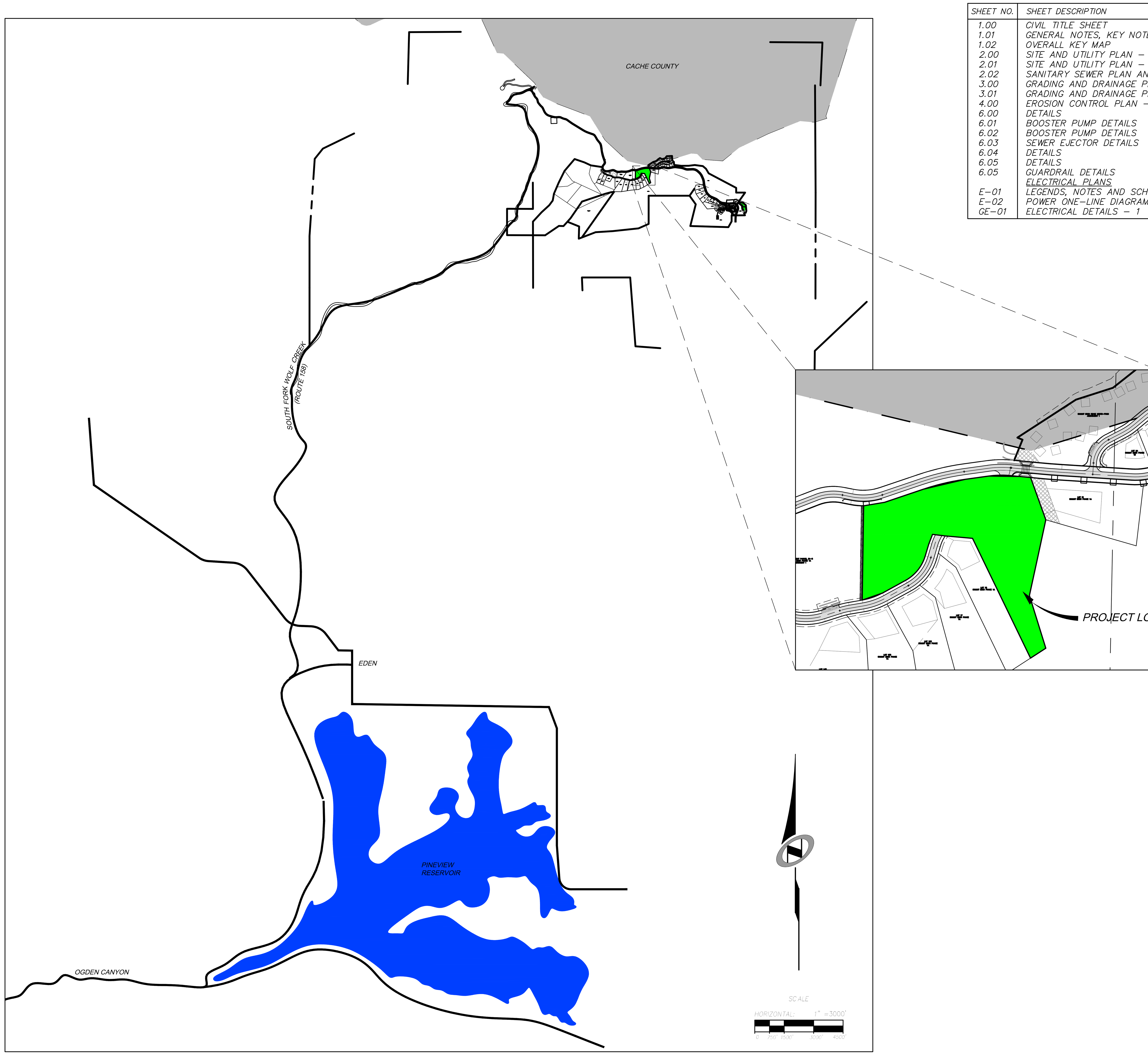
HORIZON NEIGHBORHOOD PRUD
AT SUMMIT POWDER MOUNTAIN
CONSTRUCTION DRAWINGS

Located in Sec 08 T7N R2E
Weber County, Utah



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

HORIZON NEIGHBORHOOD PRUD
CIVIL TITLE SHEET

DATE SUBMITTED: 08.01.2017
PREPARED FOR: SUMMIT POWDER MOUNTAIN

TALISMAN CIVIL CONSULTANTS
5217 SOUTH STATE STREET, SUITE 200 MURRAY, UT 84107
801.743.1300 TEL 801.743.0300 FAX

REGISTERED PROFESSIONAL ENGINEER No. 7899506 RYAN W. CATHEY STATE OF UTAH

CALL BEFORE YOU DIG! IT'S THE LAW. BLUE STAKES 1 800 662 4111

SHEET NUMBER 1.00

SCALE
VERTICAL: 1"= N/A
HORIZONTAL: 1"= 3000'

JOB NUMBER SLB0793

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). THE ORDER LISTED ABOVE IS ARRANGED BY SENIORITY. IF A CONSTRUCTION PRACTICE IS NOT SPECIFIED BY ANY OF THE LISTED SOURCES, CONTRACTOR MUST CONTACT DESIGN ENGINEER FOR DIRECTION.
2. CONTRACTOR TO STRICTLY FOLLOW GEOTECHNICAL RECOMMENDATIONS FOR THIS PROJECT. ALL GRADING INCLUDING BUT NOT LIMITED TO CUT, FILL, COMPACTION, ASPHALT SECTION, SUBBASE, TRENCH EXCAVATION/BACKFILL, SITE GRUBBING, RETAINING WALLS AND FOOTINGS MUST BE COORDINATED DIRECTLY WITH THE PROJECT GEOTECHNICAL ENGINEER.
3. TRAFFIC CONTROL, STRIPING & SIGNAGE TO CONFORM TO CURRENT UDOT TRANSPORTATION ENGINEER'S MANUAL AND MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
4. ANY AREA OUTSIDE THE LIMIT OF WORK THAT IS DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO COST TO OWNER.
5. CONSULT ALL OF THE DRAWINGS AND SPECIFICATIONS FOR COORDINATION REQUIREMENTS BEFORE COMMENCING CONSTRUCTION.
6. AT ALL LOCATIONS WHERE EXISTING PAVEMENT ABUTS NEW CONSTRUCTION, THE EDGE OF THE EXISTING PAVEMENT SHALL BE SAWCUT TO A CLEAN, SMOOTH EDGE.
7. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE MOST RECENT, ADOPTED EDITION OF ADA ACCESSIBILITY GUIDELINES.
8. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING SURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED THOROUGHLY REVIEWED PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.
9. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND NOTIFYING ENGINEER OR INSPECTING AUTHORITY 48 HOURS IN ADVANCE OF COVERING UP ANY PHASE OF CONSTRUCTION REQUIRING OBSERVATION.
10. ANY WORK IN THE PUBLIC RIGHT-OF-WAY WILL REQUIRE PERMITS FROM THE APPROPRIATE, CITY, COUNTY OR STATE AGENCY CONTROLLING THE ROAD, INCLUDING OBTAINING REQUIRED INSPECTIONS.
11. ALL DIMENSIONS, GRADES & UTILITY DESIGNS SHOWN ON THE PLANS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN OR GRADE CHANGES.
12. CONTRACTOR MUST VERIFY ALL EXISTING CONDITIONS BEFORE BIDDING AND BRING UP ANY QUESTIONS BEFOREHAND.
13. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH BY THE GEOTECHNICAL ENGINEER.
14. CATCH SLOPES SHALL BE GRADED AS SPECIFIED ON GRADING PLANS.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FLAGGING, CAUTION SIGNS, LIGHTS, BARRICADES, FLAGMEN, AND ALL OTHER DEVICES NECESSARY FOR PUBLIC SAFETY.
16. CONTRACTOR SHALL, AT THE TIME OF BIDDING AND THROUGHOUT THE PERIOD OF THE CONTRACT, BE LICENSED IN THE STATE OF UTAH AND SHALL BE BONDABLE FOR AN AMOUNT EQUAL TO OR GREATER THAN THE AMOUNT BID AND TO DO THE TYPE OF WORK CONTEMPLATED IN THE PLANS AND SPECIFICATIONS. CONTRACTOR SHALL BE SKILLED AND REGULARLY ENGAGED IN THE GENERAL CLASS AND TYPE OF WORK CALLED FOR IN THE PLANS AND SPECIFICATIONS.
17. CONTRACTOR SHALL INSPECT THE SITE OF THE WORK PRIOR TO BIDDING TO SATISFY HIMSELF BY PERSONAL EXAMINATION OR BY SUCH OTHER MEANS AS HE MAY PREFER OF THE LOCATION OF THE PROPOSED WORK AND OF THE ACTUAL CONDITIONS OF AND AT THE SITE OF WORK. IF, DURING THE COURSE OF HIS EXAMINATION, A BIDDER FINDS FACTS OR CONDITIONS WHICH APPEAR TO HIM TO BE IN CONFLICT WITH THE LETTER OR SPIRIT OF THE PROJECT PLANS AND SPECIFICATIONS, HE SHALL CONTACT THE ENGINEER FOR ADDITIONAL INFORMATION AND EXPLANATION BEFORE SUBMITTING HIS BID. SUBMISSION OF A BID BY THE CONTRACTOR SHALL CONSTITUTE ACKNOWLEDGMENT THAT, IF AWARDED THE CONTRACT, HE HAS RELIED AND IS RELYING ON HIS OWN EXAMINATION OF (1) THE SITE OF THE WORK, (2) ACCESS TO THE SITE, AND (3) ALL OTHER DATA AND MATTERS REQUISITE TO THE FULFILLMENT OF THE WORK AND ON HIS OWN KNOWLEDGE OF EXISTING FACILITIES ON AND IN THE VICINITY OF THE SITE OF THE WORK TO BE CONSTRUCTED UNDER THIS CONTRACT. THE INFORMATION PROVIDED BY THE ENGINEER IS NOT INTENDED TO BE A SUBSTITUTE FOR, OR A SUPPLEMENT TO, THE INDEPENDENT VERIFICATION BY THE CONTRACTOR TO THE EXTENT SUCH INDEPENDENT INVESTIGATION OF SITE CONDITIONS IS DEEMED NECESSARY OR DESIRABLE BY THE CONTRACTOR. CONTRACTOR SHALL ACKNOWLEDGE THAT HE HAS NOT RELIED SOLELY UPON OWNER- OR ENGINEER-FURNISHED INFORMATION REGARDING SITE CONDITIONS IN PREPARING AND SUBMITTING HIS BID.
18. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL WATER, POWER, SANITARY FACILITIES AND TELEPHONE SERVICES AS REQUIRED FOR THE CONTRACTOR'S USE DURING CONSTRUCTION.
19. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE OWNER, ENGINEER, AND/OR GOVERNING AGENCIES.
20. CONTRACTOR SHALL EXERCISE DUE CAUTION AND SHALL CAREFULLY PRESERVE BENCH MARKS, CONTROL POINTS, REFERENCE POINTS AND ALL SURVEY STAKES, AND SHALL BEAR ALL EXPENSES FOR REPLACEMENT AND/OR ERRORS CAUSED BY THEIR UNNECESSARY LOSS OR DISTURBANCE.
21. CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOBSITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
22. CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY SCHEDULING INSPECTION AND TESTING OF ALL FACILITIES CONSTRUCTED UNDER THIS CONTRACT. ALL TESTING SHALL CONFORM TO THE REGULATORY AGENCY'S STANDARD SPECIFICATIONS. ALL TESTING AND INSPECTION SHALL BE PAID FOR BY THE OWNER; ALL RE-TESTING AND/OR RE-INSPECTION SHALL BE PAID FOR BY THE CONTRACTOR.
23. IF EXISTING IMPROVEMENTS NEED TO BE DISTURBED AND/OR REMOVED FOR THE PROPER PLACEMENT OF IMPROVEMENTS TO BE CONSTRUCTED BY THESE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING IMPROVEMENTS FROM DAMAGE. COST OF REPLACING OR REPAIRING EXISTING IMPROVEMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEMS REQUIRING REMOVAL AND/OR REPLACEMENT. THERE WILL BE NO EXTRA COST DUE TO THE CONTRACTOR FOR REPLACING OR REPAIRING EXISTING IMPROVEMENTS.
24. WHENEVER EXISTING FACILITIES ARE REMOVED, DAMAGED, BROKEN, OR CUT IN THE INSTALLATION OF THE WORK COVERED BY THESE PLANS OR SPECIFICATIONS, SAID FACILITIES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE WITH MATERIALS EQUAL TO OR BETTER THAN THE MATERIALS USED IN THE ORIGINAL EXISTING FACILITIES. THE FINISHED PRODUCT SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER, THE ENGINEER, AND THE RESPECTIVE REGULATORY AGENCY.
25. CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF FULL-SIZE AS-BUILT RECORD DRAWINGS SHOWING THE FINAL LOCATION AND LAYOUT OF ALL STRUCTURES AND OTHER FACILITIES. AS-BUILT RECORD DRAWINGS SHALL REFLECT CHANGE ORDERS, ACCOMMODATIONS, AND ADJUSTMENTS TO ALL IMPROVEMENTS CONSTRUCTED. WHERE NECESSARY, SUPPLEMENTAL DRAWINGS SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR. PRIOR TO ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL DELIVER TO THE ENGINEER ONE SET OF NEATLY MARKED AS-BUILT RECORD DRAWINGS SHOWING THE INFORMATION REQUIRED ABOVE. AS-BUILT RECORD DRAWINGS SHALL BE REVIEWED AND THE COMPLETE AS-BUILT RECORD DRAWING SET SHALL BE CURRENT WITH ALL CHANGES AND DEVIATIONS REDLINED AS A PRECONDITION TO THE FINAL PROGRESS PAYMENT APPROVAL AND/OR FINAL ACCEPTANCE.
26. WHERE THE PLANS OR SPECIFICATIONS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL, IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE FIRST QUALITY ARE TO BE USED.

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. THEREFORE, THE OWNER IS RELYING UPON THE EXPERIENCE AND EXPERTISE OF THE CONTRACTOR. PRICES PROVIDED WITHIN THE CONTRACT DOCUMENTS SHALL INCLUDE ALL LABOR AND MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THE TRUE INTENT AND PURPOSE OF THESE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE COMPETENT, KNOWLEDGEABLE AND HAVE SPECIAL SKILLS IN THE NATURE, EXTENT AND INHERENT CONDITIONS OF THE WORK TO BE PERFORMED. CONTRACTOR SHALL ALSO ACKNOWLEDGE THAT THERE ARE CERTAIN PECULIAR AND INHERENT CONDITIONS EXISTENT IN THE CONSTRUCTION OF THE PARTICULAR FACILITIES WHICH MAY CREATE, DURING THE CONSTRUCTION PROGRAM, UNUSUAL OR UNSAFE CONDITIONS HAZARDOUS TO PERSONS, PROPERTY AND THE ENVIRONMENT. CONTRACTOR SHALL BE AWARE OF SUCH PECULIAR RISKS AND HAVE THE SKILL AND EXPERIENCE TO FORESEE AND TO ADOPT PROTECTIVE MEASURES TO ADEQUATELY AND SAFELY PERFORM THE CONSTRUCTION WORK WITH RESPECT TO SUCH HAZARDS.
28. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL STRIPING AND/OR PAVEMENT MARKINGS NECESSARY TO TIE EXISTING STRIPING INTO FUTURE STRIPING. METHOD OF REMOVAL SHALL BE BY GRINDING OR SANDBLASTING.
29. CONTRACTOR SHALL PROVIDE ALL SHORING, BRACING, SLOPING OR OTHER PROVISIONS NECESSARY TO PROTECT WORKMEN FOR ALL AREAS TO BE EXCAVATED TO A DEPTH OF 4' OR MORE. FOR EXCAVATIONS 4 FEET OR MORE IN DEPTH, THE CONTRACTOR SHALL COMPLY WITH INDUSTRIAL COMMISSION OF UTAH SAFETY ORDERS SECTION 68 – EXCAVATIONS, AND SECTION 69 – TRENCHES, ALONG WITH ANY LOCAL CODES OR ORDINANCES.
30. ALL EXISTING GATES AND FENCES TO REMAIN UNLESS OTHERWISE NOTED ON PLANS. PROTECT ALL GATES AND FENCES FROM DAMAGE.

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.
2. EXISTING UTILITIES HAVE BEEN SHOWN ON THE PLANS USING A COMBINATION OF ON-SITE SURVEYS (BY OTHERS). PRIOR TO COMMENCING ANY WORK, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE EACH UTILITY COMPANY LOCATE, IN THE FIELD, THEIR MAIN AND SERVICE LINES. THE CONTRACTOR SHALL NOTIFY BLUE STAKES AT 1-800-662-4111 48 HOURS IN ADVANCE OF PERFORMING ANY EXCAVATION WORK. THE CONTRACTOR SHALL RECORD THE BLUE STAKES ORDER NUMBER AND FURNISH ORDER NUMBER TO OWNER AND ENGINEER PRIOR TO ANY EXCAVATION. IT WILL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO DIRECTLY CONTACT ANY OTHER UTILITY COMPANIES THAT ARE NOT MEMBERS OF BLUE STAKES. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROTECT ALL EXISTING UTILITIES SO THAT NO DAMAGE RESULTS TO THEM DURING THE PERFORMANCE OF THIS CONTRACT. ANY REPAIRS NECESSARY TO DAMAGED UTILITIES SHALL BE PAID FOR BY THE CONTRACTOR. THE CONTRACTOR SHALL BE REQUIRED TO COOPERATE WITH OTHER CONTRACTORS AND UTILITY COMPANIES INSTALLING NEW STRUCTURES, UTILITIES AND SERVICE TO THE PROJECT.
3. CONTRACTOR SHALL POT HOLE ALL UTILITIES TO DETERMINE IF CONFLICTS EXIST PRIOR TO BEGINNING ANY EXCAVATION. NOTIFY ENGINEER OF ANY CONFLICTS. CONTRACTOR SHALL VERIFY LOCATION AND INVERTS OF EXISTING UTILITIES TO WHICH NEW UTILITIES WILL BE CONNECTED. PRIOR TO COMMENCING ANY EXCAVATION WORK THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES IN ACCORDANCE WITH THE REQUIRED PROCEDURES.
4. CARE SHOULD BE TAKEN IN ALL EXCAVATIONS DUE TO POSSIBLE EXISTENCE OF UNRECORDED UTILITY LINES. EXCAVATION REQUIRED WITHIN PROXIMITY OF EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT HIS EXPENSE.
5. ALL VALVES AND MANHOLE COVERS SHALL BE RAISED OR LOWERED TO MEET FINISHED GRADE.
6. CONTRACTOR SHALL CUT PIPES OFF FLUSH WITH THE INSIDE WALL OF THE BOX OR MANHOLE.
7. CONTRACTOR SHALL GROUT AT CONNECTION OF PIPE TO BOX WITH NON-SHRINKING GROUT, INCLUDING PIPE VOIDS LEFT BY CUTTING PROCESS, TO A SMOOTH FINISH.
8. CONTRACTOR SHALL GROUT WITH NON-SHRINK GROUT BETWEEN GRADE RINGS AND BETWEEN BOTTOM OF INLET LID FRAME AND TOP OF CONCRETE BOX.
9. SILT AND DEBRIS IS TO BE CLEANED OUT OF ALL STORM DRAIN BOXES. CATCH BASINS ARE TO BE MAINTAINED IN A CLEANED CONDITION AS NEEDED UNTIL AFTER THE FINAL BOND RELEASE INSPECTION.
10. CONTRACTOR SHALL CLEAN ASPHALT, TAR OR OTHER ADHESIVES OFF OF ALL MANHOLE LIDS AND INLET GRATES TO ALLOW ACCESS.
11. EACH TRENCH SHALL BE EXCAVATED SO THAT THE PIPE CAN BE LAID TO THE ALIGNMENT AND GRADE AS REQUIRED. THE TRENCH WALL SHALL BE SO BRACED THAT THE WORKMEN MAY WORK SAFELY AND EFFICIENTLY. ALL TRENCHES SHALL BE DRAINED SO THE PIPE LAYING MAY TAKE PLACE IN DEWATERED CONDITIONS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE COST OF DEWATERING AND NO COST CHANGE WILL BE PROVIDED.
12. CONTRACTOR SHALL PROVIDE AND MAINTAIN AT ALL TIMES AMPLE MEANS AND DEVICES WITH WHICH TO REMOVE PROMPTLY AND TO PROPERLY DISPOSE OF ALL WATER ENTERING THE TRENCH EXCAVATION.
13. MAINTAIN A MINIMUM 18" VERTICAL SEPARATION DISTANCE BETWEEN ALL UTILITY CROSSINGS.
14. CONTRACTOR SHALL START INSTALLATION AT LOW POINT OF ALL NEW GRAVITY UTILITY LINES.
15. ALL BOLTED FITTINGS MUST BE GREASED AND WRAPPED.
16. UNLESS SPECIFICALLY NOTED OTHERWISE, MAINTAIN AT LEAST 2 FEET OF COVER OVER ALL STORM DRAIN LINES AT ALL TIMES (INCLUDING DURING CONSTRUCTION).
17. ALL WATER LINES SHALL BE INSTALLED A MINIMUM OF 60" OF COVER TO TOP OF PIPE BELOW FINISHED GRADE.
18. ALL SEWER LINES AND SEWER SERVICES SHALL HAVE A MINIMUM SEPARATION OF 10 FEET, PIPE EDGE TO PIPE EDGE, FROM THE WATER LINES.
19. CONTRACTOR SHALL INSTALL THRUST BLOCKING AT ALL WATERLINE ANGLE POINTS AND TEES.
20. ALL UNDERGROUND UTILITIES SHALL BE IN PLACE PRIOR TO INSTALLATION OF CURB, GUTTER, SIDEWALK AND STREET PAVING.
21. CONTRACTOR SHALL INSTALL MAGNETIC LOCATING TAPE CONTINUOUSLY OVER ALL NONMETALLIC PIPE.
22. THE CONTRACTOR SHALL NOTIFY TALISMAN CIVIL CONSULTANTS, LLC. IN WRITING AT LEAST 48 HOURS PRIOR TO BACKFILLING OF ANY PIPE WHICH STUBS TO A FUTURE PHASE OF CONSTRUCTION FOR INVERT VERIFICATION. TOLERANCE SHALL BE IN ACCORDANCE WITH THE REGULATORY AGENCY STANDARD SPECIFICATIONS.
23. UNDER NO CIRCUMSTANCE SHALL THE PIPE OR ACCESSORIES BE DROPPED INTO THE TRENCH

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. ALSO, INSPECTORS WILL HAVE THE RIGHT TO CHANGE THE FACILITIES AS NEEDED.

CONTRACTOR SHALL KEEP THE SITE WATERED TO CONTROL DUST. CONTRACTOR TO LOCATE A NEARBY HYDRANT FOR USE AND TO INSTALL TEMPORARY METER. CONSTRUCTION WATER COST TO BE INCLUDED IN BID.

WHEN GRADING OPERATIONS ARE COMPLETED AND THE DISTURBED GROUND IS LEFT "OPEN" FOR 14 DAYS OR MORE, THE AREA SHALL BE FURROWED PARALLEL TO THE CONTOURS.

THE CONTRACTOR SHALL MODIFY EROSION CONTROL MEASURES TO ACCOMMODATE PROJECT PLANNING.

LEGEND:

SYMBOL / LINETYPE	DESCRIPTION	DETAIL
4"W	4"ø C-900 PRESSURE CLASS 165 PVC WATER PIPE	APWA PLAN NO. 381,382
6"W	6"ø C-900 PRESSURE CLASS 165 PVC WATER PIPE	APWA PLAN NO. 381,382
6" F	6"ø C-900 PRESSURE CLASS 235 PVC PIPE	APWA PLAN NO. 381,382
W	PROPOSED WATER METER	APWA PLAN NO. 521
	1 1/2" WATER LATERAL	APWA PLAN NO. 552 AND DETAIL D, SHEET 6.00
8"SS HDPE	8"ø SDR35 PVC SEWER PIPE	APWA PLAN NO. 381,382
(1)SS-P	1.5"ø PRESSURE SEWER PIPE – DR-11 IPS	APWA PLAN NO. 381,382
SS	4" SANITARY SEWER LATERAL	APWA PLAN NO. 431 AND DETAIL D, SHEET 6.00
15"SD	15"ø STORM DRAIN PIPE. SEE KEYNOTE.	
G	PROPOSED GAS MAIN	
G	PROPOSED GAS METER	
	PROPOSED GAS LATERAL	
P	PROPOSED ELECTRICAL CONDUIT	
	PROPOSED FIRE HYDRANT ASSEMBLY/STAND PIPE	APWA PLAN NO. 511
	PROPOSED SEWER CLEANOUT	
S	PROPOSED SEWER MANHOLE	
	PROPOSED PAVEMENT SECTION	APWA PLAN NO. 315
	ADJOINING PROPERTY BOUNDARY	PER IGES GEOTECH REPORT 11/09/12
	FUTURE IMPROVEMENTS	
	PROPOSED LOT LINE	
6"W	PROPOSED 6" WATER PIPE	
SS	PROPOSED SEWER PIPE	
	PROPOSED EDGE OF TRAVEL	
COM	PROPOSED COMMUNICATION LINE	
10"W	EXISTING 10" WATER PIPE	
P	EXISTING ELECTRICAL CONDUIT	

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

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. ALSO, INSPECTORS WILL HAVE THE RIGHT TO CHANGE THE FACILITIES AS NEEDED.

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WHEN GRADING OPERATIONS ARE COMPLETED AND THE DISTURBED GROUND IS LEFT "OPEN" FOR 14 DAYS OR MORE, THE AREA SHALL BE FURROWED PARALLEL TO THE CONTOURS.

THE CONTRACTOR SHALL MODIFY EROSION CONTROL MEASURES TO ACCOMMODATE PROJECT PLANNING.

ALL ACCESS TO PROPERTY WILL BE FROM PUBLIC RIGHT-OF-WAYS.

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.

MAINTENANCE:

ALL BEST MANAGEMENT PRACTICES (BMP'S) SHOWN ON THIS PLAN MUST BE MAINTAINED AT ALL TIMES UNTIL VEGETATION IS RE-ESTABLISHED.

THE CONTRACTOR'S RESPONSIBILITY SHALL INCLUDE MAKING BI-WEEKLY CHECKS ON ALL EROSION CONTROL MEASURES TO DETERMINE IF REPAIR OR SEDIMENT REMOVAL IS NECESSARY. CHECKS SHALL BE DOCUMENTED AND COPIES OF THE INSPECTIONS KEPT ON SITE.

SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF BARRIER.

SEDIMENT TRACKED ONTO PAVED ROADS MUST BE CLEANED UP AS SOON AS PRACTICAL, BUT IN NO CASE LATER THAN THE END OF THE NORMAL WORK DAY. THE CLEAN UP WILL INCLUDE SWEEPING OF THE TRACKED MATERIAL, PICKING IT UP, AND DEPOSITING IT TO A CONTAINED AREA.

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
B) TRACKING STRAW PERPENDICULAR TO SLOPES
C) INSTALLING A LIGHT-WEIGHT, TEMPORARY EROSION CONTROL BLANKET

*** SEED MIXTURE FOR REVEGITATION**

a. MEADOW BROME (RIGOR) 14lb/ac
b. ORCHARD GRASS 10lb/ac
c. ALFALFA (ADAK) 4lb/ac

WEBER COUNTY

2380 WASHINGTON BLVD. #240
OGDEN, UT 84401
(801) 399-8374

ROCKY MOUNTIAN POWER

1438 WEST 2550 SOUTH
OGDEN, UT 84401
(801) 629-4429

POWDER MOUNTAIN WATER & SEWER DISTRICT

PO BOX 270
EDEN, UT 84310
(801) 745-0912

CALL BEFORE YOU DIG! IT'S THE LAW — BLUE STAKES 1 800 662 4111

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NO. | BY | DATE | REVISIONS

HORIZON NEIGHBORHOOD PRUD

GENERAL NOTES, KEY NOTES, AND LEGEND

PREPARED FOR: SUMMIT POWDER MOUNTAIN

DATE SUBMITTED: 08.01.2017

TALISMAN CIVIL CONSULTANTS
5217 SOUTH STATE STREET, SUITE 200 MURRAY, UT 84107
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REGISTERED PROFESSIONAL ENGINEER No. 7899506 RYAN W. CATHEY STATE OF UTAH

SHEET NUMBER 1.01

SCALE
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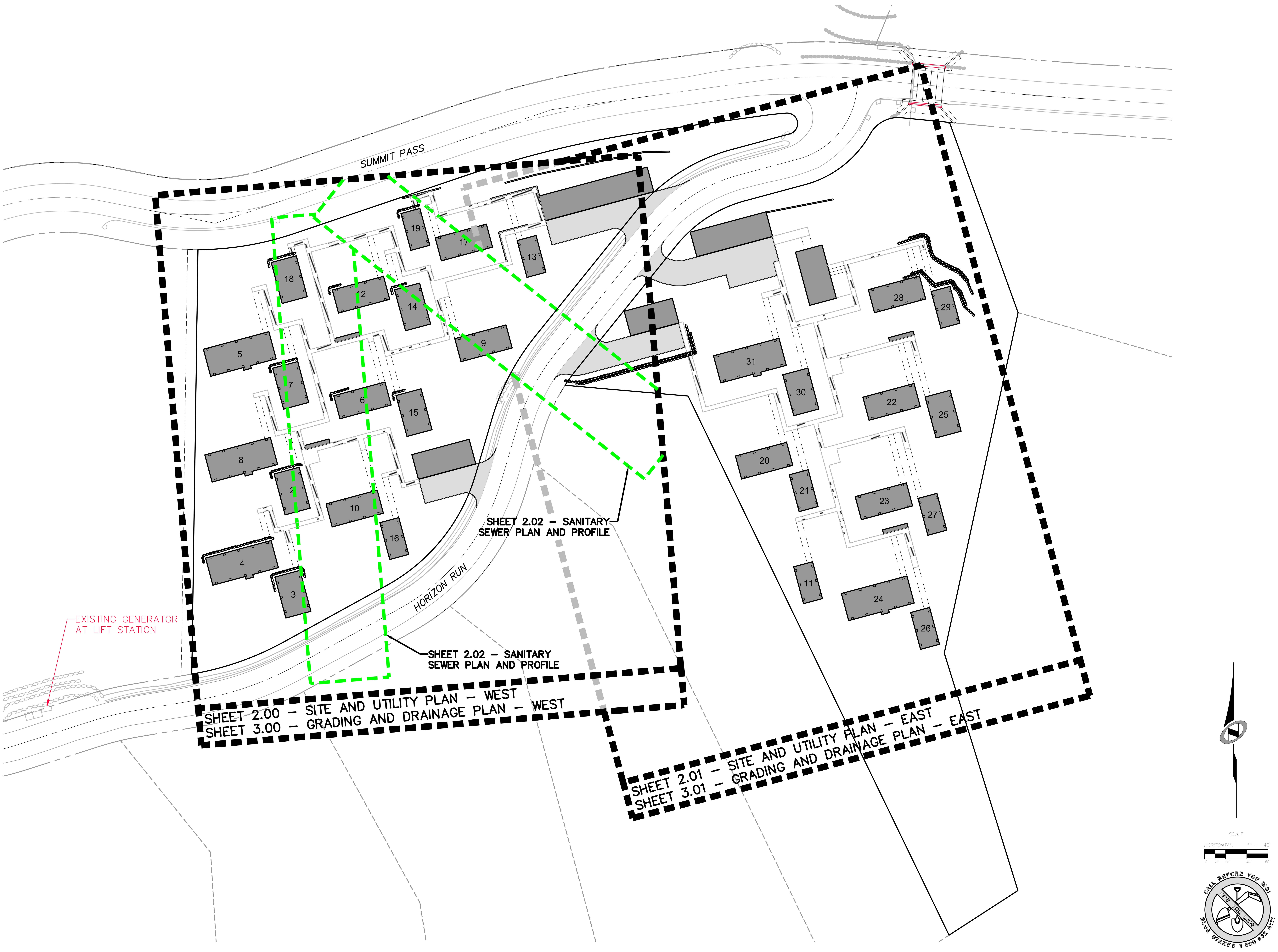

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HORIZON NEIGHBORHOOD PRUD

OVERALL KEY MAP

PREPARED FOR: SUMMIT POWDER MOUNTAIN

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REGISTERED PROFESSIONAL ENGINEER No. 7899506 RYAN W. CATHEY STATE OF UTAH 8/1/17

SHEET NUMBER
1.02

SCALE
VERTICAL: 1"= N/A
HORIZONTAL: 1"= 40'

JOB NUMBER
SLB0793

DATE: 8/1/17 TIME: 2:28:18 PM DRAWING NAME: SITE_AND_UTILITY_PLAN_-_WEST
SERVER: NONE PAGE SETUP: PDF_C3D-24x36 LAYOUT: Layout1
PATH: N:\SLB0793\CADD\HORIZON VILLAGE.DP DESIGNER: ### PROJ. MGR: ###

KEY NOTES

1. ROCKERY IN THIS AREA TO BE CONSTRUCTED PER "ROCKERY CONSTRUCTION FOR WET CONDITIONS, PHASE 1E. 1F AND 1G, POWDER MOUNTAIN RESORT, WEBER COUNTY, UTAH" PRODUCED BY IGES. IGES PROJECT NUMBER 01628-011, DATED JANUARY 18, 2016
2. INSTALL RIBBON CURB PER DETAIL A/SHEET 6.00.
3. INSTALL PAVEMENT ASPHALT PAVEMENT PER SECTION DETAIL B/SHEET 6.00.
4. PARKING GARAGE. SEE ARCHITECTURAL PLANS.
5. SEE ARCHITECTURAL PLANS FOR BUILDING PLANS.
6. BOARDWALK. SEE ARCHITECTURAL PLANS.
7. ACCESS BRIDGE. SEE ARCHITECTURAL PLANS.
8. CONCRETE RETAINING WALL. SEE STRUCTURAL PLANS.

KEY NOTES (CONT)

9. CONNECT TO WATER MAINLINE WITH 8" TEE WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.
10. CONNECT TO WATER MAINLINE WITH 6" HOT TAP.
11. INSTALL 6"x6"x6" TEE WITH THRUST BLOCKING PER APWA STANDARD NO. 561.
12. INSTALL 4"ø GATE VALVE WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.
13. INSTALL 6"ø GATE VALVE WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.
14. INSTALL 8"x4" REDUCER WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.
15. CONNECT TO EXISTING 8" WATER STUB.
16. INSTALL 1 1/2" SERVICE LATERAL PER APWA STANDARD PLAN NO. 552 AND DETAIL D, SHEET 6.00.
17. INSTALL 4"ø 11.25° BEND WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.
18. INSTALL 4"ø 22.5° BEND WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.
19. INSTALL 4"ø 45° BEND WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.
20. INSTALL 8"ø 90° BEND WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.
21. INSTALL 6"ø 22.5° BEND WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.
22. INSTALL 6"ø 45° BEND WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.

KEY NOTES (CONT)

23. INSTALL 4"ø WASHOUT VALVE PER APWA STANDARD PLAN NO. 571.
24. INSTALL AIR RELEASE ASSEMBLY PER APWA STANDARD PLAN NO. 575.
25. CONSTRUCT 4" METER PER APWA STANDARD PLAN NO. 523.
26. INSTALL FIRE DEPARTMENT CONNECTION PER DETAIL E/SHEET 6.00. COORDINATE WITH WEBER COUNTY FIRE MARSHAL.
27. INSTALL STAND PIPE PER DETAIL E/SHEET 6.00.
28. INSTALL 4'ø SANITARY SEWER MANHOLE PER APWA STANDARD PLAN NO. 411 WITH DEEP DROP INLET PER APWA STANDARD PLAN NO. 433.
29. INSTALL 4" SANITARY SEWER LATERAL AND CLEANOUT PER APWA STANDARD PLAN NO. 431 AND DETAIL D, SHEET 6.00.
30. ELECTRICAL POWER CONDUIT FROM EXISTING GENERATOR AT LIFT STATION TO BOOSTER PUMP VAULT FOR BACKUP POWER. SEE BOWEN COLLINS ELECTRICAL PLANS.
31. WYE CONNECT TO 8"ø SEWER LINE.
32. GAS PIPES, AND STORAGE TANKS (1,000 GAL) TO BE EXCAVATED AND TRENCHED BY CONTRACTOR. INSTALLATION BY OTHERS.
33. FIRE CACHE. SEE ARCHITECTURAL PLANS.
34. INSTALL FIRE HYDRANT ASSEMBLY PER APWA STANDARD PLAN NO. 511.
35. PROPANE TANK PIT PER DETAIL C/SHEET 6.00.
36. INSTALL 5'ø SANITARY SEWER MANHOLE PER APWA STANDARD PLAN NO. 411.
37. INSTALL 4'ø SANITARY SEWER MANHOLE PER APWA STANDARD PLAN NO. 411.
38. INSTALL BOOSTER PUMP VAULT PER DETAIL A, SHEET 6.02.
39. INSTALL 1 1/2" BALL VALVE.
40. CONNECT TO EXISTING BACKUP GENERATOR. SEE BOWEN COLLINS ELECTRICAL PLANS.
41. ELECTRICAL POWER CONDUIT, TRANSFORMERS AND PULL BOXES. SEE SALMON ELECTRICAL PLANS.
42. POWER METER BASE AND MAIN CIRCUIT BREAKER, SEE SALMON ELECTRICAL PLANS.
43. BOOSTER PUMP VAULT ELECTRICAL EQUIPMENT, SEE DETAIL B, SHEET 6.02. SEE BOWEN COLLINS ELECTRICAL PLANS.
44. INSTALL 15"ø RCP CLASS 3 CULVERT WITH FLARED END SECTIONS TO MATCH EXISTING FLOWLINE OF DRAINAGE CHANNEL
45. INSTALL E/ONE GRINDER PUMP STATION MODEL DH071. WITH E/ONE SENTRY ALARM PANEL INCLUDING GENERATOR RECEPTACLE WITH AUTO TRANSFER AND GFCI RECEPTACLE. ALARM PANELS SHALL BE INSTALLED WITHIN LINE OF SIGHT OF ENTRY TO UNIT. SEE DETAIL SHEET 6.03.
46. INSTALL E/ONE GRINDER PUMP STATION MODEL DH151. WITH E/ONE SENTRY ALARM PANEL INCLUDING GENERATOR RECEPTACLE WITH AUTO TRANSFER AND GFCI RECEPTACLE. ALARM PANELS SHALL BE INSTALLED WITHIN LINE OF SIGHT OF ENTRY TO UNIT. SEE DETAIL SHEET 6.03.
47. CONSTRUCT ROCK WALL WITH GUARDRAIL. SEE STRUCTURAL PLANS.
48. WYE CONNECT 1.5"ø SEWER PIPE
49. CONSTRUCT 4' WIDE x 1' DEEP DRAINAGE SWALE. LINE SWALE WITH D50=6" RIP RAP.
50. INSTALL CHECK DAM PER DETAIL A, SHEET 6.04. CHECK DAMS TO BE INSTALLED AT EVERY 12" IN ELEVATION RISE AS SHOWN ON PLAN.
51. INSTALL COMMUNICATION CONDUIT.
52. INSTALL COMMUNICATION BOX.
53. INSTALL P-TYPE CURB PER APWA PLAN NO. 209.
54. CONSTRUCT CURB TRANSITION.
55. CONSTRUCT 6" CURB CUT PER DETAIL B/SHEET 6.04.
56. INSTALL CATCH BASIN PER APWA STANDARD PLAN NO. 315, 308, AND 206.
57. INSTALL 15"ø CORRUGATED HDPE STORM DRAIN PIPE PER APWA STANDARD PLAN NO. 381, AND 382.
58. INSTALL FLARED END SECTION PER APWA STANDARD PLAN NO. 323.
59. INSTALL 8"ø 45° BEND WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.
60. INSTALL 8"x4" REDUCER WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.
61. INSTALL 8"ø GATE VALVE WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.
62. INSTALL 8"x6" REDUCER WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.
63. CONSTRUCT 18'x10' D50=9" RIP RAP OUTFALL.

SEE SHEET 2.02 FOR PLAN AND PROFILE

SEE SHEET 2.02 FOR PLAN AND PROFILE

AT EXISTING LIFT STATION GENERATOR SEE SHEET 1.02

HORIZON RUN

SUMMIT PASS

PUE

R.O.W.

NO.	BY	DATE	REVISIONS

CAUTION

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HORIZON NEIGHBORHOOD PRUD

SITE AND UTILITY PLAN - WEST

DATE SUBMITTED: 08.01.2017

PREPARED FOR: SUMMIT POWDER MOUNTAIN

TALISMAN CIVIL CONSULTANTS
MURRAY, UT 84107
5627 SOUTH STATE STREET, SUITE 200
801.743.3000 TEL 801.743.3000 FAX

REGISTERED PROFESSIONAL ENGINEER
No. 7899506
RYAN W. CATHEY
8/1/17
STATE OF UTAH

SHEET NUMBER
2.00

SCALE
VERTICAL: 1" = N/A
HORIZONTAL: 1" = 20'

JOB NUMBER
SLB0793

SCALE
HORIZONTAL: 1" = 20'

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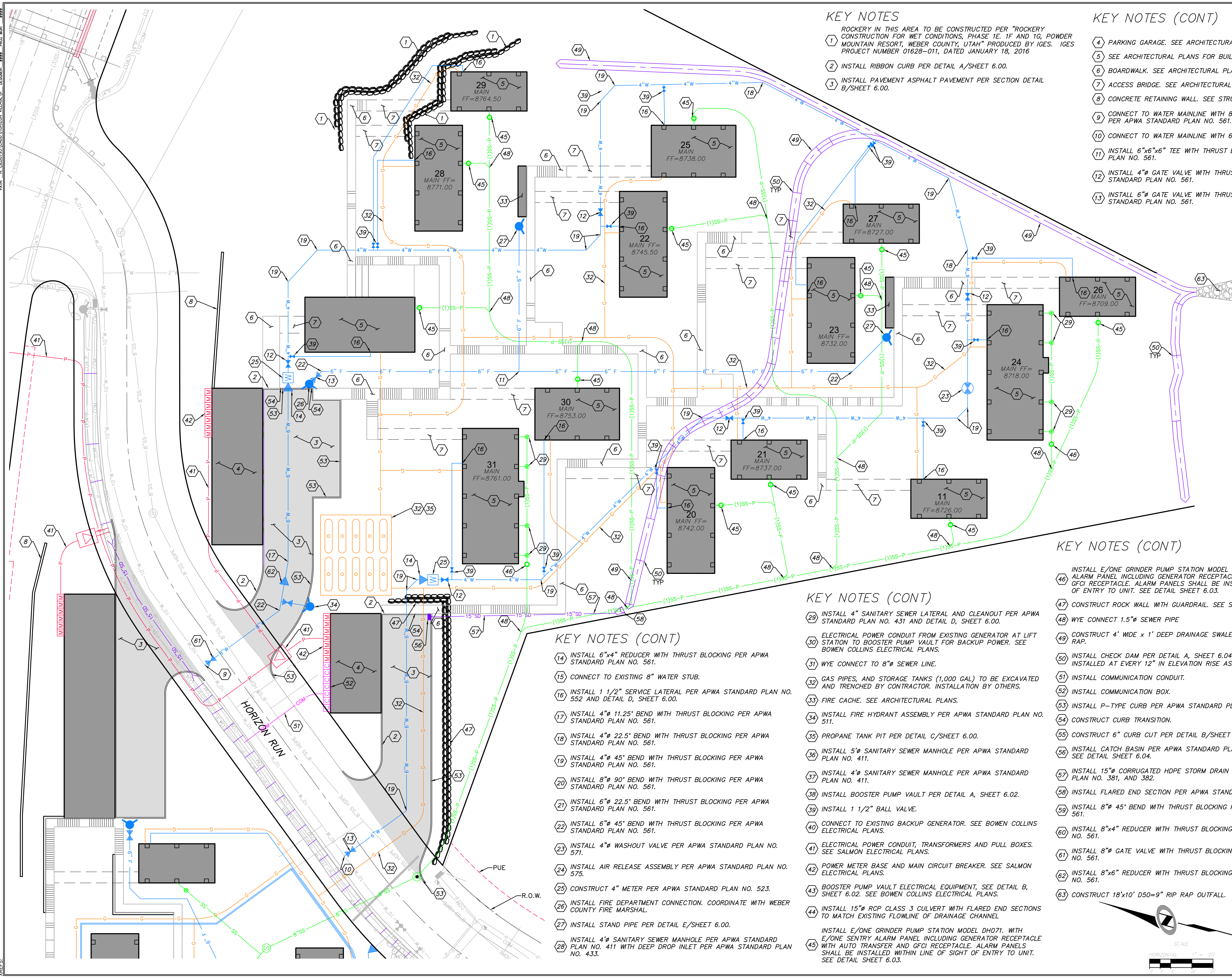
BLUE STAKES 1 800 662 4111

JOSHB
XREFS:



KEY NOTES

1. ROCKERY IN THIS AREA TO BE CONSTRUCTED PER "ROCKERY CONSTRUCTION FOR WET CONDITIONS, PHASE 1E. 1F AND 1G, POWDER MOUNTAIN RESORT, WEBER COUNTY, UTAH" PRODUCED BY IGES. IGES PROJECT NUMBER 01628-011, DATED JANUARY 18, 2016
2. INSTALL RIBBON CURB PER DETAIL A/SHEET 6.00.
3. INSTALL PAVEMENT ASPHALT PAVEMENT PER SECTION DETAIL B/SHEET 6.00.

KEY NOTES (CONT)

4. PARKING GARAGE. SEE ARCHITECTURAL PLANS.
5. SEE ARCHITECTURAL PLANS FOR BUILDING PLANS.
6. BOARDWALK. SEE ARCHITECTURAL PLANS.
7. ACCESS BRIDGE. SEE ARCHITECTURAL PLANS.
8. CONCRETE RETAINING WALL. SEE STRUCTURAL PLANS.
9. CONNECT TO WATER MAINLINE WITH 8" TEE WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.
10. CONNECT TO WATER MAINLINE WITH 6" HOT TAP.
11. INSTALL 6"x6"x6" TEE WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.
12. INSTALL 4"ø GATE VALVE WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.
13. INSTALL 6"ø GATE VALVE WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.

KEY NOTES (CONT)

14. INSTALL 6"x4" REDUCER WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.
15. CONNECT TO EXISTING 8" WATER STUB.
16. INSTALL 1 1/2" SERVICE LATERAL PER APWA STANDARD PLAN NO. 552 AND DETAIL D, SHEET 6.00.
17. INSTALL 4"ø 11.25° BEND WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.
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26. INSTALL FIRE DEPARTMENT CONNECTION. COORDINATE WITH WEBER COUNTY FIRE MARSHAL.
27. INSTALL STAND PIPE PER DETAIL E/SHEET 6.00.
28. INSTALL 4'ø SANITARY SEWER MANHOLE PER APWA STANDARD PLAN NO. 411 WITH DEEP DROP INLET PER APWA STANDARD PLAN NO. 433.

KEY NOTES (CONT)

29. INSTALL 4" SANITARY SEWER LATERAL AND CLEANOUT PER APWA STANDARD PLAN NO. 431 AND DETAIL D, SHEET 6.00.
30. ELECTRICAL POWER CONDUIT FROM EXISTING GENERATOR AT LIFT STATION TO BOOSTER PUMP VAULT FOR BACKUP POWER. SEE BOWEN COLLINS ELECTRICAL PLANS.
31. WYE CONNECT TO 8"ø SEWER LINE.
32. GAS PIPES, AND STORAGE TANKS (1,000 GAL) TO BE EXCAVATED AND TRENCHED BY CONTRACTOR. INSTALLATION BY OTHERS.
33. FIRE CACHE. SEE ARCHITECTURAL PLANS.
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KEY NOTES (CONT)

46. INSTALL E/ONE GRINDER PUMP STATION MODEL DH151. WITH E/ONE SENTRY ALARM PANEL INCLUDING GENERATOR RECEPTACLE WITH AUTO TRANSFER AND GFCI RECEPTACLE. ALARM PANELS SHALL BE INSTALLED WITHIN LINE OF SIGHT OF ENTRY TO UNIT. SEE DETAIL SHEET 6.03.
47. CONSTRUCT ROCK WALL WITH GUARDRAIL. SEE STRUCTURAL PLANS.
48. WYE CONNECT 1.5"ø SEWER PIPE
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56. INSTALL CATCH BASIN PER APWA STANDARD PLAN NO. 315, 308, AND 206. SEE DETAIL SHEET 6.04.
57. INSTALL 15"ø CORRUGATED HDPE STORM DRAIN PIPE PER APWA STANDARD PLAN NO. 381, AND 382.
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62. INSTALL 8"x6" REDUCER WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.
63. CONSTRUCT 18'x10' D50=9" RIP RAP OUTFALL.

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NO.	BY	DATE	REVISIONS

HORIZON NEIGHBORHOOD PRUD

SITE AND UTILITY PLAN - EAST

PREPARED FOR: SUMMIT POWDER MOUNTAIN

DATE SUBMITTED: 08.01.2017

TALISMAN CIVIL CONSULTANTS
5217 SOUTH STATE STREET, SUITE 200 MURRAY, UT 84107
801.743.1300 TEL 801.743.0300 FAX

REGISTERED PROFESSIONAL ENGINEER No. 7899506 RYAN W. CATHEY STATE OF UTAH

SHEET NUMBER 2.01

SCALE VERTICAL: 1"= N/A HORIZONTAL: 1"= 20'

JOB NUMBER SLB0793

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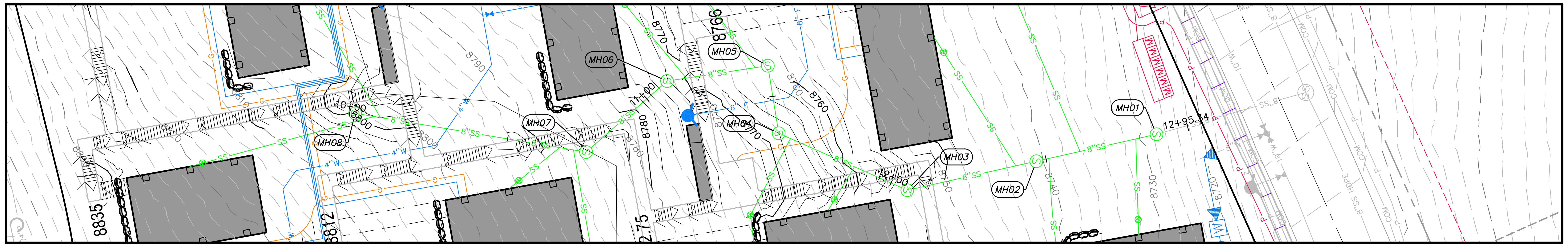

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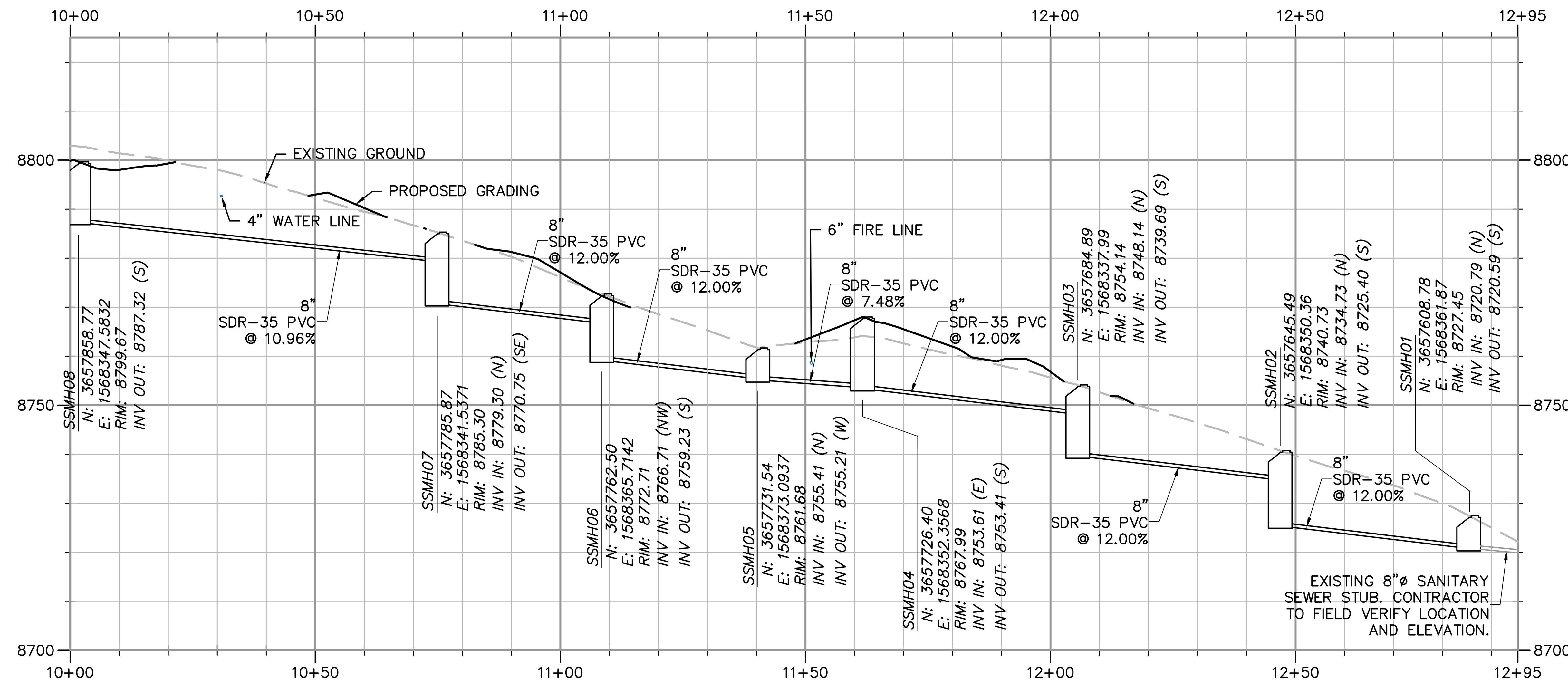

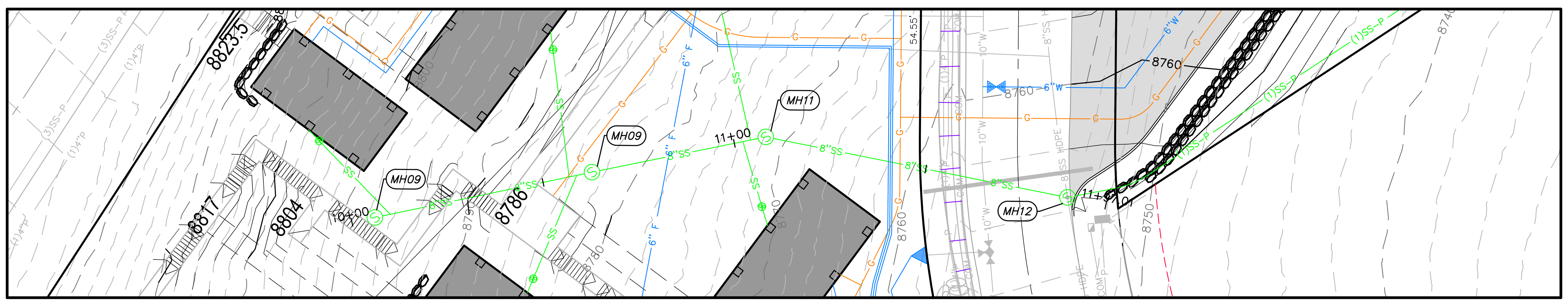

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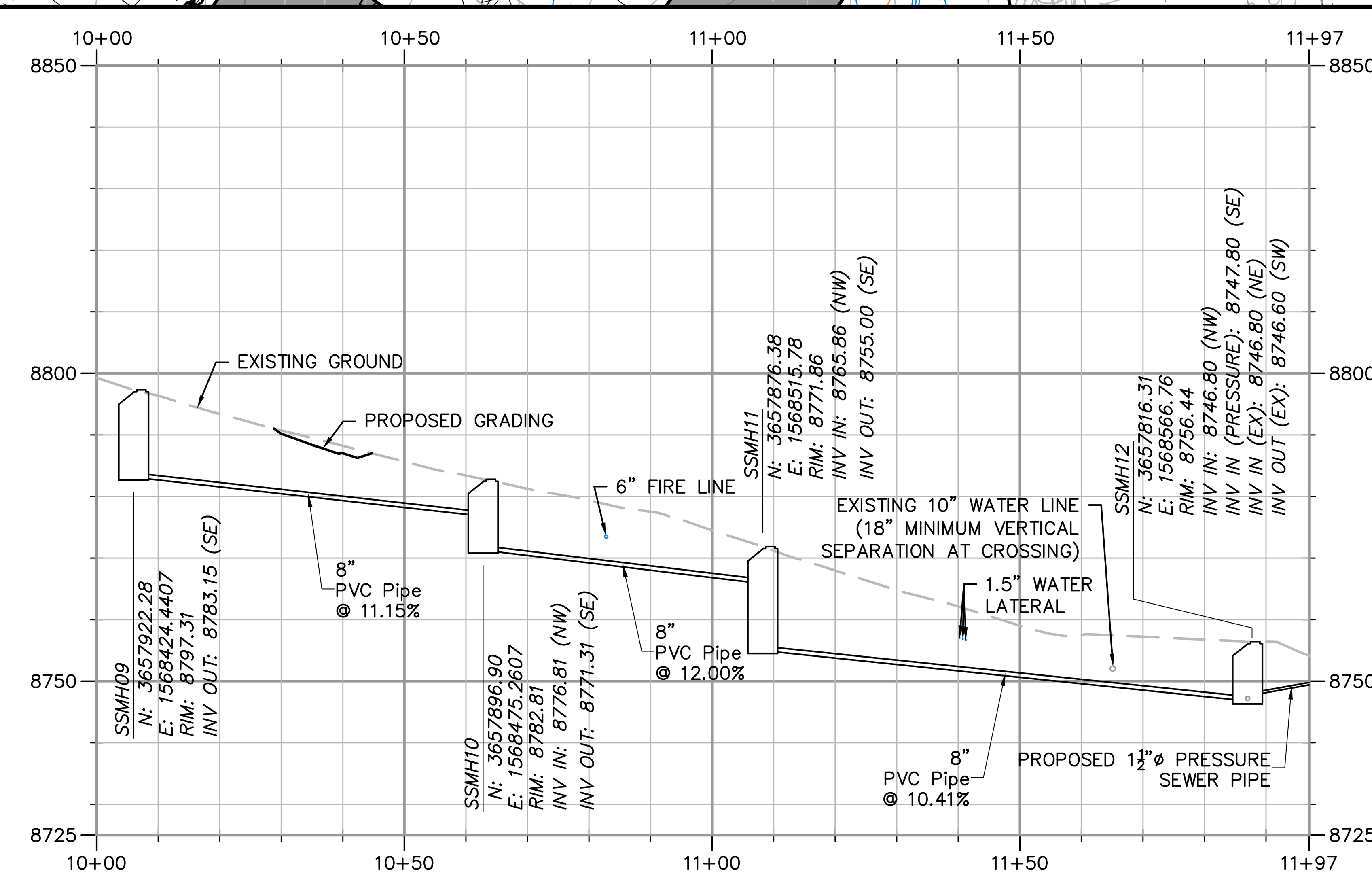

NO.	BY	DATE	REVISIONS:

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HORIZON NEIGHBORHOOD PRUD

SANITARY SEWER PLAN AND PROFILE

PREPARED FOR: SUMMIT POWDER MOUNTAIN

DATE SUBMITTED: 08.01.2017

TALISMAN CIVIL CONSULTANTS
5217 SOUTH STATE STREET, SUITE 200
MURRAY, UT 84107
801.743.1300 TEL 801.743.0300 FAX

REGISTERED PROFESSIONAL ENGINEER
No. 7899506
RYAN W. CATHEY
8/1/17
STATE OF UTAH

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SHEET NUMBER
2.02

SCALE
VERTICAL: 1"= N/A
HORIZONTAL: 1"= 20'

JOB NUMBER
SLB0793

JOSHB
XREFS:

ABBREVIATIONS:

BG	BUILDING
BK	BOARDWALK
BS	BOTTOM OF STAIRS
BW	BOTTOM OF WALL
EX	EXISTING
FG	FINISHED GRADE
FL	FLOWLINE
TC	TOP OF CURB
TS	TOP OF STAIRS
TW	TOP OF WALL

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

NO.	BY	DATE	REVISIONS

HORIZON NEIGHBORHOOD PRUD

GRADING AND DRAINAGE PLAN - WEST

PREPARED FOR: SUMMIT POWDER MOUNTAIN

DATE SUBMITTED: 08.01.2017

TALISMAN
CIVIL CONSULTANTS
5217 SOUTH STATE STREET, SUITE 200
MURRAY, UT 84107
801.743.1300 TEL 801.743.0300 FAX

REGISTERED PROFESSIONAL ENGINEER
No. 7899506
RYAN W. CATHEY
STATE OF UTAH

SHEET NUMBER
3.00

SCALE
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HORIZONTAL: 1"= 20'

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MATCHLINE – SEE THIS SHEET

ABBREVIATIONS:

BG	BUILDING
BK	BOARDWALK
BS	BOTTOM OF STAIRS
BW	BOTTOM OF WALL
EX	EXISTING
FG	FINISHED GRADE
FL	FLOWLINE
TC	TOP OF CURB
TS	TOP OF STAIRS
TW	TOP OF WALL

HORIZON RUN

MATCHLINE – SEE THIS SHEET

NO.	BY	DATE	REVISIONS

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HORIZON NEIGHBORHOOD PRUD

GRADING AND DRAINAGE PLAN - EAST

DATE SUBMITTED: 08.01.2017

PREPARED FOR: SUMMIT POWDER MOUNTAIN

TALISMAN CIVIL CONSULTANTS
MURRAY, UT 84107
5217 SOUTH STATE STREET, SUITE 200
801.743.3300 TEL 801.743.0080 FAX

REGISTERED PROFESSIONAL ENGINEER
No. 7899506
RYAN W. CATHEY
STATE OF UTAH

SHEET NUMBER
3.01

SCALE
VERTICAL: 1"= N/A
HORIZONTAL: 1"= 20'

JOB NUMBER
SLB0793

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JOSHB
XREFS:

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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. 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. RE-SEED AREA IS APPROXIMATE, CONTRACTOR IS TO REVEGITATE ALL DISTURBED AREAS.*

STABILIZED CONSTRUCTION ENTRANCE FOR SITE INGRESS/EGRESS. IF ALTERNATE ACCESS POINTS ARE APPROVED BY OWNER, ADDITIONAL STABILIZED CONSTRUCTION ENTRANCES WILL BE REQUIRED.

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.

SCALE
HORIZONTAL: 1" = 40'

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HORIZON NEIGHBORHOOD PRUD

EROSION CONTROL PLAN - OVERALL

PREPARED FOR: SUMMIT POWDER MOUNTAIN

DATE SUBMITTED: 08.01.2017

NO.	BY	DATE	REVISIONS

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TALISMAN CIVIL CONSULTANTS
MURRAY, UT 84107
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REGISTERED PROFESSIONAL ENGINEER
No. 7899506
RYAN W. CATHEY
STATE OF UTAH

SHEET NUMBER
4.00

SCALE
VERTICAL: 1" = N/A
HORIZONTAL: 1" = 40'

JOB NUMBER
SLB0793

JOSHUA KREPS

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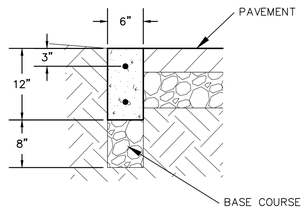
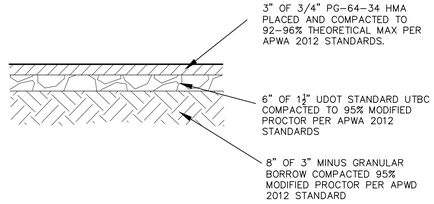
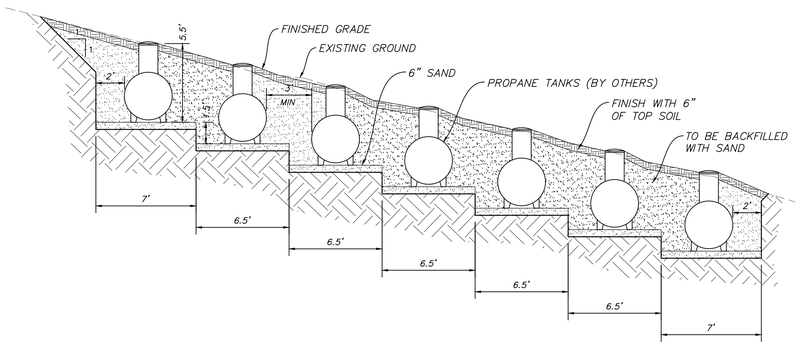


A — RIBBON CURB
(MODIFIED TYPE P CURB)
NTS

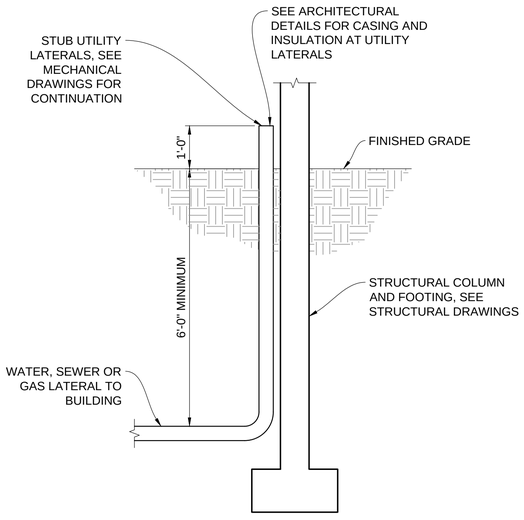


B — PARKING ASPHALT SECTION
NTS



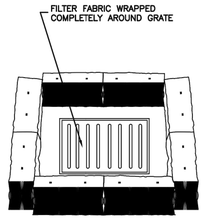
SECTION A–A

C — PROPANE TANK PIT
VAR NTS

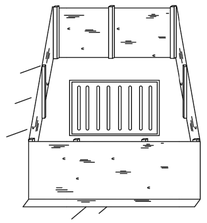


D — SERVICE LATERAL DETAIL
VAR NTS

NARRATIVE: THIS PLAN MAY BE USED FOR THE CONSTRUCTION OF A STORM WATER BEST MANAGEMENT PRACTICE (BMP). IT IS NOT INCLUSIVE OF ALL PRACTICES AVAILABLE AND IS ONLY SPECIFIC TO THE CONSTRUCTION OF THIS TYPE. MAINTENANCE OF THIS TYPE OF INSTALLATION IS IMPORTANT AND SHOULD BE CONTINUOUSLY MONITORED BY THE CONTRACTOR AND ENGINEER. DETAILS SHOWN HERE HIGHLIGHT IMPORTANT PARTS OF CONSTRUCTION, AND SHOULD BE MODIFIED AS NEEDED.



STRAW BALE BARRIER
(PLAN No. 121)



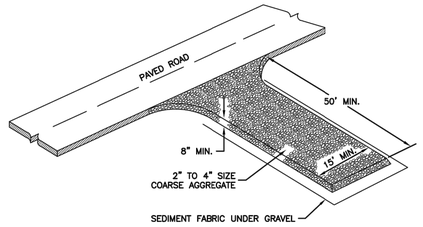
SILT FENCE
(PLAN No. 122)

Inlet protection - fence or straw bale

Plan 124 Sheet 3 of 3

February 2006 15

NARRATIVE: THIS PLAN MAY BE USED FOR THE CONSTRUCTION OF A STORM WATER BEST MANAGEMENT PRACTICE (BMP). IT IS NOT INCLUSIVE OF ALL PRACTICES AVAILABLE AND IS ONLY SPECIFIC TO THE CONSTRUCTION OF THIS TYPE. MAINTENANCE OF THIS TYPE OF INSTALLATION IS IMPORTANT AND SHOULD BE CONTINUOUSLY MONITORED BY THE CONTRACTOR AND ENGINEER. DETAILS SHOWN HERE HIGHLIGHT IMPORTANT PARTS OF CONSTRUCTION, AND SHOULD BE MODIFIED AS NEEDED.

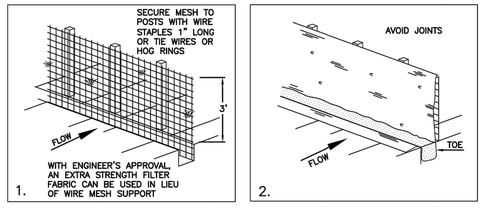


Stabilized roadway entrance

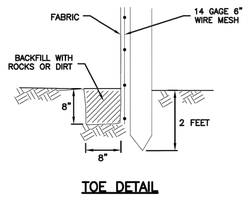
Plan 126

February 2006 19

NARRATIVE: THIS PLAN MAY BE USED FOR THE CONSTRUCTION OF A STORM WATER BEST MANAGEMENT PRACTICE (BMP). IT IS NOT INCLUSIVE OF ALL PRACTICES AVAILABLE AND IS ONLY SPECIFIC TO THE CONSTRUCTION OF THIS TYPE. MAINTENANCE OF THIS TYPE OF INSTALLATION IS IMPORTANT AND SHOULD BE CONTINUOUSLY MONITORED BY THE CONTRACTOR AND ENGINEER. DETAILS SHOWN HERE HIGHLIGHT IMPORTANT PARTS OF CONSTRUCTION, AND SHOULD BE MODIFIED AS NEEDED.



INSTALLATION SEQUENCE

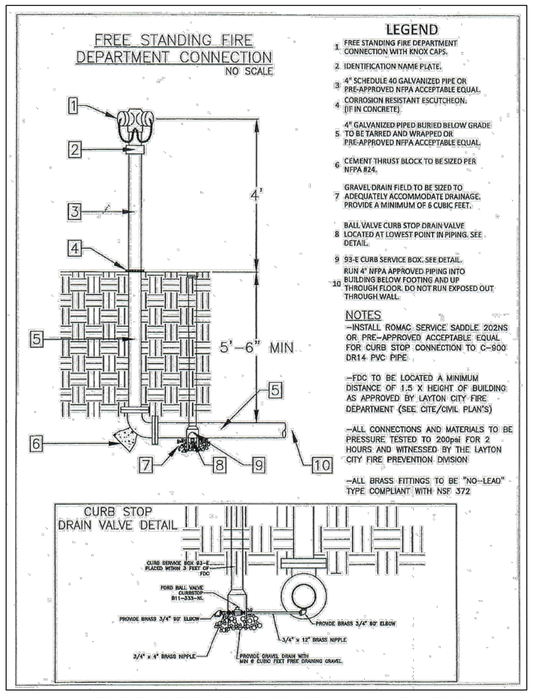


TOE DETAIL

Silt fence

Plan 122

February 2006 7



E — FIRE DEPARTMENT CONNECTION
VAR NTS

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NO.	BY	DATE	REVISIONS

CAUTION

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

HORIZON NEIGHBORHOOD PRUD

DETAILS

PREPARED FOR: SUMMIT POWDER MOUNTAIN

DATE SUBMITTED: 08.01.2017

TALISMAN CIVIL CONSULTANTS
5217 SOUTH STATE STREET, SUITE 200 MURRAY, UT 84107
801.743.3300 TEL 801.743.0080 FAX

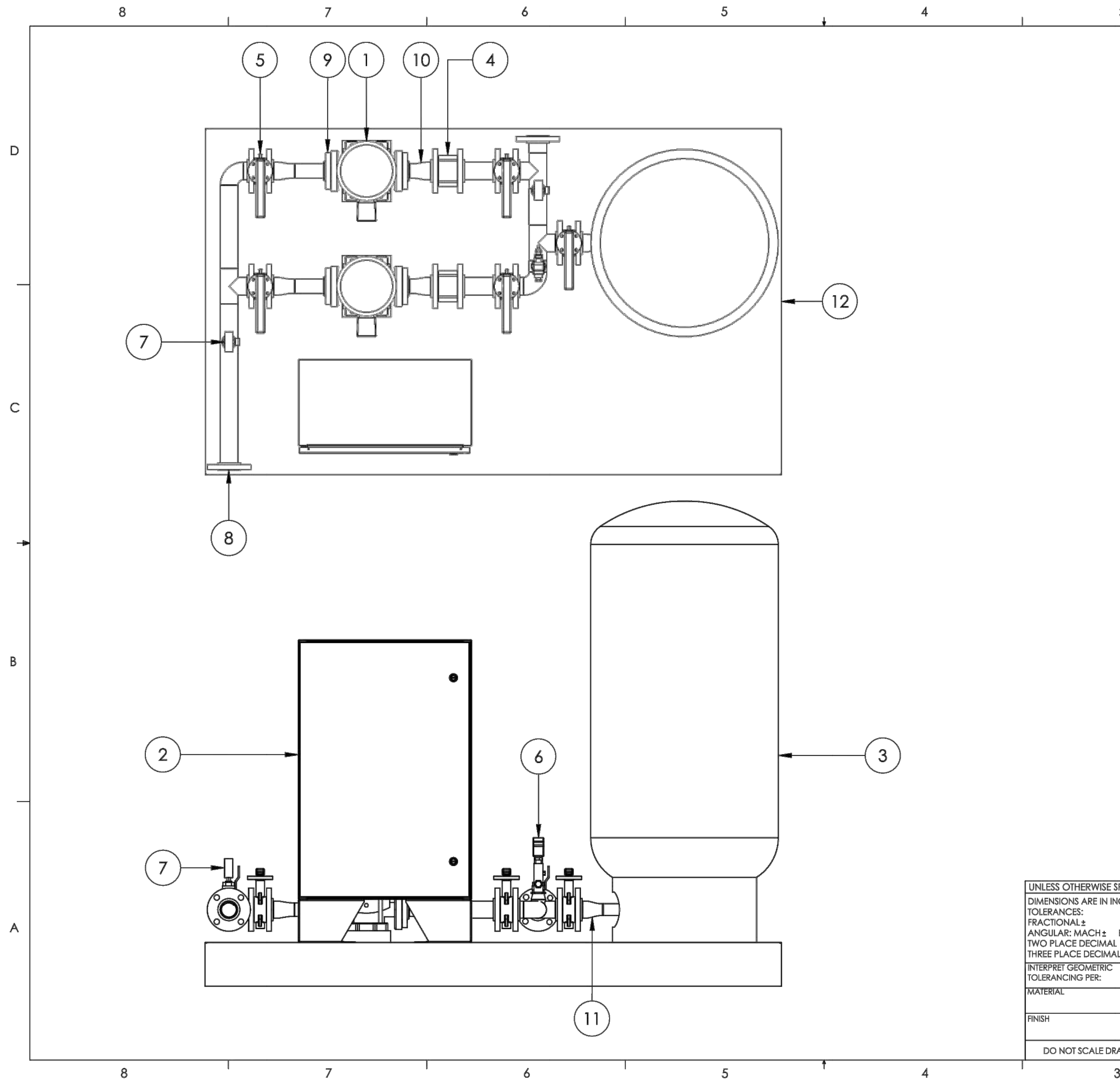
REGISTERED PROFESSIONAL ENGINEER
No. 7899506
RYAN W. CATHEY
STATE OF UTAH

SHEET NUMBER
6.00

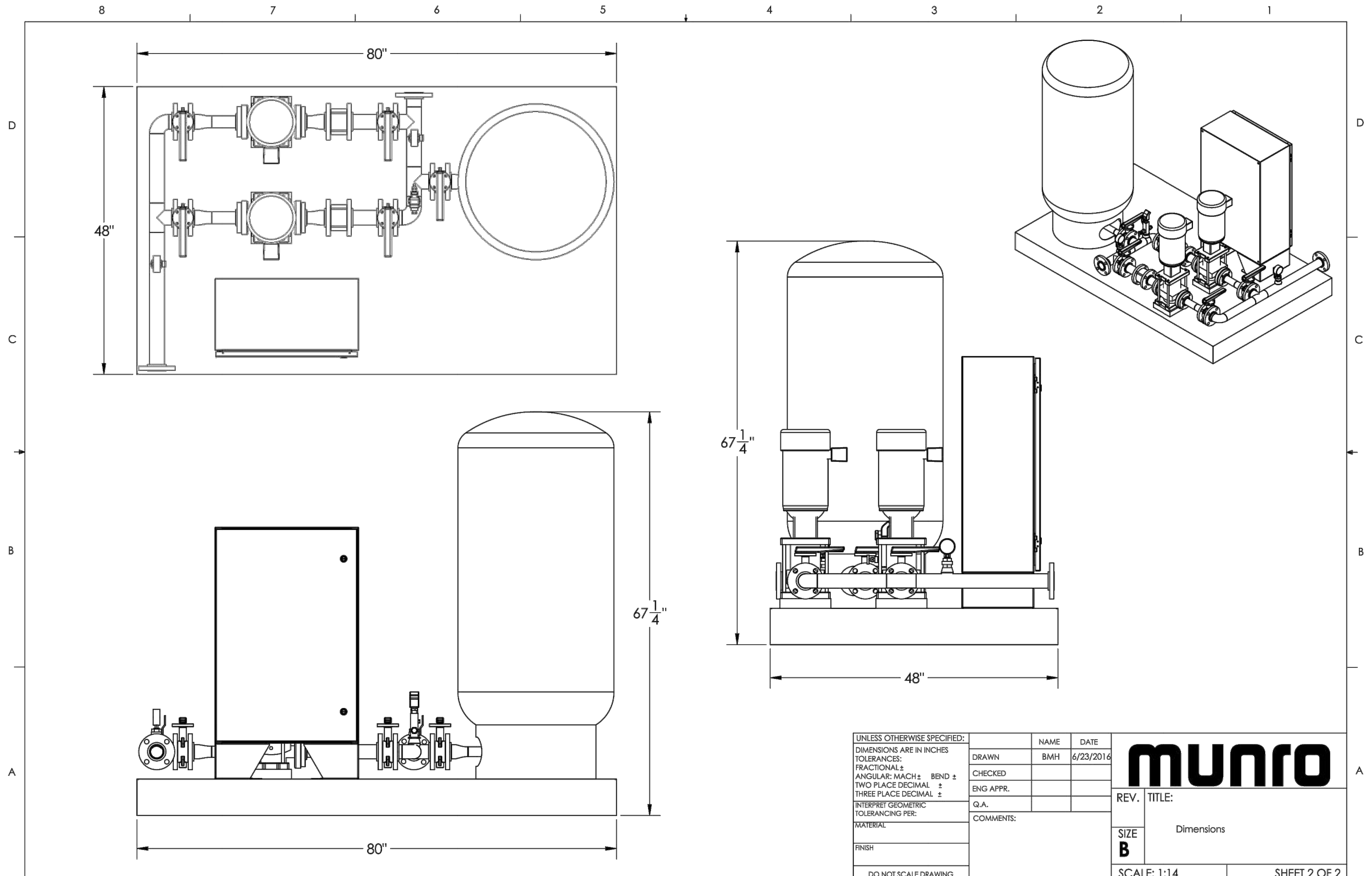
SCALE
VERTICAL: 1"= N/A
HORIZONTAL: 1"= N/A

JOB NUMBER
SLB0793

JOSHB
XREFS:



ITEM NO.	DESCRIPTION	QTY.
1	FPS 2HP 3Ph 1.5" Suc./Dis. Pump	2
2	Control Panel Enclosure	1
3	Flint & Walling Air-E-Tainer Well System Tank	1
4	2" Flomatic Wafer Check Valve	2
5	2" Keystone Full Lug Butterfly Valve	5
6	Pressure Transducer and Bleed Block	1
7	Pressure Gauge	2
8	2" Flange	16
9	1.5" Flange	4
10	2" X 1.5" Concentric Reducer	4
11	2" X 1.25" Concentric Reducer	1
12	Pump Skid	1



Pump Data Sheet - Franklin Electric

Franklin Electric

Company: NV5
Name:
Date: 6/21/2016

Pump:

Size: 5VR 2-8 stage
Type: Multi-Stage — Speed: 3450 rpm
Synch Speed: 3600 rpm — Line: 5VR-3
Curve: — Impeller:
Specific Speeds: — Ns: --- Nss: ---
Dimensions: — Suction: --- Discharge: ---

Search Criteria:

Flow: 30 US gpm — Head: 85 ft

Fluid:

Water — Temperature: 60 °F
Density: 62.37 lb/ft³ — Vapor Pressure: 0.2563 psi a
Viscosity: 1.105 cP — Atm Pressure: 14.7 psi a
NPSHa: ---

Motor:

Standard: --- — ---
Enclosure: --- — Speed: ---
Frame: ---
Sizing Criteria: none specified

Pump Limits:

Temperature: --- — Power: ---
Pressure: --- — Eye Area: ---
Sphere Size: ---

---- Duty Point ----

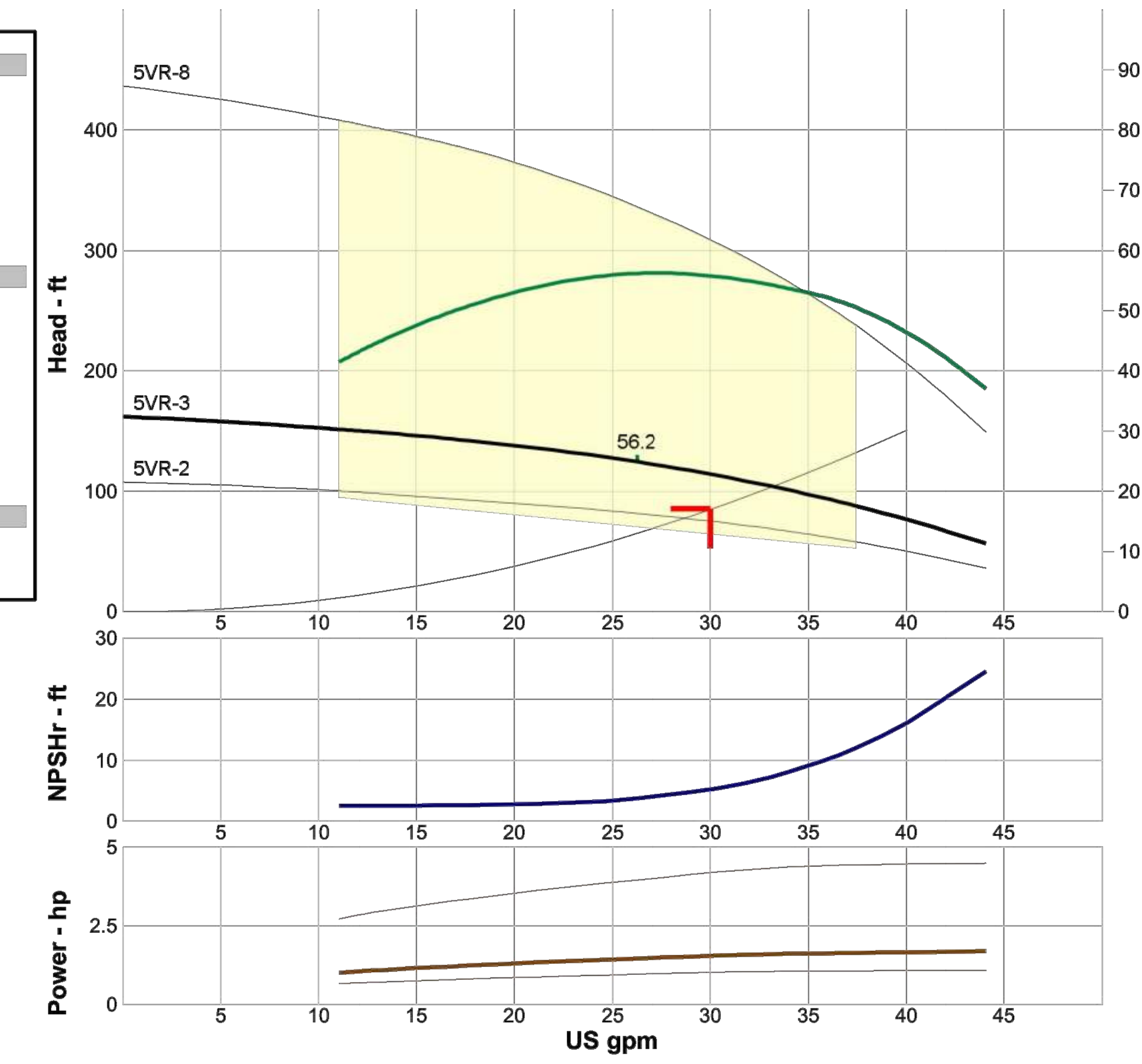
Flow: 33.2 US gpm
Head: 104 ft
Eff: 54%
Power: 1.6 hp
NPSHr: 7.44 ft

---- Design Curve ----

Shutoff Head: 162 ft
Shutoff dP: 70.2 psi
Min Flow: ---
BEP: 56.2% @ 26.3 US gpm
NOL Power: 1.7 hp @ 44 US gpm

-- Max Curve --

Max Power: 4.49 hp @ 44 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
36	3450	93.1	52	1.63	10.5
30	3450	113	55	1.54	5.74
24	3450	129	55	1.41	3.52
18	3450	141	51	1.26	2.74
12	3450	150	43	1.05	2.62

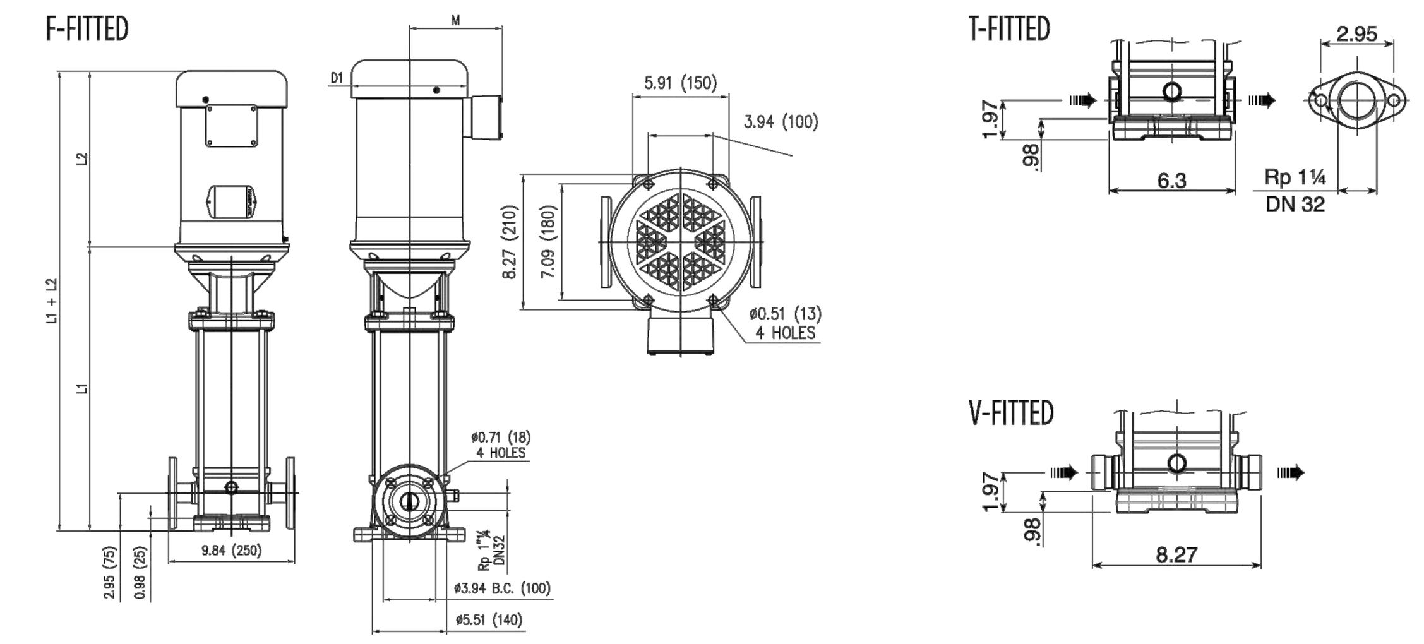
Selected from catalog: FECentrifugal.60 Vers: 1.3

MULTI-STAGE PUMPS

FPS

VERTICAL VR SERIES

DIMENSIONS — 5VR PUMP END AND MOTOR



Pump End Dimensions (in)			
Stages	HP	L1 'F"	Model No.
2	1	13.49	5VR2-60 N
3	1.5	14.44	5VR3-60 N
4	2	14.99	5VR4-60 N
5	3	15.93	5VR5-60 N
6	3	17.29	5VR6-60 N
7	5	18.25	5VR7-60 N
8	5	19.19	5VR8-60 N

Pump End Dimensions (in)			
Stages	HP	L1 'F"	Model No.
9	5	20.14	5VR9-60 N
10	5	21.08	5VR10-60 N
11	7.5	21.54	5VR11-60 N
12	7.5	22.48	5VR12-60 N
13	7.5	23.43	5VR13-60 N
14	7.5	24.37	5VR14-60 N
15	7.5	25.31	5VR15-60 N

F-Fitted*: Round flanges on body type PN25—pump is supplied without joints, bolts, and counter flanges.

T-Fitted: Oval flanges on body type PN16—pump is supplied without oval counter flanges for pipe to be screwed, joints, and bolts.

V-Fitted: Connections with rapid fittings type "Victaulic®"—pump is supplied without collars.

Motor Dimensions (in)

Phase	HP	Frame	Standard Efficiency ODP				Premium Efficiency ODP				Phase	Standard Efficiency TEFC				Standard Efficiency TEFC			
			Volts	L2	M	D1	Volt	L2	M	D1		Volts	L2	M	D1	Volt	L2	M	D1
3	1	56C	208-230/460	11.22	5.06	6.19	N/A	N/A	N/A	N/A	3	208-230/460	11.35	5.19	6.19	575	11.35	5.19	6.19
	1.5	56C		12.72	5.06	6.2							11.97	5.19	6.19		11.97	5.19	6.19
	2	56C		13.22	5.06	6.2							12.85	5.19	6.19		12.85	5.19	6.19
	3	56C		13.24	5.62	7.16							13.23	5.74	7.19		13.23	5.74	7.19
	5	182/4TC		16.55	5.61	8.92	208-230/460	13.62	6.75	8.5			16.55	6.87	8.5	N/A	N/A	N/A	N/A
	7.5	182/4TC		16.55	6.87	8.6	208-230/460	15	6.75	8.5			18.05	6.87	8.5				

Phase	HP	Frame	Premium Efficiency TEFC				Premium Efficiency TEFC				Phase	Standard Efficiency ODP				Standard Efficiency TEFC			
			Volt	L2	M	D1	Volts	L2	M	D1		Volts	L2	M	D1	Volt	L2	M	D1
3	1	56C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	115/230	12.72	5.06	6.19	115/230	12.25	5.55	7.19
	1.5	56C											12.73	5.06	6.2		13.25	5.74	7.19
	2	56C											13.24	5.61	7.19		14.12	6.62	7.19
	3	56C										230	12.94	5.73	6.62	230	14.12	5.79	7.19
	5	182/4TC	575	16.55	6.87	8.5	208-230/460	16.55	6.87	8.5		N/A	N/A	N/A	N/A		18.05	6.87	8.6
	7.5	182/4TC	575	18.05	6.87	8.6	208-230/460	18.05	6.87	8.6						N/A	N/A	N/A	N/A

NOTE: Dimensions for round flange units are for estimating purposes only.

25

FLINT & WALLING
Zoeller Family of Water Solutions

FW0019
0616
Supersedes
0416

AIR-E-TAINER®
WELL SYSTEM TANKS

- Inline tanks pre-charged for 30-50 pressure switch - Vertical tanks pre-charged for either 30 - 50 or 40 – 60 Pressure switch
- 100 PSI maximum working pressure
- Powder-coated exterior and interior
- Butyl rubber parabolic diaphragm
- 5 year Limited Warranty

In-line tanks
131009
132477

Vertical Tanks
132661 136875
132662 135460
132663 136876
133517

AIR-E-TAINER® PRE-PRESSURIZED WELL SYSTEM TANKS

Part No.	Total Tank Vol. Gallons	Drawdown - Gallons by PSI Settings***			Approx. Size In. Dia x Ht	Ship Wt Lbs	NPT Size/ MTL	Factory Precharge PSIG	Max Working Pressure (PSI)	Max Working Temp
		20/40	30/50	40/60						
131009	2	0.7	0.6		8-1/4 x 10-1/5	5	3/4" M	28	100	140
132477	4.6	1.6	1.4		11 x 14-3/4	9	3/4" M	28	100	140
132661	14	5.2	4.3	3.7	15-3/8 x 24-3/4	25.5	1" F	38	100	200
132662	20	7.4	6.2	5.4	15-3/8 x 32-1/4	30	1" F	38	100	200
132663	36	13.3	11.1	9.7	20 x 38-5/8	45	1" F	38	100	200
133517	52	19.2	16.1	14	23-3/8 x 38-5/8	77	1-1/4" F	38	100	200
136875	65	23.9	20	17.5	23-3/8 x 46-3/5	87	1-1/4" F	38	100	200
135460	86	31.8	26.7	23.2	23-3/8 x 59	105	1-1/4" F	38	100	200
136876	119.5	44	37	32	26 x 61-1/4	165	1-1/4" F	38	100	200

***In keeping with current industry standards, drawdown factors are based on Boyle's law. Actual drawdowns will vary depending upon system variables, including the accuracy and operation of the pressure switch and gauage and operating temperature of the system.

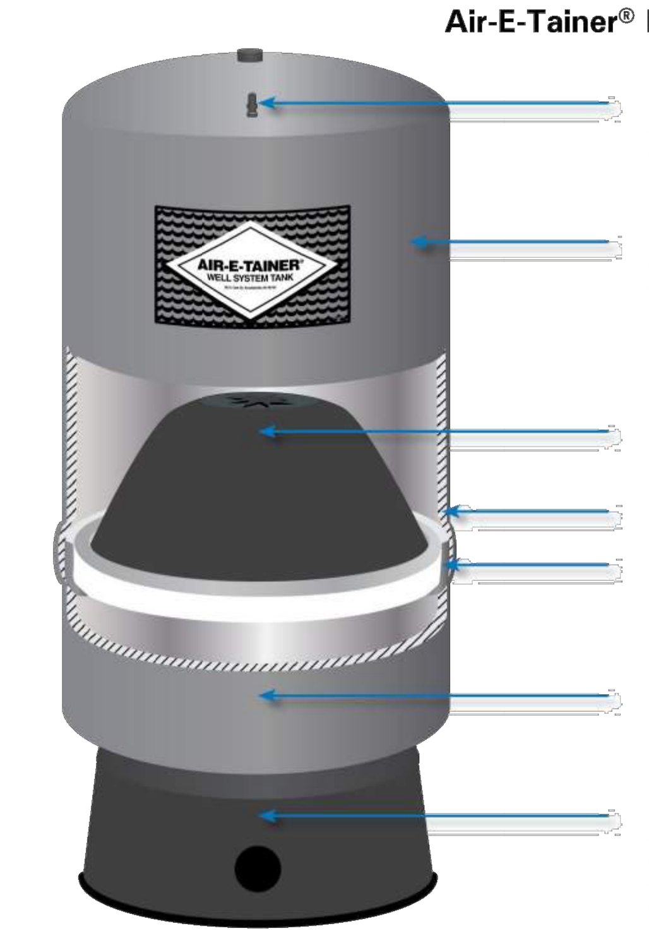
Caution: install a pressure relief valve on any installation where the pump pressure can exceed the tank's maximum working pressure.
NOTE: Precharged tanks cannot ship via air freight.

NOTE: Pre-charged tanks cannot ship via air freight.

AIR-E-TAINER®
WELL SYSTEM TANKS

FLINT & WALLING
Zoeller Family of Water Solutions

Air-E-Tainer® Features



AIR CHARGE VALVE
- Conveniently located for easy pressure adjustment
- Projection-welded for durability

DESIGNER FINISH
- High gloss exterior powder coat
- Provides positive protection against corrosion and UV rays

BUTYL RUBBER PARABOLIC DIAPHRAGM
- Eliminates rubbing on the tank wall or rolling over on itself

STEEL SHELL

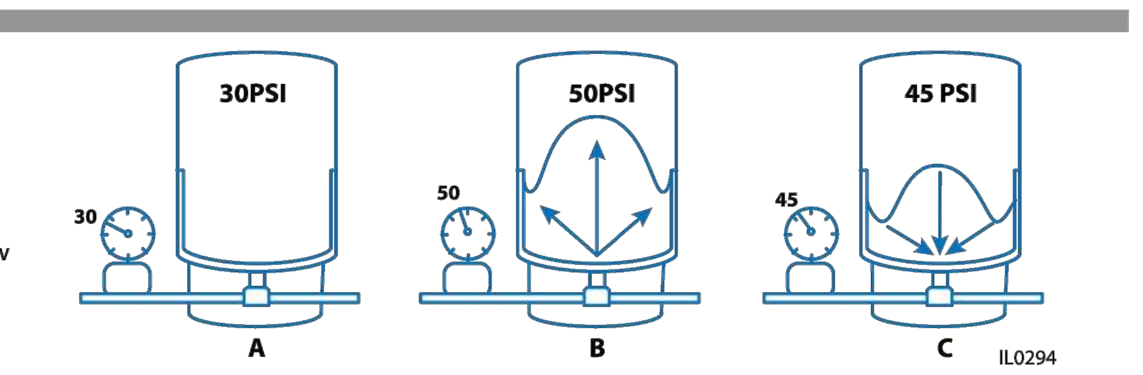
STEEL RETAINING RING

POWDER-COATED WATER CHAMBER
- Proven protection against internal corrosion

CORROSION-RESISTANT BASE
- High-impact polymer material
- Strong and stable for long life
- Base rotates for easy alignment to pipe connection
- Slotted and noted for air flow, reduced condensation build-up

Standard 40/60 PSI System

These illustrations show the operation of the Air-E-Tainer® tank in a typical 30/50 pressure range.



A. Tank is pre-pressurized with air at the factory.

B. When pump starts, water enters the reservoir. At 50 psig, system is filled. Pump shuts off.

C. When water is demanded, pressure in the air chamber forces water into the system. Pump turns on.

D. When pressure in tank drops to pressure switch cut-in point (30 psig) pump refills the tank as in illustration B.

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2

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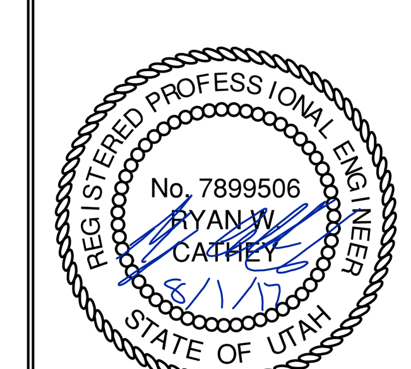
REVISIONS: NO. | BY | DATE

HORIZON NEIGHBORHOOD PRUD
BOOSTER PUMP DETAILS

DATE SUBMITTED: 08.01.2017
PREPARED FOR: SUMMIT POWDER MOUNTAIN

TALISMAN CIVIL CONSULTANTS
5217 SOUTH STATE STREET, SUITE 200 MURRAY, UT 84107
801.743.1300 TEL 801.743.0300 FAX



SHEET NUMBER
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SCALE
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JOB NUMBER
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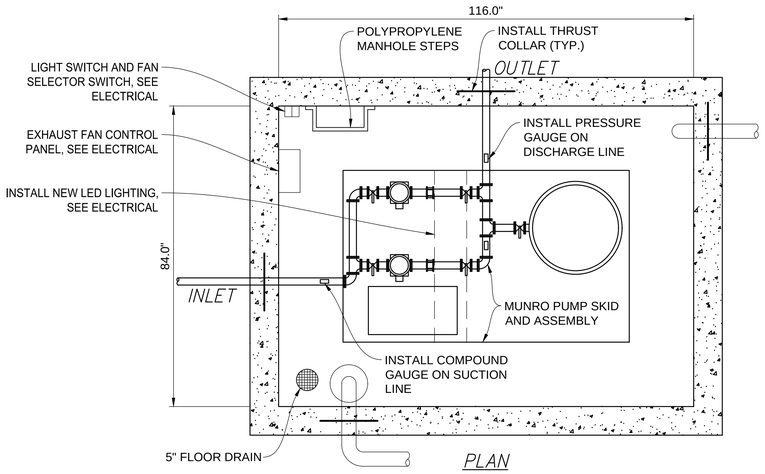
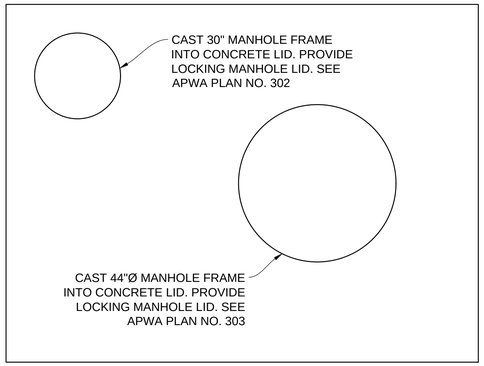


PLAN



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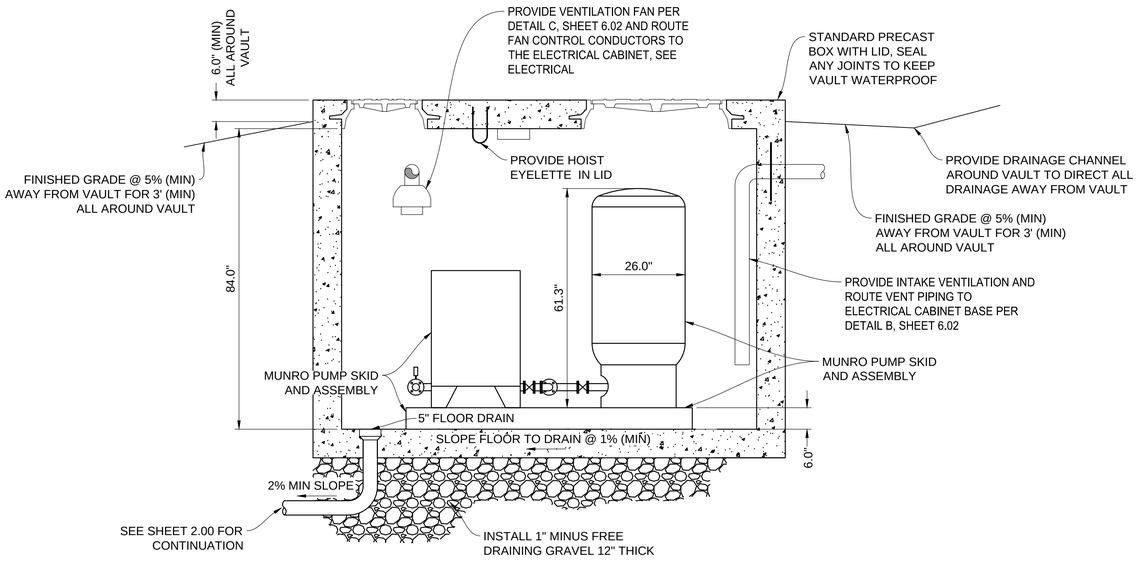
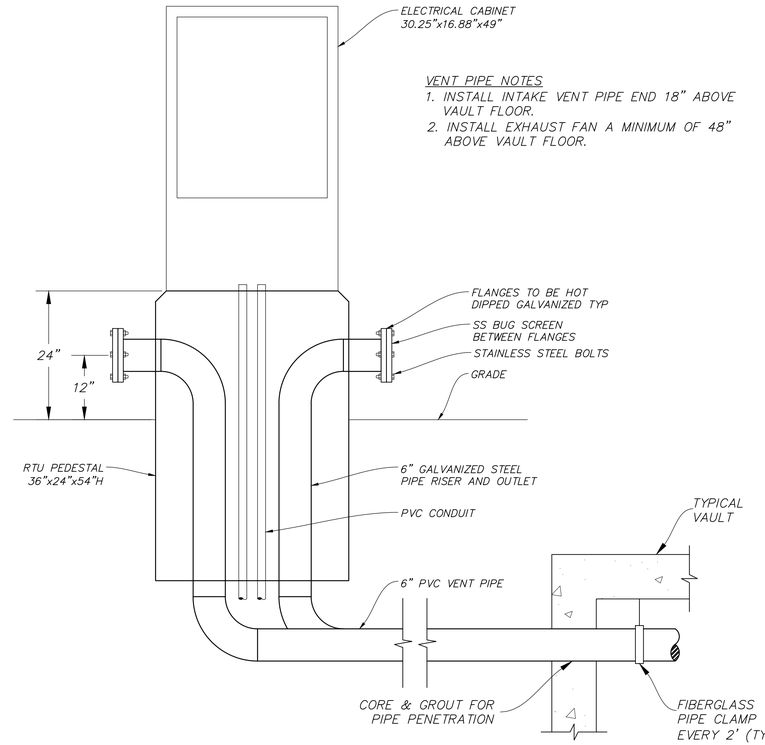


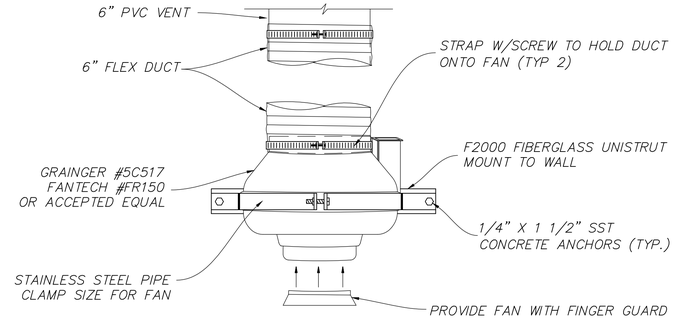
SECTION VIEW

A **BOOSTER PUMP VAULT**
NOT TO SCALE



VENT PIPE NOTES
1. INSTALL INTAKE VENT PIPE END 18" ABOVE VAULT FLOOR.
2. INSTALL EXHAUST FAN A MINIMUM OF 48" ABOVE VAULT FLOOR.

B **ELECTRICAL PEDESTAL DETAIL**
NOT TO SCALE



C **FAN DETAIL**
NOT TO SCALE

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NO.	BY	DATE	REVISIONS

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HORIZON NEIGHBORHOOD PRUD
BOOSTER PUMP DETAILS

PREPARED FOR: SUMMIT POWDER MOUNTAIN
DATE SUBMITTED: 08.01.2017

TALISMAN CIVIL CONSULTANTS
MURRAY, UT 84107
5217 SOUTH STATE STREET, SUITE 200
801.743.8300 TEL 801.743.8300 FAX

REGISTERED PROFESSIONAL ENGINEER No. 7899506 RYAN W. CATHEY STATE OF UTAH

SHEET NUMBER
6.02

SCALE
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HORIZONTAL: 1"= N/A

JOB NUMBER
SLB0793

JOSHB
XREFS:

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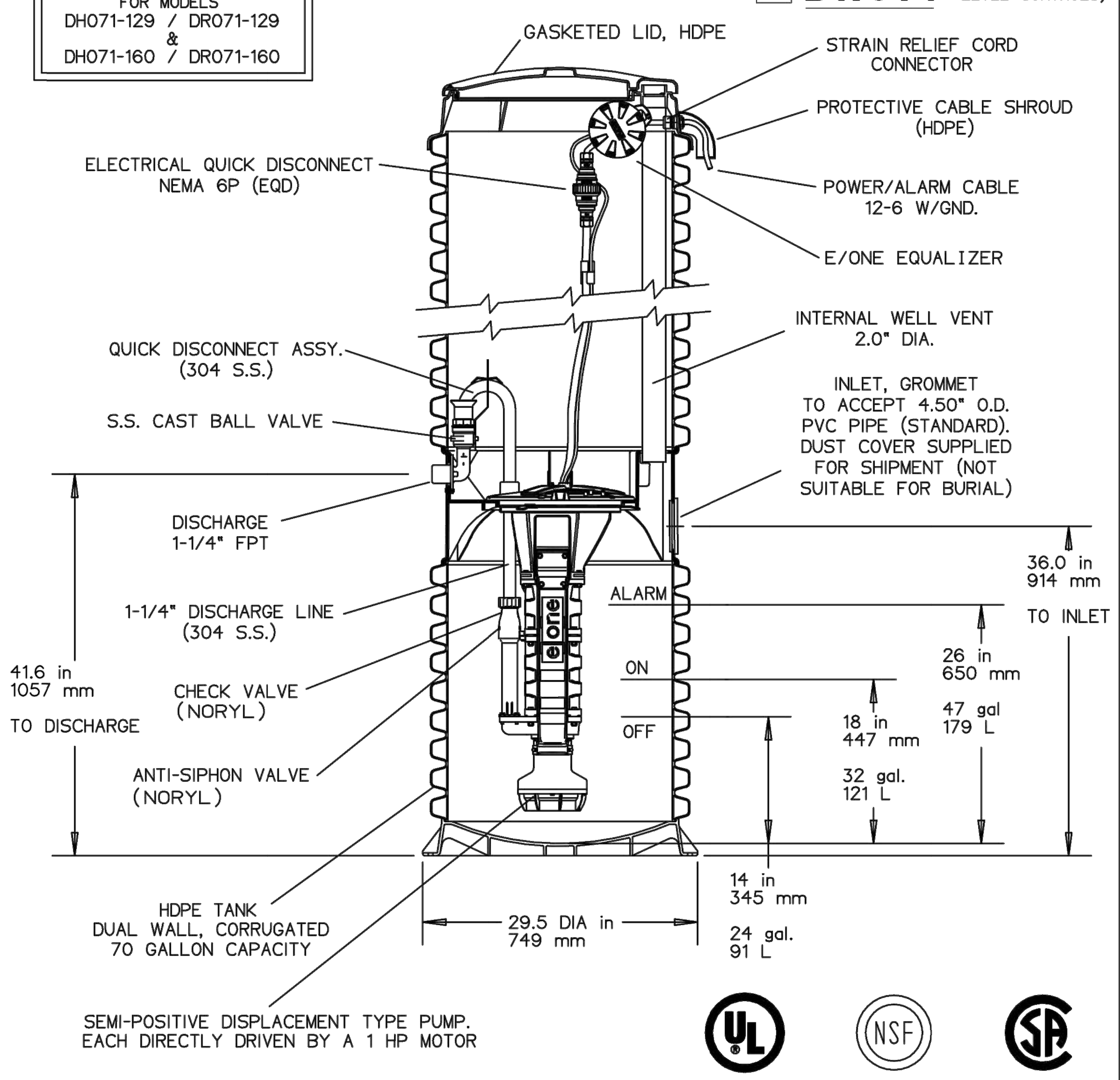
PATH: N:\SLB0793\CADD\HORIZON VILLAGE\IP DESIGNER: #### PROJ. MGR: ####

OPTIONS : ☒ DH071 (HARD WIRED LEVEL CONTROLS) ☐ DR071 (WIRELESS LEVEL CONTROLS)

FIELD JOINT REQUIRED FOR MODELS DH071-129 / DR071-129 & DH071-160 / DR071-160



AD	CH	10/20/10	D	
DR BY	CHK'D	DATE	ISSUE	SCALE

CONCRETE BALLAST MAY BE REQUIRED
SEE INSTALLATION INSTRUCTION
FOR DETAILS

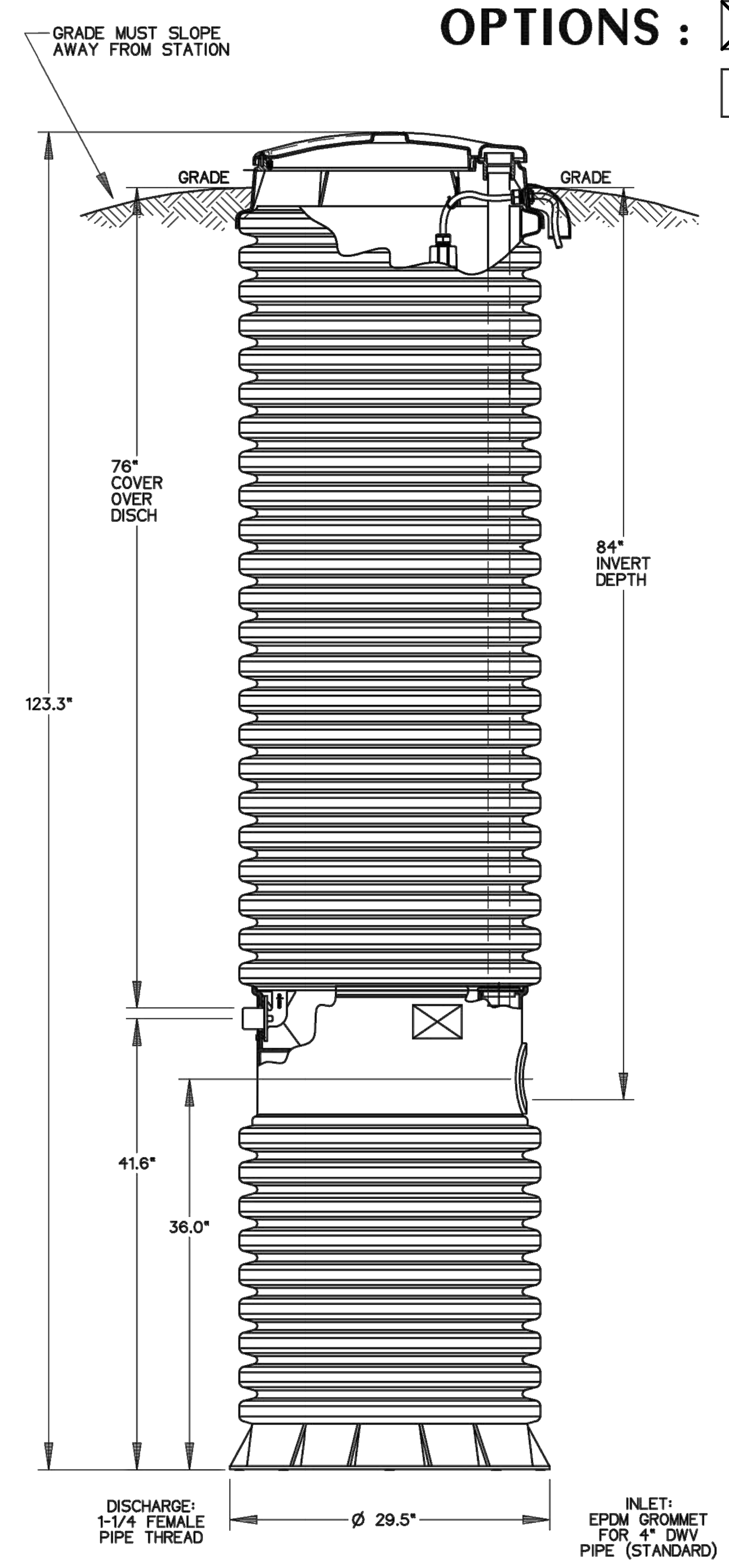
NOTE: DIMENSIONS ARE FOR REF ONLY

eone SEWER SYSTEMS

MODEL DH071 / DR071
DETAIL SHEET

NA0050P02

OPTIONS : ☒ DH071-124 (HARD WIRED LEVEL CONTROLS) ☐ DR071-124 (WIRELESS LEVEL CONTROLS)



CONCRETE BALLAST MAY BE REQUIRED
SEE INSTALLATION INSTRUCTIONS
FOR DETAILS

NOTE: DIMENSIONS ARE FOR REF ONLY

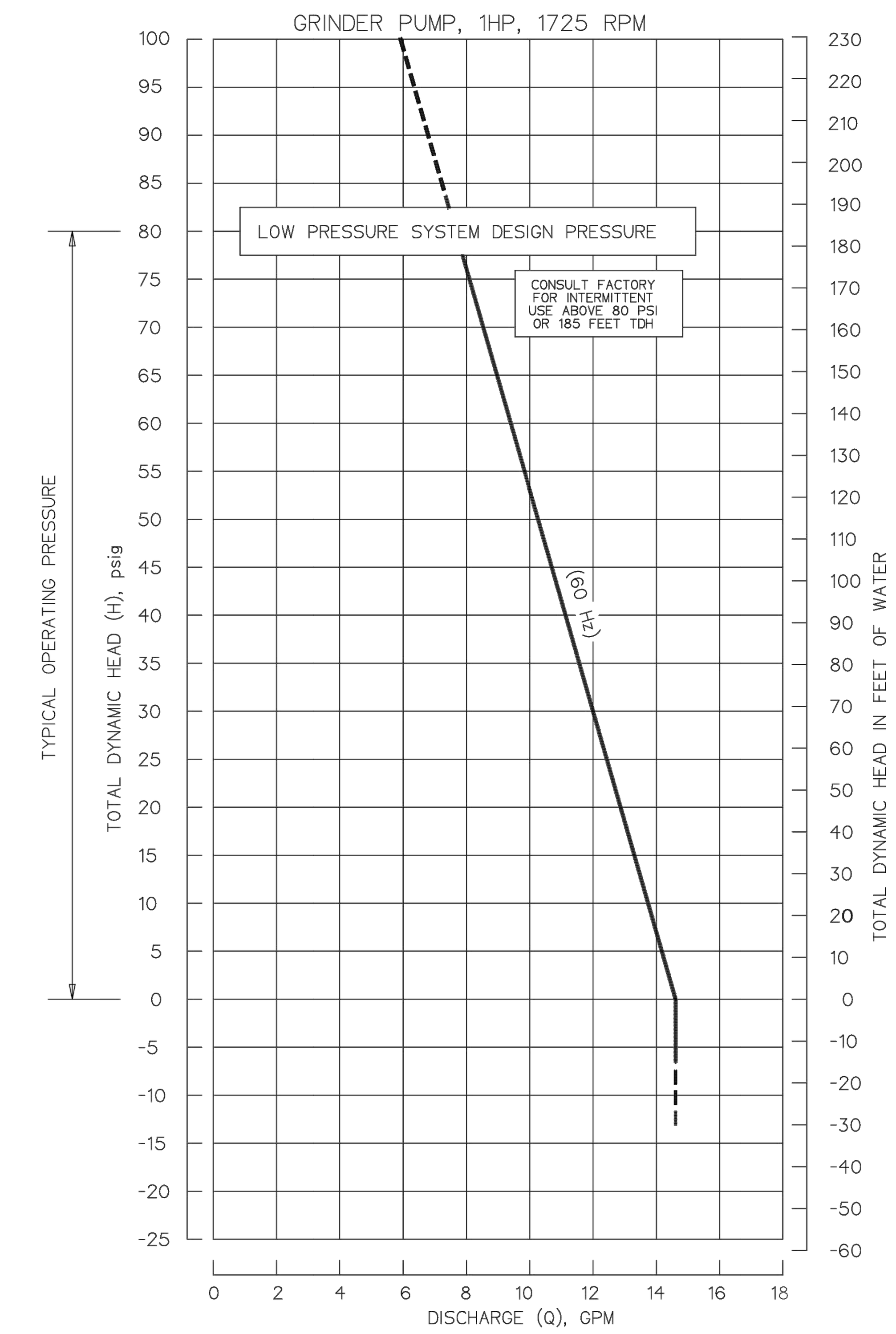
AD	CAH	07/13/07	B	1/16
DR BY	CHK'D	DATE	ISSUE	SCALE

eone SEWER SYSTEMS

MODEL DH071-124 / DR071-124

NA0050P07

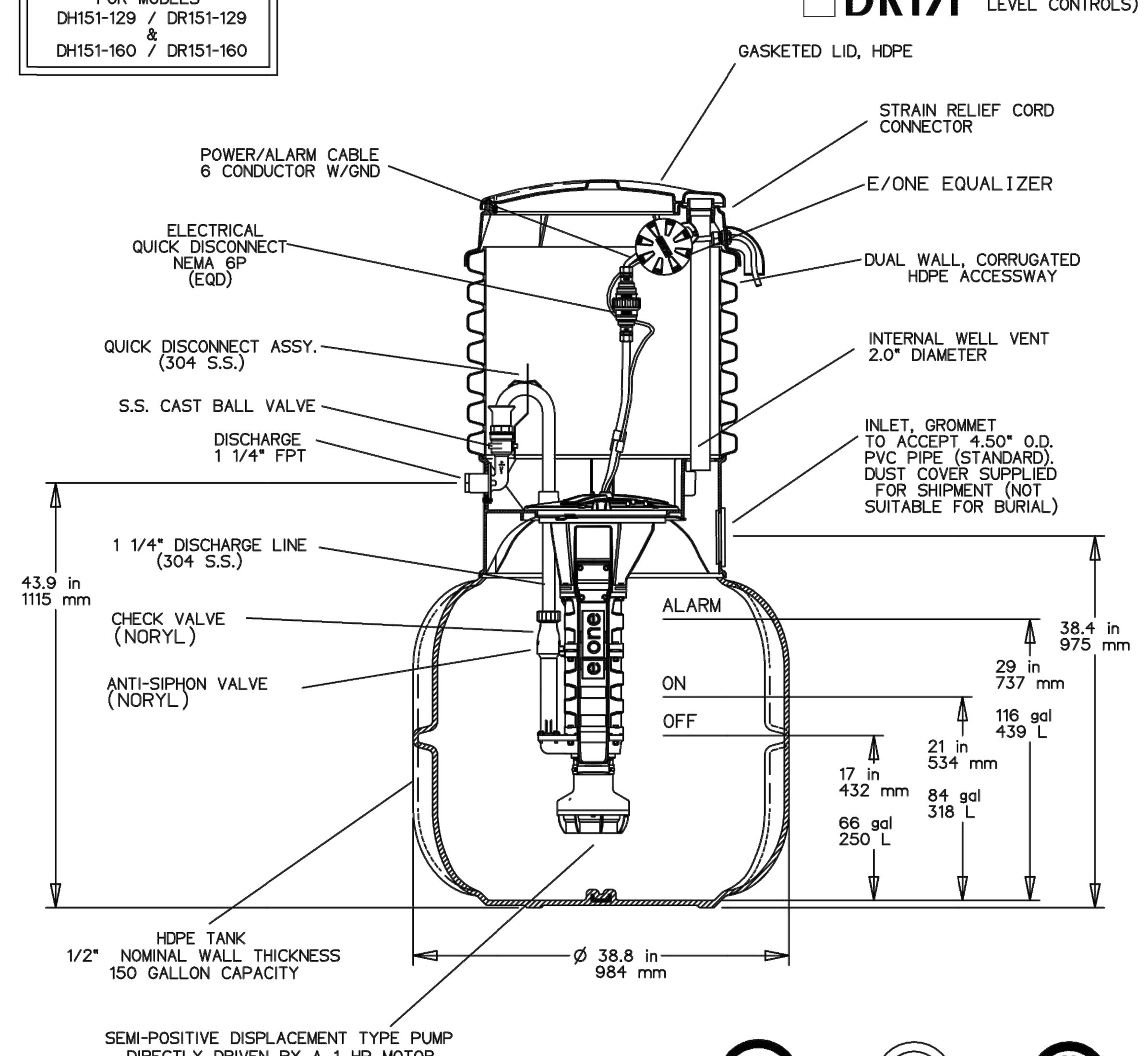
E|ONE SPD PUMP PERFORMANCE CURVE



ESD 08-0022 REV. 2, 6/08

OPTIONS : ☒ DH151 (HARD WIRED LEVEL CONTROLS) ☐ DR151 (WIRELESS LEVEL CONTROLS)

FIELD JOINT REQUIRED FOR MODELS DH151-129 / DR151-129 & DH151-160 / DR151-160



AD	CH	10/20/10	D	
DR BY	CHK'D	DATE	ISSUE	SCALE

CONCRETE BALLAST MAY BE REQUIRED
SEE INSTALLATION INSTRUCTIONS
FOR DETAILS

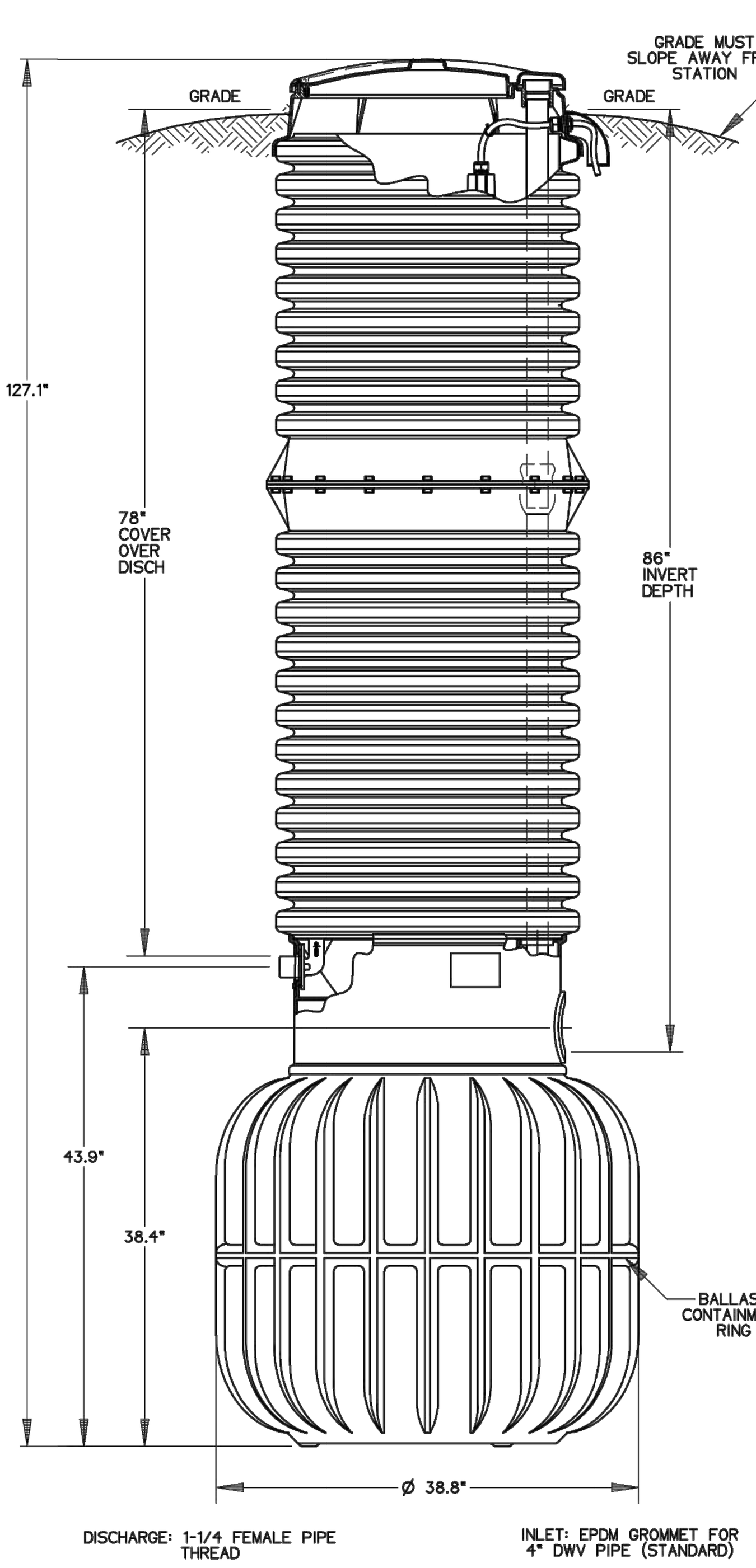
NOTE: DIMENSIONS ARE FOR REFERENCE ONLY

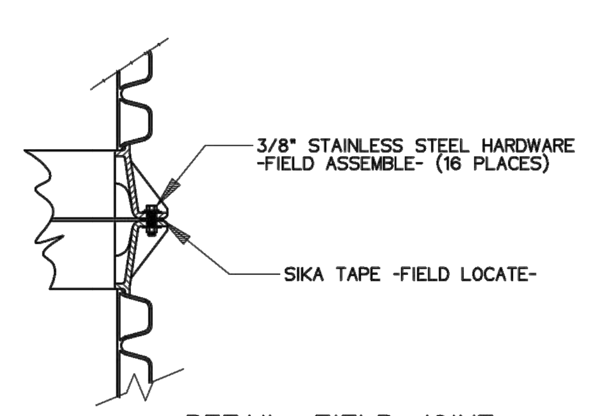
eone SEWER SYSTEMS

MODEL DH151 / DR151
DETAIL SHEET

NA0051P02

OPTIONS : ☒ DH151-129 (HARD WIRED LEVEL CONTROLS) ☐ DR151-129 (WIRELESS LEVEL CONTROLS)





DETAIL, FIELD JOINT

SEE INSTALLATION INSTRUCTIONS
FOR FURTHER DETAILS

CONCRETE BALLAST MAY BE REQUIRED
SEE INSTALLATION INSTRUCTIONS
FOR DETAILS

NOTE: DIMENSIONS ARE FOR REFERENCE ONLY

AD	CAH	07/13/07	C	1/16
DR BY	CHK'D	DATE	ISSUE	SCALE

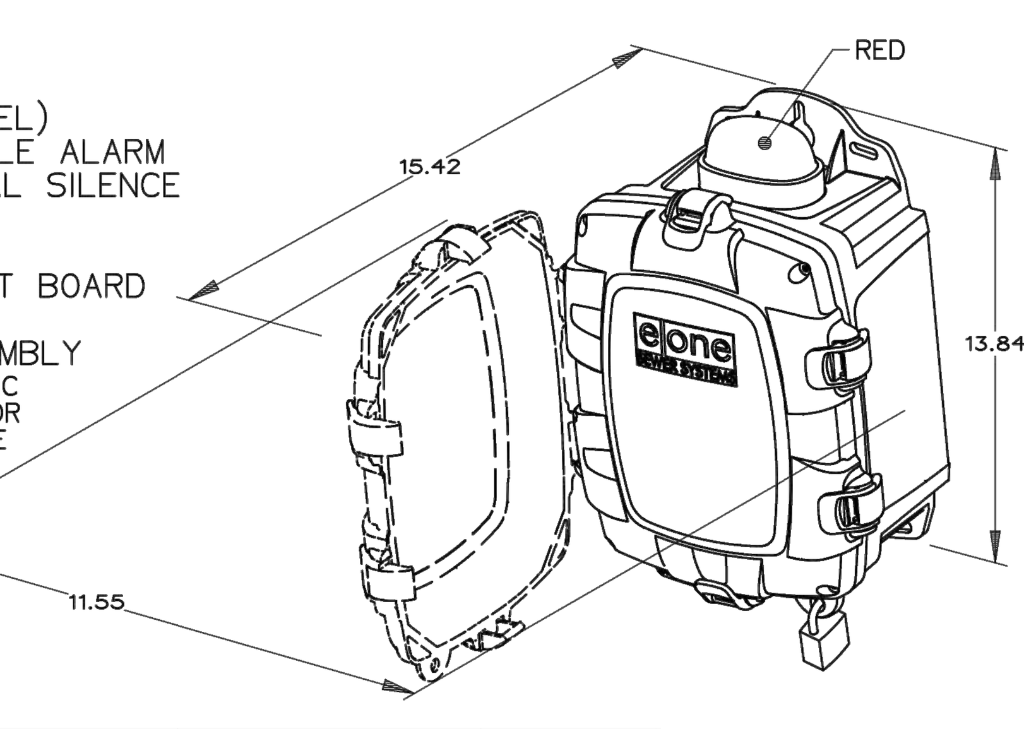
eone SEWER SYSTEMS

MODEL DH151-129 / DR151-129

NA0051P07

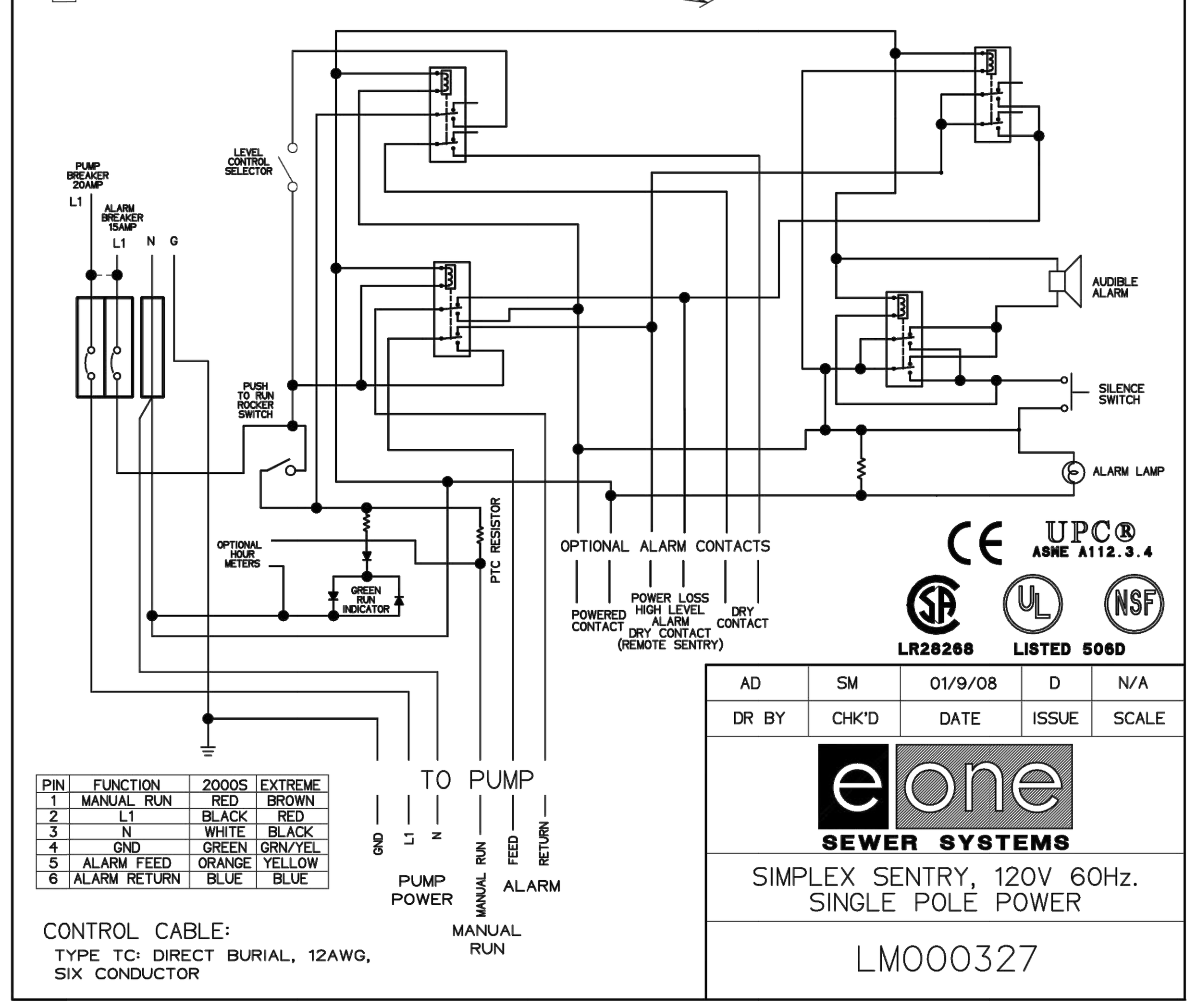
SIMPLEX SENTRY

REDUNDANT RUN (HIGH LEVEL)
EXTERNAL VISUAL & AUDIBLE ALARM
EXTERNAL LATCHING MANUAL SILENCE
MANUAL RUN
PUMP RUN INDICATOR
CONFORMAL COATED CIRCUIT BOARD
PADLOCK
NEMA 4X ENCLOSURE ASSEMBLY
CORROSION PROOF THERMOPLASTIC POLYESTER APPROVED BY UL FOR ELECTRICAL CONTROL ENCLOSURE



OPTIONS:

☐ ALARM CONTACTS
☐ HOUR METER



PIN	FUNCTION	2000S	EXTREME
1	MANUAL RUN	RED	BROWN
2	L1	BLACK	RED
3	N	WHITE	BLACK
4	GND	GREEN	GRN/YEL
5	ALARM FEED	ORANGE	YELLOW
6	ALARM RETURN	BLUE	BLUE

CONTROL CABLE:
TYPE TC: DIRECT BURIAL, 12AWG, SIX CONDUCTOR

CE UPC® ASME A112.3.4
LR28268 LISTED 506D

AD	SM	01/9/08	D	N/A
DR BY	CHK'D	DATE	ISSUE	SCALE

eone SEWER SYSTEMS

SIMPLEX SENTRY, 120V 60Hz.
SINGLE POLE POWER

LM000327

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NO.	BY	DATE	REVISIONS:

CAUTION
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HORIZON NEIGHBORHOOD PRUD
SEWER EJECTOR DETAILS

PREPARED FOR: SUMMIT POWDER MOUNTAIN
DATE SUBMITTED: 08.01.2017

TALISMAN CIVIL CONSULTANTS
5217 SOUTH STATE STREET, SUITE 200 MURRAY, UT 84107
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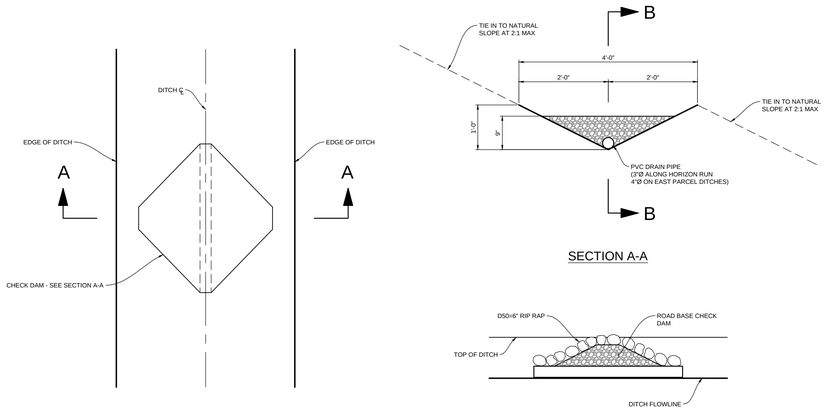
REGISTERED PROFESSIONAL ENGINEER No. 7899506 RYAN W. CATHEY STATE OF UTAH 8/1/17

SHEET NUMBER
6.03

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

JOB NUMBER
SLB0793

JOSHB
XREFS:



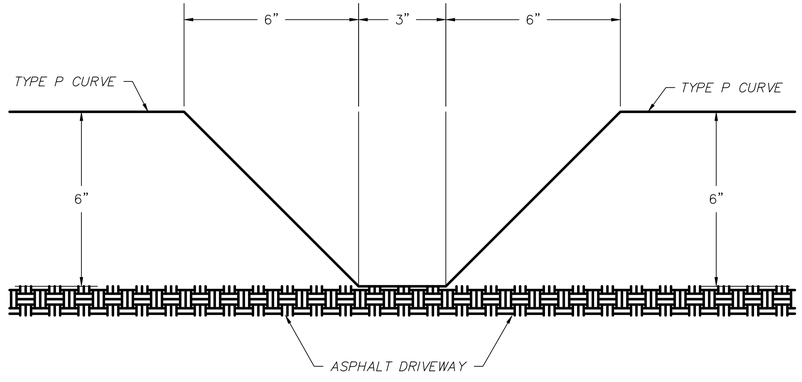
PLAN VIEW

SECTION A-A

SECTION B-B

CHECK DAM DETAIL

A / VAR — NTS



CURB CUT DETAIL

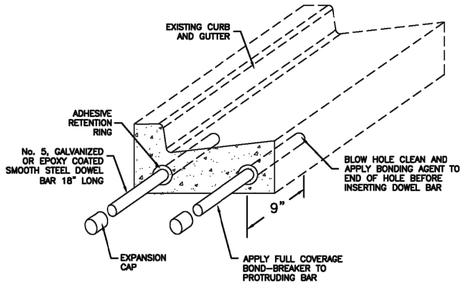
B / 604 — NTS

Curb and gutter connection

1. **GENERAL**
   A. Connect new curb and gutter to existing curb and gutter that has not been placed by CONTRACTOR.

2. **PRODUCTS**
   A. Reinforcement: Galvanized or epoxy coated, 60 ksi yield grade steel, ASTM A 615.
   B. Adhesive: Epoxy adhesive grout, APWA Section 03 61 00.
   C. Bond Breaker: Paraffin wax, lithium grease, or other semi-solid, inert lubricant.
   D. Expansion Cap: Plastic, with bar movement allowance of 1/2-inch.

3. **EXECUTION**
   A. Ensure drill rigs (or jigs) are set at mid-depth of the gutter and horizontal to the surface. Make hole size large enough to account for dowel bar and adhesive.
   B. Clean holes and dowel bars of dirt, dust and particles. Ensure coating on bars have no surface defects.
   C. Place bonding agent in the back of each hole so adhesive flows out around each bar fully encasing it. DO NOT apply adhesive to end of the bar and then insert the bar into the hole.
   D. Insert dowels with at least one full turning motion and if necessary, place a grout retention disk on the dowel after insertion to contain adhesive.
   E. Apply complete coverage of bond-breaker on the protruding end of each dowel.
   F. Install expansion caps on protruding dowel bar ends.

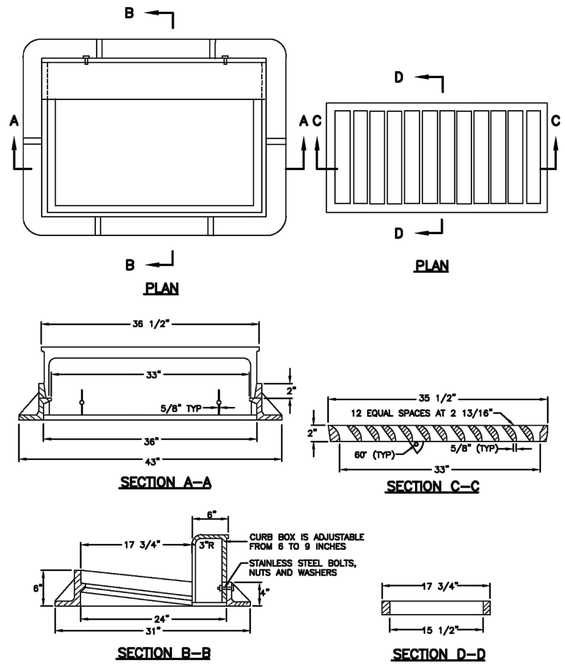


35 1/2" Grate and frame

1. **GENERAL**
   A. The grate and frame fits concrete boxes in Plan 315.

2. **PRODUCTS**
   A. Castings: Grey iron class 35 minimum per ASTM A 48, coated with asphalt based paint or better.
   B. Bolts, Nuts, Washers, Accessories: Stainless steel, APWA Section 05 05 23.

3. **EXECUTION** (Not used)



JOSHB
KREPPS

NO.	BY	DATE	REVISIONS

HORIZON NEIGHBORHOOD PRUD

DETAILS

PREPARED FOR: SUMMIT POWDER MOUNTAIN

DATE SUBMITTED: 08.01.2017

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REGISTERED PROFESSIONAL ENGINEER
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RYAN W. CATHEY
STATE OF UTAH

SHEET NUMBER
6.04

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

JOB NUMBER
SLB0793

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Catch basin

1. **GENERAL**
   A. The drawing shows typical pipe connections. Refer to construction drawings for connection locations or refer to field location of existing piping when engineering pipe connection to the box.
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: Class 4000, APWA Section 03 30 04.
   D. Reinforcement: Deformed, 60 ksi yield grade steel, ASTM A 615.
3. **EXECUTION**
   A. Base Course Placement: APWA Section 32 11 23. 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.
   B. Curb Face Opening: Make opening at least 4-inches high. Provide at least a 2-inch drop between the "warp line" in the gutter flow-line and the top of the grate at the curb face opening.
   C. Concrete Placement: APWA Section 03 30 10. Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.
   D. Backfill: Place backfill against the basin wall. Pea gravel and recycled RAP aggregate is NOT ALLOWED. Water jetting is NOT allowed. 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.

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Pipe outfall

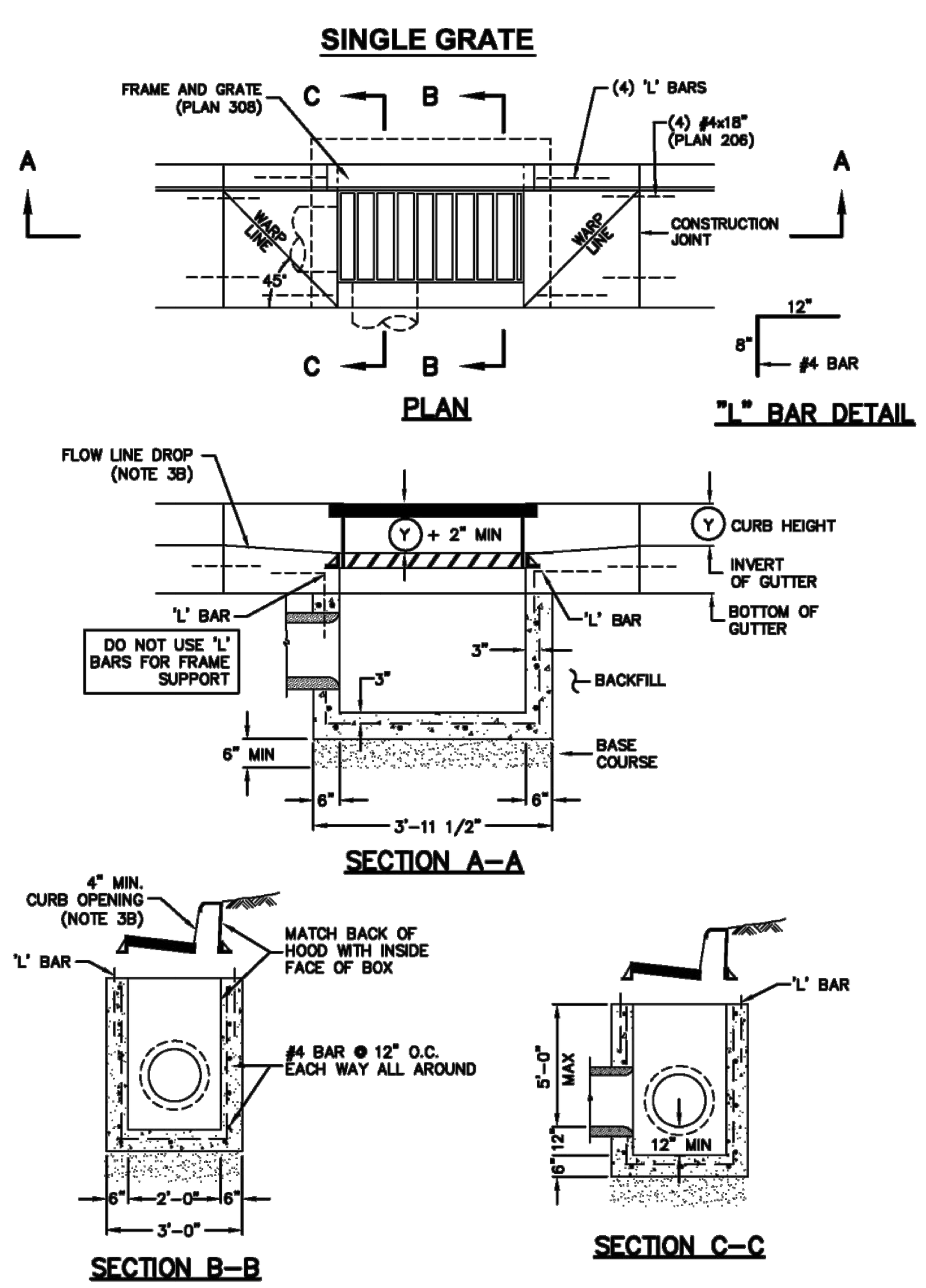
1. **GENERAL**
   A. Round concrete pipe application.
   B. Additional requirements are specified in APWA Section 33 05 02.
2. **PRODUCTS**
   A. Use the same quality of precast end section as the pipe.
   B. Use the joint material and connection that is the same as the joints in the pipeline.
3. **EXECUTION**
   A. General dimensions and geometric shapes may vary from manufacturer to manufacturer.
   B. Steel reinforcement is not required in the concrete end section shown.
   C. Provide joint restraint connectors if required by ENGINEER.

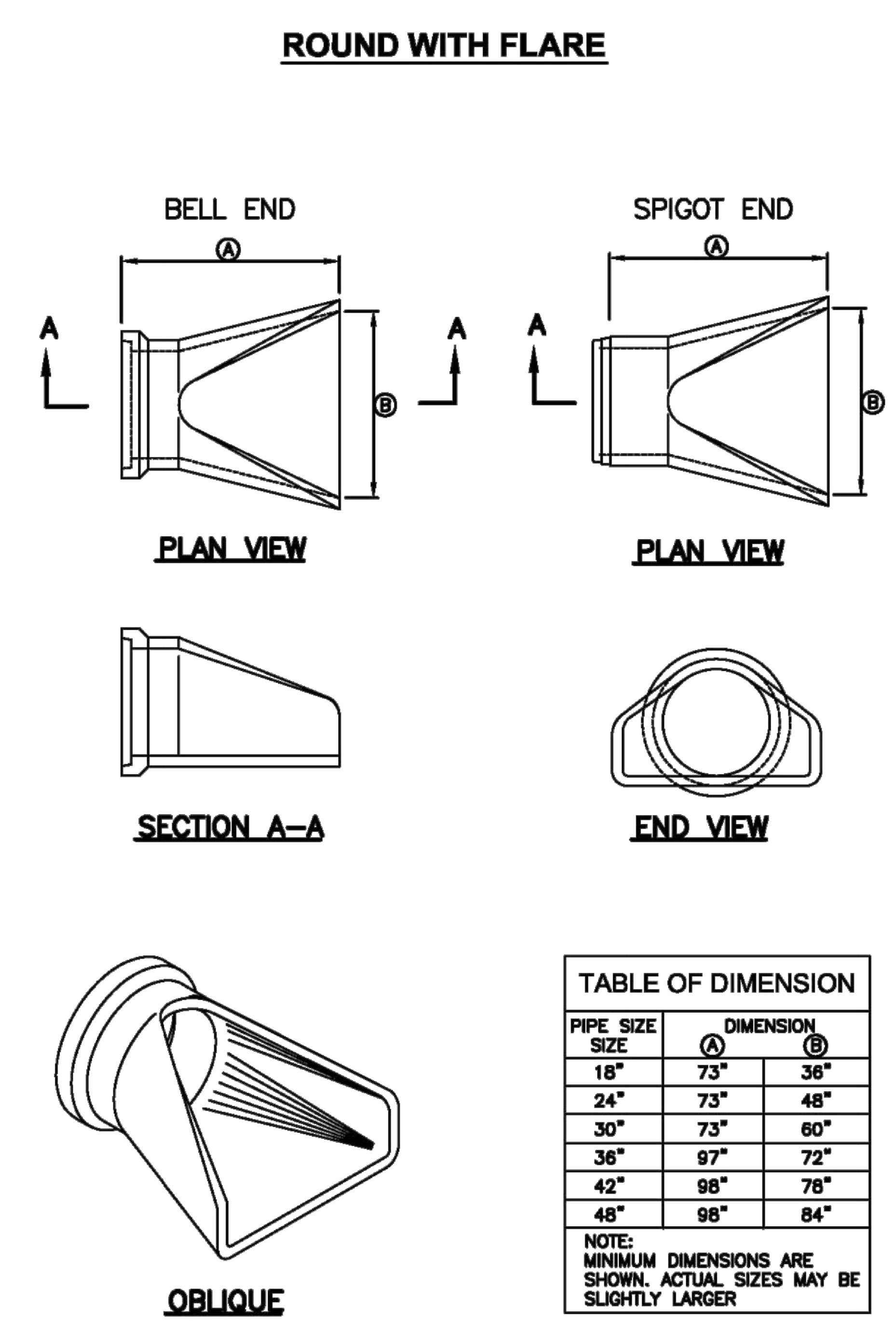
170

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 92 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).

202

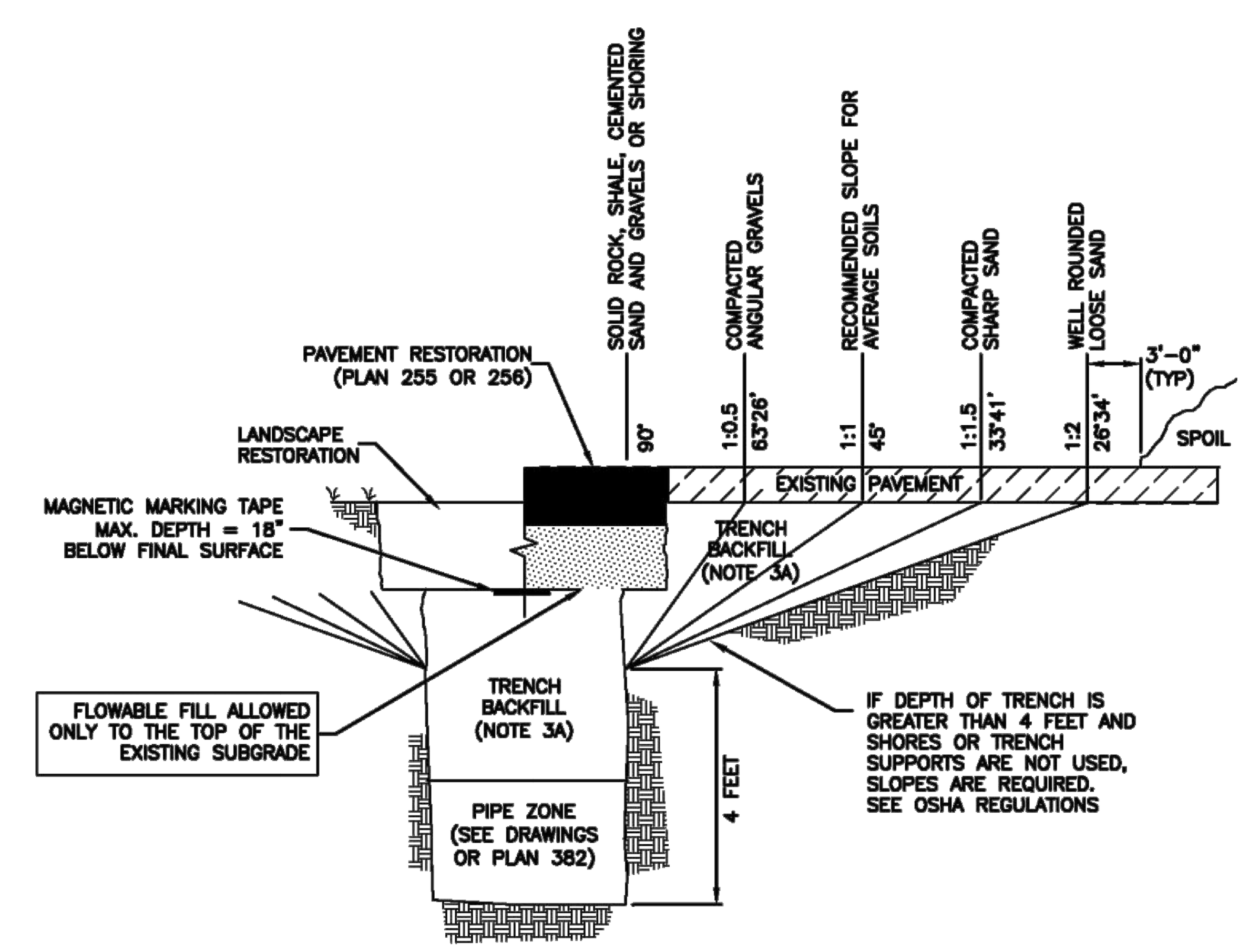




PIPE SIZE	DIMENSION (A)	DIMENSION (B)
18"	73"	36"
24"	73"	48"
30"	73"	60"
36"	97"	72"
42"	98"	78"
48"	98"	84"

TABLE OF DIMENSION

NOTE: MINIMUM DIMENSIONS ARE SHOWN. ACTUAL SIZES MAY BE SLIGHTLY LARGER



HORIZON NEIGHBORHOOD PRUD

DETAILS

PREPARED FOR: SUMMIT POWDER MOUNTAIN

DATE SUBMITTED: 08.01.2017

TALISMAN CIVIL CONSULTANTS

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SHEET NUMBER 6.05

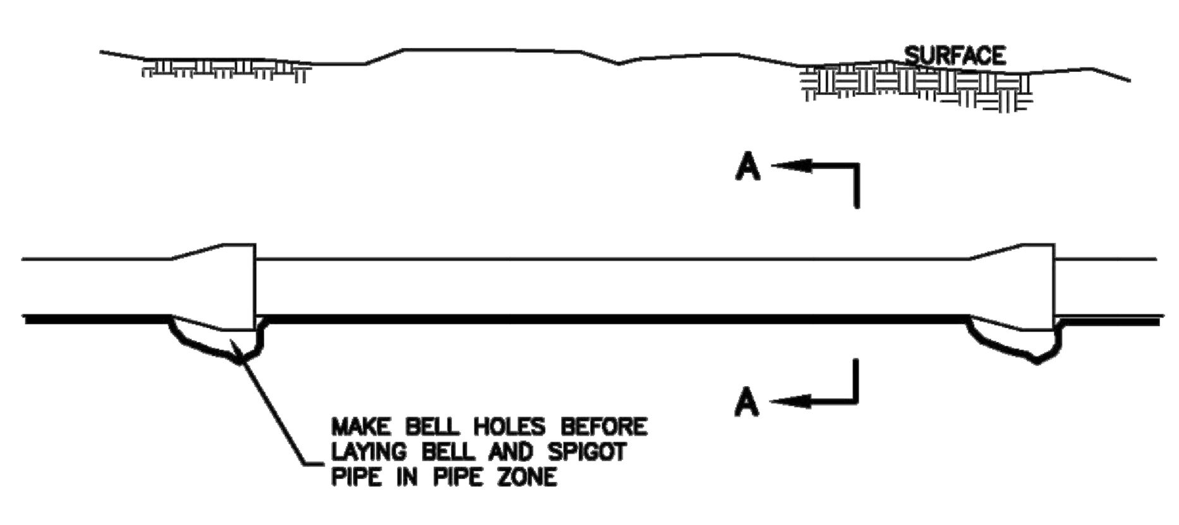
SCALE VERTICAL: 1"= N/A HORIZONTAL: 1"= N/A

JOB NUMBER SLB0793

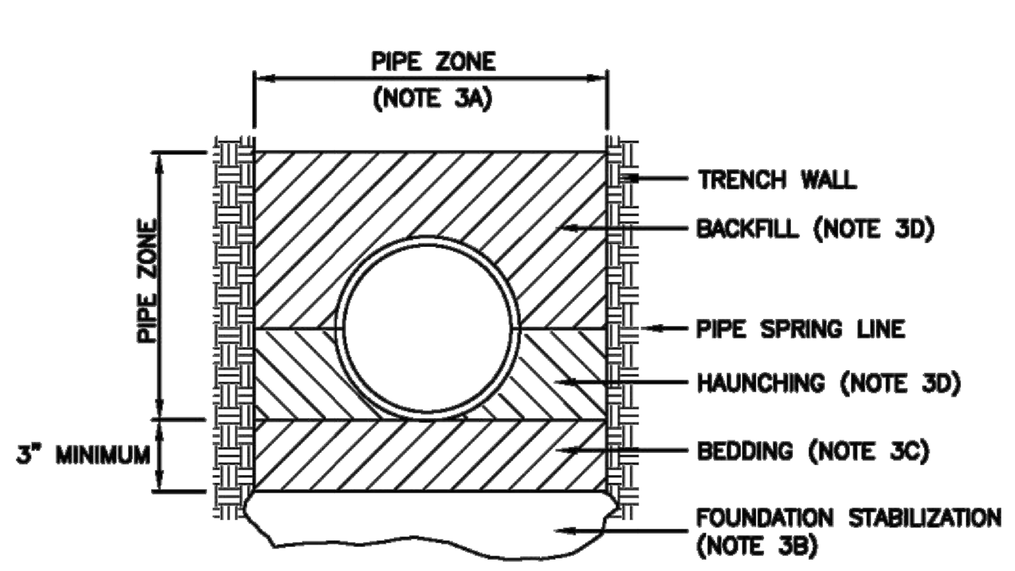
Pipe zone backfill

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.

204



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-MADE CORRUGATED STEEL PIPE FOR SEWERS AND OTHER APPLICATIONS."

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

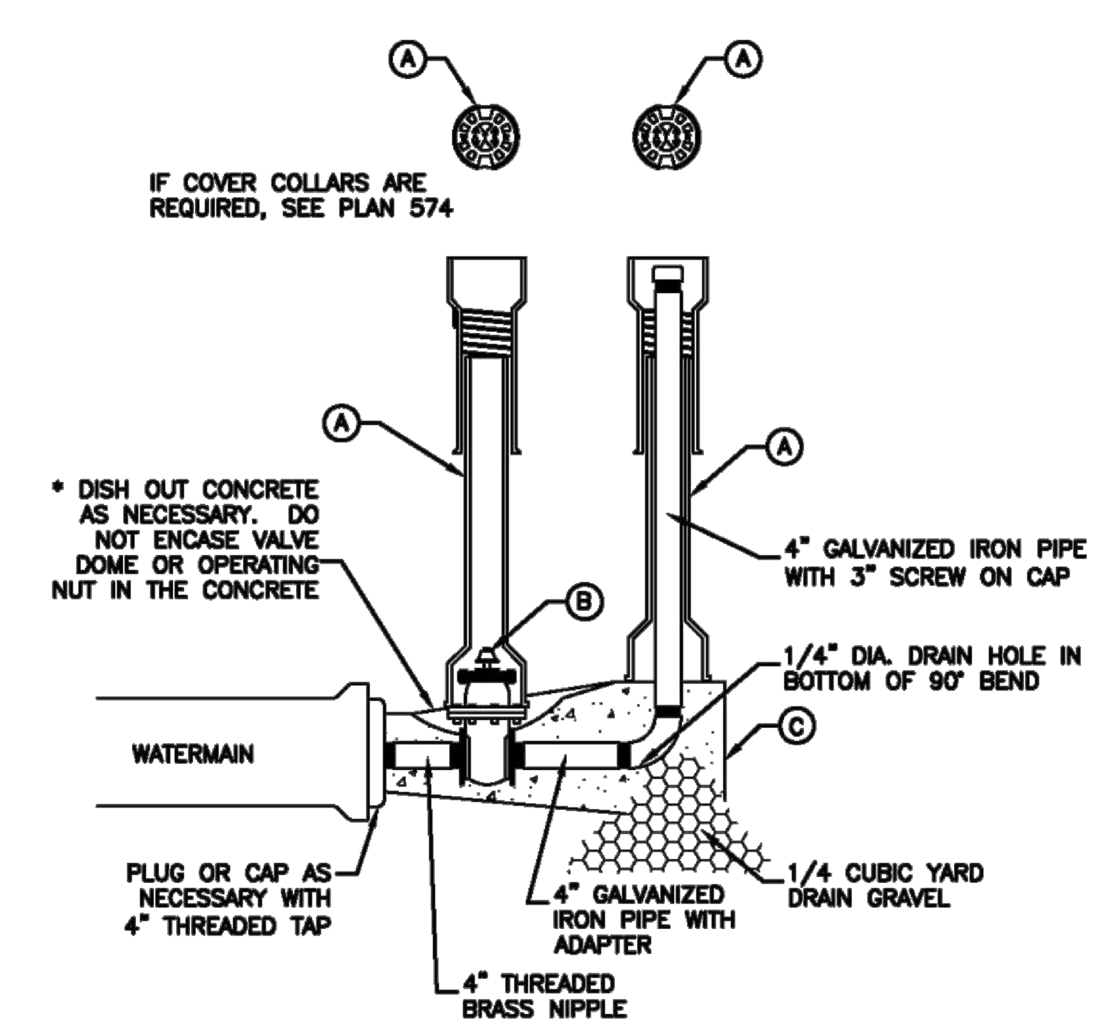
January 2011 — ***Pipe zone backfill*** — Plan **382**

205

4" washout valve

1. **GENERAL**
   A. Before backfilling, secure inspection of installation by ENGINEER.
   B. Water mains 12-inches and larger will require a special washout assembly design.
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: Class 4000, APWA Section 03 30 04.
3. **EXECUTION**
   A. Pour concrete against undisturbed soil.
   B. Apply tape wrap to the exterior of all galvanized pipe per AWWA C209.
   C. Place plastic sheet at least 6 mils thick over drain gravel to prevent silting.
   D. After installation of washout valve assembly, verify the washout valve riser drains to gravel.
   E. Backfill and Base Course Placement: Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater of a modified proctor density, APWA Section 31 23 26.

270



LEGEND

No.	ITEM	DESCRIPTION
A	VALVE BOX WITH LID	2 PIECE CAST IRON
B	4" GATE VALVE WITH SCREW ENDS	2" x 2" OPERATING NUT
C	CONCRETE THRUST BLOCK	PLAN 561

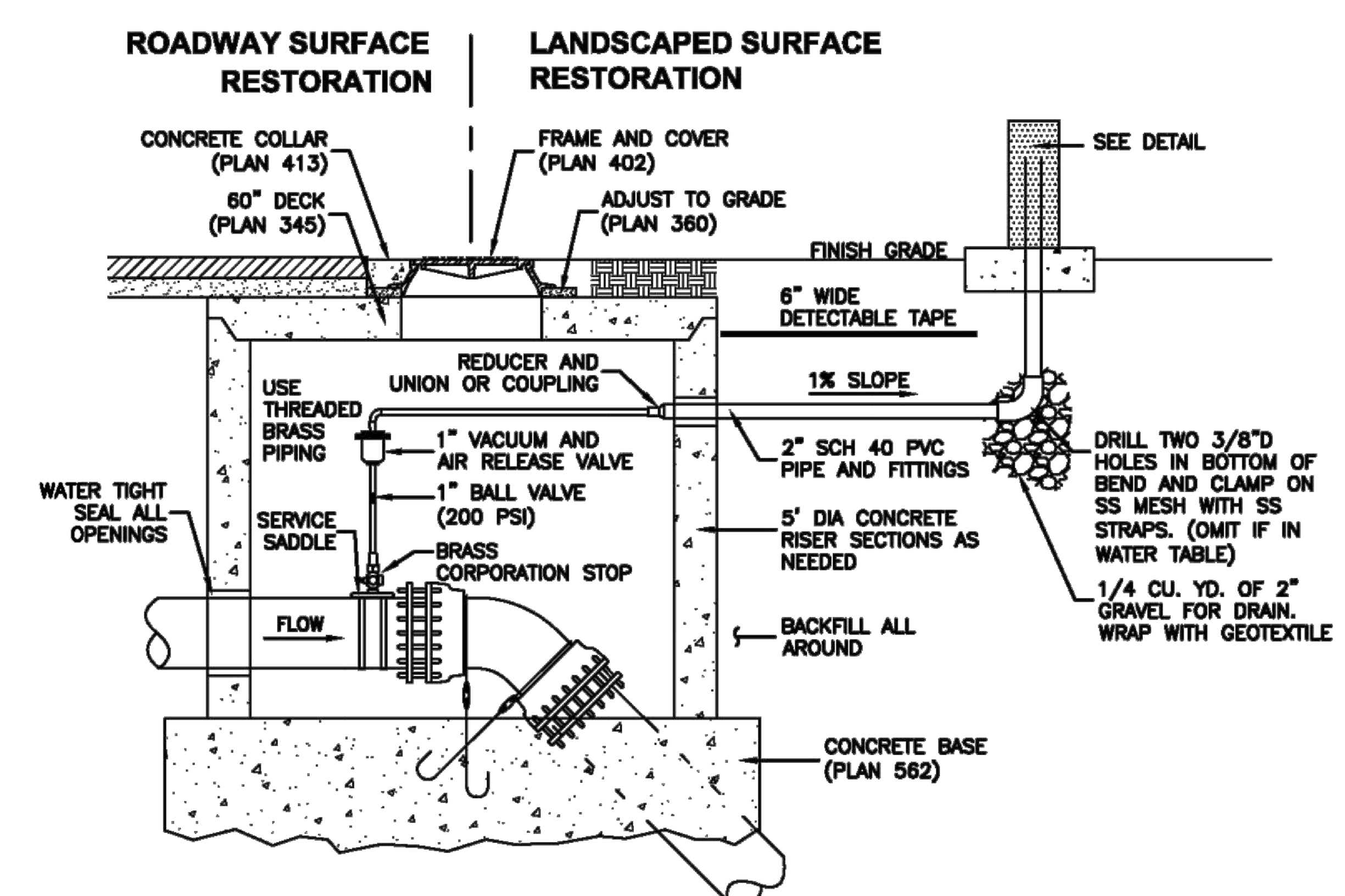
February 2011 — ***4" Washout valve*** — Plan **571**

271

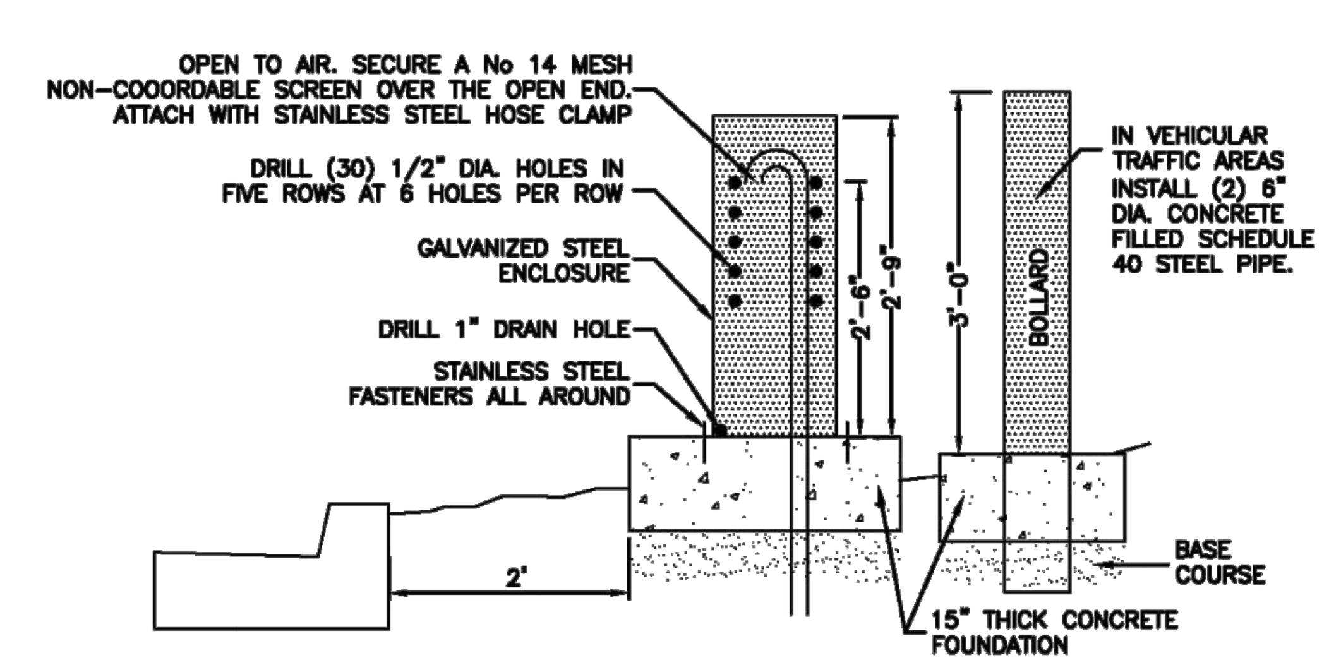
Air release assembly

1. **GENERAL**
   A. This drawing detail is applicable to water main piping less than 16-inches diameter.
   B. PCCP, steel, MLAC and other water main pipe materials will require special detail or design drawings. Submit the design and detail drawings and materials to the ENGINEER for review before installation.
   C. Installation in areas of high ground water or potential for water entering the vent pipe will require a special design to be provided by the ENGINEER.
   D. Before backfilling around the assembly, secure inspection of installation by ENGINEER.
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. Drain Gravel: Sewer rock, ASTM size no. 3 (2" to 1") or equal, APWA Section 31 05 13.
   C. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.
   D. Concrete: Class 4000, APWA Section 03 30 04.
   E. Manhole: Riser, ASTM C 478.
   F. Reinforcement: Deformed, steel, ASTM A 615. Give bars an epoxy coating at least 15 mils thick. Minimum stress yield strength of steel tie-down bars is 70,000 ksi.
   G. Small Fittings: Brass. Do not use galvanized materials.
   H. PVC Pipe and Fittings: Schedule 40, APWA Section 33 05 07.
   I. Water Tight Wall Seal: Waterproof, compressible.
3. **EXECUTION**
   A. Base Course and Backfill Placement: 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.
   B. Apply tape wrap to the exterior of all buried steel pipe per AWWA C209.
   C. Concrete Placement: APWA Section 03 30 10. Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.
   D. Service saddle is required on all PVC and AC pipe taps unless specified otherwise. Ductile iron and cast iron pipe may be direct tapped.
   E. Seal manhole joints water-tight and ground flush with interior wall.
   F. Follow applicable AWWA and NSF standards when connecting piping.
   G. If diameter of air relief valve is greater than 2-inches, provide piping to match its diameter from water main connection to open to air.

278



CROSS–SECTION



DETAIL

February 2011 — ***Air release assembly*** — Plan **575**

279

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NO.	BY	DATE	REVISIONS

HORIZON NEIGHBORHOOD PRUD

DETAILS

PREPARED FOR: SUMMIT POWDER MOUNTAIN

DATE SUBMITTED: 08.01.2017

TALISMAN CIVIL CONSULTANTS
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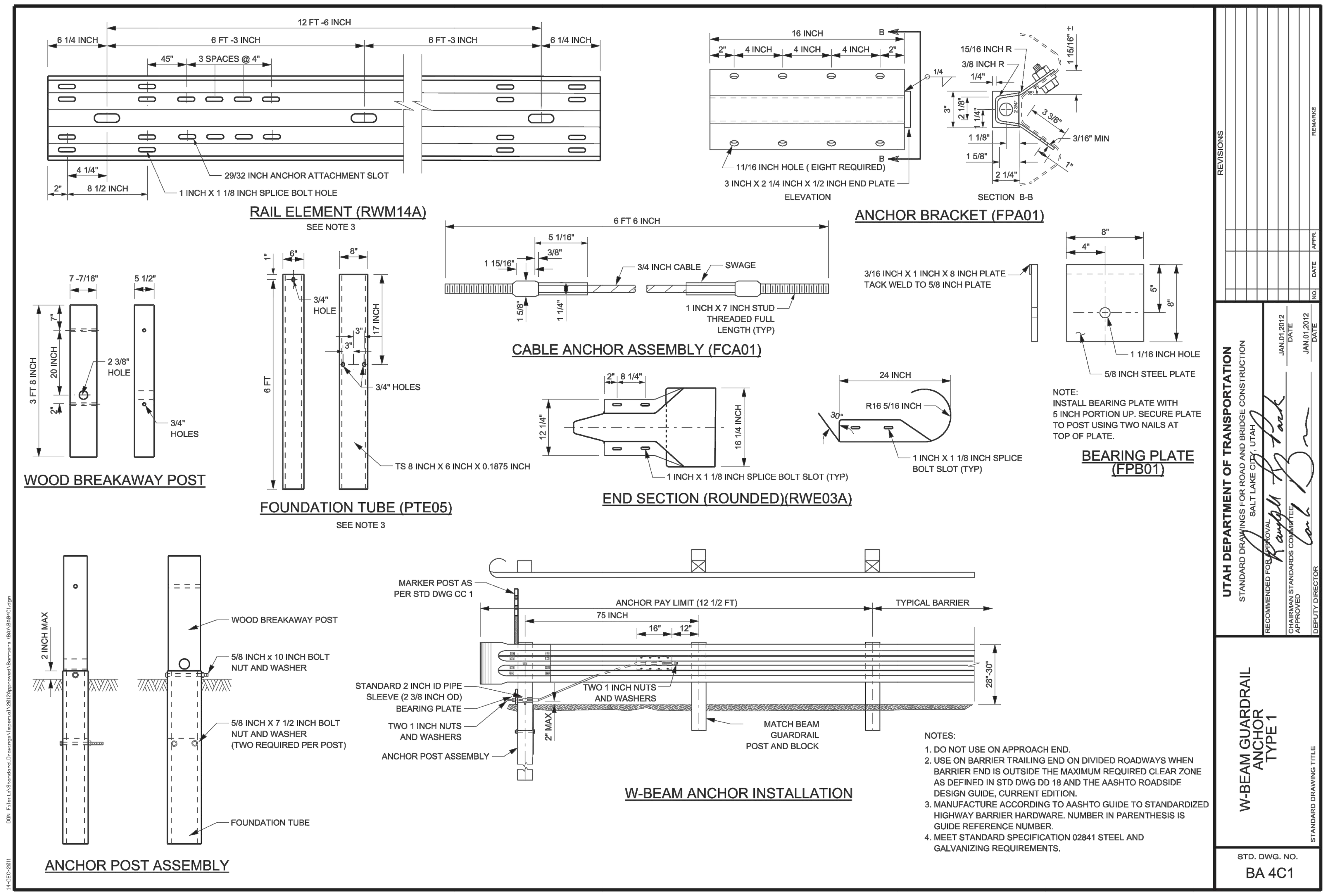
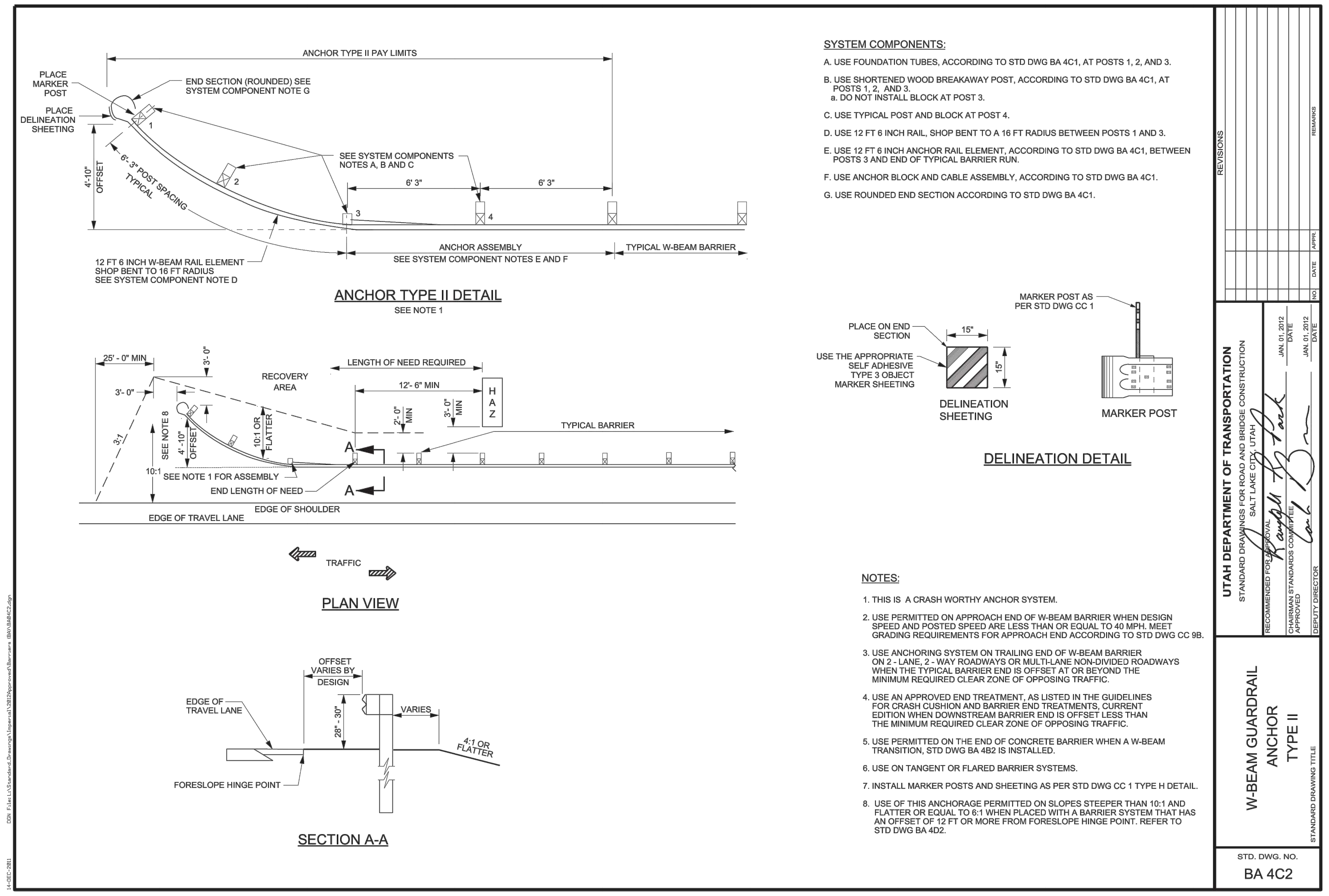
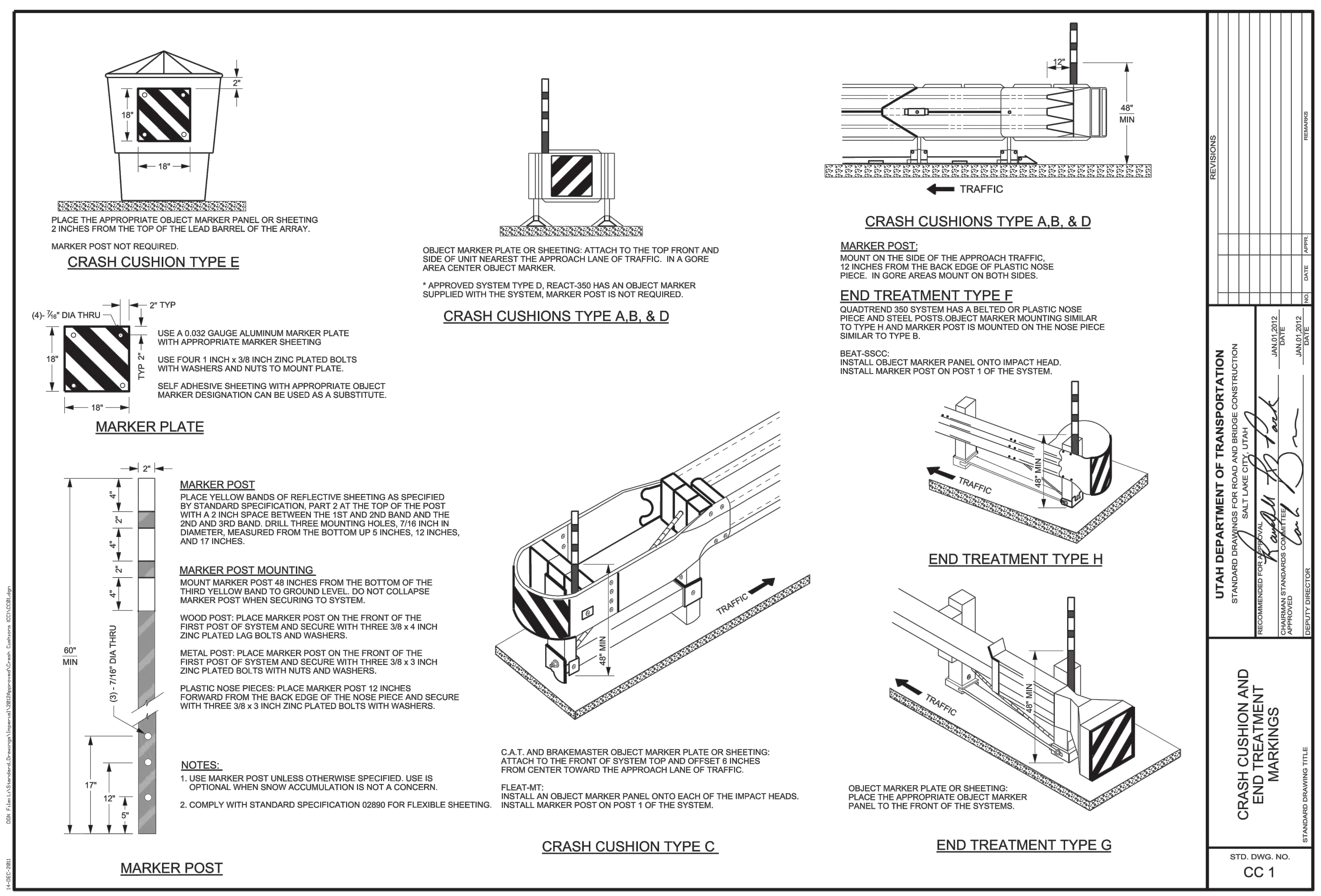
SHEET NUMBER **6.06**

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

JOB NUMBER **SLB0793**







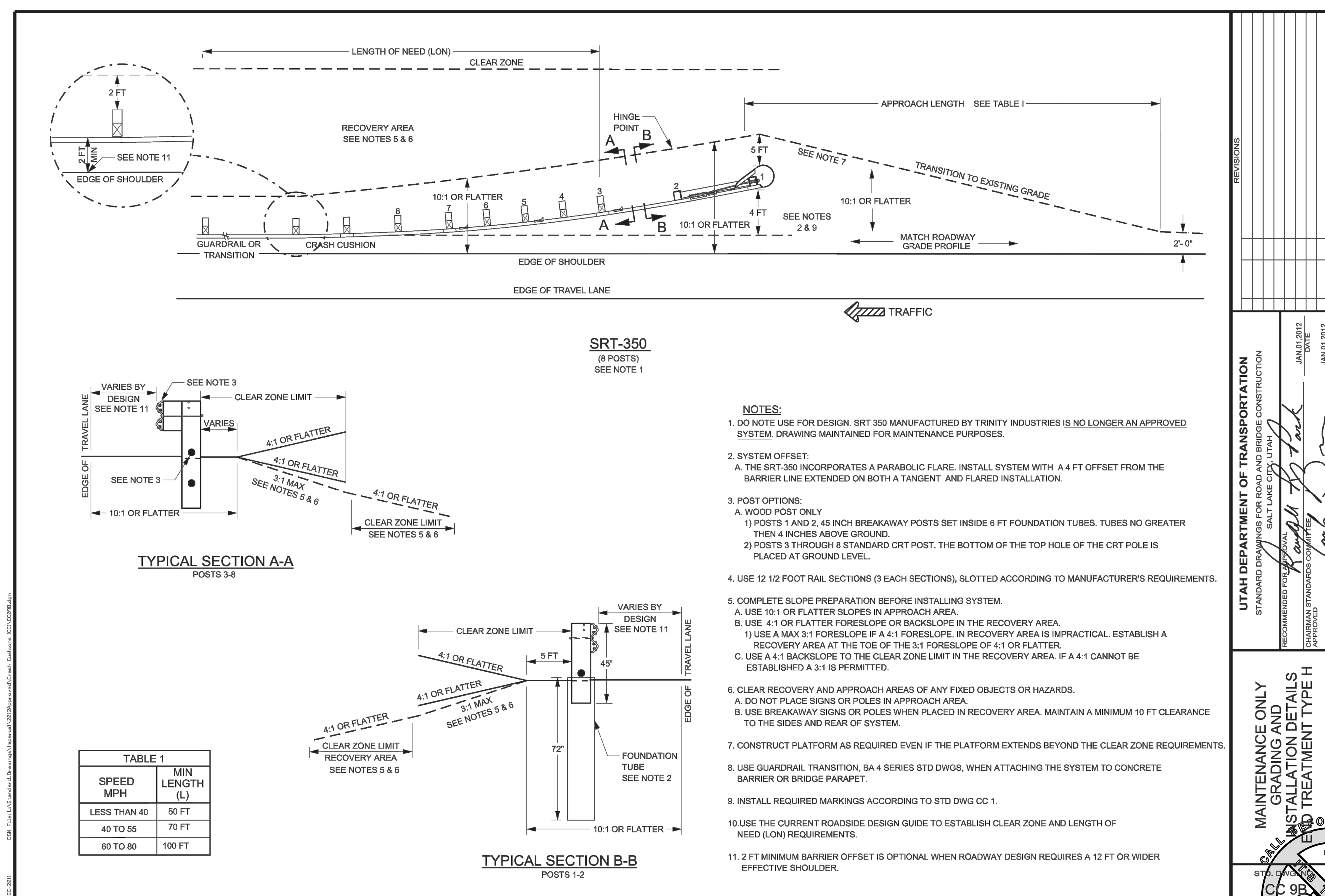


TABLE 1

SPEED MPH	MIN LENGTH (L)
LESS THAN 40	50 FT
40 TO 55	70 FT
60 TO 80	100 FT

HORIZON NEIGHBORHOOD PRUD

GUARDRAIL DETAILS

PREPARED FOR: SUMMIT POWDER MOUNTAIN

DATE SUBMITTED: 08.01.2017

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REGISTERED PROFESSIONAL ENGINEER No. 7899506 RYAN W. CATHEY STATE OF UTAH

SHEET NUMBER 6.07

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

JOB NUMBER SLB0793

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