								615	10000	LUMP		ROADS FOR MAINTAINING TRAFFIC, AS PER PLAN	11
				5911							615	25000	5911	SQ YD	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B	
	10										616	10000	10	M GAL	WATER	
				5940	2240						622	40020	8180	FT	PORTABLE CONCRETE BARRIER, 32"	
				5240							622	40021	5240	FT	PORTABLE CONCRETE BARRIER, 32", AS PER PLAN	9
											SPECIAL	10000300	LUMP		PREMIUM ON RAILROADS' PROTECTIVE PUBLIC LIABILITY AND PROPERTY DAMAGE LIABILITY INSURANCE	
											614	11000	LUMP		MAINTAINING TRAFFIC	
											619	16020	21	MONTH	FIELD OFFICE, TYPE C	
											623	10000	LUMP		CONSTRUCTION LAYOUT STAKES	
											624	10000	LUMP		MOBILIZATION	

CALCULATED SJS
CHECKED JEP

GENERAL SUMMARY

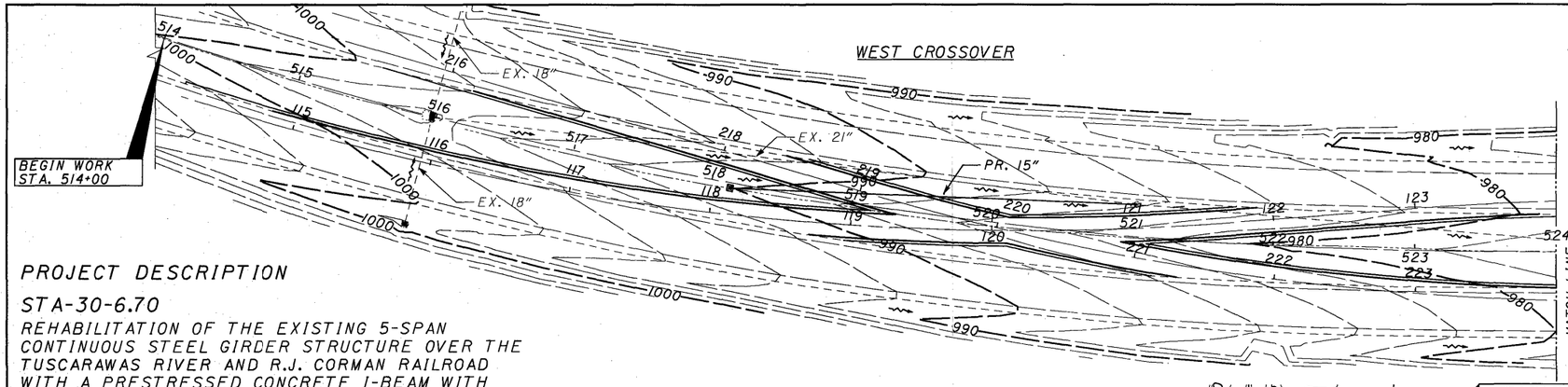
STA-30-(6.70)(11.57)

REF NO.	SHEET NO.	STATION FROM	STATION TO	SIDE	202 CATCH BASIN REMOVED EACH	202 FENCE REMOVED FT	202 GUARDRAIL REMOVED FT	209 RESHAPING UNDER GUARDRAIL STA	601 ROCK CHANNEL PROTECTION, TYPE B WITH FABRIC FILTER CU YD	602 CONCRETE MASONRY CU YD	603 4" CONDUIT, TYPE F, FOR UNDERDRAIN OUTLETS FT	603 12" CONDUIT, TYPE C FT	604 CATCH BASIN No. 5 EACH	604 CATCH BASIN No. 2-2B EACH	604 PRECAST REINFORCED CONCRETE OUTLET EACH	605 4" BASE PIPE UNDERDRAIN FT	606 GUARDRAIL, TYPE 5 FT	606 GUARDRAIL BARRIER DESIGN, TYPE 5 EACH	606 ANCHOR ASSEMBLY, TYPE B-98 EACH	606 ANCHOR ASSEMBLY, TYPE E-98 EACH	606 ANCHOR ASSEMBLY, TYPE T EACH	606 IMPACT ATTENUATER, TYPE I-98 (BIDIRECTIONAL) EACH	606 BRIDGE TERMINAL ASSEMBLY, TYPE 1 EACH	606 BRIDGE TERMINAL ASSEMBLY, TYPE 2 EACH	607 FENCE, TYPE 47 FT	622 CONCRETE BARRIER, SINGLE SLOPE, TYPE D FT	622 CONCRETE BARRIER, END SECTION, TYPE D EACH	SPECIAL MAILBOX SUPPORT SYSTEM, SINGLE EACH	SPECIAL MAILBOX SUPPORT SYSTEM, DOUBLE EACH	660 SODDING REINFORCED SQ YD
B1	71	784+63.20	785+11.20	RT.																						34	1			
D1	71	47+85.00	48+01.00	LT.								16		1																
F1	71	46+63.38	48+76.39	LT.																					32					
F2	71	48+77.09	48+84.14	RT.																					24					
G1	71	47+65.33	48+71.35	RT.													68.75		1				1							
G2	71	48+30.33	48+64.83	LT.													25				1			1						
G3	71	783+09.05	784+65.30	RT.				1.6									106.25			1			1							
G4	71	782+55.50	784+86.50	RT.				2.4										200				1								
G5	71	784+86.50	785+36.50	RT.				0.5									37.5				1									
G6	71	784+74.00	785+24.00	LT.				0.5									37.5				1									
G7	71	785+24.00	787+55.00	LT.				2.4										200				1								
M1	71	47+82.00		LT.																								1		
R1	71	47+70.24	48+72.48	RT.			100																							
R2	71	47+99.03		LT.	1																									
R3	71	48+41.11	48+65+92	LT.			25																							
R4	71	48+63.38	48+76.39	LT.		32																								
R5	71	783+24.47	785+15.59	RT.			187.5																							
R6	71	783+60.47	786+50.45	RT.			287.5																							
R7	71	783+60.47	786+50.45	LT.			287.5																							
R8	71	48+77.09	48+84.14	RT.		24																								
R9	71	47+73.20	48+76.71	RT.		119																								
U1	71	47+75.00	48+52.02	LT.												77														
U2	71	47+75.00	48+58.42	RT.												84														
U3	71	47+85.00	47+85.00	LT.&RT.							43																			
B2	72	785+01.92	785+49.97	LT.																						34	1			
D2	72	50+88.63	51+52.28	RT.						0.21		64	1																	
E1	72	51+51.60	51+60.60	LT.																									9	
E2	72	51+46.98	51+55.98	RT.																									20	
E3	72	50+80.63	50+88.63	RT.					3																					
F3	72	51+15.98	51+37.41	LT.																					31					
F4	72	51+22.68	51+55.32	RT.																					57					
G8	72	785+47.81	786+79.06	LT.				1.3									81.25			1			1							
G9	72	51+28.65	52+22.29	LT.													43.75			1			1							
G10	72	51+35.06	52+84.62	RT.													137.5				1			1						
M2	72	52+75.64		LT.																								1		
U4	72	51+41.60	53+00.00	LT.												159														
U5	72	51+48.00	53+00.00	RT.												153														
U6	72	53+00.00	53+00.00	LT.&RT.							51				1															
R10	72	784+94.29	786+58.17	LT.			162.5																							
R11	72	51+27.06	52+04.88	LT.			75																							
R12	72	51+34.53	52+61.49	RT.			125																							
R13	72	51+15.98	51+37.41	LT.		31																								
R14	72	51+22.68	51+55.32	RT.		57																								
TOTALS CARRIED TO GENERAL SUMMARY					1	263	1250	9	3	0.2	94	80	1	1	1	473	537.5	400	1	3	4	2	4	2	144	68	2	1	1	29

CALCULATED SJS
CHECKED JEP

SUBSUMMARY - PERRY DR.

STA-30-(6.70)(11.57)



MASSILLON, OHIO QUADRANGLE (USGS)
MAP NO. N4045 W8130/7.5

LONGITUDE: W81°32'03" (*)
LATITUDE: N40°45'29" (*)

(*) LONGITUDE AND LATITUDE TO APPROXIMATE CENTER OF PROJECT

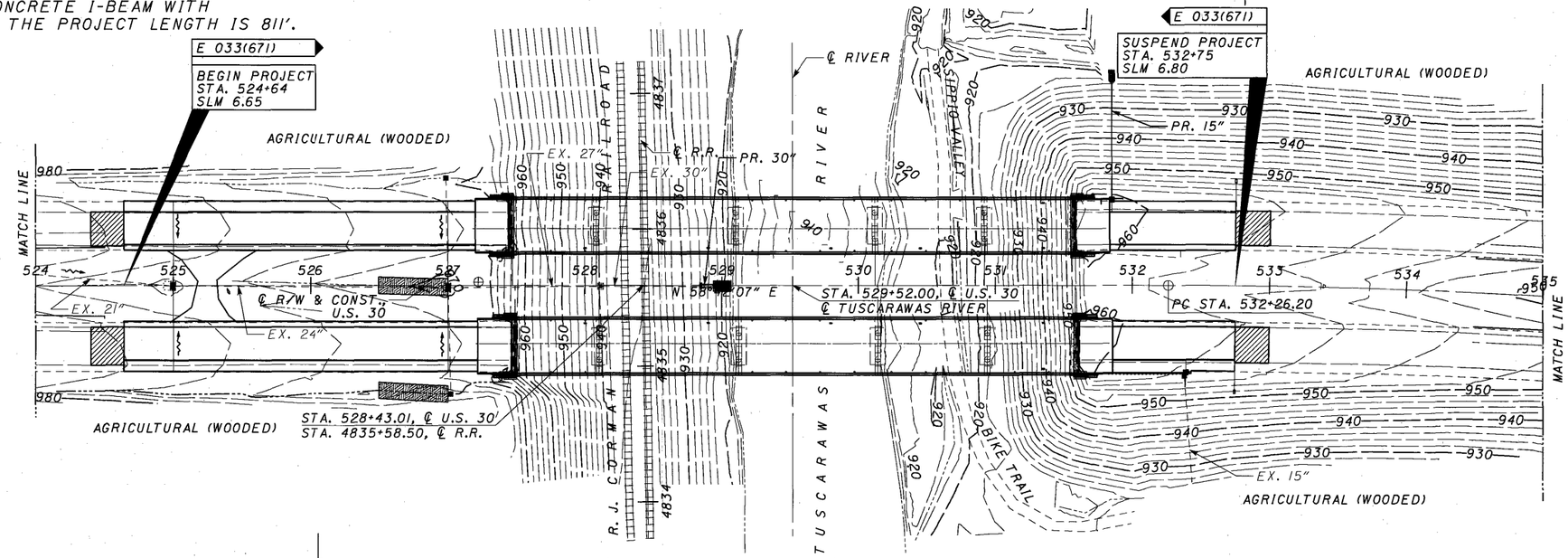
STARK COUNTY SOIL AND WATER CONSERVATION DISTRICT MAP NO. 66.

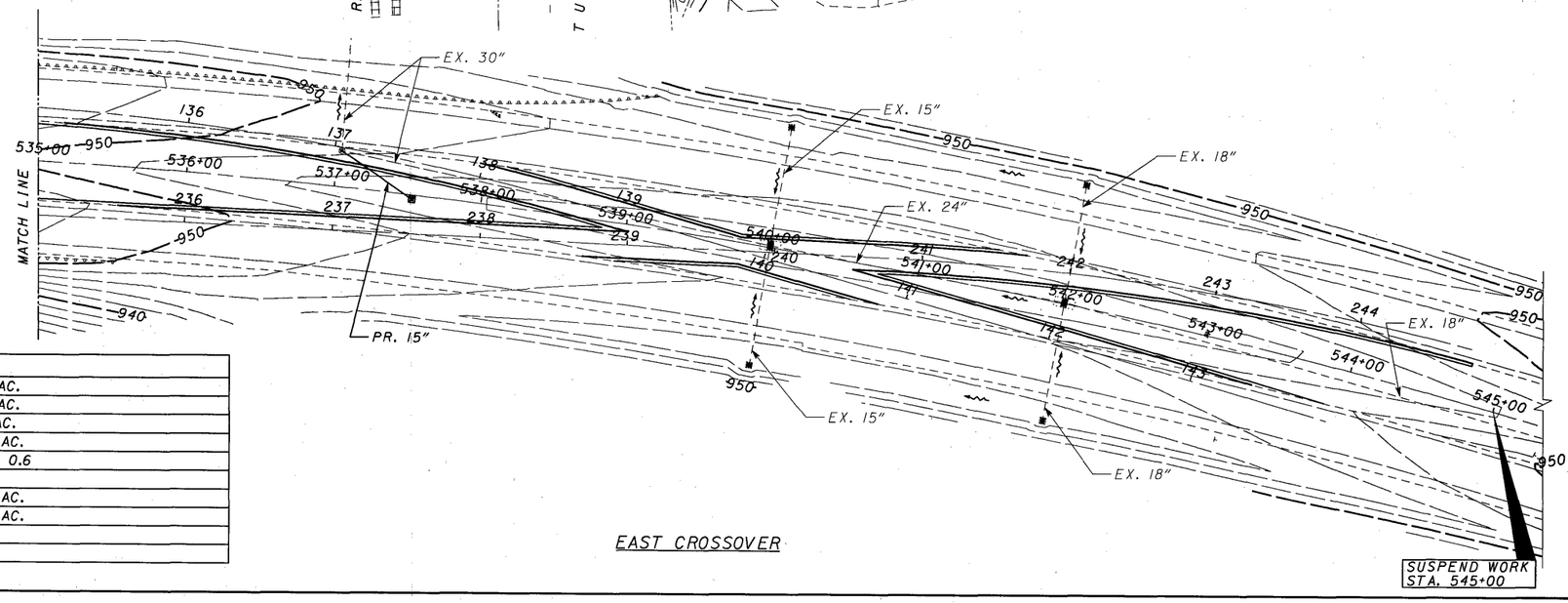
OEPA IS CURRENTLY PREPARING A TMDL REPORT FOR THE TUSCARAWAS RIVER. THIS PROJECT IS IN HYDROLOGIC UNIT 05040001-090 (TUSCARAWAS RIVER: SIPPO CREEK TO SUGAR CREEK)

PROJECT DESCRIPTION

STA-30-6.70

REHABILITATION OF THE EXISTING 5-SPAN CONTINUOUS STEEL GIRDER STRUCTURE OVER THE TUSCARAWAS RIVER AND R.J. CORMAN RAILROAD WITH A PRESTRESSED CONCRETE I-BEAM WITH MINIMAL ROADWAY WORK. THE PROJECT LENGTH IS 811'.





EAST CROSSOVER

PROJECT DATA	
TOTAL PROJECT AREA (RIGHT-OF-WAY)	4.12 AC.
PROJECT EARTH DISTURBED AREA	1.86 AC.
ESTIMATED CONTRACTOR EARTH DISTURBED AREA	1.61 AC.
NOTICE OF INTENT (NOI) EARTH DISTURBED AREA	4.90 AC.
RUNOFF COEFFICIENT: PRE-CONSTRUCTION SITE	0.3 - 0.6
POST-CONSTRUCTION SITE	0.7
ESTIMATED IMPERVIOUS AREA: PRE-CONSTRUCTION SITE	0.73 AC.
POST-CONSTRUCTION SITE	0.73 AC.
IMMEDIATE RECEIVING WATERS: TUSCARAWAS RIVER	
SUBSEQUENT RECEIVING WATERS: MUSKINGUM RIVER	

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED RJS
CHECKED SJS

PROJECT SITE PLAN
RAILROAD & TUSCARAWAS RIVER

STA-30-(6.70)(11.57)

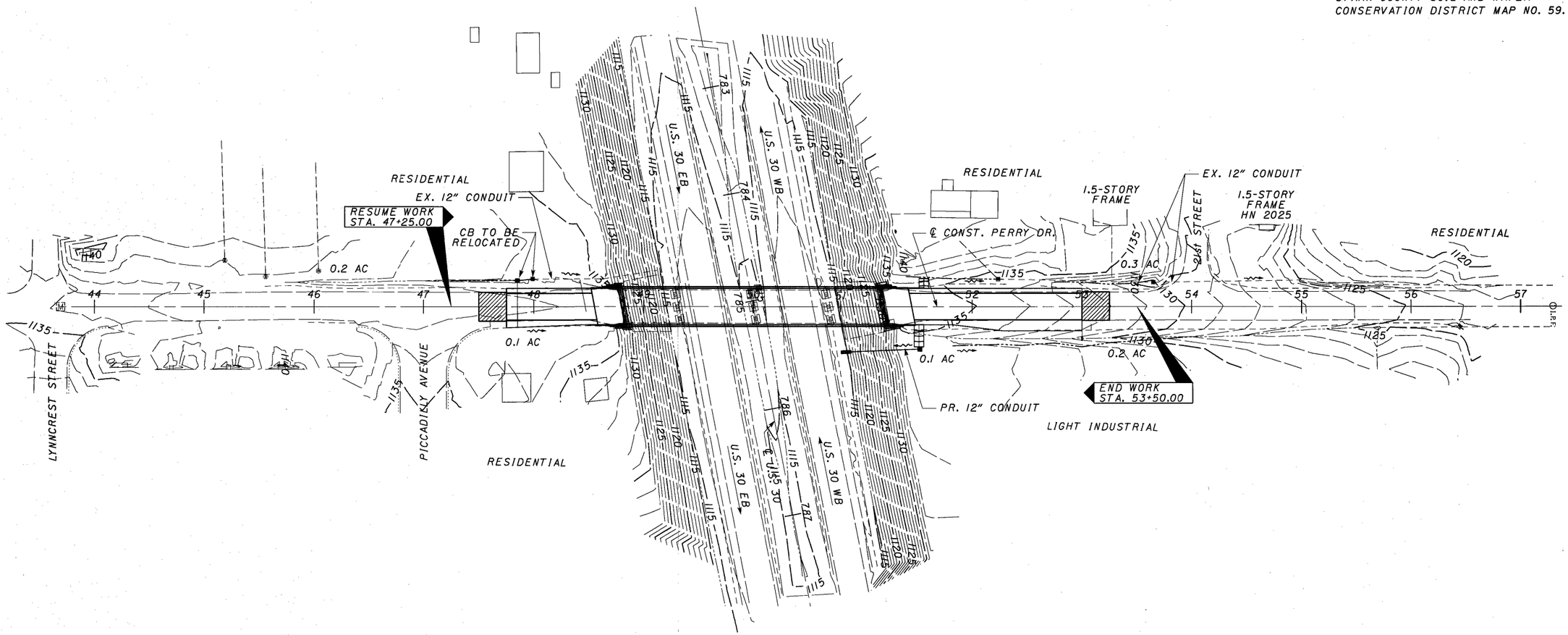
PROJECT DATA	
TOTAL PROJECT AREA (RIGHT-OF-WAY)	1.41 AC.
PROJECT EARTH DISTURBED AREA	1.26 AC.
ESTIMATED CONTRACTOR EARTH DISTURBED AREA	1.28 AC.
NOTICE OF INTENT (NOI) EARTH DISTURBED AREA	4.90 AC.
RUNOFF COEFFICIENT: PRE-CONSTRUCTION SITE	0.3 - 0.6
POST-CONSTRUCTION SITE	0.7
ESTIMATED IMPERVIOUS AREA: PRE-CONSTRUCTION SITE	0.20 AC.
POST-CONSTRUCTION SITE	0.20 AC.
IMMEDIATE RECEIVING WATERS: DITCH	
SUBSEQUENT RECEIVING WATERS: -	

CANTON WEST, OHIO QUADRANGLE (USGS)
MAP NO. 4081-G4-TF-024

LONGITUDE: W81°26'49" (*)
LATITUDE: N40°46'35" (*)

(*) LONGITUDE AND LATITUDE TO APPROXIMATE CENTER OF PROJECT

STARK COUNTY SOIL AND WATER CONSERVATION DISTRICT MAP NO. 59.



PROJECT DESCRIPTION

STA-30-11.57

REHABILITATION OF THE EXISTING 4-SPAN CONTINUOUS STEEL BEAM STRUCTURE OVER U.S. 30 WITH MINIMAL ROADWORK WORK. THE PROJECT LENGTH IS 525'.

N

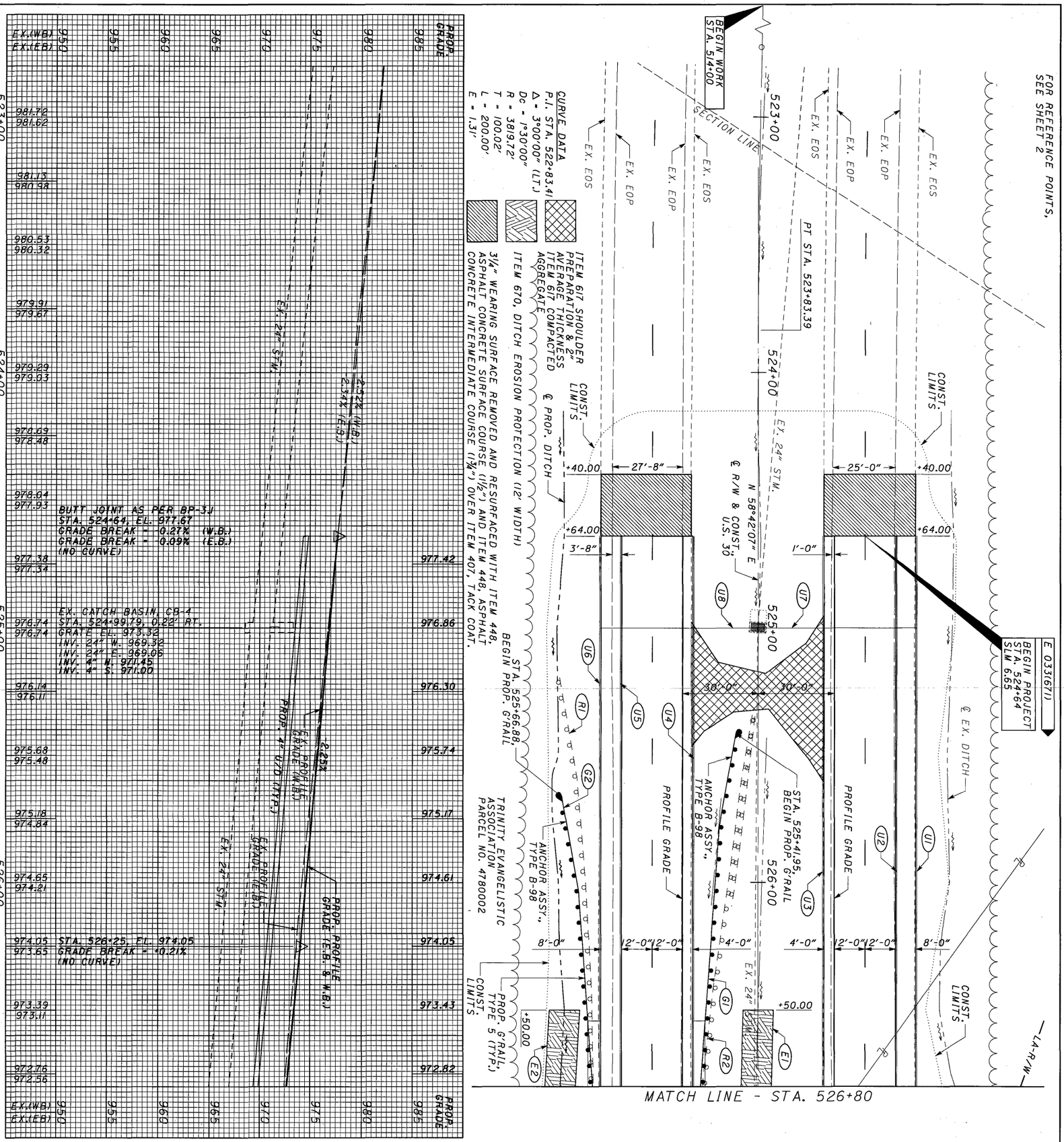
0 25 50 100 HORIZONTAL SCALE IN FEET

CALCULATED RJS
CHECKED SJS

PROJECT SITE PLAN
PERRY DRIVE

STA-30-(6.70)(11.57)

62
127



REF NO.	STATION FROM	STATION TO	SIDE	202 GUARDRAIL REMOVED	202 GUARDRAIL REMOVED, BARRIER DESIGN	603 4" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	605 4" BASE PIPE UNDERDRAINS	605 4" SHALLOW PIPE UNDERDRAINS	606 GUARDRAIL, TYPE 5	606 ANCHOR ASSEMBLY, TYPE B-98	606 BRIDGE TERMINAL ASSEMBLY, TYPE I	670 DITCH EROSION PROTECTION			
				FT.	FT.	FT.	FT.	FT.	FT.	EACH	EACH	S.Y.			
R1	525+19.55	527+34.83	RT.	212.5											
R2	525+34.25	527+34.83	RT.	125	75										
E1	526+50	527+00	C/L									67			
E2	526+50	527+00	RT.									67			
G1	525+41.95	527+34.82	RT.						156.25	1	1				
G2	525+66.88	527+34.82	RT.						131.25	1	1				
U1	524+64	527+00	LT.				236								
U2	524+64	527+00	LT.					236							
U3	524+64	527+00	LT.				236								
U4	524+64	527+00	RT.				236								
U5	524+64	527+00	RT.					236							
U6	524+64	527+00	RT.				236								
U7	525+00		LT.			63									
U8	525+00		RT.			63									
TOTALS CARRIED TO GENERAL SUMMARY				337.5	75	126	944	472	287.5	2	2	134			

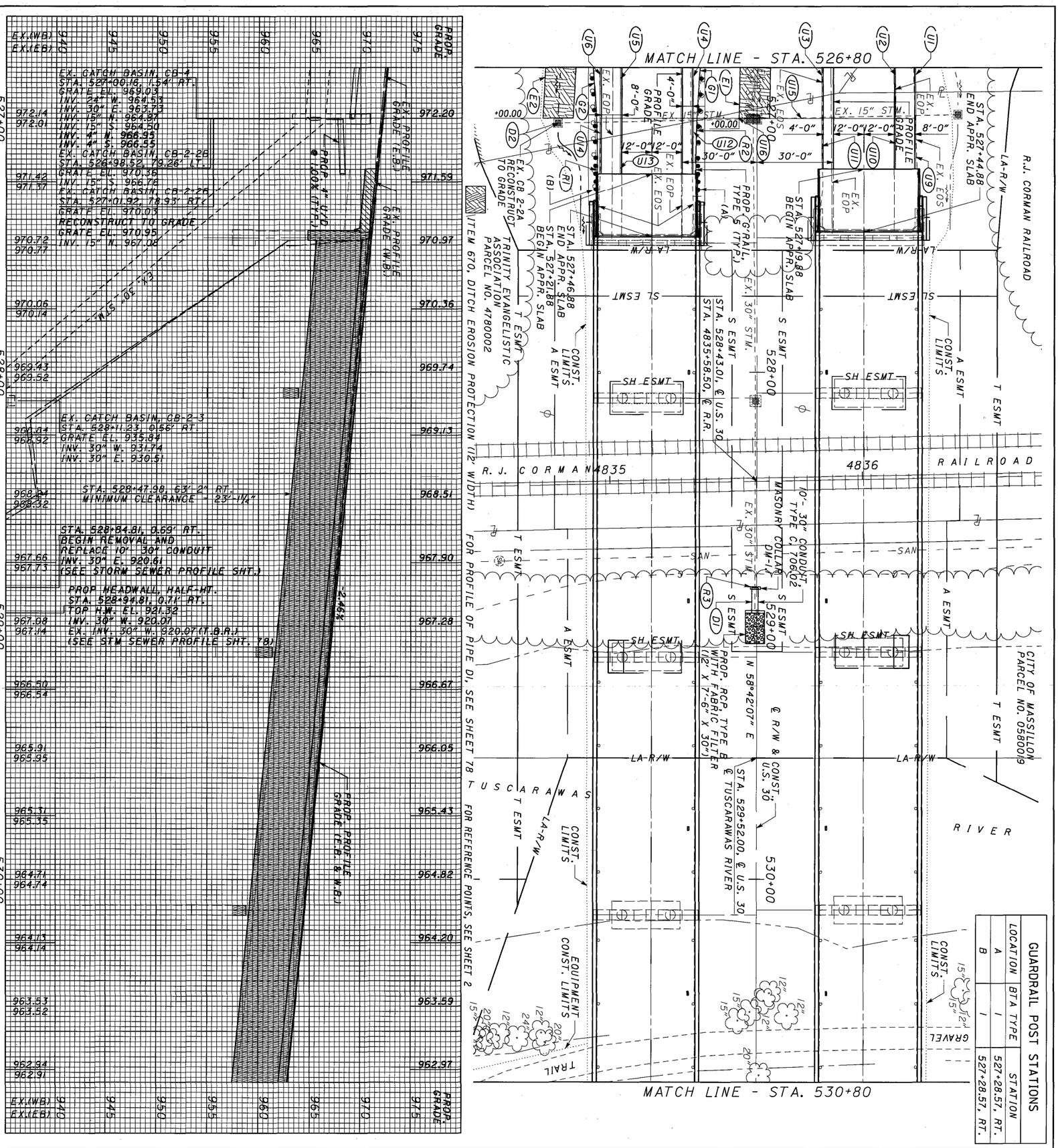
63 / 127

STA-30-(6.70)(11.57)

PLAN AND PROFILE - RAILROAD & TUSCARAWAS RIVER, STA. 522+80 TO STA. 526+80

CALCULATED RJS
CHECKED SJS

0 10 20 40
HORIZONTAL SCALE IN FEET



GUARDRAIL POST STATIONS			
LOCATION	BTA	TYPE	STATION
A			527+28.57, RT.
B			527+28.57, RT.

REF NO.	STATION FROM	STATION TO	SIDE	202 PIPE REMOVED, OVER 24"		601 RCP, TYPE B WITH FABRIC FILTER		602 CONCRETE MASONRY		603 30" CONDUIT, TYPE C, 706.02	603 4" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	604 CATCH BASIN RECONSTRUCTED TO GRADE	605 4" UNCLASSIFIED PIPE UNDERDRAINS		
				FT.		C.Y.		C.Y.		FT.	FT.	EACH	FT.		
R3	528+84.81	528+94.81	C/L	10											
D1	528+84.81	529+06.81	C/L			9		0.56		10					
D2	527+01.92											1			
U9	527+00	527+19.88	LT.										20		
U10	527+00	527+19.88	LT.										20		
U11	527+00	527+19.88	LT.										20		
U12	527+00	527+21.88	RT.										22		
U13	527+00	527+21.88	RT.										22		
U14	527+00	527+21.88	RT.										22		
U15	527+00		LT.								72				
U16	527+00		RT.								72				
TOTALS CARRIED TO GENERAL SUMMARY				10		9		0.6		10	144	1	126		

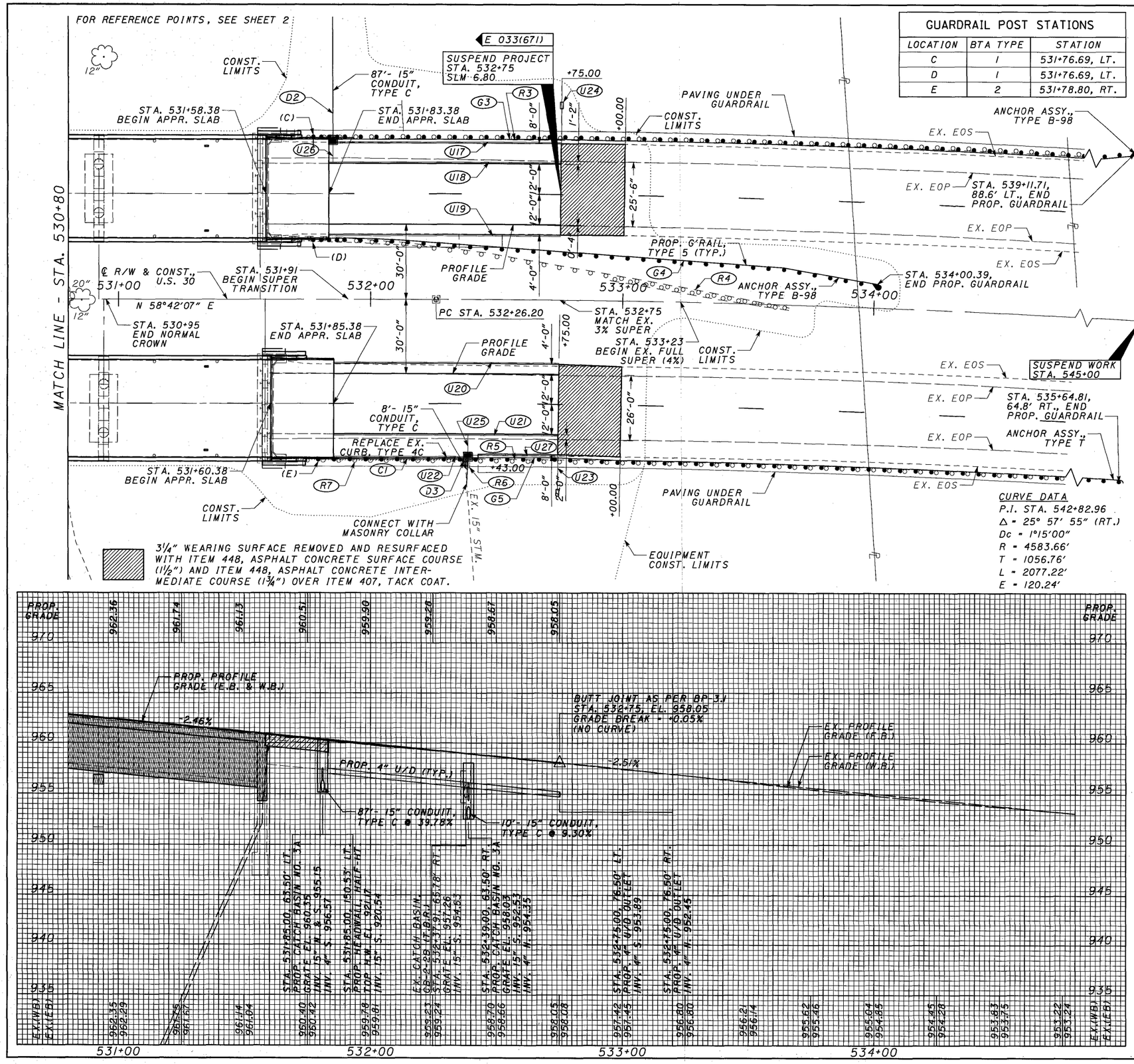
64
127

STA-30-(6.70)(11.57)

PLAN AND PROFILE - RAILROAD & TUSCARAWAS RIVER, STA. 526+80 TO STA. 530+80

CALCULATED RJS
CHECKED SJS

0 20 40
HORIZONTAL SCALE IN FEET



GUARDRAIL POST STATIONS

LOCATION	BTA TYPE	STATION
C	1	531+76.69, LT.
D	1	531+76.69, LT.
E	2	531+78.80, RT.

REF NO.	STATION FROM	STATION TO	SIDE	CURB REMOVED FT.	PIPE REMOVED 24" & UNDER FT.	CATCH BASIN REMOVED EACH	GUARDRAIL REMOVED FT.	GUARDRAIL REMOVED, BARRIER DESIGN FT.	RESHAPING UNDER GUARDRAIL STATION	RCP TYPE B, WITH FABRIC FILTER C.Y.	CONCRETE MASONRY C.Y.	4" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS FT.	15" CONDUIT, TYPE C FT.	CATCH BASIN, NO. 3A EACH	PRECAST REINF. CONCRETE OUTLET EACH	4" BASE PIPE UNDERDRAINS FT.	4" SHALLOW PIPE UNDERDRAINS FT.	GUARDRAIL, TYPE 5 FT.	ANCHOR ASSEMBLY, TYPE B-98 EACH	ANCHOR ASSEMBLY, TYPE T EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 1 EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 2 EACH	CURB, TYPE 4C FT.
				202					209	601	602	603			604		605		606				609
R3	531+67.48	539+08.81	LT.				750																
R4	532+92.95	533+66.49	C/L				125	75															
R5	531+69.50	535+56.40	RT.				361.25																
R6	532+37.91		RT.		8	1																	
R7	531+85.38	532+42.76	RT.	58																			
C1	531+85.38	532+43	RT.																				
D2	531+85		LT.										87	1									58
D3	532+39		RT.										10	1									
G3	531+70.44	539+14.48	LT.						6.1									7/8.75					
G4	531+70.44	534+00.39	LT.						1									193.75					
G5	531+72.55	535+64.81	RT.						2.6									375					
U17	531+85	532+75	LT.																		1		
U18	531+83.38	532+75	LT.																		1		
U19	531+85.38	532+75	RT.																			1	
U20	531+85.38	532+75	RT.																				
U21	531+85.38	532+75	RT.																				
U22	531+85.38	532+39	RT.																				
U23	532+75		RT.																				
U24	532+75		LT.																				
U25	532+39		RT.																				
U26	531+85		LT.																				
U27	532+39	532+75	RT.																				
TOTALS CARRIED TO GENERAL SUMMARY				58	8	1	1256.25	75	10	3	0.3	138	97	2	2	362	182	1287.5	2	1	2	1	58

N

0 10 20 40 HORIZONTAL SCALE IN FEET

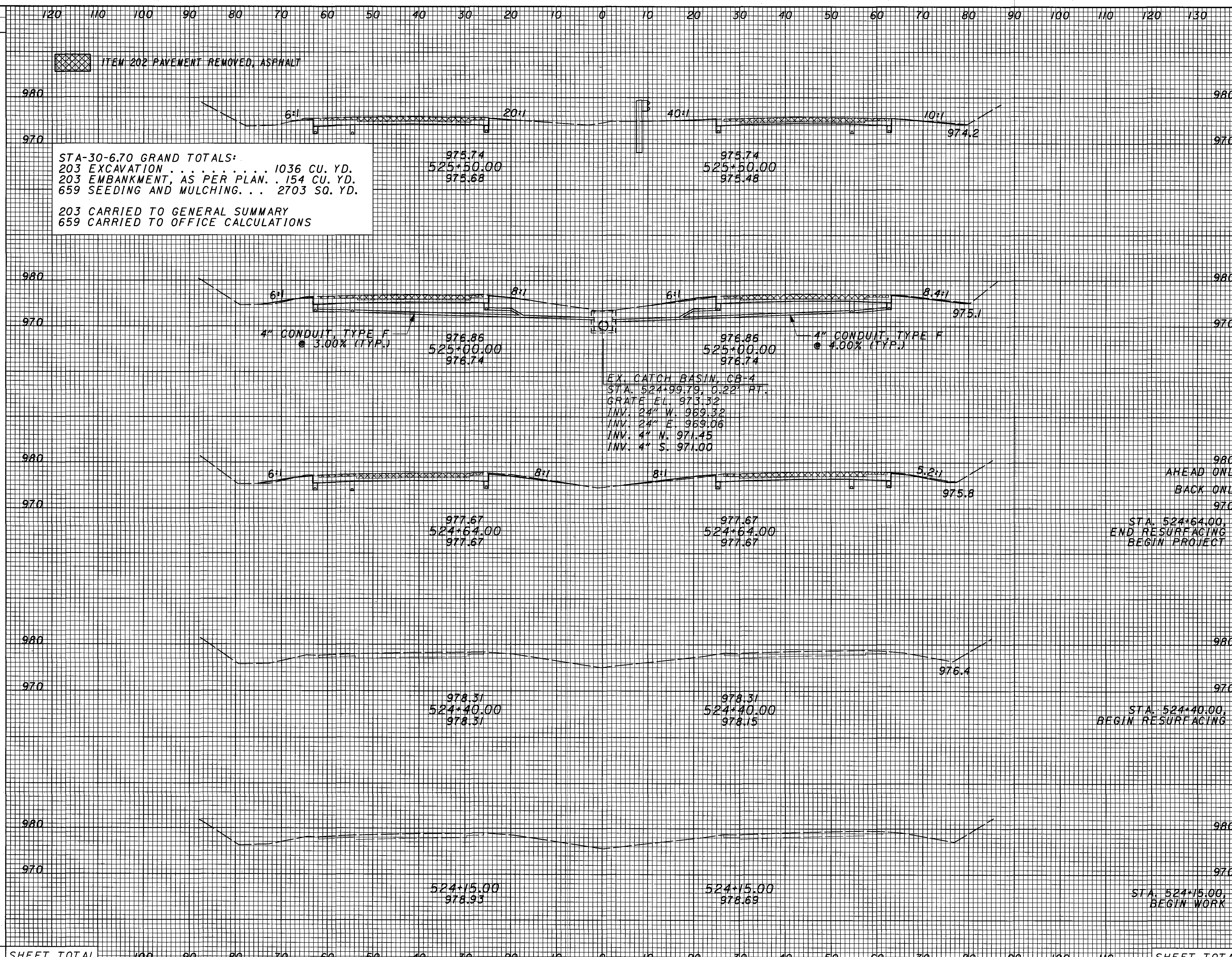
CALCULATED RJS CHECKED SJS

PLAN AND PROFILE - RAILROAD & TUSCARAWAS RIVER, STA. 530+80 TO STA. 534+80

STA-30-(6.70)(11.57) TUSCARAWAS RIVER, S

STA-30-6.70 GRAND TOTALS:
203 EXCAVATION . . . . 1036 CU. YD.
203 EMBANKMENT, AS PER PLAN. . 154 CU. YD.
659 SEEDING AND MULCHING. . . 2703 SQ. YD.

203 CARRIED TO GENERAL SUMMARY
659 CARRIED TO OFFICE CALCULATIONS



SEEDING END WIDTH	SEEDING SQ. YDS.
	325
41	
	258
52	
	236
66	
	88
0	
SHEET TOTAL	907

Station	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
			115	3
525+50.00	59	0		
			113	4
525+00.00	63	4		
			90	7
524+64.00 AHEAD ONLY	71	6		
524+64.00 BACK ONLY	8	6		
			4	3
524+40.00	0	0		
SHEET TOTAL			322	17

CALCULATED RJS CHECKED SJS

CROSS SECTIONS - RAILROAD & TUSCARAWAS RIVER
STA. 524+15 TO STA. 525+50

STA-30-(6.70)(11.57)

SEEDING END WIDTH	SEEDING SQ. YDS.
	38
	27
	87
	52
	281
	49
	120
	37
	157
	76
	683

ITEM 202 PAVEMENT REMOVED, ASPHALT

STA. 527+19.88, BEGIN APPROACH SLABS

LA-R/W

AHEAD ONLY
BACK ONLY

971.71
527+19.88
971.57

971.71
527+19.88
971.50

970.9

EX. CATCH BASIN, CB-2-2B
STA. 526+98.52, 79.26' LT.
GRATE EL. 970.36
INV. 15" S. 966.76

4" CONDUIT, TYPE F @ 3.00% (TYP.)

EX. 8" - 15" STM. @ 2.33%

972.20
527+00.00
972.14

EX. CATCH BASIN, CB-4
STA. 527+00.16, 1.54' RT.
GRATE EL. 969.03
INV. 24" W. 964.53
INV. 30" E. 963.73
INV. 15" N. 964.87
INV. 15" S. 964.50
INV. 4" N. 966.95
INV. 4" S. 966.55

972.20
527+00.00
972.01

4" CONDUIT, TYPE F @ 4.00% (TYP.)

EX. 77' 15" STM. @ 3.35%

971.0

EX. CATCH BASIN, CB-2-2B
STA. 527+01.92, 78.93' RT.
GRATE EL. 970.03
RECONSTRUCT TO GRADE
GRATE EL. 970.95
INV. 15" N. 967.08

973.43
526+50.00
973.39

973.43
526+50.00
973.11

971.7

974.05
526+25.00
974.05

974.05
526+25.00
973.65

972.2

974.61
526+00.00
974.65

974.61
526+00.00
974.21

972.9

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		114	1
81	2		
68	2		
		48	3
62	7		
		118	7
65	0		
		55	1
54	2		
		55	2
65	3		
SHEET TOTAL		390	14

CALCULATED RJS
CHECKED SJS

CROSS SECTIONS - RAILROAD & TUSCARAWAS RIVER STA. 526+00 TO STA. 527+19.88

STA-30-(6.70)(11.57)

SEEDING END WIDTH	SEEDING SQ. YDS.
	133
	78
	108
	0
	0
	241

ITEM 202 PAVEMENT REMOVED, ASPHALT

MATCH LINE 115' LT.

87' - 15" CONDUIT, TYPE C @ 39.78%

10:1 2:1

BACK ONLY
AHEAD ONLY 960.31
531+83.38
960.19

4" CONDUIT, TYPE F @ 1.00% (TYP.)
STA. 531+85.00, 63.50' LT.
PROP. CATCH BASIN NO. 3A
GRATE EL. 960.35
INV. 15" N. & S. 955.15
INV. 4" S. 956.57

6:1 10:1 2:1

960.31
531+83.38
960.20

AHEAD ONLY
BACK ONLY

STA. 531+83.38, END APPROACH SLABS

531+83.38, LT.

87' - 15" CONDUIT, TYPE C @ 39.78%

MATCH LINE 115' LT.

75:1

134.21' LT.
EL. 923.91

STA. 531+85.00, 150.53' LT.
PROP. HEADWALL, HALF-HT.
TOP H.W. EL. 921.17
INV. 15" S. 920.54

ROCK CHANNEL PROTECTION, TYPE B, WITH FABRIC FILTER, 8' X 4' X 30"

960.92
531+58.38
960.82

960.92
531+58.38
957.01

STA. 531+58.38, BEGIN APPROACH SLABS

BRIDGE LIMITS - STA. 527+44.88 TO STA. 531+58.38 - 413.50'

LA-R/W

971.10
527+44.88
970.88

971.10
527+44.88
970.86

STA. 527+44.88, END APPROACH SLABS

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		41	23
AHEAD ONLY 72	50		
BACK ONLY 83	50		
		94	65
AHEAD ONLY 120	91		
BACK ONLY 166	0		
SHEET TOTAL		135	88

CALCULATED R.J.S. CHECKED S.J.S.

CROSS SECTIONS - RAILROAD & TUSCARAWAS RIVER STA. 527+44.88 TO STA. 537+83.38

STA-30-(6.70)(11.57)

68
127

SEEDING END WIDTH	SEEDING SQ. YDS.
	96
	50
	163
	67
	370
	66
	629

ITEM 202 PAVEMENT REMOVED, ASPHALT

4" CONDUIT, TYPE F @ 1.00% (TYP.)

958.05
532+75.00
958.05

STA. 532+75, 76.50' LT.
INV. 4" S. 953.89

958.05
532+75.00
958.08

4" CONDUIT, TYPE F @ 1.00% (TYP.)

STA. 532+75, 76.50' RT.
INV. 4" N. 952.45

STA. 532+75.00,
SUSPEND PROJECT
BEGIN RESURFACING

958.67
532+50.00
958.70

958.67
532+50.00
958.66

4" CONDUIT, TYPE F @ 1.00% (TYP.)

STA. 532+39.00, 63.50' RT.
PROP. CATCH BASIN NO. 3A
GRATE EL. 958.03
INV. 15" S. 952.53
INV. 4" N. 954.32

EX. CATCH BASIN,
CB-2-2B (T.B.R.)
STA. 532+37.91, 65.78' RT.
GRATE EL. 957.26
INV. 15" S. 954.63

EX. 8' - 15" STM. (T.B.R.)
10' - 15" CONDUIT, TYPE C @ 9.30%

EX. 82' - 15" STM. @ 36.28%

STA. 532+38.52, 74.00' RT.
INV. 15" N. 951.60

MATCH LINE 125' RT.

959.90
532+00.00
959.78

959.90
532+00.00
959.81

MATCH LINE 125' RT.

STA. 532+43.79, 143.88' RT.
INV. 15" N. 924.88

EX. 82' - 15" STM. @ 36.28%

532+50.00, RT.

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		1	3
2	7		
63	7		
		61	6
68	5		
		120	26
62	23		
		182	35

SHEET TOTAL

SHEET TOTAL

CALCULATED R.J.S
CHECKED S.J.S

CROSS SECTIONS - RAILROAD & TUSCARAWAS RIVER

STA. 532+00 TO STA. 532+75

STA-30-(6.70)(11.57)

SEEDING END WIDTH	SEEDING SQ. YDS.
0	
	33
24	
	117
18	
	46
15	
	47
19	
	243

ITEM 202 PAVEMENT REMOVED, ASPHALT

STA. 534+75

STA. 534+75

10:1 12:1

534+00.00
955.04

534+00.00
954.85

STA. 534+00.00
SUSPEND WORK

10:1 10:1

533+50.00
956.21

533+50.00
956.14

10:1 5:1

533+25.00
956.80

533+25.00
956.80

10:1 8:1

957.42
533+00.00
957.42

957.42
533+00.00
957.45

STA. 533+00.00
END RESURFACING

SHEET TOTAL

SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
0	0		
		1	0
1	0		
		3	0
2	0		
		2	0
2	0		
		1	0
1	0		
		7	0

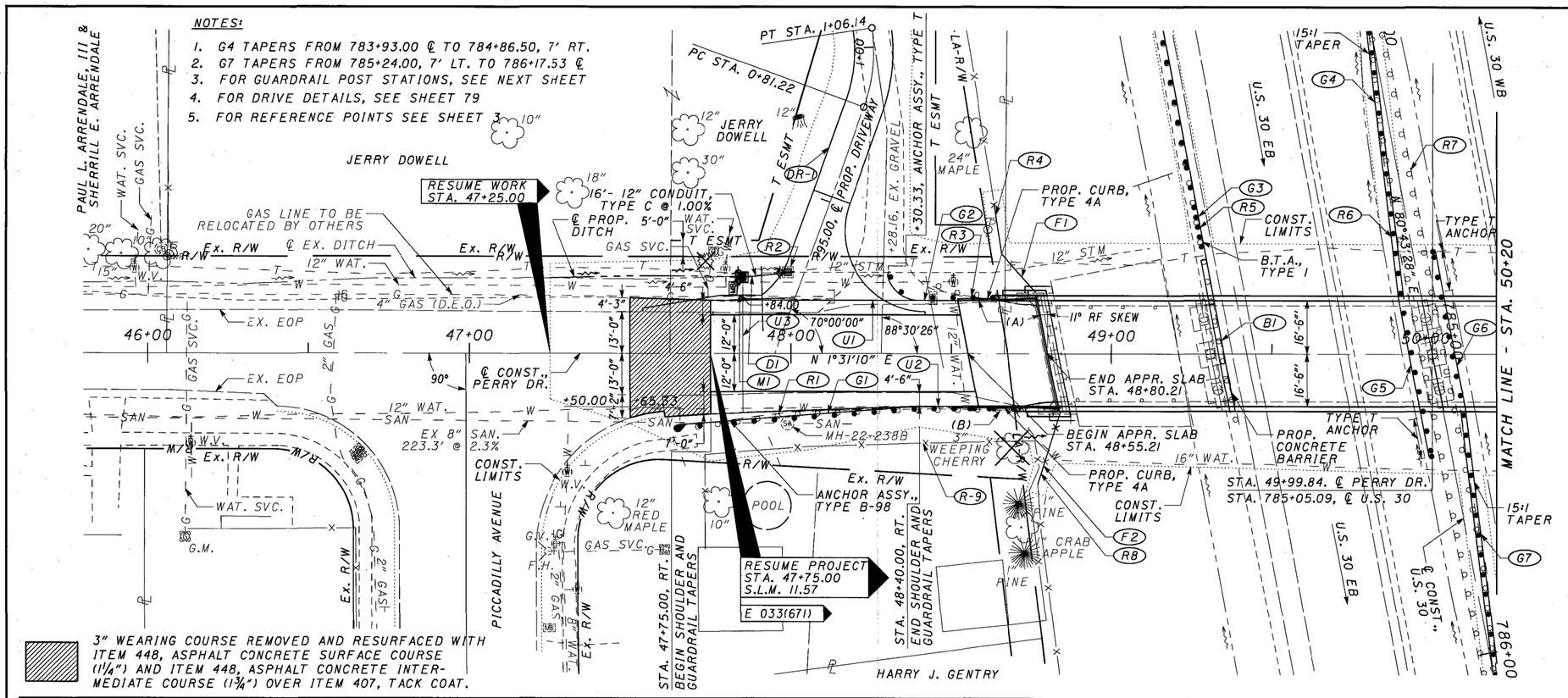
CALCULATED R.J.S.
CHECKED S.J.S.

CROSS SECTIONS - RAILROAD & TUSCARAWAS RIVER
STA. 533+00 TO STA. 534+00

STA-30-(6.70)(11.57)

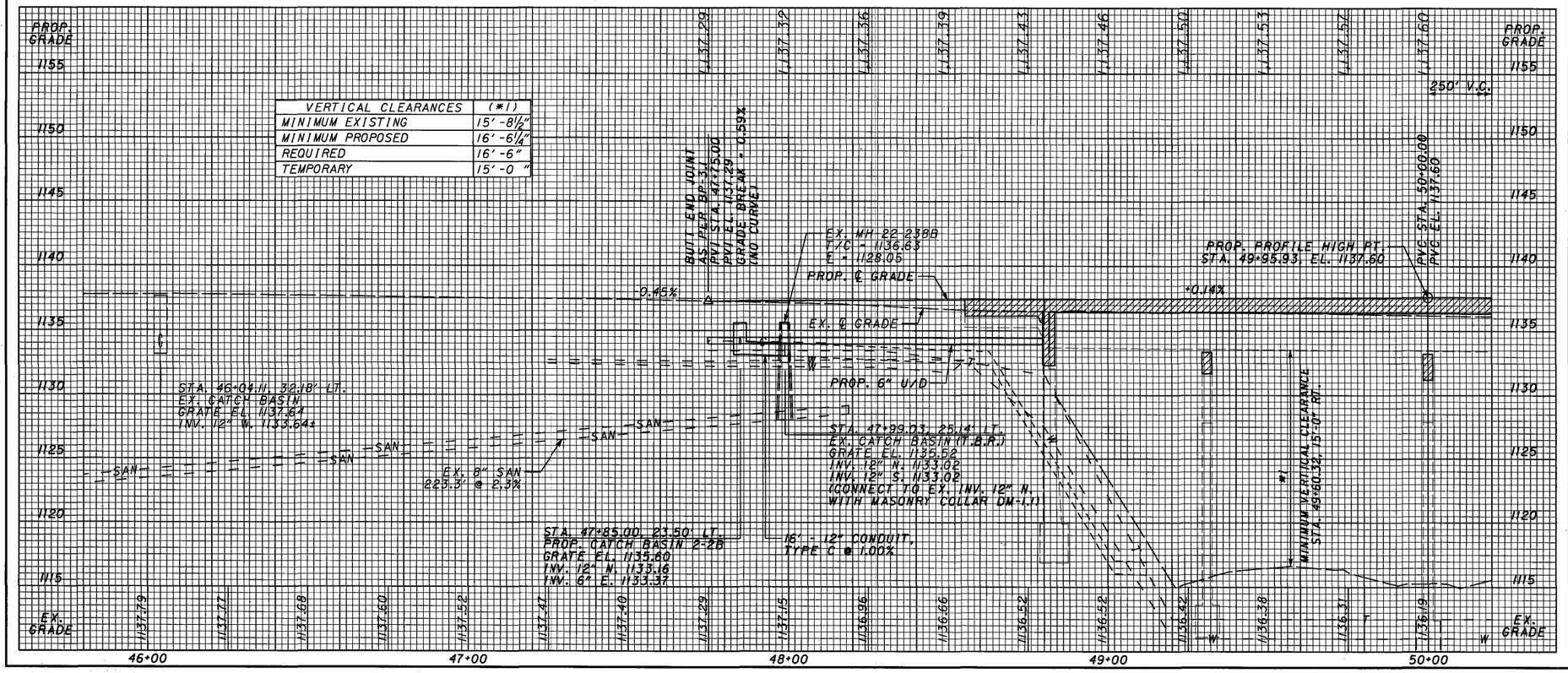
NOTES:

1. G4 TAPERS FROM 783+93.00 ℄ TO 784+86.50, 7' RT.
2. G7 TAPERS FROM 785+24.00, 7' LT. TO 786+17.53 ℄
3. FOR GUARDRAIL POST STATIONS, SEE NEXT SHEET
4. FOR DRIVE DETAILS, SEE SHEET 79
5. FOR REFERENCE POINTS SEE SHEET 3



3" WEARING COURSE REMOVED AND RESURFACED WITH ITEM 448, ASPHALT CONCRETE SURFACE COURSE (1¼") AND ITEM 448, ASPHALT CONCRETE INTERMEDIATE COURSE (1¾") OVER ITEM 407, TACK COAT.

VERTICAL CLEARANCES	(*1)
MINIMUM EXISTING	15'-8½"
MINIMUM PROPOSED	16'-6¼"
REQUIRED	16'-6"
TEMPORARY	15'-0"



REF NO.	STATION FROM	STATION TO	SIDE

TOTALS CARRIED TO GENERAL SUMMARY

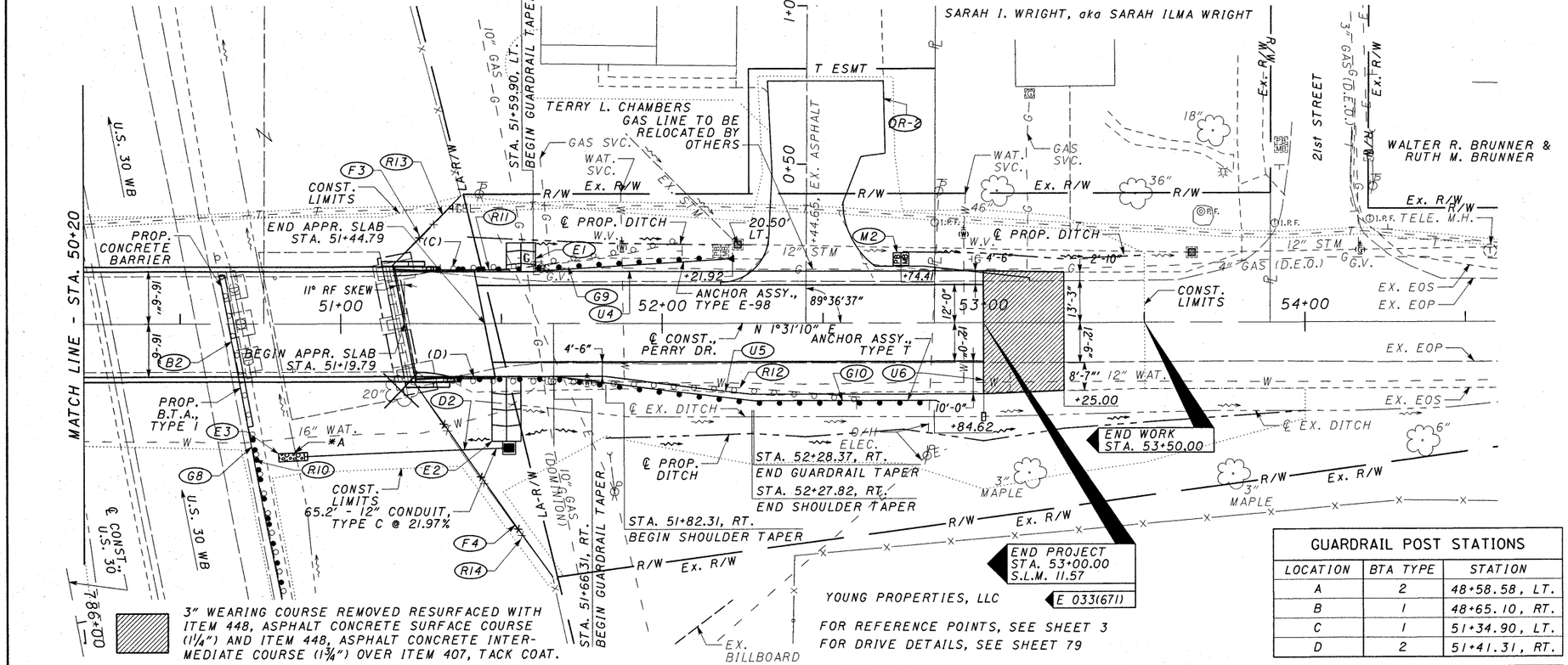
FOR QUANTITIES, SEE SHEET 60

CALCULATED R.J.S. CHECKED S.J.S.

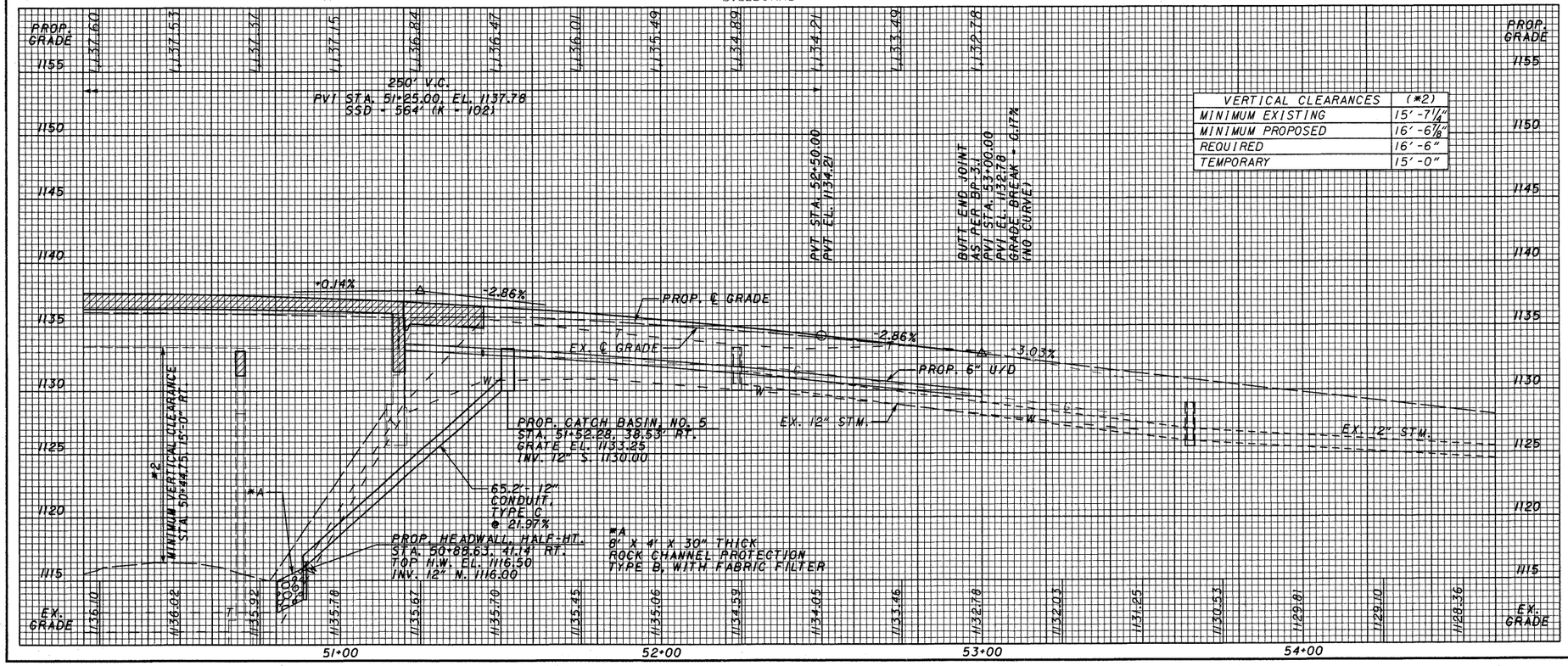
HORIZONTAL SCALE IN FEET 0 10 20 40

PLAN AND PROFILE - PERRY DRIVE STA. 45+80 TO STA. 50+20

STA-30-(6.70)(11.57)



GUARDRAIL POST STATIONS		
LOCATION	BTA TYPE	STATION
A	2	48+58.58, LT.
B	1	48+65.10, RT.
C	1	51+34.90, LT.
D	2	51+41.31, RT.



VERTICAL CLEARANCES	(*2)
MINIMUM EXISTING	15'-7 1/4"
MINIMUM PROPOSED	16'-6 1/8"
REQUIRED	16'-6"
TEMPORARY	15'-0"

REF NO.	STATION FROM	STATION TO	SIDE

TOTALS CARRIED TO GENERAL SUMMARY

FOR QUANTITIES, SEE SHEET 60

HORIZONTAL SCALE IN FEET

CALCULATED RJS CHECKED SJS

PLAN AND PROFILE - PERRY DRIVE STA. 50+20 TO STA. 54+60

STA-30-(6.70)(11.57)

72/127

SEEDING END WIDTH	SEEDING SQ. YDS.
	39
	26
	53
	12
	17
	0
	109

ITEM 202 PAVEMENT REMOVED, ASPHALT

STA-30-11.57 GRAND TOTALS:
203 EXCAVATION . . . . . .502 CU. YD.
203 EMBANKMENT, AS PER PLAN. . .70 CU. YD.
659 SEEDING AND MULCHING. . . .1346 SQ. YD.

203 CARRIED TO GENERAL SUMMARY
659 CARRIED TO OFFICE CALCULATIONS

T ESMT EX. R/W
6.6', 4" CONDUIT, TYPE F
OUTLET FOR UNDERDRAINS
@ 0.50%
EX. R/W
1140
1135
1130
4:1
4:1
11135.66
12:1
EX. GAS
EX. TEL.
CONC. DUCT BANK
TOP DUCT EL. 1132.11
STA. 47+83.60, 24.87' LT.
(FIELD VERIFIED)
STA. 47+85.00, 23.50' LT.
PROP. CATCH BASIN 2-2B
GRATE EL. 1135.60
INV. 12" N. 1133.16
INV. 4" E. 1133.37
EX. WATER
TOP OF PIPE EL. 1132.27
STA. 47+83.39, 22.10' LT.
(FIELD VERIFIED)
36.1', 4" CONDUIT, TYPE F
OUTLET FOR UNDERDRAINS
@ 0.50%
11137.29
47+75.00
11137.29
EX. WATER
EX. SANITARY
47+75 AHEAD 34 0
47+75 BACK 13 0
STA. 47+75.00,
RESUME PROJECT,
END RESURFACING,
BEGIN SHOULDER AND
GUARDRAIL TAPERS, RT.
7 0

EX. R/W
EX. R/W
1140
1135
1130
3:1
4:1
11135.75
EX. TEL.
CONC. DUCT BANK
EX. WATER
11137.40
47+50.00
11137.40
EX. SANITARY
STA. 47+50.00,
BEGIN RESURFACING
1 0

EX. R/W
1140
1135
1130
11135.83
EX. GAS
EX. TEL.
CONC. DUCT BANK
EX. WATER
EX. WATER
47+25.00
11137.47
EX. SANITARY
STA. 47+25.00,
RESUME WORK
0 0

SHEET TOTAL				50	0

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		42	0
34	0		
13	0		
		7	0
1	0		
		1	0
0	0		
	SHEET TOTAL	50	0

CALCULATED RJS
CHECKED SJS

CROSS SECTIONS - PERRY DRIVE
STA. 47+25 TO STA. 47+75

STA-30-(6.70)(11.57)

73
127

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
	46			20	13
	34	28	4		
		2	4		
				2	3
	73	4	5	70	4
	9	80	0		
	153 SHEET TOTAL			92	20

ITEM 202 PAVEMENT REMOVED, ASPHALT

EX. R/W

STA. 48+55.21, BEGIN APPROACH SLAB

1140 / 1135 / 1130

SEED WIDTH: 20.2 * COS(11°) - 19.8 FT.

3:1

EX. 12" STORM

EX. WATER

EX. TEL. CONC. DUCT BANK TOP DUCT EL. 1130.57 STA. 48+49.80, 27.72' LT. (FIELD VERIFIED)

SUBGRADE AHEAD

1137.40
48+55.21 (11° RF SKEW)
1136.59

SUBGRADE BACK

12:1

EX. WATER

AHEAD ONLY:
CUT: 28.6 * COS(11°) - 28.1 S.F.
FILL: 4.2 * COS(11°) - 4.1 S.F.

BACK ONLY:
CUT: 1.7 * COS(11°) - 1.7 S.F.
FILL: 4.2 * COS(11°) - 4.1 S.F.

EX. R/W

PROP. DRIVEWAY

-8.00%

EX. 12" STORM

EX. WATER

EX. TEL. CONC. DUCT BANK

1137.38
48+40.00
1136.78

12:1

EX. WATER

STA. 48+40.00, END SHOULDER AND GUARDRAIL TAPERS, RT.

GRAVEL DRIVEWAY

ASPHALT APRON

-2.45%

MATCH LINE - 57.50' LT.

24.69' LT. 1136.37

-7.51%

EX. TEL. CONC. DUCT BANK TOP DUCT EL. 1132.26 STA. 47+96.60, 24.98' LT. (FIELD VERIFIED)

EX. CB TBR

EX. WATER

10' V.C.

51.92' LT. 1135.15

SEED WIDTH: 9.09 * COS(20°) - 8.54 FT.

1137.32
47+95.00 (20° LF SKEW)
1137.18

EX. SANITARY

12:1

EX. WATER

STA. 47+95.00, PROP. DRIVEWAY, LT.

CUT: 84.6 * COS(20°) - 79.5 S.F.
FILL: 0.0 * COS(20°) - 0.0 S.F.

92.40' LT. 1134.76

-3.57%

-2.45%

GRAVEL DRIVEWAY

-2.45%

MATCH LINE - 57.50' LT.

60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65

105 100 95 90 85 80 75 70 65 60

50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55

SHEET TOTAL

CALCULATED R.J.S. CHECKED S.J.S.

CROSS SECTIONS - PERRY DRIVE STA. 47+95 TO STA. 48+55.21

STA-30-(6.70)(11.57)

▨ ITEM 202 PAVEMENT REMOVED, ASPHALT

AHEAD ONLY:
CUT: 35.5 * COS(11°) = 34.9 S.F.
FILL: 1.0 * COS(11°) = 1.0 S.F.

BACK ONLY:
CUT: 69.5 * COS(11°) = 68.2 S.F.
FILL: 4.6 * COS(11°) = 4.5 S.F.

EX. 10" GAS
TOP CONDUIT EL. 1131.59
STA. 51+64.45, 29.06' RT.
(FIELD VERIFIED), PROVIDE
3'-0" MIN. COVER OVER GAS
LINE @ STA. 51+66, 38.5' RT.

STA. 51+44.79, END
APPROACH SLAB

SEED WIDTH: 52.69 * COS(11°) = 51.72 FT.

AHEAD ONLY:
SEED WIDTH: 36.71 * COS(11°) = 36.04 FT.

AHEAD ONLY:
CUT: 10.8 * COS(11°) = 10.6 S.F.
FILL: 64.3 * COS(11°) = 63.1 S.F.

STA. 51+19.79, BEGIN
APPROACH SLAB

BRIDGE LIMITS - STA. 48+80.21 TO STA. 51+19.79 = 239.58'

STA. 48+80.21, END
APPROACH SLAB

BACK ONLY:
SEED WIDTH: 12.86 * COS(11°) = 12.62 FT.

BACK ONLY:
CUT: 14.4 * COS(11°) = 14.1 S.F.
FILL: 23.7 * COS(11°) = 23.3 S.F.

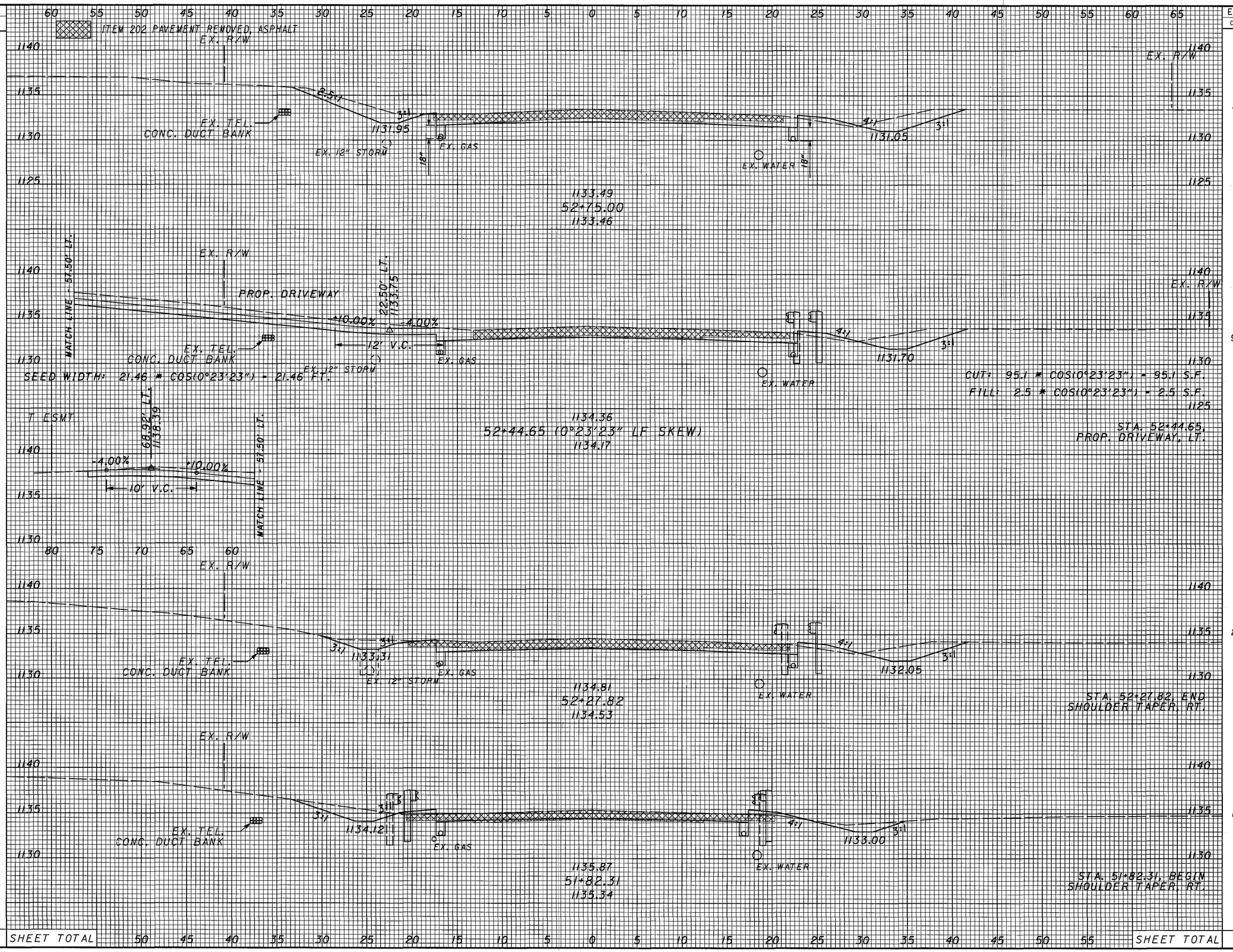
SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
	198			36	4
56					
		35	1		
		68	5		
	128				
				37	32
36					
		11	63		
13					
		14	23		
SHEET TOTAL	326			73	36

CALCULATED RJS
CHECKED SJS

CROSS SECTIONS - PERRY DRIVE
STA. 48+80.21 TO STA. 51+82.31

STA-30-(6.70)(11.57)

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
	124			56	2
40		41	3		
	105			77	3
22		95	3		
55				38	2
37		27	3		
	192			36	6
39		16	4		
	476 SHEET TOTAL			207	13



CALCULATED RJS

CHECKED SJS

CROSS SECTIONS - PERRY DRIVE STA. 52+27.82 TO STA. 52+75

STA-30-(6.70)(11.57)

SEEDING END WIDTH	SEEDING SQ. YDS.
0	
	61
22	
	92
44	
	129
49	
	282

ITEM 202 PAVEMENT REMOVED, ASPHALT

EX. R/W

EX. TEL.
EX. 12" STORM
EX. GAS
EX. WATER

54+00.00
1129.81

1128.01

STA. 54+00.00,
END WORK

EX. R/W

EX. TEL.
CONC. DUCT BANK
EX. 12" STORM
EX. GAS
EX. WATER

1129.85

4:1
3:1
1128.50

53+50.00
1131.25

EX. R/W

2.5:1
4:1
3:1
EX. TEL.
CONC. DUCT BANK
EX. 12" STORM

1130.75

1128.75

1132.03
53+25.00
1132.03

STA. 53+25.00,
END RESURFACING

EX. R/W

2.5:1
3:1
12"
EX. TEL.
CONC. DUCT BANK
EX. 12" STORM
EX. GAS

1131.20

53+00, 16.8' LT
4" INV. = 1129.69

111.7', 6" CONDUIT, TYPE F
OUTLET FOR UNDERDRAINS
@ 0.50%

53+00, 29.0' RT
6" INV. = 1129.43

4:1
3:1
12"
EX. WATER

1129.00

53+00, 22.3' RT
4" INV. = 1129.64

39.2', 6" CONDUIT, TYPE F
OUTLET FOR UNDERDRAINS
@ 0.50%

1132.78
53+00.00
1132.78

EX. R/W

STA. 53+00.00,
END PROJECT
BEGIN RESURFACING

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
0	0		
		16	0
17	0		
		23	0
32	0		
		41	1
56	2		
79	2		
		80	1

53+00 AHEAD
53+00 BACK

SHEET TOTAL

SHEET TOTAL

CALCULATED R.J.S
CHECKED S.J.S

CROSS SECTIONS - PERRY DRIVE STA. 53+00 TO STA. 53+50

STA-30-(6.70)(11.57)

SUPERELEVATION TABLE

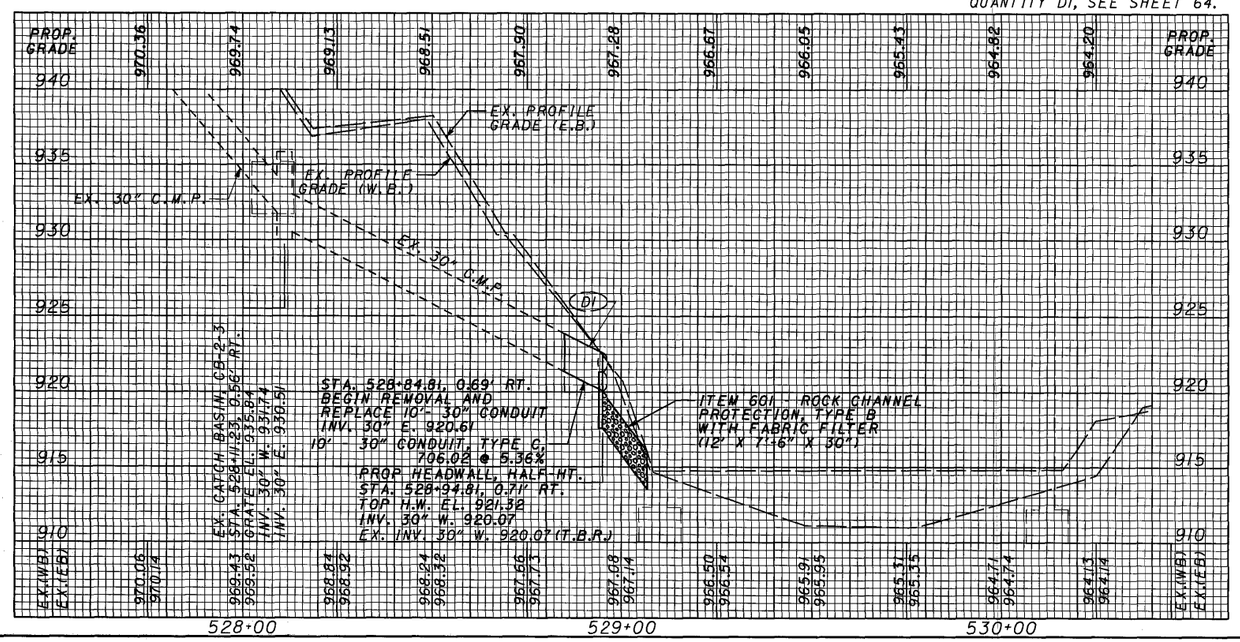
P.I. STATION = 542+82.86 | Dc = 1°15'00"

WESTBOUND LANES												EASTBOUND LANES												
	LEFT LANE					RIGHT LANE							LEFT LANE					RIGHT LANE						
EDGE ELEVATION	TRANSITION RATE	ELEVATION CORRECTION	CROSS SLOPE	WIDTH (FEET)	PAVEMENT CENTERLINE ELEVATION	TRANSITION RATE	ELEVATION CORRECTION	CROSS SLOPE	WIDTH (FEET)	PROFILE GRADE	STATION	PROFILE GRADE	WIDTH (FEET)	CROSS SLOPE	ELEVATION CORRECTION	TRANSITION RATE	PAVEMENT CENTERLINE ELEVATION	WIDTH (FEET)	CROSS SLOPE	ELEVATION CORRECTION	TRANSITION RATE	EDGE ELEVATION	REMARKS
962.48		+0.00	-0.0160	12.00	962.67		+0.19	+0.0160	12.00	962.48	530+95.00	962.48	12.00	+0.0160	+0.19		962.67	12.00	-0.0160	0.00		962.48	N.C.
962.38		+0.02	-0.0143		962.55					962.36	531+00.00	962.36		+0.0143	+0.17		962.53			-0.02		962.34	
961.86		+0.12	-0.0060		961.93					961.74	531+25.00	961.74		+0.0060	+0.07		961.81			-0.12		961.62	
961.49		+0.19	0.0000		961.49					961.30	531+43.00	961.30		0.0000	0.00		961.30			-0.19		961.11	½ LEVEL
961.35		+0.22	+0.0023		961.32					961.13	531+50.00	961.13		-0.0023	-0.03		961.10			-0.22		960.91	
960.83	250:1	+0.32	+0.0107		960.70					960.51	531+75.00	960.51		-0.0107	-0.13	250:1	960.38			-0.32		960.19	
960.50		+0.38	+0.0160		960.31		+0.19	+0.0160		960.12	531+91.00	960.12		-0.0160	-0.19		959.93		-0.0160	-0.38		959.74	R.C.
960.32		+0.42	+0.0175		960.11		+0.21	+0.0175		959.90	532+00.00	959.90		-0.0175	-0.21		959.69		-0.0175	-0.42		959.48	
959.80		+0.52	+0.0217		959.54	250:1	+0.26	+0.0217		959.28	532+25.00	959.28		-0.0217	-0.26		959.02		-0.0217	-0.52		958.76	
959.77		+0.52	+0.0219		959.51		+0.26	+0.0219		959.25	532+26.20	959.25		-0.0219	-0.26		958.99		-0.0219	-0.52	250:1	958.73	P.C.
959.29		+0.62	+0.0258		958.98		+0.31	+0.0258		958.67	532+50.00	958.67		-0.0258	-0.31		958.36		-0.0258	-0.62		958.05	
958.77		+0.72	+0.0300	12.00	958.41		+0.36	+0.0300	12.00	958.05	532+75.00	958.05	12.00	-0.0300	-0.36		957.69	12.00	-0.0300	-0.72		957.33	MATCH EXISTING

NOTE:
BEGIN FULL SUPERELEVATION AT STATION 533+23.00 (e_{max}= 0.04)

STORM SEWER PROFILE

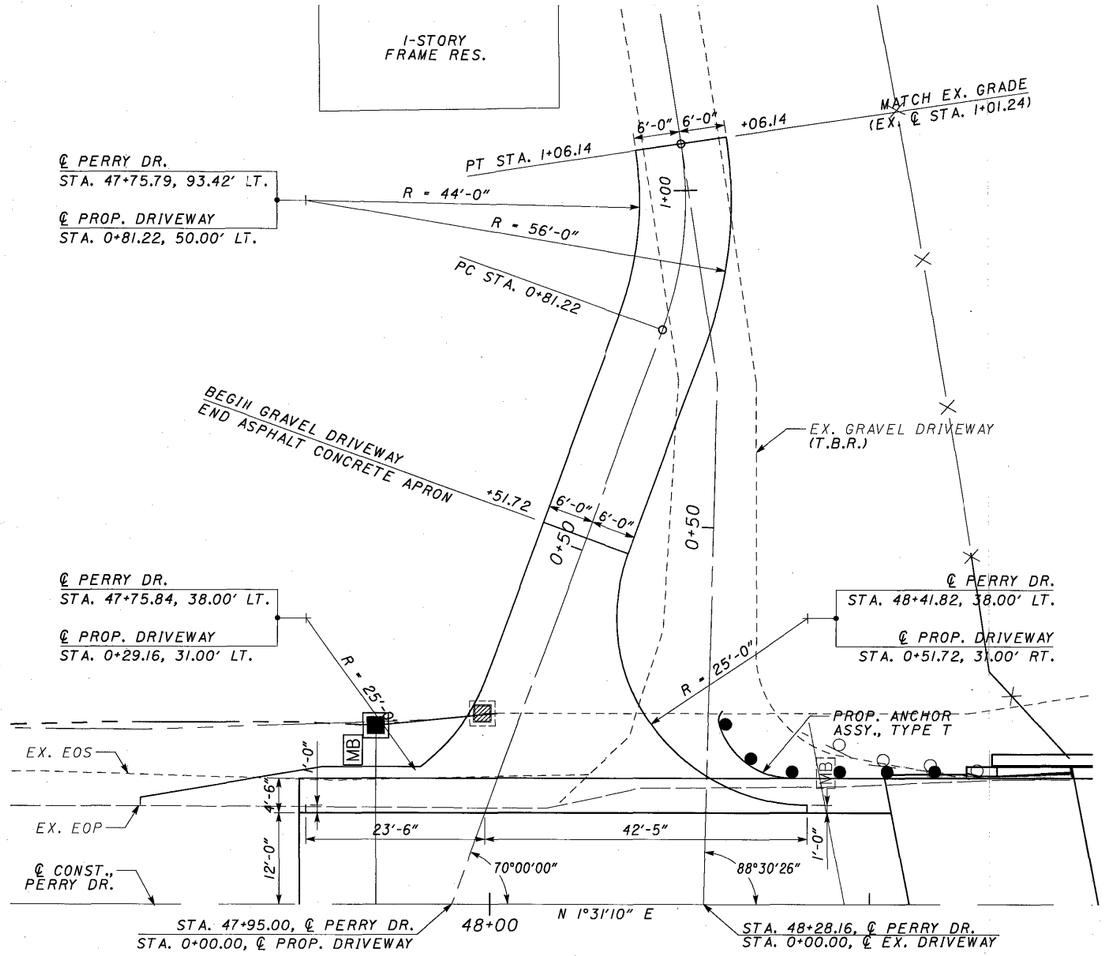
NOTE: FOR BALLOON REFERENCED QUANTITY DI, SEE SHEET 64.



CALCULATED SDT | CHECKED RJS

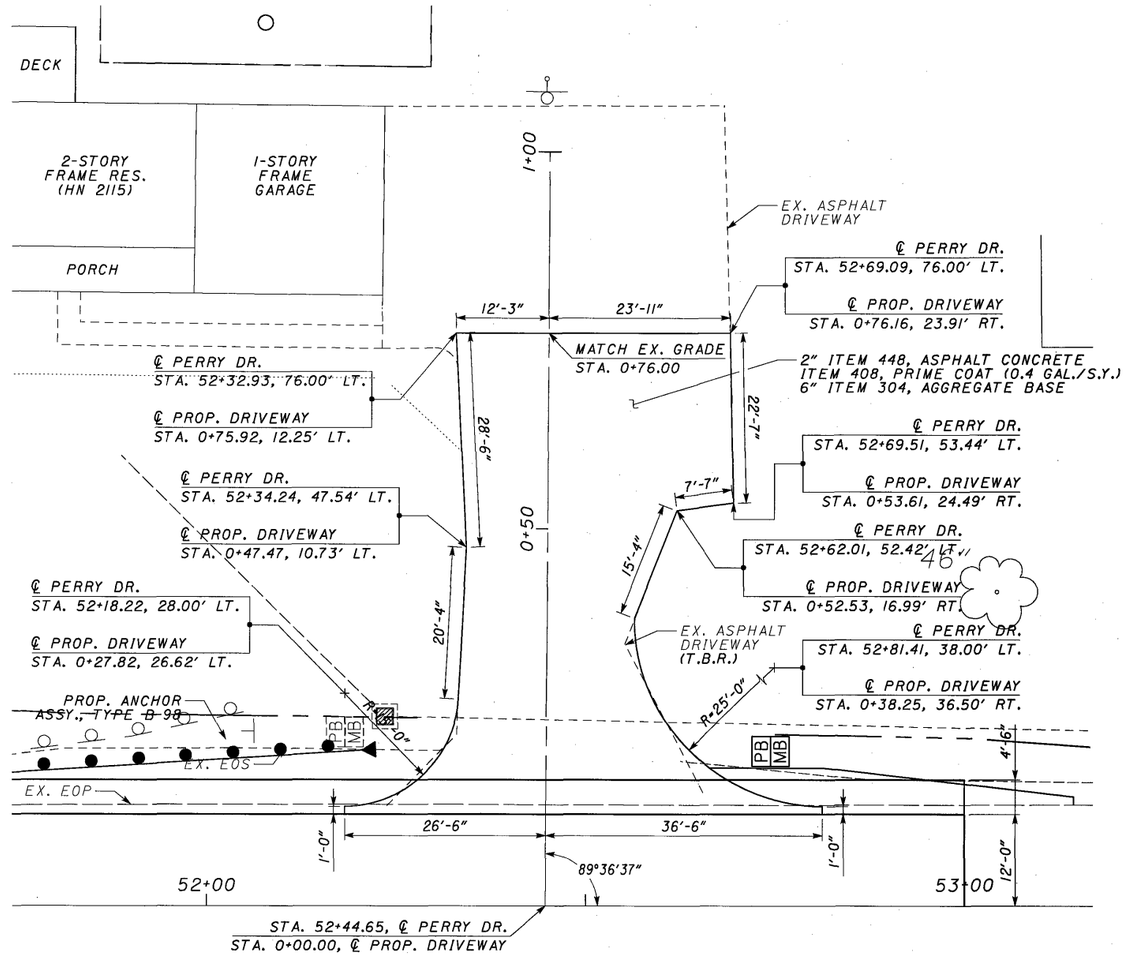
SUPERELEVATION TABLE & STORM SEWER PROFILE

STA-30-(6.70) (11.57)



RESIDENTIAL DRIVEWAY DETAIL

STA. 47+95.00



RESIDENTIAL DRIVEWAY DETAIL

STA. 52+44.65

** SUM FOR ALL THICKNESSES

DRIVEWAY COMPOSITIONS

RESIDENTIAL - ASPHALT
2" 448 ASPHALT CONCRETE SUR. COURSE TYPE I, PG64-22
408 PRIME COAT, 0.4 GAL./SQ. YD.
6" 304 AGGREGATE BASE
204 SUBGRADE COMPACTION

RESIDENTIAL - GRAVEL *
8" 304 AGGREGATE BASE
204 SUBGRADE COMPACTION

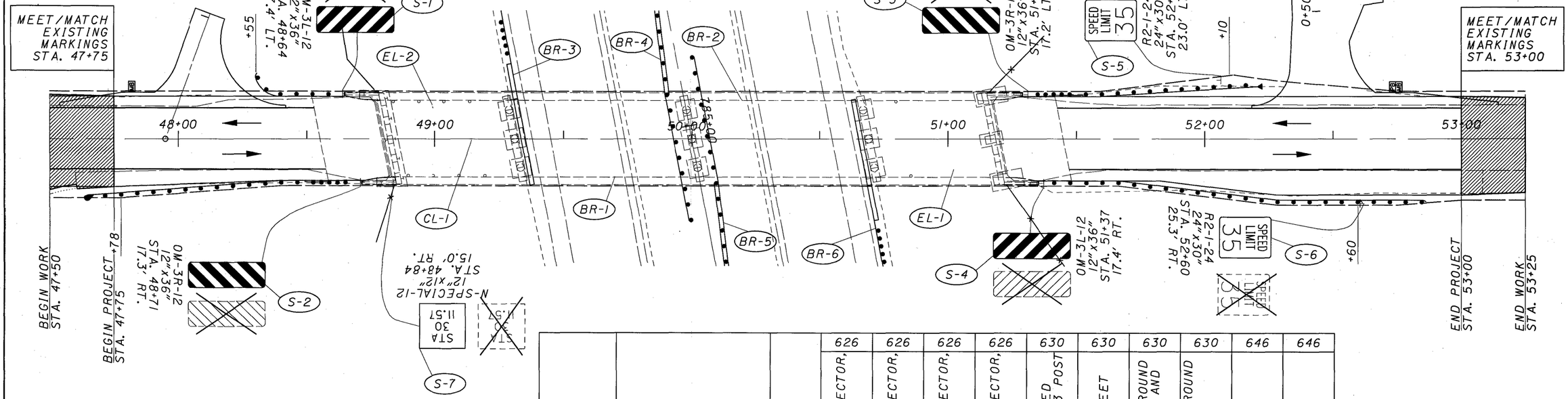
* USE SAME BUILD UP AS RESIDENTIAL - ASPHALT FOR APRON AREA

SHEET NO.	REFERENCE NO.	STATION	SIDE	DRIVE TYPE	DRIVEWAY LENGTH	WIDTH "W"	TOTAL DRIVE AREA	APRON AREA	NON-APRON AREA	202 PAVEMENT REMOVED, ASPHALT	204 SUBGRADE COMPACTION	304 8" AGGREGATE BASE, AS PER PLAN	304 6" AGGREGATE BASE, AS PER PLAN	408 PRIME COAT, 0.4 GAL/SQ.YD.	448 2" ASPHALT CONCRETE SURFACE COURSE, TYPE I, PG64-22 (DRIVEWAYS)
							SQ. YD.	SQ. YD.	SQ. YD.	SQ. YD.	SQ. YD.	CU. YD.	CU. YD.	GAL.	CU. YD.
71	DR-1	47+95.00	LT	RES-GRAVEL	88.59	12.0	145.78	73.22	72.56		145.78	16.1	12.2	29.3	4.1
72	DR-2	52+44.65	LT	RES-ASPHALT	64.00	22.63	199.46			199.46	199.46		33.2	79.8	11.1
TOTALS										199.5	345.2	16.1	45.4	109.1	15.2
TOTALS CARRIED TO GENERAL SUMMARY										200	346	62**		109	16

HORIZONTAL SCALE IN FEET
0 5 10 20
CALCULATED RJS
CHECKED SJS

DRIVEWAY DETAILS - PERRY DRIVE STA. 47+95 AND STA. 52+44.65

STA-30-(6.70)(11.57)



REF. NO.	STATION FROM	STATION TO	SIDE	626 BARRIER REFLECTOR, TYPE A	626 BARRIER REFLECTOR, TYPE B	626 BARRIER REFLECTOR, TYPE A2	626 BARRIER REFLECTOR, TYPE B2	630 GROUND MOUNTED SUPPORT, NO. 3 POST	630 SIGN, FLAT SHEET	630 REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	630 REMOVAL OF GROUND MOUNTED POST AND SUPPORT AND DISPOSAL	646 EDGE LINE	646 CENTER LINE
				EACH	EACH	EACH	EACH	FEET	SQ FT	EACH	EACH	MILE	MILE
BR-1	47+78	52+60	RT.			3	3						
BR-2	48+55	52+10	LT.			3	3						
BR-3	783+10	785+11	RT.	2	1								
BR-4	782+56	785+37	RT.	6									
BR-5	784+74	787+55	LT.	6									
BR-6	785+01	786+79	LT.	2	1								
CL-1	47+75	53+00	C.										0.1
EL-1	47+75	53+00	RT.									0.1	
EL-2	47+75	53+00	RT.									0.1	
S-1	48+64		LT.					14	3	1	1		
S-2	48+71		RT.					14	3	1	1		
S-3	51+31		LT.					14	3	1	1		
S-4	51+37		RT.					14	3	1	1		
S-5	52+06		LT.					14	5	1	1		
S-6	52+60		RT.					14	5	1	1		
S-7	48+84		RT.						1	1			
GRAND TOTAL CARRIED TO GENERAL SUMMARY				16	2	6	6	84	23	7	6	0.2	0.1

LEGEND

- (CL) CENTER LINE, DOUBLE SOLID, YELLOW
- (EL) EDGE LINE, WHITE
- (BR) BARRIER REFLECTOR
- (S-X) PROPOSED SIGN
- PROPOSED SIGN
- EXISTING SIGN TO BE REMOVED AND DISPOSED

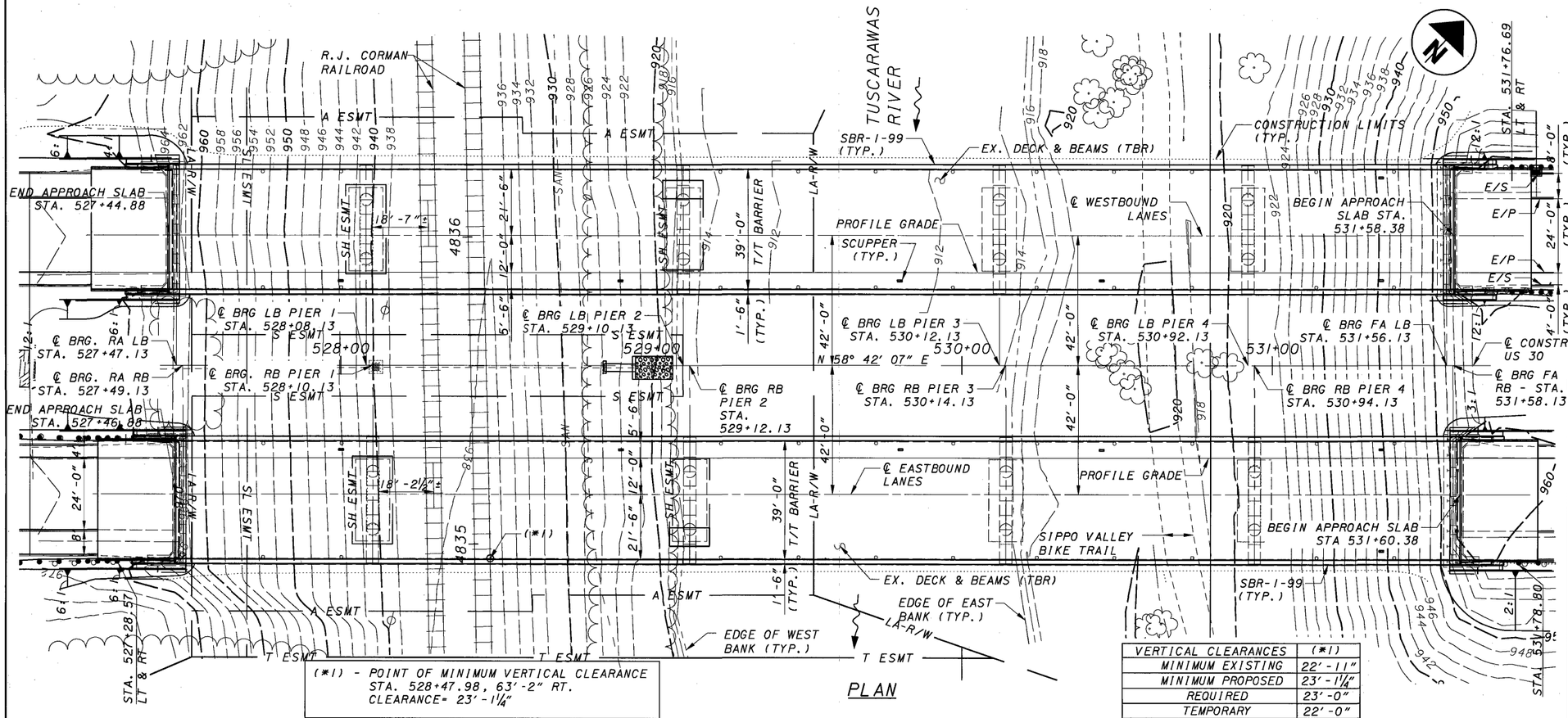
N

HORIZONTAL SCALE IN FEET 0 10 20 40

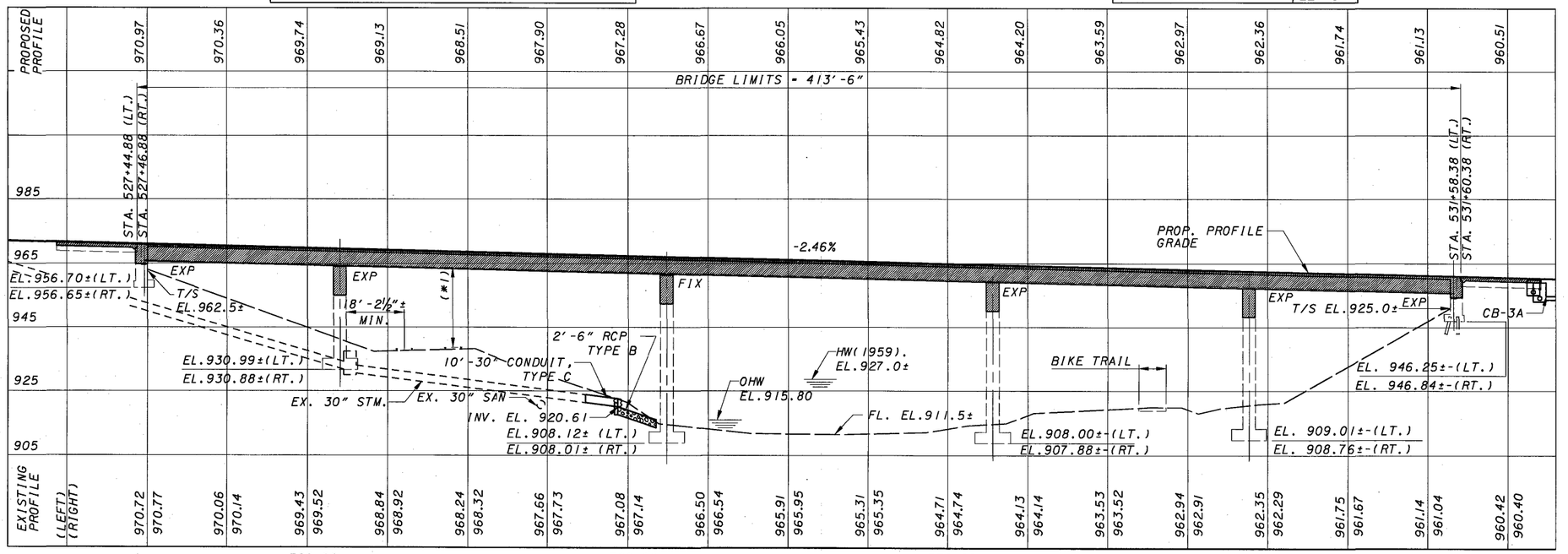
CALCULATED SMM
CHECKED MOW

SIGNING AND MARKING PLAN
PERRY DRIVE

STA-30-(6.70)
(11.57)



VERTICAL CLEARANCES	(*1)
MINIMUM EXISTING	22'-11"
MINIMUM PROPOSED	23'-1¼"
REQUIRED	23'-0"
TEMPORARY	22'-0"



PROFILE ALONG EASTBOUND & WESTBOUND PROFILE GRADE LINE

NOTES:

1. EARTHWORK LIMITS ARE APPROXIMATE, ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS
2. FOR ABBREVIATIONS SEE SHEET 2/22
3. RCP INCLUDED WITH ROADWAY QUANTITIES

HORIZONTAL CURVE DATA
P.I. Sta = 542+82.96
D = 25° 57' 55" (RT)
Dc = 1° 15' 00"
R = 4,583.66'
T = 1,056.76'
L = 2,077.22'
E = 120.24'

BENCHMARK DATA
BM1: NO. 5 REBAR WITH RED CAP STA. 527+22.38, 2.52' LT EL. 970.77
BM2: NO. 4 REBAR IN CONCRETE STA. 532+26.20, ℄ US 30 EL. 957.22

HYDRAULIC DATA

DRAINAGE AREA = 570 SQ. MILES
FLOW ELEVATION = 911.5±
ORDINARY HIGH WATER = 915.80±
HIGH WATER ELEVATION (1959) = 927.0±

TRAFFIC DATA

CURRENT ADT (2006) = 19,800
CURRENT ADTT (2006) = 4356
DESIGN ADT (2026) = 25,200
DESIGN ADTT (2025) = 5544

EXISTING STRUCTURE

TYPE: CONTINUOUS STEEL GIRDER WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPAN: 61'; 102'; 102'; 80'; 64' C/C BEARINGS
ROADWAY: 40'-0" F/F BARRIER
SKEW: NONE
LOADING: HS20-44
ALIGNMENT: TANGENT
WEARING SURFACE: LATEX MODIFIED CONCRETE
APPROACH SLABS: AS-1-67 (25' LONG)
DATE BUILT: 1969
STRUCTURE FILE NO.: 7607385 LT. 7607369 RT.

PROPOSED WORK

1. REMOVE EXISTING DECK, GIRDERS AND PORTION OF ABUTMENTS
2. CONVERT ABUTMENTS TO SEMI-INTEGRAL
3. RECONSTRUCT PIER CAPS
4. REPLACE BEARINGS WITH ELASTOMERIC BEARINGS
5. SET NEW BEAMS
6. CONSTRUCT A NEW COMPOSITE DECK 39' WIDE T/T BARRIER
7. SEAL CONCRETE SURFACES
8. CONSTRUCT FULL WIDTH APPROACH SLABS
9. COMPLETE ROADWORK ITEMS TO FINISH THE PROJECT

PROPOSED STRUCTURE

TYPE: PRESTRESSED CONCRETE I-BEAMS ON SEMI-INTEGRAL ABUTMENTS WITH REINFORCED CONCRETE DECK
SPAN: 61'; 102'; 102'; 80'; 64' C/C BEARINGS
ROADWAY: 39'-0" T/T BARRIER
SKEW: NONE
LOADING: SUPERSTRUCTURE - HS25, SUBSTRUCTURE - HS-20, ALTERNATE MILITARY LOADING AND FWS OF 60#/SF
ALIGNMENT: TANGENT
WEARING SURFACE: MONOLITHIC CONCRETE
APPROACH SLABS: AS-1-81 (25' LONG)
LONGITUDE: 81°32'03"
LATITUDE: 40°45'29"

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

DATE 12/2005
REVIEWED MLM
STRUCTURE FILE NUMBER 7607385 RT. 7607369 RT.
DRAWN JEP
REVISED
DESIGNED JEP
CHECKED KCS

STARK COUNTY
STA 527+44.88
STA 531+58.38

SITE PLAN
BRIDGE NO. STA-30-0670 L&R
US 30 OVER TUSCARAWAS RIVER & R.J. CORMAN RAILROAD

STA-30-(6.70)(11.57)
PID 23754

1/22
81/127

GENERAL NOTES

REFERENCE SHALL BE MADE TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-81	REVISED 07-19-02
PSID-1-99	REVISED 07-18-03
SBR-1-99	REVISED 07-19-02
SICD-1-96	REVISED 07-19-02

AND TO SUPPLEMENTAL SPECIFICATIONS:

843	DATED 04-18-2003

DESIGN SPECIFICATIONS:
THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2002, AND THE O.D.O.T. BRIDGE DESIGN MANUAL.

DESIGN LOADING:
HS25 (SUPERSTRUCTURE); HS 20 (SUBSTRUCTURE) AND THE ALTERNATE MILITARY LOADING.
FUTURE WEARING SURFACE (FWS) OF 60 PSF.

DESIGN STRESSES:
CONCRETE CLASS HP - COMPRESSIVE STRENGTH 4500 P.S.I.(SUPERSTRUCTURE)
CONCRETE CLASS C - COMPRESSIVE STRENGTH 4000 P.S.I. (SUBSTRUCTURE)
REINFORCING STEEL - ASTM A615 OR A996
GRADE 60 - MINIMUM YIELD STRENGTH 60,000 P.S.I.
MISCELLANEOUS STEEL - (LOAD PLS, COVER PLS, HP SECTIONS):
GRADE 36 - MINIMUM YIELD STRENGTH
36,000 P.S.I.

DESIGN DATA:
CONCRETE FOR PRESTRESSED BEAMS:
COMPRESSIVE STRENGTH (FINAL) - 7000 PSI
COMPRESSIVE STRENGTH (RELEASE) - 5000 PSI

PRESTRESSING STRAND:
AREA = 0.167 SQUARE INCHES
ULTIMATE STRENGTH = 270 KSI
INITIAL STRESS = 202.5 KSI (LOW RELAXATION STRANDS)

DECK PROTECTION METHOD:
EPOXY COATED REINFORCING STEEL
2-1/2" CONCRETE COVER
CLASS HP CONCRETE

MONOLITHIC WEARING SURFACE:
MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1" THICK

ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20' SPAN, AS PER PLAN:
THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES THAT ARE NOT SEPARATELY LISTED FOR PAYMENT, EXCEPT FOR WEARING COURSE REMOVAL. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL AND THE WEIGHT OF THE HAMMER SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.SUBMIT CONSTRUCTION PLANS PLANS ACCORDING TO CMS 501.05.

AN ASBESTOS SURVEY WAS COMPLETED FOR DISTRICT 4 BY EMERALD ENVIRONMENTAL. NO ASBESTOS WAS FOUND. A REPORT WILL BE PROVIDED TO THE CONTRACTOR BY THE DISTRICT AT THE PRECONSTRUCTION MEETING. THE CONTRACTOR SHALL FILL OUT THE REMAINDER OF THE NOTIFICATION OF DEMOLITION AND RENOVATION FORM AND SUBMIT IT TO THE OHIO EPA DIVISION OF AIR POLLUTION CONTROL, 420 MARKET AVE., NORTH CANTON, OHIO 44702, ATTENTION DAN ALEMAN, ADMINISTRATOR, (P) 330-489-3395 AND (F) 330-489-3335. ALL COST ASSOCIATED WITH THIS FORM SHALL BE INCLUDED IN ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20' SPAN, AS PER PLAN.

EXISTING STRUCTURE VERIFICATION:
DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

CONSTRUCTION CLEARANCE:
MAINTAIN A CONSTRUCTION CLEARANCE OF 15 FEET HORIZONTALLY FROM THE CENTER OF THE RAILROAD TRACKS AND 21 FEET VERTICALLY FROM A POINT LEVEL WITH THE TOP OF THE HIGHER RAIL, AND 10 FEET FROM THE CENTER OF TRACKS, AT ALL TIMES.

UTILITY LINES:
THE UTILITY(IES) SHALL BORE ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES. THE CONTRACTOR AND UTILITY(IES) ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

RAILROAD AERIAL LINES:
RAILROAD AERIAL LINES WILL BE RELOCATED BY THE RAILROAD. USE ALL PRECAUTIONS NECESSARY TO SEE THAT THE LINES ARE NOT DISTURBED DURING THE CONSTRUCTION STAGE AND COOPERATE WITH THE RAILROAD IN THE RELOCATION OF THESE LINES. THE COST OF THE RELOCATION WILL BE INCLUDED IN THE RAILROAD FORCE ACCOUNT WORK.

REINFORCING BAR MINIMUM LAP LENGTHS:
REINFORCING BARS, UNLESS OTHERWISE SHOWN IN THESE PLANS, SHALL HAVE MINIMUM LAP LENGTHS AS FOLLOWS:
#4 BARS - 1'-11"
#5 BARS - 2'-5"
#6 BARS - 2'-11"
#8 BARS - 4'-11"
#10 BARS - 7'-11"

ITEM 516, SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN:
INSTALL A 3 FOOT WIDE NEOPRENE SHEET AT LOCATIONS SHOWN IN THE PLANS. SECURE THE NEOPRENE SHEETING TO THE CONCRETE WITH 1¼" X #10 GAGE (LENGTH X SHANK DIA.) GALVANIZED BUTTON HEAD SPIKE THROUGH A 1 INCH OUTSIDE DIAMETER, # 10 GAGE GALVANIZED WASHER, MAXIMUM FASTENER WILL NOT DAMAGE EITHER THE NEOPRENE OR THE CONCRETE WILL BE USED SUBJECT TO APPROVAL OF THE ENGINEER.

CENTER THE NEOPRENE STRIPS ON ALL JOINTS. FOR HORIZONTAL JOINTS, SECURE THE HORIZONTAL NEOPRENE STRIP BY USING A SINGLE LINE OF FASTENERS, STARTING AT 6 INCHES (+/-) FROM THE NEOPRENE STRIP. FOR THE VERTICAL JOINTS SECURE THE VERTICAL NEOPRENE STRIP BY USING A SINGLE VERTICAL LINE OF FASTENERS, STARTING AT 6 INCHES (+/-) FROM THE VERTICAL EDGE OF THE NEOPRENE STRIP NEAREST TO THE CENTERLINE OF ROADWAY. FOR VERTICAL JOINTS , INSTALL 2 ADDITIONAL FASTENERS AT 6 INCHES CENTER TO CENTER, ACROSS THE TOP OF THE NEOPRENE STRIP ON THE SAME SIDE OF THE VERTICAL JOINT AS THE SINGLE VERTICAL ROW OF FASTENERS IS LOCATED.

THE VERTICAL NEOPRENE STRIPS SHALL COMPLETELY OVERLAP THE HORIZONTAL STRIPS. LAP LENGTHS OF THE HORIZONTAL STRIPS THAT ARE NOT VULCANIZED OR ADHESIVE BONDED, SHALL BE AT LEAST ONE FOOT IN LENGTH, OR 6 INCHES IN LENGTH IF THE LAP IS VULCANIZED OR ADHESIVE BONDED. NO LAPS ARE ACCEPTABLE IN VERTICALLY INSTALLED NEOPRENE STRIPS.

THE NEOPRENE SHEETING SHALL BE 3/32 INCH THICK GENERAL PURPOSE, HEAVY DUTY NEOPRENE SHEET WITH NYLON FABRIC REINFORCEMENT. THE SHEETING SHALL BE "FAIRPRENE NUMBER NN-0003", BY E.I. DUPONT DE NEMOURS AND COMPANY, INC., "WINGPRENE BY YHE GOODYEAR TIRE AND RUBBER COMPANY, OR AN APPROVED ALTERNATE. THE NEOPRENE SHEETING SHALL CONFORM TO THE FOLLOWING:

DESCRIPTION OF TEST	ASTM METHOD	REQUIREMENT
THICKNESS, INCHES	D 751	0.094 +/-.01
BREAKING STRENGTH, GRAB , LBS, MINIMUM	D 751	700 X 700
ADHESIVE STRIP, 1" WIDE X 2" LONG, LBS, MINIMUM	D 751	9
BURST STRENGTH, PSI, MINIMUM	D 751	1400
HEAT AGING, 70 HOURS, T 212°F, 180 BEND	D 2136	NO CRACKING
WITHOUT CRACKING		OF COATING
LOW TEMPERATURE BRITTLENESS, 1 HOUR AT -40° F, BEND AROUND ¼ INCH MANDREL	D 2136	NO CRACKING OF COATING

THE DEPARTMENT WILL MEASURE THE TOTAL LENGTH OF JOINT TO BE SEALED BY THE NUMBER OF FEET.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN.

ITEM 511, CLASS HP CONCRETE, BRIDGE DECK, AS PER PLAN
GENERAL REQUIREMENTS.
THE PROVISIONS OF ITEM 511 SHALL APPLY EXCEPT AS NOTED BELOW.

MIX OPTION.
ALL SUPERSTRUCTURE, BRIDGE DECK, SIDEWALK, AND PARAPET CONCRETE SHALL BE THIS MIX (HP4, AS PER PLAN)

THE FOLLOWING PROPORTIONS WILL BE USED AS A STARTING MIX DESIGN.

CONCRETE TABLE
QUANTITIES PER CUBIC YARD
AGGREGATES (SSD)

HP4, AS PER PLAN (GGBF SLAG + MICROSILICA)

AGGREGATE TYPE	FINE AGGRE (lb)	#8 COURSE AGGRE (lb)	#57 COARSE AGGRE. (lb)	TOTAL (lb)	CEMENT CONTENT (lb)	GGBF SLAG (lb)	MICRO-SILICA (lb)	WATER TO CEMENTITIOUS RATIO +/- .01	AIR CONTENT +/- 2%
GRAVEL	1245	360	1315	2920	400	170	30	0.43	7
LIMESTONE	1245	360	1335	2940	400	170	30	0.43	7
SLAG	1245	315	1155	2715	400	170	30	0.43	7

* ALL COARSE AGGREGATE SHALL HAVE AN ABSORPTION OF 1.00% OR GREATER AS DEFINED PER ASTM C127

THE WEIGHTS SPECIFIED IN THE CONCRETE TABLE WERE CALCULATED FOR MATERIALS OF THE FOLLOWING BULK SPECIFIC GRAVITIES (SSD): NATURAL SAND AND GRAVEL 2.62, LIMESTONE SAND 2.68, LIMESTONE 2.65, SLAG 2.30, FLY ASH 2.65, GGBF SLAG 2.90, MICROSILICA SOLIDS 2.20, AND PORTLAND CEMENT 3.15. FOR AGGREGATES OF SPECIFIC GRAVITIES DIFFERING MORE THAN PLUS OR MINUS 0.02 FROM THESE, THE WEIGHTS IN THE TABLE WILL BE CORRECTED

BASIS OF PAYMENT. PAYMENT FOR THE ABOVE COMPLETED QUANTITIES WILL BE MADE AT THE CONTRACT BID PRICE FOR:

ITEM	UNITS	DESCRIPTION
511	CUBIC YARDS	CLASS HP CONCRETE, FOR BRIDGE DECK WITH, AS PER PLAN
511	CUBIC YARDS	CLASS HP CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN

CONCRETE PARAPETS
AS SOON AS THE CONCRETE SAW CAN BE OPERATED WITHOUT DAMAGING THE FRESHLY PLACED CONCRETE, SAW CUT 1¼ DEEP CONTROL JOINTS INTO THE PERIMETER OF THE CONCRETE PARAPET STARTING AND ENDING AT THE ELEVATION OF THE CONCRETE DECK. PLACE THE SAWCUTS AT THE MINIMUM OF 6 FEET AND A MAXIMUM OF 10 FEET CENTERS. USE A EDGE GUIDE, FENCE, OR JIG TO ENSURE THAT THE CUT JOINT IS STRAIGHT, TRUE, AND ALIGNED ON ALL FACES OF THE PARAPET. THE JOINT WIDTH SHALL BE THE WIDTH OF THE SAW BLADE. A NOMINAL WIDTH OF ¼ INCH. SEAL THE PERIMETER OF THE DEFLECTION CONTROL JOINT TO A MINIMUM DEPTH OF 1 INCH. WITH A POLYURRTHANE OR POLYMERIC MATERIAL CONFORMING TO ASTM C920, TYPE S. LEAVE THE BOTTOM ½ INCH OF THE INSIDE AND OUTSIDE FACE UNSEALED TO ALLOW WATER TO ESCAPE.

ABBREVIATIONS:

APPR. - APPROACH
APPROX. - APPROXIMATE
BM - BENCHMARK
BOT - BOTTOM
BRG. - BEARINGS
BTA - BRIDGE TERMINAL ASSEMBLY
C/C - CENTER TO CENTER
CFS - CUBIC FEET PER SECOND
℄ - CENTERLINE
CJ - CONSTRUCTION JOINT
CMP - CORRUGATED METAL PIPE
CONC. - CONCRETE
CONST. - CONSTRUCTION
CVN - CHARPY V-NOTCH
DIA. - DIAMETER
EB - EASTBOUND
EL - ELEVATION
E/P - EDGE OF PAVEMENT
E/S - EDGE OF SHOULDER
EX. - EXISTING
EXP - EXPANSION
FA - FORWARD ABUTMENT
FF - FAR FACE
FT - FEET
FTG. - FOOTING
F/F - FACE TO FACE
G/R - GUARDRAIL
HW - HIGH WATER
INV. - INVERT
JT. - JOINT
LT. - LEFT
MH - MANHOLE
MIN. - MINIMUM
NF - NEAR FACE
NO. - NUMBER
NPCPP - NON-PERFORATED CORRUGATED PLASTIC PIPE
O/O - OUT TO OUT
PCPP - PERFORATED CORRUGATED PLASTIC PIPE
PEJF - PREFORMED EXPANSION JOINT FILLER
PG - PROFILE GRADE
SEC - SECOND
SER - SERIES
SHT. - SHEET
SPA. - SPACING
S.R. - STATE ROUTE
STA - STATION
TBR - TO BE REMOVED
TH. - THICKNESS
T/CURB - TOP OF CURB
T/S - TOP OF SLOPE
T/T - TOE TO TOE
TYP. - TYPICAL
VERT. - VERTICAL
℄ - PLATE
PROP. - PROPOSED
PVMT. - PAVEMENT
RA - REAR ABUTMENT
RCP - ROCK CHANNEL PROTECTION
REIN. - REINFORCED
RT. - RIGHT
R/W - RIGHT OF WAY
WB - WESTBOUND

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

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GENERAL NOTES
BRIDGE NO. STA-30-0670 L&R
US 30 OVER TUSCARAWAS RIVER & R.J. CORMAN RAILROAD

STA-30-(6.70) (11.57)
PID 23754

2/22

82/127

GENERAL NOTES (CON'T)

ITEM 526-REINFORCED CONCRETE APPROACH SLAB (T=15"), AS PER PLAN:
THE CONCRETE FOR THE APPROACH SLAB SHALL BE CLASS HP CONCRETE, MIX 4. THE PROPORTIONS FOR THE STARTING MIX DESIGN ARE DESCRIBED IN THE "ITEM 511-CLASS HP CONCRETE, BRIDGE DECK, AS PER PLAN" NOTE. QUANTITIES OF THE CONCRETE AND REINFORCING FOR THE PARAPET TRANSITIONS ON THE APPROACH SLABS ARE INCLUDED IN ITEM 511 AND ITEM 509 RESPECTIVELY. THE REINFORCING QUANTITY FOR THE PARAPET TRANSITIONS IS INCLUDED IN THE SUPERSTRUCTURE COLUMN FOR EACH BRIDGE.

ITEM 843-PATCHING CONCRETE SURFACES WITH TROWELABLE MORTAR, AS PER PLAN:
AN ADDITIONAL QUANTITY OF 18 SF HAS BEEN CARRIED TO THE ESTIMATED QUANTITIES TO BE USED AS DIRECTED BY THE ENGINEER.

RAILROAD NOTES:
THE CONTRACTOR SHALL NOT COMMENCE ANY WORK UNTIL REQUIRED INSURANCE HAS BEEN PROVIDED TO:

DEBBIE HAWLEY
CONTRACTS ASSISTANT
R.J. CORMAN RAILROAD GROUP
PO BOX 788
NICHOLASVILLE, KY 40340
PHONE: 859-881-2499

THE CONTRACTOR SHALL NOT COMMENCE ANY WORK ON RAILROAD CORRIDORS UNTIL IT HAS GIVEN THE RAILROAD WRITTEN NOTICE AND NOTIFIED RAILROAD SUPERINTENDENT OF ANTICIPATED START DATE AT LEAST 10 DAYS IN ADVANCE.

DARRELL PRIDDY
RAILROAD SUPERINTENDENT
PHONE: 330-364-4567

PLANS SHOULD BE SUBMITTED TO THE RAILROAD FOR ANY TEMPORARY VERTICAL OR HORIZONTAL CLEARANCE VIOLATIONS RESULTING FROM SCAFFOLDIING, FORMS, BRACING OR OTHER ITEMS TO BE PLACED WITHIN THE RAILROAD CLEARANCE (15' HORIZONTAL AND 21' VERTICAL)

THE CONTRACTOR SHOULD NOT CROSS THE RAILROAD TRACKS WITH WORKERS OR EQUIPMENT EXCEPT AT EXISTING PUBLIC GRADE CROSSINGS OR AT A TEMPORARY CROSSING INSTALLED BY AGREEMENT WITH R.J. CORMAN RAILROAD GROUP (RJC).

TRACKED EQUIPMENT SHOULD NOT CROSS EXCEPT AT TEMPORARY CROSSINGS, WHICH HAVE BEEN PRE-APPROVED FOR SUCH USE BY THE RAILROAD.

THE CONTRACTOR IS REQUIRED TO PROTECT THE TRACK AND ROADBED DURING LIFTING OPERATIONS OVER THE TRACK. TO PROTECT AGAINST DAMAGE TO THE RAILS IN THE EVENT OF A DROP, TEMPORARY PLACEMENT OF TIMBER MATTING WITHIN THE TRACK DURING REMOVAL AND INSTALLATION OF BEAMS OR OTHER LARGE ITEMS THAT ARE DIRECTLY OVER THE RAILS. THE MATTING CAN ONLY BE PLACED ON THE TRACK IN THE PRESENCE OF A RJC FLAGMAN OR OTHER QUALIFIED EMPLOYEE AND MUST BE REMOVED UPON HIS ORDER.

COMPUTED BY : SRR DATE : 12/2005
CHECKED BY : JEP DATE : 12/2005

ESTIMATED QUANTITIES

ITEM	ITEM EXT.	LEFT BRIDGE	RIGHT BRIDGE	UNIT	DESCRIPTION	LEFT BRIDGE ABUTS.	LEFT BRIDGE PIER	LEFT BRIDGE SUPER	LEFT BRIDGE GEN	RIGHT BRIDGE ABUTS.	RIGHT BRIDGE PIER	RIGHT BRIDGE SUPER	RIGHT BRIDGE GEN	AS PER PLAN SHEET NO.
202	11203	LUMP	LUMP		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LUMP				LUMP	2/22
202	22900	134	134	SQ YD	APPROACH SLAB REMOVED				134				134	
503	11100	LUMP	LUMP		COFFERDAMS, CRIBS AND SHEETING				LUMP				LUMP	
503	21100	576	576	CU YD	UNCLASSIFIED EXCAVATION	576				576				
509	10000	260,060	260,060	POUND	EPOXY COATED REINFORCING STEEL	7,981	49,751	202,328		7,981	49,751	202,328		
510	10000	152	152	EACH	DOWEL HOLES WITH NONSHRINK NONMETALLIC GROUT	152				152				
511	42500	213	213	CU YD	CLASS C CONCRETE, PIER CAP		213				213			
511	46200	49	49	CU YD	CLASS C CONCRETE	49				49				
511	50001	639	639	CU YD	CLASS HP CONCRETE, BRIDGE DECK, AS PER PLAN			639				639		2/22
511	50101	138	138	CU YD	CLASS HP CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN			130	8			130	8	2/22
511	52000	LUMP	LUMP		CLASS HP CONCRETE, TEST SLAB				LUMP				LUMP	
512	10100	2942	2942	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	142	987	1813		142	987	1813		
515	15030	25	25	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE 4 MOD. (60")			25				25		
515	20000	28	28	EACH	INTERMEDIATE DIAPHRAGMS			28				28		
516	13900	196	196	SQ FT	2" PREFORMED EXPANSION JOINT FILLER				196				196	
516	14021	90	90	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN			90				90		2/22
516	44100	5	5	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES (1'-1½" X 1'-1½" X 2¾") (NEOPRENE) AND LOAD PLATE (1'-2½" X 1'-2½" X 1½")	5				5				
516	44100	5	5	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES (1'-2" X 1'-1" X 2 13/16") (NEOPRENE) AND LOAD PLATE (1'-3" X 1'-2" X 1½")	5				5				
516	44200	10	10	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES (1'-4" X 1'-4½" X 3¼") (NEOPRENE) AND LOAD PLATE (1'-5" X 1'-5½" X 1½")		10				10			
516	44300	10	10	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES (1'-3" X 1'-2½" X 4¼") (NEOPRENE) AND LOAD PLATE (1'-4" X 1'-3½" X 1½")		10				10			
516	44300	20	20	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES (1'-4½" X 1'-4½" X 4¼") (NEOPRENE) AND LOAD PLATE (1'-5½" X 1'-5½" X 1½")		20				20			
518	12301	6	6	EACH	SCUPPERS, INCLUDING SUPPORTS, AS PER PLAN			6				6		13/22
518	21200	78	78	CU YD	POROUS BACKFILL WITH FILTER FABRIC	78				78				
518	40000	96	96	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	96				96				
518	40010	68	68	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	68				68				
526	25001	231	231	SQ YD	REINFORCED CONCRETE APPROACH SLAB (T=15"), AS PER PLAN				231				231	19/22
843	50001	10	10	SQ FT	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN		1		9		1		9	3/22

THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN RAILROAD DRAINAGE DITCHES AT ALL TIMES.

THE CONTRATOR SHALL KEEP THE IMMEDIATE RAILROAD TRACK AREA CLEAN AT ALL TIMES.

NO DIRT, DEBRIS OR OTHER FOREIGN MATERIALS CAN BE PLACED ON OR WITHIN THE TRACK AREA.

FLAGGING REQUIREMENTS:
THE CONTRACTOR SHALL NOT BE WITHIN 15' OF THE RAILROAD TRACKS WITH PERSONNEL, EQUIPMENT OR MATERIAL. THE CONTRACTOR SHALL NOT WORK DIRECTLY OVER THE TRACK, EXCEPT IN THE PRESENCE AND WITH THE APPROVAL OF A RAILROAD FLAGMAN.

THE CONTRACTOR MUST FOLLOW ALL FRA REGULATIONS AND RAILROAD SAFETY REQUIREMENTS WHILE WORKING ON RAILROAD PROPERTY.

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

IN STREAM WORK:
NO WORK SHALL OCCUR BELOW THE ORDINARY HIGH WATER MARK IN THE TUSCARAWAS RIVER BETWEEN APRIL 15 AND JUNE 30.

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 OPERATIONS SUCH AS FOUNDATION, PIER OR ABUTMENT EXCAVATION, CHANNEL CLEAN OUT, EXCAVATION FOR ROCK CHANNEL PROTECTION AND REMOVAL OF ANY TEMPORARY FILL ASSOCIATED WITH CONSTRUCTION OPERATIONS.

PAINTING AND SEALING OPERATIONS:
THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT EPOXY-URETHANE SEALER, PAINT, OR OTHER MATERIALS USED TO REPAIR, CLEAN, SEAL, OR TREAT ANY BRIDGE STRUCTURE FROM ENTERING ANY STREAMS, WETLANDS OR OTHER WATERS OF THE UNITED STATES AND TAKE THE APPROPRIATE ACTIONS IN THE EVENT OF A RELEASE. THE CONTRACTOR SHALL LIMIT THE AMOUNT OF OPEN PAINT/SEALER MATERIAL TO THE EXTENT PRACTICABLE TO PERFORM THE REQUIRED WORK. DISCARDED CONTAINERS SHALL BE REMOVED FROM THE VICINITY OF THE STREAM, AND UNDER NO CIRCUMSTANCES SHALL ANY PAINT/SEALER MATERIAL BE STORED WITHIN THE 100 YEAR FLOODPLAIN. IN EACH CASE WHERE THERE IS AN INCIDENT OF DEBRIS AND/OR MATERIALS THAT FALL OR MIGRATE INTO THE RIVER, THE CONTRACTOR SHALL, AS SOON AS POSSIBLE, NOTIFY THE ENGINEER/SUPERVISOR, AND THE FOLLOWING AGENCIES:

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

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

B. STARK COUNTY SANITARY ENGINEER:
MICHAEL ARMOGIDA, P.E.
1701 MAHONING ROAD, NE, CANTON, OHIO 44705
(330) 451-2303
OR (330) 451-2320 (24 HOUR EMERGENCY)

C. STARK SOIL AND WATER CONSERVATION DISTRICT
2350 RICHVILLE DRIVE, MASSILLON, OHIO 44646
(330) 830-7700 EXTENSION 103

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

DATE 12/2005
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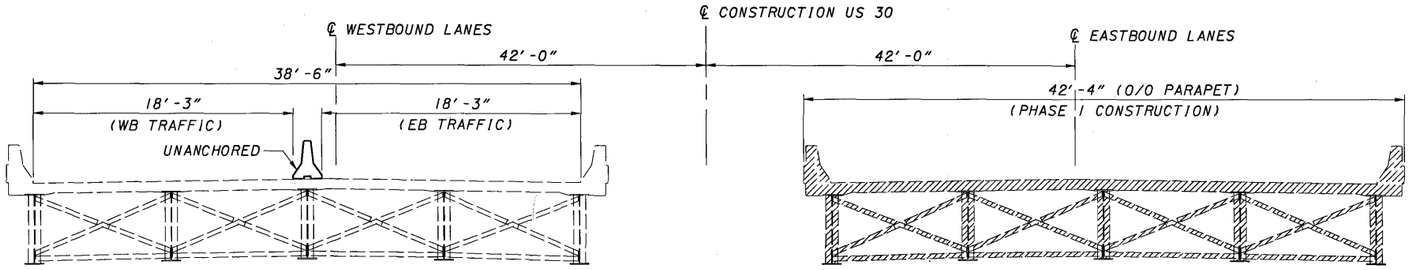
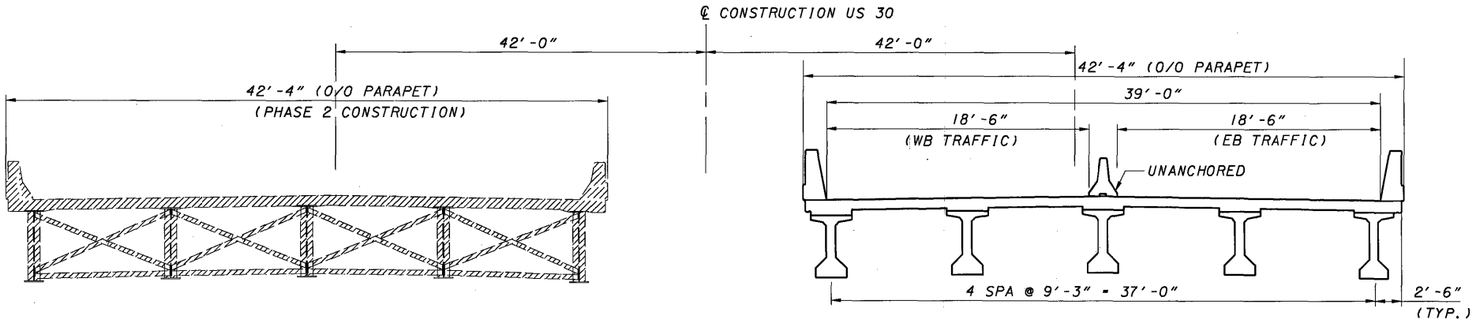
GENERAL NOTES & ESTIMATED QUANTITIES
BRIDGE NO. STA-30-0670 L&R
US 30 OVER TUSCARAWAS RIVER & R.J. CORMAN RAILROAD

STA-30-(6.70)/(11.57)
PID 23754



PHASE 1 TRAFFIC & PHASE 1 CONSTRUCTION



PHASE 2 TRAFFIC & PHASE 2 CONSTRUCTION

SEQUENCE OF CONSTRUCTION

1. INSTALL PORTABLE CONCRETE BARRIER ON LT. BRIDGE AS SHOWN IN PHASE 1 CONSTRUCTION DIAGRAM, TO MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION.
2. CLOSE RT. BRIDGE AND REMOVE RAILING, DECK, BEAMS AND PIER CAPS.
3. CONSTRUCT PIER CAPS, ERECT BEAMS, CONSTRUCT NEW SLAB, PARAPETS AND APPROACH SLABS FOR RT. BRIDGE.
4. COMPLETE REMAINING ROADWAY ITEMS FOR RT. BRIDGE AND INSTALL PORTABLE CONCRETE BARRIER AS SHOWN IN PHASE 2 CONSTRUCTION DIAGRAM.
5. SWITCH TRAFFIC TO RT. BRIDGE TO MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION.
6. CLOSE LT. BRIDGE AND REMOVE RAILING, DECK, BEAMS AND PIER CAPS.
7. CONSTRUCT PIER CAPS, ERECT BEAMS, CONSTRUCT NEW SLAB, PARAPETS AND APPROACH SLABS FOR LT. BRIDGE.
8. COMPLETE REMAINING ROADWAY ITEMS FOR LT. BRIDGE AND OPEN TWO LANE TRAFFIC FOR RT. AND LT. BRIDGE.

NOTES

1. FOR ADDITIONAL MAINTENANCE OF TRAFFIC DETAILS, SEE ROADWAY PLANS.
2. FOR SUBSTRUCTURE REMOVAL DETAILS, SEE SHEET 5/22.
3. FOR LIST OF ABBREVIATIONS, SEE SHT. 2/22.

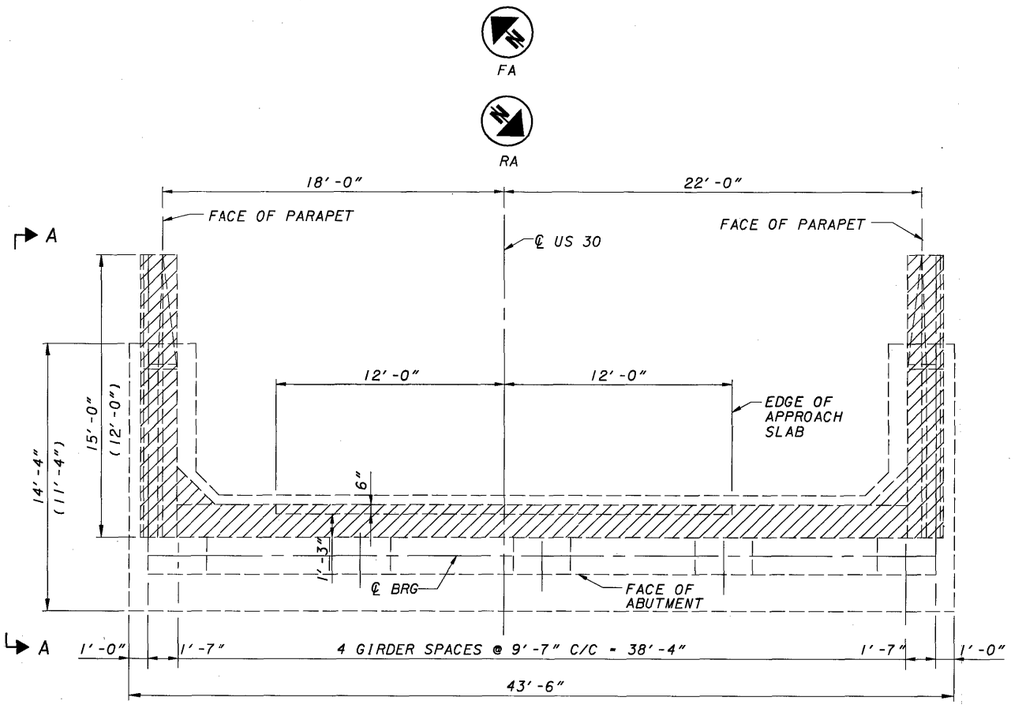
DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR. STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

DESIGNED	DRAWN	REVISED	DATE
JEP	SRR	MLM	12/2005
CHECKED	REVISED	STRUCTURE FILE NUMBER 1607365 1607369 RT.	
KCS			

PHASE CONSTRUCTION DETAILS

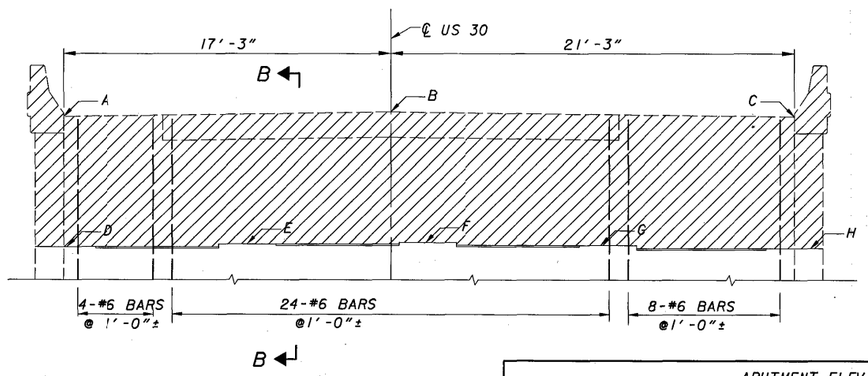
BRIDGE NO. STA-30-0670 L&R
US 30 OVER TUSCAWARAS RIVER & R.J. CORMAN RAILROAD

STA-30-(6.70) (11.57)
PID 23754



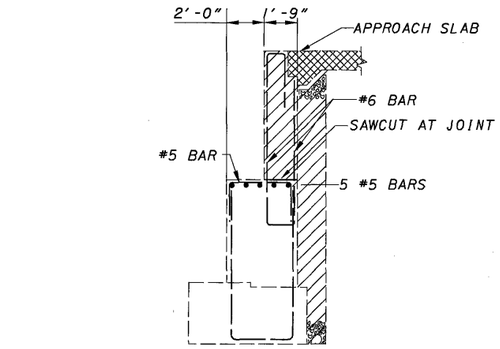
ABUTMENT PLAN

(WESTBOUND SHOWN, EASTBOUND OPPOSITE HAND)



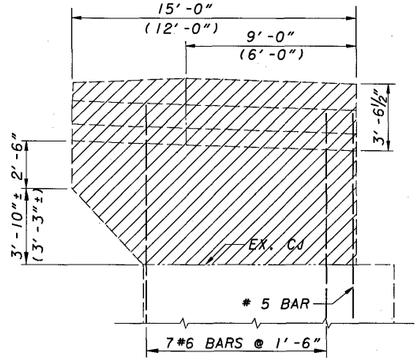
ABUTMENT ELEVATION

ABUTMENT ELEVATIONS								
ABUTMENT	A	B	C	D	E	F	G	H
RA-EB	970.61	970.96	970.63	963.72	963.88	964.03	963.94	963.82
RA-WB	970.81	971.03	970.65	963.84	963.98	964.07	963.94	963.77
FA-EB	960.98	960.79	960.46	953.96	953.89	953.77	953.60	953.50
FA-WB	961.30	961.06	960.77	954.38	954.24	954.15	954.00	953.84

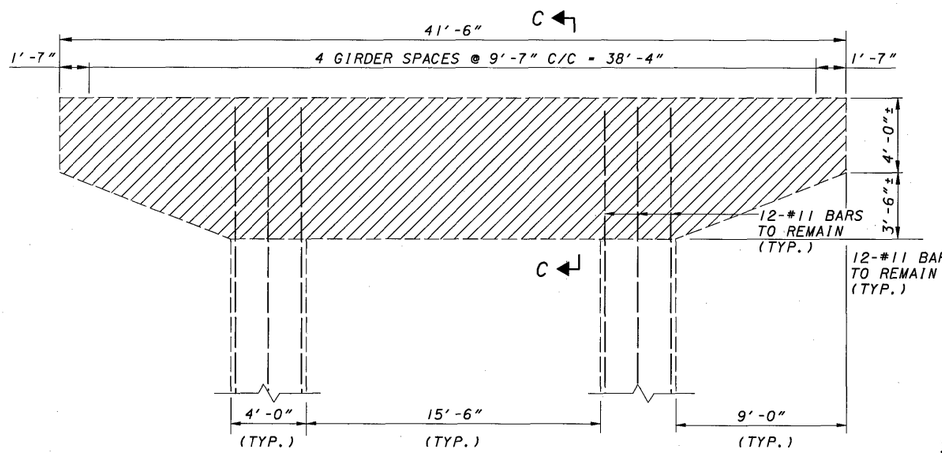


SECTION B-B

(FORWARD ABUTMENT SHOWN, REAR ABUTMENT SIMILAR)
(PILES NOT SHOWN)

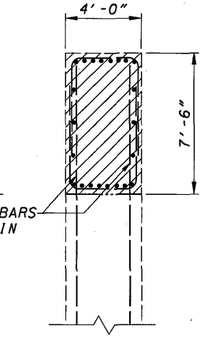


VIEW A-A



PIER ELEVATION

(PIERS 1, 2, 3 & 4)



SECTION C-C

LEGEND:

ITEM 202 - PORTIONS OF STRUCTURE TO BE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

ITEM 202 - APPROACH SLAB TO BE REMOVED

NOTES:

1. ALL EX. DIMENSIONS ARE ±.
2. BEAM SEAT ELEVATIONS FROM FIELD SURVEY.
3. CONTRACTOR SHALL REMOVE CONCRETE TO ELEVATIONS INDICATED IN PLANS.
4. FOR LIST OF ABBREVIATIONS, SEE SHT. 2722.

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

DESIGNED	DRAWN	REVIEWED	DATE
JEP	RAS	MLM	12/2005
CHECKED	REVISED	STRUCTURE FILE NUMBER 7607315 RT. 7607369 RT.	
ASB			

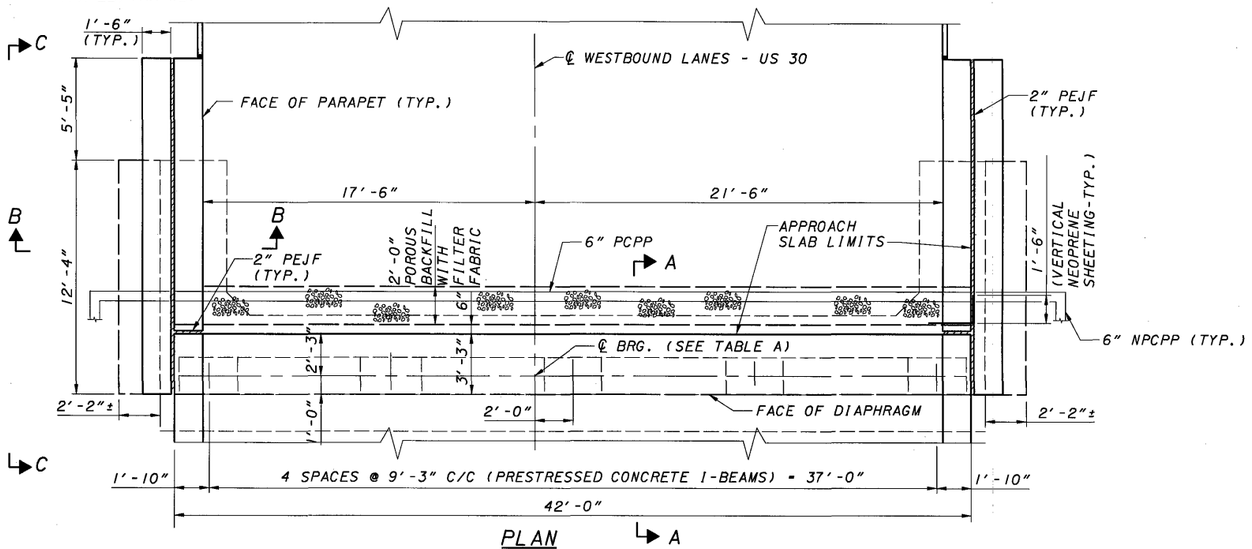
REMOVAL DETAILS
BRIDGE NO. STA-30-0670 L&R
US 30 OVER TUSCARAWAS RIVER & R.J. CORMAN RAILROAD

STA-30-(6.70) (11.57)
PID 23754

5/22

85/127

(FA-EB) (RA-WB)

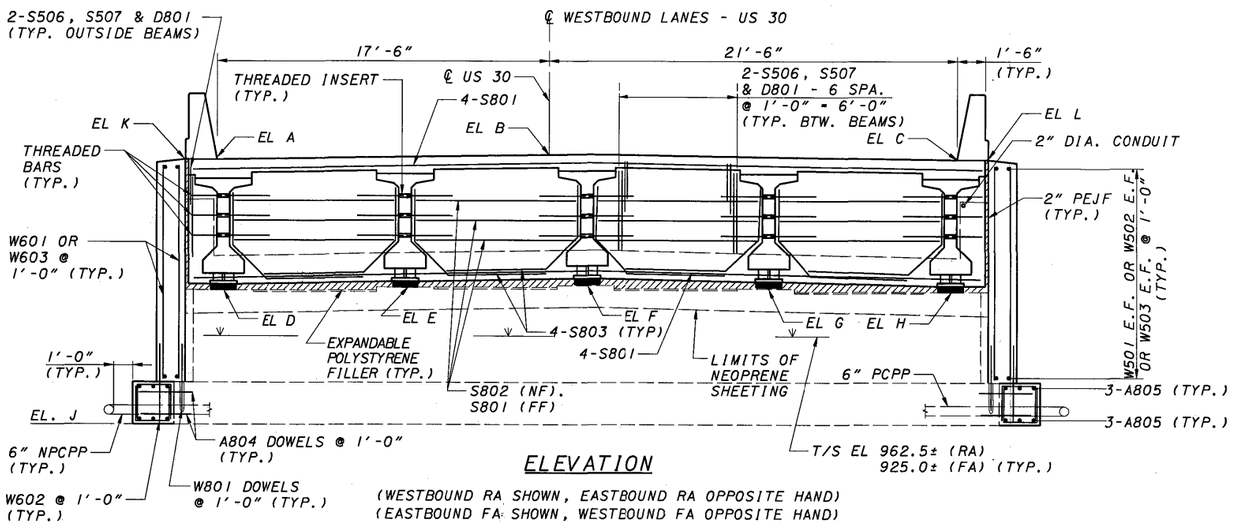


PLAN

(WESTBOUND RA SHOWN, EASTBOUND RA OPPOSITE HAND)
(EASTBOUND FA SHOWN, WESTBOUND FA OPPOSITE HAND)

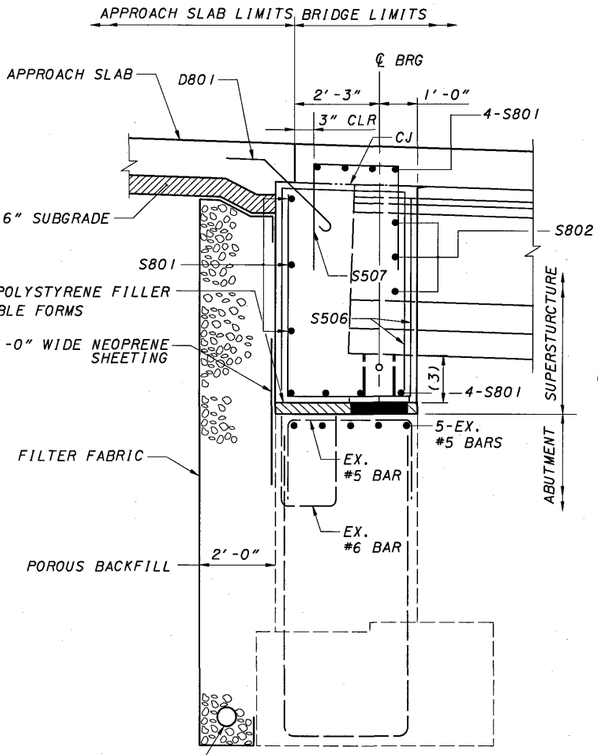
TABLE A												
ABUTMENT ELEVATIONS												
ABUTMENT	STA.	A(1)	B(1)	C(1)	D(2)	E(2)	F(2)	G(2)	H(2)	J	K	L
RA-EB	527+49.13	970.83	971.24	970.67	963.82	963.94	964.03	963.88	963.72	956.65±	970.73	970.57
FA-EB	531+58.13	960.65	960.74	960.18	953.96	953.89	953.77	953.60	953.50	945.84±	960.55	960.08
RA-WB	527+47.13	970.88	971.29	970.72	963.84	963.98	964.07	963.94	963.77	956.70±	970.78	970.62
FA-WB	531+56.13	960.70	961.11	960.85	953.38	954.00	954.15	954.24	954.84	946.25±	960.60	960.75

(1) ELEVATION AT APPROACH SLAB & BRIDGE LIMIT INTERFACE
(2) ELEVATION AT ℄ ABUTMENT BRG.



ELEVATION

(WESTBOUND RA SHOWN, EASTBOUND RA OPPOSITE HAND)
(EASTBOUND FA SHOWN, WESTBOUND FA OPPOSITE HAND)



(3) - SEE TABLE B

SECTION A-A

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR)

TABLE B				
ABUTMENT	REAR		FORWARD	
LOCATION	EB	WB	EB	WB
B1	9 7/8"	9 1/8"	7 5/8"	4 1/4"
B2	11 1/2"	11 1/2"	10 3/8"	9 1/8"
B3	11 1/2"	11 1/2"	11"	10 1/2"
B4	11 1/2"	11 1/2"	11 1/4"	10 1/2"
B5	9 1/4"	10 1/4"	8 1/4"	9 5/8"

NOTES:

1. FOR A LIST OF ABBREVIATIONS, SEE SHEET 2/22.
2. ALL EX. DIMENSIONS ARE ±.
3. FOR SECTION B-B & VIEW C-C, SEE SHT. 7/22.
4. FOR REINFORCING STEEL LAP LENGTHS, SEE SHT. 2/22.
5. ABUTMENT DIAPHRAGM CONCRETE SHALL BE PAID WITH ITEM 511-CLASS HP CONCRETE, BRIDGE DECK, AS PER PLAN
6. FOR BEAM LAYOUT DESIGNATION, SEE SHEET. 9/22.

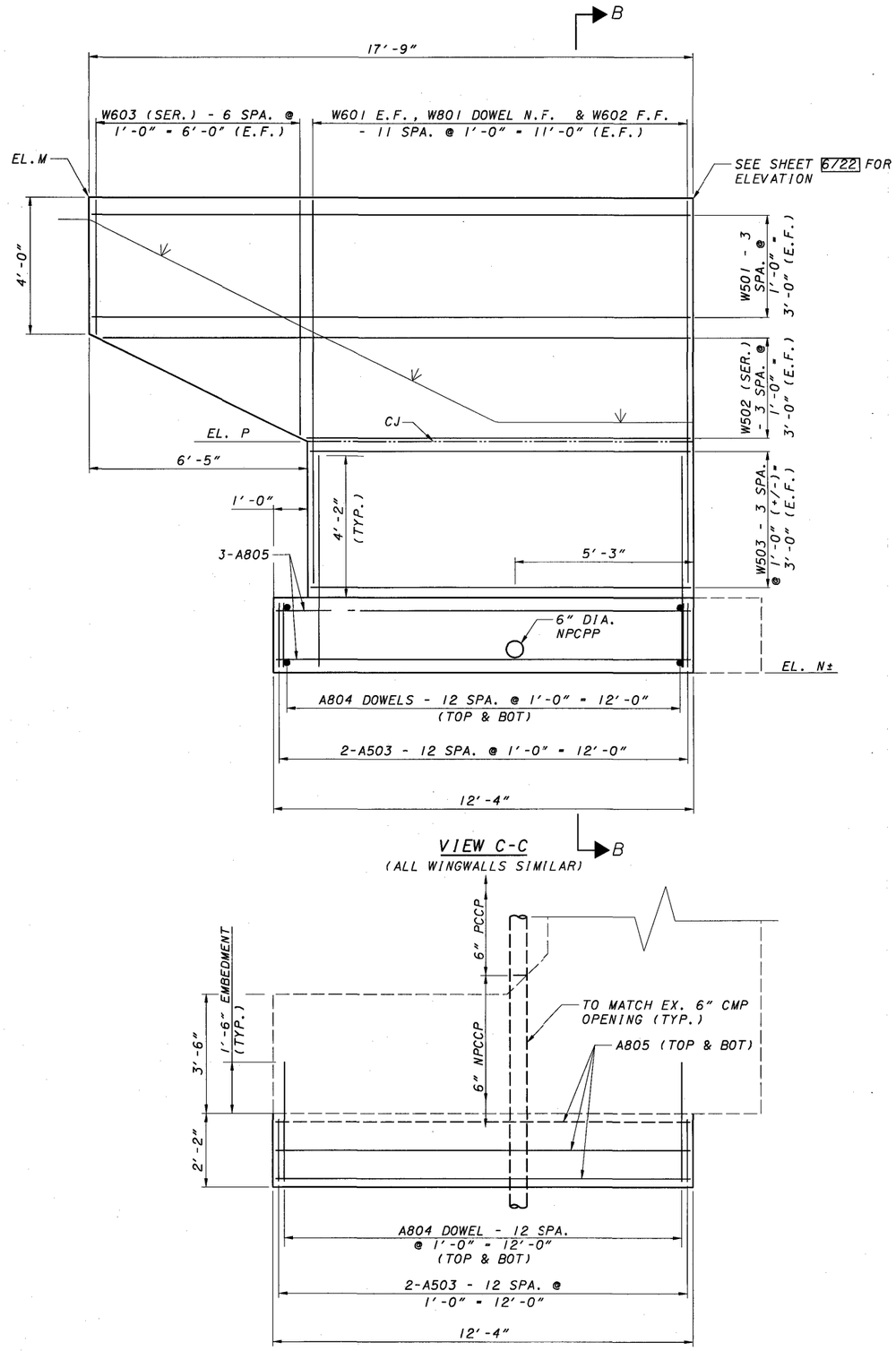
DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

DESIGNED	DRAWN	REVIEWED	DATE
JEP	SRR	MLM	12/2005
CHECKED	REVISED	STRUCTURE FILE NUMBER 7607365 LT. 7607369 RT.	
KCS			

ABUTMENT DETAILS

BRIDGE NO. STA-30-0670 L&R
US 30 OVER TUSCARAWAS RIVER & R.J. CORMAN RAILROAD

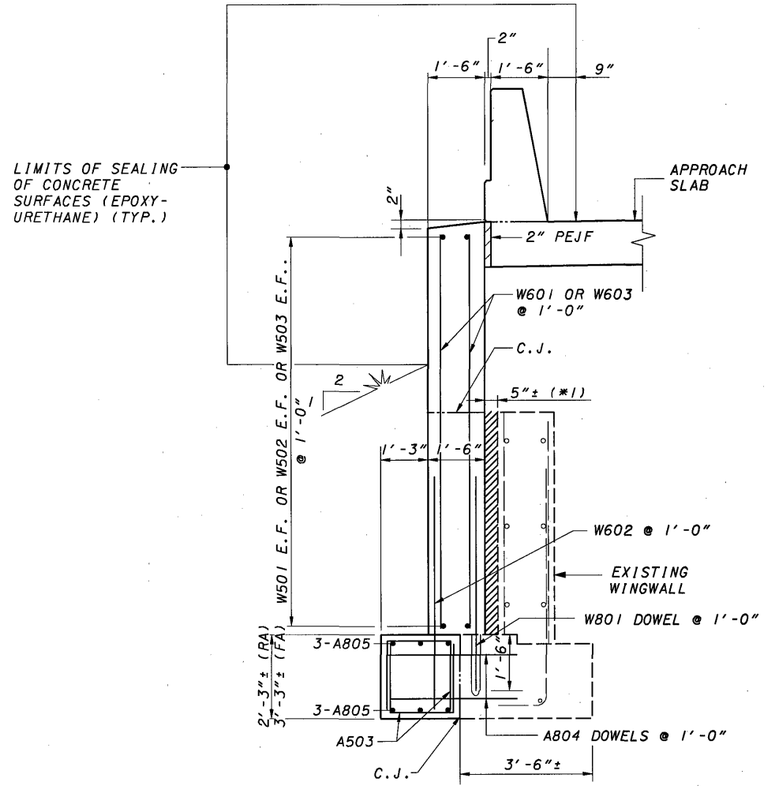
STA-30-(6.70) (11.57)
PID 23754



VIEW C-C
(ALL WINGWALLS SIMILAR)

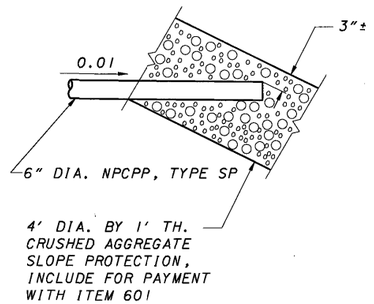
FOOTING PARTIAL PLAN

ABUTMENT	SIDE	M	N	P
RA-EB	LT	971.17	956.65	963.96
RA-EB	RT	971.01	956.65	963.86
FA-EB	LT	960.11	946.84	953.60
FA-EB	RT	959.64	946.84	953.60
RA-WB	LT	971.06	956.70	963.85
RA-WB	RT	971.22	956.70	964.01
FA-WB	LT	960.31	946.25	954.00
FA-WB	RT	960.16	946.25	954.00



SECTION B-B

(*1) - CONTRACTOR SHALL FILL THIS GAP WITH CLASS C CONCRETE OR MORTAR, VOLUME OF MATERIAL WILL BE INCIDENTAL TO ITEM 511 CLASS C CONCRETE INCLUDING FOOTING



TERMINATION OF 6" NPCPP

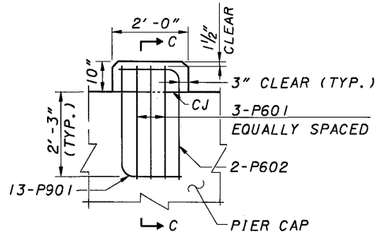
NOTES:
1. FOR LIST OF ABBREVIATIONS, SEE SHEET 2722.
2. ALL EX. DIMENSIONS ARE ±.
3. FOR REINFORCING STEEL LAP LENGTHS, SEE SHT. 2722.
4. EMBEDMENT LENGTH FOR DOWELS SHALL BE 1'-0", UNLESS NOTED OTHERWISE.
5. ALL EXPOSED SURFACES OF CONCRETE WINGWALLS SHALL BE SEALED WITH AN EPOXY-URETHANE SEALANT.
6. ELEVATIONS IN PARENTHESIS ARE FOR LEFT SIDE.

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

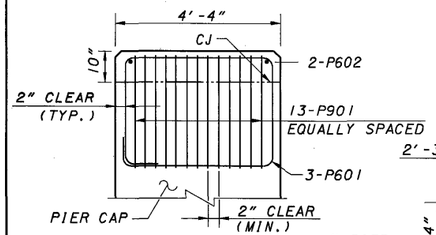
DESIGNED	DRAWN	REVISED	DATE
JEP	SAR	MLM	12/2005
CHECKED	REVISED	STRUCTURE FILE NUMBER	
KCS		7607395 LT. 7607369 RT.	

ABUTMENT DETAILS
BRIDGE NO. STA-30-0670 L&R
US 30 OVER TUSCARAWAS RIVER & R.J. CORMAN RAILROAD

STA-30-(6.70) (11.57)
PID 23754

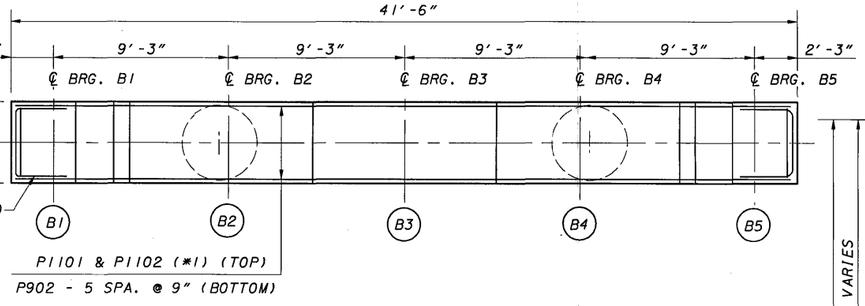


DETAIL A



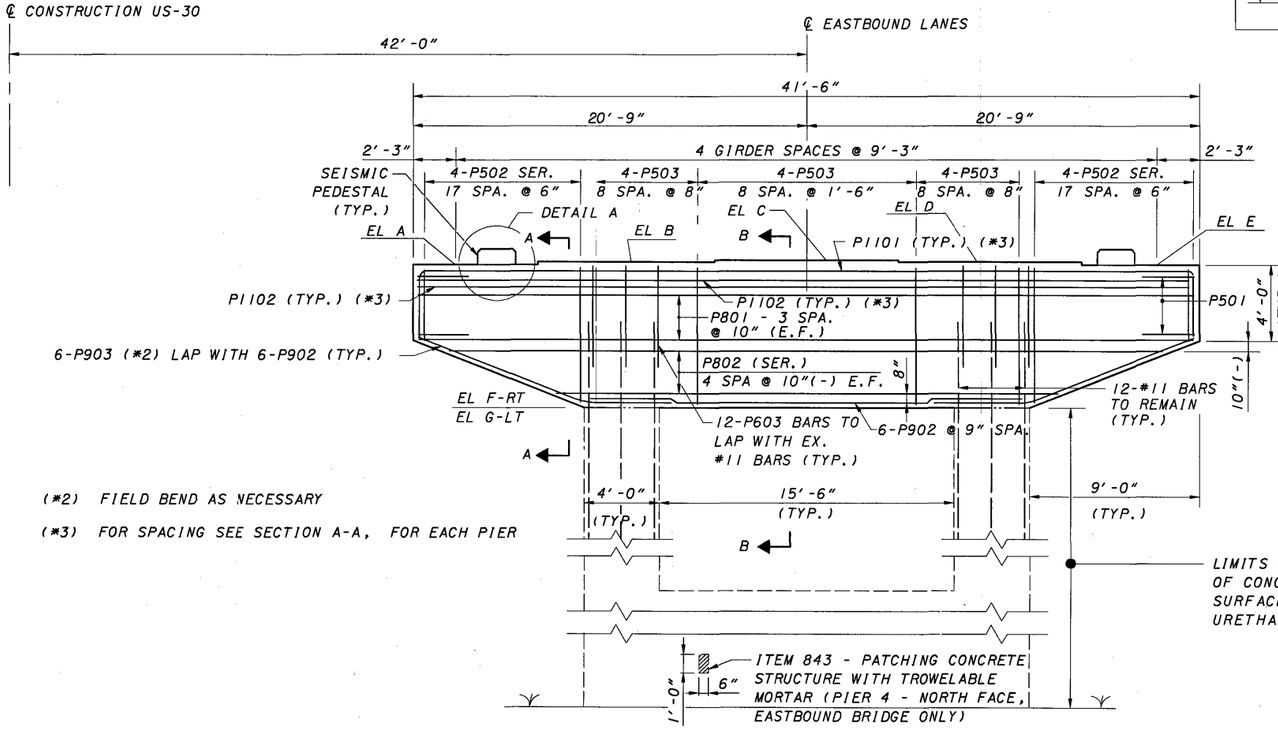
SECTION C-C

PIER ELEVATIONS							
LOCATION	A	B	C	D	E	F(±)	G(±)
PIER 1 - WB	963.02	963.27	963.35	963.21	962.86	954.14	954.25
PIER 2 - WB	960.31	960.56	960.64	960.50	960.15	951.52	951.63
PIER 3 - WB	957.80	958.05	958.13	957.99	957.64	949.22	949.34
PIER 4 - WB	955.93	956.19	956.27	956.12	955.77	947.27	947.52
PIER 1 - EB	962.97	963.22	963.30	963.16	962.81	954.14	954.25
PIER 2 - EB	960.26	960.51	960.59	960.45	960.10	951.52	951.63
PIER 3 - EB	957.75	958.00	958.08	957.94	957.59	949.22	949.34
PIER 4 - EB	955.88	956.14	956.22	956.07	955.72	947.27	947.52



(*1) FOR DETAIL SEE SECTIONS A-A AND B-B FOR EACH PIER

PLAN

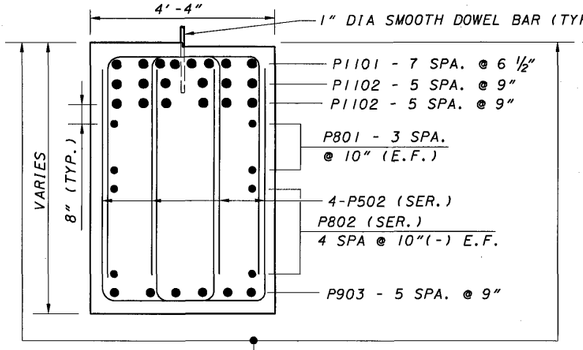


(*2) FIELD BEND AS NECESSARY

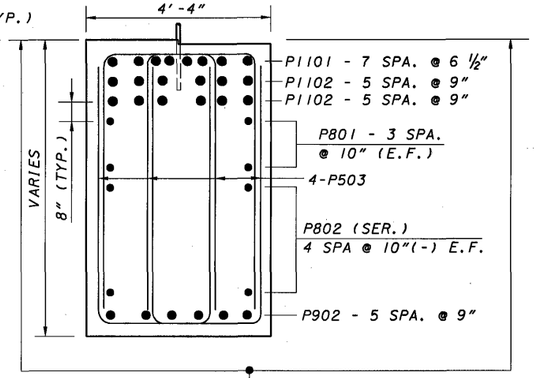
(*3) FOR SPACING SEE SECTION A-A, FOR EACH PIER

ELEVATION

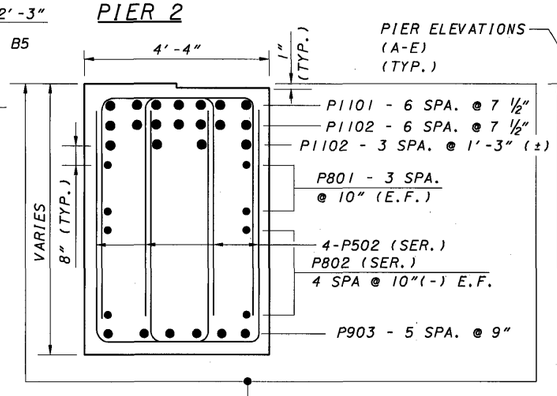
(EB PIERS SHOWN, WB PIERS SYMMETRIC ABOUT ℄ CONSTRUCTION US-30)



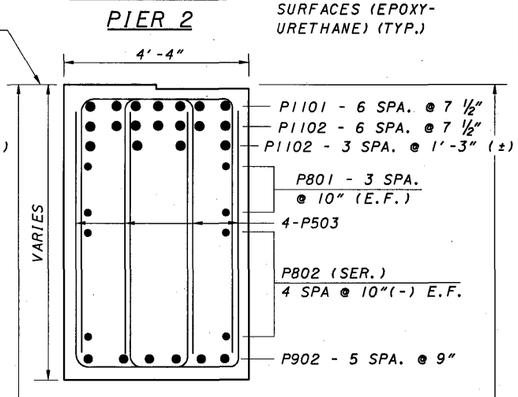
SECTION A-A
PIER 2



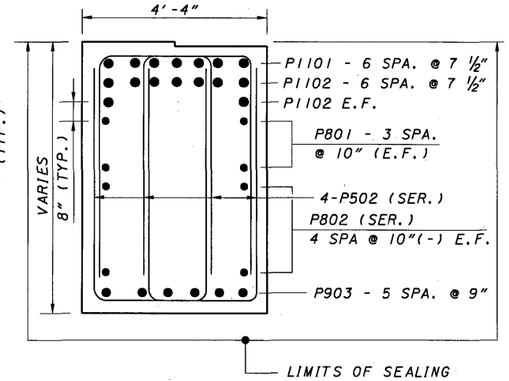
SECTION B-B
PIER 2



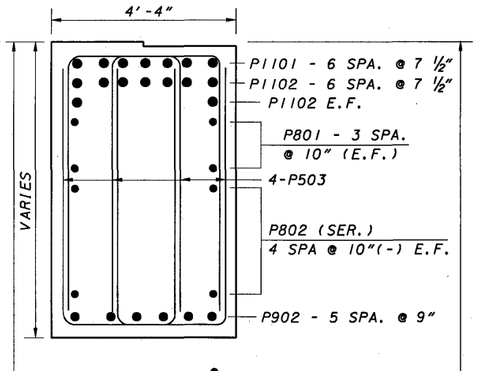
SECTION A-A
PIER 1 & 3



SECTION B-B
PIER 1 & 3



SECTION A-A
PIER 4



SECTION B-B
PIER 4

NOTE:

1. FOR LIST OF ABBREVIATIONS SEE SHT. 2722.
2. FOR REINFORCING STEEL LAP LENGTHS, SEE SHT. 2722.
3. FOR BEARING DETAILS SEE SHT. 19722.

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

DESIGNED	DRAWN	REVIEWED	DATE
KCS	KCS	MLM	12/2005

STRUCTURE FILE NUMBER
7607.365
7607.369 RT.

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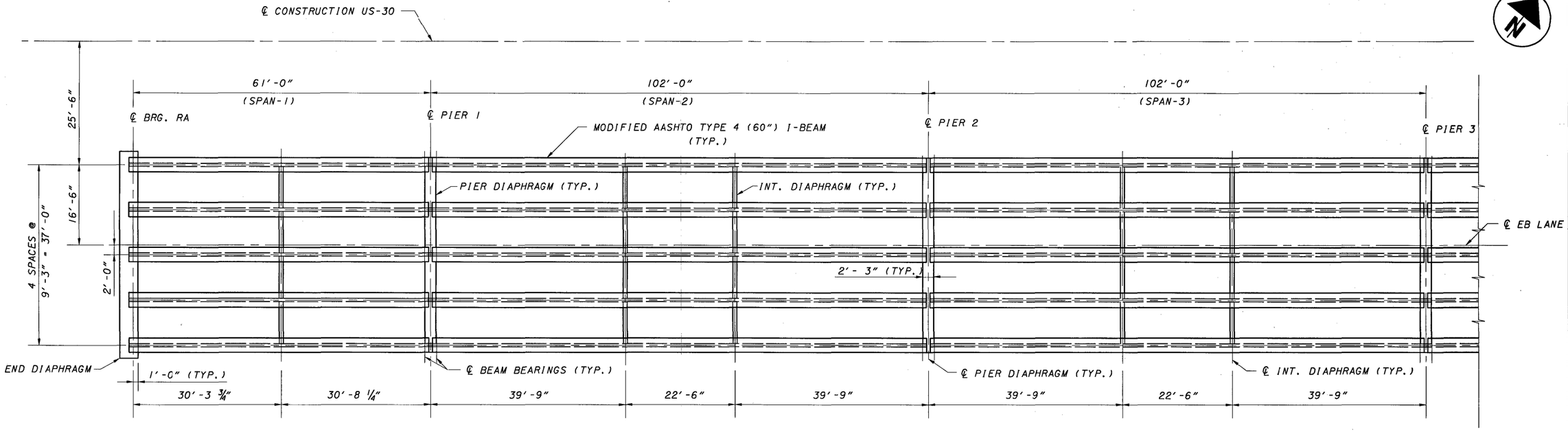
PIER DETAILS
BRIDGE NO. STA-30-0670 L&R
US 30 OVER TUSCARAWAS RIVER & R.J. CORMAN RAILROAD

STA-30-(6.70)(11.57)
PID 23754

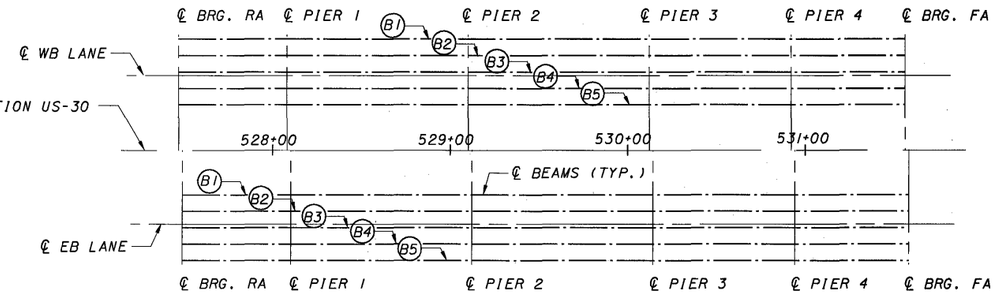
8/22

88/127

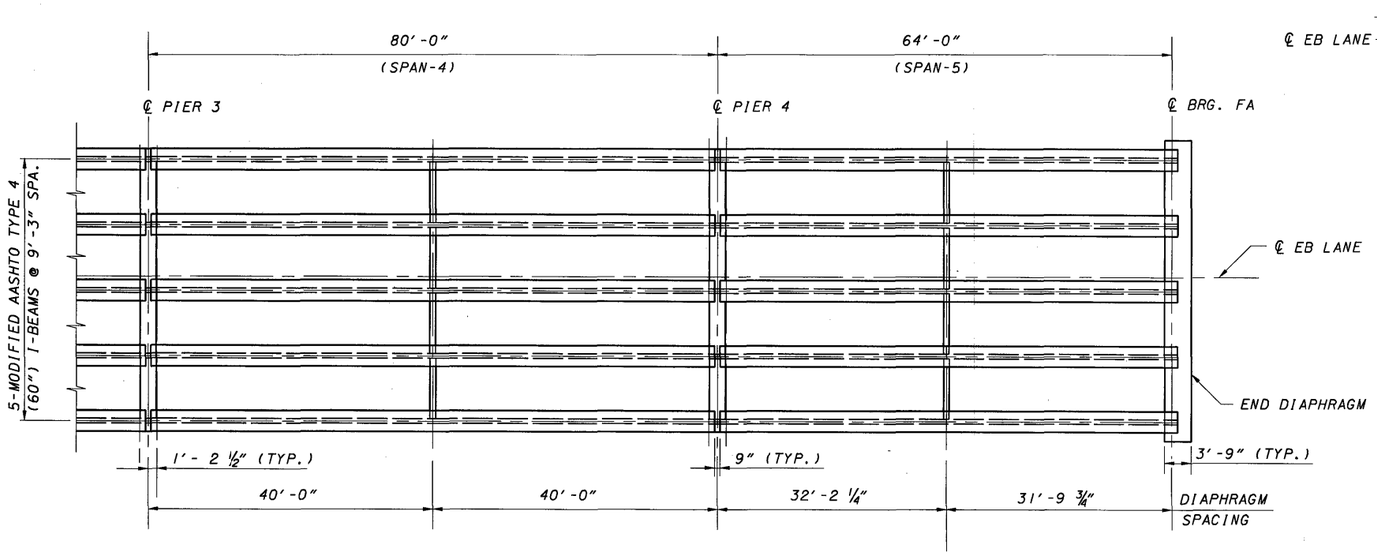


FRAMING PLAN

(EB STRUCTURE SHOWN, WB STRUCTURE SYMMETRIC ABOUT ℄ CONSTRUCTION US-30)



BEAM LAYOUT SCHEMATIC



NOTES:

1. FOR ADDITIONAL INFORMATION SEE STD. DWG. PSID-1-99.
2. FOR LIST OF ABBREVIATIONS SEE SHT. 2/22.

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

DESIGNED	DRAWN	REVIEWED	DATE
KCS	KCS	MLM	12/2005
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JEP		7607385 LT. 7607369 RT.	

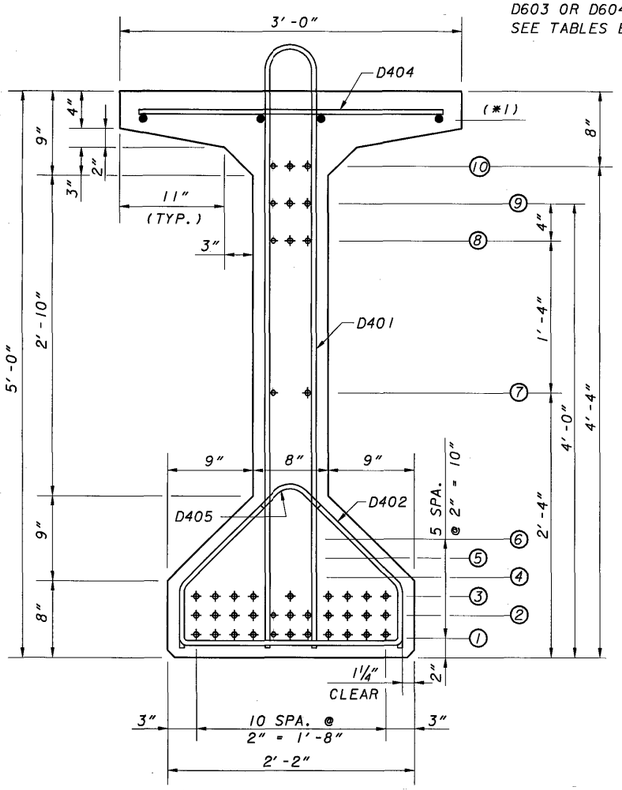
SUPERSTRUCTURE DETAILS
BRIDGE NO. STA-30-0670 L&R
US 30 OVER TUSCARAWAS RIVER & R.J. CORMAN RAILROAD

STA-30-(6.70)(11.57)
PID 23754

9/22

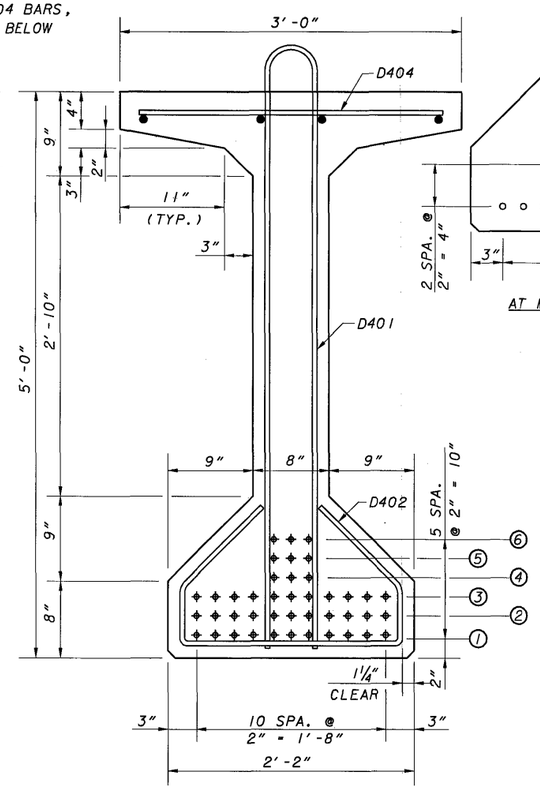
89/127

(*1) - 4 - D601 OR D602 OR D603 OR D604 BARS, SEE TABLES BELOW



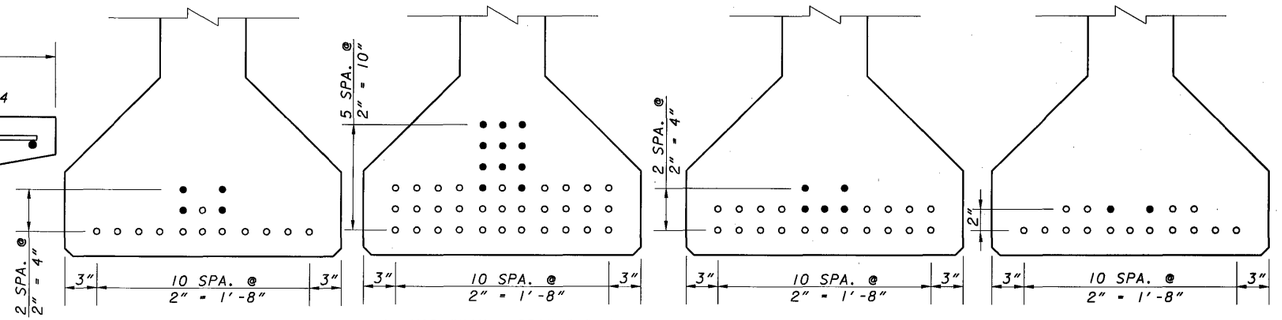
STRAND LOCATIONS IN A MODIFIED AASHTO TYPE 4 (60") I-BEAM

(AT BEAM ENDS)



STRAND LOCATIONS IN A MODIFIED AASHTO TYPE 4 (60") I-BEAM

(AT MIDSPAN)



AT MID-SPAN - SPAN 1

AT MID-SPAN - SPAN 2 & 3

AT MID-SPAN - SPAN 4

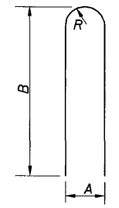
AT MID-SPAN - SPAN 5

LEGEND

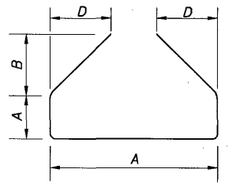
● - DRAPED STRANDS

○ - STRAIGHT STRANDS

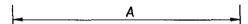
STRANDS DRAPE DETAIL



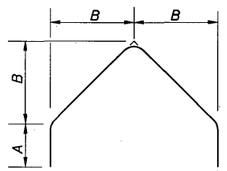
TYPE 1



TYPE 2



TYPE 3



TYPE 4

MARK	TYPE	A	B	C	D	R
D401	1	5½"	5'-4"			2½"
D402	2	1'-11½"	6¼"	8½"	8½"	
D404	3	2'-8"				
D405	4	6¼"	11¾"			
D601	3	31'-7" (2-SETS)				
D602	3	35'-2" (3-SETS)				
D603	3	41'-1" (2-SETS)				
D604	3	33'-1" (2-SETS)				

BENDING DIAGRAMS

(ALL DIMENSIONS ARE OUT-TO-OUT)

SPAN NO.	NUMBER OF STRANDS PER ROW																				TOTAL STRANDS	CONCRETE STRENGTHS		D401 BARS REQ'D	D402 BARS REQ'D	D404 BARS REQ'D	D405 BARS REQ'D	D601 BARS REQ'D	D602 BARS REQ'D	D603 BARS REQ'D	D604 BARS REQ'D	BEAM LENGTH
	END SECTION										MID SECTION																					
	ROW NUMBER										ROW NUMBER																					
	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩		f'_{ci}	f'_c									
SPAN-1	11	1					2		2		11	3	2								16	5000	7000	63	75	63	18	8				61'-5 ½"
SPAN-2	11	11	9				2	3	3	3	11	11	11	3	3	3					42	5000	7000	103	115	103	18		12			101'-3"
SPAN-3	11	11	9				2	3	3	3	11	11	11	3	3	3					42	5000	7000	103	115	103	18		12			101'-3"
SPAN-4	11	8							3	2	11	11	2								24	5000	7000	81	93	81	18			8		79'-3"
SPAN-5	11	4							2		11	6									17	5000	7000	66	78	66	18				8	64'-5 ½"

I-BEAM STRANDS

NOTES:

1. FOR ADDITIONAL AASHTO TYPE 4 (60") I-BEAM SEE STD. DWG. PSID-1-99.
2. THE PRESTRESSING STRANDS ARE LOW-RELAXATION ½ INCH DIAMETER (A = 0.167 IN) SEVEN WIRE UNCOATED STRANDS, ASTM A416, GRADE 270.
3. THE REINFORCING BARS SHALL BE EPOXY COATED.
4. FOR LIST OF ABBREVIATIONS, SEE SHEET 2/22.
5. FOR ADDITIONAL BEAM DETAILS, SEE SHEET 11/22.

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

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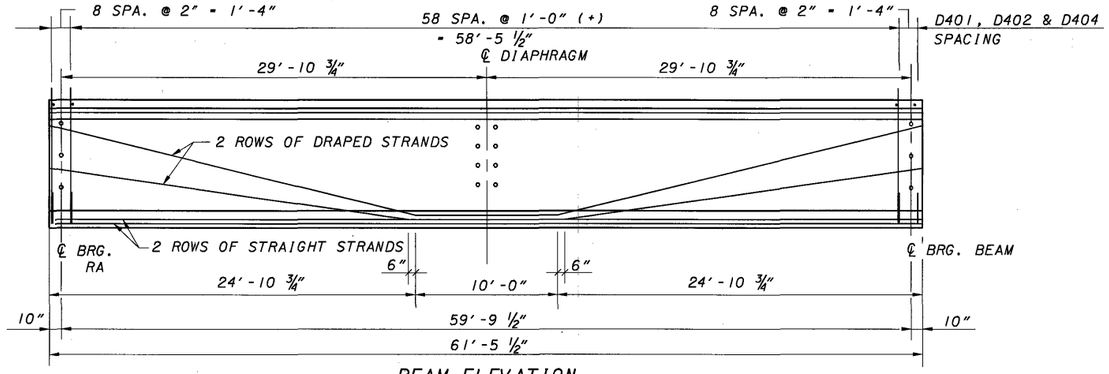
BEAM DETAILS

BRIDGE NO. STA-30-0670 L&R

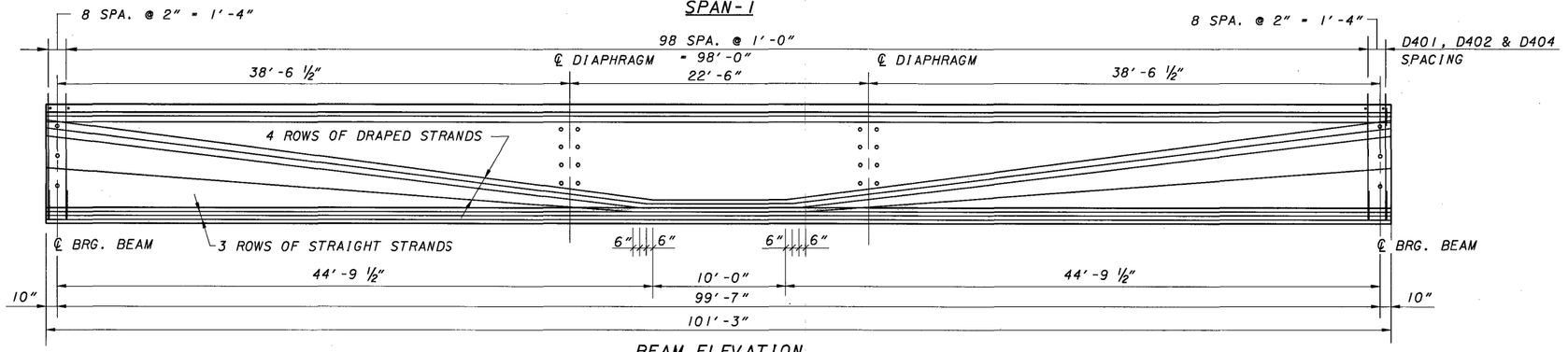
US 30 OVER TUSCARAWAS RIVER & R.J. CORMAN RAILROAD

STA-30-(6.70)(11.57)

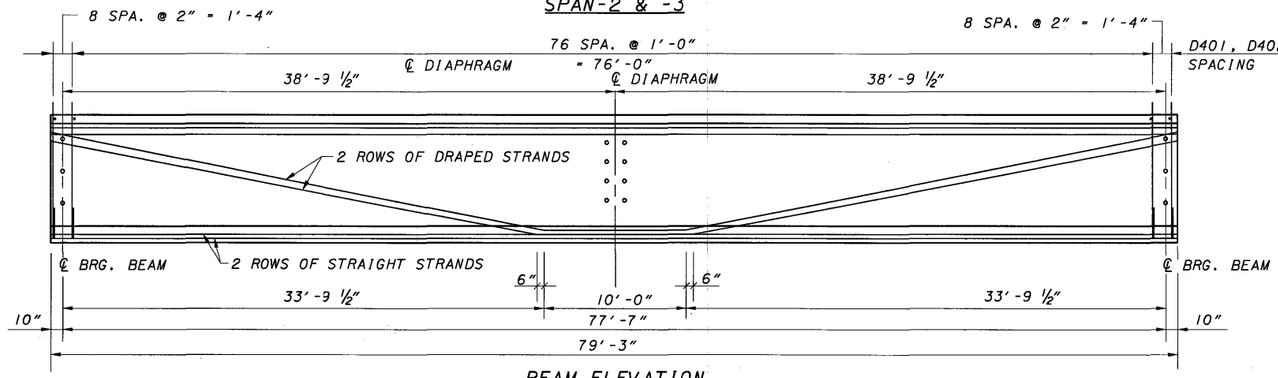
PID 23754



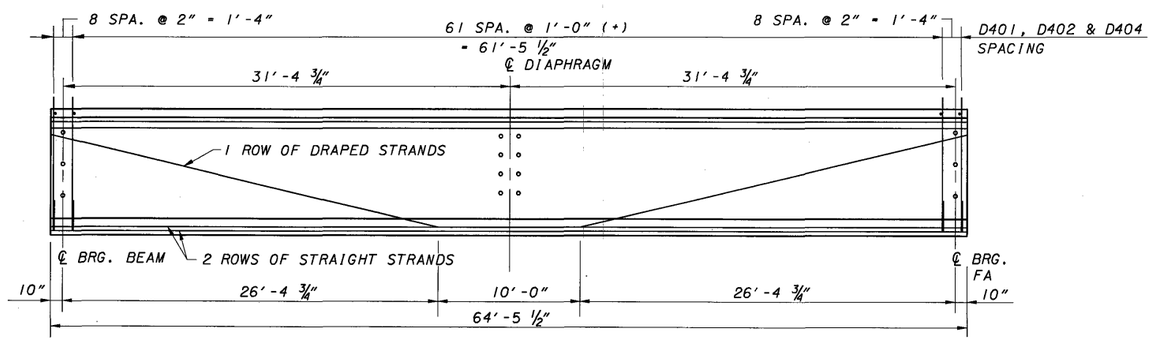
BEAM ELEVATION
SPAN-1



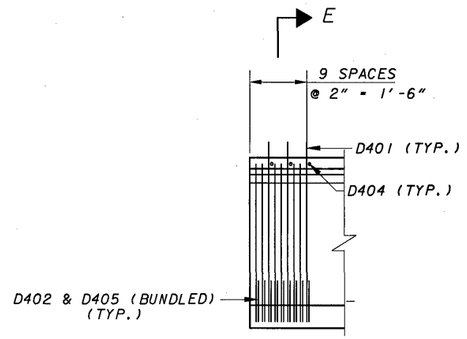
BEAM ELEVATION
SPAN-2 & -3



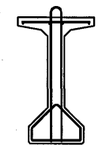
BEAM ELEVATION
SPAN-4



BEAM ELEVATION
SPAN-5



ANCHORAGE REINFORCEMENT
TYP. AT BEAM ENDS



SECTION E-E

NOTES:

1. FOR ADDITIONAL BEAM DETAILS, SEE SHT. 10722.
2. FABRICATOR SHALL INSTALL INTERMEDIATE DIAPHRAGM INSERTS TO AVOID INTERFERENCE WITH THE DRAPED STRANDS.
3. INTERMEDIATE DIAPHRAGMS MAY BE EITHER CAST-IN-PLACE CONCRETE OR GALVANIZED STEEL. THE CONTRACTOR SHALL CHOOSE THE TYPE. DETAILS FOR EACH TYPE ARE PROVIDED IN THE STANDARD BRIDGE DRAWING PSID-1-99.
4. THE CAST-IN-PLACE INTERMEDIATE DIAPHRAGMS TO BE PLACED AND CURED AT LEAST 48 HOURS BEFORE DECK PLACEMENT.
5. THREADED INSERTS SHALL BE USED TO CONNECT CAST-IN-PLACE DIAPHRAGM REINFORCING STEEL TO THE I-BEAM. THE THREADED INSERTS AND THE THREADED RODS SHALL BE GALVANIZED ACCORDING TO CMS 711.02.
6. FOR LIST OF ABBREVIATIONS, SEE SHT. 2722.

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BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

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SUPERSTRUCTURE DETAILS
BRIDGE NO. STA-30-0670 L&R
US 30 OVER TUSCARAWAS RIVER & R.J. CORMAN RAILROAD

STA-30-(6.70)(11.57)
PID 23754

11/22

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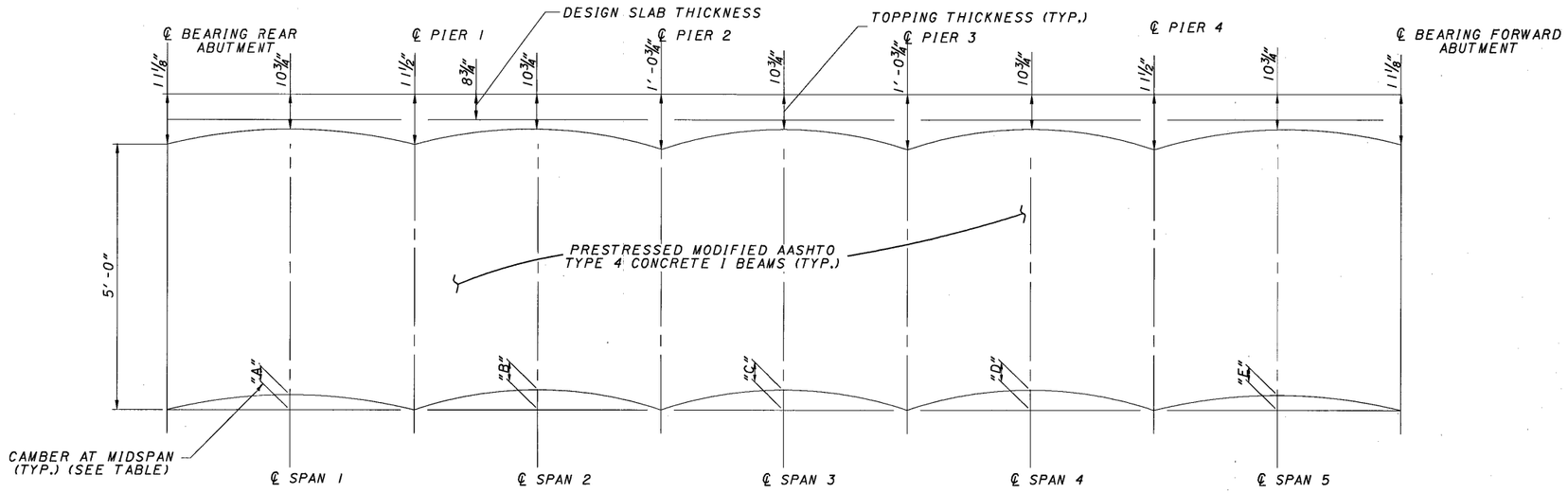

BEAM CAMBER AND DECK THICKNESS DIAGRAM

BEAM CAMBERS AT MIDSPAN					
	SPAN 1 "A"	SPAN 2 "B"	SPAN 3 "C"	SPAN 4 "D"	SPAN 5 "E"
CAMBER AT TIME OF RELEASE (NET)	5/16"	1 3/4"	1 3/4"	11/16"	7/16"
CAMBER AT TIME OF ERECTION	9/16"	3"	3"	1 1/4"	11/16"
LONG TERM CAMBER	13/16"	4 5/16"	4 5/16"	1 3/4"	1"

NOTES:

1. DECK SLAB THICKNESS FOR CONCRETE QUANTITY
   THE TOPPING THICKNESSES SHOWN FROM THE TOP OF THE DECK SLAB TO THE TOP OF THE TOP FLANGE ALONG THE CENTERLINE OF THE I-BEAM ARE THEORETICAL DIMENSIONS. THE HAUNCH DEPTH IS THE TOPPING THICKNESS MINUS THE DESIGN SLAB THICKNESS. THE DEPARTMENT WILL PAY FOR SUPERSTRUCTURE CONCRETE BASED ON THE DESIGN SLAB THICKNESS AND THE AVERAGE OF THE THEORETICAL HAUNCH DEPTH AT MID-SPAN AND AT EACH BEAM BEARING EVEN THOUGH THE DEVIATION FROM THE DIMENSION SHOWN MAY BE NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE. ONCE ALL THE BEAMS ARE SET IN THEIR FINAL POSITION, THE ACTUAL CAMBER FOR EACH MEMBER WILL BE THE TOP OF BEAM ELEVATION AT EACH BEARING. THE ACTUAL TOPPING THICKNESS AT MID-SPAN WILL BE THE THEORETICAL DIMENSION PLUS OR MINUS THE DIFFERENCE BETWEEN THE ACTUAL AND ANTICIPATED CAMBER.
2. FOR SCREED ELEVATIONS, SEE SHT. 16/22 & SHT. 17/22.
3. FOR BEAM DETAILS, SEE SHEETS 10/22 AND 11/22.
4. FOR LIST OF ABBREVIATIONS, SEE SHT. 2/22.

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2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
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12/22

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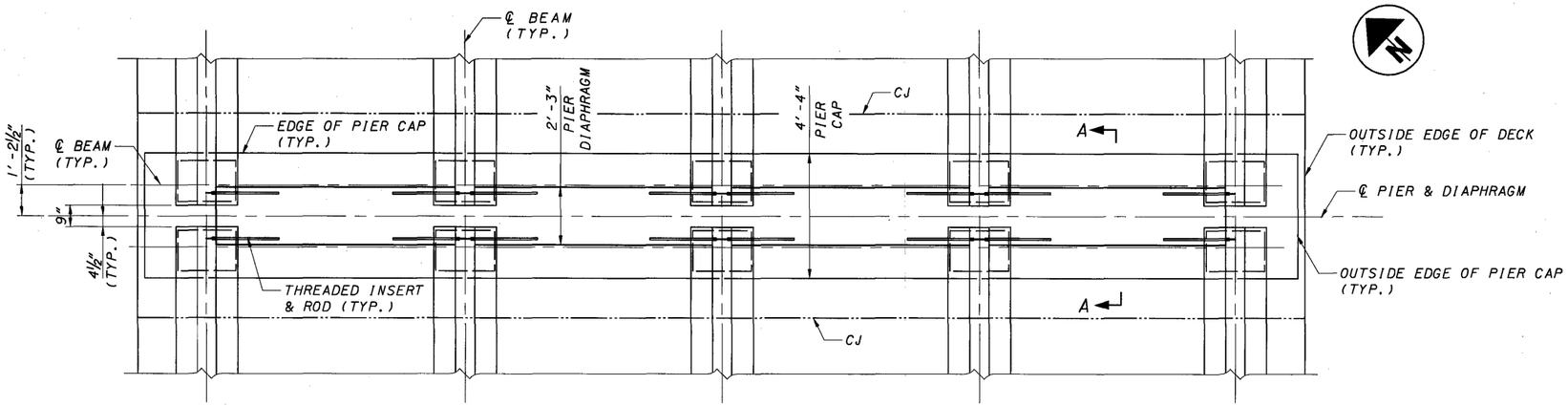
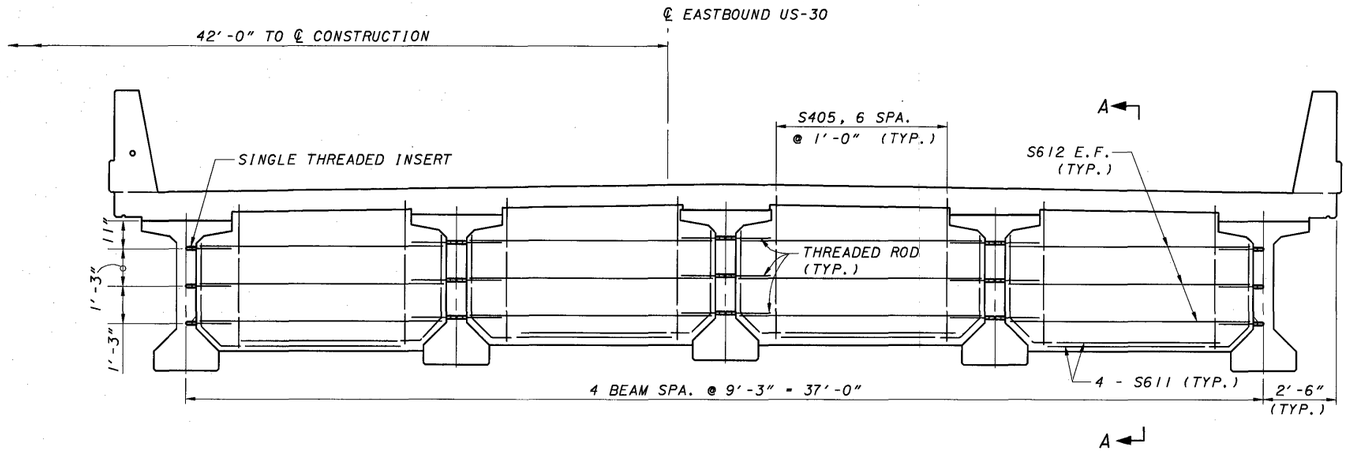


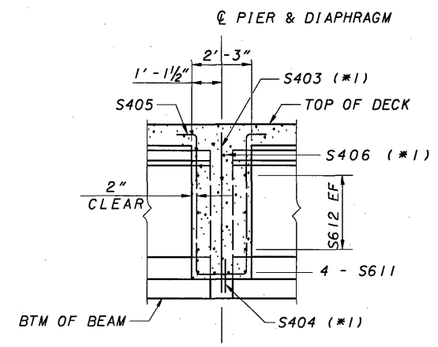
PLAN PIER DIAPHRAGM



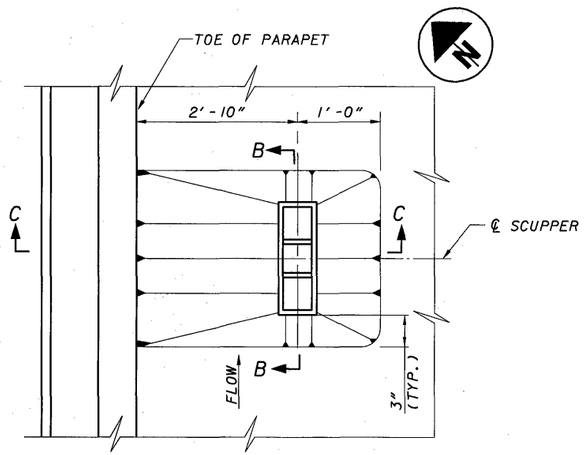
ELEVATION PIER DIAPHRAGM

(RIGHT STRUCTURE SHOWN, LEFT STRUCTURE OPPOSITE HAND)

(*1) - 1 EACH IN DIAPHRAGM BETWEEN INTERIOR BEAM ENDS

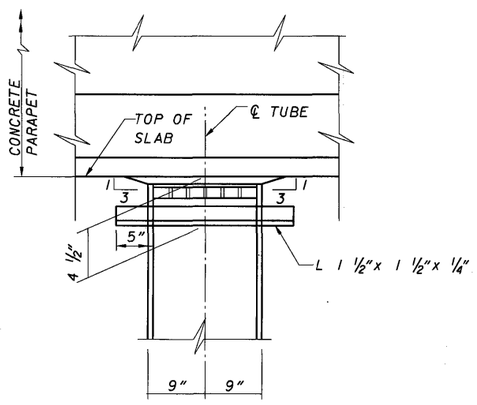


SECTION A-A

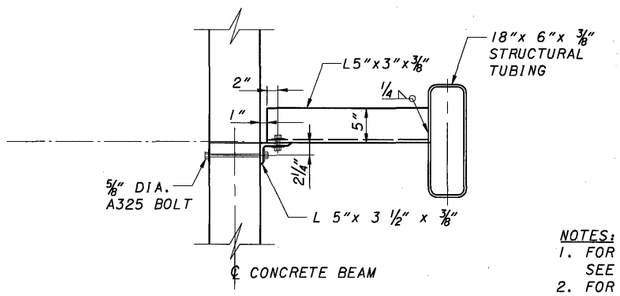


SCUPPER PLAN

(RIGHT STRUCTURE SHOWN, LEFT STRUCTURE OPPOSITE HAND)



SECTION B-B



SECTION C-C

NOTES:

1. FOR ADDITIONAL DIAPHRAGM DETAILS, SEE STD. DWG. PSID-1-99.
2. FOR BEARING DETAILS, SEE SHEET 19/22.
3. FOR SCUPPER LOCATIONS, SEE SHEET 15/22.
4. FOR REINFORCING STEEL LAP LENGTHS, SEE SHT. 2/22.
5. FOR LIST OF ABBREVIATIONS, SEE SHT. 2/22.
6. PIER DIAPHRAGM CONCRETE SHALL BE PAID WITH ITEM 511-CLASS HP CONCRETE, BRIDGE DECK, AS PER PLAN

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BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

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SUPERSTRUCTURE DETAILS

BRIDGE NO. STA-30-0670 L&R
US 30 OVER TUSCARAWAS RIVER & R.J. CORMAN RAILROAD

STA-30-(6.70) (11.57)
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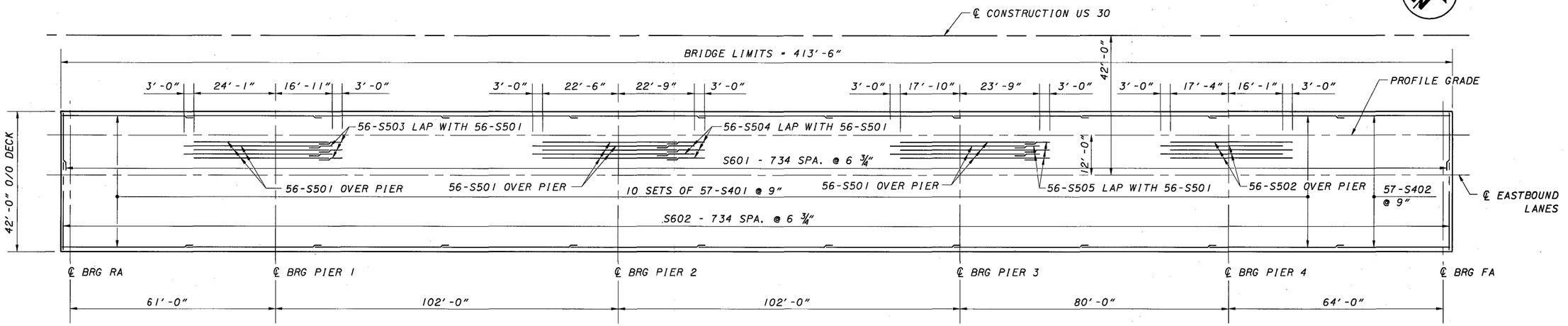
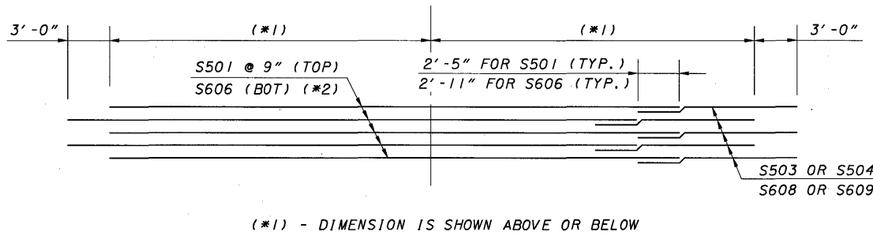


DECK REINFORCING PLAN (TOP)

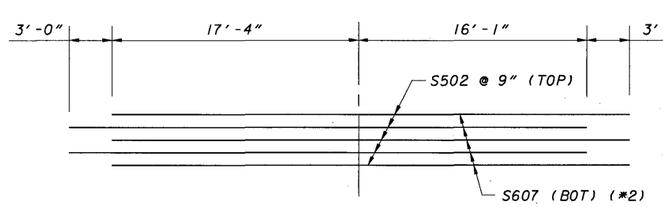
(RIGHT STRUCTURE SHOWN, LEFT STRUCTURE SYMMETRIC ABOUT ℄ CONSTRUCTION US-30)



(*1) - DIMENSION IS SHOWN ABOVE OR BELOW

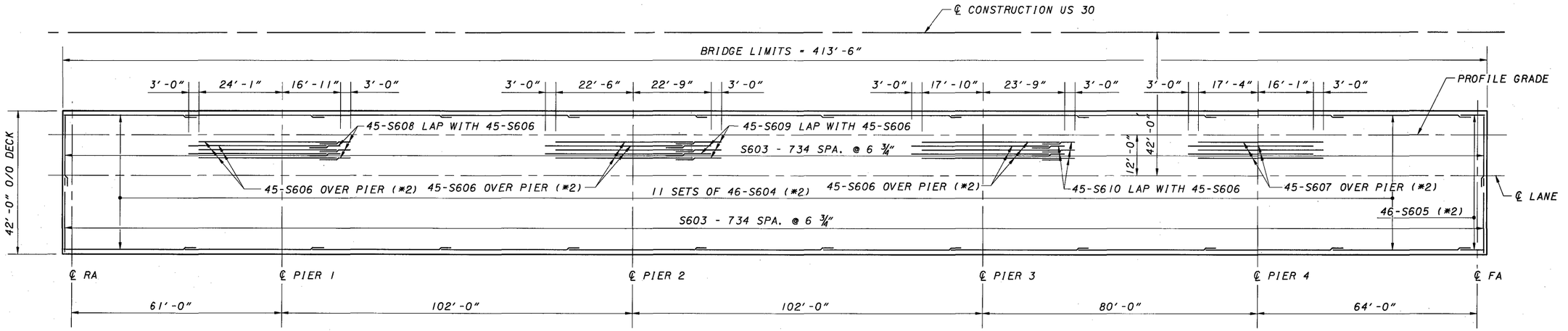
PIER REINFORCING DETAIL

(PIERS 1, 2, 3)



PIER REINFORCING DETAIL

(PIER 4)



DECK REINFORCING PLAN (BOTTOM)

(RIGHT STRUCTURE SHOWN, LEFT STRUCTURE OPPOSITE HAND)

(*2) - FOR SPACING SEE SHT. 15/22

NOTES:
1. FOR DECK POURING SEQUENCE SEE SHEET 15/22.
2. FOR REINFORCING STEEL LAP LENGTHS, SEE SHEET 2/22.
3. FOR LIST OF ABBREVIATIONS, SEE SHT. 2/22.

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BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

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SUPERSTRUCTURE DETAILS

BRIDGE NO. STA-30-0670 L&R

US 30 OVER TUSCARAWAS RIVER & R.J. CORMAN RAILROAD

STA-30-(6.70)(11.57)
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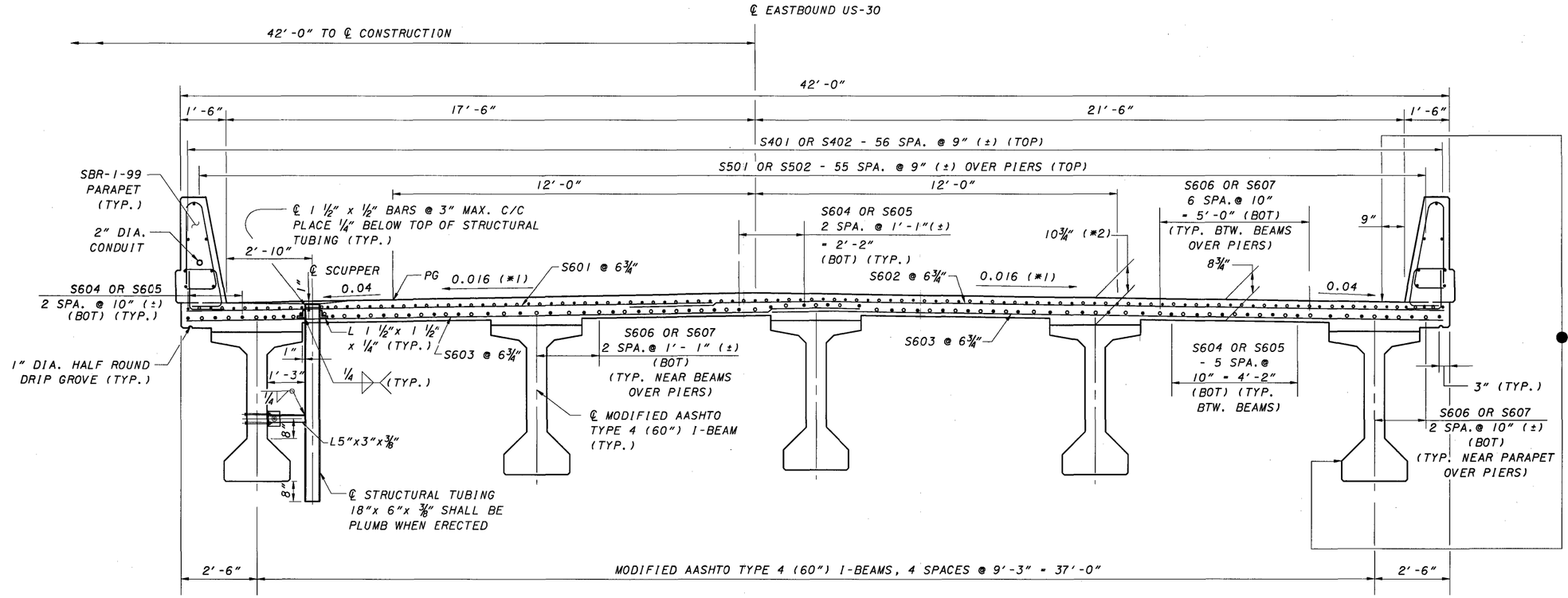


TRANSVERSE SECTION

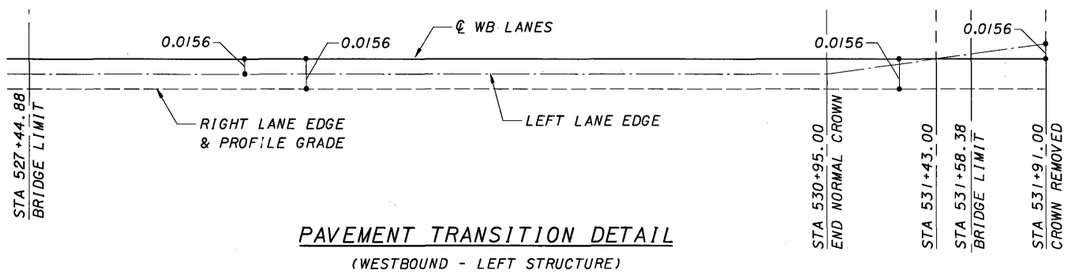
(RIGHT STRUCTURE SHOWN, LEFT STRUCTURE OPPOSITE HAND)

SCUPPER LOCATIONS	
LEFT BRIDGE - WB	RIGHT BRIDGE - EB
STA. 528+00 - RT	STA. 528+00 - LT
STA. 528+90 - RT	STA. 528+90 - LT
STA. 529+80 - RT	STA. 529+80 - LT
STA. 530+45 - RT	STA. 530+45 - LT
STA. 531+35 -LT&RT	STA. 531+35 -LT&RT

(*1) NORMAL CROWN FROM STA. 527+44.88 (LT), STA. 527+46.88 (RT) TO STA. 530+95.00.

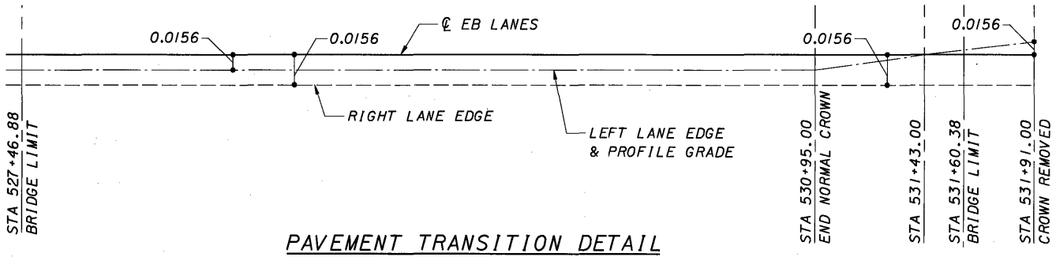
SEE SUPERELEVATION TABLE ON ROADWAY PLANS FOR DETAILS.

(*2) DIMENSION IS AT MID-SPAN, SEE SHEET 12/22 FOR TOPPING THICKNESS.



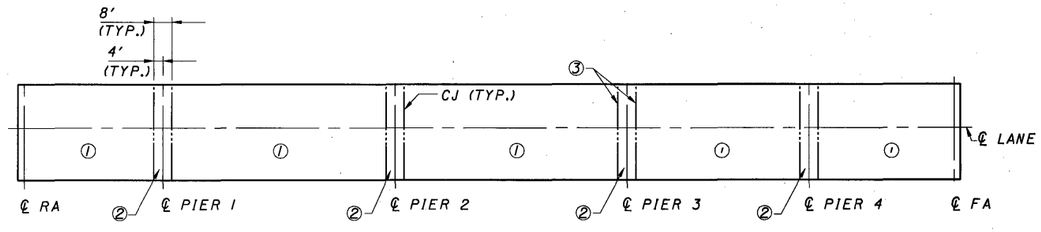
PAVEMENT TRANSITION DETAIL

(WESTBOUND - LEFT STRUCTURE)



PAVEMENT TRANSITION DETAIL

(EASTBOUND - RIGHT STRUCTURE)



DECK POURING SEQUENCE

① DECK POUR TO BE COMPLETED FIRST

② PIER DIAPHRAGM AND 8'-0" DECK SECION WITHIN CONSTRUCTION JOINTS TO BE POURED MONOLITHICALLY AFTER ADJACENT DECK POURS.

③ SEAL ALL DECK CONSTRUCTION JOINTS WITH A 2'-0" WIDE STRIP OF MOLECULAR WEIGHT METHACRYLATE RESIN (HMWM).

NOTE:

1. FOR ADDITIONAL SCUPPER DETAILS, SEE SHT. 13/22.
2. FOR REINFORCING STEEL LAP LENGTHS, SEE SHT. 2/22.
3. FOR LIST OF ABBREVIATIONS, SEE SHT. 2/22.
4. THE CONTRACTOR CAN SUBMIT A CONTINUOUS DECK POUR SEQUENCE AND PLACE THE PIER DIAPHRAGM CONCRETE CONCURRENTLY WITH THE DECK. THE PLACEMENT SUBMITTAL MUST ASSURE THE DECK CONCRETE IN ADJACENT SPANS WILL BE PLACED PRIOR TO THE PIER DIAPHRAGM HAS REACHED ITS INTIAL SET.

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2800 CORPORATE EXCHANGE DR. STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

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STRUCTURE FILE NUMBER 7607365 LT. 7607369 RT.
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STA-30-(6.70)(11.57)
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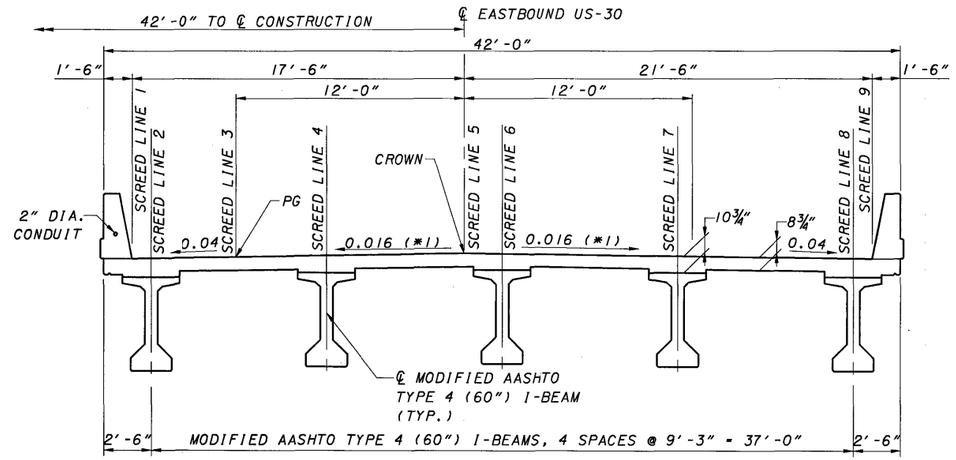
SCREED TABLE - EASTBOUND BRIDGE

	LOCATION	STATION	SCREED LINE 1 ELEVATION	SCREED LINE 2 ELEVATION	SCREED LINE 3 ELEVATION	SCREED LINE 4 ELEVATION	SCREED LINE 5 ELEVATION	SCREED LINE 6 ELEVATION	SCREED LINE 7 ELEVATION	SCREED LINE 8 ELEVATION	SCREED LINE 9 ELEVATION
SPAN 1	℄ BRG. RA	527+49.13	970.77	970.81	970.99	971.07	971.18	971.15	971.00	970.65	970.61
	0.25 L	527+64.38	970.41	970.45	970.63	970.70	970.82	970.79	970.64	970.29	970.25
	0.50 L	527+79.63	970.03	970.07	970.25	970.33	970.45	970.41	970.27	969.91	969.87
	0.75 L	527+94.88	969.66	969.70	969.88	969.95	970.07	970.04	969.89	969.54	969.50
SPAN 2	℄ BRG. PIER 1	528+10.13	969.27	969.31	969.49	969.57	969.68	969.65	969.50	969.15	969.11
	0.25 L	528+35.63	968.71	968.75	968.94	969.02	969.13	969.10	968.95	968.59	968.55
	0.50 L	528+61.13	968.11	968.15	968.35	968.42	968.54	968.51	968.36	967.99	967.95
	0.75 L	528+96.83	967.45	967.49	967.69	967.76	967.88	967.85	967.70	967.33	967.29
SPAN 3	℄ BRG. PIER 2	529+12.13	966.76	966.80	966.98	967.06	967.17	967.14	966.99	966.64	966.60
	0.25 L	529+37.63	966.20	966.24	966.43	966.51	966.62	966.59	966.44	966.08	966.04
	0.50 L	529+63.13	965.60	965.64	965.84	965.91	966.03	966.00	965.85	965.48	965.44
	0.75 L	529+88.63	964.94	964.98	965.17	965.25	965.36	965.33	965.18	964.82	964.78
SPAN 4	℄ BRG. PIER 3	530+14.13	964.25	964.29	964.47	964.55	964.66	964.63	964.48	964.13	964.09
	0.25 L	530+34.13	963.79	963.83	964.01	964.09	964.20	964.17	964.02	963.67	963.63
	0.50 L	530+54.13	963.30	963.34	963.53	963.60	963.72	963.69	963.54	963.18	963.14
	0.75 L	531+74.13	962.80	962.84	963.02	963.10	963.21	963.18	963.03	962.68	962.64
SPAN 5	℄ BRG. PIER 4	530+94.13	962.28	962.32	962.50	962.58	962.69	962.66	962.51	962.16	962.12
	0.25 L	531+10.13	961.90	961.94	962.12	962.18	962.25	962.22	962.07	961.72	961.68
	0.50 L	531+26.13	961.50	961.54	961.73	961.75	961.79	961.76	961.61	961.26	961.22
	0.75 L	531+42.13	961.11	961.15	961.33	961.34	961.35	961.31	961.16	960.81	960.77
	℄ BRG. FA	531+58.13	960.71	960.75	960.93	960.91	960.87	960.84	960.69	960.34	960.30



TRANSVERSE SECTION

(*1) - STRUCTURE CONTAINS A NORMAL CROWN FROM REAR BRIDGE LIMITS TO STA 530+95.00 THEN TRANSITIONS TO A SUPERELEVATION

DEFLECTIONS (INCHES) - EASTBOUND BRIDGE

	LOCATION	SCREED LINES 1-2	SCREED LINES 3-7	SCREED LINES 8-9
SPAN 1	℄ BRG. RA	0.000	0.000	0.000
	0.25 L	0.089	0.110	0.089
	0.50 L	0.128	0.158	0.128
	0.75 L	0.089	0.110	0.089
SPAN 2	℄ BRG. PIER 1	0.000	0.000	0.000
	0.25 L	0.721	0.889	0.721
	0.50 L	1.029	1.269	1.029
	0.75 L	0.721	0.889	0.721
SPAN 3	℄ BRG. PIER 2	0.000	0.000	0.000
	0.25 L	0.721	0.889	0.721
	0.50 L	1.029	1.269	1.029
	0.75 L	0.721	0.889	0.721
SPAN 4	℄ BRG. PIER 3	0.000	0.000	0.000
	0.25 L	0.261	0.323	0.261
	0.50 L	0.373	0.462	0.373
	0.75 L	0.261	0.323	0.261
SPAN 5	℄ BRG. PIER 4	0.000	0.000	0.000
	0.25 L	0.108	0.134	0.108
	0.50 L	0.155	0.191	0.155
	0.75 L	0.108	0.134	0.108
	℄ BRG. FA	0.000	0.000	0.000

NOTE:
1. SCREED ELEVATIONS SHOWN ARE FOR THE DECK SLAB SURFACE PRIOR TO CONCRETE PLACEMENT. ALLOWANCE HAS BEEN MADE FOR ANTICIPATED CALCULATED DEAD LOAD DEFLECTIONS.
2. FOR LIST OF ABBREVIATIONS, SEE SHT. 2/22.

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

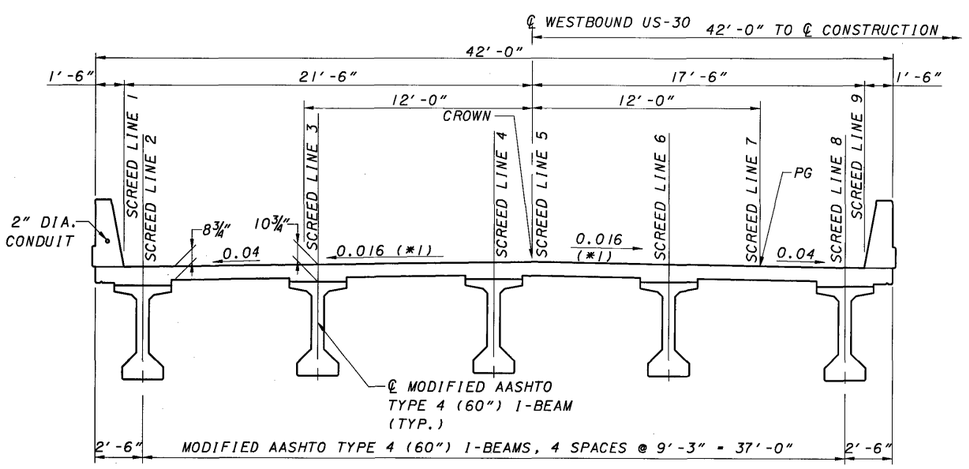
DESIGNED SRR | DRAWN SRR | REVISED MLM | DATE 12/2005 | STRUCTURE FILE NUMBER 7607365 LT. 7607369 RT.
CHECKED KCS | REVISED

SCREED ELEVATIONS
BRIDGE NO. STA-30-0670 L&R
US 30 OVER TUSCARAWAS RIVER & R.J. CORMAN RAILROAD

STA-30-(6.70) (11.57)
PID 23754

SCREED TABLE - WESTBOUND BRIDGE

	LOCATION	STATION	SCREED LINE 1 ELEVATION	SCREED LINE 2 ELEVATION	SCREED LINE 3 ELEVATION	SCREED LINE 4 ELEVATION	SCREED LINE 5 ELEVATION	SCREED LINE 6 ELEVATION	SCREED LINE 7 ELEVATION	SCREED LINE 8 ELEVATION	SCREED LINE 9 ELEVATION
SPAN 1	℄ BRG. RA	527+47.13	970.66	970.70	971.05	971.20	971.23	971.12	971.04	970.86	970.82
	0.25 L	527+62.38	970.30	970.34	970.69	970.84	970.87	970.75	970.68	970.50	970.46
	0.50 L	527+77.63	969.92	969.96	970.32	970.46	970.50	970.38	970.30	970.12	970.08
	0.75 L	527+62.88	969.55	969.59	969.94	970.09	970.12	970.00	969.93	969.75	969.68
SPAN 2	℄ BRG. PIER 1	528+08.13	969.16	969.20	969.55	969.70	969.73	969.62	969.54	969.36	969.32
	0.25 L	528+33.63	968.60	968.64	969.00	969.15	969.18	969.07	968.99	968.80	968.76
	0.50 L	528+59.13	968.00	968.04	968.41	968.56	968.59	968.47	968.40	968.20	968.16
	0.75 L	528+84.63	967.34	967.38	967.74	967.89	967.92	967.81	967.73	967.54	967.50
SPAN 3	℄ BRG. PIER 2	529+10.13	966.65	966.69	967.04	967.19	967.22	967.11	967.03	966.85	966.81
	0.25 L	529+35.63	966.09	966.13	966.49	966.64	966.67	966.56	966.48	966.29	966.25
	0.50 L	529+61.13	965.49	965.53	965.90	966.05	966.08	965.96	965.89	965.69	965.65
	0.75 L	529+85.63	964.83	964.87	965.23	965.38	965.41	965.30	965.22	965.03	964.99
SPAN 4	℄ BRG. PIER 3	530+12.13	964.14	964.18	964.53	964.68	964.71	964.60	964.52	964.34	964.30
	0.25 L	530+32.13	963.68	963.72	964.07	964.22	964.25	964.14	964.06	963.88	963.84
	0.50 L	530+52.13	963.19	963.23	963.59	963.74	963.77	963.65	963.58	963.39	963.35
	0.75 L	530+72.13	962.69	962.73	963.08	963.23	963.26	963.15	963.07	962.89	962.85
SPAN 5	℄ BRG. PIER 4	530+92.13	962.17	962.21	962.56	962.71	962.74	962.63	962.55	962.37	962.33
	0.25 L	531+08.13	961.85	961.89	962.24	962.34	962.36	962.25	962.17	961.99	961.95
	0.50 L	531+24.13	961.51	961.55	961.90	961.96	961.97	961.85	961.78	961.59	961.55
	0.75 L	531+40.13	961.18	961.22	961.56	961.57	961.57	961.46	961.38	961.20	961.16
	℄ BRG. FA	531+56.13	960.84	960.88	961.22	961.18	961.17	961.06	960.98	960.80	960.76



TRANSVERSE SECTION

(*1) - STRUCTURE CONTAINS A NORMAL CROWN FROM REAR BRIDGE LIMITS TO STA 530+95.00 THEN TRANSITIONS TO A SUPERELEVATION

DEFLECTIONS (INCHES) - WESTBOUND BRIDGE				
	LOCATION	SCREED LINES 1-2	SCREED LINES 3-7	SCREED LINES 8-9
SPAN 1	℄ BRG. RA	0.000	0.000	0.000
	0.25 L	0.089	0.110	0.089
	0.50 L	0.128	0.158	0.128
	0.75 L	0.089	0.110	0.089
SPAN 2	℄ BRG. PIER 1	0.000	0.000	0.000
	0.25 L	0.721	0.889	0.721
	0.50 L	1.029	1.269	1.029
	0.75 L	0.721	0.889	0.721
SPAN 3	℄ BRG. PIER 2	0.000	0.000	0.000
	0.25 L	0.721	0.889	0.721
	0.50 L	1.029	1.269	1.029
	0.75 L	0.721	0.889	0.721
SPAN 4	℄ BRG. PIER 3	0.000	0.000	0.000
	0.25 L	0.261	0.323	0.261
	0.50 L	0.373	0.462	0.373
	0.75 L	0.261	0.323	0.261
SPAN 5	℄ BRG. PIER 4	0.000	0.000	0.000
	0.25 L	0.108	0.134	0.108
	0.50 L	0.155	0.191	0.155
	0.75 L	0.108	0.134	0.108
	℄ BRG. FA	0.000	0.000	0.000

NOTE:
1. SCREED ELEVATIONS SHOWN ARE FOR THE DECK SLAB SURFACE PRIOR TO CONCRETE PLACEMENT. ALLOWANCE HAS BEEN MADE FOR ANTICIPATED CALCULATED DEAD LOAD DEFLECTIONS.

2. FOR LIST OF ABBREVIATIONS, SEE SHT. 2/22.

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

DESIGNED SRR | DRAWN SRR | REVIEWED MLM | DATE 12/2005

CHECKED KCS | REVISED

STRUCTURE FILE NUMBER
7607365 LT.
7607369 RT.

SCREED ELEVATIONS
BRIDGE NO. STA-30-0670 L&R
US 30 OVER TUSCARAWAS RIVER & R.J. CORMAN RAILROAD

STA-30-(6.70) (11.57)
PID 23754

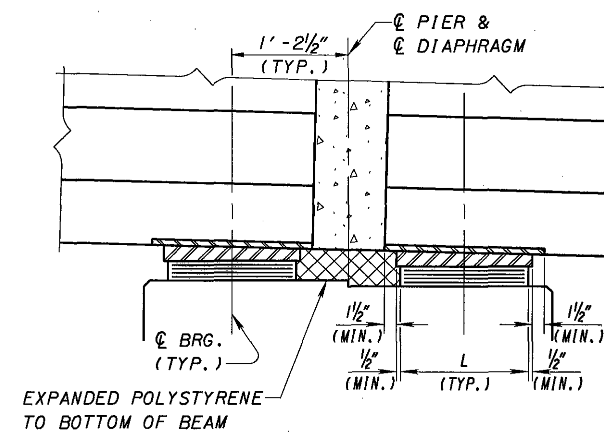
17/22

97/127

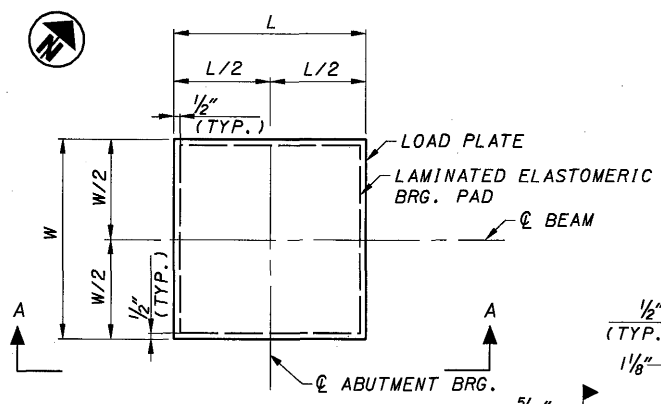
LAMINATED ELASTOMERIC BEARINGS										
LOCATION	BEARING DIMENSIONS						STEEL LOAD PLATE	REACTIONS		MAXIMUM
	L	W	ti	te	T	N	LENGTH X WIDTH X THICKNESS	DL	LL	DESIGN LOAD
REAR ABUTMENT	1'-2"	1'-1"	3/8"	1/4"	2 13/16"	6	1'-3" X 1'-2" X 1 1/2"	102 K	36 K	138 K
PIER 1	1'-4"	1'-4 1/2"	7/16"	5/16"	3 1/4"	6	1'-5" X 1'-5 1/2" X 1 1/2"	176 K	54 K	230 K
PIERS 2 & 3	1'-4 1/2"	1'-4 1/2"	7/16"	5/16"	4 1/4"	8	1'-5 1/2" X 1'-5 1/2" X 1 1/2"	183 K	60 K	243 K
PIER 4	1'-3"	1'-2 1/2"	7/16"	5/16"	4 1/4"	8	1'-4" X 1'-3 1/2" X 1 1/2"	116 K	50 K	166 K
FORWARD ABUTMENT	1'-1 1/2"	1'-1 1/2"	7/16"	5/16"	2 3/4"	6	1'-2 1/2" X 1'-2 1/2" X 1 1/2"	92 K	36 K	128 K

ti - THICKNESS OF INTERNAL LAYER
te - THICKNESS OF EXTERNAL LAYER
T - TOTAL THICKNESS OF ELASTOMERIC BEARING

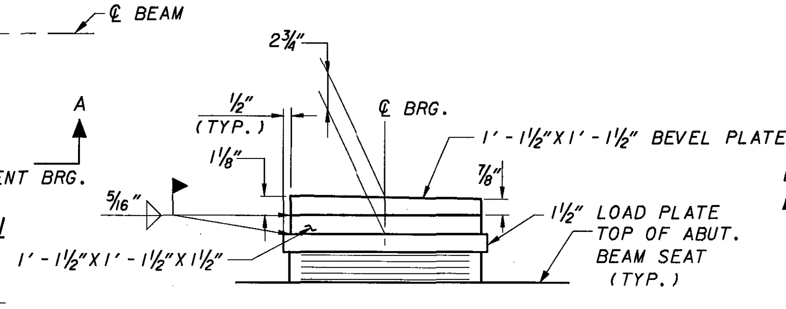
N - NO. OF STEEL LAMINATES
INTERNAL STEEL LAMINATE THICKNESS - 0.0747"
DUROMETER OF ABUTMENT ELASTOMER - 50 DUROMETER



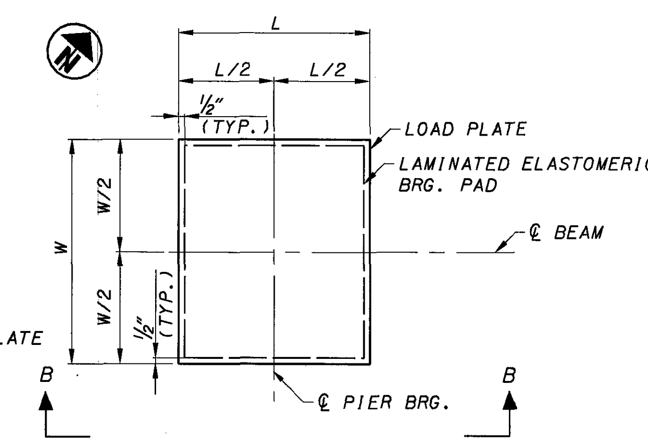
EXPANSION PIER DETAIL



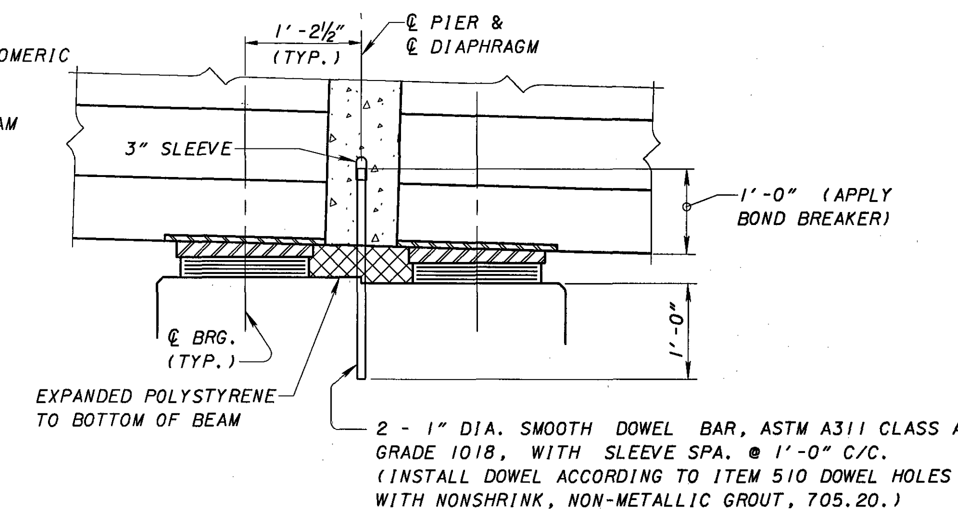
ABUTMENT BRG. PLAN



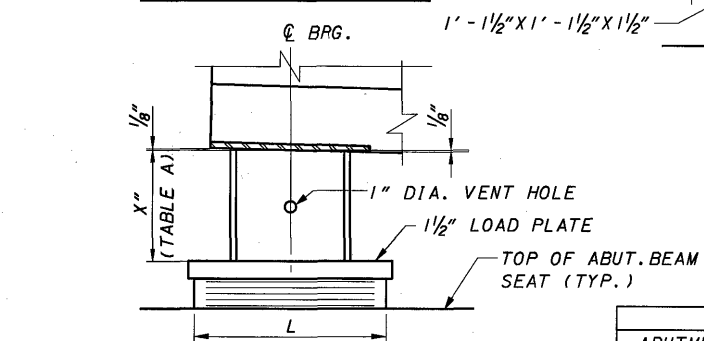
DETAIL A



PIER BRG. PLAN



FIXED PIER DETAIL

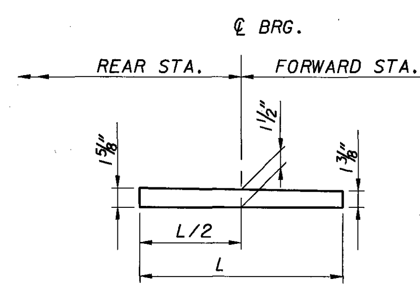


VIEW A-A

(REAR ABUTMENT SHOWN, FORWARD OPPOSITE HAND)

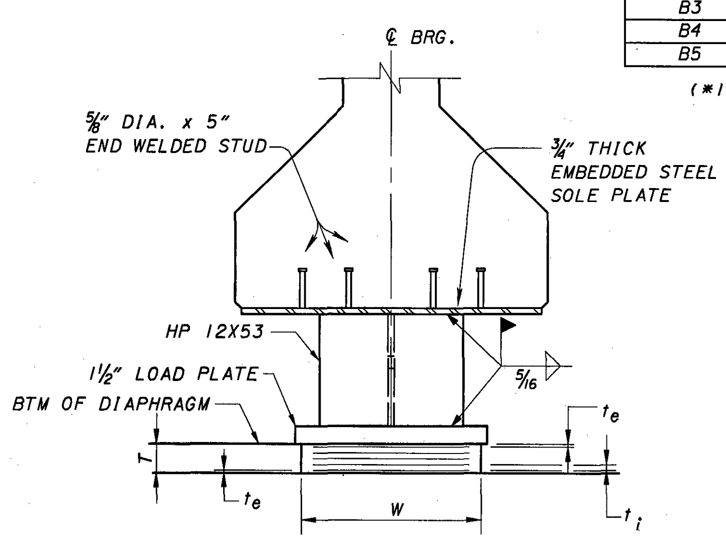
TABLE A				
ABUTMENT	REAR		FORWARD	
LOCATION	EB	WB	EB	WB
B1	8 3/8"	7 5/8"	6 1/8"	2 3/4" (*1)
B2	10"	10"	8 7/8"	8 3/8"
B3	10"	10"	9 1/2"	9"
B4	10"	10"	9 3/4"	9"
B5	7 5/8"	8 3/4"	6 3/4"	8 1/8"

(*1)-CONTRACTOR HAS THE OPTION TO USE WELDED FILL PLATES AT THIS LOCATION. SEE DETAIL A

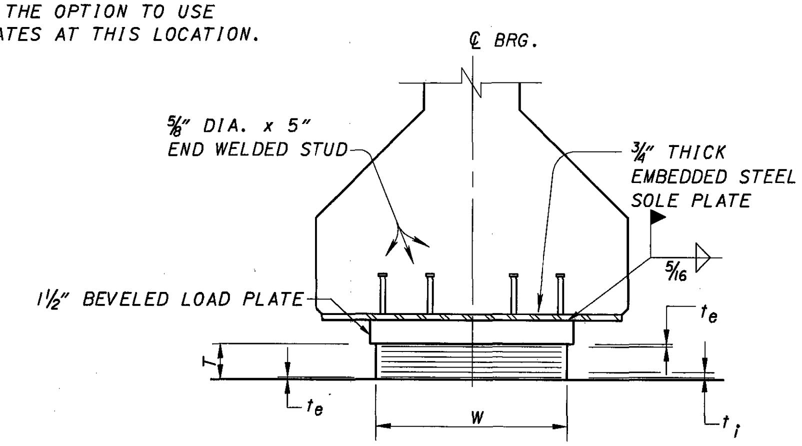


BEVELED LOAD PLATE

(PIERS ONLY)



LAMINATED ELASTOMERIC EXPANSION BRG. @ ABUTMENTS



LAMINATED ELASTOMERIC EXPANSION BRG. @ PIERS

NOTES:

1. THE BEARING ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED UNDER DIVISION I, SECTION 14.6.6 (METHOD A) OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.
2. THE UNIT BID PRICE SHALL INCLUDE ALL MATERIALS, LABOR AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL THE LAMINATED ELASTOMERIC BEARINGS, INCLUDING LOAD PLATES AND HP SHAPES. PAYMENT WILL BE MADE AT THE CONTRACT PRICE FOR ITEM 516, ELASTOMERIC BEARING PAD WITH INTERNAL LAMINATES (NEOPRENE) AND STEEL LOAD PLATE.
3. THE STEEL LOAD PLATE SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS. THE STEEL LOAD PLATE AND HP SHAPE SHALL BE A MINIMUM OF A36 STEEL
4. CONTROL WELDING SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE DOES NOT EXCEED 300°F AS DETERMINED BY THE USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.
5. IF THE BEAMS SEATS ARE SEALED WITH AN EPOXY OR NON-EPOXY SEALER PRIOR TO SETTING THE BEARINGS, DO NOT APPLY SEALER TO THE CONCRETE SURFACES UNDER THE PROPOSED BEARING LOCATIONS. IF THESE LOCATIONS ARE SEALED, REMOVE THE SEALER TO THE SATISFACTION OF THE ENGINEER PRIOR TO SETTING THE BEARINGS. THE DEPARTMENT WILL NOT PAY FOR THIS REMOVAL.
6. FOR LIST OF ABBREVIATIONS, SEE SHEET. 2/22
7. FOR BEAM LAYOUT DESIGNATION, SEE SHEET. 9/22

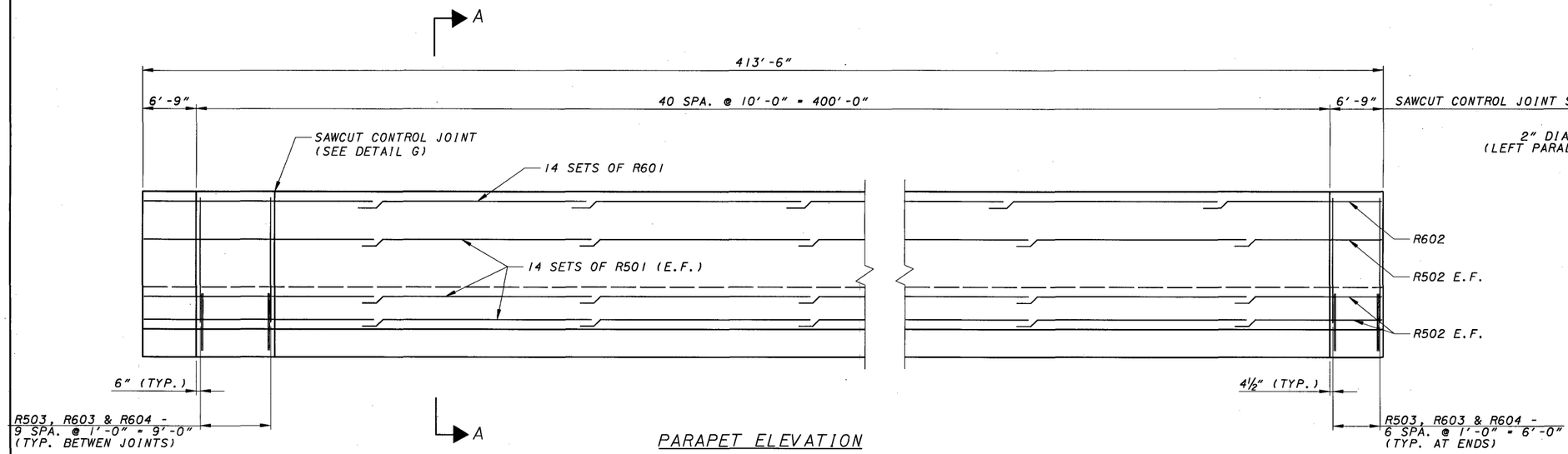
DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

DESIGNED KCS | CHECKED JEP | DRAWN KCS | REVISED | REVIEWED MLM | DATE 12/2005 | STRUCTURE FILE NUMBER 7601385 LT. 7601369 RT.

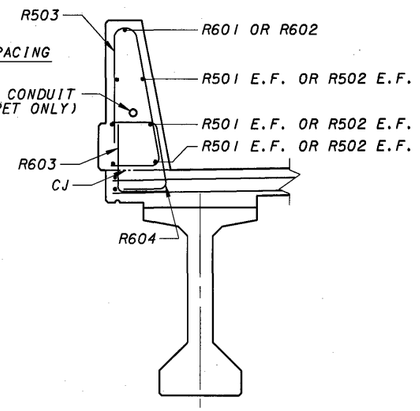
BEARING DETAILS

BRIDGE NO. STA-30-0670 L&R
US 30 OVER TUSCARAWAS RIVER & R.J. CORMAN RAILROAD

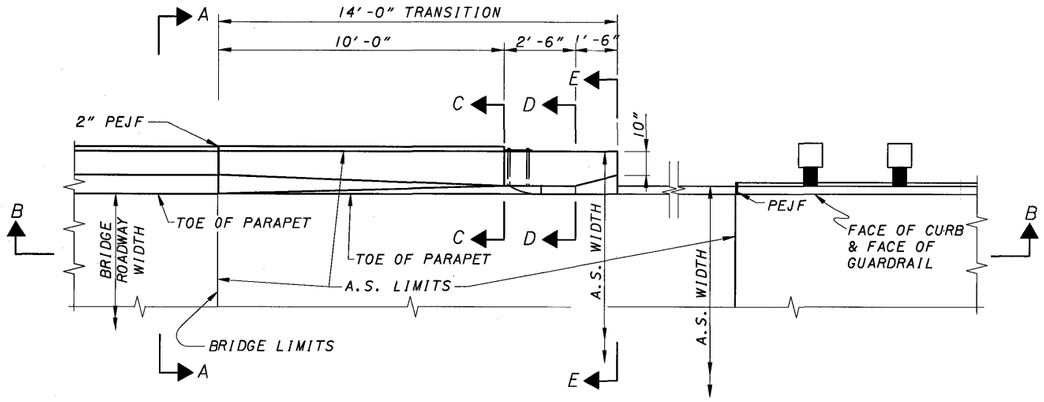
STA-30-(6.70)(11.57)
PID 23754



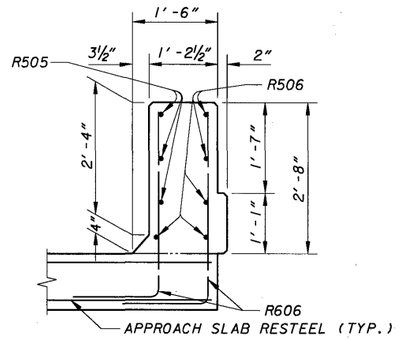
PARAPET ELEVATION
(WITHIN BRIDGE LIMITS)



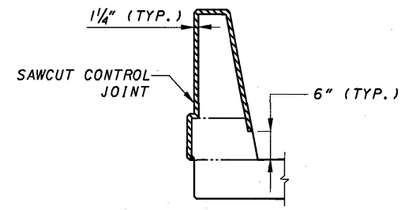
SECTION A-A



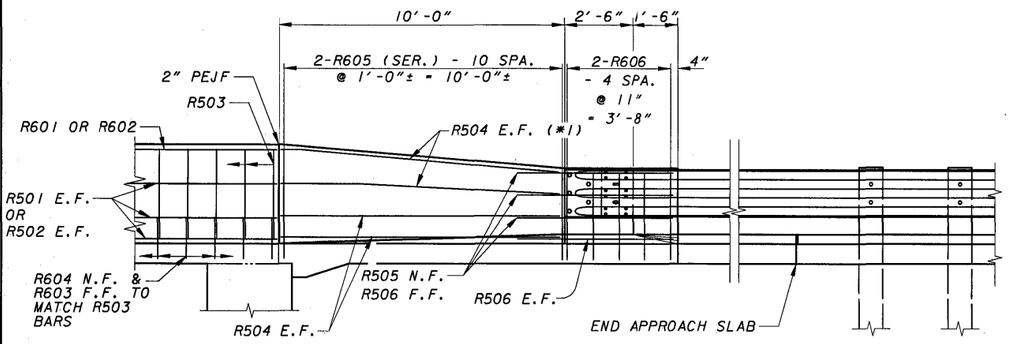
PART-PLAN AT ABUTMENT



SECTION C-C

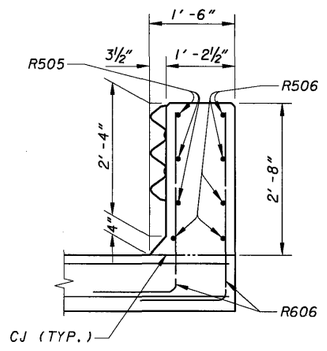


DETAIL G

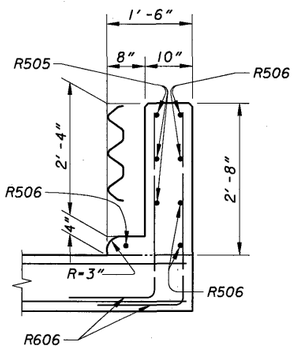


SECTION B-B

(*1) - FIELD BEND AS NECESSARY
(*2) - R503, R603 & R604 - 14 SPA. @ 9" = 10'-6"



SECTION D-D



SECTION E-E

NOTES:
1. FOR LIST OF ABBREVIATIONS, SEE SHT. 2/22.
2. FOR TRANSVERSE SECTION, SEE SHT. 15/22.
3. FOR ADDITIONAL PARAPET TRANSITION DETAILS, SEE STD. DWG. SBR-1-99.
4. FOR REINFORCING STEEL LAP LENGTHS, SEE SHT. 2/22.

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

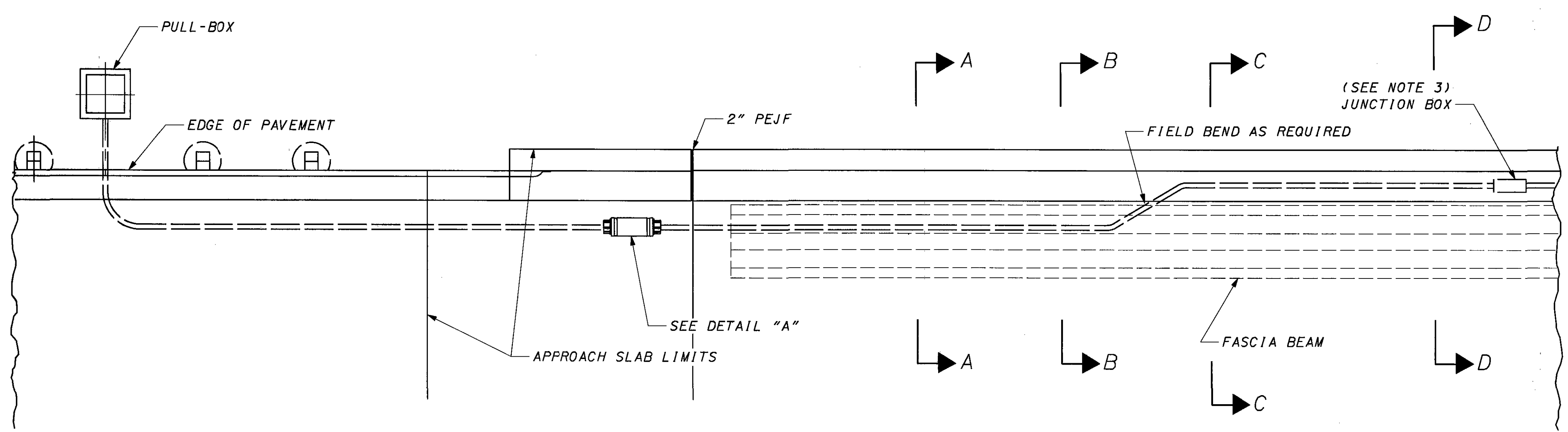
DESIGNED	DRAWN	REVIEWED	DATE
SRR	SRR	JEP	12/2005
CHECKED	REVISED	STRUCTURE FILE NUMBER	
KCS		7607369 RT.	

PARAPET DETAILS
BRIDGE NO. STA-30-0670 L&R
US 30 OVER TUSCARAWAS RIVER & R.J. CORMAN RAILROAD

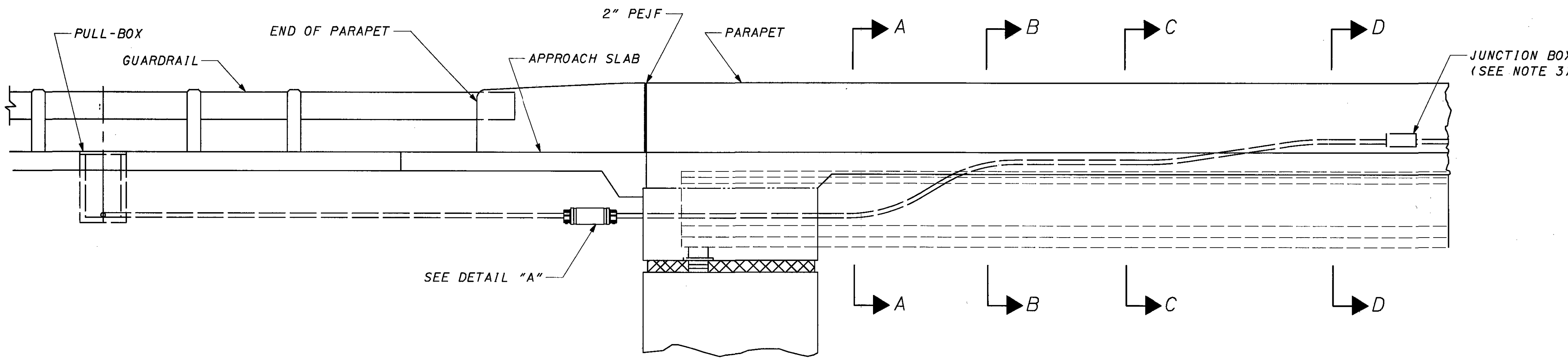
STA-30-(6.70) (11.57)
PID 23754

19/22

99
127

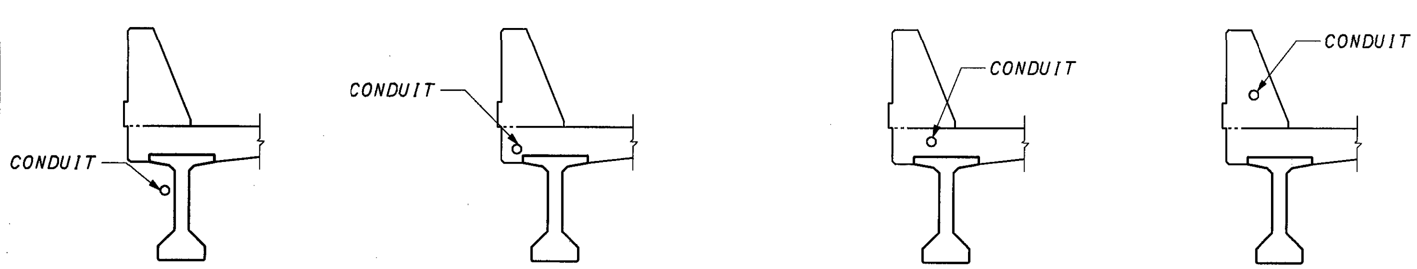


PART PLAN
(LEFT PARAPET CONDUIT DETAIL AT ABUTMENTS)

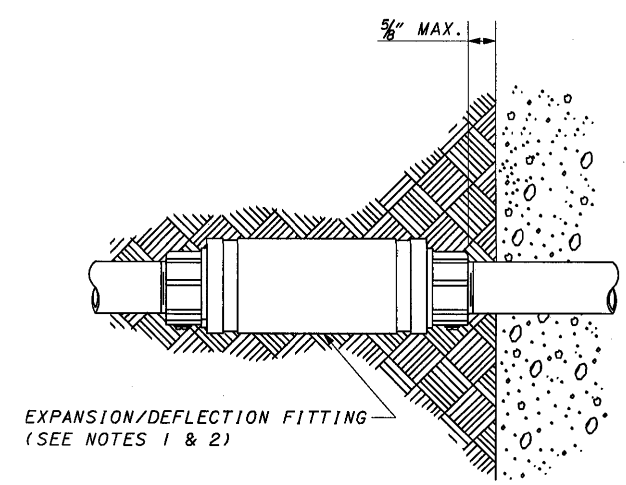


ELEVATION
(LEFT PARAPET CONDUIT DETAIL AT ABUTMENTS)

LOCATION	625 CONDUIT, 2", 725.04	625 JUNCTION BOX (6"x6"x4")	625 PULL BOX, 725.08, 24"
	FT	EACH	EACH
STA-30-0670 R	525	2	2
STA-30-0670 L	525	2	2
TOTALS CARRIED TO GENERAL SUMMARY	1050	4	4



SECTION A-A SECTION B-B SECTION C-C SECTION D-D



DETAIL "A"

NOTES:

1. THE EXPANSION/DEFLECTION FITTING (NEMA 4 RATING) SHALL CONSIST OF IRON OR BRONZE END COUPLINGS IN A HEAVY DUTY NEOPRENE SLEEVE HELD IN PLACE BY STAINLESS STEEL BONDS. A COPPER BRAID BONDING JUMPER SHALL BE INSTALLED INSIDE THE SLEEVE BETWEEN THE END COUPLINGS FOR GROUNDING CONTINUITY.
2. AT THE END OF THE ABUTMENT, PLACE CONDUIT IN CONCRETE WITH THREADS ONLY EXPOSED, COMPACT BACKFILL UP TO LEVEL OF CONDUIT, THEN ATTACH EXPANSION/DEFLECTION FITTING ALONG WITH REMAINING CONDUIT AND COMPLETE COMPACTION OF BACKFILL.
3. IF NO OTHER PULLING CAPABILITY IS LOCATED NEAR THE END OF THE BRIDGE, AN INTERNAL-FLANGE JUNCTION BOX MEETING 725.10 AND A MINIMUM LENGTH OF 5 CONDUIT DIAMETERS, SHALL BE INSTALLED.
4. FOR GROUNDING OF BRIDGE STRUCTURE, SEE ST. DWG. HL-50.21.
5. FOR LIST OF ABBREVIATIONS, SEE SHT. 2/22.

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

DESIGNED SRR | DRAWN SRR | REVIEWED JEP | DATE 12/2005
CHECKED KCS | REVISED | STRUCTURE FILE NUMBER 7607385 LT. 7607369 RT.

PARAPET DETAILS
BRIDGE NO. STA-30-0670 L&R
US 30 OVER TUSCARAWAS RIVER & R.J. CORMAN RAILROAD

STA-30-(6.70) (11.57)
PID 23754

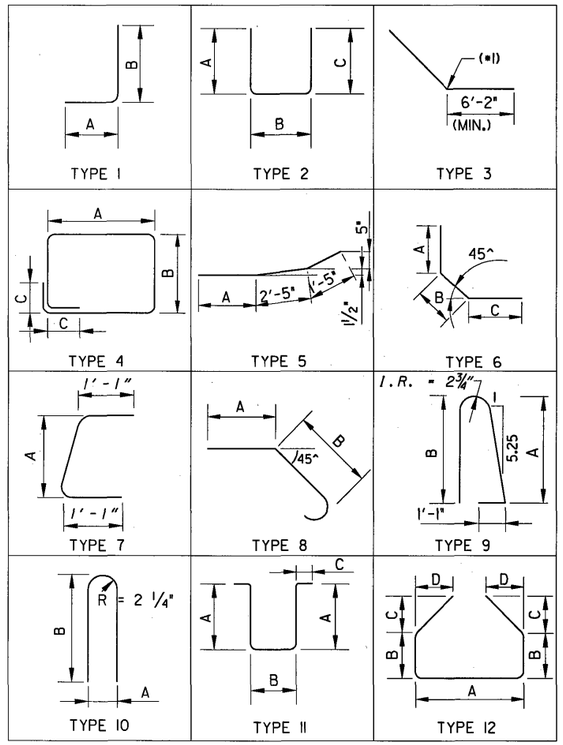
REINFORCING STEEL LIST - RIGHT BRIDGE

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	INCR.
ABUTMENTS									
A503	104	5'-2"	561	2	1'-11"	1'-7"	1'-11"		
W501	32	17'-6"	582	STR					
	8	11'-3"							
W502	S.O.	TO	476	STR					2'-0"
	4	17'-3"							
W503	32	11'-0"	367	STR					
W601	96	11'-6"	1658	STR					
W602	48	6'-3"	451	STR					
	8	3'-11"							
W603	S.O.	TO	452	STR					6"
	7	6'-10"							
A804	104	4'-0"	1111	STR					
A805	24	12'-0"	769	STR					
W801	48	5'-8"	726	STR					
D801	60	5'-2"	828	8	1'-5"	2'-8"			
ABUTMENTS TOTAL = 7,981 LBS.									
PIERS									
P501	16	9'-9"	163	2	3'-0"	4'-0"	3'-0"		
	32	9'-5"			3'-8"		3'-8"		
P502	S.O.	TO	8211	2	TO	2'-4"	TO		6"
	18	17'-11"			7'-11"		7'-11"		
P503	400	18'-3"	7614	2	8'-1"	2'-4"	8'-1"		
P601	24	14'-6"	523	4	4'-0"	3'-0"	0'-8"		
P602	16	4'-3"	102	1	1'-6"	2'-11"			
P603	96	8'-0"	1154	STR					
P801	32	41'-2"	3518	STR					
	8	27'-6"							
P802	S.O.	TO	5605	STR					2'-7"
	5	37'-8"							
P901	104	4'-2"	1459	1	1'-6"	2'-11"			
P902	24	23'-4"	1904	STR					
P903	48	16'-6"	2685	3					
P1101	29	47'-10"	7370	2	3'-8"	41'-2"	3'-8"		
P1102	43	41'-5"	9443	STR					
PIERS TOTAL = 49,751 LBS.									
END DIAPHRAGMS									
S506	120	14'-2"	1773	2	5'-6"	3'-5"	5'-6"		
S507	60	7'-5"	464	2	2'-5"	2'-10"	2'-5"		
S801	22	41'-6"	2439	STR					
S802	24	8'-3"	529	STR					
S803	64	10'-7"	1808	6	1'-11"	2'-8"	6'-1"		
END DIAPHRAGMS TOTAL = 7,013 LBS.									

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	INCR.
SUPERSTRUCTURE									
S401	570	40'-0"	15231	STR					
S402	57	33'-6"	1276	STR					
S501	168	40'-0"	7009	STR					
S502	56	36'-5"	2127	STR					
S503	56	6'-5"	375	STR					
S504	56	10'-8"	623	STR					
S505	56	7'-0"	409	STR					
S601	735	17'-10"	19688	STR					
S602	735	27'-1"	29899	STR					
S603	1470	22'-6"	49495	STR					
S604	506	40'-0"	30401	STR					
S605	46	7'-0"	484	STR					
S606	135	40'-0"	8111	STR					
S607	45	36'-5"	2462	STR					
S608	45	6'-11"	468	STR					
S609	45	11'-2"	755	STR					
S610	45	7'-6"	507	STR					
SUPERSTRUCTURE TOTAL = 169,320 LBS.									
PIER DIAPHRAGMS									
S403	12	11'-4"	70	10	0'-5½"	4'-0"			
S404	12	4'-10"	39	12	1'-11½"	0'-6¼"	0'-8½"	0'-8½"	
S405	112	9'-7"	717	11	3'-6"	1'-11"	0'-6"		
S406	12	2'-8"	22	STR					
S611	128	10'-6"	2019	6	2'-10"	1'-0"	6'-9"		
S612	96	8'-3"	1190	STR					
PIER DIAPHRAGMS TOTAL = 4,057 LBS.									
PARAPETS									
R501	168	30'-0"	5257	STR					
R502	12	28'-3"	354	STR					
R503	828	7'-5"	6405	9	3'-2"	3'-0"			
R504	32	10'-0"	334	STR					
R505	12	5'-6"	69	5	1'-8"				
R506	20	5'-6"	115	STR					
R601	28	30'-0"	1262	STR					
R602	2	35'-6"	107	STR					
R603	828	2'-4"	2902	1	1'-1"	1'-5"			
R604	828	3'-5"	4249	7	1'-5"				
	8	4'-4"			3'-6"				
R605	S.O.	TO	623	1	TO	1'-0"			1"
	11	5'-1"			4'-3"				
R606	40	4'-4"	261	1	3'-6"	1'-0"			
PARAPETS TOTAL = 21,938 LBS.									
GRAND TOTAL = 260,060 LBS.									

(•I) FIELD BEND AS NECESSARY

BENDING DIAGRAMS



NOTES:

1. THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, S501 IS A NO. 5 BAR. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE NOTED. R INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED.

2. "STR." IN THE TYPE COLUMN INDICATES STRAIGHT BARS.

3. S.O. DENOTES "SERIES OF".

4. REFER TO C.M.S. SECTION 509.05 FOR STANDARD BEND DIMENSIONS.

5. ALL REINFORCING BARS SHALL BE EPOXY COATED. COATING WHICH HAS BEEN DAMAGED OR OTHERWISE DOES NOT MEET SPECIFICATIONS WITH RESPECT TO COLOR, CONTINUITY AND UNIFORMITY MAY BE REPAIRED AS DIRECTED BY THE ENGINEER OR SHALL BE REPLACED WITH MATERIAL WHICH MEETS THE SPECIFICATIONS. PAYMENT SHALL BE INCLUDED WITH ITEM 509 FOR PAYMENT.

6. FOR LIST OF ABBREVIATIONS, SEE SHT. 2722.

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

DATE 12/2005
REVISED JEP
DRAWN SRR
DESIGNED SRR
CHECKED KCS
REVISED
STRUCTURE FILE NUMBER 7607369 RT.

REINFORCING STEEL LIST
BRIDGE NO. STA-30-0670 RIGHT
US 30 OVER TUSCARAWAS RIVER & R.J. CORMAN RAILROAD

STA-30-(6.70)/(11.57)
PID 23754

21/22

101/127

REINFORCING STEEL LIST - LEFT BRIDGE

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	INCR.
ABUTMENTS									
A503	104	5'-2"	561	2	1'-11"	1'-7"	1'-11"		
W501	32	17'-6"	582	STR					
	8	11'-3"							
W502	S.O.	TO	476	STR					2'-0"
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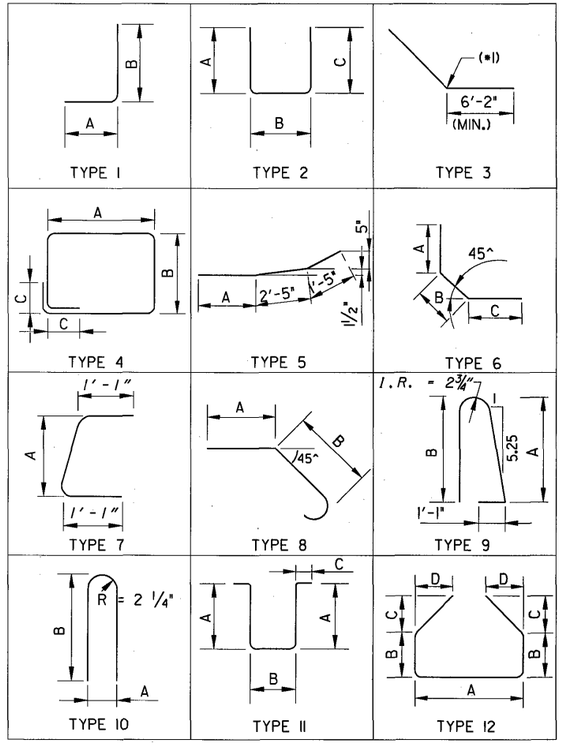
PARAPETS TOTAL = 21,938 LBS.									
GRAND TOTAL = 260,060 LBS.									

(•I) FIELD BEND AS NECESSARY

BENDING DIAGRAMS



NOTES:

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6. FOR LIST OF ABBREVIATIONS, SEE SHT. 2/22.

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

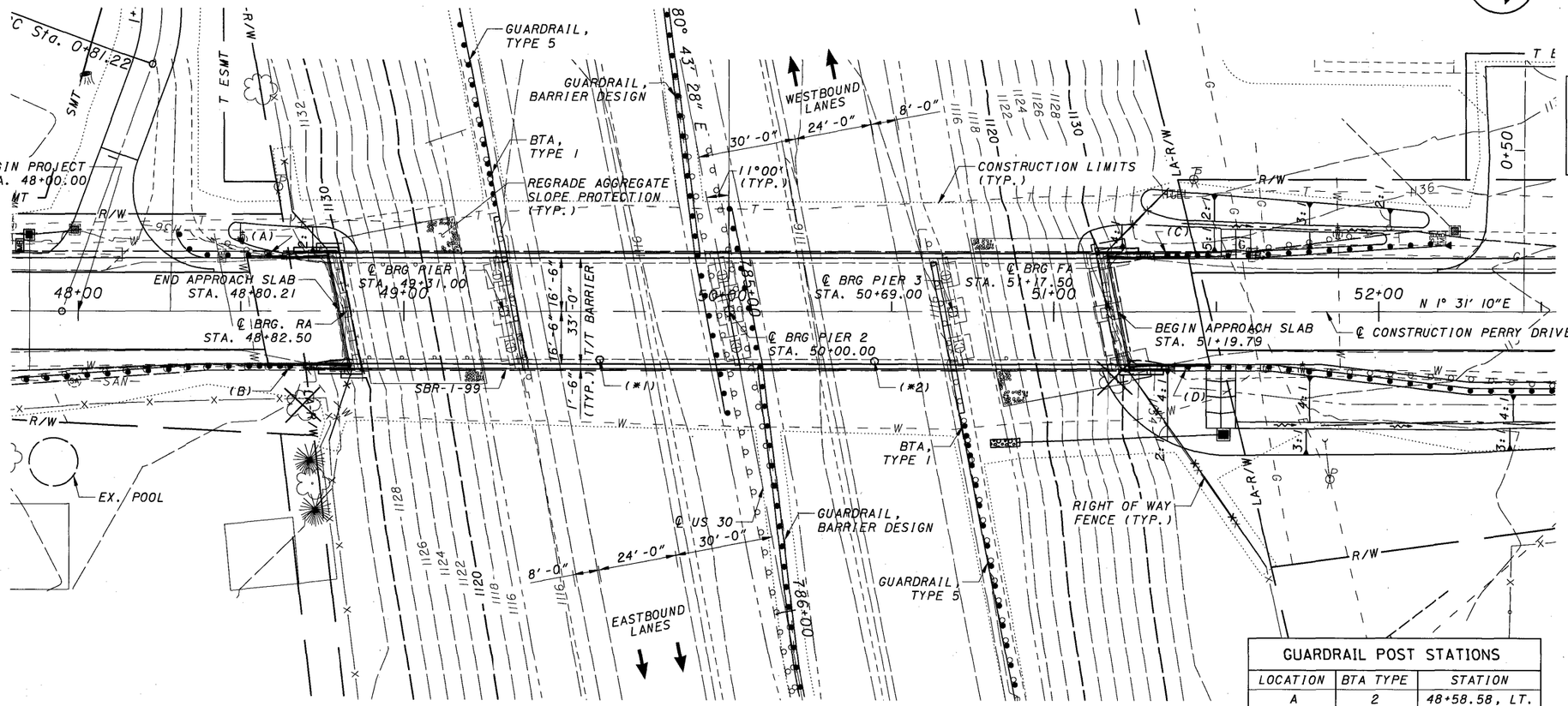
DATE 12/2005
REVIEWED JEP
DRAWN SRR
DESIGNED SRR
CHECKED KCS
REVISED
STRUCTURE FILE NUMBER 7607385 LT.

REINFORCING STEEL LIST
BRIDGE NO. STA-30-0670 LEFT
US 30 OVER TUSCARAWAS RIVER & R.J. CORMAN RAILROAD

STA-30-(6.70)/(11.57)
PID 23754

22/22

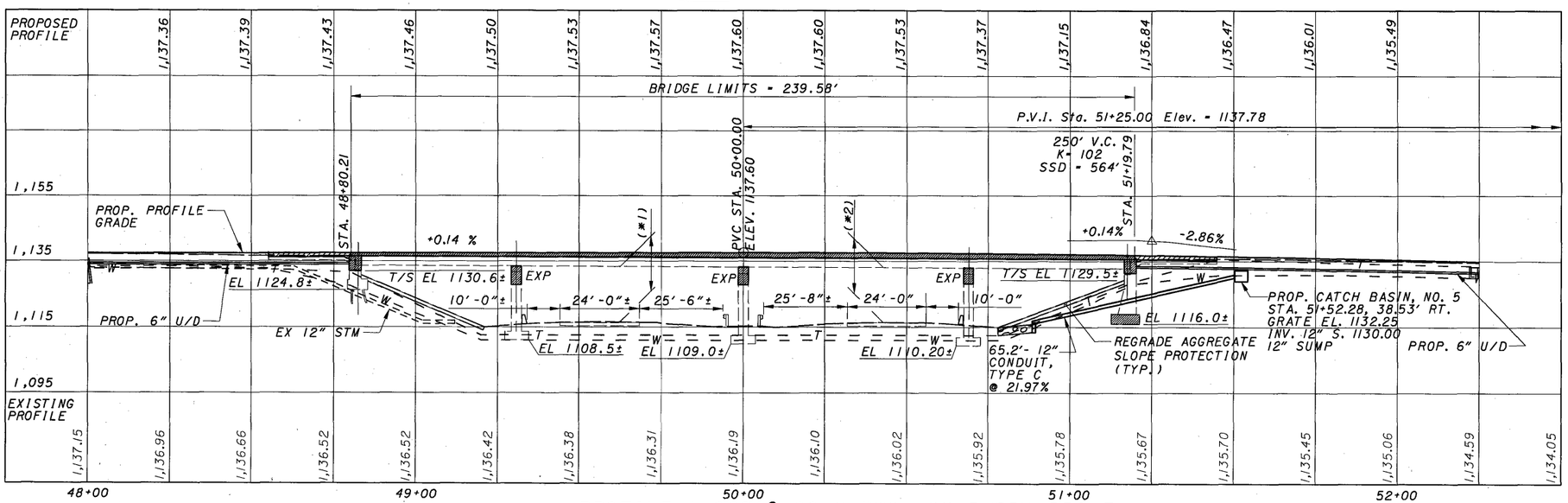
101A
127



GUARDRAIL POST STATIONS

LOCATION	BTA TYPE	STATION
A	2	48+58.58, LT.
B	1	48+65.10, RT.
C	1	51+34.90, LT.
D	2	51+41.31, RT.

PLAN



PROFILE ALONG ℄ CONSTRUCTION PERRY DRIVE

NOTES:

1. EARTHWORK LIMITS ARE APPOXIMATE, ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
2. FOR LIST OF ABBREVIATIONS, SEE SHT. 3/18.

(*1) - POINT OF MINIMUM VERTICAL CLEARANCE
STA. 49+60.32, 15'-0" RT.
CLEARANCE = 16'-6¼"

(*2) - VERTICAL CLEARANCE
STA. 50+44.75, 15'-0" RT.
CLEARANCE = 16'-6⅞"

VERTICAL CLEARANCES	(*1)	(*2)
MINIMUM EXISTING	15'-8½"	15'-7¼"
MINIMUM PROPOSED	16'-6¼"	16'-6⅞"
REQUIRED	16'-6"	16'-6"
TEMPORARY	15'-0"	15'-0"

BENCHMARK

BM1: NO. 5 REBAR WITH RED CAP
STA. 44+47.25, 25.33' RT
EL. 1136.78

BM2: NO. 5 REBAR WITH RED CAP
STA. 54+05.50, 16.87' RT
EL. 1129.28

TRAFFIC DATA

CURRENT ADT (2006) = 8700
CURRENT ADTT (2006) = 261
DESIGN ADT (2026) = 11,100
DESIGN ADTT (2025) = 333

EXISTING STRUCTURE

TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPAN: 48'-6"; 69'-0"; 69'-0"; 48'-6" C/C BEARINGS
ROADWAY: 30'-0" F/F 2'-0" SAFETY CURBS
SKEW: 11°-00' R.F.
LOADING: CF-400 (57)
ALIGNMENT: TANGENT
WEARING SURFACE: ASPHALT CONCRETE
APPROACH SLABS: AS-1-67 (25' LONG)
DATE BUILT: 1973
STRUCTURE FILE NO.: 7607539

PROPOSED WORK

1. REMOVE EXISTING DECK AND PORTION OF ABUTMENTS
2. CONVERT ABUTMENTS TO SEMI-INTEGRAL
3. RECONSTRUCT PIER CAPS AND ACHIEVE VERTICAL CLEARANCE OF 16'-6"
4. REPLACE BEARINGS WITH ELASTOMERIC BEARINGS
5. CONSTRUCT A NEW COMPOSITE DECK 33' WIDE T/T BARRIER
6. SEAL CONCRETE SURFACES
7. PAINT STRUCTURAL STEEL
8. CONSTRUCT FULL WIDTH APPROACH SLABS
9. COMPLETE ROADWORK ITEMS TO FINISH THE PROJECT

PROPOSED STRUCTURE

TYPE: CONTINUOUS STEEL BEAM WITH COMPOSITE REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPAN: 48'-6"; 69'-0"; 69'-0"; 48'-6" C/C BEARINGS
ROADWAY: 33'-0" T/T BARRIER
SKEW: 11°-00'-00" R.F.
LOADING: HS20 (CASE II), ALTERNATE MILITARY LOADING AND FWS OF 60#/SF
ALIGNMENT: TANGENT
WEARING SURFACE: MONOLITHIC CONCRETE
APPROACH SLABS: AS-1-81 (25' LONG)
LONGITUDE: 81°26'49"
LATITUDE: 40°46'35"

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

DATE 12/2005
STRUCTURE FILE NUMBER 7607539
REVIEWED MLM
DRAWN JEP
REVISED
DESIGNED JEP
CHECKED KCS

STARK COUNTY
STA. 48+80.21
STA. 51+19.79

SITE PLAN
BRIDGE NO. STA-30-1157
PERRY DRIVE OVER US 30

STA-30-(6.70)(11.57)
PID 23754

GENERAL NOTES

REFERENCE SHALL BE MADE TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-81	REVISED 07-19-02
GSD-1-96	REVISED 07-19-02
SBR-1-99	REVISED 07-19-02
SICD-1-96	REVISED 07-19-02

AND TO SUPPLEMENTAL SPECIFICATIONS:

843	DATED 04-18-2003
885	DATED 11-04-2005

DESIGN SPECIFICATIONS:
THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2002, AND THE O.D.O.T. BRIDGE DESIGN MANUAL.

DESIGN LOADING:
HS20-44, CASE II AND THE ALTERNATE MILITARY LOADING.
FUTURE WEARING SURFACE (FWS) OF 60 PSF.

DESIGN STRESSES:

CONCRETE CLASS HP - COMPRESSIVE STRENGTH 4500 P.S.I.
(SUPERSTRUCTURE)

CONCRETE CLASS C - COMPRESSIVE STRENGTH 4000 P.S.I.
(SUPERSTRUCTURE)

REINFORCING STEEL - ASTM A615 OR A996
GRADE 60 - MINIMUM YIELD STRENGTH
60,000 P.S.I.

MISCELLANEOUS STEEL - (LOAD PS, COVER PS, HP SECTIONS):
GRADE 36 - MINIMUM YIELD STRENGTH
36,000 P.S.I.

DECK PROTECTION METHOD:
EPOXY COATED REINFORCING STEEL
2-1/2" CONCRETE COVER
CLASS HP CONCRETE

MONOLITHIC WEARING SURFACE:

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1"THICK

EXISTING STRUCTURE VERIFICATION:
DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

UTILITY LINES:
THE UTILITY(IES) SHALL BORE ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES. THE CONTRACTOR AND UTILITY(IES) ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

ITEM 526 -REINFORCED CONCRETE APPROACH SLAB (T=15"), AS PER PLAN:
THE CONCRETE FOR THE APPROACH SLABS SHALL BE CLASS HP CONCRETE, MIX 4. THE PROPORTIONS FOR THE STARTING MIX DESIGN ARE DESCRIBED IN THE ITEM 511 - CLASS HP CONCRETE, BRIDGE DECK, AS PER PLAN.

ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS. SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH CMS 501.05.
IF, DURING THE JACKING OPERATIONS, DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. THE BRIDGE BEARINGS SHALL BE FULLY SEATED AT ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS.
THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS.
THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

ITEM 516, SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN:
INSTALL A 3 FOOT WIDE NEOPRENE SHEET AT LOCATIONS SHOWN IN THE PLANS. SECURE THE NEOPRENE SHEETING TO THE CONCRETE WITH 1¼" X #10 GAGE (LENGTH X SHANK DIA.) GALVANIZED BUTTON HEAD SPIKE THROUGH A 1 INCH OUTSIDE DIAMETER, # 10 GAGE GALVANIZED WASHER, MAXIMUM FASTENER SPACING IS 9 INCHES. USE OF OTHER SIMILAR GALVANIZED DEVICES, WHICH WILL NOT DAMAGE EITHER THE NEOPRENE OR THE CONCRETE WILL BE USED SUBJECT TO APPROVAL OF THE ENGINEER.

CENTER THE NEOPRENE STRIPS ON ALL JOINTS. FOR HORIZONTAL JOINTS, SECURE THE HORIZONTAL NEOPRENE STRIP BY USING A SINGLE LINE OF FASTENERS, STARTING AT 6 INCHES(+/-) FROM THE NEOPRENE STRIP. FOR THE VERTICAL JOINTS SECURE THE VERTICAL NEOPRENE STRIP BY USING A SINGLE VERTICAL LINE OF FASTENERS, STARTING AT 6 INCHES (+/-) FROM THE VERTICAL EDGE OF THE NEOPRENE STRIP NEAREST TO THE CENTERLINE OF ROADWAY. FOR VERTICAL JOINTS , INSTALL 2 ADDITIONAL FASTENERS AT 6 INCHES CENTER TO CENTER, ACROSS THE TOP OF THE NEOPRENE STRIP ON THE SAME SIDE OF THE VERTICAL JOINT AS THE SINGLE VERTICAL ROW OF FASTENERS IS LOCATED.

THE VERTICAL NEOPRENE STRIPS SHALL COMPLETELY OVERLAP THE HORIZONTAL STRIPS. LAP LENGHTS OF THE HORIZONTAL STRIPS THAT ARE NOT VULCANIZED OR ADHESIVE BONDED. SHALL BE AT LEAST 1 FOOT IN LENGTH, OR 6 INCHES IN LENGTH IF THE LAP IS VULCANIZED OR ADHESIVE BONDED. NO LAPS ARE ACCEPTABLE IN VERTICALLY INSTALLED NEOPRENE STRIPS.
THE NEOPRENE SHEETING SHALL BE 3/32 INCH THICK GENERAL PURPOSE, HEAVY DUTY NEOPRENE SHEET WITH NYLON FABRIC REINFORCEMENT. THE SHEETING SHALL BE "FAIRPRENE NUMBER NN-0003", BY E.I. DUPONT DE NEMOURS AND COMPANY, INC., "WINGPRENE BY THE GOODYEAR TIRE AND RUBBER COMPANY, OR AN APPROVED ALTERNATE.
THE NEOPRENE SHETTING SHALL CONFORM TO THE FOLLOWING:

DESCRIPTION OF TEST	ASTM METHOD	REQUIREMENT
THICKNESS, INCHES	D 751	0.094 +/-.01
BREAKING STRENGTH, GRAB , LBS, MINIMUM	D 751	700 X 700
ADHESIVE STRIP, 1" WIDE X 2" LONG, LBS, MINIMUM	D 751	9
BURST STRENGTH, PSI, MINIMUM	D 751	1400
HEAT AGING, 70 HOURS, T 212°F, 180 BEND WITHOUT CRACKING	D 2136	NO CRACKING OF COATING
LOW TEMPERATURE BRITTLENESS, 1 HOUR AT -40° F, BEND AROUND 1/4 INCH MANDREL	D 2136	NO CRACKING OF COATING

THE DEPARTMENT WILL MEASURE THE TOTAL LENGTH OF JOINT TO BE SEALED BY THE NUMBER OF FEET.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN.

ITEM 511, CLASS HP CONCRETE, FOR BRIDGE DECK, AS PER PLAN
ITEM 511, CLASS HP CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN
GENERAL REQUIREMENTS. -THE PROVISIONS OF ITEM 511 SHALL APPLY EXCEPT AS NOTED BELOW.
MIX OPTION. - ALL SUPERSTRUCTURE, BRIDGE DECK, SIDEWALK, AND PARAPET CONCRETE SHALL BE THIS MIX (HP4, AS PER PLAN)
THE FOLLOWING PROPORTIONS WILL BE USED AS A STARTING MIX DESIGN.

CONCRETE TABLE
QUANTITIES PER CUBIC YARD
AGGREGATES (SSD)
HP4, AS PER PLAN (GGBF SLAG + MICROSILICA)

AGGREGATE TYPE	FINE AGGRE (lb)	#8 COURSE AGGRE (lb)	#57 COARSE AGGRE. (lb)	TOTAL (lb)	CEMENT CONTENT (lb)	GGBF SLAG (lb)	MICRO-SILICA (lb)	WATER TO CEMENTITIOUS RATIO +/- .01	AIR CONTENT +/- 2%
GRAVEL	1245	360	1315	2920	400	170	30	0.43	7
LIMESTONE	1245	360	1335	2940	400	170	30	0.43	7
SLAG	1245	315	1155	2715	400	170	30	0.43	7

* ALL COARSE AGGREGATE SHALL HAVE AN ABSORPTION OF 1.00% OR GREATER AS DEFINED PER ASTM C127

THE WEIGHTS SPECIFIED IN THE CONCRETE TABLE WERE CALCULATED FOR MATERIALS OF THE FOLLOWING BULK SPECIFIC GRAVITIES (SSD): NATURAL SAND AND GRAVEL 2.62, LIMESTONE SAND 2.68, LIMESTONE 2.65, SLAG 2.30, FLY ASH 2.65, GGBF SLAG 2.90, MICROSILICA SOLIDS 2.20, AND PORTLAND CEMENT 3.15. FOR AGGREGATES OF SPECIFIC GRAVITIES DIFFERING MORE THAN PLUS OR MINUS 0.02 FROM THESE, THE WEIGHTS IN THE TABLE WILL BE CORRECTED.

THE PARAPETS WILL BE CARRIED ONTO THE APPROACH SLABS AND TRANSITIONED ON THE APPROACH SLABS AS DETAILED IN THE PLANS. QUANTITIES OF THE CONCRETE SHALL BE INCLUDED FOR PAYMENT WITH ITEM 511 - CLASS HP CONCRETE, BRIDGE DECK (PARAPETS), AS PER PLAN. REINFORCING STEEL FOR THE TRANSITIONS SHALL BE INCLUDED FOR PAYMENT WITH ITEM 509 - EPOXY COATED REINFORCING STEEL.

BASIS OF PAYMENT. PAYMENT FOR THE ABOVE COMPLETED QUANTITIES WILL BE MADE AT THE CONTRACT BID PRICE FOR:

ITEM	UNITS	DESCRIPTION
511	CUBIC YARDS	CLASS HP CONCRETE, FOR BRIDGE DECK, AS PER PLAN
511	CUBIC YARDS	CLASS HP CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN

ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20' SPAN, AS PER PLAN:
DESCRIPTION: THIS WORK CONSISTS OF THE REMOVAL OF CONCRETE DECKS INCLUDING SIDEWALKS, PARAPETS, RAILINGS, DECK JOINTS AND OTHER APPURTENANCES FROM STEEL SUPPORTING SYSTEMS (BEAMS, GIRDERS, CROSS FRAMES, ETC.). THE PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED BY THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING DECK REMOVALS TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/ OR HOE RAM TYPE EQUIPMENT IS PROHIBITED. SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05.

PROTECTION OF STEEL SUPPORT SYSTEMS: BEFORE DECK SLAB CUTTING IS PERMITTED, DRAW THE OUTLINE OF PRIMARY STEEL MEMBERS IN CONTACT WITH THE BOTTOM OF THE DECK ON THE SURFACE OF DECK. DRILL SMALL DIAMETER PILOT HOLES 2 INCHES OUTSIDE THESE LINES TO CONFIRM THE LOCATION OF THE FLANGE EDGES. DECK CUTS OVER OR WITHIN 2 INCHES OF FLANGE EDGES SHALL NOT EXTEND LOWER THAN THE BOTTOM LAYER OF DECK SLAB REINFORCING STEEL. CUTS MADE OUTSIDE 2 INCHES OF FLANGE EDGES MAY EXTEND THE FULL DEPTH OF THE DECK. PERFORM WORK CAREFULLY DURING CUTTING OF THE DECK SLAB TO AVOID DAMAGING STEEL MEMBERS THAT ARE TO BE INCORPORATED INTO THE PROPOSED STRUCTURE. REPLACE OR REPAIR STEEL MEMBERS DAMAGED BY THE DECK SLAB CUTTING OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE DIRECTOR. OBTAIN THE DIRECTOR'S APPROVAL BEFORE PERFORMING REPAIR.

REMOVAL METHODS: THE CONTRACTOR MAY REMOVE CONCRETE BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS. FOR REMOVALS OVER STRUCTURAL MEMBERS (PRESTRESSED BOX BEAM, I-BEAM, STEEL BEAMS, STEEL GIRDER, ETC.) THE CONTRACTOR MAY USE A HAMMER HEAVIER THAN 35 POUNDS [16 KILOGRAMS] BUT NOT EXCEED 90 POUNDS [41 KILOGRAMS] UNLESS APPROVED BY THE ENGINEER. REMOVAL METHODS OVER STRUCTURAL MEMBERS SHALL ENSURE ADEQUATE DEPTH CONTROL AND PREVENT NICKING OR GOUGING TO THE PRIMARY STRUCTURAL MEMBERS.
DUE TO THE POSSIBLE PRESENCE OF ATTACHMENTS (E.G., FINISHING MACHINE, SCUPPER AND FORM SUPPORTS, ETC.) TO EXISTING STRUCTURAL MEMBERS, PERFORM WORK CAREFULLY DURING DECK REMOVAL TO AVOID DAMAGING STRUCTURAL MEMBERS THAT ARE TO REMAIN. REPLACE OR REPAIR STRUCTURAL MEMBERS DAMAGED BY THE REMOVAL OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE DIRECTOR. OBTAIN THE DIRECTOR'S APPROVAL BEFORE PERFORMING REPAIR.

EXISTING WELDED ATTACHMENTS: REMOVE EXISTING WELDED ATTACHMENTS (E.G., FINISHING MACHINE AND FORM SUPPORTS; AND SUPPORTS FOR SCUPPERS AND BULB ANGLES WHICH ARE TO BE REMOVED) LOCATED IN THE DESIGNATED TENSION PORTIONS OF THE TOP FLANGES OF EXISTING STEEL MEMBERS AND GRIND THE FLANGE SURFACES SMOOTH. CAREFULLY GRIND PARALLEL TO THE FLANGES. MEASUREMNET & PAYMENT: THE DEPARTMENT WILL MEASURE THE QUANTITY OF REMOVALS ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES OF REMOVALS AT THE CONTRACT PRICE FOR ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20' SPAN, AS PER PLAN.

ASBESTOS SURVEY: AN ASBESTOS SURVEY WAS COMPLETED FOR DISTRICT 4 BY EMERALD ENVIRONMENTAL, INC. NO ASBESTOS WAS FOUND. A REPORT WILL BE PROVIDED TO THE CONTRACTOR BY THE DISTRICT AT THE PRECONSTRUCTION MEETING. THE CONTRACTOR SHALL FILL OUT THE REMAINDER OF THE NOTIFICATION OF DEMOLITION AND RENOVATION FORM AND SUBMIT IT TO THE OHIO EPA DIVISION OF AIR POLLUTION CONTROL, 420 MARKET AVE., NORTH CANTON, OHIO 44702, ATTENTION DAN ALEMAN, ADMINISTRATOR, (P) 330-489-3395 AND (F) 330-489-3335. ALL COST ASSOCIATED WITH THIS FORM SHALL BE INCLUDED IN ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20' SPAN, AS PER PLAN.

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN:
PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN:
15 SF OF MATERIAL HAS BEEN INCLUDED FOR PAYMENT WITH THESE PLANS. APPLICATION SHALL BE AS DIRECTED BY THE ENGINEER.

PAINTING OF STRUCTURAL STEEL:
STRUCTURAL STEEL SHALL BE PAINTED USING FEDERAL COLOR NO. 595B-20045.

REINFORCING BAR MINIMUM LAP LENGTHS:
REINFORCING BARS, UNLESS OTHERWISE SHOWN IN THESE PLANS, SHALL HAVE MINIMUM LAP LENGTHS AS FOLLOWS:

#4 BARS - 1'-11"	#5 BARS - 2'-5"
#6 BARS - 2'-11"	#8 BARS - 4'-11"

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

DATE 12/2005
REVIEWED JEP
DRAWN SRR
DESIGNED SRR
CHECKED KCS
REVISED
STRUCTURE FILE NUMBER 7607539

GENERAL NOTES
BRIDGE NO. STA-30-1157
PERRY DRIVE OVER US 30

STA-30-(6.70) (11.57)
PID 23754

GENERAL NOTES (CON'T)

ABBREVIATIONS:
APPR. - APPROACH
APPROX. - APPROXIMATE
BM - BENCHMARK
BOT - BOTTOM
BRG. - BEARINGS
BTA - BRIDGE TERMINAL ASSEMBLY
BTW. - BETWEEN
C/C - CENTER TO CENTER
℄ - CENTERLINE
CJ - CONSTRUCTION JOINT
CMP - CORRUGATED METAL PIPE
CONC. - CONCRETE
CONST. - CONSTRUCTION
CVN - CHARPY V-NOTCH
DIA. - DIAMETER
E.F. - EACH FACE
EL - ELEVATION
E/P - EDGE OF PAVEMENT
E/S - EDGE OF SHOULDER
EX. - EXISTING
EXP - EXPANSION
FA - FORWARD ABUTMENT
F.F. - FAR FACE
F/F - FACE TO FACE
G/R - GUARDRAIL
JT. - JOINT
LT. - LEFT
MIN. - MINIMUM
N.F. - NEAR FACE
NPCPP - NON-PERFORATED CORRUGATED PLASTIC PIPE
O/O - OUT TO OUT
PCPP - PERFORATED CORRUGATED PLASTIC PIPE
PEJF - PREFORMED EXPANSION JOINT FILLER
PG - PROFILE GRADE
℗ - PLATE
PROP. - PROPOSED
RA - REAR ABUTMENT
RCP - ROCK CHANNEL PROTECTION
REIN. - REINFORCED
RT. - RIGHT
R/W - RIGHT OF WAY
SER. - SERIES
SHT. - SHEET
SPA. - SPACING
STA - STATION
TBR - TO BE REMOVED
TH. - THICKNESS
T/CURB - TOP OF CURB
T/S - TOP OF SLOPE
T/T - TOE TO TOE
TYP. - TYPICAL

COMPUTED BY : TCM DATE : 12/2005
CHECKED BY : KCS DATE : 12/2005

ESTIMATED QUANTITIES

ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUTS.	PIER	SUPER	GEN	AS PER PLAN SHEET NO.
202	11203	LUMP		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LUMP	2/18
202	22900	202	SQ YD	APPROACH SLAB REMOVED				202	
503	11100	LUMP		COFFERDAMS, CRIBS AND SHEETING				LUMP	
503	21100	181	CU YD	UNCLASSIFIED EXCAVATION	181				
509	10000	97385	POUND	EPOXY COATED REINFORCING STEEL	12726	11117	73542		
510	10000	200	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	200				
511	42500	66	CU YD	CLASS C CONCRETE, PIER CAP		66			
511	46200	39	CU YD	CLASS C CONCRETE	39				
511	50001	284	CU YD	CLASS HP CONCRETE, BRIDGE DECK, AS PER PLAN			284		2/18
511	50101	84	CU YD	CLASS HP CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN			76	8	2/18
511	52000	LUMP		CLASS HP CONCRETE, TEST SLAB			LUMP		
512	10100	1005	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	116	312	577		
513	20000	2070	EACH	WELDED STUD SHEAR CONNECTORS			2070		
513	95020	LUMP		STRUCTURAL STEEL, MISC.: (FIELD DRILLING BEAM HOLES)			LUMP		11/18 15/18
513	95030	60	EACH	STRUCTURAL STEEL, MISC.: (RETROFIT FOR COVERPLATE ENDS)			60		11/18
516	13900	175	SQ FT	2" PREFORMED EXPANSION JOINT FILLER				175	
516	14021	80	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN			80		2/18
516	44200	10	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES (1'-1" X 1'-1" X 3⅛") (NEOPRENE) AND LOAD PLATE (1'-2" X 1'-2" X 1½")	10				
516	44200	10	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES (1'-3" X 1'-4" X 3⅛") (NEOPRENE) AND LOAD PLATE (1'-4" X 1'-5" X 1½")		10			
516	44200	5	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES (1'-4" X 1'-4" X 3⅛") (NEOPRENE) AND LOAD PLATE (1'-5" X 1'-5" X 1½")		5			
516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN				LUMP	2/18
518	21200	66	CU YD	POROUS BACKFILL WITH FILTER FABRIC	66				
518	40000	62	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	62				
518	40010	40	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	40				
519	11101	6	SQ FT	PATCHING CONCRETE STRUCTURE, AS PER PLAN		6			2/18
526	25001	200	SQ YD	REINFORCED CONCRETE APPROACH SLAB (T=15"), AS PER PLAN				200	2/18
601	21100	339	SQ YD	SLOPE PROTECTION, MISC.: REGRADE AGGREGATE SLOPE PROTECTION	339				
843	50001	15	SQ FT	PATCHING CONCRETE STRUCTURE WITH TROWELABLE MORTAR, AS PER PLAN	8	7			2/18
885	00050	14086	SQ FT	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL, WITH WARRANTY			14086		
885	00056	14086	SQ FT	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT, WITH WARRANTY			14086		
885	00060	14086	SQ FT	FIELD PAINTING OF STRUCTURAL STEEL, INTERMEDIATE COAT, WITH WARRANTY			14086		
885	00066	14086	SQ FT	FIELD PAINTING OF STRUCTURAL STEEL, FINISH COAT, WITH WARRANTY			14086		
885	00504	20	MAN HR	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL			20		
885	10000	13	EACH	FINAL INSPECTION REPAIR			13		

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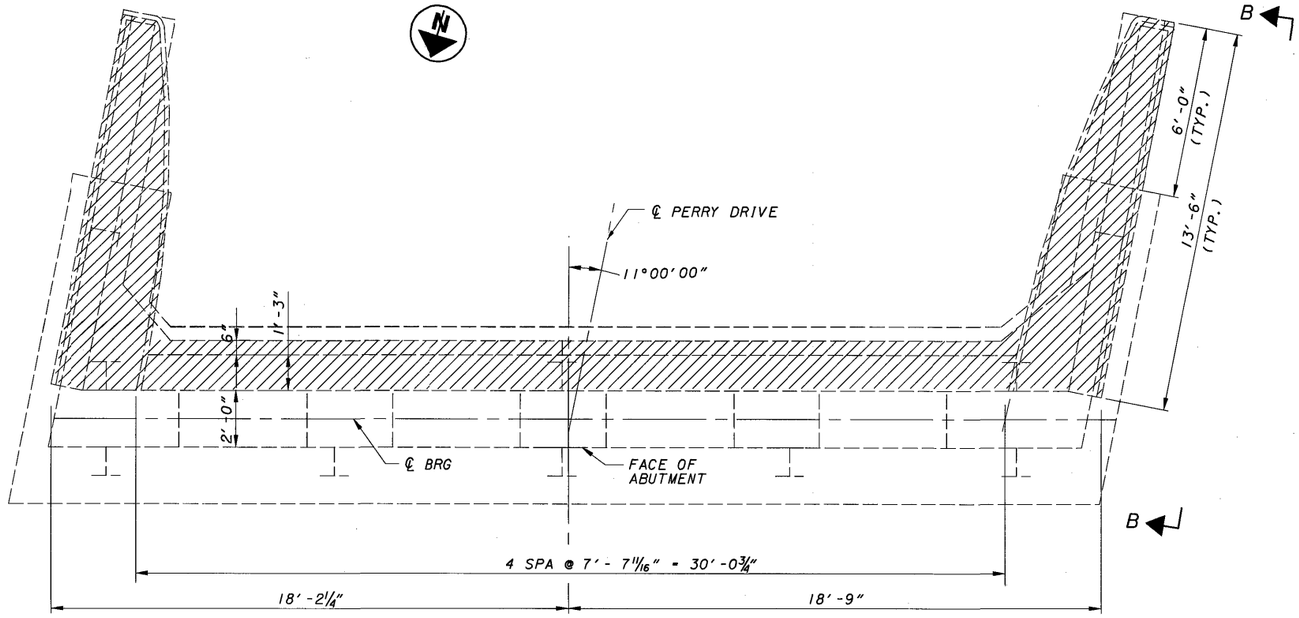
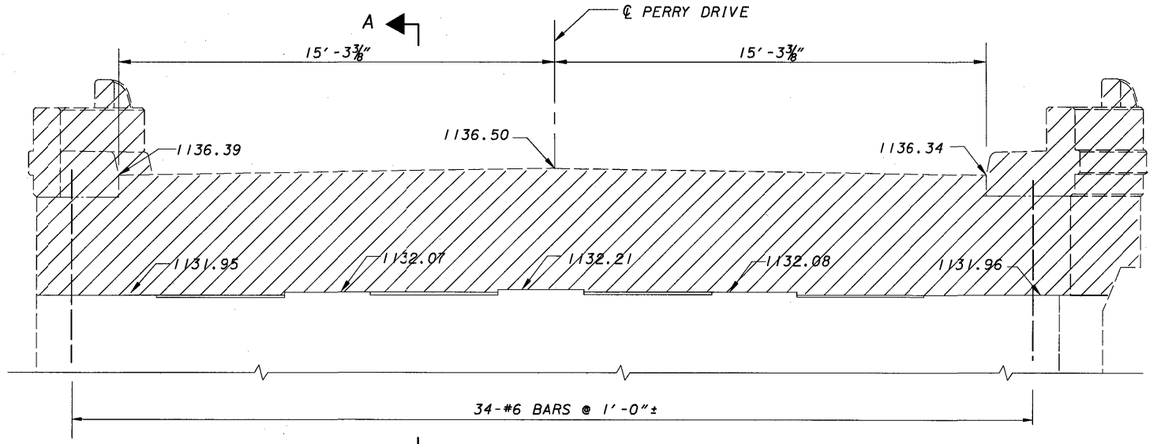
GENERAL NOTES & ESTIMATED QUANTITIES
BRIDGE NO. STA-30-1157
PERRY DRIVE OVER US 30

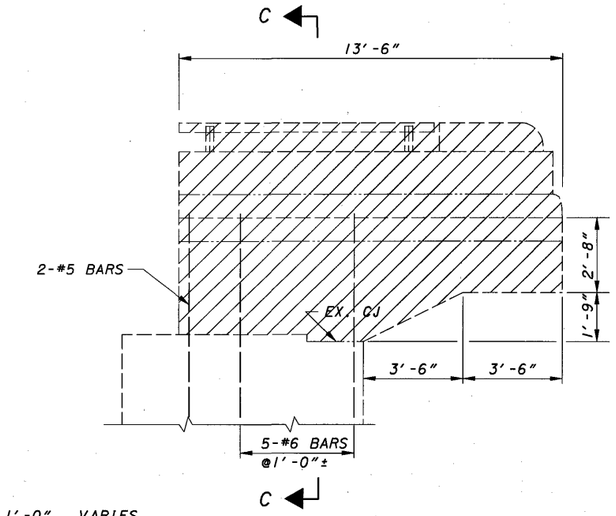
STA-30-(6.70)/(11.57)
PID 23754



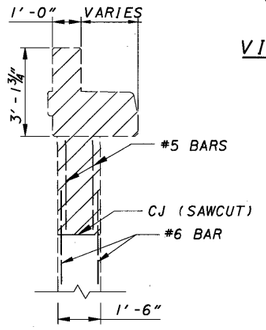
PLAN
(REAR ABUTMENT)



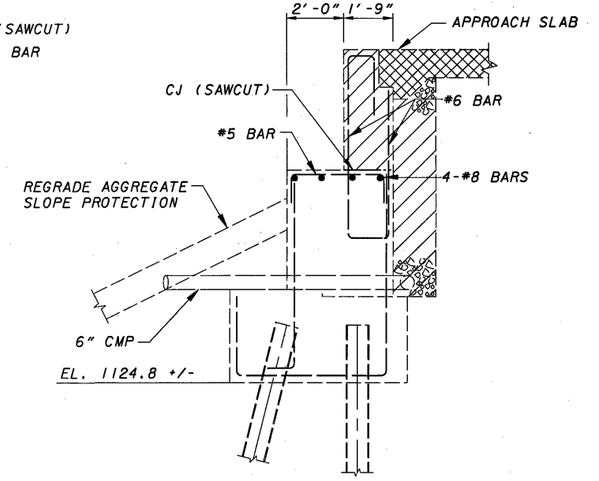
ELEVATION
(REAR ABUTMENT)



VIEW B-B



SECTION C-C



SECTION A-A

LEGEND:

- ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20' SPAN, AS PER PLAN
- ITEM 202 - APPROACH SLAB TO BE REMOVED

NOTES:

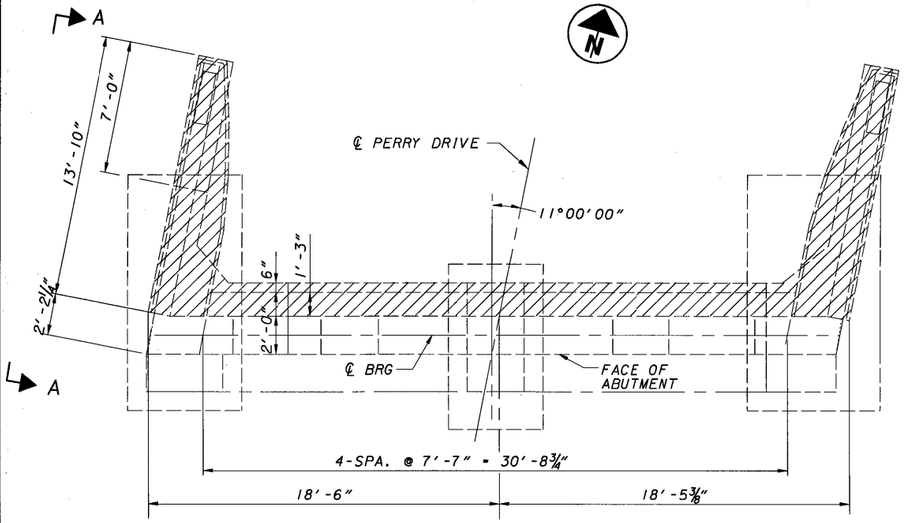
1. ALL EXISTING DIMENSIONS ARE ±.
2. CONTRACTOR SHALL SAW CUT ABUTMENTS TO REMOVE CONCRETE AND REINFORCING STEEL TO ELEVATIONS INDICATED IN PLANS.
3. FOR LIST OF ABBREVIATIONS, SEE SHT. 3/18.

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

DESIGNED	DRAWN	REVIEWED	DATE
JEP	SRR	MLM	12/2005
CHECKED	REVISED	STRUCTURE FILE NUMBER	
KCS		7607539	

REMOVAL DETAILS
BRIDGE NO. STA-30-1157
PERRY DRIVE OVER US 30

STA-30-(6.70) (11.57)
PID 23754



PLAN
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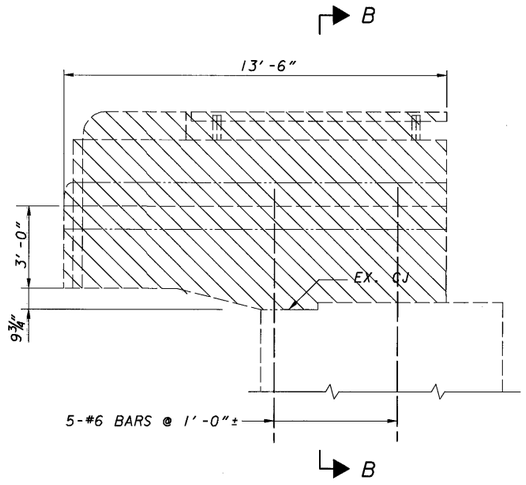
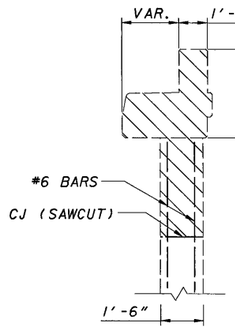
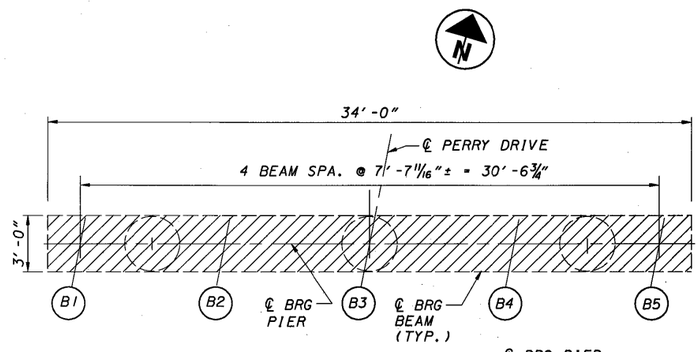


VIEW A-A

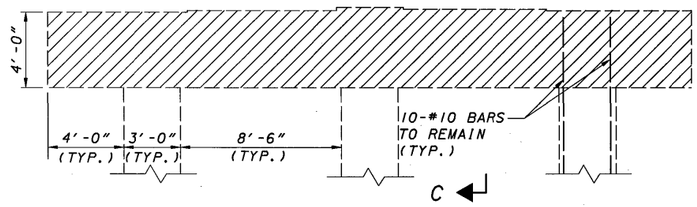


SECTION B-B

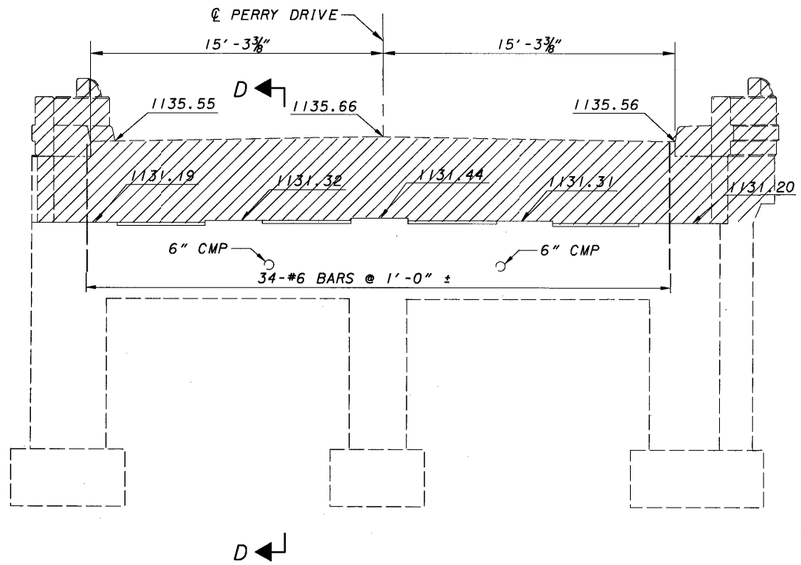


PLAN PIER CAP

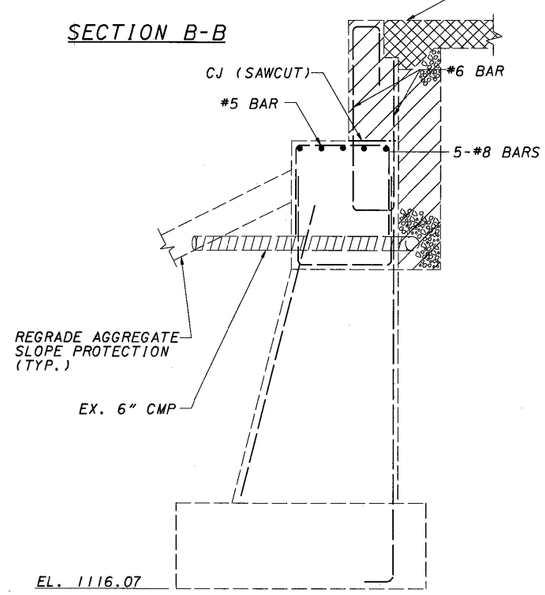
BEAM SEAT ELEVATIONS			
BEAM NO.	PIER 1	PIER 2	PIER 3
B1	1131.42	1131.03	1130.94
B2	1131.49	1131.18	1131.05
B3	1131.57	1131.29	1131.18
B4	1131.48	1131.20	1131.08
B5	1131.34	1131.08	1130.93



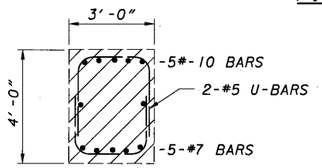
PIER ELEVATION



ELEVATION
(FORWARD ABUTMENT)



SECTION D-D



SECTION C-C

LEGEND:

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20' SPAN, AS PER PLAN

ITEM 202 - APPROACH SLAB TO BE REMOVED

NOTES:

1. ALL EXISTING DIMENSIONS ARE ±.
2. BEAM SEAT ELEVATIONS FROM FIELD SURVEY.
3. CONTRACTOR SHALL SAW CUT ABUTMENTS TO REMOVE CONCRETE AND REINFORCING STEEL TO ELEVATIONS INDICATED IN PLANS. CONTRACTOR SHALL REMOVE PIER CONCRETE TO ELEVATIONS INDICATED IN PLANS. HOWEVER, PIER REINFORCING STEEL SHALL BE SALVAGED ACCORDING TO PLANS.
4. FOR LIST OF ABBREVIATIONS, SEE SHT. 3/18.

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

DESIGNED	DRAWN	REVISED	DATE	STRUCTURE FILE NUMBER
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REMOVAL DETAILS
BRIDGE NO. STA-30-1157
PERRY DRIVE OVER US 30

STA-30-(6.70) (11.57)
PID 23754

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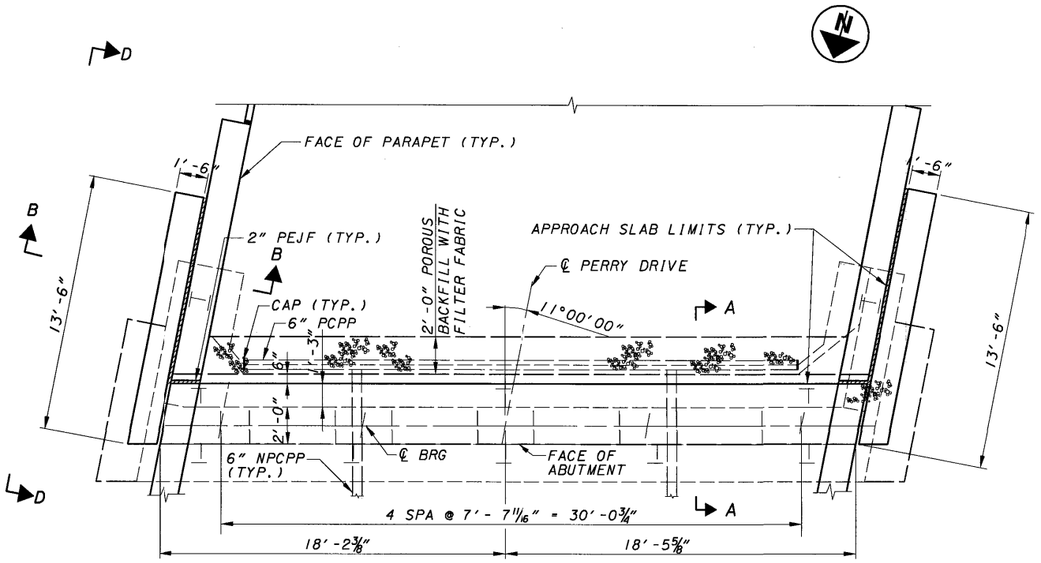
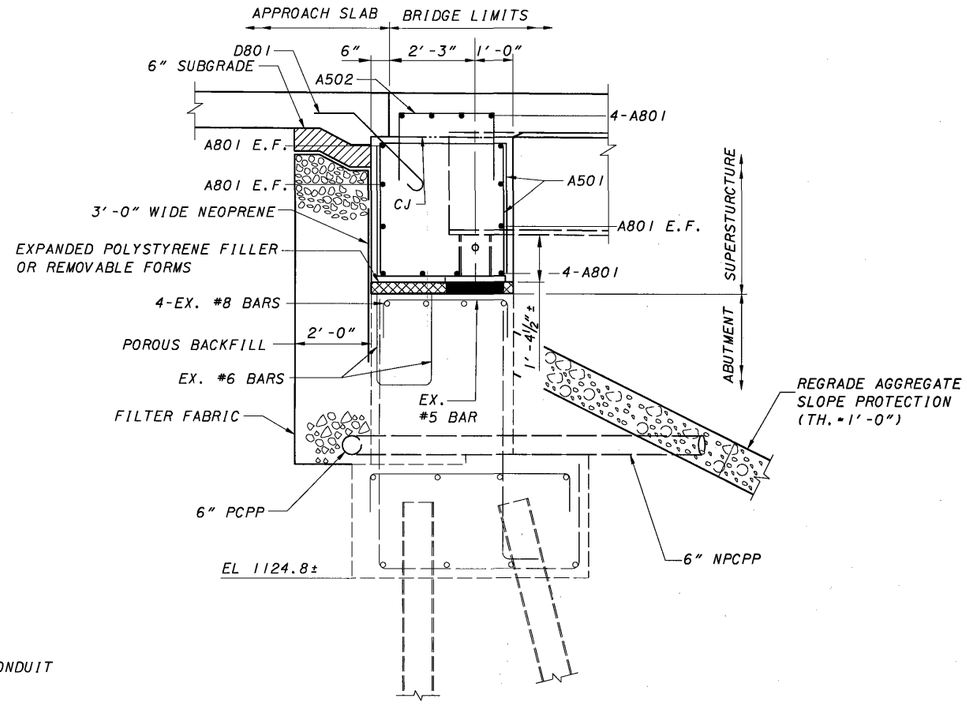
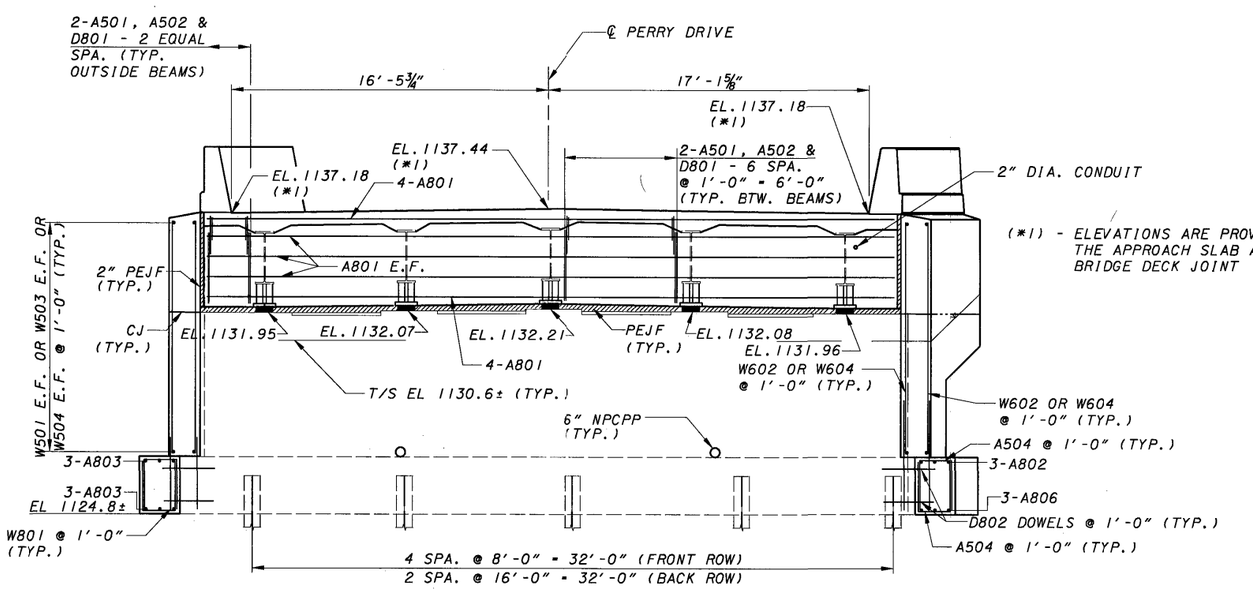


PLAN REAR ABUTMENT



SECTION A-A



ELEVATION

NOTES:

1. ALL EXISTING DIMENSIONS ARE ±.
2. FOR SECTION B-B & VIEW D-D, SEE SHT. 9/18.
3. FOR LIST OF ABBREVIATIONS, SEE SHT. 3/18.
4. SEALING OF BEAM SEATS: IF THE BEAMS SEATS ARE SEALED WITH AN EPOXY OR NON-EPOXY SEALER PRIOR TO SETTING THE BEARINGS, DO NOT APPLY SEALER TO THE CONCRETE SURFACES UNDER THE PROPOSED BEARING LOCATIONS. IF THESE LOCATIONS ARE SEALED, REMOVE THE SEALER TO THE SATISFACTION OF THE ENGINEER PRIOR TO SETTING THE BEARINGS. THE DEPARTMENT WILL NOT PAY FOR THIS REMOVAL.
5. ABUTMENT DIAPHRAGM CONCRETE, STEEL SUPERSTRUCTURE: PLACE THE CONCRETE ENCASING THE STRUCTURAL STEEL MEMBERS WITH THE DECK CONCRETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE.
6. FOR REINFORCING STEEL LAP LENGTHS, SEE SHT. 2/18.
7. POROUS BACKFILL WITH FILTER FABRIC, 2 FEET THICK SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, TO 1 FOOT BELOW THE EMBANKMENT SURFACE, AND LATERALLY TO THE ENDS OF THE WINGWALLS.
8. EMBEDMENT LENGTH FOR DOWELS IS 1'-6" UNLESS NOTED OTHERWISE.

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-704-0322

DESIGNED	DRAWN	REVIEWED	DATE
SRR	SRR	JEP	12/2005
CHECKED	REVISED	STRUCTURE FILE NUMBER	
KCS		7607539	

REAR ABUTMENT DETAILS
BRIDGE NO. STA-30-1157
PERRY DRIVE OVER US 30

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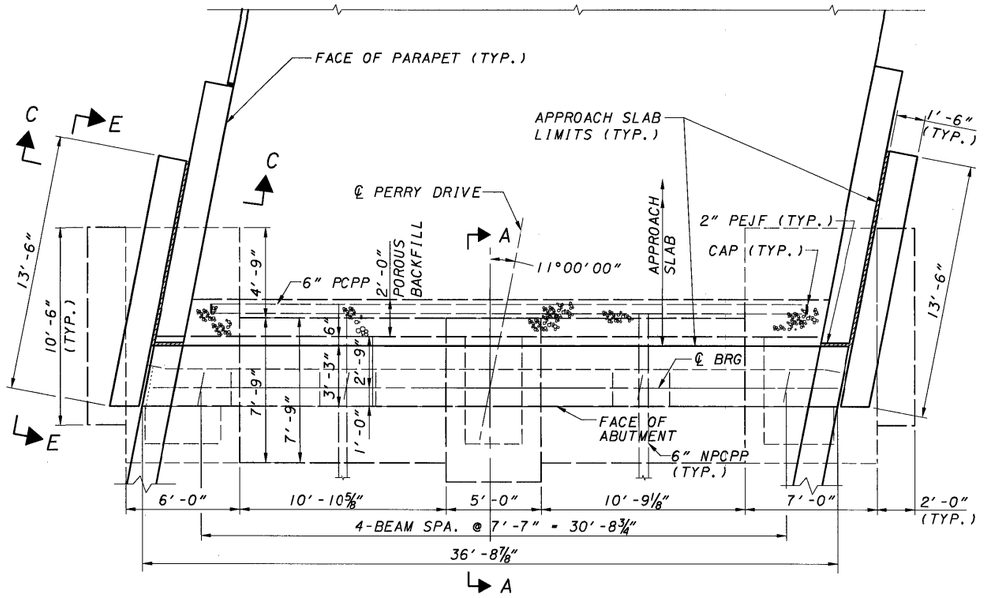
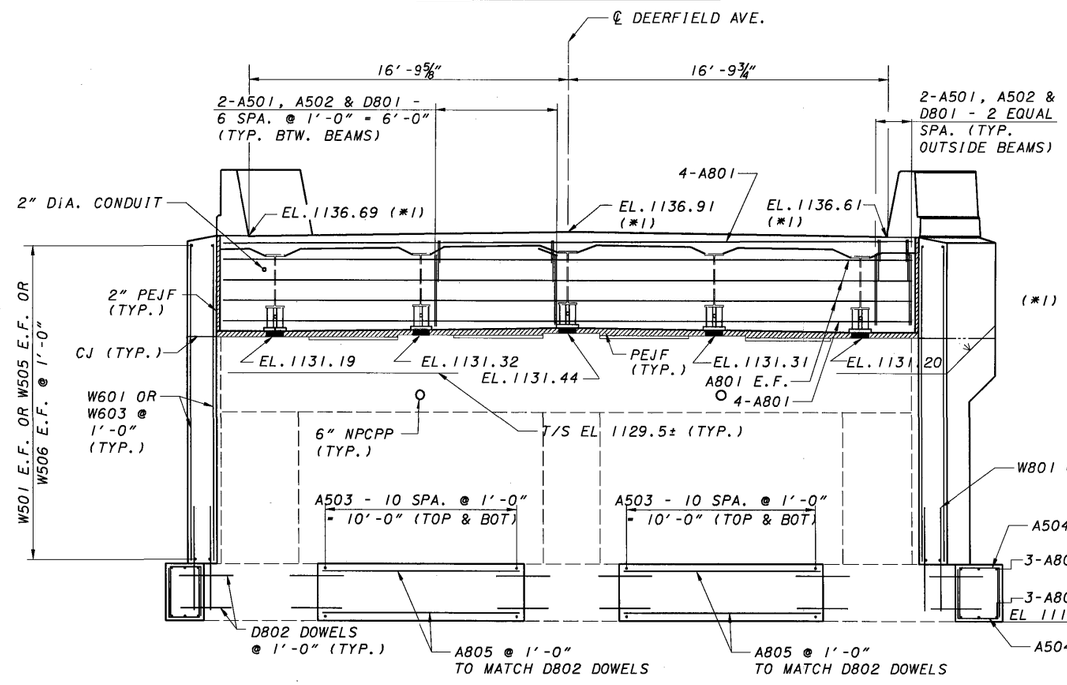
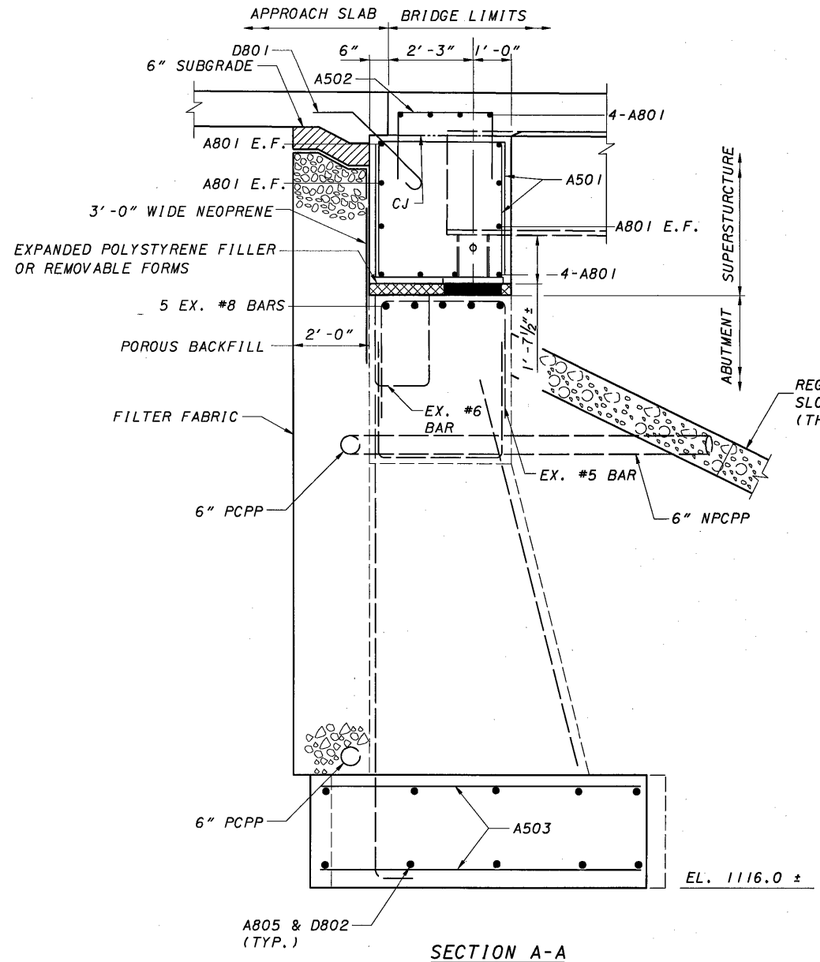


PLAN FORWARD ABUTMENT



ELEVATION

(*1) - ELEVATIONS ARE PROVIDED ALONG THE APPROACH SLAB AND BRIDGE DECK JOINT



SECTION A-A

NOTES:
1. ALL EXISTING DIMENSIONS ARE ±.
2. FOR SECTION C-C & VIEW E-E, SEE SHT. 9/18.
3. FOR LIST OF ABBREVIATIONS, SEE SHT. 3/18.
4. SEALING OF BEAM SEATS: IF THE BEAMS SEATS ARE SEALED WITH AN EPOXY OR NON-EPOXY SEALER PRIOR TO SETTING THE BEARINGS, DO NOT APPLY SEALER TO THE CONCRETE SURFACES UNDER THE PROPOSED BEARING LOCATIONS. IF THESE LOCATIONS ARE SEALED, REMOVE THE SEALER TO THE SATISFACTION OF THE ENGINEER PRIOR TO SETTING THE BEARINGS. THE DEPARTMENT WILL NOT PAY FOR THIS REMOVAL.
5. ABUTMENT DIAPHRAGM CONCRETE, STEEL SUPERSTRUCTURE: PLACE THE CONCRETE ENCASING THE STRUCTURAL STEEL MEMBERS WITH THE DECK CONCRETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE.
6. FOR REINFORCING STEEL LAP LENGTHS, SEE SHT. 2/18.
7. EMBEDMENT LENGTH FOR DOWELS IS 1'-6" UNLESS NOTED OTHERWISE.

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BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

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FORWARD ABUTMENT DETAILS
BRIDGE NO. STA-30-1157
PERRY DRIVE OVER US 30

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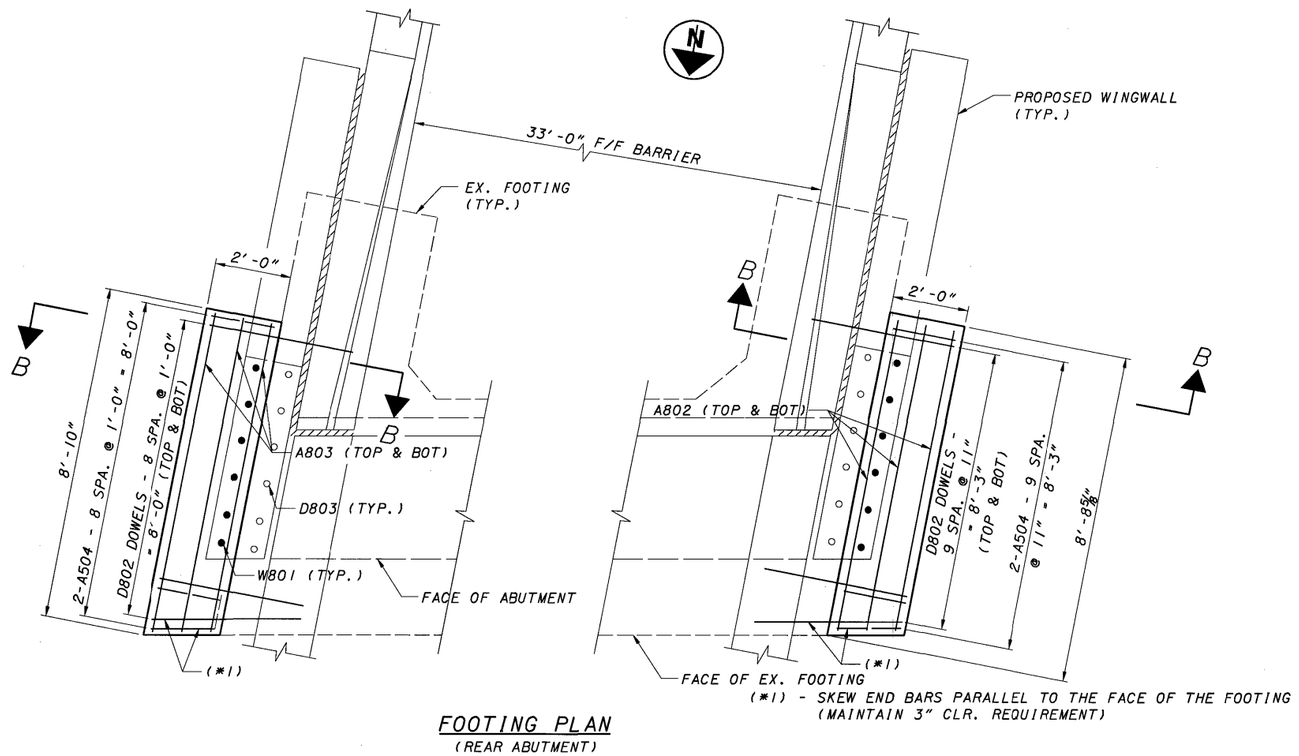
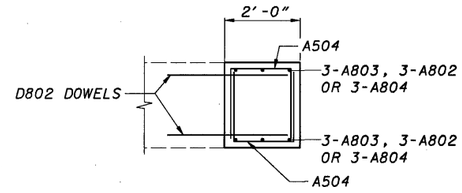
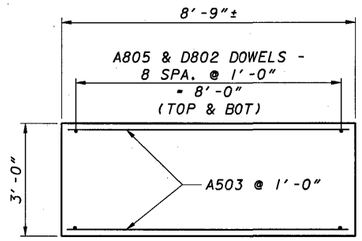


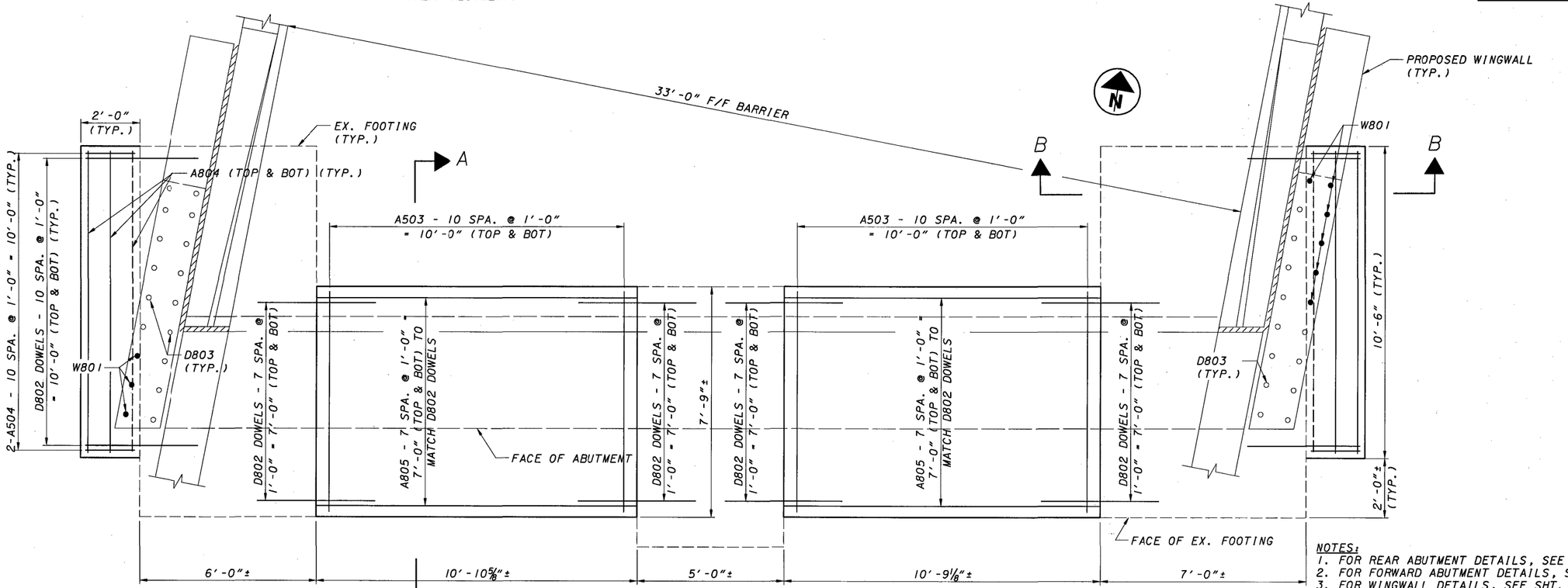
FOOTING PLAN
(REAR ABUTMENT)



SECTION B-B



SECTION A-A



FOOTING PLAN
(FORWARD ABUTMENT)

NOTES:
1. FOR REAR ABUTMENT DETAILS, SEE SHT. 6/18
2. FOR FORWARD ABUTMENT DETAILS, SEE SHT. 7/18
3. FOR WINGWALL DETAILS, SEE SHT. 9/18
4. FOR LIST OF ABBREVIATIONS, SEE SHT. 3/18
5. FOR REINFORCING STEEL LAP LENGTHS, SEE SHT. 2/18
6. DOWEL EMBEDMENT LENGTH IS 1'-6" UNLESS NOTED OTHERWISE

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FOOTING PLAN
BRIDGE NO. STA-30-1157
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STA-30-(6.70) (11.57)
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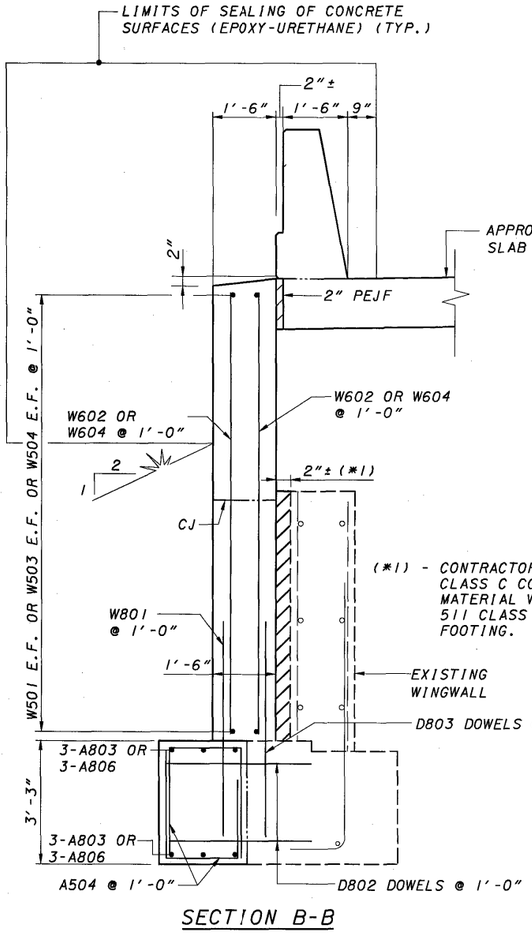
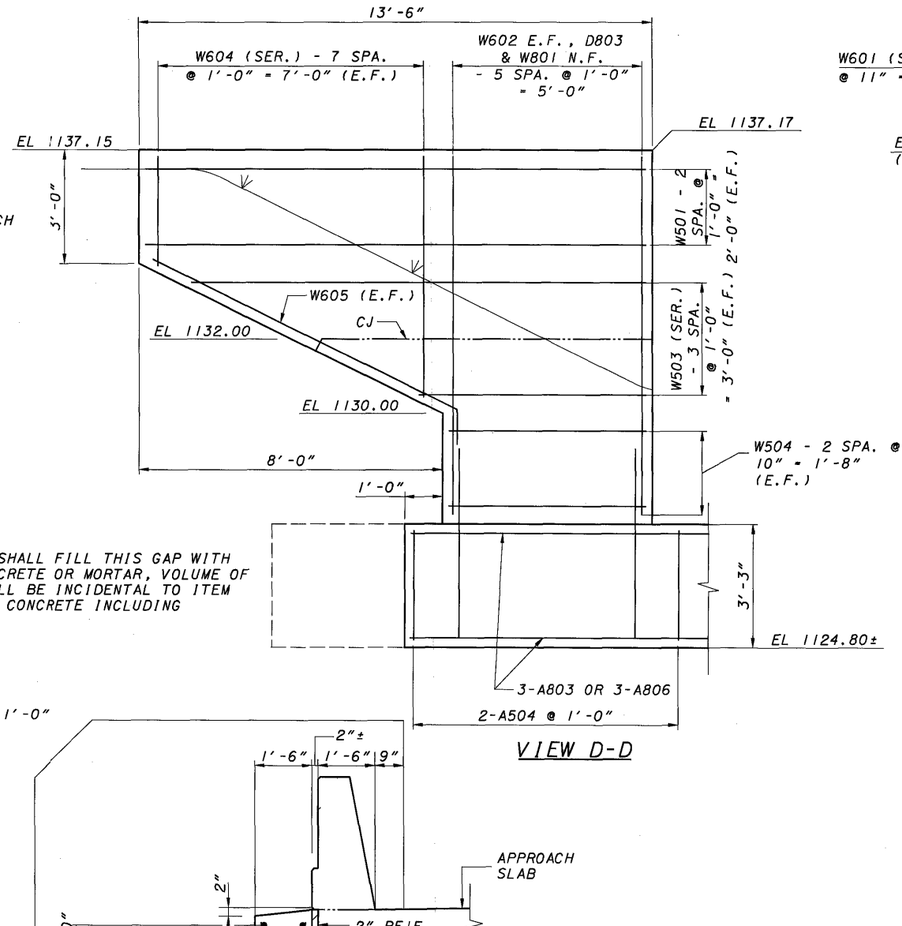
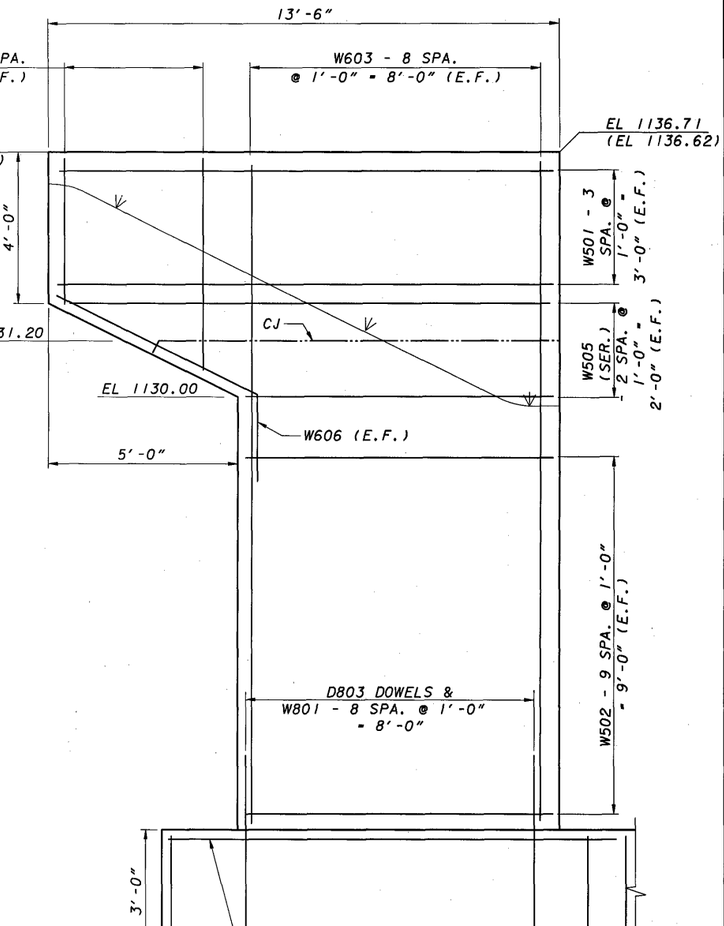


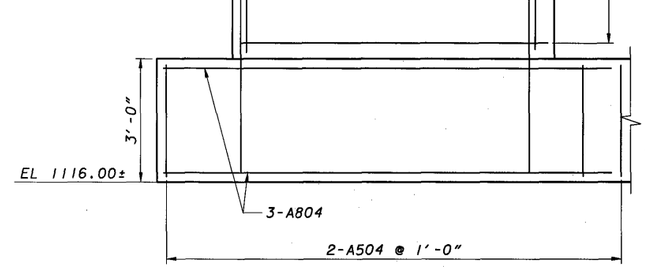
SECTION B-B

(*1) - CONTRACTOR SHALL FILL THIS GAP WITH CLASS C CONCRETE OR MORTAR, VOLUME OF MATERIAL WILL BE INCIDENTAL TO ITEM 511 CLASS C CONCRETE INCLUDING FOOTING.

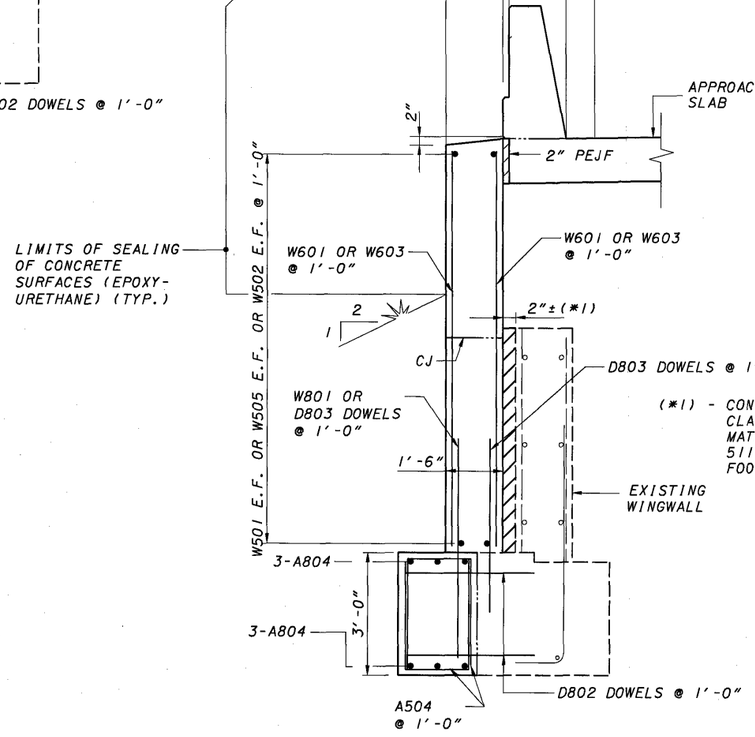


VIEW D-D





VIEW E-E



SECTION C-C

(*1) - CONTRACTOR SHALL FILL THIS GAP WITH CLASS C CONCRETE OR MORTAR, VOLUME OF MATERIAL WILL BE INCIDENTAL TO ITEM 511 CLASS C CONCRETE INCLUDING FOOTING.

NOTES:
1. FOR LOCATION OF SECTION B-B & VIEW D-D, SEE SHT. 6/18.
2. FOR LOCATION OF SECTION C-C & VIEW E-E, SEE SHT. 7/18.
3. FOR LIST OF ABBREVIATIONS, SEE SHT. 3/18.
4. FOR REINFORCING STEEL LAP LENGTHS, SEE SHT. 2/18.
5. EMBEDMENT LENGTH FOR DOWELS SHALL BE 1'-6", UNLESS NOTED OTHERWISE.
6. ALL EXPOSED SURFACES OF CONCRETE WINGWALLS SHALL BE SEALED WITH AN EPOXY-URETHANE SEALANT.
7. ELEVATIONS IN PARENTHESIS ARE FOR THE RIGHT WINGWALL.

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BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

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ABUTMENT DETAILS
BRIDGE NO. STA-30-1157
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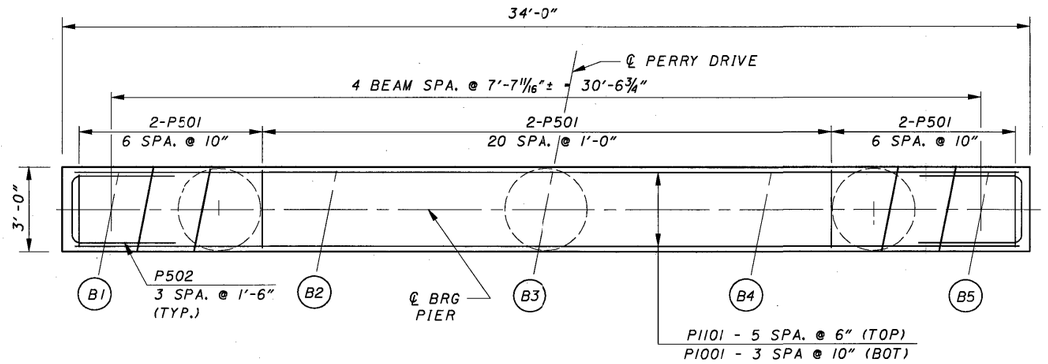
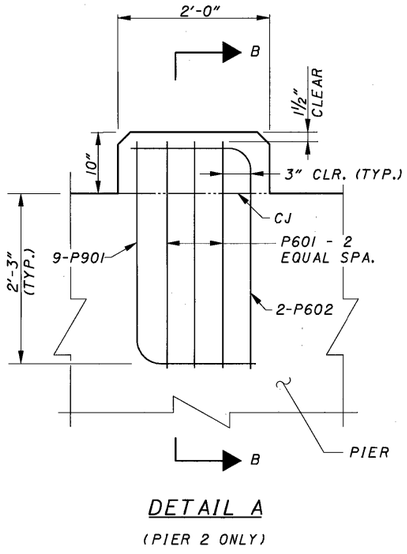
ELEVATIONS			
LOCATION	PIER 1	PIER 2	PIER 3
B1	1132.98	1132.74	1132.50
B2	1133.04	1132.88	1132.60
B3	1133.11	1132.98	1132.72
B4	1133.04	1132.91	1132.64
B5	1132.91	1132.80	1132.50
A	1127.45	1127.05	1127.01

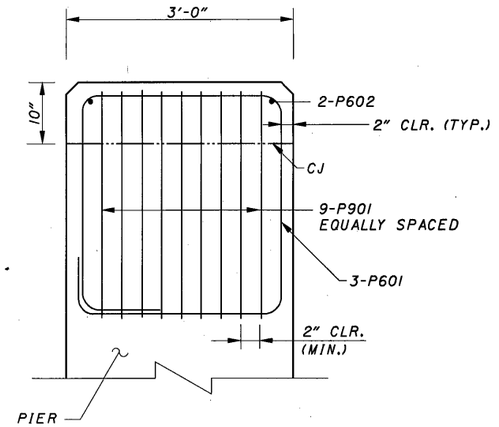


PLAN



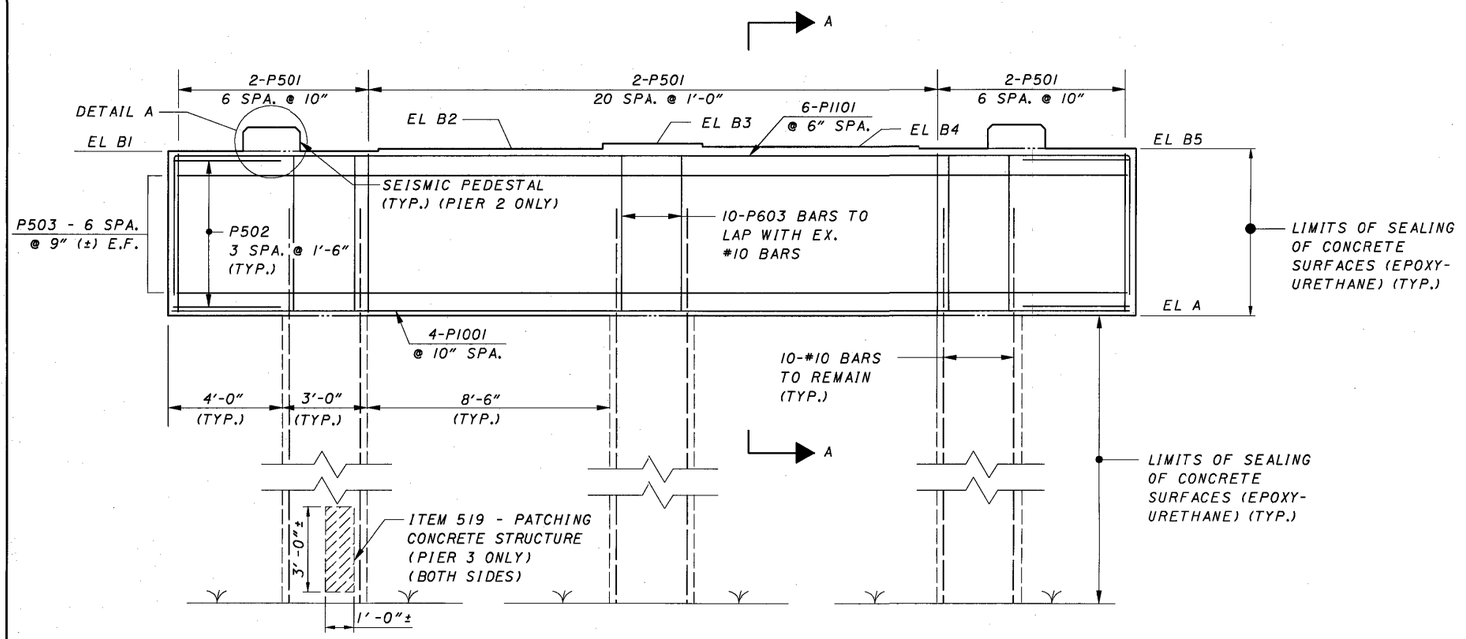
DETAIL A

(PIER 2 ONLY)

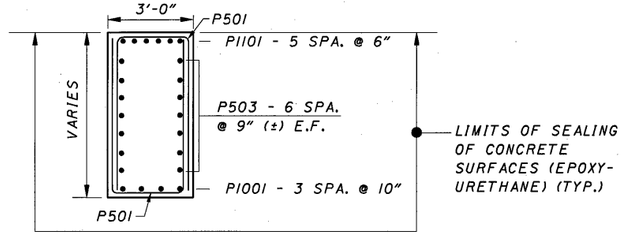


SECTION B-B

(PIER 2 ONLY)



ELEVATION



SECTION A-A

NOTE:

1. FOR LIST OF ABBREVIATIONS SEE SHT. 3/18.
2. FOR REINFORCING STEEL LAP LENGTHS, SEE SHT. 2/18.

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2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
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PIER DETAILS
BRIDGE NO. STA-30-1157
PERRY DRIVE OVER US 30

STA-30-(6.70) (11.57)
PID 23754

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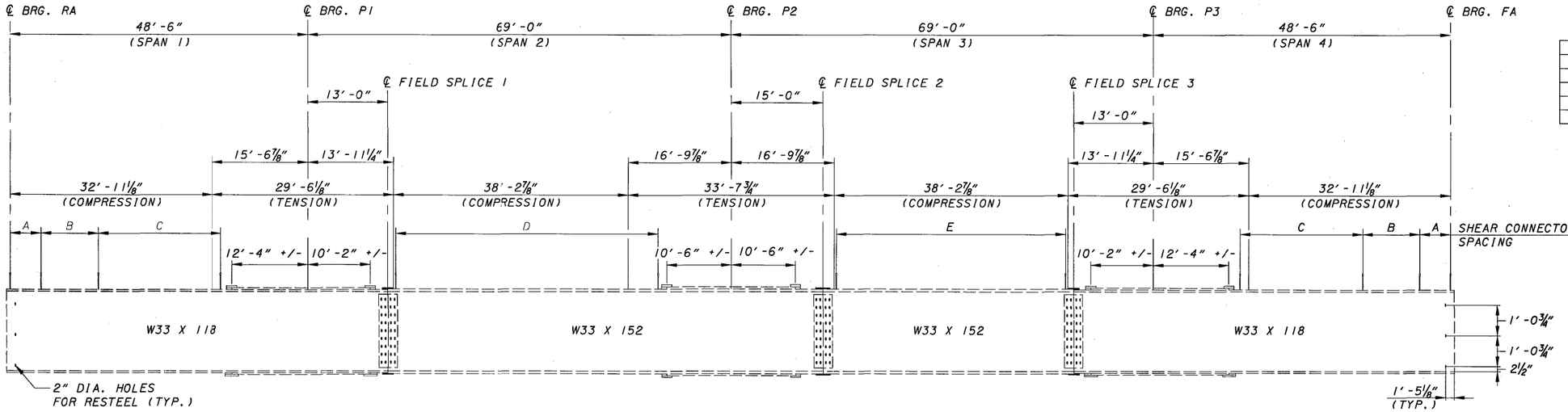
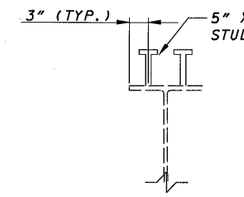
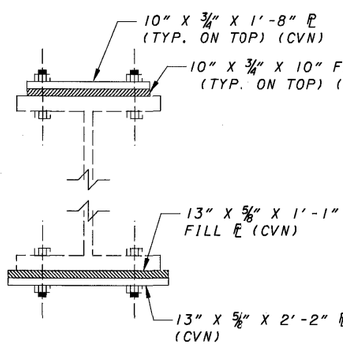


BEAM ELEVATION

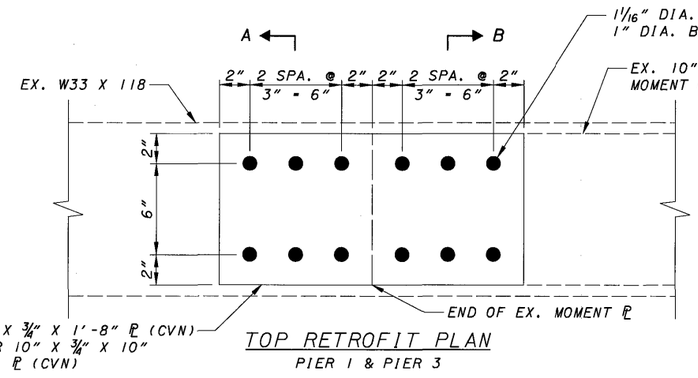
SHEAR CONNECTOR SPACING	
A	10 SPA. @ 6″ = 5′-0″
B	14 SPA. @ 8″ = 9′-4″
C	24 SPA. @ 10″ = 20′-0″
D	57 SPA. @ 9″ = 42′-9″
E	50 SPA. @ 9″ = 37′-6″



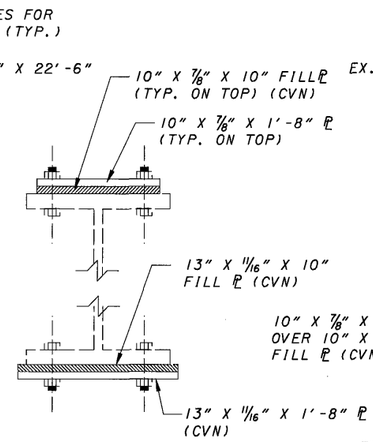
SHEAR CONNECTOR DETAIL



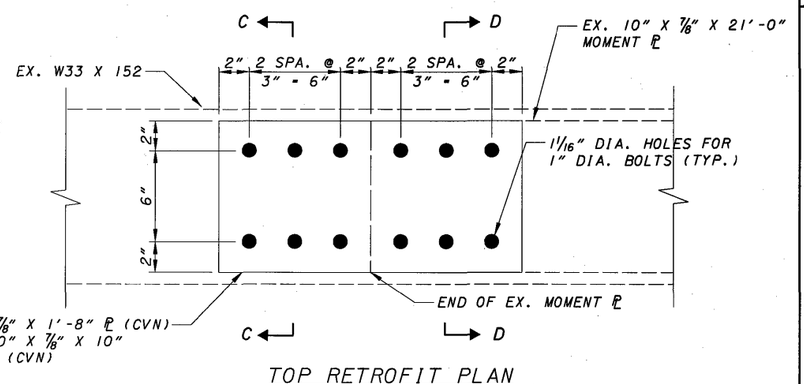
SECTION A-A



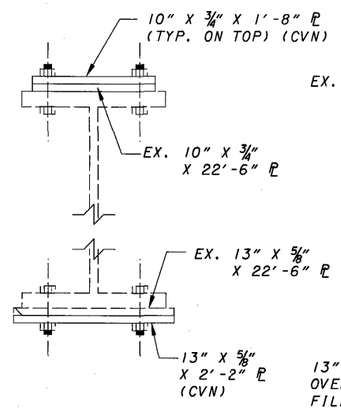
TOP RETROFIT PLAN
PIER 1 & PIER 3



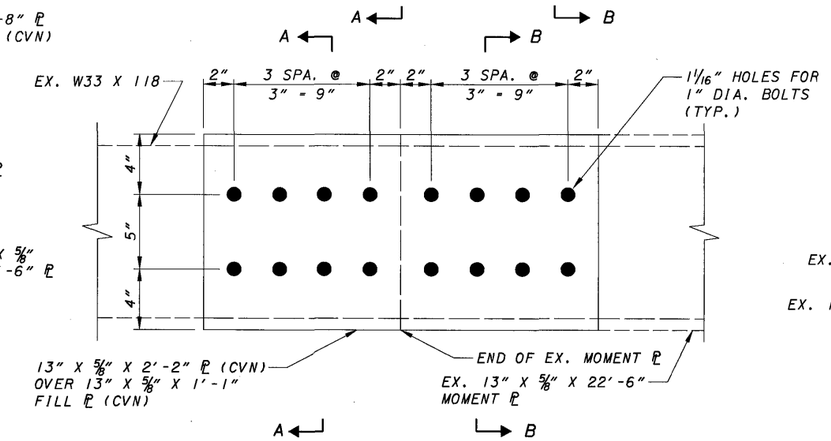
SECTION C-C



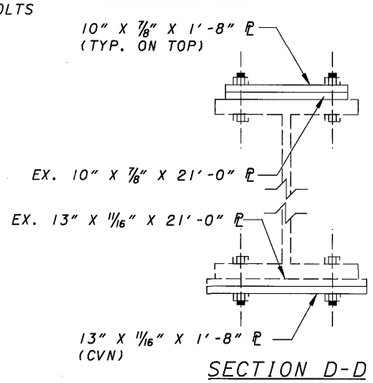
TOP RETROFIT PLAN
PIER 2



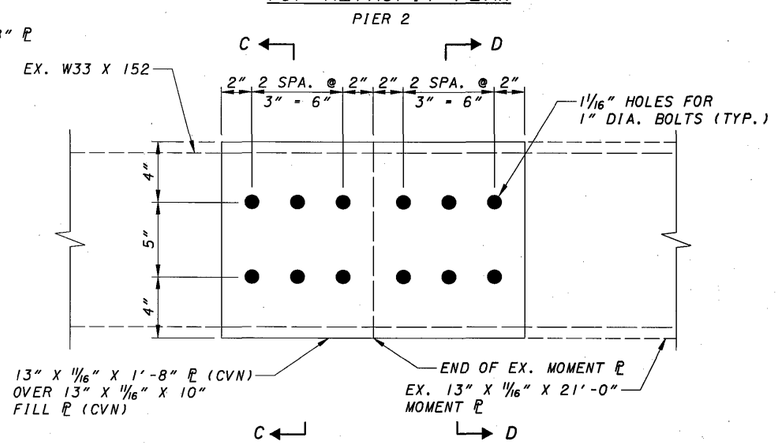
SECTION B-B



BOTTOM RETROFIT PLAN
PIER 1 & PIER 3



SECTION D-D



BOTTOM RETROFIT PLAN
PIER 2

NOTES:
1. FOR LIST OF ABBREVIATIONS, SEE SHT. 3/18.
2. WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.
3. BOLTS SHALL BE 1″ DIA., TYPE 1 GALVANIZED BOLTS, UNLESS NOTED OTHERWISE.
4. WELD ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE TO AREAS OF THE FASCIA STRINGER FLANGES DESIGNATED "COMPRESSION". DO NOT WELD ATTACHMENTS TO AREAS DESIGNATED "TENSION". FILLET WELDS TO COMPRESSION FLANGES SHALL BE AT LEAST 1″ FROM EDGE OF FLANGE, BE NO MORE THAN 2″ LONG, AND BE AT LEAST 1/4″ FOR THICKNESSES UP TO 3/4″ OR 5/16″ FOR GREATER THAN 3/4″ THICK.
5. DRILLING OF HOLES FOR RETROFIT COVER PLATES SHALL BE INCLUDED FOR PAYMENT WITH ITEM 513 - STRUCTURAL STEEL, MISC.: (RETROFIT FOR COVER PLATE ENDS). DRILLING OF HOLES FOR DIAPHRAGM REINFORCING STEEL SHALL BE INCLUDED FOR PAYMENT WITH ITEM 513 - STRUCTURAL STEEL, MISC.: (FIELD DRILLING BEAM HOLES).

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2800 CORPORATE EXCHANGE DR., STE. 240
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SUPERSTRUCTURE DETAILS
BRIDGE NO. STA-30-1157
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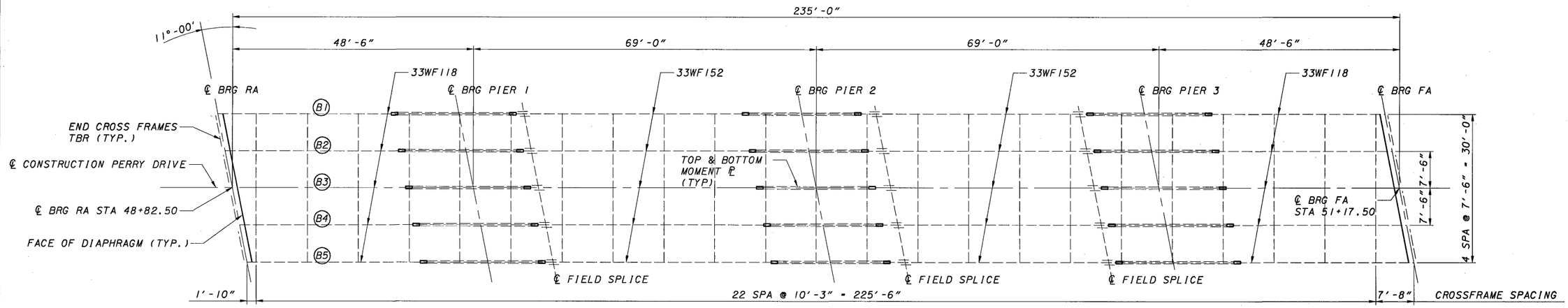
11/18



FRAMING PLAN

ESTIMATED DEAD LOAD DEFLECTIONS TABLE (IN FEET)						
SPAN NO.	LOCATION	DEAD LOAD DEFLECTION				
		B 1	B 2	B 3	B 4	B 5
SPAN NO.1	℄ BRG. RA	0.000	0.000	0.000	0.000	0.000
	0.25 L	0.016	0.016	0.016	0.016	0.016
	0.50 L	0.018	0.018	0.018	0.018	0.018
	0.75 L	0.006	0.006	0.006	0.006	0.006
SPAN NO.2	℄ BRG. P1	0.000	0.000	0.000	0.000	0.000
	0.25 L	0.023	0.023	0.023	0.023	0.023
	0.50 L	0.037	0.037	0.037	0.037	0.037
	0.75 L	0.019	0.019	0.019	0.019	0.019
	℄ BRG. P2	0.000	0.000	0.000	0.000	0.000

ESTIMATED DEAD LOAD DEFLECTIONS TABLE (IN FEET)						
SPAN NO.	LOCATION	DEAD LOAD DEFLECTION				
		B 1	B 2	B 3	B 4	B 5
SPAN NO.3	℄ BRG. P2	0.000	0.000	0.000	0.000	0.000
	0.25 L	0.019	0.019	0.019	0.019	0.019
	0.50 L	0.037	0.037	0.037	0.037	0.037
	0.75 L	0.023	0.023	0.023	0.023	0.023
SPAN NO.4	℄ BRG. P3	0.000	0.000	0.000	0.000	0.000
	0.25 L	0.007	0.007	0.007	0.007	0.007
	0.50 L	0.018	0.018	0.018	0.018	0.018
	0.75 L	0.016	0.016	0.016	0.016	0.016
	℄ BRG. FA	0.000	0.000	0.000	0.000	0.000

NOTES:

1. WELDED ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE MAY BE MADE TO AREAS OF THE FLANGES DESIGNATED "COMPRESSION", AS INDICATED ON SHT. 11/18. ATTACHMENTS SHALL NOT BE MADE TO AREAS DESIGNATED "TENSION".
2. EXISTING BEARINGS AT BOTH ABUTMENTS SHALL BE REMOVED AND REPLACED WITH ELASTOMERIC BEARINGS.
3. EXISTING END CROSSFRAMES SHALL BE REMOVED.
4. ALL EXISTING DIMENSIONS ARE ±.
5. RETROFIT FOR COVERPLATE ENDS:
   THE UNIT BID PRICE SHALL INCLUDE ALL MATERIALS LABOR, AND INCIDENTIALS NECESSARY TO FURNISH AND INSTALL THE RETROFIT SPLICE PLATES. PAYMENT SHALL BE MADE AT THE CONTRACT PRICE FOR ITEM 513, STRUCTURAL STEEL, MISC. (RETROFIT FOR COVERPLATE ENDS).
6. FOR LIST OF ABBREVIATIONS, SEE SHT. 3/18.

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SUPERSTRUCTURE DETAILS
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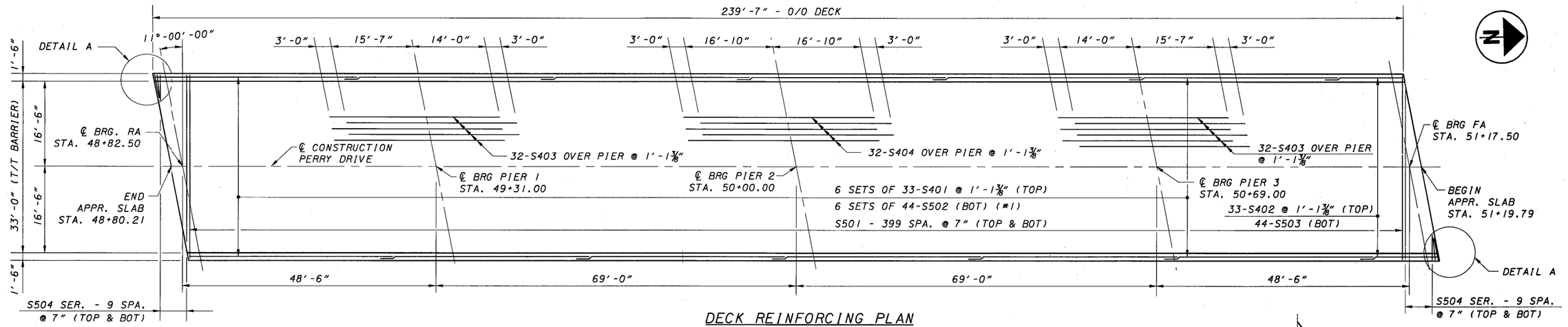
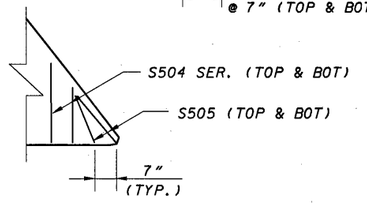
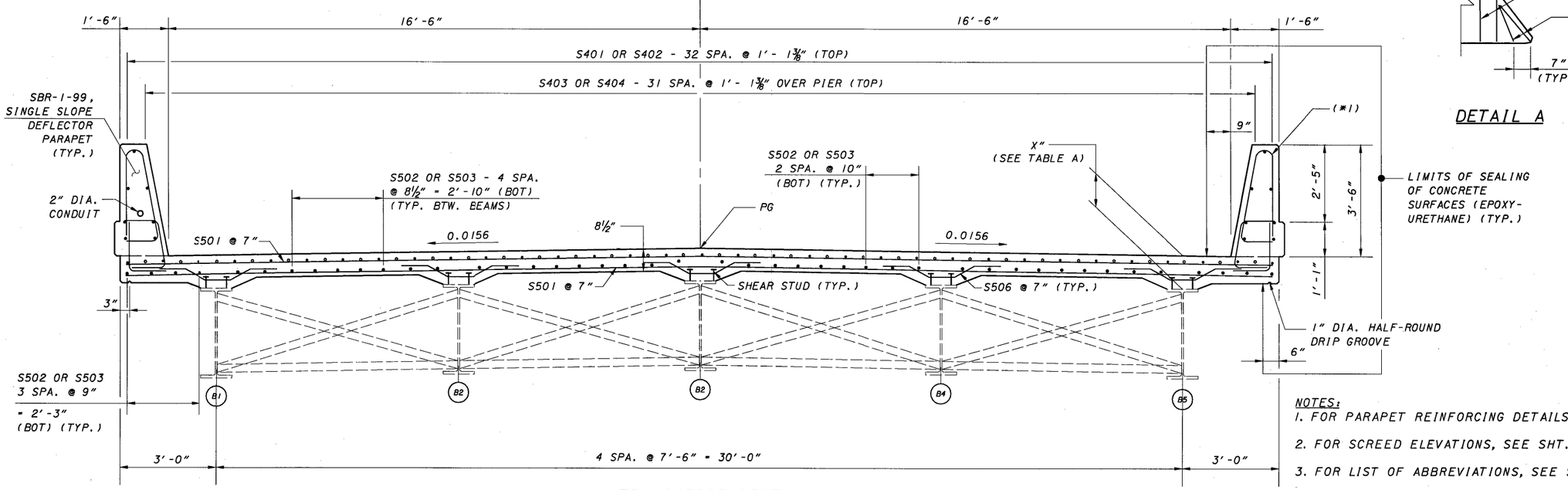
113
127



DECK REINFORCING PLAN



DETAIL A



TRANSVERSE SECTION

TABLE A					
*DEPTH OF SLAB OVER BEAM, X					
LOCATION	REAR ABUT.	PIER NO. 1	PIER NO. 2	PIER NO. 3	FRWD. ABUT.
BEAM 1	10½"	1'-2"	1'-5⅜"	1'-7"	10½"
BEAM 2	10½"	1'-2¾"	1'-5"	1'-7"	10½"
BEAM 3	10½"	1'-3¼"	1'-5⅜"	1'-6⅞"	10½"
BEAM 4	10½"	1'-2¾"	1'-4¾"	1'-6¼"	10½"
BEAM 5	10½"	1'-3"	1'-4¾"	1'-6½"	10½"

*NOTE:

THE DIMENSIONS GIVEN ARE FOR REFERENCE ONLY. DEVIATION FROM THESE DIMENSIONS MAY OCCUR BECAUSE THE EXISTING BEAMS MAY NOT HAVE THE CAMBER ANTICIPATED FROM THE ORIGINAL DESIGN. THE TOP OF THE BEAMS SHALL BE MEASURED IN THE FIELD AND ACTUAL SLAB DEPTHS SHALL BE CALCULATED BY THE CONTRACTOR.

NOTES:

1. FOR PARAPET REINFORCING DETAILS, SEE SHT. 16/18.
2. FOR SCREED ELEVATIONS, SEE SHT. 14/18.
3. FOR LIST OF ABBREVIATIONS, SEE SHT. 3/18.
4. FOR REINFORCING STEEL LAP LENGTHS, SEE SHT. 2/18.
5. THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH BEAM/GIRDER HAUNCH. THE ESTIMATE ASSUMES A HAUNCH AND DECK SLAB THICKNESS AS INDICATED IN TABLE A AND A CONSTANT HAUNCH WIDTH OUTSIDE THE EDGE OF EACH BEAM/GIRDER FLANGE OF 1'-0".

DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE. THE ALLOWABLE TOLERANCE FOR THE HAUNCH WIDTH OUTSIDE THE EDGE OF EACH BEAM/GIRDER FLANGE IS +/- 3 INCHES.

THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF THE BEAM/GIRDER, FROM THE SURFACE OF THE DECK TO THE BOTTOM OF THE TOP FLANGE MINUS THE DECK SLAB THICKNESS. THE AREA OF ALL EMBEDDED STEEL PLATES HAS BEEN DEDUCTED FROM THE HAUNCH QUANTITY IN ACCORDANCE WITH 511.24.

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

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KCS	KCS	MLM	12/2005
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JEP		7607539	

SUPERSTRUCTURE DETAILS
BRIDGE NO. STA-30-1157
PERRY DRIVE OVER US 30

STA-30-(6.70) (11.57)
PID 23754

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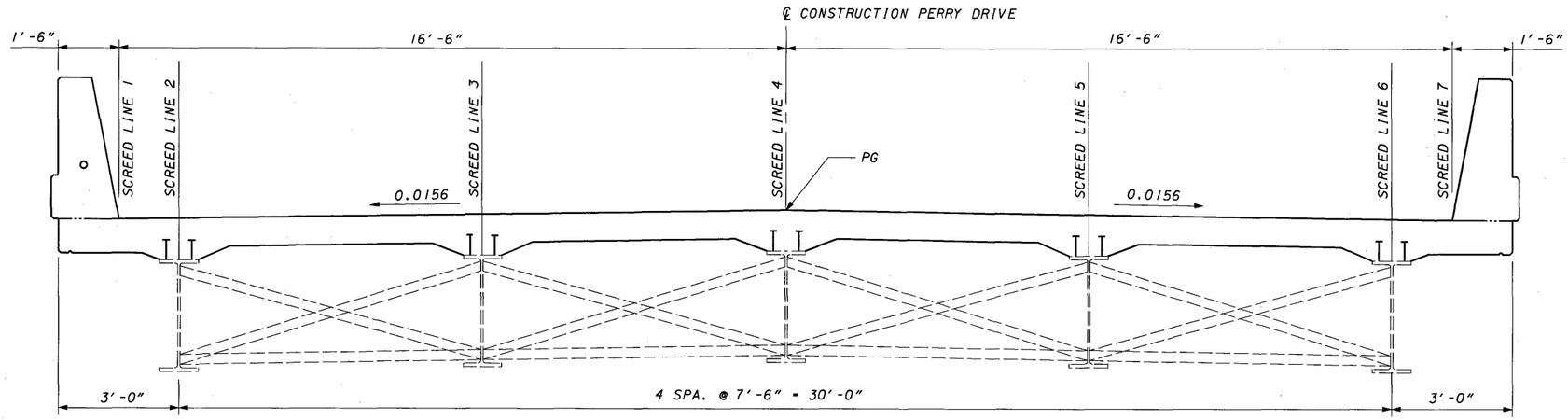
SCREED ELEVATIONS TABLE

		SCREED LINE 1		SCREED LINE 2		SCREED LINE 3		SCREED LINE 4		SCREED LINE 5		SCREED LINE 6		SCREED LINE 7	
	LOCATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
SPAN 1	℄ BRG. RA	48+79.29	1137.18	48+79.58	1137.20	48+81.04	1137.32	48+82.50	1137.44	48+83.96	1137.33	48+85.42	1137.21	48+85.71	1137.19
	0.25L	48+91.42	1137.21	48+91.71	1137.24	48+93.17	1137.35	48+94.63	1137.47	48+96.08	1137.36	48+97.54	1137.24	48+97.83	1137.22
	0.50L	49+03.54	1137.23	49+03.83	1137.25	49+05.29	1137.37	49+06.75	1137.49	49+08.21	1137.38	49+09.67	1137.26	49+09.96	1137.24
	0.75L	49+15.67	1137.24	49+15.96	1137.26	49+17.42	1137.38	49+18.88	1137.50	49+20.33	1137.38	49+21.79	1137.27	49+22.08	1137.24
SPAN 2	℄ BRG. PIER 1	49+27.79	1137.25	49+28.08	1137.27	49+29.54	1137.39	49+31.00	1137.51	49+32.46	1137.39	49+33.92	1137.28	49+34.21	1137.26
	0.25L	49+45.04	1137.29	49+45.33	1137.32	49+46.79	1137.44	49+48.25	1137.56	49+49.71	1137.44	49+51.17	1137.33	49+51.46	1137.30
	0.50L	49+62.29	1137.33	49+62.58	1137.36	49+64.04	1137.47	49+65.50	1137.59	49+66.96	1137.48	49+68.42	1137.36	49+68.71	1137.34
	0.75L	49+79.54	1137.34	49+79.83	1137.36	49+81.29	1137.48	49+82.75	1137.60	49+84.21	1137.48	49+85.67	1137.37	49+85.96	1137.35
SPAN 3	℄ BRG. PIER 2	49+96.79	1137.34	49+97.08	1137.37	49+98.54	1137.49	50+00.00	1137.60	50+01.46	1137.48	50+02.92	1137.37	50+03.21	1137.35
	0.25L	50+14.04	1137.37	50+14.33	1137.39	50+15.79	1137.51	50+17.25	1137.63	50+18.71	1137.51	50+20.17	1137.39	50+20.46	1137.36
	0.50L	50+31.29	1137.36	50+31.58	1137.39	50+33.04	1137.50	50+34.50	1137.61	50+35.96	1137.49	50+37.42	1137.37	50+37.71	1137.35
	0.75L	50+48.54	1137.29	50+48.83	1137.31	50+50.29	1137.42	50+51.75	1137.53	50+53.21	1137.41	50+54.67	1137.29	50+54.96	1137.26
SPAN 4	℄ BRG. PIER 3	50+65.79	1137.17	50+66.08	1137.20	50+67.54	1137.30	50+69.00	1137.41	50+70.46	1137.28	50+71.92	1137.16	50+72.21	1137.13
	0.25L	50+77.92	1137.09	50+78.21	1137.11	50+79.67	1137.22	50+81.13	1137.32	50+82.58	1137.20	50+84.04	1137.07	50+84.33	1137.04
	0.50L	50+90.04	1137.00	50+90.33	1137.02	50+91.79	1137.12	50+93.25	1137.23	50+94.71	1137.10	50+96.17	1136.96	50+96.46	1136.94
	0.75L	51+02.17	1136.88	51+02.46	1136.90	51+03.92	1137.00	51+05.38	1137.10	51+06.83	1136.96	51+08.29	1136.83	51+08.58	1136.80
	℄ BRG. FA	51+14.29	1136.72	51+14.58	1136.74	51+16.04	1136.84	51+17.50	1136.94	51+18.96	1136.80	51+20.42	1136.66	51+20.71	1136.64

L = SPAN LENGTH



TRANSVERSE SECTION

NOTES:

1. SCREED ELEVATIONS

   SCREED ELEVATIONS ARE FOR THE DECK SLAB SURFACE PRIOR TO CONCRETE PLACEMENT. ALLOWANCE HAS BEEN MADE DUE TO REMAINING DEAD LOAD DEFLECTIONS.

2. FOR LIST OF ABBREVIATIONS, SEE SHT. 3/18.

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BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

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SCREED ELEVATIONS
BRIDGE NO. STA-30-1157
PERRY DRIVE OVER US 30

STA-30-(6.70) (11.57)
PID 23754

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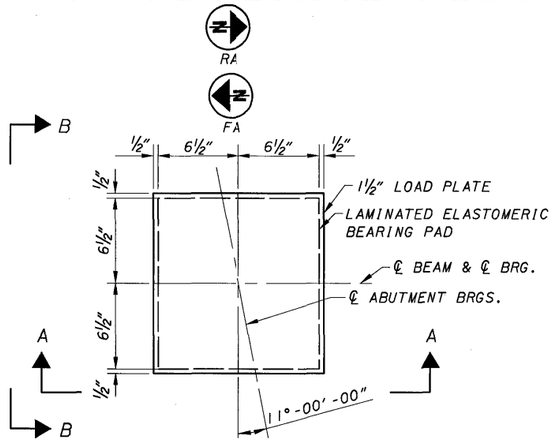
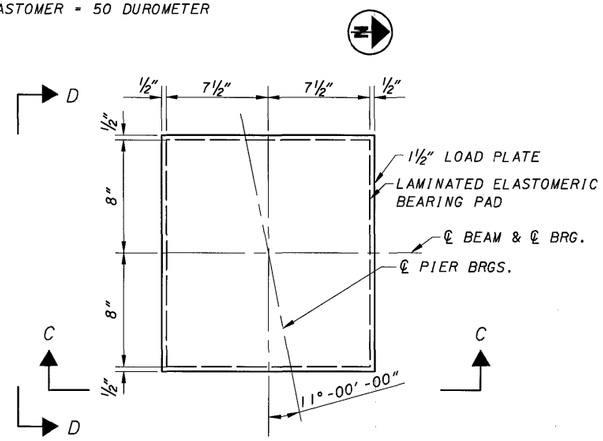
LAMINATED ELASTOMERIC BEARINGS

LOCATION	TYPE	BEARING DIMENSIONS						STEEL LOAD PLATE	REACTIONS		MAXIMUM
		L	W	ti	te	T	N	LENGTH X WIDTH X THICKNESS	DL	LL	DESIGN LOAD
ABUTMENTS	EXPANSION	1'-1"	1'-1"	0.500"	0.375"	3⅛"	5	1'-2" X 1'-2" X 1½"	49 k	55 k	104 k
PIER 1 & 3	EXPANSION	1'-3"	1'-4"	0.500"	0.375"	3⅛"	5	1'-4" x 1'-5" x 1½"	109 k	66 k	175 k
PIER 2	EXPANSION	1'-4"	1'-4"	0.500"	0.375"	3⅛"	5	1'-5" x 1'-5" x 1½"	121 k	66 k	187 k

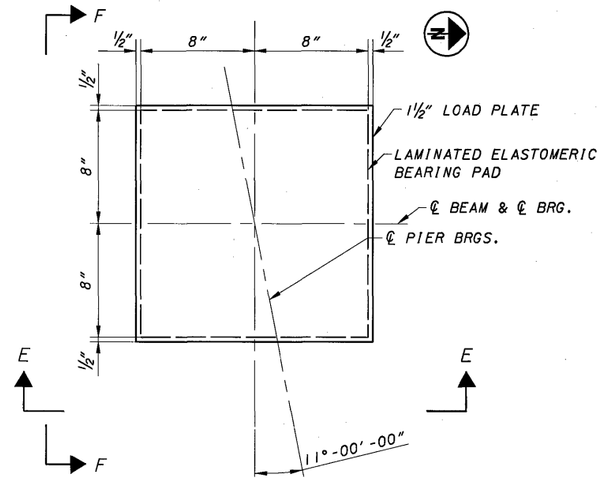
ti = THICKNESS OF INTERNAL LAYER
te = THICKNESS OF EXTERNAL LAYER
T = TOTAL THICKNESS OF ELASTOMERIC BEARING
N = NO. OF STEEL LAMINATES
INTERNAL STEEL LAMINATE THICKNESS = 0.0747"
DUROMETER OF ELASTOMER = 50 DUROMETER



PLAN
(LAMINATED ELASTOMERIC ABUTMENT EXPANSION BEARINGS)



PLAN
(LAMINATED ELASTOMERIC PIER EXPANSION BEARINGS)
(PIER 1 AND PIER 3)



PLAN
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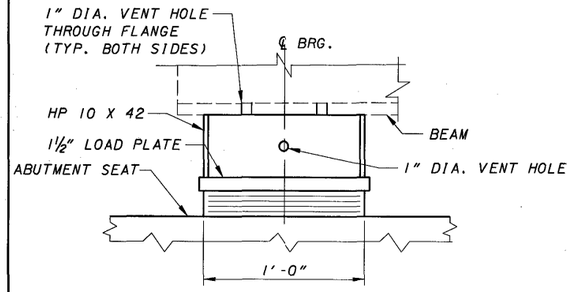
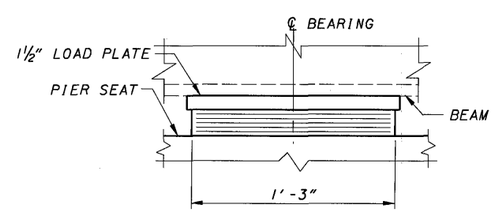
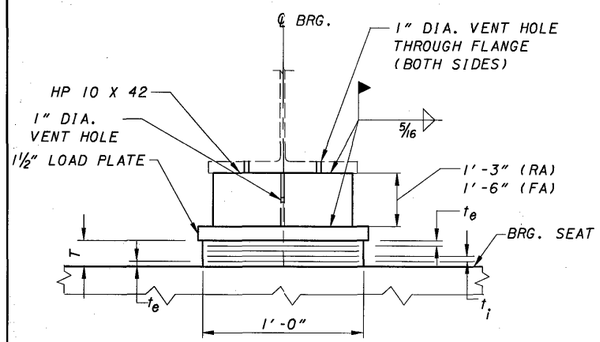
(PIER 2)



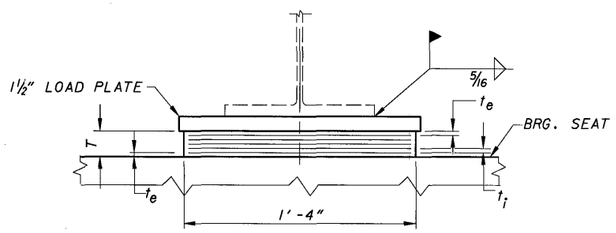
VIEW A-A



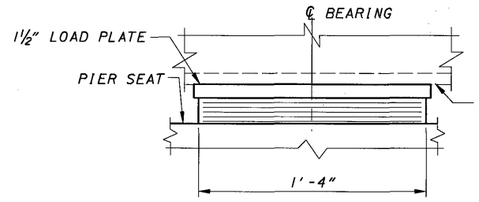
VIEW C-C



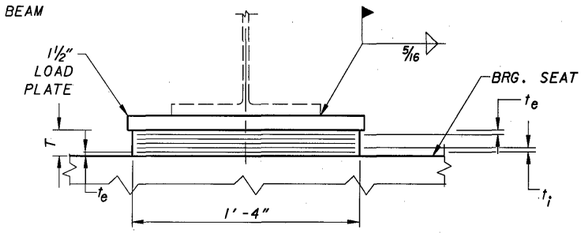
VIEW B-B



VIEW D-D



VIEW E-E



VIEW F-F

NOTES:
1. THE CONTRACTOR SHALL FIELD VERIFY THE HP10 X 42 PEDESTAL HEIGHT.
2. FOR LIST OF ABBREVIATIONS, SEE SHT. 3/18.
3. THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED UNDER DIVISION I, SECTION 14.6.6 (METHOD A) OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.
4. CONTROL WELDING SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE DOES NOT EXCEED 300 DEGREES F AS DETERMINED BY USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.
5. IF THE STEEL IS PLACED ON ELASTOMER AT AN AMBIENT TEMPERATURE HIGHER THAN 80 DEGREES F OR LOWER THAN 40 DEGREES F AND THE BEARING SHEAR DEFLECTION EXCEEDS 1/6 OF THE BEARING HEIGHT AT 60 DEGREES F (+/-) 10 DEGREES F, RAISE THE BEAMS OR GIRDERS TO ALLOW THE BEARINGS TO RETURN TO THEIR UNDEFORMED SHAPE AT 60 DEGREES F (+/-) 10 DEGREES F.
6. HP SECTIONS, LOAD PLATES AND OTHER MISCELLANEOUS STEEL FOR ELASTOMERIC BEARINGS SHALL BE A MINIMUM OF A36 STEEL AND SHALL BE INCLUDED FOR PAYMENT WITH ITEM 616 - ELASTOMERIC BEARING WITH INTERNAL LAMINATES (NEOPRENE) AND LOAD PLATE.
7. DRILLING OF HOLES FOR VENT HOLES THROUGH FLANGES SHALL BE INCLUDED FOR PAYMENT WITH ITEM 513 - STRUCTURAL STEEL, MISC.: (FIELD DRILLING BEAM HOLES).

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

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BEARING DETAILS
BRIDGE NO. STA-30-1157
PERRY DRIVE OVER US 30

STA-30-(6.70) (11.57)
PID 23754

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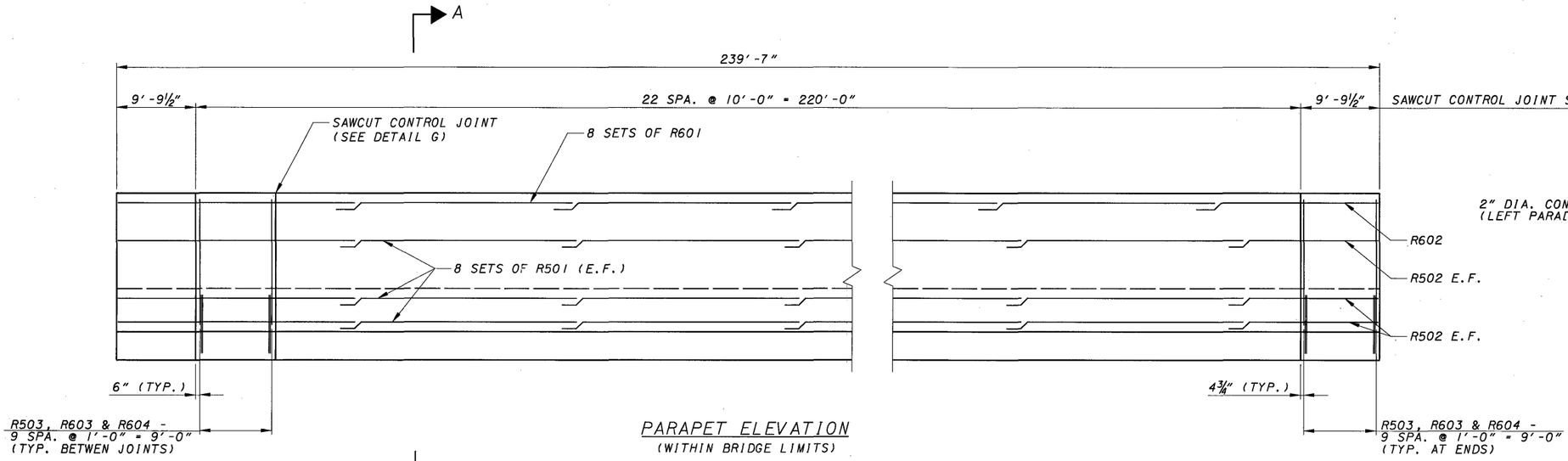
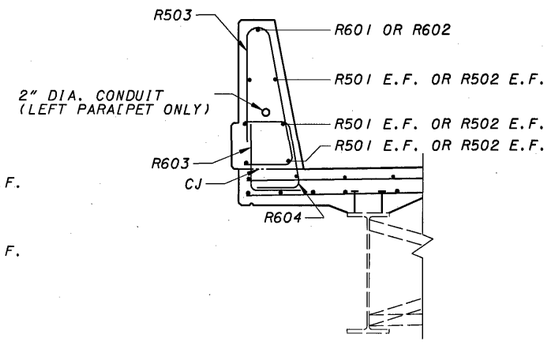
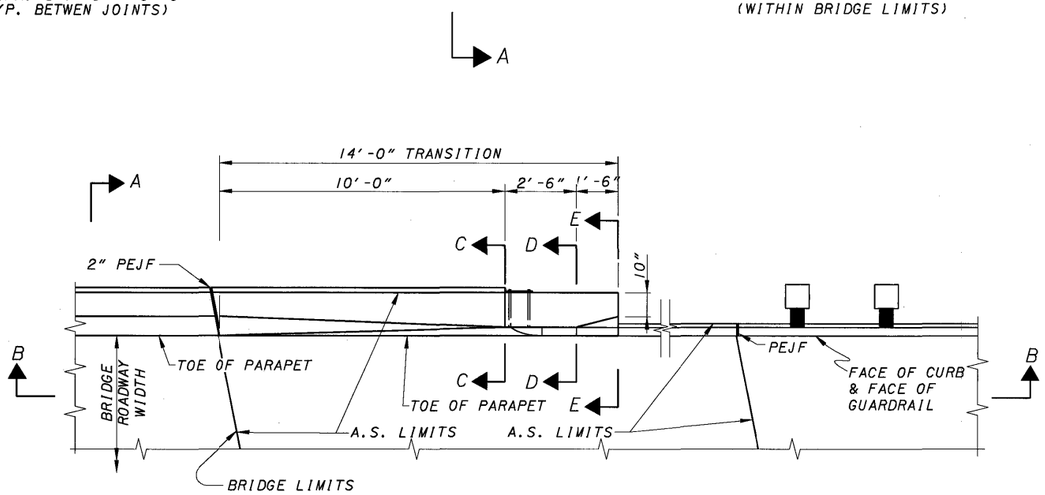


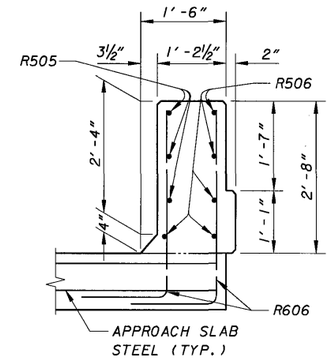
PARAPET ELEVATION
(WITHIN BRIDGE LIMITS)



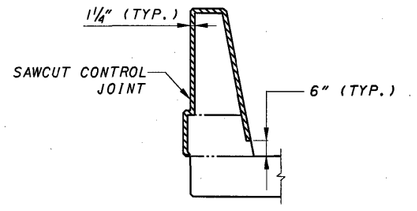
SECTION A-A



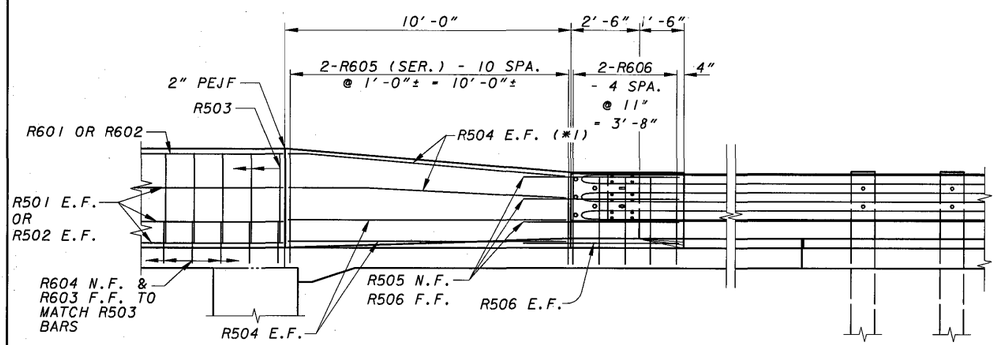
PART-PLAN AT ABUTMENT



SECTION C-C

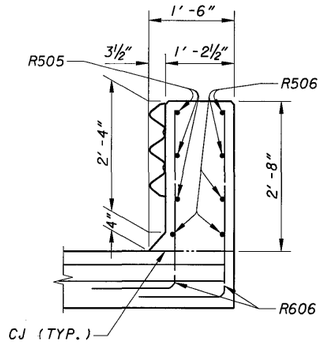


DETAIL G

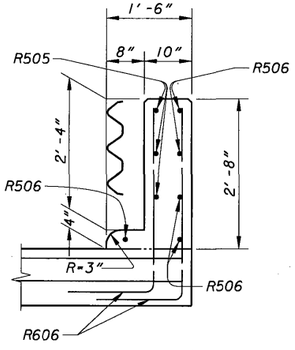


SECTION B-B

(*1) - FIELD BEND AS NECESSARY



SECTION D-D



SECTION E-E

NOTES:

1. FOR LIST OF ABBREVIATIONS, SEE SHT. 3/18.
2. FOR TRANSVERSE SECTION, SEE SHT. 13/18.
3. FOR ADDITIONAL PARAPET TRANSITION DETAILS, SEE STD. DWG. SBR-1-99.
4. FOR REINFORCING STEEL LAP LENGTHS, SEE SHT. 2/18.
5. PARAPET TRANSITIONS SHALL OCCUR ON THE APPROACH SLABS AND SHALL BE INCLUDED FOR PAYMENT WITH ITEM 511 - CLASS HP CONCRETE, BRIDGE DECK (PARAPET), AS PER PLAN. REINFORCING STEEL IN THE TRANSITIONS SHALL BE INCLUDED FOR PAYMENT WITH ITEM 509 - EPOXY COATED REINFORCING STEEL.
6. FOR APPROACH SLAB DETAILS, SEE STD. DWG. AS-1-81. APPROACH SLABS AND REINFORCING STEEL ASSOCIATED WITH APPROACH SLABS SHALL BE INCLUDED FOR PAYMENT WITH ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=15"), AS PER PLAN.

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2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

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PARAPET DETAILS
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16/18

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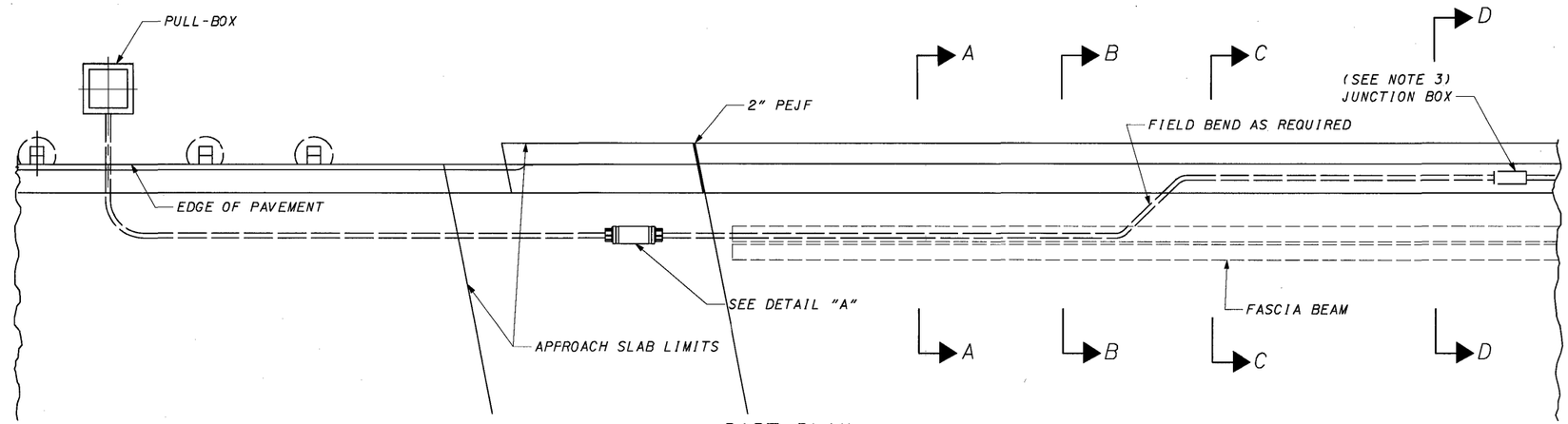
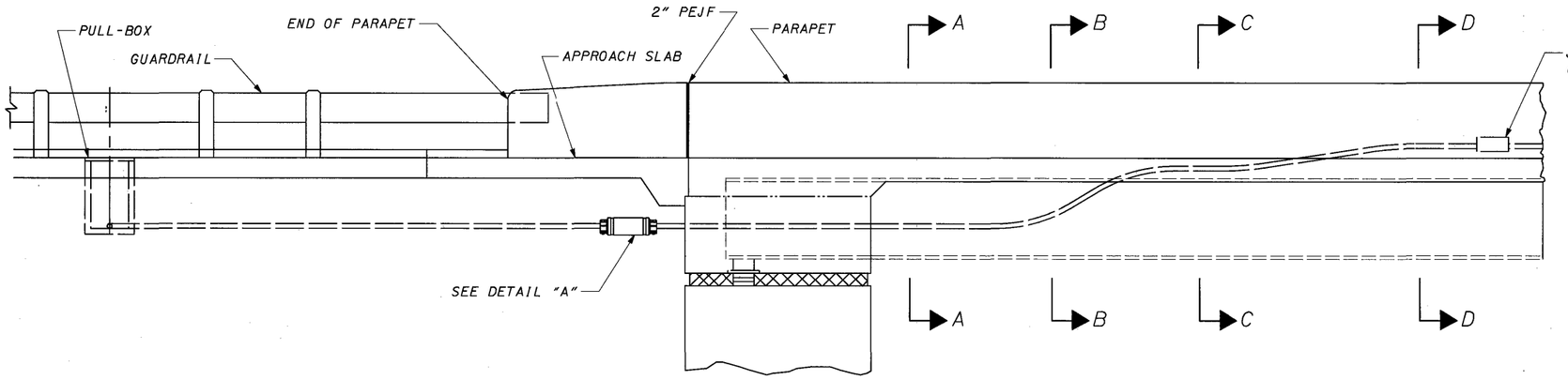
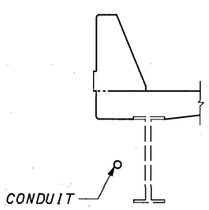


PART PLAN
(LEFT PARAPET CONDUIT DETAIL AT ABUTMENTS)

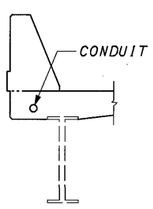


ELEVATION
(LEFT PARAPET CONDUIT DETAIL AT ABUTMENTS)

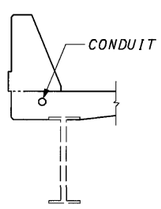
LOCATION	625 CONDUIT, 2", 725.04	625 JUNCTION BOX (6"x6"x4")	625 PULL BOX, 725.08, 24"
	FT	EACH	EACH
STA-30-1157	350	2	2
TOTALS CARRIED TO GENERAL SUMMARY	350	2	2



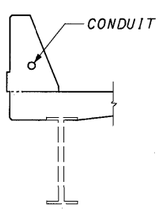
SECTION A-A



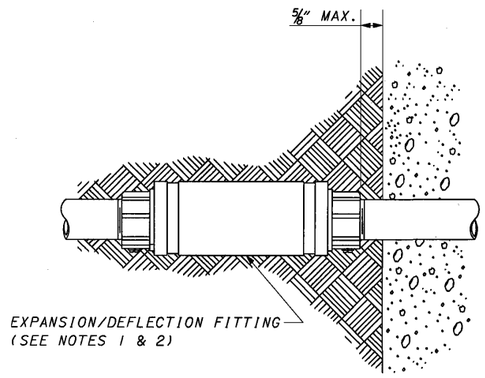
SECTION B-B



SECTION C-C



SECTION D-D



DETAIL "A"

NOTES:

1. THE EXPANSION/DEFLECTION FITTING (NEMA 4 RATING) SHALL CONSIST OF IRON OR BRONZE END COUPLINGS IN A HEAVY DUTY NEOPRENE SLEEVE HELD IN PLACE BY STAINLESS STEEL BONDS. A COPPER BRAID BONDING JUMPER SHALL BE INSTALLED INSIDE THE SLEEVE BETWEEN THE END COUPLINGS FOR GROUNDING CONTINUITY.
2. AT THE END OF THE ABUTMENT, PLACE CONDUIT IN CONCRETE WITH THREADS ONLY EXPOSED, COMPACT BACKFILL UP TO LEVEL OF CONDUIT, THEN ATTACH EXPANSION/DEFLECTION FITTING ALONG WITH REMAINING CONDUIT AND COMPLETE COMPACTION OF BACKFILL.
3. IF NO OTHER PULLING CAPABILITY IS LOCATED NEAR THE END OF THE BRIDGE, AN INTERNAL-FLANGE JUNCTION BOX MEETING 725.10 AND A MINIMUM LENGTH OF 5 CONDUIT DIAMETERS, SHALL BE INSTALLED.
4. FOR LIST OF ABBREVIATIONS, SEE SHT. 3/18.
5. FOR GROUNDING OF BRIDGE STRUCTURE, SEE STD. DWG. HL-50.21

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

DESIGNED	DRAWN	REVIEWED	DATE
SRR	SRR	JEP	12/2005
CHECKED	REVISED	STRUCTURE FILE NUMBER	
KCS		7607539	

PARAPET DETAILS
BRIDGE NO. STA-30-1157
PERRY DRIVE OVER US 30

STA-30-(6.70) (11.57)
PID 23754

17/18

118/127

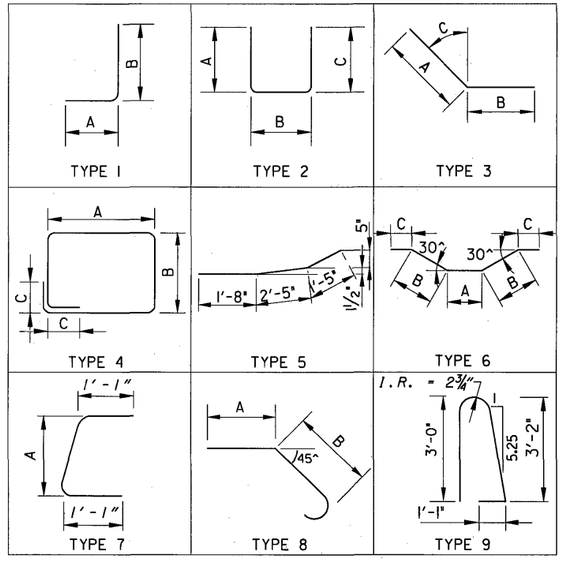
REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	INCR.
ABUTMENTS									
W501	28	13'-2"	385	STR					
W502	40	8'-0"	334	STR					
	4	7'-6"							
W503	S.O.	TO	171	STR					1'-10"
	4	13'-0"							
W504	12	5'-0"	63	STR					
	4	8'-0"							
W505	S.O.	TO	131	STR					2'-6"
	3	13'-0"							
	4	3'-8"							
W601	S.O.	TO	168	STR					3"
	6	5'-7"							
W602	24	8'-6"	306	STR					
W603	36	16'-6"	892	STR					
	4	2'-10"							
W604	S.O.	TO"	219	STR					5 7/8"
	8	6'-3"							
W605	4	9'-8"	58	3	8'-9"	1'-0"	25°59'		
W606	4	6'-3"	38	3	5'-5"	1'-0"	21°48'		
W801	21	5'-0"	280	STR					
A501	136	9'-2"	1297	2	3'-0"	3'-5"	3'-0"		
A502	68	6'-8"	471	2	2'-0"	2'-11"	2'-0"		
A503	44	7'-3"	333	STR					
A504	82	6'-9"	576	2	2'-9"	1'-6"	2'-9"		
A801	28	36'-5"	2716	STR					
A802	6	8'-4"	134	STR					
A803	6	8'-6"	136	STR					
A804	12	10'-0"	320	STR					
A805	32	10'-5"	890	STR					
A806	6	8'-5"	134	STR					
D801	68	5'-2"	938	8	1'-5"	2'-8"			
D802	146	3'-3"	1267	STR					
D803	39	4'-6"	469	STR					
ABUTMENT TOTAL =			12,726	LBS.					
PIERS									
P501	198	12'-3"	2525	2	4'-11"	2'-8"	4'-11"		
P502	24	9'-5"	236	2	3'-6"	2'-8"	3'-6"		
P503	42	33'-6"	1468	STR					
P601	6	11'-10"	107	4	2'-8"	3'-0"	0'-8"		
P602	4	4'-6"	28	1	3'-0"	1'-8"			
P603	90	5'-0"	676	STR					
P901	18	4'-5"	271	1	3'-0"	1'-8"			
P1001	12	33'-6"	1730	STR					
P1101	18	42'-8"	4076	2	4'-11"	33'-6"	4'-11"		
PIER TOTAL =			11,117	LBS.					

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	INCR.
SUPERSTRUCTURE									
S401	198	40'-0"	5291	STR					
S402	33	12'-2"	266	STR					
S403	64	32'-8"	1393	STR					
S404	32	36'-8"	784	STR					
S501	800	35'-8"	29760	STR					
S502	264	40'-0"	11014	STR					
S503	44	15'-5"	704	STR					
	4	5'-8"							
S504	S.O.	TO	800	STR					3'-0"
	10	32'-8"							
S505	8	5'-6"	46	STR					
S506	2055	4'-9"	10181	6	0'-10"	1'-3"	0'-9"		
R501	96	30'-0"	3004	STR					
R502	12	19'-10"	248	STR					
R503	480	7'-5"	3713	9	7'-5"				
R504	32	10'-0"	334	STR					
R505	12	5'-6"	69	5					
R506	20	5'-6"	115	STR					
R601	16	30'-0"	721	STR					
R602	2	24'-1"	72	STR					
R603	480	2'-4"	1682	1	1'-1"	1'-5"			
R604	480	3'-5"	2463	7	1'-5"	1'-1"			
	8	4'-4"			3'-6"				
R605	S.O.	TO	622	1	TO	1'-0"			7/8"
	11	5'-1"			4'-3"				
R606	40	4'-4"	260	1	3'-6"	1'-0"			
SUPERSTRUCTURE TOTAL = 73,542 LBS.									
GRAND TOTAL = 97,385 LBS.									

(•1) FIELD BEND AS NECESSARY

BENDING DIAGRAMS



NOTES:

1. THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, S501 IS A NO. 5 BAR. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE NOTED. R INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED.

2. "STR." IN THE TYPE COLUMN INDICATES STRAIGHT BARS.

3. S.O. DENOTES "SERIES OF".

4. REFER TO C.M.S. SECTION 509.05 FOR STANDARD BEND DIMENSIONS.

5. ALL REINFORCING BARS SHALL BE EPOXY COATED. COATING WHICH HAS BEEN DAMAGED OR OTHERWISE DOES NOT MEET SPECIFICATIONS WITH RESPECT TO COLOR, CONTINUITY AND UNIFORMITY MAY BE REPAIRED AS DIRECTED BY THE ENGINEER OR SHALL BE REPLACED WITH MATERIAL WHICH MEETS THE SPECIFICATIONS. PAYMENT SHALL BE INCLUDED WITH ITEM 509 FOR PAYMENT.

6. FOR LIST OF ABBREVIATIONS, SEE SHT. 3/18.

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE. 240
COLUMBUS, OH 43231
(614)-714-0270 FAX (614)-714-0322

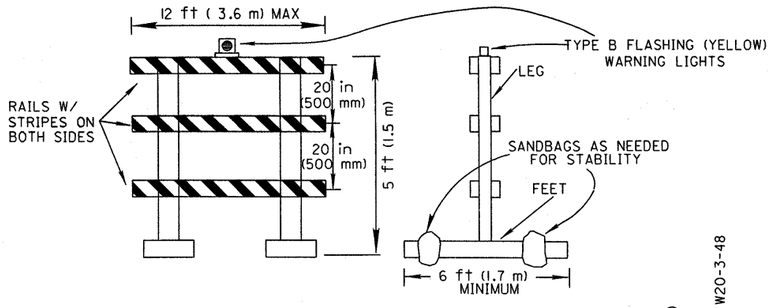
DATE 12/2005
REVIEWED JEP
DRAWN SRR
DESIGNED TCM
CHECKED KCS
REVISED
STRUCTURE FILE NUMBER 7607539

REINFORCING STEEL LIST
BRIDGE NO. STA-30-1157
PERRY DRIVE OVER US 30

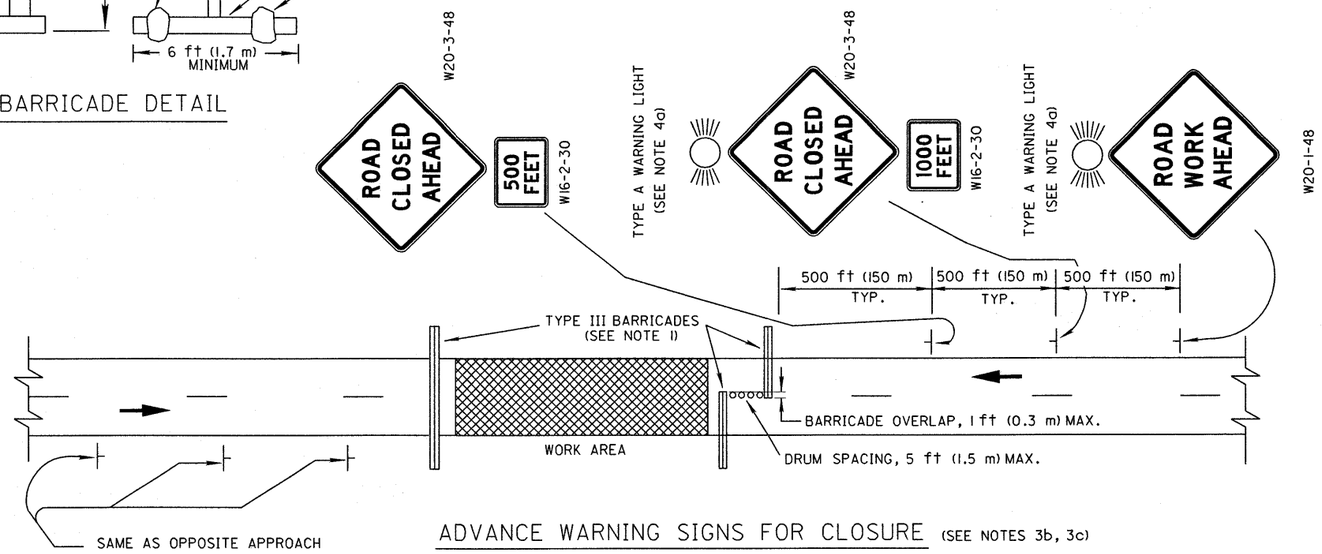
STA-30-(6.70)/(11.57)
PID 23754

18/18

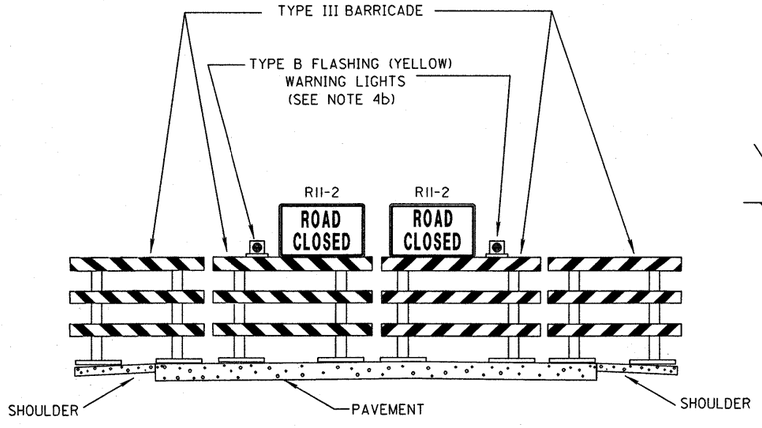
119/127



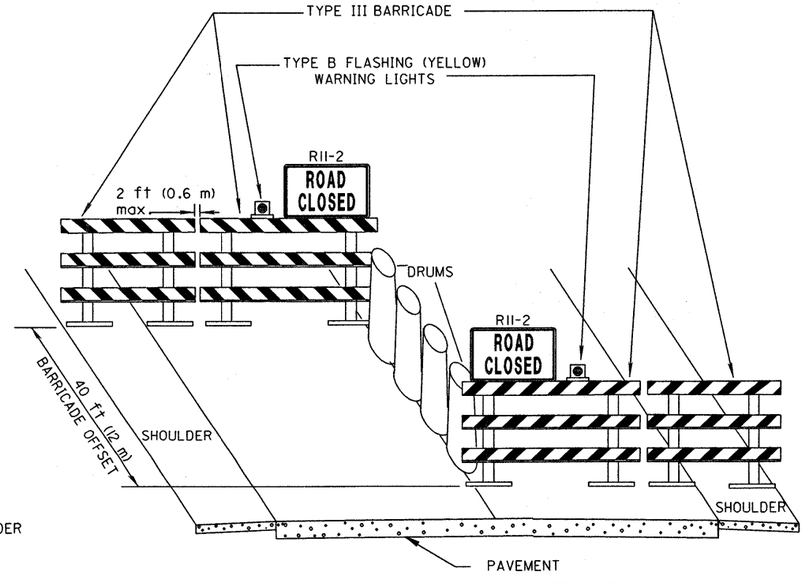
TYPE III BARRICADE DETAIL



ADVANCE WARNING SIGNS FOR CLOSURE (SEE NOTES 3b, 3c)



BARRICADE CLOSURE PROFILE



BARRICADE CLOSURE OFFSET OPTION

NOTES

1. BARRICADE USE

   a. Barricades shall be NCHRP 350 compliant and shall be erected according to details shown. When the road is closed to traffic, barricades shall be used to effectively close the entire roadway, including the paved or aggregate shoulder.

   b. Barricades along adjacent lanes may be offset from each other as shown, with drums used to close the resulting gap. Maximum drum spacing shall be 5 feet (1.5 m).

2. BARRICADE REFLECTORIZATION AND COLOR

   a. In construction or maintenance areas, all rails of the barricades shall be reflectorized with orange and white reflectorized Type G sheeting in 6 inches (150 mm) wide alternate stripes which slope downward toward the center line of the road at an angle of 45 degrees. All three rails of the barricade shall be striped on both sides. Legs and feet shall be either all-white or may display the natural color of the material used.

   b. Barricades used in permanent or semi-permanent applications shall differ only in that they shall use red and white stripes.

3. SIGNS

   a. Where the road is closed to traffic by the erection of barricades, ROAD CLOSED (RII-2) signs shall be mounted as shown.

   b. The Advance Warning Signs shown on this drawing are intended for use when the travelled way is brought to an end with no direction given to traffic. Where traffic has been directed from the permanent roadway at or just in advance of the barricades, advance signing should be provided as shown in SCD MT-95.70 or OMUTCD Figure 6H-7 as appropriate.

   c. The Advance Warning Signs shall be placed on both sides of the roadway for 4-lane divided highways or when required by the plans.

4. FLASHING WARNING LIGHTS

   a. Type A Flashing Warning Lights are required on the ROAD WORK AHEAD (W20-1) sign and on the first ROAD CLOSED AHEAD (W20-3) sign.

   b. Type B Flashing Warning Lights shall be provided on Type III Barricades, one light per each closed lane. Each light shall be conspicuously visible at all distances up to 1000 feet (300 m) under normal atmospheric conditions. The light shall be in operation at all times during the period the highway is closed.

5. OPERATION ON 2-LANE 2-WAY ROADWAYS

   a. Where the barricade runs across the entire roadway without longitudinally offsetting sections, the Contractor will normally open only the left side of the barricade as necessary to allow the construction vehicle to enter, and then shall immediately close it. The entire barricade will not normally be opened at the same time. The Contractor shall assign an employee to assure that the barricade is closed at the end of each workday.

   b. Where the sections of the barricade are offset from each other with drums provided to close the gap (see note 1b), the contractor may move the drums as necessary to allow the construction vehicle to enter, and then shall immediately replace the drums. The contractor shall assign an employee to assure that the drums are in place at the end of each workday.

ROAD CLOSURE USING TYPE III BARRICADES

OFFICE OF TRAFFIC ENGINEERING

STA-30-(6.70) (11.57)

4-21-06

SHB/LAM

NET RESIDUE = RECORD AREA - TOTAL PRO - NET TAKE

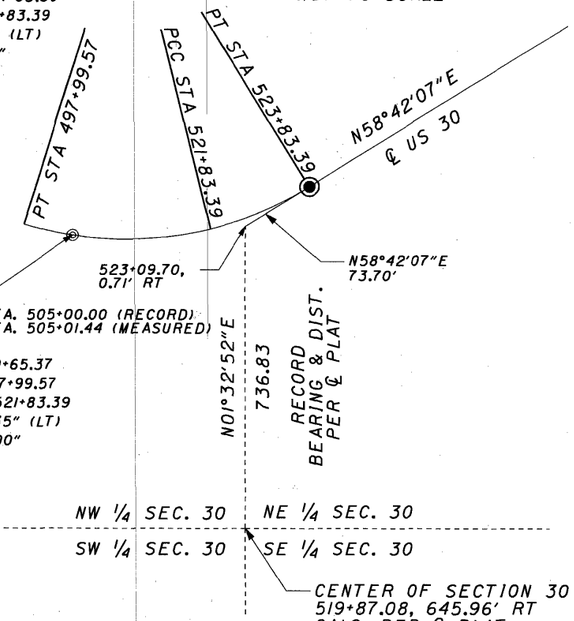
ALL AREAS IN ACRES

PARCEL NO.	OWNER	SHEET NO.	OWNERS RECORD INSTRUMENT NO.	AUDITOR'S PARCEL	RECORD AREA	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	TYPE FUND	REMARKS AND PERSONALTY		AS ACQUIRED INSTRUMENT NO.
1-T	R. J. CORMAN RAILROAD COMPANY	2	1995011737	0599004	8.61	0.000	0.036	0.000	0.036				STATE	CONSTRUCTION ACCESS	OL 674	
	CLEVELAND LINE, AN OHIO			NOT ASSIGNED	0.644	0.262	0.399	0.017	0.382					SEE OVERLAP TABLE SHEET 2	OL 680	
	CORPORATION			0599005	12.24	0.000	0.037	0.000	0.037						OL 875	
	1-T TOTAL				21.494	0.262	0.472	0.017	0.455							
2-SH1	CITY OF MASSILLON, MUNICIPALITY	2	1999050784	NOT ASSIGNED	0.316	0.014	0.002	0	0.002						OL 680	
2-SH2	OF THE STATE OF OHIO	2		NOT ASSIGNED			0.002	0	0.002						OL 680	
	GRAND TOTAL				0.316	0.014	0.004	0	0.004		0.149	0.149				
2-T		2-3		0580019	22.45	0.000	0.043	0.000	0.043					CONSTRUCTION ACCESS	OL 681	
				NOT ASSIGNED	0.316	0.014	0.316	0.014	0.302					SEE OVERLAP TABLE SHEETS 2, 3	OL 680	
				0580014	4.58	0.000	0.042	0.000	0.042						OL 877	
	2-T TOTAL				35.956	0.014	0.401	0.014	0.387							
3-T1	PSR DEVELOPMENT, LTD, AN OHIO	3	200405050031524	0617095	11.28	0	0.013	0	0.013					CONSTRUCTION ACCESS	OL 682	
	LIMITED LIABILITY COMPANY													SEE OVERLAP TABLE SHEET 3		
3-T2							0.002	0	0.002					CONSTRUCTION ACCESS	OL 682	

CURVE 1
P.I. Sta = 522+83.40
P.C.C. Sta = 521+83.39
P.T. Sta = 523+83.39
Δ = 3° 00′ 00″ (LT)
Dc = 1° 30′ 00″
R = 3,819.72′
T = 100.01′
L = 200.00′
E = 1.31′

LEAD IN COURSE DETAIL

NOT TO SCALE



CURVE 2
P.I. Sta = 510+65.37
P.C. Sta = 497+99.57
P.C.C. Sta = 521+83.39
Δ = 47° 40′ 35″ (LT)
Dc = 2° 00′ 00″
R = 2,864.79′
T = 1265.80′
L = 2383.82′
E = 267.19′

NOTE: BEARINGS SHOWN ON CENTERLINE PLAT STA-30-4.70, RECORDED IN PLAT BOOK 36, PAGES 105-106 ARE 2°56′18″ DIFFERENT FROM THOSE SHOWN ON THESE PLANS. ANGLES REMAIN THE SAME.

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

ALL TEMPORARY PARCELS TO BE OF 18 MONTH DURATION.

FRANKLIN D. BLAIR REGISTERED 5676 STATE OF OHIO PROFESSIONAL SURVEYOR

I HEREBY CERTIFY THAT THIS PLAT IS A TRUE DELINEATION OF A SURVEY MADE FOR THE OHIO DEPARTMENT OF TRANSPORTATION IN 2004 BY BARR & PREVOST INC.

THE ESTABLISHMENT OF THE PROPERTY LINES AND EXISTING RIGHT OF WAY LINES SHOWN ON THIS PLAN AS OF THIS DATE WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION.

BY _____

SURVEYOR NO. S-5676 DATE JULY 11, 2005

BARR AND PREVOST

2800 CORPORATE EXCHANGE DR.
SUITE 240
COLUMBUS, OHIO 43231

(614) 714-0270

REV. BY	DATE	DESCRIPTION
DJH	07/18/05	REVISED OWNERS NAME, PCL'S 1, 2 & 3.
SJS	07/11/05	REVISED 2-T PN TO 0580014 (TYPO)
FIELD REVIEW BY		SJS & FDB DATE: 5/24/2005
OWNERSHIP VERIFIED BY		SJS & FDB DATE: 5/27/2005
DATE COMPLETED		5/27/2005

FEDERAL PROJECT NO. E(033)671
PID NO. 23754
STATE JOB NO. 446950
R/W DESIGNER SJS
R/W REVIEWER FDB

SUMMARY OF ADDITIONAL RIGHT OF WAY

STA-30-(6.70), (11.57)

1 / 8

120 / 127

CITY OF MASSILLON
SECTION 30 TOWN 10 NORTH RANGE 9 WEST
OUTLOTS 674, 680, 681, 875, 877 PERRY TOWNSHIP
STARK COUNTY, OHIO

RIGHT OF WAY LINE DATA

LINE	LENGTH	BEARING
A	6.00'	S31°17'53"E
B	13.00'	S58°42'07"W
C	6.00'	N31°17'53"W
D	13.00'	N58°42'07"E
E	13.00'	S58°42'07"W
F	6.00'	N31°17'53"W
G	13.00'	N58°42'07"E
H	6.00'	S31°17'53"E
I	53.09'	S31°17'53"E
J	53.91'	N31°17'53"W

MONUMENTS TO BE SET DURING CONSTRUCTION

℄ of RIGHT OF WAY	DISTANCE FROM ℄ of RIGHT OF WAY		REFERENCE MONUMENT
U.S. 30	LEFT	RIGHT	ITEM 604E 40500
STA. 523+83.39	℄		1
TOTAL TO GENERAL SUMMARY			1

OVERLAP TABLE

PR. ESMT.	STANDARD HIGHWAY	AERIAL	SLOPE	SEWER
1-T	754	17,360	3,420	2,163
2-SH1	-	78	-	-
2-SH2	-	78	-	-
2-T	754 *	13,776	-	997

ALL AREAS IN OVERLAP TABLE ARE IN SQUARE FEET
* INCLUDES EX. SH, 2-SH1, AND 2-SH2

MONUMENT LEGEND

- EXISTING R/W MONUMENT BOX
- PROPOSED R/W MONUMENT BOX
- EXISTING CONCRETE MONUMENT
- PROPOSED CONCRETE MONUMENT
- RAILROAD SPIKE FOUND
- RAILROAD SPIKE SET
- I.R.F. IRON PIN FOUND
- I.R.F. IRON PIN FOUND W/ ID CAP
- I.R.S. IRON PIN SET W/ ID CAP
- P.R.F. IRON PIPE FOUND
- P.R.S. IRON PIPE SET
- P.K.F. P.K. NAIL FOUND
- P.K.S. P.K. NAIL SET

*A STA. 528+43.01 ℄ U.S. 30 - STA. 4835+58.50 ℄ R.J. CORMAN RAILROAD
*B STA. 528+68.16 ℄ U.S. 30 - STA. 1027+77.00 ℄ CITY OF MASSILON

THE PROPOSED RIGHT OF WAY SHALL BE REFERENCED FROM THE CENTERLINE OF RIGHT OF WAY.

ADJUSTABLE CENTERLINE MONUMENTS, REFERENCE MONUMENTS AND RIGHT OF WAY MONUMENTS ARE SHOWN ON STANDARD CONSTRUCTION DRAWING RM 1.1 (REV. 4-18-03) OF THE OHIO DEPARTMENT OF TRANSPORTATION. THE PLACING OF THE MONUMENTS SHALL BE UNDER THE DIRECTION OF A SURVEYOR REGISTERED IN THE STATE OF OHIO AND ARE TO BE SET, AS SHOWN BY THE HIGHWAY CONTRACTOR AT THE TIME OF CONSTRUCTION. ANY ALTERATIONS, WITH PRIOR APPROVAL OF THE OHIO DEPARTMENT OF TRANSPORTATION, SHALL BE NOTED AND O.D.O.T. SHALL BE NOTIFIED OF THE NEW LOCATIONS.

BASIS FOR BEARINGS:

THE BASIS OF BEARINGS FOR THIS PROJECT WAS DETERMINED FROM A GPS SURVEY IN OBTAINING STATE PLANE COORDINATES (OHIO COORDINATE SYSTEM OF 1983, NORTH ZONE). THE BEARINGS ARE TO BE USED FOR ANGULAR MEASUREMENT ONLY AS DEED AND PLAT BEARINGS HAVE A DIFFERENT BASIS.

THE EXISTING R/W WIDTH AND LOCATION WERE DETERMINED USING THE STA-30-4.70 (1969) PLANS ON FILE WITH O.D.O.T. DISTRICT 4, AKRON, OHIO AND THE ASSOCIATED CENTERLINE PLAT RECORDED ON DECEMBER 19, 1966 IN PLAT BOOK 36, PAGES 105 - 106 AT THE STARK COUNTY RECORDERS OFFICE.

NOTES:

STATE OF OHIO HAS EX. EASEMENTS ON R.J. CORMAN RAILROAD PROPERTY PER VOL. 3485, PAGE 584.

STATE OF OHIO HAS EX. EASEMENTS ON CITY OF MASSILLON PROPERTY PER VOL. 3449, PAGE 340.

BALTIMORE & OHIO VALUATION MAP V122.4 SHEET 28 (NOW R.J. CORMAN RAILROAD)

N.Y.C.&ST.L.R.R.CO. VALUATION MAP BOOK 6, SHEET 28 (NOW CITY OF MASSILLON)

REV. BY	DATE	DESCRIPTION
DJH	7/18/05	REVISED OWNERS NAME, PCLS 1 & 2
DATE COMPLETED	5/27/2005	

R/A DESIGNER SJS
R/A REVIEWER FDB
PID NO. 23754

RIGHT OF WAY PLAN
STA. 525+50 TO 529+50
STA-30-(6.70), (11.57)

2 / 8

(121 / 127)

I:\Projects\23754_sta-30-6.03\Rw\STA_30_670\23754RP01.dgn 18-JUL-2005 8:54AM dhouckl

CITY OF MASSILLON
SECTION 30 TOWN 10 NORTH RANGE 9 WEST
OUTLOTS 680, 681, 682, 877, PERRY TOWNSHIP
STARK COUNTY, OHIO

(2) CITY OF MASSILLON, AN MUNICIPALITY OF THE STATE OF OHIO
OUTLOT 681
A.P.N. 0580019
MAP # 05-102-01-00300

(3) PSR DEVELOPMENT, LTD., AN OHIO LIMITED LIABILITY COMPANY
OUTLOT 682
A.P.N. 0617095
MAP # 06 102 01 00400

STATE OF OHIO SLOPE EASEMENT V 3442 P 350

530+10.00 195.00' LT

530+80.00 193.50' LT

PSR DEVELOPMENT, LTD., AN OHIO LIMITED LIABILITY COMPANY
OUTLOT 682
A.P.N. 0617095
MAP # 06 102 01 00400

534+00.00 190.00' LT

CITY OF MASSILLON (FKA OHIO CANAL) OUTLOT 681

STATE OF OHIO

LA-R/W

DISTANCE FROM P.T. STA. 523+83.39
4# 568.61' (529+52.00)
SEE SHEET 1 FOR "LEAD IN COURSE DETAIL"

OVERLAP TABLE

PR. ESMT.	STANDARD HIGHWAY	AERIAL	SLOPE	SEWER
2-T	754 #	13,776	-	997
3-T1	-	-	18	-

ALL AREAS IN OVERLAP TABLE ARE IN SQUARE FEET
INCLUDES EX. SH, 2-SH1, AND 2-SH2

MONUMENT LEGEND
- EXISTING R/W MONUMENT BOX
- PROPOSED R/W MONUMENT BOX
- EXISTING CONCRETE MONUMENT
- PROPOSED CONCRETE MONUMENT
- RAILROAD SPIKE FOUND
- RAILROAD SPIKE SET
- I.R.F. IRON PIN FOUND
- I.R.F. IRON PIN FOUND W/ ID CAP
- I.R.S. IRON PIN SET W/ ID CAP
- P.R.F. IRON PIPE FOUND
- P.R.S. IRON PIPE SET
- P.K.F. P.K. NAIL FOUND
- P.K.S. P.K. NAIL SET

N

1" = 20' SCALE IN FEET

PID NO. 23754

R/W DESIGNER SJS
R/W REVIEWER FDB

S 5° 30' 17" E LA-R/W

S 31° 17' 53" E

N58°42'07"E 9.66'

529+52.00 95.00' LT

529+61.66 95.00' LT

3-T2

20.00'

22.21'

POB: 529+52.00 75.00' LT

TUSCARAWAS RIVER

OHIO AND ERIE CANAL TOWPATH TRAIL

GRAVEL TRAIL

STATE OF OHIO V 3442 P 350

CONST. LIMITS

SIGN FOUNDATIONS

E (033)671

SUSPEND PROJECT STA. 532+75 SLM 6.80

SUSPEND WORK STA. 534+09

LA-R/W

75.00'

CITY OF MASSILLON OUTLOT 680 A.P.N. NOT ASSIGNED 4# (DISTANCE CALLED OUT ON SHEET 2/8) 190.00'

529+52.00 ℄

MATCH LINE - STA. 529+50 SHEET 2

530+00 531+00 532+00 533+00 534+00

℄ SURVEY & R/W N58°42'07"E

SUSPEND ACQUISITION STA. 530+10.36

PC Sta. 532+26.20

POC Sta. 543+00.00 ℄ RECORD Sta. 542+99.36, 0.84' LT MEASURED

P.I. Sta = 542+82.96
Δ = 25° 57' 55" (RT)
Dc = 1° 15' 00"
R = 4,583.66'
T = 1,056.76'
L = 2,077.22'
E = 120.24'

CONST. LIMITS

STATE OF OHIO

ANTICIPATED CONSTRUCTION ACCESS LIMITS

POB: 529+52.00 75.00' RT

N77°37'14"E 61.68'

2-T

20.00'

58.35 T ESMT N 58° 42' 07" E

3-T1

529+52.00 95.00' RT

530+00.00 91.45' RT

530+10.35 95.00' RT

530+00.00 95.00' RT

530+90.00 122.30' RT

532+00.00 160.00' RT

(2) CITY OF MASSILLON OUTLOT 877 A.P.N. 0580014 MAP # 05-112-01-00100

℄ TUSCARAWAS RIVER S 31° 17' 53" E

SL ESMT

SL ESMT

STATE OF OHIO SLOPE EASEMENT V 3442 P 350

(3) PSR DEVELOPMENT, LTD. OUTLOT 682 A.P.N. 0617095 MAP # 06 102 01 00400

LA-R/W

CITY OF MASSILLON (FKA OHIO CANAL) OUTLOT 681

BASIS FOR BEARINGS:

THE BASIS OF BEARINGS FOR THIS PROJECT WAS DETERMINED FROM A GPS SURVEY IN OBTAINING STATE PLANE COORDINATES (OHIO COORDINATE SYSTEM OF 1983, NORTH ZONE). THE BEARINGS ARE TO BE USED FOR ANGULAR MEASUREMENT ONLY AS DEED AND PLAT BEARINGS HAVE A DIFFERENT BASIS.

NOTE: THE EXISTING R/W WIDTH AND LOCATION WERE DETERMINED USING THE STA-30-4.70 (1969) PLANS ON FILE WITH O.D.O.T. DISTRICT 4, AKRON, OHIO AND THE ASSOCIATED CENTERLINE PLAT RECORDED ON DECEMBER 19, 1966 IN PLAT BOOK 36, PAGES 105 - 106 AT THE STARK COUNTY RECORDERS OFFICE.

REV. BY	DATE	DESCRIPTION
DJH	7/18/05	REVISED OWNER'S NAME. PCL 2 & 3
DATE COMPLETED		5/27/2005

RIGHT OF WAY PLAN
STA. 529+50 TO 534+00
STA-30-(6.70), (11.57)

3/8

122/127

R.J. CORMAN RAILROAD

STARK COUNTY
SECTION 30 TOWN 10 NORTH RANGE 9 WEST
OUTLOTS 675, 682, PERRY TOWNSHIP
CITY OF MASSILLON

NOTES:

STATE OF OHIO HAS EX. EASEMENTS ON R.J. CORMAN RAILROAD PROPERTY PER VOL. 3485, PAGE 584.

BALTIMORE & OHIO VALUATION MAP V122.4 SHEET 28 (NOW R.J. CORMAN RAILROAD)

N.Y.C.&ST.L.R.R.CO. VALUATION MAP BOOK 6, SHEET 28 (NOW CITY OF MASSILLON)

RAILROAD STATIONS AND OFFSETS ARE IN (PARENTHESIS)

POINT	STATION	OFFSET
A	528+01.60	29.50' LT
B	528+01.60	58.50' LT
C	528+14.60	58.50' LT
D	528+14.60	29.50' LT
E	528+03.60	58.50' RT
F	528+03.60	29.50' RT
G	528+16.60	29.50' RT
H	528+16.60	58.50' RT

CHRISTINA L. SWISHER, TRUSTEE OF THE CHRISTINA L. SWISHER TRUST UAD FEBRUARY 2, 2004 INSTR. NO. 200402050007418

TRINITY EVANGELISTIC ASSOCIATION
OUTLOT 685
A.P.N. 4780002
MAP # 47-030-NE-01-01500

(1) R. J. CORMAN RAILROAD COMPANY, CLEVELAND LINE, AN OHIO CORPORATION
OUTLOT 875
A.P.N. 0599005
MAP # 05-122-01-00800

(1) R. J. CORMAN RAILROAD COMPANY, CLEVELAND LINE AN OHIO CORPORATION
OUTLOT 674
A.P.N. 0599004
MAP # 05-102-01-00200

* STA. 528+43.01 ℄ U.S. 30 - STA. 4835+58.50 ℄ R.J. CORMAN RAILROAD

OVERLAP TABLE

PR. ESMT.	TOTAL AREA	STANDARD HIGHWAY	AERIAL	SLOPE	SEWER
1-T	20,550	754	17,360	3,420	2,163
2-T	17,450	598	13,776	-	997

ALL AREAS IN OVERLAP TABLE ARE IN SQUARE FEET

(2) CITY OF MASSILLON A MUNICIPALITY OF THE STATE OF OHIO
OUTLOT 877
A.P.N. 0580014
MAP # 05-112-01-00100

(2) CITY OF MASSILLON A MUNICIPALITY OF THE STATE OF OHIO
OUTLOT 681
A.P.N. 0580019
MAP # 05-102-01-00300

(3) PSR DEVELOPMENT, LTD.
OUTLOT 682
A.P.N. 0617095
MAP # 06-102-01-00400

(3) PSR DEVELOPMENT, LTD.
OUTLOT 682
A.P.N. 0617095
MAP # 06-102-01-00400

REV. BY	DATE	DESCRIPTION
DJH	7/18/05	REVISED OWNER'S NAME, PCLS 1 &2.
DATE COMPLETED	5/27/2005	

SCALE IN FEET 0 10 20 40 1" = 20'

PID NO. 23754

R/W DESIGNER SJS
R/W REVIEWER FDB

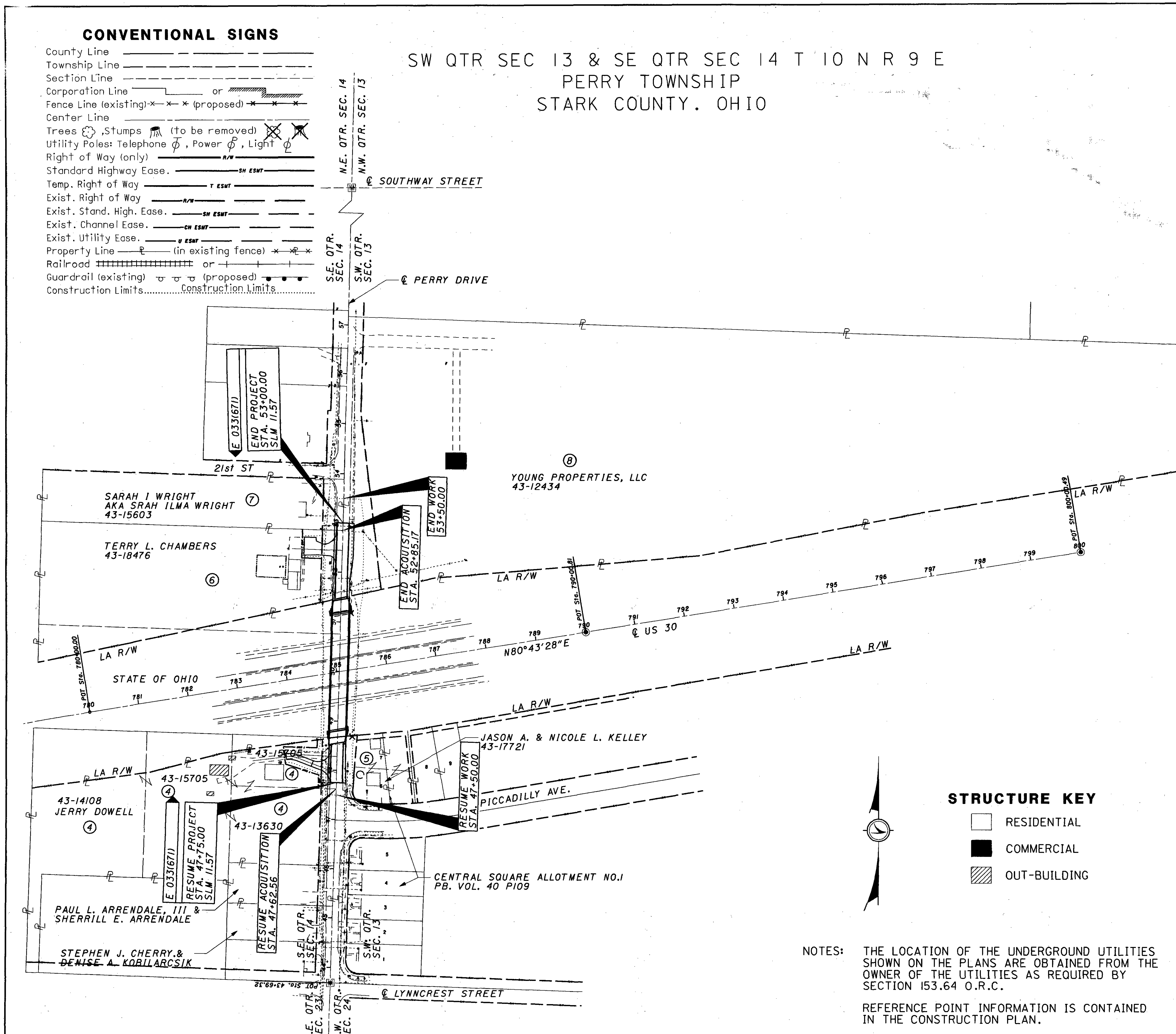
STA-30-(6.70), (11.57)

R.J. CORMAN RAILROAD

4 / 8

123 / 127

I:\Projects\23754_sta-30-6.03\Rw\STA_30_670\23754RR01.dgn 18-JUL-2005 9:58AM dhouckl



NOTES: 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.

REFERENCE POINT INFORMATION IS CONTAINED IN THE CONSTRUCTION PLAN.

AMERICAN ELECTRIC POWER
850 TECH CENTER DRIVE
GAHANNA, OHIO 43230-6605
ATTN: TONY PURSES
(614) 552-1183
(614) 552-1818 (FAX)

AQUA OHIO (CLEAR)
870 3RD STREET
MASSILLON, OHIO 44647
ATTN: DON SNYDER
(330) 833-4156 X205

CANTON WATER DEPARTMENT
ENGINEERING DEPARTMENT
P.O. BOX 7904
CANTON, OHIO 44705
ATTN: LEWIS MILLER
(330) 489-3310
(330) 489-3073 (FAX)

CITY OF MASSILLON
ENGINEERING DEPARTMENT
151 LINCOLN WAY EAST
MASSILLON, OHIO 44646
ATTN: GREG McCUE
(330) 830-1722

DOMINION EAST OHIO
4725 SOUTHWAY STREET, SW
CANTON, OHIO 44706
ATTN: KATE QUILLIN
(330) 478-3135
(330) 478-3157 (FAX)

GREAT LAKES ENERGY PARTNERS, L.L.C.
P.O. BOX 550
HARTVILLE, OHIO 44632-0550
ATTN: SUE BARCLAY
(330) 877-6747
(330) 877-6129 (FAX)

MASSILON CABLE
P.O. BOX 814
MASSILLON, OHIO 44648
ATTN: NEAL TRAVIS
(330) 833-4134
(330) 833-7522 (FAX)

NORTHERN INDUSTRIAL ENERGY
DEVELOPMENT, INC.
5900 MAYFAIR ROAD NW
NORTH CANTON, OHIO 44720
ATTN: FRANK STAUFFER
(330) 498-9130
(888) 863-0032
(330) 498-9137 (FAX)

SBC
50 W. BOWERY STREET
4TH FLOOR
AKRON, OHIO 44308
ATTN: RICK LAGRANGE
(330) 384-8057
(330) 384-8879 (FAX)

STARK COUNTY METROPOLITAN SEWER DISTRICT
1701 MAHONING ROAD, NE
P.O. BOX 7906
CANTON, OHIO 44705-7906
ATTN: JIM JONES
(330) 451-2314
(330) 453-9044 (FAX)

TIME WARNER CABLE
1655 BRITTAIN ROAD
AKRON, OHIO 44310
ATTN: CHARLIE TONEY
(330) 630-7950
(330) 633-2342 (FAX)

REV. BY	DATE	DESCRIPTION
SJS	7/11/05	MOVED DRIVE, REV. 4-T, DELETED 4-WD

DATE COMPLETED 5/27/2005

SCALE IN FEET 1" = 100'

PID NO. 23754

R/W DESIGNER R/W REVIEWER

PROPERTY MAP

STA-30-(6.70), (11.57)

5 / 8

NET RESIDUE = RECORD AREA - TOTAL PRO - NET TAKE

ALL AREAS IN ACRES

PARCEL NO.	OWNER	SHEET NO.	OWNERS RECORD BOOK	OWNERS RECORD PAGE	AUDITOR'S PARCEL	RECORD AREA	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	TYPE FUND	REMARKS AND PERSONALTY	AS ACQUIRED INSTRUMENT #
4-T	JERRY DOWELL	7	3754 4164	948 245	43-15705	1.32	0.071	0.085	0.000	0.085	NO			STATE	TRACT 2, RELOCATE DRIVE	
		7	3754 19980012315	948	43-14108	1.114	0.012				NO					
			3965 19980012314	347	43-13630	0.75	0.108				NO				TRACT 2	
	GRAND TOTAL					3.184	0.191	0.006	0.000	0.006						
5	JASON A. AND NICOLE L. KELLEY	7	20041115008067	8	43-17721	0.198	0	NO TAKE		NO TAKE	NO				PORTION OF LOT 6 & 7, 164' OF 6' SOLID WOOD FENCE *	
6-T	TERRY L. CHAMBERS	8	20010303	45	43-18476	2.94	0.133	0.052		0.052					RECONSTRUCT DRIVE	
7	SARAH I WRIGHT AKA SARAH ILMA WRIGHT	8	OR 799 1109	330 514	43-15603	1.4485	0.098	NO TAKE		NO TAKE	NO					
8	YOUNG PROPERTIES, LLC	8	19980084797		43-12434	16.00	0.598	NO TAKE		NO TAKE	NO					

NOTES:

1) ALL TEMPORARY PARCELS TO BE OF 18 MONTH DURATION.

2) UNDER NO CIRCUMSTANCES ARE TEMPORARY EASEMENTS TO BE USED FOR STORAGE OF MATERIAL OR EQUIPMENT BY THE CONTRACTOR UNLESS NOTED OTHERWISE.

3) * DENOTES RIGHT OF WAY ENCROACHMENT

REV. BY	DATE	DESCRIPTION
SJS	7/11/05	REVISED 4-T, DELETED 4-WD

FIELD REVIEW BY SJS & FDB DATE: 5/24/2005
OWNERSHIP VERIFIED BY SJS & FDB DATE: 5/27/2005
DATE COMPLETED 5/27/2005

FEDERAL PROJECT NO. E 033(671)
PID NO. 23754
STATE JOB NO. 446950
R/W DESIGNER SJS
R/W REVIEWER FDB

SUMMARY OF ADDITIONAL RIGHT OF WAY

STA-30-(6.70), (11.57)

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BASIS FOR BEARINGS:
THE BASIS OF BEARINGS FOR THIS PROJECT WAS DETERMINED FROM A GPS SURVEY IN OBTAINING STATE PLANE COORDINATES (OHIO COORDINATE SYSTEM OF 1983, NORTH ZONE). THE BEARINGS ARE TO BE USED FOR ANGULAR MEASUREMENT ONLY AS DEED AND PLAT BEARINGS HAVE A DIFFERENT BASIS.

SW QTR 13 & SE QTR. SEC. 14, T 10 N, R 9 E
PERRY TOWNSHIP
STARK COUNTY, OHIO

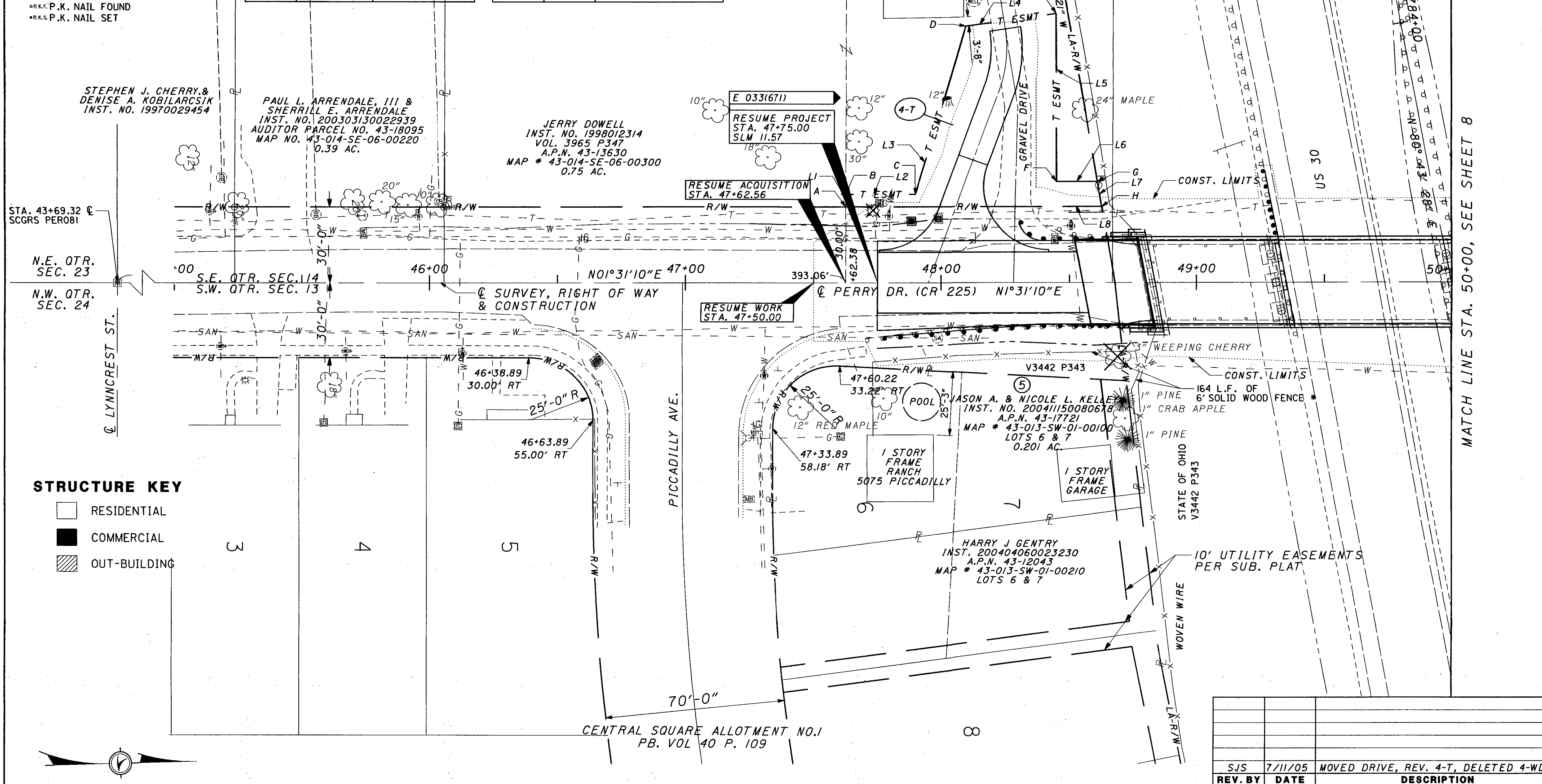
NOTE: THE EXISTING R/W WIDTH AND LOCATION WERE DETERMINED USING THE STA-30-7.64 (1971) PLANS ON FILE WITH O.D.O.T. DISTRICT 4, AKRON, OHIO AND THE ASSOCIATED CENTERLINE PLAT RECORDED MAY 13, 1969 IN PLAT BOOK 38, PAGES 63 - 66 AT THE STARK COUNTY RECORDERS OFFICE.

MONUMENT LEGEND
- EXISTING R/W MONUMENT BOX
- PROPOSED R/W MONUMENT BOX
- EXISTING CONCRETE MONUMENT
- PROPOSED CONCRETE MONUMENT
- RAILROAD SPIKE FOUND
- RAILROAD SPIKE SET
- I.R.F. IRON PIN FOUND
- I.R.F. IRON PIN FOUND W/ ID CAP
- I.R.S. IRON PIN SET W/ ID CAP
- BRK. IRON PIPE FOUND
- BRS. IRON PIPE SET
- P.K.F. P.K. NAIL FOUND
- P.K.S. P.K. NAIL SET

POINT	STATION	OFFSET
A (POB)	47+62.56	30.00' LT
B	47+62.58	35.00' LT
C	47+90.00	35.00' LT
D	48+10.00	102.00' LT
E	48+45.00	107.00' LT
F	48+45.00	40.00' LT
G	48+60.98	40.00' LT
H	48+62.67	30.00' LT

RIGHT OF WAY LINE DATA

LINE	LENGTH	BEARING
L1	5.00'	N88°08'35"W
L2	27.42'	N01°31'10"E
L3	69.92'	N71°51'36"W
L4	35.35'	N06°36'23"W
L5	67.00'	S88°28'50"E
L6	15.98'	N01°31'10"E
L7	10.14'	N81°54'21"E
L8	100.12'	S01°31'10"W



STRUCTURE KEY
- RESIDENTIAL
- COMMERCIAL
- OUT-BUILDING

SCALE IN FEET 1" = 20'

REV. BY	DATE	DESCRIPTION
SJS	7/11/05	MOVED DRIVE, REV. 4-T, DELETED 4-WD

DATE COMPLETED 5/27/2005

PID NO. 23754

R/W DESIGNER SJS
R/W REVIEWER FDB

RIGHT OF WAY PLAN PERRY DRIVE
STA. 45+00 TO STA. 50+00

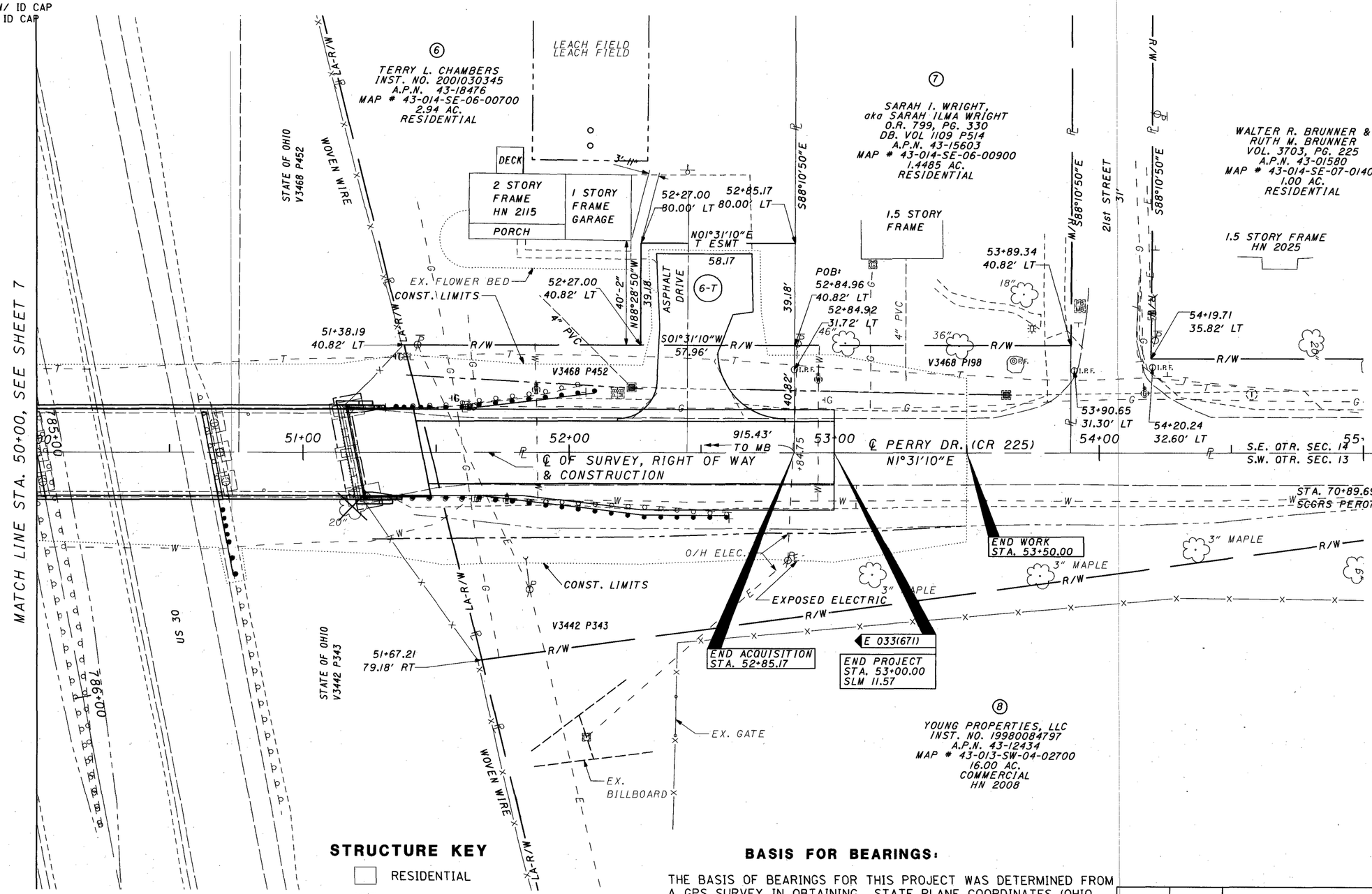
STA-30-(6.70), (11.57)

MONUMENT LEGEND

- EXISTING R/W MONUMENT BOX
- PROPOSED R/W MONUMENT BOX
- EXISTING CONCRETE MONUMENT
- PROPOSED CONCRETE MONUMENT
- RAILROAD SPIKE FOUND
- RAILROAD SPIKE SET
- I.R.F. IRON PIN FOUND
- I.R.F. IRON PIN FOUND W/ ID CAP
- I.R.S. IRON PIN SET W/ ID CAP
- I.P.F. IRON PIPE FOUND
- I.P.S. IRON PIPE SET
- P.K.F. P.K. NAIL FOUND
- P.K.S. P.K. NAIL SET

SW QTR SEC 13 & SE QTR. SEC. 14, T 10 N, R 9 E
PERRY TOWNSHIP
STARK COUNTY, OHIO

NOTE: THE EXISTING R/W WIDTH AND LOCATION WERE DETERMINED USING THE STA-30-7.64 (1971) PLANS ON FILE WITH O.D.O.T. DISTRICT 4, AKRON, OHIO AND THE ASSOCIATED CENTERLINE PLAT RECORDED MAY 13, 1969 IN PLAT BOOK 38, PAGES 63 - 66 AT THE STARK COUNTY RECORDERS OFFICE.



STRUCTURE KEY

- RESIDENTIAL
- COMMERCIAL
- OUT-BUILDING

BASIS FOR BEARINGS:

THE BASIS OF BEARINGS FOR THIS PROJECT WAS DETERMINED FROM A GPS SURVEY IN OBTAINING STATE PLANE COORDINATES (OHIO COORDINATE SYSTEM OF 1983, NORTH ZONE). THE BEARINGS ARE TO BE USED FOR ANGULAR MEASUREMENT ONLY AS DEED AND PLAT BEARINGS HAVE A DIFFERENT BASIS.

REV. BY	DATE	DESCRIPTION

DATE COMPLETED 5/27/2005

SCALE IN FEET: 0, 10, 20, 40 — 1" = 20'

PID NO. 23754

R/W DESIGNER SJS

R/W REVIEWER FDB

RIGHT OF WAY PLAN - PERRY DR. STA. 50+00 TO STA. 55+00

STA-30-(6.70), (11.57)

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