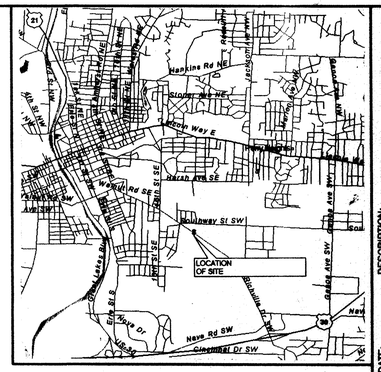
AUGUSTA LAKES NO. 1

SITUATED IN THE CITY OF MASSILLON, COUNTY OF
STARK, STATE OF OHIO AND BEING PART OF
OUTLOTS 707 & 708

NOVEMBER 6, 2000

28 LOTS

PREPARED BY:
HAMMONTREE & ASSOCIATES, LTD
ENGINEERS, PLANNERS & SURVEYORS
NORTH CANTON, OHIO



VICINITY MAP

INDEX OF SHEETS

1. COVER SHEET & UTILITY SCHEMATIC

2. TYPICAL SECTION, ESTIMATED QUANTITIES & NOTES

3. CHAMPIONSHIP CIR.
STA. 49+25.00 TO STA. 61+17.84

4. EAGLES CIR.
STA. 40+00.00 TO STA. 42+90.11

PAR FOUR CIR.
STA. 30+00.00 TO STA. 31+65.00

5. BASELINE 'A'
STA. 68+21.00 TO STA. 70+00.00

BASELINE 'B'
STA. 20+00.00 TO STA. 22+81.68

BASELINE 'C'
STA. 10+00.00 TO STA. 12+03.00

6. INTERSECTION DETAILS
CHAMPIONSHIP CIR. & RICHVILLE DR.
CHAMPIONSHIP CIR. & EAGLES CIR.
EAGLES CUL-DE-SAC

7. INTERSECTION DETAILS
CHAMPIONSHIP CIR. & PAR FOUR CIR.

8.–13. CROSS SECTIONS

14. STORM WATER POLLUTION PREVENTION AND GRADING PLAN

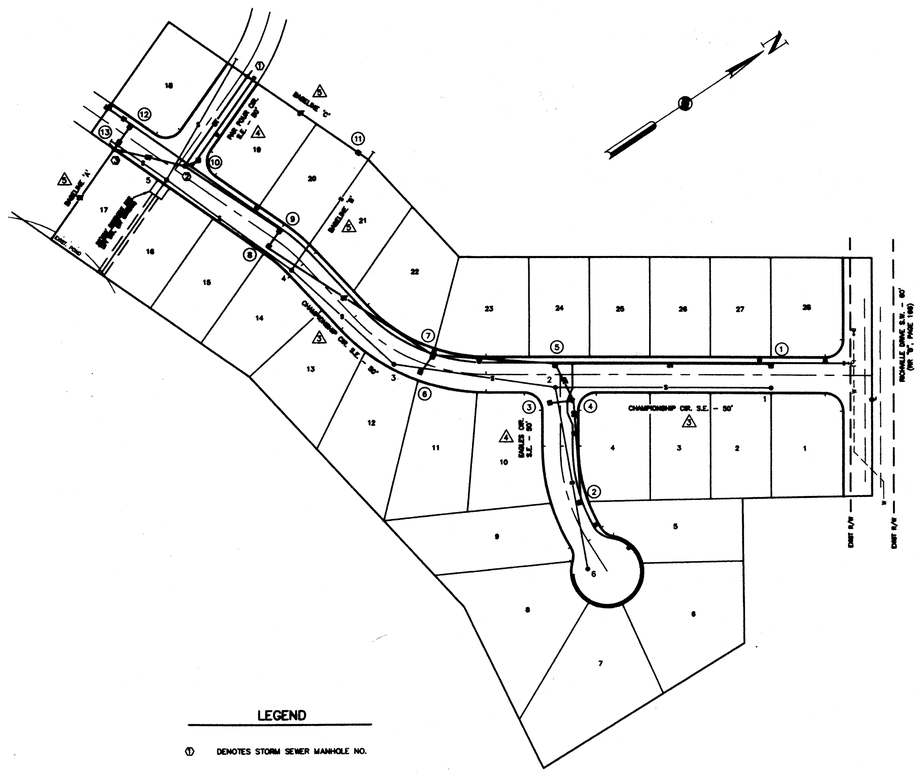
15. STORM WATER POLLUTION PREVENTION DETAILS

16. STANDARD DETAILS

17. STANDARD DETAILS

18. STANDARD DETAILS

19. FINAL PLAT



TOTAL LIN. FT. ROADS = 1638
TOTAL LIN. FT. SANITARY SEWER = 1871
TOTAL LIN. FT. STORM SEWER = 1992

LEGEND

① DENOTES STORM SEWER MANHOLE NO.

2 DENOTES SANITARY SEWER MANHOLE NO.

△3 DENOTES SHEET NO.

④ DENOTES CATCH BASIN NO.

——S—— SANITARY SEWER

——ST—— STORM SEWER

——W—— WATER

0 50 100 200

STATE OF OHIO
JONATHAN D. SCHLOSCHER E-46564
REGISTERED
PROFESSIONAL ENGINEER

DEVELOPER:
JANDA DEVELOPMENT LIMITED, LLC
ATTN. STEVE SMITH, PRESIDENT
6501 HIGHMILL AVE. N.W.
MASSILLON, OHIO 44646
PHONE: (330) 832-1040

APPROVED James J. Banks DATE 11-27-00
MASSILLON CITY ENGINEER

APPROVED _____ DATE _____
CONSUMERS OHIO WATER COMPANY

2 WORKING DAYS
BEFORE YOU DIG
CALL TOLL FREE 800-362-2764
OHIO UTILITIES PROTECTION SERVICE

REVISION BY: ____ DATE: ____ DESCRIPTION: ____
REVISION BY: ____ DATE: ____ DESCRIPTION: ____
REVISION BY: ____ DATE: ____ DESCRIPTION: ____
REVISION BY: ____ DATE: ____ DESCRIPTION: ____
REVISION BY: ____ DATE: ____ DESCRIPTION: ____

DESIGNED BY: JDS CHECKED BY: MLD
DRAWN BY: LJP REVIEWED BY: JDS
F.B. 459, PG. 1
COPYRIGHT: 2000 DATE: 11/6/00
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SCALE:
N.T.S.

COVER SHEET
AUGUSTA LAKES NO. 1
SITUATED IN THE CITY OF MASSILLON, COUNTY OF STARK, STATE OF OHIO AND BEING PART OF OUTLOTS 707 & 708

HAMMONTREE & ASSOCIATES, LTD.
ENGINEERS, PLANNERS, SURVEYORS
CANTON ORLANDO PITTSBURGH AKRON
5233 STONEHAM ROAD, NORTH CANTON, OHIO 44720
PHONE: CANTON:(330)/499-9817 AKRON:(330)/833-7274
TOLL FREE: 1-800-364-9817 FAX: (330)/499-0149

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01 50 01

ESTIMATED QUANTITIES

ITEM*	QUAN.	UNIT	DESCRIPTION
			EARTHWORK & ROADS
201	LUMP	SUM	CLEARING AND GRUBBING
203	24663	CU. YD.	EXCAVATION INCLUDING EMBANKMENT CONST. (ROADS ONLY) ①
203	6522	SQ. YD.	SUBGRADE COMPACTION
301	611	CU. YD.	4" BITUMINOUS AGGREGATE BASE
304	916	CU. YD.	6" AGGREGATE BASE
404	229	CU. YD.	1-1/2" ASPHALT CONCRETE
407	AS REQ'D	GAL.	TACK COAT (0.4 GAL./SQ. YD.)
408	2197	GAL.	PRIME COAT (0.4 GAL./SQ. YD.)
604	6	EACH	STANDARD MONUMENT
604	6	EACH	MONUMENT BOX ASSEMBLY
606	62.5	LIN. FT.	GUARDRAIL, TYPE 5
608	1464	SQ. YD.	CONCRETE WALK (BY HOMEOWNER)
608	6	EACH	CURB RAMP, TYPE 1 (BY HOMEOWNER)
609	3204	LIN. FT.	MASSILLON STANDARD CONCRETE CURB AND GUTTER
651	3325	CU. YD.	TOPSOIL STOCKPILED
659	1958	SQ. YD.	SEEDING AND MULCHING
			SANITARY
603	1871	LIN. FT.	8" P.V.C. GRAVITY SEWER PIPE, ASTM D-3034
603	22	EACH	6" ON 8" WYE W/6" 45° BEND, ASTM D-3034
603	973	LIN. FT.	6" P.V.C. GRAVITY SEWER PIPE, ASTM D-3034
603	4	EACH	8" PLUG & MARKER
604	7	EACH	SANITARY SEWER MANHOLE, MASSILLON STANDARD
604	–	EACH	DROP ATTACHMENT
			DRAINAGE
207②	AS REQ'D.	SQ. YD.	TEMPORARY SEEDING & MULCHING
207	1300	LIN. FT.	FILTER FABRIC FENCE
207	13	EACH	INLET PROTECTION
207	1	EACH	CONSTRUCTION ENTRANCE
601	3	CU. YD.	ROCK CHANNEL PROTECTION, TYPE C W/FILTER
603	614	LIN. FT.	12" TYPE "B" CONDUIT (707.33)
603	301	LIN. FT.	15" TYPE "B" CONDUIT (707.33)
603	300	LIN. FT.	18" TYPE "B" CONDUIT (707.33)
603	160	LIN. FT.	24" TYPE "B" CONDUIT (707.33)
603	343	LIN. FT.	30" TYPE "B" CONDUIT (707.33)
603	20	LIN. FT.	30" TYPE "C" CONDUIT (707.33)
603	100	LIN. FT.	36" TYPE "B" CONDUIT (707.33)
603	154	LIN. FT.	36" TYPE "C" CONDUIT (707.33)
603	874	LIN. FT.	6" TYPE "B" CONDUIT (STORM LATERAL)
604	13	EACH	STANDARD CATCH BASIN, MASSILLON STD. TYPE "A"
604	3	EACH	STORM MANHOLE COMPLETE
			WATERLINE
638	1551	LIN. FT.	8" DUCTILE IRON WATERLINE PRESSURE CLASS 350 W/POLYWRAP, JOINTS & FITTINGS
638	206	LIN. FT.	2" HDPE TUBULAR WATERLINE W/TRACER WIRE & MARKER TAPE, JOINTS & FITTINGS
638	3	EACH	8" MJ TAPPED PLUG
638	3	EACH	8" GATE VALVE
638	1	EACH	2" CORP. STOP
638	2	EACH	8" X 8" MJ TEE
638	4	EACH	2" X 1" TEE
638	1	EACH	2" BLOW-OFF VALVE
638	666	LIN. FT.	1" SERVICE CONNECTION (BY OTHERS)
638	28	EACH	1" CURB STOP (BY OTHERS)
638	4	EACH	6" FIRE HYDRANT ASS'Y. COMPLETE, TYPE II
638	4	EACH	8"-45° MJ ELBOW
638	4	EACH	8"-22.5° MJ ELBOW

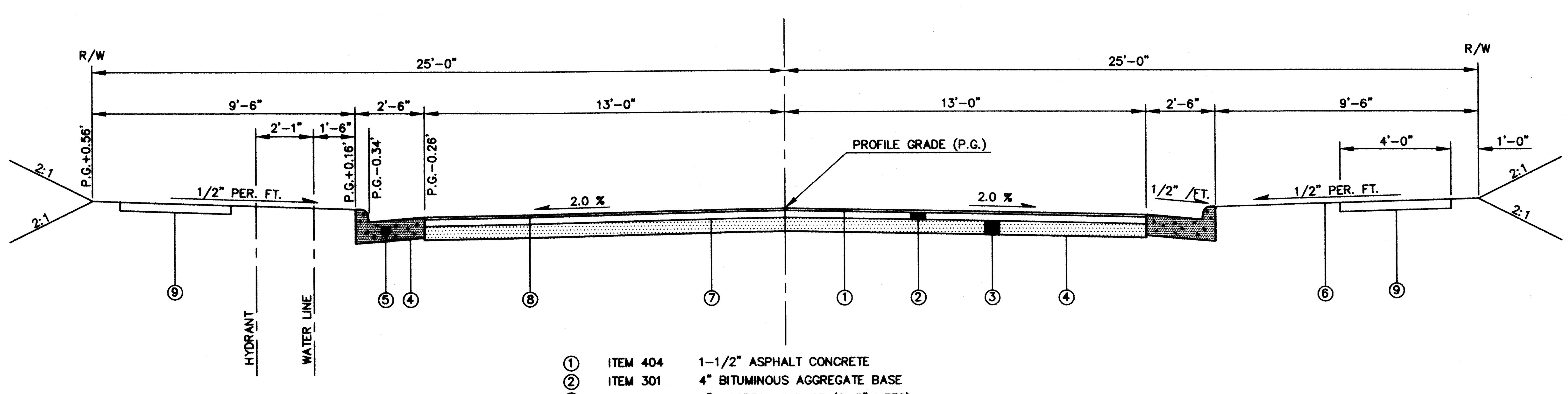
* ITEM NUMBERS REFER TO STATE OF OHIO DEPARTMENT TRANSPORTATION, CONSTRUCTION & MATERIAL SPECIFICATIONS, JANUARY 1, 1997.

① EARTHWORK SUMMARY (ROADS ONLY)
EXCAVATION = 24663 CU. YD.
EMBANKMENT +15% = 22048 CU. YD.
EXCESS = 2615 CU. YD. (USE TO FILL LOTS)
ASSUME 1' OF TOPSOIL REMOVED & STOCKPILED

② ADDITIONAL TEMPORARY EROSION CONTROL QUANTITIES MAY BE REQUIRED AT THE DIRECTION OF THE MASSILLON CITY ENGINEER AND/OR THE STARK COUNTY SOIL & WATER CONSERVATION DISTRICT.

50' R/W TYPICAL SECTION

SCALE: 3/8"=1'



① ITEM 404 1-1/2" ASPHALT CONCRETE
② ITEM 301 4" BITUMINOUS AGGREGATE BASE
③ ITEM 304 6" AGGREGATE BASE (2-3" LIFTS)
④ ITEM 203.13 COMPACTED SUBGRADE
⑤ ITEM 609 MASSILLON STANDARD CONCRETE CURB AND GUTTER
⑥ ITEM 659 SEEDING AND MULCHING
⑦ ITEM 408 PRIME COAT TO BE APPLIED AT THE RATE OF 0.4 GAL./SQ. YD.
⑧ ITEM 407 TACK COAT TO BE APPLIED AT THE RATE OF 0.4 GAL./SQ. YD. (AS REQUIRED)
⑨ ITEM 408 CONCRETE WALK (4" THICKNESS, INCREASE TO 6" ● DRIVEWAYS) WALK CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE INDIVIDUAL HOMEOWNER.

GENERAL NOTES

CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES.

2. ALL SUBGRADE COMPACTION AND ALL 304 AGGREGATE BASE SHALL BE INSPECTED AND APPROVED AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO PLACEMENT OF ANY 304 AGGREGATE BASE OR 301 BITUMINOUS AGGREGATE BASE.
3. ALL TRENCHES BENEATH THE PROPOSED PAVEMENT OR EXISTING PAVEMENT SHALL BE COMPACTED IN LIFTS. IN A MANNER, AND WITH MATERIAL SPECIFIED BY THE MASSILLON ENGINEERING DEPARTMENT OR ANY APPLICABLE, O.D.O.T. SPECIFICATIONS.
4. THE COMPLETE RIGHT-OF-WAY IS TO BE GRADED AS SHOWN ON THE TYPICAL SECTION. DURING CONSTRUCTION OF THE ROAD, THE DEVELOPER SHALL BE RESPONSIBLE FOR MAINTAINING THE TYPICAL SECTION BETWEEN THE PAVEMENT AND THE RIGHT-OF-WAY LINE.

PRIOR TO THE COMMENCEMENT OF ANY PROJECT, A PRE-CONSTRUCTION MEETING WILL BE HELD AT THE CITY ENGINEER'S OFFICE. AT THIS TIME, THE PROJECT WILL BE DISCUSSED IN REGARD TO PROCEDURE, MATERIALS, INSPECTION, ETC...

6. THE DEVELOPER/CONTRACTOR SHALL TAKE THE NECESSARY STEPS TO PREVENT SOIL EROSION AND DOWNWASH OF GRITS AND SEDIMENTS AS REQUIRED BY THE CITY OF MASSILLON ENGINEER.
7. INSPECTIONS – SEE CITY OF MASSILLON SUBDIVISION REGULATIONS, SEC. 1111.03
8. CONSTRUCTION RESPONSIBILITIES – SEE CITY OF MASSILLON REGULATIONS, SEC. 1111.04

WATER LINE NOTES

1. MINIMUM COVER OVER 8" WATER LINE = 4'.
2. MAINTAIN MINIMUM 4' HORIZONTAL SEPARATION BETWEEN WATER AND STORM SEWER LINES.
3. MAINTAIN MINIMUM 10' HORIZONTAL SEPARATION BETWEEN WATER AND SANITARY SEWER LINES.
4. WATER MAIN MATERIALS SHALL CONFORM TO AWWA C151 FOR DUCTILE IRON PIPE AND AWWA C900 FOR PVC PIPE.
5. WATER MAIN PRESSURE TESTING SHALL CONFORM TO AWWA C600.
6. WATER MAIN DISINFECTION SHALL CONFORM TO AWWA C651.
7. THE PROPOSED FACILITIES WILL MAINTAIN A MINIMUM 35 PSI PRESSURE DELIVERED TO THE CURB STOP DURING NORMAL OPERATING CONDITIONS.
8. BOOSTER PUMPS ARE NOT PERMITTED ON SERVICE CONNECTIONS. THE WATER SYSTEM MAY GRANT SPECIAL PERMISSION FOR BUILDINGS SIX STORIES OR HIGHER.
9. CONTRACTOR TO USE CONSUMERS OHIO WATER COMPANY DETAILS AND SPECIFICATIONS.
10. CONTRACTOR TO INSTALL SERVICE CONNECTIONS ALONG THE 2" MAIN LINE. SERVICE CONNECTIONS ALONG THE 8" MAIN WATER LINE TO BE INSTALLED BY OTHERS.

O.D.O.T. STANDARD DRAWING LIST		
DRAWING NO.	DATE	
BP-7.1	10-30-92	CURB RAMPS
MC-1	6-13-69	ROADWAY ITEMS
GR-2.1M	4-14-98	GUARDRAIL TYPE 5

STORM SEWER NOTES

1. ALL STORM SEWER WITHIN THE ROAD RIGHT-OF-WAY MAY BE EITHER REINFORCED CONCRETE PIPE (706.02) OR CORRUGATED POLYETHYLENE SMOOTH LINED PIPE (707.33).
2. STORM SEWER BENEATH CURB AND GUTTER AND PAVEMENT SHALL BE TYPE "B" CONDUIT.
3. STORM SEWER OUTSIDE OF CURB AND GUTTER AND PAVEMENT SHALL BE TYPE "C" CONDUIT.
4. CURB INLET CATCH BASINS ARE TO BE CITY OF MASSILLON, TYPE "A". REFER TO CITY OF MASSILLON STANDARD DRAWINGS FOR MANHOLE & CATCH BASIN DETAILS (SEE SHEETS 17, 18 & 19).
5. A 6" STORM LATERAL SHALL BE INSTALLED TO SERVE EACH LOT HAVING STORM SEWER AVAILABLE WITHIN THE ROAD RIGHT-OF-WAY OR ON A SIDE LOT LINE. LATERALS SHALL BE CORE DRILLED INTO THE SIDE OF THE MAIN STORM PIPE OR STORM MANHOLE AND EXTEND TO THE RIGHT-OF-WAY OR BEYOND FURTHEST UTILITY. PLUG THE END OF THE LATERAL AND PROVIDE A LOCATION MARKER.

SANITARY SEWER NOTES

1. ALL SANITARY SEWERS & APPURTENANCES SHALL BE CONSTRUCTED ACCORDING TO CITY OF MASSILLON ENGINEERING DEPARTMENT SPECIFICATIONS IN EFFECT AT TIME OF CONSTRUCTION.
2. ALL SANITARY SEWER LATERALS TO BE 6" DIAMETER.
3. ROOF DRAINS, FOUNDATION DRAINS & OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED.
4. MINIMUM COVER OVER SANITARY SEWER SHALL BE 3 FT.
5. SANITARY LATERALS SHALL EXTEND TO THE RIGHT-OF-WAY LINE OR BEYOND THE FURTHEST UTILITY – WHICHEVER IS GREATER. THE END OF THE SERVICE LATERAL SHALL BE PLUGGED AND A LOCATION MARKER PROVIDED.
6. NO CHANGES TO SANITARY SERVICE LOCATIONS SHALL BE MADE WITHOUT THE APPROVAL OF THE CITY ENGINEER.
7. PVC GRAVITY SEWER PIPE SHALL CONFORM TO ASTM D-3034 AS AN ALTERNATE TO PVC GRAVITY SEWER, SHOWN IN QUANTITIES VITRIFIED CLAY PIPE SEWER, EXTRA STRENGTH, ASTM C-700 MAY BE USED.
8. MINIMUM VERTICAL CLEARANCE BETWEEN SANITARY SEWER & WATERLINE IS 18 INCHES. MINIMUM VERTICAL CLEARANCE BETWEEN SANITARY SEWER & STORM SEWER IS 12 INCHES.
9. JOINT SPECIFICATIONS SHALL MEET ASTM-3212
10. MANHOLE SPECIFICATIONS SHALL MEET ASTM C-478 AND C-443
11. BEDDING SPECIFICATIONS SHALL MEET ASTM D-2321, CLASS II
12. LEAKAGE TEST LIMITS: 100 GAL./INCH OF DIA./MILE/DAY MAXIMUM.
13. ALL MANHOLES SHALL BE AIR/VACUUM TESTED IN ACCORDANCE WITH ASTM C-1244.
14. PIPE DEFLECTION TESTS SHALL BE PERFORMED ACCORDING TO GLUMRB SECTION 33.85 AND THE ASTM SPECIFICATION FOR THE PIPE BEING TESTED. THE ALLOWABLE DEFLECTION RATE SHALL NOT EXCEED 5%.

REVISION BY: ____ DATE: ____ DESCRIPTION: ____
REVISION BY: ____ DATE: ____ DESCRIPTION: ____
REVISION BY: ____ DATE: ____ DESCRIPTION: ____
REVISION BY: JDS DATE: 11/30/00 DESCRIPTION: PER C.O.W.C. COMMENTS
REVISION BY: JDS DATE: 11/28/00 DESCRIPTION: PER CITY ENG. COMMENTS

DESIGNED BY: JDS CHECKED BY: JDS
DRAWN BY: LJP REVIEWED BY: MLD
F.B.____ PAGE:____
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SCALE: AS SHOWN

TYPICAL SECTION, ESTIMATED QUANTITIES & NOTES
AUGUSTA LAKES NO. 1
SITUATED IN THE CITY OF MASSILLON, COUNTY OF STARK, STATE OF OHIO AND BEING OUTLOT 870

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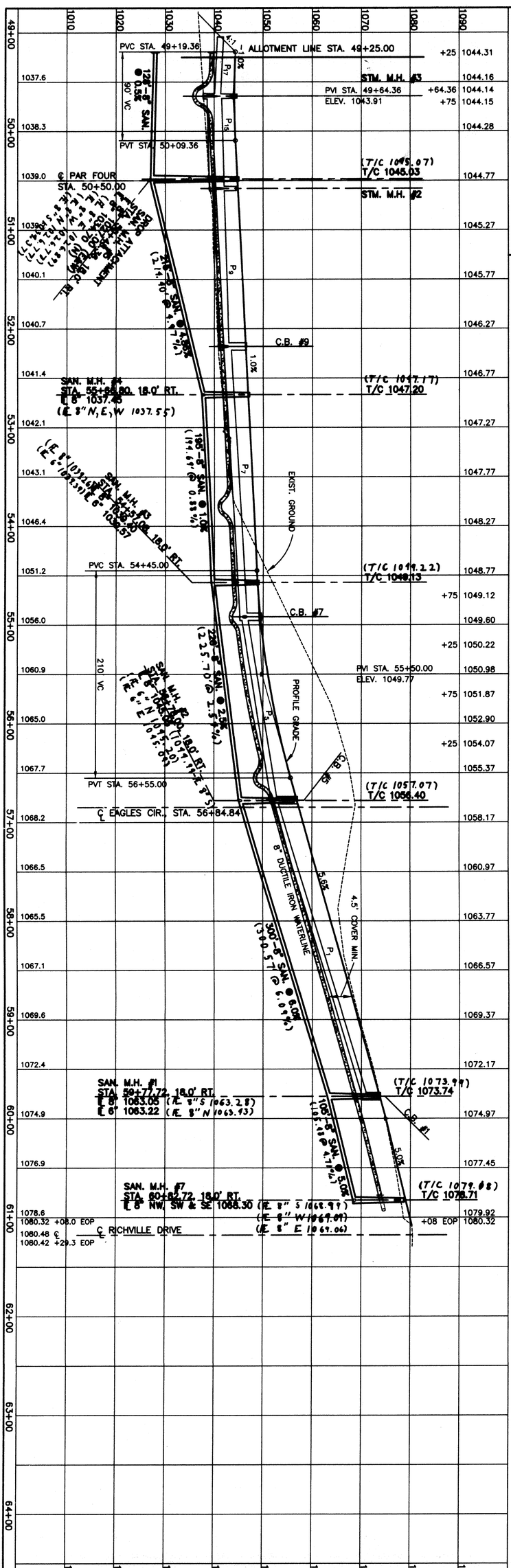
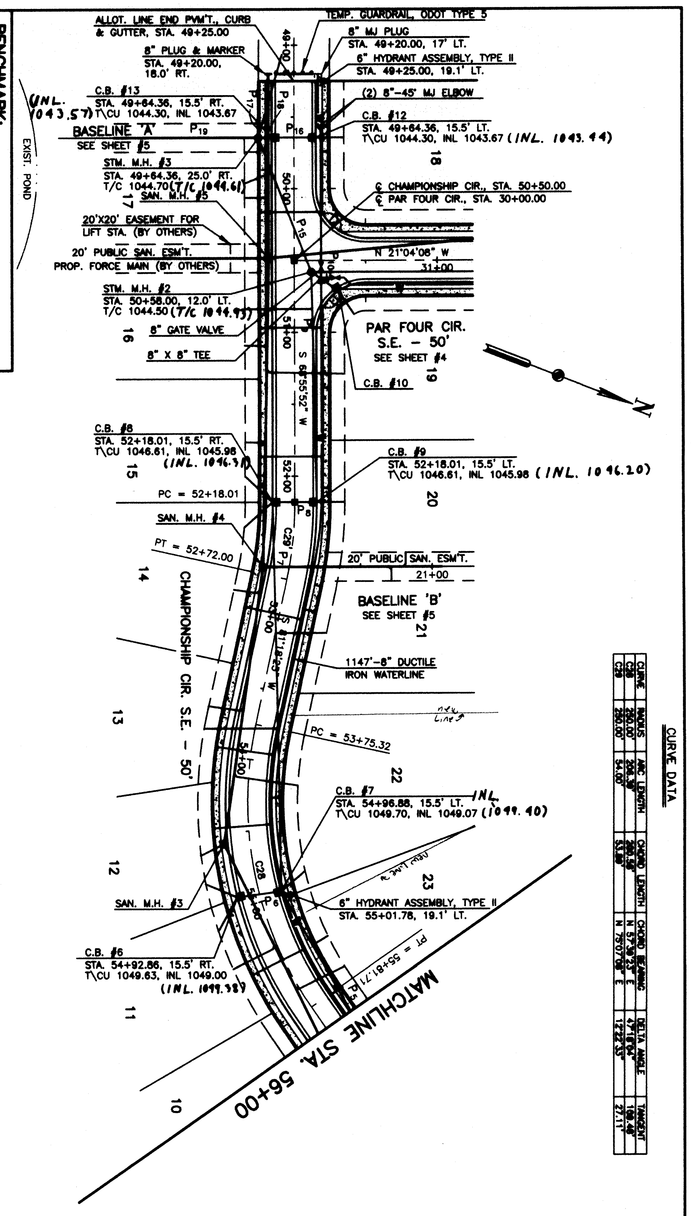
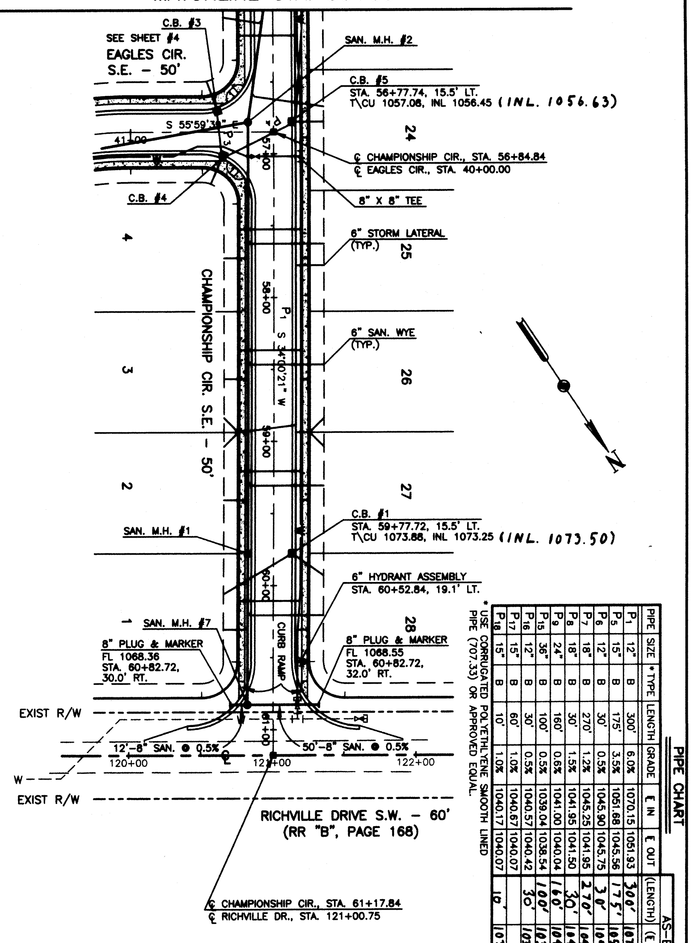




CURVE DATA

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE	TANGENT
C28	150.00'	104.94'	102.84'	N 70°39'32" E	40°04'00"	54.77'
C29	150.00'	14.00'	13.99'	N 52°32'32" E	5°20'00"	7.00'

MATCHLINE STA. 56+00



PIPE CHART

PIPE	SIZE	* TYPE	LENGTH	GRADE	℄ IN	℄ OUT
P1	12"	B	300'	6.0%	1070.15	1051.93
P2	15"	B	175'	3.5%	1051.88	1045.56
P3	15"	B	300'	0.5%	1045.90	1045.75
P4	12"	B	20'	0.5%	1045.25	1045.15
P5	18"	B	32'	1.5%	1041.95	1041.50
P6	24"	B	160'	0.5%	1041.00	1040.20
P7	36"	B	100'	0.5%	1038.04	1038.54
P8	12"	B	50'	0.5%	1040.57	1040.42
P9	15"	B	60'	1.0%	1040.67	1040.07
P10	15"	B	10'	1.0%	1040.17	1040.07
P11	15"	B	60'	1.0%	1040.67	1040.07
P12	15"	B	30'	0.5%	1040.42	1040.27
P13	15"	B	30'	0.5%	1040.42	1040.27
P14	15"	B	10'	1.0%	1040.17	1040.07

* USE CORRUGATED POLYETHLYENE SMOOTH LINED PIPE (707.33) OR APPROVED EQUAL

AS-BUILTS

(LENGTH)	(℄ IN)	(℄ OUT)
300'	1069.93	1051.71
175'	1051.62	1045.10
20'	1045.53	1045.43
32'	1041.10	1040.66
160'	1040.66	1040.21
100'	1038.54	1038.04
50'	1040.42	1040.27
60'	1040.67	1040.07
10'	1040.17	1040.07
60'	1040.67	1040.07
30'	1040.42	1040.27
30'	1040.42	1040.27
10'	1040.17	1040.07

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PLAN & PROFILE
CHAMPIONSHIP CIR. - STA. 49+25.00 TO STA. 61+17.84
AUGUSTA LAKES NO. 1
SITUATED IN THE CITY OF MASSILLON, COUNTY OF STARK, STATE OF OHIO AND BEING OUTLOT 870

SCALES: HORIZ: 1"=50' VERT: 1"=10'

DESIGNED BY: JDS CHECKED BY: MLD
DRAWN BY: LJP REVIEWED BY: JDS
F.B. 459, PG. 1
COPYRIGHT: 2000 DATE: 11/6/00
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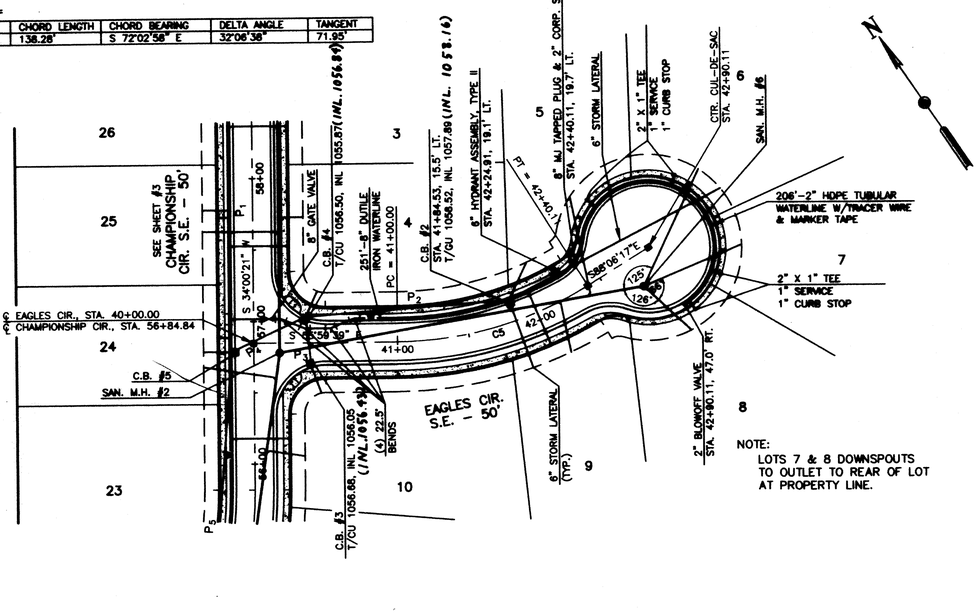
REVISION BY:	DATE:	DESCRIPTION:
DCG	12/29/00	SAN. + STM. AS BUILTS
JDS	12/19/00	PER C.O.W.C. COMMENTS
JDS	11/30/00	PER C.O.W.C. COMMENTS
JDS	11/28/00	PER CITY ENG. COMMENTS

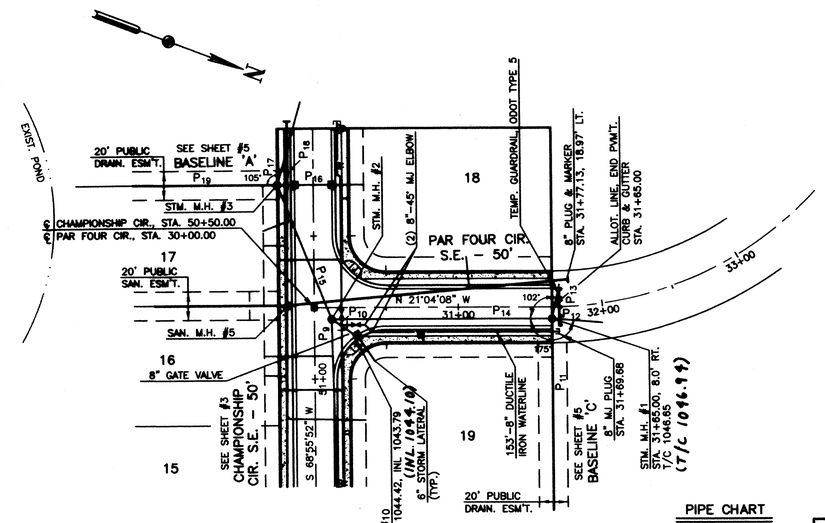
71/57

CURVE DATA

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE	TANGENT
C5	250.00'	140.11'	138.28'	S 72°02'58" E	32°06'38"	71.95'



NOTE:
LOTS 7 & 8 DOWNSPOUTS TO OUTLET TO REAR OF LOT AT PROPERTY LINE.



PIPE CHART

PIPE	SIZE	* TYPE	LENGTH	GRADE	℄ IN	℄ OUT	AS-BUILTS (LENGTH)	AS-BUILTS (℄ IN)	AS-BUILTS (℄ OUT)
P_2	12"	B	145'	0.8%	1053.95	1052.77	145'	1053.28	1052.73
P_3	12"	B	32'	0.5%	1052.93	1052.77	32'	1053.48	1052.78
P_4	15"	B	56'	1.5%	1052.52	1051.68	56'	1052.50	1051.73
P_{10}	12"	B	20'	0.5%	1040.69	1040.59	20'	1040.00	1039.71
P_{12}	12"	B	35'	1.0%	STUB	1042.85	34'	1042.33	1042.75
P_{13}	12"	B	22'	1.2%	1043.11	1042.85	22'	1043.16	1042.81
P_{14}	30"	B	155'	1.8%	1041.35	1039.54	155'	1041.33	1039.14

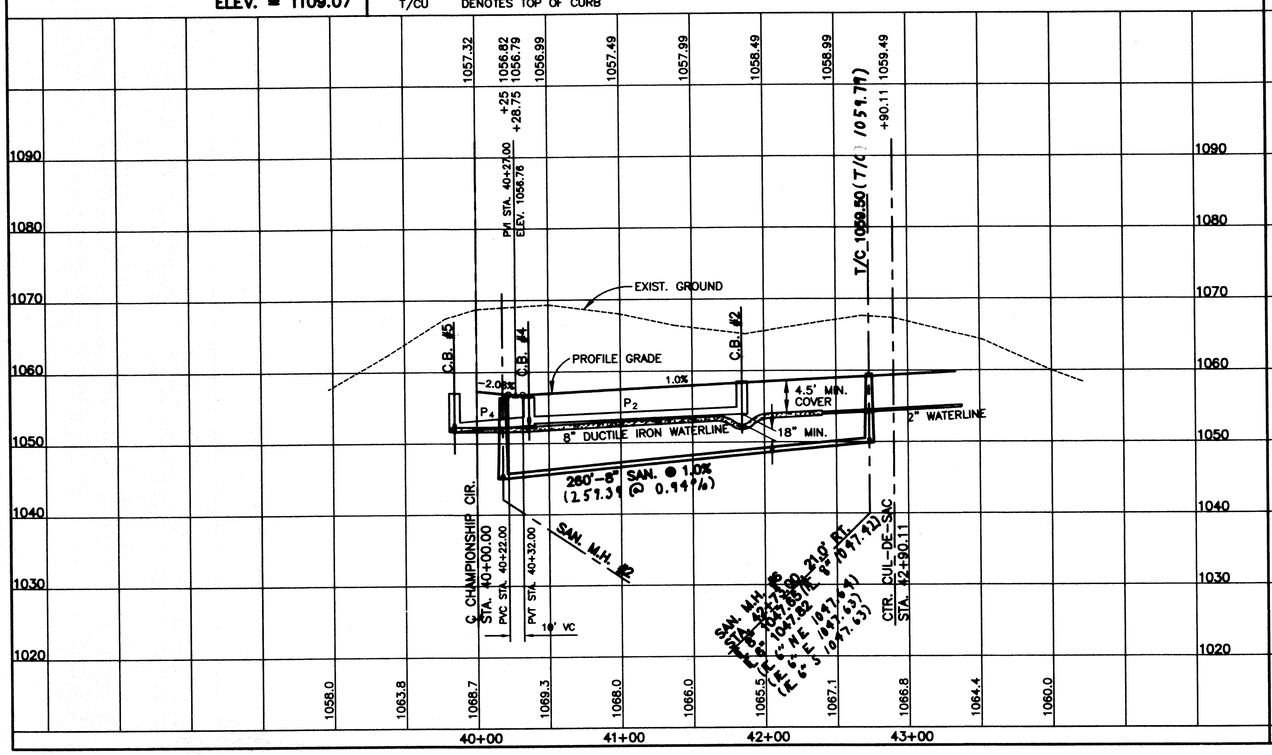
* USE CORRUGATED POLYETHLYENE SMOOTH LINED PIPE (707.33) OR APPROVED EQUAL.

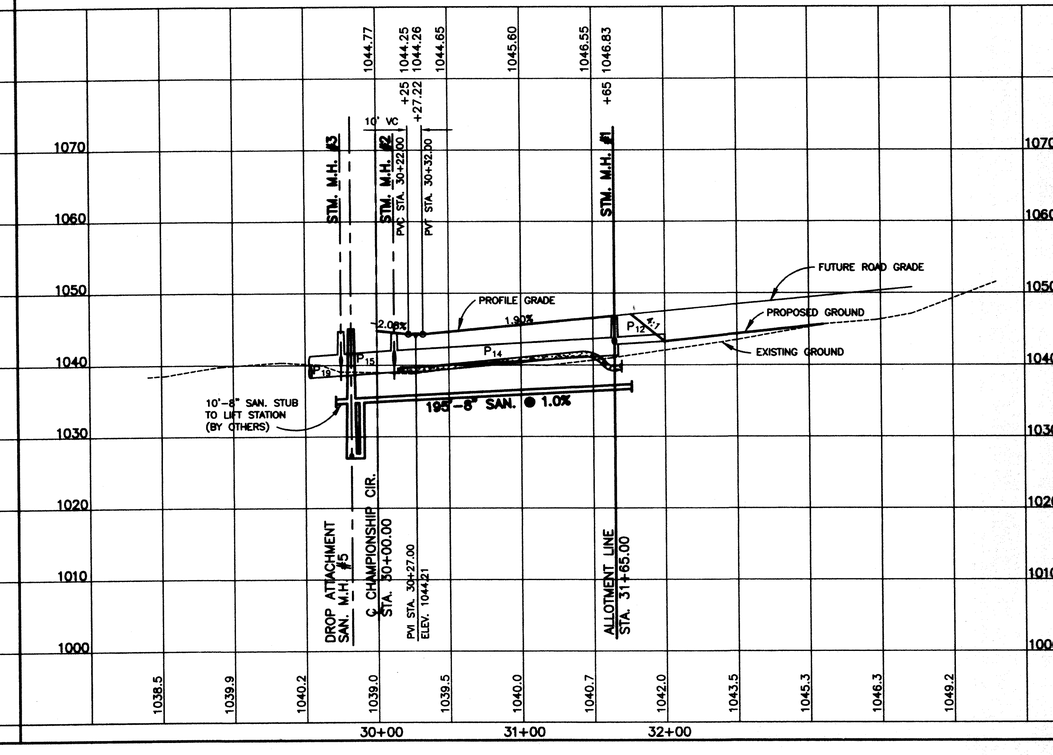
BENCHMARK:
CHISLED "X" NORTH FLANGE BOLT, FIRE HYDRANT SOUTH SIDE RICHVILLE DRIVE.

ELEV. = 1109.07

DS — DENOTES 6" DOWNSPOUT CONNECTOR
• — DENOTES PROP. CURB BOX
T/C — DENOTES TOP OF COVER
T/CU — DENOTES TOP OF CURB

NOTE:
ALL CATCH BASINS ARE STANDARD UNLESS OTHERWISE NOTED.





REVISION BY:	DATE:	DESCRIPTION:
REVISION BY:	DATE:	DESCRIPTION:
REVISION BY: DLG	DATE: 12/29/03	DESCRIPTION: SAN. + STM. AS BUILTS
REVISION BY: JDS	DATE: 11/30/00	DESCRIPTION: PER C.O.W.C. COMMENTS
REVISION BY: JDS	DATE: 11/28/00	DESCRIPTION: PER CITY ENG. COMMENTS

DESIGNED BY: JDS CHECKED BY: MLD
DRAWN BY: LJP REVIEWED BY: JDS
F.B. 459, PG. 1
COPYRIGHT: 2000 DATE: 11/8/00
R:\SHARROLD\LD_JP_BLDNG

SCALES:
HORIZ: 1"=50'
VERT: 1"=10'

PLAN & PROFILE
EAGLES CIR. - STA. 40+00.00 TO STA. 42+90.11
PAR FOUR CIR. - STA. 30+00.00 TO STA. 31+65.00
AUGUSTA LAKES NO. 1
SITUATED IN THE CITY OF MASSILLON, COUNTY OF STARK, STATE OF OHIO AND BEING OUTLOT 870

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ENGINEERS, PLANNERS, SURVEYORS
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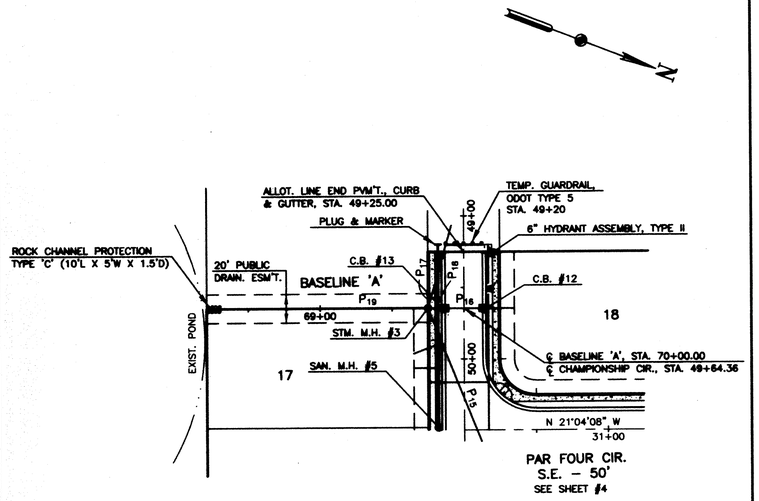
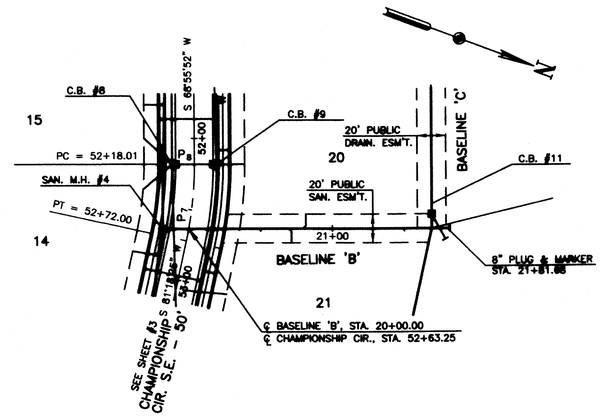
5233 STONEHAM ROAD, NORTH CANTON, OHIO 44720
PHONE: CANTON:(330)/499-8817 AKRON:(330)/835-7274
TOLL FREE: 1-800-364-8817 FAX: (330)/499-0149

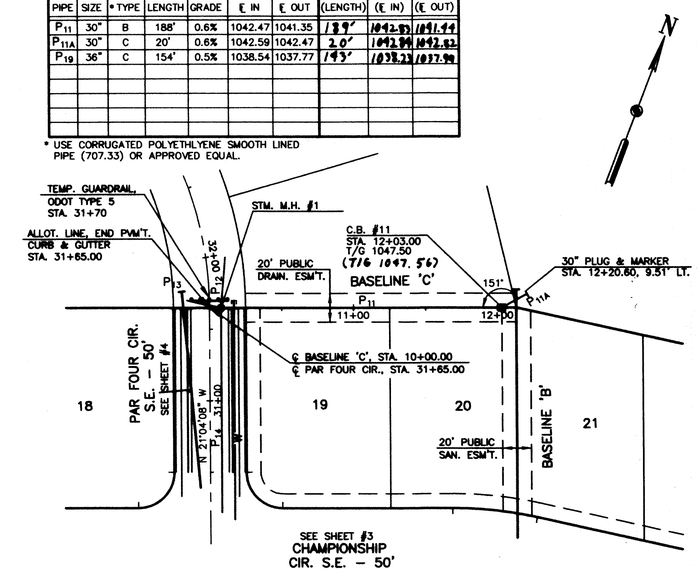




PIPE CHART

PIPE	SIZE	* TYPE	LENGTH	GRADE	℄ IN	℄ OUT	AS-BUILTS (LENGTH)	AS-BUILTS (℄ IN)	AS-BUILTS (℄ OUT)
P_{11}	30"	B	188'	0.6%	1042.47	1041.35	189'	1042.83	1041.44
P_{11A}	30"	C	20'	0.6%	1042.59	1042.47	20'	1042.99	1042.82
P_{19}	36"	C	154'	0.5%	1038.54	1037.77	149'	1038.23	1037.94

* USE CORRUGATED POLYETHLYENE SMOOTH LINED PIPE (707.33) OR APPROVED EQUAL.



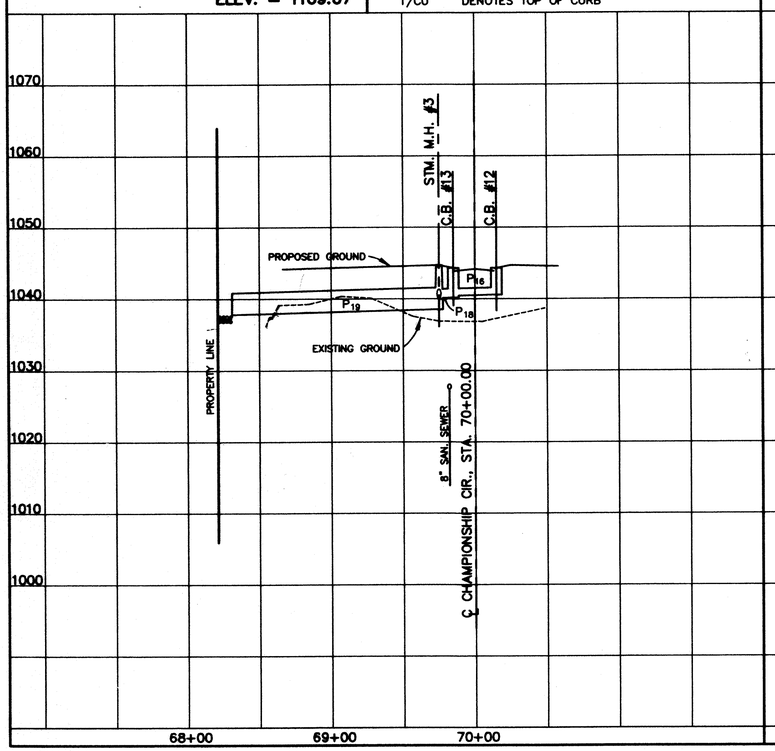
BENCHMARK:

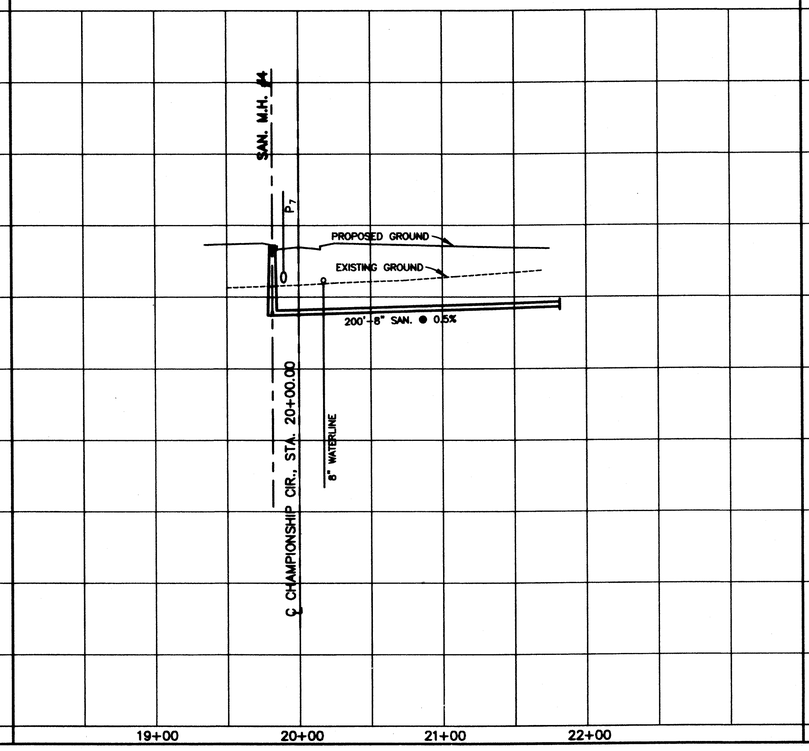
CHISLED "X" NORTH FLANGE BOLT, FIRE HYDRANT SOUTH SIDE RICHVILLE DRIVE.

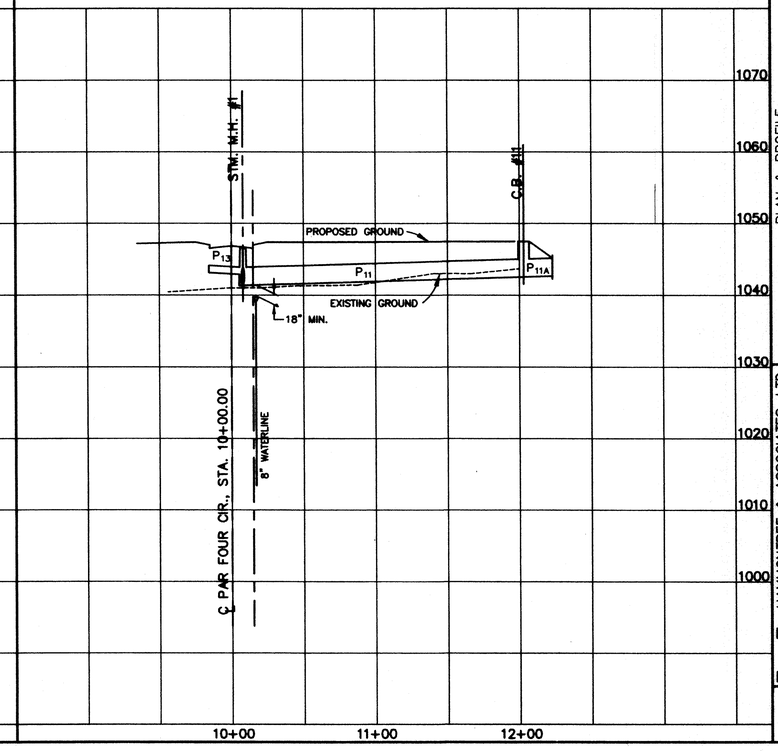
ELEV. = 1109.07

* DENOTES PROP. CURB BOX
T/C DENOTES TOP OF COVER
T/CU DENOTES TOP OF CURB

NOTE:
ALL CATCH BASINS ARE STANDARD UNLESS OTHERWISE NOTED.







REVISION BY:____ DATE:____ DESCRIPTION:____
REVISION BY:____ DATE:____ DESCRIPTION:____
REVISION BY: DLG DATE: 12/29/03 DESCRIPTION: SAN. + STM. AS BUILTS
REVISION BY: JDS DATE: 11/28/00 DESCRIPTION: PER CITY ENG. COMMENTS

DESIGNED BY: JDS CHECKED BY: MLD
DRAWN BY: LJP REVIEWED BY: JDS
F.B. 459, PG. 1
COPYRIGHT: 2000 DATE: 11/6/00
R:\SHARROLD\LD_PP_R2.DWG

SCALES:
HORIZ: 1"=50'
VERT: 1"=10'

PLAN & PROFILE
BASELINE 'A' – STA. 68+21.00 TO STA. 70+00.00
BASELINE 'B' – STA. 20+00.00 TO STA. 21+81.88
BASELINE 'C' – STA. 10+00.00 TO STA. 11+96.00

AUGUSTA LAKES NO. 1

SITUATED IN THE CITY OF MASSILLON, COUNTY OF STARK, STATE OF OHIO AND BEING OUTLOT 870

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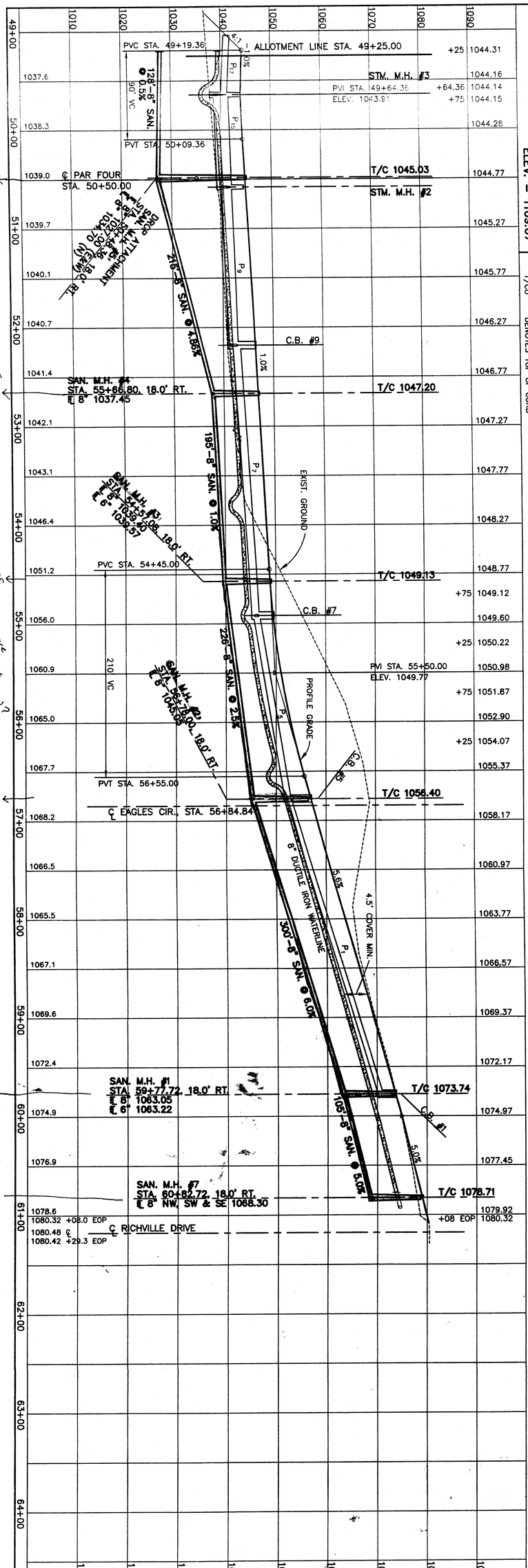
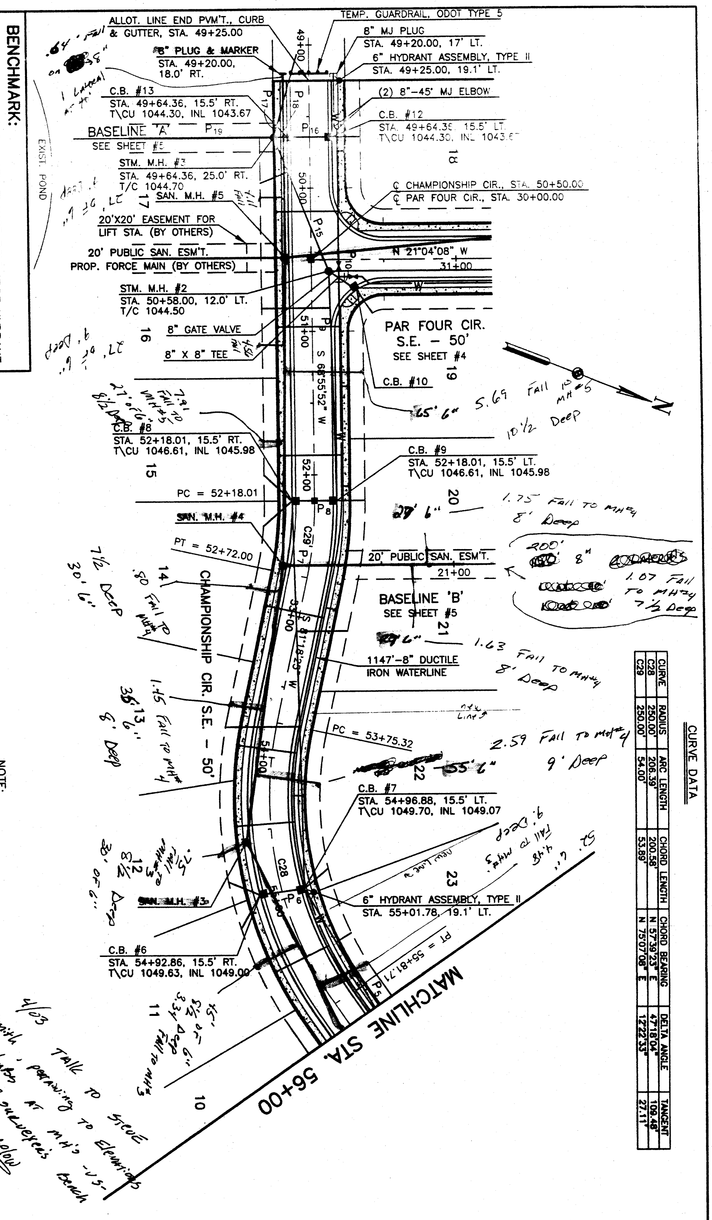
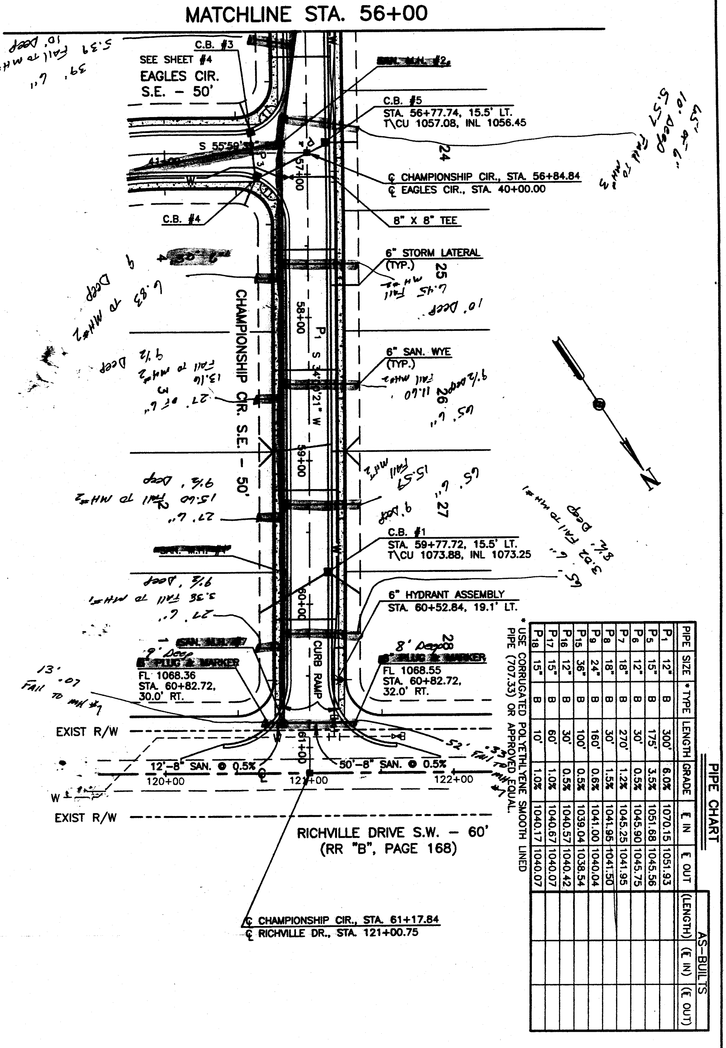
TOLL FREE: 1-800-364-8817 FAX: (330)/499-0149





CURVE DATA							
CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE	TANGENT
C28	250.00'	54.09'	53.98'	N 75°07'08" E	12°23'31"	27.11'



PIPE CHART											
	PIPE	SIZE	* TYPE	LENGTH	GRADE	℄ IN	℄ OUT	AS-BUILT'S (LENGTH)	AS-BUILT'S (℄ IN)	AS-BUILT'S (℄ OUT)
	P_1	12"	B	300'	6.0%	1070.15	1051.93			
	P_2	15"	B	175'	3.5%	1051.88	1045.56			
	P_3	12"	B	30'	0.5%	1045.90	1045.75			
	P_4	18"	B	270'	1.2%	1045.25	1041.95			
	P_5	18"	B	30'	1.5%	1041.95	1041.50			
	P_6	24"	B	160'	0.8%	1041.00	1040.04			
	P_7	36"	B	100'	0.5%	1039.04	1038.54			
	P_8	15"	B	30'	0.5%	1040.57	1040.42			
	P_{15}	12"	B	60'	1.0%	1040.67	1040.07			
	P_{16}	15"	B	10'	1.0%	1040.17	1040.07			
	P_{17}	15"	B	60'	1.0%	1040.67	1040.07			
	P_{18}	15"	B	10'	1.0%	1040.17	1040.07			

* B = CORRUGATED POLYETHYLENE SMOOTH LINED PIPE, (707.33) OR APPROVED EQUAL

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TOLL FREE: 1-800-394-8817 FAX: (330)/499-0149

19

PLAN & PROFILE
CHAMPIONSHIP CIR. - STA. 49+25.00 TO STA. 61+17.84
AUGUSTA LAKES NO. 1
SITUATED IN THE CITY OF MASSILLON, COUNTY OF STARK, STATE OF OHIO AND BEING OUTLOT 870

SCALES: HORIZ: 1"=50' VERT: 1"=10'

DESIGNED BY: JDS CHECKED BY: MLD
DRAWN BY: LJP REVIEWED BY: JDS
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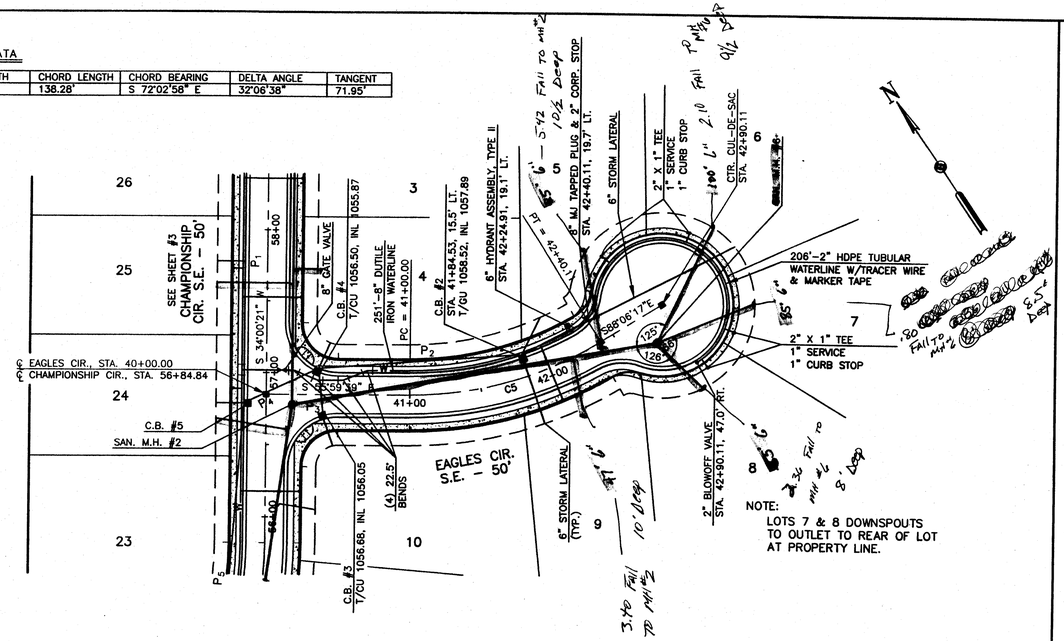
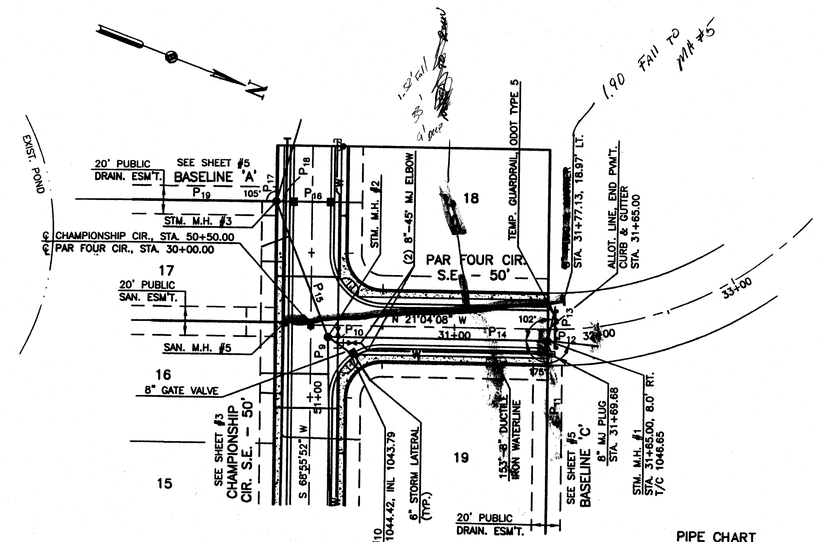
REVISION BY:	DATE:	DESCRIPTION:
JDS	12/19/00	PER C.O.W.C. COMMENTS
JDS	11/30/00	PER C.O.W.C. COMMENTS
JDS	11/28/00	PER CITY ENG. COMMENTS

CURVE DATA

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE	TANGENT
C5	250.00'	140.11'	138.28'	S 72°02'58" E	32°06'38"	71.95'



NOTE:
LOTS 7 & 8 DOWNSPOUTS TO OUTLET TO REAR OF LOT AT PROPERTY LINE.



BENCHMARK:
CHISLED "X" NORTH FLANGE BOLT, FIRE HYDRANT SOUTH SIDE RICHVILLE DRIVE.
ELEV. = 1109.07

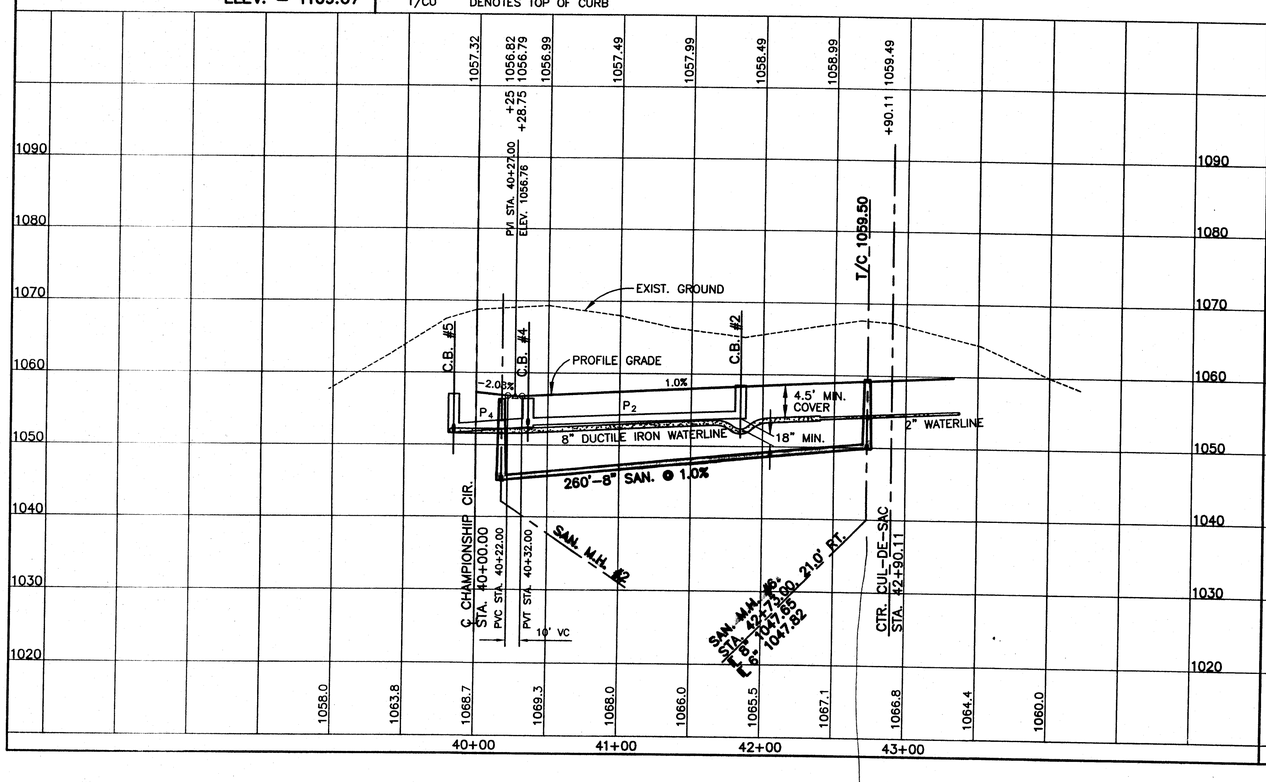
DS DENOTES 6" DOWNSPOUT CONNECTOR
• DENOTES PROP. CURB BOX
T/C DENOTES TOP OF COVER
T/CU DENOTES TOP OF CURB

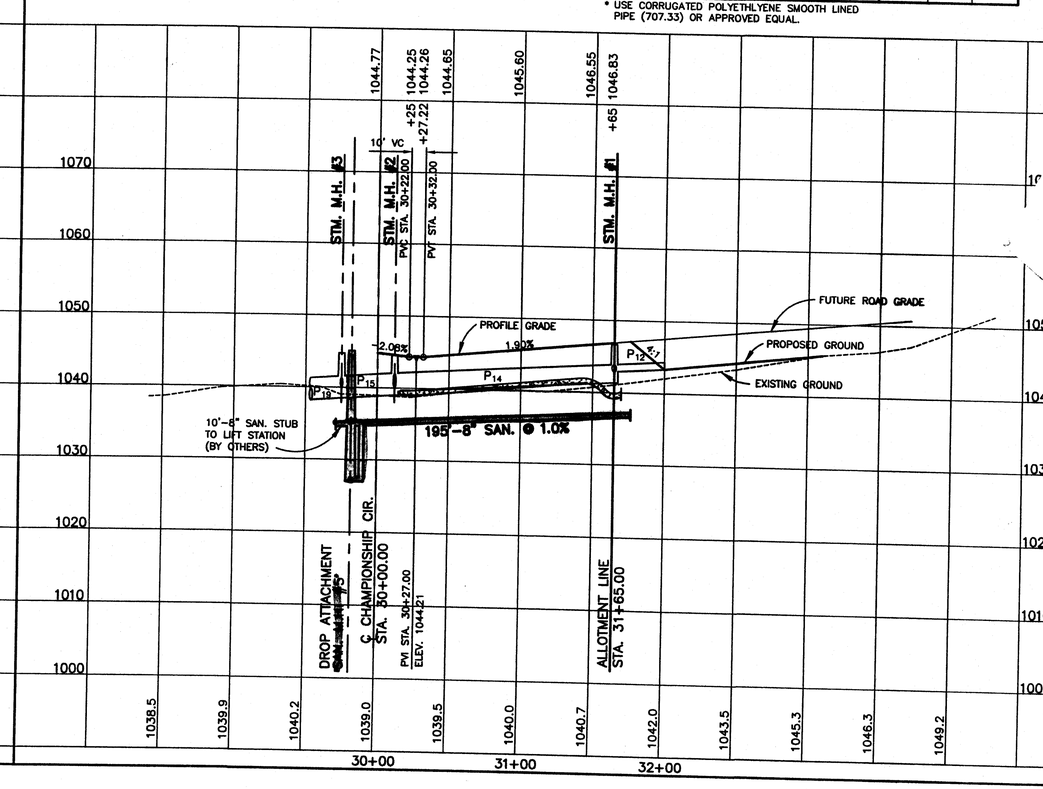
NOTE:
ALL CATCH BASINS ARE STANDARD UNLESS OTHERWISE NOTED.

PIPE CHART

PIPE	SIZE	* TYPE	LENGTH	GRADE	℄ IN	℄ OUT	AS-BUILTS (LENGTH)	(℄ IN)	(℄ OUT)
P_2	12"	B	145'	0.8%	1053.95	1052.77			
P_3	12"	B	32'	0.5%	1052.93	1052.77			
P_4	15"	B	56'	1.5%	1052.52	1051.68			
P_{10}	12"	B	20'	0.5%	1040.69	1040.59			
P_{12}	12"	B	35'	1.0%	STUB	1042.85			
P_{13}	12"	B	22'	1.2%	1043.11	1042.85			
P_{14}	30"	B	155'	1.8%	1041.35	1039.54			

* USE CORRUGATED POLYETHLYENE SMOOTH LINED PIPE (707.33) OR APPROVED EQUAL.





REVISION BY: DATE: DESCRIPTION:
REVISION BY: DATE: DESCRIPTION:
REVISION BY: JDS DATE: 11/30/00 DESCRIPTION: PER C.O.M.C. COMMENTS
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DESIGNED BY: JDS CHECKED BY: MLD
DRAWN BY: LJP REVIEWED BY: JDS
F.B. 459, Pg. 1
COPYRIGHT: 2000 DATE: 11/6/00

SCALES:
HORIZ: 1"=50'
VERT: 1"=10'

STA. 42+90.11
STA. 31+65.00

EAGLES
PAR FO

SITE OF STARK,

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AUGUSTA LAKES NO. 2

SITUATED IN THE CITY OF MASSILLON, COUNTY OF
STARK, STATE OF OHIO AND BEING
OUTLOT 870

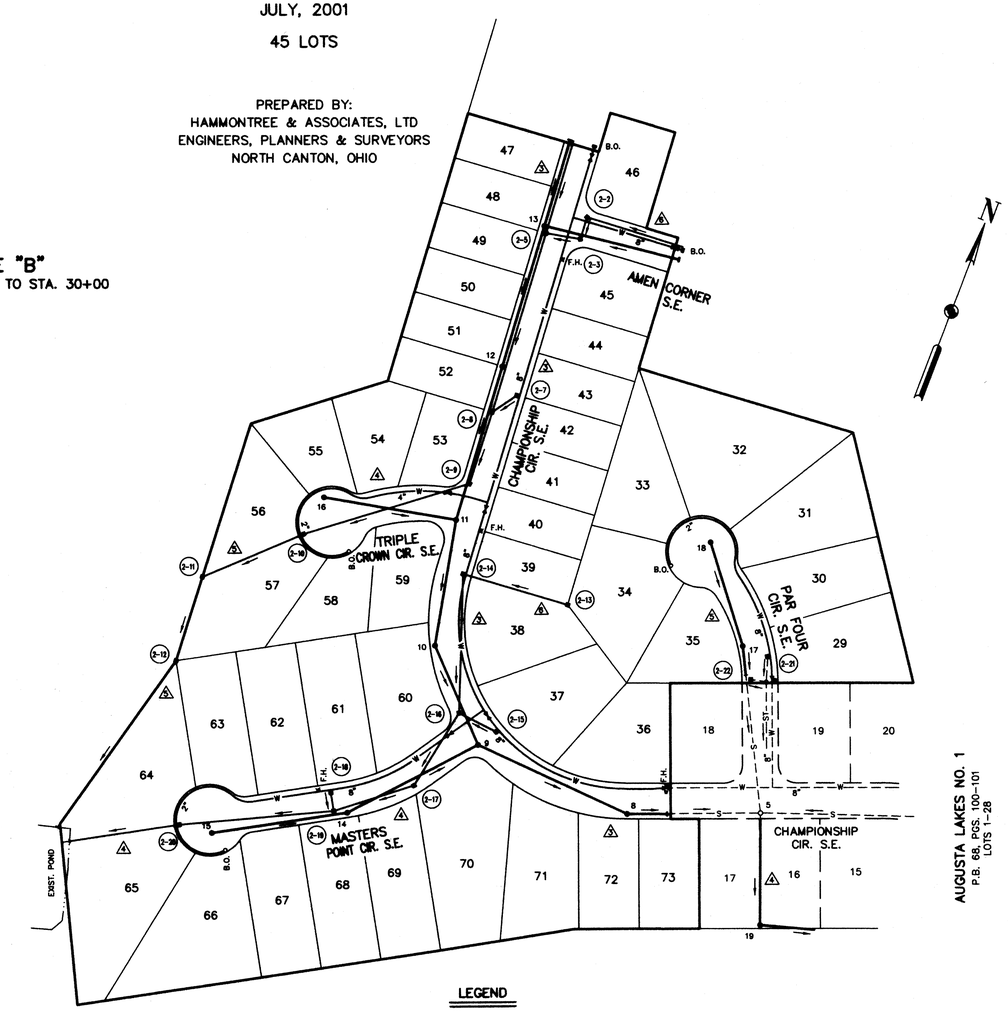
JULY, 2001

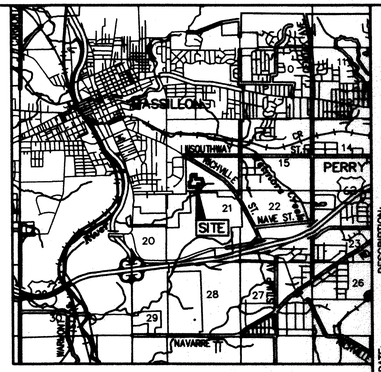
45 LOTS

PREPARED BY:
HAMMONTREE & ASSOCIATES, LTD
ENGINEERS, PLANNERS & SURVEYORS
NORTH CANTON, OHIO

INDEX OF SHEETS

1. COVER SHEET & UTILITY SCHEMATIC
2. TYPICAL SECTION, ESTIMATED QUANTITIES & NOTES
3. CHAMPIONSHIP CIR.
   STA. 39+59.60 TO STA. 49+25
4. MASTERS POINT CIR.
   STA. 25+92.64 TO STA. 30+00
   TRIPLE CROWN CIR.
   STA. 67+99.87 TO STA. 70+00
   BASELINE "B"
   STA. 28+21 TO STA. 30+00
5. PAR FOUR CIR.
   STA. 31+65 TO STA. 33+70.76
   BASELINE "A"
   STA. 40+00 TO STA. 45+99
6. AMEN CORNER
   STA. 60+00 TO STA. 61+65
   BASELINE "C"
   STA. 10+00 TO STA. 11+65
7. INTERSECTION DETAILS
   CHAMPIONSHIP CIR. & TRIPLE CROWN
   TRIPLE CROWN CUL-DE-SAC
   PAR FOUR CIR. CUL-DE-SAC
8. INTERSECTION DETAILS
   CHAMPIONSHIP CIR. & MASTERS POINT
   CHAMPIONSHIP CIR. & AMEN CORNER
   MASTERS POINT CUL-DE-SAC
9.–16. CROSS SECTIONS
17. EROSION/SEDIMENT CONTROL AND GRADING PLAN
18. EROSION/SEDIMENT CONTROL DETAILS
19. STANDARD DETAILS
20. STANDARD DETAILS
21. STANDARD DETAILS
22. FINAL PLAT





VICINITY MAP

TOTAL LIN. FT. ROADS = 2254
TOTAL LIN. FT. SANITARY SEWER = 2134
TOTAL LIN. FT. STORM SEWER = 2615

LEGEND

- DENOTES STORM SEWER MANHOLE NO.
- DENOTES SANITARY SEWER MANHOLE NO.
- DENOTES SHEET NO.
- DENOTES CATCH BASIN NO.
- DENOTES GATE VALVE
- F.H. DENOTES FIRE HYDRANT
- B.O. DENOTES BLOWOFF VALVE
- DENOTES FLOW DIRECTION
- S — SANITARY SEWER
- ST — STORM SEWER
- W — WATER

0 50 100 200

STATE OF OHIO
BARBARA HAMMONTREE BENNETT
E-56001
REGISTERED
PROFESSIONAL ENGINEER

APPROVED _____ DATE 8/10/01
MASSILLON CITY ENGINEER

APPROVED _____ DATE 8/9/01
CONSUMERS OHIO WATER COMPANY

2 WORKING DAYS
BEFORE YOU DIG
CALL TOLL FREE 800-362-2764
OHIO UTILITIES PROTECTION SERVICE

DEVELOPER:
JANDA DEVELOPMENT LIMITED, LLC
ATTN. STEVE SMITH, PRESIDENT
6501 HIGHMILL AVE. N.W.
MASSILLON, OHIO 44646
PHONE: (330) 832-1040

AUGUSTA No 1 IN DRAWER 37
MASSILLON TAX MAP 66

REVISION BY:	DATE:	DESCRIPTION:
REVISION BY: DTM	DATE: 8/02/01	DESCRIPTION: PER C.O.W.S. COMMENTS DATED 8/1/01
REVISION BY: BHB	DATE: 7/31/01	DESCRIPTION: PER CITY OF MASSILLON ENG. COMMENTS

DESIGNED BY: MLD CHECKED BY: MLD
DRAWN BY: DTM REVIEWED BY: BHB
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COPYRIGHT: 2000 DATE: 7/23/01
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SCALE: N.T.S.

COVER SHEET
AUGUSTA LAKES NO. 2
SITUATED IN THE CITY OF MASSILLON, COUNTY OF STARK, STATE OF OHIO AND BEING OUTLOT 870

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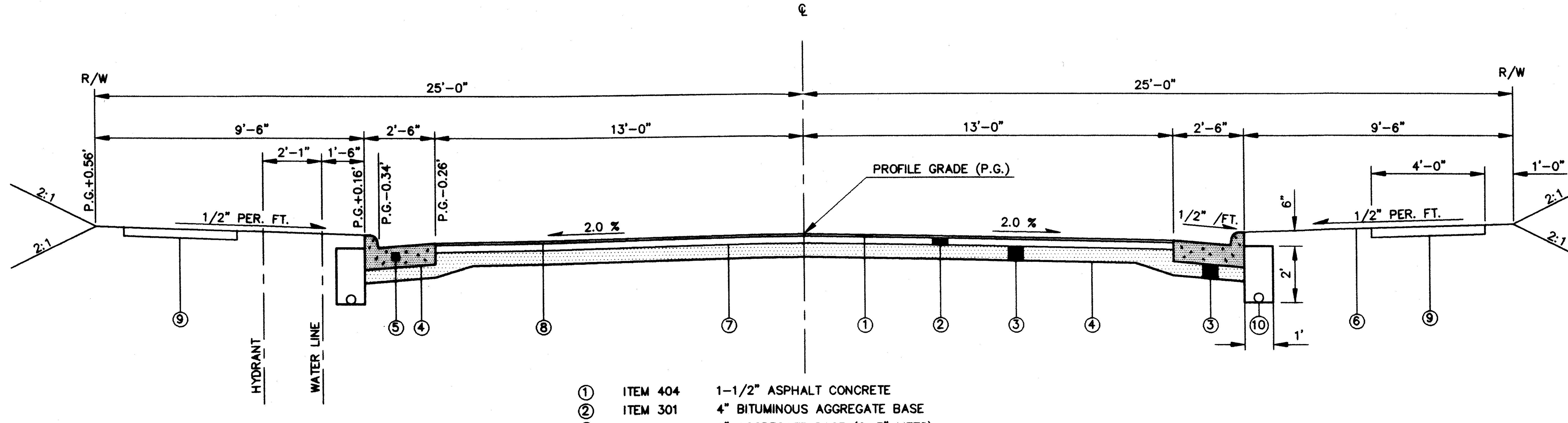
9/21

01 SO 01

50' R/W TYPICAL SECTION

SCALE: 3/8"=1'



①	ITEM 404	1-1/2" ASPHALT CONCRETE
②	ITEM 301	4" BITUMINOUS AGGREGATE BASE
③	ITEM 304	6" AGGREGATE BASE (2-3" LIFTS)
④	ITEM 203.13	COMPACTED SUBGRADE
⑤	ITEM 609	MASSILLON STANDARD CONCRETE CURB AND GUTTER
⑥	ITEM 659	SEEDING AND MULCHING
⑦	ITEM 408	PRIME COAT TO BE APPLIED AT THE RATE OF 0.4 GAL./SQ. YD.
⑧	ITEM 407	TACK COAT TO BE APPLIED AT THE RATE OF 0.4 GAL./SQ. YD. (AS REQUIRED)
⑨	ITEM 408	CONCRETE WALK (4" THICKNESS, INCREASE TO 6" @ DRIVEWAYS) WALK CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE INDIVIDUAL HOMEOWNER.
⑩	ITEM 605	4" PIPE UNDERDRAIN (INSTALL ONLY IF DIRECTED BY CITY OF MASSILLON ENGINEER DURING CONSTRUCTION & INSPECTION OF SUBGRADE IN CUT AREAS ONLY)

ESTIMATED QUANTITIES

ITEM*	QUAN.	UNIT	DESCRIPTION
			EARTHWORK & ROADS
201	LUMP	SUM	CLEARING AND GRUBBING
203	11,705	CU. YD.	EXCAVATION INCLUDING EMBANKMENT CONST. (ROADS ONLY) ①
203	9,062	SQ. YD.	SUBGRADE COMPACTION
301	869	CU. YD.	4" BITUMINOUS AGGREGATE BASE
304	1,304	CU. YD.	6" AGGREGATE BASE
404	326	CU. YD.	1-1/2" ASPHALT CONCRETE
407	AS REQ'D	GAL.	TACK COAT (0.4 GAL./SQ. YD.)
408	3,129	GAL.	PRIME COAT (0.4 GAL./SQ. YD.)
604	8	EACH	STANDARD MONUMENT
604	8	EACH	MONUMENT BOX ASSEMBLY
605	AS REQ'D	LIN. FT.	4" PIPE UNDERDRAIN (2,673 LIN. FT., MAX. AMOUNT THAT WOULD BE REQUIRED)
606	62.5	LIN. FT.	GUARDRAIL, TYPE 5
608	2,062	SQ. YD.	CONCRETE WALK (BY HOMEOWNER)
608	6	EACH	CURB RAMP, TYPE 1 (BY HOMEOWNER)
609	4,461	LIN. FT.	MASSILLON STANDARD CONCRETE CURB AND GUTTER
651	5,453	CU. YD.	TOPSOIL STOCKPILED
659	2,545	SQ. YD.	SEEDING AND MULCHING
			SANITARY
603	2,134	LIN. FT.	8" P.V.C. GRAVITY SEWER PIPE, ASTM D-3034
603	30	EACH	6" ON 8" WYE W/6" 45° BEND, ASTM D-3034
603	1,878	LIN. FT.	6" P.V.C. GRAVITY SEWER PIPE, ASTM D-3034
603	2	EACH	8" PLUG & MARKER
603	6	EACH	6" SERVICE STACK (28 VERT. FT.)
604	11	EACH	SANITARY SEWER MANHOLE, MASSILLON STANDARD (133 VERT. FT.)
604	1	EACH	DROP ATTACHMENT (5 VERT. FT.)
			DRAINAGE
602	0.74	CU. YD.	CONCRETE MASONRY (2 EA. HW-4B HEADWALL)
603	1,282	LIN. FT.	6" TYPE "E" CONDUIT (707.45) (STORM LATERAL)
603	379	LIN. FT.	8" TYPE "E" CONDUIT (707.45) (DOWNSPOUT CONN.)
603	136	LIN. FT.	12" TYPE "B" CONDUIT (707.33)
603	486	LIN. FT.	15" TYPE "B" CONDUIT (707.33)
603	639	LIN. FT.	18" TYPE "B" CONDUIT (707.33)
603	951	LIN. FT.	24" TYPE "B" CONDUIT (707.33)
603	409	LIN. FT.	24" TYPE "C" CONDUIT (707.33)
603	1	EACH	6" ON 8" WYE
604	16	EACH	STANDARD CATCH BASIN, MASSILLON STD. TYPE "A"
604	1	EACH	CATCH BASIN, ODOT 2-2-A
604	2	EACH	CATCH BASIN, ODOT 2-3
604	2	EACH	8" CLEANOUT
603	200	LIN. FT.	12" TYPE "C" CONDUIT (707.33)-OPTIONAL SEE SHEET 17
604	1	EACH	CATCH BASIN, ODOT 2-2-A-OPTIONAL SEE SHEET 17
			WATERLINE
638	1,764	LIN. FT.	8" DUCTILE IRON WATERLINE PRESSURE CLASS 350 W/POLYWRAP, JOINTS & FITTINGS
638	166	LIN. FT.	4" DUCTILE IRON WATERLINE PRESSURE CLASS 350 W/POLYWRAP, JOINTS & FITTINGS
638	663	LIN. FT.	2" HDPE TUBULAR WATERLINE W/TRACER WIRE & MARKER TAPE, JOINTS & FITTINGS
638	4	EACH	8" MJ TAPPED PLUG
638	1	EACH	4" MJ TAPPED PLUG
638	5	EACH	8" GATE VALVE
638	1	EACH	4" GATE VALVE
638	6	EACH	2" CURB STOP
638	2	EACH	8" X 8" MJ TEE
638	1	EACH	8" X 4" MJ TEE
638	12	EACH	2" X 1" TEE
638	5	EACH	2" BLOW-OFF VALVE
638	892	LIN. FT.	1" SERVICE CONNECTION (BY OTHERS) △3
638	46	EACH	1" CURB STOP (BY OTHERS) △3
638	34	EACH	1" CORPORATION STOP (BY OTHERS) △3
638	3	EACH	6" FIRE HYDRANT ASS'Y. COMPLETE, TYPE III
			EROSION/SEDIMENT CONTROL
207②	AS REQ'D.	SQ. YD.	TEMPORARY SEEDING & MULCHING
207	AS REQ'D.	SQ. YD.	PERMANENT SEEDING & MULCHING
207	1,695	LIN. FT.	FILTER FABRIC FENCE
207	5	EACH	INLET PROTECTION
207	18	EACH	CURB INLET PROTECTION
207	2	EACH	CONSTRUCTION ENTRANCE

* ITEM NUMBERS REFER TO STATE OF OHIO DEPARTMENT TRANSPORTATION, CONSTRUCTION & MATERIAL SPECIFICATIONS, JANUARY 1, 1997.

① EARTHWORK SUMMARY (ROADS ONLY)
EXCAVATION = 11,705 CU. YD.
EMBANKMENT +15% = 11,061 CU. YD.
EXCESS = 644 CU. YD. (USE TO FILL LOTS)
ASSUME 1' OF TOPSOIL REMOVED & STOCKPILED

② ADDITIONAL TEMPORARY EROSION CONTROL QUANTITIES MAY BE REQUIRED AT THE DIRECTION OF THE MASSILLON CITY ENGINEER AND/OR THE STARK COUNTY SOIL & WATER CONSERVATION DISTRICT.

△3 SERVICE CONNECTION TO INCLUDE CORPORATION STOP, 1" TYPE "K" COPPER TUBING @ REQUIRED LENGTH, SERVICE BOX & CURB STOP.

GENERAL NOTES

CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES.

2. ALL SUBGRADE COMPACTION AND ALL 304 AGGREGATE BASE SHALL BE INSPECTED AND APPROVED AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO PLACEMENT OF ANY 304 AGGREGATE BASE OR 301 BITUMINOUS AGGREGATE BASE.

3. ALL TRENCHES BENEATH THE PROPOSED PAVEMENT OR EXISTING PAVEMENT SHALL BE COMPACTED IN LIFTS. IN A MANNER, AND WITH MATERIAL SPECIFIED BY THE MASSILLON ENGINEERING DEPARTMENT OR ANY APPLICABLE, O.D.O.T. SPECIFICATIONS.

4. THE COMPLETE RIGHT-OF-WAY IS TO BE GRADED AS SHOWN ON THE TYPICAL SECTION. DURING CONSTRUCTION OF THE ROAD, THE DEVELOPER SHALL BE RESPONSIBLE FOR MAINTAINING THE TYPICAL SECTION BETWEEN THE PAVEMENT AND THE RIGHT-OF-WAY LINE.

PRIOR TO THE COMMENCEMENT OF ANY PROJECT, A PRE-CONSTRUCTION MEETING WILL BE HELD AT THE CITY ENGINEER'S OFFICE. AT THIS TIME, THE PROJECT WILL BE DISCUSSED IN REGARD TO PROCEDURE, MATERIALS, INSPECTION, ETC...

6. THE DEVELOPER/CONTRACTOR SHALL TAKE THE NECESSARY STEPS TO PREVENT SOIL EROSION AND DOWNWASH OF GRITS AND SEDIMENTS AS REQUIRED BY THE CITY OF MASSILLON ENGINEER.

7. INSPECTIONS - SEE CITY OF MASSILLON SUBDIVISION REGULATIONS, SEC. 1111.03

8. CONSTRUCTION RESPONSIBILITIES - SEE CITY OF MASSILLON REGULATIONS, SEC. 1111.04

WATER LINE NOTES

1. MINIMUM COVER OVER 8" WATER LINE = 4'.
2. MAINTAIN MINIMUM 4' HORIZONTAL SEPARATION BETWEEN WATER AND STORM SEWER LINES.
3. MAINTAIN MINIMUM 10' HORIZONTAL SEPARATION BETWEEN WATER AND SANITARY SEWER LINES.
4. WATER MAIN MATERIALS SHALL CONFORM TO AWWA C151 FOR DUCTILE IRON PIPE AND AWWA C900 FOR PVC PIPE.
5. WATER MAIN PRESSURE TESTING SHALL CONFORM TO AWWA C600.
6. WATER MAIN DISINFECTION SHALL CONFORM TO AWWA C651.
7. THE PROPOSED FACILITIES WILL MAINTAIN A MINIMUM 35 PSI PRESSURE DELIVERED TO THE CURB STOP DURING NORMAL OPERATING CONDITIONS.
8. BOOSTER PUMPS ARE NOT PERMITTED ON SERVICE CONNECTIONS. THE WATER SYSTEM MAY GRANT SPECIAL PERMISSION FOR BUILDINGS SIX STORIES OR HIGHER.
9. CONTRACTOR TO USE CONSUMERS OHIO WATER COMPANY DETAILS AND SPECIFICATIONS.
10. CONTRACTOR TO INSTALL SERVICE CONNECTIONS ALONG THE 2" MAIN LINE. SERVICE CONNECTIONS ALONG THE 8" MAIN WATER LINE TO BE INSTALLED BY OTHERS.

O.D.O.T. STANDARD DRAWING LIST

DRAWING NO.	DATE	
BP-7.1	10-30-92	CURB RAMPS
MC-1	6-13-69	ROADWAY ITEMS
HW-4B	4-1-80	HEADWALLS
CB 2-2-A	5-1-79	CATCH BASIN
CB 2-3	5-1-79	CATCH BASIN

STORM SEWER NOTES

1. ALL STORM SEWER WITHIN THE ROAD RIGHT-OF-WAY MAY BE EITHER REINFORCED CONCRETE PIPE (706.02) OR CORRUGATED POLYETHYLENE SMOOTH LINED PIPE (707.33).
2. STORM SEWER BENEATH CURB AND GUTTER AND PAVEMENT SHALL BE TYPE "B" CONDUIT.
3. STORM SEWER OUTSIDE OF CURB AND GUTTER AND PAVEMENT SHALL BE TYPE "C" CONDUIT.
4. CURB INLET CATCH BASINS ARE TO BE CITY OF MASSILLON, TYPE "A". REFER TO CITY OF MASSILLON STANDARD DRAWINGS FOR MANHOLE & CATCH BASIN DETAILS (SEE SHEET 19).
5. A 6" STORM LATERAL SHALL BE INSTALLED TO SERVE EACH LOT HAVING STORM SEWER AVAILABLE WITHIN THE ROAD RIGHT-OF-WAY OR ON A SIDE LOT LINE. LATERALS SHALL BE CORE DRILLED INTO THE SIDE OF THE MAIN STORM PIPE OR STORM MANHOLE AND EXTEND TO THE RIGHT-OF-WAY OR BEYOND FURTHEST UTILITY. PLUG THE END OF THE LATERAL AND PROVIDE A LOCATION MARKER.

SANITARY SEWER NOTES

1. ALL SANITARY SEWERS & APPURTENANCES SHALL BE CONSTRUCTED ACCORDING TO CITY OF MASSILLON ENGINEERING DEPARTMENT SPECIFICATIONS IN EFFECT AT TIME OF CONSTRUCTION.
2. ALL SANITARY SEWER LATERALS TO BE 6" DIAMETER.
3. ROOF DRAINS, FOUNDATION DRAINS & OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED.
4. MINIMUM COVER OVER SANITARY SEWER SHALL BE 3 FT.
5. SANITARY LATERALS SHALL EXTEND TO THE RIGHT-OF-WAY LINE OR BEYOND THE FURTHEST UTILITY - WHICHEVER IS GREATER. THE END OF THE SERVICE LATERAL SHALL BE PLUGGED AND A LOCATION MARKER PROVIDED.
6. NO CHANGES TO SANITARY SERVICE LOCATIONS SHALL BE MADE WITHOUT THE APPROVAL OF THE CITY ENGINEER.
7. PVC GRAVITY SEWER PIPE SHALL CONFORM TO ASTM D-3034 AS AN ALTERNATE TO PVC GRAVITY SEWER, SHOWN IN QUANTITIES VITRIFIED CLAY PIPE SEWER, EXTRA STRENGTH, ASTM C-700 MAY BE USED.
8. MINIMUM VERTICAL CLEARANCE BETWEEN SANITARY SEWER & WATERLINE IS 18 INCHES. MINIMUM VERTICAL CLEARANCE BETWEEN SANITARY SEWER & STORM SEWER IS 12 INCHES.
9. JOINT SPECIFICATIONS SHALL MEET ASTM-3212
10. MANHOLE SPECIFICATIONS SHALL MEET ASTM C-478 AND C-443
11. BEDDING SPECIFICATIONS SHALL MEET ASTM D-2321, CLASS II
12. LEAKAGE TEST LIMITS: 100 GAL./INCH OF DIA./MILE/DAY MAXIMUM.
13. ALL MANHOLES SHALL BE AIR/VACUUM TESTED IN ACCORDANCE WITH ASTM C-1244.
14. PIPE DEFLECTION TESTS SHALL BE PERFORMED ACCORDING TO GLUMRB SECTION 33.85 AND THE ASTM SPECIFICATION FOR THE PIPE BEING TESTED. THE ALLOWABLE DEFLECTION RATE SHALL NOT EXCEED 5%.
15. MAINTAIN MINIMUM 10' HORIZONTAL SEPARATION BETWEEN WATER AND SANITARY SEWER LINES.

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REVISION BY: ____ DATE: ____ DESCRIPTION: ____
REVISION BY: ____ DATE: ____ DESCRIPTION: ____
REVISION BY: BHB DATE: 8/09/01 DESCRIPTION: PER CITY OF MASSILLON ENG. COMMENTS
REVISION BY: BHB DATE: 7/31/01 DESCRIPTION: PER CITY OF MASSILLON ENG. COMMENTS

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SCALE: AS SHOWN

TYPICAL SECTION, ESTIMATED QUANTITIES & NOTES
AUGUSTA LAKES NO. 2
SITUATED IN THE CITY OF MASSILLON, COUNTY OF STARK, STATE OF OHIO AND BEING OUTLOT 870

® HAMMONTREE & ASSOCIATES, LTD.
ENGINEERS, PLANNERS, SURVEYORS
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PIPE CHART

	PIPE	SIZE	* TYPE	LENGTH	GRADE	℄ IN	℄ OUT	AS-BUILTS (LENGTH)	AS-BUILTS (℄ IN)	AS-BUILTS (℄ OUT)
EXIST.	P_{16}	12"	B	30'	0.5%	1040.57	1040.42	30'	1040.15	1039.90
EXIST.	P_{17}	15"	B	60'	1.0%	1040.67	1040.07			
EXIST.	P_{18}	15"	B	10'	1.0%	1040.17	1040.07			
EXIST.	P_{19}	36"	C	154'	0.5%	1038.54	1037.77	143'	1038.30	1037.76
	P_{2-4}	24"	B	144'	1.56%	1052.26	1050.01			
	P_{2-5}	24"	B	260'	0.96%	1050.01	1047.52			1047.72
	P_{2-7}	12"	B	44'	2.98%	1049.83	1048.52	44'	1049.52	1048.40
	P_{2-8}	24"	B	104'	1.91%	1047.52	1045.53	104'	1047.26	1045.31
	P_{2-14}	15"	B	194'	1.56%	1043.50	1040.47	194'	1043.62	1040.47
	P_{2-15}	12"	B	61'	0.9%	1041.52	1040.97	61'	1041.72	1040.77

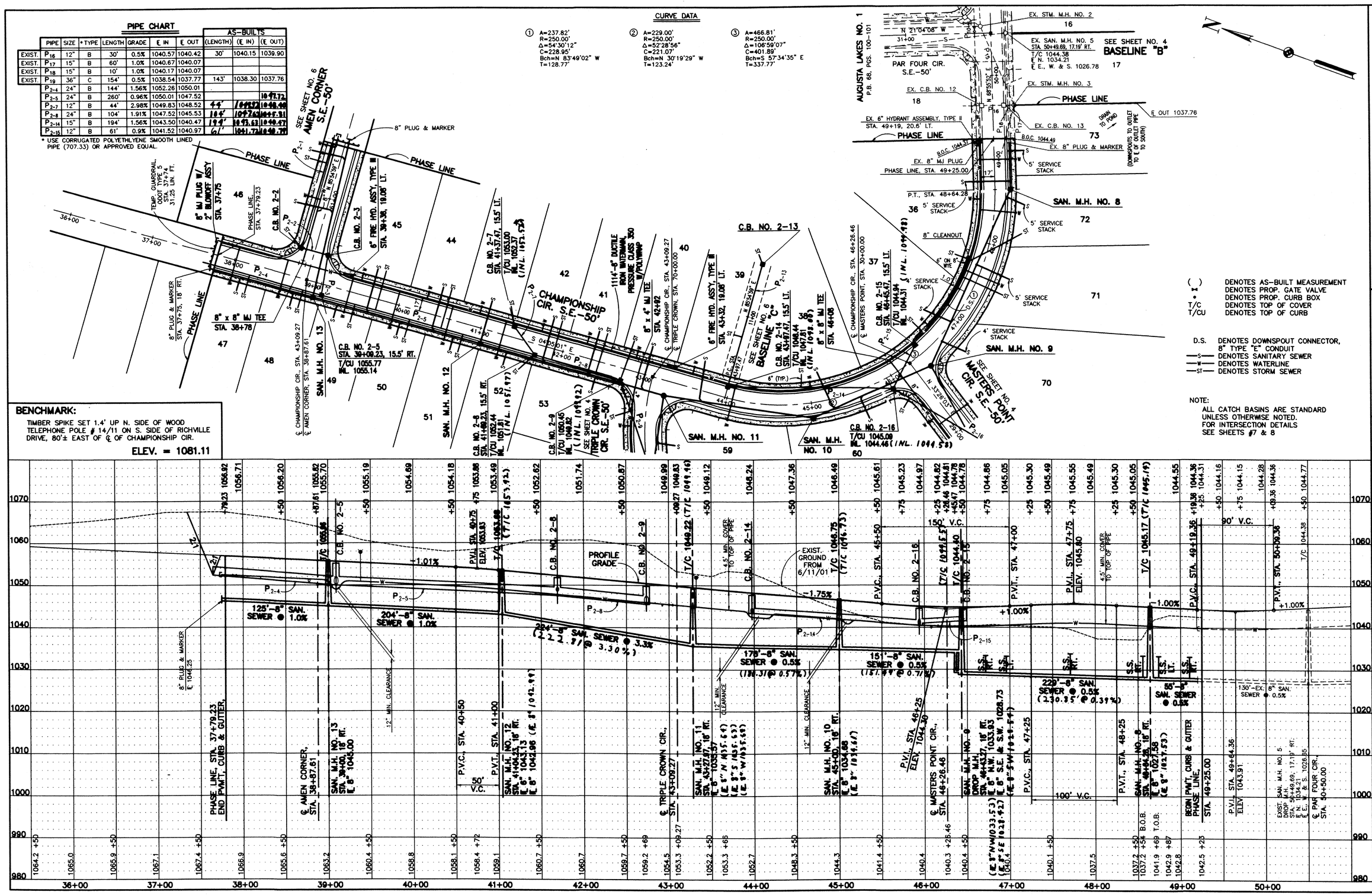
* USE CORRUGATED POLYETHILYENE SMOOTH LINED PIPE (707.33) OR APPROVED EQUAL.

CURVE DATA

① A=237.82'
R=250.00'
Δ=54°30'12"
C=228.95'
Bch=N 83°49'02" W
T=128.77'

② A=229.00'
R=250.00'
Δ=52°28'56"
C=221.07'
Bch=N 30°19'29" W
T=123.24'

③ A=466.81'
R=250.00'
Δ=106°59'07"
C=401.89'
Bch=S 57°34'35" E
T=337.77'



( ) DENOTES AS-BUILT MEASUREMENT
DENOTES PROP. GATE VALVE
DENOTES PROP. CURB BOX
T/C DENOTES TOP OF COVER
T/CU DENOTES TOP OF CURB

D.S. DENOTES DOWNSPOUT CONNECTOR, 8" TYPE "E" CONDUIT
—S— DENOTES SANITARY SEWER
—W— DENOTES WATERLINE
—ST— DENOTES STORM SEWER

NOTE:
ALL CATCH BASINS ARE STANDARD UNLESS OTHERWISE NOTED. FOR INTERSECTION DETAILS SEE SHEETS #7 & 8

BENCHMARK:
TIMBER SPIKE SET 1.4' UP N. SIDE OF WOOD TELEPHONE POLE # 14/11 ON S. SIDE OF RICHVILLE DRIVE, 80'± EAST OF ℄ OF CHAMPIONSHIP CIR.
ELEV. = 1081.11

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REVISION BY: ____ DATE: ____ DESCRIPTION: ____
REVISION BY: DLG DATE: 12/29/03 DESCRIPTION: PER C.O.W.S. COMMENTS DATED 8/1/01 — SAN. + STM. AS BUILTS
REVISION BY: DTM DATE: 8/02/01 DESCRIPTION: PER C.O.W.S. COMMENTS DATED 8/1/01
REVISION BY: BHB DATE: 8/01/01 DESCRIPTION: PER CITY OF MASSILLON ENG. COMMENTS

SCALES:
HORIZ: 1"=50'
VERT: 1"=10'

PLAN & PROFILE
CHAMPIONSHIP CIR. - STA. 39+59.60 TO STA. 49+25
AUGUSTA LAKES NO. 2
SITUATED IN THE CITY OF MASSILLON, COUNTY OF STARK, STATE OF OHIO AND BEING OUTLOT 870

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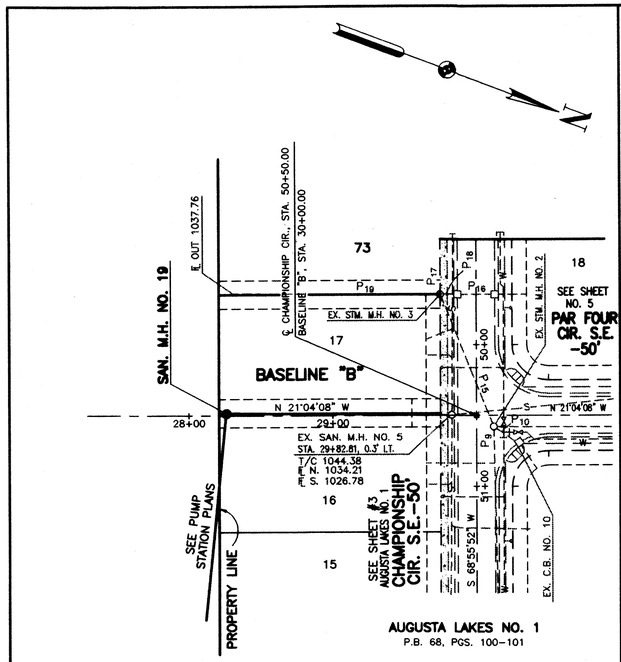
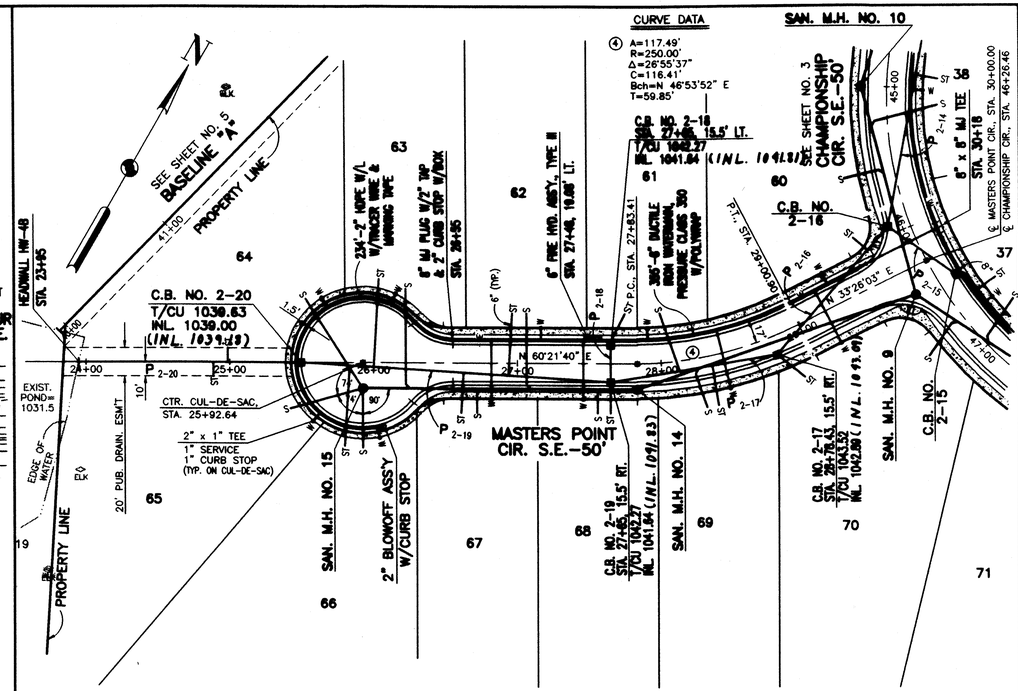
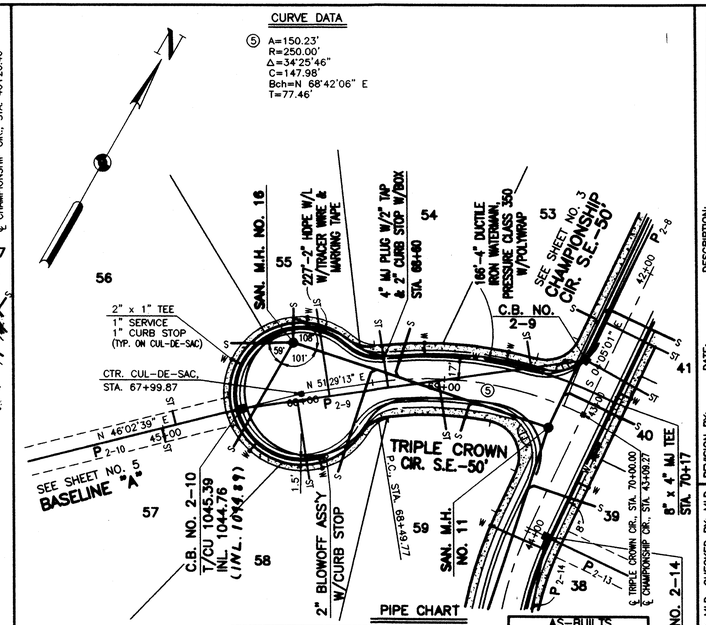






BENCHMARK:

TIMBER SPIKE SET 1.4' UP N. SIDE OF WOOD TELEPHONE POLE # 14/11 ON S. SIDE OF RICHVILLE DRIVE, 80'± EAST OF ℄ OF CHAMPIONSHIP CIR.

ELEV. = 1081.11

( ) DENOTES AS-BUILT MEASUREMENT
• DENOTES PROP. GATE VALVE
• DENOTES PROP. CURB BOX
T/C DENOTES TOP OF COVER
T/CU DENOTES TOP OF CURB

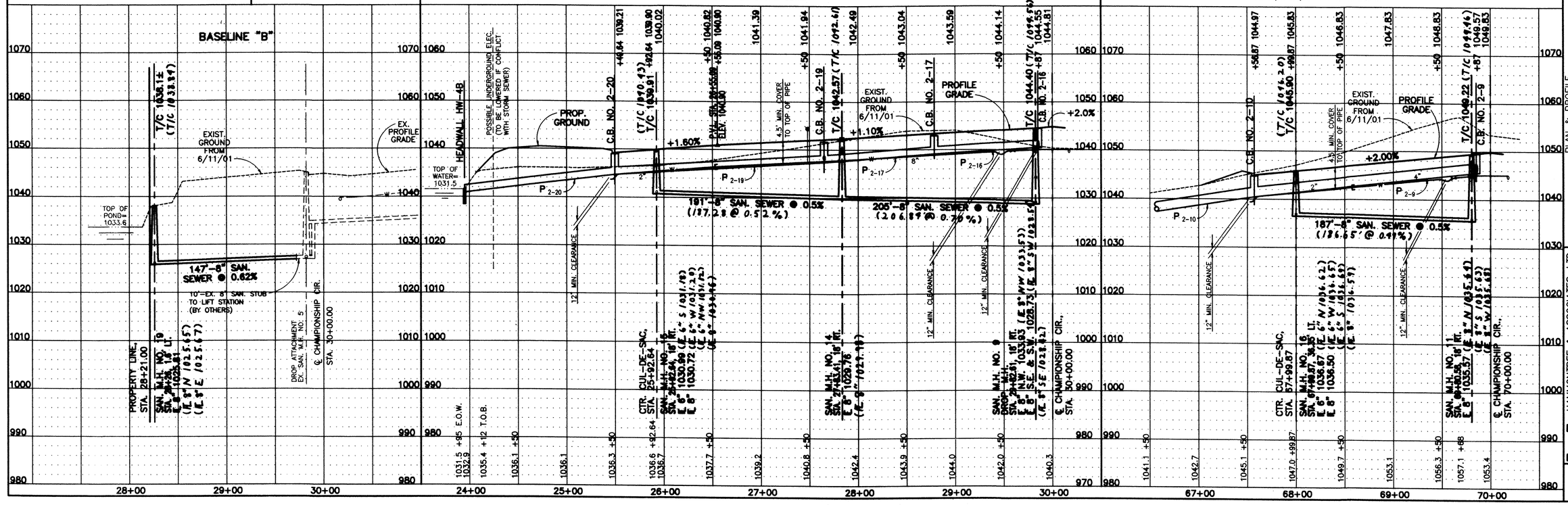
D.S. DENOTES DOWNSPOUT CONNECTOR, 8" TYPE "E" CONDUIT
—S— DENOTES SANITARY SEWER
—W— DENOTES WATERLINE
—ST— DENOTES STORM SEWER

NOTE:
ALL CATCH BASINS ARE STANDARD UNLESS OTHERWISE NOTED. FOR INTERSECTION DETAILS SEE SHEETS #7 & 8

PIPE CHART

PIPE	SIZE	* TYPE	LENGTH	GRADE	℄ IN	℄ OUT	AS-BUILTS (LENGTH)	AS-BUILTS (℄ IN)	AS-BUILTS (℄ OUT)
P_{2-9}	24"	B	243'	2.08%	1045.53	1040.47	243'	1045.71	1040.39
P_{2-16}	18"	B	119'	1.15%	1040.47	1039.10	120'	1040.44	1039.25
P_{2-17}	18"	B	118'	1.48%	1039.10	1037.35	118'	1039.21	1037.98
P_{2-18}	12"	B	31'	2.42%	1038.60	1037.85	31'	1038.72	1037.97
P_{2-19}	18"	B	218'	1.21%	1037.35	1034.71	218'	1037.23	1034.95
P_{2-20}	18"	B	152'	2.51%	1034.71	1030.90	149.3'	1034.95	1030.83

* USE CORRUGATED POLYETHLYENE SMOOTH LINED PIPE (707.33) OR APPROVED EQUAL.



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REVISION BY: ____ DATE: ____ DESCRIPTION: ____
REVISION BY: DCG DATE: 12/29/03 DESCRIPTION: SAN. + STM. AS BUILTS
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REVISION BY: BHB DATE: 8/01/01 DESCRIPTION: PER CITY OF MASSILLON ENG. COMMENTS

SCALES:
HORIZ: 1"=50'
VERT: 1"=10'

PLAN & PROFILE
MASTERS POINT CIR. – STA. 25+92.64 TO STA. 30+00
TRIPLE CROWN CIR. – STA. 67+99.87 TO STA. 70+00
BASELINE "B" – STA. 28+21 TO STA. 30+00

AUGUSTA LAKES NO. 2

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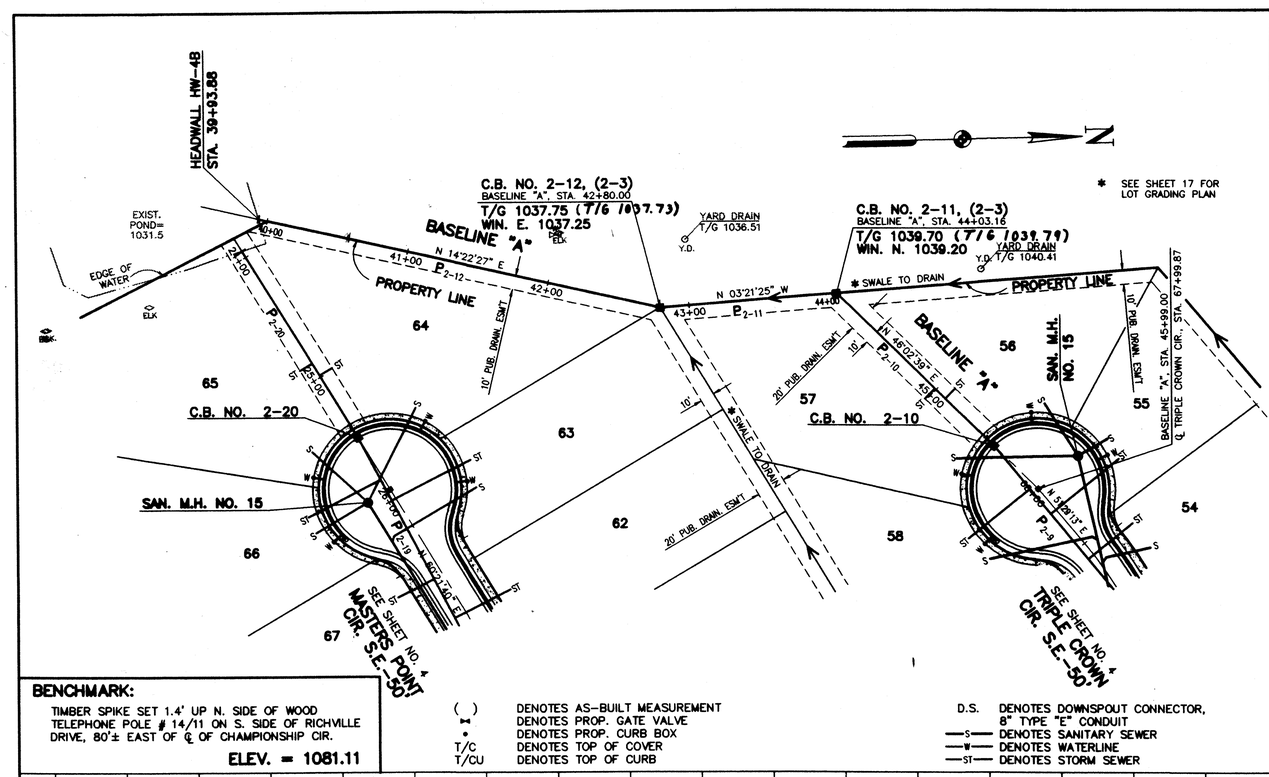
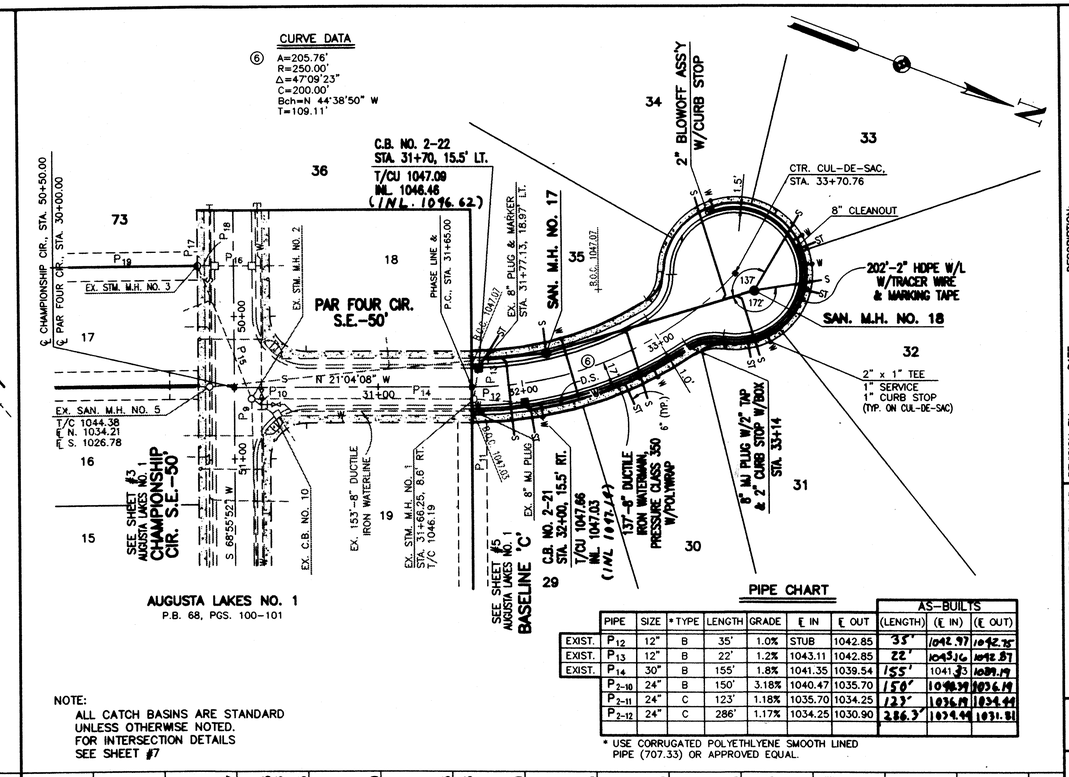




BENCHMARK:

TIMBER SPIKE SET 1.4' UP N. SIDE OF WOOD TELEPHONE POLE # 14/11 ON S. SIDE OF RICHVILLE DRIVE, 80'± EAST OF ℄ OF CHAMPIONSHIP CIR.

ELEV. = 1081.11

( ) DENOTES AS-BUILT MEASUREMENT
DENOTES PROP. GATE VALVE
DENOTES PROP. CURB BOX
T/C DENOTES TOP OF COVER
T/CU DENOTES TOP OF CURB

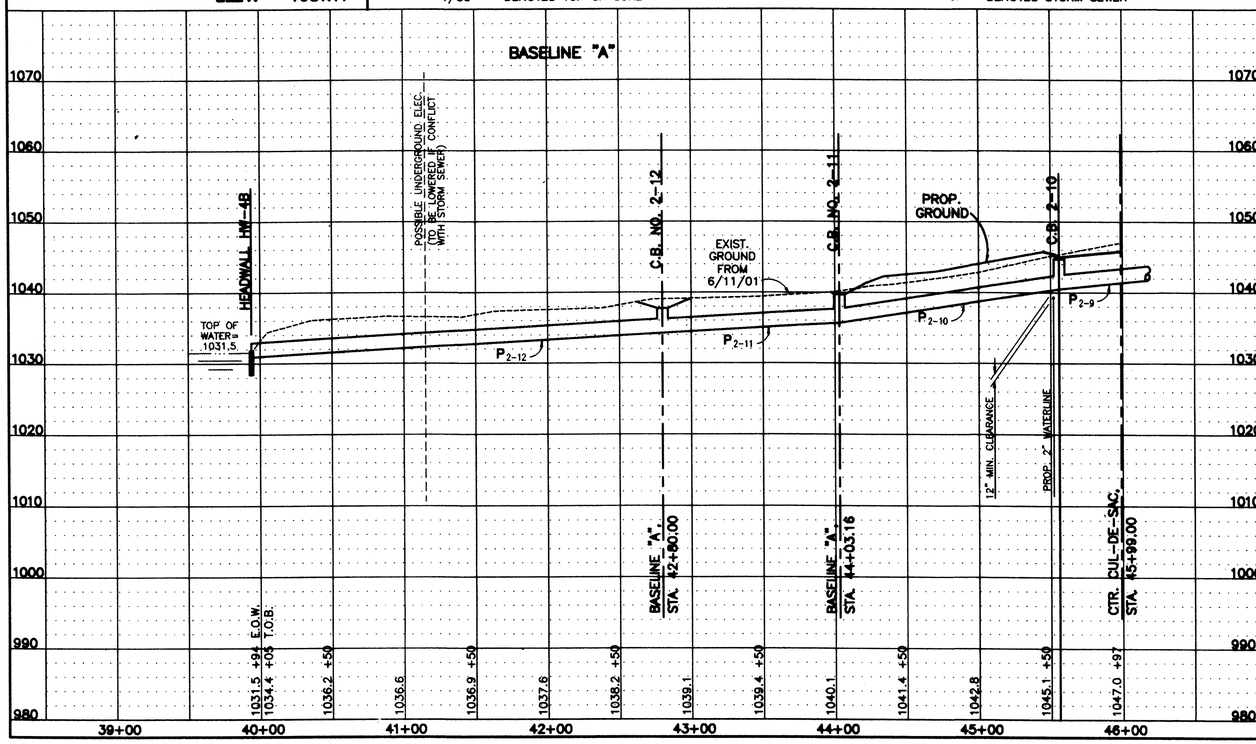
D.S. DENOTES DOWNSPOUT CONNECTOR, 8" TYPE "E" CONDUIT
—S— DENOTES SANITARY SEWER
—W— DENOTES WATERLINE
—ST— DENOTES STORM SEWER

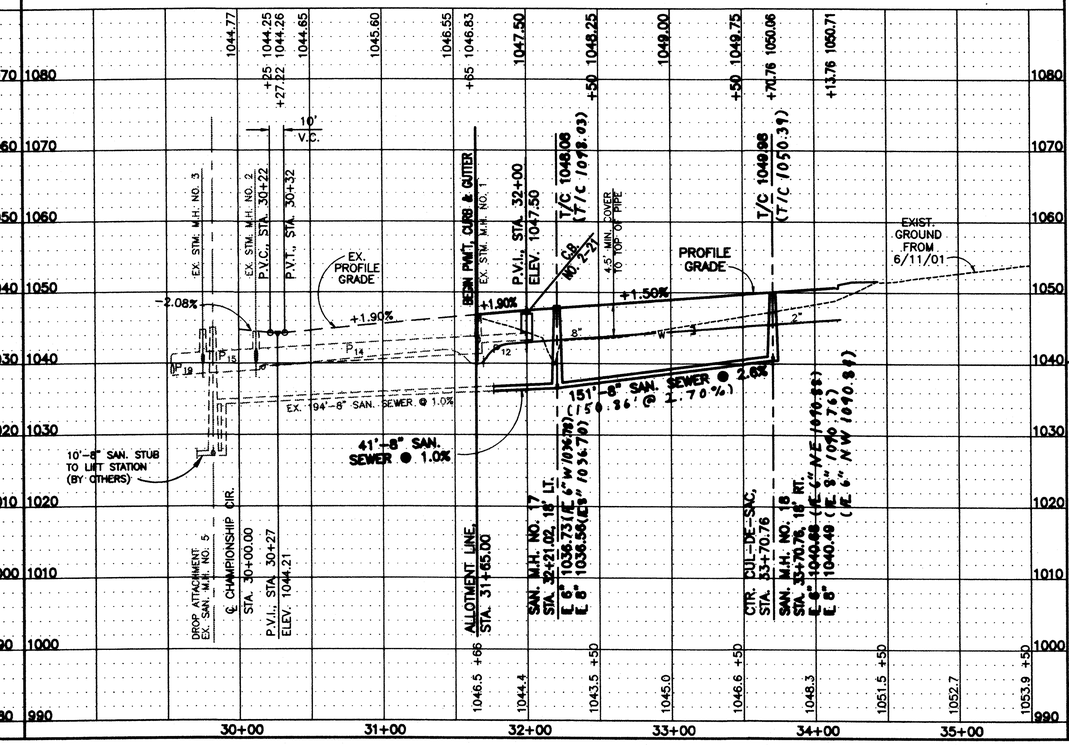
NOTE:
ALL CATCH BASINS ARE STANDARD UNLESS OTHERWISE NOTED. FOR INTERSECTION DETAILS SEE SHEET #7

PIPE CHART

	PIPE	SIZE	* TYPE	LENGTH	GRADE	℄ IN	℄ OUT	AS-BUILTS (LENGTH)	AS-BUILTS (℄ IN)	AS-BUILTS (℄ OUT)
EXIST.	P_{12}	12"	B	35'	1.0%	STUB	1042.85	35'	1042.97	1042.75
EXIST.	P_{13}	12"	B	22'	1.2%	1043.11	1042.85	22'	1043.16	1042.87
EXIST.	P_{14}	30"	B	155'	1.8%	1041.35	1039.54	155'	1041.23	1039.19
	P_{2-10}	24"	B	150'	3.18%	1040.47	1035.70	150'	1040.39	1036.19
	P_{2-11}	24"	C	123'	1.18%	1035.70	1034.25	123'	1036.19	1034.44
	P_{2-12}	24"	C	286'	1.17%	1034.25	1030.90	286.3'	1034.44	1031.81

* USE CORRUGATED POLYETHLYENE SMOOTH LINED PIPE (707.33) OR APPROVED EQUAL.





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REVISION BY:____ DATE:____ DESCRIPTION:____
REVISION BY: DCG DATE: 12/28/03 DESCRIPTION: SAN. + STM. AS BUILTS
REVISION BY: BHB DATE: 8/01/01 DESCRIPTION: PER CITY OF MASSILLON ENG. COMMENTS

SCALES:
HORIZ: 1"=50'
VERT: 1"=10'

PAR FOUR CIR. - STA. 31+65 TO STA. 33+70.76
BASELINE "A" - STA. 40+00 TO STA. 45+99
AUGUSTA LAKES NO. 2
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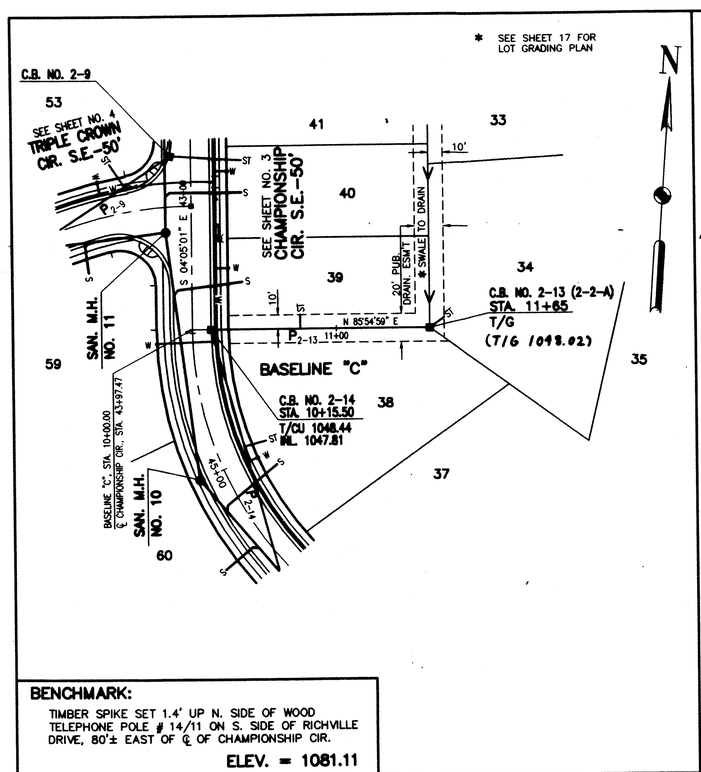
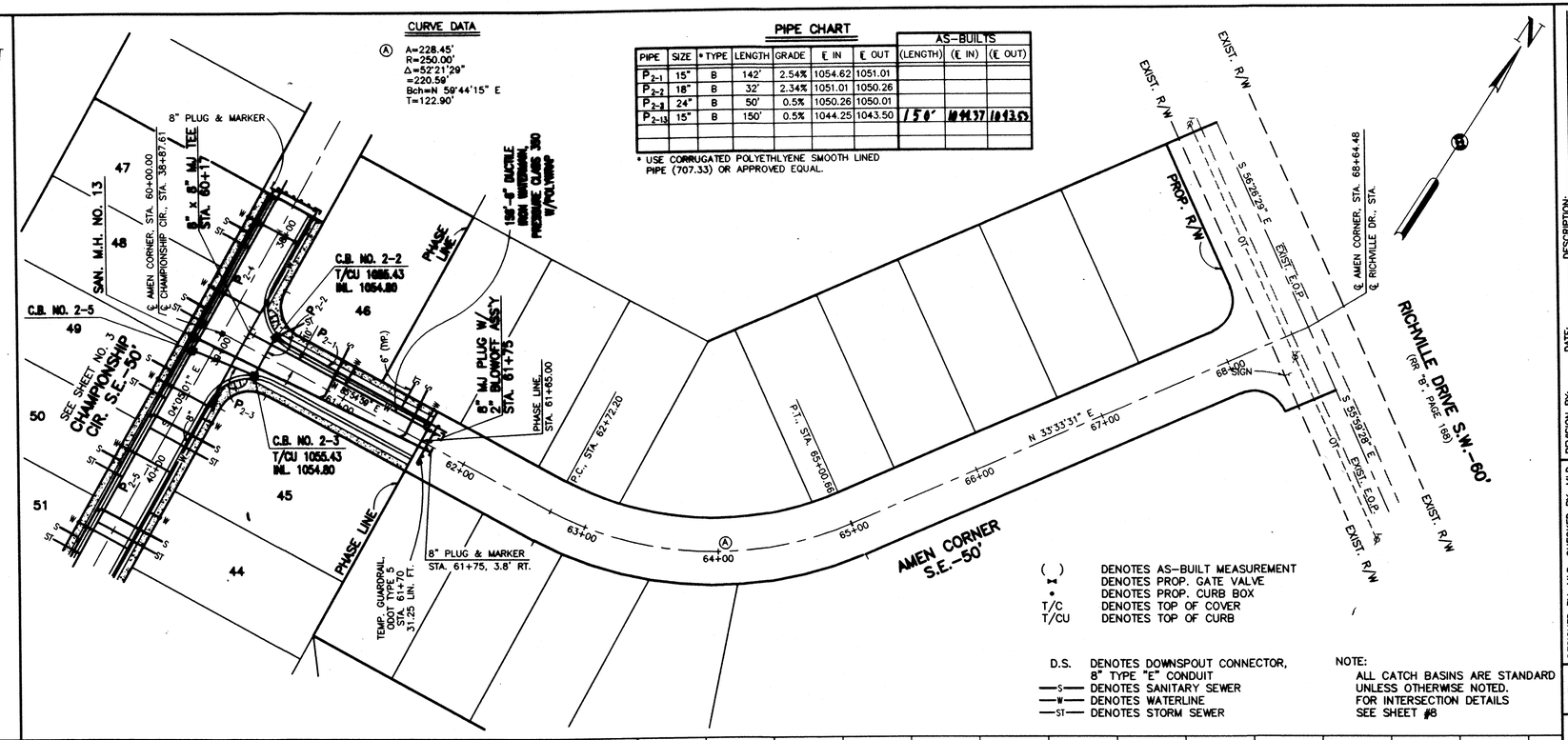




PIPE CHART

PIPE	SIZE	* TYPE	LENGTH	GRADE	℄ IN	℄ OUT	AS-BUILTS (LENGTH)	AS-BUILTS (℄ IN)	AS-BUILTS (℄ OUT)
P_{2-1}	15"	B	142'	2.54%	1054.62	1051.01			
P_{2-2}	18"	B	32'	2.34%	1051.01	1050.26			
P_{2-3}	24"	B	50'	0.5%	1050.26	1050.01			
P_{2-13}	15"	B	150'	0.5%	1044.25	1043.50	150'	1044.37	1043.52

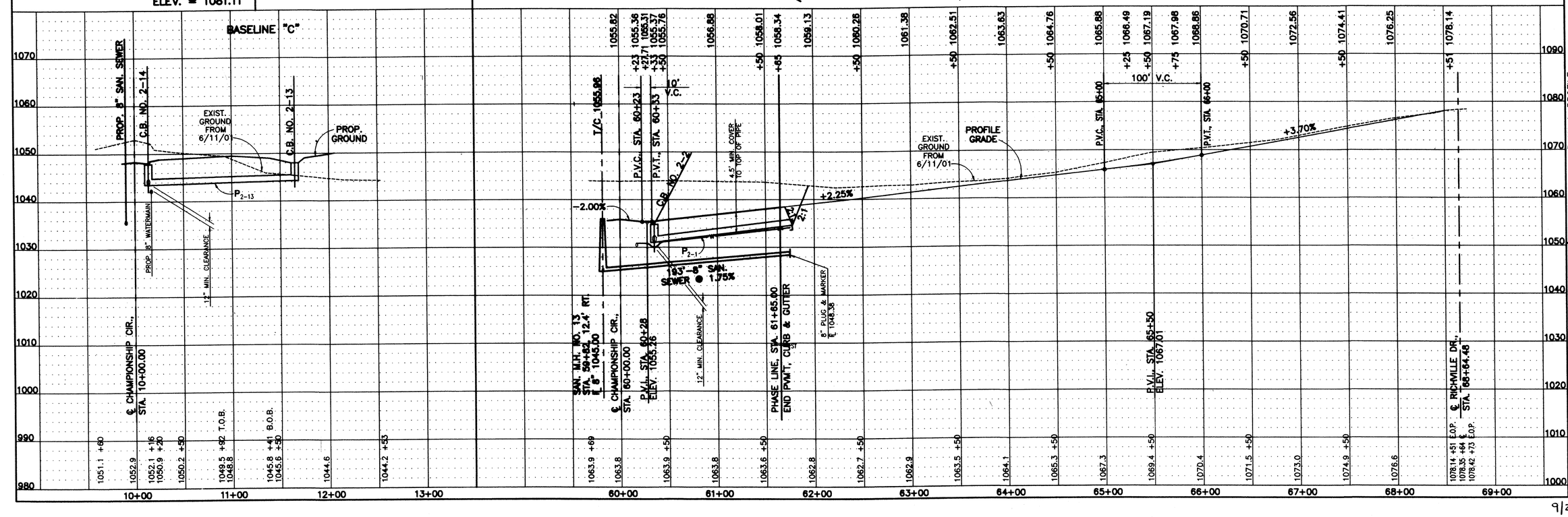
* USE CORRUGATED POLYETHLYENE SMOOTH LINED PIPE (707.33) OR APPROVED EQUAL.

( ) DENOTES AS-BUILT MEASUREMENT
DENOTES PROP. GATE VALVE
DENOTES PROP. CURB BOX
T/C DENOTES TOP OF COVER
T/CU DENOTES TOP OF CURB

D.S. DENOTES DOWNSPOUT CONNECTOR, 8" TYPE "E" CONDUIT
—S— DENOTES SANITARY SEWER
—W— DENOTES WATERLINE
—ST— DENOTES STORM SEWER

NOTE:
ALL CATCH BASINS ARE STANDARD UNLESS OTHERWISE NOTED. FOR INTERSECTION DETAILS SEE SHEET #8

BENCHMARK:
TIMBER SPIKE SET 1.4' UP N. SIDE OF WOOD TELEPHONE POLE # 14/11 ON S. SIDE OF RICHVILLE DRIVE, 80'± EAST OF ℄ OF CHAMPIONSHIP CIR.
ELEV. = 1081.11



DESIGNED BY: MLD CHECKED BY: MLD
DRAWN BY: DTM REVIEWED BY: BHB
F.B. 459, PG. 1
COPYRIGHT: 2000 DATE: 7/23/01
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REVISION BY:____ DATE:____ DESCRIPTION:____
REVISION BY:____ DATE:____ DESCRIPTION:____
REVISION BY: DCG DATE: 12/29/03 DESCRIPTION: SAN. + STM. AS BUILTS
REVISION BY: DTM DATE: 8/02/01 DESCRIPTION: PER C.O.W.S. COMMENTS DATED 8/1/01
REVISION BY: BHB DATE: 8/01/01 DESCRIPTION: PER CITY OF MASSILLON ENG. COMMENTS

SCALES:
HORIZ: 1"=50'
VERT: 1"=10'

PLAN & PROFILE
BASELINE "C" – STA. 10+00 TO STA. 11+65
AMEN CORNER – STA. 60+00 TO STA. 61+65
AUGUSTA LAKES NO. 2
SITUATED IN THE CITY OF MASSILLON, COUNTY OF STARK, STATE OF OHIO AND BEING OUTLOT 870

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9/21