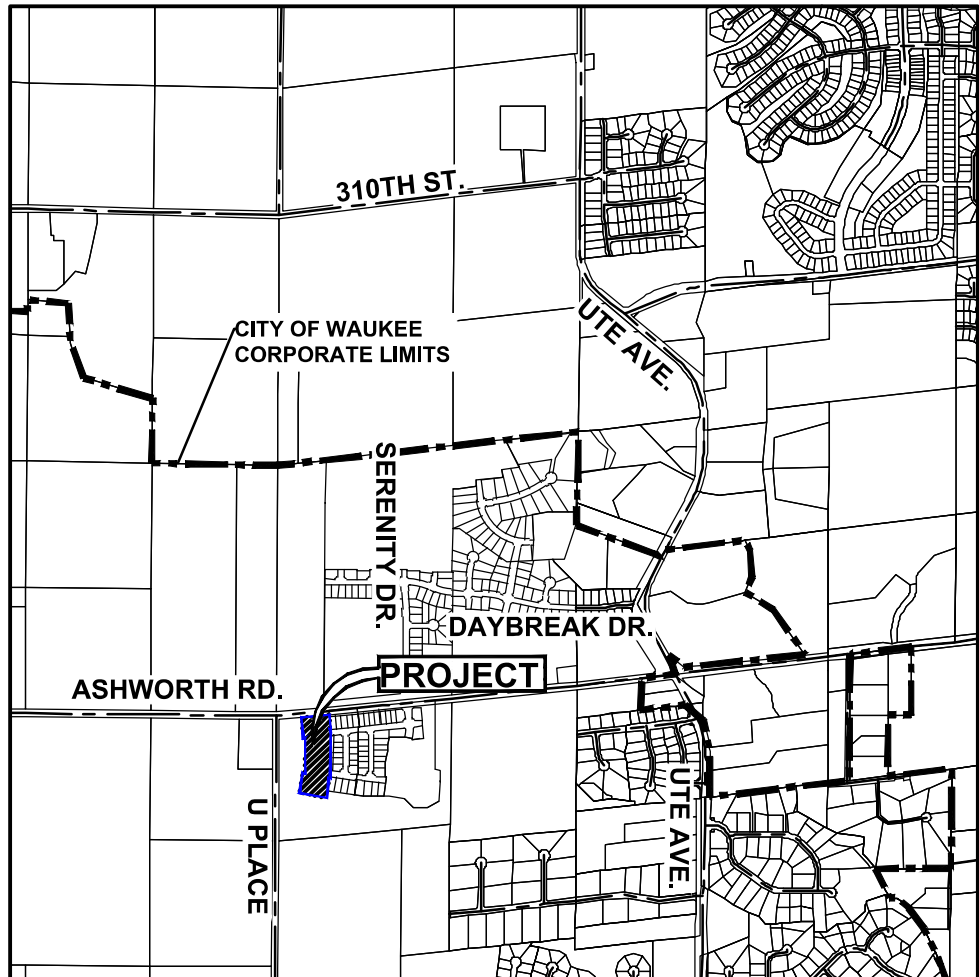


CONSTRUCTION PLANS FOR: HAMILTON RIDGE PLAT 4

WAUKEE, IOWA

VICINITY MAP

NOT TO SCALE



WAUKEE, IOWA

DEVELOPER

LANDMARK DEVELOPMENT SERVICES
9550 HICKMAN ROAD, SUITE 100
CLIVE, IOWA 50325
PH: (515) 986-5994
CONTACT: BILL SPENCER

OWNER

HAMILTON RIDGE, LLC
CONTACT: BILL SPENCER
9550 HICKMAN ROAD, SUITE 100
CLIVE, IA 50325
PH: (515) 986-5994

ENGINEER

CIVIL DESIGN ADVANTAGE
3405 SE CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
CONTACT: ERIN OLLENDIKE
EMAIL: ERINO@CDA-ENG.COM
PH: (515) 369-4400
FX: (515) 369-4410

SURVEYOR

CIVIL DESIGN ADVANTAGE
3405 SE CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
CONTACT: CHARLIE MCGLOTHLEN
EMAIL: CHARLIE@CDA-ENG.COM
PH: (515) 369-4400
FX: (515) 369-4410

ZONING

R-2: ONE AND TWO-FAMILY
RESIDENTIAL DISTRICT
PD-1: PLANNED UNIT
DEVELOPMENT DISTRICT

DATE OF SURVEY:

APRIL 16, 2020

SUBMITTALS

FIRST SUBMITTAL: 03/02/2021
SECOND SUBMITTAL: 03/30/2021
THIRD SUBMITTAL: 04/09/2021
FINAL SUBMITTAL: 04/27/2021
AS-BUILT SUBMITTAL: 10/17/2022

BULK REGULATIONS

R-2: ONE- AND TWO- FAMILY RESIDENTIAL DISTRICT (LOTS 8-10)

FRONT YARD: 30 FEET
SIDE YARD: A TOTAL OF 15 FEET - ONE SIDE MAY BE REDUCED TO
NOT LESS THAN 7 FEET
REAR YARD: 30 FEET

PD-1: PLANNED UNIT DEVELOPMENT DISTRICT WITH UNDERLYING R-2:
ONE- AND TWO- FAMILY RESIDENTIAL DISTRICT (LOTS 1-7 AND 11-15)

FRONT YARD: 25 FEET
SIDE YARD: A TOTAL OF 10 FEET - MINIMUM OF 5 FEET EACH SIDE
REAR YARD: 25 FEET

BENCHMARKS

DALLAS COUNTY BM# G121, EAST SIDE OF R16 0.1 MILE SOUTH OF 300TH
STREET.
ELEVATION=1032.82

BURY BOLT ON HYDRANT @ NW CORNER OF DAYBREAK DRIVE & CREST
RIDGE DRIVE.
ELEVATION=1023.95

CONSTRUCTION SCHEDULE

SPRING 2021 - FALL 2021

DEVELOPMENT SUMMARY

TOTAL AREA OF PLAT 4 = 2.76 ACRES (120,067 SF)

R-2: RESIDENTIAL = 0.74 ACRES (32,085 SF)
-LOTS 8-10

PD-1: RESIDENTIAL = 2.02 ACRES (87,982 SF)
-LOTS 1-7, 11-15

NOTES

- ANY CHANGES PROPOSED TO THE CONSTRUCTION DRAWINGS DURING CONSTRUCTION SHALL BE APPROVED IN WRITING BY THE DEVELOPMENT SERVICES DEPARTMENT.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY CHANGES MADE DURING CONSTRUCTION THAT HAVE NOT BEEN GRANTED APPROVAL IN WRITING BY THE DEVELOPMENT SERVICES DEPARTMENT.
- THE RESULTS OF THE GEOTECHNICAL REPORT ARE TO BE PROVIDED TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT. THE CONSTRUCTION DRAWINGS ARE SUBJECT TO ANY CHANGES REQUIRED BY THE REPORT.
- THE CONTRACTOR IS RESPONSIBLE FOR THE TRAFFIC CONTROL NEEDS FOR PAVING ASHWORTH ROAD. IF ASHWORTH ROAD IS CLOSED DURING CONSTRUCTION, THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING A SIGNED DETOUR ROUTE. A MESSAGE BOARD WILL BE REQUIRED AT LEAST 1 WEEK IN ADVANCE OF ANY LANE CLOSURES.

INDEX OF SHEETS

NO.	DESCRIPTION
1	TITLE SHEET
2-3	TYPICAL SECTIONS AND DETAILS
4	QUANTITIES, GENERAL NOTES AND BID ITEM REFERENCE NOTES
5	HYDRANT COVERAGE AND LANDSCAPE PLAN
6	GRADING PLAN
7	EROSION AND SEDIMENT CONTROL PLAN
8-12	STORM & SANITARY SEWER PLAN AND PROFILE
13-17	WATER MAIN PLAN AND PROFILE
18-19	INTERSECTION DETAILS

LEGAL DESCRIPTION

A PART OF PARCEL '20-69' AS SHOWN ON THE PLAT OF SURVEY RECORDED IN BOOK 2020, PAGE 23365, BEING A PART OF THE NORTHWEST FRACTIONAL QUARTER OF THE NORTHEAST QUARTER OF SECTION 7, TOWNSHIP 78 NORTH, RANGE 26 WEST OF THE FIFTH PRINCIPAL MERIDIAN IN THE CITY OF WAUKEE, DALLAS COUNTY, IOWA AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 7: THENCE NORTH 84°11'21" EAST ALONG THE NORTH LINE OF SAID NORTHWEST FRACTIONAL QUARTER, 332.50 FEET TO THE POINT OF BEGINNING; THENCE CONTINUING NORTH 84°11'21" EAST ALONG SAID NORTH LINE, 216.98 FEET; THENCE SOUTH 05°48'31" EAST, 255.01 FEET; THENCE NORTH 84°11'29" EAST, 19.66 FEET; THENCE SOUTH 00°17'09" WEST, 370.31 FEET; THENCE NORTH 81°03'48" WEST, 28.84 FEET; THENCE SOUTH 08°56'12" WEST, 208.28 FEET TO THE SOUTH LINE OF SAID PARCEL '20-69'; THENCE NORTH 80°44'12" WEST ALONG SAID SOUTH LINE, 45.15 FEET; THENCE NORTH 88°01'22" WEST CONTINUING ALONG SAID SOUTH LINE, 154.97 FEET; THENCE NORTH 02°26'19" EAST, 159.06 FEET; THENCE NORTH 86°16'51" WEST, 10.63 FEET; THENCE NORTH 04°05'09" EAST, 60.00 FEET; THENCE NORTH 00°17'09" EAST, 313.06 FEET; THENCE NORTH 05°48'31" WEST, 60.00 FEET; THENCE NORTH 84°11'29" EAST, 24.84 FEET; THENCE NORTH 05°48'31" WEST, 135.01 FEET; THENCE NORTH 05°48'39" WEST, 60.00 FEET TO THE POINT OF BEGINNING AND CONTAINING 4.38 ACRES (190,797 SQUARE FEET).

THE PROPERTY IS SUBJECT TO ANY AND ALL EASEMENTS OF RECORD.

UTILITY WARNING

THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY AND RECORDS OBTAINED BY THIS SURVEYOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN COMPRISE ALL THE UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION SHOWN.

GENERAL LEGEND

PROPOSED

SECTION LINE	----
CENTER LINE	-----
RIGHT OF WAY	--- R/W ---
PERMANENT EASEMENT	--- P/E ---
TEMPORARY EASEMENT	--- T/E ---
TYPE SW-501 STORM INTAKE	
TYPE SW-503 STORM INTAKE	
TYPE SW-505 STORM INTAKE	
TYPE SW-506 STORM INTAKE	
TYPE SW-513 STORM INTAKE	
TYPE SW-401 STORM MANHOLE	
TYPE SW-402 STORM MANHOLE	
TYPE SW-301 SANITARY MANHOLE	
STORM/SANITARY CLEANOUT	
WATER VALVE	
FIRE HYDRANT ASSEMBLY	
SIGN	
DETECTABLE WARNING PANEL	
WATER CURB STOP	
STORM SEWER STRUCTURE NO.	
STORM SEWER PIPE NO.	
SANITARY SEWER STRUCTURE NO.	
SANITARY SEWER PIPE NO.	
SANITARY SEWER WITH SIZE	
SANITARY SERVICE	
STORM SEWER	
STORM SERVICE	
WATERMAIN WITH SIZE	
WATER SERVICE	
SAWCUT (FULL DEPTH)	
SILT FENCE	
USE AS CONSTRUCTED	(UAC)
TOP OF PROPOSED GROUND	TG
MINIMUM OPENING ELEVATION	MPE
MINIMUM GRADE AT EXPOSED STRUCTURE	MGS

EXISTING

SANITARY MANHOLE	
WATER VALVE BOX	
FIRE HYDRANT	
WATER CURB STOP	
WELL	
STORM SEWER MANHOLE	
STORM SEWER SINGLE INTAKE	
STORM SEWER DOUBLE INTAKE	
FLARED END SECTION	
DECIDUOUS TREE	
CONIFEROUS TREE	
DECIDUOUS SHRUB	
CONIFEROUS SHRUB	
ELECTRIC POWER POLE	
GUY ANCHOR	
STREET LIGHT	
POWER POLE W/ TRANSFORMER	
UTILITY POLE W/ LIGHT	
ELECTRIC BOX	
ELECTRIC TRANSFORMER	
ELECTRIC MANHOLE OR VAULT	
TRAFFIC SIGN	
TELEPHONE JUNCTION BOX	
TELEPHONE MANHOLE/VAULT	
TELEPHONE POLE	
GAS VALVE BOX	
CABLE TV JUNCTION BOX	
CABLE TV MANHOLE/VAULT	
MAIL BOX	
BENCHMARK	
SOIL BORING	
UNDERGROUND TV CABLE	
GAS MAIN	
FIBER OPTIC	
UNDERGROUND TELEPHONE	
OVERHEAD ELECTRIC	
UNDERGROUND ELECTRIC	
FIELD TILE	
SANITARY SEWER W/ SIZE	
STORM SEWER W/ SIZE	
WATER MAIN W/ SIZE	

ALL CONSTRUCTION SHALL CONFORM TO THE PROJECT SPECIFICATIONS AND THE SOILS REPORT PREPARED BY CONSTRUCTION MATERIALS TESTING (CMT).

THIS PROJECT REQUIRES AN IOWA NPDES PERMIT #2. CIVIL DESIGN ADVANTAGE WILL PROVIDE THE PERMITS AND THE INITIAL STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR THE CONTRACTORS USE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR UPDATING THE SWPPP THROUGHOUT CONSTRUCTION AND MEETING LOCAL, STATE AND FEDERAL REQUIREMENTS.

THIS DESIGN SPECIFICALLY PREPARED FOR USE AT THE LOCATION SHOWN. USE IN ANY OTHER MANNER EXCEEDS THE INTENDED PURPOSE OF THESE DRAWINGS AND ANY ACCOMPANYING SPECIFICATIONS.

THE MOST RECENT EDITION OF THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE 2021 EDITION OF SUDAS STANDARD SPECIFICATIONS SHALL APPLY TO ALL WORK PERFORMED ON THIS PROJECT EXCEPT AS MODIFIED HEREIN.



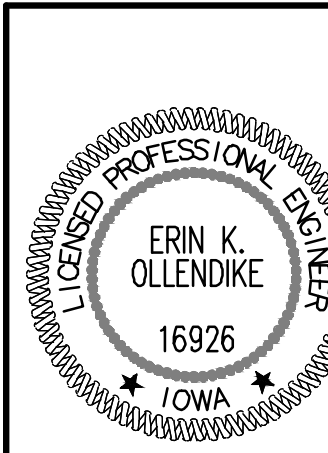
CIVIL DESIGN ADVANTAGE

3405 SE CROSSROADS DR. SUITE G GRIMES, IOWA 50111
PH: (515) 369-4400 Fax: (515) 369-4410

PROJECT NO. 2102.066



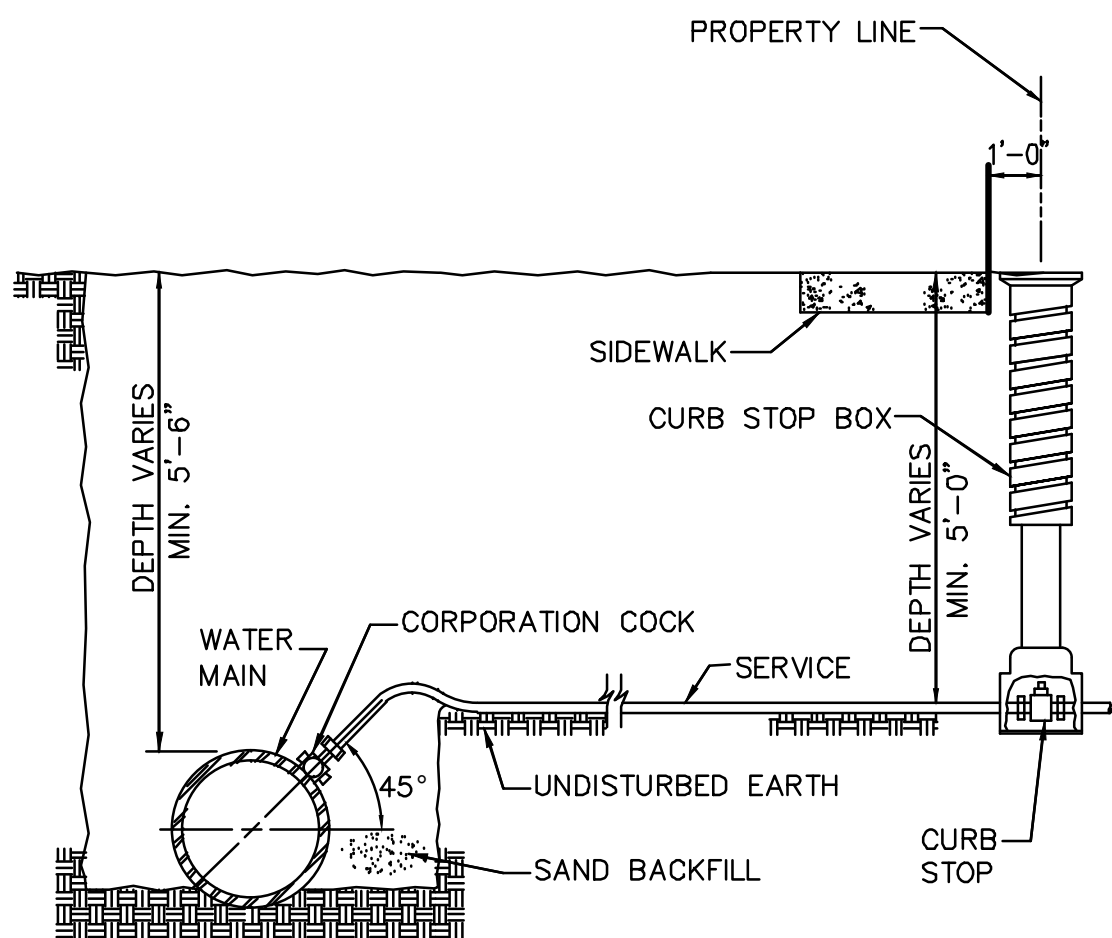
1-800-292-8989
www.iowaonecall.com



I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

Erin K. Ollendike 10/17/2022
ERIN K. OLLENDIKE, P.E. DATE

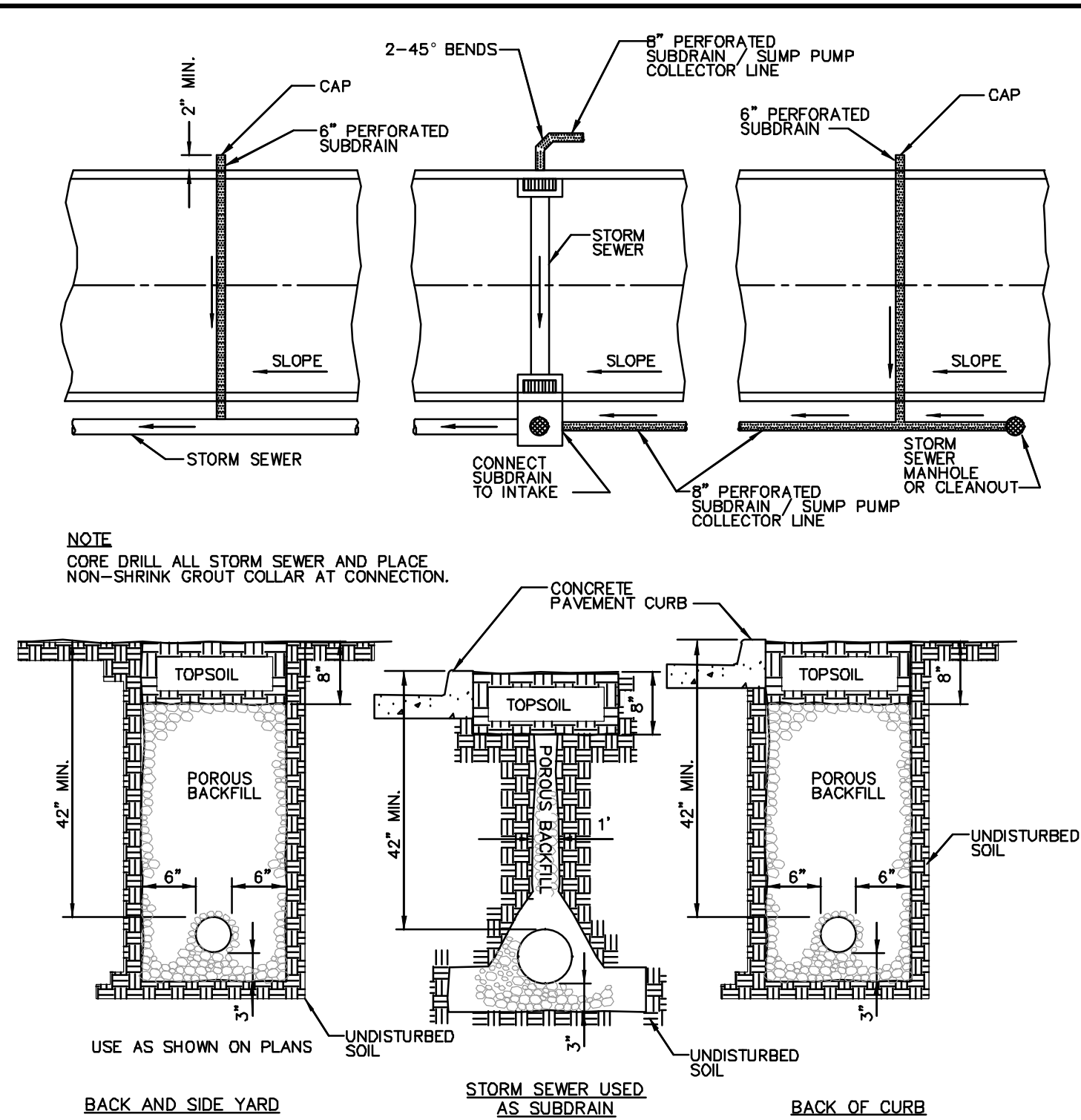
LICENSE NUMBER 16926
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2023
PAGES OR SHEETS COVERED BY THIS SEAL:
SHEETS 1-19



- NOTES:
1. TERMINATE CURB STOP BOX ROD 1'-6" BELOW FINISHED GRADE.

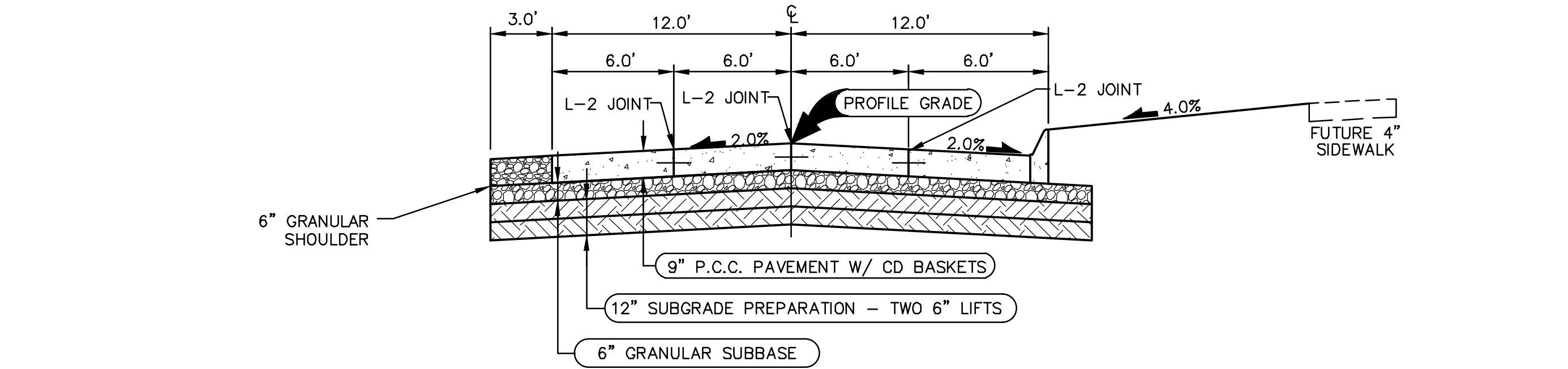
WATER SERVICE CONNECTION

NOT TO SCALE



- NOTES:
1. SLOPE SUBDRAINS TO DRAIN.
 2. 6" BACK OF CURB SUBDRAINS AND ALL BACK AND SIDE YARD SUBDRAINS; USE PEA GRAVEL FOR POROUS BACKFILL.
 3. DIRECT PERFORATIONS DOWN FOR SUBDRAINS AND UP FOR SUMP PUMP COLLECTOR LINES.

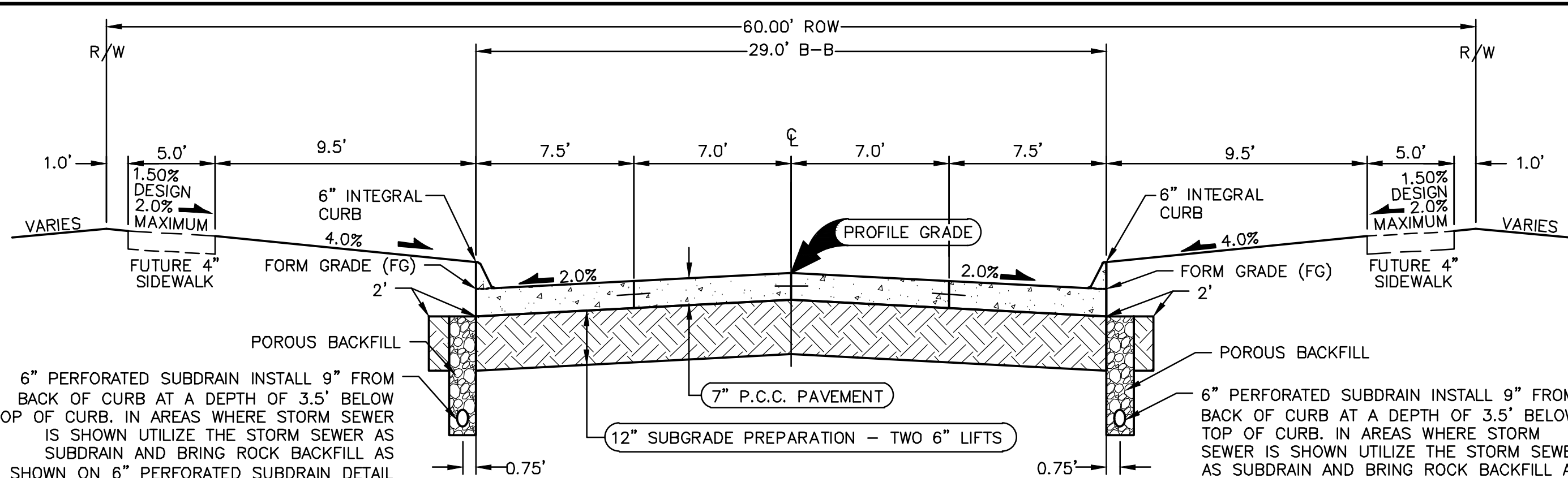
6" PERFORATED SUBDRAIN



- NOTES:
1. PREPARE SUBGRADE IN 2 - 6" LIFTS.
 2. MAXIMUM CD JOINT SPACING IS 15'.

TYPICAL SECTION - ASHWORTH ROAD

NOT TO SCALE

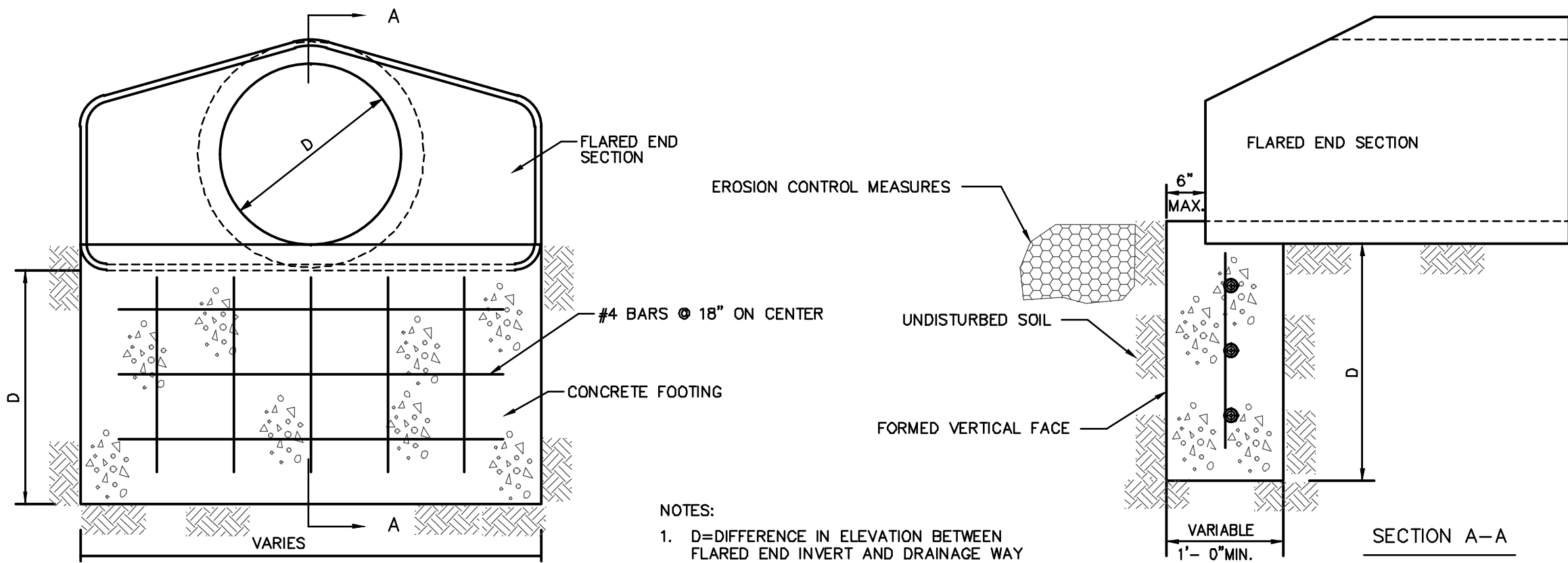


- NOTES:
1. PREPARE SUBGRADE IN 2 - 6" LIFTS.
 2. MAXIMUM C JOINT SPACING IS 15'.

29' B/B P.C.C. ROADWAY WITH 60' R.O.W.

NOT TO SCALE

HAMILTON ROAD, HARRINGTON WAY, WORCHESTER DRIVE



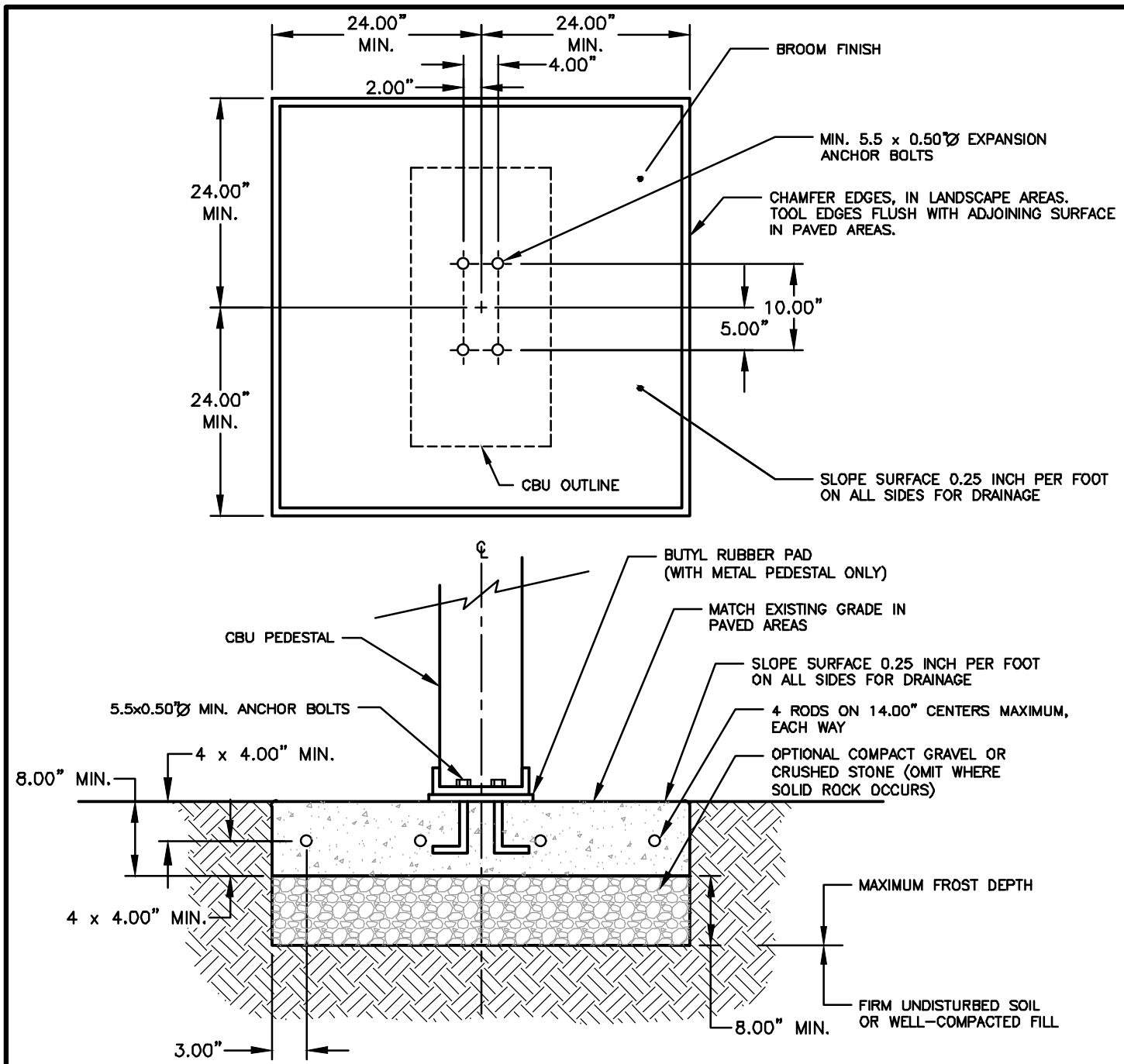
- NOTES:
1. D=DIFFERENCE IN ELEVATION BETWEEN FLARED END INVERT AND DRAINAGE WAY CHANNEL FLOW LINE 300 FT DOWNSTREAM OF FLARED END; MINIMUM D=42"
 2. INSTALL 3" WIDE CLAY WATERSTOP AT FLARED END SECTION PIPE JOINT.
 3. TRASH GUARDS ARE NOT ALLOWED ON PIPES 48" OR LARGER.

REINFORCING BAR LIST

D	W	Mark	Size	Length	Count	D	W	Mark	Size	Length	Count
12"	2'-4"	4f1	4	2'-0"	3	48"	7'-10"	4f1	4	7'-6"	3
		4f2	4	3'-8"	2			4f2	4	3'-8"	6
15"	2'-10"	4f1	4	2'-6"	3	54"	8'-5"	4f1	4	8'-1"	3
		4f2	4	3'-8"	2			4f2	4	3'-8"	6
18"	3'-5"	4f1	4	3'-1"	3	60"	8'-11"	4f1	4	8'-7"	3
		4f2	4	3'-8"	3			4f2	4	3'-8"	6
24"	4'-6"	4f1	4	4'-2"	3	66"	8'-11"	4f1	4	8'-7"	3
		4f2	4	3'-8"	3			4f2	4	3'-8"	6
30"	5'-7"	4f1	4	5'-3"	3	72"	10'-0"	4f1	4	9'-8"	3
		4f2	4	3'-8"	4			4f2	4	3'-8"	7
36"	6'-8"	4f1	4	6'-4"	3	78"	10'-7"	4f1	4	10'-3"	3
		4f2	4	3'-8"	5			4f2	4	3'-8"	7
42"	7'-3"	4f1	4	6'-11"	3	84"	11'-1"	4f1	4	10'-9"	3
		4f2	4	3'-8"	5			4f2	4	3'-8"	8

RCP APRON FOOTING DETAIL

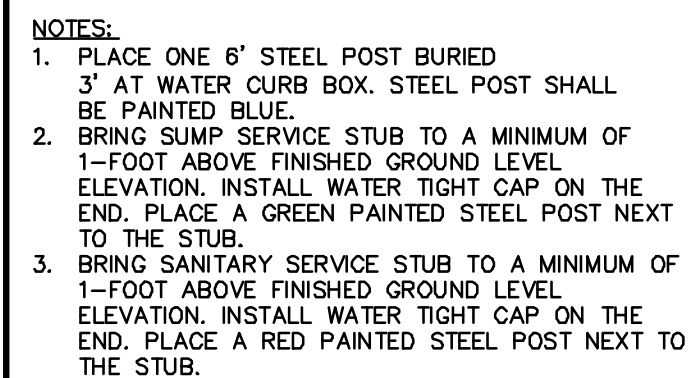
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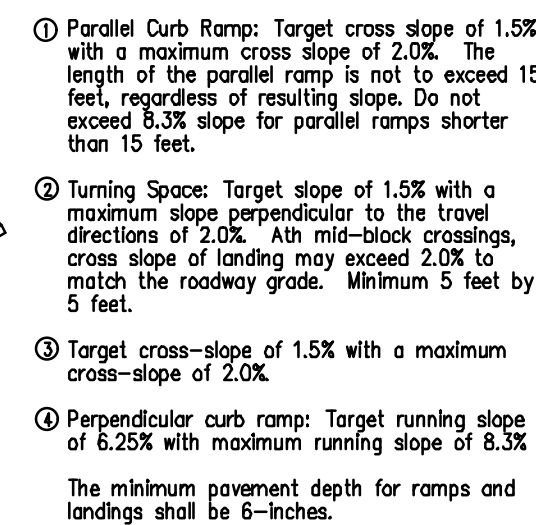
- NOTES:
1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 PSI @ 28 DAYS, CONTAIN 4% MIN. - 6% MAX. AIR ENTRAINMENT AND BE PLACED WITH A 3.50" - 4.00" SLUMP IN ACCORDANCE WITH ACI 301.
 2. REINFORCING STEEL RODS SHALL CONFORM TO ASTM A615, GRADE 60.
 3. EXPANSION BOLTS SHALL BE EQUIVALENT TO THE FOLLOWING PROVIDERS:
A. HILTI KWIK BOLT (WWW.HILTI.COM) II-1/2" DIAMETER X 5-1/2" OVERALL LENGTH. GALVANIZED, CATALOG # 000-453-698 KB II 12-512, STAINLESS STEEL: CATALOG # 000-454-744. ENSURE THAT THE MIN. EMBEDMENT IN CONCRETE IS AT LEAST 3-1/2".
B. ITW RAMSET REDHEAD TRUBOLT (WWW.RAMSET-REDHEAD.COM) GALVANIZED, 1/2" DIAMETER X 7" OVERALL LENGTH; CATALOG NUMBER: WS-1270G. ENSURE THAT MIN. EMBEDMENT IS CONCRETE IS AT LEAST 4-1/8".
C. RAWL STUD (WWW.RAWL.COM) GALVANIZED, 1/2" X 5-1/2" OVERALL LENGTH; CATALOG NUMBER: 7724. ENSURE THAT MIN. EMBEDMENT IN CONCRETE IS AT LEAST 4".

MAILBOX CLUSTER PAD DETAIL

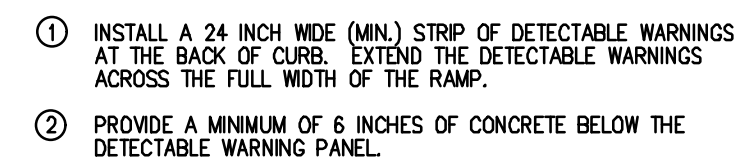
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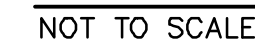
NOT TO SCALE



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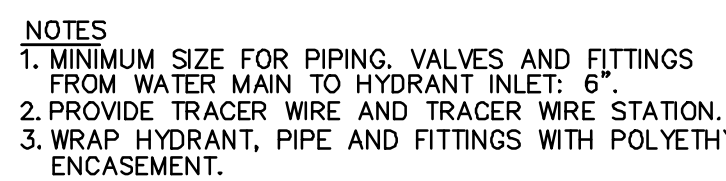


NOTE:
ALL TRUNCATED DOMES SHALL BE CAST IRON



- ### NOTES
1. INSTALL RISER TO BEAR FIRMLY AGAINST UNDISTURBED WALL OF TRENCH. STAKE RISER PIPE IN PLACE PRIOR TO BACK-FILLING TO PREVENT MOVEMENT OF PIPE
 2. NOTCH WALL OF TRENCH TO RECEIVE PIPE WHERE POSSIBLE.

NOT TO SCALE



NOT TO SCALE



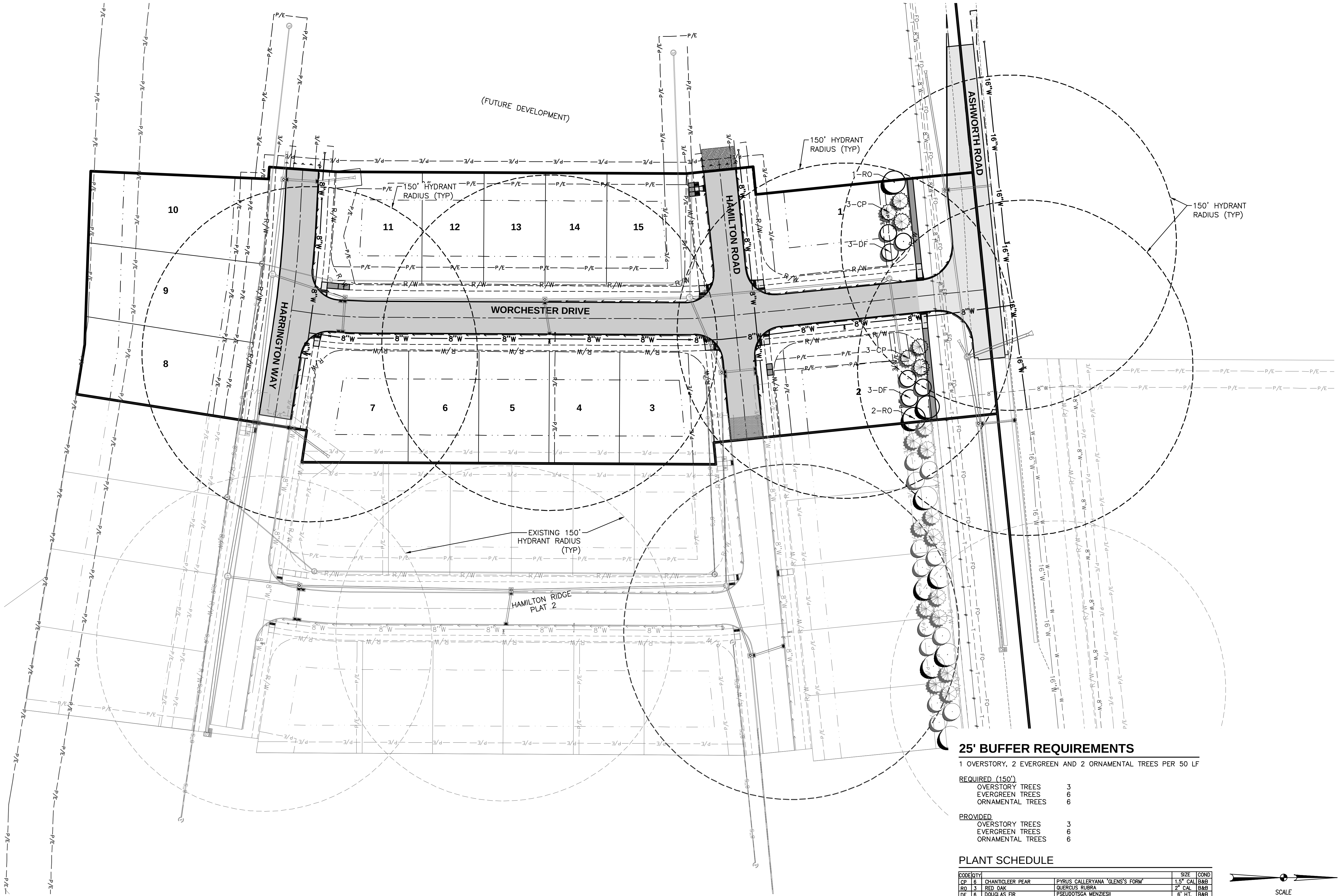
1. MAILBOX PADS TO BE INSTALLED WITH THE PLAT IMPROVEMENTS.
2. CLUSTER MAILBOX TO BE LOCATED ON THE NO PARKING/STREET LIGHT SIDE OF STREET.
3. DO NOT LOCATE AT INTERSECTION.
4. LOCATE NEAR SHARED PROPERTY LINE PER APPROVED PLAN.
5. DETERMINE SIDEWALK SIDE OF MAILBOX PAD ELEVATION ASSUMING CONSTANT 4% SLOPE FROM BACK OF CURB TO SIDEWALK SIDE OF MAILBOX PAD. RESULTING SLOPE FROM BACK OF CURB TO STREET SIDE OF MAILBOX PAD WILL BE GREATER THAN 4% FOR EXAMPLE, FOR A 29' WIDE PAVEMENT WITH A 60' WIDE R.O.W. AND A 2% MAILBOX PAD CROSS SLOPE, THE RESULTING SLOPE FROM THE BACK OF CURB TO THE STREET SIDE OF MAILBOX PAD IS 6.2%.

NOT TO SCALE

ESTIMATE INFORMATION	
Data listed below is for informational purpose only and shall not constitute a basis for any extra work orders.	
ITEM NO.	DESCRIPTION
	THE MOST RECENT EDITION OF THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE 2021 EDITION OF SUDAS STANDARD SPECIFICATIONS SHALL APPLY TO ALL WORK PERFORMED ON THIS PROJECT EXCEPT AS MODIFIED HEREIN. ALL REFERENCES TO SECTIONS AND FIGURES ARE TO THE SUDAS STANDARD SPECIFICATIONS. CITY OF WAUKEE STANDARD DETAILS SHALL GOVERN IF ANY DISCREPANCIES.
1	CLEAR AND GRUB ALL AREAS AFFECTED BY GRADING OPERATIONS. THE CONTRACTOR SHALL FIELD VERIFY CLEARING AND GRUBBING NEEDS PRIOR TO BIDDING. INCLUDES REMOVAL OF ANY EXISTING FIELD FENCE. ALL MATERIAL THAT IS REMOVED FROM THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR. INCLUDED REMOVAL OF EXISTING CROPS FOR CONSTRUCTION OF TEMPORARY ACCESS. DO NOT DISTURB CROPS OUTSIDE OF THE PROJECT LIMITS. AREA SHOWN FOR REFERENCE ONLY.
2	STRIP, SALVAGE AND RE-SPREAD TOPSOIL PER SECTION 2010 OF SUDAS STANDARD SPECIFICATIONS OR PROVIDE THE CITY WITH A TOPSOIL PRESERVATION PLAN. TOPSOIL TO BE RESPREAD SHALL BE FREE OF ROCK AND DEBRIS AND BE SUITABLE FOR THE GROWTH OF GRASS. COORDINATE LOCATION OF STOCKPILE WITH OWNER.
3	EXCAVATION INCLUDES ALL WORK NECESSARY TO ACHIEVE PROPER GRADES AS SHOWN IN THE PLANS. NO PAYMENT FOR OVERHAUL SHALL BE ALLOWED.
4	REFER TO SHEET 2 FOR TYPICAL LOCATIONS AND THICKNESS.
5	SANITARY SEWER SHALL BE PVC TRUSS PIPE. ANY CONNECTIONS TO EXISTING SANITARY SEWER SHALL BE CONSIDERED INCIDENTAL. REFER TO FIG. 3010.101 AND 3010.103 FOR PIPE EMBEDMENT DETAILS. GRANULAR PIPE BEDDING SHALL BE CONSIDERED INCIDENTAL. EXISTING SANITARY SEWER WILL NEED TO BE RETESTED AFTER SADDLE WYE INSTALLATION.
5-13	REFER TO FIGURE 3010.102 FOR TRENCH BEDDING AND BACKFILL ZONE DETAILS. GRANULAR PIPE BEDDING SHALL BE CONSIDERED INCIDENTAL. CONNECTIONS TO EXISTING STORM SEWER PIPE AND STRUCTURES SHALL BE CONSIDERED INCIDENTAL. WRAP ALL PIPE JOINTS IN ENGINEERING FABRIC. CLEAN AND TELEVIEW SANITARY AND STORM SEWER PRIOR TO PAVING AND PROVIDE TELEVIEWING REPORT TO CITY IN HARD COPY AND DISC FORMAT. TELEVIEWING SHALL BE CONSIDERED INCIDENTAL. ALL STORM SEWER PIPE THAT CROSSES OVER WATERMAIN SHALL HAVE O-RING GASKETS JOINT RATED AT 13 PSI OR GREATER. O-RING GASKET JOINTS SHALL BE INSTALLED ON EACH SIDE OF THE CROSSING UNTIL THE NORMAL DISTANCE FROM THE WATER TO THE SEWER IS AT LEAST 10 FEET.
6,12,16	REFER TO DETAILS ON SHEETS 2, 3 AND PLAN AND PROFILE SHEETS FOR LOCATION AND DEPTH. STORM SEWER SERVICES TYING INTO EXISTING RCP PIPE ARE TO BE CORE DRILLED. BRINGING STORM AND SANITARY SERVICES TO GROUND LEVEL, PLACING A WATERTIGHT CAP AND INSTALLING A POST SHALL BE CONSIDERED INCIDENTAL TO THIS BID ITEM.
13	THE LAST THREE SECTIONS AND APRON SHALL BE CONNECTED WITH PIPE CONNECTORS. REFER TO FIG. 4030.221 - RCP APRON SECTION FOOTING FOR FOOTING CONSTRUCTION DETAILS. APRON GUARD REQUIRED ON ALL APRONS. RCP APRON FOOTING, PIPE APRON GUARD AND PIPE CONNECTORS TO BE CONSIDERED INCIDENTAL. INSTALL CLAY WATERSTOPS AT ALL RCP APRONS, MIN. 3' LONG.
14-17	REFER TO FIG. 3010.101 AND FIG. 3010.104 FOR TRENCH BEDDING AND BACKFILL ZONE DETAILS. GRANULAR PIPE BEDDING SHALL BE CONSIDERED INCIDENTAL. REFER TO FIG. 5010.101 FOR THRUST BLOCK DETAILS. REFER TO FIG. 5010.102 FOR TRACER SYSTEM DETAILS. ALL FITTINGS, POLYETHYLENE WRAP, THRUST BLOCKS, AND TRACER WIRE SYSTEM SHALL BE CONSIDERED INCIDENTAL.
18-19	REFER TO FIG. 5020.201 - FIRE HYDRANT ASSEMBLY FOR FIRE HYDRANT CONSTRUCTION DETAILS. INCLUDES ANCHORING TEE, ANCHORING ELBOW, GATE VALVE, VALVE BOX, ANCHORING PIPE, ANCHORING COUPLING, ELBOWS, 5" STORZ FITTINGS, POLYETHYLENE WRAP, THRUST BLOCK AND TRACER WIRE SYSTEM AND FIRE HYDRANT.
18-19	REFER TO WATERMAIN PLAN AND PROFILE SHEETS FOR LOCATIONS OF HYDRANTS. ANY RELOCATED FIRE HYDRANTS ARE TO INCLUDE 5-INCH STORZ FITTINGS.
20	REFER TO FIG. 6010.301 - CIRCULAR SANITARY SEWER MANHOLE (SW-301) FOR CONSTRUCTION DETAILS. CASTINGS IN PAVEMENT SHALL BE TYPE B RING AND COVER. WHEN CASTINGS ARE NOT IN PAVEMENT, INSTALL MANHOLE CONE SECTION, MANHOLE STEPS, AND RING/COVER CASTING SUCH THAT SEPARATION IS MAINTAINED BETWEEN MANHOLE COVERS AND PAVED AREAS (BACK OF CURB, SIDEWALK PAVEMENT, SIDEWALK APPROACHES/RAMPS). ALL SANITARY SEWER MANHOLES SHALL BE VACUUM TESTED.
21-22	REFER TO FIG. 6010.401 - CIRCULAR STORM SEWER MANHOLE (SW-401) FOR CONSTRUCTION DETAILS. MANHOLE INSIDE DIAMETERS GREATER THAN 48" SHALL BE CONSIDERED INCIDENTAL.

CIVIL DESIGN ADVANTAGE		3405 S.E. CROSSROADS DRIVE, SUITE G GRIMES, IOWA 50111 PHONE: (515) 369-4400 FAX: (515) 369-4410	ENGINEER: EKO	TECH: BDH
		REVISIONS	DATE	
		AS-BUILT SUBMITTAL	10/17/2022	
		FINAL SUBMITTAL	04/27/2021	
		THIRD SUBMITTAL	04/09/2021	
		SECOND SUBMITTAL	03/30/2021	
		FIRST SUBMITTAL	03/02/2021	

25. ALL FIELD TILES ENCOUNTERED SHALL BE REPAIRED AND CONNECTED TO STORM SEWERS WHERE POSSIBLE. LOCATIONS SHALL BE PROVIDED TO THE ENGINEER FOR NOTATION ON AS-BUILTS.
26. ALL CONSTRUCTION STAKING TO BE COMPLETED UNDER THE DIRECTION OF A LICENSED ENGINEER OR LAND SURVEYOR. ALL CURB DROPS AND SIDEWALK/SHARED USE PATH SHALL ALSO BE STAKED UNDER THE DIRECTION OF A LICENSED ENGINEER OR LAND SURVEYOR
27. THE CONTRACTOR SHALL SUBMIT A LIST OF CONSTRUCTION MATERIALS TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT PRIOR TO CONSTRUCTION.
28. A GEOTECHNICAL ENGINEER SHALL BE ONSITE DURING CONSTRUCTION AND FOR PROOF ROLLING TO INSPECT SOILS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THE GEOTECHNICAL ENGINEER IS PRESENT. A COPY OF ALL REPORTS AND FINDINGS REQUIRING ALTERATION FROM THE APPROVED PLAN SET IS TO BE PROVIDED TO THE WAUKEE ENGINEERING DEPARTMENT FOR REVIEW AND DISCUSSION PRIOR TO COMMENCING WITH PAVING WITHIN THE PROJECT.
29. THE CONTRACTOR SHALL COORDINATE ALL EXISTING PUBLIC UTILITY CONNECTIONS WITH THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
30. ALL TESTING SHALL BE COMPLETED ACCORDING TO THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE WAUKEE ENGINEERING DEPARTMENT SHALL BE PRESENT TO WITNESS ALL TESTING.
31. AS-BUILTS SHALL BE PROVIDED TO THE WAUKEE ENGINEERING DEPARTMENT INCLUDING ALL UTILITIES AND AS-BUILT GRADES FOR DRAINAGE SWALES, OVERFLOWS, ACCESSIBLE RAMPS AND DETENTION FACILITIES. THE CONTRACTOR SHALL PROVIDE INFORMATION TO THE DESIGN ENGINEER FOR INCLUSION ON THE RECORD AS-BUILT DRAWINGS.
32. THE CONTRACTOR IS RESPONSIBLE FOR CLEANING AND TELEVISIONING ALL STORM AND SANITARY SEWERS. THE CITY OF WAUKEE ENGINEERING DEPARTMENT SHALL WITNESS AND APPROVE ALL CLEANING AND TELEVISIONING PRIOR TO PAVING. A COPY OF THE VIDEOS AND A HARD COPY OF THE INSPECTION REPORT SHALL BE PROVIDED TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT. ALL SANITARY SEWER MANHOLES ARE TO BE VACUUM TESTED.
33. ALL FIRE HYDRANTS INCLUDING ANY RELOCATED HYDRANTS SHALL HAVE 5-INCH STORZ FITTINGS.
34. ALL PROPOSED PEDESTRIAN CROSSINGS SHALL BE INSTALLED AS PART OF THE PLAT IMPROVEMENTS.
35. ALL CONNECTIONS TO EXISTING MANHOLES ARE TO BE CORE DRILLED AND USE A LINK SEAL.
36. ANY FIELD FENCE LOCATED WITHIN THE PROPERTY IS TO BE REMOVED.
37. ALL EXISTING AND PROPOSED MANHOLES SHALL HAVE A MINIMUM OF 1 - 4" ADJUSTING RING TO ALLOW FOR FUTURE ADJUSTMENT SHOULD THE STRUCTURE END UP IN A DRIVEWAY.
38. THE RESULTS OF THE GEOTECHNICAL EXPLORATION ARE TO BE PROVIDED TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT AND THE PLAN IS SUBJECT TO ANY CHANGES REQUIRED BY THE REPORT.
39. THIS SITE WILL HAVE SAWCUTTING AND CONCRETE GRINDING SO PROTECTION OF STORM SEWERS AND DRAINAGE WAYS FROM SLURRY WILL NEED TO OCCUR FOR ALL OFFSITE DISCHARGE.



25' BUFFER REQUIREMENTS

1 OVERSTORY, 2 EVERGREEN AND 2 ORNAMENTAL TREES PER 50 LF

REQUIRED (150')

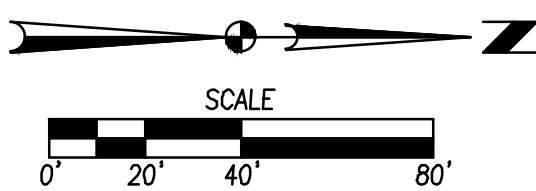
OVERSTORY TREES	3
EVERGREEN TREES	6
ORNAMENTAL TREES	6

PROVIDED

OVERSTORY TREES	3
EVERGREEN TREES	6
ORNAMENTAL TREES	6

PLANT SCHEDULE

CODE	QTY	DESCRIPTION	SIZE	COND
CP	6	CHANTICLEER PEAR	PYRUS CALLERYANA 'GLENS'S FORM'	1.5" CAL B&B
RO	3	RED OAK	QUERCUS RUBRA	2" CAL B&B
DF	6	DOUGLAS FIR	PSEUDOTSUGA MENZIESII	6' HT. B&B



HAMILTON RIDGE PLAT 4

HYDRANT COVERAGE AND LANDSCAPE PLAN



WAUKEE, IOWA

3405 S.E. CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
PHONE: (515) 369-4400 FAX: (515) 369-4410

ENGINEER: EKO

TECH: BDH

REVISIONS

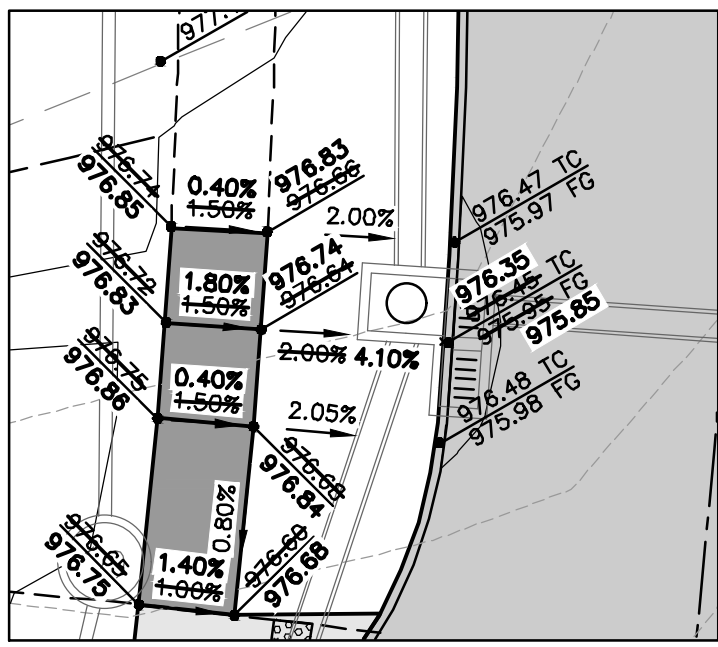
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10/17/2022	AS-BUILT SUBMITTAL
04/27/2021	FINAL SUBMITTAL
04/09/2021	THIRD SUBMITTAL
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03/02/2021	FIRST SUBMITTAL



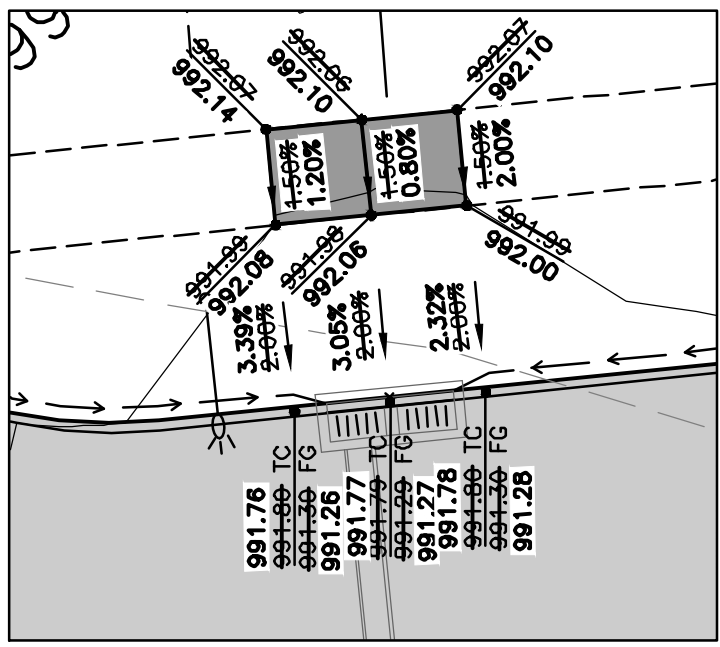
GRADING NOTES

1. IT IS THE APPLICANT'S RESPONSIBILITY TO PROVIDE THE WAUKEE ENGINEERING DEPARTMENT WITH A CERTIFIED AS-BUILT GRADING PLAN PRIOR TO ACCEPTANCE OF IMPROVEMENTS.
2. REMOVE ANY FARM FENCING ON THE PROPERTY AS PART OF THE IMPROVEMENTS.
3. A DETAILED GRADING PLAN WILL BE REQUIRED WHEN LOT 1 SUBMITS A BUILDING PERMIT

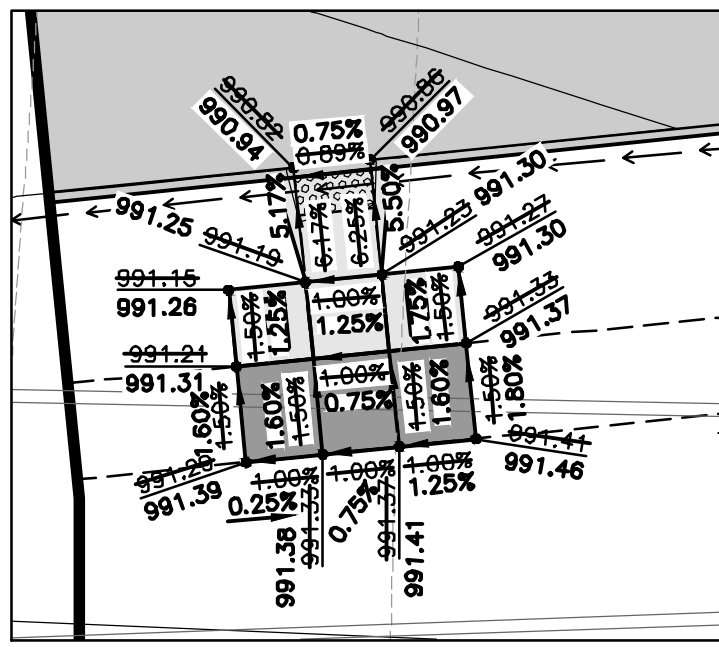
AREA OF DISTURBANCE =5.45 AC



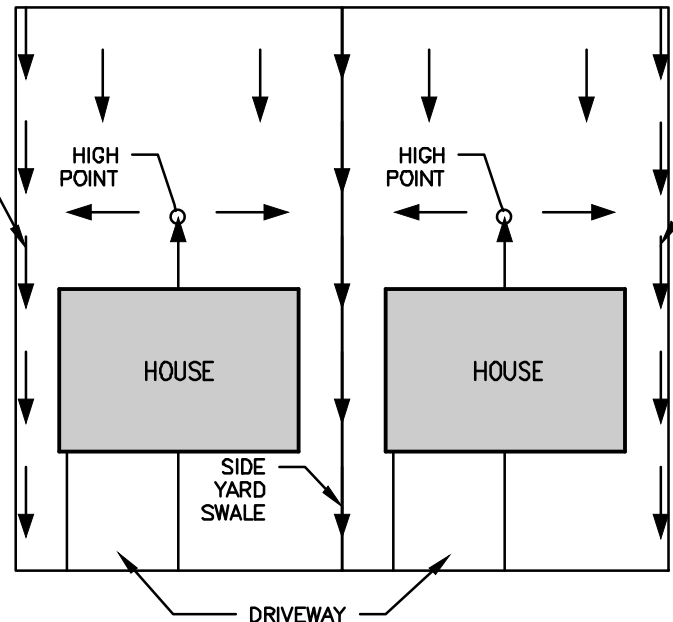
DETAIL 'A' (1" = 10' FULL-SIZE)



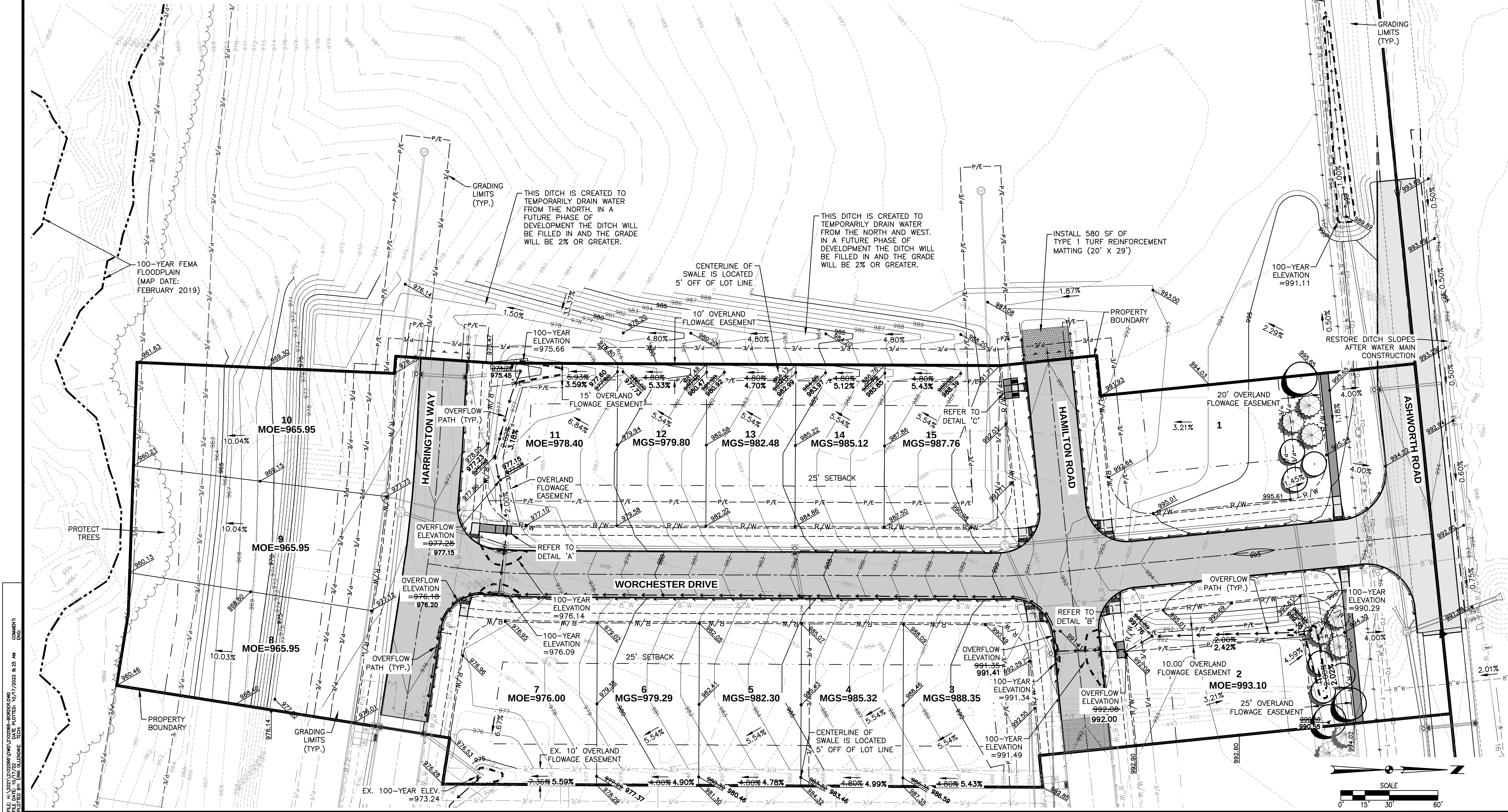
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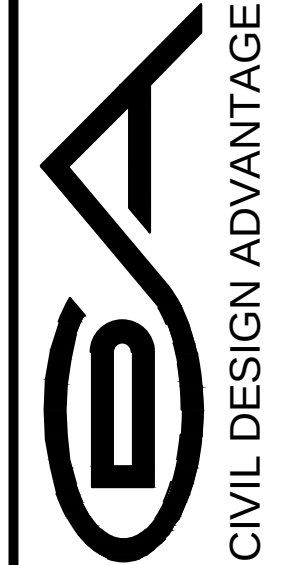
DETAIL 'C' (1" = 10' FULL-SIZE)



TYPICAL BACK TO FRONT GRADING NOT TO SCALE



3405 S.E. CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
PHONE: (515) 369-4400 FAX: (515) 369-4410



WAUKEE, IOWA

HAMILTON RIDGE PLAT 4
GRADING PLAN

REVISIONS	DATE
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SECOND SUBMITTAL	03/30/2023
FIRST SUBMITTAL	03/02/2023

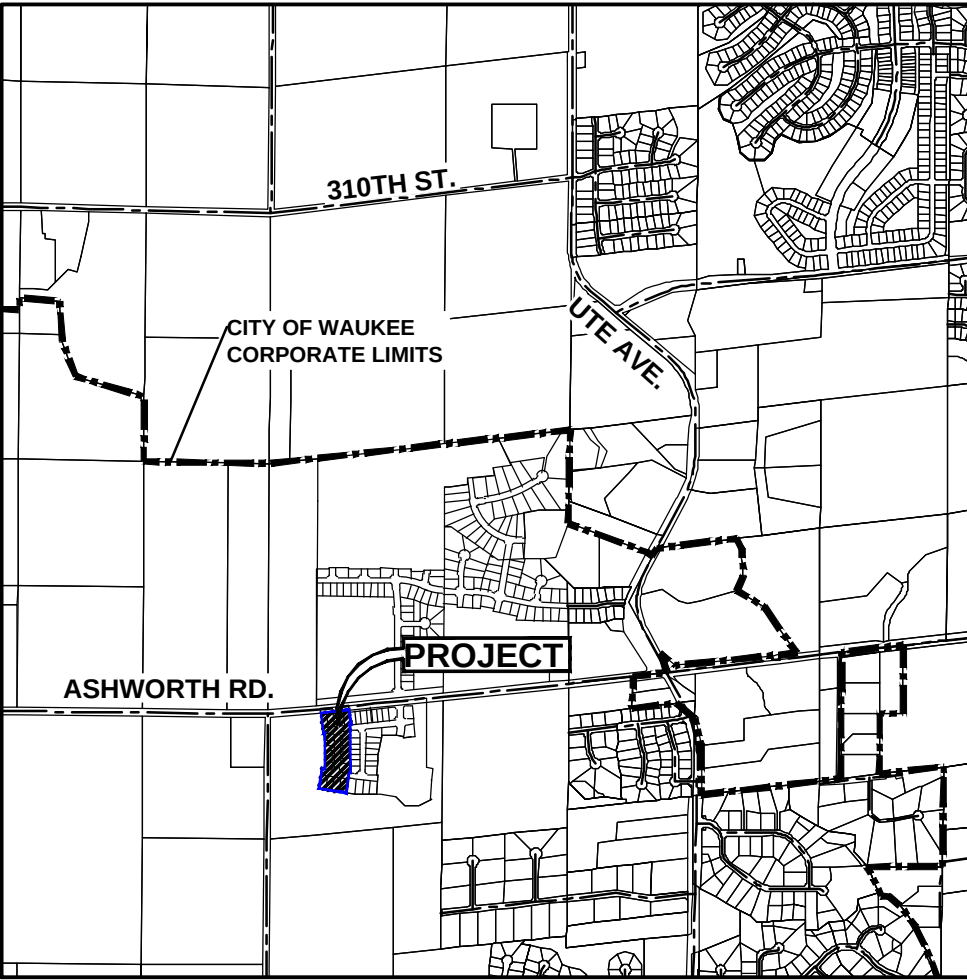
TECH: BDH
ENGINEER: EKO

HAMILTON RIDGE PLAT 4

EROSION AND SEDIMENT CONTROL PLAN

VICINITY MAP

NOT TO SCALE



WAUKEE, IOWA

STABILIZATION QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL
1	SILT FENCE	LF	1,200
2	DITCH CHECKS	LF	650
3	TYPE 1 TURF REINFORCEMENT MATTING	SF	580
4	SEEDING, FERTILIZING, AND MULCHING	AC	4.51
5	INLET PROTECTION DEVICES	EA	9
6	CONCRETE WASHOUT PIT	EA	1

DISCHARGE POINT SUMMARY

DISCHARGE POINT #1 ±1000 FEET INTO AN UNKNOWN TRIBUTARY OF SUGAR CREEK

TOTAL AREA DISTURBED TO DISCHARGE POINT 5.45 ACRES
STORAGE VOLUME REQUIRED (# OF ACRES*3600 CU FT) 19,620 CU FT

VOLUME PROVIDED IN SILT FENCE (1,200 LF @ 10.0 CU FT/LF OF FENCE) 12,000 CU FT
VOLUME PROVIDED IN DITCH CHECK (650 LF @ 15.0 CU FT/LF) 9,750 CU FT

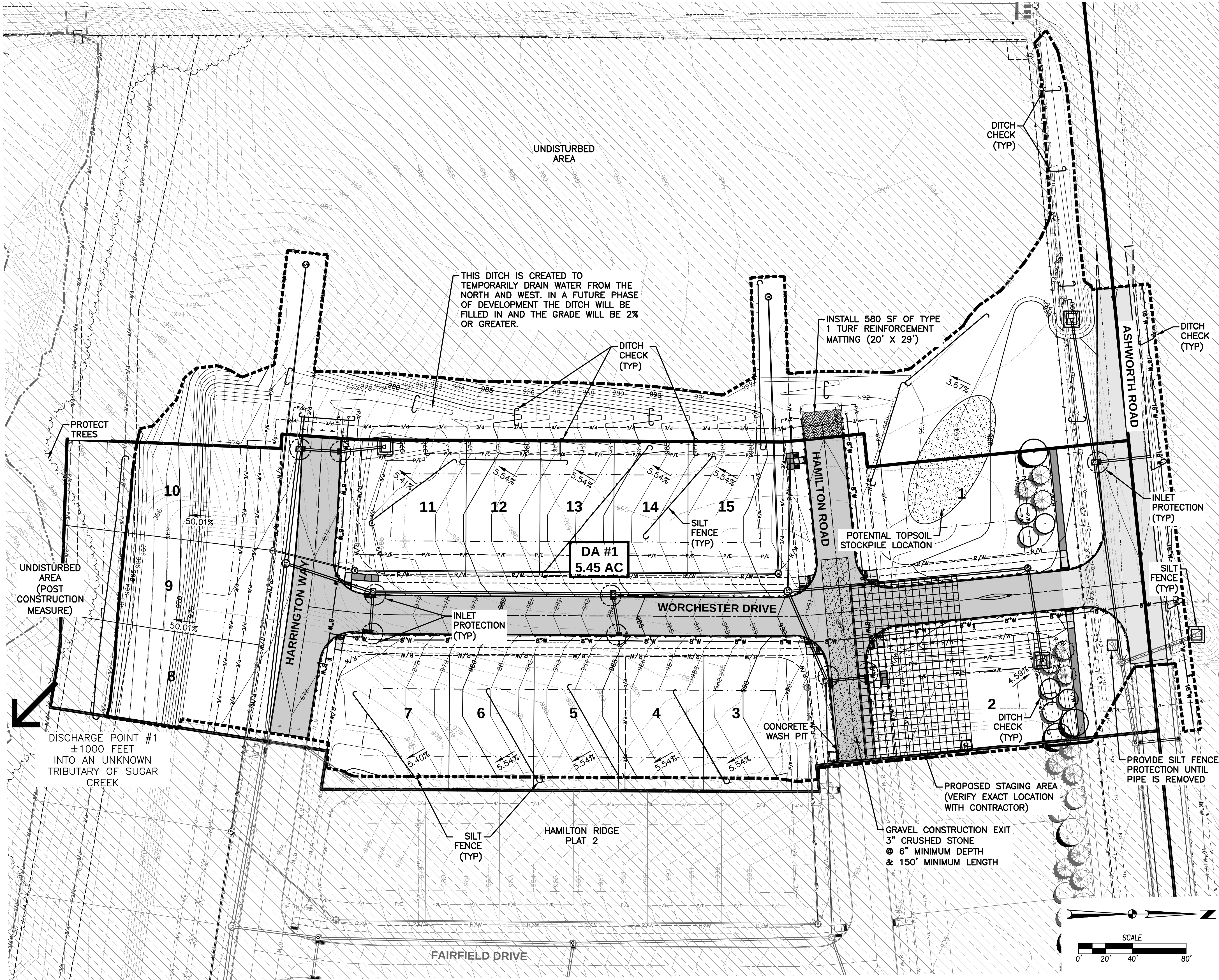
TOTAL VOLUME PROVIDED 21,750 CU FT

SWPPP LEGEND

DRAINAGE ARROW	X.XX %	UNDISTURBED AREA
GRADING LIMITS	---	RIP-RAP
FILTER SOCK		GRAVEL ENTRANCE
SILT FENCE	---	STAGING AREA
DITCH CHECK	---	CONCRETE WASHOUT PIT
INLET PROTECTION	○	
PORTABLE RESTROOM	R	

NOTES:

- IF DEWATERING IS NEEDED FOR ANY REASON, DISCHARGE OF WATER OFFSITE IS TO CONFORM WITH THE GENERAL PERMIT #2 REQUIREMENT.
- DISTURBED AREAS SHALL BE TEMPORARILY SEEDED OR MULCHED IMMEDIATELY WHENEVER CLEARING, GRADING, EXCAVATING, OR OTHER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS.
- STORM SEWERS AND DRAINAGE WAYS SHALL BE PROTECTED FROM CONCRETE SLURRY PRODUCED BY SAWCUTTING AND CONCRETE GRINDING.
- SHOULD A TEMPORARY SEED MIX BE REQUIRED TO CONFORM WITH THE GENERAL PERMIT #2 REQUIREMENTS IT SHALL BE A SUDAS TYPE 4 TEMPORARY SEED MIX.



DATE
10/17/2022
10/17/2022
04/27/2023
04/09/2021
03/02/2021

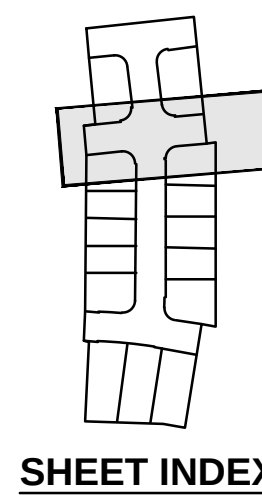
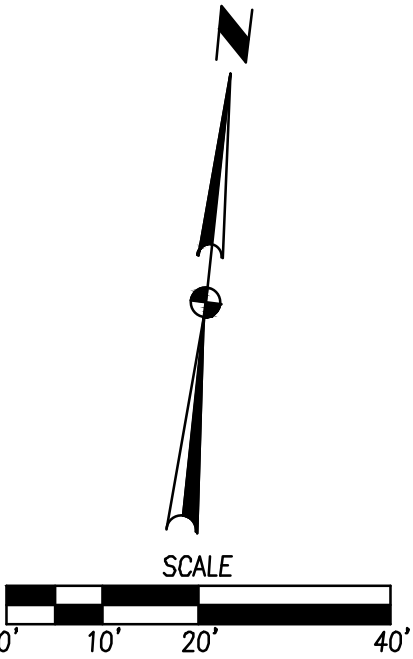
REVISIONS
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3405 S.E. CROSSROADS DRIVE, SUITE G
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ENGINEER: EKO

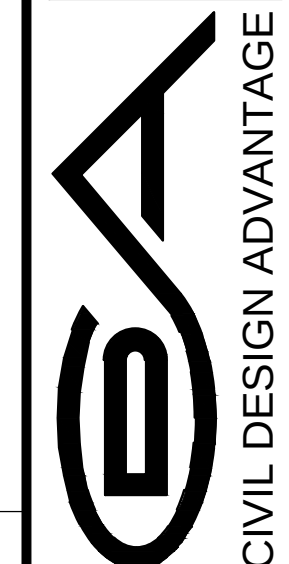
CIVIL DESIGN ADVANTAGE
WAUKEE, IOWA

HAMILTON RIDGE PLAT 4
EROSION AND SEDIMENT CONTROL PLAN

07/19
2102.066



3405 S.E. CROSSROADS DRIVE, SUITE G GRIMES, IOWA 50111 PHONE: (515) 369-4400 FAX: (515) 369-4410		TECH: BDH
ENGINEER: EKO		

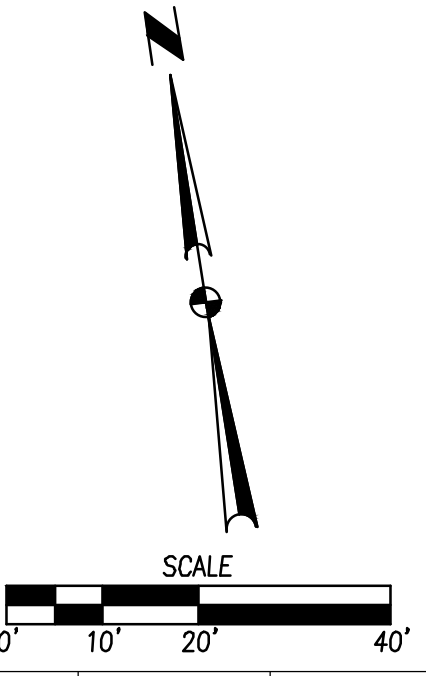
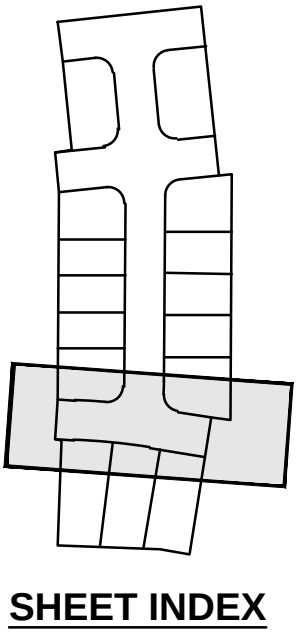
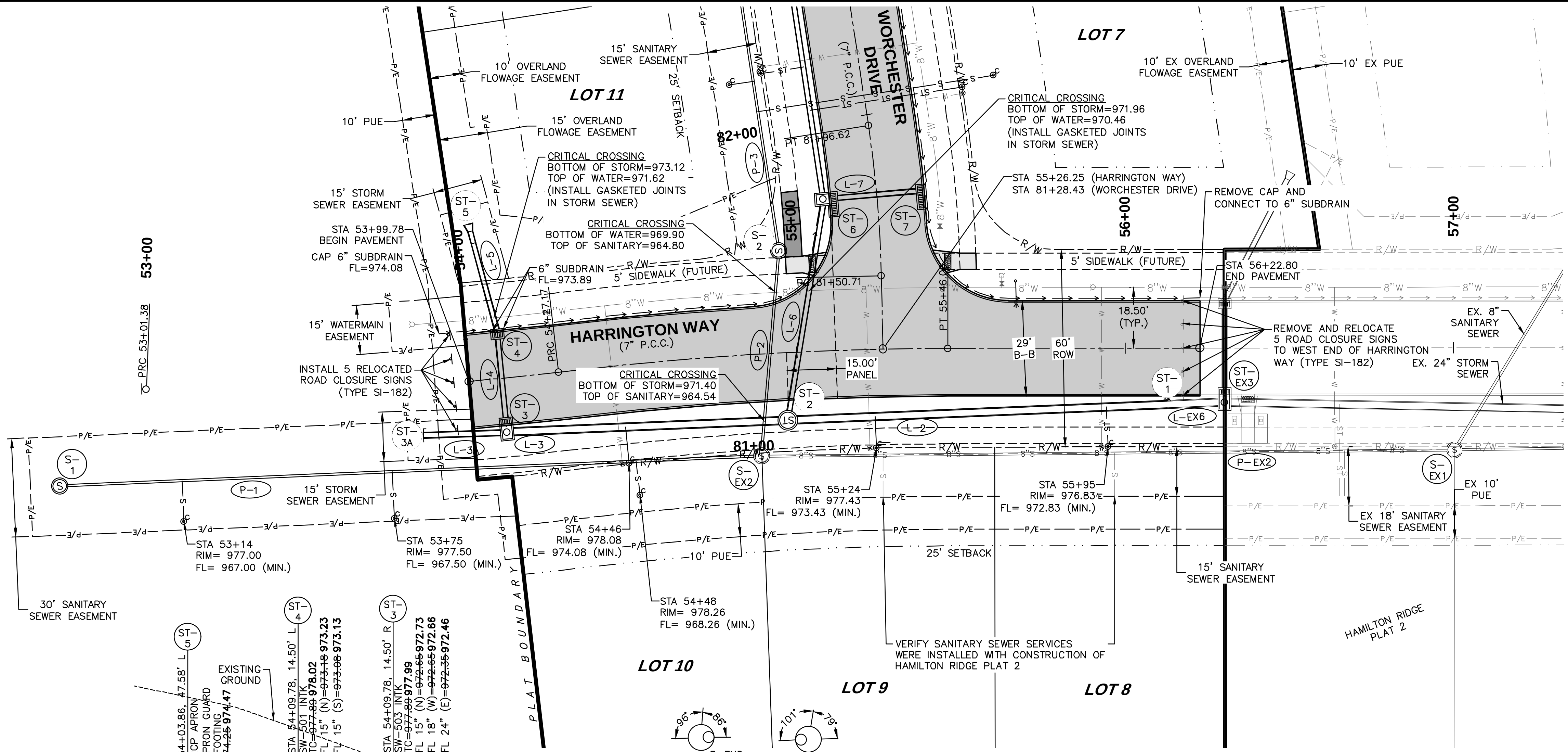
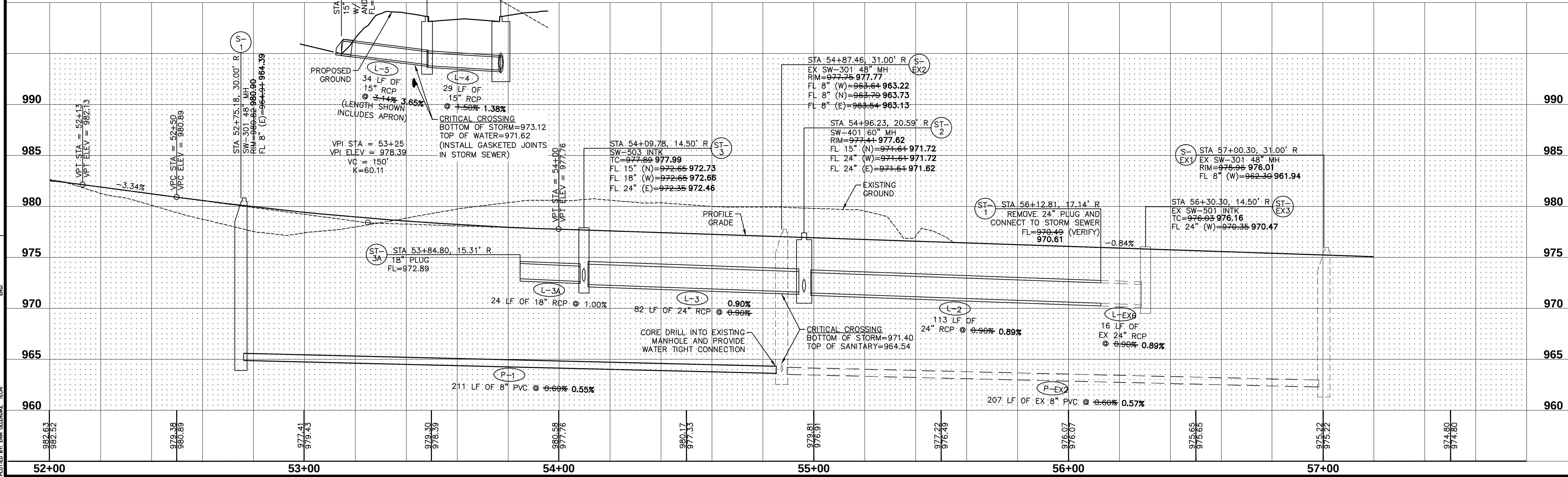


HAMILTON RIDGE PLAT 4

STORM & SANITARY SEWER PLAN AND PROFILE

WAUKEE, IOWA

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PLOT: 10/17/2022 9:08 AM
PLOT: 10/17/2022 9:08 AM



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CIVIL DESIGN ADVANTAGE

HAMILTON RIDGE PLAT 4

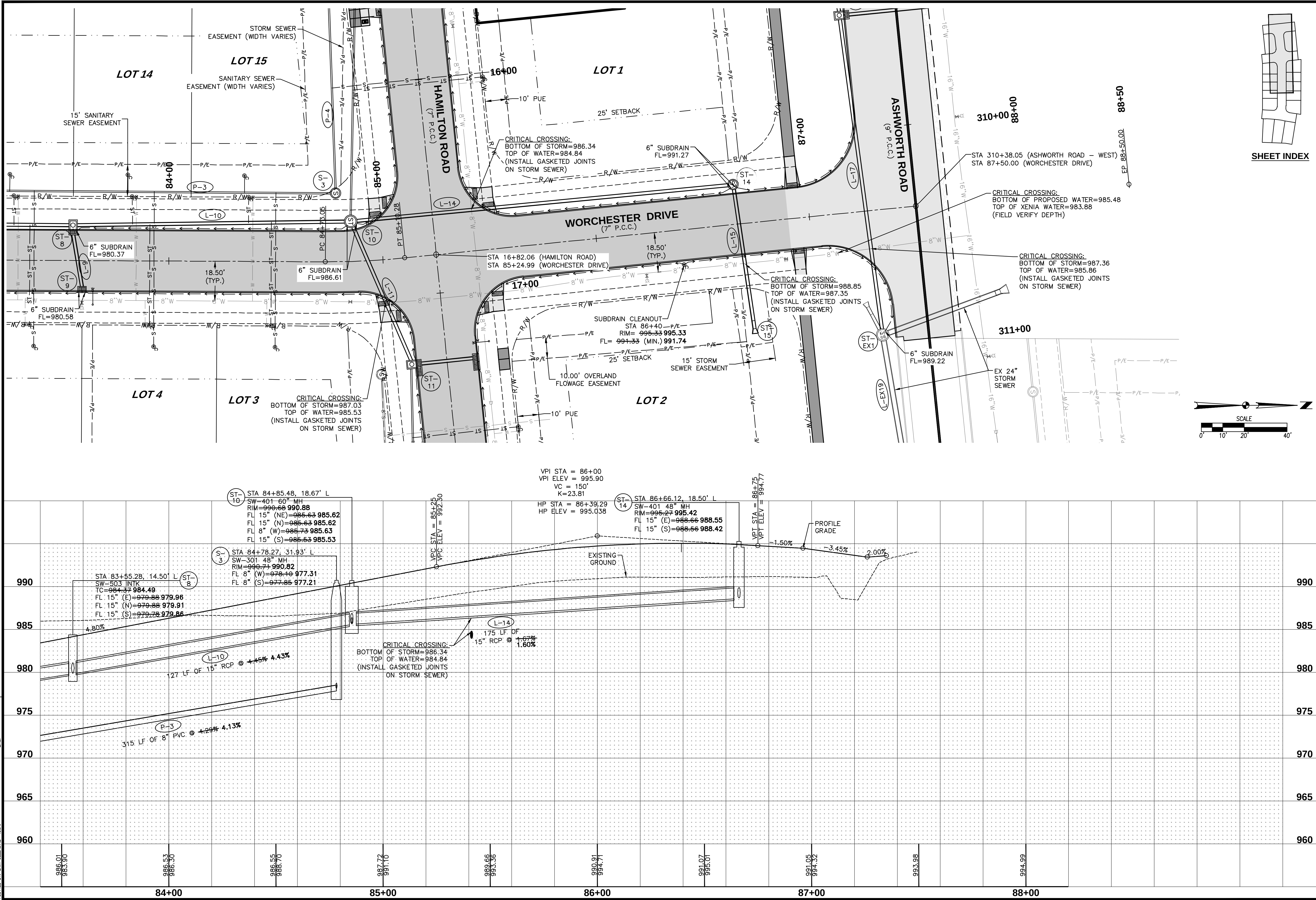
STORM & SANITARY SEWER PLAN AND PROFILE

WAUKEE, IOWA

9/19

2102.066

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DATE

10/17/2022

AS-BUILT SUBMITTAL

DATE

04/27/2021

FINAL SUBMITTAL

DATE

04/09/2021

THIRD SUBMITTAL

DATE

03/30/2021

SECOND SUBMITTAL

DATE

03/02/2021

FIRST SUBMITTAL

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PHONE: (515) 369-4400 FAX: (515) 369-4410

ENGINEER: EKO
TECH: BDH

CIVIL DESIGN ADVANTAGE

WAUKEE, IOWA

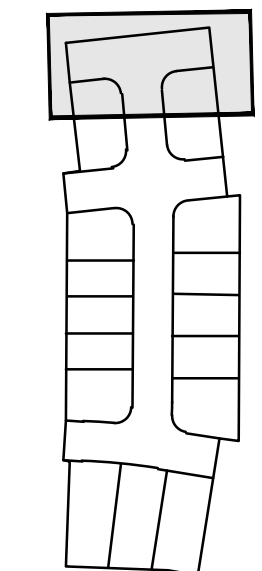
HAMILTON RIDGE PLAT 4

STORM & SANITARY SEWER PLAN AND PROFILE

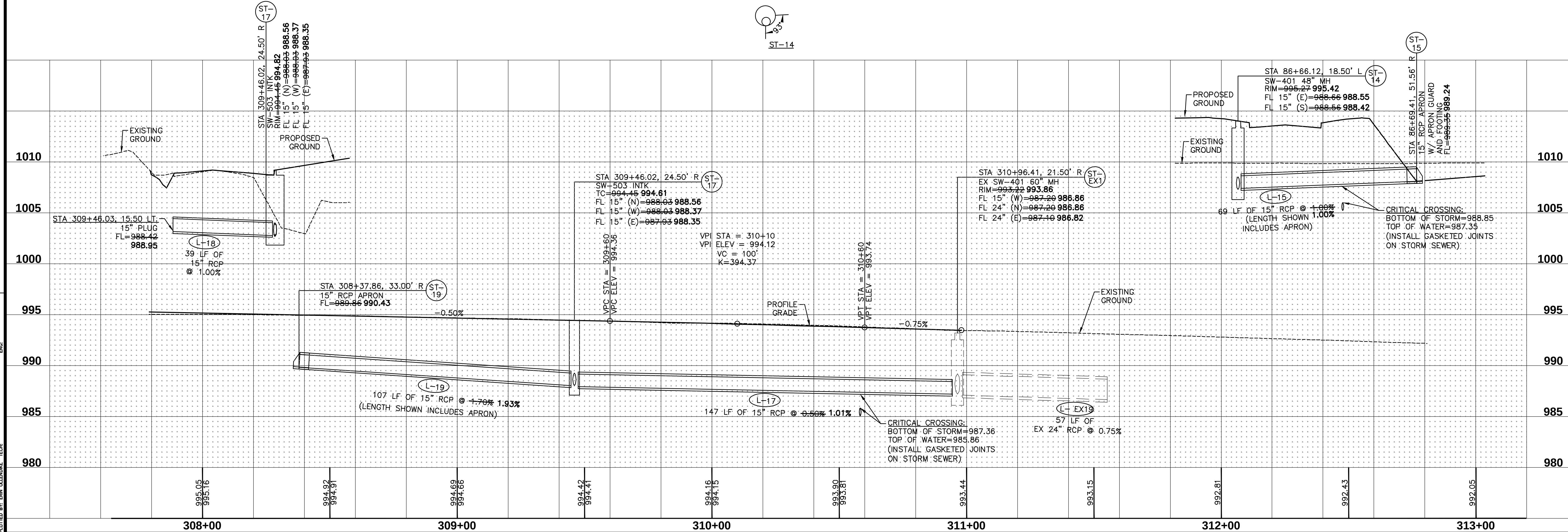
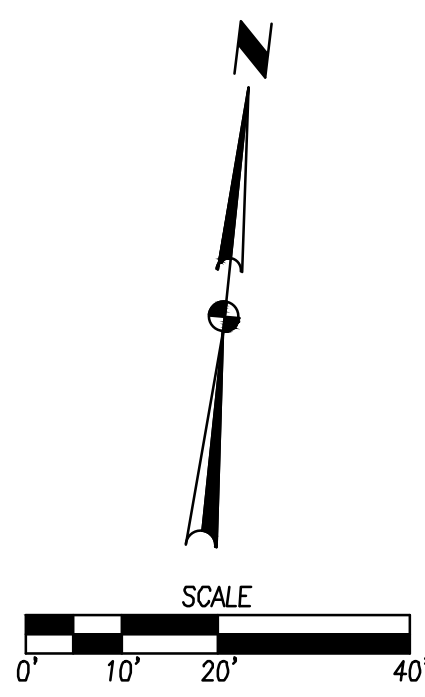
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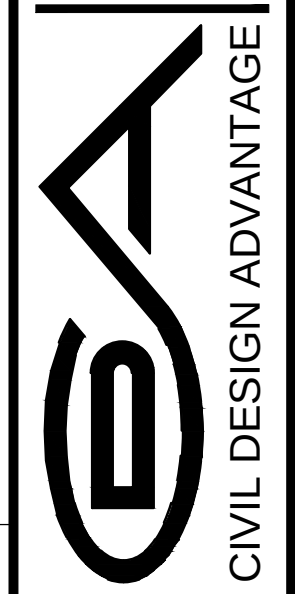
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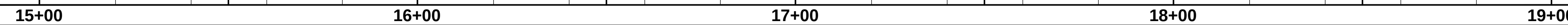
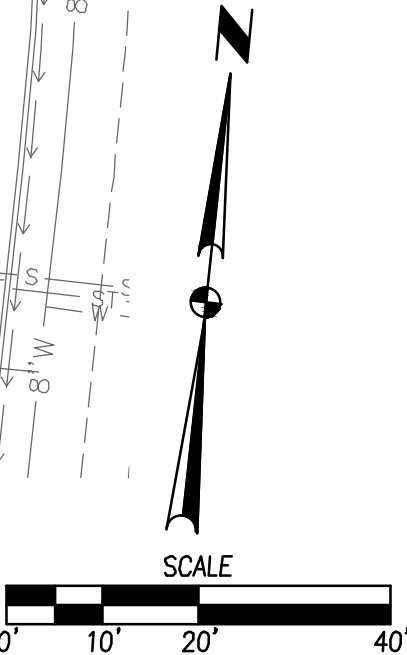
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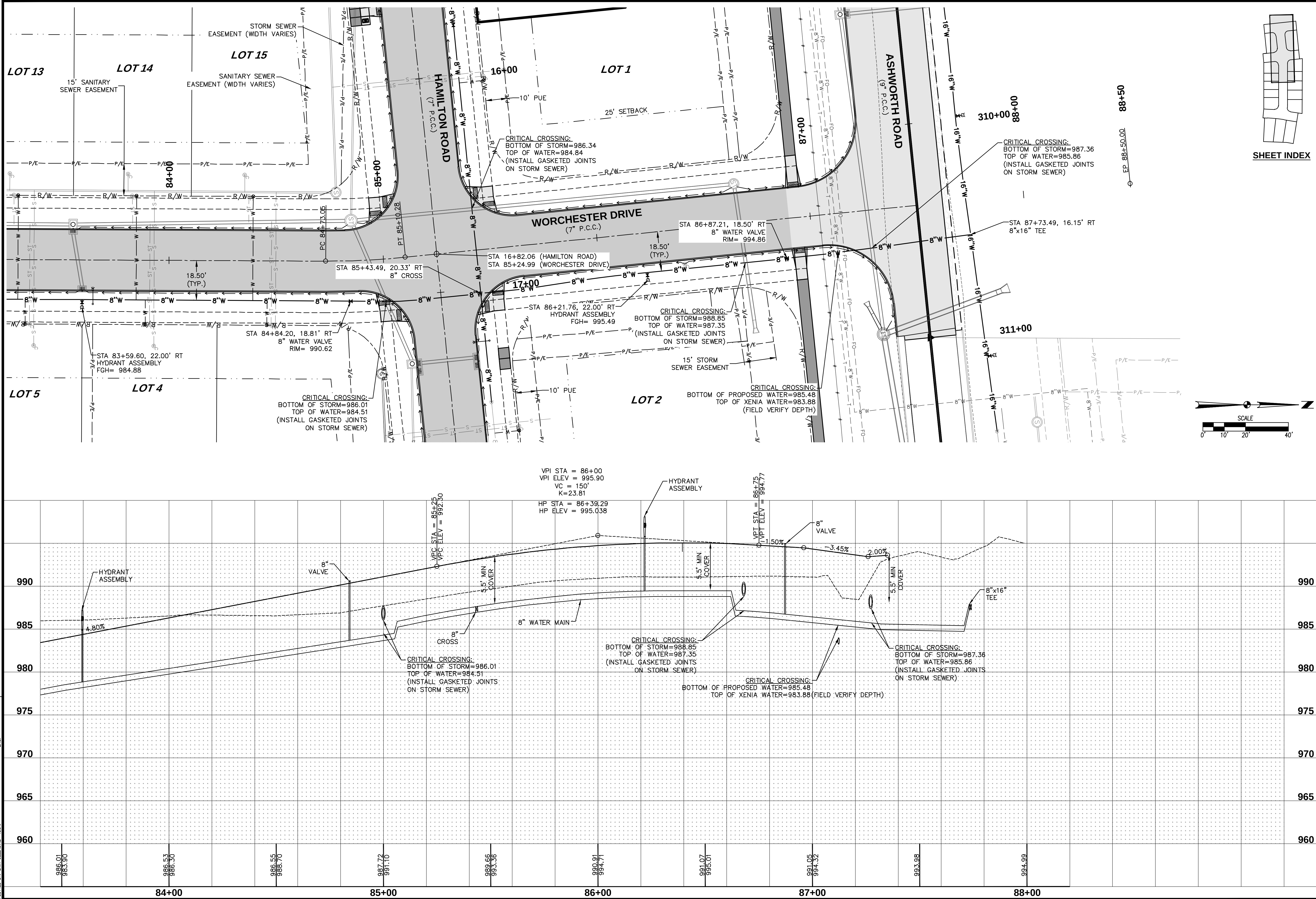
HAMILTON RIDGE PLAT 4

STORM & SANITARY SEWER PLAN AND PROFILE

WAUKEE, IOWA

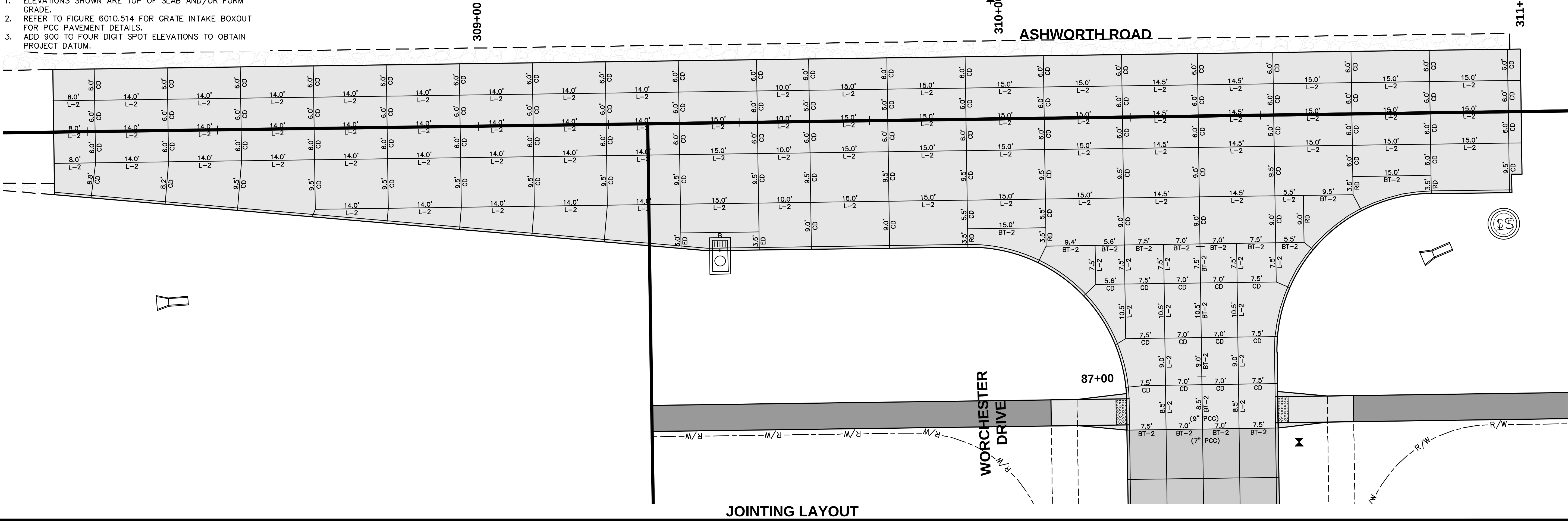


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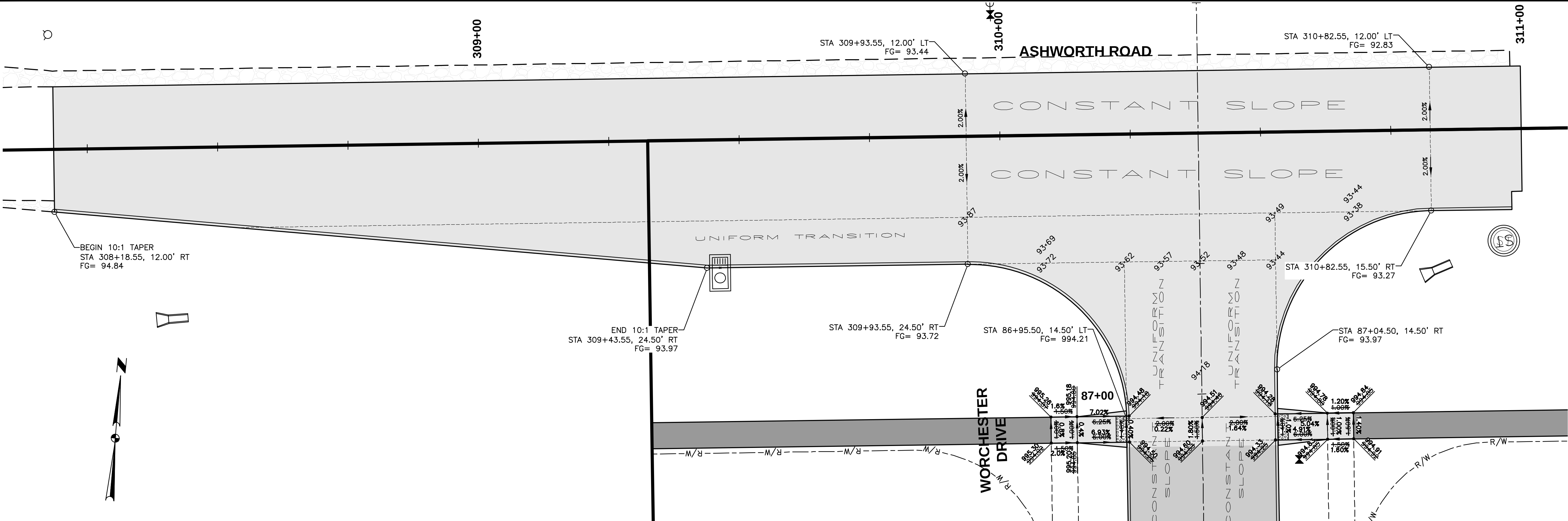


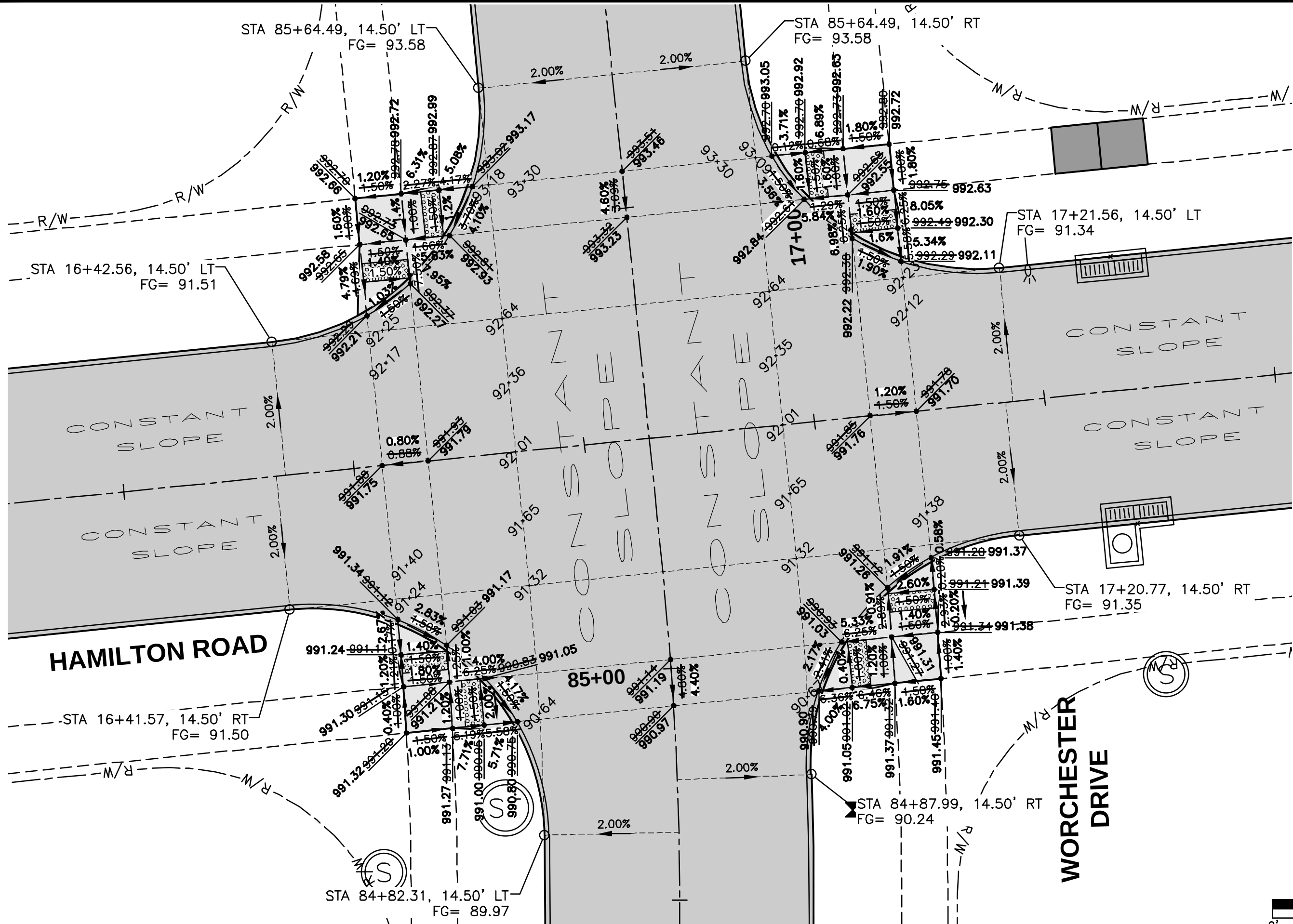
HAMILTON RIDGE PLAT 4
WATERMAIN PLAN AND PROFILE

- NOTES:
- ELEVATIONS SHOWN ARE TOP OF SLAB AND/OR FORM GRADE.
 - REFER TO FIGURE 6010.514 FOR GRATE INTAKE BOXOUT FOR PCC PAVEMENT DETAILS.
 - ADD 900 TO FOUR DIGIT SPOT ELEVATIONS TO OBTAIN PROJECT DATUM.

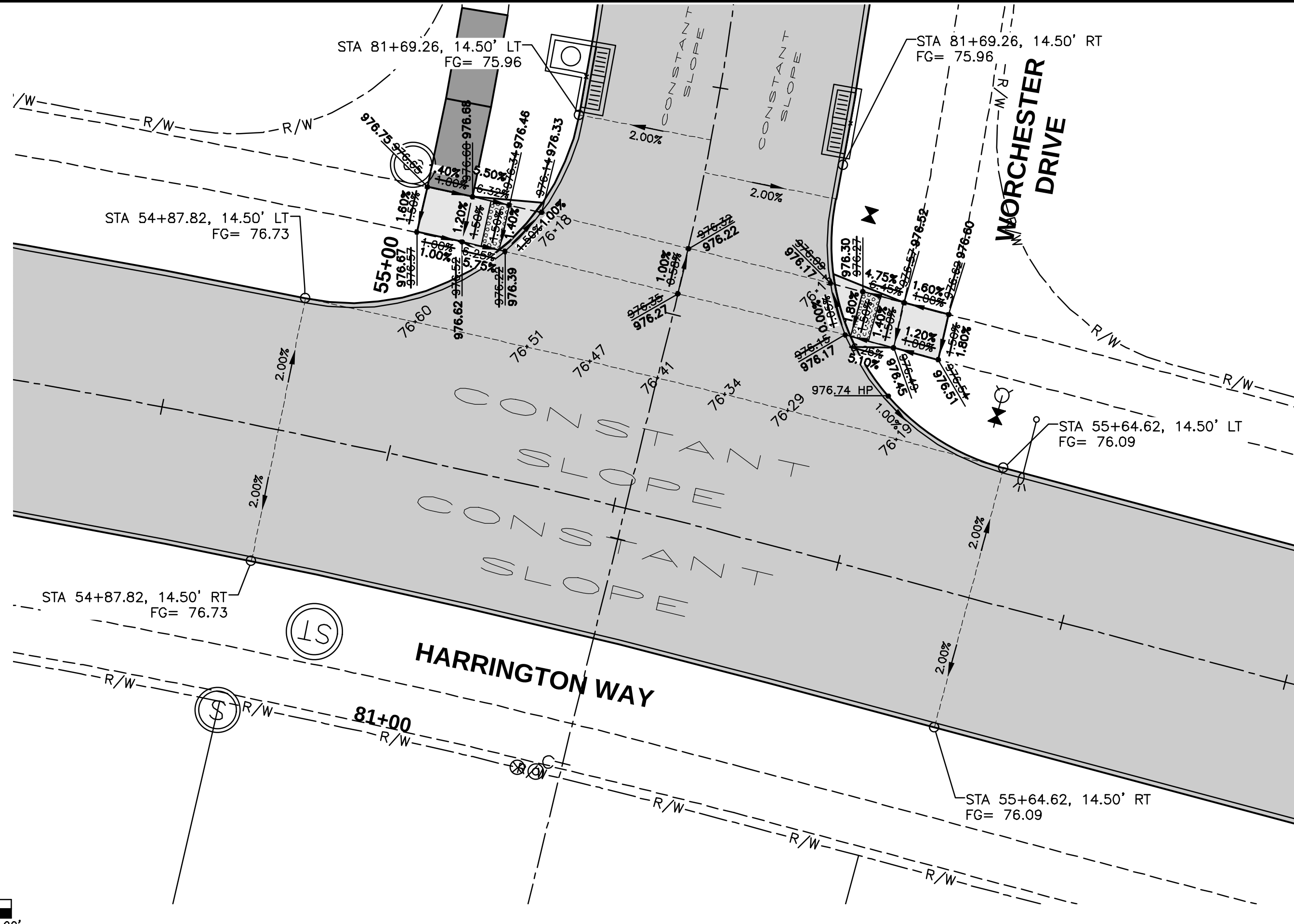


GEOMETRICS AND STAKING LAYOUT

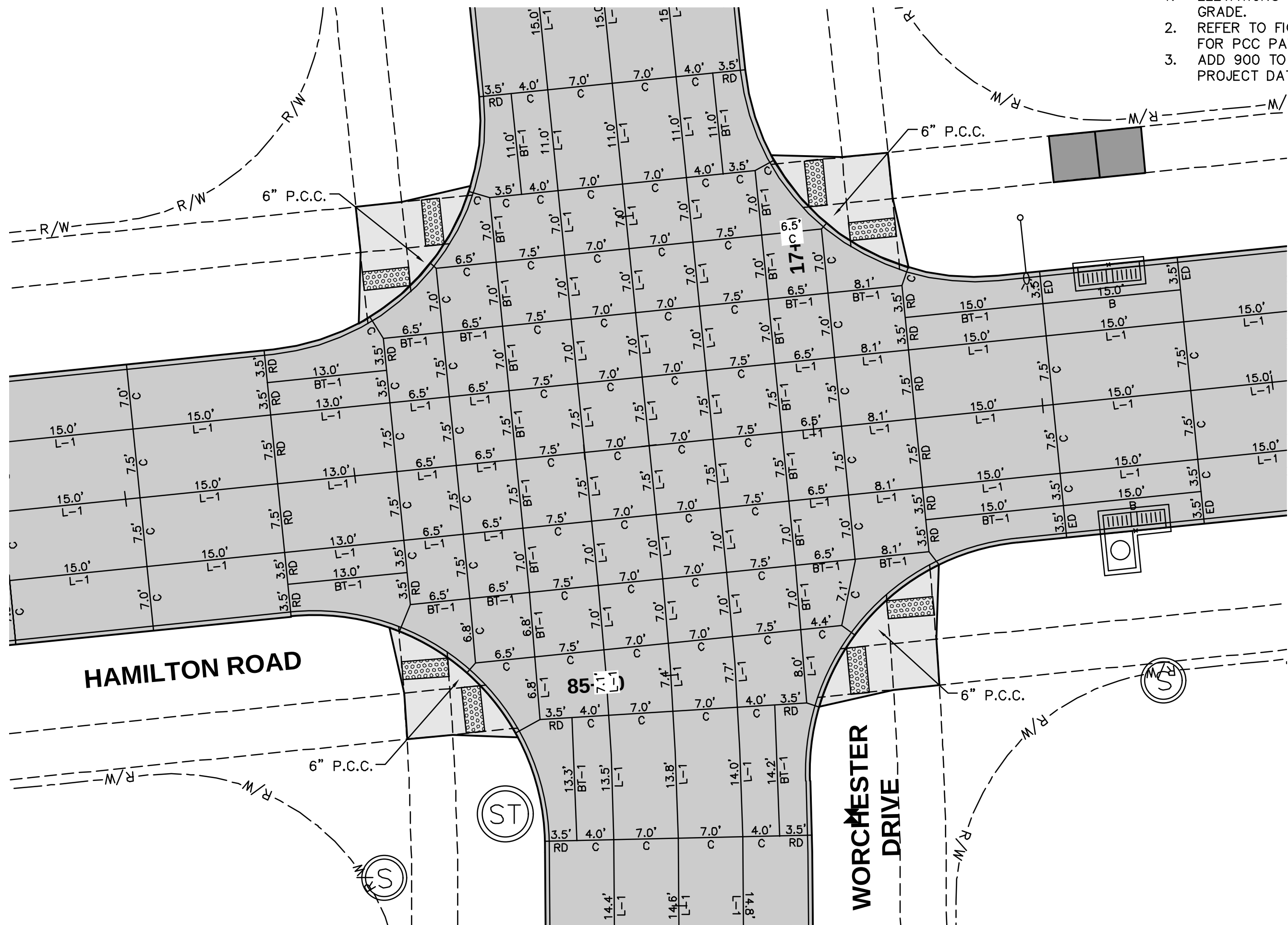




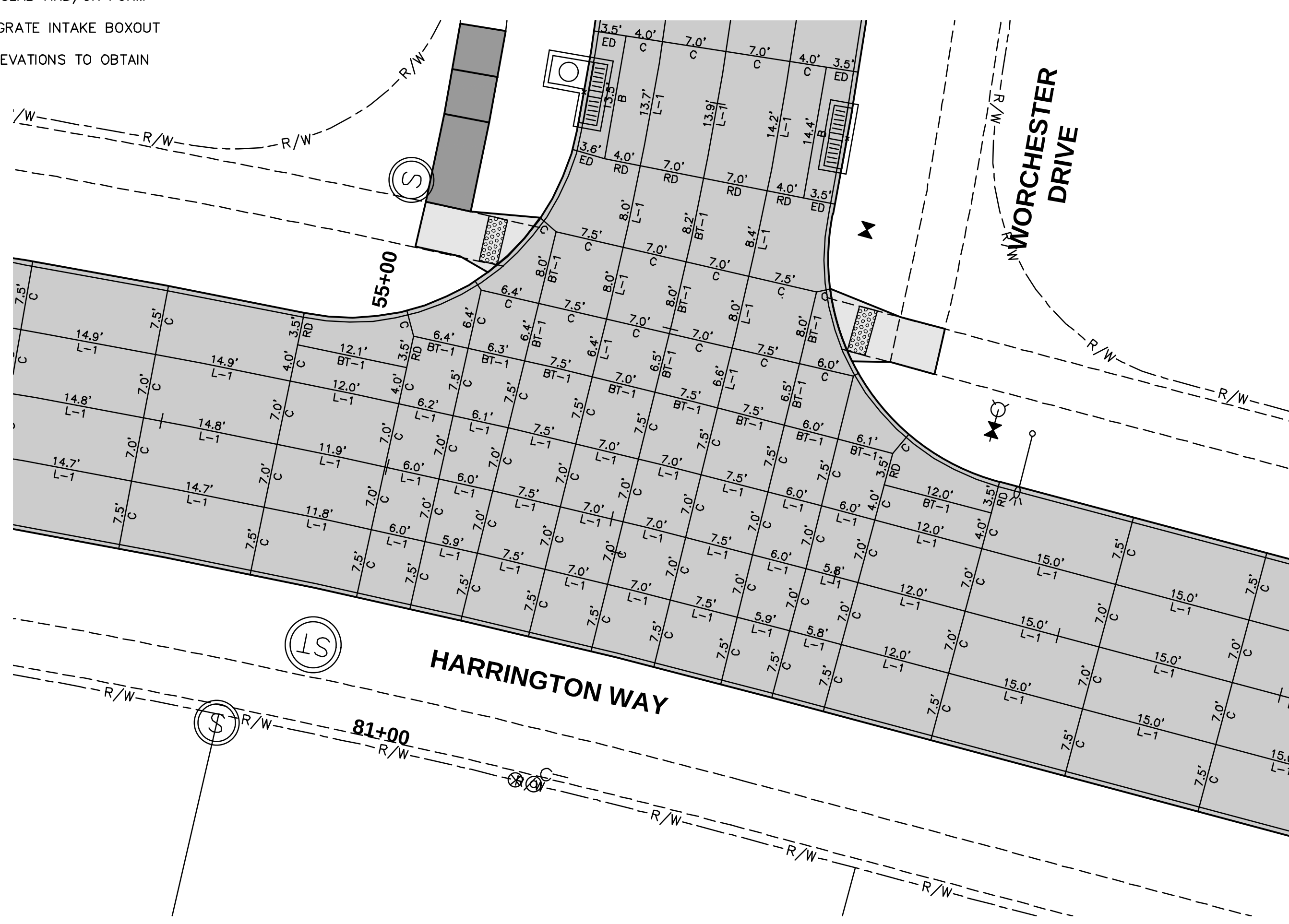
GEOMETRICS AND STAKING LAYOUT



GEOMETRICS AND STAKING LAYOUT



JOINTING LAYOUT



JOINTING LAYOUT

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