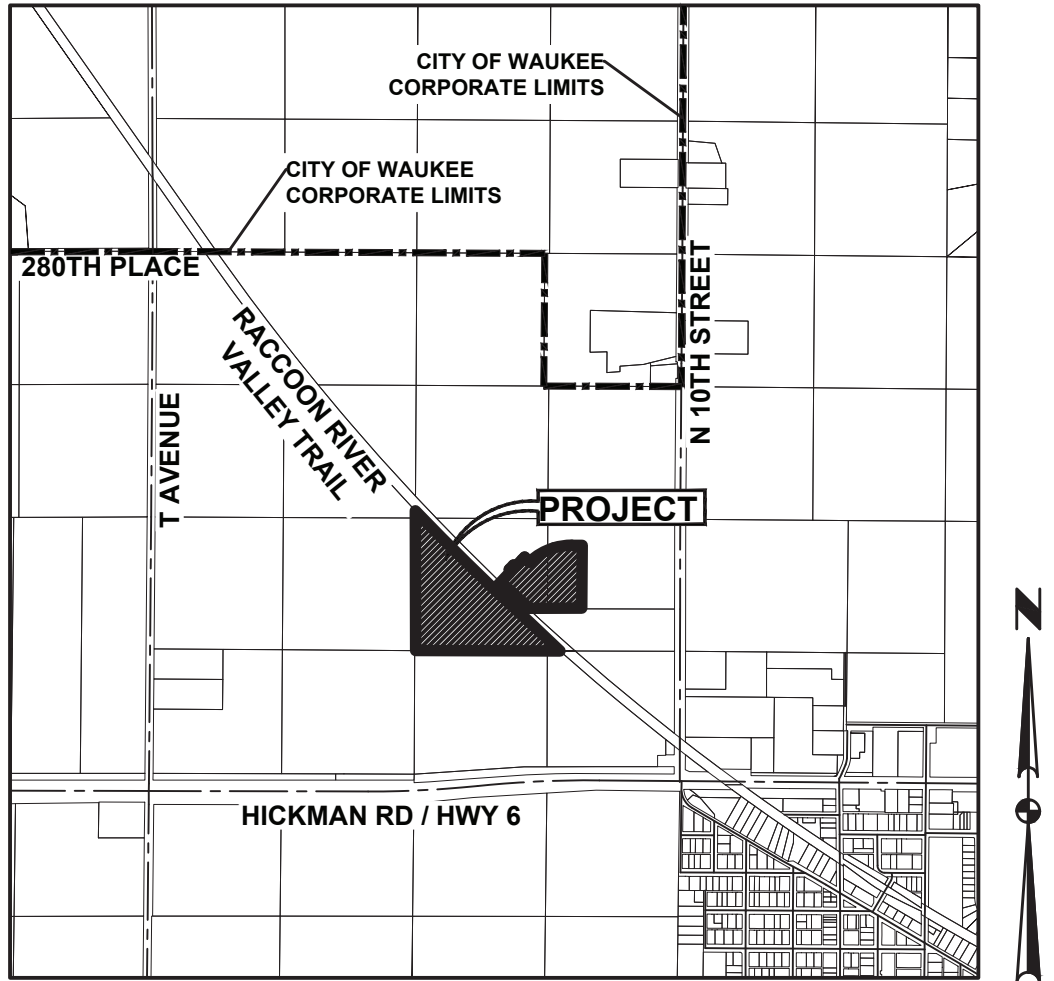


# CONSTRUCTION PLANS FOR: STRATFORD CROSSING PLAT 4

## VICINITY MAP

NOT TO SCALE



## WAUKEE, IOWA

### PROJECT MANAGER

LANDMARK DEVELOPMENT SERVICES  
CONTACT: NICK HALFHILL  
9550 HICKMAN ROAD, SUITE 100  
CLIVE, IA 50325  
PH. (515) 986-5994

### OWNER / DEVELOPER

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

### ENGINEER / SURVEYOR

CIVIL DESIGN ADVANTAGE, LLC  
3405 S.E. CROSSROADS DRIVE, SUITE G  
GRIMES, IOWA 50111  
PH: 515-369-4400  
CONTACT: ERIN OLLENDIKE

### ZONING

M-1 - LIGHT INDUSTRIAL DISTRICT  
R-3 - RENTAL MULTI-FAMILY RESIDENTIAL DISTRICT

### BENCHMARKS

USGS MONUMENT ALUMINUM ROD WITH CAP  
STAMPED G121 AND NGS ACCESS COVER 3" DEEP, EAST SIDE OF R AVE. (R16) 0.1 MILES SOUTH OF 300TH STREET.  
ELEVATION=1022.24

### SUBMITTALS

|                    |            |
|--------------------|------------|
| FIRST SUBMITTAL:   | 03/20/2018 |
| SECOND SUBMITTAL:  | 04/06/2018 |
| THIRD SUBMITTAL:   | 06/05/2018 |
| FOURTH SUBMITTAL:  | 06/27/2018 |
| FIFTH SUBMITTAL:   | 08/20/2018 |
| SIXTH SUBMITTAL:   | 10/16/2018 |
| SEVENTH SUBMITTAL: | 01/29/2019 |
| EIGHTH SUBMITTAL:  | 03/05/2019 |
| NINTH SUBMITTAL:   | 04/23/2019 |
| FINAL SUBMITTAL:   | 06/07/2019 |
| ASBUILT SUBMITTAL: | 05/27/2020 |

### DEVELOPMENT SUMMARY:

TOTAL AREA OF SITE = 31.71 ACRES (1,381,207 SQUARE FEET)

M-1 LIGHT INDUSTRIAL = 22.63 ACRES (985,647 SQUARE FEET)  
LOTS 1-10

R-3 RESIDENTIAL = 9.08 ACRES (395,561 SQUARE FEET)  
LOT 11

### BULK REGULATIONS:

#### M-1

FRONT YARD: 30 FEET

SIDE YARD: NO MINIMUM SHALL APPLY, EXCEPT WHERE THE SIDE YARD IS ADJACENT TO AN "R" OR "C-1" DISTRICT OR STREET R.O.W. LINE, IN WHICH CASE THE SIDE YARD SHALL BE 25 FEET.

REAR YARD: 30 FEET

#### R-3

FRONT YARD: 30 FEET

SIDE YARD: A TOTAL OF 15 FEET; ONE SIDE MAY BE REDUCED TO NOT LESS THAN 7 FEET; 15 FEET FOR ANY OTHER PRINCIPLE BUILDING.

REAR YARD: 30 FEET

### NOTES

1. ANY CHANGES PROPOSED TO THE CONSTRUCTION DRAWINGS DURING CONSTRUCTION SHALL BE APPROVED IN WRITING BY THE DEVELOPMENT SERVICES DEPARTMENT.

2. THE CONTRACTOR IS RESPONSIBLE FOR ANY CHANGES MADE DURING CONSTRUCTION THAT HAVE NOT BEEN GRANTED APPROVAL IN WRITING BY THE DEVELOPMENT SERVICES DEPARTMENT.

3. 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.

4. THE TEMPORARY TURNAROUND AT THE WEST END OF NW GETTYSBURG LANE WILL NOT BE REQUIRED IF THE PROPERTY TO THE WEST IS UNDER CONSTRUCTION AT THE SAME TIME AS STRATFORD CROSSING PLAT 4.

5. THE DEVELOPER WILL BE RESPONSIBLE FOR MAINTENANCE OF THE TEMPORARY TURNAROUNDS. THIS INCLUDES AREAS OF THE TEMPORARY TURNAROUNDS LOCATED IN THE PUBLIC RIGHT-OF-WAY.

## WAUKEE, IOWA

### 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                    |
| 6-8   | GRADING PLAN                                           |
| 9-10  | EROSION AND SEDIMENT CONTROL PLAN                      |
| 11-18 | STORM & SANITARY SEWER PLAN AND PROFILE                |
| 19-23 | WATER MAIN PLAN AND PROFILE                            |
| 24-26 | INTERSECTION DETAILS                                   |

### LEGAL DESCRIPTION

A PART OF THE NORTH HALF OF THE SOUTHEAST QUARTER AND A PART OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER, ALL OF SECTION 29, TOWNSHIP 79 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 SOUTH QUARTER CORNER OF SAID SECTION 29; THENCE NORTH 00°06'03" WEST ALONG THE WEST LINE OF SAID SOUTHEAST QUARTER, 1318.88 FEET TO THE SOUTHWEST CORNER OF SAID NORTH HALF OF THE SOUTHEAST QUARTER AND THE POINT OF BEGINNING; THENCE CONTINUING NORTH 00°06'03" WEST ALONG SAID WEST LINE, 1318.88 FEET TO THE CENTER OF SAID SECTION 29; THENCE NORTH 00°04'41" EAST ALONG THE WEST LINE OF SAID SOUTHWEST QUARTER OF THE NORTHEAST QUARTER, 78.82 FEET TO THE SOUTHERLY RIGHT OF WAY LINE OF THE FORMER CHICAGO AND NORTHWESTERN TRANSPORTATION COMPANY; THENCE SOUTHEASTERLY ALONG SAID SOUTHERLY RIGHT OF WAY LINE AND A CURVE CONCAVE NORTHEASTERLY WHOSE RADIUS IS 22968.31 FEET, WHOSE ARC LENGTH IS 1112.32 FEET AND WHOSE CHORD BEARS SOUTH 45°04'28" EAST, 1112.21 FEET; THENCE NORTH 43°27'03" EAST, 224.35 FEET; THENCE NORTHERLY ALONG A CURVE CONCAVE WESTERLY WHOSE RADIUS IS 25.00 FEET, WHOSE ARC LENGTH IS 38.82 FEET AND WHOSE CHORD BEARS NORTH 01°02'03" WEST, 35.04 FEET; THENCE NORTH 45°31'09" WEST, 1.98 FEET; THENCE NORTH 44°28'51" EAST, 60.00 FEET; THENCE EASTERLY ALONG A CURVE CONCAVE NORTHERLY WHOSE RADIUS IS 25.00 FEET, WHOSE ARC LENGTH IS 39.72 FEET AND WHOSE CHORD BEARS NORTH 88°57'57" EAST, 35.67 FEET; THENCE NORTH 43°27'03" EAST, 72.53 FEET; THENCE NORTHEASTERLY ALONG A CURVE CONCAVE SOUTHEASTERLY WHOSE RADIUS IS 685.00 FEET, WHOSE ARC LENGTH IS 37.04 FEET AND WHOSE CHORD BEARS NORTH 45°00'00" EAST, 37.04 FEET; THENCE SOUTH 43°27'03" EAST, 70.00 FEET; THENCE NORTHEASTERLY ALONG A CURVE CONCAVE SOUTHEASTERLY WHOSE RADIUS IS 615.00 FEET, WHOSE ARC LENGTH IS 284.33 FEET AND WHOSE CHORD BEARS NORTH 59°47'38" EAST, 281.81 FEET; THENCE EASTERLY ALONG A CURVE CONCAVE SOUTHERLY WHOSE RADIUS IS 615.00 FEET, WHOSE ARC LENGTH IS 180.19 FEET AND WHOSE CHORD BEARS NORTH 81°25'57" EAST, 179.55 FEET; THENCE NORTH 89°49'35" EAST, 106.53 FEET; THENCE SOUTH 00°27'19" WEST, 628.88 FEET; THENCE SOUTH 89°54'07" WEST, 526.81 FEET TO THE NORTHERLY RIGHT OF WAY LINE OF SAID FORMER CHICAGO AND NORTHWESTER TRANSPORTATION COMPANY; THENCE NORTHWESTERLY ALONG SAID NORTHERLY LINE A CURVE CONCAVE NORTHEASTERLY WHOSE RADIUS IS 22868.31 FEET, WHOSE ARC LENGTH IS 314.85 FEET AND WHOSE CHORD BEARS NORTH 47°01'53" WEST, 314.85 FEET; THENCE SOUTH 43°27'03" WEST, 100.00 FEET TO SAID SOUTHERLY RIGHT OF WAY LINE; THENCE SOUTHEASTERLY ALONG SAID SOUTHERLY LINE AND A CURVE CONCAVE NORTHEASTERLY WHOSE RADIUS IS 22968.31 FEET, WHOSE ARC LENGTH IS 834.03 FEET AND WHOSE CHORD BEARS SOUTH 47°40'36" WEST ALONG SAID SOUTH LINE, 1452.69 FEET TO THE POINT OF BEGINNING AND EXCEPT FORMER CHICAGO AND NORTHWESTERN TRANSPORTATION COMPANY RIGHT OF WAY, CONTAINING 31.71 ACRES (1,381,207 SQUARE FEET). THE PROPERTY IS SUBJECT TO ANY AND ALL EASEMENTS OF RECORD.

### UTILITY NOTE

ANY 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    | MOE       |

#### 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 THIELE GEOTECH, INC (PN 02.17120.0) DATED JANUARY 25, 2018.

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 CURRENT EDITION OF SUDAS STANDARD SPECIFICATIONS SHALL APPLY TO ALL WORK PERFORMED ON THIS PROJECT EXCEPT AS MODIFIED HEREIN.

## 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

3405 SE CROSSROADS DR. SUITE G GRIMES, IOWA 50111  
PH: (515) 369-4400 Fax: (515) 369-4410  
PROJECT NO. 1803.104

## IOWA ONE CALL

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

ERIN K. OLLENDIKE  
16926

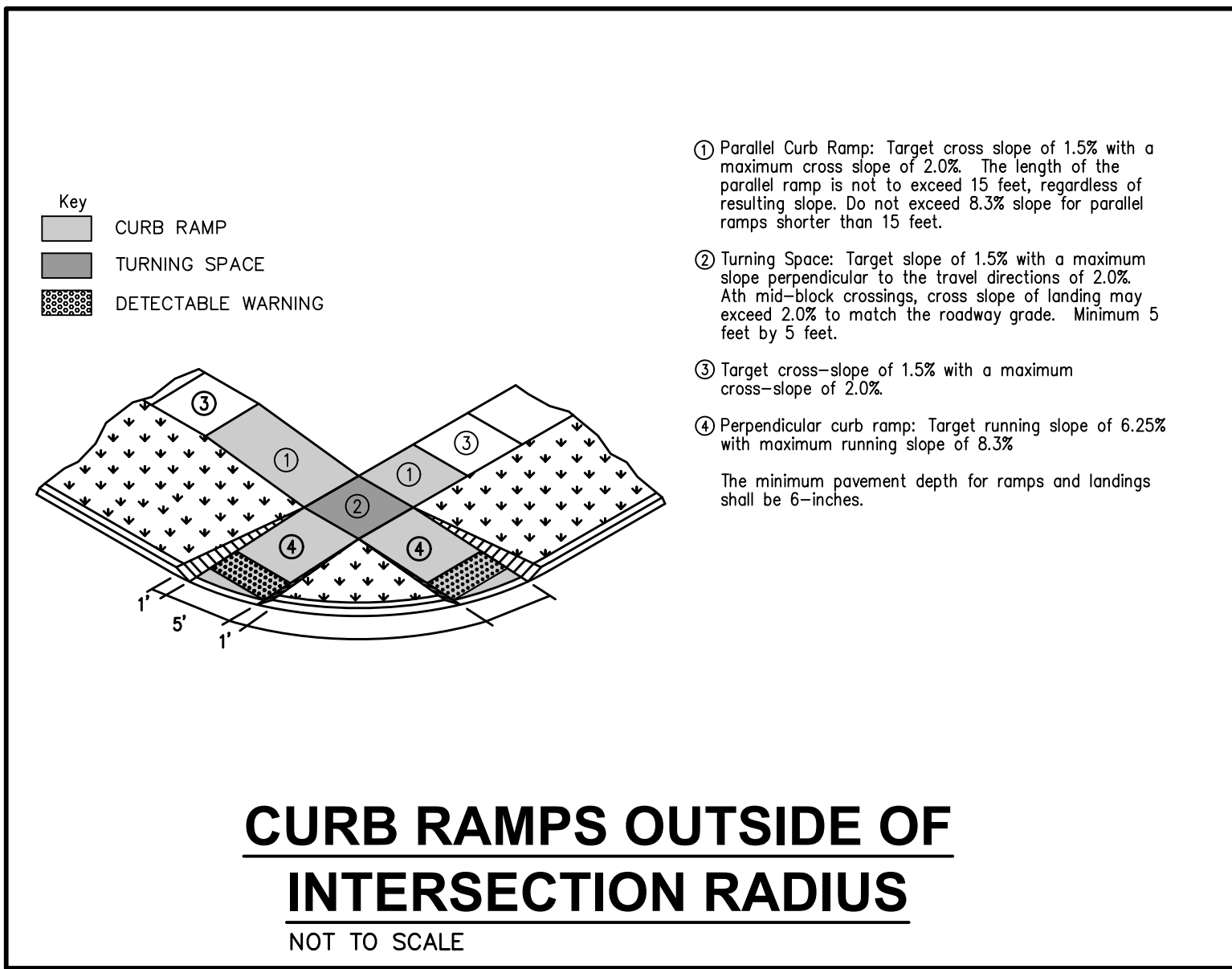
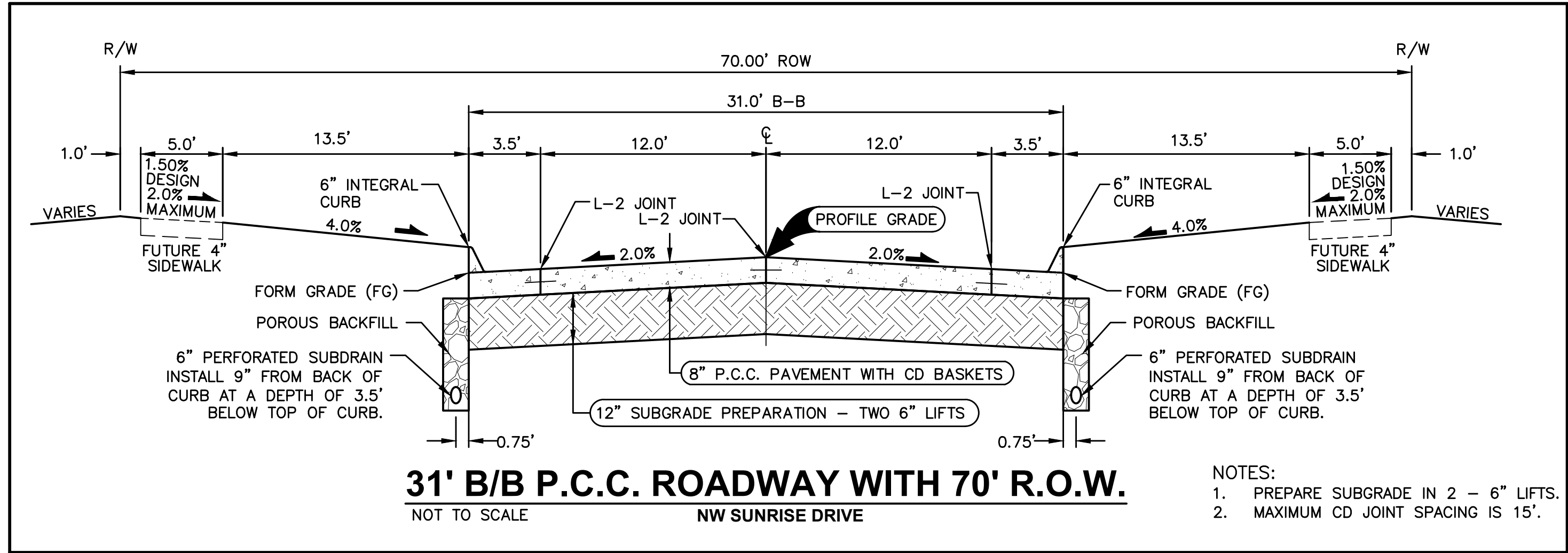
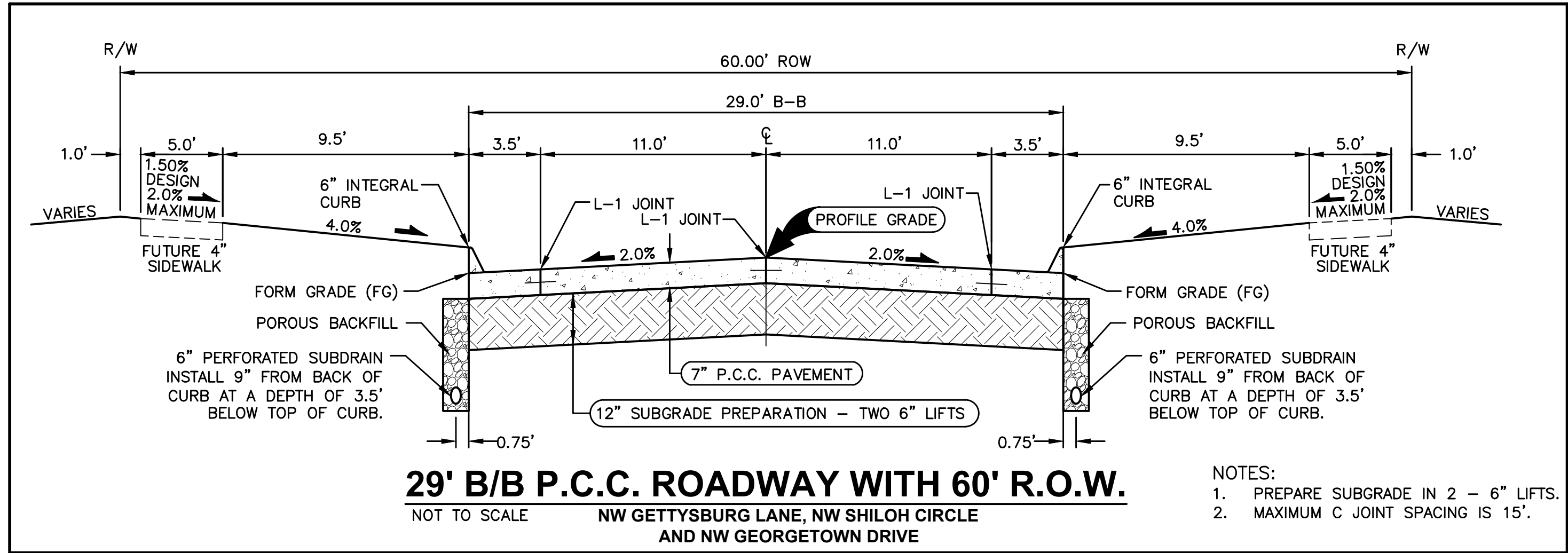
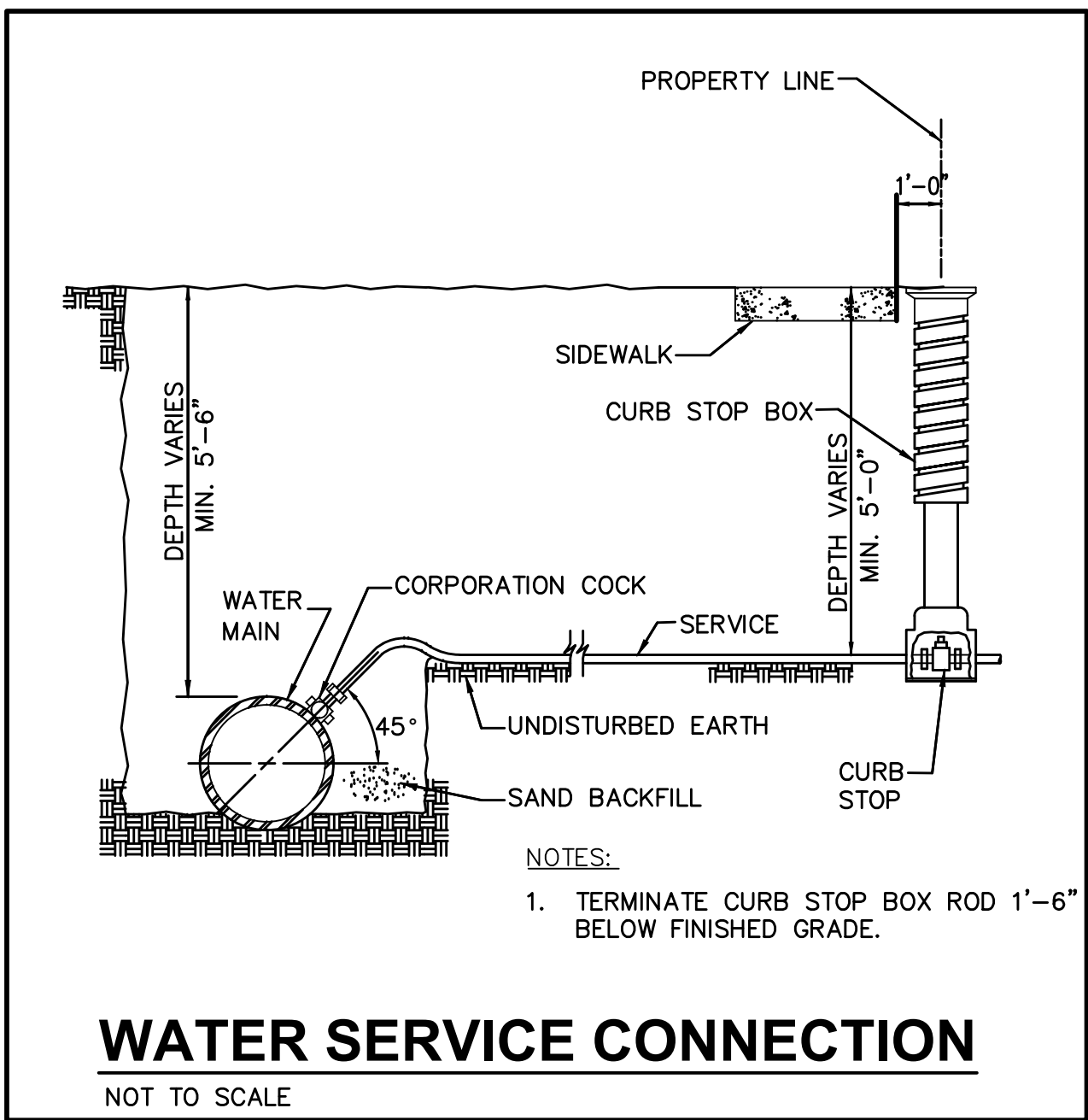
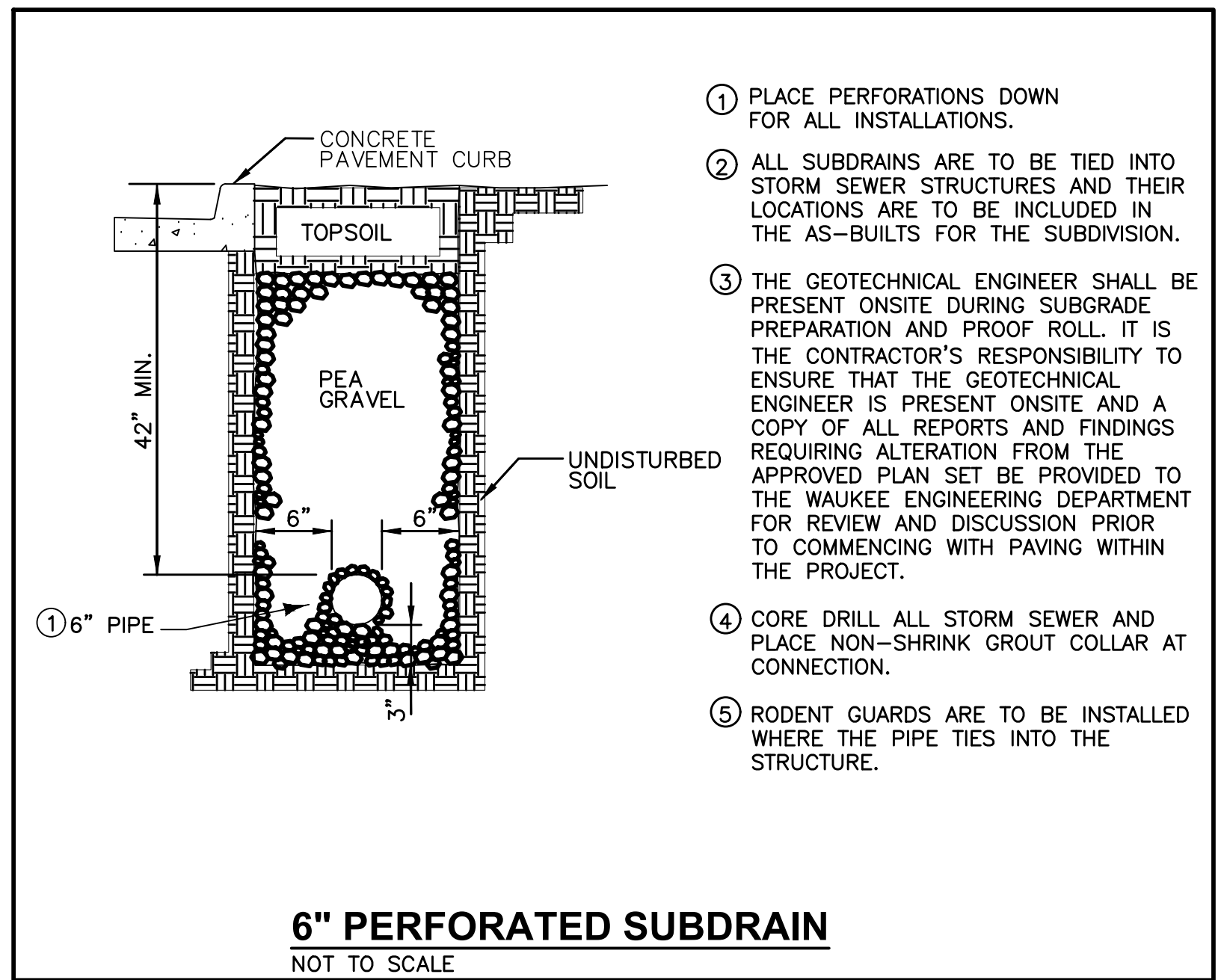
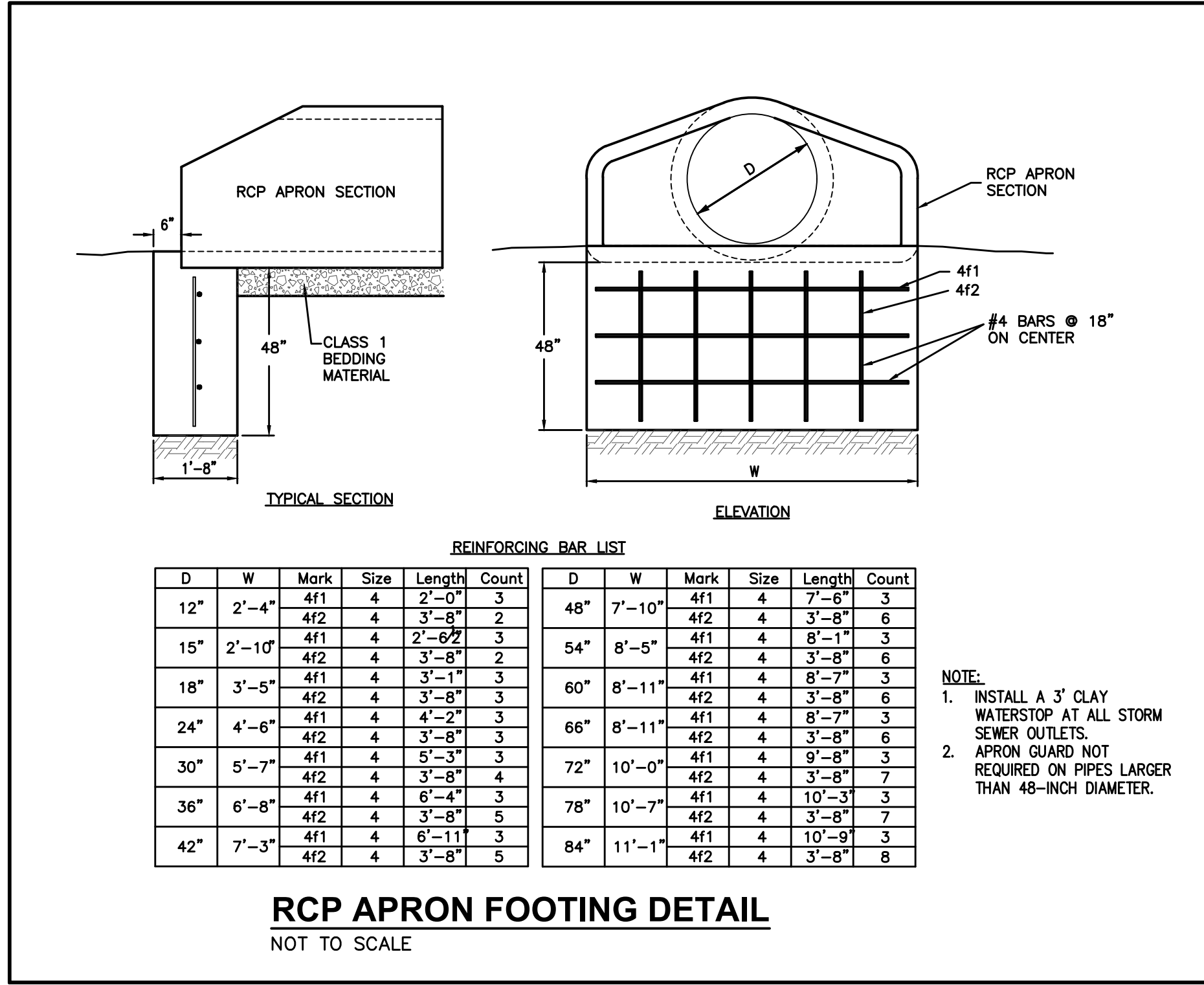
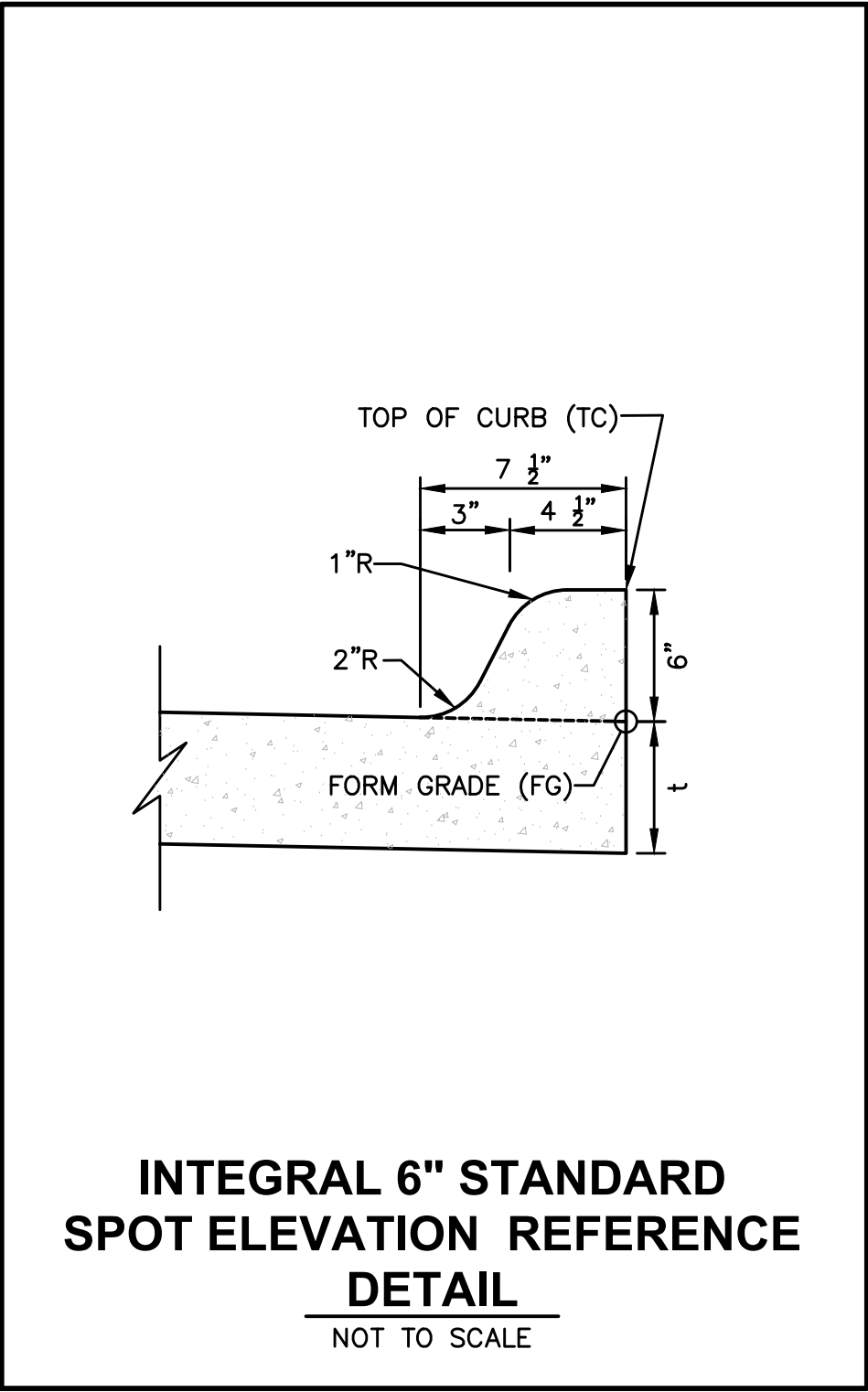
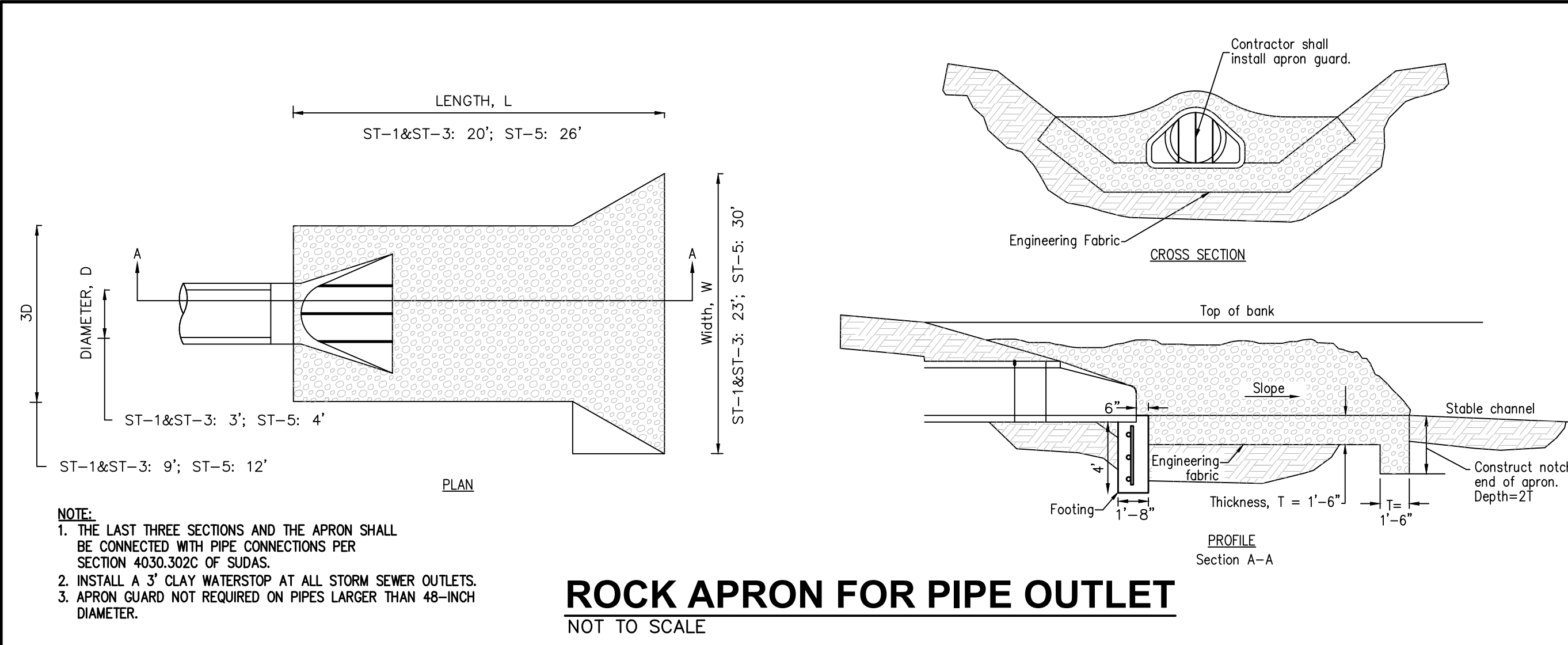
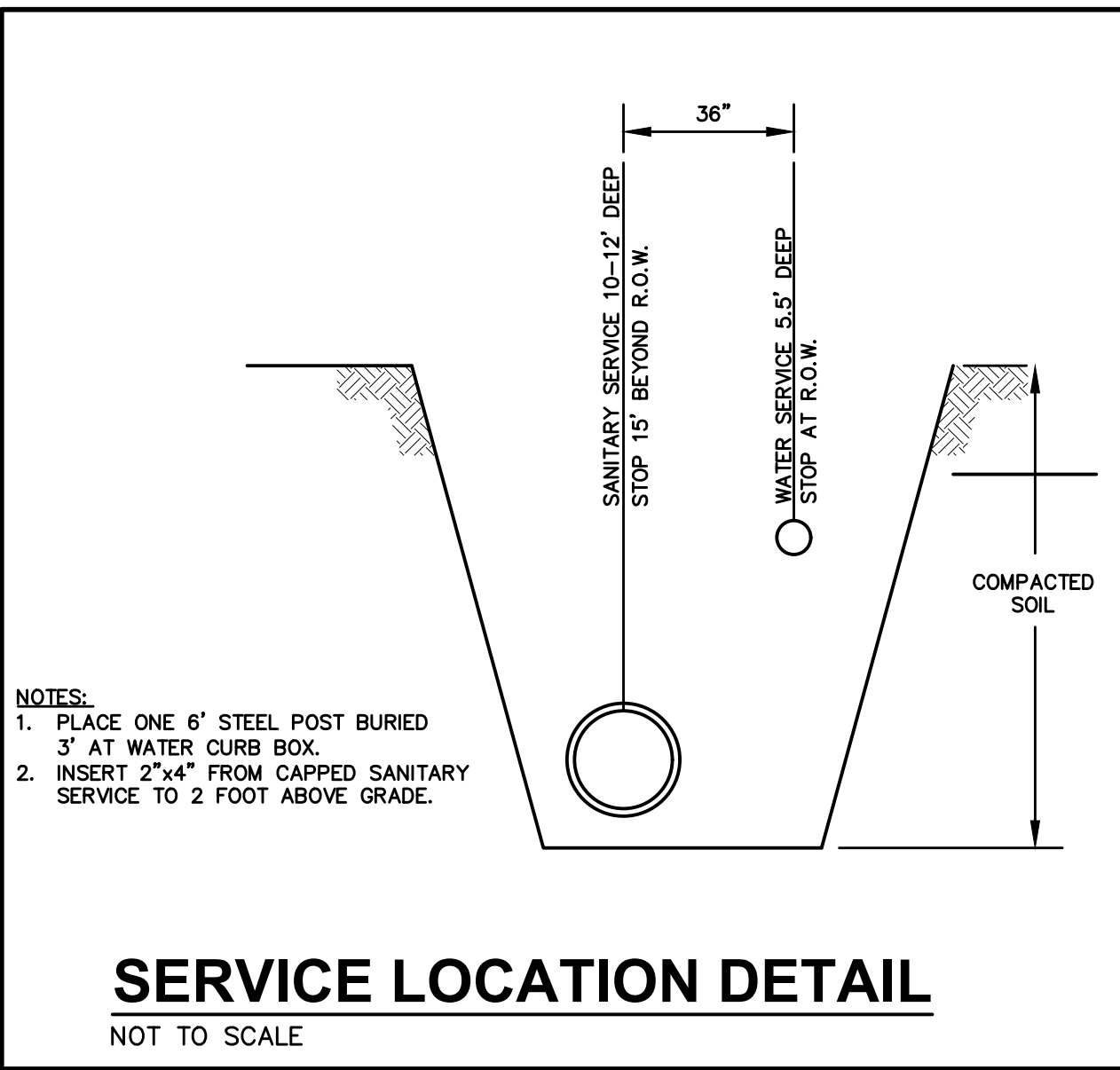
I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

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

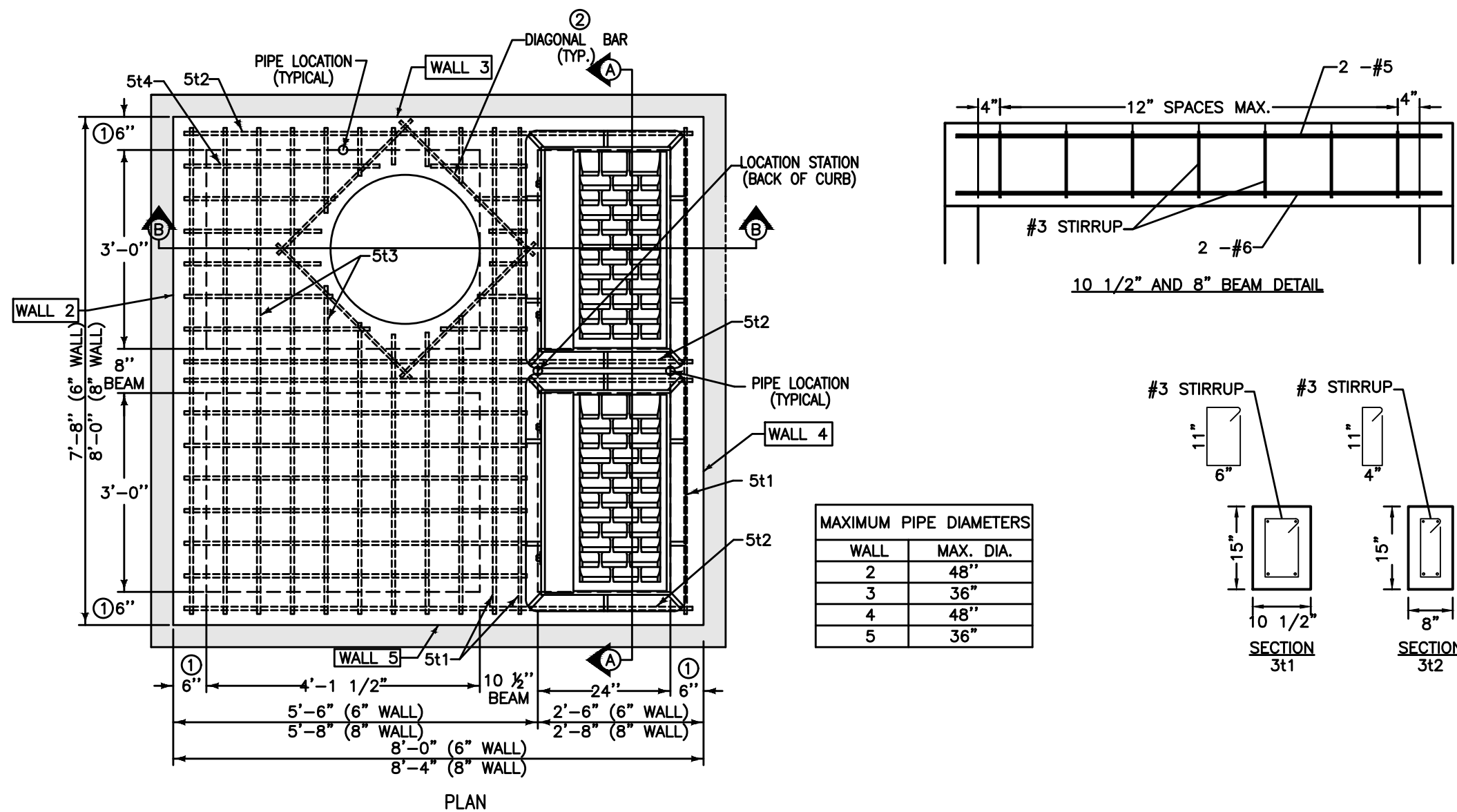
05-27-2020  
DATE

MY LICENSE RENEWAL DATE IS DECEMBER 31, 2021  
PAGES OR SHEETS COVERED BY THIS SEAL:  
1-26

FILE: H:\2018\180304\DWG\ASBUIL\180304-COV-DET-TAB - ASBUIL.DWG  
PLOT DATE: 5/28/2020 9:42 AM  
PLOT BY: J. GAVARON, MICHIGAN  
TECHNICAL: ENG.



FILE: H:\2018\180304\DWG\ASBUILT\180304-COV-DET-TAB - ASBUILT.DWG  
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PLOTTER: HP DESIGN PLT  
PLOT BY: JAWAHAR MISHRA

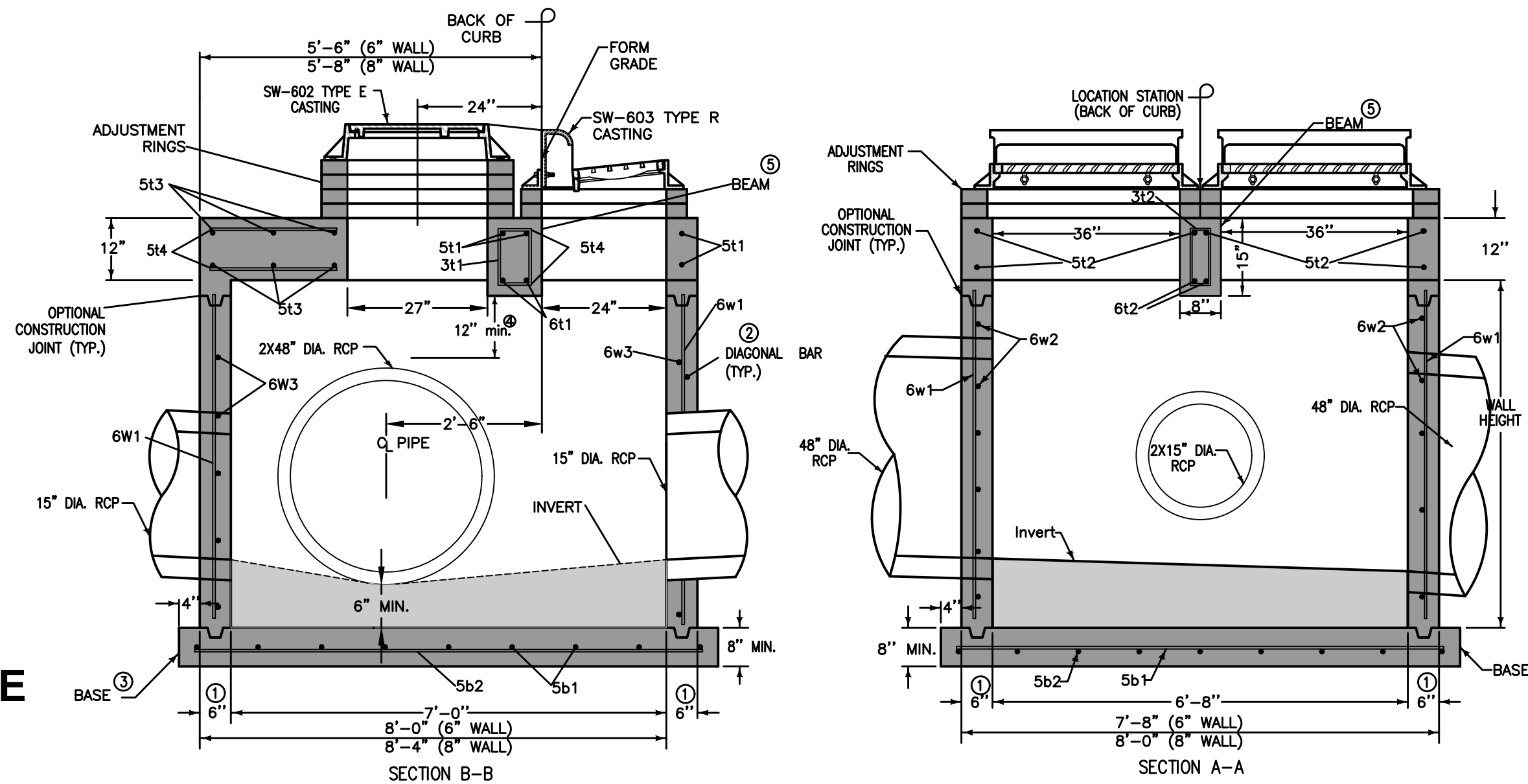


| REINFORCING BAR LIST |      |          |       |        |                         |         |
|----------------------|------|----------|-------|--------|-------------------------|---------|
| MARK                 | SIZE | LOCATION | SHAPE | COUNT  | LENGTH                  | SPACING |
| 3t1                  | 3    | TOP      |       | 7      | 8" WALL                 | 6" WALL |
| 3t2                  | 3    | TOP      |       | 8      | 8" WALL                 | 6" WALL |
| 5b1                  | 5    | BASE     |       | 9      | 7'-10"                  | 2'-10"  |
| 5b2                  | 5    | BASE     |       | 9      | 8'-2"                   | 8'-6"   |
| 6w1                  | 6    | WALLS    |       | 30     | 30 WALL HEIGHT MINUS 4" | 12"     |
| 6w2                  | 6    | WALLS    |       | VARIES | VARIES                  | VARIES  |
| 6w3                  | 6    | WALLS    |       | VARIES | VARIES                  | VARIES  |
| 5t1                  | 5    | TOP      |       | 4      | 7'-4"                   | 7'-8"   |
| 5t2                  | 5    | TOP      |       | 6      | 7'-8"                   | 8'-0"   |
| 5t3                  | 5    | TOP      |       | 18     | 18 7'-4"                | 7'-8"   |
| 5t4                  | 5    | TOP      |       | 24     | 24 5'-2"                | 5'-4"   |
| 6t1                  | 6    | TOP      |       | 2      | 7'-4"                   | 7'-8"   |
| 6t2                  | 6    | TOP      |       | 2      | 7'-8"                   | 8'-0"   |

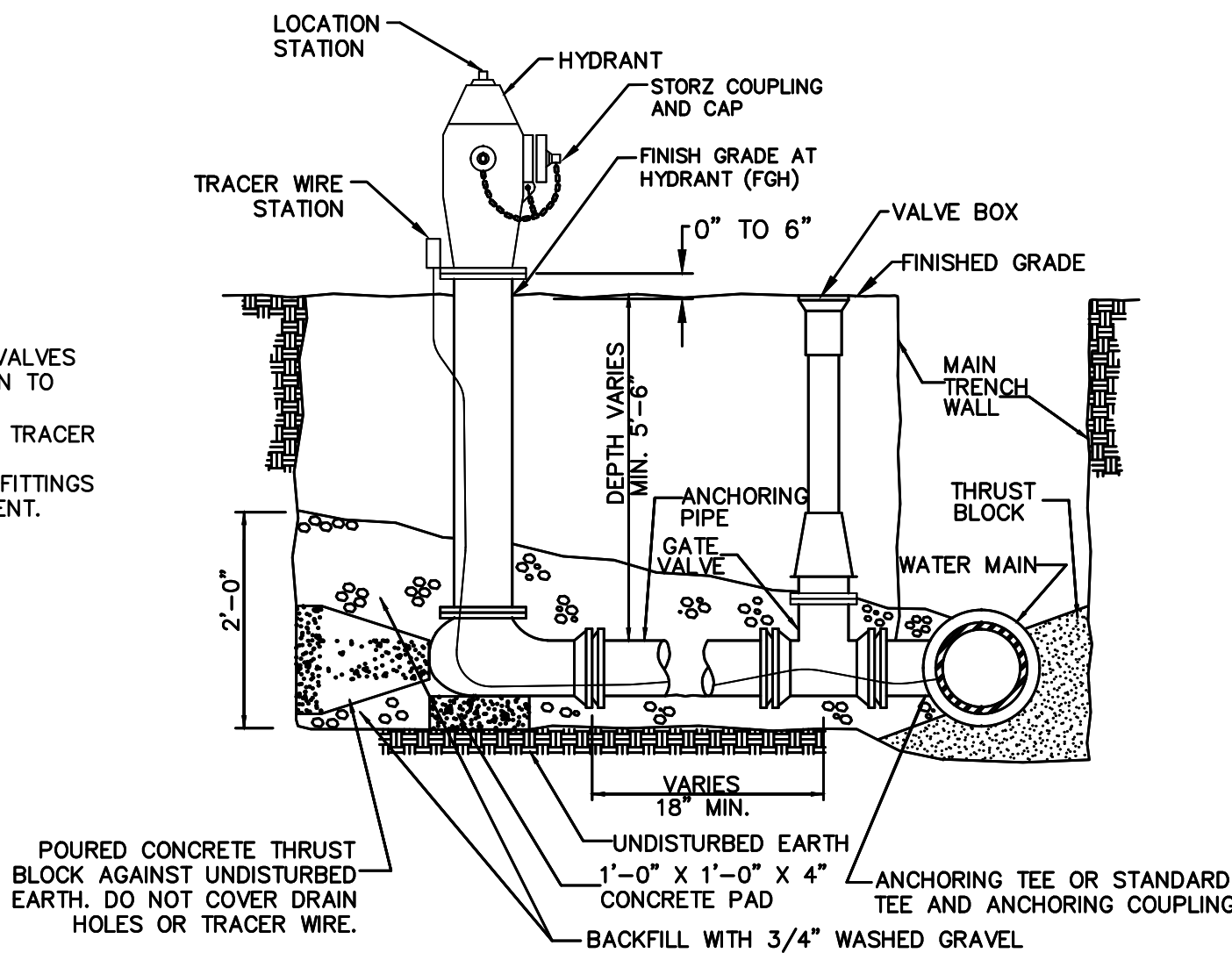
- USE 8" WALL OPTION FOR INTAKE DEPTHS GREATER THAN 7'-0" AND LESS THAN 10'-0".
- INSTALL FOUR #4 DIAGONAL BARS AT MANHOLE OPENING AND AT ALL PIPE OPENINGS.
- CAST-IN-PLACE BASE SHOWN. IF BASE IS PRECAST INTEGRAL WITH WALLS, THE FOOTPRINT OF BASE IS NOT REQUIRED TO EXTEND BEYOND THE OUTER EDGE OF THE WALLS.
- 12 INCH MINIMUM WALL HEIGHT ABOVE ALL PIPES.
- 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-11)

NOT TO SCALE

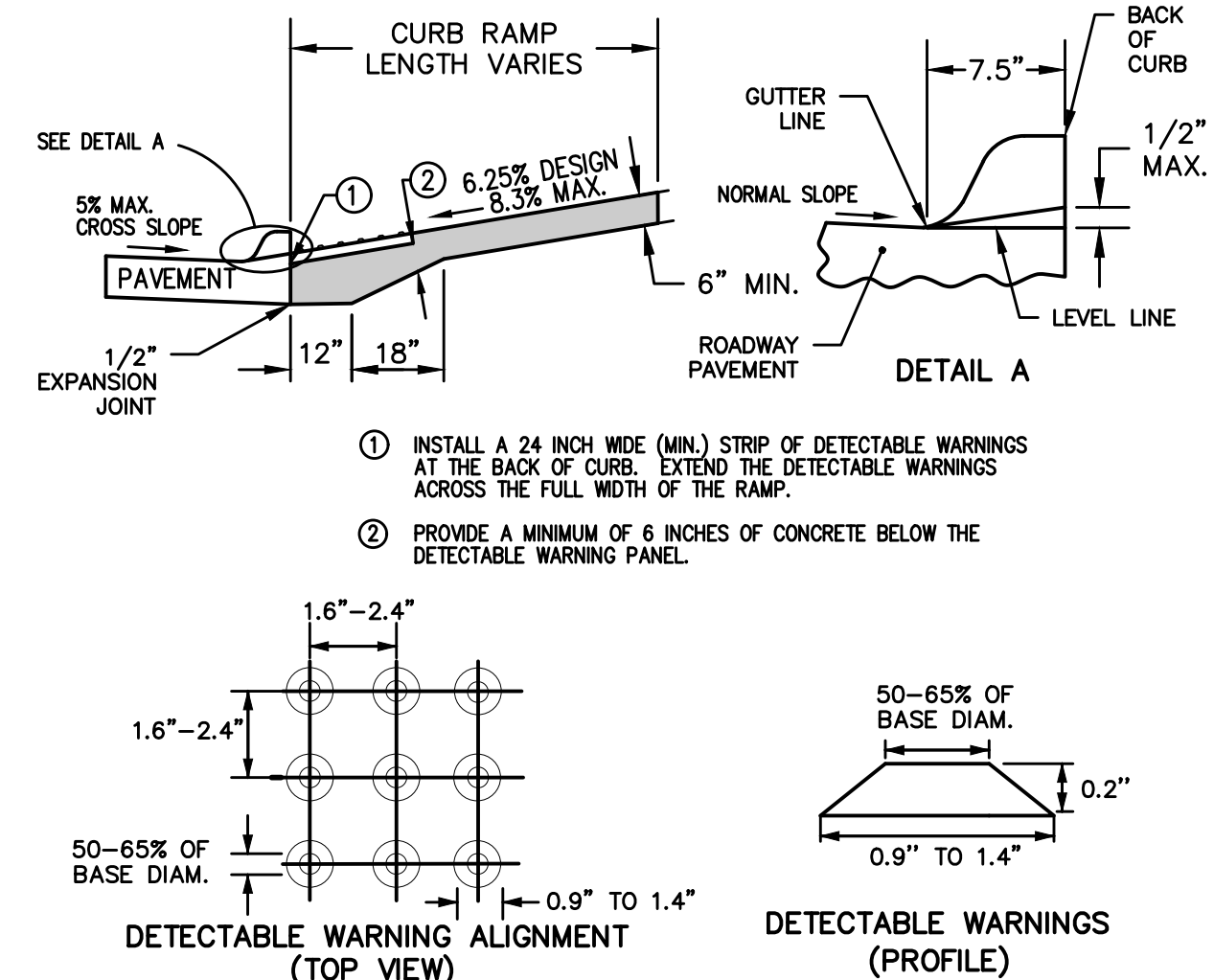


- NOTES
- MINIMUM SIZE FOR PIPING, VALVES AND FITTINGS FROM WATERMAIN TO HYDRANT INLET: 6".
  - PROVIDE TRACER WIRE AND TRACER WIRE STATION.
  - WRAP HYDRANT, PIPE AND FITTINGS WITH POLYETHYLENE ENCASEMENT.



## HYDRANT ASSEMBLY DETAIL

NOT TO SCALE



## DETECTABLE WARNING DETAIL

NOT TO SCALE

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PLOTED BY: J. ANTONIO MORGADO DATE PLOTTED: 5/28/2020 9:42 AM  
REVISION: ENG

| ESTIMATED PROJECT QUANTITIES |                                                         |               |       |
|------------------------------|---------------------------------------------------------|---------------|-------|
| ITEM NO.                     | ITEM DESCRIPTION                                        | UNIT QUANTITY |       |
| 1                            | COMBINED CLEARING AND GRUBBING                          | AC            | 23.30 |
| 2                            | STRIPPING, SALVAGING AND SPREAD TOPSOIL                 | LS            | 1     |
| 3                            | CLASS 10 EXCAVATION                                     | LS            | 1     |
| 4                            | SUBGRADE PREPARATION                                    | SY            | 8,811 |
| 5                            | SANITARY SEWER GRAVITY MAIN, 8" DIA                     | LF            | 2,224 |
| 6                            | SANITARY SEWER SERVICE STUB, 6" DIA                     | EA            | 10    |
| 7                            | SUBDRAIN, 6" PERFORATED PVC                             | LF            | 2,580 |
| 8                            | STORM SEWER, TRENCHED, 8" TILE LINE                     | LF            | 10    |
| 9                            | STORM SEWER, TRENCHED, 15" RCP                          | LF            | 963   |
| 10                           | STORM SEWER, TRENCHED, 18" RCP                          | LF            | 98    |
| 11                           | STORM SEWER, TRENCHED, 24" RCP                          | LF            | 139   |
| 12                           | STORM SEWER, TRENCHED, 36" RCP                          | LF            | 502   |
| 13                           | STORM SEWER, TRENCHED, 42" RCP                          | LF            | 311   |
| 14                           | STORM SEWER, TRENCHED, 48" RCP                          | LF            | 924   |
| 15                           | STORM SEWER, 15" RCP APRON W/ FOOTING & APRON GUARD     | EA            | 7     |
| 16                           | STORM SEWER, 18" RCP APRON W/ FOOTING & APRON GUARD     | EA            | 2     |
| 17                           | STORM SEWER, 24" RCP APRON W/ FOOTING & APRON GUARD     | EA            | 1     |
| 18                           | STORM SEWER, 36" RCP APRON W/ FOOTING & APRON GUARD     | EA            | 4     |
| 19                           | STORM SEWER, 48" RCP APRON W/ FOOTING & APRON GUARD     | EA            | 1     |
| 20                           | WATER MAIN, 8" DIA                                      | LF            | 2,250 |
| 21                           | WATER SERVICE STUB, 6" DIA                              | EA            | 10    |
| 22                           | VALVE, 6" DIA                                           | EA            | 10    |
| 23                           | VALVE, 8" DIA                                           | EA            | 10    |
| 24                           | FIRE HYDRANT ASSEMBLY                                   | EA            | 8     |
| 25                           | TEMPORARY FIRE HYDRANT ASSEMBLY                         | EA            | 12    |
| 26                           | TEMPORARY FIRE HYDRANT ASSEMBLY (RELOCATE)              | EA            | 1     |
| 27                           | MANHOLE, SW-301, 48" (SANITARY SEWER)                   | EA            | 10    |
| 28                           | MANHOLE, SW-401, 60" (STORM SEWER)                      | EA            | 1     |
| 29                           | MANHOLE, SW-401, 60" WITH TYPE 4C CASTING (STORM SEWER) | EA            | 1     |
| 30                           | MANHOLE, SW-401, 72" (STORM SEWER)                      | EA            | 1     |
| 31                           | MANHOLE, SW-401, 84" (STORM SEWER)                      | EA            | 1     |
| 32                           | MANHOLE, SW-401, 96" (STORM SEWER)                      | EA            | 1     |
| 33                           | MANHOLE, SW-401, 108" (STORM SEWER)                     | EA            | 1     |
| 34                           | MANHOLE, SW-402, 5'x5' (STORM SEWER)                    | EA            | 3     |
| 35                           | INTAKE, SW-501                                          | EA            | 2     |
| 36                           | INTAKE, SW-503                                          | EA            | 2     |
| 37                           | INTAKE, SW-505                                          | EA            | 6     |
| 38                           | INTAKE, SW-506                                          | EA            | 1     |
| 39                           | INTAKE, SW-506 MODIFIED                                 | EA            | 1     |
| 40                           | PAVEMENT, 7" P.C.C.                                     | SY            | 3,946 |
| 41                           | PAVEMENT, 8" P.C.C.                                     | SY            | 3,863 |
| 42                           | PAVEMENT, 6" P.C.C. SIDEWALK RAMPS                      | SY            | 148   |
| 43                           | DETECTABLE WARNING PANELS                               | SF            | 160   |
| 44                           | SEEDING, FERTILIZING, AND MULCHING                      | AC            | 21.59 |
| 45                           | PERMANENT ROAD CLOSURE, URBAN, SI-182                   | EA            | 10    |
| 46                           | PERMANENT ROAD CLOSURE, URBAN, SI-182 (RELOCATE)        | EA            | 5     |
| 47                           | TRAFFIC CONTROL                                         | LS            | 1     |
| 48                           | EROSION CONTROL                                         | LS            | 1     |
| 49                           | ROCK OUTLET PROTECTION, CLASS 'E' RIP RAP               | TONS          | 75    |
| 50                           | SANITARY SEWER CLEANOUT                                 | EA            | 10    |
| 51                           | STORM SEWER CLEANOUT                                    | EA            | 12    |
| 52                           | PAVEMENT MARKINGS                                       | LS            | 1     |
| 53                           | REMOVAL OF EXISTING 8" TILE LINE                        | LF            | 1,520 |
| 54                           | 8-INCH GRANULAR TURNAROUND                              | SY            | 342   |
|                              |                                                         |               |       |

## GENERAL NOTES

- ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND TO THE CURRENT EDITION OF SUDAS STANDARD SPECIFICATIONS. THE WAUKEE STANDARD SPECIFICATIONS SHALL GOVERN IF ANY DISCREPANCIES.
- WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE, THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS. THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATIONS AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.
- THE CONTRACTOR IS REQUIRED TO UTILIZE THE UTILITY ONE-CALL SERVICE AT 800-292-8989 AT LEAST 48 HOURS PRIOR TO EXCAVATING ANYWHERE ON THE PROJECT.
- THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY AREAS OF PAVEMENT OR SIDEWALK NOT TO BE REMOVED THAT IS DAMAGED DUE TO OPERATING HIS EQUIPMENT ON THE PAVEMENT OR SIDEWALK. PAVEMENT REPLACEMENT SHALL COMPLY WITH THE WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF WORK BETWEEN ALL SUPPLIERS AND SUBCONTRACTORS INVOLVED IN THE PROJECT. INCLUDING STAGING OF CONSTRUCTION DETAILS.
- THE CONTRACTOR SHALL CONFINE HIS GRADING OPERATIONS TO WITHIN THE PROPOSED AND EXISTING RIGHT OF WAY, CONSTRUCTION LIMITS AND EASEMENTS SHOWN ON THE PLANS. ANY DAMAGE TO PROPERTIES OUTSIDE THE SITE BOUNDARY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- PRIOR TO CONSTRUCTION, CONTRACTOR SHALL NOTIFY (48 HRS NOTICE) THE FOLLOWING:
  - CITY OF WAUKEE ENGINEERING DEPARTMENT
  - APPROPRIATE UTILITY COMPANIES
  - OWNER
  - CIVIL DESIGN ADVANTAGE
- 48 HOUR NOTICE SHALL BE GIVEN TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT PRIOR TO WEEKEND AND HOLIDAY WORK.

## 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 MOST RECENT EDITION OF THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE CURRENT 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 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 FOR 8" 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.                                                                                                                                                                                                                                                                                                                                                                          |
| 5-14     | 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 TELEVISE SANITARY AND STORM SEWER PRIOR TO PAVING AND PROVIDE TELEVISING REPORT TO CITY IN HARD COPY AND DISC FORMAT. TELEVISING 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, 21    | REFER TO DETAIL ON SHEET 2 AND PLAN AND PROFILE SHEETS FOR LOCATION AND DEPTH.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 15-19    | 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.                                                                                                                                                                                                                                                                                                                                                        |
| 20       | 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.                                                                                                                                                                                                                                                                                                                                                   |
| 24       | 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, STORZ FITTINGS, POLYETHYLENE WRAP, THRUST BLOCK AND TRACER WIRE SYSTEM AND FIRE HYDRANT.                                                                                                                                                                                                                                                                                                                                                                                                               |
| 24-26    | REFER TO WATERMAIN PLAN AND PROFILE SHEETS FOR LOCATIONS OF HYDRANTS. ANY RELOCATED FIRE HYDRANTS ARE TO INCLUDE STORZ FITTINGS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 27       | 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.                                                                                                                                                                                                                                                       |
| 28-33    | REFER TO FIG. 6010.401 - CIRCULAR STORM SEWER MANHOLE (SW-401) FOR CONSTRUCTION DETAILS. MANHOLE INSIDE DIAMETERS GREATER THAN 48" SHALL BE CONSIDERED INCIDENTAL.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

- PRIOR TO CONSTRUCTION, THE PROJECT MANAGER SHALL CONTACT THE WAUKEE ENGINEERING DEPARTMENT AND SCHEDULE A PRE-CONSTRUCTION MEETING AT LEAST ONE WEEK PRIOR TO THE ANTICIPATED START OF CONSTRUCTION.
- SPECIAL CARE SHALL BE TAKEN WHEN FORMING AT INTERSECTIONS SO THE PROFILES SHOWN ON THE PLANS AND THE ELEVATIONS SHOWN ON THE INTERSECTION DETAILS ARE OBTAINED. SHORT LENGTHS OF FORMS OR FLEXIBLE FORMS MAY BE NECESSARY AT THESE LOCATIONS.
- 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.
- 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. THE IS 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.
- 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.
- THE CONTRACTOR SHALL APPLY NECESSARY MOISTURE TO THE CONSTRUCTION AREA AND HAUL ROADS TO PREVENT THE SPREAD OF DUST.
- THE CONTRACTOR IS REQUIRED TO BE FAMILIAR WITH AND COMPLY WITH OSHA STANDARDS. NOTHING WITHIN THESE PLANS SHALL RELIEVE THE CONTRACTOR OF THIS REQUIREMENT.
- ALL MATERIAL TESTING SHALL BE CONSIDERED INCIDENTAL TO OTHER CONSTRUCTION.
- 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.
- ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. (MUTCD)
- ALL SLOPES IN PAVEMENT SHALL BE UNIFORM TO AVOID PONDING.
- 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.
- 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.
- REMOVE DEBRIS SPILLED INTO R.O.W. AT THE END OF EACH WORK DAY AND BEFORE RAIN EVENTS.
- DO NOT STORE CONSTRUCTION MATERIALS AND EQUIPMENT IN THE R.O.W.
- ALL PROPERTY PINS SHALL BE PROTECTED FROM GRADING OR OTHER OPERATIONS. ANY PINS DISTURBED SHALL BE RESET AT THE CONTRACTOR'S EXPENSE.

## 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                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 34       | REFER TO FIG. 6010.402 - RECTANGULAR STORM SEWER MANHOLE (SW-402) FOR CONSTRUCTION DETAILS.                                                                                                                                                                                                                                                                                                                                                                |
| 35-38    | REFER TO FIG. 6010.514 - BOXOUTS FOR GRATE INTAKES. REFER TO FIG. 6010.603 - CASTINGS FOR GRATE INTAKES FOR TYPE R GRATE DETAILS AND FIG. 6010.602 - CASTINGS FOR STORM SEWER MANHOLES FOR TYPE E CASTING DETAILS. THE MAXIMUM HEIGHT OF ADJUSTING RINGS ALLOWED FOR INTAKE CASTINGS IS 6". THE MAXIMUM HEIGHT OF ADJUSTING RINGS ALLOWED FOR MANHOLE CASTINGS IS 12".                                                                                     |
| 35       | REFER TO FIG. 6010.501 - SINGLE GRATE INTAKE (SW-501) FOR CONSTRUCTION DETAILS.                                                                                                                                                                                                                                                                                                                                                                            |
| 36       | REFER TO FIG. 6010.503 - SINGLE GRATE INTAKE WITH MANHOLE (SW-503) FOR CONSTRUCTION DETAILS.                                                                                                                                                                                                                                                                                                                                                               |
| 37       | REFER TO FIG. 6010.505 - DOUBLE GRATE INTAKE (SW-505) FOR CONSTRUCTION DETAILS.                                                                                                                                                                                                                                                                                                                                                                            |
| 38       | REFER TO FIG. 6010.506 - DOUBLE GRATE INTAKE WITH MANHOLE (SW-506) FOR CONSTRUCTION DETAILS.                                                                                                                                                                                                                                                                                                                                                               |
| 39       | REFER TO SHEET 3 FOR CONSTRUCTION DETAILS.                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 40-41    | REFER TO FIG. 7010.101 - JOINTS (PV-101) FOR JOINT DETAILS. MAXIMUM C AND CD JOINT SPACING IS 15 FEET.                                                                                                                                                                                                                                                                                                                                                     |
| 42       | REFER TO FIG. 7030.204 - GENERAL SIDEWALK AND ACCESSIBLE RAMP DETAILS AND FIG. 7030.208 - CURB RAMPS WITHIN INTERSECTION RADIUS FOR CLASS B OR C SIDEWALK FOR CONSTRUCTION DETAILS. DETECTABLE WARNING PANELS TO BE ARMOR TILE, ADA SOLUTIONS OR APPROVED EQUAL, BRICK RED IN COLOR. ACCESSIBLE CURB RAMPS INCLUDING TURNING SPACES SHALL BE 6" THICK P.C.C.                                                                                               |
| 43       | REFER TO SHEET 3 FOR CONSTRUCTION DETAILS.                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 44       | THE SITE SEEDING SHALL CONFORM TO THE SPECIFICATION FOR TYPE (1) PERMANENT LAWN MIXTURE AND TYPE (4) URBAN TEMPORARY EROSION CONTROL SEED MIXTURE.<br><u>SEEDING QUANTITIES</u><br>-TYPE 1 PERMANENT LAWN MIXTURE = 1.77 AC<br>-TYPE 4 URBAN TEMPORARY EROSION CONTROL MIXTURE = 19.82 AC                                                                                                                                                                  |
| 45-46    | REFER TO PLAN AND PROFILE SHEETS FOR LOCATIONS. REFER TO IDOT STANDARD ROAD PLAN SI-182 FOR CONSTRUCTION DETAILS. EACH LOCATION CONSISTS OF FIVE SIGNS WITH POSTS PER SI-182.                                                                                                                                                                                                                                                                              |
| 47       | ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON TRAFFIC CONTROL DEVICES. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ROAD BARRICADES AT END OF EXISTING PAVEMENTS UNTIL THE PROJECT IS ACCEPTED. THE DEVELOPER AND CONTRACTOR SHALL WORK WITH THE DALLAS COUNTY CONSERVATION BOARD ON TRAFFIC CONTROL NEEDED FOR TEMPORARY CLOSURES AND MODIFIED ACCESS TO THE RACCOON RIVER VALLEY TRAIL.                               |
| 48       | REFER TO SHEETS 9 AND 10 OF THE CONSTRUCTION DRAWINGS FOR EROSION AND SEDIMENT CONTROLS. REFER TO SEPARATE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR SPECIFIC DETAILS.<br><br><u>EROSION CONTROL QUANTITIES</u><br>- 1 CONCRETE WASH PIT<br>- 5,333 LF OF SILT FENCE<br>- 21.59 ACRES OF SEEDING, FERTILIZING AND MULCHING.<br>- 10 INLET PROTECTION DEVICES<br>- 1-15" CMP OR HDPE TEMPORARY STANDPIPE<br>- 2-30" CMP OR HDPE TEMPORARY STANDPIPE |
| 49       | INSTALL ENGINEERING FABRIC UNDER ALL RIP RAP. ENGINEERING FABRIC SHALL BE CONSIDERED INCIDENTAL. REFER TO SHEET 17 AND 18 FOR LOCATION.                                                                                                                                                                                                                                                                                                                    |
| 50       | REFER TO FIG. 4010.203 - SANITARY SEWER CLEANOUT FOR CONSTRUCTION DETAILS.                                                                                                                                                                                                                                                                                                                                                                                 |
| 51       | REFER TO FIG. 4040.232 - SUBDRAIN CLEANOUTS FOR CONSTRUCTION DETAILS.                                                                                                                                                                                                                                                                                                                                                                                      |
| 52       | REFER TO SHEET 25 FOR LOCATION AND DETAILS.                                                                                                                                                                                                                                                                                                                                                                                                                |
| 53       | EXISTING TILE LINE IS BASED OFF OF MAP LOCATION.                                                                                                                                                                                                                                                                                                                                                                                                           |
| 54       | REFER TO SHEETS 11 AND 13 FOR LOCATION.                                                                                                                                                                                                                                                                                                                                                                                                                    |

- IN THE EVENT OF A DISCREPANCY BETWEEN DETAILED PLANS AND QUANTITIES, THE DETAILED PLANS SHALL GOVERN.
- 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.
- 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
- THE CONTRACTOR SHALL SUBMIT A LIST OF CONSTRUCTION MATERIALS TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT PRIOR TO CONSTRUCTION.
- 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 FINDING 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.
- THE CONTRACTOR SHALL COORDINATE ALL EXISTING PUBLIC UTILITY CONNECTIONS WITH THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
- 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.
- 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.
- THE CONTRACTOR IS RESPONSIBLE FOR CLEANING AND TELEVISING ALL STORM AND SANITARY SEWERS. THE CITY OF WAUKEE ENGINEERING DEPARTMENT SHALL WITNESS AND APPROVE ALL CLEANING AND TELEVISING 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.
- ALL FIRE HYDRANTS INCLUDING ANY RELOCATED HYDRANTS SHALL HAVE 4-INCH STORZ FITTINGS.
- ALL PROPOSED PEDESTRIAN CROSSINGS SHALL BE INSTALLED AS PART OF THE PLAT IMPROVEMENTS.
- ALL CONNECTIONS TO EXISTING MANHOLES ARE TO BE CORE DRILLED AND USE A LINK SEAL.
- ANY FIELD FENCE LOCATED WITHIN THE PROPERTY IS TO BE REMOVED. ANY TREES OR BRUSH ALONG THE NORTH PROPERTY BOUNDARY IS ALSO TO BE REMOVED.
- 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.
- 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.

DATE

05/27/20

AS-BUILT SUBMITTAL

06/07/19

FINAL SUBMITTAL

04/23/19

NINTH SUBMITTAL

03/05/19

EIGHTH SUBMITTAL

01/29/19

SEVENTH SUBMITTAL

10/16/18

SIXTH SUBMITTAL

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

ENGINEER: EKO

EI: GH

4

26

1803.104

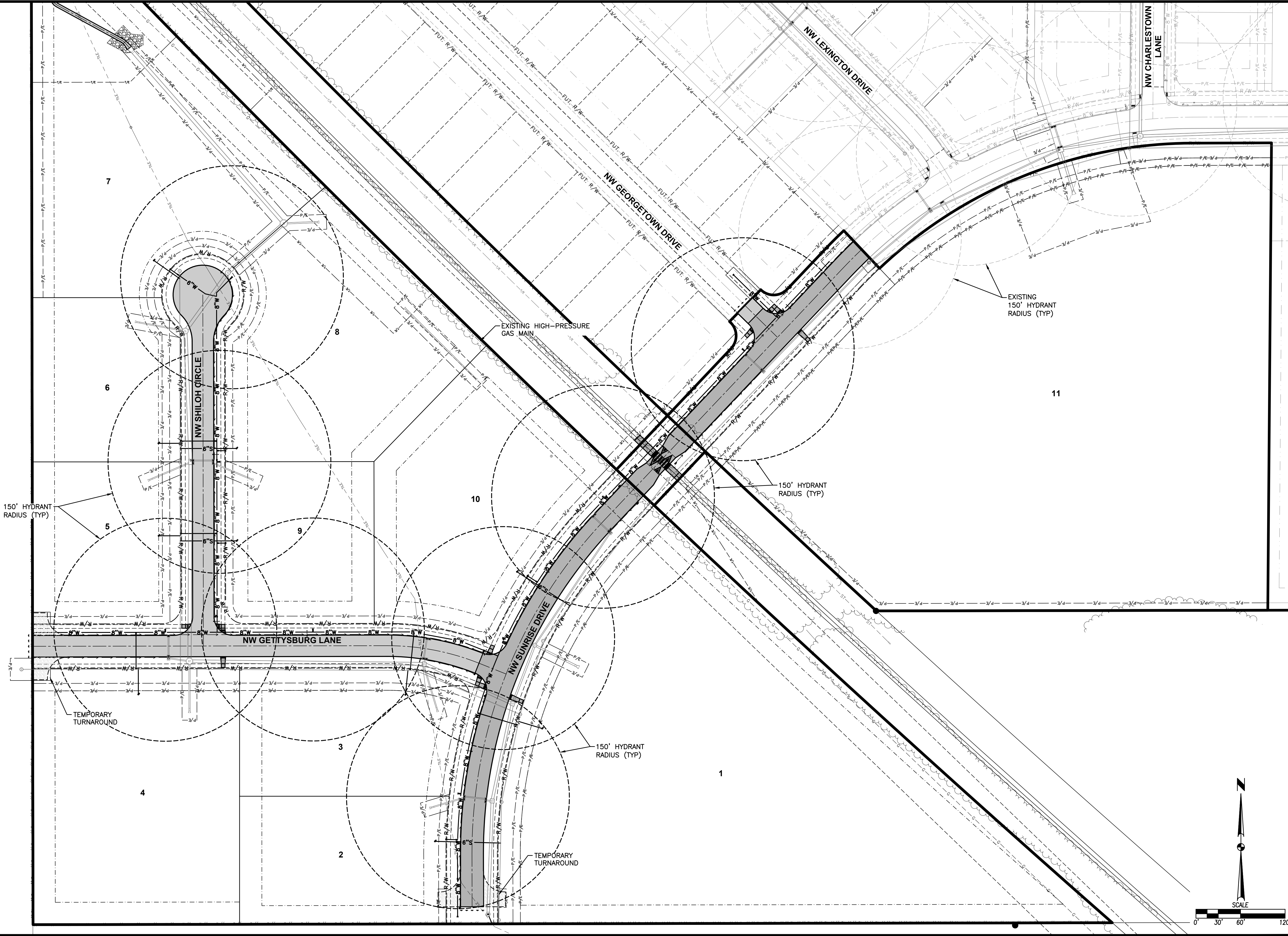
STRATFORD CROSSING PLAT 4

QUANTITIES, GENERAL NOTES AND  
BID ITEM REFERENCE NOTES

WAUKEE, IOWA

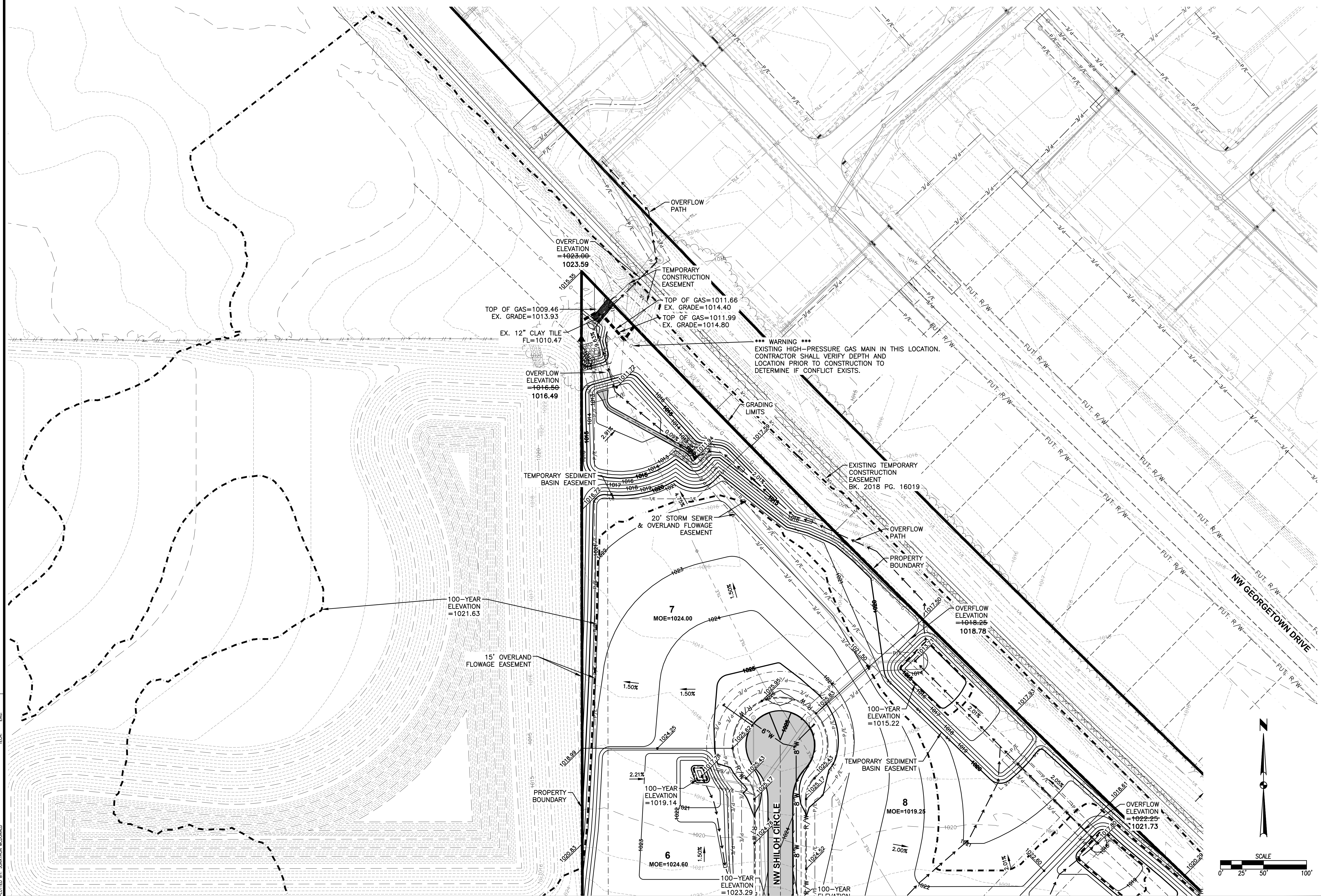
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PLOT BY: J. GONCHAROV, M.D., INC.  
TECHNICAL: ENG.



| DATE     |                    |
|----------|--------------------|
| 05/27/20 | AS-BUILT SUBMITTAL |
| 06/07/19 | FINAL SUBMITTAL    |
| 04/23/19 | NINTH SUBMITTAL    |
| 03/05/19 | EIGHTH SUBMITTAL   |
| 01/29/19 | SEVENTH SUBMITTAL  |
| 10/16/18 | SIXTH SUBMITTAL    |





| REVISIONS          | DATE     |
|--------------------|----------|
| AS-BUILT SUBMITTAL | 05/27/20 |
| FINAL SUBMITTAL    | 06/07/19 |
| NINTH SUBMITTAL    | 04/23/19 |
| EIGHTH SUBMITTAL   | 03/05/19 |
| SEVENTH SUBMITTAL  | 01/29/19 |
| SIXTH SUBMITTAL    | 10/16/18 |



CIVIL DESIGN ADVANTAGE

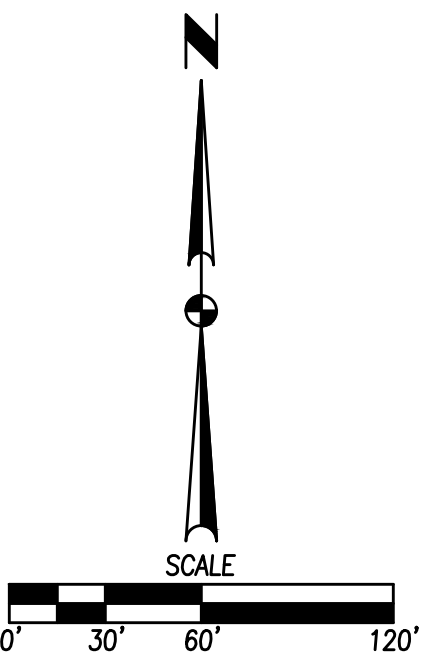
# STRATFORD CROSSING PLAT 4

## GRADING PLAN



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# EROSION AND SEDIMENT CONTROL PLAN



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|               |        |
|---------------|--------|
| ENGINEER: EKO | EI: GH |
|---------------|--------|

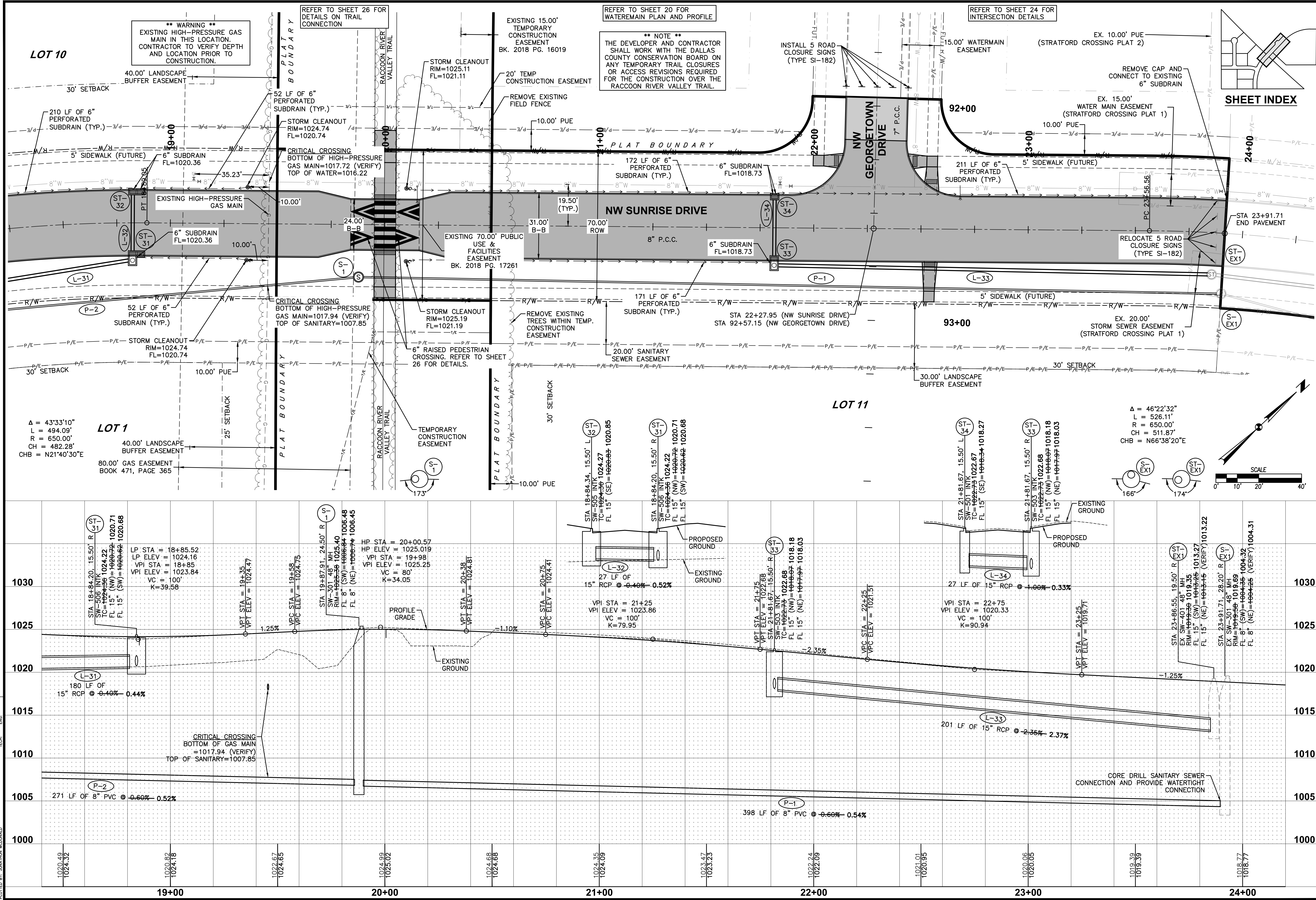
# STRATFORD CROSSING PLAT 4

## EROSION AND SEDIMENT CONTROL PLAN

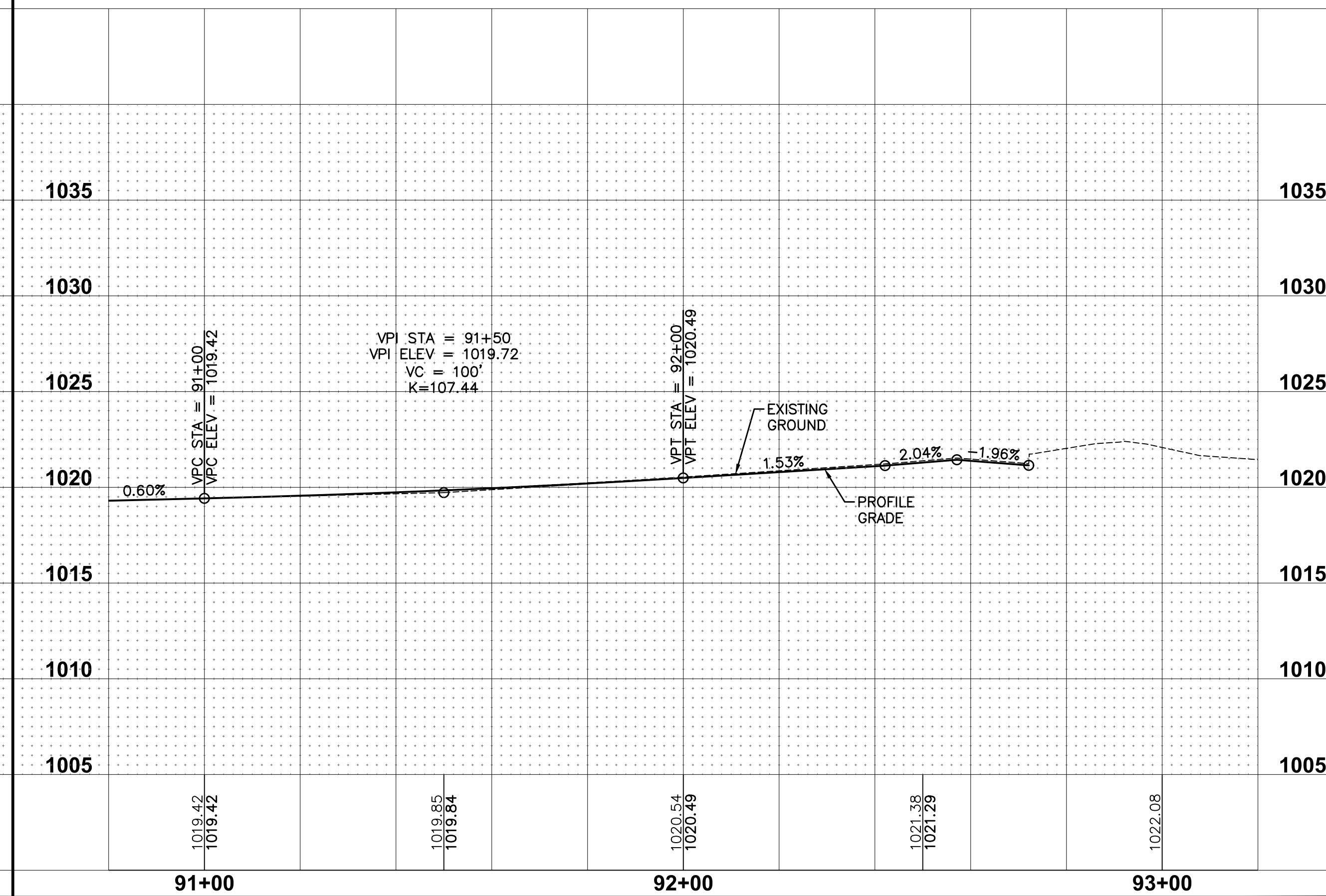
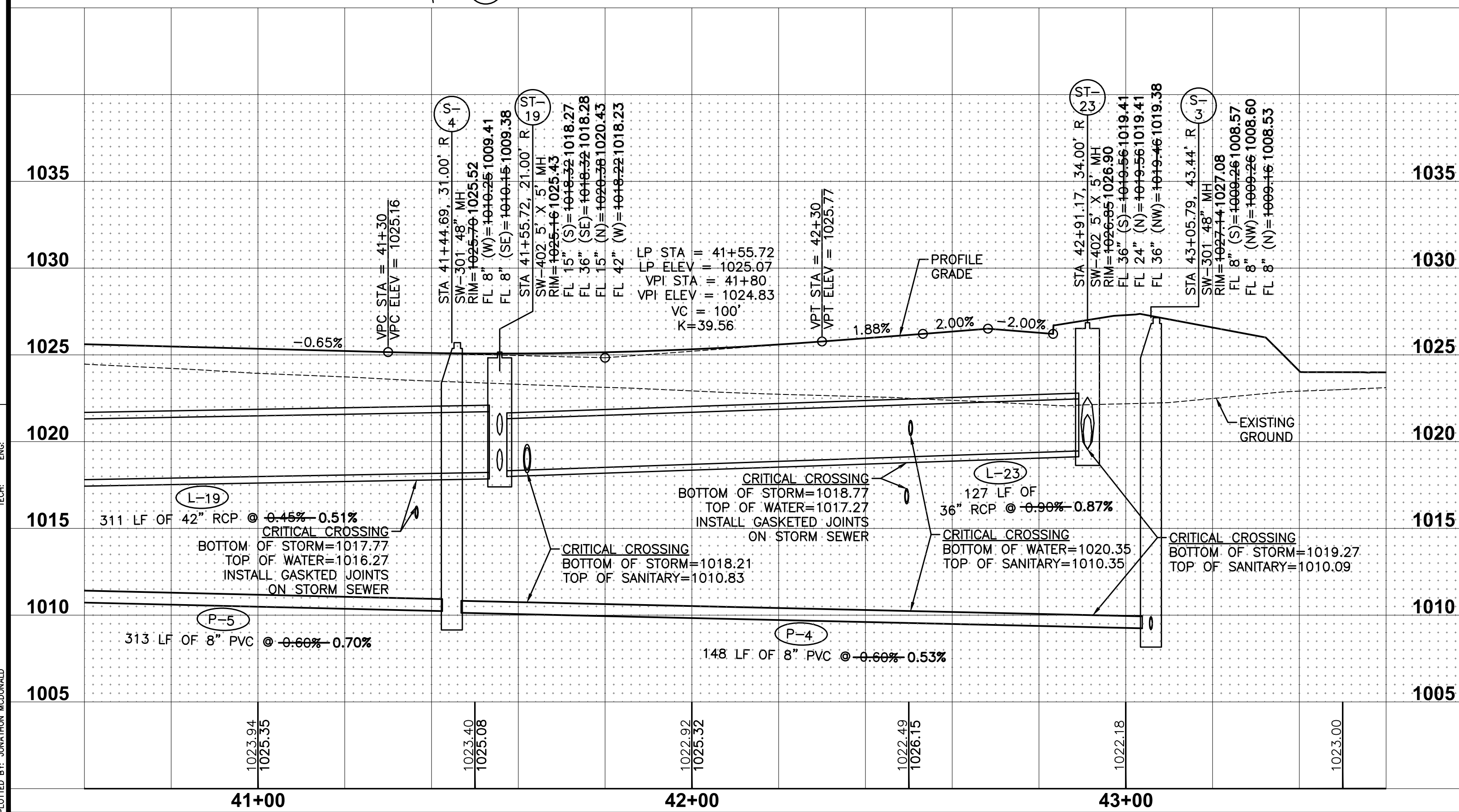
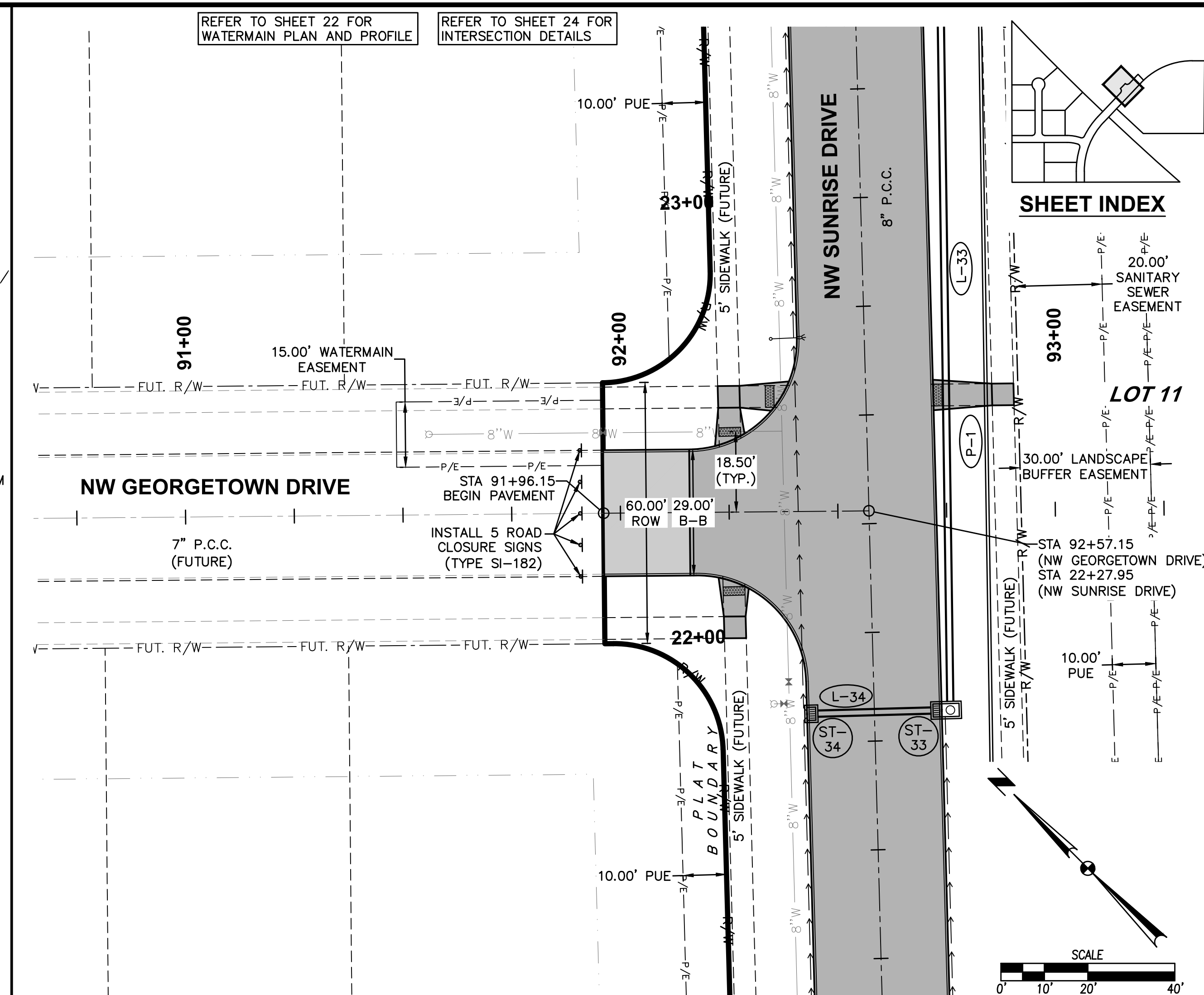
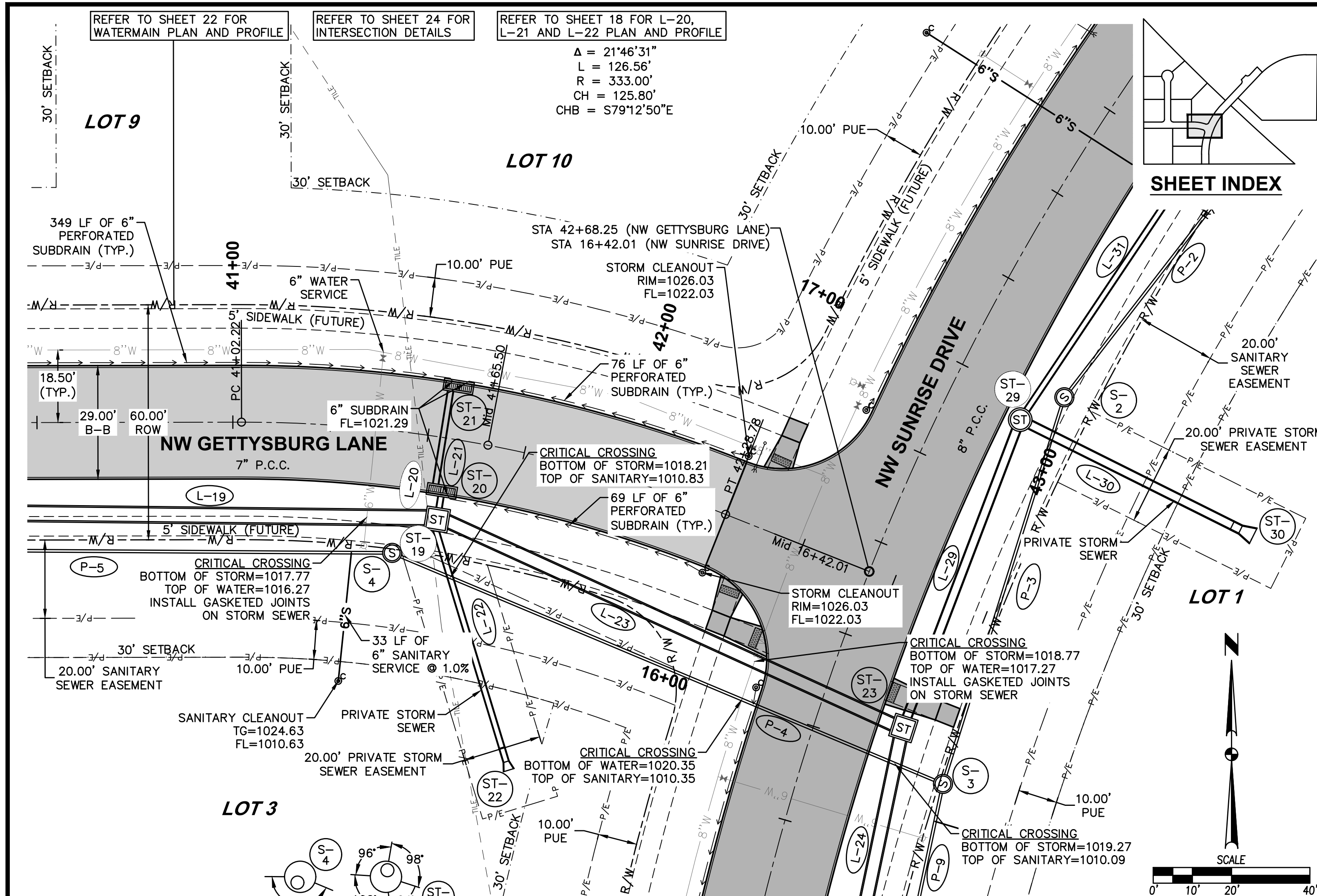
WAUKEE, IOWA



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PLOT BY: J. B. WILSON, M.D., P.E.  
DRAWING: ENGINEER









**STRATFORD CROSSING PLAT 4**  
**STORM AND SANITARY SEWER PLAN AND PROFILE**

WAUKEE, IOWA

**14** / **26**

1803.104



**3405 S.E. CROSSROADS DRIVE, SUITE G**  
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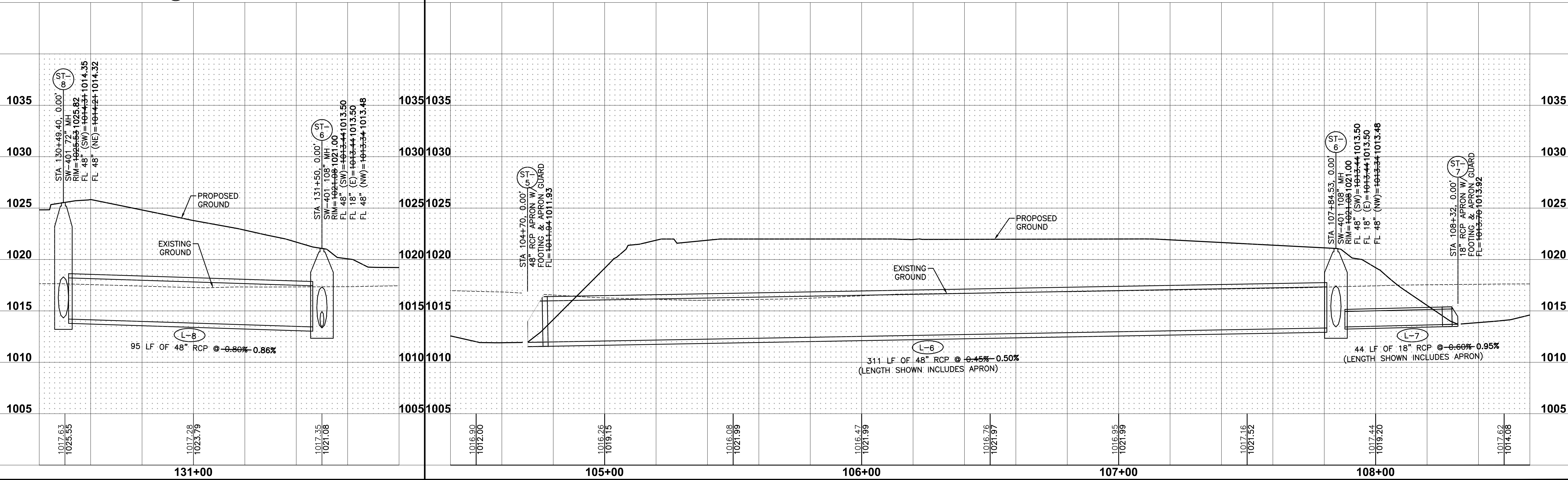
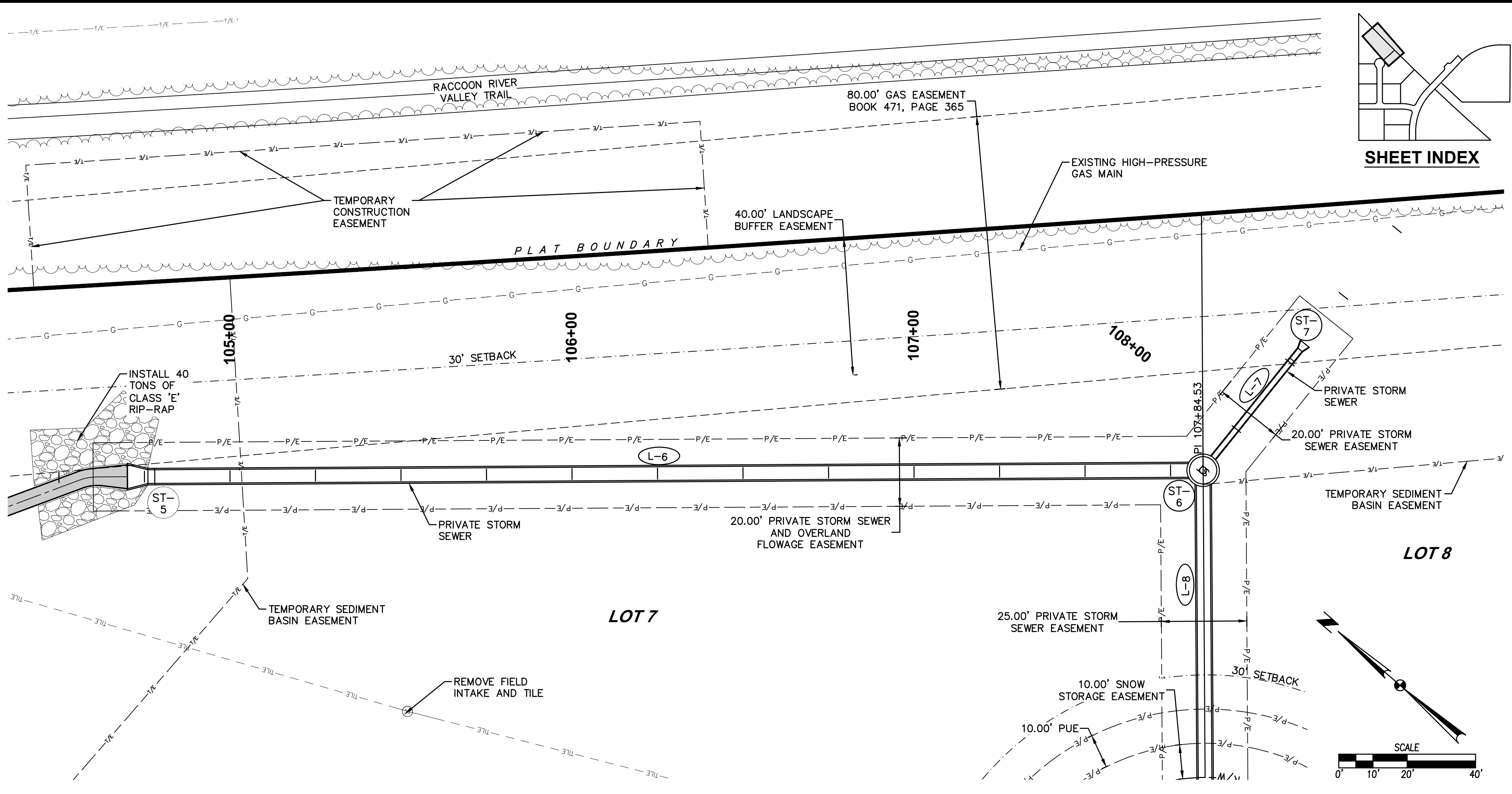
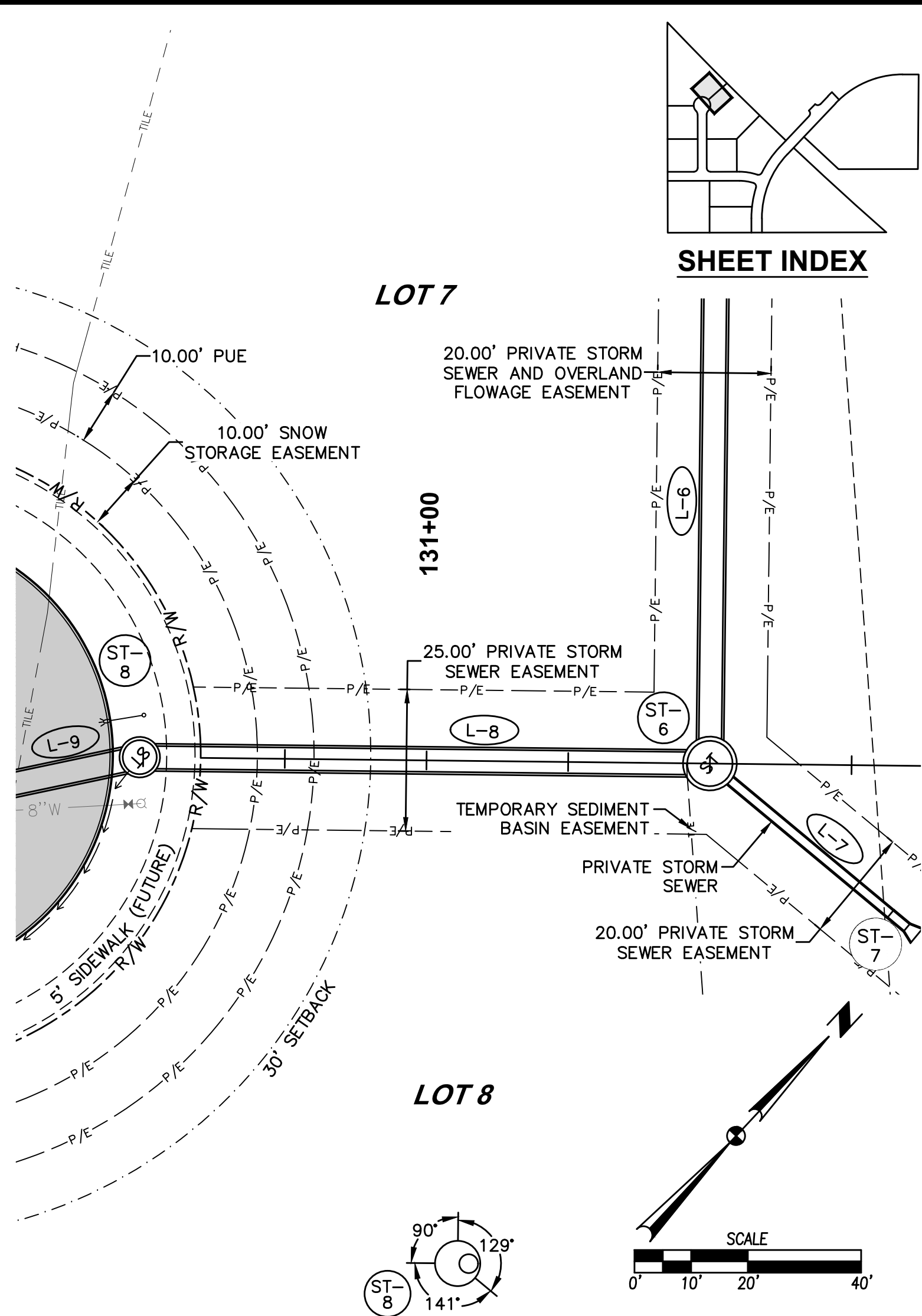
**ENGINEER: EKO**      **EI: GH**

| REVISONS           | DATE     |
|--------------------|----------|
| AS-BUILT SUBMITTAL | 05/27/20 |
| FINAL SUBMITTAL    | 06/07/19 |
| NINTH SUBMITTAL    | 04/23/19 |
| EIGHTH SUBMITTAL   | 03/05/19 |
| SEVENTH SUBMITTAL  | 01/29/19 |
| SIXTH SUBMITTAL    | 10/16/18 |





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PLOT DATE: 5/28/2020 9:48 AM  
PLOT BY: J. WILSON, M.D., P.E.  
COMMENTS: ENG.



17

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1803.104

STRATFORD CROSSING PLAT 4

STORM AND SANITARY SEWER PLAN AND PROFILE

CIVIL DESIGN ADVANTAGE

WAUKEE, IOWA

DATE

05/27/20

06/07/19

04/23/19

03/05/19

01/29/19

10/16/18

REVISIONS

AS-BUILT SUBMITTAL

FINAL SUBMITTAL

NINTH SUBMITTAL

EIGHTH SUBMITTAL

SEVENTH SUBMITTAL

SIXTH SUBMITTAL

3405 S.E. CROSSROADS DRIVE, SUITE G

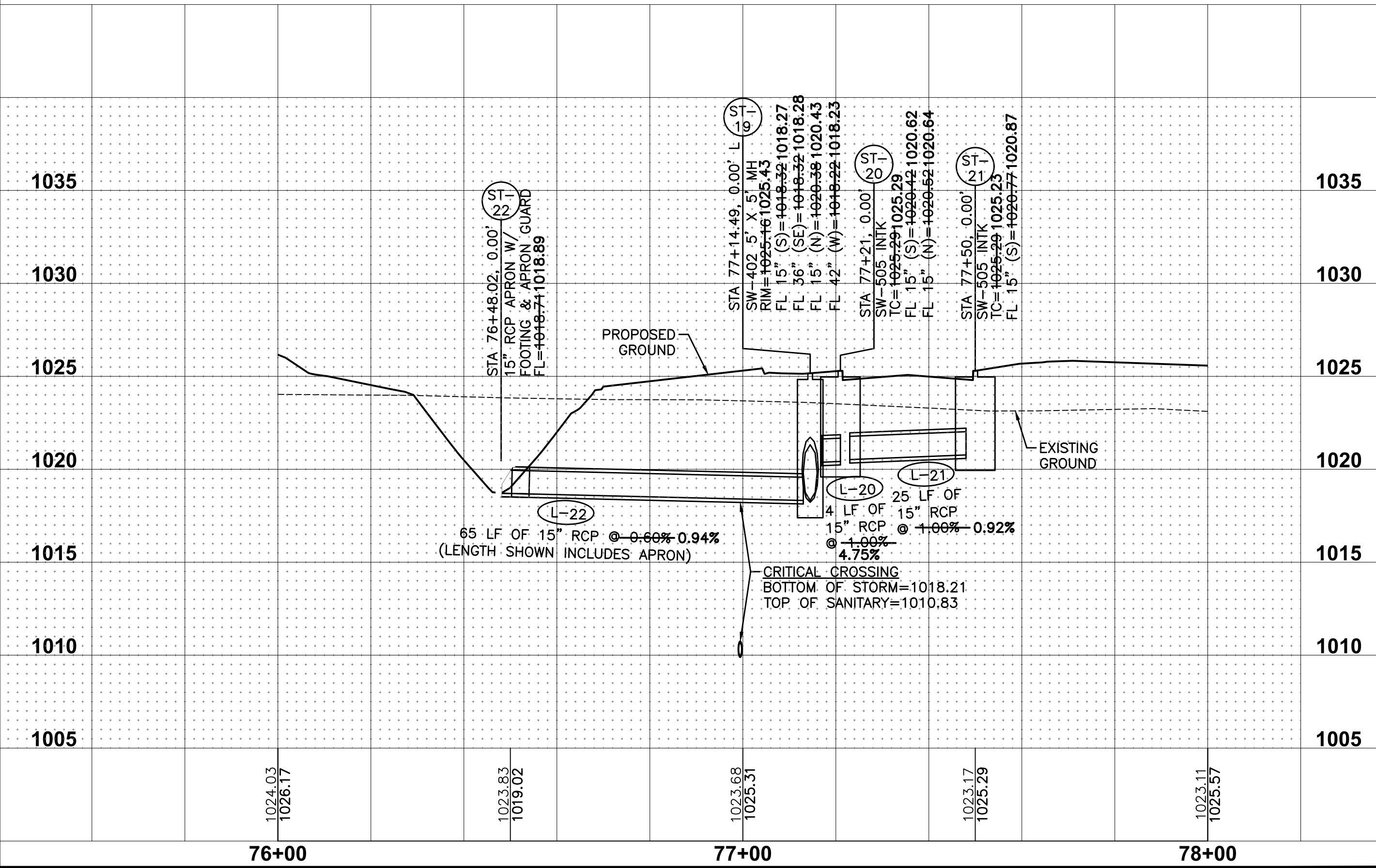
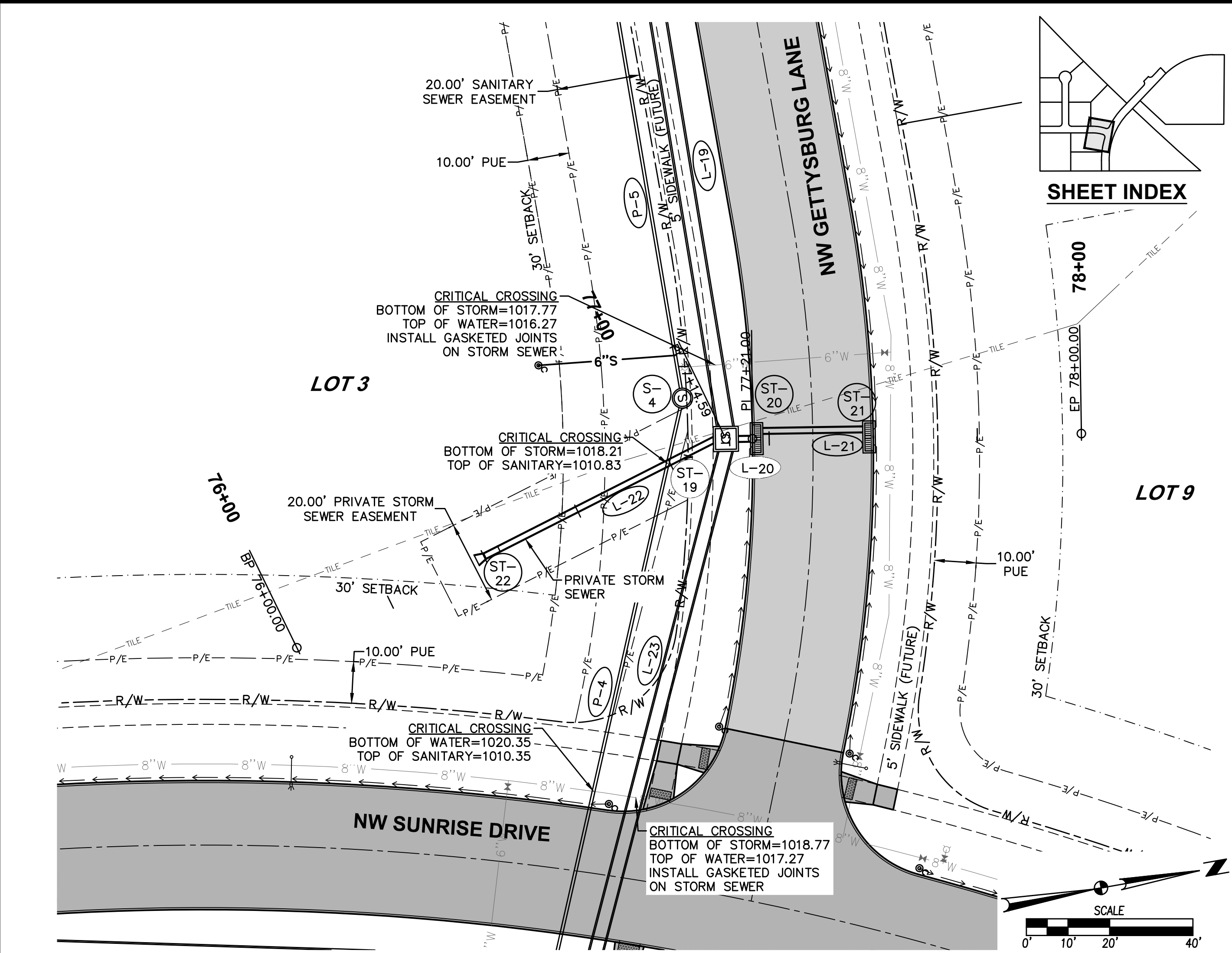
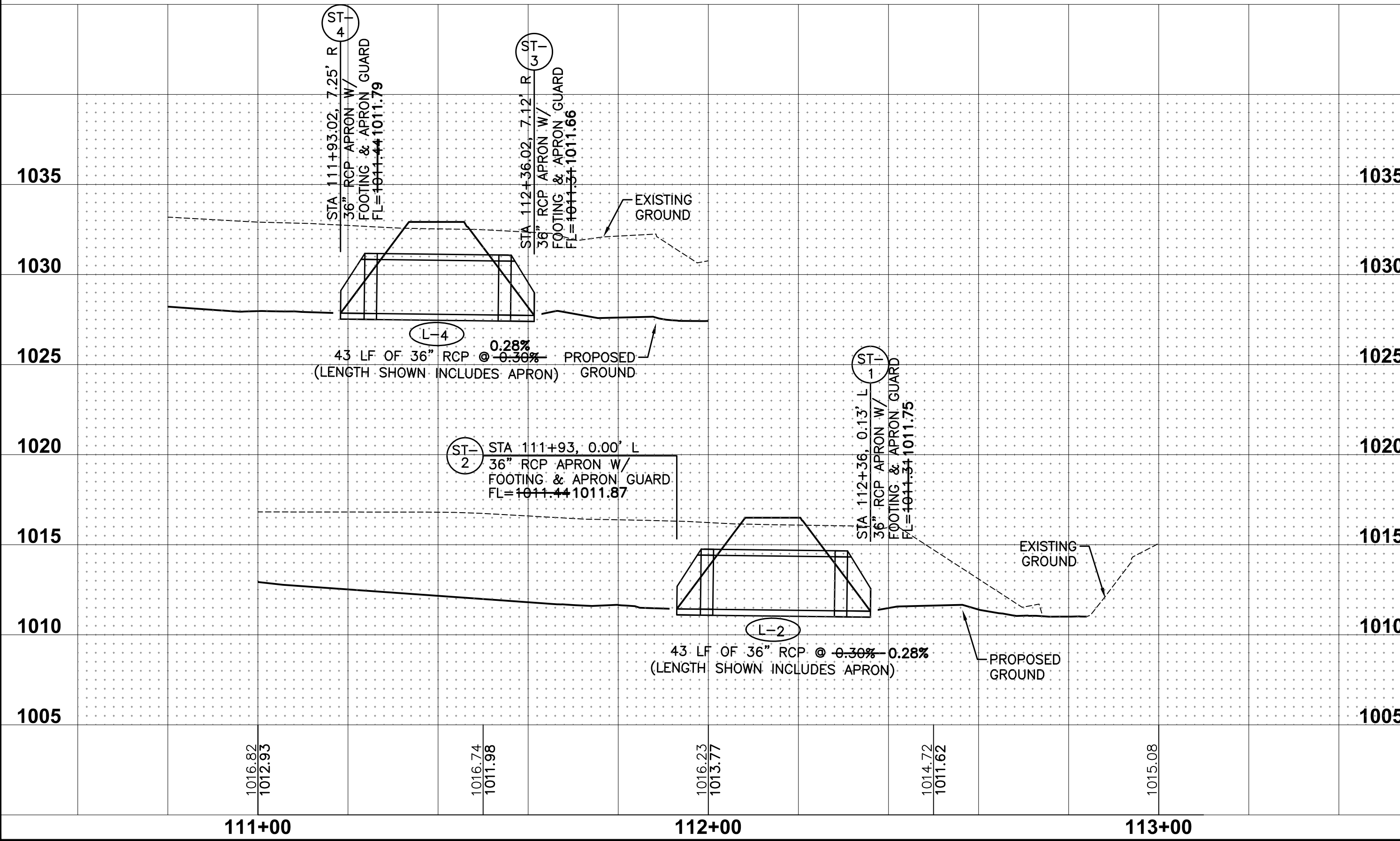
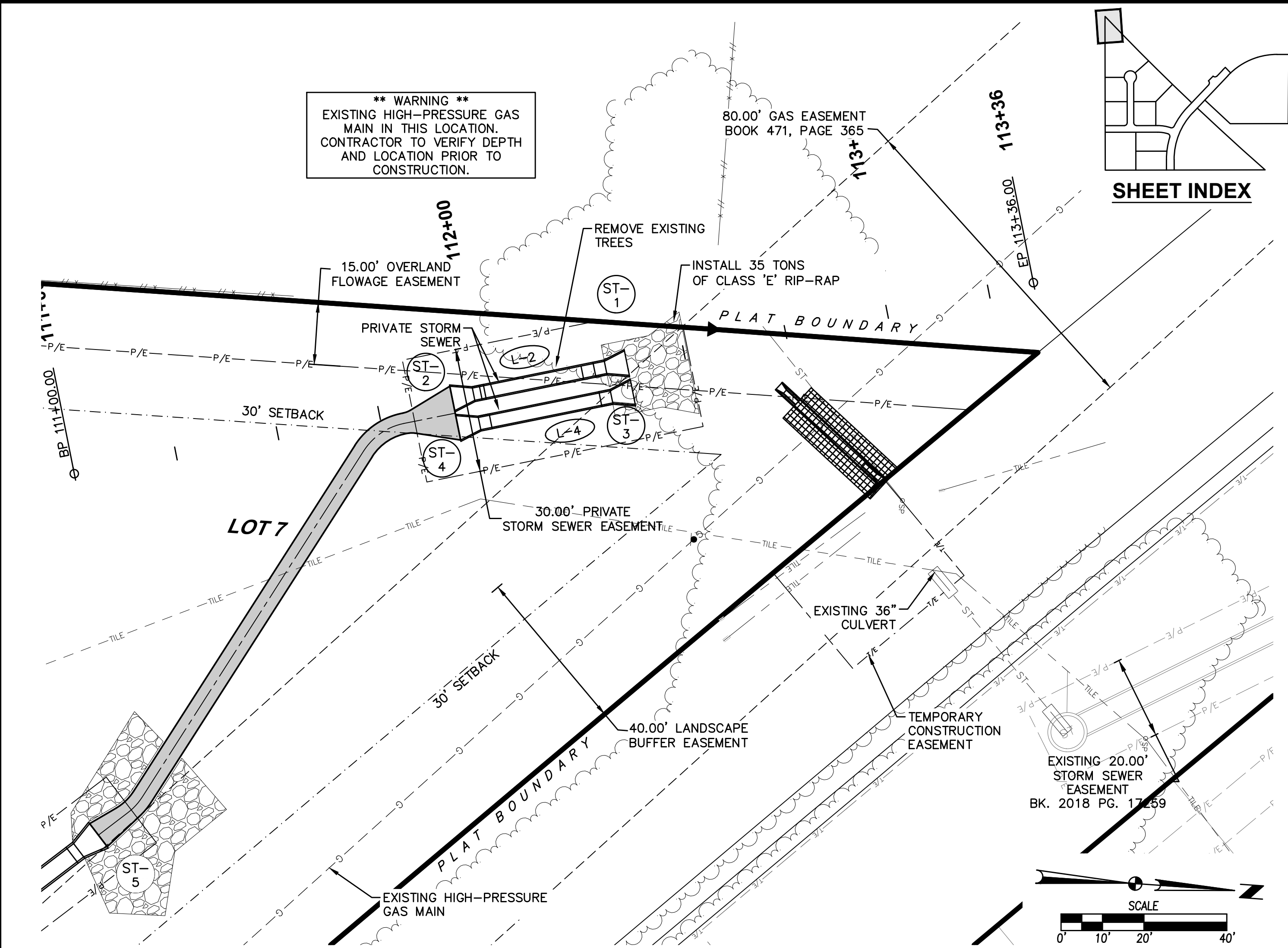
GRIMES, IOWA 50111

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

ENGINEER: EKO

EI: GH

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PLOT: 5/28/2020 9:48 AM  
PLOT: 5/28/2020 9:48 AM  
PLOT: 5/28/2020 9:48 AM



DATE  
05/27/20  
06/07/19  
04/23/19  
03/05/19  
01/29/19  
10/16/18

REVISIONS  
AS-BUILT SUBMITTAL  
FINAL SUBMITTAL  
NINTH SUBMITTAL  
EIGHTH SUBMITTAL  
SEVENTH SUBMITTAL  
SIXTH SUBMITTAL

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

18  
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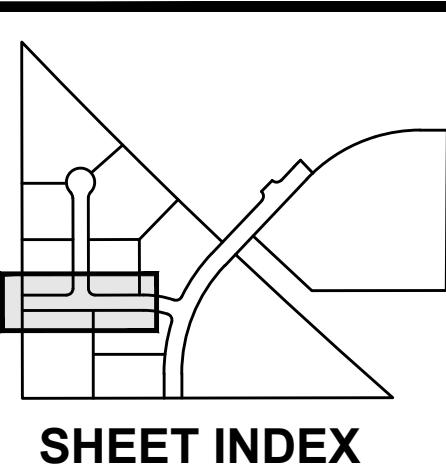
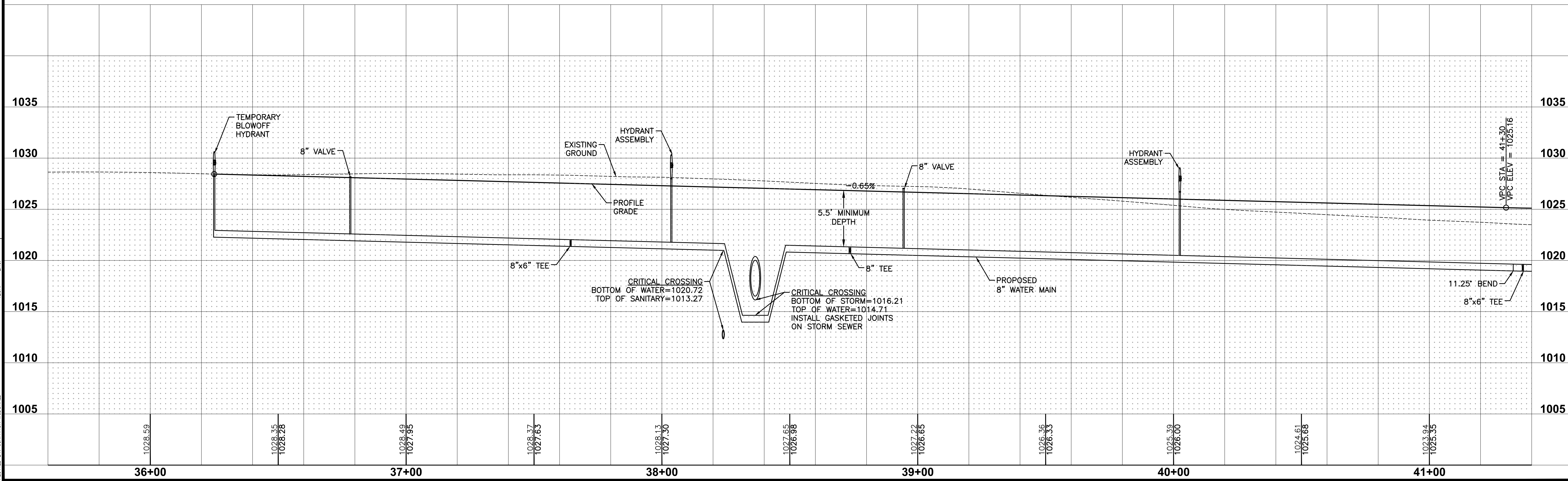
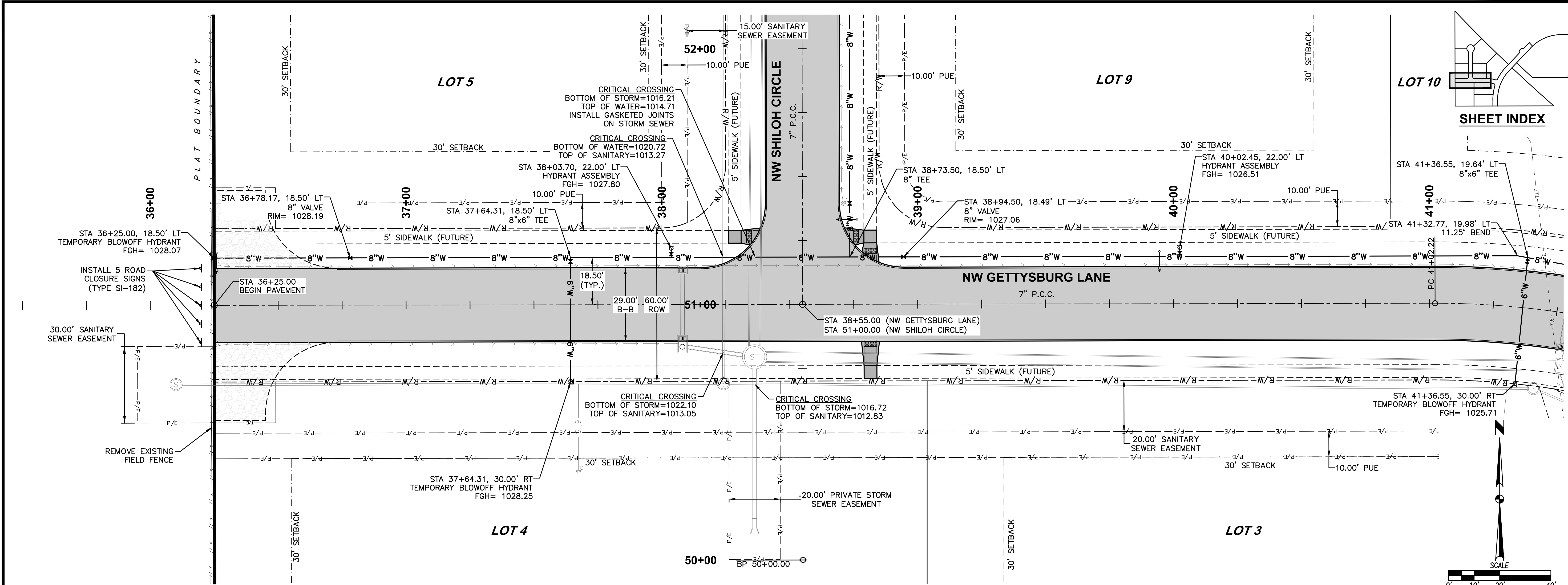
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STRATFORD CROSSING PLAT 4  
STORM AND SANITARY SEWER PLAN AND PROFILE  
CIVIL DESIGN ADVANTAGE  
WAUKEE, IOWA





FILE: H:\2018\180304\DWG\ASBUILT\180304-PWP-WATERMAIN - ASBUILT.DWG  
DATE PLOTTED: 5/28/2020 9:47 AM  
PLOT BY: J. WATSON, MWD/AD  
DESIGNED BY: J. WATSON, MWD/AD  
CHECKED BY: J. WATSON, MWD/AD  
ENGINEER: ENG.



| REVISIONS |                    |
|-----------|--------------------|
| DATE      | DESCRIPTION        |
| 05/27/20  | AS-BUILT SUBMITTAL |
| 06/07/19  | FINAL SUBMITTAL    |
| 04/23/19  | NINTH SUBMITTAL    |
| 03/05/19  | EIGHTH SUBMITTAL   |
| 01/29/19  | SEVENTH SUBMITTAL  |
| 10/16/18  | SIXTH SUBMITTAL    |

|                                                                                                        |                         |
|--------------------------------------------------------------------------------------------------------|-------------------------|
| 3405 S.E. CROSSROADS DRIVE, SUITE G<br>GRIMES, IOWA 50111<br>PHONE: (515) 369-4400 FAX: (515) 369-4410 | ENGINEER: EKO<br>EI: GH |
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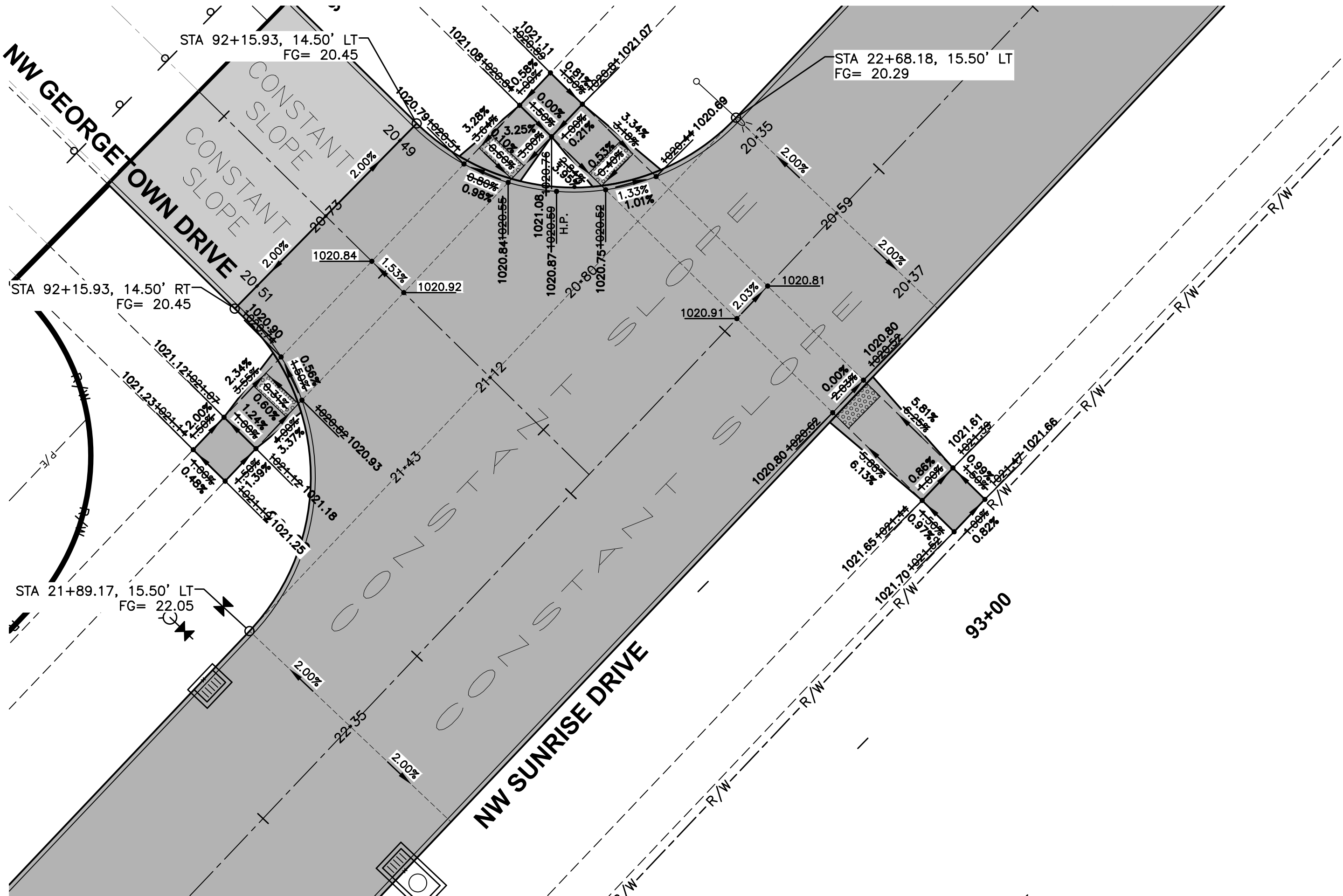
**STRATFORD CROSSING PLAT 4**  
WATERMAIN PLAN AND PROFILE  
WAUKEE, IOWA

**21**  
**26**  
1803.104

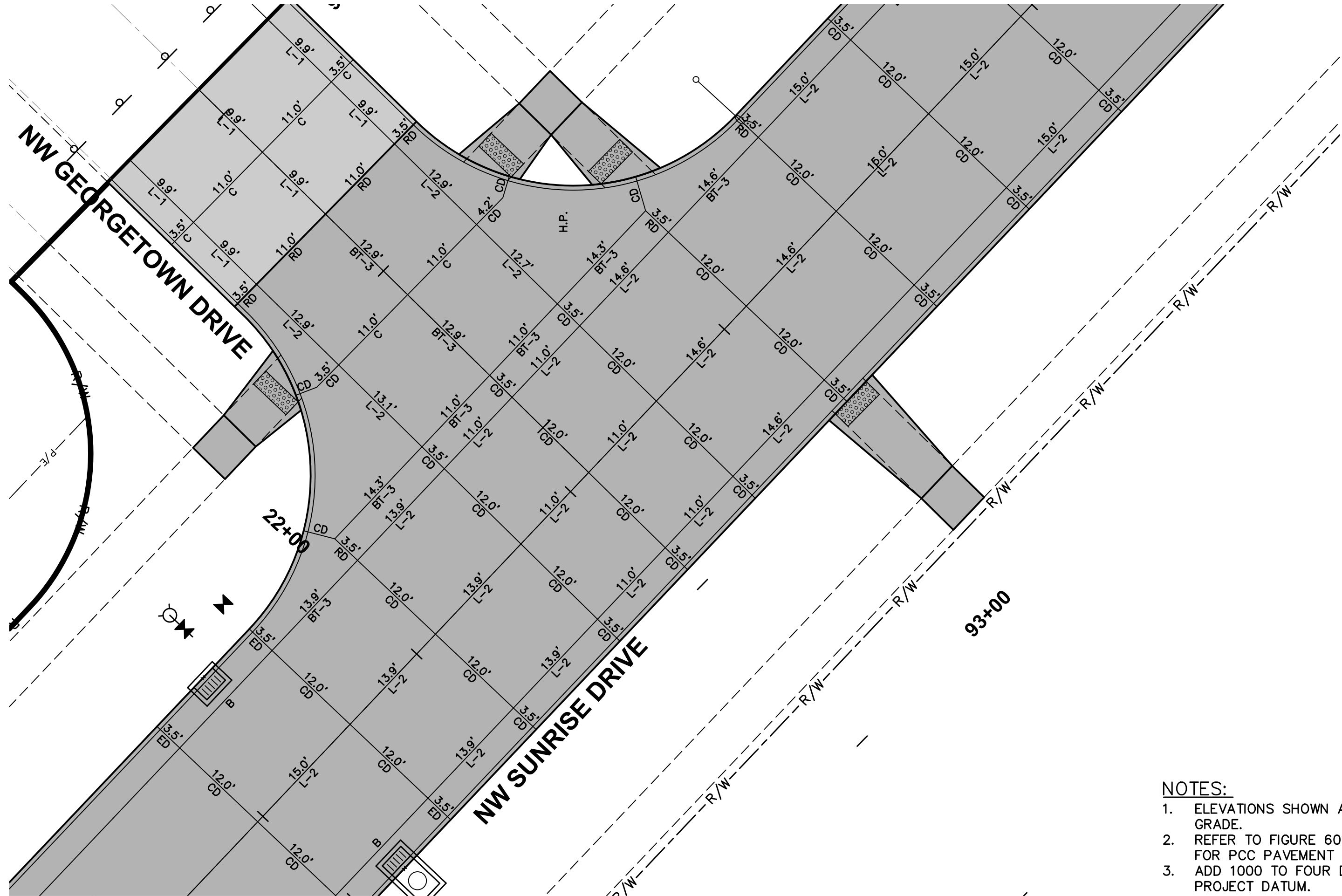




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PLOTTER MODEL: HP DesignJet 5000  
PLOTTER SERIAL: 180304-INTERSECTIONS - ASBUILT.DWG  
PLOTTER USER: ENG



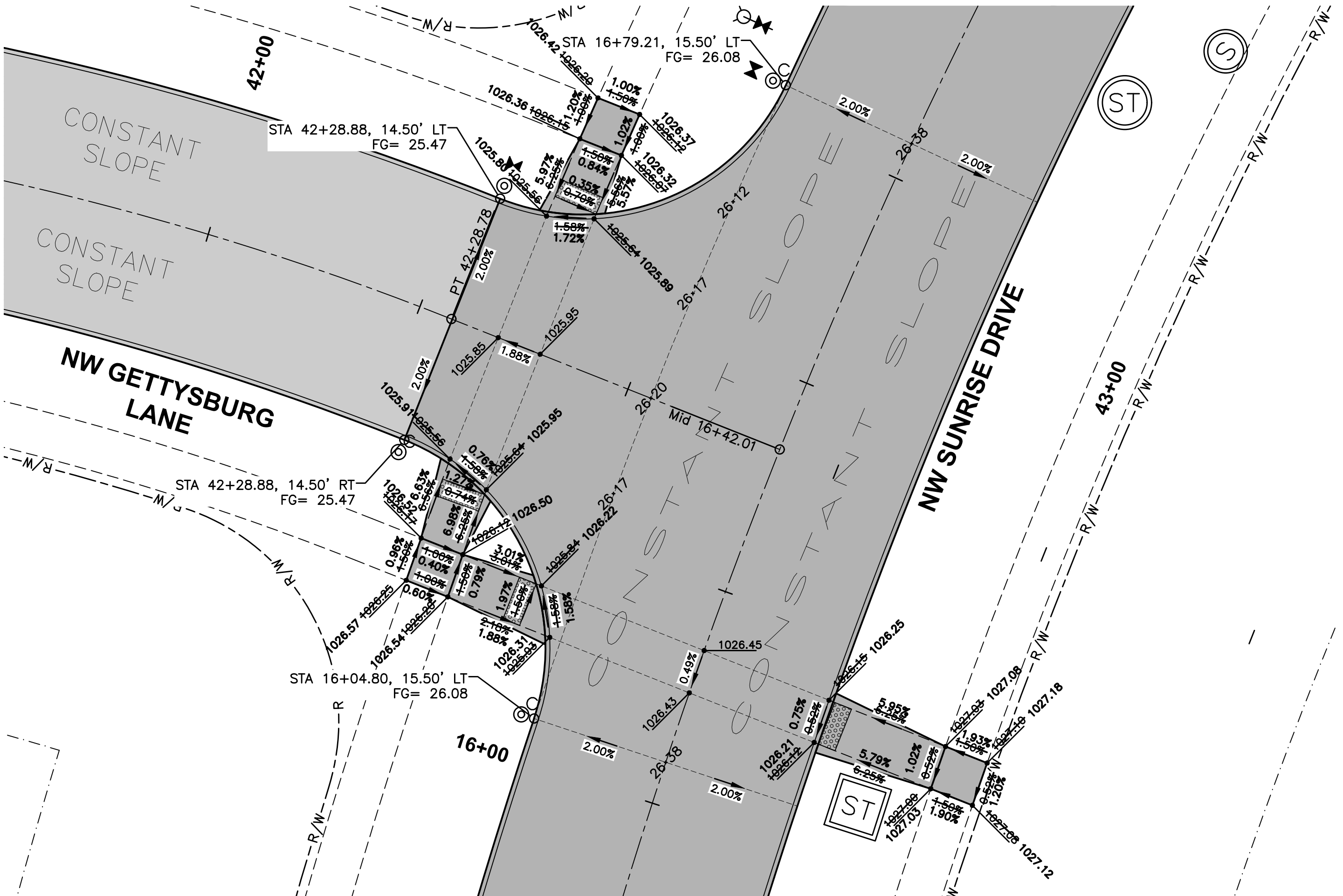
GEOMETRICS AND STAKING LAYOUT



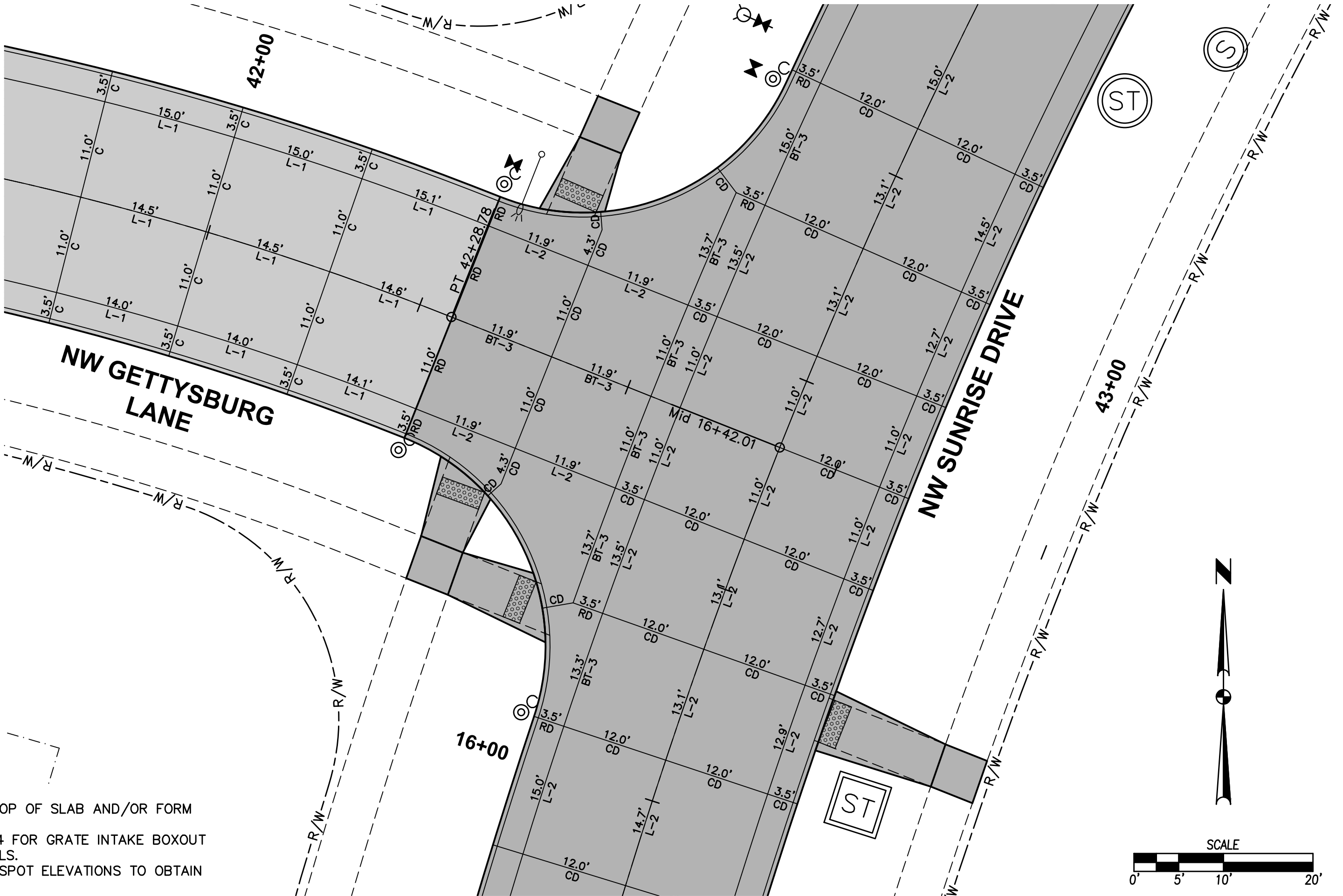
JOINTING LAYOUT

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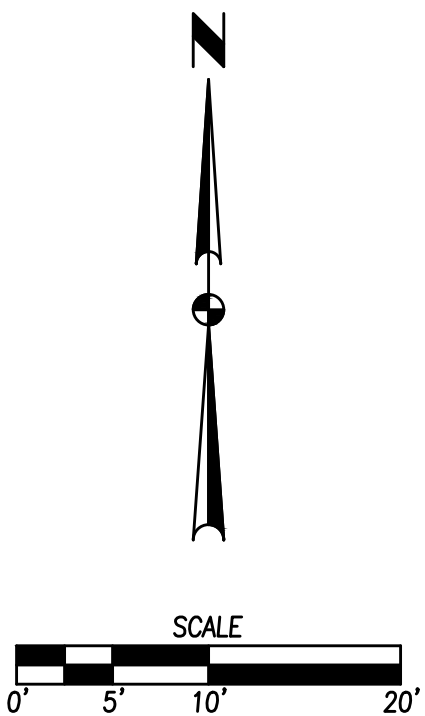
1. ELEVATIONS SHOWN ARE TOP OF SLAB AND/OR FORM GRADE.
2. REFER TO FIGURE 6010.514 FOR GRATE INTAKE BOXOUT FOR PCC PAVEMENT DETAILS.
3. ADD 1000 TO FOUR DIGIT SPOT ELEVATIONS TO OBTAIN PROJECT DATUM.



GEOMETRICS AND STAKING LAYOUT



JOINTING LAYOUT



| DATE     |                    |
|----------|--------------------|
| 05/27/20 | AS-BUILT SUBMITTAL |
| 06/07/19 | FINAL SUBMITTAL    |
| 04/23/19 | NINTH SUBMITTAL    |
| 03/05/19 | EIGHTH SUBMITTAL   |
| 01/29/19 | SEVENTH SUBMITTAL  |
| 10/16/18 | SIXTH SUBMITTAL    |

| 3405 S.E. CROSSROADS DRIVE, SUITE G<br>GRIMES, IOWA 50111<br>PHONE: (515) 369-4400 FAX: (515) 369-4410 |        |
|--------------------------------------------------------------------------------------------------------|--------|
| ENGINEER: EKO                                                                                          | EI: GH |

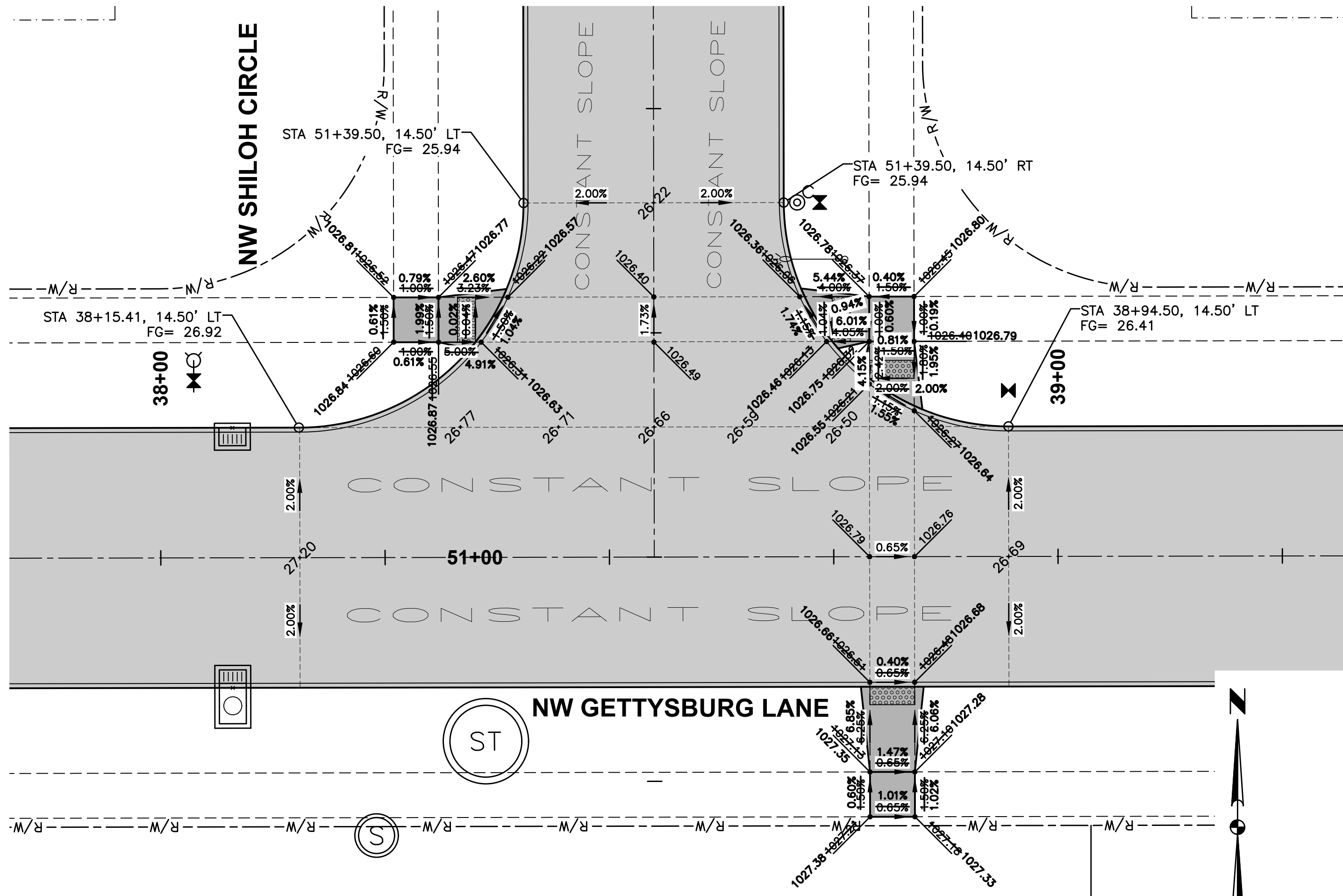
| CIVIL DESIGN ADVANTAGE |  |
|------------------------|--|
| WAUKEE, IOWA           |  |

| STRATFORD CROSSING PLAT 4 |  |
|---------------------------|--|
| INTERSECTION DETAILS      |  |

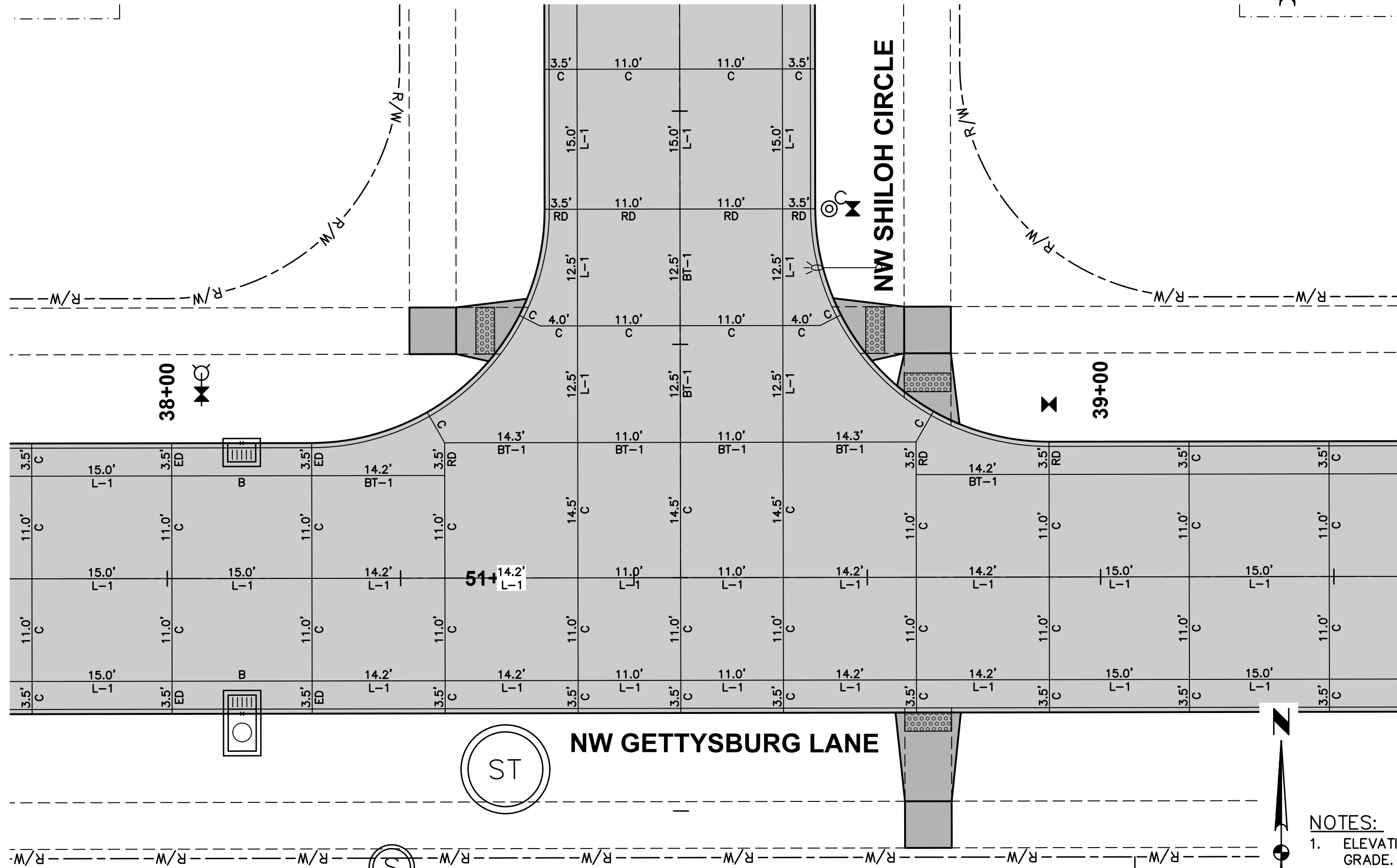
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1803.104

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PLOT DATE: 5/28/2020 9:48 AM  
PLOT BY: JAWAHAR MUDANLOU  
COMMENT: ENG.



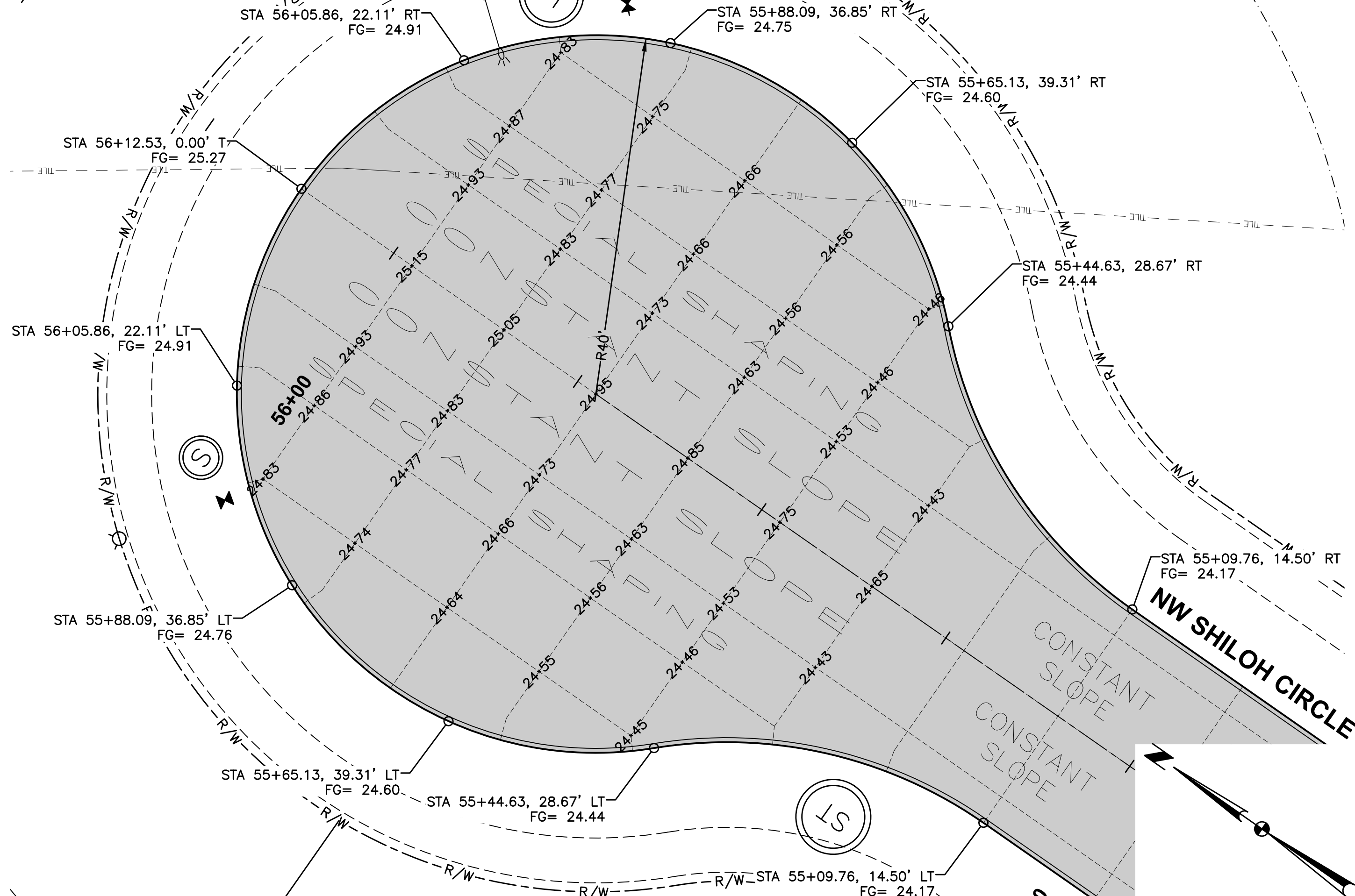
GEOMETRICS AND STAKING LAYOUT



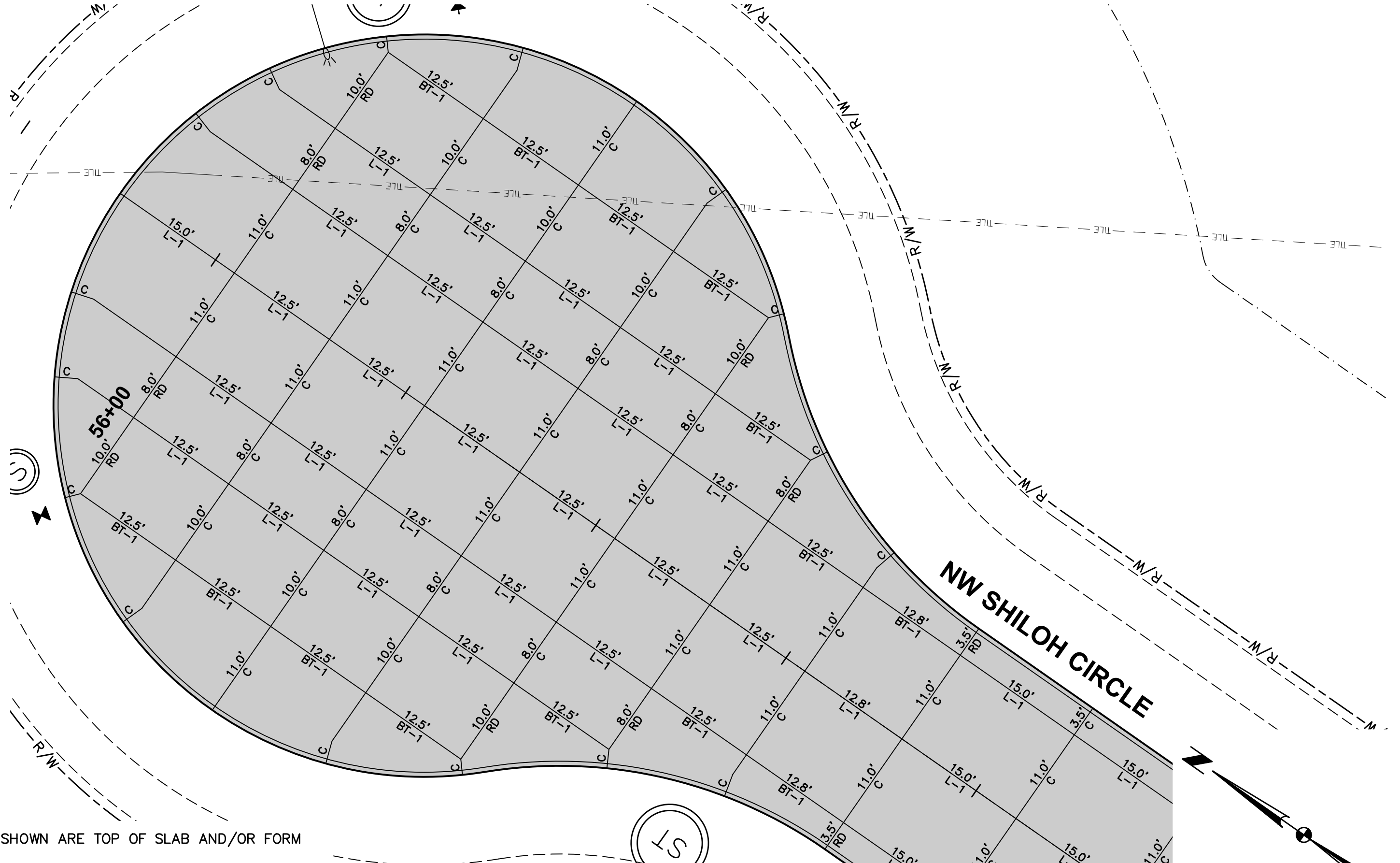
JOINTING LAYOUT

NOTES:

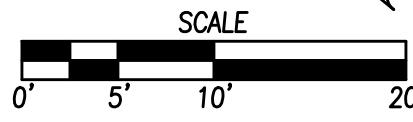
1. ELEVATIONS SHOWN ARE TOP OF SLAB AND/OR FORM GRADE.
2. REFER TO FIGURE 6010.514 FOR GRATE INTAKE BOXOUT FOR PCC PAVEMENT DETAILS.
3. ADD 1000 TO FOUR DIGIT SPOT ELEVATIONS TO OBTAIN PROJECT DATUM.



GEOMETRICS AND STAKING LAYOUT



JOINTING LAYOUT



| DATE     |                    |
|----------|--------------------|
| 05/27/20 | AS-BUILT SUBMITTAL |
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| 10/16/18 | SIXTH SUBMITTAL    |

|                                                                                                        |                         |
|--------------------------------------------------------------------------------------------------------|-------------------------|
| 3405 S.E. CROSSROADS DRIVE, SUITE G<br>GRIMES, IOWA 50111<br>PHONE: (515) 369-4400 FAX: (515) 369-4410 | ENGINEER: EKO<br>EI: GH |
|--------------------------------------------------------------------------------------------------------|-------------------------|

**STRATFORD CROSSING PLAT 4**  
**INTERSECTION DETAILS**

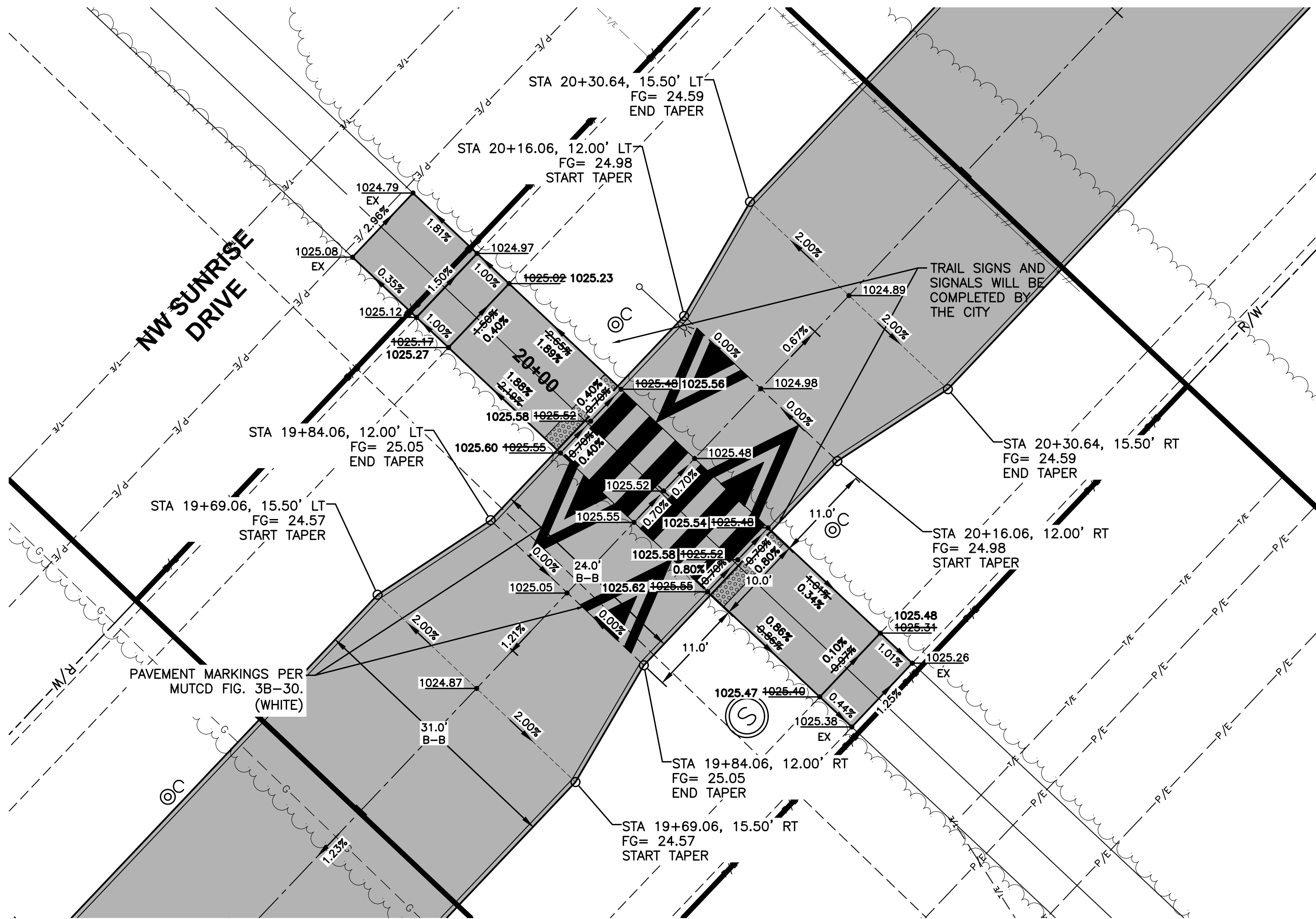
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1803.104

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PLOT DATE: 5/28/2020 9:48 AM  
PLOT BY: JAWAHAR MUDANAD  
REVISION: ENG.



NOTES:

1. ELEVATIONS SHOWN ARE TOP OF SLAB AND/OR FORM GRADE.
2. REFER TO FIGURE 6010.514 FOR GRATE INTAKE BOXOUT FOR PCC PAVEMENT DETAILS.
3. ADD 1000 TO FOUR DIGIT SPOT ELEVATIONS TO OBTAIN PROJECT DATUM.
4. PAVEMENT SHALL BE GROOVED AND MARKED WITH DURABLE PAINT THAT MEETS THE IOWA DOT STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, SECTION 2527 REQUIREMENTS.



GEOMETRICS AND STAKING LAYOUT

