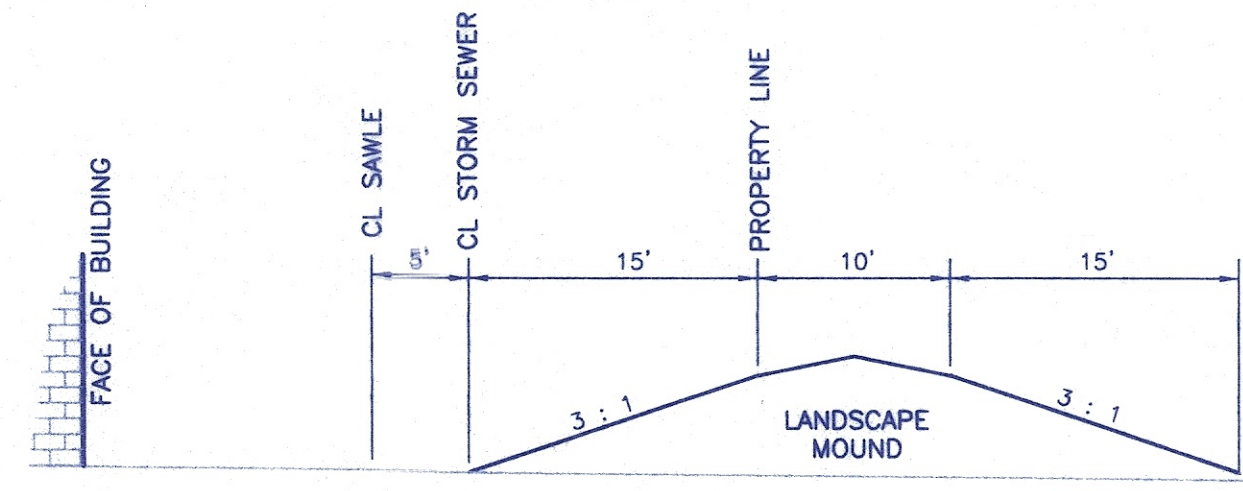
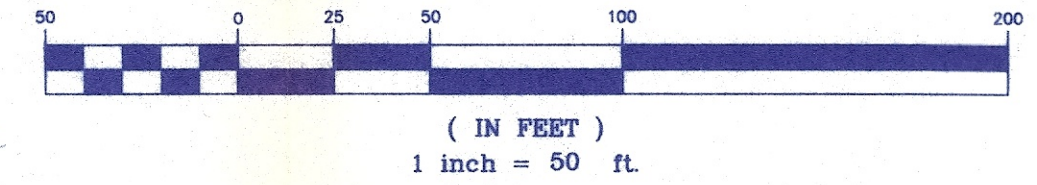


GRAPHIC SCALE



SECTION A-A
TYPICAL SECTION
THROUGH LANDSCAPE MOUND
SCALE 1" = 10'

LEGEND

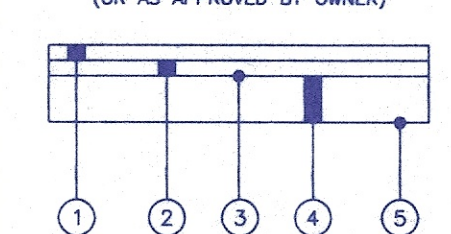
- GFE GARAGE FLOOR ELEVATION
- SANITARY MANHOLE
- CATCH BASIN
- FIRE HYDRANT
- ▨ PAVEMENT AREA-SEE TYPICAL PAVEMENT SECTION DETAIL
- ⑧ NUMBER OF PARKING SPACES

UTILITY LOCATION NOTE

LOCATION OF ALL UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASED ON FIELD LOCATIONS OF ALL VISIBLE STRUCTURES SUCH AS CATCH BASINS, MANHOLES, WATER AND GAS LINES, ETC., TOGETHER WITH INFORMATIONAL DATA OBTAINED FROM PLANS AND RECORDS SUPPLIED BY VARIOUS UTILITY COMPANIES AND GOVERNMENT AGENCIES. ALL CONTRACTORS SHOULD NOTIFY IN WRITING ALL UTILITY COMPANIES AND GOVERNMENT AGENCIES PRIOR TO ANY EXCAVATION WORK OR CALL O.U.P.S. AT 1-800-362-2764.

TYPICAL PAVEMENT SECTION

(OR AS APPROVED BY OWNER)



- ① ITEM 404 - 1" ASPHALT CONCRETE SURFACE COURSE
- ② ITEM 402 - 2" ASPHALT CONCRETE INTERMEDIATE COURSE
- ③ ITEM 408 - BITUMINOUS PRIME COAT (0.4 GAL. S.Y.)
- ④ ITEM 304 - 6" AGGREGATE BASE
- ⑤ ITEM 203 - COMPACTED SUBGRADE

GRADING NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE CODES, ORDINANCES, AND STANDARD SPECIFICATIONS OF THE CITY OF MASSILLON. IN LIEU OF ANY LOCAL SPECIFICATIONS WORK SHALL BE DONE IN CONFORMANCE WITH THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS MOST RECENT EDITION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FOR CONSTRUCTION.
3. ALL EXISTING FIELD CONDITIONS SHALL BE FIELD CHECKED AND VERIFIED BY CONTRACTORS PRIOR TO BIDDING AND CONSTRUCTION. SHOULD THERE BE ANY DISCREPANCY BETWEEN PLANS AND ACTUAL FIELD CONDITIONS, CONTRACTOR HAS TO SEEK WRITTEN CLARIFICATION FROM THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF WORK.
4. SHOULD THE CONTRACTOR ENCOUNTER CONFLICT BETWEEN THESE PLANS AND SPECIFICATIONS, EITHER AMONG THEMSELVES OR WITH THE REQUIREMENTS OF ANY AND ALL REVIEWING AND PERMIT-ISSUING AGENCIES, HE SHALL SEEK CLARIFICATION IN WRITING FROM THE OWNER'S REPRESENTATIVE BEFORE COMMENCEMENT OF CONSTRUCTION.
5. IT SHALL BE CONTRACTOR'S SOLE RESPONSIBILITY TO CONSTRUCT ALL ITEMS ON THESE PLANS USING CONSTRUCTION MEANS AND METHODS THAT WILL PROTECT PROPERTY AND PREVENT BODILY INJURY AND/OR DEATH. THE CONTRACTOR SHALL TAKE ANY NECESSARY SAFETY PRECAUTIONS TO COMPLY WITH THE SAFETY REQUIREMENTS OF CITY, STATE, AND FEDERAL GOVERNMENTS.
6. CONSTRUCTION SHALL BE PERFORMED, AND EQUIPMENT STORED, IN A MANNER WHICH PERMITS EXISTING FACILITIES TO PERFORM WITHOUT INTERRUPTION.
7. CONTRACTOR SHALL PERFORM SITE CLEARING AND GRUBBING OPERATIONS IN ACCORDANCE WITH ODOT ITEM 201. TOPSOIL SHALL BE STRIPPED FROM ALL AREAS OF PROPOSED GRADE CHANGES AND STOCKPILED IN ACCORDANCE WITH THE OWNER'S DIRECTION.
8. EXCESS EARTHWORK MATERIALS MAY BE DISTRIBUTED ON THE SITE IN ACCORDANCE WITH THE OWNERS DIRECTION.
9. ALL DISTURBED YARD AREAS SHALL BE FINE GRADED, SEEDED, FERTILIZED AND MULCHED IN ACCORDANCE WITH ODOT 659.
10. NO SOIL BORINGS WERE ACQUIRED FOR THIS PROJECT. THE CONTRACTOR MAY PERFORM HIS OWN SOILS INVESTIGATION AFTER OBTAINING APPROVAL FROM THE OWNER.
11. EMBANKMENT CONSTRUCTION AND SUBGRADE COMPACTION SHALL BE IN GENERAL CONFORMANCE WITH ODOT SPECIFICATIONS AND MORE SPECIFICALLY AS FOLLOWS:
STANDARD PROCTOR WITHIN BUILDING LIMITS (TO 5' OUTSIDE BUILDING LINE) AND UNDER PAVEMENT = 100%
STANDARD PROCTOR IN UTILITY TRENCHES = 95%
STANDARD PROCTOR IN YARD AREAS = 90%

SECTION B-B
CONC. CHANNEL DETAIL
N.T.S.

NOTE: DO NOT CONSTRUCT CONCRETE CHANNEL IN DETENTION BASIN UNTIL SUCH TIME AS THE SEDIMENT BASIN IS NO LONGER REQUIRED. (SEE STORM WATER POLLUTION PREVENTION PLAN)

SHEET INDEX	
SHEET No.	SHEET DESCRIPTION
1	GRADING AND PAVING PLAN
2	UTILITY AND GEOMETRIC PLAN
3	SANITARY SEWER EXTENSION

SITE DATA

SITE AREA = 9.762 ACRES
NUMBER OF BUILDINGS = 14

ROADWAY WIDTH = 24'
DRIVEWAY WIDTH = 16'
EXTRA PARKING 28 SPACES @ 9' x 20'

ZONING DATA

ZONED RM-1 MULTIPLE FAMILY RESIDENTIAL DISTRICT

FRONT YARD SETBACK = 25'
SIDE YARD SETBACK = 15'
REAR YARD SETBACK = 35'

APPROXIMATE EARTHWORK
CUT: 18,360 CY
FILL: 17,970 CY

5.26Ac @ 0.9 (2.94 Roof, 2.32 Pav't)
4.50Ac @ 0.25
9.76Ac = WC = 0.6

BENCH MARK

60d SPIKE FOUND 1.2' UP SOUTH SIDE OF A 12" OAK TREE; 32.8' N 10' W OF THE S.W. CORNER OF THE N.W. QTR. OF SECTION 22, T-10(PERRY), R-9.
ELEV 1079.735

BENCH MARK

60d SPIKE FOUND 0.5' UP NORTH SIDE OF A TWIN 15" OAK TREE; 42' S 12' W OF THE 5/8" IRON BAR FOUND WITH 'DEIBEL' 6673 PLASTIC YELLOW CAP.
ELEV 1074.625

HOR. SCALE 1"=50'

VERT. SCALE 1"=5'

DATE: April 12, 2001

FIELD BOOK No. N/A

SHEET 1 of 3

BRYAN J. ASHMAN
JEROLD E. GEIB

COOPER & ASSOCIATES, P.L.L.
ENGINEERS AND SURVEYORS

1359 MARKET AVENUE, NORTH CANTON, OHIO 44714
PHONE (330) 452-5731
FAX No. (330) 452-9110

GRADING and PAVING PLAN

UNIVERSITY COMMONS

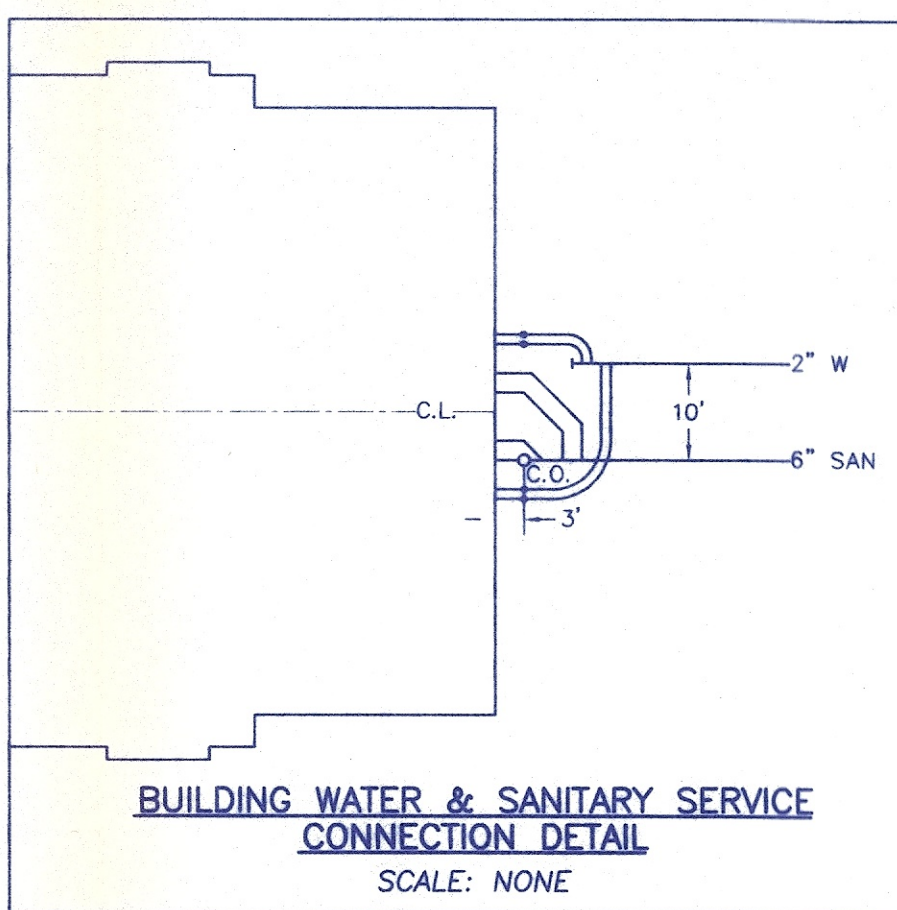
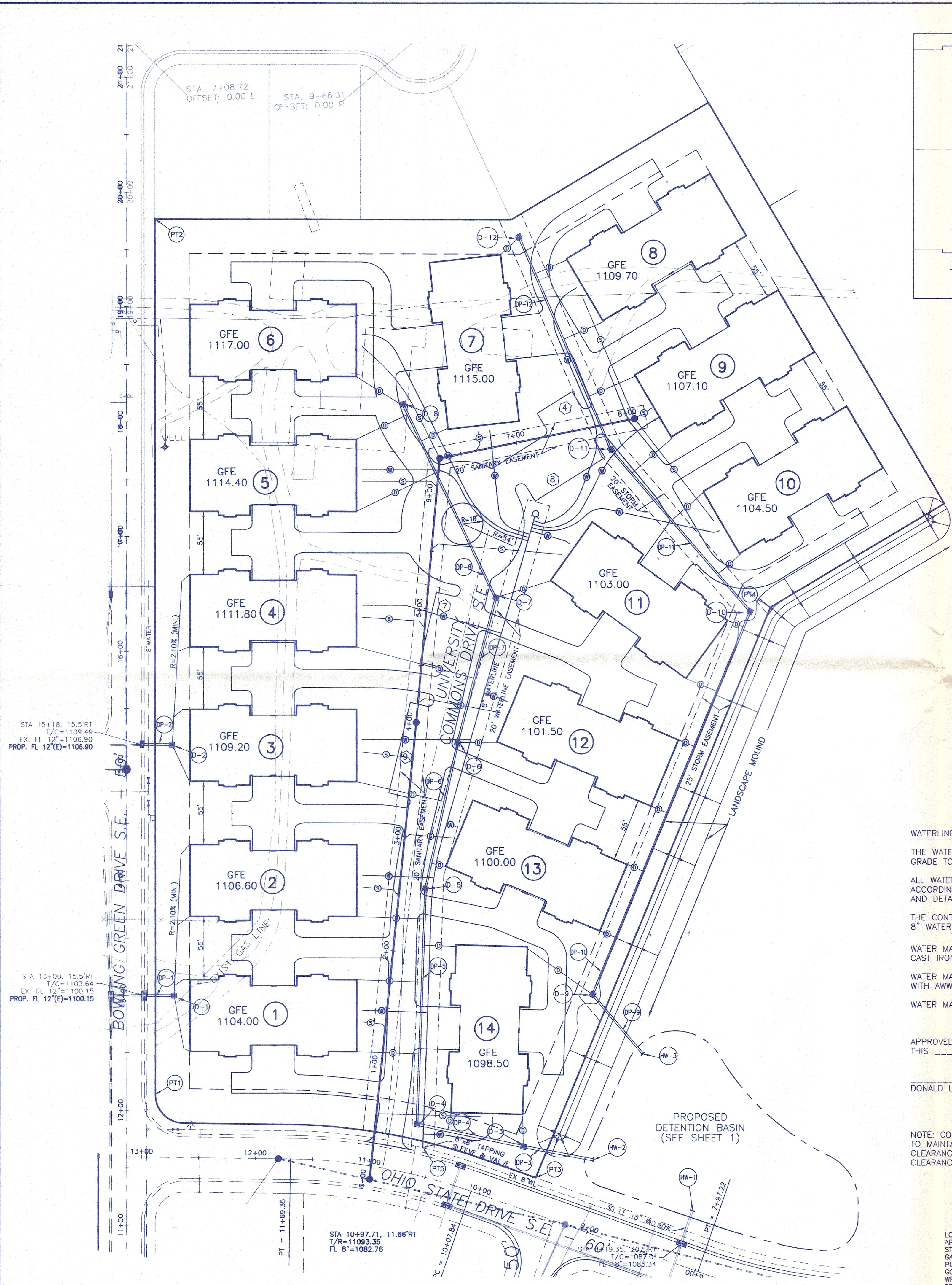
CITY OF MASSILLON
STARK COUNTY, OHIO

FOR : P.R.M.D.C. LTD.

PLAN REVIEW MEETING 4/24/01	DESCRIPTION	DATE	BY
REVISIONS			

DWYER, C.H.B. CHK'D BY:

PROJ.# 01138



POINT	NORTHING	EASTING
PT1	11207.88	9291.11
PT2	11969.84	9326.23
PT3	11120.38	9620.94
PT4	11607.80	9849.45
D-1	11293.04	9311.28
D-2	11511.43	9319.67
HW-1	11086.07	9756.89
HW-2	11146.67	9672.28
D-3	11142.81	9611.71
D-4	11171.52	9519.13
D-5	11375.82	9535.77
D-6	11501.66	9570.14
D-7	11627.05	9609.60
D-8	11798.79	9536.35
HW-3	11205.34	9722.37
D-9	11277.35	9677.96
D-10	11604.90	9831.52
D-11	11750.99	9716.20
D-12	11939.70	9644.24
HYD.	11698.15	9647.66
PT5	11150.90	9523.22

ESTIMATED WATERLINE QUANTITIES		
ITEM	QTY.	DESCRIPTION
638	14	EA. 2" WATER LINE TO BUILDING W/ (4) 3/4" SERVICES & CURB BOX
638	563	LF 8" DCIP (CL 52)
638	1	EA. HYDRANT ASSEMBLY (COMPLETE)
638	1	EA. 8"x8" TAPPING SLEEVE AND VALVE

ESTIMATED STORM SEWER QUANTITIES		
601	3.56	C.Y. ROCK CHANNEL PROTECTION TYPE 'C' W/ GEOTEXTILE
603	1567	LF 6" STORM LATERAL
603	235	LF 12" STORM SEWER TYPE 'B'
603	389	LF 15" STORM SEWER TYPE 'B'
603	444	LF 15" STORM SEWER TYPE 'C'
603	465	LF 18" STORM SEWER TYPE 'B'
603	156	LF 24" STORM SEWER TYPE 'C'
604	12	EA. CATCH BASIN: ODOT 2-2-B
604	1	EA. HEADWALL (ODOT HW-4B MOD FULL HT) - 15" PIPE
604	1	EA. HEADWALL (ODOT HW-4B MOD FULL HT) - 18" PIPE
604	1	EA. HEADWALL (ODOT HW-4B MOD FULL HT) - 24" PIPE

WATERLINE NOTES:

THE WATERLINES SHALL BE INSTALLED SO THAT 4'-6" OF COVER, FROM GRADE TO TOP OF WATERLINE, IS MAINTAINED AS A MINIMUM.

ALL WATERLINES AND APPURTENANCES SHALL BE CONSTRUCTED ACCORDING TO CONSUMERS OHIO WATER COMPANY SPECIFICATIONS AND DETAILS IN EFFECT AT THE TIME OF CONSTRUCTION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION OF THE 8" WATER MAINS AND THE 2" BUILDING SERVICES.

WATER MAIN MATERIALS SHALL CONFORM TO AWWA C151 FOR DUCTILE CAST IRON PIPE.

WATER MAINS SHALL BE INSTALLED AND PRESSURE TESTED IN ACCORDANCE WITH AWWA C600.

WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA C651.

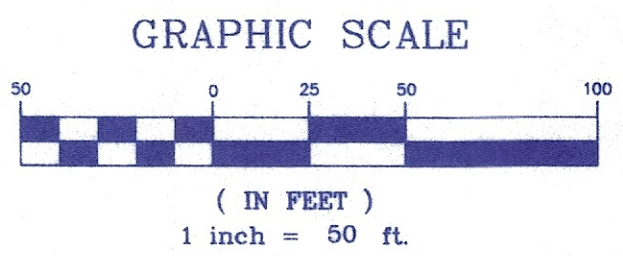
APPROVED BY CONSUMERS OHIO WATER COMPANY
THIS _____ DAY OF _____, 199__.

DONALD L. SNYDER, COWC

NOTE: CONTRACTOR MUST CONSTRUCT ALL WATER LINES AS NECESSARY TO MAINTAIN A MINIMUM OF 18" VERTICAL CLEARANCE & 10' HORIZONTAL CLEARANCE WITH THE SANITARY SEWER AND A MINIMUM OF 12" VERTICAL CLEARANCE WITH THE STORM SEWER.

UTILITY LOCATION NOTE

LOCATION OF ALL UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASED ON FIELD LOCATIONS OF ALL VISIBLE STRUCTURES SUCH AS CATCH BASINS, MANHOLES, WATER AND GAS LINES, ETC., TOGETHER WITH INFORMATION OBTAINED FROM PLANS AND RECORDS SUPPLIED BY VARIOUS UTILITY COMPANIES AND GOVERNMENT AGENCIES. ALL CONTRACTORS SHOULD NOTIFY IN WRITING ALL UTILITY COMPANIES AND GOVERNMENT AGENCIES PRIOR TO ANY EXCAVATION WORK OR CALL O.U.P.S. AT 1-800-362-2764.



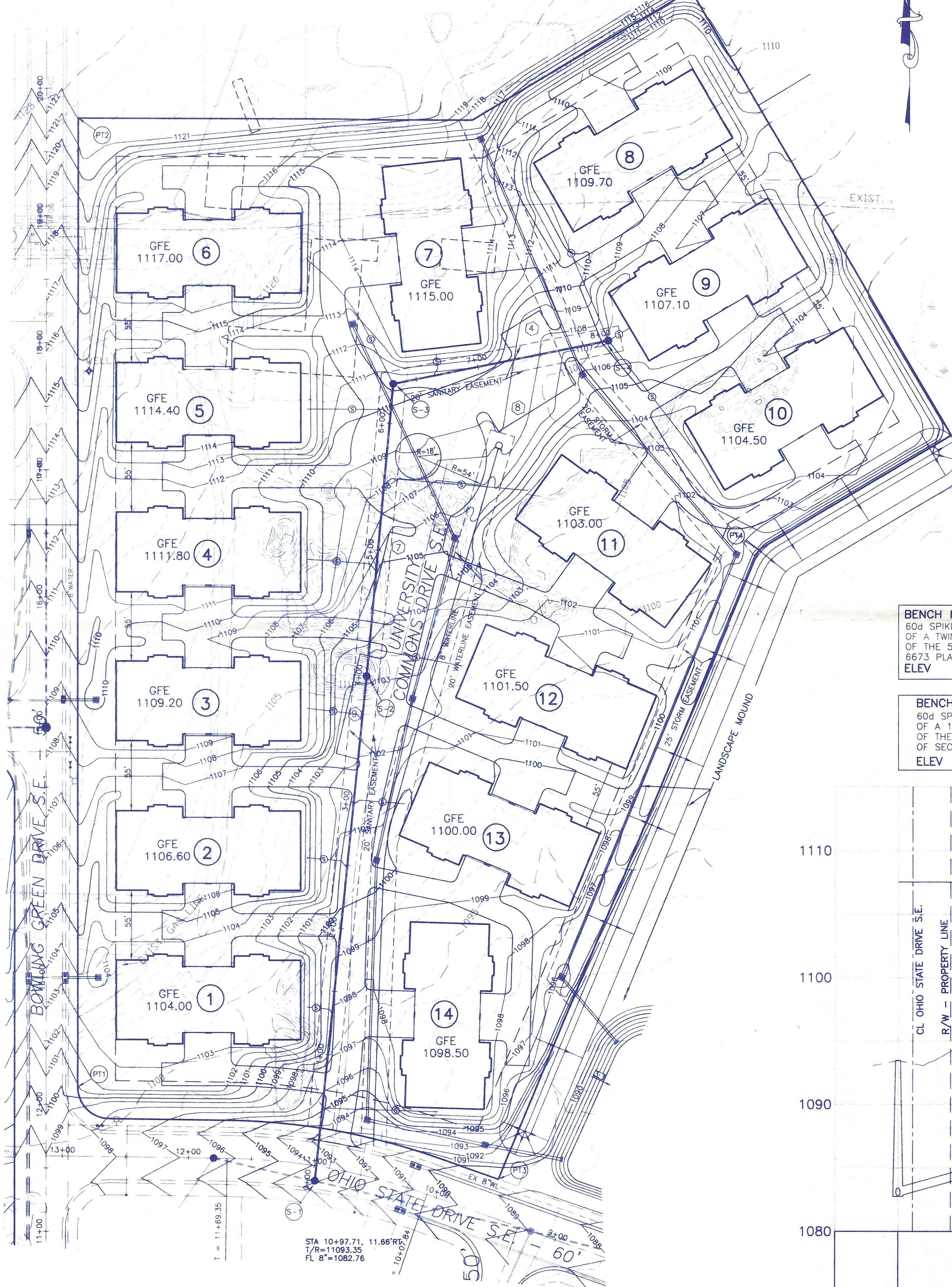
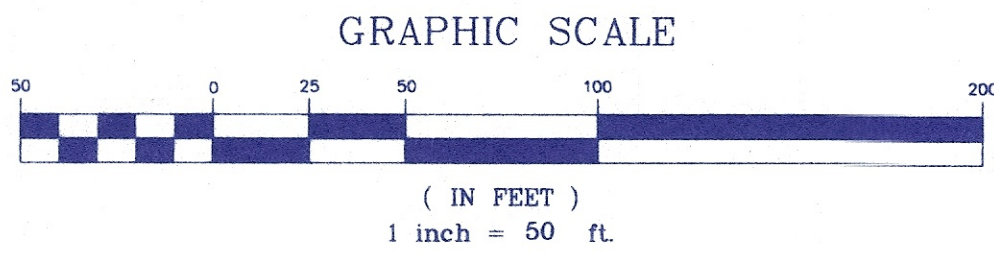
BENCH MARK
60d SPIKE FOUND 1.2' UP SOUTH SIDE OF A 12" OAK TREE; 32.8' N 10' W OF THE S.W. CORNER OF THE N.W. QTR. OF SECTION 22, T-10(PERRY),R-9.
ELEV 1079.735

BENCH MARK
60d SPIKE FOUND 0.5' UP NORTH SIDE OF A TWIN 15" OAK TREE; 42' S 12' W OF THE 5/8" IRON BAR FOUND WITH 'DEIBEL' 6673 PLASTIC YELLOW CAP.
ELEV 1074.625

PROPOSED STORM STRUCTURE DATA	
D-1: ODOT 2-2-B T/GRATE = 1103.50 F.L. 6" (N&S) = 1101.50 F.L. 12" (W) = 1101.00	D-7: ODOT 2-2-B T/GRATE = 1105.00 F.L. 6" (E) = 1101.00 F.L. 12" (NW) = 1100.50 F.L. 18" (S) = 1100.00
D-2: ODOT 2-2-B T/GRATE = 1109.50 F.L. 6" (N&S) = 1102.50 F.L. 12" (W) = 1107.00	D-8: ODOT 2-2-B T/GRATE = 1112.25 F.L. 6" (NW) = 1110.25 F.L. 12" (SE) = 1109.75
HW-1: ODOT TYPE 4-B (MOD. FULL HEIGHT) EX. F.L. 18" (SW) = 1083.58 PROP. F.L. 8" (SW) = 1083.58	HW-3: ODOT TYPE 4-B (MOD. FULL HEIGHT) F.L. 15" (NW) = 1086.50
HW-2: ODOT TYPE 4-B (MOD. FULL HEIGHT) F.L. 24" (W) = 1086.50	D-9: ODOT 2-2-B T/GRATE = 1095.50 F.L. 6" (NW) = 1091.32 F.L. 15" (NE&SE) = 1090.57
D-3: ODOT 2-2-B T/GRATE = 1092.75 F.L. 6" (N) = 1090.20 F.L. 24" (E&W) = 1088.70	D-10: ODOT 2-2-B T/GRATE = 1101.50 F.L. 15" (NW&SW) = 1097.75
D-4: ODOT 2-2-B T/CURB = 1093.25 F.L. 18" (N) = 1089.75 F.L. 24" (E) = 1089.25	D-11: ODOT 2-2-B T/GRATE = 1105.75 F.L. 15" (NW&SE) = 1102.75
D-5: ODOT 2-2-B T/GRATE = 1100.25 F.L. 18" (N&S) = 1096.75	D-12: ODOT 2-2-B T/GRATE = 1114.50 F.L. 6" (SW) = 1108.85 F.L. 15" (NW&SE) = 1108.10 P.O. N.W. OPENING
D-6: ODOT 2-2-B T/GRATE = 1102.25 F.L. 6" (E) = 1099.75 F.L. 18" (N&S) = 1098.75	

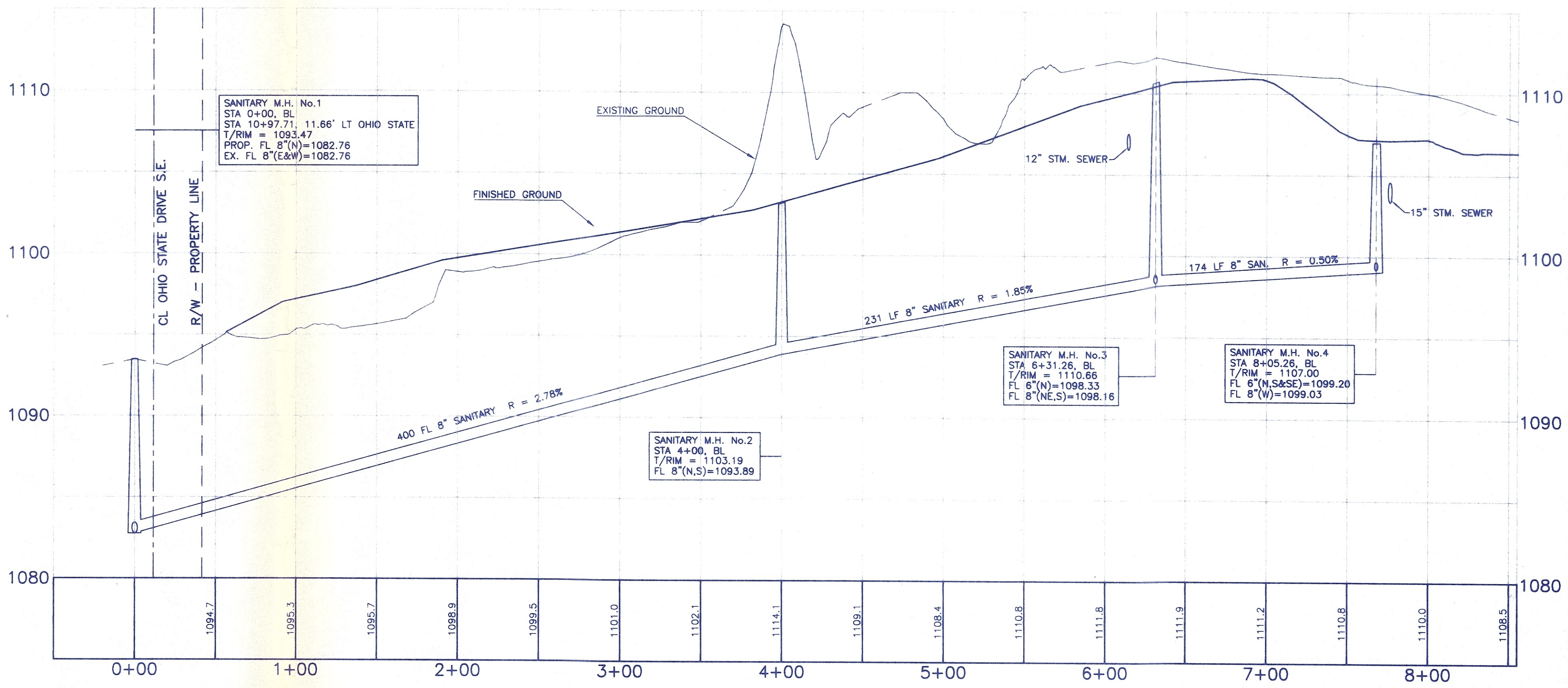
PROPOSED STORM PIPE DATA	
DP-1: 24 L.F. 12" STM SEWER R=3.54%	DP-7: 130 L.F. 18" STM SEWER R=0.96%
DP-2: 24 L.F. 12" STM SEWER R=0.42%	DP-8: 187 L.F. 12" STM SEWER R=4.95%
DP-3: TYPE 'C' 63 L.F. 24" STM SEWER R=3.55%	DP-9: TYPE 'C' 67 L.F. 15" STM SEWER R=6.07%
DP-4: TYPE 'C' 96 L.F. 24" STM SEWER R=0.57%	DP-10: TYPE 'C' 359 L.F. 15" STM SEWER R=2.00%
DP-5: 205 L.F. 18" STM SEWER R=3.41%	DP-11: 187 L.F. 15" STM SEWER R=2.67%
DP-6: 130 L.F. 18" STM SEWER R=1.54%	DP-12: 202 L.F. 15" STM SEWER R=2.65%

- SITE UTILITY NOTES**
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 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FOR CONSTRUCTION.
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 - SHOULD THE CONTRACTOR ENCOUNTER CONFLICT BETWEEN THESE PLANS AND SPECIFICATIONS, EITHER AMONG THEMSELVES OR WITH THE REQUIREMENTS OF ANY AND ALL REVIEWING AND PERMIT-ISSUING AGENCIES, HE SHALL SEEK CLARIFICATION IN WRITING FROM THE OWNER'S REPRESENTATIVE BEFORE COMMENCEMENT OF CONSTRUCTION.
 - IT SHALL BE CONTRACTOR'S SOLE RESPONSIBILITY TO CONSTRUCT ALL ITEMS ON THESE PLANS USING CONSTRUCTION MEANS AND METHODS THAT WILL PROTECT PROPERTY AND PREVENT BODILY INJURY AND/OR DEATH. THE CONTRACTOR SHALL TAKE ANY NECESSARY SAFETY PRECAUTIONS TO COMPLY WITH THE SAFETY REQUIREMENTS OF CITY, STATE, AND FEDERAL GOVERNMENTS.
 - CONSTRUCTION SHALL BE PERFORMED, AND EQUIPMENT STORED, IN A MANNER WHICH PERMITS EXISTING FACILITIES TO PERFORM WITHOUT INTERRUPTION.
 - ALL DISTURBED YARD AREAS SHALL BE FINE GRADED, SEEDED, FERTILIZED AND MULCHED IN ACCORDANCE WITH ODOT 659.
 - THE FOLLOWING MATERIALS ARE APPROVED FOR THE STORM SEWER UNLESS OTHERWISE DESIGNATED ON THE PLAN. INSTALLATION TO BE IN ACCORDANCE WITH ODOT TYPE 'B' UNLESS OTHERWISE NOTED.
ITEM 603
HIGH DENSITY POLYETHYLENE CORRUGATED PIPE WITH SMOOTH INTERIOR PER ODOT
ITEM 944
PVC (SDR 35) IN ACCORDANCE WITH ASTM D-3034
 - CATCH BASINS TO BE IN ACCORDANCE WITH ODOT 2-2-B UNLESS OTHERWISE NOTED ON THE PLAN. CATCH BASIN TOP SLAB & GRATE SHALL BE MODIFIED FOR HIGHWAY LOADING AS REQUIRED. GRATES TO BE BIKE SAFE (EAST JORDAN IRON WORKS : 5110 TYPE M3).
 - DOWNSPOUT HEADERS SHALL BE PVC IN ACCORDANCE WITH ASTM D-3034 AND SHALL BE INSTALLED AT A MINIMUM SLOPE OF 1.00% UNLESS OTHERWISE SPECIFIED ON THESE PLANS.



BENCH MARK
60d SPIKE FOUND 0.5' UP NORTH SIDE
OF A TWIN 15" OAK TREE; 42' S 12' W
OF THE 5/8" IRON BAR FOUND WITH 'DEIBEL'
6673 PLASTIC YELLOW CAP.
ELEV **1074.625**

BENCH MARK
60d SPIKE FOUND 1.2' UP SOUTH SIDE
OF A 12" OAK TREE; 32.8' N 10' W
OF THE S.W. CORNER OF THE N.W. QTR.
OF SECTION 22, T-10(PERRY), R-9.
ELEV **1079.735**



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

UTILITY LOCATION NOTE
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POINT	NORTHING	EASTING
PT1	11207.88	9291.11
PT2	11969.84	9326.23
PT3	11120.38	9620.94
PT4	11607.80	9849.45
S-1	11125.47	9475.51
S-2	11521.10	9534.51
S-3	11750.20	9566.01
S-4	11776.91	9737.94

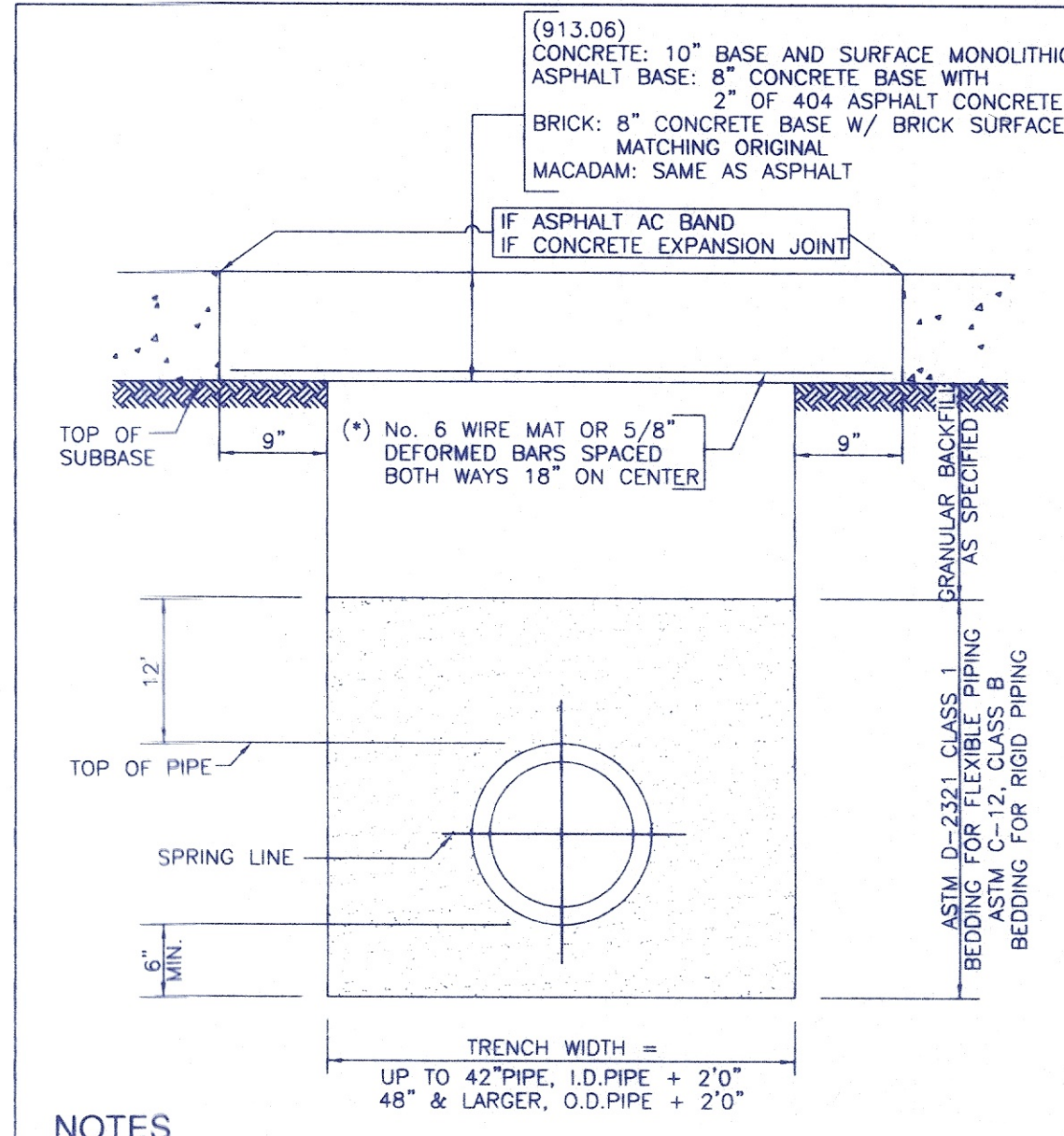
SANITARY SEWER NOTES

- ALL SANITARY SEWERS AND APPURTENANCES SHALL BE CONSTRUCTED ACCORDING TO MASSILLON CITY ENGINEERING DEPARTMENT SPECIFICATIONS IN EFFECT AT THE TIME OF CONSTRUCTION.
- ROOF DRAINS, FOUNDATION DRAINS AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED.
- MINIMUM COVER OVER ALL SANITARY SEWERS MUST BE 4.0 FEET.
- ALL SANITARY SEWERS, 8" DIAMETER AND LARGER, MUST PASS INTERNAL TELEVISION INSPECTION. THE CONTRACTOR SHALL PROVIDE COMPLETE INTERNAL INSPECTION VIDEOTAPE TO THE SANITARY ENGINEERING DEPARTMENT. THE VIDEOTAPE PROCEDURE MUST BE IN ACCORDANCE WITH CITY OF MASSILLON SANITARY ENGINEERING DEPARTMENT SPECIFICATIONS.
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE CITY OF MASSILLON ENGINEERING DEPT., (330-830-1722) TO SCHEDULE A PRE-CONSTRUCTION MEETING. A MINIMUM OF 3 DAYS NOTICE IS REQUIRED TO SCHEDULE THIS MEETING.
- SANITARY SEWER MAY BE ANY OF THE FOLLOWING MATERIALS, HOWEVER THE COMPLETE SYSTEM MUST BE UNIFORM IN PIPE MATERIAL:
 - V.C.P. EXTRA STRENGTH A.S.T.M. C-700 WITH COMPRESSION TYPE JOINTS IN CONFORMANCE WITH A.S.T.M. C-425.
 - A.B.S. COMPOSITE PIPE A.S.T.M. D-2680 WITH CHEMICALLY WELDED PREMIUM JOINTS ASTM D-2680.
 - P.V.C. PIPE A.S.T.M. D-3034 S.D.R. 35 MAXIMUM WITH GASKETED PREMIUM JOINTS ASTM D-3212. BEDDING PER ASTM-2321.
- A BULKHEAD SHALL BE CONSTRUCTED IN THE EXISTING MANHOLE AT THE ENTRANCE OF THE PROPOSED SEWER PIPE AND REMAIN IN PLACE UNTIL THE NEW SEWER LINE IS COMPLETE, TESTED AND APPROVED BY THE MASSILLON CITY ENGINEER, AT WHICH TIME THE BULKHEAD SHALL BE REMOVED.
- MANHOLE AND TRENCHES SHALL BE PER MASSILLON DETAILS DRAWINGS.
- CONTRACTOR MUST CONSTRUCT ALL WATER LINES AS NECESSARY TO MAINTAIN A MINIMUM OF 18" VERTICAL CLEARANCE & 10" HORIZONTAL CLEARANCE WITH THE SANITARY SEWER AND A MINIMUM OF 12" VERTICAL CLEARANCE WITH THE STORM SEWER.
- A DEFLECTION TEST SHALL BE REQUIRED FOR ALL FLEXIBLE PIPE OF 8-INCH DIAMETER AND LARGER. THE TEST SHALL BE CONDUCTED AT LEAST 30 DAYS AFTER COMPLETION OF BACKFILL AND SHALL BE IN ACCORDANCE WITH CITY OF MASSILLON SANITARY ENGINEERING DEPARTMENT SPECIFICATIONS. THE ALLOWABLE DEFLECTION RATE SHALL NOT EXCEED FIVE (5%) PERCENT. TESTING SHALL BE IN ACCORDANCE WITH ASTM D-3034.
- ALL SANITARY SEWERS MUST PASS A LOW PRESSURE AIR TEST, WHICH SHALL BE CONDUCTED IN ACCORDANCE WITH CITY OF MASSILLON SANITARY ENGINEERING DEPARTMENT SPECIFICATIONS. THE MAXIMUM ALLOWABLE TEST LEAKAGE SHALL BE 100 GAL/INCH OF DIAMETER/MILE/DAY.
- MANHOLE CONSTRUCTION SHALL MEET THE REQUIREMENTS OF ASTM C-478 AND C-443. ALL MANHOLES SHALL BE AIR/VACUUM TESTED IN ACCORDANCE WITH AND MEET ALL THE REQUIREMENTS OF ASTM C1244.

ESTIMATED SANITARY SEWER QUANTITIES

ITEM	QTY.	UNIT	DESCRIPTION
603	1017	LF	6" SANITARY SEWER PIPE (LATERALS)
603	805	LF	8" SANITARY SEWER PIPE
603	10	EACH	8" x 6" WYES
603	14	EACH	SANITARY CLEANOUT
604	3	EACH	SANITARY MANHOLE TYPE 'A' (COMPLETE)(29.77 VF)
604	1	EACH	SANITARY MANHOLE CONSTRUCTED ON-LINE

PAVEMENT REPLACEMENT, TRENCHING, BEDDING AND ALL RESTORATION ITEMS ARE TO BE INCLUDED IN THE UNIT PRICE BID FOR SANITARY SEWER PIPE.



NOTES
(*) MUST BE USED WHEN WIDTH OF TRENCH IS GREATER THAN 3' AT THE SUBBASE LEVEL.
CONCRETE BASE SHALL BE OF 1:2:4, 6 BAG MIX, PORTLAND CEMENT CONCRETE USING HIGH EARLY STRENGTH CEMENT AND IT MUST BE CURED AT LEAST 48 HRS.
OPEN CUT DETAIL
N.T.S.

() DENOTES AS-BUILT DIMENSIONS CONTAINED IN FIELD BOOK PAGE

I HEREBY CERTIFY THAT THESE IMPROVEMENTS HAVE BEEN COMPLETED AS INDICATED BY THE "AS-BUILT" DIMENSIONS SHOWN ON THESE PLANS
THIS _____ DAY OF _____ 20__

BRYAN J. ASHMAN : REG. ENGR. No. E-043804

APPROVALS
Approved by the Massillon City Engineer
this 30th day of April, 2001.
[Signature]
Massillon City Engineer

SCALE: 1"=50' VERT. 1"=1' HORIZ.

DATE: APRIL 12, 2001

FIELD BOOK NO. N/A

SHEET 3 OF 3

BRYAN J. ASHMAN
JEROLD E. GEIB

COOPER & ASSOCIATES, P.L.L.C.
ENGINEERS AND SURVEYORS
1359 MARKET AVENUE, NORTH CANTON, OHIO 44714
PHONE (330) 452-5731
FAX (330) 452-9110

SANITARY SEWER EXTENSION

UNIVERSITY COMMONS

CITY OF MASSILLON
STARK COUNTY, OHIO

FOR : P.R.M.D.C. LTD.

PLAN REVIEW MEETING	4/24/01	BDG
DESCRIPTION	DATE	BY
REVISIONS		

DWILEY, C.H.B., CHK'D BY:

PROJ.# **01138**