

CITY OF MASSILLON

CITY ENGINEER DEPARTMENT

STARK COUNTY, OHIO

RICHVILLE DR. REHABILITATION

PROJECT DESCRIPTION

WIDING AND RESURFACING OF EXISTING ROADWAY,
RELOCATION OF TWO INTERSECTIONS.

DESIGN DESIGNATION

CURRENT ADT (2001) ——— N/A
DESIGN YEAR ADT (2011) ——— N/A
DESIGN HOURLY VOLUME (2019) ——— N/A
DIRECTIONAL DISTRIBUTION ——— N/A
TRUCKS (24 HOUR B&C) ——— N/A
DESIGN SPEED ——— 45 MPH
LEGAL SPEED ——— 45 MPH

DESIGN FUNCTIONAL CLASSIFICATION — Connector

CONVENTIONAL SIGNS

RIGHT OF WAY . . . EXISTING: ———, PROPOSED: ———
COUNTY LINE . . . ———
TOWNSHIP LINE . . . ———
CORPORATION LINE . . . ———
FENCE LINE . . . EXISTING: ———, PROPOSED: ———
GUARDRAIL . . . EXISTING: ———, PROPOSED: ———
MANHOLES . . . EXISTING: ○, PROPOSED: ●, ADJUSTED: ○
CATCH BASINS . . . EXISTING: □, PROPOSED: ■, ADJUSTED: □
SIGNS 1-POST: †, 2-POST: ‡, 3-POST: ‡
EXISTING POLES . . . POWER: ⚡, TELEPHONE ⚡, LIGHT ⚡, SPAN ⚡
PROPOSED POLES . . . POWER: ⚡, TELEPHONE ⚡, LIGHT ⚡, SPAN ⚡
EXIST. UTILITIES . . . VALVE: ⚡, HYDRANT: ⚡, METERS: ⚡, GUY: ⚡

NOTES FOR ALTERNATE BID

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

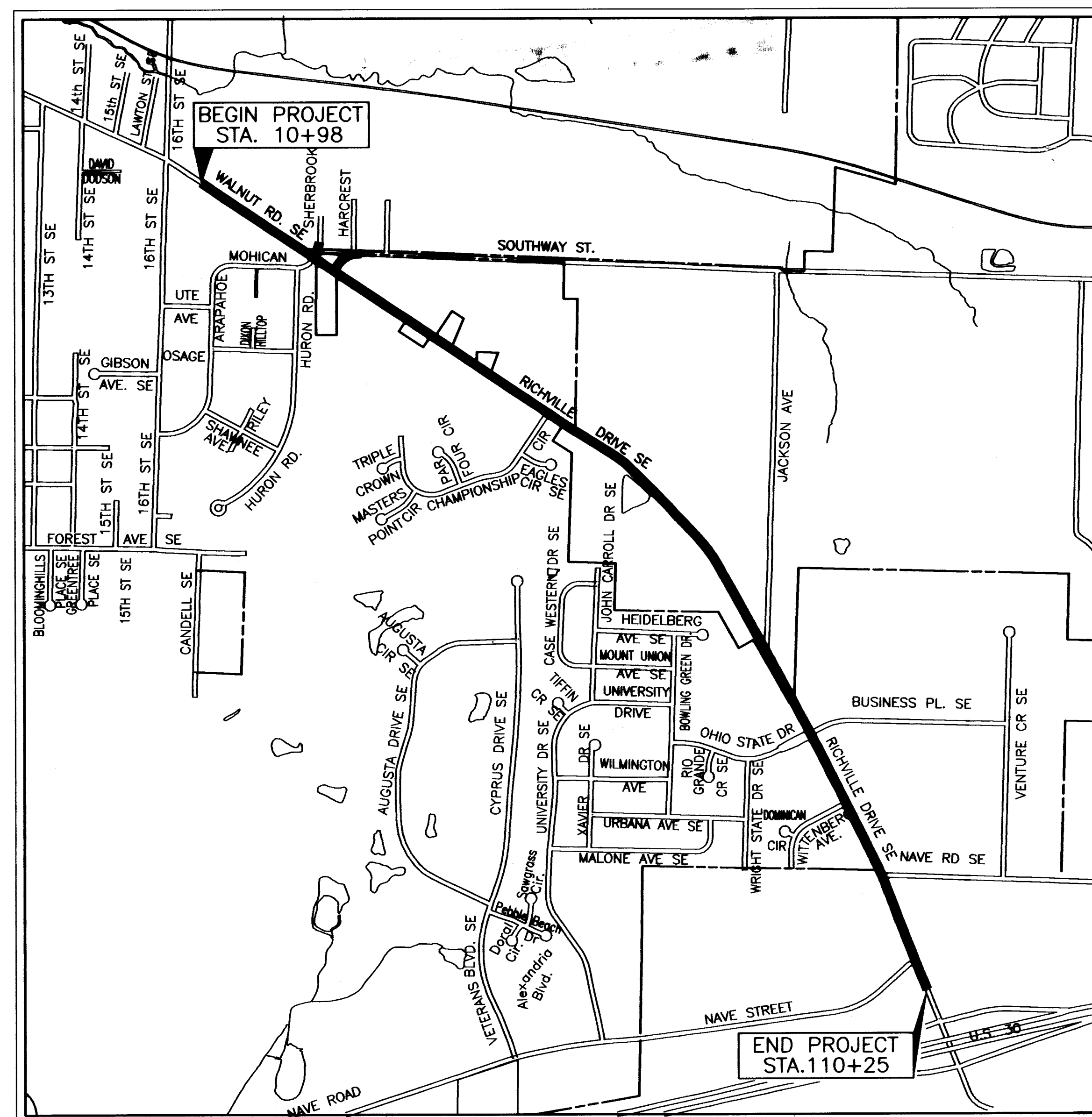
TWO WORKING DAYS
BEFORE YOU DIG

CALL 1-800-925-0988 (TOLL FREE)

OIL & GAS PRODUCERS UNDERGROUND
PROTECTION SERVICE

PLAN PREPARED BY:

CITY OF MASSILLON
Engineering Department



PORTION TO BE IMPROVED ———
STREETS ———

Francis H. Cicchinelli, Jr.
Mayor



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APPROVALS

DIRECTOR OF PUBLIC SAFETY AND SERVICE	MIKE LOUDIANA	DATE
CITY ENGINEER	STEVEN D. HAMIT, P.E.	DATE
STARK COUNTY ENGINEER	MICHAEL J. REFUS, P.E., P.S.	DATE

OFFICIALS

FRANCIS H. CICCHINELLI, Jr.	MAYOR
MIKE LOUDIANA	DIRECTOR OF PUBLIC SAFETY AND SERVICE
STEVEN D. HAMIT, P.E.	CITY ENGINEER
JOE ULRICH	WASTE WATER TREATMENT PLANT MANAGER
PERICLES G. STERGIOS	LAW DIRECTOR/PROSECUTOR
BILL HAMIT	AUDITOR
PAUL LAMBERT	TREASURER
MARY BETH BAILEY	CLERK OF COUNCIL

COUNCIL

GLEN GAMBER	PRESIDENT
RONALD MANG	1st WARD
CHUCK MAIER	2nd WARD
KATHERINE CATAZARO-PERRY	3rd WARD
GLORIA AUTREY	4th WARD
DORIS LEWIS	5th WARD
TOM WEBER	6th WARD

COUNCIL AT LARGE

TIM BRYAN
PAUL MANSON
JAYNE FERRERO

800 400 0 400 800
HORIZONTAL
SCALE IN FEET

DRAWN BY: FPW
CHECKED BY: SDH

DATE: April, 2005
DATE: April, 2005

Richville Dr. Rehabilitation

Title Sheet
City of Massillon
Stark County, Ohio

Francis H. Cicchinelli, Jr.
Mayor

Massillon
Means More!

REVISIONS:	
DATE	DESCRIPTION

FILE NAME: standard

ACCOUNT NUMBER: 05st03

1 / 36

1 CURVE DATA
 P.I. = STA. 19+93.07
 Δ = 5°07'42" LT.
 Dc = 09°32'57"
 R = 600.00'
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 L = 53.70'
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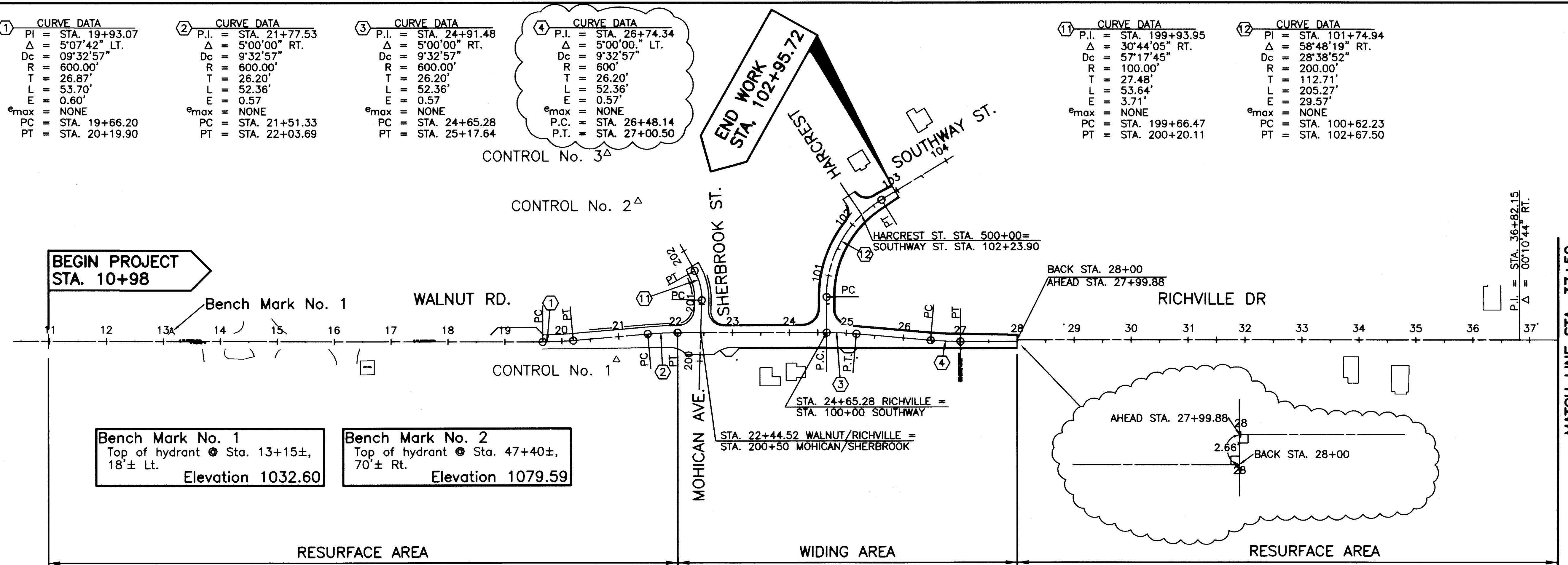
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 PT = STA. 22+03.69

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 PT = STA. 25+17.64

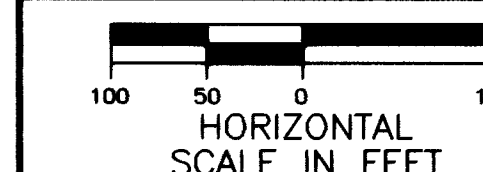
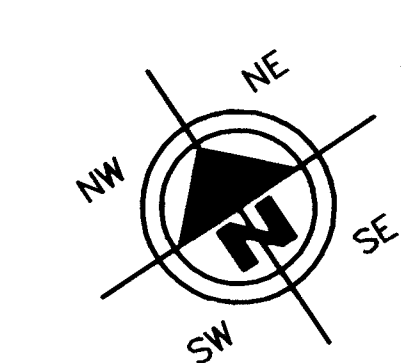
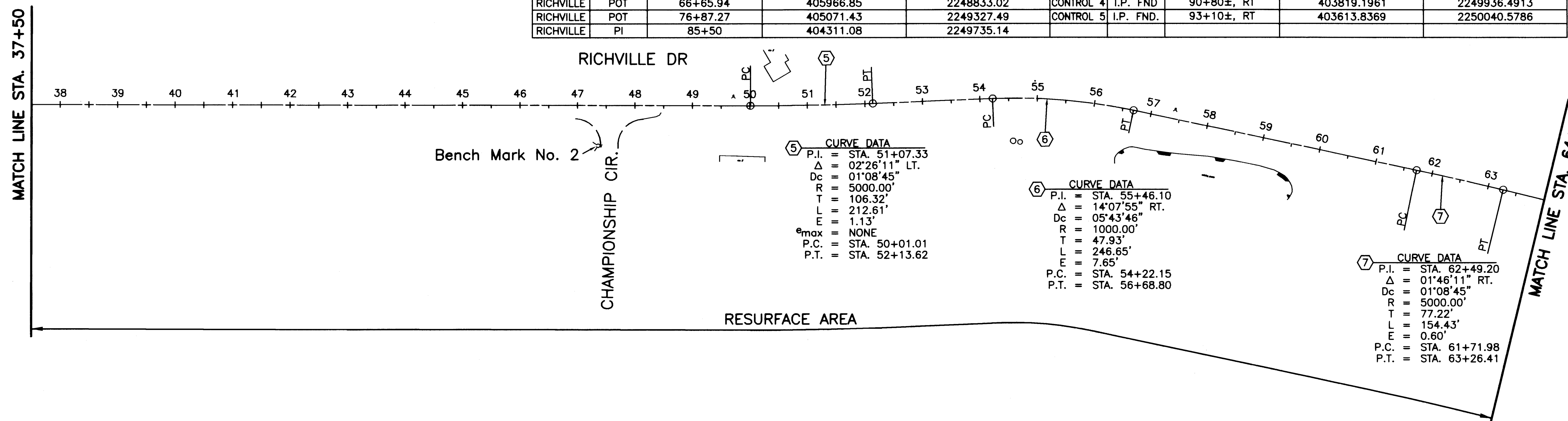
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 P.C. = STA. 26+48.14
 P.T. = STA. 27+00.50

11 CURVE DATA
 P.I. = STA. 199+93.95
 Δ = 30°44'05" RT.
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 R = 100.00'
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 E = 3.71'
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 PT = STA. 200+20.11

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 P.I. = STA. 101+74.94
 Δ = 58°48'19" RT.
 Dc = 28°38'52"
 R = 200.00'
 T = 112.71'
 L = 205.27'
 E = 29.57'
 e_{max} = NONE
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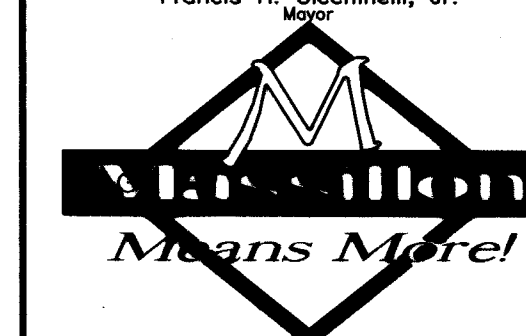
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RICHVILLE	PI	21+77.53	408642.77	2245254.09					
RICHVILLE	POT	24+91.48	408468.75	2245515.43	SOUTHWAY	INT	100+00	408483.2650	2245493.6295
RICHVILLE	PI	26+74.34	408354.49	2245658.25	SOUTHWAY	PI	101+74.94	408628.8725	2245590.5872
RICHVILLE	POT	28+00(BACK)	408284.83	2245762.87	SOUTHWAY	POT	104+00	408618.3293	2245835.5688
RICHVILLE	POT	27+99.88(BACK)	408287.04	2245764.35					
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RICHVILLE	PI	55+46.10	406775.81	2248057.02	CONTROL 2	I.P. FND.	21+53±'LT	408858.8102	2245346.4621
RICHVILLE	PI	62+49.20	406273.14	2248550.41	CONTROL 3	I.P. FND.	21+08±'LT	408958.8430	2245348.1665
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RICHVILLE	POT	76+87.27	405071.43	2249327.49	CONTROL 5	I.P. FND.	93+10±, RT	403613.8369	2250040.5786
RICHVILLE	PI	85+50	404311.08	2249735.14					



DRAWN BY: FPW	CHECKED BY: SDH
DATE: April, 2005	DATE: April, 2005

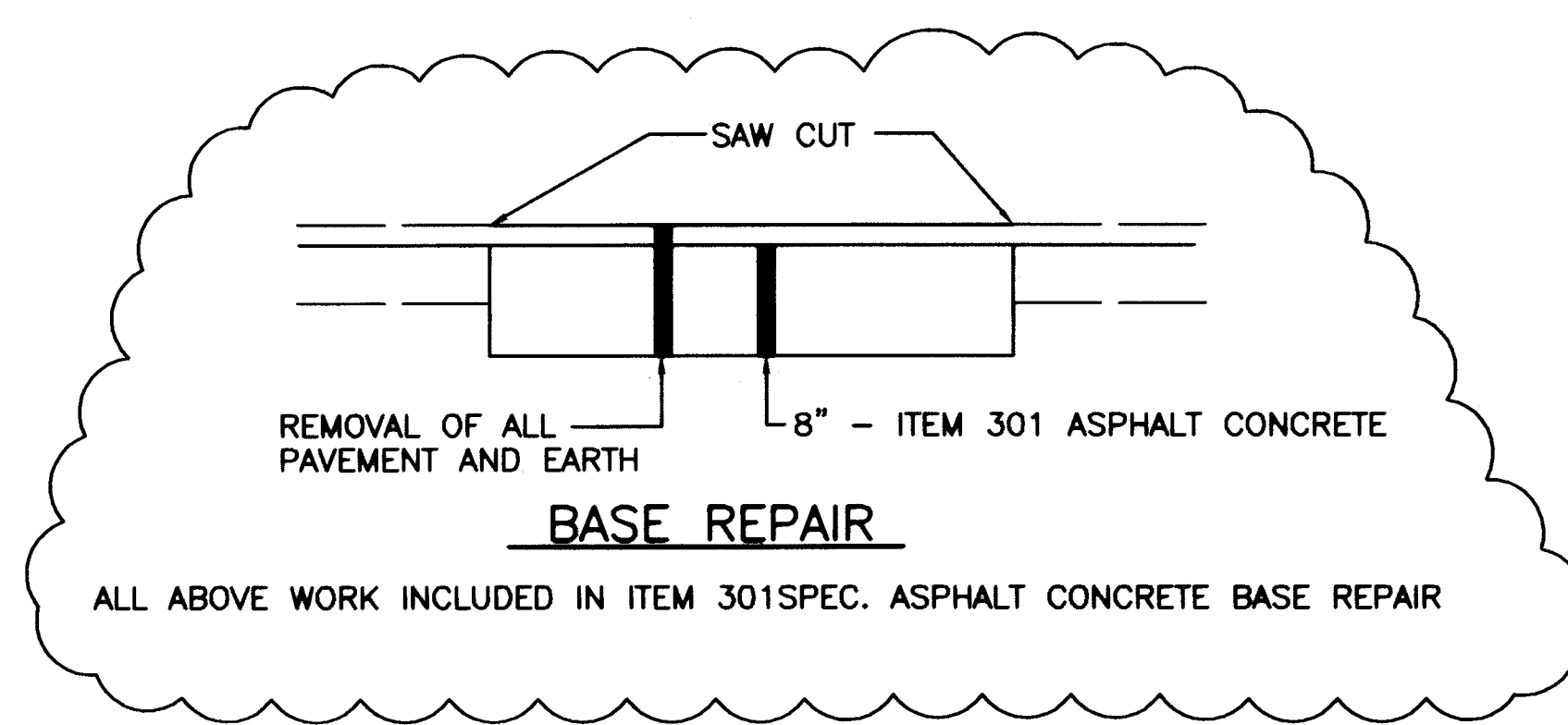
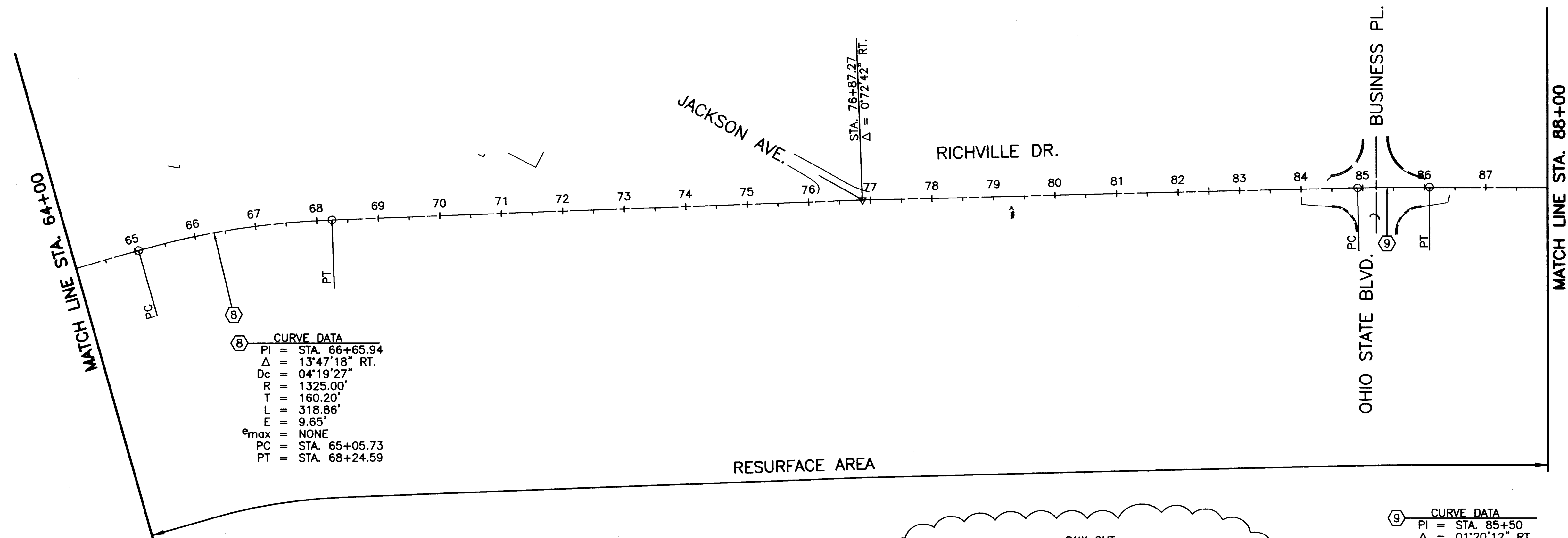
Richville Dr. Rehabilitation
 Alternate Schematic and Paving
 City of Massillon
 Stark County, Ohio

Francis H. Cicchinelli, Jr.
 Mayor



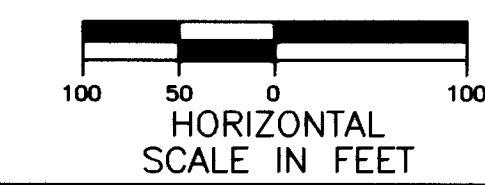
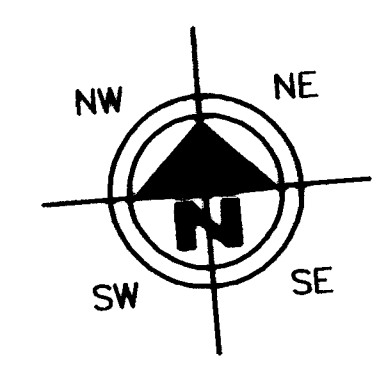
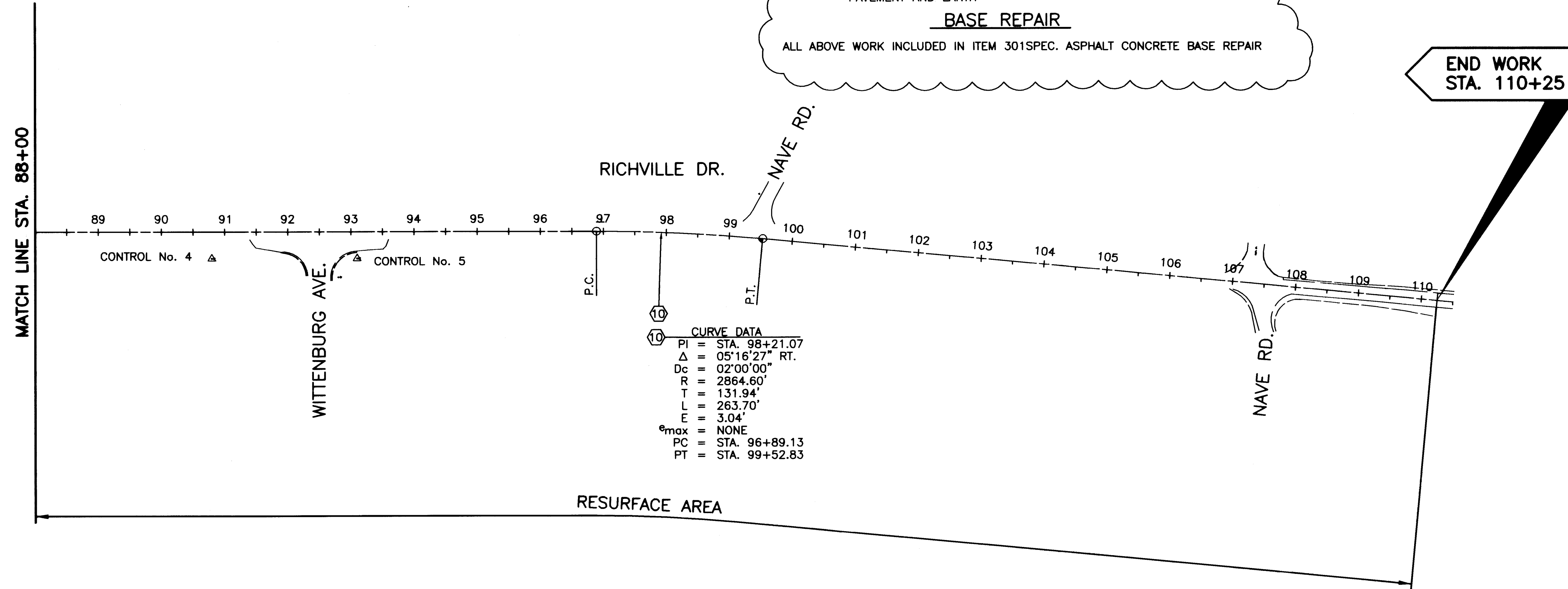
REVISIONS:	
DATE	DESCRIPTION

FILE NAME: .DWG
 ACCOUNT NUMBER: 05st03



CURVE DATA

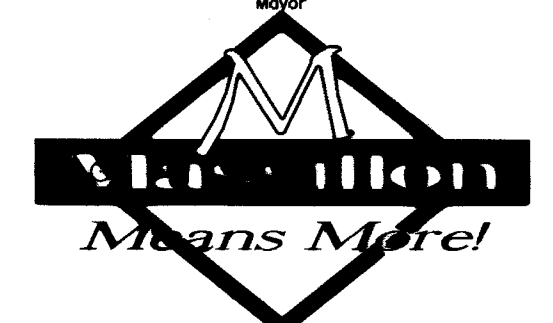
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Δ	= 01°20'12" RT.
Dc	= 01°08'45"
R	= 5000.00'
T	= 58.32'
L	= 116.64'
E	= 0.34'
e_{max}	= NONE
PC	= STA. 84+91.68
PT	= STA. 86+08.32



DRAWN BY:	CHECKED BY:
FPW	SDH
DATE:	DATE:
July 2004	July 2004

Richville Dr. Rehabilitation
 Alternate Schematic and Paving
 City of Massillon
 Stark County, Ohio

Francis H. Cicchinelli, Jr.
 Mayor

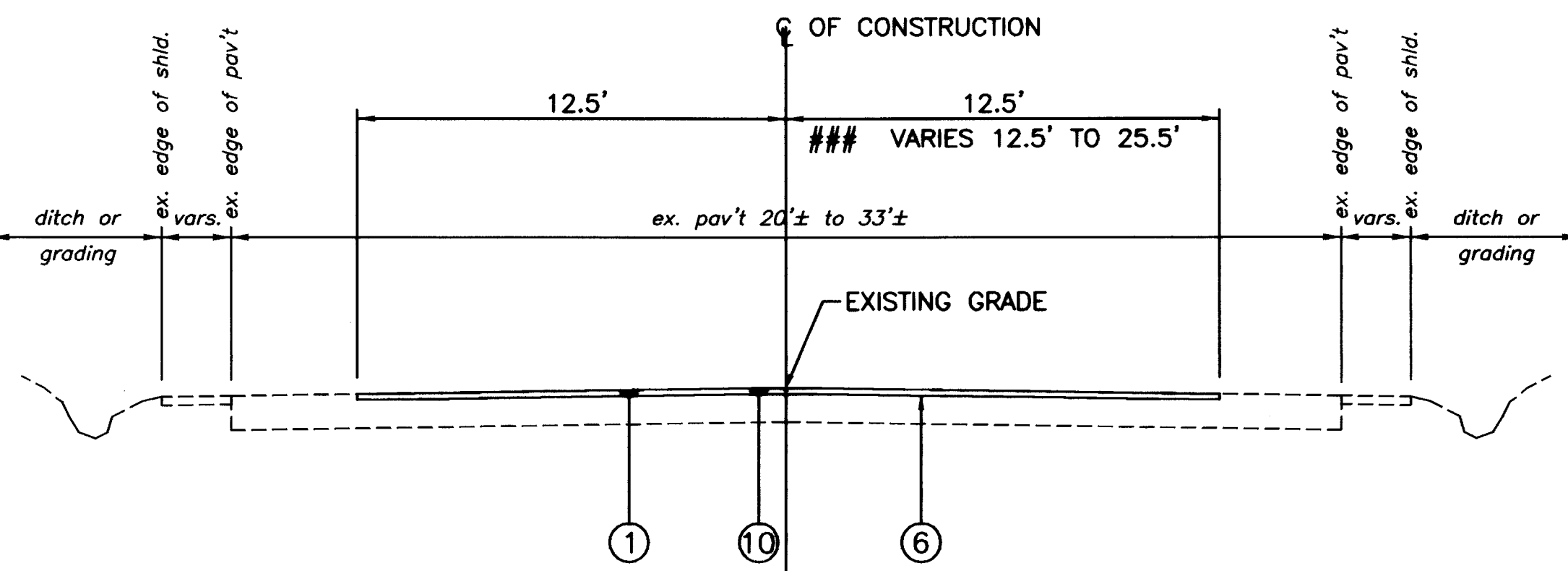


REVISIONS:

DATE	DESCRIPTION

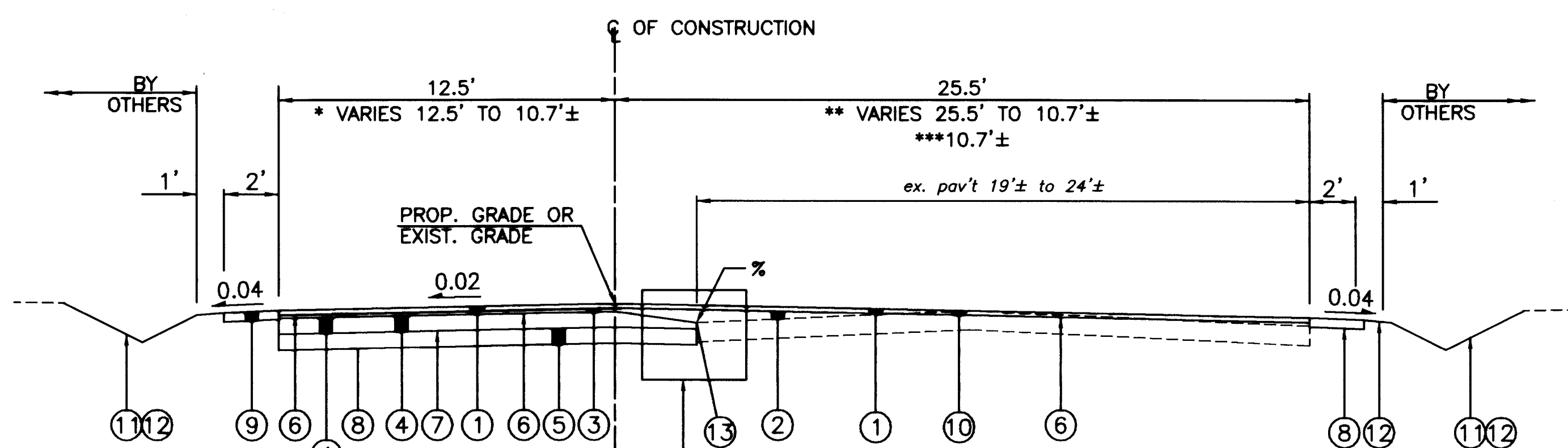
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ACCOUNT NUMBER: 05st03



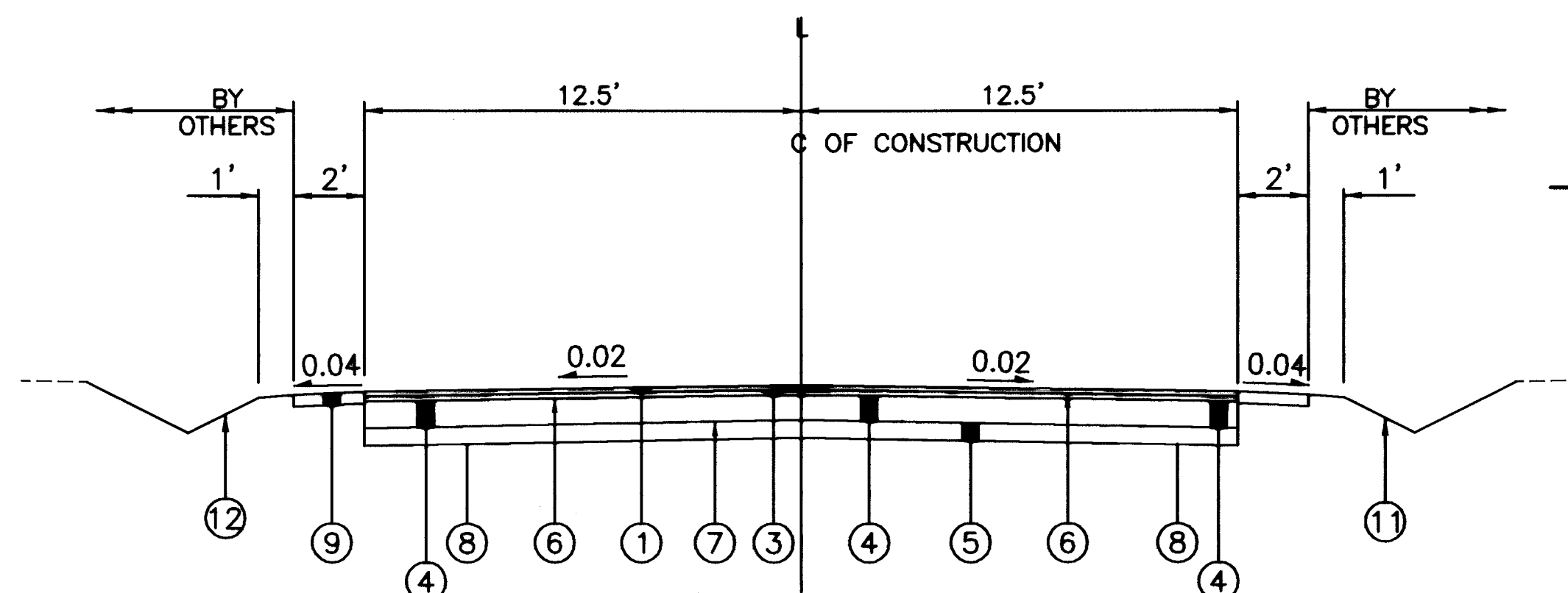
RESURFACING TYPICAL "A" SECTION

RICHVILLE DR.
STA. 10+98 TO STA. 19+75
STA. 19+75 TO STA. 22+03.69
STA. 106+86.60 TO STA. 110+25
SHERBROOK
STA. 201+00 TO STA. 201+70
HARCRESS
STA. 500+00 TO STA. 500+40.44
SOUTHWAY
STA. 102+00 TO STA. 102+95.72



FULL LANE WIDING TYPICAL SECTION

RICHVILLE DR.
STA. 22+00 TO STA. 28+00
LEFT * STA 27+00.50 TO STA. 28+00(BACK)
RIGHT ** STA 24+65.28 TO STA. 27+00.50
*** STA 27+00.50 TO STA. 28+00(BACK)



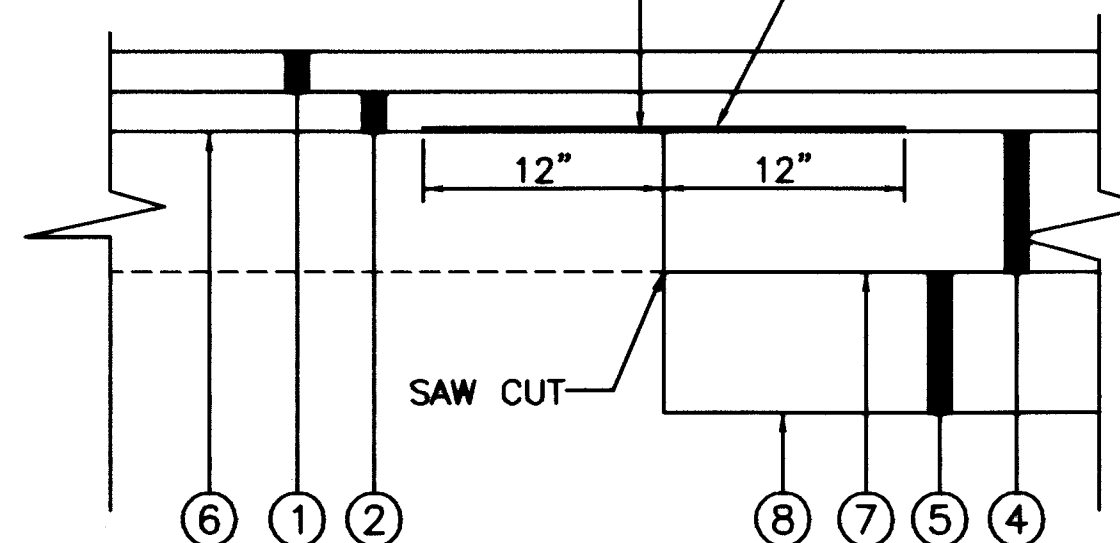
SOUTHWAY ST. TYPICAL SECTION

STA. 100+00 TO STA. 102+00

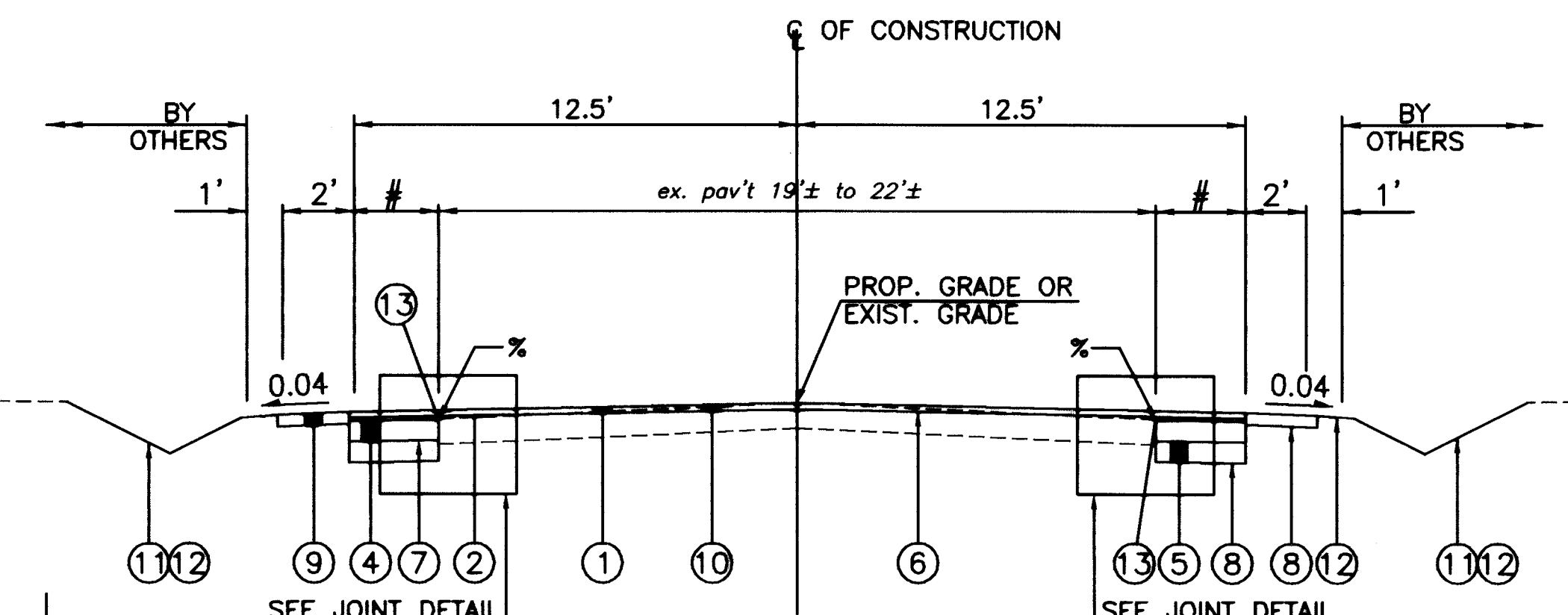
RESURFACING TYPICAL SECTION "B"

RICHVILLE DR.
STA. 27+99.88(AHEAD) TO STA. 106+86.60

ITEM 407-TACK COAT
PG 64-22, INCLUDE IN COST
OF ITEM 448spec-PAVEMENT
REINFORCING FABRIC



JOINT DETAIL



WIDING TYPICAL SECTION

SHERBROOK
STA. 200+50 TO STA. 201+00

- AMOUNT OF WIDING IS DEPENDENT UPON THE CENTERLINE OF CONSTRUCTION. AS SHOWN ON THE PLAN AND PROFILES. AT NO TIME SHALL PAVEMENT BE WIDENED LESS THAN 2' ON ANY SIDE. THIS WORK WILL BE AS DIRECT IN THE FIELD.

% - SAW CUT SHALL BE WHITE EDGE LINE OR DETERMINED IN FIELD TO UTILIZE EXISTING PAVEMENT. COST TO BE INCLUDED IN ITEM 254.

NOTE:

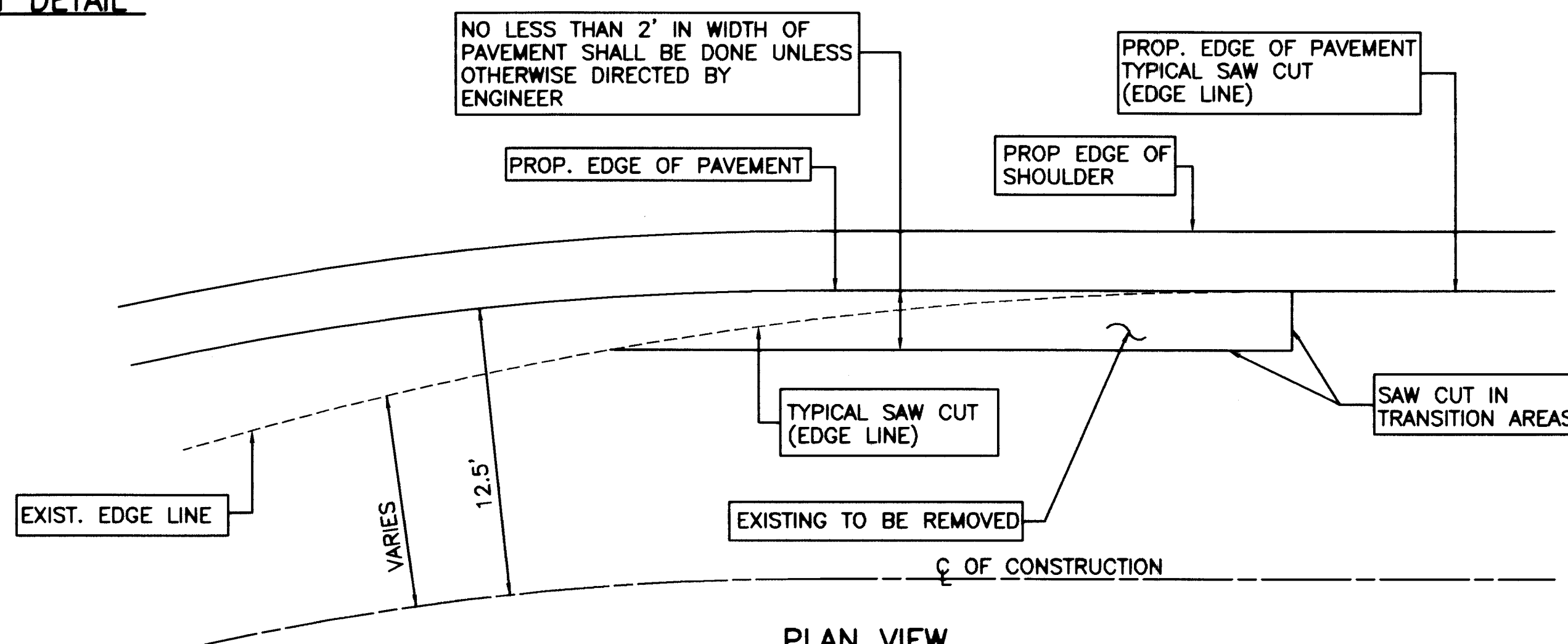
ALL JOINTS WITH EXISTING PAVEMENT SHALL RECEIVE ITEM 705.04 JOINT SEALER WORK AND MATERIAL SHALL BE INCLUDE IN COST OF ITEM 448 ASPHALT CONCRETE SURFACE COURSE TYPE 1, PG 70-22.

EXISTING LEGEND

① variable thickness asphalt pavement

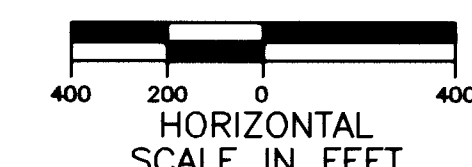
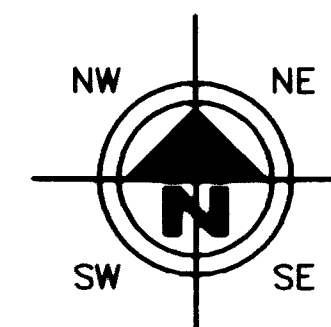
PROPOSED LEGEND

- ① - ITEM 448-2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22
- ② - ITEM 448-VARIES DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22, (6" MAX. TO 0" MIN.)
- ③ - ITEM 448-1 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22
- ④ - ITEM 301-7" ASPHALT CONCRETE BASE
- ⑤ - ITEM 304-7" AGGREGATE BASE
- ⑥ - ITEM 407-TACK COAT
- ⑦ - ITEM 408-PRIME COAT
- ⑧ - ITEM 204 - SUBGRADE COMPACTION
- ⑨ - ITEM 254spec-4" THICK SHOULDER MATERIAL (SHALL CONSIST OF THE PAVEMENT PLANING MATERIAL)
- ⑩ - ITEM 254-VARIES PAVEMENT PLANING (2" MAX. TO 0" MIN.)
- ⑪ - ITEM 659-SEEDING AND MULCHING
- ⑫ - ITEM 209spec-LINEAR GRADING
- ⑬ - ITEM 690spec-PAVEMENT REINFORCING FABRIC



PLAN VIEW

RICHVILLE DR. SAW CUT IN TRANSITION AREAS



DRAWN BY:	CHECKED BY:
FPW	SDH
DATE:	DATE:
April, 2005	April, 2005

Richville Dr Rehabilitation
Alternate Typical Sections
City of Massillon
Stark County, Ohio

Francis H. Cicchinelli, Jr.
Mayor



REVISIONS:

DATE	DESCRIPTION

FILE NAME:

.DWG

ACCOUNT NUMBER

05st03

UTILITIES

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

SBC 50 W.BOWERY, 6TH FLOOR AKRON, OH 44308 800-384-8057	CONSUMERS OHIO WATER P.O. BOX 584 MASSILLON, OH 44648 (330) 833-4156	OHIO EDISON STARK DIVISION 2600 S. ERIE ST. MASSILLON, OH 44545 (330) 833-3141	MASSILLON CABLE TV P.O. BOX 814 MASSILLON, OH 44648 (330) 833-4134	GREAT LAKES 104 6TH ST. S.W. CANTON, OH 44702 (330) 456-2454
CITY OF MASSILLON SANITARY SEWER 151 LINCOLN WAY EAST MASSILLON, OH 44646 (330) 830-1722	AT&T COMMUNICATIONS 2535 E. 40TH AVE. DENVER, CO 80205-3601 (800) 852-3786	DOMINION EAST OHIO GAS COMPANY 4725 SOUTHWAY ST. S.W. CANTON, OH 44706 (330) 478-3142	NORTHEAST OHIO NATURAL GAS CORP. 9081 S.R. 250 STRASBURG, OH 44680-9766 (330) 878-5589	

THE CONTRACTOR SHALL NOTIFY ALL UTILITIES 48 HOURS PRIOR TO WORK.

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

OUPS - 1-800-362-2764
OGUPUPS - 1-800-925-0988

DATUM ELEVATION

ALL BENCHMARKS ARE BASED ON REFERENCE BENCHMARKS PROVIDED BY THE CITY OF MASSILLON

STATIONING

ALL STATIONING SHOWN IS REFERENCED TO THE CENTERLINE OF CONSTRUCTION AS SHOWN.

NOTIFICATION OF SAFETY FORCES AND BUS GARAGES

THE CONTRACTOR SHALL NOTIFY ALL APPLICABLE AGENCIES LISTED BELOW AT LEAST 48 HOURS IN ADVANCE OF ANY STREET CLOSING OR TRAFFIC CHANGE.

MASSILLON SAFETY SERVICE 330-830-1702	MASSILLON FIRE DEPARTMENT 330-833-1053	PERRY TOWNSHIP HALL 330-833-2141	NORTH LAWRENCE FIRE DEPT. 330-832-6347
TUSCARAWAS TOWNSHIP HALL 330-832-4337	JACKSON FIRE DEPARTMENT 330-834-3950	MASSILLON POLICE DEPARTMENT 330-830-1735	MASSILLON SCHOOL BUS GARAGE 330-830-1849
JACKSON TOWNSHIP HALL 330-832-7416	PERRY FIRE DEPARTMENT 330-833-3865	JACKSON POLICE DEPARTMENT 330-834-3960	JACKSON SCHOOL BUS GARAGE 330-830-8042
PERRY POLICE DEPARTMENT 330-478-5121	PERRY SCHOOL BUS GARAGE 330-477-1300	STARK COUNTY SHERIFF 330-430-3800	TUSCARAWAS SCHOOL BUS GARAGE 330-837-7805

SARTA
330-454-5333

SUBSURFACE CONDITIONS

IT IS THE OBLIGATION AND RESPONSIBILITY OF THE CONTRACTOR TO MAKE HIS OWN INVESTIGATION OF SUBSURFACE CONDITIONS PRIOR TO SUBMITTING BID. PROSPECTIVE BIDDERS ARE TO COORDINATE WITH THE OWNER FOR ACCESS TO THE SITE FOR INSPECTIONS AND EXPLORATORY EXCAVATION. THE BIDDER SHALL CONTACT THE OWNER AT LEAST 72 HOURS IN ADVANCE OF THE DESIRED INSPECT OR EXCAVATION. THE BIDDER SHALL CONTACT O.U.P.S. AND OBTAIN LOCATIONS OF OTHER UTILITIES.

QUANTITIES

QUANTITIES ARE INDICATED FOR COMPARISON OF BIDS ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY QUANTITIES BEFORE ORDERING MATERIALS. VARIATIONS FROM THE PLAN QUANTITIES SHALL BE APPROVED BY THE ENGINEER OR OWNER BEFORE MATERIALS ORDERS ARE PLACED. MATERIALS REJECTED DUE TO INCOMPATIBILITY BETWEEN ORDERED QUANTITIES AND FIELD CONDITIONS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

CONSTRUCTION SPECIFICATIONS & STANDARDS

ALL CONSTRUCTION TO BE CITY OF MASSILLON SPECIFICATIONS AND STANDARDS, THE LATEST EDITION OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS AND FOLLOW ALL OSHA AND ADA REGULATIONS AND REQUIREMENTS, SEDIMENT EROSION STANDARDS.

MAINTENANCE OF TRAFFIC

THE CONTRACTOR SHALL SUPPLY A MAINTENANCE OF TRAFFIC PLAN TO THE CITY ENGINEER.

MAINTENANCE OF TRAFFIC PLAN MUST BE APPROVED BY THE CITY ENGINEER AND STARK COUNTY ENGINEER PRIOR TO ANY CONSTRUCTION

COMMENCING SAID APPROVED DETOUR SHALL BE FORWARDED TO THE LOCAL NEWSPAPER BY THE CONTRACTOR.

MATERIALS AND LABOR SHALL BE INCLUDED IN LUMP SUM BID.

ALL ABOVE SAID WORK SHALL BE PAID FOR UNDER ITEM 614 MAINTAINING TRAFFIC.

CONTRACTOR AVAILABILITY

THE CONTRACTOR SHALL SUPPLY THE ENGINEER WITH A 24 HOUR PHONE NUMBER WHERE THE CONTRACTOR SHALL BE AVAILABLE FOR EMERGENCIES.

PRESERVATION OF PRIVATE PROPERTY

THE CONTRACTOR SHALL PERFORM WORK AS TO NOT DISTURB, DAMAGE OR DESTROY ANY TELEPHONE OR POWER POLES, SIGNS, LANDSCAPING ITEMS, ETC.. ANY ITEM DAMAGED OR DESTROYED SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE ANY ITEM DISTURBED OR IN CONFLICT WITH THE WORK TO BE PERFORMED SHALL BE REMOVED AND RESET AT THE CONTRACTOR'S EXPENSE. PRIOR ENGINEER APPROVAL IS REQUIRED BEFORE ANY OF THE ABOVE ITEMS ARE PERFORMED.

PRESERVATION OF PROPERTY CORNERS AND SURVEY MARKERS

THE CONTRACTOR SHALL PRESERVE ALL CORNERSTONES, IRON PINS, CONCRETE MONUMENTS ANY TYPE OF LAND MONUMENT. HE SHALL HAVE ALL LAND MONUMENTS IN THE PROXIMITY OF THE WORK REFERENCED. HE SHALL REPLACE DESTROYED OR DAMAGED MONUMENTS AND SHALL FURNISH A CERTIFICATION BY AN OHIO REGISTERED SURVEYOR THAT THE MONUMENTS HAVE BEEN RESTORED.

CONDITIONS OF WORK

ALL WORK PERFORMED UNDER THIS CONTRACT SHALL COMPLY WITH THE U.S. DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ACT, STATE, COUNTY, AND CITY OF MASSILLON LAWS AND REGULATIONS. ALL WORK, AT ALL TIMES SHALL BE SUBJECT TO OBSERVATION BY THE OWNER AND/OR ENGINEER. ALL WORK SHALL COMPLY WITH THE CONDITIONS OF THE CONTRACT DOCUMENTS AND OHIO EPA, AND STANDARDS OF THE CITY OF MASSILLON ALL ELECTRICAL WORK SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE, AND APPLICABLE CITY, COUNTY, STATE AND FEDERAL CODES.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN SAFE AND SATISFACTORY ACCESS TO ALL ADJUTING PROPERTIES TO THE PROJECT SITE. ADJACENT ROADS SHALL BE MAINTAINED AND KEPT CLEAN OF MUD AND OTHER DEBRIS THAT MAY BE CAUSED BY TRAFFIC EXITING THE WORK SITE. THE CONTRACTOR SHALL COORDINATE AND PROVIDE FOR ALL NECESSARY TRAFFIC CONTROL. TRAFFIC CONTROL SHALL FOLLOW THE MORE STRINGENT GUIDELINES OF THE CITY OF MISSION OR ODOT.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE AND MAINTAIN FACILITIES FOR A CONSTRUCTION OFFICE, EMPLOYEE PARKING, AND EMPLOYEE SANITARY FACILITIES. ON STREET PARKING WILL NOT BE PERMITTED. THE CONTRACTOR SHALL PROVIDE FOR THE LAWFUL OFF-SITE DISPOSAL OF DEMOLITION DEBRIS AND CONSTRUCTION WASTE.

EXISTING DATA

EACH CONTRACTOR SHALL VISIT THE SITE PERSONALLY TO ASCERTAIN THE NATURE OF THE WORK AND BECOME THOROUGHLY FAMILIARIZED WITH THE SITE PRIOR TO BID SUBMISSION.

EXISTING STRUCTURES, GRADES, PIPING, ETC. ARE INDICATED IN APPROXIMATE LOCATION ON THE PLAN. INFORMATION SHOWN IS NOT GUARANTEED TO BE CORRECT AND COMPLETE. THE DATA SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR. THE EXISTENCE OF FACILITIES ABOVE OR BELOW GROUND, WHICH MAY NOT BE SHOWN, SHALL NOT BE A BASIS FOR A CLAIM FOR EXTRA WORK.

EXISTING UNDERGROUND UTILITIES SHOWN ARE RECORDS PROVIDED BY UTILITY COMPANIES AND ARE APPROXIMATE ONLY. SERVICE LATERALS ARE NOT SHOWN.

IT IS THE RESPONSIBILITY OF CONTRACTOR TO NOTIFY THE CITY, PRIOR TO BID OPENING NON-CONFORMING OR CONFLICTING INFORMATION.

ACCESSIBILITY TO PRIVATE PROPERTY

ACCESS TO ALL DRIVEWAYS AND PARKING AREAS WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED AT ALL TIMES EXCEPT WHILE LAYING THE SANITARY SEWER ACROSS THE DRIVE. THE TRENCH SHALL BE BACKFILLED AT THE END OF EACH WORK DAY TO PROVIDE ACCESS. THE CONTRACTOR MUST NOTIFY EACH PROPERTY OWNER AT LEAST 24 HOURS IN ADVANCE OF CUTTING THEIR DRIVEWAY.

PRESERVATION OF EXISTING UTILITY SERVICES

ANY EXISTING WATER LINE, SANITARY SEWER, STORM SEWER, GAS LINE OR OTHER UTILITY IN OR OUTSIDE OF THE CONSTRUCTION LIMITS, DAMAGED DURING CONSTRUCTION OF THE PROPOSED PROJECT, WILL BE REPLACED AT THAT CONTRACTORS EXPENSE.

EXCAVATED MATERIAL

ALL EXCAVATED MATERIAL AND ALL MATERIAL USED IN CONSTRUCTION OF THE WORK SHALL BE PILED AND STORED IN A MANNER THAT WILL NOT ENDANGER THE WORK AND THAT WILL LEAVE DRIVEWAYS OR OTHER CONTROLS UNOBSTRUCTED AND ACCESSIBLE WHILE THE WORK IS TO BE COMPLETED. SATISFACTORY PROVISIONS SHALL BE MADE FOR STREET DRAINAGE, AND NATURAL WATERCOURSES SHALL NOT BE OBSTRUCTED. DURING THE PROGRESS OF THE WORK, ALL MATERIAL PILES SHALL BE KEPT TRIMMED UP AND MAINTAINED IN A NEAT MANNER. ALL EXCAVATED WASTE MATERIAL SHALL BE REMOVED FROM THE PROJECT SITE, AS DIRECTED BY THE ENGINEER. THE WASTE SITE IS TO BE PROVIDED BY THE CONTRACTOR AT NO COST TO THE CITY, UNLESS OTHERWISE NOTED IN THE SPECIFICATIONS. ALONG WITH A LETTER FROM THE PROPOSED WASTE SITE OWNER PERMITTING SUCH AND HOLDING THE CITY HARMLESS.

RESTORATION

FOR SANITARY SEWER INSTALLED, TESTED, AND ACCEPTED UP TO MAY 15TH OF ANY CALENDER YEAR, RESTORATION SHALL BE COMPLETE BY JUNE 30th OF THAT YEAR. FOR INSTALLATION OF SANITARY SEWER TESTED AND ACCEPTED FROM MAY 15th TO SEPTEMBER 30th OF ANY CALENDER YEAR, RESTORATION SHALL BE COMPLETE BY NOVEMBER 15th OF THAT CALENDER YEAR. FOR SANITARY SEWER INSTALLED, TESTED, AND ACCEPTED AFTER NOVEMBER 15TH OF ANY CALENDER YEAR, RESTORATION SHALL BE COMPLETE BY MAY 15th OF THE NEXT CALENDER YEAR.

ALL SOIL AREAS DISTURBED BY THE CONTRACTOR SHALL BE TOPSOILED, SEEDED AND MULCHED. COST TO BE INCLUDED IN THE UNIT PRICE BID FOR EACH ITEM OF AFFECTED WORK. TOPSOIL, SEEDING AND MULCHING SHALL NOT BE A SEPERATE PAY ITEM. THIS INCLUDES BACKFILLING, SEEDING AND MULCHING ALONG THE EDGE OF ALL PAVEMENT RESTORATION.

PAVEMENT CROSSINGS WILL RECEIVE TYPE C PAVEMENT REPLACEMENT WITH FULL WIDTH PAVEMENT OVERLAY.

CONTRACTOR TO REPLACE ALL PAVEMENT MARKINGS. COST TO BE INCLUDED IN THE UNIT PRICE BID FOR PAVEMENT

CONTRACTOR TO USE HOT APPLIED JOINT CRACK SEALER ON ASPHALT PAVEMENT AT ALL ENDS AND INTERSECTIONS.

ALL TRENCHES IN ROAD RIGHT OF WAY WILL RECEIVE FULL DEPTH PREMIUM GRANULAR BACKFILL.

REMOVAL AND RELOCATION OF EXISTING UTILITIES

THE CONTRACTOR IS REQUIRED TO COOPERATE WITH EACH RESPECTIVE UTILITY OWNER FOR THE REMOVAL AND RELOCATION OF ANY AND ALL UTILITIES THAT CREATE A CONFLICT WITH CONSTRUCTION OF THE PROJECT.

ITEM 203SPEC. ROADWAY REMOVAL

ALL EXISTING CONCRETE INCLUDING CURBS, DRIVES, CULVERTS, AND BASE ETC. WITHIN WORK LIMITS SHALL BE REMOVED ALL EXISTING PAVEMENT REMOVAL OUTSIDE OF NEW PAVEMENT AREA SHALL BE GRADED, TOP SOIL AND SEEDED TO THE SATISFACTION OF THE CITY.

ALL ABOVE SAID WORK SHALL BE PAID FOR UNDER ITEM 203 ROADWAY REMOVAL, LUMP SUM BID

ITEM 623. CONSTRUCTION STAKING

CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION LAYOUT AND AS-BUILT DRAWINGS. THIS WORK IS TO BE PERFORMED UNDER ITEM 623 CONSTRUCTION STAKING.

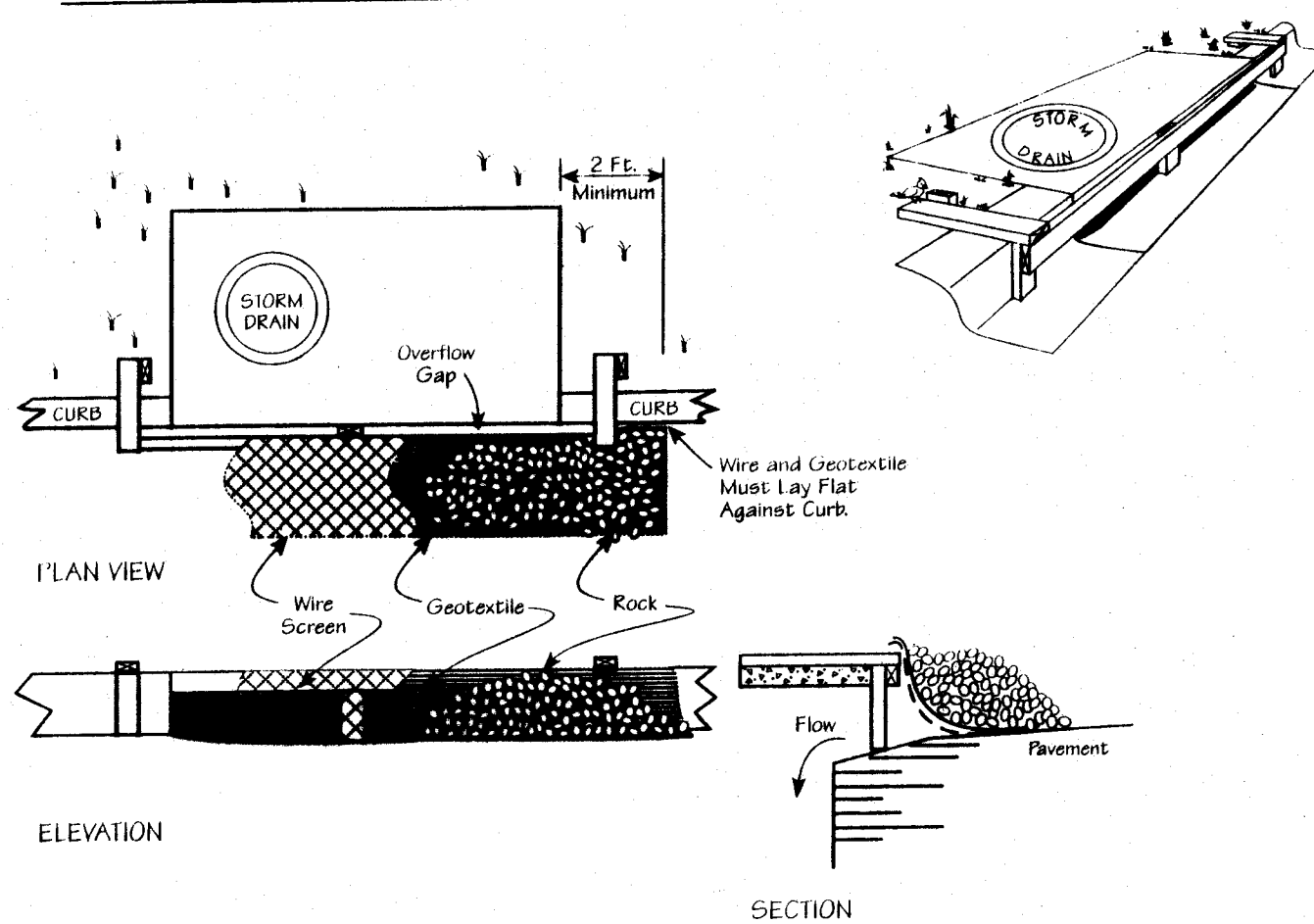
Richville Dr. Rehabilitation
General Notes
City of Massillon
Stark County, Ohio

Francis H. Cicchinelli, Jr.
Mayor



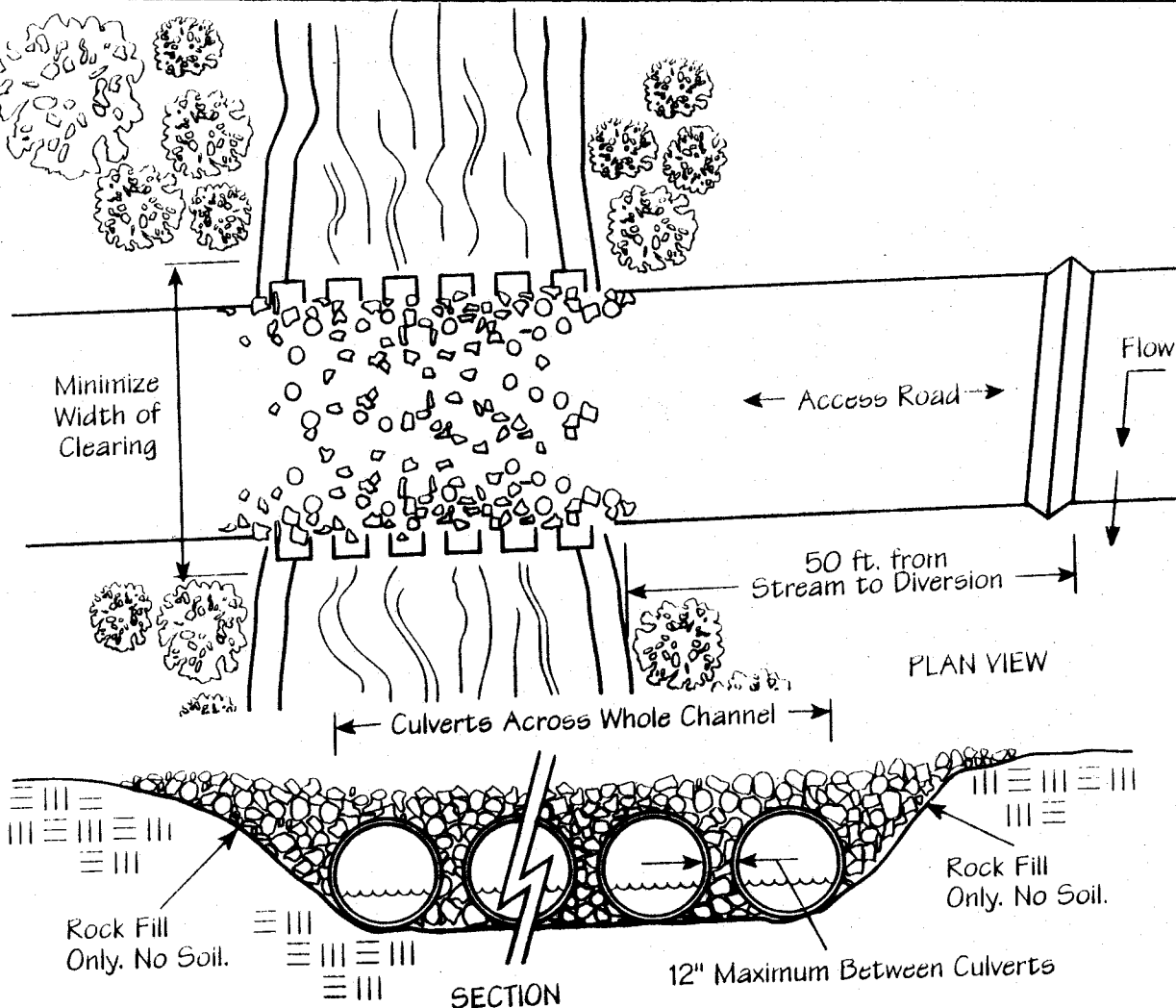
REVISIONS:	
DATE	DESCRIPTION
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ACCOUNT NUMBER 05st03	

Curb Inlet Protection



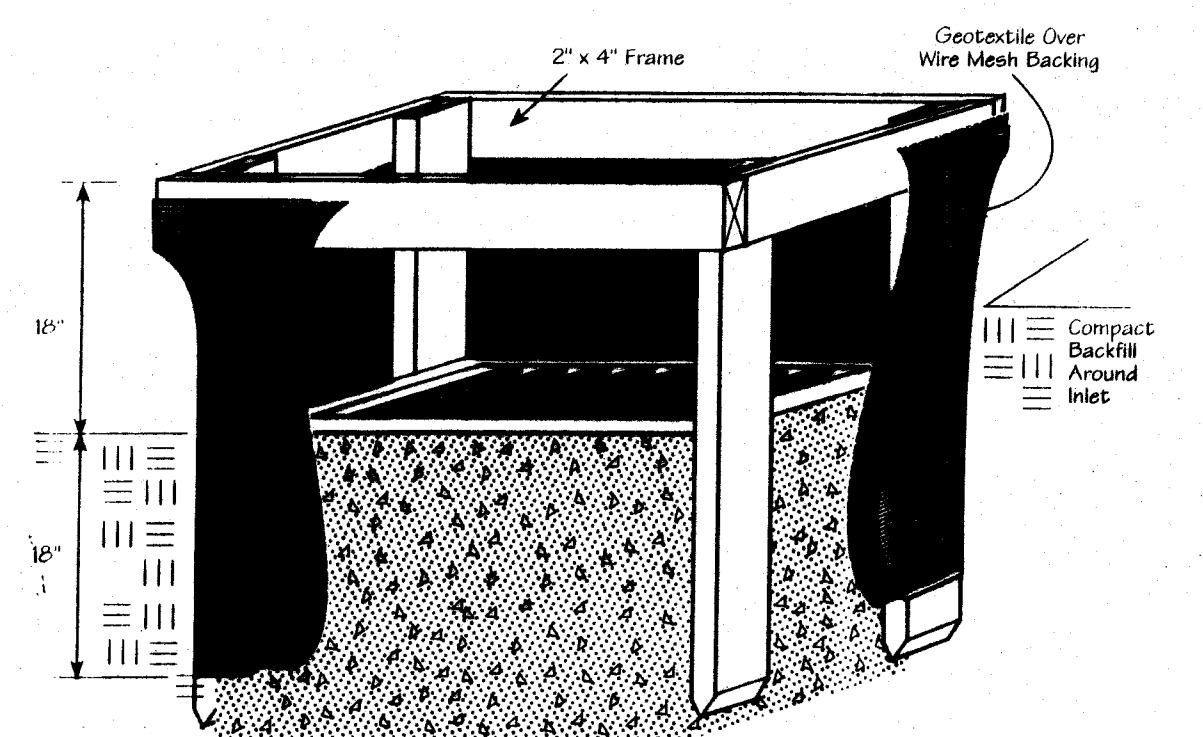
- Inlet protection shall be constructed either before upslope land disturbance begins or before the storm drain becomes operational.
- The wooden frame is to be constructed of 2-by-4-in. construction-grade lumber. The end spacers shall be a minimum of 1 ft. beyond both ends of the throat opening. The anchors shall be nailed to 2-by-4-in. stakes driven on the opposite side of the curb.
- The wire mesh shall be of sufficient strength to support fabric and stone. It shall be a continuous piece with a minimum width of 30 in. and 4 ft. longer than the throat length of the inlet, 2 ft. on each side.
- Geotextile cloth shall have an equivalent opening size (EOS) of 20-40 sieve and be resistant to sunlight. It shall be at least the same size as the wire mesh.
- The wire mesh and geotextile cloth shall be formed to the concrete gutter and against the face of the curb on both sides of the inlet and securely fastened to the 2-by-4-in. frame.
- Two-inch stone shall be placed over the wire mesh and geotextile in such a manner as to prevent water from entering the inlet under or around the geotextile cloth.

Culvert Stream Crossing



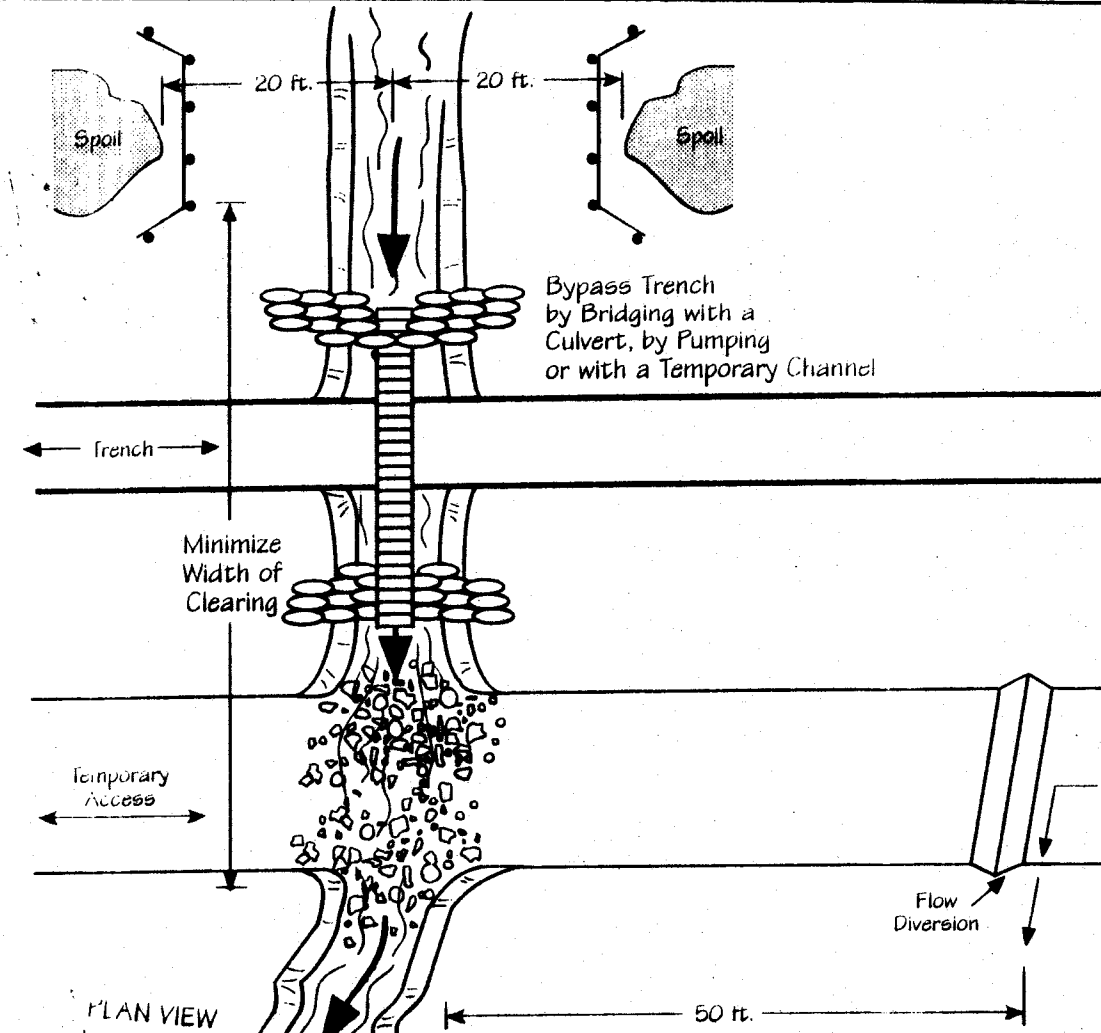
- Stream Disturbance—Disturbance to the stream shall be kept to a minimum. Streambank vegetation shall be preserved to the maximum extent practical and the stream crossing shall be as narrow as practical.
- Clearing shall be done by cutting NOT grubbing. The roots and stumps shall be left in place to help stabilize the banks and accelerate revegetation.
- To minimize interference with fish spawning and migration, crossing construction should be avoided where practical from March 15 through June 15.
- Water shall not be allowed to flow along the road directly to the stream. Diversions and swales shall direct runoff away from the access road to a sediment-control practice.
- Placement—Culverts shall be placed on the existing streambed to avoid a drop or waterfall at the downstream end of the pipe, which would be a barrier to fish migration. Crossings shall be made in shallow areas rather than deep pools where possible.
- Culvert Size Culvert diameter shall be at least three times the depth of normal stream flow at the point of the stream crossing. If the crossing must be placed in deep, slow-moving pools, the culvert diameter may be reduced to twice the depth of normal stream flow. The minimum size culvert that may be used is 18 in.
- Number of Culverts—There shall be sufficient number of culverts to completely cross the stream channel from streambank to streambank with no more than a 12-in. space between each one.
- Fill and Surface Material—All material placed in the stream channel, around the culverts and on the surface of the crossing shall be stone, rock or aggregate. ODOT No. 1 shall be the minimum acceptable size. To prevent washouts, larger stone and rock may be used and they may be placed in gabion mattresses. NO SOIL SHALL BE USED IN THE CONSTRUCTION OF A STREAM CROSSING OR PLACED IN THE STREAM CHANNEL.
- Removal—Aggregate stone and rock used for this structure does not need to be removed. Care should be taken so that any aggregate left does not create an impoundment or impede fish passage. All pipes, culverts, gabions or structures must be removed.
- Stabilization—Streambanks shall be stabilized. Plantings shall include woody vegetation where practical.

Inlet Protection in Swales, Ditch Lines or Yard Inlets



- Inlet protection shall be constructed either before upslope land disturbance begins or before the storm drain becomes operational.
- The earth around the inlet shall be excavated completely to a depth of at least 18 in.
- The wooden frame shall be constructed of 2-by-4-in. construction-grade lumber. The 2-by-4-in. posts shall be driven 1 ft. into the ground at four corners of the inlet and the top portion of 2-by-4-in. frame assembled using the overlap joint shown. The top of the frame shall be at least 6 in. below adjacent roads if ponded water would pose a safety hazard to traffic.
- Wire mesh shall be of sufficient strength to support fabric with water fully impounded against it. It shall be stretched tightly around the frame and fastened securely to the frame.
- Geotextile shall have an equivalent opening size of 20-40 sieve and be resistant to sunlight. It shall be stretched tightly around the frame and fastened securely. It shall extend from the top of the frame to 18 in. below the inlet notch elevation. The geotextile shall overlap across one side of the inlet so the ends of the cloth are not fastened to the same post.
- Backfill shall be placed around the inlet in compacted 6-in. layers until the earth is even with notch elevation on ends and top elevation on sides.
- A compacted earth dike or a check dam shall be constructed in the ditch line below the inlet if the inlet is not in a depression and if runoff bypassing the inlet will not flow to a settling pond. The top of earth dikes shall be at least 6 in. higher than the top of the frame.

Small Stream Utility Crossing



- When site conditions allow, one of the following shall be used to divert stream flow or otherwise keep the flow away from construction activity.
 - Drill or bore the utility lines under the stream channel.
 - Construct a cofferdam or barricade of sheet piling, sandbags or a turbidity curtain to keep the stream from continually flowing through the disturbed areas. Turbidity curtains shall be a pre-assembled system and used only parallel to flow.
 - Stage construction by confining first one-half of the channel until work there is completed and stabilized, then move to the other side to complete the crossing.
 - Route the stream flow around the work area by bridging the trench with a rigid culvert, pumping, or constructing a temporary channel. Temporary channels shall be stabilized by rock or a geotextile completely lining the channel bottom and side slopes.
- Crossing Width The width of clearing shall be minimized through the riparian area. The limits of disturbance shall be as narrow as possible including not only construction operations within the channel itself but also clearing done through the vegetation growing on the streambanks.
- Clearing shall be done by cutting NOT grubbing. The roots and stumps shall be left in place to help stabilize the banks and accelerate revegetation.
- Material excavated from the trench shall be placed at least 20 ft. from the streambanks.
- To the extent other constraints allow, stream shall be crossed during periods of low flow.
- Duration of Construction—The time between initial disturbance of the stream and final stabilization shall be kept to a minimum. Construction shall not begin on the crossing until the utility line is in place to within 10 ft. of the streambank.
- Fill Placed Within the Channel—The only fill permitted in the channel should be clean aggregate, stone or rock. No soil or other aggregate material shall be placed in the channel. This restriction includes all fill for temporary crossings, diversions, and trench backfill when placed in flowing water. If the stream flow is diverted away from construction activity the material originally excavated from the trench may be used to backfill the trench.
- Streambank Restorations—Streambanks shall be restored to their original line and grade and stabilized with riprap or vegetative bank stabilization.
- Runoff Control Along the Right-of-Way—To prevent sediment-laden runoff from flowing to the stream, runoff shall be diverted with water bar or swales to a sediment trapping practice a minimum of 50 ft. from the stream.
- Dewatering or pumping water containing sediment shall not be discharge directly to a stream. The flow shall be routed through a settling pond, dewatering sump or a flat, well-vegetated area adequate for removing sediment before the pumped water reaches the stream.
- Dewatering operations shall not cause significant reductions in stream temperatures. If groundwater is to be discharged in high volumes during summer months, it shall first be routed through a settling pond or overland through a flat well-vegetated area.
- Permits—In addition to these specifications, stream crossings shall conform to the rules and regulations of the U.S. Army Corps of Engineers for in-stream modifications (404 permits) and Ohio Environmental Protection Agency's State Water Quality Certification (401 permits).

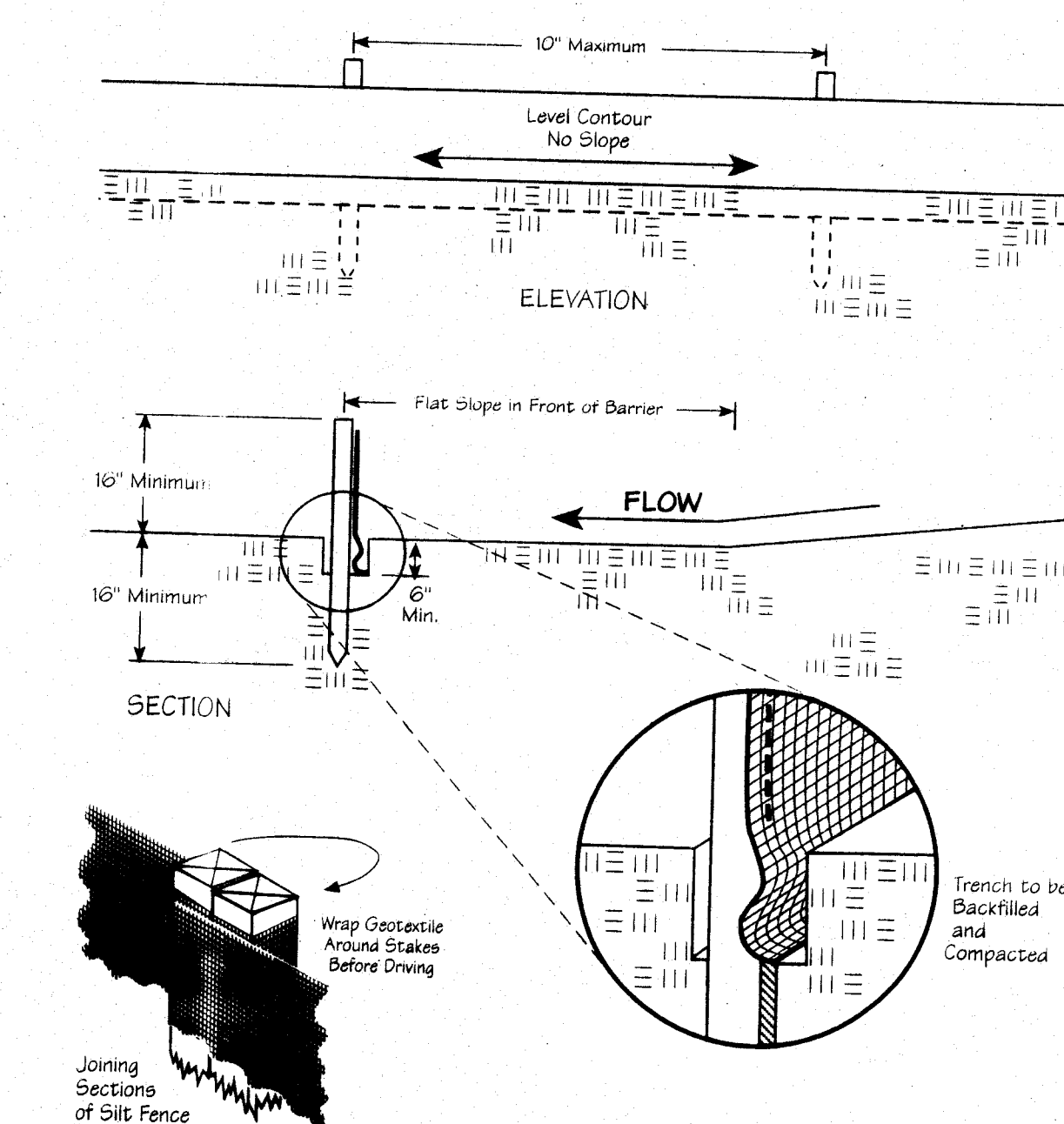
Silt Fence

- Silt fence shall be constructed before upslope land disturbance begins.
- All silt fence shall be placed as close to the contour as possible so that water will not concentrate at low points in the fence and so that small swales or depressions which may carry small concentrated flows to the silt fence are dissipated along its length.
- To prevent water ponded by the silt fence from flowing around the ends, each end shall be constructed upslope so that the ends are at a higher elevation.
- Where possible, silt fence shall be placed on the flattest area available.
- Where possible, vegetation shall be preserved for 5 ft. (or as much as possible) upslope from the silt fence. If vegetation is removed, it shall be reestablished within 7 days from the installation of the silt fence.
- The height of the silt fence shall be a minimum of 16 in. above the original ground surface.
- The silt fence shall be placed in a trench cut a minimum of 6 in. deep. The trench shall be cut with a trencher, cable laying machine, or other suitable device which will ensure an adequately uniform trench depth.
- The silt fence shall be placed with the stakes on the downslope side of the geotextile and so that 6 in. of cloth are below the ground surface. Excess material shall lay on the bottom of the 6-in.-deep trench. The trench shall be backfilled and compacted.
- Seams between section of silt fence shall be overlapped with the end stakes of each section wrapped together before driving into the ground.
- Maintenance—Silt fence shall allow runoff to pass only as diffuse flow through the geotextile. If runoff overtops the silt fence, flows under or around the ends, or in any other way becomes a concentrated flow, one of the following shall be performed, as appropriate: 1) The layout of the silt fence shall be changed, 2) Accumulated sediment shall be removed, or 3) Other practices shall be installed.

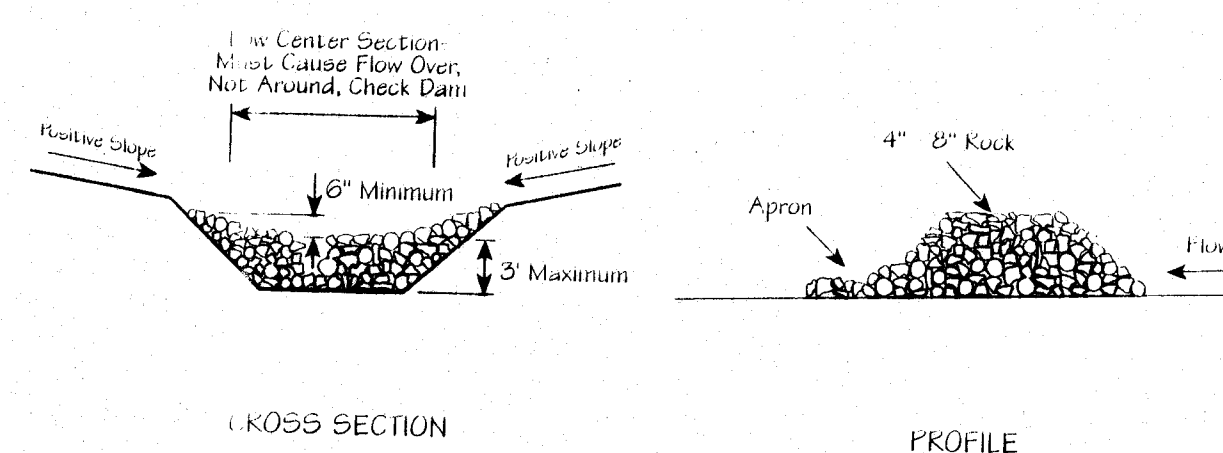
Fabric Properties	
Minimum Tensile Strength	120 lbs.
Maximum Elongation at 60 lbs.	50%
Minimum Puncture Strength	60 lbs.
Minimum Tear Strength	40 lbs.
Minimum Burst Strength	200 psi
Apparent Opening Size	≤ 0.84mm
Minimum Permeability	1X10 ⁻⁵ sec ⁻¹
Ultraviolet Exposure Strength Retention	70%

Mulching

- Mulch and/or other appropriate vegetative practices shall be applied to disturbed areas within 7 days of grading if the area is to remain dormant (undisturbed) for more than 45 days or on areas and portions of the site which can be brought to final grade.
- Mulch shall consist of one of the following:
 - Straw—Straw shall be unrotted small grain straw applied at the rate of 2 tons/ac. or 90 lb./1,000 sq. ft. (two to three bales). The straw mulch shall be spread uniformly by hand or mechanically so the soil surface is covered. For uniform distribution of hand-spread mulch, divide area into approximately 1,000-sq.-ft. sections and place two 45-lb. bales of straw in each section.
 - Hydroseeders—Wood cellulose fiber should be used at 2,000 lb./ac. or 46 lb./1,000 sq. ft.
 - Other—Other acceptable mulches include mulch matings applied according to manufacturer's recommendations or wood chips applied at 10-20 tons/ac.
- Mulch Anchoring—Mulch shall be anchored immediately to minimize loss by wind or runoff. The following are acceptable methods for anchoring mulch.
 - Mechanical—Use a disk, crimper, or similar type tool set straight to punch or anchor the mulch material into the soil. Straw mechanically anchored shall not be finely chopped but be left generally longer than 6 in.
 - Mulch Nettings—Use according to the manufacturer's recommendations, following all placement and anchoring suggestions. Use in areas of water concentration and steep slopes to hold mulch in place.
 - Asphalt Emulsion—For straw mulch, apply at the rate of 160 gal./ac. (0.1 gal./sq.) into the mulch as it is being applied or as recommended by the manufacturer.
 - Synthetic Binders—For straw mulch, synthetic binders such as Acrylic DLR (Agri-Tac), DCA-70, Petroset, Terra Tack or equal may be used at rates recommended by the manufacturer.
 - Wood Cellulose Fiber—Wood cellulose fiber may be used for anchoring straw. The wood cellulose fiber shall be mixed with a maximum of 50 lb./100 gal. of wood cellulose fiber.



Check Dam



- The check dam shall be constructed of 4-8 in.-diameter stone, placed so that it completely covers the width of the channel.
- The top of the check dam shall be constructed so that the center is approximately 6 in. lower than the outer edges, so water will flow across the center and not around the ends.
- The maximum height of the check dam at the center of the weir shall not exceed 3 ft.
- Spacing between dams shall be as shown in the plans or by the following table:

Check Dam Spacing				
Dam Height (ft.)	Channel Slope			
	< 5%	5 - 10%	10 - 15%	15 - 20%
1	65 ft.	30 ft.	20 ft.	15 ft.
2	130 ft.	65 ft.	40 ft.	30 ft.
3	200 ft.	100 ft.	65 ft.	50 ft.

NOTE

THE DETAILS SHOWN ON THIS SHEET ARE STORM WATER BEST MANAGEMENT PRACTICES FROM (RAINWATER AND LAND DEVELOPMENT) OHIO'S STANDARDS FOR STORM WATER MANAGEMENT LAND DEVELOPMENT AND URBAN STREAM PROTECTION. THE CONTRACTOR SHALL USE THE ADJACENT OR PROVIDE A DETAIL PROPOSAL WHEN CREATING, IMPLEMENTING THE SWP3 PLAN AS REQUIRED BY THE CITY AND THE STARK SOIL & WATER CONSERVATION DISTRICT.

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DATE:	DATE:

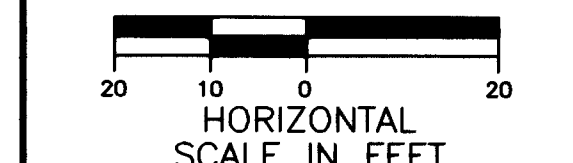
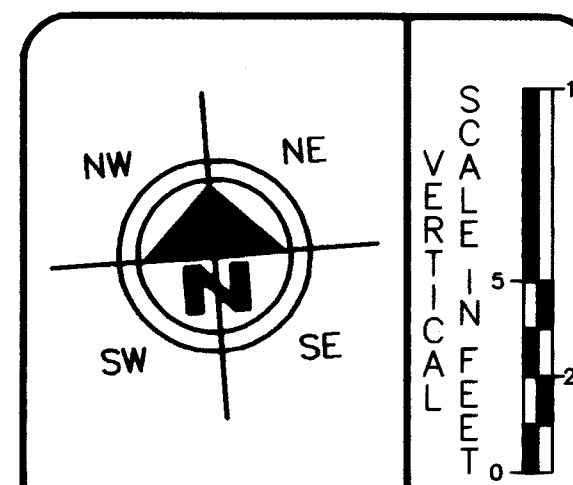
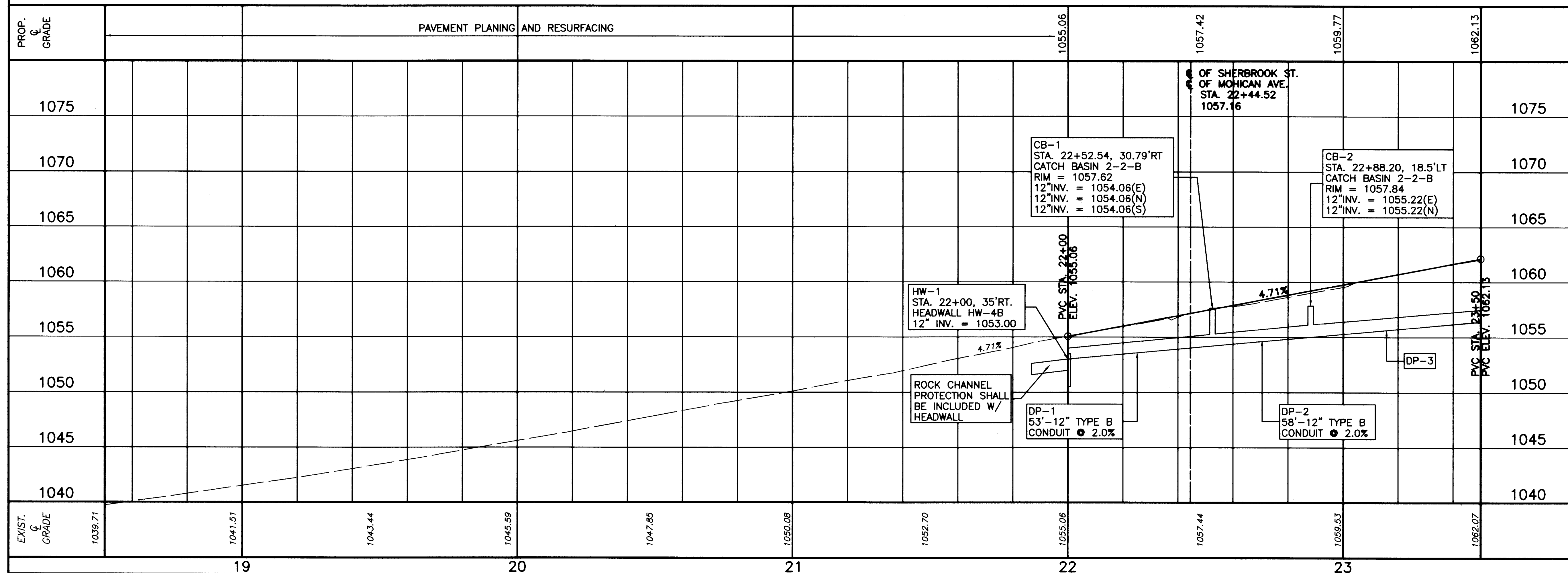
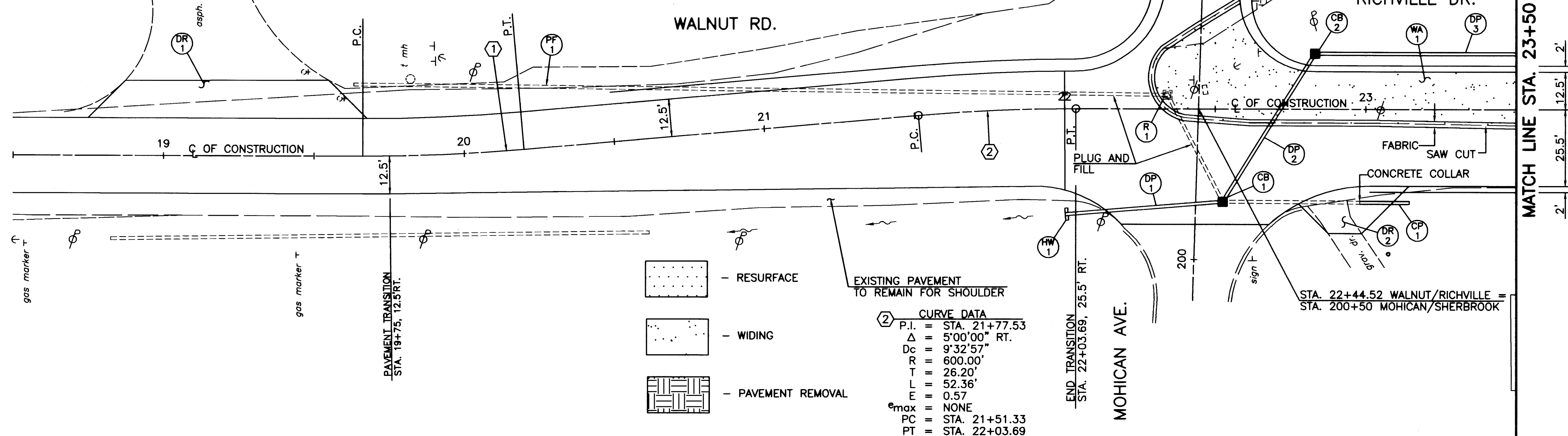
Massillon Standard
Storm Water Pollution Control Details
City of Massillon
Stark County, Ohio



REVISIONS:	
DATE	DESCRIPTION

FILE NAME:
ACCOUNT NUMBER

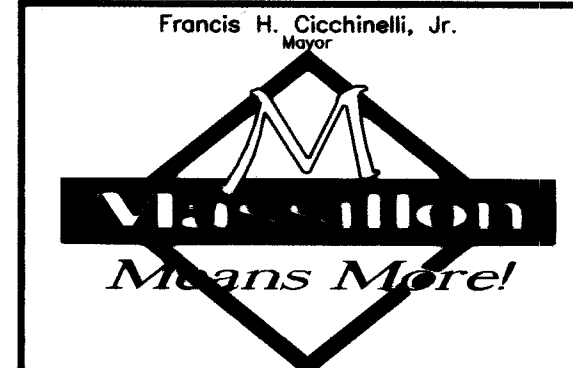
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 DC = 99°32'57"
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 E = 53.70'
 L = 0.60'
 e_{max} = NONE
 PC = STA. 19+66.20
 PT = STA. 20+19.90



DRAWN BY: FPW
 CHECKED BY: SDH
 DATE: April, 2005
 DATE: April, 2005

Richville Dr Rehabilitation Alternate A

Alternate Plan and Profile Sta. 18+50 to Sta. 23+50
 City of Massillon
 Stark County, Ohio



REVISIONS:	
DATE	DESCRIPTION

FILE NAME: .DWG
 ACCOUNT NUMBER: 05st03

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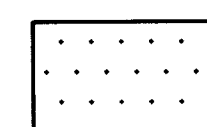
EXISTING PAVEMENT
TO REMAIN FOR SHOULDER

4' OF EXISTING PAVEMENT
TO BE UTILIZED FOR SHOULDER

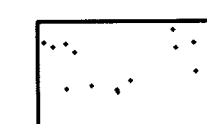
END TRANSITION
STA. 22+03.69, 25.5' RT.

MOHICAN AVE.

STA. 200+50 MOHICAN AVE., SHERBROOK ST. =
STA. 22+44.52 RICHVILLE DR.



- RESURFACE



- WIDING



- PAVEMENT REMOVAL

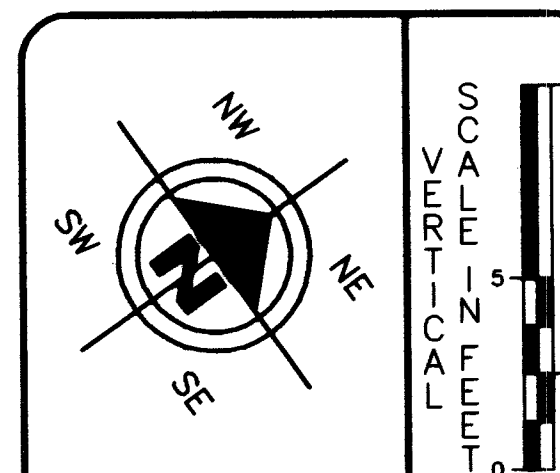
RICHVILLE DR.

SHERBROOK ST.

4' EXISTING PAVEMENT
TO REMAIN FOR SHOULDER

ALL EXISTING PAVEMENT AND SHOULDER
SHALL BE REMOVED UNLESS OTHERWISE
DIRECTED

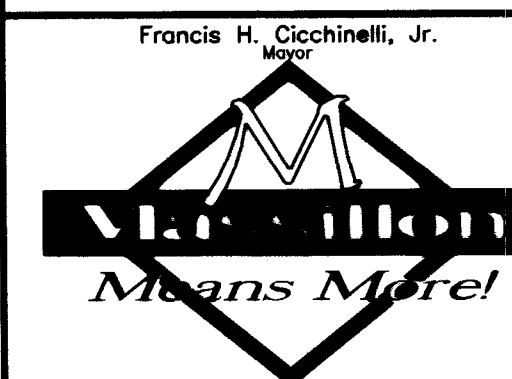
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1060					+46.72		+78.46				1060
1055											1055
1050											1050
1045											1045
1040											1040
1035											1035
1030											1030
EXIST. GRADE		1058.33		1057.05		1056.34		1052.43		1049.33	
		200		201		202					



HORIZONTAL
SCALE IN FEET

DRAWN BY: FPW
CHECKED BY: SDH
DATE: April, 2005
DATE: April, 2005

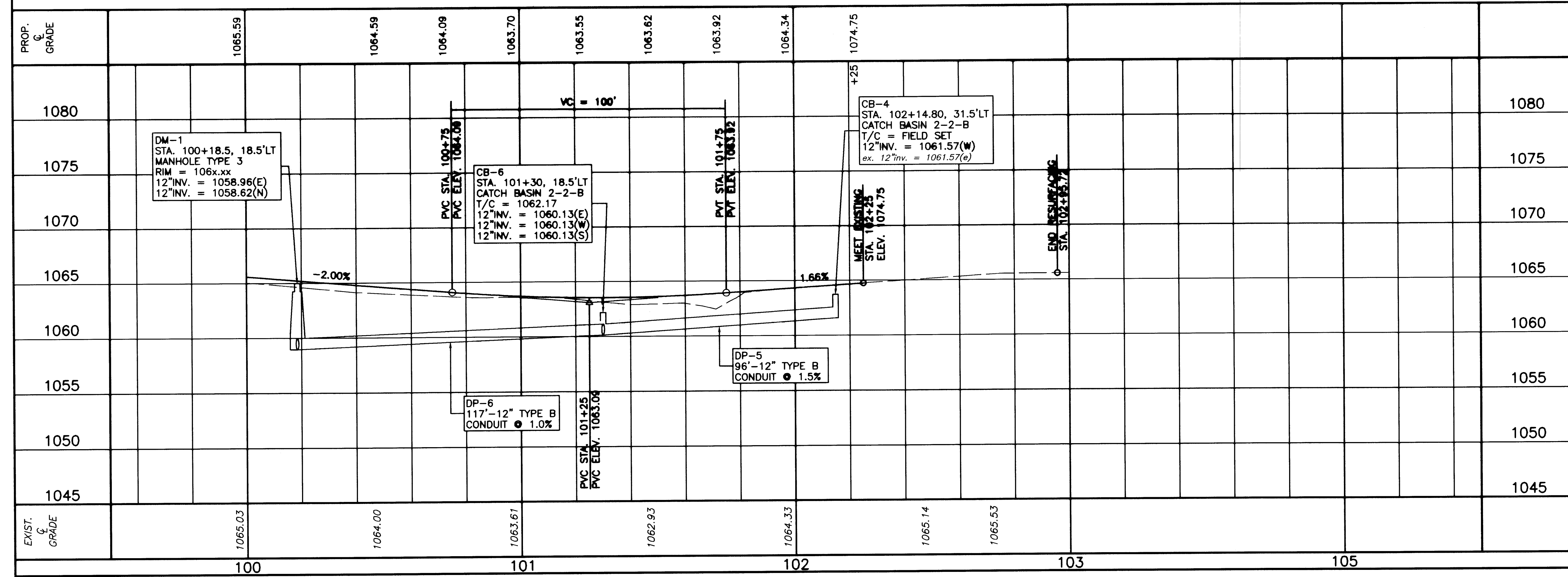
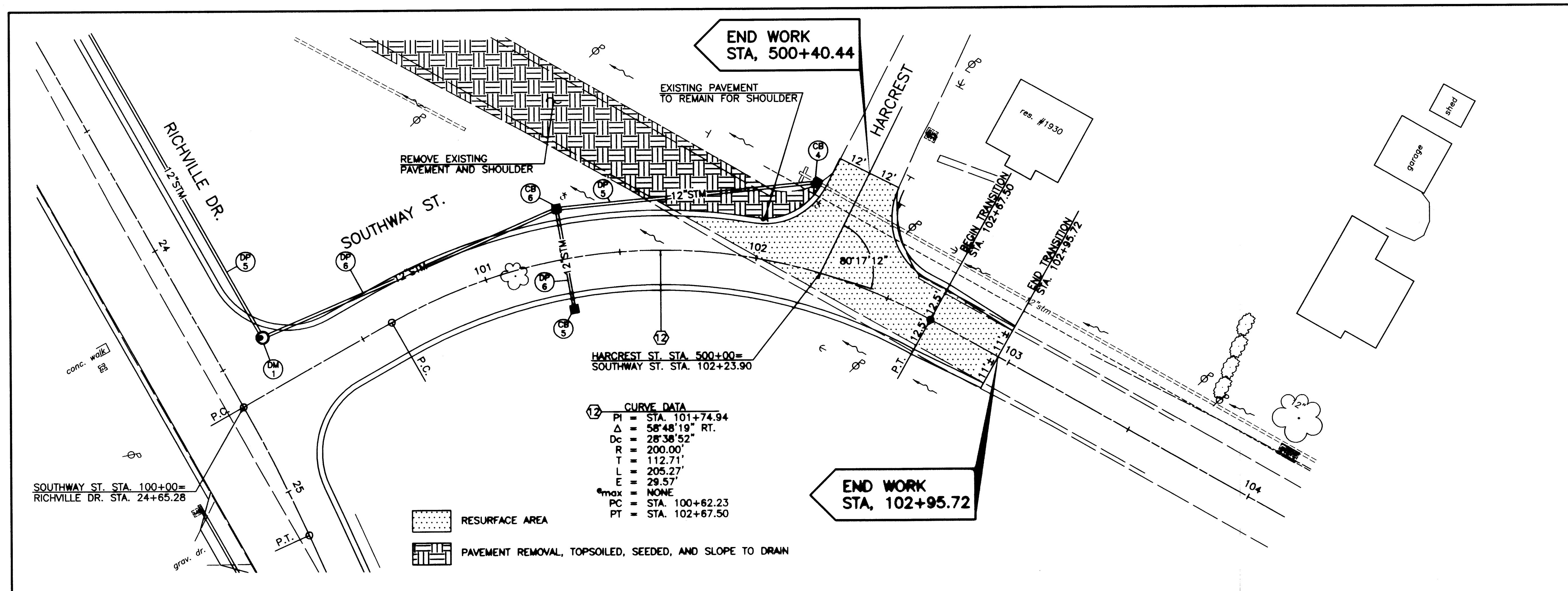
Richville Dr. Rehabilitation
Plan and Profile Sta. 199+50+00 to Sta. 202+50
City of Massillon
Stark County, Ohio



REVISIONS:	
DATE	DESCRIPTION

FILE NAME:
.DWG

ACCOUNT NUMBER
05st03



Richville Dr. Rehabilitation

Plan and Profile Sta. 100+00 to Sta. 104+00

City of Massillon
Stark County, Ohio

Francis H. Cicchinelli, Jr.

Massillon

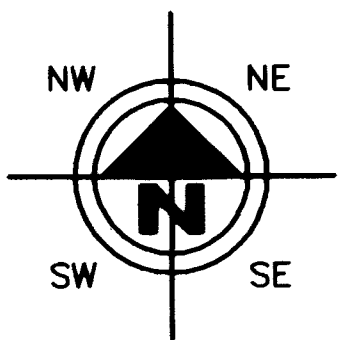
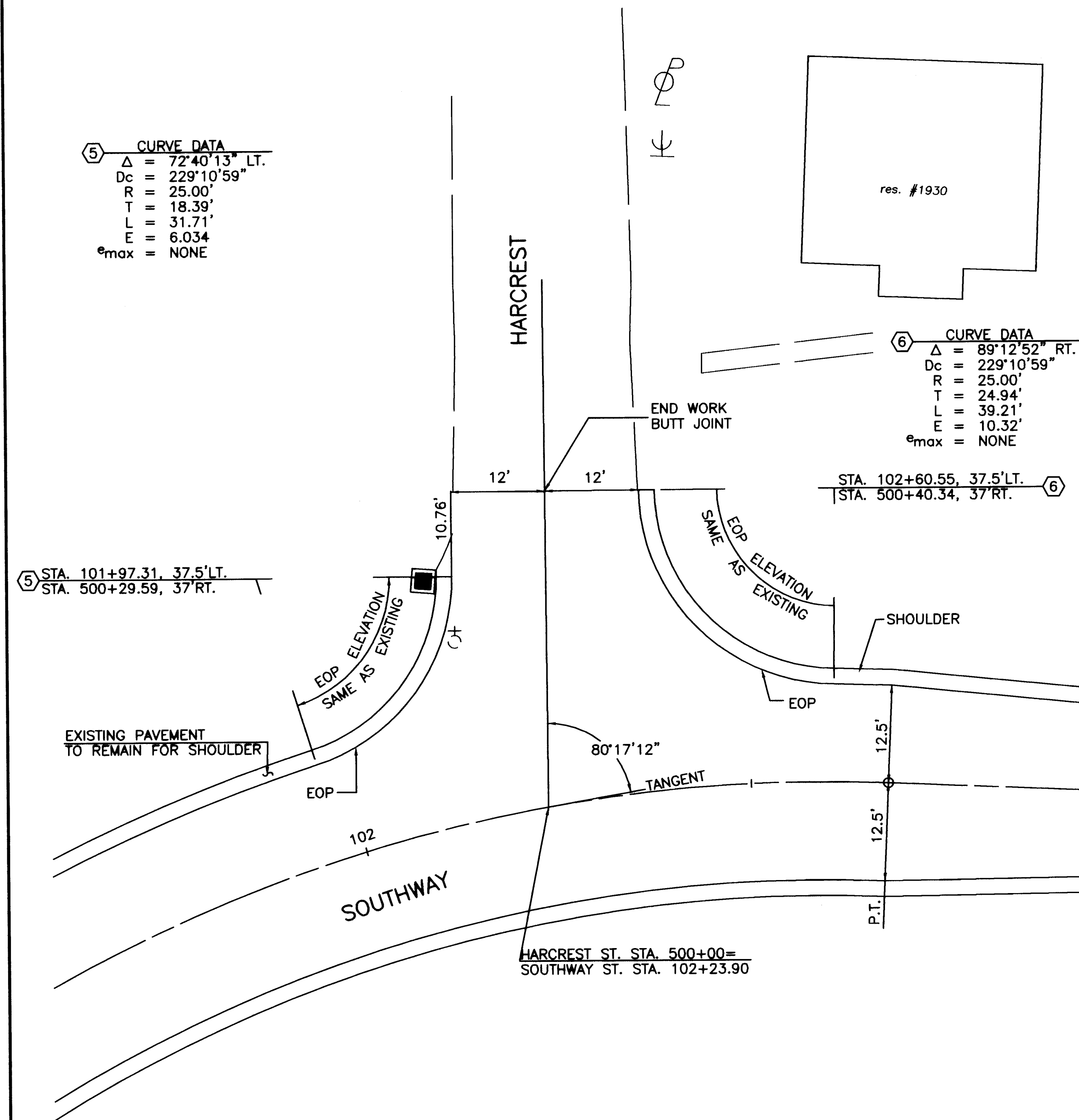
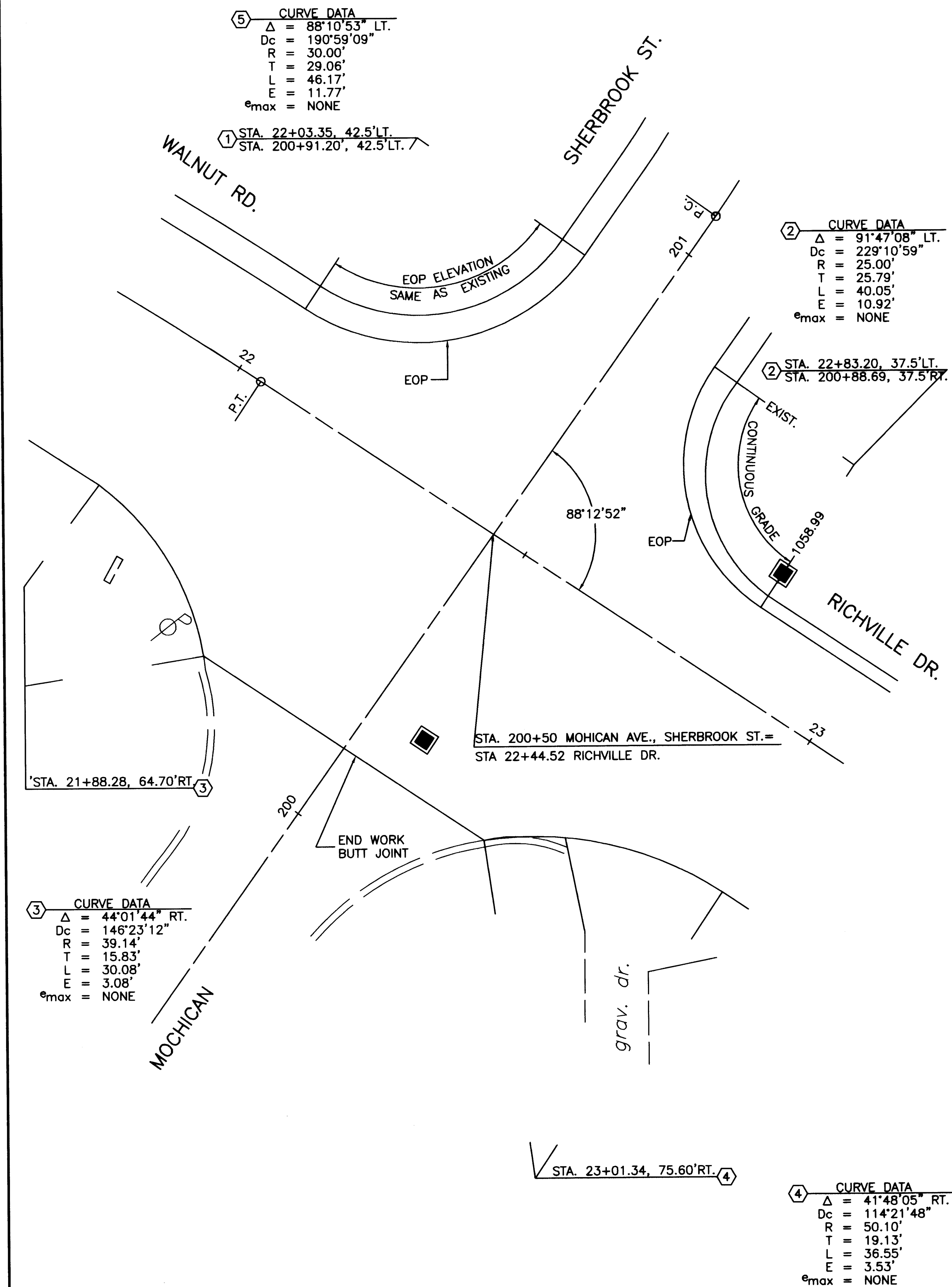
Means More!

REVISIONS:	
DATE	DESCRIPTION

FILE NAME: .DWG

ACCOUNT NUMBER: 05st03

31
36



HORIZONTAL
SCALE IN FEET

DRAWN BY: FPW
 CHECKED BY: SDH
 DATE: April, 2005
 DATE: April, 2005

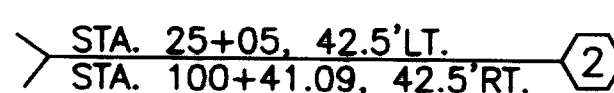
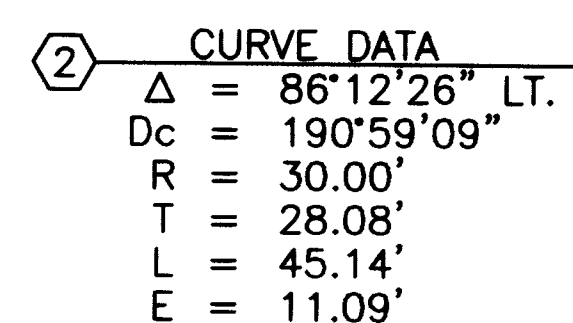
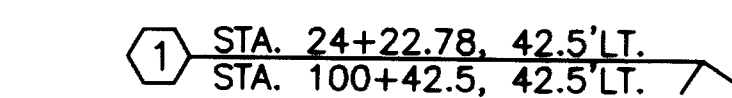
Richville Dr. Rehabilitation Intersection Details City of Massillon Stark County, Ohio

Francis H. Cicchinelli, Jr.
 Mayor

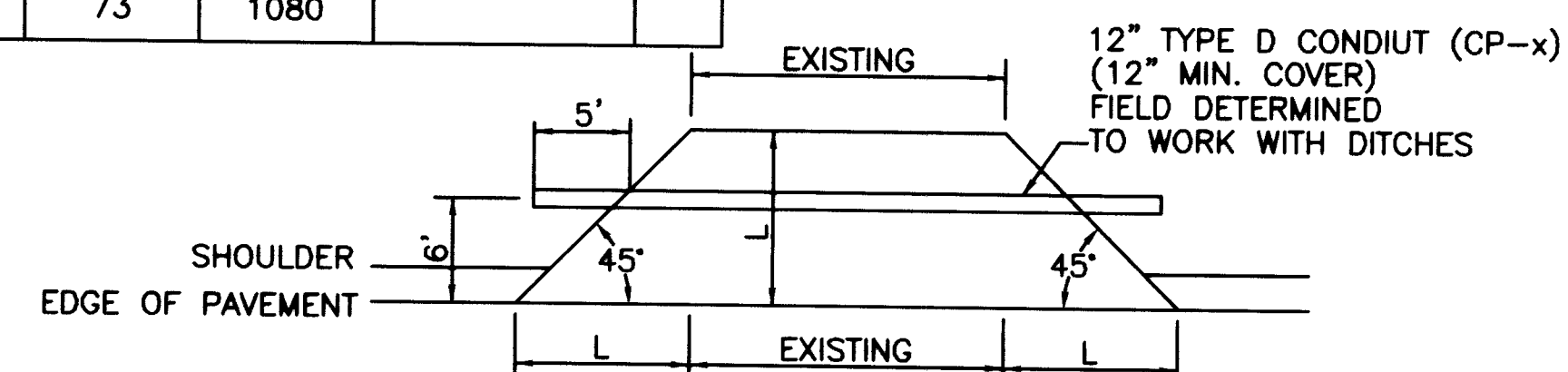
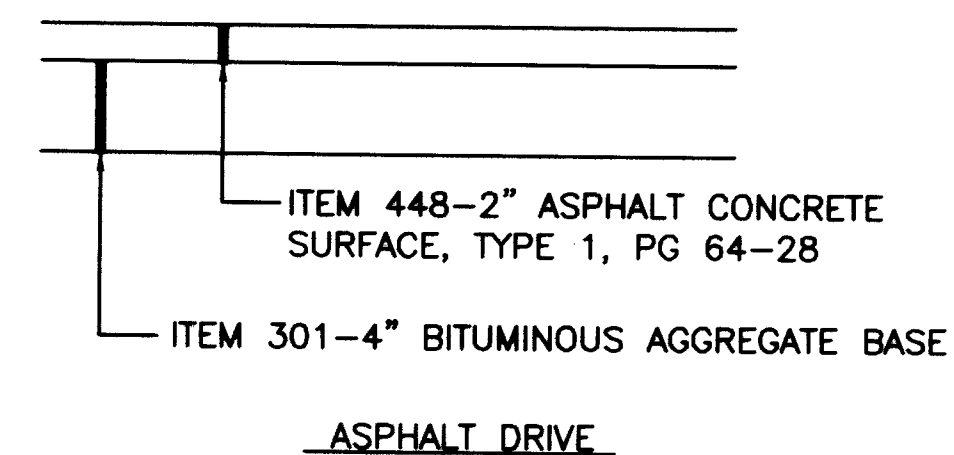
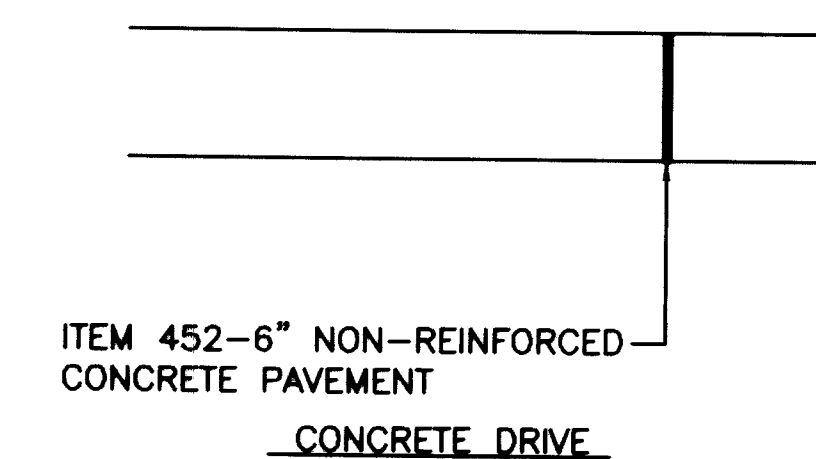


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DATE	DESCRIPTION

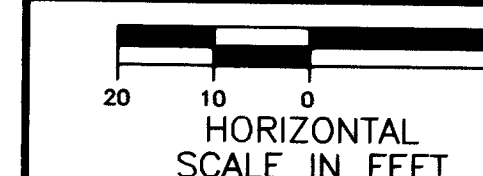
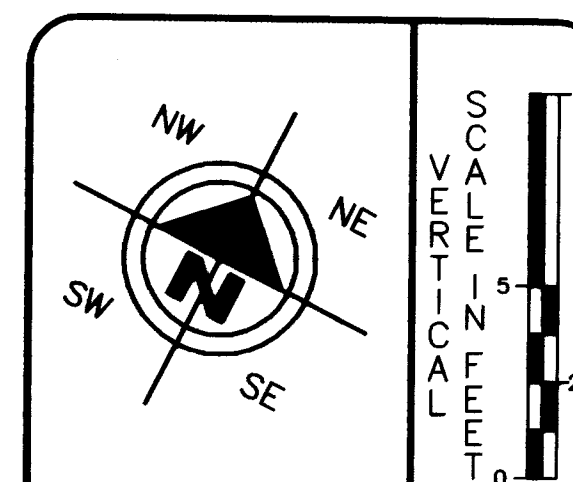
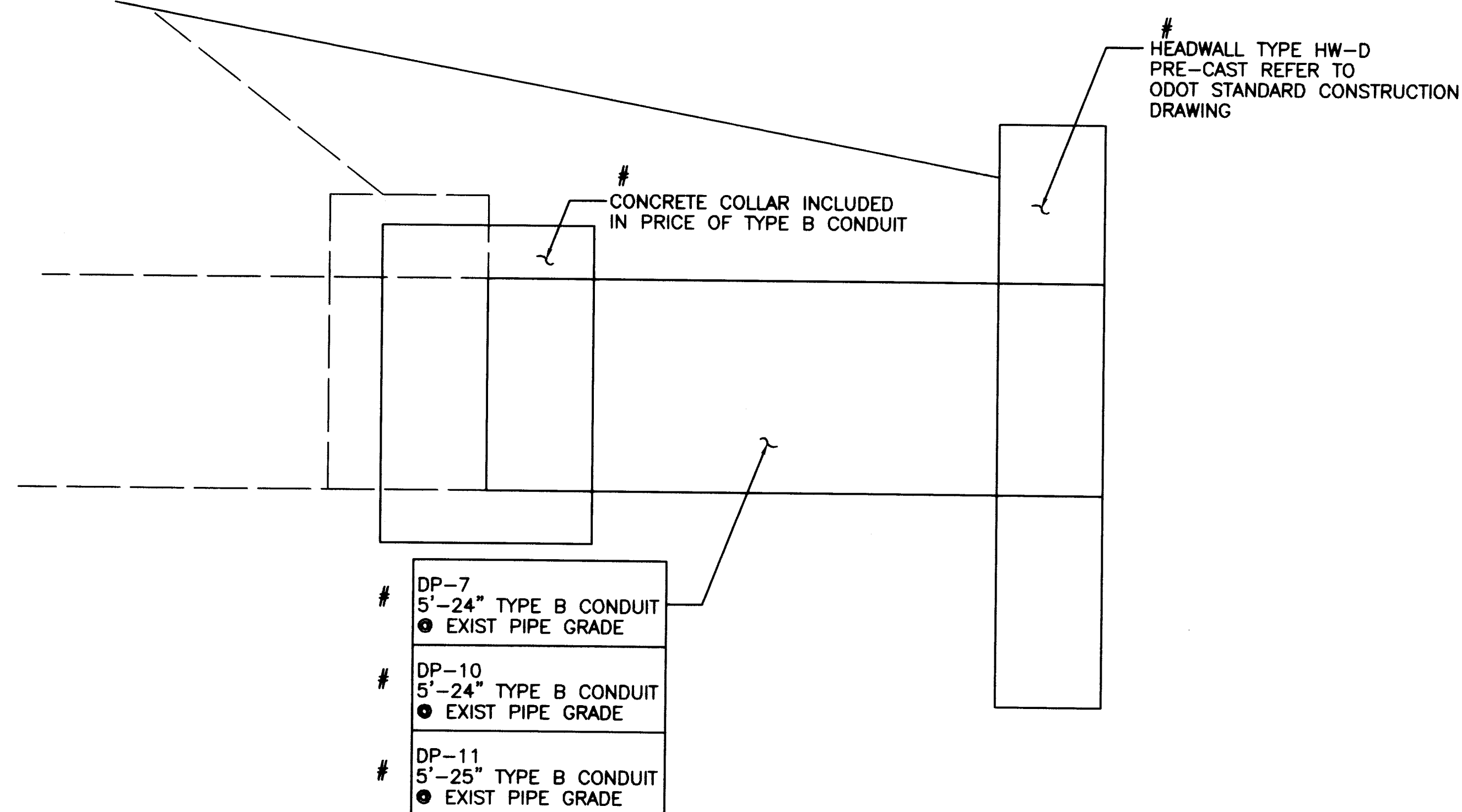
FILE NAME: .DWG
 ACCOUNT NUMBER: 05st03



						CP-1 thru CP-22 12" TYPE D CONDUIT		
REF.	EXISTING	L	TYPE	SY	SY	LF	NOTE	
DR-1	67.5'	12.5'	ASPHALT	111		NONE	RESURFACE	
DR-2	11'	15.75'	ASPHALT	47		29	FULL DEPTH	
DR-3	15'	10'	ASPHALT	28		33	FULL DEPTH	
DR-4	15.5'	10'	ASPHALT	28		34	FULL DEPTH	
DR-5	7.5'	10'	ASPHALT	19		NONE	FULL DEPTH	
DR-6	9.5'	10'	ASPHALT	22		NONE	FULL DEPTH	
DR-7	12'	10'	ASPHALT	24		NONE	FULL DEPTH	
DR-8	14.5'	10'	ASPHALT	27		33	FULL DEPTH	
DR-9	13.5'	10'	ASPHALT	26		32	FULL DEPTH	
DR-10	12'	10'	ASPHALT	24		30	FULL DEPTH	
DR-11	15'	10'	ASPHALT	28		33	FULL DEPTH	
DR-12	17'	10'	ASPHALT	30		35	FULL DEPTH	
DR-13	10.5'	10'	ASPHALT	23		NONE	FULL DEPTH	
DR-14	56'	10'	CONCRETE		73	74	FULL DEPTH	
DR-15	11'	10'	ASPHALT	23		29	FULL DEPTH	
DR-16	25.5'	10'	ASPHALT	39		44	FULL DEPTH	
DR-17	15'	10'	ASPHALT	28		33	FULL DEPTH	
DR-18	26.5'	10'	ASPHALT	41		NONE	FULL DEPTH	
DR-19	21'	5.5'	ASPHALT	16		NONE	FULL DEPTH	
DR-20	16'	5'	ASPHALT	12		NONE	FULL DEPTH	
DR-21	12.5'	10'	ASPHALT	25		NONE	FULL DEPTH	
DR-22	13.5'	10'	ASPHALT	26		NONE	FULL DEPTH	
DR-23	23'	5'	ASPHALT	16		NONE	FULL DEPTH	
DR-24	16'	10'	ASPHALT	29		150	FULL DEPTH	
DR-25	15.5'	10'	ASPHALT	28		34	FULL DEPTH	
DR-26	33.5'	10'	ASPHALT	48		52	FULL DEPTH	
DR-27	16.5'	10'	ASPHALT	30		35	FULL DEPTH	
DR-28	48.5'	10'	ASPHALT	65		67	FULL DEPTH	
DR-29	29.5'	10'	ASPHALT	44		48	FULL DEPTH	
DR-30	20'	10'	ASPHALT	33		38	FULL DEPTH	
DR-31	20'	10'	ASPHALT	33		38	FULL DEPTH	
DR-32	29'	10'	ASPHALT	43		47	FULL DEPTH	
DR-33	105'	10'	ASPHALT	128		132	FULL DEPTH	
TOTAL				1144	73	1080		



NOTE:
= WORK NOT PERFORMED IN Alternate



DRAWN BY: FPW	CHECKED BY: SDH
DATE: April, 2005	DATE: April, 2005

Richville Dr. Rehabilitation

Details
City of Massillon
Stark County, Ohio

Francis H. Cicchinelli, Jr.



REVISIONS:

[illegible]

FILE NAME: .DWG

ACCOUNT NUMBER 03STXX

LEGEND

- (S) - 12" STOP LINE (WHITE)
- (C) - WIDE SOLID WHITE CHANNELIZING LINE (8")
- (SY) - 4" CENTER LINE DOUBLE YELLOW, NO-PASSING MARKING
- (SW) - WHITE EDGE LINE(4")
- ↖ - THERMOPLASTIC ARROWS

ITEM 630 SIGNS W/ ALL APPURTENANCES

THIS WORK SHALL INCLUDE ALL MATERIALS AND LABOR FOR THE PROPER INSTALLATION OF TRAFFIC SIGNS IN ACCORDANCE WITH THE CITY OF MASSILLON, STARK CONUTY ENGINEER, AND OHIO DEPARTMENT OF TRANSPORTATION STANDARDS.

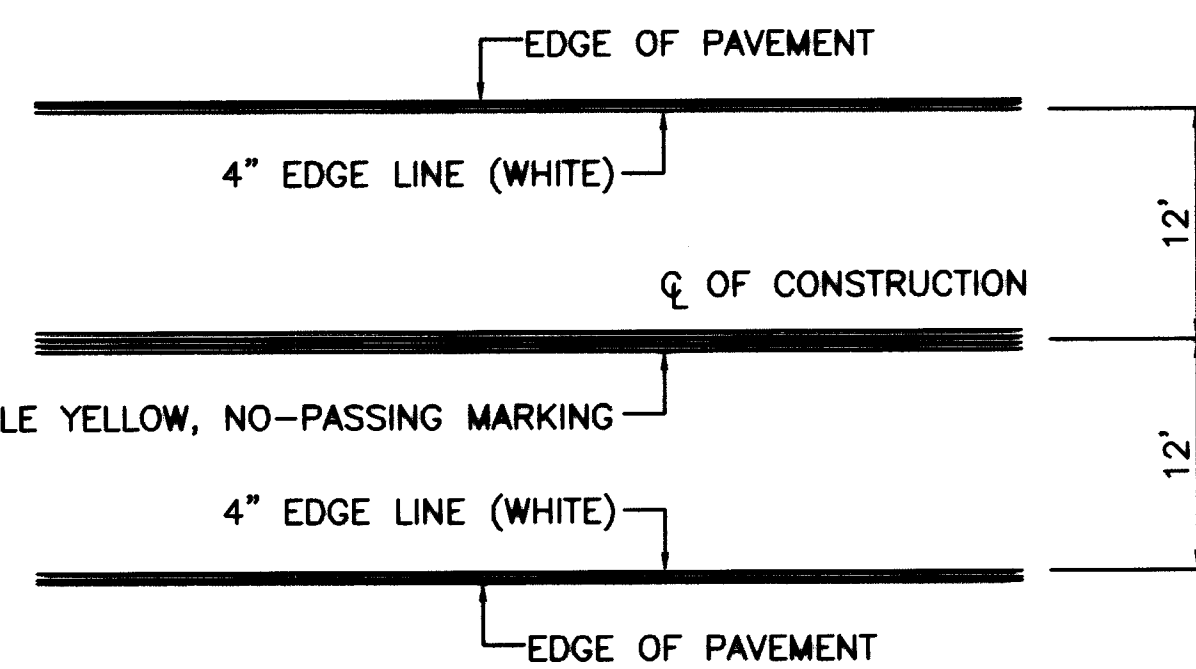
ITEM 632 TRAFFIC SIGNALS W/ ALL APPURTENANCES

THIS WORK SHALL INCLUDE ALL MATERIALS AND LABOR FOR THE PROPER INSTALLATION OF TRAFFIC SIGNALS IN ACCORDANCE WITH THE CITY OF MASSILLON, STARK CONUTY ENGINEER, AND OHIO DEPARTMENT OF TRANSPORTATION STANDARDS.

ITEMS INCLUDED IN COST BUT NOT LIMITED TO:

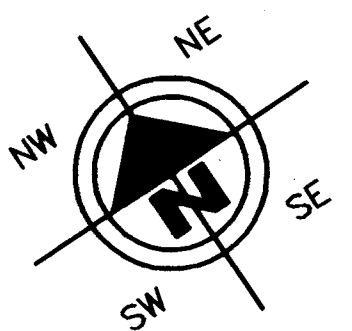
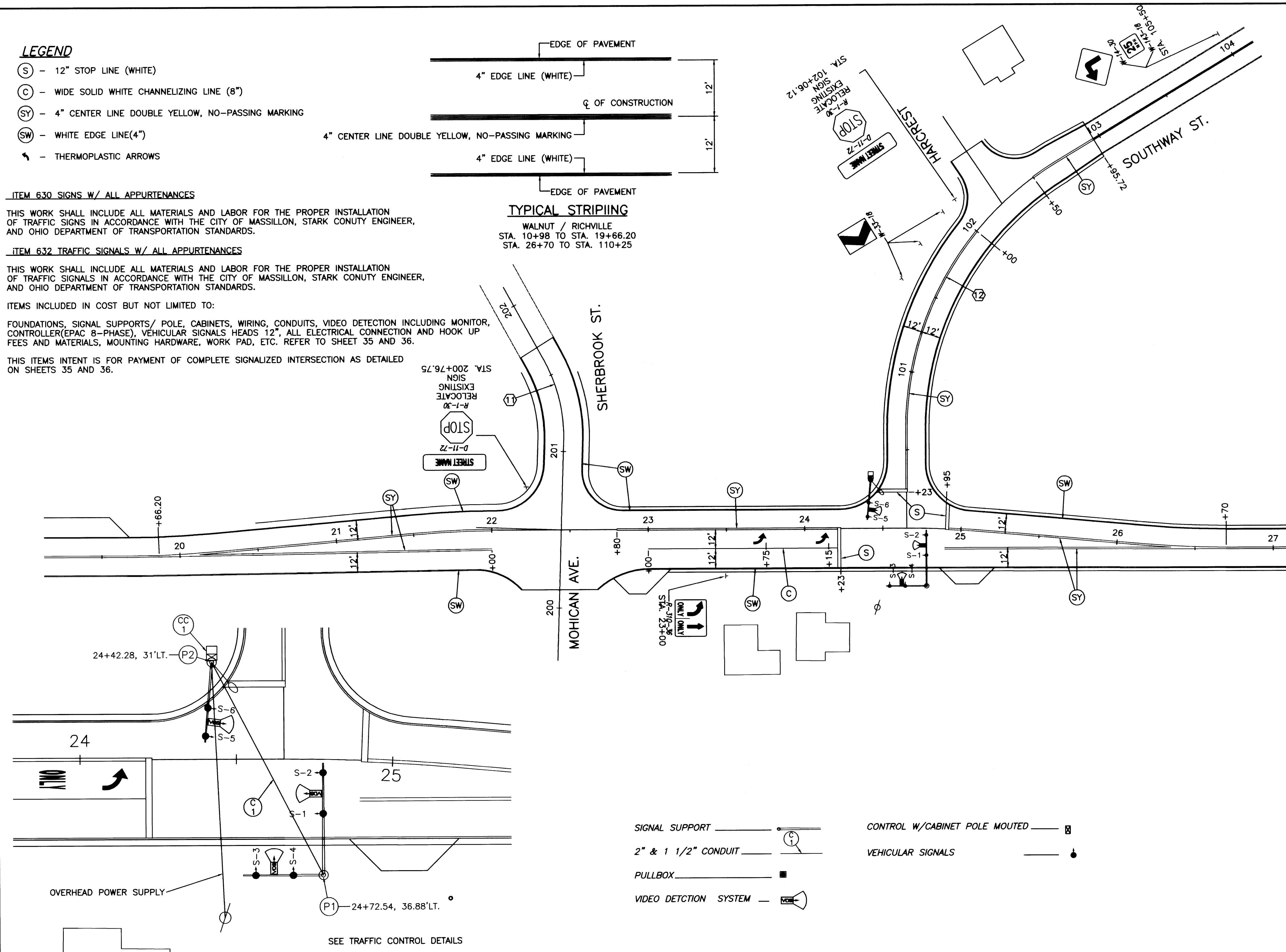
FOUNDATIONS, SIGNAL SUPPORTS/ POLE, CABINETS, WIRING, CONDUITS, VIDEO DETECTION INCLUDING MONITOR, CONTROLLER(EPAC 8-PHASE), VEHICULAR SIGNALS HEADS 12", ALL ELECTRICAL CONNECTION AND HOOK UP FEES AND MATERIALS, MOUNTING HARDWARE, WORK PAD, ETC. REFER TO SHEET 35 AND 36.

THIS ITEMS INTENT IS FOR PAYMENT OF COMPLETE SIGNALIZED INTERSECTION AS DETAILED ON SHEETS 35 AND 36.



TYPICAL STRIPIING

WALNUT / RICHVILLE
STA. 10+98 TO STA. 19+66.20
STA. 26+70 TO STA. 110+25



HORIZONTAL
SCALE IN FEET

DRAWN BY: FPW
CHECKED BY: SDH
DATE: April, 2005
DATE: April, 2005

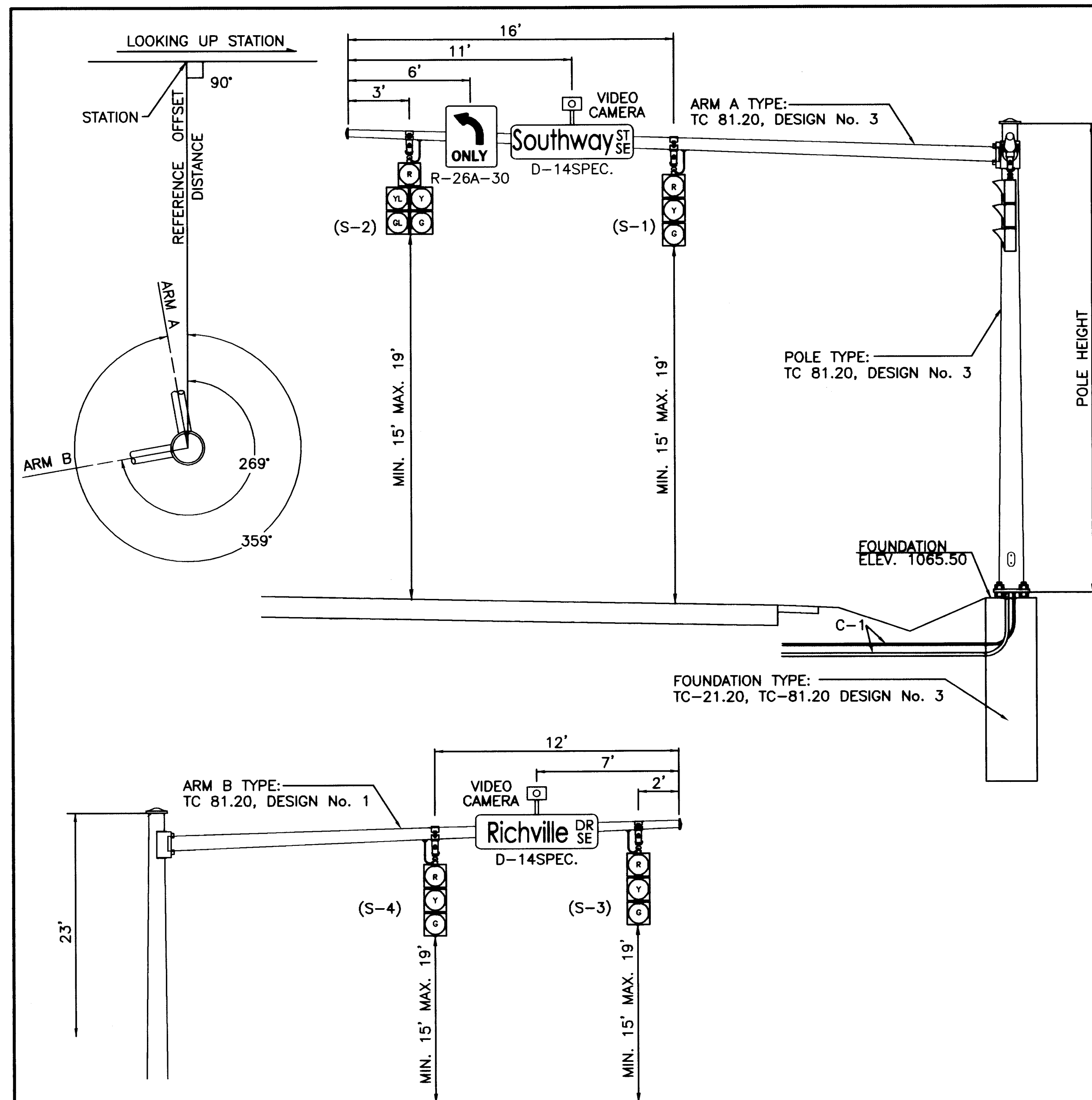
Richville Dr. Rehabilitation
Traffic Control
City of Massillon
Stark County, Ohio

Francis H. Cicchinelli, Jr.
Mayor

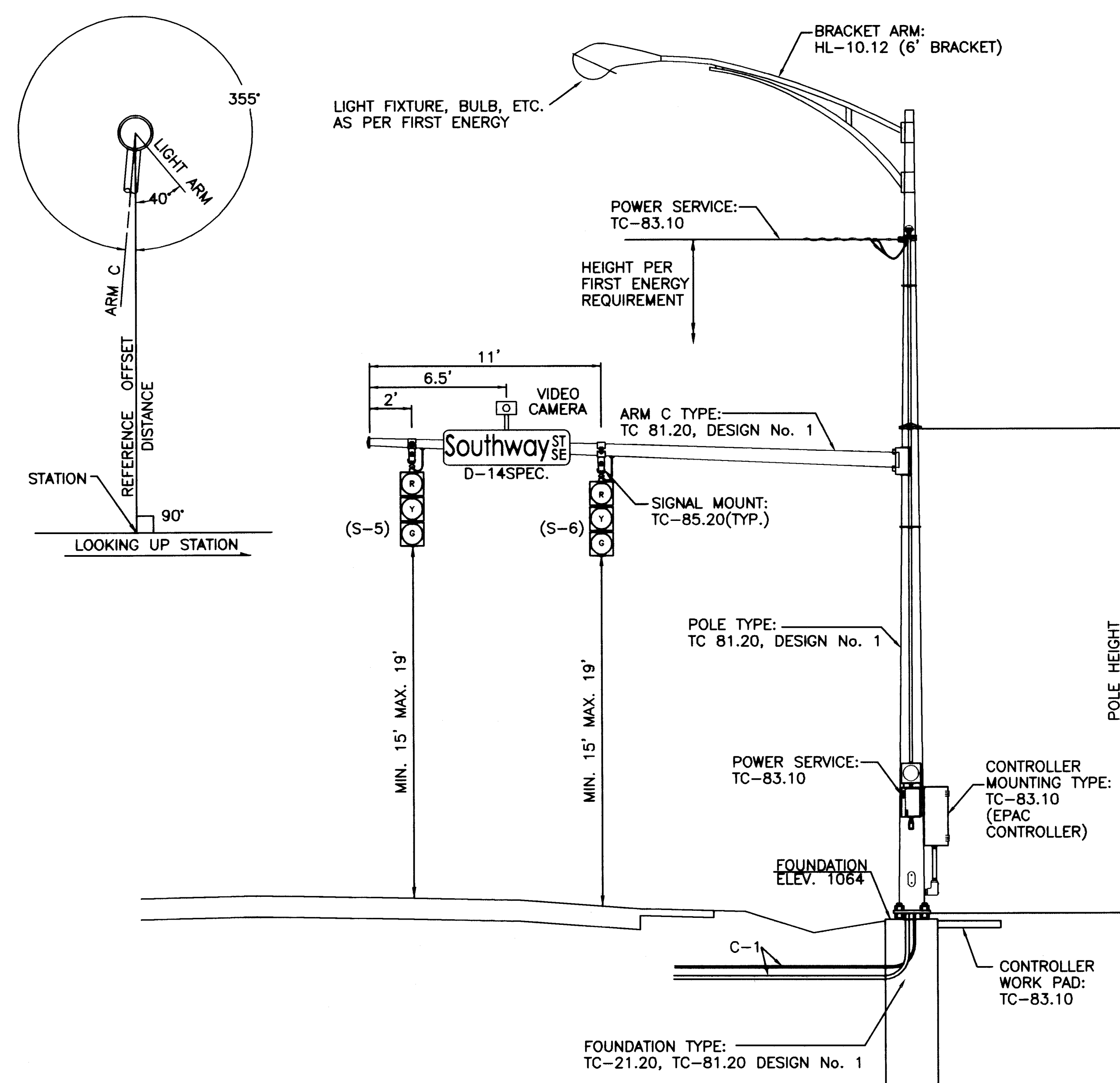


REVISIONS:	
DATE	DESCRIPTION

FILE NAME: .DWG
ACCOUNT NUMBER: 05st03



(P-1) TWO ARM OVERHEAD SIGNAL SUPPORT



(P-2) SINGLE ARM OVERHEAD SIGNAL SUPPORT



TEXT FONT: HIGHWAY GOTHIC, C

MATERIAL:

3390 WHITE (REFLECTIVE SHEETING CONFORMING TO THE SPECIFICATIONS FOR WIDE ANGLE PRISMATIC RETROREFLECTIVE SHEETING FOR VISUAL IMPACT PERFORMANCE)

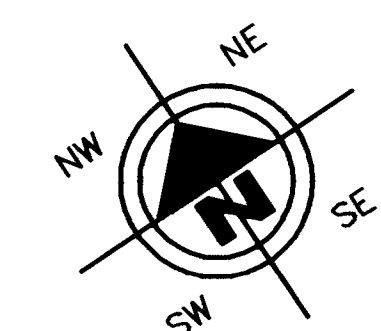
1175 BLUE (ELECTRONICALLY CUTTABLE FILMS FOR USE ON RETROREFLECTIVE SHEETING)

EXTRUDED BLADE

D-14SPEC.

MOUNTING:

ASTRO-SIGN BRACKET, CABLE MOUNT W/ DOUBLE MOUNT HARDWARE



DRAWN BY:	CHECKED BY:
FPW	SDH
DATE:	DATE:
April, 2005	April, 2005

Richville Dr. Rehabilitation
Traffic Control Detail
City of Massillon
Stark County, Ohio

Francis H. Cicchinelli, Jr.
Mayor



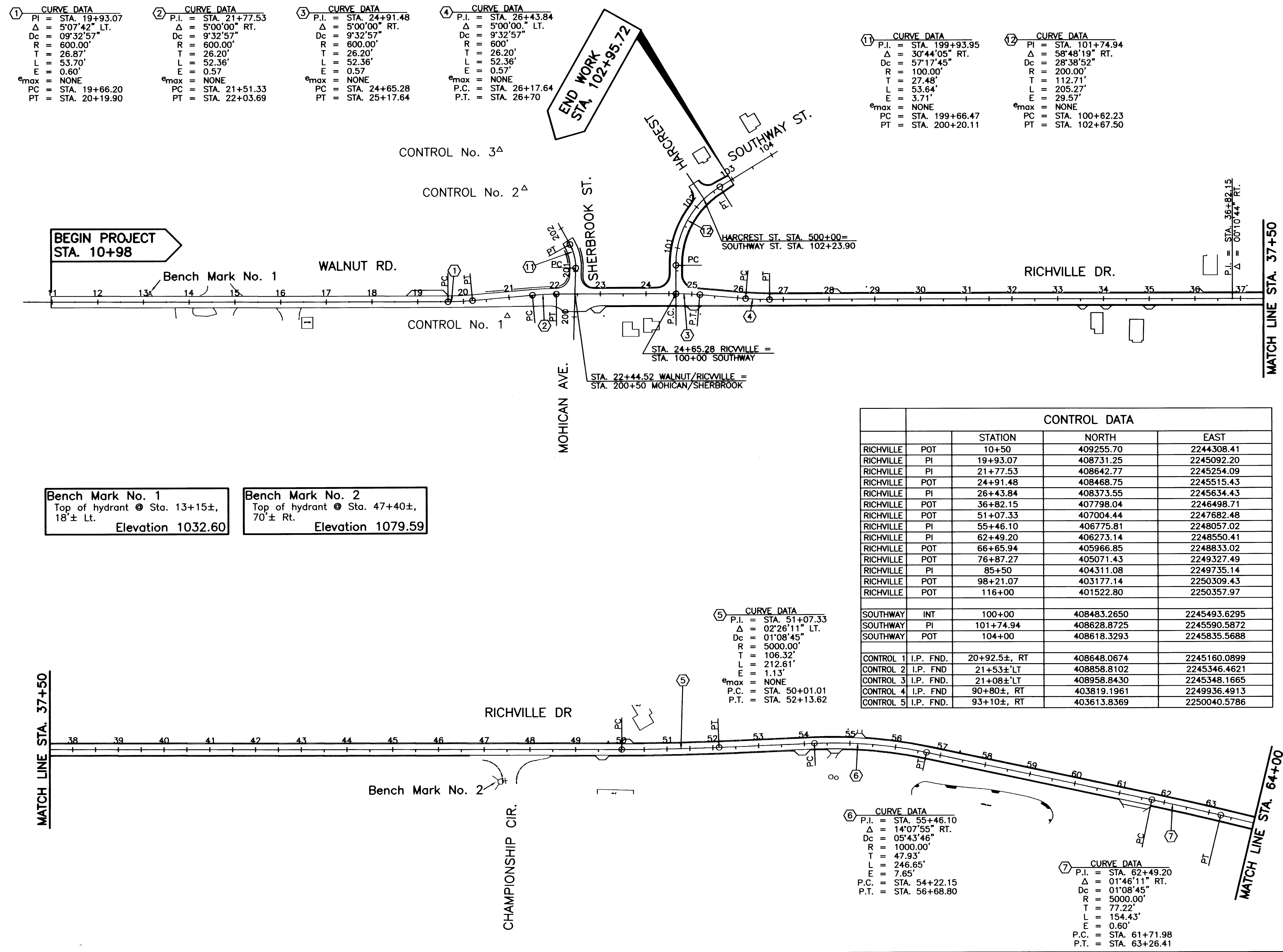
REVISIONS:

DATE	DESCRIPTION

FILE NAME:	.DWG
ACCOUNT NUMBER	05st03

1 CURVE DATA	2 CURVE DATA	3 CURVE DATA	4 CURVE DATA
PI = STA. 19+93.07	PI = STA. 21+77.53	PI = STA. 24+91.48	PI = STA. 26+43.84
Δ = 5°07'42" LT.	Δ = 5°00'00" RT.	Δ = 5°00'00" RT.	Δ = 5°00'00" LT.
Dc = 600.00'	Dc = 600.00'	Dc = 600.00'	Dc = 600.00'
R = 26.87'	R = 26.20'	R = 26.20'	R = 26.20'
T = 53.70'	T = 52.36'	T = 52.36'	T = 52.36'
E = 0.60'	E = 0.57'	E = 0.57'	E = 0.57'
E _{max} = NONE	E _{max} = NONE	E _{max} = NONE	E _{max} = NONE
PC = STA. 19+66.20	PC = STA. 21+51.33	PC = STA. 24+65.28	PC = STA. 26+17.64
PT = STA. 20+19.90	PT = STA. 22+03.69	PT = STA. 25+17.64	PT = STA. 26+70

11 CURVE DATA	12 CURVE DATA
PI = STA. 199+93.95	PI = STA. 101+74.94
Δ = 30°44'05" RT.	Δ = 58°48'19" RT.
Dc = 57'17'45"	Dc = 28'38'52"
R = 100.00'	R = 200.00'
T = 27.48'	T = 112.71'
L = 53.64'	L = 205.27'
E = 3.71'	E = 29.57'
E _{max} = NONE	E _{max} = NONE
PC = STA. 199+66.47	PC = STA. 100+62.23
PT = STA. 200+20.11	PT = STA. 102+67.50



Bench Mark No. 1
Top of hydrant @ Sta. 13+15±,
18'± Lt.
Elevation 1032.60

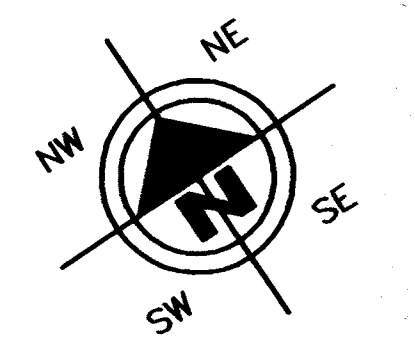
Bench Mark No. 2
Top of hydrant @ Sta. 47+40±,
70'± Rt.
Elevation 1079.59

CONTROL DATA				
		STATION	NORTH	EAST
RICHVILLE	POT	10+50	409255.70	2244308.41
RICHVILLE	PI	19+93.07	408731.25	2245092.20
RICHVILLE	PI	21+77.53	408642.77	2245254.09
RICHVILLE	POT	24+91.48	408468.75	2245515.43
RICHVILLE	PI	26+43.84	408373.55	2245634.43
RICHVILLE	POT	36+82.15	407798.04	2246498.71
RICHVILLE	POT	51+07.33	407004.44	2247682.48
RICHVILLE	PI	55+46.10	406775.81	2248057.02
RICHVILLE	PI	62+49.20	406273.14	2248550.41
RICHVILLE	POT	66+65.94	405966.85	2248833.02
RICHVILLE	POT	76+87.27	405071.43	2249327.49
RICHVILLE	PI	85+50	404311.08	2249735.14
RICHVILLE	POT	98+21.07	403177.14	2250309.43
RICHVILLE	POT	116+00	401522.80	2250357.97
SOUTHWAY	INT	100+00	408483.2650	2245493.6295
SOUTHWAY	PI	101+74.94	408628.8725	2245590.5872
SOUTHWAY	POT	104+00	408618.3293	2245835.5688
CONTROL 1	I.P. FND.	20+92.5±, RT	408648.0674	2245160.0899
CONTROL 2	I.P. FND.	21+53±'LT	408858.8102	2245346.4621
CONTROL 3	I.P. FND.	21+08±'LT	408958.8430	2245348.1665
CONTROL 4	I.P. FND.	90+80±, RT	403819.1961	2249936.4913
CONTROL 5	I.P. FND.	93+10±, RT	403613.8369	2250040.5786

5 CURVE DATA
PI = STA. 51+07.33
Δ = 02°26'11" LT.
Dc = 01°08'45"
R = 5000.00'
T = 106.32'
L = 212.61'
E = 1.13'
E _{max} = NONE
P.C. = STA. 50+01.01
P.T. = STA. 52+13.62

6 CURVE DATA
PI = STA. 55+46.10
Δ = 14°07'55" RT.
Dc = 05°43'46"
R = 1000.00'
T = 47.93'
L = 246.65'
E = 7.65'
P.C. = STA. 54+22.15
P.T. = STA. 56+68.80

7 CURVE DATA
PI = STA. 62+49.20
Δ = 01°46'11" RT.
Dc = 01°08'45"
R = 5000.00'
T = 77.22'
L = 154.43'
E = 0.60'
P.C. = STA. 61+71.98
P.T. = STA. 63+26.41



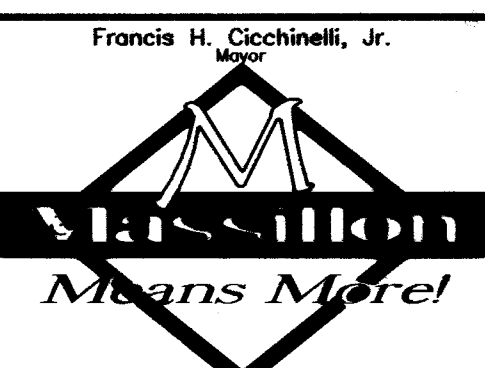
HORIZONTAL SCALE IN FEET

100 50 0 50 100

DRAWN BY: FPW		CHECKED BY: SDH	
DATE: April, 2005		DATE: April, 2005	

Richville Dr. Rehabilitation

Schematic
City of Massillon
Stark County, Ohio



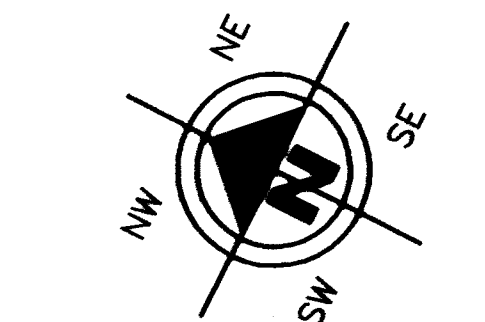
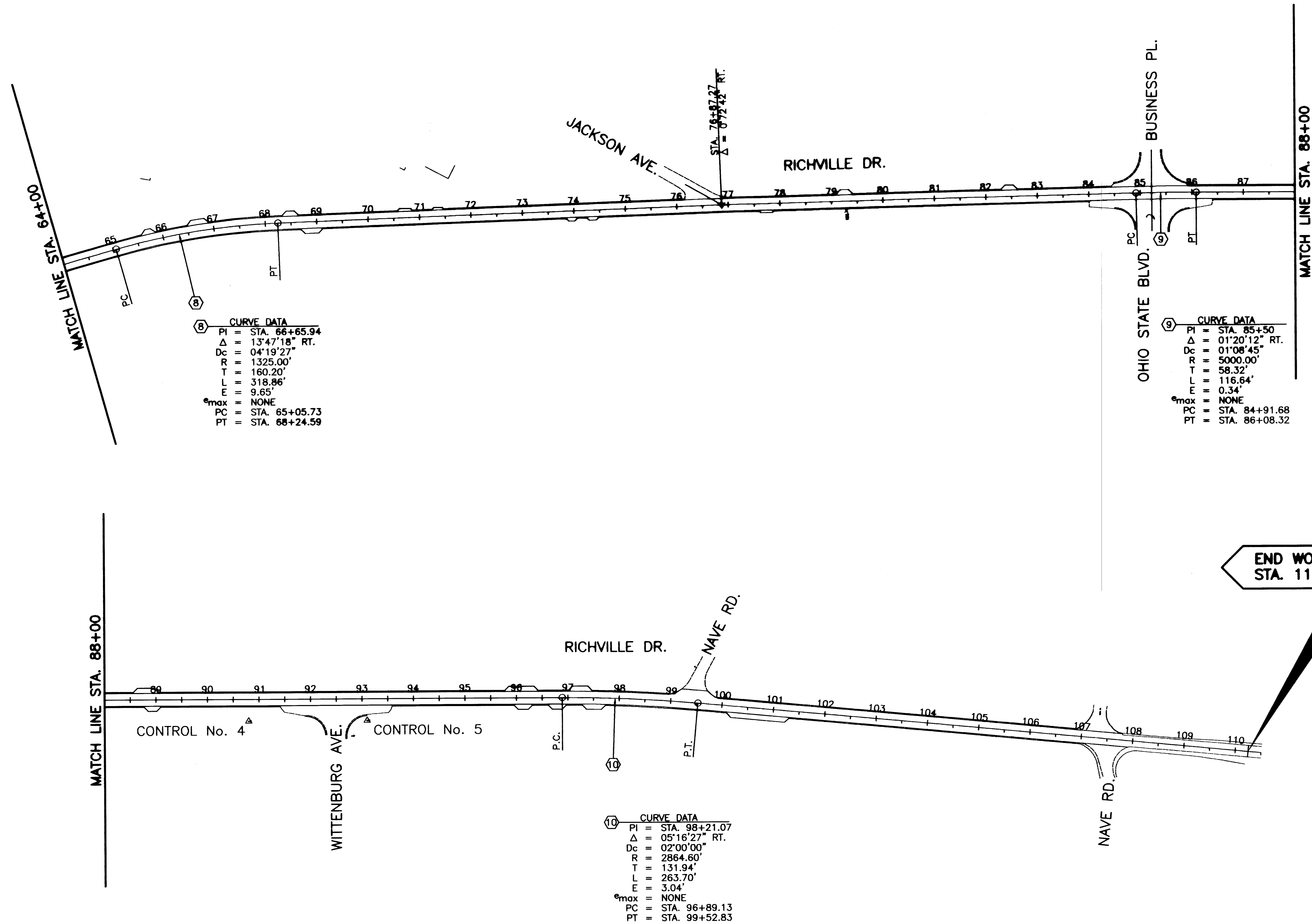
Francis H. Cicchinelli, Jr.

REVISIONS:	
DATE	DESCRIPTION

FILE NAME: .DWG

ACCOUNT NUMBER: 05st03

2
36



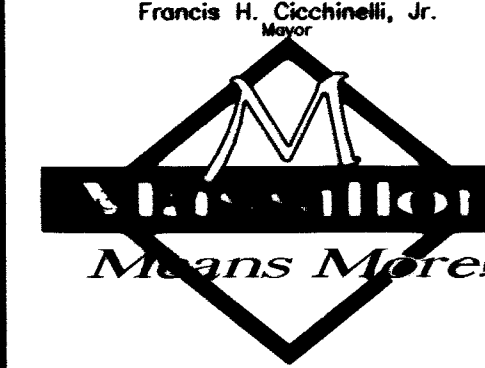
HORIZONTAL
SCALE IN FEET

DRAWN BY: FPW
CHECKED BY: SDH

DATE: July 2004
DATE: July 2004

Richville Dr. Rehabilitation

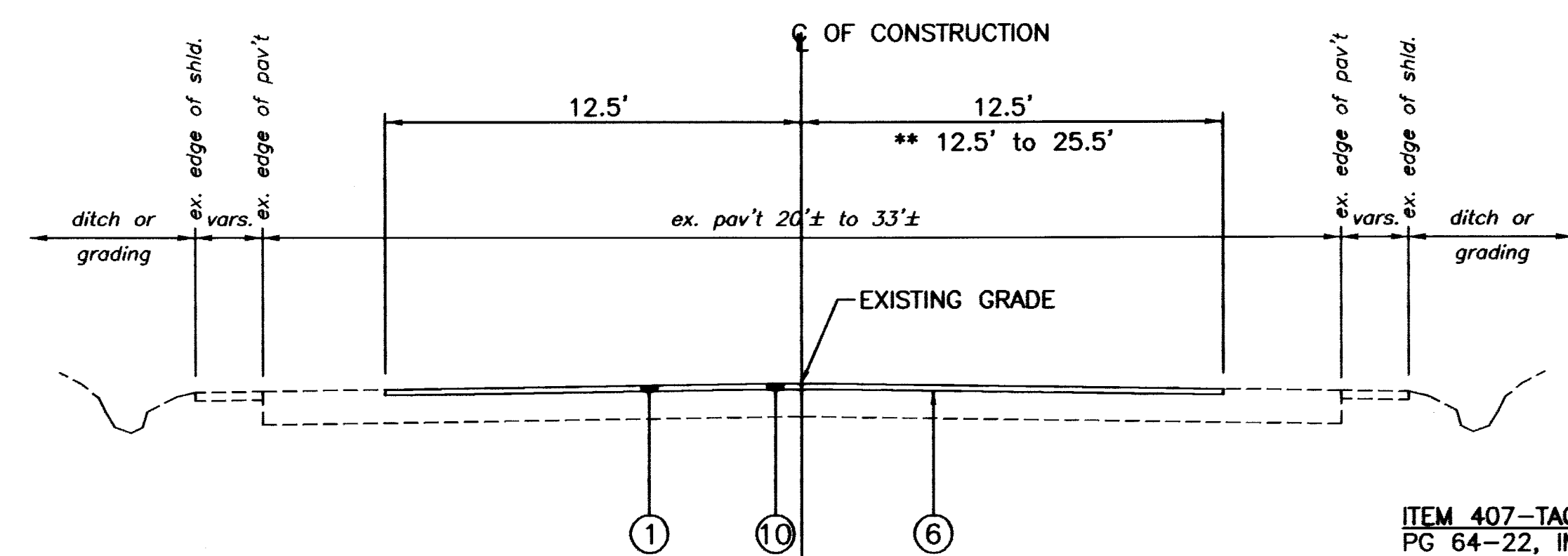
Schematic
City of Massillon
Stark County, Ohio



REVISIONS:	
DATE	DESCRIPTION

FILE NAME: .DWG

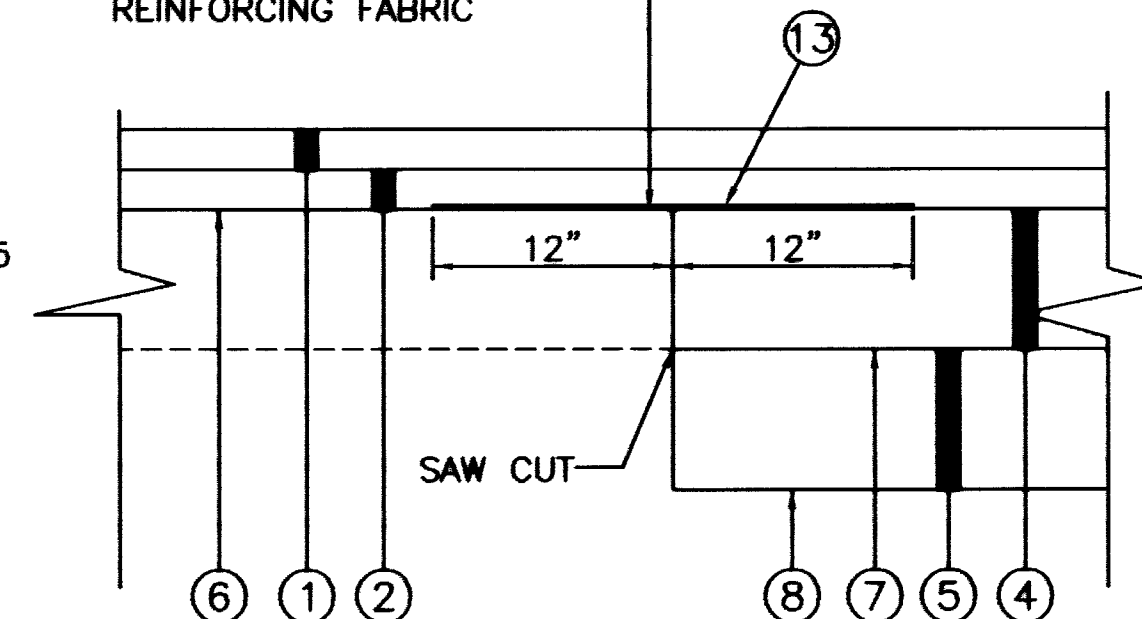
ACCOUNT NUMBER 05st03



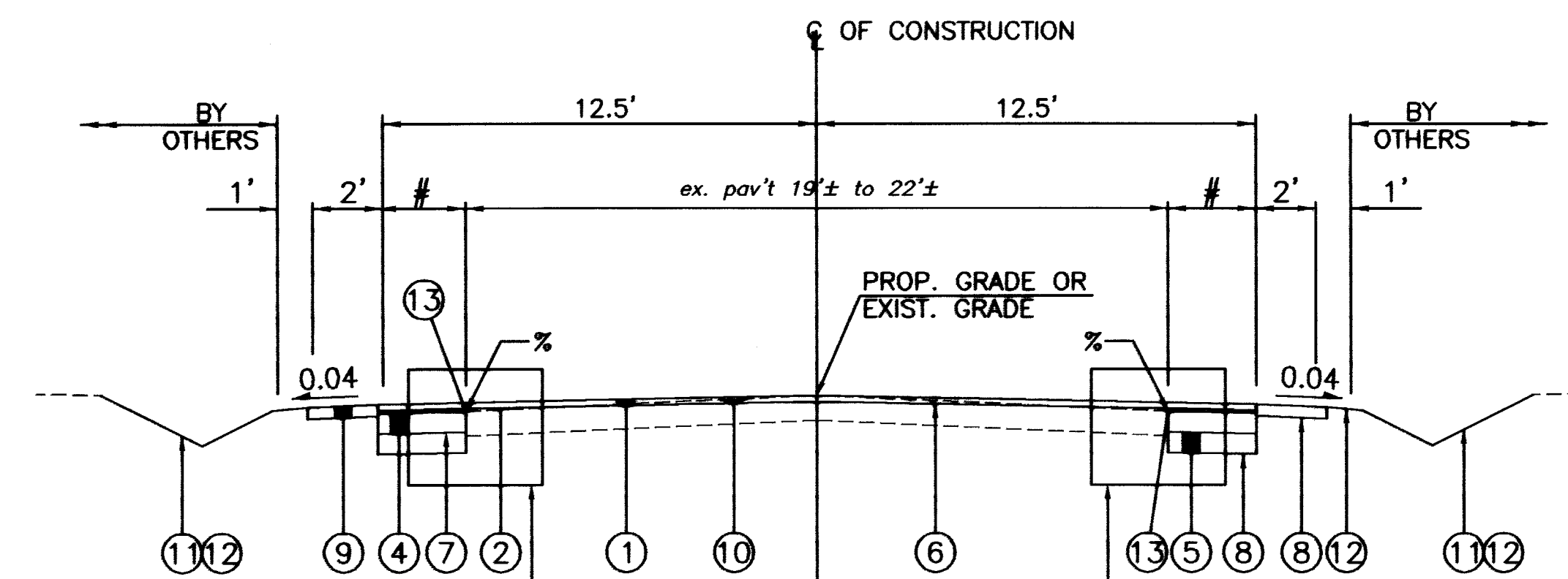
RESURFACING TYPICAL SECTION

RICHVILLE DR.
 STA. 10+98 TO STA. 19+75
 ** STA. 19+75 TO STA. 22+03.69
 LEFT STA. 106+86.60 TO STA. 110+25
 RIGHT STA. 107+00 TO STA. 110+25
 SHERBROOK STA. 201+00 TO STA. 201+70
 HARCREST STA. 500+00 TO 500+40.44
 SOUTHWAY STA. 102+00 TO 102+95.72

ITEM 407-TACK COAT
 PG 64-22, INCLUDE IN COST
 OF ITEM 448spec-PAVEMENT
 REINFORCING FABRIC



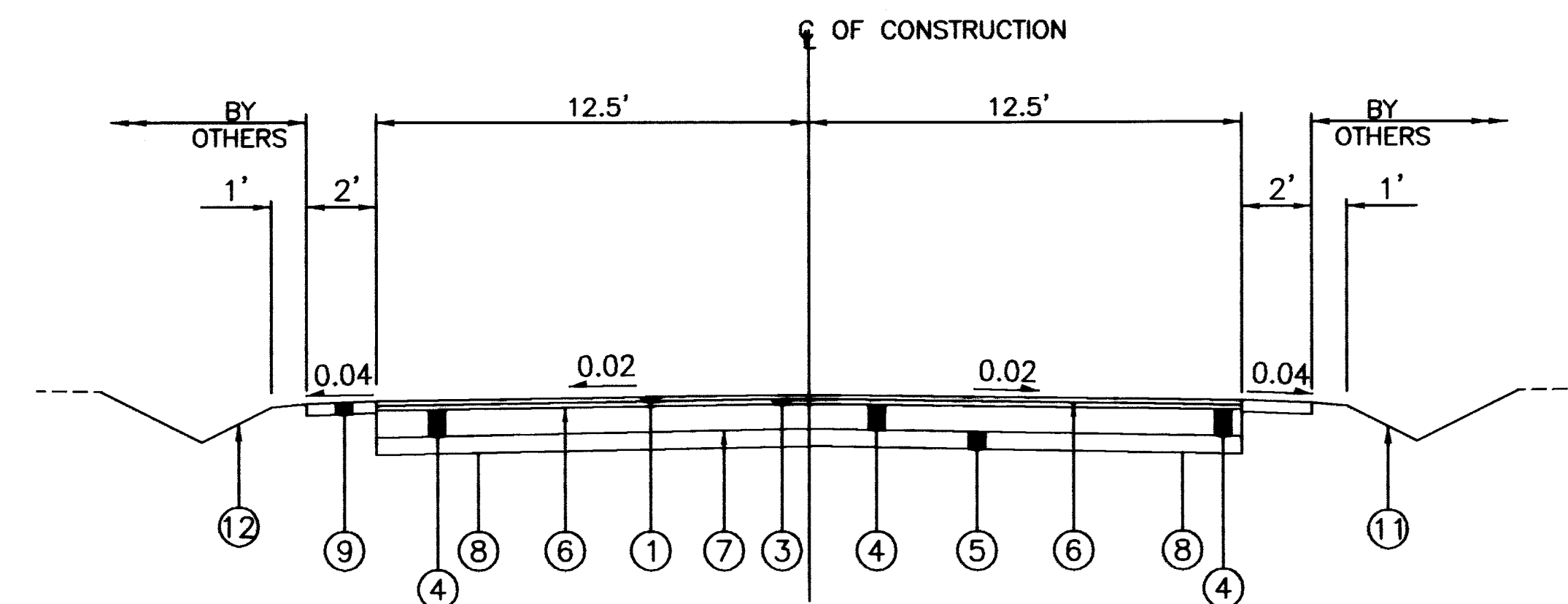
JOINT DETAIL



WIDING TYPICAL SECTION

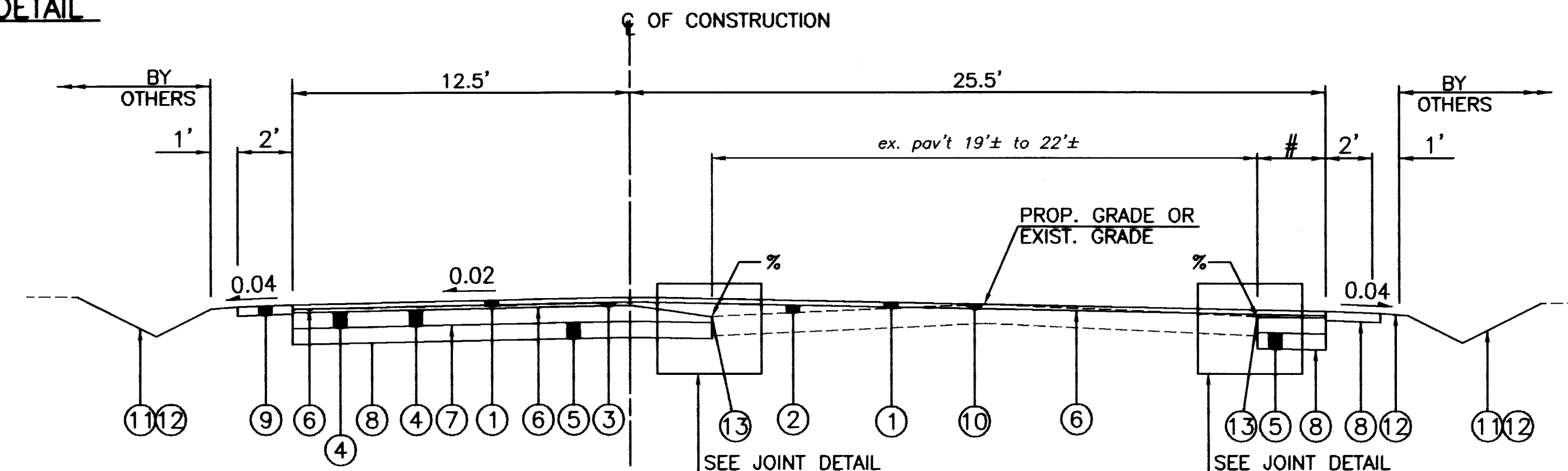
LEFT STA. 26+70 TO STA. 106+86.60
 RIGHT STA. 26+70 TO STA. 107+00
 SHERBROOK STA. 200+50 TO STA. 201+00

- AMOUNT OF WIDING IS DEPENDENT UPON THE CENTERLINE OF CONSTRUCTION. AS SHOWN ON THE PLAN AND PROFILES. AT NO TIME SHALL PAVEMENT BE WIDENED LESS THAN 2' ON ANY SIDE. THIS WORK WILL BE AS DIRECT IN THE FIELD.
 % - SAW CUT SHALL BE WHITE EDGE LINE OR DETERMINED IN FIELD TO UTILIZE EXISTING PAVEMENT. COST TO BE INCLUDED IN ITEM 254.



SOUTHWAY ST. TYPICAL SECTION

STA. 100+00 TO STA. 102+00



FULL LANE WIDING TYPICAL SECTION

RICHVILLE DR.
 STA. 22+00 TO STA. 26+70

NOTE:

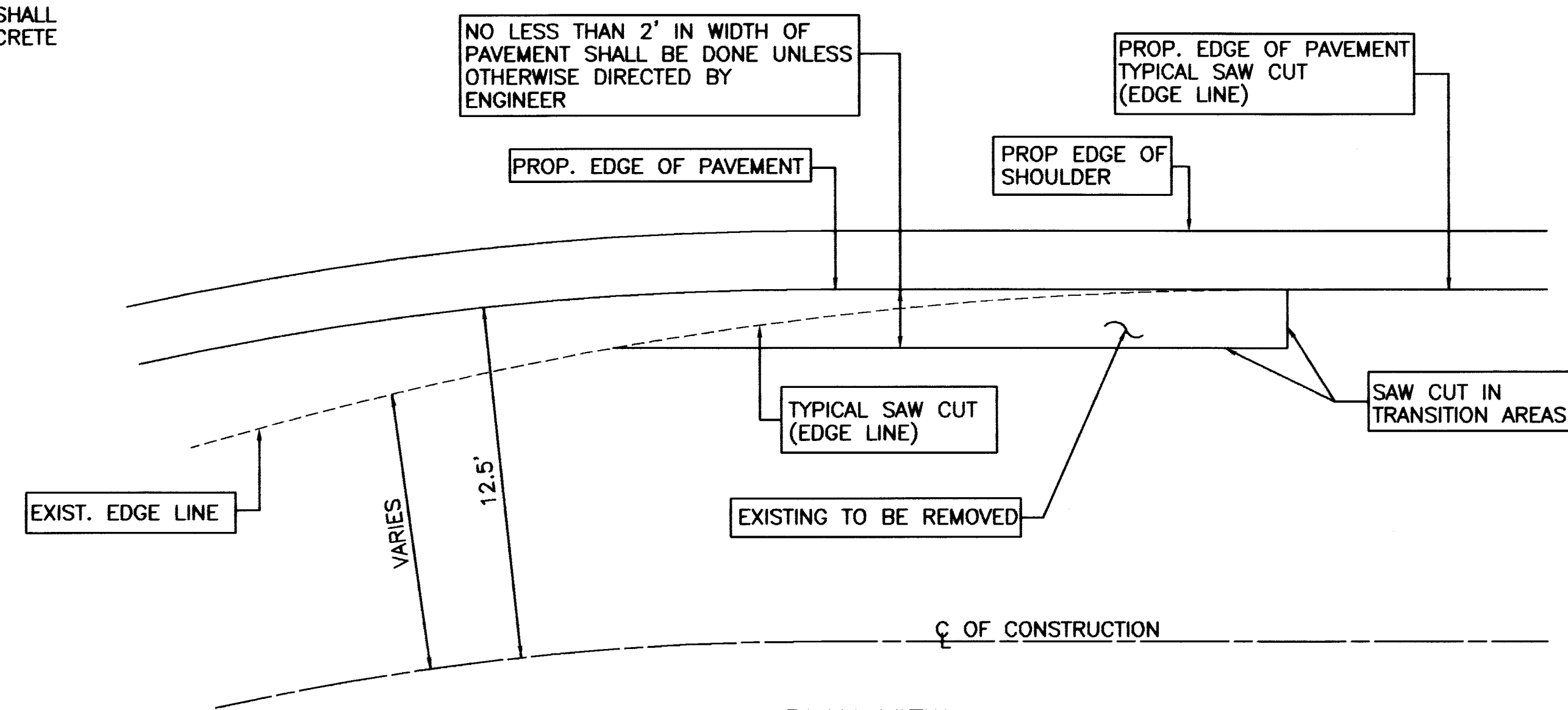
ALL JOINTS WITH EXISTING PAVEMENT SHALL RECIEVE ITEM 705.04 JOINT SEALER WORK AND MATERIAL SHALL BE INCLUDE IN COST OF ITEM 448 ASPHALT CONCRETE SURFACE COURSE TYPE 1, PG 70-22.

EXISTING LEGEND

(a) variable thickness asphalt pavement

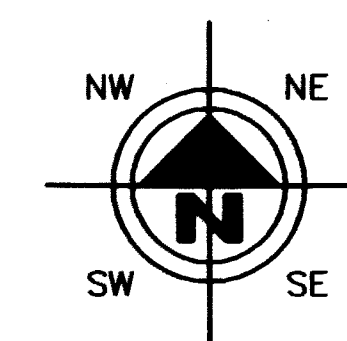
PROPOSED LEGEND

- ① - ITEM 448-2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22
- ② - ITEM 448-VARIOUS DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-28, (6" MAX. TO 0" MIN.)
- ③ - ITEM 448-1 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-28
- ④ - ITEM 301-7" ASPHALT CONCRETE BASE
- ⑤ - ITEM 304-7" AGGREGATE BASE
- ⑥ - ITEM 407-TACK COAT
- ⑦ - ITEM 408-PRIME COAT
- ⑧ - ITEM 204 - SUBGRADE COMPACTION
- ⑨ - ITEM 254spec-4" THICK SHOULDER MATERIAL (SHALL CONSIST OF THE PAVEMENT PLANING MATERIAL)
- ⑩ - ITEM 254-VARIES PAVEMENT PLANING (2" MAX. TO 0" MIN.)
- ⑪ - ITEM 659-SEEDING AND MULCHING
- ⑫ - ITEM 209spec-LINEAR GRADING
- ⑬ - ITEM 690spec-PAVEMENT REINFORCING FABRIC



PLAN VIEW

RICHVILLE DR. SAW CUT IN TRANSITION AREAS



HORIZONTAL SCALE IN FEET
 400 200 0 200 400

DRAWN BY: FFW
 CHECKED BY: SDH
 DATE: April, 2005
 DATE: April, 2005

Richville Dr Rehabilitation
 Typical Sections
 City of Massillon
 Stark County, Ohio



REVISIONS:	
DATE	DESCRIPTION

FILE NAME: .DWG
 ACCOUNT NUMBER: 05st03

ITEM 301 BITUMINOUS AGGREGATE BASE

(WA-1) = (6117) (7/12) (1/27)	132.2 CU YD
(WA-2) = (2640) (7/12) (1/27)	57.0 CU YD
(WA-3) = (1759) (7/12) (1/27)	38.0 CU YD
(WA-4) = (2555) (7/12) (1/27)	55.2 CU YD
(WA-5) = (2386) (7/12) (1/27)	51.5 CU YD
(WA-6) = (2425) (7/12) (1/27)	52.4 CU YD
(WA-7) = (101) (7/12) (1/27)	2.2 CU YD
(WA-8) = (1425) (7/12) (1/27)	30.8 CU YD
(WA-9) = (1011) (7/12) (1/27)	21.8 CU YD
(WA-10) = (1423) (7/12) (1/27)	30.7 CU YD
(WA-11) = (869) (7/12) (1/27)	18.8 CU YD
(WA-12) = (1918) (7/12) (1/27)	41.4 CU YD
(WA-13) = (453) (7/12) (1/27)	9.8 CU YD
(WA-14) = (500) (7/12) (1/27)	10.8 CU YD
(WA-15) = (1722) (7/12) (1/27)	37.2 CU YD
(WA-16) = (1035) (7/12) (1/27)	22.4 CU YD
(WA-17) = (1240) (7/12) (1/27)	26.8 CU YD
(WA-18) = (1254) (7/12) (1/27)	27.1 CU YD
(WA-19) = (200) (7/12) (1/27)	4.3 CU YD
(WA-20) = (699) (7/12) (1/27)	15.1 CU YD
(WA-21) = (1019.46) (7/12) (1/27)	22.0 CU YD
(WA-22) = (883) (7/12) (1/27)	19.1 CU YD
(WA-23) = (741) (7/12) (1/27)	16.0 CU YD
(WA-24) = (1128) (7/12) (1/27)	24.4 CU YD
(WA-25) = (732) (7/12) (1/27)	15.8 CU YD
(WA-26) = (1071) (7/12) (1/27)	23.1 CU YD
(WA-27) = (206) (7/12) (1/27)	4.5 CU YD
(WA-28) = (382) (7/12) (1/27)	8.3 CU YD
(WA-29) = (1086) (7/12) (1/27)	23.5 CU YD
(WA-30) = (1300) (7/12) (1/27)	28.1 CU YD
(WA-31) = (703) (7/12) (1/27)	15.2 CU YD
(WA-32) = (1458) (7/12) (1/27)	31.5 CU YD
(WA-33) = (364) (7/12) (1/27)	7.9 CU YD
(WA-34) = (300) (7/12) (1/27)	6.5 CU YD

SOUTHWAY

(WA-35) = (5289) (7/12) (1/27) 114.3 CU YD

TOTAL ITEM 301 = 1045.6 CU YD
USED: 1050 CU YD

ITEM 304 AGGREGATE BASE

(WA-1) = (6117) (7/12) (1/27)	132.2 CU YD
(WA-2) = (2640) (7/12) (1/27)	57.0 CU YD
(WA-3) = (1759) (7/12) (1/27)	38.0 CU YD
(WA-4) = (2555) (7/12) (1/27)	55.2 CU YD
(WA-5) = (2386) (7/12) (1/27)	51.5 CU YD
(WA-6) = (2425) (7/12) (1/27)	52.4 CU YD
(WA-7) = (101) (7/12) (1/27)	2.2 CU YD
(WA-8) = (1425) (7/12) (1/27)	30.8 CU YD
(WA-9) = (1011) (7/12) (1/27)	21.8 CU YD
(WA-10) = (1423) (7/12) (1/27)	30.7 CU YD
(WA-11) = (869) (7/12) (1/27)	18.8 CU YD
(WA-12) = (1918) (7/12) (1/27)	41.4 CU YD
(WA-13) = (453) (7/12) (1/27)	9.8 CU YD
(WA-14) = (500) (7/12) (1/27)	10.8 CU YD
(WA-15) = (1722) (7/12) (1/27)	37.2 CU YD
(WA-16) = (1035) (7/12) (1/27)	22.4 CU YD
(WA-17) = (1240) (7/12) (1/27)	26.8 CU YD
(WA-18) = (1254) (7/12) (1/27)	27.1 CU YD
(WA-19) = (200) (7/12) (1/27)	4.3 CU YD
(WA-20) = (699) (7/12) (1/27)	15.1 CU YD
(WA-21) = (1019.46) (7/12) (1/27)	22.0 CU YD
(WA-22) = (883) (7/12) (1/27)	19.1 CU YD
(WA-23) = (741) (7/12) (1/27)	16.0 CU YD
(WA-24) = (1128) (7/12) (1/27)	24.4 CU YD
(WA-25) = (732) (7/12) (1/27)	15.8 CU YD
(WA-26) = (1071) (7/12) (1/27)	23.1 CU YD
(WA-27) = (206) (7/12) (1/27)	4.5 CU YD
(WA-28) = (382) (7/12) (1/27)	8.3 CU YD
(WA-29) = (1086) (7/12) (1/27)	23.5 CU YD
(WA-30) = (1300) (7/12) (1/27)	28.1 CU YD
(WA-31) = (703) (7/12) (1/27)	15.2 CU YD
(WA-32) = (1458) (7/12) (1/27)	31.5 CU YD
(WA-33) = (364) (7/12) (1/27)	7.9 CU YD
(WA-34) = (300) (7/12) (1/27)	6.5 CU YD

SOUTHWAY

(WA-35) = (5289) (7/12) (1/27) 114.3 CU YD

TOTAL ITEM 304 = 1045.6 CU YD
USED: 1050 CU YD

ITEM 407 TACK COAT

(Walnut Sta.10+98 to Sta. 19+75) (877) (25) (1/9) (0.08)	194.9 GAL
(Walnut Sta. 19+75 to Sta. 22+03.69) (228.69) [(25+38) 1/2] (1/9) (0.08)	64.0 GAL
(Walnut / Richville Sta. 22+03.69 to Sta. 24+65.28) (261.59) (38) (1/9) (0.08)	88.4 GAL

(Continue Item 407 Tack Coat)

(Richville Sta. 24+65.28 to Sta. 26+70) (204.72) [(38+25) 1/2] (1/9) (0.08)	57.3 GAL
(Richville Sta. 26+70 to Sta. 107+00) (8030) (25) (1/9) (0.08)	1784.4 GAL
(Richville Sta. 107+00 to Sta. 110+25) (325) (24) (1/9) (0.08)	69.3 GAL
(Mohican / Sherbrook) (865.6+3003.0) (1/9) (0.08)	34.4 GAL
(Southway / Harcrest) (8283.6) (1/9) (0.08)	73.7 GAL

TOTAL ITEM 407 = 2366.4 Gal.
USED: 2370 Gal.

ITEM 408 PRIME COAT

(WA-1) = (6117) (1/9) (0.40)	271.9 GAL
(WA-2) = (2640) (1/9) (0.40)	117.3 GAL
(WA-3) = (1759) (1/9) (0.40)	78.2 GAL
(WA-4) = (2555) (1/9) (0.40)	113.6 GAL
(WA-5) = (2386) (1/9) (0.40)	106.0 GAL
(WA-6) = (2425) (1/9) (0.40)	107.8 GAL
(WA-7) = (101) (1/9) (0.40)	4.5 GAL
(WA-8) = (1425) (1/9) (0.40)	63.3 GAL
(WA-9) = (1011) (1/9) (0.40)	44.9 GAL
(WA-10) = (1423) (1/9) (0.40)	63.2 GAL
(WA-11) = (869) (1/9) (0.40)	38.6 GAL
(WA-12) = (1918) (1/9) (0.40)	85.2 GAL
(WA-13) = (453) (1/9) (0.40)	20.1 GAL
(WA-14) = (500) (1/9) (0.40)	22.2 GAL
(WA-15) = (1722) (1/9) (0.40)	76.5 GAL
(WA-16) = (1035) (1/9) (0.40)	46.0 GAL
(WA-17) = (1240) (1/9) (0.40)	55.1 GAL
(WA-18) = (1254) (1/9) (0.40)	55.7 GAL
(WA-19) = (200) (1/9) (0.40)	8.9 GAL
(WA-20) = (699) (1/9) (0.40)	31.1 GAL
(WA-21) = (1019.46) (1/9) (0.40)	45.3 GAL
(WA-22) = (883) (1/9) (0.40)	39.2 GAL
(WA-23) = (741) (1/9) (0.40)	32.9 GAL
(WA-24) = (1128) (1/9) (0.40)	50.1 GAL
(WA-25) = (732) (1/9) (0.40)	32.5 GAL
(WA-26) = (1071) (1/9) (0.40)	47.6 GAL
(WA-27) = (206) (1/9) (0.40)	9.2 GAL
(WA-28) = (382) (1/9) (0.40)	17.0 GAL
(WA-29) = (1086) (1/9) (0.40)	48.3 GAL
(WA-30) = (1300) (1/9) (0.40)	57.8 GAL
(WA-31) = (703) (1/9) (0.40)	31.2 GAL
(WA-32) = (1458) (1/9) (0.40)	64.8 GAL
(WA-33) = (364) (1/9) (0.40)	16.2 GAL
(WA-34) = (300) (1/9) (0.40)	13.3 GAL

SOUTHWAY

(WA-35) = (5289) (1/9) (0.40) 235.1 GAL

TOTAL ITEM 408 = 2150.9 Gal.
USED: 2155 Gal.

ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1

(Walnut / Richville Sta. 22+03.69 to Sta. 24+65.28) (261.59) (38) (0.17) (1/27)	62.6 CU YD
(Richville Sta. 24+65.28 to Sta. 26+70) (204.72) [(38+25) 1/2] (0.17) (1/27)	40.6 CU YD
(Richville Sta. 26+70 to Sta. 107+00) (8030) (25) (0.17) (1/27)	1264.0 CU YD
(Mohican / Sherbrook Sta. 200+50 to Sta. 201+00) (50) (25) (0.17) (1/27)	7.9 CU YD
(Southway / Harcrest Sta. 100+00 to Sta. 102+00) (200) (25) (0.17) (1/27)	23.1 CU YD

TOTAL ITEM 407 = 1398.2 CU YD
USED: 1400 CU YD

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22

(Walnut Sta.10+98 to Sta. 19+75) (877) (25) (0.17) (1/27)	138.1 CU YD
(Walnut Sta. 19+75 to Sta. 22+03.69) (228.69) [(25+38) 1/2] (0.17) (1/27)	45.4 CU YD
(Walnut / Richville Sta. 22+03.69 to Sta. 24+65.28) (261.59) (38) (0.17) (1/27)	62.6 CU YD
(Richville Sta. 24+65.28 to Sta. 26+70) (204.72) [(38+25) 1/2] (0.17) (1/27)	40.6 CU YD

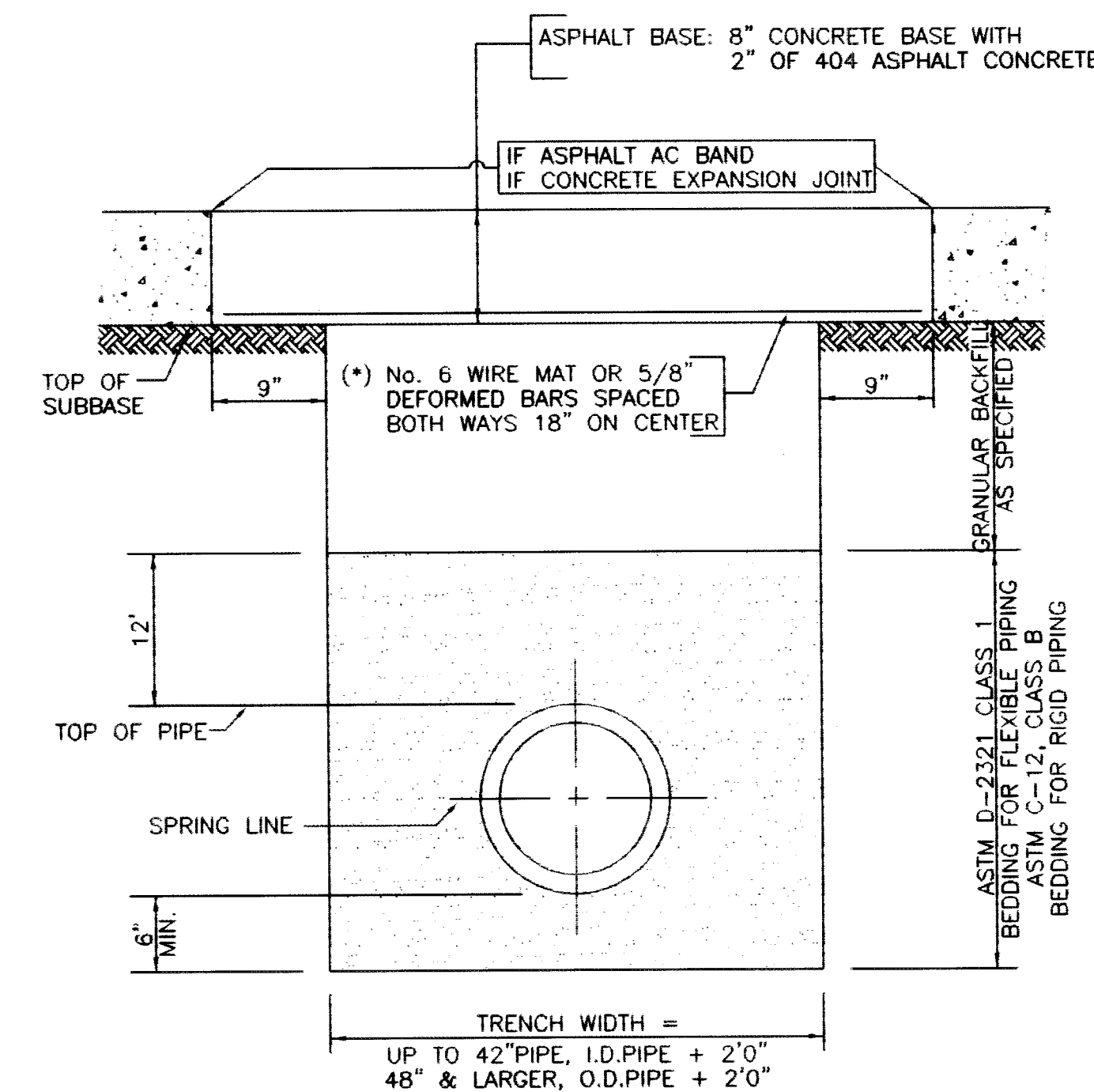
(Continue Item 448 Asphalt Concrete Surface Course, Type 1, PG 70-22)

(Richville Sta. 26+70 to Sta. 107+00) (8030) (25) (0.17) (1/27)	1264.00 CU YD
(Richville Sta. 107+00 to Sta. 110+25) (325) (24) (0.17) (1/27)	49.1 CU YD
(Mohican / Sherbrook Sta. 200+11.70 to Sta. 201+69.68) (865.6+3003.0) (0.17) (1/27)	24.4 CU YD
(Southway / Harcrest Sta. 200+11.70 to Sta. 201+69.68) (8283.6) (0.17) (1/27)	52.2 CU YD

TOTAL ITEM 448 = 1676.4 CU YD
USED: 1680 CU YD

ITEM 209 LINEAR GRADING

(Walnut Sta.10+98 to Sta. 22+44.52)	1147 LF
Richville Dr. Sta. 22+44.52 to Sta. 110+25)	8781 LF
(Sherbrook Sta. 200+50 to Sta. 201+70)	120 LF
(Southway Sta. 100+00 to Sta. 102+95.72)	296 LF

TOTAL ITEM 209 = 2 x 10344 LF
USED: 20700 LF

NOTES

(*) MUST BE USED WHEN WIDTH OF TRENCH IS GREATER THAN 3' AT THE SUBBASE LEVEL

CONCRETE BASE SHALL BE OF 1:2:4, 6 BAG MIX, PORTLAND CEMENT CONCRETE USING HIGH EARLY STRENGTH CEMENT AND IT MUST BE CURED AT LEAST 48 HRS.

ALL WORK AND MATERIAL SHALL BE INCLUDE IN ITEM 603 CONDUIT

OPEN CUT DETAIL

Richville Dr. Rehabilitation
Calculations and Estimated Quantities
City of Massillon
Stark County, Ohio

Francis H. Cicchinelli, Jr.



REVISIONS:

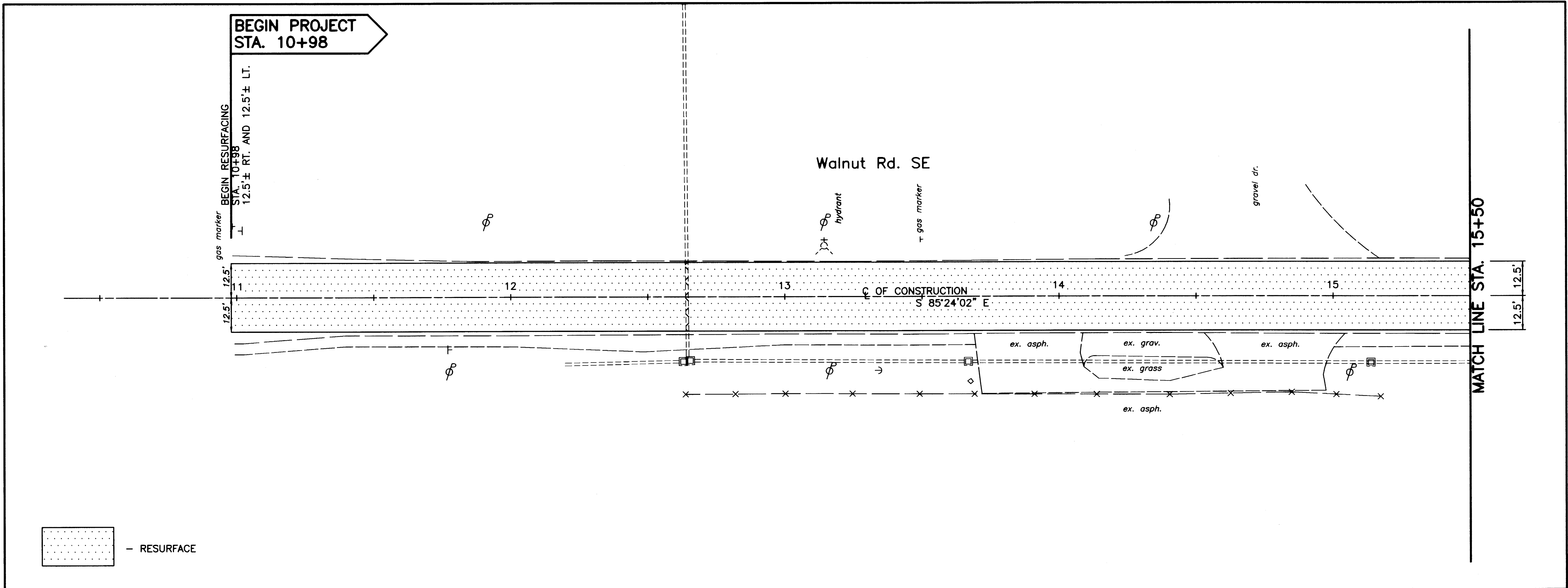
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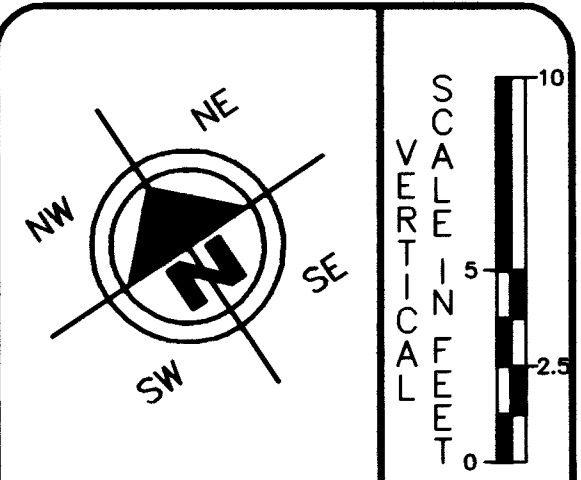
05GM0107.DWG

ACCOUNT NUMBER

05GM01



PROP. G. GRADE	PAVEMENT PLANING AND RESURFACING																				
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1040																					1040
1035																					1035
1030																					1030
1025																					1025
1020																					1020
1015																					1015
1010																					1010
EXIST. G. GRADE	1031.21	1030.85	1030.54	1030.50	1030.72	1031.02	1031.40	1031.87	1032.46	1033.17											
	11	12	13	14	15																



HORIZONTAL SCALE IN FEET

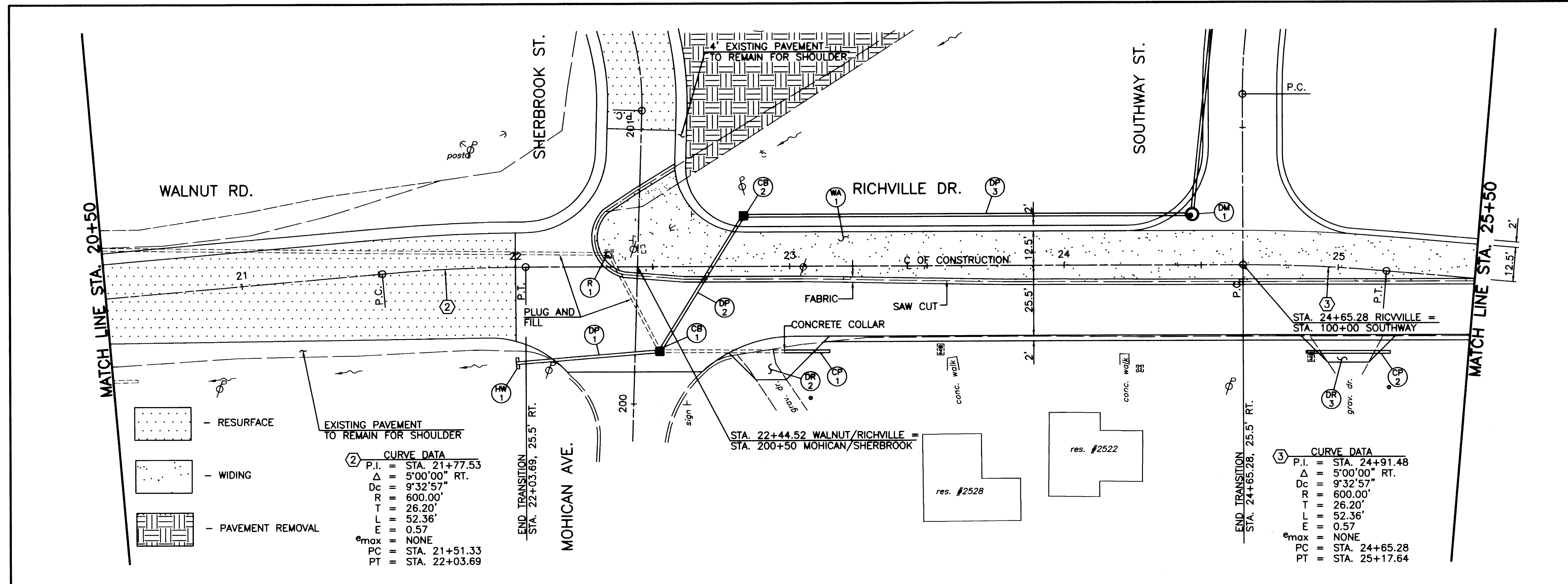
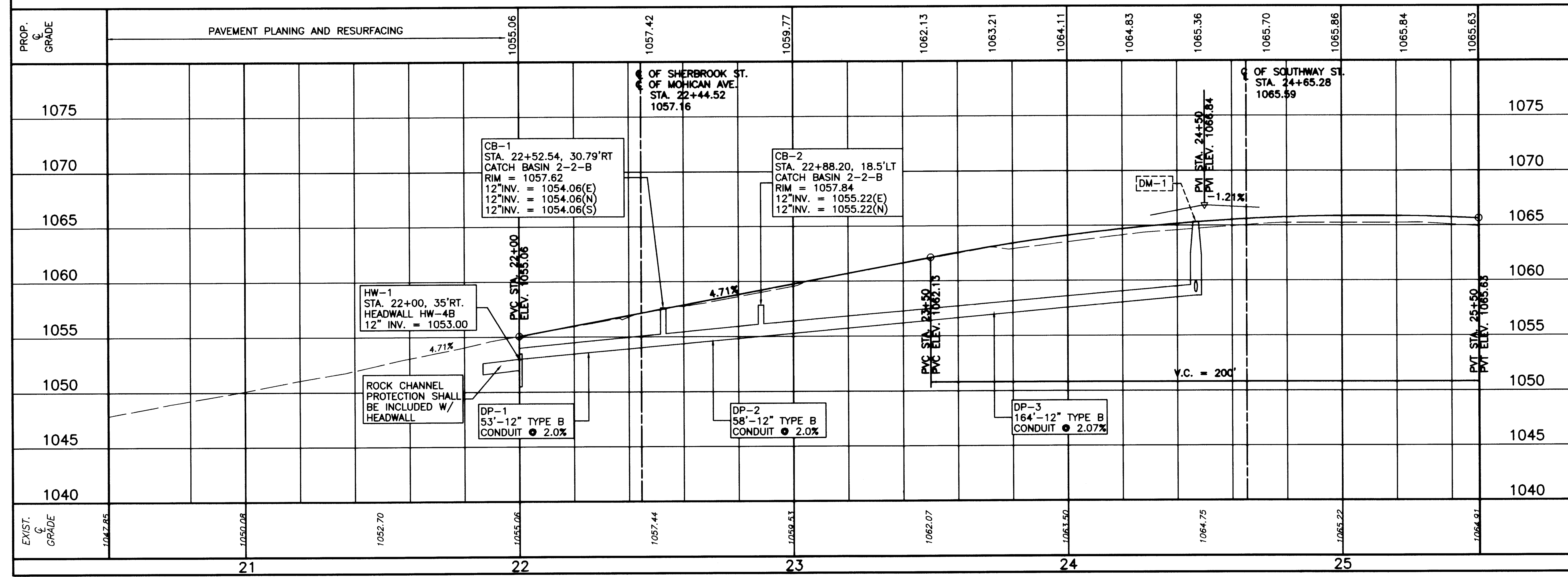
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 CHECKED BY: SDH
 DATE: June 11, 2003
 DATE: June 2003

Richville Drive Rehabilitation
 Plan and Profile Sta. 10+50 to Sta. 15+50
 City of Massillon
 Stark County, Ohio



REVISIONS:	
DATE	DESCRIPTION

FILE NAME: .DWG
 ACCOUNT NUMBER: 05st03



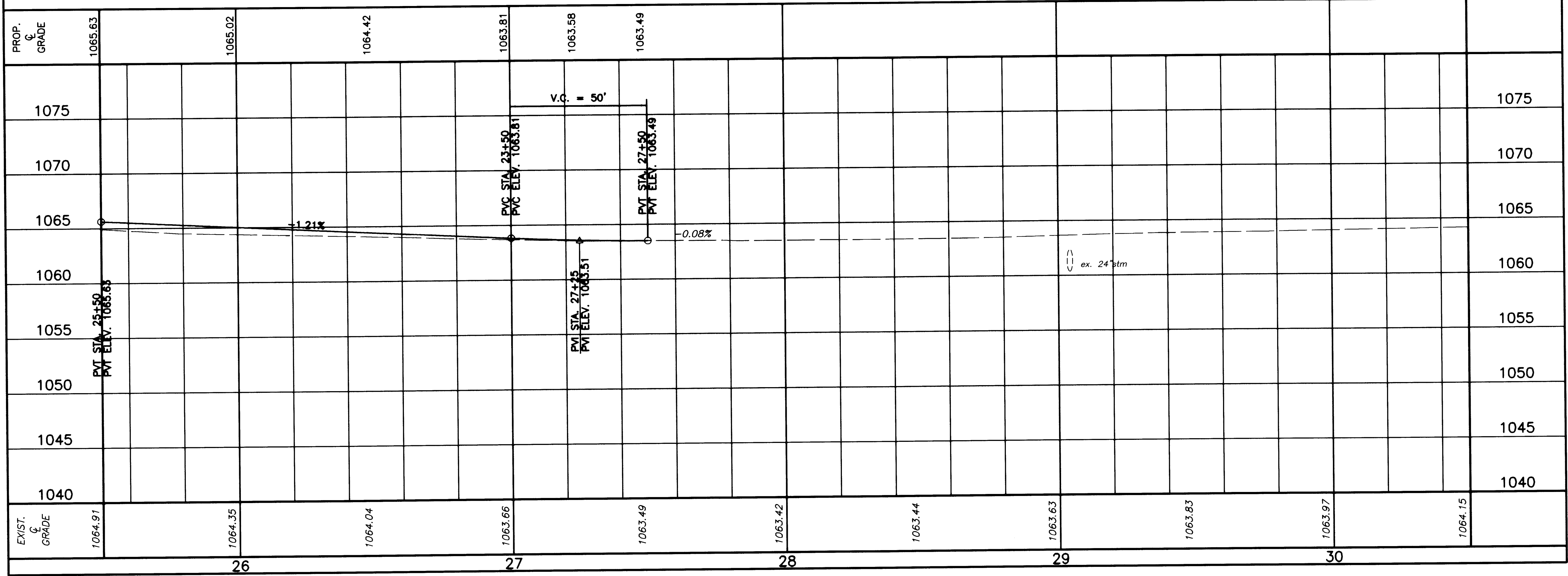
Richville Dr Rehabilitation
Plan and Profile Sta. 20+50 to Sta. 25+50
City of Massillon
Stark County, Ohio

Francis H. Cicchinelli, Jr.
Massillon
Means More!

REVISIONS:	
DATE	DESCRIPTION

FILE NAME: .DWG
ACCOUNT NUMBER: 05st03

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CURVE DATA

P.I.	= STA. 26+43.84
Δ	= 5°00'00" LT.
Dc	= 9°32'57"
R	= 600'
T	= 26.20'
L	= 52.36'
E	= 0.57'
e _{max}	= NONE
P.C.	= STA. 26+17.64
P.T.	= STA. 26+70

Richville Dr Rehabilitation
Plan and Profile Sta. 25+50 to Sta. 30+50
City of Massillon
Stark County, Ohio

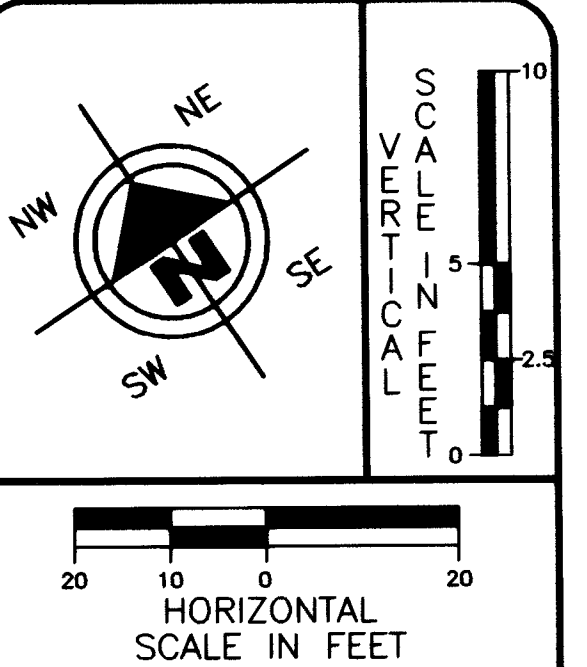
Francis H. Cicchinelli, Jr.
Mayer

Massillon
Means More!

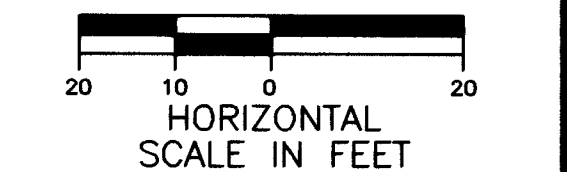
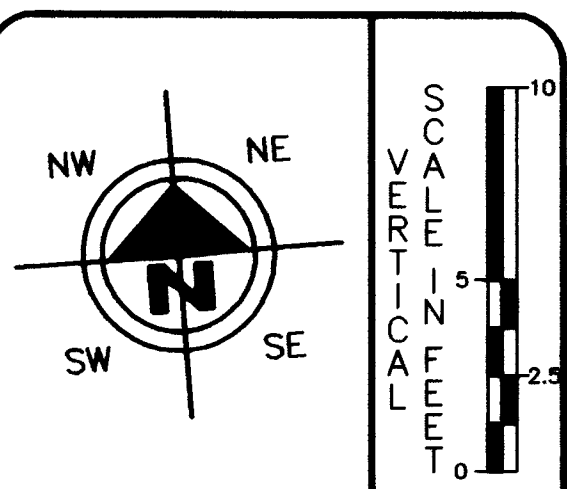
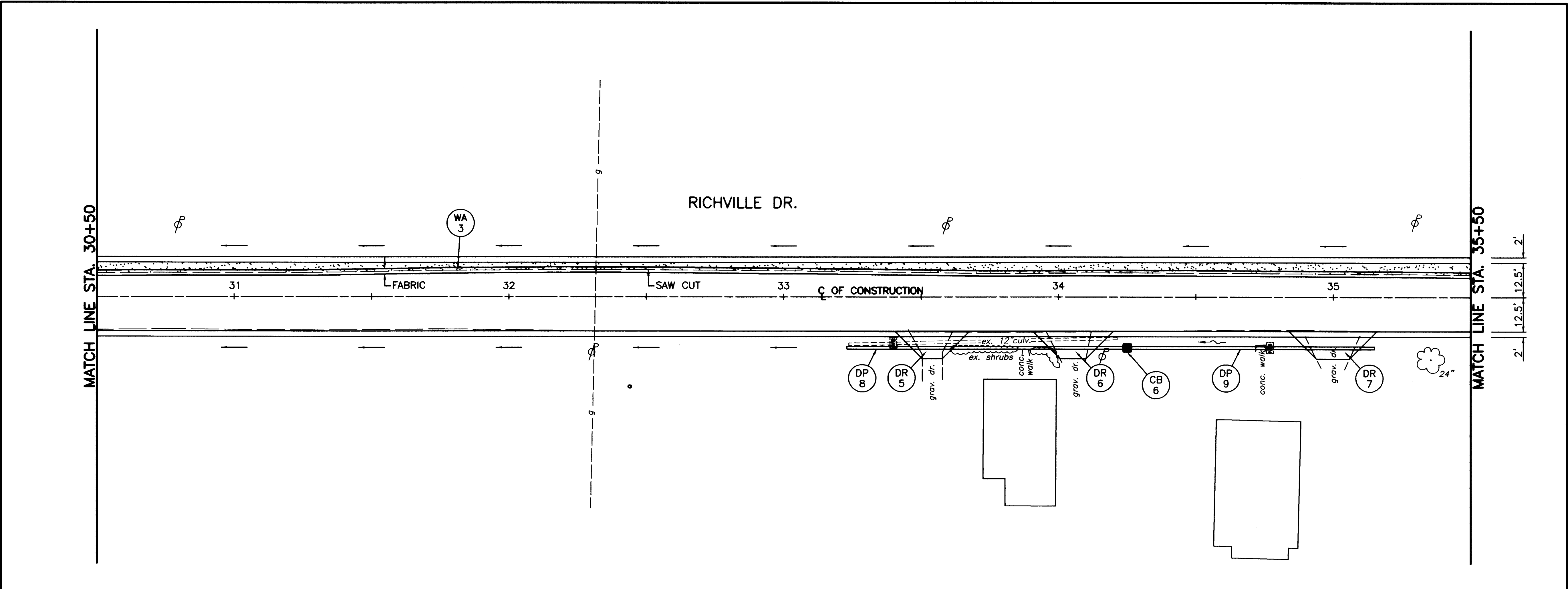
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DATE	DESCRIPTION

FILE NAME: .DWG
ACCOUNT NUMBER: 05st03

13
36

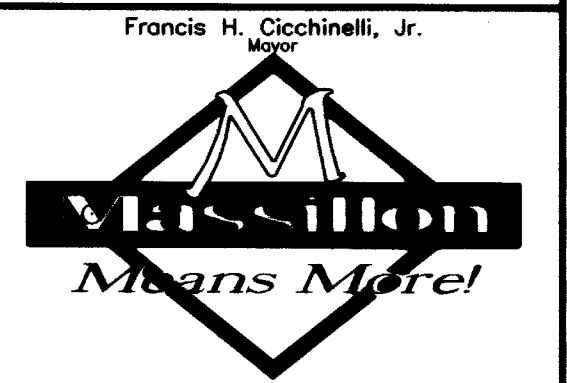


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FPW	SDH
DATE:	DATE:
April, 2005	April, 2005



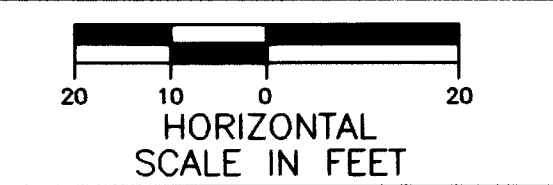
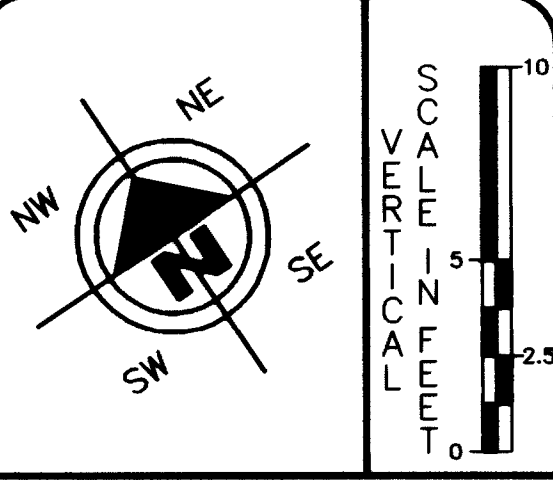
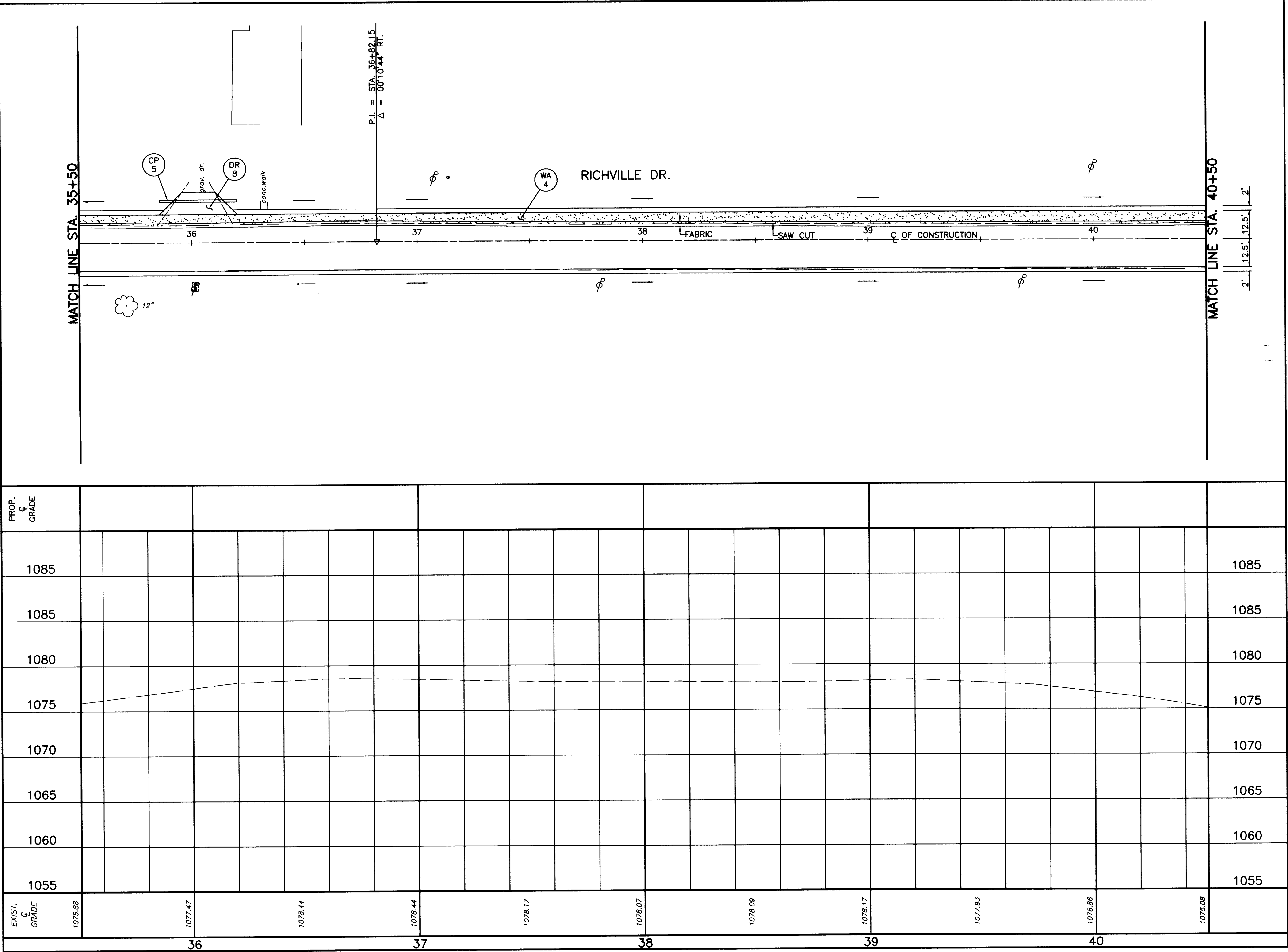
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FPW	SDH
DATE:	DATE:
April, 2005	April, 2005

Richville Dr. Rehabilitation
Plan and Profile Sta. 30+50 to Sta. 35+50
City of Massillon
Stark County, Ohio



REVISIONS:	
DATE	DESCRIPTION

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ACCOUNT NUMBER	02ST02



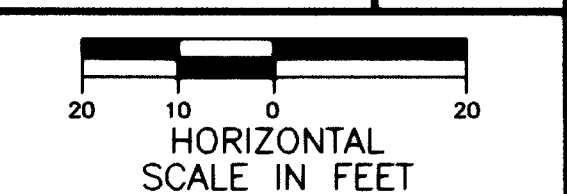
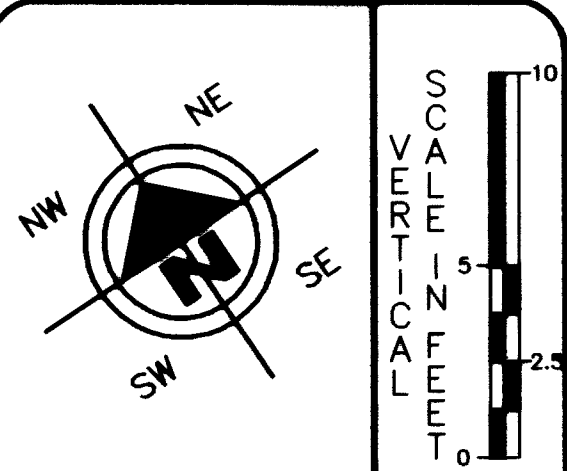
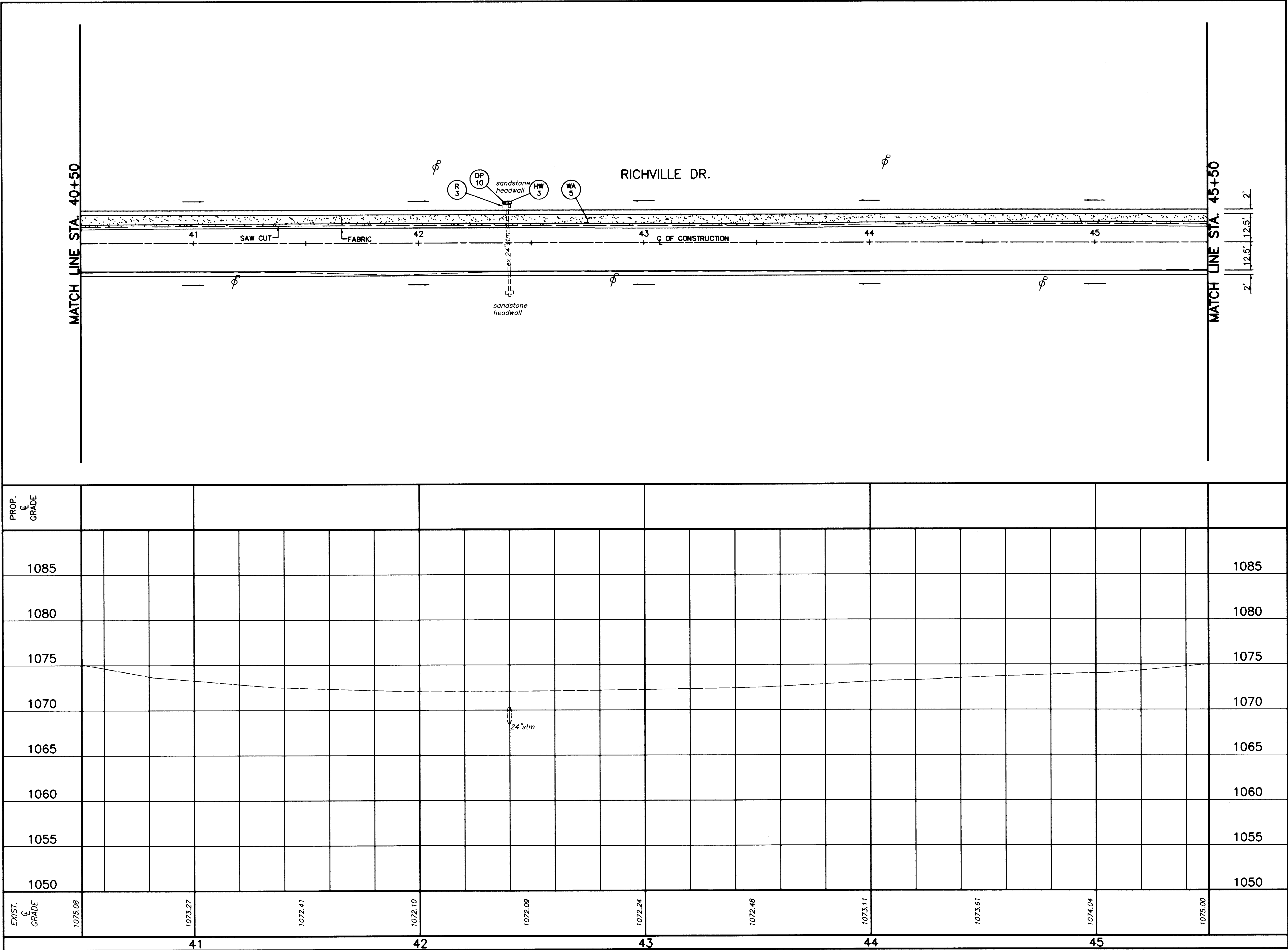
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FPW	SDH
DATE:	DATE:
April, 2005	April, 2005

Richville Dr. Rehabilitation
Plan and Profile Sta. 35+50 to Sta. 40+50
City of Massillon
Stark County, Ohio



REVISIONS:	
DATE	DESCRIPTION

FILE NAME:
.DWG
ACCOUNT NUMBER
05st03



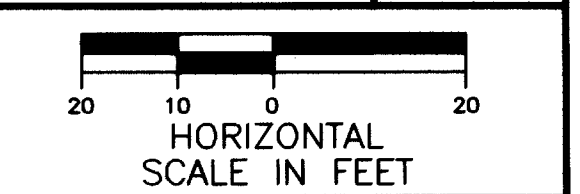
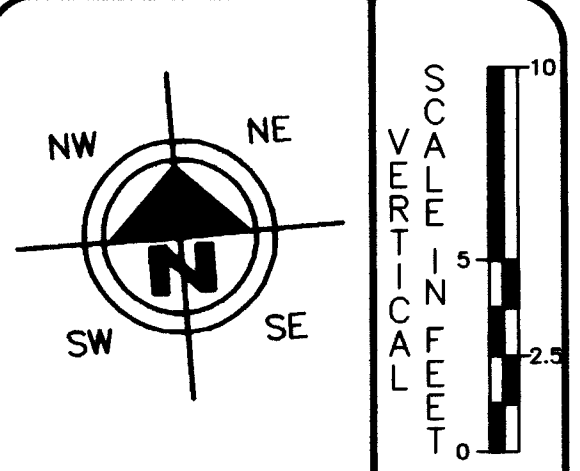
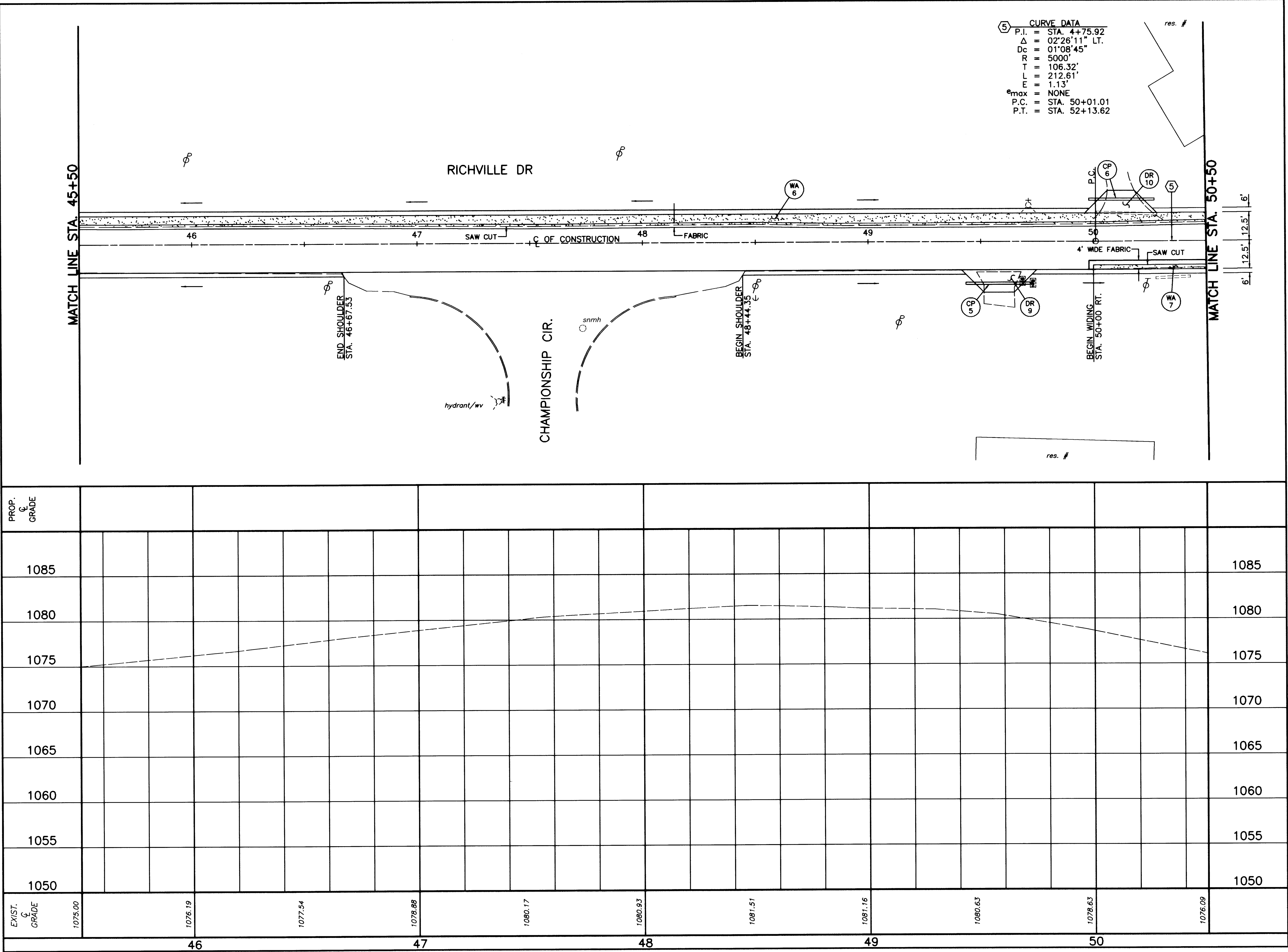
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FPW	SDH
DATE:	DATE:
April, 2005	April, 2005

Richville Dr. Rehabilitation
Plan and Profile Sta. 40+50 to Sta. 45+50
City of Massillon
Stark County, Ohio



REVISIONS:	
DATE	DESCRIPTION

FILE NAME:
.DWG
ACCOUNT NUMBER
05st03



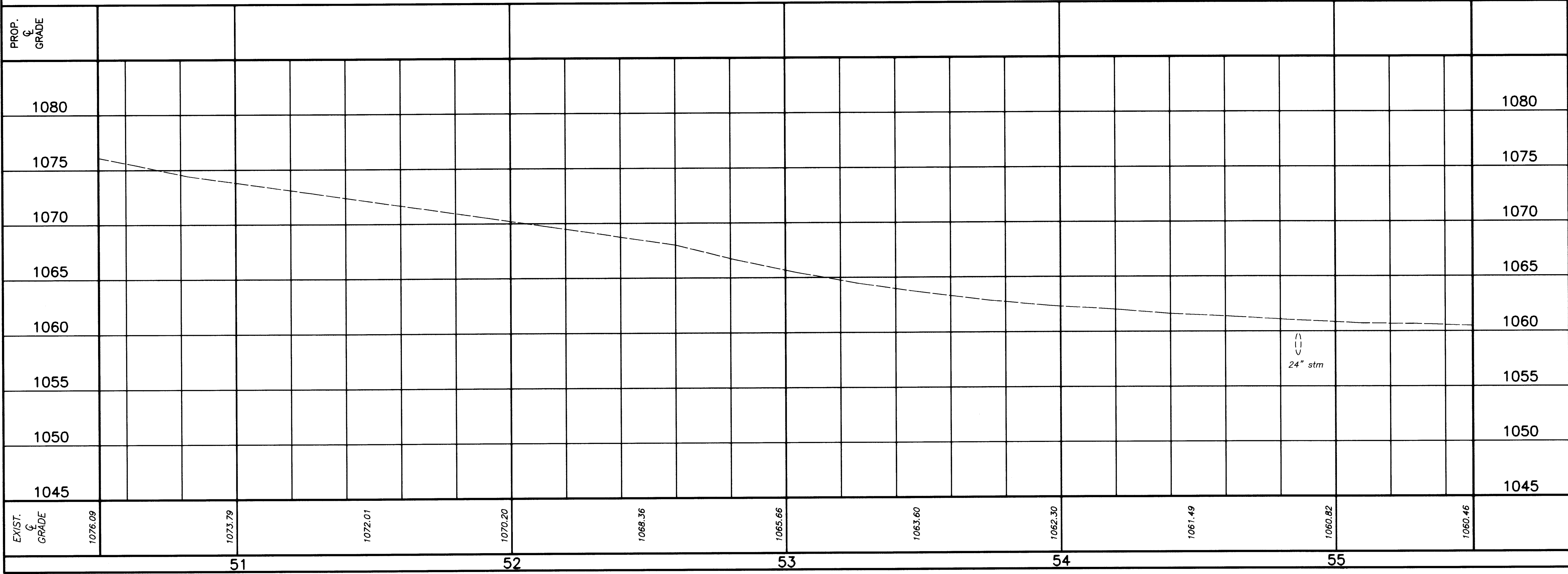
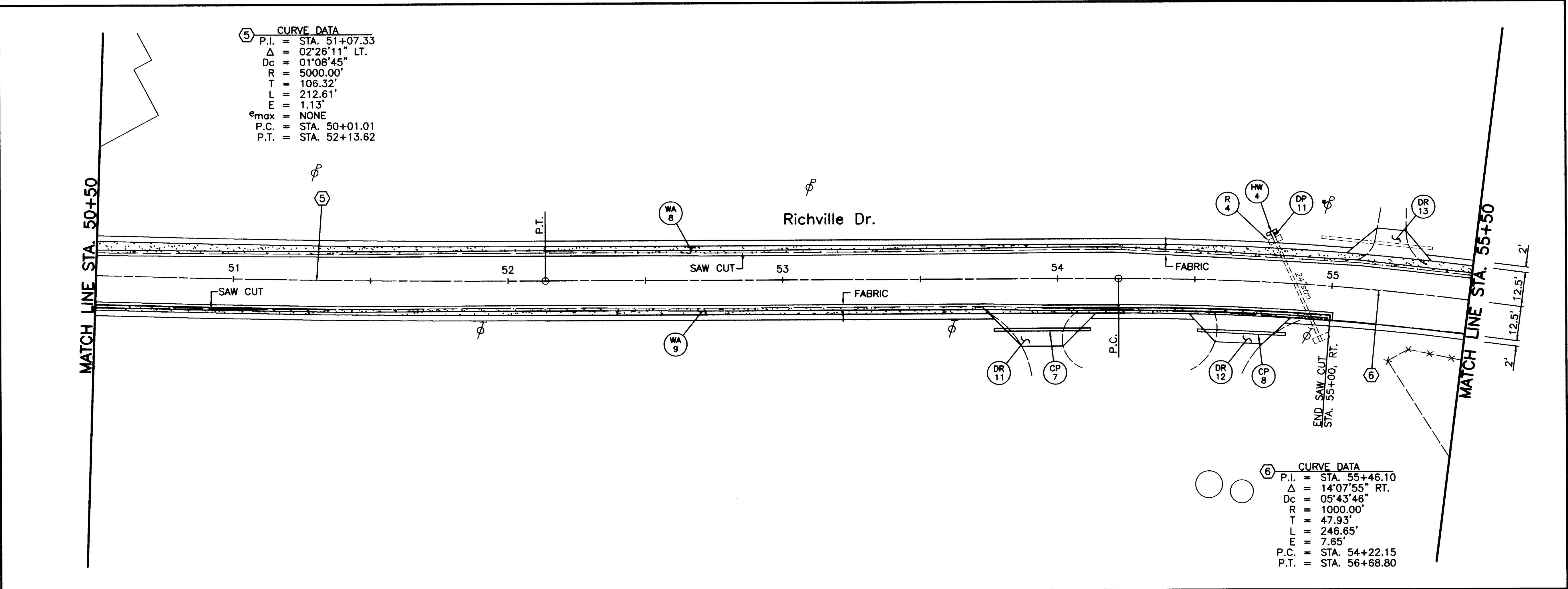
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FPW	SDH
DATE:	DATE:
April, 2005	April, 2005

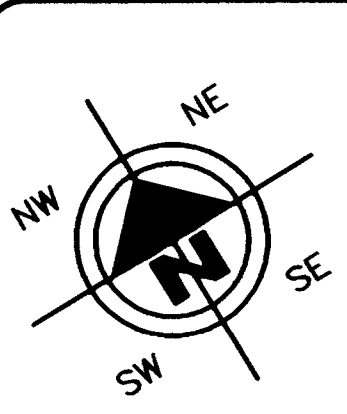
Richville Dr Rehabilitation
Plan and Profile Sta. 45+50 to Sta. 50+50
City of Massillon
Stark County, Ohio



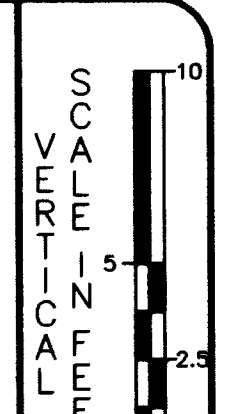
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DATE	DESCRIPTION

FILE NAME:	.DWG
ACCOUNT NUMBER	05st03





NE
NW
SW
SE



VERTICAL SCALE IN FEET



HORIZONTAL SCALE IN FEET

DRAWN BY: FPW
CHECKED BY: SDH

DATE: April, 2005
DATE: April, 2005

Richville Dr. Rehabilitation
 Plan and Profile Sta. 50+50 to Sta. 55+50
 City of Massillon
 Stark County, Ohio



Francis H. Cicchinelli, Jr.
 Mayor

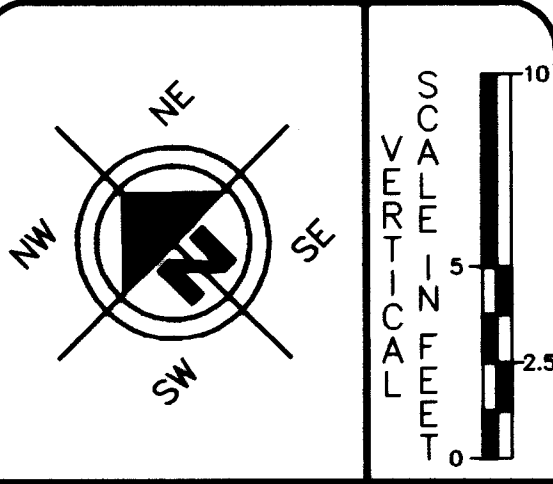
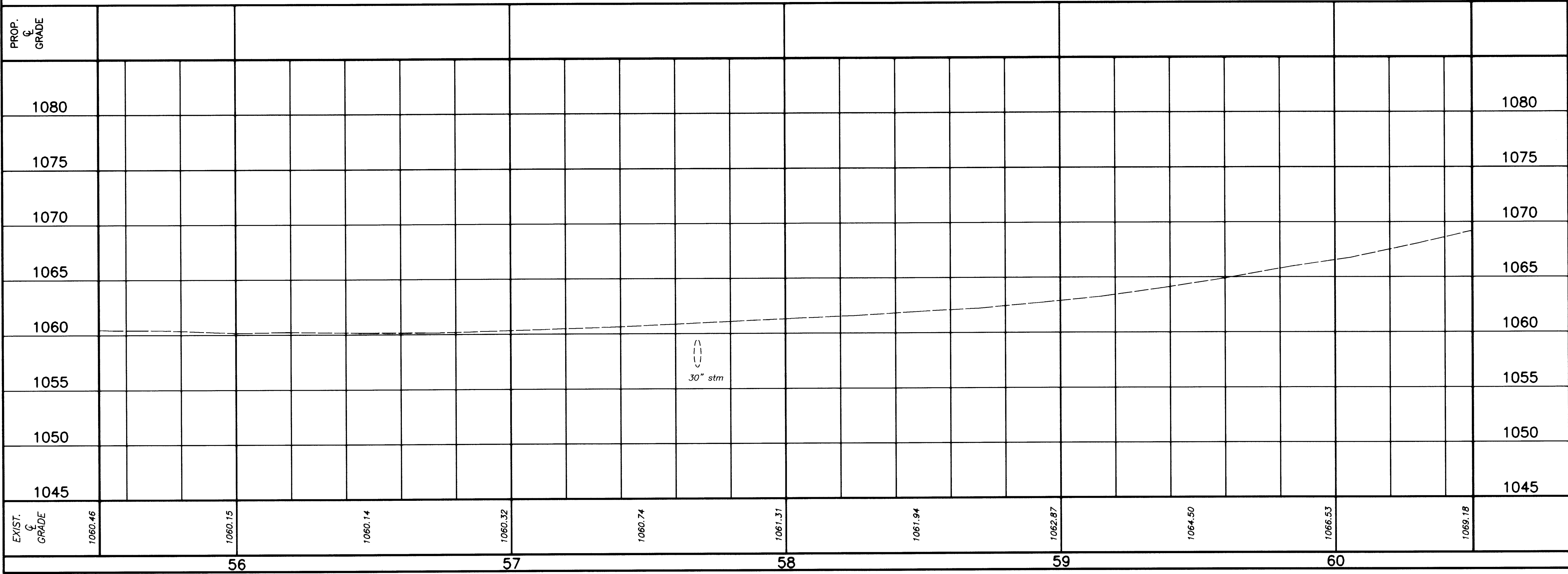
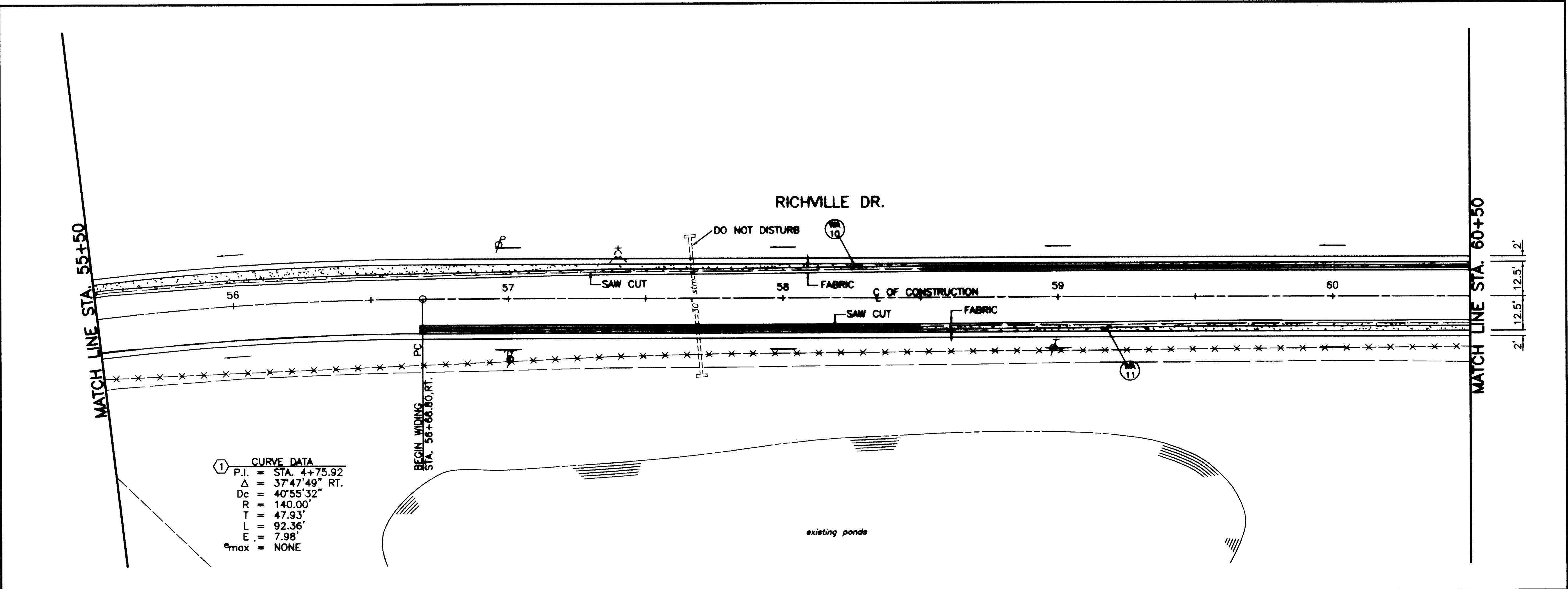
REVISIONS:

DATE	DESCRIPTION

FILE NAME: .DWG

ACCOUNT NUMBER: 03STXX

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HORIZONTAL
SCALE IN FEET

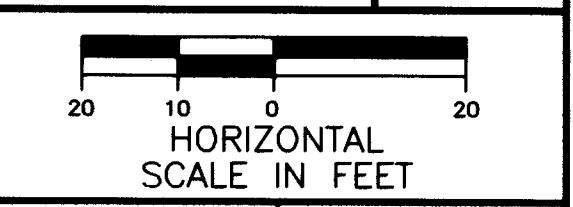
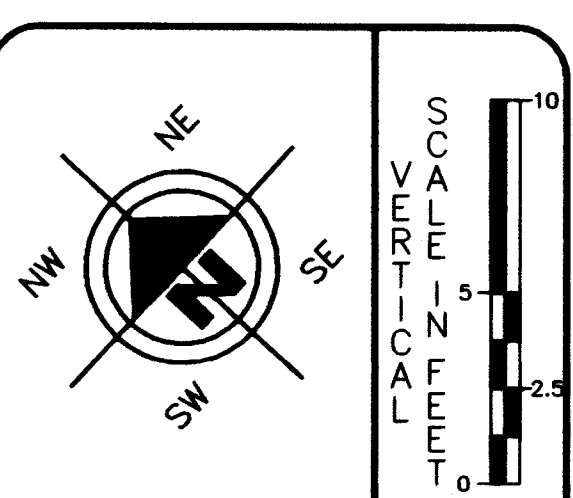
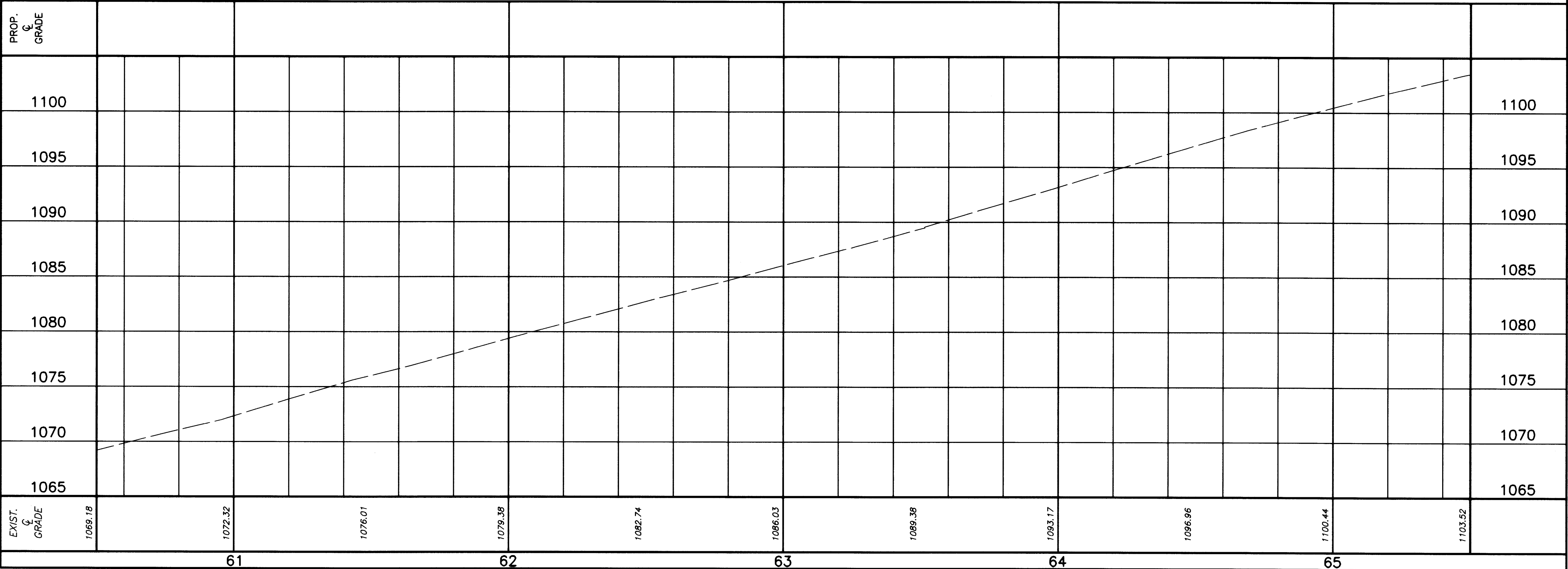
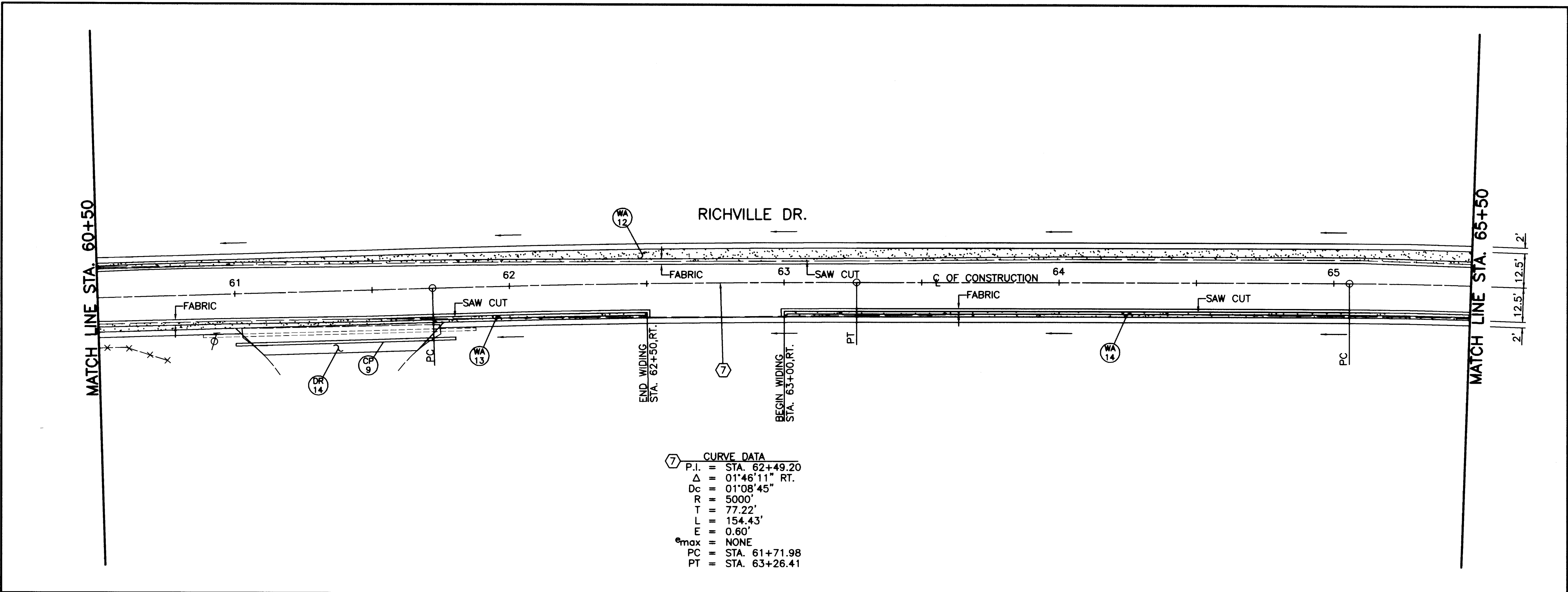
DRAWN BY:	CHECKED BY:
FPW	SDH
DATE:	DATE:
April, 2005	April, 2005

Richville Dr. Rehabilitation
Plan and Profile Sta. 55+50 to Sta. 60+50
City of Massillon
Stark County, Ohio



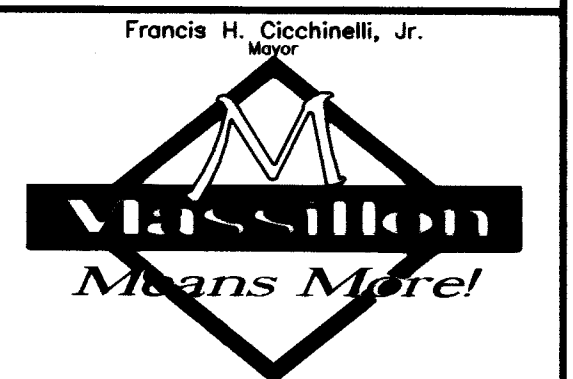
REVISIONS:	
DATE	DESCRIPTION

FILE NAME: .DWG
ACCOUNT NUMBER: 05st03



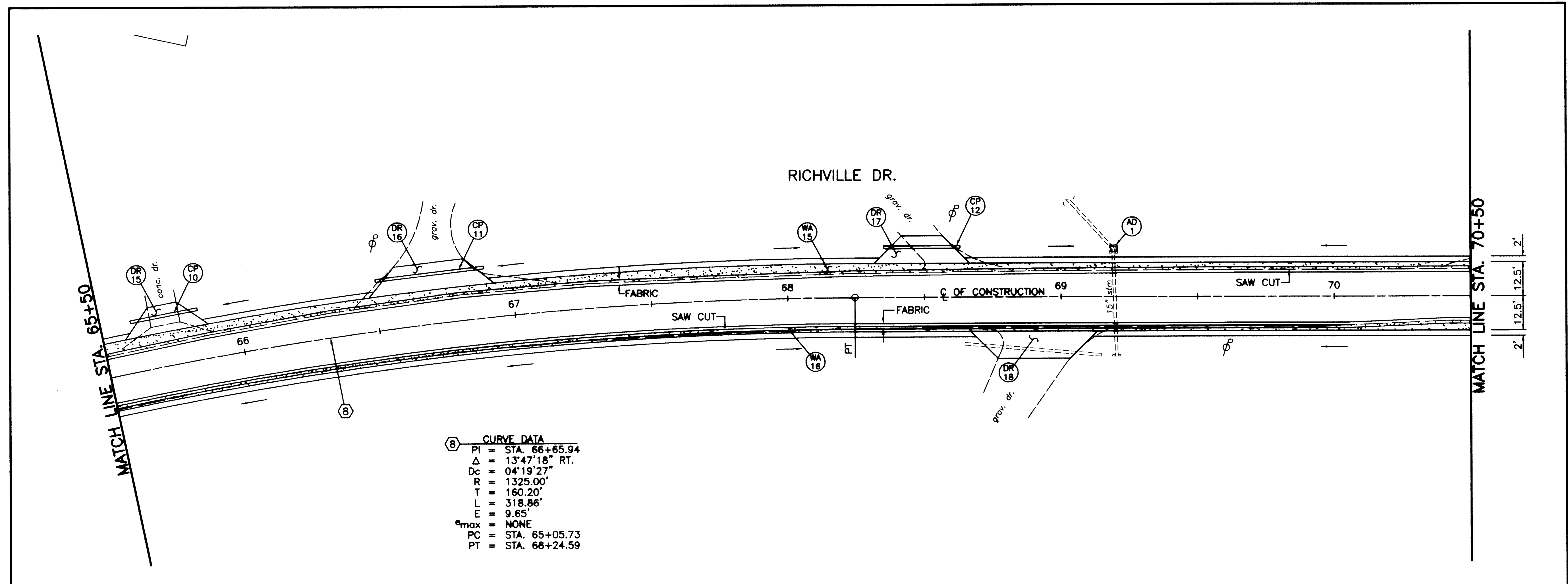
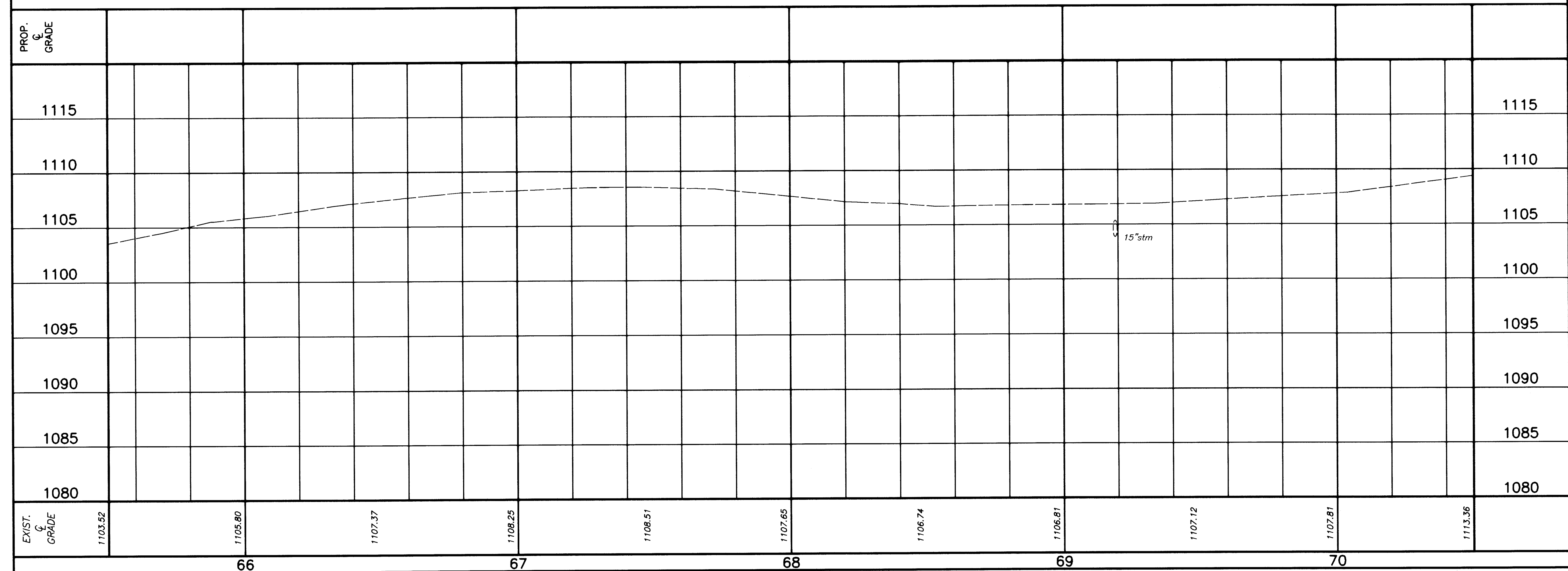
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DATE:	DATE:
April, 2005	April, 2005

Richville Dr. Rehabilitation
Plan and Profile Sta. 60+50 to Sta. 65+50
City of Massillon
Stark County, Ohio



REVISIONS:	
DATE	DESCRIPTION

FILE NAME: .DWG
ACCOUNT NUMBER: 05st03



HORIZONTAL SCALE IN FEET

DRAWN BY:
FPW

CHECKED BY:
SDH

DATE:
April, 2005

DATE:
April, 2005

Richville Dr. Rehabilitation

Plan and Profile Sta. 65+50 to Sta. 70+50

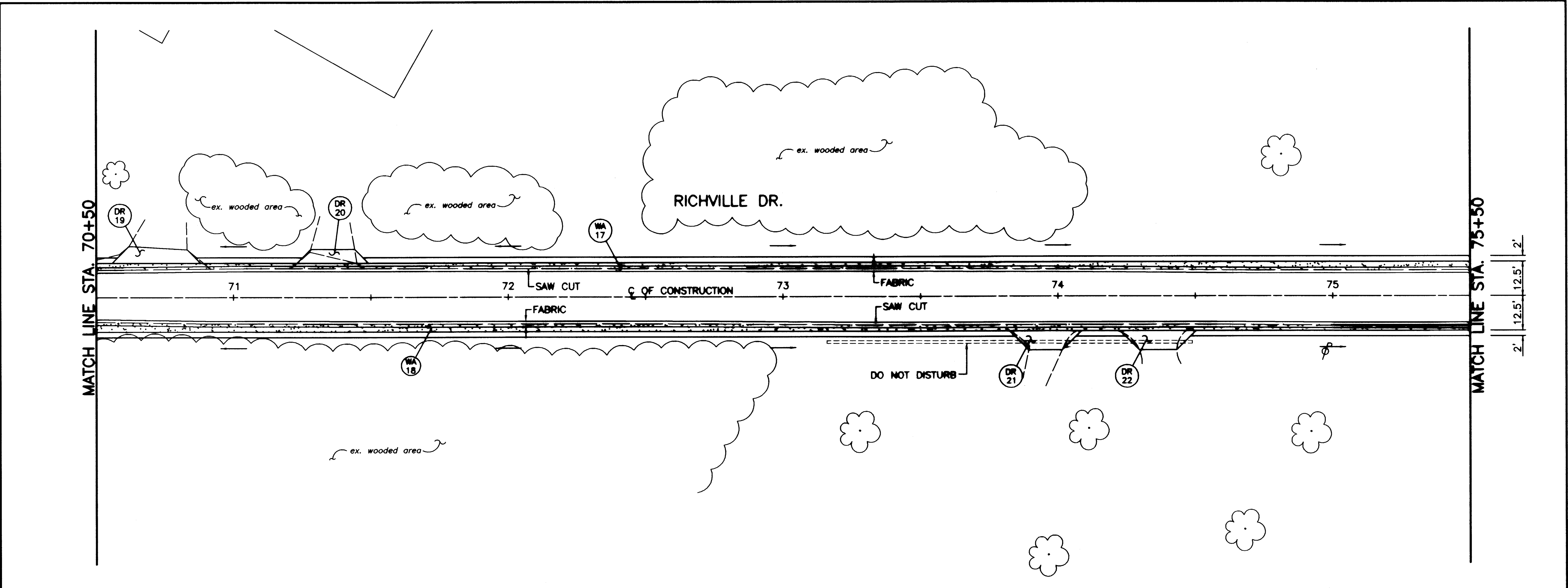
City of Massillon
Stark County, Ohio

REVISIONS:	
DATE	DESCRIPTION

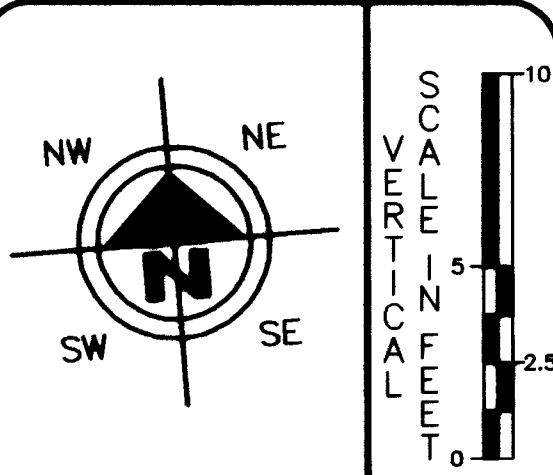
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ACCOUNT NUMBER: 05st03

21
36



PROP. GRADE																										
1125																										1125
1120																										1120
1115																										1115
1110																										1110
1105																										1105
1100																										1100
1095																										1095
1090																										1090
EXIST. GRADE	1109.36	1110.85			1112.25				1113.47		1113.99			1113.78		1113.46			1113.21		1112.83			1111.37		1109.36
	71			72					73					74					75							



HORIZONTAL SCALE IN FEET

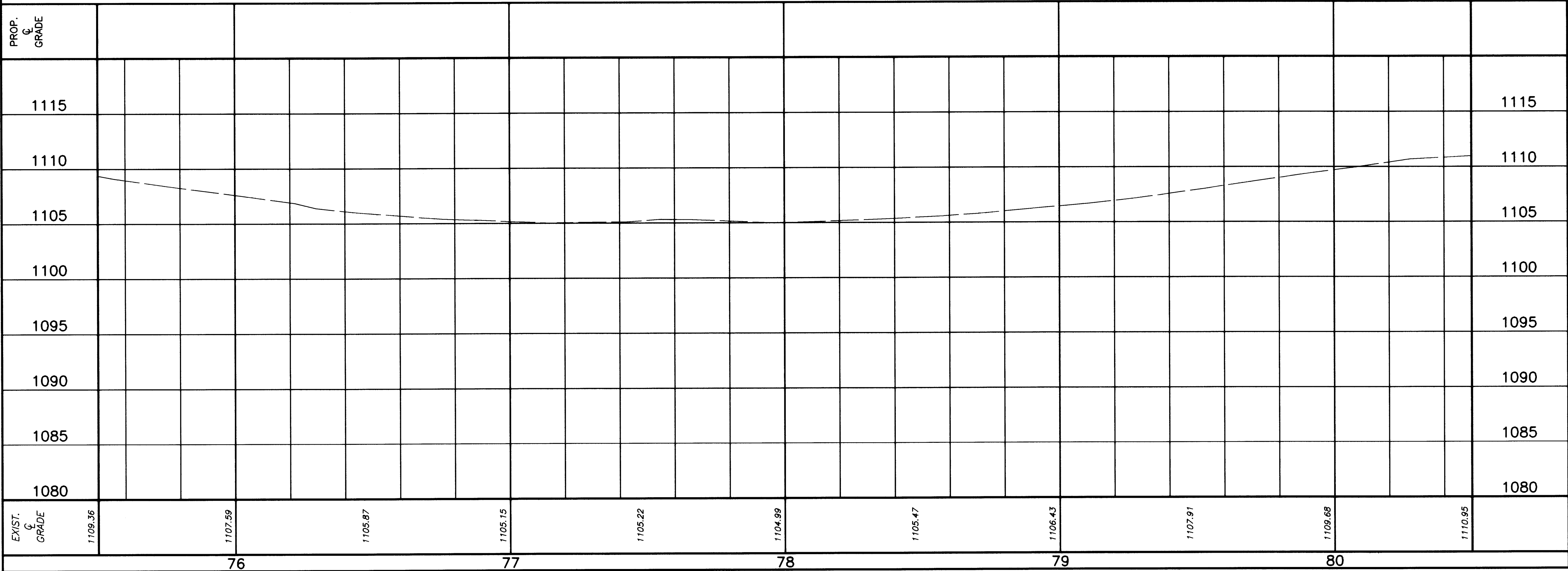
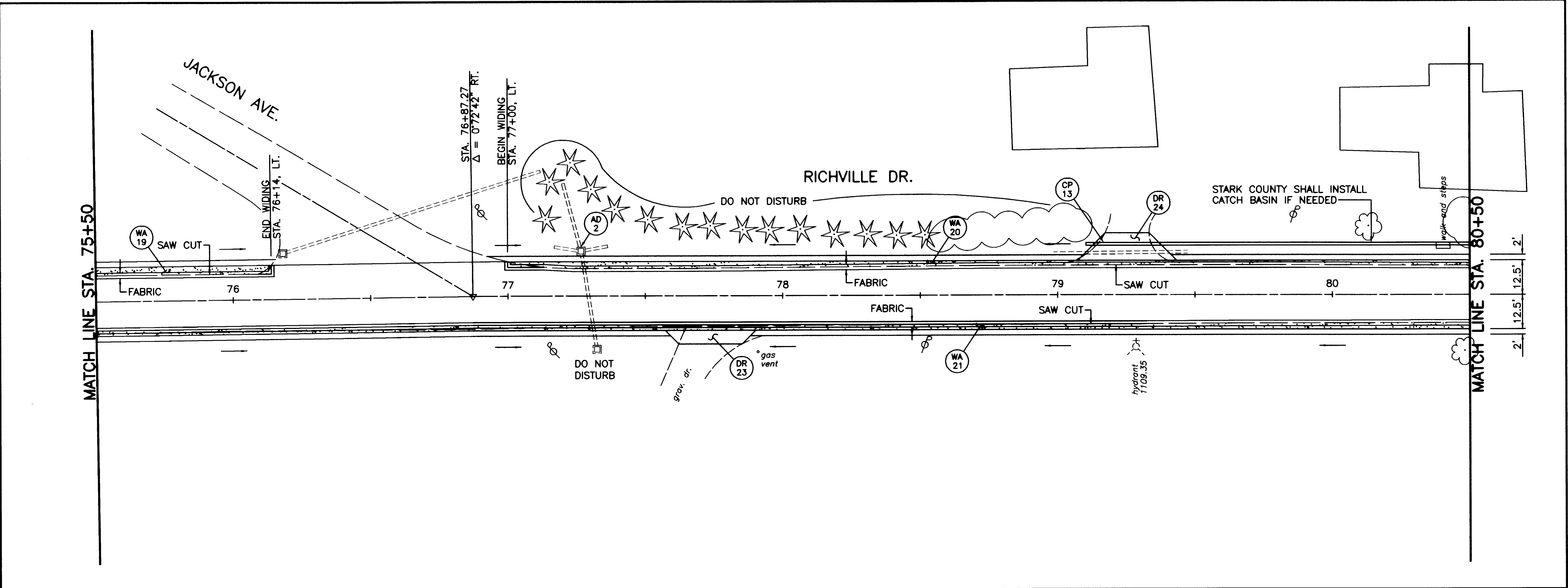
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CHECKED BY: SDH
DATE: April, 2005
DATE: April, 2005

Richville Dr. Rehabilitation
Plan and Profile Sta. 70+50 to Sta. 75+50
City of Massillon
Stark County, Ohio



REVISIONS:	
DATE	DESCRIPTION

FILE NAME: .DWG
ACCOUNT NUMBER: 05st03



20 10 0 10 20
HORIZONTAL SCALE IN FEET

DRAWN BY: FPW
CHECKED BY: SDH

DATE: April, 2005
DATE: April, 2005

Richville Dr. Rehabilitation
Plan and Profile Sta. 75+50 to Sta. 80+50
City of Massillon
Stark County, Ohio

Francis H. Cicchinelli, Jr.
Mayor

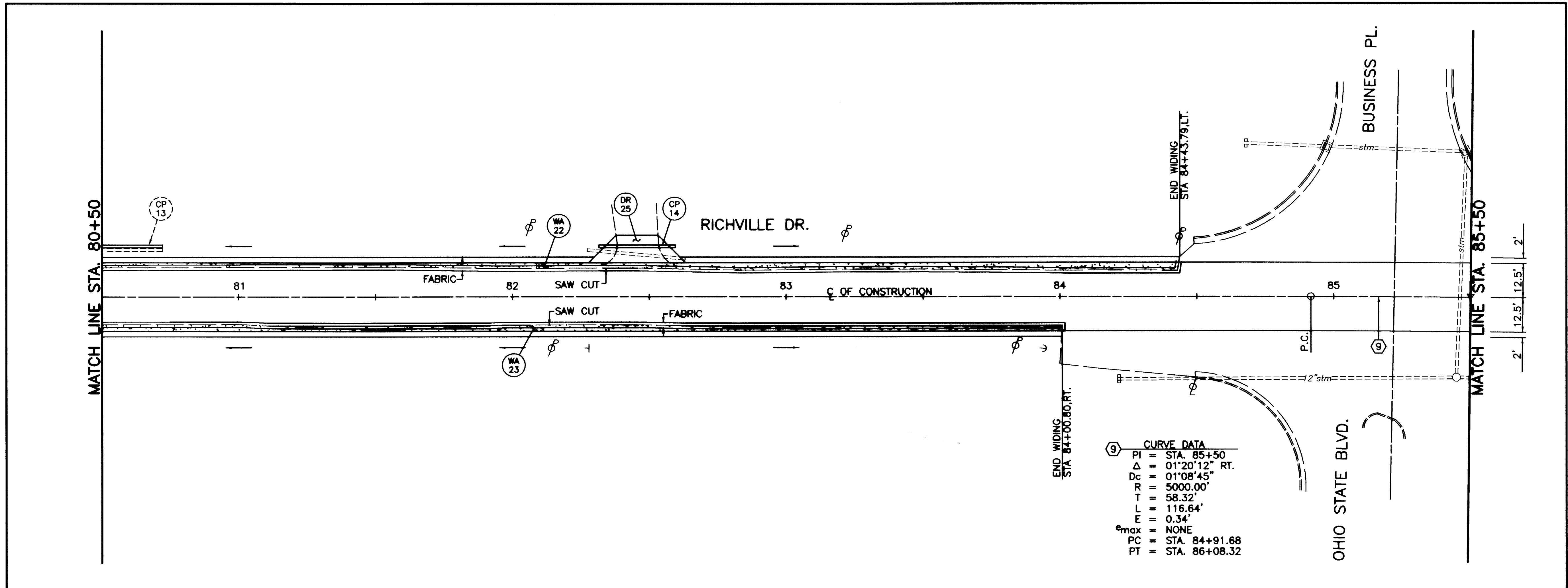
REVISIONS:

DATE	DESCRIPTION

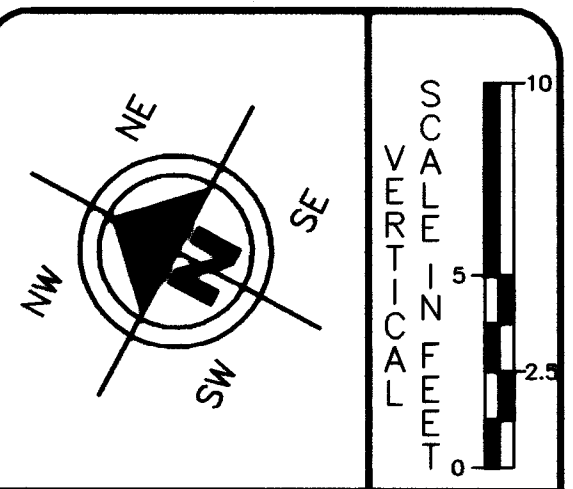
FILE NAME: .DWG

ACCOUNT NUMBER: 05st03

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PROP. GRADE													
1125													1125
1120													1120
1115													1115
1110													1110
1105													1105
1100													1100
1095													1095
1090													1090
EXIST. GRADE	1110.95	1111.29	1111.36	1111.82	1112.04	1111.86	1111.66	1111.86	1111.52	1111.51	1111.40		
	81	82	83	84	85								



DRAWN BY:	CHECKED BY:
FPW	SDH
DATE:	DATE:
April, 2005	April, 2005

Richville Dr. Rehabilitation
Plan and Profile Sta. 80+50 to Sta. 85+50
City of Massillon
Stark County, Ohio

Francis H. Cicchinelli, Jr.
Mayor

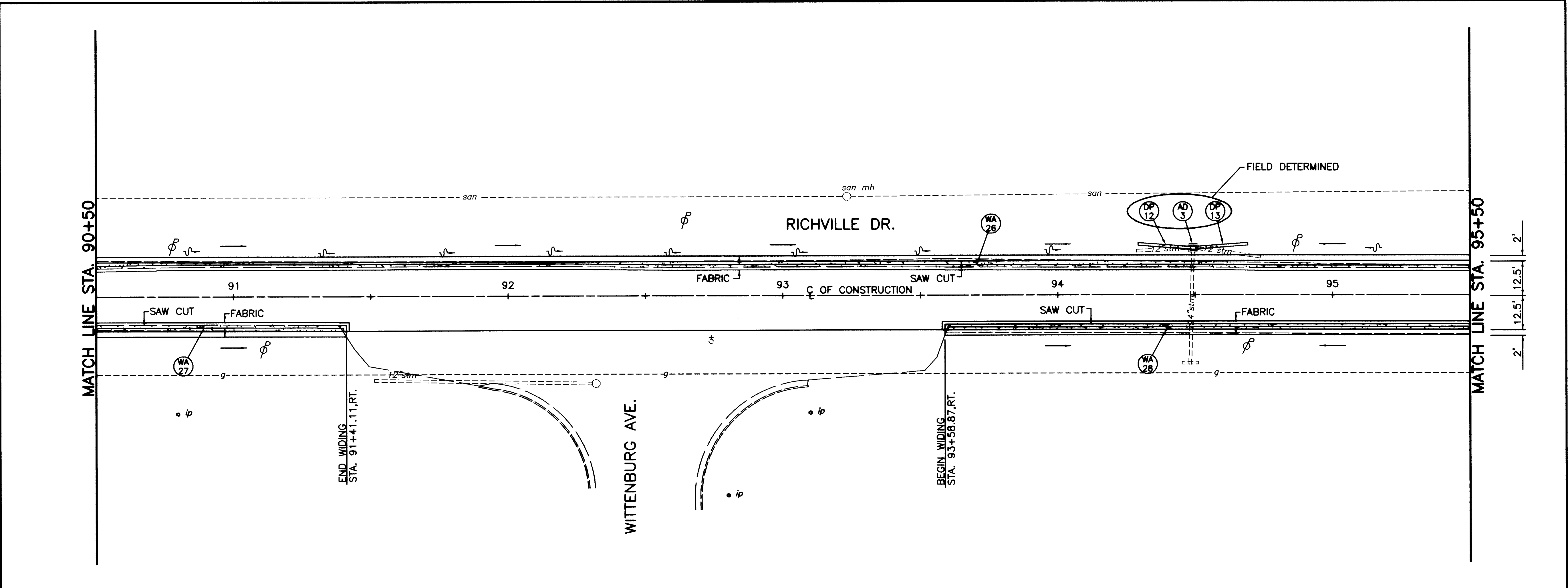
REVISIONS:

DATE	DESCRIPTION

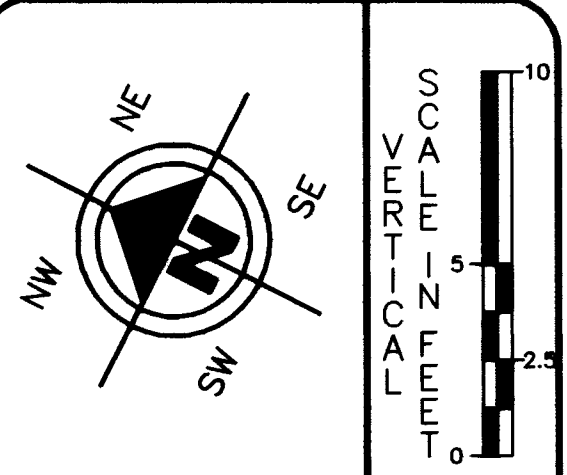
FILE NAME: .DWG

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PROP. C. GRADE													
1115													1115
1110													1110
1105													1105
1100													1100
1095													1095
1090													1090
1085													1085
1080													1080
EXIST. C. GRADE	1107.80	1106.33	1105.09	1104.28	1103.65	1103.12	1102.67	1102.58	1102.46	1102.55	1102.89		
	91			92			93			94		95	



HORIZONTAL SCALE IN FEET

DRAWN BY: FPW
CHECKED BY: SDH
DATE: April, 2005
DATE: April, 2005

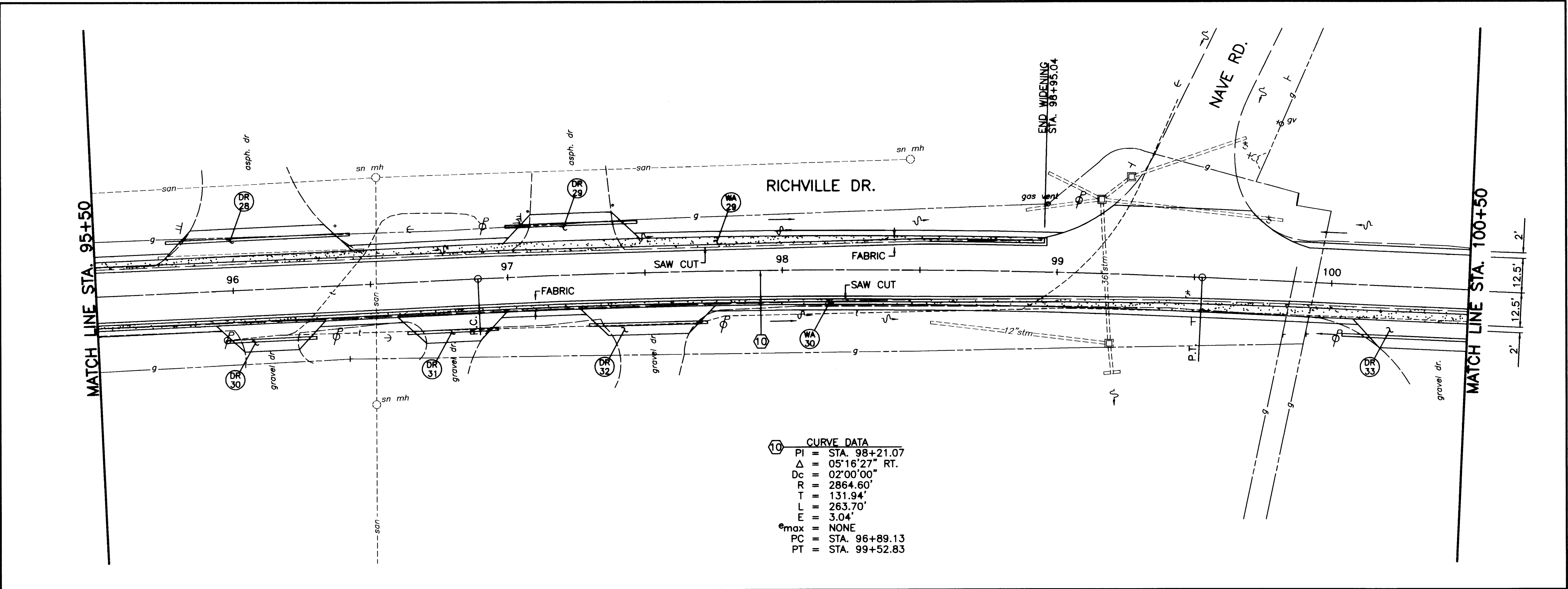
Richville Dr. Rehabilitation
Plan and Profile Sta. 90+50 to Sta. 95+50

City of Massillon
Stark County, Ohio



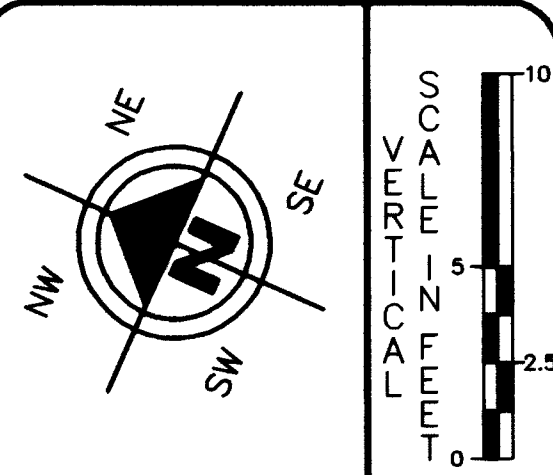
REVISIONS:	
DATE	DESCRIPTION

FILE NAME: .DWG
ACCOUNT NUMBER: 05st03



10 CURVE DATA
PI = STA. 98+21.07
Δ = 05°16'27" RT.
Dc = 02°00'00"
R = 2864.60'
T = 131.94'
L = 263.70'
E = 3.04
e_{max} = NONE
PC = STA. 96+89.13
PT = STA. 99+52.83

PROP. GRADE													
1115													1115
1110													1110
1105													1105
1100													1100
1095													1095
1090													1090
1085													1085
1080													1080
EXIST. GRADE	1102.89	1103.41	1103.99	1103.63	1102.24	1101.09	1100.65	1100.54	1100.94	1101.32	1102.31		
	96			97		98		99		100			

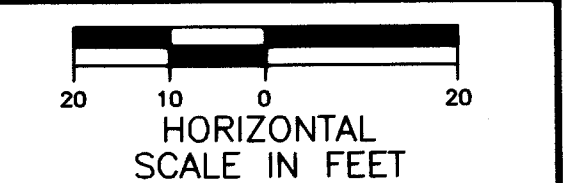
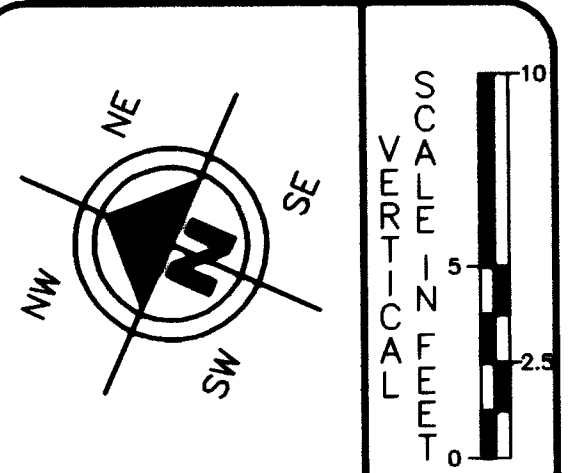
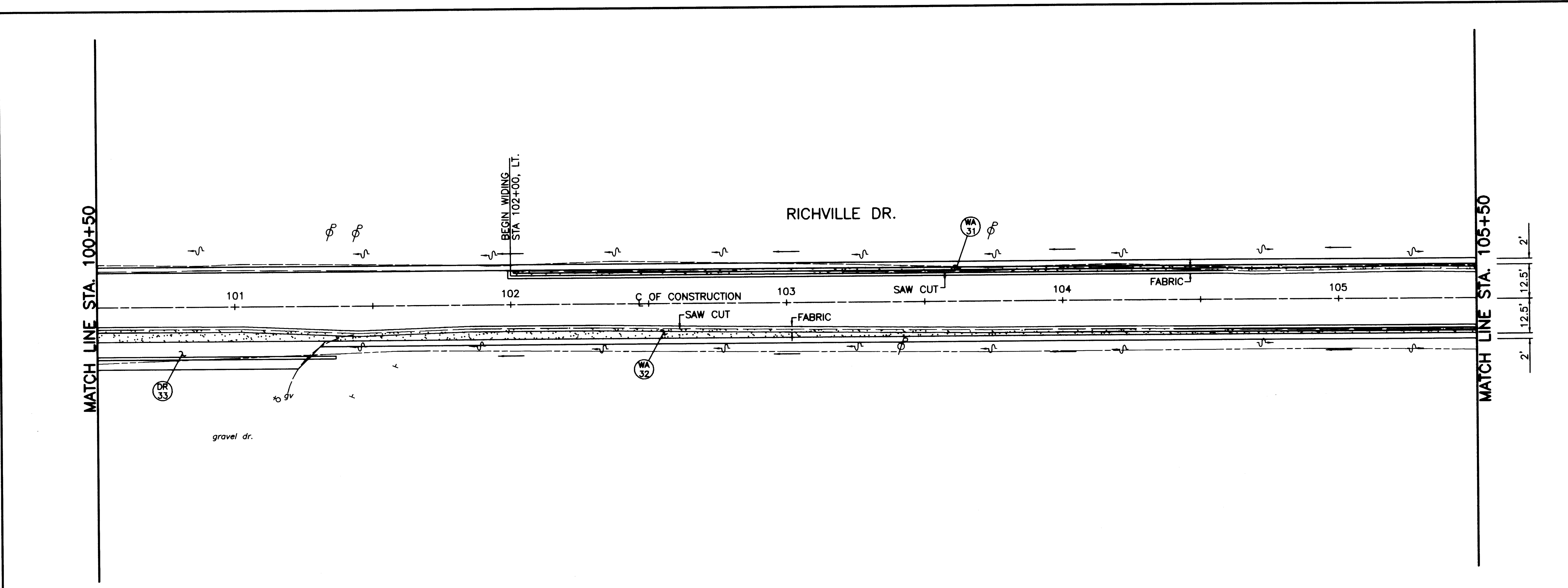


HORIZONTAL SCALE IN FEET
DRAWN BY: FPW
CHECKED BY: SDH
DATE: April, 2005
DATE: April, 2005

Richville Dr. Rehabilitation
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City of Massillon
Stark County, Ohio

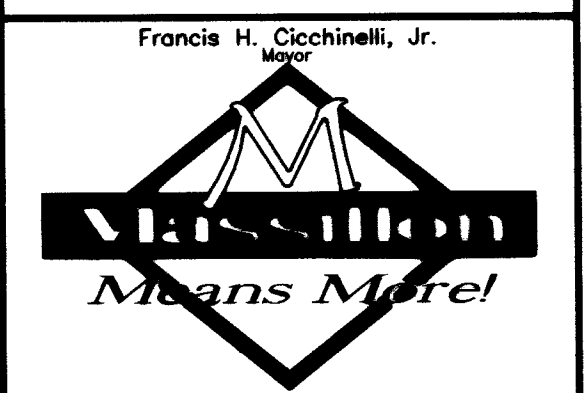


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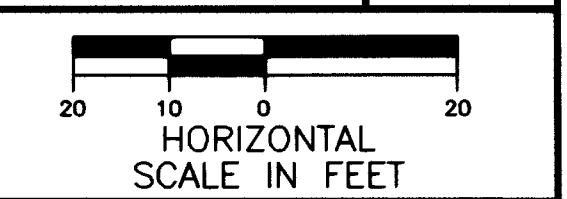
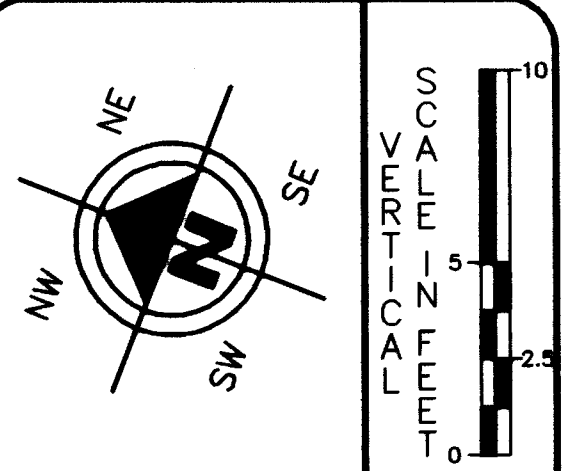
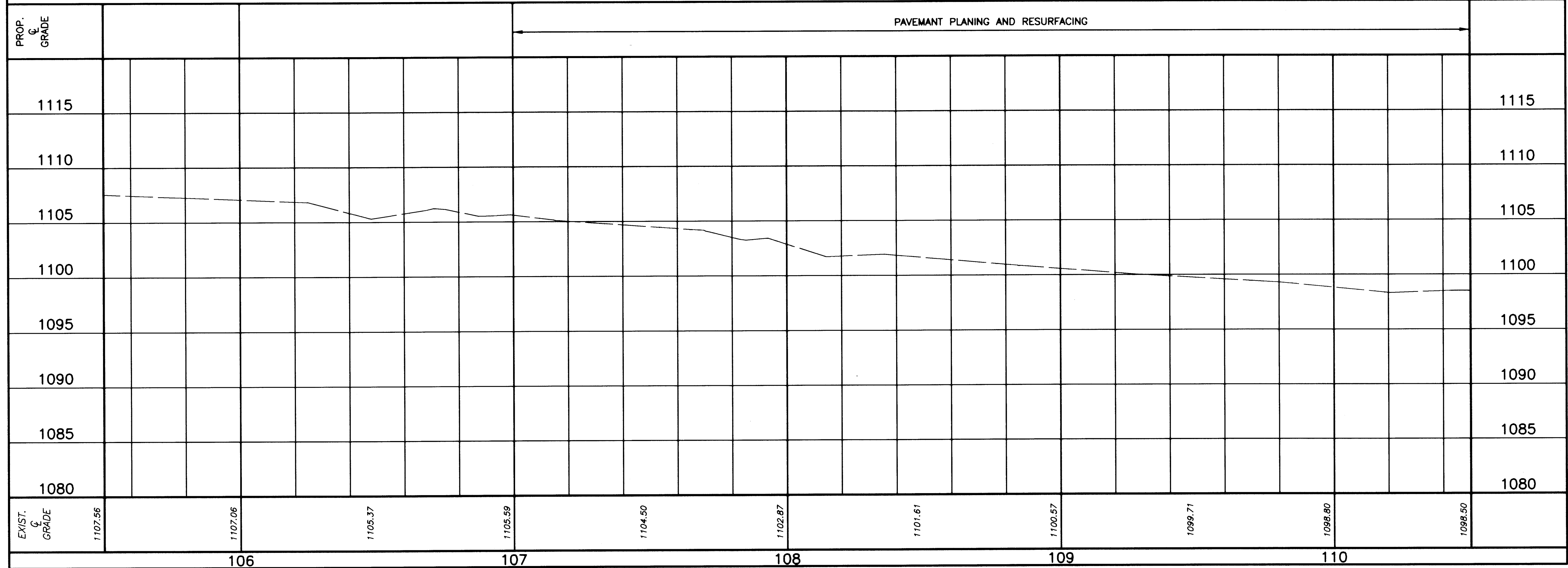
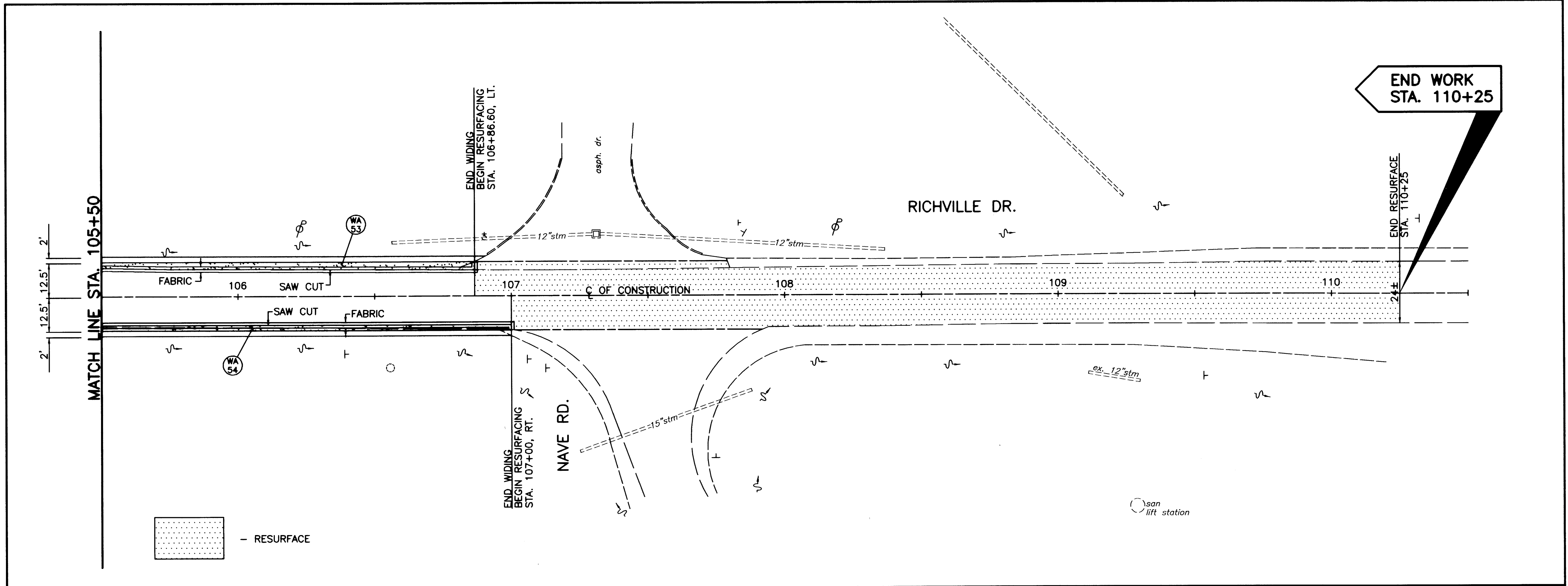


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DATE: April, 2005	DATE: April, 2005

Richville Dr. Rehabilitation
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City of Massillon
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FILE NAME:	.DWG
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Richville Dr. Rehabilitation
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REVISIONS:	
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FILE NAME:
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ACCOUNT NUMBER
05st03