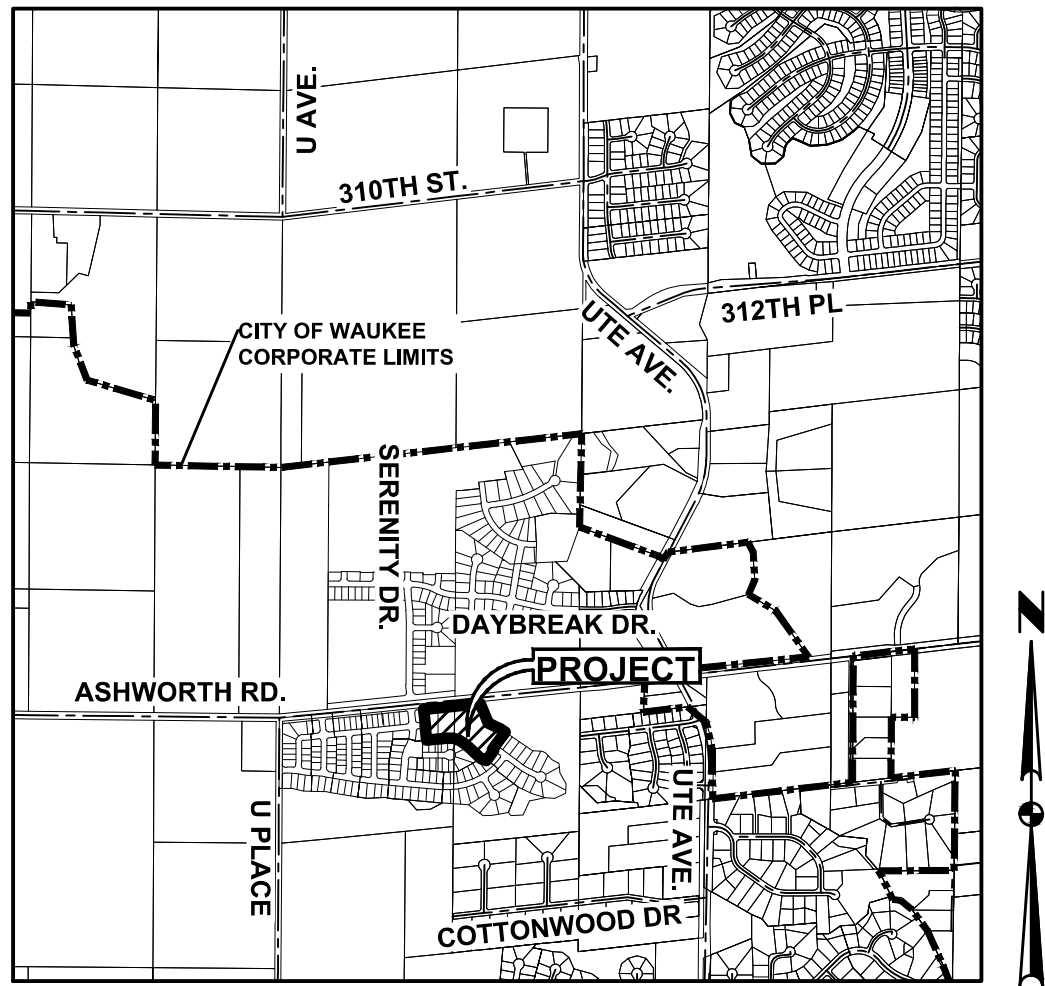


CONSTRUCTION PLANS FOR: HAMILTON RIDGE PLAT 9

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
4121 NW URBANDALE DR.
URBANDALE, IOWA 50322
CONTACT: ERIN OLLENDIKE
EMAIL: ERINO@CDA-ENG.COM
PH. (515) 369-4400
FX. (515) 369-4410

SURVEYOR

CIVIL DESIGN ADVANTAGE
4121 NW URBANDALE DR.
URBANDALE, IOWA 50322
CONTACT: CHARLIE MCGLOTHLEN
EMAIL: CHARLIEM@CDA-ENG.COM
PH. (515) 369-4400
FX. (515) 369-4410

ZONING

R-2: ONE AND TWO-FAMILY
RESIDENTIAL DISTRICT

DATE OF SURVEY:

APRIL 16, 2020

SUBMITTALS

FIRST SUBMITTAL: 01/04/2022
SECOND SUBMITTAL: 01/27/2022
THIRD SUBMITTAL: 02/22/2022
FOURTH SUBMITTAL: 03/16/2022
FIFTH SUBMITTAL: 04/01/2022
FINAL SUBMITTAL: 04/14/2022
AS-BUILT SUBMITTAL: 10/20/2023

BULK REGULATIONS

R-2: ONE- AND TWO- FAMILY RESIDENTIAL DISTRICT (LOTS 1-21)

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

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 2022 - FALL 2022

DEVELOPMENT SUMMARY

TOTAL AREA OF PLAT 9 = 7.32 ACRES (318,968 SF)

NOTES

- ANY CHANGES PROPOSED TO THE CONSTRUCTION DRAWINGS DURING CONSTRUCTION SHALL BE APPROVED IN WRITING BY THE COMMUNITY DEVELOPMENT DEPARTMENT.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY CHANGES MADE DURING CONSTRUCTION THAT HAVE NOT BEEN GRANTED APPROVAL IN WRITING BY THE COMMUNITY DEVELOPMENT 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.

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.

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
13-14	WATER MAIN PLAN AND PROFILE

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 AND A PART OF OUTLOT 'Z', HERTZ FARM PLAT 1, AN OFFICIAL PLAT, ALL IN THE CITY OF WAUKEE, DALLAS COUNTY, IOWA AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF HAMILTON RIDGE PLAT 1, AN OFFICIAL PLAT IN SAID CITY OF WAUKEE; THENCE NORTH 84°11'21" EAST ALONG THE NORTHERLY LINE OF SAID PARCEL '20-69' AND THE NORTHERLY LINE OF SAID OUTLOT 'Z', 592.75 FEET TO THE NORTHEAST CORNER OF SAID OUTLOT 'Z'; THENCE SOUTH 00°02'19" EAST ALONG THE EASTERLY LINE OF SAID OUTLOT 'Z', 60.31 FEET; THENCE SOUTH 22°41'56" EAST CONTINUING ALONG SAID EASTERLY LINE, 219.43 FEET; THENCE SOUTH 64°19'42" EAST CONTINUING ALONG SAID EASTERLY LINE, 137.21 FEET; THENCE SOUTH 55°59'24" EAST CONTINUING ALONG SAID EASTERLY LINE, 59.95 FEET TO THE NORTH CORNER OF HAMILTON RIDGE PLAT 8, AN OFFICIAL PLAT IN SAID CITY OF WAUKEE; THENCE SOUTH 36°28'53" WEST ALONG THE NORTHWESTERLY LINE OF SAID HAMILTON RIDGE PLAT 8, A DISTANCE OF 221.87 FEET; THENCE SOUTH 53°31'07" EAST CONTINUING ALONG SAID NORTHWESTERLY LINE, 17.92 FEET; THENCE SOUTH 36°28'53" WEST CONTINUING ALONG SAID NORTHWESTERLY LINE, 130.00 FEET TO THE NORTHERLY LINE OF HAMILTON RIDGE PLAT 6, AN OFFICIAL PLAT IN SAID CITY OF WAUKEE; THENCE NORTH 70°10'37" WEST ALONG SAID NORTHERLY LINE, 59.26 FEET TO THE EAST CORNER OF HAMILTON RIDGE PLAT 7, AN OFFICIAL PLAT IN SAID CITY OF WAUKEE; THENCE NORTH 47°15'30" WEST ALONG THE NORTHERLY LINE OF SAID HAMILTON RIDGE PLAT 7, A DISTANCE OF 16.32 FEET; THENCE NORTH 47°15'30" WEST CONTINUING ALONG SAID NORTHERLY LINE, 73.44 FEET; THENCE NORTH 47°15'30" WEST CONTINUING ALONG SAID NORTHERLY LINE, 73.12 FEET; THENCE NORTH 56°03'28" WEST CONTINUING ALONG SAID NORTHERLY LINE, 65.26 FEET; THENCE NORTH 72°08'41" WEST CONTINUING ALONG SAID NORTHERLY LINE, 59.31 FEET; THENCE NORTH 89°39'26" WEST CONTINUING ALONG SAID NORTHERLY LINE, 61.32 FEET; THENCE SOUTH 84°11'29" WEST CONTINUING ALONG SAID NORTHERLY LINE, 72.37 FEET; THENCE SOUTH 84°11'29" WEST CONTINUING ALONG SAID NORTHERLY LINE, 142.37 FEET TO THE SOUTHEAST CORNER OF LOT 10, SAID HAMILTON RIDGE PLAT 1; THENCE NORTH 05°48'31" WEST ALONG THE EASTERLY LINE OF SAID HAMILTON RIDGE PLAT 1, A DISTANCE OF 140.50 FEET; THENCE NORTH 84°11'29" EAST CONTINUING ALONG SAID EASTERLY LINE, 2.86 FEET; THENCE NORTH 05°48'39" WEST CONTINUING ALONG SAID EASTERLY LINE, 239.55 FEET TO THE POINT OF BEGINNING AND CONTAINING 7.33 ACRES (319,150 SQUARE FEET).

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

AS-BUILT DRAWINGS

AS-BUILT PLANS ARE BASED ON SURVEYED INVERT ELEVATIONS AND INFORMATION SUPPLIED BY THE CONTRACTOR. CIVIL DESIGN ADVANTAGE TAKES NO RESPONSIBILITY FOR UNAUTHORIZED CHANGES TO THE PLANS WITHOUT CITY/OWNER KNOWLEDGE. FIELD VERIFICATION OF UTILITIES OR OTHER PLAN ELEMENTS IS ALWAYS RECOMMENDED.



CIVIL DESIGN ADVANTAGE

4121 NW URBANDALE DR. URBANDALE, IOWA 50322

PH: (515) 369-4400 Fax: (515) 369-4410

PROJECT NO. 2111.924

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	MOE
MINIMUM GRADE AT EXPOSED STRUCTURE	MGS

EXISTING

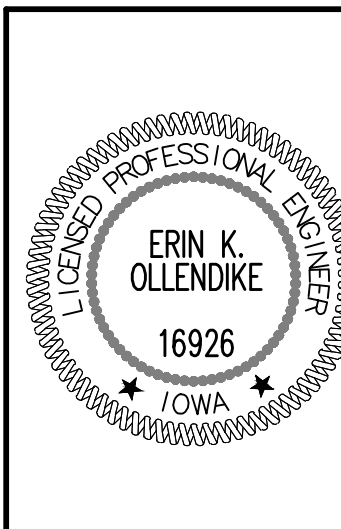
SANITARY MANHOLE	
WATER VALVE BOX	
FIRE HYDRANT	
WATER CURB STOP	
WELL	
STORM SEWER MANHOLE	
STORM SEWER SINGLE INTAKE	
STORM SEWER DOUBLE INTAKE	
FLARED END SECTION	
DECIDUOUS TREE	
CONIFEROUS TREE	
DECIDUOUS SHRUB	
CONIFEROUS SHRUB	
ELECTRIC POWER POLE	
GUY ANCHOR	
STREET LIGHT	
POWER POLE W/ TRANSFORMER	
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 2020 EDITION OF THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE 2022 EDITION OF SUDAS STANDARD SPECIFICATIONS SHALL APPLY TO ALL WORK PERFORMED ON THIS PROJECT EXCEPT AS MODIFIED HEREIN.



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.

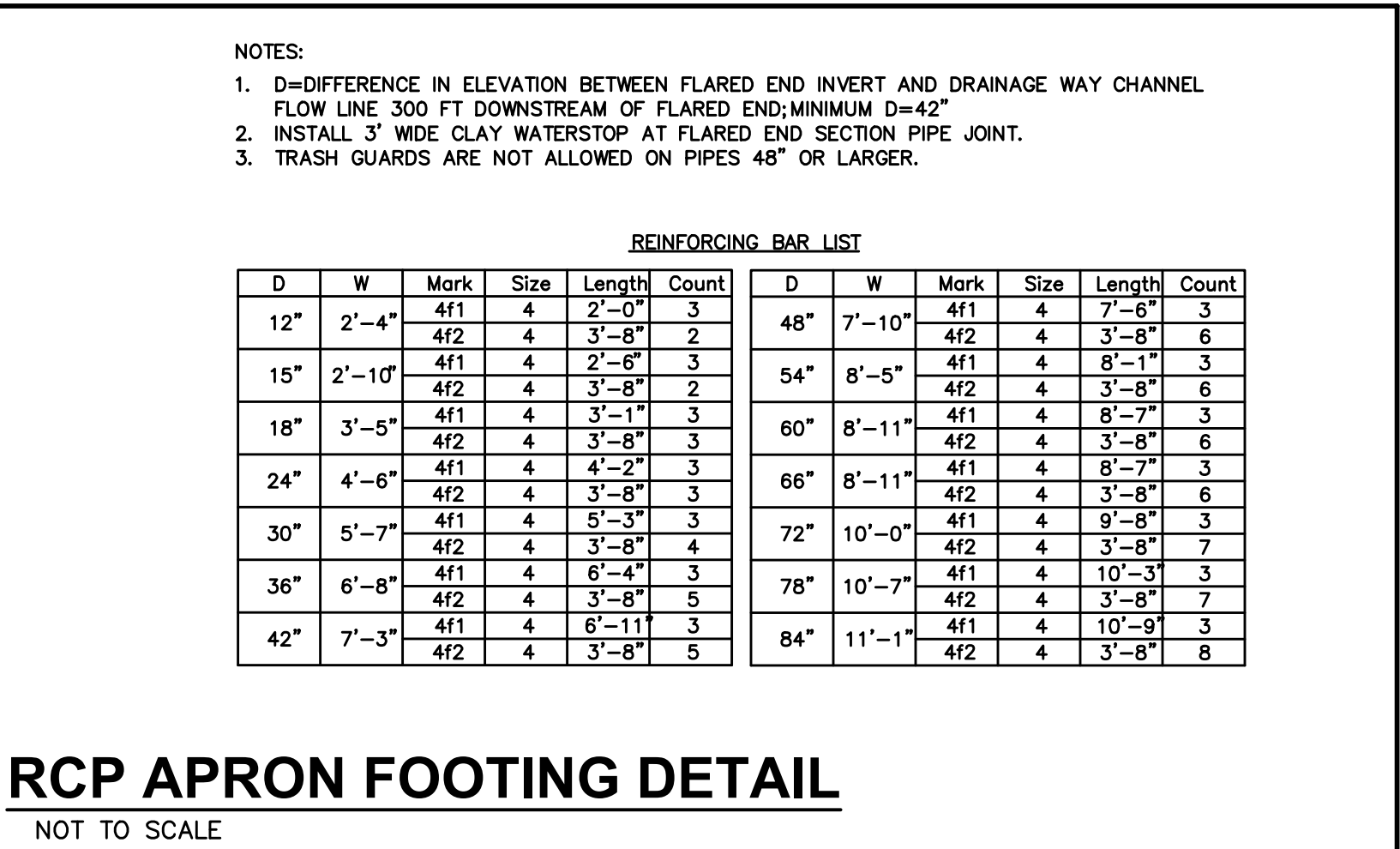
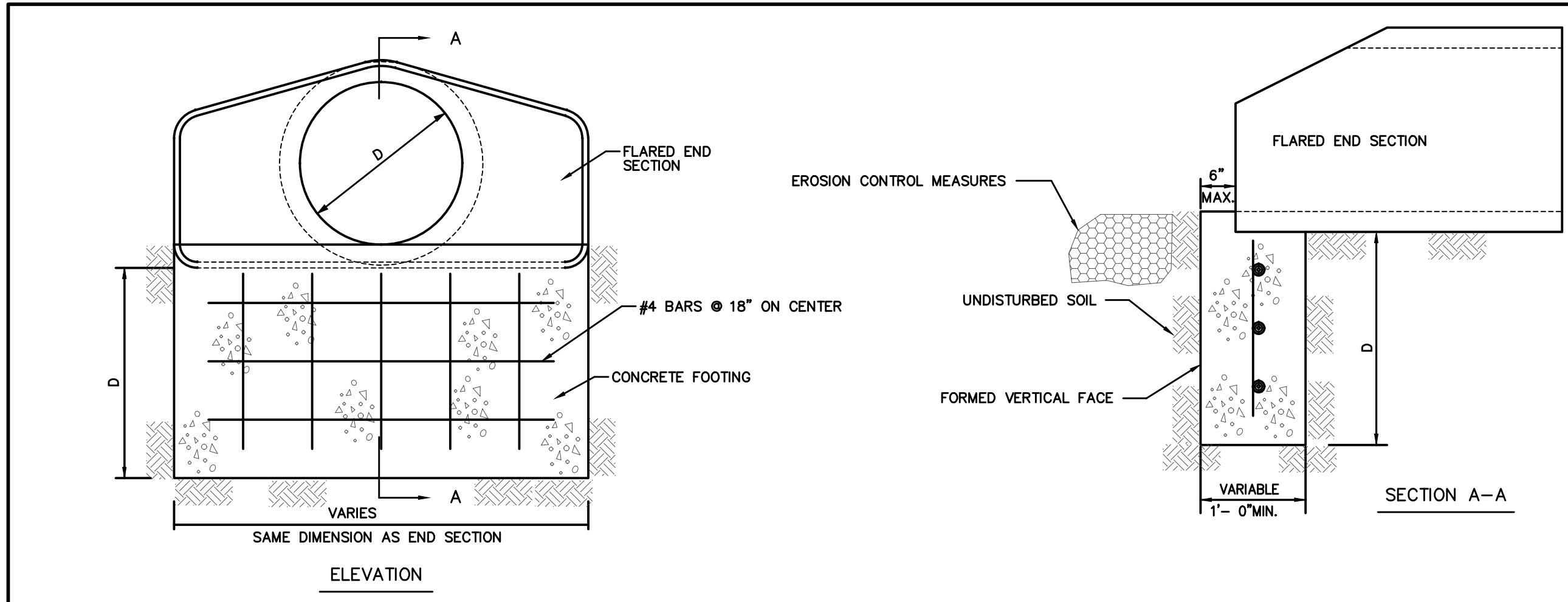
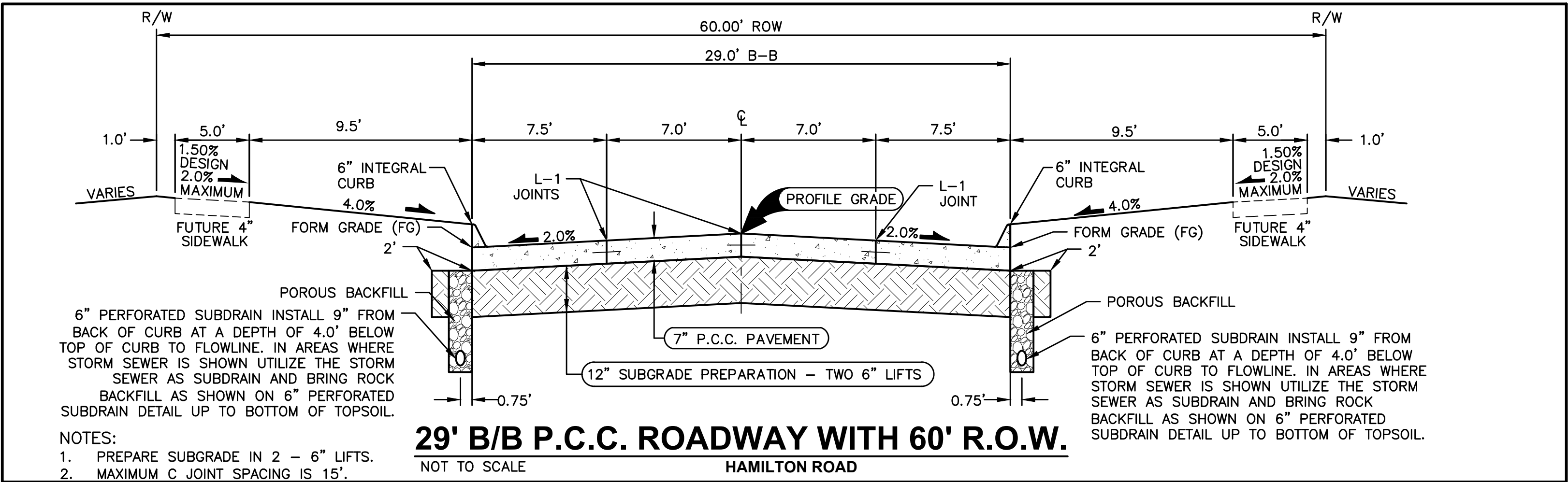
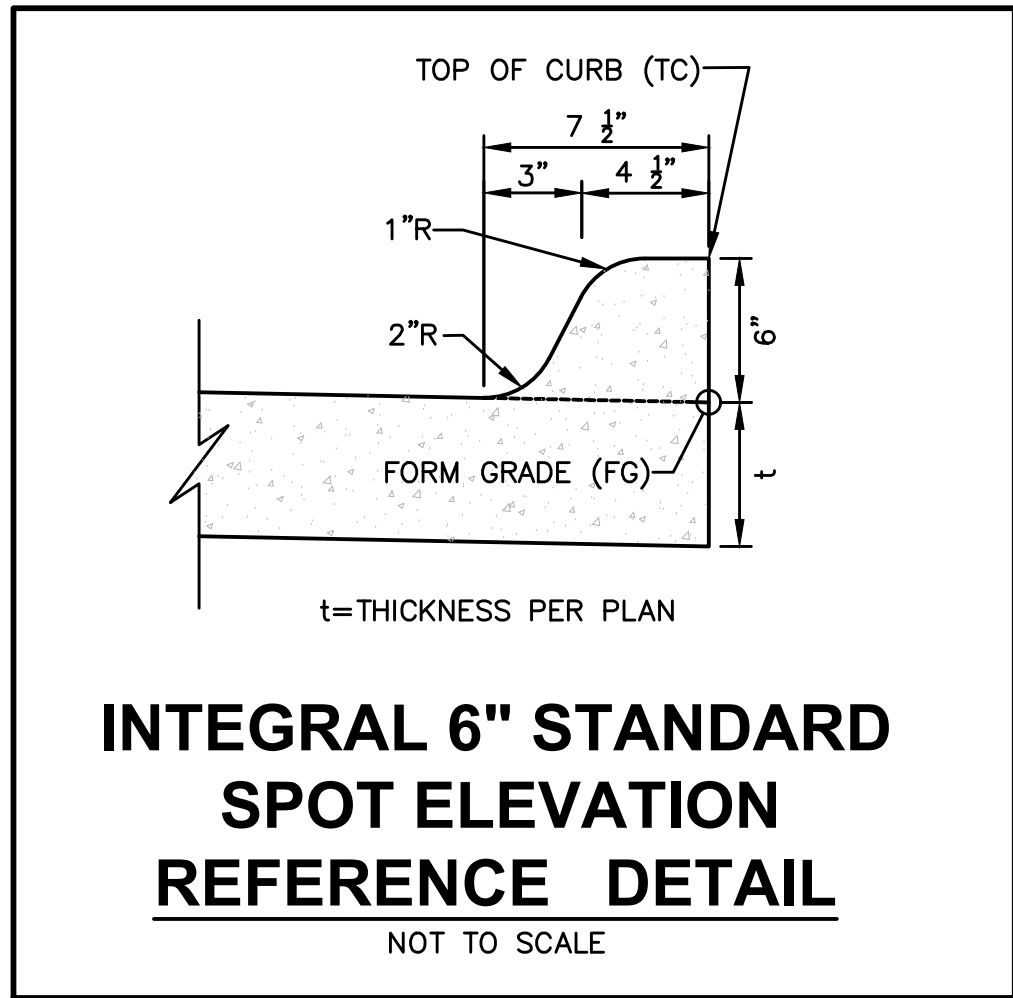
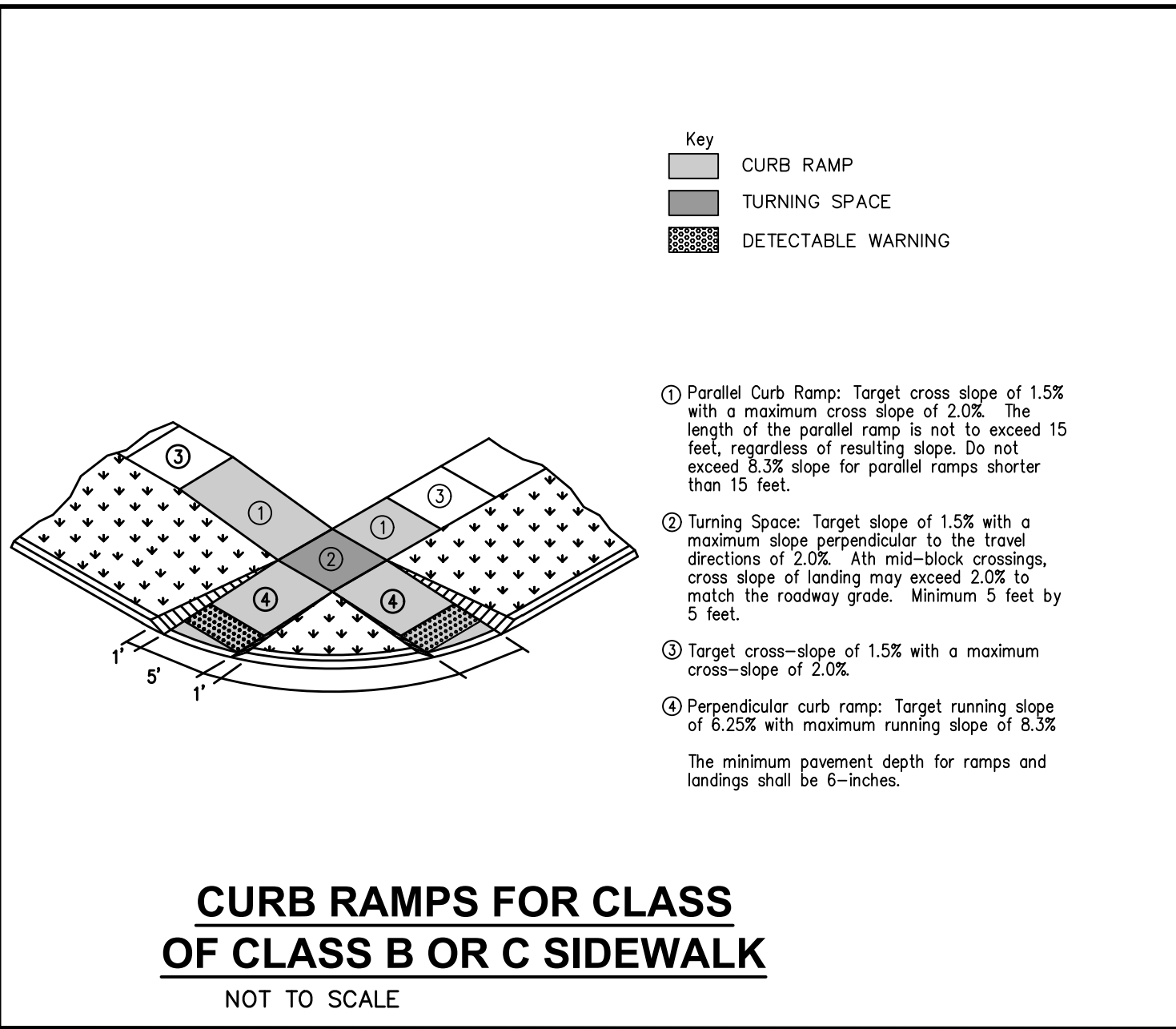
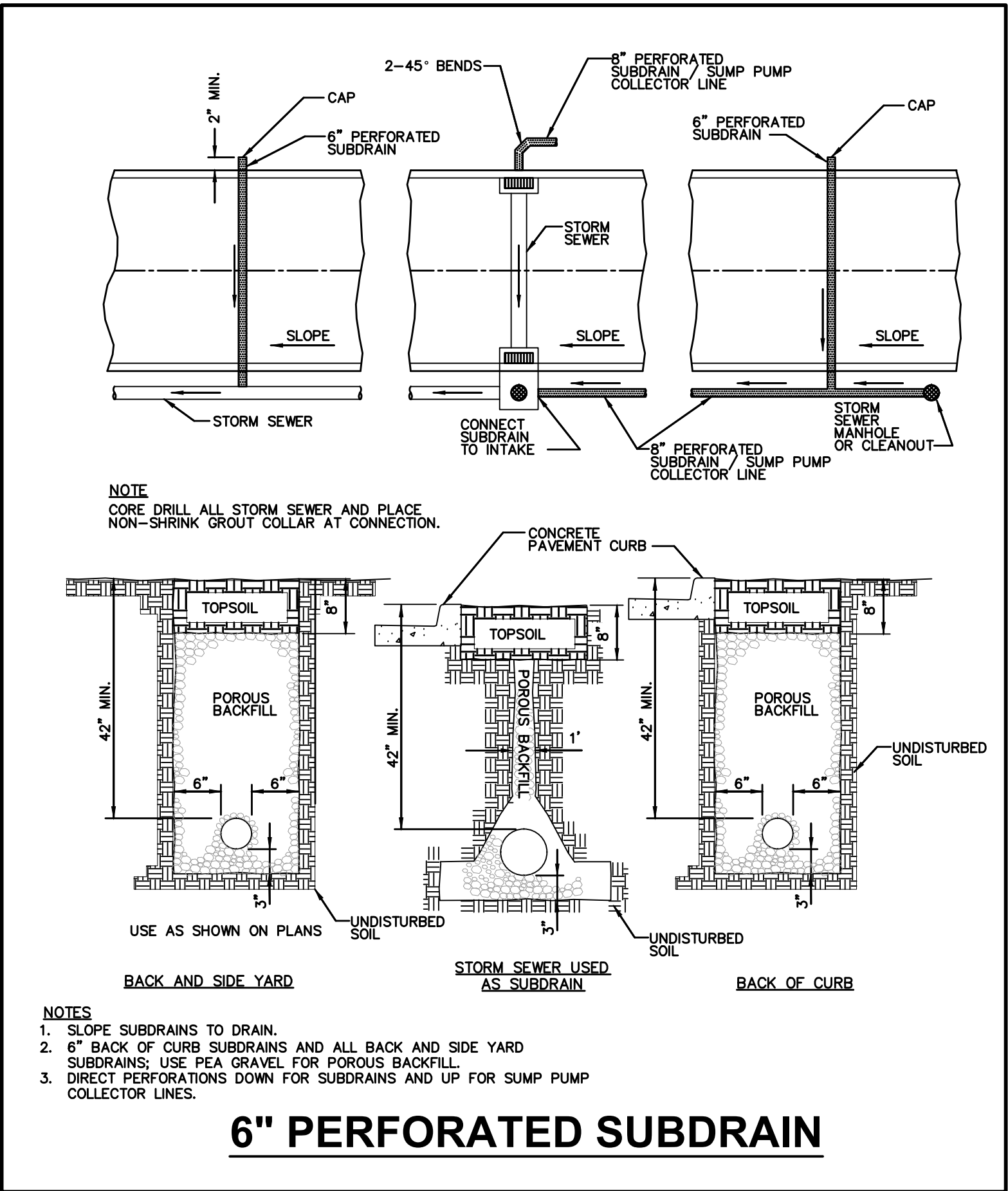
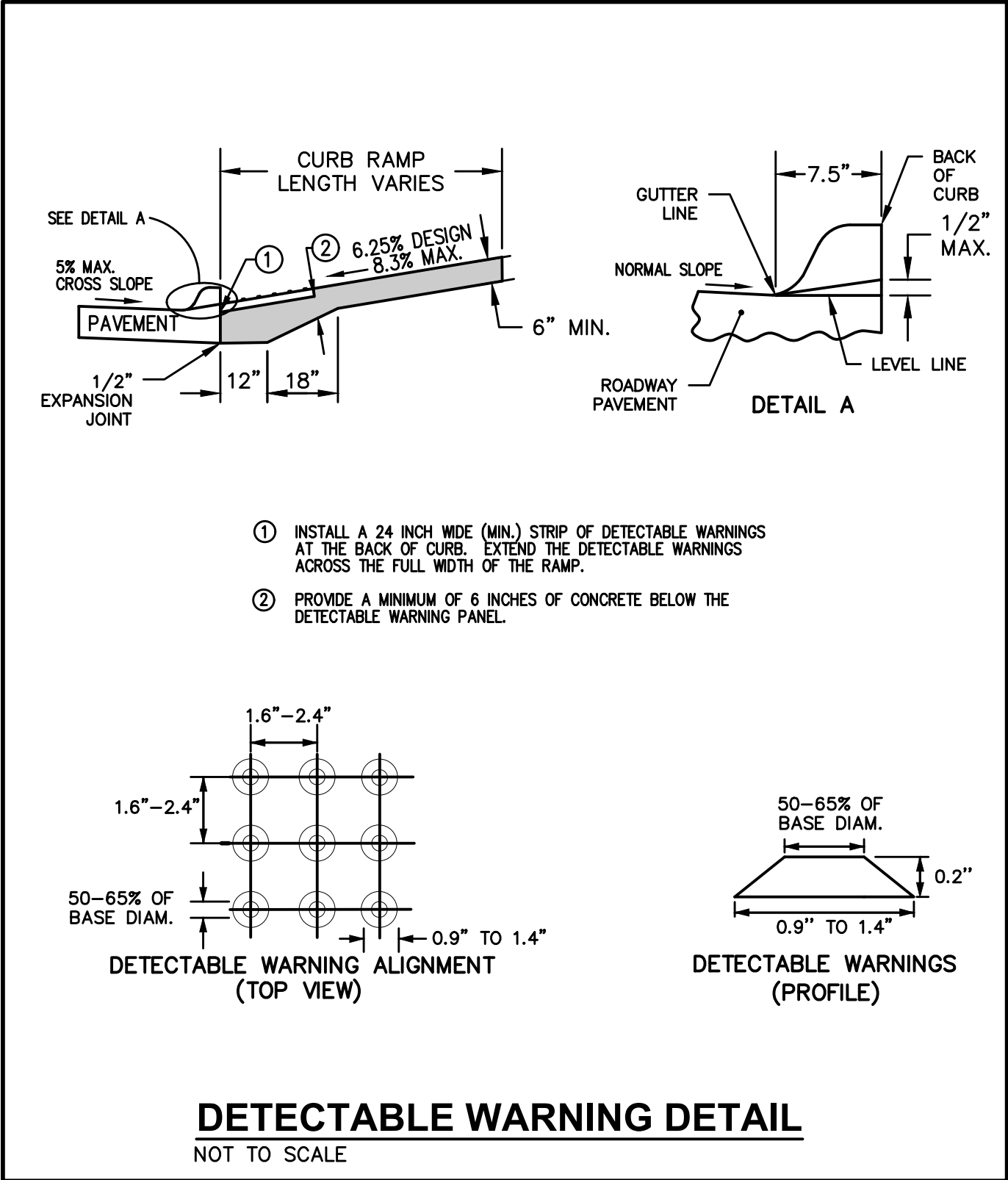
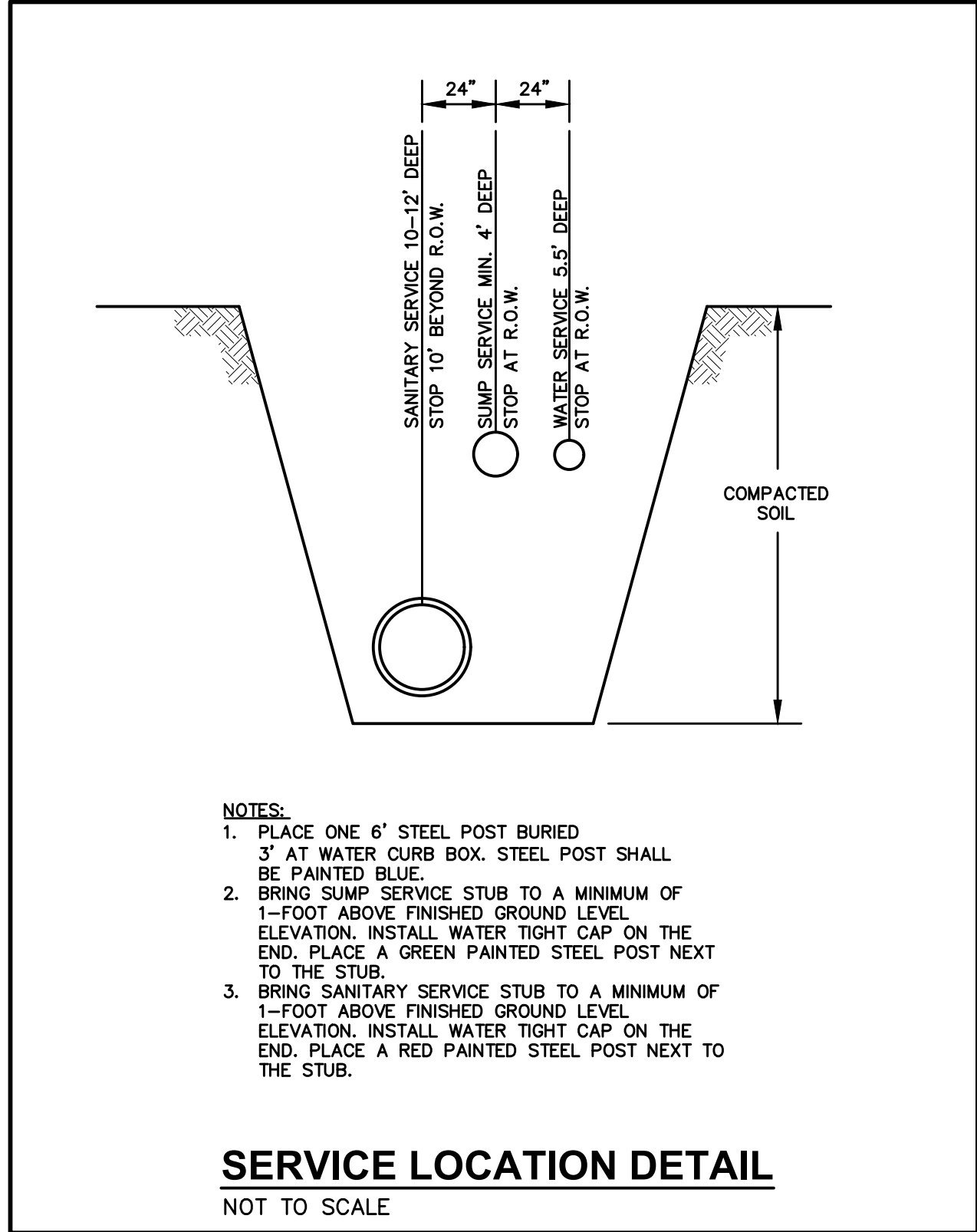
Erin K. Ollendike
ERIN K. OLLENDIKE, P.E.

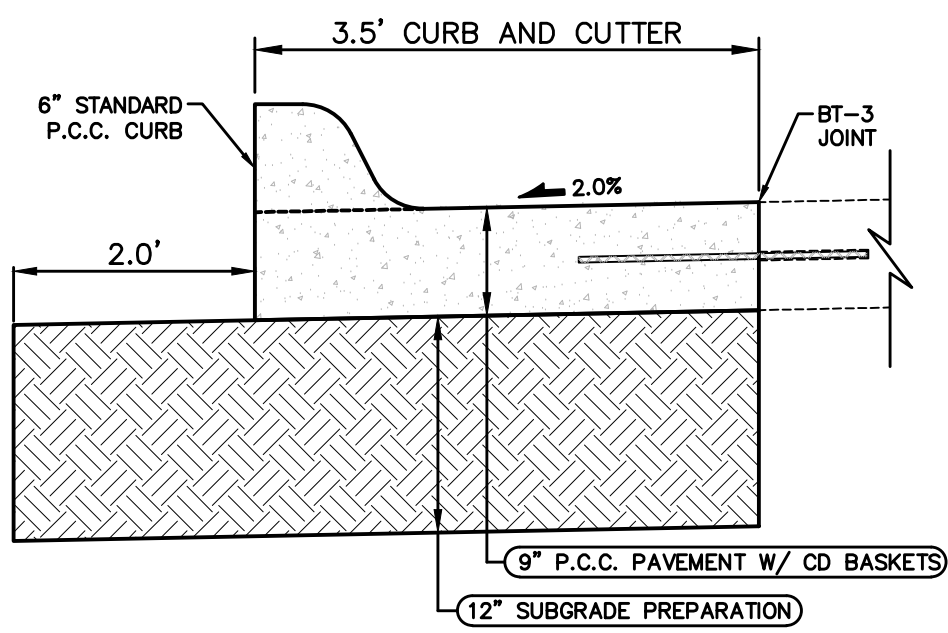
10/20/2023
DATE

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

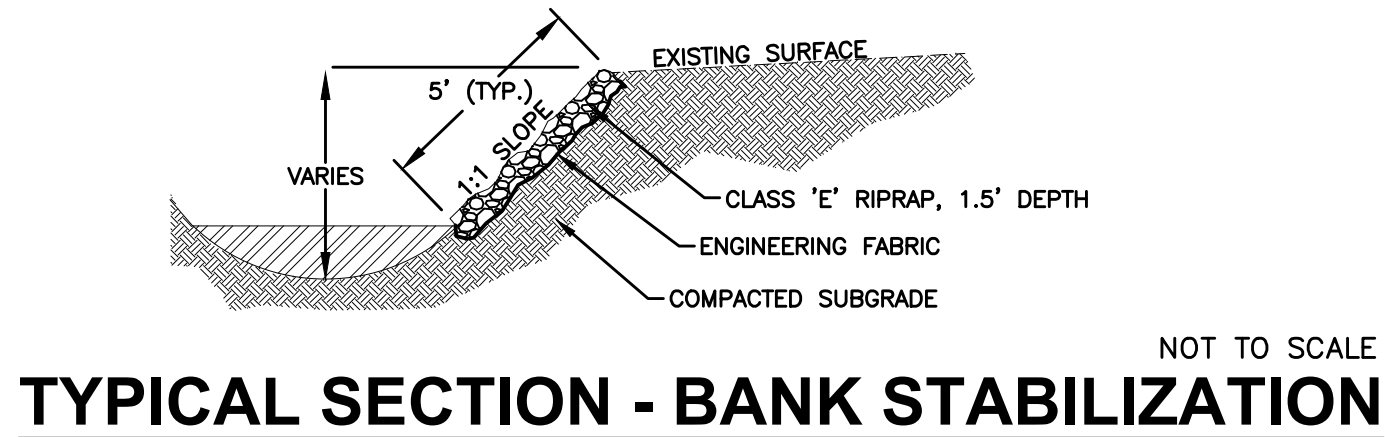
ALL SHEETS



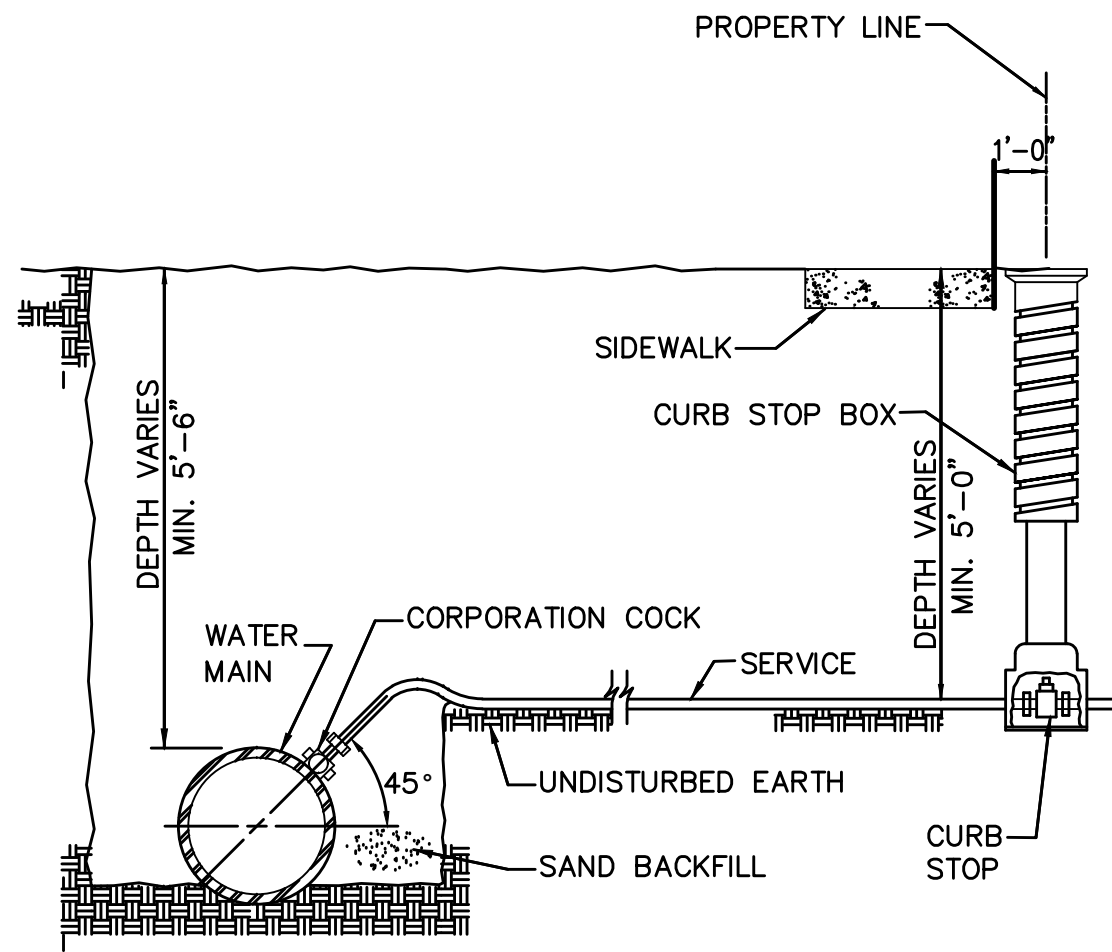




P.C.C. WIDENING - 3.5' CURB AND GUTTER
NOT TO SCALE

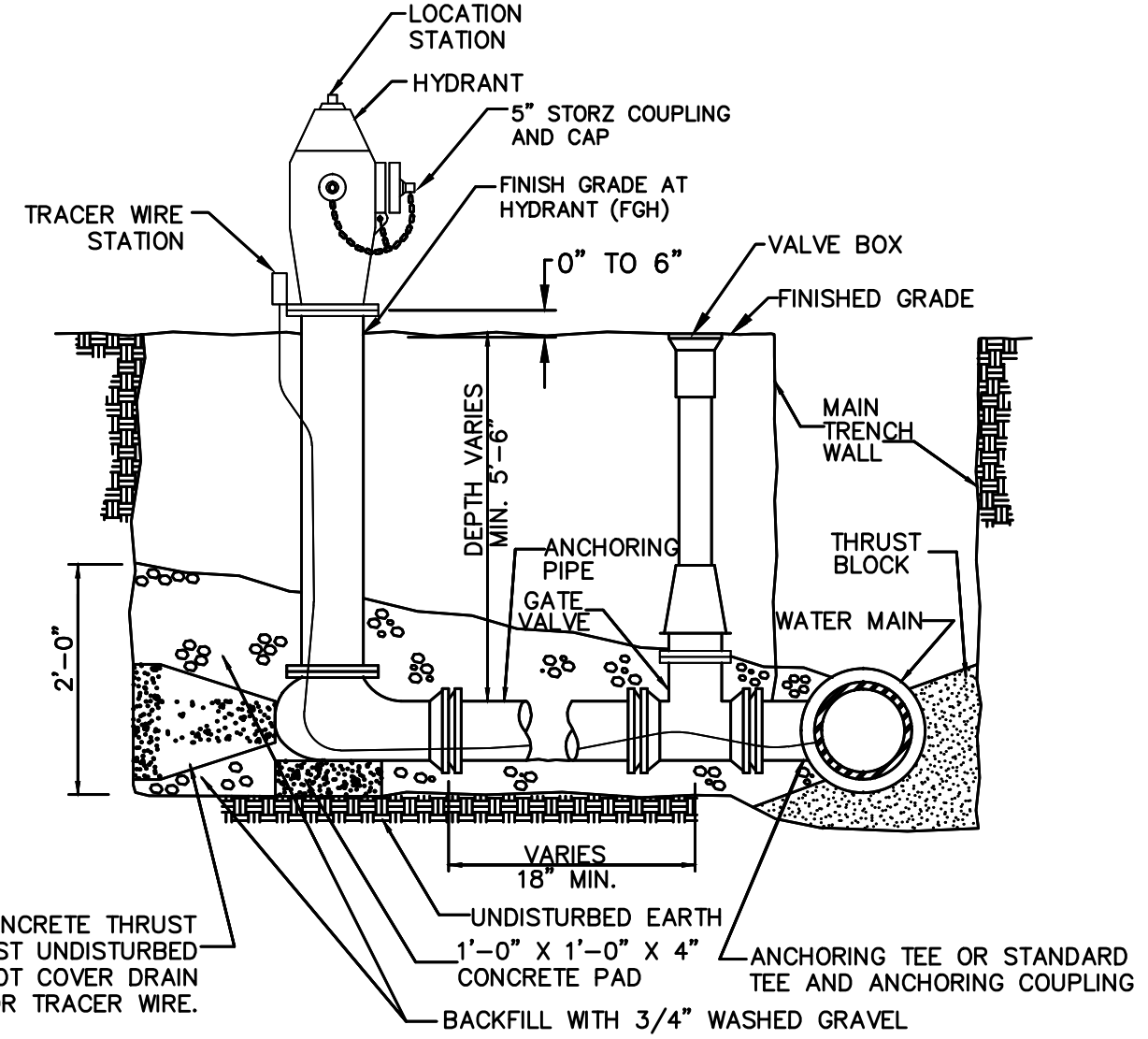


TYPICAL SECTION - BANK STABILIZATION
NOT TO SCALE



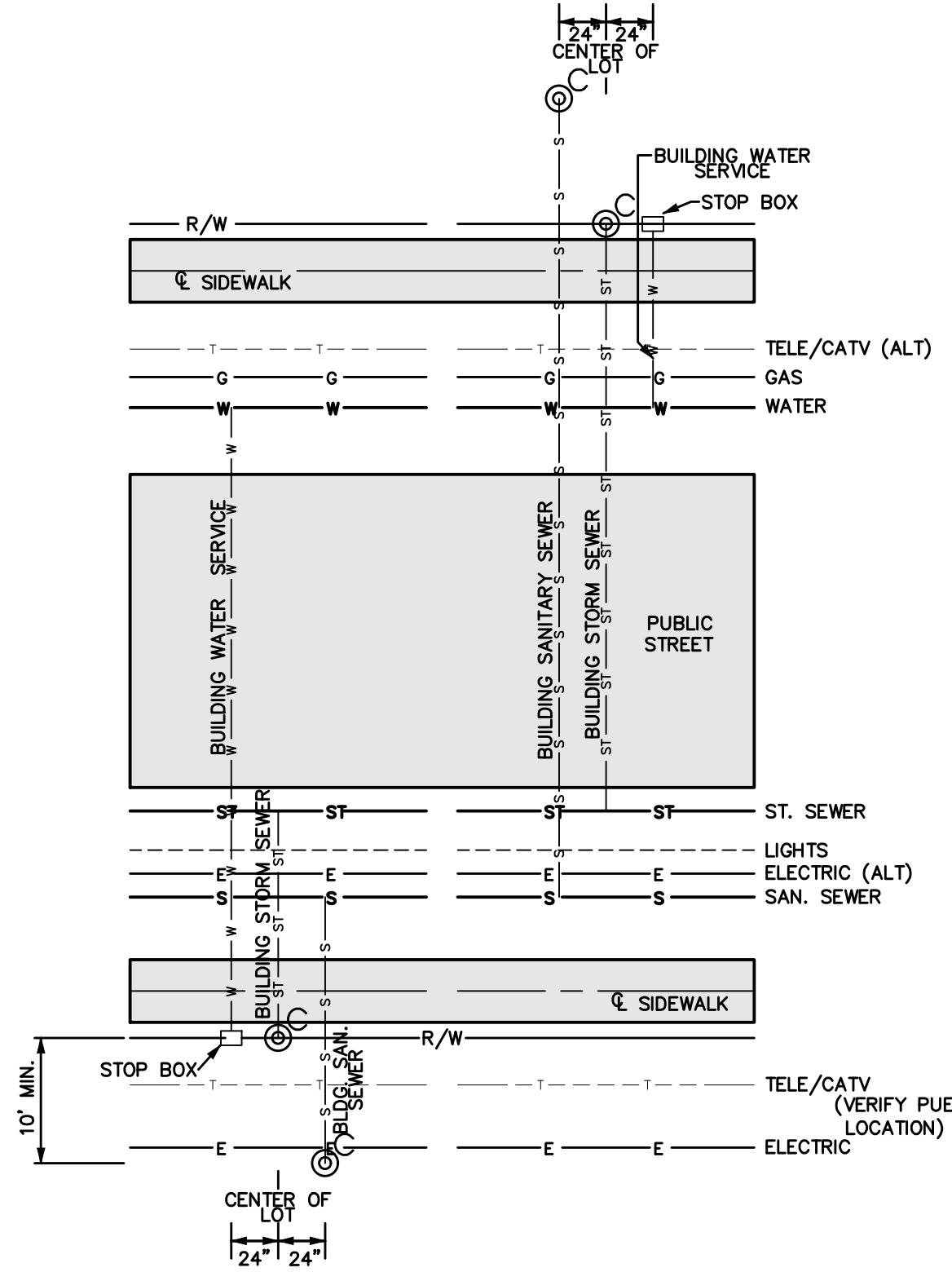
- NOTES:
1. TERMINATE CURB STOP BOX ROD 1'-6" BELOW FINISHED GRADE.

WATER SERVICE CONNECTION
NOT TO SCALE

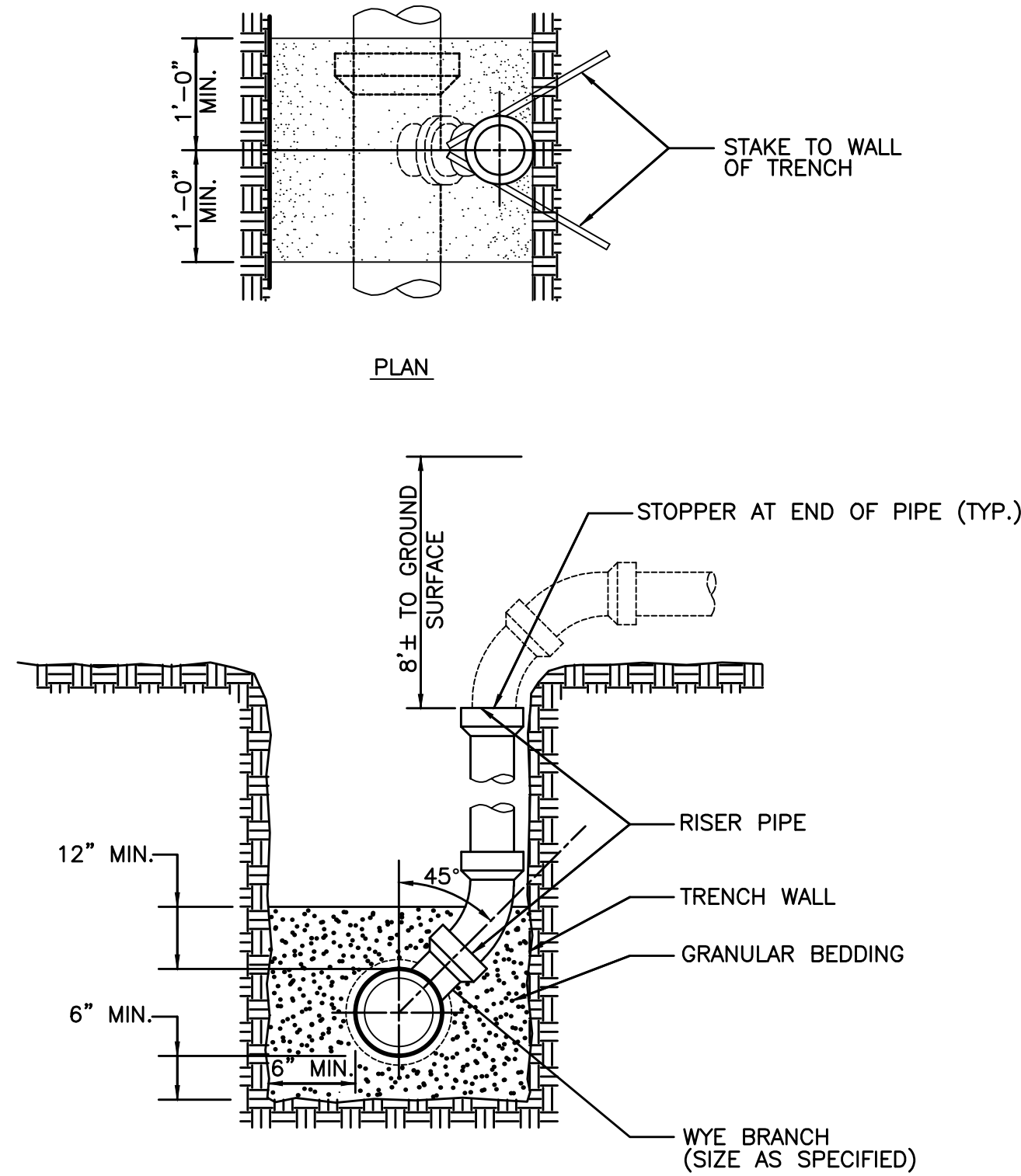


- NOTES:
1. MINIMUM SIZE FOR PIPING, VALVES AND FITTINGS FROM WATER MAIN TO HYDRANT INLET: 6".
 2. PROVIDE TRACER WIRE AND TRACER WIRE STATION.
 3. WRAP HYDRANT, PIPE AND FITTINGS WITH POLYETHYLENE ENCASMENT.

HYDRANT ASSEMBLY DETAIL
NOT TO SCALE

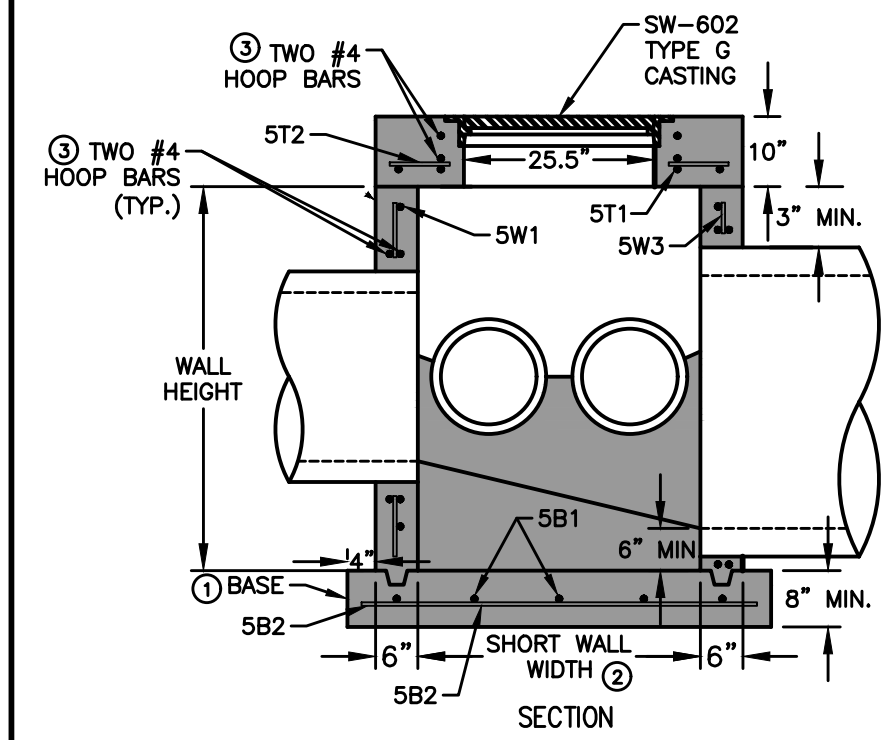


**CITY OF WAUKEE
UTILITY SERVICE LOCATIONS**
NOT TO SCALE

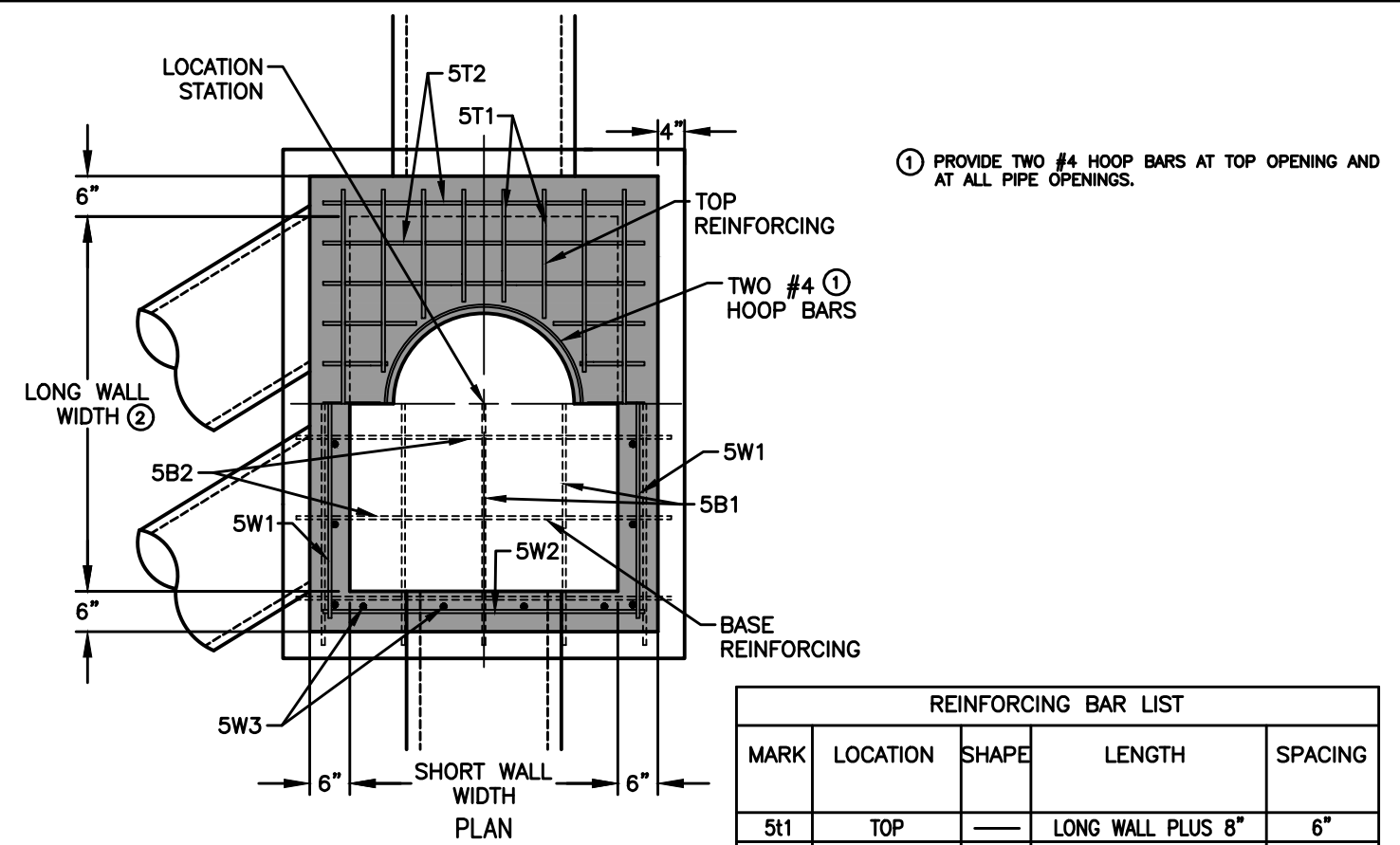


- NOTES:
1. INSTALL RISER TO BEAR FIRMLY AGAINST UNDISTURBED WALL OF TRENCH. STAKE RISER PIPE IN PLACE PRIOR TO BACK-FILLING TO PREVENT MOVEMENT OF PIPE.
 2. NOTCH WALL OF TRENCH TO RECEIVE PIPE WHERE POSSIBLE.

SANITARY SEWER SERVICE RISER
NOT TO SCALE



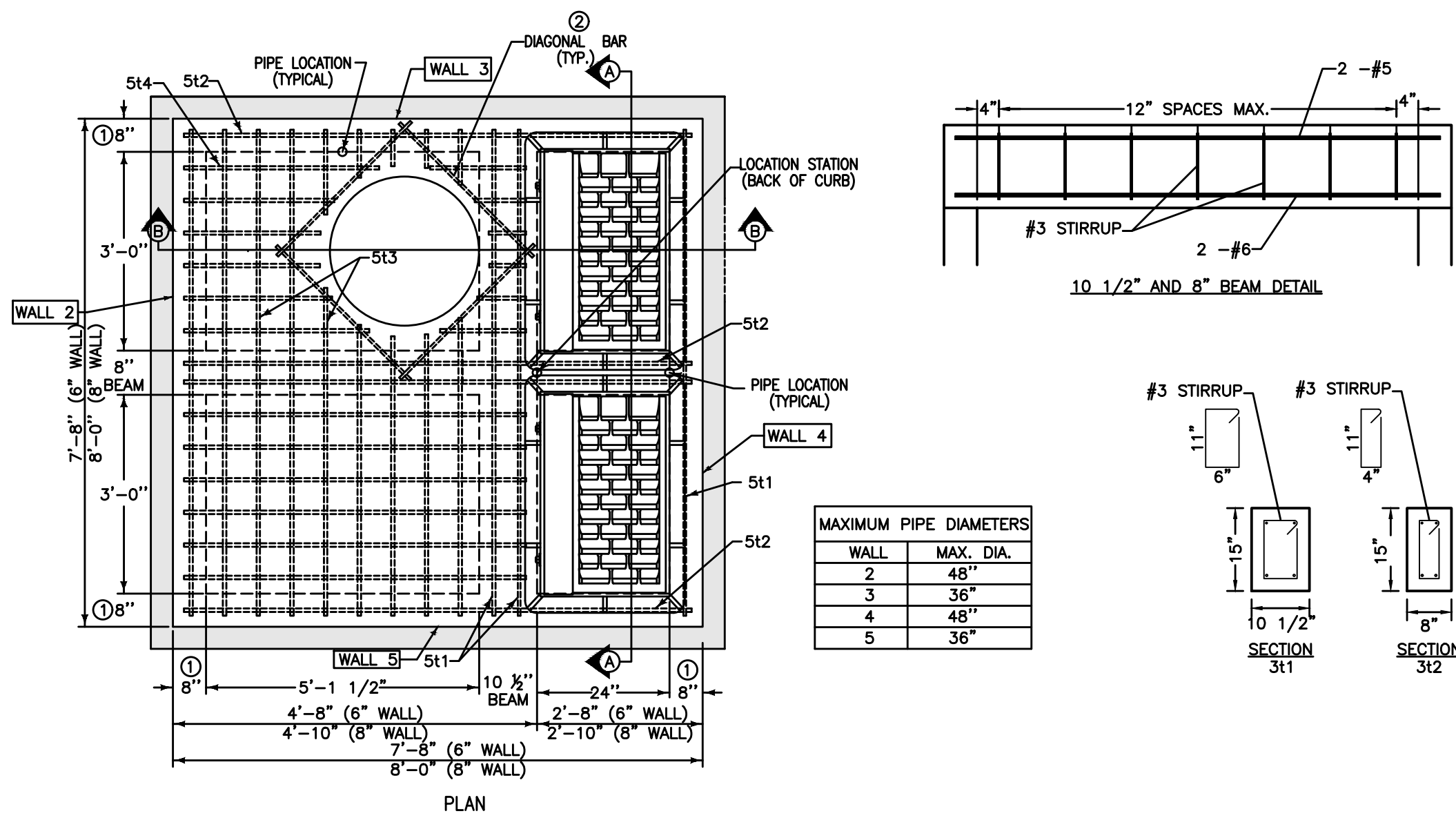
- ADJACENT WALLS MAY HAVE DIFFERENT WIDTHS BASED UPON PIPE CONFIGURATION, BUT STRUCTURE MUST BE RECTANGULAR.
- ① CAST-IN-PLACE BASE SHOWN. IF BASE IS PRECAST INTEGRAL WITH WALLS, THE FOOTPRINT OF THE BASE IS NOT REQUIRED TO EXTEND BEYOND THE OUTER EDGE OF THE WALLS.
 - ② PROVIDE 6 INCHES OF WALL WIDTH (MINIMUM) EACH SIDE OF PIPE OPENING.
 - ③ PROVIDE TWO #4 HOOP BARS AT TOP OPENING AND AT ALL PIPE OPENINGS.



REINFORCING BAR LIST				
MARK	LOCATION	SHAPE	LENGTH	SPACING
511	TOP	—	LONG WALL PLUS 8"	6"
512	TOP	—	SHORT WALL PLUS 8"	6"
5b1	BASE	—	LONG WALL PLUS 14"	12"
5b2	BASE	—	SHORT WALL PLUS 14"	12"
5w1	WALLS	—	LONG WALL PLUS 8"	12"
5w2	WALLS	—	SHORT WALL PLUS 8"	12"
5w3	WALLS	—	WALL HEIGHT MINUS 4"	12"

* PLACE A MINIMUM OF ONE 5W1 BAR ABOVE EACH PIPE OPENING.

12' X 8' MODIFIED SW-406 MANHOLE (ST-16)
NOT TO SCALE

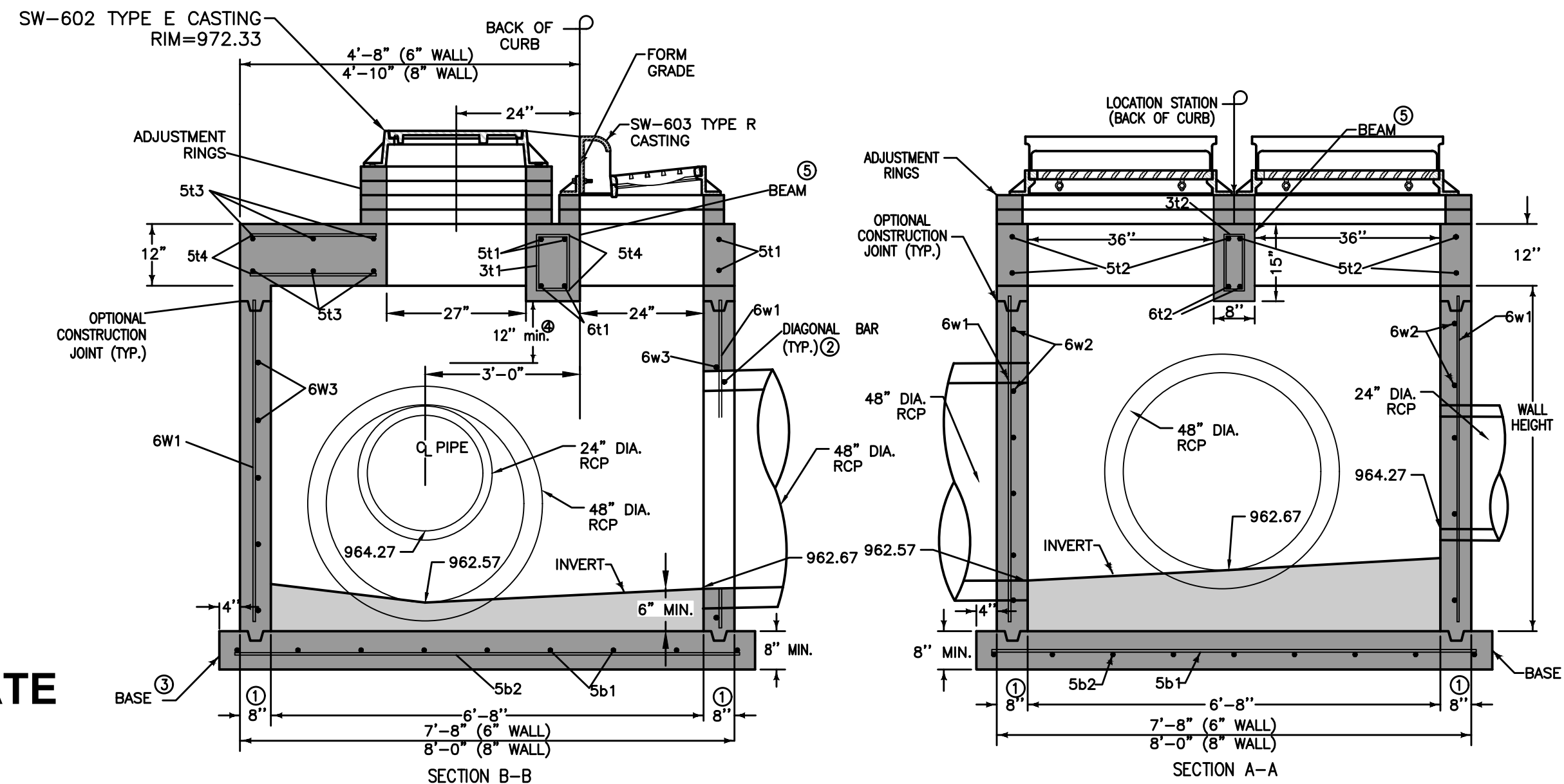


MAXIMUM PIPE DIAMETERS	
WALL	MAX. DIA.
2	48"
3	36"
4	48"
5	36"

REINFORCING BAR LIST						
MARK	SIZE	LOCATION	SHAPE	COUNT	LENGTH	SPACING
311	3	TOP	—	7	3'-2"	12"
312	3	TOP	—	8	2'-10"	10 1/2"
5b1	5	BASE	—	9	7'-10"	12 1/2"
5b2	5	BASE	—	9	8'-2"	11 3/4"
6w1	6	WALLS	—	30	WALL HEIGHT MINUS 4"	12"
6w2	6	WALLS	—	VARIES	7'-8"	12"
6w3	6	WALLS	—	VARIES	7'-4"	12"
511	5	TOP	—	4	7'-4"	SEE DETAIL
512	5	TOP	—	6	7'-8"	SEE DETAIL
513	5	TOP	—	18	7'-4"	6 1/2"
514	5	TOP	—	24	5'-2"	5 1/2"
611	6	TOP	—	2	7'-4"	SEE DETAIL
612	6	TOP	—	2	7'-8"	SEE DETAIL

- NOTES:
- ① USE 8" WALL OPTION FOR INTAKE DEPTHS GREATER THAN 7'-0" AND LESS THAN 10'-0".
 - ② INSTALL FOUR #4 DIAGONAL BARS AT MANHOLE OPENING AND AT ALL PIPE OPENINGS.
 - ③ CAST-IN-PLACE BASE SHOWN. IF BASE IS PRECAST INTEGRAL WITH WALLS, THE FOOTPRINT OF THE BASE IS NOT REQUIRED TO EXTEND BEYOND THE OUTER EDGE OF THE WALLS.
 - ④ 12 INCH MINIMUM WALL HEIGHT ABOVE ALL PIPES.
 - ⑤ CONSTRUCT 8"x15" AND 10 1/2"x15" P.C. CONCRETE BEAMS INTEGRAL WITH 12" P.C. CONCRETE FLAT TOP.

**SW-506 MODIFIED DOUBLE GRATE
INTAKE WITH MANHOLE (ST-12)**
NOT TO SCALE



ESTIMATE REFERENCE INFORMATION	
Data listed below is for informational purpose only and shall not constitute a basis for any extra work orders.	
ITEM NO.	DESCRIPTION
	THE 2020 EDITION OF THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE 2022 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.
5-15	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. THE ROCK CHIMNEY IS INCIDENTAL TO STORM SEWER CONSTRUCTION WHEN THE STORM SEWER HAS DUAL PURPOSE OF STORM SEWER AND SUBDRAIN. REFER TO SHEET 2 FOR THE CITY STANDARD SUBDRAIN DETAIL.
6,14,16	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.
16-17	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	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 A MANHOLE CASTING WITH PRO RINGS PER THE 2020 WAUKEE STANDARD SPECIFICATIONS. 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.
21-23	REFER TO FIG. 6010.401 - CIRCULAR STORM SEWER MANHOLE (SW-401) FOR CONSTRUCTION DETAILS. MANHOLE INSIDE DIAMETERS GREATER THAN 48" SHALL BE CONSIDERED INCIDENTAL.
24	REFER TO SHEET 3 FOR CONSTRUCTION DETAILS.

 CIVIL DESIGN ADVANTAGE KEE, IOWA	4121 NW URBANDALE DR. URBANDALE, IOWA 50322 PHONE: (515) 369-4400		ENGINEER: EKO ENGINEER: JWM TECH: MST		REVISIONS AS-BUILT SUBMITTAL FINAL SUBMITTAL FIFTH SUBMITTAL FOURTH SUBMITTAL THIRD SUBMITTAL SECOND SUBMITTAL	DATE 10/20/2023 04/14/2022 04/01/2022 03/16/2022 02/22/2022 01/27/2022
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- TO OBTAIN THE CORRECT FORM GRADES AT LOW POINTS WHERE INTAKES ARE LOCATED, THE CONTRACTOR MUST EXERCISE ADDITIONAL CARE WHEN PAVING FULL WIDTH PAVEMENTS. THIS MAY REQUIRE POURING ONE HALF OF THE PAVEMENT AT A TIME OR OTHER METHODS APPROVED BY THE ENGINEER.
11. THE CONTRACTOR MAY BE REQUIRED AS DIRECTED BY THE ENGINEER OR THE CITY, TO PLACE TEMPORARY WARNING DEVICES AND SAFETY FENCE AT CERTAIN LOCATIONS WHERE REPLACEMENT FEATURES ARE NOT INSTALLED THE SAME DAY. THIS SHALL BE INCIDENTAL TO THE BID ITEM TRAFFIC CONTROL. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ROAD BARRICADES AT END OF EXISTING PAVEMENTS UNTIL THE PROJECT IS ACCEPTED.
12. PLAN AND PROFILE SHEETS INCLUDED IN THE PROJECT ARE FOR THE PURPOSE OF ALIGNMENT, LOCATION AND SPECIFIC DIRECTIONS FOR WORK TO BE PERFORMED UNDER THIS CONTRACT. IRRELEVANT DATA ON THESE SHEETS IS NOT TO BE CONSIDERED A PART OF THIS CONTRACT.
13. THE CONTRACTOR SHALL APPLY NECESSARY MOISTURE TO THE CONSTRUCTION AREA AND HAUL ROADS TO PREVENT THE SPREAD OF DUST.
14. THE CONTRACTOR IS REQUIRED TO BE FAMILIAR WITH AND COMPLY WITH OSHA STANDARDS. NOTHING WITHIN THESE PLANS SHALL RELIEVE THE CONTRACTOR OF THIS REQUIREMENT.
15. ALL MATERIAL TESTING SHALL BE CONSIDERED INCIDENTAL TO OTHER CONSTRUCTION.
16. PRIOR TO ANY WORK AT THE SITE, CONTRACTOR SHALL EXAMINE ANY APPLICABLE DRAWINGS AVAILABLE FROM THE OWNER, ENGINEER, AND/OR ARCHITECT, AND CONSULT WITH OWNER'S PERSONNEL AND UTILITY COMPANY REPRESENTATIVES. NO COMPENSATION WILL BE ALLOWED FOR DAMAGE FROM FAILURE TO COMPLY WITH THIS REQUIREMENT.
17. ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
18. ALL SLOPES IN PAVEMENT SHALL BE UNIFORM TO AVOID PONDING.
19. SIDEWALKS, ACCESSIBLE CURB RAMPS AND SIDEWALK RAMPS INCLUDING RAISED TRUNCATED DOME AND DETECTABLE WARNINGS AND WARNING PANELS SHALL BE DESIGNED AND INSTALLED TO THE LATEST P.R.O.W.A.G. AND A.D.A. REQUIREMENTS.
20. PLACE 3/4" EXPANSION JOINT BETWEEN ALL P.C.C. PAVEMENT/SIDEWALKS AND BUILDINGS. PLACE 1/2" EXPANSION JOINT BETWEEN SIDEWALKS AND P.C.C PAVEMENT. THE PCC RAMP JOINT LOCATED AT THE BACK OF CURB AND ALL EXPANSION JOINTS SHALL BE SEALED.
21. REMOVE DEBRIS SPILLED ON R.O.W. AT THE END OF EACH WORK DAY AND BEFORE RAIN EVENTS.
22. DO NOT STORE CONSTRUCTION MATERIALS AND EQUIPMENT IN THE R.O.W.
23. ALL PROPERTY PINS SHALL BE PROTECTED FROM GRADING OR OTHER OPERATIONS. ANY PINS DISTURBED SHALL BE RESET AT THE CONTRACTOR'S EXPENSE.
24. IN THE EVENT OF A DISCREPANCY BETWEEN DETAILED PLANS AND QUANTITIES, THE DETAILED PLANS SHALL GOVERN.



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HAMILTON RIDGE PLAT 9

QUANTITIES, GENERAL NOTES AND

BID ITEM REFERENCE NOTES

WAUKEGE

25' BUFFER REQUIREMENTS

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

REQUIRED (600')

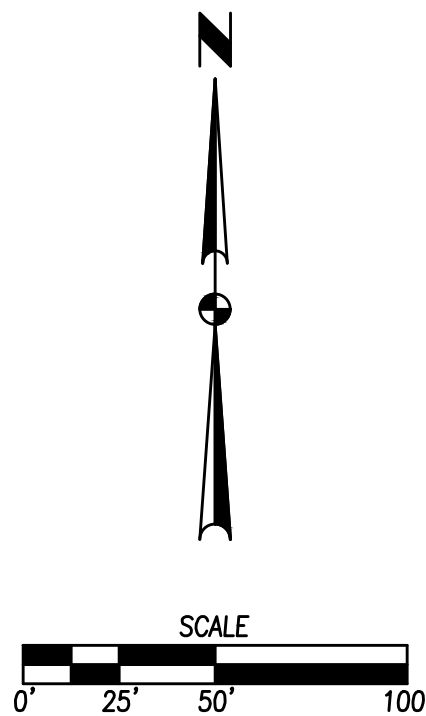
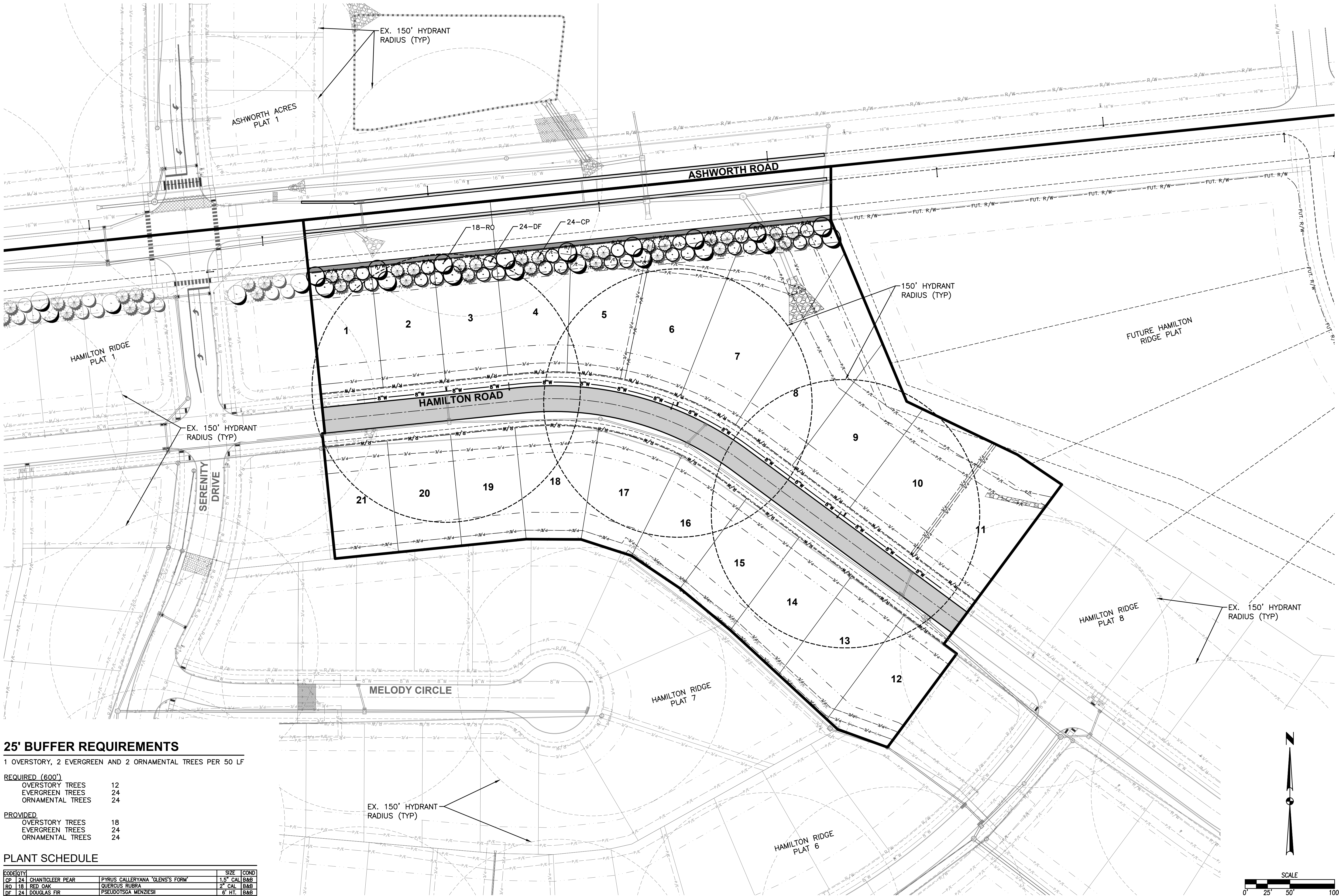
OVERSTORY TREES	12
EVERGREEN TREES	24
ORNAMENTAL TREES	24

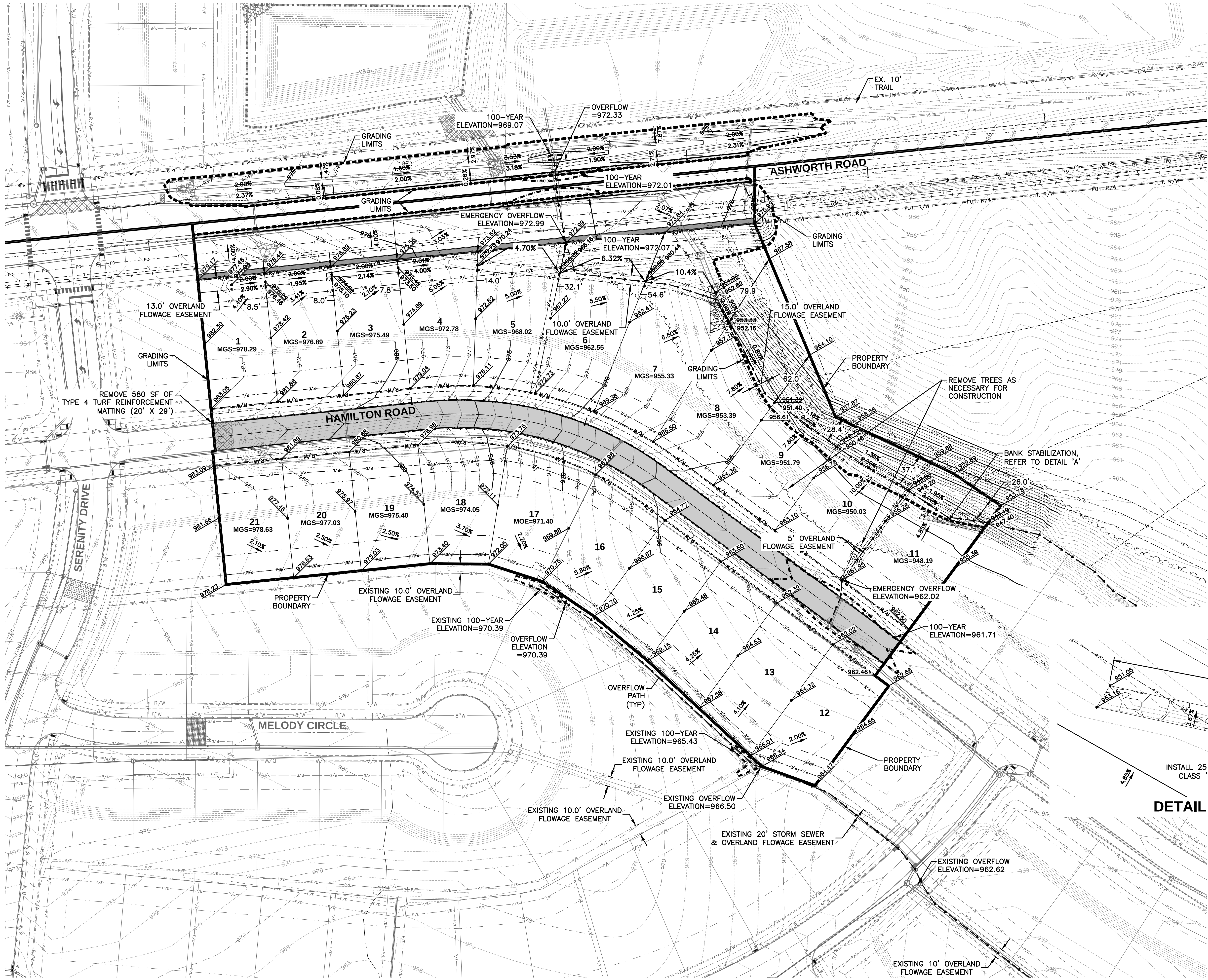
PROVIDED

OVERSTORY TREES	18
EVERGREEN TREES	24
ORNAMENTAL TREES	24

PLANT SCHEDULE

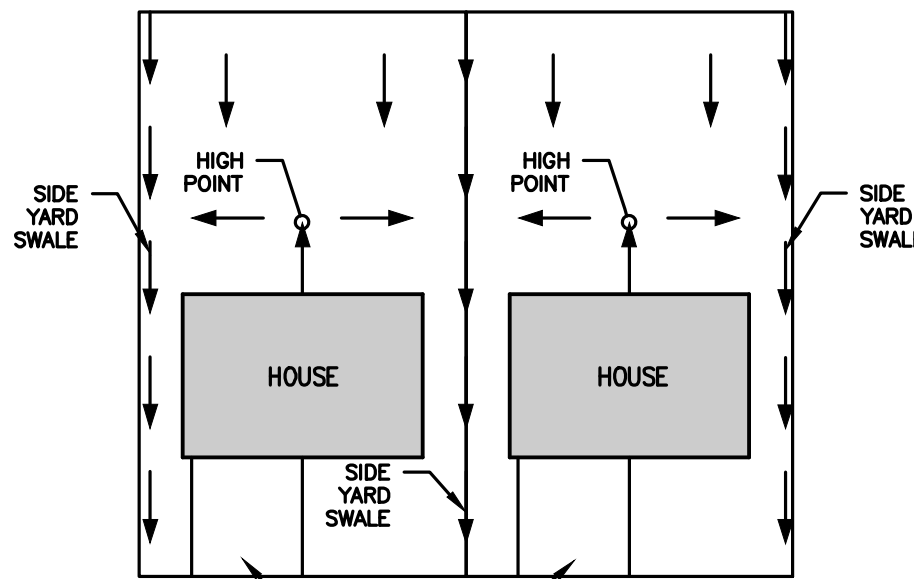
CODE	QTY	DESCRIPTION	SIZE	COND
CP	24	CHANDOLEER PEAR	1.5" CAL	B&B
RO	18	RED OAK	2" CAL	B&B
DF	24	DOUGLAS FIR	6' HT.	B&B





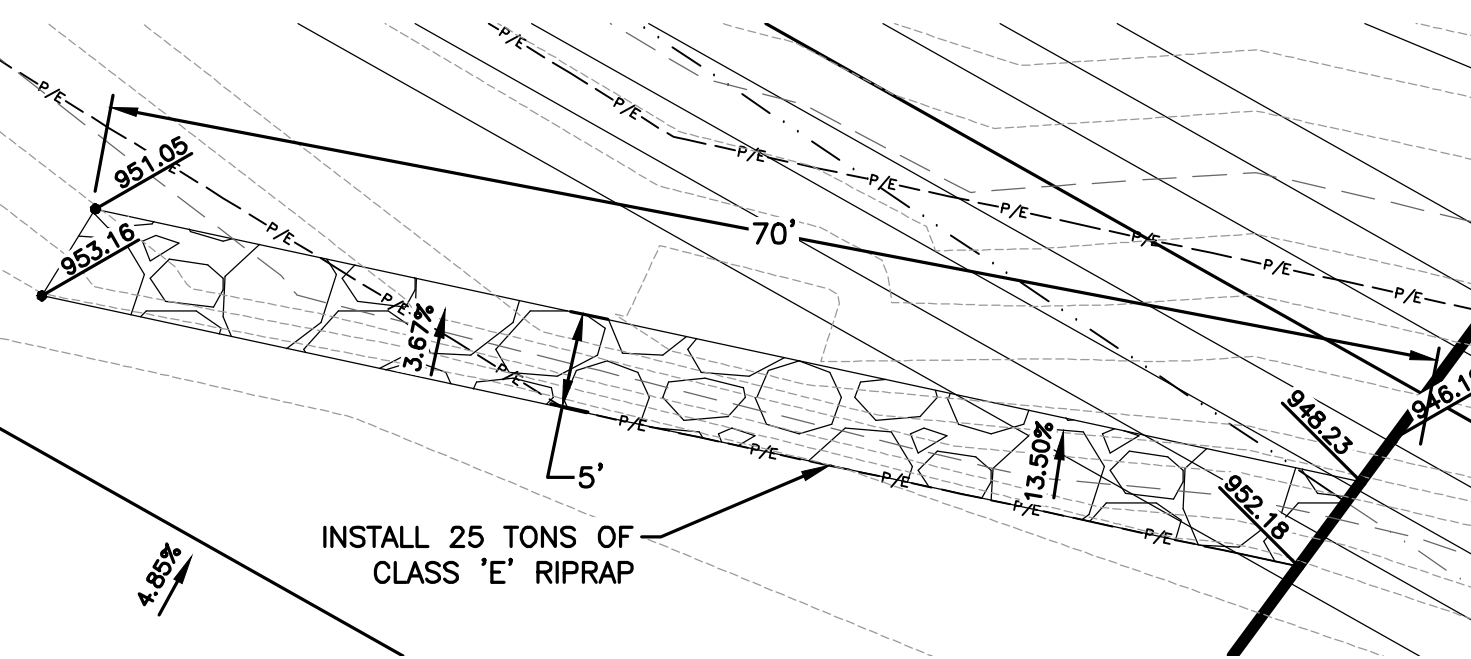
GRADING NOTES

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. EXISTING TOPOGRAPHIC SURVEY SHOWN AT BOUNDARY OF EXISTING PLATS IS SHOWN AS THE DESIGN GRADES FROM HAMILTON RIDGE PLATS 6 & 8. ACTUAL CONDITIONS MAY DIFFER FROM WHAT IS SHOWN.
4. LOTS 12-16 WILL REQUIRE A DETAILED GRADING PLAN FOR INDIVIDUAL LOT DEVELOPMENT.



TYPICAL BACK TO FRONT GRADING
NOT TO SCALE

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

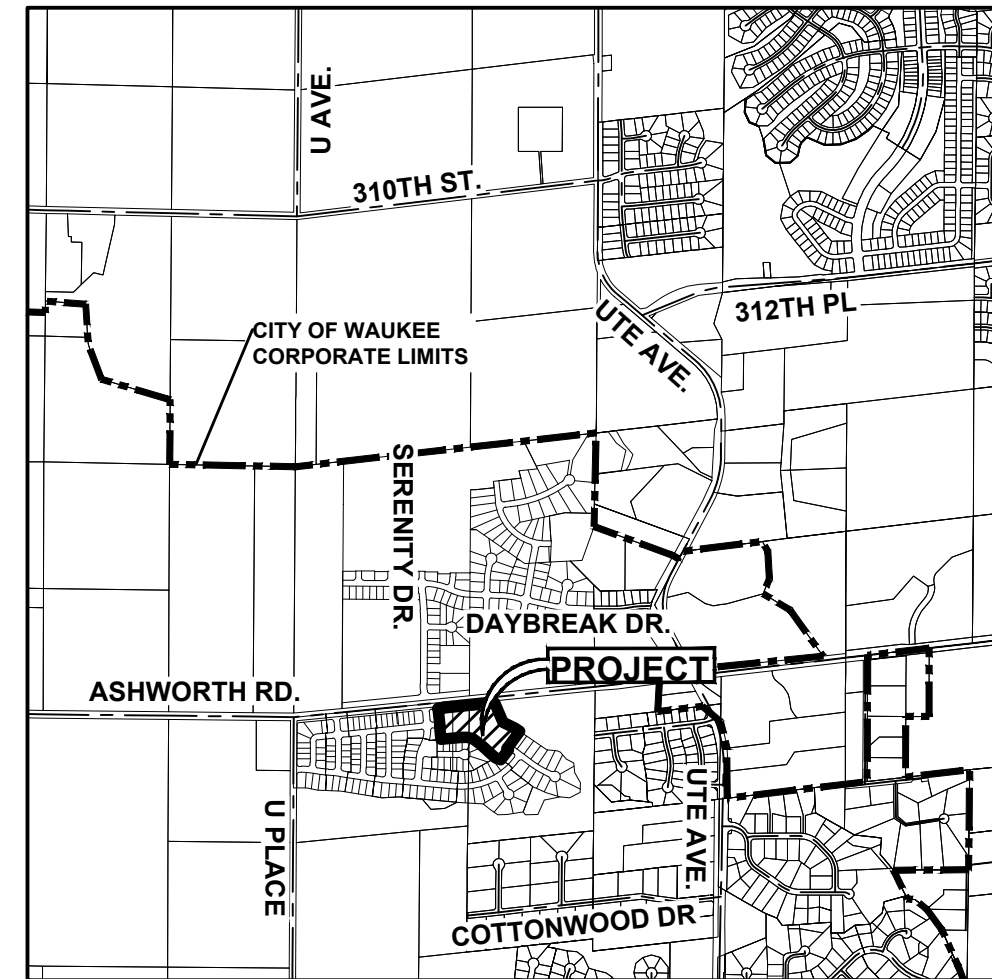


HAMILTON RIDGE PLAT 9

EROSION AND SEDIMENT CONTROL PLAN

VICINITY MAP

NOT TO SCALE



WAUKEE, IOWA

STABILIZATION QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL
1	SILT FENCE	LF	1,836
2	DITCH CHECKS	LF	945
3	CLASS E RIP-RAP, RELOCATED	TON	70
4	CLASS E RIP-RAP	TON	45
5	SEEDING, FERTILIZING, AND MULCHING	AC	6.57
6	INLET PROTECTION DEVICES	EA	10
7	CONCRETE WASHOUT PIT	EA	1

NOTES:

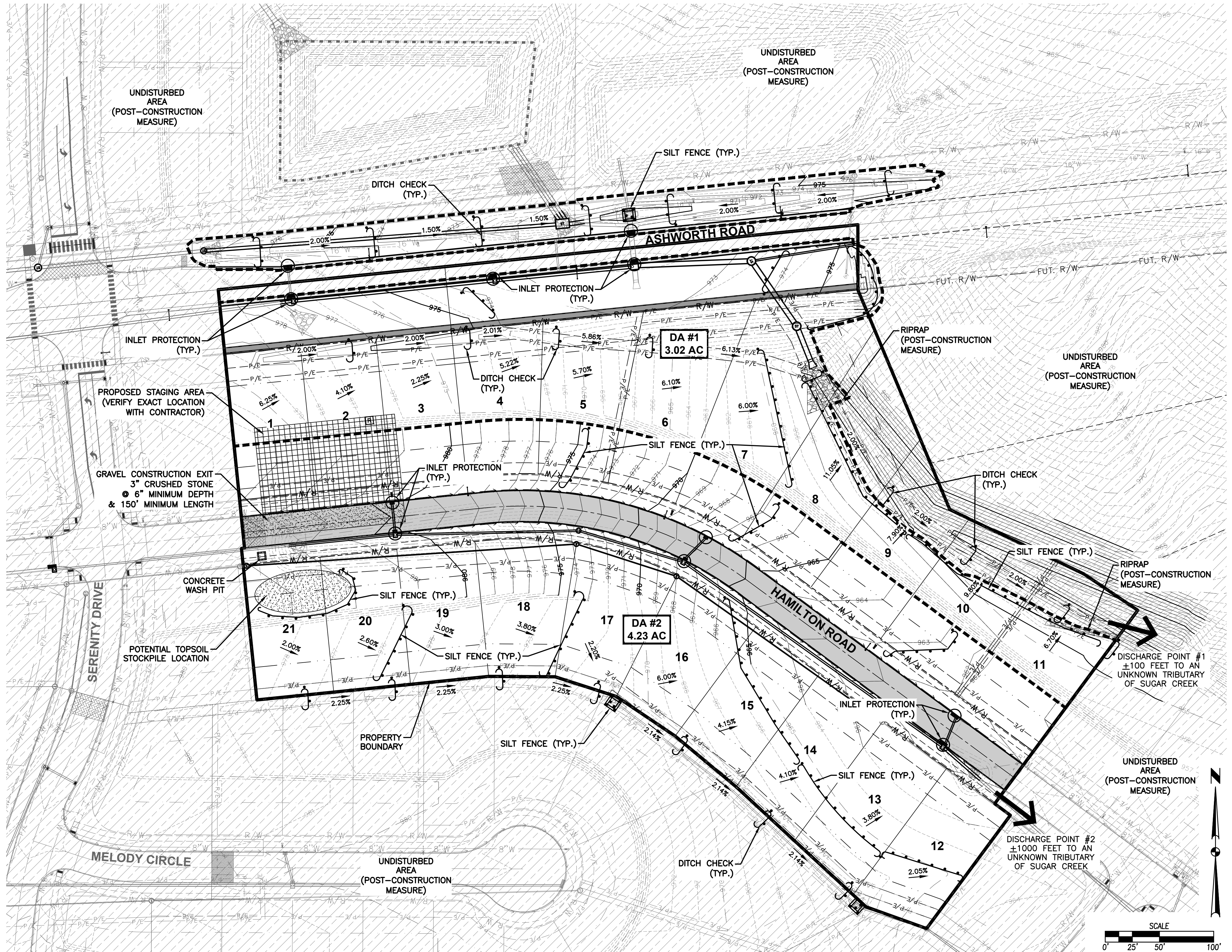
- IF DEWATERING IS NEEDED FOR ANY REASON, DISCHARGE OF WATER OFFSITE IS TO CONFORM WITH THE GENERAL PERMIT #2 REQUIREMENT.
- DISTURBED AREAS SHALL BE TEMPORARILY SEED OR MULCHED IMMEDIATELY WHENEVER CLEARING, GRADING, EXCAVATING, OR OTHER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED 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.

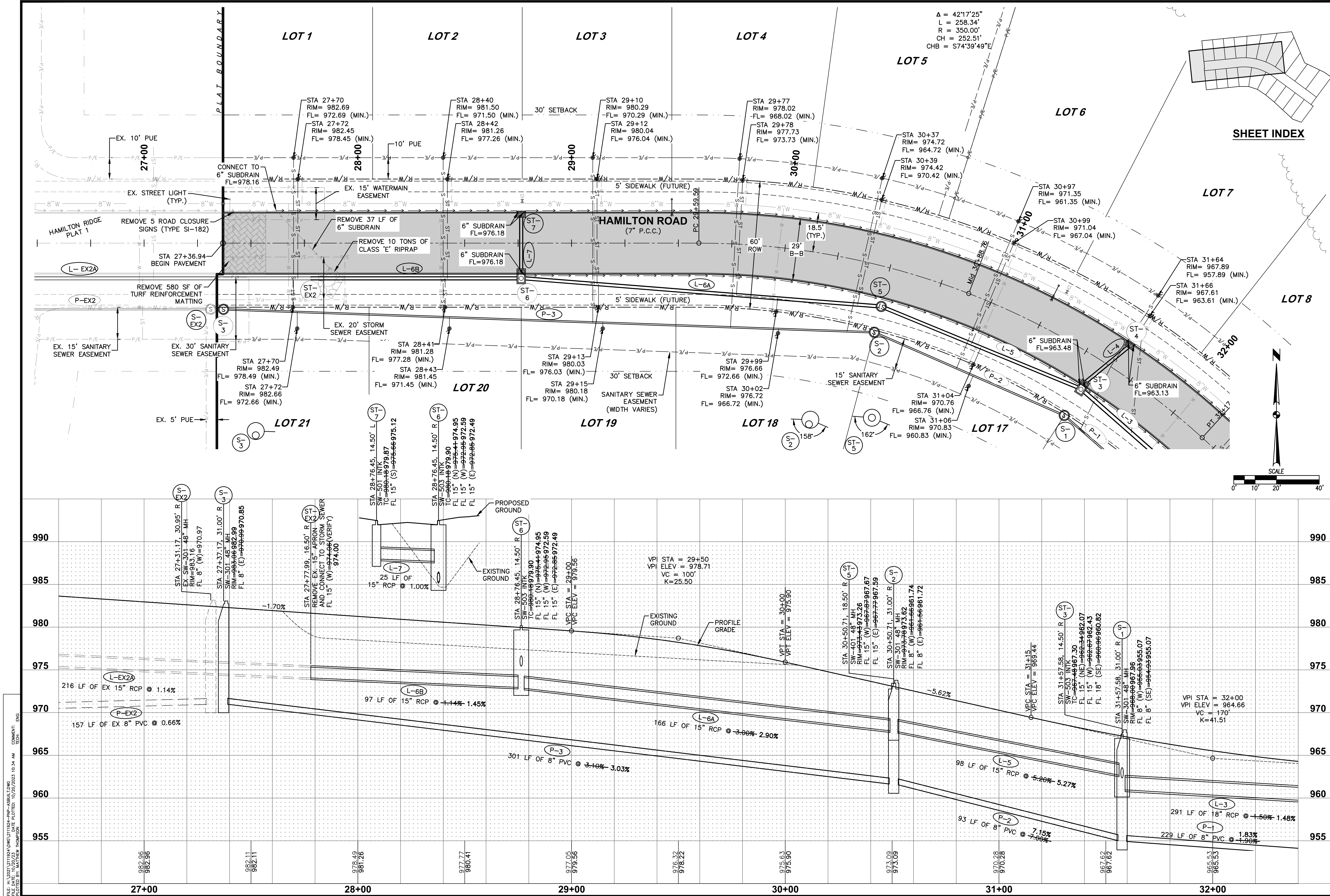
DISCHARGE POINT SUMMARY

DISCHARGE POINT #1 TO AN UNKNOWN TRIBUTARY OF SUGAR CREEK ±100 FT	3.02 ACRES
TOTAL AREA DISTURBED TO DISCHARGE POINT	10,872 CU FT
STORAGE VOLUME REQUIRED (# OF ACRES*3600 CU FT)	
VOLUME PROVIDED IN SILT FENCE (790 LF @ 10.0 CU FT/LF OF FENCE)	7,900 CU FT
VOLUME PROVIDED IN DITCH CHECK (569 LF @ 15.0 CU FT/LF)	8,535 CU FT
TOTAL VOLUME PROVIDED	16,435 CU FT
DISCHARGE POINT #2 TO AN UNKNOWN TRIBUTARY OF SUGAR CREEK ±1000 FT	4.23 ACRES
TOTAL AREA DISTURBED TO DISCHARGE POINT	15,228 CU FT
STORAGE VOLUME REQUIRED (# OF ACRES*3600 CU FT)	
VOLUME PROVIDED IN SILT FENCE (1,046 LF @ 10.0 CU FT/LF OF FENCE)	10,460 CU FT
VOLUME PROVIDED IN DITCH CHECK (376 LF @ 15.0 CU FT/LF)	5,640 CU FT
TOTAL VOLUME PROVIDED	16,100 CU FT

SWPPP LEGEND

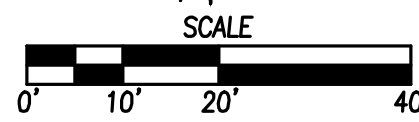
DRAINAGE ARROW	X.XX %	AREA TO BE SEED	
GRADING LIMITS		STRAW MAT	
FILTER SOCK		UNDISTURBED AREA	
SILT FENCE		GRASS ENTRANCE	
DITCH CHECK		STAGING AREA	
INLET PROTECTION		TEMPORARY SEDIMENT BASIN	TSB #
PORTABLE RESTROOM	R		
TEMPORARY STANDPIPE			
CONCRETE WASHOUT PIT			







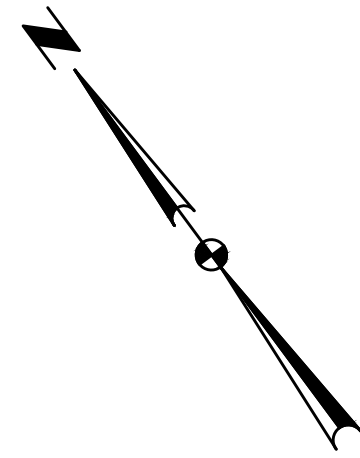
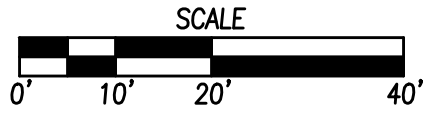
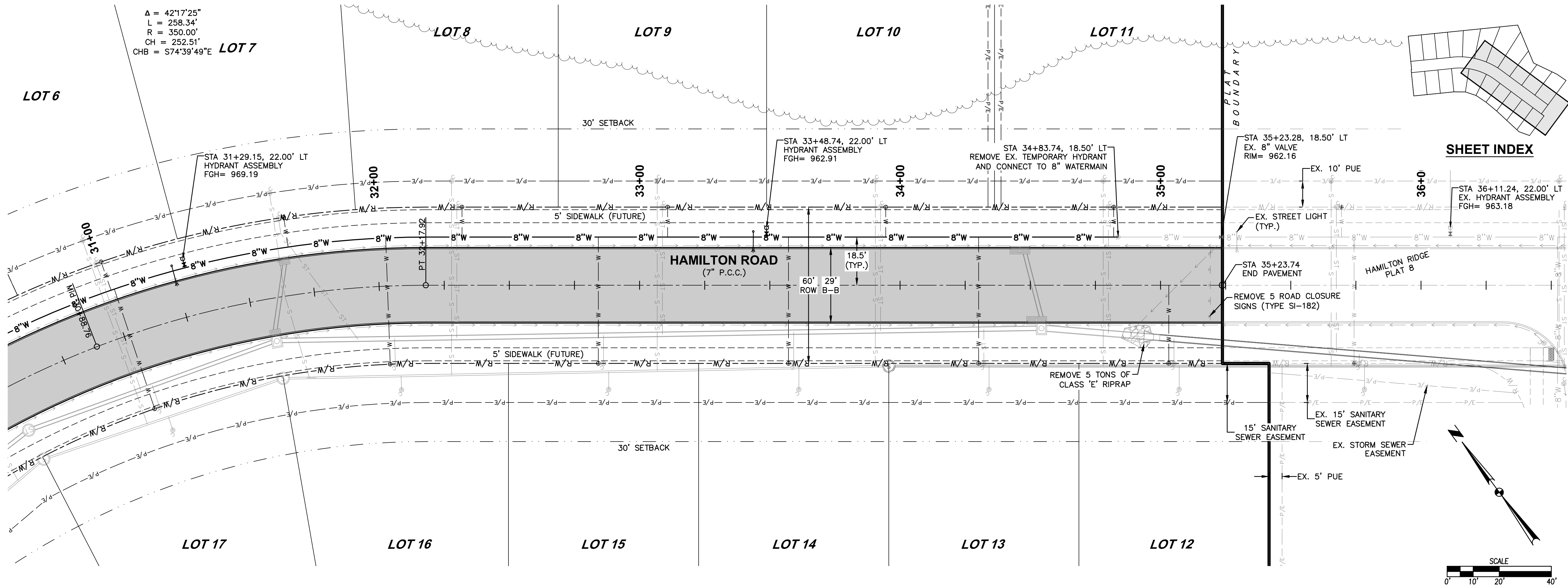
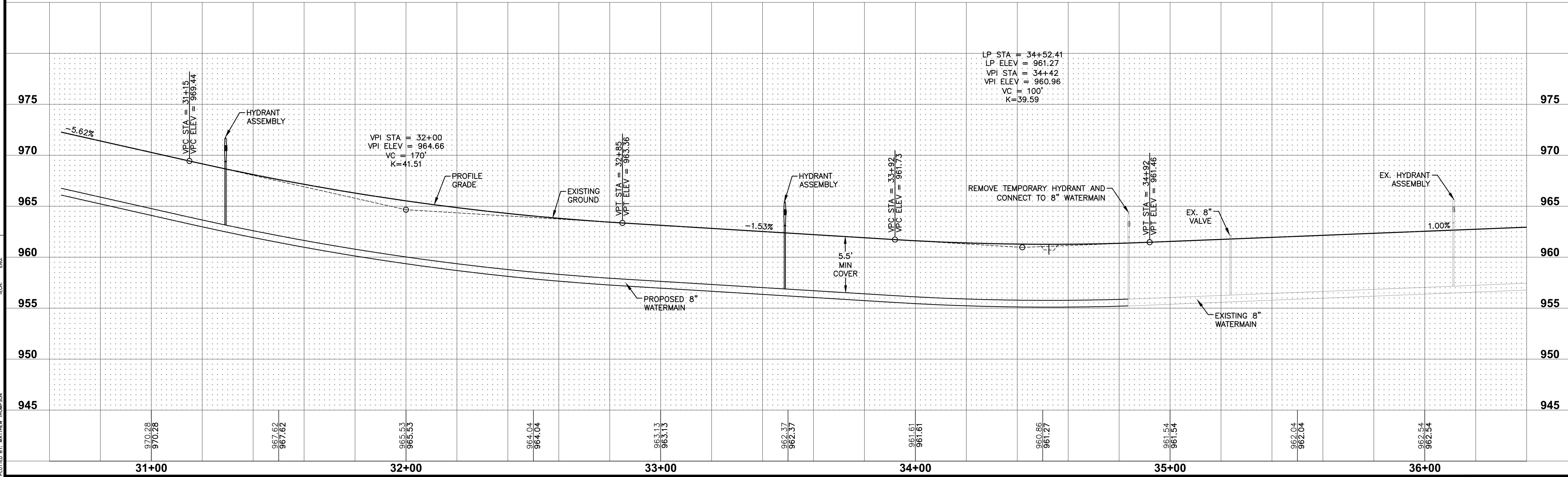
1. A TRAFFIC CONTROL PLAN FOR THE IMPROVEMENTS ALONG ASHWORTH ROAD SHALL BE CREATED BY THE CONTRACTOR AND PRESENTED TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT FOR APPROVAL PRIOR TO CONSTRUCTION. THE CLOSURE OF ASHWORTH ROAD WILL NOT BE ALLOWED. ACCESS SHALL BE MAINTAINED AT ALL TIMES.



CH·MST

REVISIONS	DATE
AS-BUILT SUBMITTAL	10/20/2023
FINAL SUBMITTAL	04/14/2022
FIFTH SUBMITTAL	04/01/2022
FOURTH SUBMITTAL	03/16/2022
THIRD SUBMITTAL	02/22/2022

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COMMENTS: 211192A
DRAWN BY: WATKINS, THOMAS
CHECKED BY: WATKINS, THOMAS



SHEET INDEX

HAMILTON RIDGE PLAT 9

WATERMAIN PLAN AND PROFILE

REVISIONS

DATE	DESCRIPTION
10/20/2023	AS-BUILT SUBMITTAL
04/14/2023	FINAL SUBMITTAL
04/01/2023	FIFTH SUBMITTAL
03/16/2023	FOURTH SUBMITTAL
02/22/2023	THIRD SUBMITTAL
01/27/2023	SECOND SUBMITTAL