

CITY OF MASSILLON
CITY ENGINEER DEPARTMENT
STARK COUNTY, OHIO

FOTHERGILL-BELMONT SANITARY SEWER PROJECT

PROJECT DESCRIPTION

WORK SHALL CONSIST OF FULL DEPTH PAVING WITH CURB, STORM SEWER SYSTEM, AND SANITARY SEWER. THIS WORK SHALL BE PERFORMED ON PART OF 29th St. N.W., NOBLE PL. NW., AND GORDON AVE, N.W. AND ALL OF CREST CIR N.W., STARBROOK ST. NW, BELMERE AVE. N.W.

29th ST. NW DESIGN DESIGNATION

CURRENT ADT (1998)	2900
DESIGN YEAR ADT (2018)	3800
DESIGN HOURLY VOLUME (2018)	158
DIRECTIONAL DISTRIBUTION	93%
TRUCKS (24 HOUR B&C)	3%
DESIGN SPEED	35 MPH
LEGAL SPEED	35 MPH

DESIGN FUNCTIONAL CLASSIFICATION - RURAL PRINCIPLE ARTERIAL

DESIGN DESIGNATION

CURRENT ADT (1998)	120
DESIGN YEAR ADT (2018)	120
DESIGN HOURLY VOLUME (2018)	5
DIRECTIONAL DISTRIBUTION	99%
TRUCKS (24 HOUR B&C)	1%
DESIGN SPEED	25 MPH
LEGAL SPEED	25 MPH

DESIGN FUNCTIONAL CLASSIFICATION - LOCAL STREETS

CONVENTIONAL SIGNS

RIGHT OF WAY EXISTING: ———, PROPOSED: ———
COUNTY LINE
TOWNSHIP LINE
CORPORATION LINE
FENCE LINE EXISTING: — x — x —, PROPOSED: — x — x —
GUARDRAIL EXISTING: — o — o —, PROPOSED: — o — o —
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: ⚡

UNDERGROUND UTILITIES

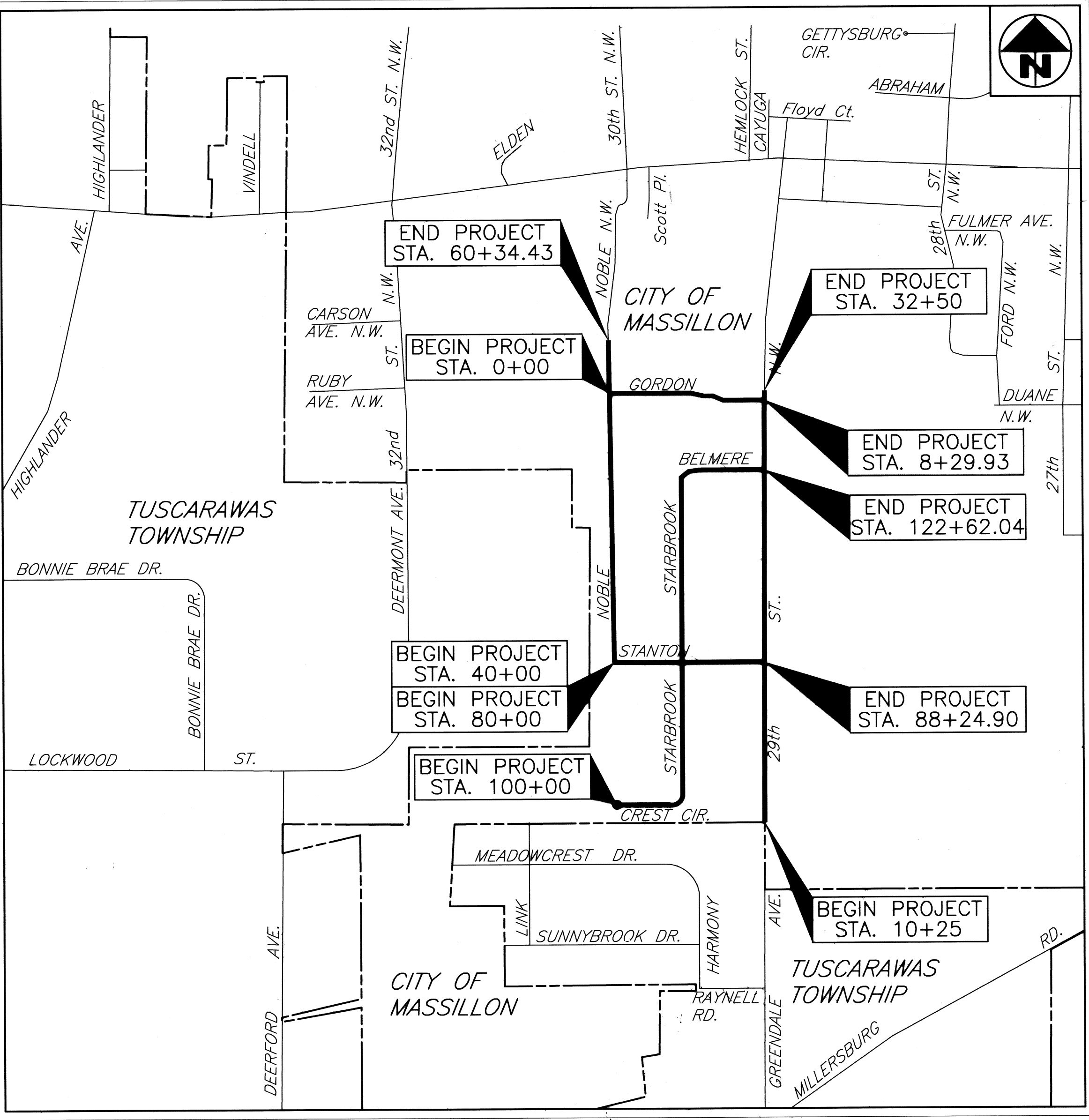
TWO WORKING DAYS
BEFORE YOU DIG

CALL 1-800-362-2764 (TOLL FREE)

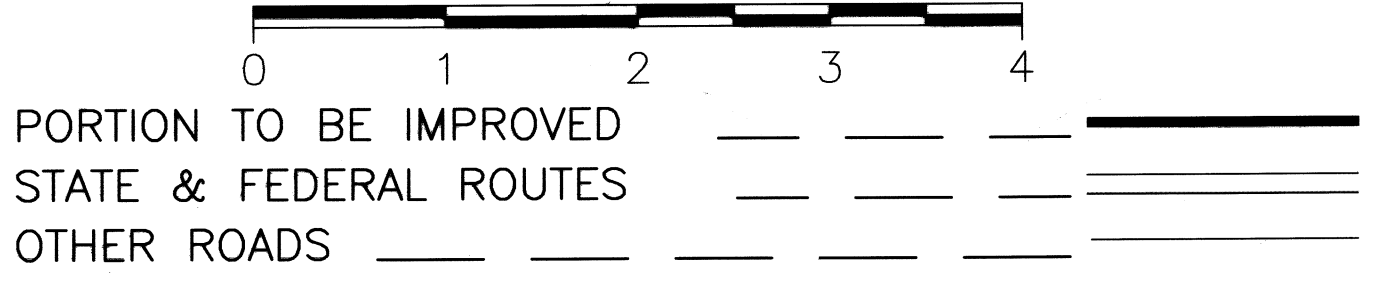
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

PLAN PREPARED BY:

CITY OF MASSILLON
Engineering Department



LOCATION MAP
SCALE IN MILES



RT. 30 W. — RT. 30 E.
AT THE INDUSTRIAL CROSSROADS OF OHIO
RT. 21

THE CITY OF MASSILLON, OHIO

Mayor
FRANCIS H. CICCINELLI, Jr.

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APPROVALS

DIRECTOR OF PUBLIC SAFETY AND SERVICE ALAN W. CLIMER DATE
James J. Benekos 12/21/98
CITY ENGINEER JAMES J. BENEKOS, P.E., P.S. DATE

OFFICIALS

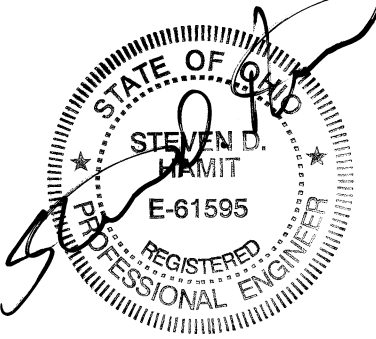
FRANCIS H. CICCINELLI, Jr. MAYOR
ALAN W. CLIMER DIRECTOR OF PUBLIC SAFETY AND SERVICE
JAMES J. BENEKOS, P.E., P.S. CITY ENGINEER
JOE ULRICH WASTE WATER TREATMENT PLANT MANAGER
JOHN D. FERRERO JR. LAW DIRECTOR/PROSECUTOR
DOLORES B. LOOMIS AUDITOR
BILL H. HAMIT TREASURER
SHARON K. HOWELL CLERK OF COUNCIL

COUNCIL

DENNIS HARWIG PRESIDENT
JAMES H. ROHR 1st WARD
BILL AMAN 2nd WARD
CHARLIE A. TRIBBET 3rd WARD
WILLIAM POOLE 4th WARD
GLENN E. GAMBER 5th WARD
PAUL F. LAMBERT 6th WARD

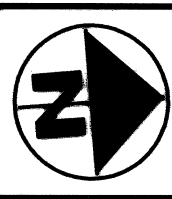
COUNCIL AT LARGE

MIKE LOUDIANA
TIM BRYAN
NANCY J. HALTER

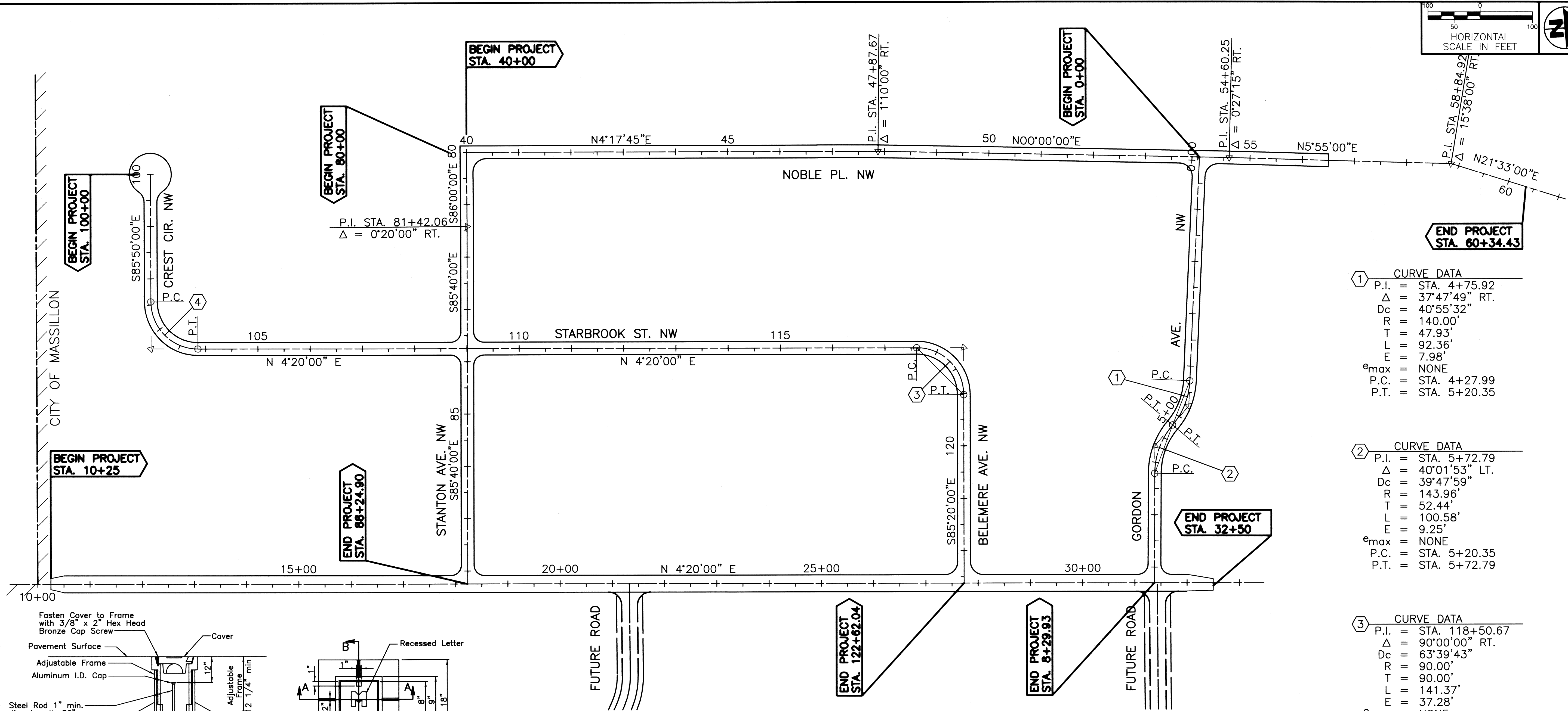


City of Massillon, Ohio
Francis H. Cicchinelli, Jr.
Mayor

1
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THE CITY OF MASSILLON, OHIO
ACCOUNT NUMBER 98SS01
DATE Nov. 24, 1998
DRAWN BY F. Werner
ELECTRONIC FILE NAME: 98SS0102.DWG



1 CURVE DATA

P.I.	=	STA. 4+75.92
Δ	=	37°47'49" RT.
Dc	=	40°55'32"
R	=	140.00'
T	=	47.93'
L	=	92.36'
E	=	7.98'
e_{max}	=	NONE
P.C.	=	STA. 4+27.99
P.T.	=	STA. 5+20.35

2 CURVE DATA

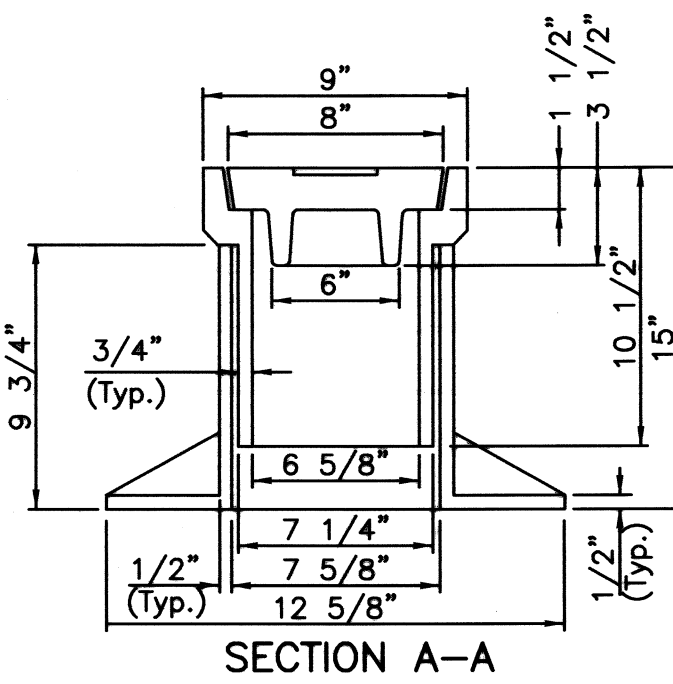
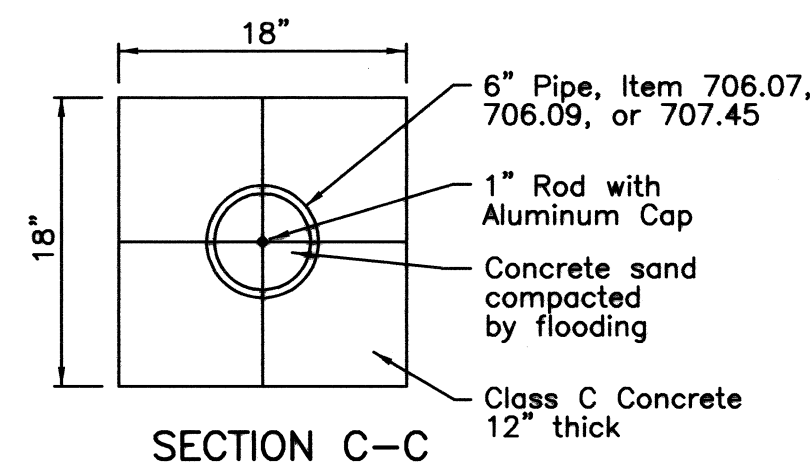
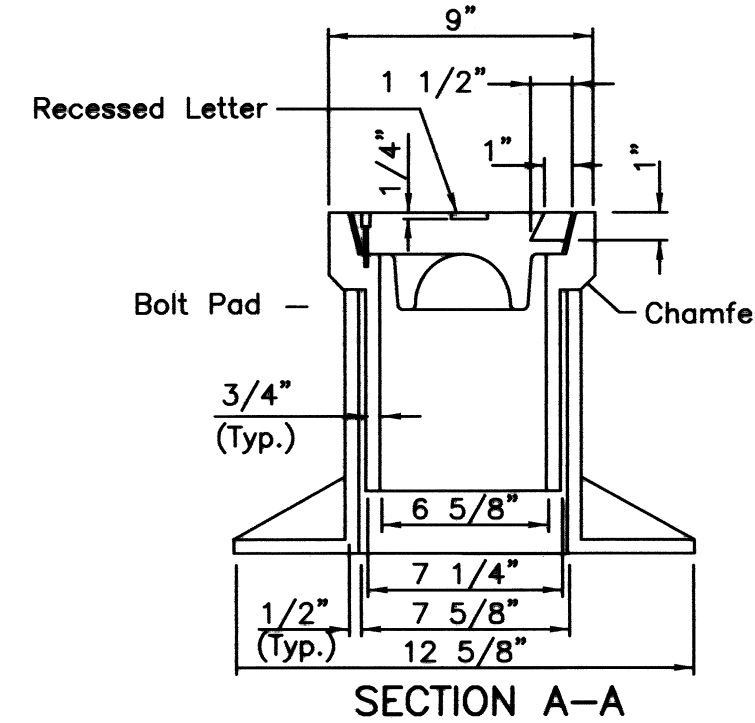
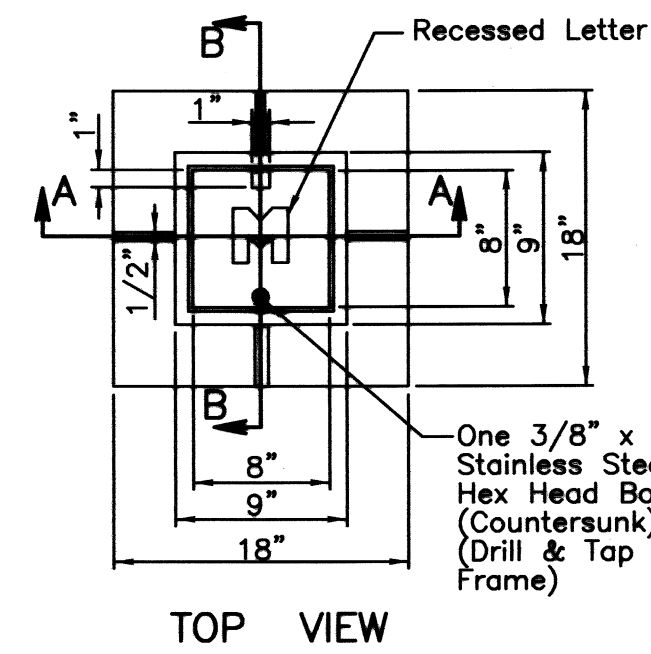
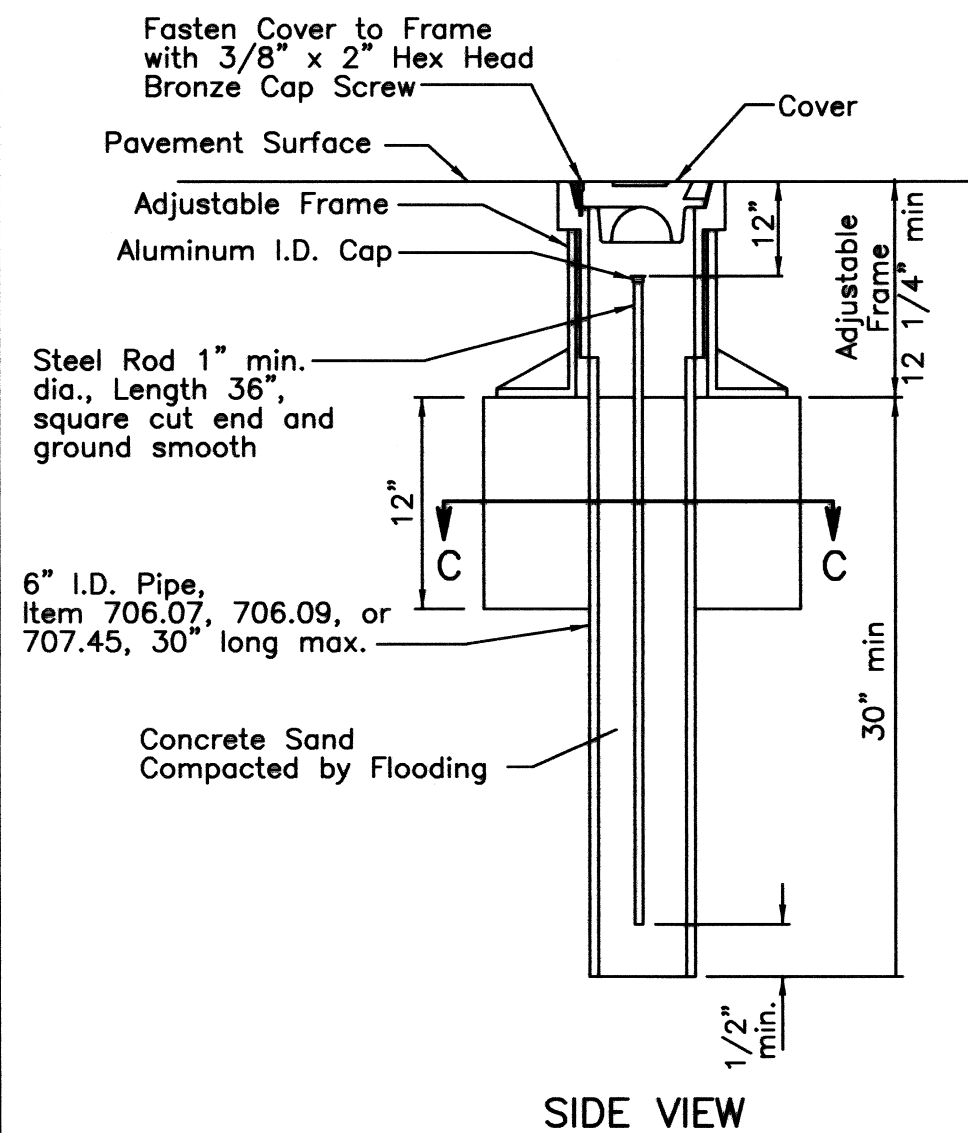
P.I.	=	STA. 5+72.79
Δ	=	40°01'53" LT.
Dc	=	39°47'59"
R	=	143.96'
T	=	52.44'
L	=	100.58'
E	=	9.25'
e_{max}	=	NONE
P.C.	=	STA. 5+20.35
P.T.	=	STA. 5+72.79

3 CURVE DATA

P.I.	=	STA. 118+50.67
Δ	=	90°00'00" RT.
Dc	=	63°39'43"
R	=	90.00'
T	=	90.00'
L	=	141.37'
E	=	37.28'
e_{max}	=	NONE
P.C.	=	STA. 117+60.67
P.T.	=	STA. 119+02.04

4 CURVE DATA

P.I.	=	STA. 103+33.80
Δ	=	89°50'00" LT.
Dc	=	63°39'43"
R	=	90.00'
T	=	89.74'
L	=	141.11'
E	=	37.10'
e_{max}	=	NONE
P.C.	=	STA. 102+44.06
P.T.	=	STA. 103+85.17



NOTES

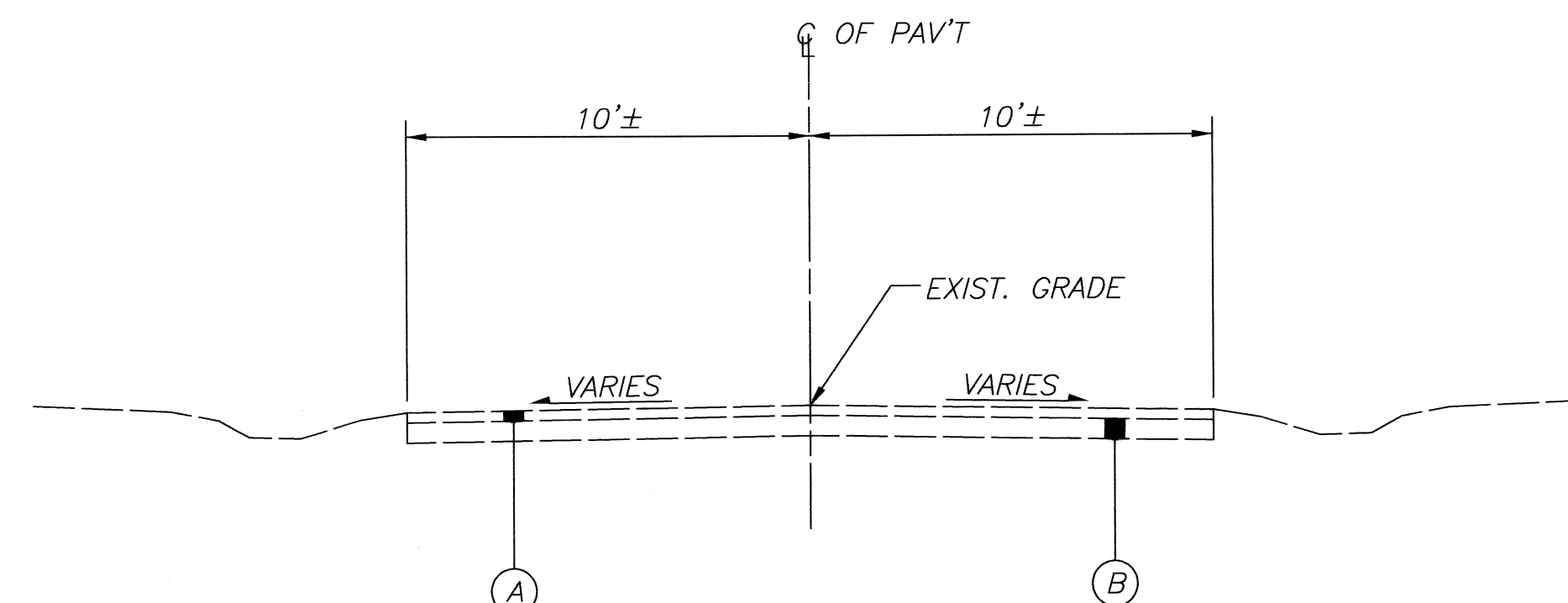
The monuments shall be placed under the direction of a Registered Surveyor and are to be set, as shown on the Plans at the time of construction. All alterations, with Engineers prior approval. All alterations shall be noted and the City of Massillon shall be notified of new locations.

LOCATION	OFFSET	604	SPECIAL
		ADJUSTABLE CENTERLINE MONUMENT	RAILROAD SPIKE
		EACH	EACH
10+00.00 29th ST. NW			1
18+23.13 29th ST. NW/88+24.90 STANTON AVE. NW		1	
27+73.13 29th ST. NW /122+62.04 BELMERE AVE. NW		1	
31+37.43 29th ST. NW/8+29.93 GORDON AVE. NW		1	
0+00.00 GORDON AVE. NW/54+03.09 NOBLE PL. NW		1	
4+27.99 GORDON AVE. NW PC OF CURVE		1	
5+20.35 GORDON AVE. NW PT/PC OF CURVE		1	
5+72.79 GORDON AVE. NW PT OF CURVE		1	
40+00.00 NOBLE PL. NW/80+00.00 STANTON AVE. NW		1	
47+87.67 NOBLE PL. NW P.I.		1	
54+60.25 NOBLE PL. NW P.I.		1	
58+84.92 NOBLE PL. NW P.I.			1
81+42.06 STANTON AVE. NW P.I.		1	
83+74.90 STANTON AVE. NW/109+00.67 STARBROOK AVE. NW		1	
100+00.00 CREST CIR. NW		1	
102+44.06 CREST CIR. NW P.C. OF CURVE		1	
103+85.17 CREST CIR. NW P.T. OF CURVE		1	
117+60.67 STARBROOK ST. NW P.C. OF CURVE		1	
119+02.04 STARBROOK ST. NW P.T. OF CURVE		1	
TOTAL		17	2

ADJUSTABLE CENTERLINE MONUMENT DETAILS

FOTHERGILL-BELMONT SANITARY SEWER PLANS

CITY OF MASSILLON
Francis H. Cicchinelli, Jr.
Mayor

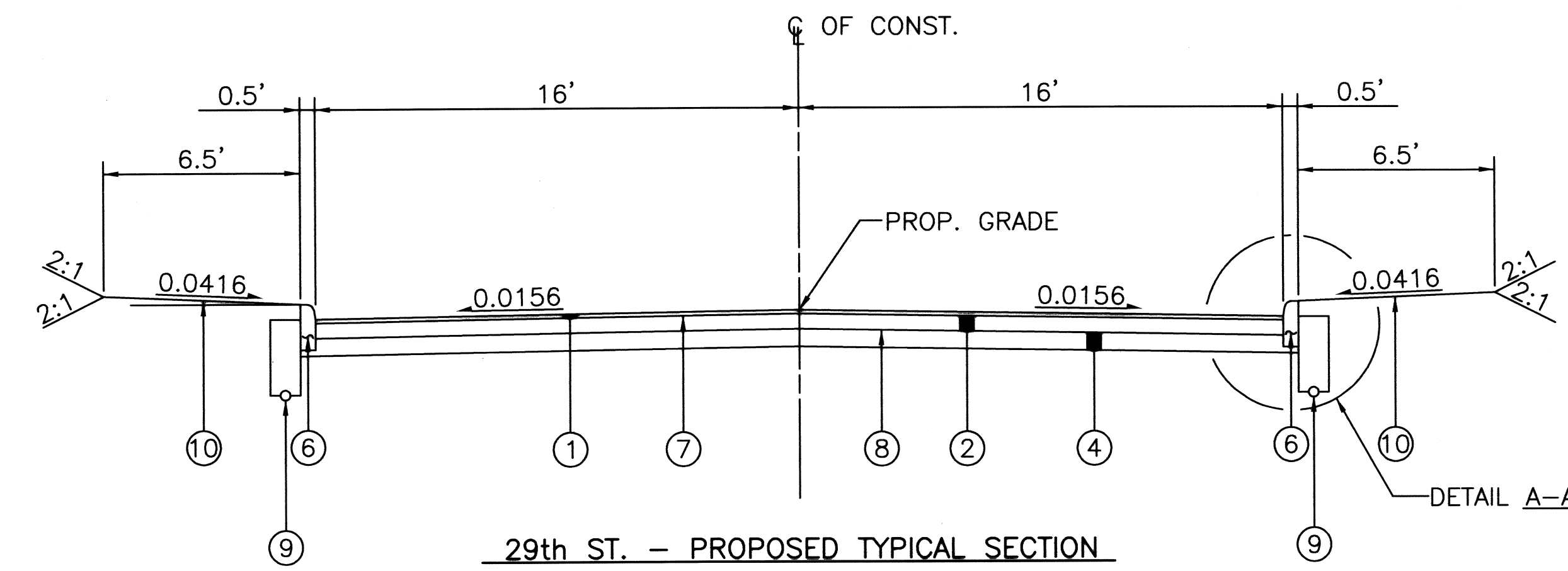


EXISTING TYPICAL SECTION

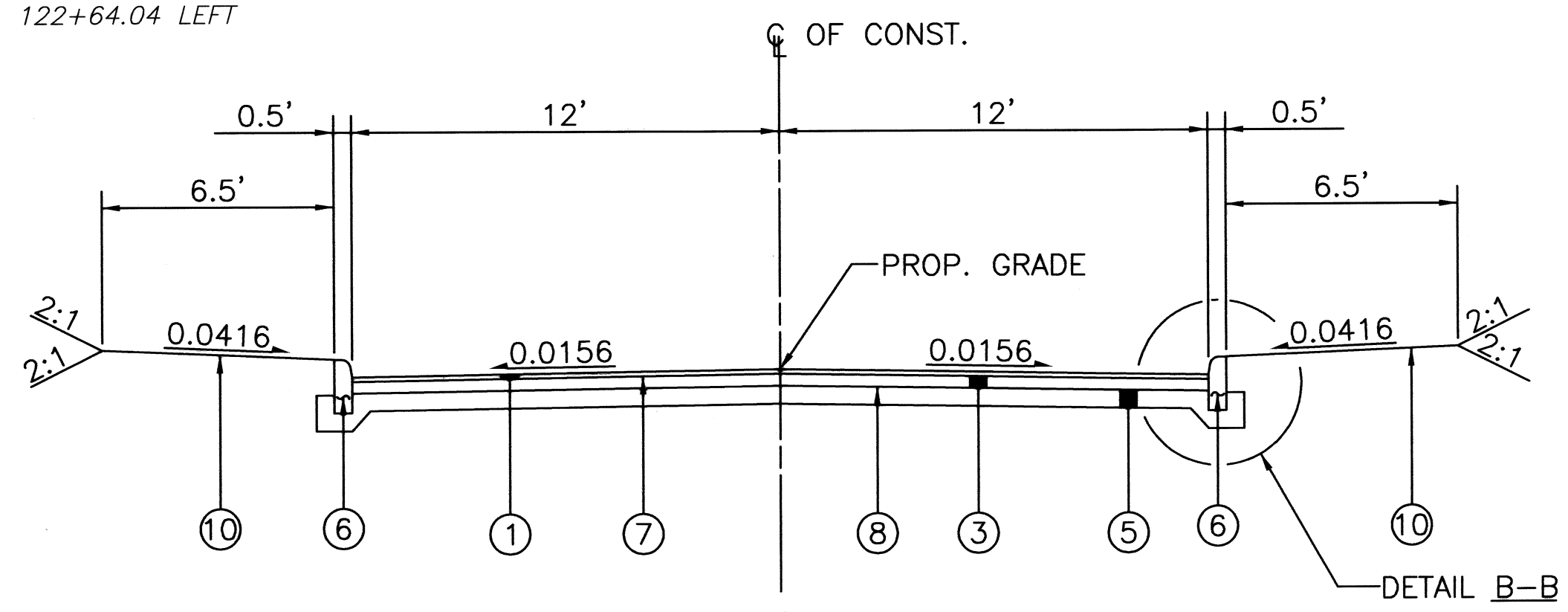
- 29th ST. NW - STA. 10+00.00 TO STA. 32+50
- NOBLE PLACE NW - STA. 40+00.00 TO STA. 60+34.43
- GORDON AVE. NW - STA. 0+00.00 TO STA. 8+29.93
- STANTON AVE. NW - STA. 80+00.00 TO STA. 88+24.90
- CREST CIR. NW - STA. 100+00.00 TO STA. 104+75.67 RIGHT
- CREST CIR. NW - STA. 100+00.00 TO STA. 105+33.28 LEFT
- STARBROOK ST. NW - STA. 104+75.67 TO STA. 120+37.04 RIGHT
- STARBROOK ST. NW - STA. 105+33.28 TO STA. 118+62.58 LEFT
- BELMERE AVE. NW - STA. 120+37.04 TO STA. 122+64.04 RIGHT
- BELMERE AVE. NW - STA. 118+62.58 TO STA. 122+64.04 LEFT

EXISTING LEGEND

- Ⓐ - 1"± TO 3"± CHIP AND SEAL
- Ⓑ - 4"± TO 9"± AGGREGATE BASE



29th ST. - PROPOSED TYPICAL SECTION
STA. 10+50 TO STA. 32+25

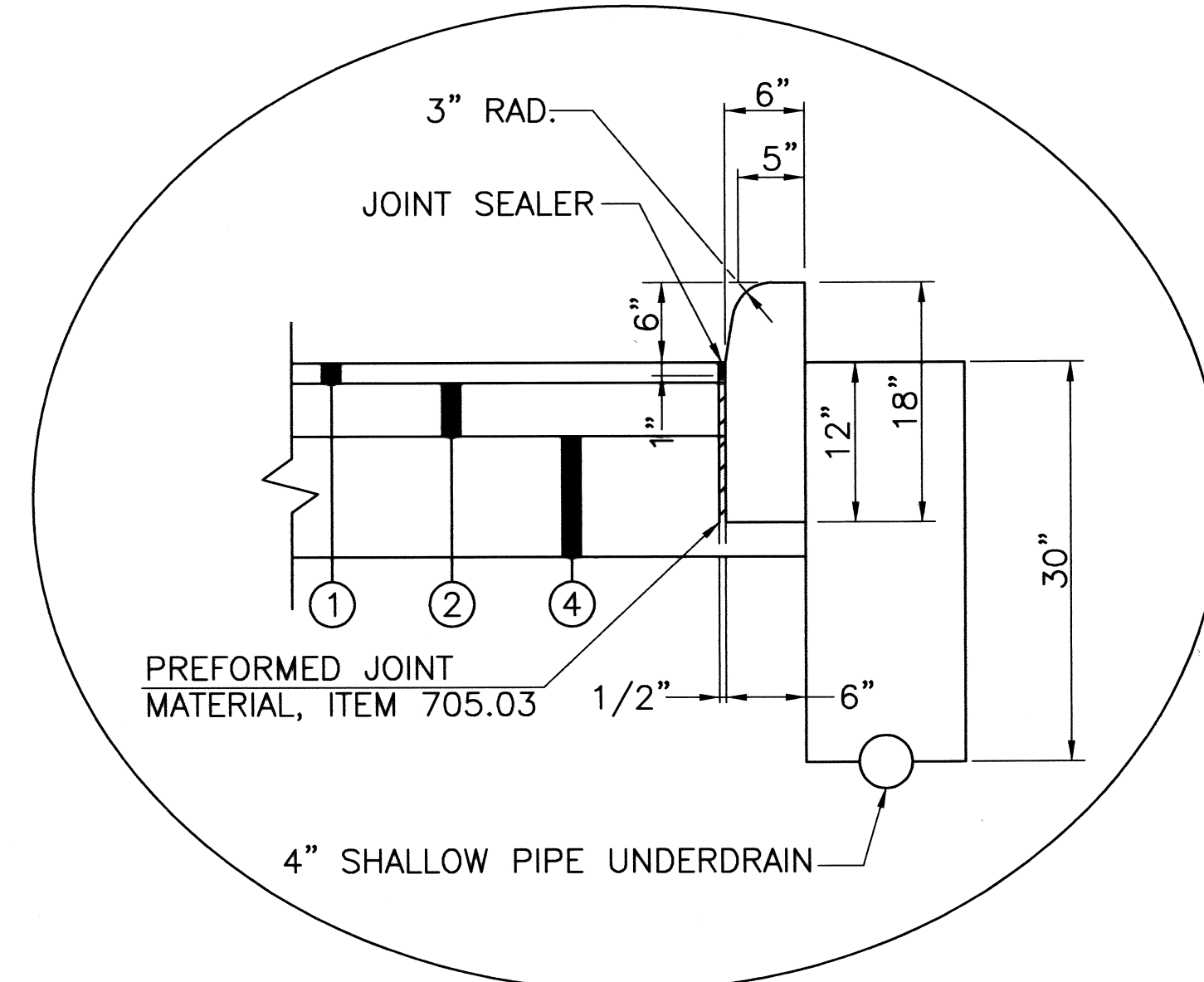


PROPOSED TYPICAL SECTION

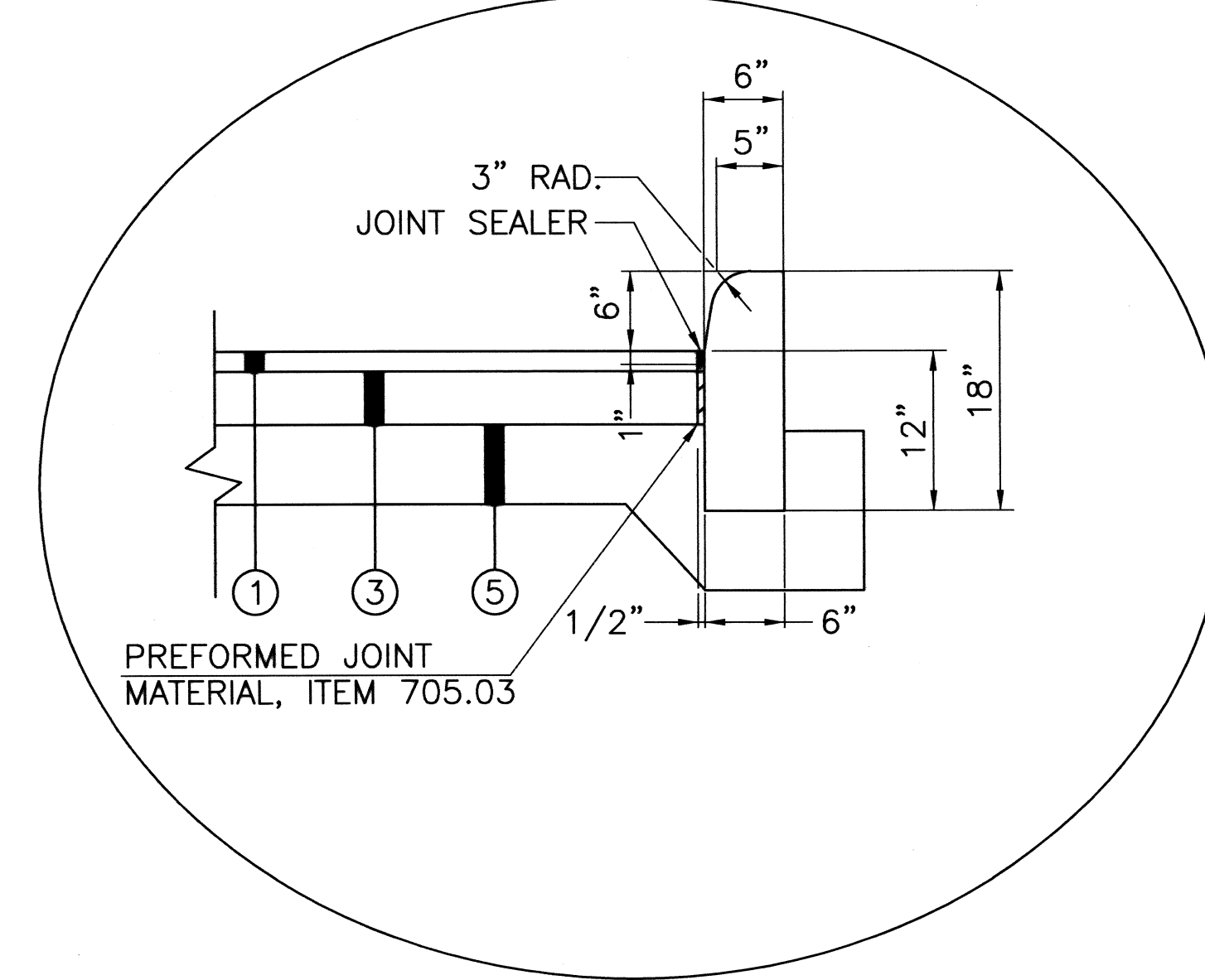
- NOBLE PLACE NW - STA. 40+00.00 TO STA. 54+25.00
- GORDON AVE NW - STA. 0+00 TO STA. 8+29.93
- STANTON AVE NW - STA. 80+00 TO STA. 88+24.97
- CREST CIR. NW - STA. 100+00 TO STA. 104+75.67 RIGHT
- CREST CIR. NW - STA. 100+00 TO STA. 105+33.28 LEFT
- STARBROOK ST. NW - STA. 104+75.67 TO STA. 120+37.04 RIGHT
- STARBROOK ST. NW - STA. 105+33.28 TO STA. 118+62.58 LEFT
- BELMERE AVE. NW - STA. 120+37.04 TO STA. 122+64.04 RIGHT
- BELMERE AVE. NW - STA. 118+62.58 TO STA. 122+64.04 LEFT

PROPOSED LEGEND

- ① - ITEM 404-1 1/2" ASPHALT CONCRETE
- ② - ITEM 301-6" BITUMINOUS AGGREGATE BASE
- ③ - ITEM 301-4" BITUMINOUS AGGREGATE BASE
- ④ - ITEM 304-7" AGGREGATE BASE
- ⑤ - ITEM 304-6" AGGREGATE BASE
- ⑥ - ITEM 609-CAST IN PLACE CONCRETE CURB-6" x 18"
- ⑦ - ITEM 407-TACK COAT
- ⑧ - ITEM 408-PRIME COAT
- ⑨ - ITEM 605-SHALLOW PIPE UNDERDRAINS
- ⑩ - ITEM 659-SEEDING AND MULCHING



DETAIL A-A



DETAIL B-B

UTILITIES

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

AMERITECH 50 W.BOWERY, 6TH FLOOR AKRON, OH 44308 800-290-2242 RICK MARSLI	CONSUMER OHIO WATER COMPANY P.O. BOX 584 MASSILLON, OH 44648 (330) 833-4156	OHIO EDISON STARK DIVISION 2600 S. ERIE ST. MASSILLON, OH 44545 (330) 833-3141
MB OPERATING 104 6TH ST. S.W. CANTON, OH 44702 (330) 456-2454	AT&T COMMUNICATIONS 2535 E. 40TH AVE. DENVER, CO 80205-3601 (800) 852-3786	MASSILLON CABLE TV P.O. BOX 814 MASSILLON, OH 44648 (330) 8334134
CITY OF MASSILLON SANITARY SEWER ONE JAMES DUNCAN PLAZA MASSILLON, OH 44646 (330) 830-1722	THE EAST OHIO GAS COMPANY 4725 SOUTHWAY ST. S.W. CANTON, OH 44706 (330) 478-3142 NANCY KOVACH	NORTHEAST OHIO NATURAL GAS CORP. 1425 N. WOOSTER AVE. 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

DATUM ELEVATION

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

STATIONING

ALL STATIONING SHOWN IS REFERENCED TO THE BASELINE AS SHOWN.

REMOVAL OF TREES OR STUMPS

ALL TREES AND STUMPS REMOVED DURING CONSTRUCTION SHALL BE UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING ANG GRUBBING.

MONUMENTS

MONUMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAIL AS SHOWN ON THE STANDARD CONSTRUCTION DRAWINGS AND AT THE LOCATIONS SHOWN ON SHEET NO. 2.

ITEM SPECIAL - MAILBOX SUPPORT

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

WOOD POSTS SHALL BE NORMAL 4"x4" SQUARE OR 4-1/2" DIAMETER ROUND, AND CONFORM TO 710.14.

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

HARDWARE (PLATES, SCREWS, BOLTS, ECT.) SHALL BE COMMERIAL-GRADE GAL-VANIZED STEEL.

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

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

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

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

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

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

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

ITEM 609. CAST IN PLACE 6"x18" CONCRETE CURB

GRANULAR BEDDING, BACKFILLING AND CONCRETE CURB PLACEMENT ALONG WITH ALL APPURTENANCES IS TO BE INCLUDED IN ITEM 609.

ITEM 659. TOPSOIL. SEEDING AND MULCHING

SEEDING AND MULCHING SHALL BE APPLIED TO ALL EXPOSED SOIL BETWEEN THE RIGHT OF WAY LINES, AND WITHIN THE CONSTRUCTIONS LIMITS FOR AREAS OUT-SIDE THE RIGHT OF WAY LINES DISTURB DURING CONSTRUCTION.

THE CITY SHALL APPROVE SEED MIX PRIOR TO CONSTRUCTION TO BE USED THROUGH OUT CONSTRUCTION LIMITS. PROPOSED MIX SHALL BE SUBMITTED IN WRITING PRIOR TO ANY CONSTRUCTION.

ITEM 659, SEEDING AND MULCHING LUMP SUM BID

EROSION CONTROL

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL AND SHALL MEET THE REQUIREMENTS OF 108.04.

ITEM 604. CATCH BASIN NO. 3. 3A

CATCH BASINS SHALL BE CONSTRUCTED IN CONFORMANCE WITH ITEM 604 EXCEPT THAT THE GRATES SHALL BE NEENAH NO. R-4859-C OR EAST JORDAN NO. 6730-2 OR APPROVED EQUALS.

CROSSING OR CONNECTING TO EXISTING PIPES AND UTILITIES

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

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

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

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

REMOVAL AND RELOCATION OF EXISTING UTILITIES

ALL UTILITY CONFLICTS WHERE THE REMOVAL AND RELOCATION OF AND EXISTING UTILITY DO TO PROPOSED WORK SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 202 REMOVAL AND RELOCATION OF EXISTING UTILITIES.

RESIDENTIAL AND COMMERCIAL DRAINAGE CONNECTIONS

EACH LOT SHALL BE SUPPLIED WITH A SINGLE 6" STORM LATERAL THAT WILL BE INSTALLED FROM THE MAIN TO THE PROPERTY LINE. SAID STORM LATERAL SHALL SE CONNECTED TO FOUNDATION DRAINS, SUMP DRAIN AND WHEN POSSIBLE AS PER ENGINEER'S DIRECTION THE DOWN SPOUT WILL BE CONNECTED.

THE FOLLOWING WORK SHALL BE PAID FOR UNDER ITEM 603 6" STORM LATERAL.

DOWN SPOUTS

ALL DOWN SPOUTS UNABLE TO BE CONNECTED TO THE STORM LATERAL SHALL BE PUT THROUGH THE CURB AS PER ENGINEERS DIRECTION.

CURB OPENING SHALL NOT GREATER THAN A 3 1/2" DIAMETER.

THE WORK ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 609.

ITEM 651. TOPSOIL STOCKPILED

THE MATERIAL FOR THIS ITEM SHALL BE OBTAINED FROM AREAS WITHIN THE PROPOSED RIGHT-OF-WAY.

PROVISION OF THIS 651 ITEM SHALL NOT BE CONSTRUED AS A WAIVER OF THE PROVISIONS OF 201.4. SOD AND INCIDENTAL TOPSOIL REMOVED ELSEWHERE ON THIS PROJECT FOR SALVAGE, FOR USE AS DESCRIBED IN 203.04(e), SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE VARIOUS 203 ITEMS.

MANHOLES, CATCH BASINS, INLETS AND PIPES REMOVED OR ABANDONED

ALL CASTING AND PIPES SHALL BE CAREFULLY REMOVED AND STORED WITHIN THE RIGHT-OF-WAY FOR SALVAGE BY THE CITY. CONTACT THE CITY OF MASSILLON STREET SUPERINTENDENT - GEORGE PATTERSON AT 330-833-5746.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 202 ITEM.

ITEM 407. TACK COAT

THE RATE OF APPLICATION OF THE 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.08 GALLONS PER SQUARE YARD OF TACK COAT FOR ESTIMATING PURPOSES ONLY.

ITEM 408. BITUMINOUS PRIME COAT

THE RATE OF APPLICATION OF THE 408 PRIME COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.40 GALLONS PER SQUARE YARD OF PRIME COAT FOR ESTIMATING PURPOSES ONLY.

REVIEW OF SANITARY AND DRAINAGE FACILITIES

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

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

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

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

NOTIFICATION OF SAFETY FORCES

THE CONTRACTIONS SHALL NOTIFY THE CITY OF MASSILLON FIRE DEPARTMENT, MASSILLON POLICE DEPARTMENT, CITY ENGINEER AND LOCAL (MASSILLON, TULSAW, JACKSON & PERRY) SCHOOL DISTRICT TRANSPORTATION SUPERVISOR, AND THE SAFETY & SERVICE DIRECTOR AT LEAST 48 HOURS IN ADVANCE OF ANY STREET CLOSING OR TRAFFIC CHANGE.



BY SEAL
AT THE REQUEST
OF THE BOARD OF
CITY ENGINEERS

ELECTRONIC FILE NAME:
98SS0104.DWG

ACCOUNT NUMBER:
98SS01

DRAWN BY:
F. Werner

DATE:
Oct. 28, 1997

FOTHERGILL-BELMONT SANITARY SEWER PLANS

General Notes
City of Massillon
Stark County, Ohio

CITY OF MASSILLON

Francis H. Cicchinelli, Jr.
Mayor

4

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SANITARY / STORM WORK

THE FOLLOWING CONDUIT TYPES MAY BE USED FOR SANITARY SEWER: 707.44 SDR35, 706.08, 706.03, 706.02 WITH JOINTS AS PER 706.11 OR 706.12.

THE FOLLOWING CONDUIT TYPES MAY BE USED FOR STORM SEWER WITH MORE THAN (1) ONE FOOT OF COVER: 707.42, 706.08, 706.02, WITH JOINTS AS PER 706.10 OR 706.11.

THE FOLLOWING CONDUIT TYPES MAY BE USED FOR STORM SEWER WITH LESS THAN (1) ONE FOOT OF COVER: 706.02 WITH JOINTS AS PER 706.10 OR 706.11

CONNECTION TO EXISTING SEWERS

CONSTRUCTION OF THE NEW SEWER SHALL BE SCHEDULED AND PERFORMED SUCH THAT ALL NEW SEWER IS IN PLACE TESTED AND FOUND READY FOR ACCEPTANCE BEFORE THE ACTUAL CUTTING AND TIEING INTO THE EXISTING SEWER IS PERFORMED.

INTERAL TELEVISION INSPECTION

ALL SANITARY SEWERS 8" DIAMETER AND LARGER, MUST PASS INTERNAL TELEVISION INSPECTION. THE CONTRACTOR SHALL PROVIDE COMPLETE, INTERNAL INSPECTION VIDEOTAPE TO THE CITY OF MASSILLON ENGINEERING DEPARTMENT. THE VIDEOTAPING PROCEDURE MUST BE IN ACCORDANCE WITH SPECIFICATION SECTION 02743.

LATERAL LOCATIONS

ALL NEW LATERAL LOCATIONS SHALL BE DETERMINED IN THE FIELD. TO DETERMINE THE LOCATION THE CONTRACTOR SHALL SPEAK TO THE LAND OWNER FOR BEST SUITABLE LOCATION. ALL LOCATIONS MUST BE APPROVED BY ENGINEER.

ALL NEW LATERIAL LOCATIONS TO BE FIELD CHECKED AND LOCATED BY THE CONTRACTOR PRIOR TO BACKFILLING.

LATERIALS SHALL BE 6" CONDUIT TYPE B.

LATERAL PRICE SHALL INCLUDE ALL APPURTENANCES NECESSARY

EXISTING ROOF DRAINS, OR YARD DRAINS, FOUNDATION DRAINS SHALL BE CONNECTED TO THE 6" STORM SEWER LATERIAL AND NOT THE SANITARY SEWER LATERIAL.

THE FOLLOWING WORK SHALL BE PAID FOR UNDER ITEM 603 6" CONDUIT TYPE B 707.42.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 603 ITEM.

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, WILL 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.

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.

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.

EXCAVATED MATERIAL

ALL EXCAVATED MATERIAL AND ALL MATERIAL USED IN CONSTRUCTION OF THE WORK SHALL BE PILED 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 TO 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.

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.

ITEM 623. CONSTRUCTION STAKING

CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION LAYOUT AND UPON COMPLETION OF PROJECT AS-BUILT DRAWINGS ARE REQUIRED.

THIS WORK IS TO BE UNDER ITEM 623 CONSTRUCTION STAKING.

SUBSURFACE CONDITIONS

IT IS THE OBLIGATION AND RESPONSIBILITY OF THE BIDDER TO MAKE HIS OWN INVESTIGATIONS OF SUBSURFACE CONDITIONS PRIOR TO SUBMITTING HIS PROPOSAL. THE BIDDER MAY EXAMINE THE RECORDS OF ALL BORINGS, TEST EXCAVATIONS AND OTHER SUBSURFACE INVESTIGATIONS, IF ANY, MADE SOLELY FOR DESIGN PURPOSES FOR THE OWNER. SAID BORINGS, TEST EXCAVATIONS AND OTHER SUBSURFACE INVESTIGATIONS, ARE NOT A PART OF THE CONTRACT DOCUMENTS, EXCEPT TO THE EXTENT THAT THE RESULTS THEREOF ARE SPECIFICALLY SHOWN ON THE PLANS OR INCLUDED IN THE SPECIFICATIONS AND ARE NOT WARRANTED TO SHOW THE ACTUAL SUBSURFACE CONDITIONS. THE CONTRACTOR AGREES THAT THEY WILL MAKE NO CLAIM AGAINST THE OWNER OR THE ENGINEER IF, IN CARRYING OUT THE WORK, HE FINDS THAT THE ACTUAL SUBSURFACE CONDITIONS ENCOUNTERED DO NOT CONFORM TO THOSE INDICATED BY SAID BORINGS, TEST EXCAVATIONS AND OTHER SUBSURFACE INVESTIGATIONS.

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 CALENDAR 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.

MAINTENANCE OF TRAFFIC

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

MAINTENANCE OF TRAFFIC PLAN MUST BE APPROVED BY THE CITY ENGINEER PRIOR TO ANY CONSTRUCTION COMMENCING.

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 THIER DRIVEWAY.

FINAL APPROVAL

A VIDEO TAPE WILL BE MADE BY THE CONTRACTOR AND SUBMITTED TO THE CITY PRIOR TO THE PROJECT COMMENCING. AFTER THE FINAL INVOICE IS RECEIVED THE SITE WILL BE VIDEO TAPED AGAIN BY THE CONTRACTOR. ANY DISCREPANCIES WILL BE RESOLVED PRIOR TO FINAL PAYMENT.

COST OF THIS WORK SHALL BE INCLUDED IN OTHER ITEMS OF WORK.

DEWATERING

IF THE CONTRACTORS MEANS OF INSTALLATION CAUSES ANY HARDSHIP DO TO THERE REMOVAL OF THE GROUND WATER. THAT THE CONTRACTOR MUST SUPPLY WATER TO THESE INDIVIDUALS UNTIL THAT TIME THE WATER TABLES SUBSIDES AND IS DEEMED PALATABLE.



AT THE REQUEST OF THE CITY OF MASSILLON, OHIO

ELECTRONIC FILE NAME:
98SS0105.DWG
ACCOUNT NUMBER
98SS01

DRAWN BY
F. Werner
DATE
Nov. 24, 1998

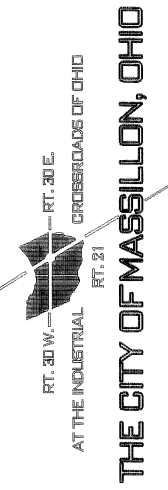
FOTHERGILL-BELMONT SANITARY SEWER PLANS

CITY OF MASSILLON
Francis H. Cicchinelli, Jr.
Mayor

General Notes
City of Massillon
Stark County, Ohio

5
37

SHEET NUMBER																			ITEM	GRAND TOTAL	UNIT	DESCRIPTION
2	4	5			8	9	10	11	12	13												
																						ROADWAY
	LUMP																		201	LUMP	LUMP	CLEARING AND GRUBBING
																			202	LUMP	LUMP	REMOVAL OF OBSTRUCTIONS
																			203	1000	C.Y.	ROADWAY EXCAVATION
																			203	LUMP	LUMP	EMBANKMENT
	LUMP																		203	LUMP	LUMP	TOP SOIL FURNISHED AND PLACED
17																			604	17	EACH	MONUMENTS
2																			604	2	EACH	RAIL ROAD SPIKES
	LUMP																		SPEC	LUMP	LUMP	REMOVAL AND RELOCATION OF EXISTING UTILITIES
	LUMP																		SPEC	LUMP	LUMP	MAILBOX REMOVAL AND REPLACEMENT
																						EROSION CONTROL
																			601	LUMP	LUMP	ROCK CHANNEL PROTECTION
	LUMP																		659	LUMP	LUMP	SEEDING AND MULCHING, AS PER PLAN
																						PAVEMENT
					3,026														301	3026	CU YD	BITUMINOUS AGGREGATE BASE
					4,205														304	4205	CU YD	AGGREGATE BASE
						971													404	971	CU YD	ASPHALT CONCRETE
						1,864													407	1864	GAL	TACK COAT
						9,663													408	9663	GAL	PRIME COAT
							96												452	96	SQ YD	6" PORTLAND CONCRETE CEMENT DRIVEWAT APPROACHS
							15,195												609	15195	LIN FT	CAST IN PLACE 6" X 18" CURB
																						DRAINAGE
																			603	3255	LIN FT	6" CONDUIT, TYPE B
								375	394	150									603	919	LIN FT	12" CONDUIT, TYPE B
										15									603	15	LIN FT	15" CONDUIT, TYPE B
								4	3	3									604	10	EACH	CATCH BASIN, NO. 3A
																			604		EACH	CATCH BASIN, NO. 3
																			604		EACH	INLET, NO. 1
								2	2	2									604	6	EACH	MANHOLE, NO. 3
								950	916	980									605	2646	LIN FT	4" SHALLOW PIPE UNDERDRAIN
								1											602	1	EACH	HEADWALL, TYPE HWD
																						SANITARY SEWERS
																			603	3162	LIN FT	6" CONDUIT, TYPE B WITH LINING
								400	500	500									603	1400	LIN FT	8" CONDUIT, TYPE B WITH LINING
								2	1	2									604	5	EACH	MANHOLE, NO. 3



ELECTRONIC FILE NAME:
98SS0106.DWG
ACCOUNT NUMBER
98SS01

DRAWN BY
F. Werner
DATE
April 03, 1997

FOTHERGILL - BELMONT SANITARY SEWER PLANS
General Summary
City of Massillon
Stark County, Ohio

CITY OF MASSILLON
Francis H. Cicchinelli, Jr.
Mayor

[illegible]

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ITEM 301 BITUMINOUS AGGREGATE BASE

(29th St. N.W. Sta. 10+25. to Sta. 10+50) (25) [(21+32) /2] (6/12) (1/27)	12.27 CU YD
(29th St. N.W. Sta. 10+50 to Sta 32+00) (2150) (32) (6/12) (1/27)	1274.07 CU YD
(29th St. N.W. Sta. 32+00 to Sta 32+50) (50) [(32+22.6) /2] (6/12) (1/27)	25.28 CU YD
(Gordon Ave. N.W. Sta. 0+12 to Sta 8+13.93) (801.93) (24) (4/12) (1/27)	237.61 CU YD
(Stanton Ave. N.W. Sta. 80+00 to Sta 88+08.90) (808.90) (24) (4/12) (1/27)	239.67 CU YD
(Noble Pl. N.W. Sta. 40+00 to Sta 56+50) (1650) (24) (4/12) (1/27)	488.89 CU YD
(Noble Pl. N.W. Sta. 56+50 to Sta 56+75) (25) [(24+20.1) /2] (4/12) (1/27)	6.81 CU YD
(Crest Cir. N.W. Left Sta. 100+59.42 to Sta 105+33.28) (473.86) (12) (4/12) (1/27)	70.20 CU YD
(Crest Cir. N.W. Right Sta. 100+59.42 to Sta 104+75.67) (416.25) (12) (4/12) (1/27)	61.67 CU YD
(Starbrook St. N.W. Left Sta. 105+33.28 to Sta. 108+88.67) (355.39) (12) (4/12) (1/27)	52.65 CU YD
(Starbrook St. N.W. Right Sta. 104+75.67 to Sta. 108+88.67) (413) (12) (4/12) (1/27)	61.19 CU YD
(Starbrook St. N.W. Left Sta. 109+12.67 to Sta. 118+62.58) (949.91) (12) (4/12) (1/27)	140.73 CU YD
(Starbrook St. N.W. Right Sta. 109+12.67 to Sta. 120+37.04) (1124.37) (12) (4/12) (1/27)	166.57 CU YD
(Belmere Ave. N.W. Left Sta. 118+62.58 to Sta. 122+46.04) (383.46) (12) (4/12) (1/27)	56.81 CU YD
(Belmere Ave. N.W. Right Sta. 120+37.04 to Sta. 122+46.04) (209) (12) (4/12) (1/27)	30.96 CU YD
(S.W. corner of 29th St. N.W./Stanton Ave. N.W. Intersection) (85.84) (4/12) (1/27)	1.06 CU YD
(N.W. corner of 29th St. N.W./Stanton Ave. N.W. Intersection) (85.84) (4/12) (1/27)	1.06 CU YD
(S.W. corner of 29th St. N.W./Belmere Ave. N.W. Intersection) (134.13) (4/12) (1/27)	1.66 CU YD
(N.W. corner of 29th St. N.W./Belmere Ave. N.W. Intersection) (134.13) (4/12) (1/27)	1.66 CU YD
(S.W. corner of 29th St. N.W./Gordon Ave. N.W. Intersection) (84.68) (4/12) (1/27)	1.05 CU YD
(N.W. corner of 29th St. N.W./Gordon Ave. N.W. Intersection) (87.01) (4/12) (1/27)	1.07 CU YD
(S.W. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (85.84) (4/12) (1/27)	1.06 CU YD
(N.W. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (85.84) (4/12) (1/27)	1.06 CU YD
(S.E. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (85.84) (4/12) (1/27)	1.06 CU YD
(N.E. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (85.84) (4/12) (1/27)	1.06 CU YD
(N.E. corner of Noble Pl. N.W./Stanton Ave. N.W. Intersection) (89.66) (4/12) (1/27)	1.11 CU YD

CONTINUED: Item 301 Bituminous Aggregate Base

(S.E. corner of Noble Pl. N.W./Gordon Ave. N.W. Intersection) (142.17) (4/12) (1/27)	1.76 CU YD
(N.E. corner of Noble Pl. N.W./Gordon Ave. N.W. Intersection) (126.47) (4/12) (1/27)	1.56 CU YD
(Crest Cir. N.W. circle area) (6798.92) (4/12) (1/27)	83.94 CU YD

TOTAL ITEM 301 = 3,025.55 Cu. Yd.
USED: 3,026 Cu. Yd.

ITEM 304 AGGREGATE BASE

(29th St. N.W. Sta. 10+25. to Sta. 10+50) (25) [(21+33) /2] (7/12) (1/27)	14.58 CU YD
(29th St. N.W. Sta. 10+50 to Sta 32+00) (2150) (33) (7/12) (1/27)	1532.87 CU YD
(29th St. N.W. Sta. 32+00 to Sta 32+50) (50) [(33+22.6) /2] (7/12) (1/27)	30.03 CU YD
(Gordon Ave. N.W. Sta. 0+12 to Sta 8+13.93) (801.93) (25) (6/12) (1/27)	371.26 CU YD
(Stanton Ave. N.W. Sta. 80+00 to Sta 88+08.90) (808.90) (25) (6/12) (1/27)	374.49 CU YD
(Noble Pl. N.W. Sta. 40+00 to Sta 56+50) (1650) (25) (6/12) (1/27)	763.89 CU YD
(Noble Pl. N.W. Sta. 56+50 to Sta 56+75) (25) [(25+20.1) /2] (6/12) (1/27)	10.44 CU YD
(Crest Cir. N.W. Left Sta. 100+59.42 to Sta 105+33.28) (473.86) (12.5) (6/12) (1/27)	63.01 CU YD
(Crest Cir. N.W. Right Sta. 100+59.42 to Sta 104+75.67) (416.25) (12.5) (6/12) (1/27)	96.35 CU YD
(Starbrook St. N.W. Left Sta. 105+33.28 to Sta. 108+88.67) (355.39) (12.5) (6/12) (1/27)	82.27 CU YD
(Starbrook St. N.W. Right Sta. 104+75.67 to Sta. 108+88.67) (413) (12.5) (6/12) (1/27)	95.60 CU YD
(Starbrook St. N.W. Left Sta. 109+12.67 to Sta. 118+62.58) (949.91) (12.5) (6/12) (1/27)	219.89 CU YD
(Starbrook St. N.W. Right Sta. 109+12.67 to Sta. 120+37.04) (1124.37) (12.5) (6/12) (1/27)	260.27 CU YD
(Belmere Ave. N.W. Left Sta. 118+62.58 to Sta. 122+46.04) (383.46) (12.5) (6/12) (1/27)	88.76 CU YD
(Belmere Ave. N.W. Right Sta. 120+37.04 to Sta. 122+46.04) (209) (12.5) (6/12) (1/27)	48.38 CU YD
(S.W. corner of 29th St. N.W./Stanton Ave. N.W. Intersection) (81.60) (6/12) (1/27)	1.51 CU YD
(N.W. corner of 29th St. N.W./Stanton Ave. N.W. Intersection) (81.60) (6/12) (1/27)	1.51 CU YD
(S.W. corner of 29th St. N.W./Belmere Ave. N.W. Intersection) (128.81) (6/12) (1/27)	2.39 CU YD
(N.W. corner of 29th St. N.W./Belmere Ave. N.W. Intersection) (128.81) (6/12) (1/27)	2.39 CU YD
(S.W. corner of 29th St. N.W./Gordon Ave. N.W. Intersection) (80.50) (6/12) (1/27)	1.49 CU YD
(N.W. corner of 29th St. N.W./Gordon Ave. N.W. Intersection) (82.71) (6/12) (1/27)	1.53 CU YD

CONTINUED: Item 301 Bituminous Aggregate Base

(S.W. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (81.60) (6/12) (1/27)	1.51 CU YD
(N.W. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (81.60) (6/12) (1/27)	1.51 CU YD
(S.E. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (81.60) (6/12) (1/27)	1.51 CU YD
(N.E. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (81.60) (6/12) (1/27)	1.51 CU YD
(N.E. corner of Noble Pl. N.W./Stanton Ave. N.W. Intersection) (130.37) (6/12) (1/27)	2.41 CU YD
(S.E. corner of Noble Pl. N.W./Gordon Ave. N.W. Intersection) (136.54) (6/12) (1/27)	2.53 CU YD
(N.E. corner of Noble Pl. N.W./Gordon Ave. N.W. Intersection) (121.46) (6/12) (1/27)	2.25 CU YD
(Crest Cir. N.W. circle area) (6940.97) (6/12) (1/27)	128.54 CU YD

TOTAL ITEM 304 = 4204.68 Cu. Yd.
USED: 4205 Cu. Yd.

ITEM 404 ASPHALT CONCRETE

(29th St. N.W. Sta. 10+25. to Sta. 10+50) (25) [(21+32) /2] (1.5/12) (1/27)	3.07 CU YD
(29th St. N.W. Sta. 10+50 to Sta 32+00) (2150) (32) (1.5/12) (1/27)	318.52 CU YD
(29th St. N.W. Sta. 32+00 to Sta 32+50) (50) [(32+22.6) /2] (1.5/12) (1/27)	6.32 CU YD
(Gordon Ave. N.W. Sta. 0+12 to Sta 8+13.93) (801.93) (24) (1.5/12) (1/27)	89.10 CU YD
(Stanton Ave. N.W. Sta. 80+00 to Sta 88+08.90) (808.90) (24) (1.5/12) (1/27)	89.88 CU YD
(Noble Pl. N.W. Sta. 40+00 to Sta 56+50) (1650) (24) (1.5/12) (1/27)	183.33 CU YD
(Noble Pl. N.W. Sta. 56+50 to Sta 56+75) (25) [(24+20.1) /2] (1.5/12) (1/27)	2.55 CU YD
(Crest Cir. N.W. Left Sta. 100+59.42 to Sta 105+33.28) (473.86) (12) (1.5/12) (1/27)	26.33 CU YD
(Crest Cir. N.W. Right Sta. 100+59.42 to Sta 104+75.67) (416.25) (12) (1.5/12) (1/27)	23.13 CU YD
(Starbrook St. N.W. Left Sta. 105+33.28 to Sta. 108+88.67) (355.39) (12) (1.5/12) (1/27)	19.74 CU YD
(Starbrook St. N.W. Right Sta. 104+75.67 to Sta. 108+88.67) (413) (12) (1.5/12) (1/27)	22.94 CU YD
(Starbrook St. N.W. Left Sta. 109+12.67 to Sta. 118+62.58) (949.91) (12) (1.5/12) (1/27)	52.77 CU YD
(Starbrook St. N.W. Right Sta. 109+12.67 to Sta. 120+37.04) (1124.37) (12) (1.5/12) (1/27)	62.47 CU YD
(Belmere Ave. N.W. Left Sta. 118+62.58 to Sta. 122+46.04) (383.46) (12) (1.5/12) (1/27)	21.30 CU YD
(Belmere Ave. N.W. Right Sta. 120+37.04 to Sta. 122+46.04) (209) (12) (1.5/12) (1/27)	11.61 CU YD

Total This Sheet = 933.06 CU YD

CONTINUED: Item 404 Asphalt Concrete to Sheet No. 9

FOTHERGILL – BELMONT SANITARY SEWER PLANS

CITY OF MASSILLON
Francis H. Cicchinelli, Jr.
Mayor

Calculations
City of Massillon
Stark County, Ohio

ELECTRONIC FILE NAME:
98SS0108.DWG

ACCOUNT NUMBER
98SS01

DRAWN BY
F. Werner

DATE
Nov. 24, 1998

IT'S ALL ABOUT THE CITY OF MASSILLON, OHIO

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CONTINUED: Item 404 Asphalt Concrete from Sheet No. ____		
(S.W. corner of 29th St. N.W./Stanton Ave. N.W. Intersection) (85.84) (1.5/12) (1/27)	0.40	CU YD
(N.W. corner of 29th St. N.W./Stanton Ave. N.W. Intersection) (85.84) (1.5/12) (1/27)	0.40	CU YD
(S.W. corner of 29th St. N.W./Belmere Ave. N.W. Intersection) (134.13) (1.5/12) (1/27)	0.62	CU YD
(N.W. corner of 29th St. N.W./Belmere Ave. N.W. Intersection) (134.13) (1.5/12) (1/27)	0.62	CU YD
(S.W. corner of 29th St. N.W./Gordon Ave. N.W. Intersection) (84.68) (1.5/12) (1/27)	0.39	CU YD
(N.W. corner of 29th St. N.W./Gordon Ave. N.W. Intersection) (87.01) (1.5/12) (1/27)	0.40	CU YD
(S.W. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (85.84) (1.5/12) (1/27)	0.40	CU YD
(N.W. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (85.84) (1.5/12) (1/27)	0.40	CU YD
(S.E. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (85.84) (1.5/12) (1/27)	0.40	CU YD
(N.E. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (85.84) (1.5/12) (1/27)	0.40	CU YD
(N.E. corner of Noble Pl. N.W./Stanton Ave. N.W. Intersection) (89.66) (1.5/12) (1/27)	0.42	CU YD
(S.E. corner of Noble Pl. N.W./Gordon Ave. N.W. Intersection) (142.17) (1.5/12) (1/27)	0.66	CU YD
(N.E. corner of Noble Pl. N.W./Gordon Ave. N.W. Intersection) (126.47) (1.5/12) (1/27)	0.59	CU YD
(Crest Cir. N.W. circle area) (6798.92) (1.5/12) (1/27)	31.48	CU YD

Total This Sheet = 37.58 CU YD
Total Sheet No. 8 = 933.06 CU YD

TOTAL ITEM 404 = 970.64 Cu. Yd.
USED: 971 Cu. Yd.

ITEM 407 TACK COAT

(29th St. N.W. Sta. 10+25. to Sta. 10+50) (25) [(21+32) /2] (0.08) (1/9)	5.89	GAL
(29th St. N.W. Sta. 10+50 to Sta 32+00) (2150) (32) (0.08) (1/9)	611.56	GAL
(29th St. N.W. Sta. 32+00 to Sta 32+50) (50) [(32+22.6) /2] (0.08) (1/9)	12.13	GAL
(Gordon Ave. N.W. Sta. 0+12 to Sta 8+13.93) (801.93) (24) (0.08) (1/9)	171.08	GAL
(Stanton Ave. N.W. Sta. 80+00 to Sta 88+08.90) (808.90) (24) (0.08) (1/9)	172.57	GAL
(Noble Pl. N.W. Sta. 40+00 to Sta 56+50) (1650) (24) (0.08) (1/9)	352.00	GAL
(Noble Pl. N.W. Sta. 56+50 to Sta 56+75) (25) [(24+20.1) /2] (0.08) (1/9)	4.90	GAL
(Crest Cir. N.W. Left Sta. 100+59.42 to Sta 105+33.28) (473.86) (12) (0.08) (1/9)	50.55	GAL

CONTINUED: Item 407 Tack Coat		
(Crest Cir. N.W. Right Sta. 100+59.42 to Sta 104+75.67) (416.25) (12) (0.08) (1/9)	44.40	GAL
(Starbrook St. N.W. Left Sta. 105+33.28 to Sta. 108+88.67) (355.39) (12) (0.08) (1/9)	37.91	GAL
(Starbrook St. N.W. Right Sta. 104+75.67 to Sta. 108+88.67) (413) (12) (0.08) (1/9)	44.05	GAL
(Starbrook St. N.W. Left Sta. 109+12.67 to Sta. 118+62.58) (949.91) (12) (0.08) (1/9)	101.32	GAL
(Starbrook St. N.W. Right Sta. 109+12.67 to Sta. 120+37.04) (1124.37) (12) (0.08) (1/9)	119.93	GAL
(Belmere Ave. N.W. Left Sta. 118+62.58 to Sta. 122+46.04) (383.46) (12) (0.08) (1/9)	40.90	GAL
(Belmere Ave. N.W. Right Sta. 120+37.04 to Sta. 122+46.04) (209) (12) (0.08) (1/9)	22.29	GAL
(S.W. corner of 29th St. N.W./Stanton Ave. N.W. Intersection) (85.84) (0.08) (1/9)	0.76	GAL
(N.W. corner of 29th St. N.W./Stanton Ave. N.W. Intersection) (85.84) (0.08) (1/9)	0.76	GAL
(S.W. corner of 29th St. N.W./Belmere Ave. N.W. Intersection) (134.13) (0.08) (1/9)	1.19	GAL
(N.W. corner of 29th St. N.W./Belmere Ave. N.W. Intersection) (134.13) (0.08) (1/9)	1.19	GAL
(S.W. corner of 29th St. N.W./Gordon Ave. N.W. Intersection) (84.68) (0.08) (1/9)	0.75	GAL
(N.W. corner of 29th St. N.W./Gordon Ave. N.W. Intersection) (87.01) (0.08) (1/9)	0.77	GAL
(S.W. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (85.84) (0.08) (1/9)	0.76	GAL
(N.W. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (85.84) (0.08) (1/9)	0.76	GAL
(S.E. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (85.84) (0.08) (1/9)	0.76	GAL
(N.E. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (85.84) (0.08) (1/9)	0.76	GAL
(N.E. corner of Noble Pl. N.W./Stanton Ave. N.W. Intersection) (89.66) (0.08) (1/9)	0.80	GAL
(S.E. corner of Noble Pl. N.W./Gordon Ave. N.W. Intersection) (142.17) (0.08) (1/9)	1.26	GAL
(N.E. corner of Noble Pl. N.W./Gordon Ave. N.W. Intersection) (126.47) (0.08) (1/9)	1.12	GAL
(Crest Cir. N.W. circle area) (6798.92) (0.08) (1/9)	60.43	GAL

TOTAL ITEM 407 = 1,863.55 GAL
USED: 1864 GAL

ITEM 408 PRIME COAT

(29th St. N.W. Sta. 10+25. to Sta. 10+50) (25) [(21+33) /2] (0.40) (1/9)	30.00	GAL
(29th St. N.W. Sta. 10+50 to Sta 32+00) (2150) (33) (0.40) (1/9)	3,153.33	GAL
(29th St. N.W. Sta. 32+00 to Sta 32+50) (50) [(33+22.6) /2] (0.40) (1/9)	61.78	GAL

CONTINUED: Item 407 Tack Coat		
(Gordon Ave. N.W. Sta. 0+12 to Sta 8+13.93) (801.93) (25) (0.40) (1/9)	891.03	GAL
(Stanton Ave. N.W. Sta. 80+00 to Sta 88+08.90) (808.90) (25) (0.40) (1/9)	898.78	GAL
(Noble Pl. N.W. Sta. 40+00 to Sta 56+50) (1650) (25) (0.40) (1/9)	1833.33	GAL
(Noble Pl. N.W. Sta. 56+50 to Sta 56+75) (25) [(25+20.1) /2] (0.40) (1/9)	25.06	GAL
(Crest Cir. N.W. Left Sta. 100+59.42 to Sta 105+33.28) (473.86) (12.5) (0.40) (1/9)	263.26	GAL
(Crest Cir. N.W. Right Sta. 100+59.42 to Sta 104+75.67) (416.25) (12.5) (0.40) (1/9)	231.25	GAL
(Starbrook St. N.W. Left Sta. 105+33.28 to Sta. 108+88.67) (355.39) (12.5) (0.40) (1/9)	197.44	GAL
(Starbrook St. N.W. Right Sta. 104+75.67 to Sta. 108+88.67) (413) (12.5) (0.40) (1/9)	229.44	GAL
(Starbrook St. N.W. Left Sta. 109+12.67 to Sta. 118+62.58) (949.91) (12.5) (0.40) (1/9)	527.73	GAL
(Starbrook St. N.W. Right Sta. 109+12.67 to Sta. 120+37.04) (1124.37) (12.5) (0.40) (1/9)	624.65	GAL
(Belmere Ave. N.W. Left Sta. 118+62.58 to Sta. 122+46.04) (383.46) (12.5) (0.40) (1/9)	213.03	GAL
(Belmere Ave. N.W. Right Sta. 120+37.04 to Sta. 122+46.04) (209) (12.5) (0.40) (1/9)	116.11	GAL
(S.W. corner of 29th St. N.W./Stanton Ave. N.W. Intersection) (81.60) (0.40) (1/9)	3.63	GAL
(N.W. corner of 29th St. N.W./Stanton Ave. N.W. Intersection) (81.60) (0.40) (1/9)	3.63	GAL
(S.W. corner of 29th St. N.W./Belmere Ave. N.W. Intersection) (128.81) (0.40) (1/9)	5.72	GAL
(N.W. corner of 29th St. N.W./Belmere Ave. N.W. Intersection) (128.81) (0.40) (1/9)	5.72	GAL
(S.W. corner of 29th St. N.W./Gordon Ave. N.W. Intersection) (80.50) (0.40) (1/9)	3.58	GAL
(N.W. corner of 29th St. N.W./Gordon Ave. N.W. Intersection) (82.71) (0.40) (1/9)	3.68	GAL
(S.W. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (81.60) (0.40) (1/9)	3.63	GAL
(N.W. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (81.60) (0.40) (1/9)	3.63	GAL
(S.E. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (81.60) (0.40) (1/9)	3.63	GAL
(N.E. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (81.60) (0.40) (1/9)	3.63	GAL
(N.E. corner of Noble Pl. N.W./Stanton Ave. N.W. Intersection) (130.37) (0.40) (1/9)	5.79	GAL
(S.E. corner of Noble Pl. N.W./Gordon Ave. N.W. Intersection) (136.54) (0.40) (1/9)	6.07	GAL
(N.E. corner of Noble Pl. N.W./Gordon Ave. N.W. Intersection) (121.46) (0.40) (1/9)	5.40	GAL
(Crest Cir. N.W. circle area) (6940.97) (0.40) (1/9)	308.49	GAL

TOTAL ITEM 408 = 9,662.45 GAL
USED: 9,663 GAL



THE CITY OF MASSILLON, OHIO

ELECTRONIC FILE NAME: 98SS0108.DWG
ACCOUNT NUMBER: 98SS01

DRAWN BY: F. Werner
DATE: Nov. 24, 1998

FOTHERGILL - BELMONT SANITARY SEWER PLANS

CITY OF MASSILLON
Francis H. Cicchinelli, Jr.
Mayor

9
37

ITEM 609 CAST IN PLACE CONCRETE CURB — 6" X 18"

29th St. N.W. Right

Sta. 10+50 to Sta. 32+00 2,150.00 LIN FT

29th St. N.W. Left

Sta. 10+50 to Sta. 17+91.13 741.31 LIN FT
SW Intersection return of 29th St. NW/Stanton Ave. NW 31.42 LIN FT
NW Intersection return of 29th St. NW/Stanton Ave. NW 31.42 LIN FT
Sta. 18+55.13 to Sta. 27+36.13 881.00 LIN FT
SW Intersection return of 29th St. NW/Belmere Ave. NW 39.27 LIN FT
NW Intersection return of 29th St. NW/Belmere Ave. NW 39.27 LIN FT
Sta. 28+10.13 to Sta. 31+05.64 295.51 LIN FT
SW Intersection return of 29th St. NW/Gordon Ave. NW 39.27 LIN FT
NW Intersection return of 29th St. NW/Gordon Ave. NW 39.27 LIN FT
Sta. 31+96.64 to Sta. 32+00 30.36 LIN FT

Noble Pl. N.W. Left

Sta. 39+97.94 to Sta. 56+50 1,652.06 LIN FT

Noble Pl. N.W. Right

NE Intersection return of Noble Pl. NW/Stanton Ave. NW 39.40 LIN FT
Sta. 40+37.19 to Sta. 53+65.15 1,327.96 LIN FT
SE Intersection return of Noble Pl. NW/Gordon Ave. NW 39.90 LIN FT
NE Intersection return of Noble Pl. NW/Gordon Ave. NW 38.64 LIN FT
Sta. 54+39.18 to Sta. 56+50 200.82 LIN FT

Gordon Ave. N.W. Left

Sta. 0+36.08 to Sta. 7+93.75 757.67 LIN FT

Gordon Ave. N.W. Right

Sta. 0+37.94 to Sta. 7+94.12 756.18 LIN FT

Stanton Ave. N.W. Left

Sta. 80+37.19 to Sta. 83+42.90 305.71 LIN FT
Sta. 84+06.90 to Sta. 87+88.90 382.00 LIN FT

Stanton Ave. N.W. Right

Sta. 79+87.94 to Sta. 83+42.90 354.96 LIN FT
Sta. 84+06.90 to Sta. 87+88.90 382.00 LIN FT

Crest Cir. N.W.

Cul—Da—Sac 232.62 LIN FT

Crest Cir. N.W. Left

N returning entering Cul—Da—Sac 25.35 LIN FT
Sta. 100+59.42 to Sta. 105+33.28 473.86 LIN FT

Crest Cir. N.W. Right

S returning leaving Cul—Da—Sac 25.35 LIN FT
Sta. 100+59.42 to Sta. 104+75.67 416.25 LIN FT

Starbrook St. N.W. Left

Sta. 105+33.28 to Sta. 108+68.67 335.39 LIN FT
SW Intersection return of Starbrook St. NW/Stanton Ave. NW 31.42 LIN FT
NW Intersection return of Starbrook St. NW/Stanton Ave. NW 31.42 LIN FT
Sta. 109+32.67 to Sta. 118+62.58 929.91 LIN FT

Starbrook St. N.W. Right

Sta. 104+75.67 to Sta. 108+68.67 393.00 LIN FT
SE Intersection return of Starbrook St. NW/Stanton Ave. NW 31.42 LIN FT
NE Intersection return of Starbrook St. NW/Stanton Ave. NW 31.42 LIN FT
Sta. 109+32.67 to Sta. 120+37.04 1,104.37 LIN FT

CONTINUED: Item 609 Cast in Place Concrete Curb 6" X 18"

Belmere Ave. N.W. Left

Sta. 118+62.58 to Sta. 122+21.04 393.00 LIN FT

Belmere Ave. N.W. Right

Sta. 120+37.04 to Sta. 122+21.04 184.00 LIN FT

TOTAL ITEM 609 = 15,194.18 LIN FT
USED: 15,195 LIN FT

ITEM 452 PLAIN PORTLAND CEMENT CONCRETE PAVEMENT FOR DRIVEWAY

(29th St. N.W.)

Driveways (Plan & Profile Sheet No. 11) 5 EACH
Driveways (Plan & Profile Sheet No. 12) 6 EACH
Driveways (Plan & Profile Sheet No. 13) 8 EACH
Driveways (Plan & Profile Sheet No. 14) 5 EACH
Driveways (Plan & Profile Sheet No. 15) 1 EACH

(Gordon Ave. N.W.)

Driveways (Plan & Profile Sheet No. 16) 6 EACH
Driveways (Plan & Profile Sheet No. 17) 4 EACH

(Noble Pl. N.W.)

Driveways (Plan & Profile Sheet No. 18) 7 EACH
Driveways (Plan & Profile Sheet No. 19) 10 EACH
Driveways (Plan & Profile Sheet No. 20) 8 EACH
Driveways (Plan & Profile Sheet No. 21) 3 EACH

(Stanton Ave. N.W.)

Driveways (Plan & Profile Sheet No. 23) 4 EACH
Driveways (Plan & Profile Sheet No. 24) 2 EACH

(Crest Cir. N.W.)

Driveways (Plan & Profile Sheet No. 25) 8 EACH

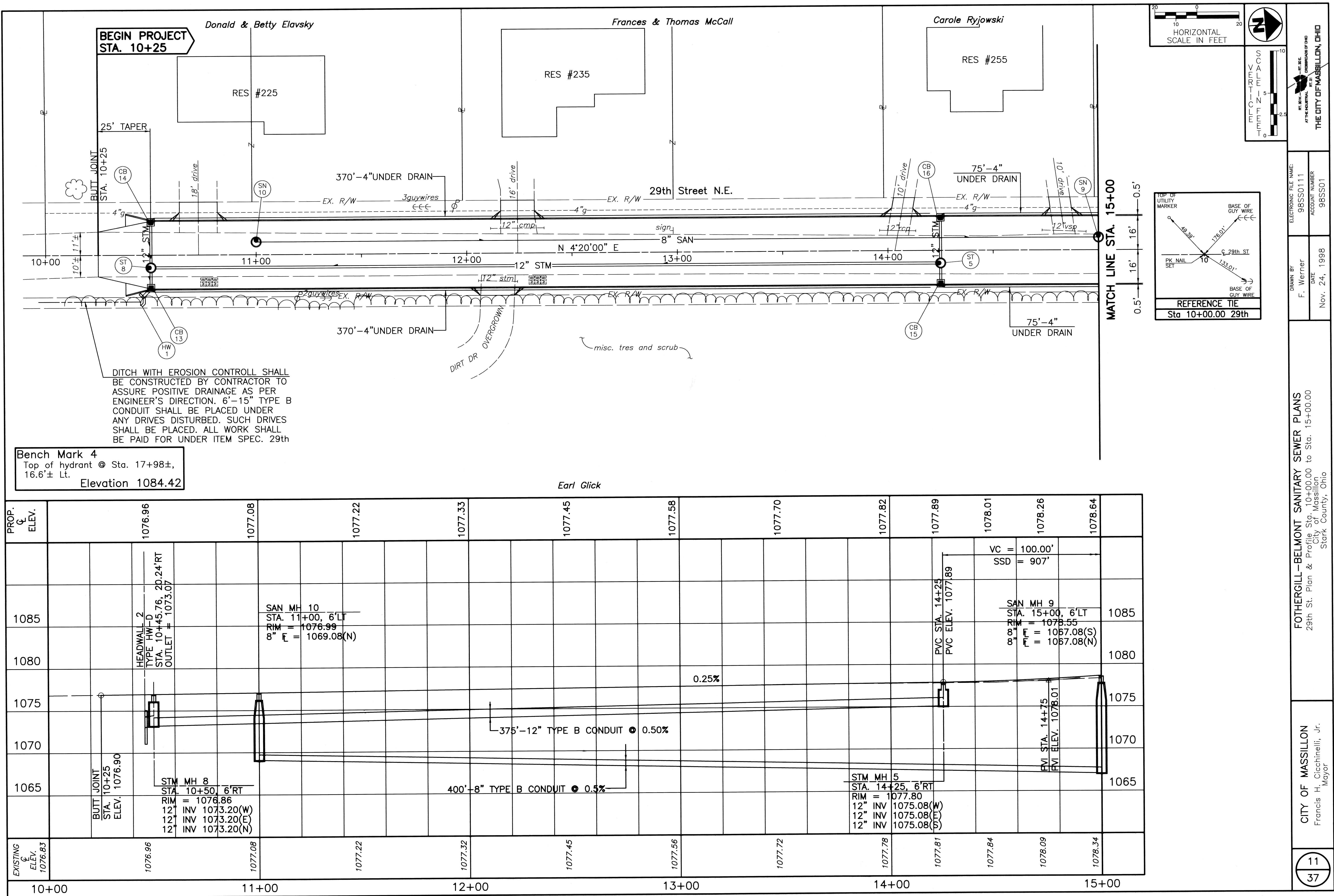
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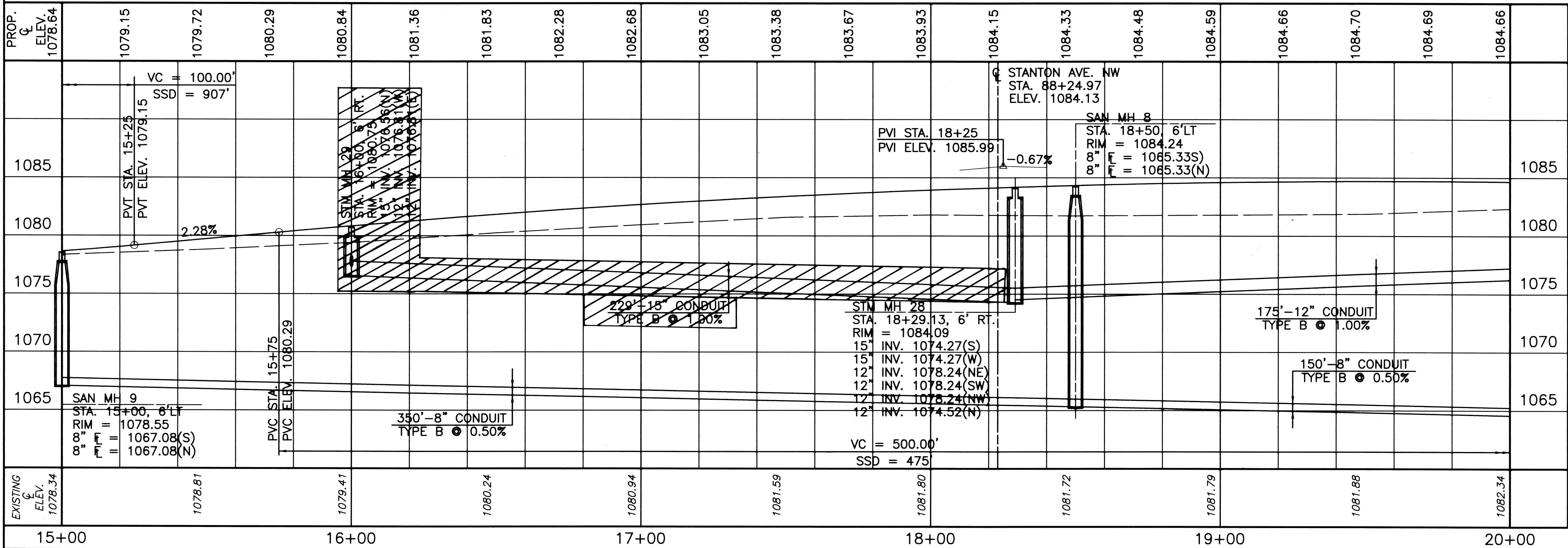
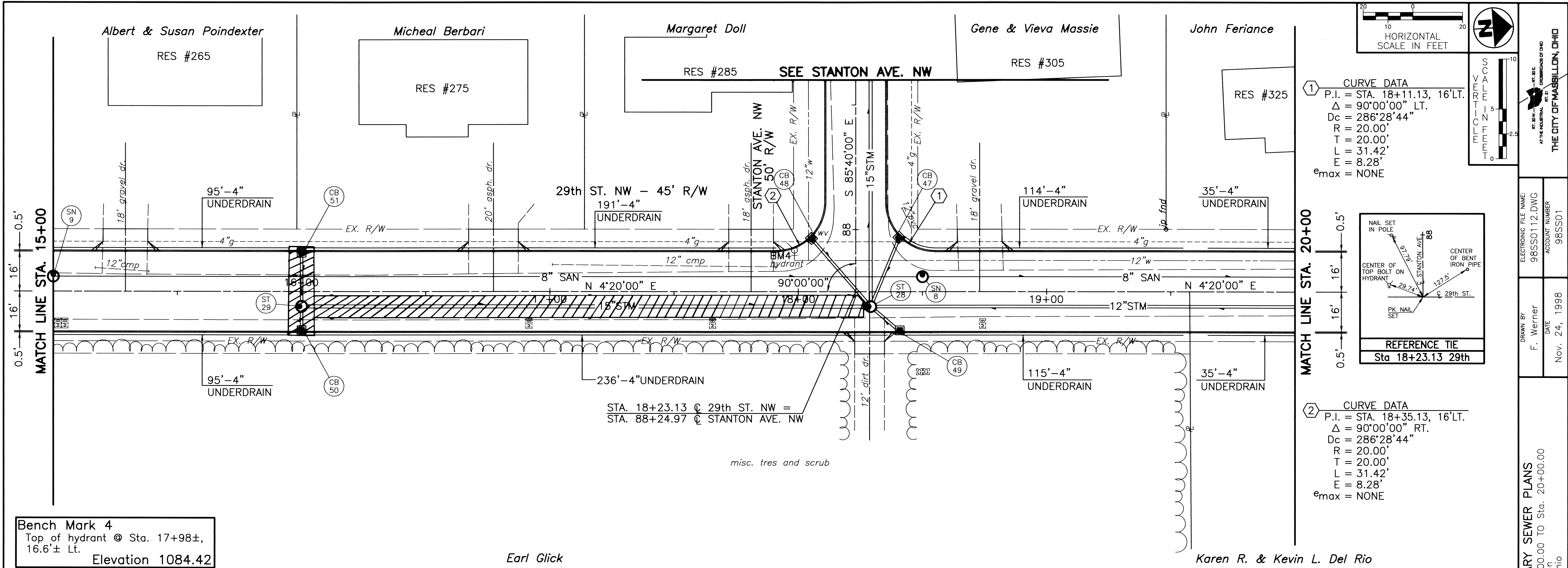
Driveways (Plan & Profile Sheet No. 26) 2 EACH
Driveways (Plan & Profile Sheet No. 27) 5 EACH
Driveways (Plan & Profile Sheet No. 28) 6 EACH
Driveways (Plan & Profile Sheet No. 29) 1 EACH

(Belmere Ave. N.W.)

Driveways (Plan & Profile Sheet No. 29) 5 EACH

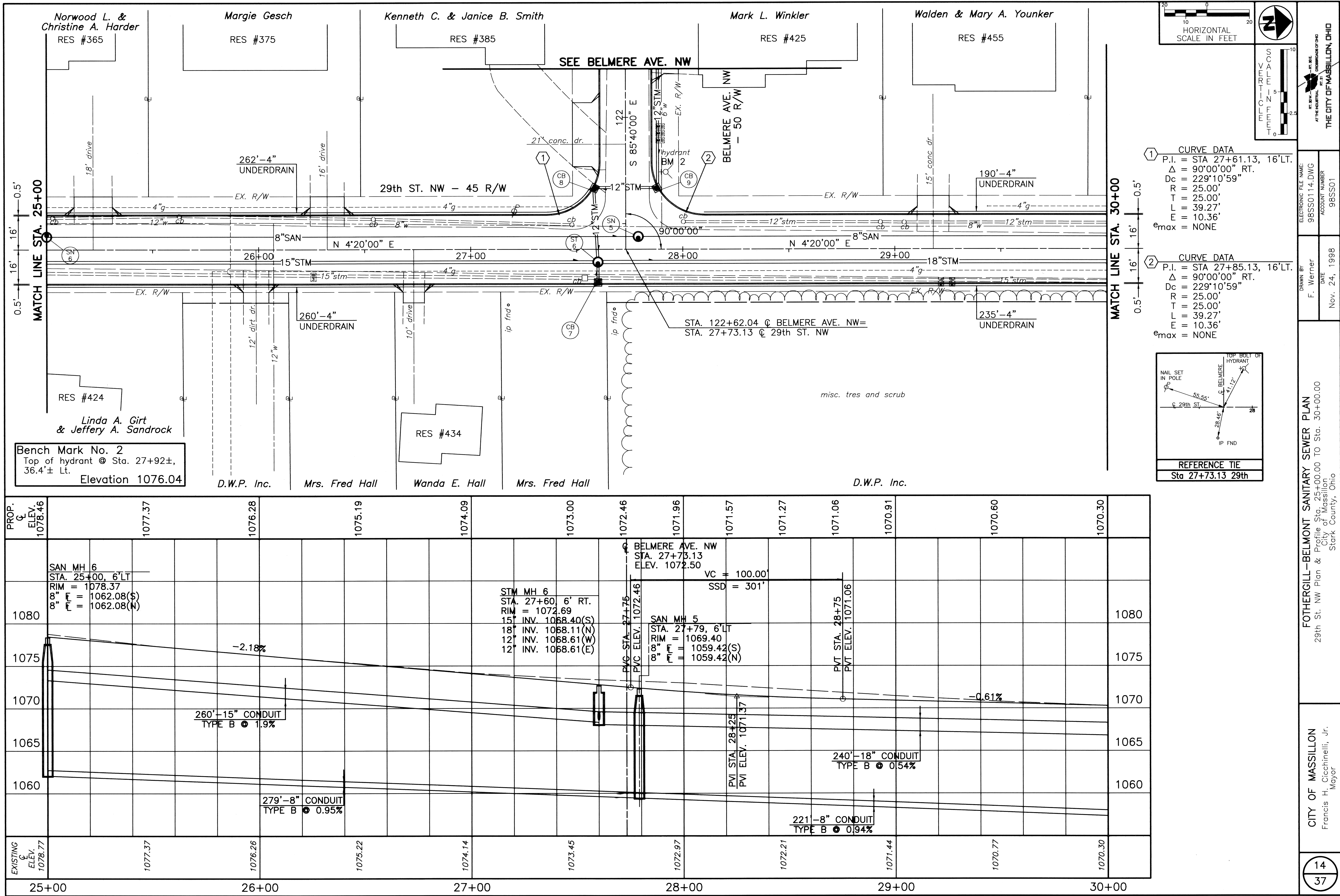
TOTAL ITEM 609 = 96 EACH
USED: 96 EACH

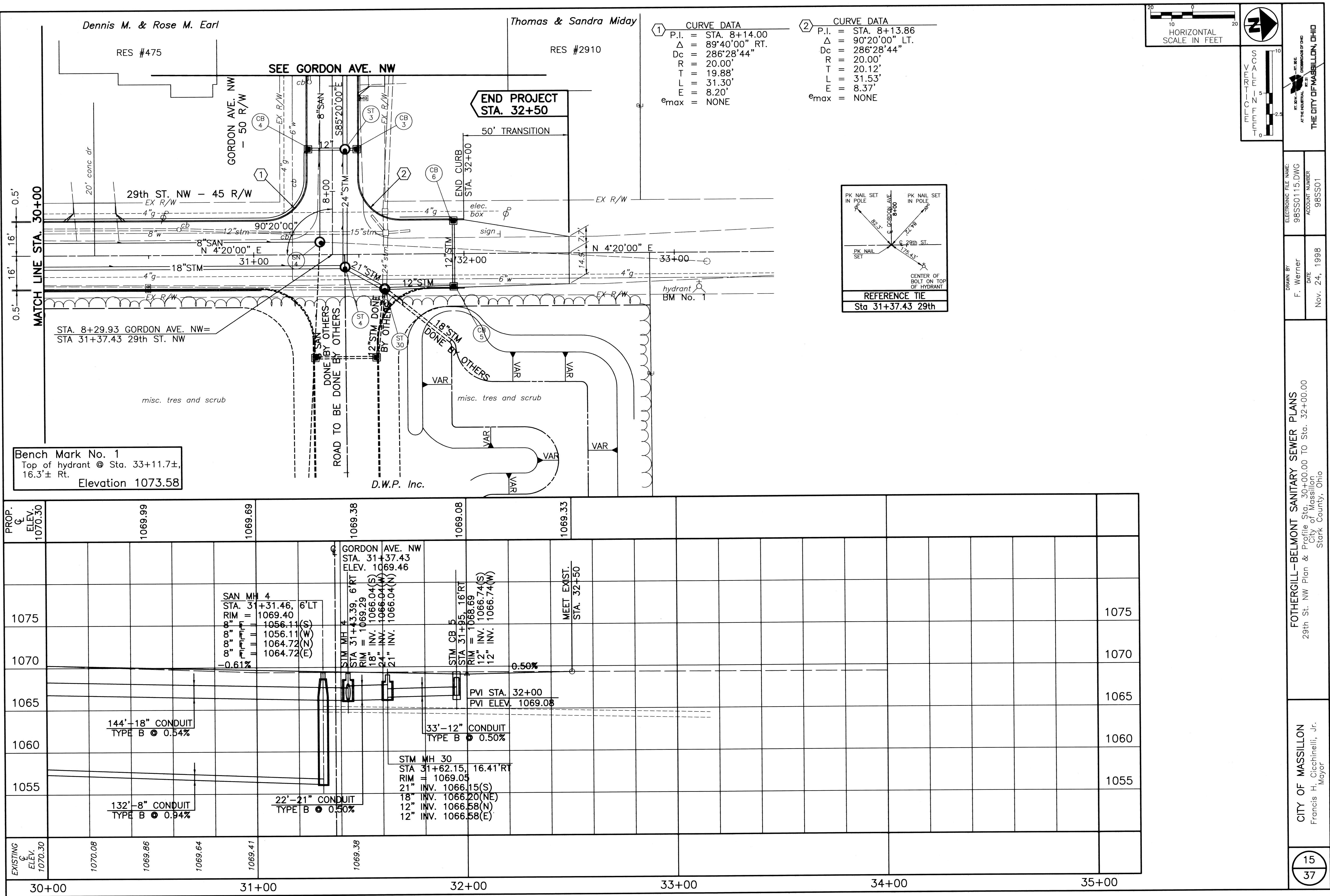


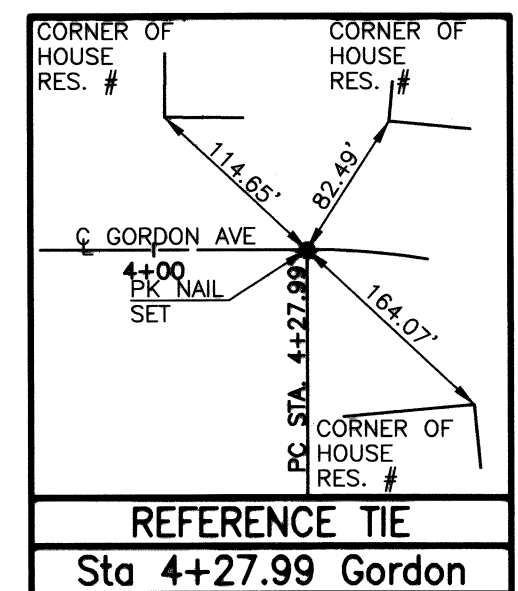
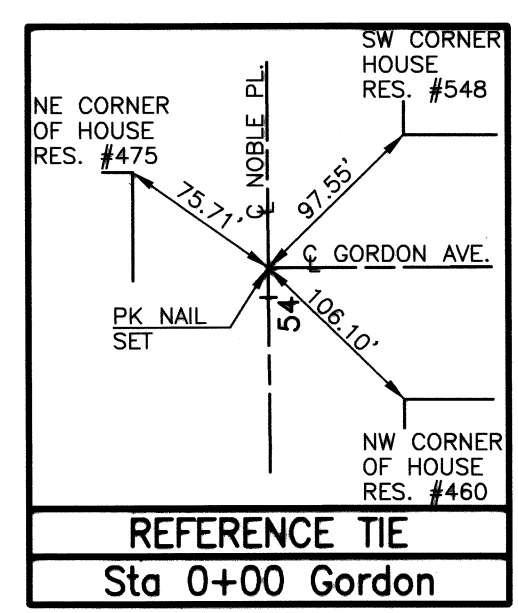
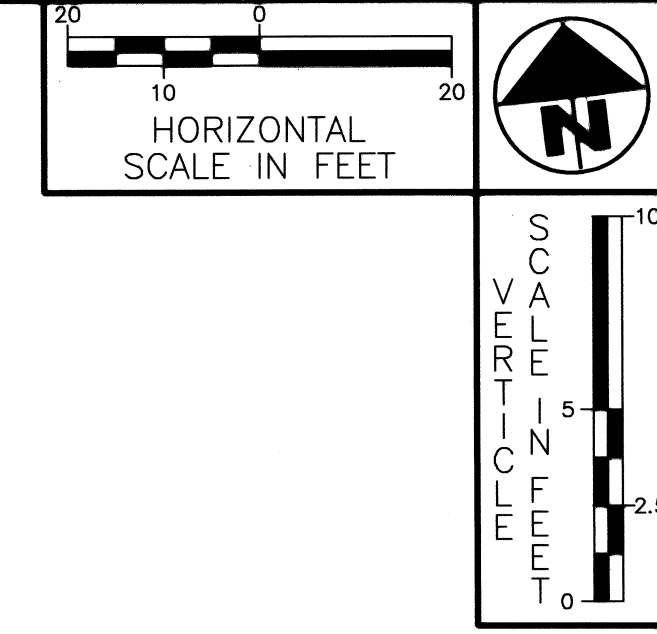
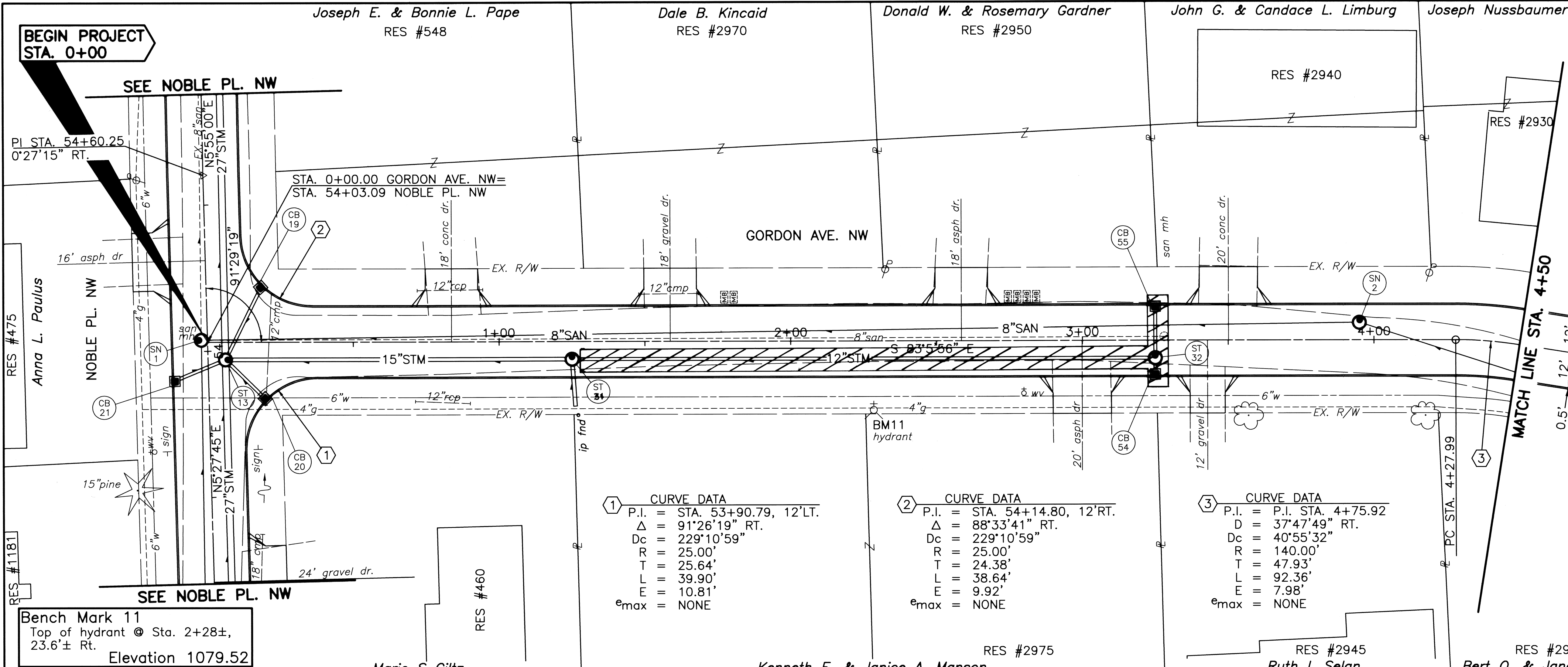


FOTHERGILL-BELMONT SANITARY SEWER PLANS
29th St. NW Plan & Profile Sta. 15+00.00 To Sta. 20+00.00
City of Massillon
Stark County, Ohio

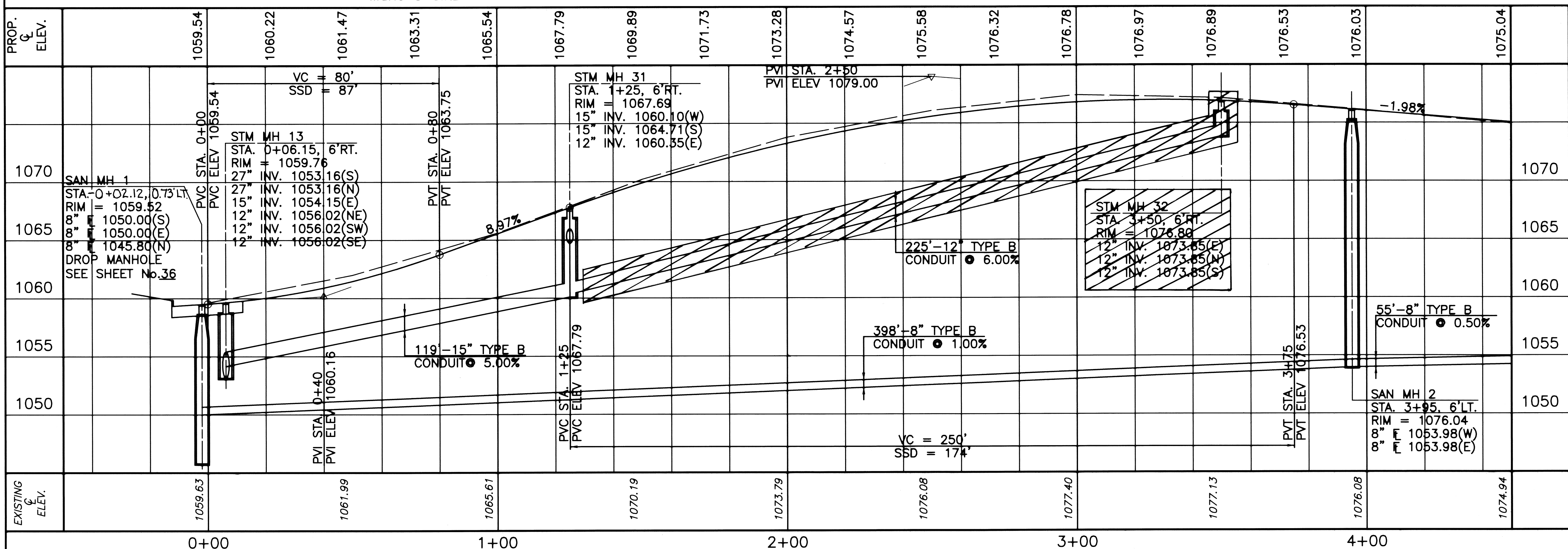
CITY OF MASSILLON
Francis H. Cicchinelli, Jr.
Mayor







CURVE DATA	
1	P.I. = STA. 53+90.79, 12'LT. Δ = 91°26'19" RT. Dc = 229'10'59" R = 25.00' T = 25.64' L = 39.90' E = 10.81' emax = NONE
CURVE DATA	
2	P.I. = STA. 54+14.80, 12'RT. Δ = 88°33'41" RT. Dc = 229'10'59" R = 25.00' T = 24.38' L = 38.64' E = 9.92' emax = NONE
CURVE DATA	
3	P.I. = STA. 4+75.92 Δ = 37°47'49" RT. Dc = 40°55'32" R = 140.00' T = 47.93' L = 92.36' E = 7.98' emax = NONE



THE CITY OF MASSILLON, OHIO

98SS0116.DWG

Nov. 24, 1998

98SS01

FOTHERGILL-BELMERE SANITARY SEWER PLANS

Gordon Ave. NW Plan & Profile Sta. 0+00.00 TO Sta. 4+50.00

City of Massillon, Stark County, Ohio

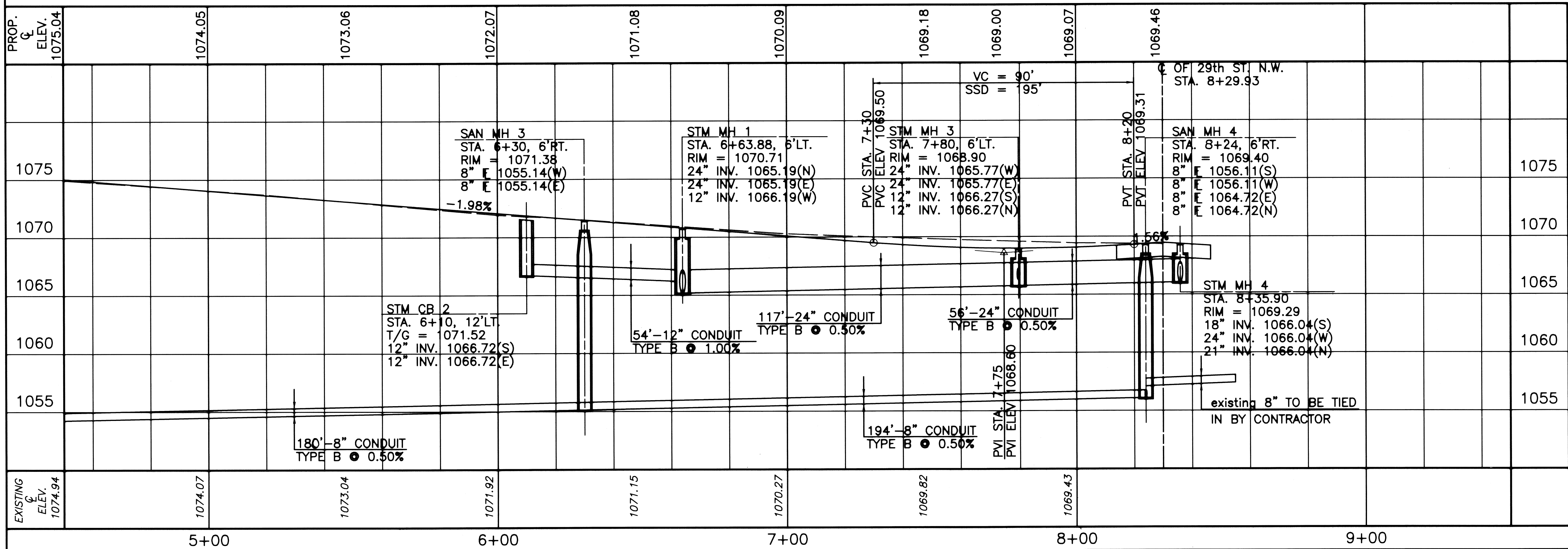
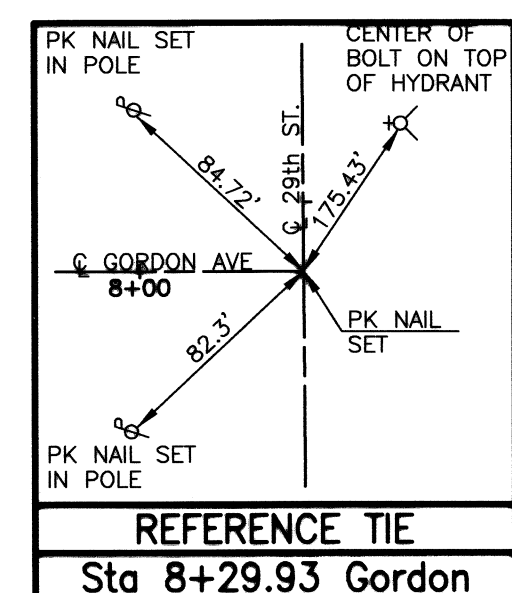
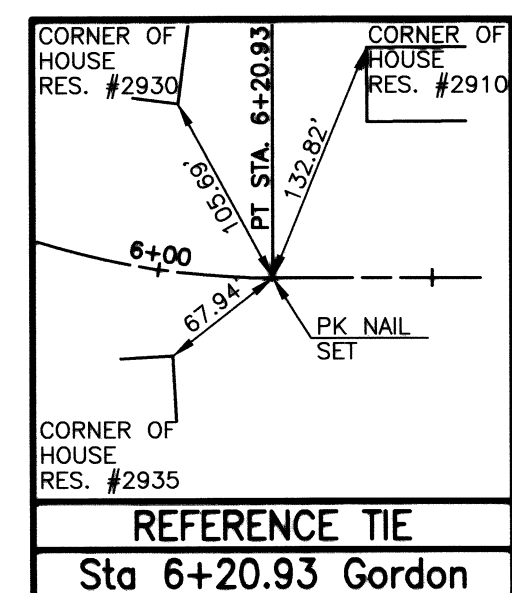
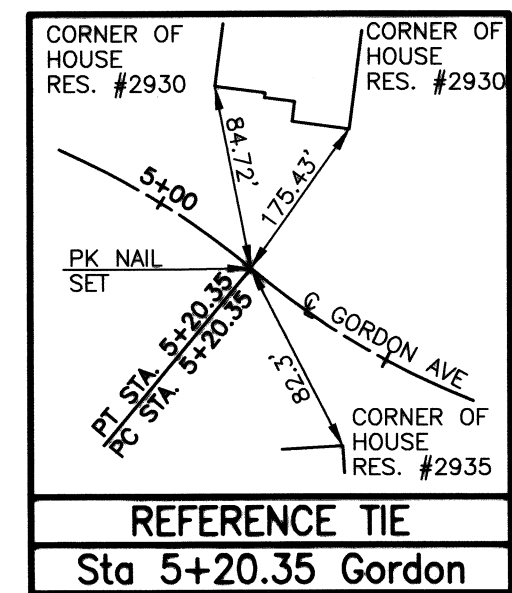
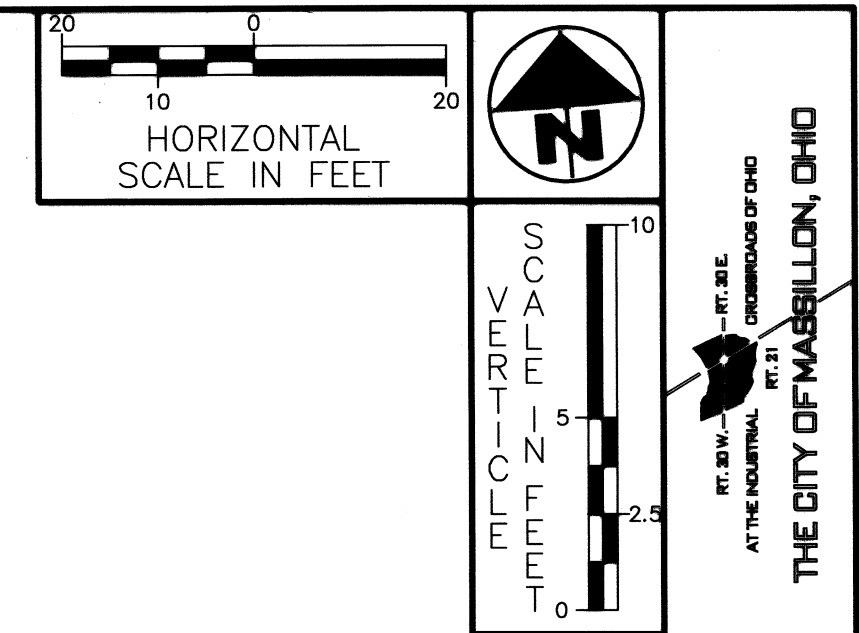
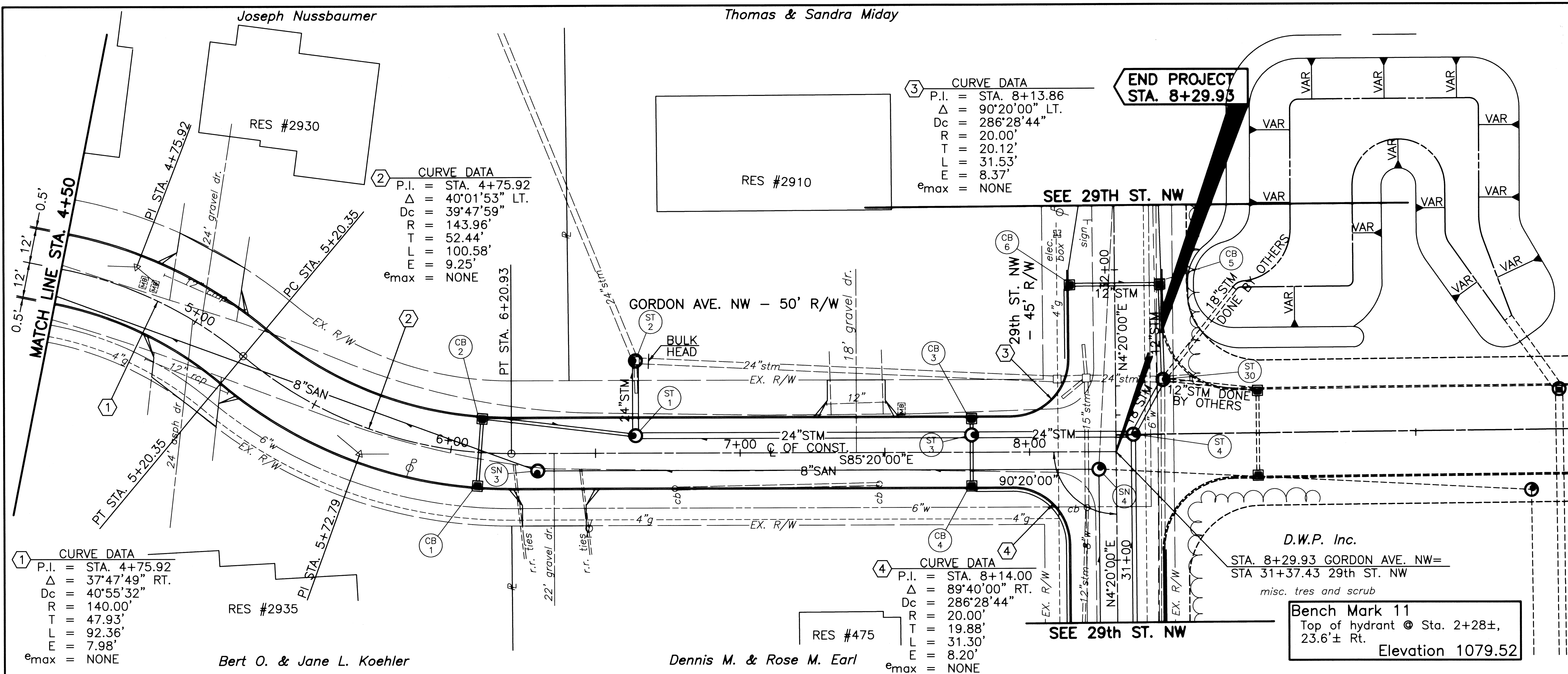
CITY OF MASSILLON

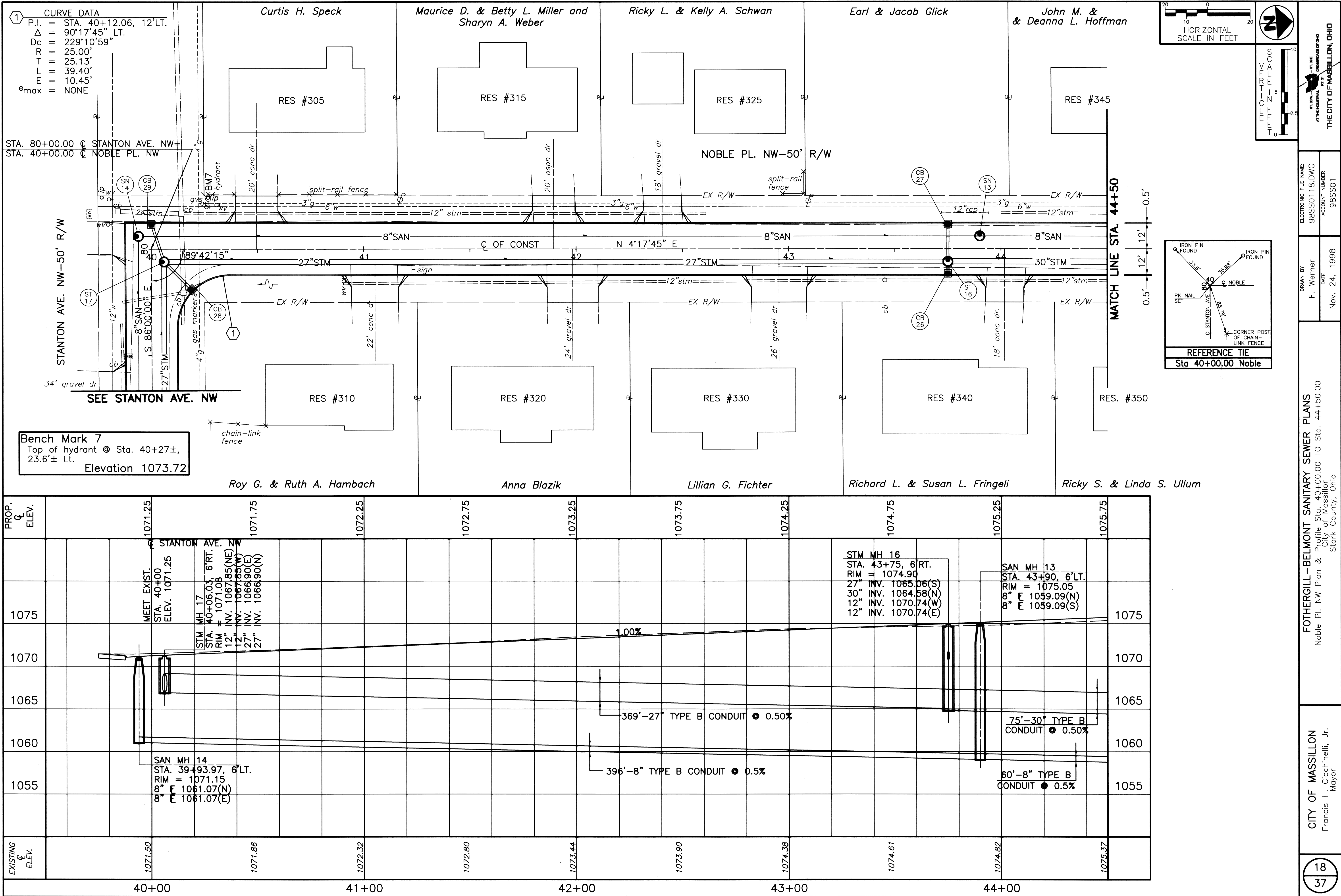
Francis H. Cicchinelli, Jr.

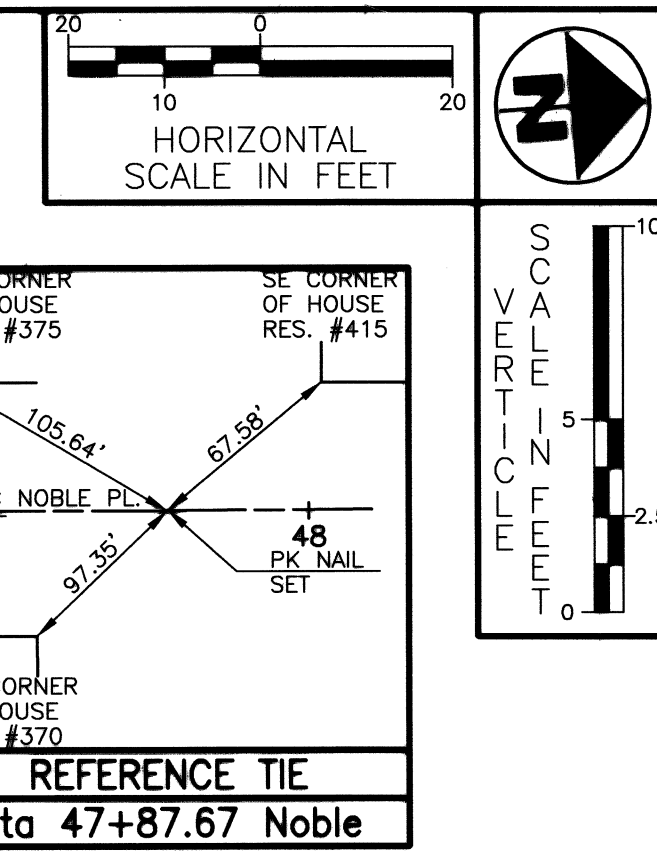
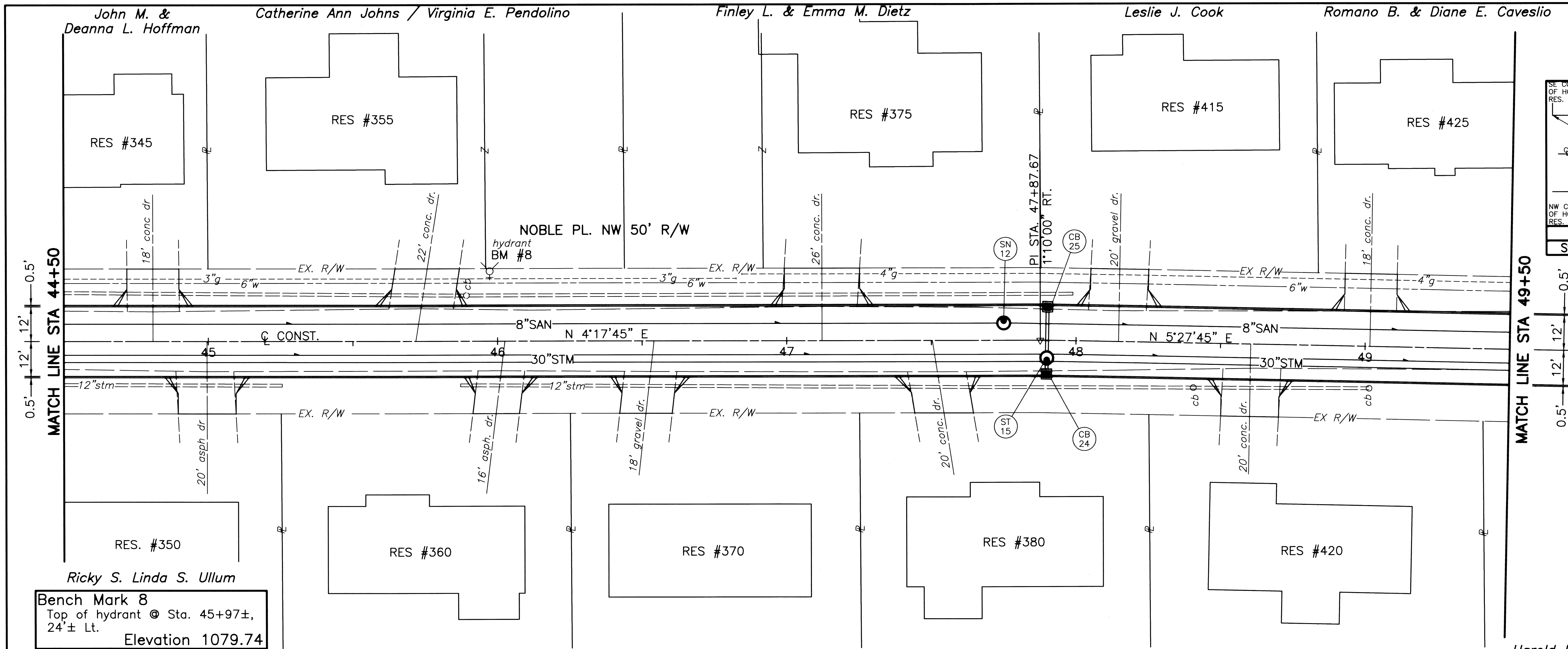
Mayor

16

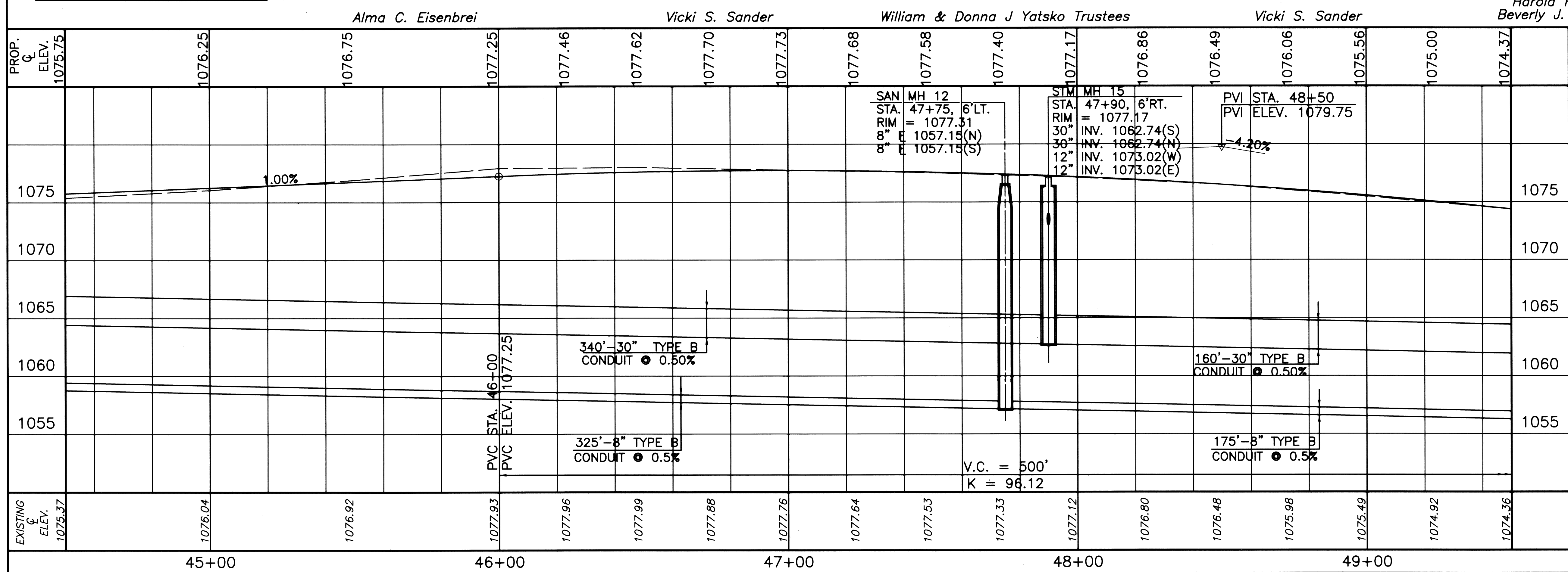
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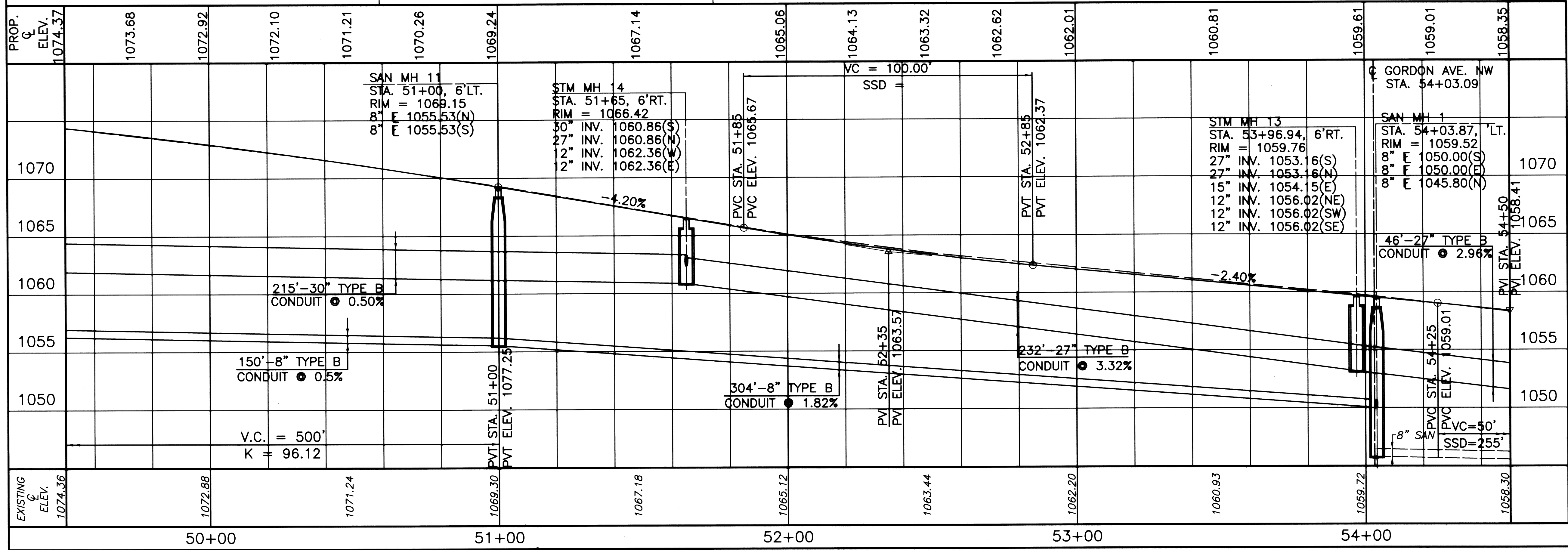
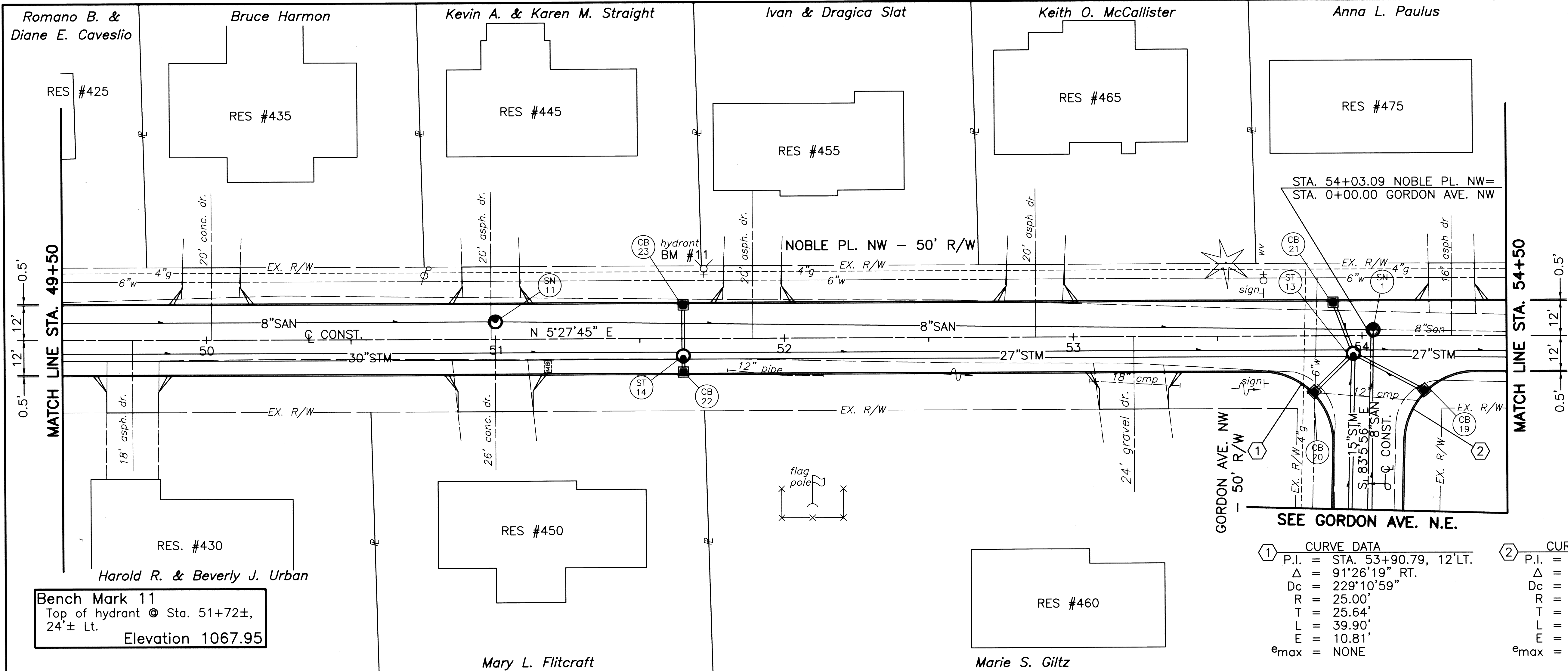






Bench Mark 8
Top of hydrant @ Sta. 45+97±,
24± Lt.
Elevation 1079.74





ROMANO B. & DIANE E. CAVESLIO

BRUCE HARMON

KEVIN A. & KAREN M. STRAIGHT

IVAN & DRAGICA SLAT

KEITH O. MCCALLISTER

ANNA L. PAULUS

RES #425

RES #435

RES #445

RES #455

RES #465

RES #475

RES #430

RES #450

RES #460

Match Line Sta. 49+50

Match Line Sta. 54+50

SEE GORDON AVE. N.E.

Curve Data 1

P.I. = Sta. 53+90.79, 12'LT.

Δ = 91°26'19" RT.

Dc = 229'10'59"

R = 25.00'

T = 25.64'

L = 39.90'

E = 10.81'

e_{max} = NONE

Curve Data 2

P.I. = Sta. 54+14.80, 12'RT.

Δ = 88°33'41" RT.

Dc = 229'10'59"

R = 25.00'

T = 24.38'

L = 38.64'

E = 9.92'

e_{max} = NONE

Reference Tie

Sta 54+03.09 Noble

Electronic File Name:

98SS0120.DWG

Account Number:

98SS01

Drawn By:

F. Werner

Date:

Nov. 24, 1998

City of Massillon

Francis H. Cicchinelli, Jr.

Mayor

FOTHERGILL-BELMONT SANITARY SEWER PLAN

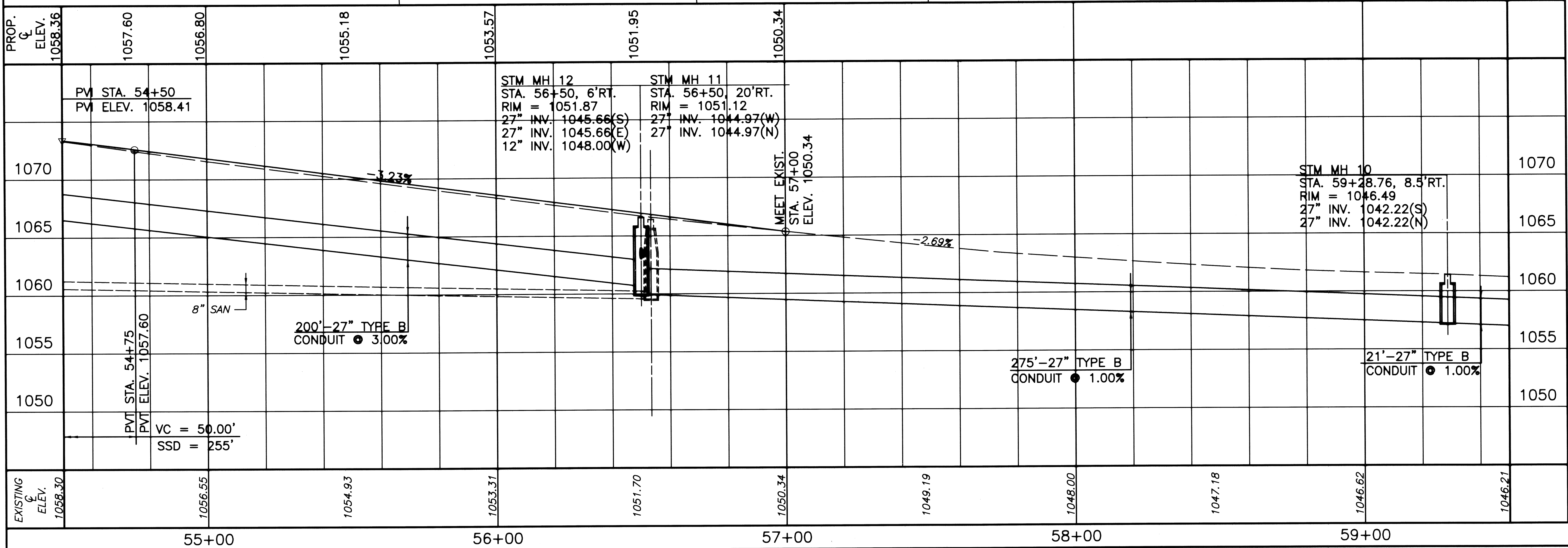
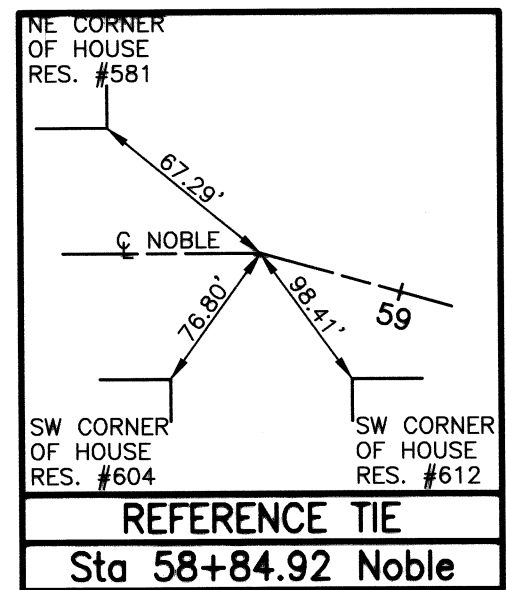
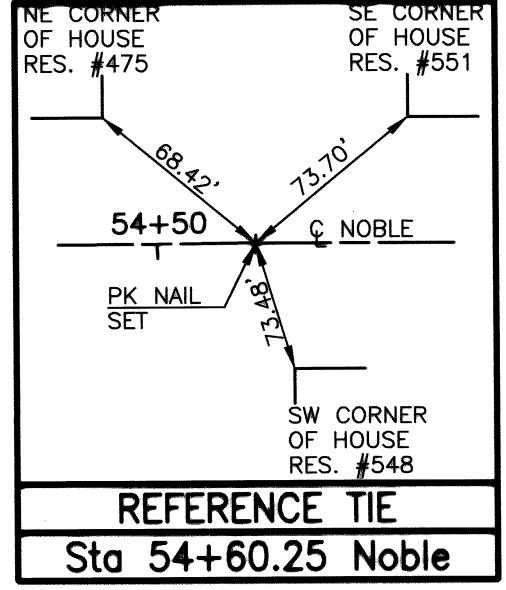
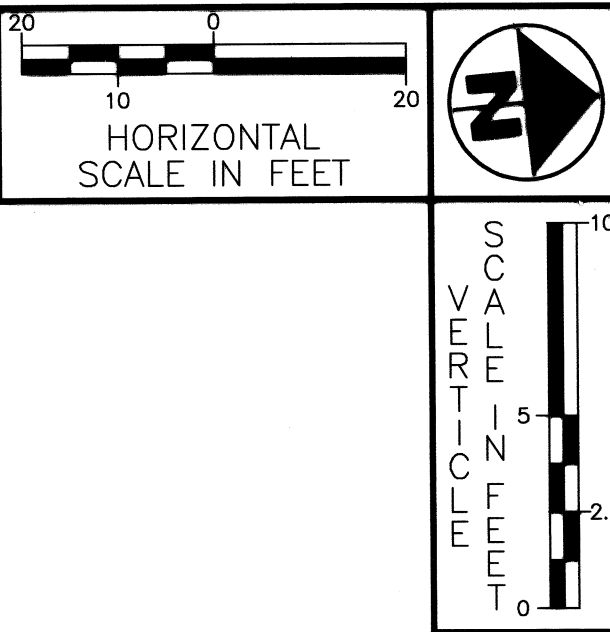
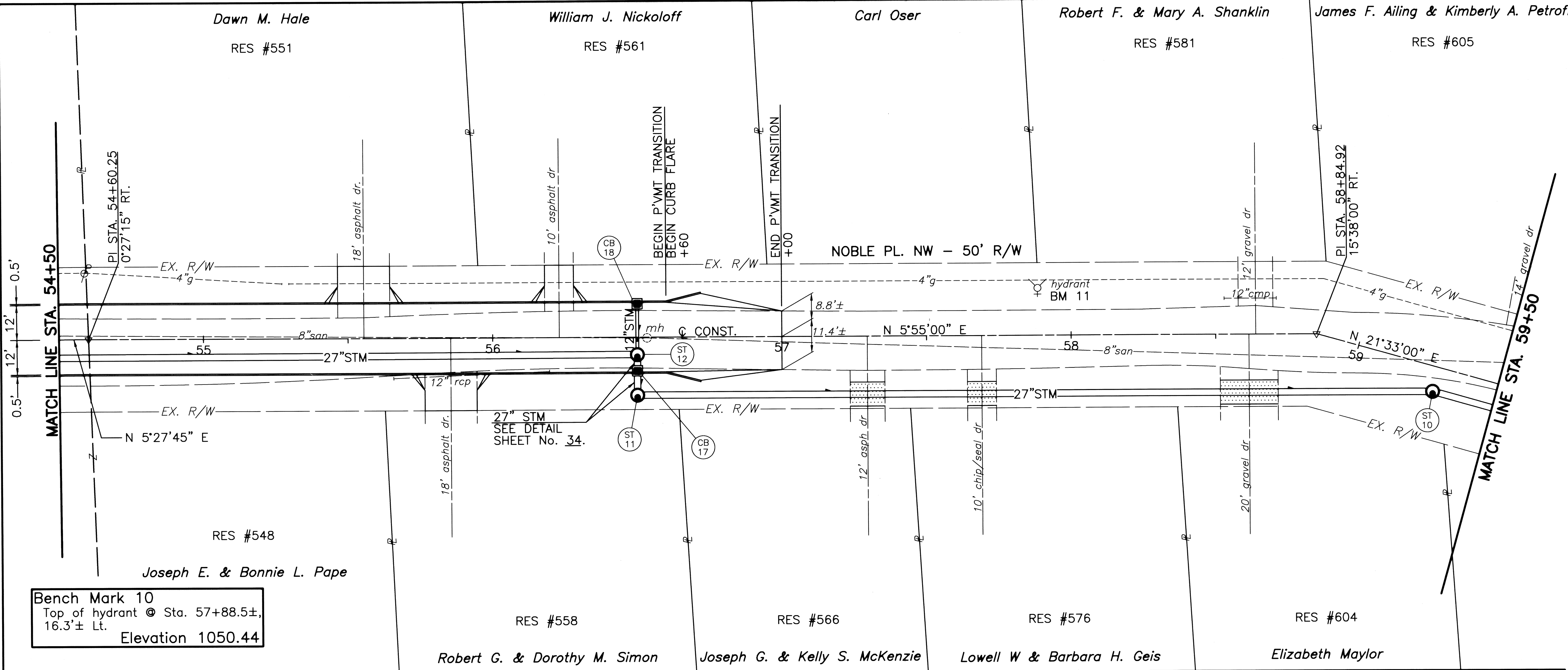
Noble Pl. NW Plan & Profile Sta. 49+50.00 TO Sta. 54+50.00

City of Massillon

Stark County, Ohio

20

37



THE CITY OF MASSILLON, OHIO

ACCOUNT NUMBER 98SS01

DATE Oct. 29, 1998

DRAWN BY F. Werner

ELECTRONIC FILE NAME: 98SS2101.DWG

CITY OF MASSILLON

Francis H. Cicchinelli, Jr.
Mayor

21

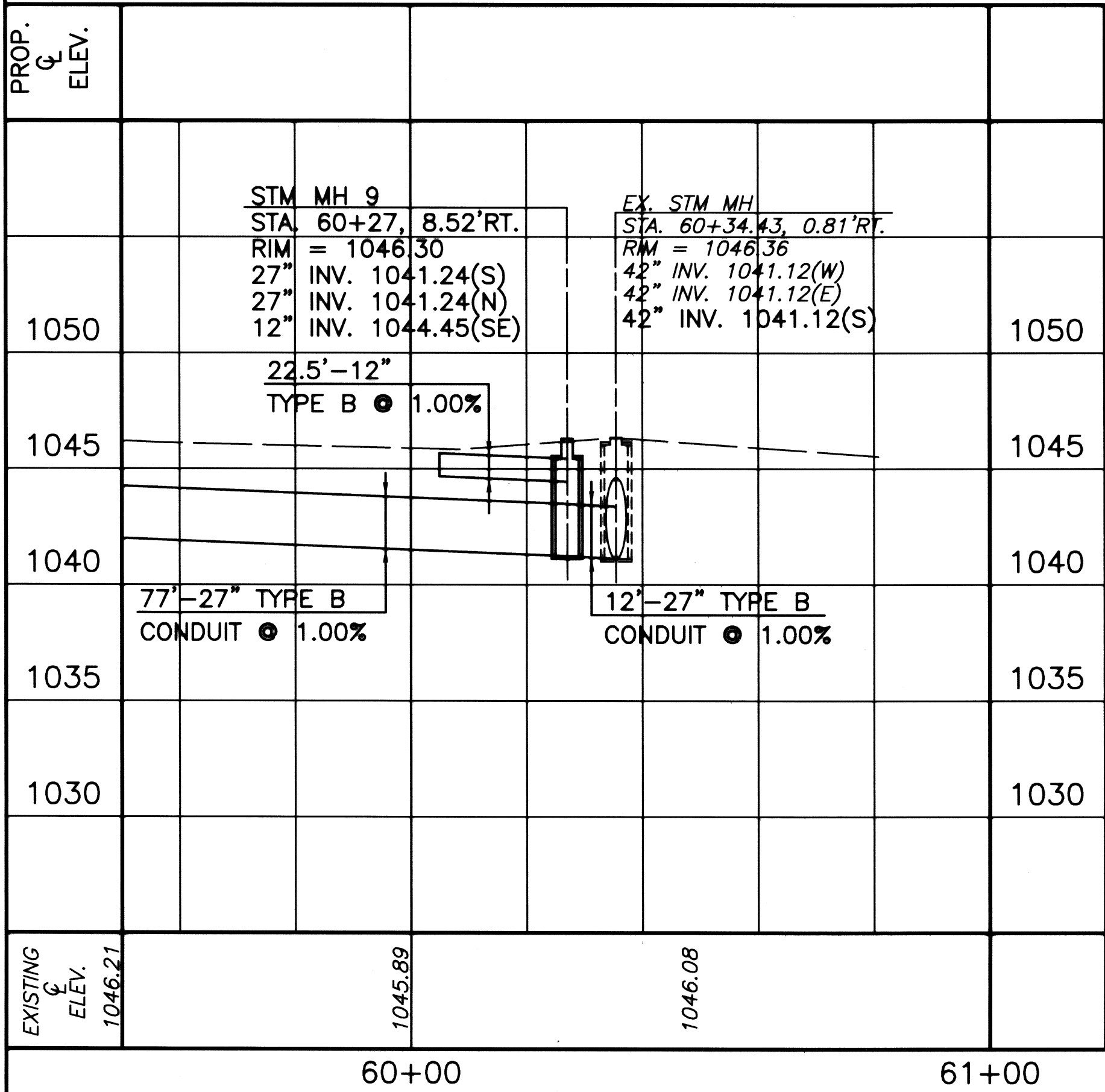
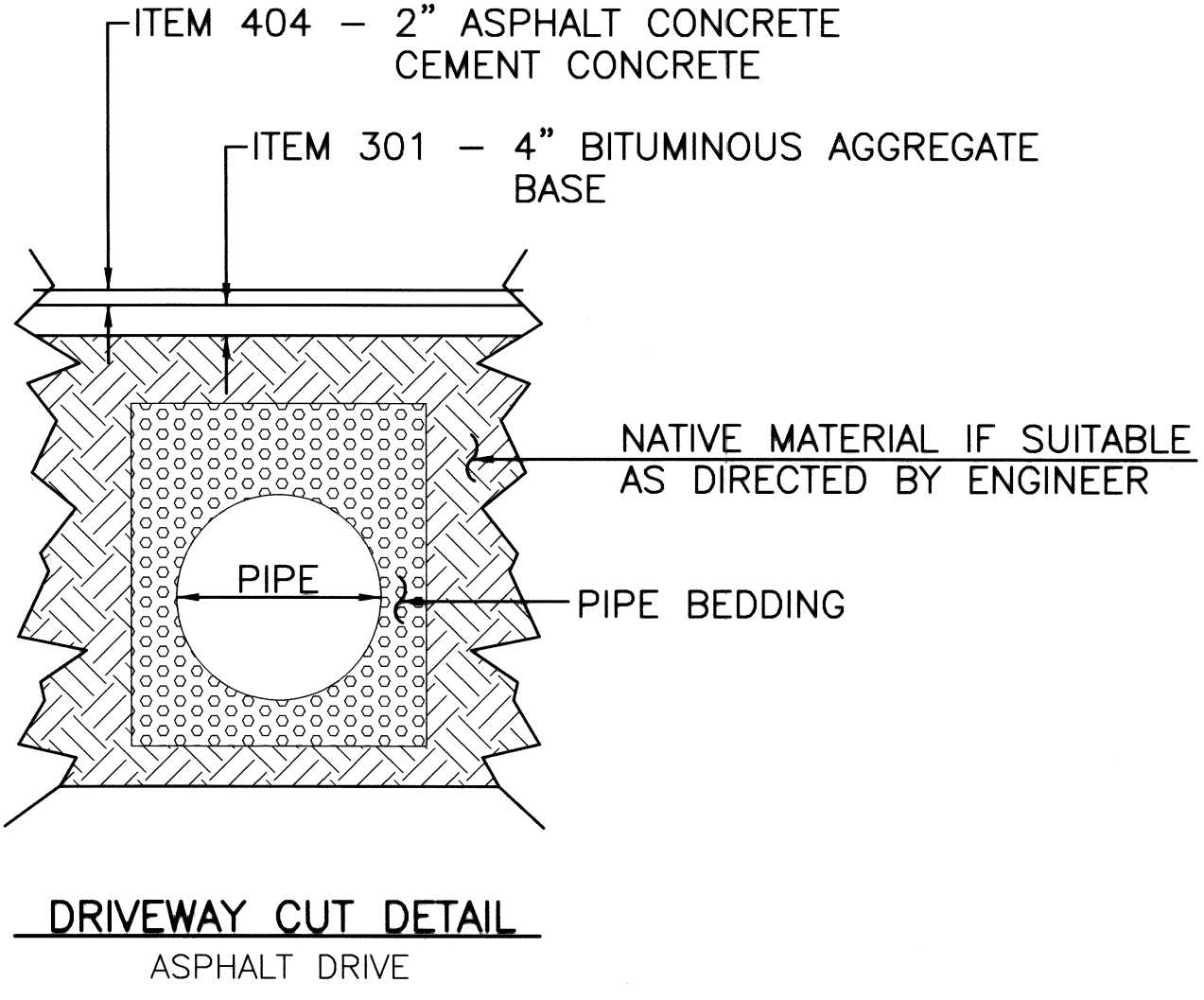
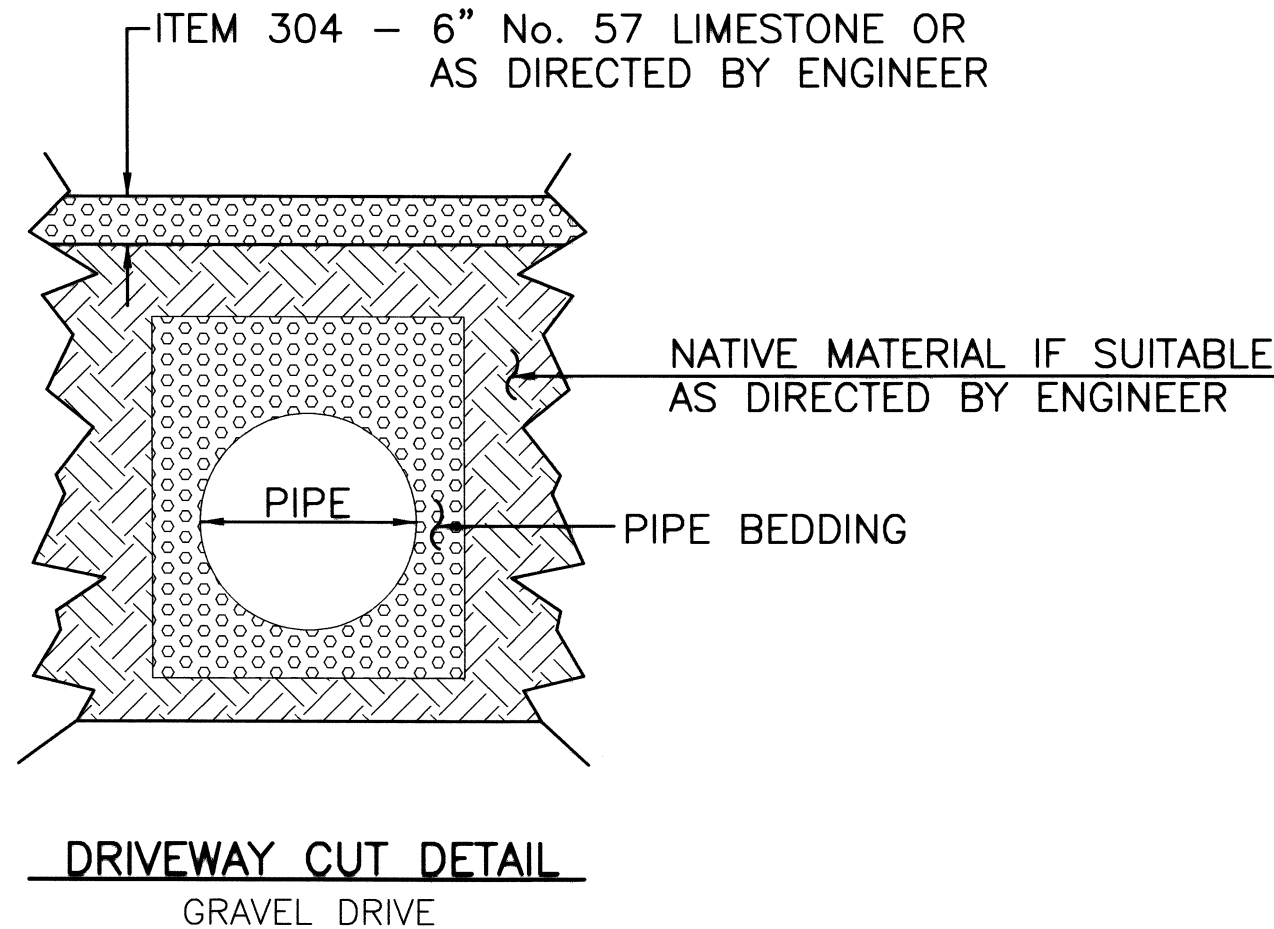
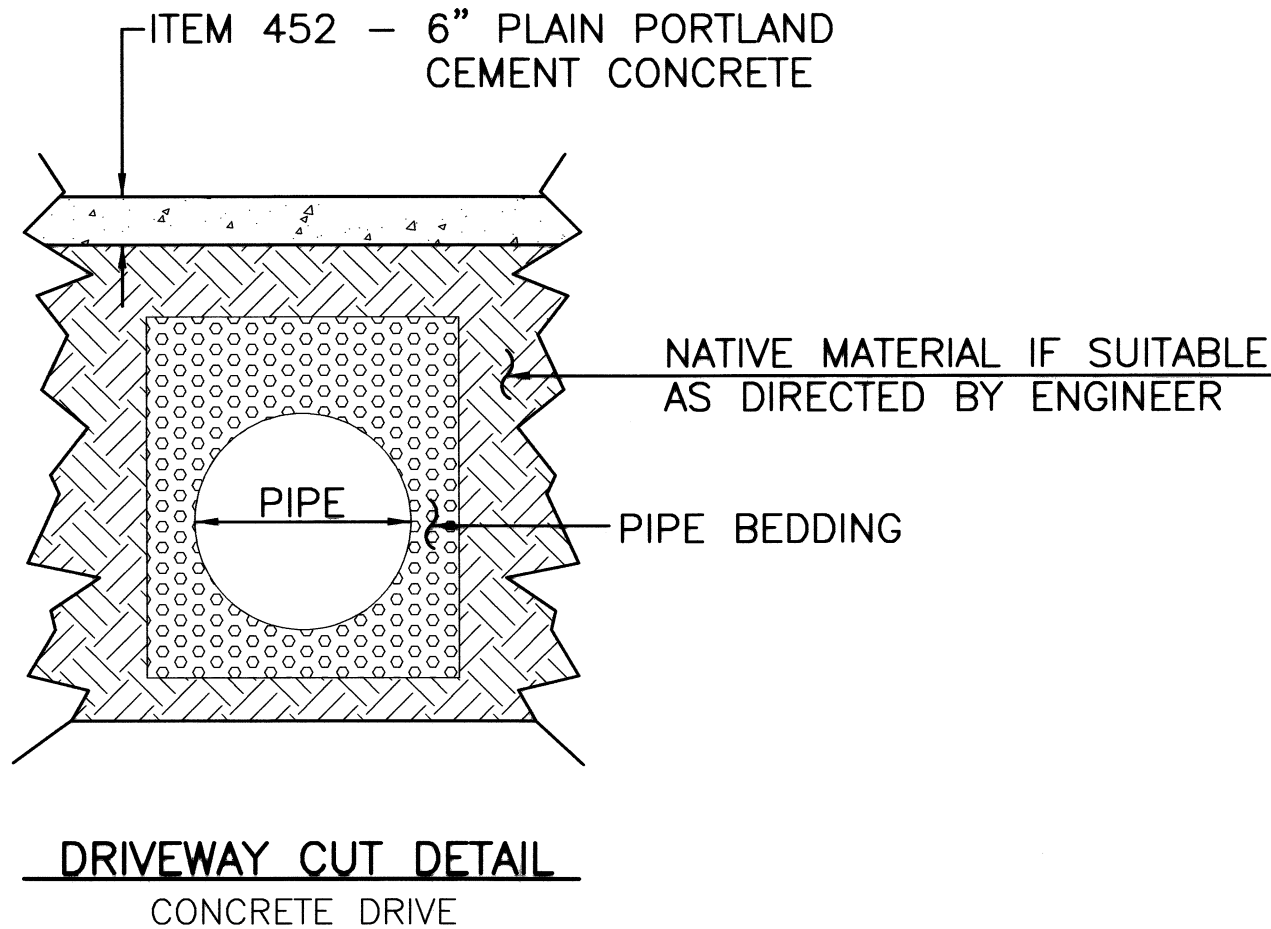
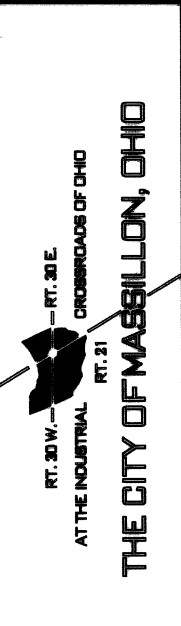
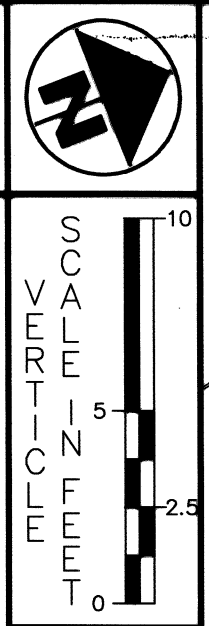
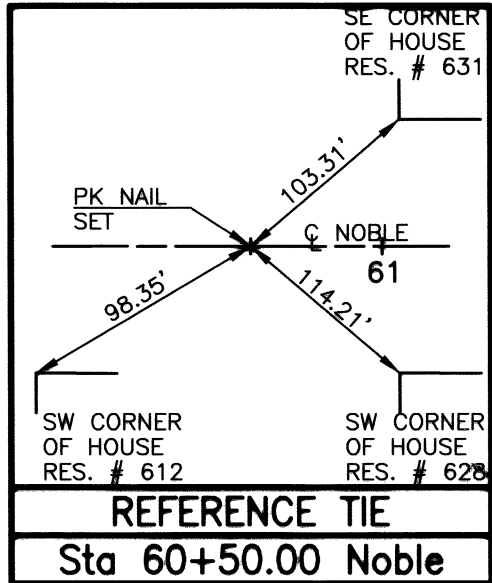
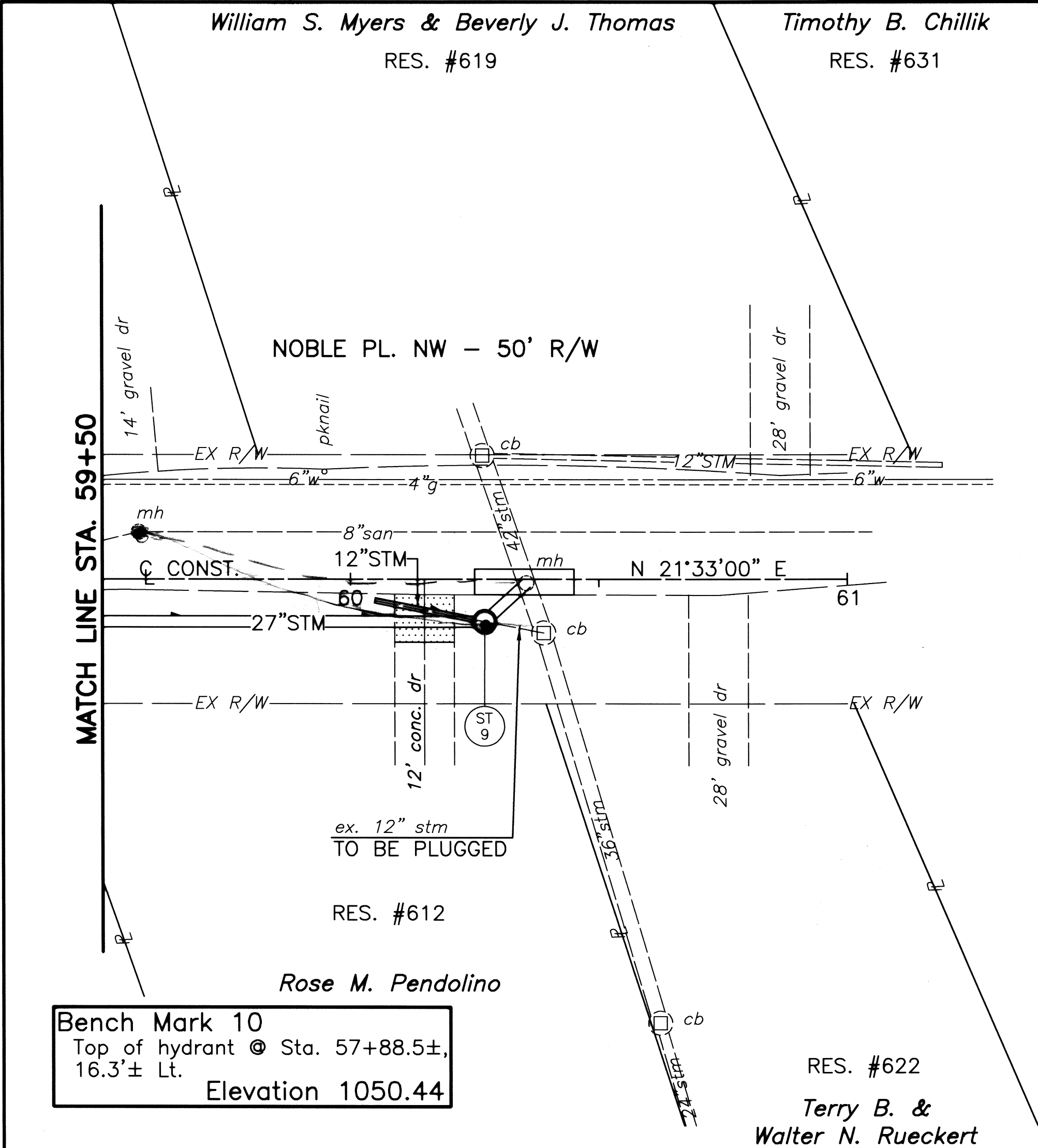
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FOTHERGILL-BELMONT SANITARY SEWER PROJECTS

Noble Pl. NW Plan & Profile Sta. 54+50.00 TO Sta. 59+50.00

City of Massillon

Stark County, Ohio



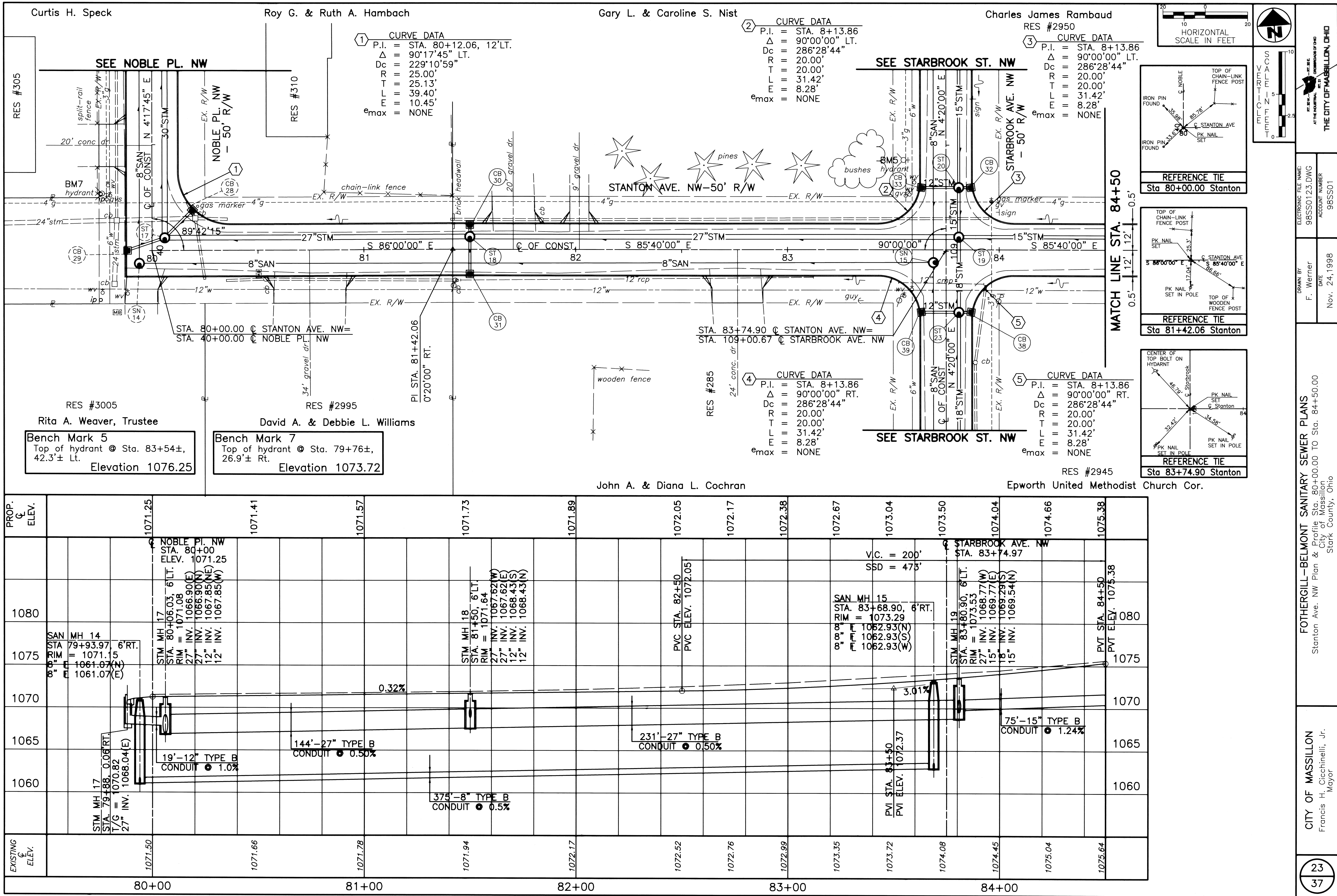
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DRAWN BY
F. Werner

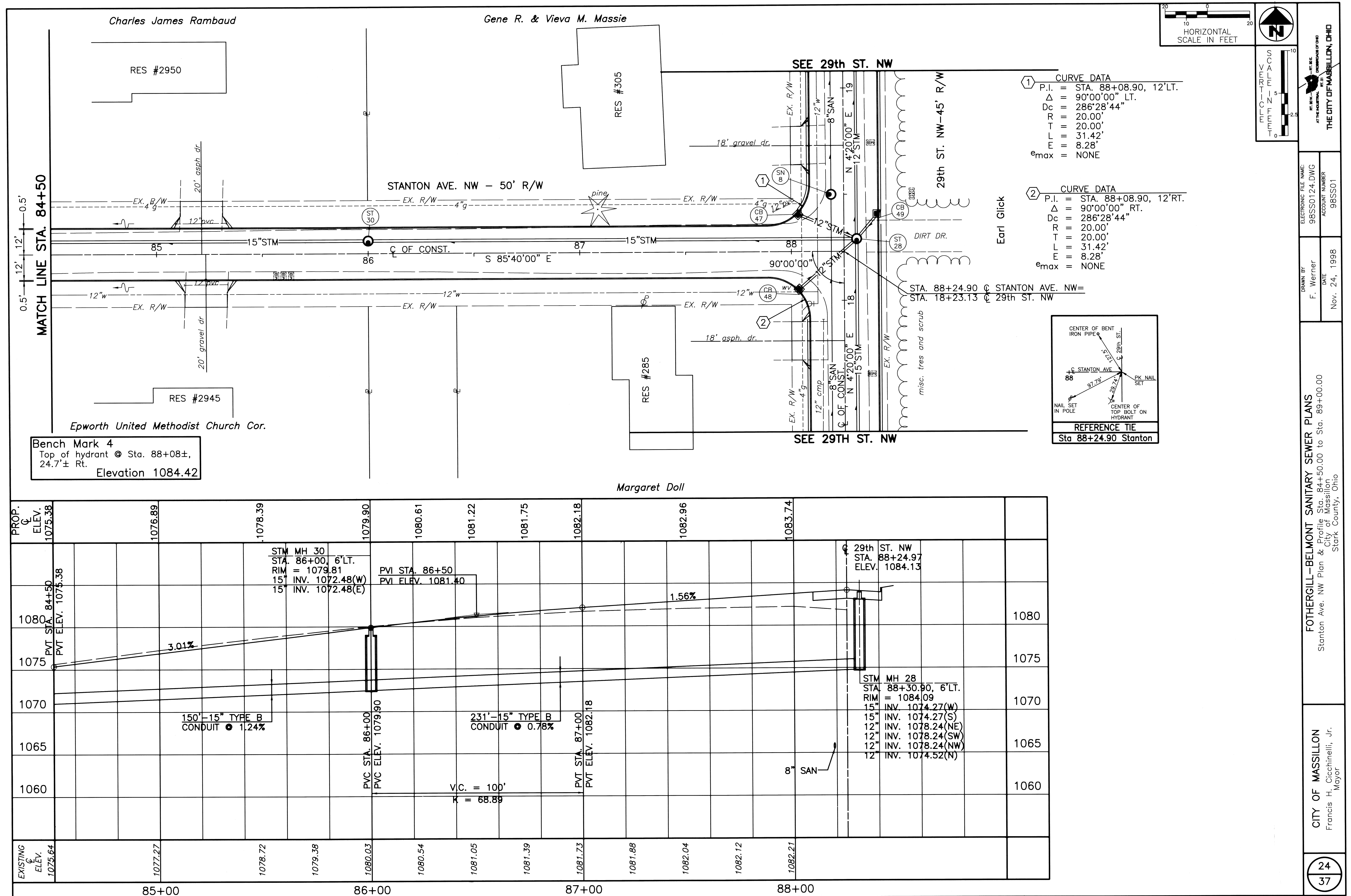
DATE
Nov. 24, 1998

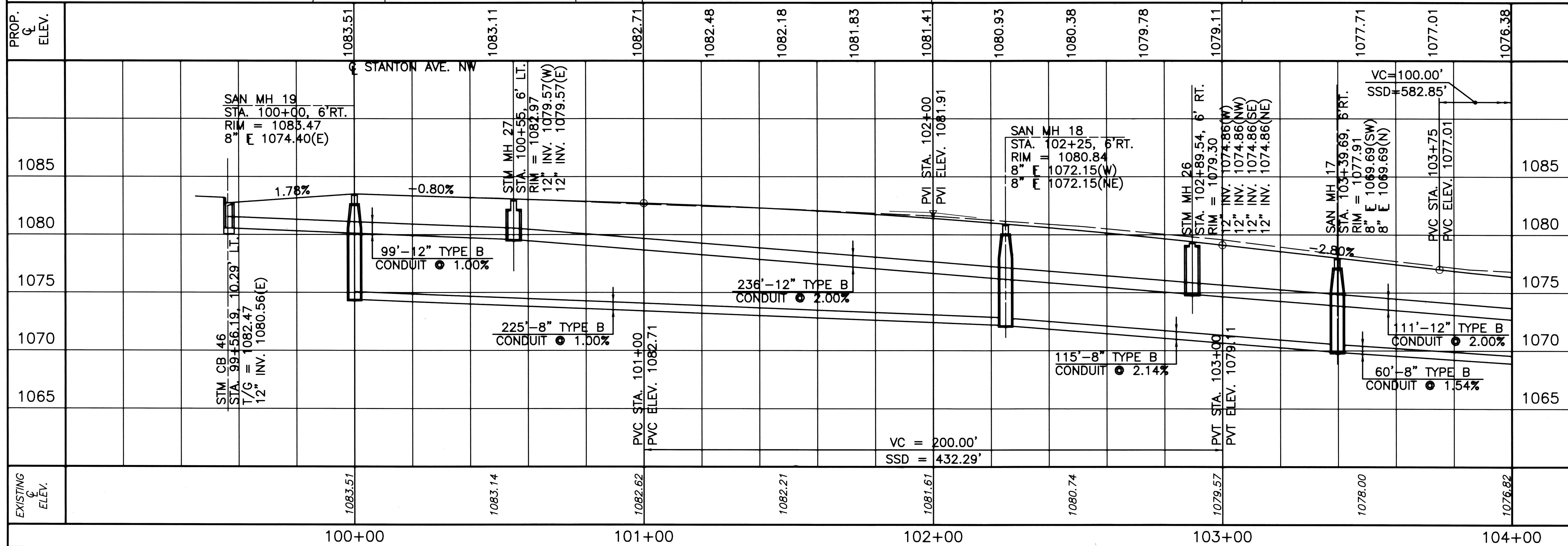
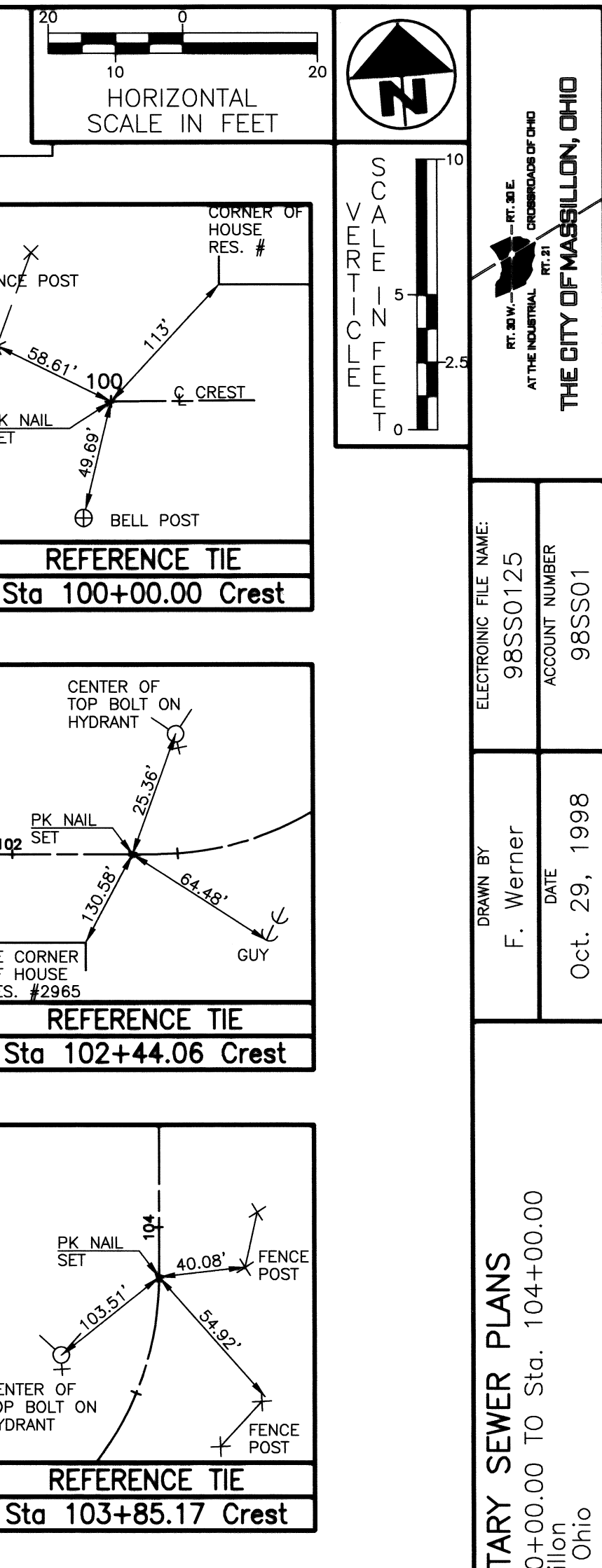
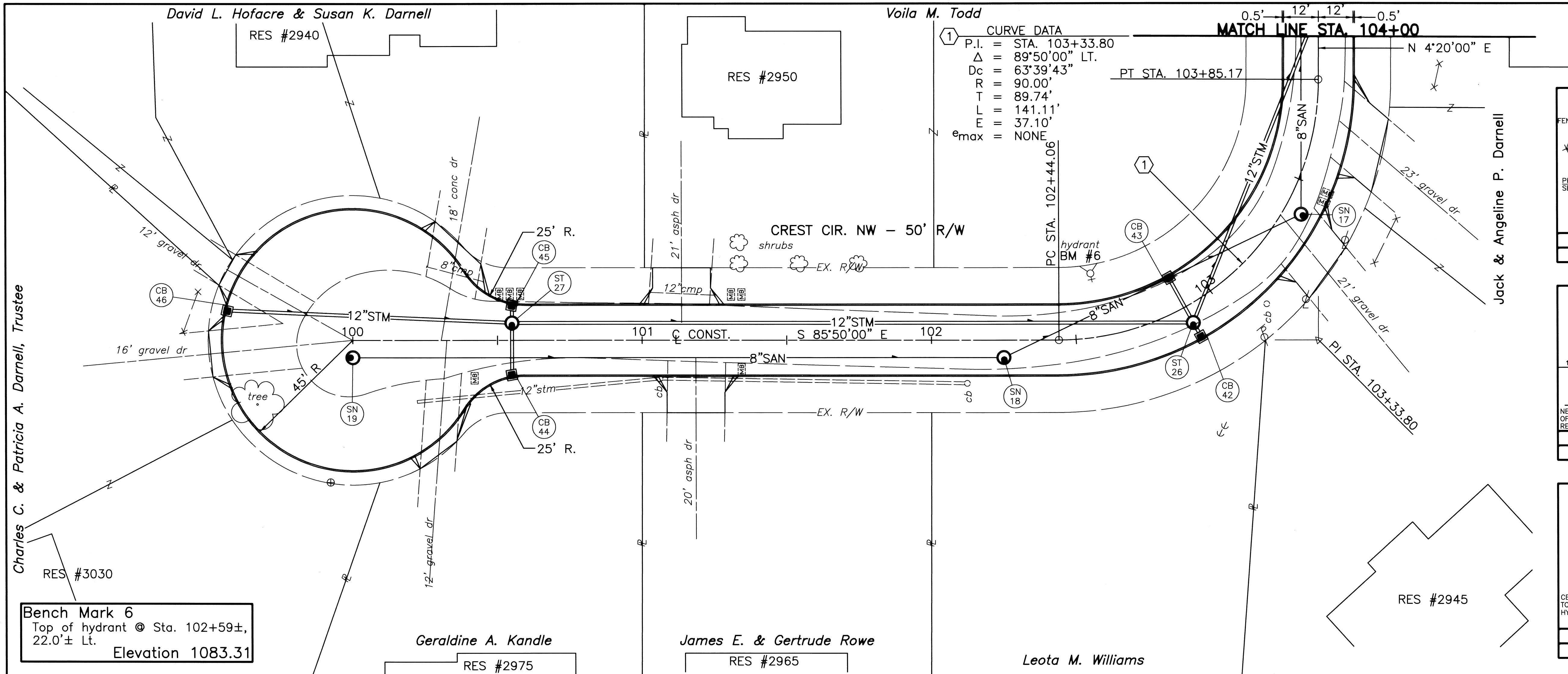
FOTHERGILL-BELMONT SANITARY SEWER PLANS
Noble Pl. Plan & Profile Sta. 59+50 TO Sta. 61+00
City of Massillon
Stark County, Ohio

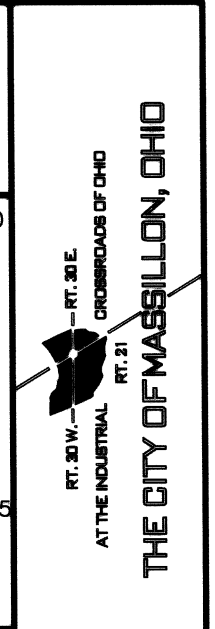
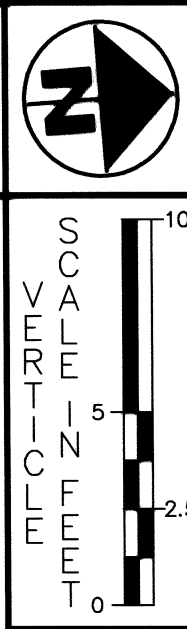
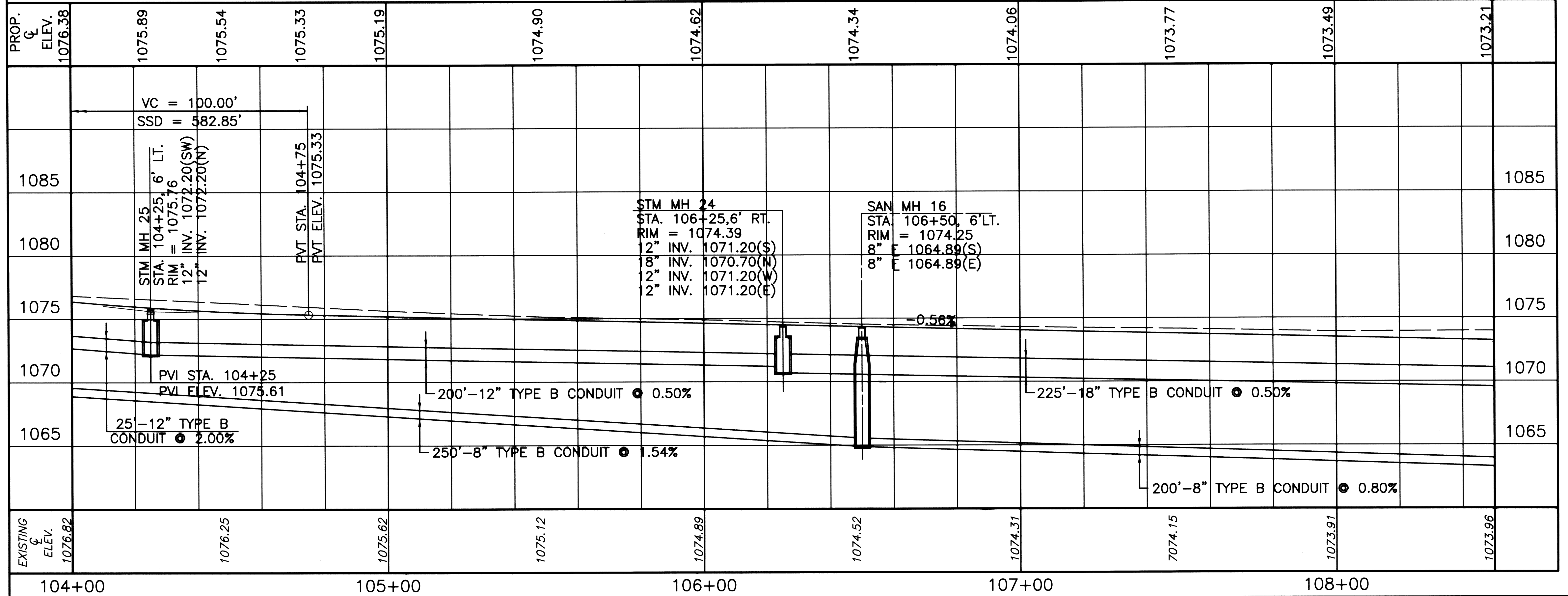
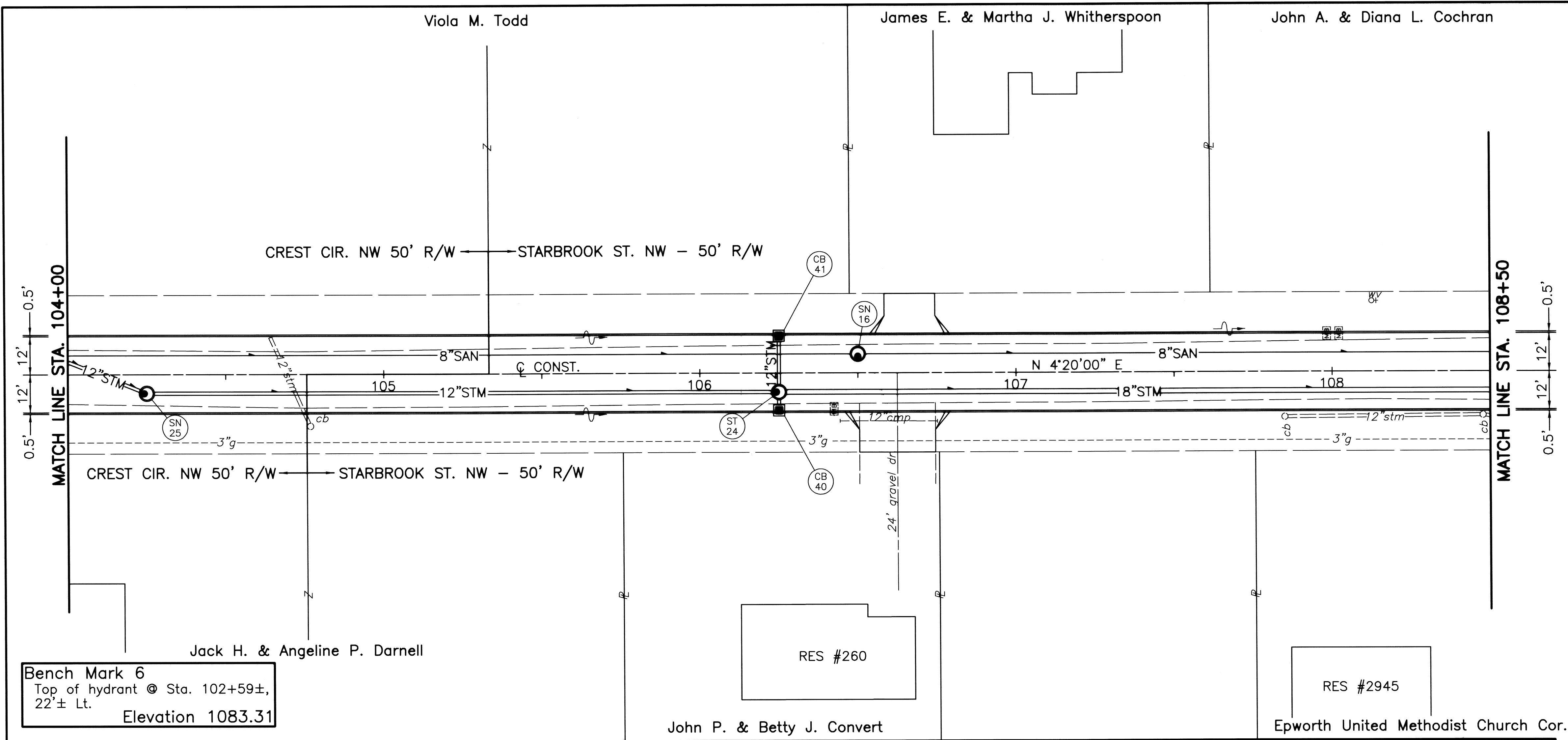
CITY OF MASSILLON
Francis H. Cicchinelli, Jr.
Mayor



FOTHERGILL-BELMONT SANITARY SEWER PLANS
Stanton Ave. NW Plan & Profile Sta. 80+00.00 TO Sta. 84+50.00
City of Massillon
Francis H. Cicchinelli, Jr.
Mayor





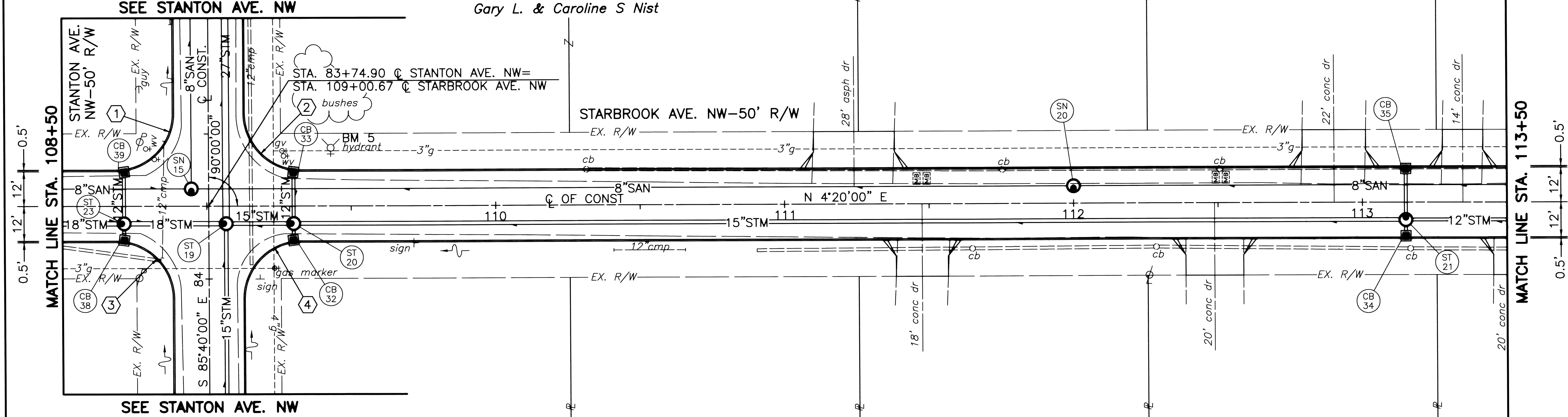


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98SS0125.DWG
DRAWN BY:
F. Werner
DATE:
Nov. 25, 1998
ACCOUNT NUMBER:
98SS01

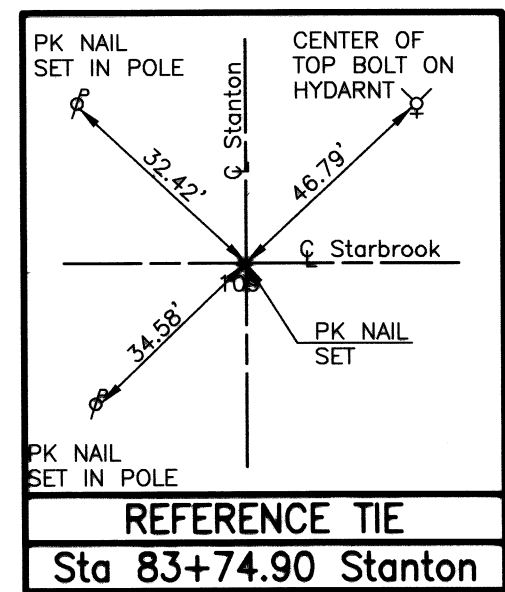
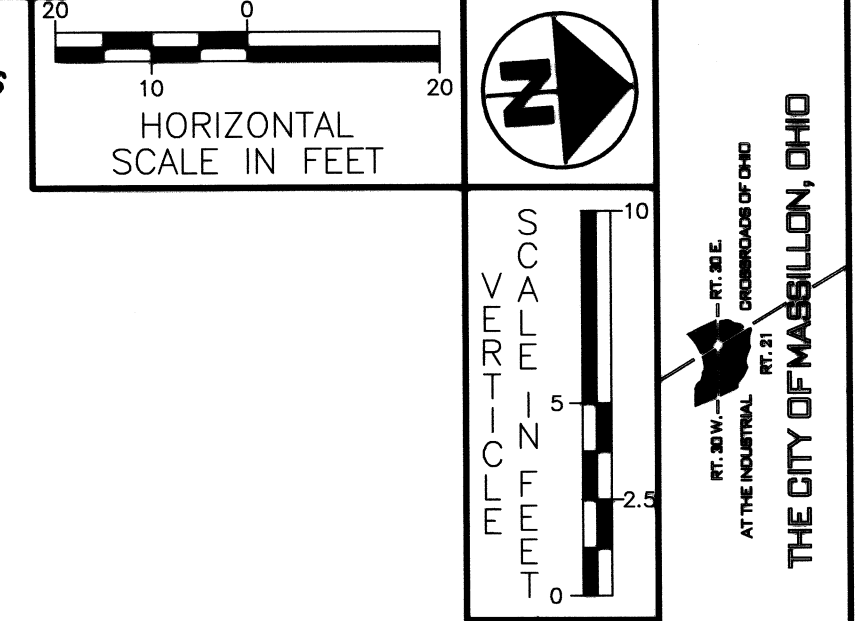
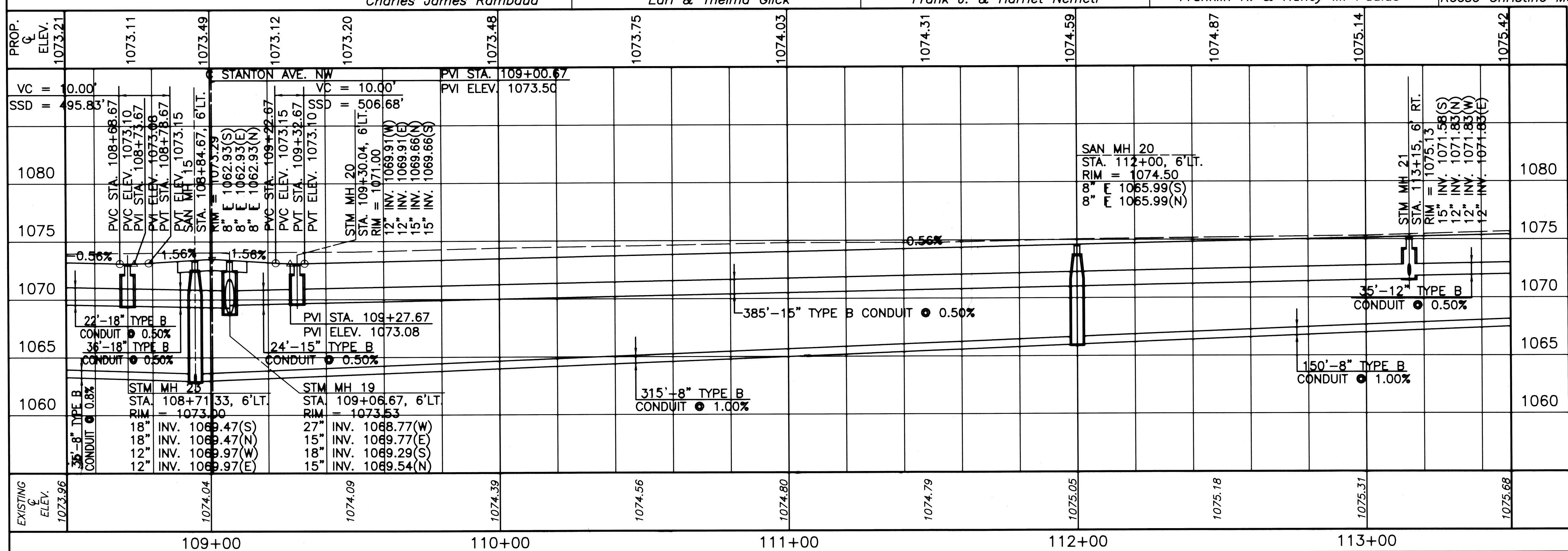
FOTHERGILL-BELMONT SANITARY SEWER PLANS
Crest Cir. NW / Starbrook St. NW Sta. 80+00.00 to Sta. 84+50.00
City of Massillon
Stark County, Ohio

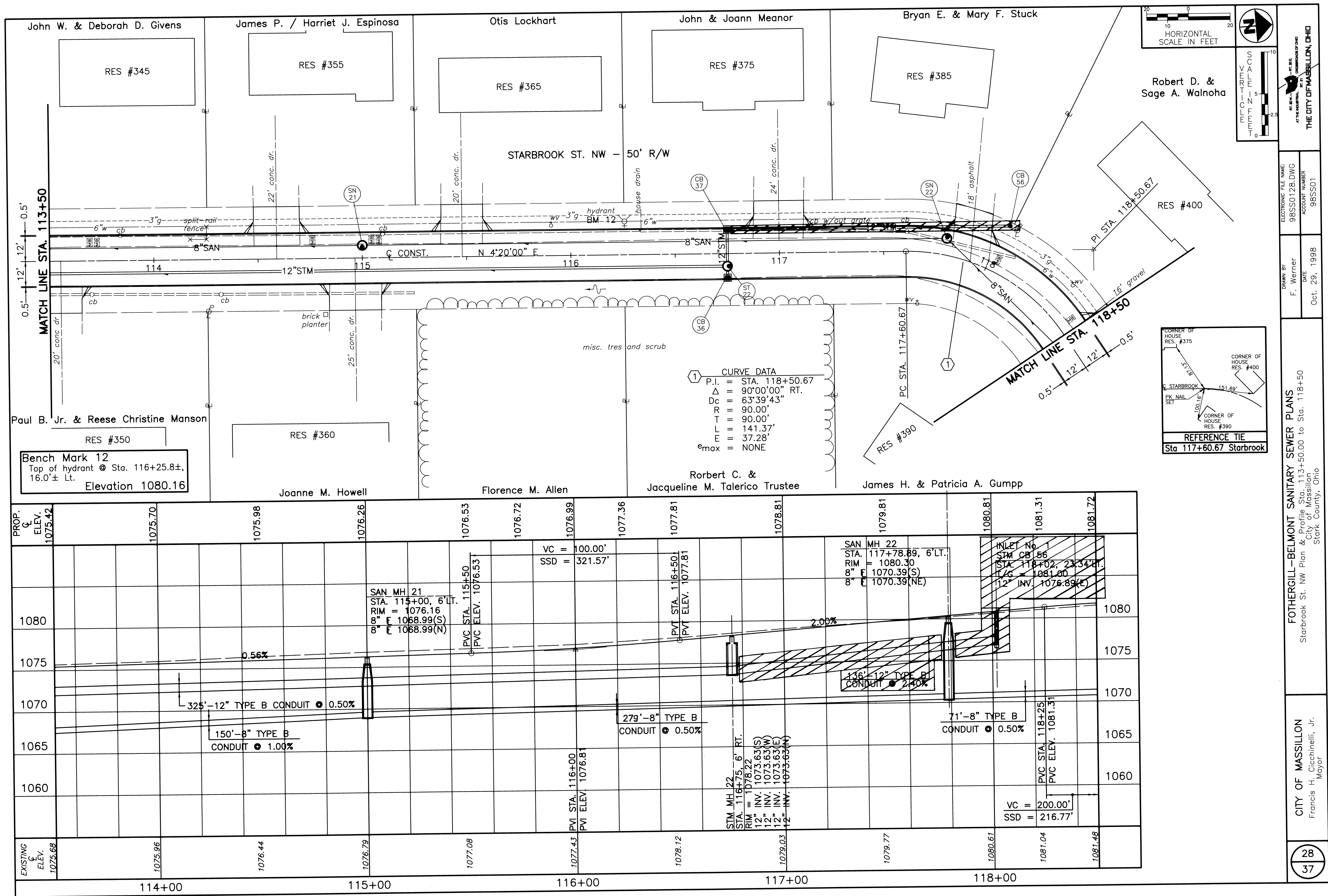
CITY OF MASSILLON
Francis H. Cicchinelli, Jr.
Mayor

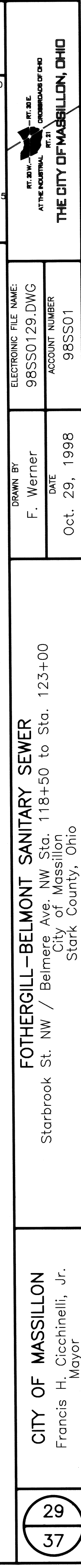
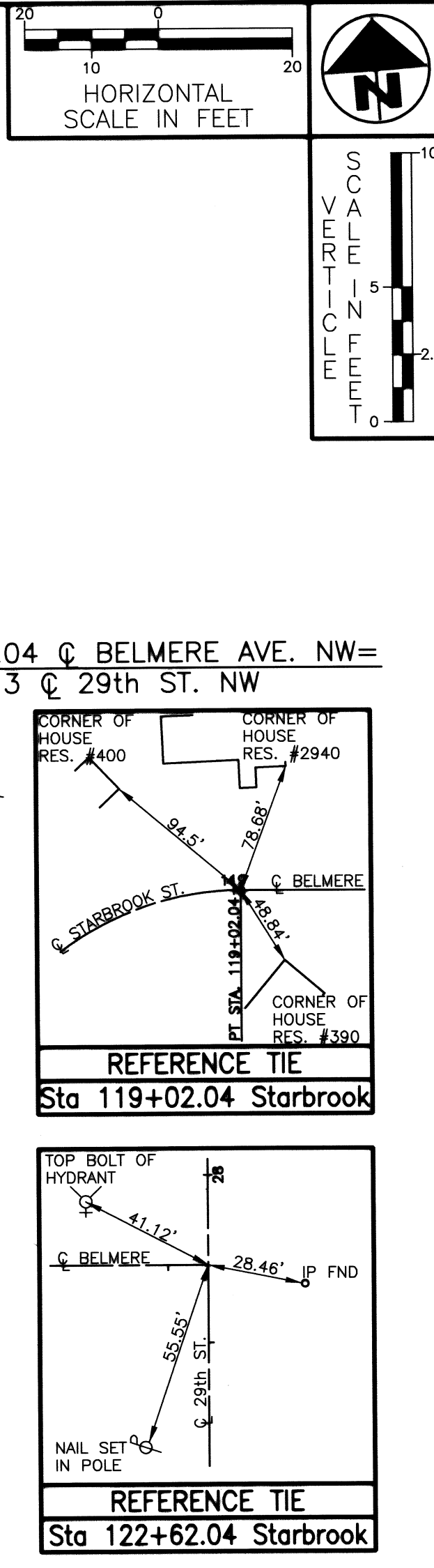
CURVE DATA	CURVE DATA	CURVE DATA	CURVE DATA
1. P.I. = STA. 108+88.87 Δ = 90°00'00" RT. Dc = 286°28'44" R = 20.00' T = 20.00' L = 31.42' E = 8.28' e _{max} = NONE	2. P.I. = STA. 110+12.67 Δ = 90°00'00" LT. Dc = 286°28'44" R = 20.00' T = 20.00' L = 31.42' E = 8.28' e _{max} = NONE	3. P.I. = STA. 108+88.87 Δ = 90°00'00" RT. Dc = 286°28'44" R = 20.00' T = 20.00' L = 31.42' E = 8.28' e _{max} = NONE	4. P.I. = STA. 110+12.67 Δ = 90°00'00" LT. Dc = 286°28'44" R = 20.00' T = 20.00' L = 31.42' E = 8.28' e _{max} = NONE



Bench Mark 5
Top of hydrant @ Sta. 109+43±,
20.0'± Lt.
Elevation 1076.25



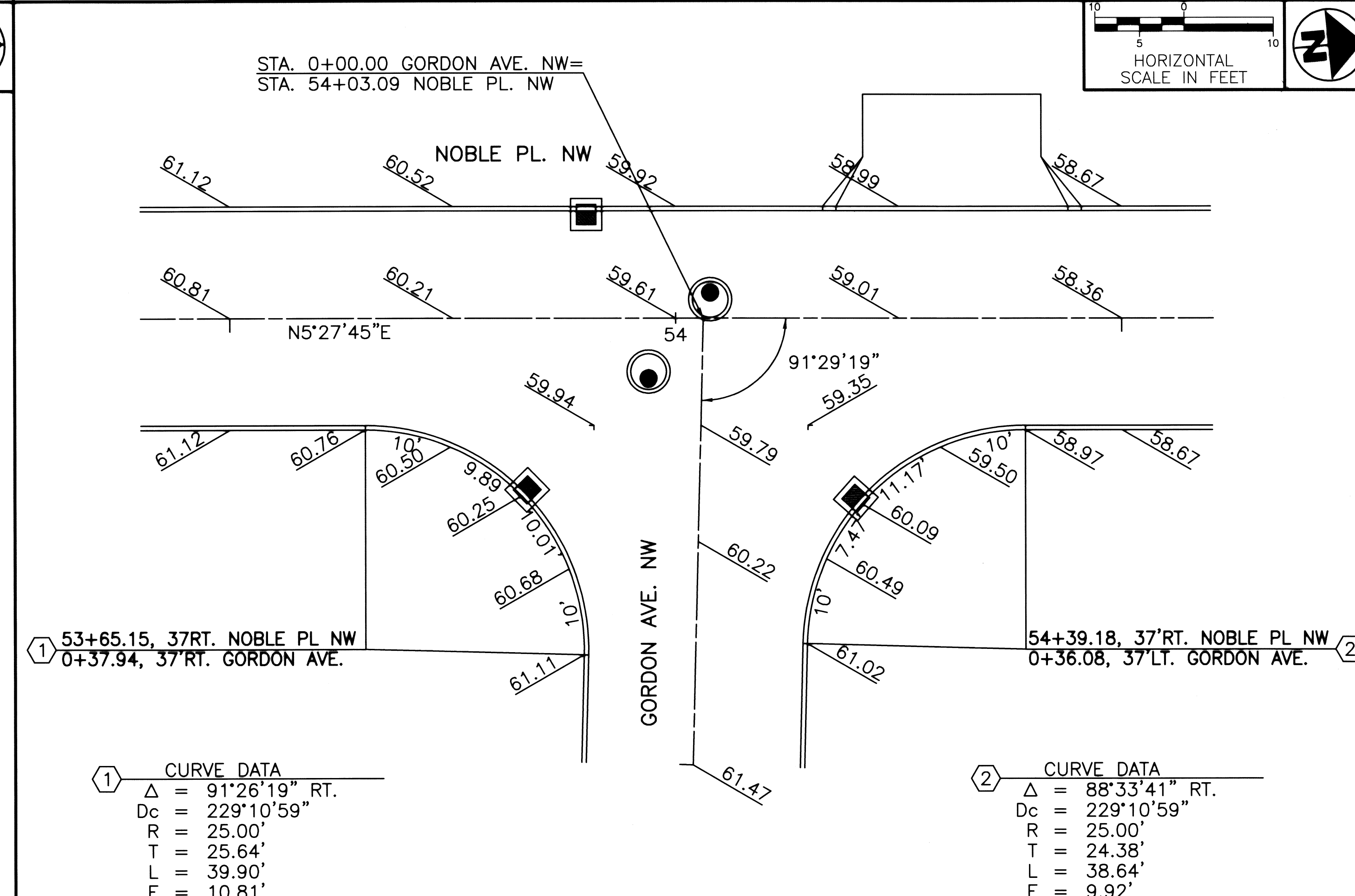
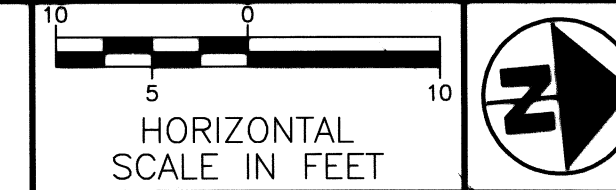
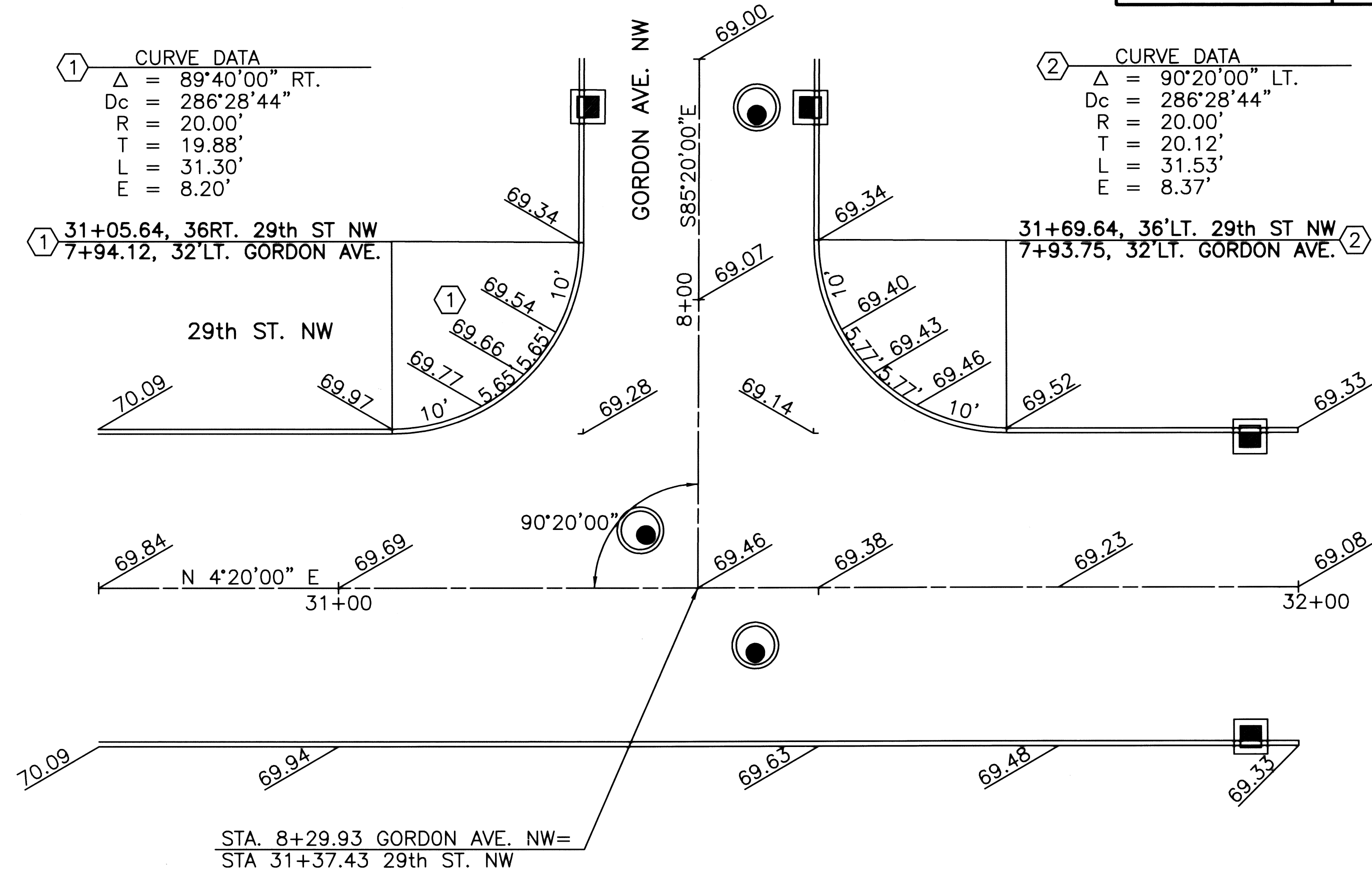
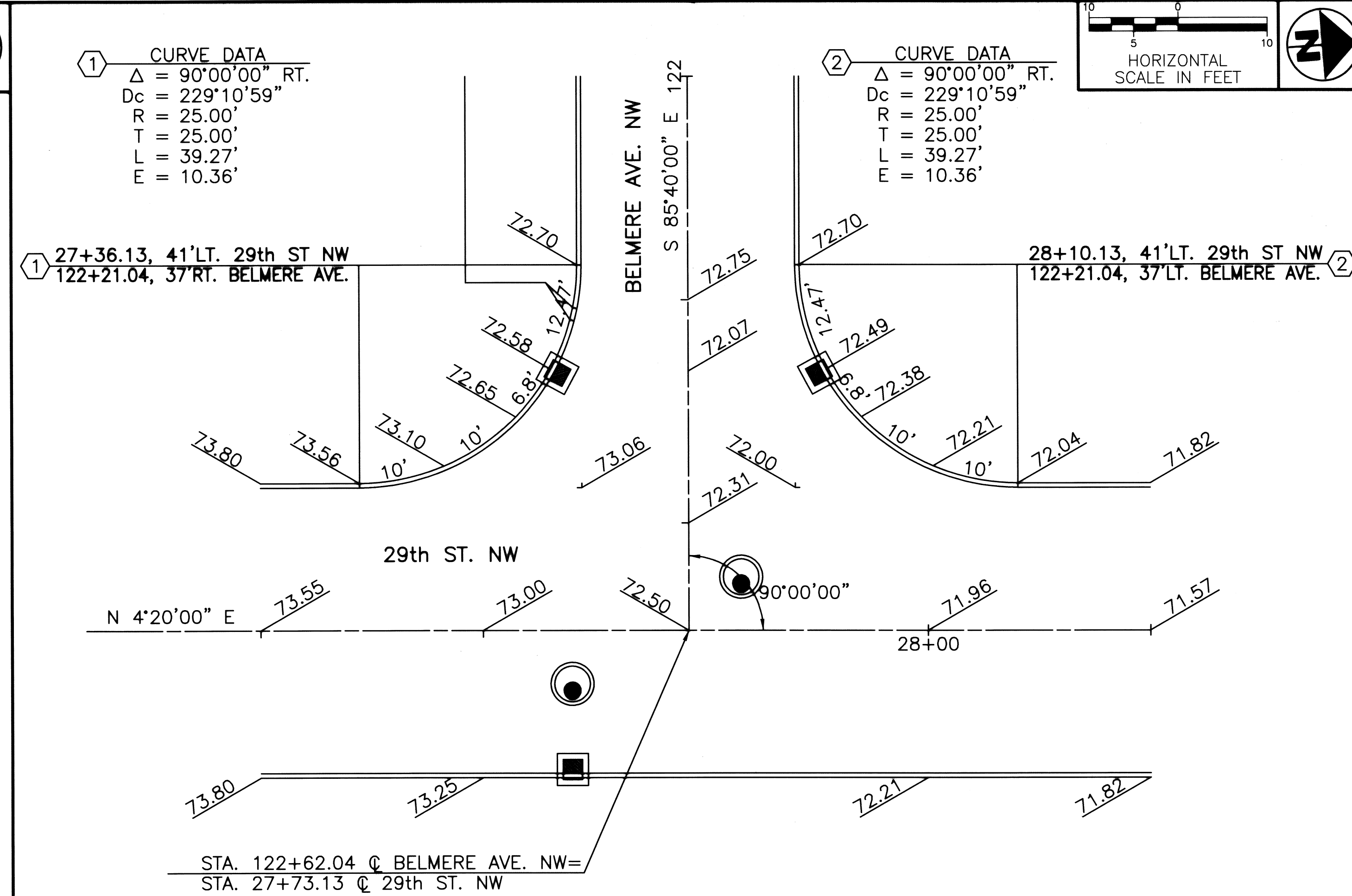
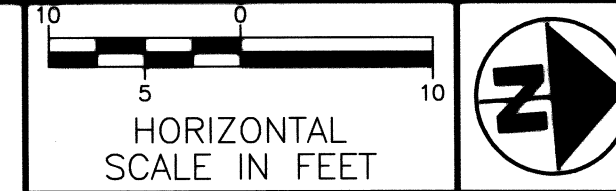
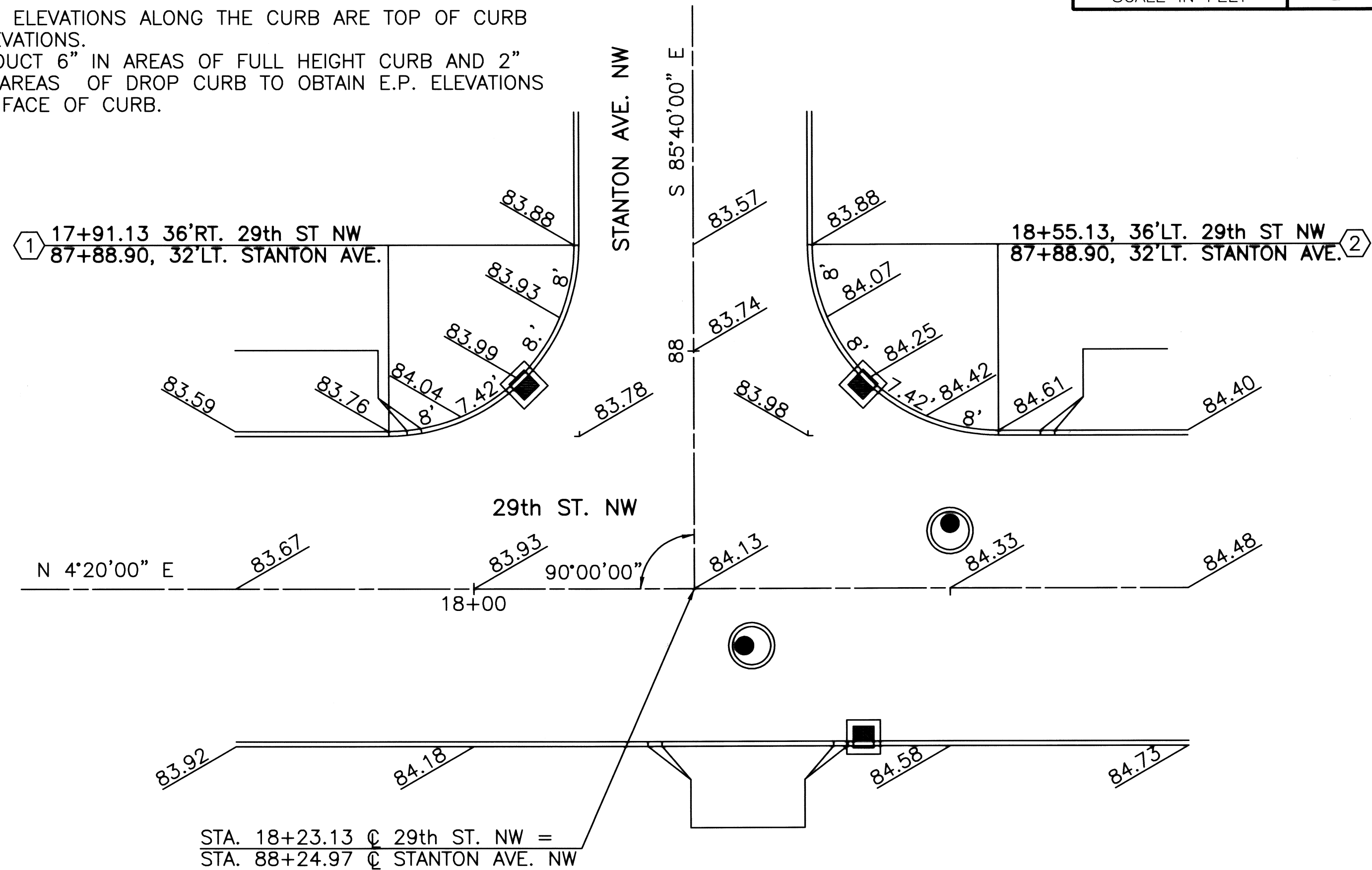




NOTES

ADD 1000 TO THE ELEVATION SHOWN FOR ACTUAL ELEVATION.

ALL ELEVATIONS ALONG THE CURB ARE TOP OF CURB ELEVATIONS.
DEDUCT 6" IN AREAS OF FULL HEIGHT CURB AND 2" IN AREAS OF DROP CURB TO OBTAIN E.P. ELEVATIONS AT FACE OF CURB.



FOTHERGILL-BELMONT SANITARY SEWER PLANS

Intersection Details-29th St./Stanton Ave.-29th St./Belmere Ave.-29th St./Gordon Ave.-Gordon Ave./Noble Pl.
City of Massillon
Stark County, Ohio

CITY OF MASSILLON
Francis H. Cicchinelli, Jr.
Mayor

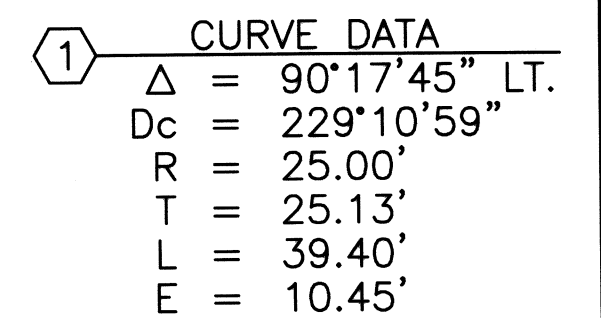
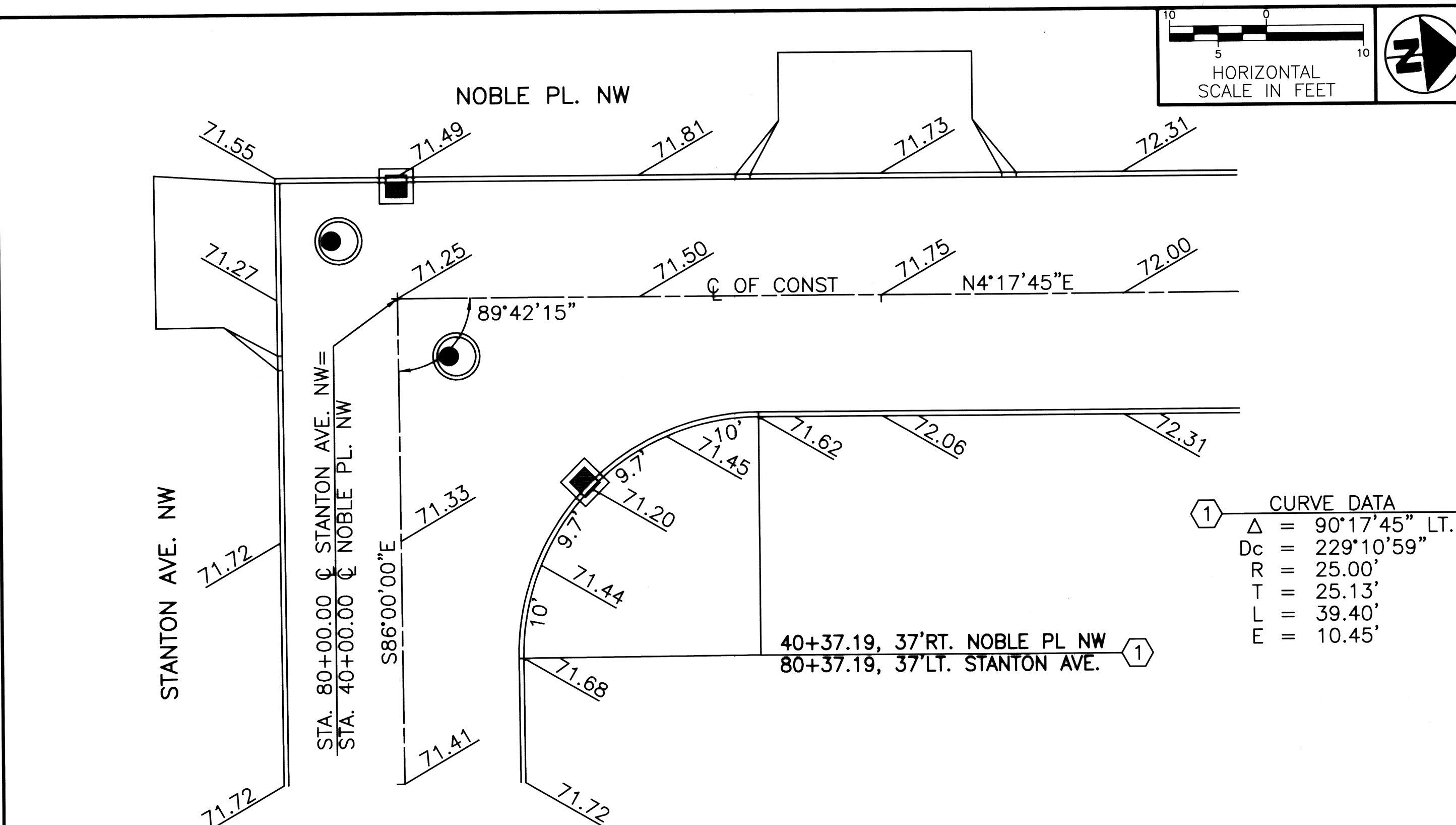
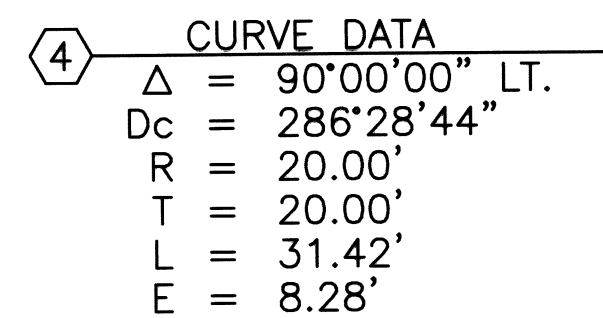
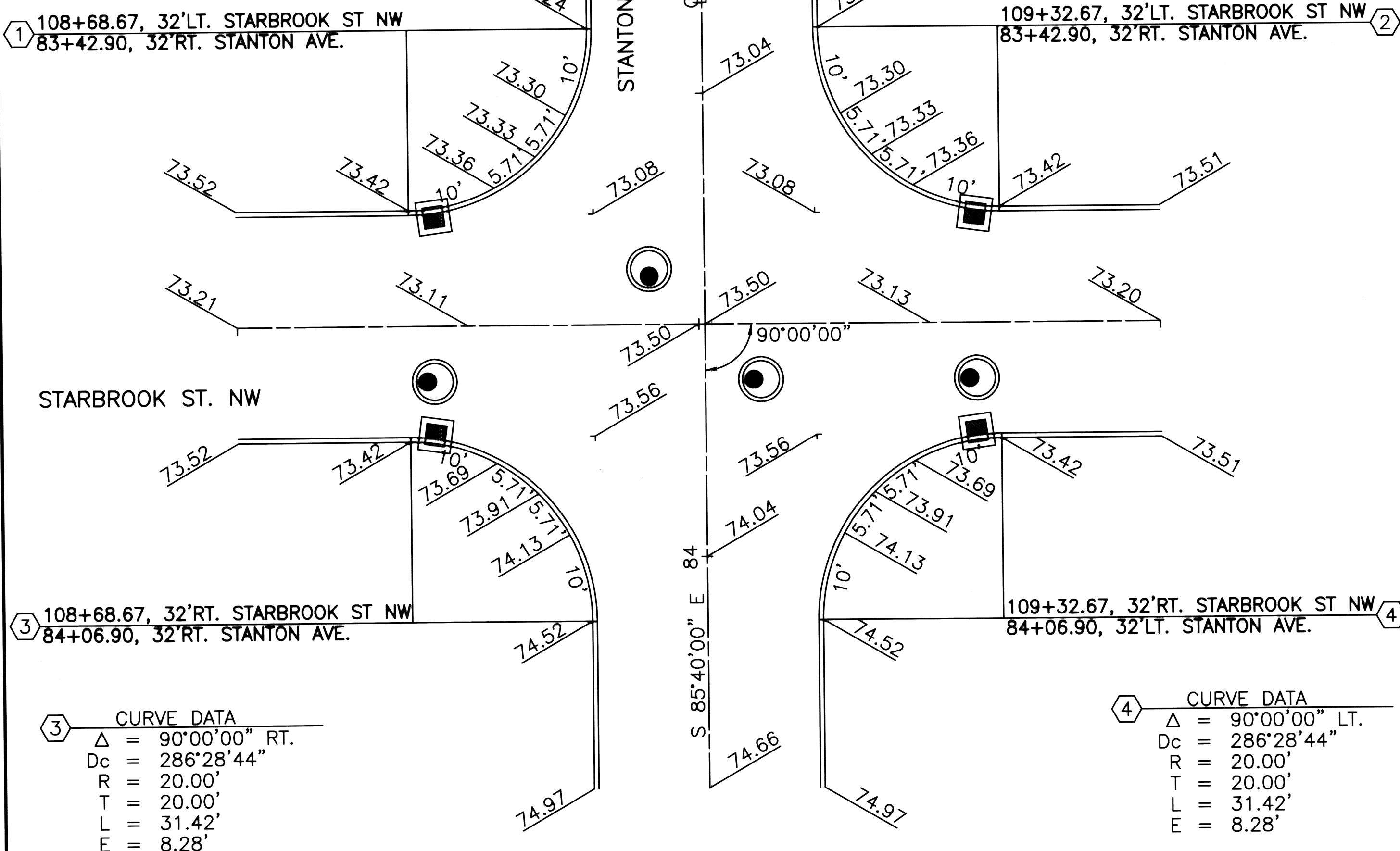
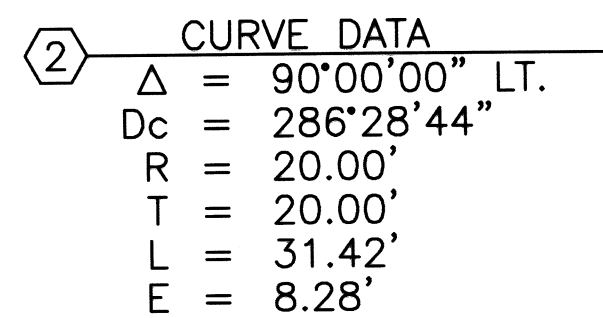
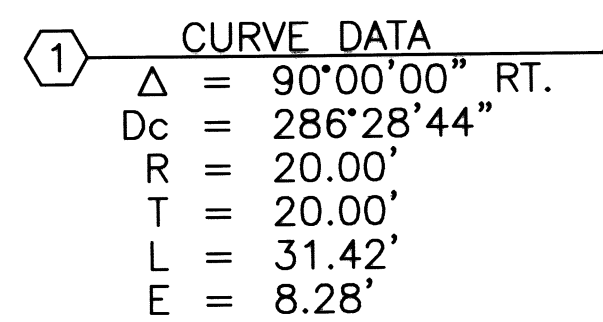
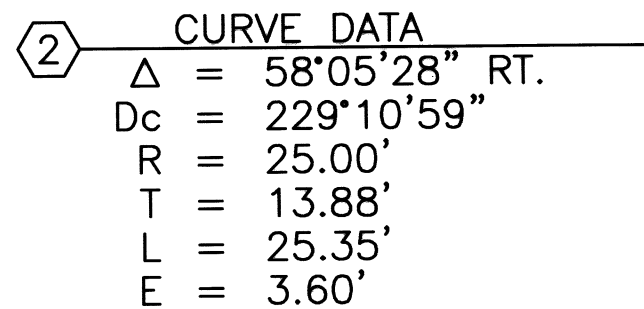
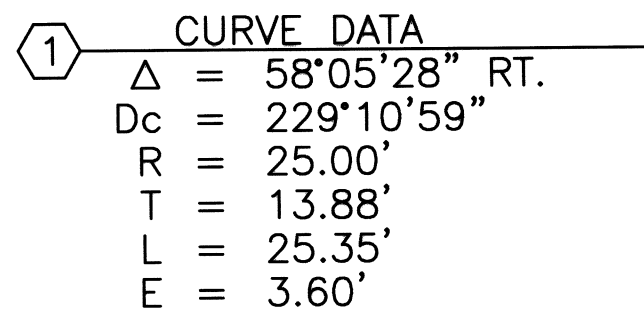
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ACCOUNT NUMBER
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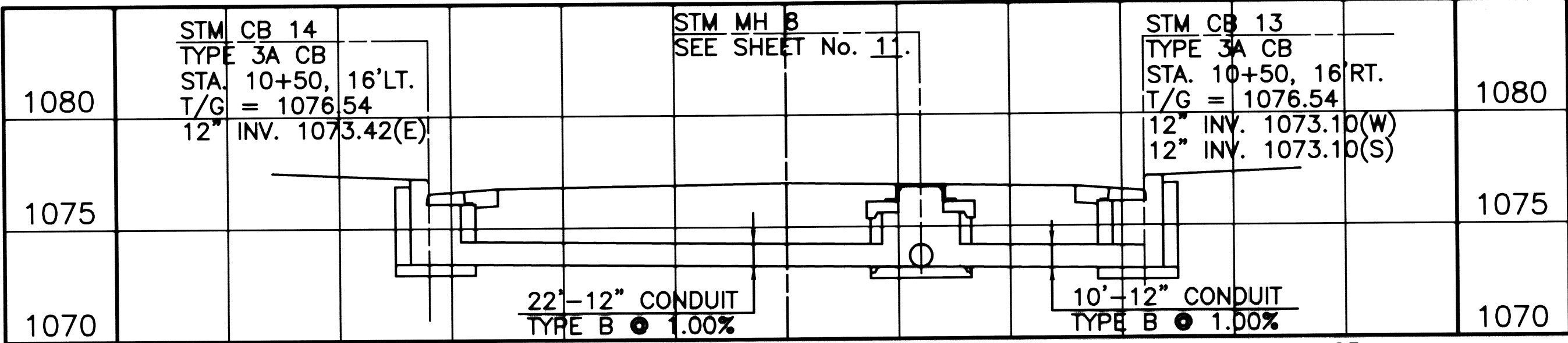
DRAWN BY:
F. Werner
DATE
Nov. 25, 1998

IT SHALL BE THE RESPONSIBILITY OF THE ENGINEER TO OBTAIN THE NECESSARY PERMITS FROM THE CITY OF MASSILLON, OHIO

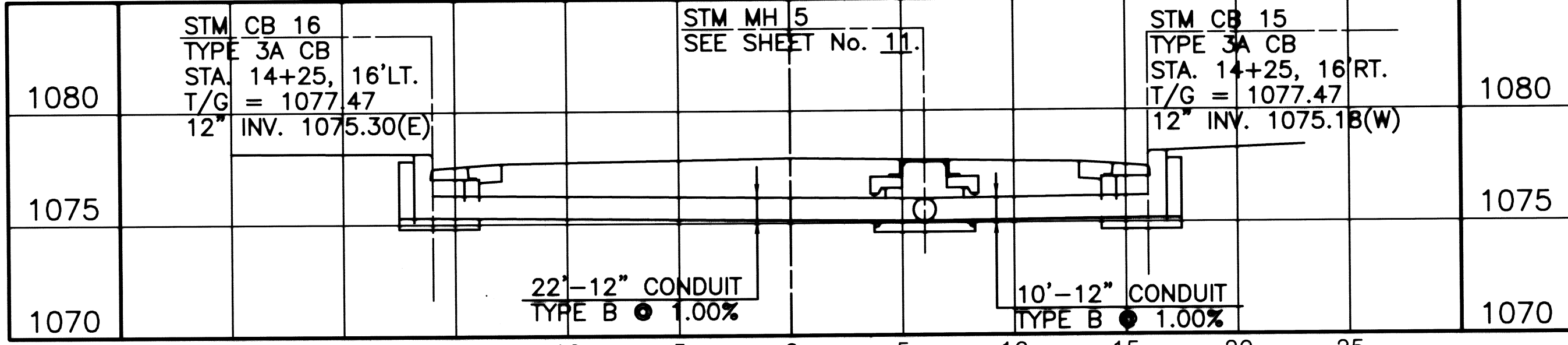
ADD 1000 TO THE ELEVATION SHOWN FOR ACTUAL ELEVATION.

ALL ELEVATIONS ALONG THE CURB ARE TOP OF CURB ELEVATIONS.
DEDUCT 6" IN AREAS OF FULL HEIGHT CURB AND 2" IN AREAS OF DROP CURB TO OBTAIN E.P. ELEVATIONS AT FACE OF CURB.

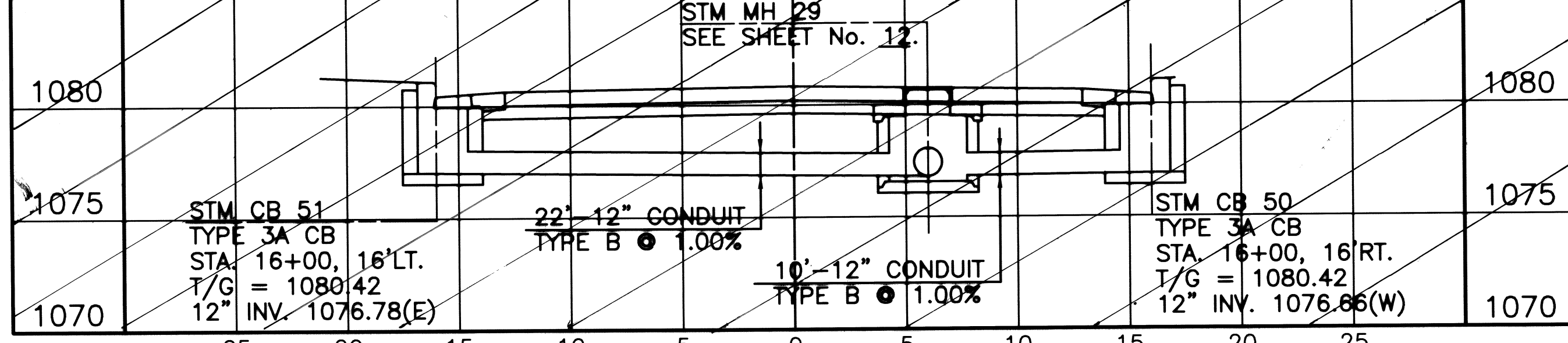




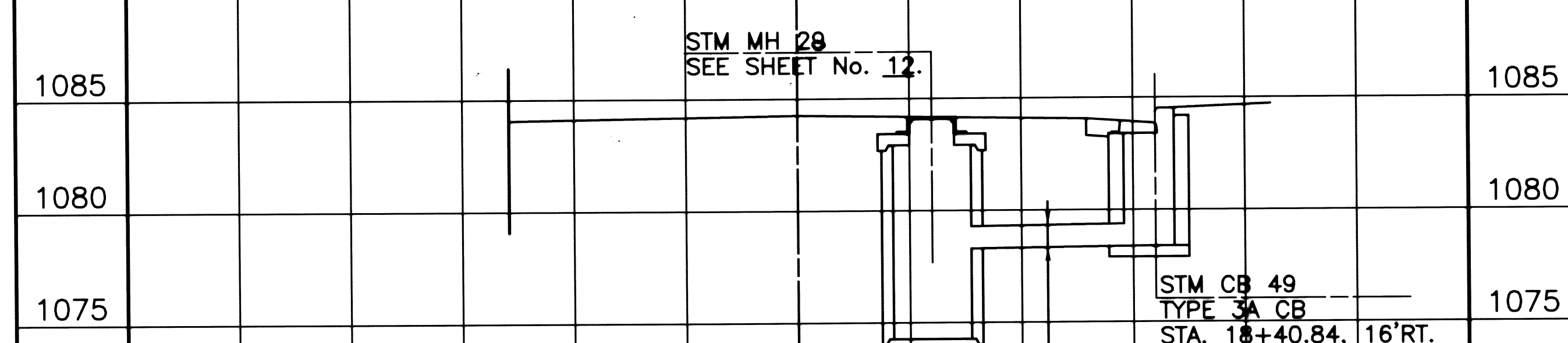
STORM SEWER DETAIL
STA. 10+50 29th St. NW



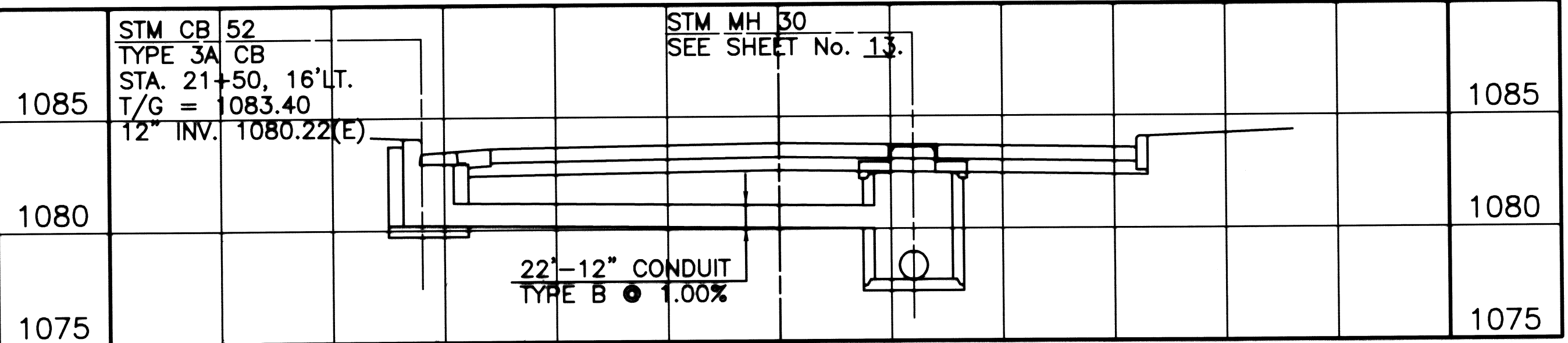
STORM SEWER DETAIL
STA. 14+25 29th St. NW



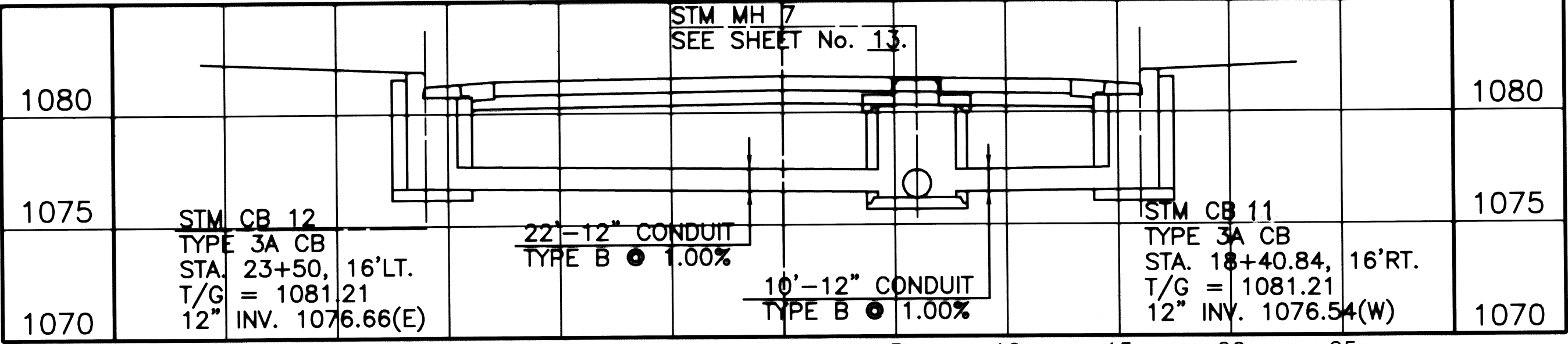
STORM SEWER DETAIL
STA. 16+00 29th St. NW



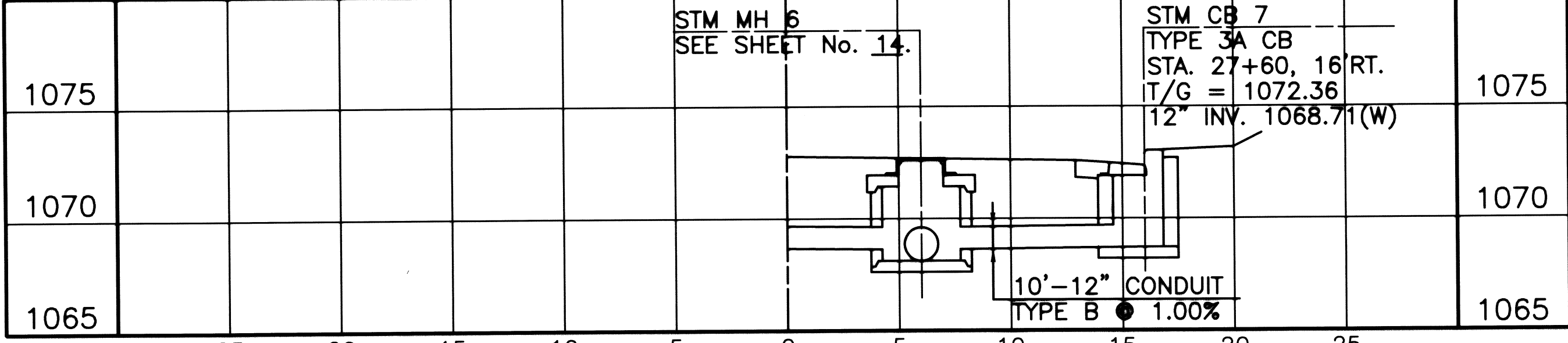
STORM SEWER DETAIL
STA. 18+40.84 29th St. NW



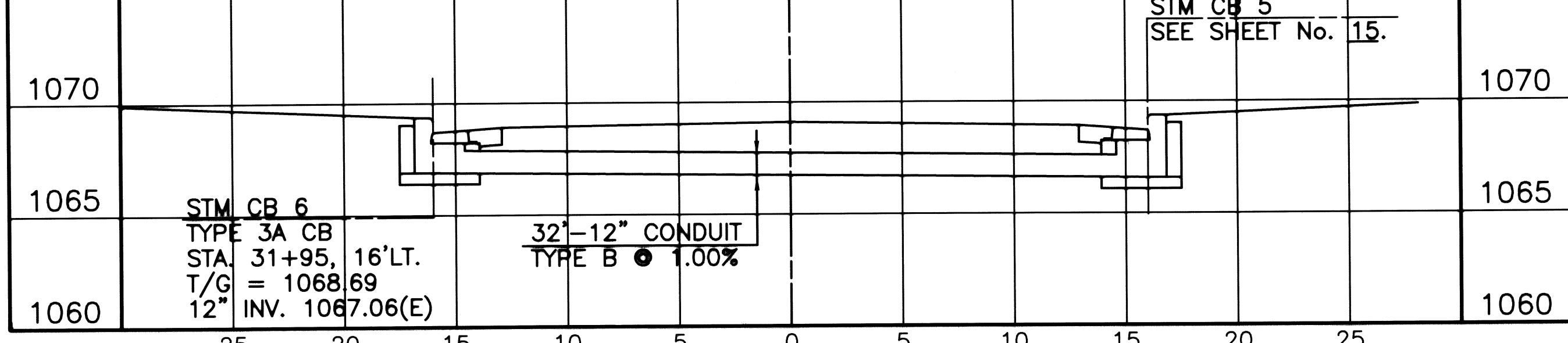
STORM SEWER DETAIL
STA. 21+50 29th St. NW



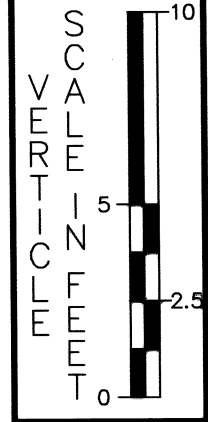
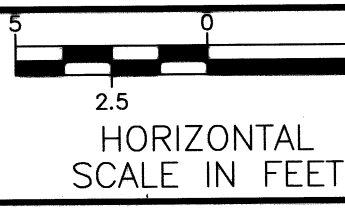
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STA. 23+50 29th St. NW

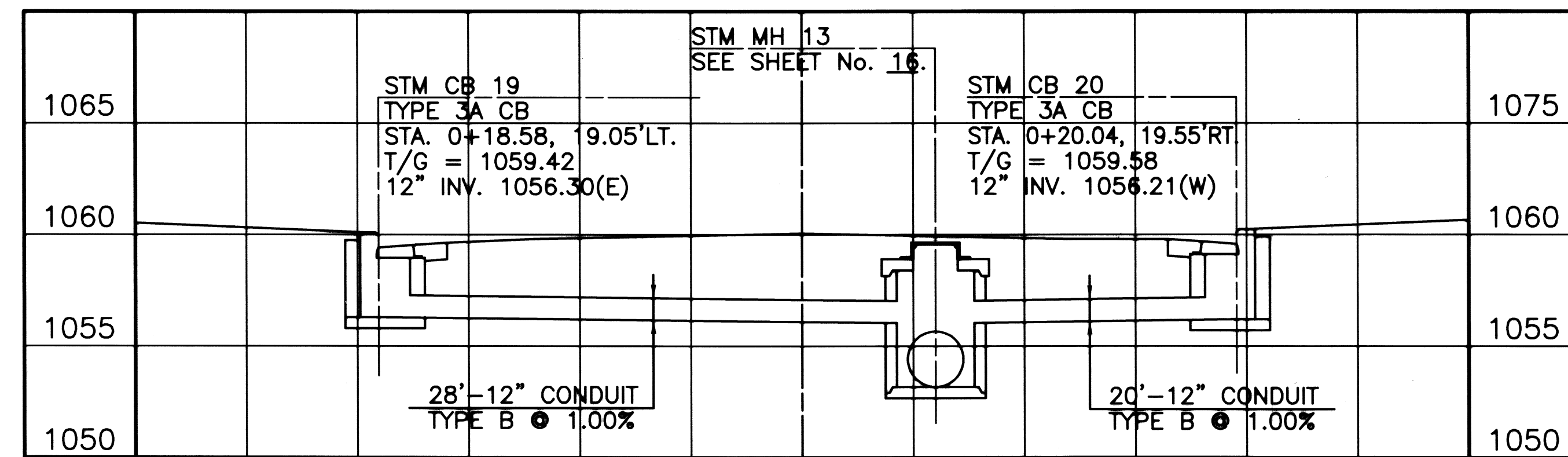


STORM SEWER DETAIL
STA. 27+60 29th St. NW

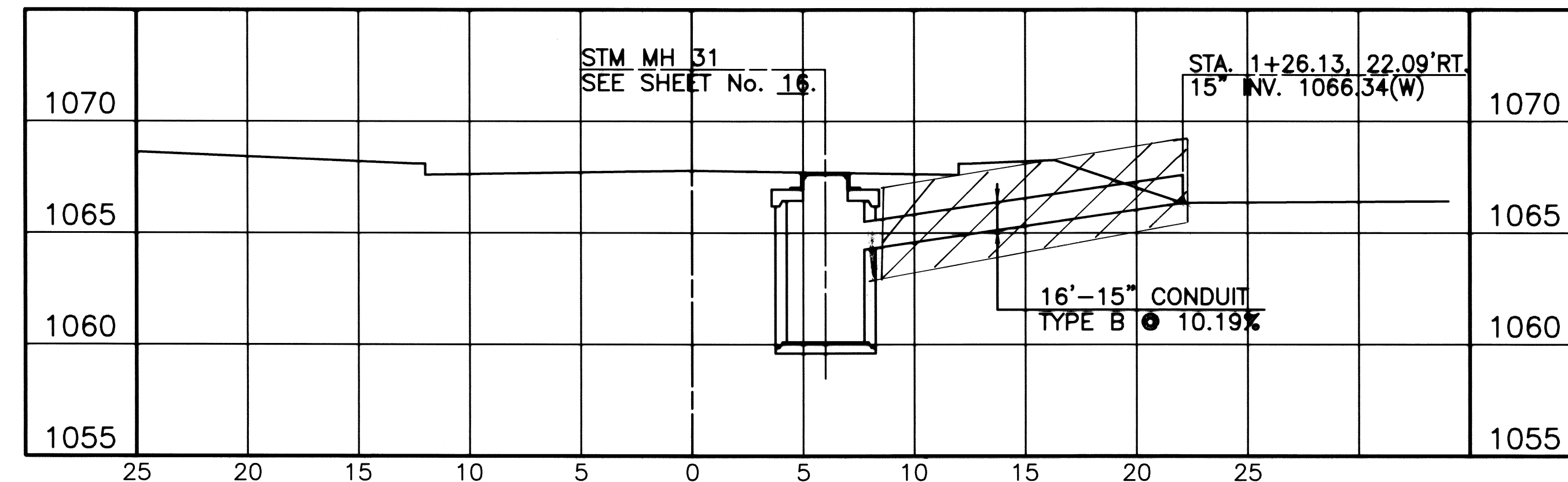


STORM SEWER DETAIL
STA. 31+95 29th St. NW

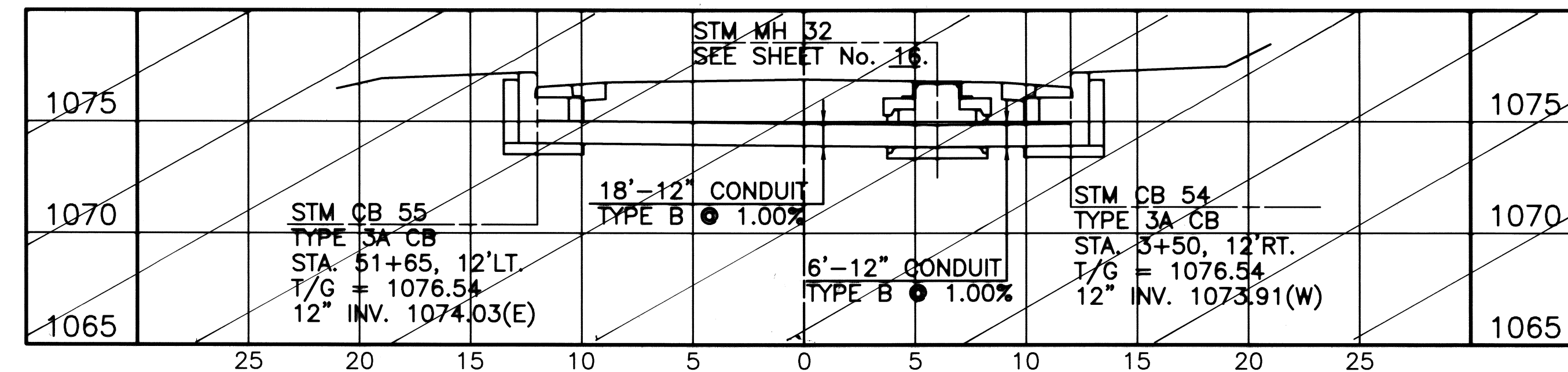




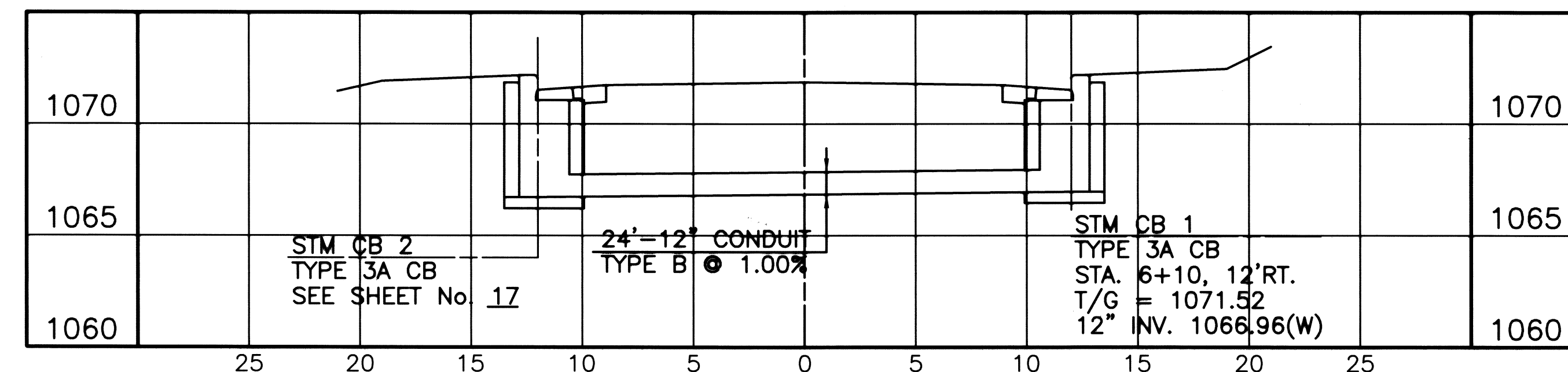
STORM SEWER DETAIL
0+20.04 GORDON AVE. NW



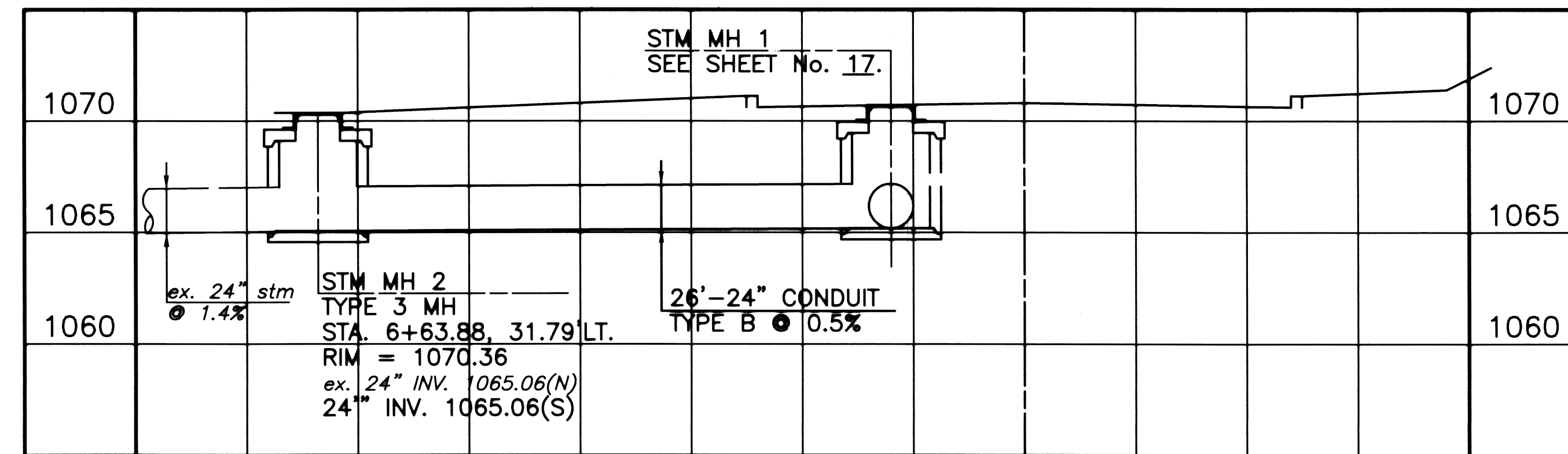
STORM SEWER DETAIL
1+25 GORDON AVE. NW



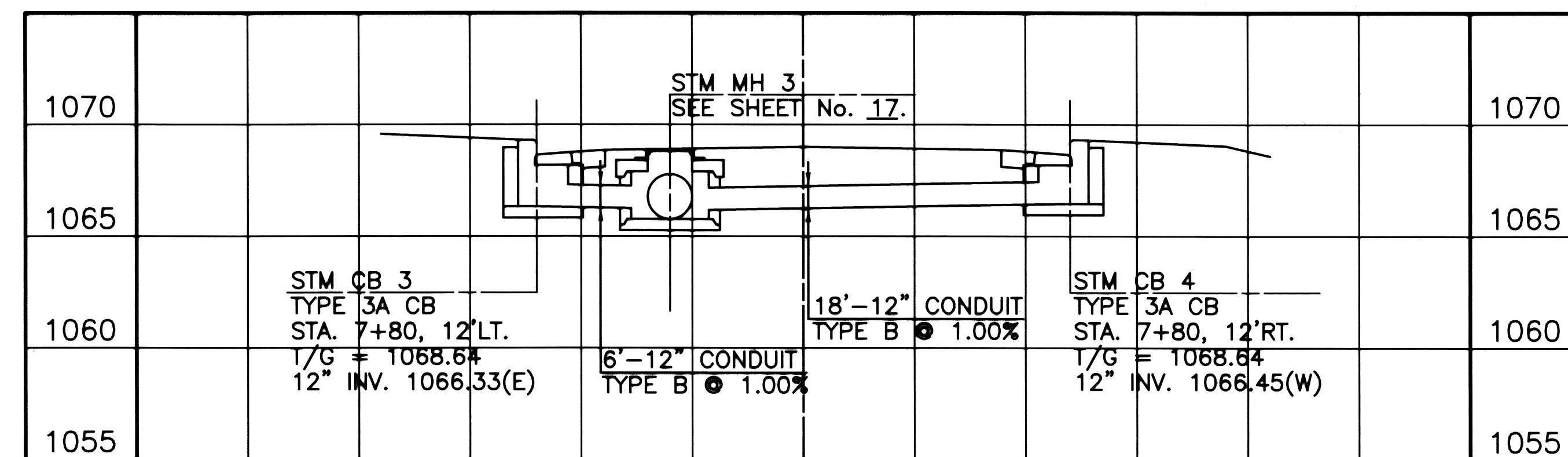
STORM SEWER DETAIL
3+50 GORDON AVE. NW



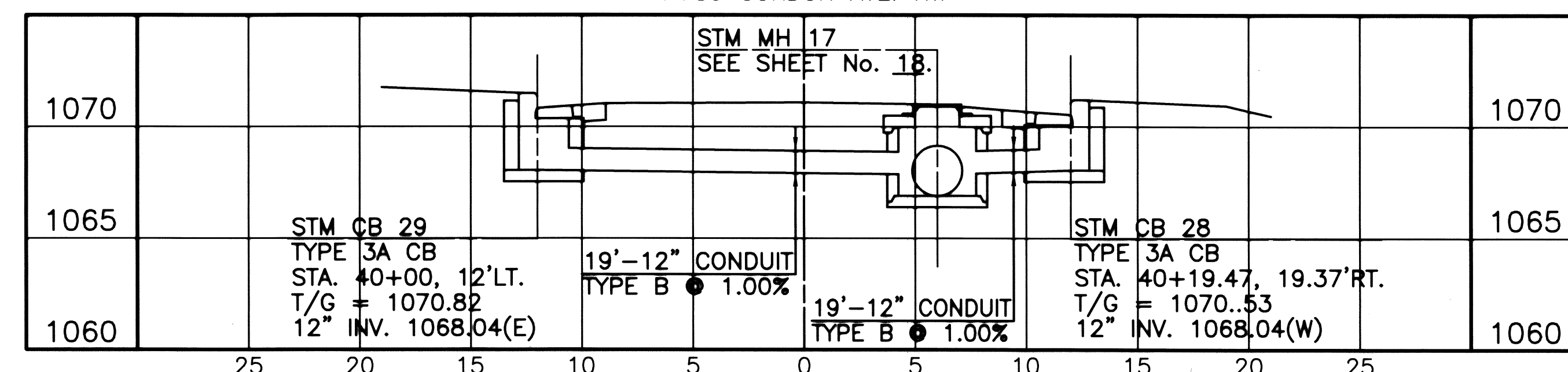
STORM SEWER DETAIL
6+10 GORDON AVE. NW



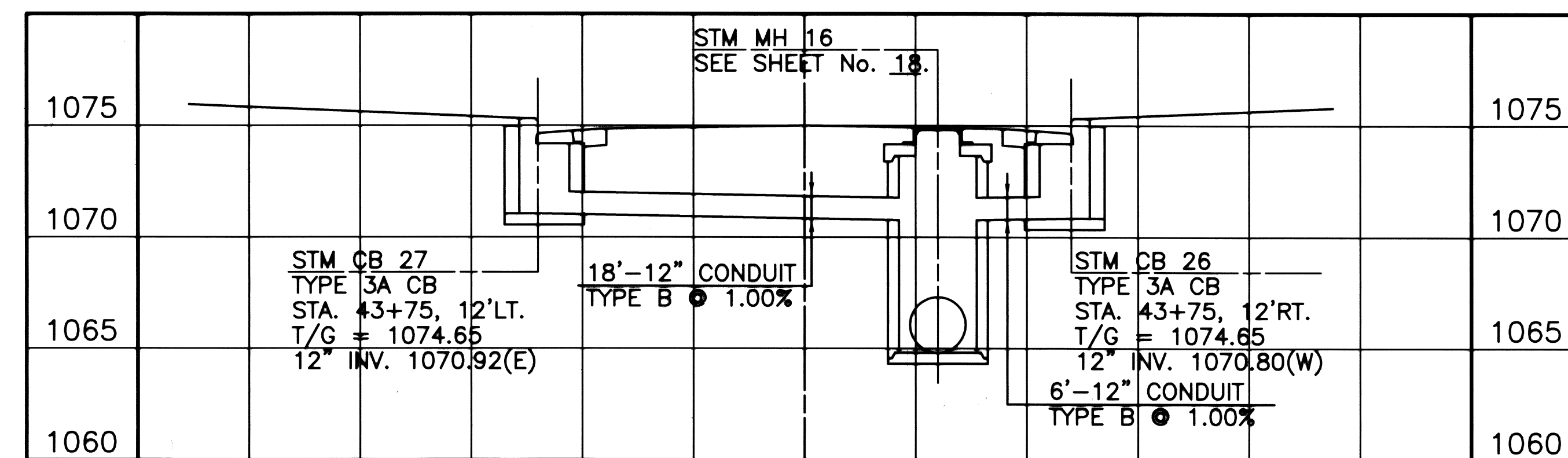
STORM SEWER DETAIL
6+63.88 GORDON AVE. NW



STORM SEWER DETAIL
7+80 GORDON AVE. NW



STORM SEWER DETAIL
40+06.03 NOBLE PL. NW



STORM SEWER DETAIL
43+75 NOBLE AVE. NW

HORIZONTAL
SCALE IN FEET

VERTICAL
SCALE IN FEET

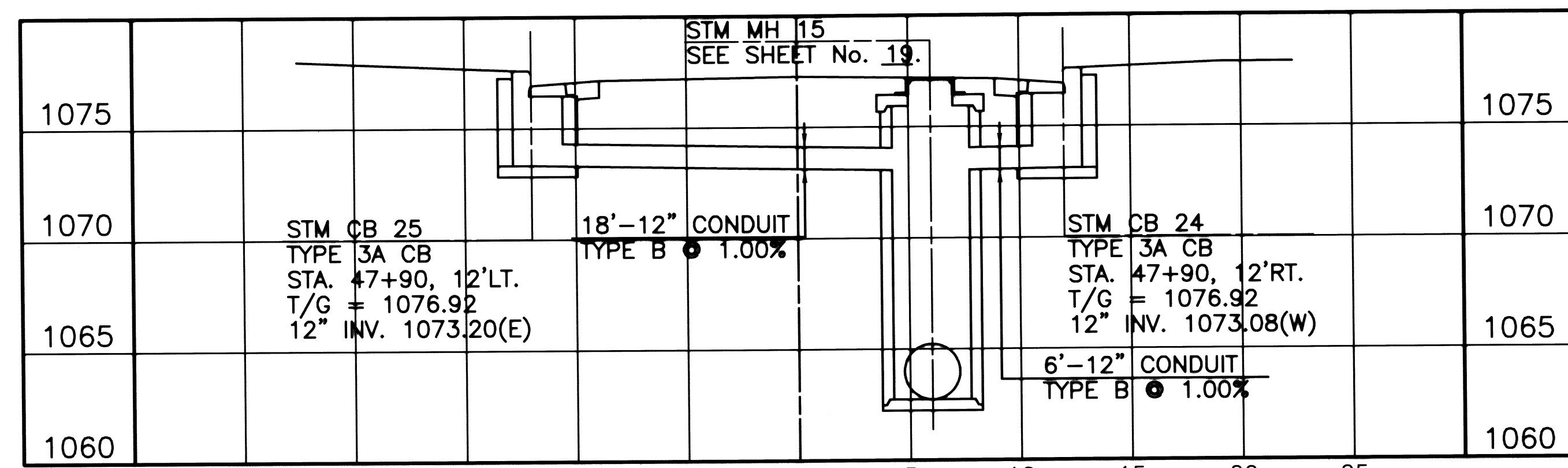
THE CITY OF MASSILLON, OHIO

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ACCOUNT NUMBER:
98SS01

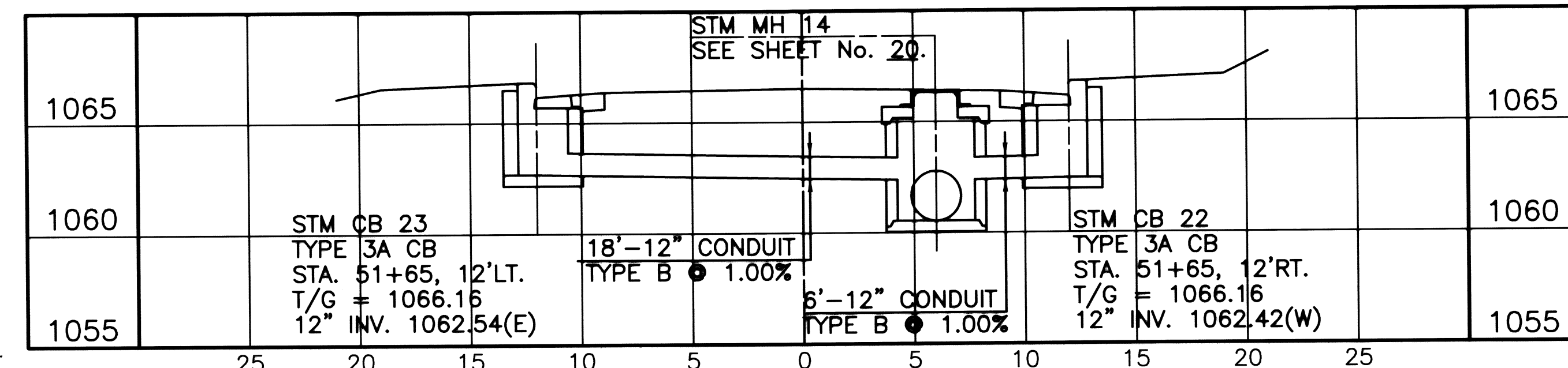
DRAWN BY:
F. Werner
DATE:
Nov. 25, 1998

FOTHERGILL-BELMONT SANITARY SEWER PLANS
CREST CIR. NW/STARBROOK ST. NW/BELMERE AVE. NW/STANTON AVE. NW STORM SEWER DETAILS
City of Massillon
Stark County, Ohio

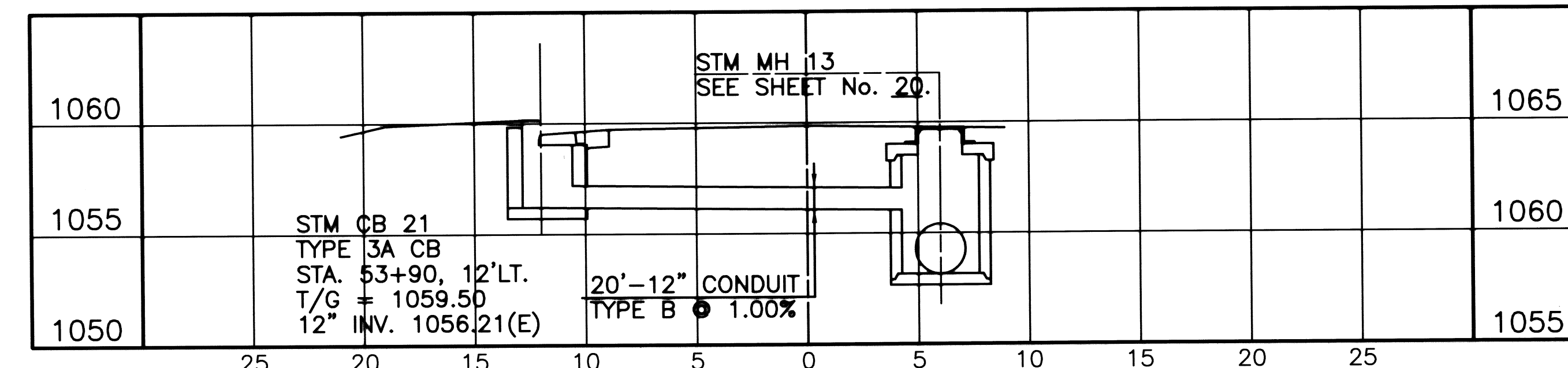
CITY OF MASSILLON
Francis H. Cicchinelli, Jr.
Mayor



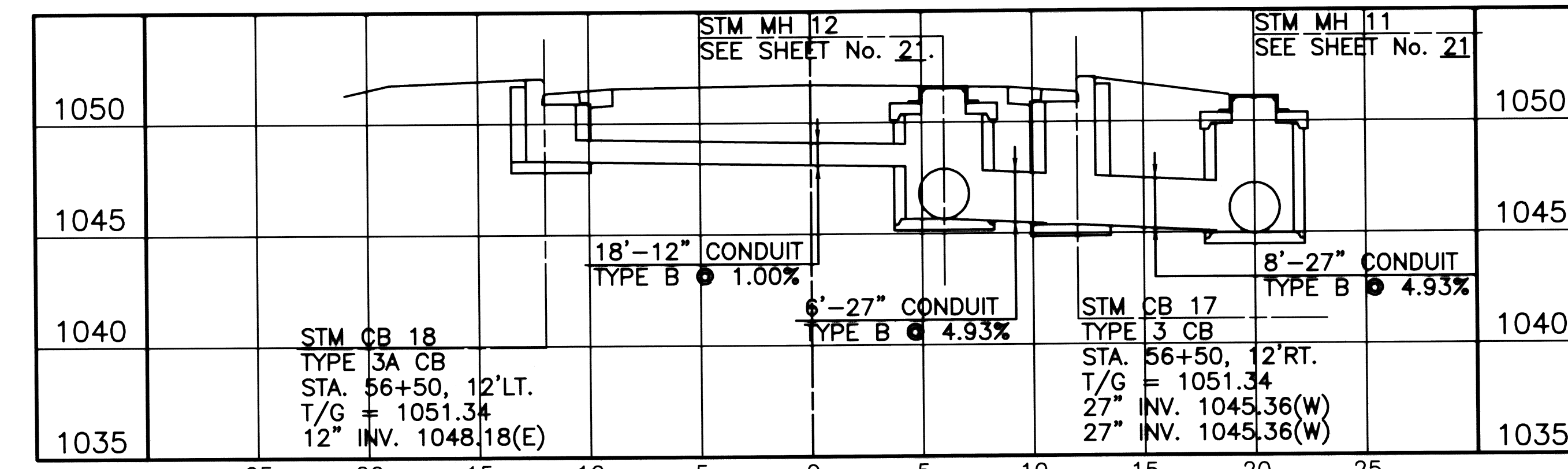
STORM SEWER DETAIL
47+90 NOBLE AVE. NW



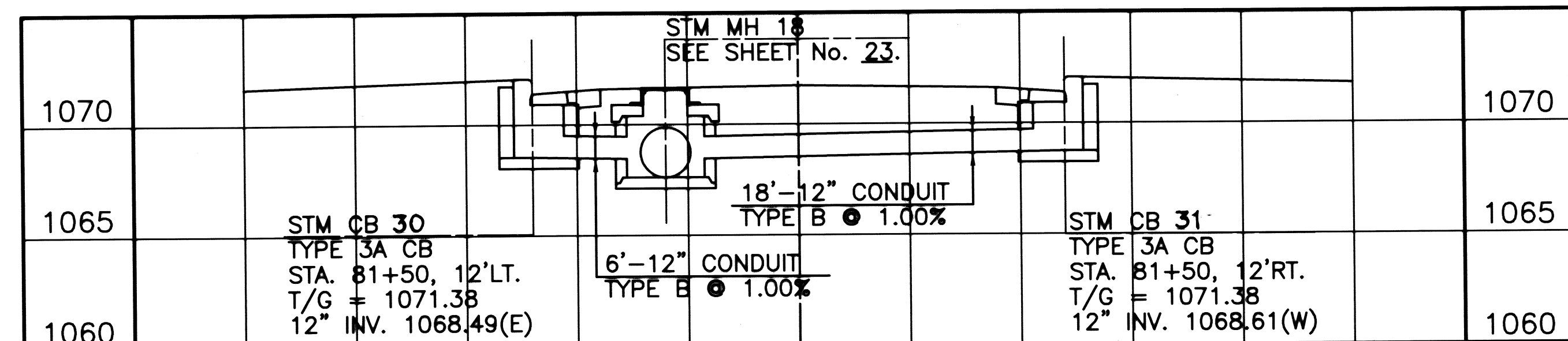
STORM SEWER DETAIL
51+65 NOBLE AVE. NW



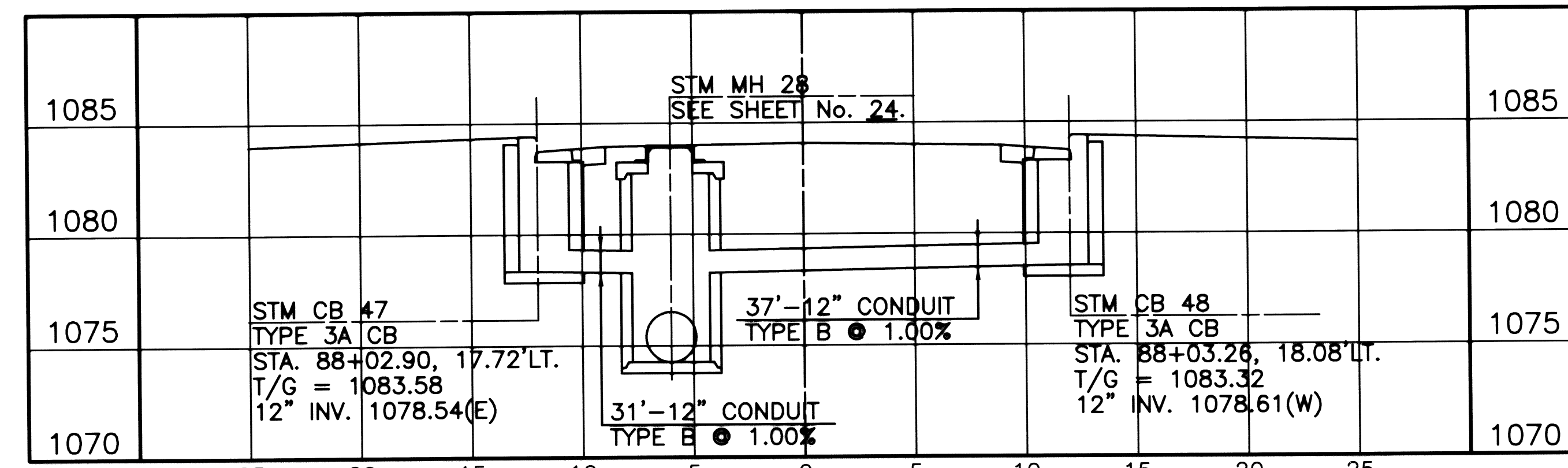
STORM SEWER DETAIL
53+90 NOBLE AVE. NW



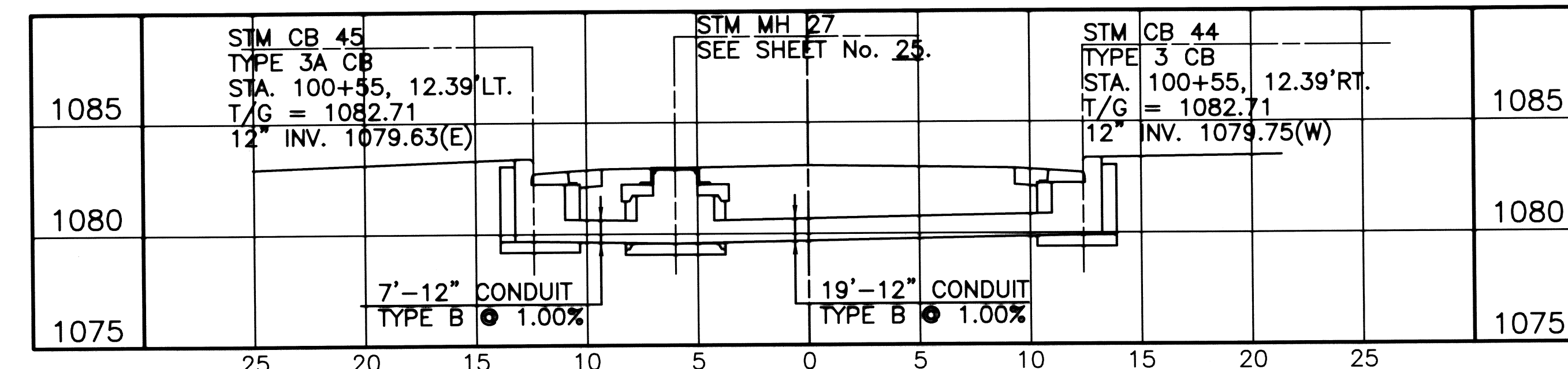
STORM SEWER DETAIL
56+50 NOBLE AVE. NW



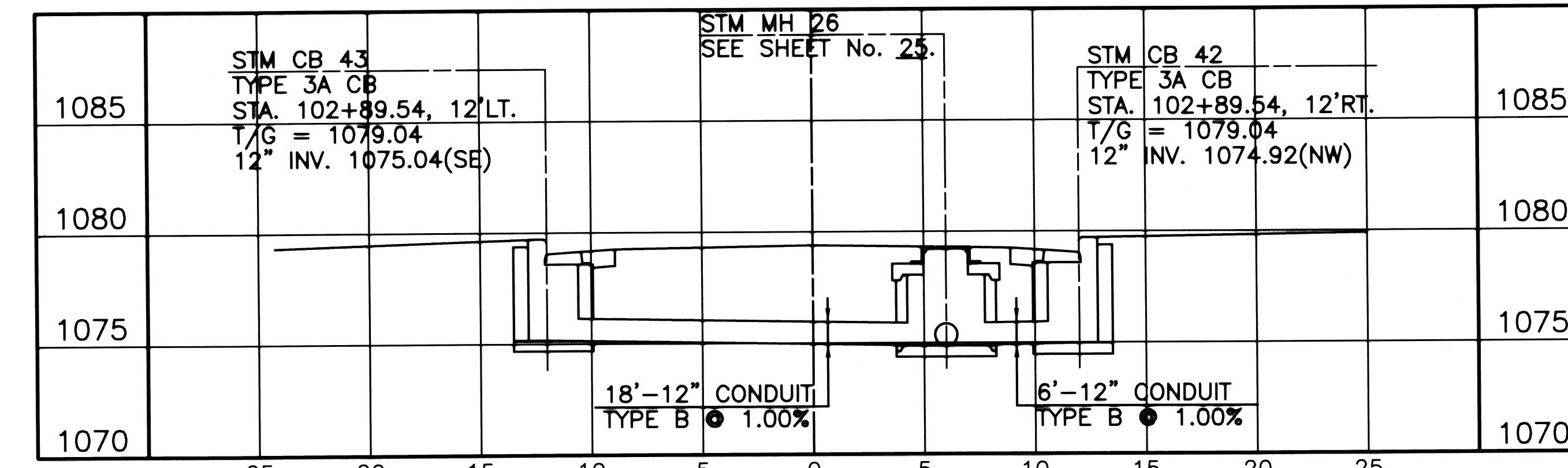
STORM SEWER DETAIL
STA. 81+50 STANTON AVE. NW



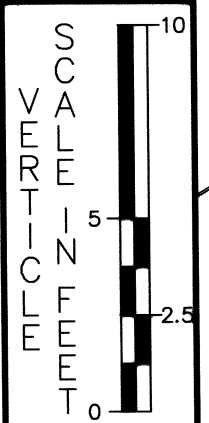
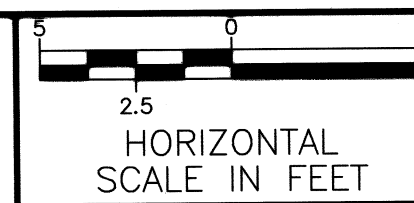
STORM SEWER DETAIL
STA. 88+30.90 STANTON AVE. NW

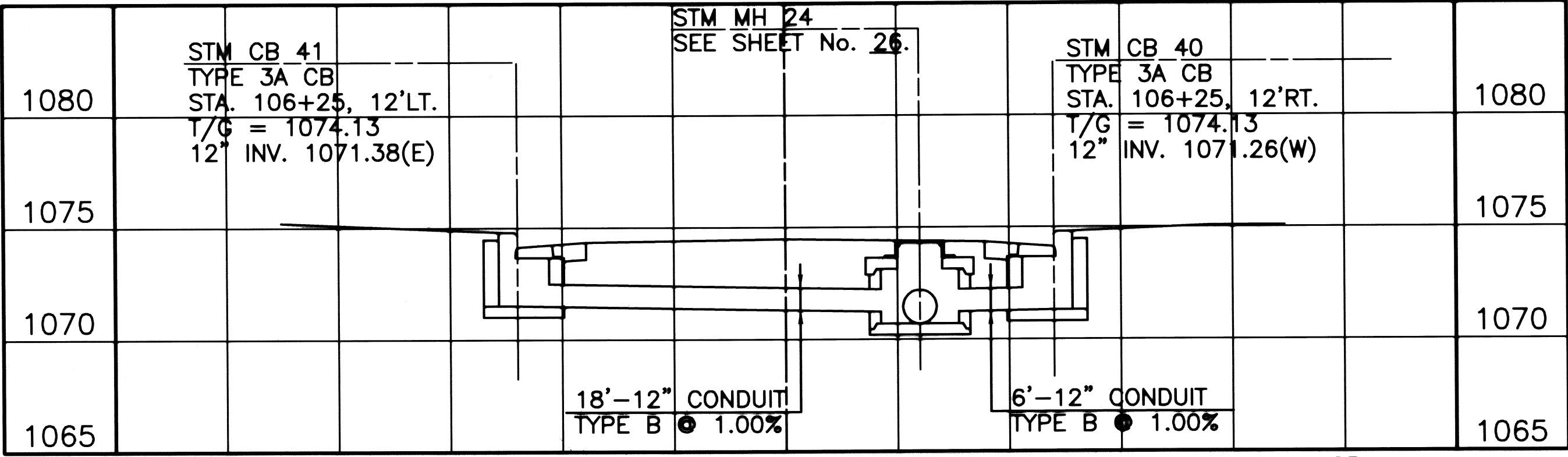


STORM SEWER DETAIL
STA. 100+55 CREST CIR. NW

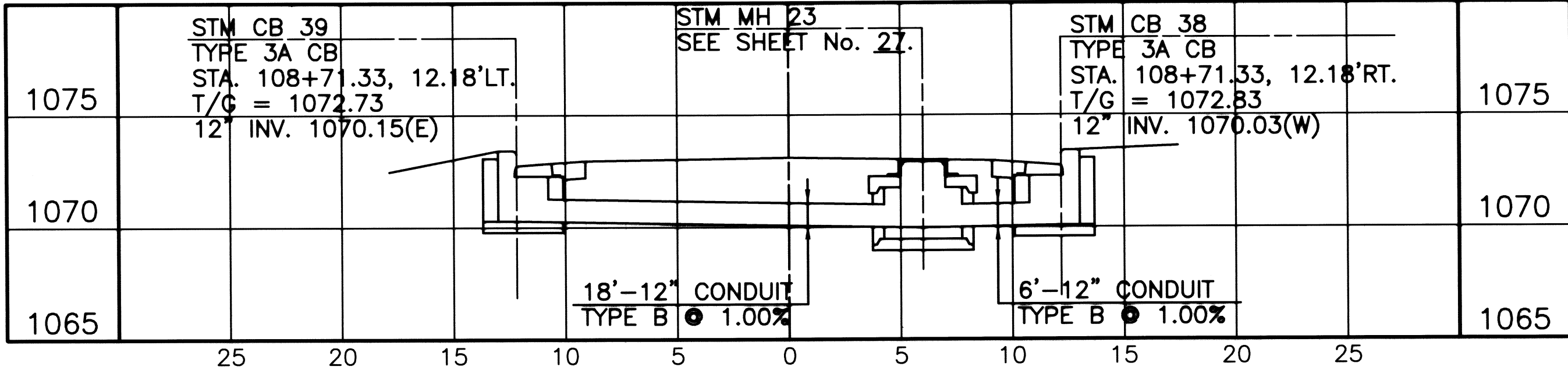


STORM SEWER DETAIL
STA. 102+89.54 CREST CIR. NW

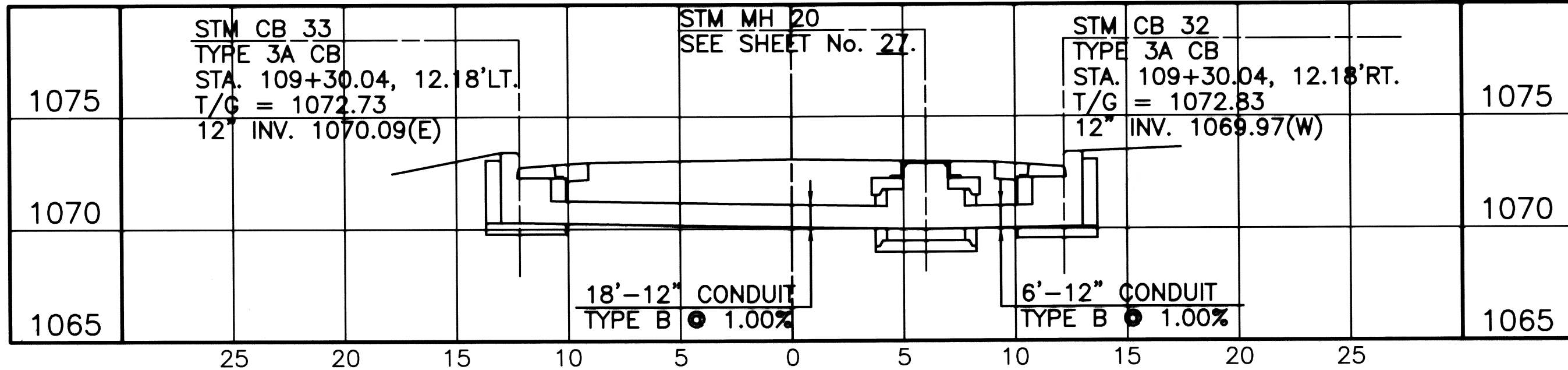




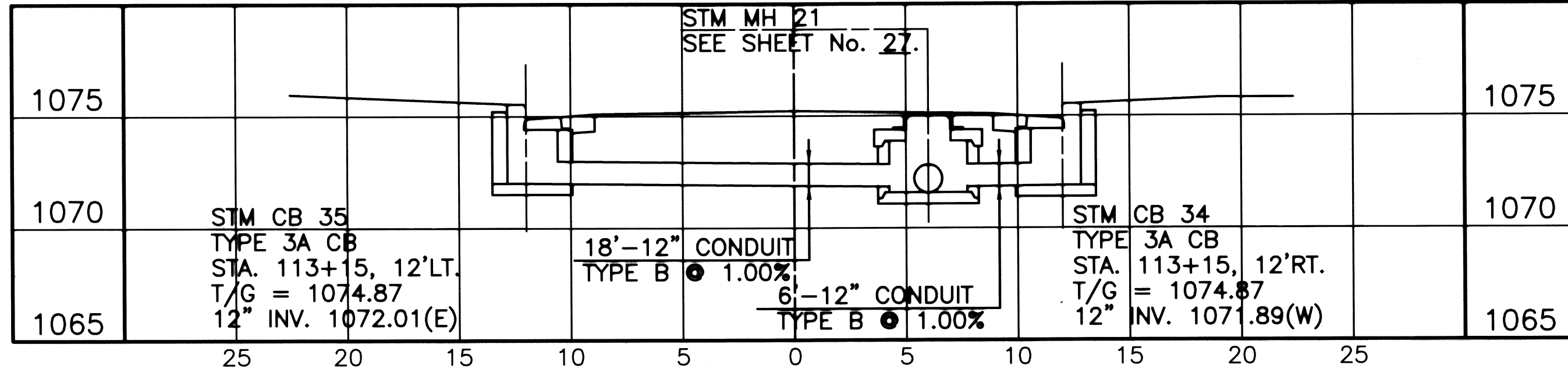
STORM SEWER DETAIL
STA. 106+25 STARBROOK ST. NW



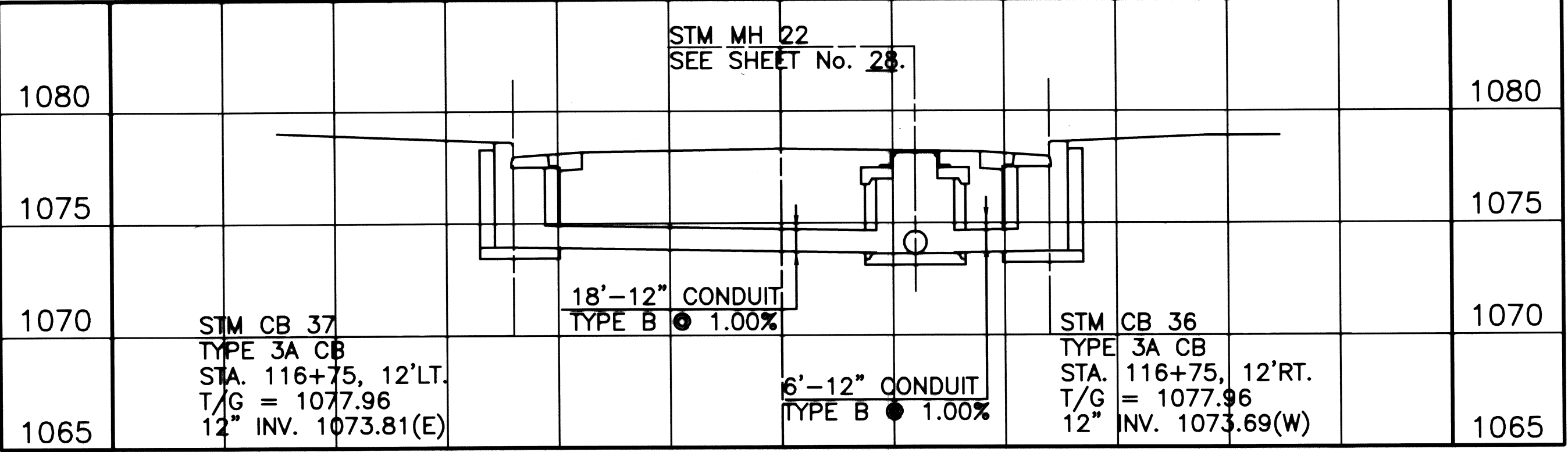
STORM SEWER DETAIL
STA. 108+71.33 STARBROOK ST. NW



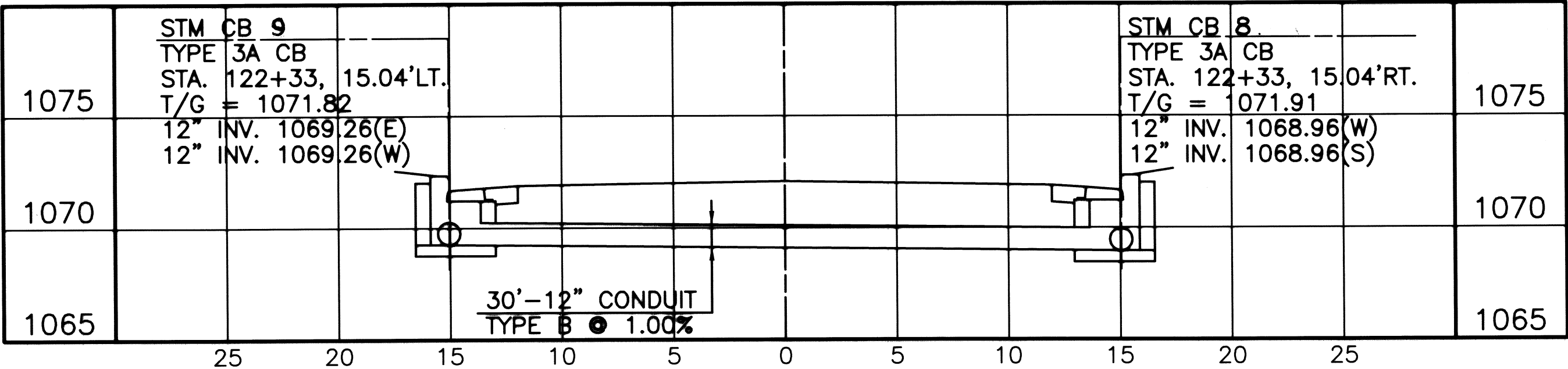
STORM SEWER DETAIL
STA. 109+30.04 STARBROOK ST. NW



STORM SEWER DETAIL
STA. 113+15 STARBROOK ST. NW



STORM SEWER DETAIL
STA. 116+75 STARBROOK ST. NW



STORM SEWER DETAIL
STA. 122+33 BELMERE AVE. NW



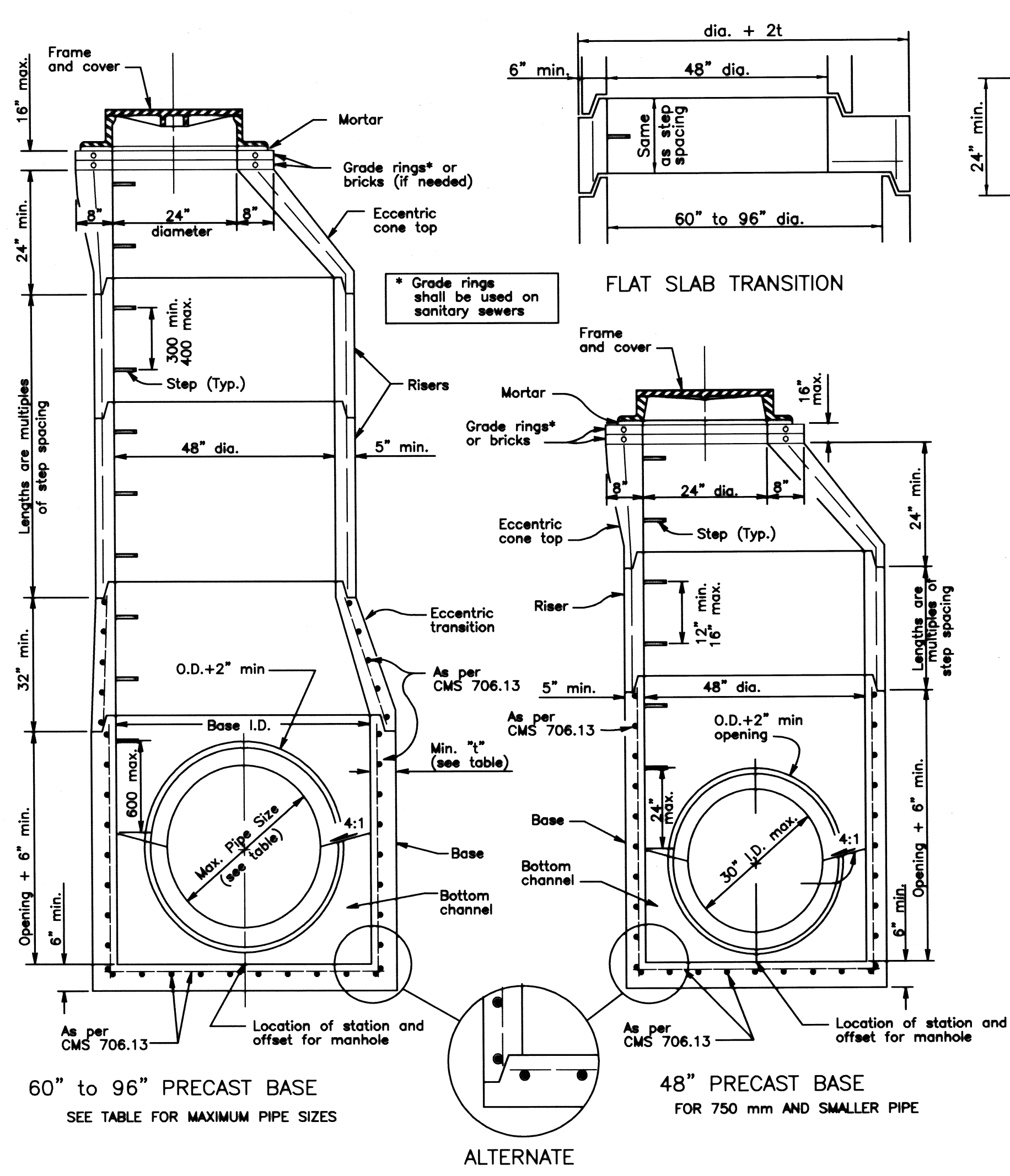
THE CITY OF MASSILLON, OHIO
ATTEST:
CITY ENGINEER

ELECTRONIC FILE NAME:
98SS0135.DWG
ACCOUNT NUMBER
98SS01

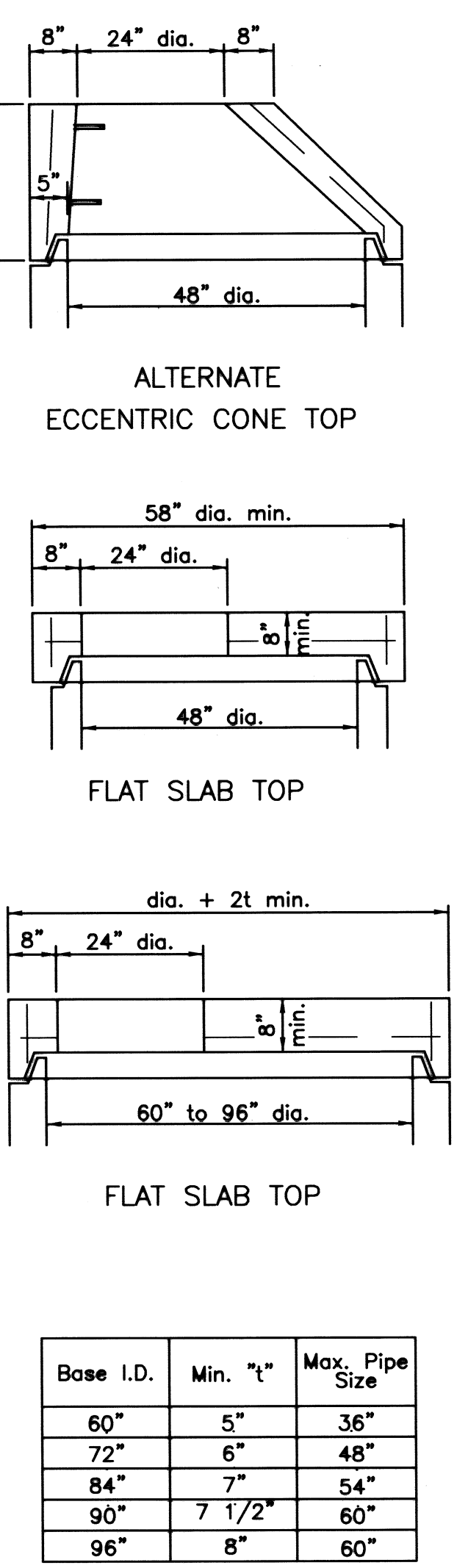
DRAWN BY
F. Werner
DATE
Nov. 25, 1998

FOTHERGILL-BELMONT SANITARY SEWER PLANS
CREST CIR. NW/STARBROOK ST. NW/BELMERE AVE. NW/STANTON AVE. NW STORM SEWER DETAILS
City of Massillon
Stark County, Ohio

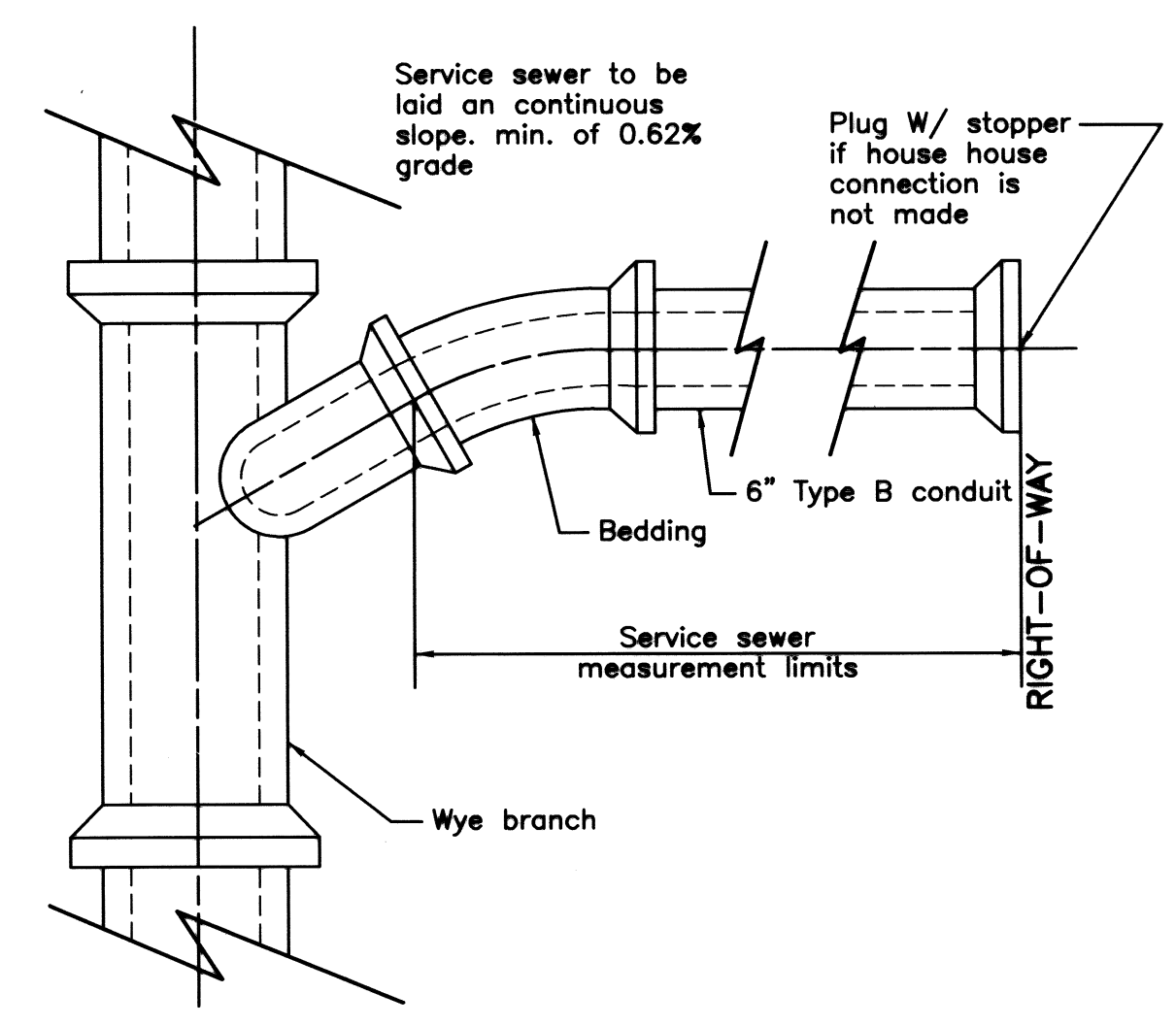
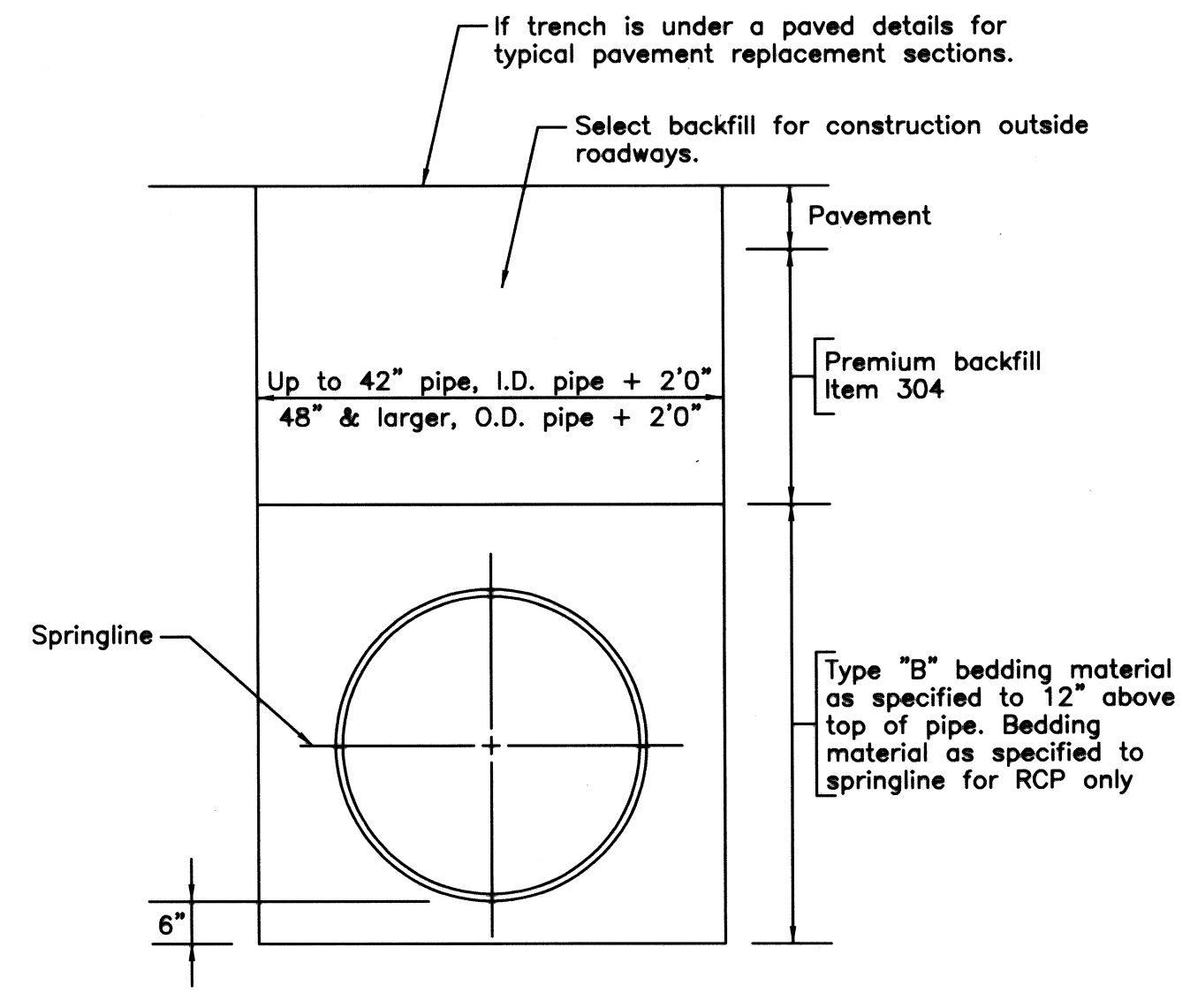
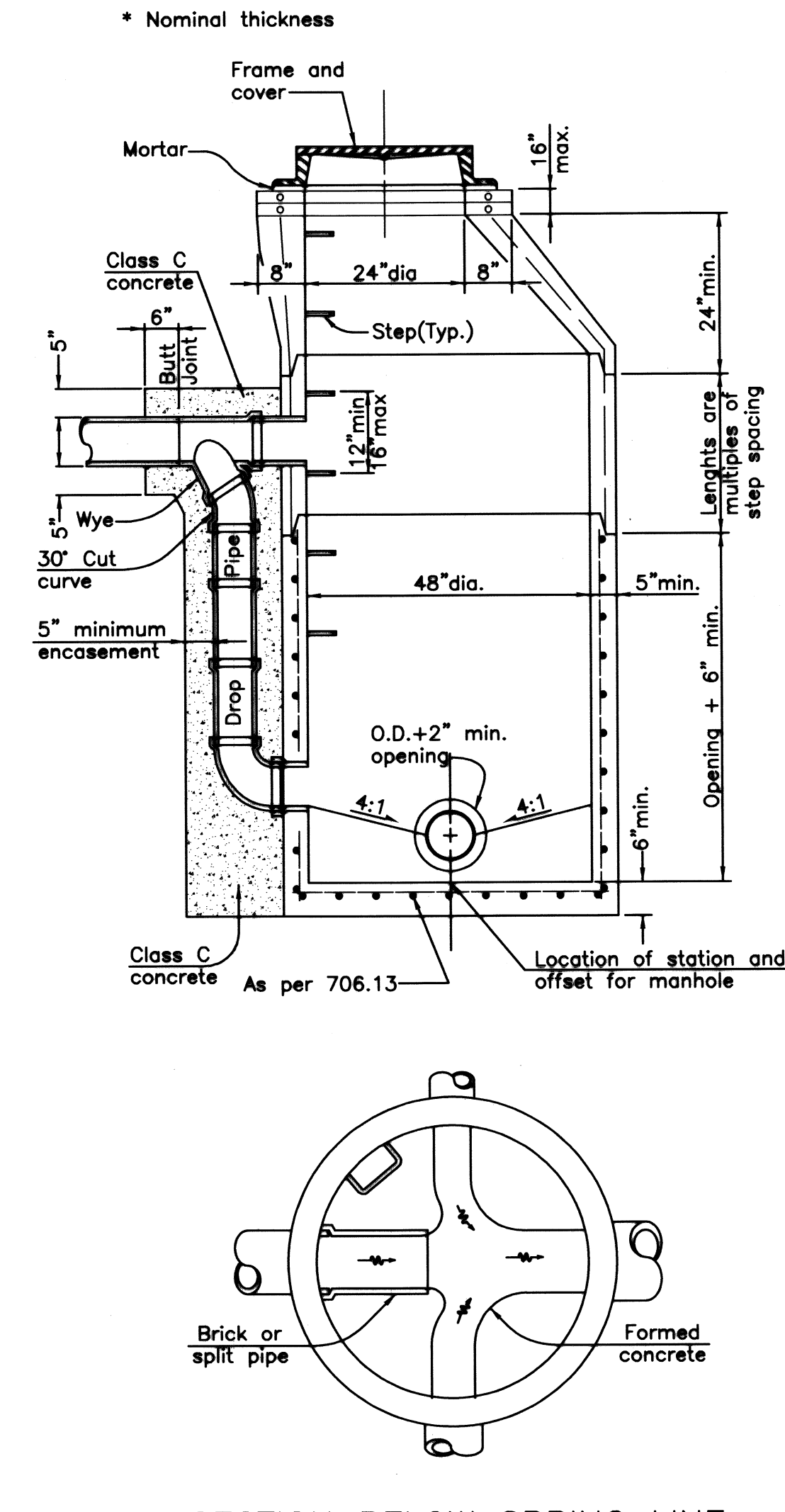
CITY OF MASSILLON
Francis H. Cicchinelli, Jr.
Mayor



SECTION VIEWS OF REINFORCED PRECAST MANHOLES



Base I.D.	Min. "t"	Max. Pipe Size
60"	5"	36"
72"	6"	48"
84"	7"	54"
90"	7 1/2"	60"
96"	8"	60"



NOTES

GENERAL: With normal soil and site conditions this standard precast manhole may be used for any required manhole depth.

Sections of the precast manhole shall be cast and assembled with either all tongue or all groove ends up. Lift holes may be provided in each section for handling.

TOP AND TRANSITION (OR REDUCER): This section shall be a flat slab unless an eccentric cone is specified.

BASE: Manhole No. 3 is shown with a monolithic floor and riser which may be cast in one or two operations. A permissible alternate is to cast and ship the floor and barrel separately. Openings for inlet and outlet pipes shall be provided, either when

Bottom channels may be formed of concrete, precast in the base or field constructed as shown

RISER SECTIONS: Openings for 18" and smaller inlet pipes may be either prefabricated, or cut in the field provided the sides of the pipe at the springline do not project into the manhole.

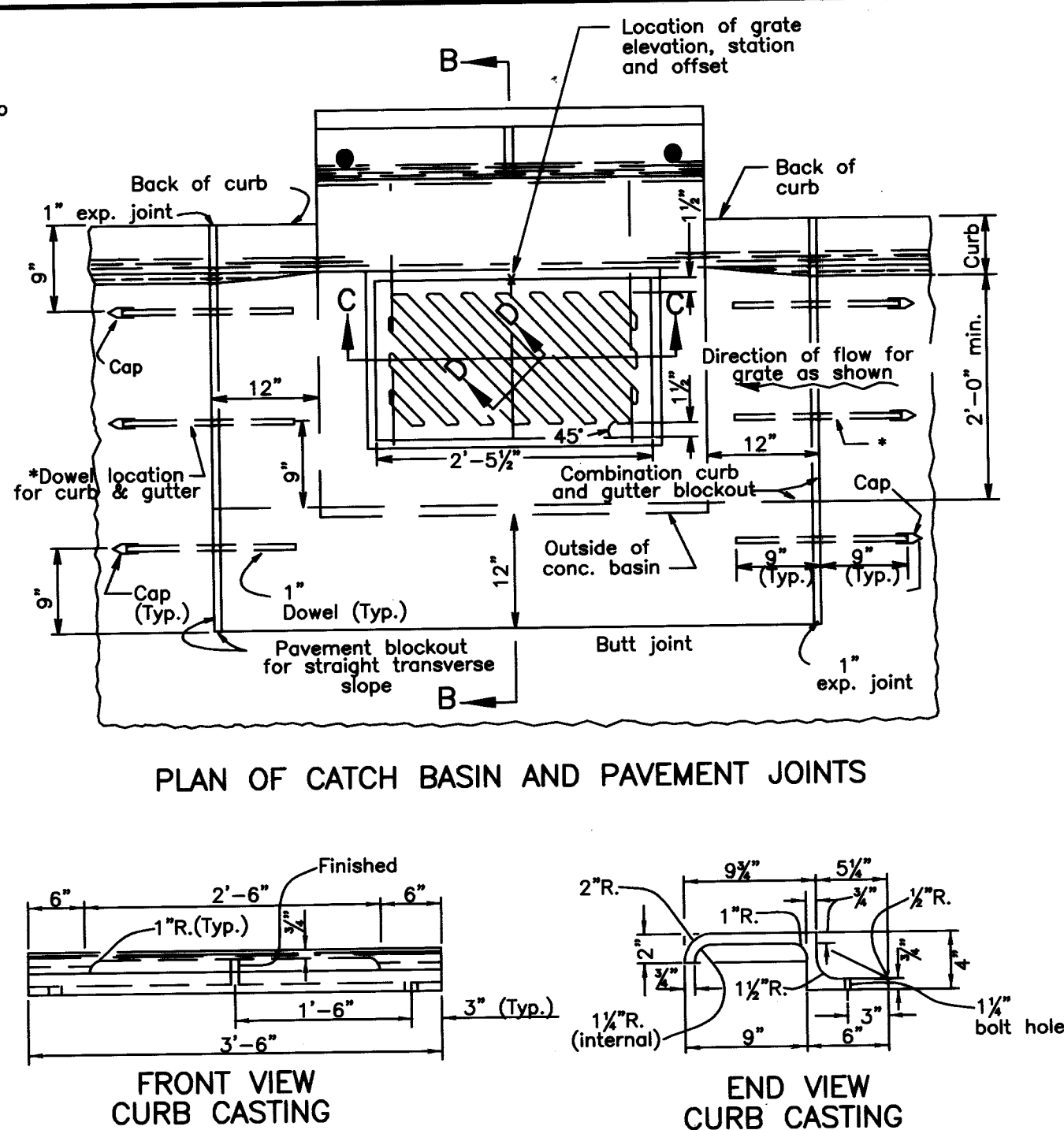
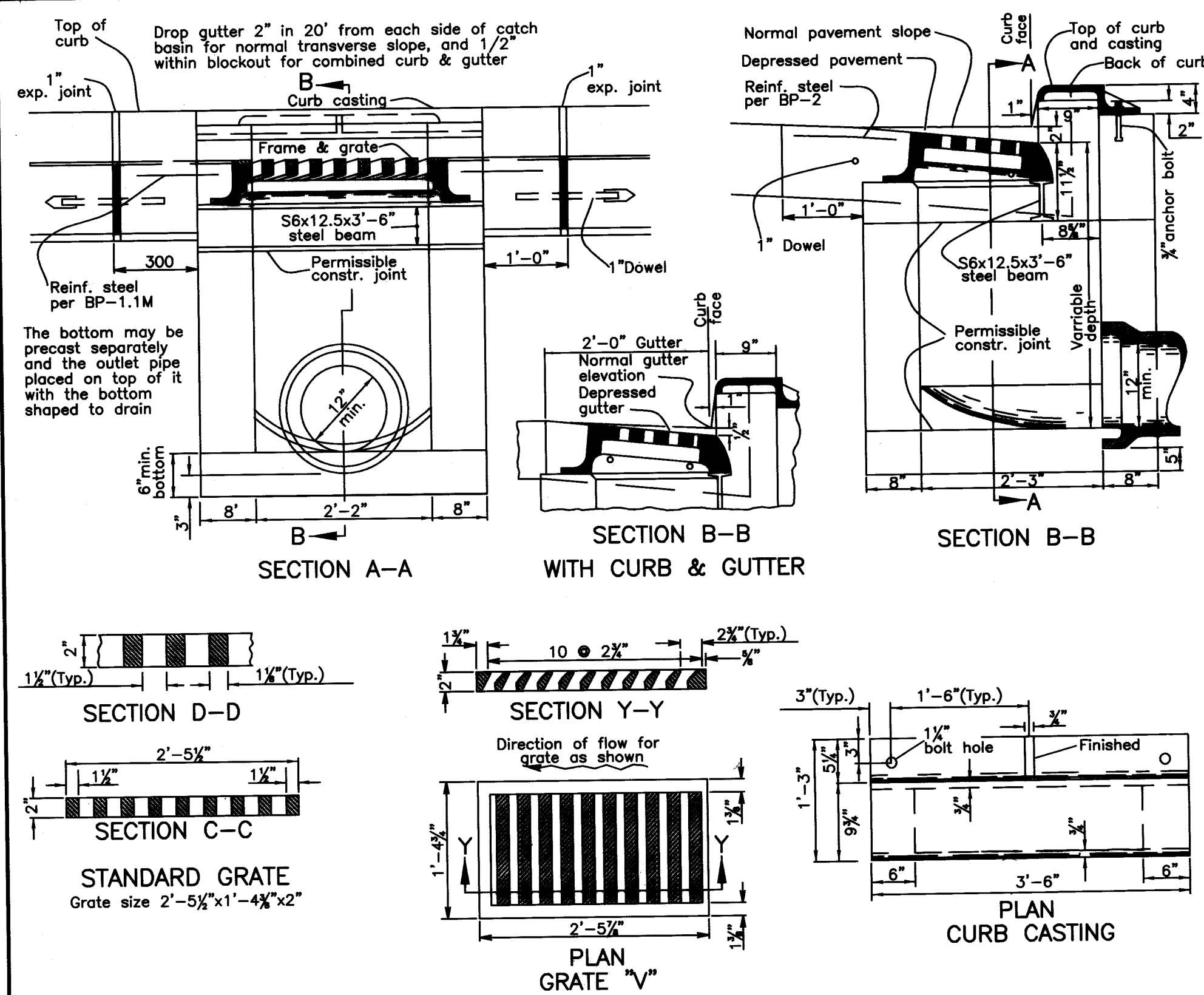
CONNECTIONS: Connections between precast manhole sections and pipes on sanitary sewers may be sealed with resilient connectors conforming to ASTM C 923.

JOINT SEAL: Seal between precast manhole sections on sanitary sewers shall be resilient and flexible gasket joints per CMS 706.11.

MATERIALS: Materials for bases and other precast sections, including reinforcement not specified hereon, shall comply with the requirements of CMS 706.13.

DROP PIPE: When specified on the plans, drop pipe shall be constructed as shown on MH-3.1M.

STEPS, FRAMES AND COVERS: Shall comply with the requirements set forth on MH-1.1M.

CB 3A NOTES

GRATE: The Grate "V" shall be provided unless the plans specifically require the diagonal grate. If the diagonal grate is specified, it shall be placed so that the diagonal bars direct drainage flow toward the curb.

CASTINGS: The design shall be essentially the same and equally as strong as those shown.
Minimum mass: Curb Casting 170 lbs., Standard Grate 127 lbs., Frame 320 lbs., and Grate "V" 105 lbs.

BEARING AREAS: The frame and grate shall be so fitted and finished as to provide a firm and even seat. No projections shall exist on bearing areas of either casting and the grate shall seat in its frame without rocking.

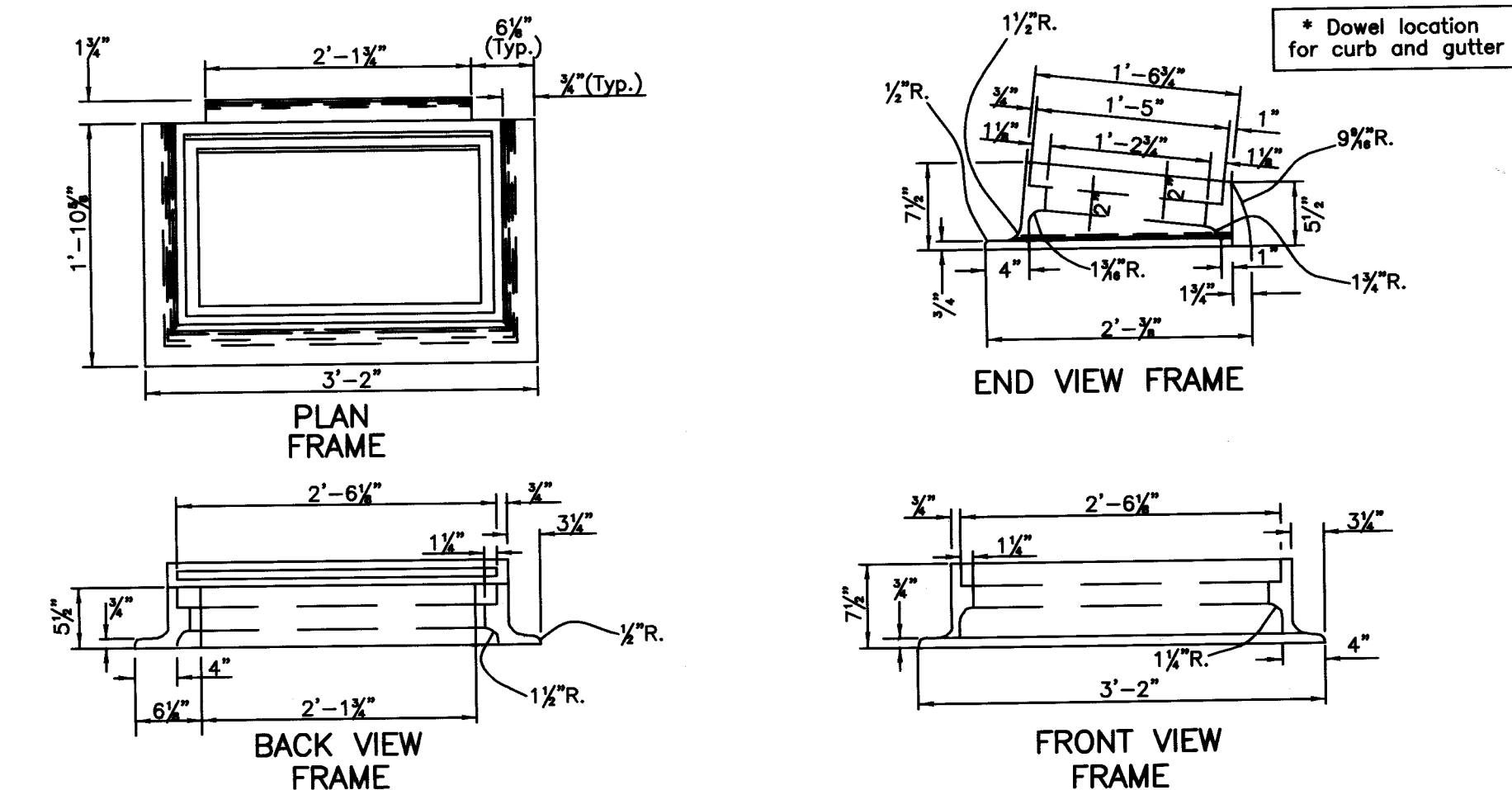
PRECAST CONSTRUCTION: Permitted, except for the apron. Concrete shall meet the requirements of CMS 706.13 with a minimum of 4% entrained air in the hardened concrete. Precast walls shall have a minimum thickness of 6" and reinforcing shall be sufficient to permit shipping and placement without damage.

MINIMUM DEPTH: The minimum depth shall be the outside diameter (O.D.) of the outlet pipe plus 360 mm.

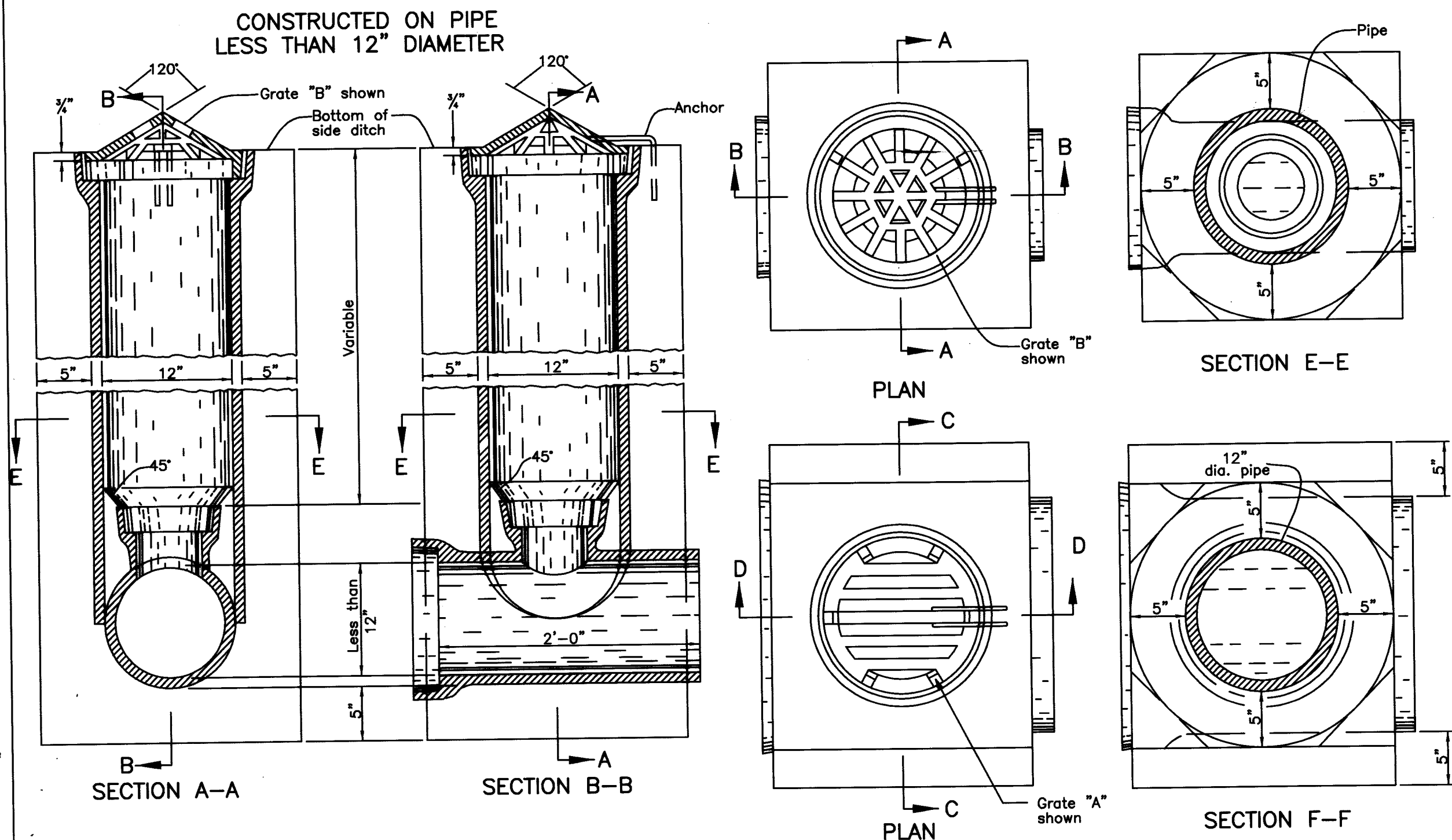
OPENINGS: Pipe openings shall be the O.D. of the pipe being supplied plus 50 mm when fabricated or field cut. The interstitial space shall be filled with grout per CMS 601.

DOWELS: Four 1"x18" dowels are required for concrete pavement or gutter blockout. See Std. Constr. Dwg. BP-4 for dowel details.

BLOCKOUT: Blockouts shall be paved with Class C concrete in PCC pavement or gutter and paid for as a part of the pavement or gutter with no deduction in pavement, curb or gutter quantities because of the castings. A Class C concrete apron the size of the 2' gutter shall be cast-in-place in asphalt pavement (no dowels required) with the cost included in the catch basin bid price. No deduction to be made in curb quantities.



CATCH BASIN No. 3A



NOTES

GRATES: Grate "A" shall be provided unless the plans specify Grate "B".

CASTINGS: Castings shall meet the requirements of CMS 604. The design shall be essentially the same and equally as strong as the one shown hereon.

CASTING ANCHOR: Anchor is to be a 3/8 in. rod, 2 ft. long, bent around grate as shown and anchored into concrete casing.

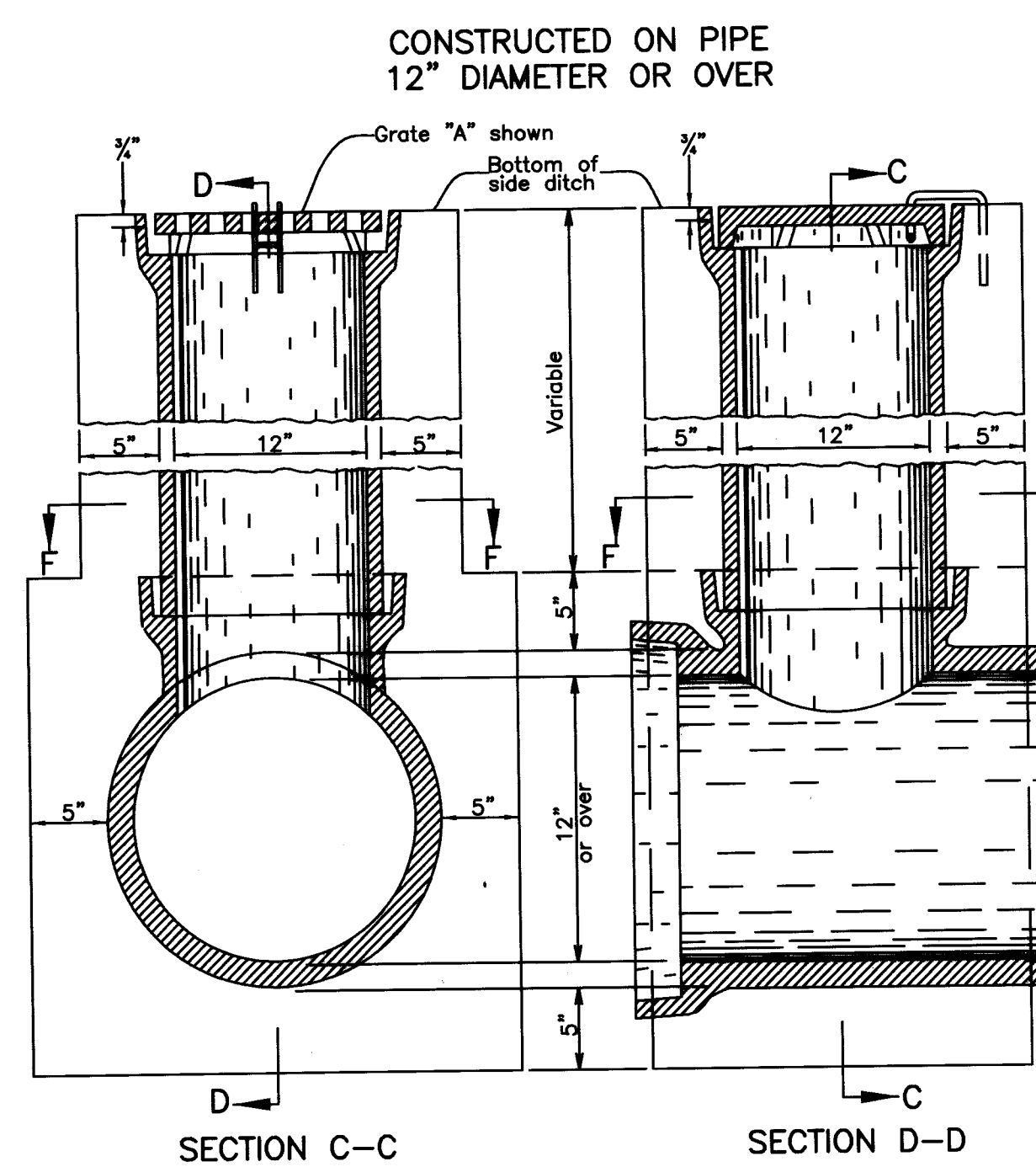
CONCRETE CASING: Casing for riser may be square, round or hexagonal in shape. Concrete shall be Class C.

RISER PIPE: Riser shall be 12 in. in diameter regardless of size of sewer line.

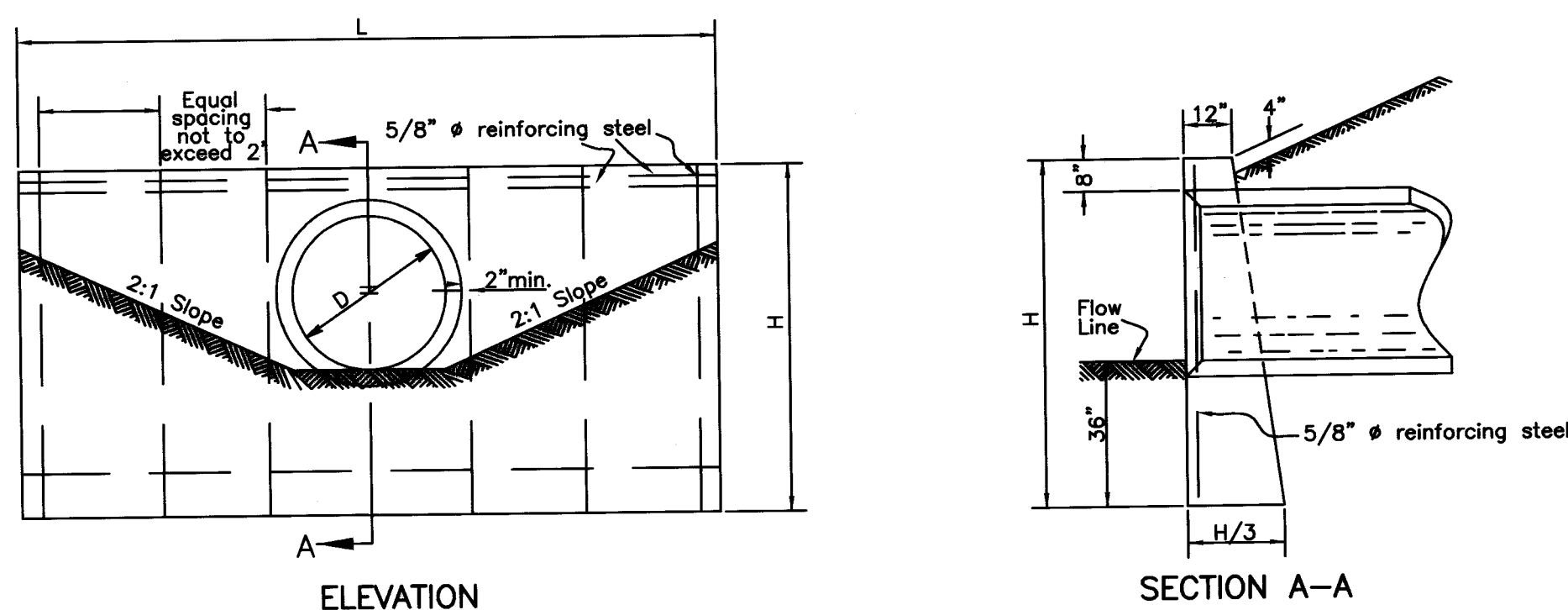
TEE: Where sewer line is not continuous through inlet, the upstream opening of the tee shall be properly plugged using a preformed stopper and sealed joint.

RISER AND TEE: Shall be constructed of standard strength vitrified clay pipe or non-reinforced concrete pipe having bell and spigot ends.

PAYMENT: Payment for these inlets shall be Item 604, Each, Inlet, Side Ditch.



STANDARD NO. 1 SIDE DITCH INLETS



FULL-HEIGHT HEADWALL - HW-1

DIMENSIONS			QUANTITIES ONE HEADWALL	
Diameter	M	L	Concrete (C.Y.)	Reinforcing Steel (lbs.)
15"	5'-2"	7'-0"	1.7	41
18"	5'-5"	8'-4"	2.2	57
21"	5'-8"	9'-8"	2.8	62
24"	5'-11"	11'-0"	3.3	69
30"	6'-5"	13'-8"	4.7	92
36"	7'-0"	16'-4"	6.5	105

L	Circular	Sections	=	5D	+	4t	
L	Elliptical	or Pipe-Arch	=	4R	+	4t	+
L	Circular	Sections	=	D	+	t	+
H	Elliptical	or Pipe-Arch	=	R	+	t	+

D = Diameter of Pipe
 R = Rise of Pipe
 s = Span of Pipe
 t = Thickness of Barrel
 L = Length of Headwall
 H = Height of Headwall

HW-1 NOTES

NO. 1 HEADWALL: Where required will be provided for nonskewed culverts having a diameter or rise of 36 inches or less.

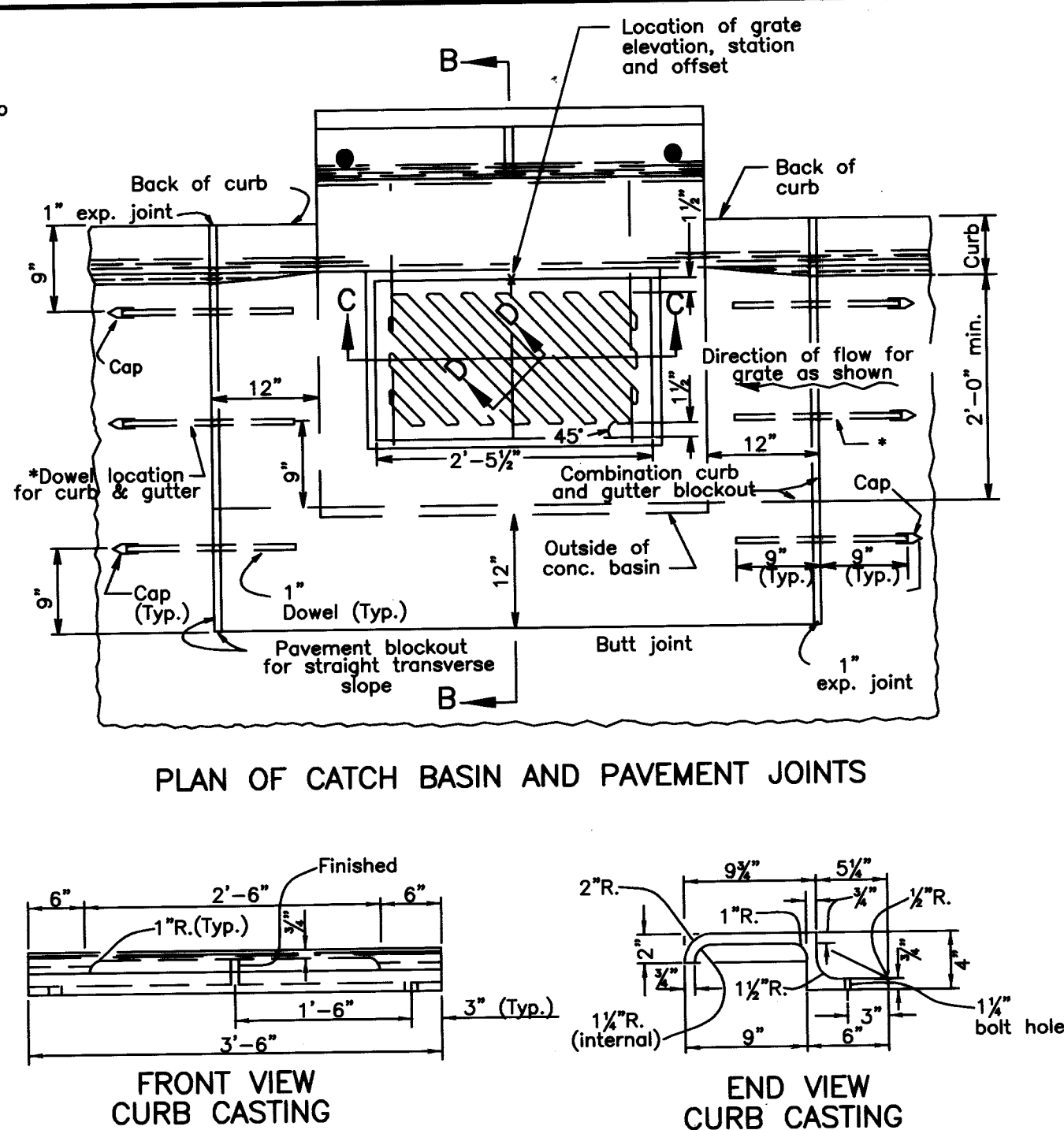
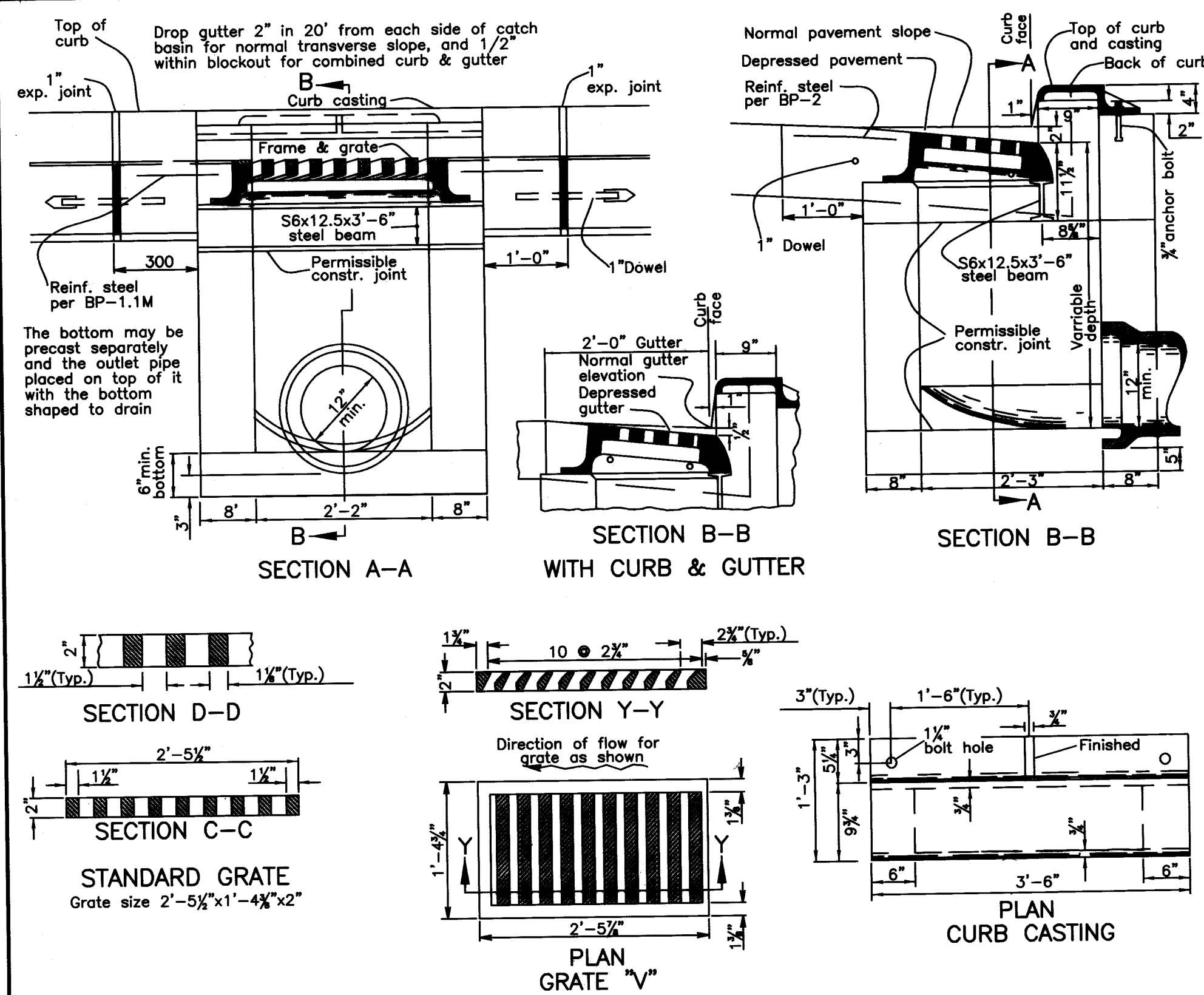
CONCRETE: Concrete shall be Class C.

REINFORCING STEEL: Bars shall be #5
and epoxy coated.

DETAILS AND QUANTITIES: Are shown for circular sections only. When used with reinforced elliptical concrete pipe or corrugated metal pipe arches, it will be necessary to adjust dimensions and quantities to conform to those listed for the nearest size circular pipe. The dimensions established by vertical diameter shall apply to rise, and dimensions established by horizontal diameter shall apply to span. All calculated dimensions shall be rounded to the nearest 1 inch. Chamfer all exposed corners $3/4$ of an inch.

FOUNDATION: Where the soil borings indicate a bearing capacity of less than 2600 pounds, it will be necessary to increase the width of the footing.

HEADWALL LOCATION: To be determined by the intersection of the embankment slope at the back of the headwall at Point "K". The slopes adjacent to the headwall shall be 2:1.

CB 3A NOTES

GRATE: The Grate "V" shall be provided unless the plans specifically require the diagonal grate. If the diagonal grate is specified, it shall be placed so that the diagonal bars direct drainage flow toward the curb.

CASTINGS: The design shall be essentially the same and equally as strong as those shown.
Minimum mass: Curb Casting 170 lbs., Standard Grate 127 lbs., Frame 320 lbs., and Grate "V" 105 lbs.

BEARING AREAS: The frame and grate shall be so fitted and finished as to provide a firm and even seat. No projections shall exist on bearing areas of either casting and the grate shall seat in its frame without rocking.

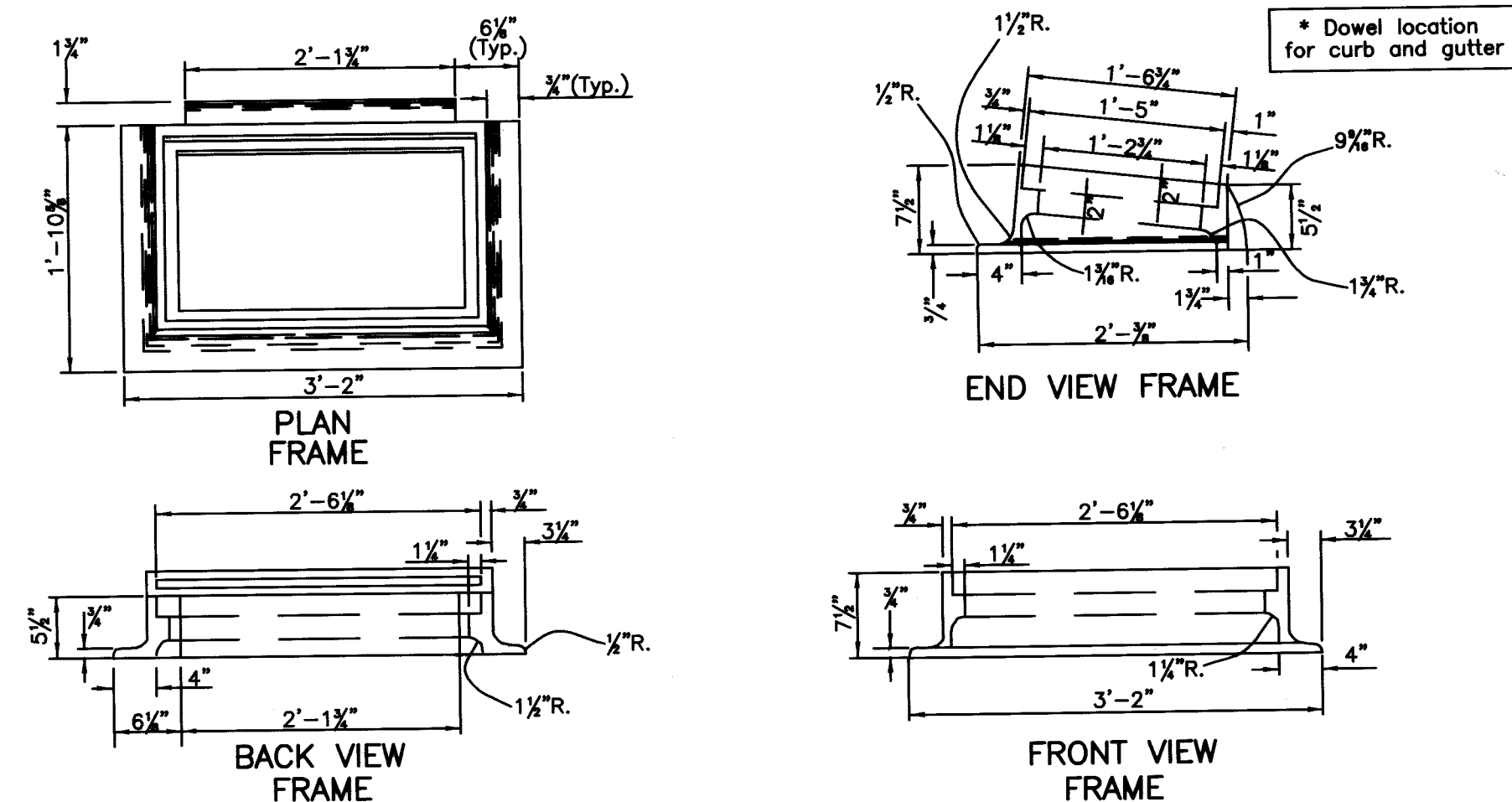
PRECAST CONSTRUCTION: Permitted, except for the apron. Concrete shall meet the requirements of CMS 706.13 with a minimum of 4% entrained air in the hardened concrete. Precast walls shall have a minimum thickness of 6" and reinforcing shall be sufficient to permit shipping and placement without damage.

MINIMUM DEPTH: The minimum depth shall be the outside diameter (O.D.) of the outlet pipe plus 360 mm.

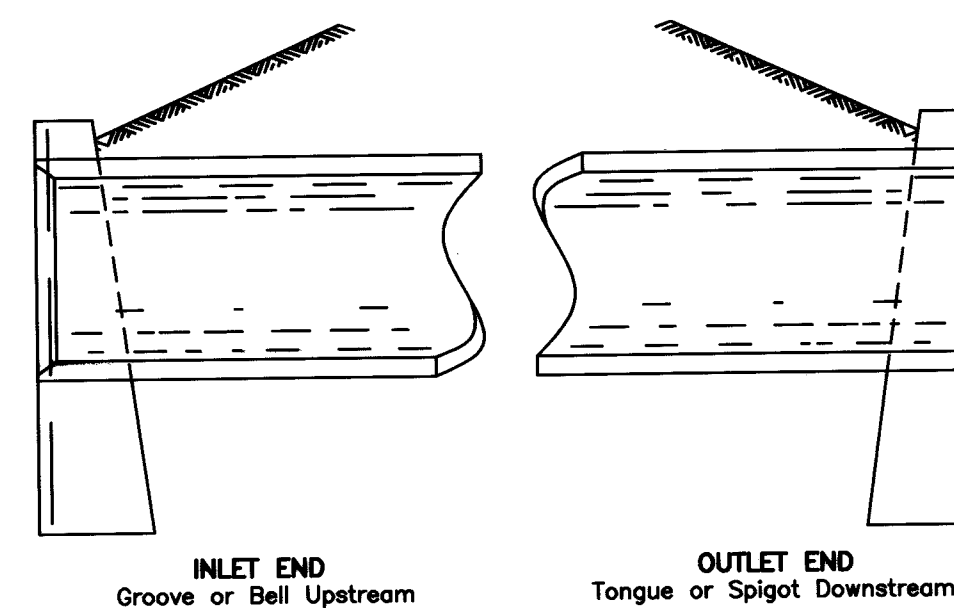
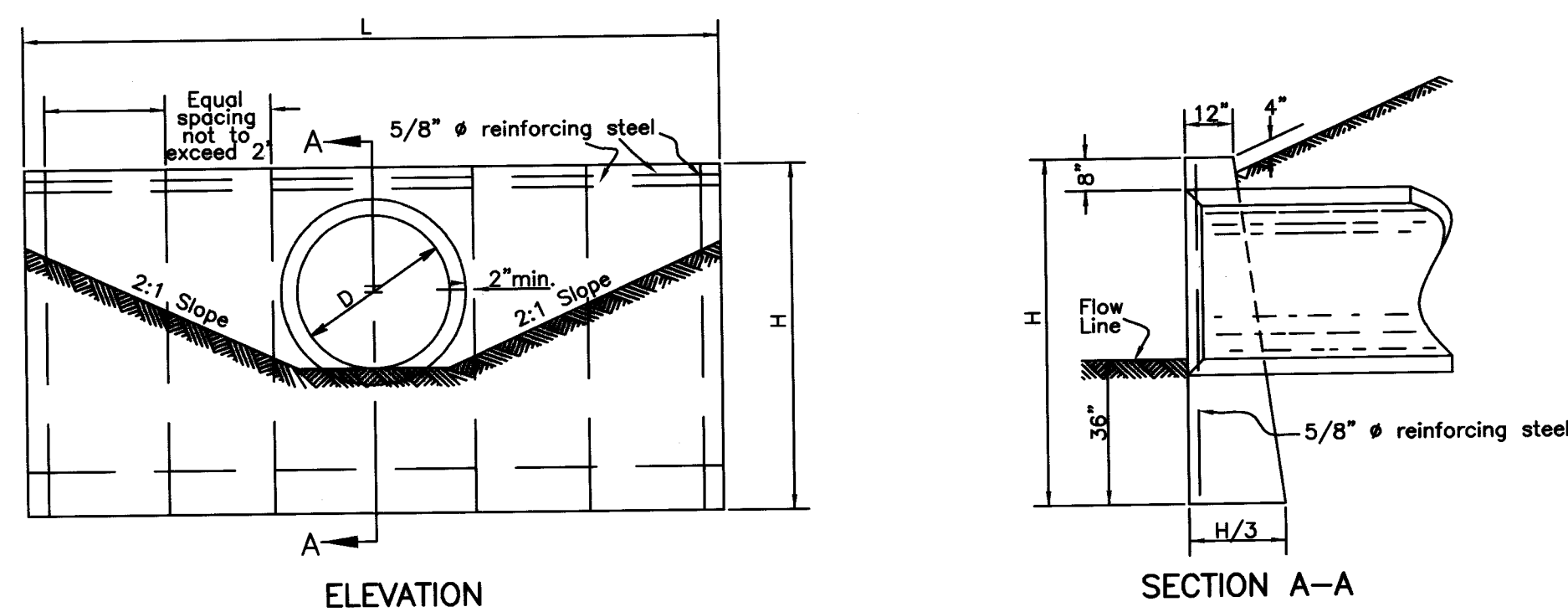
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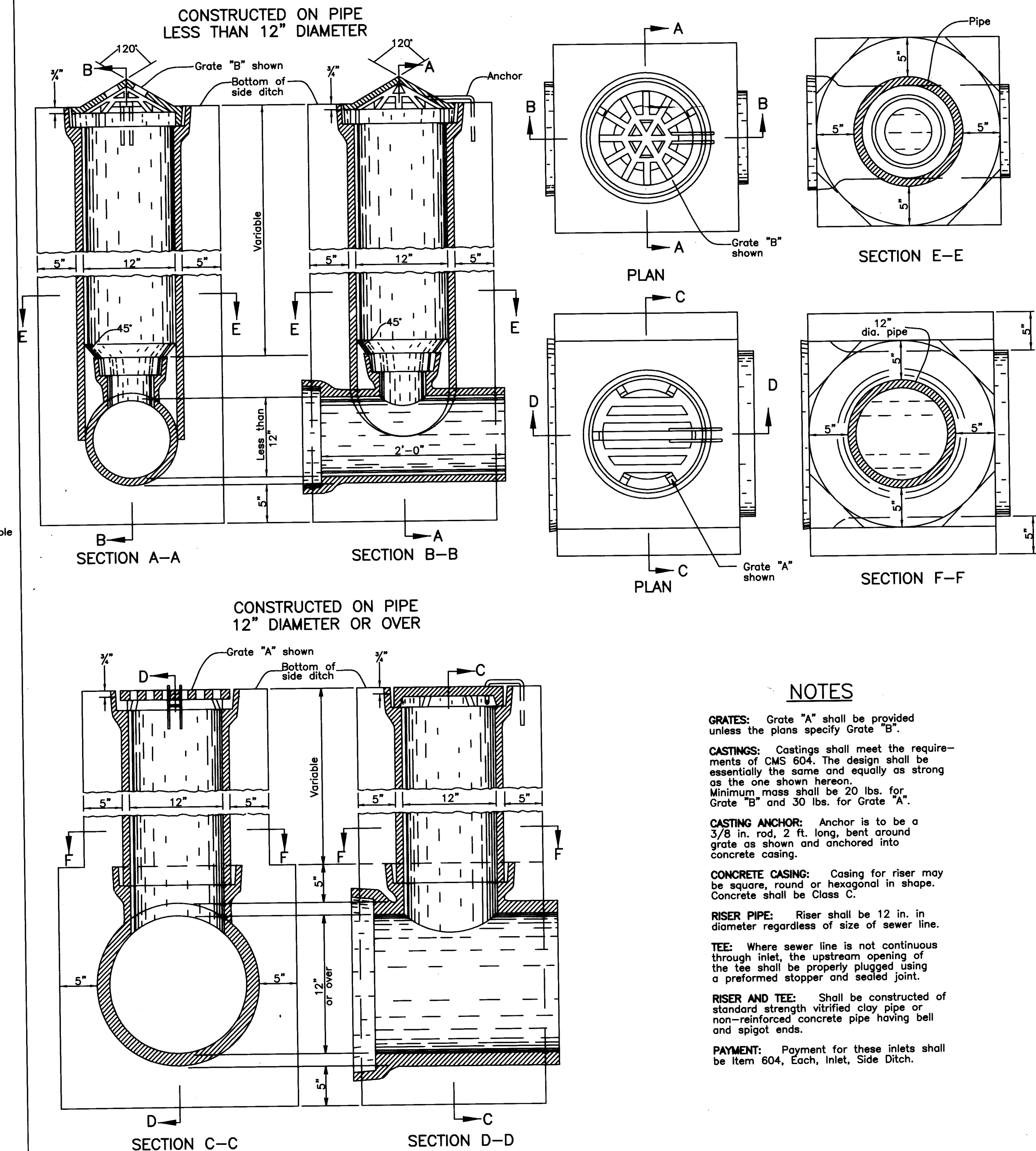


CATCH BASIN No. 3A



RIGID PIPE
END TREATMENT AT HEADWALL

FULL-HEIGHT HEADWALL - HW-1



NOTES

GRATES: Grate "A" shall be provided unless the plans specify Grate "B".

CASTINGS: Castings shall meet the requirements of CMS 604. The design shall be essentially the same and equally as strong as the one shown hereon.

CASTING ANCHOR: Anchor is to be 3/8 in. rod, 2 ft. long, bent around grate as shown and anchored into concrete casing.

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L	Elliptical	or Pipe-Arch	=	4R	+	4t	+
L	Circular	Sections	=	D	+	t	+
H	Elliptical	or Pipe-Arch	=	R	+	t	+

D = Diameter of Pipe
 R = Rise of Pipe
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 t = Thickness of Barrel
 L = Length of Headwall
 H = Height of Headwall

CITY OF MASSILLON
CITY ENGINEER DEPARTMENT
STARK COUNTY, OHIO

FOTHERGILL-BELMONT SANITARY SEWER PROJECT

PROJECT DESCRIPTION

WORK SHALL CONSIST OF FULL DEPTH PAVING WITH CURB, STORM SEWER SYSTEM, AND SANITARY SEWER. THIS WORK SHALL BE PERFORMED ON PART OF 29th St. N.W., NOBLE PL. N.W., AND GORDON AVE. N.W. AND ALL OF CREST CIR N.W., STARBROOK ST. NW, BELMERE AVE. N.W.

29th ST. NW DESIGN DESIGNATION

CURRENT ADT (1998)	2900
DESIGN YEAR ADT (2018)	3800
DESIGN HOURLY VOLUME (2018)	158
DIRECTIONAL DISTRIBUTION	93%
TRUCKS (24 HOUR B&C)	3%
DESIGN SPEED	35 MPH
LEGAL SPEED	35 MPH

DESIGN FUNCTIONAL CLASSIFICATION - RURAL PRINCIPLE ARTERIAL

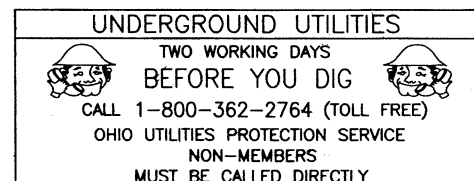
DESIGN DESIGNATION

CURRENT ADT (1998)	120
DESIGN YEAR ADT (2018)	120
DESIGN HOURLY VOLUME (2018)	5
DIRECTIONAL DISTRIBUTION	99%
TRUCKS (24 HOUR B&C)	1%
DESIGN SPEED	25 MPH
LEGAL SPEED	25 MPH

DESIGN FUNCTIONAL CLASSIFICATION - LOCAL STREETS

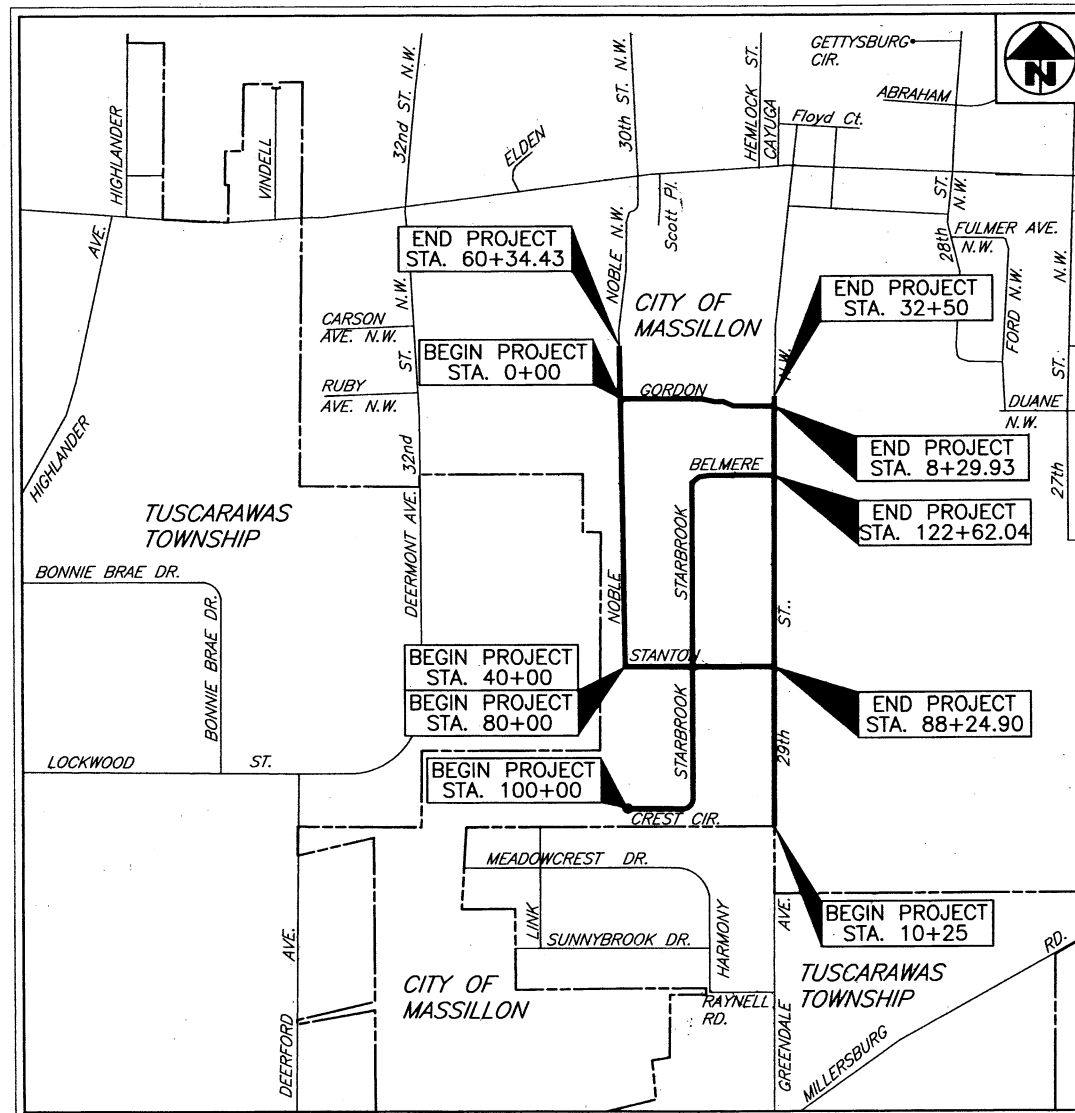
CONVENTIONAL SIGNS

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: 

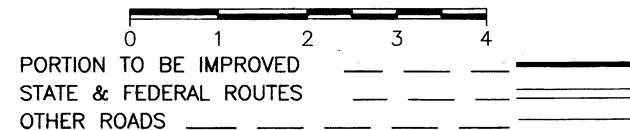


PLAN PREPARED BY:

CITY OF MASSILLON
Engineering Department



LOCATION MAP
SCALE IN MILES



RT. 30 W. — RT. 30 E.
AT THE INDUSTRIAL CROSSROADS OF OHIO
RT. 21

THE CITY OF MASSILLON, OHIO
Mayor
FRANCIS H. CICHINELLI, Jr.

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APPROVALS

DIRECTOR OF PUBLIC SAFETY AND SERVICE	ALAN W. CLIMER	DATE
CITY ENGINEER	JAMES J. BENEKOS, P.E., P.S.	02/21/98

OFFICIALS

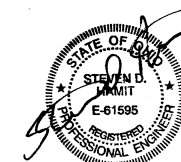
FRANCIS H. CICHINELLI, Jr.	MAYOR
ALAN W. CLIMER	DIRECTOR OF PUBLIC SAFETY AND SERVICE
JAMES J. BENEKOS, P.E., P.S.	CITY ENGINEER
JOE ULRICH	WASTE WATER TREATMENT PLANT MANAGER
JOHN D. FERRERO JR.	LAW DIRECTOR/PROSECUTOR
DOLORES B. LOOMIS	AUDITOR
BILL H. HAMIT	TREASURER
SHARON K. HOWELL	CLERK OF COUNCIL

COUNCIL

DENNIS HARWIG	PRESIDENT
JAMES H. ROHR	1st WARD
BILL AMAN	2nd WARD
CHARLIE A. TRIBBET	3rd WARD
WILLIAM POOLE	4th WARD
GLENN E. GAMBER	5th WARD
PAUL F. LAMBERT	6th WARD

COUNCIL AT LARGE

MIKE LOUDIANA
TIM BRYAN
NANCY J. HALTER



FOTHERGILL-BELMONT SANITARY SEWER PLANS
Title Sheet
City of Massillon
Stark County, Ohio

City of Massillon, Ohio
Francis H. Cichinelli, Jr.
Mayor

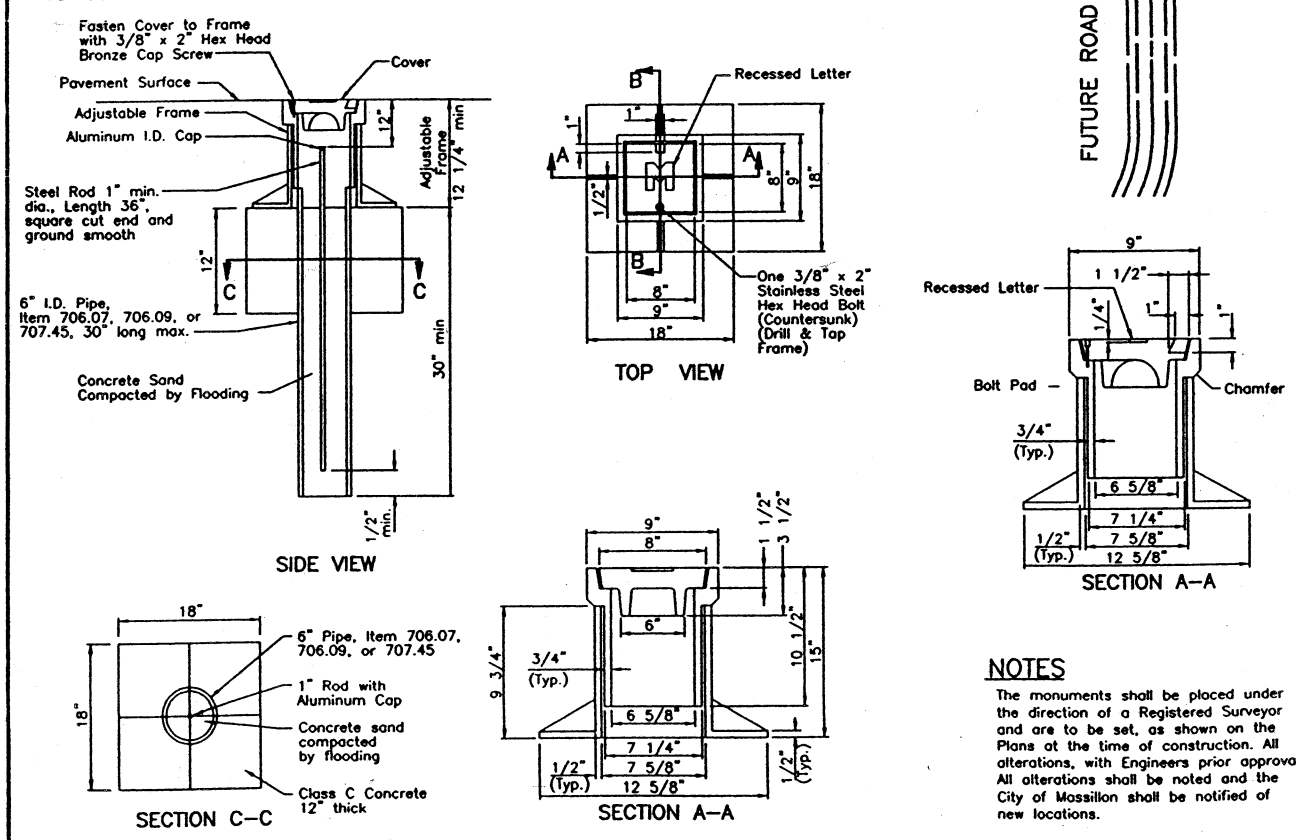


CURVE DATA	
P.I. =	STA. 4+75.92
Δ =	37°47'49" RT.
Dc =	40°55'32"
R =	140.00'
T =	47.93'
L =	92.36'
E =	7.98'
e _{max} =	NONE
P.C. =	STA. 4+27.99
P.T. =	STA. 5+20.35

CURVE DATA	
② P.I. =	STA. 5+72.79
Δ =	40°01'53" LT.
Dc =	39°47'59"
R =	143.96'
T =	52.44'
L =	100.58'
E =	9.25'
e _{max} =	NONE
P.C. =	STA. 5+20.35
P.T. =	STA. 5+72.79

CURVE DATA	
③ P.I. =	STA. 118+50.67
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Dc =	63°39'43"
R =	90.00'
L =	90.00'
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E =	37.28'
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P.T. =	STA. 119+02.04

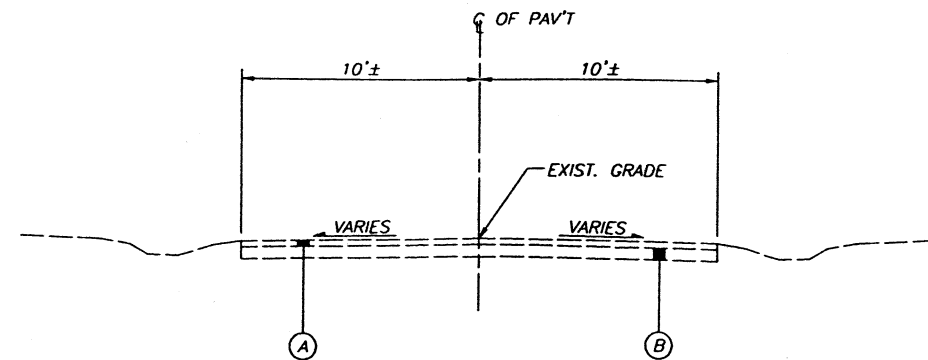
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Dc =	63°39'43"
R =	90.00'
T =	89.74'
L =	141.11'
E =	37.10'
e_{max} =	NONE
P.C. =	STA. 102+44.06
P.T. =	STA. 103+85.17



LOCATION	OFFSET	604	SPECIAL
		ADJUSTABLE CENTERLINE MONUMENT	RAILROAD SPIKE
		EACH	EACH
10+00.00 29th ST. NW	☑		1
18+23.13 29th ST. NW/88+24.90 STANTON AVE. NW	☑	1	
27+73.13 29th ST. NW /122+62.04 BELMERE AVE. NW	☑	1	
31+37.43 29th ST. NW/8+29.93 GORDON AVE. NW	☑	1	
0+00.00 GORDON AVE. NW/54+03.09 NOBLE PL. NW	☑	1	
4+27.99 GORDON AVE. NW PC OF CURVE	☑		
5+20.35 GORDON AVE. NW PT/PC OF CURVE	☑	1	
5+72.79 GORDON AVE. NW PT OF CURVE	☑	1	
40+00.00 NOBLE PL. NW/80+00.00 STANTON AVE. NW	☑	1	
47+87.67 NOBLE PL. NW P.I.	☑	1	
54+60.25 NOBLE PL. NW P.I.	☑	1	
58+84.92 NOBLE PL. NW P.I.	☑		1
81+42.06 STANTON AVE. NW P.I.	☑	1	
83+74.90 STANTON AVE. NW/109+00.67 STARBROOK AVE. NW	☑	1	
100+00.00 CREST CIR. NW	☑	1	
102+44.06 CREST CIR. NW P.C. OF CURVE	☑	1	
103+85.17 CREST CIR. NW P.T. OF CURVE	☑	1	
117+60.67 STARBROOK ST. NW P.C. OF CURVE	☑	1	
119+02.04 STARBROOK ST. NW P.T. OF CURVE	☑	1	
TOTAL		17	2

NOTES

The monuments shall be placed under the direction of a Registered Surveyor and are to be set, as shown on the Plans at the time of construction. All alterations, with Engineers prior approval. All alterations shall be noted and the City of Massillon shall be notified of new locations.

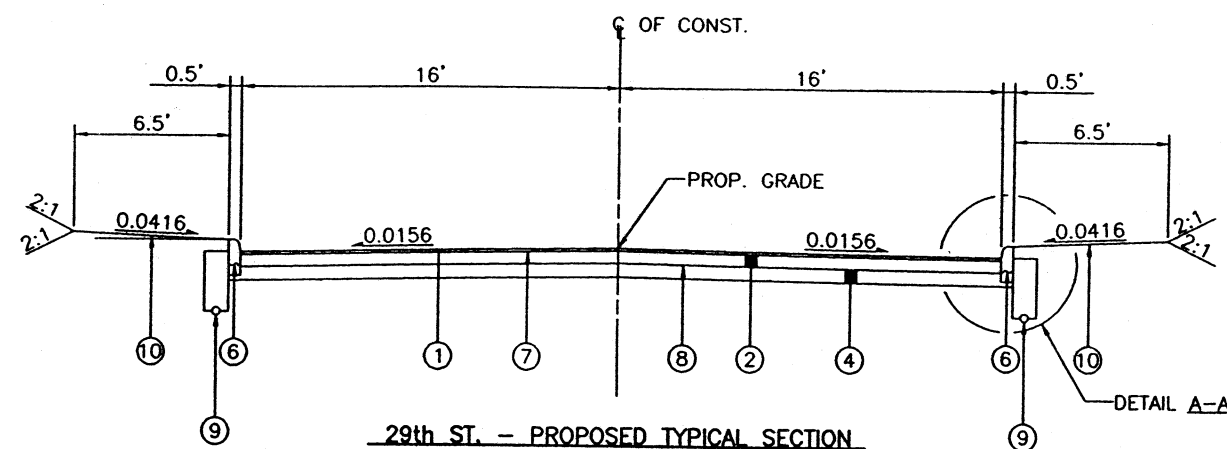


EXISTING TYPICAL SECTION

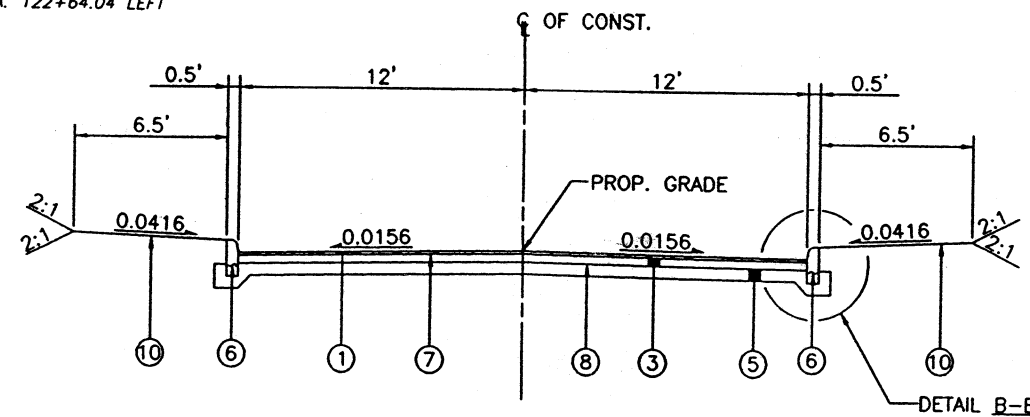
29th ST. NW	- STA. 10+00.00 TO STA. 32+50
NOBLE PLACE NW	- STA. 40+00.00 TO STA. 60+34.43
GORDON AVE. NW	- STA. 0+00.00 TO STA. 8+29.93
STANTON AVE. NW	- STA. 80+00.00 TO STA. 88+24.90
CREST CIR. NW	- STA. 100+00.00 TO STA. 104+75.67 RIGHT
CREST CIR. NW	- STA. 100+00.00 TO STA. 105+33.28 LEFT
STARBROOK ST. NW	- STA. 104+75.67 TO STA. 120+37.04 RIGHT
STARBROOK ST. NW	- STA. 105+33.28 TO STA. 118+62.58 LEFT
BELMERE AVE. NW	- STA. 120+37.04 TO STA. 122+64.04 RIGHT
BELMERE AVE. NW	- STA. 118+62.58 TO STA. 122+64.04 LEFT

EXISTING LEGEND

- (A) - 1"± TO 3"± CHIP AND SEAL
- (B) - 4"± TO 9"± AGGREGATE BASE



29th ST. - PROPOSED TYPICAL SECTION
STA. 10+50 TO STA. 32+25

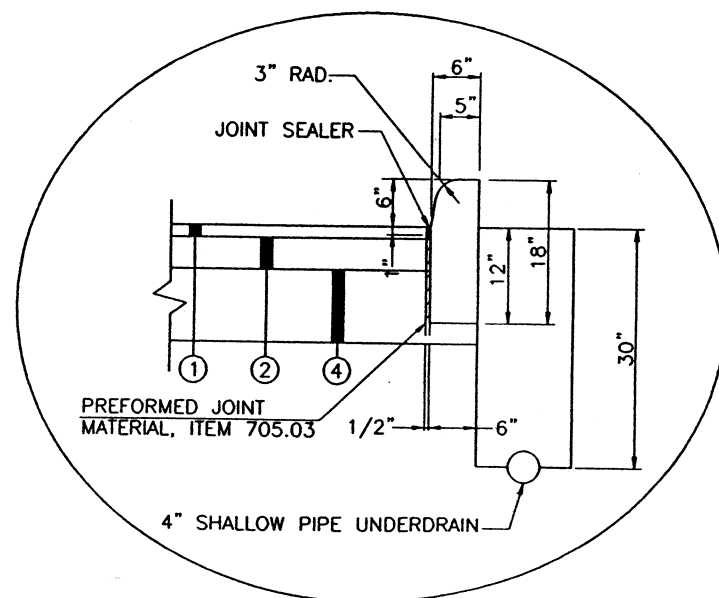


PROPOSED TYPICAL SECTION

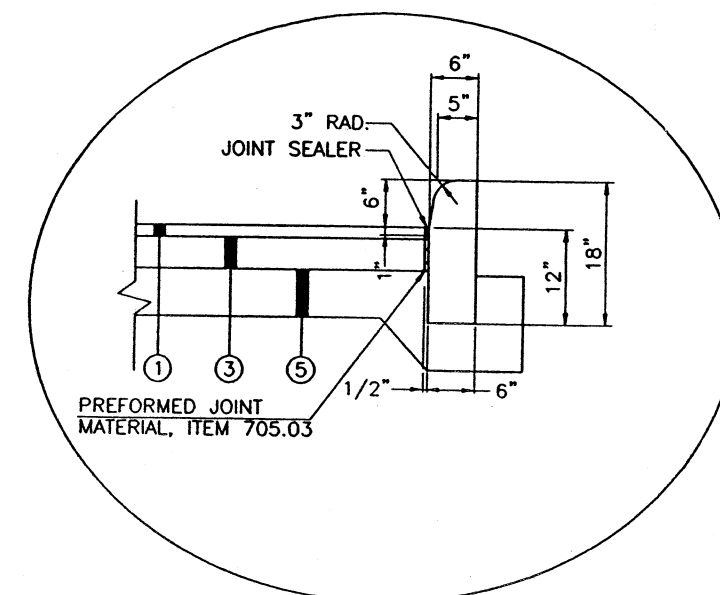
NOBLE PLACE NW	- STA. 40+00.00 TO STA. 54+25.00
GORDON AVE NW	- STA. 0+00 TO STA. 8+29.93
STANTON AVE NW	- STA. 80+00 TO STA. 88+24.97
CREST CIR. NW	- STA. 100+00 TO STA. 104+75.67 RIGHT
CREST CIR. NW	- STA. 100+00 TO STA. 105+33.28 LEFT
STARBROOK ST. NW	- STA. 104+75.67 TO STA. 120+37.04 RIGHT
STARBROOK ST. NW	- STA. 105+33.28 TO STA. 118+62.58 LEFT
BELMERE AVE. NW	- STA. 120+37.04 TO STA. 122+64.04 RIGHT
BELMERE AVE. NW	- STA. 118+62.58 TO STA. 122+64.04 LEFT

PROPOSED LEGEND

- (1) - ITEM 404-1 1/2" ASPHALT CONCRETE
- (2) - ITEM 301-6" BITUMINOUS AGGREGATE BASE
- (3) - ITEM 301-4" BITUMINOUS AGGREGATE BASE
- (4) - ITEM 304-7" AGGREGATE BASE
- (5) - ITEM 304-6" AGGREGATE BASE
- (6) - ITEM 609-CAST IN PLACE CONCRETE CURB-6" x 18"
- (7) - ITEM 407-TACK COAT
- (8) - ITEM 408-PRIME COAT
- (9) - ITEM 605-SHALLOW PIPE UNDERDRAINS
- (10) - ITEM 659-SEEDING AND MULCHING



DETAIL A-A



DETAIL B-B

UTILITIES

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

AMERITECH 50 W.BOWERY, 6TH FLOOR AKRON, OH 44308 800-290-2242 RICK MARSLI	CONSUMER OHIO WATER COMPANY P.O. BOX 584 MASSILLON, OH 44648 (330) 833-4156	OHIO EDISON STARK DIVISION 2600 S. ERIE ST. MASSILLON, OH 44545 (330) 833-3141
MB OPERATING 104 6TH ST. S.W. CANTON, OH 44702 (330) 456-2454	AT&T COMMUNICATIONS 2535 E. 40TH AVE. DENVER, CO 80205-3601 (800) 852-3786	MASSILLON CABLE TV P.O. BOX 814 MASSILLON, OH 44648 (330) 8334134
CITY OF MASSILLON SANITARY SEWER ONE JAMES DUNCAN PLAZA MASSILLON, OH 44646 (330) 830-1722	THE EAST OHIO GAS COMPANY 4725 SOUTHWAY ST. S.W. CANTON, OH 44706 (330) 478-3142 NANCY KOVACH	NORTHEAST OHIO NATURAL GAS CORP. 1425 N. WOOSTER AVE. 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

DATUM ELEVATION

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

STATIONING

ALL STATIONING SHOWN IS REFERENCED TO THE BASELINE AS SHOWN.

REMOVAL OF TREES OR STUMPS

ALL TREES AND STUMPS REMOVED DURING CONSTRUCTION SHALL BE UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING.

MONUMENTS

MONUMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAIL AS SHOWN ON THE STANDARD CONSTRUCTION DRAWINGS AND AT THE LOCATIONS SHOWN ON SHEET NO. 2.

ITEM SPECIAL - MAILBOX SUPPORT

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

WOOD POSTS SHALL BE NORMAL 4"x4" SQUARE OR 4-1/2" DIAMETER ROUND, AND CONFORM TO 710.14.

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

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

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

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

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

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

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

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

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

ITEM 609. CAST IN PLACE 6"x18" CONCRETE CURB

GRANULAR BEDDING, BACKFILLING AND CONCRETE CURB PLACEMENT ALONG WITH ALL APPURTENANCES IS TO BE INCLUDED IN ITEM 609.

ITEM 659. TOPSOIL, SEEDING AND MULCHING

SEEDING AND MULCHING SHALL BE APPLIED TO ALL EXPOSED SOIL BETWEEN THE RIGHT OF WAY LINES, AND WITHIN THE CONSTRUCTIONS LIMITS FOR AREAS OUTSIDE THE RIGHT OF WAY LINES DISTURB DURING CONSTRUCTION.

THE CITY SHALL APPROVE SEED MIX PRIOR TO CONSTRUCTION TO BE USED THROUGHOUT CONSTRUCTION LIMITS. PROPOSED MIX SHALL BE SUBMITTED IN WRITING PRIOR TO ANY CONSTRUCTION.

ITEM 659, SEEDING AND MULCHING LUMP SUM BID

EROSION CONTROL

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL AND SHALL MEET THE REQUIREMENTS OF 108.04.

ITEM 604. CATCH BASIN NO. 3. 3A

CATCH BASINS SHALL BE CONSTRUCTED IN CONFORMANCE WITH ITEM 604 EXCEPT THAT THE GRATES SHALL BE NEENAH NO. R-4859-C OR EAST JORDAN NO. 6730-2 OR APPROVED EQUALS.

CROSSING OR CONNECTING TO EXISTING PIPES AND UTILITIES

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

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

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

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

REMOVAL AND RELOCATION OF EXISTING UTILITIES

ALL UTILITY CONFLICTS WHERE THE REMOVAL AND RELOCATION OF AN EXISTING UTILITY DO TO PROPOSED WORK SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 202 REMOVAL AND RELOCATION OF EXISTING UTILITIES.

RESIDENTIAL AND COMMERCIAL DRAINAGE CONNECTIONS

EACH LOT SHALL BE SUPPLIED WITH A SINGLE 6" STORM LATERAL THAT WILL BE INSTALLED FROM THE MAIN TO THE PROPERTY LINE. SAID STORM LATERAL SHALL BE CONNECTED TO FOUNDATION DRAINS, SUMP DRAIN AND WHEN POSSIBLE AS PER ENGINEER'S DIRECTION THE DOWN SPOUT WILL BE CONNECTED.

THE FOLLOWING WORK SHALL BE PAID FOR UNDER ITEM 603 6" STORM LATERAL.

DOWN SPOUTS

ALL DOWN SPOUTS UNABLE TO BE CONNECTED TO THE STORM LATERAL SHALL BE PUT THROUGH THE CURB AS PER ENGINEER'S DIRECTION.

CURB OPENING SHALL NOT BE GREATER THAN A 3 1/2" DIAMETER.

THE WORK ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 609.

ITEM 651. TOPSOIL STOCKPILED

THE MATERIAL FOR THIS ITEM SHALL BE OBTAINED FROM AREAS WITHIN THE PROPOSED RIGHT-OF-WAY.

PROVISION OF THIS 651 ITEM SHALL NOT BE CONSTRUED AS A WAIVER OF THE PROVISIONS OF 201.4. SOD AND INCIDENTAL TOPSOIL REMOVED ELSEWHERE ON THIS PROJECT FOR SALVAGE, FOR USE AS DESCRIBED IN 203.04(e), SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE VARIOUS 203 ITEMS.

MANHOLES, CATCH BASINS, INLETS AND PIPES REMOVED OR ABANDONED

ALL CASTING AND PIPES SHALL BE CAREFULLY REMOVED AND STORED WITHIN THE RIGHT-OF-WAY FOR SALVAGE BY THE CITY. CONTACT THE CITY OF MASSILLON STREET SUPERINTENDENT - GEORGE PATTERSON AT 330-833-5746.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 202 ITEM.

ITEM 407. TACK COAT

THE RATE OF APPLICATION OF THE 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.08 GALLONS PER SQUARE YARD OF TACK COAT FOR ESTIMATING PURPOSES ONLY.

ITEM 408. BITUMINOUS PRIME COAT

THE RATE OF APPLICATION OF THE 408 PRIME COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.40 GALLONS PER SQUARE YARD OF PRIME COAT FOR ESTIMATING PURPOSES ONLY.

REVIEW OF SANITARY AND DRAINAGE FACILITIES

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

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

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

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

NOTIFICATION OF SAFETY FORCES

THE CONTRACTOR SHALL NOTIFY THE CITY OF MASSILLON FIRE DEPARTMENT, MASSILLON POLICE DEPARTMENT, CITY ENGINEER AND LOCAL (MASSILLON, TULSAW, JACKSON & PERRY) SCHOOL DISTRICT TRANSPORTATION SUPERVISOR, AND THE SAFETY & SERVICE DIRECTOR AT LEAST 48 HOURS IN ADVANCE OF ANY STREET CLOSING OR TRAFFIC CHANGE.

AT THE MASSILLON, OHIO
OFFICE OF THE CITY ENGINEER
THE CITY OF MASSILLON, OHIO

ELECTRONIC FILE NAME:
98SS0104.DWG
ACCOUNT NUMBER
98SS01

DRAWN BY
F. Werner
DATE
Oct. 28, 1997

FOTHERGILL-BELMONT SANITARY SEWER PLANS
General Notes
City of Massillon
Stark County, Ohio

CITY OF MASSILLON
Francis H. Cicchinelli, Jr.
Mayor

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SANITARY / STORM WORK

THE FOLLOWING CONDUIT TYPES MAY BE USED FOR SANITARY SEWER: 707.44 SDR35, 706.08, 706.03, 706.02 WITH JOINTS AS PER 706.11 OR 706.12.

THE FOLLOWING CONDUIT TYPES MAY BE USED FOR STORM SEWER WITH MORE THAN (1) ONE FOOT OF COVER: 707.42, 706.08, 706.02, WITH JOINTS AS PER 706.10 OR 706.11.

THE FOLLOWING CONDUIT TYPES MAY BE USED FOR STORM SEWER WITH LESS THAN (1) ONE FOOT OF COVER: 706.02 WITH JOINTS AS PER 706.10 OR 706.11

CONNECTION TO EXISTING SEWERS

CONSTRUCTION OF THE NEW SEWER SHALL BE SCHEDULED AND PERFORMED SUCH THAT ALL NEW SEWER IS IN PLACE TESTED AND FOUND READY FOR ACCEPTANCE BEFORE THE ACTUAL CUTTING AND TIEING INTO THE EXISTING SEWER IS PERFORMED.

INTERNAL TELEVISION INSPECTION

ALL SANITARY SEWERS 8" DIAMETER AND LARGER, MUST PASS INTERNAL TELEVISION INSPECTION. THE CONTRACTOR SHALL PROVIDE COMPLETE, INTERNAL INSPECTION VIDEOTAPE TO THE CITY OF MASSILLON ENGINEERING DEPARTMENT. THE VIDEOTAPING PROCEDURE MUST BE IN ACCORDANCE WITH SPECIFICATION SECTION 02243.

LATERAL LOCATIONS

ALL NEW LATERAL LOCATIONS SHALL BE DETERMINED IN THE FIELD. TO DETERMINE THE LOCATION THE CONTRACTOR SHALL SPEAK TO THE LAND OWNER FOR BEST SUITABLE LOCATION. ALL LOCATIONS MUST BE APPROVED BY ENGINEER.

ALL NEW LATERIAL LOCATIONS TO BE FIELD CHECKED AND LOCATED BY THE CONTRACTOR PRIOR TO BACKFILLING.

LATERALS SHALL BE 6" CONDUIT TYPE B.

LATERAL PRICE SHALL INCLUDE ALL APPURTENANCES NECESSARY

EXISTING ROOF DRAINS, OR YARD DRAINS, FOUNDATION DRAINS SHALL BE CONNECTED TO THE 6" STORM SEWER LATERIAL AND NOT THE SANITARY SEWER LATERIAL.

THE FOLLOWING WORK SHALL BE PAID FOR UNDER ITEM 603 6" CONDUIT TYPE B 707.42.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 603 ITEM.

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, WILL 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.

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.

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.

EXCAVATED MATERIAL

ALL EXCAVATED MATERIAL AND ALL MATERIAL USED IN CONSTRUCTION OF THE WORK SHALL BE PILED 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 TO 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.

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.

ITEM 623. CONSTRUCTION STAKING

CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION LAYOUT AND UPON COMPLETION OF PROJECT AS-BUILT DRAWINGS ARE REQUIRED.

THIS WORK IS TO BE UNDER ITEM 623 CONSTRUCTION STAKING.

SUBSURFACE CONDITIONS

IT IS THE OBLIGATION AND RESPONSIBILITY OF THE BIDDER TO MAKE HIS OWN INVESTIGATIONS OF SUBSURFACE CONDITIONS PRIOR TO SUBMITTING HIS PROPOSAL. THE BIDDER MAY EXAMINE THE RECORDS OF ALL BORINGS, TEST EXCAVATIONS AND OTHER SUBSURFACE INVESTIGATIONS, IF ANY, MADE SOLELY FOR DESIGN PURPOSES FOR THE OWNER. SAID BORINGS, TEST EXCAVATIONS AND OTHER SUBSURFACE INVESTIGATIONS, ARE NOT A PART OF THE CONTRACT DOCUMENTS, EXCEPT TO THE EXTENT THAT THE RESULTS THEREOF ARE SPECIFICALLY SHOWN ON THE PLANS OR INCLUDED IN THE SPECIFICATIONS AND ARE NOT WARRANTED TO SHOW THE ACTUAL SUBSURFACE CONDITIONS. THE CONTRACTOR AGREES THAT THEY WILL MAKE NO CLAIM AGAINST THE OWNER OR THE ENGINEER IF, IN CARRYING OUT THE WORK, HE FINDS THAT THE ACTUAL SUBSURFACE CONDITIONS ENCOUNTERED DO NOT CONFORM TO THOSE INDICATED BY SAID BORINGS, TEST EXCAVATIONS AND OTHER SUBSURFACE INVESTIGATIONS.

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 CALENDAR 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.

MAINTENANCE OF TRAFFIC

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

MAINTENANCE OF TRAFFIC PLAN MUST BE APPROVED BY THE CITY ENGINEER PRIOR TO ANY CONSTRUCTION COMMENCING.

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 THIER DRIVEWAY.

FINAL APPROVAL

A VIDEO TAPE WILL BE MADE BY THE CONTRACTOR AND SUBMITTED TO THE CITY PRIOR TO THE PROJECT COMMENCING. AFTER THE FINAL INVOICE IS RECEIVED THE SITE WILL BE VIDEO TAPED AGAIN BY THE CONTRACTOR. ANY DISCREPANCIES WILL BE RESOLVED PRIOR TO FINAL PAYMENT.

COST OF THIS WORK SHALL BE INCLUDED IN OTHER ITEMS OF WORK.



THE CITY OF MASSILLON, OHIO

ELECTRONIC FILE NAME:
98SS0105.DWG

ACCOUNT NUMBER
98SS01

DRAWN BY
F. Werner

DATE
Nov. 24, 1998

FOTHERGILL-BELMONT SANITARY SEWER PLANS

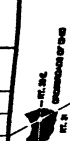
General Notes
City of Massillon
Stark County, Ohio

CITY OF MASSILLON

Francis H. Cicchinelli, Jr.
Mayor

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SHEET NUMBER																	ITEM	GRAND TOTAL	UNIT	DESCRIPTION
2	4	5			8	9	10	11	12	13										
																				ROADWAY
																	201	LUMP	LUMP	CLEARING AND GRUBBING
																	202	LUMP	LUMP	REMOVAL OF OBSTRUCTIONS
																	203	1000	C.Y.	ROADWAY EXCAVATION
																	203	LUMP	LUMP	EMBANKMENT
																	203	LUMP	LUMP	TOP SOIL FURNISHED AND PLACED
																	604	17	EACH	MONUMENTS
																	604	2	EACH	RAIL ROAD SPIKES
17																	SPEC	LUMP	LUMP	REMOVAL AND RELOCATION OF EXISTING UTILITIES
2																	SPEC	LUMP	LUMP	MAILBOX REMOVAL AND REPLACEMENT
																				EROSION CONTROL
																	601	LUMP	LUMP	ROCK CHANNEL PROTECTION
																	659	LUMP	LUMP	SEEDING AND MULCHING, AS PER PLAN
																				PAVEMENT
																	301	3026	CU YD	BITUMINOUS AGGREGATE BASE
																	304	4205	CU YD	AGGREGATE BASE
																	404	971	CU YD	ASPHALT CONCRETE
																	407	1864	GAL	TACK COAT
																	408	9663	GAL	PRIME COAT
																	452	96	SQ YD	6" PORTLAND CONCRETE CEMENT DRIVEWAT APPROACHS
																	609	15195	LIN FT	CAST IN PLACE 6" X 18" CURB
																				DRAINAGE
																	603	3255	LIN FT	6" CONDUIT, TYPE B
																	603	919	LIN FT	12" CONDUIT, TYPE B
																	603	15	LIN FT	15" CONDUIT, TYPE B
																	604	10	EACH	CATCH BASIN, NO. 3A
																	604		EACH	CATCH BASIN, NO. 3
																	604		EACH	INLET, NO. 1
																	604	6	EACH	MANHOLE, NO. 3
																	605	2646	LIN FT	4" SHALLOW PIPE UNDERDRAIN
																	602	1	EACH	HEADWALL, TYPE HWD
																				SANITARY SEWERS
																	603	3162	LIN FT	6" CONDUIT, TYPE B WITH LINING
																	603	1400	LIN FT	8" CONDUIT, TYPE B WITH LINING
																	604	5	EACH	MANHOLE, NO. 3


 THE CITY OF MASSILLON, OHIO

ELECTRONIC FILE NAME:
 98SS0106.DWG
 ACCOUNT NUMBER:
 98SS01

DRAWN BY:
 F. Werner
 DATE:
 April 03, 1997

FOTHERGILL - BELMONT SANITARY SEWER PLANS
 General Summary
 City of Massillon
 Stark County, Ohio

CITY OF MASSILLON
 Francis H. Cicchinelli, Jr.
 Mayor

[illegible]

ITEM 301 BITUMINOUS AGGREGATE BASE

(29th St. N.W. Sta. 10+25. to Sta. 10+50) (25) [(21+32) /2] (6/12) (1/27)	12.27 CU YD
(29th St. N.W. Sta. 10+50 to Sta 32+00) (2150) (32) (6/12) (1/27)	1274.07 CU YD
(29th St. N.W. Sta. 32+00 to Sta 32+50) (50) [(32+22.6) /2] (6/12) (1/27)	25.28 CU YD
(Gordon Ave. N.W. Sta. 0+12 to Sta 8+13.93) (801.93) (24) (4/12) (1/27)	237.61 CU YD
(Stanton Ave. N.W. Sta. 80+00 to Sta 88+08.90) (808.90) (24) (4/12) (1/27)	239.67 CU YD
(Noble Pl. N.W. Sta. 40+00 to Sta 56+50) (1650) (24) (4/12) (1/27)	488.89 CU YD
(Noble Pl. N.W. Sta. 56+50 to Sta 56+75) (25) [(24+20.1) /2] (4/12) (1/27)	6.81 CU YD
(Crest Cir. N.W. Left Sta. 100+59.42 to Sta 105+33.28) (473.86) (12) (4/12) (1/27)	70.20 CU YD
(Crest Cir. N.W. Right Sta. 100+59.42 to Sta 104+75.67) (416.25) (12) (4/12) (1/27)	61.67 CU YD
(Starbrook St. N.W. Left Sta. 105+33.28 to Sta. 108+88.67) (355.39) (12) (4/12) (1/27)	52.65 CU YD
(Starbrook St. N.W. Right Sta. 104+75.67 to Sta. 108+88.67) (413) (12) (4/12) (1/27)	61.19 CU YD
(Starbrook St. N.W. Left Sta. 109+12.67 to Sta. 118+62.58) (949.91) (12) (4/12) (1/27)	140.73 CU YD
(Starbrook St. N.W. Right Sta. 109+12.67 to Sta. 120+37.04) (1124.37) (12) (4/12) (1/27)	166.57 CU YD
(Belmere Ave. N.W. Left Sta. 118+62.58 to Sta. 122+46.04) (383.46) (12) (4/12) (1/27)	56.81 CU YD
(Belmere Ave. N.W. Right Sta. 120+37.04 to Sta. 122+46.04) (209) (12) (4/12) (1/27)	30.96 CU YD
(S.W. corner of 29th St. N.W./Stanton Ave. N.W. Intersection) (85.84) (4/12) (1/27)	1.06 CU YD
(N.W. corner of 29th St. N.W./Stanton Ave. N.W. Intersection) (85.84) (4/12) (1/27)	1.06 CU YD
(S.W. corner of 29th St. N.W./Belmere Ave. N.W. Intersection) (134.13) (4/12) (1/27)	1.66 CU YD
(N.W. corner of 29th St. N.W./Belmere Ave. N.W. Intersection) (134.13) (4/12) (1/27)	1.66 CU YD
(S.W. corner of 29th St. N.W./Gordon Ave. N.W. Intersection) (84.68) (4/12) (1/27)	1.05 CU YD
(N.W. corner of 29th St. N.W./Gordon Ave. N.W. Intersection) (87.01) (4/12) (1/27)	1.07 CU YD
(S.W. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (85.84) (4/12) (1/27)	1.06 CU YD
(N.W. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (85.84) (4/12) (1/27)	1.06 CU YD
(S.E. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (85.84) (4/12) (1/27)	1.06 CU YD
(N.E. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (85.84) (4/12) (1/27)	1.06 CU YD
(N.E. corner of Noble Pl. N.W./Stanton Ave. N.W. Intersection) (89.66) (4/12) (1/27)	1.11 CU YD

CONTINUED: Item 301 Bituminous Aggregate Base

(S.E. corner of Noble Pl. N.W./Gordon Ave. N.W. Intersection) (142.17) (4/12) (1/27)	1.76 CU YD
(N.E. corner of Noble Pl. N.W./Gordon Ave. N.W. Intersection) (126.47) (4/12) (1/27)	1.56 CU YD
(Crest Cir. N.W. circle area) (6798.92) (4/12) (1/27)	83.94 CU YD

TOTAL ITEM 301 = 3,025.55 Cu. Yd.
USED: 3,026 Cu. Yd.

ITEM 304 AGGREGATE BASE

(29th St. N.W. Sta. 10+25. to Sta. 10+50) (25) [(21+33) /2] (7/12) (1/27)	14.58 CU YD
(29th St. N.W. Sta. 10+50 to Sta 32+00) (2150) (33) (7/12) (1/27)	1532.87 CU YD
(29th St. N.W. Sta. 32+00 to Sta 32+50) (50) [(33+22.6) /2] (7/12) (1/27)	30.03 CU YD
(Gordon Ave. N.W. Sta. 0+12 to Sta 8+13.93) (801.93) (25) (6/12) (1/27)	371.26 CU YD
(Stanton Ave. N.W. Sta. 80+00 to Sta 88+08.90) (808.90) (25) (6/12) (1/27)	374.49 CU YD
(Noble Pl. N.W. Sta. 40+00 to Sta 56+50) (1650) (25) (6/12) (1/27)	763.89 CU YD
(Noble Pl. N.W. Sta. 56+50 to Sta 56+75) (25) [(25+20.1) /2] (6/12) (1/27)	10.44 CU YD
(Crest Cir. N.W. Left Sta. 100+59.42 to Sta 105+33.28) (473.86) (12.5) (6/12) (1/27)	63.01 CU YD
(Crest Cir. N.W. Right Sta. 100+59.42 to Sta 104+75.67) (416.25) (12.5) (6/12) (1/27)	96.35 CU YD
(Starbrook St. N.W. Left Sta. 105+33.28 to Sta. 108+88.67) (355.39) (12.5) (6/12) (1/27)	82.27 CU YD
(Starbrook St. N.W. Right Sta. 104+75.67 to Sta. 108+88.67) (413) (12.5) (6/12) (1/27)	95.60 CU YD
(Starbrook St. N.W. Left Sta. 109+12.67 to Sta. 118+62.58) (949.91) (12.5) (6/12) (1/27)	219.89 CU YD
(Starbrook St. N.W. Right Sta. 109+12.67 to Sta. 120+37.04) (1124.37) (12.5) (6/12) (1/27)	260.27 CU YD
(Belmere Ave. N.W. Left Sta. 118+62.58 to Sta. 122+46.04) (383.46) (12.5) (6/12) (1/27)	88.76 CU YD
(Belmere Ave. N.W. Right Sta. 120+37.04 to Sta. 122+46.04) (209) (12.5) (6/12) (1/27)	48.38 CU YD
(S.W. corner of 29th St. N.W./Stanton Ave. N.W. Intersection) (81.60) (6/12) (1/27)	1.51 CU YD
(N.W. corner of 29th St. N.W./Stanton Ave. N.W. Intersection) (81.60) (6/12) (1/27)	1.51 CU YD
(S.W. corner of 29th St. N.W./Belmere Ave. N.W. Intersection) (128.81) (6/12) (1/27)	2.39 CU YD
(N.W. corner of 29th St. N.W./Belmere Ave. N.W. Intersection) (128.81) (6/12) (1/27)	2.39 CU YD
(S.W. corner of 29th St. N.W./Gordon Ave. N.W. Intersection) (80.50) (6/12) (1/27)	1.49 CU YD
(N.W. corner of 29th St. N.W./Gordon Ave. N.W. Intersection) (82.71) (6/12) (1/27)	1.53 CU YD

CONTINUED: Item 301 Bituminous Aggregate Base

(S.W. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (81.60) (6/12) (1/27)	1.51 CU YD
(N.W. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (81.60) (6/12) (1/27)	1.51 CU YD
(S.E. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (81.60) (6/12) (1/27)	1.51 CU YD
(N.E. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (81.60) (6/12) (1/27)	1.51 CU YD
(N.E. corner of Noble Pl. N.W./Stanton Ave. N.W. Intersection) (130.37) (6/12) (1/27)	2.41 CU YD
(S.E. corner of Noble Pl. N.W./Gordon Ave. N.W. Intersection) (136.54) (6/12) (1/27)	2.53 CU YD
(N.E. corner of Noble Pl. N.W./Gordon Ave. N.W. Intersection) (121.46) (6/12) (1/27)	2.25 CU YD
(Crest Cir. N.W. circle area) (6940.97) (6/12) (1/27)	128.54 CU YD

TOTAL ITEM 304 = 4204.68 Cu. Yd.
USED: 4205 Cu. Yd.

ITEM 404 ASPHALT CONCRETE

(29th St. N.W. Sta. 10+25. to Sta. 10+50) (25) [(21+32) /2] (1.5/12) (1/27)	3.07 CU YD
(29th St. N.W. Sta. 10+50 to Sta 32+00) (2150) (32) (1.5/12) (1/27)	318.52 CU YD
(29th St. N.W. Sta. 32+00 to Sta 32+50) (50) [(32+22.6) /2] (1.5/12) (1/27)	6.32 CU YD
(Gordon Ave. N.W. Sta. 0+12 to Sta 8+13.93) (801.93) (24) (1.5/12) (1/27)	89.10 CU YD
(Stanton Ave. N.W. Sta. 80+00 to Sta 88+08.90) (808.90) (24) (1.5/12) (1/27)	89.88 CU YD
(Noble Pl. N.W. Sta. 40+00 to Sta 56+50) (1650) (24) (1.5/12) (1/27)	183.33 CU YD
(Noble Pl. N.W. Sta. 56+50 to Sta 56+75) (25) [(24+20.1) /2] (1.5/12) (1/27)	2.55 CU YD
(Crest Cir. N.W. Left Sta. 100+59.42 to Sta 105+33.28) (473.86) (12) (1.5/12) (1/27)	26.33 CU YD
(Crest Cir. N.W. Right Sta. 100+59.42 to Sta 104+75.67) (416.25) (12) (1.5/12) (1/27)	23.13 CU YD
(Starbrook St. N.W. Left Sta. 105+33.28 to Sta. 108+88.67) (355.39) (12) (1.5/12) (1/27)	19.74 CU YD
(Starbrook St. N.W. Right Sta. 104+75.67 to Sta. 108+88.67) (413) (12) (1.5/12) (1/27)	22.94 CU YD
(Starbrook St. N.W. Left Sta. 109+12.67 to Sta. 118+62.58) (949.91) (12) (1.5/12) (1/27)	52.77 CU YD
(Starbrook St. N.W. Right Sta. 109+12.67 to Sta. 120+37.04) (1124.37) (12) (1.5/12) (1/27)	62.47 CU YD
(Belmere Ave. N.W. Left Sta. 118+62.58 to Sta. 122+46.04) (383.46) (12) (1.5/12) (1/27)	21.30 CU YD
(Belmere Ave. N.W. Right Sta. 120+37.04 to Sta. 122+46.04) (209) (12) (1.5/12) (1/27)	11.61 CU YD

Total This Sheet = 933.06 CU YD

CONTINUED: Item 404 Asphalt Concrete to Sheet No. 9

FOTHERGILL - BELMONT SANITARY SEWER PLANS

CITY OF MASSILLON
Francis H. Cicchinelli, Jr.
Mayor

8
37

THE CITY OF MASSILLON, OHIO

ELECTRONIC FILE NAME:
98SS0108.DWG

DRAWN BY
F. Werner

DATE
Nov. 24, 1998

ACCOUNT NUMBER
98SS01

CONTINUED: Item 404 Asphalt Concrete from Sheet No. ____

(S.W. corner of 29th St. N.W./Stanton Ave. N.W. Intersection) (85.84) (1.5/12) (1/27)	0.40 CU YD
(N.W. corner of 29th St. N.W./Stanton Ave. N.W. Intersection) (85.84) (1.5/12) (1/27)	0.40 CU YD
(S.W. corner of 29th St. N.W./Belmere Ave. N.W. Intersection) (134.13) (1.5/12) (1/27)	0.62 CU YD
(N.W. corner of 29th St. N.W./Belmere Ave. N.W. Intersection) (134.13) (1.5/12) (1/27)	0.62 CU YD
(S.W. corner of 29th St. N.W./Gordon Ave. N.W. Intersection) (84.68) (1.5/12) (1/27)	0.39 CU YD
(N.W. corner of 29th St. N.W./Gordon Ave. N.W. Intersection) (87.01) (1.5/12) (1/27)	0.40 CU YD
(S.W. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (85.84) (1.5/12) (1/27)	0.40 CU YD
(N.W. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (85.84) (1.5/12) (1/27)	0.40 CU YD
(S.E. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (85.84) (1.5/12) (1/27)	0.40 CU YD
(N.E. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (85.84) (1.5/12) (1/27)	0.40 CU YD
(N.E. corner of Noble Pl. N.W./Stanton Ave. N.W. Intersection) (89.66) (1.5/12) (1/27)	0.42 CU YD
(S.E. corner of Noble Pl. N.W./Gordon Ave. N.W. Intersection) (142.17) (1.5/12) (1/27)	0.66 CU YD
(N.E. corner of Noble Pl. N.W./Gordon Ave. N.W. Intersection) (126.47) (1.5/12) (1/27)	0.59 CU YD
(Crest Cir. N.W. circle area) (6798.92) (1.5/12) (1/27)	31.48 CU YD

Total This Sheet = 37.58 CU YD
Total Sheet No. 8 = 933.06 CU YD

TOTAL ITEM 404 = 970.64 Cu. Yd.
USED: 971 Cu. Yd.

ITEM 407 TACK COAT

(29th St. N.W. Sta. 10+25. to Sta. 10+50) (25) [(21+32) /2] (0.08) (1/9)	5.89 GAL
(29th St. N.W. Sta. 10+50 to Sta 32+00) (2150) (32) (0.08) (1/9)	611.56 GAL
(29th St. N.W. Sta. 32+00 to Sta 32+50) (50) [(32+22.6) /2] (0.08) (1/9)	12.13 GAL
(Gordon Ave. N.W. Sta. 0+12 to Sta 8+13.93) (801.93) (24) (0.08) (1/9)	171.08 GAL
(Stanton Ave. N.W. Sta. 80+00 to Sta 88+08.90) (808.90) (24) (0.08) (1/9)	172.57 GAL
(Noble Pl. N.W. Sta. 40+00 to Sta 56+50) (1650) (24) (0.08) (1/9)	352.00 GAL
(Noble Pl. N.W. Sta. 56+50 to Sta 56+75) (25) [(24+20.1) /2] (0.08) (1/9)	4.90 GAL
(Crest Cir. N.W. Left Sta. 100+59.42 to Sta 105+33.28) (473.86) (12) (0.08) (1/9)	50.55 GAL

CONTINUED: Item 407 Tack Coat

(Crest Cir. N.W. Right Sta. 100+59.42 to Sta 104+75.67) (416.25) (12) (0.08) (1/9)	44.40 GAL
(Starbrook St. N.W. Left Sta. 105+33.28 to Sta. 108+88.67) (355.39) (12) (0.08) (1/9)	37.91 GAL
(Starbrook St. N.W. Right Sta. 104+75.67 to Sta. 108+88.67) (413) (12) (0.08) (1/9)	44.05 GAL
(Starbrook St. N.W. Left Sta. 109+12.67 to Sta. 118+62.58) (949.91) (12) (0.08) (1/9)	101.32 GAL
(Starbrook St. N.W. Right Sta. 109+12.67 to Sta. 120+37.04) (1124.37) (12) (0.08) (1/9)	119.93 GAL
(Belmere Ave. N.W. Left Sta. 118+62.58 to Sta. 122+46.04) (383.46) (12) (0.08) (1/9)	40.90 GAL
(Belmere Ave. N.W. Right Sta. 120+37.04 to Sta. 122+46.04) (209) (12) (0.08) (1/9)	22.29 GAL
(S.W. corner of 29th St. N.W./Stanton Ave. N.W. Intersection) (85.84) (0.08) (1/9)	0.76 GAL
(N.W. corner of 29th St. N.W./Stanton Ave. N.W. Intersection) (85.84) (0.08) (1/9)	0.76 GAL
(S.W. corner of 29th St. N.W./Belmere Ave. N.W. Intersection) (134.13) (0.08) (1/9)	1.19 GAL
(N.W. corner of 29th St. N.W./Belmere Ave. N.W. Intersection) (134.13) (0.08) (1/9)	1.19 GAL
(S.W. corner of 29th St. N.W./Gordon Ave. N.W. Intersection) (84.68) (0.08) (1/9)	0.75 GAL
(N.W. corner of 29th St. N.W./Gordon Ave. N.W. Intersection) (87.01) (0.08) (1/9)	0.77 GAL
(S.W. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (85.84) (0.08) (1/9)	0.76 GAL
(N.W. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (85.84) (0.08) (1/9)	0.76 GAL
(S.E. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (85.84) (0.08) (1/9)	0.76 GAL
(N.E. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (85.84) (0.08) (1/9)	0.76 GAL
(N.E. corner of Noble Pl. N.W./Stanton Ave. N.W. Intersection) (89.66) (0.08) (1/9)	0.80 GAL
(S.E. corner of Noble Pl. N.W./Gordon Ave. N.W. Intersection) (142.17) (0.08) (1/9)	1.26 GAL
(N.E. corner of Noble Pl. N.W./Gordon Ave. N.W. Intersection) (126.47) (0.08) (1/9)	1.12 GAL
(Crest Cir. N.W. circle area) (6798.92) (0.08) (1/9)	60.43 GAL

TOTAL ITEM 407 = 1,863.55 GAL
USED: 1864 GAL

ITEM 408 PRIME COAT

(29th St. N.W. Sta. 10+25. to Sta. 10+50) (25) [(21+33) /2] (0.40) (1/9)	30.00 GAL
(29th St. N.W. Sta. 10+50 to Sta 32+00) (2150) (33) (0.40) (1/9)	3,153.33 GAL
(29th St. N.W. Sta. 32+00 to Sta 32+50) (50) [(33+22.6) /2] (0.40) (1/9)	61.78 GAL

CONTINUED: Item 407 Tack Coat

(Gordon Ave. N.W. Sta. 0+12 to Sta 8+13.93) (801.93) (25) (0.40) (1/9)	891.03 GAL
(Stanton Ave. N.W. Sta. 80+00 to Sta 88+08.90) (808.90) (25) (0.40) (1/9)	898.78 GAL
(Noble Pl. N.W. Sta. 40+00 to Sta 56+50) (1650) (25) (0.40) (1/9)	1833.33 GAL
(Noble Pl. N.W. Sta. 56+50 to Sta 56+75) (25) [(25+20.1) /2] (0.40) (1/9)	25.06 GAL
(Crest Cir. N.W. Left Sta. 100+59.42 to Sta 105+33.28) (473.86) (12.5) (0.40) (1/9)	263.26 GAL
(Crest Cir. N.W. Right Sta. 100+59.42 to Sta 104+75.67) (416.25) (12.5) (0.40) (1/9)	231.25 GAL
(Starbrook St. N.W. Left Sta. 105+33.28 to Sta. 108+88.67) (355.39) (12.5) (0.40) (1/9)	197.44 GAL
(Starbrook St. N.W. Right Sta. 104+75.67 to Sta. 108+88.67) (413) (12.5) (0.40) (1/9)	229.44 GAL
(Starbrook St. N.W. Left Sta. 109+12.67 to Sta. 118+62.58) (949.91) (12.5) (0.40) (1/9)	527.73 GAL
(Starbrook St. N.W. Right Sta. 109+12.67 to Sta. 120+37.04) (1124.37) (12.5) (0.40) (1/9)	624.65 GAL
(Belmere Ave. N.W. Left Sta. 118+62.58 to Sta. 122+46.04) (383.46) (12.5) (0.40) (1/9)	213.03 GAL
(Belmere Ave. N.W. Right Sta. 120+37.04 to Sta. 122+46.04) (209) (12.5) (0.40) (1/9)	116.11 GAL
(S.W. corner of 29th St. N.W./Stanton Ave. N.W. Intersection) (81.60) (0.40) (1/9)	3.63 GAL
(N.W. corner of 29th St. N.W./Stanton Ave. N.W. Intersection) (81.60) (0.40) (1/9)	3.63 GAL
(S.W. corner of 29th St. N.W./Belmere Ave. N.W. Intersection) (128.81) (0.40) (1/9)	5.72 GAL
(N.W. corner of 29th St. N.W./Belmere Ave. N.W. Intersection) (128.81) (0.40) (1/9)	5.72 GAL
(S.W. corner of 29th St. N.W./Gordon Ave. N.W. Intersection) (80.50) (0.40) (1/9)	3.58 GAL
(N.W. corner of 29th St. N.W./Gordon Ave. N.W. Intersection) (82.71) (0.40) (1/9)	3.68 GAL
(S.W. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (81.60) (0.40) (1/9)	3.63 GAL
(N.W. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (81.60) (0.40) (1/9)	3.63 GAL
(S.E. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (81.60) (0.40) (1/9)	3.63 GAL
(N.E. corner of Stanton Ave. N.W./Starbrook St. N.W. Intersection) (81.60) (0.40) (1/9)	3.63 GAL
(N.E. corner of Noble Pl. N.W./Stanton Ave. N.W. Intersection) (130.37) (0.40) (1/9)	5.79 GAL
(S.E. corner of Noble Pl. N.W./Gordon Ave. N.W. Intersection) (136.54) (0.40) (1/9)	6.07 GAL
(N.E. corner of Noble Pl. N.W./Gordon Ave. N.W. Intersection) (121.46) (0.40) (1/9)	5.40 GAL
(Crest Cir. N.W. circle area) (6940.97) (0.40) (1/9)	308.49 GAL

TOTAL ITEM 408 = 9,662.45 GAL
USED: 9,663 GAL



ELECTRONIC FILE NAME:
98SS0108.DWG
ACCOUNT NUMBER
98SS01

DRAWN BY
F. Werner
DATE
Nov. 24, 1998

FOTHERGILL - BELMONT SANITARY SEWER PLANS
Calculations
City of Massillon
Stark County, Ohio

CITY OF MASSILLON
Francis H. Cicchinelli, Jr.
Mayor

ITEM 609 CAST IN PLACE CONCRETE CURB - 6" X 18"

29th St. N.W. Right

Sta. 10+50 to Sta. 32+00 2,150.00 LIN FT

29th St. N.W. Left

Sta. 10+50 to Sta. 17+91.13 741.31 LIN FT
SW Intersection return of 29th St. NW/Stanton Ave. NW 31.42 LIN FT
NW Intersection return of 29th St. NW/Stanton Ave. NW 31.42 LIN FT
Sta. 18+55.13 to Sta. 27+36.13 881.00 LIN FT
SW Intersection return of 29th St. NW/Belmer Ave. NW 39.27 LIN FT
NW Intersection return of 29th St. NW/Belmer Ave. NW 39.27 LIN FT
Sta. 28+10.13 to Sta. 31+05.64 295.51 LIN FT
SW Intersection return of 29th St. NW/Gordon Ave. NW 39.27 LIN FT
NW Intersection return of 29th St. NW/Gordon Ave. NW 39.27 LIN FT
Sta. 31+96.64 to Sta. 32+00 30.36 LIN FT

Noble Pl. N.W. Left

Sta. 39+97.94 to Sta. 56+50 1,652.06 LIN FT

Noble Pl. N.W. Right

NE Intersection return of Noble Pl. NW/Stanton Ave. NW 39.40 LIN FT
Sta. 40+37.19 to Sta. 53+65.15 1,327.96 LIN FT
SE Intersection return of Noble Pl. NW/Gordon Ave. NW 39.90 LIN FT
NE Intersection return of Noble Pl. NW/Gordon Ave. NW 38.64 LIN FT
Sta. 54+39.18 to Sta. 56+50 200.82 LIN FT

Gordon Ave. N.W. Left

Sta. 0+36.08 to Sta. 7+93.75 757.67 LIN FT

Gordon Ave. N.W. Right

Sta. 0+37.94 to Sta. 7+94.12 756.78 LIN FT

Stanton Ave. N.W. Left

Sta. 80+37.19 to Sta. 83+42.90 305.71 LIN FT
Sta. 84+06.90 to Sta. 87+88.90 382.00 LIN FT

Stanton Ave. N.W. Right

Sta. 79+87.94 to Sta. 83+42.90 354.96 LIN FT
Sta. 84+06.90 to Sta. 87+88.90 382.00 LIN FT

Crest Cir. N.W.

Cul-Da-Sac 232.62 LIN FT

Crest Cir. N.W. Left

N returning entering Cul-Da-Sac 25.35 LIN FT
Sta. 100+59.42 to Sta. 105+33.28 473.86 LIN FT

Crest Cir. N.W. Right

S returning leaving Cul-Da-Sac 25.35 LIN FT
Sta. 100+59.42 to Sta. 104+75.67 416.25 LIN FT

Starbrook St. N.W. Left

Sta. 105+33.28 to Sta. 108+68.67 335.39 LIN FT
SW Intersection return of Starbrook St. NW/Stanton Ave. NW 31.42 LIN FT
NW Intersection return of Starbrook St. NW/Stanton Ave. NW 31.42 LIN FT
Sta. 109+32.67 to Sta. 118+62.58 929.91 LIN FT

Starbrook St. N.W. Right

Sta. 104+75.67 to Sta. 108+68.67 393.00 LIN FT
SE Intersection return of Starbrook St. NW/Stanton Ave. NW 31.42 LIN FT
NE Intersection return of Starbrook St. NW/Stanton Ave. NW 31.42 LIN FT
Sta. 109+32.67 to Sta. 120+37.04 1,104.37 LIN FT

CONTINUED: Item 609 Cast in Place Concrete Curb 6" X 18"

Belmer Ave. N.W. Left

Sta. 118+62.58 to Sta. 122+21.04 393.00 LIN FT

Belmer Ave. N.W. Right

Sta. 120+37.04 to Sta. 122+21.04 184.00 LIN FT

TOTAL ITEM 609 = 15,194.18 LIN FT
USED: 15,195 LIN FT

ITEM 452 PLAIN PORTLAND CEMENT CONCRETE PAVEMENT
FOR DRIVEWAY(29th St. N.W.)

Driveways (Plan & Profile Sheet No. 11) 5 EACH
Driveways (Plan & Profile Sheet No. 12) 6 EACH
Driveways (Plan & Profile Sheet No. 13) 8 EACH
Driveways (Plan & Profile Sheet No. 14) 5 EACH
Driveways (Plan & Profile Sheet No. 15) 1 EACH

(Gordon Ave. N.W.)

Driveways (Plan & Profile Sheet No. 16) 6 EACH
Driveways (Plan & Profile Sheet No. 17) 4 EACH

(Noble Pl. N.W.)

Driveways (Plan & Profile Sheet No. 18) 7 EACH
Driveways (Plan & Profile Sheet No. 19) 10 EACH
Driveways (Plan & Profile Sheet No. 20) 8 EACH
Driveways (Plan & Profile Sheet No. 21) 3 EACH

(Stanton Ave. N.W.)

Driveways (Plan & Profile Sheet No. 23) 4 EACH
Driveways (Plan & Profile Sheet No. 24) 2 EACH

(Crest Cir. N.W.)

Driveways (Plan & Profile Sheet No. 25) 8 EACH

(Starbrook St. N.W.)

Driveways (Plan & Profile Sheet No. 26) 2 EACH
Driveways (Plan & Profile Sheet No. 27) 5 EACH
Driveways (Plan & Profile Sheet No. 28) 6 EACH
Driveways (Plan & Profile Sheet No. 29) 1 EACH

(Belmer Ave. N.W.)

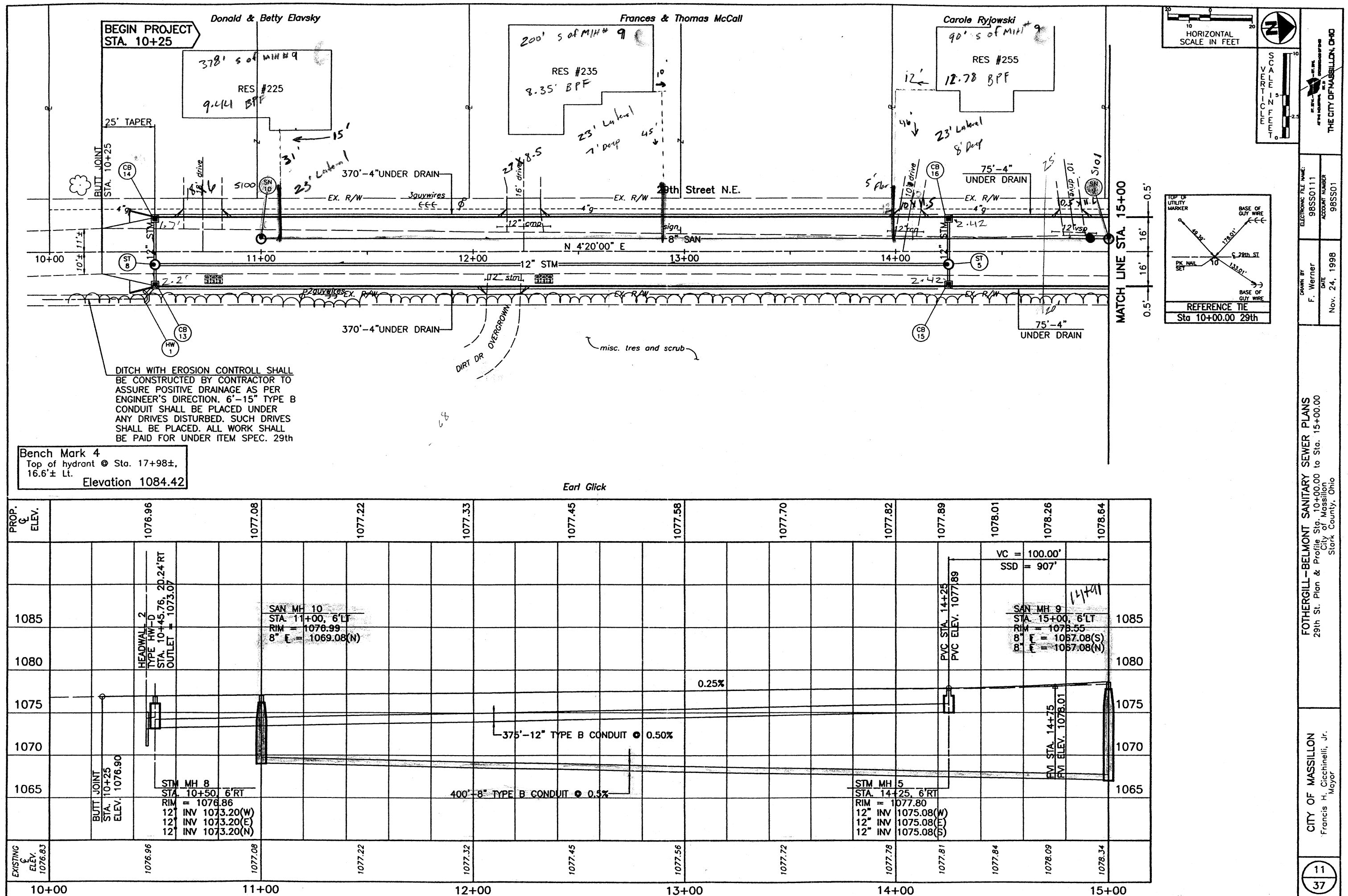
Driveways (Plan & Profile Sheet No. 29) 5 EACH

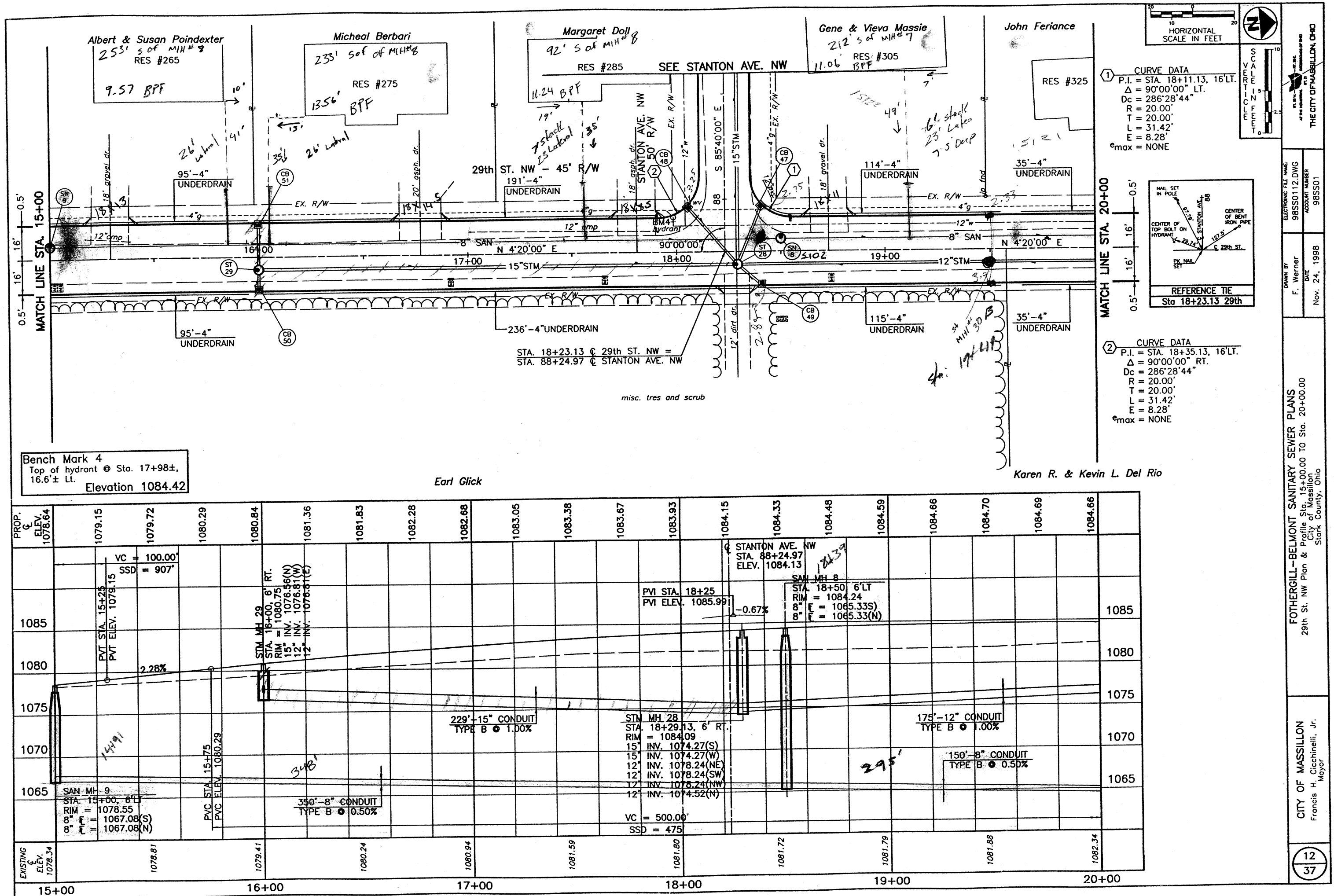
TOTAL ITEM 609 = 96 EACH
USED: 88 EACH

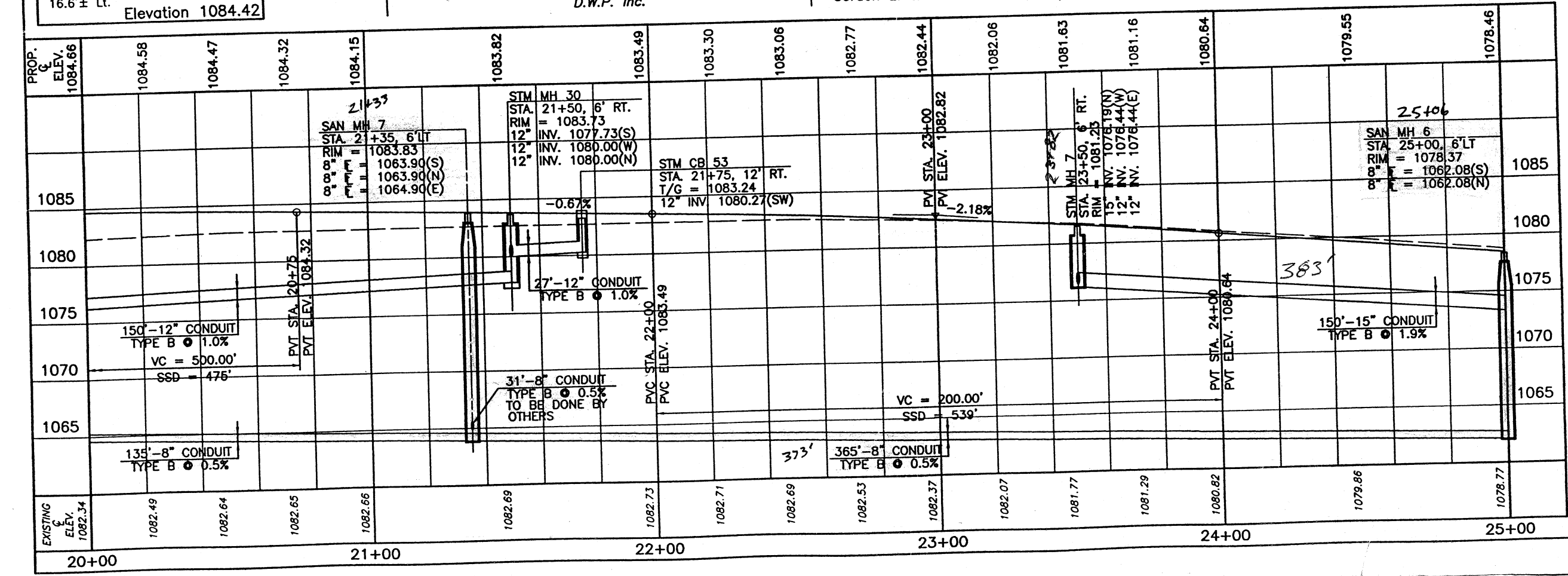
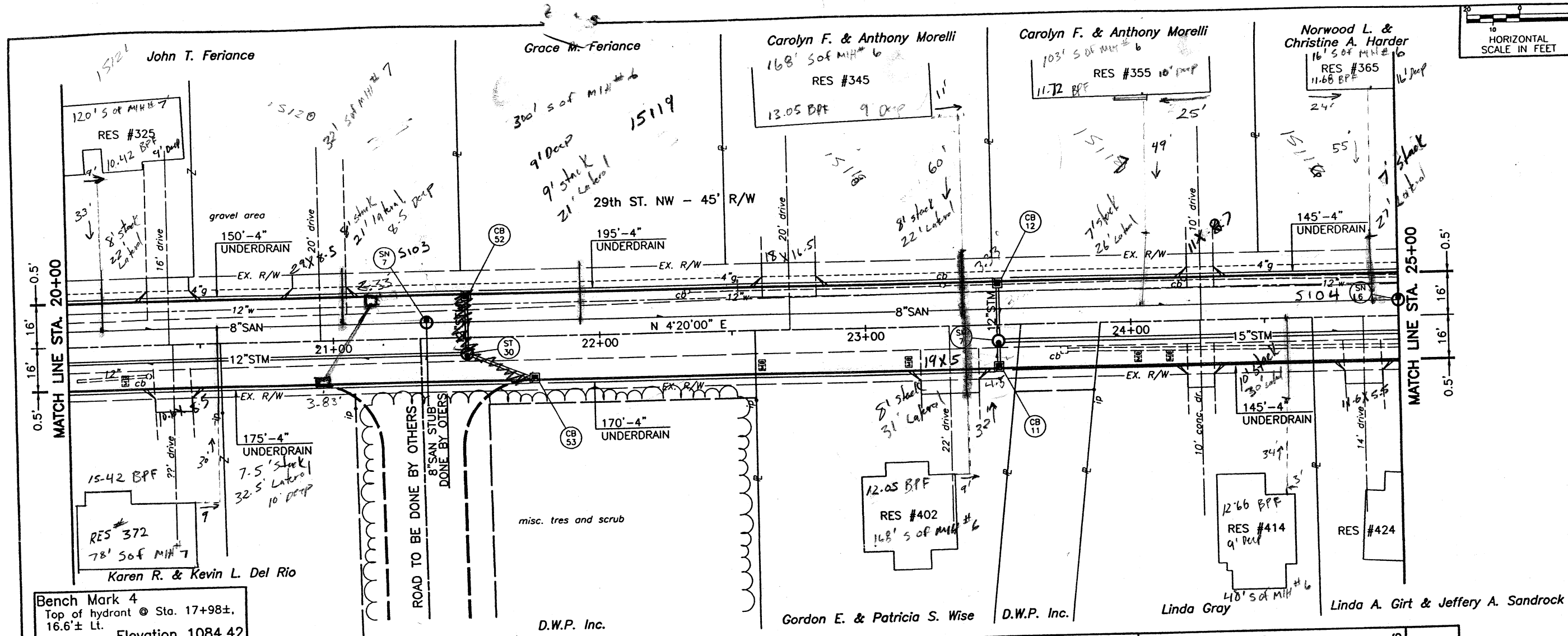
FOTHERGILL - BELMONT SANITARY SEWER PLANS

CITY OF MASSILLON
Francis H. Cicchinelli, Jr.
Mayor10
37DRAWN BY
F. Werner
DATE
Nov. 24, 1998
ELECTRONIC FILE NAME:
98SS0108.DWG
ACCOUNT NUMBER
98SS01

THE CITY OF MASSILLON, OHIO







Scale: HORIZONTAL SCALE IN FEET

North Arrow: [Symbol]

City of Massillon: Francis H. Cicchinelli, Jr. Mayor

Project: FOTHERGILL-BELMONT SANITARY SEWER PLAN

Location: 29th St. NW Plan & Profile Sta. 20+00.00 TO Sta. 25+00.00

City of Massillon: City of Massillon Stark County, Ohio

Drawn By: F. Werner

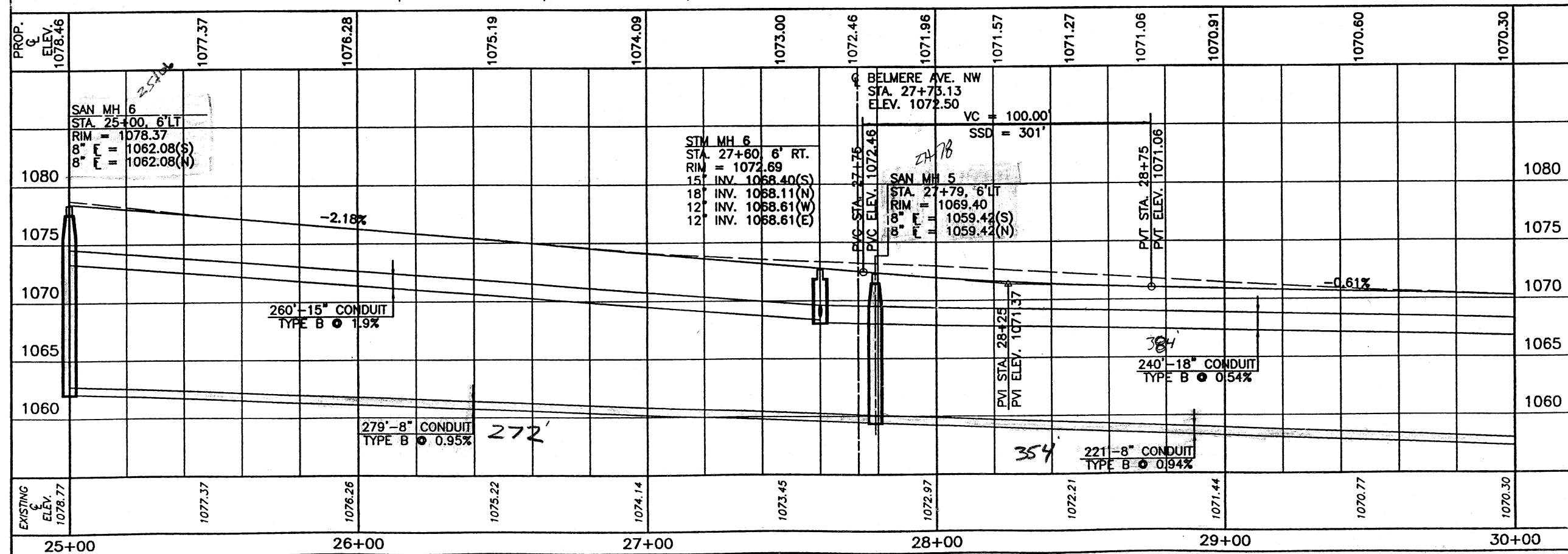
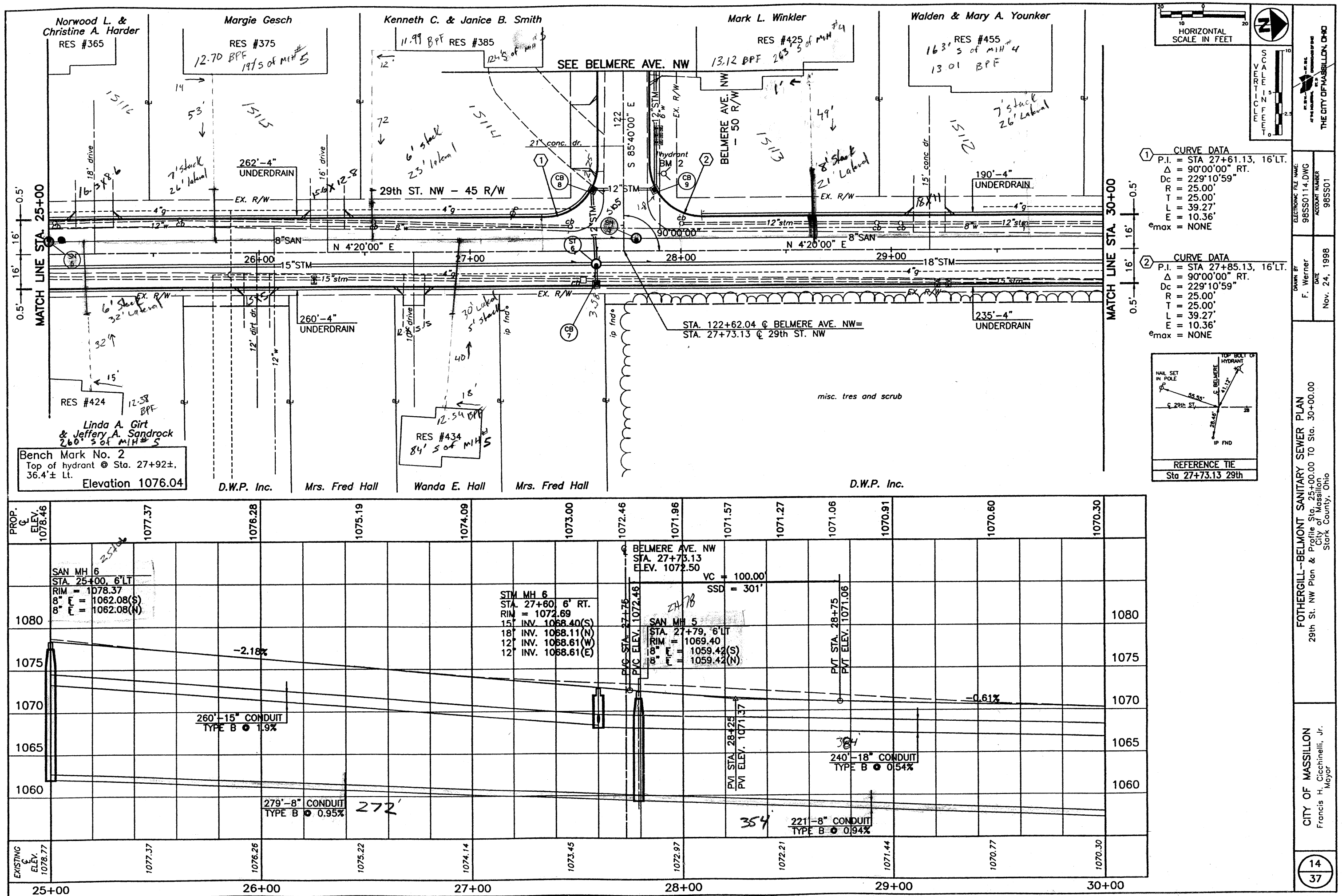
Date: Nov. 24, 1998

Electronic File Name: 98SS013.DWG

Account Number: 98SS01

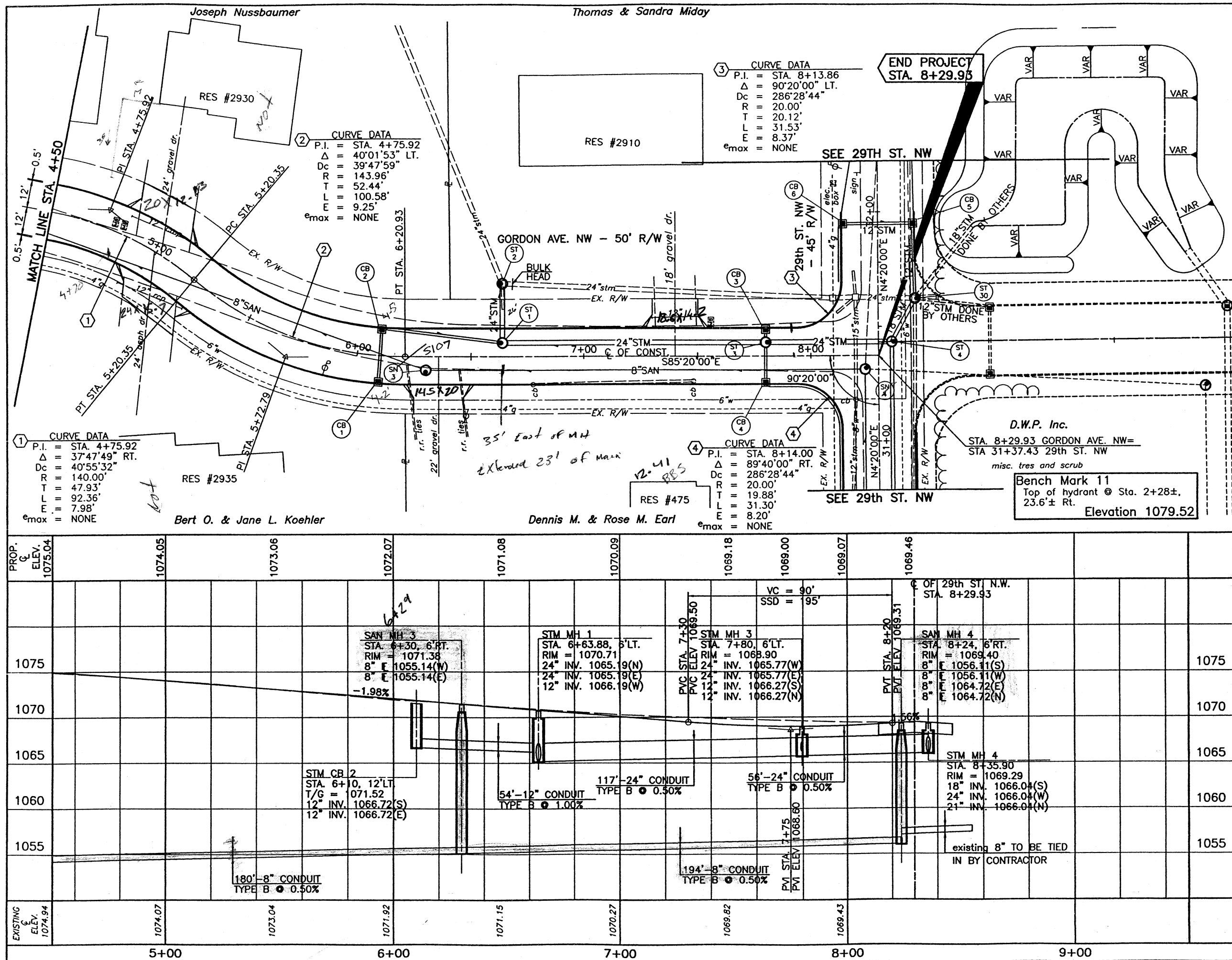
13

37



FOTHERGILL--BELMONT SANITARY SEWER PLAN
29th St. NW Plan & Profile Sta. 25+00.00 TO Sta. 30+00.00
City of Massillon
Stark County, Ohio

CITY OF MASSILLON
Francis H. Cicchinelli, Jr.
Mayor



END PROJECT STA. 8+29.93

SEE 29TH ST. NW

SEE 29TH ST. NW

Bench Mark 11
 Top of hydrant @ Sta. 2+28±,
 23.6± Rt. Elevation 1079.52

REFERENCE TIE
 Sta 5+20.35 Gordon

REFERENCE TIE
 Sta 6+20.93 Gordon

REFERENCE TIE
 Sta 8+29.93 Gordon

Joseph Nussbaumer

Thomas & Sandra Miday

Bert O. & Jane L. Koehler

Dennis M. & Rose M. Earl

RES #2930

RES #2910

RES #2935

RES #475

Match Line STA. 4+50

PT STA. 4+75.92

PT STA. 5+20.35

PT STA. 6+20.93

PT STA. 8+29.93

RES #2930

RES #2910

RES #2935

RES #475

Joseph Nussbaumer

Thomas & Sandra Miday

Bert O. & Jane L. Koehler

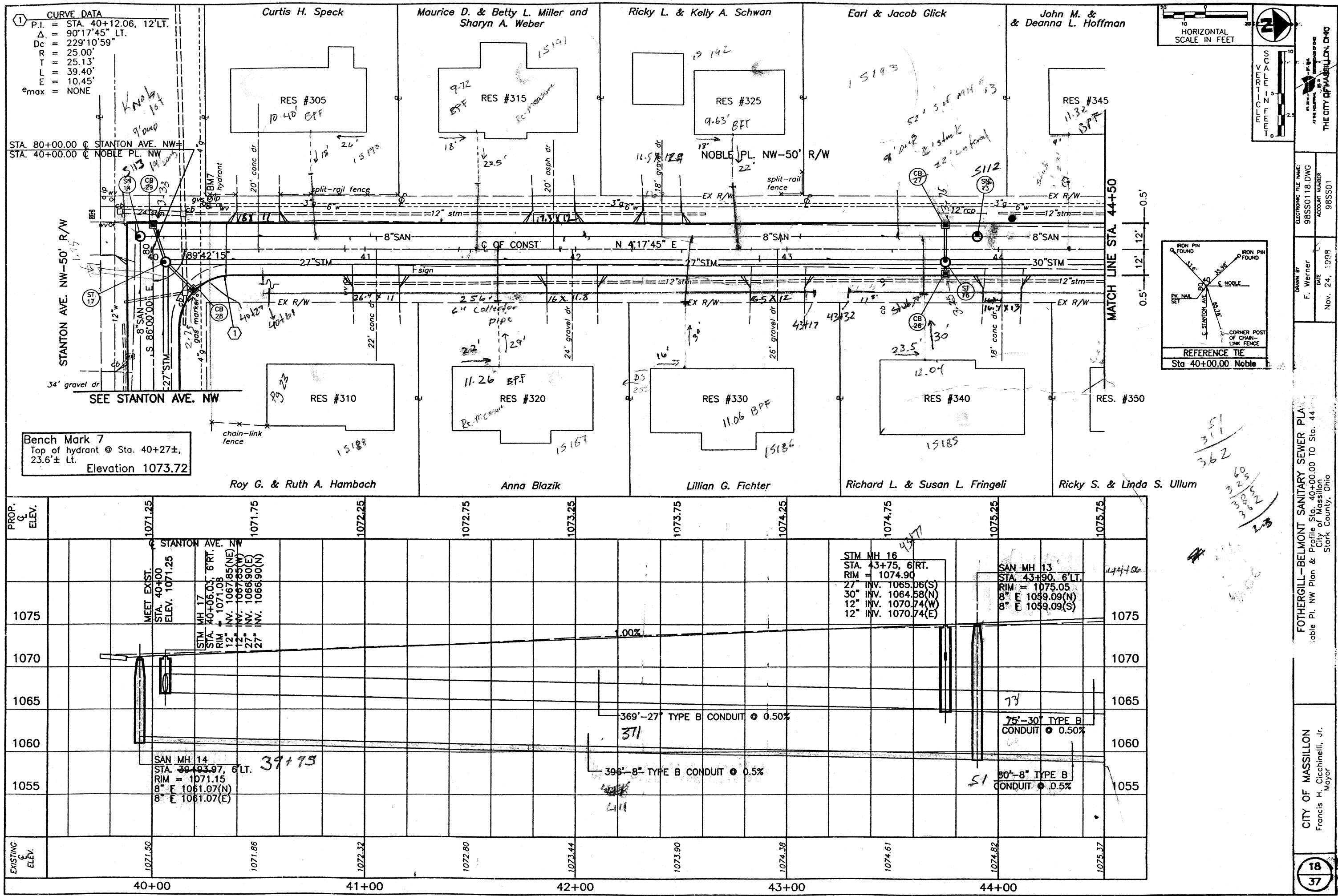
Dennis M. & Rose M. Earl

RES #2930

RES #2910

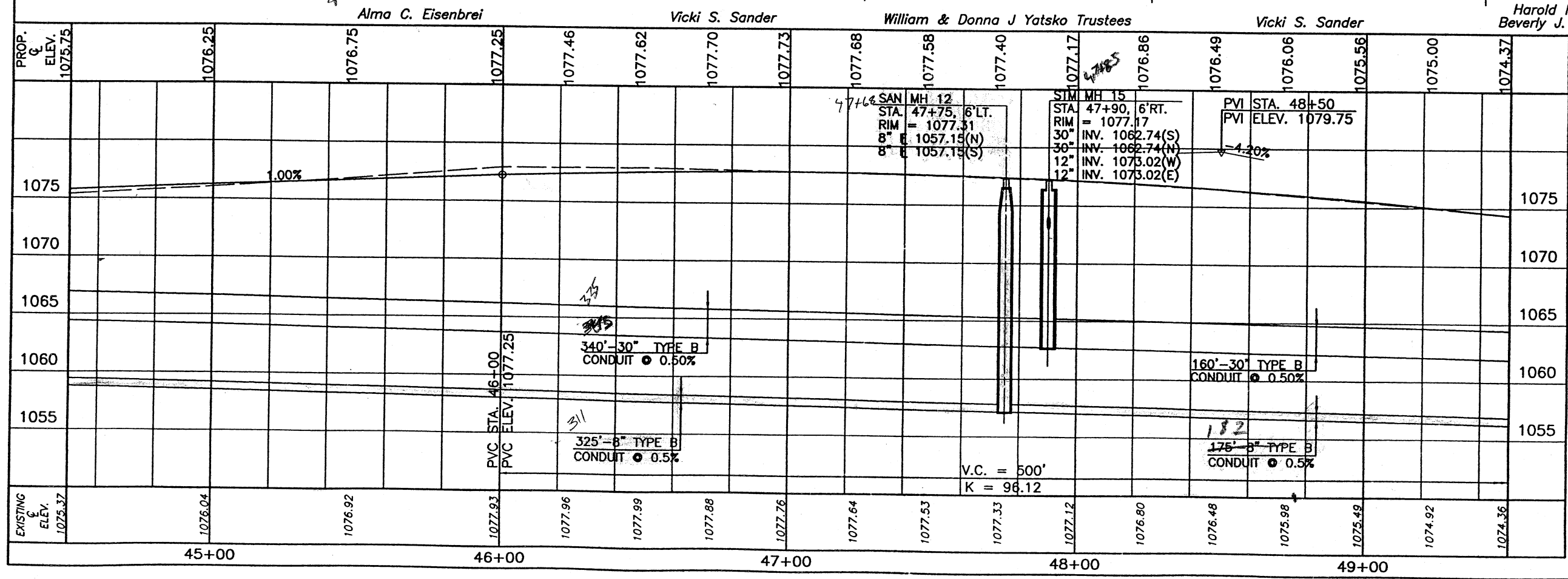
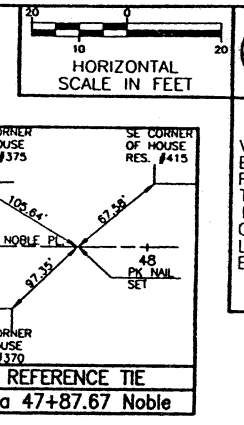
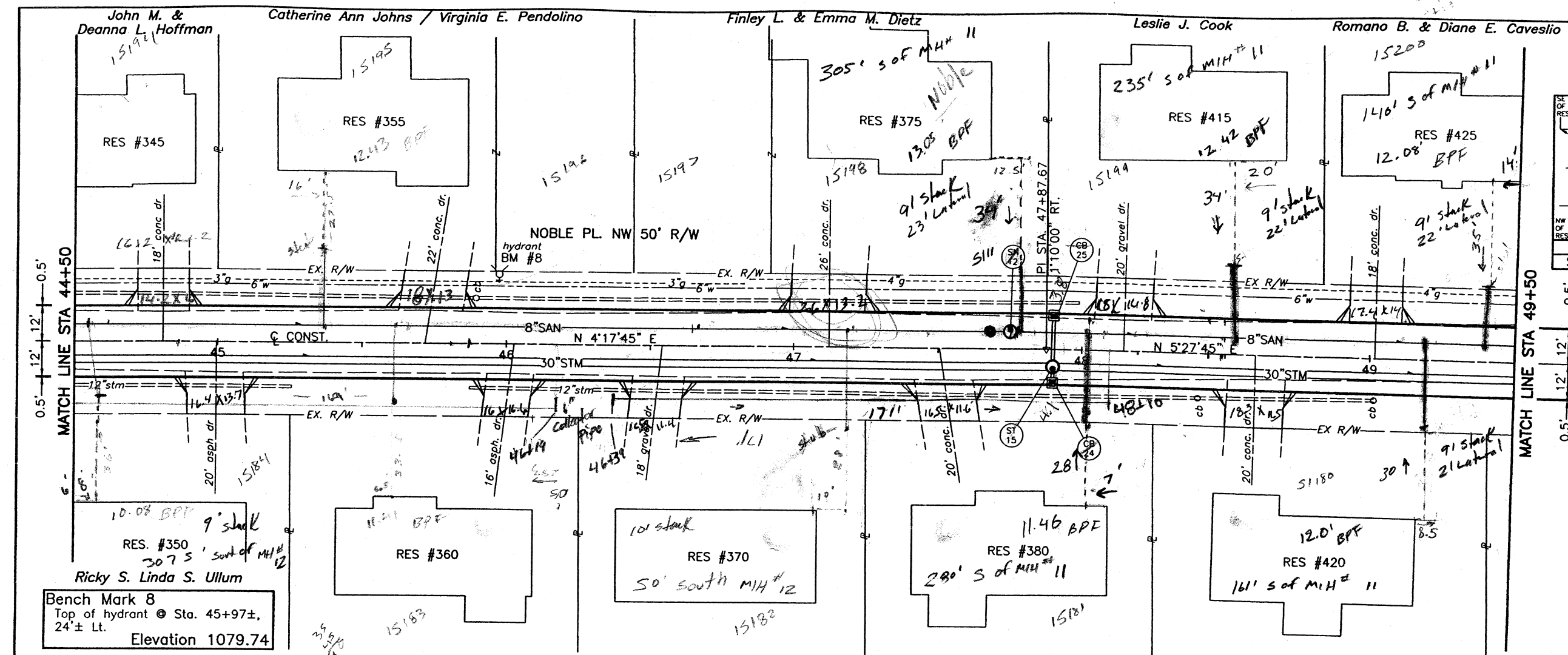
RES #2935

RES #475



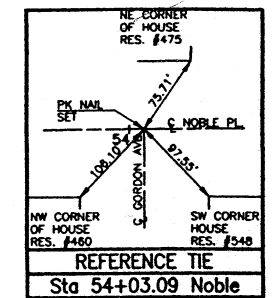
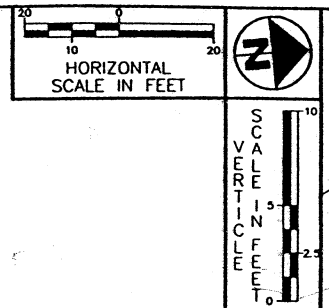
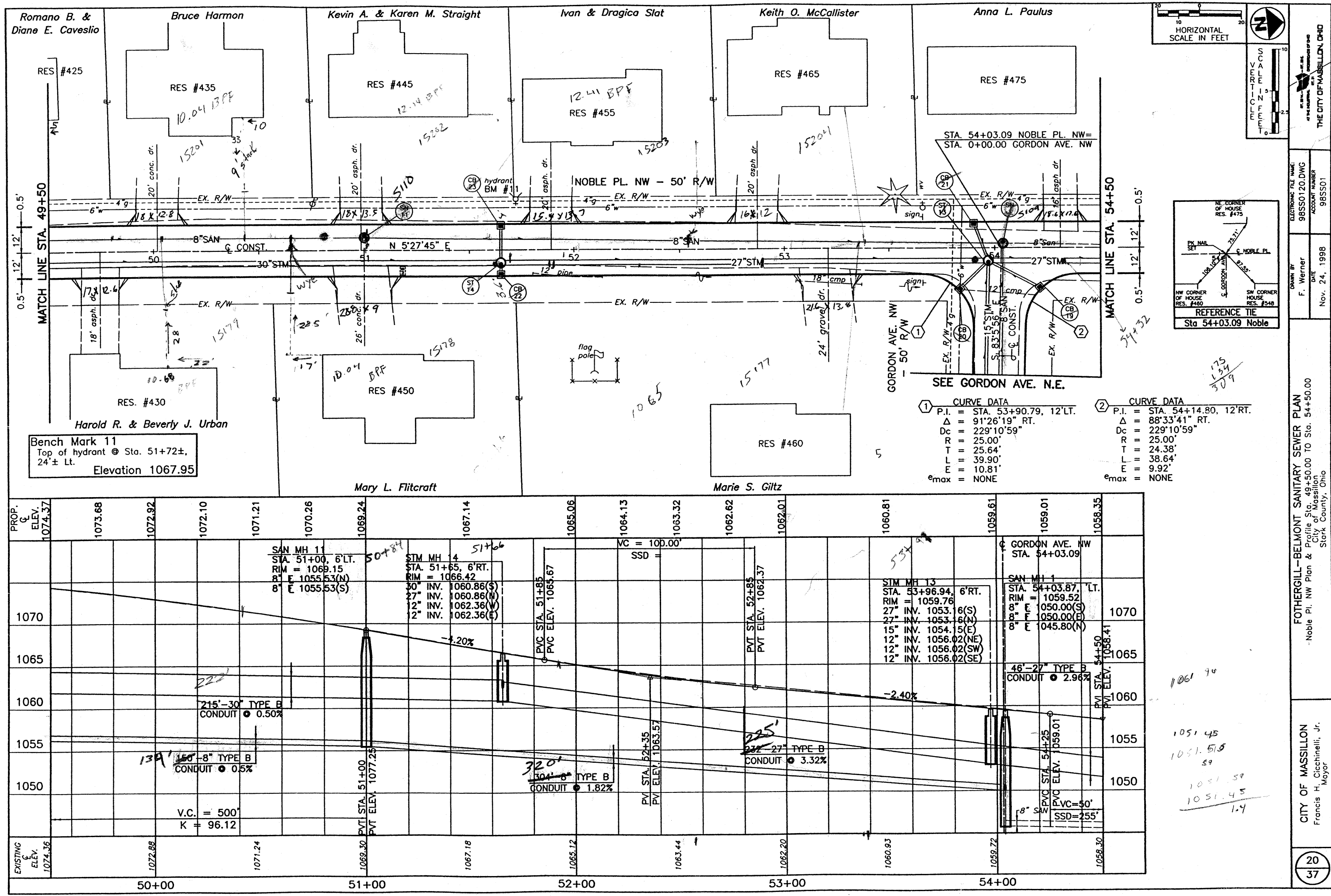
FOTHERGILL-BELMONT SANITARY SEWER PLAN
Noble Pl. NW Plan & Profile Sta. 40+00.00 TO Sta. 44+00.00
City of Massillon, Stark County, Ohio

CITY OF MASSILLON
Francis H. Cicchinelli, Jr.
Mayor



FOTHERGILL-BELMONT SANITARY SEWER PLANS
Noble Pl. NW Plan & Profile Sta. 84+50.00 TO Sta. 89+50.00
City of Massillon
Stark County, Ohio

CITY OF MASSILLON
Francis H. Cicchinelli, Jr.
Mayor



CURVE DATA	
①	P.I. = STA. 53+90.79, 12°LT. Δ = 91°26'19" RT. Dc = 229°10'59" R = 25.00' T = 25.64' L = 39.90' E = 10.81' emax = NONE
②	P.I. = STA. 54+14.80, 12°RT. Δ = 88°33'41" RT. Dc = 229°10'59" R = 25.00' T = 24.38' L = 38.64' E = 9.92' emax = NONE

1061.90
1051.45
1051.518
59
1051.59
1051.45
1.4

THE CITY OF MASSILLON, OHIO

98SS0120.DWG
F. Werner
Nov. 24, 1998
98SS01

FOTHERGILL-BELMONT SANITARY SEWER PLAN
Noble Pl. NW Plan & Profile Sta. 49+50.00 TO Sta. 54+50.00
City of Massillon,
Stark County, Ohio

CITY OF MASSILLON
Francis H. Cicchinelli, Jr.
Mayor

20
37

William S. Myers & Beverly J. Thomas
RES. #619

Timothy B. Chillik
RES. #631

Offset -
Drive
for
cracks

NOBLE PL. NW - 50' R/W

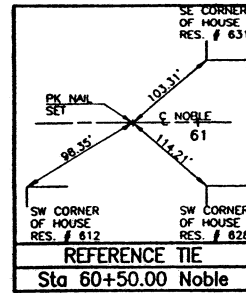
MATCH LINE STA. 59+50

Bench Mark 10
Top of hydrant @ Sta. 57+88.5±,
16.3'± Lt.
Elevation 1050.44

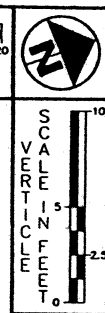
Rose M. Pendolino

RES. #622

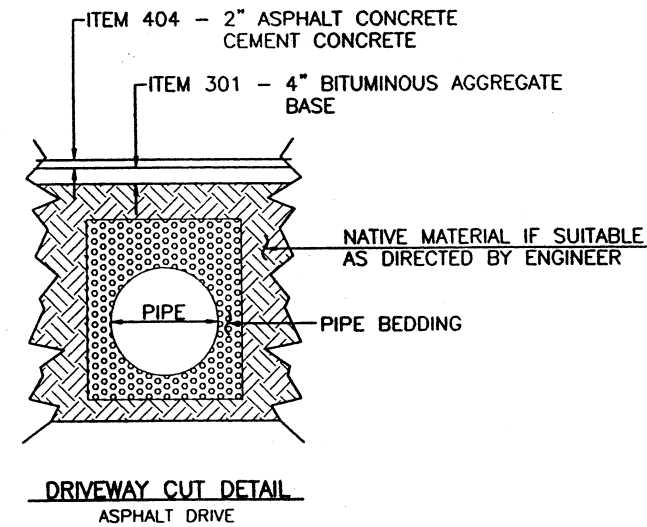
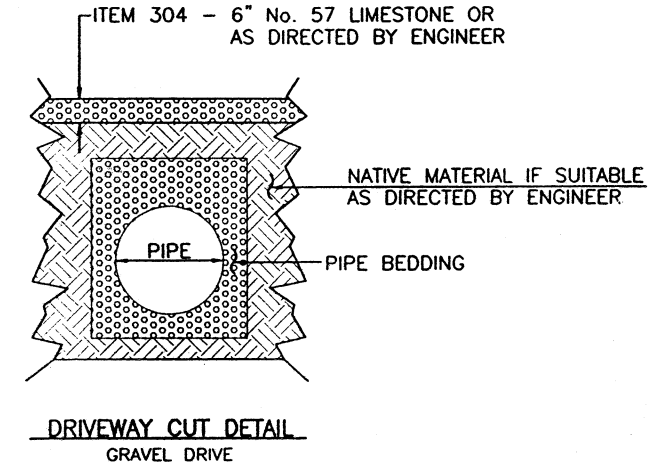
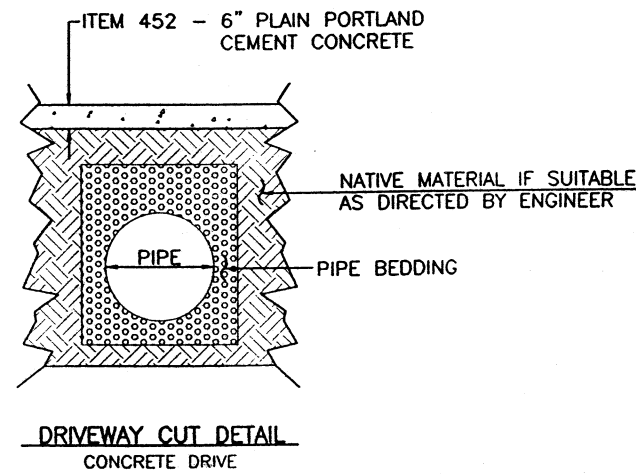
Terry B. &
Walter N. Rueckert



HORIZONTAL
SCALE IN FEET



THE CITY OF MASSILLON, OHIO

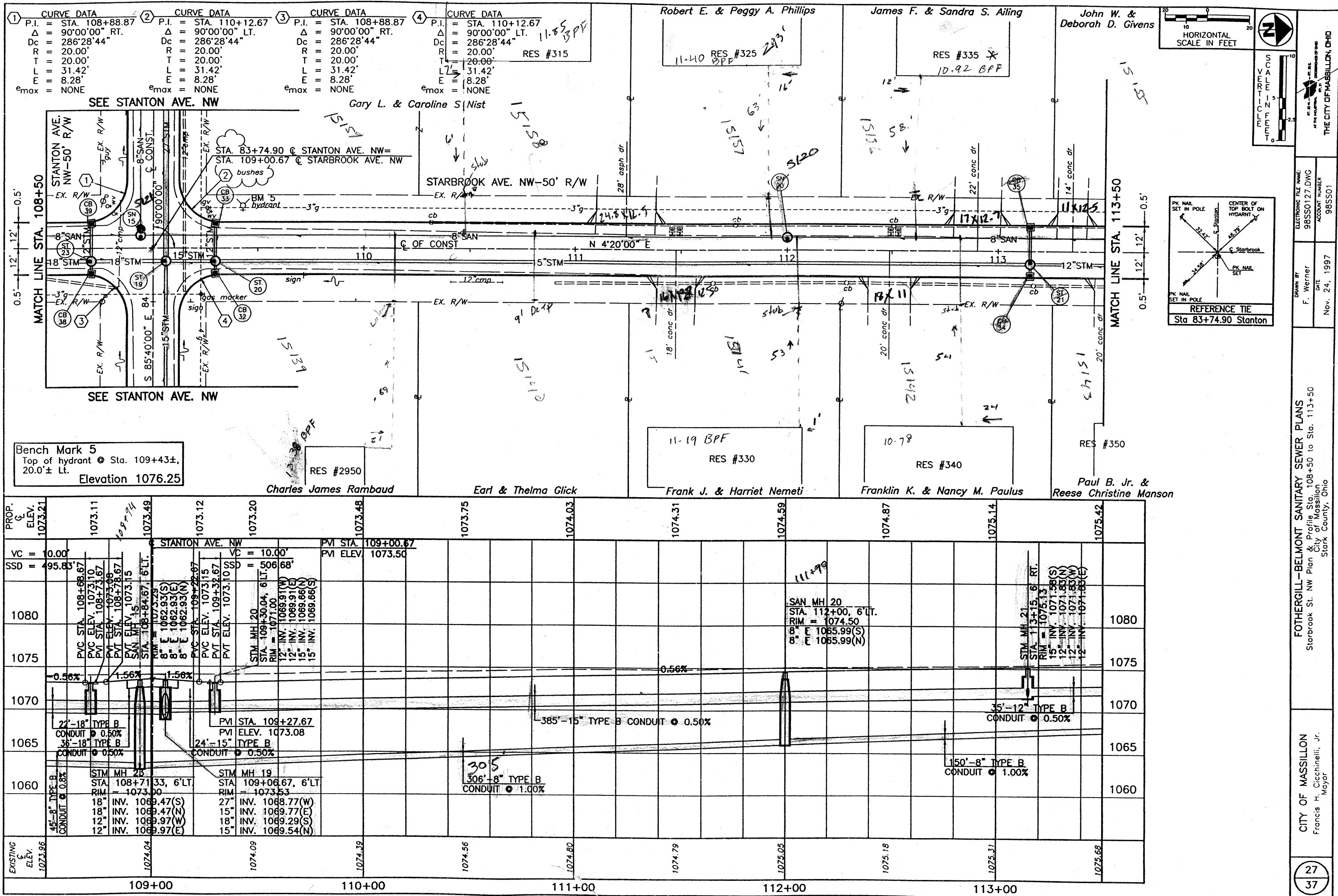


PROP. G. ELEV.									
1050		STM MH 9 STA 60+27.852 RT. RIM = 1046.30 27\"/>		EX STM MH STA 60+34.43, 0.81 RT. RIM = 1046.36 42\"/>		1050			
1045		22.5'-12\"/>				1045			
1040		77'-27\"/>		12'-27\"/>		1040			
1035						1035			
1030						1030			
EXISTING G. ELEV.	1046.21	1045.89		1046.08					
		60+00		61+00					

FOTHERGILL-BELMONT SANITARY SEWER PLANS
Noble Pl. Plan & Profile Sta. 59+50 to Sta. 61+00
City of Massillon
Stark County, Ohio

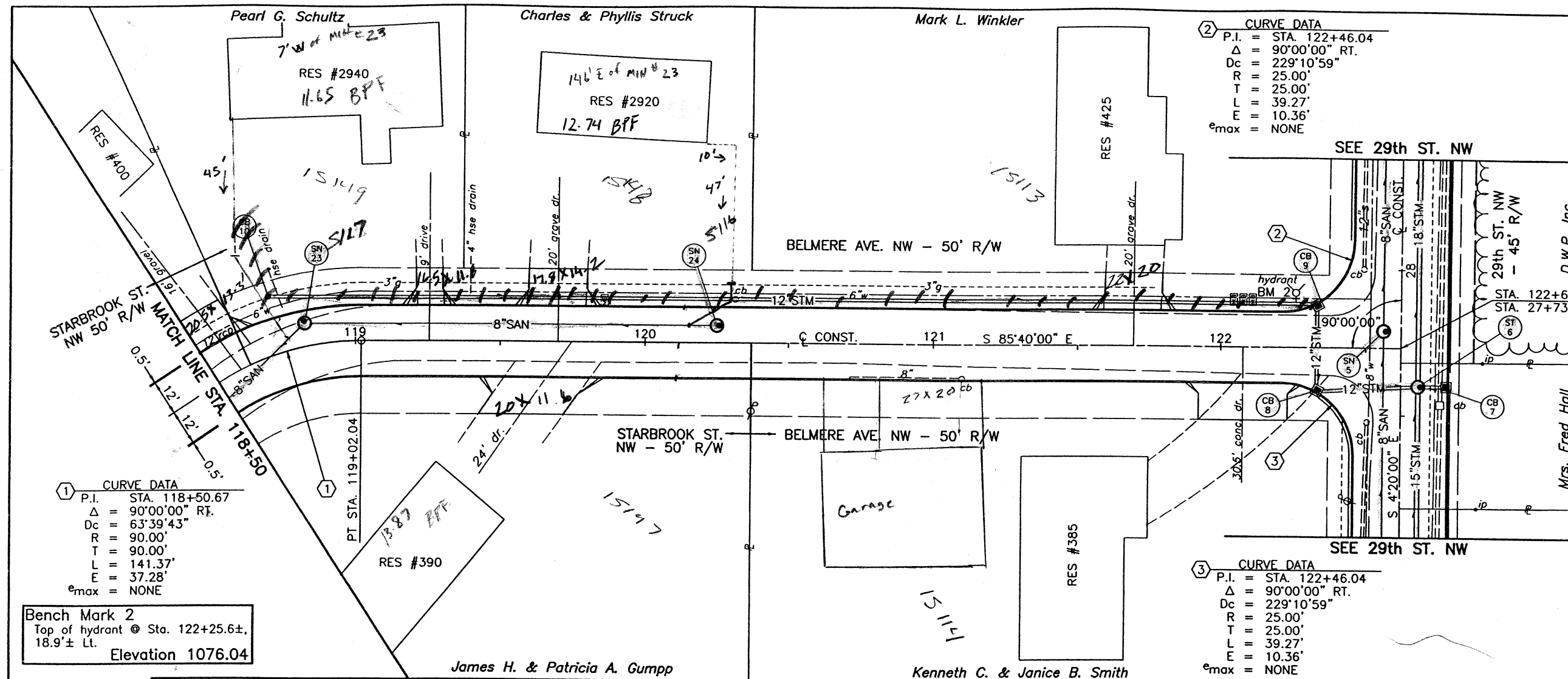
CITY OF MASSILLON
Francis H. Cicchinelli, Jr.
Mayor

22
37



FOTHERGILL-BELMONT SANITARY SEWER PLANS
Starbrook St. NW Plan & Profile Sta. 108+50 to Sta. 113+50
City of Massillon
Stark County, Ohio

CITY OF MASSILLON
Francis H. Cicchinelli, Jr.
Mayor



20' 0" 10' 0" 0' 0" 10' 0" 20' 0"

HORIZONTAL SCALE IN FEET

VERTICAL SCALE

1" = 10'

THE CITY OF MASSILLON, OHIO

ELECTRONIC FILE NAME: 98SS0129.DWG

DRAWN BY: F. Werner

DATE: Oct. 29, 1998

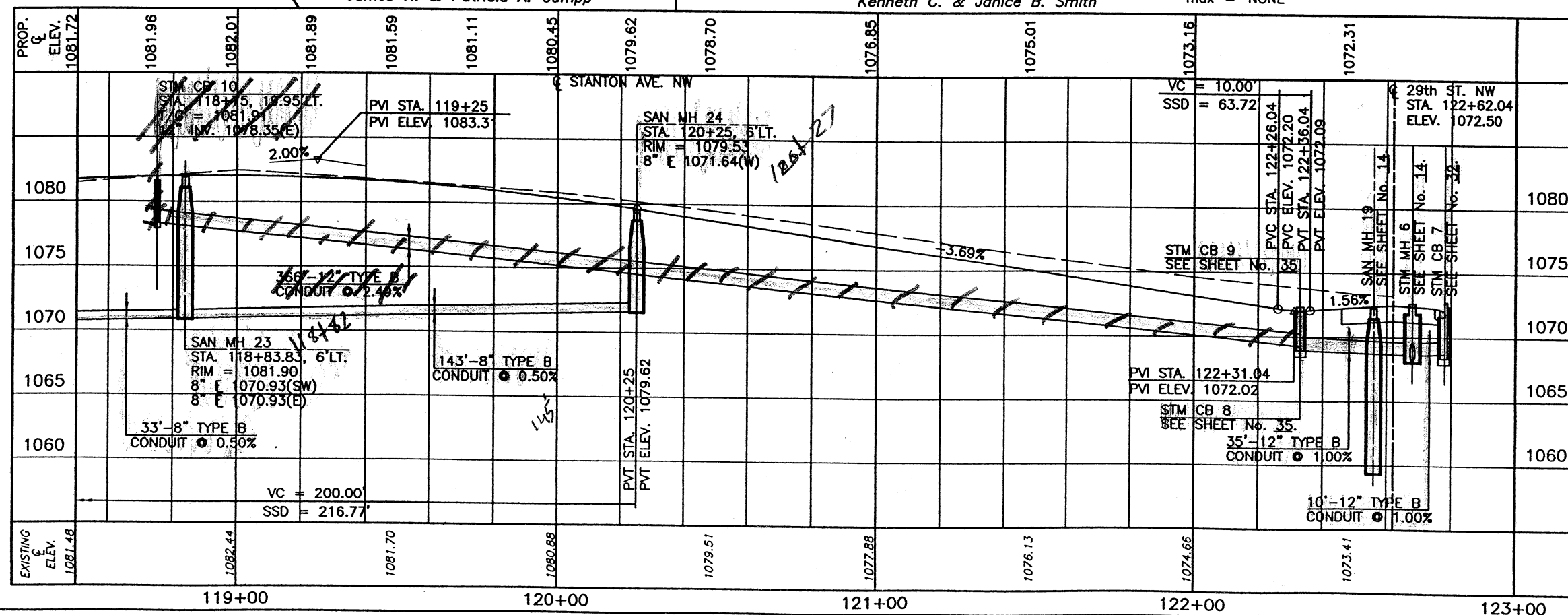
ACCOUNT NUMBER: 98SS01

REFERENCE TIE

Sta 119+02.04 Starbrook

REFERENCE TIE

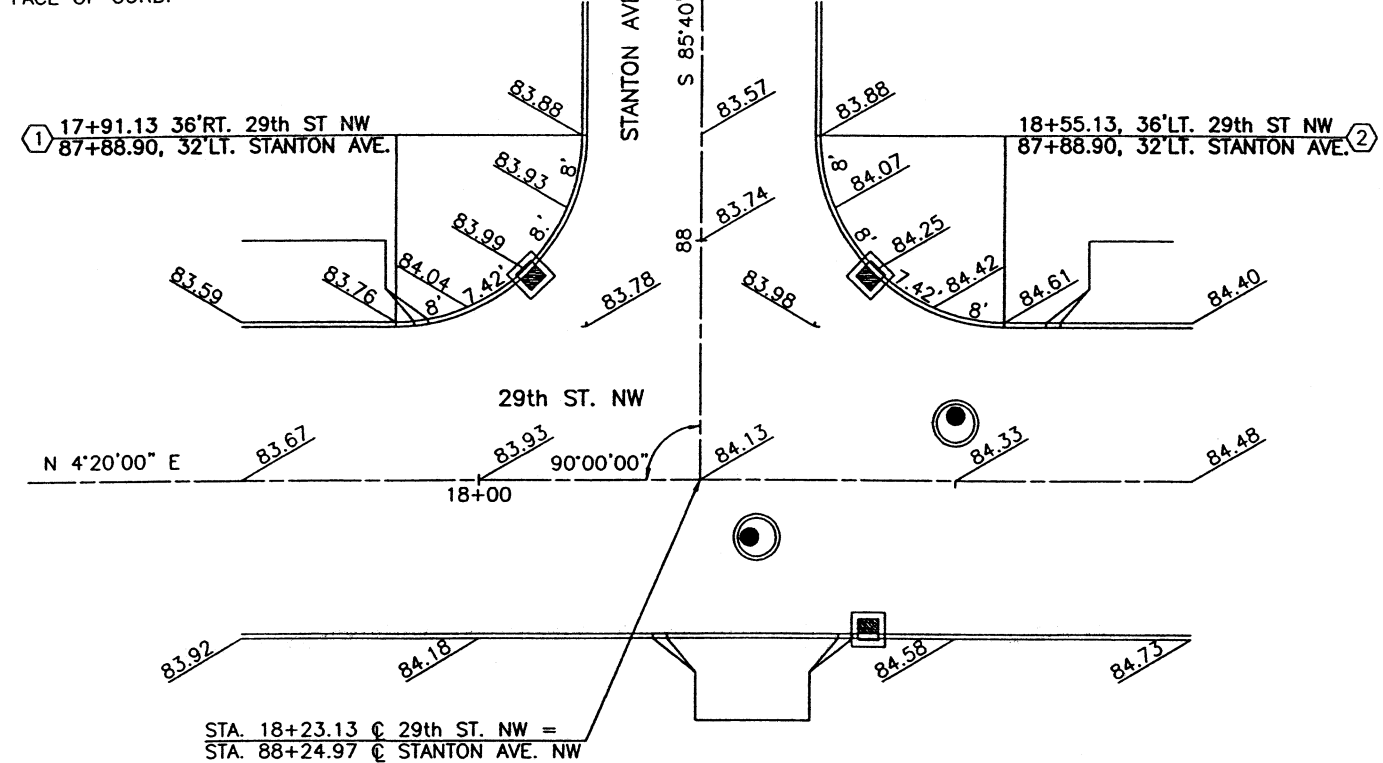
Sta 122+62.04 Starbrook



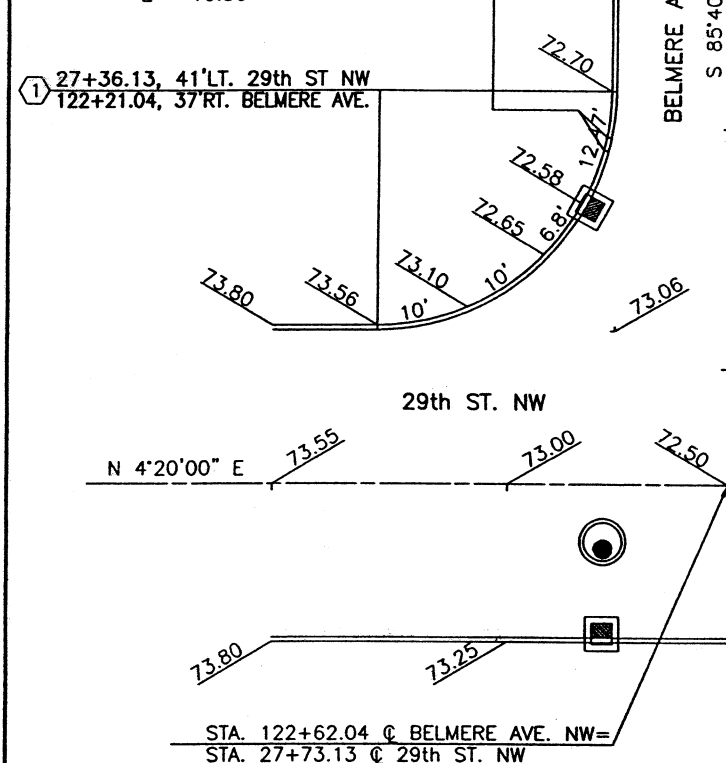
NOTES

ADD 1000 TO THE ELEVATION SHOWN FOR ACTUAL ELEVATION.

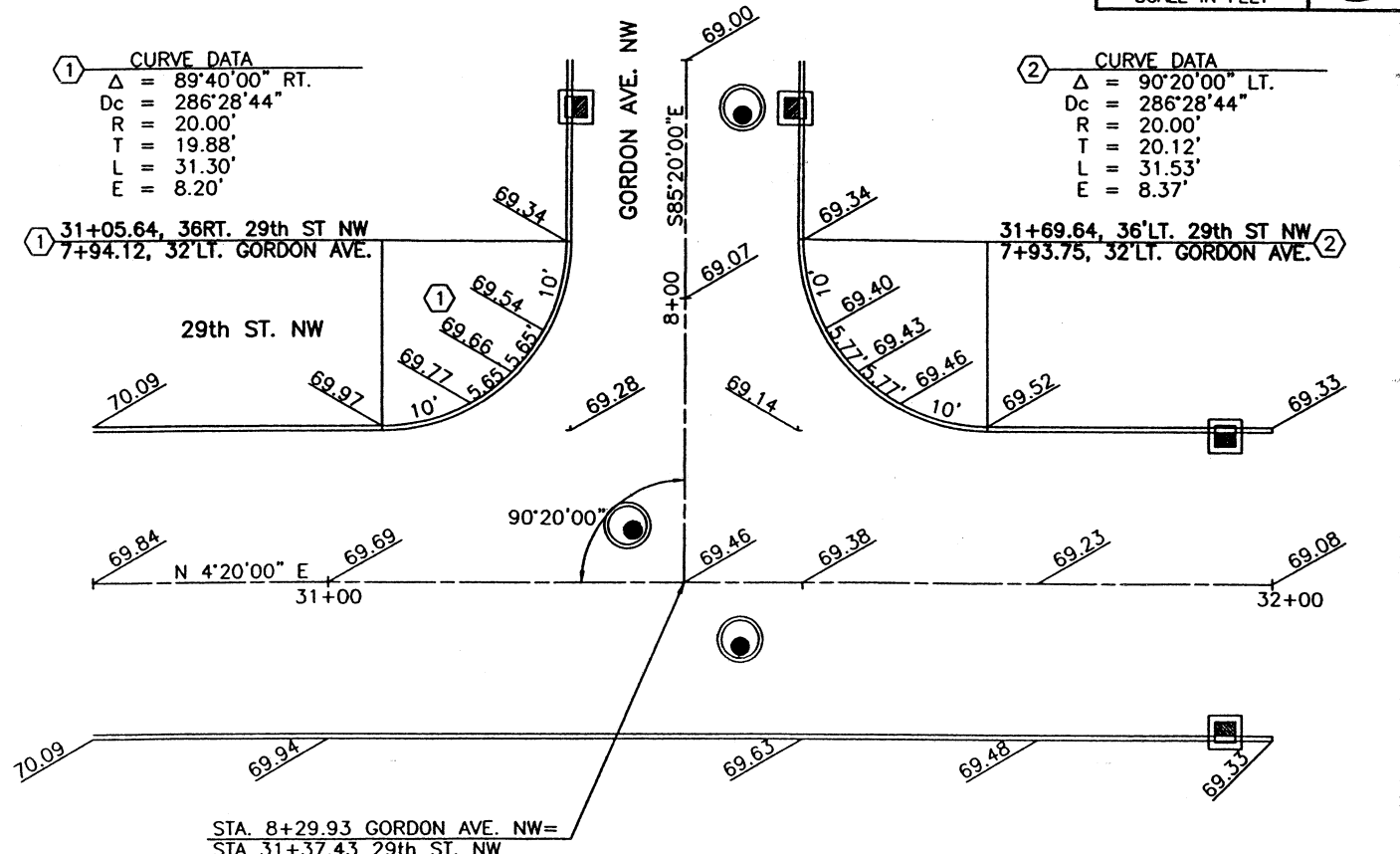
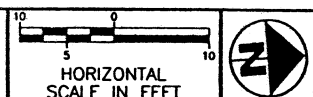
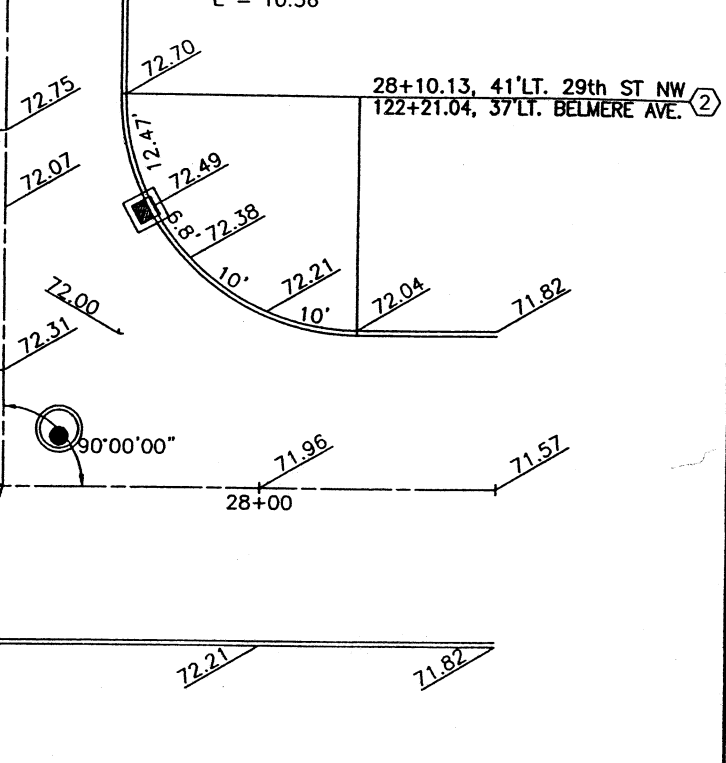
ALL ELEVATIONS ALONG THE CURB ARE TOP OF CURB ELEVATIONS.
DEDUCT 6" IN AREAS OF FULL HEIGHT CURB AND 2" IN AREAS OF DROP CURB TO OBTAIN E.P. ELEVATIONS AT FACE OF CURB.



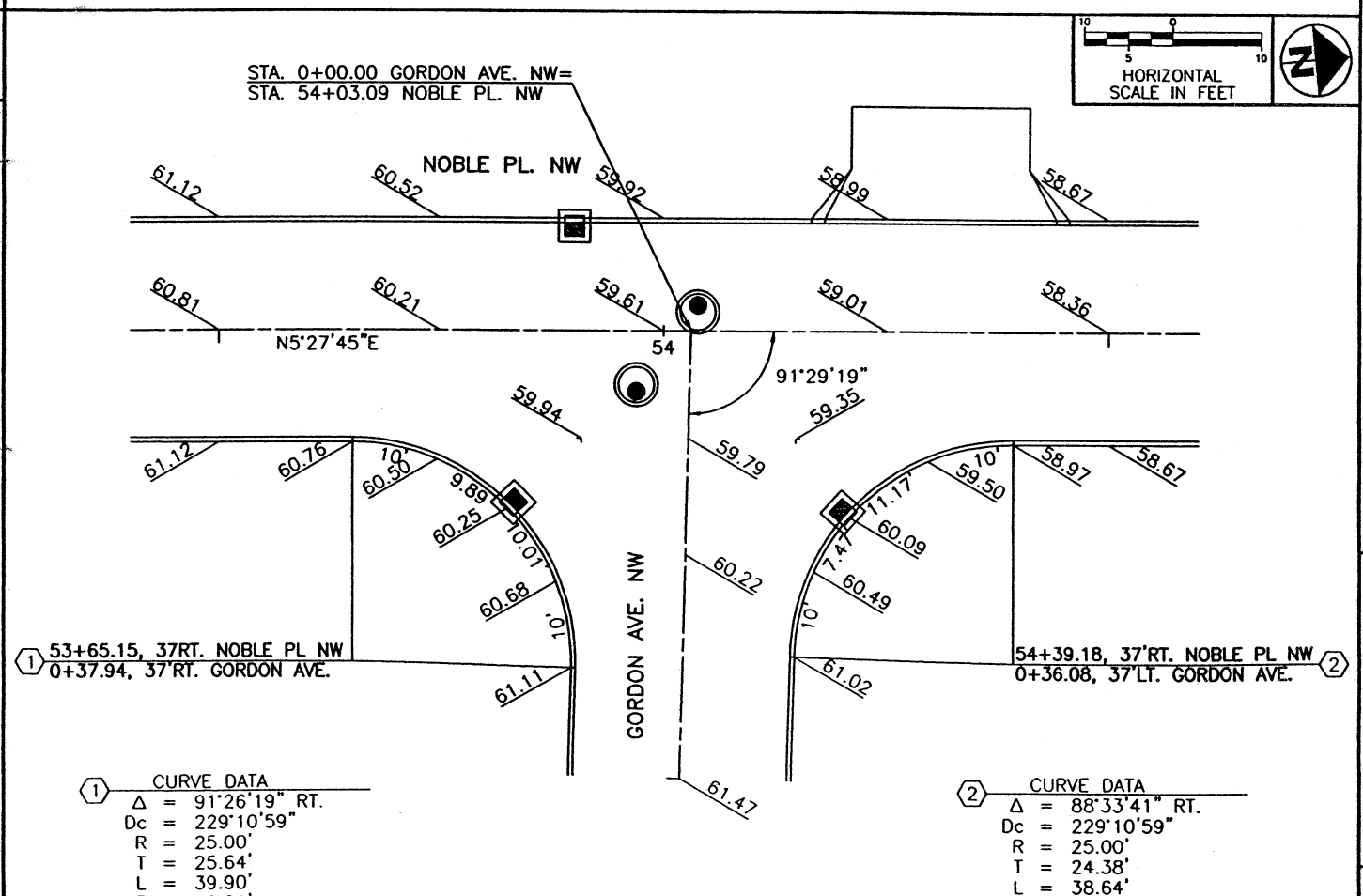
CURVE DATA
 $\Delta = 90^{\circ}00'00''$ RT.
 $D_c = 229'10'59''$
 $R = 25.00'$
 $T = 25.00'$
 $L = 39.27'$
 $E = 10.36'$



CURVE DATA
 $\Delta = 90^{\circ}00'00''$ RT.
 $D_c = 229'10'59''$
 $R = 25.00'$
 $T = 25.00'$
 $L = 39.27'$
 $E = 10.36'$



CURVE DATA
 $\Delta = 90^{\circ}20'00''$ LT.
 $D_c = 286'28'44''$
 $R = 20.00'$
 $T = 20.12'$
 $L = 31.53'$
 $E = 8.37'$



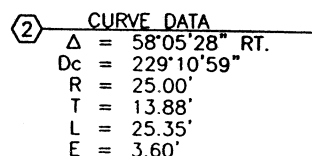
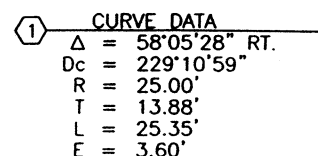
CURVE DATA
 $\Delta = 91^{\circ}26'19''$ RT.
 $D_c = 229'10'59''$
 $R = 25.00'$
 $T = 25.64'$
 $L = 39.90'$
 $E = 10.81'$

CURVE DATA
 $\Delta = 88^{\circ}33'41''$ RT.
 $D_c = 229'10'59''$
 $R = 25.00'$
 $T = 24.38'$
 $L = 38.64'$
 $E = 9.92'$

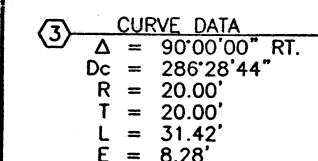
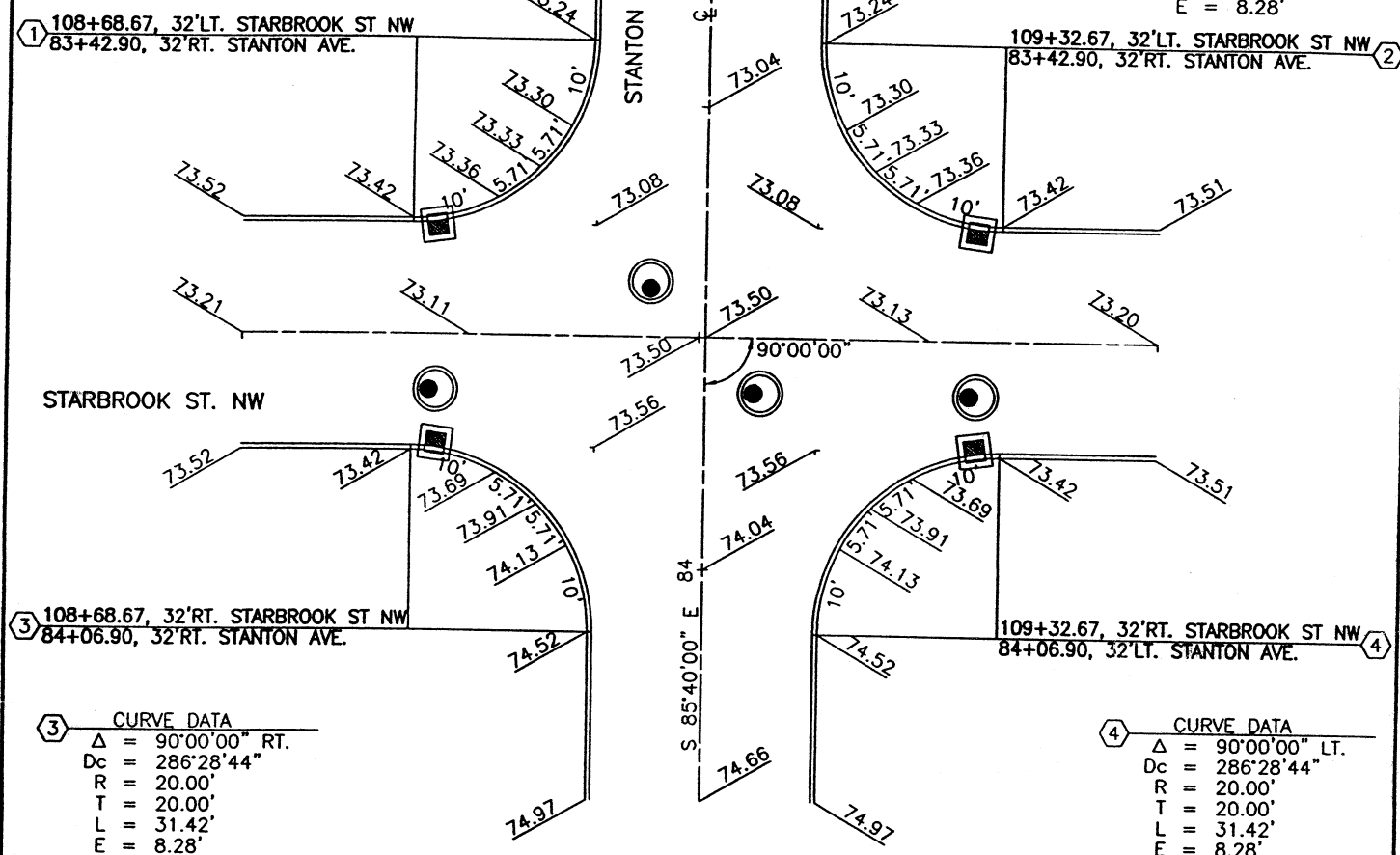
ADD 1000 TO THE ELEVATION SHOWN FOR ACTUAL ELEVATION.

HORIZONTAL SCALE IN FEET

A horizontal scale bar with markings at 0, 5, and 10 feet. To the right of the scale is a north arrow pointing towards the top right, with a stylized 'N' inside a circle.

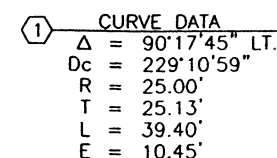
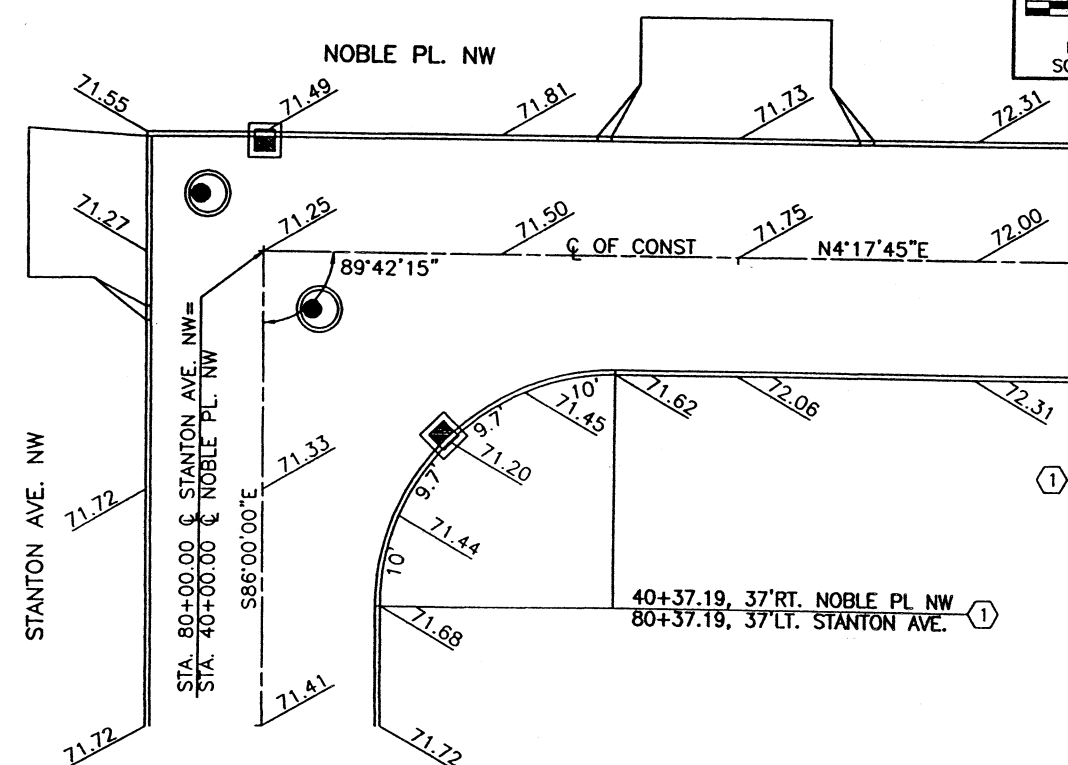


Δ	=	90°00'00" RT
Dc	=	286°28'44"
R	=	20.00'
T	=	20.00'
L	=	31.42'
E	=	8.28'



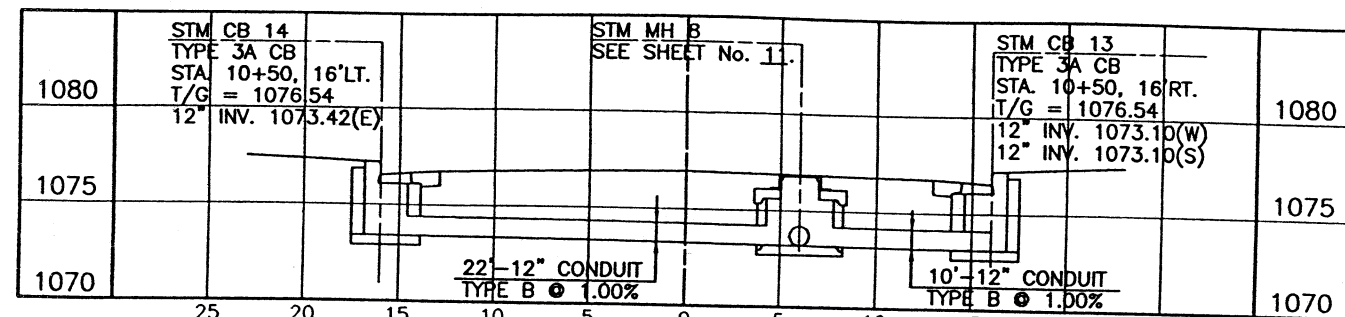
CURVE DATA

Δ	=	90°00'00"	LT.
Dc	=	286°28'44"	
R	=	20.00'	
T	=	20.00'	
L	=	31.42'	
E	=	8.28'	

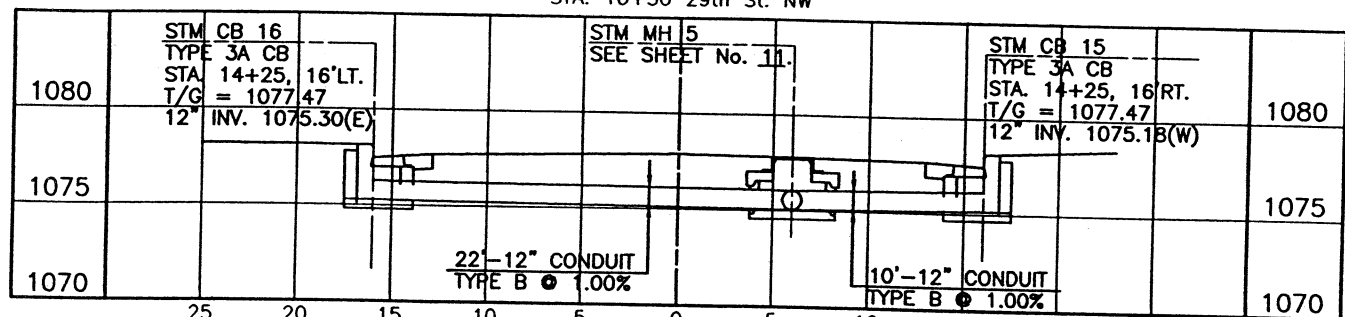


FOTHERGILL-BELMONT SANITARY SEWER PLANS
 Detail-Crest Cir. - Stanton Ave./Starbrook St. - Stanton Ave./Noble Pl.
 City of Montreal

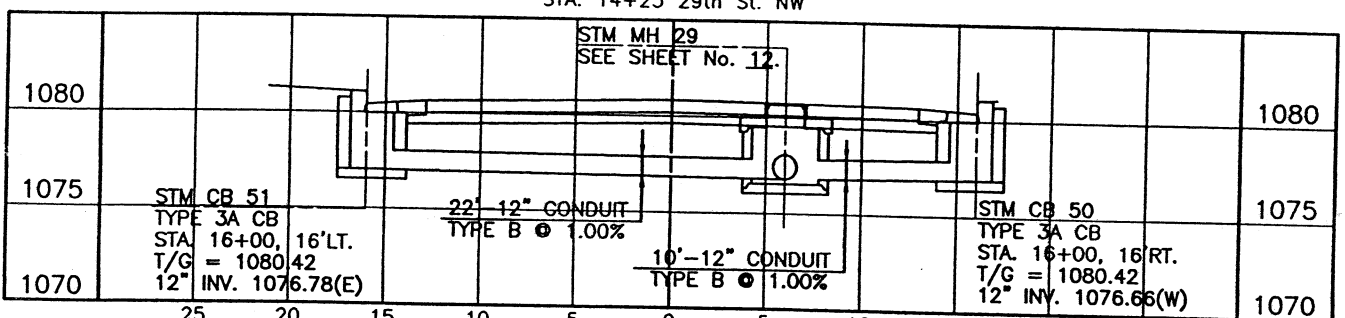
CITY OF MASSILLON
Francis H. Cicchinelli, Jr.
Mayor



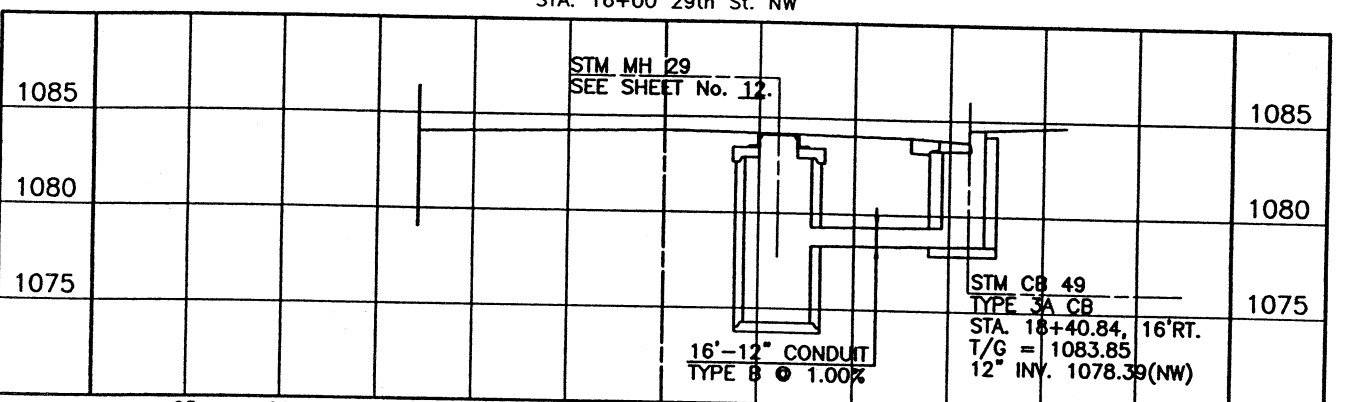
STORM SEWER DETAIL
STA. 10+50 29th St. NW



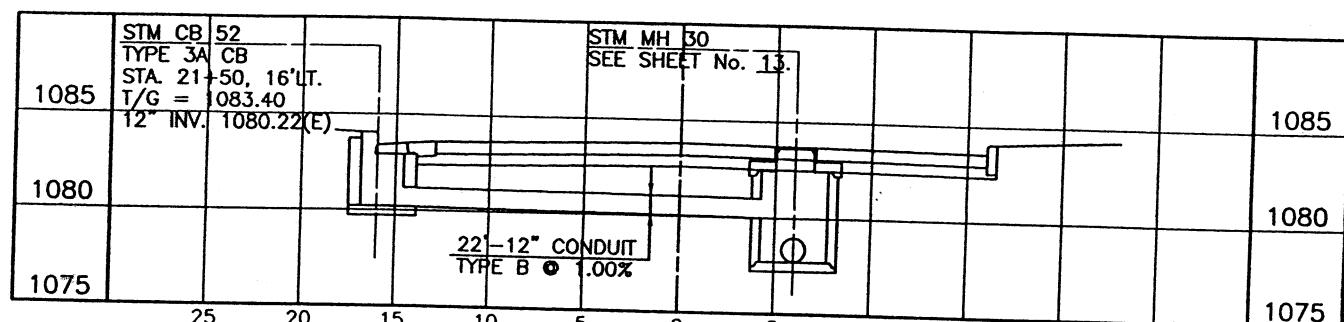
STORM SEWER DETAIL
STA. 14+25 29th St. NW



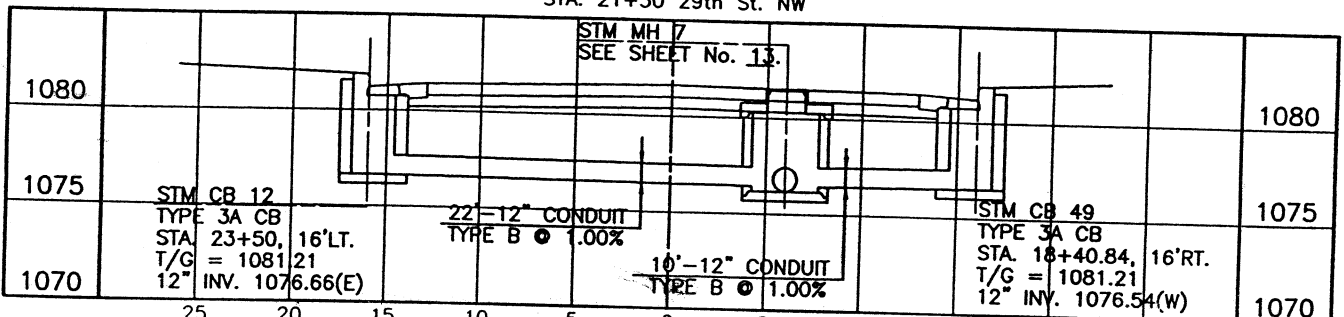
STORM SEWER DETAIL
STA. 16+00 29th St. NW



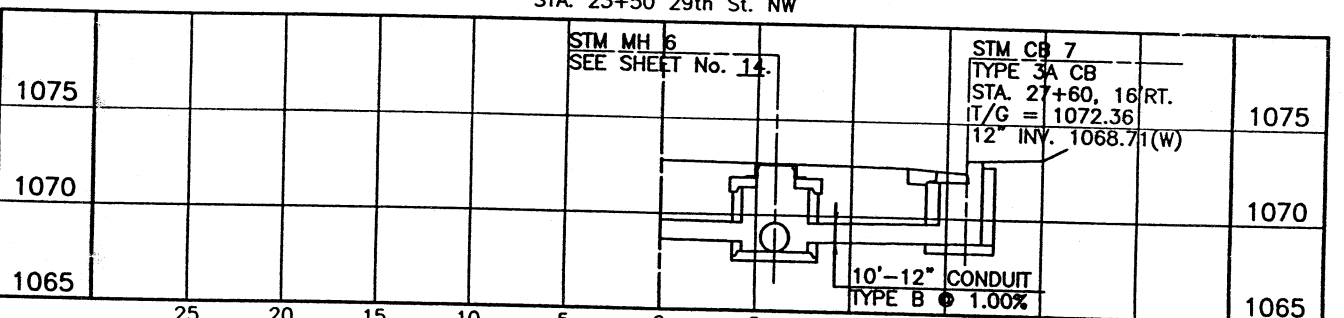
STORM SEWER DETAIL
STA. 18+40.84 29th St. NW



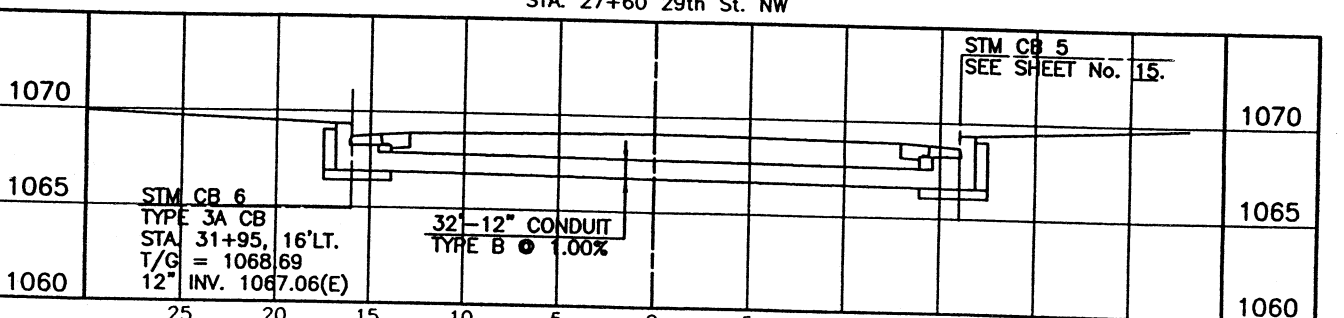
STORM SEWER DETAIL
STA. 21+50 29th St. NW



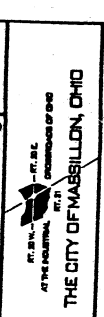
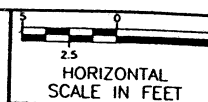
STORM SEWER DETAIL
STA. 23+50 29th St. NW



STORM SEWER DETAIL
STA. 27+60 29th St. NW



STORM SEWER DETAIL
STA. 31+95 29th St. NW

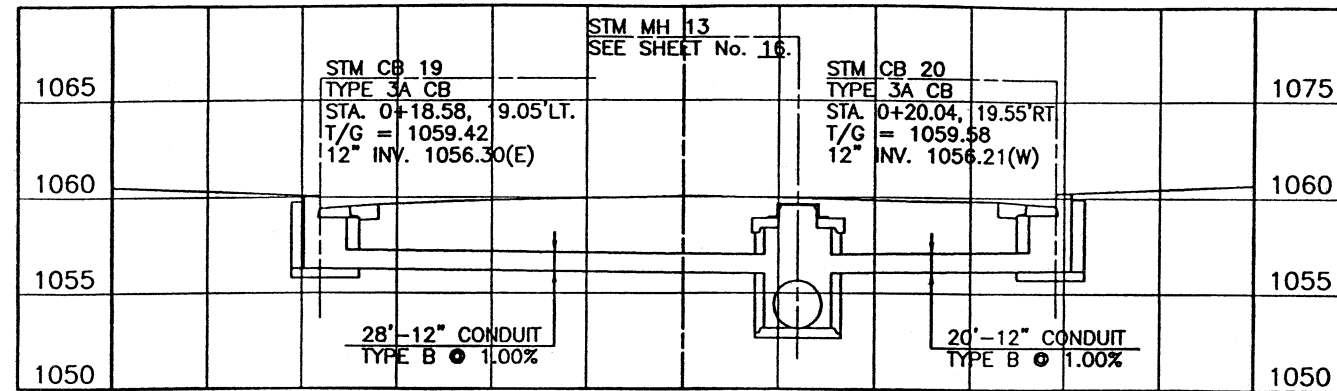


ELECTRONIC FILE NAME:
98SS0132.DWG
ACCOUNT NUMBER
98SS01

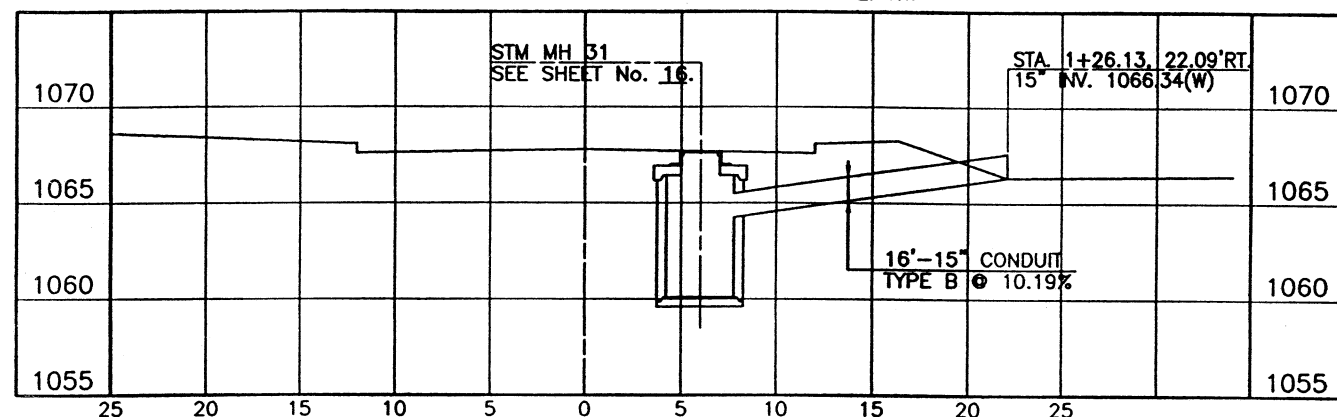
DRAWN BY
F. Werner
DATE
Nov. 25, 1998

FOTHERGILL BELMONT SANITARY SEWER PLANS
29th ST. NW STORM SEWER DETAILS
City of Massillon
Stark County, Ohio

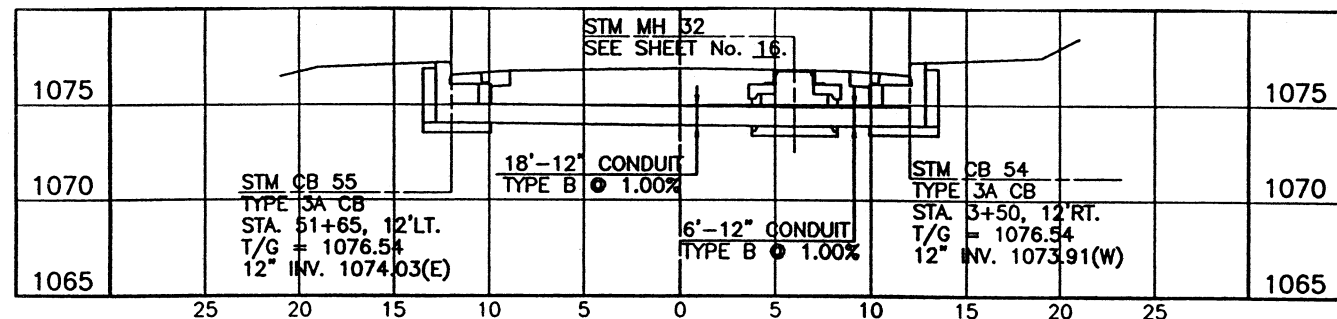
CITY OF MASSILLON
Francis H. Cicchinelli, Jr.
Mayor



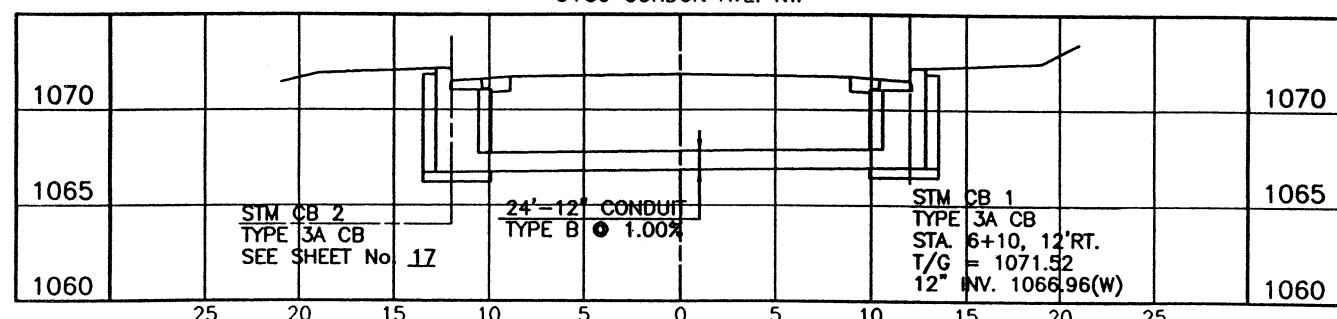
STORM SEWER DETAIL
0+20.04 GORDON AVE. NW



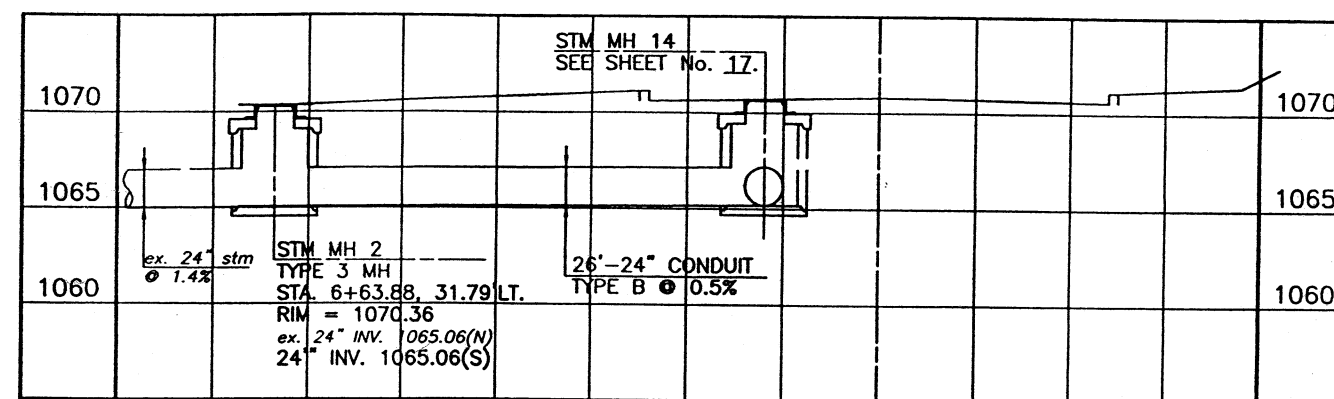
STORM SEWER DETAIL
1+25 GORDON AVE. NW



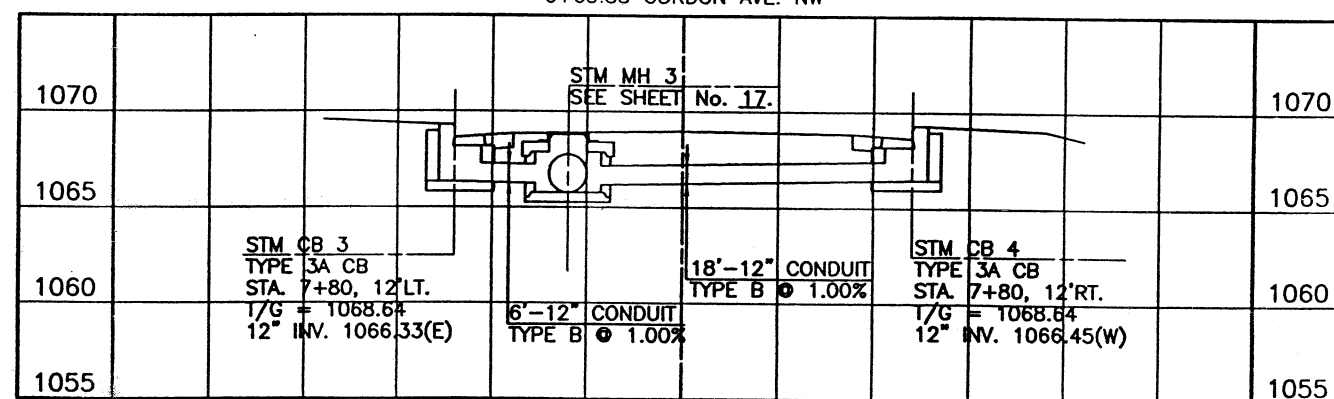
STORM SEWER DETAIL
3+50 GORDON AVE. NW



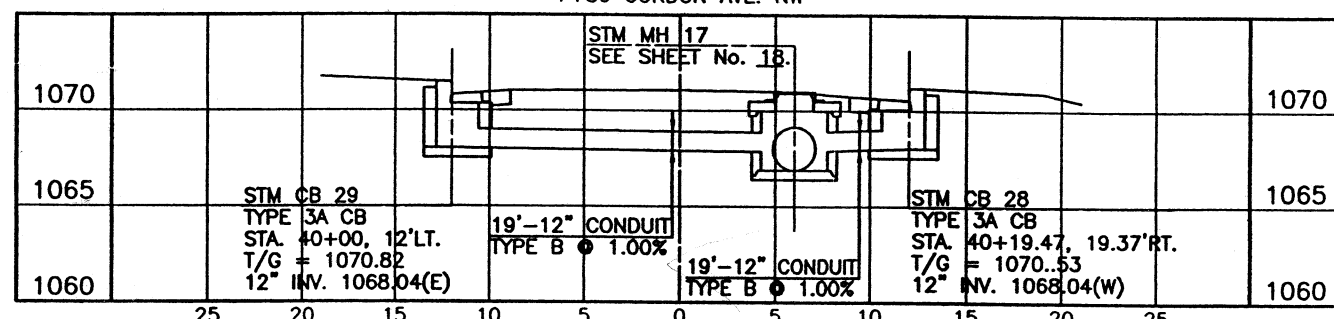
STORM SEWER DETAIL
6+10 GORDON AVE. NW



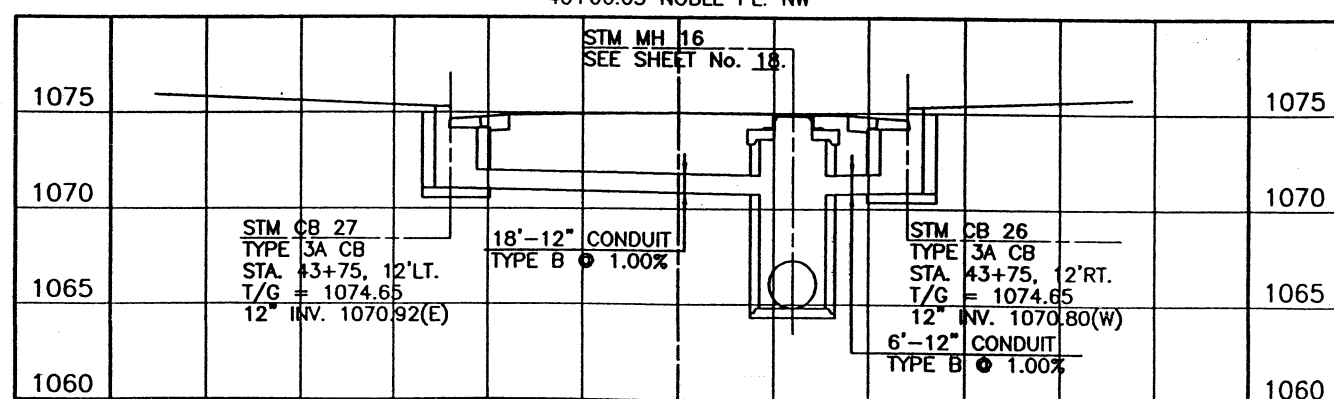
STORM SEWER DETAIL
6+63.88 GORDON AVE. NW



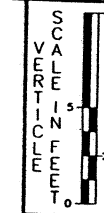
STORM SEWER DETAIL
7+80 GORDON AVE. NW



STORM SEWER DETAIL
40+06.03 NOBLE PL. NW



STORM SEWER DETAIL
43+75 NOBLE AVE. NW



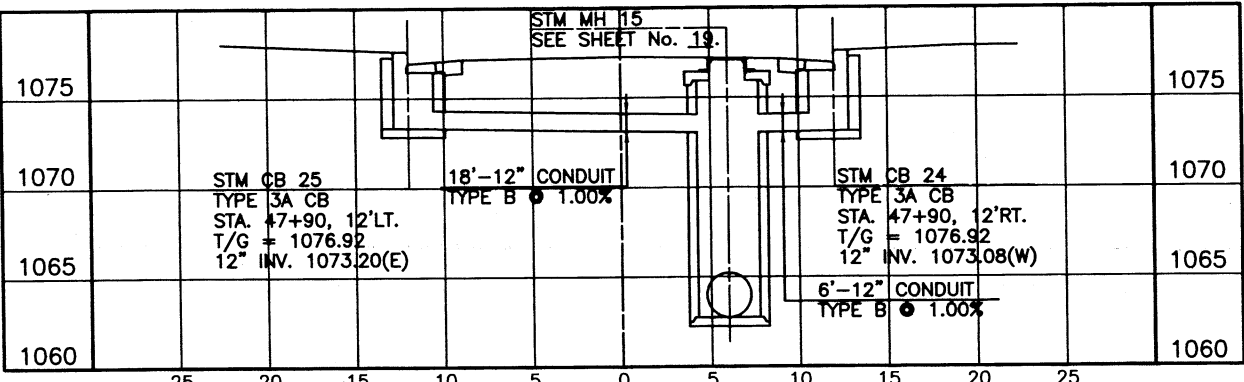
THE CITY OF MASSILLON, OHIO

STARK COUNTY, OHIO

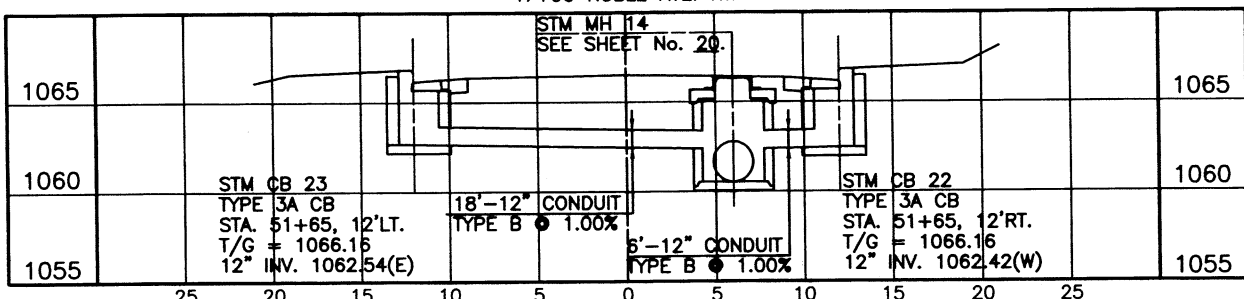
CREST CIR. NW/STARBROOK ST. NW/BELMERE AVE. NW/STANTON AVE. NW STORM SEWER DETAILS

CITY OF MASSILLON
Francis H. Cicchinelli, Jr.
Mayor

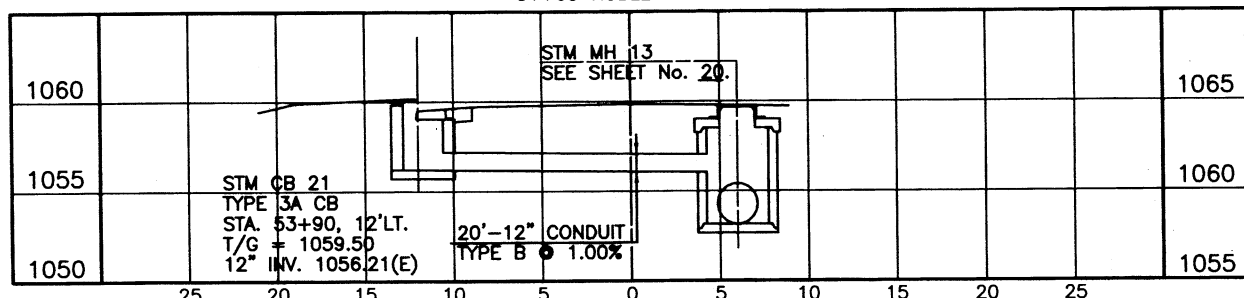
33
57



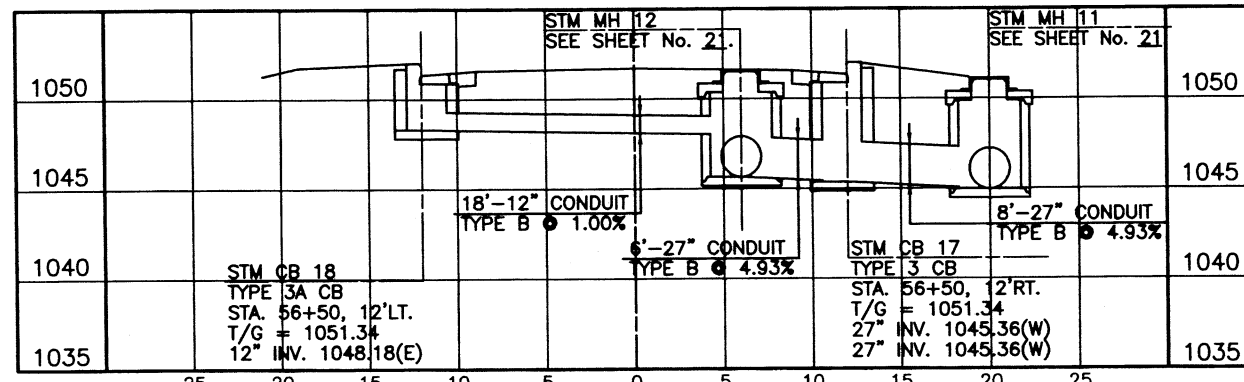
STORM SEWER DETAIL
47+90 NOBLE AVE. NW



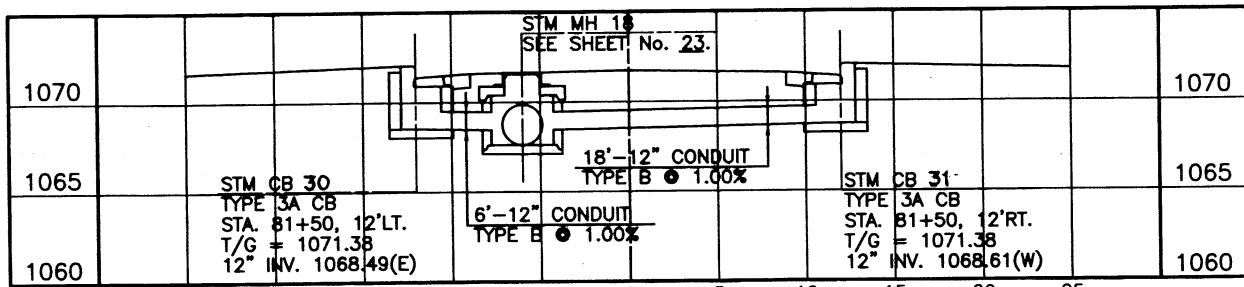
STORM SEWER DETAIL
51+65 NOBLE AVE. NW



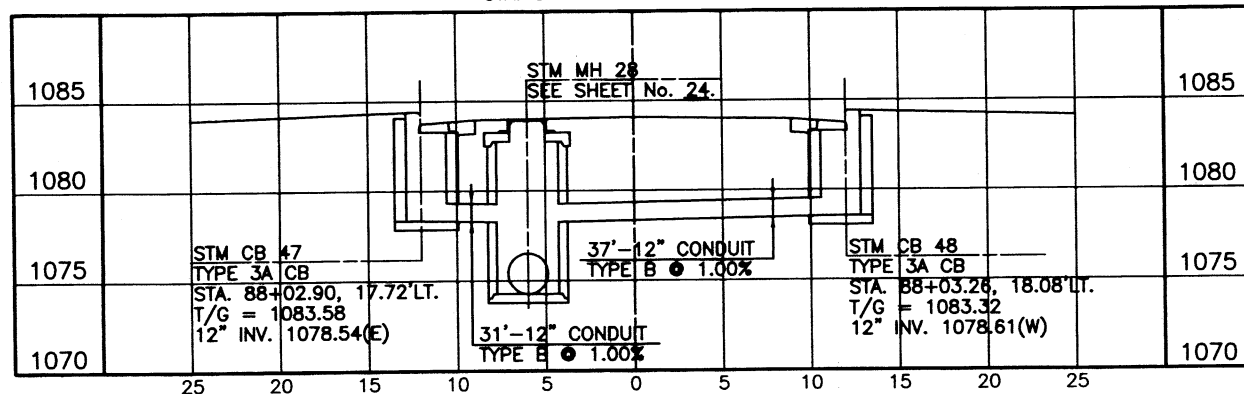
STORM SEWER DETAIL
53+90 NOBLE AVE. NW



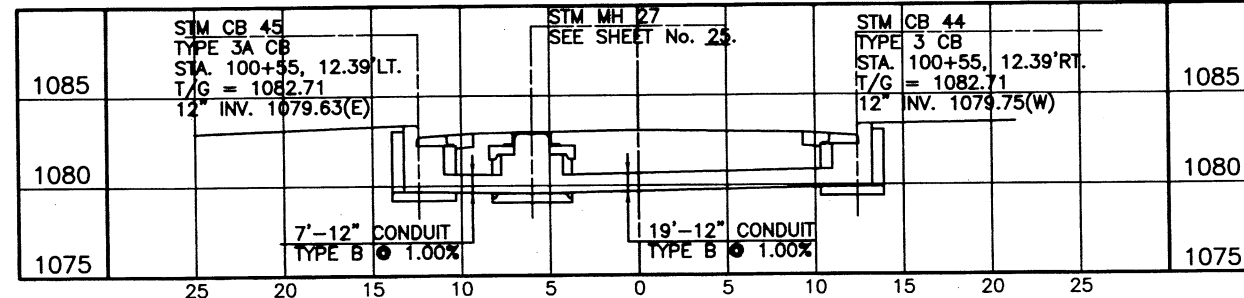
STORM SEWER DETAIL
56+50 NOBLE AVE. NW



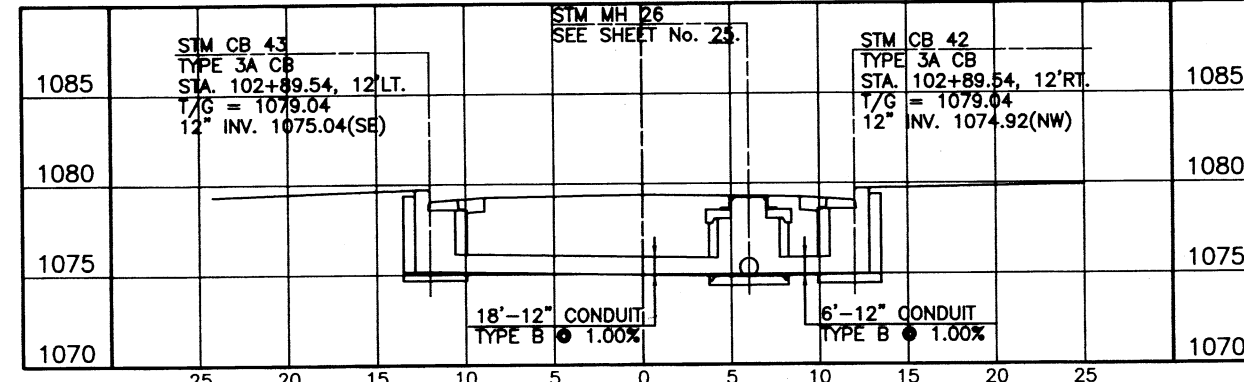
STORM SEWER DETAIL
STA. 81+50 STANTON AVE. NW



STORM SEWER DETAIL
STA. 88+30.90 STANTON AVE. NW



STORM SEWER DETAIL
STA. 100+55 CREST CIR. NW



STORM SEWER DETAIL
STA. 102+89.54 CREST CIR. NW

