TALUS RIDGE

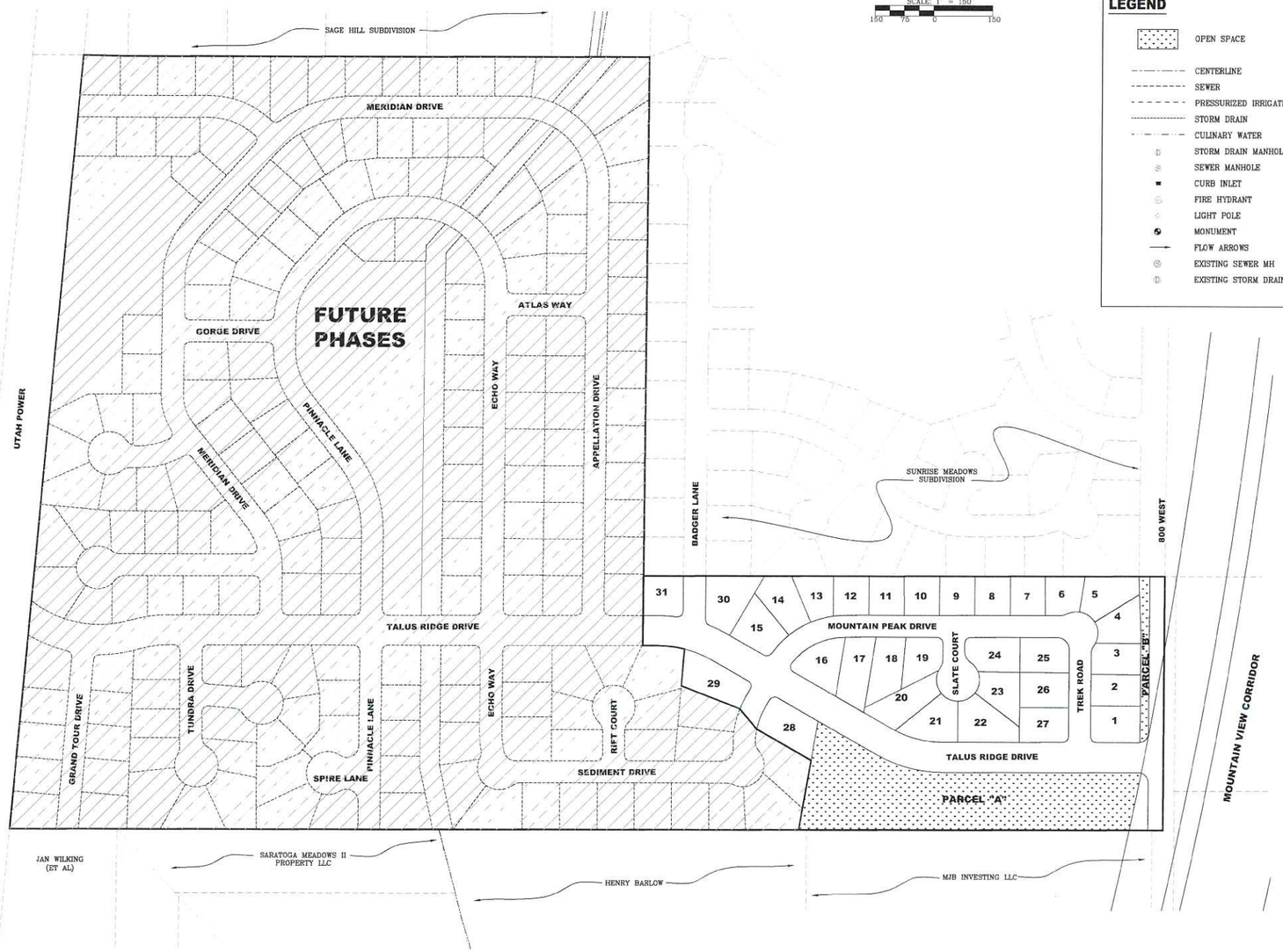
PLAT "A"

A PORTION OF THE NW 1/4 OF SECTION 22,
T5S, R1W, SLB&M,
SARATOGA SPRING CITY, UTAH

NORTH

SCALE: 1" = 150'

150 75 0 150



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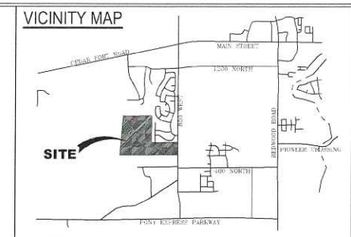
LEGEND

- OPEN SPACE
- CENTERLINE
- SEWER
- PRESSURIZED IRRIGATION
- STORM DRAIN
- CULINARY WATER
- STORM DRAIN MANHOLE
- SEWER MANHOLE
- CURB INLET
- FIRE HYDRANT
- LIGHT POLE
- MONUMENT
- FLOW ARROWS
- EXISTING SEWER MH
- EXISTING STORM DRAIN MH

VICINITY MAP



TABULATIONS

-SINGLE FAMILY LOTS	31 DU	
Average Lot Size	11,315 SF	
Smallest Lot Size	9,000 SF	
Largest Lot Size	16,287 SF	
TOTAL AREA 16.65 AC		
-OPEN SPACE AREA	3.48 ACRES	(20.90%)
-MOUNTAIN VIEW CORRIDOR	0.44 ACRES	(2.64%)
-LOT AREA	8.05 ACRES	(48.35%)
-ROAD AREA	4.68 ACRES	(28.11%)
-DENSITY	1.86 UNITS/ACRE	

ZONING - R-3

NOTES

1. ALL CONSTRUCTION SHALL COMPLY TO THE STANDARD TECHNICAL SPECIFICATIONS AND DRAWINGS FOR THE CITY OF SARATOGA SPRINGS, UTAH.
2. CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND INVERT ELEVATIONS OF EXISTING STORM DRAIN STRUCTURES AND OTHER UTILITIES BEFORE STAKING OR CONSTRUCTING ANY NEW STORM TRAIN LINES
3. ALL CONSTRUCTION SHALL COMPLY TO THE STANDARD TECHNICAL SPECIFICATIONS AND DRAWINGS FOR THE CITY OF SARATOGA SPRINGS, UTAH.
4. EXISTING UTILITIES HAVE BEEN NOTED TO THE BEST OF ENGINEERS KNOWLEDGE, IT IS OWNERS AND CONTRACTORS RESPONSIBILITY TO LOCATE UTILITIES IN FIELD AND NOTIFY ENGINEER AND CITY IF DISCREPANCIES EXIST.
5. POST-APPROVAL ALTERATIONS TO LIGHTING PLANS OR INTENDED SUBSTITUTIONS FOR APPROVED LIGHTING EQUIPMENT SHALL BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL.
6. THE CITY RESERVES THE RIGHT TO CONDUCT POST-INSTALLATION INSPECTIONS TO VERIFY COMPLIANCE WITH THE CITY'S REQUIREMENTS AND APPROVED LIGHTING PLAN COMMITMENTS, AND IF DEEMED APPROPRIATE BY THE CITY, TO REQUIRE REMEDIAL ACTION AT NO EXPENSE TO THE CITY.
7. ALL EXTERIOR LIGHTING SHALL MEET IESNA FULL-CUTOFF CRITERIA UNLESS OTHERWISE APPROVED BY THE CITY.
8. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
9. ALL INTERSECTIONS TO HAVE ADA HANDICAP RAMPS ACCORDING TO CITY STANDARDS.
10. ALL EXISTING FENCING WITHIN THE PROPOSED BOUNDARY TO BE REMOVED.
11. NO FLOOD PLAINS OR WETLANDS INDICATED BY FEMA WITHIN SITE LIMITS.
12. ALL LOTS MUST DRAIN TO RIGHT OF WAY OR TO A SWALE/YARD DRAIN SYSTEM, LOTS MAY NOT DRAIN TO ADJACENT LOTS.
13. ALL LOTS BORDERING OPEN SPACE PARKS, TRAILS & EASEMENT CORRIDORS TO HAVE 6' SEMI PRIVATE VINYL FENCE.
14. POST-APPROVAL ALTERATIONS TO LIGHTING PLANS OR INTENDED SUBSTITUTIONS FOR APPROVED LIGHTING EQUIPMENT SHALL BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL.
15. THE CITY RESERVES THE RIGHT TO CONDUCT POST-INSTALLATION INSPECTIONS TO VERIFY COMPLIANCE WITH THE CITY'S REQUIREMENTS AND APPROVED LIGHTING PLAN COMMITMENTS, AND IF DEEMED APPROPRIATE BY THE CITY, TO REQUIRE REMEDIAL ACTION AT NO EXPENSE TO THE CITY.
16. ALL EXTERIOR LIGHTING SHALL MEET IESNA FULL-CUTOFF CRITERIA UNLESS OTHERWISE APPROVED BY THE CITY.
17. ALL CULINARY & SECONDARY WATER PIPES 12" OR LARGER TO BE DUCTILE IRON CLASS 53. PIPES 8" & 6" TO BE C-900 PVC.

OWNER / DEVELOPER

EDGEhomes
480 WEST 800 NORTH
OREM, UTAH 84057
(801) 494-0150

ENGINEER

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

QUESTAR GAS
(801) 324-5111 or 800-323-5517

QWEST
(866) 642-0444

ROCKY MOUNTAIN POWER
800-715-9238

COMCAST CABLE
800-934-6469

SARATOGA SPRINGS CITY
(801) 766-9793

LEI
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

TALUS RIDGE PLAT "A"
SARATOGA SPRINGS CITY, UTAH

COVER

REVISIONS
1 -
2 -
3 -
4 -
5 -

LEI PROJECT #: 2013-1795
DRAWN BY: BLS/MJV
CHECKED BY: NKW
SCALE: 1" = 150'
DATE: 9/12/2014
SHEET
COVER

RECEIVED SEP 11 2014

U:\LAND DESKTOP PROJECTS\13-1795 MT. SARATOGA\DWG\13-1795 PLAT A.DWG

TALUS RIDGE PLAT "A"

SARATOGA SPRINGS, UTAH

A PORTION OF SECTIONS 22, T5S, R1W SLB&M

LEGEND

- BOUNDARY LINE
- CENTERLINE
- SETBACK LINE
- EASEMENT LINE
- EXISTING LOT LINES
- PROPOSED LOT LINES
- PROPOSED FIRE HYDRANT
- EXISTING FIRE HYDRANT
- STREET LIGHT
- EXISTING MONUMENT
- PROPOSED STREET MONUMENT

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3302 N. Main Street
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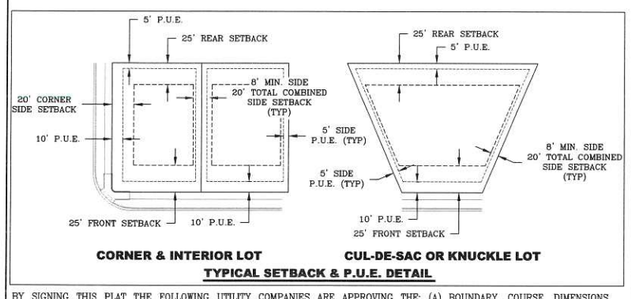
Phone: 801.798.0555
Fax: 801.798.9393
office@lei-eng.com
www.lei-eng.com

NOTES:

1. PLAT MUST BE RECORDED WITHIN 24 MONTHS OF FINAL PLAT APPROVAL BY CITY COUNCIL. FINAL PLAT APPROVAL WAS GRANTED ON THE ____ DAY OF _____,2014.
2. THE INSTALLATION OF IMPROVEMENTS SHALL CONFORM TO ALL CITY RULES, ORDINANCES, REQUIREMENTS, STANDARDS, AND POLICIES REGARDING THE DEVELOPMENT OF THIS PROPERTY.
3. PRIOR TO BUILDING PERMITS BEING ISSUED, SOIL TESTING STUDIES MAY BE REQUIRED ON EACH LOT AS DETERMINED BY THE CITY BUILDING OFFICIAL.
4. PLAT MAY BE SUBJECT TO A MASTER DEVELOPMENT AGREEMENT, DEVELOPMENT AGREEMENT, SUBDIVISION AGREEMENT, OR SITE PLAN AGREEMENT. SEE CITY RECORDER FOR MORE INFORMATION.
5. BUILDING PERMITS WILL NOT BE ISSUED UNTIL ALL IMPROVEMENTS HAVE BEEN INSTALLED AND ACCEPTED BY THE CITY IN WRITING; ALL IMPROVEMENTS CURRENTLY MEET CITY STANDARDS; AND BONDS ARE POSTED BY THE CURRENT OWNER OF THE PROJECT PURSUANT TO CITY CODE.
6. ALL BONDS AND BOND AGREEMENTS ARE BETWEEN THE CITY, DEVELOPER/OWNER AND FINANCIAL INSTITUTION. NO OTHER PARTY, INCLUDING UNIT OR LOT OWNERS, SHALL BE DEEMED A THIRD-PARTY BENEFICIARY OR HAVE ANY RIGHTS INCLUDING THE RIGHT TO BRING ANY ACTION UNDER ANY BOND OR BOND AGREEMENT.
7. THE OWNER OF THIS SUBDIVISION AND ANY SUCCESSORS AND ASSIGNS ARE RESPONSIBLE FOR ENSURING THAT IMPACT AND CONNECTION FEES ARE PAID AND WATER RIGHTS ARE SECURED FOR EACH INDIVIDUAL LOT. NO BUILDING PERMITS SHALL BE ISSUED FOR ANY LOT IN THIS SUBDIVISION UNTIL ALL IMPACT AND CONNECTION FEES, AT THE RATES IN EFFECT WHEN APPLYING FOR BUILDING PERMIT, ARE PAID IN FULL AND WATER RIGHTS SECURED AS SPECIFIED BY CURRENT CITY ORDINANCES AND FEE SCHEDULES.
8. ANY REFERENCE HEREIN TO OWNERS, DEVELOPERS, OR CONTRACTORS SHALL APPLY TO SUCCESSORS, AGENTS, AND ASSIGNS.
9. THE BENCHMARK FOR THE TOPOGRAPHIC INFORMATION PROVIDED HEREON IS THE FOUND 2002 UTAH COUNTY MONUMENT AT THE NORTH 1/4 CORNER OR SAID SECTION 22, WITH A PUBLISHED UTAH COUNTY (NGVD29) ELEVATION OF 4,625.47 FEET.
10. ALL OPEN SPACE TO BE IMPROVED BY THE DEVELOPER, DEDICATED TO THE CITY, & MAINTAINED BY THE CITY OF SARATOGA SPRINGS.
11. ALL LOTS BORDERING OPEN SPACE TO HAVE 6' SEMI PRIVATE VINYL FENCE.
12. NO ACCESS PERMITTED ON LOTS ADJACENT TO COLLECTOR ROADS. ALL LOTS TO ACCESS FROM INTERIOR RESIDENTIAL ROADS.



TYPICAL SETBACK & P.U.E. DETAIL

BY SIGNING THIS PLAT THE FOLLOWING UTILITY COMPANIES ARE APPROVING THE: (A) BOUNDARY, COURSE, DIMENSIONS, AND INTENDED USE OF THE RIGHT-OF-WAY AND EASEMENT GRANTS OF RECORD; (B) LOCATION OF EXISTING UNDERGROUND AND UTILITY FACILITIES; (C) CONDITIONS OR RESTRICTIONS GOVERNING THE LOCATION OF THE FACILITIES WITHIN THE RIGHT-OF-WAY, AND EASEMENT GRANTS OF RECORD, AND UTILITY FACILITIES WITHIN THE SUBDIVISION. "APPROVING" SHALL HAVE THE MEANING IN THE UTAH CODE SECTION 10-9A-603(4)(C)(ii).

QUESTAR GAS COMPANY
APPROVED THIS _____ DAY OF _____, A.D. 20____.
QUESTAR GAS COMPANY

ROCKY MOUNTAIN POWER
APPROVED THIS _____ DAY OF _____, A.D. 20____.
ROCKY MOUNTAIN POWER

COMCAST CABLE TELEVISION
APPROVED THIS _____ DAY OF _____, A.D. 20____.
COMCAST CABLE TELEVISION

QWEST
APPROVED THIS _____ DAY OF _____, A.D. 20____.
QWEST

CURVE TABLE

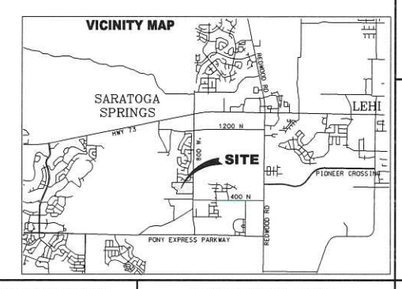
CURVE	RADIUS	DELTA	LENGTH	CHORD
C1	25.00	83°21'37"	36.37	N41°52'48"E	33.25
C2	25.00	83°21'37"	36.37	N41°52'48"E	33.25
C3	25.00	6°20'13"	2.76	N86°43'43"E	2.76
C4	261.50	29°59'59"	136.92	N75°06'10"W	135.36
C5	25.00	90°18'10"	39.40	N44°57'06"W	35.45
C6	228.00	16°19'36"	64.97	S59°00'30"W	64.75
C7	15.00	90°18'35"	23.64	S44°56'53"E	21.27
C8	15.00	89°41'25"	23.48	N45°03'06"E	21.16
C9	30.00	36°52'12"	19.31	S18°38'30"W	18.97
C10	55.00	9°47'40"	9.40	N32°10'46"E	9.39
C11	55.00	58°58'25"	56.61	N2°12'17"W	54.14
C12	55.00	50°08'02"	48.13	N56°45'30"W	46.60
C13	55.00	36°21'00"	34.89	S79°59'59"W	34.31
C14	30.00	28°04'25"	14.70	N75°51'41"E	14.55
C15	30.00	90°18'30"	47.29	N44°56'51"W	42.54
C16	15.00	90°00'00"	23.56	S44°53'54"W	21.21
C17	30.50	56°08'06"	29.88	S28°10'09"E	28.70
C18	55.00	34°03'29"	32.69	N39°12'27"W	32.21
C19	55.00	59°35'28"	57.20	N7°37'01"E	54.66

CURVE TABLE

CURVE	RADIUS	DELTA	LENGTH	CHORD
C20	55.00	52°33'51"	50.46	N63°41'41"E	48.71
C21	55.00	50°45'26"	48.72	S64°38'41"E	47.15
C22	55.00	64°08'03"	61.56	S7°11'56"E	58.40
C23	55.00	10°49'07"	10.39	S30°16'39"W	10.37
C24	30.50	35°47'18"	19.05	N17°47'33"E	18.74
C25	15.00	90°00'00"	23.56	N45°06'06"W	21.21
C26	228.00	7°46'57"	30.97	S86°00'26"W	30.95
C27	228.00	14°56'39"	59.47	S74°38'38"W	59.30
C28	228.00	16°19'36"	64.97	S59°00'30"W	64.75
C29	228.00	16°04'15"	63.95	S42°48'35"W	63.74
C30	15.00	85°07'22"	22.29	N77°20'08"E	20.29
C31	172.00	52°26'22"	157.42	S63°40'43"W	151.98
C32	15.00	97°33'43"	25.54	S11°19'20"E	22.57
C33	200.00	60°00'05"	209.44	S59°53'52"W	200.00
C34	338.55	8°03'37"	47.63	S64°08'01"E	47.59
C35	15.00	67°43'23"	17.73	S33°57'47"E	16.72
C36	15.00	97°30'00"	25.53	N48°38'56"E	22.56
C37	338.50	7°30'07"	44.32	S86°21'08"E	44.29
C38	261.50	15°35'50"	71.19	N67°54'06"W	70.97

CURVE TABLE

CURVE	RADIUS	DELTA	LENGTH	CHORD
C39	15.00	90°00'00"	23.56	N15°06'11"W	21.21
C40	228.00	8°17'49"	33.02	S25°44'54"W	32.99
C41	172.00	19°08'24"	57.46	S20°19'37"W	57.19
C42	15.00	90°00'00"	23.56	S74°53'49"W	21.21
C43	200.00	12°47'31"	44.65	S23°30'04"W	44.56
C44	261.50	2°20'09"	10.66	S61°16'16"E	10.66
C45	261.50	27°39'51"	126.26	S76°16'16"E	125.04
C46	261.50	30°00'00"	136.92	S75°06'11"E	135.36
C47	338.50	30°00'01"	177.24	S75°06'11"E	175.22
C48	300.00	30°00'00"	157.08	S75°06'11"E	155.29
C49	55.00	271°55'24"	261.03	N79°43'30"E	76.47
C50	300.00	17°17'15"	90.52	N81°27'33"W	90.17
C51	300.00	12°42'45"	66.56	N66°27'33"W	66.43
C52	300.00	30°00'00"	157.08	N75°06'11"W	155.29
C53	55.00	50°08'02"	48.13	N56°45'30"W	46.60



SURVEYOR'S CERTIFICATE

I, CHAD A. POULSEN, DO HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR, AND THAT I HOLD CERTIFICATE NO. 501182 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 NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 5 SOUTH, RANGE 1 WEST, SALT LAKE BASE & MERIDIAN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF LOT 712, PLAT "G", SUNRISE MEADOWS SUBDIVISION ACCORDING TO THE OFFICIAL PLAT THEREOF ON FILE IN THE OFFICE OF THE UTAH COUNTY RECORDER, SAID POINT BEING LOCATED N89°54'00"E ALONG THE SECTION LINE 1324.69 FEET AND S0°19'04"W 1327.12 FEET FROM THE NORTHWEST CORNER OF SECTION 22, TOWNSHIP 5 SOUTH, RANGE 1 WEST, SALT LAKE BASE & MERIDIAN; THENCE ALONG THE SOUTHERN BOUNDARY OF PLAT "G" AND PLAT "F" SUNRISE MEADOWS SUBDIVISION N89°53'54"E 1327.40 FEET TO THE QUARTER SECTION LINE; THENCE S0°11'59"W ALONG THE QUARTER SECTION LINE 649.41 FEET; THENCE S89°53'35"W 928.31 FEET; THENCE N9°47'30"E 180.86 FEET; THENCE N60°06'11"W 159.73 FEET; THENCE N39°41'16"W 67.35 FEET; N68°24'00"W 159.08 FEET; THENCE N4°54'54"E 94.40 FEET; THENCE ALONG THE ARC OF A 261.50 FOOT RADIUS NON-TANGENT CURVE (RADIUS BEARS: S14°17'59"W) TO THE LEFT 65.73 FEET THROUGH A CENTRAL ANGLE OF 14°24'09" (CHORD N82°54'05"W 65.56 FEET); THENCE S89°53'49"W 42.20 FEET; THENCE N0°19'04"E 178.47 FEET TO THE POINT OF BEGINNING

CONTAINS: ±16.65 ACRES

DATE

SURVEYOR'S NAME (See Seal Below)

LICENSE NO. 501182

OWNERS DEDICATION

KNOW ALL MEN BY THESE PRESENTS THAT _____ THE _____ UNDERSIGNED OWNER(S) OF THE ABOVE DESCRIBED TRACT OF LAND HAVING CAUSED SAME TO BE SUBDIVIDED INTO LOTS AND STREETS TO BE HEREAFTER KNOWN AS

TALUS RIDGE SUBDIVISION

DO HEREBY DEDICATE FOR THE PERPETUAL USE OF THE PUBLIC AND/OR CITY ALL PARCELS OF LAND, EASEMENTS, RIGHT-OF-WAY, AND PUBLIC AMENITIES SHOWN ON THIS PLAT AS INTENDED FOR PUBLIC AND/OR CITY USE. THE OWNER(S) VOLUNTARILY DEFEND, INDEMNIFY, AND SAVE HARMLESS THE CITY AGAINST ANY EASEMENTS OR OTHER ENCUMBRANCE ON A DEDICATED STREET WHICH WILL INTERFERE WITH CITY'S USE, MAINTENANCE, AND OPERATION OF THE STREET. THE OWNER(S) VOLUNTARILY DEFEND, INDEMNIFY, AND HOLD HARMLESS THE CITY FROM ANY DAMAGE CLAIMED BY PERSONS WITHIN OR WITHOUT THIS SUBDIVISION TO HAVE BEEN CAUSED BY ALTERATIONS OF THE GROUND SURFACE, VEGETATION, DRAINAGE, OR SURFACE OR SUB-SURFACE WATER FLOWS WITHIN THIS SUBDIVISION OR BY ESTABLISHMENT OR CONSTRUCTION OF THE ROADS WITHIN THIS SUBDIVISION.

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

OWNER'S ACKNOWLEDGMENT

STATE OF UTAH
S.S.
COUNTY OF UTAH

ON THE _____ DAY OF _____, A.D. 20____ PERSONALLY APPEARED BEFORE ME, THE UNDERSIGNED NOTARY PUBLIC, IN AND FOR THE COUNTY OF UTAH IN SAID STATE OF UTAH, THE SIGNER OF THE ABOVE OWNER'S DEDICATION, _____ IN NUMBER, WHO DULY ACKNOWLEDGED TO ME THAT _____ SIGNED IT FREELY AND VOLUNTARILY AND FOR THE USES AND PURPOSES THEREIN MENTIONED.

MY COMMISSION EXPIRES

A NOTARY PUBLIC COMMISSIONED IN UTAH

PRINTED FULL NAME OF NOTARY

CORPORATE ACKNOWLEDGMENT

STATE OF UTAH
S.S.
COUNTY OF UTAH

ON THE _____ DAY OF _____, A.D. 20____ PERSONALLY APPEARED BEFORE ME DULY SWORN DID SAY EACH FOR HIMSELF, THAT HE, THE SAID _____ IS THE PRESIDENT AND HE THE SAID _____ IS THE SECRETARY OF _____ CORPORATION, AND THAT THE WITHIN AND FORGOING INSTRUMENT WAS SIGNED IN BEHALF OF SAID CORPORATION BY AUTHORITY OF A RESOLUTION OF ITS BOARD OF DIRECTORS AND SAID _____ AND _____ EACH DULY ACKNOWLEDGE TO BE THAT SAID CORPORATION EXECUTED THE SAME AND THAT THE SEAL AFFIXED IS THE SEAL OF SAID CORPORATION.

MY COMMISSION EXPIRES

A NOTARY PUBLIC COMMISSIONED IN UTAH

PRINTED FULL NAME OF NOTARY

APPROVAL BY LEGISLATIVE BODY

THE CITY COUNCIL OF THE CITY OF SARATOGA SPRINGS, COUNTY OF UTAH, APPROVES THIS SUBDIVISION SUJECT TO THE CONDITIONS AND RESTRICTIONS STATED HEREON, AND HEREBY ACCEPTS THE DEDICATION OF ALL STREETS, EASEMENTS AND RESTRICTIONS STATED HEREON, AND HEREBY ACCEPTS THE DEDICATION OF ALL STREETS, EASEMENTS, AND OTHER PARCELS OF LAND INTENDED FOR THE PUBLIC PURPOSE OF THE PERPETUAL USE OF THE PUBLIC.

THIS_____DAY OF_____, A.D. 20_____.

CITY MAYOR

ATTEST_____ CLERK-RECORDER (See Seal Below)

PLAT "A"

TALUS RIDGE

SUBDIVISION

SARATOGA SPRINGS UTAH COUNTY, UTAH

SCALE: 1" = 60 FEET

FIRE CHIEF APPROVAL
APPROVED BY THE FIRE CHIEF ON THIS DAY OF _____, A.D. 20____.
CITY FIRE CHIEF

PLANNING COMMISSION REVIEW
REVIEWED BY THE PLANNING COMMISSION ON THIS DAY OF _____, A.D. 20____.
CHAIRMAN, PLANNING COMMISSION

SARATOGA SPRINGS ENGINEER APPROVAL
APPROVED BY THE CITY ENGINEER ON THIS DAY OF _____, A.D. 20____.
CITY ENGINEER

SARATOGA SPRINGS ATTORNEY
APPROVED BY SARATOGA SPRINGS ATTORNEY ON THIS _____ DAY OF _____, A.D. 20____.
SARATOGA SPRINGS ATTORNEY

LEHI CITY POST OFFICE
APPROVED BY POST OFFICE REPRESENTATIVE ON THIS _____ DAY OF _____, A.D. 20____.
LEHI CITY POST OFFICE REPRESENTATIVE

SURVEYOR'S SEAL	NOTARY PUBLIC SEAL	CITY-COUNTY ENGINEER SEAL	COUNTY-RECORDER SEAL

This form approved by Utah County and the municipalities therein.

RECEIVED SEP 11 2014

NOTES

1. SEE PLAN & PROFILE SHEETS FOR PIPE SIZES, MATERIALS, SLOPES, JUNCTION BOXES, INLETS, CATCH BASINS & SERVICE LATERAL LOCATIONS.
2. ALL PRIVATE UTILITIES TO BE LOCATED IN PUBLIC UTILITY EASEMENTS. EXISTING PRIVATE UTILITIES IN 800 WEST TO BE RELOCATED TO PUBLIC UTILITY EASEMENTS.

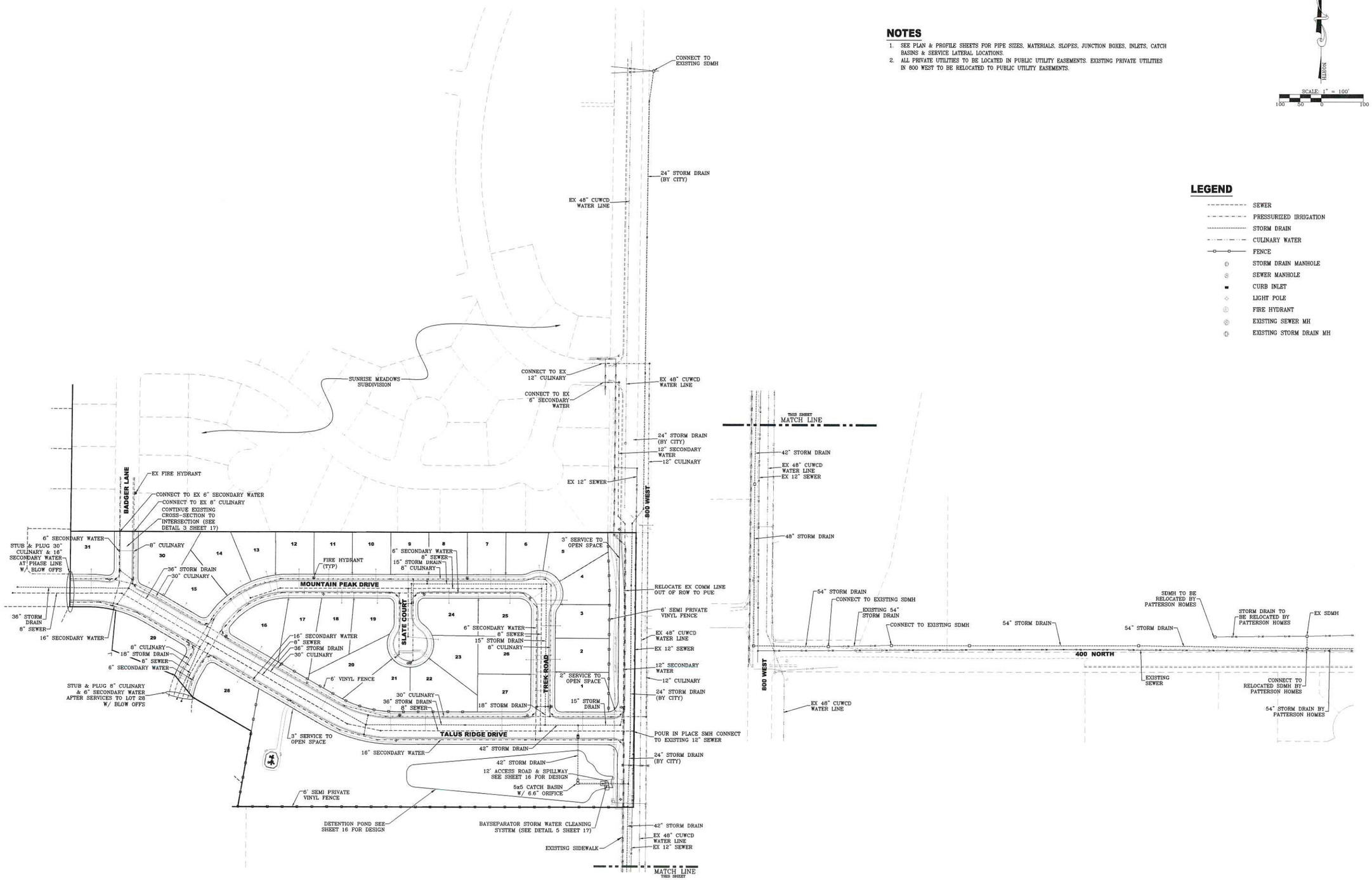
NORTH

SCALE: 1" = 100'

100 50 0 100

LEGEND

- SEWER
- PRESSURIZED IRRIGATION
- STORM DRAIN
- CULINARY WATER
- FENCE
- STORM DRAIN MANHOLE
- SEWER MANHOLE
- CURB INLET
- LIGHT POLE
- FIRE HYDRANT
- EXISTING SEWER MH
- EXISTING STORM DRAIN MH



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TALUS RIDGE PLAT "A"

SARATOGA SPRINGS, UTAH

UTILITY PLAN

REVISIONS
1 -
2 -
3 -
4 -
5 -

LEI PROJECT #: 2013-1795
DRAWN BY: BLS/MJV
CHECKED BY: NKW
SCALE: 1" = 100'
DATE: 9/12/2014
SHEET 1

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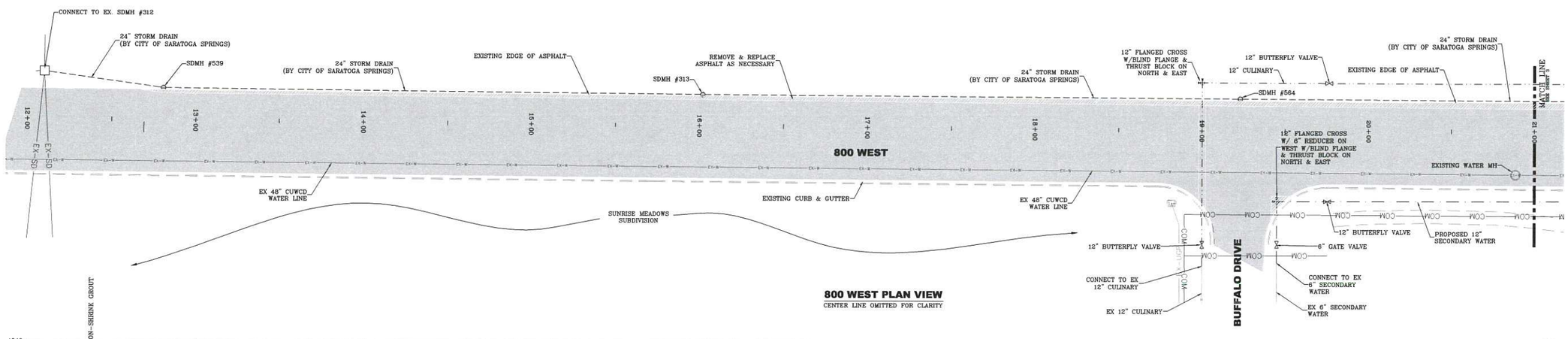
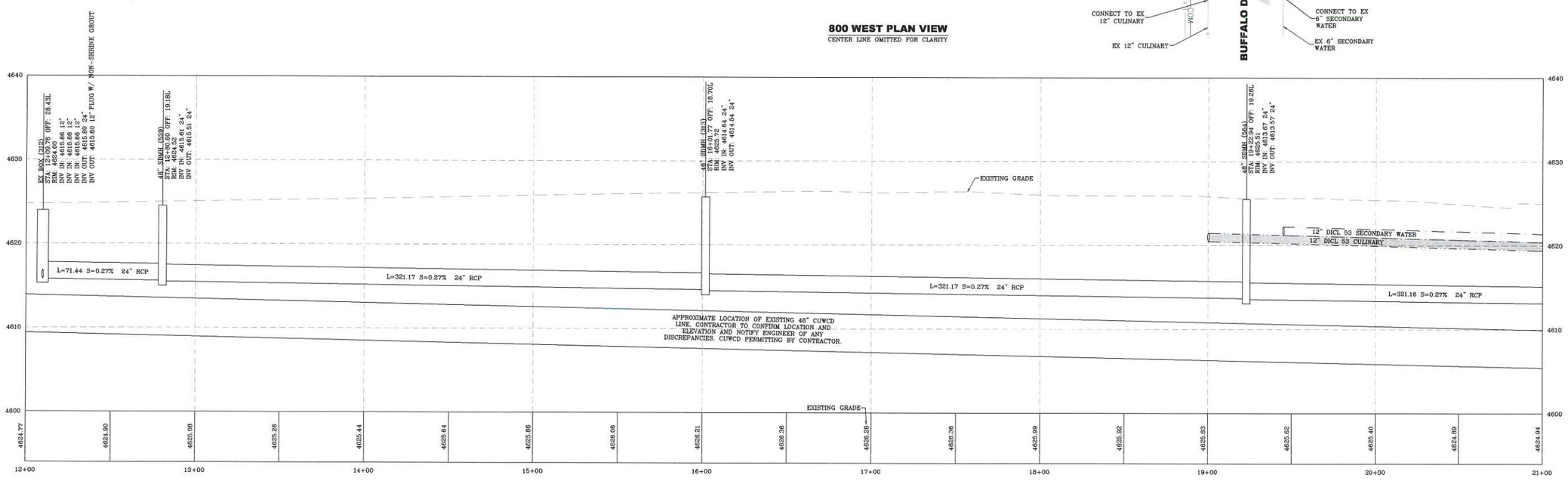
U:\LAND DESKTOP PROJECTS\13-1795 MT. SARATOGA\DWG\13-1795 PLAT A.DWG





800 WEST PROFILE

NORTH

SCALE
1" = 30'H 30 15 0 30
1" = 6'V 6 3 0 6

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TALUS RIDGE PLAT "A"

SARATOGA SPRINGS CITY, UTAH

800 WEST PLAN & PROFILE

STA: 12+00.00 - 21+00.00

REVISIONS
1 -
2 -
3 -
4 -
5 -

LEI PROJECT #: 2013-1795
DRAWN BY: BLS/MJV
CHECKED BY: NKW
SCALE: H: 1" = 30' V: 1" = 6'
DATE: 9/12/2014
SHEET 2

RECEIVED SEP 11 2014

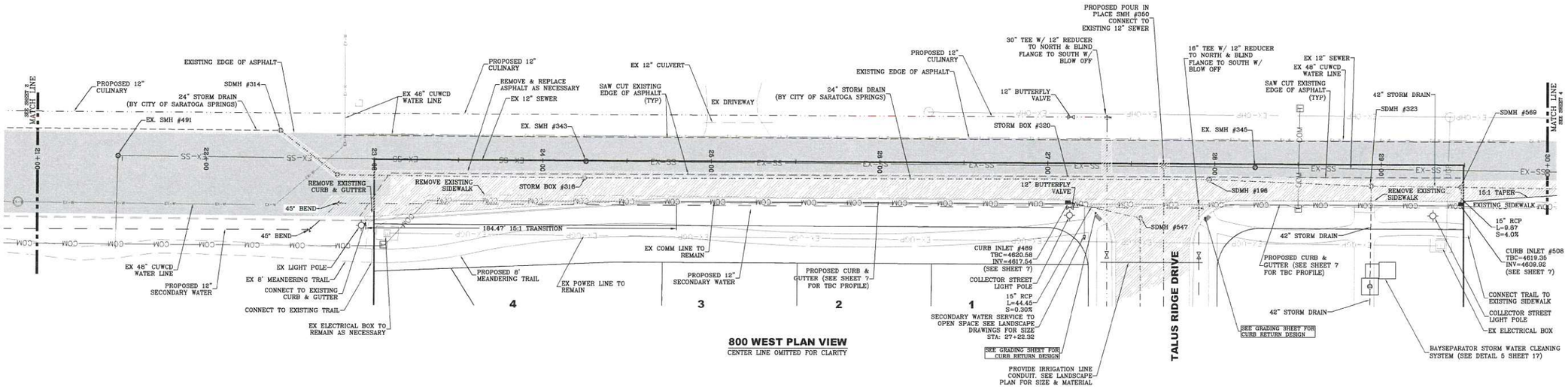
I:\LAND DESKTOP PROJECTS\13-1795 MT. SARATOGA\DWG\13-1795 PLAT A.DWG

NOTE

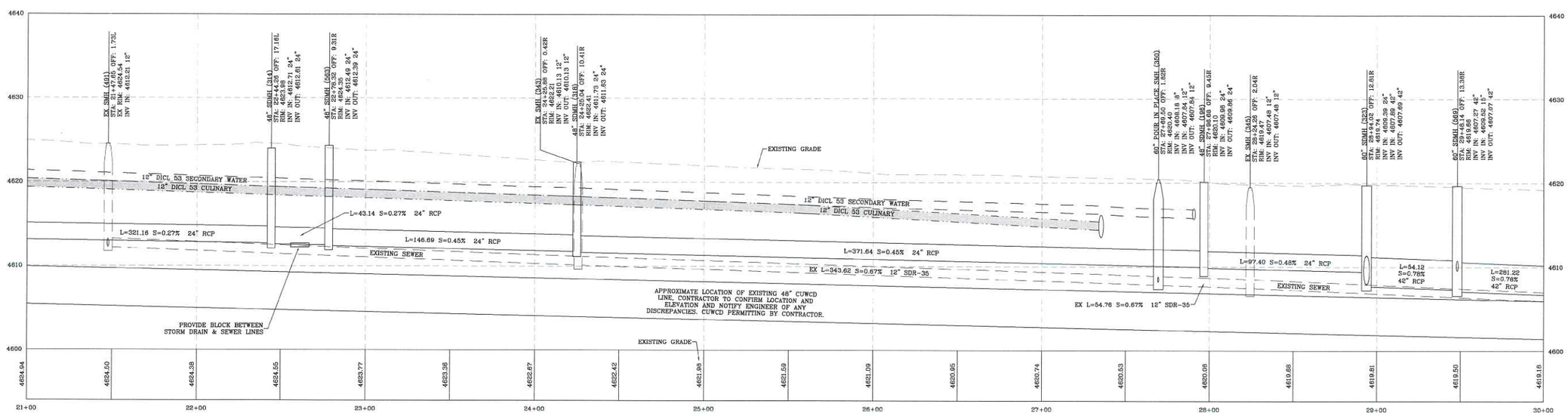
1. SEE SHEET 7 FOR STRIPING, AREAS OF NEW PAVEMENT & TBC PLAN & PROFILE OF 800 WEST.
2. ALL PRIVATE UTILITIES TO BE LOCATED IN PUBLIC UTILITY EASEMENTS. EXISTING PRIVATE UTILITIES IN 800 WEST TO BE RELOCATED TO PUBLIC UTILITY EASEMENTS.
3. SEE SHEET 17, DETAIL 4 FOR CROSS SECTION OF 800 WEST ROADWAY.
4. SEE SHEET 14 FOR STRIPING & SIGNAGE LOCATIONS.

NORTH

SCALE
1" = 30'H
1" = 6'V



800 WEST PLAN VIEW
CENTER LINE OMITTED FOR CLARITY



800 WEST PROFILE

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TALUS RIDGE PLAT "A"

SARATOGA SPRINGS CITY, UTAH

800 WEST PLAN & PROFILE

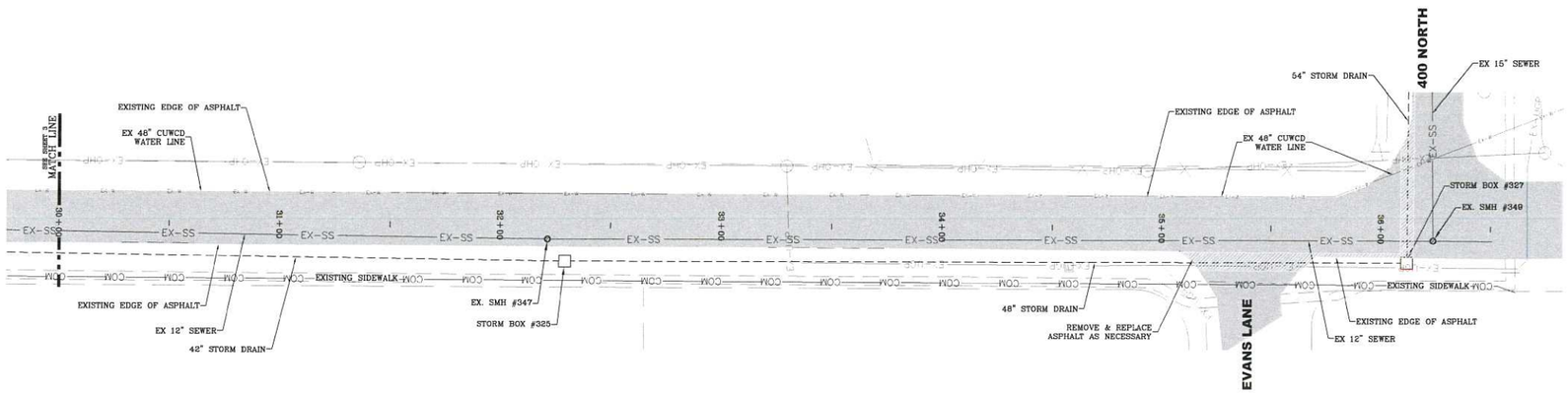
STA: 21+00.00 - 30+00.00

REVISIONS
1 -
2 -
3 -
4 -
5 -

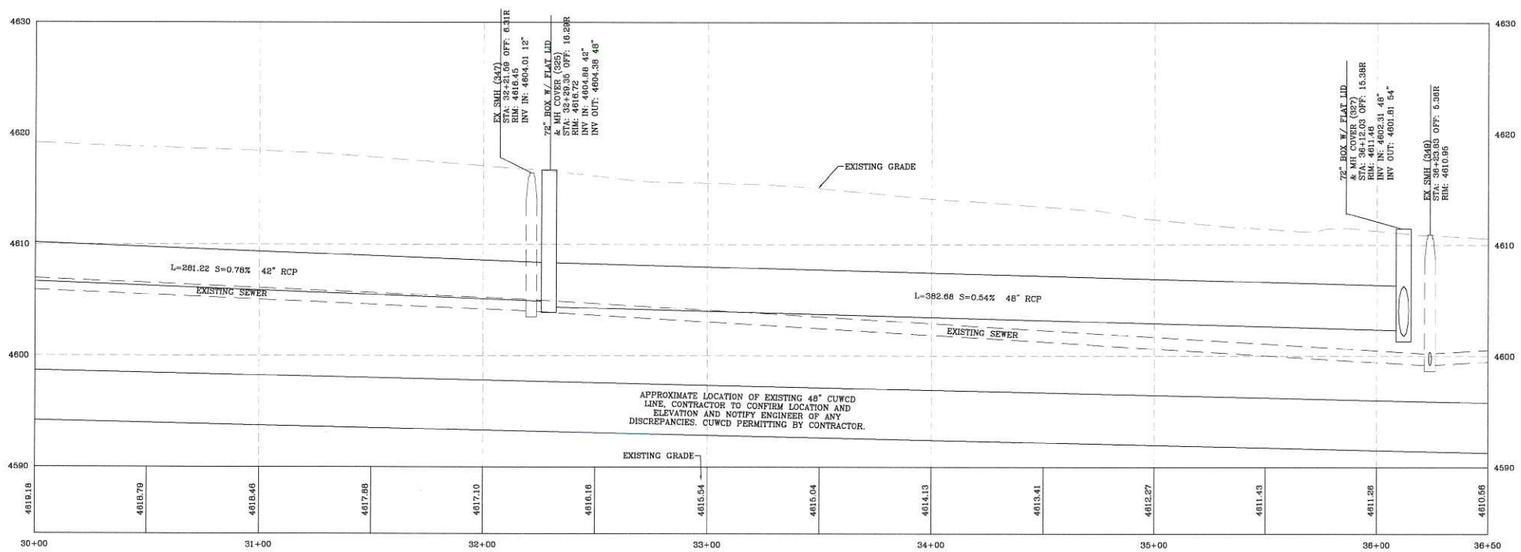
LEI PROJECT #: 2013-1795
DRAWN BY: BLS/MJV
CHECKED BY: NKW
SCALE: H: 1" = 30' V: 1" = 6'
DATE: 9/12/2014
SHEET 3

RECEIVED SEP 11 2014

U:\LAND DESKTOP PROJECTS\13-1795 MT. SARATOGA\DWG\13-1795 PLAT A.DWG



800 WEST PLAN VIEW
CENTER LINE OMITTED FOR CLARITY



800 WEST PROFILE

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TALUS RIDGE PLAT "A"
SARATOGA SPRINGS CITY, UTAH

800 WEST PLAN & PROFILE
STA: 30+00.00 - 36+50.00

REVISIONS
1 -
2 -
3 -
4 -
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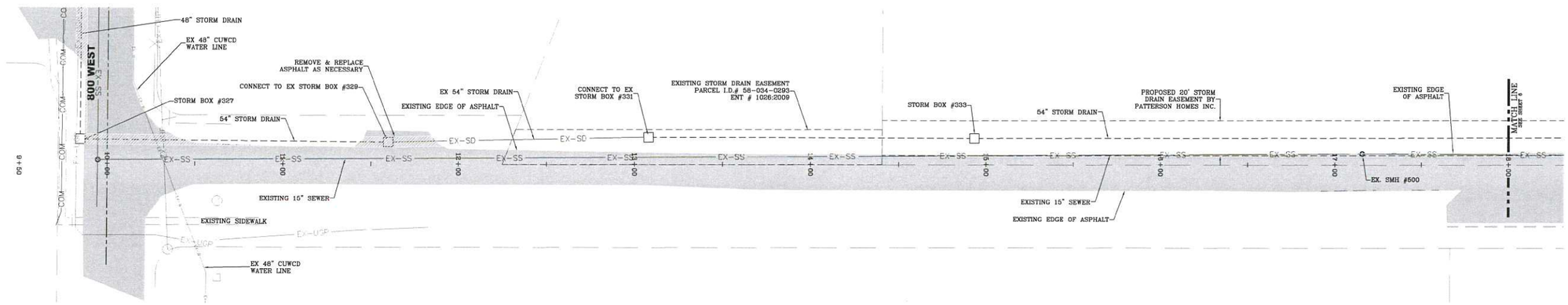
LEI PROJECT #: 2013-1795
DRAWN BY: BLS/MJV
CHECKED BY: NKW
SCALE: H: 1" = 30' V: 1" = 6'
DATE: 9/12/2014
SHEET 4

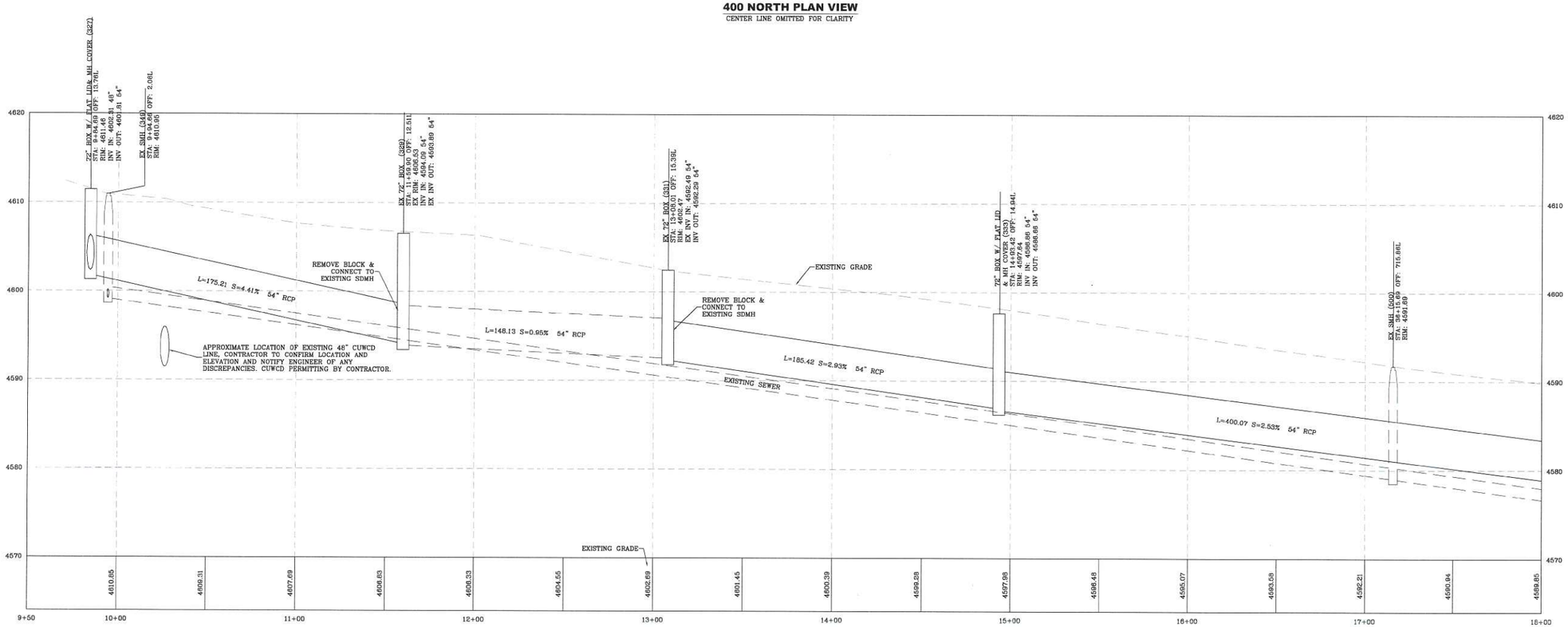
RECEIVED SEP 11 2014

U:\LAND DESKTOP PROJECTS\13-1795 MT. SARATOGA\DWG\13-1795 PLAT A.DWG



400 NORTH PLAN VIEW

CENTER LINE OMITTED FOR CLARITY



400 NORTH PROFILE

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TALUS RIDGE PLAT "A"

SARATOGA SPRINGS CITY, UTAH

400 NORTH PLAN & PROFILE

STA: 9+50.00 - 18+00.00

REVISIONS

1 -
2 -
3 -
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LEI PROJECT #: 2013-1795

DRAWN BY: BLS/MJV

CHECKED BY: NKW

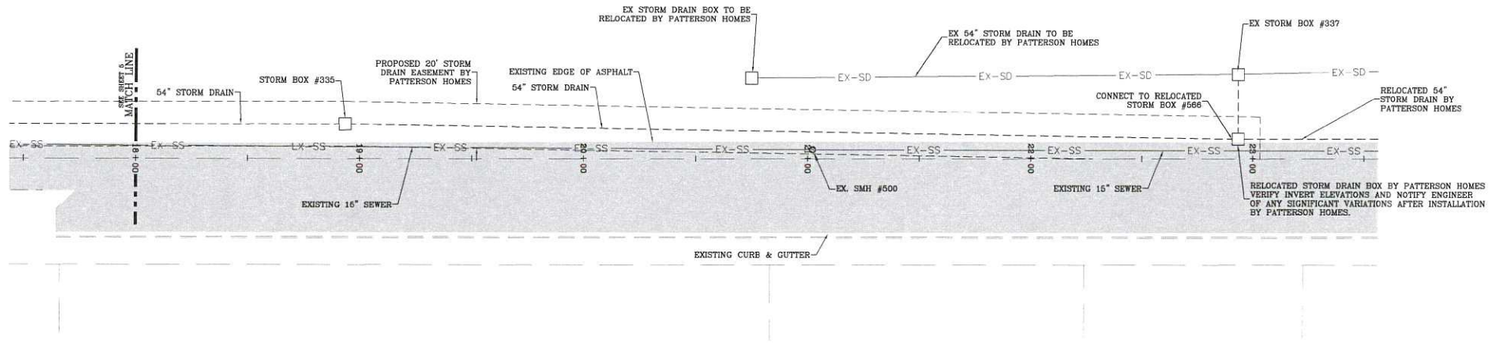
SCALE: H: 1" = 30' V: 1" = 6'

DATE: 9/12/2014

SHEET 5

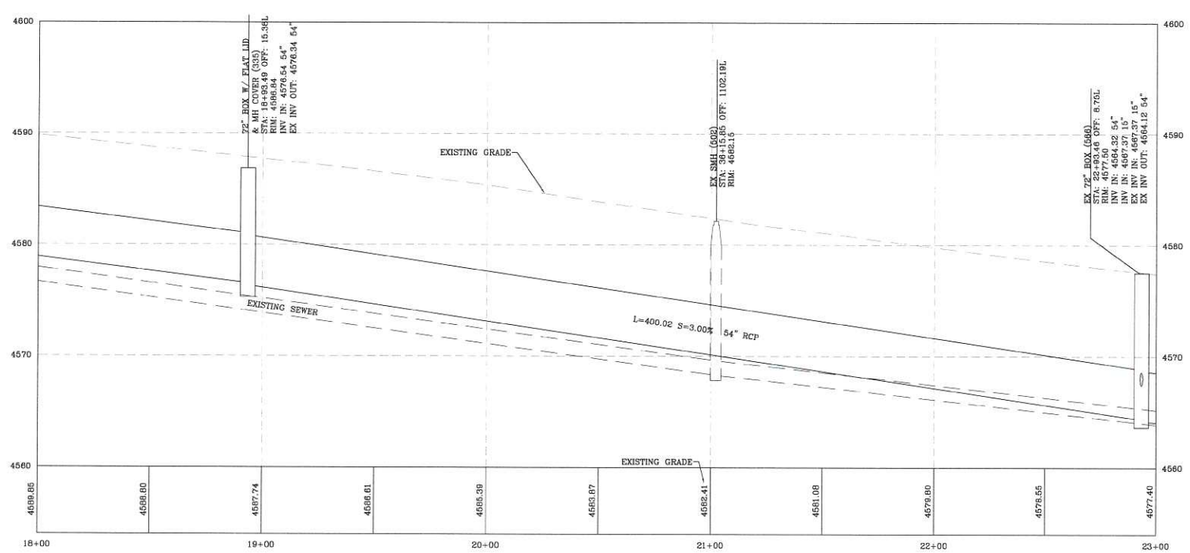
RECEIVED SEP 11 2014

D:\LAND DESKTOP PROJECTS\13-1795 MT. SARATOGA\DWG\13-1795 PLAT A.DWG



400 NORTH PLAN VIEW

CENTER LINE OMITTED FOR CLARITY



400 NORTH PROFILE

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TALUS RIDGE PLAT "A"

SARATOGA SPRINGS CITY, UTAH

400 NORTH PLAN & PROFILE

STA: 18+00.00 - 23+00.00

REVISIONS
1 -
2 -
3 -
4 -
5 -

LEI PROJECT #: 2013-1795
DRAWN BY: BLS/MJV
CHECKED BY: NKW
SCALE: H: 1" = 30' V: 1" = 6'
DATE: 9/12/2014
SHEET 6

RECEIVED SEP 11 2014

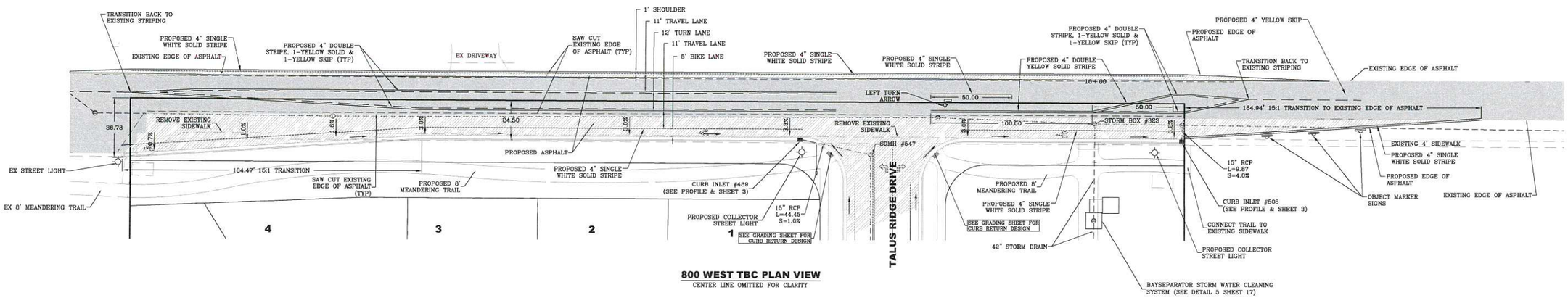
U:\LAND DESKTOP PROJECTS\13-1795 MT. SARATOGA\DWG\13-1795 PLAT A.DWG

NORTH

SCALE
1" = 30'H
1" = 6'V

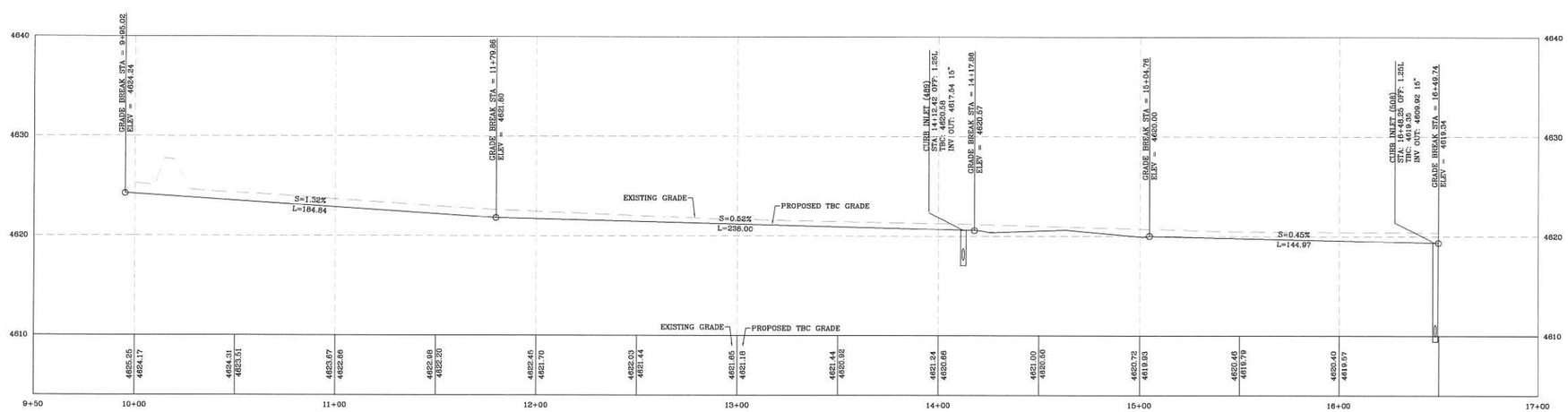
NOTE

1. SEE SHEET 3 FOR ADDITIONAL UTILITIES IN 800 WEST.
2. SEE DETAIL 4 SHEET 17 FOR 800 WEST ROAD SECTION.



800 WEST TBC PLAN VIEW

CENTER LINE OMITTED FOR CLARITY



800 WEST TBC PROFILE

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TALUS RIDGE PLAT "A"
SARATOGA SPRINGS CITY, UTAH

800 WEST STRIPING & TBC PLAN & PROFILE

REVISIONS
1 -
2 -
3 -
4 -
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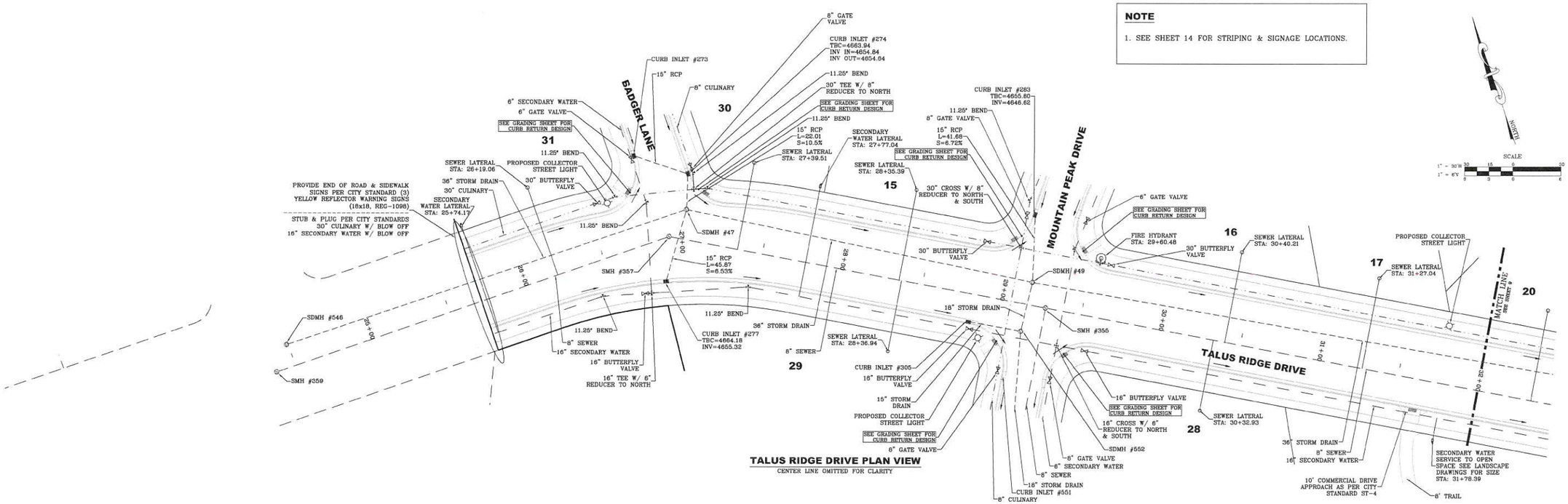
LEI PROJECT #: 2013-1795
DRAWN BY: BLS/MJV
CHECKED BY: NKW
SCALE: H: 1" = 30' V: 1" = 6'
DATE: 9/12/2014
SHEET 7

RECEIVED SEP 11 2014

U:\LAND DESKTOP PROJECTS\13-1795 MT SARATOGA\DWG\13-1795 PLAT A.DWG

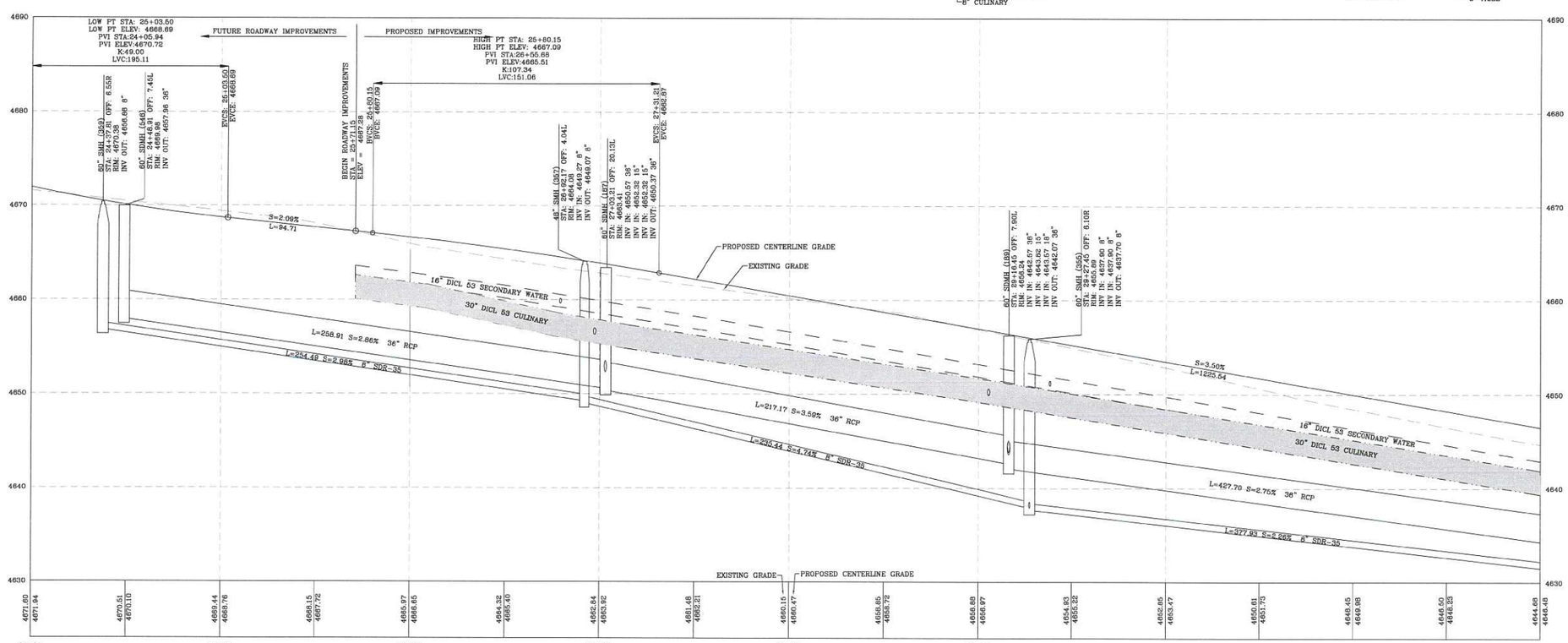
NOTE

1. SEE SHEET 14 FOR STRIPING & SIGNAGE LOCATIONS.



TALUS RIDGE DRIVE PLAN VIEW

CENTER LINE OMITTED FOR CLARITY



TALUS RIDGE DRIVE PROFILE

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TALUS RIDGE PLAT "A"

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TALUS RIDGE DRIVE PLAN & PROFILE

STA: 24+00.00 - 32+00.00

REVISIONS

1 -
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LEI PROJECT #: 2013-1795

DRAWN BY: BLS/MJV

CHECKED BY: NKW

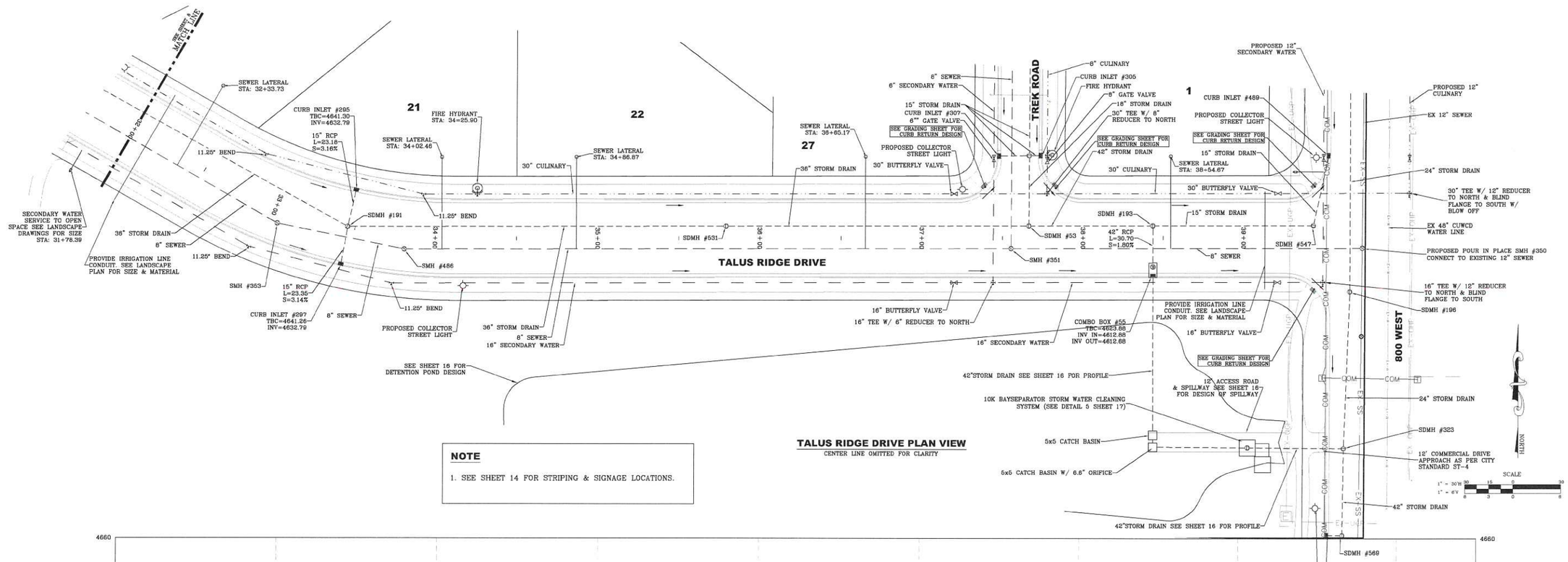
SCALE: H: 1" = 30' V: 1" = 6'

DATE: 9/12/2014

SHEET 8

RECEIVED SEP 11 2014

U:\LAND DESKTOP PROJECTS\13-1795 MT. SARATOGA\DWG\13-1795 PLAT A.DWG

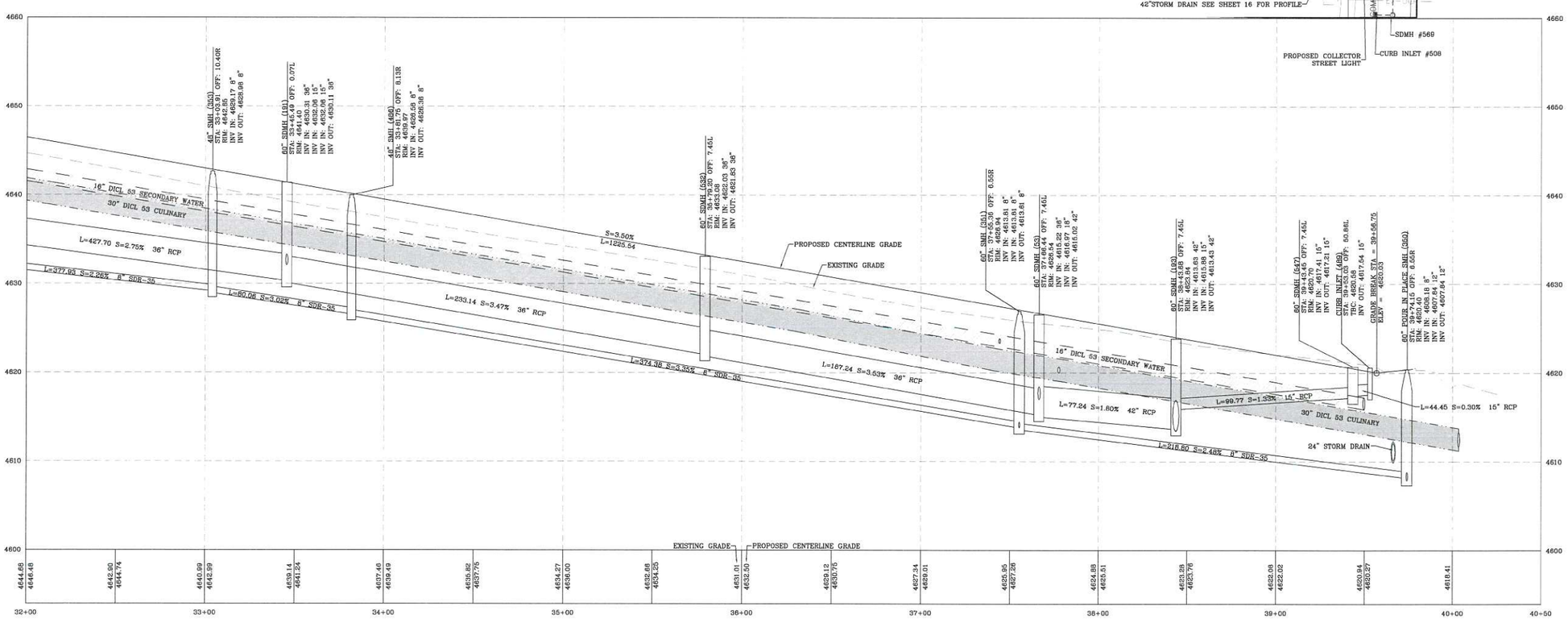


NOTE

1. SEE SHEET 14 FOR STRIPING & SIGNAGE LOCATIONS.

TALUS RIDGE DRIVE PLAN VIEW

CENTER LINE OMITTED FOR CLARITY



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TALUS RIDGE PLAT "A"

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TALUS RIDGE DRIVE PLAN & PROFILE

STA: 32+00.00 - 40+50.00

REVISIONS

1 -
2 -
3 -
4 -
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LEI PROJECT #: 2013-1795

DRAWN BY: BLS/MJV

CHECKED BY: NKW

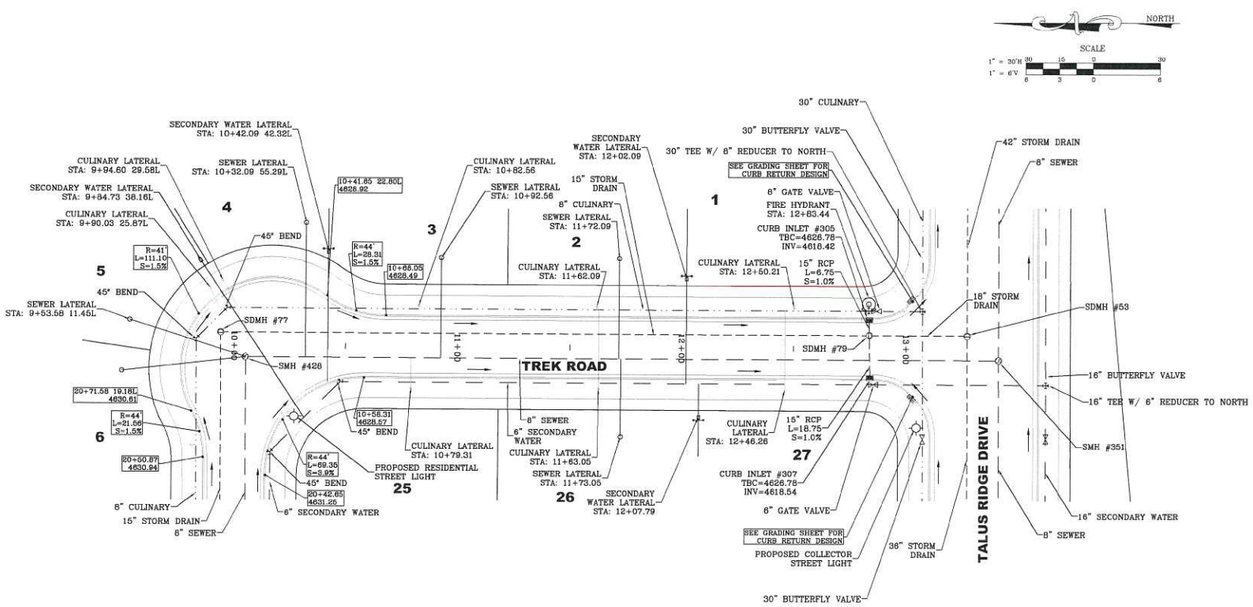
SCALE: H: 1" = 30' V: 1" = 6'

DATE: 9/12/2014

SHEET 9

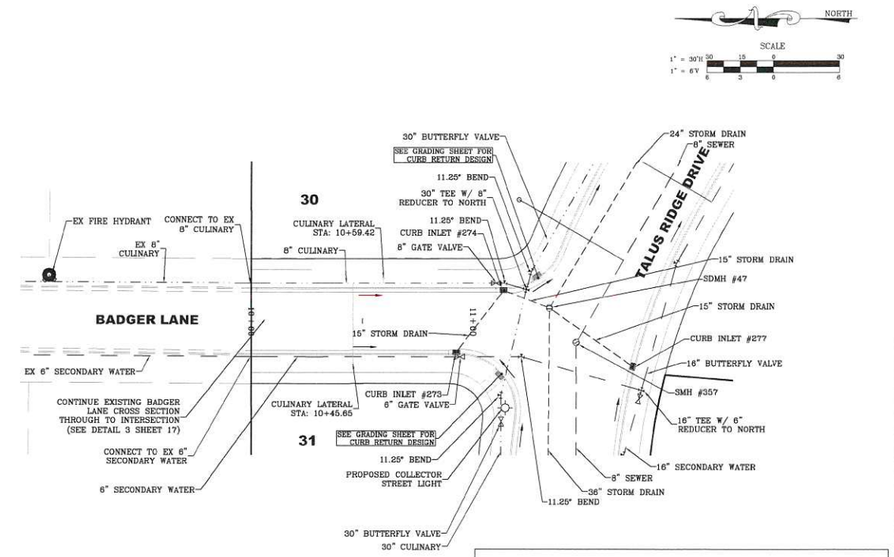
RECEIVED SEP 11 2014

U:\LAND DESKTOP PROJECTS\13-1795 MT. SARATOGA\DWG\13-1795 PLAT A.DWG



TREK ROAD PLAN VIEW

CENTER LINE OMITTED FOR CLARITY

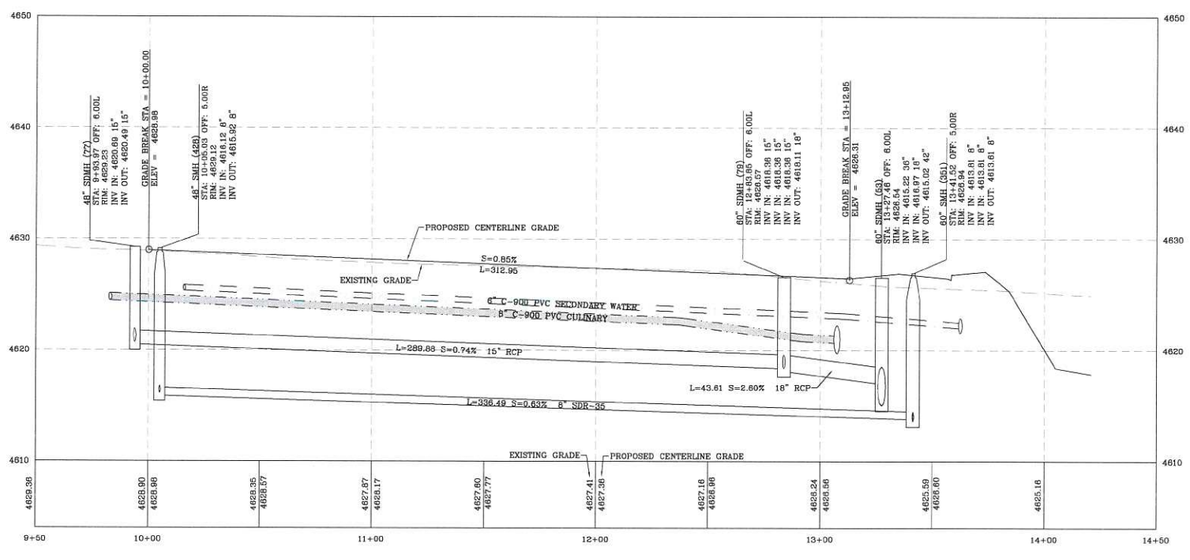


BADGER LANE PLAN VIEW

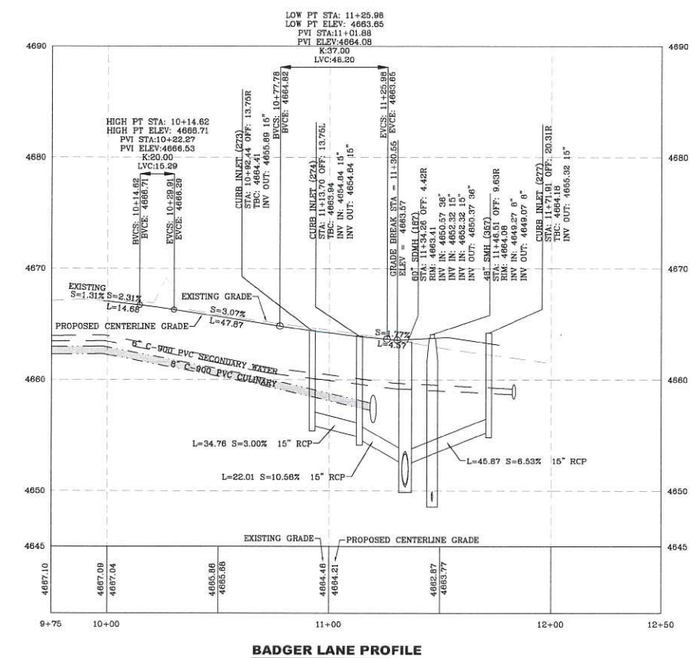
CENTER LINE OMITTED FOR CLARITY

NOTE

1. CONTINUE EXISTING BADGER LANE CROSS SECTION THROUGH TO INTERSECTION. (SEE DETAIL 3 SHEET 17)
2. SEE SHEET 14 FOR STRIPING & SIGNAGE LOCATIONS.



TREK ROAD PROFILE



BADGER LANE PROFILE

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TALUS RIDGE PLAT "A"

SARATOGA SPRINGS CITY, UTAH

TREK ROAD & BADGER LANE PLAN & PROFILES

REVISIONS

1 -
2 -
3 -
4 -
5 -

LEI PROJECT #: 2013-1795

DRAWN BY: BLS/MJV

CHECKED BY: NKW

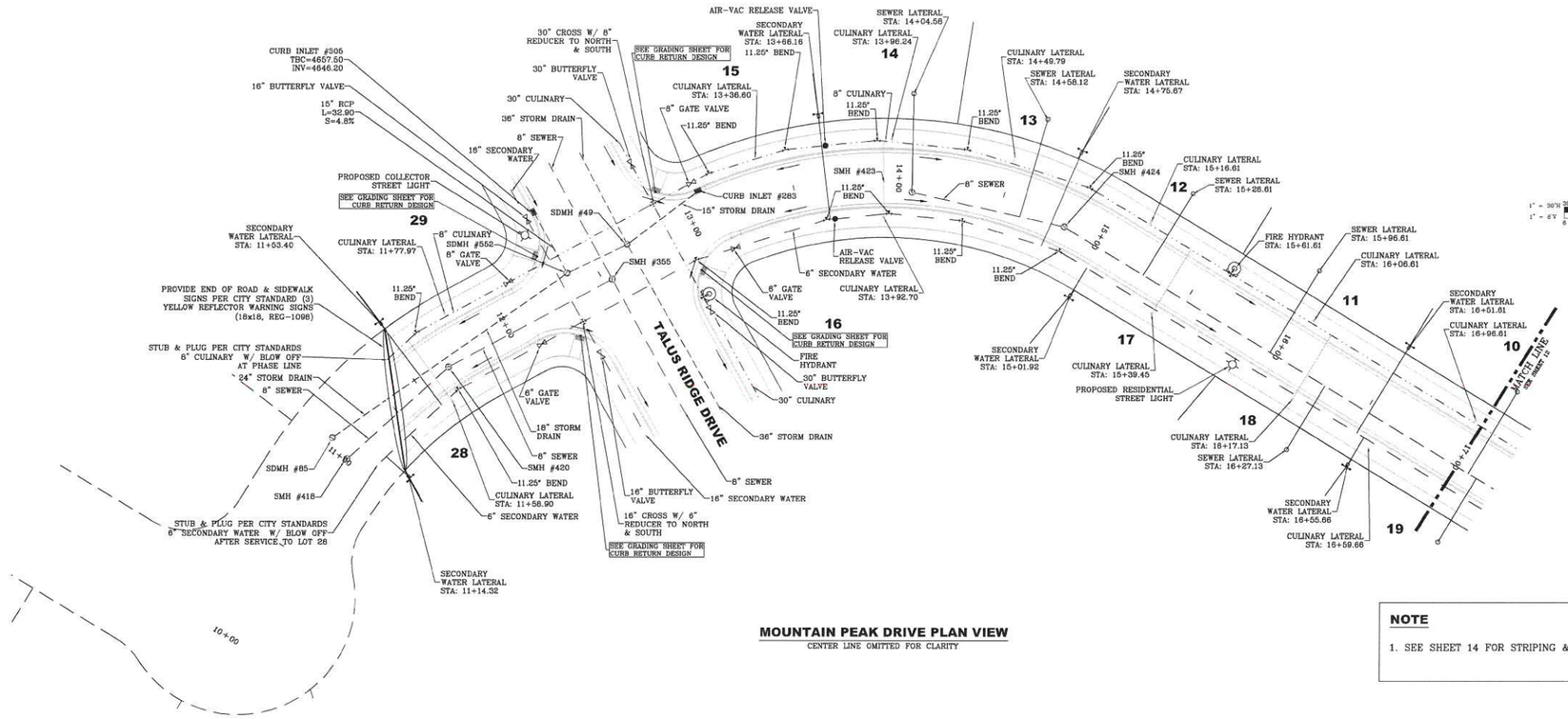
SCALE: H: 1" = 30' V: 1" = 6'

DATE: 9/12/2014

SHEET 10

RECEIVED SEP 11 2014

D:\LAND DESKTOP PROJECTS\13-1795 MT. SARATOGA\DWG\13-1795 PLAT A.DWG

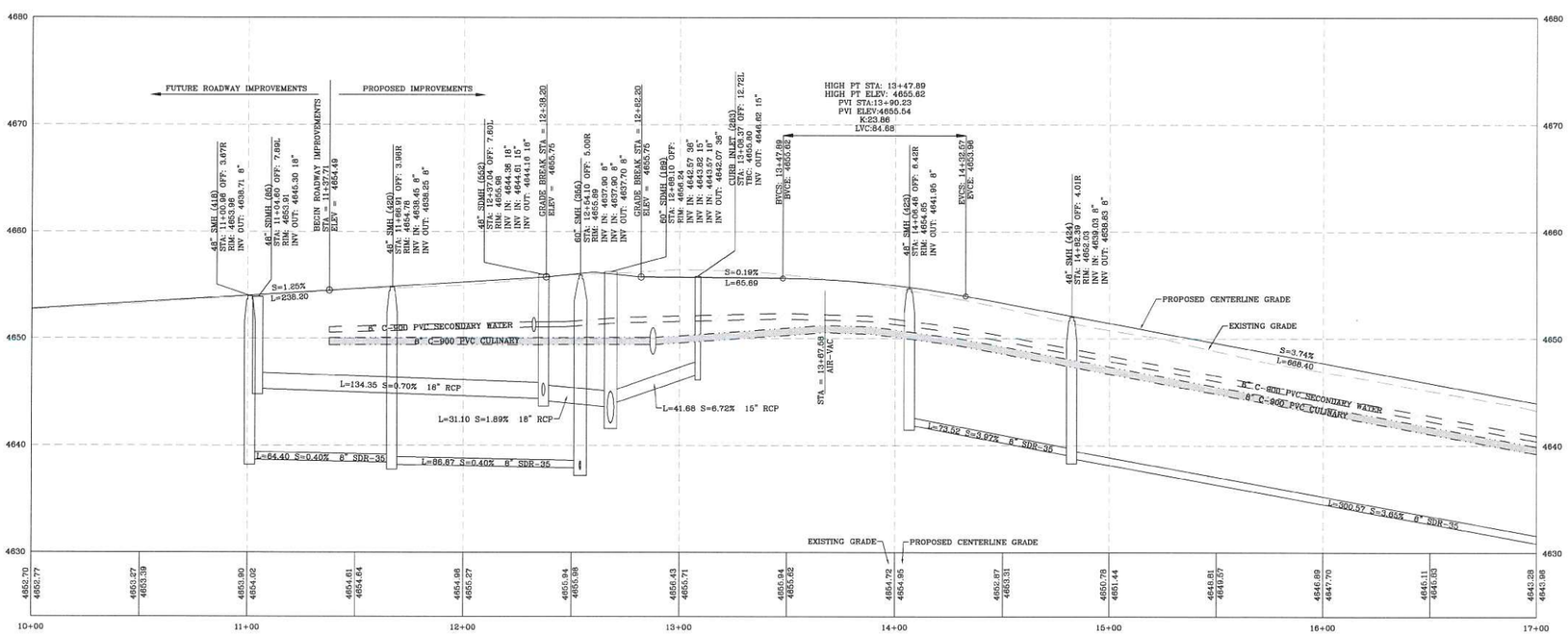


MOUNTAIN PEAK DRIVE PLAN VIEW

CENTER LINE OMITTED FOR CLARITY

NOTE

1. SEE SHEET 14 FOR STRIPING & SIGNAGE LOCATIONS.



MOUNTAIN PEAK DRIVE PROFILE

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TALUS RIDGE PLAT "A"

SARATOGA SPRINGS CITY, UTAH

MOUNTAIN PEAK DRIVE PLAN & PROFILE

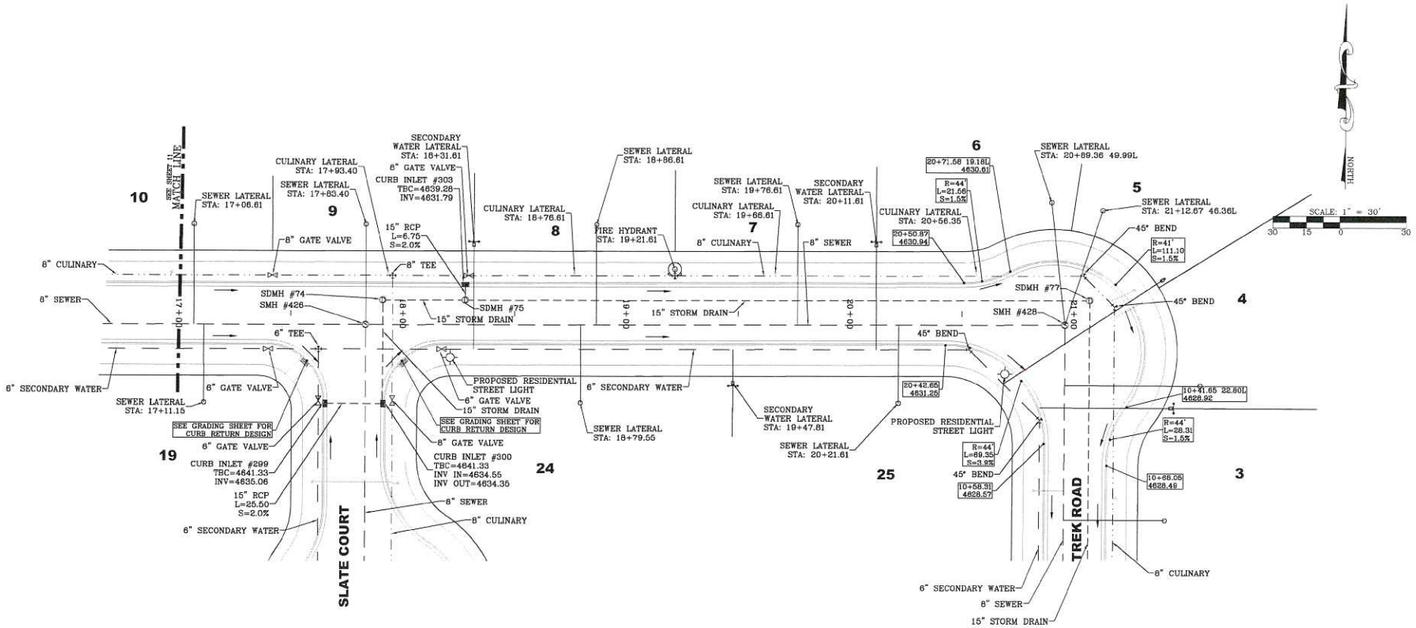
STA: 10+00.00 - 17+00.00

REVISIONS
1 -
2 -
3 -
4 -
5 -

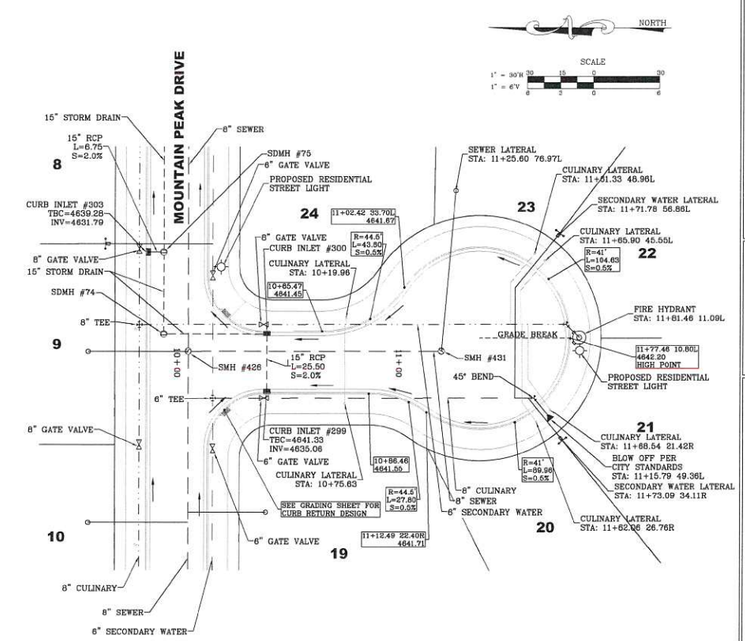
LEI PROJECT #: 2013-1795
DRAWN BY: BLS/MJV
CHECKED BY: NKW
SCALE: H: 1" = 30' V: 1" = 6'
DATE: 9/12/2014
SHEET 11

RECEIVED SEP 11 2014

U:\LAND DESKTOP PROJECTS\13-1795 MT. SARATOGA\DWG\13-1795 PLAT A.DWG



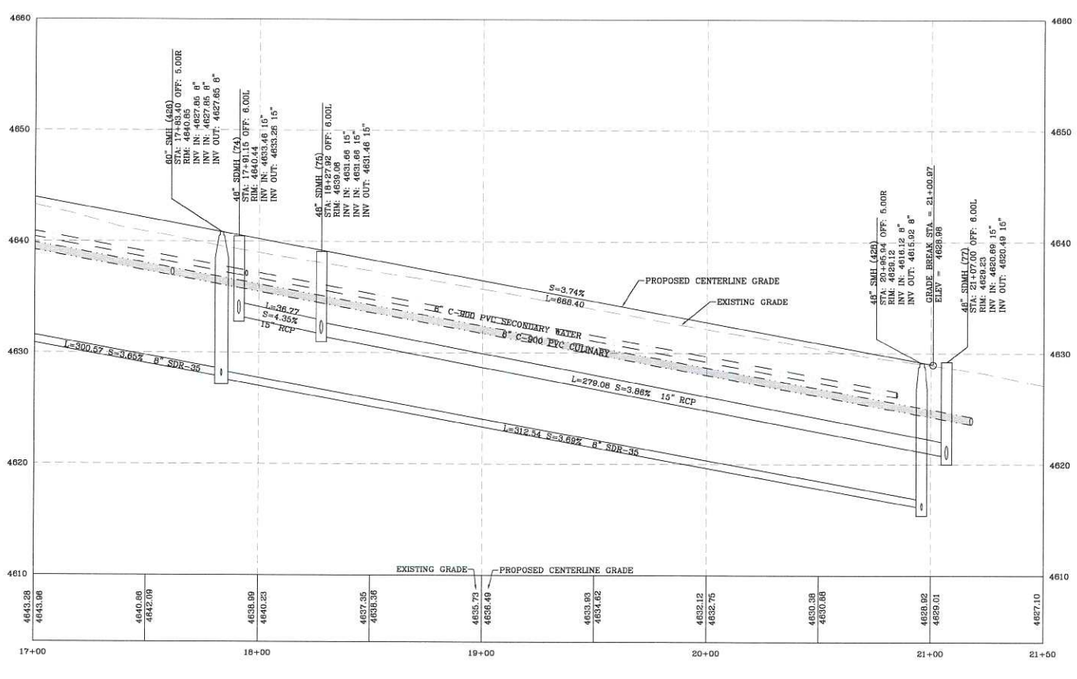
MOUNTAIN PEAK DRIVE PLAN VIEW
CENTER LINE OMITTED FOR CLARITY



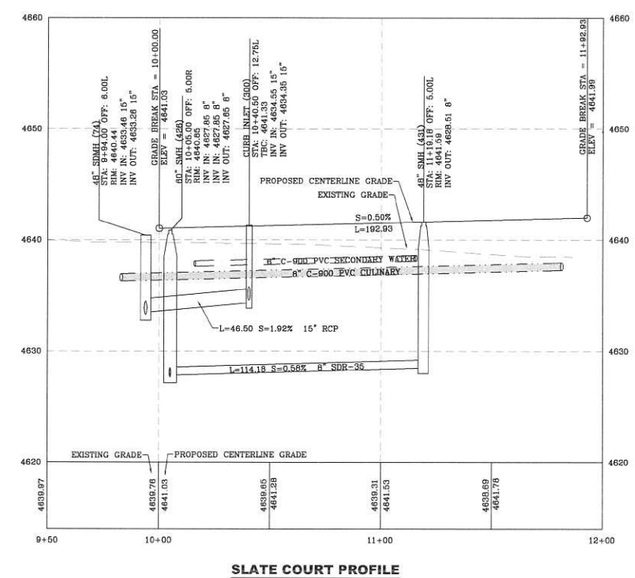
NOTE

1. SEE SHEET 14 FOR STRIPING & SIGNAGE LOCATIONS.

SLATE COURT PLAN VIEW
CENTER LINE OMITTED FOR CLARITY



MOUNTAIN PEAK DRIVE PROFILE



SLATE COURT PROFILE

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TALUS RIDGE PLAT "A"
SARATOGA SPRINGS CITY, UTAH

MOUNTAIN PEAK DRIVE (STA: 17+00.00 - 21+50.00) & SLATE COURT PLAN & PROFILES

REVISIONS
1 -
2 -
3 -
4 -
5 -

LEI PROJECT #: 2013-1795
DRAWN BY: BLS/MJV
CHECKED BY: NKW
SCALE: H: 1" = 30' V: 1" = 6'
DATE: 9/12/2014
SHEET 12

RECEIVED SEP 11 2014

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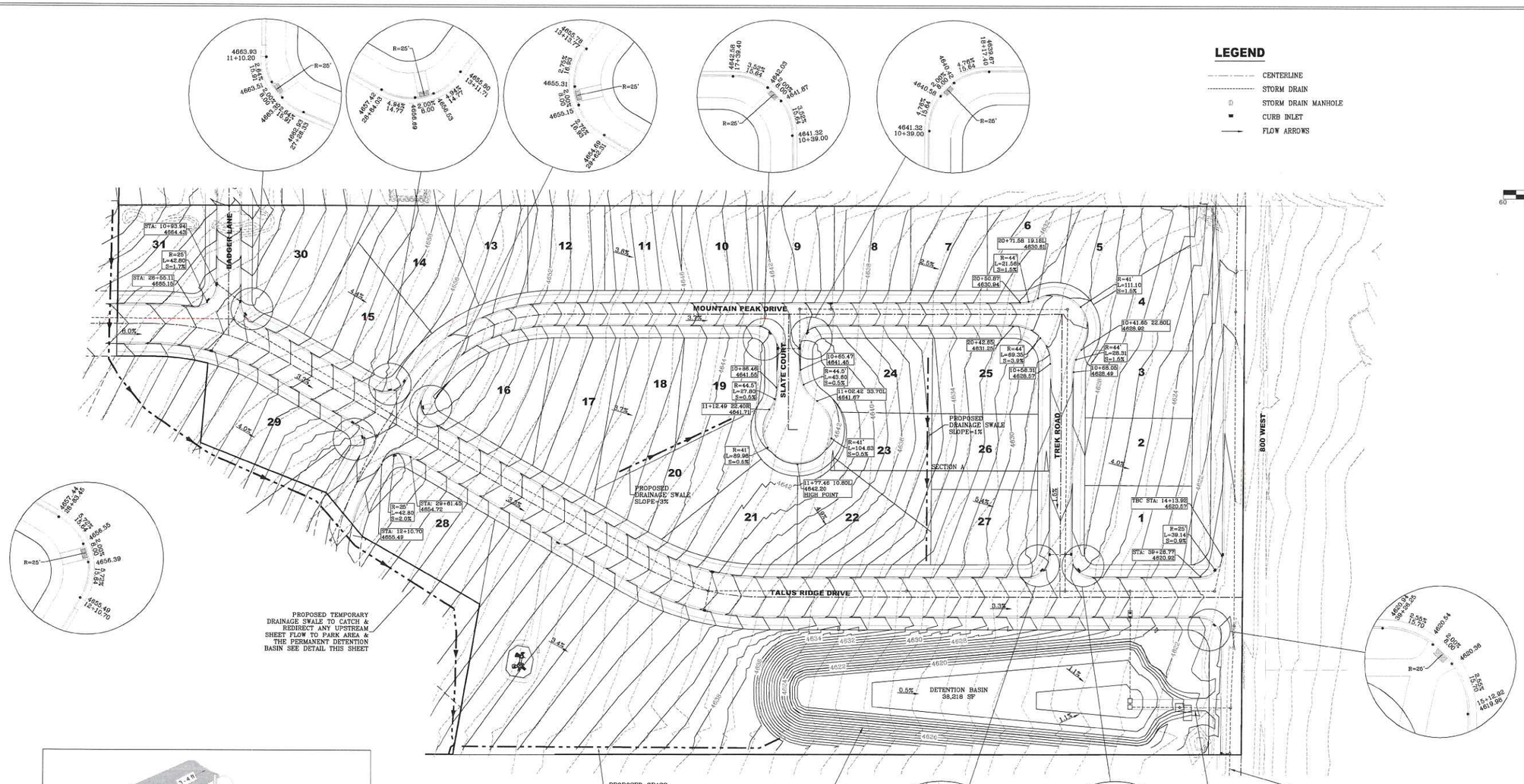
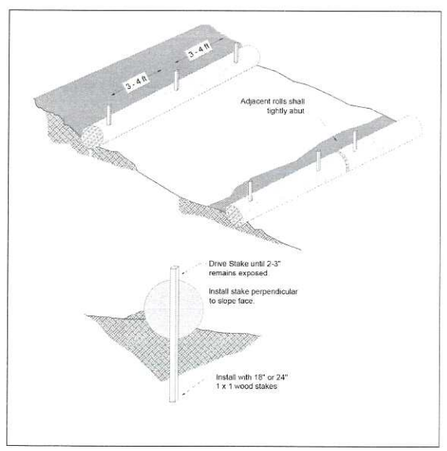
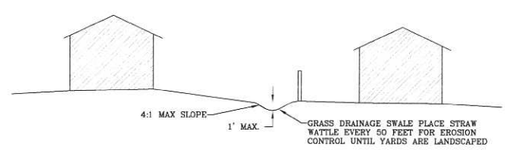




TYPICAL STRAW WATTLE DETAIL



TYPICAL SECTION "A"

TEMPORARY DRAINAGE SWALE

NOTES

1. THE BENCHMARK FOR THE TOPOGRAPHIC INFORMATION PROVIDED HEREON IS THE FOUND 2002 UTAH COUNTY MONUMENT AT THE NORTH 1/4 CORNER OR SAID SECTION 22, WITH A PUBLISHED UTAH COUNTY (NGVD29) ELEVATION OF 4,625.47 FEET.
2. CATCH SLOPE NOT TO EXCEED 4:1 SLOPE MAX.
3. LOT GRADING NOT TO EXCEED 4:1 SLOPE, TERRACING & RETAINING WALLS MAY BE USED TO IMPROVE BUILDING PAD SITE IN ACCORDANCE WITH CITY STANDARDS. (TO BE DETERMINED ON FINAL LOT DRAWINGS).
4. SEE PLAN & PROFILE SHEETS FOR STORM DRAIN SYSTEM PIPE SIZES, MATERIALS, SLOPES, JUNCTION BOXES, INLETS, AND CATCH BASINS.
5. ALL UPSTREAM SHEET FLOW TO BE REDIRECTED WITH A TEMPORARY SWALE TO THE PARK AREA & PERMANENT DETENTION BASIN.

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

TALUS RIDGE PLAT "A"
SARATOGA SPRINGS CITY, UTAH

GRADING PLAN

REVISIONS
1 -
2 -
3 -
4 -
5 -

LEI PROJECT #: 2013-1795
DRAWN BY: BLS/MJV
CHECKED BY: NKW
SCALE: 1" = 60'
DATE: 9/12/2014
SHEET 13

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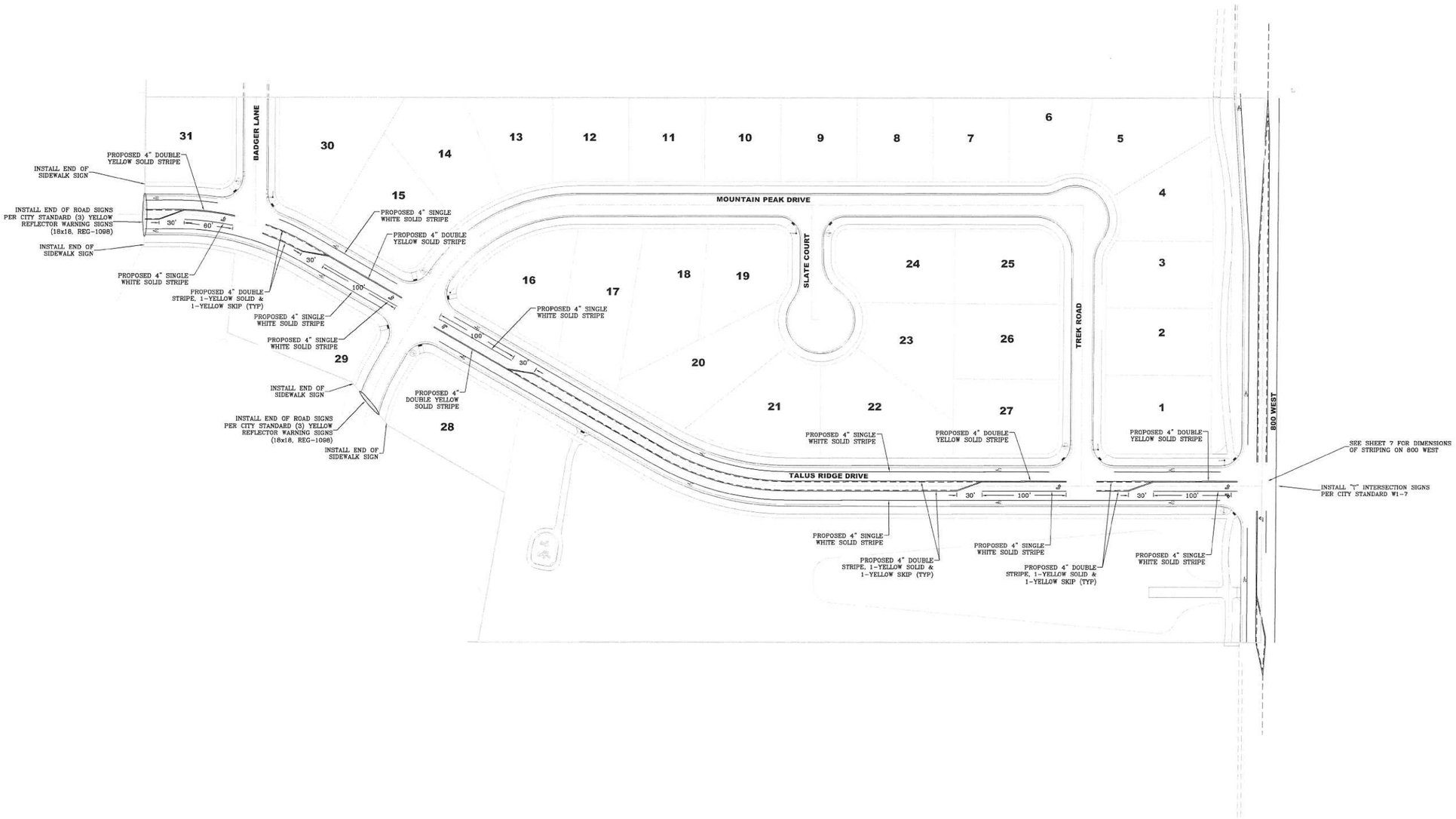

LEGEND

- CENTERLINE
- STREET SIGN
- STOP SIGN & BAR

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TALUS RIDGE PLAT "A"

SARATOGA SPRINGS, UTAH

STRIPING & SIGNAGE PLAN

REVISIONS
1 -
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LEI PROJECT #: 2013-1795
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SHEET 14

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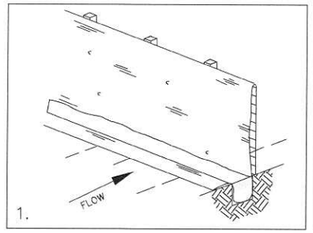
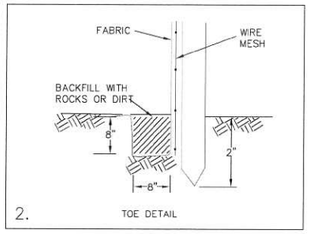
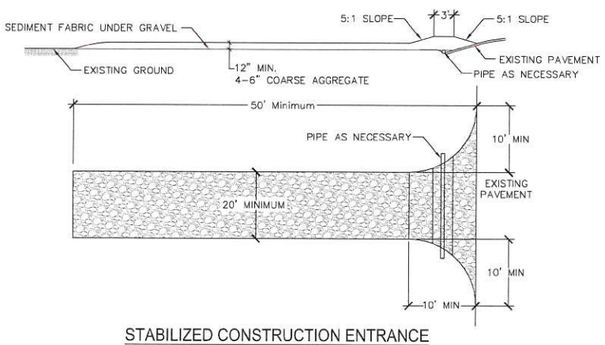




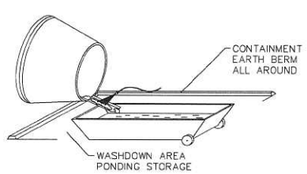
SILT FENCE

SILT FENCE MAY BE INSTALLED FOR PERIMETER CONTROL. A MINIMUM 20-FOOT VEGETATED BUFFER MAY ALSO BE SUBSTITUTED FOR PERIMETER CONTROL (PRESERVATION OF EXISTING VEGETATION).



STABILIZED CONSTRUCTION ENTRANCE

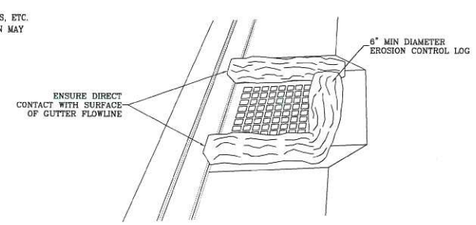
STABILIZED CONSTRUCTION ENTRANCE SHALL BE MAINTAINED UNTIL SUCH TIME AS ROADS ARE ASPHALTED AND INDIVIDUAL HOME LOTS ARE BEING DEVELOPED.



CONCRETE WASTE MANAGEMENT

PRESERVATION OF EXISTING VEGETATION

- CLEARLY MARK, FLAG OR FENCE VEGETATION OR AREAS WHERE VEGETATION SHOULD BE PRESERVED.
- PREPARE LANDSCAPING PLANS WHICH INCLUDE AS MUCH EXISTING VEGETATION AS POSSIBLE AND STATE PROPER CARE DURING AND AFTER CONSTRUCTION.
- DEFINE AND PROTECT WITH BERMS, FENCING, SIGNS, ETC. A SETBACK AREA FROM VEGETATION TO BE PRESERVED.
- PROPOSE LANDSCAPE PLANS WHICH DO NO INCLUDE PLANT SPECIES THAT COMPETE WITH EXISTING VEGETATION.
- DO NOT LOCATE CONSTRUCTION TRAFFIC ROUTES, SPOIL PILES, ETC. WHERE SIGNIFICANT ADVERSE IMPACT ON EXISTING VEGETATION MAY OCCUR.



INLET PROTECTION

LEGEND

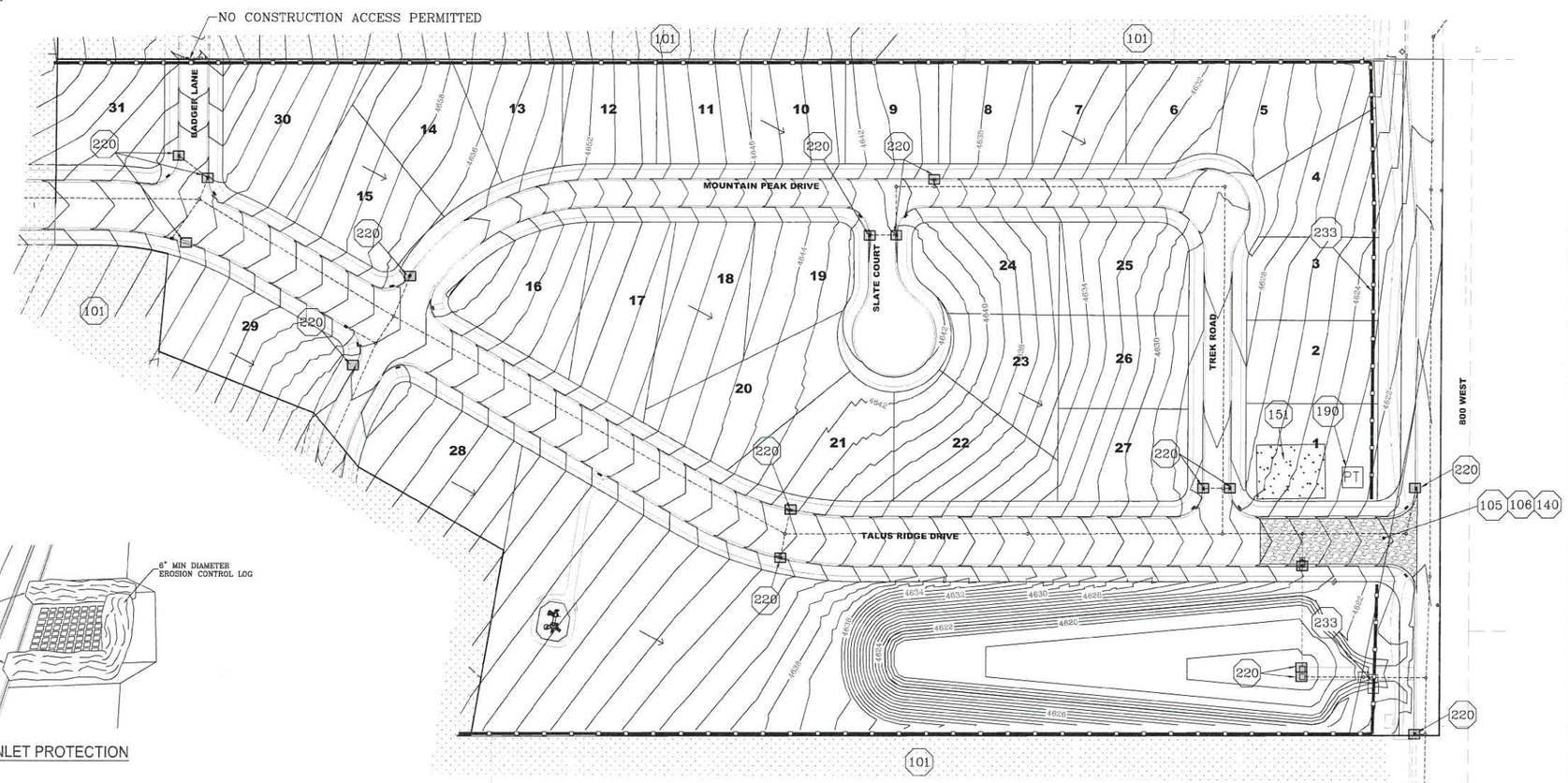
- SITE BOUNDARY
- SILT FENCE
- STORM DRAIN CURB INLET
- INLET PROTECTION
- CONCRETE WASTE MGMT.
- STABILIZED CONSTRUCTION ENTRANCE
- PRESERVE EXISTING VEGETATION
- PORTABLE TOILETS
- FLOW ARROW

CONSTRUCTION PHASE STORM WATER POLLUTION PROTECTION PLAN BEST MANAGEMENT PRACTICES (BMP)

BMP#	BMP SYMBOL	TITLE	LOCATION	DURATION
C101	101	PRESERVING NATURAL VEGETATION	AS SHOWN	COMMENCEMENT OF GRADING THROUGH COMPLETION OF SITE IMPROVEMENTS
C105	105	STABILIZED CONSTRUCTION ENTRANCE	AS SHOWN	BEGINNING OF CONSTRUCTION THROUGH COMPLETION OF SITE IMPROVEMENTS
C106	106	WHEEL WASH	AS NECESSARY	BEGINNING OF CONSTRUCTION THROUGH COMPLETION OF SITE IMPROVEMENTS
C190	190	PORTABLE TOILETS	AS SHOWN	BEGINNING OF CONSTRUCTION THROUGH COMPLETION OF SITE IMPROVEMENTS
C140	140	DUST CONTROL	PER CONTRACTOR	BEGINNING OF CONSTRUCTION THROUGH COMPLETION OF SITE IMPROVEMENTS
C151	151	CONCRETE WASTE MANAGEMENT	PER CONTRACTOR / AS SHOWN	BEGINNING OF CONSTRUCTION THROUGH COMPLETION OF SITE IMPROVEMENTS
C220	220	STORM DRAIN INLET PROTECTION	AS SHOWN	COMMENCEMENT OF GRADING THROUGH COMPLETION OF SITE IMPROVEMENTS
C233	233	SILT FENCE	PER CONTRACTOR/ AS SHOWN	COMMENCEMENT OF GRADING THROUGH COMPLETION OF SITE IMPROVEMENTS

EROSION CONTROL NOTES

1. CONTROLLING SEDIMENT TRANSPORT AND PREVENTING AND/OR CORRECTING PROBLEMS ASSOCIATED WITH EROSION AND RUNOFF PROCESSES THAT COULD OCCUR BOTH DURING AND AFTER PROJECT CONSTRUCTION WILL BE CLOSELY MONITORED. PERIODIC MAINTENANCE AND INSPECTION OF SEDIMENT CONTROL DEVICES WILL BE SCHEDULED. PARTICULAR ATTENTION SHALL BE GIVEN TO EXISTING DRAINAGE PATTERNS THAT RUN THROUGH DISTURBED AREAS AND OVER EXTREME SLOPES. THESE PATTERNS WILL BE IDENTIFIED TO ISOLATE PROBLEM AREAS WHERE WATER WILL CONCENTRATE. PROVISIONS SHALL BE MADE TO CHANNEL RUNOFF AWAY FROM NEW OR EXISTING IMPROVEMENTS TO PREVENT UNDERMINING AND GENERAL SITE EROSION. THESE PROVISIONS SHALL BE STABILIZED AND SHALL REMAIN IN PLACE UNTIL THE PERMANENT STORM DRAINAGE FACILITIES ARE INSTALLED AND FUNCTIONAL.
2. EROSION CONTROL – A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) WILL BE PREPARED IN ACCORDANCE WITH THE UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM (UPDES) PERMIT FOR CONSTRUCTION, OUTLINING HOW EROSION AND SILTATION WILL BE CONTROLLED. A NOTICE OF INTENT (NOI) WILL BE SUBMITTED TO OBTAIN THE UPDES CONSTRUCTION PERMIT. A COPY OF THE PLAN MUST BE ON SITE AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING THE PLAN AND INSTALLING AND MAINTAINING THE EROSION CONTROL FACILITIES WITH EACH PHASE OF WORK. SHOULD SILT LEAVE THE SITE OR EROSION OCCURS, IT WILL BE THE CONTRACTORS RESPONSIBILITY TO TAKE CORRECTIVE ACTION AND REPAIR ANY DAMAGE CAUSED BY THE SILT OR EROSION IMMEDIATELY. ALL COSTS ASSOCIATED WITH THE MODIFICATION AND APPROVAL OF THE PLAN WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. BEFORE CONSTRUCTION BEGINS, THE LIMITS OF DISTURBANCE (LOD) BOUNDARY SHALL BE STAKED ON SITE AND APPROVED BY THE OWNER'S REPRESENTATIVE AND THE ENGINEER.
4. EXCAVATION AND EMBANKMENT OPERATIONS SHALL PROCEED IN SUCH A MANNER SO THAT FINISHING OF SLOPES, INCLUDING REVEGETATION SHALL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER ROUGH GRADING. ALL SLOPES 2:1 OR FLATTER SHALL BE SCARIFIED WITH HEAVY EQUIPMENT, LEAVING TRACKS PERPENDICULAR TO THE SLOPES. SLOPES OVER 1:1 SHALL UTILIZE EROSION CONTROL/REVEGETATION MATTING.
5. CUT AND FILL SLOPES SHALL BE CONDUCTED PER THE GEOTECHNICAL REPORT. THE TOPS OF ALL CUT SLOPES IN SOIL SHALL BE ROUNDED FOR A HORIZONTAL DISTANCE OF THREE (3) FEET BEYOND THE CATCH POINT. SLOPE ROUNDING SHALL OCCUR AS THE SLOPE IS BEING BROUGHT DOWN. THE OVERALL SHAPE, HEIGHT AND GRADE OF ANY CUT AND/OR FILL SLOPE SHALL BE DEVELOPED IN CONCERT WITH EXISTING NATURAL CONTOURS, SCALE AND VEGETATION OF NATURAL TERRAIN.
6. EXISTING VEGETATION SHOULD BE PRESERVED WHEREVER POSSIBLE AND DISTURBED PORTIONS OF THE SITE SHALL BE STABILIZED. STABILIZATION PRACTICES MAY INCLUDE, BUT NOT LIMITED TO, TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, GEOTEXTILES, SOD STABILIZATION, VEGETATION BUFFER STRIPS, PROTECTION OF TREES, PRESERVATION OF NATURAL VEGETATION AND OTHER APPROPRIATE MEASURES. USE OF IMPERVIOUS SURFACES FOR STABILIZATION SHALL BE AVOIDED. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS POSSIBLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED. FOR MORE INFORMATION, SEE SHEET 7.
7. SPECIFICALLY OUTLINED DISTURBED AREAS, BOTH ON AND OFF-SITE SHALL BE REVEGETATED. THESE AREAS SHALL BE INCLUDE, BUT NOT BE LIMITED TO, ALL UNSURFACED AREAS WITHIN THE STAKED LOD, STAGING AND STORAGE AREAS, MATERIAL WASTE AREAS, UNDERGROUND UTILITY CONSTRUCTION AREAS, BENCHED AREAS, INCLUDING RETAINING WALL BENCHES, AND TEMPORARY OR EXISTING ACCESS ROADS USED FOR CONSTRUCTION ACTIVITIES.
8. CONTROLLED OUTLETS SHALL DIRECT COLLECTED RUNOFF THROUGH SILT FENCES, STRAW BALES, OR WATTLE.
9. TYPICAL FUGITIVE DUST SHALL BE CONTROLLED BY WATERING AND/OR CHEMICAL STABILIZATION, PROVIDING VEGETATIVE OR SYNTHETIC COVER AND WIND BREAKS CONSISTENT WITH UTAH STATE DIVISION OF AIR QUALITY STANDARDS.
10. ANY SEDIMENT TRACKED OFF-SITE SHALL BE REMOVED PRIOR TO THE END OF THE WORK SHIFT OR PRIOR TO SUNSET, WHICHEVER COMES FIRST.
11. CONTRACTOR MAY ADJUST THE LOCATIONS OF THE CONSTRUCTION FENCE, CONSTRUCTION TRAILERS, AND CONSTRUCTION MATERIALS RECEIVING AND STORAGE AREAS, AS NEEDED TO ACCOMPLISH THE CONSTRUCTION. ALL CHANGES SHALL BE NOTATED ON THE EROSION CONTROL PLAN.
12. THE CONTRACTOR SHALL CONDUCT PERIODIC INSPECTIONS OF THE EROSION CONTROL MEASURES, AS REQUIRED AND NOTATED IN THE SWPPP. THE CONTRACTOR WILL MAINTAIN A LOG ON-SITE OF ALL INSPECTIONS WITH THE SWPPP.
13. ALL DITCHES AND SWALES GREATER THAN 5% SHALL BE ARMORED WITH AN APPROPRIATE EROSION CONTROL/REVEGETATION STABILIZATION MAT TO PROMOTE REVEGETATION.
14. CONTRACTOR MAY ADJUST THE LOCATION OF CONCRETE WASHOUT AREAS AS NEEDED TO ACCOMPLISH THE CONSTRUCTION.
15. TEMPORARY SEDIMENTATION BASINS TO BE PROVIDED FOR AREAS 10 ACRES OR LARGER WITH DIVERSION DITCHES TO ROUTE RUNOFF TO THE BASIN.



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TALUS RIDGE PLAT "A"

SARATOGA SPRINGS CITY, UTAH

EROSION CONTROL PLAN

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LEI PROJECT #: 2013-1795
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SHEET
15

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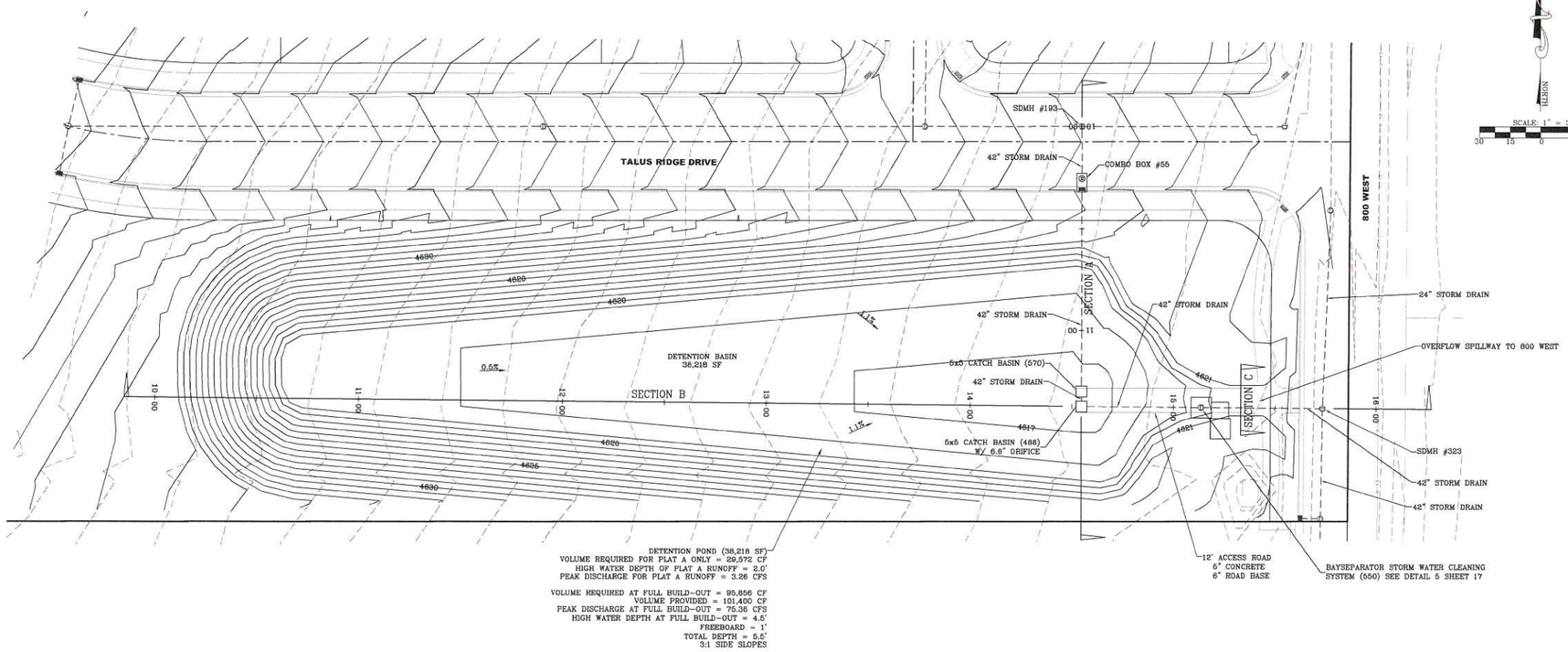


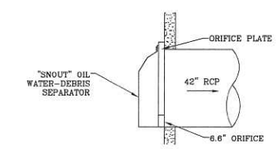
SCALE: 1" = 30'

30 15 0 30

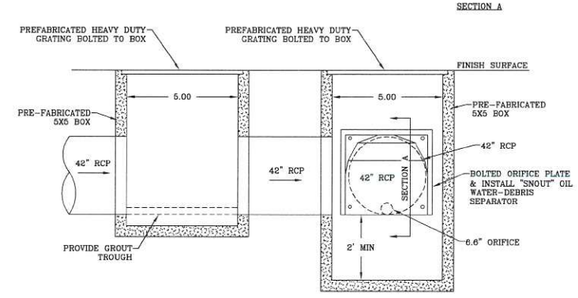
LEGEND

- CENTERLINE
- STORM DRAIN
- STORM DRAIN MANHOLE
- CURB INLET
- FLOW ARROWS

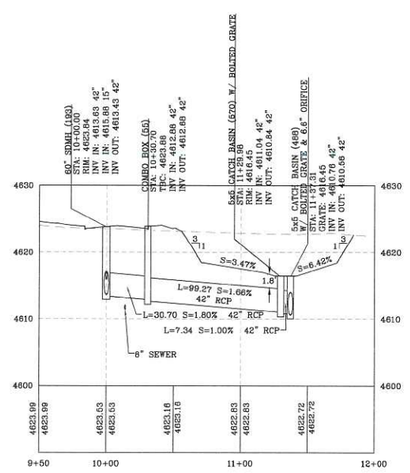
SECTION "C"



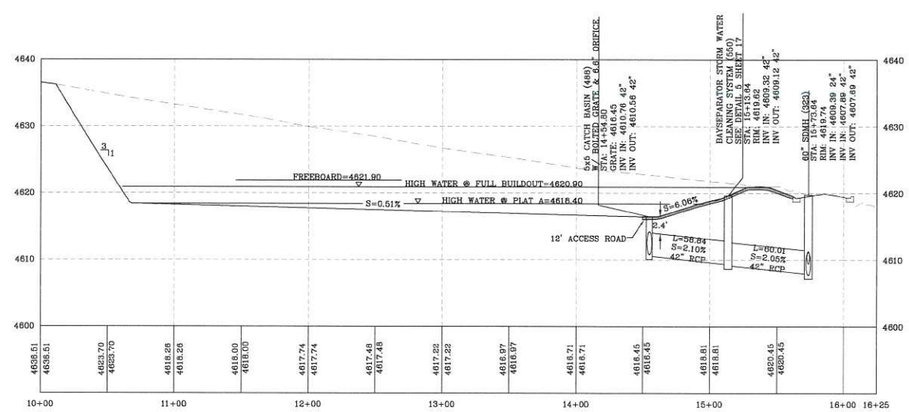
SECTION A



DETAIL 5x5 CATCH BASIN (570) & (488)



SECTION "A" PROFILE



SECTION "B" PROFILE

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TALUS RIDGE PLAT "A"
SARATOGA SPRINGS CITY, UTAH
DETENTION BASIN PLAN

REVISIONS
1 .
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LEI PROJECT #: 2013-1795
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CHECKED BY: NKW
SCALE: 1" = 60'
DATE: 9/12/2014
SHEET 16

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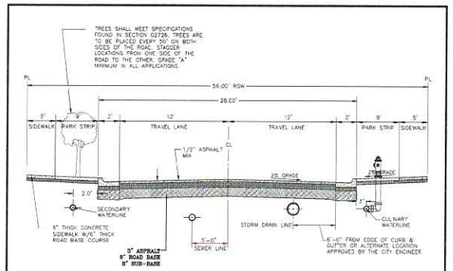
SEE CITY OF SARATOGA SPRINGS CONSTRUCTION SPECIFICATION AND STANDARDS FOR FURTHER UTILITY DETAILS



NOTES:

1. MAXIMUM DIFFERENCE IN ELEVATION BETWEEN CURB ON OPPOSITE SIDES OF STREET SHALL NOT EXCEED 1'-0"
2. PAVEMENT DESIGN MAY BE AS RECOMMENDED BY A SOILS REPORT AND A GEOTECHNICAL ENGINEER, AND AS APPROVED BY CITY ENGINEER. LOCATION OF SIDEWALK AND CURB & GUTTER MAY VARY ON INDIVIDUAL ARTERIAL STREETS PER DIRECTION OF CITY ENGINEER.
3. ALL RESIDENTIAL STREETS SHALL CONFORM TO THE CROSS-SECTION DRAWING ABOVE UNLESS APPROVED OTHERWISE BY THE CITY ENGINEER.
4. PROVIDE A MINIMUM 6" THICKNESS OF 3/4" OR 1" CRUSHED GRAVEL BASE COURSE UNDER SIDEWALKS, DRIVEWAY APPROACHES, AND CURB & GUTTER
5. INSTALL TYPE 2 SLURRY SEAL
6. HOUSES MAY FRONT ON THESE STREETS
7. THIS ROW CROSS SECTION SHALL BE PERMITTED FOR PRIVATE ROAD CROSS SECTIONS IN THE FOLLOWING ZONES: R-2, R-3 AND R-4.

DESIGN CRITERIA

DESIGN SPEED: 25 M.P.H.

MIN CENTERLINE RADIUS: 200' MIN. UNLESS APPROVED OTHERWISE BY CITY ENGINEER.

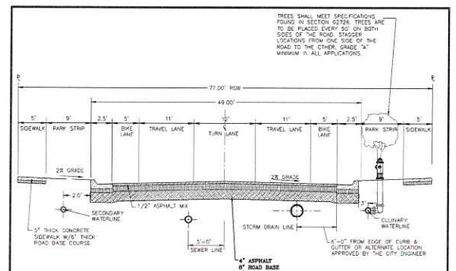
VERTICAL CURVE REQUIREMENTS: SAG K VALUE = 37

CREST K VALUE = 20

RESIDENTIAL ROADWAY 56' RIGHT-OF-WAY

DATE APRIL 2014 | REVISIONS: DATE | COMMENTS
DRAWING NAME: ST-8
DRAWN BY: ETL
CHECKED / APPROVED
SARATOGA SPRINGS CITY
STANDARD DETAILS | STREET STANDARDS | **ST-8**

1 | 56' RESIDENTIAL ROADWAY



NOTES:

1. MAXIMUM DIFFERENCE IN ELEVATION BETWEEN CURB ON OPPOSITE SIDES OF STREET SHALL NOT EXCEED 1'-0"
2. PAVEMENT DESIGN SHALL BE AS RECOMMENDED BY A SOILS REPORT AND A GEOTECHNICAL ENGINEER, AND AS APPROVED BY CITY ENGINEER.
3. ALL COLLECTORS SHALL CONFORM TO THE CROSS-SECTION DRAWING ABOVE UNLESS APPROVED OTHERWISE BY THE CITY ENGINEER.
4. PROVIDE A MINIMUM 6" THICKNESS OF 3/4" OR 1" CRUSHED GRAVEL BASE COURSE UNDER SIDEWALKS, DRIVEWAY APPROACHES, AND CURB & GUTTER.
5. INSTALL TYPE 2 SLURRY SEAL
6. HOUSES ARE DISCOURAGED FROM FRONTING ON THESE STREETS.

DESIGN CRITERIA

DESIGN SPEED: 30 M.P.H.

MIN CENTERLINE RADIUS: 300' MIN. UNLESS APPROVED OTHERWISE BY CITY ENGINEER.

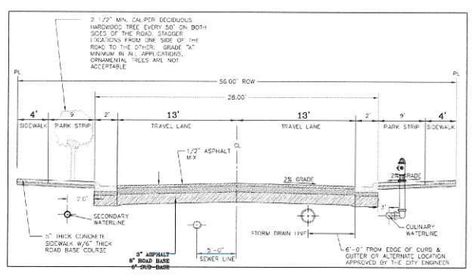
VERTICAL CURVE REQUIREMENTS: SAG K VALUE = 49

CREST K VALUE = 29

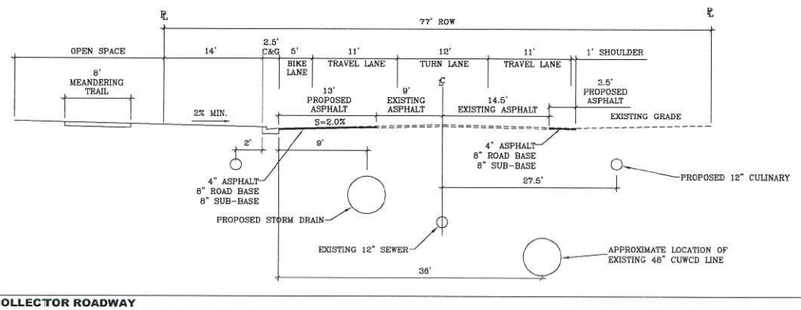
COLLECTOR 77' RIGHT OF WAY

DATE APRIL 2014 | REVISIONS: DATE | COMMENTS
DRAWING NAME: ST-9
DRAWN BY: ETL
CHECKED / APPROVED
SARATOGA SPRINGS CITY
STANDARD DETAILS | STREET STANDARDS | **ST-9**

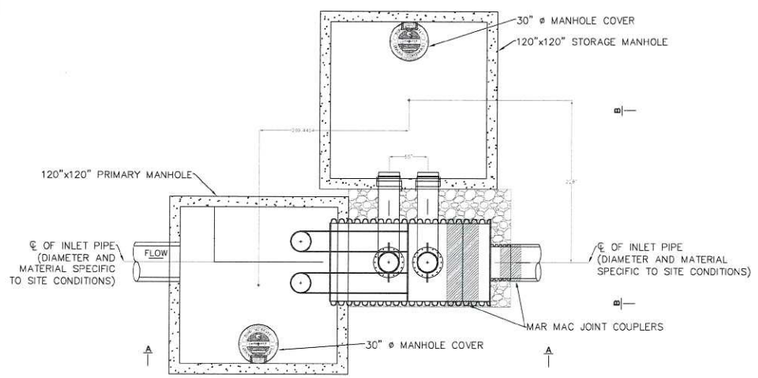
2 | 77' COLLECTOR ROADWAY



3 | BADGER LANE 56' RESIDENTIAL ROADWAY

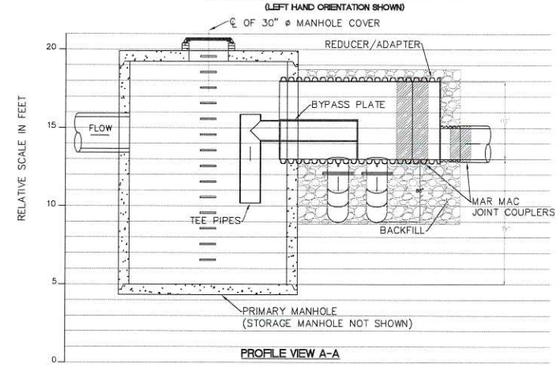


4 | 800 WEST 77' COLLECTOR ROADWAY

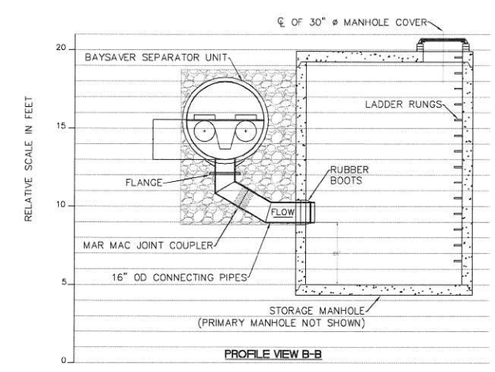


PLAN VIEW-BAYSAVER SEPARATION SYSTEM

(LEFT HAND ORIENTATION SHOWN)



PROFILE VIEW A-A



PROFILE VIEW B-B

INLET PIPE INVERT:	4609.32
INLET PIPE ID AND MATERIAL:	RCP
OUTLET PIPE INVERT:	4609.12
OUTLET PIPE ID AND MATERIAL:	RCP
PRIMARY MANHOLE RIM ELEVATION:	4619.62
STORAGE MANHOLE RIM ELEVATION:	4620.90
ORIENTATION (RIGHT):	

GENERAL NOTES:

1. MANHOLES SHOWN REPRESENT STANDARD PRECAST STRUCTURES PROVIDED BY OTHERS.
2. SEAL THE CONNECTING PIPES INTO THE STORAGE MANHOLE USING RUBBER BOOTS/GASKETS.
3. THE BAYSAVER SEPARATION SYSTEM INCLUDES THE SEPARATOR UNIT, (2) CONNECTING PIPES, (2) FERNCO COUPLERS, (1) REDUCER ADAPTER, AND (2) MARMAC JOINT COUPLERS.
4. LEFT HAND ORIENTATION SHOWN. FOR RIGHT HAND ORIENTATION ROTATE STORAGE MANHOLE AND CONNECTING PIPES 180°.
5. SEE BAYSAVER SPECIFICATIONS AND INSTALLATION INSTRUCTIONS FOR FURTHER DETAIL.
6. USE NON-SHRINK GROUT TO SEAL THE INLET PIPE AND BAYSEPARATOR IN TO THE PRIMARY MANHOLE.
7. BACKFILL: CLASS I, II OR III BACKFILL SHOULD BE USED TO AN ELEVATION OF AT LEAST 6" OVER THE CROWN OF THE SEPARATOR UNIT.
8. 12" COVER REQUIRED FOR TRAFFIC RATED SURFACE.
9. BAYSEPARATOR IS PROTECTED BY US PATENT NO. 5,746,911

5 | 10K BAYSEPARATOR GENERAL SYSTEM DETAILS

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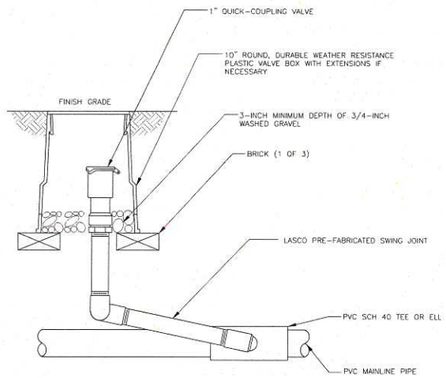
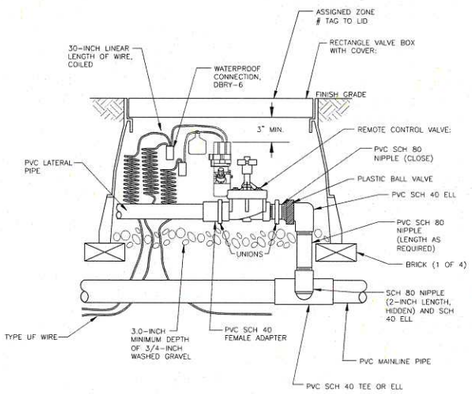


SPRINKLER SYSTEM QUICK COUPLER VALVE

DATE: APRIL 2014	REVISIONS			
DRAWING NAME: LS-2	REV	DATE	BY	COMMENTS
DRAWN BY: ETL				
CHECKED: APPROVED:				

SARATOGA SPRINGS CITY — LEI'S COMMENTS ON ACTUAL SARATOGA SPRINGS, UT MAP. PHONE: 801.798.0555 FAX: 801.798.9393

STANDARD DETAILS — LANDSCAPING — **LS-2**



NOTES:

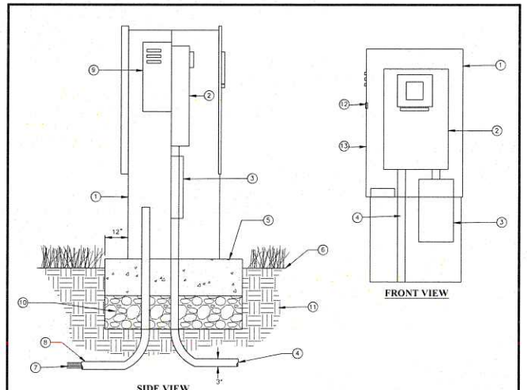
1. NO MALE ADAPTORS.
2. 1 VALVE PER BOX
3. NO ACTION MANUFACTURE FITTING

SPRINKLER SYSTEM REMOTE CONTROL VALVE

DATE: APRIL 2014	REVISIONS			
DRAWING NAME: LS-3	REV	DATE	BY	COMMENTS
DRAWN BY: ETL				
CHECKED: APPROVED:				

SARATOGA SPRINGS CITY — LEI'S COMMENTS ON ACTUAL SARATOGA SPRINGS, UT MAP. PHONE: 801.798.0555 FAX: 801.798.9393

STANDARD DETAILS — LANDSCAPING — **LS-3**



1. METERED CONTROLLER ENCLOSURE, MUST BE RMP APPROVED
2. METER SOCKET WITH TEST BLOCKS
3. LOAD CENTER
4. CONDUIT (NOT SUPPLIED) FOR LINE FEED INTO METER; 3" (MIN) SCH 40 GREY
5. POURED CONCRETE BASE 4" MIN. THICKNESS, EXTEND 12" BEYOND OUTSIDE DIMENSIONS OF ENCLOSURE WITH 0.5% MIN. SLOPE FOR DRAINAGE
6. FINISH GRADE
7. DIRECT BURIAL CONTROL WIRES TO CONTROL VALVES
8. PVC LONG SWEEP ELL – USE ONE SWEEP 3" ELL PER CONTROLLER INSTALL ONE EXTRA 3" ELL FOR FUTURE USE
9. AUTOMATIC CONTROLLERS – REMOVE FRONT DOORS OF CONTROLLERS AND PLACE SIDE BY SIDE; HUNTER ACC W/ ALL IMMS RADIO CONTROL AND COMMUNICATION DEVICES
10. 6" MIN. ROAD BASE
11. SUBGRADE COMPACTED TO 95%
12. INSTALL SMART PORT THROUGH WALL OF STRONG BOX.
13. ENCLOSURE TO BE STAINLESS STEEL STRONG BOX, OR ACCEPTABLE EQUAL

NOTE:

GROUND LOW VOLTAGE WITH 3 GROUND ROD GRID 8 FEET APART

METER & CONTROLLER STAINLESS STEEL ENCLOSURE

DATE: APRIL 2014	REVISIONS			
DRAWING NAME: LS-4	REV	DATE	BY	COMMENTS
DRAWN BY: ETL				
CHECKED: APPROVED:				

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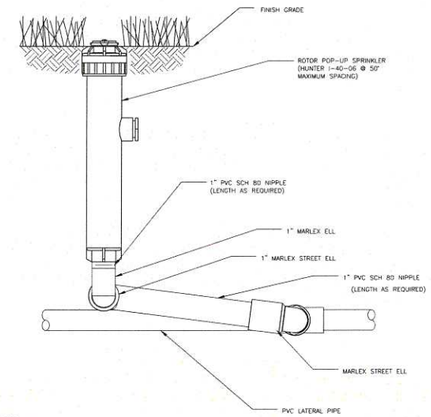
STANDARD DETAILS — LANDSCAPING — **LS-4**



NOTE:

1. USE MARLEX STREET ELL
2. USE OF TEFLON TAPE OR PIPE DOPE IS NOT PERMITTED ON MARLEX STREET ELLS

SPRINKLER SYSTEM LARGE AREA ROTARY HEAD DETAIL

DATE: APRIL 2014	REVISIONS			
DRAWING NAME: LS-6	REV	DATE	BY	COMMENTS
DRAWN BY: ETL				
CHECKED: APPROVED:				

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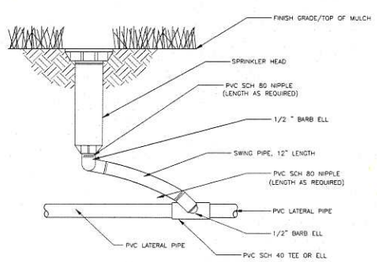
STANDARD DETAILS — LANDSCAPING — **LS-6**



ROTORS FOR MEDIUM AND SMALL AREAS:

HUNTER I-20-06 @ 35' MAXIMUM SPACING

SPRAY HEADS FOR SMALL AREAS:

RAINBIRD #1806 FOR TURF AREAS, #1812 FOR SHRUB BEDS

HUNTER 6" PRO-SPRAY FOR TURF AREAS, 12" PRO-SPRAY FOR SHRUB BEDS

MEDIUM AND SMALL AREA SPRINKLER HEAD DETAIL

DATE: APRIL 2014	REVISIONS			
DRAWING NAME: LS-7	REV	DATE	BY	COMMENTS
DRAWN BY: ETL				
CHECKED: APPROVED:				

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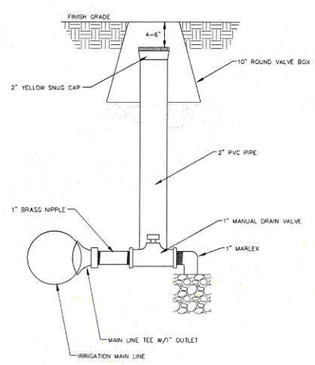
STANDARD DETAILS — LANDSCAPING — **LS-7**



SPRINKLER SYSTEM MANUAL DRAIN DETAIL

DATE: APRIL 2014	REVISIONS			
DRAWING NAME: LS-8	REV	DATE	BY	COMMENTS
DRAWN BY: ETL				
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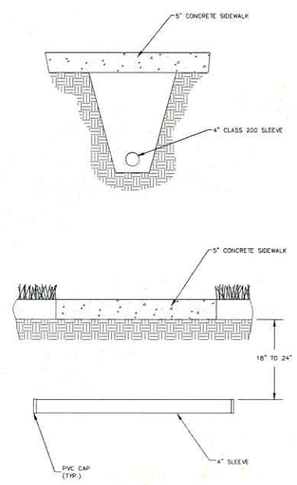
STANDARD DETAILS — LANDSCAPING — **LS-8**



NOTES:

1. ONE WATER LINE PER SLEEVE.
2. ELECTRICITY AND WATER NOT TO SHARE SLEEVES.

SPRINKLER SYSTEM SLEEVING DETAIL

DATE: APRIL 2014	REVISIONS			
DRAWING NAME: LS-9	REV	DATE	BY	COMMENTS
DRAWN BY: ETL				
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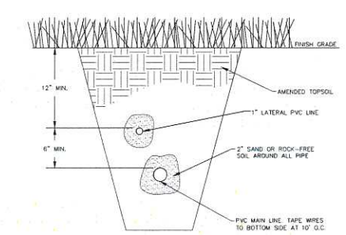
STANDARD DETAILS — LANDSCAPING — **LS-9**



SPRINKLER SYSTEM PIPE/TRENCH DETAIL

DATE: APRIL 2014	REVISIONS			
DRAWING NAME: LS-10	REV	DATE	BY	COMMENTS
DRAWN BY: ETL				
CHECKED: APPROVED:				

SARATOGA SPRINGS CITY — LEI'S COMMENTS ON ACTUAL SARATOGA SPRINGS, UT MAP. PHONE: 801.798.0555 FAX: 801.798.9393

STANDARD DETAILS — LANDSCAPING — **LS-10**

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TALUS RIDGE PLAT "A"

SARATOGA SPRINGS CITY, UTAH

CITY DETAILS

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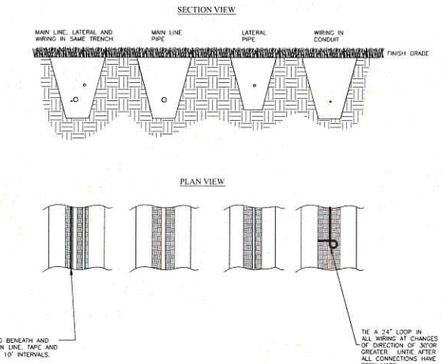
LEI PROJECT #: 2013-1795
DRAWN BY: BLS/MJV
CHECKED BY: NKW
SCALE: NONE
DATE: 9/3/2014
SHEET: D-1

RECEIVED SEP 11 2014

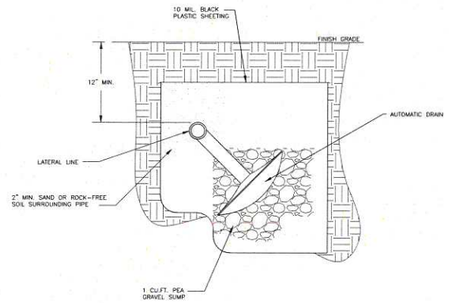


NOTES:

1. SLEEVE BELOW ALL HARDSCAPE ELEMENTS WITH CLASS 200 PVC TWICE THE DIAMETER OF THE PIPE OR WIRE BUNDLE WITHIN.
2. FOR PIPE AND WIRE BURIAL DEPTHS DETAILS. SEE SPECS.
3. ELECTRIC AND WATER NOT TO SHARE SLEEVES.

SPRINKLER SYSTEM PIPE AND WIRE TRENCH DETAIL

DATE: APRIL 2014 | REVISIONS: REV | DATE | BY | COMMENTS | DRAWING NAME: LS-11 | DRAWN BY: ETL | CHECKED | APPROVED | SARATOGA SPRINGS CITY | STANDARD DETAILS | LANDSCAPING | **LS-11**

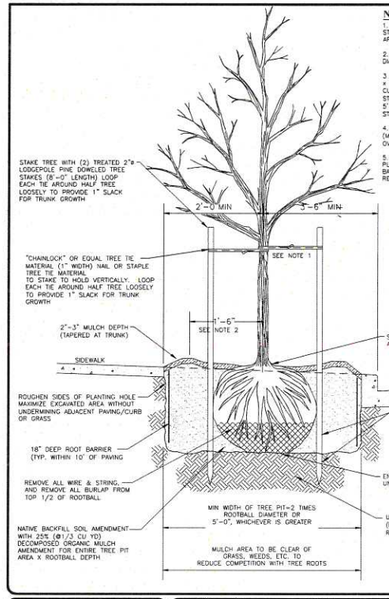


NOTE:

1. USE ONLY AT LOW POINTS OF LATERAL LINES. DO NOT USE IN VALVE BOXES.
2. DO NOT USE ON MAIN LINE

SPRINKLER SYSTEM AUTOMATIC DRAIN

DATE: APRIL 2014 | REVISIONS: REV | DATE | BY | COMMENTS | DRAWING NAME: LS-12 | DRAWN BY: ETL | CHECKED | APPROVED | SARATOGA SPRINGS CITY | STANDARD DETAILS | LANDSCAPING | **LS-12**

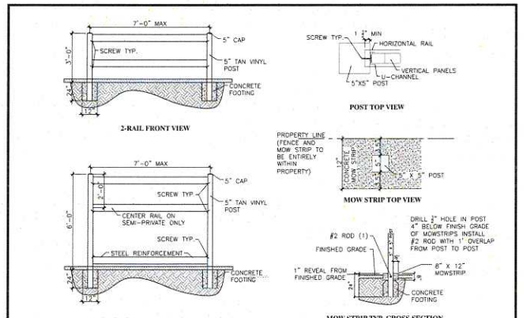


NOTES:

1. INSTALLATION INCLUDES REMOVAL OF STAKES AND WATERING RING ONE YEAR AFTER INSTALLATION.
2. SHAPE SOIL SURFACE TO PROVIDE 3' DIAMETER WATERING RING.
3. MULCH TREE PIT MIN 5'-0" LENGTH x FULL PLANTING STRIP WIDTH BETWEEN CURB AND SIDEWALK (FOR PLANTING STRIPS LESS THAN 6'-0"WIDE.) PROVIDE 5'-0"ø MULCH RING FOR PLANTING STRIPS WIDER THAN 6'-0".
4. TREE PIT DEPTH = ROOTBALL DEPTH (MEASURE BEFORE DIGGING TO AVOID OVER EXCAVATION).
5. GRANULAR FERTILIZER PLACE AFTER PLANT HOLE IS BACKFILLED. QUANTITY BASED ON TREE GROWERS RECOMMENDATIONS.

TREE STAKING AND PLANTING

DATE: APRIL 2014 | REVISIONS: REV | DATE | BY | COMMENTS | DRAWING NAME: LS-13 | DRAWN BY: ETL | CHECKED | APPROVED | SARATOGA SPRINGS CITY | STANDARD DETAILS | LANDSCAPING | **LS-13**



NOTES:

1. ALL ATTACHMENT SCREWS TO BE ZINC PLATED
2. FENCING SUB-CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR ALL FENCING
3. GLUE ON CAPS WITH CLEAR PVC CEMENT
4. EXTEND RAIL AND STIFFENER INTO EACH POST 1 ½" MINIMUM.
5. MAXIMUM DISTANCE FROM CENTER OF POST TO CENTER OF POST IS 7'.
6. PROVIDE 12" MINIMUM CIRCUMFERENCE HOLE FOR POST WITH A MINIMUM BURY DEPTH OF 24".
7. USE WET MIX CONCRETE ONLY; ALLOW TO SET FOR 5 DAYS BEFORE SETTING RAILS. MINIMUM 3,000 PSI MIX.
8. USE VERTICAL U-CHANNEL ON ALL PRIVACY FENCING POSTS TO SUPPORT FENCE PANELS. ON SEMI PRIVATE FENCING USE WHERE PANELS ARE ADJACENT TO POSTS. SCREW SPACING ON U-CHANNLES TO BE 18" MAX. WITH A MINIMUM OF 2 SCREWS PER SEGMENT.
9. ATTACH ALL RAILS TO POSTS WITH FULL SHANK THREADED, ZINC PLATED, WOOD SCREWS (2"); "CRIMPED ENDS" ON RAILS NOT ACCEPTABLE. SECURE SCREW THROUGH POST AND INTO RAIL FROM UNDERNEATH THE HORIZONTAL RAIL EXCEPT ON BOTTOM RAIL WHERE SCREW CAN BE INSTILLED FROM THE TOP.
10. MATERIALS, CONSTRUCTION, AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH CITY'S STANDARD SPECIFICATIONS.
11. COMPACT NATIVE SOIL BELOW MOW STRIP TO 90%

Privacy Fence			
	Post	Horizontal Rail	Vertical Planks
Wall thickness	0.125"	0.05"	0.06"
Dimension	5"x5", 6" tall above grade	1.5"X3.5"	5"X6"
Reinforcement Steel/Alum.	NO	Bottom Rail only	NO
Type	Square	rectangular	T & G rectangular
Spacing	7' on Center	N/A	5"

Semi-Private			
	Post	Horizontal Rail	Vertical Planks
Wall thickness	0.125"	0.05"	0.06"
Dimension	5"x5", 6" tall above grade	1.5"X3.5"	5"X3"
Reinforcement Steel/Alum.	NO	Bottom rail only	NO
Type	square	Rectangular	Rectangular
Spacing	7' on center	Approx 2' from top of post	4" on center

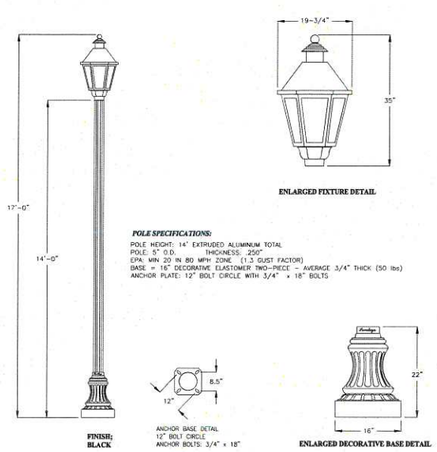
Two Rail Fence			
	Post	Horizontal Rail	Vertical Planks
Wall thickness	0.125"	0.125"	N/A
Dimension	5"X5", 6" tall above grade	2"X 6"	N/A
Reinforcement Steel/Alum.	NO	NO	NO
Type	square	rectangular	rectangular
Spacing	7' on center	approx. 16" apart	N/A

VINYL FENCE WITH MOW STRIP

DATE: APRIL 2014 | REVISIONS: REV | DATE | BY | COMMENTS | DRAWING NAME: LS-14 | DRAWN BY: ETL | CHECKED | APPROVED | SARATOGA SPRINGS CITY | STANDARD DETAILS | LANDSCAPING | **LS-14**

ORDERING GUIDE:

COMPLETE ASSEMBLY PART: LP-1
POLE: 14EFA-5.0-TT-3X3-AB
LIGHT FIXTURE: SS-CL52T4-44LED
DECORATIVE BASE: 16"VIRG(NAME)-BK



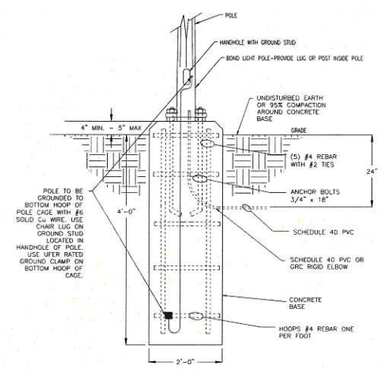
POLE SPECIFICATIONS:

POLE HEIGHT: 14' EXTRUDED ALUMINUM TOTAL
POLE: 5" O.D. THICKNESS: .250"
EPA: MIN 20 IN 80 MPH ZONE (1.3 GUST FACTOR)
BASE = 16" DECORATIVE ELASTOMER TWO-PIECE - AVERAGE 3/4" THICK (50 lbs)
ANCHOR PLATE: 12" BOLT CIRCLE WITH 3/4" x 18" BOLTS

14' RESIDENTIAL STREET LIGHT

DATE: APRIL 2014 | REVISIONS: REV | DATE | BY | COMMENTS | DRAWING NAME: LP-1 | DRAWN BY: ETL | CHECKED | APPROVED | SARATOGA SPRINGS CITY | STANDARD DETAILS | STREET LIGHTS | **LP-1**

NOTE:
IF DEPTH CANNOT BE MET MASS MUST BE EQUIVALENT TO MASS SHOWN

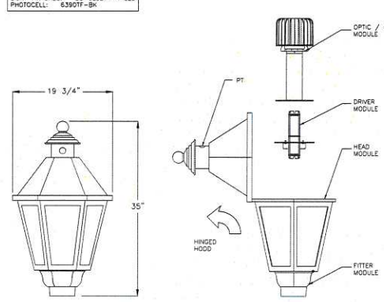


CONCRETE BASE DETAIL FOR 14' RESIDENTIAL STREET LIGHT

DATE: APRIL 2014 | REVISIONS: REV | DATE | BY | COMMENTS | DRAWING NAME: LP-1B | DRAWN BY: ETL | CHECKED | APPROVED | SARATOGA SPRINGS CITY | STANDARD DETAILS | STREET LIGHTS | **LP-1B**

ORDERING GUIDE:

LIGHT FIXTURES: SS-CL52T4-44LED
PHOTOCELL: 6390TF-BK



CATALOG NO: CL62T4-FLAF-3L-44W-4K-120-EK1-DEP-F3AP-PT-RAL9005TX
LUMINAIRE: HEXAGONAL SHAPE
IES CLASSIFICATION: FROSTED ACRYLIC LENS
WATTAGE: 44 WATTS
LIGHT SOURCE: BOARD LED - 4000K
LINE VOLTAGE: 120 VOLTS
DRIVER: MOUNTED ON TRAY WITH QUICK RELEASE CONNECTORS
IP66 WEATHERPROOF LUMINAIRE WITH "V" GROOVE SILICONE GASKET
OPTION: TWIST LOCK PHOTOCELL PRE-INSTALLED IN DECORATIVE CUPOLA.

ALL NON ELECTRICAL HARDWARE SHALL BE STAINLESS STEEL

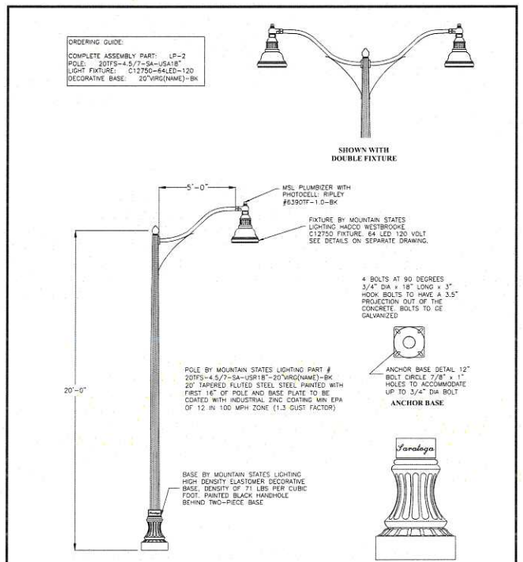
COLOR & FINISH: BLACK (RAL9005TX) TEXTURED POWDER COAT
PAINT WARRANTY: 5 YEARS

RESIDENTIAL STREET LIGHT LUMINARE

DATE: APRIL 2014 | REVISIONS: REV | DATE | BY | COMMENTS | DRAWING NAME: LP-1C | DRAWN BY: ETL | CHECKED | APPROVED | SARATOGA SPRINGS CITY | STANDARD DETAILS | STREET LIGHTS | **LP-1C**

ORDERING GUIDE:

COMPLETE ASSEMBLY PART: LP-2
POLE: 20TFS-4.5/7-SA-USA18"
LIGHT FIXTURE: C12750-64LED-120
DECORATIVE BASE: 20"VIRG(NAME)-BK



20' LIGHT STANDARD FOR COLLECTOR ROADS, COMMERCIAL AREAS, & PARKING LOT LIGHTS

DATE: APRIL 2014 | REVISIONS: REV | DATE | BY | COMMENTS | DRAWING NAME: LP-2 | DRAWN BY: ETL | CHECKED | APPROVED | SARATOGA SPRINGS CITY | STANDARD DETAILS | STREET LIGHTS | **LP-2**

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

TALUS RIDGE PLAT "A"
SARATOGA SPRINGS CITY, UTAH
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LEI PROJECT #: 2013-1795
DRAWN BY: BLS/MJV
CHECKED BY: NKW
SCALE: NONE
DATE: 9/3/2014
SHEET
D-2

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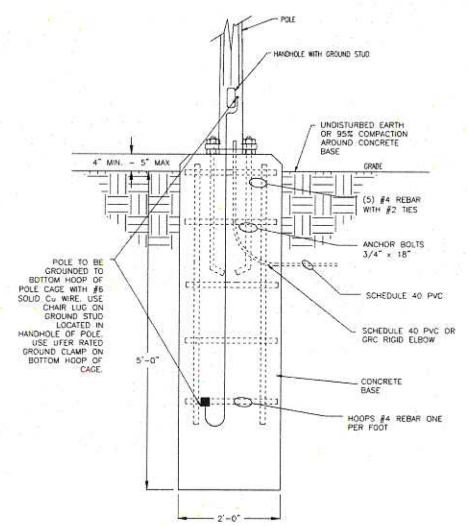
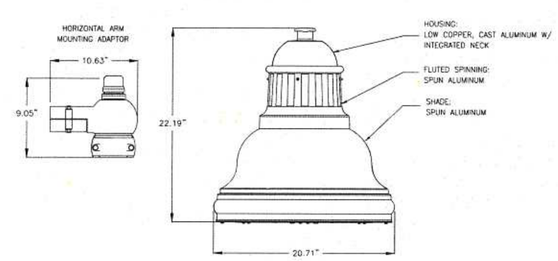
NOTE!
IF DEPTH CANNOT BE MET MASS MUST BE EQUIVALENT TO MASS SHOWN



CONCRETE BASE DETAIL FOR COLLECTOR ROADS, COMMERCIAL AREAS, & PARKING LOT LIGHTS

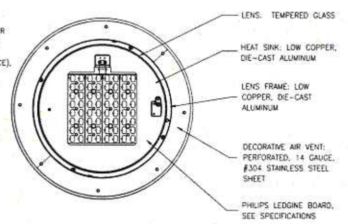
DATE: APRIL 2014 | DRAWING NAME: LP-2B | DRAWN BY: ETL | SARATOGA SPRINGS CITY | STANDARD DETAILS | STREET LIGHTS | **LP-2B**

MSL ORDERING GUIDE
LIGHT FIXTURE: C17750A-64LED-120
PHOTOCELL: 6390TF-BK



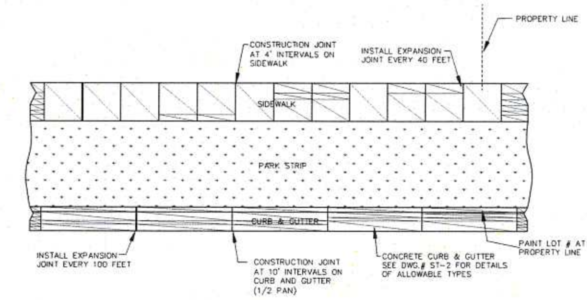
Philips LEDgine Specifications:

- 64, 4000K (NEUTRAL) PHILIPS LUMILEDs LUXEON R LEDs, TYPICAL 75 COLOR RENDERING INDEX (CRI), >65,000 HOURS OF OPERATIONAL LIFE (AT 25°C AMBIENT TEMPERATURE & 70% LUMEN MAINTENANCE). INJECTION MOLDED TYPE III OPTICAL PLATES.
- INTEGRAL PHILIPS ADVANCE XITANIUM LED DRIVER, CLASS 1, IP66 RATED, 350mA, INTELLIVOLT 120 VAC, 50-60 Hz, RoHS COMPLIANT, STANDARD BUILD IN >3kV SURGE SUPPRESSION.
- UL8750 & UL1598 COMPLIANT, ETL/cETL LISTED TO U.S. & CANADIAN SAFETY STANDARDS FOR WET LOCATIONS. MANUFACTURED TO ISO 9001:2008 STANDARDS. VIBRATION TESTED TO ANSI C136.31 FOR BRIDGE APPLICATIONS.



LUMINARE FOR COLLECTOR ROADS, COMMERCIAL AREAS, & PARKING LOT LIGHTS

DATE: APRIL 2014 | DRAWING NAME: LP-2C | DRAWN BY: ETL | SARATOGA SPRINGS CITY | STANDARD DETAILS | STREET LIGHTS | **LP-2C**



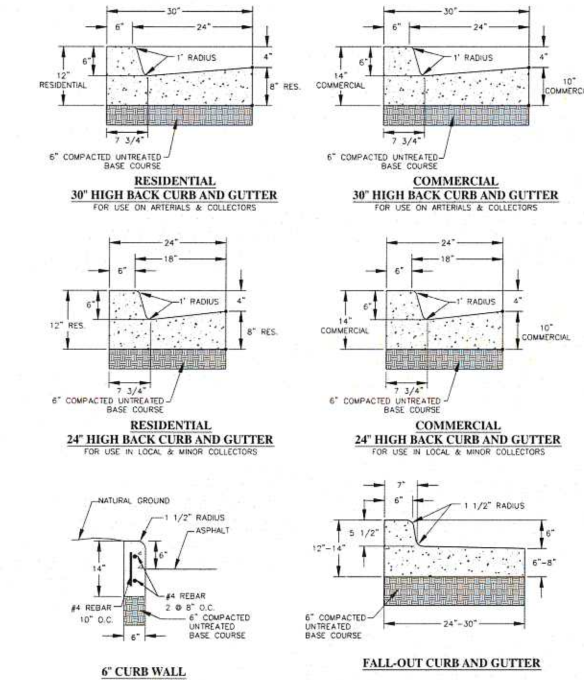
PLAN VIEW

NOTES:

1. A MINIMUM 6" DEPTH OF ROADBASE MATERIAL SHALL BE PLACED TO GRADE AND COMPACTED TO 95% OF MAXIMUM DRY DENSITY UNDER DRIVEWAY, WATERWAY, AND CURB & GUTTER PRIOR TO PLACEMENT OF CONCRETE.
2. A MINIMUM 6" DEPTH OF ROADBASE MATERIAL SHALL BE PLACED TO GRADE AND COMPACTED TO 95% OF MAXIMUM DRY DENSITY UNDER SIDEWALK AT ALL OTHER LOCATIONS PRIOR TO PLACEMENT OF CONCRETE.
3. WHERE CONSTRUCTION IS ADJACENT TO STATE HIGHWAY FRONTAGE, STATE HIGHWAY DEPARTMENT REQUIREMENTS SHALL GOVERN.
4. CONCRETE SHALL BE 3/4 INCH MAXIMUM AGGREGATE, 6.3 BAGS PER YARD OF TYPE 2 CEMENT WITH A MINIMUM COMMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS.
5. EXPANSION JOINTS FOR CURB & GUTTER ARE TO BE SPACED NO MORE THAN 100 FT. AND SIDEWALKS SHALL BE SPACED NO MORE THAN EVERY 40 FT. EXPANSION JOINTS SHALL BE CONSTRUCTED BY PLACING AN APPROVED MATERIAL, (TYPICALLY BITUMINOUS IMPREGNATED FIBERBOARD), THE FULL DEPTH OF THE CONCRETE. EXPANSION MATERIAL SHALL BE SET 1/2" BELOW THE FINISH LEVEL OF THE SIDEWALK.
6. CONSTRUCTION JOINT IS MADE BY SCORING THE CONCRETE WITH 1/2" RADIUS EDGING TOOL OR OTHER METHOD APPROVED BY ENGINEER.
7. SLOPE SIDEWALK TO ROADWAY AT 2% GRADE.
8. LOCATE ALL INLET GRATES 2' MINIMUM AWAY FROM THE PEDESTRIAN CROSSWALK, WITH ALL DRAINAGE INTERCEPTED BEFORE IT GETS TO THE CROSSWALK AREA.
9. THE SIDEWALK SHALL BE A MIN. 5" THICK CONCRETE.
10. IN ROCKY SUB-GRADES 18" OF BOTTOM OF TRENCH TO BOTTOM OF PIPE. MIN. OF 2' OF OUTSIDE DIAMETER.
11. INSTALL MAGNETIC DETECTOR TAPE WITH A MIN. OF 14 GAUGE COATED TRACER WIRE FOR ALL PVC OR OTHER PIPE.
12. PAINT LOT NUMBER AT PROPERTY LINE.
13. SEWER LATERAL LOCATIONS TO BE MARKED ON TOP OF CURB WITH AN S
14. CULINARY WATER LATERAL LOCATIONS TO BE MARKED ON TOP OF CURB WITH A W
15. SECONDARY WATER LATERAL LOCATIONS TO BE MARKED ON TOP OF CURB WITH AN I
16. WATER VALVE LOCATIONS TO BE MARKED ON TOP OF CURB WITH A V

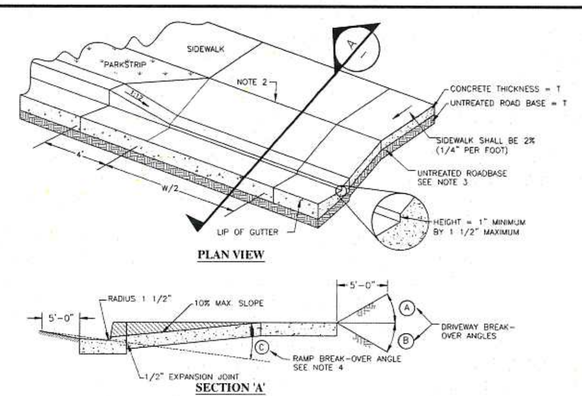
SIDEWALK, CURB & GUTTER STANDARDS

DATE: APRIL 2014 | DRAWING NAME: ST-1 | DRAWN BY: ETL | SARATOGA SPRINGS CITY | STANDARD DETAILS | STREET STANDARDS | **ST-1**



CURB & GUTTER DETAILS

DATE: APRIL 2014 | DRAWING NAME: ST-2 | DRAWN BY: ETL | SARATOGA SPRINGS CITY | STANDARD DETAILS | STREET STANDARDS | **ST-2**



NOTES:

1. EDGE CONCRETE WITH 1/2" RADIUS EDGING TOOL.
2. PLACE 1/2" EXPANSION JOINT BETWEEN DRIVEWAY APRON AND CURB AND IN THE DRIVEWAY CENTERLINE IF "W" IS GREATER THAN 20'. FILLER MATERIAL SHALL BE FULL DEPTH OF CONCRETE PLUS 1", WITH TOP SET FLUSH WITH TOP OF CONCRETE.
3. USE UNTREATED ROADBASE UNDER CURB, GUTTER AND SIDEWALK. COMPACT TO 95% OF THE MAXIMUM DRY DENISTY.
4. DIFFERENCE IN SLOPE OF DRIVEWAY RAMP AND THE SLOPE OF A LINE BETWEEN THE GUTTER AND A POINT ON THE ROADWAY 5' FROM THE FRONT EDGE OF THE GUTTER SHALL NOT EXCEED 15%. REDUCE DRIVEWAY RAMP SLOPE, NOT GUTTER SLOPE, WHERE REQUIRED.
5. ALL CONCRETE SLABS WITH A LENGTH/WIDTH RATIO GREATER THAN 2:1 SHALL HAVE CONTRACTION JOINTS INSTALLED AS REQUIRED TO STAY WITHIN 2:1 RATIO.
6. BACK EDGE OF SIDEWALK TO BE SET AT AN ELEVATION 2% HIGHER THAN THE TOP BACK OF CURB.
7. SIDEWALK TO BE A MINIMUM OF 5 FEET WIDE UNLESS OTHERWISE SPECIFIED.
8. MATERIALS, CONSTRUCTION, AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH CITY'S STANDARD SPECIFICATIONS.

DRIVE APPROACH DIMENSIONS

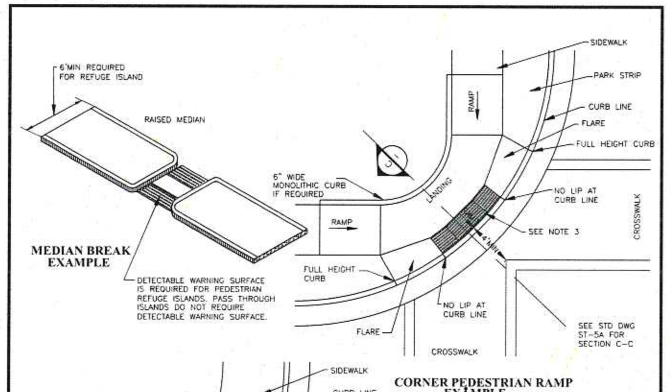
DIMENSION	LEGNTH ACCORDING TO ZONE
W	10'-0" MIN. RESIDENTIAL ZONES 20'-0" MAX. RESIDENTIAL ZONES 30'-0" MAX. COMMERCIAL/INDUSTRIAL ZONES
T	0'-6" RESIDENTIAL ZONES 0'-8" INDUSTUSTRIAL/COMMERCIAL ZONES

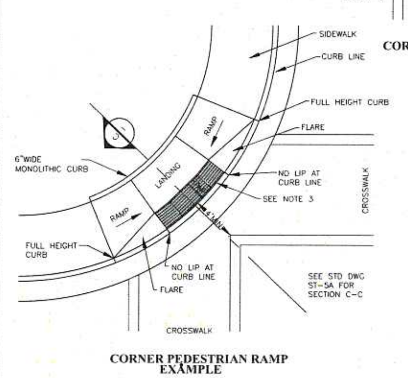
SLOPE TABLE

DIMENSION	ZONE
(A) 12% MAX. 6% MAX.	RESIDENTIAL ZONE INDUST. AND COMM. ZONE
(B) 13% MAX. 6% MAX.	RESIDENTIAL ZONE INDUST. AND COMM. ZONE
(C) 15% MAX. 6% MAX.	RESIDENTIAL ZONE INDUST. AND COMM. ZONE

FLARE DRIVE APPROACH

DATE: APRIL 2014 | DRAWING NAME: ST-4 | DRAWN BY: ETL | SARATOGA SPRINGS CITY | STANDARD DETAILS | STREET STANDARDS | **ST-4**



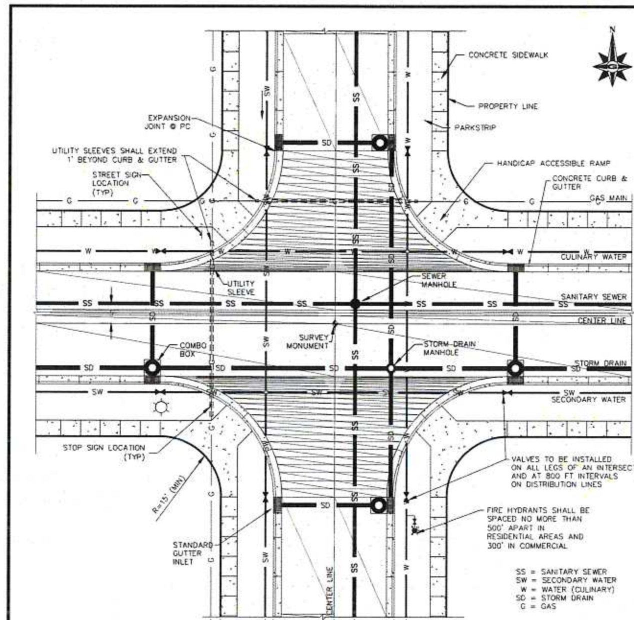


NOTES:

1. REFER TO STD DWG ST 5A FOR PEDESTRIAN ACCESS RAMP DETAIL AND SLOPE REQUIREMENTS.
2. PROVIDE DETECTABLE WARNING SURFACE FOR FULL WIDTH OF RAMP, LANDING, OR CURB CUT. SEE DETAIL A ON STD DWG ST 5A FOR DETECTABLE WARNING SURFACE DIMENSIONS.
3. LOCATE DETECTABLE WARNING SURFACE SO THAT THE EDGE NEAREST THE STREET IS 6" TO 8" FROM THE CURB LINE.
4. WHEN DETECTABLE WARNING SURFACE IS CUT, GRIND REMAINING PORTION OF ANY CUT DOMES. SEAL ALL CUT PANEL EDGES TO PREVENT WATER DAMAGE.
5. LOCATE CURB CUT WITHIN CROSSWALK.

HANDICAP ACCESSIBLE RAMP

DATE: APRIL 2014 | DRAWING NAME: ST-5E | DRAWN BY: ETL | SARATOGA SPRINGS CITY | STANDARD DETAILS | STREET STANDARDS | **ST-5E**



NOTES:

1. LAND DRAINS ARE UNACCEPTABLE UNLESS EXPLICITLY ALLOWED BY CITY ENGINEER. WHEN ALLOWED, PIPES SHALL NOT BE PERFORATED OR DESIGNED TO ACCEPT WATER WITHIN THE STREET RIGHT-OF-WAY.
2. CURB RADIUS ON LOCAL AND COLLECTOR RIGHT-OF-WAYS SHALL BE 25', ON MINOR ARTERIALS IT SHALL BE 35', AND ON MAJOR AND PRINCIPAL ARTERIALS SHALL BE 40' AS MEASURED FROM FACE OF CURB.
3. CHECK ALL CITY STANDARDS FOR UTILITY LOCATIONS.
4. STREET LIGHTS ARE TO BE CENTERED IN PARK STRIPS.
5. STREET LIGHTS ARE TO BE PLACED AT INTERSECTIONS AND EVERY 300 FEET, ALTERNATING SIDES OF STREET.

STANDARD INTERSECTION & UTILITY DETAILS

DATE: APRIL 2014 | DRAWING NAME: ST-7 | DRAWN BY: ETL | SARATOGA SPRINGS CITY | STANDARD DETAILS | STREET STANDARDS | **ST-7**

NOTES:

1. MARKERS MUST BE PLACED AT ALL "OFFSITE" UTILITIES. PLACE AT MANHOLES AND EVERY 500' ON ALL UNDERGROUND UTILITIES.
2. MANHOLE MARKERS: MARKERS SHALL BE MANUFACTURED OF FIBER REINFORCED COMPOSITE MATERIAL. THAT REINFORCEMENT SHALL BE COMPRISED OF BOTH LINEAL STRANDS AND HORIZONTAL MESH MATS. MARKERS HALL BE FLAT WITH ROUNDED RIB DOWN THE CENTER AND RAILS ON EACH SIDE; SHALL BE AT LEAST 3-3/4" WIDE AND AT LEAST 66" TALL.
3. MARKERS SHALL BE CAPABLE OF WITHSTANDING A MINIMUM OF 10 VEHICLE IMPACTS AT 55 MPH WITH A CAR BUMPER.
4. MARKERS SHALL BE COATED WITH A COLORED COATING THAT WILL TOTALLY PREVENT ULTRA-VIOLET LIGHT FROM REACHING THE RESIN PORTION OF THE MARKER. COATING SHALL NOT FADE, PEEL, OR BLISTER AFTER A MINIMUM OF 2000 HOURS IN A QUV WEATHEROMETER
5. STANDARD SIZE, HIGH VISIBILITY DECALS SHALL BE PLACED ON EACH SIDE OF THE MARKER. THE DECALS SHALL INCLUDE: THE INTERNATIONAL "NO-DIG" SYMBOL; FEDERAL LAW WARNING TO DETER VANDALS; THE WARNING MESSAGE, TO INCLUDE "WARNING", THE TYPE OF UTILITY AND "SARATOGA SPRINGS, CALL 776-9793.
6. COLORS SHALL BE AS FOLLOWS PER APWA SPECIFICATIONS:

RED: ELECTRIC POWER LINES, CABLES, CONDUIT AND LIGHTING CABLES
YELLOW: GAS, OIL, STEAM, PETROLEUM OR GASEOUS MATERIALS
ORANGE: COMMUNICATIONS, ALARM, SIGNAL, CABLES OR CONDUITS
BLUE: POTABLE WATER
PURPLE: RECLAIMED WATER, IRRIGATION AND SLURRY LINES
GREEN: SEWER AND STORM DRAIN LINES

UTILITY MARKERS

DATE: APRIL 2014 | DRAWING NAME: ST-27 | DRAWN BY: ETL | SARATOGA SPRINGS CITY | STANDARD DETAILS | STREET STANDARDS | **ST-27**

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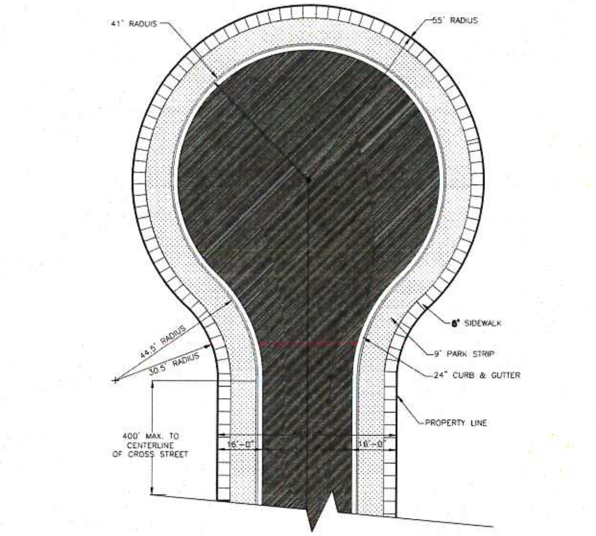
TALUS RIDGE PLAT "A"
SARATOGA SPRINGS CITY, UTAH

CITY DETAILS

REVISIONS
1 -
2 -
3 -
4 -
5 -

LEI PROJECT #: 2013-1795
DRAWN BY: BLS/MJV
CHECKED BY: NKW
SCALE: NONE
DATE: 9/3/2014
SHEET
D-3

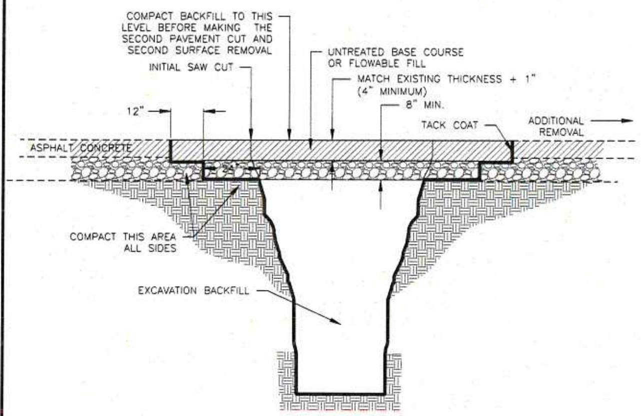
RECEIVED SEP 1 1 2014



NOTE:
MAXIMUM 4.0% SLOPE IN CUL-DE-SAC IN ANY DIRECTION

STANDARD CUL-DE-SAC

DATE: APRIL 2014 | DRAWING NAME: ST-16 | DRAWN BY: ETL | CHECKED | APPROVED | REVISIONS: REV DATE BY COMMENTS
SARATOGA SPRINGS CITY
STANDARD DETAILS | STREET STANDARDS | **ST-16**



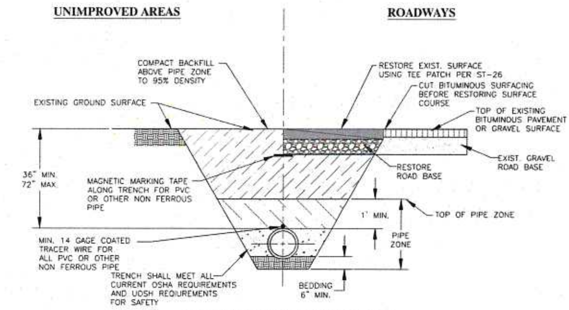
NOTES

1. ADDITIONAL PAVEMENT REMOVAL: REMOVE ADDITIONAL PAVEMENT TO A PAINTED LANE STRIPE, A LIP OF GUTTER, A CURB, AN EXISTING PAVEMENT PATCH OR AN EDGE OF THE PAVEMENT IF SUCH STREET FEATURE IS WITHIN 2 FEET OF THE SECOND SAW-CUT.
2. FLOWABLE FILL: PROVIDE 28 DAYS 60 PSI CONTROLLED LOW STRENGTH MATERIAL AS SPECIFIED IN APWA SECTION 31 05 15. USE FILL MATERIAL WHICH FLOWS EASILY AND VIBRATION IS NOT REQUIRED. CURE TO INITIAL SET BEFORE PLACING AGGREGATE BASE OR ASPHALT PAVEMENT. USE FLOWABLE FILL IN EXCAVATIONS THAT ARE TOO NARROW TO RECEIVE COMPACTION EQUIPMENT.
3. JOINT REPAIR: IF A CRACK OCCURS AT THE "T" PATCH CONNECTION TO EXISTING PAVEMENT OR AT ANY STREET FIXTURE, SEAL THE CRACK.
4. PATCH REPAIR: REPAIR THE ASPHALT PAVEMENT PATCH IF ANY OF THE FOLLOWING CONDITIONS OCCUR WITHIN THE PATCH

   A. PAVEMENT SURFACE DISTORTION EXCEEDS ¼" DEVIATION IN 10 FEET. REPAIR
   OPTION: PLANE OFF SURFACE DISTORTIONS. COAT PLANED SURFACES WITH CATIONIC OR ANIONIC EMULSION AND PROVIDE SAND BLOTTER.
   B. CRACK AT LEAST 1-FOOT LON AND ¼ INCH WIDE OCCUR MORE OFTEN THAN 1 IN 10 SQUARE FEET.
   C. REPAIR OPTION: CRACK SEAL.
   D. ASPHALT RAVELING IS GREATER THAN 1 SQUARE FOOT PER 100 SQUARE FEET. REPAIR OPTION: MILL AND INLAY

STANDARD TEE PATCH

DATE: APRIL 2014 | DRAWING NAME: ST-26 | DRAWN BY: ETL | CHECKED | APPROVED | REVISIONS: REV DATE BY COMMENTS
SARATOGA SPRINGS CITY
STANDARD DETAILS | STREET STANDARDS | **ST-26**



CROSS-SECTION: TYPICAL TRENCH

NOTES:

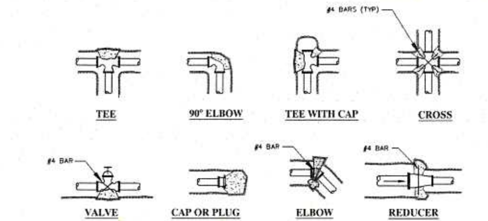
1. WATER LINES 12 INCHES AND LARGER SHALL BE DUCTILE IRON CLASS-51.
2. WATER LINES 10 INCHES AND SMALLER SHALL BE PVC AWWA C900 CLASS 200.
3. VALVES 12 INCHES AND LARGER SHALL BE BUTTERFLY VALVES.
4. WHENEVER POSSIBLE "HOT TAP" CONNECTIONS REQUIRED. HOT TAP VALVE TO BE SUPPORTED DURING CONNECTION. CONTRACTOR TO NOTIFY CITY 24 HOURS IN ADVANCE OF MAKING CONNECTION.
5. PIPE ZONE SHALL BE BACKFILLED WITH BEDDING MATERIAL, OR OTHER ACCEPTABLE MATERIAL.
6. TRACING WIRE TO BE BROUGHT OUTSIDE OF BOTTOM PORTION OF VALVE BOX AND INSIDE TOP TO SURFACE.
7. FURNISH AND INSTALL POLY-WRAP ON DUCTILE IRON PIPE. POLY-WRAP MAY BE DELETED WHERE DIRECTED BY CITY ENGINEER.
8. WHERE COLLAPSIBLE SOILS ARE ENCOUNTERED, FURNISH, PLACE AND COMPACT IMPORTED BACKFILL MATERIALS AS REQUIRED AND AS DIRECTED.

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL OF THE REQUIREMENTS ESTABLISHED FOR SAFE TRENCHING. (SEE OSHA AND UOSH REQUIREMENTS, LATEST EDITIONS).
2. MINIMUM COVER OVER TOP OF PIPE SHALL BE 36-INCHES BELOW THE FINISHED GRADE. THIS DEPTH MAY BE INCREASED AS REQUIRED TO MISS UNDERGROUND UTILITIES, STORM DRAINS, OR OTHER OBSTRUCTIONS, OR WHERE INDICATED ON THE DRAWINGS.
3. CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES BEFORE LAYING PIPE WITHIN 200 FEET OF UTILITY CROSSINGS SHOWN ON THE DRAWINGS, OR AS "BLUE-STAKED."
4. SEWER MAINS, WATER MAINS, GAS MAINS AND OTHER UTILITIES ARE SHOWN ON THE PLANS IN A GENERAL SCHEMATIC WAY ACCORDING TO INFORMATION RECEIVED FROM OTHERS AND SOMETIMES FROM FIELD MEASUREMENTS. THE ACCURACY OR COMPLETENESS OF THE LOCATIONS SHOWN IS NOT GUARANTEED. THE CONTRACTOR SHALL DETERMINE THE ACTUAL LOCATION OF EXISTING SERVICE CONNECTIONS AND UTILITIES AND TAKE THE NECESSARY STEPS TO AVOID THEM.
5. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S SOLE EXPENSE.
6. THE CONTRACTOR MAY, AT HIS DISCRETION, USE SLOPING WALLS IN UNIMPROVED TERRAIN.

TRENCH DETAIL

DATE: APRIL 2014 | DRAWING NAME: PI-1 | DRAWN BY: ETL | CHECKED | APPROVED | REVISIONS: REV DATE BY COMMENTS
SARATOGA SPRINGS CITY
STANDARD DETAILS | PRESSURIZED IRR | **PI-1**



SAFE BEARING LOADS

SOIL TYPE	SAFE BEARING LOAD (lb/ft²)
SAND	1000
SAND & GRAVEL	1500
SAND & GRAVEL CEMENTED WITH CLAY	2000
SHALE	5000

SAFE BEARING LOAD FORMULA

THRUST BLOCK AREA AGAINST TRENCH WALL (SQUARE FEET) = THRUST ON FITTING / SAFE BEARING LOAD OF SOIL

NOTES:

1. REINFORCING BARS SHALL BE EPOXY COATED.
2. RESIDENT PROJECT ENGINEER WILL CALCULATE QUANTITIES OF CONCRETE REQ'D AND SPECIFY PLACEMENT METHODS & REQUIREMENTS; WHICH SHALL BE APPROVED BY CITY ENGINEER.
3. CONCRETE SHALL BE 4000 PSI MIN.
4. POUR CONCRETE AGAINST UNDISTURBED SOIL.

THRUST ON FITTINGS

POUNDS @ 1 POUND PER SQUARE INCH OF WATER PRESSURE*

PIPE SIZE	TEES/PLUGS	90° BENDS	45° BENDS	22.5° BENDS
4"	18.5	26.1	14.2	7.2
6"	38	53.7	29.1	14.7
8"	65.8	93	50.4	25.5
10"	107.5	152	82.4	41.7
12"	153.1	216.4	117.2	59.4
14"	215.5	304.7	164.9	84
16"	281.5	398.1	215.4	109.8
18"	356.3	503.8	272.6	139
20"	439.8	622	336.6	171.6
24"	633.3	895.6	484.7	247.1

*MULTIPLY THRUST BY MAXIMUM WATER PRESSURE

*PIPE SIZES LARGER THAN 24" SHALL BE THRUST BLOCKED AS PER ENGINEER RECOMMENDATION

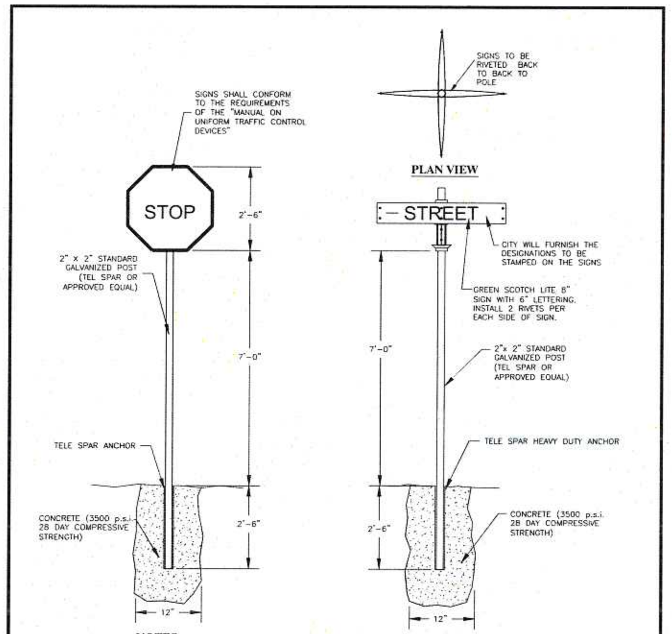
THRUST BLOCK AREA AGAINST TRENCH WALL (SQUARE FEET)

ASSUMING SAND AND MAX PRESSURE OF 150 PSI SIZE MAY BE REDUCED WITH AN ENGINEERED SUBMITTAL AND AS APPROVED BY THE CITY ENGINEER

PIPE SIZE	TEES/PLUGS	90° BENDS	45° BENDS	22.5° BENDS
4"	2.8	3.9	2.1	1.1
6"	5.7	8.1	4.4	2.2
8"	9.9	14.0	7.6	3.8
10"	16.1	22.8	12.4	6.3
12"	23.0	32.5	17.6	8.9
14"	32.3	45.7	24.7	12.6
16"	42.2	59.7	32.3	16.5
18"	53.4	75.6	40.9	20.9
20"	66.0	93.3	50.5	25.7
24"	95.0	134.3	72.7	37.1

CONCRETE THRUST BLOCKS

DATE: APRIL 2014 | DRAWING NAME: PI-2 | DRAWN BY: ETL | CHECKED | APPROVED | REVISIONS: REV DATE BY COMMENTS
SARATOGA SPRINGS CITY
STANDARD DETAILS | PRESSURIZED IRR | **PI-2**

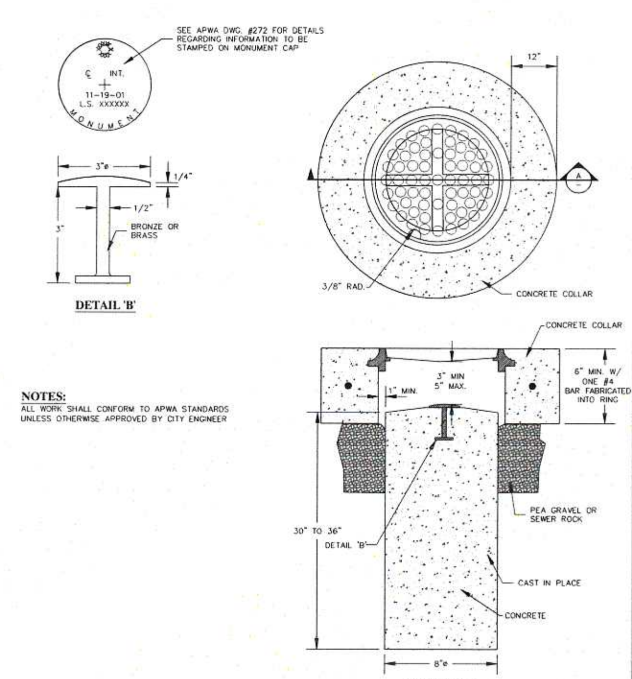


NOTES:

1. SECURE CITY'S APPROVAL OF SIGN FORMAT AND INSTALLATION.
2. INSTALL THE EDGE OF THE SIGN TWO FEET FROM THE VERTICAL EXTENSION OF THE BACK OF CURB AS NEAR AS POSSIBLE TO THE APPROACH CURB POINT OF CURVATURE. SIGNS SHOULD NOT OVERHANG SIDEWALK OR CURB & GUTTER.
3. ALL STREET SIGNS (STOP, SPEED, ETC.) SHALL BE 7' MINIMUM FROM GROUND TO BOTTOM OF SIGN.
4. ALL STREET SIGNS TO BE COATED WITH 3M-HIGH INTENSITY SHEETING, OR ACCEPTABLE EQUAL.

STREET AND REGULATORY SIGNS

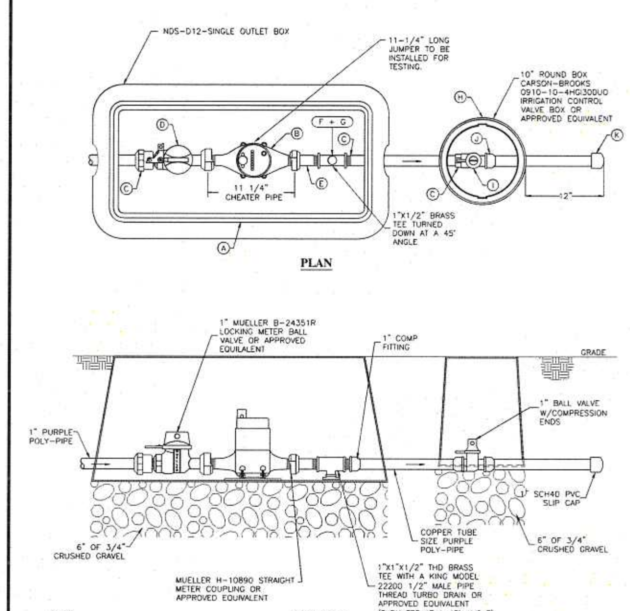
DATE: APRIL 2014 | DRAWING NAME: ST-28 | DRAWN BY: ETL | CHECKED | APPROVED | REVISIONS: REV DATE BY COMMENTS
SARATOGA SPRINGS CITY
STANDARD DETAILS | STREET STANDARDS | **ST-28**



NOTES:
ALL WORK SHALL CONFORM TO APWA STANDARDS UNLESS OTHERWISE APPROVED BY CITY ENGINEER

SURVEY MONUMENT TYPE I

DATE: APRIL 2014 | DRAWING NAME: ST-29 | DRAWN BY: ETL | CHECKED | APPROVED | REVISIONS: REV DATE BY COMMENTS
SARATOGA SPRINGS CITY
STANDARD DETAILS | STREET STANDARDS | **ST-29**

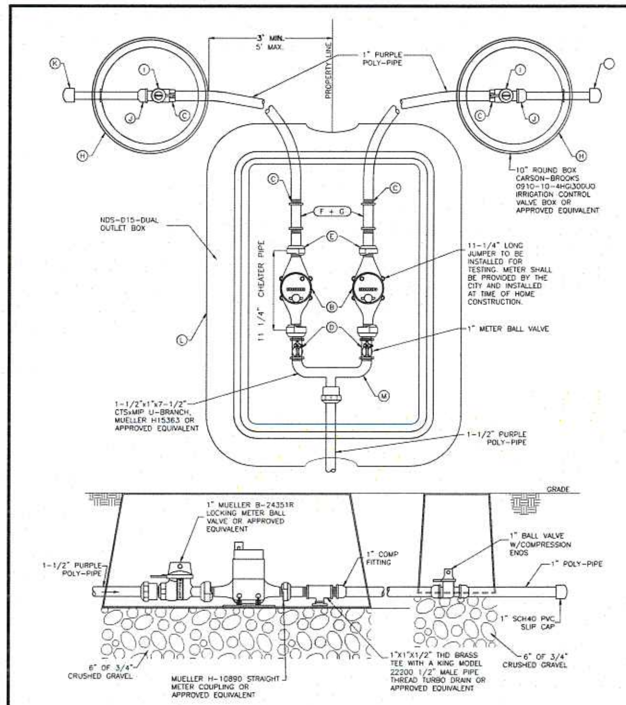


NOTE:

1. 1" METERS PROVIDED BY CITY
2. ALL PIPES SHALL BE BURIED WITH 14 GAUGE STRANDED THHN TRACE WIRE
3. CHEATER PIPE TO BE EXACTLY 11" 1/4" FROM FACE TO FACE

1" SINGLE SERVICE LATERAL BOX

DATE: APRIL 2014 | DRAWING NAME: PI-5A | DRAWN BY: ETL | CHECKED | APPROVED | REVISIONS: REV DATE BY COMMENTS
SARATOGA SPRINGS CITY
STANDARD DETAILS | PRESSURIZED IRR | **PI-5A**



Note:
1. CHEATER PIPE TO BE EXACTLY 11" 1/4" FROM FACE TO FACE.

1 1/2" DUAL SERVICE LATERAL BOX

DATE: APRIL 2014 | DRAWING NAME: PI-5B | DRAWN BY: | CHECKED | APPROVED | REVISIONS: REV DATE BY COMMENTS
SARATOGA SPRINGS CITY
STANDARD DETAILS | PRESSURIZED IRR | **PI-5B**

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TALUS RIDGE PLAT "A"
SARATOGA SPRINGS CITY, UTAH
CITY DETAILS

REVISIONS
1 -
2 -
3 -
4 -
5 -

LEI PROJECT #: 2013-1795
DRAWN BY: BLS/MJV
CHECKED BY: NKW
SCALE: NONE
DATE: 9/3/2014
SHEET: D-4

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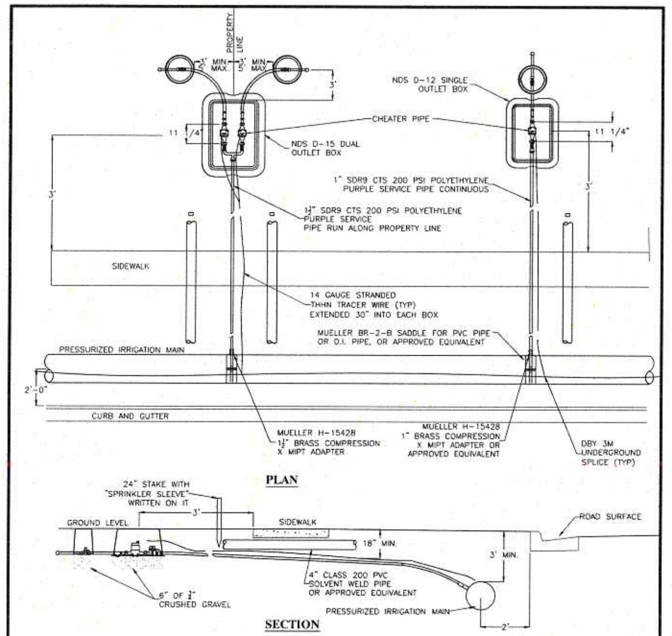


NOTES:

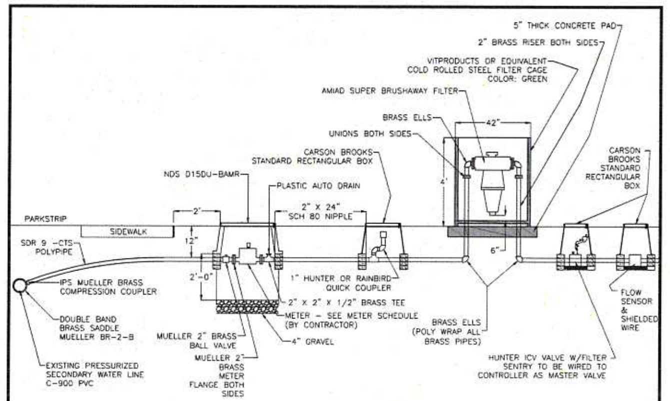
1. STANDARD SERVICE SIZE SHALL BE 1½" FOR DUAL SERVICES AND 1" FOR SINGLE SERVICES. SEE DETAIL PI-5A AND PI-5B FOR SERVICE BOX AND METER DETAILS
2. STAINLESS STEEL LINER INSERTS WILL BE REQUIRED INSIDE OF TUBING AT COMPRESSION FITTINGS.
3. ALL FITTINGS SHALL BE COMPATIBLE WITH SERVICE SIZE.
4. SERVICE LATERAL SHALL SLOPE TOWARDS PRESSURIZED IRRIGATION MAIN.
5. SPRINKLER SLEEVE SHALL NOT BE IN LINE WITH ANY UTILITY BOXES.
6. 4" SLEEVE SHALL BE BURIED 1' BELOW GRADE.
7. CHEATER PIPE TO BE EXACTLY 11 1/4" FROM FACE TO FACE.

1" SINGLE & DUAL SERVICE LATERALS

DATE: APRIL 2014 — DRAWING NAME: PI-3 — DRAWN BY: — CHECKED: — APPROVED:

REVISIONS: B 1/31/05 — C 4-6-06 MH WR WHITE REDLINES

SARATOGA SPRINGS CITY — STANDARD DETAILS — PRESSURIZED IRR — **PI-3**



PUBLIC PARKS & OPEN SPACE SECONDARY WATER CONNECTION (2" & SMALLER P.O.C.)

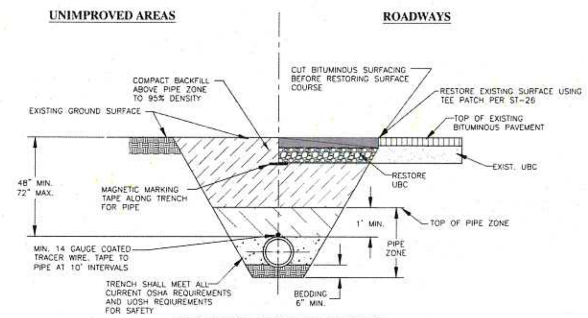
NOTES:

1. MINIMUM SURFACE RESTORATION SHALL BE 3" BITUMINOUS OVER 8" ROADBASE COMPACTED TO 95%. AT MAJOR STREETS, CITY ENGINEER WILL PROVIDE PAVEMENT DESIGN.
2. SERVICES MAY BE TUNNELED OR JETTED UNDER CURB AND GUTTER, DRIVEWAYS, OR SIDEWALKS. OTHER STRUCTURES SHALL BE OPEN CUT WITH SURFACE RESTORATION AT THE ENGINEERS DIRECTION.
3. IF TAPPING SADDLES ARE USED, METHOD OF SAWING/DRILLING TAP HOLES, TYPE OF SADDLE, PROCEDURES MUST BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
4. ALL PIPE AND FITTINGS UPSTREAM OF FILTER TO BE SCH 80 UNLESS SPECIFIED AS BRASS.
5. SCH 40 PIE AND FITTINGS ALLOWED DOWNSTREAM OF FILTER.
6. NO MALE ADAPTERS.
7. 18" BURY TO TOP OF PIPE.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL OF THE REQUIREMENTS ESTABLISHED FOR SAFE TRENCHING. (SEE OSHA REQUIREMENTS)
9. ALL CONSTRUCTION SHALL MEET CURRENT SARATOGA SPRINGS CITY STANDARDS, SPECIFICATIONS, & ORDINANCES.
10. STAINLESS STEEL LINER INSERTS WILL BE REQUIRED INSIDE OF TUBING AT COMPRESSION FITTINGS.
11. ALL FITTINGS SHALL BE COMPATIBLE WITH SERVICE SIZE.
12. SEE STANDARD FOR PRESSURIZED IRRIGATION SERVICE BOX, 2" PRESSURIZED IRRIGATION SERVICE, AND 4" PRESSURIZED IRRIGATION SERVICE.
13. SERVICE LATERAL SHALL SLOPE TOWARDS PRESSURIZED IRRIGATION MAIN.
14. SPRINKLER SLEEVE SHALL NOT BE IN LINE WITH ANY UTILITY BOXES.
15. SEE SERVICE DETAILS FOR BOX DESCRIPTIONS & TYPES
16. ALL PIPES TO BE BURIED WITH 14 GAUGE STRANDED THHN TRACE WIRE AND MARKING TAPE.

CONNECTION FOR PUBLIC PARKS & OPEN SPACE

DATE: APRIL 2014 — DRAWING NAME: PI-4 — DRAWN BY: ETL — CHECKED: — APPROVED:

SARATOGA SPRINGS CITY — STANDARD DETAILS — PRESSURIZED IRR — **PI-4**



CROSS-SECTION: TYPICAL TRENCH

NOTES:

1. WATER LINES 12 INCHES AND LARGER SHALL BE DUCTILE IRON CLASS-51.
2. WATER LINES 10 INCHES AND SMALLER SHALL BE PVC AWWA C900 CLASS 200.
3. VALVES 12 INCHES AND LARGER SHALL BE BUTTERFLY VALVES.
4. WHENEVER POSSIBLE "HOT TAP" CONNECTIONS REQUIRED. HOT TAP VALVE TO BE SUPPORTED DURING CONNECTION. CONTRACTOR TO NOTIFY CITY 24 HOURS IN ADVANCE OF MAKING CONNECTION.
5. PIPE ZONE SHALL BE BACKFILLED WITH BEDDING MATERIAL, OR OTHER ACCEPTABLE MATERIAL.
6. TRACING WIRE TO BE BROUGHT OUTSIDE OF BOTTOM PORTION OF VALVE BOX AND INSIDE TOP TO SURFACE.
7. FURNISH AND INSTALL POLY-WRAP ON DUCTILE IRON PIPE.
8. WHERE COLLAPSIBLE SOILS ARE ENCOUNTERED, FURNISH, PLACE AND COMPACT IMPORTED BACKFILL MATERIALS AS REQUIRED AND AS DIRECTED.

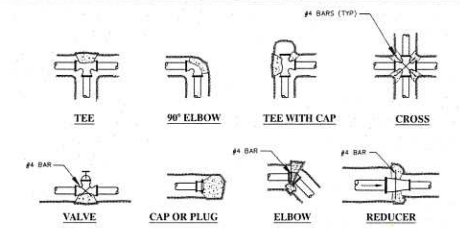
CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL OF THE REQUIREMENTS ESTABLISHED FOR SAFE TRENCHING. (SEE OSHA AND UOSH REQUIREMENTS, LATEST EDITIONS).
2. MINIMUM COVER OVER TOP OF PIPE SHALL BE 48-INCHES BELOW THE FINISHED GRADE. THIS DEPTH MAY BE INCREASED AS REQUIRED TO MISS UNDERGROUND UTILITIES, STORM DRAINS, OR OTHER OBSTRUCTIONS, OR WHERE INDICATED ON THE DRAWINGS.
3. CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES BEFORE LAYING PIPE WITHIN 200 FEET OF UTILITY CROSSINGS SHOWN ON THE DRAWINGS, OR AS "BLUE-STAKED."
4. SEWER MAINS, WATER MAINS, GAS MAINS AND OTHER UTILITIES ARE SHOWN ON THE PLANS IN A GENERAL SCHEMATIC WAY ACCORDING TO INFORMATION RECEIVED FROM OTHERS AND SOMETIMES FROM FIELD MEASUREMENTS. THE ACCURACY OR COMPLETENESS OF THE LOCATIONS SHOWN IS NOT GUARANTEED. THE CONTRACTOR SHALL DETERMINE THE ACTUAL LOCATION OF EXISTING SERVICE CONNECTIONS AND UTILITIES AND TAKE THE NECESSARY STEPS TO AVOID THEM.
5. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S SOLE EXPENSE.
6. THE CONTRACTOR MAY, AT HIS DISCRETION, USE SLOPING WALLS IN UNIMPROVED TERRAIN.

CULINARY WATERLINE TRENCH

DATE: APRIL 2014 — DRAWING NAME: CW-1 — DRAWN BY: ETL — CHECKED: — APPROVED:

SARATOGA SPRINGS CITY — STANDARD DETAILS — CULINARY WATER — **CW-1**



SAFE BEARING LOADS

SOIL TYPE	SAFE BEARING LOAD (lb/ft²)
SAND	1000
SAND & GRAVEL	1500
SAND & GRAVEL CEMENTED WITH CLAY	2000
SHALE	5000

SAFE BEARING LOAD FORMULA

THRUST BLOCK AREA AGAINST TRENCH WALL (SQUARE FEET) = THRUST ON FITTING / SAFE BEARING LOAD OF SOIL

NOTES:

1. REINFORCING BARS SHALL BE EPOXY COATED
2. RESIDENT PROJECT ENGINEER WILL CALCULATE QUANTITIES OF CONCRETE REQ'D AND SPECIFY PLACEMENT METHODS & REQUIREMENTS; WHICH SHALL BE APPROVED BY CITY ENGINEER
3. CONCRETE SHALL BE 4000 PSI MIN.
4. POUR CONCRETE AGAINST UNDISTURBED SOIL

THRUST ON FITTINGS

POUNDS @ 1 POUND PER SQUARE INCH OF WATER PRESSURE*

PIPE SIZE	TEES/ PLUGS	90° BENDS	45° BENDS	22.5° BENDS
4"	18.5	26.1	14.2	7.2
6"	38	53.7	29.1	14.7
8"	65.8	93	50.4	25.5
10"	107.5	152	82.4	41.7
12"	153.1	216.4	117.2	59.4
14"	215.5	304.7	164.9	84
16"	281.5	398.1	215.4	109.8
18"	356.3	503.8	272.6	139
20"	439.8	622	336.6	171.6
24"	633.3	895.6	484.7	247.1

*MULTIPLY THRUST BY MAXIMUM WATER PRESSURE

*PIPE SIZES LARGER THAN 24" SHALL BE THRUST BLOCKED AS PER ENGINEER RECOMMENDATION

THRUST BLOCK AREA AGAINST TRENCH WALL (SQUARE FEET)

ASSUMING SAND AND MAX PRESSURE OF 150 PSI SIZE MAY BE REDUCED WITH AN ENGINEERED SUBMITTAL AND AS APPROVED BY THE CITY ENGINEER

PIPE SIZE	TEES/ PLUGS	90° BENDS	45° BENDS	22.5° BENDS
4"	2.8	3.9	2.1	1.1
6"	5.7	8.1	4.4	2.2
8"	9.9	14.0	7.6	3.8
10"	16.1	22.8	12.4	6.3
12"	23.0	32.5	17.6	8.9
14"	32.3	45.7	24.7	12.6
16"	42.2	59.7	32.3	16.5
18"	53.4	75.6	40.9	20.9
20"	66.0	93.3	50.5	25.7
24"	95.0	134.3	72.7	37.1

CONCRETE THRUST BLOCKS

DATE: APRIL 2014 — DRAWING NAME: CW-2 — DRAWN BY: ETL — CHECKED: — APPROVED:

SARATOGA SPRINGS CITY — STANDARD DETAILS — CULINARY WATER — **CW-2**

SCHEDULE OF PLUMBING MATERIAL FOR WATER METER BOXES

1" SINGLE SERVICE CONNECTION

ITEM	QUANTITY	DESCRIPTION
A	1ea	14"x19"x12" METER BOX W/ SINGLE OUTLET
B	1ea	1" METER (SUPPLIED AND INSTALLED BY CITY)
C	3ea	1" COUPLER CCT/MIPT H15428
D	1ea	1" STR BALL METER VALVE B24351R
E	1ea	1" STR METER COUPLER H10890
F	1ea	1"X1/2" BRASS TEE
G	1ea	1/2" MALE PIPE THREAD AUTO DRAIN
H	1ea	10" IRRIGATION VALVE BOX
I	1ea	1" BRASS BALL VALVE 600 WOG
J	1ea	1" MALE ADAPT SXM1PT SCH 40
K	1ea	1" SLIP CAP SHC 40

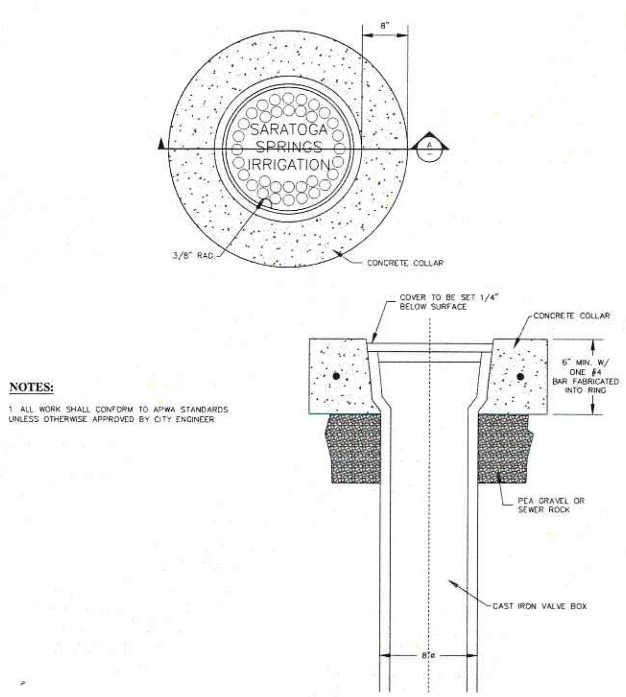
1 1/2" TO DUAL 1" SERVICE CONNECTION

ITEM	QUANTITY	DESCRIPTION
L	1ea	13"x20"x12" JUMBO METER BOX W/ DOUBLE OUTLET
B	2ea	1" METER (SUPPLIED AND INSTALLED BY CITY)
M	1ea	1.5"X7.5" CTSxMIP U-BRANCH H15363
D	2ea	1" STR BALL METER VALVE B24351R
E	2ea	1" STR METER COUPLER H10890
F	2ea	1"X1/2" BRASS TEE
G	2ea	1/2" MALE PIPE THREAD AUTO DRAIN
C	4ea	1" COUPLER CCT/MIPT H15428
I	2ea	1" BRASS BALL VALVE 600 WOG
H	2ea	10" IRRIGATION VALVE BOX
J	2ea	1" MALE ADAPT SXM1PT SCH 40
K	2ea	1" SLIP CAP SHC 40

PARTS LIST FOR SINGLE AND DUAL SERVICE LATERAL BOXES

DATE: APRIL 2014 — DRAWING NAME: PI-5C — DRAWN BY: ETL — CHECKED: — APPROVED:

SARATOGA SPRINGS CITY — STANDARD DETAILS — PRESSURIZED IRR — **PI-5C**



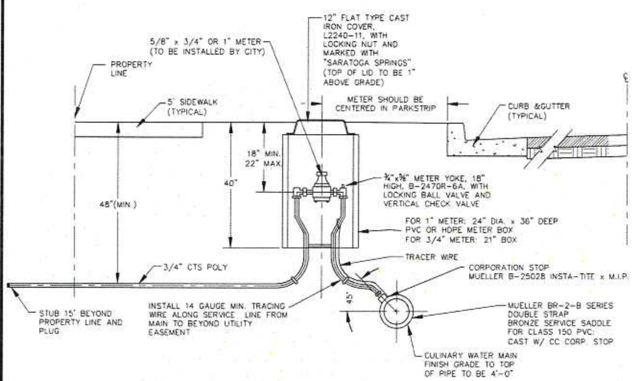
NOTES:

1. ALL WORK SHALL CONFORM TO APWA STANDARDS UNLESS OTHERWISE APPROVED BY CITY ENGINEER

CONCRETE COLLAR FOR WATER VALVES

DATE: APRIL 2014 — DRAWING NAME: PI-13 — DRAWN BY: ETL — CHECKED: — APPROVED:

SARATOGA SPRINGS CITY — STANDARD DETAILS — PRESSURIZED IRR — **PI-13**



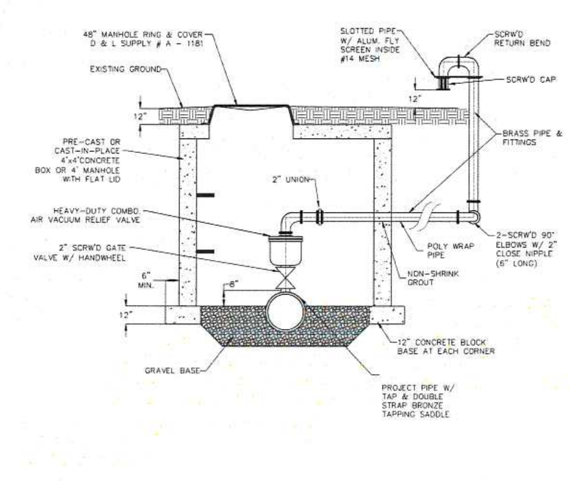
NOTES:

1. INSPECTION: METER BOX AND SERVICE LINE SHALL BE INSPECTED BY CITY PRIOR TO BACKFILLING.
2. BACKFILL: INSTALL BACKFILL IN LIFTS NOT EXCEEDING 8" AFTER COMPACTION. COMPACT EACH LIFT TO AN AVERAGE DRY DENSITY OF 95% WITH NO DENSITY TEST RESULT LESS THAN 92%.
3. CONTRACTOR TO SUPPLY ALL MATERIALS EXCLUDING METER
4. METER BOXES SHOULD BE PVC OR HDPE.
5. PIPE: INSTALL MINIMUM 3/4" CTS POLY PIPE (SDR-9) FROM MAIN TO METER AND FROM METER TO BUILDING. MINIMUM 1" POLYETHYLENE PIPE TO BE USED IN COMMERCIAL AREAS. INSTALL TRACING WIRE FROM MAIN LINE TO METER.
6. PLACEMENT: ALL METERS ARE TO BE INSTALLED IN THE PARK STRIP, MUST BE PLACED NEAR MIDPOINT OF THE LOT, AND MUST NOT BE LOCATED IN A DRIVEWAY OR IN A SIDEWALK.
7. METER YOKE TO BE MUELLER B-2470R-6A, OR ACCEPTABLE EQUAL
9. SERVICE SADDLES SHALL BE MUELLER BR-2-B SERIES, OR EQUAL
11. METER LID TO BE 1" ABOVE LINE GRADE OF WALK/CURB
12. STAINLESS STEEL LINER INSERTS WILL BE REQUIRED INSIDE OF TUBING AT COMPRESSION FITTINGS.
13. WATER SERVICES SHALL BE STUBBED TO A POINT APPROXIMATELY 1' BEYOND UTILITY EASEMENT (PUE).
14. 1" METER INSTALLATION TO BE SIMILAR USING 1" METER, PIPE, AND FITTINGS.

RESIDENTIAL METER CONNECTION 3/4" x 5/8" OR 1"

DATE: APRIL 2014 — DRAWING NAME: CW-5 — DRAWN BY: ETL — CHECKED: — APPROVED:

SARATOGA SPRINGS CITY — STANDARD DETAILS — CULINARY WATER — **CW-5**



NOTE:

1. SIZE OF AIR-VACUUM RELIEF VALVE & PIPING SHALL BE AS DETERMINED BY PROJECT ENGINEER; AND APPROVED BY CITY ENGINEER.
2. LOCATE RISER IN LANDSCAPED AREA BEHIND CURB & GUTTER OR APPROX. 2 FT. FROM R/W LINE, AS DIRECTED BY CITY ENGINEER.
3. PROVIDE BOLLARDS OR OTHER PROTECTION FOR RISER IF AND AS DIRECTED BY CITY INSPECTOR.

AIR VACUUM RELIEF VALVE

DATE: APRIL 2014 — DRAWING NAME: CW-12 — DRAWN BY: ETL — CHECKED: — APPROVED:

SARATOGA SPRINGS CITY — STANDARD DETAILS — CULINARY WATER — **CW-12**

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www.lei-eng.com

TALUS RIDGE PLAT "A"
SARATOGA SPRINGS CITY, UTAH

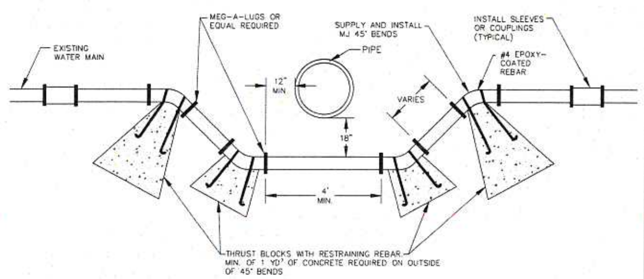
CITY DETAILS

REVISIONS
1 -
2 -
3 -
4 -
5 -

LEI PROJECT #: 2013-1795
DRAWN BY: BLS/MJV
CHECKED BY: NKW
SCALE: NONE
DATE: 9/3/2014

SHEET **D-5**

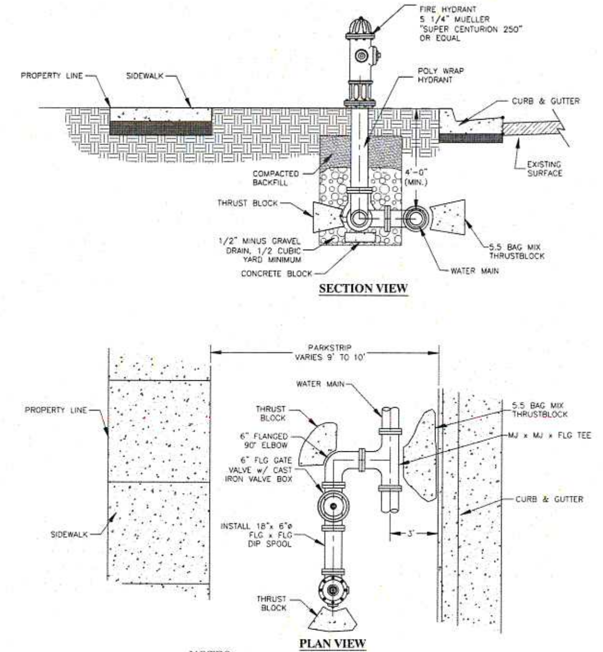
RECEIVED SEP 11 2014



NOTES:

1. CITY TO BE GIVEN 72 HOUR NOTICE BEFORE LOOPING ANY WATERLINE WHEN SHUT OFF IS REQUIRED.
2. A CASE OR SLEEVE IS REQUIRED WHEN CROSSING CULINARY WATER UNDER SANITARY AND STORM SEWER.
3. ENGINEER SHALL DETERMINE # AND LOCATION OF RESTRAINTS.

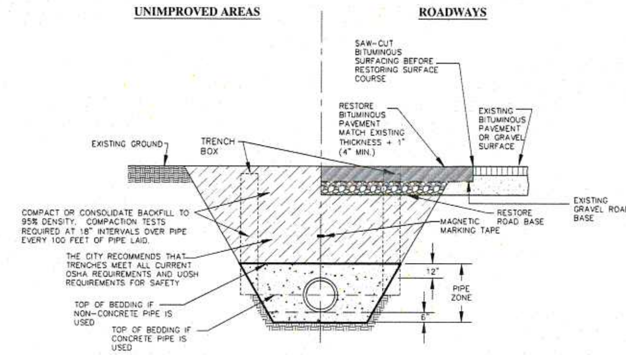
CULINARY WATERLINE LOOP — DATE: APRIL 2014 — DRAWING NAME: CW-3 — DRAWN BY: ETL — SARATOGA SPRINGS CITY — STANDARD DETAILS — CULINARY WATER — **CW-3**



NOTES:

1. HYDRANT SHALL BE "TRAFFIC" TYPE WITH A REPLACEABLE BREAK-AWAY UNIT IMMEDIATELY ABOVE GROUND.
2. HYDRANT SHALL BE CENTERED IN A CONCRETE PAD.

FIRE HYDRANT CONNECTION — DATE: APRIL 2014 — DRAWING NAME: CW-4 — DRAWN BY: ETL — SARATOGA SPRINGS CITY — STANDARD DETAILS — CULINARY WATER — **CW-4**

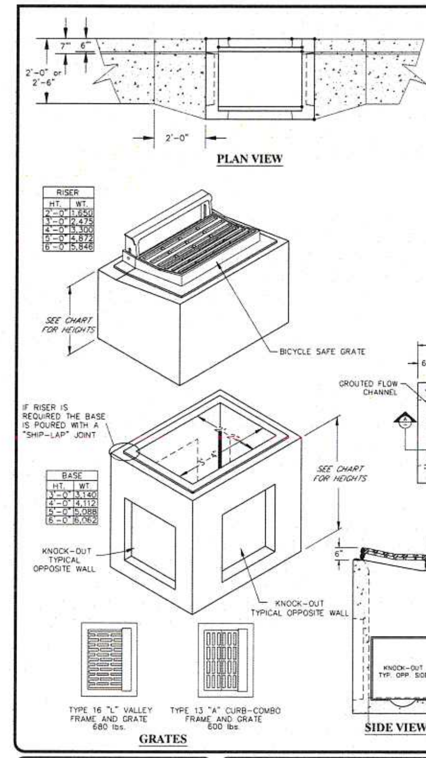


CROSS-SECTION: TYPICAL TRENCH

NOTES:

1. THE CITY RECOMMENDS CONTRACTOR MEET ALL OF THE REQUIREMENTS ESTABLISHED FOR SAFE TRENCHING. (SEE OSHA AND UOSH REQUIREMENTS, LATEST EDITIONS).
2. CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES BEFORE LAYING PIPE WITHIN 50' OF SAID UTILITIES WHICH MAY BE EXPOSED, DAMAGED OR CROSSED AS SHOWN ON THE DRAWINGS OR AS "BLUE STAKED". THE CONTRACTOR WILL MAKE ARRANGEMENTS WITH THE UTILITY COMPANY TO MOVE THE UTILITY IF NECESSARY OR OBTAIN PERMISSION FROM THE CITY ENGINEER TO MODIFY GRADE OF PIPELINE IN ORDER TO GO AROUND UTILITIES.
3. TESTING: ALL STORM DRAIN LINES TO BE "VIDEOED" AND NECESSARY REPAIRS MADE BEFORE ACCEPTANCE. A MANDRAL OR BALL CAN BE USED TO VERIFY DEFORMATION OF A PIPE AS DETERMINED FROM THE VIDEO UNLESS SPECIFIED OTHERWISE.
4. ALL STORM DRAIN TO BE INSTALLED IN PUBLIC RIGHT-OF-WAY OR RECORDED DRAINAGE EASEMENT UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
5. WHERE COLLAPSIBLE SOILS ARE ENCOUNTERED, FURNISH, PLACE AND COMPACT IMPORTED BACKFILL MATERIALS AS REQUIRED AND AS DIRECTED.
6. MIN. DEPTH OF COVER SHALL MEET MANUFACTURERS RECOMMENDATIONS.
7. IN ROCKY SUB-GRADES 18" OF CLEARANCE SHALL BE PROVIDED ON ALL SIDES OF PIPE.
8. INSTALL MAGNETIC DETECTOR TAPE 3' ABOVE PIPE IN TRENCH.

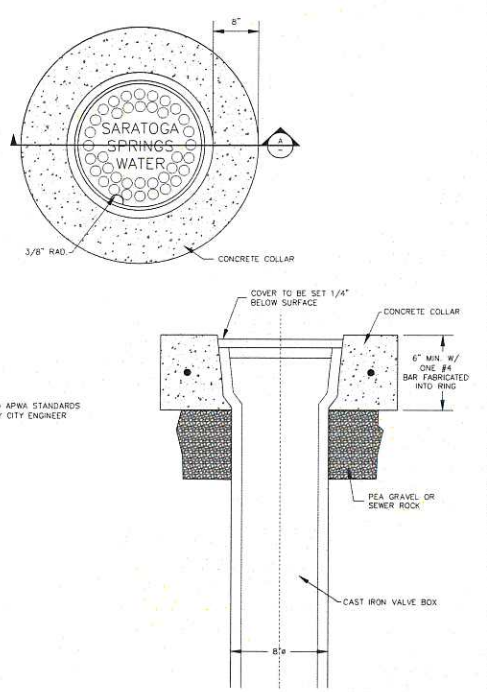
STORM DRAIN TRENCH — DATE: APRIL 2014 — DRAWING NAME: SD-1 — DRAWN BY: ETL — SARATOGA SPRINGS CITY — STANDARD DETAILS — STORM DRAIN — **SD-1**



NOTES:

1. DESIGNED FOR AASHTO HS-20 LOADING.
2. DESIGNED ACCORDING TO ASTM C857-87 AND ASTM C858-83.
3. ALL SUMPS TO BE GROUTED WITH FLOW CHANNELS FORMED INTO THE BOTTOM OF THE BOX TO MINIMIZE DEBRIS ACCUMULATION.
4. BICYCLE SAFE GRATES ONLY. PROVIDE TYPE 13 "A" GRATE, D&L I-3516, OR TYPE 16 "L" GRATE, D&L I-3517.
5. POUR CONCRETE COLLARS AROUND CIRCUMFERENCE OF PIPE ON EXTERIOR OF BOX.
6. USE NON-SHRINK GROUT AROUND CIRCUMFERENCE OF PIPE ON INTERIOR OF BOX.

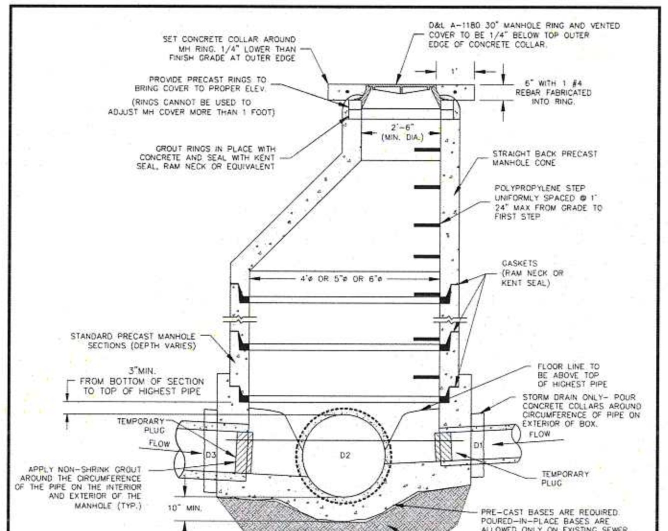
GUTTER INLET BOX — DATE: APRIL 2014 — DRAWING NAME: SD-2 — DRAWN BY: ETL — SARATOGA SPRINGS CITY — STANDARD DETAILS — STORM DRAIN — **SD-2**



NOTES:

1. ALL WORK SHALL CONFORM TO APWA STANDARDS UNLESS OTHERWISE APPROVED BY CITY ENGINEER.

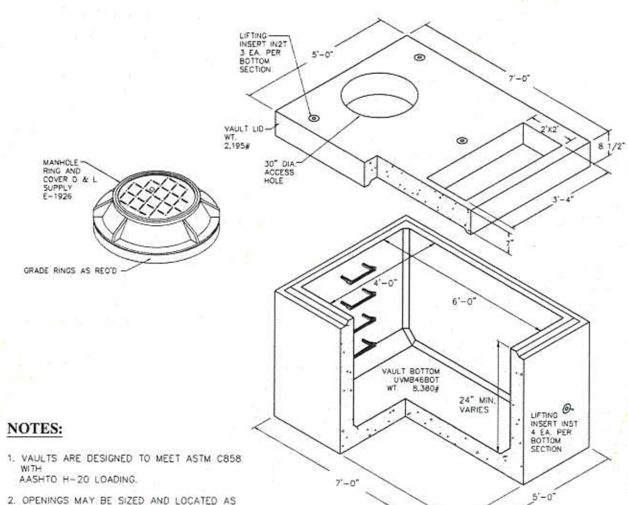
CONCRETE COLLAR — DATE: APRIL 2014 — DRAWING NAME: CW-15 — DRAWN BY: ETL — SARATOGA SPRINGS CITY — STANDARD DETAILS — STREET STANDARDS — **CW-15**



NOTES:

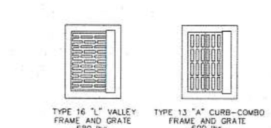
1. IF GRADE ALLOWS, INVERTS OF D1 & D3 SHALL BE REQUIRED TO MATCH TOP OF D2.
2. AFTER ALL GRADING AROUND MANHOLE HAS BEEN COMPLETED AND FINAL SURFACING IS IN PLACE REMOVE TEMPORARY PLUGS, DEBRIS AND PLYWOOD FROM INSIDE OF MANHOLES.
3. IF MANHOLE IS TO BE POURED IN PLACE, FOLLOW SAME PATTERN AS SHOWN EXCEPT USE 10" MIN WALL THICKNESS.
4. MANHOLES DEEPER THAN 20 FEET SHALL HAVE AN 18" THICK CONCRETE BASE.
5. CONE AND WALL SECTIONS SHALL CONFORM WITH ASTM C-478 STANDARD.
6. ALL MANHOLES TO BE HS-20 RATED.
7. MANHOLES WITH SOLID LIDS MUST BE EPOXY LINED.
8. MANHOLES OUTSIDE OF ROW SHALL HAVE SOLID LOCKING LIDS.
9. FLAT CAST RINGS ARE NOT PERMITTED.
10. LID SHALL BE MARKED SS SEWER.

SANITARY SEWER MANHOLE — DATE: APRIL 2014 — DRAWING NAME: SS-2 — DRAWN BY: ETL — SARATOGA SPRINGS CITY — STANDARD DETAILS — SANITARY SEWER — **SS-2**



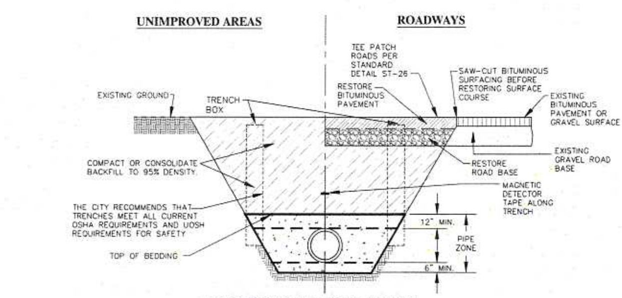
NOTES:

1. VAULTS ARE DESIGNED TO MEET ASTM C858 WITH AASHTO H-20 LOADING.
2. OPENINGS MAY BE SIZED AND LOCATED AS REQUIRED.
3. OPTIONAL HARDWARE MAY BE CAST IN AS REQUIRED.
4. CHECK HARDWARE SECTION FOR OPTIONAL HARDWARE.
5. POUR CONCRETE COLLARS AROUND CIRCUMFERENCE OF PIPE ON EXTERIOR OF BOX.
6. USE NON-SHRINK GROUT AROUND CIRCUMFERENCE OF PIPE ON INTERIOR OF BOX.
7. BICYCLE SAFE GRATES ONLY. PROVIDE TYPE 13 "A" GRATE, D&L I-3516, OR TYPE 16 "L" GRATE, D&L I-3517.



GRATES

COMBINATION GUTTER INLET & CLEANOUT BOX — DATE: APRIL 2014 — DRAWING NAME: SD-4 — DRAWN BY: ETL — SARATOGA SPRINGS CITY — STANDARD DETAILS — STORM DRAIN — **SD-4**



CROSS-SECTION: TYPICAL TRENCH

RECOMMENDED TRENCH QUANTITIES

PIPE DIAMETER (INCHES)		RECOMMENDED MAXIMUM TRENCH WIDTH FOR FILL IN PIPE ZONE		RECOMMENDED MAXIMUM WIDTH FOR FILL & SURFACING ABOVE PIPE ZONE MEASURED AT TOP OF TRENCH CENTERED ON PIPE	
inches	mm	inches	mm	inches	mm
4	101.6	72	1828.8	96	2438.4
6	152.4	72	1828.8	96	2438.4
8	203.2	72	1828.8	96	2438.4
10	254.0	72	1828.8	96	2438.4
12	304.8	72	1828.8	96	2438.4
15	381.0	72	1828.8	96	2438.4
18	457.2	72	1828.8	96	2438.4
21	533.4	72	1828.8	96	2438.4
24	609.6	72	1828.8	96	2438.4
30	762.0	84	2133.6	108	2743.2
36	914.4	84	2133.6	108	2743.2
42	1066.8	96	2438.4	120	3048.0
48	1219.2	96	2438.4	120	3048.0
54	1371.6	108	2743.2	132	3352.8
60	1524.0	120	3048.0	144	3657.6

NOTES:

1. THE CITY RECOMMENDS CONTRACTOR MEET ALL OF THE REQUIREMENTS ESTABLISHED FOR SAFE TRENCHING. (SEE OSHA AND UOSH REQUIREMENTS, LATEST EDITIONS).
2. CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES BEFORE LAYING PIPE WITHIN 50' OF SAID UTILITIES WHICH MAY BE EXPOSED, DAMAGED OR CROSSED AS SHOWN ON THE DRAWINGS OR AS "BLUE STAKED". THE CONTRACTOR WILL MAKE ARRANGEMENTS WITH THE UTILITY COMPANY TO MOVE THE UTILITY IF NECESSARY OR OBTAIN PERMISSION FROM THE CITY ENGINEER TO MODIFY GRADE OF PIPELINE IN ORDER TO GO AROUND UTILITIES.
3. TESTING: ALL NEW SANITARY SEWERS TO BE "TELEVISED" AND NECESSARY REPAIRS MADE BEFORE ACCEPTANCE. ALL LINES SHALL BE PRESSURE TESTED TO 3.5 psi MIN. FOR 5 MINUTES. A MANDRAL OR BALL CAN BE USED TO VERIFY DEFORMATION OF A PIPE AS DETERMINED FROM THE VIDEO UNLESS SPECIFIED OTHERWISE. MANHOLES SHALL BE TESTED AS PER CITY STANDARDS.
4. ALL SEWER LINES TO BE INSTALLED IN PUBLIC RIGHT-OF-WAY OR RECORDED SEWER EASEMENT UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
5. WHERE COLLAPSIBLE SOILS ARE ENCOUNTERED, FURNISH, PLACE AND COMPACT IMPORTED BACKFILL MATERIALS AS REQUIRED AND AS DIRECTED.
6. MIN. DEPTH SHALL BE 4' TO TOP OF PIPE. A 2' SPACING MUST BE MAINTAINED BETWEEN ALL WATER LINE PIPE CROSSINGS AND THE TOP OF THE SEWER PIPE.
7. IF THE SEWER LINE IS NOT 13' DEEP A NOTE MUST BE PLACED ON THE PLAT "SHALLOW SEWER DEPTHS. BEFORE EXCAVATING BASEMENTS, CONTRACTOR MUST VERIFY SEWER DEPTH"
8. MAX. DEPTH SHALL BE 20' TO THE TOP OF PIPE UNLESS APPROVED OTHERWISE BY THE CITY ENGINEER.
9. INSTALL MAGNETIC DETECTOR TAPE 3' ABOVE PIPE.
10. IN ROCKY SUB-GRADES A MINIMUM OF 18" CLEARANCE ON ALL SIDES OF THE PIPE SHALL BE PROVIDED.

STANDARD SEWER TRENCH — DATE: APRIL 2014 — DRAWING NAME: SS-1 — DRAWN BY: ETL — SARATOGA SPRINGS CITY — STANDARD DETAILS — SANITARY SEWER — **SS-1**

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TALUS RIDGE PLAT "A"

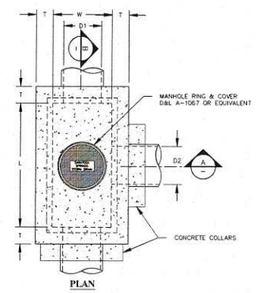
SARATOGA SPRINGS CITY, UTAH

CITY DETAILS

REVISIONS

LEI PROJECT #: 2013-1795
DRAWN BY: BLS/MJV
CHECKED BY: NKW
SCALE: NONE
DATE: 9/3/2014
SHEET D-6

RECEIVED SEP 11 2014

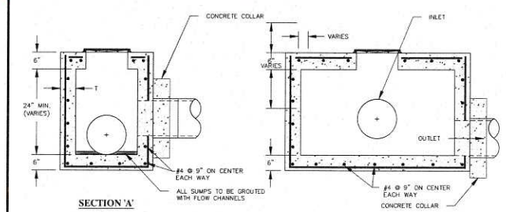


PLAN

NOTES:

1. BOTTOM OF BOX SHALL BE GROUTED TO ENSURE FLOW LINE OF PIPE IS FLUSH WITH BOTTOM OF BOX.
2. AMCOR CB110 OR EQUAL BOXES WILL BE ACCEPTED.
3. PRE-CAST MANHOLES ARE ALSO ACCEPTABLE. SEE DETAIL SS-2
4. "FLAT" CASTING RINGS AND COVERS ARE NOT ACCEPTABLE
5. DESIGN FOR AASHTO HS-20 LOADING
5. POUR CONCRETE COLLARS AROUND CIRCUMFERENCE OF PIPE ON EXTERIOR OF BOX.
6. USE NON-SHRINK GROUT AROUND CIRCUMFERENCE OF PIPE ON INTERIOR OF BOX.

DIMENSIONS	
W=	D1 + 12" (24" MIN.)
L=	D2 + 24" (44" MIN.)
T=	6" IF L IS LESS THAN OR EQUAL TO 5'-0"
T=	8" IF L IS GREATER THAN 5'-0"



SECTION 'A' SECTION 'B'

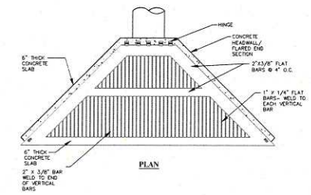
CLEANOUT BOX

DATE: APRIL 2014	REVISIONS		
DRAWING NAME: SD-3	REV DATE	BY	COMMENTS
DRAWN BY: EEL			
CHECKED EEL / APPROVED			

SARATOGA SPRINGS CITY

LEHI & CONNECTED ON THE SARATOGA SPRINGS CITY GRID. PROJECT SPC PROJECT ZONE: NAD 83 UTAH CENTRAL ZONE, INTERNATIONAL FEET

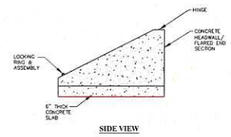
STANDARD DETAILS | STORM DRAIN | **SD-3**



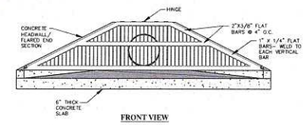
PLAN

NOTES:

1. INSTALL AT INLETS AND OUTLETS OF ALL STORM DRAIN PIPE 15" OR GREATER.
2. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS PRIOR TO FABRICATION.
3. FABRICATION SHALL BE ALL STEEL; FLAT, HOT DIP GALVANIZED AFTER FABRICATION.
4. FLARED END SECTIONS SHALL BE CONCRETE UNLESS OTHERWISE APPROVED BY CITY ENGINEER.
5. REINFORCE ALL CONCRETE WITH #4 BARS AT 9" O.C. EACH WAY MINIMUM.



SIDE VIEW



FRONT VIEW

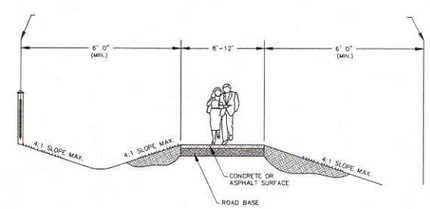
INLET/OUTLET TRASH GRATES

DATE: APRIL 2014	REVISIONS		
DRAWING NAME: SD-5	REV DATE	BY	COMMENTS
DRAWN BY: EEL			
CHECKED EEL / APPROVED			

SARATOGA SPRINGS CITY

LEHI & CONNECTED ON THE SARATOGA SPRINGS CITY GRID. PROJECT SPC PROJECT ZONE: NAD 83 UTAH CENTRAL ZONE, INTERNATIONAL FEET

STANDARD DETAILS | STORM DRAIN | **SD-5**



NOTES:

1. TRAILS ALONG ARTERIAL ROADWAYS, AND CANAL PARKWAYS SHALL BE 12' WIDE MEANDERING CONCRETE TRAILS.
2. TRAILS FOR LAKESIDE AND RIVERSIDE ACCESS MUST USE CONCRETE AND BE 12' WIDE.
3. IN RIPARIAN AREAS PROVIDE 8' CONCRETE TRAILS.
4. IN UPLAND AREAS PROVIDE 12' ASPHALT TRAILS.
5. FOR POWER LINE CORRIDORS, MOUNTAIN TRAILS, ATV TRAILS, AND EQUESTRIAN USE, PROVIDE 12' WIDE TRAILS WITH 8" OF ROAD BASE OR APPROVED SOFT-SURFACE MATERIAL.
6. FOR WILDERNESS TRAILS IN DEVELOPED AREAS PROVIDE 12' WIDE ASPHALT TRAILS.
8. FOR WILDERNESS TRAILS IN UNDEVELOPED AREAS PROVIDE 8'-10' WIDE TRAILS WITH 8" OF ROAD BASE OR APPROVED SOFT-SURFACE MATERIAL.
7. ALL TRAILS MUST BE ADA ACCESSIBLE AND PROVIDE MAINTENANCE ACCESS.
8. CENTER LINE RADIUS OF MEANDERING SIDEWALKS/TRAILS SHALL BE 100' MIN.
9. FOR CONCRETE TRAILS, PROVIDE CONSTRUCTION JOINTS @ 8' INTERVALS EXPANSION JOINTS @ 40 ' INTERVALS
10. CONCRETE TRAILS MUST HAVE 5" OF CONCRETE OVER 6" OF ROAD BASE.
11. ASPHALT TRAILS MUST HAVE 3" OF ASPHALT OVER 8" OF ROAD BASE.

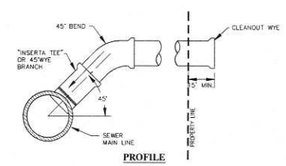
TRAILS

DATE: APRIL 2014	REVISIONS		
DRAWING NAME: ST-34	REV DATE	BY	COMMENTS
DRAWN BY: JMT			
CHECKED / APPROVED			

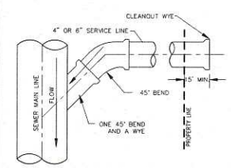
SARATOGA SPRINGS CITY

LEHI & CONNECTED ON THE SARATOGA SPRINGS CITY GRID. PROJECT SPC PROJECT ZONE: NAD 83 UTAH CENTRAL ZONE, INTERNATIONAL FEET

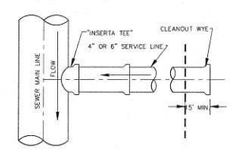
STANDARD DETAILS | STREET STANDARDS | **ST-34**



PROFILE



PLAN VIEW- 45° WYE BRANCH



PLAN VIEW- "INSERTA TEE"

NOTES:

1. ALL RESIDENTIAL SERVICES SHALL BE 4" DIAMETER. NON-RESIDENTIAL SHALL BE 6" DIAMETER UNLESS DIRECTED OTHERWISE AND SHALL BE EXTENDED FROM MAIN LINES TO PROPERTY LINES.
2. EVERY RESIDENTIAL UNIT SHALL HAVE A SEPARATE SEWER LATERAL.
3. MINIMUM GRADE SHALL BE 2% FOR SERVICE LINES.
4. ALL 90° BENDS AT CONNECTION TO MAIN MUST BE CONSTRUCTED WITH ONE 45° BEND AND A WYE.
5. DIRECT NOSE ON IS ALLOWED WHEN CONNECTING TO EXISTING MAIN LINE. USE RUBBER BOOT AS PER CITY WITH STAINLESS STEEL STRAPS, IF REQUIRED. CORE CUT EXISTING PIPE, DO NOT BREAK OUT WITH A HAMMER.
6. NOTIFY CITY 24 HOURS IN ADVANCE OF ANY CONNECTION. EVERY CONNECTION TO BE INSPECTED BY CITY.
7. CONNECTION TO USERS TO BE DONE BY OTHERS.
8. CAST IRON WYE'S ARE REQUIRED FOR ALL NON-RESIDENTIAL CONNECTIONS.

SEWER SERVICE CONNECTION

DATE: APRIL 2014	REVISIONS		
DRAWING NAME: SS-3	REV DATE	BY	COMMENTS
DRAWN BY: EEL			
CHECKED / APPROVED			

SARATOGA SPRINGS CITY

LEHI & CONNECTED ON THE SARATOGA SPRINGS CITY GRID. PROJECT SPC PROJECT ZONE: NAD 83 UTAH CENTRAL ZONE, INTERNATIONAL FEET

STANDARD DETAILS | SANITARY SEWER | **SS-3**

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TALUS RIDGE PLAT "A"
SARATOGA SPRINGS CITY, UTAH

CITY DETAILS

REVISIONS
1 -
2 -
3 -
4 -
5 -

LEI PROJECT #: 2013-1795
DRAWN BY: BLS/MJV
CHECKED BY: NKW
SCALE: NONE
DATE: 9/3/2014
SHEET: D-7

RECEIVED SEP 11 2014