



DEVELOPMENT REVIEW COMMITTEE

Tuesday, October 26, 2021, at 10:00 AM
Court Room/Council Chambers (2nd Floor) and Online

MEETINGS HELD IN PERSON & ONLINE

The public is invited to participate as outlined below:

- **In Person** – Meetings are held on the 2nd floor in the Court Room/Council Chambers at City Hall
- **YouTube Live** – Public meetings will be shown live on the Santaquin City YouTube Channel, which can be found at <https://bit.ly/2P7ICfQ> or by searching for Santaquin City Channel on YouTube.

ADA NOTICE

If you are planning to attend this Public Meeting and due to a disability need assistance in understanding or participating in the meeting, please notify the City Office ten or more hours in advance and we will, within reason, provide what assistance may be required.

AGENDA

NEW BUSINESS

1. Summit Ridge Townhomes- Phasing Plan Amendment (Minor Change)

The DRC will review a proposed amendment to the Summit Ridge Townhomes phasing plan which would combine plats E and F.

2. Summit Ridge Townhomes Plat E Final Review

A final review of Summit Ridge Townhomes Plat E, a 99 unit townhome development located at approximately Fox Run Avenue and Cattail Drive.

3. Santaquin Estates Concept Plan Review

A concept review of a proposed 79 lot subdivision located at approximately Main Street and 900 E.

4. Ridley's 2-Lot Commercial Subdivision Preliminary/Final Review

A preliminary/final review of a 2-lot commercial subdivision located at approximately Main Street and 500 E.


MEETING MINUTES APPROVAL

- 5.** September 14, 2021
- 6.** September 28, 2021

AJOURNMENT

CERTIFICATE OF MAILING/POSTING

The undersigned duly appointed City Recorder for the municipality of Santaquin City hereby certifies that a copy of the foregoing Notice and Agenda was e-mailed to the Payson Chronicle, Payson, UT, 84651, posted on www.santaquin.org, as well as posted on the State of Utah's Public Notice Website.

BY: 
K. Aaron Shirley, City Recorder



- A Utah Corporation -
ENGINEERS
SURVEYORS
PLANNERS

3302 N. Main Street
Spanish Fork, UT 84660
Phone: 801.798.0555
Fax: 801.798.9393
office@lei-eng.com
www.lei-eng.com



SUMMIT RIDGE TOWNHOMES
SANTAQUIN, UTAH
PHASING PLAN

REVISIONS

1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-

LEI PROJECT #:

2019-0081

DRAWN BY:

RWH

DESIGNED BY:

BCT

SCALE:

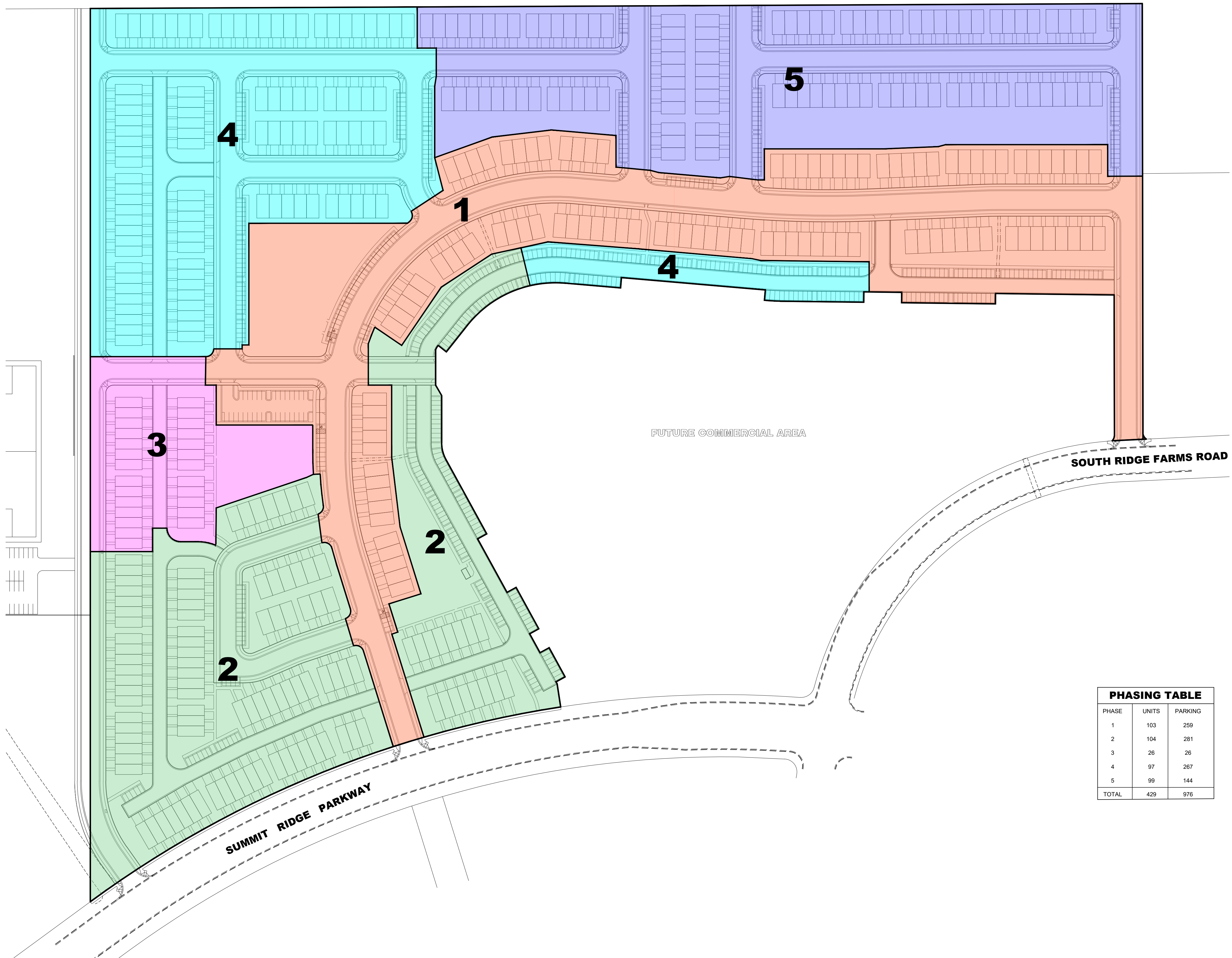
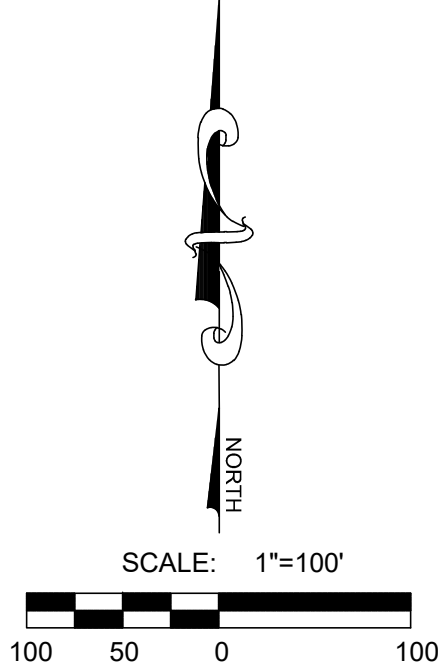
1"=100'

DATE:

6/10/2021

SHEET

12



PHASING TABLE		
PHASE	UNITS	PARKING
1	103	259
2	104	281
3	26	26
4	97	267
5	99	144
TOTAL	429	976

SUMMIT RIDGE TOWNHOMES - PLAT E
SANTAQUIN, UTAH COUNTY, UTAH

VICINITY MAP

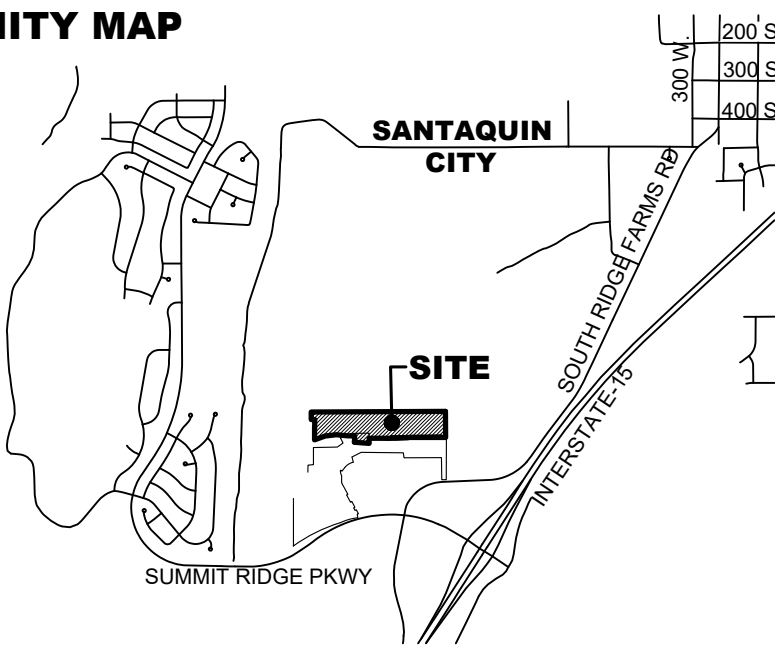


TABLE OF CONTENTS

Table with 2 columns: SHEET and COVER. Rows include SHEET 101 COVER, SHEET 201 UTILITY PLAN, SHEET 301 GRADING PLAN, SHEET 401 HIDDEN SPRING DRIVE P&P, SHEET 402 THISTLE DRIVE P&P, SHEET 403 CATTAIL DRIVE P&P, SHEET 404 BROADLEAF DRIVE 1 P&P, SHEET 405 BROADLEAF DRIVE 2 P&P, SHEET 406 DASHER DRIVE P&P, SHEET 601 DETAILS.

TABULATIONS

Table with 2 columns: ZONE and PC (PLANNED COMMUNITY). Rows include TOTAL AREA (8.91 ACRES), TOTAL OPEN SPACE (2.87 ACRES), TOTAL ACRES IN ROADS (2.33 ACRES), TOTAL AREA IN LOTS (2.51 ACRES), TOTAL UNITS (99 UNITS), TOWN HOMES (99 UNITS), DENSITY (12 UNITS/ACRE), REQUIRED PARKING (PLATS A, B, C, D & E), TOWN HOMES (429X2) (858 STALLS), GUEST PARKING (115 STALLS), TOTAL PARKING REQUIRED (973 STALLS), PROVIDED PARKING (PLATS A, B, C, D & E), TOWN HOMES W/ DOUBLE GARAGE (429X1) (0 STALLS), TOWN HOMES W/ SINGLE GARAGE (429X1) (429 STALLS), EXTERIOR PARKING (547 STALLS), TOTAL PARKING PROVIDED (976 STALLS).

NOTES

1. ALL CONSTRUCTION TO BE DONE ACCORDING TO SANTAQUIN CITY STANDARDS AND SPECIFICATIONS.
2. PROJECT VERTICAL DATUM: ELEVATION 4982.19 ON THE 1933 G.L.O. TYPE MONUMENT AT THE NORTHEAST CORNER OF SECTION 15, T10S, R1E, S.L.B. & M. AS PUBLISHED BY THE UTAH COUNTY SURVEYOR.
3. ALL SPEED & TRAFFIC REGULATION SIGNS TO BE DETERMINED AND INSTALLED BY SANTAQUIN CITY DEVELOPER TO PAY SIGN EXPENSES WITH DEVELOPMENT BOND.
4. ALL RECOMMENDATIONS MADE IN THE GEOTECHNICAL REPORT DATED AUGUST 8, 2019 PREPARED BY GEOSTRATA FOR THESUMMIT RIDGE TOWNHOMES MUST BE FOLLOWED.
5. 18" MIN. VERTICAL SEPARATION BETWEEN CW AND PI, SD OR SS AT ALL CROSSINGS. CW TO HAVE 4' MIN COVER AS PER CITY STANDARD.
6. NOTE TO DEVELOPERS AND GENERAL CONTRACTORS: IT IS IMPORTANT FOR THE DEVELOPER AND THE GENERAL CONTRACTOR TO UNDERSTAND THAT IT IS HIS/HER RESPONSIBILITY TO ENSURE THAT ALL IMPROVEMENTS INSTALLED WITHIN THIS DEVELOPMENT ARE CONSTRUCTED IN FULL COMPLIANCE WITH ALL STATE AND SANTAQUIN CITY CODES, ORDINANCES AND STANDARDS. THE DEVELOPMENT PLANS ARE NOT ALL INCLUSIVE OF ALL MINIMUM CODES, ORDINANCES AND STANDARDS. THIS FACT DOES NOT RELIEVE THE DEVELOPER OR GENERAL CONTRACTOR FROM FULL COMPLIANCE WITH ALL MINIMUM STATE AND SANTAQUIN CITY STANDARDS.
7. CONTRACTOR TO VERIFY SIZE & LOCATION OF ALL UTILITIES STUBBED INTO PROPERTY. CONTRACTOR TO NOTIFY ENGINEERING OF ANY DISCREPANCIES BETWEEN CONSTRUCTION DRAWINGS AND ACTUAL FIELD CONDITIONS.
8. ALL SEWER MANHOLE LIDS IN BROOKSIDE DRIVE AND HARVEST VIEW DRIVE SHALL BE GASKETED TO REDUCE INFILTRATION.
9. ALL OPEN SPACE SHALL SERVE AS A PUBLIC UTILITY EASEMENT AND SHALL BE MAINTAINED BY THE HOA.
10. ALL PRIVATE ROADS SHALL HAVE RED CURB & GUTTERS AND "NO PARKING" SIGNS TO PREVENT ALL STREET PARKING IN THESE AREAS.
11. PI DRAINS TO BE PROVIDED AT ALL TRUE LOW POINTS IN THE PI SYSTEM.
12. SHALLOW SEWER DEPTHS EXIST IN THIS PHASE. CONTRACTOR TO VERIFY SEWER LATERAL DEPTH PRIOR TO HOUSE CONSTRUCTION. SOME UNITS MAY REQUIRE EJECTOR PUMPS.
13. PI AND WATER LINES TO BE PVC UNLESS NOTED OTHERWISE. SANITARY SEWER TO BE SDR-35 UNLESS NOTED OTHERWISE.
14. ALL PARKING STALLS ASSOCIATED WITH THE PROJECT ARE TO BE MAINTAINED BY THE HOA.

LEGEND

Legend table with columns: EXISTING, PROPOSED, and descriptions of various infrastructure elements like boundary lines, sewer pipes, manholes, catch basins, water pipes, valves, and signs.

LEI logo and contact information: A Utah Corporation - ENGINEERS SURVEYORS PLANNERS. 3302 N. Main Street, Spanish Fork, UT 84660. Phone: 801.798.0555, Fax: 801.798.9393, office@lei-eng.com, www.lei-eng.com

NOT FOR CONSTRUCTION

SUMMIT RIDGE TOWNS - PLAT E
SANTAQUIN, UTAH COUNTY, UTAH

COVER

REVISIONS

Table with 2 columns: REVISIONS and descriptions of changes to the drawing.

LEI PROJECT #: 2019-0081

DRAWN BY: RWH

DESIGNED BY: BCT

SCALE: 1"=100'

DATE: 6/7/2021

SHEET

101

DEVELOPER / OWNER

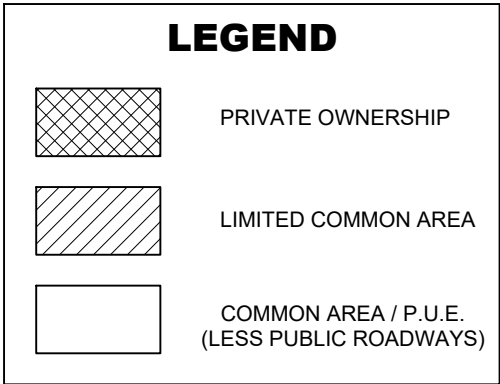
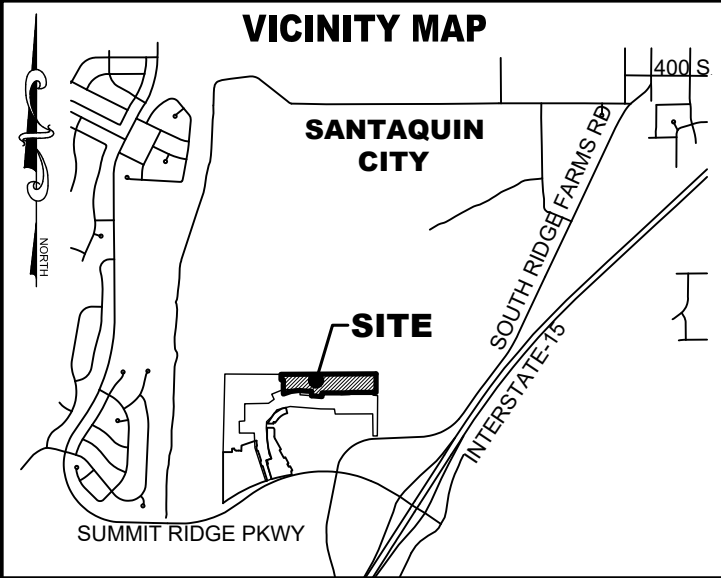
DR HORTON
12351 S. GATEWAY PARK PLACE
DRAPER, UTAH 84020
(801) 571-7101

ENGINEER

LEI CONSULTING ENGINEERS
3302 NORTH MAIN
SPANISH FORK, UTAH 84660
(801) 798-0555

PROJECT NAME

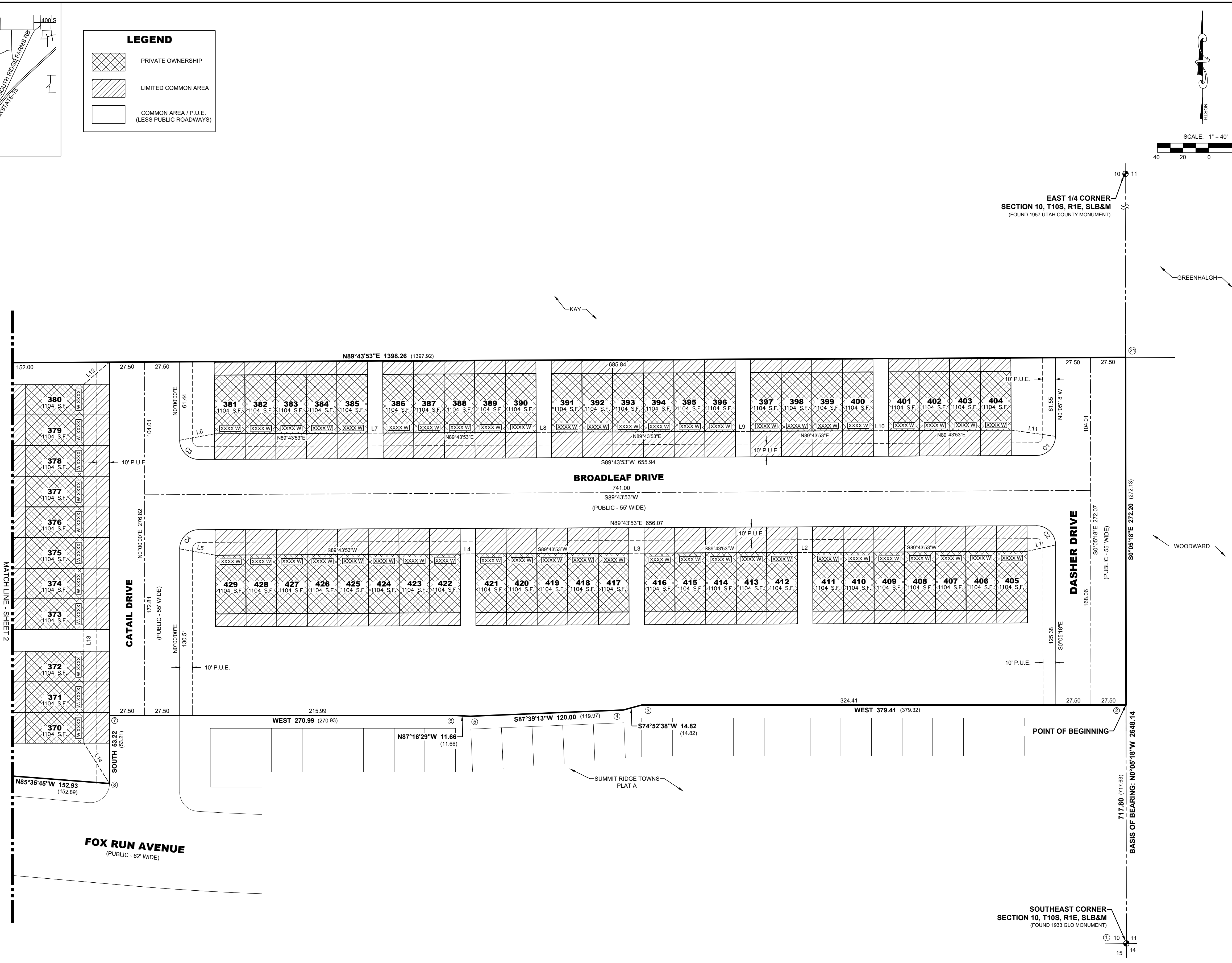
SUMMIT RIDGE TOWNS



NAD27 STATE PLANE COORDINATES

	Northing	Easting
1	590161.95	1914757.36
2	590879.58	1914756.25
3	590879.58	1914376.94
4	590875.72	1914362.63
5	590870.80	1914242.76
6	590871.36	1914231.12
7	590871.36	1913960.19
8	590818.15	1913960.19
9	590829.89	1913807.75
10	590842.97	1913808.23
11	590897.16	1913808.23
12	590897.16	1913740.24
13	590907.85	1913617.18
14	590894.38	1913502.95
15	590854.82	1913392.61
16	590992.48	1913391.61
17	591010.86	1913394.60
18	591065.85	1913394.60
19	591065.85	1913357.93
20	591145.16	1913357.93
21	591151.71	1914755.83

GRID FACTOR: 0.99976



SURVEYOR'S CERTIFICATE

I, RYAN W. HALL, DO HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR, AND THAT I HOLD CERTIFICATE NO. 6310734 IN ACCORDANCE WITH TITLE 58, CHAPTER 22, OF UTAH STATE CODE. I FURTHER CERTIFY BY AUTHORITY OF THE OWNER(S), THAT I HAVE COMPLETED A SURVEY OF THE PROPERTY DESCRIBED ON THIS PLAT IN ACCORDANCE WITH SECTION 17-23-17, OF SAID CODE, AND HAVE SUBDIVIDED SAID TRACT OF LAND INTO LOTS, BLOCKS, STREETS, AND EASEMENTS, AND THE SAME HAS, OR WILL BE, CORRECTLY SURVEYED, STAKED, AND MONUMENTED ON THE GROUND AS SHOWN ON THIS PLAT, AND THAT THIS PLAT IS TRUE AND CORRECT.

BOUNDARY DESCRIPTION

A PORTION OF THE SOUTHEAST QUARTER OF SECTION 10, TOWNSHIP 10 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE NORTHERLY LINE OF PLAT A, SUMMIT RIDGE TOWNS AND THE EAST LINE OF SECTION 10, SAID POINT BEING N0°05'18"W ALONG THE SECTION LINE 717.80 FEET FROM THE SOUTHEAST CORNER OF SECTION 10, TOWNSHIP 10 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN; THENCE ALONG SAID NORTHERLY LINE THE FOLLOWING THIRTEEN (13) COURSES: WEST 379.41 FEET; THENCE S74°52'38"W 14.82 FEET; THENCE S87°39'13"W 120.00 FEET; THENCE N87°16'29"W 11.66 FEET; THENCE WEST 270.99 FEET; THENCE SOUTH 53.22 FEET; THENCE N85°35'45"W 152.93 FEET; THENCE ALONG THE ARC OF A NON-TANGENT CURVE TO THE LEFT 13.09 FEET WITH A RADIUS OF 177.50 FEET THROUGH A CENTRAL ANGLE OF 04°13'30"; CHORD: N02°06'45"E 13.09 FEET; THENCE NORTH 54.21 FEET; THENCE WEST 68.00 FEET; THENCE N85°02'14"W 123.56 FEET; THENCE S83°16'29"W 115.05 FEET; THENCE S70°16'39"W 117.24 FEET; THENCE N00°24'58"W 137.69 FEET; THENCE N09°15'52"E 18.63 FEET; THENCE NORTH 55.00 FEET; THENCE WEST 36.69 FEET; THENCE NORTH 79.33 FEET; THENCE N89°43'53"E 1398.26 FEET TO THE EASE LINE OF SECTION 10; THENCE S00°05'18"E ALONG THE SECTION LINE 272.20 FEET TO THE POINT OF BEGINNING.

CONTAINS: ± 8.61 ACRES.

OWNERS DEDICATION

KNOW ALL MEN BY THESE PRESENTS THAT WE, ALL OF THE UNDERSIGNED OWNERS OF ALL OF THE PROPERTY DESCRIBED IN THE SURVEYOR'S CERTIFICATE HEREON AND SHOWN ON THIS MAP, HAVE CAUSED THE SAME TO BE SUBDIVIDED INTO LOTS, BLOCKS, STREETS AND EASEMENTS AND DO HEREBY DEDICATE THE STREETS, EASEMENTS AND OTHER PUBLIC AREAS AS INDICATED HEREON FOR PERPETUAL USE OF THE PUBLIC, PURSUANT TO UTAH CODE 10-9A-604(D). THE OWNER(S) HEREBY CONVEYS THE COMMON AREA, AS INDICATED HEREON, TO THE HOME OWNERS ASSOCIATION, WITH A REGISTERED ADDRESS OF _____

IN WITNESS WHEREOF WE HAVE HEREUNTO SET OUR HANDS THIS _____ DAY OF _____, A.D. 20____

CORPORATE ACKNOWLEDGMENT

STATE OF UTAH
COUNTY OF UTAH
S.S.
ON THIS _____ DAY OF _____, 20____, PERSONALLY APPEARED BEFORE ME
WHOSE IDENTITY IS PERSONALLY KNOWN TO ME OR PROVEN IN THE BASIS OF SATISFACTORY EVIDENCE AND WHO BY ME DULY SWORN/AFFIRED, DID SAY THAT HE/SHE IS THE _____ OF _____
AND THAT SAID DOCUMENT WAS SIGNED BY HIM/HER IN BEHALF OF SAID CORPORATION BY AUTHORITY OF ITS BYLAWS, OR RESOLUTION OF ITS BOARD OF DIRECTORS, AND SAID _____ ACKNOWLEDGEMENT TO ME THAT SAID CORPORATION EXECUTED THE SAME.

NOTARY PUBLIC FULL NAME: _____
COMMISSION NUMBER: _____
MY COMMISSION EXPIRES: _____
A NOTARY PUBLIC COMMISSIONED IN UTAH

ACCEPTANCE BY LEGISLATIVE BODY

THE _____ OF _____
COUNTY OF UTAH, APPROVES THIS SUBDIVISION AND HEREBY ACCEPTS THE DEDICATION OF ALL STREETS; EASEMENTS, AND OTHER PARCELS OF LAND INTENDED FOR PUBLIC PURPOSES FOR THE PERPETUAL USE OF THE PUBLIC
THIS _____ DAY OF _____, A.D. 20____

APPROVED BY MAYOR _____

APPROVED _____ ENGINEER (See Seal Below)
ATTEST _____ CLERK-RECORDER (See Seal Below)

PLAT "E"

PLANNED COMMUNITY

A PORTION OF THE SOUTHEAST QUARTER OF SECTION 10, TOWNSHIP 10 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN

SHEET 1 OF 2

SANTAQUIN _____ UTAH COUNTY, UTAH

SCALE: 1" = 40'

NOTARY PUBLIC SEAL	CITY/COUNTY ENGINEER SEAL	COUNTY-RECORDER SEAL
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LEI
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ENGINEERS SURVEYORS PLANNERS

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office@lei-eng.com
www.lei-eng.com

DRAWING DATE: MAY 24, 2021

OWNER/DEVELOPER

DR HORTON
12351 S. GATEWAY PARK PLACE
DRAPER, UTAH 84020
(801) 571-7101

DOMINION ENERGY UTAH ACCEPTANCE

QUESTAR GAS COMPANY DBA DOMINION ENERGY UTAH APPROVES THIS PLAT FOR THE PURPOSE OF APPROXIMATING THE LOCATION, BOUNDARIES, COURSE AND DIMENSIONS OF THE RIGHTS-OF-WAY AND EASEMENT GRANTS AND EXISTING UNDERGROUND FACILITIES. NOTHING HEREIN SHALL BE CONSTRUED TO WARRANT OR VERIFY THE PRECISE LOCATION OF SUCH ITEMS. THE RIGHTS-OF-WAY AND EASEMENTS ARE SUBJECT TO NUMEROUS RESTRICTIONS APPEARING ON THE RECORDED RIGHT-OF-WAY AND EASEMENT GRANT(S). DOMINION ENERGY UTAH ALSO APPROVES THIS PLAT FOR THE PURPOSE OF CONFIRMING THAT THE PLAT CONTAINS PUBLIC UTILITY EASEMENTS. HOWEVER, DOMINION ENERGY UTAH MAY REQUIRE ADDITIONAL EASEMENTS IN ORDER TO SERVE THIS DEVELOPMENT. THIS APPROVAL DOES NOT CONSTITUTE ABROGATION OR WAIVER OF ANY OTHER EXISTING RIGHTS, OBLIGATIONS OR LIABILITIES INCLUDING PRESCRIPTIVE RIGHTS AND OTHER RIGHTS, OBLIGATIONS OR LIABILITIES PROVIDED BY LAW OR EQUITY. THIS APPROVAL DOES NOT CONSTITUTE ACCEPTANCE, APPROVAL OR ACKNOWLEDGMENT OF ANY TERMS CONTAINED IN THE PLAT, INCLUDING THOSE SET FORTH IN THE OWNERS DEDICATION OR THE NOTES, AND DOES NOT CONSTITUTE A GUARANTEE OF PARTICULAR TERMS OR CONDITIONS OF NATURAL GAS SERVICE. FOR FURTHER INFORMATION PLEASE CONTACT DOMINION ENERGY UTAH'S RIGHT-OF-WAY DEPARTMENT AT 801-366-8532.

QUESTAR GAS COMPANY DBA DOMINION ENERGY UTAH

APPROVED THIS _____ DAY OF _____, 20____

BY- _____

TITLE- _____

CENTRACOM ACCEPTANCE

APPROVED THIS _____ DAY OF _____, 2021

CENTRACOM COMPANY

BY: _____ TITLE: _____

CENTURY LINK ACCEPTANCE

APPROVED THIS _____ DAY OF _____, 2021

CENTURY LINK COMPANY

BY: _____ TITLE: _____

ROCKY MOUNTAIN POWER ACCEPTANCE

APPROVED THIS _____ DAY OF _____, 2021

CENTURY LINK COMPANY

BY: _____ TITLE: _____

LEGEND

PRIVATE OWNERSHIP

LIMITED COMMON AREA

COMMON AREA / P.U.E.
(LESS PUBLIC ROADS)

NOTES

1. ALL COMMON AREA, LIMITED COMMON AREA & OPEN SPACE ARE DEDICATED AS A PUBLIC UTILITY EASEMENT.

2. ALL BUILDING WALLS ARE PARALLEL WITH, PERPENDICULAR TO REFERENCE BEARING SHOWN ON BUILDINGS.

3. ALL LANDSCAPING SHALL BE INSTALLED (OR BONDED FOR) AS SHOWN ON THE LANDSCAPING PLAN FOR EACH BUILDING BEFORE OCCUPANCY WILL BE ISSUED.

4. TYPE II MONUMENT (ALUMINUM CAP AND REBAR) TO BE SET.

5. ALL R-TANKS, STORM PIPES, STORM MANHOLES, STORM INLETS, ETC THAT ARE LOCATED OUTSIDE THE PUBLIC RIGHT-OF-WAY SHALL BE OWNED AND MAINTAINED BY THE HOA.

LINE TABLE

LINE	DIRECTION	LENGTH
L1	N77°13'42"E	22.88
L2	N89°43'53"E	12.00
L3	N89°43'53"E	12.00
L4	N89°43'53"E	12.00
L5	S79°54'26"E	28.19
L6	N79°29'25"E	27.73
L7	N89°43'53"E	12.00
L8	N89°43'53"E	12.00
L9	N89°43'53"E	12.00
L10	N89°43'53"E	12.00
L11	S81°58'51"E	35.02
L12	S49°05'52"W	26.46
L13	S0°00'00"W	17.00
L14	S32°20'40"E	37.38
L15	N50°17'05"W	26.00
L16	N0°00'00"W	17.00
L17	N45°54'55"E	28.51
L18	S82°52'37"E	12.97
L19	N90°00'00"E	12.00
L20	N78°37'25"E	25.35
L21	S16°41'57"W	20.88
L22	N89°59'59"E	12.00
L23	S73°58'32"E	18.11

CURVE TABLE

CURVE	RADIUS	DELTA	LENGTH	CHORD
C1	15.00	89°49'11"	23.51	N44°49'18"E 21.18
C2	15.00	90°10'49"	23.61	N45°10'42"W 21.25
C3	15.00	90°16'07"	23.63	S45°08'04"E 21.26
C4	15.00	89°43'53"	23.49	S44°51'56"W 21.16
C5	15.00	90°00'00"	23.56	N45°00'00"E 21.21
C6	15.00	90°00'00"	23.56	N45°00'00"W 21.21

24.00

24.00

24.00

10.00

46.00

20.00

72.00

FRONT LOAD 3-PLEX

UNITS: 367-369, 370-372

24.00

24.00

24.00

24.00

10.00

46.00

20.00

96.00

FRONT LOAD 4-PLEX

UNITS: 397-400, 401-404

24.00

24.00

24.00

24.00

24.00

10.00

46.00

20.00

120.00

FRONT LOAD 5-PLEX

UNITS: 331-335, 381-385, 386-390, 412-416, 417-421

24.00

24.00

24.00

24.00

24.00

24.00

10.00

46.00

20.00

144.00

FRONT LOAD 6-PLEX

UNITS: 391-396

24.00

24.00

24.00

24.00

24.00

24.00

24.00

10.00

46.00

20.00

168.00

FRONT LOAD 7-PLEX

UNITS: 352-358, 405-411

24.00

24.00

24.00

24.00

24.00

24.00

24.00

24.00

10.00

46.00

20.00

192.00

FRONT LOAD 8-PLEX

UNITS: 336-343, 344-351, 359-366, 373-380, 422-429

LEI

A Utah Corporation

ENGINEERS
SURVEYORS
PLANNERS

2302 N. Main Street
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Fax: 801.798.9393
office@lei-eng.com
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PLAT "D"

SUMMIT RIDGE TOWNS

PLANNED COMMUNITY

A PORTION OF THE SOUTHEAST QUARTER OF SECTION 10, TOWNSHIP 10 SOUTH,
RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN

SHEET 2 OF 2

SANTAQUIN

UTAH COUNTY, UTAH

SCALE: 1" = 40'

LEI JOB #19-001

6

NOT FOR
CONSTRUCTION

SUMMIT RIDGE TOWNS - PLAT E

SANTAQUIN, UTAH COUNTY, UTAH

UTILITY PLAN 1

REVISIONS	
1	-
-	-
2	-
-	-
3	-
-	-
4	-
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5	-
-	-

LEI PROJECT #:

DRAWN BY:

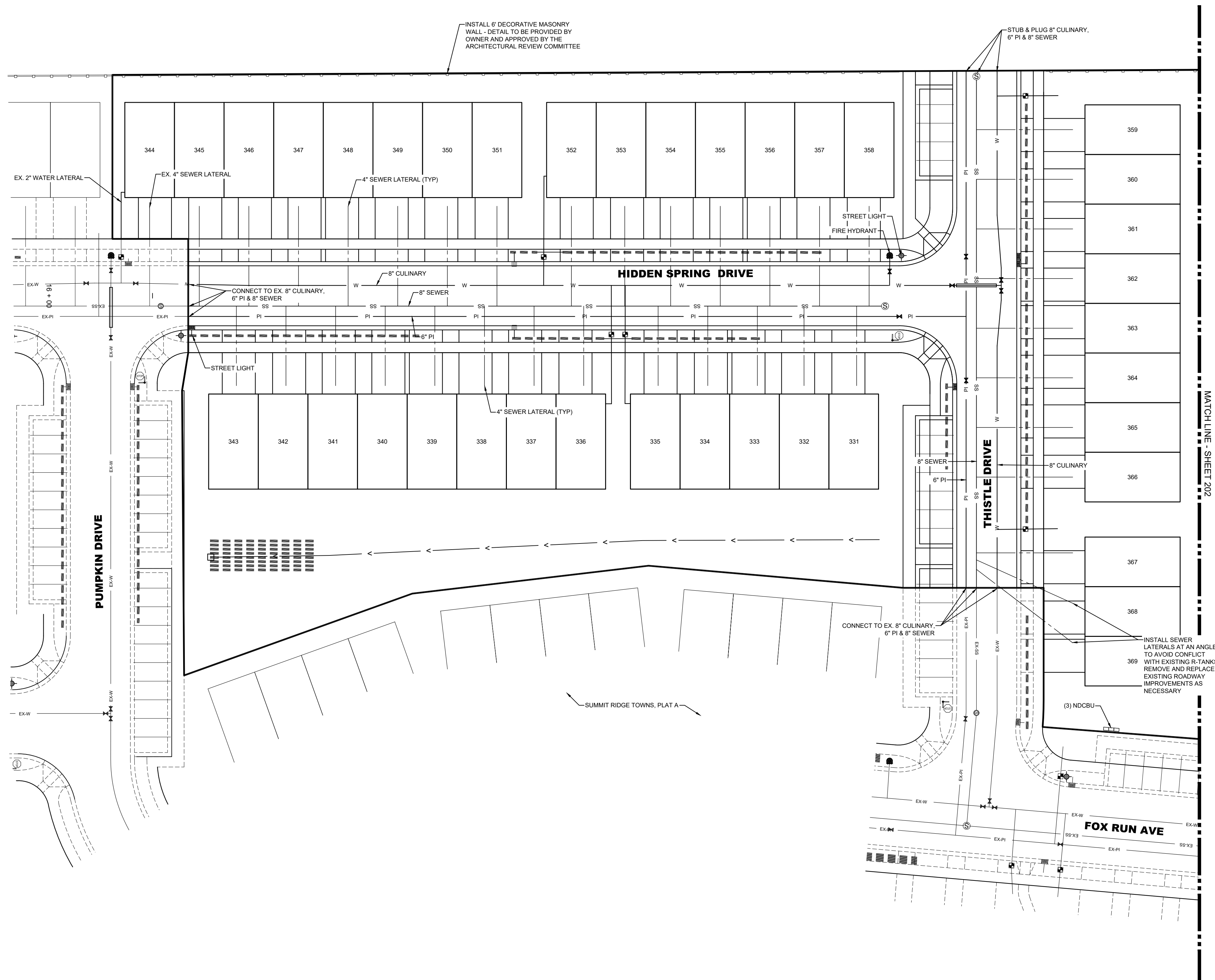
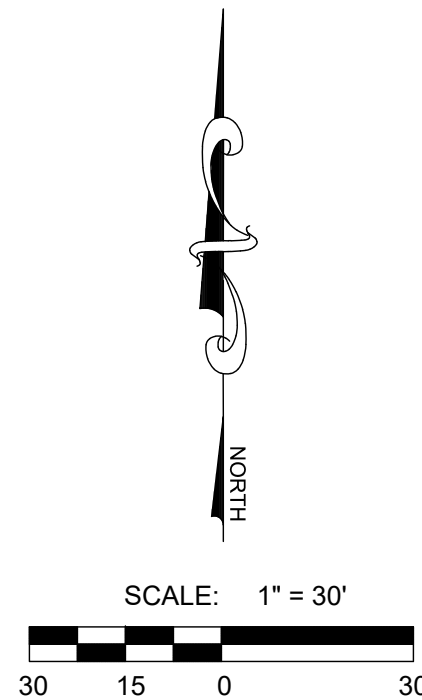
DESIGNED BY:

SCALE:

DATE: _____

◆ 参考文献

201





- A Utah Corporation -
**ENGINEERS
SURVEYORS
PLANNERS**

3302 N. Main Street
Spanish Fork, UT 84660
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www.lei-eng.com

NOT FOR
CONSTRUCTION

SUMMIT RIDGE TOWNS - PLAT E
SANTAQUIN, UTAH COUNTY, UTAH
UTILITY PLAN 2

REVISIONS

1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-

LEI PROJECT #:

2019-0081

DRAWN BY:

RWH

DESIGNED BY:

BCT

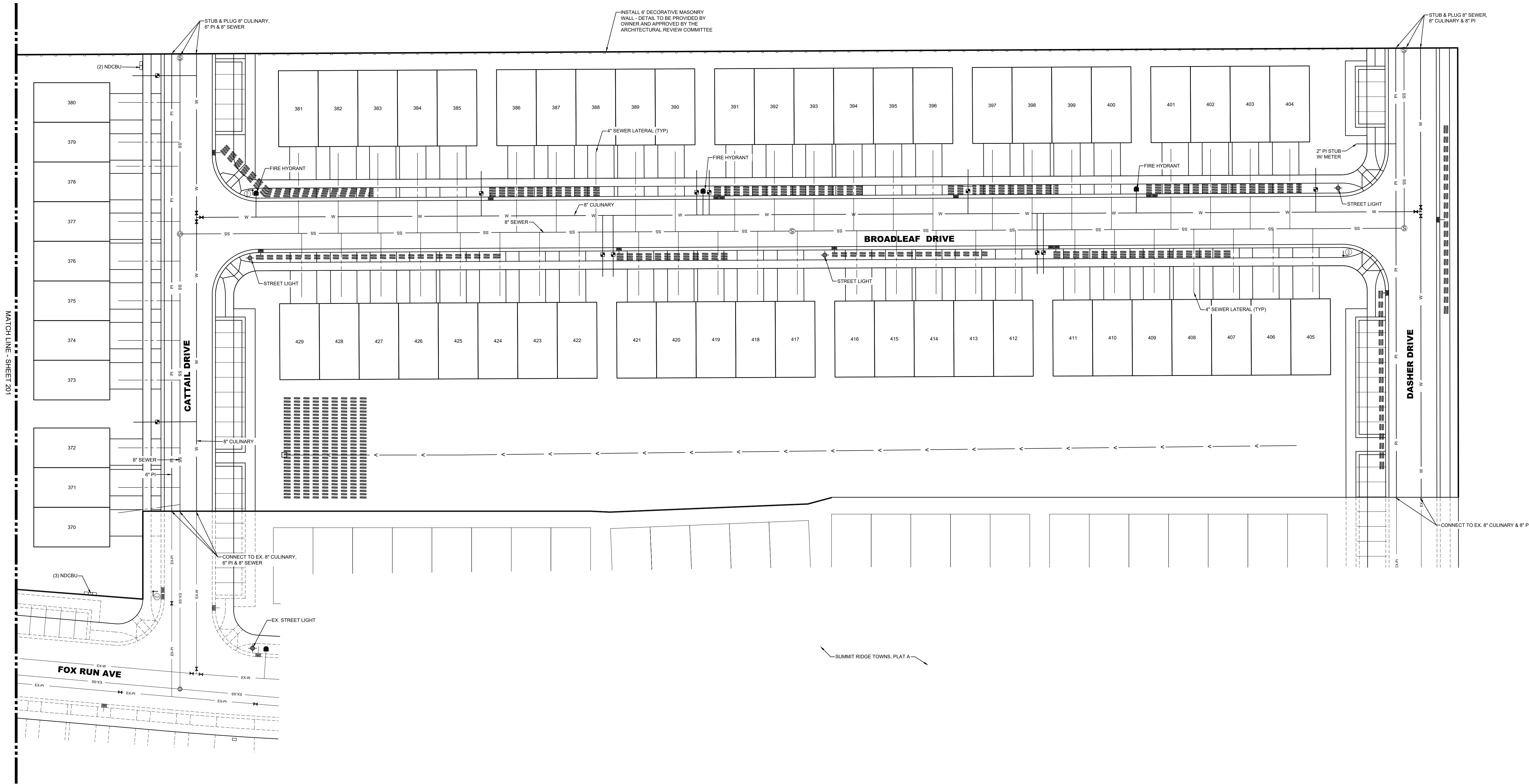
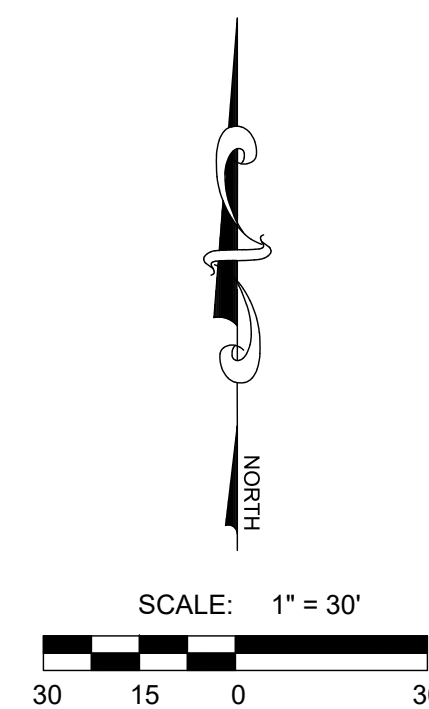
SCALE:

1" = 30'

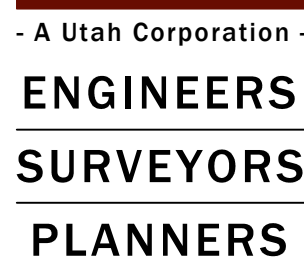
DATE:

6/7/2021

SHEET

202

MATCH LINE - SHEET 201



NOT FOR
CONSTRUCTION

SUMMIT RIDGE TOWNS - PLATE 1

SANTAQUIN, UTAH COUNTY, UTAH

GRADING PLAN 1

LEI PROJECT #:
2019-0081

DRAWN BY:
RWH

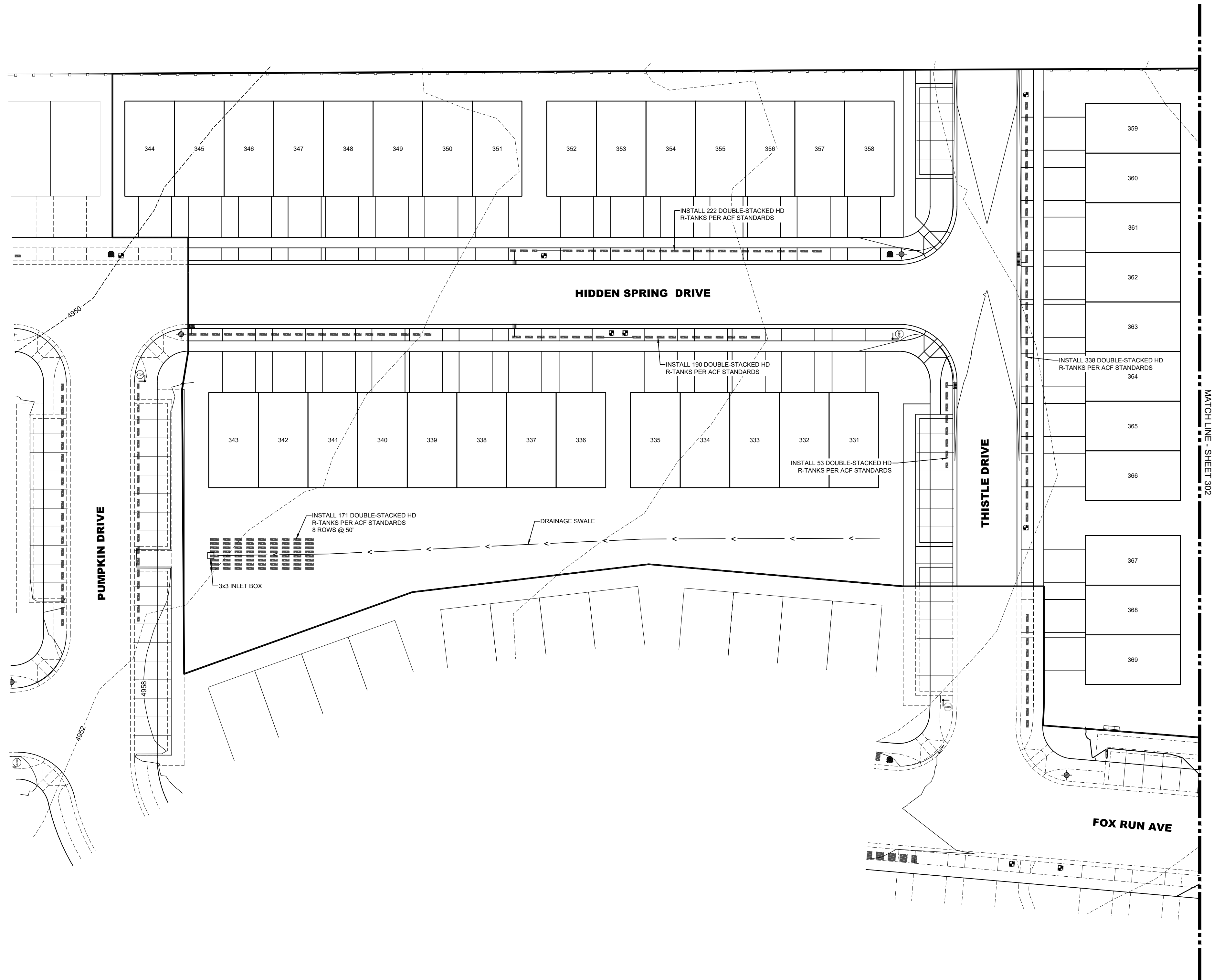
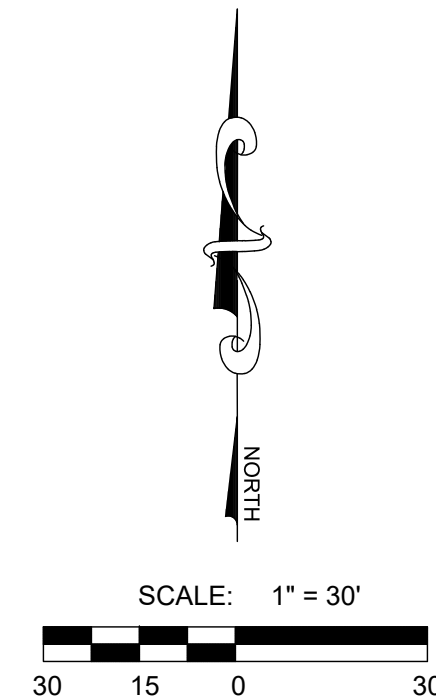
DESIGNED BY:
BCT

SCALE:
1" = 30'

DATE:
6/7/2021

SHEET

301





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NOT FOR
CONSTRUCTION

SUMMIT RIDGE TOWNS - PLAT E
SANTAQUIN, UTAH COUNTY, UTAH
GRADING PLAN 2

REVISIONS

1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-

LEI PROJECT #:

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DRAWN BY:

RWH

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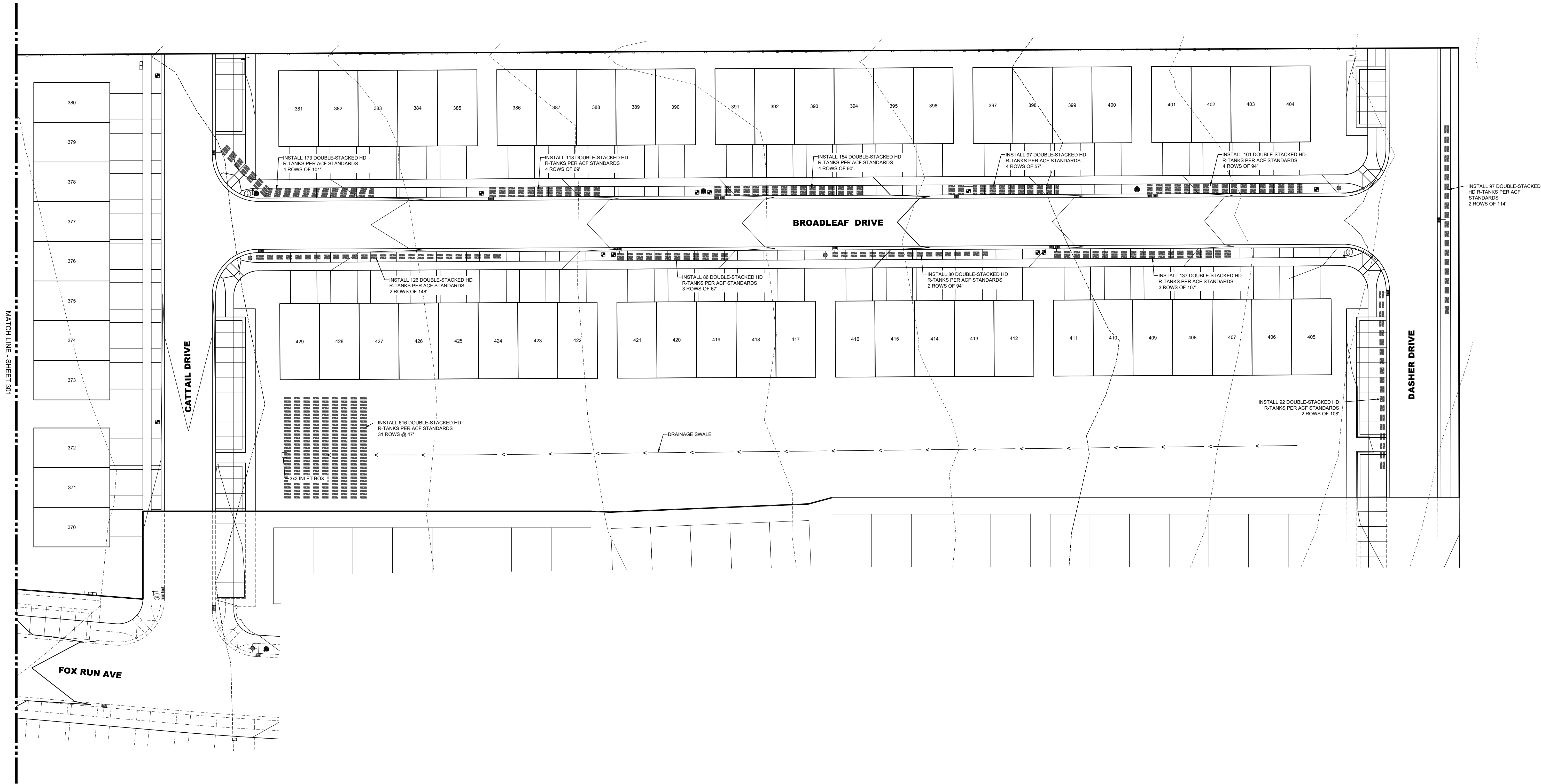
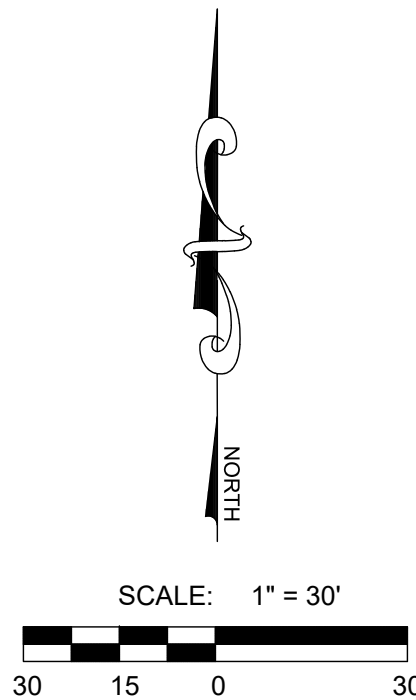
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ENGINEERS
SURVEYORS
PLANNERS

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 Spanish Fork, UT 84660
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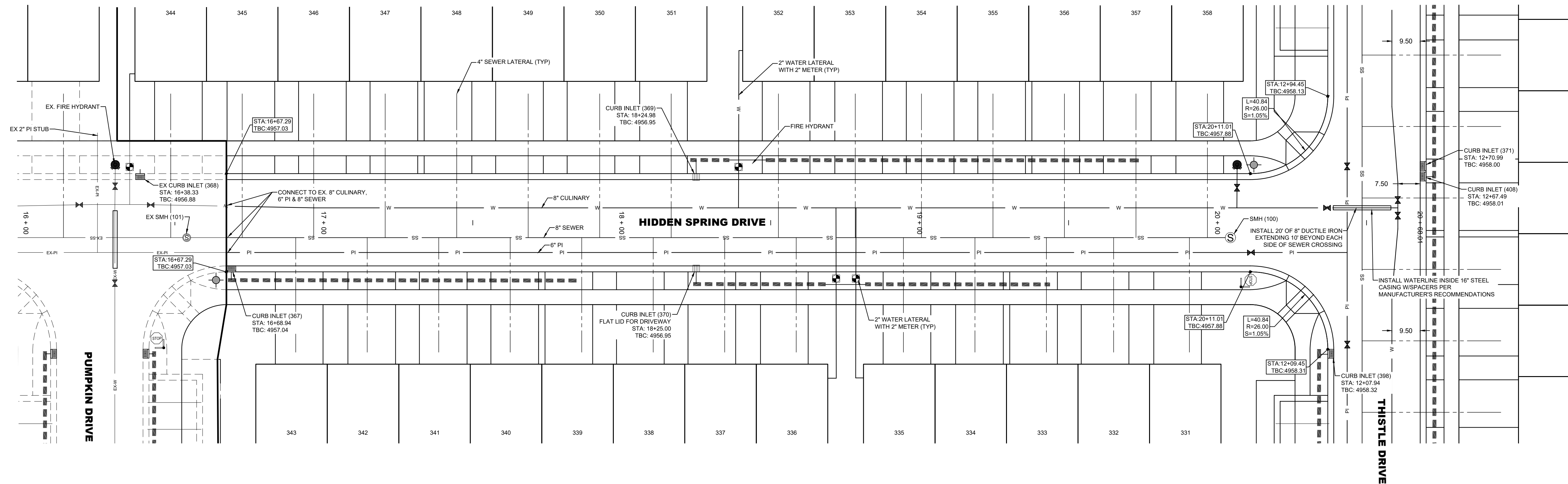
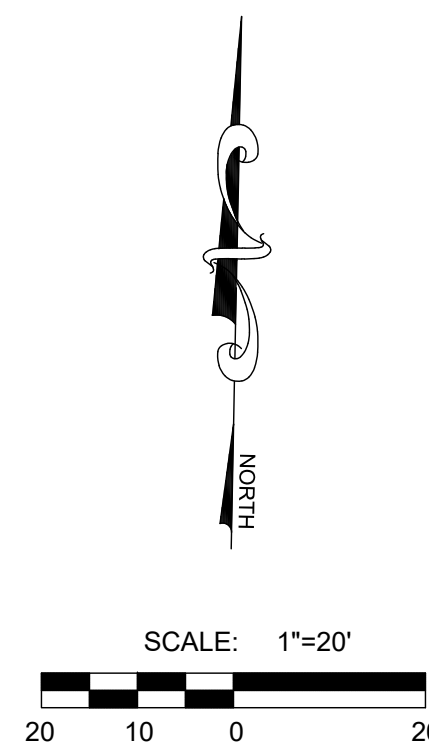
SUMMIT RIDGE TOWNS - PLAT E
 SANTAQUIN, UTAH COUNTY, UTAH
HIDDEN SPRING DRIVE 16+67 TO 16+67 PLAN & PROFILE

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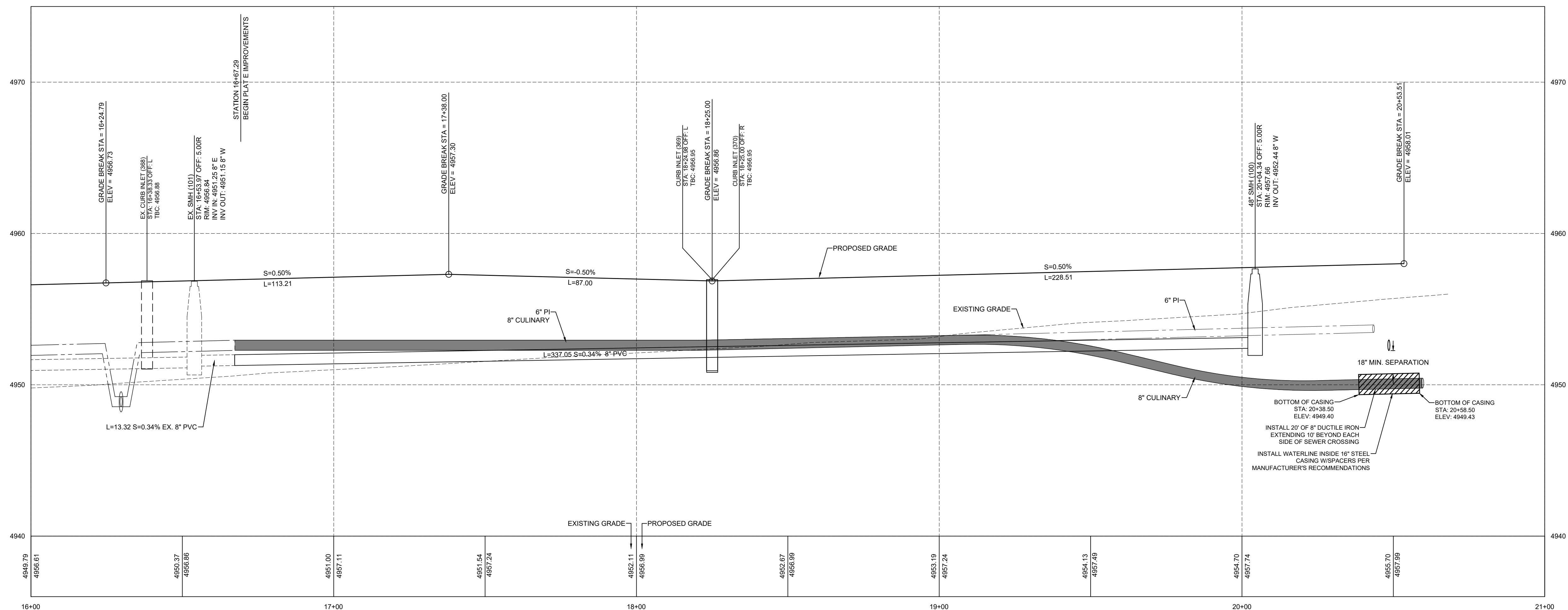
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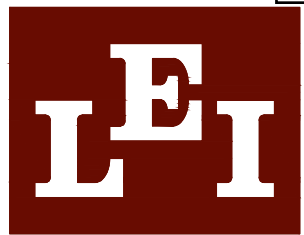


HIDDEN SPRING DRIVE PLAN VIEW
 CENTER LINE OMITTED FOR CLARITY



HIDDEN SPRING DRIVE PROFILE

NOTE: ALL ROADWAY STRUCTURAL FILLS MUST BE
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SANTAQUIN, UTAH COUNTY, UTAH

THISTLE DRIVE PLAN & PROFILE

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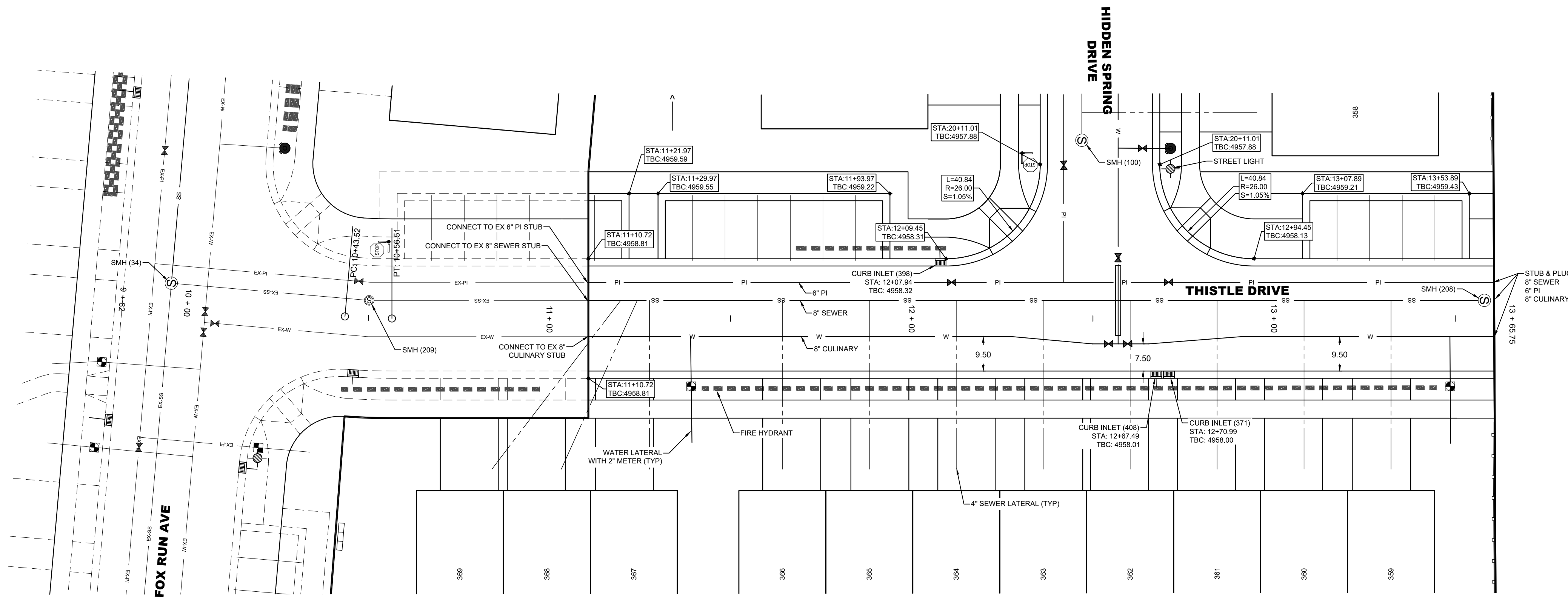
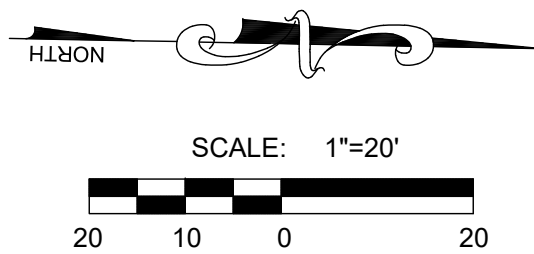
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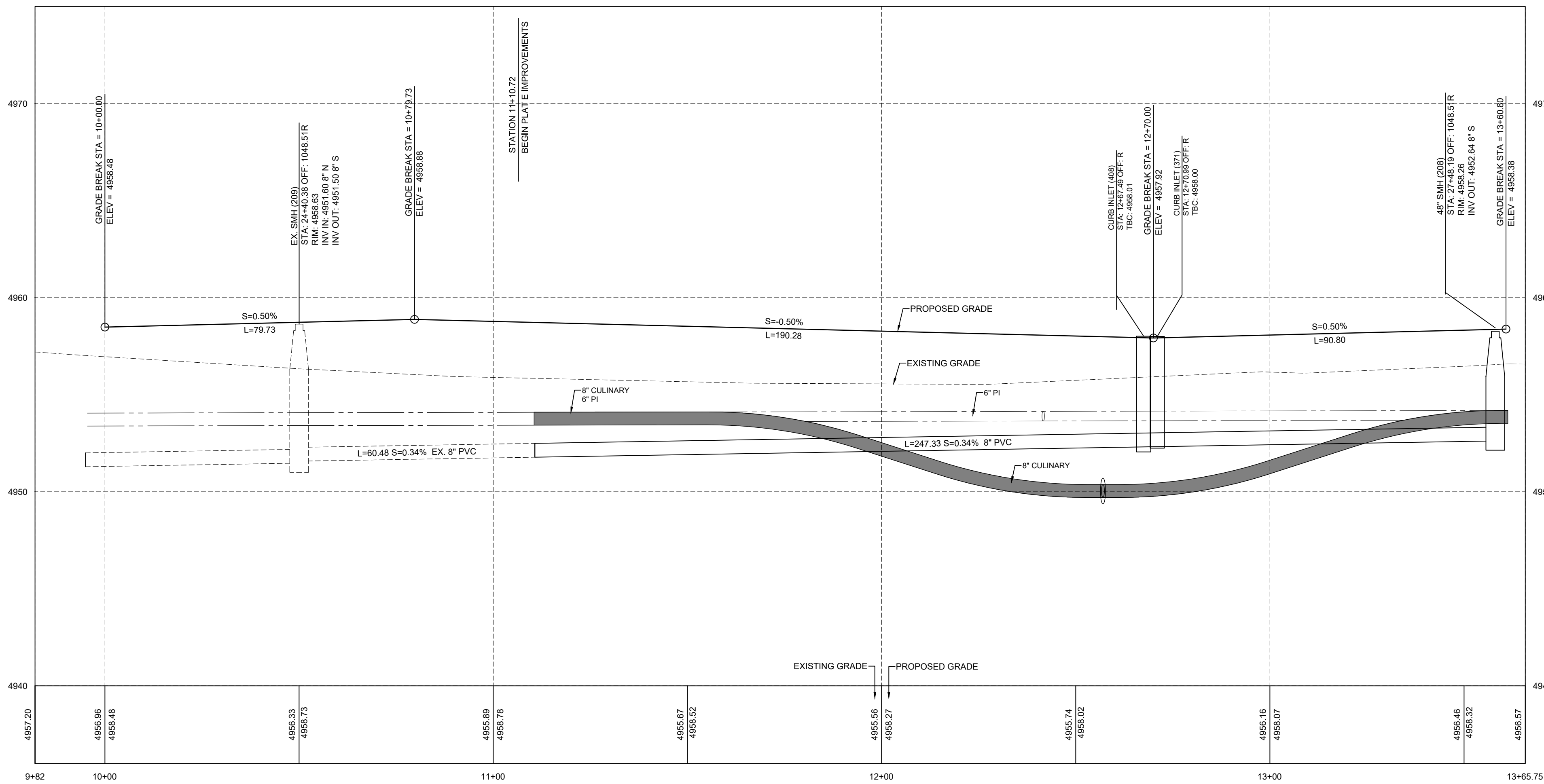
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THISTLE DRIVE PLAN VIEW
 CENTER LINE OMITTED FOR CLARITY



THISTLE DRIVE PROFILE

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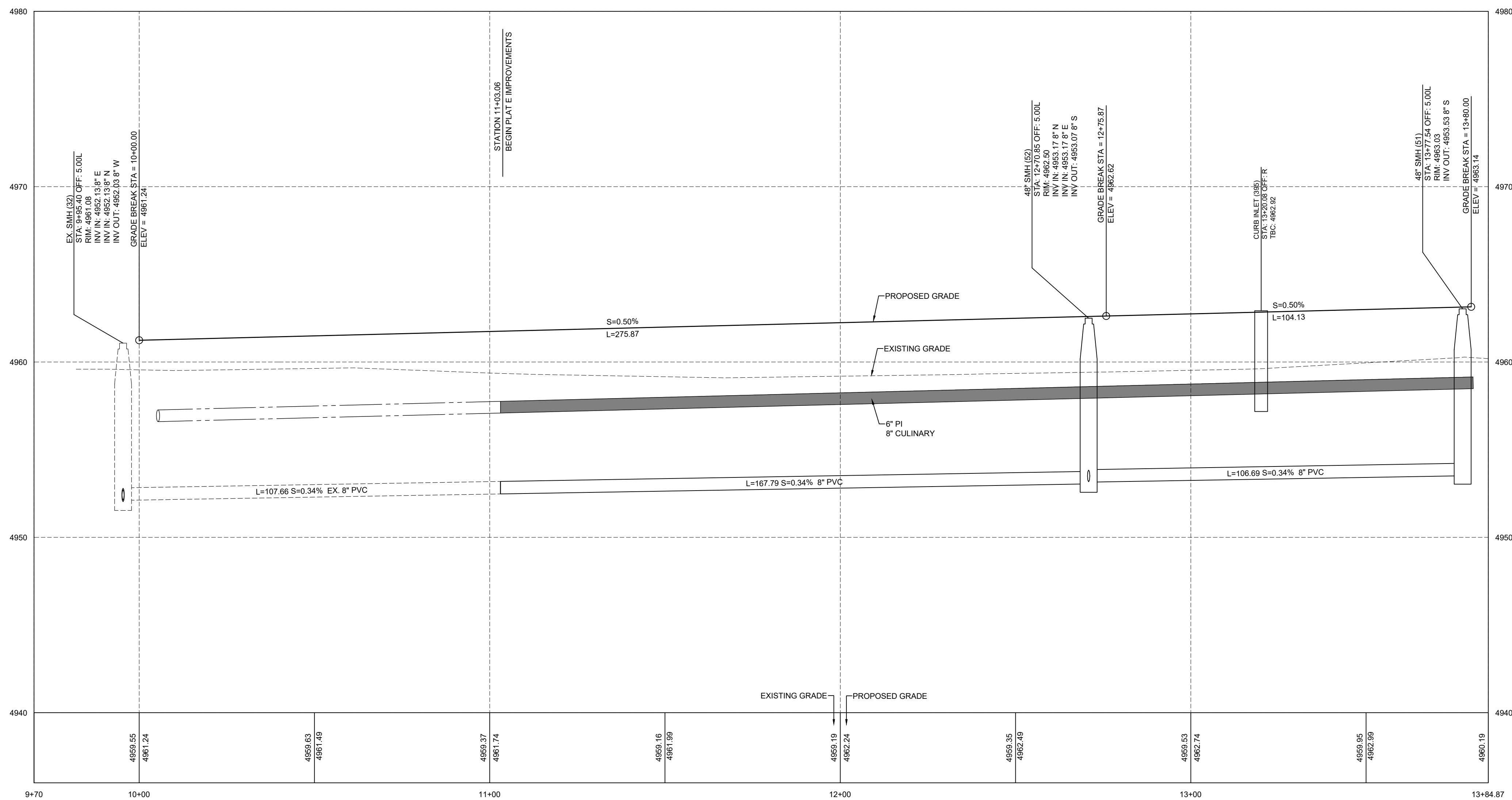
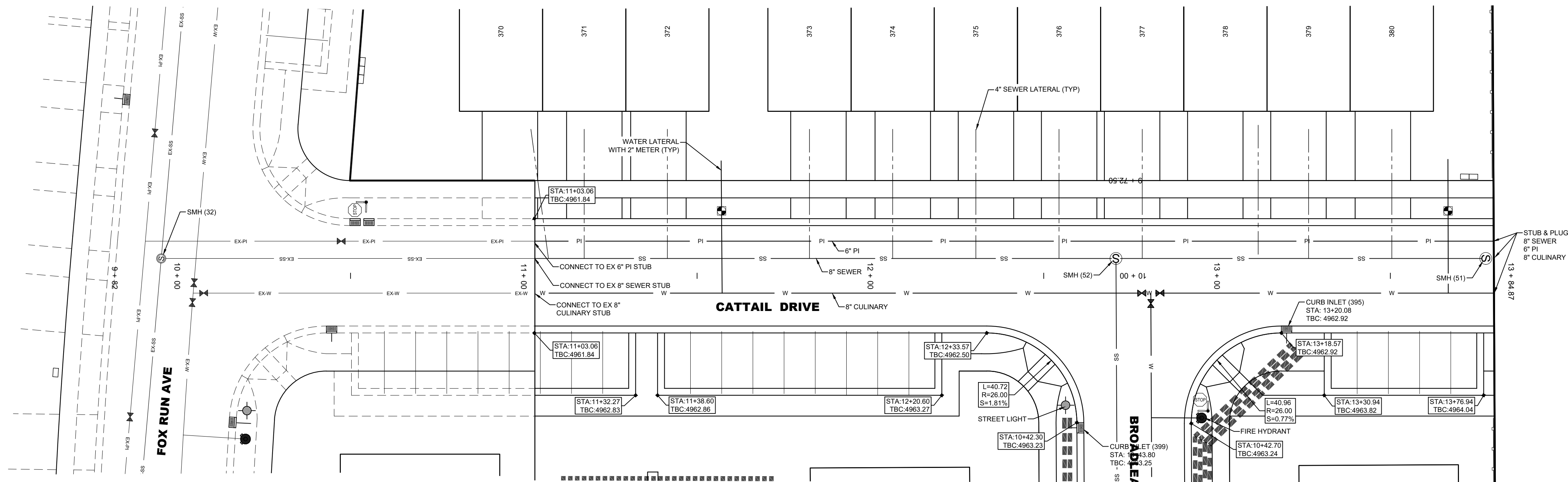
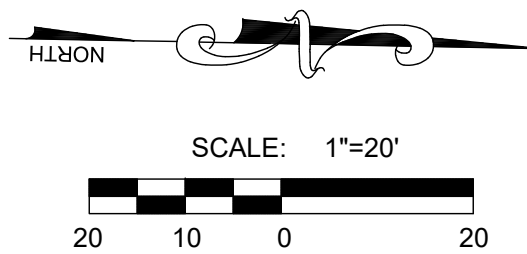
SUMMIT RIDGE TOWNS - PLAT E
 SANTAQUIN, UTAH COUNTY, UTAH
CATTAIL DRIVE PLAN & PROFILE

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NOTE: ALL ROADWAY STRUCTURAL FILLS MUST BE
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SUMMIT RIDGE TOWNS - PLAT E
SANTAQUIN, UTAH COUNTY, UTAH
BROADLEAF DRIVE 10+00 TO 14+00 PLAN & PROFILE

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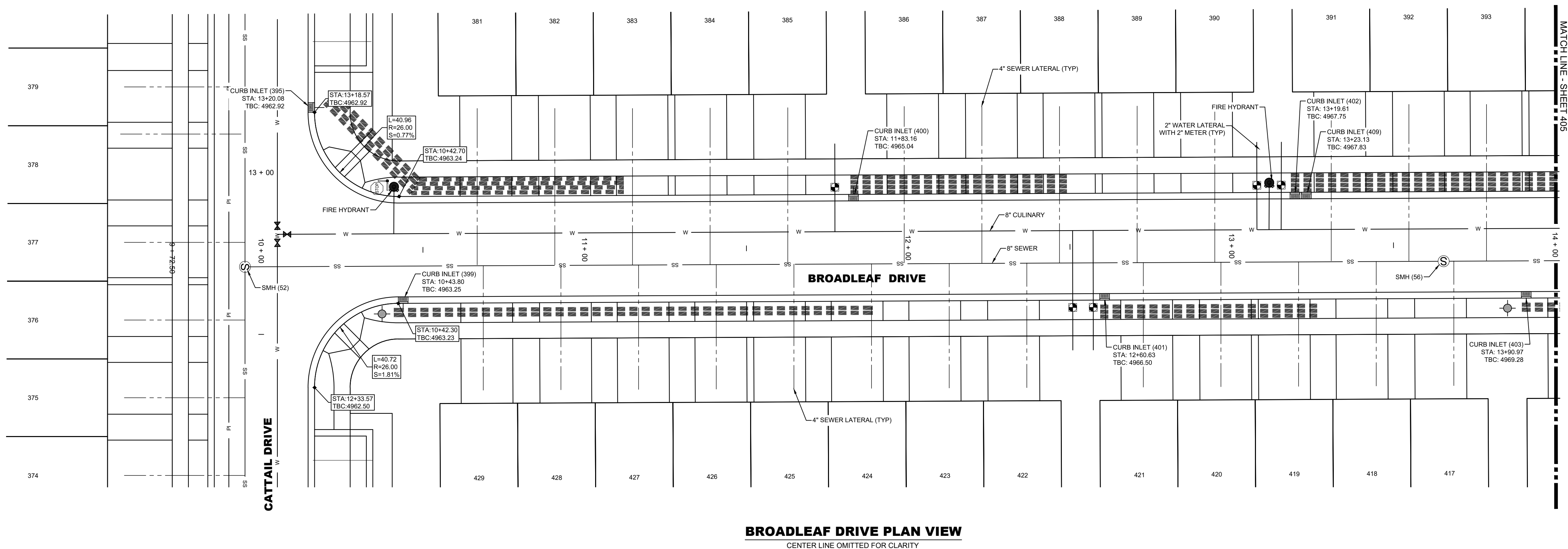
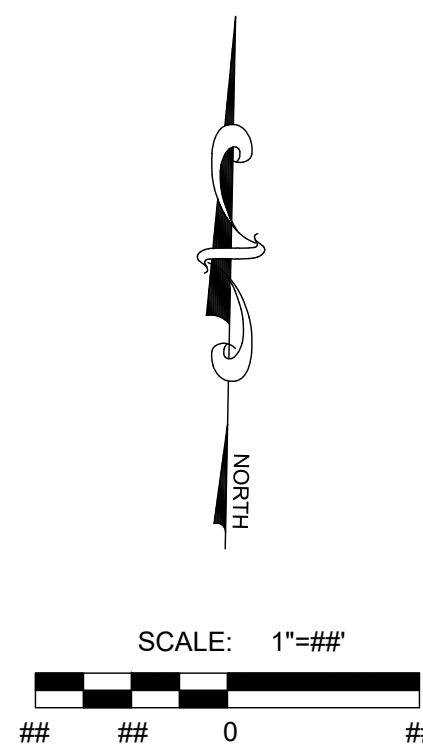
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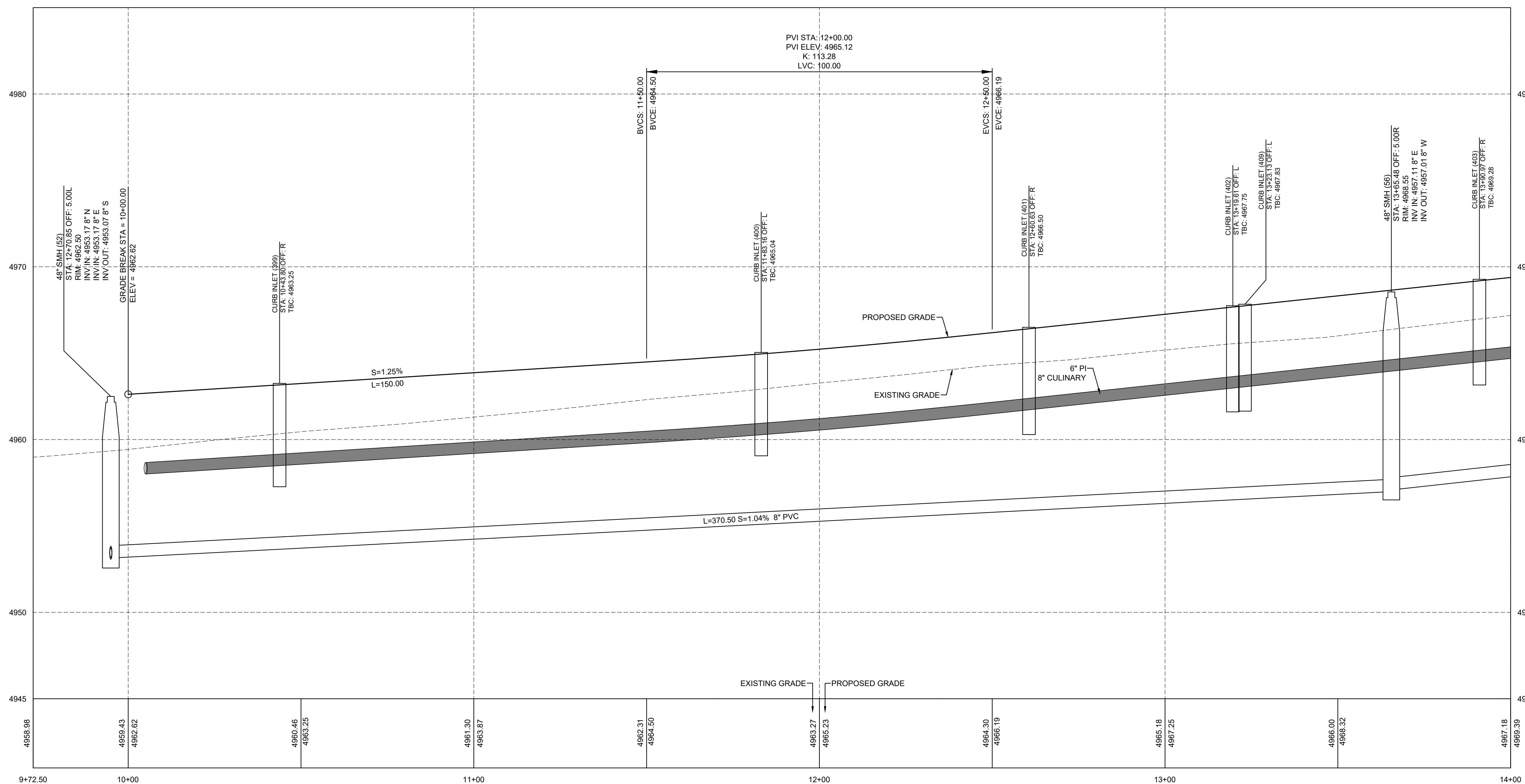
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BROADLEAF DRIVE PLAN VIEW
CENTER LINE OMITTED FOR CLARITY



BROADLEAF DRIVE PROFILE

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SUMMIT RIDGE TOWNS - PLAT E
SANTAQUIN, UTAH COUNTY, UTAH
BROADLEAF DRIVE 14+00 TO 18+00 PLAN & PROFILE

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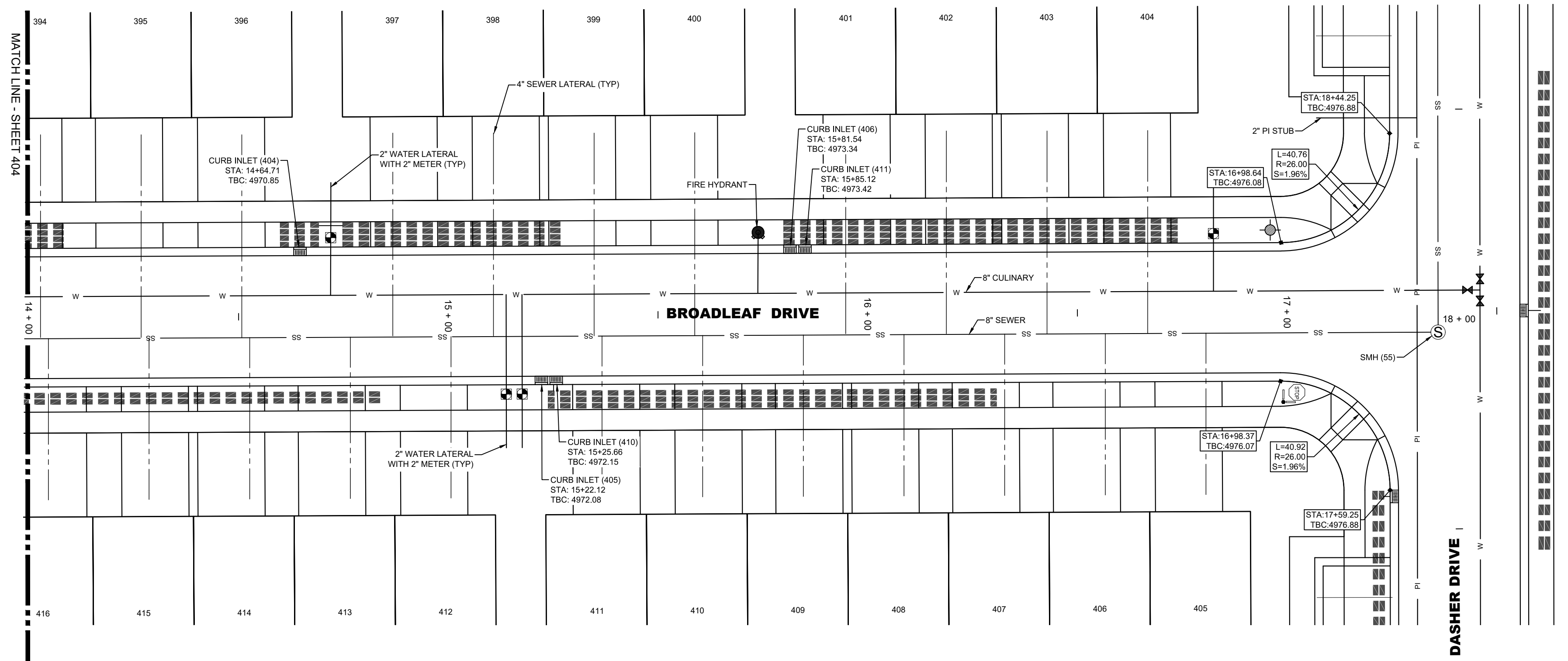
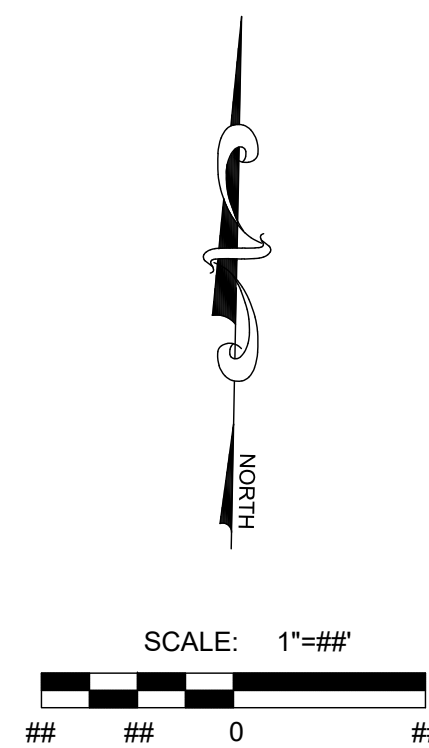
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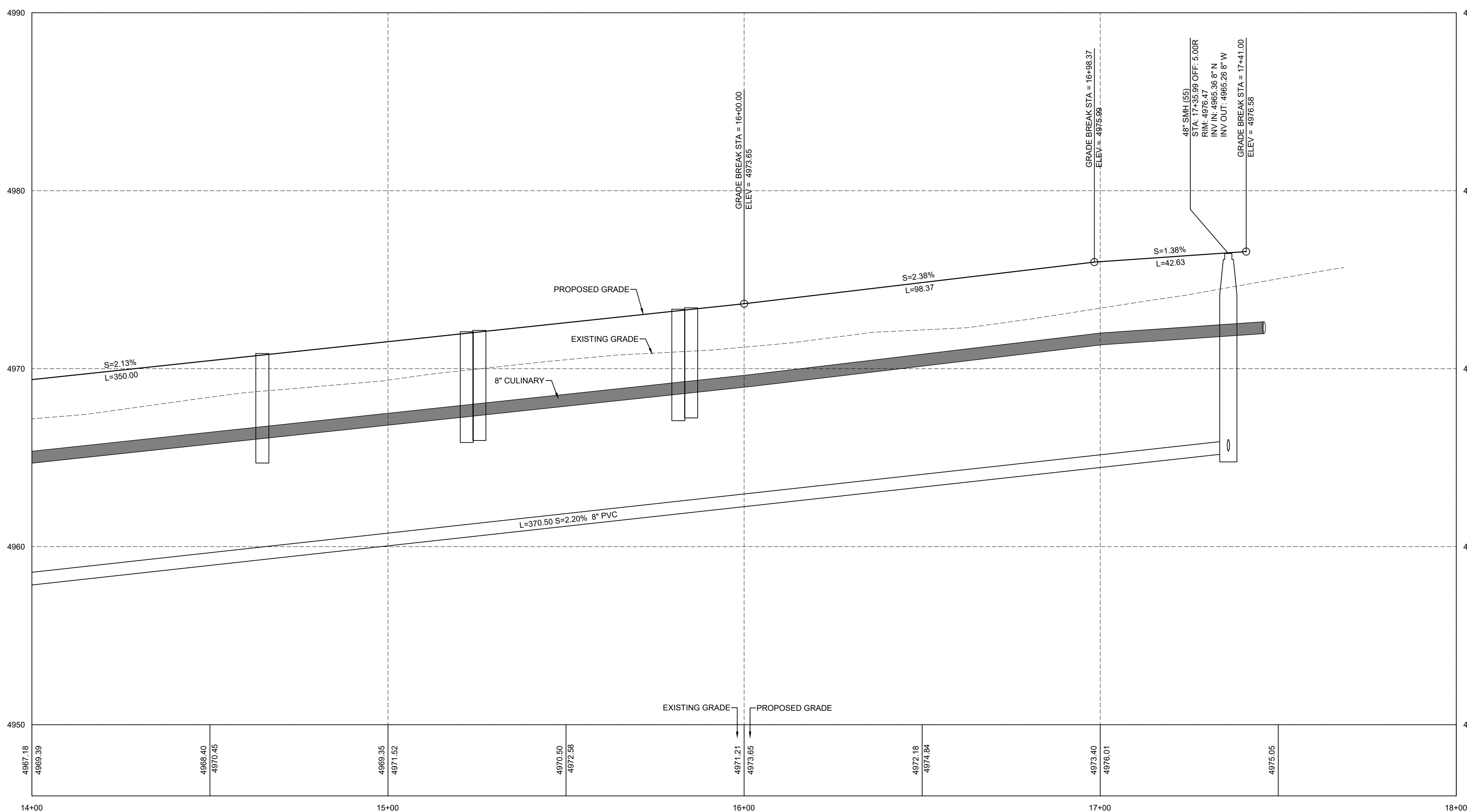
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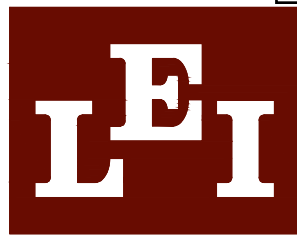
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BROADLEAF DRIVE PLAN VIEW
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BROADLEAF DRIVE PROFILE

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SUMMIT RIDGE TOWNS - PLAT E

SANTAQUIN, UTAH COUNTY, UTAH

DASHER DRIVE PLAN & PROFILE

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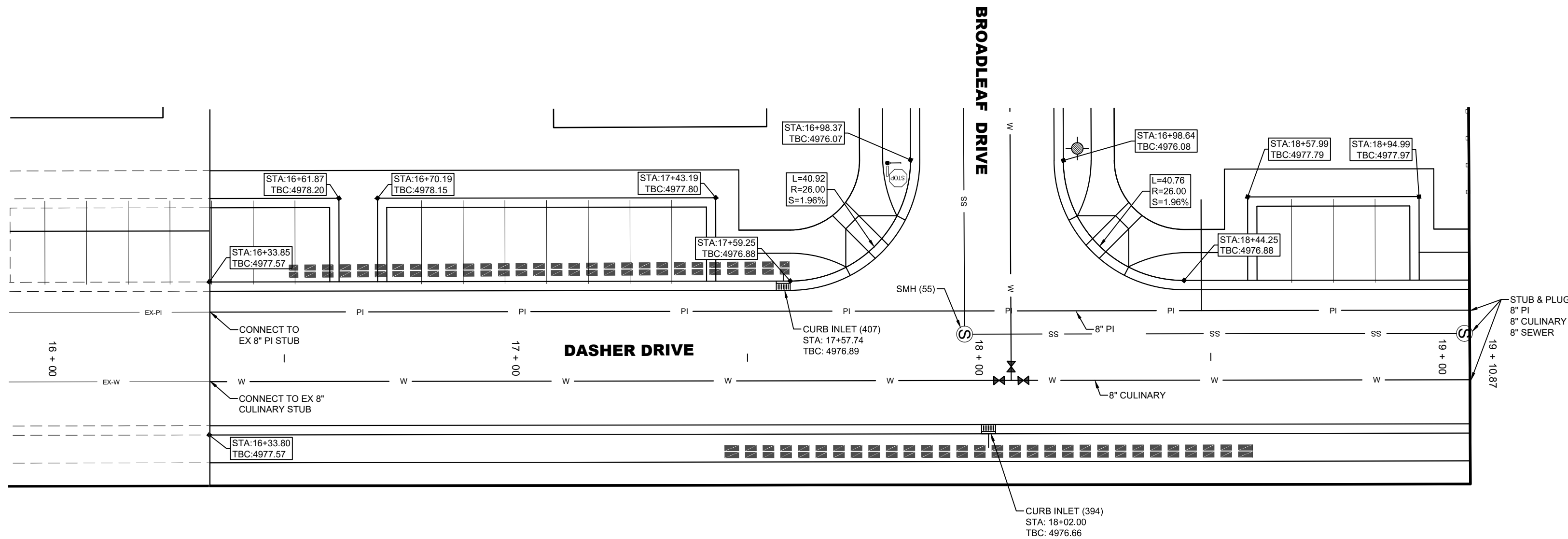
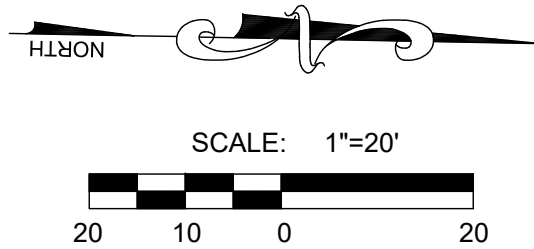
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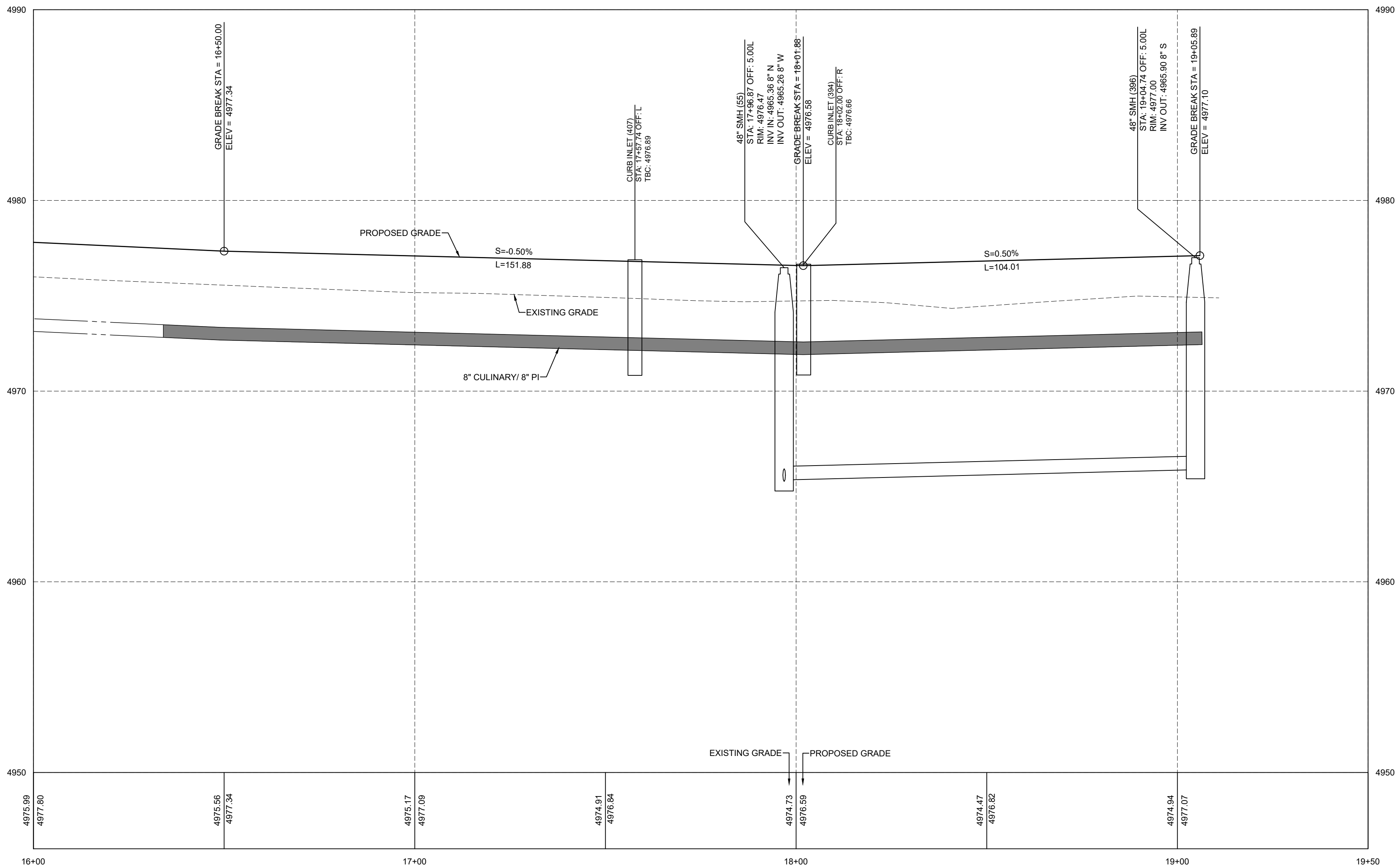
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DASHER DRIVE PLAN VIEW

CENTER LINE OMITTED FOR CLARITY



DASHER DRIVE PROFILE

NOTE: ALL ROADWAY STRUCTURAL FILLS MUST BE
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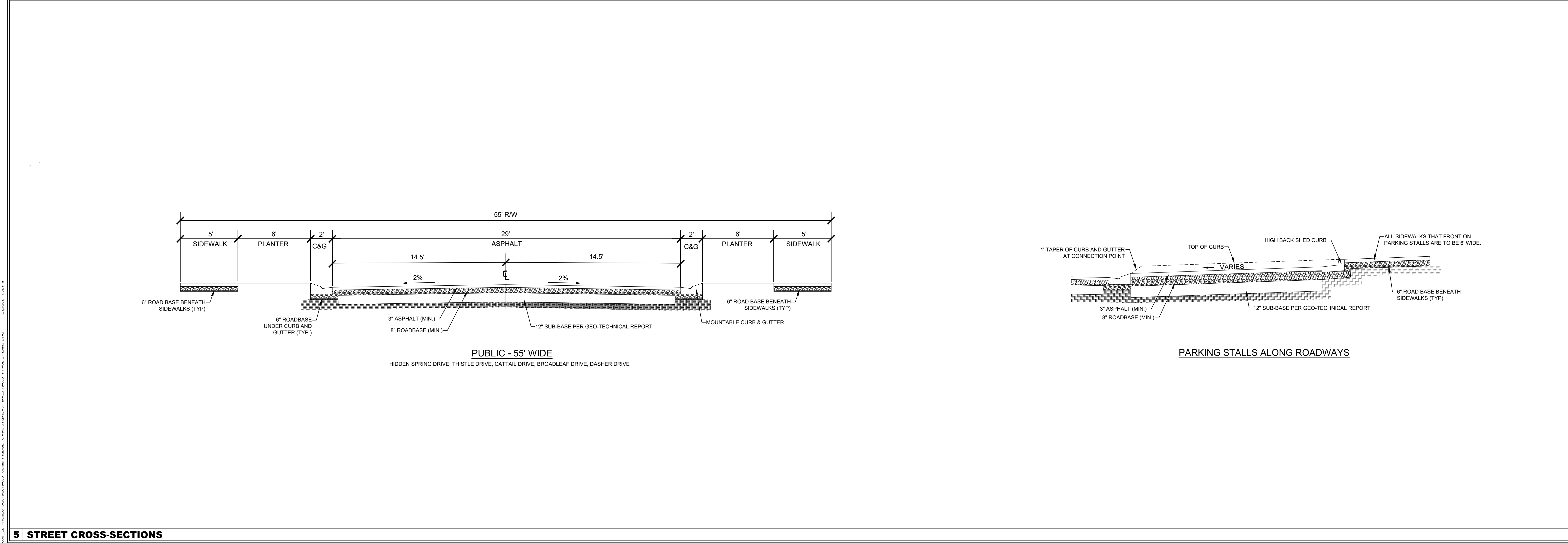
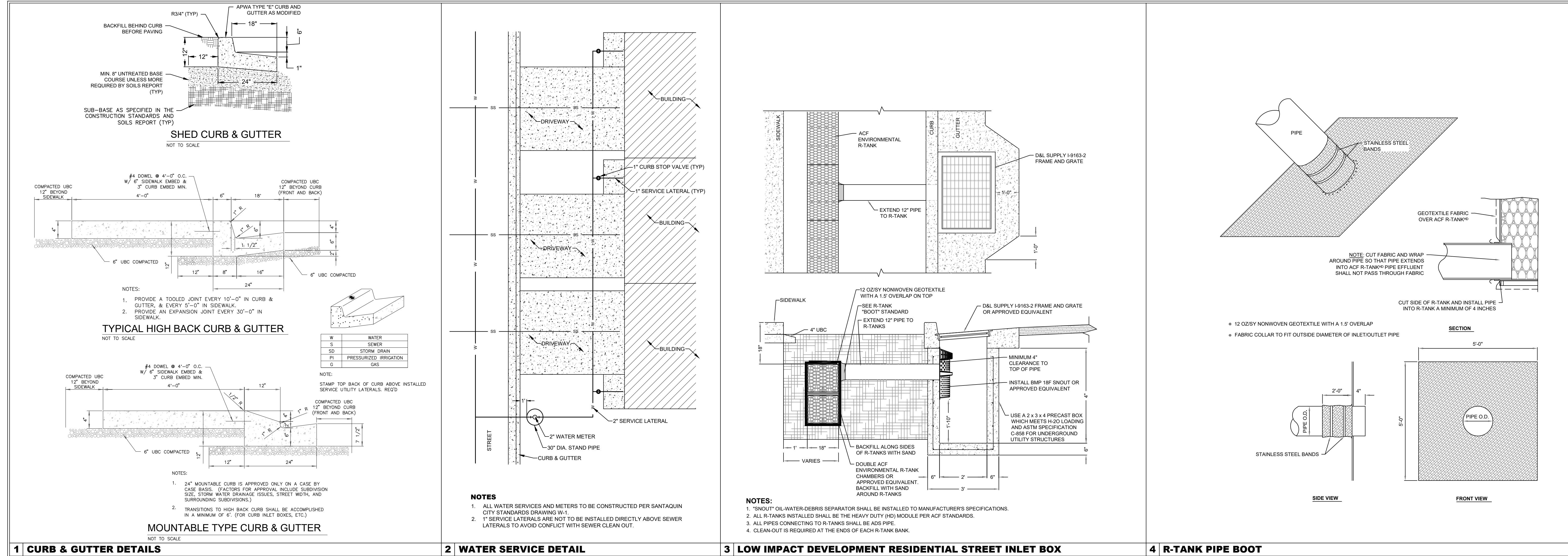
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SUMMIT RIDGE TOWNHOMES

SANTAQUIN, UTAH

IRRIGATION PLAN SPECIFICATIONS

- IRRIGATION SPECIFICATIONS
- PART 1 - GENERAL
- 1.1 SUMMARY
- Work to be done includes all labor, materials, equipment and services required to complete the Project irrigation system as indicated on the Construction Drawings, and as specified herein. Includes but is not limited to: Furnishing and installing underground and above ground sprinkler system complete with any accessories necessary for proper function and operation of the system. All plant material on the Project shall be irrigated. Remove and dispose of any existing sprinkler system components which are disturbed during the construction process and are not to be saved. Restoration of any altered or damaged existing landscape to original state and condition.
- 1.2 SYSTEM DESCRIPTION
- A.Design of irrigation components: Locations of irrigation components on Construction Drawings may be approximate. Piping, sleeving and/or other components shown on Construction drawings may be shown schematically for graphic clarity and demonstration of component groupings and separations. All irrigation components shall be placed in landscaped areas, with the exception of pipe and wire in sleeving under landscapes. Actual routing of pipe, wire or other components may be altered due to site conditions not accounted for in the design process.
- B.Construction requirements: Actual placement may vary as required to achieve a minimum of 100% coverage without overspray onto landscape, buildings or other features.
- C.Layout of Irrigation Components: During layout and staking, consult with Owner-Approved Representative (hereafter referred to as OAR) to verify proper placement of irrigation components, and to provide Contractor recommendations for changes where revisions may be advisable. Small or minor adjustments to system layout are permissible to avoid existing field obstructions such as utility boxes or street light poles. Contractor shall place remote control valves in groups as practical to economize on quantity of manifold isolation valves. Quick coupler valves shall be placed with manifold groups and protected by manifold isolation valves. Quick coupler valves are shown on Construction Documents in approximate locations.
- 1.3 DEFINITIONS
- A.Water Supply: Secondary water piping and components, furnished and installed by others to provide irrigation water to this Project, including but not limited to filter, saddles, nipples, spools, shut off valves, corporation stop valves, water meters, pressure regulation valves, and piping upstream of (or prior to) the Point of Connection.
- B.Point of Connection: Location where the Contractor shall tie into the water supply. May require filter, saddle, nipples, spools, isolation valves or Stop and Waste valve for landscape irrigation needs and use.
- C.Main Line Piping: Pressurized piping downstream of the Point of Connection to provide water to remote control valves and quick couplers. Normally under constant pressure.
- D. Lateral Line Piping: Circuit piping downstream of remote control valves to provide water to sprinkler heads, drip systems or bubblers.
- 1.4 REFERENCES
- A.The following standards will apply to the work of this Section:
- a. ASTM-American Society for Testing and Materials
 - b. IA - The Irrigation Association: Main BMP Document, Landscape Irrigation Scheduling and Water Management Document.
- 1.5 SUBMITTALS
- A.At least thirty (30) days prior to ordering of any materials, the Contractor shall provide manufacturer catalog cut sheet and current printed specifications for each element or component of the irrigation system. Submittals shall be in three ring binders or other similar bound form. Provide five copies of submittals to OAR for distribution. Place cover or index sheet indicating order in submittal document. No material shall be ordered, delivered or any work proceeded in the field until the required submittals have been reviewed in its entirety and stamped approved. Delivered material shall match the approved samples.
- B.Operation and Maintenance Manual:
- a. At least thirty (30) days prior to final inspection, the Contractor shall provide Operation and Maintenance manual to OAR, containing:
 - i. Manufacturer catalog cut sheet and current printed specifications for each element or component of the irrigation system.
 - ii. Parts list for each operating element of the system
 - iii. Manufacturer printed literature on operation and maintenance of operating elements of the system.
 - a.Section listing instructions for overall system operation and maintenance. Include directions for Spring Start-up and Winterization.
 - b. Project Record Copy
 - i. Maintain at project site one copy of all project documents clearly marked "Project Record Copy". Mark any deviation in material installation on Construction drawings. Maintain and update drawing at least weekly. Project Record Copy to be available to OAR on demand.
 - ii. Completed Project As-Built Drawings
1. Prior to final inspection, prepare and submit to OAR accurate as-built drawings
2. Show detail and dimension changes made during installation. Show significant details and dimensions that were not shown in original Contract Documents.
3. Field dimension locations of sleeving, points of connection, main line piping, wiring runs not contained in main line pipe trenches, valves and valve boxes, quick coupler valves.
4. Dimensions are to be taken from permanent constructed surfaces, features, or finished edges located at or above finished grade.
5. Controller Map: upon completion of system, place in each controller a color coded copy of the area that controller services: indicating zone number, type of plant material and location on project that zone services. Laminate map with heat shrink clear plastic.
- 1.6 QUALITY ASSURANCE
- A.Acceptance: Do not install work in this section prior to acceptance by OAR.
- B.Regulatory Requirements: All work and materials shall be according to any and all rules, regulations or codes, whether they are State or Local laws and ordinances. Contract documents, drawings or specifications may not be construed or interpreted to permit work or materials not conforming to the above codes.
- C.Adequate Water Supply: Water supply to this Project exists, installed by others. Connections to these supply lines shall be by this Contractor. Verify that proper connection is available to supply line and is of adequate size. Verify that secondary connection components may be installed if necessary. Perform static pressure test prior to commencement of work. Notify OAR in writing of problems encountered prior to proceeding.
- D. Workmanship and Materials:
- a. It is the intent of this specification that all material herein specified and shown on the construction documents shall be of the highest quality available and meeting the requirements specified.
 - b. All work shall be performed in accordance with the best standards of practice relating to the trade.
- E.Contractors Qualifications:
- a. Contractor shall provide document or resume including at least the following items:
 - i. That Contractor has been installing sprinklers on commercial projects for five previous consecutive years.
 - ii. Contractor is licensed to perform Landscape and Irrigation construction in the State of this Project.
 - iii. Contractor is bondable for the work to be performed.
 - iv. References of five projects of similar size and scope completed within the last five years. Three of the projects listed shall be local.
 - v. Listing of suppliers where materials will be obtained for use on this Project.
 - vi. Project site Foreman or Supervisor has at least five consecutive years of commercial irrigation installation experience. This person shall be a current Certified Irrigation Contractor in good standing as set forth by the Irrigation Association. This person shall be on Project site at least 75% of each working day.
 - vii. Evidence that Contractor currently employs workers in sufficient quantities to complete Project within time limits that are established by the Contract.
 - viii. All General laborers or workers on the Project shall be previously trained and familiar with sprinkler installation and have a minimum of one-year experience. Those workers performing tasks related to PVC pipe shall be certified and

- designed below.
- 1.7 DELIVERY-STORAGE-HANDLING
- A.During delivery, installation and storage of materials for Project, all materials shall be protected from contamination, damage, vandalism, and prolonged exposure to sunlight. All material stored at Project site shall be neatly organized in a compact arrangement and storage shall not disrupt Project Owner or other trades on Project site. All material to be installed shall be handled by Contractor with care to avoid breakage or damage. Damaged materials attributed to Contractor shall be replaced with new on Contractor's expense.
- 1.8 SEQUENCING
- A.Perform site survey, research utility records, contact utility location services. The Contractor shall familiarize himself with all hazards and utilities prior to work commencement. Install sleeving prior to installation of concrete, paving or other permanent site elements. Irrigation system Point of Connection components, backflow prevention and pressure regulation devices shall be installed and operational prior to all downstream components. All main lines shall be thoroughly flushed of all debris prior to installation of any sprinkler heads.
- 1.9 WARRANTY
- A. Contractor shall provide one year Warranty. Warranty shall cover all materials, workmanship and labor. Warranty shall include filling and/or repairing depressions or replacing turf or other plantings due to settlement of irrigation trenches or irrigation system elements. Valve boxes, sprinklers or other components settled from original finish grade shall be restored to proper grade. Irrigation system shall have been adjusted to provide proper, adequate coverage of irrigated areas.
- 1.10 OWNERS INSTRUCTION
- A. After system is installed, inspected, and approved, instruct Owner's Representatives in complete operation and maintenance procedures. Coordinate instruction with references to previously submitted Operation and Maintenance Manual.
- 1.11 MAINTENANCE
- A. Furnish the following items to Owner's Representative:
- a. Two quick coupler keys with hose swivels.
 - b. One of each type or size of quick coupler valve and remote control valve. Five percent of total quantities used of each sprinkler and sprinkler nozzle.
- B. Provide the following services:
- a. Winterize entire irrigation system installed under this contract. Winterize by "blow-out" method using compressed air. Compressor shall be capable of minimum of 175 CFM. This operation shall occur at the end of first growing season after need for plant irrigation but prior to freezing. Compressor shall be capable of evacuating system of all water pressure regulation devices. Compressor shall be regulated to not more than 60 PSI. Start up system the following spring 217 after danger of freezing has passed. Contractor shall train Owner's Representative in proper start-up and winterization procedure.

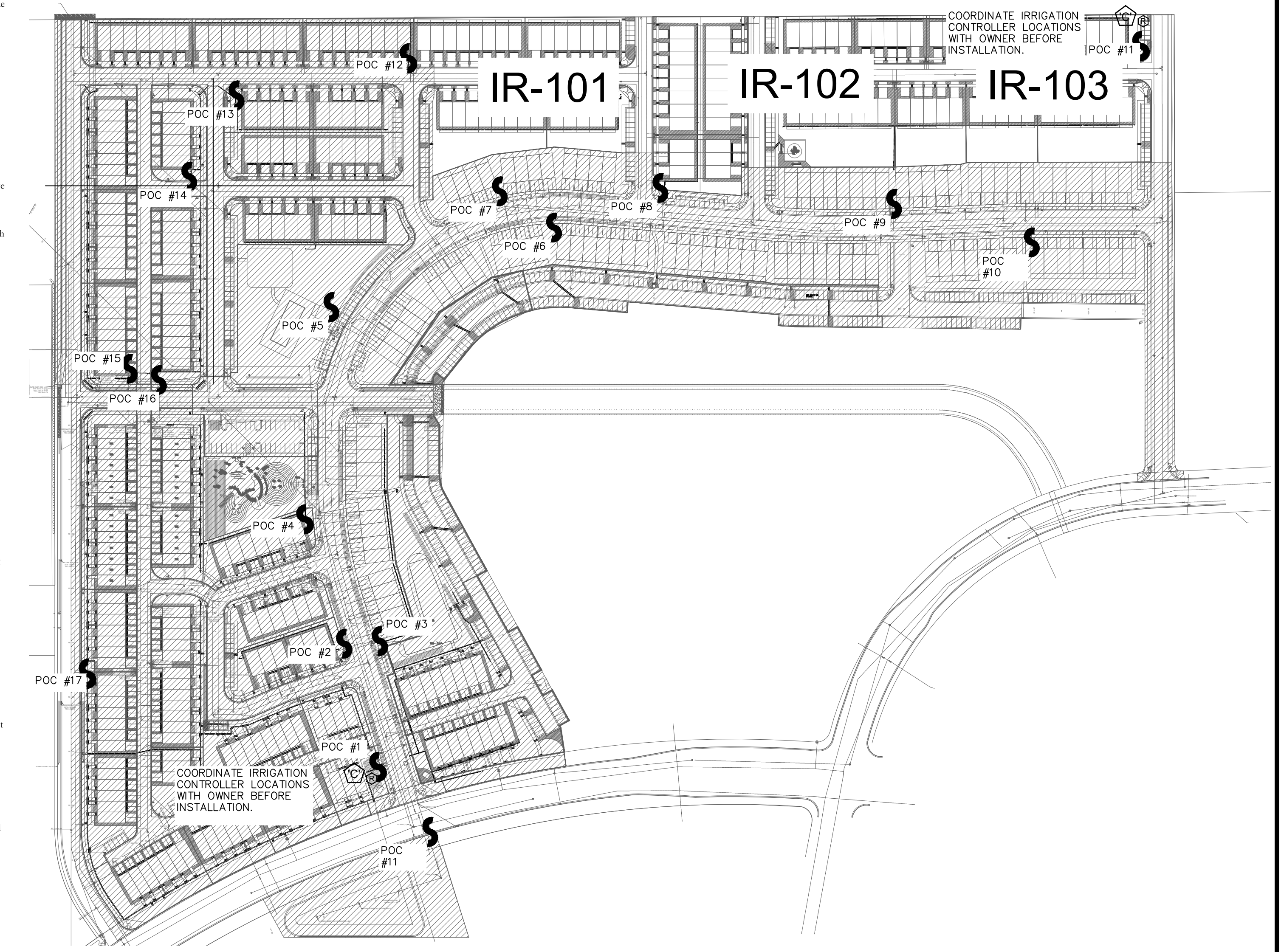
- PART 2 - PRODUCTS
- 2.1 GENERAL NOTES
- A. Contractor shall provide materials to be used on this Project. Contractor shall not remove any material purchased for this Project from the Project Site, nor mix Project materials with other Contractor owned materials. Owner retains right to purchase and provide project material.
- 2.2 POINT OF CONNECTION
- A. The Contractor shall connect onto existing irrigation or water main line as needed for Point(s) of Connection. Contractor shall install new main line as is indicated.
- 2.3 CONNECTION ASSEMBLY
- A. Secondary water shall be used on this Project. Install filter and RPZ as needed.
- 2.4 CONTROL SYSTEM
- A. Power supply to the irrigation controller shall be provided for by this Contract.
- B. Controller shall be as specified in the drawings. Controller shall be surge protected.
- a. Installation of wall-mount controllers: Irrigation contractor shall be responsible for this task. Power configuration for wall-mount controllers shall be 120 VAC unless otherwise noted.
 - b. Locate Controller(s) in general location shown on Construction drawings. Coordinate power supply and breaker allocation with electrical contractor. Contractor shall be responsible for all power connections to Controllers, whether they are wall mount or pedestal mount. Contractor shall coordinate with electrical or other Project trades as needed to facilitate installation of power to controllers.
- C. Wires connecting the remote control valves to the irrigation controller are single conductors, type PE. Wire construction shall incorporate a solid copper conductor and polyethylene (PE) insulation with a minimum thickness of 0.045 inches. The wires shall be UL listed for direct burial in irrigation systems and be rated at a minimum of 30 VAC. Paige Electric Co., LP specification number P7070D.
- a. A minimum of 24" of additional wire shall be left at each valve, each splice box and at each controller.
 - b. Common wire shall be white in color, 12 gauge. Control wire shall be red in color, 14 gauge. Spare wire shall be looped within each valve box of the grouping it is to service.
- D. RCV wire splicing connectors shall be 3M brand DBV or DBR. Wire splicing between controllers and valves shall be avoided if at all possible. Any wire splices shall be contained within a valve box. Splices within a valve box that contains no control valves shall be stamped "WIRE SPLICE" or "WS" on box lid.
- 2.5 SLEEVING
- A. Contractor shall be responsible to protect existing underground utilities and components. Sleeving minimum size shall be 2". Sleeving 2" through 4" in size shall be S/40 PVC solvent weld. Sleeving 6" and larger shall be GL 200 PVC gasketed. Sleeve diameter shall be at least two times the diameter of the pipe within the sleeve. Sleeves shall be extended 6" minimum beyond walk or edge of pavement. Wire or cable shall not be installed in the same sleeve as piping, but shall be installed in separate sleeves. Sleeve ends on sleeve sizes 4" and larger shall be capped with integral corresponding sized PVC slip cap, pressure fit, until used, to prevent contamination. Sleeves shall be installed at appropriate depths for main line pipe or lateral pipe.
- 2.6 MAIN LINE PIPE
- A. All main line pipe 4" and larger shall be Class 200 gasketed bell end. All main line pipe 3" in size and smaller shall be Schedule 40 PVC solvent weld bell end.
- a. Maximum flows allowed through main line pipe shall be:
 - 3/4" 8 GPM
 - 1" 12 GPM
 - 1-1/2" 30 GPM
 - 2" 53 GPM
 - 2-1/2" 75 GPM
 - 3" 110 GPM
 - 4" 180 GPM
 - b. Main line pipe shall be buried with 24" cover
- 2.7 MAIN LINE FITTINGS
- A. All main line fittings 3" and larger shall be gasketed ductile iron material. All ductile iron fittings having change of direction shall have proper concrete thrust block installed. All main line fittings smaller than 3" in size shall be Schedule 80 PVC.
- 2.8 ISOLATION VALVES
- A. Isolation valves 3" and larger shall be Waterloo brand model 2500 cast iron gate valve, resilient wedge, push on type, with 2" square operating nut. Place sleeve of 6" or larger pipe over top of valve vertically and then extend to grade. Place 10" round valve box over sleeve at grade.
- B. Isolation valves 2-1/2" and smaller shall be Apollo brand 70 series brass ball valves, contained in a Carson Standard size valve box. Valve box shall be installed with S/80 PVC TOE. Nipples on both sides of the valve. Valve shall be placed so that the handle is vertical toward the top of the valve box in the "off" position.
- 2.9 MANIFOLDS
- A. Action Manifold fittings shall be used to create unions on both sides of each control valve, allowing the valve to be removed from the manifold without cutting piping. Valves shall be located in boxes with ample space surrounding them to allow access for

- maintenance and repair. Where practical, group remote control valves in close proximity, and protect each grouping with a manifold isolation valve as shown in details. Manifold Main Line (or Sub-Main Line) and all manifold components and isolation valves shall be at least as large as the largest diameter lateral served by the respective manifold.
- 2.10 REMOTE CONTROL VALVES
- A. Remote control valves shall be as specified on the drawings. Remote control valves shall be located separately and individually in separate control boxes.
- 2.11 MANUAL CONTROL VALVES
- A. Quick coupler valve shall be attached to the manifold sub-main line using a Lasco G17S212 swing joint assembly with snap-lock outlet and brass stabilizer elbow. Quick coupler valve shall be placed within a Carson 10" round valve box. Top of quick coupler valve cover shall allow for complete installation of valve box lid, but also allow for insertion and operation of key. Base of quick coupler valve and top of quick coupler swing joint shall be covered in 3/2" gravel. Contractor shall not place quick coupler valves further than 200 feet apart, to allow for spot watering or supplemental irrigation of new plant material. Quick coupler valve at POC shall not be eliminated or relocated.
- 2.12 LATERAL LINE PIPE
- A. All lateral piping shall be Schedule 40 PVC, solvent weld, and bell end. Lateral pipe shall be buried with 12-18" of cover typically. Lateral pipe shall be 3/2", 1", 1 1/4", 1 1/2" or 2" in size as indicated on Construction Drawings.
- 2.13 LATERAL LINE FITTINGS
- A. All lateral line fittings shall be S/40 PVC
- 2.14 Spray Sprinklers
- A. Spray head sprinklers shall be as specified on the drawings. Nozzles shall be as specified on the drawings.
- 2.15 VALVE BOXES
- A. Carson valve boxes shall be used on this project. Sizes are as directed in these Specifications, detail sheets or plan sheets. Valve boxes shall be centered over the control valve or element they control. Valve box shall be sized large enough to allow ample room for services access, removal or replacement of valve or element. Valve box shall be set to flush to finish grade of topsoil or barfed areas. Contractor shall provide extensions or stack additional valve boxes as necessary to bring valve box top to proper grade.
- 2.16 IMPORT BACKFILL
- A. All main line pipe, lateral line pipe and other irrigation elements shall be bedded and backfilled with clean soil, free of rocks 1" and larger. Contractor shall furnish and install additional backfill material as necessary due to rocky conditions. Trenches and other elements shall be compacted and/or water settled to eliminate settling. Debris from trenching operations un-usable for fill shall be removed from project and disposed of properly by Contractor.
- 2.17 OTHER PRODUCTS
- A. Substitution of equivalent products is subject to the OAR's approval and must be designated as accepted in writing.
- a. The Contractor shall provide materials to make the system complete and operational.




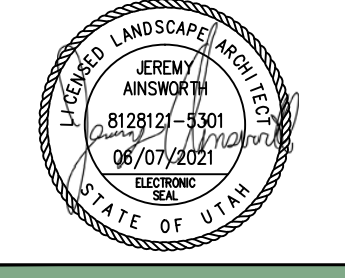

- PART 3 - EXECUTION
- 3.1 PREPARATION
- A. Contractor shall repair or replace work damaged by irrigation system installation. If damaged work is new, repair or replacement shall be performed by the original installer of that work. The existing landscape of this Project shall remain in place. Contractor shall protect and work around existing plant material. Coordination of trench and valve locations shall be laid out for the OAR prior to any excavation occurring. Plant material deemed damaged by the OAR shall be replaced with new plant material at Contractor's expense. Contractor shall not cut existing tree roots larger than 2" to install this Project. Route pipe, wire and irrigation elements around tree canopy drip line to minimize damage to tree roots. Contractor shall have no part of existing system used by other portions of site landscape without water for more than 24 hours at a time.
- 3.2 TRENCHING AND BACKFILLING
- A. Pulling of pipe shall not be permitted on this project. Over excavate trenches both in width and depth. Ensure base of trench is rock or debris free to protect pipe and wire. Grade trench base to ensure flat, even support of piping. Backfill with clean soil or import material. Contractor shall backfill no less than 2" around entire pipe with clean, rock free fill. Main line piping and fittings shall not be backfilled until OAR has inspected and pipe has passed pressure testing. Perform balance of backfill operation to eliminate any settling.
- 3.3 SLEEVING
- A. Sleeve all piping and wiring that pass under paving or landscape features. Wiring shall be placed in separate sleeving from piping. Sleeves shall be positioned relative to structures or obstructions to allow for pipe or wire within to be removed if necessary.
- 3.4 GRADES AND DRAINAGE
- A. Place irrigation pipe and other elements at uniform grades. Winterization shall be by evacuation with compressed air. Automatic drains shall not be installed on this Project. Manual drains shall only be installed at POC where designated on Construction Drawings.
- 3.5 PVC PIPE
- A. Install pipe to allow for expansion and contraction as recommended by pipe manufacturer.
- B. Install main line pipes with 18" of cover, lateral line pipes with 12" of cover.
- C. Drawings show diagrammatic or conceptual location of piping - Contractor shall install piping to minimize change of direction, avoid placement under large trees or large shrubs, avoid placement under landscape features.
- D. Plastic pipe shall be cut squarely. Burrs shall be removed. Spigot ends of pipes 3" and larger shall be beveled.
- E. Pipe shall not be glued unless ambient temperature is at least 50 degrees F. Pipe shall not be glued in rainy conditions unless properly tented. All solvent weld joints shall be assembled using IPS 711 glue and P70 primer according to manufacturer's specification, no exceptions. All workers performing glue operations shall provide evidence of certification. Glued main line pipe shall cure a minimum of 24 hours prior to being energized. Lateral lines shall cure a minimum of 2 hours prior to being energized and shall not remain under constant pressure unless cured for 24 hours.
- F. Appropriate thrust blocking shall be performed on fittings 3" and larger. All threaded joints shall be wrapped with Teflon tape or paste unless directed by product manufacturer or sealing by o-ring.
- 3.6 CONTROLLERS
- A. All grounding for pedestal controllers shall be as directed by controller manufacturer and ASIC guidelines, not to exceed a resistance reading of 5 OHMS.
- B. Locate controllers in protected, inconspicuous places, when possible. Coordinate location of pedestal controllers with Landscape Architect to minimize visibility.
- C. Coordinate location of wall mount controllers with building or electrical Contractor to facilitate electrical service and future maintenance needs. Wall mount shall be securely fastened to surface. If exterior mounted, wall mount controllers shall have electrical service wire and field control wire in separate, appropriate sized weatherproof electrical conduit. PVC pipe shall not be used.
- D. Wiring under landscape surfaces shall be placed continuously in conduit. Contractor shall be responsible to coordinate sleeving needs for conduit or sweeps elbows from exterior to interior of building.
- E. Pedestal controllers shall be placed upon VIT-Strong Box Quick Pad as per manufacturer's recommendations. Controllers shall be oriented such that Owner's Representative maintenance personnel may access easily and perform field system tests efficiently.
- F. Place Standard valve box at base of controller or nearby to allow for three to five feet of slack field control wire to be placed at each controller. This Contractor shall provide conduit access if needed for Electrical Contractor. Electrical supply and installation, as well as hook-up to controller shall be by this Contractor.
- 3.7 VALVES
- A. Isolation valves, remote control valves, and quick coupler valves shall be installed according to manufacturer recommendation and Contract Specifications and Details.
- B. Valve boxes shall be set over valves so that all parts of the valve can be reached for service.
- C. Valve box and lid shall be set to be flush with finished grade. Only one remote control valve may be installed in a Carson 1419124 box. Place a minimum of 4" of 3/4" washed gravel beneath valve box for drainage. Bottom of remote control valve shall be a minimum of 2" above gravel.
- 3.8 SPRINKLER HEADS
- A. No sprinkler shall be located closer than 6" to walls, fences, or buildings.
- B. Heads adjacent to walks, curbs, or paths shall be located at grade and 2" away from hardscape.

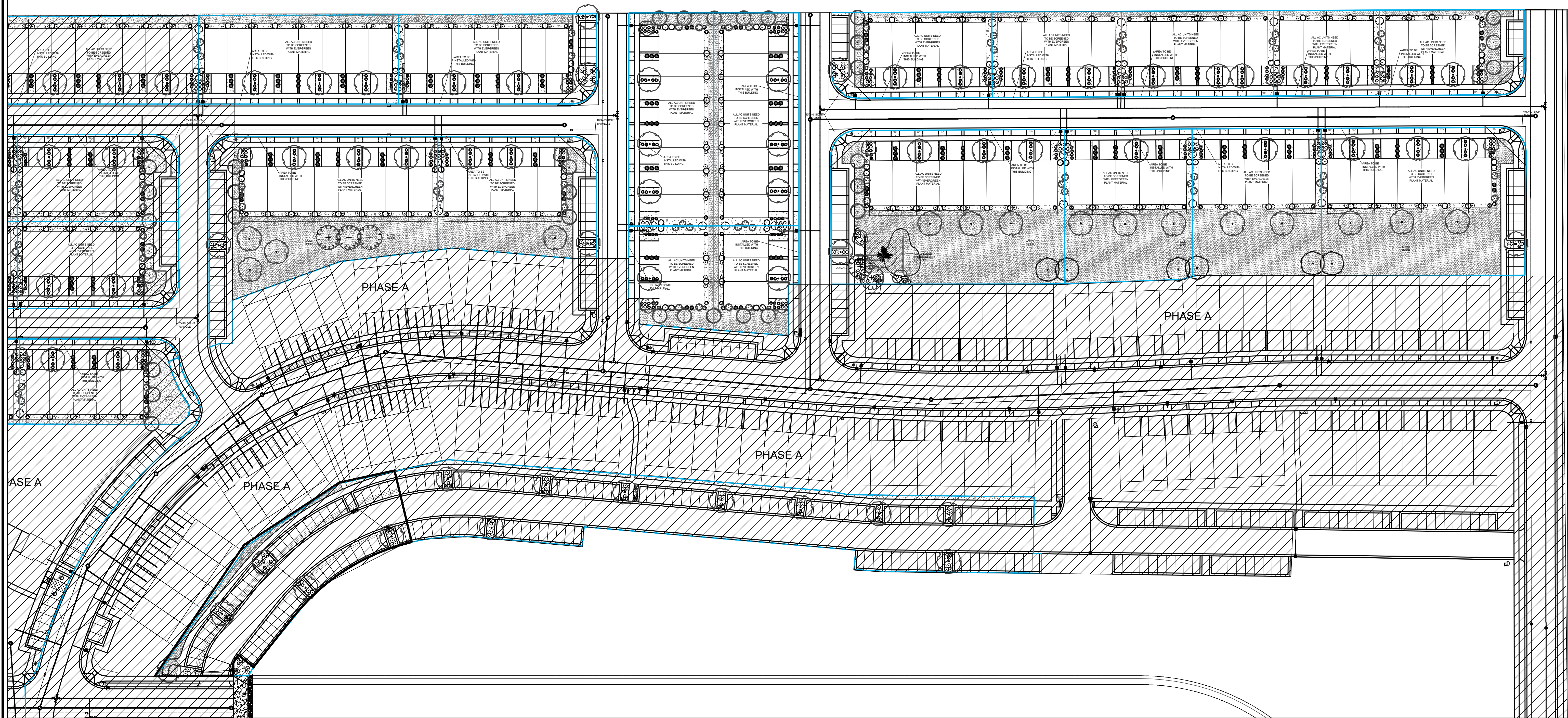
- C. Control valves shall be opened. Then fully flush lateral line pipe and swing joints prior to installation of sprinklers.
- D. Spray heads shall be installed and flushed again prior to installation of nozzles.
- E. Contractor shall be responsible for adjustment if necessary due to grade changes during landscape construction.
- 3.9 FIELD QUALITY CONTROL
- A. Main line pipes shall not be backfilled or accepted until the system has been tested for 2 hours at 100 psi.
- B. Main line pressure test shall include all pipe and components from the point of connection to the upstream side of remote control valves. Test shall include all manifold components under constant pressure. Piping may be tested in sections that can be isolated.
- C. Contractor shall provide pressurized water pump to increase or boost pressure where existing static pressure is less than 100 psi.
- D. Schedule testing with OAR 48 hours in advance for approval.
- E. Leaks or defects shall promptly be repaired or rectified at the Contractors expense and retested until able to pass testing.
- F. Grounding resistance at pedestal controller shall also be tested and shall not exceed 5 OHMS.
- 3.10 ADJUSTMENT
- A. Sprinkler heads shall be adjusted to proper height when installed. Changes in grade or adjustment of head height after installation shall be considered a part of the original contract and at Contractor's expense.
- B. Adjust all sprinkler heads for are, radius, proper trim and distribution to cover all landscaped areas that are to be irrigated.
- C. Adjust sprinklers so they do not water buildings, structures, or other landscape features.
- D. Adjust run times of station to meet needs of plant material the station services.
- 3.11 CLEANING
- A. Contractor shall be responsible for cleanliness of jobsite. Work areas shall be swept cleanly and picked up daily.
- B. Open trenches or hazards shall be protected with yellow caution tape.
- C. Contractor is responsible for removal and disposal of offsite trash and debris generated as a result of this Project.
- D. OAR shall perform periodic as well as a final cleanliness inspection.
- E. Contractor shall leave Project in at least a "broom clean" condition.



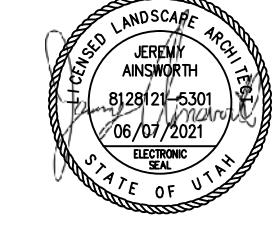
END OF SECTION



2" MAINLINE ROUTING ,CONTROLLER AND P.O.C. LOCATION OVERVIEW

ISSUE DATE			PROJECT NUMBER			PLAN INFORMATION			PROJECT INFORMATION			DEVELOPER / PROPERTY OWNER / CLIENT			LANDSCAPE ARCHITECT / PLANNER			LICENSE STAMP			DRAWING INFO		
6/7/2021			UT20053			 BLUE STAKES OF UTAH UTILITY NOTIFICATION CENTER, INC. 1-800-662-4111 www.bluestakes.org						Developer / Property Owner: D.R.HORTON			 PKJ DESIGN GROUP Landscape Architecture • Planning & Visualization 3450 N. TRIUMPH BLVD. SUITE 102 LEHI, UTAH 84043 (801) 960-2698 www.pkjdesigngroup.com						PLOT: KBA DRAWN: KBA CHECKED: JTA PLOT DATE: 6/7/2021		
NO.	REVISION	DATE	0' 75' 150' 300' 600'			GRAPHIC SCALE: 1" = 150'						Building Architect / Engineer:  LEI ENGINEERS SURVEYORS PLANNERS			LEI-ENGINEERING 3302 N. Main Street Spanish Fork, Ut. 84660 801-798-0555 ext. 226 www.lei-eng.com								
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ISSUE DATE			PROJECT NUMBER			PLAN INFORMATION			PROJECT INFORMATION			DEVELOPER / PROPERTY OWNER / CLIENT			LANDSCAPE ARCHITECT / PLANNER			LICENSE STAMP			DRAWING INFO		
06-07-2021			UT20053			<div>811 BLUE STAKES OF UTAH UTILITY NOTIFICATION CENTER, INC 1-800-662-4111 www.bluestakes.org</div> <div> 0' 25' 50' 100' 200' GRAPHIC SCALE: 1" = 50'</div>			<div>SUMMIT RIDGE TOWNHOMES</div> <div>PHASE D</div> <div>SANTAQUIN, UTAH</div>			<div>Developer / Property Owner:</div> <div>D.R.HORTON</div> <div>Client / Engineer:</div> <div>LEI-ENGINEERING 3302 N. Main Street Spanish Fork, Ut. 84660 801-798-0555 ext. 226 www.lei-eng.com</div>			<div>LANDSCAPE ARCHITECT / PLANNER</div> <div> DESIGN GROUP Landscape Architecture • Planning • Visualization 3450 N. TRIUMPH BLVD. SUITE 102 LEHI, UTAH 84043 (801) 960-2698 www.pkjdesigngroup.com</div>			<div> LANDSCAPE PLAN</div>			<div>PM: JTA</div> <div>DRAWN: KBA</div> <div>CHECKED: TM</div> <div>PLOT DATE: 6/7/2021</div>		

PART I - GENERAL

1.1 SUMMARY

A. This section includes landscape procedures for the Project including all labor, materials, and installation necessary, but not limited to, the following:

- Site Conditions
- Guarantees
- Maintenance
- Soil Amendments
- Fine Grading
- Landscape Edging
- Furnish and Installing Plant
- Turf Planting
- Weed Barrier

1.2 SITE CONDITIONS

A. Examination: Before submitting a Bid, each Contractor shall carefully examine the Contract Documents; shall visit the site of the Work; shall fully inform themselves as to all existing conditions and limitations; and shall include in the Bid the cost of all items required by the Contract Documents are at a variance with the applicable laws, building codes, rules, regulations, or contain obvious erroneous or uncoordinated information, the Contractor shall promptly notify the Project Representative and the necessary changes shall be accomplished by Addendum.

B. Protection: Contractor to conduct the Work in such a manner to protect all existing underground utilities or structures. Contractor to repair or replace any damaged utility or structure using identical materials to match existing at no expense to the Owner.

C. Irrigation System: Do not begin planting until the irrigation system is completely installed, is adjusted for full coverage and is completely operational.

1.3 PERMITS

A. Blue Stake / Dig Line: When digging is required, "Blue Stake" or "Dig Line" the work site and identify the approximate location of all known underground utilities or structures.

1.4 PLANT DELIVERY, QUALITY, AND AVAILABILITY

A. Unauthorized substitutions will not be accepted. If proof is submitted that specific plants or plant sizes are unobtainable, written substitution requests will be considered for the nearest equivalent plant or size. All substitution requests must be made in writing and preferably before the bid due date.

1.5 FINAL INSPECTION

A. All plants will be inspected at the time of Final Inspection prior to receiving a Landscape Substantial Completion for conformance to specified planting procedures, and for general appearance and vitality. Any plant not approved by the Project Representative will be rejected and replaced immediately.

1.6 LANDSCAPE SUBSTANTIAL COMPLETION

A. A Substantial Completion Certificate will only be issued by the Project Representative for "landscape and irrigation" in their entirety. Substantial Completion will not be proportioned to be designated areas of a project.

1.7 MAINTENANCE

A. Plant Material: The Contractor is responsible to maintain all planted materials in a healthy and growing condition for 30 days after receiving a Landscape Substantial Completion at which time the Guarantee period commences. This maintenance is to include mowing, weeding, cultivating, fertilizing, monitoring water schedules, controlling insects and diseases, re-guying and staking, and all other operations of care necessary for the promotion of root growth and plant life so that all plants are in a condition satisfactory at the end of the guarantee period. The Contractor shall be held responsible for failure to monitor watering operations and shall replace any and all plant material that is lost due to improper application of water.

1.8 GUARANTEE

A. Guarantee: A guarantee period of one year shall begin from end of maintenance period and final acceptance for trees, shrubs, and ground covers. All plants shall grow and be healthy for the guarantee period and trees shall live and grow in acceptable upright position. Any plant not alive, in poor health, or in poor condition at the end of the guarantee period will be replaced immediately. Any plant will only need to be replaced once during the guarantee period. Contractor to provide documentation showing where each plant to be replaced is located. Any outside factors, such as vandalism or lack of maintenance on the part of the Owner, shall not be part of the guarantee.

PART II - PRODUCTS

2.1 LANDSCAPE MATERIALS

A. Tree Staking: All trees shall be staked for one year warranty period. All trees not plumb shall be replaced. Staked trees shall use vinyl tree ties and tree stakes two (2) inch by two (2) by eight (8) foot common pine stakes used as shown on the details.

B. Tree Wrap: Tree wrap is not to be used.

C. Mulch/Rock: See Plans. All planter beds to receive a minimum 3" layer for trees, shrubs, and perennials and 1" for groundcovers.

D. Weed Barrier: DeWit 5 oz. weed barrier fabric. Manufactured by DeWit Company, dewitcompany.com or approved equal.

E. Tree, Shrub, and Grass Backfill Mixture: Backfill mixture to be 75% native soil and 25% topsoil, thoroughly mixed together prior to placement.

F. Topsoil: Required for turf areas, planter beds and Backfill Mixture. Acceptable topsoil shall meet the following standards:

- pH: 5.5-7.5
- EC (electrical conductivity): < 2.0 mmhos per centimeter
- SAR (sodium absorption ratio): < 3.0
- % OM (percent organic matter): >1%
- Texture (particle size per USDA soil classification): Sand <70%; Clay < 30%; Silt < 70%; Stone fragments (gravel or any soil particle greater than two (2) mm in size) < 5% by volume.

G. Turf Sod: All sod shall be 18 month old as specified on plans (or approved equal) that has been cut fresh the morning of installation. Only sod that has been grown on a commercial soil farm shall be used. Only use sod from a single source.

H. Landscape Curb Edging: six (6) inches by four (4) inches extruded concrete curb made up of the following materials:

- Washed mortar sand free of organic material.
- Portland Cement (see concrete spec. below for type)
- Reinforced fiber - Specifically produced for compatibility with aggressive alkaline environment of Portland cement-based composites.
- Only potable water for mixing.

I. Landscape Metal Edging: 5.5" steel edging with 18" dowels into the ground for stabilization.

PART III - EXECUTION

3.1 GRADING

A. Topsoil Preparation: Grade planting areas according to the grading plan. Eliminate uneven areas and low spots. Provide for proper grading and drainage.

B. Topsoil Placement: Slope surfaced away from building at two (2) percent slope with no pockets of standing water. Establish finish grades of one (1) inches for planters below grade of adjacent paved surfaced. Provide neat, smooth, and uniform finish grades. Remove surplus sub-soil and topsoil from the site.

C. Compaction: compaction under hard surface areas (asphalt paths and concrete surfaces) shall be ninety-five (95) percent. Compaction under planting areas shall be between eighty-five (85) and ninety (90) percent.

3.2 TURF GRADING

A. The surface on which the sod is to be laid shall be firm and free from footprints, depressions, or undulations of any kind. The surface shall be free of all materials larger than 1/2" in diameter.

B. The finish grade of the topsoil adjacent to all sidewalks, mow-strips, etc. prior to the laying of sod, shall be set such that the crown of the grass shall be at the same level as the adjacent concrete or hard surface. No exceptions.

3.3 PLANTING OPERATIONS

A. Review the exact locations of all trees and shrubs with the Project Representative for approval prior to the digging of any holes. Prepare all holes according to the details on the drawings.

B. Water plants immediately upon arrival at the site. Maintain in moist condition until planted.

C. Before planting, locate all underground utilities prior to digging. Do not place plants on or near utility lines.

D. The tree planting hole should be the same depth as the root ball, and two times the diameter of the root ball.

E. Trees must be placed on undisturbed soil at the bottom of the planting hole.

F. The tree hole depth shall be determined so that the tree may be set slightly high of finish grade, 1" to 2" above the base of the trunk flare, using the top of the root ball as a guide.

G. Plant immediately after removal of container for container plants.

H. Set tree on soil and remove all burlap, wire baskets, twine, wrappings, etc. before beginning and backfilling operations. Do not use planting stock if the ball is cracked or broken before or during planting operation.

I. Apply vitamin B-1 root stimulator at the rate of one (1) tablespoon per gallon.

J. Upon completion of backfilling operation, thoroughly water tree to completely settle the soil and fill any voids that may have occurred. Use a watering hose, not the area irrigation system. If additional prepared topsoil mixture needs to be added. It should be a coarser mix as required to establish finish grade as indicated on the drawings.

K. The amount of pruning shall be limited to the minimum necessary to remove dead or injured twigs and branches. All cuts, scars, and bruises shall be properly treated according to the direction of the Project Representative. Proper pruning techniques shall be used. Do not leave stubs and do not cut the leader branch. Improper pruning shall be cause for rejection of the plant material.

L. Prepare a watering circle of 2' diameter around the trunk. For conifers, extend the watering well to the drip line of the tree canopy. Place mulch around the planted trees.

4. TURF - SOD LAYING

A. Top Soil Amendments: Prior to laying sod, commercial fertilizer shall be applied and incorporated into the upper four (4) inches of the topsoil at a rate of four pounds of nitrogen per one thousand (1,000) square feet. Adjust fertilization mixture and rate of application as needed to meet recommendations given by topsoil analysis.

B. Fertilization: Three weeks after sod placement fertilize the turf at a rate of ½ pound of nitrogen per 1000 square feet. Use fertilizer specified above. Adjust fertilization mixture and rates to meet recommendations given by topsoil analysis.

C. Sod Availability and Condition: Sod is to be delivered to the site in good condition. It is to be inspected upon arrival and installed within 24 hours. Sod is to be moist and cool to ensure that decomposition has not begun and is to be free of pests, diseases, or blight. The Contractor shall satisfy himself as to the existing conditions prior to any construction. The Contractor shall be fully responsible for furnishing and laying all sod required on the plans. He shall furnish new sod as specified above and lay it so as to completely satisfy the intent and meaning of the plans and specification at no extra cost to the owner. In the case of any discrepancy in the amount of sod to be removed or amount to be used, it shall be the Contractor's responsibility to report such to the Project Representative prior to commencing the work.

D. Sod Laying: The surface upon which the new sod to be laid will be prepared as specified in the detail and be lightly watered before laying. Areas where sod is to be laid shall be cut trimmed, or shaped to receive full width sod (minimum twelve (12) inches). No partial strip or pieces will be accepted.

E. Sod shall be tamped lightly as each piece is set to ensure that good contact is made between edges and also the ground. If voids or holes are discovered, the sod piece(s) is (are) to be raised and topsoil is to be used to fill in the areas until level. Sod laid on any sloped areas shall be anchored with wooden dowels or other materials which are accepted by the grass sod industry.

F. Sod shall be rolled with a roller that is at least 50% full immediately after installation to ensure the full contact with soil is made.

G. Apply water directly after laying sod. Rainfall is not acceptable.

H. Watering of the sod shall be the complete responsibility of the Contractor by whatever means necessary to establish the sod in an acceptable manner to the end of the Maintenance period. If an irrigation system is in place on the site, but for whatever reason, water is not available in the system. It is the responsibility of the Contractor to water the sod by whatever means, until the sod is accepted by the Project Representative.

I. Protection of the newly laid sod shall be the complete responsibility of the Contractor. The Contractor shall provide acceptable visual barriers, to include barricades set appropriate distances with string or tapes between barriers, as an indication of new work. The Contractor is to restore any damaged areas caused by others (including vehicular traffic), erosion, etc, until such time as the lawn is accepted by the Owner.

J. All sod that has not been laid within 24 hours shall be deemed unacceptable and will be removed from the site.

3.5 WEED BARRIER

A. For the health of the soil and the microorganisms, weed barrier is not recommended. If use is required or requested, do not place in annual or grass areas.

B. Cut weed barrier back to the edge of the plant rootball.

C. Overlap rows of fabric min. 6"

D. Stable fabric edges and overlaps to ground.

END OF SECTION

LANDSCAPE NOTES

INSTALLATION

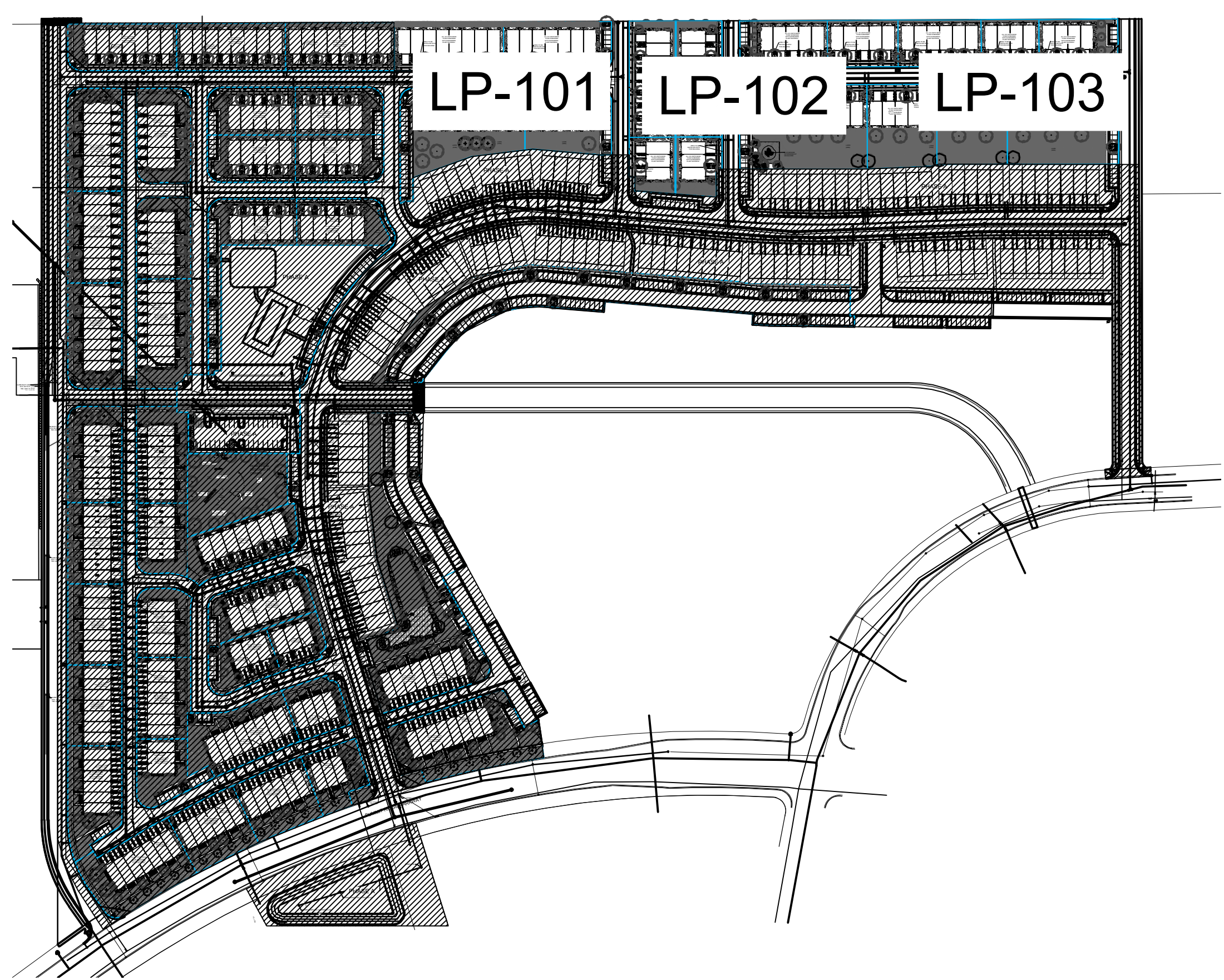
- LANDSCAPE CONTRACTOR SHALL HAVE ALL UTILITIES BLUE STAKED PRIOR TO DIGGING. ANY DAMAGE TO UTILITIES SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE WITH NO ADDITIONAL COST TO THE OWNER.
- DURING THE BIDDING AND INSTALLATION PROCESS, THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES OF ALL MATERIALS. IF DISCREPANCIES EXIST, THE PLAN SHALL DICTATE QUANTITIES TO BE USED.
- ALL PLANT MATERIAL SHALL BE PLANTED ACCORDING TO INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA) STANDARDS WITH CONSIDERATION TO INDIVIDUAL SOIL AND SITE CONDITIONS, AND NURSERY CARE AND INSTALLATION INSTRUCTIONS.
- SELECTED PLANTS WILL BE ACCORDING TO THE PLANT LEGEND. IF SUBSTITUTIONS ARE NECESSARY, PROPOSED LANDSCAPE CHANGES MUST BE SUBMITTED TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO LAYING SOD.
- SHOULD THE SITE REQUIRE ADDITIONAL TOPSOIL, REFER TO SOIL TEST WHEN MATCHING EXISTING SOIL. IF A MATCHING SOIL IS NOT LOCATABLE, A 6" DEPTH OF SANDY LOAM TOPSOIL (MIXED PRIOR TO SPREADING WITH 2-3" OF QUALITY COMPOST) CAN BE INCORPORATED INTO THE EXISTING SOIL USING THE FOLLOWING DIRECTIONS: SCARIFY TOP 6" OF EXISTING SUBSOIL AND INCORPORATE 3" OF NEW COMPOST ENRICHED TOPSOIL. SPREAD REMAINING TOPSOIL TO REACH FINISHED GRADE.
- SOD FOR NEW LAWN AREAS SHALL BE A DROUGHT TOLERANT VARIETY. FINE LEVEL ALL AREAS PRIOR TO LAYING SOD.
- EDGING, AS INDICATED ON PLAN, IS TO BE INSTALLED BETWEEN ALL LAWN AND PLANTER AREAS. ANY TREES LOCATED IN LAWN MUST HAVE A 4-6' TREE RING OF THE SAME EDGING.
- IF REQUIRED BY CITY OR OWNER SPECIFIED, DeWit 5 OZ WEED BARRIER FABRIC TO BE INSTALLED IN ALL PLANTER AREAS EXCEPT UNDER ANNUAL PLANTING AREAS AS SHOWN ON PLAN. WEED BARRIER SHALL BE CUT BACK FROM EACH PLANT TO THE DIAMETER OF THE ROOTBALL.
- ROCK MULCH (INORGANIC MULCH) TO BE APPLIED AT THE FOLLOWING DEPTHS: 3" IN ALL TREE, SHRUB, AND PERENNIAL PLANTER AREAS; ANNUAL PLANTING AREAS AS SHOWN ON PLAN TO RECEIVE 4" OF SOIL AID MATERIAL (ORGANIC MULCH). NO MULCH SHALL BE PLACED WITHIN 12" OF BASE OF TREE AND 6" WITHIN BASE OF SHRUBS AND PERENNIALS.
- A NEW UNDERGROUND, AUTOMATIC IRRIGATION SYSTEM IS TO BE INSTALLED BY CONTRACTOR IN ALL LANDSCAPED AREAS. LAWN AREAS TO RECEIVE AT LEAST 100% HEAD TO HEAD COVERAGE AND PLANTER AREAS TO RECEIVE A FULL DRIP SYSTEM TO EACH TREE AND SHRUB. POINT SOURCE DRIP OR IN-LINE DRIP TUBING TO BE SECURED AT EDGE OF ROOTBALL, NOT AGAINST TRUNK. SEE IRRIGATION PLAN.
- UPON REQUEST, A PLANT GUIDE IS AVAILABLE WITH OUR RECOMMENDATIONS REGARDING WEED BARRIER, PLANT CARE, AND MAINTENANCE.

INSTALLER RESPONSIBILITIES AND LIABILITIES

- THESE PLANS ARE FOR BASIC DESIGN LAYOUT AND INFORMATION. LANDSCAPE CONTRACTOR IS REQUIRED TO USE TRADE KNOWLEDGE FOR IMPLEMENTATION. OWNER ASSUMES NO LIABILITIES FOR INADEQUATE ENGINEERING CALCULATIONS, MANUFACTURER PRODUCT DEFECTS, INSTALLATION OF ANY LANDSCAPING AND COMPONENTS, OR TIME EXECUTION.
- LANDSCAPE CONTRACTOR IS RESPONSIBLE AND LIABLE FOR INSTALLATION OF ALL LANDSCAPING AND IRRIGATION SYSTEMS INCLUDING CODE REQUIREMENTS, TIME EXECUTIONS, INSTALLED PRODUCTS AND MATERIALS.

GRADING AND DRAINAGE REQUIREMENTS

- AS PER CODE, ALL GRADING IS TO SLOPE AWAY FROM ANY STRUCTURE. SURFACE OF THE GROUND WITHIN 10' FEET OF THE FOUNDATION SHOULD DRAIN AWAY FROM THE STRUCTURE WITH A MINIMUM FALL OF 6"
- AS PER CODE, FINISHED GRADE WILL NOT DRAIN ON NEIGHBORING PROPERTIES
- A MINIMUM OF 6" OF FOUNDATION WILL BE LEFT EXPOSED AT ALL CONDITIONS
- LANDSCAPE CONTRACTOR TO MAINTAIN OR IMPROVE FINAL GRADE AND PROPER DRAINAGE ESTABLISHED BY EXCAVATOR, INCLUDING BUT NOT LIMITED TO ANY MAINTENANCE, PRESERVATION, OR EXAGGERATION OF SLOPES, BERMS, AND SWALES.
- LANDSCAPE CONTRACTOR IS RESPONSIBLE TO CORRECT ANY DAMAGED OR IMPROPER WATERFLOW OF ALL SWALES, BERMS, OR GRADE.
- DEVICES FOR CHANNELING ROOF RUN-OFF SHOULD BE INSTALLED FOR COLLECTION AND DISCHARGE OF RAINWATER AT A MINIMUM OF 10' FROM THE FOUNDATION, OR BEYOND THE LIMITS OF FOUNDATION WALL BACKFILL, WHICHEVER DISTANCE IS GREATER



PLANT SCHEDULE PHASE E

DECIDUOUS TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL
	An's	6	Acer negundo "Sensation" Sensation Box Elder Maple	B & B	2' Cal
	Ax'n	5	Acer truncatum x platanoides "Keithsform" TM Norwegian Sunset Maple	B & B	2' Cal
	Axp	58	Acer truncatum x platanoides "Warrenred" TM Pacific Sunset Maple	B & B	2' Cal
	Ag'a	25	Amelanchier x grandiflora "Autumn Brilliance" "Autumn Brilliance" Serviceberry	B & B	Multi-trunked
	Bp'j	57	Betula papyrifera "Jelppark" Parkland Pillar Birch	B & B	2' Cal
	Cb'f	25	Cornus betulus "Franz Fontaine" Franz Fontaine Hornbeam	B & B	2' Cal
SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	
	Jb	11	Juniperus chinensis "Blue Point" Blue Point Juniper		5 gal
	R'c	45	Rhamnus frangula "Columnaris" Alder Buckthorn		5 gal
	Vn	197	Viburnum opulus "Nanum" Dwarf European Viburnum		5 gal
DECIDUOUS SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	
	Au's	24	Amelanchier utahensis Utah Serviceberry		5 gal
	P'f	156	Potentilla fruticosa "Gold Drop" Gold Drop Potentilla		5 gal
	V'ta	127	Viburnum trilobum "Alfreda" Alfreda Cranberrybush Viburnum		5 gal
GRASSES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	
	Ca'k	295	Calamagrostis x acutiflora "Karl Foerster" Feather Reed Grass		1 gal
	Ms'g	157	Miscanthus sinensis "Gracillimus" Maiden Grass		1 gal

REFERENCE NOTES SCHEDULE PHASE E

SYMBOL	1. LANDSCAPE DESCRIPTION	QTY
 1-01	SODDED LAWN AREA LAWN AREAS SHALL BE SOD. NEW TURF AREAS TO BE SODDED WITH 18% "BLUESTAR" KENTUCKY BLUEGRASS, 17% "MARQUIS" KENTUCKY BLUEGRASS, 17% "NEWPORT" KENTUCKY BLUEGRASS, 17% "TOUCHDOWN" KENTUCKY BLUEGRASS, 16% "APM" PERENNIAL RYEGRASS, 13% "ACCENT" PERENNIAL RYEGRASS OR APPROVED EQUAL AT A RATE OF 220 LBS. PER ACRE. FINE LEVEL ALL AREAS PRIOR TO LAYING SOD. ALL LAWN AREAS SHALL BE IRRIGATED WITH 100% COVERAGE BY POP-UP SPRAY HEADS AND GEAR-DRIVEN ROTORS. ALL DECIDUOUS AND CONIFER TREES PLANTED WITHIN SOD AREAS SHALL HAVE A FOUR FOOT(4') DIAMETER TREE RING COVERED WITH CHOCOLATE BROWN BARK MULCH, NO SHREDED FINES. SUBMIT SAMPLES TO BE APPROVED BY LANDSCAPE ARCHITECT AND OWNER BEFORE INSTALLATION.	81,459 sf
 1-02	2" SOUTHTOWN COBBLE; 3" DEPTH; PLANTING AREAS TO RECEIVE MIN. 12" DEPTH OF QUALITY TOPSOIL IF TOPSOIL IS PRESENT ON SITE. PROVIDE SOIL TEST TO DETERMINE SOIL QUALITY FOR PROPOSED PLANTINGS.	9,003 sf
 1-08	5.5" DEEP STEEL EDGING - INSTALL PER MANUFACTURER SPECIFICATION.	2,905 lf
SYMBOL	1. LANDSCAPE DESCRIPTION	QTY
 1-10	PLAYGROUND SURFACE: SOFT FALL ENGINEERED WOOD.	53.48 cy

ISSUE DATE

06-07-2021

PROJECT NUMBER

UT20053

PLAN INFORMATION

811

BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC.
1-800-662-4111
www.bluestakes.org

PROJECT INFORMATION

SUMMIT RIDGE TOWNHOMES

PHASE E

SANTAQUIN, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

Developer / Property Owner:

D.R.HORTON

Client / Engineer:

LEI-ENGINEERING
3302 N. Main Street
Spanish Fork, Ut. 84660
801-798-0555 ext. 226
www.lei-eng.com

LANDSCAPE ARCHITECT / PLANNER

PKJ

DESIGN GROUP

Landscape Architecture • Planning & Visualization

3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 960-2698
www.pkjdesigngroup.com

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DRAWING INFO

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DRAWN: KBA
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PLOT DATE: 6/7/2021

LANDSCAPE PLAN

LP-100

NO.

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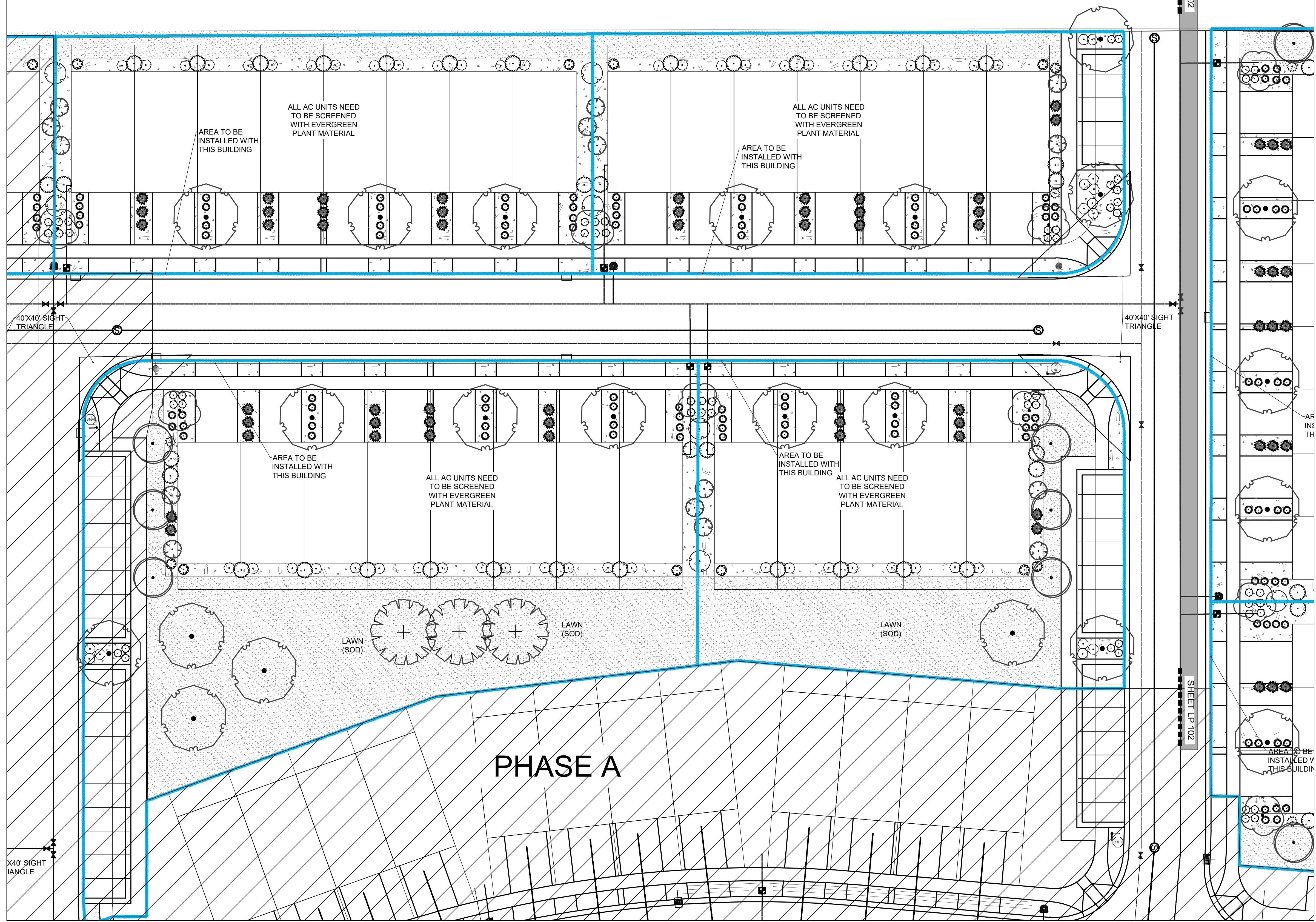
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0' 100' 200' 400' 800'

GRAPHIC SCALE: 1" = 200'

20



PLANT SCHEDULE PHASE E

DECIDUOUS TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL
	An's	6	Acer negundo 'Sensation' Sensation Box Elder Maple	B & B	2' Cal
	Ax'n	5	Acer truncatum x platanoides 'Keithsform' TM Norwegian Sunset Maple	B & B	2' Cal
	Ax'p	58	Acer truncatum x platanoides 'Warrenred' TM Pacific Sunset Maple	B & B	2' Cal
	Ag'a	25	Amelanchier x grandiflora 'Autumn Brilliance' 'Autumn Brilliance' Serviceberry	B & B	Multi-trunked
	Bp'j	57	Betula platyphylla 'Jefpark' Parkland Pillar Birch	B & B	2' Cal
	Cb'f	25	Carpinus betulus 'Franz Fontaine' Franz Fontaine Hornbeam	B & B	2' Cal
SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	
	Jb	11	Juniperus chinensis 'Blue Point' Blue Point Juniper	5 gal	
	Rf'c	45	Rhamnus frangula 'Columnaris' Alder Buckthorn	5 gal	
	Vn	197	Viburnum opulus 'Nanum' Dwarf European Viburnum	5 gal	
DECIDUOUS SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	
	Au's	24	Amelanchier utahensis Utah Serviceberry	5 gal	
	Pf'g	156	Potentilla fruticosa 'Gold Drop' Gold Drop Potentilla	5 gal	
	Vt'a	127	Viburnum trilobum 'Alfreda' Alfreda Cranberrybush Viburnum	5 gal	
GRASSES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	
	Ca'k	295	Calamagrostis x acutiflora 'Karl Foerster' Feather Reed Grass	1 gal	
	M's'g	157	Miscanthus sinensis 'Gracillimus' Maiden Grass	1 gal	

REFERENCE NOTES SCHEDULE PHASE

SYMBOL	1. LANDSCAPE DESCRIPTION	QTY
	1.01 SODDED LAWN AREA LAWN AREAS SHALL BE SOD. NEW TURF AREAS TO BE SODDED WITH 18% "BLUESTAR" KENTUCKY BLUEGRASS, 19% "MARKUIS" KENTUCKY BLUEGRASS, 17% "NEWPORT" KENTUCKY BLUEGRASS, 17% "TOUCHDOWN" KENTUCKY BLUEGRASS, 14% "APW" PERENNIAL RYEGRASS, 13% "ACCENT PERENNIAL RYEGRASS OR APPROVED EQUAL AT A RATE OF 220 LBS. PER ACRE. FINE LEVEL ALL AREAS PRIOR TO LAYING SOD. ALL LAWN AREAS SHALL BE IRRIGATED WITH 100% COVERAGE BY POP-UP SPRAY HEADS AND GEAR-DRIVEN ROTATORS. ALL DECIDUOUS AND CONIFER TREES PLANTED WITHIN SOD AREAS SHALL HAVE A FOUR FOOT(4') DIAMETER TREE RING COVERED WITH CHOCOLATE BROWN BARK MULCH, NO SHREDDED FINES. SUBMIT SAMPLES TO BE APPROVED BY LANDSCAPE ARCHITECT AND OWNER BEFORE INSTALLATION.	81,459 sf
	1.02 2" SOUTHTOWN COBBLE, 3" DEPTH: PLANTING AREAS TO RECEIVE MIN. 1/2" DEPTH OF QUALITY TOPSOIL. IF TOPSOIL IS PRESENT ON SITE, PROVIDE SOIL TEST TO DETERMINE SOIL QUALITY FOR PROPOSED PLANTINGS.	9,003 sf
	1.08 5.5" DEEP STEEL EDGING - INSTALL PER MANUFACTURER SPECIFICATION.	2,905 lf
SYMBOL	1. LANDSCAPE DESCRIPTION	QTY
	1.10 PLAYGROUND SURFACE, SOF'FALL ENGINEERED WOOD.	53.48 cy

ISSUE DATE: 06-07-2021

PROJECT NUMBER: UT20053

PLAN INFORMATION

811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC.
1-800-662-4111
www.bluestakes.org

GRAPHIC SCALE: 1" = 20'

PROJECT INFORMATION

SUMMIT RIDGE TOWNHOMES
PHASE E
SANTAQUIN, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

Developer / Property Owner: D.R.HORTON

Client / Engineer: LEI-ENGINEERING
3302 N. Main Street
Spanish Fork, Ut. 84660
801-798-0555 ext. 226
www.lei-eng.com

LANDSCAPE ARCHITECT / PLANNER

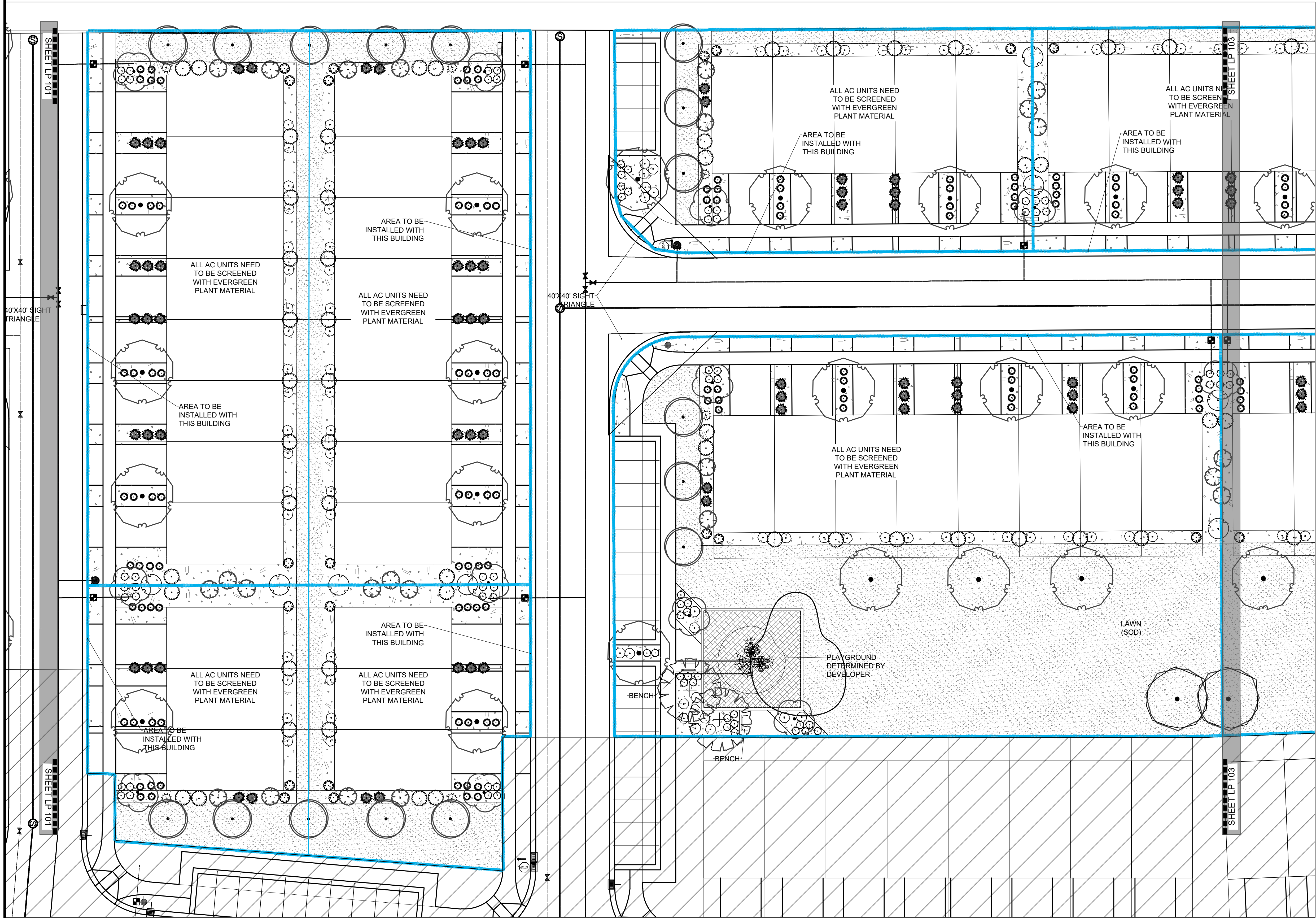
PKJ DESIGN GROUP
Landscape Architecture • Planning & Visualization
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 960-2698
www.pkjdesigngroup.com

LICENSE STAMP

LANDSCAPE PLAN

DRAWING INFO

PM: JTA
DRAWN: KBA
CHECKED: TM
PLOT DATE: 6/7/2021



PLANT SCHEDULE PHASE E

DECIDUOUS TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL
	An's	6	Acer negundo 'Sensation' Sensation Box Elder Maple	B & B	2' Cal
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	Ax'p	58	Acer truncatum x platanoides 'Warrenred' TM Pacific Sunset Maple	B & B	2' Cal
	Ag'a	25	Amelanchier x grandiflora 'Autumn Brilliance' 'Autumn Brilliance' Serviceberry	B & B	Multi-trunked
	Bp'j	57	Betula platyphylla 'Jefpark' Parkland Pillar Birch	B & B	2' Cal
	Cb'f	25	Carpinus betulus 'Franz Fontaine' Franz Fontaine Hornbeam	B & B	2' Cal
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	Vn	197	Viburnum opulus 'Nanum' Dwarf European Viburnum	5 gal	
DECIDUOUS SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	
	Au's	24	Amelanchier utahensis Utah Serviceberry	5 gal	
	Pfg	156	Potentilla fruticosa 'Gold Drop' Gold Drop Potentilla	5 gal	
	Vfa	127	Viburnum trilobum 'Alfreda' Alfreda Cranberrybush Viburnum	5 gal	
GRASSES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	
	Ca'k	295	Calamagrostis x acutiflora 'Karl Foerster' Feather Reed Grass	1 gal	
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REFERENCE NOTES SCHEDULE PHASE

SYMBOL	1. LANDSCAPE DESCRIPTION	QTY
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SYMBOL	1. LANDSCAPE DESCRIPTION	QTY
	1.10 PLAYGROUND SURFACE. SOF'FALL ENGINEERED WOOD.	53.48 cy

ISSUE DATE
06-07-2021

PROJECT NUMBER
UT20053

NO. REVISION DATE

1 XXXX XX-XX-XX

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811 BLUE STAKES OF UTAH
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www.bluestakes.org

0' 15' 30' 60' 120'

GRAPHIC SCALE: 1" = 30'

SUMMIT RIDGE TOWNHOMES
PHASE E
SANTAQUIN, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT
Developer / Property Owner:
D.R.HORTON

Client / Engineer:
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LANDSCAPE ARCHITECT / PLANNER
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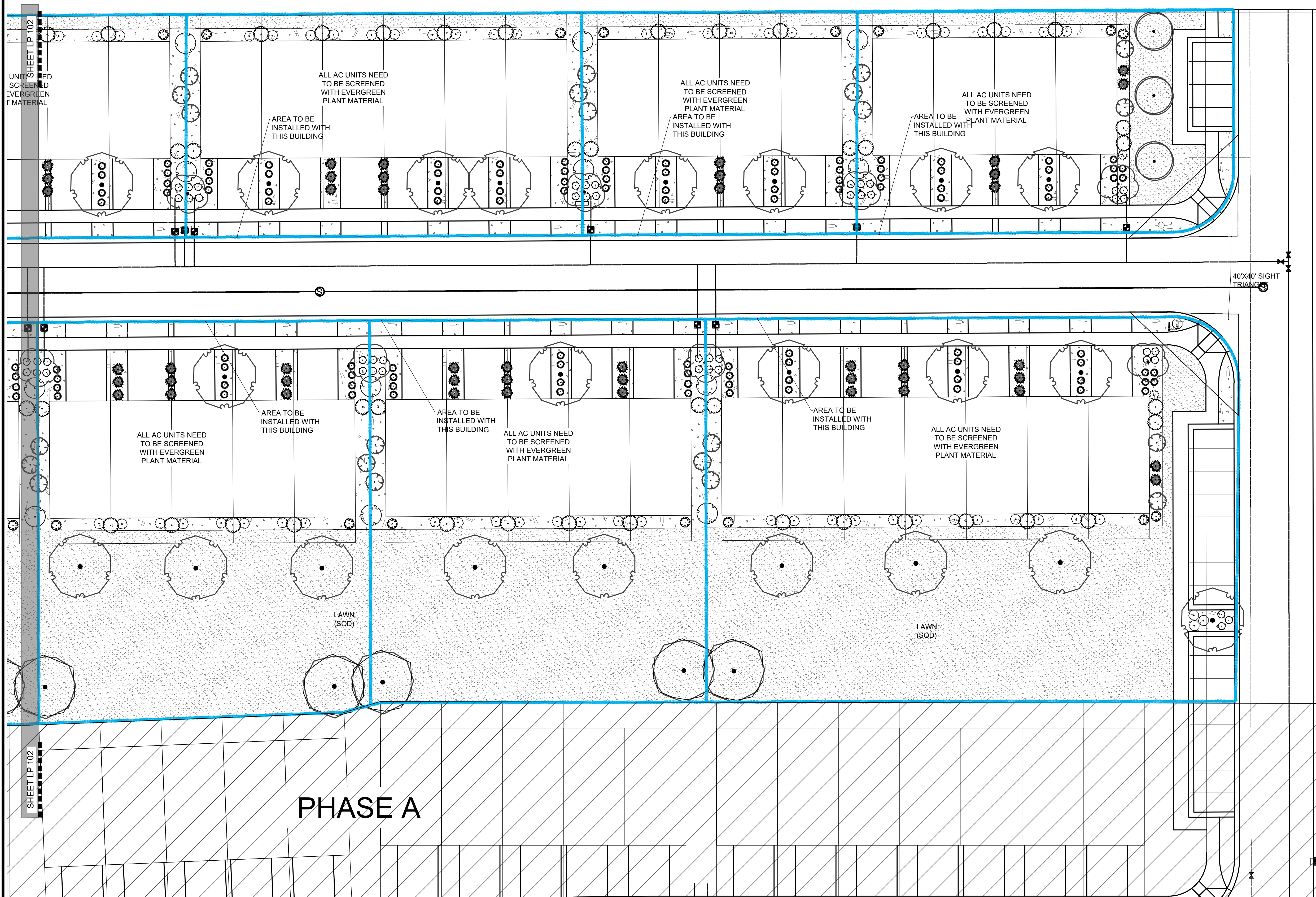
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DRAWN: KBA
CHECKED: TM
PLOT DATE: 6/7/2021

LANDSCAPE PLAN

LP-102

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PLANT SCHEDULE PHASE E

DECIDUOUS TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL
	An's	6	Acer negundo 'Sensation' Sensation Box Elder Maple	B & B	2' Cal
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1 XXXX XX-XX-XX

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811 BLUE STAKES OF UTAH
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1-800-662-4111
www.bluestakes.org

0' 10' 20' 40' 80'

GRAPHIC SCALE: 1" = 20'

SUMMIT RIDGE TOWNHOMES
PHASE E
SANTAQUIN, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT
Developer / Property Owner: D.R.HORTON

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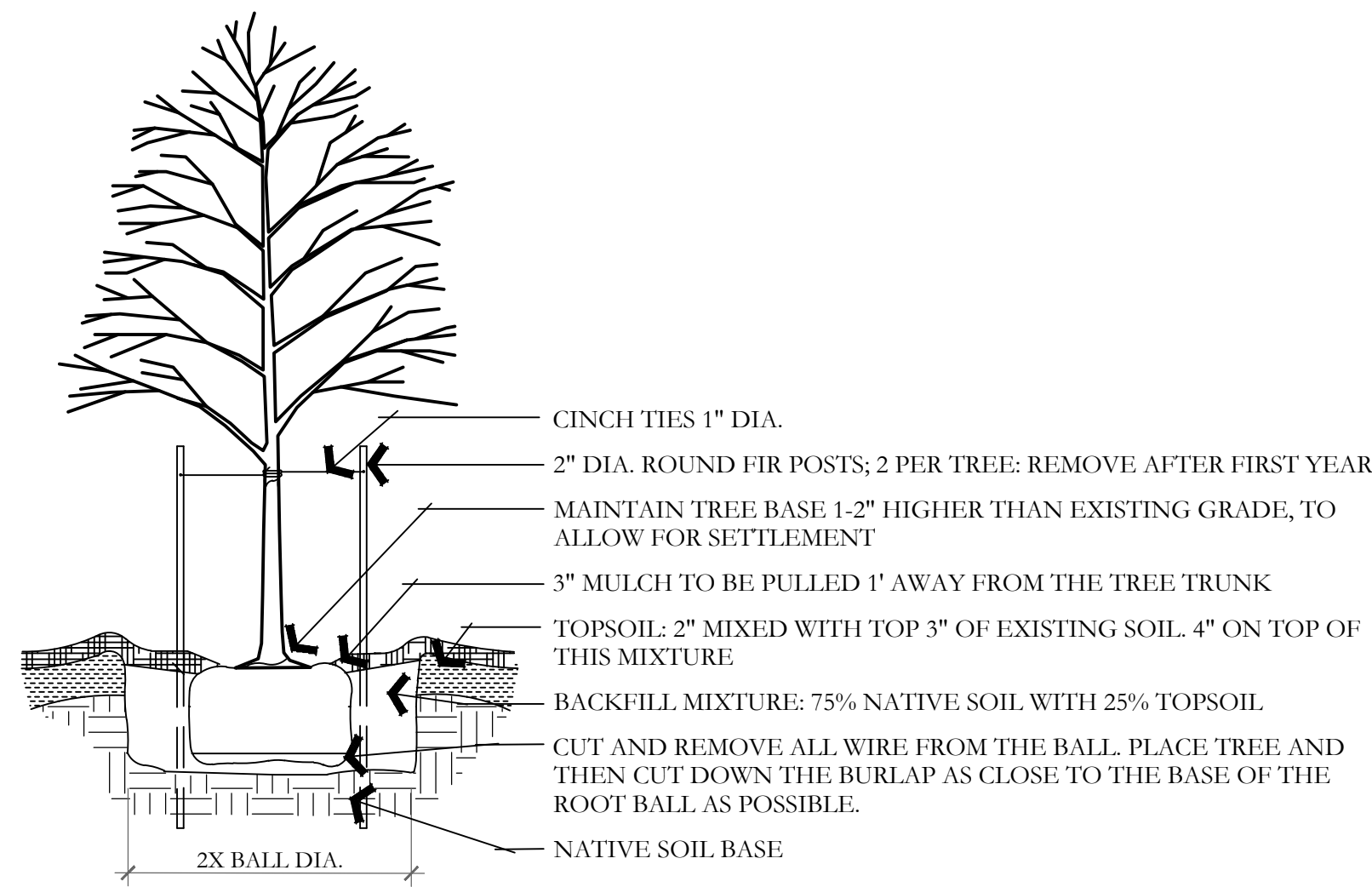
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DRAWN: KBA
CHECKED: TM
PLOT DATE: 6/7/2021

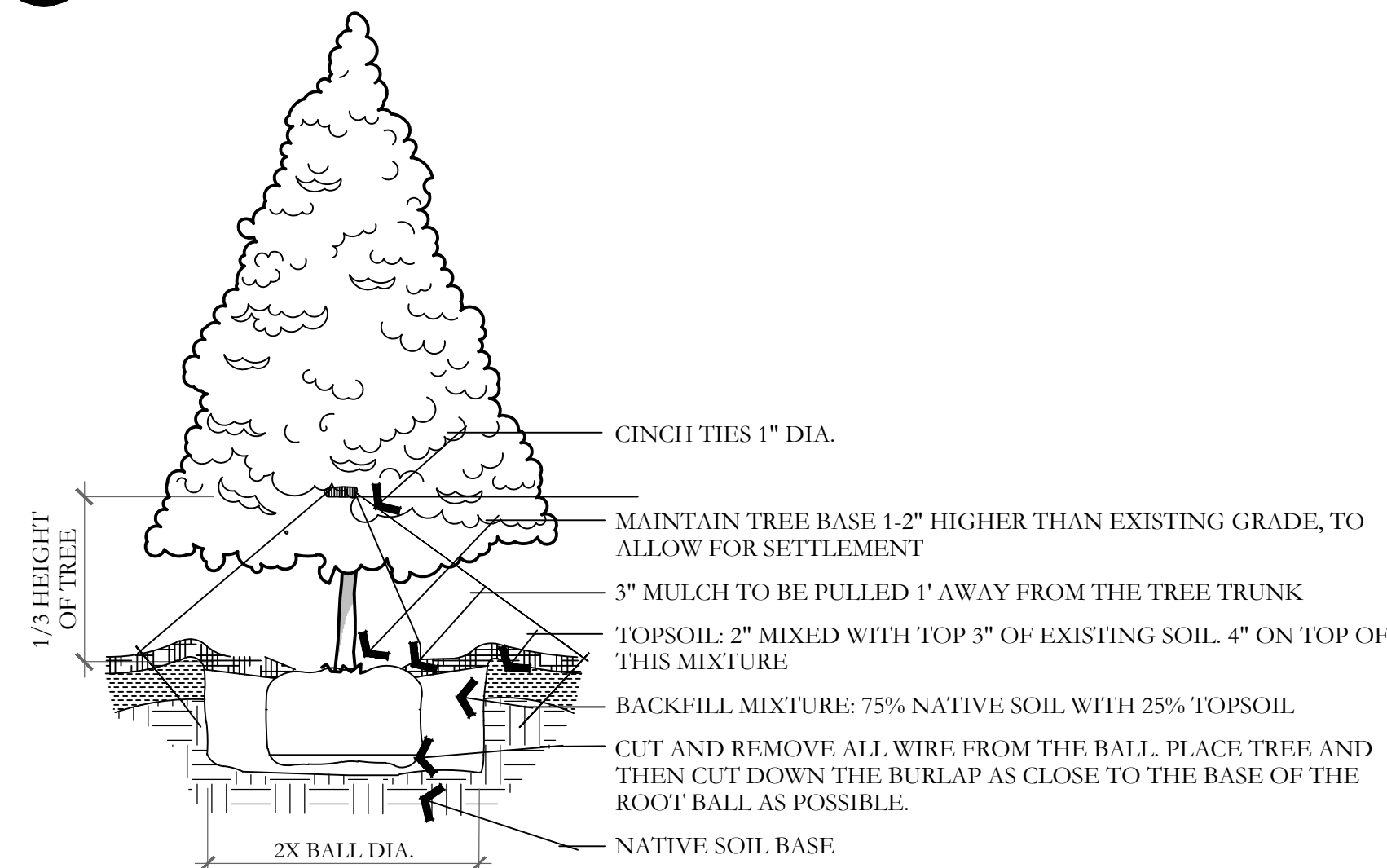
LANDSCAPE PLAN

LP-103

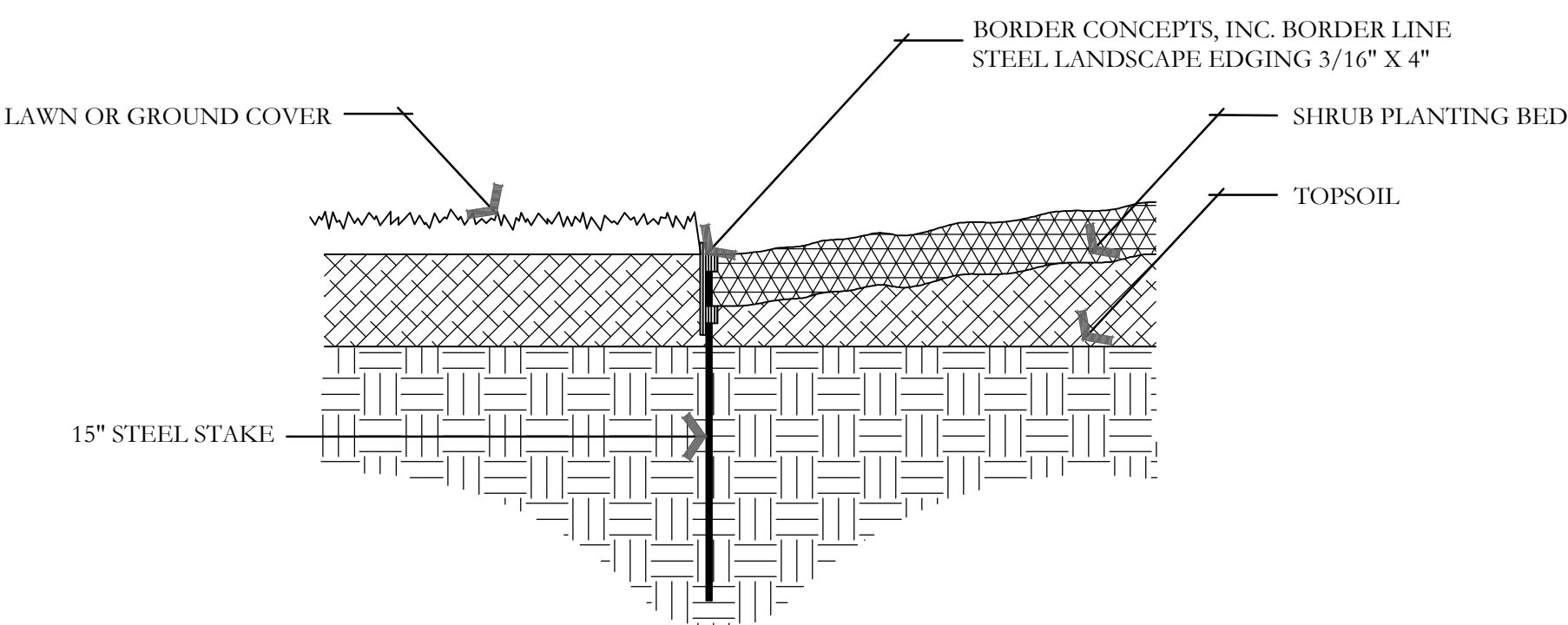
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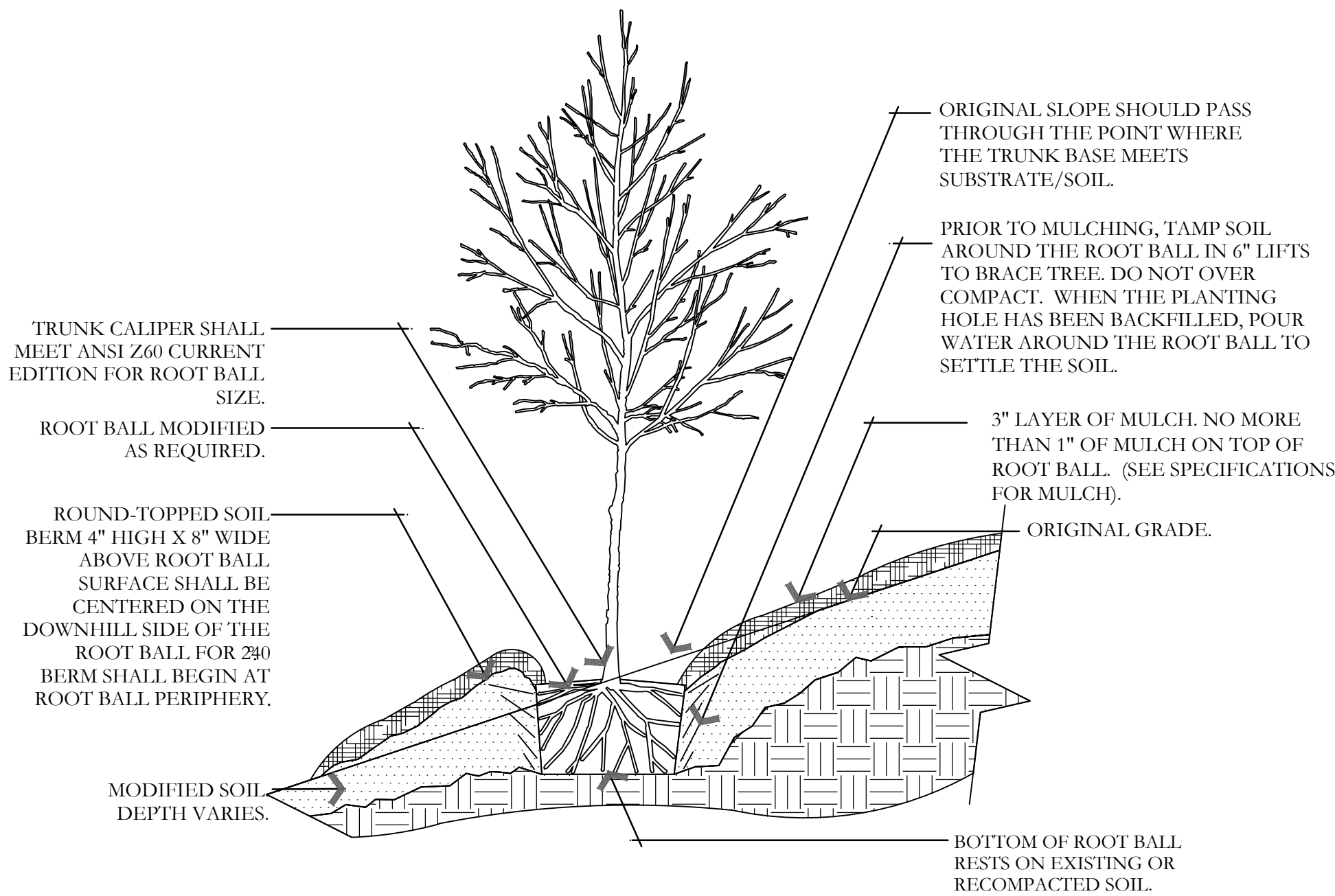
A DECIDUOUS TREE PLANTING
NOT TO SCALE



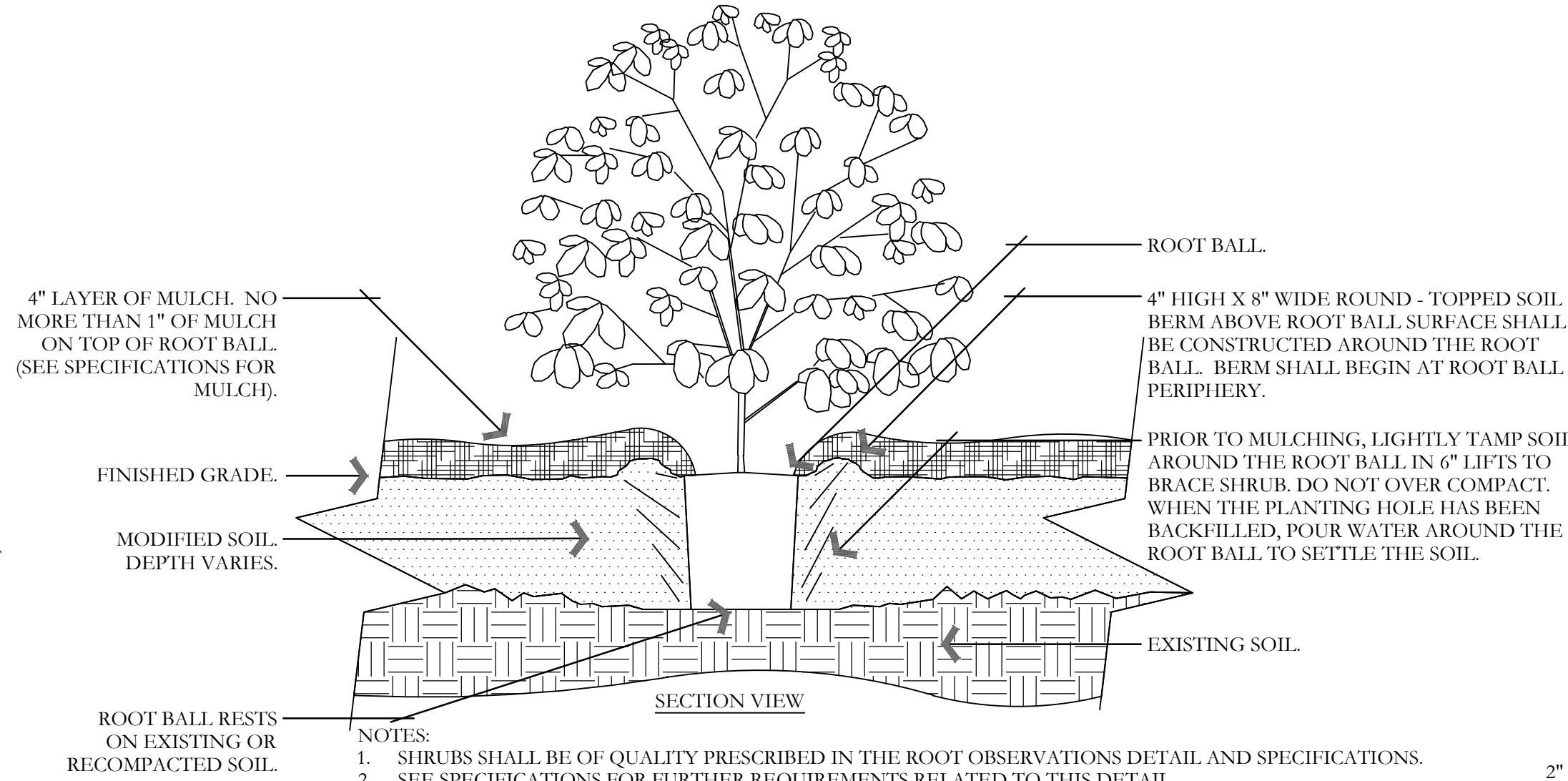
D EVERGREEN TREE PLANTING
NOT TO SCALE



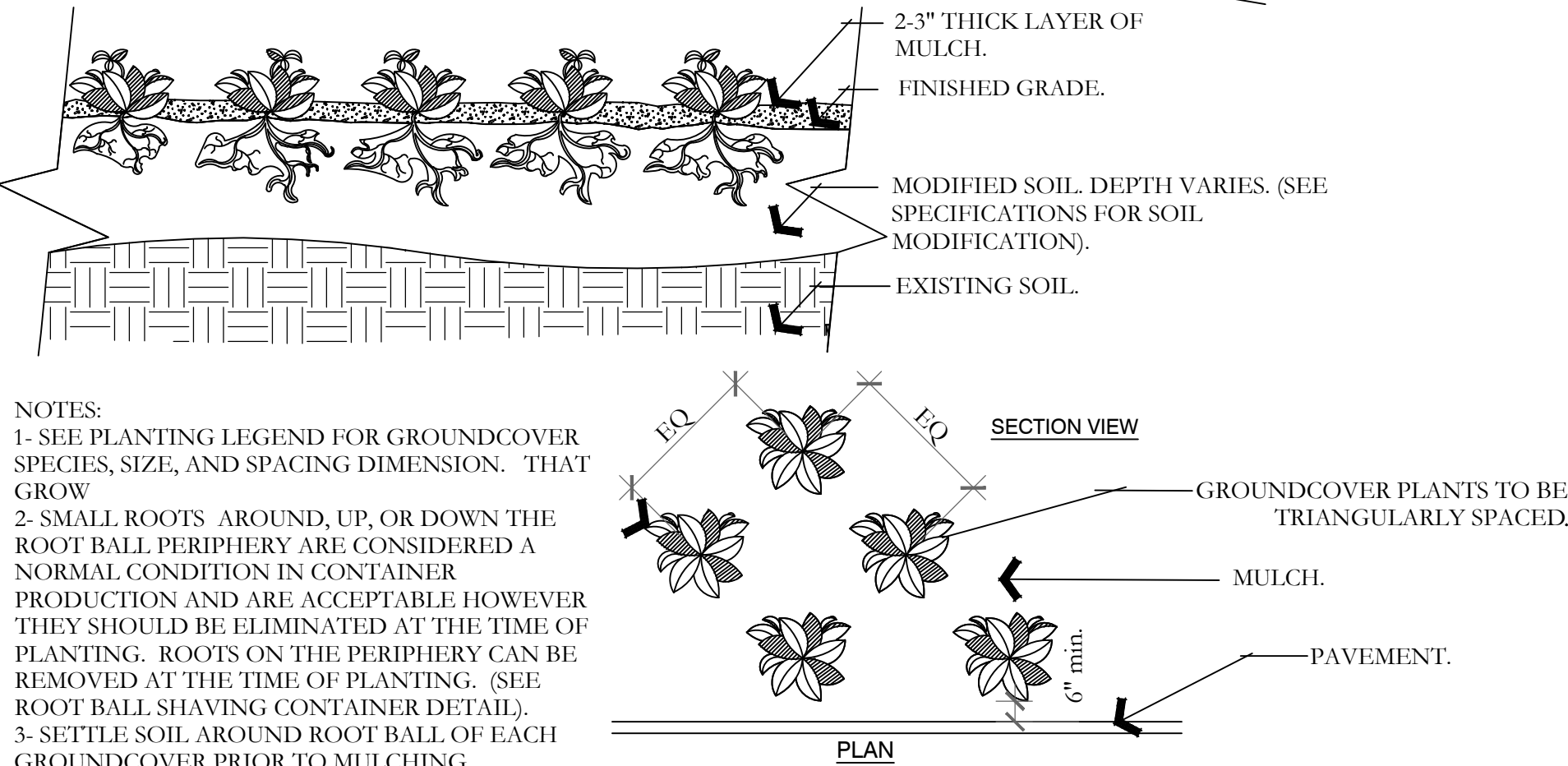
G METAL EDGING DETAIL
NOT TO SCALE



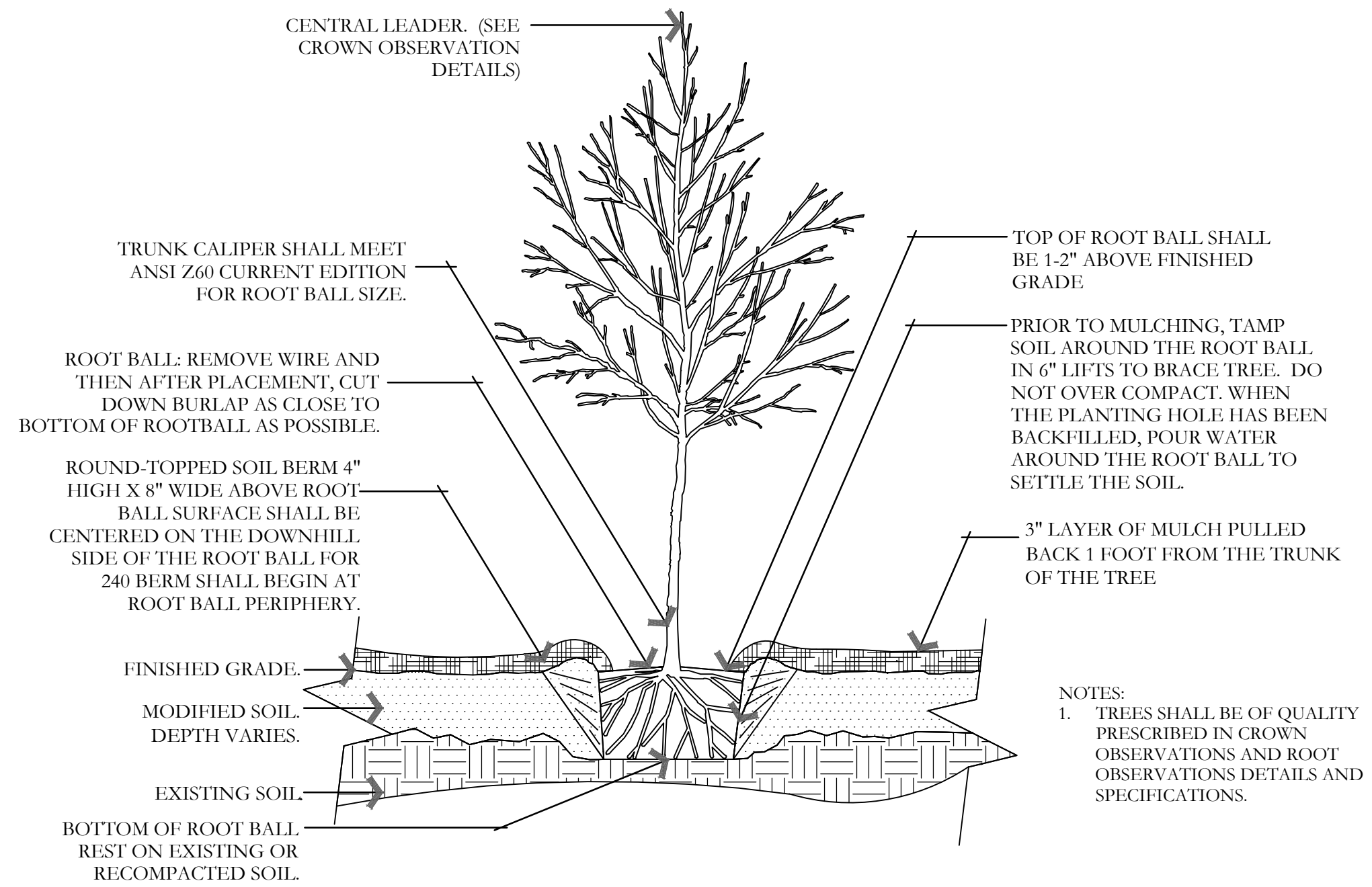
B TREE ON SLOPE 5% (20:1) TO 50% (2:1)
NOT TO SCALE



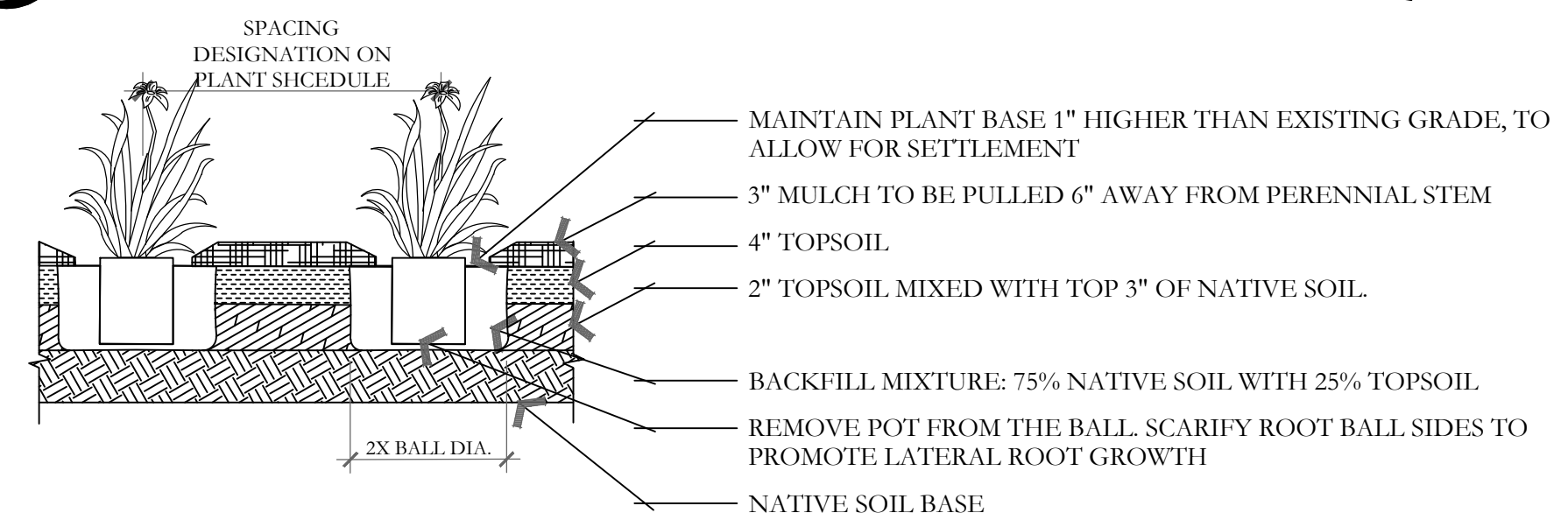
E SHRUB - MODIFIED SOIL
NOT TO SCALE



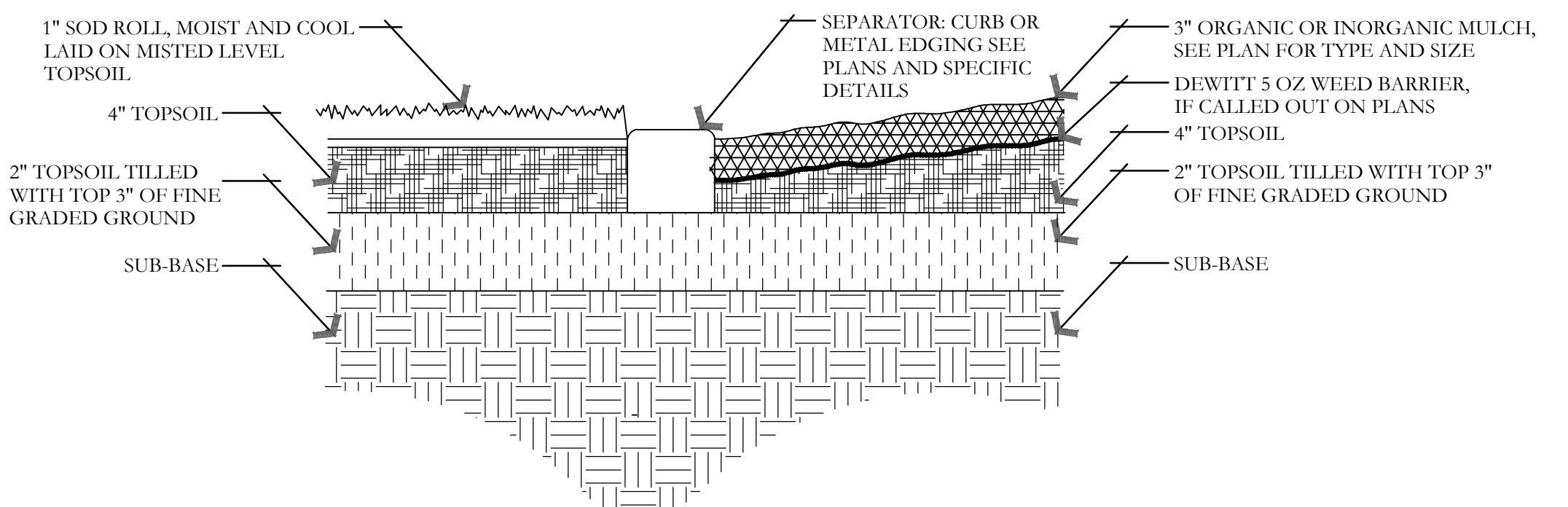
H PERENNIAL/GROUNDCOVER PLANTING
NOT TO SCALE



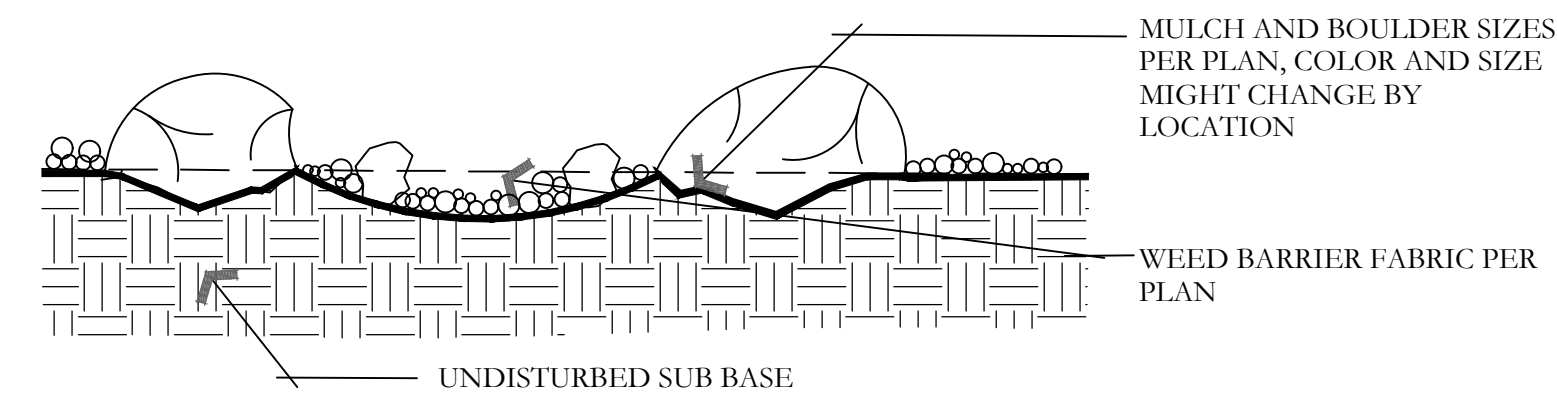
C TREE W/ BERM (EXISTING SOIL MODIFIED)
NOT TO SCALE



F PERENNIAL PLANTING
NOT TO SCALE



I SOD LAYING/MULCH DETAIL
NOT TO SCALE



J BOULDER AND DRY STREAM BED DETAIL
NOT TO SCALE

ISSUE DATE			PROJECT NUMBER			PLAN INFORMATION			PROJECT INFORMATION			DEVELOPER / PROPERTY OWNER / CLIENT			LANDSCAPE ARCHITECT / PLANNER			LICENSE STAMP			DRAWING INFO		
06-07-2021			UT20053			BLUE STAKES OF UTAH UTILITY NOTIFICATION CENTER, INC. 1-800-662-4111 www.bluestakes.org			SUMMIT RIDGE TOWNHOMES PHASE E SANTAQUIN, UTAH			Developer / Property Owner: D.R.HORTON			Client / Engineer: LEI-ENGINEERING 3302 N. Main Street Spanish Fork, Ut. 84660 801-798-0555 ext. 226 www.lei-eng.com			LANDSCAPE ARCHITECT / PLANNER PKJ DESIGN GROUP Landscape Architecture • Planning & Visualization 3450 N. TRIUMPH BLVD. SUITE 102 LEHI, UTAH 84043 (801) 960-2698 www.pkjdesigngroup.com			PM: JTA DRAWN: KBA CHECKED: TM PLOT DATE: 6/7/2021		
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SUMMIT RIDGE TOWNHOMES

SANTAQUIN, UTAH

IRRIGATION PLAN SPECIFICATIONS

IRRIGATION SPECIFICATIONS	
PART 1 - GENERAL	
1.1 SUMMARY	
Work to be done includes all labor, materials, equipment and services required to complete the Project irrigation system as indicated on the Construction Drawings, and as specified herein. Includes but is not limited to: Furnishing and installing underground and above ground sprinkler system complete with any accessories necessary for proper function and operation of the system. All plant material on the Project shall be irrigated. Remove and dispose of any existing sprinkler system components which are disturbed during the construction process and are not to be saved. Restoration of any altered or damaged existing landscape to original state and condition.	
1.2 SYSTEM DESCRIPTION	
A.Design of irrigation components: Locations of irrigation components on Construction Drawings may be approximate. Piping, sleeving and/or other components shown on Construction drawings may be shown schematically for graphic clarity and demonstration of component groupings and separations. All irrigation components shall be placed in landscaped areas, with the exception of pipe and wire in sleeving under landscapes. Actual routing of pipe, wire or other components may be altered due to site conditions not accounted for in the design process.	
B.Construction requirements: Actual placement may vary as required to achieve a minimum of 100% coverage without overspray onto landscape, buildings or other features.	
C.Layout of Irrigation Components: During layout and staking, consult with Owner-Approved Representative (hereafter referred to as OAR) to verify proper placement of irrigation components, and to provide Contractor recommendations for changes where revisions may be advisable. Small or minor adjustments to system layout are permissible to avoid existing field obstructions such as utility boxes or street light poles. Contractor shall place remote control valves in groups as practical to economize on quantity of manifold isolation valves. Quick coupler valves shall be placed with manifold groups and protected by manifold isolation valves. Quick coupler valves are shown on Construction Documents in approximate locations.	
1.3 DEFINITIONS	
A.Water Supply: Secondary water piping and components, furnished and installed by others to provide irrigation water to this Project, including but not limited to filter, saddles, nipples, spools, shut off valves, corporation stop valves, water meters, pressure regulation valves, and piping upstream of (or prior to) the Point of Connection.	
B.Point of Connection: Location where the Contractor shall tie into the water supply. May require filter, saddle, nipples, spools, isolation valves or Stop and Waste valve for landscape irrigation needs and use.	
C.Main Line Piping: Pressurized piping downstream of the Point of Connection to provide water to remote control valves and quick couplers. Normally under constant pressure.	
D. Lateral Line Piping: Circuit piping downstream of remote control valves to provide water to sprinkler heads, drip systems or bubblers.	
1.4 REFERENCES	
A.The following standards will apply to the work of this Section:	
a. ASTM-American Society for Testing and Materials	
b. IA - The Irrigation Association: Main BMP Document, Landscape Irrigation Scheduling and Water Management Document.	
1.5 SUBMITTALS	
A.At least thirty (30) days prior to ordering of any materials, the Contractor shall provide manufacturer catalog cut sheet and current printed specifications for each element or component of the irrigation system. Submittals shall be in three ring binders or other similar bound form. Provide five copies of submittals to OAR for distribution. Place cover or index sheet indicating order in submittal document. No material shall be ordered, delivered or any work preceded in the field until the required submittals have been reviewed in its entirety and stamped approved. Delivered material shall match the approved samples.	
B.Operation and Maintenance Manual:	
a. At least thirty (30) days prior to final inspection, the Contractor shall provide Operation and Maintenance manual to OAR, containing:	
i. Manufacturer catalog cut sheet and current printed specifications for each element or component of the irrigation system.	
ii. Parts list for each operating element of the system	
iii. Manufacturer printed literature on operation and maintenance of operating elements of the system.	
iv.Section listing instructions for overall system operation and maintenance. Include directions for Spring Start-up and Winterization.	
b. Project Record Copy	
i. Maintain at project site one copy of all project documents clearly marked "Project Record Copy". Mark any deviation in material installation on Construction drawings. Maintain and update drawing at least weekly. Project Record Copy to be available to OAR on demand.	
ii. Completed Project As-Built Drawings	
1. Prior to final inspection, prepare and submit to OAR accurate as-built drawings	
2. Show detail and dimension changes made during installation. Show significant details and dimensions that were not shown in original Contract Documents.	
3. Field dimension locations of sleeving, points of connection, main line piping, wiring runs not contained in main line pipe trenches, valves and valve boxes, quick coupler valves.	
4. Dimensions are to be taken from permanent constructed surfaces, features, or finished edges located at or above finished grade.	
5. Controller Map: upon completion of system, place in each controller a color coded copy of the area that controller services: indicating zone number, type of plant material and location on project that zone services. Laminate map with heat shrink clear plastic.	
1.6 QUALITY ASSURANCE	
A.Acceptance: Do not install work in this section prior to acceptance by OAR.	
B.Regulatory Requirements: All work and materials shall be according to any and all rules, regulations or codes, whether they are State or Local laws and ordinances. Contract documents, drawings or specifications may not be construed or interpreted to permit work or materials not conforming to the above codes.	
C.Adequate Water Supply: Water supply to this Project exists, installed by others. Connections to these supply lines shall be by this Contractor. Verify that proper connection is available to supply line and is of adequate size. Verify that secondary connection components may be installed if necessary. Perform static pressure test prior to commencement of work. Notify OAR in writing of problems encountered prior to proceeding.	
D. Workmanship and Materials:	
a. It is the intent of this specification that all material herein specified and shown on the construction documents shall be of the highest quality available and meeting the requirements specified.	
b. All work shall be performed in accordance with the best standards of practice relating to the trade.	
E.Contractors Qualifications:	
a. Contractor shall provide document or resume including at least the following items:	
i. That Contractor has been installing sprinklers on commercial projects for five previous consecutive years.	
ii. Contractor is licensed to perform Landscape and Irrigation construction in the State of this Project.	
iii.Contractor is bondable for the work to be performed.	
iv.References of five projects of similar size and scope completed within the last five years. Three of the projects listed shall be local.	
v. Listing of suppliers where materials will be obtained for use on this Project.	
vi.Project site Foreman or Supervisor has at least five consecutive years of commercial irrigation installation experience. This person shall be a current Certified Irrigation Contractor in good standing as set forth by the Irrigation Association. This person shall be on Project site at least 75% of each working day.	
vii. Evidence that Contractor currently employs workers in sufficient quantities to complete Project within time limits that are established by the Contract.	
viii. All General laborers or workers on the Project shall be previously trained and familiar with sprinkler installation and have a minimum of one-year experience. Those workers performing tasks related to PVC pipe shall be certified and	
designed below.	
1.7 DELIVERY-STORAGE-HANDLING	
A.During delivery, installation and storage of materials for Project, all materials shall be protected from contamination, damage, vandalism, and prolonged exposure to sunlight. All material stored at Project site shall be neatly organized in a compact arrangement and storage shall not disrupt Project Owner or other trades on Project site. All material to be installed shall be handled by Contractor with care to avoid breakage or damage. Damaged materials attributed to Contractor shall be replaced with new on Contractor's expense.	
1.8 SEQUENCING	
A.Perform site survey, research utility records, contact utility location services. The Contractor shall familiarize himself with all hazards and utilities prior to work commencement. Install sleeving prior to installation of concrete, paving or other permanent site elements. Irrigation system Point of Connection components, backflow prevention and pressure regulation devices shall be installed and operational prior to all downstream components. All main lines shall be thoroughly flushed of all debris prior to installation of any sprinkler heads.	
1.9 WARRANTY	
A. Contractor shall provide one year Warranty. Warranty shall cover all materials, workmanship and labor. Warranty shall include filling and/or repairing depressions or replacing turf or other plantings due to settlement of irrigation trenches or irrigation system elements. Valve boxes, sprinklers or other components settled from original finish grade shall be restored to proper grade. Irrigation system shall have been adjusted to provide proper, adequate coverage of irrigated areas.	
OWNERS INSTRUCTION	
A.After system is installed, inspected, and approved, instruct Owner's Representatives in complete operation and maintenance procedures. Coordinate instruction with references to previously submitted Operation and Maintenance Manual.	
1.11 MAINTENANCE	
A.Furnish the following items to Owner's Representative:	
a. Two quick coupler keys with hose swivels.	
b. One of each type or size of quick coupler valve and remote control valve. Five percent of total quantities used of each sprinkler and sprinkler nozzle.	
B. Provide the following services:	
a. Winterize entire irrigation system installed under this contract. Winterize by "blow-out" method using compressed air. Compressor shall be capable of minimum of 175 CFM. This operation shall occur at the end of first growing season after need for plant irrigation but prior to freezing. Compressor shall be capable of evacuating system of all water pressure regulation devices. Compressor shall be regulated to not more than 60 PSI. Start up system the following spring 217 after danger of freezing has passed. Contractor shall train Owner's Representative in proper start-up and winterization procedure.	
PART 2 - PRODUCTS	
2.1 GENERAL NOTES	
A. Contractor shall provide materials to be used on this Project. Contractor shall not remove any material purchased for this Project from the Project Site, nor mix Project materials with other Contractor owned materials. Owner retains right to purchase and provide project material.	
2.2 POINT OF CONNECTION	
A.The Contractor shall connect onto existing irrigation or water main line as needed for Point(s) of Connection. Contractor shall install new main line as indicated.	
2.3 CONNECTION ASSEMBLY	
A.Secondary water shall be used on this Project. Install filter and RPZ as needed.	
2.4 CONTROL SYSTEM	
A.Power supply to the irrigation controller shall be provided for by this Contract.	
B. Controller shall be as specified in the drawings. Controller shall be surge protected.	
a. Installation of wall-mount controllers: Irrigation contractor shall be responsible for this task. Power configuration for wall-mount controllers shall be 120 VAC unless otherwise noted.	
b. Locate Controller(s) in general location shown on Construction drawings. Coordinate power supply and breaker allocation with electrical contractor. Contractor shall be responsible for all power connections to Controllers, whether they are wall mount or pedestal mount. Contractor shall coordinate with electrical or other Project trades as needed to facilitate installation of power to controllers.	
C. Wires connecting the remote control valves to the irrigation controller are single conductors, type PE. Wire construction shall incorporate a solid copper conductor and polyethylene (PE) insulation with a minimum thickness of 0.045 inches. The wires shall be UL listed for direct burial in irrigation systems and be rated at a minimum of 30 VAC. Paige Electric Co., LP specification number P7070D.	
a. A minimum of 24" of additional wire shall be left at each valve, each splice box and at each controller.	
b. Common wire shall be white in color, 12 gauge. Control wire shall be red in color, 14 gauge. Spare wire shall be looped within each valve box of the grouping it is to service.	
D. RCV wire splicing connectors shall be 3M brand DBV or DBR. Wire splicing between controllers and valves shall be avoided if at all possible. Any wire splices shall be contained within a valve box. Splices within a valve box that contains no control valves shall be stamped "WIRE SPLICE" or "WS" on box lid.	
2.5 SLEEVING	
A. Contractor shall be responsible to protect existing underground utilities and components. Sleeving minimum size shall be 2". Sleeving 2" through 4" in size shall be S/40 PVC solvent weld. Sleeving 6" and larger shall be GL 200 PVC gasketed. Sleeve diameter shall be at least two times the diameter of the pipe within the sleeve. Sleeves shall be extended 6" minimum beyond walk or edge of pavement. Wire or cable shall not be installed in the same sleeve as piping, but shall be installed in separate sleeves. Sleeve ends on sleeve sizes 4" and larger shall be capped with integral corresponding sized PVC slip cap, pressure fit, until used, to prevent contamination. Sleeves shall be installed at appropriate depths for main line pipe or lateral pipe.	
2.6 MAIN LINE PIPE	
A.All main line pipe 4" and larger shall be Class 200 gasketed bell end. All main line pipe 3" in size and smaller shall be Schedule 40 PVC solvent weld bell end.	
a. Maximum flows allowed through main line pipe shall be:	
3/4" 8 GPM	
1" 12 GPM	
1-1/2" 30 GPM	
2" 53 GPM	
2-1/2" 75 GPM	
3" 110 GPM	
4" 180 GPM	
b. Main line pipe shall be buried with 24" cover	
2.7 MAIN LINE FITTINGS	
A.All main line fittings 3" and larger shall be gasketed ductile iron material. All ductile iron fittings having change of direction shall have proper concrete thrust block installed. All main line fittings smaller than 3" in size shall be Schedule 80 PVC.	
2.8 ISOLATION VALVES	
A.Isolation valves 3" and larger shall be Watertool brand model 2500 cast iron gate valve, resilient wedge, push on type, with 2" square operating nut. Place sleeve of 6" or larger pipe over top of valve vertically and then extend to grade. Place 10" round valve box over sleeve at grade.	
B. Isolation valves 2-1/2" and smaller shall be Apollo brand 70 series brass ball valves, contained in a Carson Standard size valve box. Valve box shall be installed with S/80 PVC TOE. Nipples on both sides of the valve. Valve shall be placed so that the handle is vertical toward the top of the valve box in the "off" position.	
2.9 MANIFOLDS	
A.Action Manifold fittings shall be used to create unions on both sides of each control valve, allowing the valve to be removed from the manifold without cutting piping. Valves shall be located in boxes with ample space surrounding them to allow access for	
maintenance and repair. Where practical, group remote control valves in close proximity, and protect each grouping with a manifold isolation valve as shown in details. Manifold Main Line (or Sub-Main Line) and all manifold components and isolation valves shall be at least as large as the largest diameter lateral served by the respective manifold.	
2.10 REMOTE CONTROL VALVES	
A.Remote control valves shall be as specified on the drawings. Remote control valves shall be located separately and individually in separate control boxes.	
2.11 MANUAL CONTROL VALVES	
A.Quick coupler valve shall be attached to the manifold sub-main line using a Lasco G175212 swing joint assembly with snap-lock outlet and brass stabilizer elbow. Quick coupler valve shall be placed within a Carson 10" round valve box. Top of quick coupler valve cover shall allow for complete installation of valve box lid, but also allow for insertion and operation of key. Base of quick coupler valve and top of quick coupler swing joint shall be covered in 3/4" gravel. Contractor shall not place quick coupler valves further than 200 feet apart, to allow for spot watering or supplemental irrigation of new plant material. Quick coupler valve at POC shall not be eliminated or relocated.	
2.12 LATERAL LINE PIPE	
A.All lateral piping shall be Schedule 40 PVC, solvent weld, and bell end. Lateral pipe shall be buried with 12-18" of cover typically. Lateral pipe shall be 3/2", 1", 1 1/4", 1 1/2" or 2" in size as indicated on Construction Drawings.	
2.13 LATERAL LINE FITTINGS	
A.All lateral line fittings shall be S/40 PVC	
2.14 Spray Sprinklers	
A.Spray head sprinklers shall be as specified on the drawings. Nozzles shall be as specified on the drawings.	
2.15 VALVE BOXES	
A.Carson valve boxes shall be used on this project. Sizes are as directed in these Specifications, detail sheets or plan sheets. Valve boxes shall be centered over the control valve or element they control. Valve box shall be sized large enough to allow ample room for services access, removal or replacement of valve or element. Valve box shall be set to flush to finish grade of topsoil or barfed areas. Contractor shall provide extensions or stack additional valve boxes as necessary to bring valve box top to proper grade.	
2.16 IMPORT BACKFILL	
A.All main line pipe, lateral line pipe and other irrigation elements shall be bedded and backfilled with clean soil, free of rocks 1" and larger. Contractor shall furnish and install additional backfill material as necessary due to rocky conditions. Trenches and other elements shall be compacted and/or water settled to eliminate settling. Debris from trenching operations un-usable for fill shall be removed from project and disposed of properly by Contractor.	
2.17 OTHER PRODUCTS	
A.Substitution of equivalent products is subject to the OAR's approval and must be designated as accepted in writing.	
a. The Contractor shall provide materials to make the system complete and operational.	
PART 3 - EXECUTION	
3.1 PREPARATION	
A. Contractor shall repair or replace work damaged by irrigation system installation. If damaged work is new, repair or replacement shall be performed by the original installer of that work. The existing landscape of this Project shall remain in place. Contractor shall protect and work around existing plant material. Coordination of trench and valve locations shall be laid out for the OAR prior to any excavation occurring. Plant material deemed damaged by the OAR shall be replaced with new plant material at Contractor's expense. Contractor shall not cut existing tree roots larger than 2" to install this Project. Route pipe, wire and irrigation elements around tree canopy drip line to minimize damage to tree roots. Contractor shall have no part of existing system used by other portions of site landscape without water for more than 24 hours at a time.	
3.2 TRENCHING AND BACKFILLING	
A.Pulling of pipe shall not be permitted on this project. Over excavate trenches both in width and depth. Ensure base of trench is rock or debris free to protect pipe and wire. Grade trench base to ensure flat, even support of piping. Backfill with clean soil or import material. Contractor shall backfill no less than 2" around entire pipe with clean, rock free fill. Main line piping and fittings shall not be backfilled until OAR has inspected and pipe has passed pressure testing. Perform balance of backfill operation to eliminate any settling.	
3.3 SLEEVING	
A.Sleeve all piping and wiring that pass under paving or landscape features. Wiring shall be placed in separate sleeving from piping. Sleeves shall be positioned relative to structures or obstructions to allow for pipe or wire within to be removed if necessary.	
3.4 GRADES AND DRAINAGE	
A.Place irrigation pipe and other elements at uniform grades. Winterization shall be by evacuation with compressed air. Automatic drains shall not be installed on this Project. Manual drains shall only be installed at POC where designated on Construction Drawings.	
3.5 PVC PIPE	
A.Install pipe to allow for expansion and contraction as recommended by pipe manufacturer.	
B. Install main line pipes with 18" of cover, lateral line pipes with 12" of cover.	
C. Drawings show diagrammatic or conceptual location of piping - Contractor shall install piping to minimize change of direction, avoid placement under large trees or large shrubs, avoid placement under landscape features.	
D. Plastic pipe shall be cut squarely. Burrs shall be removed. Spigot ends of pipes 3" and larger shall be beveled.	
E. Pipe shall not be glued unless ambient temperature is at least 50 degrees F. Pipe shall not be glued in rainy conditions unless properly tented. All solvent weld joints shall be assembled using IPS 711 glue and P70 primer according to manufacturer's specification, no exceptions. All workers performing glue operations shall provide evidence of certification. Glued main line pipe shall cure a minimum of 24 hours prior to being energized. Lateral lines shall cure a minimum of 2 hours prior to being energized and shall not remain under constant pressure unless cured for 24 hours.	
F. Appropriate thrust blocking shall be performed on fittings 3" and larger. All threaded joints shall be wrapped with Teflon tape or paste unless directed by product manufacturer or sealing by o-ring.	
3.6 CONTROLLERS	
A.All grounding for pedestal controllers shall be as directed by controller manufacturer and ASIC guidelines, not to exceed a resistance reading of 5 OHMS.	
B. Locate controllers in protected, inconspicuous places, when possible. Coordinate location of pedestal controllers with Landscape Architect to minimize visibility.	
C. Coordinate location of wall mount controllers with building or electrical Contractor to facilitate electrical service and future maintenance needs. Wall mount shall be securely fastened to surface. If exterior mounted, wall mount controllers shall have electrical service wire and field control wire in separate, appropriate sized weatherproof electrical conduit. PVC pipe shall not be used.	
D. Wiring under landscape surfaces shall be placed continuously in conduit. Contractor shall be responsible to coordinate sleeving needs for conduit or sweeps elbows from exterior to interior of building.	
E. Pedestal controllers shall be placed upon VIT-Strong Box Quick Pad as per manufacturer's recommendations. Controllers shall be oriented such that Owner's Representative maintenance personnel may access easily and perform field system tests efficiently.	
F. Place Standard valve box at base of controller or nearby to allow for three to five feet of slack field control wire to be placed at each controller. This Contractor shall provide conduit access if needed for Electrical Contractor. Electrical supply and installation, as well as hook-up to controller shall be by this Contractor.	
3.7 VALVES	
A. Isolation valves, remote control valves, and quick coupler valves shall be installed according to manufacturer recommendation and Contract Specifications and Details.	
B. Valve boxes shall be set over valves so that all parts of the valve can be reached for service.	
C. Valve box and lid shall be set to be flush with finished grade. Only one remote control valve may be installed in a Carson 1419124 box. Place a minimum of 4" of 3/4" washed gravel beneath valve box for drainage. Bottom of remote control valve shall be a minimum of 2" above gravel.	
3.8 SPRINKLER HEADS	
A.No sprinkler shall be located closer than 6" to walls, fences, or buildings.	
B. Heads adjacent to walks, curbs, or paths shall be located at grade and 2" away from hardscape.	

maintainance and repair. Where practical, group remote control valves in close proximity, and protect each grouping with a manifold isolation valve as shown in details. Manifold Main Line (or Sub-Main Line) and all manifold components and isolation valves shall be at least as large as the largest diameter lateral served by the respective manifold.

2.10 REMOTE CONTROL VALVES

A.Remote control valves shall be as specified on the drawings. Remote control valves shall be located separately and individually in separate control boxes.

2.11 MANUAL CONTROL VALVES

A.Quick coupler valve shall be attached to the manifold sub-main line using a Lasco G175212 swing joint assembly with snap-lock outlet and brass stabilizer elbow. Quick coupler valve shall be placed within a Carson 10" round valve box. Top of quick coupler valve cover shall allow for complete installation of valve box lid, but also allow for insertion and operation of key. Base of quick coupler valve and top of quick coupler swing joint shall be covered in 3/4" gravel. Contractor shall not place quick coupler valves further than 200 feet apart, to allow for spot watering or supplemental irrigation of new plant material. Quick coupler valve at POC shall not be eliminated or relocated.

2.12 LATERAL LINE PIPE

A.All lateral piping shall be Schedule 40 PVC, solvent weld, and bell end. Lateral pipe shall be buried with 12-18" of cover typically. Lateral pipe shall be 3/2", 1", 1 1/4", 1 1/2" or 2" in size as indicated on Construction Drawings.

2.13 LATERAL LINE FITTINGS

A.All lateral line fittings shall be S/40 PVC

2.14 Spray Sprinklers

A.Spray head sprinklers shall be as specified on the drawings. Nozzles shall be as specified on the drawings.

2.15 VALVE BOXES

A.Carson valve boxes shall be used on this project. Sizes are as directed in these Specifications, detail sheets or plan sheets. Valve boxes shall be centered over the control valve or element they control. Valve box shall be sized large enough to allow ample room for services access, removal or replacement of valve or element. Valve box shall be set to flush to finish grade of topsoil or barfed areas. Contractor shall provide extensions or stack additional valve boxes as necessary to bring valve box top to proper grade.

2.16 IMPORT BACKFILL

A.All main line pipe, lateral line pipe and other irrigation elements shall be bedded and backfilled with clean soil, free of rocks 1" and larger. Contractor shall furnish and install additional backfill material as necessary due to rocky conditions. Trenches and other elements shall be compacted and/or water settled to eliminate settling. Debris from trenching operations un-usable for fill shall be removed from project and disposed of properly by Contractor.

2.17 OTHER PRODUCTS

A.Substitution of equivalent products is subject to the OAR's approval and must be designated as accepted in writing.

a. The Contractor shall provide materials to make the system complete and operational.

C.Control valves shall be opened. Then fully flush lateral line pipe and swing joints prior to installation of sprinklers.

D. Spray heads shall be installed and flushed again prior to installation of nozzles.

E.Contractors shall be responsible for adjustment if necessary due to grade changes during landscape construction.

3.9 FIELD QUALITY CONTROL

A.Main line pipes shall not be backfilled or accepted until the system has been tested for 2 hours at 100 psi.

B.Main line pressure test shall include all pipe and components from the point of connection to the upstream side of remote control valves. Test shall include all manifold components under constant pressure. Piping may be tested in sections that can be isolated.

C. Contractor shall provide pressurized water pump to increase or boost pressure where existing static pressure is less than 100 psi.

D. Schedule testing with OAR 48 hours in advance for approval.

E.Leaks or defects shall promptly be repaired or rectified at the Contractors expense and retested until able to pass testing.

F. Grounding resistance at pedestal controller shall also be tested and shall not exceed 5 OHMS.

3.10 ADJUSTMENT

A.Sprinkler heads shall be adjusted to proper height when installed. Changes in grade or adjustment of head height after installation shall be considered a part of the original contract and at Contractor's expense.

B.Adjust all sprinkler heads for are, radius, proper trim and distribution to cover all landscaped areas that are to be irrigated.

C. Adjust sprinklers so they do not water buildings, structures, or other landscape features.

D. Adjust run times of station to meet needs of plant material the station services.

3.11 CLEANING

A. Contractor shall be responsible for cleanliness of jobsite. Work areas shall be swept cleanly and picked up daily.

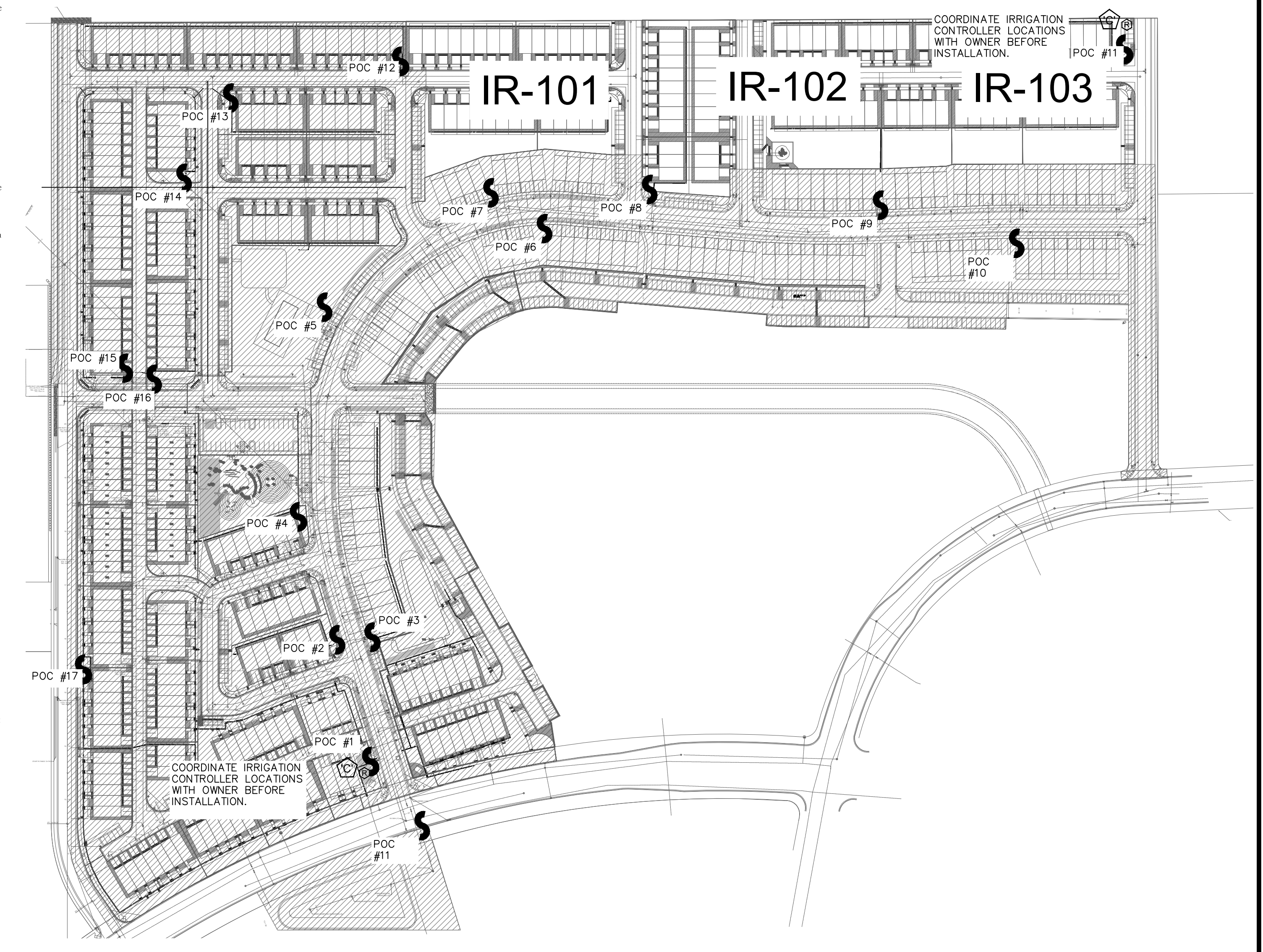
B. Open trenches or hazards shall be protected with yellow caution tape.

C. Contractor is responsible for removal and disposal of offsite trash and debris generated as a result of this Project.

D. OAR shall perform periodic as well as a final cleanliness inspection.

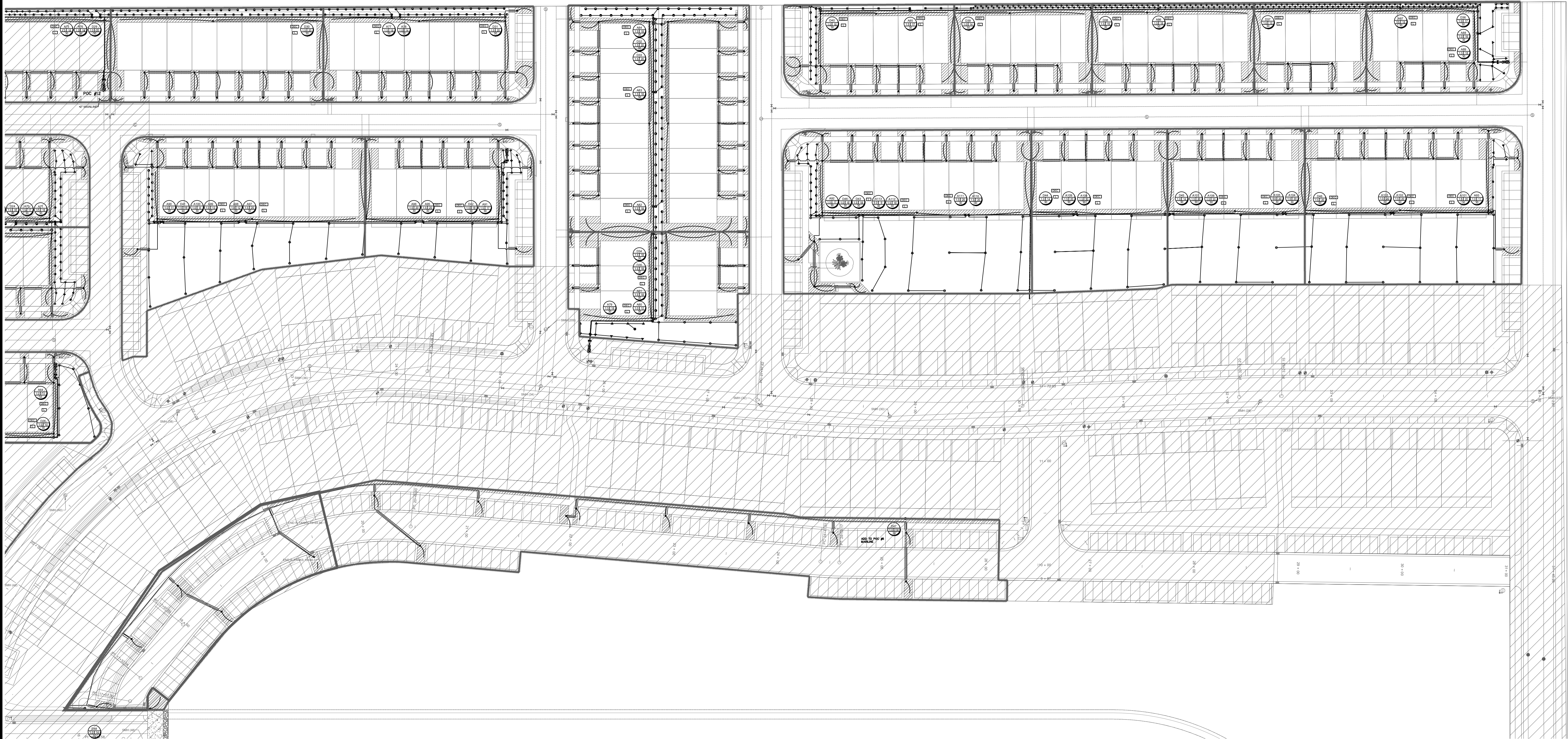
E. Contractor shall leave Project in at least a "broom clean" condition.

END OF SECTION



2" MAINLINE ROUTING, CONTROLLER AND P.O.C. LOCATION OVERVIEW

ISSUE DATE			PROJECT NUMBER			PLAN INFORMATION			PROJECT INFORMATION			DEVELOPER / PROPERTY OWNER / CLIENT			LANDSCAPE ARCHITECT / PLANNER			LICENSE STAMP			DRAWING INFO																							
6/7/2021			UT20053			<div><div>811</div><div>BLUE STAKES OF UTAH UTILITY NOTIFICATION CENTER, INC. 1-800-662-4111 www.bluestakes.org</div><div></div></div>			SUMMIT RIDGE TOWNHOMES PHASE E SANTAQUIN, UTAH			Developer / Property Owner: D.R.HORTON			<div> 3450 N. TRIUMPH BLVD. SUITE 102 LEHI, UTAH 84043 (801) 960-2698 www.pkjdesigngroup.com</div>			<div> IR 100</div>			PLOT: KBA DRAWN: KBA CHECKED: JTA PLOT DATE: 6/7/2021																							
<table><tr><th>NO.</th><th>REVISION</th><th>DATE</th></tr><tr><td>1</td><td></td><td></td></tr><tr><td>2</td><td></td><td></td></tr><tr><td>3</td><td></td><td></td></tr><tr><td>4</td><td></td><td></td></tr><tr><td>5</td><td></td><td></td></tr><tr><td>6</td><td></td><td></td></tr><tr><td>7</td><td></td><td></td></tr></table>			NO.	REVISION	DATE	1			2			3			4			5			6			7			<div><div><div>0'</div><div>75'</div><div>150'</div><div>300'</div><div>600'</div></div><div>GRAPHIC SCALE: 1" = 150'</div></div>						<div><div> LEI-ENGINEERING 3302 N. Main Street Spanish Fork, Ut. 84660 801-798-0555 ext. 226 www.lei-eng.com</div></div>											
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GRAPHIC SCALE: 1" = 50'
0' 25' 50' 100' 200'

SUMMIT RIDGE TOWNHOMES

PHASE E

SANTAQUIN, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

Developer / Property Owner:

D.R.HORTON

Building Architect / Engineer:

LEI-ENGINEERING
3302 N. Main Street
Spanish Fork, Ut. 84660
801-798-0555 ext. 226
www.lei-eng.com

LANDSCAPE ARCHITECT / PLANNER

PKJ
DESIGN GROUP
Landscape Architecture Planning & Visualization
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 960-2698
www.pkjdesigngroup.com

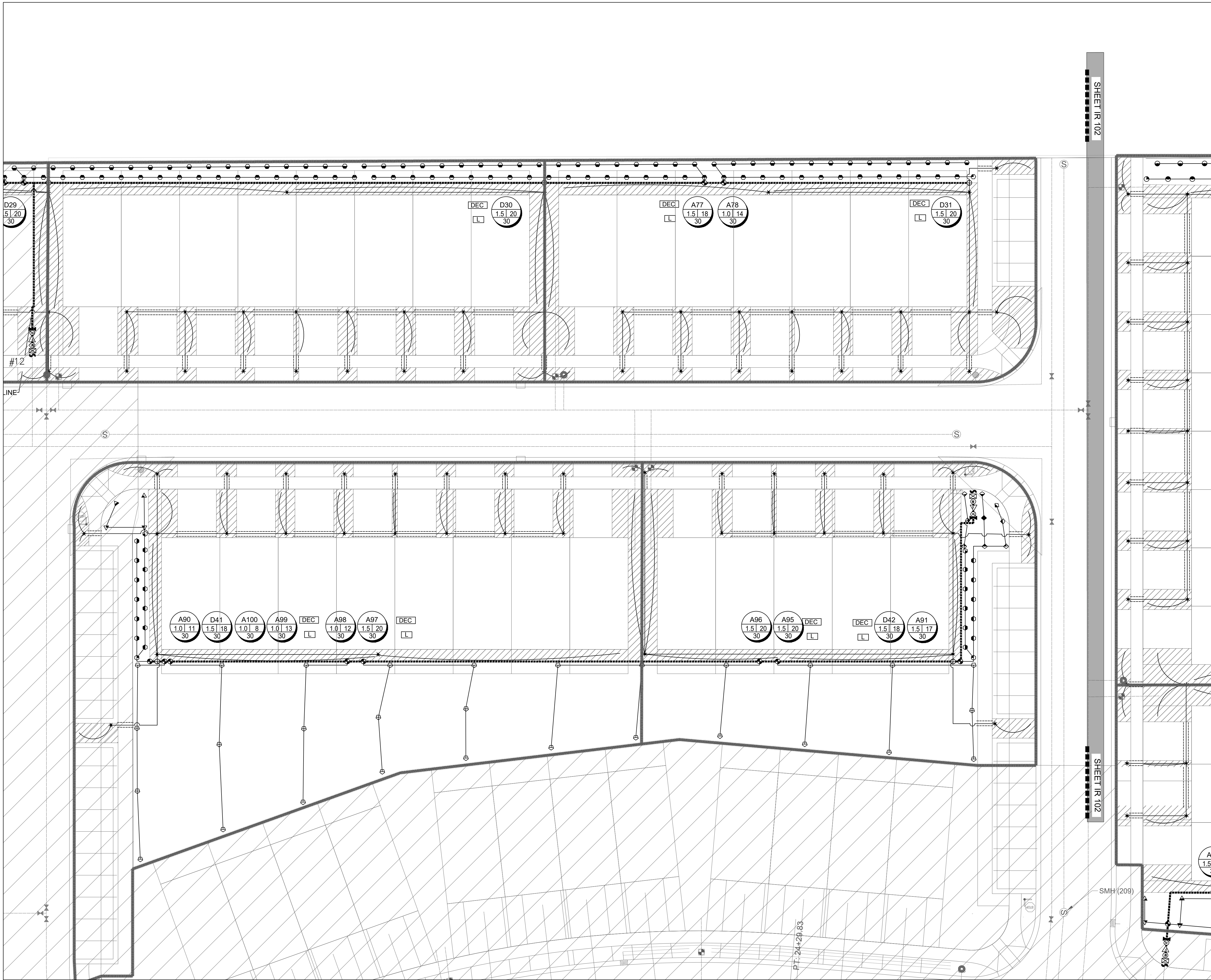
LICENSE STAMP

DRAWING INFO

PM: KBA
DRAWN: KBA
CHECKED: JTA
PLOT DATE: 6/7/2021

IRRIGATION PLAN

IR OVERVIEW



IRRIGATION LEGEND

SYMBOL	MANUFACTURER-MODEL NUMBER
●	RAINBIRD RD04-S-PRS POP UP SPRAY 5 SERIES @ 30 PSI
●	RAINBIRD RD04-S-PRS POP UP SPRAY 8 U-SERIES @ 30 PSI
●	RAINBIRD RD04-S-PRS POP UP SPRAY 10 U-SERIES @ 30 PSI
●	RAINBIRD RD04-S-PRS POP UP SPRAY 12 U-SERIES @ 30 PSI
●	RAINBIRD RD04-S-PRS POP UP SPRAY 15 U-SERIES @ 30 PSI
●	RAINBIRD RD04-S-PRS POP UP SPRAY 15 SST @ 30 PSI
●	RAINBIRD RD04-S-PRS POP UP SPRAY 15 SST @ 30 PSI
●	RAINBIRD 5000 SERIES MPR NOZZLES @ 55 PSI
●	RAINBIRD 9005 SERIES Q#8-6.6 GPM, 11#14-12.6 GPM, F#26-24.3 GPM NOZZLES @ 55 PSI
S	POINT OF CONNECTION (SECONDARY WATER) SEE PLAN FOR SIZE
Ⓢ	CONTROLLER: RAINBIRD LX-IVMPRO, CONTRACTOR TO ADJUST LOCATION WITH OWNER PRIOR TO CONSTRUCTION
Ⓢ	RAINBIRD WR2-RC WIRELESS RAIN SHUT OFF DEVICE
Ⓢ	ISOLATION BALL VALVE - LINE SIZED INSTALL PER MANUFACTURER'S SPEC.
Ⓢ	2" T SUPER AMIAD PLASTIC FILTER - INSTALL PER MANUFACTURER'S RECOMMENDATIONS (130 MICRON)
Ⓢ	MASTER VALVE
Ⓢ	FLOW SENSOR
Ⓢ	QUICK COUPLER: RAINBIRD 44LRC INSTALL PER MANUFACTURER'S SPEC.
Ⓢ	VALVE DECODER (AT ALL VALVE GROUPINGS) INSTALL PER MANUFACTURER'S SPEC. LIGHTNING ARRESTER (AT ALL VALVE GROUPINGS) INSTALL PER MANUFACTURER'S SPEC.
Ⓢ	REMOTE CONTROL VALVE: RAINBIRD IVMSOL AUTOMATIC CONTROL VALVE (SIZE AS NOTED ON PLAN - USE JUMBO BOX PURPLE LID) PLACE YELLOW TAGS ON ALL VALVES AND LABEL
Ⓢ	DRIP CONTROL ZONE KIT: RAINBIRD XEZ (PER PLAN)-PRBR-COM MED FLOW (SIZE AS NOTED ON PLAN)
Ⓢ	MAINLINE: SCHEDULE 40 PVC WITH SCHEDULE 80 FITTINGS, 2" DIAMETER 24" MIN. COVER
Ⓢ	LATERAL LINE: SCHEDULE 40 PVC WITH SCH. 40 FITTINGS. SEE PIPE SIZING CHART
Ⓢ	DRIP CONNECTION: PROVIDE DRIP IRRIGATION TO ALL TREES, SHRUBS, AND PERENNIALS AND PLANTER AREAS
Ⓢ	DRIP LINE: RAINBIRD XESP-09-18-100 OR EQUIVALENT
Ⓢ	CLASS 200 SLEEVE PER PLAN
NO SYMBOL	WIRE CHASE, SIZE TO BE TWICE THE DIAMETER OF THE WIRE BUNDLE WITHIN 1.1/4" DIAMETER MINIMUM
	14 GAUGE SOLID COPPER SINGLE STRAND CONTROL WIRE. INSTALL PER MANUFACTURER'S SPEC. PROVIDE 2 WIRE LOOP SYSTEM. ONLY WIRE FROM POC TO CONTROLLER IS DEPICTED ON PLANS. CONTRACTOR TO INSTALL WIRE IN CONDUIT FROM POC TO ALL VALVES. THE WIRE TO VALVES IS NOT SHOWN ON PLAN.

DRIP ZONE

TYPE	PART NUMBER	EMITTER FLOW	EMITTER SPACING	ROW SPACING	ROW SPACING
XIS DRIPLINE	XESP-09-18	9 GPH	18"	18"	18-21 IN.
TOTAL DRIP ZONE FLOW		20 GPM		TIME TO APPLY 1/4" OF WATER	23
MAX. LATERAL LENGTH OF TUBING	350 FT			REQUIRED NUMBER OF STAKES	500
TOTAL LENGTH OF ZONE DRIPLINE	2,000 FT (varies per plan)			NUMBER OF FLUSH POINTS	2
APPLICATION RATE	64 IN. / HR			SUGGESTED HEADER & FOOTER PIPE SIZE	CLASS 200 1.25"

IRRIGATION NOTES

- BEFORE WORK IS TO COMMENCE, BLUE STAKES/DIG LINE IS TO BE CALLED AND NOTIFIED. IF ANY DAMAGE TO UTILITIES HAPPEN DURING CONSTRUCTION, THE CONTRACTOR SHALL REPAIR IT AT THEIR EXPENSE WITH NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL APPLY AND PAY FOR ALL NECESSARY PERMITS IN ACCORDANCE WITH CITY AND/OR COUNTY CODES AND COMPLY WITH SPECIFICATIONS AND DRAWINGS.
- INVESTIGATE TO MAKE SURE THAT THE IRRIGATION SYSTEM IS, IN FACT, BEING CONNECTED TO A SECONDARY SYSTEM. IF IT IS NOT CONNECTED TO SECONDARY, CONTACT THE OWNER AND LANDSCAPE ARCHITECT TO COORDINATE A CULINARY SYSTEM AND REQUIRED COMPONENTS. A FUNCTIONING AMIAD FILTER IS TO BE USED AT THE POINT OF CONNECTION.
- VERIFY THAT THE POINT OF CONNECTION IS IN THE CORRECT LOCATION BEFORE INSTALLATION. ALL CONNECTIONS ON THIS PROJECT ARE TO SECONDARY WATER AND SHOULD BE NOTED AS SUCH; THEREFORE, ALL PARTS MUST MEET WATER STANDARDS THAT PERTAIN TO SECONDARY WATER USE. PURPLE VALVE BOXES FOR SECONDARY WATER SYSTEMS.
- ON OCCASION AND FOR GRAPHIC PURPOSES ONLY, THE IRRIGATION SYSTEM MIGHT BE SHOWN IN HARDSCAPE AREAS. THIS IRRIGATION IS TO BE PLACED IN LANDSCAPED AREAS ON THE PROPERTY SITE.
- CONTRACTOR SHALL USE ONLY COMMERCIAL GRADE IRRIGATION PRODUCTS. THIS INCLUDES PIPE TO BE SCHEDULE 40 PVC OR BETTER. NO POLY PIPE IS TO BE USED. FITTINGS UP TO 1-1/2" MUST BE SCHEDULE 40 OR BETTER. FITTINGS LARGER THAN 1-1/2" SHALL BE SCHEDULE 80 OR BETTER. CONTRACTOR IS RESPONSIBLE FOR ENSURING ACCURATE COUNTS AND QUANTITIES OF ALL IRRIGATION MATERIALS FOR BIDDING AND INSTALLATION.
- MAIN LINES SHALL BE A MINIMUM OF 24" DEEP AND LATERAL LINES A MINIMUM OF 12" DEEP. NO ROCK GREATER THAN 1/2" DIAMETER SHALL BE ALLOWED IN TRENCHES. TRENCHING BACKFILL MATERIAL SHALL BE COMPACTED TO PROPER FINISHED GRADE.
- NO IRRIGATION MAIN LINE MAY BE LOCATED WITHIN 5 FEET OF ANY STRUCTURE.
- TO AVOID PIPE DAMAGE, ADJUST LOCATION OF PIPE TO NOT BE DIRECTLY UNDER PLANT MATERIALS. VALVE BOXES ARE PREFERRED TO BE IN PLANTER BEDS INSTEAD OF THE LAWN.
- PLAN INDICATES 100% OR BETTER HEAD TO HEAD COVERAGE. SHOULD CONTRACTOR FIND DISCREPANCIES DUE TO NECESSARY FIELD ADJUSTMENTS, CONTACT LANDSCAPE ARCHITECT FOR IRRIGATION CORRECTION.
- DRIP IRRIGATION TO BE INSTALLED PER DETAILS. CONTRACTOR SHALL MAKE NECESSARY ADJUSTMENTS. TUBING SHOULD REST TOWARD OUTER EDGE OF ROOTBALL AND NOT AGAINST TRUNK OF PLANT.
- A QUICK COUPLER SHALL BE INSTALLED AT POINT OF CONNECTION TO ALLOW BLOW OUT OF SYSTEM BY AIR COMPRESSOR AT END OF EACH SEASON.
- INSTALL SLEEVES FOR ALL PIPES AND WIRE CONDUIT THAT ARE PLACED UNDER PAVEMENT AND SIDEWALKS. SLEEVES SHALL BE 2 SIZES LARGER THAN PIPE BEING PLACED INTERNALLY. WIRE CONDUIT SHALL BE INSTALLED IN CLASS 200 PIPE AT ANY DIRECTIONAL CHANGE THAT OCCURS, A JUNCTION BOX IS TO BE PLACED.
- CONDUITS CAN NOT BE SHARED BY WATER AND ELECTRICAL LINES. ALL WIRE TO BE PUT IN PVC CONDUIT. ALL WIRE CONNECTIONS TO BE PLACED IN A VALVE BOX. ALL WIRE CONNECTIONS TO USE WATERPROOF WIRE CONNECTORS WITH AT LEAST 3' OF EXTRA WIRE. PROVIDE PLENTY OF EXTRA WIRE AT EVERY DIRECTIONAL CHANGE. INSULATED 14 GAUGE COPPER TO BE USED FOR ALL CONTROL WIRES AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
- CONTRACTOR TO INSTALL LIGHTNING ARRESTOR AND GROUNDING RODS ON SITE PER MANUFACTURER'S RECOMMENDATIONS, SEE DETAILS.
- CONTRACTOR TO SEPARATE SYSTEM (CONTROLLER, VALVES, AND DIFFERENT COLORED WIRE) FROM CITY MAINTAINED PROPERTY AND HOA/OWNER MAINTAINED PROPERTY.
- DUCT TAPE ALL SLEEVES TO PREVENT SOIL OR OTHER DEBRIS ENTERING PIPE. IDENTIFY ALL SLEEVES BY WOOD OR PVC STAKES AND SPRAY PAINT WITH MARKING PAINT. REMOVE STAKES ONCE IRRIGATION SYSTEM IS COMPLETE.
- TO PREVENT EROSION AND LOW POINT DRAINAGE CONTRACTOR SHALL INSTALL CHECK VALVES
- LOCATE SPRAY HEADS NO CLOSER THAN 6" FROM WALLS, FENCES OR BUILDINGS AND 2" AWAY FROM WALKS, PATHS OR CURBS.
- PRESSURE TEST MAINLINE FOR LEAKS PRIOR TO BACKFILLING. CONTACT LANDSCAPE ARCHITECT/OWNER AT THIS TIME FOR COMPLIANCE.
- CONTRACTOR TO CONSULT WITH OWNER ON EXACT LOCATION OF CONTROLLER. CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR AND OWNER FOR THE POWER SUPPLY. INSTALL ALL PER MANUFACTURER'S SPECIFICATIONS. CONTRACTOR SHALL INSTALL A RAIN SENSOR WITH THE CONTROLLER UNLESS OTHERWISE DIRECTED BY OWNER OR LANDSCAPE ARCHITECT.
- LATERAL LINES SHALL BE NO SMALLER THAN 3/4". LANDSCAPE CONTRACTOR TO ENSURE THE FOLLOWING PIPE SIZES DO NOT EXCEED THE SUGGESTED GPM LISTED BELOW:

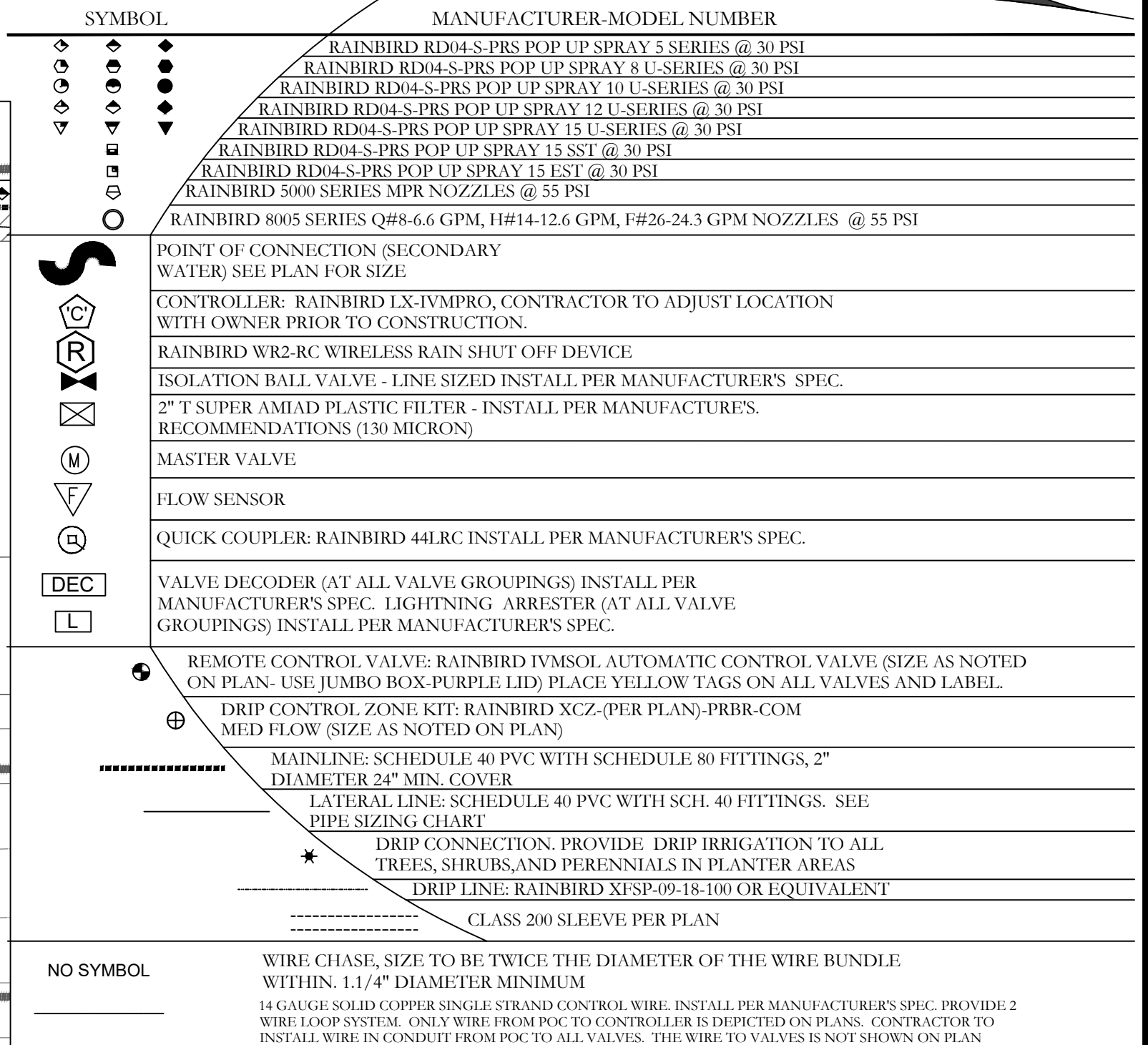
3/4"	8 GPM
1"	12 GPM
1-1/2"	30 GPM
2"	53 GPM
2-1/2"	75 GPM
3"	110 GPM
4"	180 GPM

VALVE ID TAG

VALVE SIZE	1.0 18
PSI AT LAST HEAD IN ZONE	55

NOTE: VALVE ID TAGS ARE LOCATED NEAR VALVES IN THE ORDER THE VALVES APPEAR ON THE DRAWING

ISSUE DATE	PROJECT NUMBER	PLAN INFORMATION	PROJECT INFORMATION	DEVELOPER / PROPERTY OWNER / CLIENT	LANDSCAPE ARCHITECT / PLANNER	LICENSE STAMP	DRAWING INFO
6/7/2021	UT20053	<div>811 BLUE STAKES OF UTAH UTILITY NOTIFICATION CENTER, INC. 1-800-662-4111 www.bluestakes.org</div> <div> GRAPHIC SCALE: 1" = 20'</div>	<h2>SUMMIT RIDGE TOWNHOMES</h2> <h3>PHASE E</h3> <h3>SANTAQUIN, UTAH</h3>	<div>Developer / Property Owner: D.R.HORTON</div> <div>Building Architect / Engineer: LEI-ENGINEERING 3302 N. Main Street Spanish Fork, Ut. 84660 801-798-0555 ext. 226 www.lei-eng.com</div>	<div> Landscape Architecture Planning & Visualization 3450 N. TRIUMPH BLVD. SUITE 102 LEHI, UTAH 84043 (801) 960-2698 www.pkjdesigngroup.com</div>	<div> IRRIGATION PLAN IR 101</div>	<div>PM: KBA DRAWN: KBA CHECKED: JTA PLOT DATE: 6/7/2021</div>



IRRIGATION NOTES

- The diagram shows a circular valve ID tag with the following information:

 - Flow Rate (Left):** 3/4" 8 GPM, 1" 12 GPM, 1-1/2" 30 GPM, 2" 53 GPM, 2-1/2" 75 GPM, 3" 110 GPM, 4" 180 GPM.
 - Pressure (Right):** PSI AT LAST HEAD IN ZONE.
 - Valve ID Tag (Center):** A1 (top), 1.0 (left), 18 (right), 55 (bottom).
 - Labels:** VALVE ID TAG, CONTROLLER NUMBER, VALVE NUMBER, GALLONS PER MINUTE, NOTE.
 - Note:** 1. VALVE ID TAGS ARE LOCATED NEAR VALVES IN THE ORDER THE VALVES APPEAR ON THE DRAWING.

28

IRRIGATION LEGEND

SYMBOL	MANUFACTURER-MODEL NUMBER
	RAINBIRD RD04-S-PRS POP UP SPRAY 5 SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 6 SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 10 SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 12 SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 SST @ 30 PSI
	RAINBIRD 5000 SERIES MPR NOZZLES @ 55 PSI
	RAINBIRD 9005 SERIES Q#8-6.6 GPM, 11#14-12.6 GPM, F#26-24.3 GPM NOZZLES @ 55 PSI
	POINT OF CONNECTION (SECONDARY WATER) SEE PLAN FOR SIZE
	CONTROLLER: RAINBIRD LX-IV-MPRO, CONTRACTOR TO ADJUST LOCATION WITH OWNER PRIOR TO CONSTRUCTION.
	RAINBIRD WR2-RC WIRELESS RAIN SHUT OFF DEVICE
	ISOLATION BALL VALVE - LINE SIZED INSTALL PER MANUFACTURER'S SPEC.
	2" T SUPER AMIAD PLASTIC FILTER - INSTALL PER MANUFACTURER'S RECOMMENDATIONS (130 MICRON)
	MASTER VALVE
	FLOW SENSOR
	QUICK COUPLER: RAINBIRD 44LRC INSTALL PER MANUFACTURER'S SPEC.
	VALVE DECODER (AT ALL VALVE GROUPINGS) INSTALL PER MANUFACTURER'S SPEC. LIGHTNING ARRESTER (AT ALL VALVE GROUPINGS) INSTALL PER MANUFACTURER'S SPEC.
	REMOTE CONTROL VALVE: RAINBIRD IVMSOL AUTOMATIC CONTROL VALVE (SIZE AS NOTED ON PLAN: USE JUMBO BOX PURPLE LID) PLACE YELLOW TAGS ON ALL VALVES AND LABEL.
	DRIP CONTROL ZONE KIT: RAINBIRD XCZ-(PER PLAN)-PRBR-COM MED FLOW (SIZE AS NOTED ON PLAN)
	MAINLINE: SCHEDULE 40 PVC WITH SCHEDULE 80 FITTINGS, 2" DIAMETER 24" MIN. COVER
	LATERAL LINE: SCHEDULE 40 PVC WITH SCH. 40 FITTINGS. SEE PIPE SIZING CHART
	DRIP CONNECTION: PROVIDE DRIP IRRIGATION TO ALL TREES, SHRUBS, AND PERENNIALS IN PLANTER AREAS
	DRIP LINE: RAINBIRD XISP-09-18-100 OR EQUIVALENT
	CLASS 200 SLEEVE PER PLAN
NO SYMBOL	WIRE CHASE, SIZE TO BE TWICE THE DIAMETER OF THE WIRE BUNDLE WITHIN 1.1/4" DIAMETER MINIMUM 14 GAUGE SOLID COPPER SINGLE STRAND CONTROL WIRE. INSTALL PER MANUFACTURER'S SPEC. PROVIDE 2 WIRE LOOP SYSTEM. ONLY WIRE FROM POC TO CONTROLLER IS DEPICTED ON PLANS. CONTRACTOR TO INSTALL WIRE IN CONDUIT FROM POC TO ALL VALVES. THE WIRE TO VALVES IS NOT SHOWN ON PLAN.

DRIP ZONE

TYPE	PART NUMBER	EMITTER FLOW	EMITTER SPACING	ROW SPACING	ROW SPACING
XIS DRIPLINE	XISP-09-18	.9 GPH	18"	18"	18-21 IN.
TOTAL DRIP ZONE FLOW		20 GPM	TIME TO APPLY 1/4" OF WATER	23	
MAX. LATERAL LENGTH OF TUBING	350 FT		REQUIRED NUMBER OF STAKES	500	
TOTAL LENGTH OF ZONE DRIPLINE	2,000 FT (varies per plan)		NUMBER OF FLUSH POINTS	2	
APPLICATION RATE	64 IN. / 1 HR.		SUGGESTED HEADER & FOOTER PIPE SIZE	CLASS 200 1.25"	

NUMBERS MAY CHANGE DUE TO SIZE OF DRIP ZONE PER PLAN

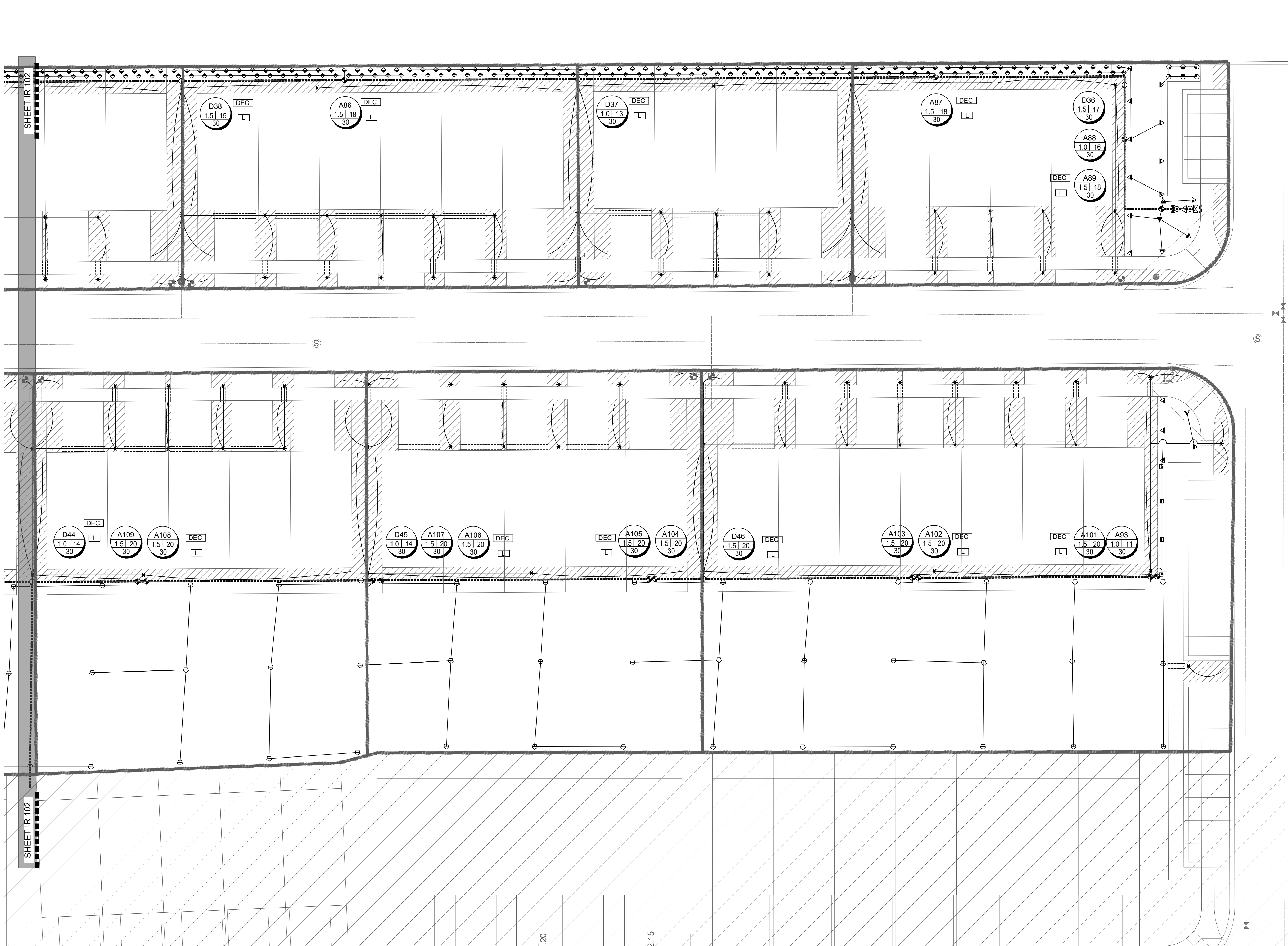
IRRIGATION NOTES

- BEFORE WORK IS TO COMMENCE, BLUE STAKES/DIG LINE IS TO BE CALLED AND NOTIFIED. IF ANY DAMAGE TO UTILITIES HAPPEN DURING CONSTRUCTION, THE CONTRACTOR SHALL REPAIR IT AT THEIR EXPENSE WITH NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL APPLY AND PAY FOR ALL NECESSARY PERMITS IN ACCORDANCE WITH CITY AND/OR COUNTY CODES AND COMPLY WITH SPECIFICATIONS AND DRAWINGS.
- INVESTIGATE TO MAKE SURE THAT THE IRRIGATION SYSTEM IS, IN FACT, BEING CONNECTED TO A SECONDARY SYSTEM. IF IT IS NOT CONNECTED TO SECONDARY, CONTACT THE OWNER AND LANDSCAPE ARCHITECT TO COORDINATE A CULINARY SYSTEM AND REQUIRED COMPONENTS. A FUNCTIONING AMIAD FILTER IS TO BE USED AT THE POINT OF CONNECTION.
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- MAIN LINES SHALL BE A MINIMUM OF 2" DEEP AND LATERAL LINES A MINIMUM OF 12" DEEP. NO ROCK GREATER THAN 1/2" DIAMETER SHALL BE ALLOWED IN TRENCHES. TRENCHING BACKFILL MATERIAL SHALL BE COMPACTED TO PROPER FINISHED GRADE.
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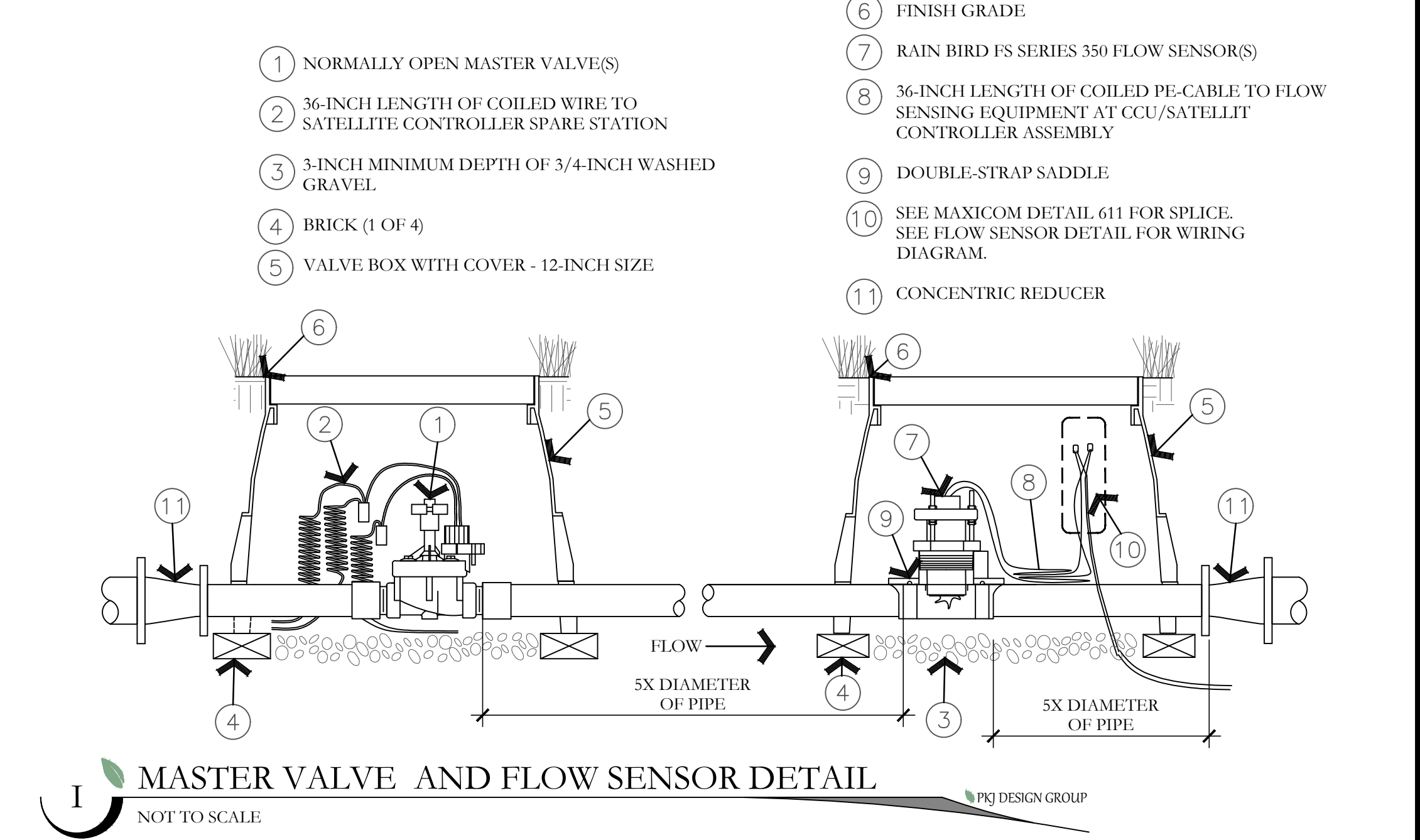
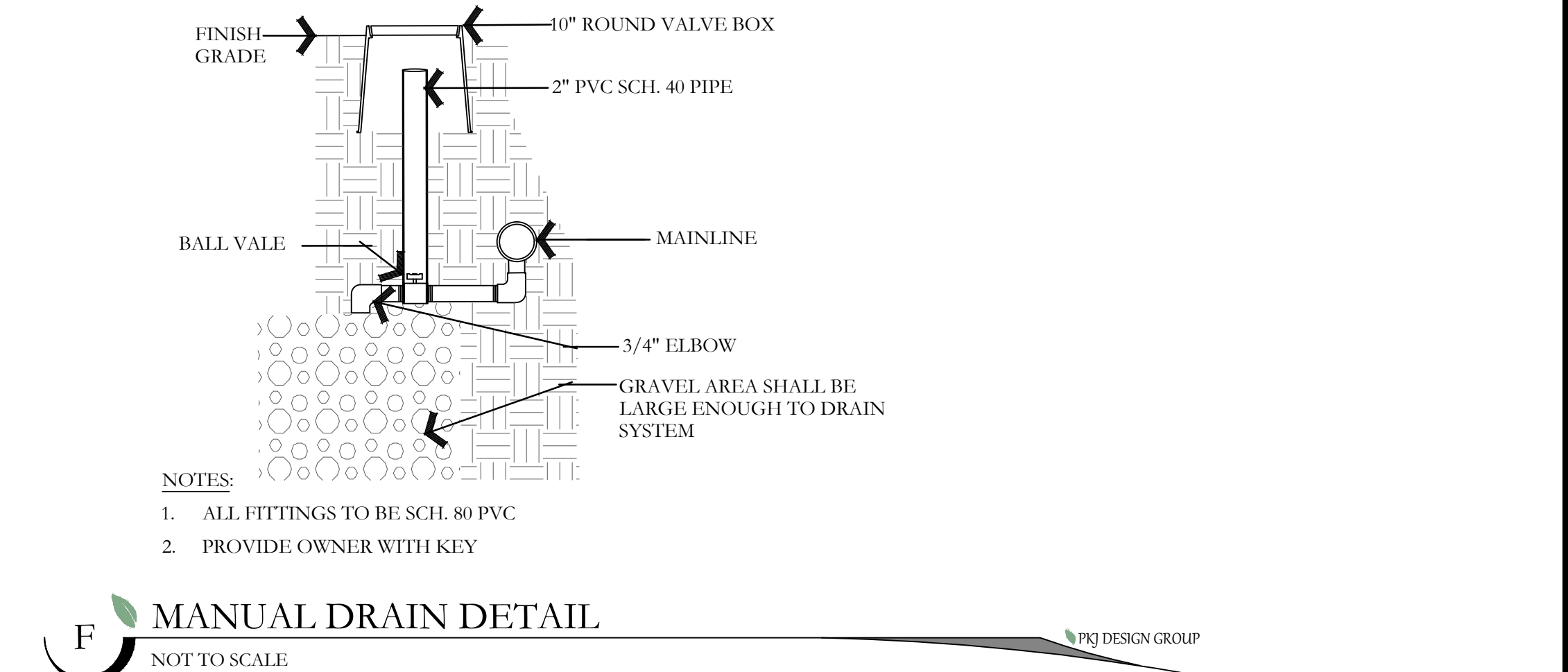
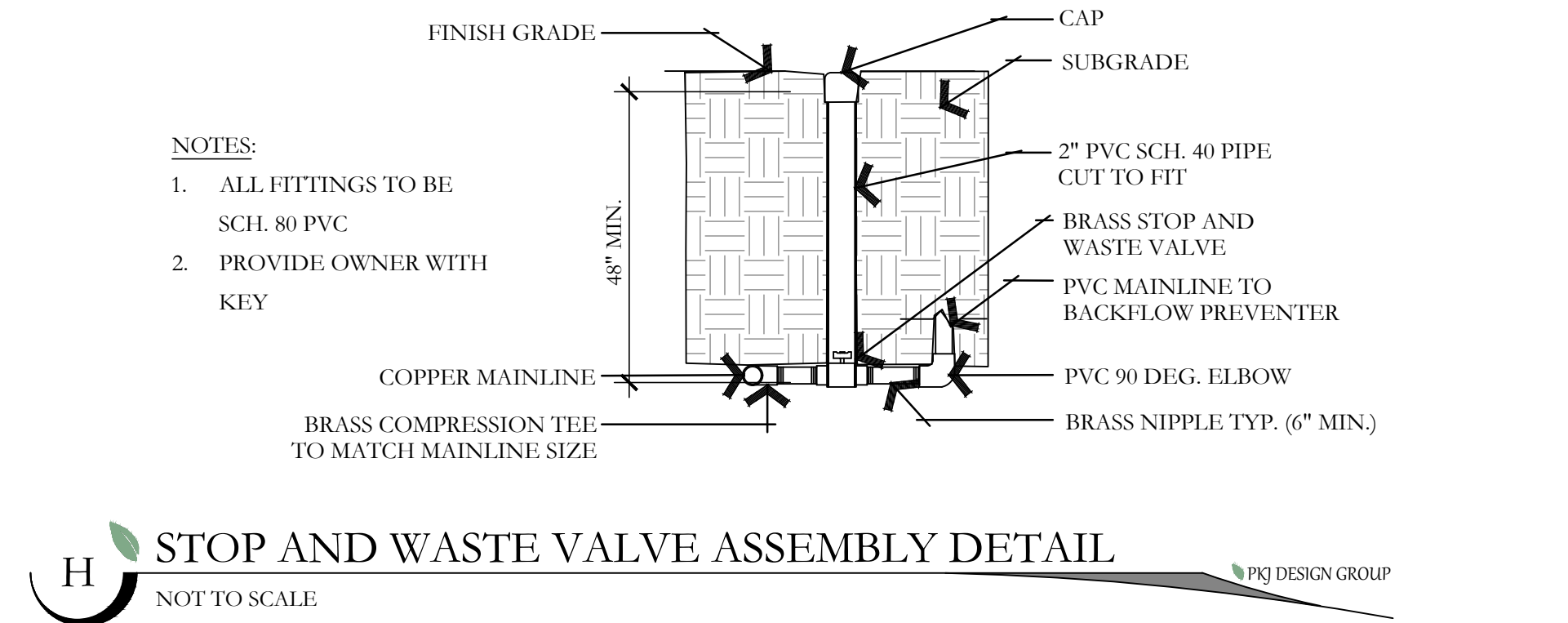
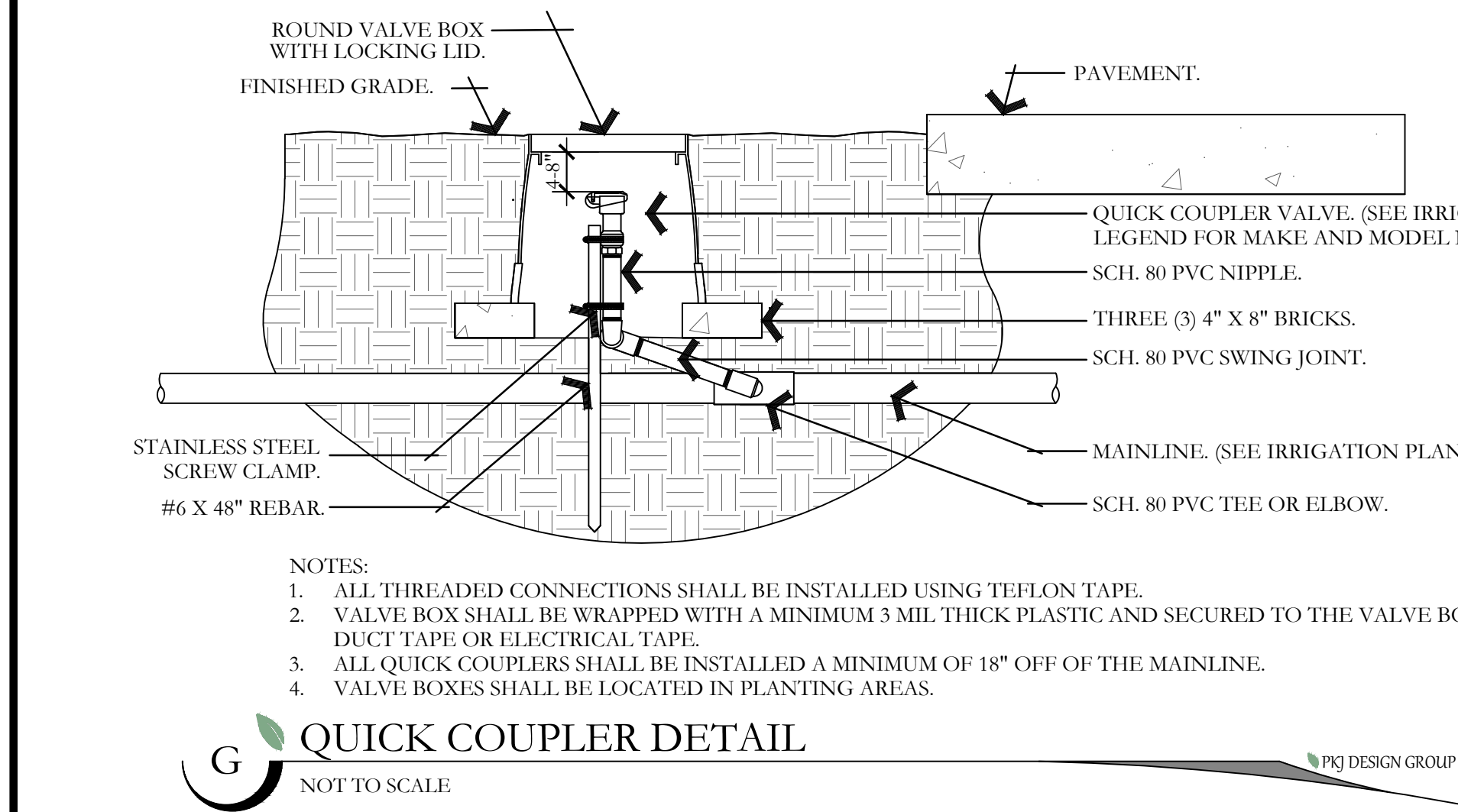
VALVE ID TAG

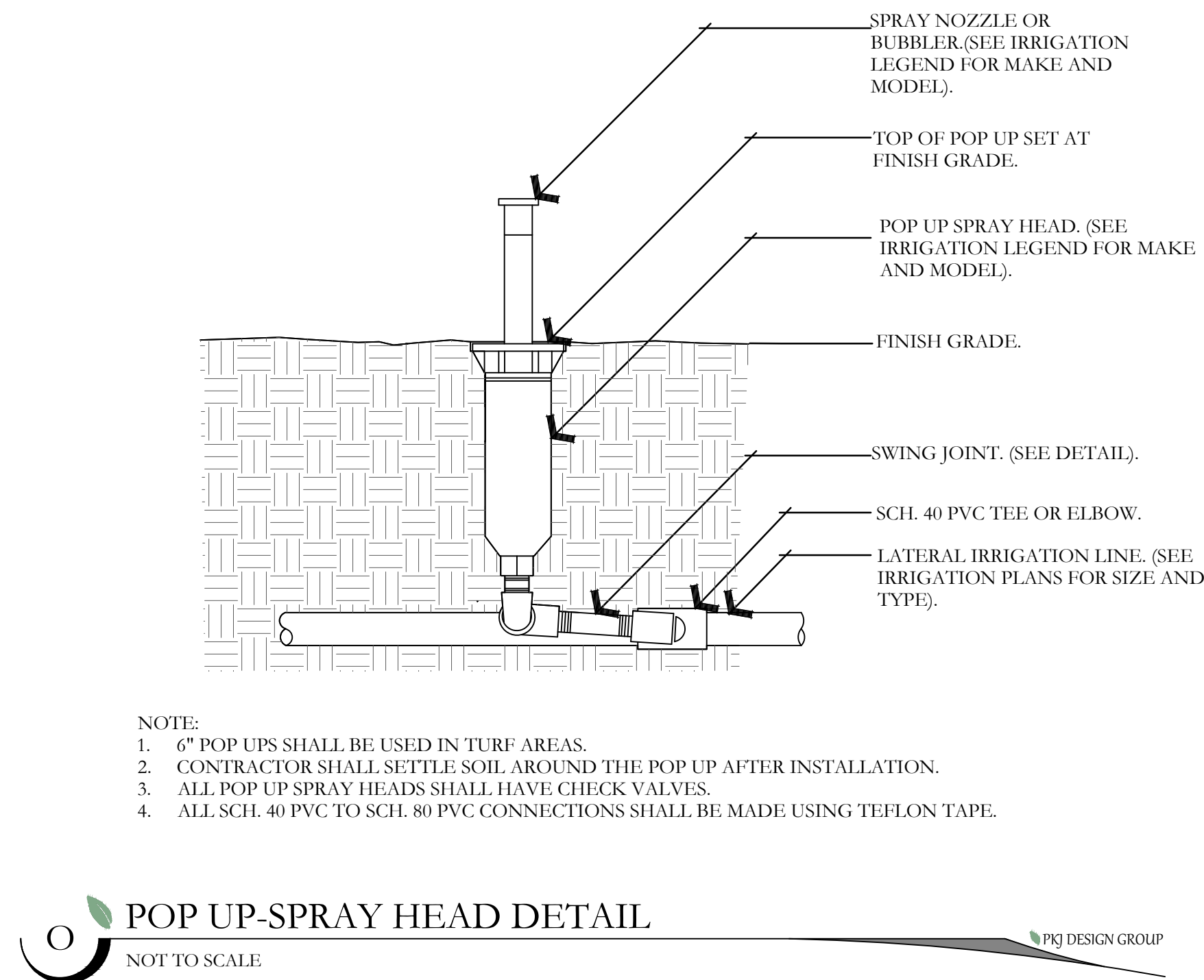
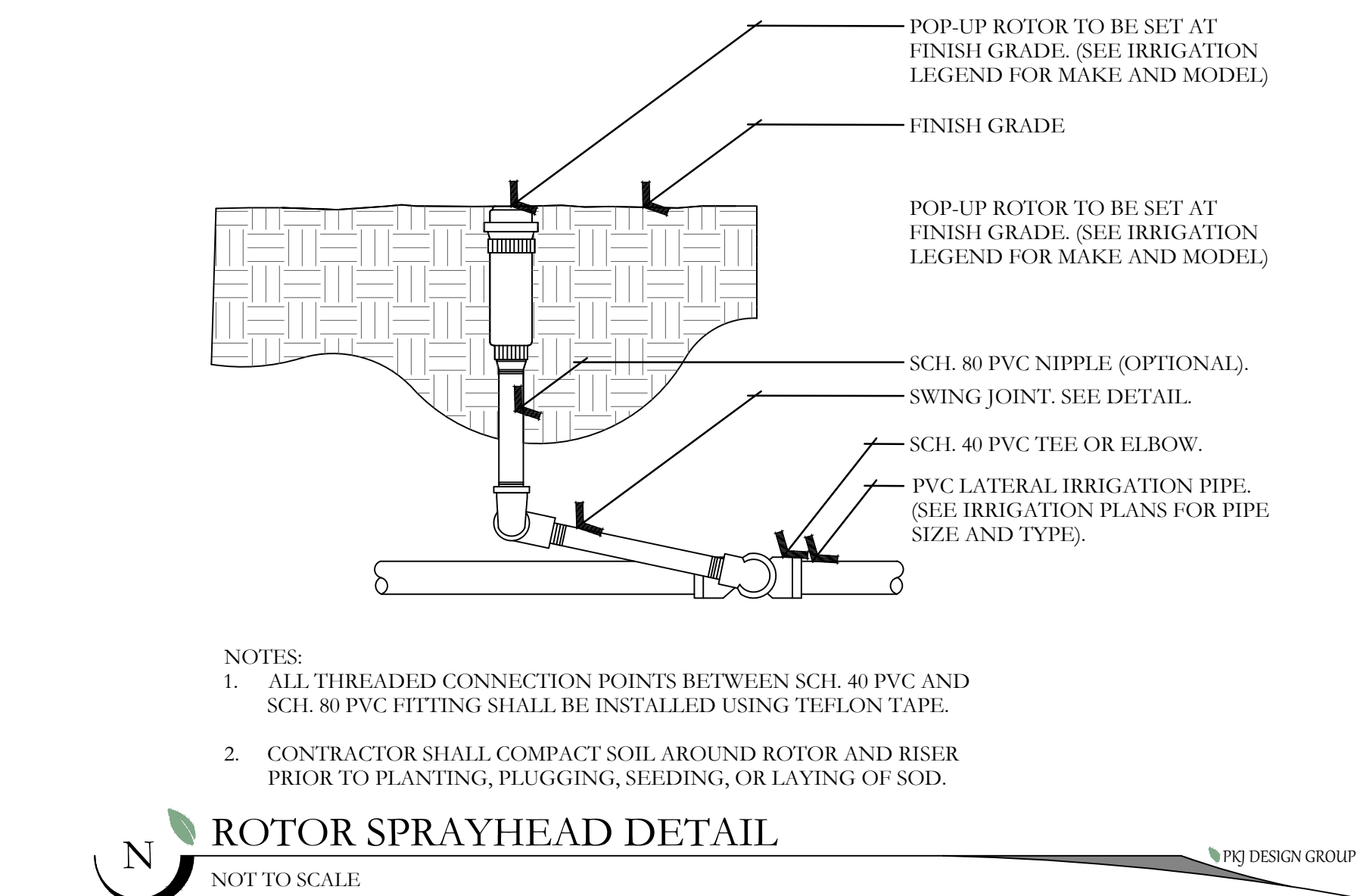
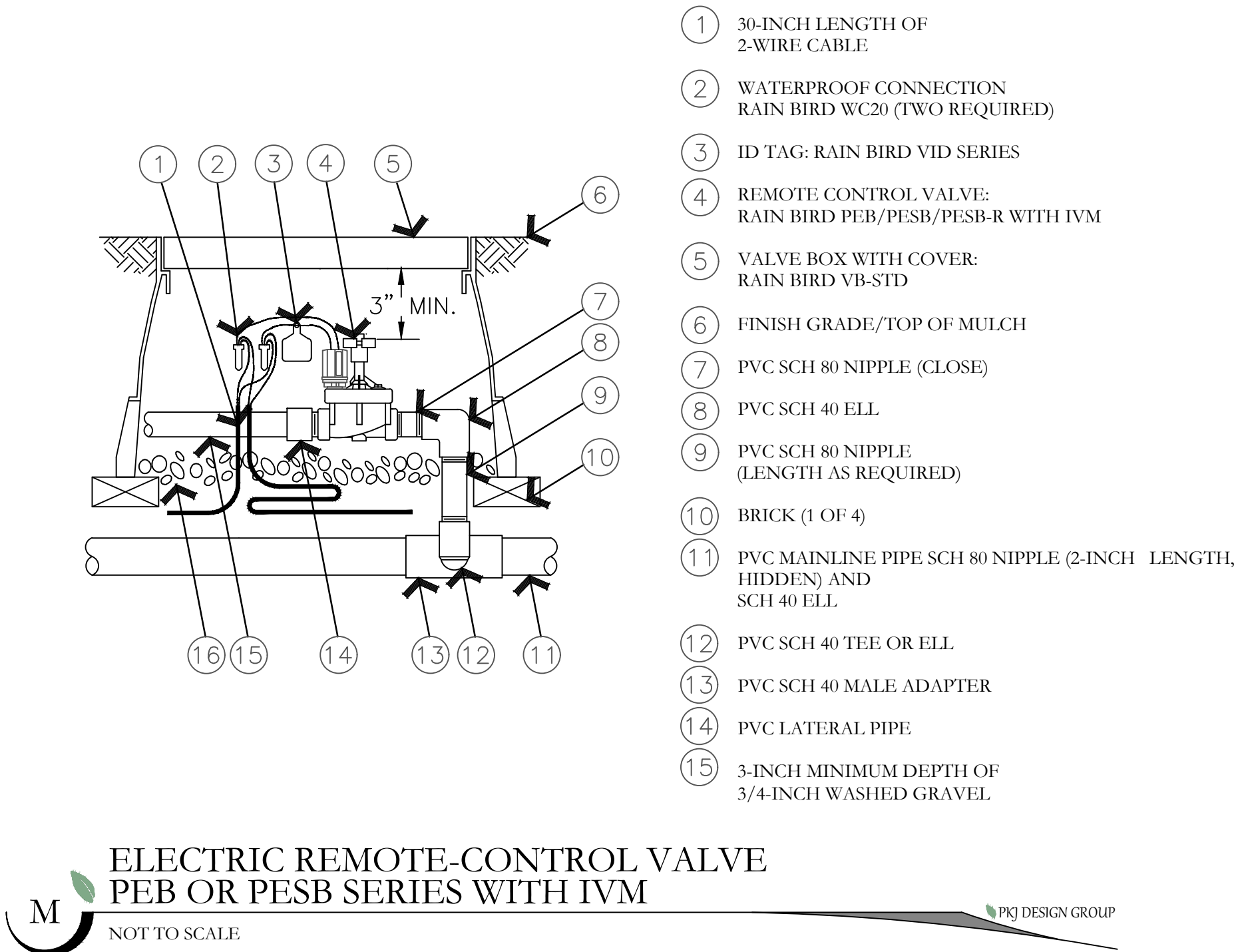
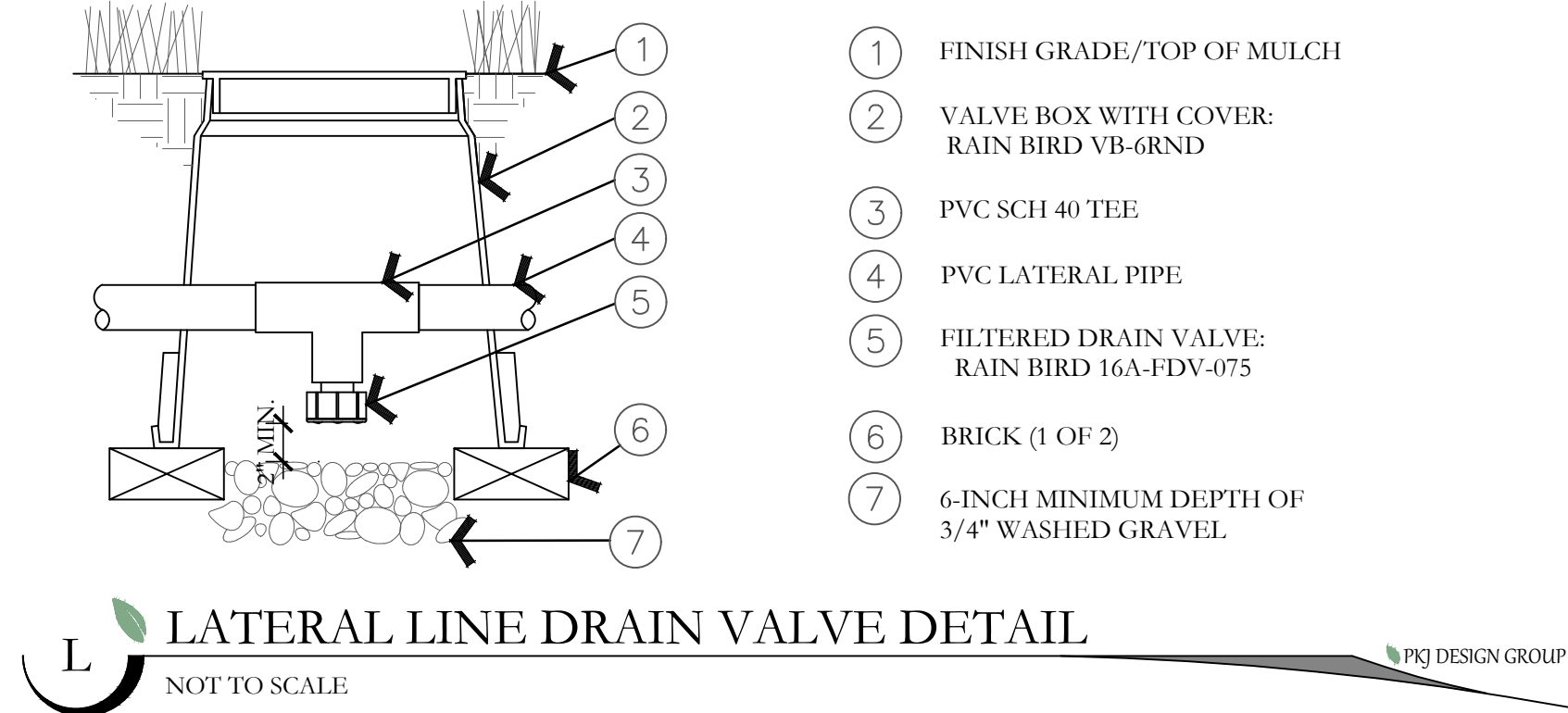
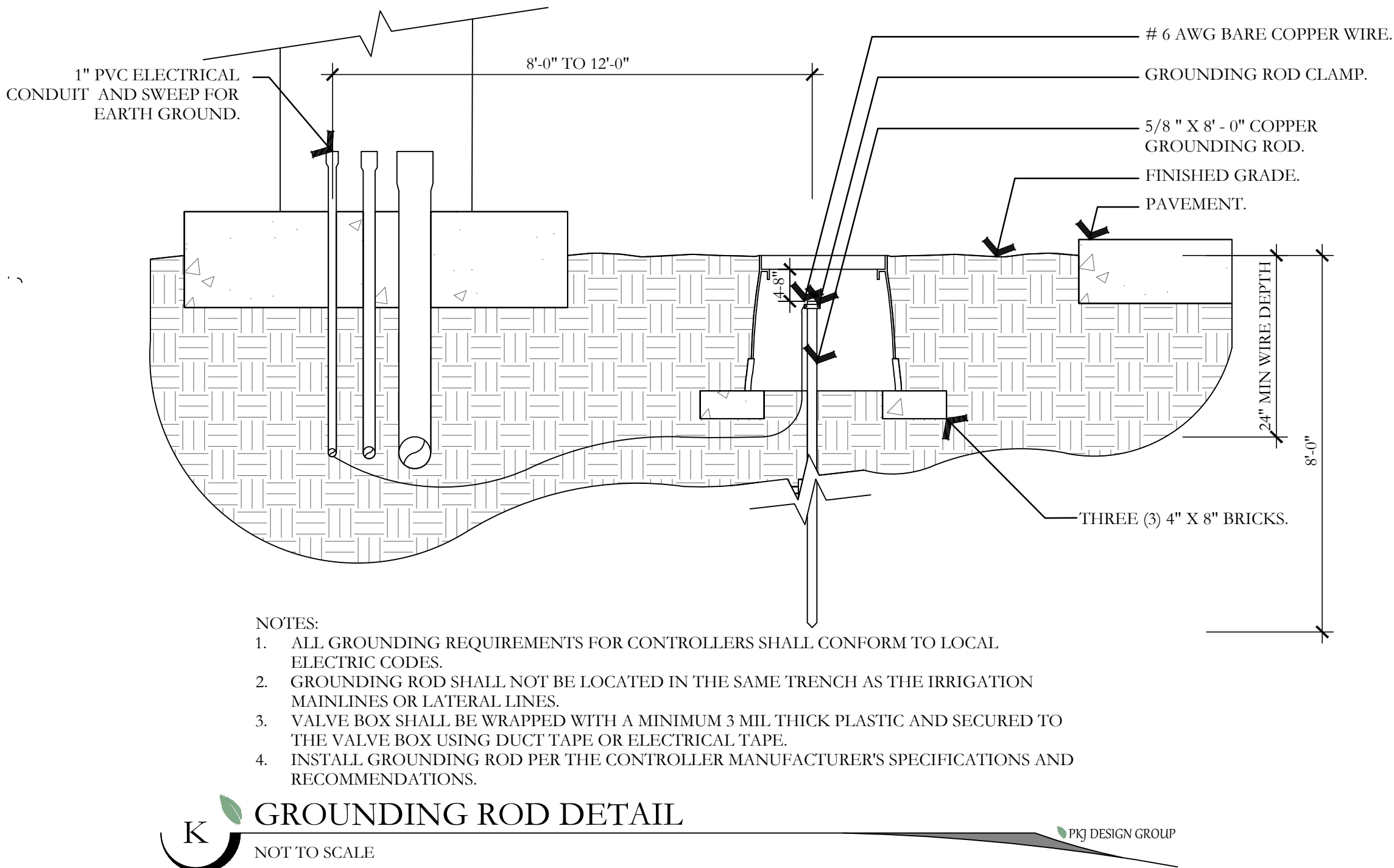
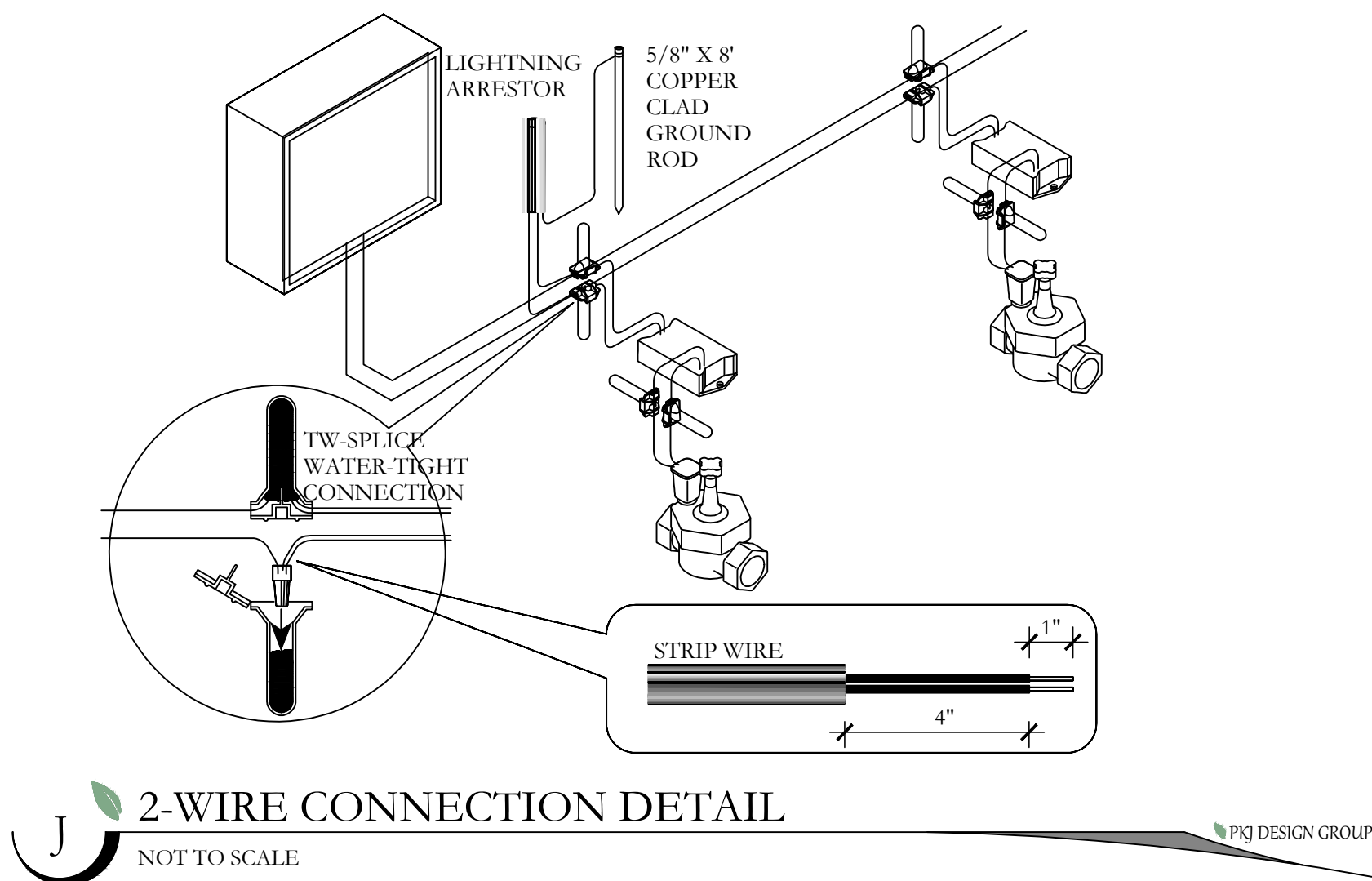
VALVE SIZE	1.0 18	CONTROLLER NUMBER
PSI AT LAST HEAD IN ZONE	55	VALVE NUMBER
		GALLONS PER MINUTE

NOTE:
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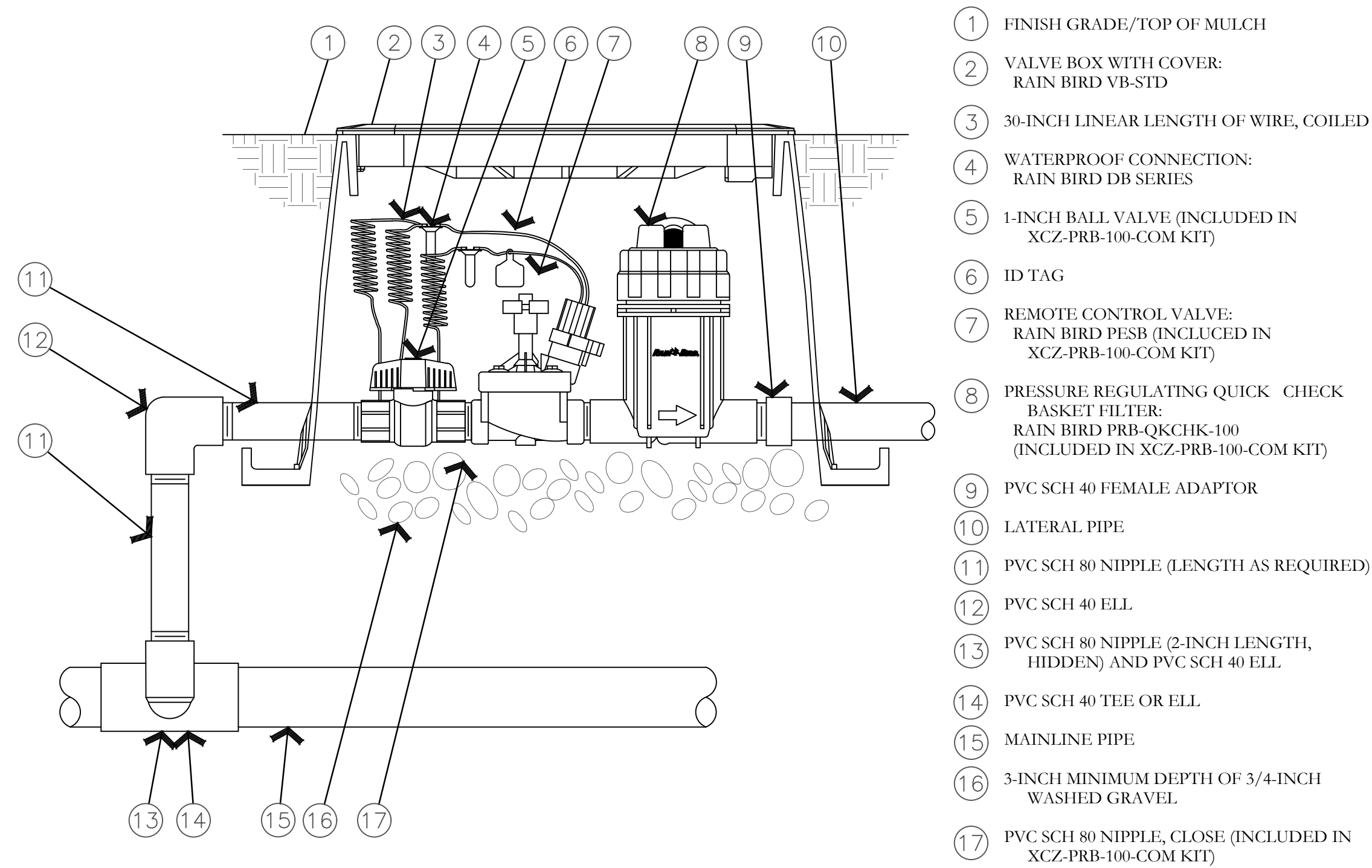
ISSUE DATE	PROJECT NUMBER	PLAN INFORMATION	PROJECT INFORMATION	DEVELOPER / PROPERTY OWNER / CLIENT	LANDSCAPE ARCHITECT / PLANNER	LICENSE STAMP	DRAWING INFO
6/7/2021	UT20053	 BLUE STAKES OF UTAH UTILITY NOTIFICATION CENTER, INC. 1-800-662-4111 www.bluestakes.org	SUMMIT RIDGE TOWNHOMES PHASE E SANTAQUIN, UTAH	Developer / Property Owner: D.R.HORTON	 PKJ DESIGN GROUP Landscape Architecture Planning & Visualization 3450 N. TRIUMPH BLVD. SUITE 102 LEHI, UTAH 84043 (801) 960-2698 www.pkjdesigngroup.com	 JEREMY AINSWORTH 812812-06/07/2021 STATE OF UTAH	PM: KBA DRAWN: KBA CHECKED: JTA PLOT DATE: 6/7/2021
NO.	REVISION	DATE		Building Architect / Engineer: LEI-ENGINEERING 3302 N. Main Street Spanish Fork, Ut. 84660 801-798-0555 ext. 226 www.lei-eng.com		IRRIGATION PLAN	
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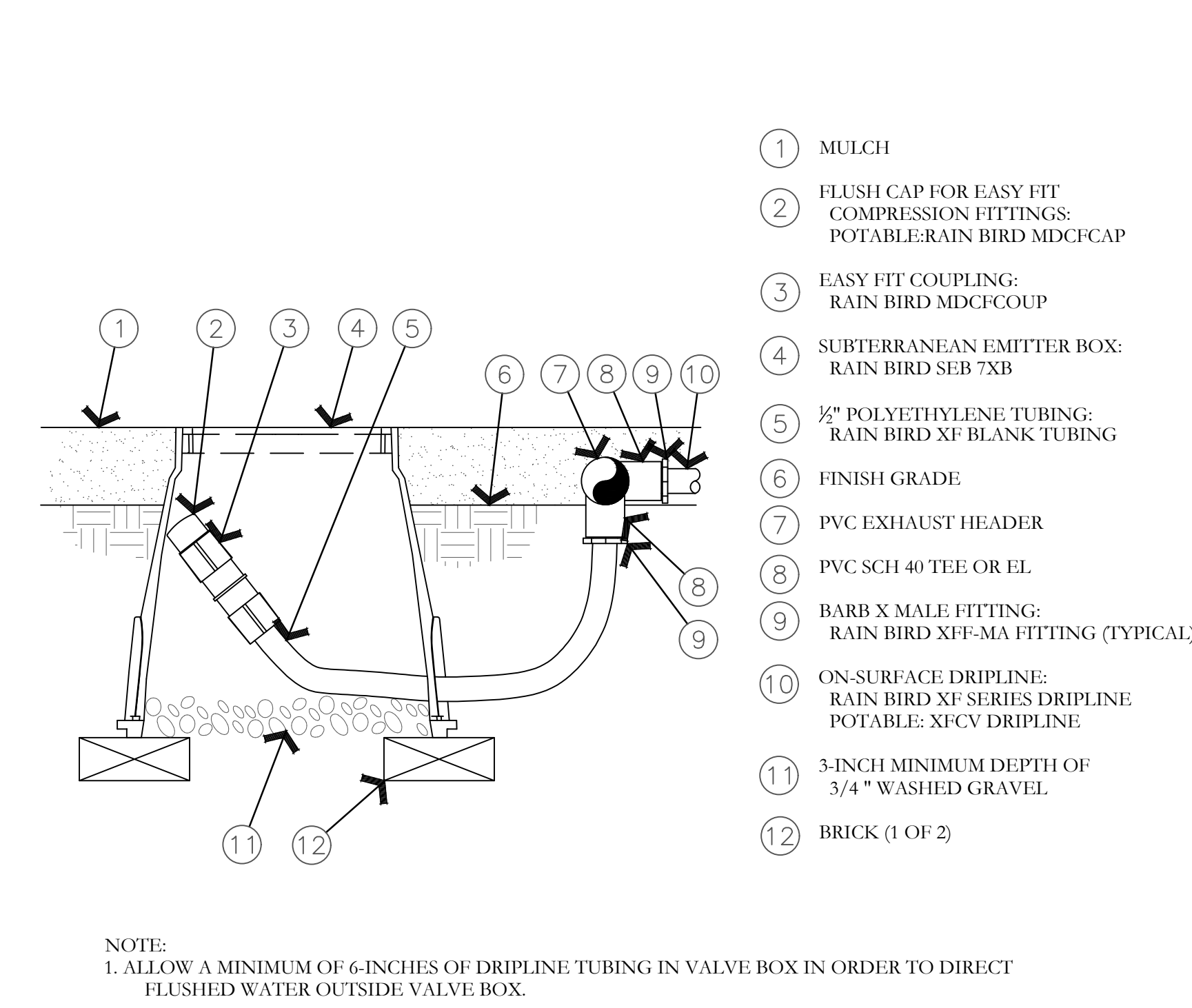




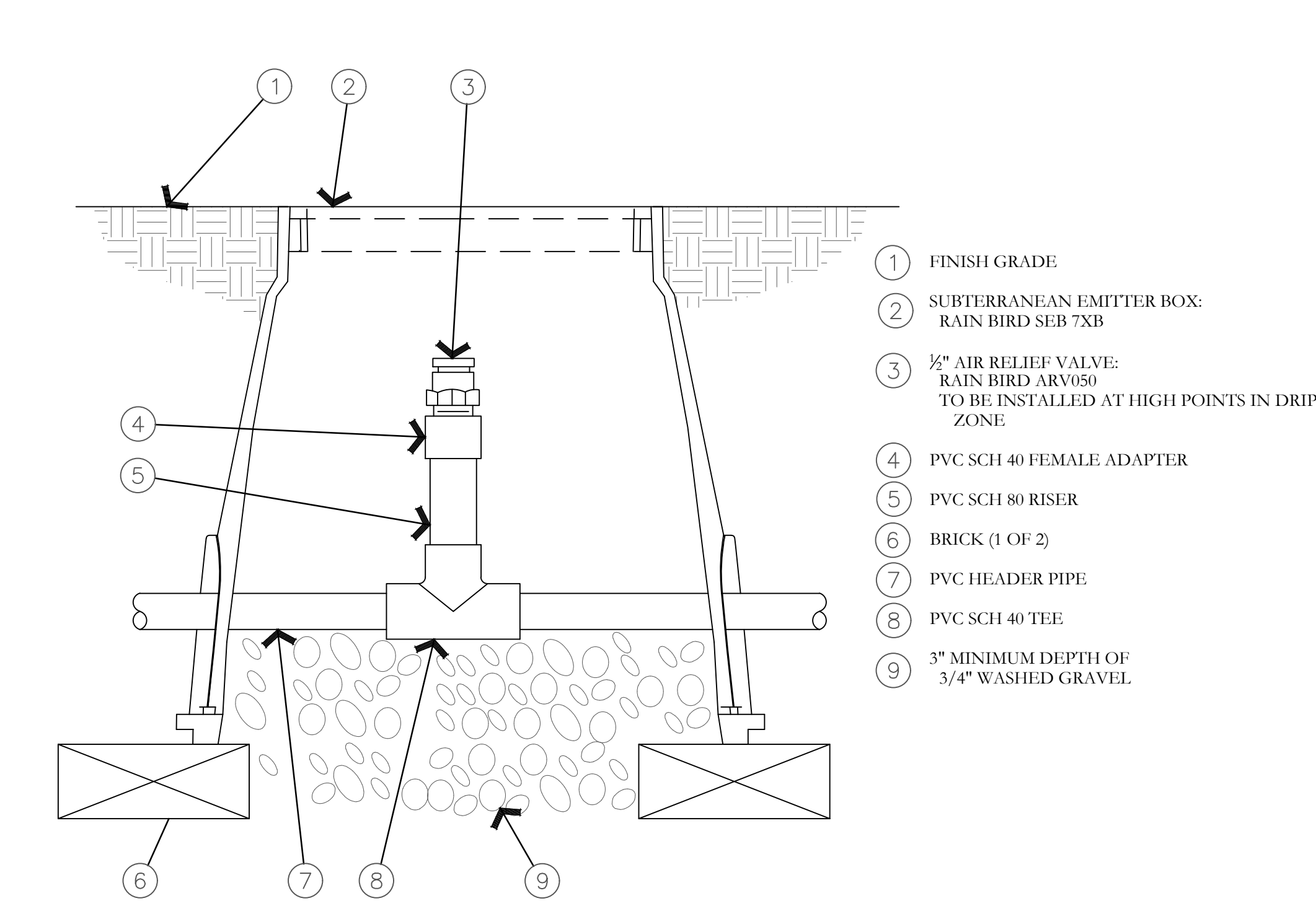
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<table><tr><th>NO.</th><th>REVISION</th><th>DATE</th></tr><tr><td>1</td><td></td><td></td></tr><tr><td>2</td><td></td><td></td></tr><tr><td>3</td><td></td><td></td></tr><tr><td>4</td><td></td><td></td></tr><tr><td>5</td><td></td><td></td></tr><tr><td>6</td><td></td><td></td></tr><tr><td>7</td><td></td><td></td></tr></table>			NO.			REVISION	DATE				1			2			3			4			5			6			7			Building Architect / Engineer:	
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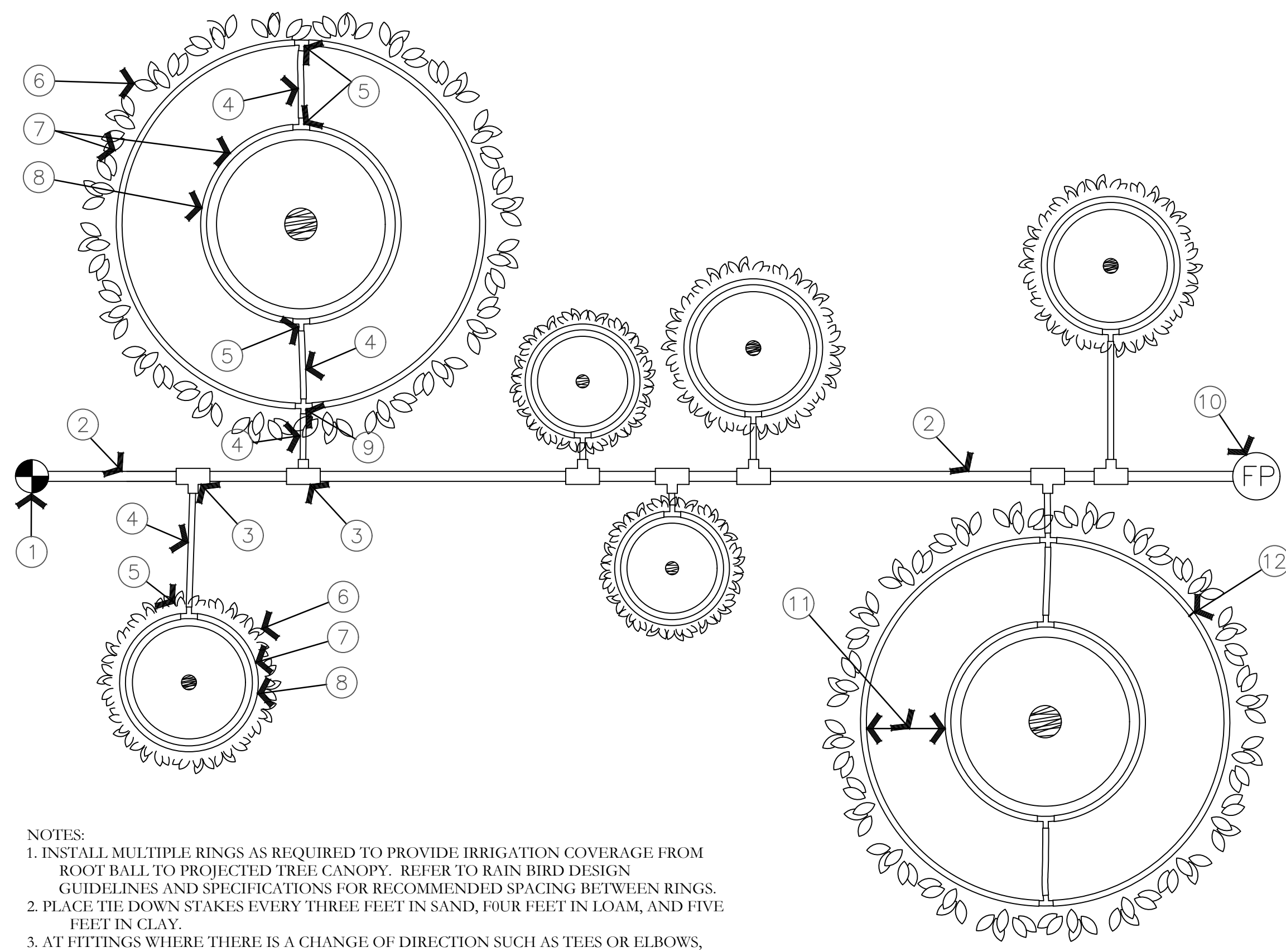
P DRIP CONTROL ZONE KIT DETAIL
NOT TO SCALE



Q ON-SURFACE DRIPLINE FLUSH POINT DETAIL
NOT TO SCALE



R AIR RELIEF VALVE DETAIL
NOT TO SCALE



NOTES:
1. INSTALL MULTIPLE RINGS AS REQUIRED TO PROVIDE IRRIGATION COVERAGE FROM ROOT BALL TO PROJECTED TREE CANOPY. REFER TO RAIN BIRD DESIGN GUIDELINES AND SPECIFICATIONS FOR RECOMMENDED SPACING BETWEEN RINGS.
2. PLACE TIE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.
3. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE-DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.

S ON-SURFACE DRIPLINE TREE/SHRUB DETAIL
NOT TO SCALE

ISSUE DATE			PROJECT NUMBER			PLAN INFORMATION			PROJECT INFORMATION			DEVELOPER / PROPERTY OWNER / CLIENT			LANDSCAPE ARCHITECT / PLANNER			LICENSE STAMP								
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SANTAQUIN ESTATES

C o n c e p t P l a n R e n d e r i n g # 2

Ridley's Subdivision Phase 2

500 East Main Street
Santaquin, Utah County, Utah, 84655



Vicinity Map
Not to Scale

Civil Sheet Index

C0.0	Cover Sheet
C1.0	Preliminary Plat
C2.0	Phasing Plan
C3.0	Grading Plan
C4.0	Utility Plan

Phase 2 (2 Lots)

Zone: C-1 General Commercial
Overall Area = 108,497 s.f. (2.49 Acres)
Lot 7 Area = 49,625 s.f. (1.14 Acres)
Lot 8 Area = 58,872 s.f. (1.35 Acres)

Future Phases

Zone: C-1 General Commercial
Overall Area = 598,358 s.f. (13.74 Acres)

Santaquin City Notes

The developer and the general contractor understand that it is his/her responsibility to ensure that all improvements installed within this development are constructed in full compliance with all state and Santaquin City codes, ordinances and standards. These plans are not all inclusive of all minimum codes, ordinances and standards. This fact does not relieve the developer or general contractor from the full compliance with all minimum state and Santaquin City codes, ordinances and standards.

Santaquin City Note to Developers & General Contractors

All recommendations made in the provided geotechnical report/study shall be followed explicitly during construction of building and site improvements.

Abbreviations

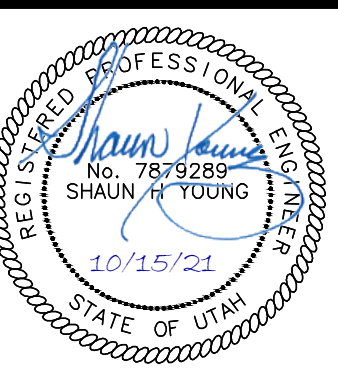
BCR	Begin Curb Return	PT	Point of Tangency
BOL	Ballard	PVC	Polyvinyl Chloride
BRW	Finish Grade - Bottom of Retaining Wall	PVI	Point of Vertical Intersection
CATV	Cable Television Box	RCP	Reinforced Concrete Pipe
CB	Catch Basin	RD	Roof Drain
CMP	Corrugated Metal Pipe	SB	Signal Box
COB	Cleanout Box	SD	Storm Drain
COTG	Cleanout to Grade	SDMH	Storm Drain Manhole
EA	Edge of Asphalt	SMH	Sewer Manhole
EB	Electrical Box	SP	Signal Pole
EC	End of Curve	SS	Sanitary Sewer
ECR	End Curb Return	SVZ	Sight Visibility Zone
GB	Grade Break	SW	Secondary Water
GM	Gas Meter	TA	Top of Asphalt
HB	Hose Bib	TB	Telephone Box
HP	High Point	TBC	Top Back of Curb
I	Irrigation Line	TG	Top of Grate
ICB	Irrigation Control Box	TMH	Telephone Manhole
Lip	Lip of Gutter	TP	Top of Concrete
LP	Light Pole	TRW	Finish Grade - Top of Retaining Wall
MH	Manhole	TW	Top of Walk
Mon	Monument	VC	Vertical Curve
PC	Point of Curvature	VPC	Vertical Point of Curve
PCC	Point of Compound Curvature	VPT	Vertical Point of Tangency
PI	Point of Intersection	WL	Waterline
PM	Power Meter	WP	Working Point
PP	Power Pole	WV	Water Valve

Legend

Proposed Curb & Gutter	Existing Improvements	Existing Asphalt
Proposed Open Face C & G	Existing Concrete	Existing Concrete
Proposed Asphalt	Existing Inlet Box	Existing Catch Basin
Proposed Concrete	Existing Manhole	Existing Fire Hydrant
Proposed Truncated Domes	Existing Water Valve	Existing Overhead Power Line
Proposed Inlet Box	Existing Water	Existing Sewer
Proposed Catch Basin	Existing Secondary Water	Existing Storm Drain
Proposed Manhole	Existing Sewer	Existing Gas
Proposed Transformer	Existing Storm Drain	Existing Power
Proposed Meter Box	Existing Gas	Existing Telephone
Proposed Water Meter	Existing Power	Existing Fence
Proposed Water Valve	Existing Telephone	Flowline
Proposed Water Line	Existing Fence	Centerline
Proposed Sanitary Sewer	Flowline	Existing Contour
Proposed Storm Drain	Centerline	Existing Spot
Proposed Conduit Line	Existing Contour	Existing Light Pole
Proposed Power Line	Existing Spot	Existing Street Light
Proposed Gas Line	Existing Light Pole	Existing Building
Proposed Fire Line	Existing Street Light	Existing Telephone Box
Proposed Secondary Water Line	Existing Building	Existing Power Meter
Proposed Roof Drain	Existing Telephone Box	Existing Electrical Box
Proposed Fence	Existing Power Meter	Existing Electrical Cabinet
Ridge line	Existing Electrical Box	Existing Gas Meter
Grade Break	Existing Electrical Cabinet	Existing Water Meter
Proposed Contour	Existing Gas Meter	Existing Irrig. Control Box
Direction of Drainage	Existing Water Meter	Existing Ballard
Proposed Spot	Existing Irrig. Control Box	Existing Hose Bib
ADA Accessible Route	Existing Ballard	Working Point
Property Line	Existing Hose Bib	Existing Deciduous Tree
Sawcut Line	Working Point	Existing Coniferous Tree
Proposed Light Pole	Existing Deciduous Tree	
Proposed Street Light	Existing Coniferous Tree	
Proposed Building		
Existing Power Pole		
Existing Power Pole w/ Guy		
Existing Utility Marker		
Existing Post		

ANDERSON WAHLEN & ASSOCIATES
2010 North Redwood Road, Salt Lake City, Utah 84116
(801) 521-8828 - AWahlen@awh.com

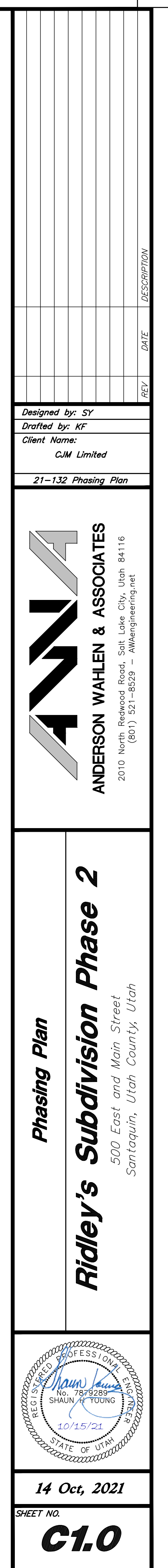
Cover Sheet
Ridley's Subdivision Phase 2
500 East and Main Street
Santaquin, Utah County, Utah



14 Oct, 2021

SHEET NO.

C0.0





General Grading Notes:

1. All grading shall be in accordance with the project geotechnical study.
 2. Cut slopes shall be no steeper than 3 horizontal to 1 vertical.
 3. Fill slopes shall be no steeper than 3 horizontal to 1 vertical.
 4. Fills shall be compacted per the recommendations of the geotechnical report prepared for the project and shall be certified by a Geotechnical Engineer.
 5. Areas to receive fill shall be properly prepared and approved by a Geotechnical Engineer prior to placing fill.
 6. Fills shall be benched into competent material as per specifications and geotechnical report.
 7. All trench backfill shall be tested and certified by a Geotechnical Engineer.
 8. A geotechnical engineer shall perform periodic inspections and submit a complete report and map upon completion of the rough grading.
 9. The final compaction report and certification from a Geotechnical Engineer shall contain the type of field testing performed. Each test shall be identified with the method of obtaining the in-place density, whether sand cone or drive ring and shall be as noted for each test. Sufficient maximum density determinations shall be performed to verify the accuracy of the maximum density curves used by the field technician.
 10. Dust shall be controlled by watering.
 11. The location and protection of all utilities is the responsibility of the permittee.
 12. Approved protective measures and temporary drainage provisions must be used to protect adjoining properties during the grading process.
 13. All public roadways must be cleared daily of all dirt, mud and debris deposited on them as a result of the grading operation. Cleaning is to be done to the satisfaction of the City Engineer.
 14. The site shall be cleared and grubbed of all vegetation and deleterious matter prior to grading.
 15. The contractor shall provide shoring in accordance with OSHA requirements for trench walls.
 16. Aggregate base shall be compacted per the geotechnical report prepared for the project.
 17. The recommendations in the following Geotechnical Engineering Report by _____ are included in the requirements of grading and site Preparation. The Report is titled "_____".
- Project No.: _____
Date: _____
18. As part of the construction documents, owner has provided contractor with a topographic survey performed by manual or aerial means. Such survey is prepared for project design purposes and is provided to the contractor as a courtesy. It is expressly understood that such survey may not accurately reflect existing topographic conditions.
19. If Contractor observes evidence of hazardous materials or contaminated soils he shall immediately contact the project engineer to provide information and obtain direction before proceeding with disturbance of soil materials or contaminated soil.

Project No.:
Dated:

Curb and Gutter Construction Notes:

1. Open face gutter shall be constructed where drainage is directed away from curb.
- ① 2. Open face gutter locations are indicated by shading and notes on the grading plan.
3. It is the responsibility of the surveyor to adjust top of asphalt grades to top of curb grades at the time of construction staking.
4. Refer to the typical details for standard and open face curb and gutter dimensions.
- ② 5. Transitions from open face to standard curb and gutter are to be smooth. Hand form these areas if necessary.
6. Spot elevations are shown on this plan with text masking. Coordinate and verify site information with project drawings.

Sidewalk Construction Notes:

1. Concrete sidewalk shall be constructed with a cross slope of 1.5% unless shown otherwise on plan.
2. Running slope of sidewalks shall be built per grades shown on the plan. where grades are not provided, sidewalks shall be constructed with a maximum running slope of 4.5%
3. Refer to the Site Plan for sidewalk dimensions.

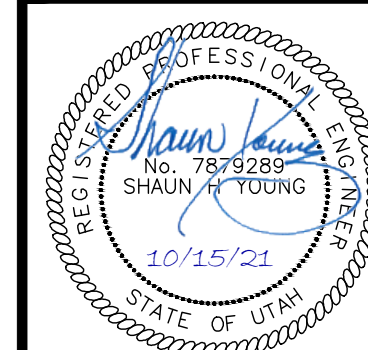
Designed by: SY
Drafted by: KF
Client Name: CJM Limited
21-132 GR

ANDERSON WAHLEN & ASSOCIATES
2010 North Redwood Road, Salt Lake City, Utah 84116
(801) 521-8529 - AWEngineering.net

Grading Plan

Ridley's Subdivision Phase 2

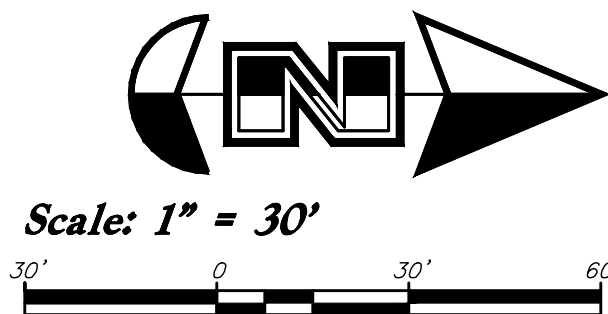
500 East and Main Street
Santaquin, Utah County, Utah



14 Oct, 2021

SHEET NO.

C2.0



1. *All sewer and water facilities shall be constructed per local jurisdiction standards and specifications. Contractor is responsible to obtain standards and specifications.*
2. *Coordinate all utility connections to building with plumbing plans and building contractor.*
3. *Verify depth and location of all existing utilities prior to constructing any new utility lines. Notify Civil Engineer of any discrepancies or conflicts prior to any connections being made.*
4. *All catch basin and inlet box grates are to be bicycle proof.*
5. *Refer to the site electrical plan for details and locations of electrical lines, transformers and light poles.*
6. *Gas lines, telephone lines, and cable TV lines are not a part of these plans.*
7. *Water meters are to be installed per city standards and specifications. It will be the contractor's responsibility to install all items required.*
8. *Water lines, valves, fire hydrants, fittings etc. are to be constructed as shown. Contractor is responsible, at no cost to the owner, to construct any vertical adjustments necessary to clear sewer, storm drain, or other utilities as necessary including valve boxes and hydrant stops to proper grade.*
9. *Contractor shall install a 12" concrete collar around all manholes, vaults, catch basins, cleanouts & any other structures located within the asphalt.*

All piping materials shall be per local agency standards or the specifications below at a minimum. All utility piping shall be installed per manufacturers recommendations. Refer to project specifications for more detailed information regarding materials, installation, etc.

1. Polyethylene (PE) Water Pipe (Up to 3 inches diameter), AWWA C901, PE 3408, SDR 9 (200 psi)
2. Copper Pipe (Up to 3 inches diameter): Type "K"

1. *Polyvinyl Chloride (PVC) (4 inches to 12 inches diameter): AWWA C900, Class 200*

1. All sewer piping to be Polyvinyl Chloride (PVC) sewer pipe, ASTM D3034, Type PSM, SDR 35

1. 12" pipes or smaller - Polyvinyl Chloride (PVC) sewer pipe, ASTM D3034, Type PSM, SDR 35
2. 15" pipes or larger - Reinforced Concrete Pipe, ASTM C76, Class I

***All Storm Drainage & Sanitary Sewer Pipe
Lengths and Slopes are from
Center of Structure to Center of Structure***

1. Contractor shall field verify all utility connection elevations prior to any utility construction has begun.
2. Contractor shall construct utility lines into site prior to any onsite utility construction. Gravity lines are to be constructed starting at the lowest point and be installed prior to any waterline installation
3. Construction of any onsite utilities prior to the offsite connection will be done at the contractors risk.

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Ridley's Subdivision Phase 2
500 East and Main Street
Santaquin, Utah County, Utah

C3.0



DRC Meeting Minutes
Tuesday, September 14, 2021

DRC Members in Attendance: City Engineer Jon Lundell, Building Official Randy Spadafora, Community Development Director Jason Bond, and City Manager Ben Reeves.

Others in Attendance: Staff Planner Ryan Harris, Operations Manager Dennis Marker, Jimmy DeGraffenried, Kurt Greenhalgh, and Garrison West (representing the DeGraffenried Single Lot Split and Green Hollow Subdivision), Steve Larsen, and Ken Berg (representing the Grey Cliff's Subdivision).

Mr. Lundell called the meeting to order at 10:02 a.m.

Mr. Lundell suggested that the agenda items be moved to accommodate the applicants who were in attendance.

DeGraffenried Single Lot Split Preliminary/Final Review

A Preliminary/Final review of a single lot split located at 275 E. 100 N.

Mr. Lundell explained that curb, gutter, and sidewalk improvements are required for new subdivisions. However, in the core area of town, the applicant can request a deferral agreement from the City Council to delay the improvements. Mr. DeGraffenried indicated that he would like to apply for a deferral agreement.

Engineering: Mr. Lundell indicated that the new sewer lateral for lot number 2 doesn't extend to the sewer line. He added that a note will need to be included on the plat for the trench cut, a T patch will also be mandatory. He noted that a road cut permit fee will be required and included with the bonding of the subdivision.

No comments from Building Official, Planning and Zoning, Administration, Public Works, Police or Fire.

Motion: Mr. Bond motioned to send a positive recommendation for the DeGraffenried Single Lot Split to the Planning Commission with the following conditions: That the redlines be addressed and the departments not in attendance today be given an opportunity to provide comments. And that the City Council consider a deferral agreement for the improvements of the subdivision. Mr. Spadafora seconded. The motion passed unanimously in the affirmative.

Green Hollow Final Subdivision Review

A final review of a 22-lot subdivision located at approximately 300 W. and 500 N.

Mr. Lundell explained that 200 West will be completed and connected with this subdivision.

Building: Mr. Spadafora stated that he has assigned addressing and it is included on the plat.

Planning and Zoning: Mr. Bond asked if the applicant is proposing to develop this in one phase? Mr. DeGraffenried confirmed that they are. Mr. Bond explained that preliminary approval was given a few years ago. At the time it was discussed that everything surrounding this

DRC Meeting Minutes
September 14, 2021
Page 2 of 4

subdivision has curb, gutter, and sidewalk, but no park strips. However, current subdivision code requires that a park strip be included with the improvements. Mr. Bond asked the applicant if they would be willing to consider having the park strip removed to be consistent with the neighboring subdivisions. Mr. DeGraffenried stated that he would be ok with that. He added that removing the park strip may help address the concerns of the narrowness of the road. Mr. Bond clarified that this change would require Planning Commission approval. He added that the infiltration galleries located within the park strips would need to be moved to accommodate that change. Mr. Spadafora noted that removing the park strips would also increase the asphalt area.

Administration: Mr. Reeves stated that he would like to see 200 W. be a wider road if possible.

Engineering: Mr. Lundell indicated that the plans don't reflect the improvements that have been made along 300 West, they need to be updated appropriately. He asked that this be added to ensure that these improvements don't change the design. The setbacks shown on the plat do not match what is required within the R-10 zone. These will need to be corrected. He added that stop signs will be needed on the east and west bound lanes of 500 North.

No comments from Public Works, Police or Fire.

Motion: Mr. Bond motioned to table the Green Hollow final subdivision plat for the purpose of approaching the Planning Commission and having them consider the waiver of park strips; to keep the infrastructure consistent and 200 West wider for traffic flow. And that the applicant addresses the redlines. Mr. Spadafora seconded. The motion passed unanimously in the affirmative.

Grey Cliffs Subdivision Preliminary Review

A preliminary review of a proposed 217-lot residential subdivision with approximately 26.28 acres of commercial space; located east of State Road 198 and approximately 600 N.

Mr. Lundell explained that this proposed subdivision is comprised of single-family homes with R-10 minimum lot sizes.

Building Official: Mr. Spadafora stated that he will assign addressing during the final subdivision application process.

Planning and Zoning: Mr. Bond explained that it has been determined that the development agreement needs to be reviewed prior to granting preliminary approval. He stated that the development agreement has been received and staff has begun reviewing it.

Engineering: Mr. Lundell asked how and when the open space will be dedicated and improved? He stated that UDOT connectivity to 198 needs to be taken care of. Mr. Lundell asked how the developer is proposing to delineate the private property from the open space?

Mr. Lundell indicated that an updated storm drain report will be required. He referred to items that are discussed in the geo hazard report that don't appear to be addressed, such as debris basins, channels, etc. Mr. Lundell asked how the City utilities located by the fault line will be protected.

DRC Meeting Minutes
September 14, 2021
Page 3 of 4

Mr. Lundell indicated that an updated study needs to be completed by the JUB, Santaquin City's sewer modeling company. He stated that a fence will be needed between the development and the active agricultural perimeter, additional details will be required. Mr. Lundell pointed out that the lengths of the dead-end roads exceed the 500-foot requirement. If the developer would like to request an extension up to 750 feet in length, it would require City Council approval.

Mr. Lundell pointed out that Abundance Ave. has a 62-foot cross section, and Rocky Crag only has a 55-foot cross section. At previous DRC meetings having a wider cross section at Rocky Crag was discussed as the traffic from Abundance Ave. will be funneled down to it.

Mr. Lundell stated that lot 611 is a dual frontage lot that does not meet the width requirements. He indicated that a 10% slope is the maximum allowed, it can be increased to 12% with City Council approval. He asked if the private lift station is proposed to be taken care of with the HOA? Mr. Larsen explained that this is included in the development agreement. Mr. Lundell stated that additional details will need to be provided for the culinary pump station.

No comments from Administration, Public Works, Police or Fire.

Motion: Mr. Bond motioned to table the Grey Cliffs Preliminary Plan. In the meantime, staff will review the development agreement and concurrently ask the developer to address the engineering specific redlines. Mr. Reeves seconded. The motion passed unanimously in the affirmative.

Cedar Point Plat F at Summit Ridge Preliminary/Final Review

A preliminary/final review of a proposed 2-lot subdivision located at 1371 West Cedar Pass Drive.

Building Official: Mr. Spadafora stated that the addressing has been assigned for the additional lot.

Engineering: Mr. Lundell indicated that there is an existing meter shown for the lot that the applicant is proposing to split. Another meter and road cut will be needed in order to service the additional lot. Mr. Reeves asked that a note be added stating that there will be no access from Summit Ridge Parkway for landscaping or grading purposes. Mr. Spadafora asked if a grading plan will be required for these lots? Mr. Lundell explained that grading plans are only required for lots located within the Hillside Overlay zone. These lots are not included in the Hillside Overlay zone. Mr. Marker noted that some lots in Summit Ridge have specific notes requiring grading plans. Mr. Lundell added that an inclusion of an agricultural note is required on all new plats.

No comments from Planning and Zoning, Administration, Police or Fire.

Motion: Mr. Bond motioned to make a positive recommendation to the Planning Commission for Cedar Point Plat F @ Summit Ridge with the following conditions: That all redlines be addressed. That a plat note be added stating there is no access for landscaping, grading etc. from Summit Ridge Parkway. And that verification be provided that a grading plan is not required on previous plats. Mr. Spadafora seconded. The motion passed unanimously in the affirmative.

DRC Meeting Minutes
September 14, 2021
Page 4 of 4

Traffic Control Device Request- Cross Walk and School Signs

The DRC will review a request for a cross walk and school signs along 200 E.

Mr. Lundell explained that this request was tabled at the last DRC meeting to gather more information. He reported that the school district indicated that there are 77 students who live along 200 E. and east of 200 E. Pedestrians typically walk to destinations if they live within a mile of a destination. He indicated that 200 E. and 400 W. are designated as safe routes to school. The north and south legs of 610 N. are not controlled by stop signs. Based off previous reviews that intersection does not warrant 4 way stop signs at this time. Mr. Lundell stated that it appears that 400 N. would be the most appropriate location for a cross walk since the intersection of 400 N and 200 E is already a 4-way stop. Potentially a north and south bound crosswalk could be installed at 610 N. and 150 E. since it is the designated safe route to school.

Mr. Lundell recognized that there are a lot of areas in the core area of town that don't have fully improved right of ways. Mr. Reeves indicated that a work meeting is being planned with the City Council in October to discuss what areas make the most sense to build swells vs curb, gutter, and sidewalk (for the storm drain master plan). He recognized the concerns from residents regarding the walkability of those areas. He indicated that they don't want to create a false sense of safety of an uncontrolled crosswalk. Mr. Reeves stated that he feels that this proposal is a step in the right direction.

Motion: Mr. Reeves motioned to approve a cross walk east/west on the north side of the intersection of 400 N. and 200 E. And approve a north/south crosswalk at the intersection of 610 N. on the west side of 200 E. And approve a crosswalk east/west on 150 E. on the south side of 730 N. Encouraging the school children of the area to make their way to 100 E. where they can cross with the assistance of the teachers and principal of Apple Valley Elementary. Mr. Spadafora seconded. The motion passed unanimously in the affirmative.

MEETING MINUTES APPROVAL

August 24, 2021

Motion: Mr. Spadafora motioned to approve the DRC minutes from August 24, 2021. Mr. Reeves seconded. The motion passed unanimously in the affirmative.

Adjournment

Mr. Reeves motioned to adjourn at 11:15 a.m.

Jon Lundell, City Engineer

Kira Petersen, Deputy Recorder



DRC Meeting Minutes

Tuesday, September 28, 2021

DRC Members in Attendance: Officer Russ Woodland, Public Works Director Jason Callaway, Fire Chief Ryan Lind, Community Development Director Jason Bond, and City Manager Ben Reeves.

Others in Attendance: Operations Manager Dennis Marker.

Mr. Lundell called the meeting to order at 10:00 a.m.

Lind 2-Lot Subdivision Concept Plan

A concept review of a single lot split located at 315 N. Center Street.

Mr. Lundell outlined that this is a request for a 2-lot subdivision. There is an existing home located on the southern portion of the property.

Public Works: Mr. Callaway stated that the utilities need to be verified. Both age, and to ensure that the sewer lateral is stubbed into the lot.

Fire: Fire Chief Lind indicated that he has a conflict with this agenda item as it is his proposal. Since this is the case, he will abstain from commenting.

Planning and Zoning: Mr. Bond asked for clarification on the proposed property line. The concept plan appears to show two property lines. Chief Lind answered that the northern straight line is the proposed property line. The jagged line to the south represents an existing fence line.

Engineering: Mr. Lundell stated that this subdivision could qualify for a deferral agreement if the applicant would like to request one. Chief Lind indicated that he would like to request a deferral agreement from the City Council. Mr. Lundell stated that a deferral agreement draft will be provided to the applicant.

No Comments from Police, or Administration.

Adjournment

Mr. Reeves motioned to adjourn at 10:04 a.m.

Jon Lundell, City Engineer

Kira Petersen, Deputy Recorder