

SITE IMPROVEMENT PLANS FOR KENYON CREEK ESTATES - PHASE I

SITUATED IN THE CITY OF MASSILLON,
COUNTY OF STARK, STATE OF OHIO

SANITARY SEWER

CONSTRUCTION NOTES:

1. FLEXIBLE GASKETS ON SEWER LINES SHOULD MEET SECTION 34.8 OF THE TEN STATE STANDARDS AND ASTM SPEC. D-823.
2. MANHOLE ADJUSTMENTS TO GRADE SHALL BE 12" OR LESS. USE PRECAST COLLARS AND A MAXIMUM OF TWO COURSES OF BRICK IF NECESSARY AND SHALL FOLLOW ASTM SPEC C-32.
3. LEAKAGE TEST LIMITS ARE 100 GAL./IN DIAMETER/MILE/DAY.

DEFLECTION TEST NOTES:

1. DEFLECTION TESTS SHALL BE PERFORMED ON ALL FLEXIBLE PIPE. THE TEST SHALL BE CONDUCTED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE FOR AT LEAST 30 DAYS TO PERMIT STABILIZATION OF THE SOIL-PIPE SYSTEM.
2. NO PIPE SHALL EXCEED A DEFLECTION OF 5 PERCENT. IF DEFLECTION EXCEEDS 5 PERCENT, RELACEMENT OR CORRECTION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH REQUIREMENTS IN THE APPROVED SPECIFICATIONS, G.L.U.M.R.B. SECTION 33.85.
3. THE RIGID BALL OR MANDRELL USED FOR THE DEFLECTION TEST SHALL HAVE A DIAMETER NOT LESS THAN 85 PERCENT OF THE BASE INSIDE DIAMETER OR AVERAGE INSIDE DIAMETER OF THE PIPE DEPENDING ON WHICH IS SPECIFIED IN THE ASTM SPECIFICATION, INCLUDING THE APPENDIX, TO WHICH THE PIPE IS MANUFACTURED. THE TEST SHALL BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES.

OHIO E.P.A. NOTES

1. HYDROSTATIC TEST SHALL NOT EXCEED 100 GAL. PER INCH OF PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION OF THE SYSTEM.
2. AIR LEAKAGE TESTING OF PLASTIC SANITARY SEWER SHALL BE PER A.S.T.M. F-1417.
3. MANHOLE AIR/VACUUM TESTING SHALL BE PER A.S.T.M. C-1244.
4. BOOSTER PUMPS ARE NOT PERMITTED ON SERVICE CONNECTIONS.
5. ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED. (ORDINANCE NO. 88-658, APPROVED 10/8/86).

PLANS SUBMITTED BY

PREPARED BY JEFFREY S. SMITH, P.E. AND SUBMITTED
THIS 15 DAY OF MAY, 2002.

Jeffrey S. Smith
JEFFREY S. SMITH, P.E. Reg. No. E-64042

APPROVED BY A. R. LOCKHART DEVELOPMENT COMPANY
THIS 15 DAY OF JULY, 2002.

A.R. Lockhart
A. R. LOCKHART, PRESIDENT

PLAN APPROVALS

APPROVED BY THE CITY OF MASSILLON ENGINEER
THIS 15 DAY OF JULY, 2002.

Donald Chrysler
CITY OF MASSILLON ENGINEER

WATERLINE IS APPROVED BY CONSUMERS OHIO WATER COMPANY
THIS 9 DAY OF JULY, 2002.

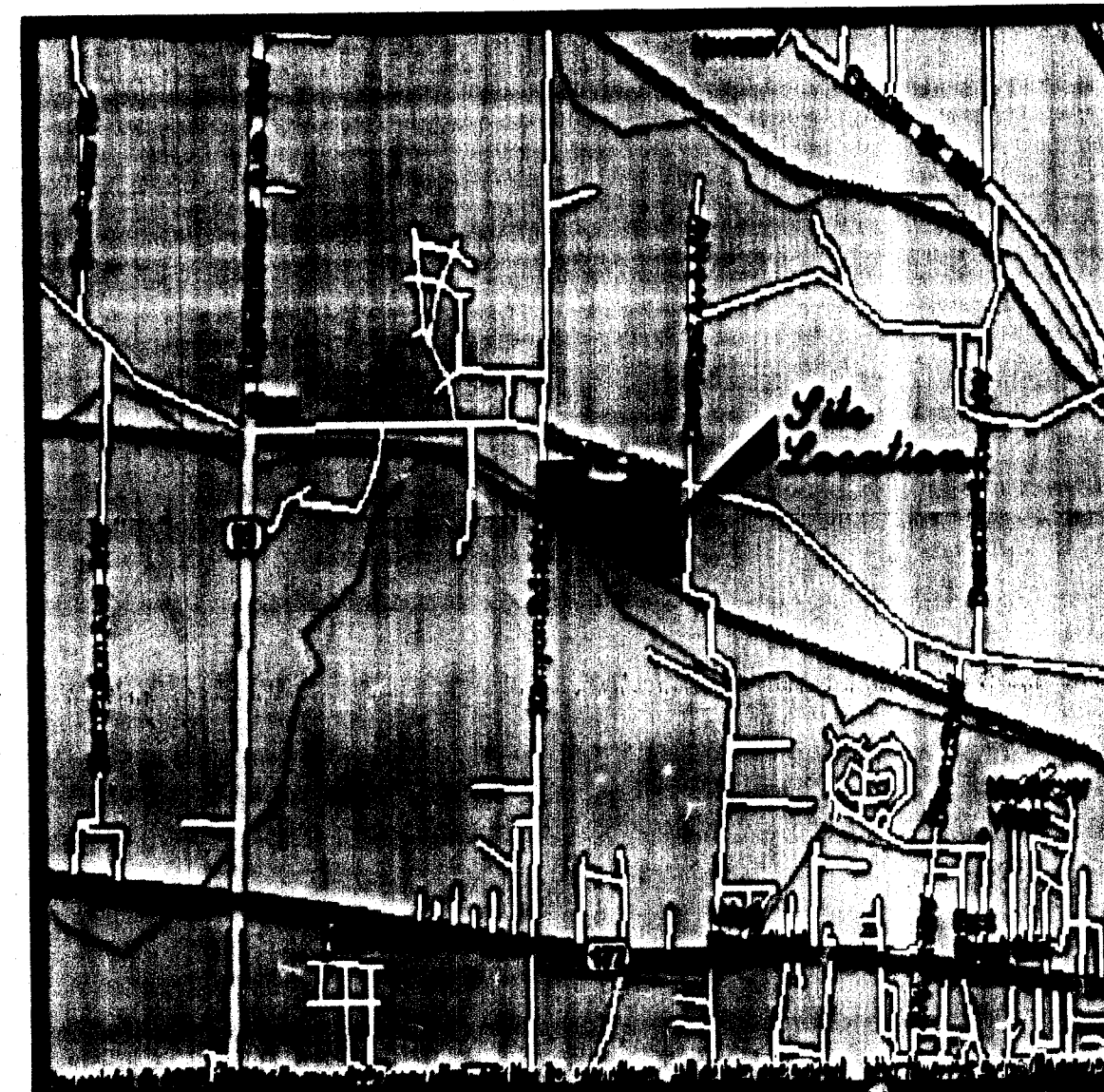
Donald Chrysler
CONSUMERS OHIO WATER COMPANY

SANITARY SEWER PERMIT TO INSTALL (P.T.I.) HAS BEEN RECEIVED
FROM THE OHIO ENVIRONMENTAL PROTECTION AGENCY
THIS 8 DAY OF AUGUST, 2002.

WATERLINE PERMIT TO INSTALL (P.T.I.) HAS BEEN RECEIVED
FROM THE OHIO ENVIRONMENTAL PROTECTION AGENCY
THIS 24 DAY OF SEPTEMBER, 2002.

A.R. LOCKHART DEVELOPMENT COMPANY
800 WEST WATERLOO ROAD
AKRON, OHIO 44314
PH: (330) 745-8520
FAX: (330) 745-0716

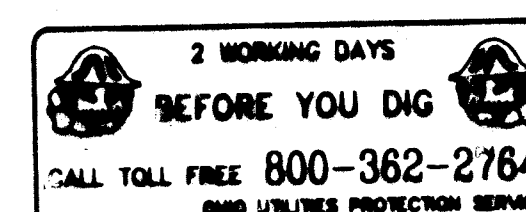
MARCH, 2002



LOCATION MAP
Not to scale

DRAWING LIST

ENT. NO.	DESCRIPTION
1	TITLE SHEET
2	SITE AND UTILITY PLAN
3	GRADING AND S.W.P.P. PLAN
4	S.W.P.P. NOTES AND DETAILS
5	S.W.P.P. NOTES AND DETAILS
6	TYPICAL SECTION AND INTERSECTION DETAILS
7	PLAN/PROFILE - KENYON CREEK AVE.
8	PLAN/PROFILE - WOOD CREEK CIR. AND SILVER CREEK CIR.
9	PLAN/PROFILE - LAKE CREEK CIRCLE AND SANITARY LINE "A"
10	MISCELLANEOUS UTILITY PROFILES
11	POND "A" DETAILS
12	POND "B" DETAILS
13	WATER MAIN AND MISCELLANEOUS DETAILS
14	MISCELLANEOUS DETAILS
15	MISCELLANEOUS DETAILS
16	CITY OF MASSILLON - STANDARD GENERAL NOTES
17	CITY OF MASSILLON - STANDARD GENERAL NOTES



WATER MAIN CONSTRUCTION NOTES

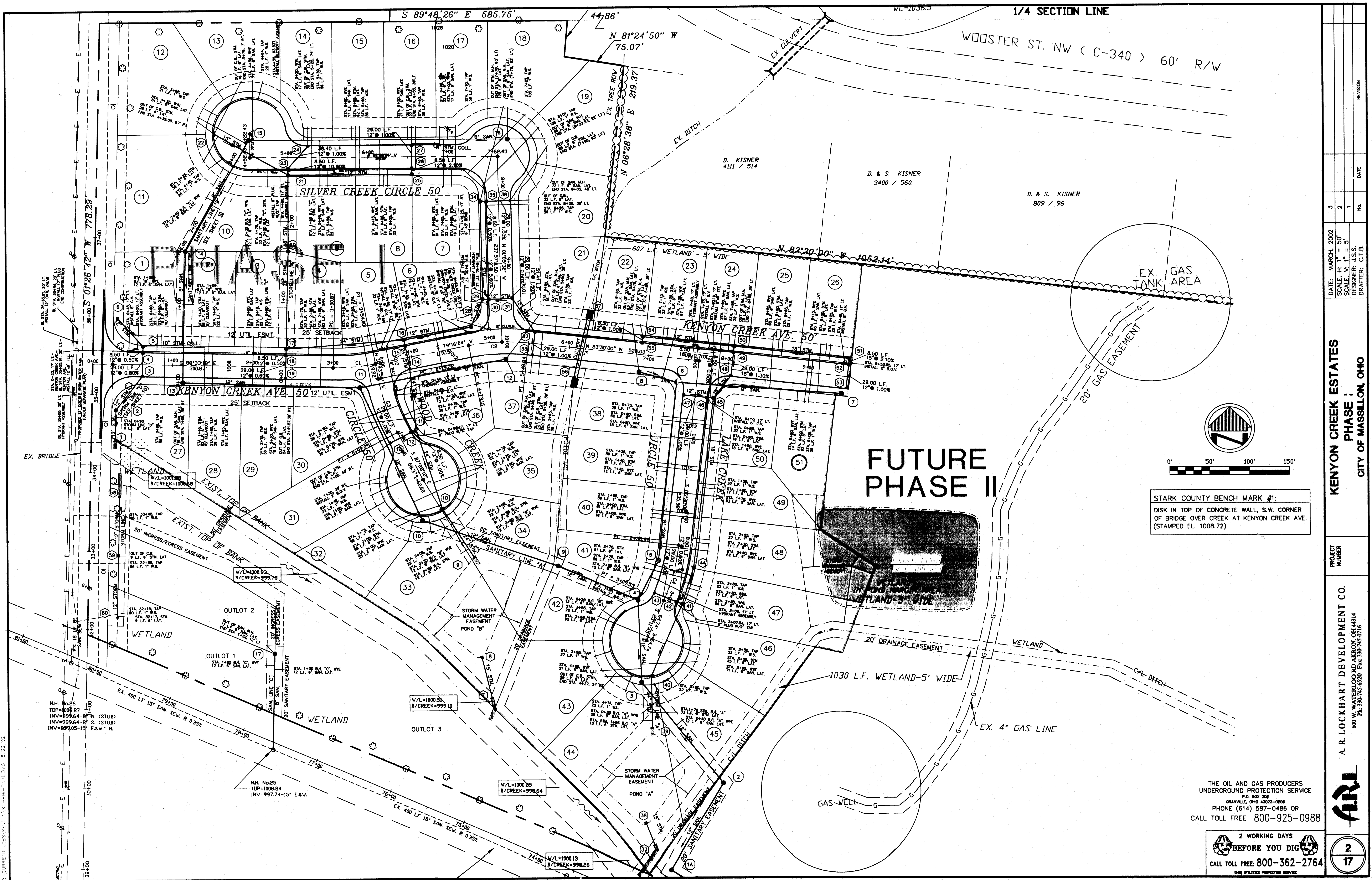
1. MUST MAINTAIN A 12" MINIMUM VERTICAL CLEARANCE FROM EDGE OF ALL WATER MAIN PIPE TO EDGE OF ALL PROPOSED STORM SEWERS AND/OR INLET LEAD PIPE WHERE THEY CROSS.
2. MUST MAINTAIN A 4.0' MINIMUM HORIZONTAL CLEARANCE FROM EDGE OF WATER MAIN PIPE TO EDGE OF STORM SEWER PIPE INLETS AND STORM SEWER MANHOLES.
3. MUST MAINTAIN A 10.0' MINIMUM HORIZONTAL CLEARANCE FROM EDGE OF WATER MAIN PIPE TO EDGE OF SANITARY SEWER AND/OR FORCE MAIN PIPE.
4. MUST MAINTAIN A 18" MINIMUM VERTICAL CLEARANCE FROM EDGE OF ALL WATER MAIN PIPE AND/OR SERVICE TO OUTSIDE EDGE OF ALL SANITARY SEWER PIPE WHERE THEY CROSS.
5. THE GROUND OVER THE WATER MAIN LINE SHALL REMAIN FREE OF TRASH CONTAINERS, TREES, SHRUBS AND ALL OTHER VEGETATION (EXCLUDING GRASS). MOUNDING OF EARTH OVER THE WATER LINE FOR AESTHETIC PURPOSES IS PROHIBITED.
6. WHERE WATER MAINS CROSS SEWER TRENCHES, THE TRENCH IS TO BE BACKFILLED WITH APPROVED GRANULAR MATERIAL.
7. ALL WATERLINES AND APPURTENANCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS ESTABLISHED BY THE CONSUMERS OHIO WATER COMPANY. PIPE SHALL BE CLASS 350, CEMENT-LINED, DUCTILE IRON WITH PUSH ON JOINTS, EXCEPT AS NOTED. ALL FITTINGS SHALL BE CEMENT-LINED MECHANICAL JOINT TYPE. VALVES SHALL BE MECHANICAL JOINT, NON-RISING STEM, RIGHT OPEN (CLOCKWISE) WITH 2-INCH SQUARE OPERATING NUT. POURED CONCRETE THRUST BLOCKS MUST BE CONSTRUCTED WHERE NECESSARY. ALL VALVES 4" THRU 12" ARE GATE VALVES AND MUST HAVE BOXES.
8. COMPACTED PREMIUM BACKFILL IS REQUIRED FOR UNDERGROUND CONSTRUCTION UNDER OR WITHIN 3 FEET OF ANY PROPOSED OR EXISTING SIDEWALK OR PAVEMENT.
9. ANY EXISTING WATER APPURTENANCES THAT ARE DAMAGED MUST BE REPLACED AT THE CONTRACTOR'S EXPENSE.
10. THE CONTRACTOR SHALL SUPPLY A TEMPORARY SAFE WATER SERVICE TO ANY HOME THAT WILL HAVE ITS WATER SERVICE INTERRUPTED BY THIS CONSTRUCTION.
11. NO TAPS FOR WATER SERVICES SHALL BE MADE UNTIL AFTER THE MAIN LINE HAS BEEN TESTED AND STERILIZED.
12. ALL WATER MAIN CONSTRUCTION SHALL BE INSPECTED BY THE CONSUMERS OHIO WATER COMPANY. NOTIFY THE CONSUMERS OHIO WATER COMPANY AT LEAST 48 HOURS PRIOR TO BEGINNING WATERLINE CONSTRUCTION.
13. ALL NEW WATER MAINS ARE TO BE COMPLETELY WRAPPED WITH POLYETHYLENE ENCASEMENT AS SPECIFIED IN AWWA C-105.
14. PRIOR TO ACCEPTANCE THE WATERLINE SHALL BE PRESSURE TESTED IN ACCORDANCE WITH AWWA C-600, LATEST EDITION, AND DISINFECTED IN ACCORDANCE WITH AWWA C-851, LATEST EDITION, BY THE CONTRACTOR.
15. ALL HYDRANTS SHALL HAVE STANDARD THREADS ON ALL HOSE CONNECTIONS.
16. MUST MAINTAIN A 36" MINIMUM HORIZONTAL CLEARANCE FROM THE EDGE OF ALL WATER MAIN PIPE TO THE EDGE OF DIRECT BURIAL CONDUIT, CONCRETE ENCASED ELECTRICAL CONDUIT, THE LIGHT POLE BASES, AND THE HAND HOLE PULL BOXES.
17. MUST MAINTAIN A 12" MINIMUM VERTICAL CLEARANCE FROM EDGE OF ALL WATER MAIN PIPE TO THE EDGE OF THE DIRECT BURIAL CONDUIT WHERE THEY CROSS.
18. USE EXTREME CAUTION WHEN EXCAVATING IN THE AREA OF EXISTING WATER MAIN PIPES, VALVES OR HYDRANTS.
19. ALL 2 INCH PIPE AND FITTINGS AROUND CUL-DE-SACS ARE TO BE HOPE TUBING WITH TRACER WIRE AND MARKING TAPE INSTALLED WITH 4 FEET 6 INCHES OF COVER.
20. SERVICE TAPS OFF OF MAINLINE TO BE MADE BY CONSUMERS OHIO WATER COMPANY. SERVICES OFF OF 2" TEES AT CUL-DE-SACS MAY BE SPLIT TO SERVICE TWO UNITS, WITH INDIVIDUAL CURB STOPS, INSTALLED BY THE CONTRACTOR.
21. BLOW-OFF ASSEMBLIES TO BE KUPFERLE FOUNDRY TF500 WITH VALVE BOX. INSTALL 2" CURB STOP WITH BOX AHEAD OF EACH BLOW OFF.

GENERAL CONSTRUCTION NOTES

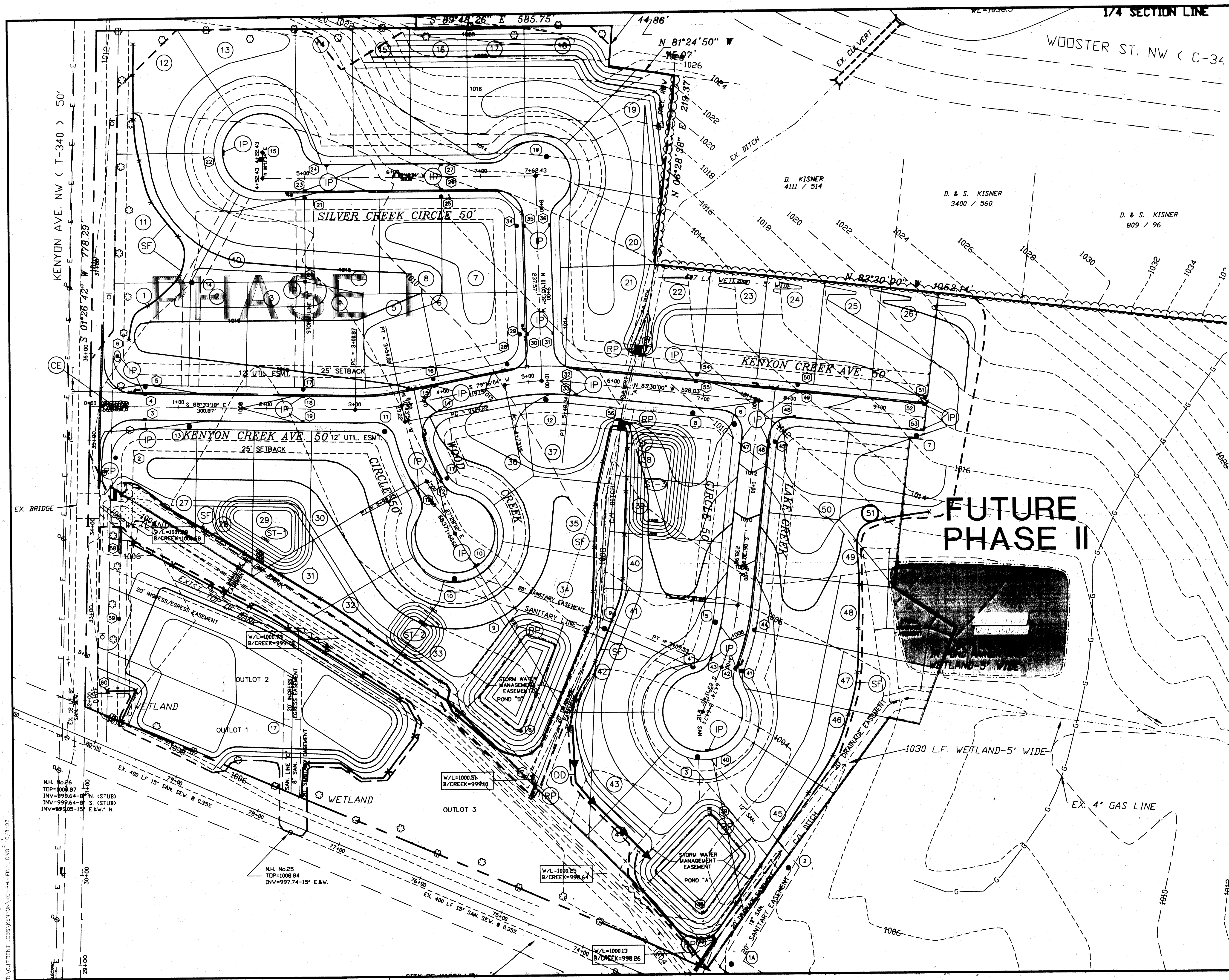
1. CONSTRUCTION SHALL BE INSPECTED BY THE CITY OF MASSILLON ENGINEERING DEPARTMENT. A PRE-CONSTRUCTION MEETING IS REQUIRED AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. CONTACT JASON HAINES AT 330-830-1722.
2. THE CONTRACTOR OR OWNER MUST NOTIFY THE ENGINEERING DEPARTMENT FOR MATERIAL AND CONSTRUCTION INSPECTION AT LEAST THREE (3) WORKING DAYS PRIOR TO THE TIME WORK IS STARTED ON THE PROPOSED PROJECT WHICH THE CITY OF MASSILLON WILL INSPECT.
3. MATERIALS:
SANITARY SEWER
THE CONTRACTOR SHALL USE SDR 35 PVC PIPE IN ACCORDANCE WITH ITEM 707.44 OF THE O.D.O.T. CONSTRUCTION AND MATERIAL SPECIFICATIONS (LATEST EDITION) UNLESS NOTED OTHERWISE ON THE PLANS, WITH CLASS "B" BEDDING IN ACCORDANCE WITH SECTION 603.04.
STORM SEWER
ALL STORM SEWERS 12" OR GREATER SHALL BE REINFORCED CONCRETE PIPE IN ACCORDANCE WITH ITEM 706.02 OF THE O.D.O.T. CONSTRUCTION AND MATERIAL SPECIFICATIONS (LATEST EDITION) UNLESS OTHERWISE NOTED ON THE PLANS, WITH CLASS "B" BEDDING IN ACCORDANCE WITH SECTION 603.04.
4. ALL TRENCH BACKFILL SHALL BE GRANULAR MATERIAL THAT CONFORMS TO O.D.O.T. ITEM 603.
5. ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.
6. ALL MANHOLE TOPS WITHIN STREET RIGHTS-OF-WAY ARE TO BE SET FLUSH WITH FINISHED GRADE. ALL MANHOLE TOPS IN EASEMENTS ARE TO BE 6 INCHES ABOVE FINISH GRADE. ALL MANHOLES SHALL BE SUPPLIED WITH SOLID LIDS EXCEPT IN EASEMENTS WHERE THE MANHOLE COVERS SHALL BE THE SOLID-LOCKING TYPE.
7. ALL SANITARY MANHOLES SHALL HAVE PRECAST CONCRETE BOTTOMS AND INVERTS CHANNELLED TO CARRY FLOW.
8. CONTACT OHIO UTILITIES PROTECTION SERVICE (1-800-362-2764) 48 HOURS BEFORE BEGINNING WORK.
9. COST OF WYES AND STUBS TO BE INCLUDED IN PRICE BID PER LINEAR FOOT OF SANITARY SEWER.
10. PRICES BID PER FOOT FOR ALL PIPE IS COMPLETE IN PLACE REGARDLESS OF SOIL OR ROCK CONDITIONS.
11. ALL FILL AREAS UNDER PAVEMENT, STRUCTURES AND OTHER AREAS INDICATED ON THE PLANS SHALL CONFORM TO CITY SPECIFICATIONS.
12. EACH SANITARY LATERAL (6" PVC SDR 35 MATERIAL) IS TO BE EXTENDED AT LEAST 12" INTO A LOT, OR BEYOND THE FARTHEST UTILITY, WHICHEVER IS GREATER. EACH LATERAL SHALL BE NO SHALLOWER THAN EIGHT (8) FEET BELOW GRADE AT ITS TERMINUS.
13. EXCESS EXCAVATION TO BE PLACED IN ACCORDANCE WITH THE APPROVED GRADING PLAN.
14. FERTILIZING, SEEDING AND MULCHING FOR THE RESTORATION OF DISTURBED AREAS BETWEEN THE PAVEMENT EDGES AND THE RIGHT-OF-WAY LINE AND EASEMENTS SHALL CONFORM TO O.D.O.T. ITEM 659 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (LATEST EDITION). TOPSOIL IS TO BE SPREAD 4" THICK OVER ALL DISTURBED AREAS.
15. ALL SANITARY SEWERS TO PASS AIR AND MANDRELL TESTS AND TO BE VIDEO-TAPED, WITH ALL COSTS TO BE AT THE DEVELOPER'S EXPENSE.
16. COST OF ANY SHEETING OR DEWATERING NECESSARY FOR THE INSTALLATION OF SANITARY SEWER SHALL BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF RESPECTIVE ITEMS. ANY FOUNDATION SLAG REQUIRED WILL BE INCLUDED IN THE COST OF THE SANITARY SEWER.
17. ALL EXISTING ROAD SURFACES, EASEMENTS OR RIGHTS OF WAY DISTURBED BY CONSTRUCTION OF ANY PART OF THIS IMPROVEMENT PLAN ARE TO BE RESTORED COMPLETELY TO THE "BEFORE CONSTRUCTION" CONDITION OR BETTER AND ALL COSTS ARE INCLUDED IN THE PAY ITEMS.
18. TEMPORARY SOIL EROSION AND SILTATION CONTROL WILL BE REQUIRED IN ACCORDANCE WITH O.D.O.T. ITEM 207 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (LATEST EDITION).
19. ALL SEWER RUN DISTANCES GIVEN ARE FROM CENTERLINE TO CENTERLINE OF MANHOLES OR INLETS. ALL INVERT ELEVATIONS ARE TO CENTERLINE OF MANHOLE OR INLET. ALL TOP ELEVATIONS ARE TO TOP OF MANHOLE OR BACK OF CURB AT INLETS. SEWER GRADES ARE ESTABLISHED FROM CENTERLINE TO CENTERLINE OF MANHOLE OR INLET AND ARE CARRIED THROUGH TO ASSURE POSITIVE FLOW FROM INVERT TO INVERT.
20. ALL SANITARY LATERALS SHALL BE LAID AT NO LESS THAN 1.00%.
21. AS-BUILT DRAWINGS ARE REQUIRED UPON CONSTRUCTION COMPLETION.

SHEET 1 OF 17

As Built Drawing
02 SD 02



KENYON CREEK ESTATES			PROJECT NUMBER		
PHASE I			A.R. LOCKHART DEVELOPMENT CO.		
CITY OF MASSILLON, OHIO			800 W. WATERLOO RD. ABRON, OH 44314		
			PH. 330-745-6520 FAX 330-745-0716		
			THE OIL AND GAS PRODUCERS UNDERGROUND PROTECTION SERVICE		
			GRANVILLE, OHIO 43033-0208		
			PHONE (614) 587-0486 OR		
			CALL TOLL FREE 800-925-0988		
			2 WORKING DAYS BEFORE YOU DIG		
			CALL TOLL FREE: 800-362-2764		
			SITE AND UTILITY PLAN		
			As Built Drawing		
			2		
			17		



STARK COUNTY BENCH MARK #1:
DISK IN TOP OF CONCRETE WALL, S.W. CORNER
OF BRIDGE OVER CREEK AT KENYON CREEK AVE.
(STAMPED EL. 1008.72)

EROSION CONTROL LEGEND

CE	CONSTRUCTION ENTRANCE	
DD	DIVERSION DIKE	
SF	SILT FENCE	
IP	INLET PROTECTION	
RP	ROCK CHANNEL PROTECTION	

- EROSION CONTROL NOTES**
1. THIS PLAN IS IN CONFORMANCE WITH LOCAL WASTE DISPOSAL, SANITARY AND HEALTH REGULATIONS.
 2. DUMPED ROCK CHANNEL PROTECTION IS TO BE PLACED AS PER PLAN.
 3. INSTALL GEOTAB OR EQUAL FABRIC FENCE AS SHOWN, 3.5' IN HEIGHT, AS PER MANUFACTURER'S RECOMMENDATIONS. THIS FABRIC FENCE WILL BE USED DURING GRADING OPERATIONS AND UNTIL ALL BARE AREAS ARE STABILIZED.
 4. ALL AREAS LEFT BARE DUE TO CONSTRUCTION AND ARE NOT DISTURBED FOR 14 DAYS SHALL BE SEEDED.
 5. TEMPORARY SEEDING OF ENTIRE SITE SHALL OCCUR BY NOVEMBER 1st, UNLESS THE SITE CAN BE FINAL SEEDED BY NOVEMBER 15th.
 6. SEDIMENT PONDS/TRAPS AND PERMETER CONTROL SHALL BE IMPLEMENTED AS A FIRST STEP OF GRADING AND WITHIN 7 DAYS FROM THE START OF GRUBBING AND SHALL CONTINUE TO FUNCTION UNTIL UPLAND AREAS ARE STABILIZED.
 7. DISTURBED AREAS WHICH WILL REMAIN UNWORKED FOR A PERIOD OF 45 DAYS OR MORE, SHALL BE STABILIZED WITH SEEDING AND MULCHING OR OTHER APPROPRIATE MEANS WITHIN 7 DAYS.
 8. EROSION CONTROL BLANKETS WITH MATTING WILL BE USED ON DITCHES GREATER THAN 1.5% AND ALL OTHER SLOPES GREATER THAN 6% GRADE.
 9. BUILDER IS RESPONSIBLE FOR EROSION CONTROL ON EACH INDIVIDUAL LOT. BUILDER MUST FILE AN INDIVIDUAL LOT NOTICE OF INTENT (NOI) WITH OHIO E.P.A.
 10. NO SOLID OR LIQUID WASTE SHALL BE DISCHARGED INTO STORM WATER RUNOFF.
 11. OFF-SITE SEDIMENT TRACKING SHALL BE MINIMIZED. CONSTRUCTION VEHICLES ARE LIMITED TO THE CONSTRUCTION ACCESS ROAD(S) NOTED ON THE PLAN.
 12. ALL EROSION AND SEDIMENT CONTROL PRACTICES MUST MEET THE STANDARDS AND SPECIFICATIONS OF THE OHIO RAINWATER AND LAND DEVELOPMENT HANDBOOK (1998).
 13. OTHER EROSION CONTROL ITEMS MAY BE NECESSARY DUE TO ENVIRONMENTAL CONDITIONS.
 14. REGULAR INSPECTION AND MAINTENANCE WILL BE PROVIDED FOR ALL EROSION AND SEDIMENT CONTROL PRACTICES. PERMANENT RECORDS OF MAINTENANCE AND INSPECTIONS MUST BE KEPT THROUGHOUT THE CONSTRUCTION PERIOD.
 15. INSPECTIONS MUST BE MADE A MINIMUM OF ONCE EVERY 7 DAYS AND IMMEDIATELY AFTER STORM EVENTS GREATER THAN 0.5 INCHES OF RAIN IN A 24-HOUR PERIOD. PROVIDE THE NAME OF THE INSPECTOR, MAJOR OBSERVATIONS, DATE OF INSPECTION AND ANY CORRECTIVE MEASURES TAKEN.

THE OIL AND GAS PRODUCERS
UNDERGROUND PROTECTION SERVICE
P.O. BOX 308
GRANVILLE, OHIO 43023-0308
PHONE (614) 587-0486 OR
CALL TOLL FREE 800-925-0988

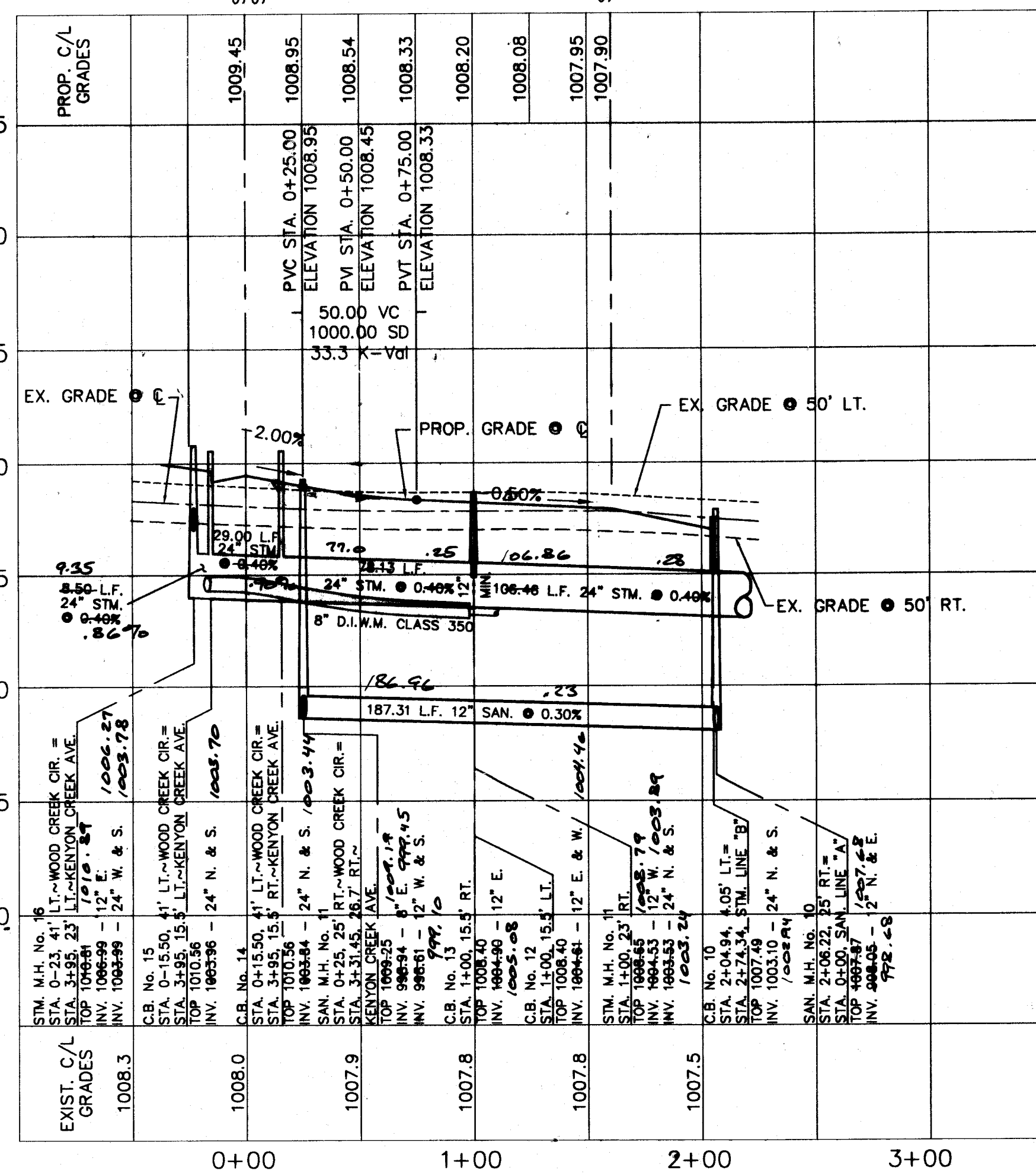
**2 WORKING DAYS
BEFORE YOU DIG**
CALL TOLL FREE: 800-362-2764
UNDERGROUND UTILITY PROTECTION SERVICE

DATE: MARCH, 2002		3
SCALE: H: 1" = 50'		2
SCALE: V: 1" = 5'		1
DESIGNER: J.S.S.	DATE	No.
DRAFTER: C.T.B.		
KENYON CREEK ESTATES PHASE I CITY OF MASSILLON, OHIO		
PROJECT NUMBER		
A.R. LOCKHART DEVELOPMENT CO. 800 W. WATERLOO RD AKRON, OH 44314 PH: 330-745-6250 FAX: 330-745-0716		
3 17		

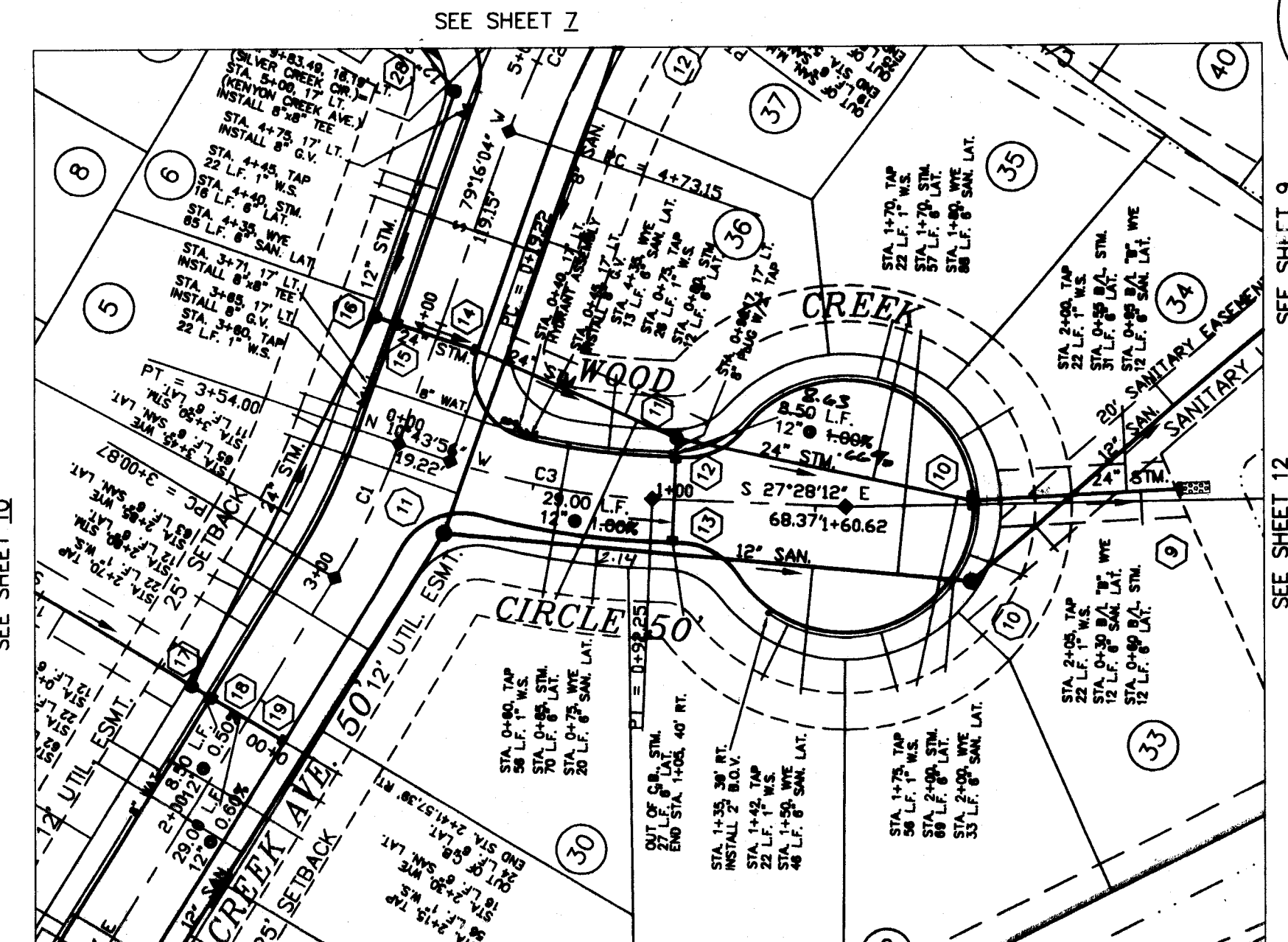
GRADING AND S.W.P.P. PLAN

As Built Drawing

T:\CURRENT\JOBS\KENYON\2-PR-FINAL.DWG 5/29/02



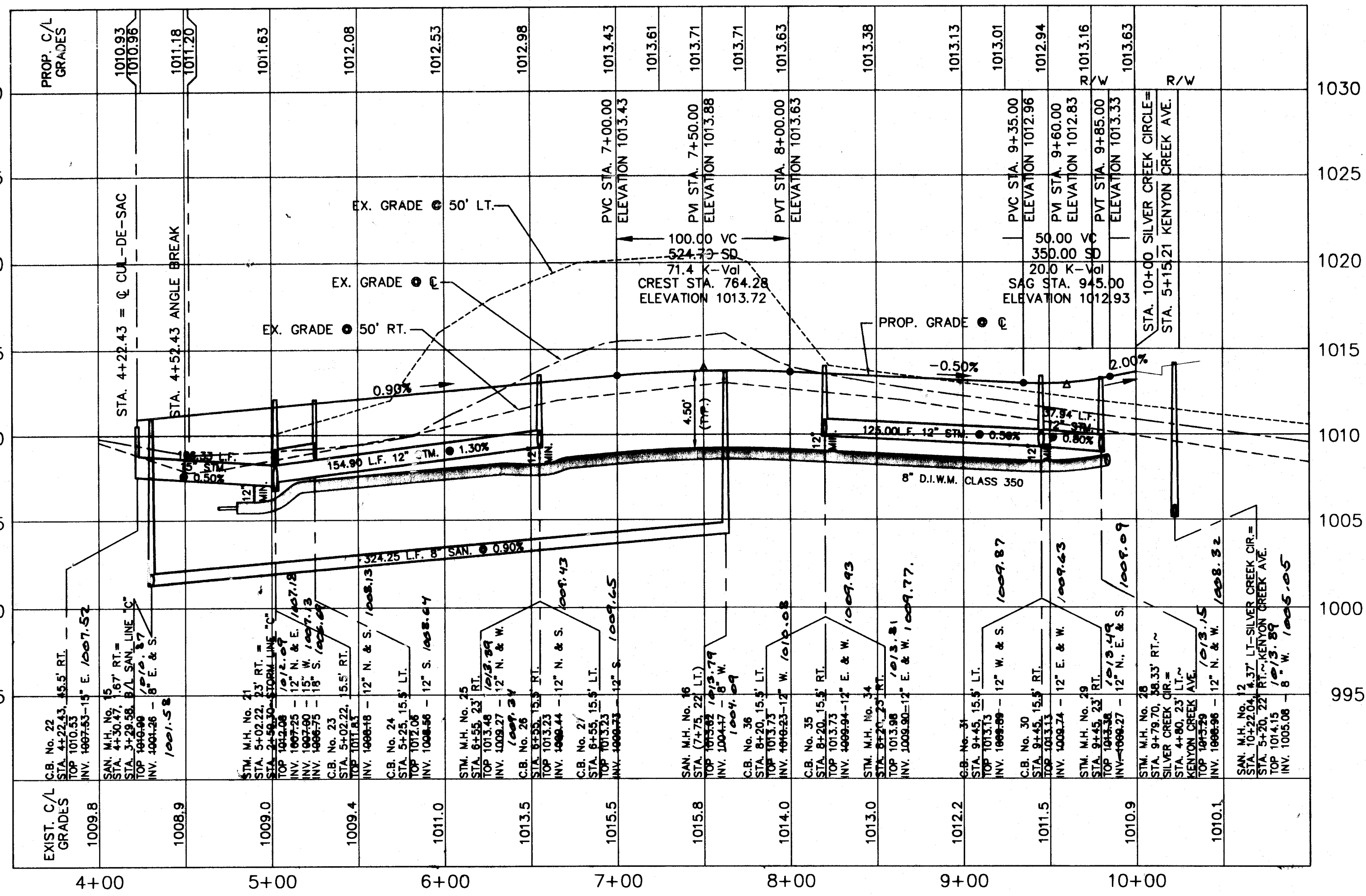
CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C3	250.00'	73.03'	72.77'	S 19°06'04" E	16°44'17"



WOOD CREEK CIRCLE

STA. 10+00 WOOD CREEK CIRCLE =
STA. 3+54.00 KENYON CREEK AVE.

STA. 1+60.82 = CUL-DE-SAC

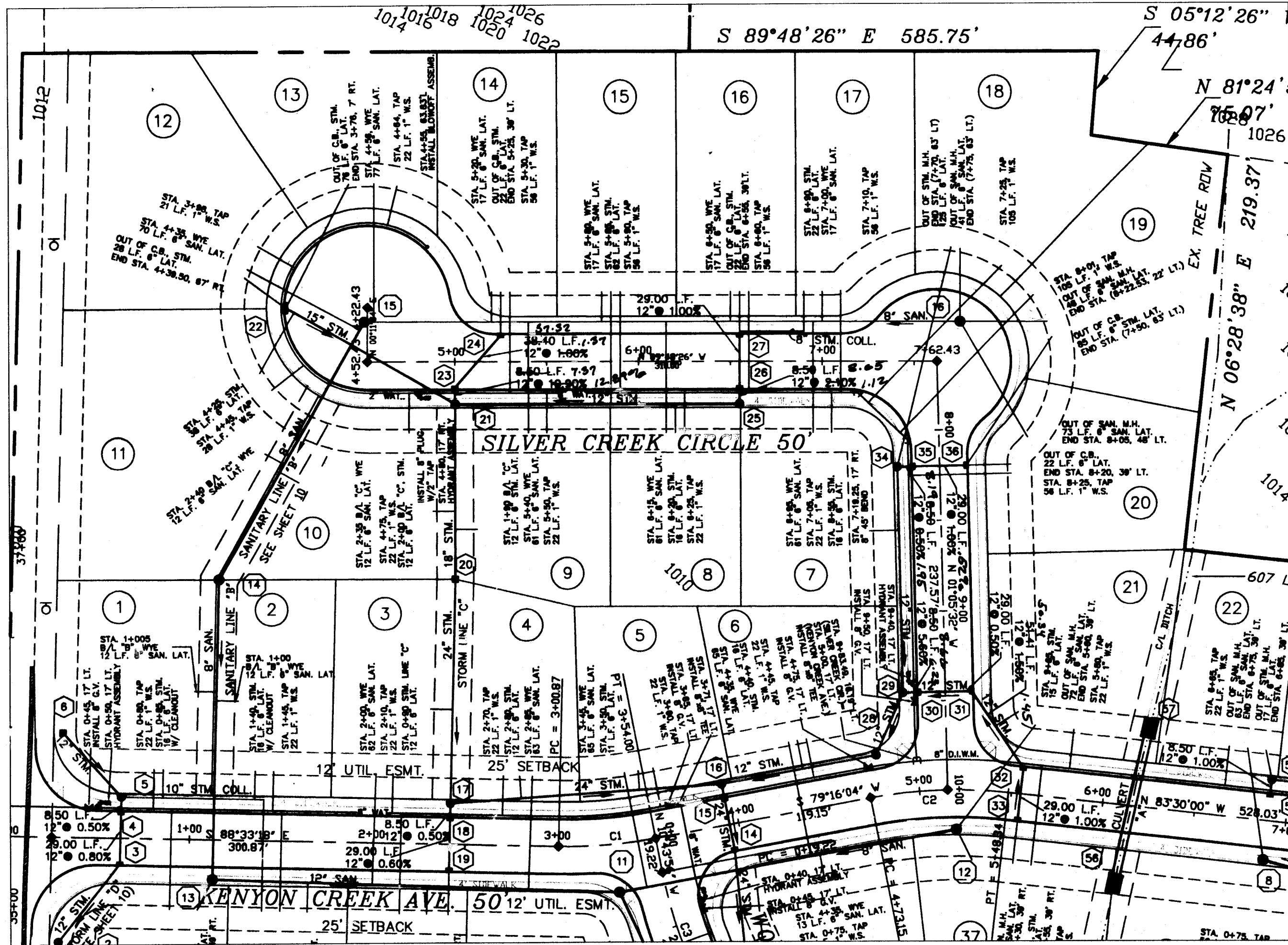


SILVER CREEK CIRCLE

SEE THIS SHEET

SEE SHEET 10

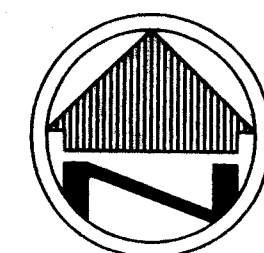
SEE SHEET 10



STARK COUNTY BENCH MARK #1:
DISK IN TOP OF CONCRETE WALL, S.W. CORNER
OF BRIDGE OVER CREEK AT KENYON CREEK AVE.
(STAMPED EL. 1008.72)

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	250.00'	53.13'	53.03'	N 85°21'23" E	12°10'38"
C2	250.00'	75.19'	74.91'	N 87°53'02" E	17°13'56"

0' 50' 100' 150'



A. R. LOCKHART DEVELOPMENT CO.
800 W. WATERLOO RD ARLINGTON, OH 43014
PH. 330-745-6200 FAX 330-745-0716

KENYON CREEK ESTATES
PHASE 1
CITY OF MASSILLON, OHIO

DATE	REVISION
MARCH, 2002	3
SCALE: H: 1" = 50'	2
SCALE: V: 1" = 5'	1
DESIGNER: J.S.S.	
DRAFTER: C.T.B.	

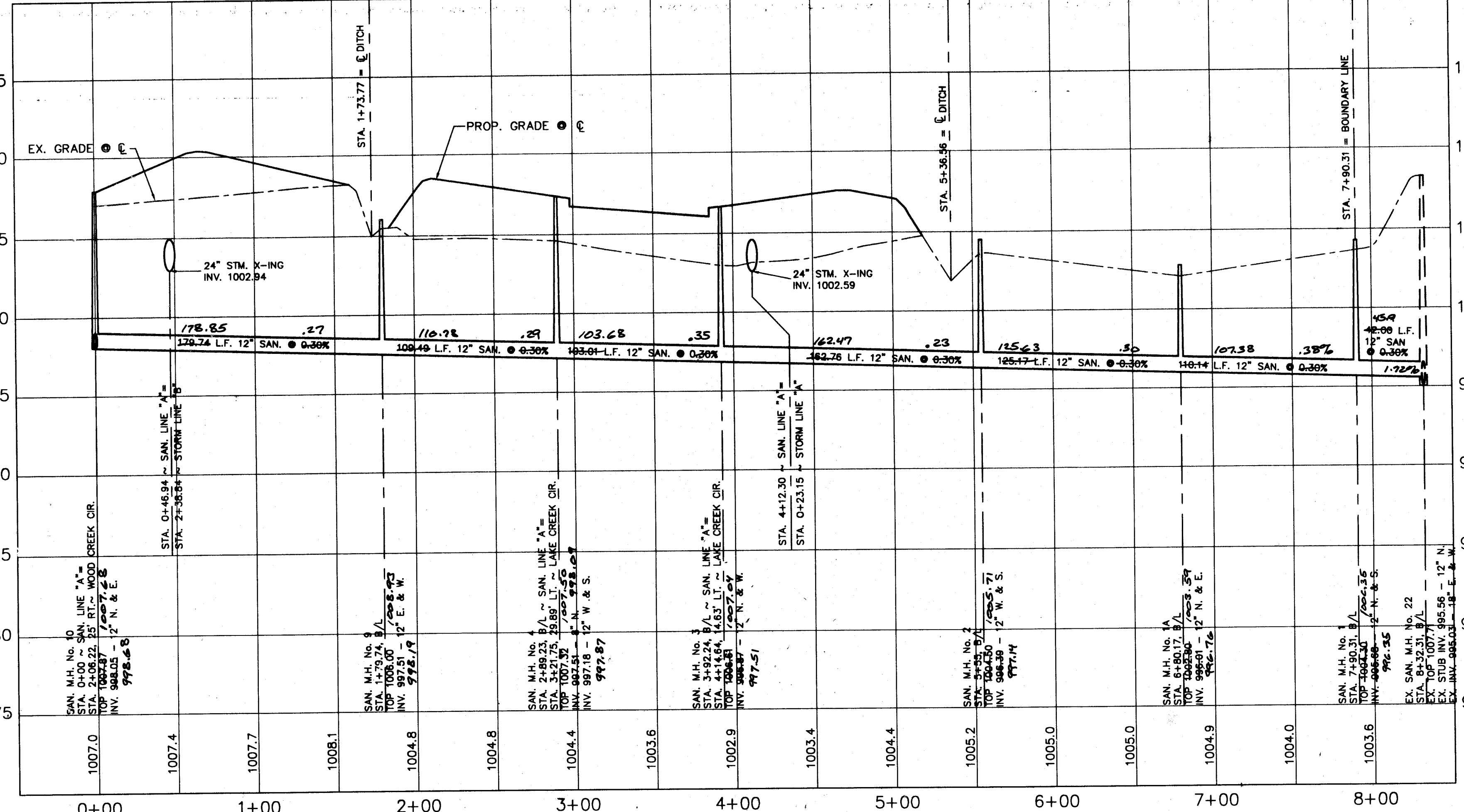
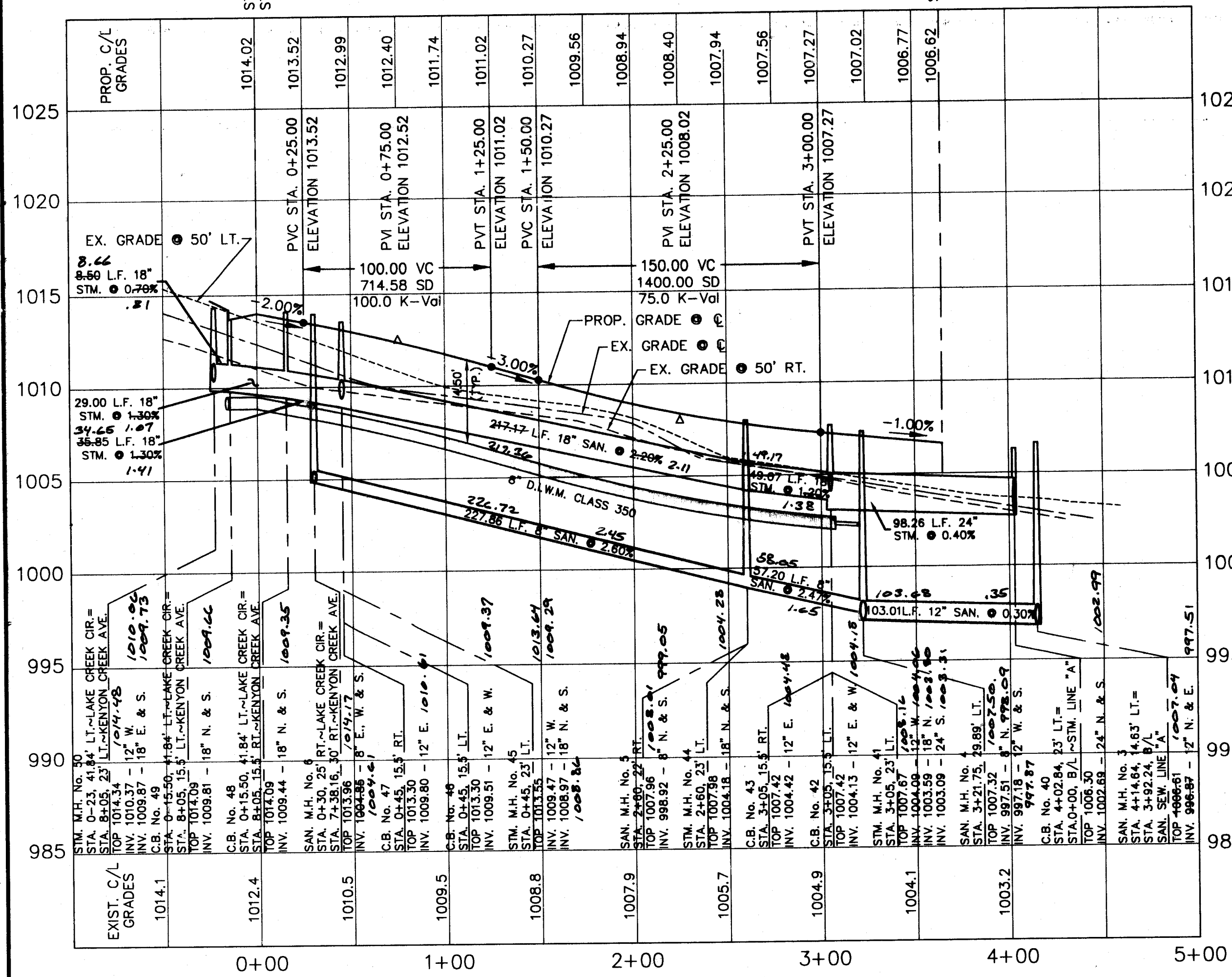
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GEO UTILITIES PROTECTION SERVICE

8
17

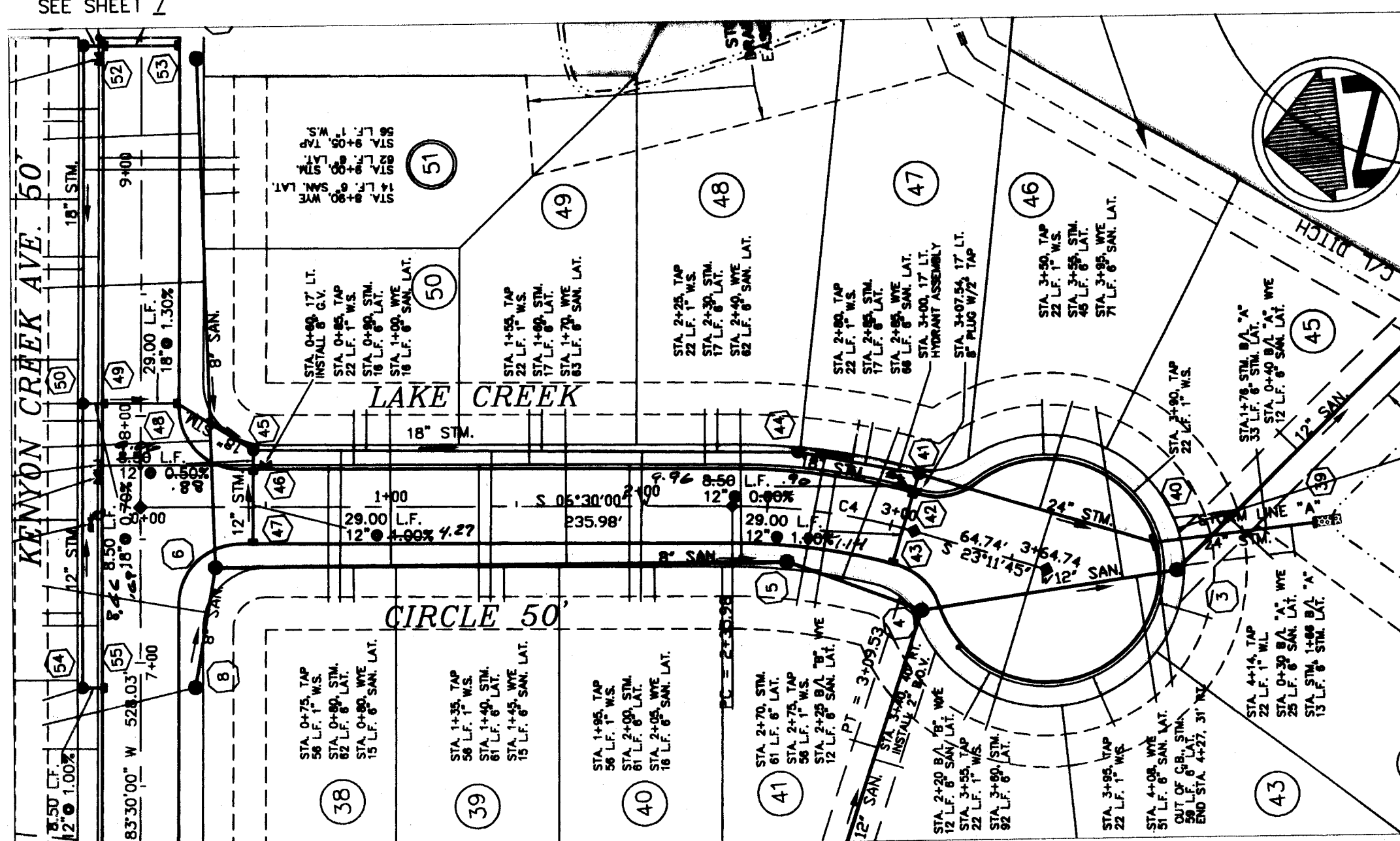
WOOD CREEK CIRCLE AND SILVER CREEK CIRCLE

As Built Drawing.



LAKE CREEK CIRCLE AND SANITARY LINE 'A'

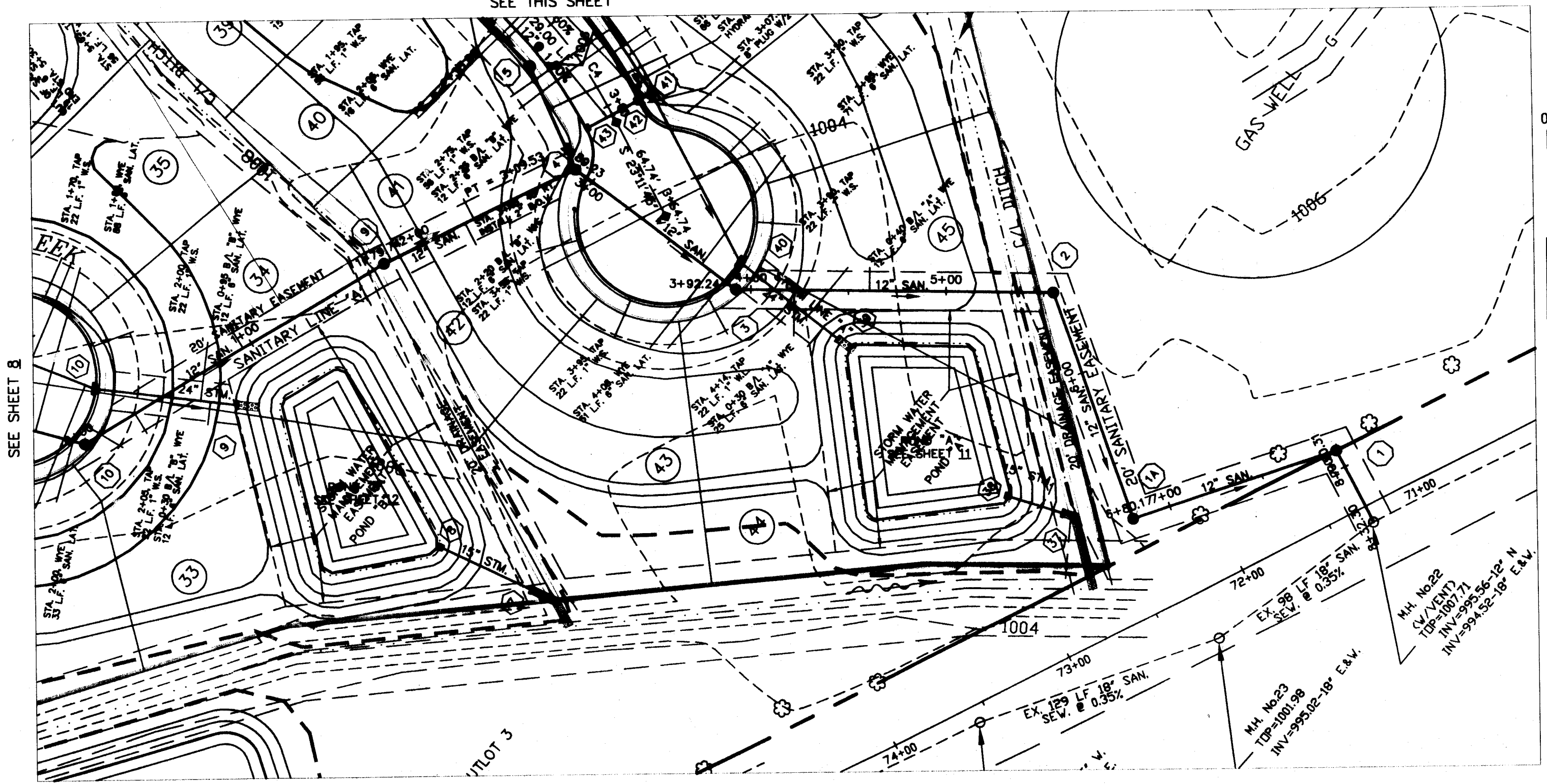
As Built Drawing.



LAKE CREEK CIRCLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C4	250.00'	73.55'	73.29'	N 14°55'42" E	16°51'24"

STA. 3+64.74 = C/L CUL-DE-SAC



SANITARY LINE 'A'

THE OIL AND GAS PRODUCERS
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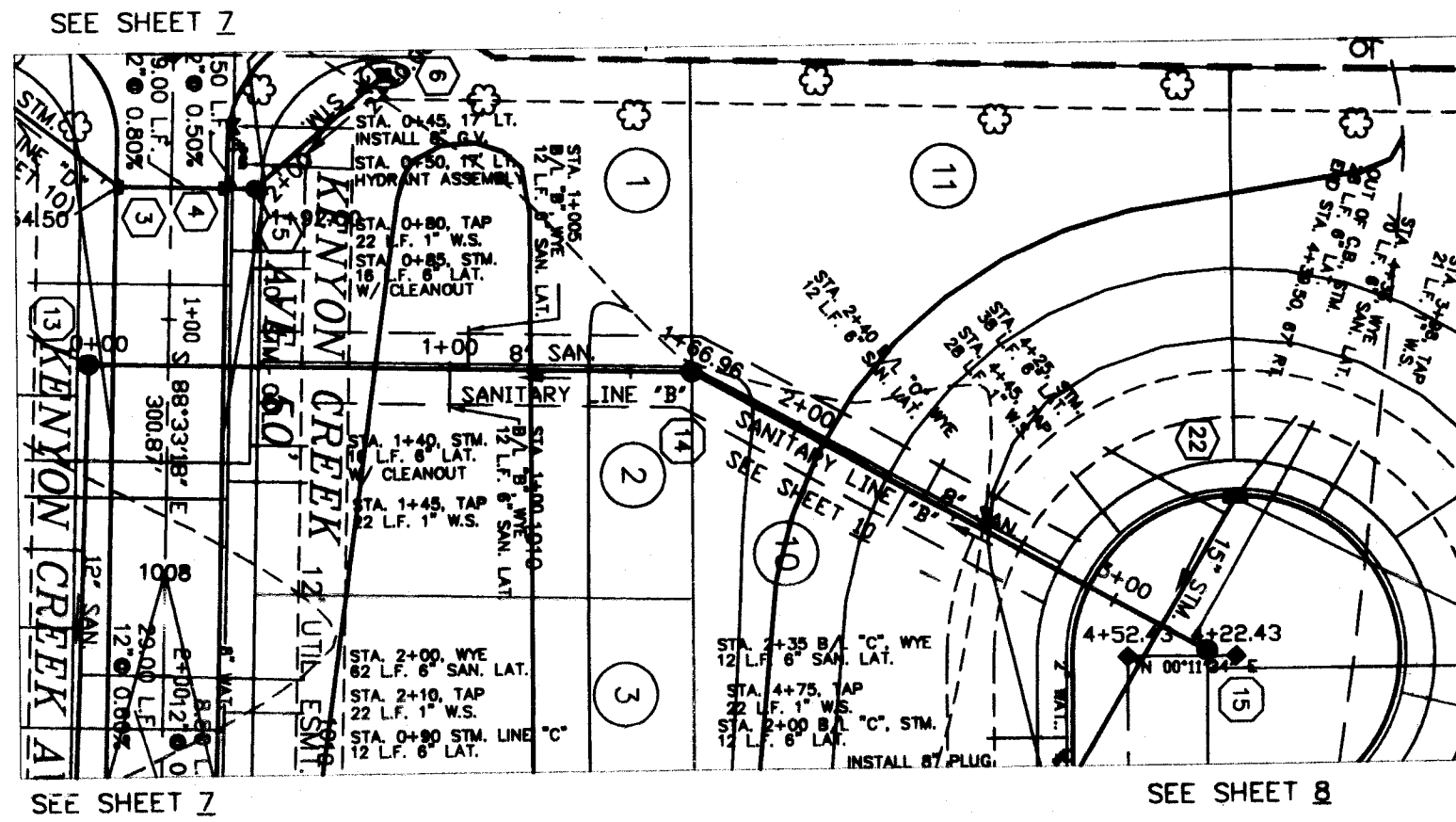
STARK COUNTY BENCH MARK #1:
DISK IN TOP OF CONCRETE WALL, S.W.
CORNER OF BRIDGE OVER CREEK AT
KENYON AVE. (STAMPED EL. 1008.72)

KENYON CREEK ESTATES
PHASE I
CITY OF MASSILLON, OHIO

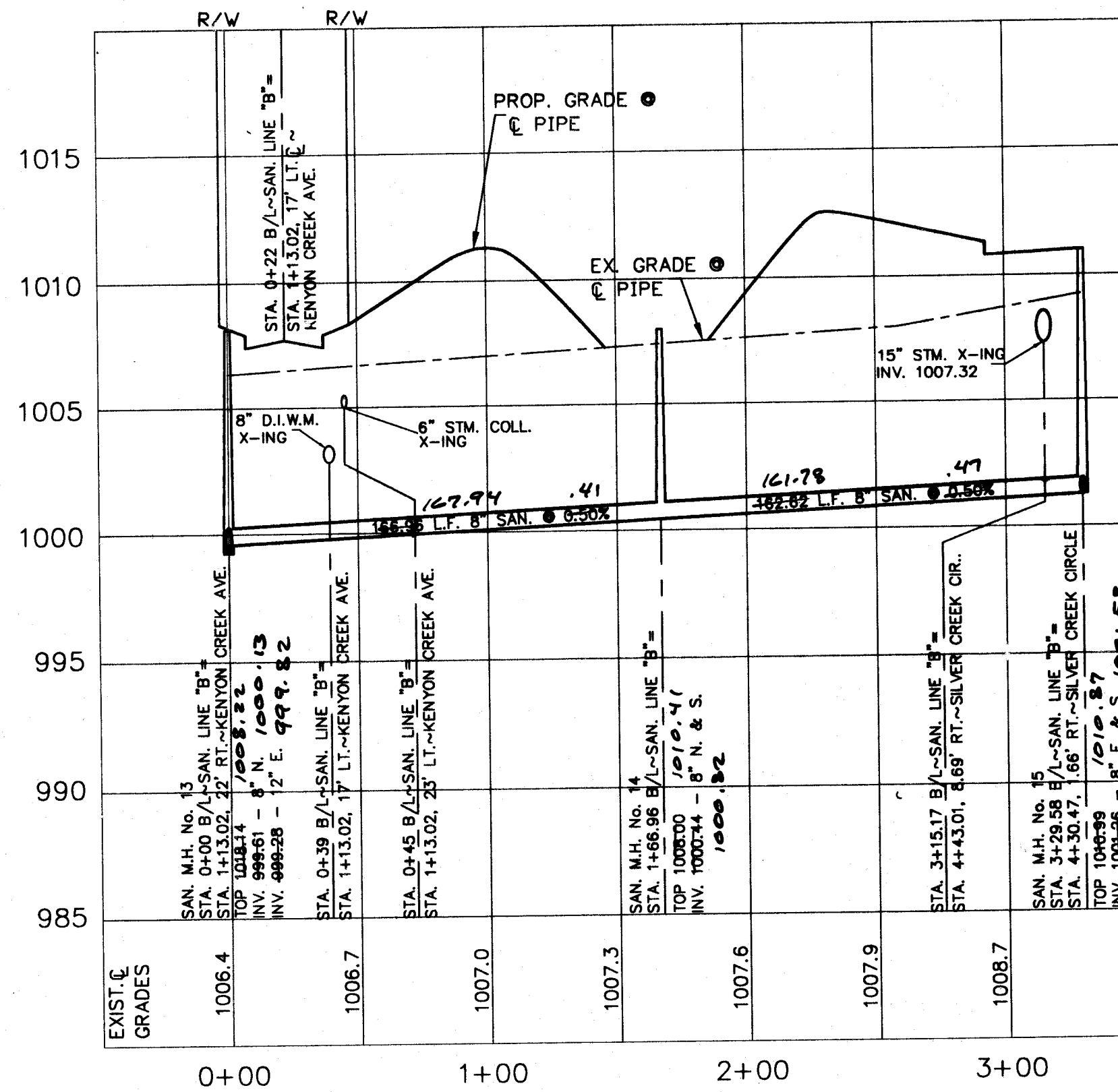
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800 W. WATERLOO RD. AKRON, OH 44314
Ph. 330-745-6520 Fax. 330-745-0716

PROJECT NUMBER
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DESIGNER: J.S.S.
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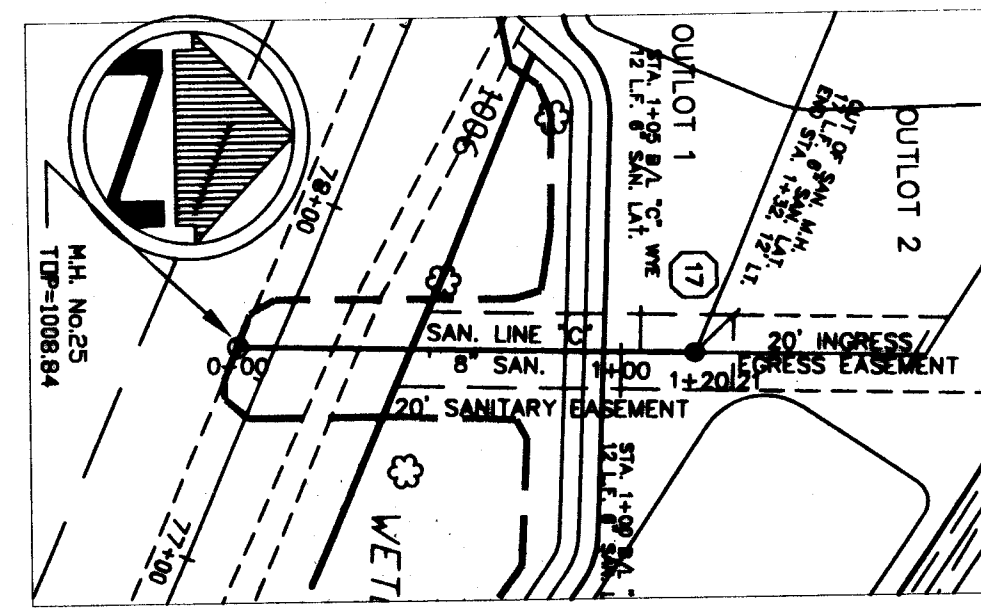
REVISION
No. DATE



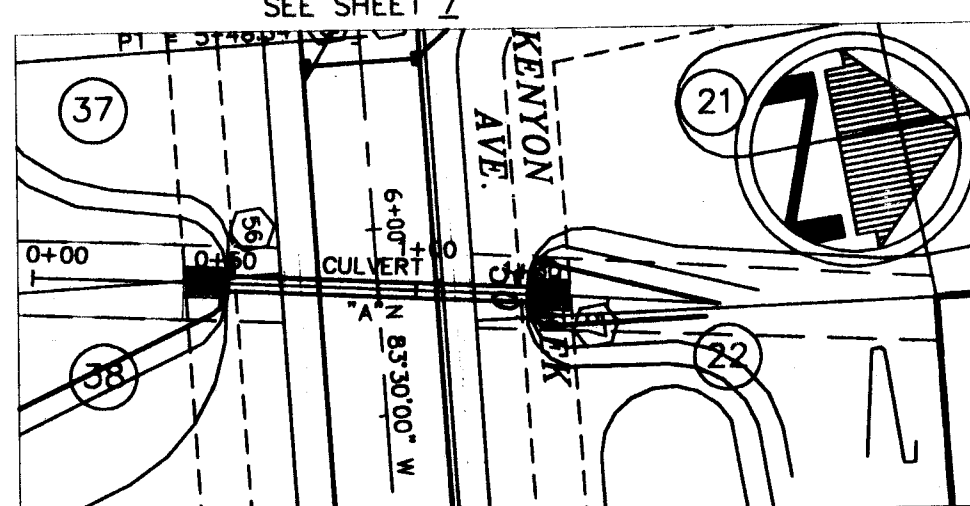
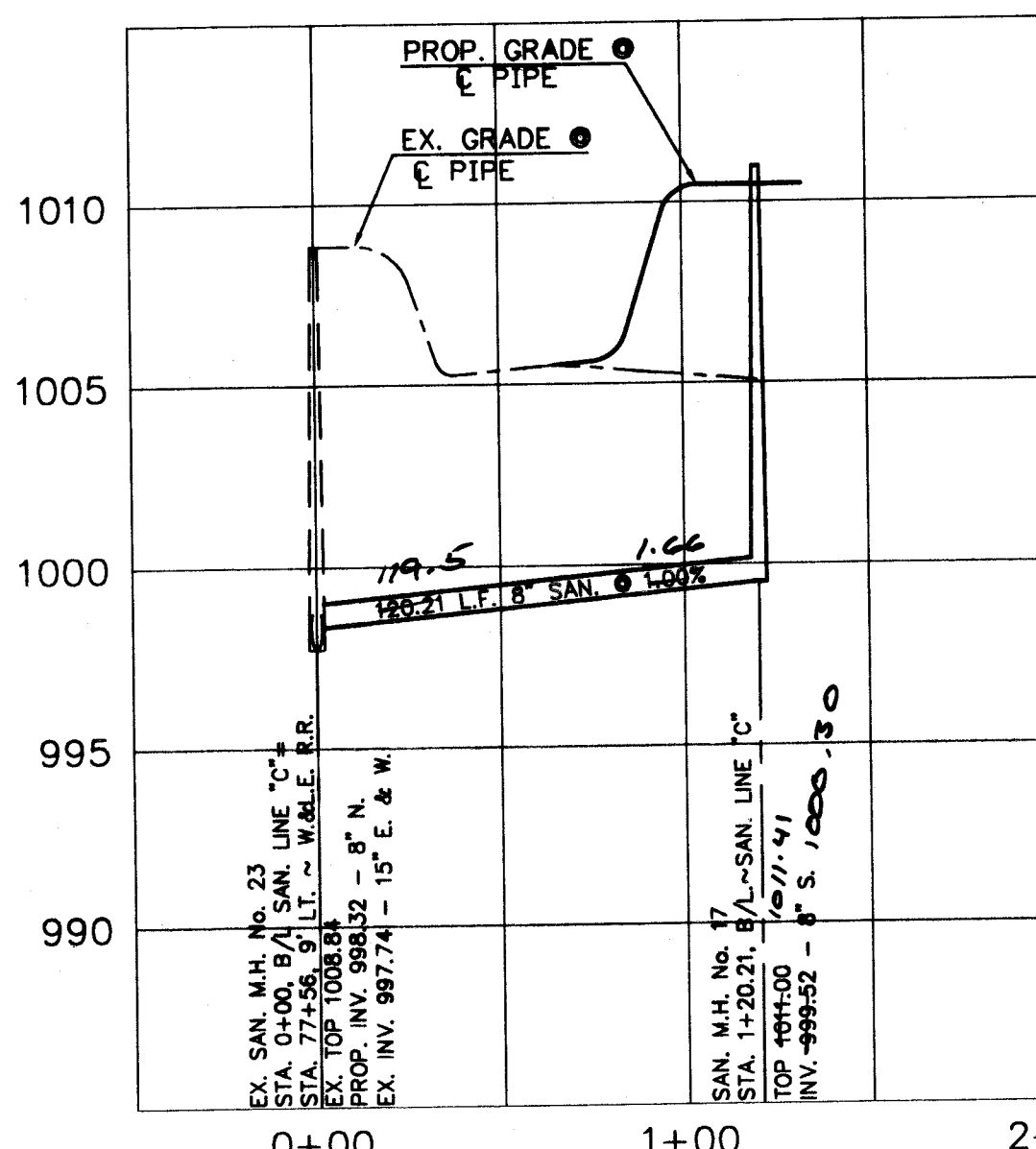
SANITARY LINE 'B'



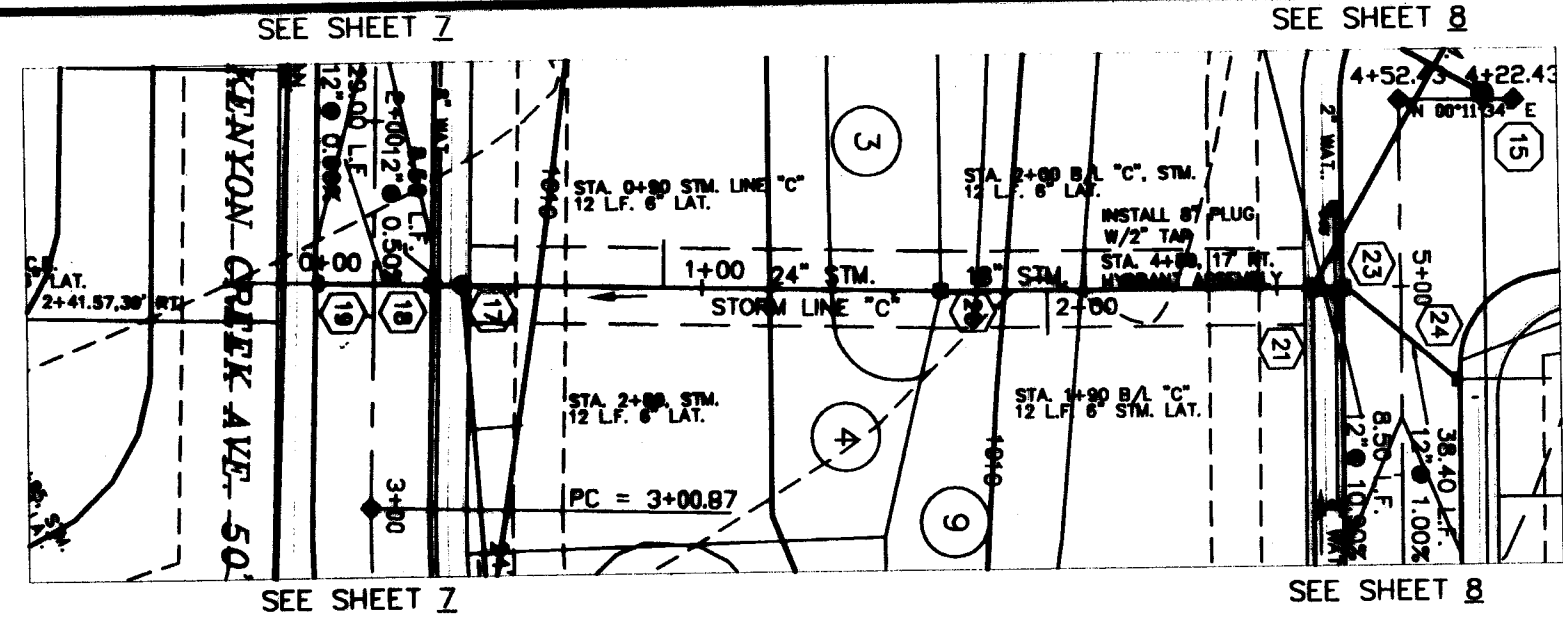
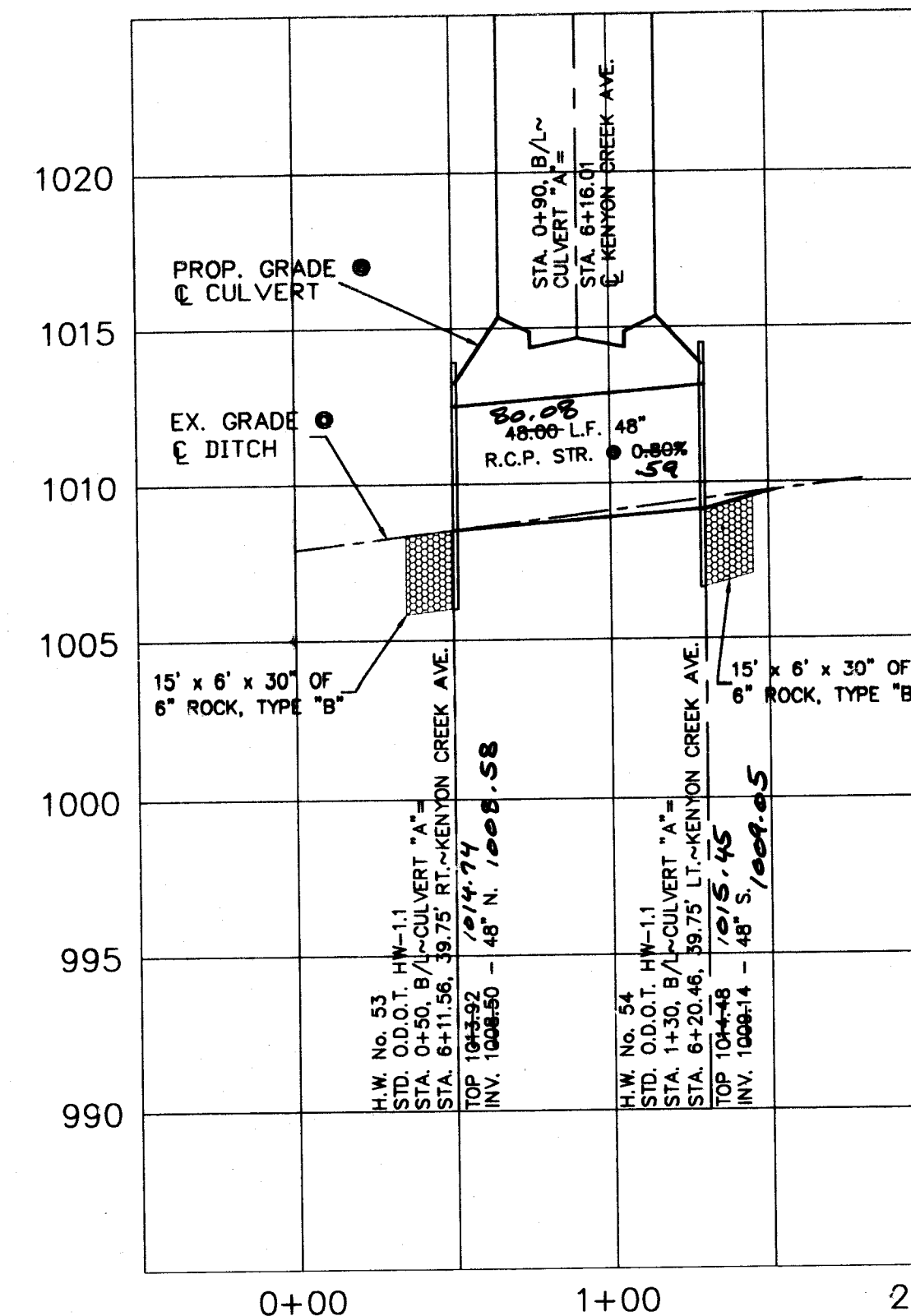
NOTE:
SEE SHEETS 11 AND 12 FOR STORM LINES "A" AND "B" RESPECTIVELY.



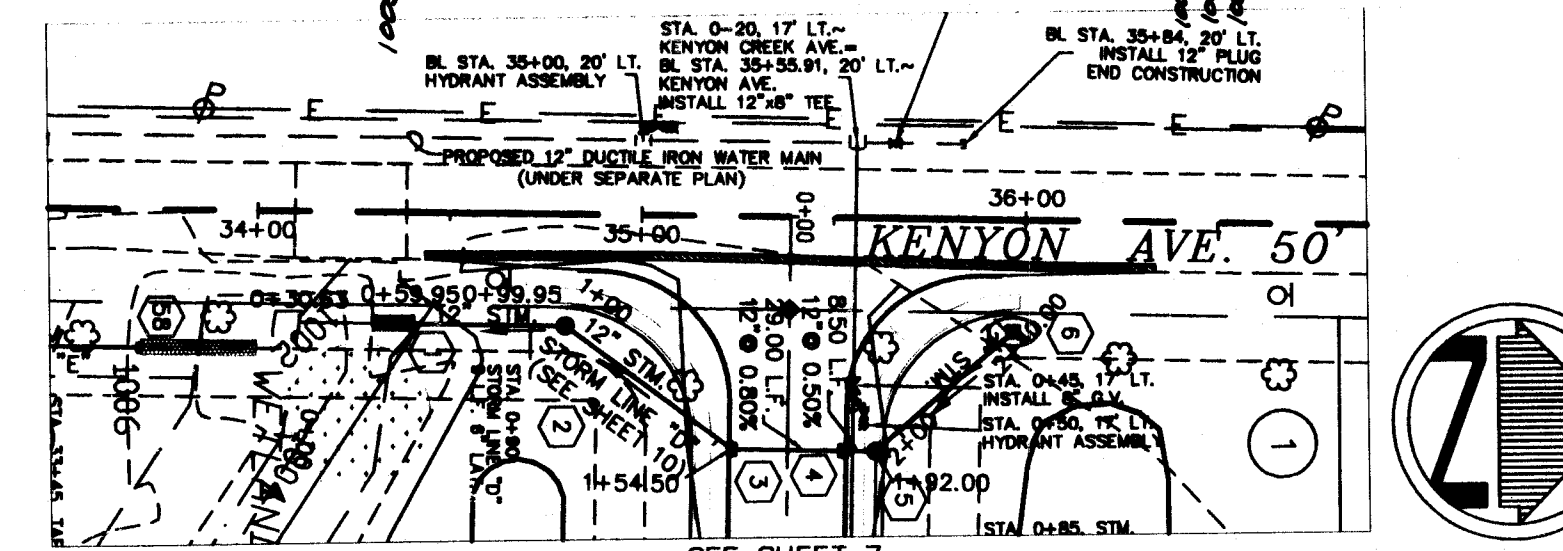
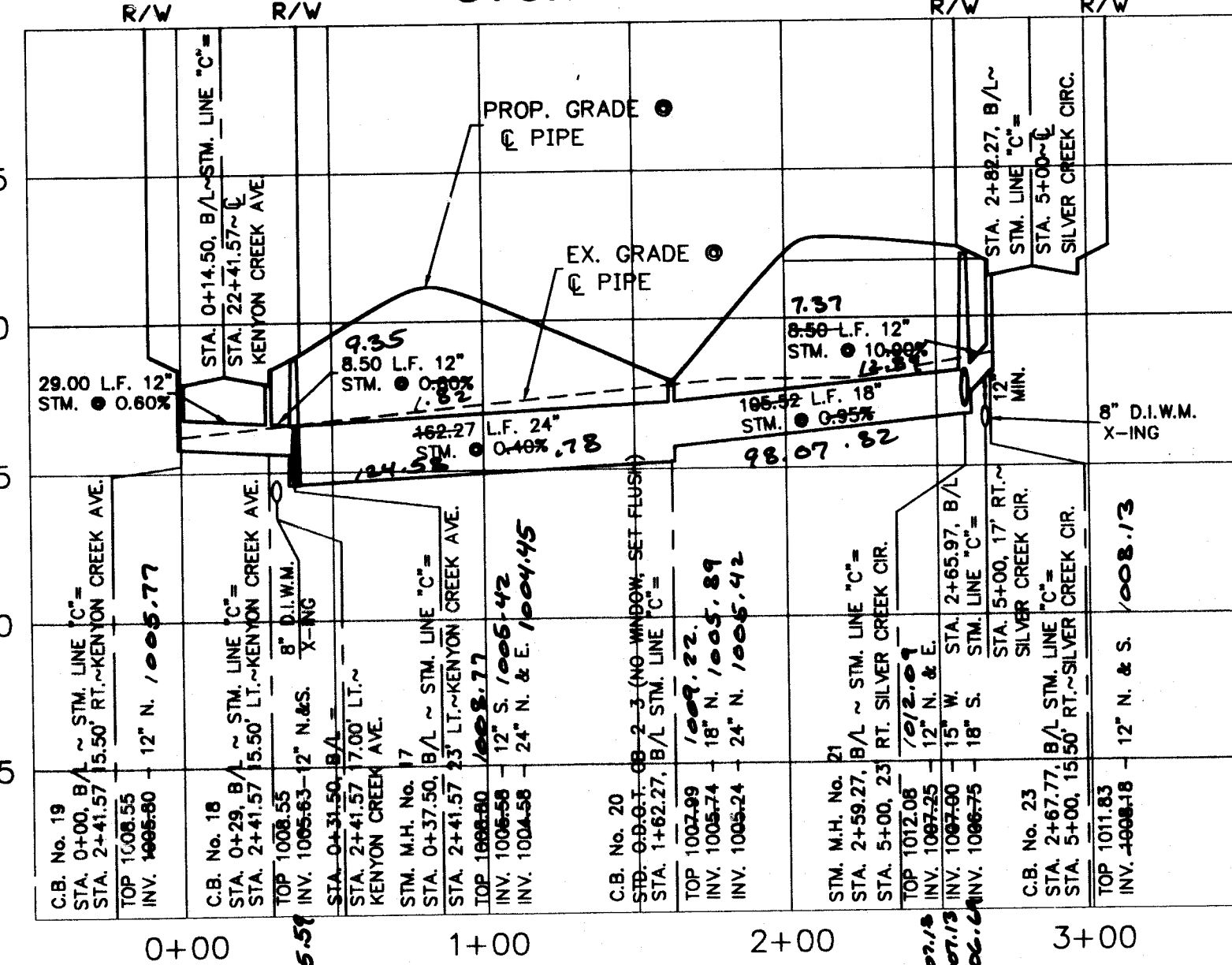
SANITARY LINE 'C'



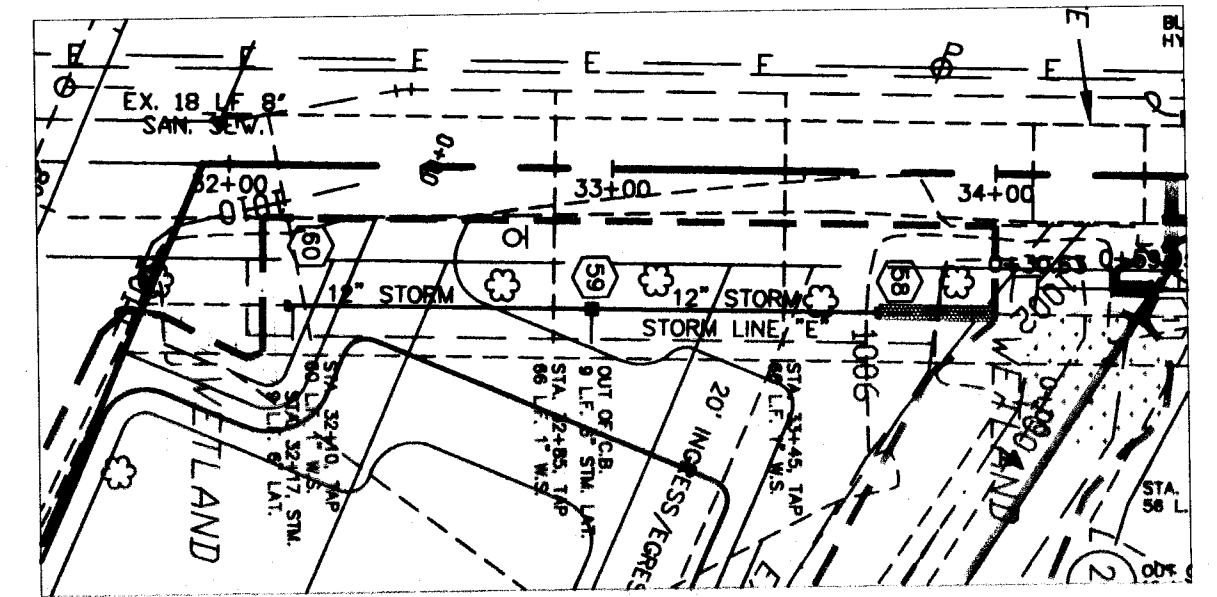
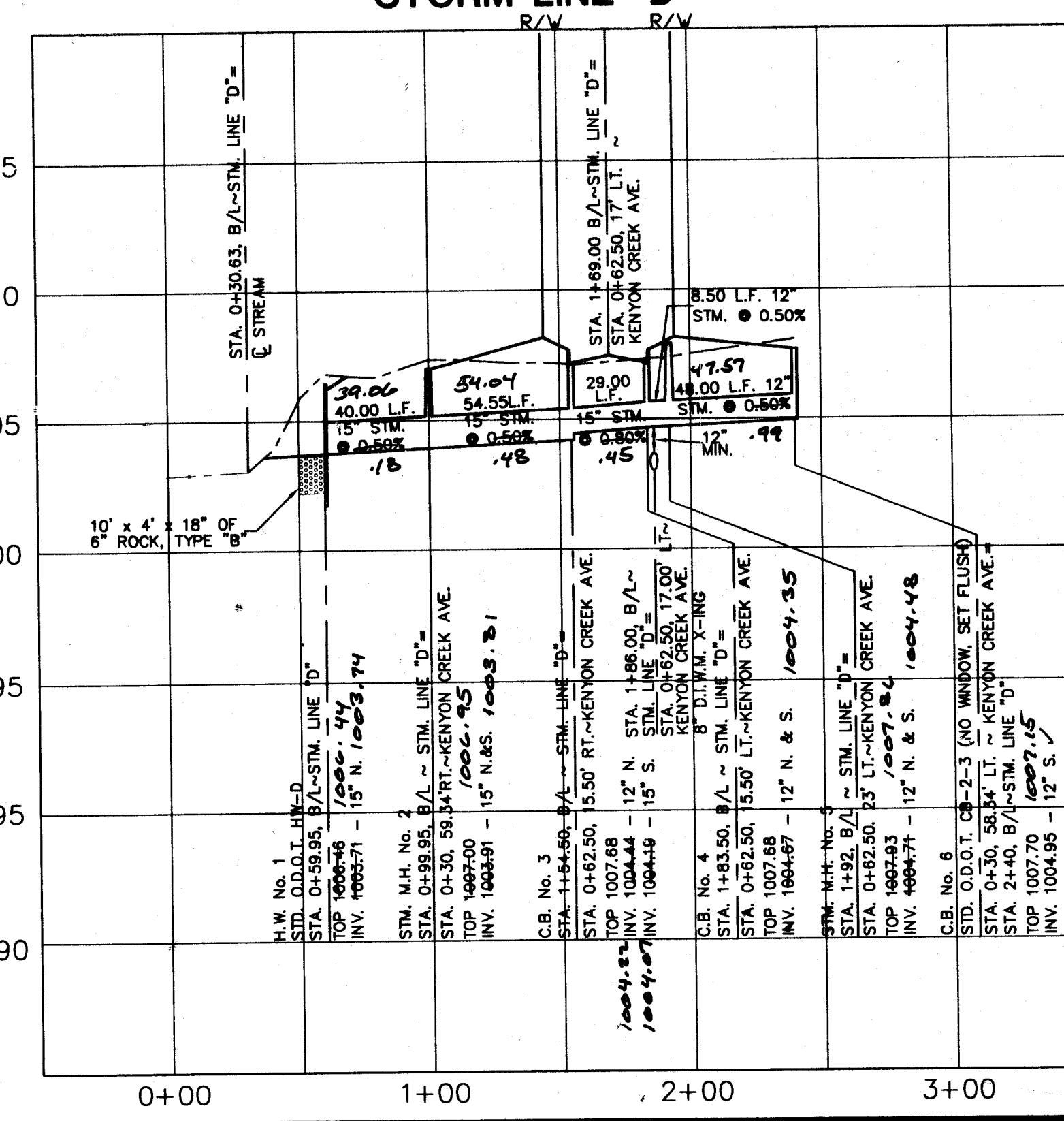
CULVERT 'A'



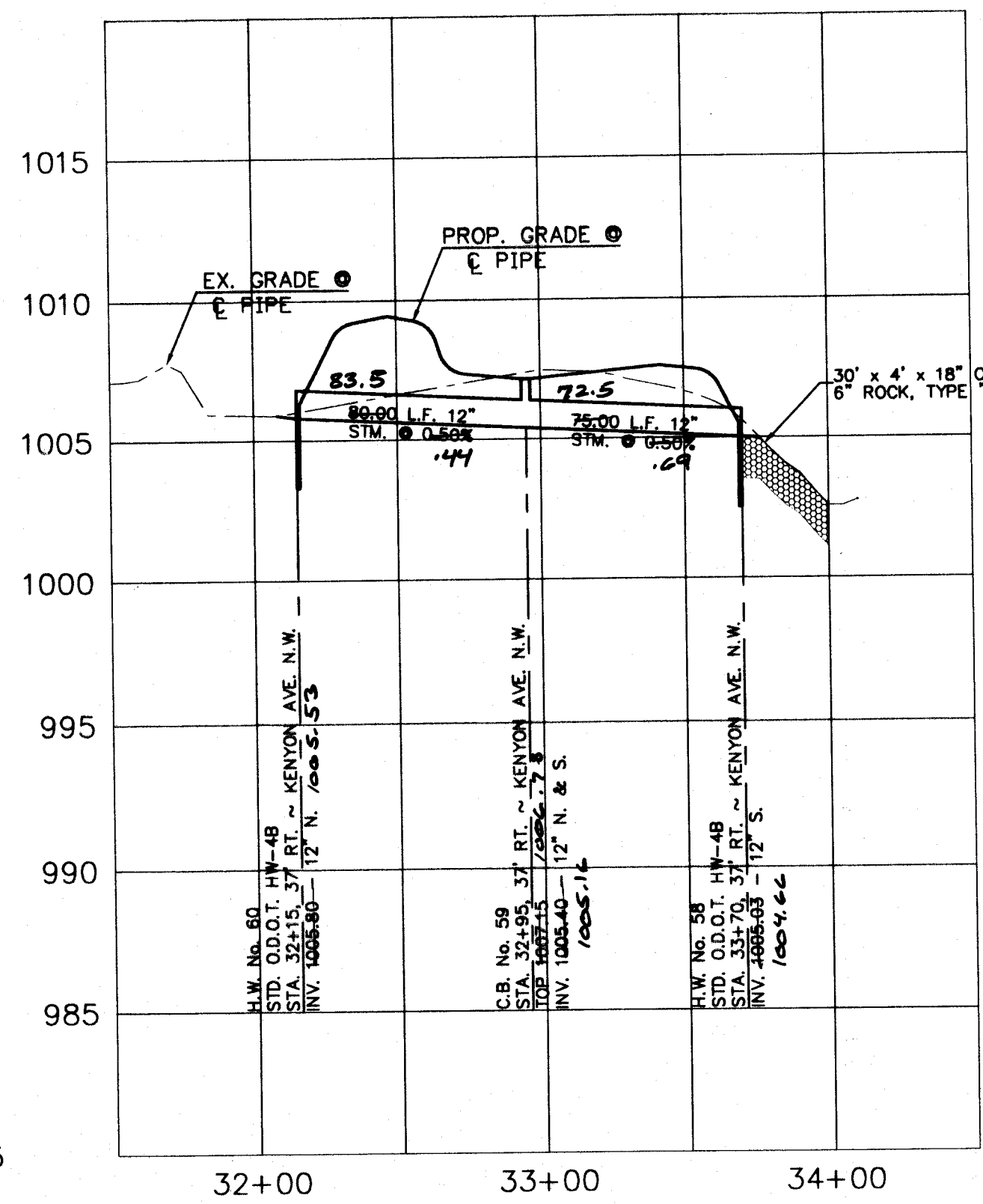
STORM LINE 'C'



STORM LINE 'D'



STORM LINE 'E'



STARK COUNTY BENCH MARK #1:
DISK IN TOP OF CONCRETE WALL, S.W. CORNER
OF BRIDGE OVER CREEK AT KENYON CREEK AVE.
(STAMPED EL. 1008.72)



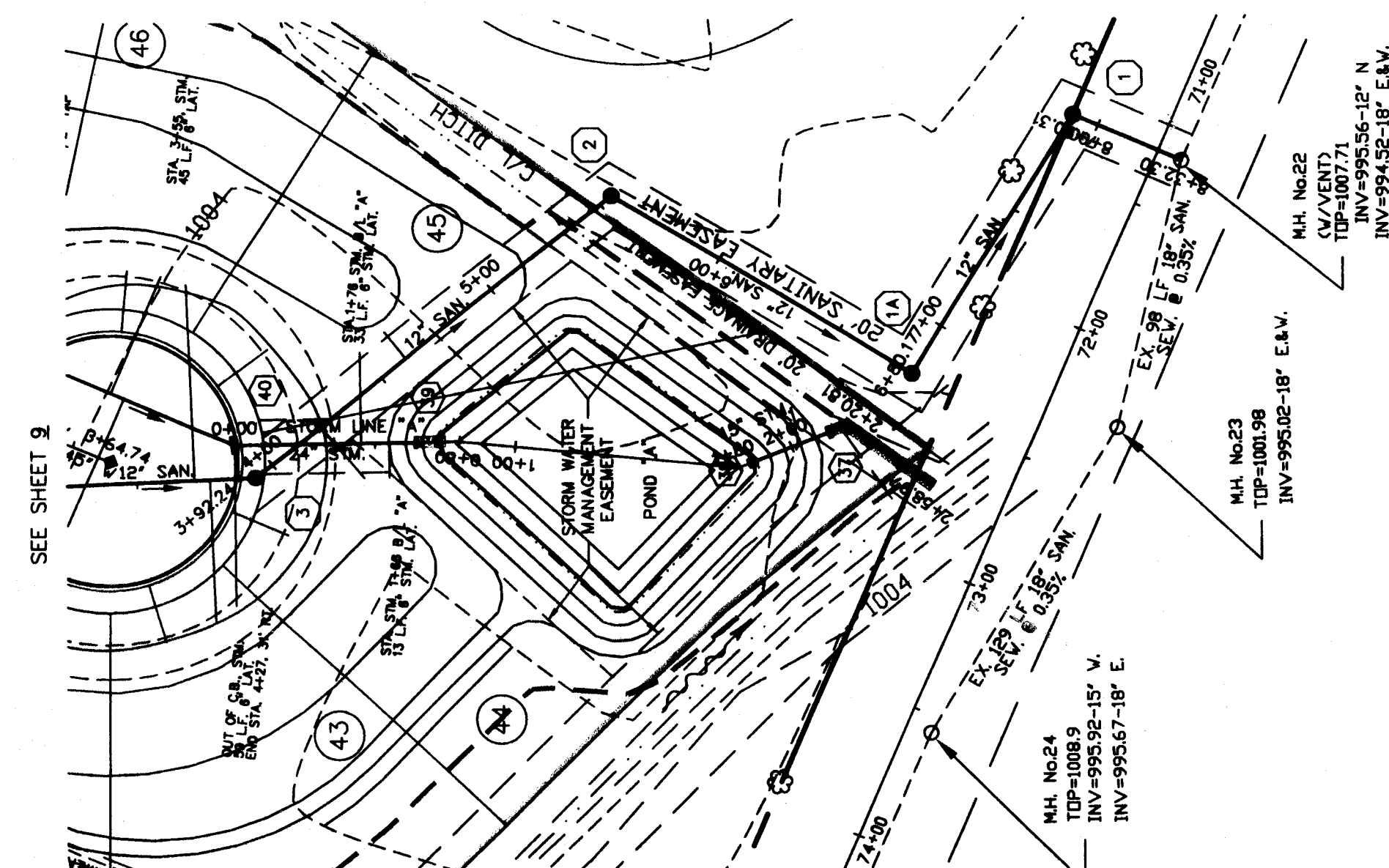
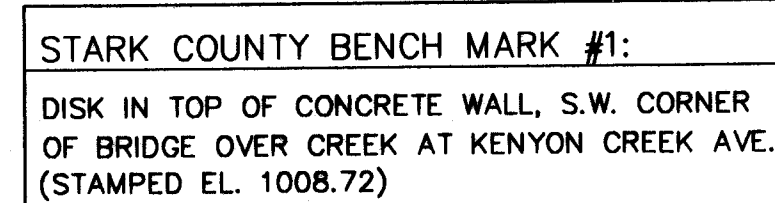
THE OIL AND GAS PRODUCERS
UNDERGROUND PROTECTION SERVICE
P.O. BOX 208
GRANVILLE, OHIO 43023-0208
PHONE (614) 587-0486 OR
CALL TOLL FREE 800-925-0988

2 WORKING DAYS
BEFORE YOU DIG
CALL TOLL FREE: 800-362-2764

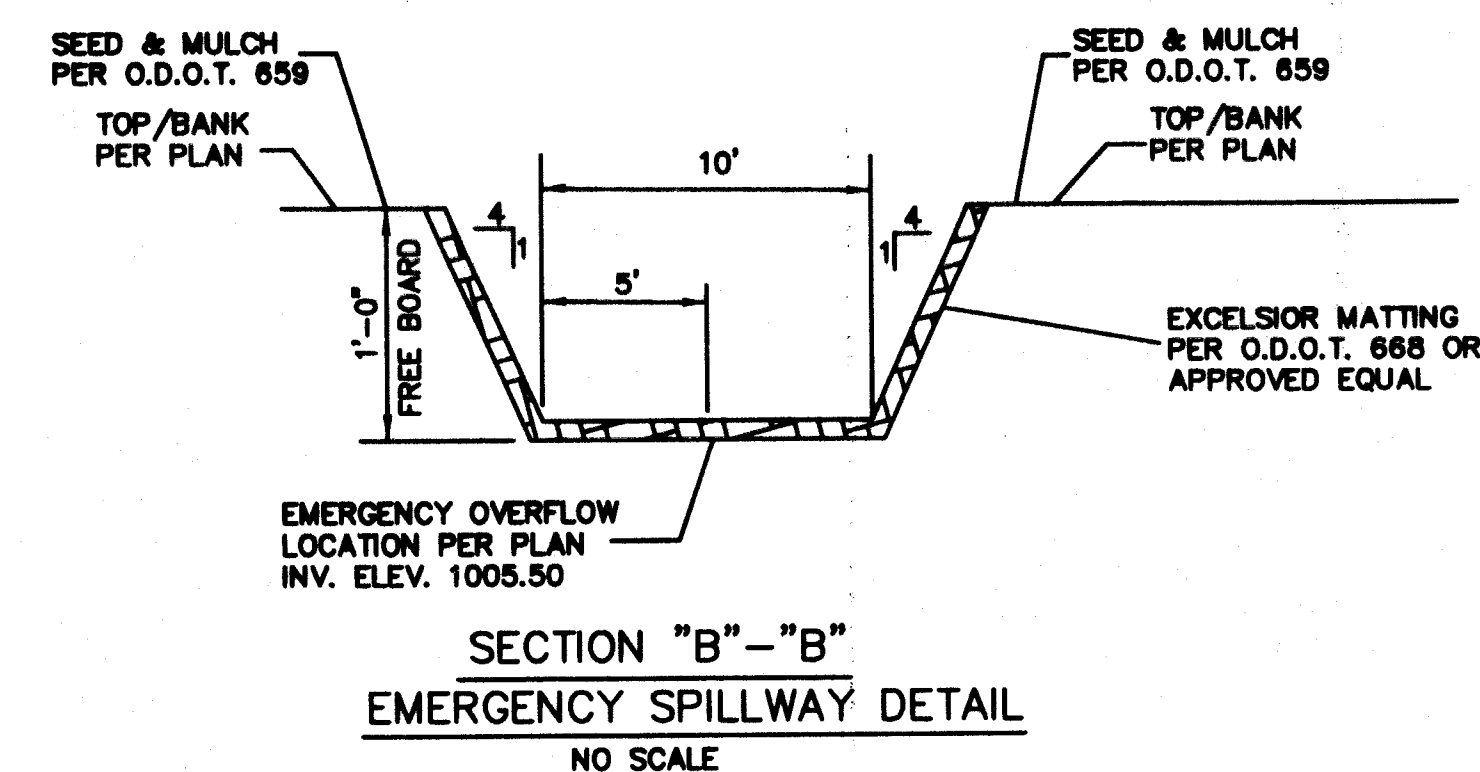
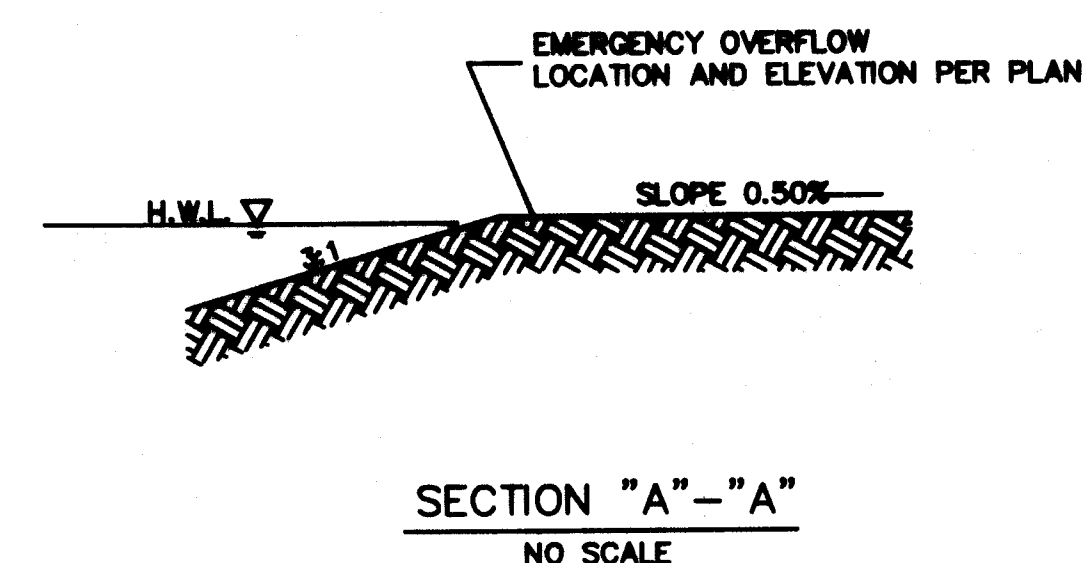
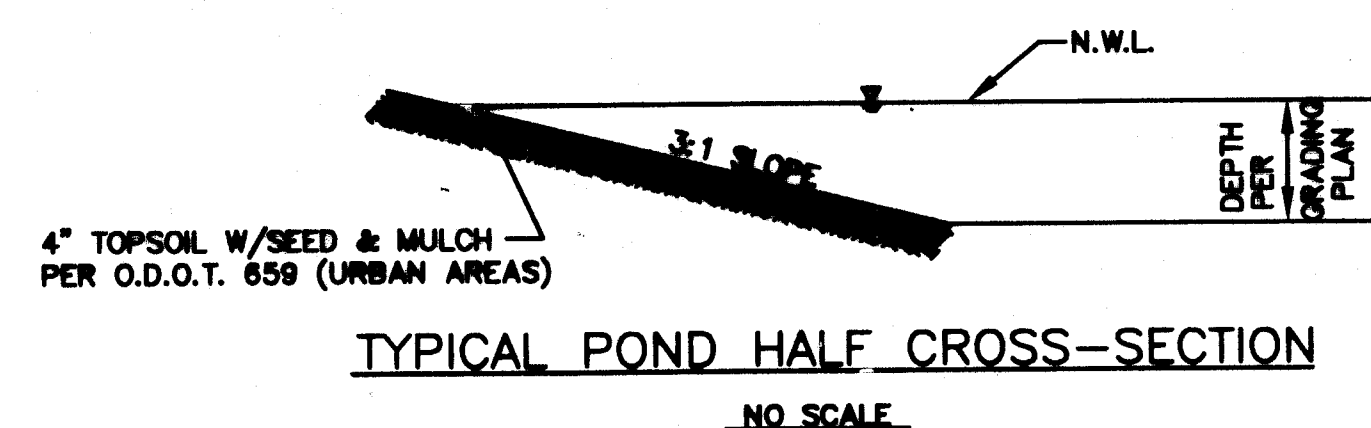
**KENYON CREEK ESTATES
PHASE I
CITY OF MASSILLON, OHIO**

A. R. LOCKHART DEVELOPMENT CO.
800 W. WATERLOO RD AKRON, OH 44314
PH: 330-745-6520 FAX: 330-745-0716

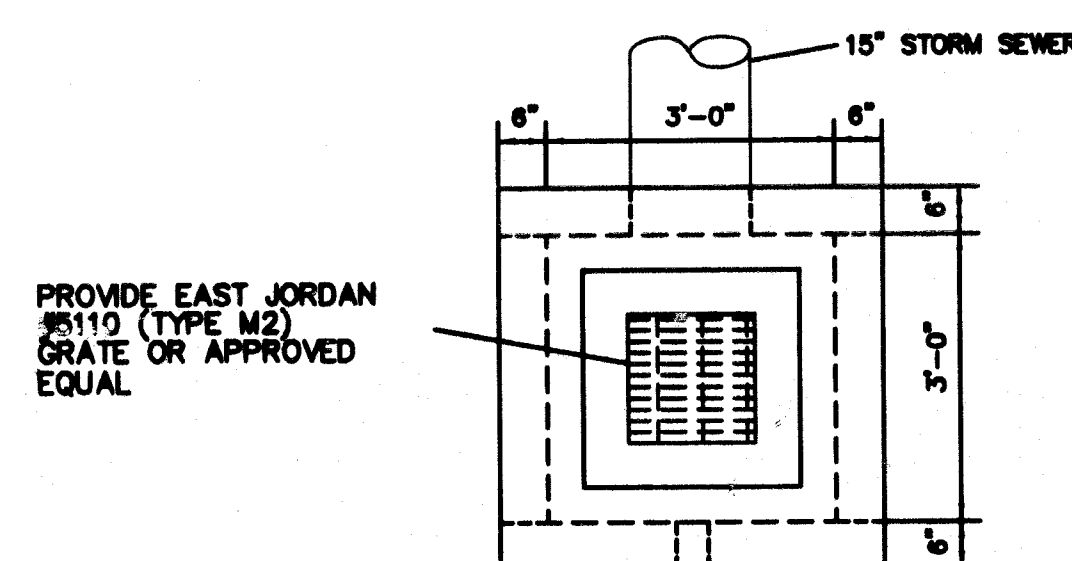
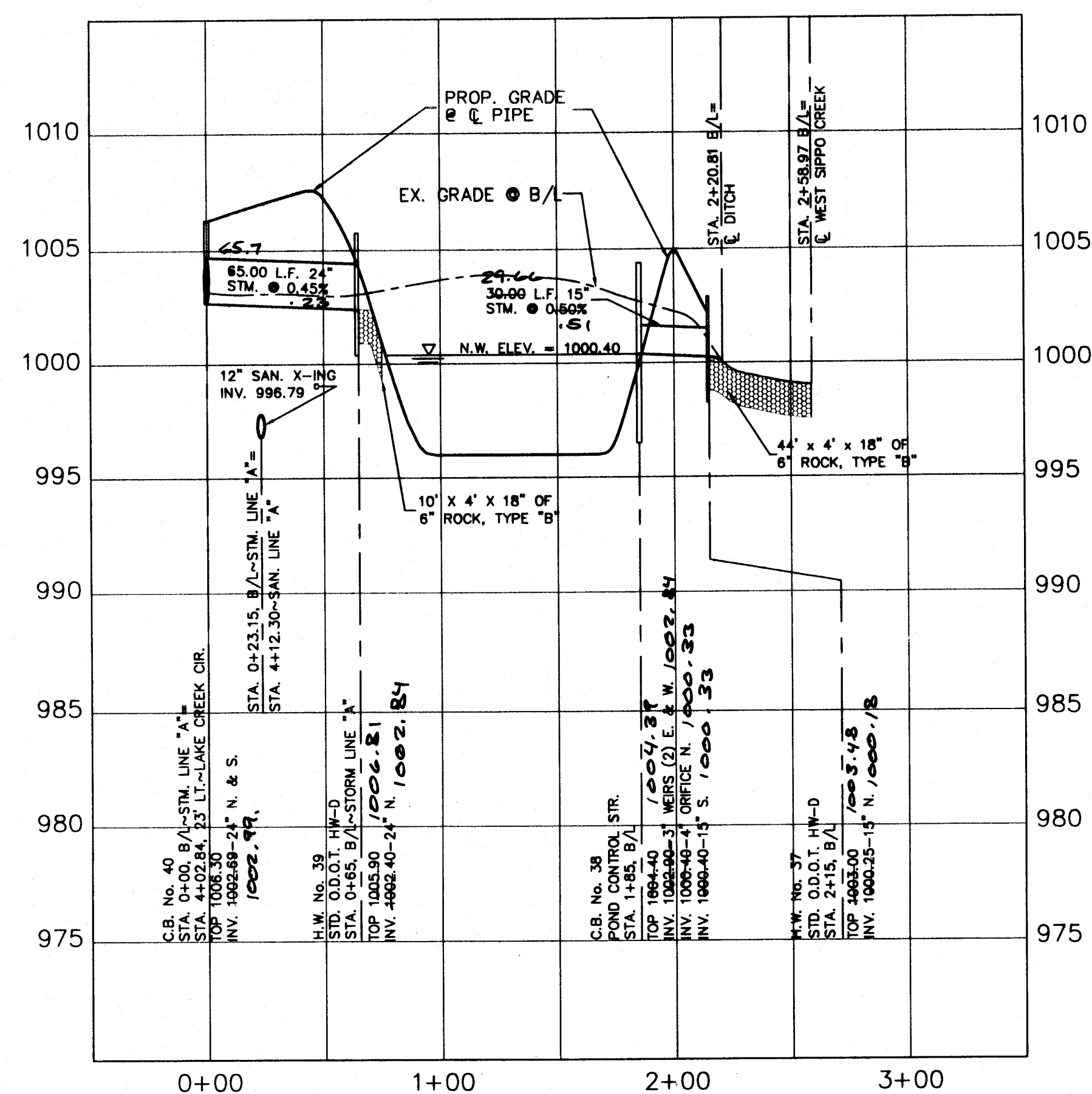
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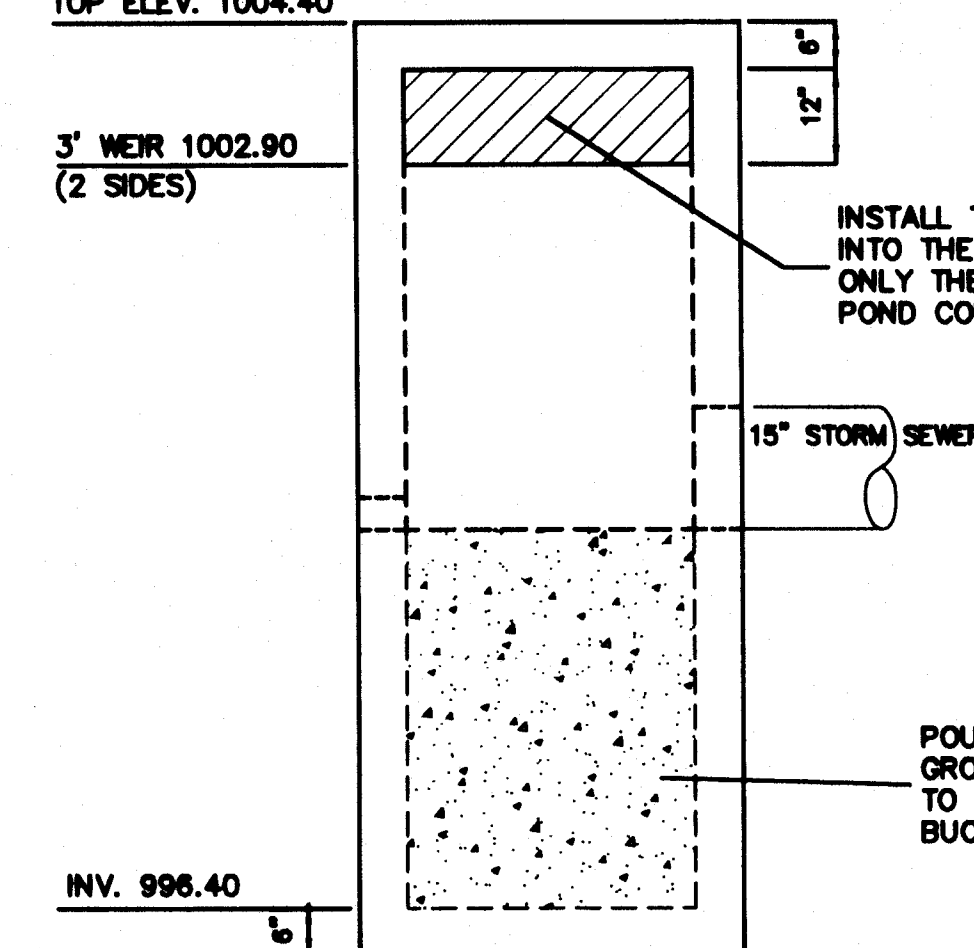
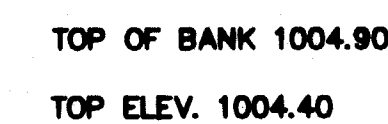
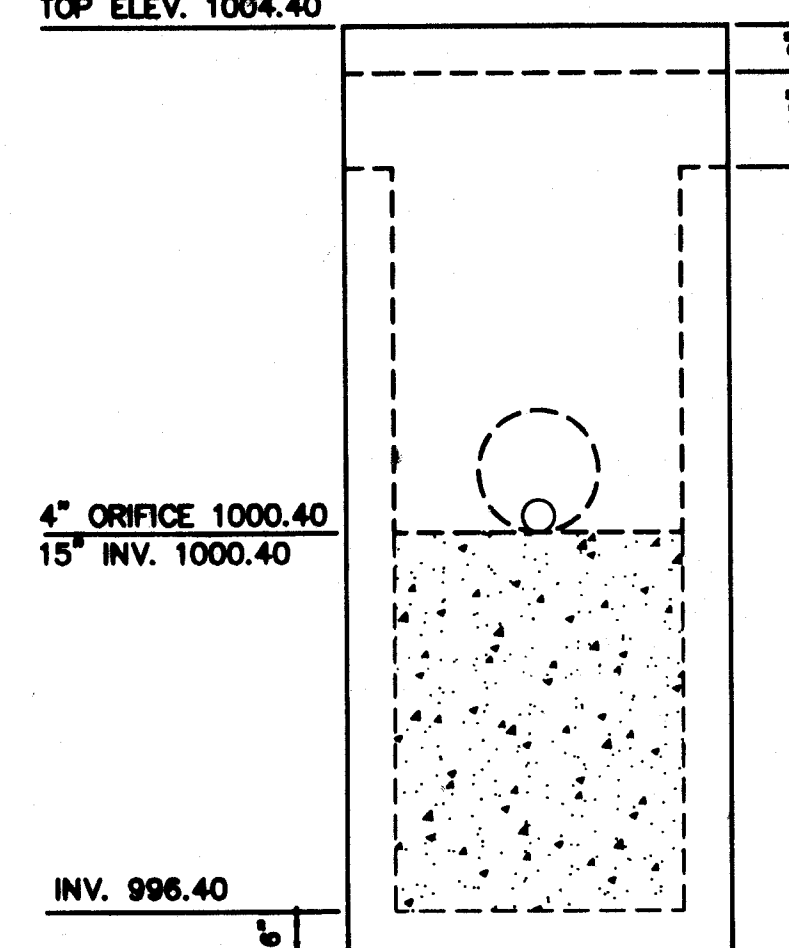
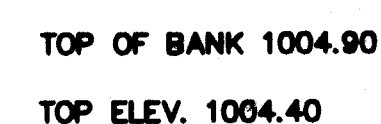
STORM LINE 'A' AND POND 'A'



NOTE:
THE STORM WATER MANAGEMENT POND FACILITY WILL BE USED AS
A TEMPORARY SEDIMENT BASIN. UPON UPSTREAM STABILIZATION,
THE TEMPORARY WEIR PLATES ARE TO BE REMOVED AT THE DIRECTION
OF THE OHIO E.P.A. AND/OR THE CITY OF MASSILLON ENGINEER.



100-YR.	W.S.E.	=	1003.20
50-YR.	W.S.E.	=	1003.09
25-YR.	W.S.E.	=	1003.00
10-YR.	W.S.E.	=	1002.78
2-YR.	W.S.E.	=	1000.93



PROPOSED POND CONTROL STRUCTURE
O.D.O.T CB-2-3 (MODIFIED)
NO SCALE

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BEFORE YOU DIG**

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ONE UTILITIES PROTECTION SERVICE

**KENYON CREEK ESTATES
PHASE I
CITY OF MASSILLON, OHIO**

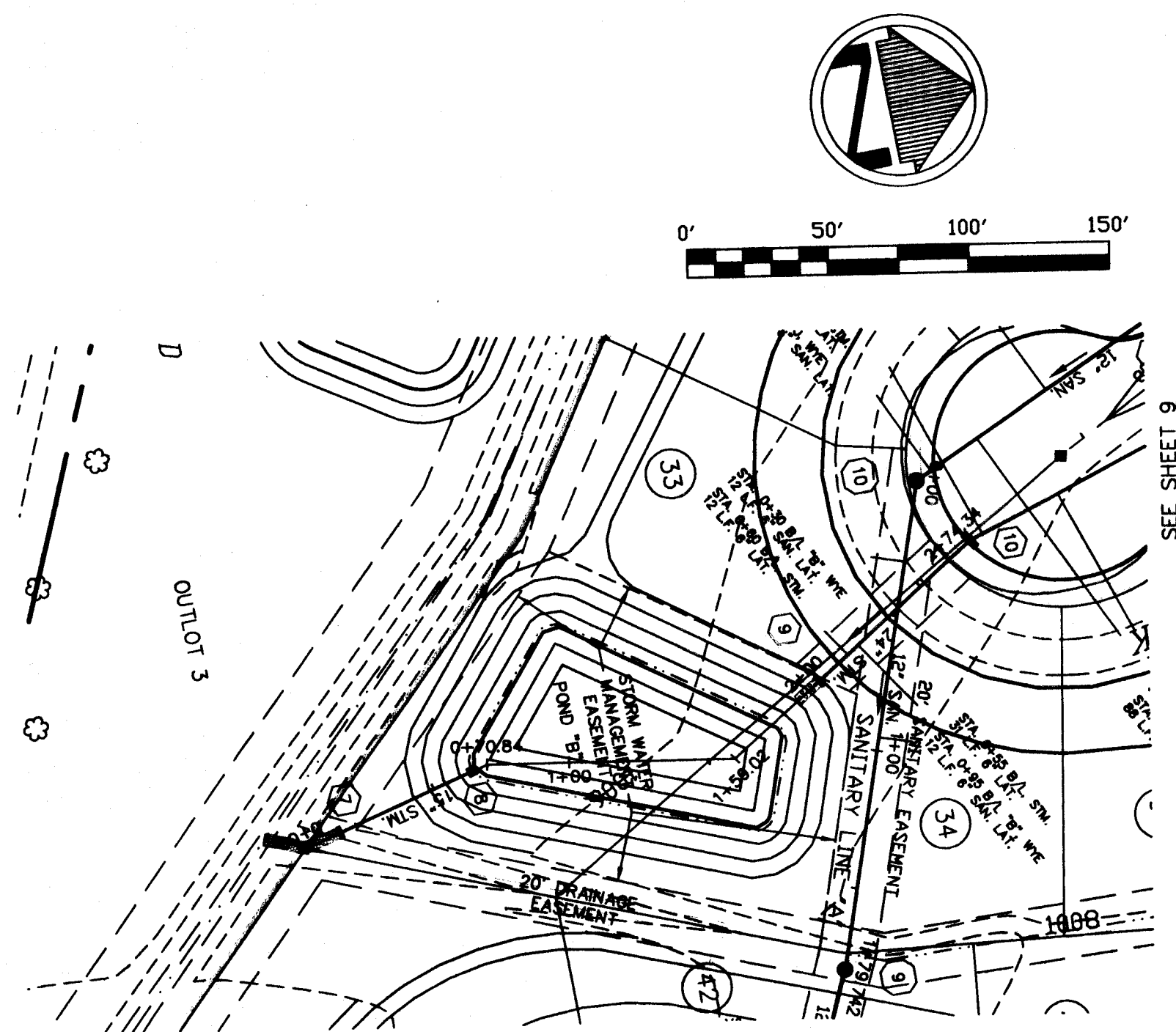
A. R. LOCKHART DEVELOPMENT CO.
800 W. WATERLOO RD AKRON OH 44314
Ph: 330-745-6520 Fax: 330-745-0716



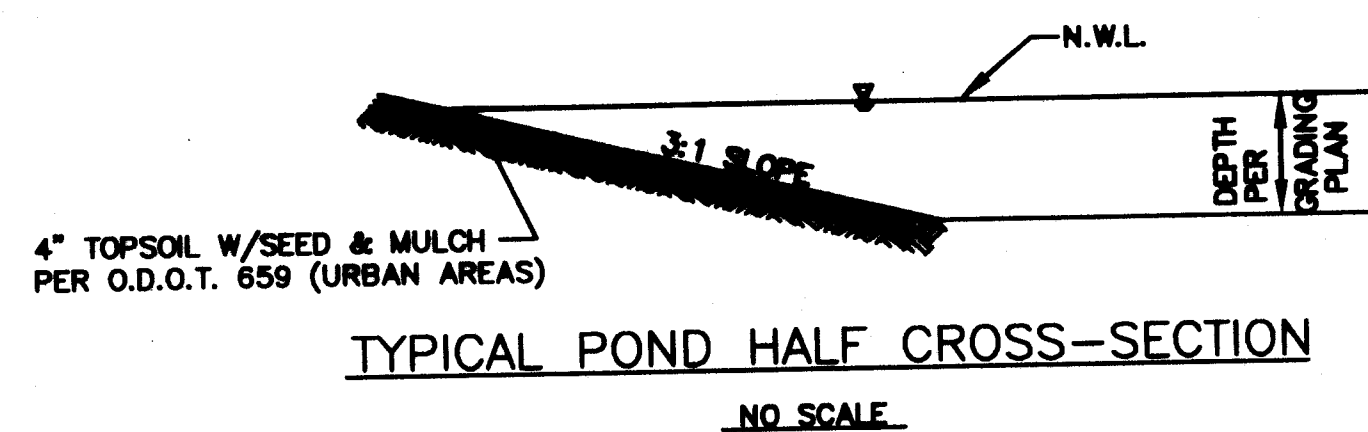
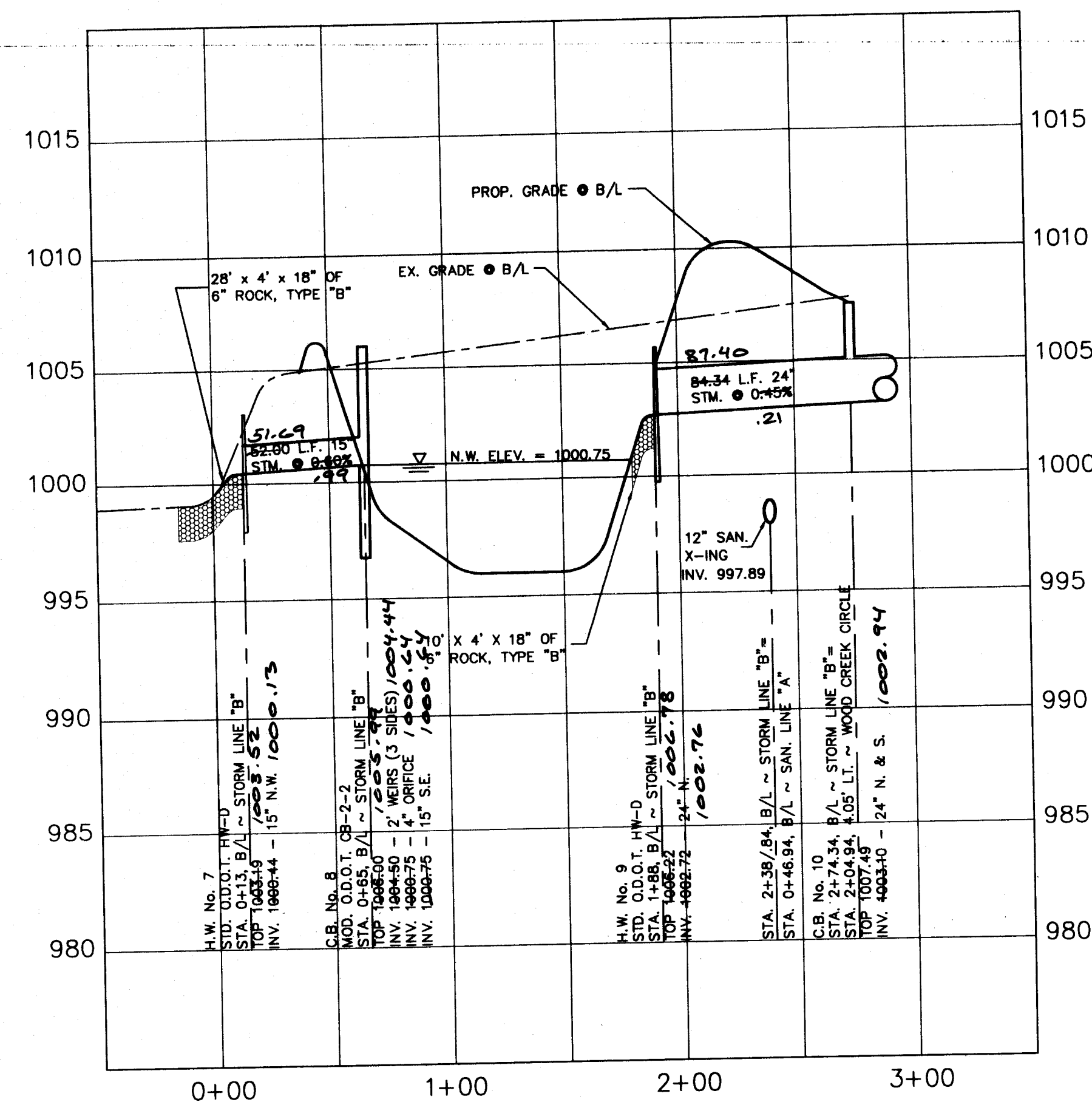
4 | 

POND 'A' DETAILS

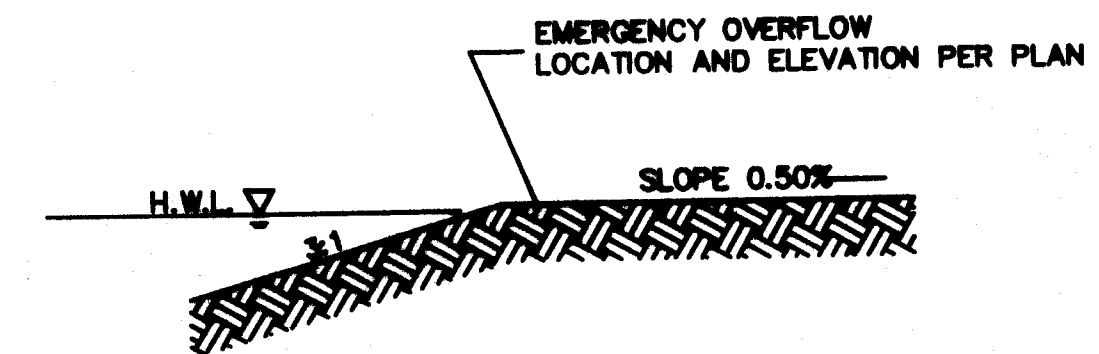
As Built Drawing



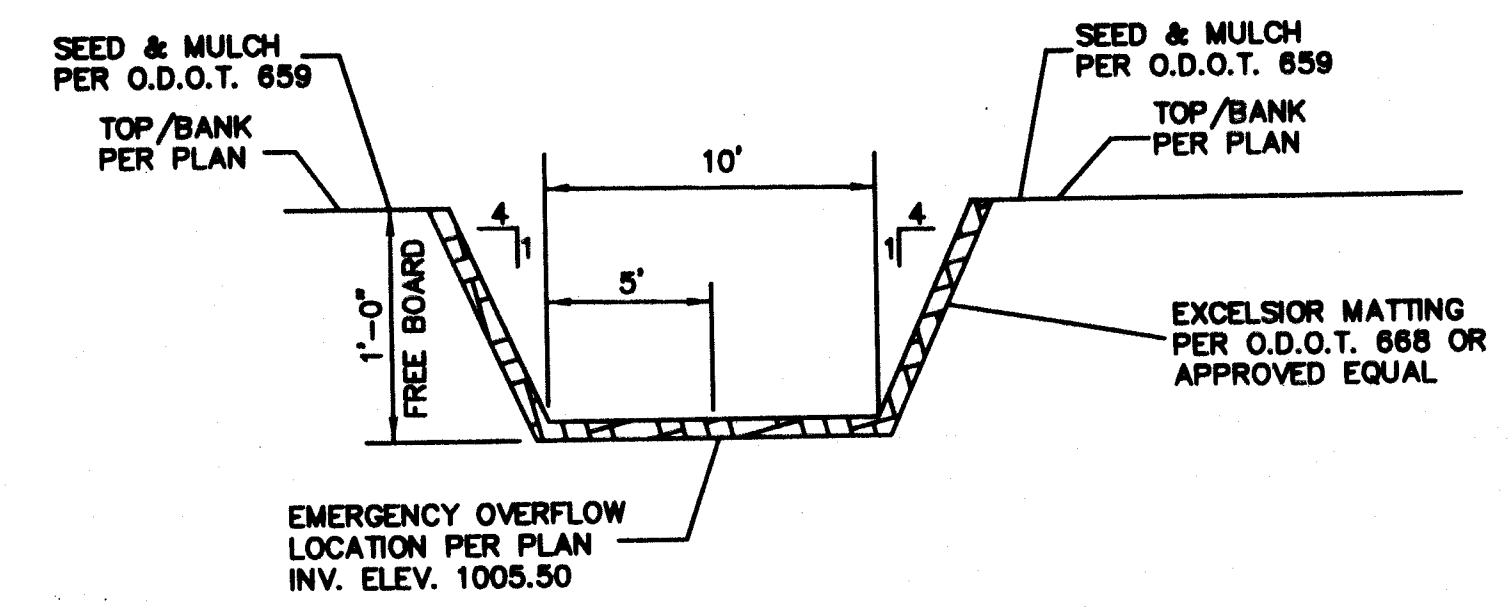
STORM LINE 'B' AND POND 'B'



TYPICAL POND HALF CROSS-SECTION
NO SCALE

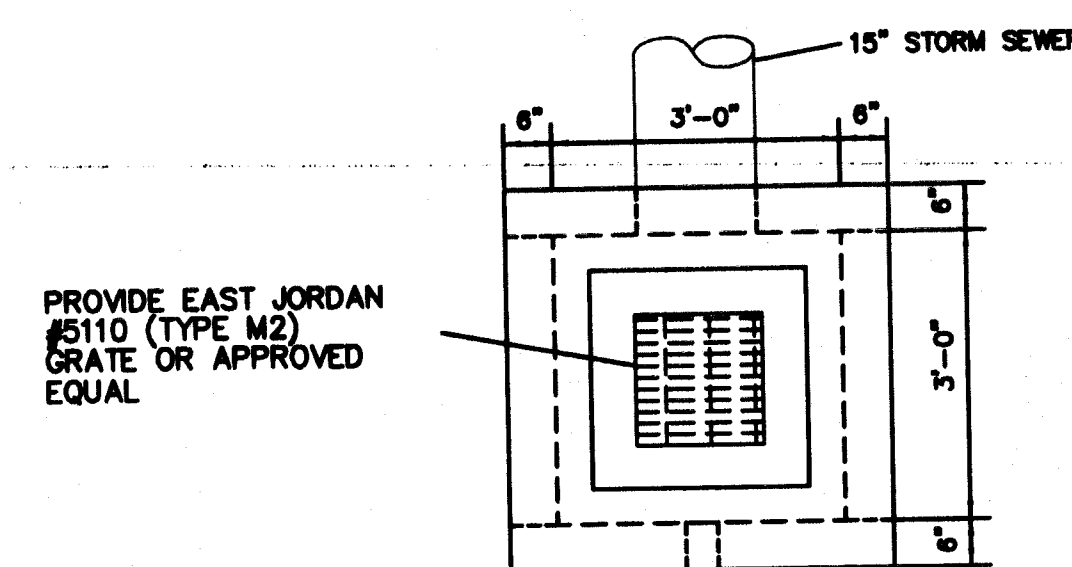


SECTION "A"-A"
NO SCALE

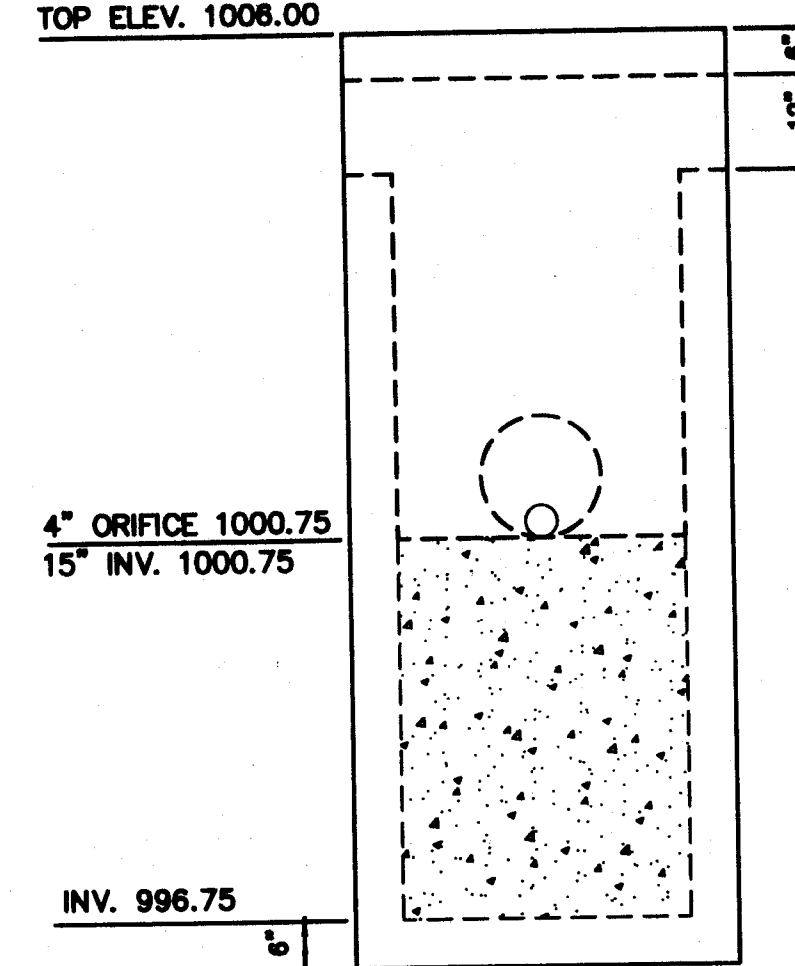


SECTION "B"-B"
EMERGENCY SPILLWAY DETAIL
NO SCALE

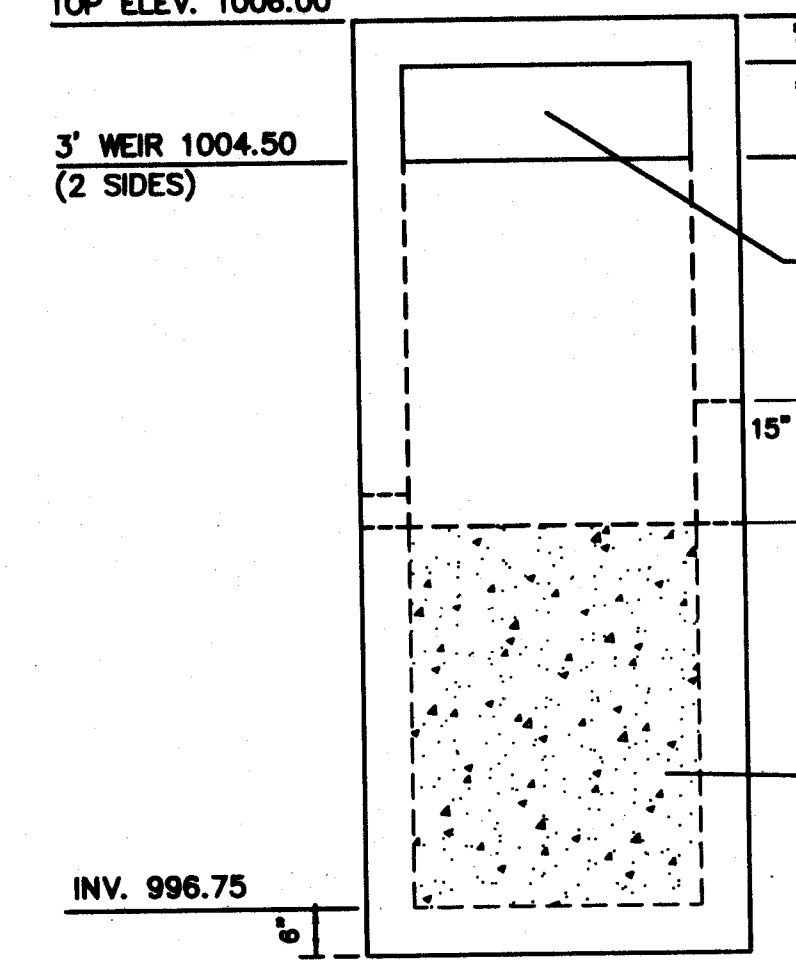
NOTE:
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TOP OF BANK 1006.50
TOP ELEV. 1006.00



TOP OF BANK 1006.50
TOP ELEV. 1006.00



100-YR. W.S.E.	= 1004.88
50-YR. W.S.E.	= 1004.74
25-YR. W.S.E.	= 1004.63
10-YR. W.S.E.	= 1004.42
2-YR. W.S.E.	= 1001.88

PROPOSED POND CONTROL STRUCTURE
O.D.O.T. CB-2-3 (MODIFIED)
NO SCALE

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A.R.L.

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POND 'B' DETAILS

As Built Drawing.