



July 30, 2014

Dana Schuler
Weber County Engineering Division
2380 Washington Blvd. #240
Ogden, UT 84401

RE: Summit Eden Phase 1C

Mrs. Shuler,

The following are comments and responses pertaining to the civil engineering plans from your review and received on June 06, 2014.

Engineering review 5

1. Provide Easements

Response: Owner is working with Weber County to secure necessary easements.

2. Sheet 1.01 - Why did the water service size change from 3/4" to 2"? Seems very large for residential service.

Response: In home sprinkler demand, experience, and vendor recommendation.

3. Sheet 1.01 - Why did the sewer service size change from standard to 6"? Seems very large for residential service.

Response: The laterals have been changed back to 4".

4. Sheet 1.02 - Why has the water main size changed? Is this in the master plan approved by DDW?

Response: To avoid stagnation within the line

5. Sheet 1.02 - Design of dry utilities?

Response: Dry utilities has been added to plans.

6. Sheet 1.02/1.03 - Easement needed for SD/SS through open space. (open space vs PUE)

Response: Owner is working with Weber County to secure necessary easements.

7. Sheet 1.03 - Slope easement required on unplatted land north of road.

Response: Easement is shown on the design plans, and easement document is being drafted and will be submitted shortly.

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CONSTRUCTION QUALITY ASSURANCE - INFRASTRUCTURE ENGINEERING - MUNICIPAL OUTSOURCING - ASSET MANAGEMENT - ENVIRONMENTAL SERVICES

8. Sheet 1.03 - Did subdrain move? If so, revised easement required.

*Response: Subdrain moved slightly due to revised grading. New easement is not required. Plat note #28 identifies a 10-foot wide slope drain easement, 5 feet on each side of the **as-constructed pipe alignment, in the approximate location as shown hereon.***

9. Sheet 1.03 - Appears SD in Summit Pass and through unplatted land has been revised to tie into revised SD on Copper Crest. Revised sheets for Summit Pass project required. Revised easement for unplatted land required. (REV 16)

Response: Revised sheets have been submitted. Owner is working with Weber County to secure necessary easements.

10. Sheet 1.03 - SD/SS easement note refers to plat - are you planning on filling a revised plat? If not, please remove reference.

Response: removed reference to plat

11. Sheet 2.00 - Fire department approval for road grade of 12.89%?

Response: 13% has been approved by Fire Marshall

12. Sheet 2.00 - Sewer lateral through open space requires an easement, or route lateral to Copper Crest.

Response: Owner is working with Weber County to secure necessary easements.

Regards,



Ryan Cathey, PE
Engineering Manager
NV5, Inc.

CC: Jared Andersen, PE- Weber County Engineer
Rick Everson, PE- Watts Enterprises, Inc.-Land Owner's Representative

NV5

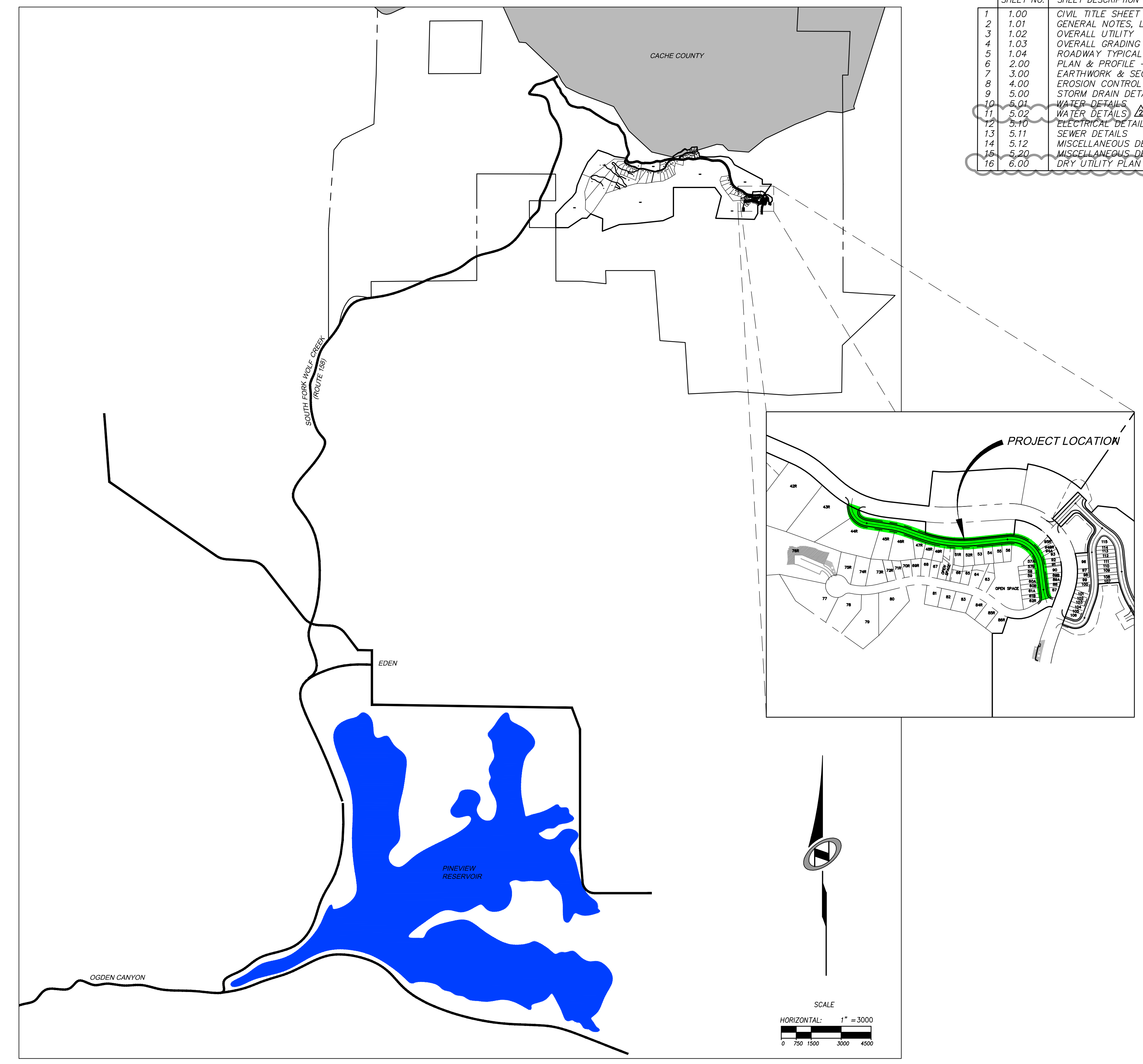
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SUMMIT EDEN PHASE 1C

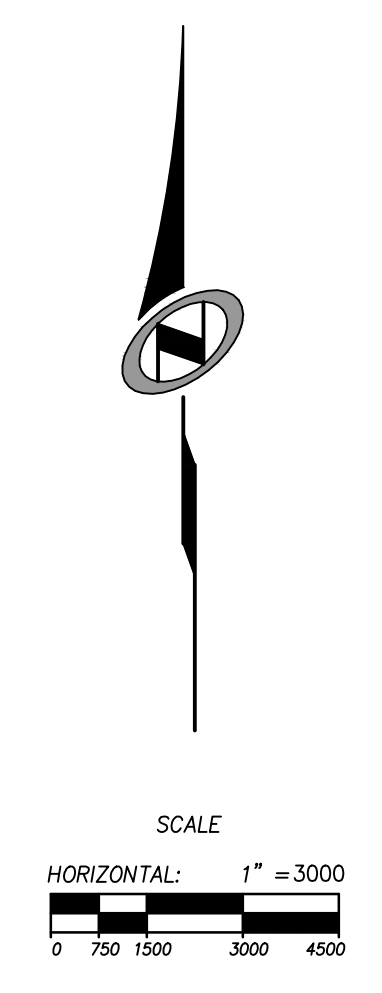
ROADWAY AND UTILITY CONSTRUCTION DRAWINGS

Located in Sec 01 T7N R1E
Weber County, Utah



SHEET INDEX:

SHEET NO.	SHEET DESCRIPTION
1	1.00 CIVIL TITLE SHEET
2	1.01 GENERAL NOTES, LEGEND, AND KEYNOTES
3	1.02 OVERALL UTILITY
4	1.03 OVERALL GRADING
5	1.04 ROADWAY TYPICAL SECTIONS
6	2.00 PLAN & PROFILE - COPPER CREST ROAD
7	3.00 EARTHWORK & SECTIONS - COPPER CREST ROAD
8	4.00 EROSION CONTROL PLAN - COPPER CREST ROAD
9	5.00 STORM DRAIN DETAILS
10	5.01 WATER DETAILS
11	5.02 WATER DETAILS
12	5.10 ELECTRICAL DETAILS
13	5.11 SEWER DETAILS
14	5.12 MISCELLANEOUS DETAILS
15	5.20 MISCELLANEOUS DETAILS
16	6.00 DRY UTILITY PLAN - COPPER CREST ROAD



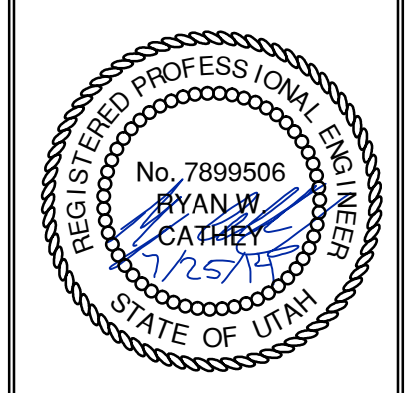
NO.	BY	DATE	REVISIONS
1	RWC	5/27/2014	LOW K DESIGN
2	RWC	7/23/2014	CONTRACT COMMENTS

CAUTION
 The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these plans, and must be approved by the preparer of these plans.

SUMMIT EDEN PHASE 1C
CIVIL TITLE SHEET

DATE SUBMITTED: 12/17/2013
 PREPARED FOR: SUMMIT, LLC

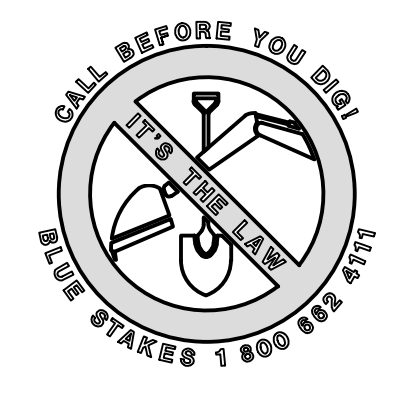
NV5
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 6217 SOUTH STATE STREET, SUITE 200
 MURRAY, UT 84107
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SHEET NUMBER
1.00

SCALE
 VERTICAL: 1" = 8'
 HORIZONTAL: 1" = 3000'

JOB NUMBER
SLB079306



BOWDEN
 XREFS:

GENERAL NOTES

- 1. ALL CONSTRUCTION MUST STRICTLY FOLLOW THE STANDARDS AND SPECIFICATIONS SET FORTH BY: GOVERNING UTILITY MUNICIPALITY, GOVERNING CITY OR COUNTY (IF UN-INCORPORATED), INDIVIDUAL PRODUCT MANUFACTURERS, THE DESIGN ENGINEER, AND AMERICAN PUBLIC WORKS ASSOCIATION (APWA)...

GENERAL NOTES CONT.

- 27. CONTRACTOR SHALL BE SKILLED AND REGULARLY ENGAGED IN THE GENERAL CLASS AND TYPE OF WORK CALLED FOR IN THE PROJECT PLANS AND SPECIFICATIONS...

UTILITY NOTES

- 1. CONTRACTOR SHALL COORDINATE LOCATION OF NEW "DRY UTILITIES" WITH THE APPROPRIATE UTILITY COMPANY, INCLUDING BUT NOT LIMITED TO: TELEPHONE SERVICE, GAS SERVICE, CABLE, POWER, INTERNET.

EROSION CONTROL GENERAL NOTES:

THE CONTRACTOR TO USE BEST MANAGEMENT PRACTICES FOR PROVIDING EROSION CONTROL FOR CONSTRUCTION OF THIS PROJECT. ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO WEBER COUNTY ORDINANCES AND ALL WORK SHALL BE SUBJECT TO INSPECTION BY THE COUNTIES...

LEGEND:

Table with columns: SYMBOL / LINETYPE, DESCRIPTION, and DETAIL. Lists various pipe types (HDPE, CLUII RCP, PVC, etc.) and their corresponding details.

NOTE: LEGEND MAY CONTAIN SYMBOLS THAT ARE NOT USED IN PLAN SET.

EROSION CONTROL GENERAL NOTES CONT.:

- THE CONTRACTOR IS REQUIRED BY STATE AND FEDERAL REGULATIONS TO PREPARE A STORM WATER POLLUTION PREVENTION PLAN AND FILE A "NOTICE OF INTENT" WITH THE UTAH DIVISION OF WATER QUALITY.

SEDIEMENT TRACKED ON PAVED ROADS MUST BE CLEANED UP AS SOON AS PRACTICAL, BUT IN NO CASE LATER THAN THE END OF THE NORMAL WORK DAY.

- EXPOSED SLOPES: ANY EXPOSED SLOPE THAT WILL REMAIN UNTOUCHED FOR LONGER THAN 14 DAYS MUST BE STABILIZED BY ONE OR MORE OF THE FOLLOWING METHODS: A) SPRAYING DISTURBED AREAS WITH A TACKIFIER VIA HYDROSEED

SCOPE OF WORK: PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

- HATCHING INDICATES AREAS TO RECEIVE 4" TOPSOIL AND TO BE SEEDED FOR NATURAL VEGETATION*. AREAS RECEIVING SEEDING FOR NATURAL REVEGETATION MUST BE COVERED WITH AN EROSION CONTROL BLANKET AFTER THE FINAL GRADING AND SEEDING ARE FINISHED.

KEYNOTE CALLOUTS

- 1) CONNECT TO EXISTING WATER STUB WITH HDPE ELECTRO FUSION COUPLING
2) 8" 22.5" DI BEND PER APWA PLAN NO. 561,562
3) 8" 45" DI BEND PER APWA PLAN NO 561,562

Small table with columns: NO, BY, DATE, REVISIONS, COMMENTS. Includes revision 1 dated 5/27/2014.

SUMMIT EDEN PHASE 1C
GENERAL NOTES, LEGEND, AND KEYNOTES
DATE SUBMITTED: 12/17/2013
PREPARED FOR: SUMMIT, LLC

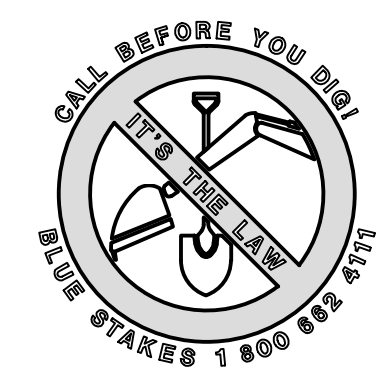
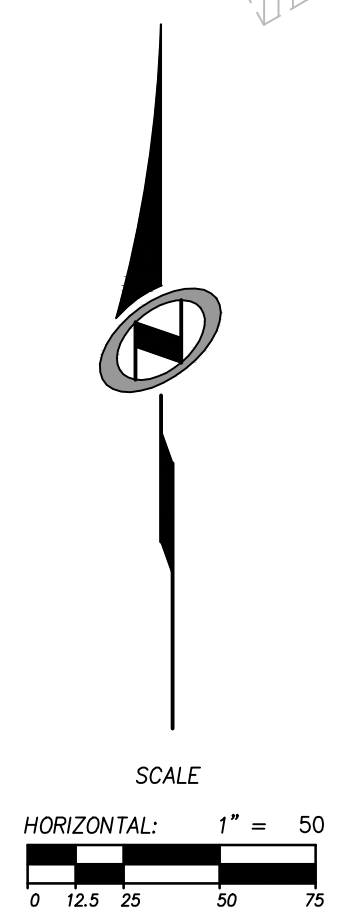
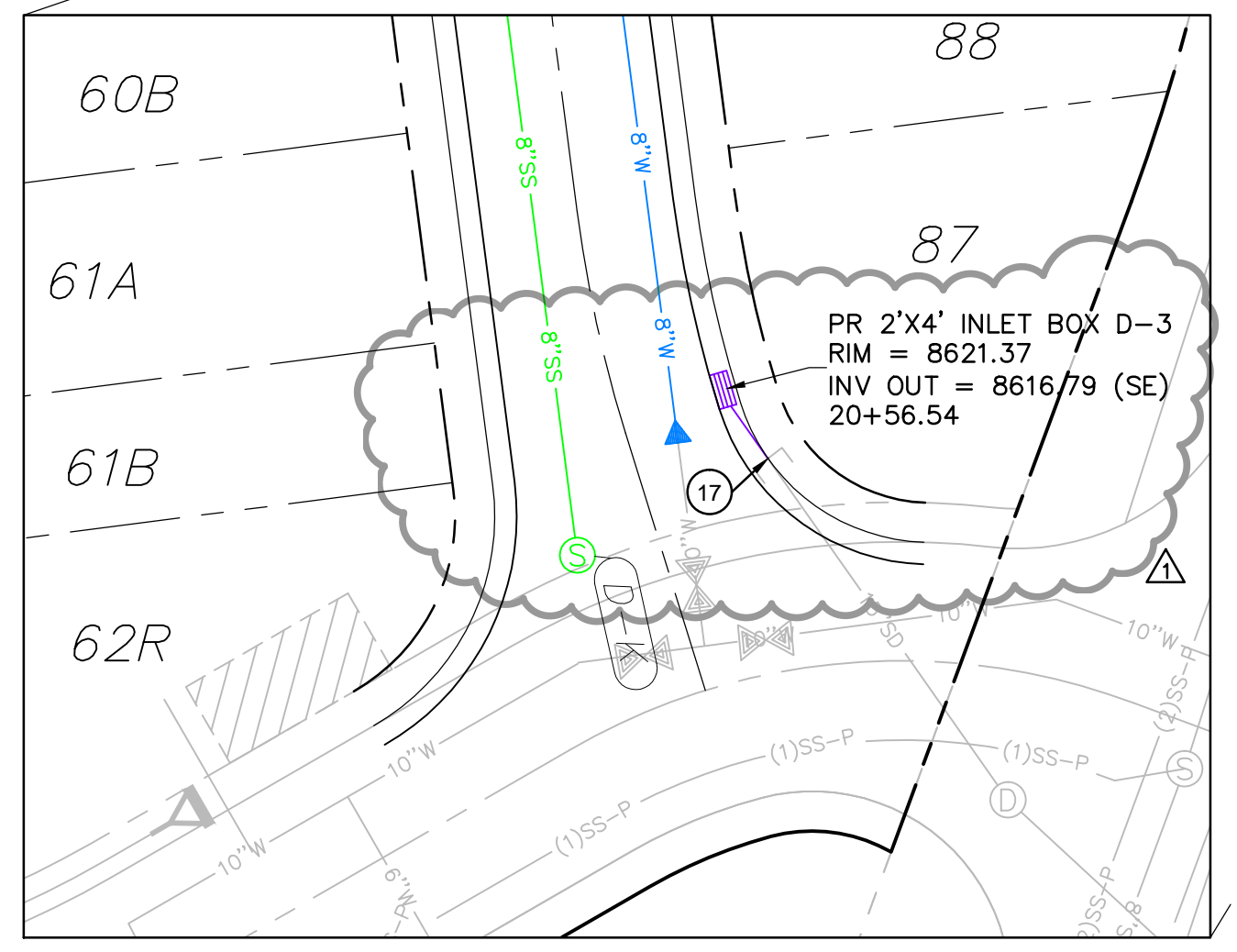
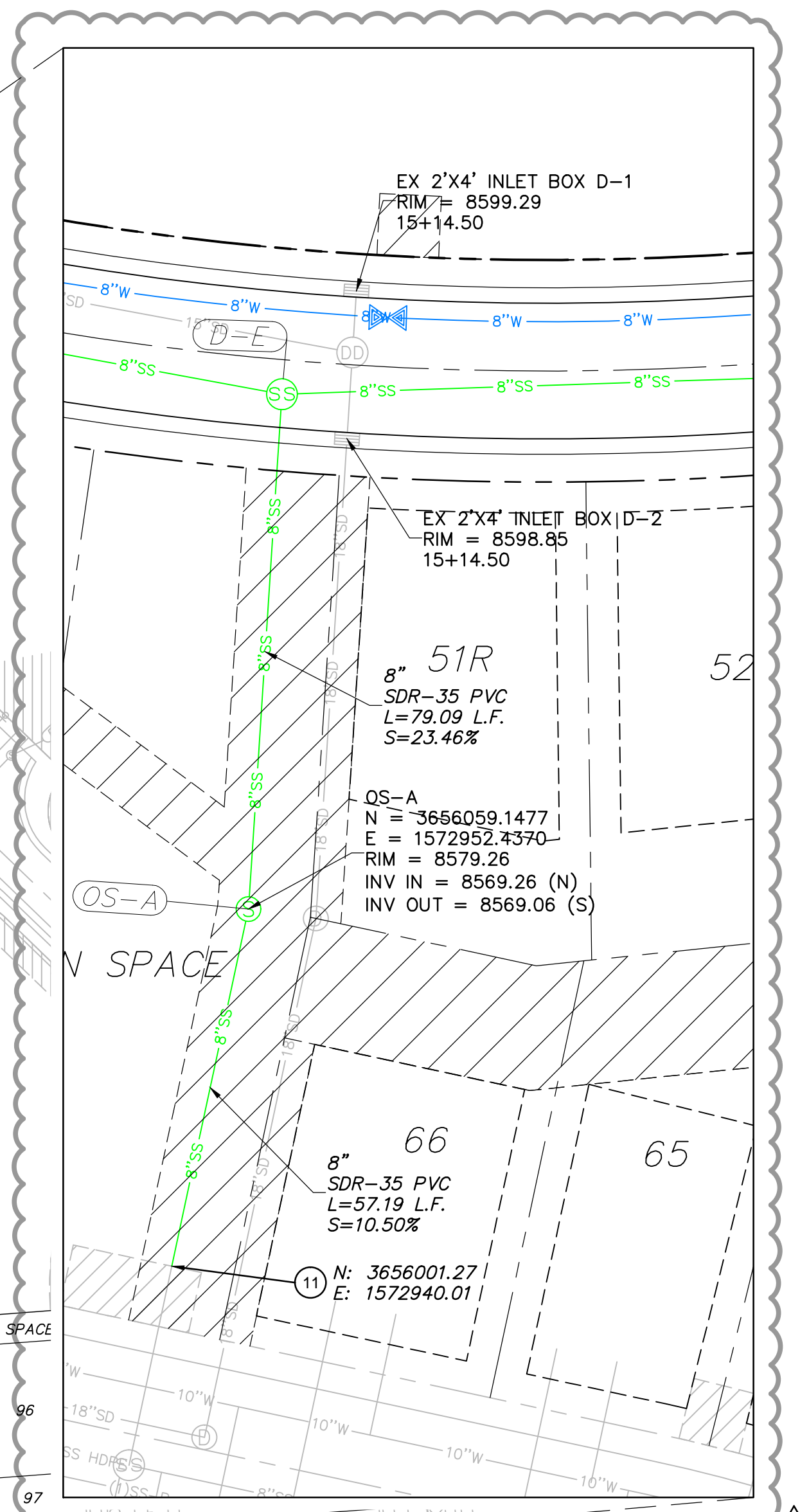
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Professional Engineer Seal for Bryan W. Cather, No. 7899506, State of Utah.



DATE SUBMITTED: 12/17/2013

PREPARED FOR: SUMMIT, LLC



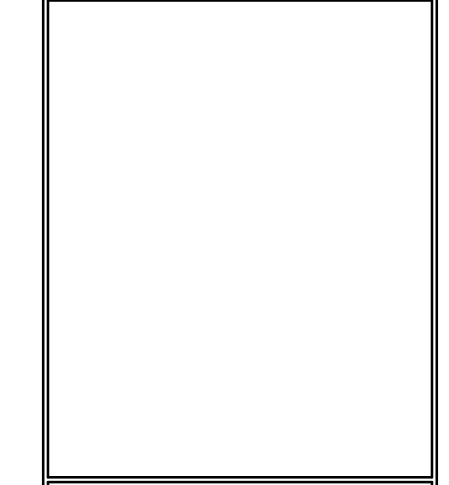
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1	RAC	5/27/2014	LOW K DESIGN
2	RAC	7/23/2014	COUNT COMMENTS

SUMMIT EDEN PHASE 1C
OVERALL UTILITY PLAN

DATE SUBMITTED: 12/17/2013

PREPARED FOR: SUMMIT, LLC

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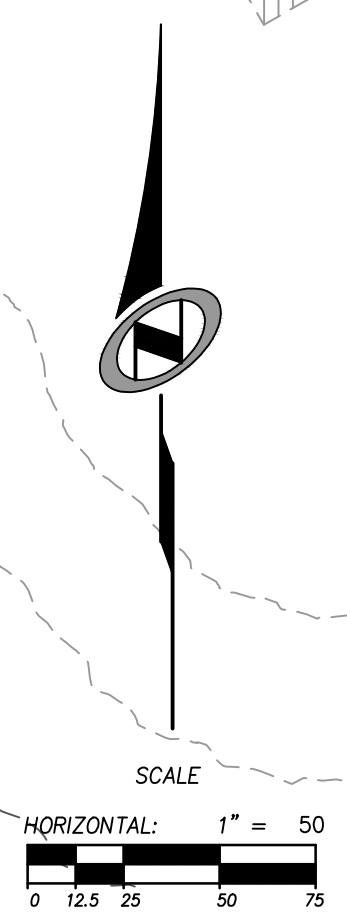
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SCALE
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 HORIZONTAL: 1" = 40'

JOB NUMBER
SLB079306

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CALUTION



NO.	BY	DATE	REVISIONS
1	RWC	5/27/2014	LOW F. DESIGN
2	RWC	7/23/2014	COUNT COMMENTS

CAUTION
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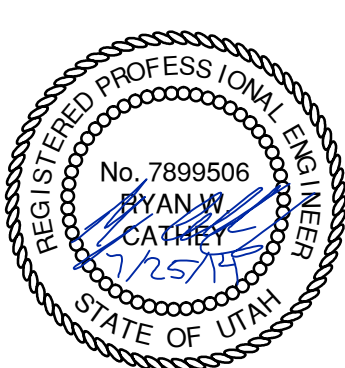
SUMMIT EDEN PHASE 1C

OVERALL GRADING PLAN

DATE SUBMITTED: 12/17/2013

PREPARED FOR: SUMMIT, LLC

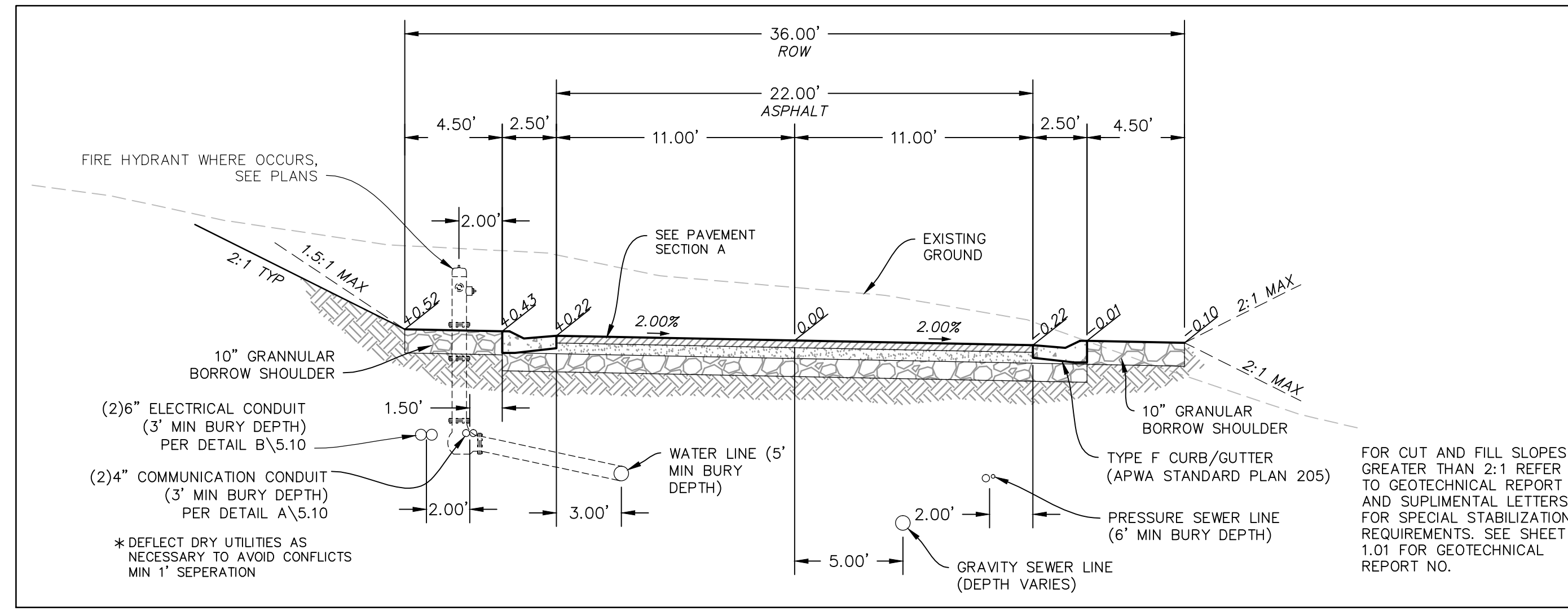
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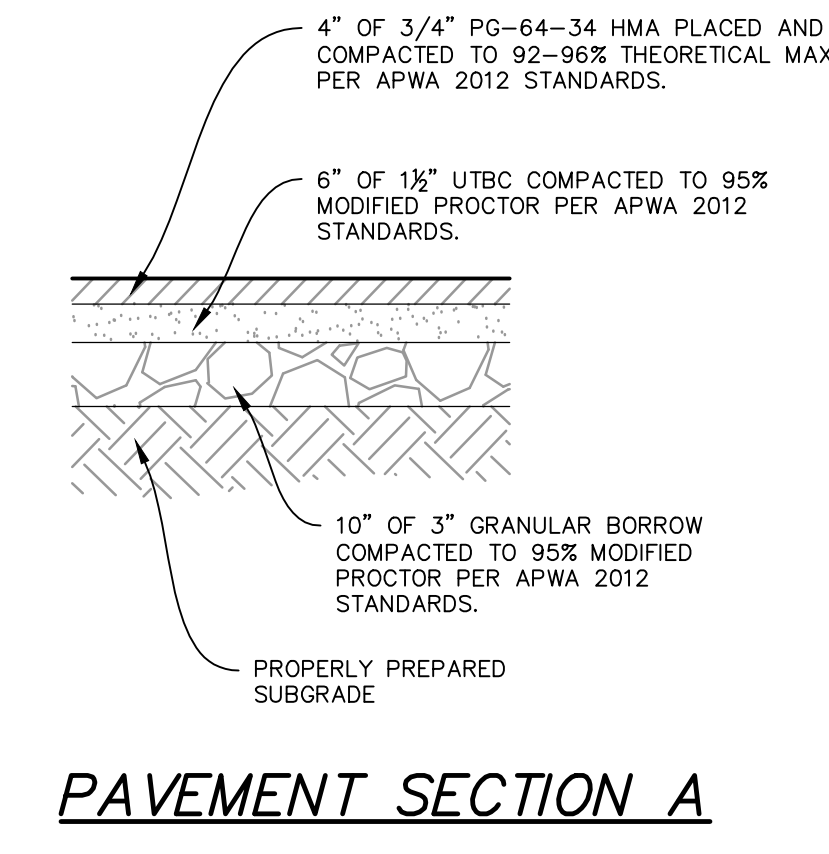
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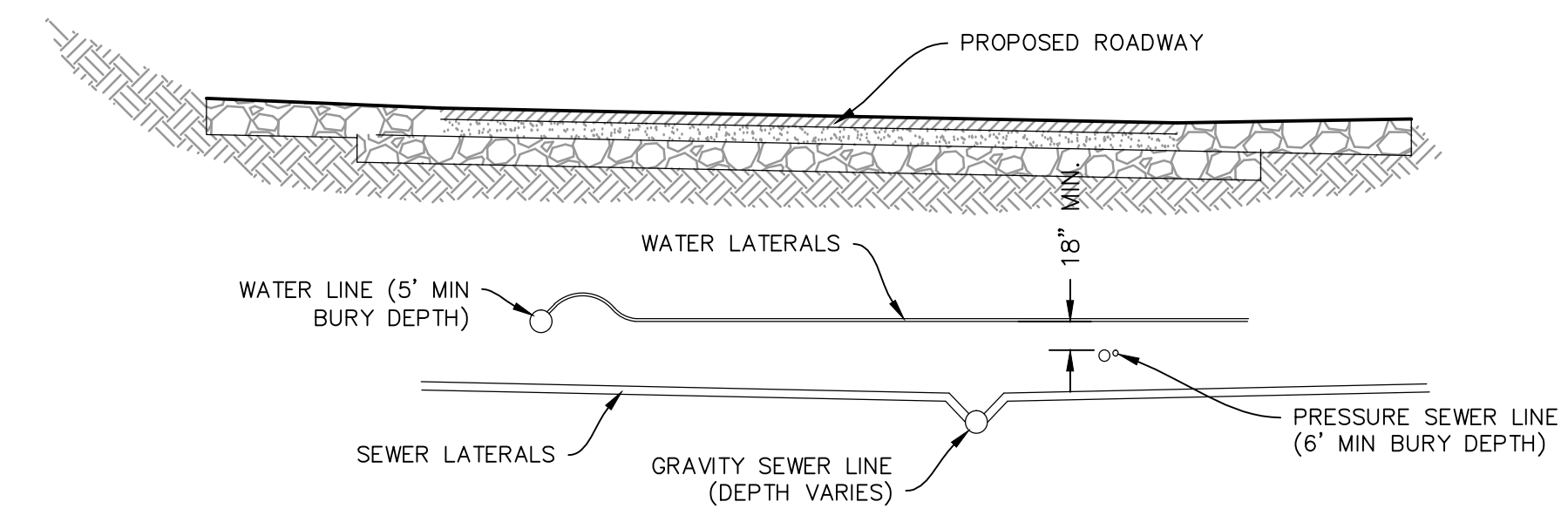
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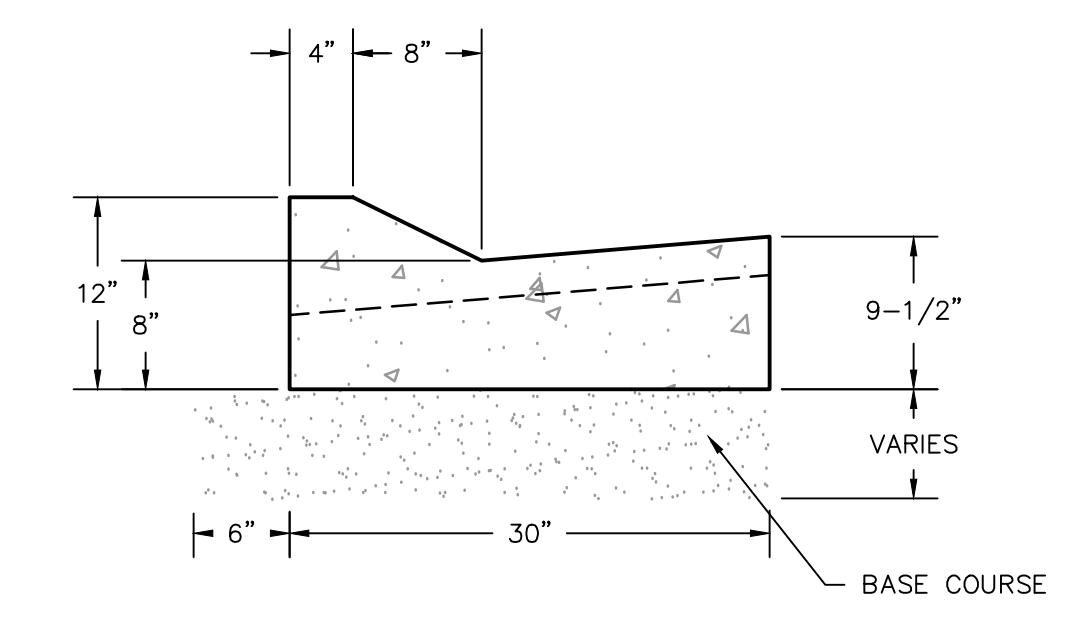
TYPICAL ROADWAY SECTION A-A
 (36' RIGHT OF WAY SECTION)
 STA: 10+00.00 TO 20+88.66



PAVEMENT SECTION A



SECTION



TYPE F CURB & GUTTER

NO.	BY	DATE	REVISIONS
1	RMC	5/27/2014	LOW F. DESIGN
2	RMC	7/23/2014	COUNT COMMENTS

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SUMMIT EDEN PHASE 1C
ROADWAY TYPICAL SECTIONS

DATE SUBMITTED: 12/17/2013

PREPARED FOR: SUMMIT, LLC

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REGISTERED PROFESSIONAL ENGINEER
 No. 7899506
 RYAN W. CATHEY
 12/21/13
 STATE OF UTAH

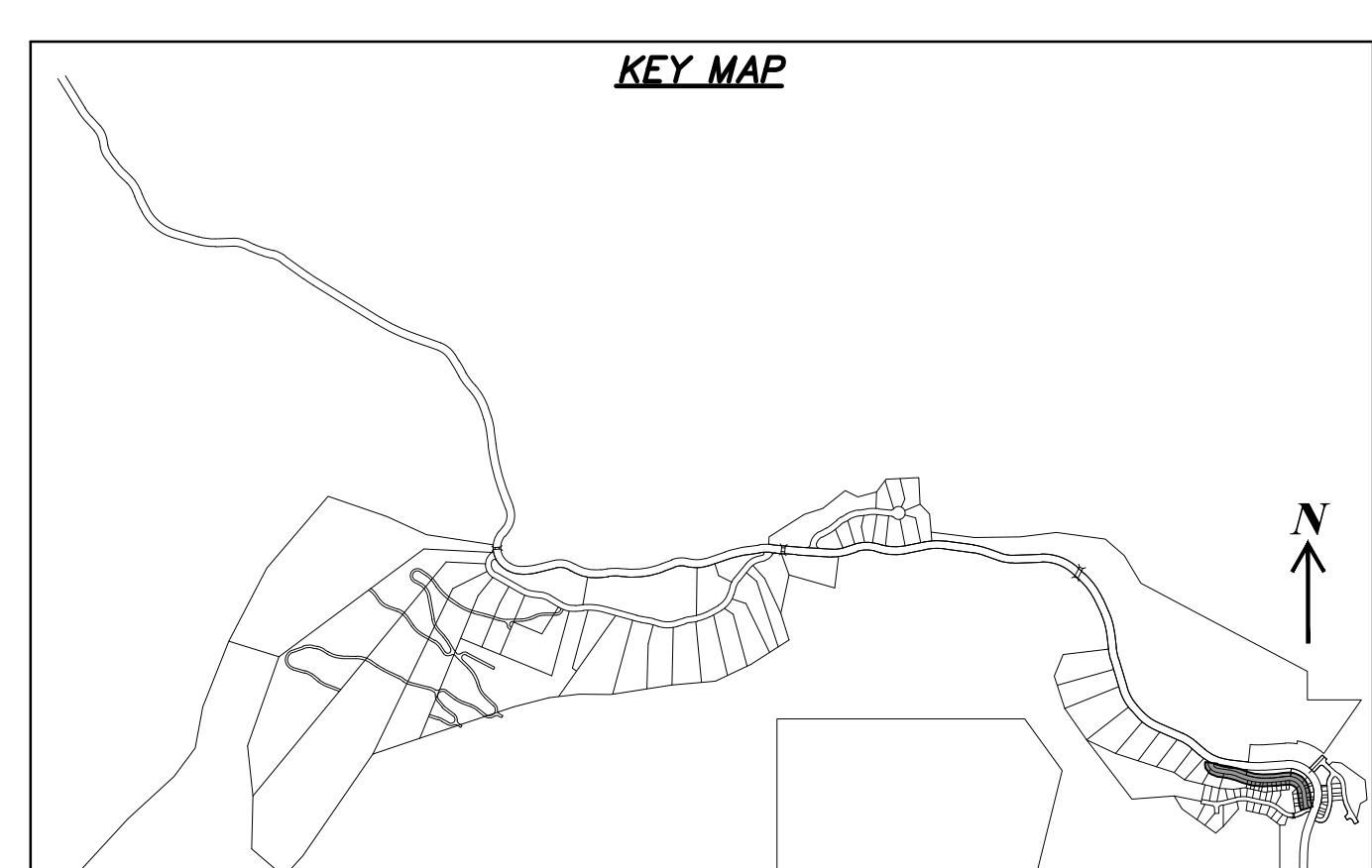
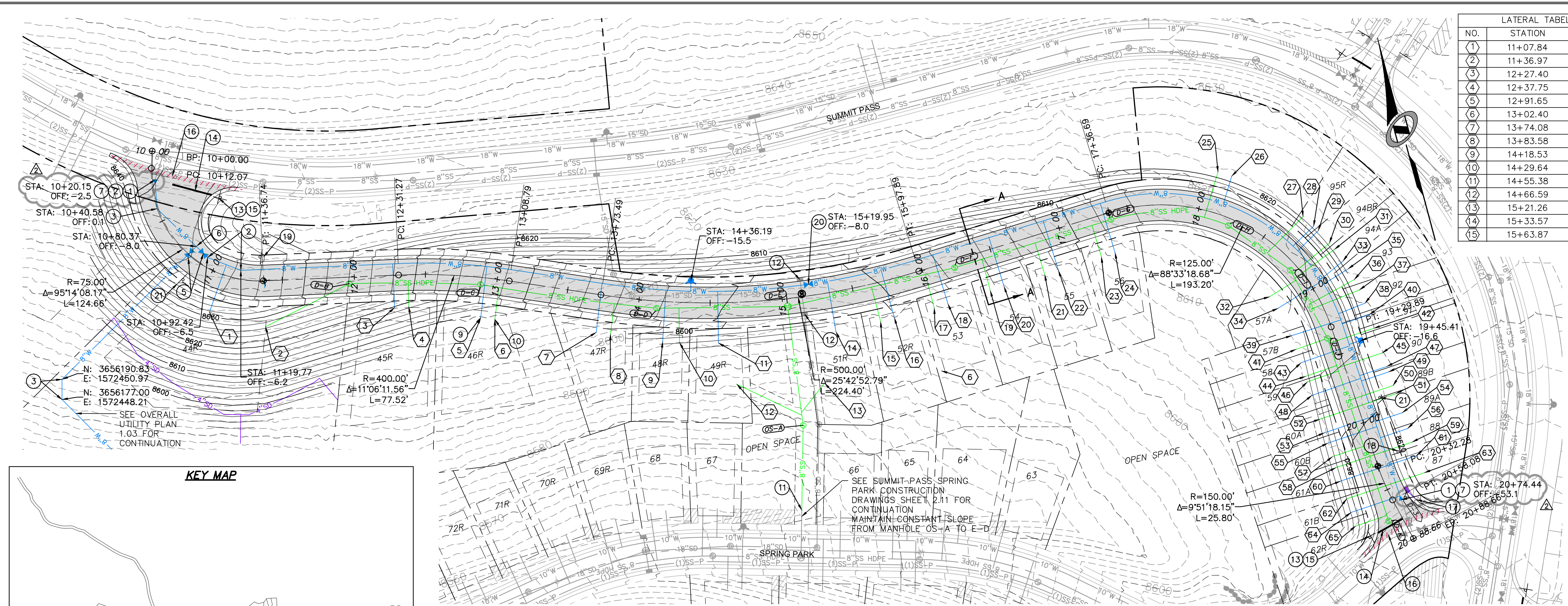
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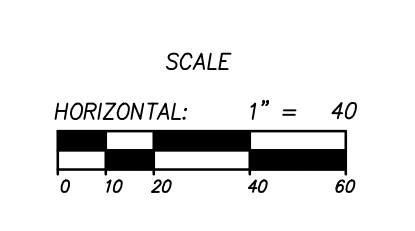
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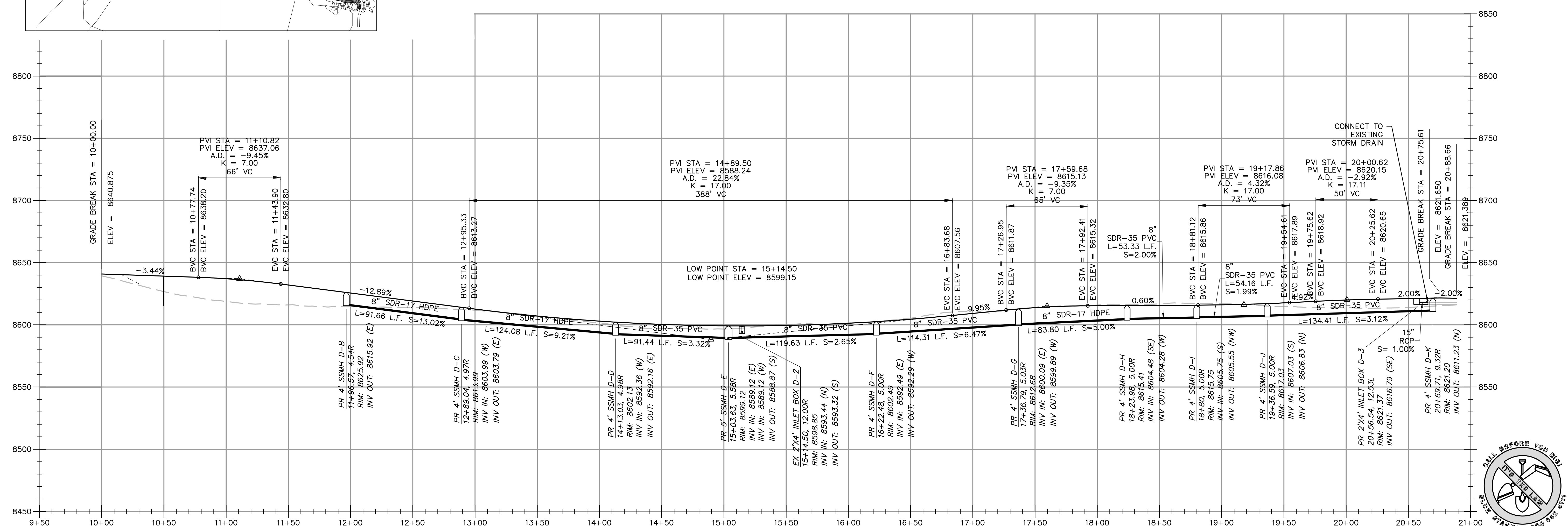


COPPER CREST ROAD
 STA: 10+00.00 TO 20+88.66



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4	12+37.75	22
5	12+91.65	28
6	13+02.40	28
7	13+74.08	26
8	13+83.58	26
9	14+18.53	28
10	14+29.64	28
11	14+55.38	28
12	14+66.59	57
13	15+21.26	62
14	15+33.57	28
15	15+63.87	27

16	15+73.36	27
17	16+00.64	28
18	16+10.64	28
19	16+41.59	28
20	16+51.59	28
21	16+81.22	28
22	16+91.22	29
23	17+22.67	28
24	17+32.67	28
25	18+06.59	-28
26	18+14.76	-28
27	18+61.79	-28
28	18+69.94	-28
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65	20+61.82	31



SUMMIT EDEN PHASE 1C
PLAN AND PROFILE
COPPER CREST ROAD

REVISIONS:
 NO. BY DATE
 1 RMC 5/27/2014
 2 RMC 7/23/2014

DATE SUBMITTED: 12/17/2013

PREPARED FOR: SUMMIT, LLC

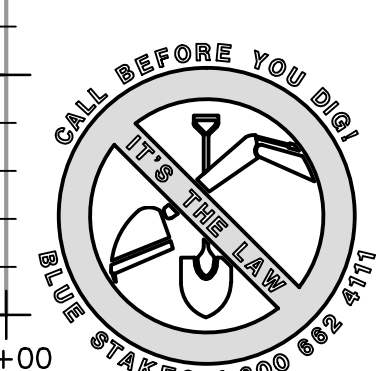
NV5
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 MURRAY, UT 84107
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REGISTERED PROFESSIONAL ENGINEER
 No. 7899506
 RYAN W. CATHER
 12/17/13
 STATE OF UTAH

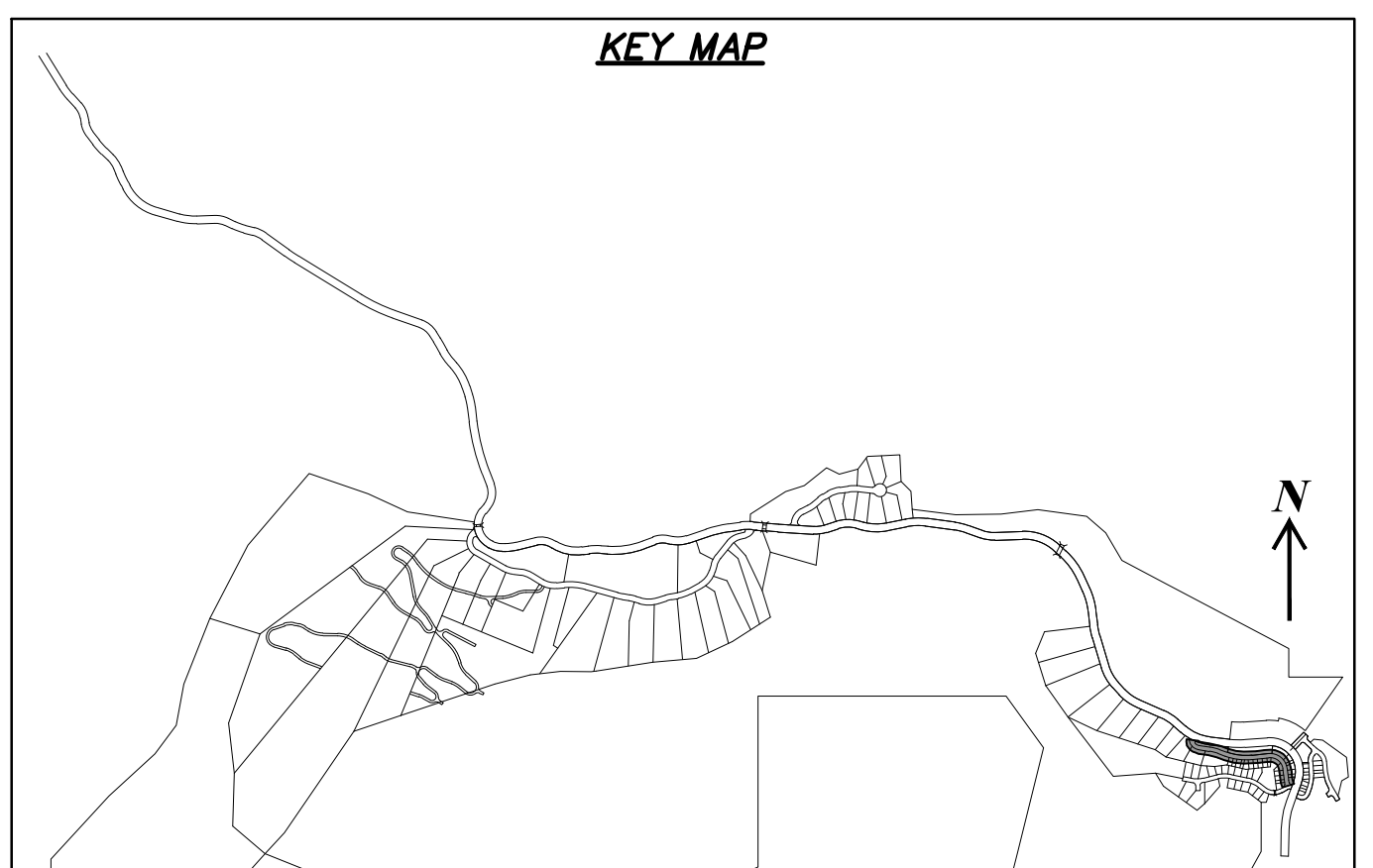
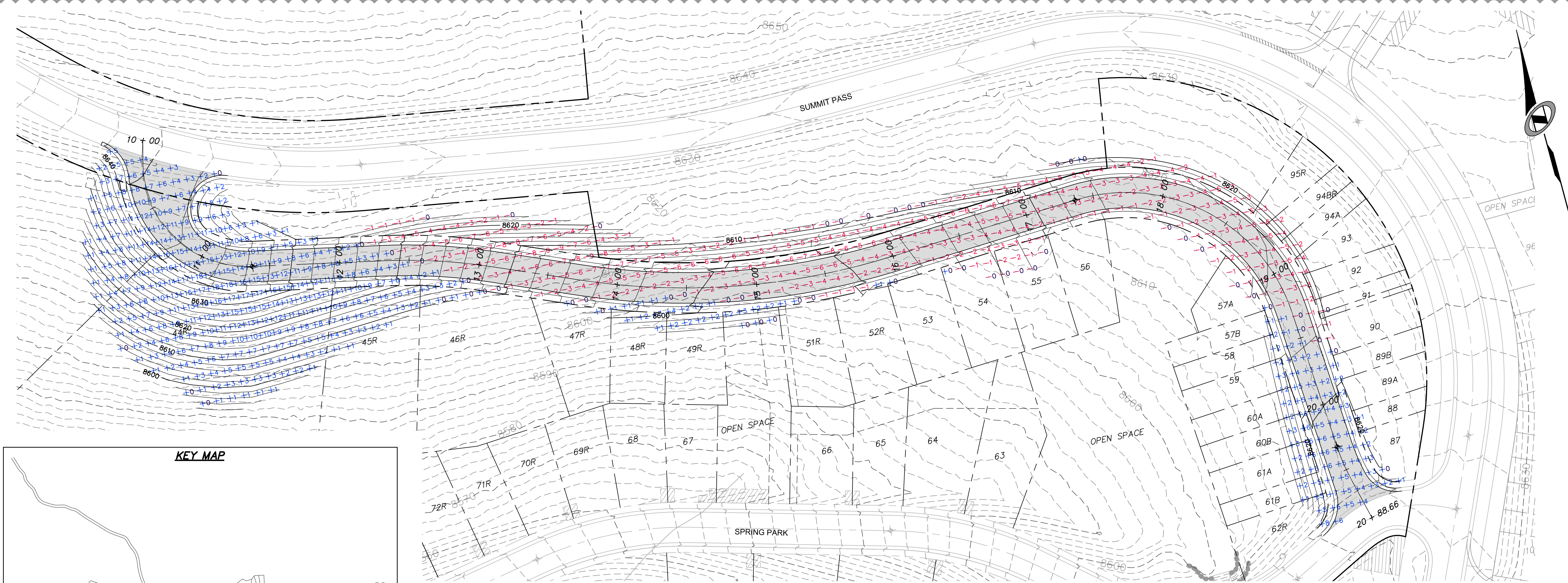
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2.00

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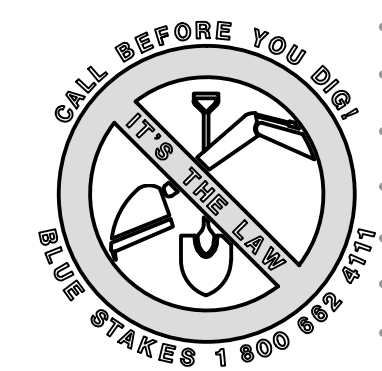
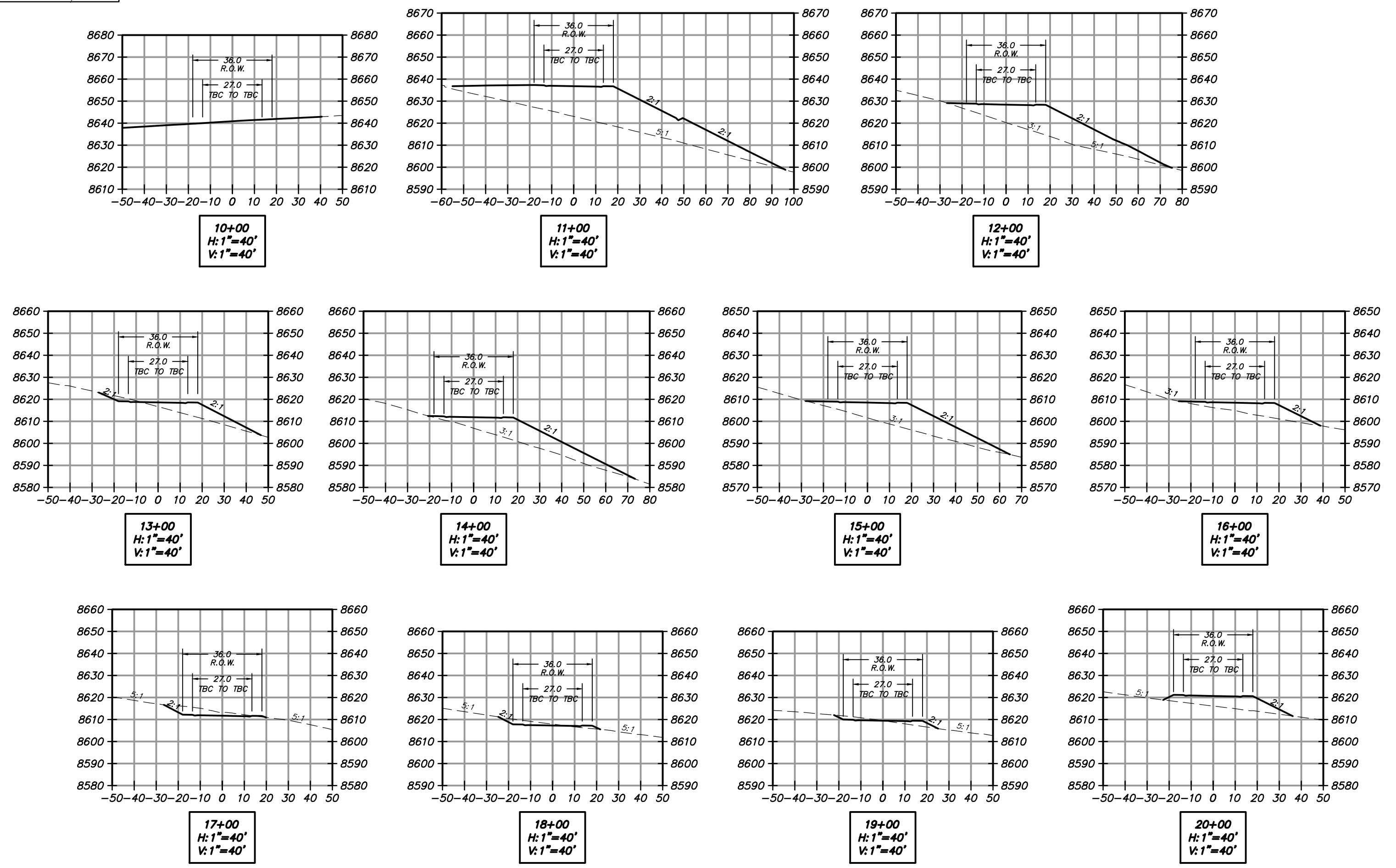
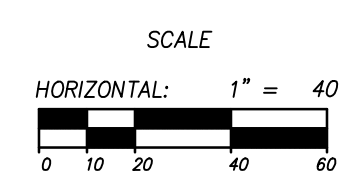
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SLB079306



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COPPER CREST ROAD
 STA: 10+00.00 TO 20+88.66



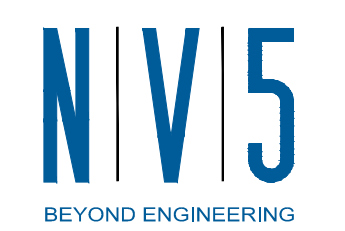
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1	5/27/2014	RWC	LOW E DESIGN
2	7/23/2014	RWC	COUNT COMMENTS

CAUTION: The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these plans, and must be approved by the preparer of these plans.

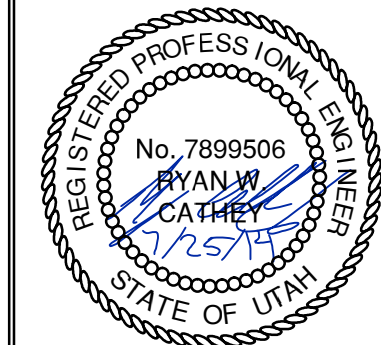
SUMMIT EDEN PHASE 1C
EARTHWORK AND SECTIONS
COPPER CREST ROAD

DATE SUBMITTED: 12/17/2013

PREPARED FOR: SUMMIT, LLC



5217 SOUTH STATE STREET, SUITE 200
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SHEET NUMBER
3.00

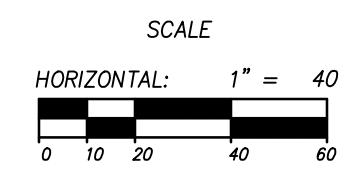
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JOB NUMBER
SLB079306

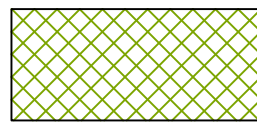
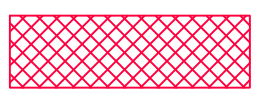




BOWDEN
 XREFS:



COPPER CREST ROAD
 STA: 10+00.00 TO 20+88.66



LEGEND

-  HATCHING INDICATES AREAS TO RECEIVE 4" TOPSOIL AND TO BE SEED FOR NATURAL VEGETATION*. AREAS RECEIVING SEEDING FOR NATURAL VEGETATION MUST BE COVERED WITH AN EROSION CONTROL BLANKET AFTER THE FINAL GRADING AND SEEDING ARE FINISHED. INSTALL NORTH AMERICAN GREEN SC-150 BLANKET OR APPROVED EQUAL. FOLLOW MANUFACTURER'S SPECIFICATIONS. INSTALL NORTH AMERICAN GREEN P300 EROSION CONTROL BLANKET ON ALL SLOPES GREATER THAN 1.5:1.
-  INSTALL 15' X 50' VEHICLE WASH DOWN AREA WITH 1"-2.5" COARSE AGGREGATE PLACED A MINIMUM 8" THICK. SUPPLY WATER FOR VEHICLE WASH DOWN.
-  STABILIZED CONSTRUCTION ENTRANCE FOR SITE INGRESS/EGRESS. IF ALTERNATE ACCESS POINTS ARE APPROVED BY OWNER, ADDITIONAL STABILIZED CONSTRUCTION ENTRANCES WILL BE REQUIRED.
-  INSTALL INLET PROTECTION IN FORM OF CONCRETE BLOCKS / FILTER CLOTH / GRAVEL OR SILT SACK AT EXISTING AND PROPOSED CATCH BASINS AS SHOWN ON PLAN.
-  INSTALL SILT FENCE ALONG DOWN GRADIENT LIMITS OF DISTURBANCE AS SHOWN ON PLAN.
-  INSTALL ORANGE SAFETY FENCING AROUND OUTER LIMITS OF PROJECT PRIOR TO GRADING.

- * SEED MIXTURE FOR REVEGETATION
- a. MEADOW BROME (RIGOR) 14lb/ac
 - b. ORCHARD GRASS 10lb/ac
 - c. ALFALFA (ADAK) 4lb/ac



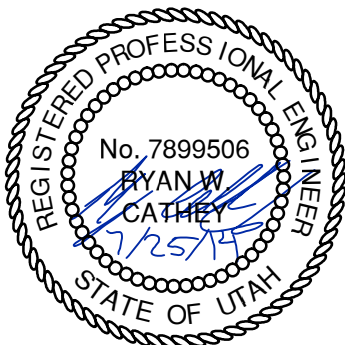
NO.	BY	DATE	REVISIONS
1	RMC	5/27/2014	LOW K DESIGN
2	RMC	7/29/2014	COUNT COMMENTS

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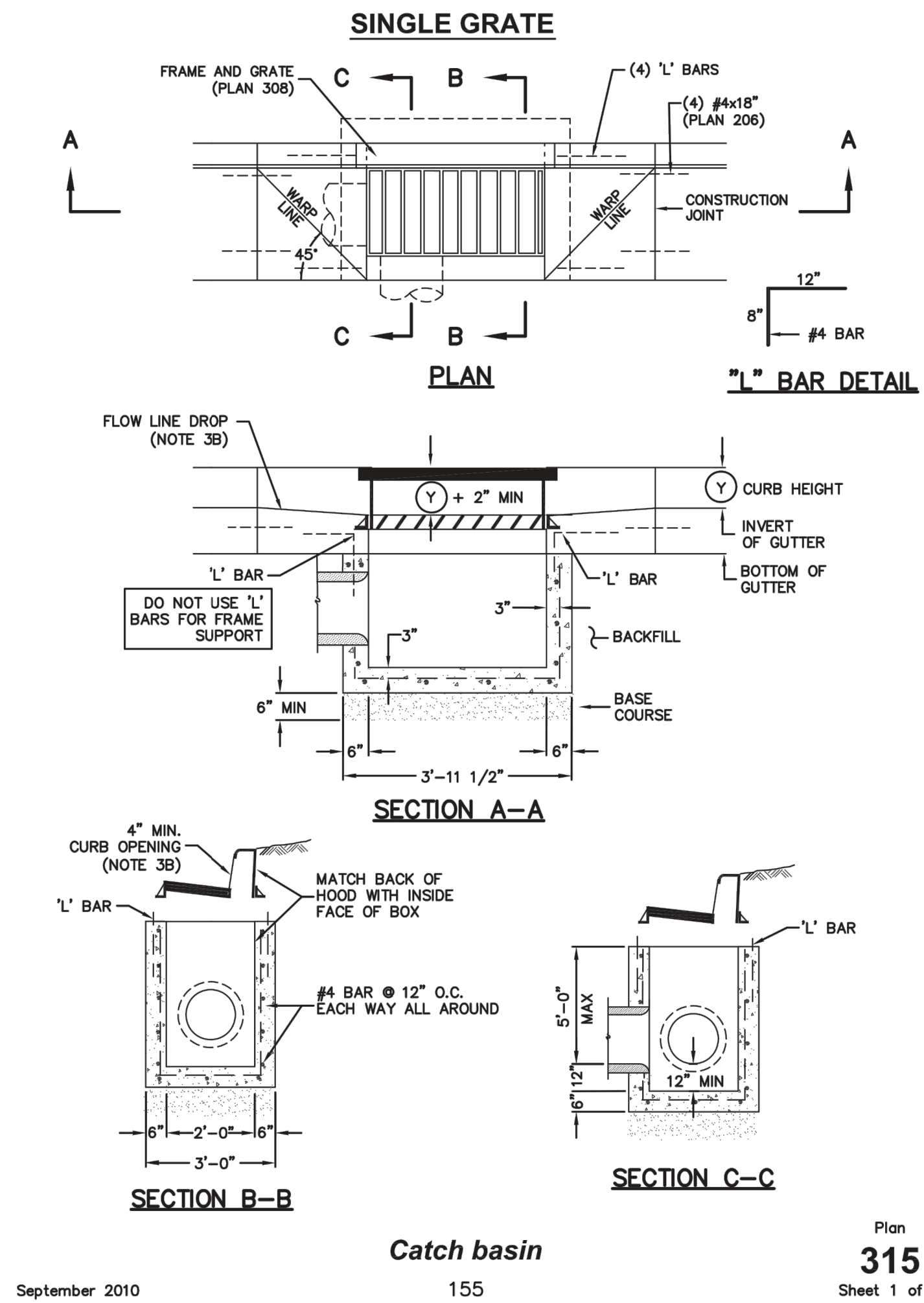
SUMMIT EDEN PHASE 1C
EROSION CONTROL PLAN
COPPER CREST ROAD

PREPARED FOR: SUMMIT, LLC DATE SUBMITTED: 12/17/2013

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SHEET NUMBER	4.00
SCALE	VERTICAL: 1" = 40' HORIZONTAL: 1" = 40'
JOB NUMBER	SLB079306



September 2010

155

Plan
315
Sheet 1 of 2

SUMMIT EDEN PHASE 1C
STORM DRAIN DETAILS

NO.	BY	DATE	REVISIONS
1	RMC	5/27/2014	LOW K DESIGN
2	RMC	7/23/2014	COUNT COMMENTS

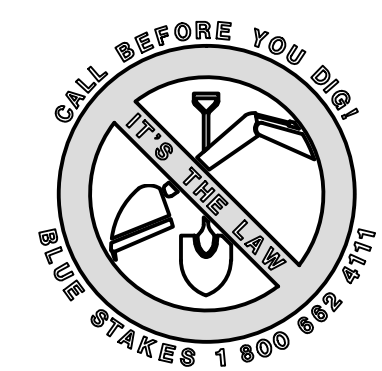
CAUTION
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DATE SUBMITTED: 12/17/2013

PREPARED FOR: SUMMIT, LLC

NV5
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6217 SOUTH STATE STREET, SUITE 200
MURRAY, UT 84107
801.743.0300 TEL. 801.743.0300 FAX
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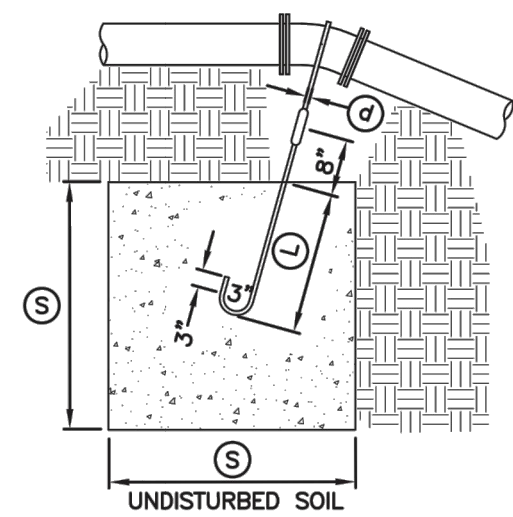
REGISTERED PROFESSIONAL ENGINEER
No. 7899506
RYAN W. CATHEY
12/25/13
STATE OF UTAH



SHEET NUMBER
5.00

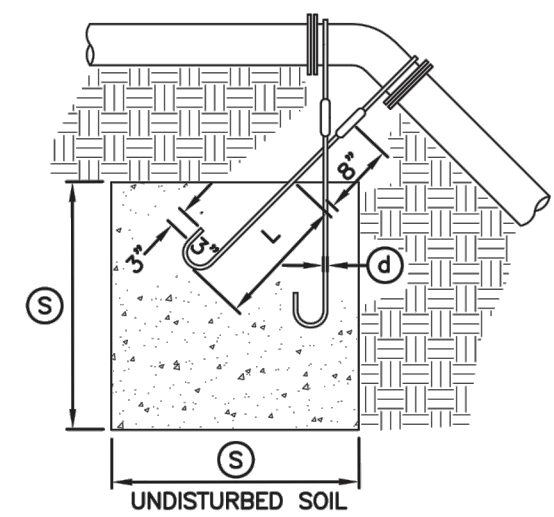
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HORIZONTAL: 1" = N/A

JOB NUMBER
SLB079306



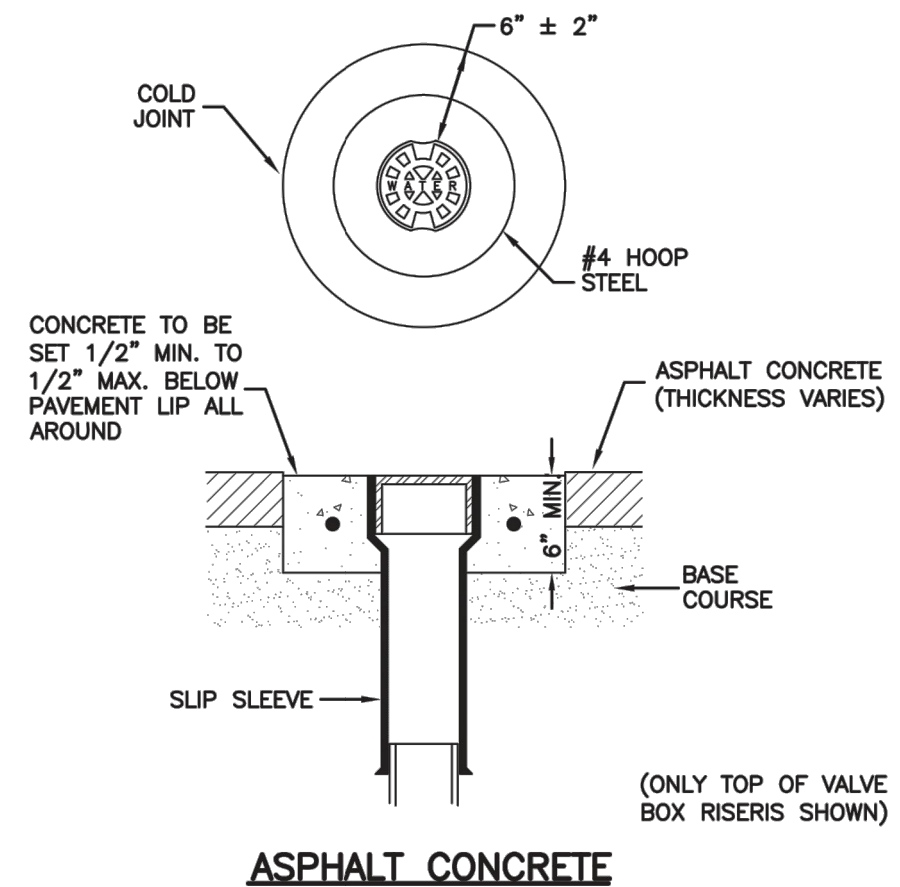
TYPE A RESTRAINT
 FOR 11 1/4" - 22 1/2" VERTICAL BENDS

PIPE SIZE NOMINAL DIAMETER - INCH	VERTICAL BEND IN DEGREES	CONCRETE BLOCKING IN CUBIC FEET	SIDE OF CURVE - FEET	DIAMETER OF SHANK OR REBAR RODS - INCH	DEPTH OF ROD CONCRETE - FEET
4"	11 1/4"	8	2.0	5/8"	1.5
	22 1/2"	15.6	2.5	5/8"	2.0
6"	11 1/4"	15.6	2.5	5/8"	2.0
	22 1/2"	34.3	3.25	5/8"	2.0
8"	11 1/4"	27	3.0	5/8"	2.0
	22 1/2"	64	4.0	5/8"	2.0
12"	11 1/4"	64	4.0	5/8"	2.0
	22 1/2"	125	5.0	3/4"	3.0
16"	11 1/4"	107	4.25	7/8"	3.0
	22 1/2"	216	6.0	7/8"	3.0
20"	11 1/4"	138	5.17	1"	3.5
	22 1/2"	334	6.94	1"	4.0
24"	11 1/4"	240	6.22	1"	4.0
	22 1/2"	478	7.81	1"	4.0
30"	11 1/4"	369	7.17	1"	4.0
	22 1/2"	733	9.02	1"	4.0

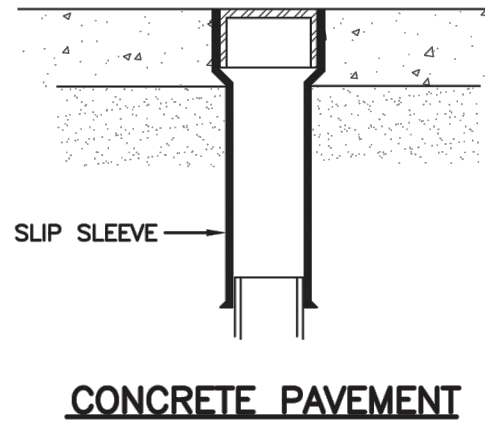


TYPE B RESTRAINT
 FOR 45° VERTICAL BENDS

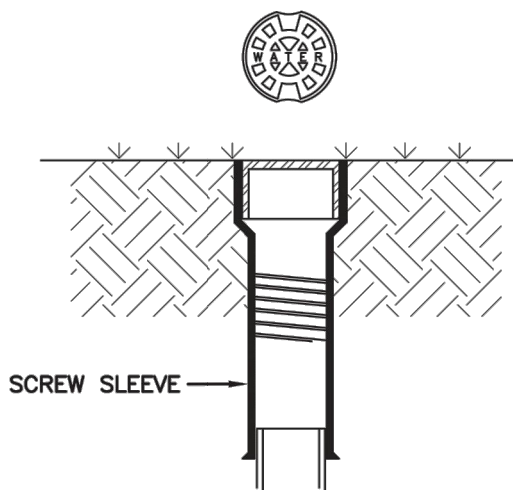
PIPE SIZE NOMINAL DIAMETER - INCH	VERTICAL BEND IN DEGREES	CONCRETE BLOCKING IN CUBIC FEET	SIDE OF CURVE - FEET	DIAMETER OF SHANK OR REBAR RODS - INCH	DEPTH OF ROD CONCRETE - FEET
4"	45°	1	3.0	5/8"	2.0
6"		2.37	4.0	5/8"	2.5
8"		3.97	4.75	5/8"	3.0
12"		9.04	6.25	5/8"	4.0
16"		17.24	7.75	3/4"	4.0
20"		26.52	9.25	3/4"	4.0
24"		37.82	10.07	3/4"	4.0
30"		58.26	11.63	3/4"	4.0



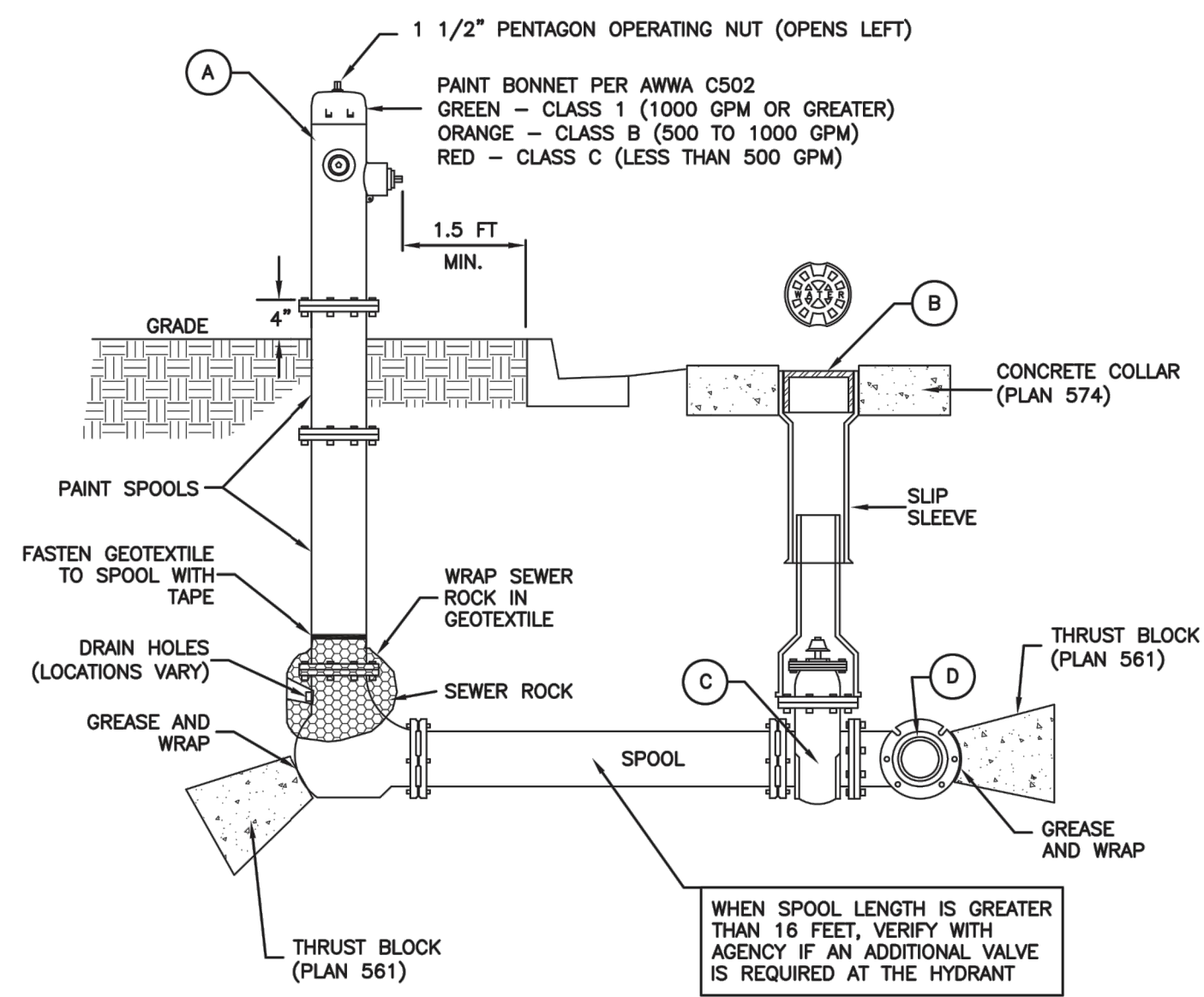
ASPHALT CONCRETE



CONCRETE PAVEMENT



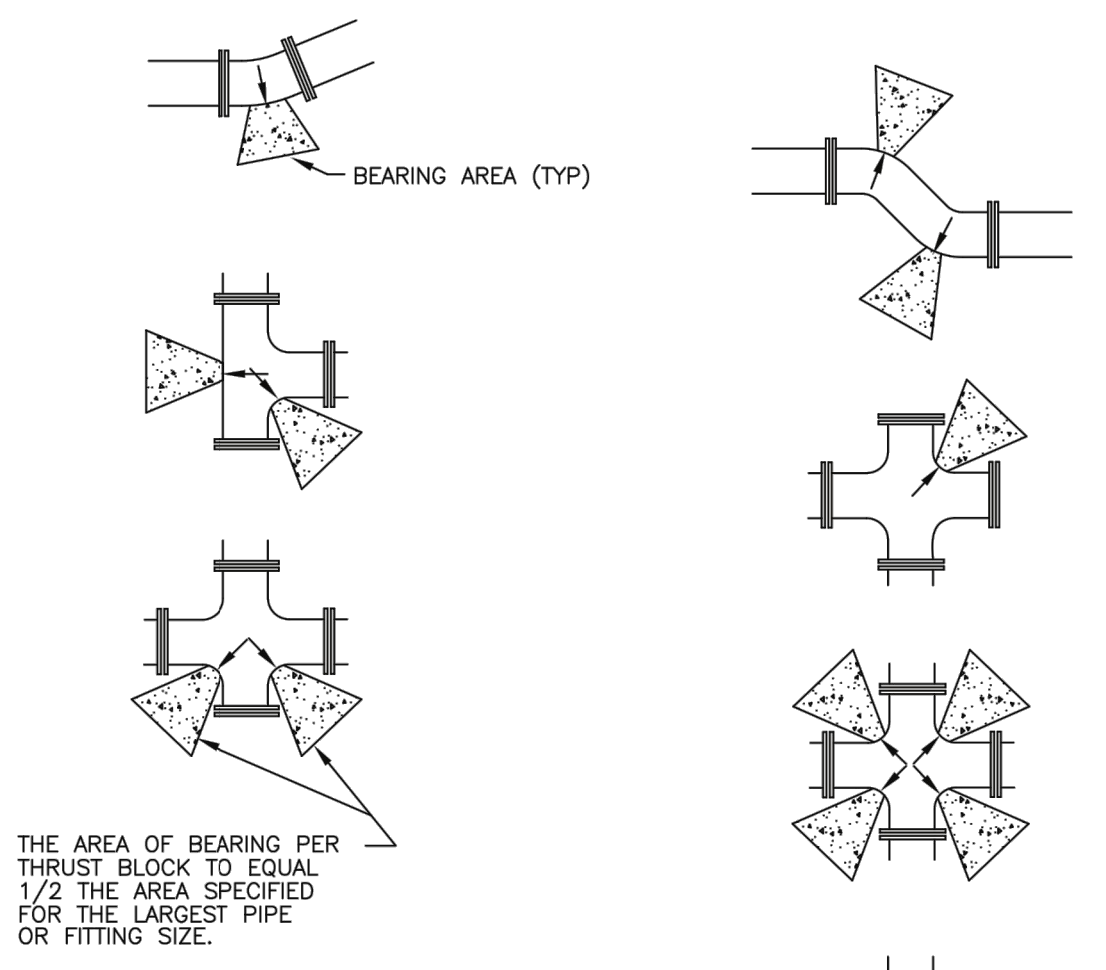
LANDSCAPED AREA



No.	ITEM	DESCRIPTION
(A)	FIRE HYDRANT	AWWA C502
(B)	VALVE BOX WITH LID	2-PIECE CAST IRON
(C)	GATE VALVE WITH 2" X 2" NUT	AWWA C509
(D)	TEE WITH 125 # FLANGE	AWWA C110

SECTION

Plan 562
 Tie-down thrust restraints
 April 1997 269

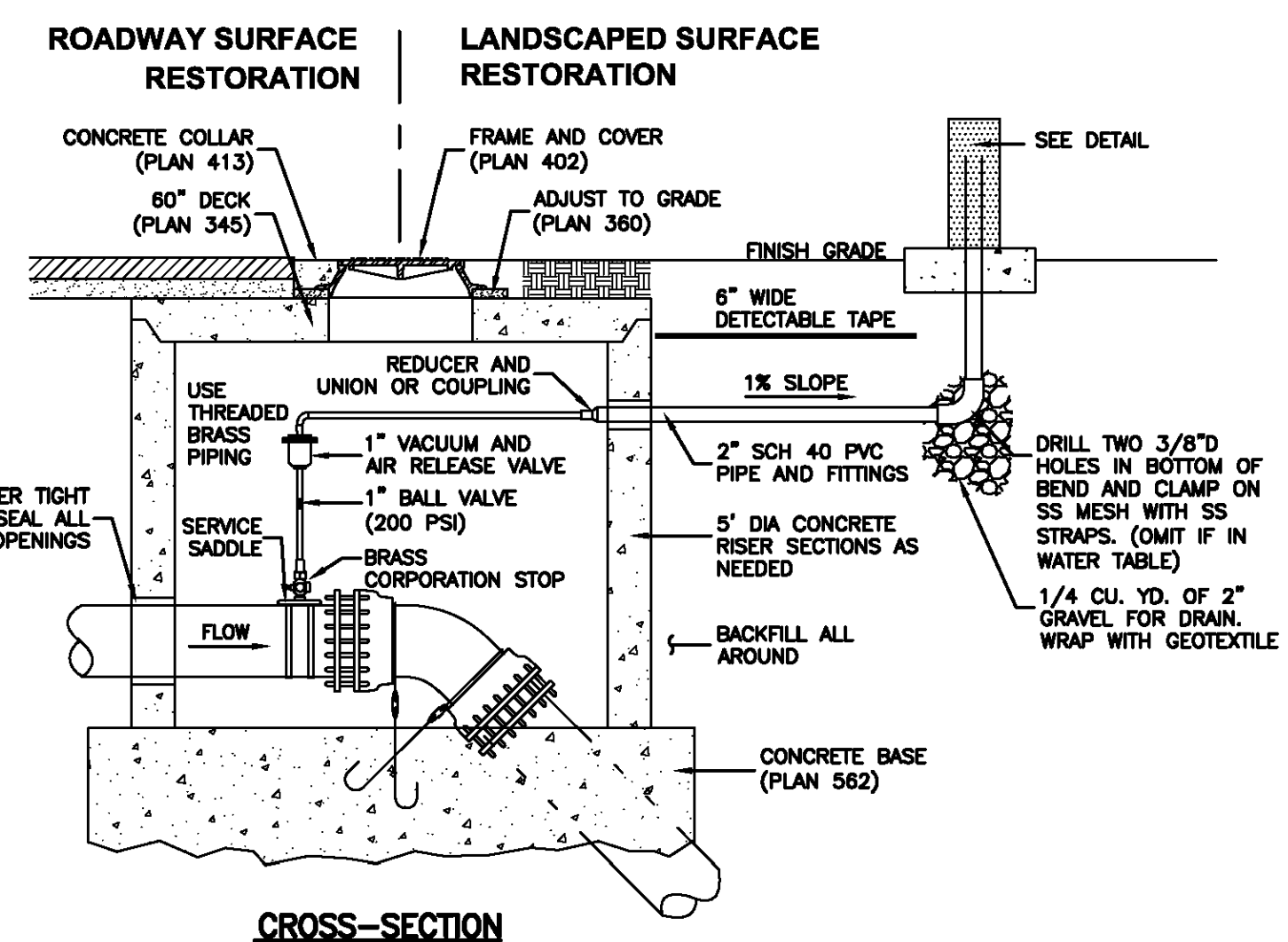


SIZE OF PIPE	TEES, VALVES, DEAD ENDS	90° BENDS	45° BENDS	22 1/2° BENDS	11 1/4° BENDS
4"	2	3	2	2	2
6"	4	5.5	3	1.5	1
8"	6.5	9.5	5	2.75	1.5
12"	14	20	11	5.5	3
14"	19	26.5	14.5	7.5	4
16"	24	34	18.5	9.5	6
20"	27	52	28.5	14.5	16
24"	53	74	41	21	53
30"	81	114	62	32	16

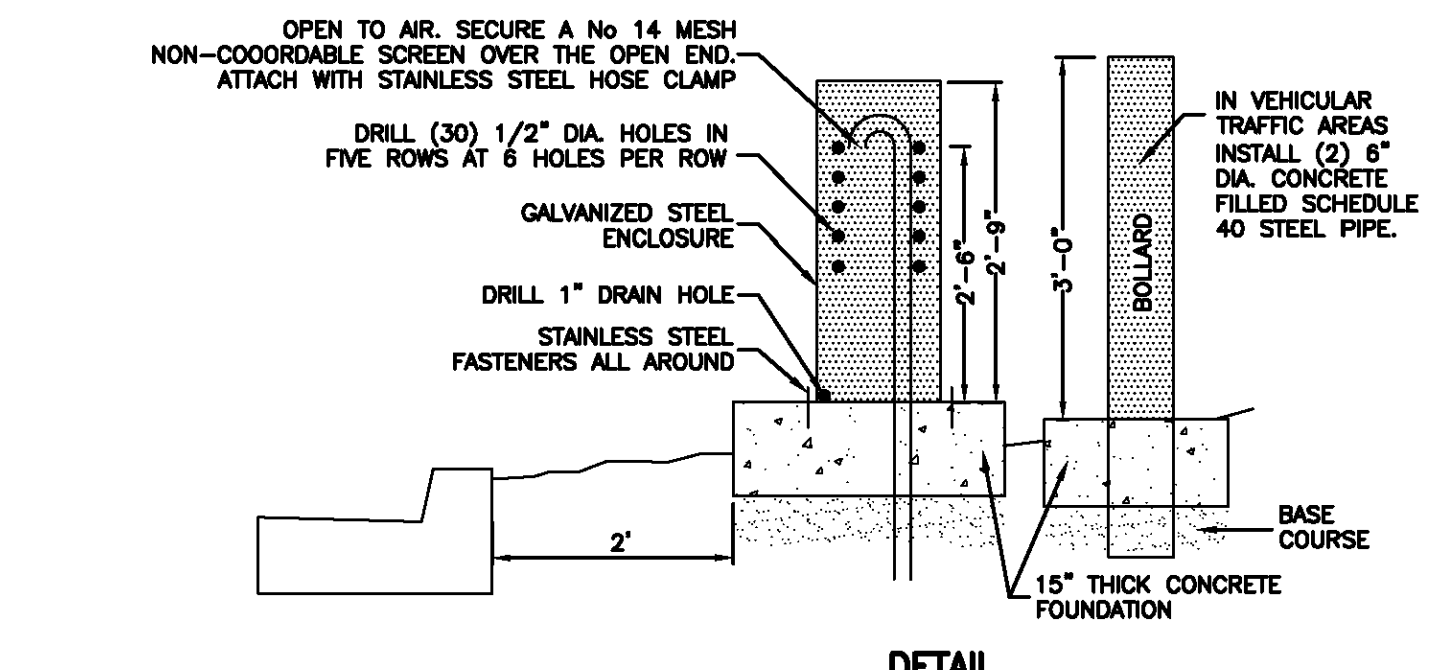
Direct bearing thrust block

Plan No. 561
 April 1997 239

Plan 574
 Cover collar for water valve box
 August 2010 277



CROSS-SECTION



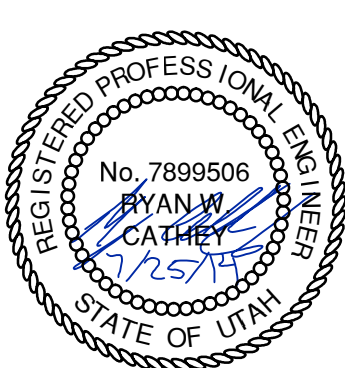
DETAIL

Plan 575
 February 2011 279

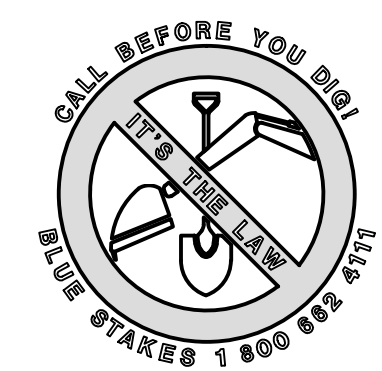
Plan 511
 Fire hydrant with valve
 February 2011 237

SUMMIT EDEN PHASE 1C
WATER DETAILS

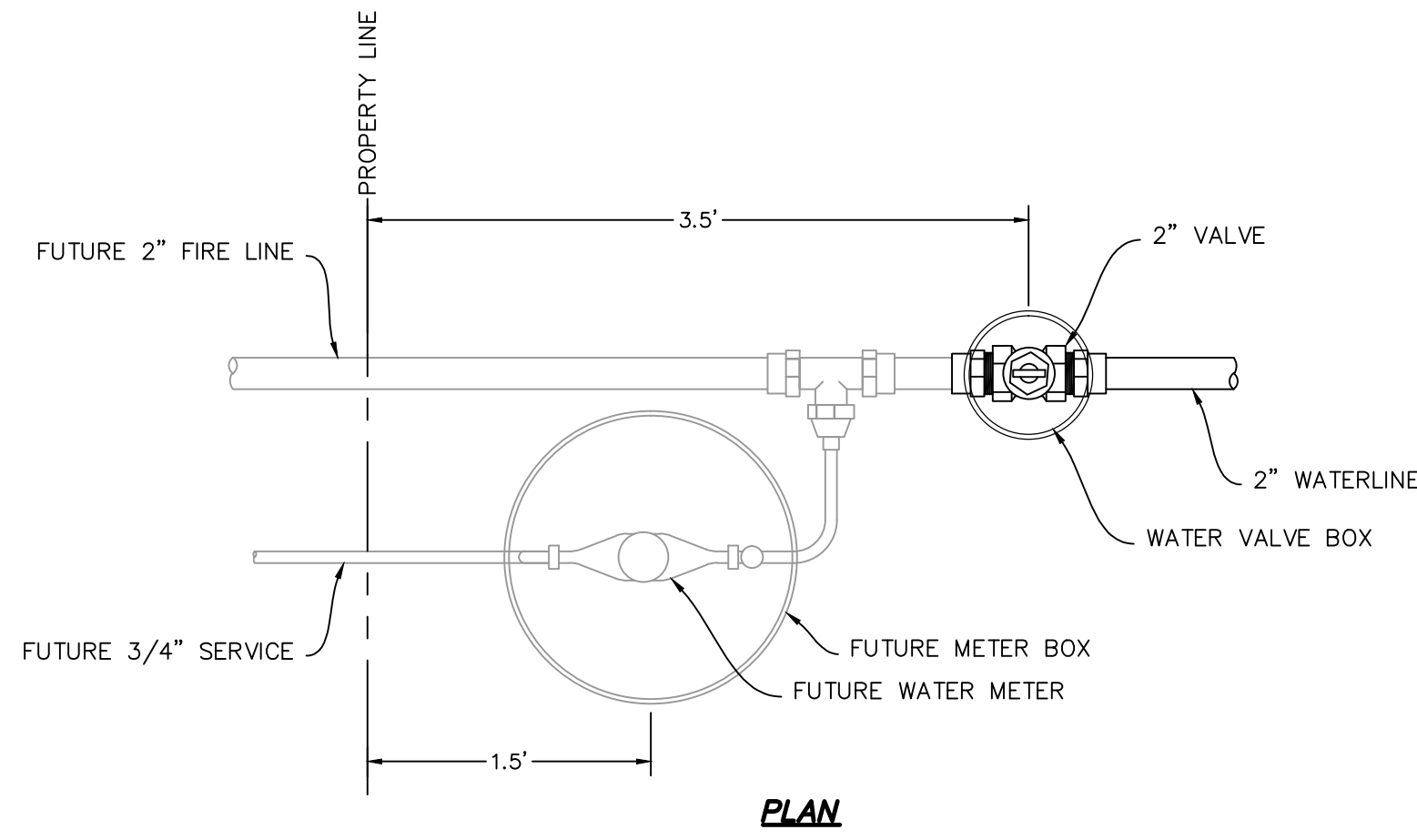
PREPARED FOR: SUMMIT, LLC
 DATE SUBMITTED: 12/17/2013



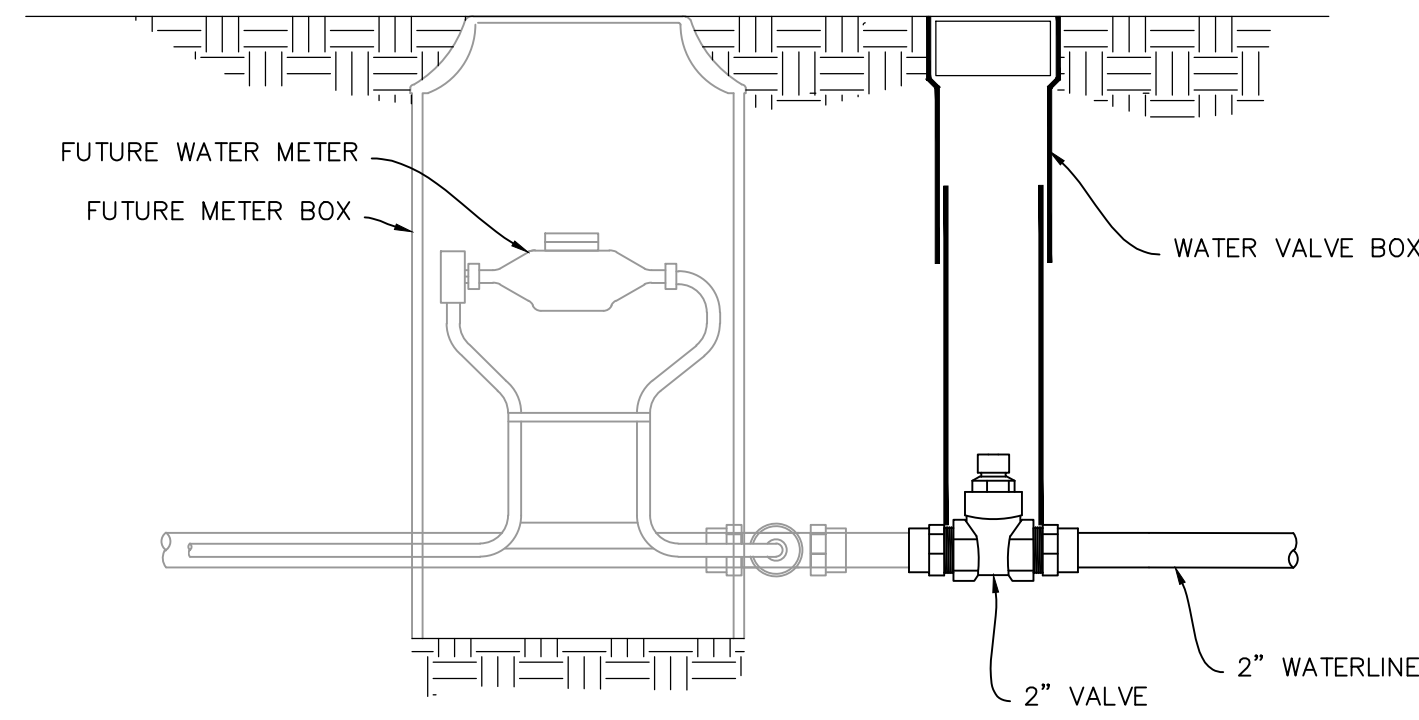
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 HORIZONTAL: 1" = N/A
 JOB NUMBER
SLB079306



NO. 1
 DATE 5/27/2014
 BY RMC
 REVISIONS
 DATE 7/23/2014
 BY RMC
 COMMENTS



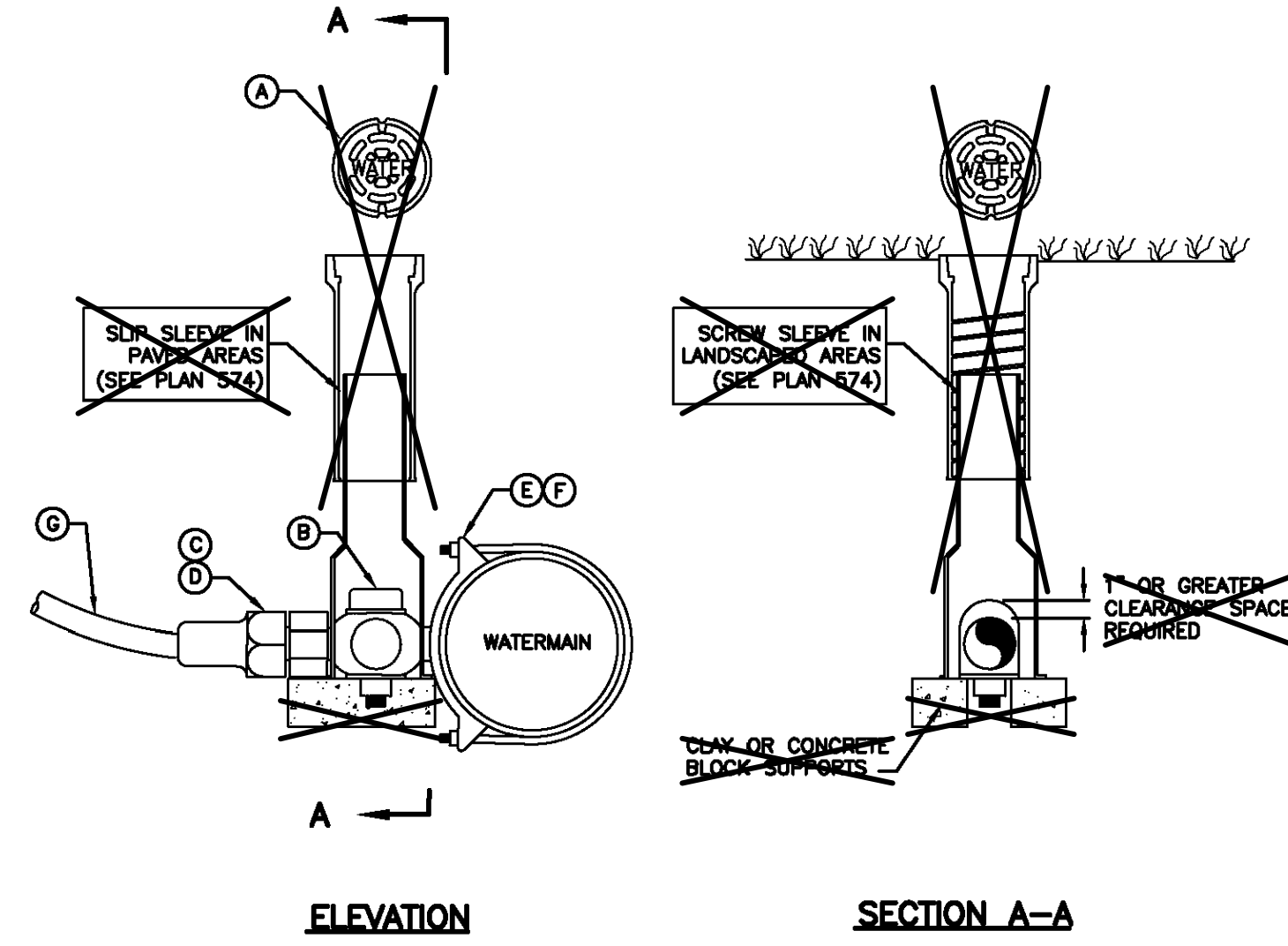
PLAN



SECTION

NOTE:
 FUTURE SIZES ARE PRELIMINARY.
 ACTUAL SIZE TO BE DETERMINED
 BY BUILDING DESIGNER

WATER LATERAL DETAIL
 NO SCALE



ELEVATION

SECTION A-A

LEGEND			
No.	*	ITEM	DESCRIPTION
(A)		VALVE BOX WITH LID	2-PIECE CAST IRON
(B)		CORPORATION STOP	BRASS
(C)		COPPER ADAPTER	
(D)		FLARE OR PACK JOINT COPPER ADAPTER	
(E)		SERVICE SADDLE CLAMP	D.I., A.C., C.I.
(F)		SERVICE SADDLE CLAMP	P.V.C.
(G)		COPPER PIPE (SERVICE LINE)	TYPE K (SOFT)

OMIT VALVE BOX

1 1/2" and 2" Service taps

August 2001

265

Plan 552

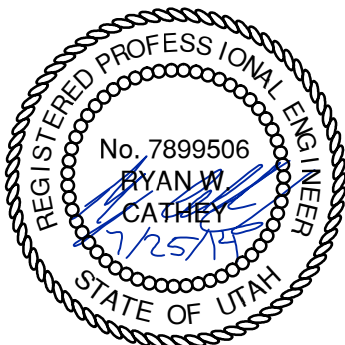
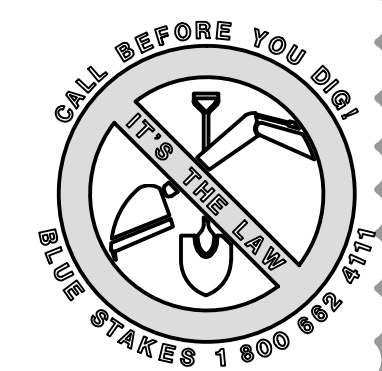
SUMMIT EDEN PHASE 1C
WATER DETAILS

DATE SUBMITTED: 12/17/2013

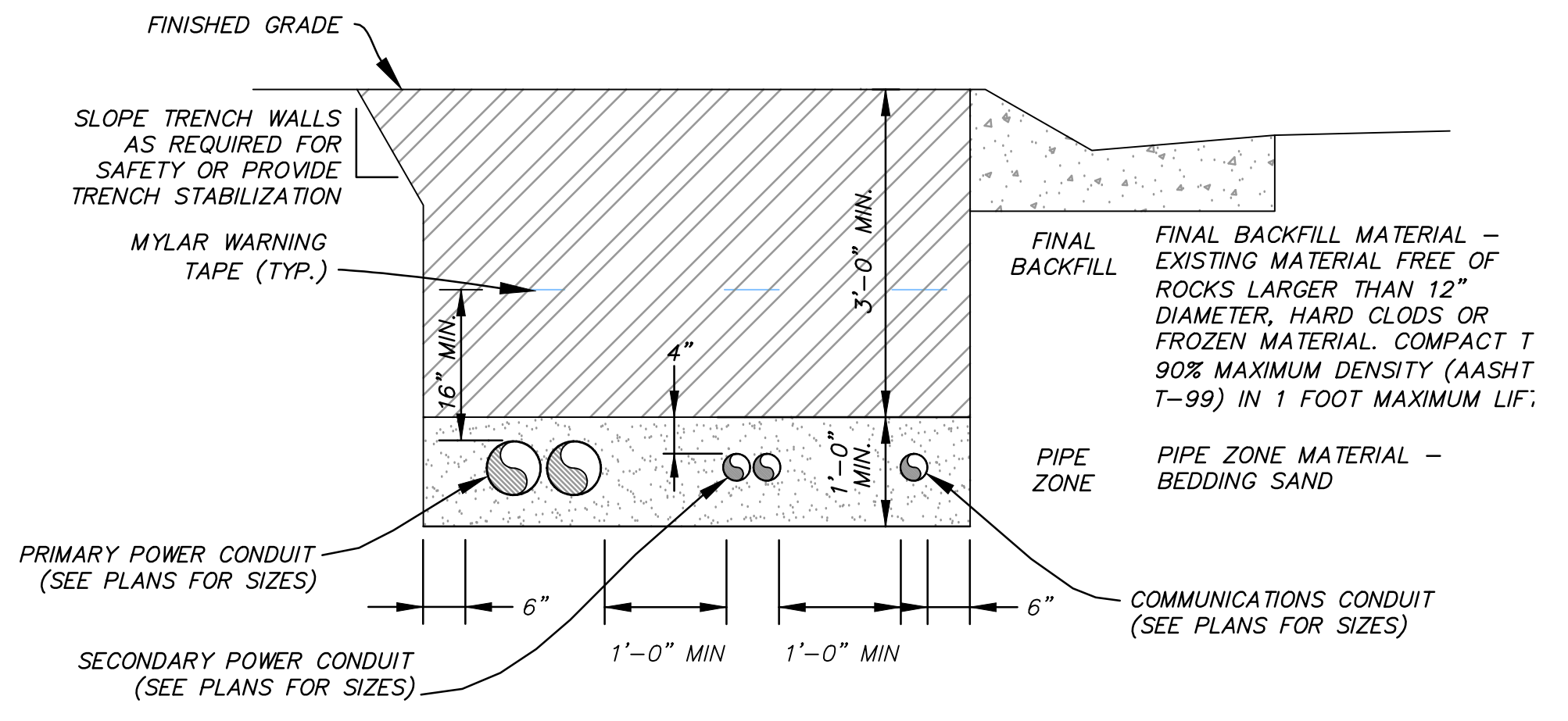
PREPARED FOR: SUMMIT, LLC

NO.	DATE	BY	REVISIONS
1	5/27/2014	RMC	LOW K DESIGN
2	7/23/2014	RMC	COUNT COMMENTS

CAUTION
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SHEET NUMBER	5.02
SCALE	VERTICAL: 1" = N/A HORIZONTAL: 1" = N/A
JOB NUMBER	SLB079306



NOTE: EACH CONDUIT REQUIRES 2500lb MULE TAPE WITHIN

POWER CONDUIT TRENCH

B
 VAR NTS

SUMMIT EDEN PHASE 1C
ELECTRICAL DETAILS

DATE SUBMITTED: 12/17/2013

PREPARED FOR: SUMMIT, LLC

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REGISTERED PROFESSIONAL ENGINEER
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 12/21/13
 STATE OF UTAH



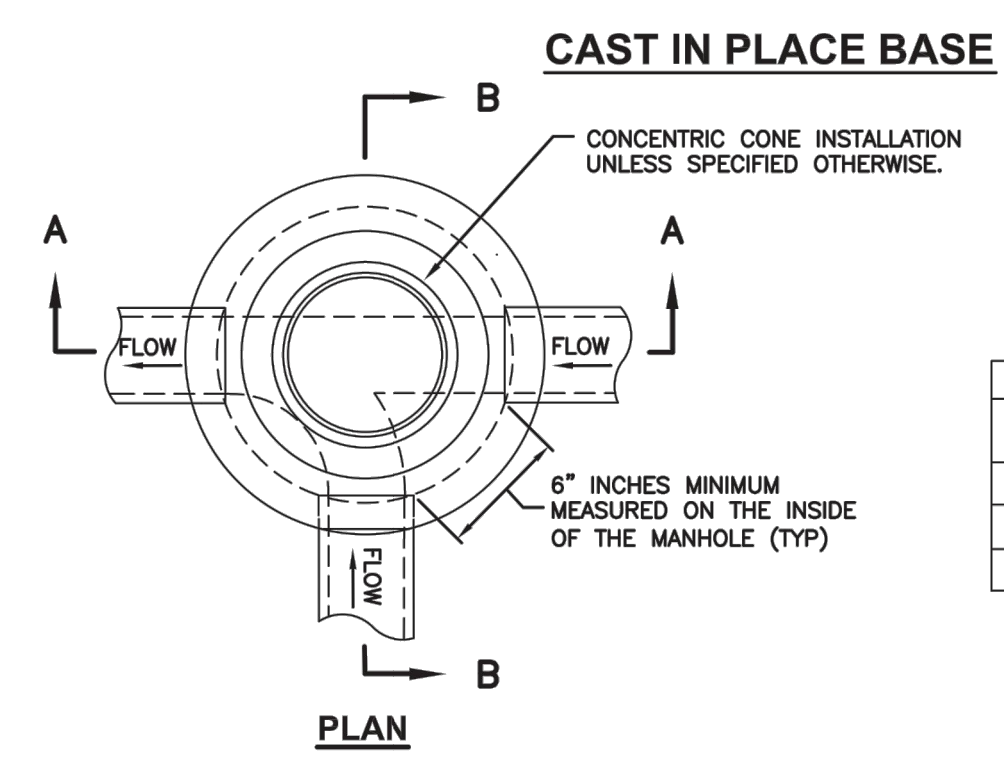
SHEET NUMBER
5.10

SCALE
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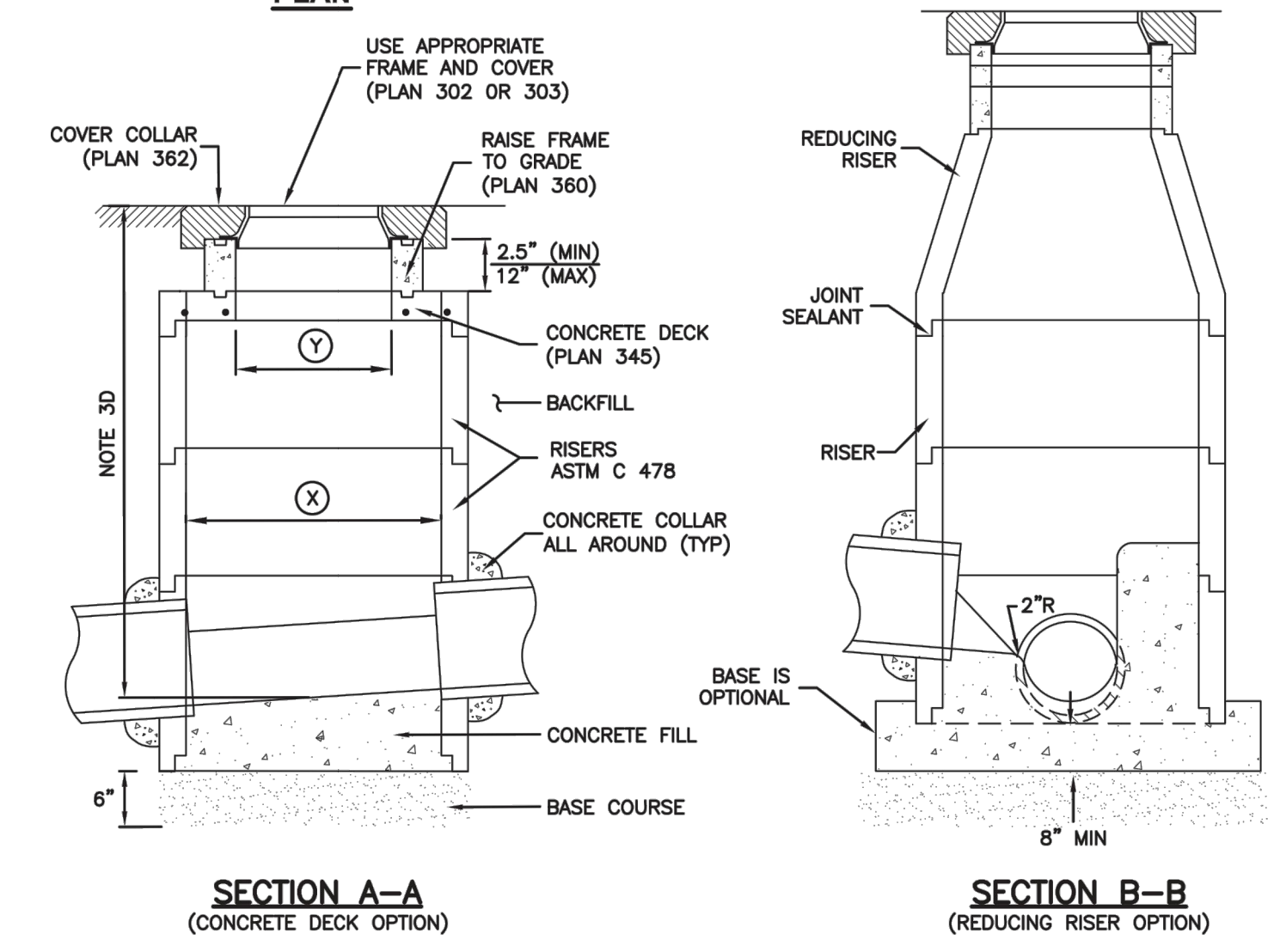
JOB NUMBER
SLB079306

NO.	BY	DATE	REVISIONS
1	RWC	5/27/2014	LOW K DESIGN
2	RWC	7/23/2014	COUNT COMMENTS

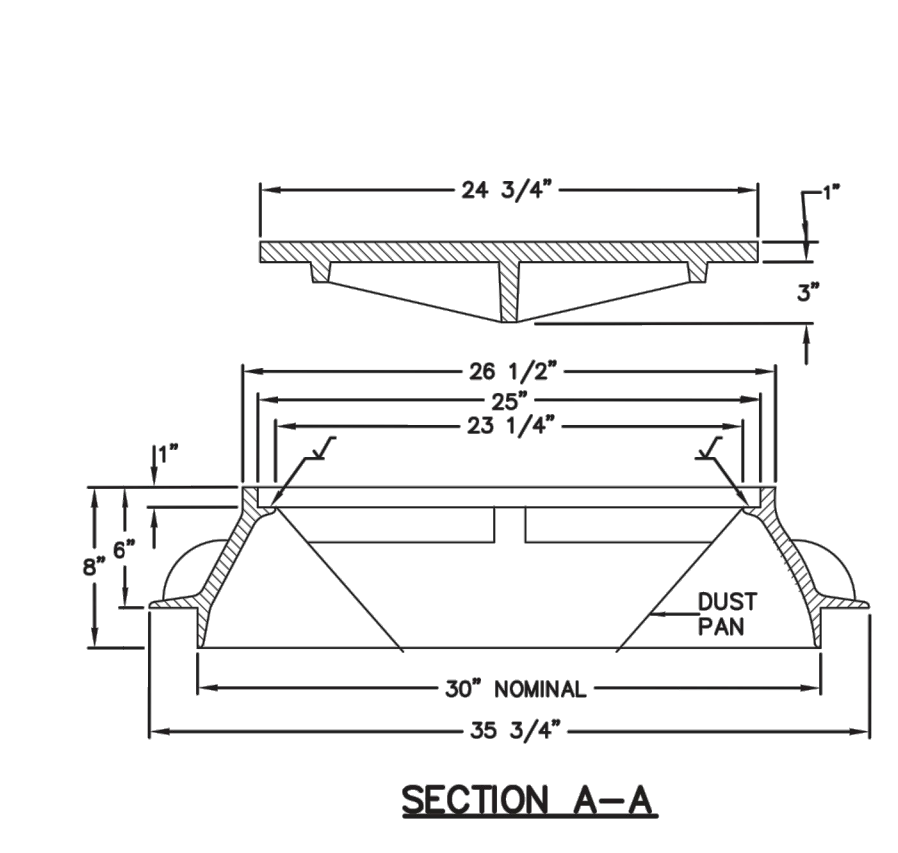
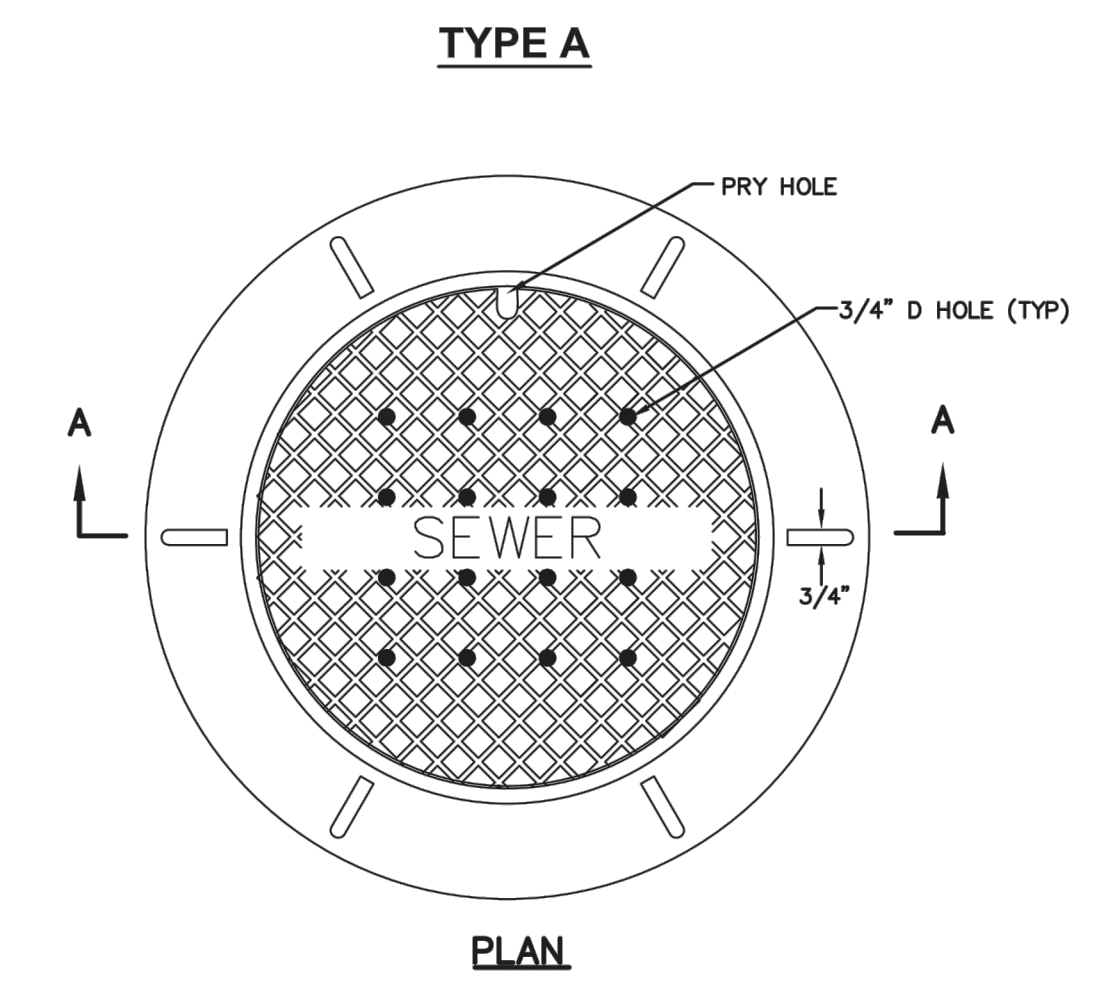
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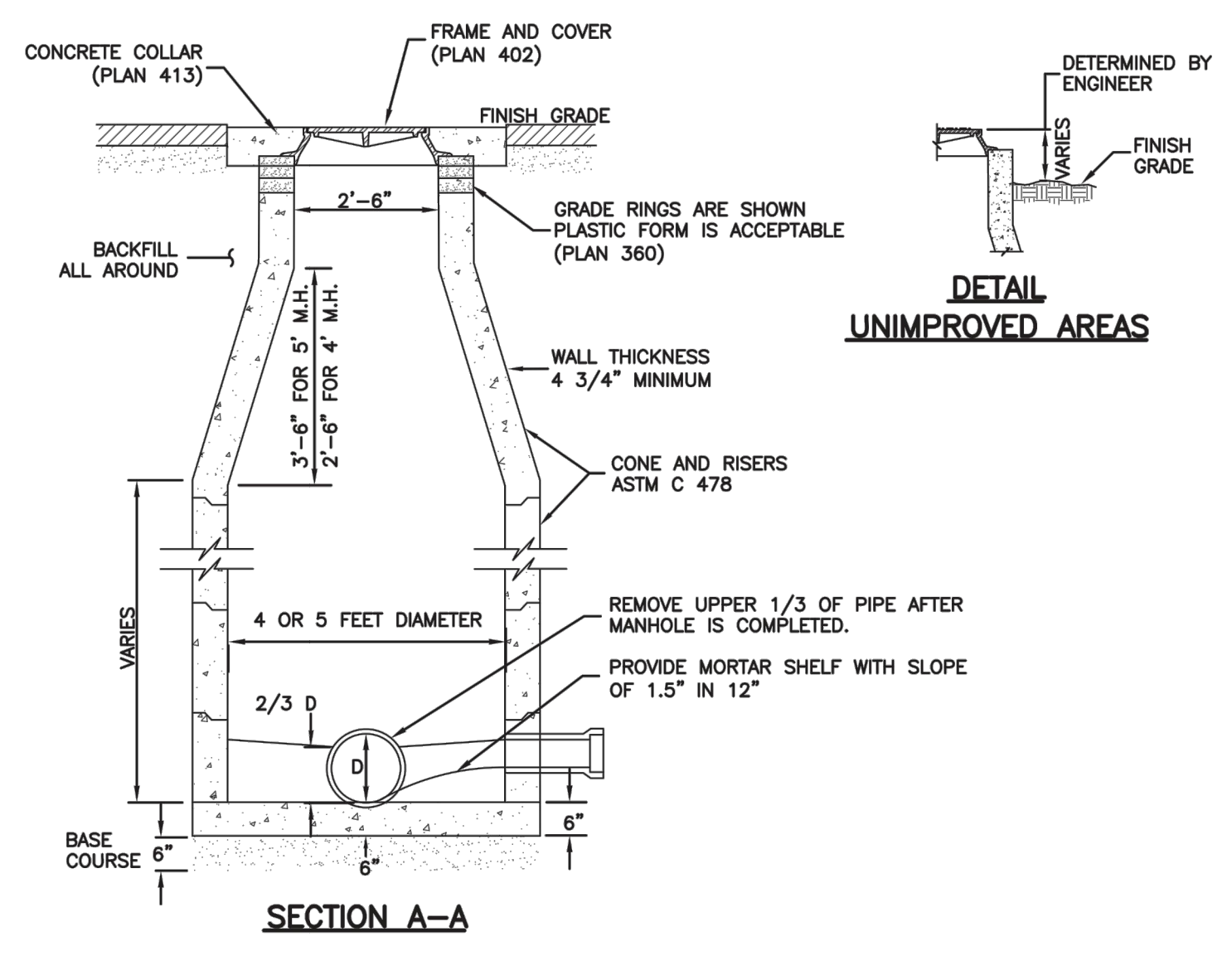
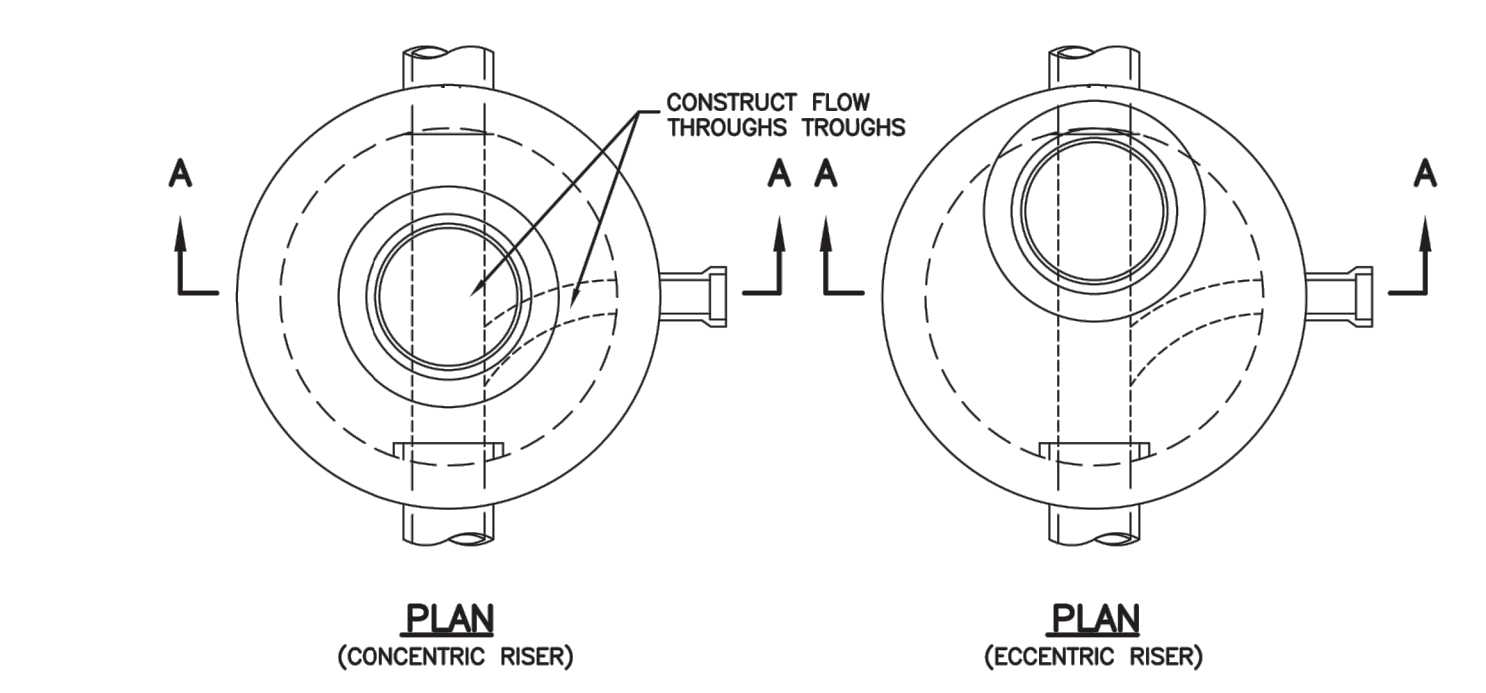
MANHOLE STYLE	DIMENSION	
A	⊗=48" ⊙=30"	
B	⊗=60" ⊙=44"	
C	⊗=60" ⊙=30"	



Precast manhole Plan 341
 November 2010 187 Sheet 1 of 2

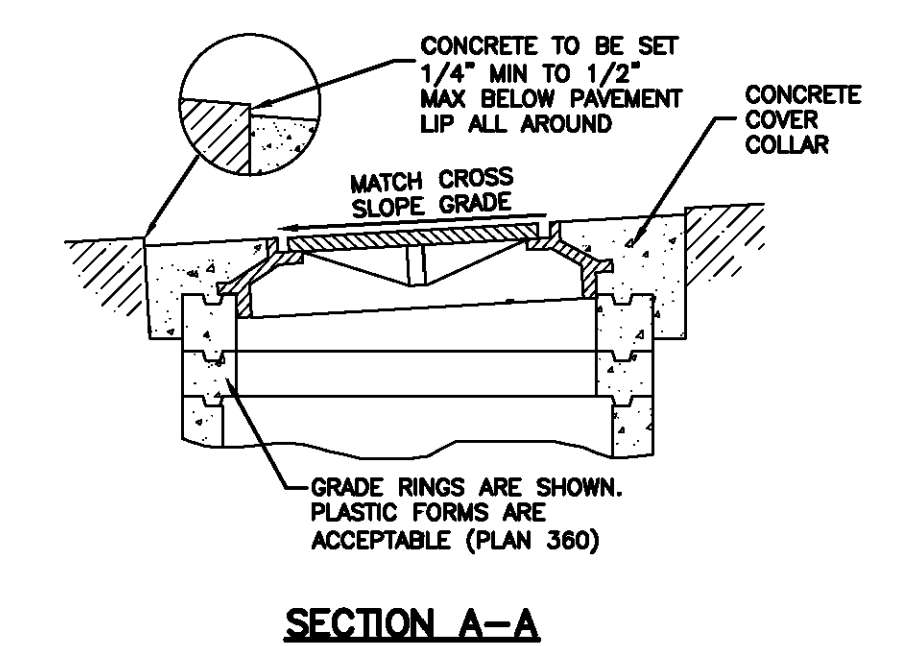
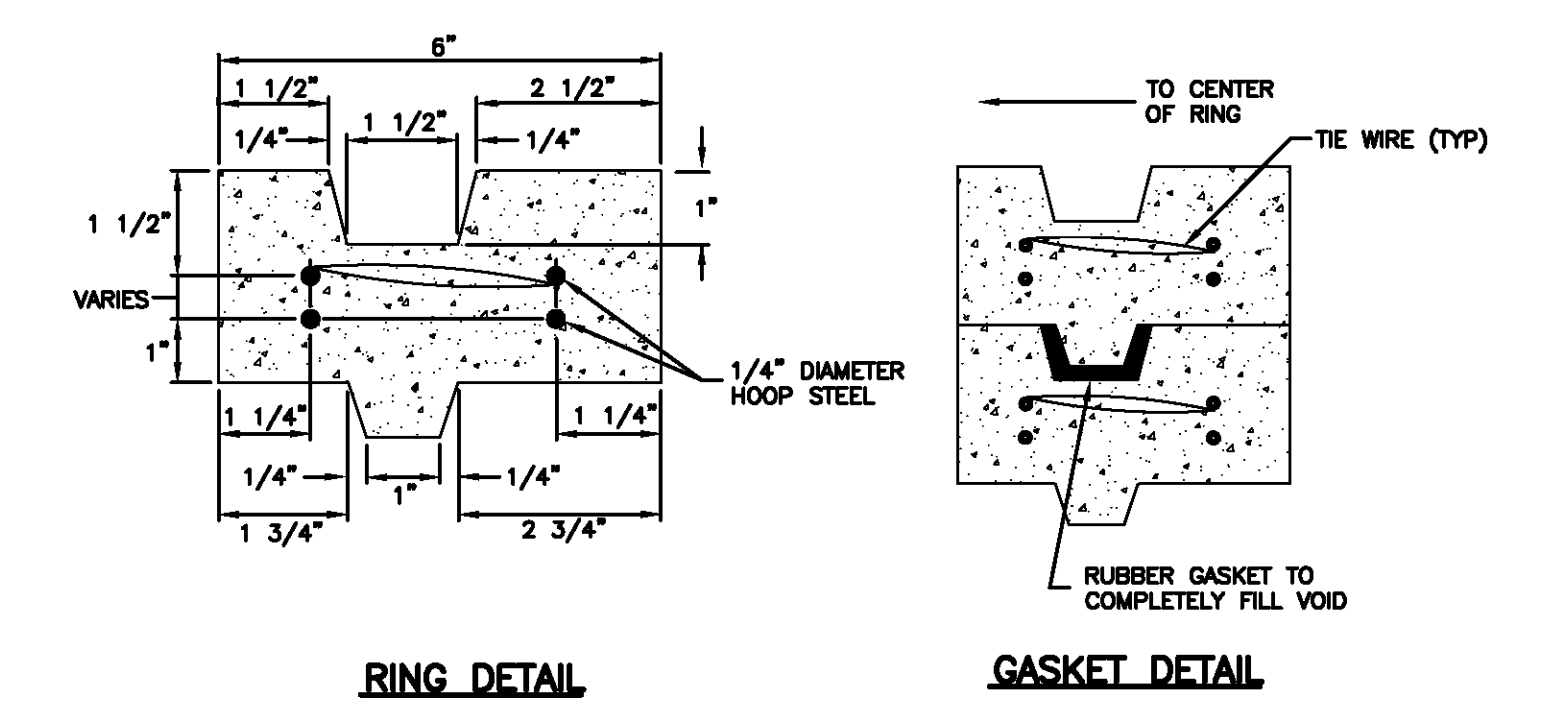
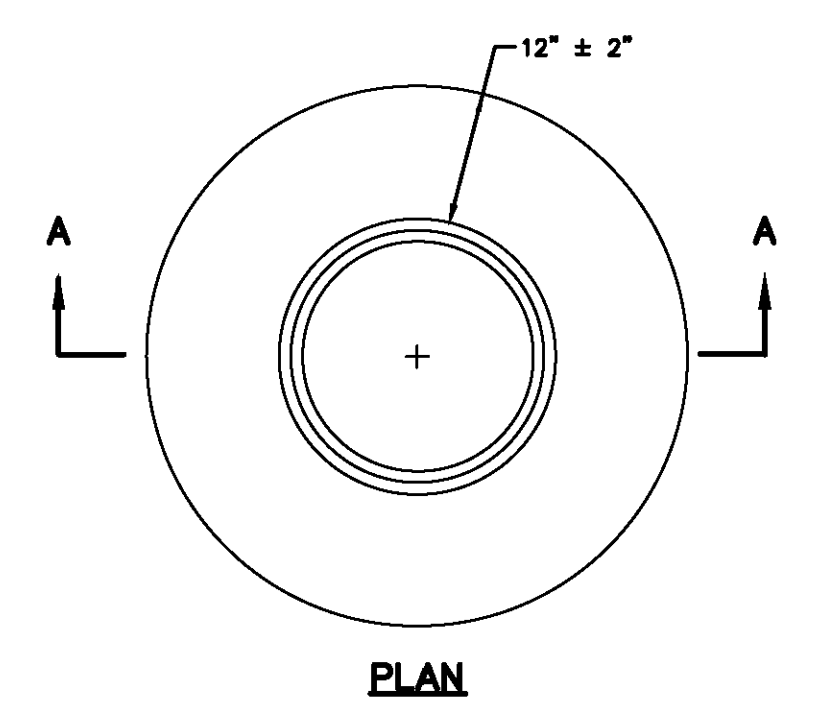
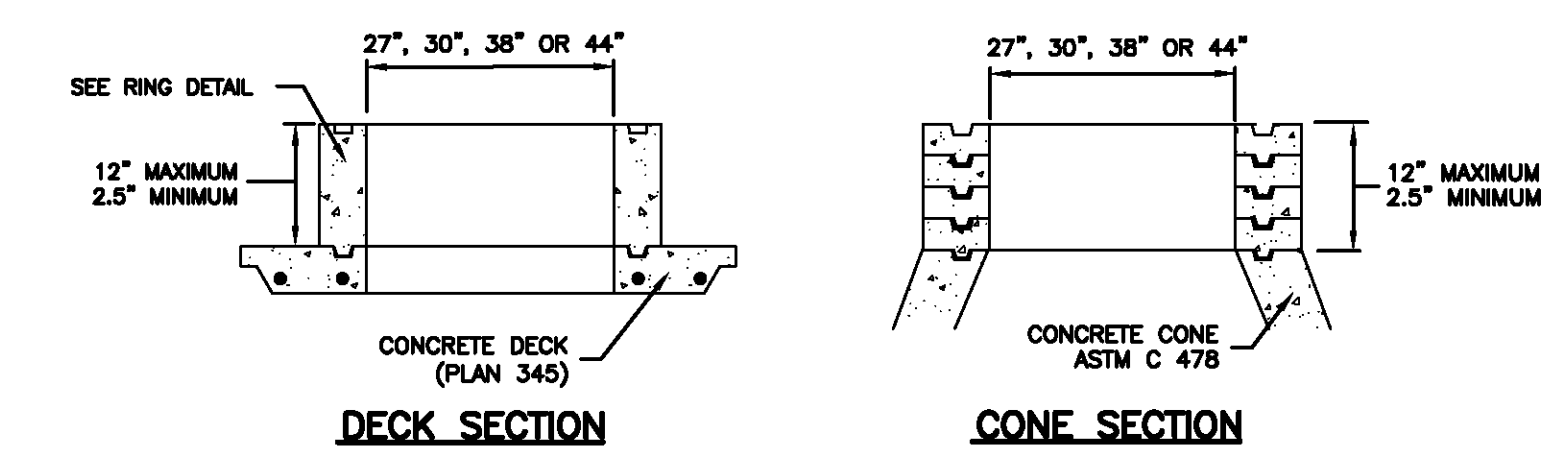


30" Frame and cover Plan 402
 April 1997 211

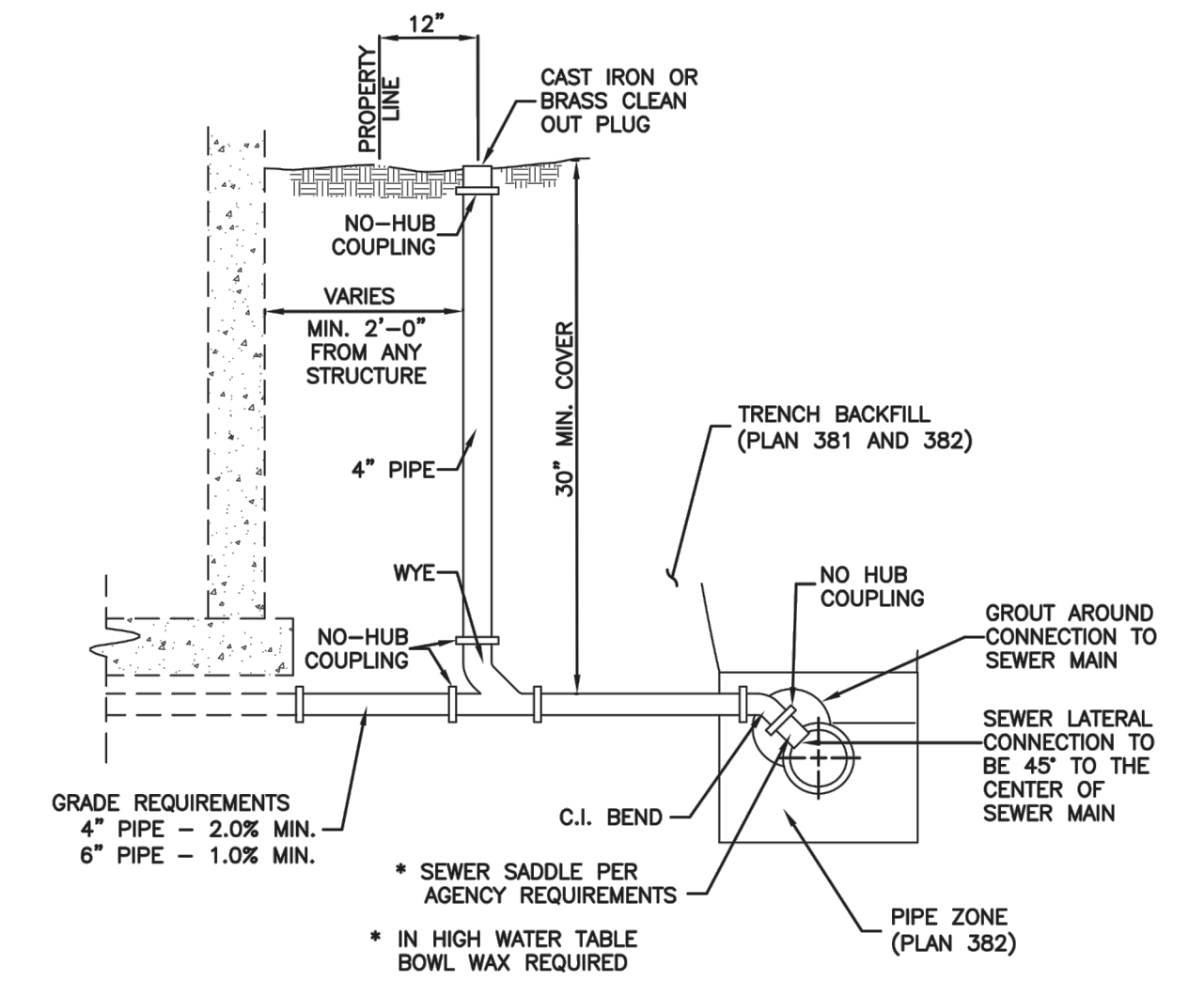


Sanitary sewer manhole Plan 411
 April 2011 213

GRADE RING



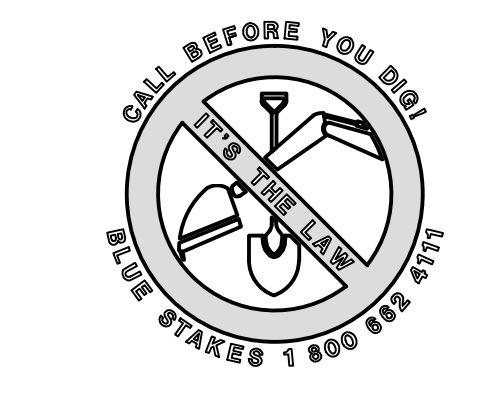
Cover collar for sanitary sewer manhole Plan 413
 September 2001 217



Sewer lateral connection Plan 431
 January 2011 219



Raise frame to grade Plan 360
 May 2008 193 Sheet 1 of 2



NO.	BY	DATE	REVISIONS
1	RMC	5/27/2014	LOW K DESIGN
2	RMC	7/23/2014	CONIT COMMENTS

SUMMIT EDEN PHASE 1C
SEWER DETAILS

DATE SUBMITTED: 12/17/2013

PREPARED FOR: SUMMIT, LLC

NV5
 BEYOND ENGINEERING

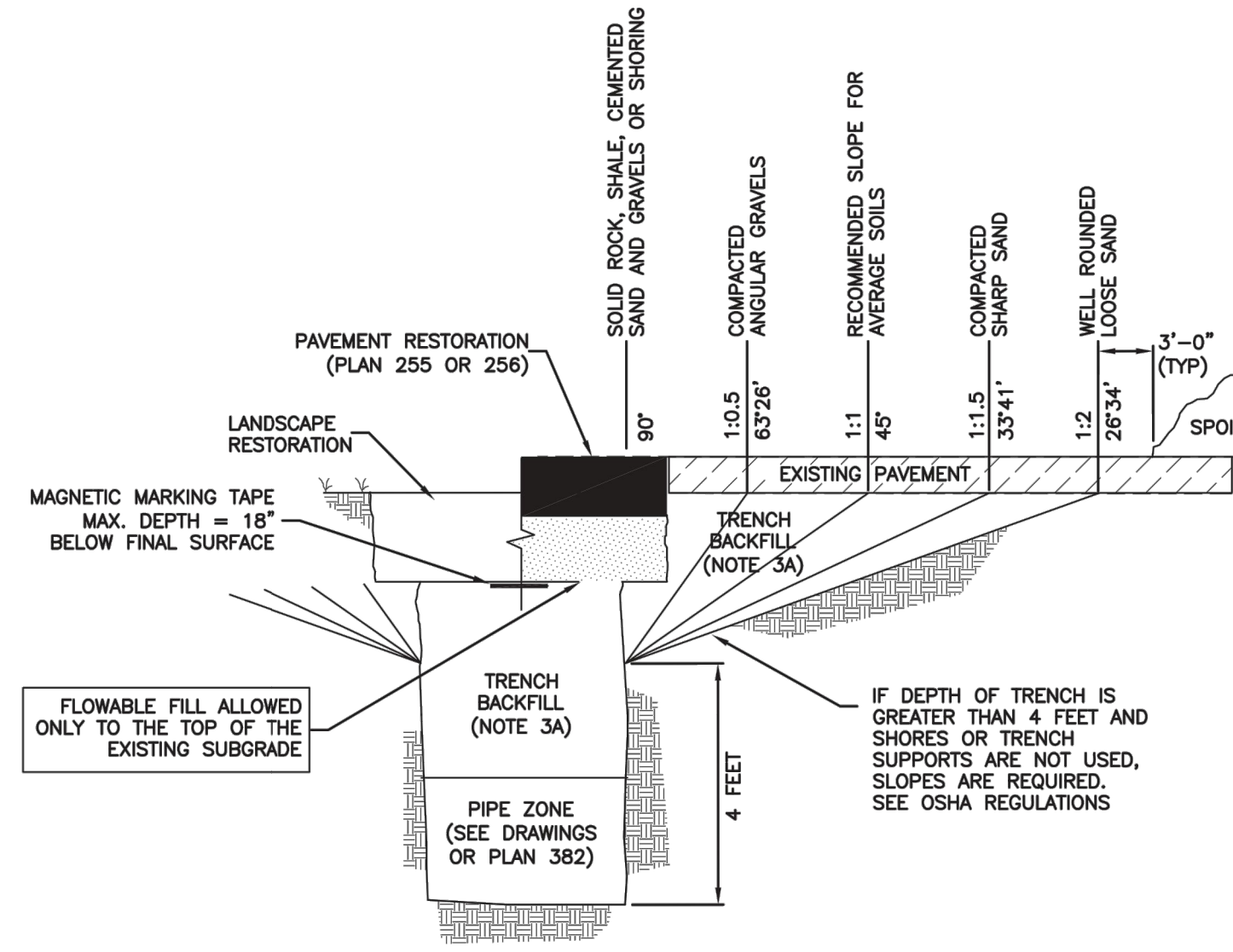
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 12/25/11
 STATE OF UTAH

SHEET NUMBER	5.11
SCALE	VERTICAL: 1" = N/A HORIZONTAL: 1" = N/A
JOB NUMBER	SLB079306

Trench backfill

1. **GENERAL**
 - A. The drawing applies to backfilling the trench above the pipe zone.
2. **PRODUCTS**
 - A. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 3-inches.
 - B. Flowable Fill: Target is 60 psi in 28 days with 90 psi maximum in 28 days, APWA Section 31 05 15. It must flow easily requiring no vibration for consolidation.
3. **EXECUTION**
 - A. Trench Backfill:
 - 1) DO NOT USE sewer rock, pea gravel, or recycled RAP aggregate as trench backfill.
 - 2) Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23 26.
 - 3) Water jetting is NOT allowed.
 - 4) Submission of quality control compaction test result data developed for haunching areas may be requested by ENGINEER at any time. Provide results of tests immediately upon request.
 - B. Flowable Fill: When required, place controlled low strength material in the trench, APWA Section 31 05 15. Cure the fill before placing surface restorations.
 - C. Surface Restoration:
 - 1) Landscaped Surface: Rake to match existing grade. Replace vegetation to match pre-construction conditions. Follow APWA Section 32 93 00 (turf or grass) or APWA Section 32 93 13 (ground cover) requirements.
 - 2) Paved Surface: Do not install asphalt or concrete surfacing until trench compaction is acceptable to ENGINEER. Follow APWA Section 33 05 25 (asphalt surfacing), or APWA Section 33 05 25 (concrete surfacing).



Trench backfill

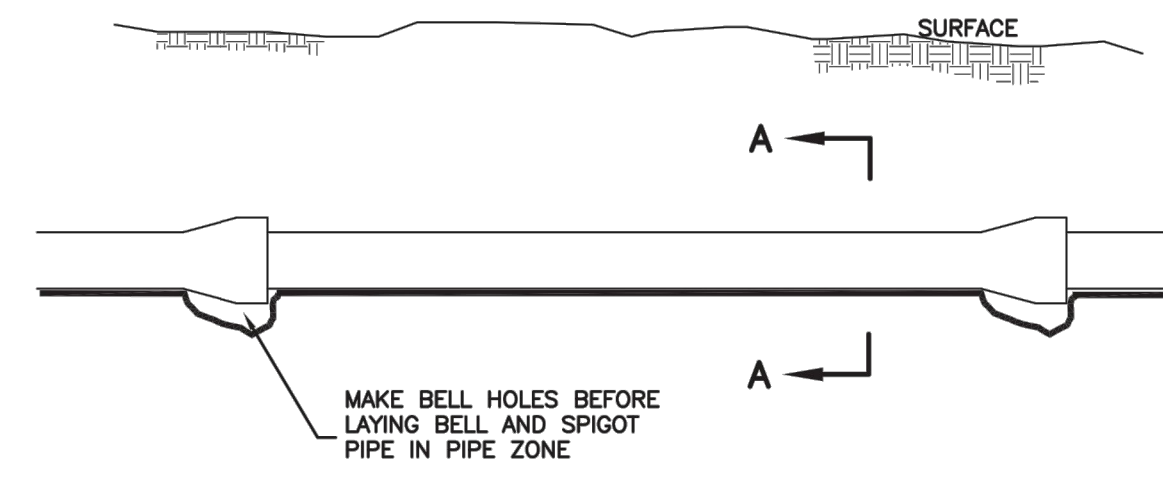
Plan 381

202

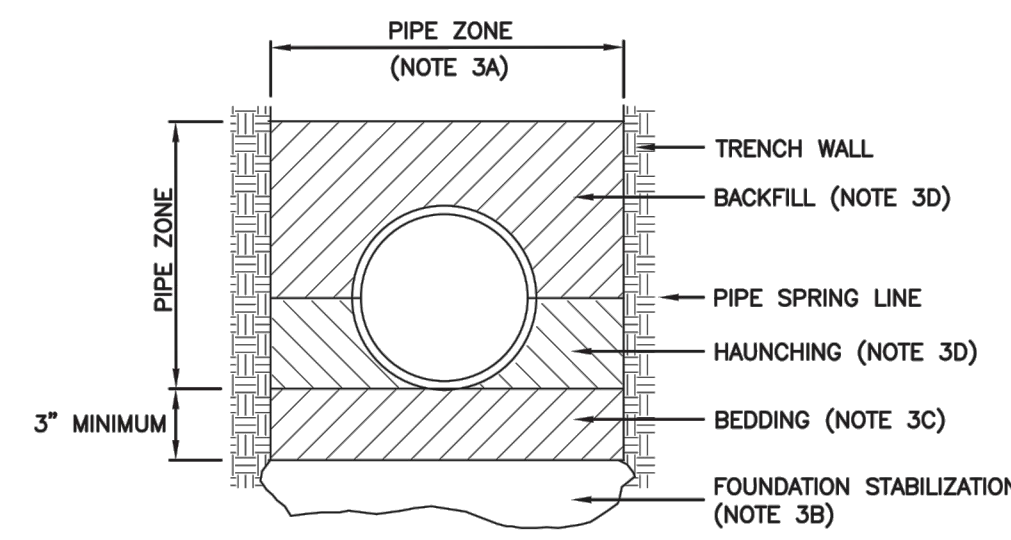
January 2011

Pipe zone backfill

1. **GENERAL**
 - A. Install the pipe in the center of the trench or no closer than 6-inches from the wall of the pipe to the wall of the trench.
2. **PRODUCTS**
 - A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
 - B. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.
 - C. Concrete: APWA Section 03 30 04.
 - D. Flowable Fill: Target is 60 psi in 28 days with 90 psi maximum in 28 days, APWA Section 31 05 15. It must flow easily requiring no vibration for consolidation.
 - E. Stabilization-Separation Geotextile: Moderate or high at CONTRACTOR's choice, APWA Section 31 05 19.
3. **EXECUTION**
 - A. Excavate the Pipe Zone: Width is measured at the pipe spring line and includes any necessary sheathing. Provide width recommended by pipe manufacturer. Follow manufacturer's recommendations when using trench boxes.
 - B. Foundation Stabilization: Get ENGINEER's permission before installing common fill. Vibrate to stabilize. Installation of stabilization-separation geotextile will be required to separate backfill material and native subgrade materials if common fill cannot provide a working surface or prevent soils migration.
 - C. Base Course:
 - 1) Furnish untreated base course material unless specified otherwise by pipe manufacturer.
 - 2) Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
 - 3) When using concrete, provide at least Class 2,000 per APWA Section 03 30 04.
 - D. Pipe Zone: DO NOT USE sewer rock, pea gravel, or recycled RAP aggregate in the pipe zone. Water jetting is NOT allowed.
 - 1) Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26 unless pipe manufacturer requires more stringent installation.
 - 2) Submission of quality control compaction test result data developed for the haunch zone may be requested by ENGINEER at any time. CONTRACTOR is to provide results of tests immediately upon request.
 - E. Flowable Fill (when required and if allowed by pipe manufacturer):
 - 1) Place the controlled low strength material. APWA Section 31 05 15.
 - 2) Prevent pipe flotation by installing in lifts and providing pipe restraints as required by pipe manufacturer.
 - 3) Reset pipe to line and grade if pipe "floats" out of position.



ELEVATION VIEW



SECTION A-A

INSTALLATION

CONCRETE PIPE: FOLLOW ASTM C 1479
 *STANDARD PRACTICE FOR INSTALLATION OF PRECAST CONCRETE SEWER, STORM DRAIN, AND CULVERT PIPE USING STANDARD INSTALLATIONS.

PVC AND HDPE PIPE: FOLLOW ASTM D 2321
 *STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS.

CORRUGATED METAL PIPE: FOLLOW ASTM A 798
 *STANDARD PRACTICE FOR INSTALLING FACTORY-WADE CORRUGATED STEEL PIPE FOR SEWERS AND OTHER APPLICATIONS.

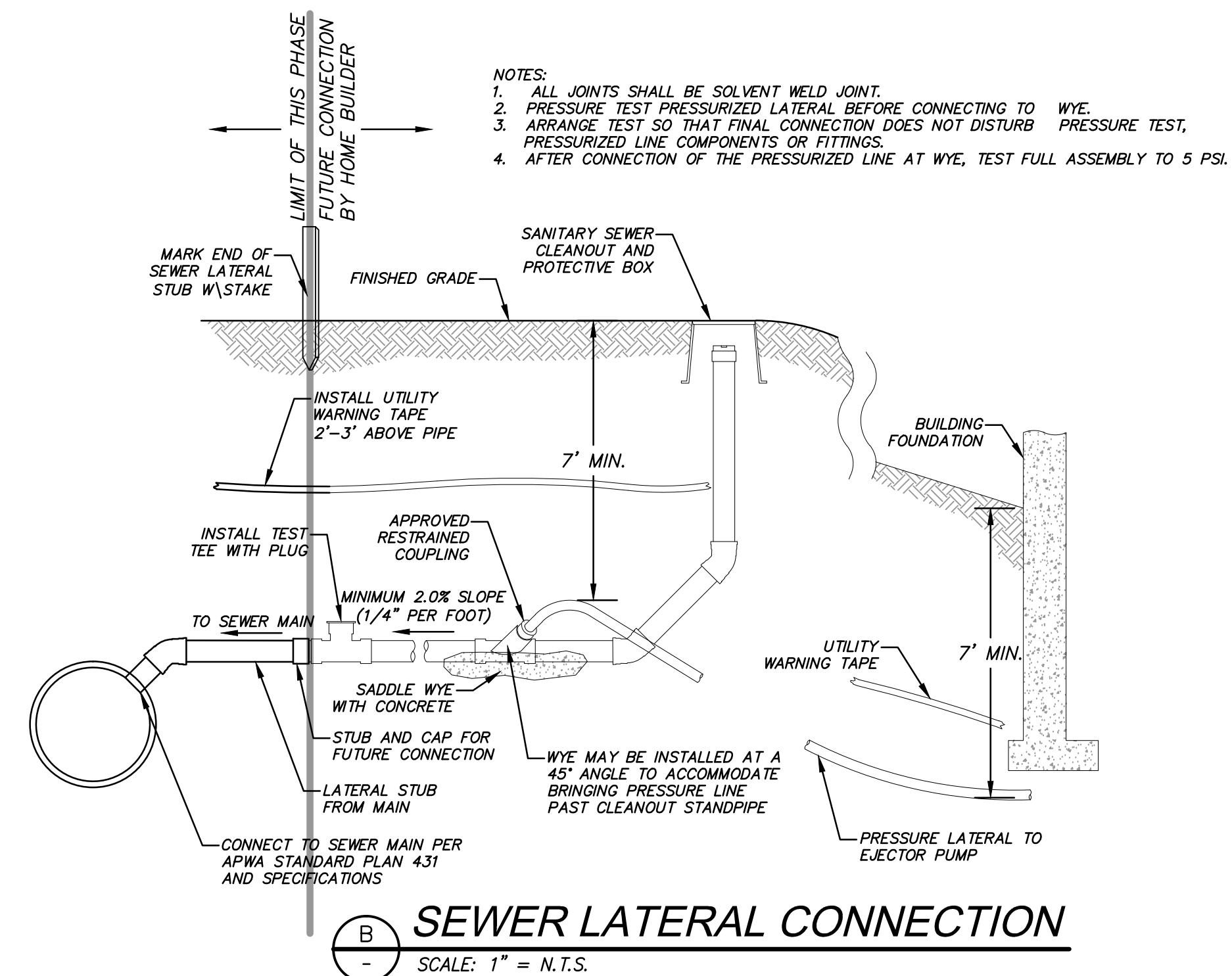
VITRIFIED CLAY PIPE: FOLLOW ASTM C 12.
 *STANDARD RECOMMENDED PRACTICE FOR INSTALLING VITRIFIED CLAY PIPE LINES.

Pipe zone backfill

Plan 382

204

January 2011



NOTES:

1. ALL JOINTS SHALL BE SOLVENT WELD JOINT.
2. PRESSURE TEST PRESSURIZED LATERAL BEFORE CONNECTING TO WYE.
3. ARRANGE TEST SO THAT FINAL CONNECTION DOES NOT DISTURB PRESSURE TEST, PRESSURIZED LINE COMPONENTS OR FITTINGS.
4. AFTER CONNECTION OF THE PRESSURIZED LINE AT WYE, TEST FULL ASSEMBLY TO 5 PSI.

SEWER LATERAL CONNECTION

SCALE: 1" = N.T.S.

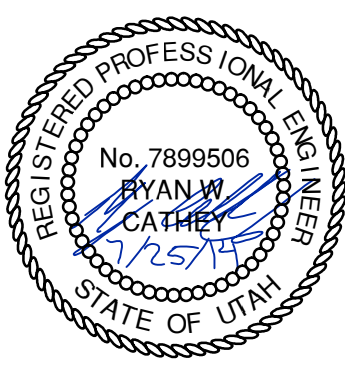
SUMMIT EDEN PHASE 1C
MISCELLANEOUS DETAILS

DATE SUBMITTED: 12/17/2013

PREPARED FOR: SUMMIT, LLC



5217 SOUTH STATE STREET, SUITE 200
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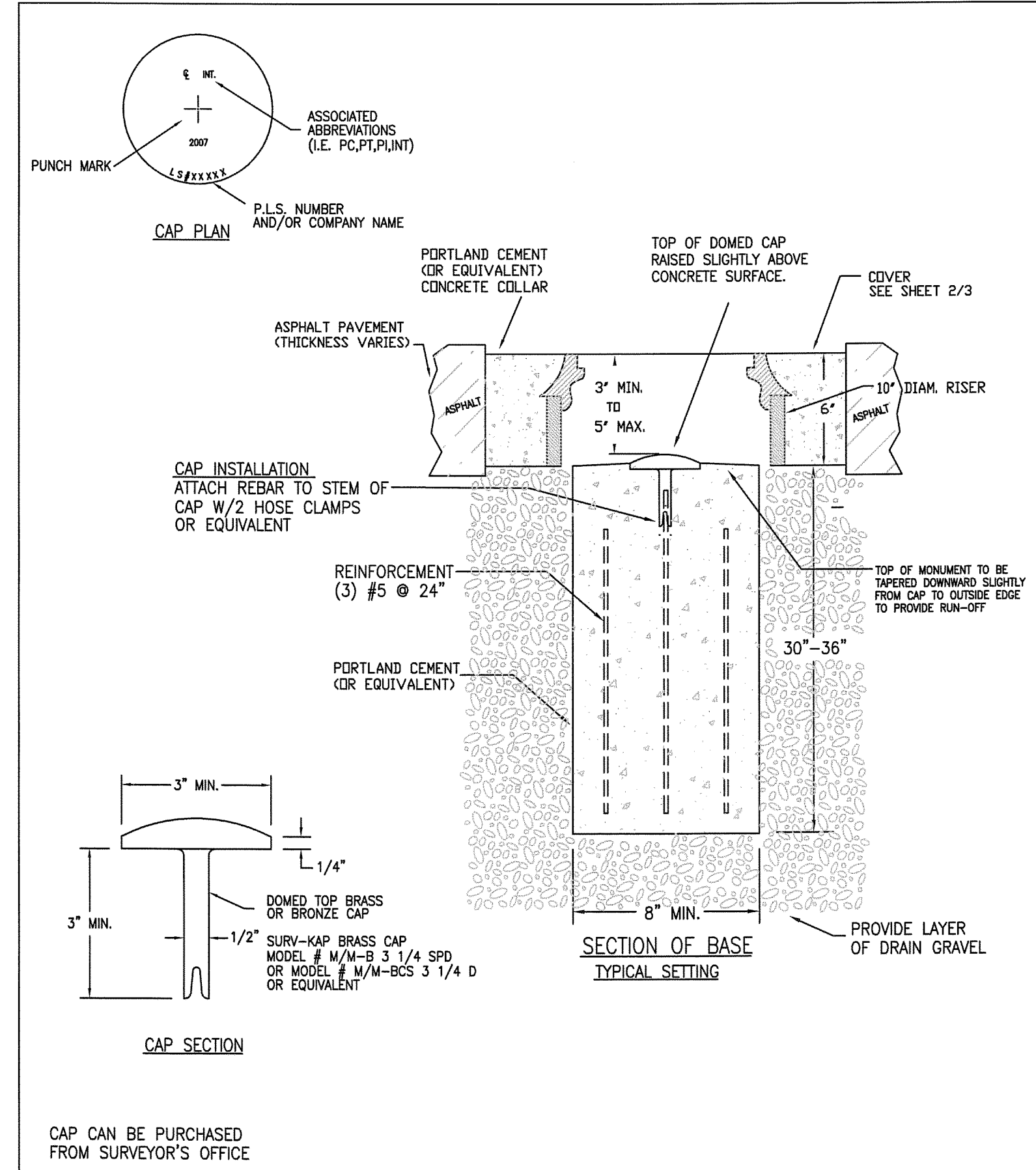


SHEET NUMBER
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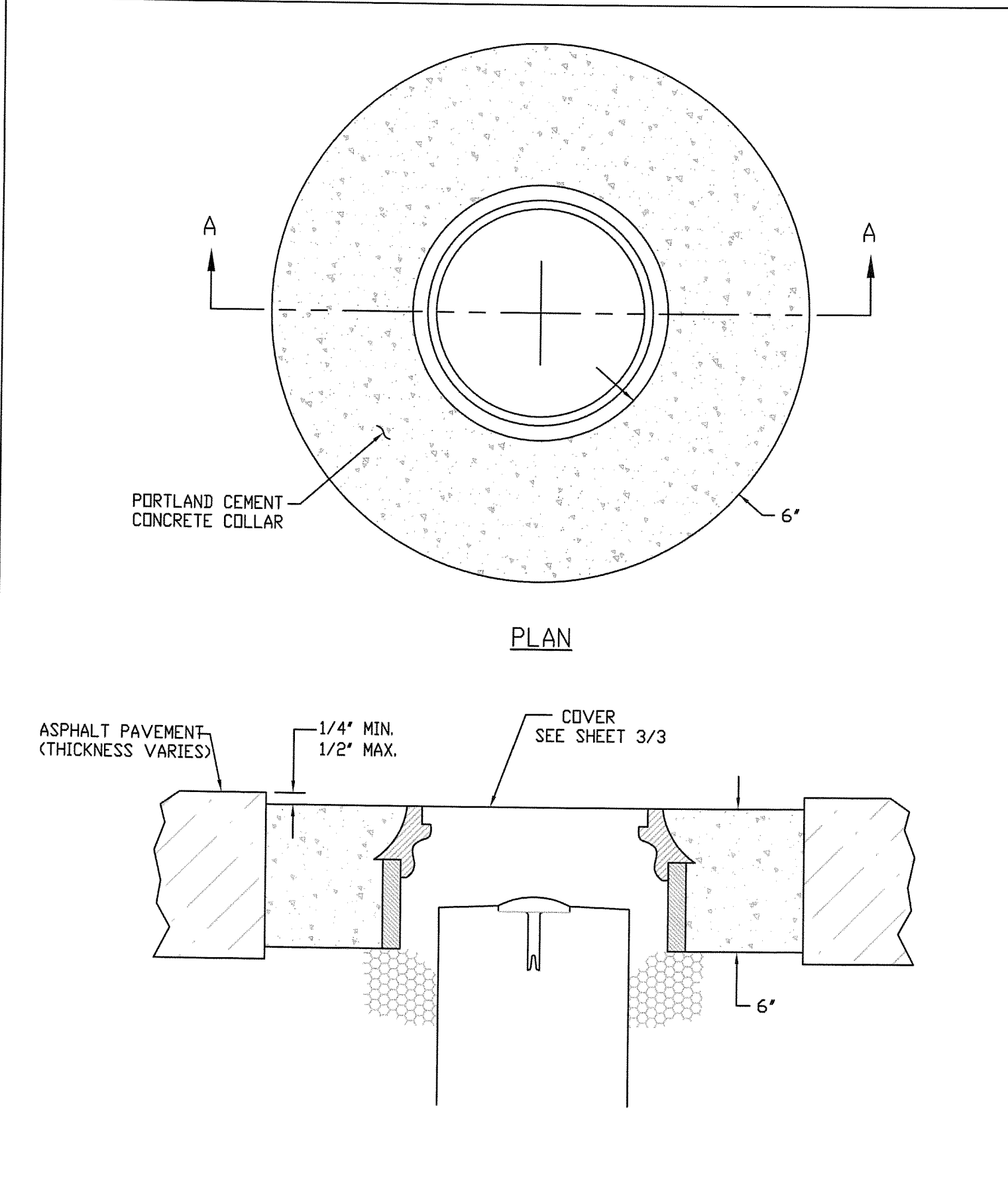
SCALE
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 HORIZONTAL: 1" = N/A

JOB NUMBER
SLB079306

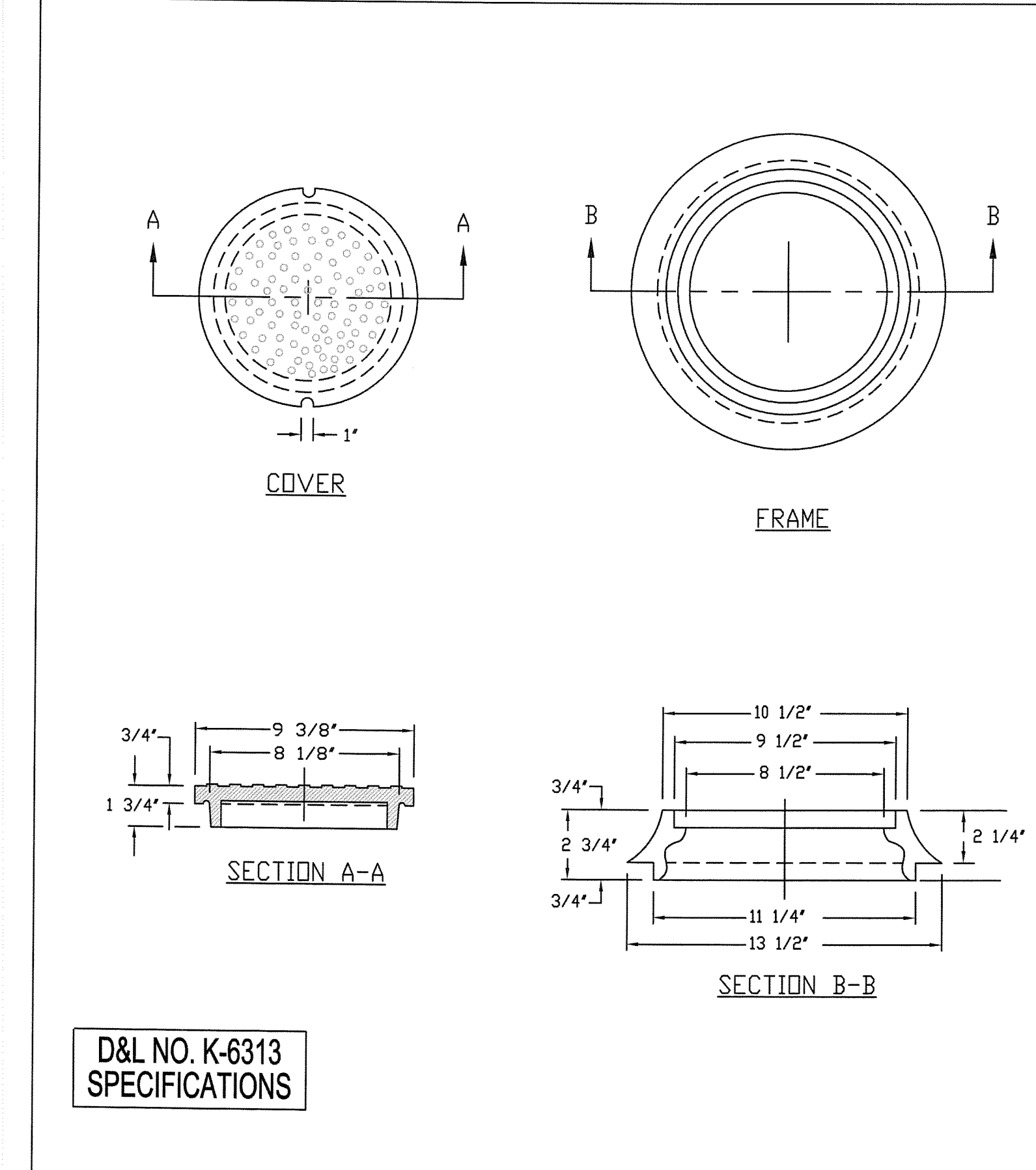




WEBER COUNTY SURVEY OFFICE	RING & LID SURVEY MONUMENT	STANDARD PLANS
		Monument Standard
3/28/10	399-8020	SHEET 1 OF 3



WEBER COUNTY SURVEY OFFICE	Cover Collar For Survey Monuments	STANDARD PLANS
		Monument Specifications
3/28/10	399-8020	SHEET 2 OF 3



WEBER COUNTY SURVEY OFFICE	RING & LID SURVEY MONUMENT	STANDARD PLANS
		Monument Specifications
3/28/10	399-8020	SHEET 3 OF 3

D&L NO. K-6313
SPECIFICATIONS

NO.	BY	DATE	REVISIONS
1	RWC	5/27/2014	LOW K DESIGN
2	RWC	7/23/2014	COUNT COMMENTS

SUMMIT EDEN PHASE 1C
MISCELLANEOUS DETAILS
 PREPARED FOR: SUMMIT, LLC
 DATE SUBMITTED: 12/17/2013

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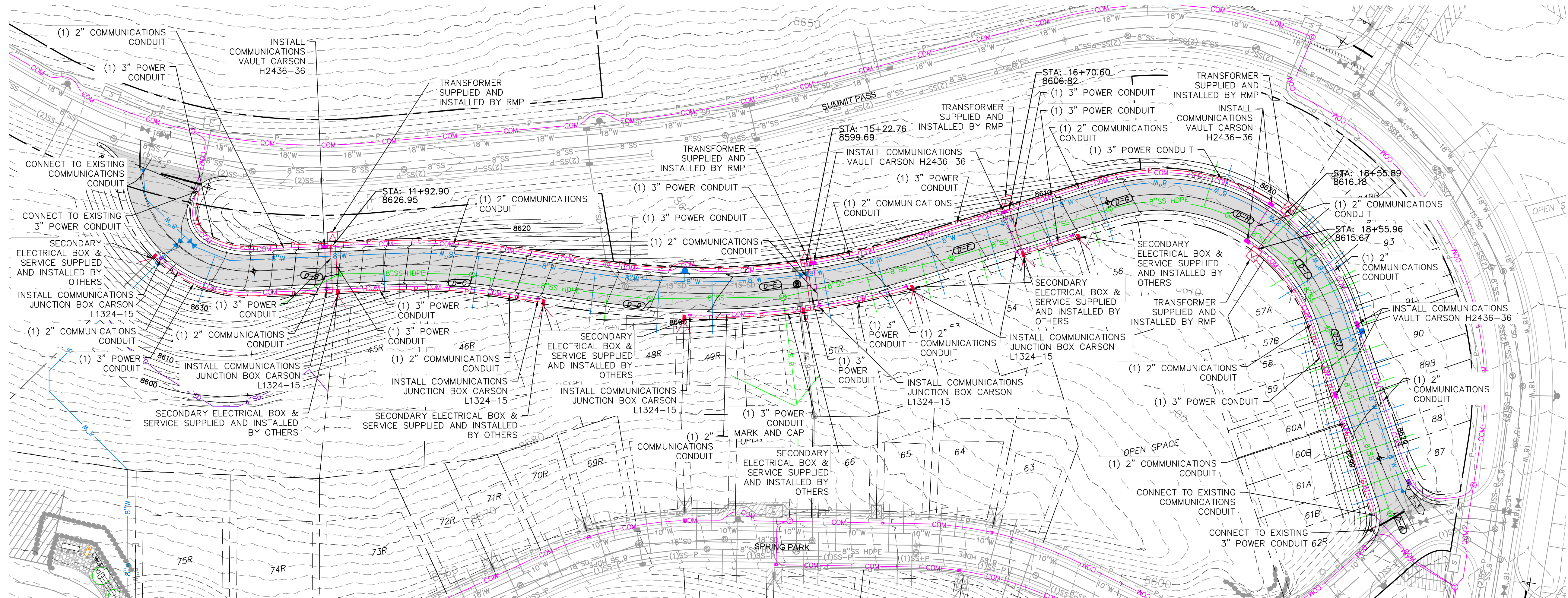
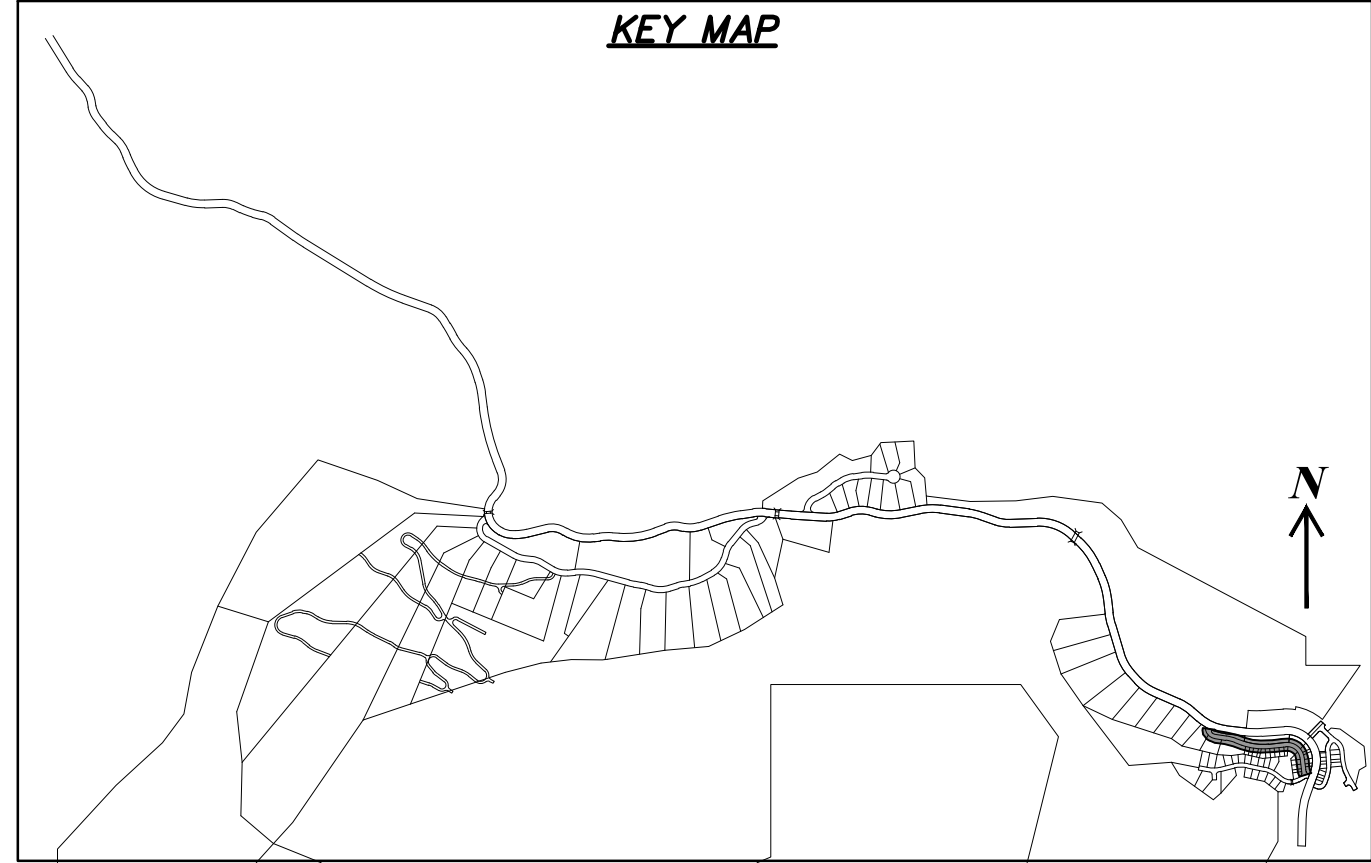
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SCALE
 VERTICAL: 1" = N/A
 HORIZONTAL: 1" = N/A

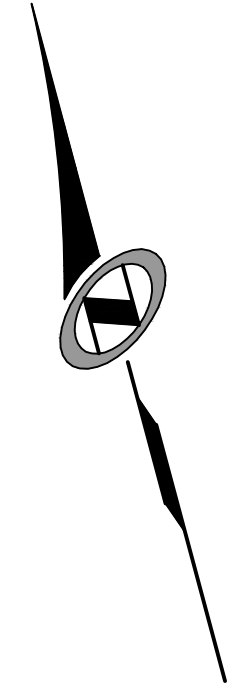
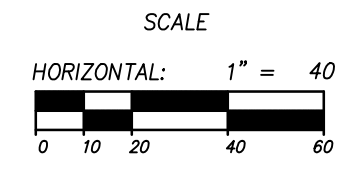
JOB NUMBER
SLB079306



DATE: 7/21/14 TIME: 4:26:31 PM DRAWING NAME: I:\PROJECTS\1400\PHASE 1\1400.P1-5 LAYOUT: LAYOUT1
 SERVER: N:\SLB0793\CAD\PHASE 1\1400.P1-5 DESIGNED: TB PROJ. MGR: RE



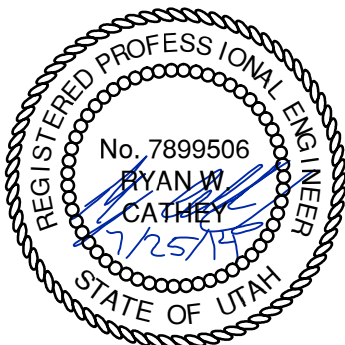
COPPER CREST ROAD
 STA: 10+00.00 TO 20+88.66



SUMMIT EDEN PHASE 1C
 DRY UTILITIES
 COPPER CREST ROAD

PREPARED FOR: SUMMIT, LLC DATE SUBMITTED: 12/17/2013

NV5
 BEYOND ENGINEERING
 5217 SOUTH STATE STREET, SUITE 200
 MURRAY, UT 84107
 WWW.NV5.COM



SHEET NUMBER	6.00
SCALE	VERTICAL: 1" = 8' HORIZONTAL: 1" = 40'
JOB NUMBER	SLB079306



NO.	BY	DATE	REVISIONS
1	RMC	5/27/2014	LOW K DESIGN
2	RMC	7/23/2014	COUNT COMMENTS

The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these plans, and must be approved by the preparer of these plans.

CAUTION

BOWDEN XREFS: