VILLAGE NEST EAST PRUD

SITE CONSTRUCTION DRAWINGS

Located in Sec 08 T7N R2E
Weber County, Utah

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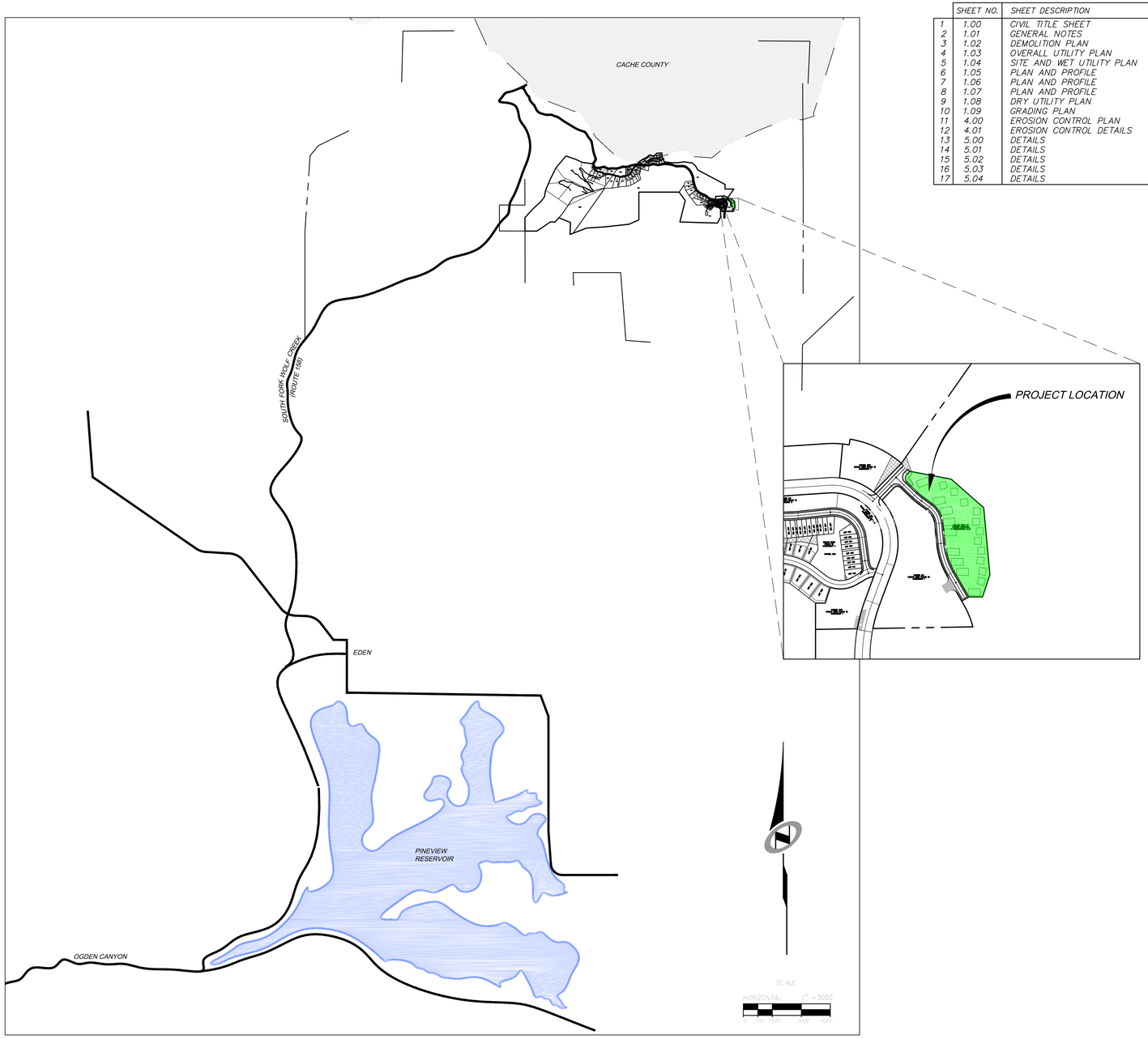

TALISMAN
CIVIL CONSULTANTS
5217 SOUTH STATE STREET
SUITE 200
MURRAY, UT 84107
801.743.1300

NO.	BY	DATE	REVISIONS:

VILLAGE NEST EAST PRUD
SITE CONSTRUCTION DRAWINGS
CIVIL TITLE SHEET

DATE SUBMITTED: 07.20.2017

TCC JOB NUMBER: 17-200.08

REGISTERED PROFESSIONAL ENGINEER
No. 7899506
RYAN W. CATHEY
5/20/17
STATE OF UTAH

SHEET NUMBER
1.00

CALL 811 BEFORE YOU DIG
BLUE STAKES OF UTAH

DATE: 5/03/17

PATH: N:\SLB0793\Cadd\Village Nest\IP\IP1007.dwg

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
6"W	6"ø C-900 PVC WATER PIPE (UNLESS NOTED OTHERWISE)	APWA PLAN NO. 381, 382
4"W	4"ø C-900 PVC WATER PIPE (UNLESS NOTED OTHERWISE)	APWA PLAN NO. 381, 382
2"W	2"ø C-900 PVC WATER PIPE (UNLESS NOTED OTHERWISE)	APWA PLAN NO. 381, 382
	1 1/2" SERVICE LATERAL	N/A
W	PROPOSED WATER METER	APWA PLAN NO. 523
	PROPOSED WATER LINE REDUCER	APWA PLAN NO. 561, 562
	PROPOSED WATER VALVE	APWA PLAN NO. 561, 562
SP	WASHOUT VALVE ASSEMBLY	APWA PLAN NO. 571
8"SS	8" SDR35 PVC SEWER PIPE	APWA PLAN NO. 381, 382
(1)SS-P	1.5"ø HDPE PRESSURE SEWER PIPE	APWA PLAN NO. 381, 382
	PROPOSED PVC SANITARY SEWER LATERAL	DETAIL A, SHEET 5.00
S	PROPOSED SANITARY SEWER MANHOLE	APWA PLAN NO. 411
	PROPOSED GRINDER PUMP STATION	DETAIL B, SHEET 5.00
15"SD	15"ø CLIII RCP DRAINAGE PIPE	APWA PLAN NO. 381, 382
D	PROPOSED STORM DRAIN MANHOLE	APWA PLAN NO. 341
	PIPE OUTFALL	APWA PLAN NO. 323
G	PROPOSED GAS MAIN	N/A
G	PROPOSED GAS MATERS	N/A
	PROPOSED TELECOMMUNICATION CONDUIT	N/A
TL	PROPOSED TELECOMMUNICATION PULL BOX	N/A
	PROPOSED ELECTRICAL CONDUIT	N/A
E	PROPOSED ELECTRICAL METER	N/A
TR	PROPOSED ELECTRICAL TRANSFORMER	N/A
	LOT LINE	N/A
	WEBER/CACHE COUNTY LINE	N/A
	PROPOSED LOT LINE	N/A
8"W	EXISTING 8"ø WATER LINE	N/A
16"W	EXISTING 16"ø WATER LINE	N/A
	EXISTING WATER VALVE	N/A
	EXISTING FIRE HYDRANT	N/A
15"SD	EXISTING 15"ø STORM DRAIN LINE	N/A
D	EXISTING STORM DRAIN MANHOLE	N/A
	EXISTING STORM DRAIN CATCH BASIN	N/A
8"SS	EXISTING 8"ø SANITARY SEWER LINE	N/A
S	EXISTING SANITARY SEWER MANHOLE	N/A
G G	EXISTING GAS PIPE/SLEEVE	N/A
P P	EXISTING MISCELLANEOUS POWER CONDUIT	N/A
(1)4"P	EXISTING 4"ø POWER CONDUIT	N/A
(1)2"COM	EXISTING 2"ø COMMUNICATION CONDUIT	N/A
8"SS_HDPE	EXISTING SANITARY SEWER LINE TO BE REMOVED	N/A
15"SD	EXISTING STORM DRAIN LINE TO BE REMOVED	N/A
16"W	EXISTING WATER LINE TO BE REMOVED	N/A
S	EXISTING SANITARY SEWER MANHOLE TO BE REMOVED	N/A

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.

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.

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

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:

LEGEND

HATCHING INDICATES AREAS LESS THAN 3:1 SLOPE TO BE SEEDED FOR REVEGETATION.

HATCHING INDICATES SLOPES 3:1 OR STEEPER TO BE SEEDED AND REQUIRING EROSION CONTROL BLANKET.

INSTALL 15' X 30' 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.

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

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. USE THE FOLLOWING SEED MIXTURE.
   i. MEADOW BROME (RIGOR) 14 lb/AC
   ii. ORCHARD GRASS 10 lb/AC
   iii. ALFALFA (ADAK) 4 lb/AC
B) TRACKING STRAW PERPENDICULAR TO SLOPES
C) INSTALLING A LIGHT-WEIGHT, TEMPORARY EROSION CONTROL BLANKET

811 DIG SAFE BEFORE YOU DIG - SAFE DIGGING PARTNER

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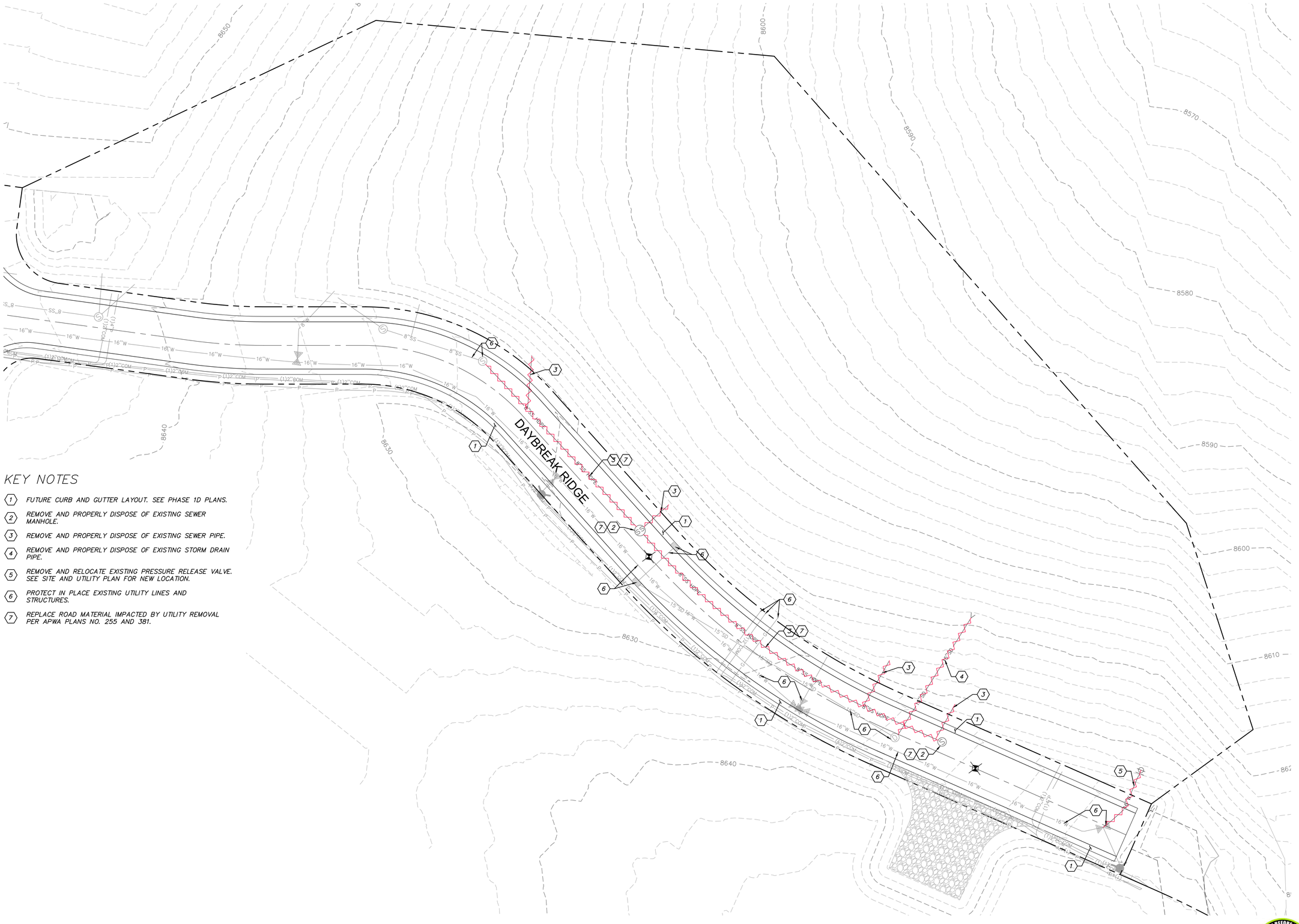
No. 7899506
RYAN W. CATHEY
7/20/17
STATE OF UTAH

SHEET NUMBER
1.01

DATE: 5/03/17

PATH: N:\SLC\793\Cadd\Village Nest\PUP\1.01GN.dwg

DATE: 5/03/17



KEY NOTES

1. FUTURE CURB AND GUTTER LAYOUT. SEE PHASE 1D PLANS.
2. REMOVE AND PROPERLY DISPOSE OF EXISTING SEWER MANHOLE.
3. REMOVE AND PROPERLY DISPOSE OF EXISTING SEWER PIPE.
4. REMOVE AND PROPERLY DISPOSE OF EXISTING STORM DRAIN PIPE.
5. REMOVE AND RELOCATE EXISTING PRESSURE RELEASE VALVE. SEE SITE AND UTILITY PLAN FOR NEW LOCATION.
6. PROTECT IN PLACE EXISTING UTILITY LINES AND STRUCTURES.
7. REPLACE ROAD MATERIAL IMPACTED BY UTILITY REMOVAL PER APWA PLANS NO. 255 AND 381.

TALISMAN
CIVIL CONSULTANTS
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SUITE 200
MURRAY, UT 84107
801.743.1300

NO.	BY	DATE	REVISIONS:

VILLAGE NEST EAST PRUD

SITE CONSTRUCTION DRAWINGS

DEMOLITION PLAN

DATE SUBMITTED: 07.20.2017

TCC JOB NUMBER: 17-200.08

REGISTERED PROFESSIONAL ENGINEER
No. 7899506
RYAN W. CATHEY
7/20/17
STATE OF UTAH

SCALE

HORIZONTAL: 1" = 20

0 5 10 20 30

SHEET NUMBER

1.02

CALL 811 BEFORE YOU DIG
SAFE DIGGING PARTNER

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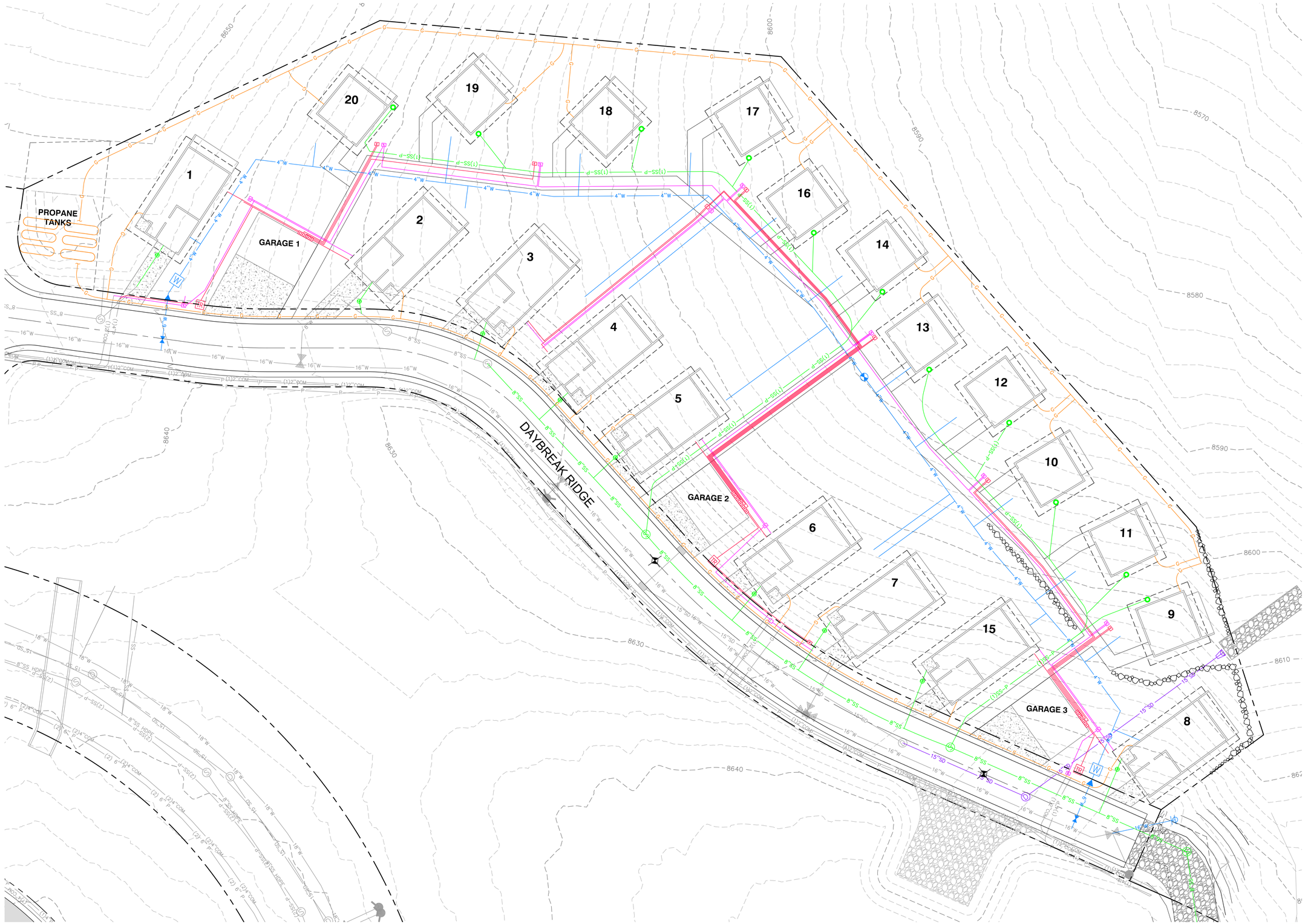

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SUITE 200
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NO.	BY	DATE	REVISIONS:

VILLAGE NEST EAST PRUD

SITE CONSTRUCTION DRAWINGS

OVERALL UTILITY PLAN

DATE SUBMITTED: 07.20.2017

TCC JOB NUMBER: 17-200.08

REGISTERED PROFESSIONAL ENGINEER
No. 7899506
RYAN W. CATHEY
07/20/17
STATE OF UTAH

SCALE

HORIZONTAL: 1" = 20

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SHEET NUMBER

1.03

DATE: 5/03/17

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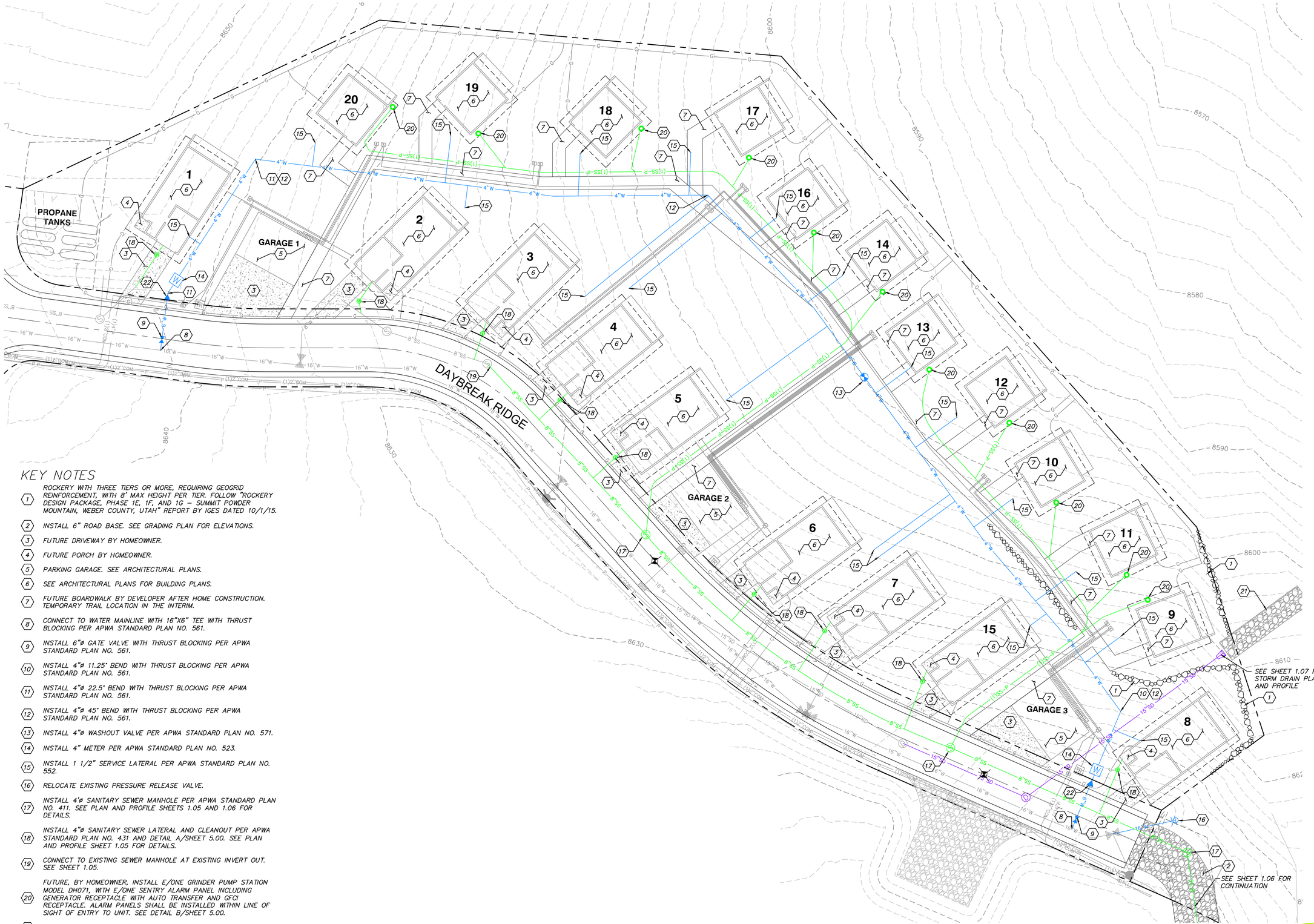

KEY NOTES

1. ROCKERY WITH THREE TIERS OR MORE, REQUIRING GEOGRID REINFORCEMENT, WITH 8' MAX HEIGHT PER TIER. FOLLOW "ROCKERY DESIGN PACKAGE, PHASE 1E, 1F, AND 1G – SUMMIT POWDER MOUNTAIN, WEBER COUNTY, UTAH" REPORT BY IGES DATED 10/1/15.
2. INSTALL 6" ROAD BASE. SEE GRADING PLAN FOR ELEVATIONS.
3. FUTURE DRIVEWAY BY HOMEOWNER.
4. FUTURE PORCH BY HOMEOWNER.
5. PARKING GARAGE. SEE ARCHITECTURAL PLANS.
6. SEE ARCHITECTURAL PLANS FOR BUILDING PLANS.
7. FUTURE BOARDWALK BY DEVELOPER AFTER HOME CONSTRUCTION. TEMPORARY TRAIL LOCATION IN THE INTERIM.
8. CONNECT TO WATER MAINLINE WITH 16"X6" TEE WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.
9. INSTALL 6"ø GATE VALVE WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.
10. INSTALL 4"ø 11.25° BEND WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.
11. INSTALL 4"ø 22.5° BEND WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.
12. INSTALL 4"ø 45° BEND WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.
13. INSTALL 4"ø WASHOUT VALVE PER APWA STANDARD PLAN NO. 571.
14. INSTALL 4" METER PER APWA STANDARD PLAN NO. 523.
15. INSTALL 1 1/2" SERVICE LATERAL PER APWA STANDARD PLAN NO. 552.
16. RELOCATE EXISTING PRESSURE RELEASE VALVE.
17. INSTALL 4'ø SANITARY SEWER MANHOLE PER APWA STANDARD PLAN NO. 411. SEE PLAN AND PROFILE SHEETS 1.05 AND 1.06 FOR DETAILS.
18. INSTALL 4"ø SANITARY SEWER LATERAL AND CLEANOUT PER APWA STANDARD PLAN NO. 431 AND DETAIL A/SHEET 5.00. SEE PLAN AND PROFILE SHEET 1.05 FOR DETAILS.
19. CONNECT TO EXISTING SEWER MANHOLE AT EXISTING INVERT OUT. SEE SHEET 1.05.
20. FUTURE, BY HOMEOWNER, 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 B/SHEET 5.00.
21. INSTALL 10' WIDE D50=9" RIP RAP PAD ACROSS SKI RUN.
22. INSTALL 6"x4" REDUCER WITH THRUST BLOCKING PER APWA STANDARD PLAN NO. 561.

DATE: 5/03/17

PATH: N:\SL0793\Cadd\Village Nest\P\P104UT.dwg

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NO.	BY	DATE	REVISIONS:

VILLAGE NEST EAST PRUD
SITE CONSTRUCTION DRAWINGS
SITE AND WET UTILITY PLAN

DATE SUBMITTED: 07.20.2017

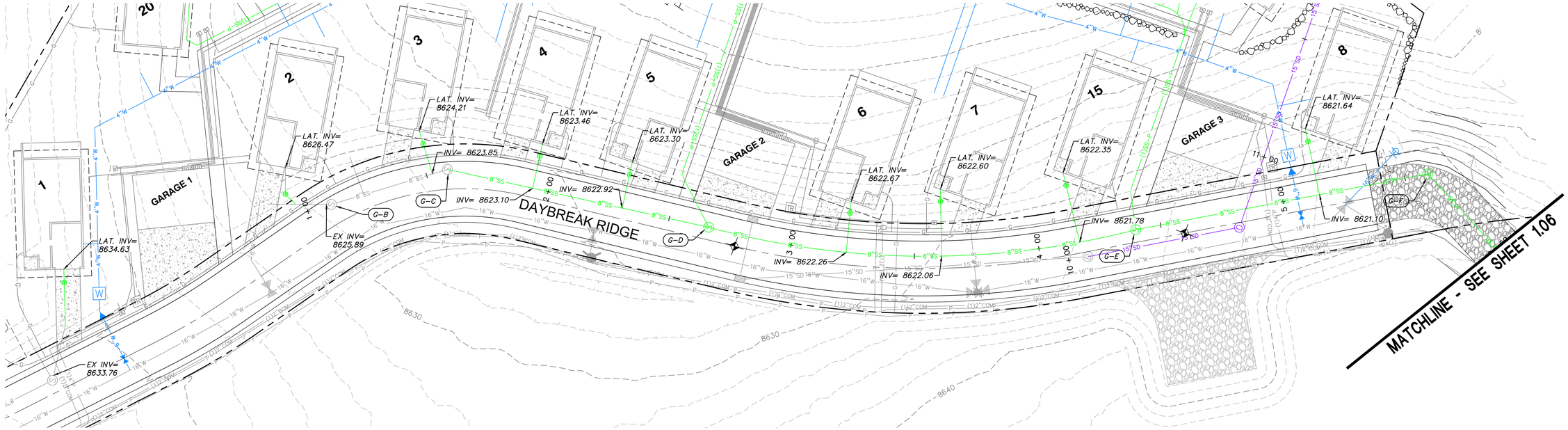
TCC JOB NUMBER: 17-200.08

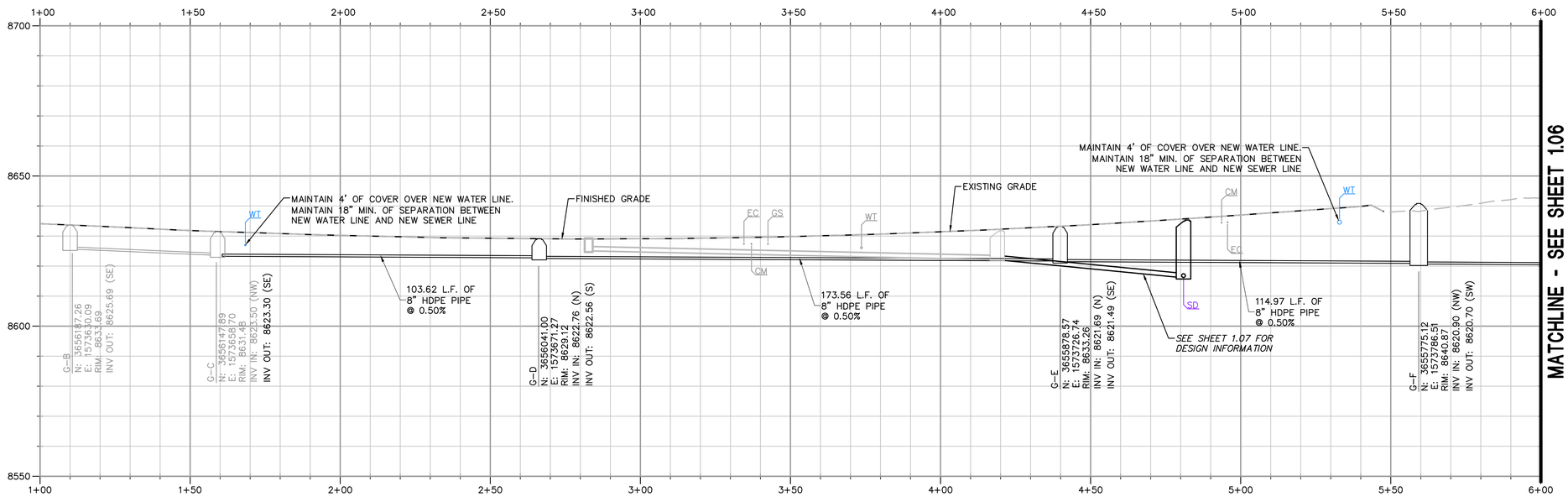
REGISTERED PROFESSIONAL ENGINEER
No. 7899506
RYAN W. CATHEY
7.20.17
STATE OF UTAH

SCALE
HORIZONTAL: 1" = 20
0 5 10 20 30

SHEET NUMBER
1.04

CALL 811 BEFORE YOU DIG
STOP! DIGGING PAST NO!





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NO.	BY	DATE	REVISIONS:

VILLAGE NEST EAST PRUD
SITE CONSTRUCTION DRAWINGS
PLAN AND PROFILE

DATE SUBMITTED: 07.20.2017

TCC JOB NUMBER: 17-200.08

REGISTERED PROFESSIONAL ENGINEER
No. 7899506
RYAN W. CATHEY
7/20/17
STATE OF UTAH

SCALE
HORIZONTAL: 1" = 20
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SHEET NUMBER
1.05

DATE: 5/03/17

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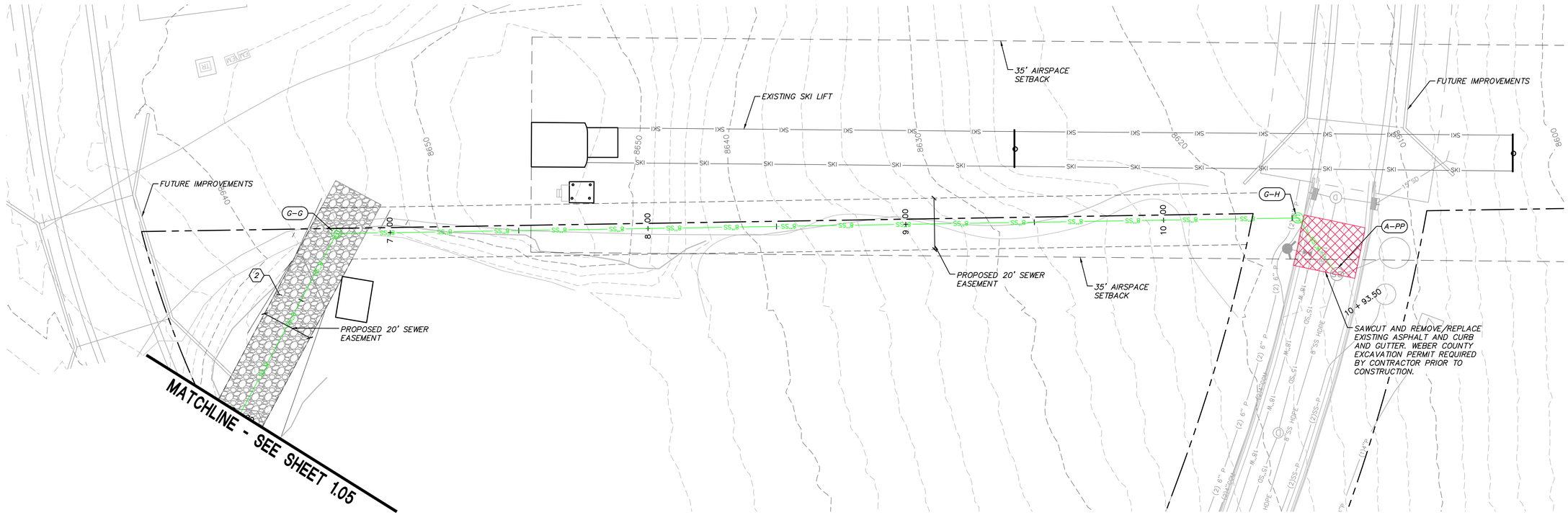

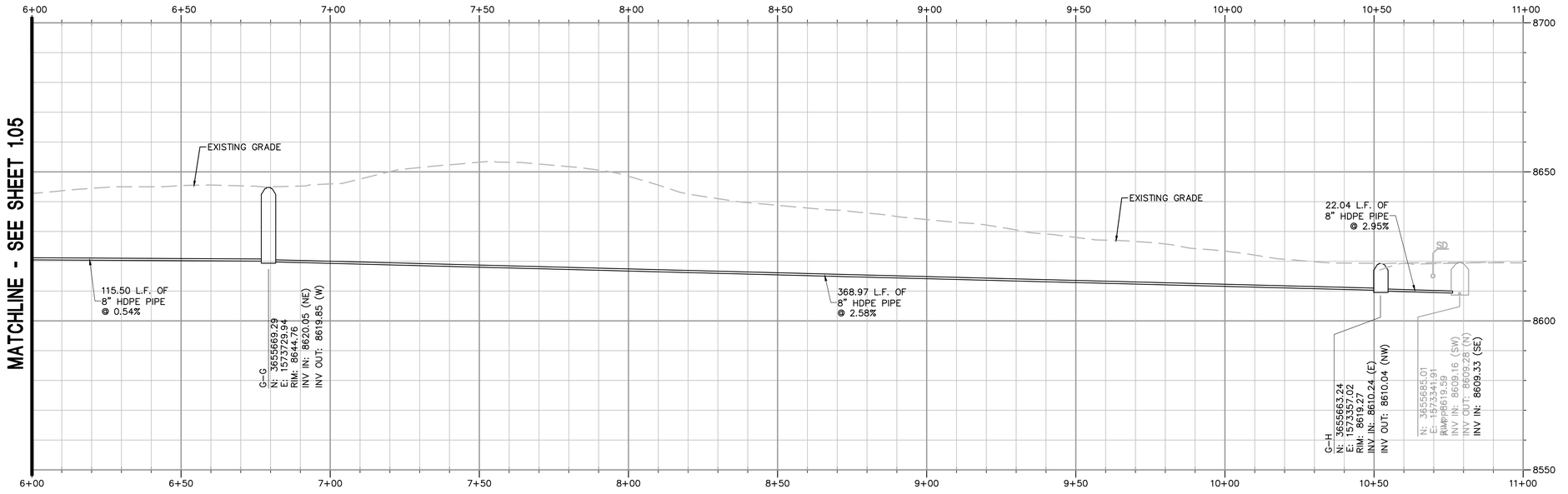

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NO.	BY	DATE	REVISIONS:

VILLAGE NEST EAST PRUD
SITE CONSTRUCTION DRAWINGS
PLAN AND PROFILE

DATE SUBMITTED: 07.20.2017

TCC JOB NUMBER: 17-200.08

REGISTERED PROFESSIONAL ENGINEER
No. 7899506
RYAN W. CATHEY
07/17
STATE OF UTAH

SCALE
HORIZONTAL: 1" = 20
0 5 10 20 30

SHEET NUMBER
1.06

CALL 811 BEFORE YOU DIG
811
BLUE STAKES OF UTAH
BEFORE YOU DIG

DATE: 5/03/17

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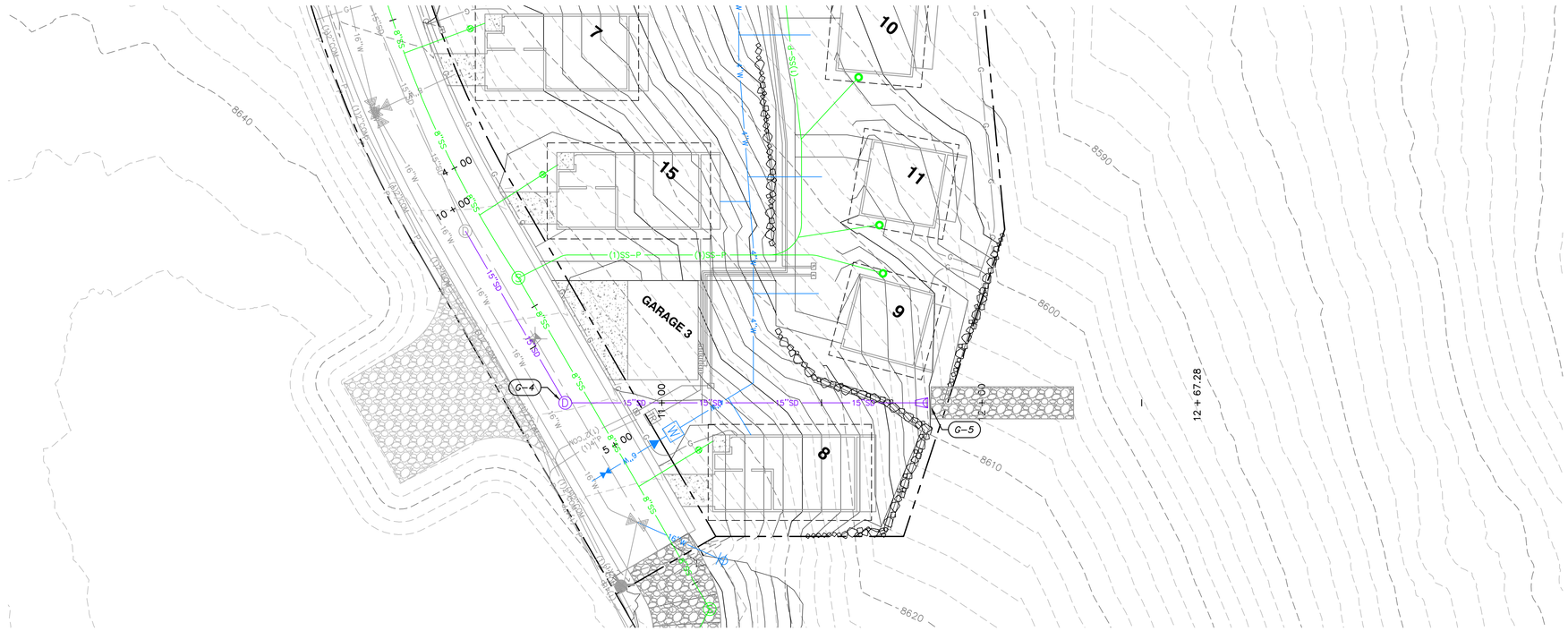

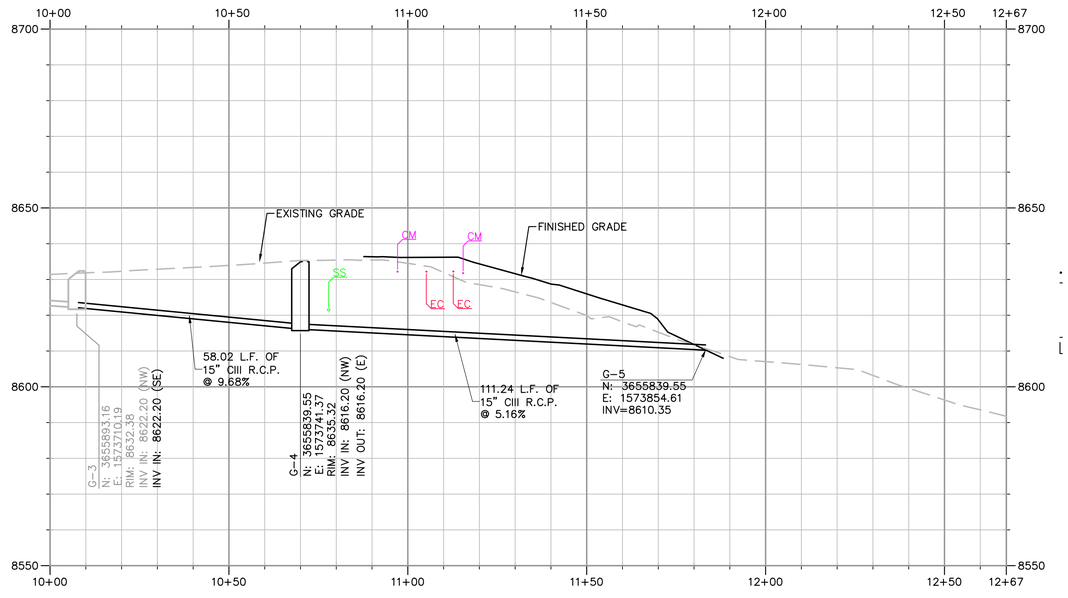

DATE: 5/03/17

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NO.	BY	DATE	REVISIONS:

VILLAGE NEST EAST PRUD
SITE CONSTRUCTION DRAWINGS
PLAN AND PROFILE

DATE SUBMITTED: 07.20.2017

TCC JOB NUMBER: 17-200.08

REGISTERED PROFESSIONAL ENGINEER
No. 7899506
RYAN W.
CATHEY
7/20/17
STATE OF UTAH

SCALE
HORIZONTAL: 1" = 20
0 5 10 20 30

SHEET NUMBER
1.07

CALL 811 BEFORE YOU DIG
811
IT'S FREE

DATE: 5/03/17

PATH: N:\SLB07933 Codd Village Nest\IP\IP1080U.dwg

PROPANE TANKS

GARAGE 1

GARAGE 2

GARAGE 3

DAYBREAK RIDGE

KEY NOTES

1. GAS PIPES, AND STORAGE TANKS (1,000 GAL) TO BE EXCAVATED AND TRENCHED BY CONTRACTOR. INSTALLATION BY OTHERS.
2. PROPANE TANK PIT PER DETAIL A/SHEET 5.03.
3. ELECTRICAL POWER CONDUIT, TRANSFORMERS, AND PULL BOXES. SEE ELECTRICAL PLANS.
4. POWER METER BASE AND MAIN CIRCUIT BREAKER. SEE ELECTRICAL PLANS.
5. COMMUNICATION CONDUIT AND PULL BOXES. SEE ELECTRICAL PLANS.

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NO.	BY	DATE	REVISIONS:

VILLAGE NEST EAST PRUD
SITE CONSTRUCTION DRAWINGS
DRY UTILITY PLAN

DATE SUBMITTED: 07.20.2017

TCC JOB NUMBER: 17-200.08

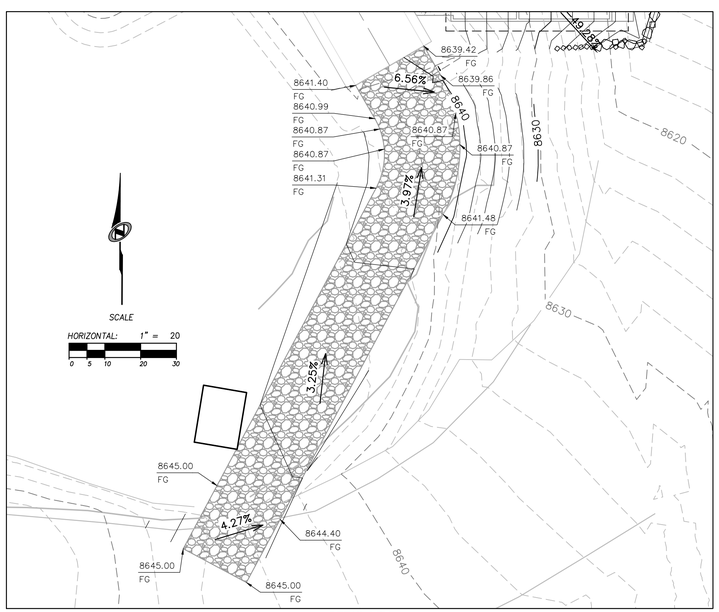
REGISTERED PROFESSIONAL ENGINEER
No. 7899506
RYAN W. CATHEY
7/20/17
STATE OF UTAH

SCALE
HORIZONTAL: 1" = 20
0 5 10 20 30

SHEET NUMBER
1.08

CALL 811 BEFORE YOU DIG
BLUE STAKING PAINTING

1. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND READ A COPY OF THE GEOTECHNICAL REPORT "DESIGN GEOTECHNICAL INVESTIGATION POWDER MOUNTAIN RESORT WEBER, COUNTY, UTAH" PRODUCED BY IGES. IGES PROJECT NUMBER 01628-003, DATED NOVEMBER 9, 2012. CONTRACTOR SHALL FOLLOW THE RECOMMENDATIONS AND GUIDELINES FOUND THEREIN.
2. CONTRACTOR TO PROVIDE POSITIVE DRAINAGE OF A MIN 2.0% AWAY FROM BUILDING FOR A MIN OF 10 FEET.
3. CONTRACTOR TO SHOW A MINIMUM OF 6" OF FOUNDATION REVEAL.
4. ANY QUESTIONS ON GRADES SHOULD BE VERIFIED BY ENGINEER



DETAIL "A"

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801.743.1300

NO.	BY	DATE	REVISIONS:

VILLAGE NEST EAST PRUD
SITE CONSTRUCTION DRAWINGS
GRADING PLAN

DATE SUBMITTED: 07.20.2017

TCC JOB NUMBER: 17-200.08

REGISTERED PROFESSIONAL ENGINEER
No. 7899506
RYAN W. CATHEY
7/20/17
STATE OF UTAH

SCALE
HORIZONTAL: 1" = 20
0 5 10 20 30

SHEET NUMBER
1.09

CALL 811 BEFORE YOU DIG
BUFFALO PARTNERS

DATE: 5/03/17

PATH: N:\SLB0793\Cad\Village Nest\PLP109GR.dwg

DATE: 5/03/17

LEGEND

HATCHING INDICATES AREAS LESS THAN 3:1 SLOPE TO BE SEEDED FOR REVEGETATION.

HATCHING INDICATES SLOPES 3:1 OR STEEPER TO BE SEEDED AND REQUIRING EROSION CONTROL BLANKET.

INSTALL 15' X 30' 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.

EXPOSED SLOPES:

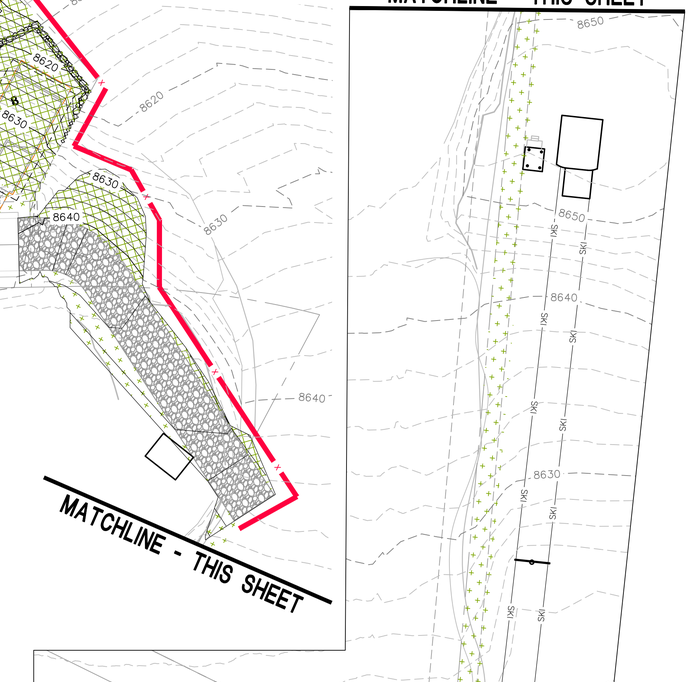
ANY EXPOSED SLOPE THAT WILL REMAIN UNTOUCHED FOR LONGER THAN 14 DAYS MUST BE STABILIZED BY ONE OR MORE OF THE FOLLOWING METHODS:

A) SPRAYING DISTURBED AREAS WITH A TACKIFIER VIA HYDROSEED. USE THE FOLLOWING SEED MIXTURE.
- i. MEADOW BROME (RIGOR) 14 lb/AC
- ii. ORCHARD GRASS 10 lb/AC
- iii. ALFALFA (ADAK) 4 lb/AC

B) TRACKING STRAW PERPENDICULAR TO SLOPES

C) INSTALLING A LIGHT–WEIGHT, TEMPORARY EROSION CONTROL BLANKET

MATCHLINE - THIS SHEET



MATCHLINE - THIS SHEET

SCALE
HORIZONTAL: 1" = 30
0 7.5 15 30 45

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SUITE 200
MURRAY, UT 84107
801.743.1300

NO.	BY	DATE	REVISIONS:

VILLAGE NEST EAST PRUD
SITE CONSTRUCTION DRAWINGS
EROSION CONTROL PLAN

DATE SUBMITTED: 07.20.2017

TCC JOB NUMBER: 17-200.08

REGISTERED PROFESSIONAL ENGINEER
No. 7899506
BRYAN W. CATHEY
STATE OF UTAH
7/20/17

SCALE
HORIZONTAL: 1" = 30
0 7.5 15 30 45

SHEET NUMBER
4.00

811 DIG SAFE BEFORE YOU DIG

PATH: N:\SLB0793\Cadd\Village Nest\VP\VP400EC.dwg

DATE: 5/03/17

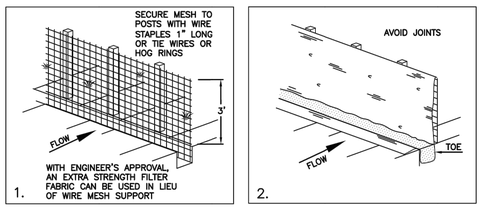
Silt fence

1. **GENERAL**
   - A. Description. A temporary sediment barrier consisting of a filter fabric stretched across and attached to supporting posts and entrenched.
   - B. Application. To intercept sediment from disturbed areas of limited extent.
   - C. Perimeter Control: Place barrier at down gradient limits of disturbance.
   - D. Sediment Barrier: Place barrier at toe of slope or soil stockpile.
   - E. Protection of Existing Waterways: Place barrier at top of stream bank.
   - F. Inlet Protection.

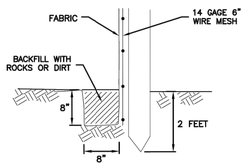
2. **PRODUCTS**
   - A. Fabric. Synthetic filter fabric shall be a pervious sheet of propylene, nylon, polyester, or polyethylene yarn. Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of 6 months of expected usable construction life at a temperature range of 0 deg F to 120 deg F.
   - B. Burlap. 10 ounces per square yard of fabric.
   - C. Posts. Either 2" x 4" diameter wood, or 1.33 pounds per linear foot steel with a minimum length of 5 feet, or steel posts with projections for fastening wire to them.

3. **EXECUTION**
   - A. Cut the fabric on site to desired width, unroll, and drape over the barrier. Secure the fabric toe with rocks or dirt and secure the fabric to the mesh with twin, staples or similar devices.
   - B. When attaching two silt fences together, place the end post of the second fence inside the end post of the first fence. Rotate both posts at least 180 degrees on a clockwise direction to create a tight seal with the filter fabric. Drive both posts into the ground and bury the flap.
   - C. When used to control sediments from a steep slope, place silt fences away from the toe of the slope for increased holding capacity.
   - D. Maintenance.
     1) Inspect immediately after each rainfall and at least daily during prolonged rainfall.
     2) Should the fabric on a silt fence or filter barrier decompose or become ineffective before the end of the expected usable life and the barrier still be necessary, replace the fabric promptly.
     3) Remove sediment deposits after each storm event. They must be removed when deposits reach approximately one-half the height of the barrier.
     4) Re-anchor fence as necessary to prevent shortcutting.
     5) Inspect for runoff bypassing ends of barriers or undercutting barriers.

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

Inlet protection – fence or straw bale

1. **GENERAL**
   - A. Description. A temporary sediment barrier around storm drain inlet.
   - B. Application. At inlets in paved or unpaved areas where up gradient area is to be disturbed by construction activities.

2. **PRODUCT** (Not used)

3. **EXECUTION**
   - A. Installation and application criteria.
     1) Provide up gradient sediment controls, such as silt fence during construction of inlet.
     2) When construction of inlet is complete erect straw bale barrier, silt fence or other approved sediment barrier surrounding perimeter of inlet.
     3) Install filter fabric completely around grate.
   - B. Maintenance.
     1) Inspect inlet protection after every large storm event and at a minimum of once monthly.
     2) Remove sediment accumulated when it reaches 4-inches in depth.
     3) Repair or re-align barrier or fence as needed.
     4) Look for bypassing or undercutting and re-compact soil around barrier or fence as required.

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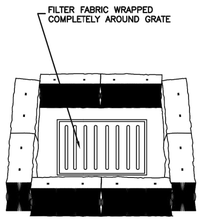
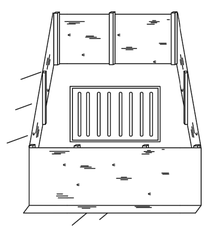


STRAW BALE BARRIER
(PLAN No. 121)



SILT FENCE
(PLAN No. 122)

Stabilized roadway entrance

1. **GENERAL**
   - A. Description. A temporary stabilized pad of gravel for controlling equipment and construction vehicle access to the site.
   - B. Application. At any site where vehicles and equipment enter the public right of way.

2. **PRODUCT** (Not used)

3 **EXECUTION**
   - A. Clear and grub area and grade to provide maximum slope of 1 percent away from paved roadway.
   - B. Compact subgrade.
   - C. Place filter fabric under stone if desired (recommended for entrance area that remains more than 3 months).
   - D. Maintenance.
     1) Prevent tracking or flow of mud into the public right-of-way.
     2) Periodic top dressing with 2-inch stone may be required, as conditions demand, and repair any structures used to trap sediments.
     3) Inspect daily for loss of gravel or sediment buildup.
     4) Inspect adjacent area for sediment deposit and install additional controls as necessary.
     5) Expand stabilized area as required to accommodate activities.

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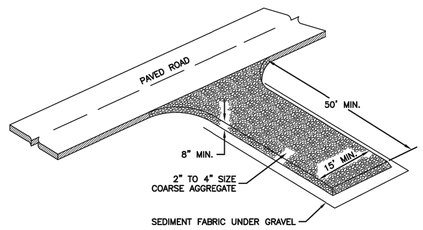

TALISMAN
CIVIL CONSULTANTS
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SUITE 200
MURRAY, UT 84107
801.743.1300

NO.	BY	DATE	REVISIONS:

VILLAGE NEST EAST PRUD
SITE CONSTRUCTION DRAWINGS
EROSION CONTROL DETAILS

DATE SUBMITTED: 07.20.2017

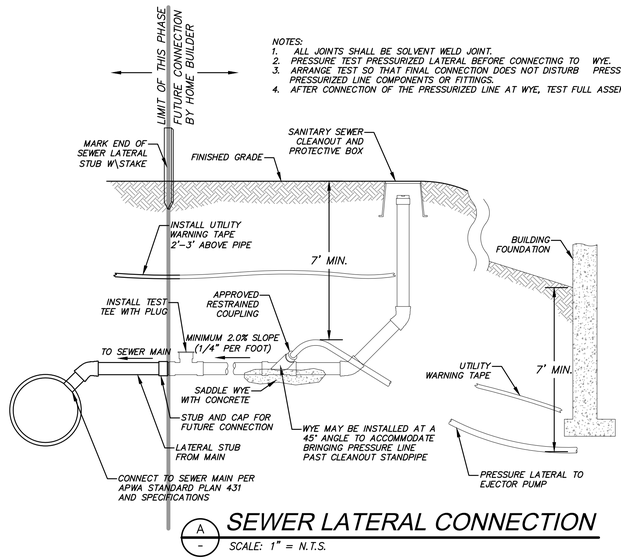
TCC JOB NUMBER: 17-200.08

REGISTERED PROFESSIONAL ENGINEER
No. 7899506
BRYAN W. CATHEY
7/20/17
STATE OF UTAH

CALL 811 BEFORE YOU DIG
SAFE DIGGING PARTNER

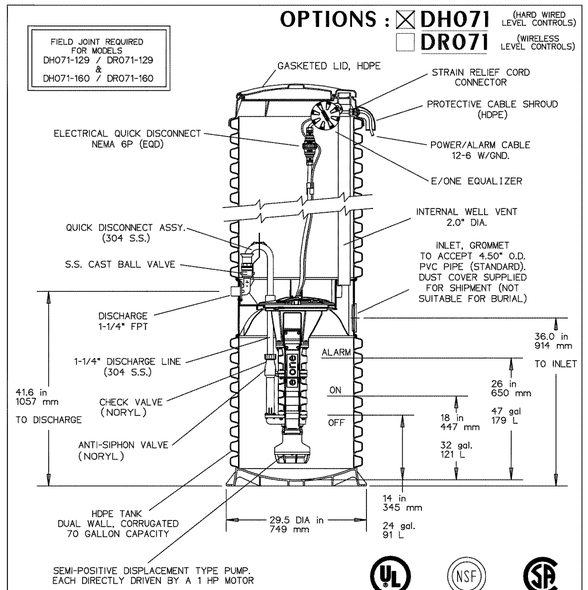
SHEET NUMBER
4.01

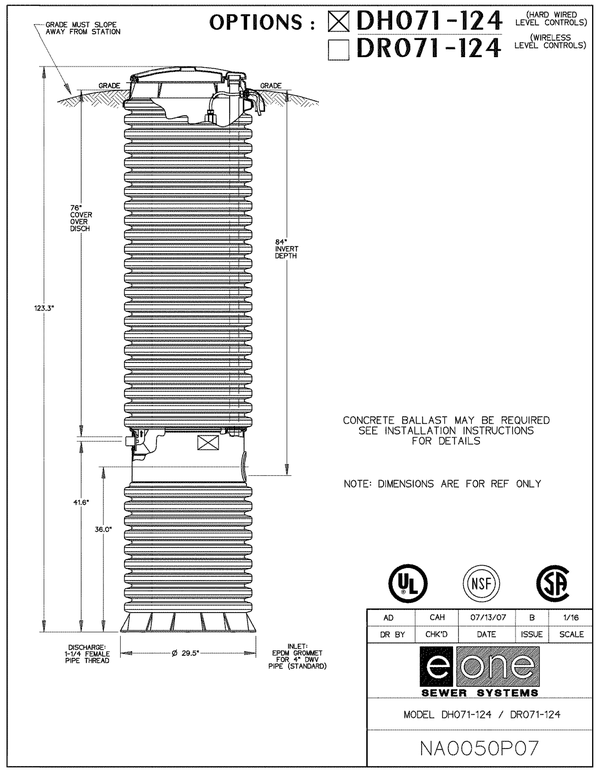
PATH: N:\SLB0793\Cadd\Village Nest\IP\IP40117.dwg



A – SEWER LATERAL CONNECTION

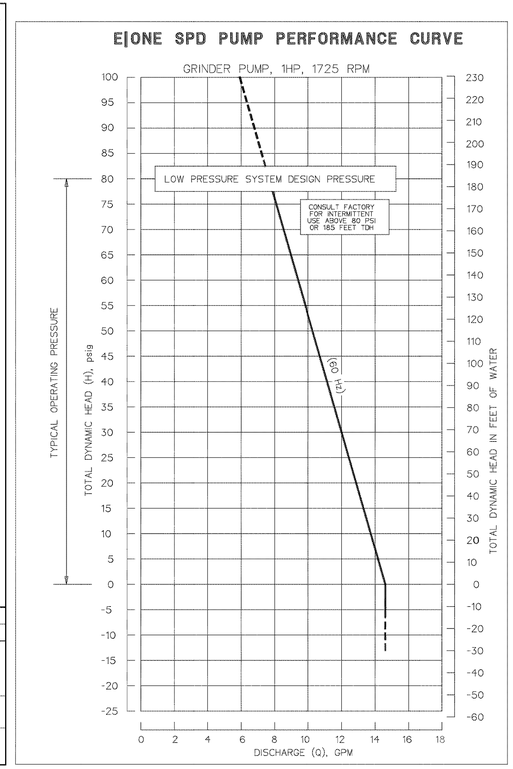
SCALE: 1" = N.T.S.





B – GRINDER PUMP STATION DETAIL

SCALE: 1" = N.T.S.



ESD 08-0022 REV. 2, 6/08

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

NO.	BY	DATE	REVISIONS:

VILLAGE NESTEST PRUD
SITE CONSTRUCTION DRAWINGS
DETAILS

DATE SUBMITTED: 07.20.2017

TCC JOB NUMBER: 17-200.08

REGISTERED PROFESSIONAL ENGINEER No. 7899506 RYAN W. CATHEY 07/20/17 STATE OF UTAH

SHEET NUMBER 5.00

CALL 811 BEFORE YOU DIG – BLUE STAKES OF UTAH

DATE: 5/03/17

PATH: N:\SLB0793\Cadd\Village Nest\VP\P50001.dwg

DATE: 5/03/17

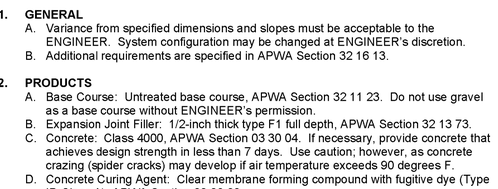
Curb and gutter

1. **GENERAL**
   A. Variance from specified dimensions and slopes must be acceptable to the ENGINEER. System configuration may be changed at ENGINEER's discretion.
   B. Additional requirements are specified in APWA Section 32 16 13.

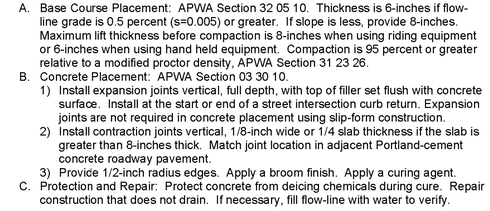
2. **PRODUCTS**
   A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
   B. Expansion Joint Filler: 1/2-inch thick type F1 full depth, APWA Section 32 13 73.
   C. Concrete: Class 4000, APWA Section 03 30 04. If necessary, provide concrete that achieves design strength in less than 7 days. Use caution; however, as concrete crazing (spider cracks) may develop if air temperature exceeds 90 degrees F.
   D. Concrete Curing Agent: Clear membrane forming compound with fugitive dye (Type ID Class A), APWA Section 03 39 00.

3. **EXECUTION**
   A. Base Course Placement: APWA Section 32 05 10. Thickness is 6-inches if flow-line grade is 0.5 percent (s=0.005) or greater. If slope is less, provide 8-inches. Maximum lift thickness before compaction is 8-inches when using riding equipment or 6-inches when using hand held equipment. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
   B. Concrete Placement: APWA Section 03 30 10.
      1) Install expansion joints vertical, full depth, with top of filler set flush with concrete surface. Install at the start or end of a street intersection curb return. Expansion joints are not required in concrete placement using slip-form construction.
      2) Install contraction joints vertical, 1/8-inch wide or 1/4 slab thickness if the slab is greater than 8-inches thick. Match joint location in adjacent Portland-cement concrete roadway pavement.
      3) Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.
   C. Protection and Repair: Protect concrete from deicing chemicals during cure. Repair construction that does not drain. If necessary, fill flow-line with water to verify.

BACKFILL BEHIND CURB BEFORE PAVING AGAINST LIP OF GUTTER



Type E Type F



Type G Type H

JOINT DETAIL

Asphalt concrete T-patch

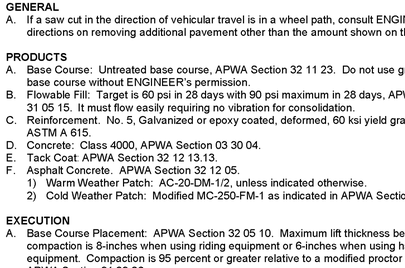
1. **GENERAL**
   A. If a saw cut in the direction of vehicular travel is in a wheel path, consult ENGINEER for directions on removing additional pavement other than the amount shown on the drawing.

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. Flowable Fill: Target is 80 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.
   C. Reinforcement. No. 5, Galvanized or epoxy coated, deformed, 60 ksi yield grade steel, ASTM A 615.
   D. Concrete: Class 4000, APWA Section 03 30 04.
   E. Tack Coat: APWA Section 32 12 13.13.
   F. Asphalt Concrete. APWA Section 32 12 05.
      1) Warm Weather Patch: AC-20-DM-1/2, unless indicated otherwise.
      2) Cold Weather Patch: Modified MC-250-FM-1 as indicated in APWA Section 33 05 25.

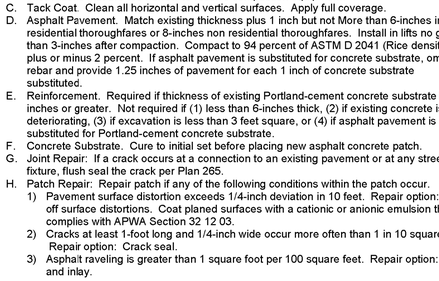
3. **EXECUTION**
   A. Base Course Placement: APWA Section 32 05 10. Maximum lift thickness before compaction is 8-inches when using riding equipment or 8-inches when using hand held equipment. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26
   B. Flowable Fill: Cure to initial set before placing aggregate base or asphalt pavement. Use in excavations that are too narrow to receive compaction equipment.
   C. Tack Coat. Clean all horizontal and vertical surfaces. Apply full coverage.
   D. Asphalt Pavement. Match existing thickness plus 1 inch but not More than 6-inches in residential thoroughfares or 8-inches non residential thoroughfares. Install in lifts no greater than 3-inches after compaction. Compact to 94 percent of ASTM D 2041 (Rice density) plus or minus 2 percent. If asphalt pavement is substituted for concrete substrate, omit rebar and provide 1.25 inches of pavement for each 1 inch of concrete substrate substituted.
   E. Reinforcement. Required if thickness of existing Portland-cement concrete substrate is 6-inches or greater. Not required if (1) less than 6-inches thick, (2) if existing concrete is deteriorating, (3) if excavation is less than 3 feet square, or (4) if asphalt pavement is substituted for Portland-cement concrete substrate.
   F. Concrete Substrate. Cure to initial set before placing new asphalt concrete patch.
   G. Joint Repair: If a crack occurs at a connection to an existing pavement or at any street fixture, flush seal the crack per Plan 265.
   H. Patch Repair: Repair patch if any of the following conditions within the patch occur.
      1) Pavement surface distortion exceeds 1/4-inch deviation in 10 feet. Repair option: Plane off surface distortions. Coat planed surfaces with a cationic or anionic emulsion that complies with APWA Section 32 12 03.
      2) Cracks at least 1-foot long and 1/4-inch wide occur more often than 1 in 10 square feet. Repair option: Crack seal.
      3) Asphalt raveling is greater than 1 square foot per 100 square feet. Repair option: Mill and inlay.

SHALLOW EXCAVATION

(LESS THAN 48 INCHES FROM PAVEMENT SURFACE TO BOTTOM OF EXCAVATION)



ASPHALT RESTORATION



COMPOSITE RESTORATION

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.

ROUND WITH FLARE

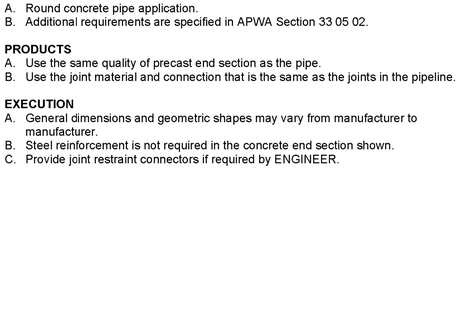


TABLE OF DIMENSION		
PIPE SIZE SIZE	DIMENSION Ⓐ	DIMENSION Ⓑ
18"	73"	36"
24"	73"	48"
30"	73"	60"
36"	97"	72"
42"	98"	78"
48"	98"	84"

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

Precast manhole

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 manhole.
   B. Manhole size.
      1) Diameter is 4-feet: For pipe under 12" diameter.
      2) Diameter is 5-feet: For pipe 12" and larger, or when 3 or more drain pipes intersect the manhole.
   C. Wall thickness:
      1) Precast reinforced concrete walls 4 3/4" minimum.
      2) Cast-in-place concrete to be 8 inches thick minimum.

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. Riser and Reducing Riser: ASTM C 478.
   E. Joint Sealant: Rubber based, compressible.
   F. Grout: 2 parts sand to 1 part cement mortar, ASTM C 1329.
   G. Stabilization-Separation Geotextile: Moderate or high at CONTRACTOR's choice, APWA Section 31 05 19.

3. **EXECUTION**
   A. Foundation Stabilization: Get ENGINEER's permission to use a sewer rock or a sewer rock in a geotextile wrap to stabilize an unstable foundation.
   B. 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.
   C. Invert cover. During construction, place invert covers over the top of pipe in manholes that currently convey sewerage. See Plan 412.
   D. Concrete Deck or Reducing Riser: When depth of manhole from pipe invert to finish grade exceeds 7 feet, use an ASTM C 478 reducing riser.
   E. Pipe Connections: Grout around all pipe openings.
   F. Pipe Seal: Install rubber-based pipe seals on all plastic pipes when connecting plastic pipes to manholes. Hold water-stop in place with stainless steel bands.
   G. Joints: Place flexible sealant in all riser joints. Finish with grout.
   H. Adjustment: If the required manhole adjustment is more than 1'-0", remove the cone and grade rings and adjust the manhole elevation with the appropriate manhole section, the cone section, and the grade rings or plastic form to make frame and lid match finish grade.
   I. Finish: Provide smooth and neat finishes on interior of cones, shafts, and rings. Imperfect moldings or honeycombs will not be accepted.
   J. Backfill: Provide backfill against the manhole shaft. 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.

CAST IN PLACE BASE

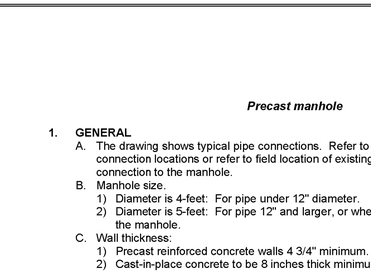
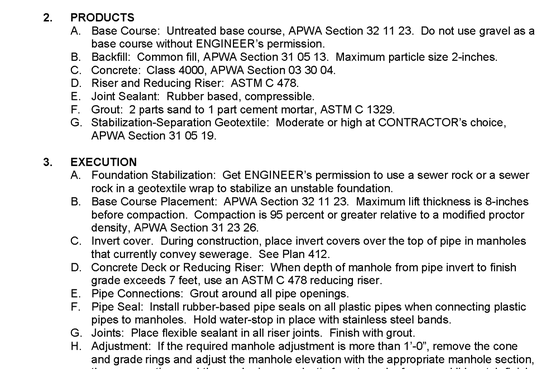


TABLE OF DIMENSIONS	
MANHOLE STYLE	DIMENSION
A	Ⓧ =48" Ⓨ =30"
B	Ⓧ =60" Ⓨ =44"
C	Ⓧ =60" Ⓨ =30"



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

NO.	BY	DATE	REVISIONS:

VILLAGE NEST EAST PRUD
SITE CONSTRUCTION DRAWINGS
DETAILS

DATE SUBMITTED: 07.20.2017

TCC JOB NUMBER: 17-200.08

REGISTERED PROFESSIONAL ENGINEER
No. 7899506
RYAN W. CATHEY
7/20/17
STATE OF UTAH

SHEET NUMBER
5.01

PATH: N:\SLB0793\Cad\Village Nest\PW\P501017.dwg

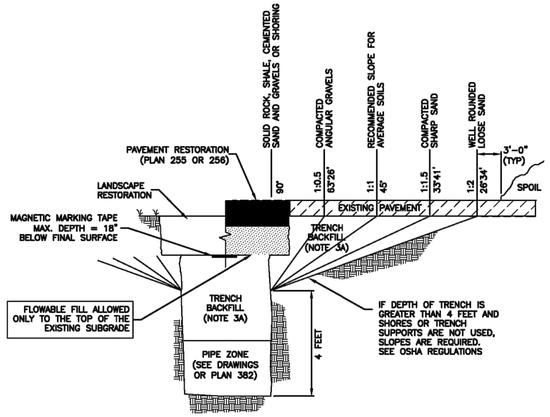
DATE: 5/03/17

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).



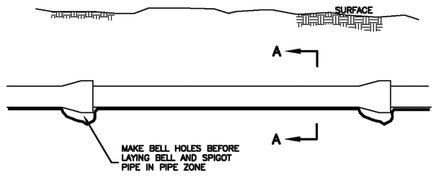
Trench backfill — Plan 381
January 2011 — 203

Pipe zone backfill

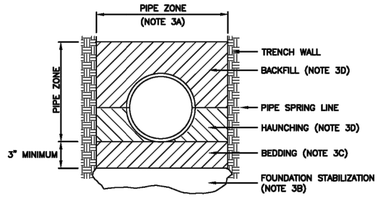
1. GENERAL
A. Install the pipe in the center of the trench or no closer than 6-inches from the wall of the pipe to the wall of the trench.

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-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.

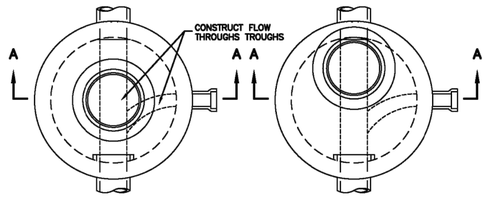
Pipe zone backfill — Plan 382
January 2011 — 205

Sanitary sewer manhole

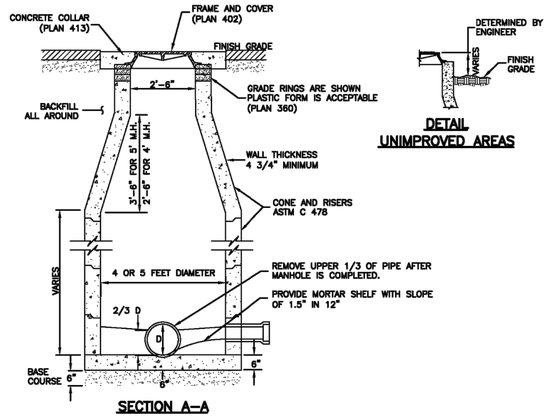
1. GENERAL
A. The drawing shows typical pipe connections. Refer to construction drawings for connection locations or refer to field location of existing piping when engineering pipe connection to the manhole.
B. Manhole size.
1) Diameter is 4 feet: For sewers under 12" diameter.
2) Diameter is 5 feet: For sewers 12" and larger, or when 3 or more pipes intersect the manhole.

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. Riser and Reducing Riser: ASTM C 478.
E. Reinforcement: Deformed, 60 ksi yield grade steel, ASTM A 615.
F. Grout: 2 parts sand to 1 part cement mortar, ASTM C 1329.
G. Stabilization-Separation Geotextile: Moderate or high at CONTRACTOR's choice, APWA Section 31 05 19.

3. EXECUTION
A. Foundation Stabilization: Get ENGINEER's permission to use a sewer rock or a granular backfill borrow in a geotextile wrap to stabilize an unstable foundation.
B. 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.
C. Invert Cover. During construction, place invert covers over the top of pipe in manholes that currently convey sewerage. See Plan 412.
D. Pipe Connections: Grout around all pipe openings.
E. Pipe Seal: Install rubber-based pipe seals on all plastic pipes when connecting plastic pipes to manholes. Hold water-stop in place with stainless steel bands.
F. Joints: Place flexible gasket-type sealant in all riser joints. Finish with grout.
G. Adjustment: If the required manhole adjustment is more than 1'-0", remove the cone and grade rings and adjust the manhole elevation with the appropriate manhole section, the cone section, and the grade rings or plastic form to make frame and lid match finish grade.
H Finish: Provide smooth and neat finishes on interior of cones, shafts, and rings. Imperfect moldings or honeycombs will not be accepted.
I. Backfill: Provide backfill against the manhole shaft. 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.



PLAN (CONCENTRIC RISER) — PLAN (ECCENTRIC RISER)



SECTION A–A

DETAIL UNIMPROVED AREAS

Sanitary sewer manhole — Plan 411
April 2011 — 213

PATH: N:\SLB0793\Cadd\Village Nest\VP\PS0207.dwg

TALISMAN
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5217 SOUTH STATE STREET
SUITE 200
MURRAY, UT 84107
801.743.1300

NO.	BY	DATE	REVISIONS:

VILLAGE NEST EAST PRUD
SITE CONSTRUCTION DRAWINGS
DETAILS

DATE SUBMITTED: 07.20.2017

TCC JOB NUMBER: 17-200.08

REGISTERED PROFESSIONAL ENGINEER
No. 7899506
RYAN W. CATHEY
7/20/17
STATE OF UTAH

CALL 811 BEFORE YOU DIG
IT'S FREE
IT'S DIGGING PARTNERS

SHEET NUMBER
5.02

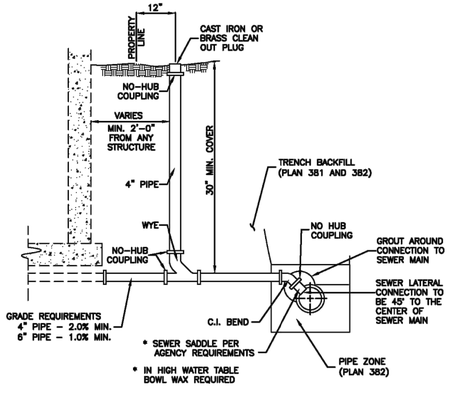
DATE: 5/03/17

Sewer lateral connection

1. **GENERAL**
   A. Before installation, secure acceptance by ENGINEER for all pipe, fittings, and couplings to be used.
   B. Before backfilling, secure inspection of installation by ENGINEER. Give at least 24 hours notice.
   C. Verify if CONTRACTOR or agency is to install the wye.

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. Provide agency approved wye or tee with appropriate donut.
   D. Stainless steel straps required.

3. **EXECUTION**
   A. Tape wrap pipe as required by soil conditions.
   B. Remove core plug from sewer main. Do not break into sewer main to make connection.
   C. Base Course and Backfill Placement: 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.



Sewer lateral connection Plan **431**

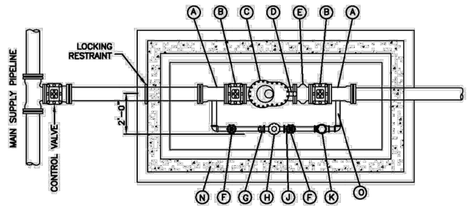
January 2011 219

3" and 4" Compound meter with 2" bypass

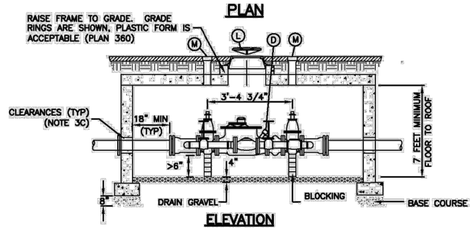
1. **GENERAL**
   A. Configuration may be changed at ENGINEER's discretion.
   B. Additional requirements are specified in APWA Section 33 12 16.

2 **PRODUCTS**
   A. Small Fittings: Brass. Do not use galvanized materials.
   B. Blocking: Clay brick or concrete block.
   C. Drain Gravel: Sewer rock, ASTM size no. 3 (2" to 1") or equal, APWA Section 31 05 13.

3. **EXECUTION**
   A. Control Valve: Install valve with valve box adjacent to main.
   B. Center frame and cover over water meter.
   C. Allow 1-inch clearance around waterline where water line passes through concrete box wall. Seal opening with compressible seal.



PLAN



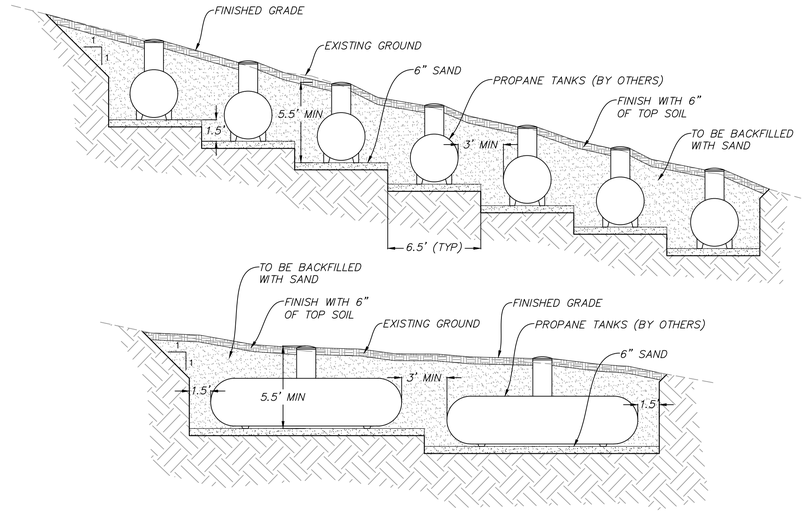
ELEVATION

LEGEND			
No.	*	ITEM	DESCRIPTION
A		3" OR 4" FLANGE x M.J. ADAPTER	
B		3" OR 4" GATE VALVE WITH 2"x2" OPERATING NUT	
C		3" OR 4" COMPOUND METER	
D		2" TEST ASSEMBLY	
E		3" OR 4" CHECK VALVE	
F		2" GATE VALVE	
G		2" METER FLANGE	
H		2" DISPLACEMENT METER	
J		2" MALE METER FLANGE	
K		2" CHECK VALVE	
L		27" FRAME AND COVER	PLAN 502
M		TOP SECTION OF VALVE BOX WITH LID	PLAN 574
N		CONCRETE BOX	PLAN 505
O		COPPER PIPING	

* FURNISHED BY AGENCY

3" and 4" Compound meter with 2" bypass Plan **523**

August 2001 243



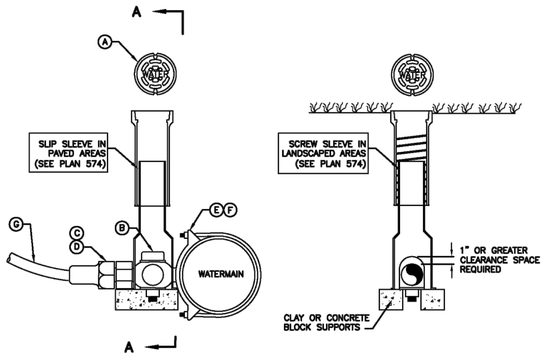
A — PROPANE TANK PIT TYPICAL DETAIL
NTS

1 1/2" and 2" Service taps

1. **GENERAL**
   A. Before backfilling around taps, 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. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.
   C. Tape: Teflon tape is required on all taps.

3. **EXECUTION**
   A. Tapping: Place taps a minimum of 36-inches apart. Use a tapping tool that is sized corresponding to the size of the service line to be installed. No taps within 36-inches of end of pipe.
   B. PVC or AC Pipe: A service saddle clamp is required on all PVC and AC pipe taps unless specified otherwise.
   C. Backfill: 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.
   D. Blocks: Clay brick or concrete block required under valve box to assure a 1" or greater space between the box and the corporation stop and pipe assembly.



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)

* FURNISHED BY UTILITY AGENCY

1 1/2" and 2" Service taps Plan **552**

August 2001 265

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

NO.	BY	DATE	REVISIONS:

VILLAGE NEST EAST PRUD
SITE CONSTRUCTION DRAWINGS
DETAILS

DATE SUBMITTED: 07.20.2017

TCC JOB NUMBER: 17-200.08

REGISTERED PROFESSIONAL ENGINEER
No. 7899506
RYAN W. CATHEY
5/20/17
STATE OF UTAH

CALL 811 BEFORE YOU DIG
SAFE DIGGING PARTNER

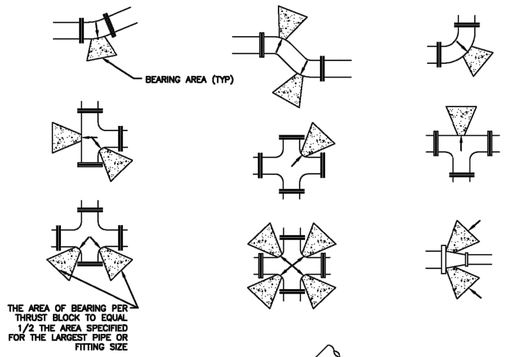
SHEET NUMBER
5.03

PATH: N:\SLB0793\Cadd\Village Nest\IP\IP5030T.dwg

DATE: 5/03/17

Direct bearing thrust block

1. **GENERAL**
   - A. Thrust design for pipe sizes or configurations not shown require special design.
   - B. Bearing areas, volumes, and special thrust blocking details shown on Drawings take precedence over this plan.
   - C. Restraint sizing is based upon a maximum operating pressure of 150 psi and a test pressure of 200 psi, and a minimum soil bearing strength of 2,000 psf. Operating pressures in excess of 150 psi or soils with less than 2,000 pound bearing strength will require special design.
   - D. Before backfilling around thrust block, 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. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.
   - C. Thrust Bocks: Concrete Class 4000, APWA Section 03 30 04.
   - D. Grease: Non-oxide poly-FM.
3. **EXECUTION**
   - A. Pour concrete against undisturbed soil.
   - B. Pipe Joints: Do not cover with concrete. Leave completely accessible.
   - C. Grease: Apply grease to all buried metal surfaces. Wrap with polyethylene sheet and tape wrap.
   - D. Locking restraint devices may be used in conjunction with concrete thrust blocking (at discretion of ENGINEER).
   - E. 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.



SIZE OF PIPE	MINIMUM BEARING AREA IN SQ. FT.				
	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

Plan **561**

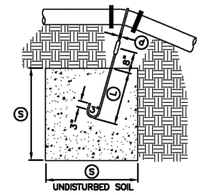
Direct bearing thrust block

August 2010

267

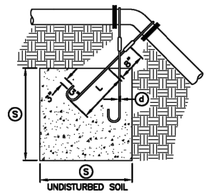
Tie-down thrust restraints

1. **GENERAL**
   - A. Thrust design for pipe sizes or configurations not shown require special design.
   - B. Bearing areas, volumes, and special thrust blocking details shown on Drawings take precedence over this plan.
   - C. Restraint sizing is based upon a maximum operating pressure of 150 psi and a test pressure of 200 psi, and a minimum soil bearing strength of 2,000 psf. Operating pressures in excess of 150 psi or soils with less than 2,000 pound bearing strength will require special design.
   - D. Before backfilling around thrust block, 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. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.
   - C. Concrete: Class 4,000 minimum, APWA Section 03 30 04.
   - D. 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.
   - E. Grease: Non-oxide poly-FM.
3. **EXECUTION**
   - A. Pour concrete against undisturbed soil. Concrete must be allowed to cure in thrust restraints for 5 days before pressurizing water lines or have additional approved thrust restraints installed before pressurizing the water line.
   - B. Pipe Joints: Do not cover with concrete. Leave completely accessible.
   - C. Grease: Apply grease to all buried metal surfaces. Wrap with polyethylene sheet and tape wrap.
   - D. Locking restraint devices may be used in conjunction with concrete thrust blocking (at discretion of ENGINEER).
   - E. 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.



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	S SIDE OF CUBE – FEET	d DIAMETER OF SHANK OR REBAR RODS – INCH	L 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°	476	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	S SIDE OF CUBE – FEET	d DIAMETER OF SHANK OR REBAR RODS – INCH	L DEPTH OF ROD CONCRETE – FEET
4"	45°	1	3.0	5/8"	2.0
				5/8"	
6"		2.37	4.0	5/8"	2.5
				5/8"	
8"		3.97	4.75	5/8"	3.0
				5/8"	
12"		9.04	6.25	5/8"	4.0
				5/8"	
16"		17.24	7.75	3/4"	4.0
				3/4"	
20"		26.52	92.17	3/4"	4.0
				3/4"	
24"		37.82	10.07	3/4"	4.0
				3/4"	
30"		58.26	11.63	3/4"	4.0
				3/4"	

Plan **562**

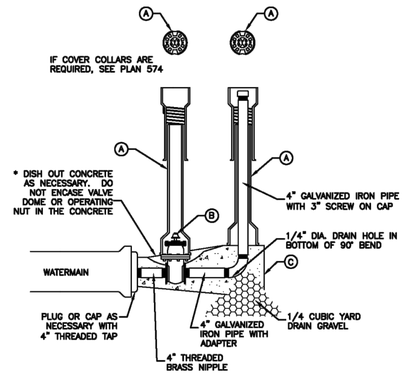
Tie-down thrust restraints

April 1997

269

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.



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

Plan **571**

4" Washout valve

February 2011

271

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

NO.	BY	DATE	REVISIONS:

VILLAGE NEST EAST PRUD
SITE CONSTRUCTION DRAWINGS
DETAILS

DATE SUBMITTED: 07.20.2017

TCC JOB NUMBER: 17-200.08

REGISTERED PROFESSIONAL ENGINEER
No. 7899506
RYAN W. CATHEY
7/20/17
STATE OF UTAH

SHEET NUMBER
5.04

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