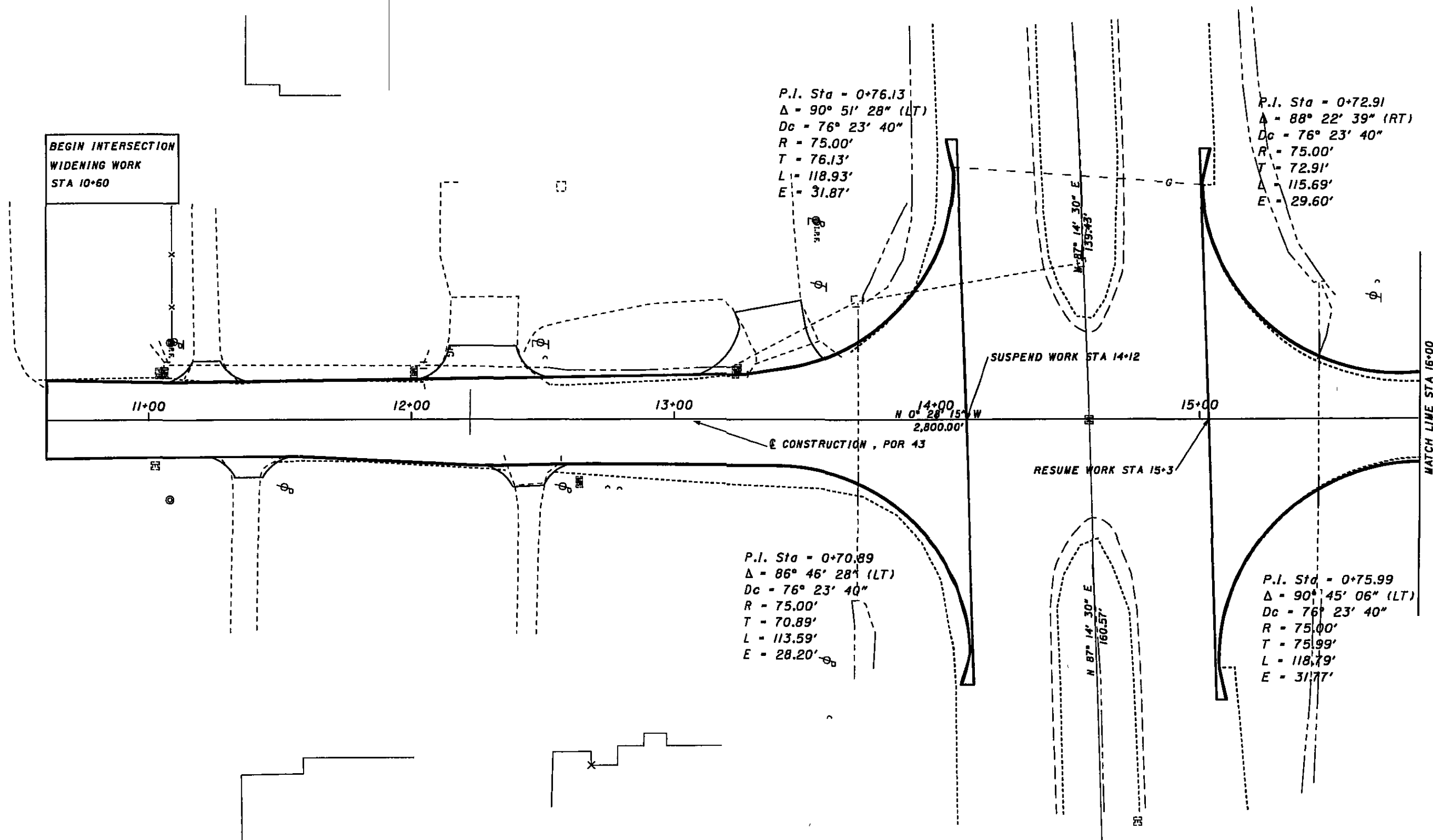


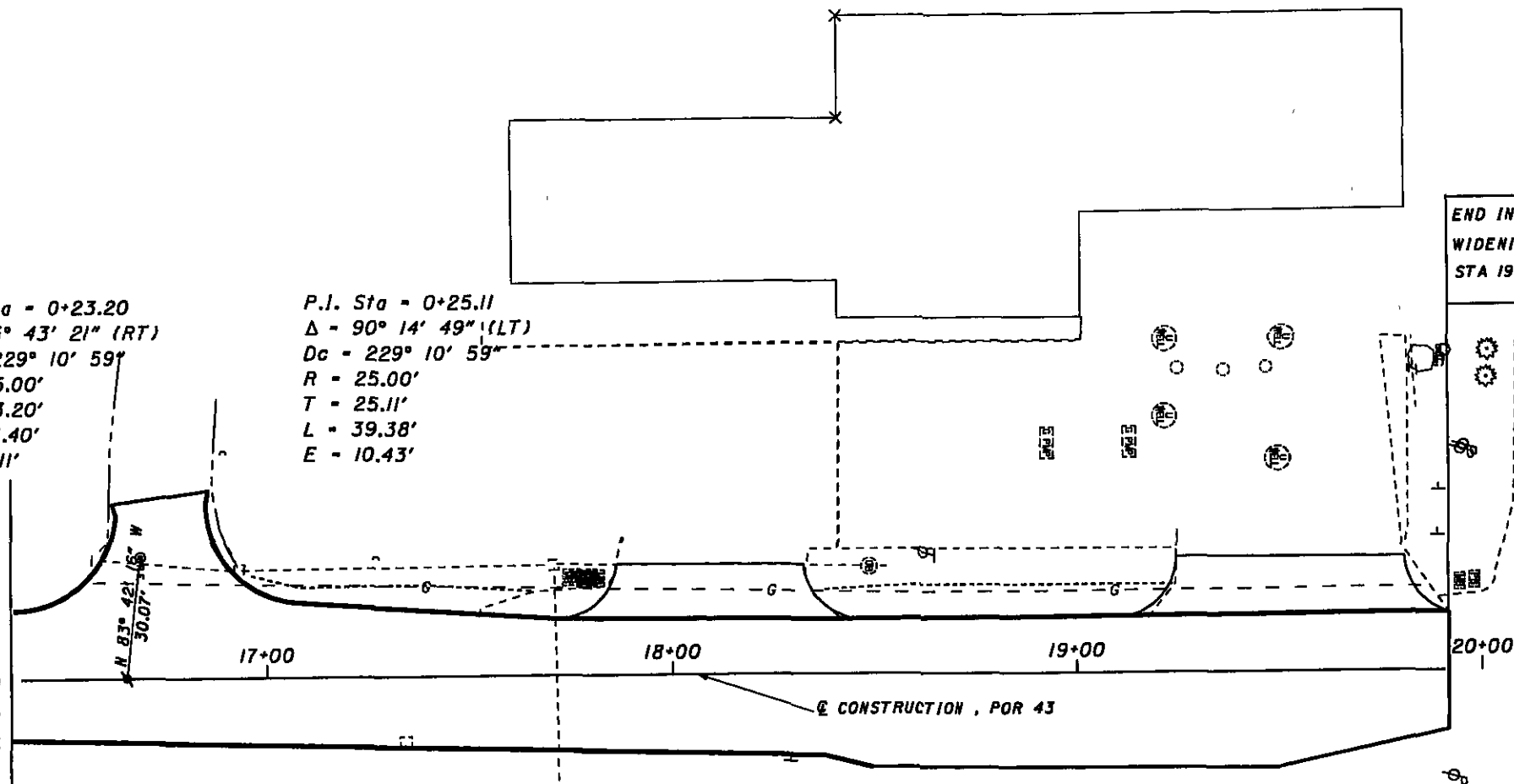


FOR INTERSECTION DETAILS SEE SHEET 31

P.I. Sta = 0+23.20
 $\Delta = 85^\circ 43' 21''$ (RT)
 $Dc = 229^\circ 10' 59''$
 $R = 25.00'$
 $T = 23.20'$
 $L = 37.40'$
 $E = 9.11'$

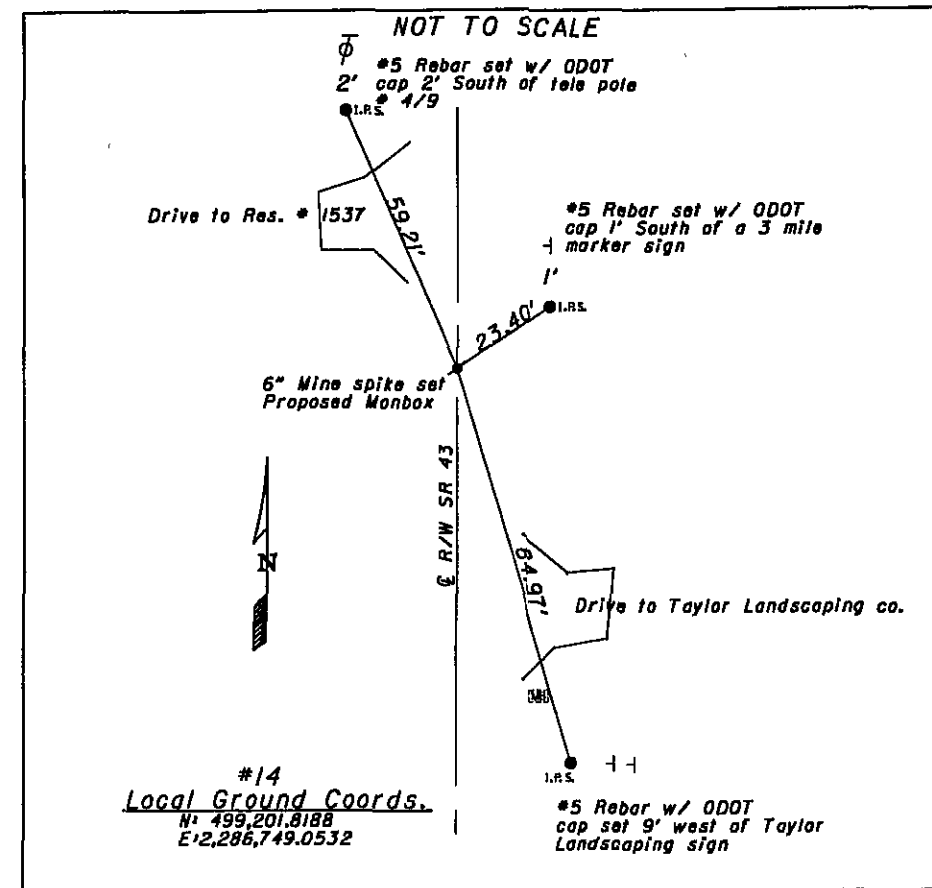
P.I. Sta = 0+25.11
 $\Delta = 90^\circ 14' 49''$ (LT)
 $Dc = 229^\circ 10' 59''$
 $R = 25.00'$
 $T = 25.11'$
 $L = 39.38'$
 $E = 10.43'$

MATCH LINE STA 16+00

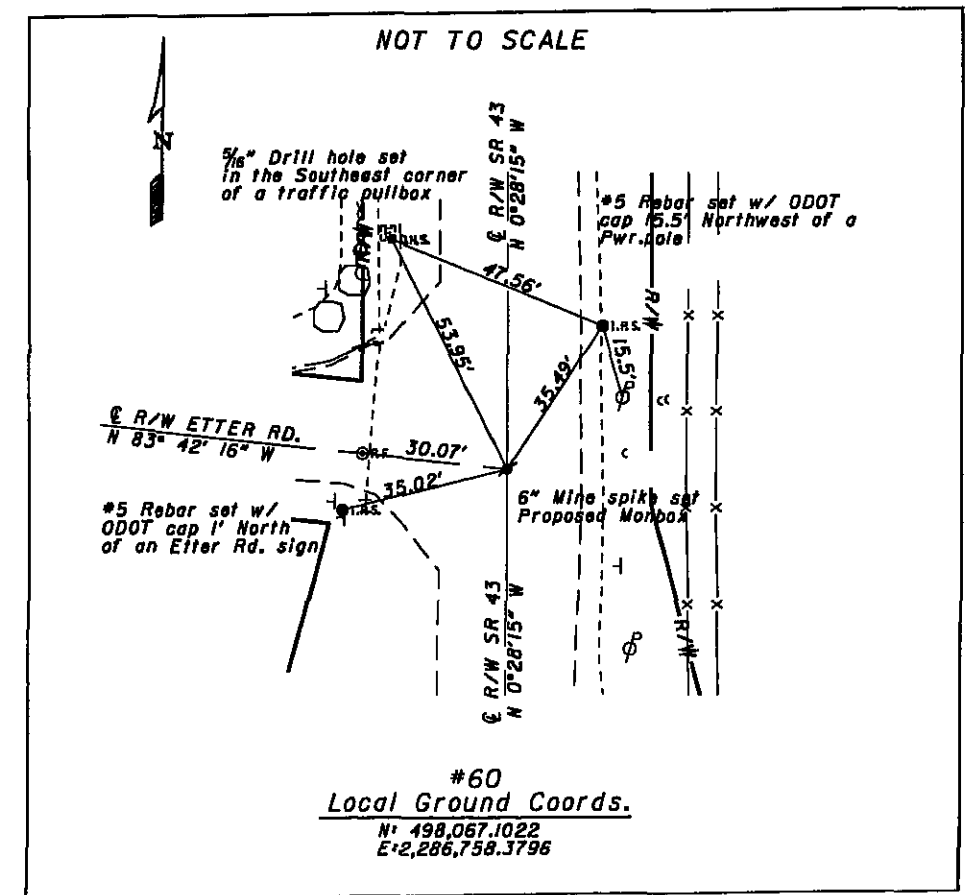


END INTERSECTION
 WIDENING WORK
 STA 19+93

Ref. Ties for $\odot$ POT $\bullet$ Sta. 28+00.00



Ref. Ties for $\odot$ POT $\bullet$ Sta. 16+65.25

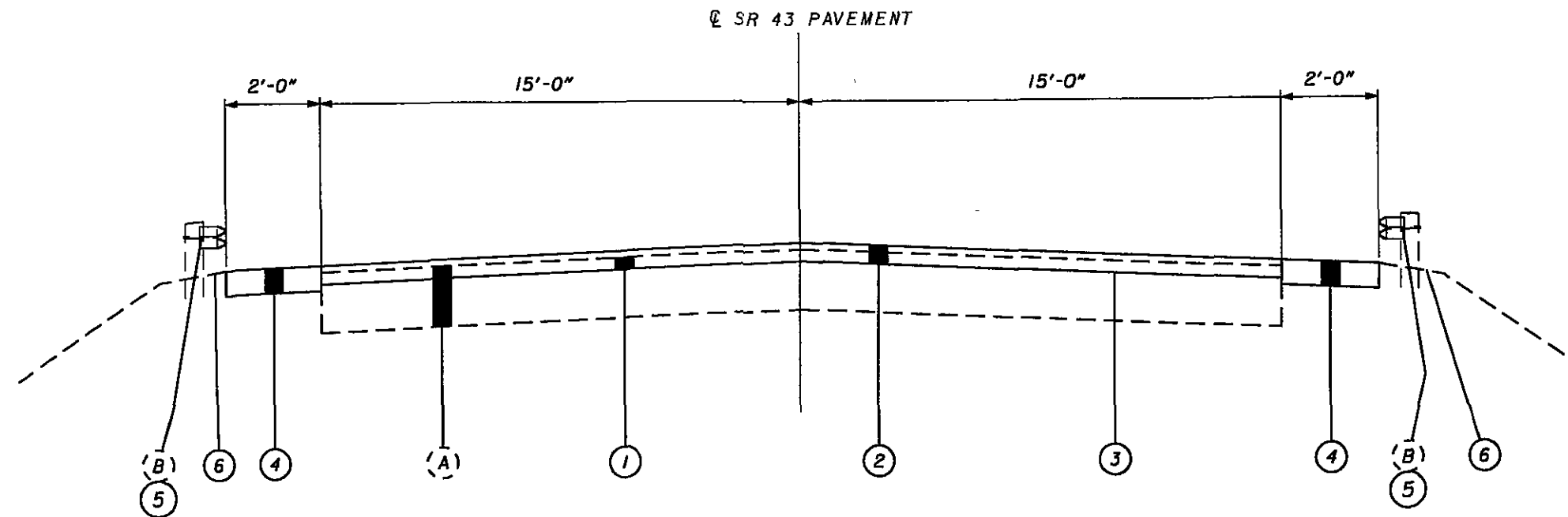


FOR INTERSECTION DETAILS SEE SHEET 31

SCHEMATIC PLAN
 INTERSECTION WIDENING

POR-43-0.00

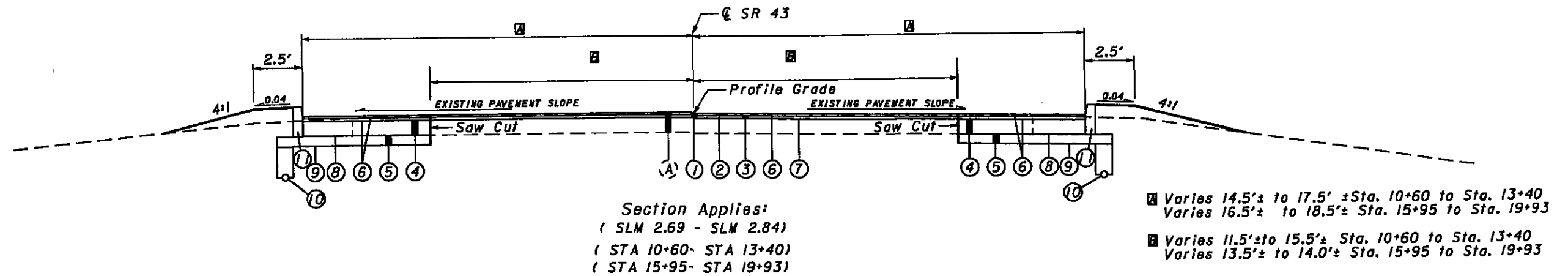
2A
 56



SR 43
SLM 0.00 TO SLM 2.69 (PART 1)
SLM 2.84 TO SLM 7.55 (PART 3)

LEGEND:

- | | |
|-----|---|
| (A) | EXISTING PAVEMENT |
| (B) | EXISTING GUARDRAIL |
| (1) | 254 1-1/4" PAVEMENT PLANING, ASPHALT CONCRETE |
| (2) | 446 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 |
| (3) | 407 TACK COAT |
| (4) | 617 COMPACTED AGGREGATE, TYPE A, AS PER PLAN |
| (5) | 606 GUARDRAIL, TYPE 5 |
| (6) | 209 RESHAPING UNDER GUARDRAIL, AS PER PLAN |



(**) CURBED INTERSECTION US 224 AND SR 43
 (STA 13+40- STA 14+12)
 (STA 15+3- STA 15+95)

NO WORK
 (STA 14+12- STA 15+3)

(*) FOR THE EXISTING PAVEMENT MILL 1 1/2"

(**) SEE INTERSECTION DETAIL, SHEET 31 FOR
 ADDITIONAL INFORMATION.

PROPOSED

- ① 254, 1 1/2" PAVEMENT PLANING, ASPHALT CONCRETE (*)
- ② 446, 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
- ③ 448, 1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22
- ④ 301, 9" ASPHALT CONCRETE BASE, PG64-22
- ⑤ 304, 6" AGGREGATE BASE
- ⑥ 407, TACK COAT FOR INTERMEDIATE COURSE
- ⑦ 407, TACK COAT
- ⑧ 408, PRIME COAT
- ⑨ 204, SUBGRADE COMPACTION
- ⑩ 605, 4" SHALLOW PIPE UNDERDRAINS] STA 10+60- 19+93 LT.
- ⑪ 609, CURB, TYPE 6] STA 10+60-18+50, RT.

EXISTING

- (A) ASPHALT CONCRETE PAVEMENT

ITEM 407 - TACK COAT

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

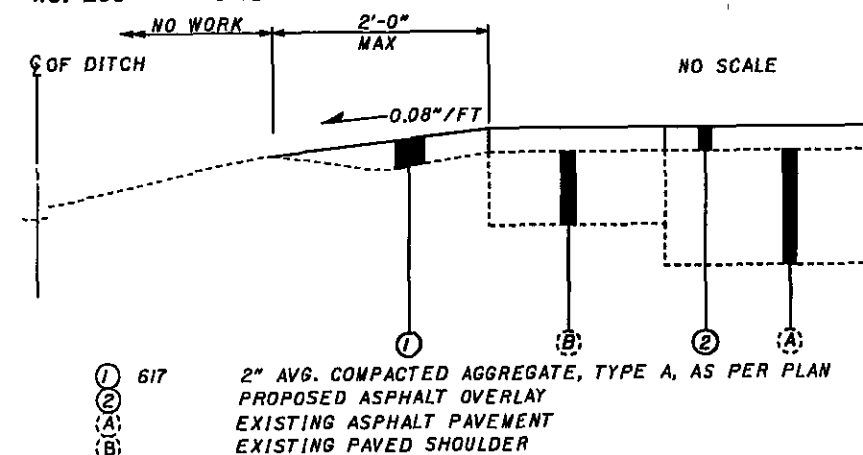
407, TACK COAT 0.15 GAL. PER SQ. YARD FOR THE PLANED SURFACE.

ITEM 617 - COMPACTED AGGREGATE, TYPE A, 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 BID PRICE FOR ITEM 617 COMPACTED AGGREGATE, TYPE A, AS PER PLAN.

MODIFIED GRADATION SHALL APPLY:
SIEVE TOTAL PERCENT PASSING

1-1/2"	100
3/4"	50-90
NO. 4	35-70
NO. 30	9-33
NO. 200	0-13



ITEM 203 --- BORROW, AS PER PLAN

ITEM 203, BORROW, HAS BEEN PROVIDED FOR REPAIR OF ERODED AREAS ADJACENT TO SHOULDERS OR BEHIND GUARDRAIL. ERODED AREAS SHALL BE REPAIRED WITH COMPACTABLE GRANULAR MATERIAL CONFORMING TO CMS 203 PLACED TO GRADE AS APPROVED BY THE ENGINEER.

ALL EQUIPMENT, MATERIALS, AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER 203, BORROW.

THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 203 --- BORROW, AS PER PLAN 2055 CU. YD.

CONTINGENCY QUANTITIES

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

ELEVATION DATUM

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

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.

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS ON SR 43 AT VARIOUS GUARDRAIL INSTALLATIONS.

659, SEEDING AND MULCHING	3077 SQ. YD.
659, COMMERCIAL FERTILIZER	0.28 TON
659, WATER	17.0 M. GAL.
659, LIME	0.64 ACRE

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS ON SR 43 BETWEEN SLM 2.69 TO SLM 2.84.

659, SEEDING AND MULCHING	1644 SQ. YD.
659, COMMERCIAL FERTILIZER	0.22 TON
659, WATER	9.0 M. GAL.
659, LIME	0.34 ACRE

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS ON SR 43 AT MANNING ROAD (0.64) AND BETWEEN SLM 6.19 TO SLM 6.44.

659, SEEDING & MULCHING	280 SQ YD
659, COMMERCIAL FERTILIZER	0.04 TON
659, WATER	2.0 M. GAL.
659, LIME	0.06 ACRE

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.

ITEM 606 - ANCHOR ASSEMBLY, TYPE E-98

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

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

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

DWG. NO.	DRAWING NAME	DWG./REV. DATE	ODOT APPROVAL DATE
SSS265M	ET-2000 (1997) PLAN, ELEVATION AND SECTIONS	6/20/97	3/6/98
SSI42	ET2000 PLUS 50'-0" PLAN, ELEVATION AND SECTION 25'-0" RAIL, SLEEVE W/PL POSTS 1-4	4/12/00	7/31/00
SSI41	ET2000 PLUS PLAN, ELEVATION AND SECTION 25'-0" RAIL, HBA POSTS 1-4	2/29/00	7/31/00
SSI58	ET2000 PLUS 50'-0" WITH 12'-6" PANELS AND HBA POSTS 1-4 PLAN, ELEVATION AND SECTION	5/22/00	7/31/00

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

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

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

THE FACE OF THE TYPE E-98 IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19, APPROXIMATELY 18" X 18" [450 MM X 450 MM]

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 27-3/4-INCHES FROM THE EDGE OF THE SHOULDER.

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

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

GENERAL NOTES

POR-43-0.00

5/56

UTILITIES- POR 43

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

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

THE HORIZONTAL AND VERTICAL LOCATIONS OF THE UNDERGROUND UTILITIES WITHIN THE PROJECT LIMITS WERE LOCATED BY TBE, AN SUBSURFACE UTILITY ENGINEERING COMPANY. IF THERE ARE ANY DISCREPANCIES BETWEEN FIELD MARKING AND WHAT THE PLAN INDICATES, PLEASE CONTACT STEVE JONES, ODOT DISTRICT 4 UTILITIES COORDINATOR 330-786-4818 PRIOR TO ANY SUBSURFACE WORK BEING INITIATED.

Akron Water
565 Johnson Street
Akron, Ohio 44311
(330) 375-2420 Greg Wysen

Dominion East Ohio
1000 West Wilbeth Road
Akron, Ohio 44314
(330) 798-7104 George Turner

Dominion East Ohio
4725 Southway St., S.W.
Canton, Ohio 44706
(330) 478-3136 Steve Crowl

Dominion Telecom
Allegheny Center Mall - Suite 108
Pittsburgh, Pennsylvania 15212
(412) 321-8432 Doug Pierce

Level 3 Communications
Attn: Network Relocations Department
1025 El Dorado Boulevard
Broomfield, Colorado 80021
(720) 888-3406 Bill O'Dwyer

Belden and Blake
1748 Saltwell Road
Dover, Ohio 44622
(330) 602-5551 Keith Kerstetter

BP Oil Company
4421 Bradley Road
Cleveland, Ohio 44109
(33) 586-2050 Tom Coyne

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

Marathon Ashland Pipeline
8930 Maplehurst Avenue
PO Box 429
East Sparta, Ohio 44626
(330) 866-5525 ext. 212
Jim Allen

Ohio Edison
1910 West Market Street
Building I
Akron, Ohio 44313
(330) 384-4714 Nick Toussant

*Denotes Limited Basis Member - must be contacted directly

UTILITIES- POR 43, CONTINUED

SBC
50 W. Bowery St., 4th Floor
Akron, Ohio 44308
(330) 384-8057 Sabrina Lampley

Sunoco Pipeline
525 Fritztown Road
Sinking Spring, Pennsylvania 19608
(610) 670-3256 JoMarie Jenkins

*City of Kent
930 Overholt Road
Kent, Ohio 44240
(330) 676-7335 Gene Roberts

*PEP Drilling Company
2120 Brentwood Drive
Akron, Ohio 44333
(330) 697-4090 Brooks Yarbrough

* Denotes limited basis member, must contact directly.

Rootstown Water
4332 Tallmadge Road
PO Box 94
Rootstown, Ohio 44272
(330) 325-7556 Ken Boydell

Time Warner Cable
1200 Brownstone Ave.
Akron, Ohio 44310
(330) 490-2506 Tod Dean

*Portage County Water
449 South Meridian Street
Ravenna, Ohio 44266
(330) 297-3670 Louie Munoz

Asset Resources
8804 Tyler Boulevard
Mentor, Ohio 44060
(440) 266-0450 Paul Ladas

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.

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. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR STORE EQUIPMENT AND/OR MATERIALS IN ANY WETLANDS OR STREAMS.

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.

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. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR TO ANY EXCAVATION, GRADING OR FILLING OPERATIONS AND INSTALLATION OF PROPOSED STRUCTURES OR UTILITIES. THEY SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE AND THE AREA IS STABILIZED AS ACCEPTED BY THE ENGINEER.

INTERSECTIONS

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

PAVEMENT MARKING LANE WIDTHS

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

ROUTE	S.L.M. TO S.L.M.	LANE WIDTH
SR 43	0.00 TO 2.69	11 FEET
SR 43	2.84 TO 7.55	12 FEET

DITCH CLEANOUT OPERATIONS

ALL MATERIALS REMOVED FROM DITCHES MUST BE IMMEDIATELY REMOVED TO AN UPLAND SITE AND STABILIZED (I.E. SEEDED) TO PREVENT REDISTRIBUTION INTO ANY WATERS OF THE UNITED STATES. IMMEDIATE REMOVAL IS DEFINED BY THE UNITED STATES ARMY CORPS OF ENGINEERS AS DEPOSITING THE REMOVED MATERIALS DIRECTLY INTO A TRUCK AND REMOVING THE MATERIAL FROM THE SITE; PLACEMENT OF REMOVED MATERIALS INTO A WETLAND OR ON THE BANKS OF A STREAM EVEN TEMPORARILY IS CONSIDERED A FILL AND REQUIRES A PERMIT ACTION. ANY AREAS DISTURBED BY EQUIPMENT ACTIVITIES MUST BE SEEDED TO PREVENT EROSION OF SEDIMENTS INTO WATERS OF THE UNITED STATES.

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

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

CALCULATED
N/D
CHECKED
M/JH

GENERAL NOTES

POR-43-0.00

6
56

ITEM 604 - MONUMENT ASSEMBLY, AS PER PLAN

ADJUSTABLE MONUMENT ASSEMBLIES AS SHOWN ON STANDARD CONSTRUCTION DRAWING "RM-1.1", REVISED APRIL 18, 2003, WILL BE PLACED BY THE CONTRACTOR AT THE TIME OF CONSTRUCTION. THE MONUMENTS SHALL BE CASTING MODEL #8371 WITH LID #8370-A, MANUFACTURED BY EAST JORDAN IRONWORKS, INC, 301 SPRING STREET, MICHIGAN 49727.

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

THE CONTRACTOR SHALL HAVE A PROFESSIONAL SURVEYOR, LICENSED IN THE STATE OF OHIO, REFERENCE ALL DATUM POINT LOCATIONS WITH CROSS TIES PRIOR TO DISTURBING ANY EXISTING MONUMENTATION AND PRIOR TO THE INSTALLATION OF THE NEW ADJUSTABLE MONUMENT BOX ASSEMBLIES. PAYMENT FOR SAID CROSS TIES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 604. DEPENDING ON SITE CONDITIONS AND DEPTH, INSTALLATION OF THE NEW MONUMENT BOX MAY NOT REQUIRE THE REMOVAL OF THE EXISTING MONUMENT BOX. UNLESS UNAVOIDABLE, REMOVAL AND PLACEMENT OF THE NEW MONUMENT BOX SHALL NOT DISTURB THE EXISTING DATUM POINT. SHOULD REMOVAL, IF REQUIRED, OF THE EXISTING BOX OR PLACEMENT OF THE NEW BOX DISTURB THE DATUM POINT, THE REFERENCE TIES ESTABLISHED BY THE CONTRACTOR'S SURVEYOR SHALL BE USED TO RESET THE DATUM POINT. THE ACTUAL PLACEMENT OF THE DATUM POINT WITHIN THE MONUMENT ASSEMBLY SHALL BE DIRECTLY AND PHYSICALLY SUPERVISED IN THE FIELD BY THE CONTRACTOR'S LICENSED PROFESSIONAL SURVEYOR. SURVEY NOTES VERIFYING THE ACCURACY OF ANY RESET DATUM POINTS AS WELL AS VERIFICATION THAT ANY DATUM POINTS THAT WERE NOT RESET WERE NOT DISTURBED SHALL BE SEALED BY THE SURVEYOR AND RETURNED TO THE DISTRICT 4 SURVEY OPERATIONS MANAGER. ANY REQUEST FOR NON-PERFORMANCE SHALL BE DIRECTED IN WRITING TO THE DISTRICT 4 PRODUCTION ADMINISTRATOR OR SURVEY OPERATIONS MANAGER AND MUST INCLUDE PROPER WRITTEN JUSTIFICATION.

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

QUANTITY THAT WILL BE CARRIED TO THE GENERAL SUMMARY:
ITEM 604 - MONUMENT ASSEMBLY, AS PER PLAN 6 EACH

PAVEMENT RESTORATION FOR MONUMENT ASSEMBLY INSTALLATIONS

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

ITEM 446 - 2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22	3 CU. YD.
ITEM 301 - 10" ASPHALT CONCRETE BASE, PG64-22	5 CU. YD.
ITEM 407 - TACK COAT (0.15 GAL. / SQ. YD.)	2 GAL.

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

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

CLEARING AND GRUBBING

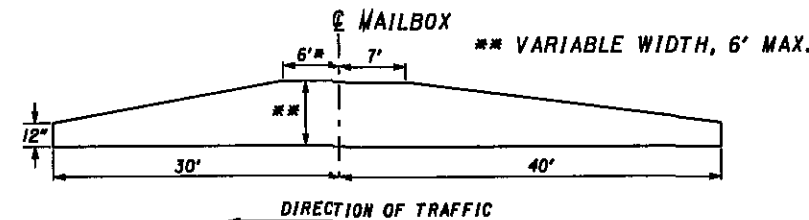
ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM SHALL BE INCLUDED IN THE LUMP SUM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

MAILBOX APPROACHES

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

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

*ADD 3' FOR EACH ADDITIONAL MAILBOX



QUANTITY THAT WILL BE CARRIED TO GENERAL SUMMARY

ITEM 448 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS) 135 CU. YD.

THE FOLLOWING ESTIMATED QUANTITY FOR DRIVEWAYS HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR SPOT REPAIR USE AS DIRECTED BY THE ENGINEER.

ITEM 448 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS) 10 CU. YD.

ITEM 604 - INLET ADJUSTED TO GRADE, AS PER PLAN

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

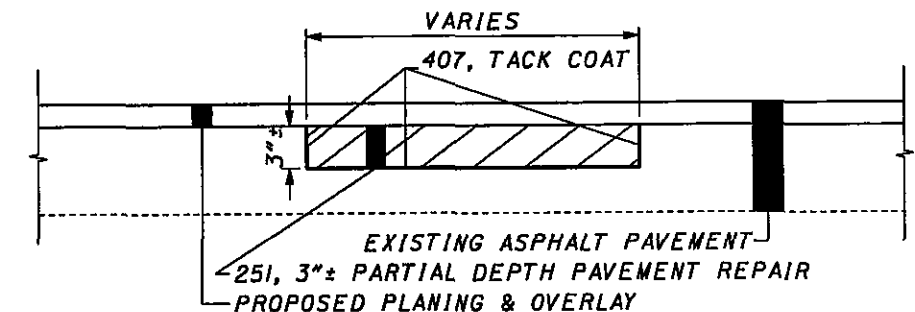
ITEM 604 - INLET ADJUSTED TO GRADE, AS PER PLAN 5 EACH

ITEM SPECIAL- MISCELLANEOUS METAL

EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTINGS OF THE REQUIRED TYPE, SIZE AND STRENGTH (HEAVY OR LIGHT DUTY) FOR THE PARTICULAR STRUCTURE IN QUESTION. ALL MATERIAL SHALL MEET ITEM 604 OF THE SPECIFICATIONS AND SHALL HAVE THE PRIOR APPROVAL OF THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

SPECIAL, MISCELLANEOUS METAL 500 POUNDS
THE CONTRACTOR IS CAUTIONED TO USE EXTREME CARE IN THE REMOVAL, STORAGE AND REPLACEMENT OF ALL EXISTING CASTINGS. CASTINGS DAMAGED BY THE NEGLIGENCE OF THE CONTRACTOR, AS DETERMINED BY THE ENGINEER, SHALL BE REPLACED WITH THE PROPER NEW CASTINGS AT THE EXPENSE OF THE CONTRACTOR.



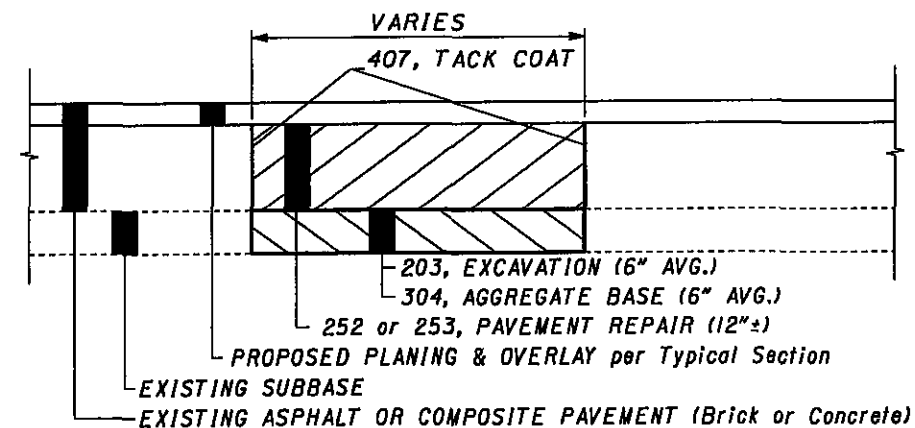
ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR

A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THE ITEM SHALL CONSIST OF REPAIRING EXISTING LOCATIONS EXHIBITING SURFACE DETERIORATION AND PLACING 3"± OF ITEM 448 ASPHALT CONCRETE, TYPE 2. THE ASPHALT CONCRETE SHALL BE COMPACTED WITH A TYPE 1 PNEUMATIC TIRE ROLLER AND A STEEL WHEEL ROLLER AS PER 401.JI.

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

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

251, PARTIAL DEPTH PAVEMENT REPAIR 5,500 SQ. YD.



ITEM 253 - PAVEMENT REPAIR

A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THIS ITEM SHALL CONSIST OF REMOVING DETERIORATED PAVEMENT FULL DEPTH AND PLACING 12"± 301 ASPHALT CONCRETE BASE, PG64-22. THE MAXIMUM COMPACTED DEPTH OF ANY ONE LAYER SHALL BE 6 INCHES.

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

203, EXCAVATION	100 CU. YD.
253, PAVEMENT REPAIR	100 SQ. YD.
304, AGGREGATE BASE	100 CU. YD.

ITEM 609 --- 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 ST., 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 PREAPPROVED 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	6/3/98

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

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 PREAPPROVED 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 27-3/4-INCHES FROM THE EDGE OF THE SHOULDER.

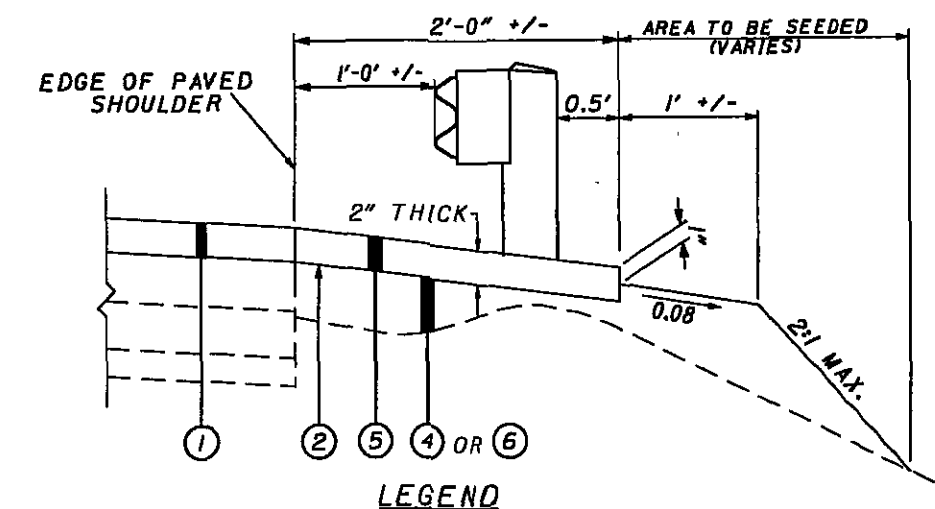
ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4-INCHES ABOVE THE GROUND LINE.

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.

ITEM 609 --- ANCHOR ASSEMBLY, TYPE B-98, CONT.

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 448 --- ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I, UNDER GUARDRAIL, PG64-22 AS PER PLAN



- LEGEND**
- ① RESURFACED SHOULDER
 - ② HERBICIDE APPLICATION UNDER ASPHALT
 - ④ 209 RESHAPING UNDER GUARDRAIL
 - ⑤ 448 ASPHALT CONCRETE INTER. COURSE, UNDER GUARDRAIL, TYPE I, PG64-22, AS PER PLAN
 - ⑥ 203 BORROW

PAVING UNDER GUARDRAIL

THIS OPERATION SHALL INCLUDE PREPARATION OF THE GRADED SHOULDER USING 209, RESHAPING UNDER GUARDRAIL, AND PAVING UNDER THE GUARDRAIL USING 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I, UNDER GUARDRAIL, PG 64-22.

ALL COLLECTED DEBRIS AND TOPSOIL, INCLUDING RHIZOMES, ROOTS AND OTHER VEGETATIVE PLANT MATERIAL SHALL BE REMOVED AND DISPOSED OF AS SPECIFIED IN 203.05.

THE REMOVED MATERIAL SHALL BE REPLACED WITH COMPACTABLE GRANULAR MATERIAL CONFORMING TO 203.02 PLACED TO GRADE AS APPROVED BY THE ENGINEER OR TO EXISTING GRADE.

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.

ITEM 448 --- ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I, PG64-22, UNDER GUARDRAIL, AS PER PLAN, CONT.

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, RESHAPING UNDER GUARDRAIL.

PAVING UNDER GUARDRAIL SHALL CONSIST OF PLACING ITEM 448 TO THE DEPTH OF 2 INCHES 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 A BITUMINOUS 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 I, UNDER GUARDRAIL, PG 64-22.

THE FOLLOWING CONTINGENCY QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 209, RESHAPING UNDER GUARDRAIL, AS PER PLAN 93 STA.

ITEM 448, ASPHALT CONCRETE INTER. COURSE, UNDER GUARDRAIL, TYPE I, PG64-22, AS PER PLAN 120 CU. YD.

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.

GENERAL NOTES

POR-43-0.00

8
56

MAINTENANCE OF TRAFFIC

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

1. A MINIMUM OF ONE TEN FOOT BIDIRECTIONAL LANE SHALL BE MAINTAINED ON THE EXISTING PAVEMENT OR COMPLETED PAVEMENT DURING CONSTRUCTION OF THE WORK.
2. THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE 330-786-2209, EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.
3. CONES SHALL NOT BE ACCEPTABLE TRAFFIC CONTROL DEVICES FOR LANE RESTRICTIONS OR LANE REDUCTIONS THAT ARE IN OPERATION ONE-HALF HOUR AFTER SUNSET OR ONE HALF-HOUR BEFORE SUNRISE. ALL NIGHTTIME LANE RESTRICTIONS SHALL REQUIRE DRUMS OR BARRICADES AT A MAXIMUM SPACING OF FIFTY (50) FEET. WEIGHTED CHANNELIZERS MAY BE USED IN ACCORDANCE WITH THE ADDITIONAL NOTE PROVIDED HEREIN.
4. LANE RESTRICTIONS OR LANE REDUCTIONS SHALL NOT BE PERMITTED AFTER NORMAL WORKING HOURS. NORMAL WORKING HOURS SHALL BE THOSE HOURS DURING WHICH THE CONTRACTOR HAS A FULL COMPLEMENT OF EMPLOYEES AND EQUIPMENT ACTIVELY REMOVING AND/OR PLACING PAVEMENT MATERIALS.
5. THE CONTRACTOR SHALL FURNISH, MAINTAIN, AND SUBSEQUENTLY REMOVE ALL FLAGS, BARRICADES, SIGNS, SIGN SUPPORTS AND FURNISH AND MAINTAIN ALL FLAGGERS, WATCHERS AND INCIDENTALS RELATED THERETO.
6. ALL FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT OPERATIONS SHALL BE COMPLETED THE SAME DAY THE EXCAVATION IS MADE. IF THE CONTRACTOR CANNOT COMPLETE THE WORK, THE EXCAVATION SHALL BE BACKFILLED.
7. PRIOR TO OPENING TO TRAFFIC, EACH LANE SHALL BE IN A SAFE, PASSABLE CONDITION. ALL TRANSVERSE JOINTS SHALL BE EXTENDED 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.
8. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMITTED TO HAVE SUCESSIVE WORK ZONES UNLESS THE DISTANCE BETWEEN THE DRUMS, BARRICADES, WEIGHTED CHANNELIZERS OR CONES EXCEEDS TWO (2) MILES.
9. IN ADDITION TO THE REQUIREMENTS OF 614 WORK ZONE PAVEMENT MARKING (614.II), AT THE END OF EACH DAY OF WORK, THE CONTRACTOR SHALL REPLACE (WITH TEMPORARY MARKINGS) ALL CENTER, CHANNELIZING OR STOP LINES THAT WERE REMOVED OR COVERED DURING THE PAYMENT 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 10 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.

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

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

ITEM 614 WORK ZONE CENTER LINE, CLASS II	15.24	MILE
ITEM 614 WORK ZONE STOP LINE, CLASS I	330	FT.
ITEM 614 WORK ZONE MARKING SIGN	30	EACH
ITEM 614 WORK ZONE CHANNELIZING LINE, CLASS II	340	FT.

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.

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.

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.

TRAFFIC CONTROL INSPECTOR

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

HOLIDAY WORK LIMITATIONS

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

CHRISTMAS
MEMORIAL DAY
LABOR DAY

NEW YEARS
FOURTH OF JULY
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
MONDAY
TUESDAY
WEDNESDAY
THURSDAY
FRIDAY
SATURDAY

12:00N FRIDAY THROUGH 12:00N MONDAY
12:00N FRIDAY THROUGH 12:00N TUESDAY
12:00N MONDAY THROUGH 12:00N WEDNESDAY
12:00N TUESDAY THROUGH 12:00N THURSDAY
12:00N WEDNESDAY THROUGH 12:00N MONDAY
12:00N THURSDAY THROUGH 12:00N MONDAY
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.

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.

ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN

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

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

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

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

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

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DE-ACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK. OUT OF SERVICE FOR MORE THAN 12 HOURS INCLUDING WEEKENDS. 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

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
B SIGN MONTH

LOOP DETECTOR REPLACEMENT

THE CONTRACTOR SHALL CONTACT THE DISTRICT OFFICE (330-786-3146) THREE WORKING DAYS PRIOR TO ANY PLANING OR TRENCHING AT ANY INTERSECTIONS ON THIS PROJECT. LOOP DETECTORS DISTURBED BY PAVEMENT PLANING OR TRENCHING SHALL BE ABANDONED IN PLACE. THE LOOP DETECTOR WIRE WILL BE CUT INTO THE PAVEMENT AFTER THE PROPOSED SURFACE COURSE HAS BEEN PLACED. EACH DETECTOR SHALL BE REPLACED IN KIND, AT THE SAME LOCATION AS EXISTING. THE QUANTITIES LISTED BELOW HAVE BEEN CARRIED TO THE GENERAL SUMMARY. THE NEW LOOP DETECTOR WIRES SHALL BE RUN INTO THE EXISTING CONTROL BOX OR THE EXISTING PULLBOX. INCLUDED IN THIS ITEM IS THE POURED EPOXY TYPE CABLE SPLICE KIT CONFORMING TO 725.15 THAT MUST BE USED IN MAKING THESE CONNECTIONS.

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

ITEM 632 DETECTOR LOOP

8 EACH

(4 - 6' X 40')
(4 - 8' X 6')

ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR)

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

DURING THE PERFORMANCE OF WORK ON SR 43 BETWEEN SLM 2.69 TO SLM 2.84.

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

THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THESE SERVICES WITH:

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

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

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

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR 80 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.

I:\Projects\24505_POR-43-0.00\24505gg.dgn 08-DEC-2004 4:17PM ndar

SHEET NUMBER													ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
5	7	8	15	16	17	28	30	32	38	39	40	48						
ROADWAY																		
													201	11000	LUMP		CLEARING AND GRUBBING	
								2					202	20010	2	EACH	HEADWALL REMOVED	
					240								202	23500	240	SQ YD	WEARING COURSE REMOVED	
							1162						202	32000	1162	FT	CURB REMOVED	
							119	401					202	35100	520	FT	PIPE REMOVED, 24" AND UNDER	
							48						202	35200	48	FT	PIPE REMOVED, OVER 24"	
									1162.5	5325	387.5		202	38000	6875	FT	GUARDRAIL REMOVED	
									13	17	22		202	42000	52	EACH	ANCHOR ASSEMBLY REMOVED, TYPE A	
												600	202	54000	600	EACH	RPM REMOVED AND DISPOSED	
							9						202	58100	9	EACH	CATCH BASIN REMOVED	
	100						311	5					203	10000	416	CU YD	EXCAVATION	
							180						203	20000	180	CU YD	EMBANKMENT	
2055								3					203	40001	2058	CU YD	BORROW, AS PER PLAN	5
						427	539						204	10000	966	SQ YD	SUBGRADE COMPACTION	
		93											209	15001	93	STATION	RESHAPING UNDER GUARDRAIL, AS PER PLAN	8
	6												604	38501	6	EACH	MONUMENT ASSEMBLY, AS PER PLAN	7
									787.5	5562.5	1075		606	13000	7425	FT	GUARDRAIL, TYPE 5	
									1		1		606	22000	2	EACH	ANCHOR ASSEMBLY, TYPE B-98	
									6	15	17		606	22010	38	EACH	ANCHOR ASSEMBLY, TYPE E-98	
									1		2		606	26500	3	EACH	ANCHOR ASSEMBLY, TYPE T	
EROSION CONTROL																		
5001							1955						659	10000	6956	SQ YD	SEEDING AND MULCHING	
.54													659	20000	0.54	TON	COMMERCIAL FERTILIZER	
1.04													659	31000	1.04	ACRE	LIME	
28													659	35000	28	M GAL	WATER	
DRAINAGE																		
							90						603	00406	90	FT	4" CONDUIT, TYPE F	
							33						603	05900	33	FT	15" CONDUIT, TYPE B, 707.42	
							464						603	06100	464	FT	15" CONDUIT, TYPE C	
								68					603	07400	68	FT	18" CONDUIT, TYPE B, 706.02	
								130					603	10400	130	FT	24" CONDUIT, TYPE B, 706.02	
								1029					603	10600	1029	FT	24" CONDUIT, TYPE C, 707.42	
							48						603	11900	48	FT	27" CONDUIT, TYPE B, 706.02	
							4						604	00400	4	EACH	CATCH BASIN, NO. 3	
							10						604	04500	10	EACH	CATCH BASIN, NO. 2-2B	
								7					604	04900	7	EACH	CATCH BASIN, NO. 2-3	
	5												604	20601	5	EACH	INLET ADJUSTED TO GRADE, AS PER PLAN	7
500													604	50000	500	POUNDS	MISCELLANEOUS METALS	
							1528						605	05100	1528	FT	4" SHALLOW PIPE UNDERDRAINS	

GENERAL SUMMARY

POR-43-0.00

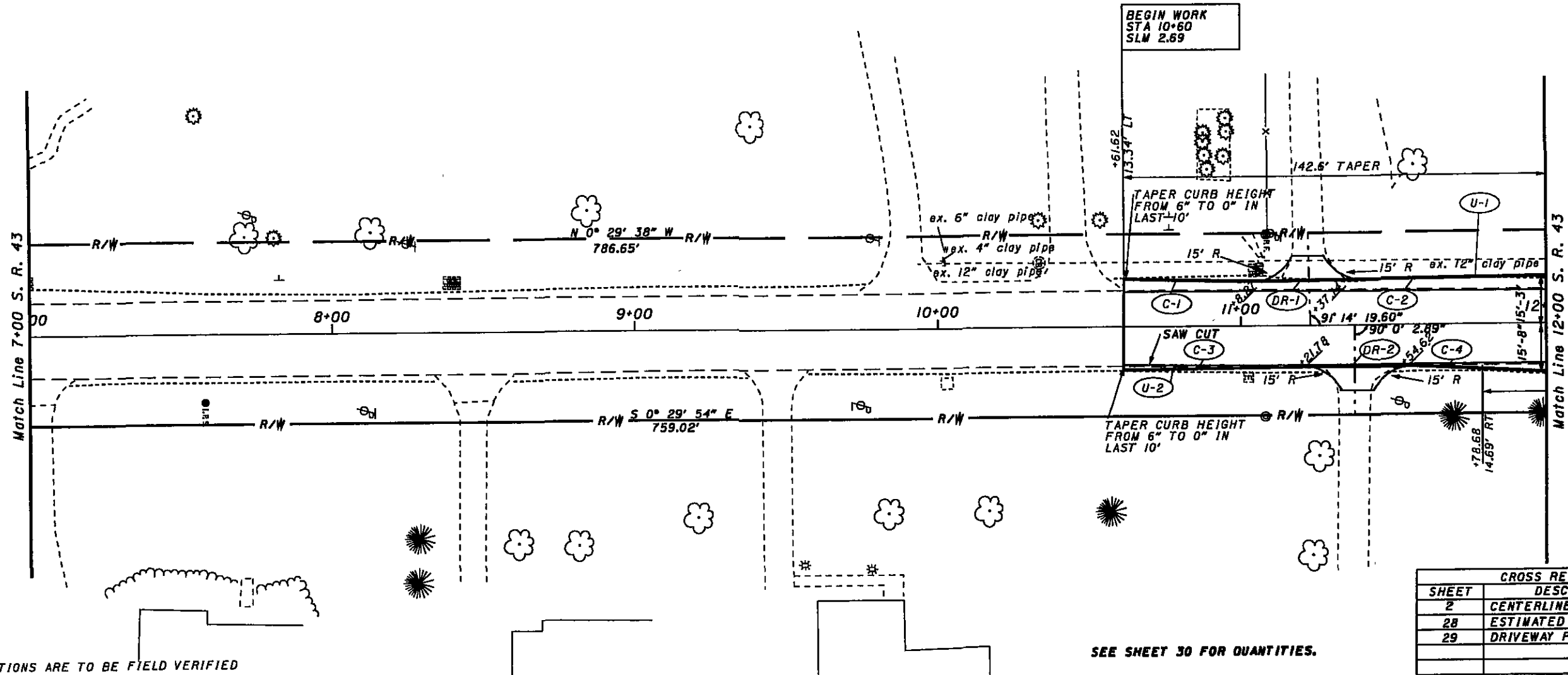
SHEET NUMBER													ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
7	8	15	16	17	28	30	38	39	40	42	48	52						
PAVEMENT																		
5500													251	01000	5500	SQ YD	PARTIAL DEPTH PAVEMENT REPAIR	
100													253	01000	100	SQ YD	PAVEMENT REPAIR	
		44956	41844	45852		3322							254	01000	132652	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE	
5						135							301	46000	140	CU YD	ASPHALT CONCRETE BASE, PG64-22	
100					93	92							304	20000	285	CU YD	AGGREGATE BASE	
2		6743	6278	6878		516							407	10000	20417	GALLON	TACK COAT	
						177							407	14000	177	GALLON	TACK COAT FOR INTERMEDIATE COURSE	
					171								408	10000	171	GALLON	PRIME COAT	
3		1874	1745	1911		120							446	47020	5653	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22	
						169							448	46020	169	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22	
					18								448	46024	18	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22 (DRIVEWAYS)	
145					39								448	48020	184	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)	
	120												448	46061	120	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, UNDER GUARDRAIL, PG64-22, AS PER PLAN	
						1616							609	26000	1616	FT	CURB, TYPE 6	
		333	314	340									617	10101	987	CU YD	COMPACTED AGGREGATE, TYPE A, AS PER PLAN	
TRAFFIC CONTROL																		
											609		621	00100	609	EACH	RPM	
					16	71	31						626	00100	118	EACH	BARRIER REFLECTOR, TYPE A	
												106	630	02100	106	FT	GROUND MOUNTED SUPPORT, NO. 2 POST	
												1662.25	630	03100	1662.25	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
												876.5	630	80100	876.5	SQ FT	SIGN, FLAT SHEET	
												168	630	84900	168	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
												154	630	86002	154	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
										15.10			646	10000	15.10	MILE	EDGE LINE	
										7.62			646	10200	7.62	MILE	CENTER LINE	
										170			646	10300	170	FT	CHANNELIZING LINE	
										165			646	10400	165	FT	STOP LINE	
										2			646	20110	2	EACH	SCHOOL SYMBOL MARKING, 96"	
										4			646	20300	4	EACH	LANE ARROW	

GENERAL SUMMARY

POR - 43 - 0.00

1356

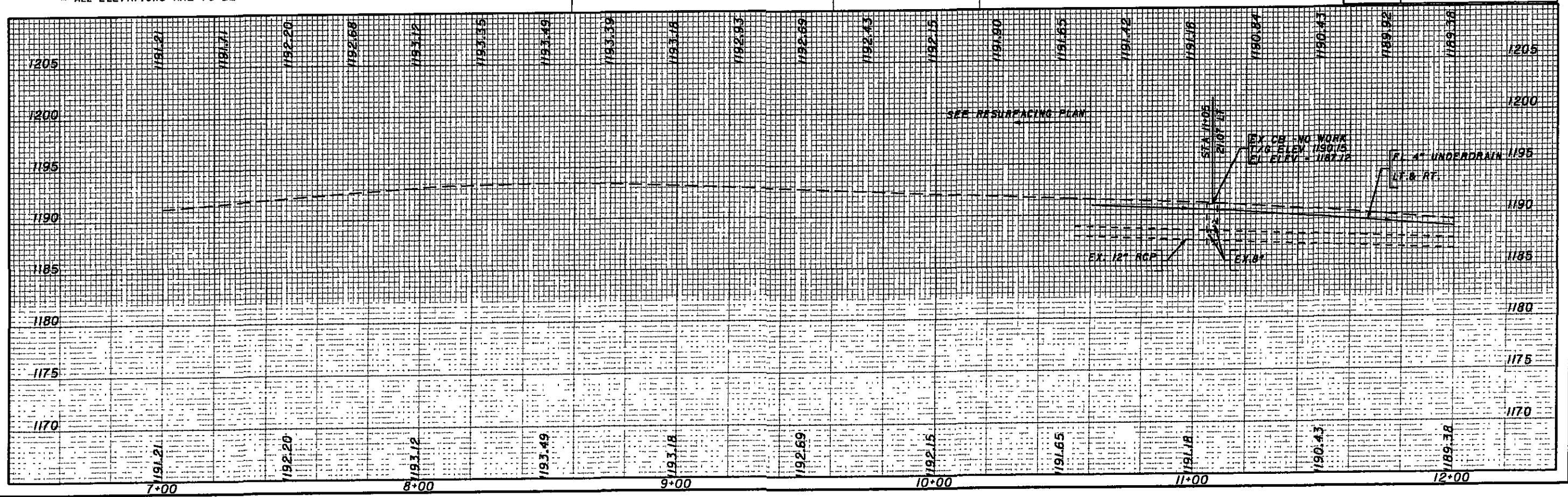
[illegible]



* ALL ELEVATIONS ARE TO BE FIELD VERIFIED

SEE SHEET 30 FOR QUANTITIES.

CROSS REFERENCES	
SHEET	DESCRIPTION
2	CENTERLINE REFERENCES
28	ESTIMATED QUANTITIES
29	DRIVEWAY PROFILES



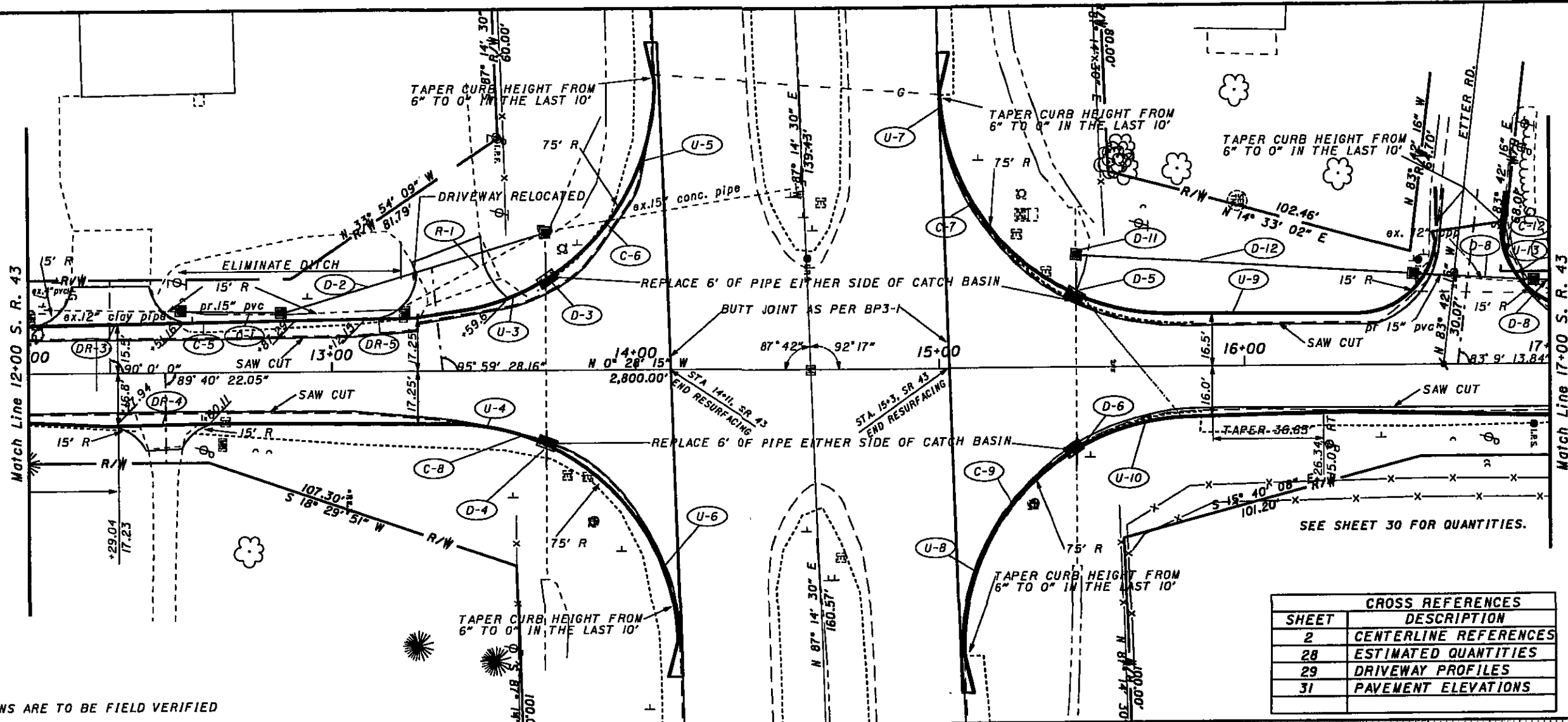
HORIZONTAL SCALE IN FEET

CALCULATED N/D CHECKED M/JH

PLAN AND PROFILE

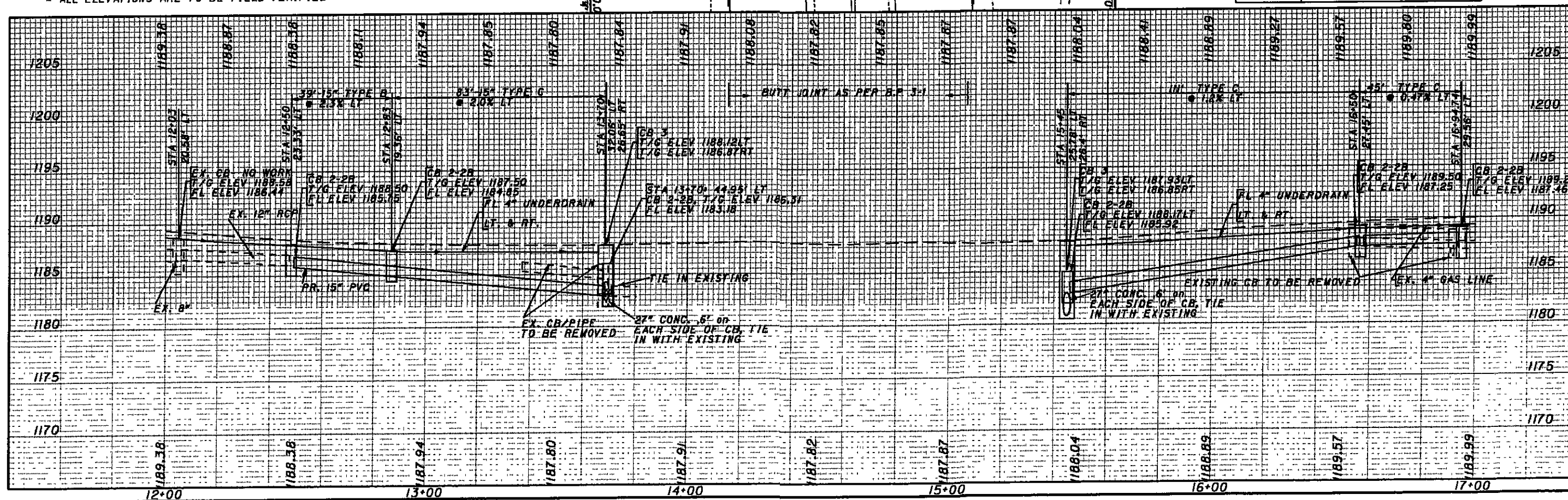
POR-43-0.00

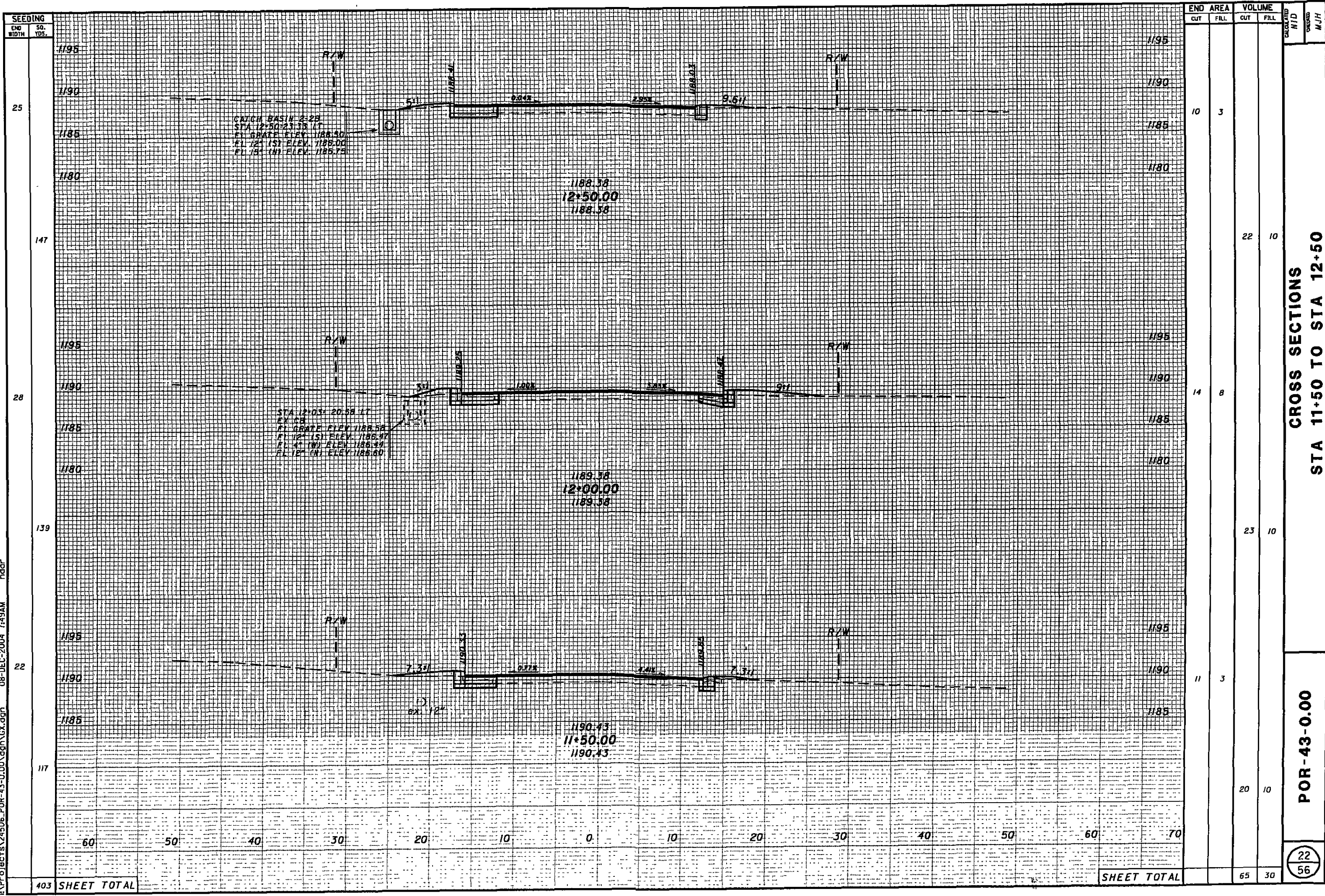
18/56



* ALL ELEVATIONS ARE TO BE FIELD VERIFIED

CROSS REFERENCES	
SHEET	DESCRIPTION
2	CENTERLINE REFERENCES
28	ESTIMATED QUANTITIES
29	DRIVEWAY PROFILES
31	PAVEMENT ELEVATIONS

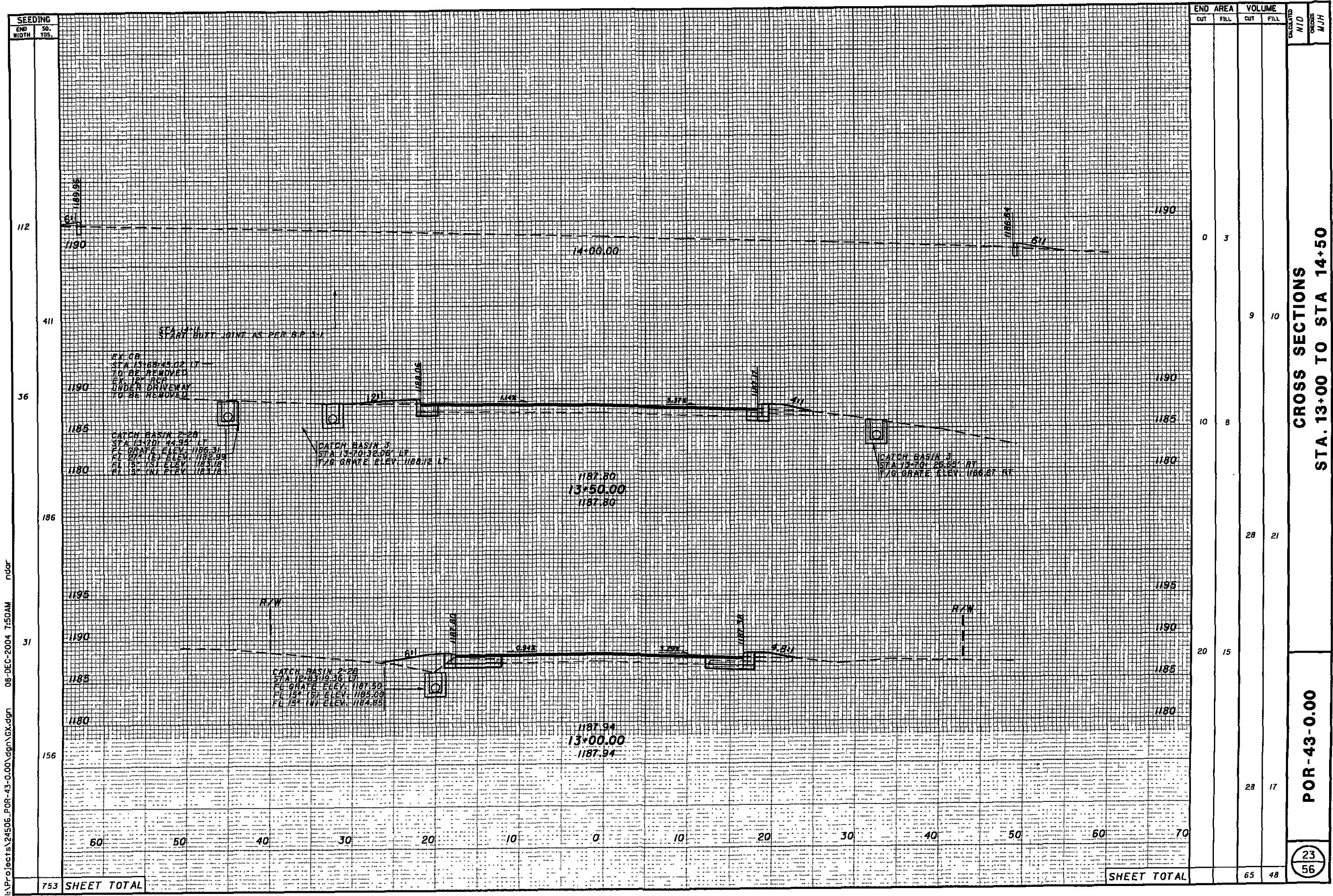


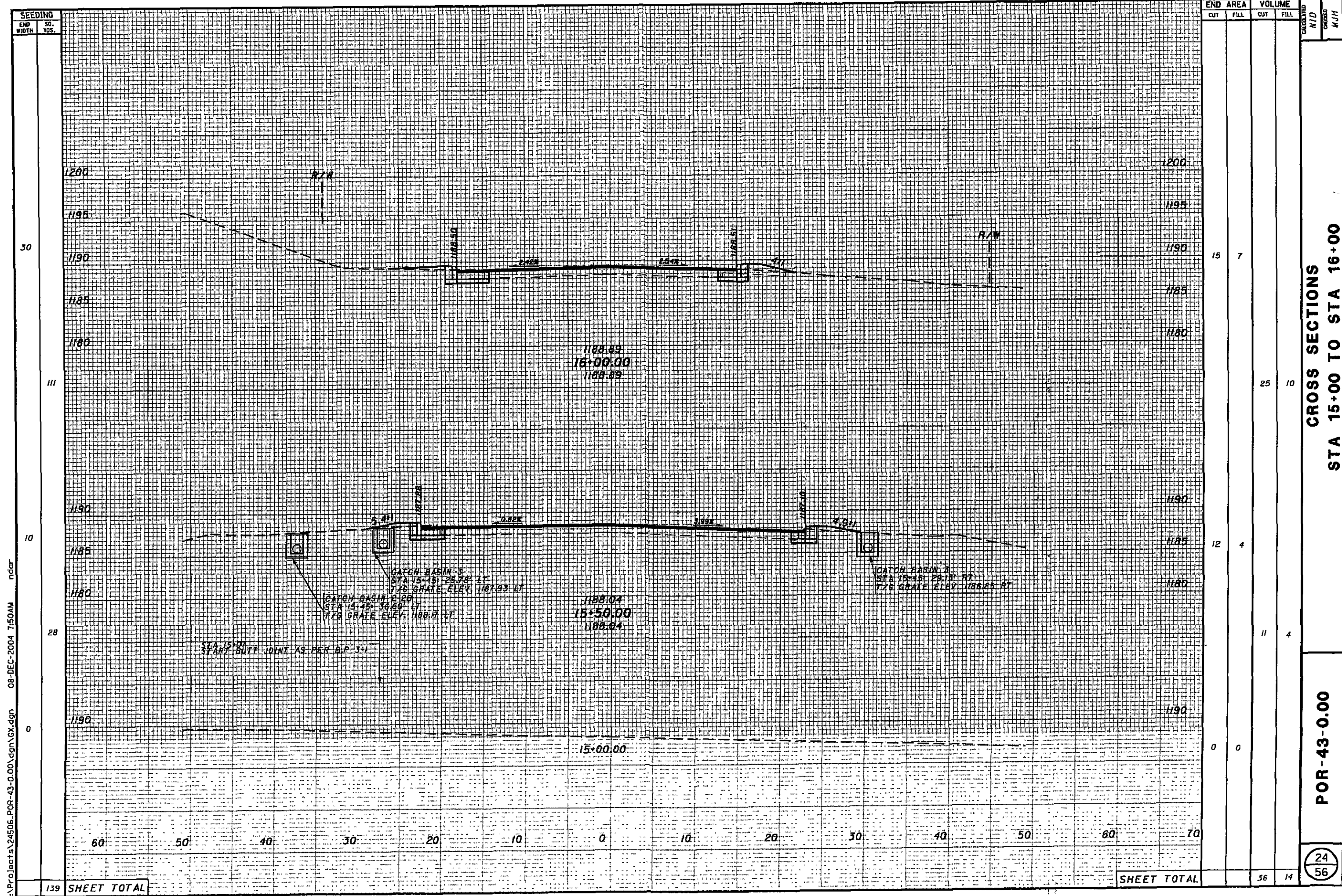


CROSS SECTIONS
STA 11+50 TO STA 12+50

POR-43-0.00

22
56





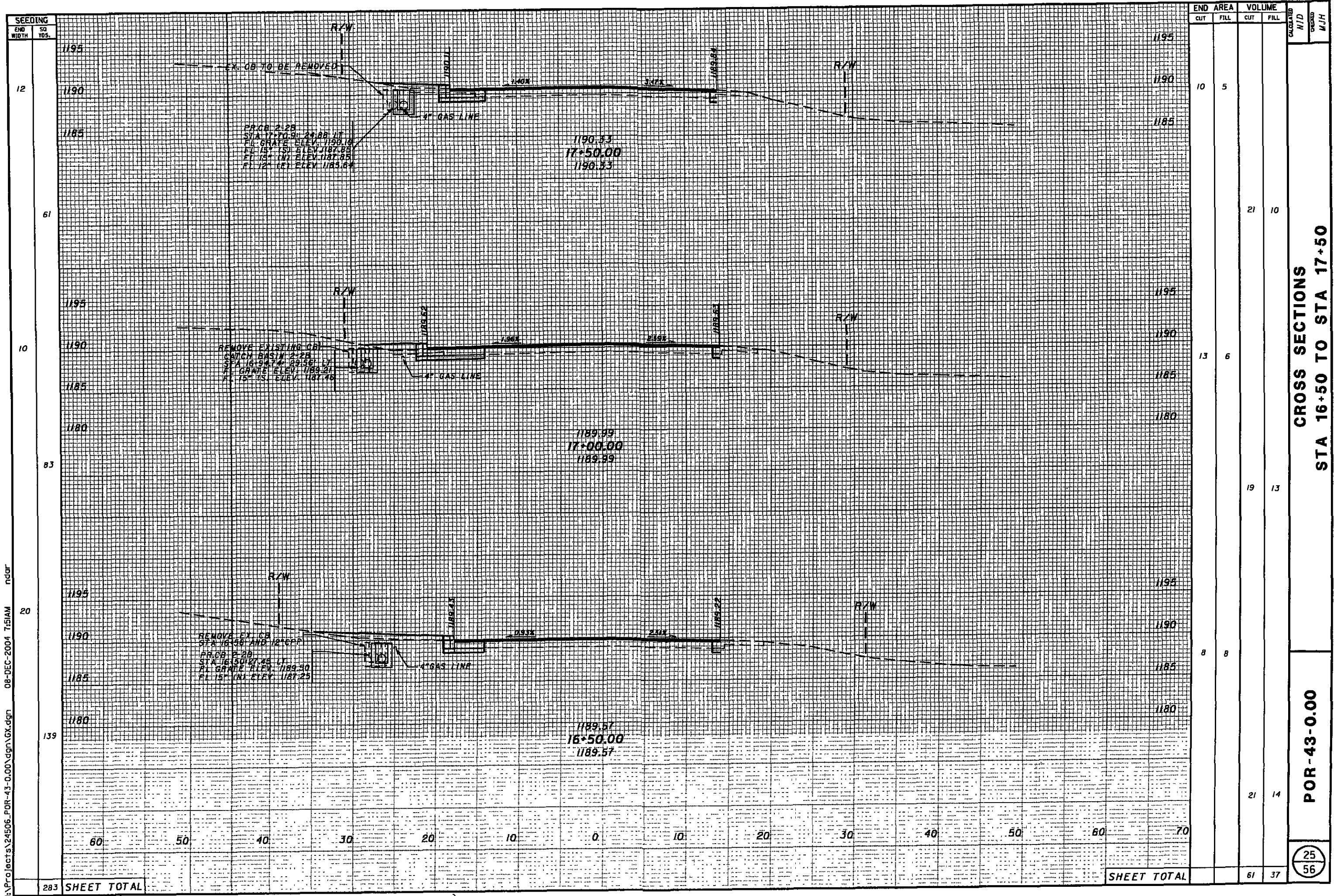
SEEDING
END WIDTH SO. YOS.
30
10
28
0
139 SHEET TOTAL

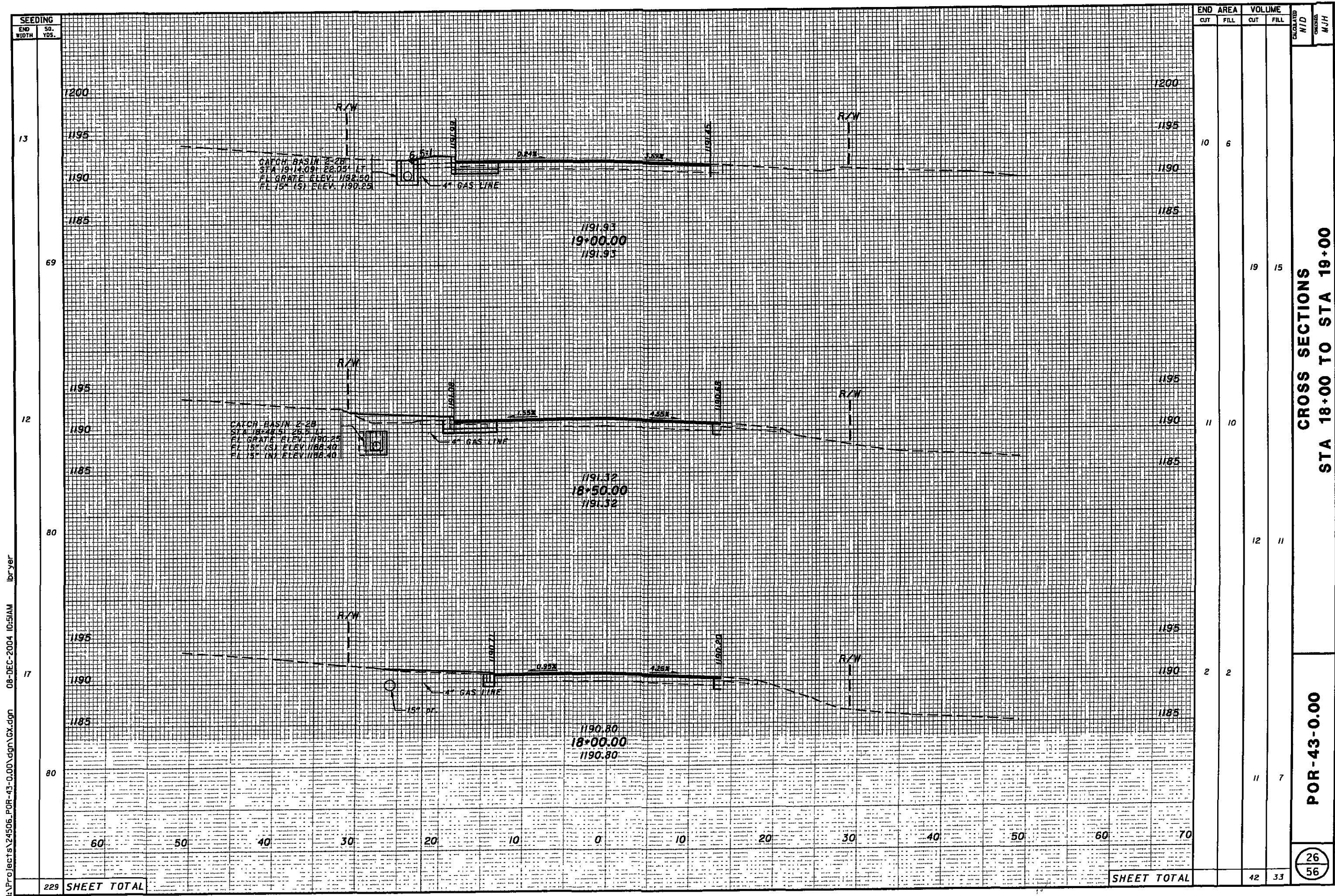
END AREA		VOLUME		CALCULATED N/D	CHECKED M/JH
CUT	FILL	CUT	FILL		
15	7	25	10		
12	4	11	4		
0	0				
36	14				

CROSS SECTIONS
STA 15+00 TO STA 16+00

POR-43-0.00

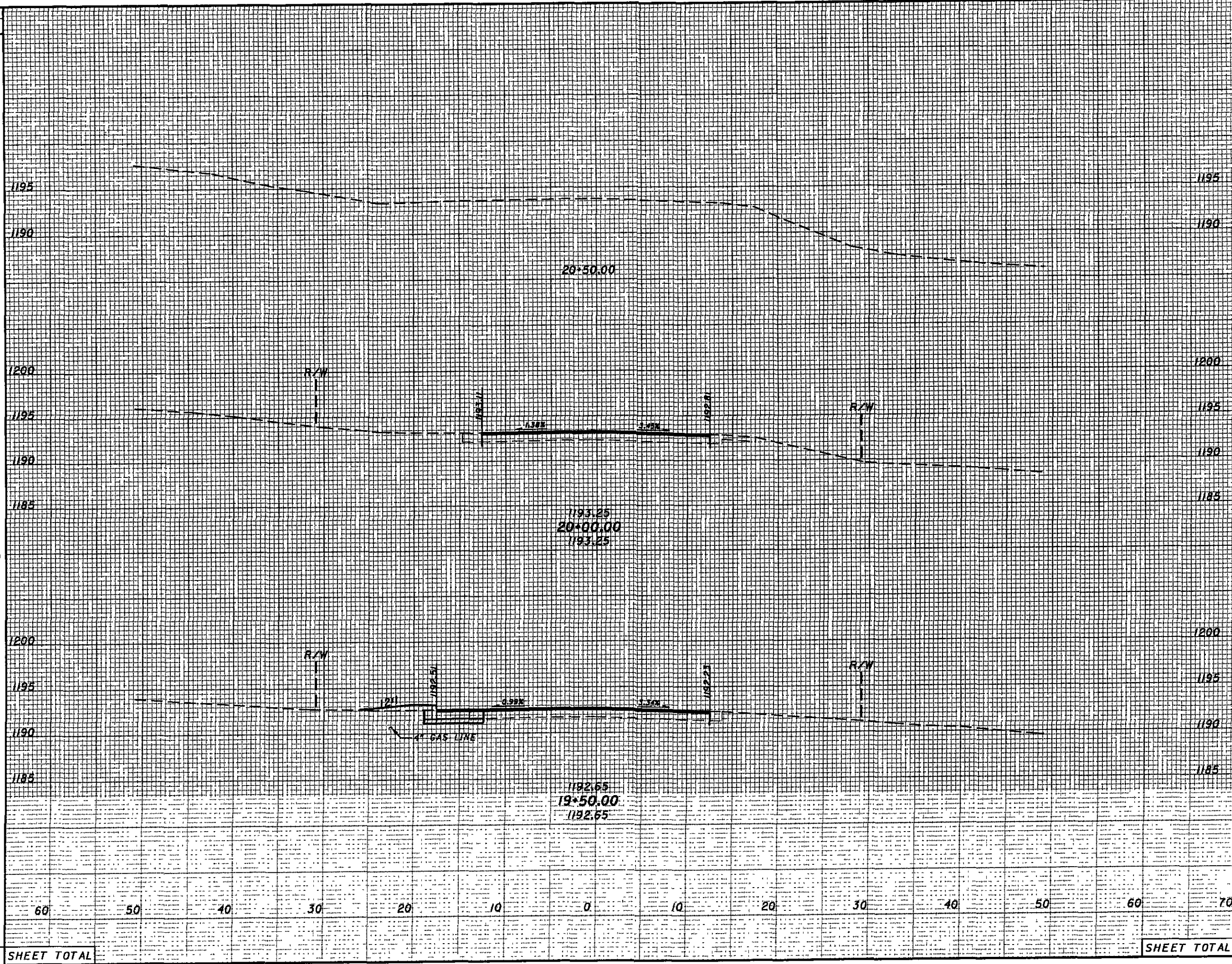
24
56





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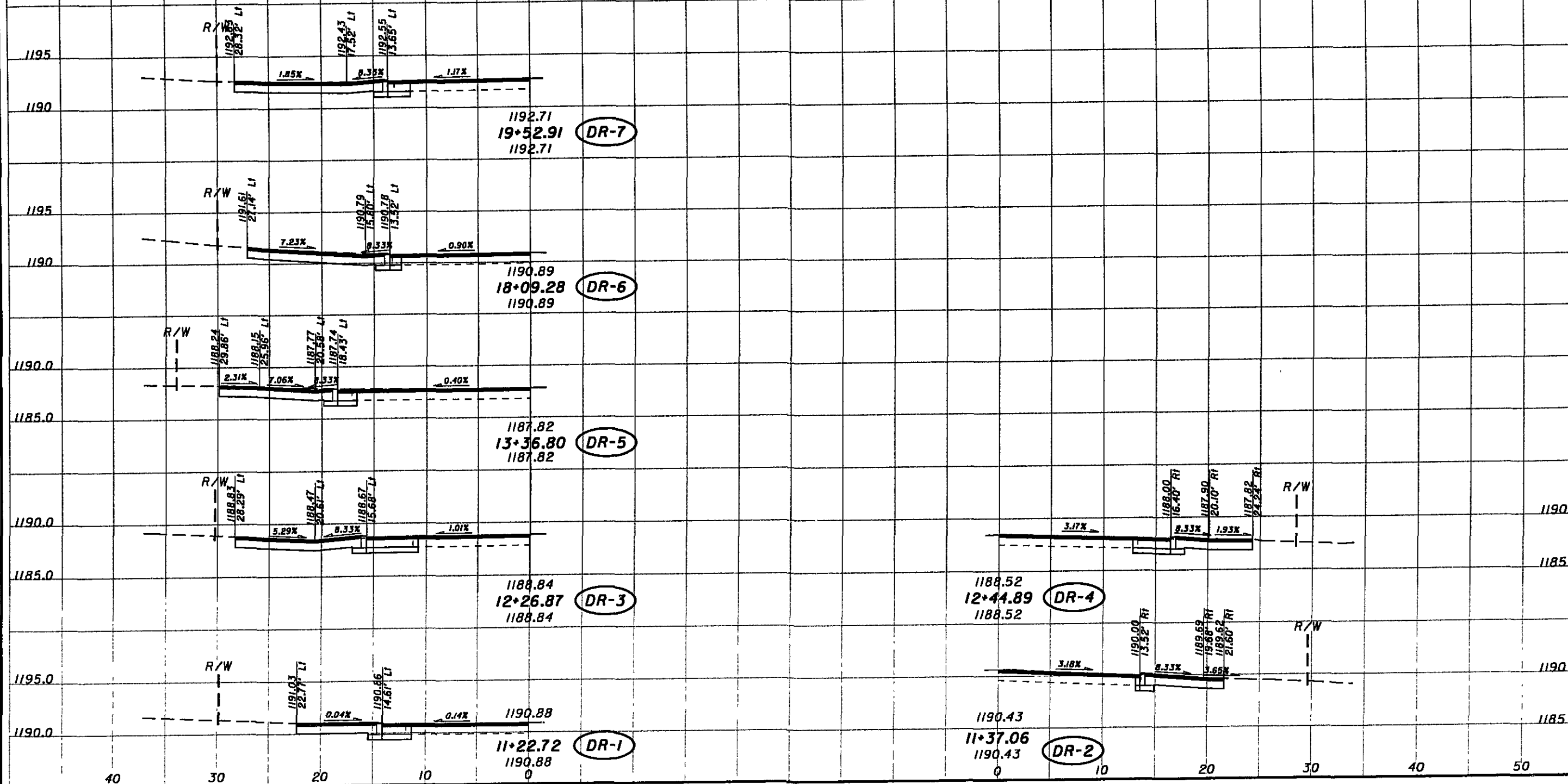
SEEDING	
END WIDTH	SO. YDS.
0	
250	
575	
825	

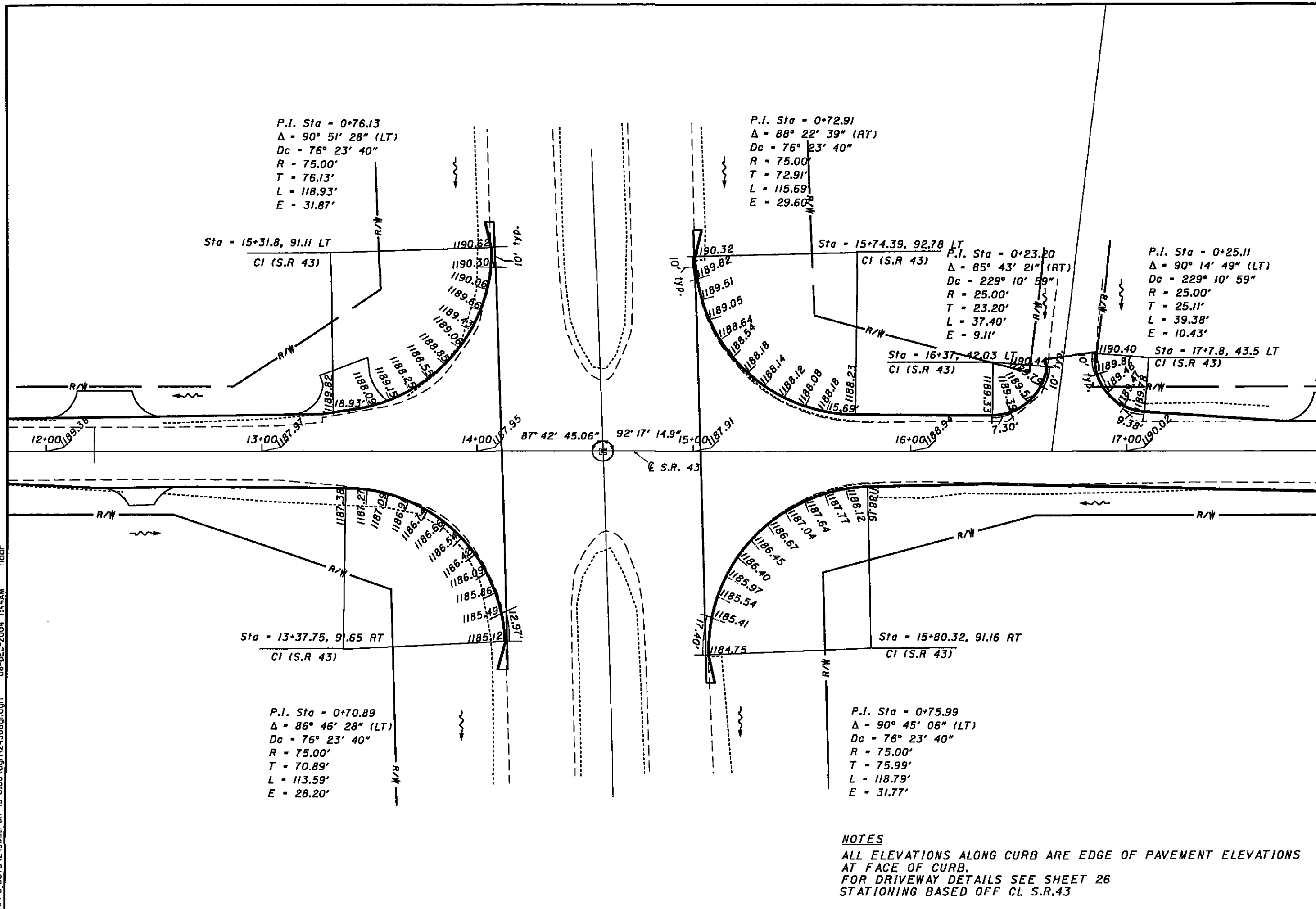


END AREA		VOLUME		CALCULATED N/D	CHECKED M/JH
CUT	FILL	CUT	FILL		
0	0	9	3	19	8
SHEET TOTAL		28	11	27	56

CROSS SECTIONS
STA 19+50 TO STA 20+50

POR-43-0.00





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ndor
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SHEET

REFERENCE

STATIONS

BEGIN

END

SIDE

PIPE
REMOVED,
UNDER 24"

HEAD-
WALL
REMOVED

EXCAVATION

BORROW
AS PER PLAN

CATCH
BASIN
NO. 2-3

24" CONDUIT,
TYPE B
706.02

24" CONDUIT,
TYPE C
707.42

18" CONDUIT,
TYPE B
706.02

FEET

EACH

CU. YDS.

CU. YDS.

EACH

FEET

FEET

FEET

32a

64

5

3

33

D-1

0+60

1+21.50

RT

62

62

33

D-2

1+21.50

1+21.50

RT

8

8

33

D-3

1+21.50

3+21.50

RT

1

200

33

D-4

3+21.50

5+41.50

RT

1

220

33

R-1

3+31

4+37

RT

106

34

D-5

5+41.50

6+20

RT

1

79

34

D-6

6+20

8+85

RT

1

265

34

D-7

8+85

11+50

RT

1

265

34

R-2

5+47

5+96

RT

49

34

R-3

8+09

RT

52

1

35

D-8

11+50

LT/RT

2

60

35

R-4

11+50

LT/RT

60

1

CARRIED TO GENERAL SUMMARY

401

2

5

3

7

130

1029

68

0

20

40

1" = 20'

HORIZONTAL
SCALE IN FEET

CALCULATED

N/D

08/05

M/JH

POR-43-0.00

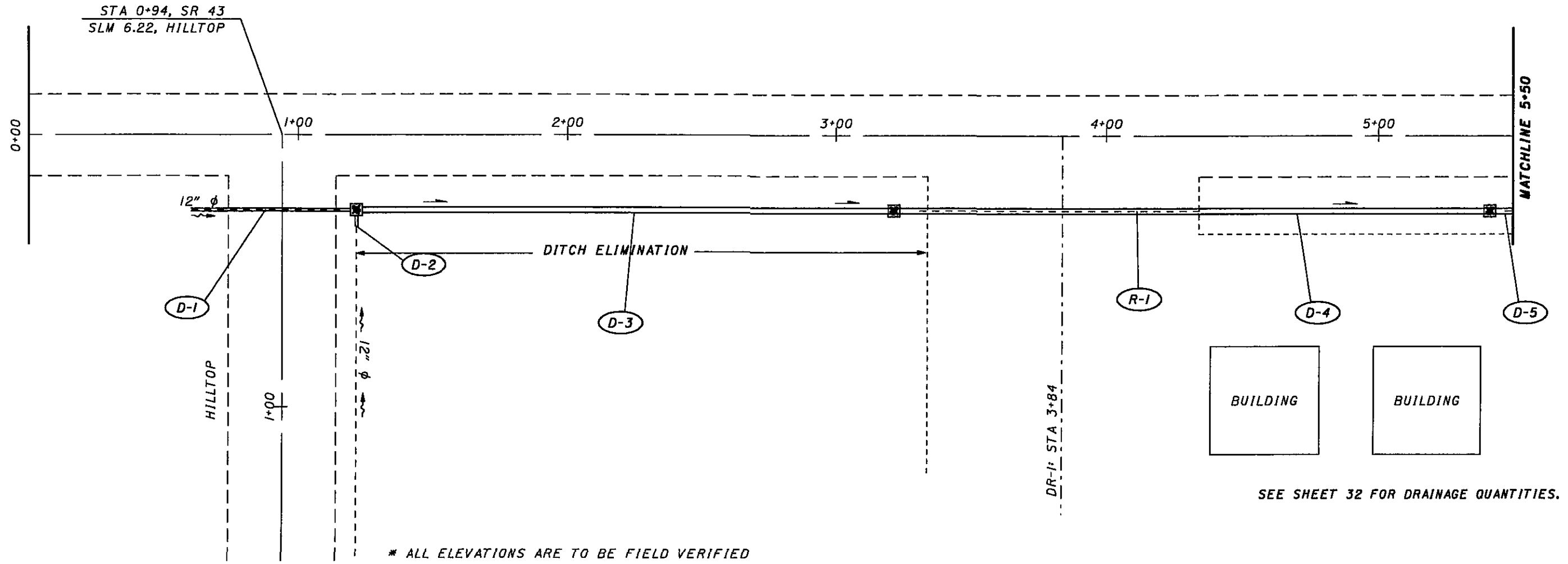
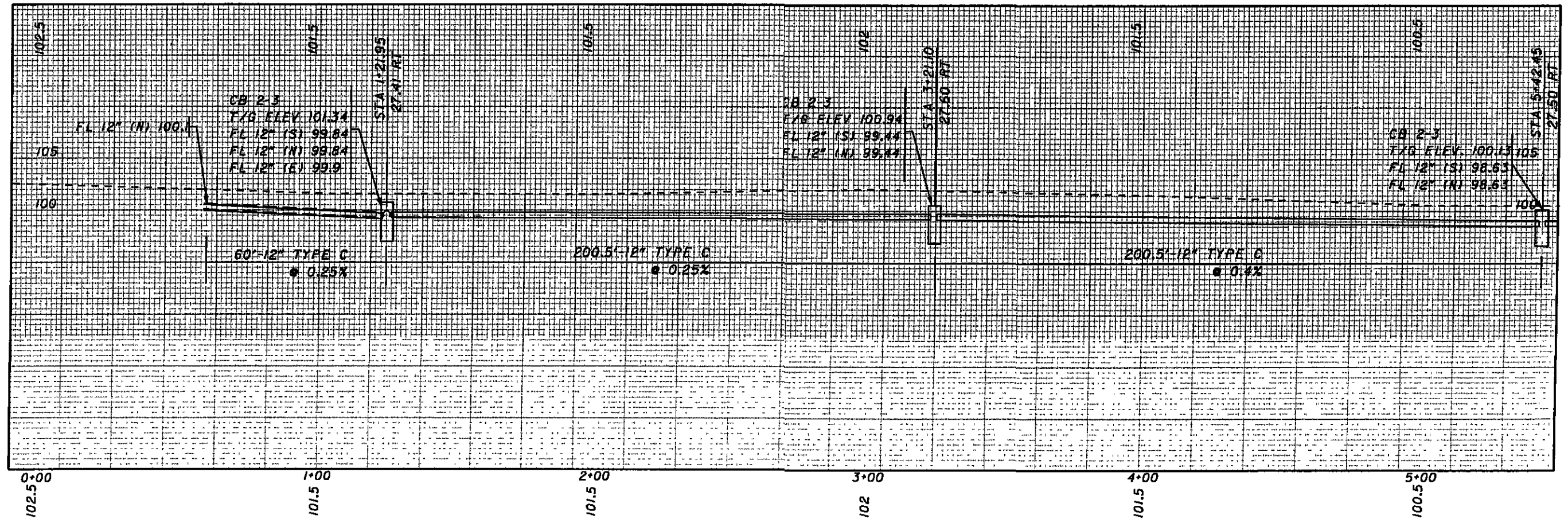
32
56

CULVERT REPLACEMENT SUMMARY SHEET

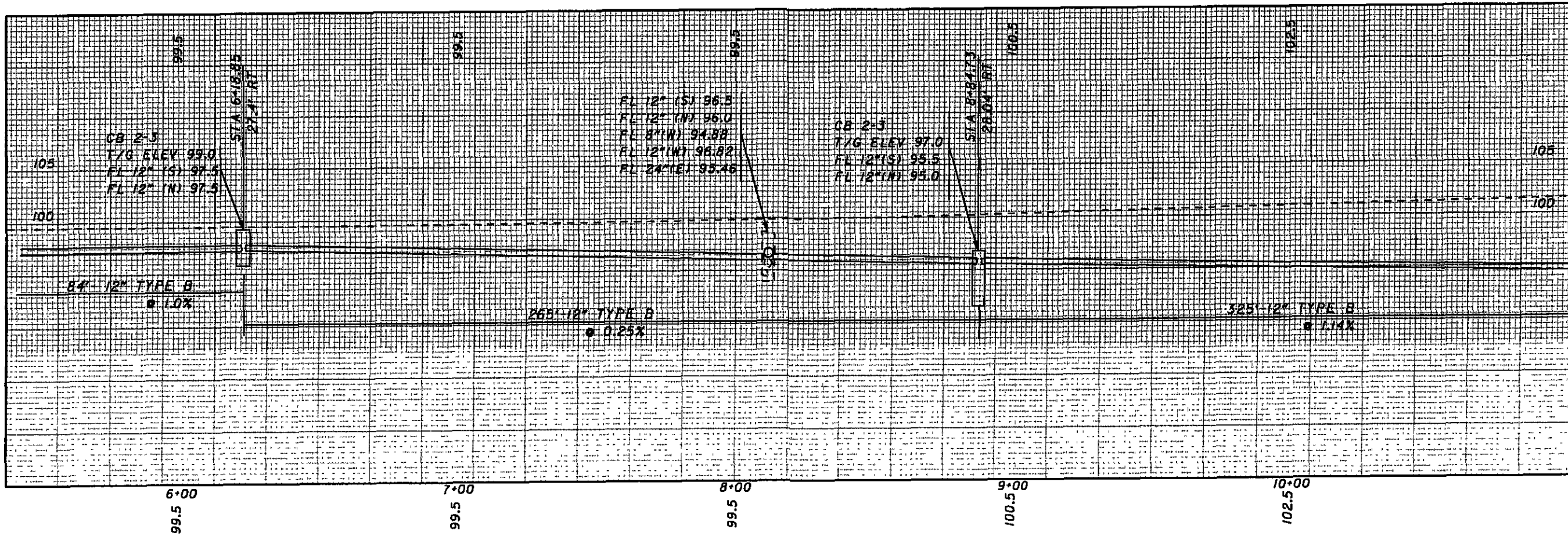
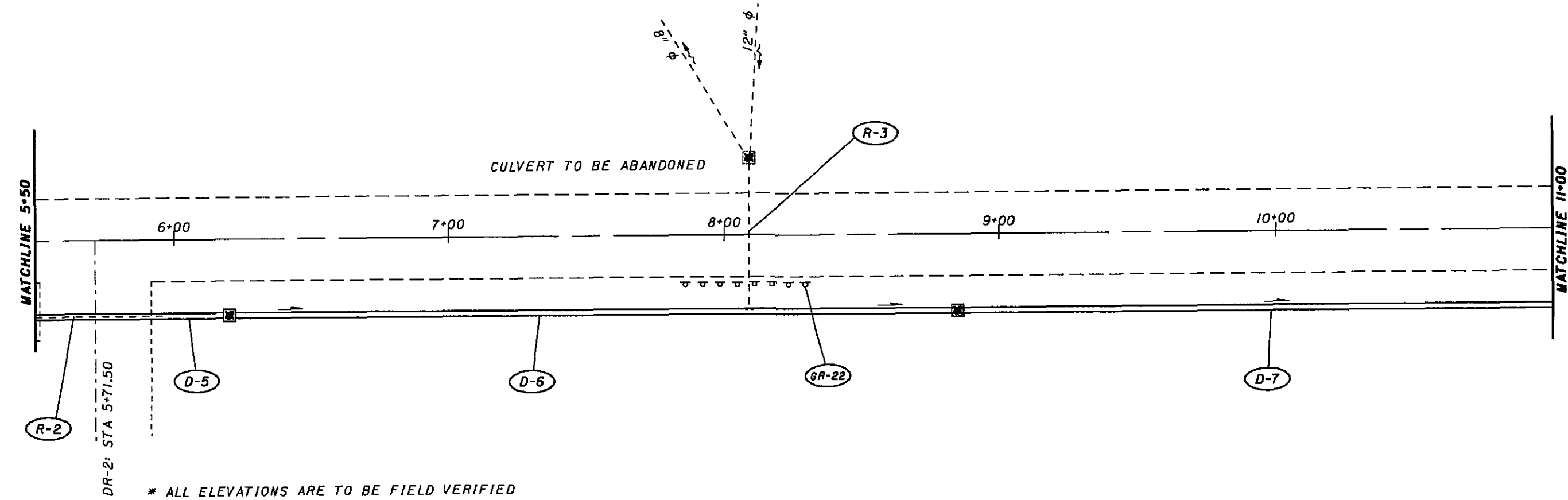
SLM 6.22 TO 6.44

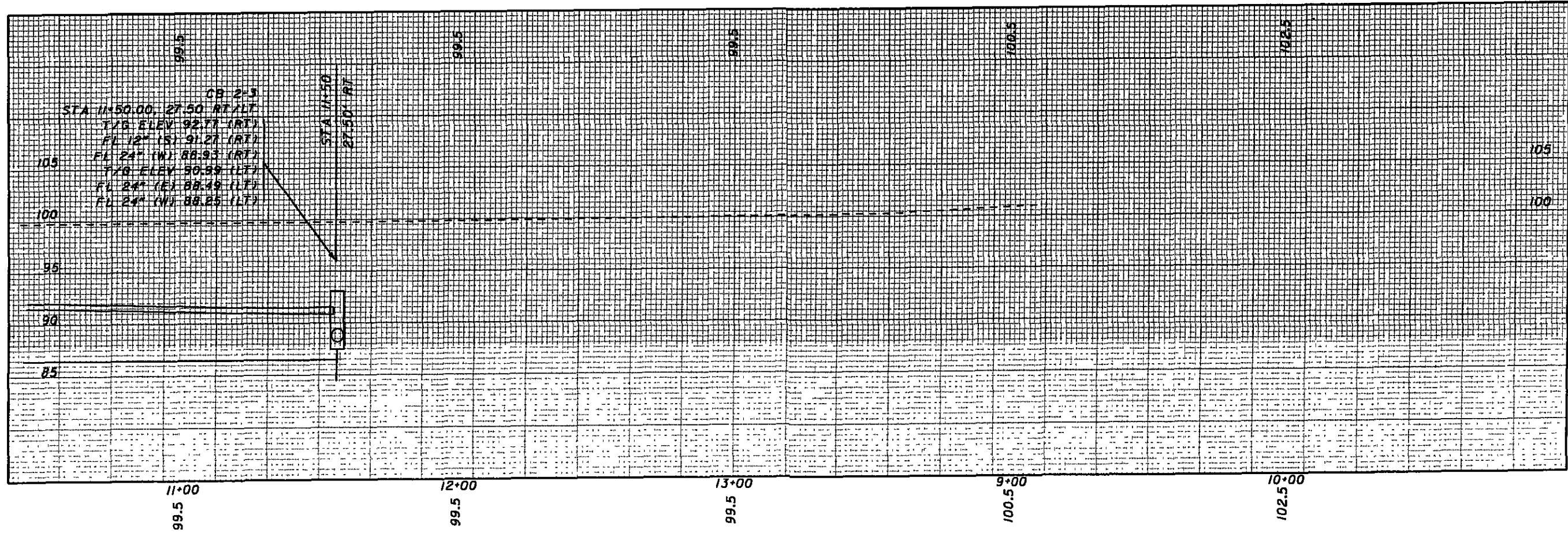
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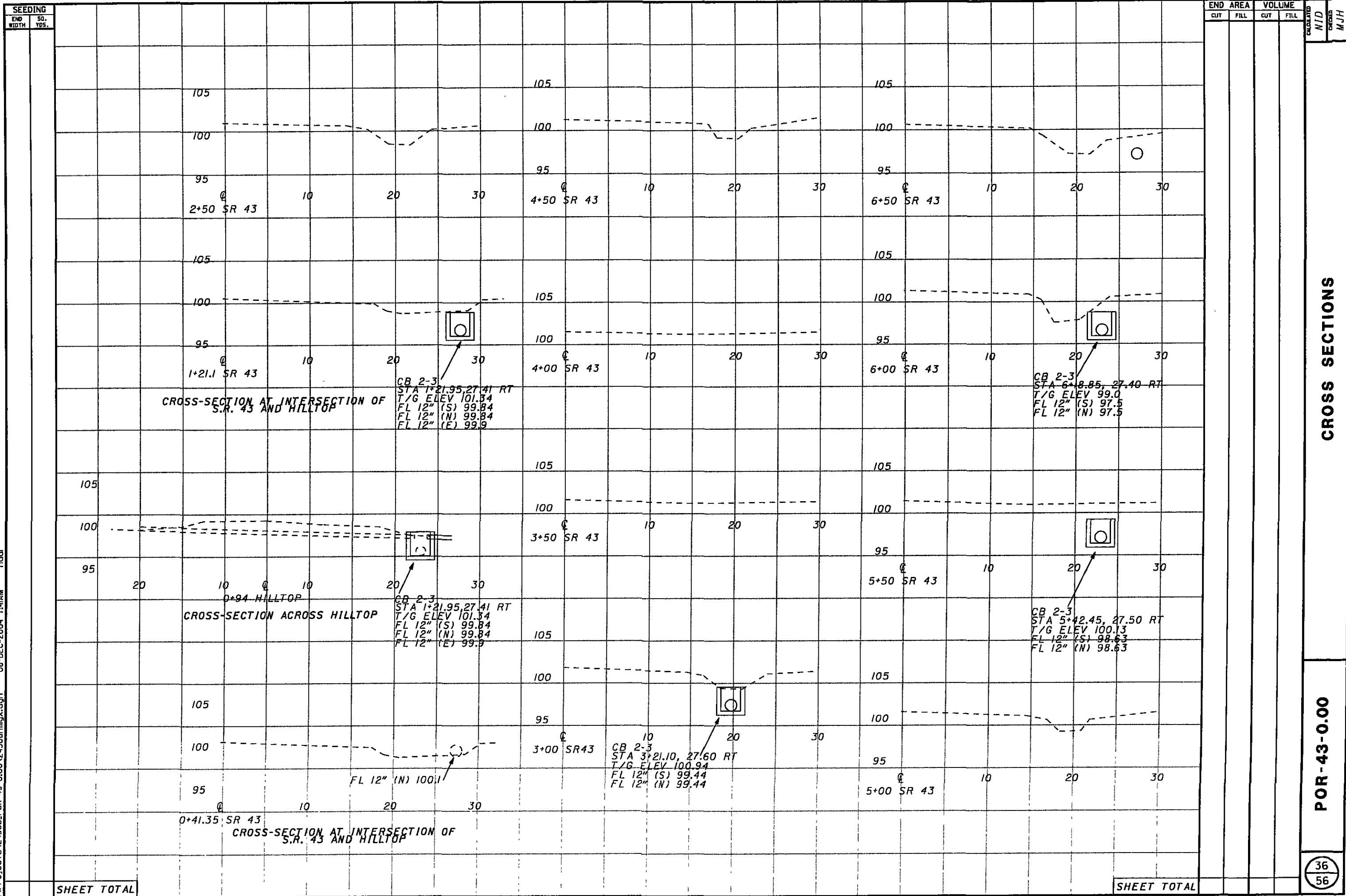


SEE SHEET 32 FOR DRAINAGE QUANTITIES.





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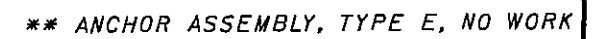


CROSS SECTIONS

POR-43-0.00

36
56

37
56



SEE SHEET 41 FOR GUARDRAIL DETAILS.

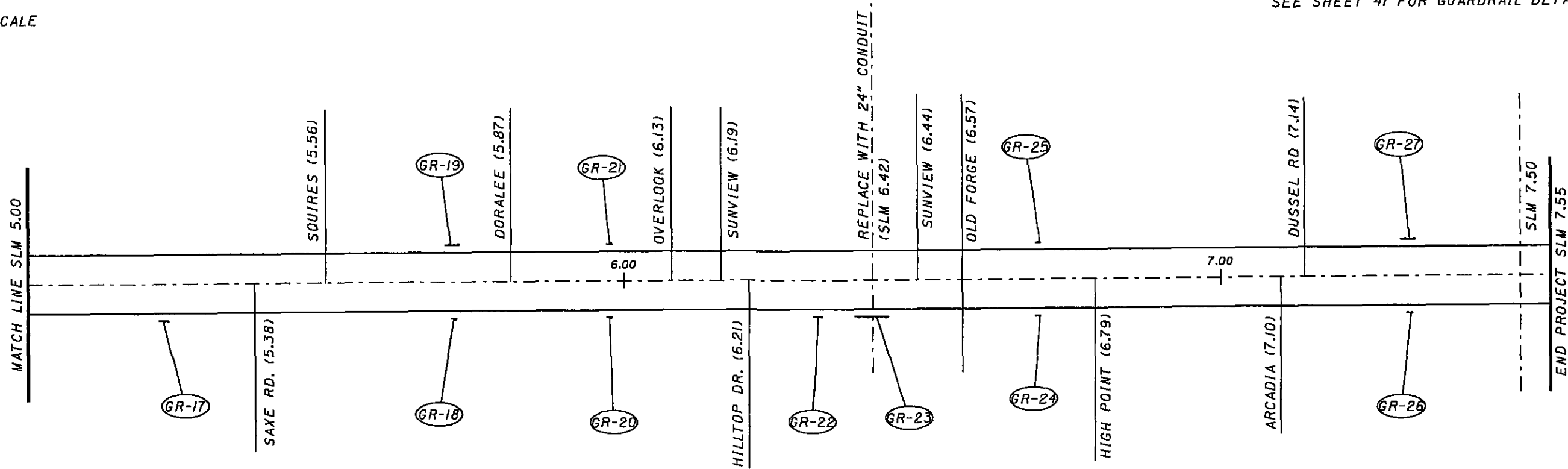
ndar	08-DEC-2004 7:14AM	24506gr.dgn	ndar

GUARDRAIL PLAN SML 2.50 TO 5.00

POR-43-0.00

NOT TO SCALE

SEE SHEET 41 FOR GUARDRAIL DETAILS.

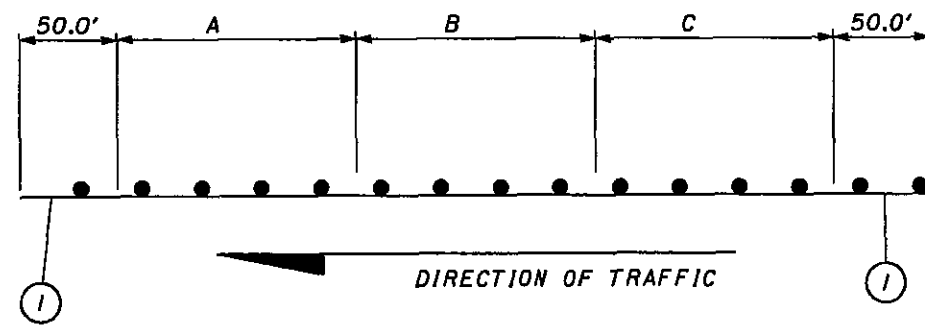


GUARDRAIL SUB-SUMMARY

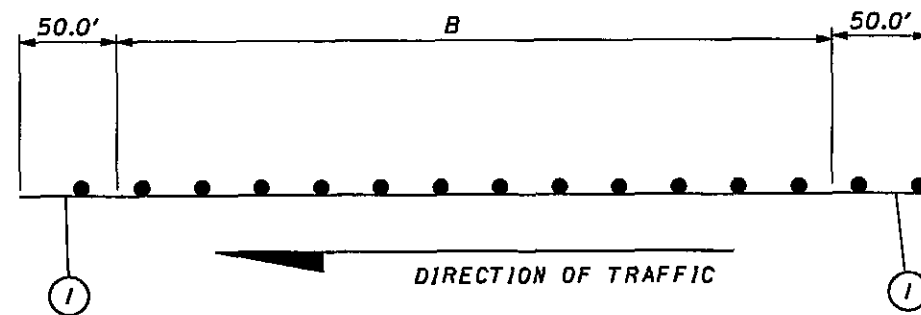
REFERENCE	LOCATION		SIDE	DETAIL	202		606						626	
					GUARDRAIL REMOVED	ANCHOR ASSEMBLY REMOVED, TYPE A	GUARDRAIL, TYPE 5				ANCHOR ASSEMBLY, TYPE E-98	ANCHOR ASSEMBLY, TYPE B-98	ANCHOR ASSEMBLY, TYPE T	BARRIER REFLECTOR, TYPE A
	BEGIN SLM	END SLM					A	B	C	TOTAL				
					FEET	EACH	FEET	FEET	FEET	FEET	EACH	EACH	EACH	EACH
GR-17	5.22	5.23	RT	1	25.0	2	50.0	25.0	12.5	87.5	2			3
GR-18	5.71	5.72	RT	1	62.5	2		62.5	12.5	75.0	2			3
GR-19	5.70	5.72	LT	1	62.5	2	12.5	62.5		75.0	2			3
GR-20	5.98	5.98	RT	4	25.0	2	100.0	25.0		125.0	1		1	3
GR-21	5.97	5.98	LT	5	25.0	2	62.5	25.0	37.5	125.0	1	1		3
GR-22	6.32	6.33	RT		25.0	2								
GR-23	6.41	6.42	RT	6	37.5	2	50.0	12.5	50.0	112.5	2			3
GR-24	6.70	6.70	RT	1	25.0	2	62.5	25.0	25.0	112.5	2			3
GR-25	6.69	6.70	LT	1	25.0	2	62.5	25.0	50.0	137.5	2			3
GR-26	7.31	7.32	RT	4	12.5	2	25.0	12.5	12.5	50.0	1		1	3
GR-27	7.30	7.32	LT	1	62.5	2	62.5	62.5	50.0	175.0	2			4
*THIS SHEET TOTAL					387.5	22				1075.0	17	1	2	31

GUARDRAIL PLAN SLM 5.00 TO 7.55

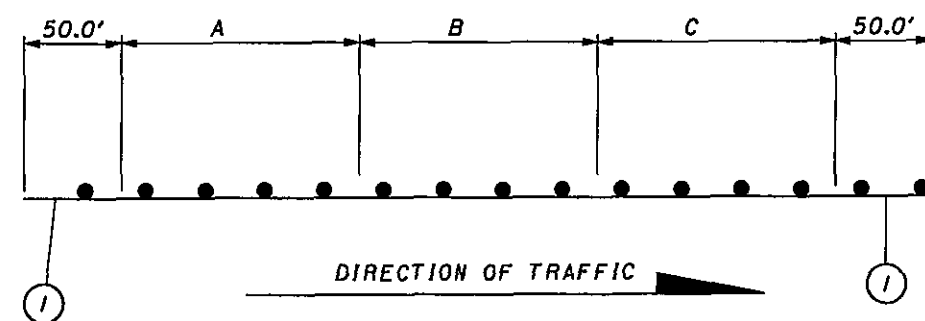
POR-43-0.00



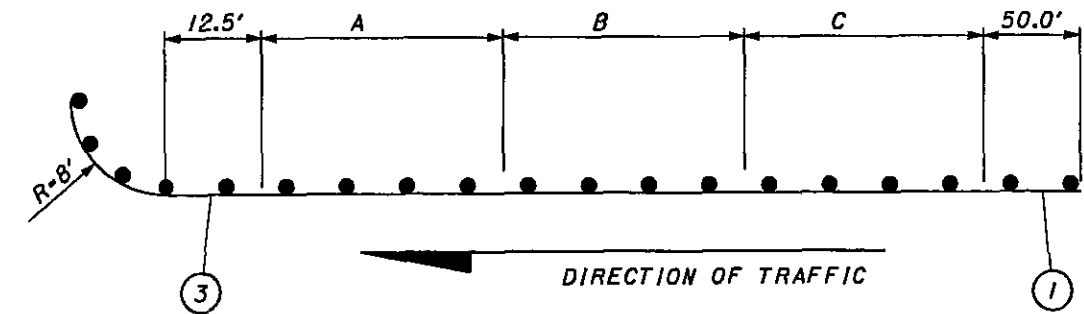
DETAIL 1



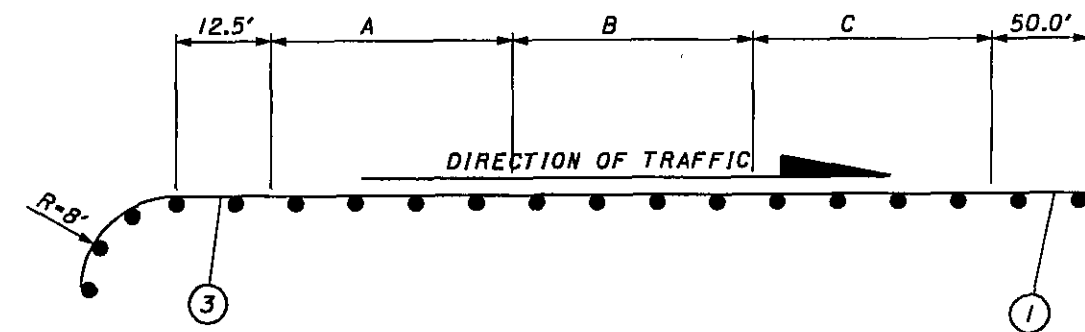
DETAIL 2



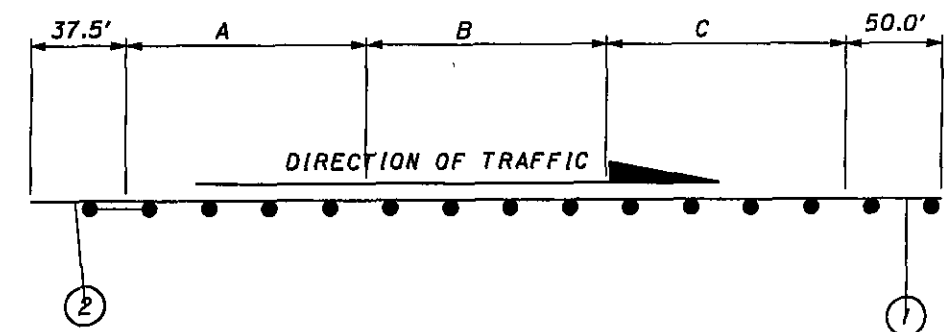
DETAIL 6



DETAIL 3



DETAIL 4



DETAIL 5

LEGEND:

- ① ANCHOR ASSEMBLY, TYPE E-98
- ② ANCHOR ASSEMBLY, TYPE B-98
- ③ ANCHOR ASSEMBLY, TYPE T

NOT TO SCALE

GENERAL SPEC. 640
MATERIAL TYPE

PLAN No.	TJD
	CHECKED

PAVEMENT MARKING SUB-SUMMARY

POH-43-0.00

42
56

\\projects\24506_POR-43-0,00\24506pm2.dgn	09-DEC-2004 8:56AM	jcramer
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ON

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

Yellow: Solid 1.354 Dash 0.455 Yellow: Solid 1.663 Dash 0.595 Yellow: Solid 1.752 Dash 0.196
TOTAL YELLOW THIS PAGE: SOLID 4.761, DASH 1.246, EQUIVALENT LINE 5.072

① N

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

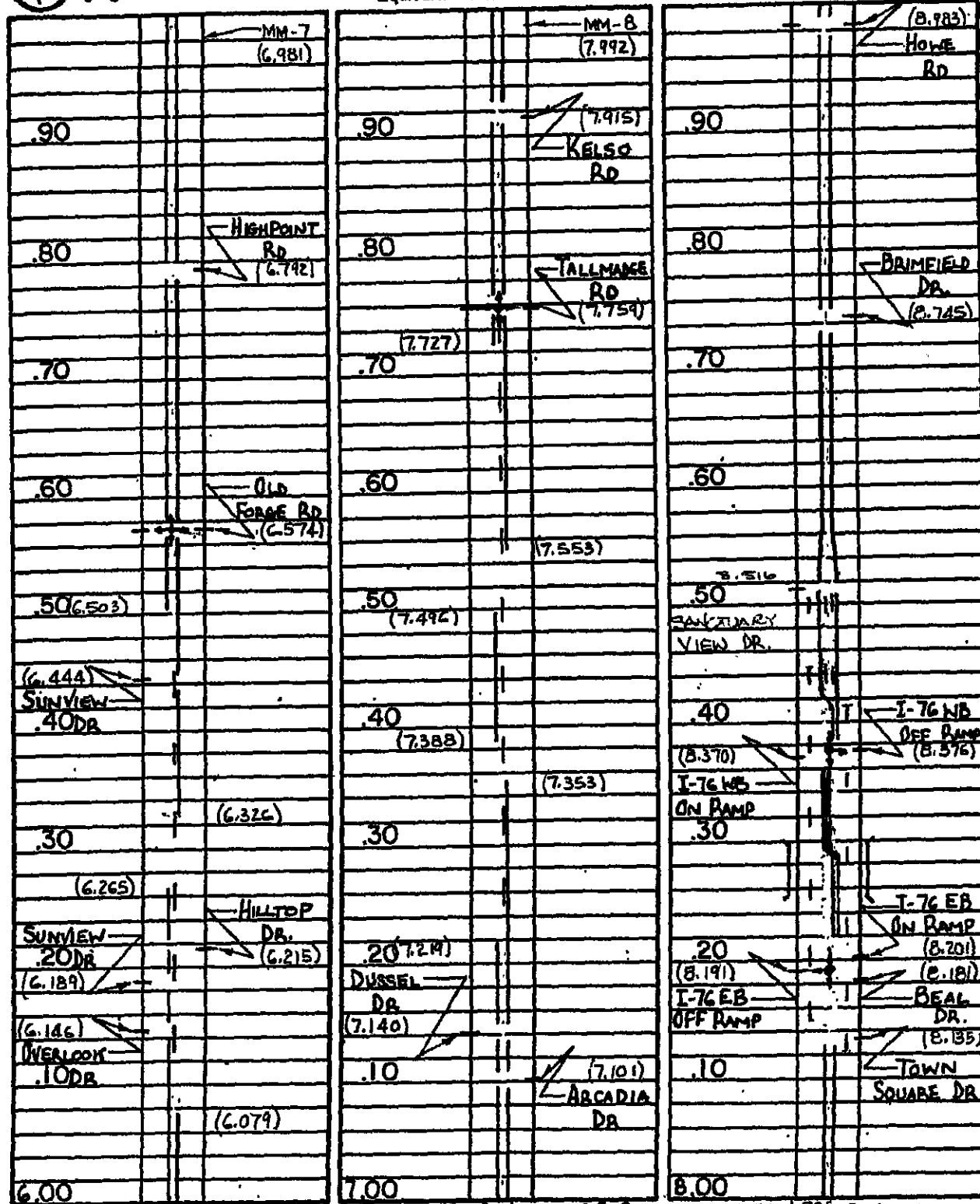
Yellow: Solid 1.635 Dash 0.217 Yellow: Solid 0.446 Dash 0.856 Yellow: Solid 1.639 Dash 0.289
TOTAL YELLOW THIS PAGE: SOLID 3.770, DASH 1.462, EQUIVALENT LINE 4.136

4
56

DISTRICT 4
N

COUNTY PORTAGE ROUTE 43

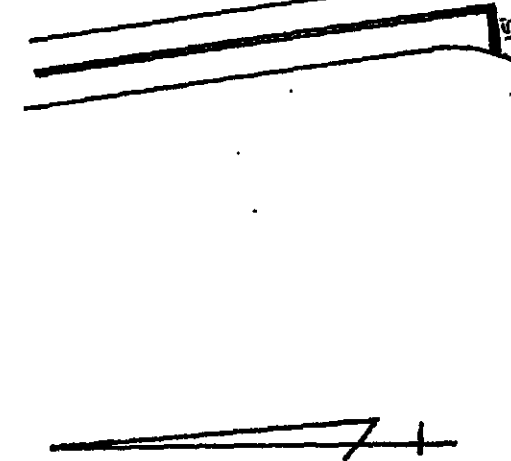
Total This Route = Yellow: Solid _____, Yellow: Dash _____, White: Dash _____
Equivalent Yellow _____



Yellow: Solid 1.419 Dash 0.424 Yellow: Solid 1.304 Dash 0.508 Yellow: Solid 1.936 Dash —
TOTAL YELLOW THIS PAGE: SOLID 4.659, DASH 0.932, EQUIVALENT LINE 4.892

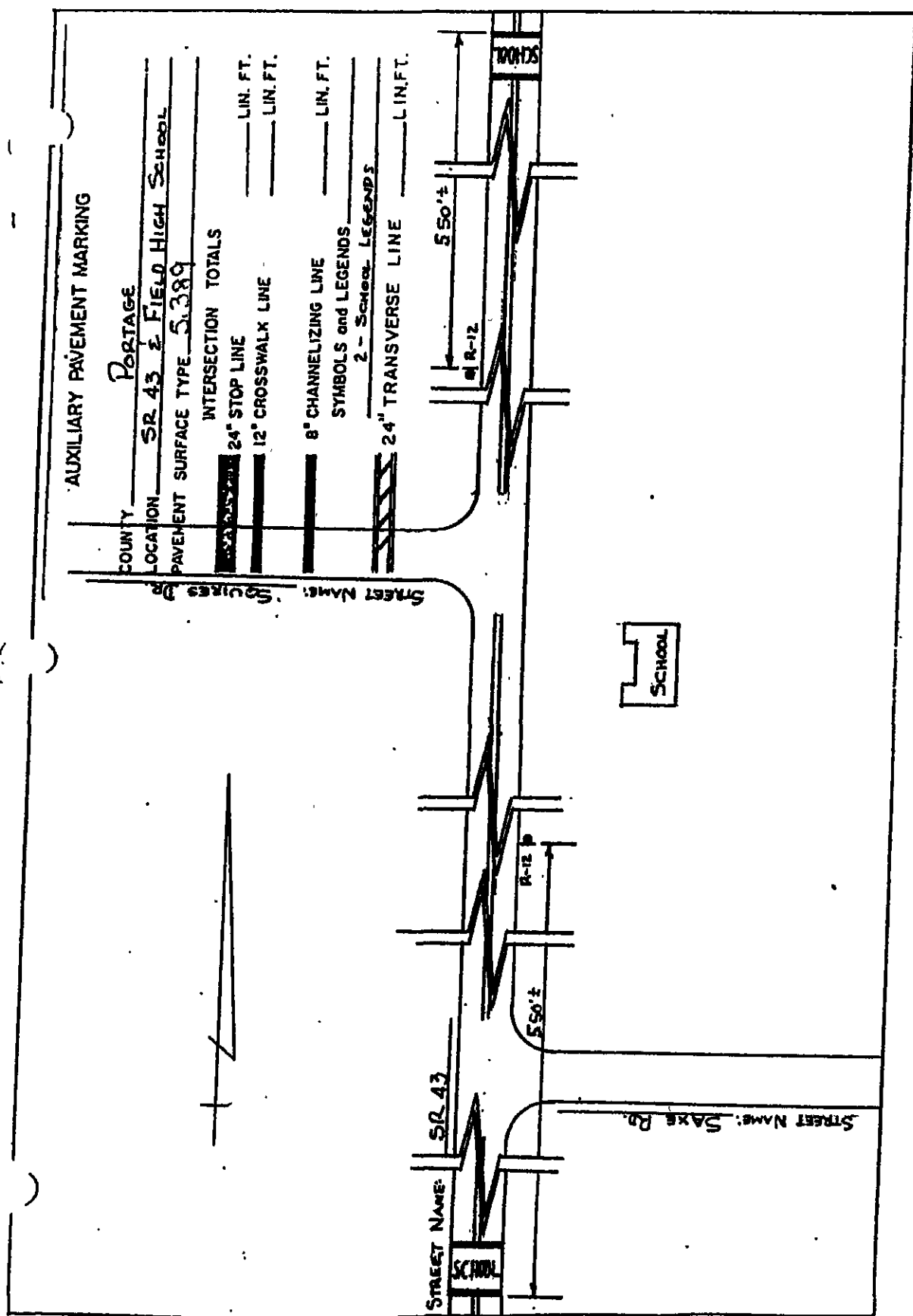
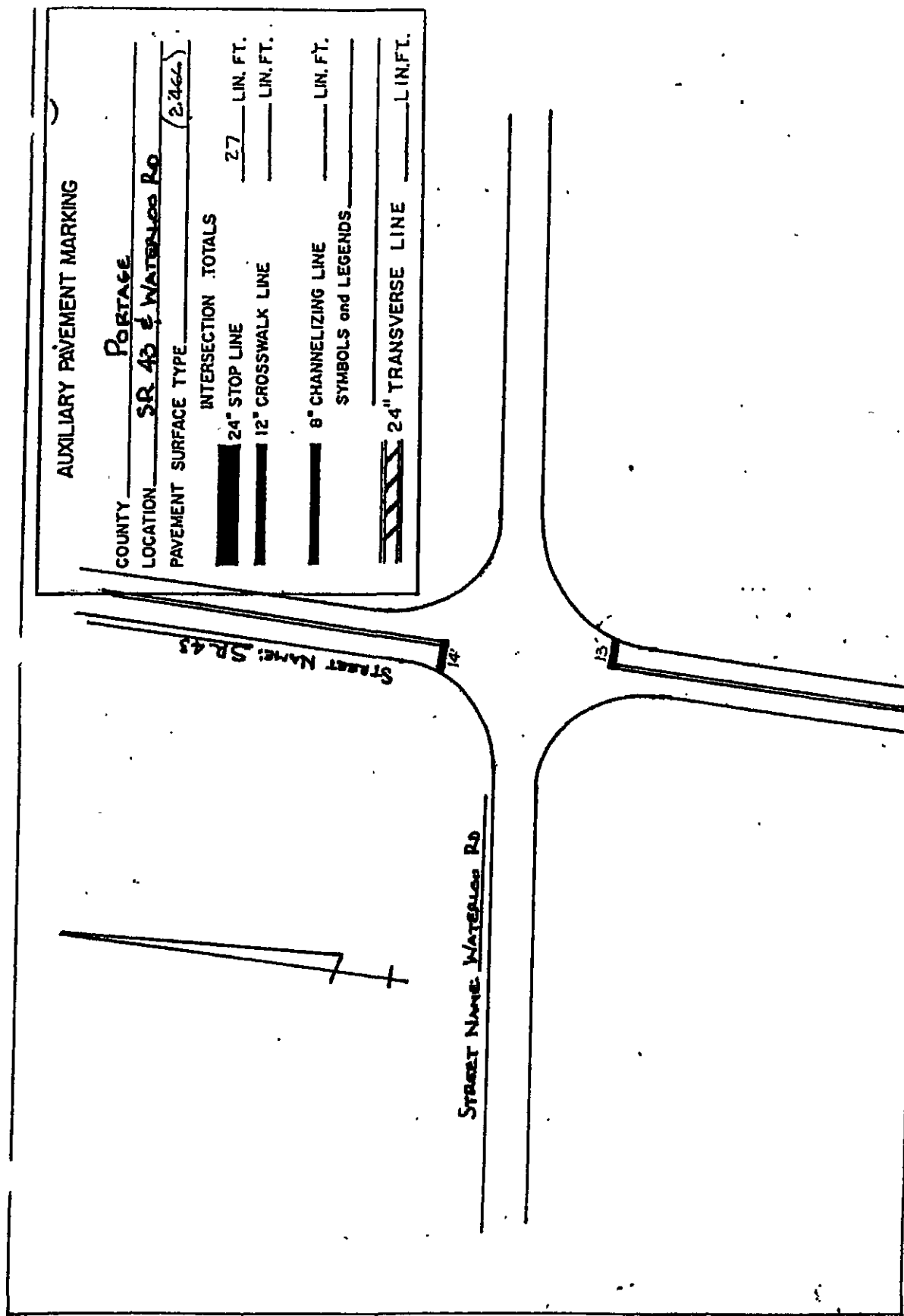
AUXILIARY PAVEMENT MARKING

COUNTY PORTAGE
LOCATION SR 43 & TALLMAGE RD
PAVEMENT SURFACE TYPE (7.759)
INTERSECTION TOTALS
24" STOP LINE 30' LIN. FT.
12" CROSSWALK LINE — LIN. FT.
8" CHANNELIZING LINE — LIN. FT.
SYMBOLS and LEGENDS
24" TRANSVERSE LINE — LIN. FT.



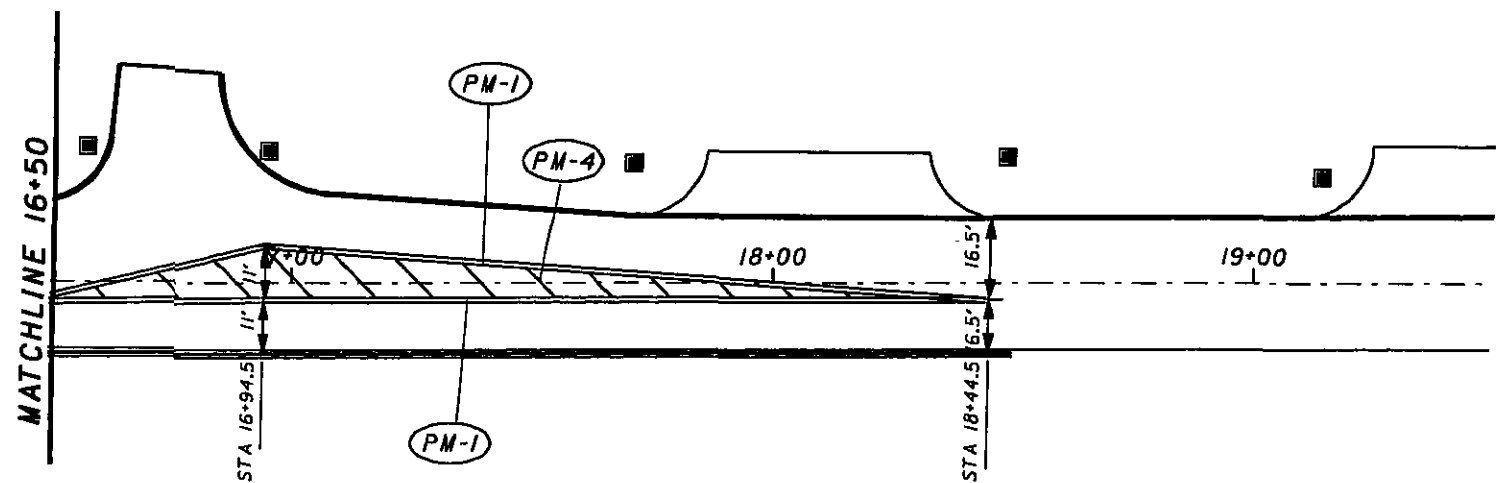
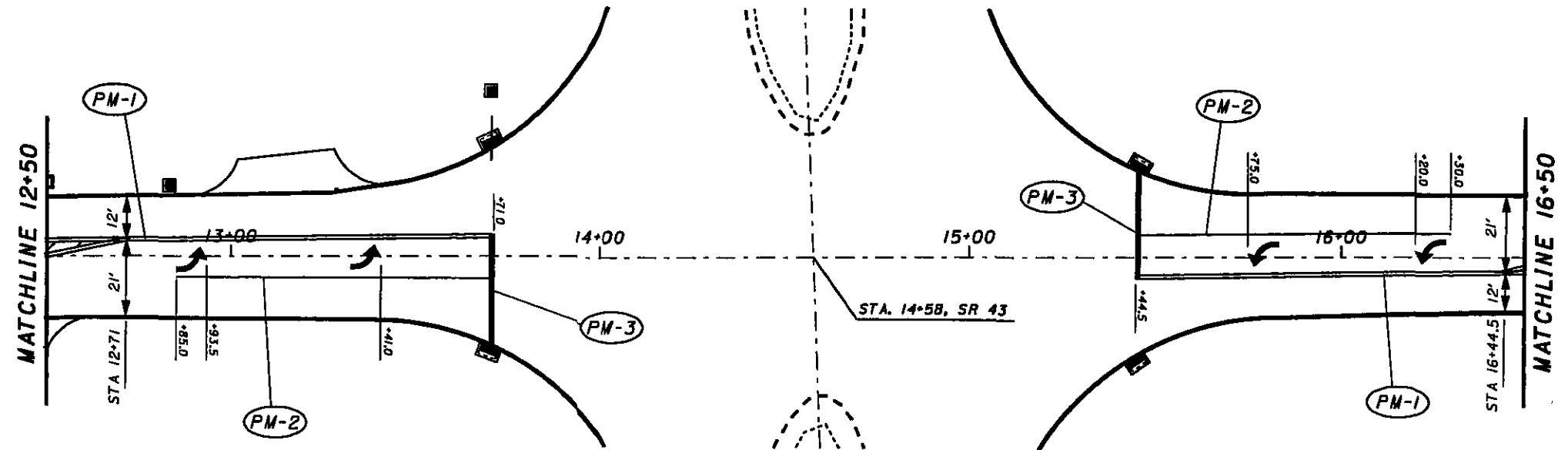
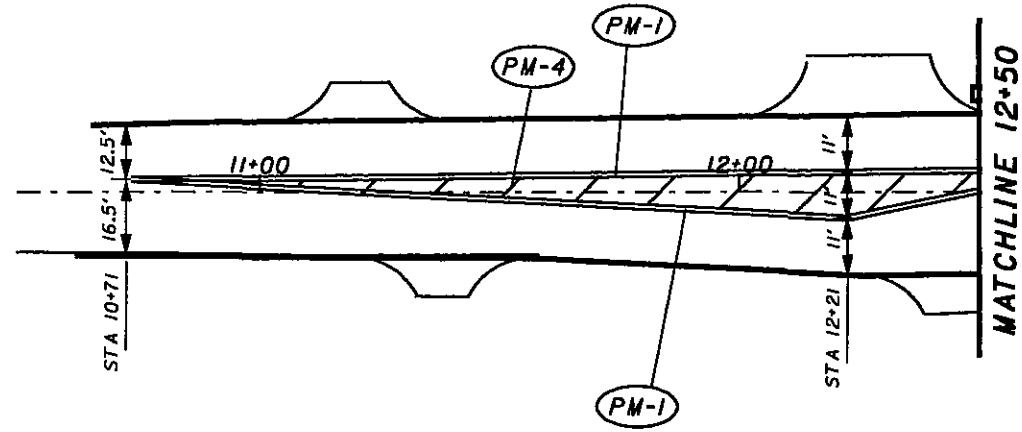
STREET NAME: TALLMAGE Rd

STREET NAME: SR 43



LEGEND:

- (PM-1) YELLOW DOUBLE CENTER LINE
- (PM-2) WHITE CHANNELIZING LINE
- (PM-3) WHITE STOP LINE
- (PM-4) TRANSVERSE LINE



[illegible]

RPM1TBL.DGN

49
56

REFERENCE NO.	# - SHEETING TO BE YELLOW-GREEN COLOR STATION (S.L.M.) * - FABRICATE ON PLYWOOD AS PER 730.25 ** - DOUBLE-SIDED SIGN	SIDE	CODE	SIZE (INCHES)	630															
					GROUND MOUNTED SUPPORT, NO.2 POST	GROUND MOUNTED SUPPORT, NO.3 POST	SIGN, FLAT SHEET	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL											
					FT.	FT.	SQ. FT.	EACH	EACH											
	SHEET 54																			
40	2.50	RT.	R-10-24	24 x 30		11.5	5	1	1											
	2.50	RT.	M-37-24	24 x 12		12	2	1	1											
	2.50	RT.	M-2-24-2	24 x 24			4	1												
41	2.52	LT.	W-92-36	36 x 36		13.25	9	1	1											
42	2.62	RT.	M-17-24	24 x 12		12	2													
	2.62	RT.	M-1-24-3	30 x 24			5													
43	2.62	LT.	W-47-36	36 x 36		13.25	9	1	1											
44	2.66 *	RT.	D-1-72	72 x 12		11/11	6	1	2											
	2.66 *	RT.	D-1-72	72 x 12			6	1												
	2.66	RT.	R-31A-36	36 X 30		12.5	7.5													
45	2.73	LT.	R-10-24	24 x 30		11.5	5	1	1											
46	2.74	LT.	M-38-24	24 x 12		12	2	1	1											
	2.74	LT.	M-2-24-2	24 x 24			4	1												
47	2.75	LT.	M-1-24-3	30 x 24		12	5	1	1											
	2.75	LT.	M-25-21	21 x 15			2.19	1												
48	2.77	RT.	M-1-24-3	30 x 24		12	5	1	1											
	2.77	RT.	M-25-21	21 x 15			2.19	1												
49	2.78	RT.	M-37-24	24 x 12		12	2	1	1											
	2.78	RT.	M-2-24-2	24 x 24			4	1												
50	2.79	LT.	R-1-30	30 x 30		11.5	6.25	1	1											
51	2.82	RT.	R-10-24	24 x 30		11.5	5	1	1											
52	2.86 *	LT.	D-1-72	72 x 12		11/11	6													
	2.86 *	LT.	D-1-72	72 x 12			6													
	2.86	LT.	R-31A-36	36 X 30		12.5	7.5													
53	2.89	LT.	M-17-24	24 x 12		12	2		1											
	2.89	LT.	M-1-24-3	30 x 24			5	1												
54	3.00 **	RT.	N-45-12	12 x 12	10		1	1	1											
55	3.00	LT.	R-84-30	30 x 30		11.5	6.25	1	1											
56	3.09	RT.	R-10-24	24 x 30		11.5	5	1	1											
57	3.09	LT.	R-10-24	24 x 30		11.5	5	1	1											
58	3.17	LT.	N-1-40	40 x 20		10.5/10.5	5.56	1	2											
59	3.27	LT.	R-10-24	24 x 30				1	1											
60	3.54	LT.	N-89-48	48 x 30		11.5/11.5	10	1	2											
61	3.54	RT.	N-89-48	48 x 30		11.5/11.5	10	1	2											
62	3.60	RT.	R-10-24	24 x 30				1	1											
63	3.71 *	RT.	W-79-30	30 x 30		12.5	6.25	1	1											
64	3.75	RT/LT	W-24A-30MOD	30 x 30		13.5/13.5	6.25/6.25	2	2											
	3.75	RT/LT	W-143-24	24 x 24			4/4	2												
65	3.89	RT.	M-2-24-2	24 x 24		12	4	1	1											
	3.89	RT.	M-25-21	21 x 15			2.19	1												
66	3.89	LT.	R-1-30	30 x 30		11.5	6.25	1	1											
67	3.89	RT.	R-1-30	30 x 30		11.5	6.25	1	1											
68	3.91	RT.	R-1-30	30 x 30		11.5	6.25	1	1											
69	3.96	RT.	R-1-30	30 x 30		11.5	6.25	1	1											
70	3.98	RT.	R-1-30	30 x 30		11.5	6.25	1	1											
71	4.00 **	RT.	N-45-12	12 x 12	10		1	1	1											
72	4.03	RT/LT	W-24A-30MOD	30 x 30		13.5/13.5	6.25/6.25	2	2											
	4.03	RT/LT	W-143-24	24 x 24			4/4	2												
73	4.06	RT.	R-10-24	24 x 30		11.5	5	1	1											
74	4.09	LT.	R-10-24	24 x 30				1	1											
75	4.17	RT.	R-10-24	24 x 30				1	1											
TOTALS CARRIED TO SHEET #52					20	474.5	258.13	49	41											

50

56

S.R. 43 SIGNING SUBSUMMARY

POR-43-0.00

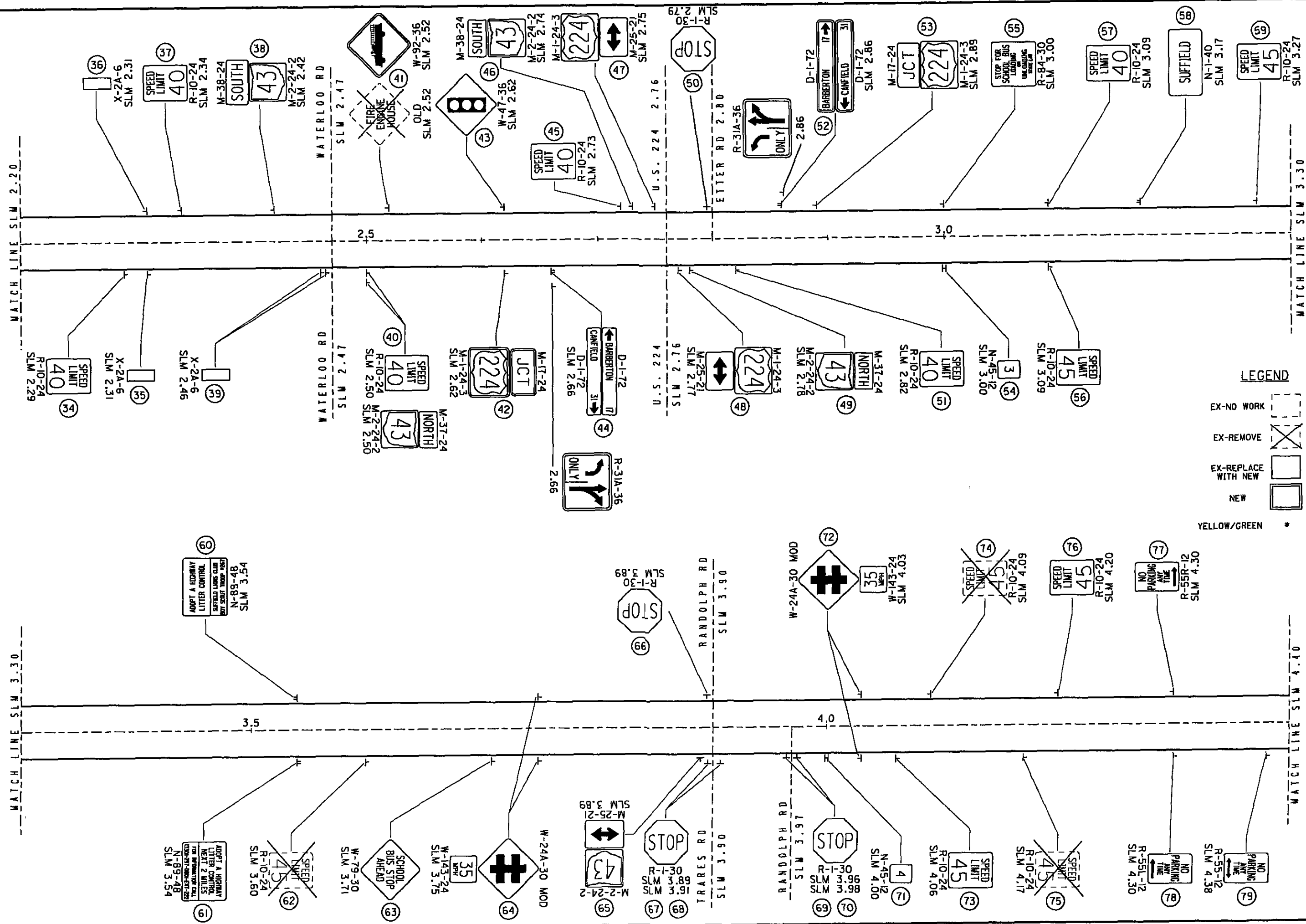
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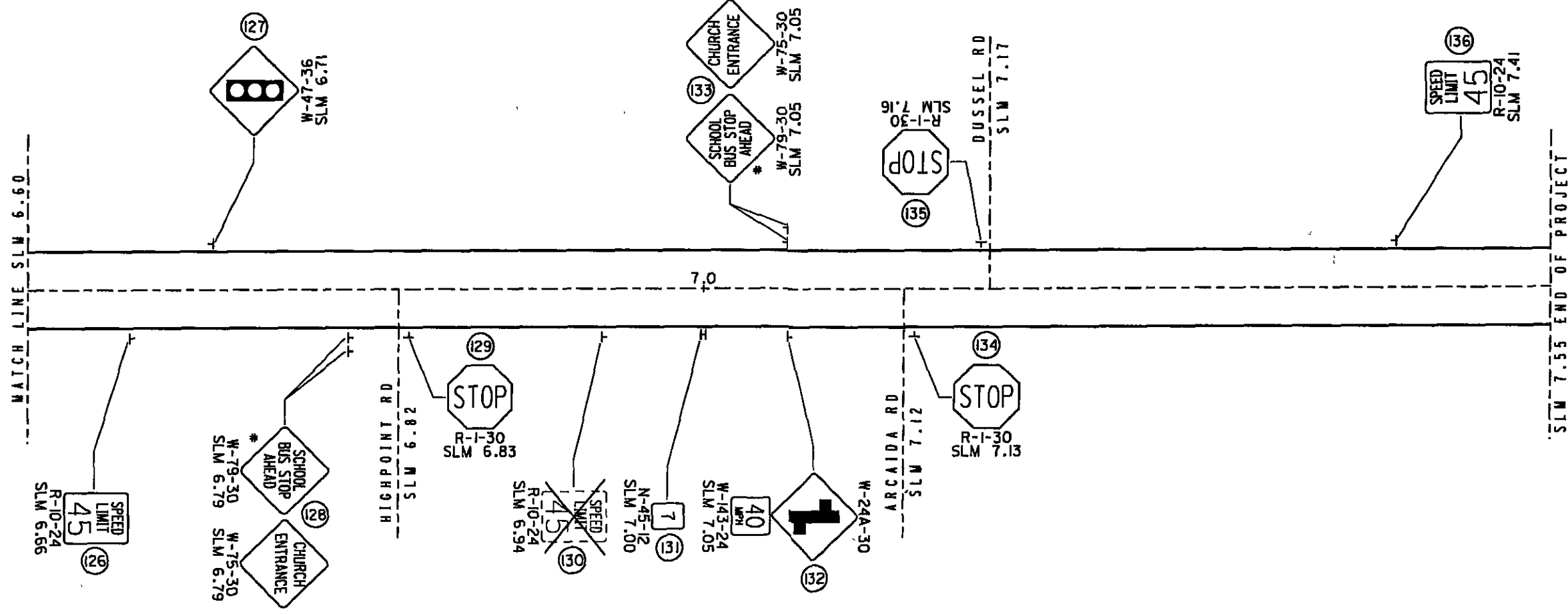
TP

KG

S.R. 43 SIGNING SUBSUMMARY

CALCULATED	CHECKED
TP	KG





LEGEND

EX-NO WORK	
EX-REMOVE	
EX-REPLACE WITH NEW	
NEW	
YELLOW/GREEN	*